



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 9, 2023 – 01:53 PM EDT

PDB ID : 8F4D
Title : RT XFEL structure of Photosystem II 50 microseconds after the third illumination at 2.15 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 : 2.15 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

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>.

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

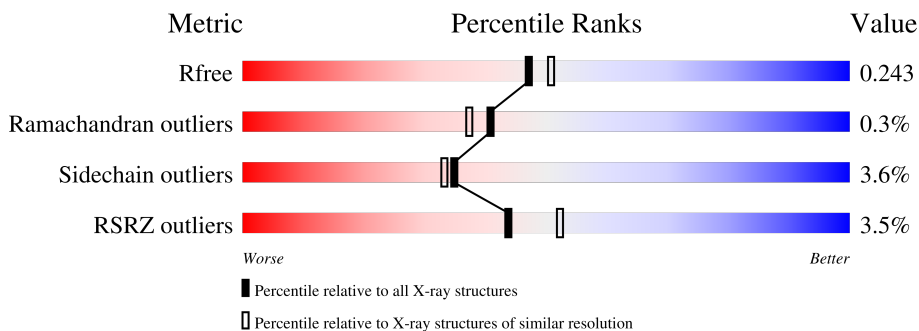
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

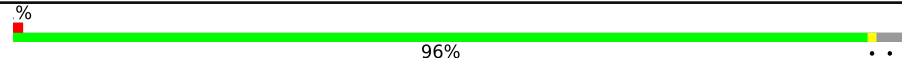
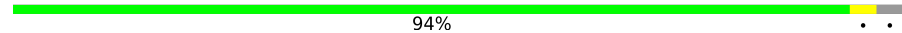
The reported resolution of this entry is 2.15 Å.

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	1479 (2.16-2.16)
Ramachandran outliers	138981	1560 (2.16-2.16)
Sidechain outliers	138945	1559 (2.16-2.16)
RSRZ outliers	127900	1456 (2.16-2.16)

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 ≥ 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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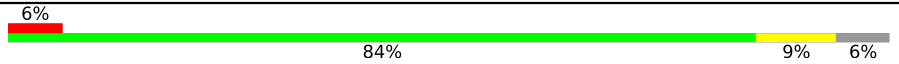

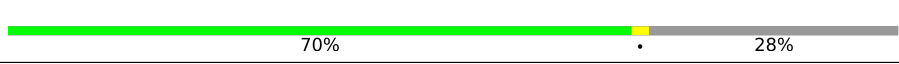
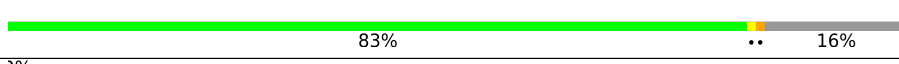

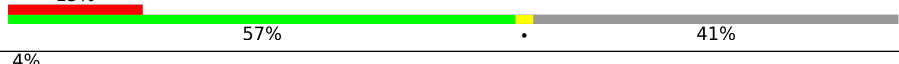

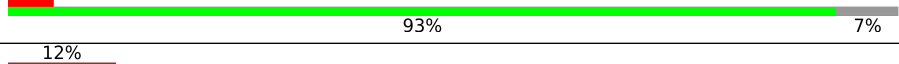
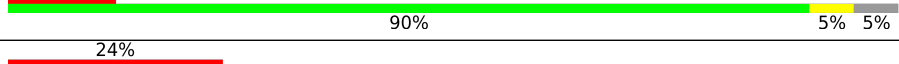

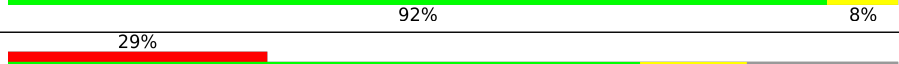


buster-report : 1.1.7 (2018)
 Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
 Refmac : 5.8.0158
 CCP4 : 7.0.044 (Gargrove)
 Ideal geometry (proteins) : Engh & Huber (2001)
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 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	3% 95% ..
4	D	352	95% ..
4	d	352	94% ..
5	E	84	7% 92% 6% .
5	e	84	5% 94% ..
6	F	45	2% 76% 24%
6	f	45	2% 69% 7% 24%
7	H	66	2% 95% ..
7	h	66	6% 88% 8% 5%
8	I	38	3% 87% 8% 5%
8	i	38	5% 92% 5%
9	J	40	8% 88% 10%
9	j	40	10% 85% 5% 10%
10	K	46	2% 74% 7% 20%
10	k	46	2% 76% 20%
11	L	37	100%
11	l	37	5% 86% 11% .
12	M	36	86% 6% 8%
12	m	36	86% 11%
13	O	272	6% 86% 10%
13	o	272	6% 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
25	CLA	A	606	X	-	-	-
25	CLA	A	609	X	-	-	-
25	CLA	B	601	X	-	-	-
25	CLA	B	602	X	-	-	-
25	CLA	B	603	X	-	-	-
25	CLA	B	604	X	-	-	-
25	CLA	B	605	X	-	-	-
25	CLA	B	606	X	-	-	-
25	CLA	B	607	X	-	-	-
25	CLA	B	608	X	-	-	-
25	CLA	B	610	X	-	-	-
25	CLA	B	611	X	-	-	-
25	CLA	B	612	X	-	-	-
25	CLA	B	613	X	-	-	-
25	CLA	B	614	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	B	615	X	-	-	-
25	CLA	B	616	X	-	-	-
25	CLA	C	501	X	-	-	-
25	CLA	C	502	X	-	-	-
25	CLA	C	503	X	-	-	-
25	CLA	C	504	X	-	-	-
25	CLA	C	505	X	-	-	-
25	CLA	C	506	X	-	-	-
25	CLA	C	507	X	-	-	-
25	CLA	C	509	X	-	-	-
25	CLA	C	510	X	-	-	-
25	CLA	C	511	X	-	-	-
25	CLA	C	512	X	-	-	-
25	CLA	C	513	X	-	-	-
25	CLA	D	403	X	-	-	-
25	CLA	D	405	X	-	-	-
25	CLA	a	606	X	-	-	-
25	CLA	a	607	X	-	-	-
25	CLA	a	609	X	-	-	-
25	CLA	a	612	X	-	-	-
25	CLA	b	601	X	-	-	-
25	CLA	b	602	X	-	-	-
25	CLA	b	603	X	-	-	-
25	CLA	b	604	X	-	-	-
25	CLA	b	605	X	-	-	-
25	CLA	b	606	X	-	-	-
25	CLA	b	607	X	-	-	-
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25	CLA	b	610	X	-	-	-
25	CLA	b	611	X	-	-	-
25	CLA	b	612	X	-	-	-
25	CLA	b	613	X	-	-	-
25	CLA	b	614	X	-	-	-
25	CLA	b	615	X	-	-	-
25	CLA	b	616	X	-	-	-
25	CLA	c	501	X	-	-	-
25	CLA	c	504	X	-	-	-
25	CLA	c	505	X	-	-	-
25	CLA	c	506	X	-	-	-
25	CLA	c	507	X	-	-	-
25	CLA	c	509	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	c	510	X	-	-	-
25	CLA	c	511	X	-	-	-
25	CLA	c	512	X	-	-	-
25	CLA	c	513	X	-	-	-
25	CLA	d	403	X	-	-	-
25	CLA	d	404	X	-	-	-

2 Entry composition

There are 37 unique types of molecules in this entry. The entry contains 52853 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 3113	C 2030	N 513	O 551	S 19	0	64	0
1	a	334	Total 3110	C 2027	N 513	O 551	S 19	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 3509	C 2302	N 586	O 607	S 14	0	11	0
3	c	451	Total 3583	C 2343	N 602	O 624	S 14	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 2731	C 1809	N 446	O 464	S 12	0	2	0
4	d	341	Total 2737	C 1813	N 446	O 466	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
			Total	C	N	O			
10	k	37	293	204	43	46	0	0	0

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

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

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

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

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

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

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

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

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

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

- 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				

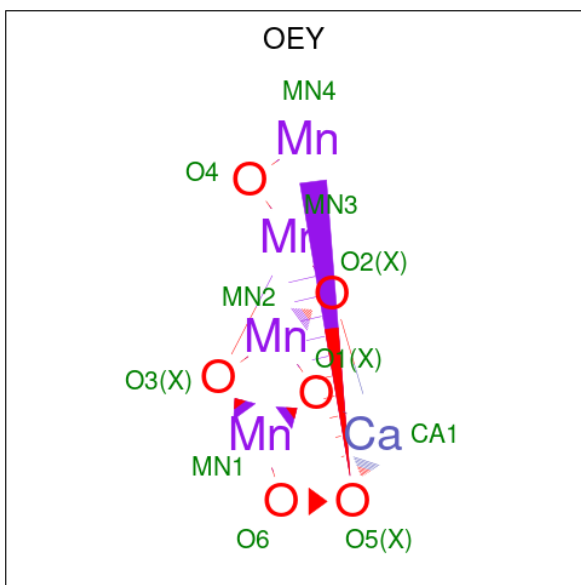
- Molecule 19 is a protein called Photosystem II reaction center protein Z.

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.

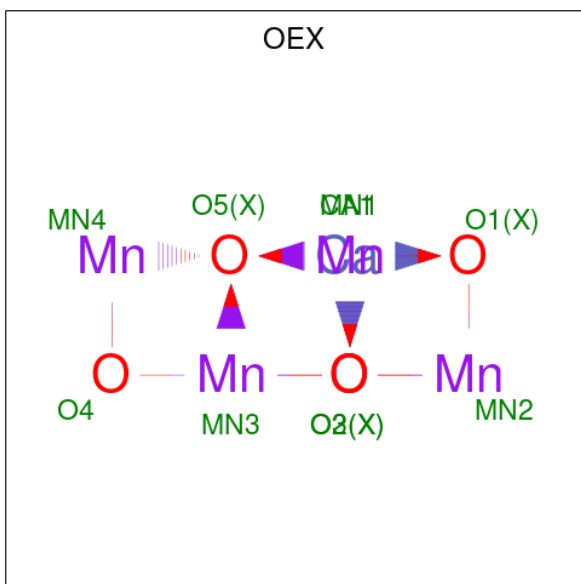
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	34	Total	C	N	O	S	0	0	0
			271	184	47	40				
20	r	31	Total	C	N	O	S	0	0	0
			246	166	43	37				

- Molecule 21 is CA-MN4-O6 CLUSTER (three-letter code: OEY) (formula: CaMn_4O_6) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
21	A	1	11	1	4	6	0	1
21	a	1	11	1	4	6	0	1

- Molecule 22 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn_4O_5) (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

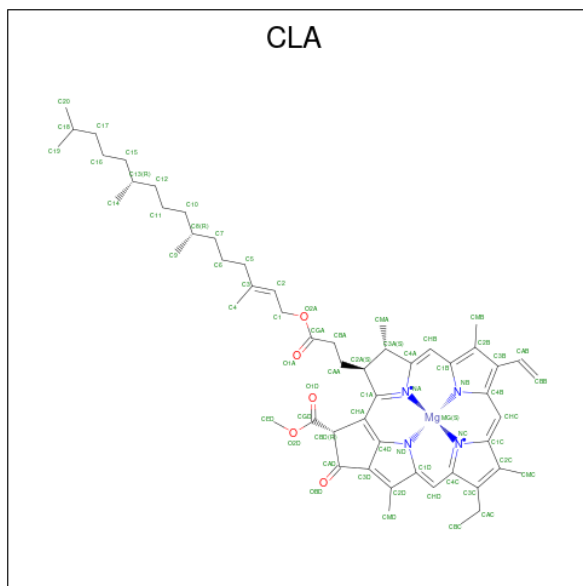
- Molecule 23 is FE (II) ION (three-letter code: FE2) (formula: Fe).

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



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
			Total	C	Mg	N			O
25	A	1	65	55	1	4	5	0	0
25	A	1	65	55	1	4	5	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		

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

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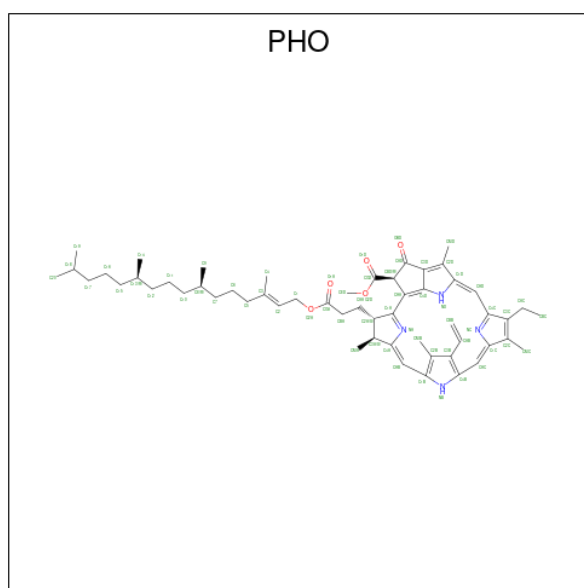
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5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

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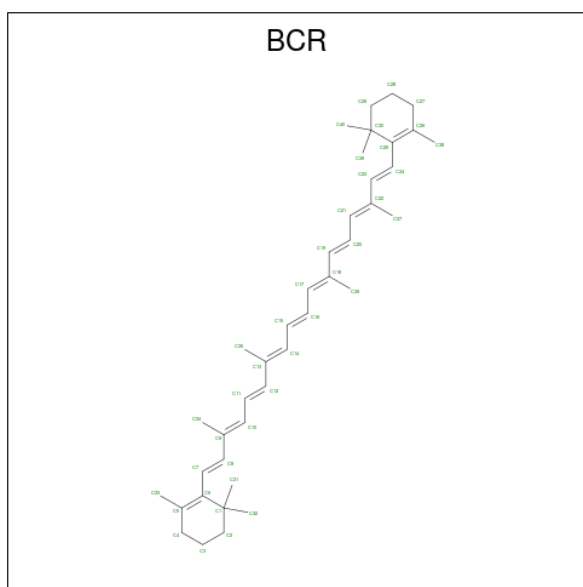
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 26 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



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

- Molecule 27 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



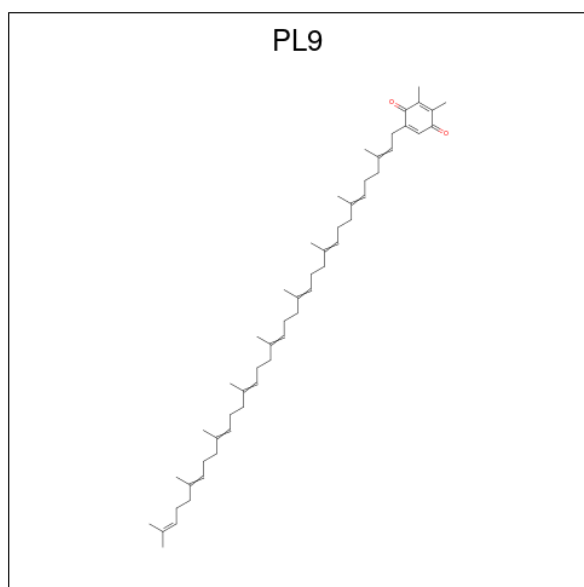
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	C	1	Total C 40 40	0	0
27	C	1	Total C 40 40	0	0
27	D	1	Total C 40 40	0	0
27	H	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	T	1	Total C 40 40	0	0
27	a	1	Total C 40 40	0	0
27	b	1	Total C 40 40	0	0
27	b	1	Total C 40 40	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	b	1	Total C 40 40	0	0
27	c	1	Total C 40 40	0	0
27	c	1	Total C 40 40	0	0
27	d	1	Total C 40 40	0	0
27	h	1	Total C 40 40	0	0
27	k	1	Total C 40 40	0	0
27	k	1	Total C 40 40	0	0
27	t	1	Total C 40 40	0	0

- Molecule 28 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: C₅₃H₈₀O₂).



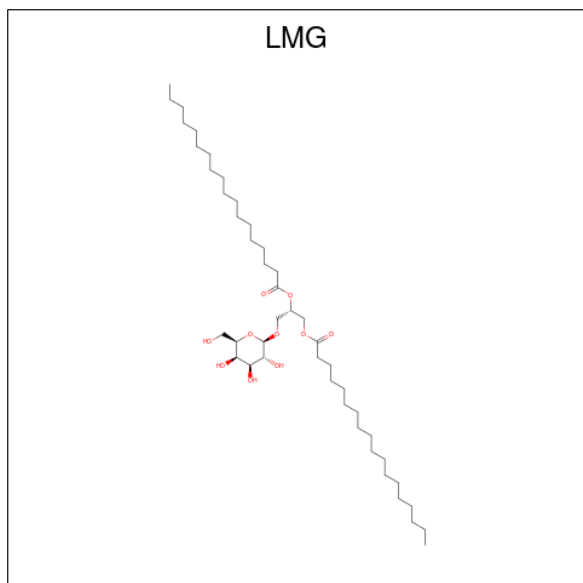
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O 55 53 2	0	0
28	D	1	Total C O 55 53 2	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
28	a	1	Total	C	O	0	0
			55	53	2		
28	d	1	Total	C	O	0	0
			55	53	2		

- Molecule 29 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



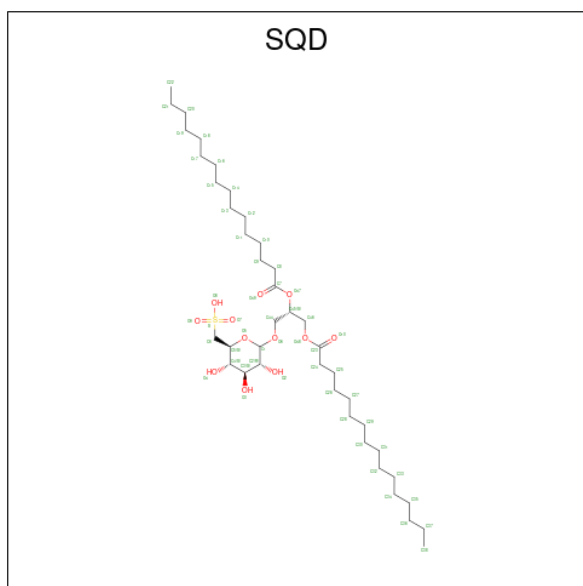
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A	1	Total	C	O	0	0
			48	38	10		
29	B	1	Total	C	O	0	0
			28	24	4		
29	C	1	Total	C	O	0	0
			48	38	10		
29	D	1	Total	C	O	0	0
			51	41	10		
29	D	1	Total	C	O	0	0
			33	27	6		
29	M	1	Total	C	O	0	0
			51	41	10		
29	b	1	Total	C	O	0	0
			55	45	10		
29	c	1	Total	C	O	0	0
			37	27	10		
29	c	1	Total	C	O	0	0
			48	38	10		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	c	1	Total	C	O	0	0
			49	39	10		
29	d	1	Total	C	O	0	0
			23	21	2		
29	d	1	Total	C	O	0	0
			44	34	10		
29	m	1	Total	C	O	0	0
			51	41	10		

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



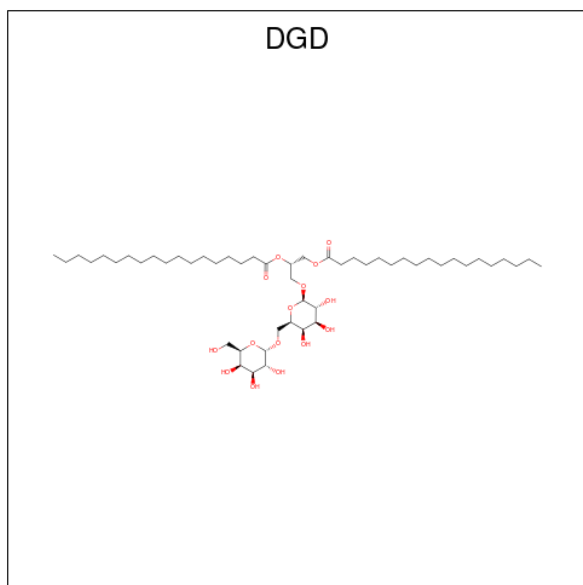
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	C	O	S	0	0
			52	39	12	1		
30	A	1	Total	C	O		0	0
			39	35	4			
30	B	1	Total	C	O	S	0	0
			54	41	12	1		
30	D	1	Total	C	O	S	0	0
			36	25	10	1		
30	L	1	Total	C	O	S	0	0
			49	36	12	1		
30	a	1	Total	C	O	S	0	0
			54	41	12	1		
30	f	1	Total	C	O	S	0	0
			41	28	12	1		

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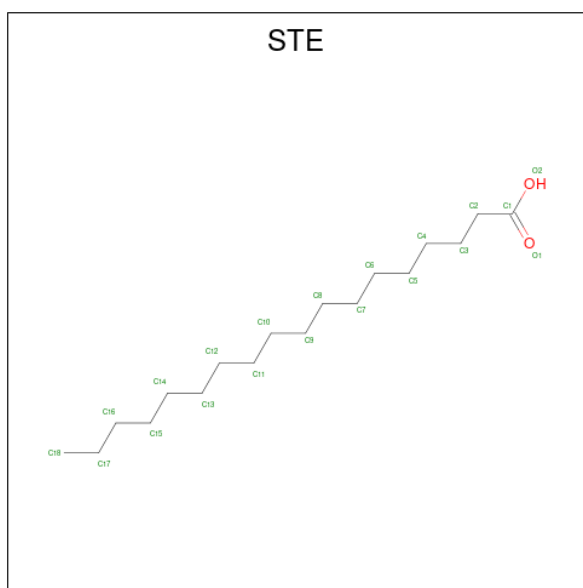
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
30	t	1	36	31	5	0	0

- Molecule 31 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



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

- Molecule 32 is STEARIC ACID (three-letter code: STE) (formula: $C_{18}H_{36}O_2$).



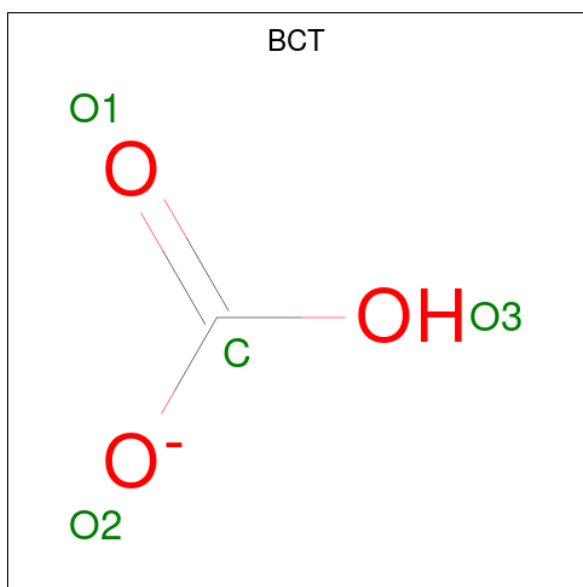
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	B	1	Total C O 17 15 2	0	0
32	B	1	Total C O 12 10 2	0	0
32	B	1	Total C O 12 10 2	0	0
32	B	1	Total C 16 16	0	0
32	C	1	Total C O 12 10 2	0	0
32	C	1	Total C O 12 10 2	0	0
32	C	1	Total C 16 16	0	0
32	H	1	Total C 18 18	0	0
32	I	1	Total C 15 15	0	0
32	J	1	Total C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

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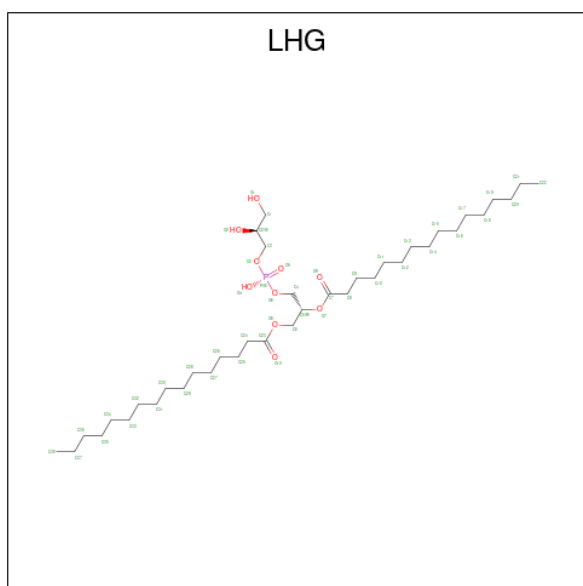
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	X	1	Total C O 20 18 2	0	0
32	R	1	Total C O 12 10 2	0	0
32	a	1	Total C 10 10	0	0
32	a	1	Total C O 12 10 2	0	0
32	b	1	Total C 16 16	0	0
32	b	1	Total C O 20 18 2	0	0
32	b	1	Total C O 16 14 2	0	0
32	b	1	Total C 15 15	0	0
32	b	1	Total C O 20 18 2	0	0
32	b	1	Total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

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



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

- Molecule 34 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: C₃₈H₇₅O₁₀P).



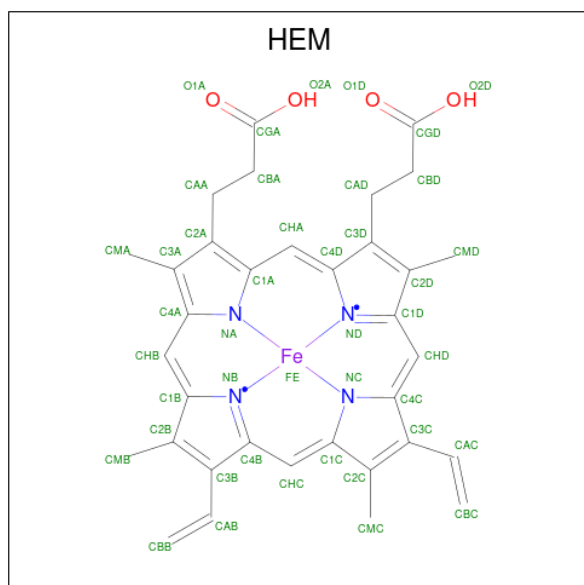
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	D	1	Total	C	O	P	0	0
			49	38	10	1		

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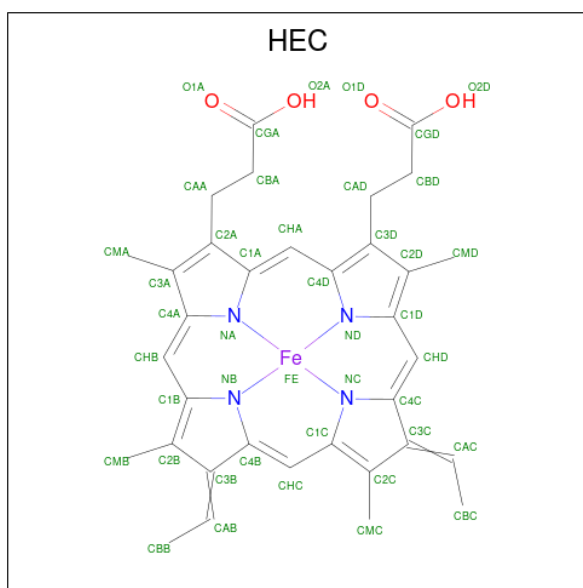
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	D	1	Total	C	O	P	0	0
			47	36	10	1		
34	D	1	Total	C	O	P	0	0
			49	38	10	1		
34	E	1	Total	C	O	P	0	0
			49	38	10	1		
34	L	1	Total	C	O	P	0	0
			49	38	10	1		
34	d	1	Total	C	O	P	0	0
			49	38	10	1		
34	d	1	Total	C	O	P	0	0
			49	38	10	1		
34	d	1	Total	C	O	P	0	0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

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



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
35	F	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
35	e	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 36 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
36	V	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
36	v	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 37 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	A	120	Total	O	0	4
			124	124		
37	B	165	Total	O	0	0
			165	165		
37	C	112	Total	O	0	0
			112	112		
37	D	94	Total	O	0	0
			94	94		
37	E	22	Total	O	0	0
			22	22		
37	F	5	Total	O	0	0
			5	5		
37	H	24	Total	O	0	0
			24	24		
37	I	18	Total	O	0	0
			18	18		
37	J	8	Total	O	0	0
			8	8		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	K	2	Total O 2 2	0	0
37	L	8	Total O 8 8	0	0
37	M	7	Total O 7 7	0	0
37	O	66	Total O 66 66	0	0
37	T	6	Total O 6 6	0	0
37	U	30	Total O 30 30	0	0
37	V	45	Total O 45 45	0	0
37	Y	6	Total O 6 6	0	0
37	X	10	Total O 10 10	0	0
37	Z	5	Total O 5 5	0	0
37	R	9	Total O 9 9	0	0
37	a	103	Total O 107 107	0	4
37	b	132	Total O 132 132	0	0
37	c	128	Total O 128 128	0	0
37	d	77	Total O 77 77	0	0
37	e	14	Total O 14 14	0	0
37	f	2	Total O 2 2	0	0
37	h	20	Total O 20 20	0	0
37	i	10	Total O 10 10	0	0
37	j	7	Total O 7 7	0	0
37	k	5	Total O 5 5	0	0

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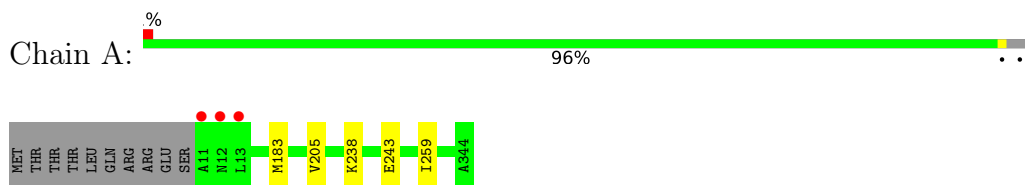
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	l	7	Total O 7 7	0	0
37	m	3	Total O 3 3	0	0
37	o	76	Total O 76 76	0	0
37	t	7	Total O 7 7	0	0
37	u	34	Total O 34 34	0	0
37	v	39	Total O 39 39	0	0
37	y	2	Total O 2 2	0	0
37	x	4	Total O 4 4	0	0
37	z	1	Total O 1 1	0	0
37	r	5	Total O 5 5	0	0

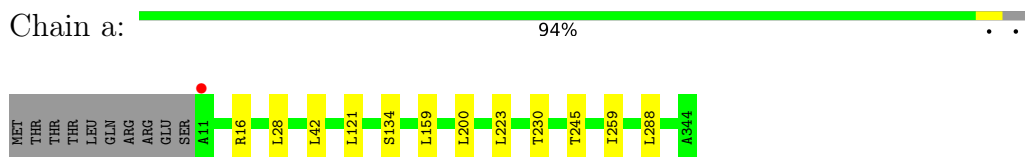
3 Residue-property plots [i](#)

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.

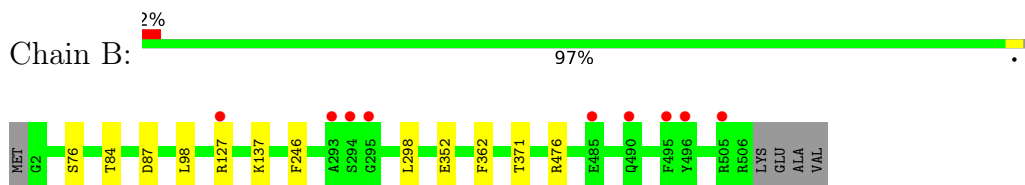
- Molecule 1: Photosystem II protein D1 1



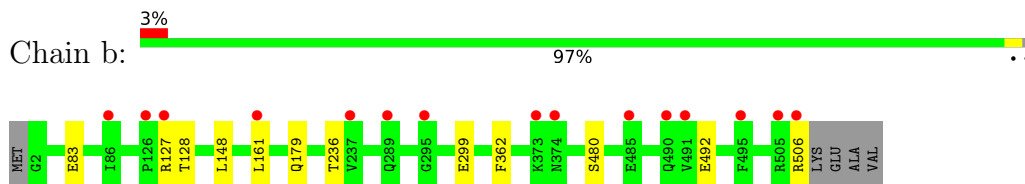
- Molecule 1: Photosystem II protein D1 1



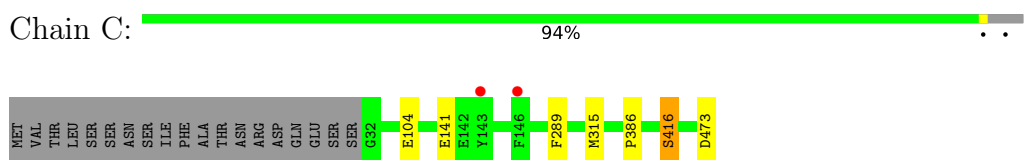
- Molecule 2: Photosystem II CP47 reaction center protein



- Molecule 2: Photosystem II CP47 reaction center protein



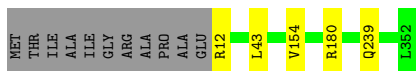
- Molecule 3: Photosystem II CP43 reaction center protein



- Molecule 3: Photosystem II CP43 reaction center protein



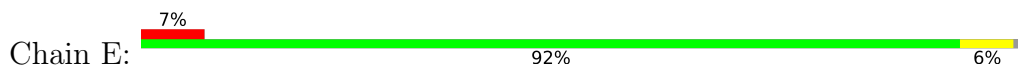
- Molecule 4: Photosystem II D2 protein



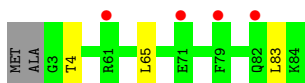
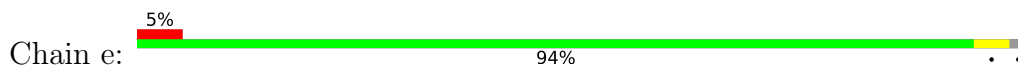
- Molecule 4: Photosystem II D2 protein



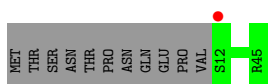
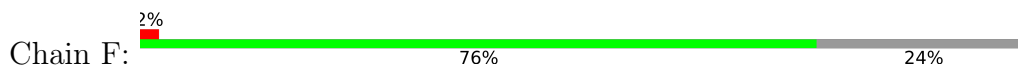
- Molecule 5: Cytochrome b559 subunit alpha



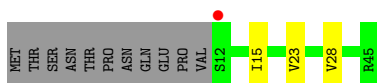
- Molecule 5: Cytochrome b559 subunit alpha



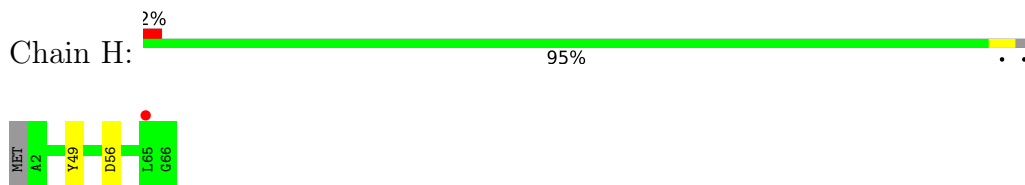
- Molecule 6: Cytochrome b559 subunit beta



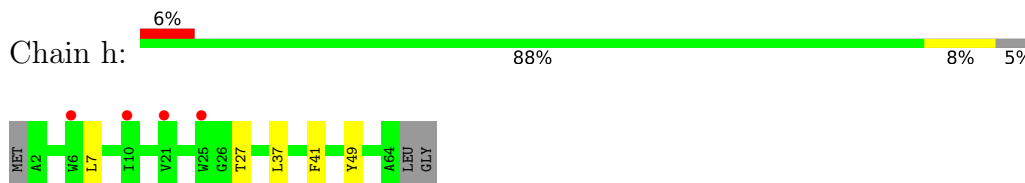
- Molecule 6: Cytochrome b559 subunit beta



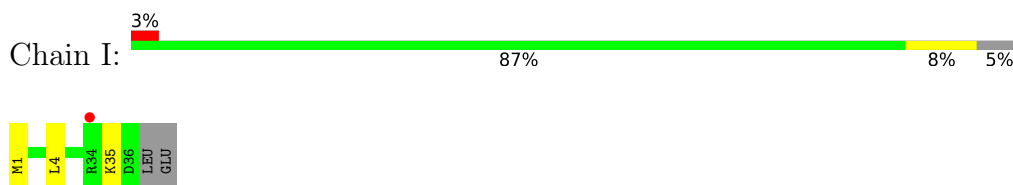
- Molecule 7: Photosystem II reaction center protein H



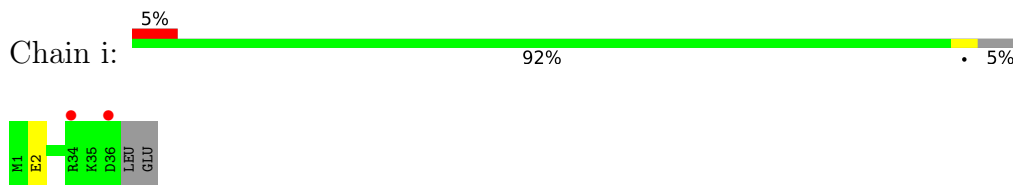
- Molecule 7: Photosystem II reaction center protein H



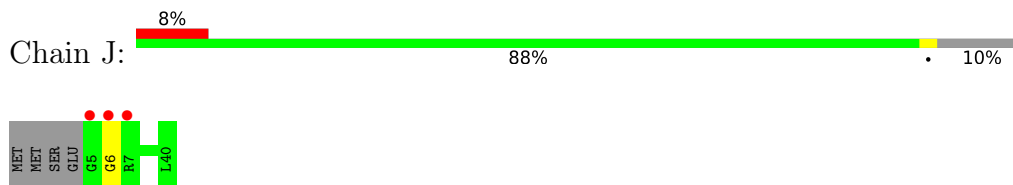
- Molecule 8: Photosystem II reaction center protein I



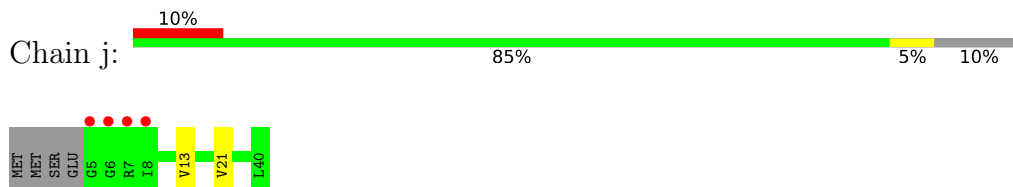
- Molecule 8: Photosystem II reaction center protein I



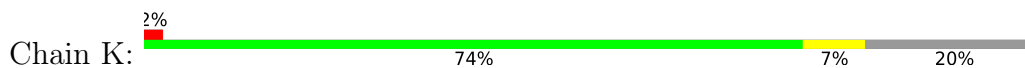
- Molecule 9: Photosystem II reaction center protein J

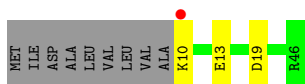


- Molecule 9: Photosystem II reaction center protein J

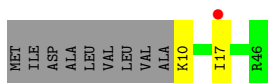
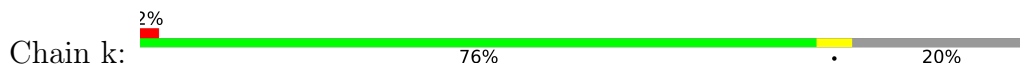


- Molecule 10: Photosystem II reaction center protein K





- Molecule 10: Photosystem II reaction center protein K

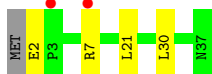
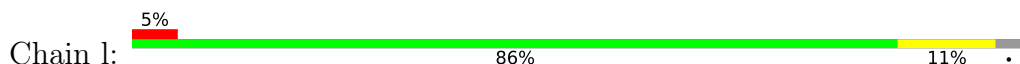


- Molecule 11: Photosystem II reaction center protein L

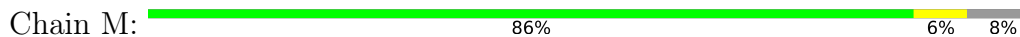


There are no outlier residues recorded for this chain.

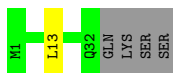
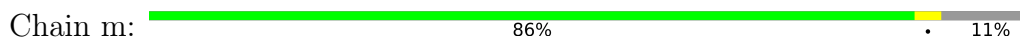
- Molecule 11: Photosystem II reaction center protein L



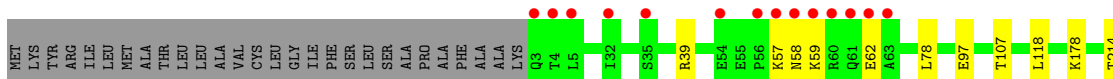
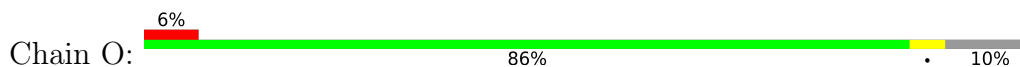
- Molecule 12: Photosystem II reaction center protein M



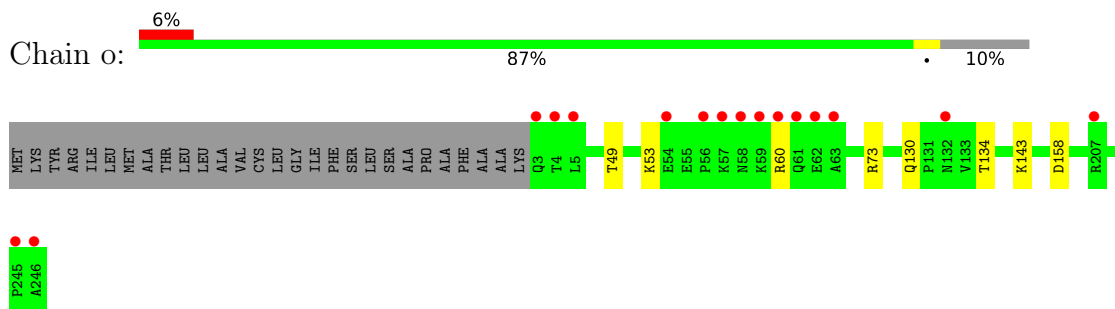
- Molecule 12: Photosystem II reaction center protein M



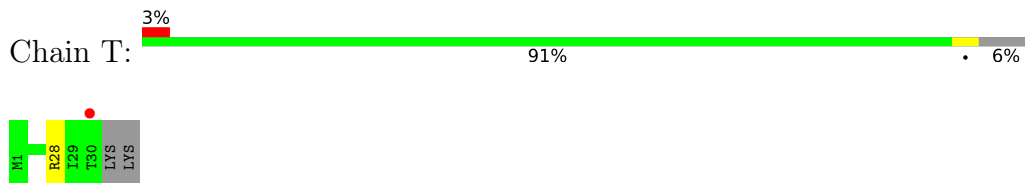
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



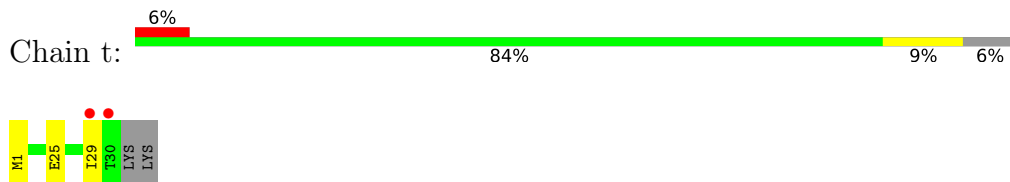
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



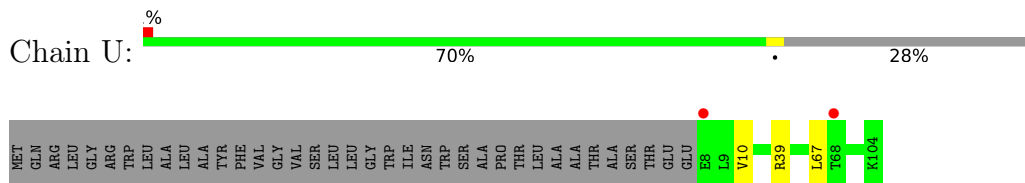
- Molecule 14: Photosystem II reaction center protein T



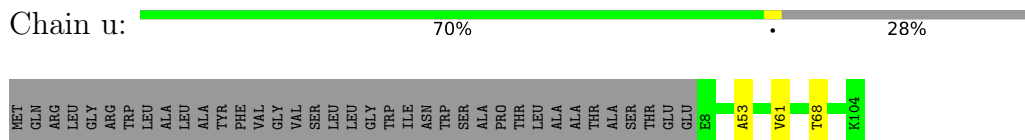
- Molecule 14: Photosystem II reaction center protein T



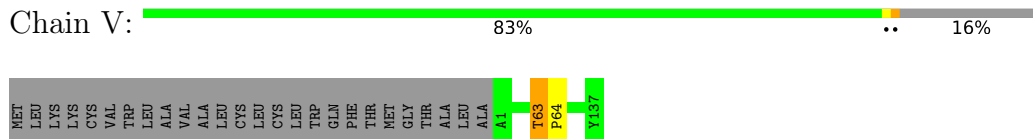
- Molecule 15: Photosystem II 12 kDa extrinsic protein



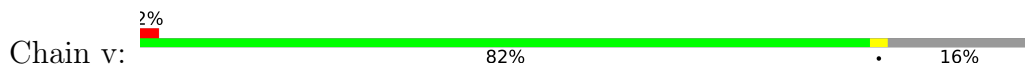
- Molecule 15: Photosystem II 12 kDa extrinsic protein

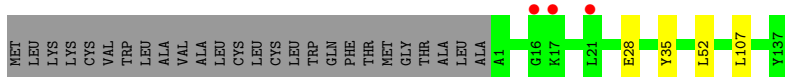


- Molecule 16: Cytochrome c-550

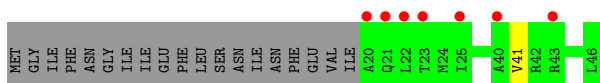


- Molecule 16: Cytochrome c-550

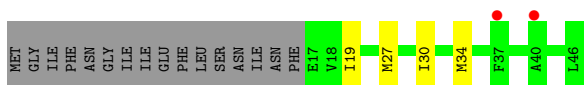




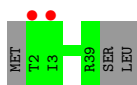
- Molecule 17: Photosystem II reaction center protein Ycf12



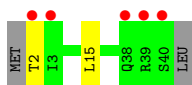
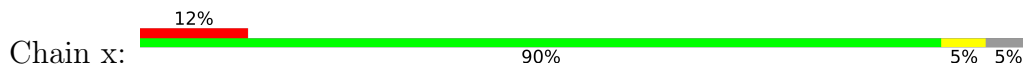
- Molecule 17: Photosystem II reaction center protein Ycf12



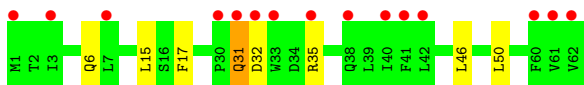
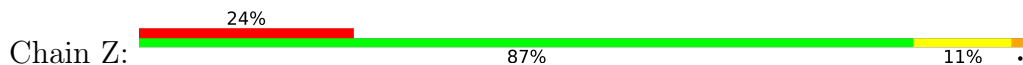
- Molecule 18: Photosystem II reaction center X protein



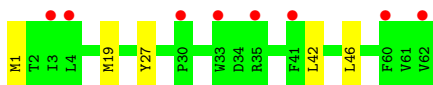
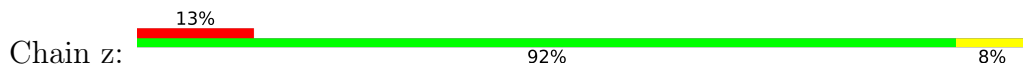
- Molecule 18: Photosystem II reaction center X protein



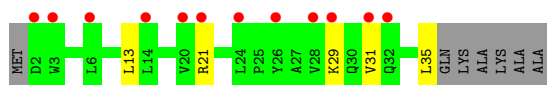
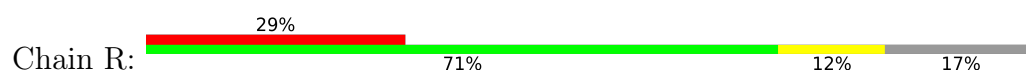
- Molecule 19: Photosystem II reaction center protein Z



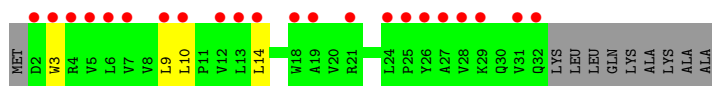
- Molecule 19: Photosystem II reaction center protein Z



- 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, α , β , γ	117.10Å 222.20Å 308.42Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	33.74 – 2.15 33.74 – 2.15	Depositor EDS
% Data completeness (in resolution range)	99.4 (33.74-2.15) 85.1 (33.74-2.15)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.42 (at 2.16Å)	Xtrriage
Refinement program	PHENIX 1.19.2_4158	Depositor
R, R_{free}	0.188 , 0.243 0.188 , 0.243	Depositor DCC
R_{free} test set	3853 reflections (0.89%)	wwPDB-VP
Wilson B-factor (Å ²)	29.9	Xtrriage
Anisotropy	0.171	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 68.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.29$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	52853	wwPDB-VP
Average B, all atoms (Å ²)	44.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.63% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical 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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: FME, SQD, HEC, STE, LMG, BCR, OEX, FE2, DGD, OEY, BCT, PL9, LHG, CLA, PHO, HEM, CL

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	0.53	0/3212	0.64	2/4376 (0.0%)
1	a	0.52	0/3209	0.61	0/4372
2	B	0.43	0/4155	0.59	0/5661
2	b	0.40	0/4118	0.57	0/5611
3	C	0.43	0/3625	0.57	0/4935
3	c	0.40	0/3705	0.56	0/5042
4	D	0.43	0/2825	0.57	0/3847
4	d	0.42	0/2834	0.58	0/3859
5	E	0.37	0/688	0.53	0/940
5	e	0.34	0/683	0.53	0/932
6	F	0.36	0/284	0.51	0/387
6	f	0.33	0/284	0.52	0/387
7	H	0.41	0/523	0.60	0/713
7	h	0.40	0/511	0.60	0/697
8	I	0.43	0/293	0.59	0/396
8	i	0.44	0/293	0.58	0/396
9	J	0.41	0/263	0.58	0/356
9	j	0.34	0/263	0.52	0/356
10	K	0.39	0/303	0.54	0/416
10	k	0.37	0/303	0.53	0/416
11	L	0.41	0/311	0.58	0/422
11	l	0.39	0/303	0.59	0/412
12	M	0.37	0/249	0.53	0/341
12	m	0.44	0/244	0.57	0/334
13	O	0.38	0/1904	0.62	0/2585
13	o	0.39	0/1905	0.64	1/2583 (0.0%)
14	T	0.51	0/257	0.60	0/349
14	t	0.45	0/255	0.53	0/346
15	U	0.36	0/785	0.55	0/1064
15	u	0.38	0/785	0.62	0/1064
16	V	0.35	0/1085	0.61	1/1473 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.36	0/1085	0.57	0/1473
17	Y	0.30	0/197	0.53	0/264
17	y	0.28	0/219	0.48	0/294
18	X	0.37	0/284	0.53	0/384
18	x	0.31	0/289	0.47	0/391
19	Z	0.33	0/490	0.48	0/669
19	z	0.31	0/488	0.43	0/666
20	R	0.34	0/277	0.57	0/380
20	r	0.31	0/252	0.51	0/347
All	All	0.42	0/44038	0.58	4/59936 (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 (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	63	THR	C-N-CD	-6.21	106.94	120.60
1	A	183[A]	MET	CA-CB-CG	6.10	123.67	113.30
1	A	183[B]	MET	CA-CB-CG	6.10	123.67	113.30
13	o	158	ASP	CB-CG-OD1	5.94	123.65	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	395/344 (115%)	389 (98%)	5 (1%)	1 (0%)	41	37
1	a	395/344 (115%)	388 (98%)	6 (2%)	1 (0%)	41	37
2	B	507/510 (99%)	502 (99%)	5 (1%)	0	100	100
2	b	503/510 (99%)	495 (98%)	7 (1%)	1 (0%)	47	46
3	C	451/461 (98%)	440 (98%)	10 (2%)	1 (0%)	47	46
3	c	461/461 (100%)	447 (97%)	13 (3%)	1 (0%)	47	46
4	D	340/352 (97%)	331 (97%)	9 (3%)	0	100	100
4	d	341/352 (97%)	334 (98%)	7 (2%)	0	100	100
5	E	81/84 (96%)	78 (96%)	2 (2%)	1 (1%)	13	7
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%)	60 (95%)	3 (5%)	0	100	100
7	h	61/66 (92%)	57 (93%)	4 (7%)	0	100	100
8	I	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
8	i	34/38 (90%)	30 (88%)	4 (12%)	0	100	100
9	J	34/40 (85%)	31 (91%)	2 (6%)	1 (3%)	4	1
9	j	34/40 (85%)	33 (97%)	1 (3%)	0	100	100
10	K	35/46 (76%)	35 (100%)	0	0	100	100
10	k	35/46 (76%)	34 (97%)	1 (3%)	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%)	31 (100%)	0	0	100	100
12	m	30/36 (83%)	29 (97%)	1 (3%)	0	100	100
13	O	243/272 (89%)	231 (95%)	9 (4%)	3 (1%)	13	7

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	o	242/272 (89%)	233 (96%)	8 (3%)	1 (0%)	34	29
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	28/32 (88%)	26 (93%)	2 (7%)	0	100	100
15	U	95/134 (71%)	92 (97%)	3 (3%)	0	100	100
15	u	95/134 (71%)	91 (96%)	3 (3%)	1 (1%)	14	8
16	V	135/163 (83%)	128 (95%)	6 (4%)	1 (1%)	22	15
16	v	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
17	Y	25/46 (54%)	23 (92%)	2 (8%)	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%)	37 (100%)	0	0	100	100
19	Z	60/62 (97%)	57 (95%)	2 (3%)	1 (2%)	9	3
19	z	60/62 (97%)	59 (98%)	1 (2%)	0	100	100
20	R	32/41 (78%)	30 (94%)	2 (6%)	0	100	100
20	r	29/41 (71%)	28 (97%)	1 (3%)	0	100	100
All	All	5386/5700 (94%)	5242 (97%)	130 (2%)	14 (0%)	41	37

All (14) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
16	V	64	PRO
3	c	416	SER
13	O	59	LYS
13	O	62	GLU
15	u	53	ALA
9	J	6	GLY
19	Z	31	GLN
5	E	82	GLN
13	O	57	LYS
2	b	127	ARG
13	o	73	ARG
1	A	259	ILE
1	a	259	ILE

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	322/280 (115%)	319 (99%)	3 (1%)	78	83
1	a	321/280 (115%)	309 (96%)	12 (4%)	34	32
2	B	407/407 (100%)	395 (97%)	12 (3%)	42	42
2	b	402/407 (99%)	391 (97%)	11 (3%)	44	46
3	C	353/362 (98%)	346 (98%)	7 (2%)	55	59
3	c	362/362 (100%)	349 (96%)	13 (4%)	35	33
4	D	277/283 (98%)	272 (98%)	5 (2%)	59	63
4	d	278/283 (98%)	269 (97%)	9 (3%)	39	38
5	E	72/73 (99%)	67 (93%)	5 (7%)	15	10
5	e	71/73 (97%)	68 (96%)	3 (4%)	30	28
6	F	28/39 (72%)	28 (100%)	0	100	100
6	f	28/39 (72%)	25 (89%)	3 (11%)	6	3
7	H	54/55 (98%)	52 (96%)	2 (4%)	34	32
7	h	53/55 (96%)	48 (91%)	5 (9%)	8	4
8	I	32/34 (94%)	30 (94%)	2 (6%)	18	13
8	i	32/34 (94%)	31 (97%)	1 (3%)	40	39
9	J	24/28 (86%)	24 (100%)	0	100	100
9	j	24/28 (86%)	22 (92%)	2 (8%)	11	6
10	K	30/37 (81%)	27 (90%)	3 (10%)	7	4
10	k	30/37 (81%)	28 (93%)	2 (7%)	16	11
11	L	35/35 (100%)	35 (100%)	0	100	100
11	l	34/35 (97%)	30 (88%)	4 (12%)	5	2
12	M	28/32 (88%)	27 (96%)	1 (4%)	35	33
12	m	28/32 (88%)	27 (96%)	1 (4%)	35	33
13	O	206/228 (90%)	198 (96%)	8 (4%)	32	30
13	o	207/228 (91%)	201 (97%)	6 (3%)	42	42

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	T	26/28 (93%)	25 (96%)	1 (4%)	33	31
14	t	25/28 (89%)	23 (92%)	2 (8%)	12	7
15	U	84/112 (75%)	81 (96%)	3 (4%)	35	33
15	u	84/112 (75%)	82 (98%)	2 (2%)	49	51
16	V	117/138 (85%)	117 (100%)	0	100	100
16	v	117/138 (85%)	113 (97%)	4 (3%)	37	35
17	Y	19/37 (51%)	18 (95%)	1 (5%)	22	19
17	y	22/37 (60%)	18 (82%)	4 (18%)	1	0
18	X	31/34 (91%)	31 (100%)	0	100	100
18	x	31/34 (91%)	29 (94%)	2 (6%)	17	12
19	Z	52/52 (100%)	44 (85%)	8 (15%)	2	1
19	z	51/52 (98%)	46 (90%)	5 (10%)	8	4
20	R	28/33 (85%)	23 (82%)	5 (18%)	2	0
20	r	25/33 (76%)	21 (84%)	4 (16%)	2	1
All	All	4450/4654 (96%)	4289 (96%)	161 (4%)	35	33

All (161) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	205	VAL
1	A	238	LYS
1	A	243	GLU
2	B	76	SER
2	B	84	THR
2	B	87	ASP
2	B	98	LEU
2	B	127	ARG
2	B	137	LYS
2	B	246	PHE
2	B	298	LEU
2	B	352	GLU
2	B	362	PHE
2	B	371	THR
2	B	476	ARG
3	C	104	GLU
3	C	141	GLU
3	C	289	PHE

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Mol	Chain	Res	Type
3	C	315	MET
3	C	386	PRO
3	C	416	SER
3	C	473	ASP
4	D	12	ARG
4	D	43	LEU
4	D	154	VAL
4	D	180	ARG
4	D	239	GLN
5	E	4	THR
5	E	22[A]	ILE
5	E	22[B]	ILE
5	E	54	SER
5	E	62	SER
7	H	49	TYR
7	H	56	ASP
8	I	4	LEU
8	I	35	LYS
10	K	10	LYS
10	K	13	GLU
10	K	19	ASP
12	M	25	LEU
13	O	39	ARG
13	O	58	ASN
13	O	78	LEU
13	O	97	GLU
13	O	107	THR
13	O	118	LEU
13	O	178	LYS
13	O	214	THR
14	T	28	ARG
15	U	10	VAL
15	U	39	ARG
15	U	67	LEU
17	Y	41	VAL
19	Z	6	GLN
19	Z	15	LEU
19	Z	17	PHE
19	Z	31	GLN
19	Z	32	ASP
19	Z	35	ARG
19	Z	46	LEU

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Mol	Chain	Res	Type
19	Z	50	LEU
20	R	13	LEU
20	R	21	ARG
20	R	29	LYS
20	R	31	VAL
20	R	35	LEU
1	a	16	ARG
1	a	28	LEU
1	a	42	LEU
1	a	121	LEU
1	a	134	SER
1	a	159[A]	LEU
1	a	159[B]	LEU
1	a	200	LEU
1	a	223	LEU
1	a	230	THR
1	a	245	THR
1	a	288	LEU
2	b	83	GLU
2	b	128	THR
2	b	148	LEU
2	b	161	LEU
2	b	179	GLN
2	b	236	THR
2	b	299	GLU
2	b	362	PHE
2	b	480	SER
2	b	492	GLU
2	b	506	ARG
3	c	24	THR
3	c	72	LEU
3	c	124	VAL
3	c	125	LEU
3	c	165	LEU
3	c	216	SER
3	c	289	PHE
3	c	315	MET
3	c	346	THR
3	c	355[A]	THR
3	c	355[B]	THR
3	c	413[A]	GLU
3	c	413[B]	GLU

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Mol	Chain	Res	Type
4	d	12	ARG
4	d	90	LEU
4	d	180	ARG
4	d	182	LEU
4	d	230	SER
4	d	291	LEU
4	d	293	LEU
4	d	307	GLU
4	d	321	LEU
5	e	4	THR
5	e	65	LEU
5	e	83	LEU
6	f	15	ILE
6	f	23	VAL
6	f	28	VAL
7	h	7	LEU
7	h	27	THR
7	h	37	LEU
7	h	41	PHE
7	h	49	TYR
8	i	2	GLU
9	j	13	VAL
9	j	21	VAL
10	k	10	LYS
10	k	17	ILE
11	l	2	GLU
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	60	ARG
13	o	130	GLN
13	o	134	THR
13	o	143	LYS
14	t	25	GLU
14	t	29	ILE
15	u	61	VAL
15	u	68	THR
16	v	28	GLU
16	v	35	TYR

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Mol	Chain	Res	Type
16	v	52	LEU
16	v	107	LEU
17	y	19	ILE
17	y	27	MET
17	y	30	ILE
17	y	34	MET
18	x	2	THR
18	x	15	LEU
19	z	1	MET
19	z	19	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 (14) such sidechains are listed below:

Mol	Chain	Res	Type
2	B	409	GLN
7	H	59	ASN
13	O	36	GLN
13	O	88	ASN
13	O	231	HIS
17	Y	21	GLN
18	X	38	GLN
19	Z	31	GLN
1	a	234	ASN
2	b	409	GLN
3	c	378	ASN
5	e	60	GLN
13	o	61	GLN
20	r	30	GLN

5.3.3 RNA [i](#)

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	1.05	0	7,9,11	1.03	0
8	FME	I	1	8	8,9,10	1.02	0	7,9,11	1.41	1 (14%)
12	FME	m	1	12	8,9,10	1.00	0	7,9,11	0.75	0
14	FME	t	1	14	8,9,10	1.16	1 (12%)	7,9,11	0.88	0
8	FME	i	1	8	8,9,10	1.06	0	7,9,11	0.75	0
12	FME	M	1	12	8,9,10	1.00	1 (12%)	7,9,11	1.22	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	-	2/7/9/11	-
8	FME	I	1	8	-	0/7/9/11	-
12	FME	m	1	12	-	0/7/9/11	-
14	FME	t	1	14	-	4/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-
12	FME	M	1	12	-	1/7/9/11	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	t	1	FME	CA-N	-2.25	1.43	1.46
12	M	1	FME	CA-N	-2.04	1.43	1.46

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	I	1	FME	CA-N-CN	-3.18	117.93	122.82

There are no chirality outliers.

All (8) torsion outliers are listed below:

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

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 188 ligands modelled in this entry, 6 are monoatomic - leaving 182 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
29	LMG	M	101	-	51,51,55	0.84	4 (7%)	59,59,63	1.38	7 (11%)
31	DGD	H	102	-	63,63,67	1.16	4 (6%)	77,77,81	1.43	11 (14%)
27	BCR	A	610	-	41,41,41	0.98	2 (4%)	56,56,56	1.27	6 (10%)
25	CLA	B	603	-	65,73,73	1.64	7 (10%)	76,113,113	1.47	9 (11%)
28	PL9	D	407	-	55,55,55	0.95	3 (5%)	68,69,69	1.54	16 (23%)
28	PL9	d	406	-	55,55,55	1.07	3 (5%)	68,69,69	1.71	17 (25%)
27	BCR	k	101	-	41,41,41	1.04	2 (4%)	56,56,56	1.11	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
36	HEC	v	201	16	32,50,50	2.14	3 (9%)	24,82,82	1.90	5 (20%)
25	CLA	b	605	-	65,73,73	1.47	5 (7%)	76,113,113	1.50	11 (14%)
25	CLA	b	608	-	65,73,73	1.56	7 (10%)	76,113,113	1.59	14 (18%)
25	CLA	B	613	-	65,73,73	1.50	8 (12%)	76,113,113	1.51	11 (14%)
29	LMG	B	621	-	26,26,55	0.76	2 (7%)	26,26,63	1.19	1 (3%)
26	PHO	d	402	-	51,69,69	1.00	3 (5%)	47,99,99	1.61	7 (14%)
31	DGD	a	614	-	43,43,67	0.72	2 (4%)	45,45,81	1.45	6 (13%)
25	CLA	B	612	-	65,73,73	1.46	8 (12%)	76,113,113	1.51	12 (15%)
34	LHG	D	410	-	48,48,48	0.77	1 (2%)	51,54,54	1.32	7 (13%)
25	CLA	C	502	-	65,73,73	1.64	9 (13%)	76,113,113	1.15	8 (10%)
25	CLA	A	609	-	54,62,73	1.59	6 (11%)	62,99,113	1.55	9 (14%)
31	DGD	c	517	-	63,63,67	1.01	6 (9%)	77,77,81	1.47	12 (15%)
25	CLA	c	508	-	64,72,73	1.59	7 (10%)	74,111,113	1.41	10 (13%)
32	STE	b	620	-	15,15,19	0.38	0	14,14,19	0.88	0
25	CLA	c	507	37	65,73,73	1.55	9 (13%)	76,113,113	1.36	8 (10%)
30	SQD	t	102	-	35,35,54	1.66	6 (17%)	37,37,65	1.48	4 (10%)
25	CLA	B	607	37	65,73,73	1.57	7 (10%)	76,113,113	1.53	7 (9%)
31	DGD	c	516	-	63,63,67	1.08	7 (11%)	77,77,81	1.40	10 (12%)
25	CLA	C	504	37	59,67,73	1.71	8 (13%)	68,105,113	1.41	10 (14%)
27	BCR	K	102	-	41,41,41	1.12	2 (4%)	56,56,56	1.20	3 (5%)
29	LMG	C	519	-	48,48,55	0.86	2 (4%)	56,56,63	1.34	6 (10%)
27	BCR	d	405	-	41,41,41	1.04	2 (4%)	56,56,56	1.10	2 (3%)
25	CLA	B	606	-	65,73,73	1.58	8 (12%)	76,113,113	1.47	11 (14%)
25	CLA	b	610	37	65,73,73	1.47	6 (9%)	76,113,113	1.36	11 (14%)
25	CLA	a	612	37	65,73,73	1.65	8 (12%)	76,113,113	1.39	9 (11%)
25	CLA	d	404	-	65,73,73	1.55	7 (10%)	76,113,113	1.32	9 (11%)
25	CLA	b	616	-	60,68,73	1.44	7 (11%)	70,107,113	1.60	9 (12%)
25	CLA	C	507	37	65,73,73	1.52	7 (10%)	76,113,113	1.49	9 (11%)
32	STE	R	101	-	11,11,19	0.70	0	11,11,19	1.15	1 (9%)
32	STE	a	616	-	11,11,19	0.82	0	11,11,19	0.86	0
27	BCR	B	619	-	41,41,41	1.00	1 (2%)	56,56,56	1.34	7 (12%)
32	STE	L	103	-	11,11,19	0.64	0	11,11,19	1.37	1 (9%)
25	CLA	C	505	-	65,73,73	1.75	7 (10%)	76,113,113	1.40	10 (13%)
25	CLA	a	606	-	65,73,73	1.55	8 (12%)	76,113,113	1.39	8 (10%)
25	CLA	c	511	3	65,73,73	1.59	6 (9%)	76,113,113	1.42	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	CLA	b	607	37	65,73,73	1.53	8 (12%)	76,113,113	1.40	8 (10%)
25	CLA	B	605	-	65,73,73	1.46	7 (10%)	76,113,113	1.29	7 (9%)
25	CLA	b	603	-	65,73,73	1.59	8 (12%)	76,113,113	1.57	12 (15%)
25	CLA	C	506	-	65,73,73	1.52	8 (12%)	76,113,113	1.41	7 (9%)
25	CLA	C	513	-	65,73,73	1.59	6 (9%)	76,113,113	1.39	9 (11%)
28	PL9	A	611	-	55,55,55	0.96	1 (1%)	68,69,69	1.49	11 (16%)
31	DGD	A	615	-	67,67,67	1.04	5 (7%)	81,81,81	1.41	15 (18%)
32	STE	j	101	-	11,11,19	0.78	0	11,11,19	1.16	0
27	BCR	B	618	-	41,41,41	1.04	2 (4%)	56,56,56	1.28	7 (12%)
25	CLA	c	501	-	65,73,73	1.48	7 (10%)	76,113,113	1.51	7 (9%)
30	SQD	B	622	-	53,54,54	1.56	8 (15%)	62,65,65	1.80	11 (17%)
32	STE	B	623	-	11,11,19	0.75	0	11,11,19	1.13	0
27	BCR	D	406	-	41,41,41	1.13	3 (7%)	56,56,56	1.27	6 (10%)
25	CLA	b	613	-	65,73,73	1.71	10 (15%)	76,113,113	1.58	12 (15%)
35	HEM	F	101	5,6	41,50,50	1.48	4 (9%)	45,82,82	1.41	3 (6%)
25	CLA	c	509	-	65,73,73	1.38	5 (7%)	76,113,113	1.66	9 (11%)
25	CLA	B	602	-	65,73,73	1.64	8 (12%)	76,113,113	1.49	12 (15%)
31	DGD	c	518	-	63,63,67	0.92	3 (4%)	77,77,81	1.47	15 (19%)
32	STE	t	103	-	13,13,19	0.65	0	13,13,19	1.26	2 (15%)
25	CLA	b	612	-	65,73,73	1.55	7 (10%)	76,113,113	1.52	12 (15%)
26	PHO	A	608	-	51,69,69	1.02	4 (7%)	47,99,99	1.28	5 (10%)
29	LMG	d	410	-	21,21,55	0.59	0	20,20,63	1.15	0
32	STE	l	102	-	17,17,19	0.33	0	16,16,19	0.95	0
25	CLA	D	404	-	65,73,73	1.48	7 (10%)	76,113,113	1.42	9 (11%)
29	LMG	D	408	-	51,51,55	0.78	1 (1%)	59,59,63	1.24	6 (10%)
32	STE	B	624	-	11,11,19	0.67	0	11,11,19	1.22	2 (18%)
25	CLA	a	609	-	65,73,73	1.48	8 (12%)	76,113,113	1.35	11 (14%)
25	CLA	b	606	-	65,73,73	1.64	6 (9%)	76,113,113	1.58	11 (14%)
27	BCR	k	102	-	41,41,41	1.05	4 (9%)	56,56,56	1.20	6 (10%)
32	STE	c	522	-	11,11,19	0.73	0	11,11,19	1.23	1 (9%)
32	STE	M	102	-	14,14,19	0.71	0	14,14,19	1.11	1 (7%)
32	STE	B	620	-	16,16,19	0.68	0	16,16,19	1.12	0
31	DGD	C	517	-	63,63,67	0.96	6 (9%)	77,77,81	1.42	11 (14%)
25	CLA	B	611	-	65,73,73	1.38	7 (10%)	76,113,113	1.57	9 (11%)
25	CLA	c	512	-	65,73,73	1.50	7 (10%)	76,113,113	1.43	10 (13%)
27	BCR	b	619	-	41,41,41	1.00	2 (4%)	56,56,56	1.20	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	STE	b	624	-	14,14,19	0.29	0	13,13,19	0.97	0
27	BCR	b	617	-	41,41,41	0.96	2 (4%)	56,56,56	1.24	5 (8%)
34	LHG	D	413	-	48,48,48	0.88	2 (4%)	51,54,54	1.37	6 (11%)
25	CLA	B	610	37	65,73,73	1.47	8 (12%)	76,113,113	1.49	12 (15%)
33	BCT	d	401	23	2,3,3	1.32	0	2,3,3	2.96	1 (50%)
29	LMG	D	412	-	31,31,55	0.66	1 (3%)	33,33,63	1.19	2 (6%)
29	LMG	m	101	-	51,51,55	0.90	3 (5%)	59,59,63	1.47	9 (15%)
34	LHG	d	407	-	48,48,48	0.79	2 (4%)	51,54,54	1.33	7 (13%)
25	CLA	D	405	-	65,73,73	1.48	10 (15%)	76,113,113	1.44	9 (11%)
27	BCR	a	610	-	41,41,41	0.94	3 (7%)	56,56,56	1.25	5 (8%)
34	LHG	l	101	-	48,48,48	0.89	2 (4%)	51,54,54	1.26	8 (15%)
29	LMG	c	519	-	37,37,55	1.03	4 (10%)	45,45,63	1.32	5 (11%)
25	CLA	B	604	-	65,73,73	1.54	8 (12%)	76,113,113	1.72	10 (13%)
25	CLA	b	609	-	65,73,73	1.53	8 (12%)	76,113,113	1.51	10 (13%)
25	CLA	c	504	37	60,68,73	1.58	6 (10%)	70,107,113	1.34	6 (8%)
25	CLA	b	602	-	65,73,73	1.58	9 (13%)	76,113,113	1.61	12 (15%)
25	CLA	C	511	3	65,73,73	1.66	6 (9%)	76,113,113	1.42	7 (9%)
25	CLA	c	506	-	65,73,73	1.57	8 (12%)	76,113,113	1.43	6 (7%)
25	CLA	c	502	-	65,73,73	1.50	9 (13%)	76,113,113	1.51	9 (11%)
32	STE	a	615	-	9,9,19	0.41	0	8,8,19	0.59	0
25	CLA	c	503	-	65,73,73	1.50	7 (10%)	76,113,113	1.55	10 (13%)
27	BCR	K	101	-	41,41,41	1.06	2 (4%)	56,56,56	1.38	9 (16%)
25	CLA	b	601	37	65,73,73	1.62	7 (10%)	76,113,113	1.45	8 (10%)
31	DGD	C	516	-	63,63,67	1.06	4 (6%)	77,77,81	1.36	10 (12%)
35	HEM	e	101	5,6	41,50,50	1.47	6 (14%)	45,82,82	1.68	12 (26%)
27	BCR	B	617	-	41,41,41	1.06	2 (4%)	56,56,56	1.28	6 (10%)
32	STE	b	626	-	9,9,19	0.34	0	8,8,19	0.72	0
34	LHG	L	102	-	48,48,48	0.71	0	51,54,54	1.23	5 (9%)
32	STE	d	412	-	16,16,19	0.64	0	16,16,19	1.12	1 (6%)
22	OEX	a	602[A]	3,1,37	0,15,15	-	-	-	-	-
30	SQD	A	613	-	51,52,54	1.55	8 (15%)	60,63,65	2.05	13 (21%)
25	CLA	B	615	-	65,73,73	1.60	8 (12%)	76,113,113	1.31	8 (10%)
27	BCR	c	515	-	41,41,41	1.06	2 (4%)	56,56,56	1.26	4 (7%)
22	OEX	A	602[A]	3,1,37	0,15,15	-	-	-	-	-
26	PHO	a	608	-	51,69,69	0.97	2 (3%)	47,99,99	1.23	6 (12%)
32	STE	J	101	-	11,11,19	0.73	0	11,11,19	1.36	2 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	CLA	C	510	-	65,73,73	1.47	8 (12%)	76,113,113	1.41	6 (7%)
29	LMG	c	521	-	48,48,55	0.97	4 (8%)	56,56,63	1.30	8 (14%)
32	STE	b	621	-	19,19,19	0.60	0	19,19,19	1.10	1 (5%)
27	BCR	t	101	-	41,41,41	1.00	2 (4%)	56,56,56	1.33	8 (14%)
25	CLA	b	611	-	65,73,73	1.51	7 (10%)	76,113,113	1.48	9 (11%)
32	STE	c	520	-	19,19,19	0.63	0	19,19,19	0.98	0
27	BCR	C	515	-	41,41,41	1.08	2 (4%)	56,56,56	1.15	3 (5%)
32	STE	d	413	-	19,19,19	0.69	0	19,19,19	0.87	1 (5%)
21	OEY	a	601[B]	3,1,37	0,16,16	-	-	-	-	-
29	LMG	d	411	-	44,44,55	0.83	2 (4%)	52,52,63	1.33	7 (13%)
25	CLA	a	607	37	65,73,73	1.53	7 (10%)	76,113,113	1.43	12 (15%)
25	CLA	B	609	-	65,73,73	1.42	8 (12%)	76,113,113	1.35	10 (13%)
34	LHG	e	102	-	41,41,48	0.78	1 (2%)	44,47,54	1.30	6 (13%)
21	OEY	A	601[B]	3,1,37	0,16,16	-	-	-	-	-
30	SQD	L	101	-	48,49,54	1.62	10 (20%)	57,60,65	1.97	13 (22%)
32	STE	C	522	-	15,15,19	0.39	0	14,14,19	0.69	0
32	STE	b	625	-	19,19,19	0.59	0	19,19,19	1.02	1 (5%)
25	CLA	A	606	-	65,73,73	1.52	5 (7%)	76,113,113	1.45	6 (7%)
25	CLA	b	604	-	65,73,73	1.54	8 (12%)	76,113,113	1.64	11 (14%)
25	CLA	B	601	37	65,73,73	1.65	6 (9%)	76,113,113	1.38	12 (15%)
34	LHG	E	101	-	48,48,48	0.76	2 (4%)	51,54,54	1.21	6 (11%)
32	STE	X	101	-	19,19,19	0.64	0	19,19,19	1.07	0
26	PHO	D	402	-	51,69,69	1.04	5 (9%)	47,99,99	1.42	7 (14%)
30	SQD	A	614	-	38,38,54	1.74	5 (13%)	40,40,65	1.28	3 (7%)
25	CLA	C	512	-	65,73,73	1.70	8 (12%)	76,113,113	1.47	11 (14%)
28	PL9	a	611	-	55,55,55	0.74	1 (1%)	68,69,69	1.53	10 (14%)
32	STE	M	103	-	9,9,19	0.37	0	8,8,19	0.66	0
32	STE	t	104	-	17,17,19	0.56	0	17,17,19	1.21	1 (5%)
27	BCR	b	618	-	41,41,41	1.10	3 (7%)	56,56,56	1.26	6 (10%)
34	LHG	D	411	-	46,46,48	0.90	2 (4%)	49,52,54	1.24	4 (8%)
25	CLA	b	614	-	65,73,73	1.63	9 (13%)	76,113,113	1.36	11 (14%)
29	LMG	A	612	-	48,48,55	0.97	3 (6%)	56,56,63	1.31	8 (14%)
32	STE	b	623	-	15,15,19	0.78	0	15,15,19	0.89	0
34	LHG	d	408	-	48,48,48	0.62	0	51,54,54	1.32	7 (13%)
27	BCR	h	101	-	41,41,41	1.01	2 (4%)	56,56,56	1.30	8 (14%)
29	LMG	c	523	-	49,49,55	0.83	1 (2%)	57,57,63	1.30	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	SQD	D	409	-	35,36,54	1.52	5 (14%)	42,45,65	3.02	12 (28%)
30	SQD	a	613	-	53,54,54	1.52	7 (13%)	62,65,65	2.03	12 (19%)
25	CLA	A	607	37	65,73,73	1.49	9 (13%)	76,113,113	1.45	12 (15%)
27	BCR	C	514	-	41,41,41	1.12	2 (4%)	56,56,56	1.25	8 (14%)
32	STE	C	521	-	11,11,19	0.72	0	11,11,19	1.18	1 (9%)
32	STE	H	103	-	17,17,19	0.36	0	16,16,19	0.80	0
25	CLA	B	608	-	65,73,73	1.51	8 (12%)	76,113,113	1.45	9 (11%)
25	CLA	C	503	-	65,73,73	1.75	10 (15%)	76,113,113	1.46	8 (10%)
25	CLA	C	509	-	65,73,73	1.65	9 (13%)	76,113,113	1.52	9 (11%)
25	CLA	c	510	-	65,73,73	1.49	8 (12%)	76,113,113	1.54	10 (13%)
25	CLA	d	403	-	65,73,73	1.41	6 (9%)	76,113,113	1.30	8 (10%)
31	DGD	h	102	-	63,63,67	0.91	2 (3%)	77,77,81	1.50	14 (18%)
32	STE	B	625	-	15,15,19	0.35	0	14,14,19	0.83	0
27	BCR	T	101	-	41,41,41	0.94	2 (4%)	56,56,56	1.20	5 (8%)
33	BCT	D	401	23	2,3,3	1.26	0	2,3,3	2.85	1 (50%)
25	CLA	D	403	37	65,73,73	1.50	6 (9%)	76,113,113	1.40	10 (13%)
25	CLA	C	508	-	65,73,73	1.54	7 (10%)	76,113,113	1.60	12 (15%)
25	CLA	b	615	-	65,73,73	1.53	7 (10%)	76,113,113	1.51	7 (9%)
27	BCR	H	101	-	41,41,41	1.01	2 (4%)	56,56,56	1.23	4 (7%)
34	LHG	d	409	-	38,38,48	0.71	1 (2%)	41,44,54	1.14	3 (7%)
25	CLA	c	505	-	65,73,73	1.62	8 (12%)	76,113,113	1.40	10 (13%)
32	STE	I	101	-	14,14,19	0.38	0	13,13,19	0.66	0
25	CLA	c	513	-	65,73,73	1.57	8 (12%)	76,113,113	1.22	6 (7%)
29	LMG	b	622	-	55,55,55	0.81	1 (1%)	63,63,63	1.37	6 (9%)
27	BCR	c	514	-	41,41,41	1.05	2 (4%)	56,56,56	1.27	8 (14%)
36	HEC	V	201	16	32,50,50	2.04	3 (9%)	24,82,82	1.94	7 (29%)
30	SQD	f	101	-	40,41,54	1.68	8 (20%)	49,52,65	1.84	12 (24%)
31	DGD	C	518	-	63,63,67	0.83	2 (3%)	77,77,81	1.45	11 (14%)
25	CLA	C	501	-	65,73,73	1.64	10 (15%)	76,113,113	1.51	11 (14%)
25	CLA	B	614	-	65,73,73	1.73	9 (13%)	76,113,113	1.24	9 (11%)
32	STE	C	520	-	11,11,19	0.66	0	11,11,19	1.54	1 (9%)
25	CLA	B	616	-	60,68,73	1.54	7 (11%)	70,107,113	1.44	8 (11%)

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
29	LMG	M	101	-	-	20/46/66/70	0/1/1/1
31	DGD	H	102	-	-	15/51/91/95	0/2/2/2
27	BCR	A	610	-	-	6/29/63/63	0/2/2/2
25	CLA	B	603	-	1/1/15/20	10/37/115/115	-
28	PL9	D	407	-	-	16/53/73/73	0/1/1/1
28	PL9	d	406	-	-	16/53/73/73	0/1/1/1
27	BCR	k	101	-	-	9/29/63/63	0/2/2/2
36	HEC	v	201	16	-	2/10/54/54	-
25	CLA	b	605	-	1/1/15/20	10/37/115/115	-
25	CLA	b	608	-	1/1/15/20	7/37/115/115	-
25	CLA	B	613	-	1/1/15/20	16/37/115/115	-
29	LMG	B	621	-	-	14/22/22/70	-
26	PHO	d	402	-	-	5/37/103/103	0/5/6/6
31	DGD	a	614	-	-	26/45/45/95	-
25	CLA	B	612	-	1/1/15/20	13/37/115/115	-
34	LHG	D	410	-	-	18/53/53/53	-
25	CLA	C	502	-	1/1/15/20	10/37/115/115	-
25	CLA	A	609	-	1/1/12/20	6/24/102/115	-
31	DGD	c	517	-	-	19/51/91/95	0/2/2/2
25	CLA	c	508	-	-	8/36/114/115	-
32	STE	b	620	-	-	5/13/13/17	-
25	CLA	c	507	37	1/1/15/20	12/37/115/115	-
30	SQD	t	102	-	-	19/37/37/69	-
25	CLA	B	607	37	1/1/15/20	18/37/115/115	-
31	DGD	c	516	-	-	26/51/91/95	0/2/2/2
25	CLA	C	504	37	1/1/13/20	8/30/108/115	-
27	BCR	K	102	-	-	7/29/63/63	0/2/2/2
29	LMG	C	519	-	-	18/43/63/70	0/1/1/1
27	BCR	d	405	-	-	9/29/63/63	0/2/2/2
25	CLA	B	606	-	1/1/15/20	12/37/115/115	-
25	CLA	b	610	37	1/1/15/20	10/37/115/115	-
25	CLA	a	612	37	1/1/15/20	5/37/115/115	-
25	CLA	d	404	-	1/1/15/20	7/37/115/115	-
25	CLA	b	616	-	1/1/14/20	12/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	C	507	37	1/1/15/20	9/37/115/115	-
32	STE	R	101	-	-	4/9/9/17	-
32	STE	a	616	-	-	4/9/9/17	-
27	BCR	B	619	-	-	9/29/63/63	0/2/2/2
32	STE	L	103	-	-	6/9/9/17	-
25	CLA	C	505	-	1/1/15/20	14/37/115/115	-
25	CLA	a	606	-	1/1/15/20	4/37/115/115	-
25	CLA	c	511	3	1/1/15/20	16/37/115/115	-
25	CLA	b	607	37	1/1/15/20	16/37/115/115	-
25	CLA	B	605	-	1/1/15/20	9/37/115/115	-
25	CLA	b	603	-	1/1/15/20	7/37/115/115	-
25	CLA	C	506	-	1/1/15/20	15/37/115/115	-
25	CLA	C	513	-	1/1/15/20	12/37/115/115	-
28	PL9	A	611	-	-	20/53/73/73	0/1/1/1
31	DGD	A	615	-	-	23/55/95/95	0/2/2/2
32	STE	j	101	-	-	5/9/9/17	-
27	BCR	B	618	-	-	8/29/63/63	0/2/2/2
25	CLA	c	501	-	1/1/15/20	4/37/115/115	-
30	SQD	B	622	-	-	24/49/69/69	0/1/1/1
32	STE	B	623	-	-	5/9/9/17	-
27	BCR	D	406	-	-	7/29/63/63	0/2/2/2
25	CLA	b	613	-	1/1/15/20	12/37/115/115	-
35	HEM	F	101	5,6	-	2/12/54/54	-
25	CLA	c	509	-	1/1/15/20	6/37/115/115	-
25	CLA	B	602	-	1/1/15/20	9/37/115/115	-
31	DGD	c	518	-	-	16/51/91/95	0/2/2/2
32	STE	t	103	-	-	3/11/11/17	-
25	CLA	b	612	-	1/1/15/20	11/37/115/115	-
26	PHO	A	608	-	-	11/37/103/103	0/5/6/6
29	LMG	d	410	-	-	13/17/17/70	-
32	STE	l	102	-	-	7/15/15/17	-
25	CLA	D	404	-	-	16/37/115/115	-
29	LMG	D	408	-	-	21/46/66/70	0/1/1/1
32	STE	B	624	-	-	4/9/9/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	a	609	-	1/1/15/20	8/37/115/115	-
25	CLA	b	606	-	1/1/15/20	7/37/115/115	-
27	BCR	k	102	-	-	7/29/63/63	0/2/2/2
32	STE	c	522	-	-	5/9/9/17	-
32	STE	M	102	-	-	8/12/12/17	-
32	STE	B	620	-	-	10/14/14/17	-
31	DGD	C	517	-	-	21/51/91/95	0/2/2/2
25	CLA	B	611	-	1/1/15/20	10/37/115/115	-
25	CLA	c	512	-	1/1/15/20	20/37/115/115	-
27	BCR	b	619	-	-	7/29/63/63	0/2/2/2
32	STE	b	624	-	-	9/12/12/17	-
27	BCR	b	617	-	-	8/29/63/63	0/2/2/2
34	LHG	D	413	-	-	22/53/53/53	-
25	CLA	B	610	37	1/1/15/20	5/37/115/115	-
29	LMG	D	412	-	-	19/33/33/70	-
29	LMG	m	101	-	-	20/46/66/70	0/1/1/1
34	LHG	d	407	-	-	18/53/53/53	-
25	CLA	D	405	-	1/1/15/20	8/37/115/115	-
27	BCR	a	610	-	-	2/29/63/63	0/2/2/2
34	LHG	l	101	-	-	22/53/53/53	-
29	LMG	c	519	-	-	10/31/51/70	0/1/1/1
25	CLA	B	604	-	1/1/15/20	17/37/115/115	-
25	CLA	b	609	-	1/1/15/20	9/37/115/115	-
25	CLA	c	504	37	1/1/14/20	7/31/109/115	-
25	CLA	b	602	-	1/1/15/20	8/37/115/115	-
25	CLA	C	511	3	1/1/15/20	6/37/115/115	-
25	CLA	c	506	-	1/1/15/20	15/37/115/115	-
25	CLA	c	502	-	-	7/37/115/115	-
32	STE	a	615	-	-	5/7/7/17	-
25	CLA	c	503	-	-	13/37/115/115	-
27	BCR	K	101	-	-	7/29/63/63	0/2/2/2
25	CLA	b	601	37	1/1/15/20	20/37/115/115	-
31	DGD	C	516	-	-	23/51/91/95	0/2/2/2
35	HEM	e	101	5,6	-	3/12/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	BCR	B	617	-	-	4/29/63/63	0/2/2/2
32	STE	b	626	-	-	2/7/7/17	-
34	LHG	L	102	-	-	21/53/53/53	-
32	STE	d	412	-	-	7/14/14/17	-
30	SQD	A	613	-	-	19/47/67/69	0/1/1/1
25	CLA	B	615	-	1/1/15/20	8/37/115/115	-
27	BCR	c	515	-	-	4/29/63/63	0/2/2/2
26	PHO	a	608	-	-	4/37/103/103	0/5/6/6
32	STE	J	101	-	-	3/9/9/17	-
25	CLA	C	510	-	1/1/15/20	10/37/115/115	-
29	LMG	c	521	-	-	25/43/63/70	0/1/1/1
32	STE	b	621	-	-	10/17/17/17	-
27	BCR	t	101	-	-	7/29/63/63	0/2/2/2
25	CLA	b	611	-	1/1/15/20	10/37/115/115	-
32	STE	c	520	-	-	14/17/17/17	-
27	BCR	C	515	-	-	7/29/63/63	0/2/2/2
32	STE	d	413	-	-	11/17/17/17	-
29	LMG	d	411	-	-	10/39/59/70	0/1/1/1
25	CLA	a	607	37	1/1/15/20	16/37/115/115	-
25	CLA	B	609	-	-	7/37/115/115	-
34	LHG	e	102	-	-	23/46/46/53	-
30	SQD	L	101	-	-	23/44/64/69	0/1/1/1
32	STE	C	522	-	-	5/13/13/17	-
32	STE	b	625	-	-	11/17/17/17	-
25	CLA	A	606	-	1/1/15/20	3/37/115/115	-
25	CLA	b	604	-	1/1/15/20	9/37/115/115	-
25	CLA	B	601	37	1/1/15/20	21/37/115/115	-
34	LHG	E	101	-	-	29/53/53/53	-
32	STE	X	101	-	-	11/17/17/17	-
26	PHO	D	402	-	-	3/37/103/103	0/5/6/6
30	SQD	A	614	-	-	13/39/39/69	-
25	CLA	C	512	-	1/1/15/20	9/37/115/115	-
28	PL9	a	611	-	-	22/53/73/73	0/1/1/1
32	STE	M	103	-	-	3/7/7/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	STE	t	104	-	-	9/15/15/17	-
27	BCR	b	618	-	-	6/29/63/63	0/2/2/2
34	LHG	D	411	-	-	20/51/51/53	-
25	CLA	b	614	-	1/1/15/20	18/37/115/115	-
29	LMG	A	612	-	-	19/43/63/70	0/1/1/1
32	STE	b	623	-	-	8/13/13/17	-
34	LHG	d	408	-	-	23/53/53/53	-
27	BCR	h	101	-	-	4/29/63/63	0/2/2/2
29	LMG	c	523	-	-	27/44/64/70	0/1/1/1
30	SQD	D	409	-	-	14/28/48/69	0/1/1/1
30	SQD	a	613	-	-	24/49/69/69	0/1/1/1
25	CLA	A	607	37	-	7/37/115/115	-
27	BCR	C	514	-	-	8/29/63/63	0/2/2/2
32	STE	C	521	-	-	5/9/9/17	-
32	STE	H	103	-	-	10/15/15/17	-
25	CLA	B	608	-	1/1/15/20	5/37/115/115	-
25	CLA	C	503	-	1/1/15/20	12/37/115/115	-
25	CLA	C	509	-	1/1/15/20	12/37/115/115	-
25	CLA	c	510	-	1/1/15/20	13/37/115/115	-
25	CLA	d	403	-	1/1/15/20	9/37/115/115	-
31	DGD	h	102	-	-	14/51/91/95	0/2/2/2
32	STE	B	625	-	-	2/13/13/17	-
27	BCR	T	101	-	-	7/29/63/63	0/2/2/2
25	CLA	D	403	37	1/1/15/20	4/37/115/115	-
25	CLA	C	508	-	-	9/37/115/115	-
25	CLA	b	615	-	1/1/15/20	15/37/115/115	-
27	BCR	H	101	-	-	4/29/63/63	0/2/2/2
34	LHG	d	409	-	-	13/43/43/53	-
25	CLA	c	505	-	1/1/15/20	10/37/115/115	-
32	STE	I	101	-	-	5/12/12/17	-
25	CLA	c	513	-	1/1/15/20	12/37/115/115	-
29	LMG	b	622	-	-	24/50/70/70	0/1/1/1
27	BCR	c	514	-	-	8/29/63/63	0/2/2/2
36	HEC	V	201	16	-	2/10/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	SQD	f	101	-	-	15/36/56/69	0/1/1/1
31	DGD	C	518	-	-	14/51/91/95	0/2/2/2
25	CLA	C	501	-	1/1/15/20	8/37/115/115	-
25	CLA	B	614	-	1/1/15/20	19/37/115/115	-
32	STE	C	520	-	-	3/9/9/17	-
25	CLA	B	616	-	1/1/14/20	11/31/109/115	-

All (751) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	614	CLA	C4B-NB	8.56	1.42	1.35
25	c	504	CLA	C4B-NB	8.35	1.42	1.35
25	B	603	CLA	MG-NA	8.19	2.25	2.06
25	C	504	CLA	C4B-NB	8.19	1.42	1.35
25	B	601	CLA	C4B-NB	8.14	1.42	1.35
25	B	602	CLA	C4B-NB	8.06	1.42	1.35
25	b	613	CLA	C4B-NB	7.95	1.42	1.35
25	C	505	CLA	C4B-NB	7.92	1.42	1.35
25	B	614	CLA	C4B-NB	7.88	1.42	1.35
25	b	601	CLA	C4B-NB	7.88	1.42	1.35
25	C	501	CLA	C4B-NB	7.86	1.42	1.35
25	B	615	CLA	C4B-NB	7.82	1.42	1.35
25	C	507	CLA	C4B-NB	7.74	1.42	1.35
25	A	606	CLA	C4B-NB	7.71	1.42	1.35
25	b	605	CLA	C4B-NB	7.67	1.42	1.35
25	b	607	CLA	C4B-NB	7.62	1.42	1.35
25	C	513	CLA	C4B-NB	7.57	1.42	1.35
25	a	607	CLA	C4B-NB	7.55	1.41	1.35
25	B	608	CLA	C4B-NB	7.51	1.41	1.35
25	c	505	CLA	C4B-NB	7.51	1.41	1.35
25	C	503	CLA	C4B-NB	7.50	1.41	1.35
25	c	508	CLA	C4B-NB	7.43	1.41	1.35
25	c	513	CLA	C4B-NB	7.41	1.41	1.35
25	c	511	CLA	C4B-NB	7.30	1.41	1.35
25	C	509	CLA	C4B-NB	7.30	1.41	1.35
25	B	606	CLA	C4B-NB	7.25	1.41	1.35
25	c	512	CLA	C4B-NB	7.24	1.41	1.35
25	C	512	CLA	C4B-NB	7.24	1.41	1.35
25	C	508	CLA	C4B-NB	7.22	1.41	1.35
25	c	506	CLA	C4B-NB	7.21	1.41	1.35
25	C	502	CLA	C4B-NB	7.19	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	604	CLA	C4B-NB	7.17	1.41	1.35
25	B	610	CLA	C4B-NB	7.10	1.41	1.35
25	d	404	CLA	C4B-NB	7.08	1.41	1.35
25	b	612	CLA	C4B-NB	7.04	1.41	1.35
25	b	610	CLA	C4B-NB	6.99	1.41	1.35
25	C	506	CLA	C4B-NB	6.98	1.41	1.35
25	A	609	CLA	C4B-NB	6.97	1.41	1.35
25	D	405	CLA	C4B-NB	6.96	1.41	1.35
25	A	607	CLA	C4B-NB	6.96	1.41	1.35
25	B	613	CLA	C4B-NB	6.92	1.41	1.35
25	b	615	CLA	C4B-NB	6.92	1.41	1.35
25	b	606	CLA	MG-NA	6.91	2.22	2.06
25	b	611	CLA	C4B-NB	6.89	1.41	1.35
25	c	502	CLA	C4B-NB	6.85	1.41	1.35
25	B	609	CLA	C4B-NB	6.81	1.41	1.35
25	C	510	CLA	C4B-NB	6.80	1.41	1.35
25	b	602	CLA	C4B-NB	6.79	1.41	1.35
25	b	609	CLA	C4B-NB	6.78	1.41	1.35
25	d	403	CLA	C4B-NB	6.78	1.41	1.35
36	V	201	HEC	C2B-C3B	-6.71	1.33	1.40
25	B	612	CLA	C4B-NB	6.68	1.41	1.35
25	B	616	CLA	C4B-NB	6.68	1.41	1.35
25	c	507	CLA	C4B-NB	6.67	1.41	1.35
25	C	511	CLA	MG-NA	6.65	2.22	2.06
25	a	606	CLA	C4B-NB	6.65	1.41	1.35
25	c	509	CLA	C4B-NB	6.64	1.41	1.35
25	a	609	CLA	C4B-NB	6.64	1.41	1.35
25	a	612	CLA	C4B-NB	6.62	1.41	1.35
25	C	511	CLA	C4B-NB	6.62	1.41	1.35
25	c	510	CLA	C4B-NB	6.55	1.41	1.35
36	v	201	HEC	C2B-C3B	-6.51	1.34	1.40
25	b	603	CLA	C4B-NB	6.44	1.41	1.35
25	b	606	CLA	C4B-NB	6.43	1.40	1.35
25	B	605	CLA	C4B-NB	6.37	1.40	1.35
25	b	608	CLA	C4B-NB	6.37	1.40	1.35
25	c	501	CLA	C4B-NB	6.36	1.40	1.35
25	B	604	CLA	C4B-NB	6.34	1.40	1.35
25	c	503	CLA	C4B-NB	6.29	1.40	1.35
25	b	616	CLA	C4B-NB	6.26	1.40	1.35
25	D	404	CLA	C4B-NB	6.05	1.40	1.35
25	D	403	CLA	C4B-NB	5.99	1.40	1.35
25	B	607	CLA	C4B-NB	5.85	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	v	201	HEC	C3C-C2C	-5.75	1.34	1.40
25	B	607	CLA	MG-NA	5.72	2.19	2.06
25	B	611	CLA	C4B-NB	5.70	1.40	1.35
30	A	614	SQD	O47-C45	-5.54	1.37	1.47
25	B	603	CLA	C4B-NB	5.48	1.40	1.35
25	b	603	CLA	MG-NA	5.47	2.19	2.06
25	C	505	CLA	MG-NA	5.37	2.19	2.06
25	c	511	CLA	MG-NA	5.35	2.19	2.06
25	B	606	CLA	MG-NA	5.31	2.18	2.06
25	b	608	CLA	MG-NA	5.30	2.18	2.06
25	a	612	CLA	MG-NA	5.21	2.18	2.06
25	b	602	CLA	MG-NA	5.20	2.18	2.06
36	v	201	HEC	C3D-C2D	5.20	1.53	1.37
35	F	101	HEM	C3C-C2C	-5.19	1.33	1.40
25	C	512	CLA	MG-NA	5.18	2.18	2.06
25	D	404	CLA	MG-NC	5.16	2.18	2.06
25	C	505	CLA	MG-ND	-5.14	1.95	2.05
25	C	503	CLA	MG-ND	5.11	2.15	2.05
25	b	613	CLA	MG-NA	5.09	2.18	2.06
30	D	409	SQD	O48-C23	5.06	1.48	1.33
25	B	614	CLA	MG-ND	-5.06	1.95	2.05
30	L	101	SQD	O48-C23	4.98	1.47	1.33
25	c	505	CLA	MG-NA	4.89	2.17	2.06
25	B	601	CLA	MG-NA	4.86	2.17	2.06
36	V	201	HEC	C3C-C2C	-4.79	1.35	1.40
36	V	201	HEC	C3D-C2D	4.79	1.51	1.37
30	A	613	SQD	O48-C23	4.74	1.47	1.33
25	C	501	CLA	MG-NA	4.72	2.17	2.06
30	f	101	SQD	O48-C23	4.68	1.47	1.33
25	C	502	CLA	MG-NA	4.66	2.17	2.06
30	a	613	SQD	O48-C23	4.61	1.46	1.33
25	b	612	CLA	MG-ND	-4.61	1.96	2.05
30	B	622	SQD	O48-C23	4.60	1.46	1.33
30	t	102	SQD	O48-C23	4.57	1.46	1.33
25	B	615	CLA	MG-NA	4.57	2.17	2.06
25	C	509	CLA	MG-NA	4.57	2.17	2.06
25	b	601	CLA	MG-NA	4.57	2.17	2.06
25	a	612	CLA	MG-ND	-4.56	1.96	2.05
25	c	507	CLA	MG-NA	4.55	2.17	2.06
30	A	614	SQD	O48-C23	4.54	1.46	1.33
25	b	615	CLA	MG-NA	4.48	2.16	2.06
25	D	403	CLA	C1D-ND	4.47	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	504	CLA	MG-NA	4.45	2.16	2.06
25	c	506	CLA	C1D-ND	4.42	1.43	1.37
25	c	508	CLA	C1D-ND	4.39	1.43	1.37
25	B	602	CLA	C1D-ND	4.35	1.43	1.37
25	C	512	CLA	MG-ND	-4.33	1.97	2.05
25	C	513	CLA	MG-NA	4.32	2.16	2.06
25	c	501	CLA	MG-NC	4.27	2.16	2.06
25	a	606	CLA	MG-NA	4.25	2.16	2.06
25	b	609	CLA	C1D-ND	4.24	1.43	1.37
28	A	611	PL9	C7-C3	-4.22	1.47	1.51
25	a	609	CLA	C1D-ND	4.19	1.42	1.37
25	b	610	CLA	C1D-ND	4.18	1.42	1.37
25	b	607	CLA	C1D-ND	4.18	1.42	1.37
25	B	616	CLA	C1D-ND	4.18	1.42	1.37
25	C	508	CLA	MG-NA	4.17	2.16	2.06
25	a	606	CLA	C1D-ND	4.15	1.42	1.37
25	B	604	CLA	MG-NA	4.11	2.16	2.06
28	d	406	PL9	C7-C3	-4.11	1.47	1.51
25	C	513	CLA	C1D-ND	4.08	1.42	1.37
25	b	612	CLA	C1D-ND	4.05	1.42	1.37
25	c	503	CLA	C1D-ND	4.05	1.42	1.37
25	B	613	CLA	C1D-ND	4.04	1.42	1.37
25	a	612	CLA	C1D-ND	4.03	1.42	1.37
25	A	606	CLA	C1D-ND	4.00	1.42	1.37
25	c	513	CLA	MG-ND	-3.96	1.97	2.05
25	d	403	CLA	C1D-ND	3.94	1.42	1.37
25	D	405	CLA	C1D-ND	3.91	1.42	1.37
25	b	611	CLA	C1D-ND	3.91	1.42	1.37
25	c	508	CLA	C4D-ND	-3.91	1.32	1.37
25	C	506	CLA	C1D-ND	3.91	1.42	1.37
25	a	607	CLA	C4D-ND	-3.90	1.32	1.37
25	A	609	CLA	C1D-ND	3.89	1.42	1.37
25	B	614	CLA	C1D-ND	3.87	1.42	1.37
25	c	501	CLA	C1D-ND	3.85	1.42	1.37
25	B	607	CLA	C1D-ND	3.85	1.42	1.37
25	b	613	CLA	MG-ND	-3.84	1.98	2.05
25	C	503	CLA	MG-NA	3.84	2.15	2.06
25	b	613	CLA	C1D-ND	3.84	1.42	1.37
25	b	616	CLA	C1D-ND	3.81	1.42	1.37
25	A	606	CLA	C4D-ND	-3.81	1.32	1.37
25	B	601	CLA	C1D-ND	3.80	1.42	1.37
25	c	513	CLA	C1D-ND	3.79	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	604	CLA	C1D-ND	3.79	1.42	1.37
25	b	603	CLA	C1D-ND	3.79	1.42	1.37
25	D	403	CLA	MG-NA	3.78	2.15	2.06
25	C	505	CLA	CHC-C1C	3.77	1.44	1.35
25	C	511	CLA	C1D-ND	3.76	1.42	1.37
25	b	614	CLA	C1D-ND	3.76	1.42	1.37
27	K	102	BCR	C1-C6	-3.74	1.48	1.53
25	b	601	CLA	C1D-ND	3.74	1.42	1.37
25	C	509	CLA	MG-ND	3.73	2.13	2.05
25	C	506	CLA	MG-NA	3.73	2.15	2.06
25	c	511	CLA	C1D-ND	3.73	1.42	1.37
30	B	622	SQD	O47-C7	3.73	1.44	1.34
31	A	615	DGD	C4D-C5D	3.72	1.60	1.53
25	b	602	CLA	C1D-ND	3.72	1.42	1.37
25	c	510	CLA	C1D-ND	3.72	1.42	1.37
30	t	102	SQD	O47-C7	3.69	1.44	1.34
25	c	503	CLA	MG-NA	3.69	2.15	2.06
30	a	613	SQD	O47-C45	-3.68	1.37	1.46
27	B	617	BCR	C1-C6	-3.68	1.48	1.53
25	C	507	CLA	C1D-ND	3.67	1.42	1.37
25	C	502	CLA	C1D-ND	3.67	1.42	1.37
25	c	507	CLA	C1D-ND	3.67	1.42	1.37
25	C	503	CLA	C1D-ND	3.66	1.42	1.37
25	C	501	CLA	C1D-ND	3.65	1.42	1.37
25	B	602	CLA	CHC-C1C	3.65	1.44	1.35
30	f	101	SQD	O47-C7	3.64	1.44	1.34
30	A	614	SQD	O47-C7	3.64	1.44	1.34
34	D	413	LHG	O7-C5	-3.64	1.37	1.46
35	e	101	HEM	C3C-C2C	-3.63	1.35	1.40
25	b	605	CLA	C4D-ND	-3.63	1.32	1.37
25	B	611	CLA	C1D-ND	3.63	1.42	1.37
25	d	404	CLA	C1D-ND	3.62	1.42	1.37
25	C	509	CLA	C1D-ND	3.62	1.42	1.37
25	B	612	CLA	C4D-ND	-3.62	1.32	1.37
25	a	606	CLA	CHC-C1C	3.62	1.44	1.35
25	b	615	CLA	C1D-ND	3.61	1.42	1.37
25	b	608	CLA	CHC-C1C	3.61	1.44	1.35
25	B	608	CLA	MG-NA	3.60	2.14	2.06
25	b	605	CLA	C1D-ND	3.60	1.42	1.37
25	c	510	CLA	MG-NA	3.58	2.14	2.06
25	c	512	CLA	C1D-ND	3.58	1.42	1.37
25	b	604	CLA	C1D-ND	3.58	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	614	CLA	MG-NC	3.58	2.14	2.06
27	C	515	BCR	C1-C6	-3.58	1.48	1.53
29	A	612	LMG	C4-C3	3.57	1.61	1.52
25	b	608	CLA	C1D-ND	3.57	1.42	1.37
25	c	505	CLA	CHC-C1C	3.57	1.44	1.35
25	c	509	CLA	C4D-ND	-3.57	1.32	1.37
25	C	501	CLA	CHC-C1C	3.56	1.44	1.35
27	C	514	BCR	C1-C6	-3.56	1.48	1.53
35	e	101	HEM	C3C-CAC	3.55	1.55	1.47
25	B	604	CLA	MG-NC	3.54	2.14	2.06
25	D	404	CLA	C1D-ND	3.54	1.42	1.37
25	C	504	CLA	CHC-C1C	3.53	1.44	1.35
27	D	406	BCR	C30-C25	-3.53	1.48	1.53
25	c	502	CLA	C1D-ND	3.52	1.42	1.37
25	C	510	CLA	CHC-C1C	3.51	1.44	1.35
25	c	509	CLA	C1D-ND	3.50	1.42	1.37
30	A	613	SQD	O47-C7	3.50	1.44	1.34
25	A	606	CLA	CHC-C1C	3.49	1.43	1.35
30	L	101	SQD	O47-C7	3.49	1.44	1.34
25	A	607	CLA	C4D-ND	-3.49	1.32	1.37
25	B	605	CLA	C1D-ND	3.49	1.42	1.37
25	B	612	CLA	C1D-ND	3.48	1.42	1.37
25	B	613	CLA	MG-ND	-3.47	1.98	2.05
25	c	505	CLA	C4D-ND	-3.47	1.32	1.37
25	d	404	CLA	MG-ND	-3.46	1.98	2.05
25	b	606	CLA	C1D-ND	3.46	1.42	1.37
25	A	607	CLA	CHC-C1C	3.46	1.43	1.35
25	C	512	CLA	C1D-ND	3.46	1.42	1.37
25	b	601	CLA	CHC-C1C	3.43	1.43	1.35
25	B	611	CLA	CHC-C1C	3.43	1.43	1.35
25	B	605	CLA	C4D-ND	-3.43	1.33	1.37
25	B	613	CLA	C4D-ND	-3.43	1.33	1.37
27	c	515	BCR	C1-C6	-3.43	1.49	1.53
25	B	612	CLA	MG-ND	-3.42	1.99	2.05
25	B	602	CLA	MG-NA	3.40	2.14	2.06
25	b	610	CLA	C4D-ND	-3.40	1.33	1.37
25	C	512	CLA	CHC-C1C	3.38	1.43	1.35
27	H	101	BCR	C30-C25	-3.38	1.49	1.53
25	c	511	CLA	CHC-C1C	3.38	1.43	1.35
30	t	102	SQD	C24-C23	3.38	1.60	1.50
27	b	618	BCR	C30-C25	-3.37	1.49	1.53
30	D	409	SQD	C24-C23	3.37	1.60	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	508	CLA	CHC-C1C	3.36	1.43	1.35
25	b	616	CLA	C4D-ND	-3.36	1.33	1.37
25	c	506	CLA	MG-NA	3.36	2.14	2.06
25	D	403	CLA	CHC-C1C	3.35	1.43	1.35
25	c	513	CLA	CHC-C1C	3.35	1.43	1.35
25	b	604	CLA	C4D-ND	-3.35	1.33	1.37
25	B	610	CLA	CHC-C1C	3.35	1.43	1.35
25	a	607	CLA	C1D-ND	3.35	1.41	1.37
27	K	102	BCR	C30-C25	-3.34	1.49	1.53
31	C	516	DGD	C4E-C3E	3.34	1.60	1.52
27	B	618	BCR	C30-C25	-3.33	1.49	1.53
25	C	503	CLA	MG-NC	3.33	2.14	2.06
25	b	614	CLA	CHC-C1C	3.33	1.43	1.35
28	d	406	PL9	C3-C4	-3.32	1.44	1.49
25	a	607	CLA	CHC-C1C	3.32	1.43	1.35
25	c	501	CLA	C4D-ND	-3.32	1.33	1.37
25	d	404	CLA	C4D-ND	-3.32	1.33	1.37
25	B	615	CLA	CHC-C1C	3.31	1.43	1.35
27	h	101	BCR	C30-C25	-3.31	1.49	1.53
34	D	411	LHG	P-O6	3.31	1.72	1.59
25	c	512	CLA	CHC-C1C	3.30	1.43	1.35
25	C	503	CLA	CHC-C1C	3.30	1.43	1.35
25	C	509	CLA	C4D-ND	-3.30	1.33	1.37
25	B	601	CLA	CHC-C1C	3.29	1.43	1.35
25	B	604	CLA	CHC-C1C	3.29	1.43	1.35
25	D	405	CLA	C4D-ND	-3.29	1.33	1.37
25	B	615	CLA	C1D-ND	3.28	1.41	1.37
25	A	609	CLA	C4D-ND	-3.27	1.33	1.37
27	A	610	BCR	C1-C6	-3.25	1.49	1.53
25	a	612	CLA	CHC-C1C	3.25	1.43	1.35
25	c	513	CLA	C4D-ND	-3.24	1.33	1.37
25	b	604	CLA	CHC-C1C	3.24	1.43	1.35
30	A	613	SQD	O47-C45	-3.23	1.38	1.46
25	B	610	CLA	C1D-ND	3.22	1.41	1.37
25	B	616	CLA	C4D-ND	-3.22	1.33	1.37
27	c	514	BCR	C1-C6	-3.21	1.49	1.53
25	c	509	CLA	CHC-C1C	3.21	1.43	1.35
25	D	404	CLA	C4D-ND	-3.20	1.33	1.37
35	F	101	HEM	C3C-CAC	3.19	1.54	1.47
25	B	605	CLA	CHC-C1C	3.19	1.43	1.35
25	d	404	CLA	CHC-C1C	3.18	1.43	1.35
25	B	615	CLA	C4D-ND	-3.18	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	503	CLA	C4D-ND	-3.18	1.33	1.37
25	B	614	CLA	CHC-C1C	3.18	1.43	1.35
30	B	622	SQD	O47-C45	-3.17	1.38	1.46
25	c	506	CLA	CHC-C1C	3.15	1.43	1.35
25	b	611	CLA	CHC-C1C	3.15	1.43	1.35
25	B	614	CLA	MG-NA	3.15	2.13	2.06
30	f	101	SQD	C24-C23	3.15	1.59	1.50
27	K	101	BCR	C30-C25	-3.15	1.49	1.53
25	C	508	CLA	C4D-ND	-3.14	1.33	1.37
25	b	606	CLA	CHC-C1C	3.14	1.43	1.35
25	B	608	CLA	C4D-ND	-3.14	1.33	1.37
30	A	614	SQD	C24-C23	3.14	1.59	1.50
25	B	609	CLA	C1D-ND	3.14	1.41	1.37
30	L	101	SQD	O5-C1	3.13	1.49	1.41
27	k	101	BCR	C1-C6	-3.12	1.49	1.53
25	C	505	CLA	C1D-ND	3.12	1.41	1.37
29	m	101	LMG	C4-C3	3.12	1.60	1.52
25	B	603	CLA	C4D-ND	-3.12	1.33	1.37
25	C	502	CLA	C4D-ND	-3.12	1.33	1.37
27	C	514	BCR	C30-C25	-3.12	1.49	1.53
25	D	403	CLA	C4D-ND	-3.11	1.33	1.37
25	a	609	CLA	C4D-ND	-3.11	1.33	1.37
25	c	503	CLA	CHC-C1C	3.10	1.42	1.35
25	C	511	CLA	CHC-C1C	3.10	1.42	1.35
25	C	510	CLA	C4D-ND	-3.10	1.33	1.37
30	a	613	SQD	O47-C7	3.10	1.43	1.34
25	B	605	CLA	MG-ND	-3.10	1.99	2.05
25	C	504	CLA	C1D-ND	3.09	1.41	1.37
28	a	611	PL9	C53-C6	-3.09	1.44	1.50
25	b	612	CLA	C4D-ND	-3.09	1.33	1.37
25	C	508	CLA	CHC-C1C	3.09	1.42	1.35
34	l	101	LHG	O7-C5	-3.08	1.38	1.46
27	D	406	BCR	C1-C6	-3.08	1.49	1.53
30	f	101	SQD	O47-C45	-3.08	1.38	1.46
25	C	509	CLA	CHC-C1C	3.08	1.42	1.35
25	c	504	CLA	CHC-C1C	3.08	1.42	1.35
25	c	502	CLA	CHC-C1C	3.07	1.42	1.35
25	b	608	CLA	C4D-ND	-3.07	1.33	1.37
25	c	507	CLA	C4D-ND	-3.07	1.33	1.37
25	C	511	CLA	C4D-ND	-3.07	1.33	1.37
25	B	603	CLA	CHC-C1C	3.07	1.42	1.35
25	C	507	CLA	C4D-ND	-3.07	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	613	CLA	CHC-C1C	3.07	1.42	1.35
25	A	607	CLA	MG-ND	3.07	2.11	2.05
25	b	612	CLA	CHC-C1C	3.07	1.42	1.35
25	c	507	CLA	CHC-C1C	3.07	1.42	1.35
27	k	102	BCR	C1-C6	-3.05	1.49	1.53
30	a	613	SQD	O5-C1	3.05	1.49	1.41
25	C	507	CLA	CHC-C1C	3.05	1.42	1.35
25	C	506	CLA	CHC-C1C	3.04	1.42	1.35
25	b	607	CLA	C4D-ND	-3.04	1.33	1.37
25	C	510	CLA	MG-NA	3.04	2.13	2.06
31	c	516	DGD	O2G-C2G	-3.03	1.39	1.46
25	C	510	CLA	C1D-ND	3.02	1.41	1.37
25	b	607	CLA	CHC-C1C	3.01	1.42	1.35
31	a	614	DGD	O1G-C1A	3.01	1.42	1.33
25	b	606	CLA	C4D-ND	-3.01	1.33	1.37
25	a	609	CLA	MG-NC	-3.01	1.99	2.06
25	C	512	CLA	C4D-ND	-3.00	1.33	1.37
25	C	513	CLA	CHC-C1C	3.00	1.42	1.35
30	A	613	SQD	C24-C23	2.99	1.59	1.50
27	d	405	BCR	C1-C6	-2.98	1.49	1.53
25	c	503	CLA	C4D-ND	-2.98	1.33	1.37
25	B	607	CLA	CHC-C1C	2.97	1.42	1.35
25	b	615	CLA	CHC-C1C	2.97	1.42	1.35
25	c	502	CLA	C4D-ND	-2.97	1.33	1.37
25	B	606	CLA	C1D-ND	2.97	1.41	1.37
25	B	610	CLA	C3B-C2B	-2.96	1.36	1.40
25	B	612	CLA	CHC-C1C	2.96	1.42	1.35
31	H	102	DGD	O5D-C1E	2.96	1.45	1.40
25	A	609	CLA	CHC-C1C	2.95	1.42	1.35
25	b	604	CLA	MG-NA	2.95	2.13	2.06
25	c	510	CLA	C4D-ND	-2.95	1.33	1.37
25	c	512	CLA	C4D-ND	-2.95	1.33	1.37
25	b	603	CLA	CHC-C1C	2.95	1.42	1.35
25	b	614	CLA	C4D-ND	-2.94	1.33	1.37
25	d	403	CLA	CHC-C1C	2.94	1.42	1.35
25	C	502	CLA	CHC-C1C	2.93	1.42	1.35
25	B	608	CLA	C1D-ND	2.93	1.41	1.37
25	b	613	CLA	CHC-C1C	2.93	1.42	1.35
30	a	613	SQD	C24-C23	2.92	1.59	1.50
25	B	614	CLA	C4D-ND	-2.91	1.33	1.37
25	c	510	CLA	CMB-C2B	-2.91	1.45	1.51
29	M	101	LMG	C4-C5	2.90	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	t	102	SQD	O47-C45	-2.90	1.39	1.46
30	B	622	SQD	C24-C23	2.90	1.59	1.50
25	c	508	CLA	MG-NA	2.90	2.13	2.06
25	b	610	CLA	CHC-C1C	2.89	1.42	1.35
25	b	603	CLA	MG-ND	-2.89	2.00	2.05
25	B	608	CLA	CHC-C1C	2.89	1.42	1.35
29	c	521	LMG	C3-C2	2.88	1.59	1.52
27	B	619	BCR	C1-C6	-2.87	1.49	1.53
25	c	501	CLA	CHC-C1C	2.87	1.42	1.35
30	L	101	SQD	C24-C23	2.86	1.59	1.50
25	A	607	CLA	C1D-ND	2.86	1.41	1.37
27	b	619	BCR	C1-C6	-2.85	1.49	1.53
30	B	622	SQD	O5-C1	2.85	1.49	1.41
25	c	504	CLA	C4D-ND	-2.85	1.33	1.37
25	B	616	CLA	CHC-C1C	2.84	1.42	1.35
25	C	508	CLA	C1D-ND	2.84	1.41	1.37
25	B	611	CLA	MG-NA	2.84	2.13	2.06
25	C	501	CLA	C4D-ND	-2.84	1.33	1.37
25	D	404	CLA	CHC-C1C	2.84	1.42	1.35
25	b	604	CLA	MG-NC	2.83	2.13	2.06
25	B	603	CLA	C1D-ND	2.83	1.41	1.37
25	c	505	CLA	CMB-C2B	-2.82	1.45	1.51
25	B	606	CLA	CHC-C1C	2.82	1.42	1.35
27	k	101	BCR	C30-C25	-2.81	1.49	1.53
27	b	618	BCR	C1-C6	-2.81	1.49	1.53
25	c	510	CLA	CHC-C1C	2.81	1.42	1.35
25	b	605	CLA	CHC-C1C	2.81	1.42	1.35
26	d	402	PHO	CAC-C3C	-2.81	1.47	1.52
25	C	507	CLA	MG-NA	2.80	2.12	2.06
30	f	101	SQD	O5-C1	2.79	1.49	1.41
27	C	515	BCR	C30-C25	-2.78	1.49	1.53
27	d	405	BCR	C30-C25	-2.77	1.50	1.53
31	C	517	DGD	O6D-C5D	-2.77	1.37	1.44
26	a	608	PHO	CAC-C3C	-2.77	1.47	1.52
25	B	607	CLA	C4D-ND	-2.77	1.33	1.37
29	B	621	LMG	O8-C28	2.76	1.40	1.30
27	t	101	BCR	C1-C6	-2.76	1.50	1.53
25	b	611	CLA	MG-NA	2.75	2.12	2.06
25	c	504	CLA	C1D-ND	2.75	1.41	1.37
34	d	407	LHG	C24-C23	2.75	1.58	1.50
25	b	613	CLA	MG-NC	2.74	2.12	2.06
25	b	609	CLA	C4D-ND	-2.74	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	604	CLA	C4D-ND	-2.73	1.33	1.37
25	c	511	CLA	C4D-ND	-2.73	1.33	1.37
25	C	506	CLA	C4D-ND	-2.71	1.34	1.37
31	c	517	DGD	O3D-C3D	-2.71	1.36	1.43
30	L	101	SQD	O47-C45	-2.71	1.39	1.46
31	H	102	DGD	C6D-C5D	2.70	1.60	1.51
25	d	403	CLA	C4D-ND	-2.70	1.34	1.37
25	B	609	CLA	MG-NA	2.70	2.12	2.06
25	c	502	CLA	MG-NA	2.70	2.12	2.06
25	a	612	CLA	C4D-ND	-2.70	1.34	1.37
34	d	407	LHG	O7-C5	-2.70	1.39	1.46
25	b	606	CLA	MG-ND	2.69	2.11	2.05
25	a	606	CLA	C4D-ND	-2.68	1.34	1.37
31	A	615	DGD	C3D-C2D	2.68	1.59	1.52
25	B	609	CLA	CHC-C1C	2.67	1.41	1.35
34	l	101	LHG	O8-C23	2.67	1.41	1.33
25	c	505	CLA	C1D-ND	2.67	1.41	1.37
29	d	411	LMG	O7-C8	-2.67	1.39	1.46
25	a	606	CLA	MG-NC	2.66	2.12	2.06
25	b	603	CLA	CMB-C2B	-2.66	1.46	1.51
25	B	616	CLA	MG-NA	2.66	2.12	2.06
30	A	614	SQD	C46-C45	2.66	1.56	1.50
27	K	101	BCR	C1-C6	-2.65	1.50	1.53
25	C	513	CLA	C4D-ND	-2.65	1.34	1.37
26	D	402	PHO	CAC-C3C	-2.64	1.47	1.52
35	F	101	HEM	CAB-C3B	2.64	1.54	1.47
25	c	506	CLA	C4D-ND	-2.64	1.34	1.37
25	b	616	CLA	CHC-C1C	2.64	1.41	1.35
35	e	101	HEM	FE-NB	2.63	2.09	1.96
25	B	616	CLA	MG-NC	2.63	2.12	2.06
29	c	519	LMG	C1-C2	2.63	1.60	1.52
25	b	605	CLA	MG-NA	2.62	2.12	2.06
25	B	602	CLA	CMB-C2B	-2.62	1.46	1.51
25	c	506	CLA	MG-ND	-2.61	2.00	2.05
25	b	611	CLA	C4D-ND	-2.61	1.34	1.37
25	b	609	CLA	CHC-C1C	2.61	1.41	1.35
25	B	609	CLA	C4D-ND	-2.61	1.34	1.37
27	k	102	BCR	C30-C25	-2.61	1.50	1.53
25	b	611	CLA	MG-NC	2.61	2.12	2.06
31	C	516	DGD	O2G-C2G	-2.61	1.40	1.46
25	a	609	CLA	CHC-C1C	2.60	1.41	1.35
25	C	504	CLA	CMB-C2B	-2.60	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	507	CLA	CMB-C2B	-2.60	1.46	1.51
25	b	607	CLA	CMB-C2B	-2.60	1.46	1.51
25	B	612	CLA	MG-NA	2.59	2.12	2.06
34	E	101	LHG	P-O6	2.59	1.69	1.59
25	B	615	CLA	CMB-C2B	-2.59	1.46	1.51
31	A	615	DGD	C4D-C3D	2.58	1.58	1.52
25	b	609	CLA	MG-NA	2.58	2.12	2.06
27	b	617	BCR	C30-C25	-2.57	1.50	1.53
25	B	607	CLA	MG-ND	-2.57	2.00	2.05
25	b	609	CLA	CMB-C2B	-2.57	1.46	1.51
27	c	514	BCR	C30-C25	-2.56	1.50	1.53
25	b	602	CLA	CHC-C1C	2.55	1.41	1.35
27	a	610	BCR	C1-C6	-2.55	1.50	1.53
25	d	403	CLA	CMB-C2B	-2.55	1.46	1.51
31	C	517	DGD	O1G-C1G	-2.55	1.39	1.45
29	c	521	LMG	C1-C2	2.55	1.59	1.52
25	b	616	CLA	CMB-C2B	-2.55	1.46	1.51
30	A	613	SQD	O5-C1	2.54	1.48	1.41
35	e	101	HEM	CAB-C3B	2.54	1.54	1.47
31	C	516	DGD	O2E-C2E	-2.54	1.37	1.43
28	d	406	PL9	C6-C1	-2.54	1.44	1.48
25	c	507	CLA	CMB-C2B	-2.54	1.46	1.51
25	b	612	CLA	CMB-C2B	-2.53	1.46	1.51
31	c	516	DGD	O4D-C4D	-2.53	1.37	1.43
25	C	512	CLA	CMB-C2B	-2.53	1.46	1.51
25	b	611	CLA	CMB-C2B	-2.52	1.46	1.51
27	b	617	BCR	C1-C6	-2.52	1.50	1.53
29	A	612	LMG	C4-C5	2.52	1.58	1.53
25	b	603	CLA	C4D-ND	-2.52	1.34	1.37
29	c	519	LMG	C4-C5	2.51	1.58	1.53
27	b	619	BCR	C30-C25	-2.49	1.50	1.53
34	D	410	LHG	O7-C5	-2.49	1.40	1.46
25	C	506	CLA	MG-ND	-2.49	2.00	2.05
25	C	511	CLA	CMB-C2B	-2.49	1.46	1.51
25	b	601	CLA	C4D-ND	-2.49	1.34	1.37
25	B	607	CLA	CMB-C2B	-2.48	1.46	1.51
25	A	607	CLA	CMB-C2B	-2.48	1.46	1.51
25	a	606	CLA	CMB-C2B	-2.48	1.46	1.51
25	c	513	CLA	CMB-C2B	-2.48	1.46	1.51
27	t	101	BCR	C30-C25	-2.48	1.50	1.53
25	C	507	CLA	MG-NC	2.48	2.12	2.06
25	B	605	CLA	MG-NA	2.47	2.12	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	D	407	PL9	C52-C5	-2.47	1.45	1.50
25	b	615	CLA	C4D-ND	-2.47	1.34	1.37
25	B	601	CLA	CMB-C2B	-2.46	1.46	1.51
25	c	502	CLA	MG-ND	2.45	2.10	2.05
28	D	407	PL9	C3-C4	-2.45	1.45	1.49
34	e	102	LHG	P-O6	2.45	1.69	1.59
25	a	612	CLA	CMB-C2B	-2.45	1.46	1.51
25	B	606	CLA	C4D-ND	-2.44	1.34	1.37
25	b	608	CLA	CMB-C2B	-2.42	1.46	1.51
30	D	409	SQD	O9-S	2.42	1.52	1.45
25	B	602	CLA	C4D-ND	-2.42	1.34	1.37
25	C	503	CLA	CMB-C2B	-2.42	1.46	1.51
29	m	101	LMG	O1-C7	-2.42	1.39	1.43
25	b	613	CLA	CMB-C2B	-2.41	1.46	1.51
25	C	502	CLA	C3B-C2B	-2.41	1.37	1.40
31	c	516	DGD	C3G-C2G	2.41	1.58	1.50
25	B	603	CLA	CMB-C2B	-2.41	1.46	1.51
31	H	102	DGD	O2G-C1B	2.41	1.41	1.34
30	D	409	SQD	O5-C1	2.41	1.48	1.41
31	c	517	DGD	C3E-C2E	2.41	1.58	1.52
31	c	516	DGD	O1G-C1G	-2.40	1.39	1.45
25	D	405	CLA	CHC-C1C	2.40	1.41	1.35
25	B	610	CLA	CMB-C2B	-2.40	1.46	1.51
25	C	509	CLA	MG-NC	-2.40	2.00	2.06
30	B	622	SQD	O9-S	2.40	1.52	1.45
25	c	508	CLA	CMB-C2B	-2.39	1.46	1.51
25	b	615	CLA	CMB-C2B	-2.39	1.46	1.51
31	A	615	DGD	C1E-C2E	2.39	1.59	1.52
25	c	504	CLA	CMB-C2B	-2.39	1.46	1.51
26	D	402	PHO	CMC-C2C	-2.39	1.45	1.51
25	c	512	CLA	CMB-C2B	-2.39	1.46	1.51
26	D	402	PHO	CMD-C2D	-2.38	1.45	1.51
30	A	613	SQD	C46-C45	2.38	1.58	1.50
29	B	621	LMG	O7-C10	2.37	1.38	1.30
34	d	409	LHG	P-O6	2.36	1.68	1.59
25	b	602	CLA	CMB-C2B	-2.36	1.46	1.51
25	b	615	CLA	CMD-C2D	-2.36	1.45	1.50
25	c	501	CLA	CMB-C2B	-2.36	1.46	1.51
26	A	608	PHO	CMC-C2C	-2.36	1.45	1.51
34	D	411	LHG	O7-C7	2.36	1.41	1.34
25	B	614	CLA	CMB-C2B	-2.35	1.46	1.51
25	C	510	CLA	CMB-C2B	-2.35	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	513	CLA	CMB-C2B	-2.35	1.46	1.51
29	D	412	LMG	C7-C8	2.35	1.56	1.51
25	c	502	CLA	CMC-C2C	-2.34	1.45	1.50
25	c	502	CLA	CMD-C2D	-2.34	1.45	1.50
25	d	404	CLA	MG-NA	2.34	2.11	2.06
25	B	611	CLA	C4D-ND	-2.33	1.34	1.37
25	b	604	CLA	MG-ND	-2.33	2.01	2.05
25	B	610	CLA	C1D-C2D	2.33	1.49	1.45
25	a	607	CLA	CMB-C2B	-2.33	1.46	1.51
25	b	610	CLA	C3B-C2B	-2.33	1.37	1.40
31	a	614	DGD	O2G-C2G	-2.33	1.40	1.46
30	L	101	SQD	C46-C45	2.32	1.57	1.50
28	D	407	PL9	C6-C1	-2.32	1.44	1.48
25	C	502	CLA	CMB-C2B	-2.32	1.46	1.51
25	C	505	CLA	C4D-ND	-2.32	1.34	1.37
25	c	503	CLA	CMB-C2B	-2.32	1.46	1.51
29	c	521	LMG	C4-C3	2.31	1.58	1.52
30	L	101	SQD	O9-S	2.31	1.51	1.45
25	C	508	CLA	CMB-C2B	-2.31	1.46	1.51
25	B	606	CLA	C3B-C2B	-2.31	1.37	1.40
25	b	614	CLA	CMB-C2B	-2.31	1.46	1.51
31	c	517	DGD	O2G-C2G	-2.30	1.40	1.46
25	B	603	CLA	MG-NC	-2.30	2.00	2.06
31	c	516	DGD	C4D-C3D	2.30	1.58	1.52
27	B	618	BCR	C1-C6	-2.30	1.50	1.53
27	T	101	BCR	C1-C6	-2.30	1.50	1.53
27	H	101	BCR	C1-C6	-2.30	1.50	1.53
30	f	101	SQD	O7-S	2.29	1.51	1.45
25	b	603	CLA	CMD-C2D	-2.29	1.45	1.50
29	m	101	LMG	O8-C9	-2.29	1.39	1.45
25	D	403	CLA	C1D-C2D	2.29	1.49	1.45
29	C	519	LMG	O7-C8	-2.28	1.40	1.46
25	D	405	CLA	C4B-CHC	-2.28	1.34	1.41
31	h	102	DGD	O1G-C1G	-2.28	1.40	1.45
29	M	101	LMG	C9-C8	2.28	1.57	1.50
25	c	502	CLA	CMB-C2B	-2.27	1.46	1.51
25	c	509	CLA	CMB-C2B	-2.27	1.46	1.51
25	b	604	CLA	CMB-C2B	-2.27	1.46	1.51
30	L	101	SQD	C6-S	2.27	1.85	1.77
25	B	606	CLA	CMB-C2B	-2.26	1.46	1.51
25	C	502	CLA	MG-NC	-2.26	2.00	2.06
29	A	612	LMG	C1-C2	2.26	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	c	518	DGD	O2E-C2E	-2.25	1.37	1.43
25	b	613	CLA	C4D-ND	-2.25	1.34	1.37
25	d	404	CLA	CMB-C2B	-2.25	1.47	1.51
31	C	518	DGD	C1G-C2G	2.25	1.57	1.50
25	D	405	CLA	CMD-C2D	-2.24	1.46	1.50
25	b	601	CLA	CMB-C2B	-2.24	1.47	1.51
25	b	614	CLA	MG-NC	2.24	2.11	2.06
26	A	608	PHO	C3B-C2B	-2.24	1.37	1.40
31	c	517	DGD	C1E-C2E	2.24	1.58	1.52
25	B	612	CLA	CMB-C2B	-2.24	1.47	1.51
31	A	615	DGD	C3E-C2E	2.24	1.58	1.52
34	E	101	LHG	O7-C5	-2.23	1.41	1.46
29	C	519	LMG	C1-C2	2.23	1.58	1.52
31	c	516	DGD	C4E-C3E	2.22	1.58	1.52
25	B	604	CLA	CMB-C2B	-2.22	1.47	1.51
26	A	608	PHO	CMD-C2D	-2.22	1.46	1.51
25	a	612	CLA	MG-NC	-2.22	2.01	2.06
29	M	101	LMG	O7-C8	-2.22	1.41	1.46
25	C	510	CLA	CMD-C2D	-2.22	1.46	1.50
25	B	616	CLA	CMC-C2C	-2.22	1.46	1.50
25	b	612	CLA	CMC-C2C	-2.22	1.46	1.50
35	e	101	HEM	C3B-C2B	-2.22	1.32	1.37
25	C	509	CLA	CMD-C2D	-2.21	1.46	1.50
27	a	610	BCR	C30-C25	-2.21	1.50	1.53
25	b	608	CLA	MG-ND	-2.21	2.01	2.05
25	D	404	CLA	CMD-C2D	-2.21	1.46	1.50
31	C	517	DGD	C1G-C2G	2.21	1.57	1.50
25	C	501	CLA	MG-ND	2.21	2.10	2.05
26	d	402	PHO	CMC-C2C	-2.21	1.46	1.51
25	a	609	CLA	CMC-C2C	-2.20	1.46	1.50
35	e	101	HEM	CAA-C2A	2.20	1.55	1.52
25	D	405	CLA	C3B-CAB	-2.20	1.43	1.47
31	C	518	DGD	O3G-C3G	-2.20	1.39	1.43
29	c	519	LMG	C7-C8	2.20	1.57	1.50
25	B	615	CLA	C3B-CAB	-2.20	1.43	1.47
25	b	609	CLA	MG-NC	2.20	2.11	2.06
31	c	518	DGD	O2G-C2G	-2.20	1.41	1.46
25	C	506	CLA	CMB-C2B	-2.20	1.47	1.51
30	a	613	SQD	O7-S	2.20	1.51	1.45
25	D	404	CLA	CMB-C2B	-2.19	1.47	1.51
25	B	611	CLA	CMD-C2D	-2.19	1.46	1.50
25	b	602	CLA	C4B-CHC	-2.19	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	602	CLA	MG-ND	2.19	2.10	2.05
25	A	606	CLA	CMD-C2D	-2.19	1.46	1.50
30	a	613	SQD	C6-S	2.18	1.85	1.77
29	c	521	LMG	O7-C8	-2.18	1.41	1.46
25	C	505	CLA	CMB-C2B	-2.18	1.47	1.51
25	B	606	CLA	C3B-CAB	-2.18	1.43	1.47
29	M	101	LMG	C4-C3	2.18	1.57	1.52
25	c	513	CLA	MG-NC	2.18	2.11	2.06
30	f	101	SQD	O9-S	2.18	1.51	1.45
27	T	101	BCR	C30-C25	-2.18	1.50	1.53
26	A	608	PHO	CAC-C3C	-2.18	1.48	1.52
25	C	506	CLA	C3B-C2B	-2.17	1.37	1.40
29	d	411	LMG	C4-C5	2.17	1.57	1.53
29	c	523	LMG	C1-C2	2.17	1.58	1.52
30	f	101	SQD	O5-C5	2.17	1.49	1.44
31	C	517	DGD	C4D-C5D	2.17	1.57	1.53
25	B	613	CLA	CMB-C2B	-2.17	1.47	1.51
25	B	614	CLA	C3B-CAB	-2.17	1.43	1.47
31	C	517	DGD	O2G-C2G	-2.17	1.41	1.46
25	C	509	CLA	CMB-C2B	-2.17	1.47	1.51
25	a	606	CLA	C3D-C4D	2.16	1.49	1.44
25	c	507	CLA	C3B-C2B	-2.16	1.37	1.40
25	D	405	CLA	CMB-C2B	-2.15	1.47	1.51
31	h	102	DGD	O2G-C1B	2.15	1.40	1.34
25	B	608	CLA	CMB-C2B	-2.15	1.47	1.51
25	b	607	CLA	C3B-CAB	-2.15	1.43	1.47
29	c	519	LMG	C4-C3	2.15	1.57	1.52
25	b	616	CLA	CMC-C2C	-2.14	1.46	1.50
25	A	609	CLA	CMD-C2D	-2.14	1.46	1.50
25	C	502	CLA	MG-ND	-2.14	2.01	2.05
25	C	504	CLA	MG-ND	-2.14	2.01	2.05
31	C	517	DGD	C4D-C3D	2.14	1.57	1.52
25	B	613	CLA	CMC-C2C	-2.14	1.46	1.50
30	B	622	SQD	O7-S	2.13	1.51	1.45
25	b	602	CLA	C4D-ND	-2.13	1.34	1.37
25	c	507	CLA	C3B-CAB	-2.13	1.43	1.47
25	b	610	CLA	CMD-C2D	-2.13	1.46	1.50
25	A	607	CLA	C3C-C2C	2.13	1.41	1.36
25	B	615	CLA	C3B-C2B	-2.13	1.37	1.40
26	D	402	PHO	CMB-C2B	-2.12	1.46	1.51
25	c	511	CLA	CMB-C2B	-2.12	1.47	1.51
30	A	613	SQD	C6-S	2.12	1.85	1.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	H	102	DGD	C1E-C2E	2.12	1.58	1.52
25	B	609	CLA	CMD-C2D	-2.11	1.46	1.50
25	b	614	CLA	C1D-C2D	2.11	1.49	1.45
25	a	607	CLA	CMC-C2C	-2.11	1.46	1.50
30	A	613	SQD	O9-S	2.11	1.51	1.45
25	c	512	CLA	C1D-C2D	2.11	1.49	1.45
25	C	512	CLA	CMD-C2D	-2.10	1.46	1.50
29	b	622	LMG	C3-C2	2.10	1.57	1.52
25	C	504	CLA	CMD-C2D	-2.10	1.46	1.50
25	D	405	CLA	CMC-C2C	-2.10	1.46	1.50
25	a	609	CLA	C4B-CHC	-2.10	1.35	1.41
25	b	607	CLA	CMD-C2D	-2.10	1.46	1.50
30	B	622	SQD	C8-C7	2.10	1.56	1.50
31	c	516	DGD	C3D-C2D	2.10	1.57	1.52
25	C	504	CLA	O2D-CGD	2.10	1.38	1.33
27	b	618	BCR	C38-C26	-2.10	1.47	1.50
25	c	504	CLA	O2D-CGD	2.10	1.38	1.33
25	B	612	CLA	CMD-C2D	-2.09	1.46	1.50
30	L	101	SQD	C44-C45	2.09	1.57	1.50
27	c	515	BCR	C30-C25	-2.09	1.50	1.53
25	B	610	CLA	C4D-ND	-2.09	1.34	1.37
25	a	609	CLA	CMB-C2B	-2.09	1.47	1.51
25	C	503	CLA	CMD-C2D	-2.09	1.46	1.50
27	h	101	BCR	C1-C6	-2.09	1.50	1.53
25	c	510	CLA	CMC-C2C	-2.09	1.46	1.50
25	C	501	CLA	CMC-C2C	-2.09	1.46	1.50
25	c	505	CLA	C3B-CAB	-2.09	1.43	1.47
25	c	507	CLA	C3D-C4D	2.09	1.48	1.44
25	B	601	CLA	CMC-C2C	-2.09	1.46	1.50
25	a	607	CLA	MG-NC	2.09	2.11	2.06
27	B	617	BCR	C33-C5	-2.08	1.47	1.50
25	A	609	CLA	CMB-C2B	-2.08	1.47	1.51
27	k	102	BCR	C38-C26	-2.08	1.47	1.50
25	C	503	CLA	CMC-C2C	-2.07	1.46	1.50
25	b	602	CLA	MG-NC	-2.07	2.01	2.06
25	b	614	CLA	CMC-C2C	-2.07	1.46	1.50
25	C	501	CLA	CMB-C2B	-2.07	1.47	1.51
25	c	501	CLA	CMC-C2C	-2.07	1.46	1.50
26	a	608	PHO	O2D-CGD	2.07	1.38	1.33
30	L	101	SQD	O5-C5	2.07	1.49	1.44
31	c	517	DGD	O3G-C3G	-2.07	1.40	1.43
31	c	518	DGD	O4D-C4D	-2.07	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	601	CLA	C3D-C4D	2.07	1.48	1.44
30	D	409	SQD	C6-S	2.06	1.84	1.77
30	t	102	SQD	C44-C45	2.06	1.56	1.51
25	c	506	CLA	CMB-C2B	-2.06	1.47	1.51
25	b	613	CLA	C3C-C2C	2.06	1.41	1.36
25	B	609	CLA	CMB-C2B	-2.06	1.47	1.51
25	c	512	CLA	C3D-C4D	2.06	1.48	1.44
25	c	510	CLA	CMD-C2D	-2.06	1.46	1.50
25	C	501	CLA	C1D-C2D	2.05	1.49	1.45
25	B	604	CLA	C3C-C2C	2.05	1.41	1.36
25	D	405	CLA	C3B-C2B	-2.05	1.37	1.40
27	A	610	BCR	C33-C5	-2.05	1.47	1.50
25	c	508	CLA	CMC-C2C	-2.05	1.46	1.50
25	B	613	CLA	C3B-CAB	-2.05	1.43	1.47
25	C	510	CLA	O2A-CGA	2.05	1.39	1.33
25	B	608	CLA	CMD-C2D	-2.05	1.46	1.50
25	B	608	CLA	C3C-C2C	2.04	1.41	1.36
26	d	402	PHO	CMD-C2D	-2.04	1.46	1.51
29	D	408	LMG	O7-C8	-2.04	1.41	1.46
25	b	614	CLA	MG-NA	2.04	2.11	2.06
25	B	609	CLA	O2D-CGD	2.04	1.38	1.33
26	D	402	PHO	C3D-C2D	2.04	1.43	1.39
25	B	605	CLA	C3B-C2B	-2.04	1.37	1.40
34	D	413	LHG	C24-C23	2.04	1.56	1.50
25	b	613	CLA	CMD-C2D	-2.03	1.46	1.50
27	a	610	BCR	C38-C26	-2.03	1.47	1.50
25	C	508	CLA	C1D-C2D	2.03	1.49	1.45
25	A	607	CLA	CMD-C2D	-2.03	1.46	1.50
25	C	501	CLA	CMD-C2D	-2.03	1.46	1.50
25	b	607	CLA	CMC-C2C	-2.03	1.46	1.50
25	B	602	CLA	C3C-C2C	2.03	1.41	1.36
25	c	505	CLA	C3C-C2C	2.03	1.41	1.36
25	c	513	CLA	CMD-C2D	-2.03	1.46	1.50
25	b	609	CLA	C3D-C4D	2.02	1.48	1.44
30	t	102	SQD	C46-C45	2.02	1.56	1.50
25	B	610	CLA	C3D-C4D	2.02	1.48	1.44
31	c	517	DGD	O4E-C4E	-2.02	1.38	1.43
25	c	506	CLA	CMD-C2D	-2.02	1.46	1.50
27	k	102	BCR	C33-C5	-2.02	1.47	1.50
25	B	602	CLA	C1B-NB	2.01	1.37	1.35
25	A	607	CLA	C3B-CAB	-2.01	1.43	1.47
25	c	503	CLA	CMC-C2C	-2.01	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	C	516	DGD	C3G-C2G	2.01	1.56	1.50
35	F	101	HEM	CMD-C2D	2.01	1.55	1.50
27	D	406	BCR	C38-C26	-2.01	1.47	1.50
25	d	403	CLA	CMC-C2C	-2.00	1.46	1.50
25	B	611	CLA	CMB-C2B	-2.00	1.47	1.51
25	b	616	CLA	C3D-C4D	2.00	1.48	1.44

All (1231) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	D	409	SQD	O6-C1-C2	13.20	128.91	108.30
25	B	604	CLA	C4A-NA-C1A	9.31	110.89	106.71
25	c	509	CLA	C4A-NA-C1A	8.59	110.57	106.71
25	C	507	CLA	C4A-NA-C1A	7.99	110.30	106.71
25	b	615	CLA	C4A-NA-C1A	7.89	110.25	106.71
25	A	606	CLA	C4A-NA-C1A	7.52	110.09	106.71
25	b	616	CLA	C4A-NA-C1A	7.49	110.07	106.71
25	B	606	CLA	C4A-NA-C1A	7.47	110.06	106.71
25	c	511	CLA	C4A-NA-C1A	7.45	110.06	106.71
25	C	511	CLA	C4A-NA-C1A	7.43	110.05	106.71
25	c	501	CLA	C4A-NA-C1A	7.40	110.03	106.71
25	c	503	CLA	C4A-NA-C1A	7.36	110.01	106.71
25	C	508	CLA	C4A-NA-C1A	7.34	110.00	106.71
25	C	503	CLA	C4A-NA-C1A	7.33	110.00	106.71
25	b	606	CLA	C4A-NA-C1A	7.32	110.00	106.71
25	B	607	CLA	C4A-NA-C1A	7.32	110.00	106.71
25	c	502	CLA	C4A-NA-C1A	7.28	109.98	106.71
25	b	604	CLA	C4A-NA-C1A	7.14	109.92	106.71
25	c	510	CLA	C4A-NA-C1A	7.03	109.86	106.71
25	B	611	CLA	C4A-NA-C1A	7.00	109.86	106.71
30	a	613	SQD	O6-C1-C2	6.93	119.13	108.30
25	b	611	CLA	C4A-NA-C1A	6.87	109.80	106.71
25	b	601	CLA	C4A-NA-C1A	6.86	109.79	106.71
25	C	501	CLA	C4A-NA-C1A	6.67	109.71	106.71
30	L	101	SQD	O6-C1-C2	6.59	118.60	108.30
25	C	513	CLA	C4A-NA-C1A	6.59	109.67	106.71
30	a	613	SQD	C1-O5-C5	-6.57	100.79	113.69
25	c	507	CLA	C4A-NA-C1A	6.57	109.66	106.71
25	c	506	CLA	C4A-NA-C1A	6.51	109.63	106.71
25	b	602	CLA	C4A-NA-C1A	6.46	109.61	106.71
30	D	409	SQD	C1-O5-C5	-6.30	101.33	113.69
25	C	510	CLA	C4A-NA-C1A	6.24	109.51	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	608	CLA	C4A-NA-C1A	6.15	109.47	106.71
25	c	508	CLA	C4A-NA-C1A	6.14	109.47	106.71
25	C	506	CLA	C4A-NA-C1A	6.12	109.46	106.71
25	B	602	CLA	C4A-NA-C1A	6.11	109.45	106.71
30	A	613	SQD	O6-C1-C2	6.05	117.74	108.30
25	D	404	CLA	C4A-NA-C1A	5.95	109.38	106.71
25	b	609	CLA	C4A-NA-C1A	5.93	109.37	106.71
25	B	601	CLA	C4A-NA-C1A	5.81	109.32	106.71
25	B	608	CLA	C4A-NA-C1A	5.79	109.31	106.71
25	B	616	CLA	C4A-NA-C1A	5.77	109.30	106.71
25	B	603	CLA	C4A-NA-C1A	5.72	109.28	106.71
25	B	605	CLA	C4A-NA-C1A	5.72	109.28	106.71
25	a	606	CLA	C4A-NA-C1A	5.69	109.26	106.71
25	B	615	CLA	C4A-NA-C1A	5.63	109.24	106.71
25	c	512	CLA	C4A-NA-C1A	5.60	109.22	106.71
25	b	603	CLA	C4A-NA-C1A	5.51	109.19	106.71
30	A	613	SQD	O7-S-C6	5.48	113.45	106.94
30	D	409	SQD	O8-S-C6	5.46	114.44	105.74
25	b	613	CLA	C4A-NA-C1A	5.45	109.15	106.71
28	a	611	PL9	C7-C3-C4	5.43	121.30	116.88
25	c	505	CLA	C4A-NA-C1A	5.41	109.14	106.71
30	A	613	SQD	C1-O5-C5	-5.35	103.19	113.69
26	d	402	PHO	C1-C2-C3	-5.34	116.80	126.04
30	D	409	SQD	C44-O6-C1	5.28	122.59	113.84
25	D	405	CLA	C4A-NA-C1A	5.24	109.06	106.71
30	t	102	SQD	O47-C7-C8	5.24	122.80	111.50
25	C	509	CLA	C4A-NA-C1A	5.22	109.05	106.71
25	A	609	CLA	C4A-NA-C1A	5.19	109.04	106.71
25	d	403	CLA	C4A-NA-C1A	5.19	109.04	106.71
25	B	613	CLA	C1-C2-C3	-5.15	117.13	126.04
25	C	504	CLA	C4A-NA-C1A	5.14	109.02	106.71
30	B	622	SQD	O7-S-C6	5.12	113.03	106.94
25	D	403	CLA	C4A-NA-C1A	5.12	109.01	106.71
30	B	622	SQD	O47-C7-C8	5.08	122.46	111.50
25	b	605	CLA	C4A-NA-C1A	5.04	108.97	106.71
25	C	512	CLA	C4A-NA-C1A	4.93	108.92	106.71
25	B	609	CLA	C4A-NA-C1A	4.92	108.92	106.71
28	A	611	PL9	C7-C3-C4	4.91	120.87	116.88
36	v	201	HEC	CBD-CAD-C3D	-4.90	104.26	112.62
25	C	509	CLA	CMB-C2B-C1B	-4.88	120.96	128.46
25	B	612	CLA	C4A-NA-C1A	4.85	108.89	106.71
25	b	603	CLA	O2D-CGD-O1D	-4.85	114.36	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	B	622	SQD	O6-C1-C2	4.81	115.81	108.30
25	b	610	CLA	C4A-NA-C1A	4.78	108.86	106.71
25	B	612	CLA	O2D-CGD-O1D	-4.78	114.50	123.84
31	c	517	DGD	O3G-C3G-C2G	-4.78	99.37	110.90
25	B	607	CLA	CMB-C2B-C1B	-4.76	121.15	128.46
30	a	613	SQD	O9-S-C6	4.73	112.56	106.94
25	b	607	CLA	CMB-C2B-C1B	-4.72	121.21	128.46
25	b	613	CLA	CMB-C2B-C1B	-4.70	121.23	128.46
25	B	613	CLA	CMB-C2B-C1B	-4.69	121.25	128.46
25	b	616	CLA	O2D-CGD-O1D	-4.69	114.67	123.84
30	f	101	SQD	O9-S-C6	4.66	112.48	106.94
25	C	508	CLA	CMB-C2B-C1B	-4.64	121.33	128.46
30	L	101	SQD	O47-C7-C8	4.60	121.42	111.50
25	b	612	CLA	CMB-C2B-C1B	-4.58	121.43	128.46
36	V	201	HEC	CMC-C2C-C1C	-4.55	121.46	128.46
25	B	610	CLA	O2D-CGD-O1D	-4.55	114.94	123.84
25	c	504	CLA	CMB-C2B-C1B	-4.54	121.49	128.46
34	d	408	LHG	O4-P-O5	4.50	134.49	112.24
25	d	404	CLA	CMB-C2B-C1B	-4.50	121.55	128.46
25	A	609	CLA	CMB-C2B-C1B	-4.47	121.59	128.46
25	A	607	CLA	C4A-NA-C1A	4.47	108.72	106.71
31	a	614	DGD	O3G-C3G-C2G	-4.46	99.96	111.78
25	b	606	CLA	O2D-CGD-O1D	-4.42	115.20	123.84
28	d	406	PL9	C7-C8-C9	-4.40	119.47	126.79
25	C	505	CLA	CMB-C2B-C1B	-4.40	121.70	128.46
30	A	613	SQD	O47-C7-C8	4.36	120.91	111.50
25	a	607	CLA	C4A-NA-C1A	4.36	108.67	106.71
28	D	407	PL9	C7-C3-C4	4.34	120.40	116.88
25	c	513	CLA	C4A-NA-C1A	4.33	108.65	106.71
25	C	509	CLA	CHD-C1D-ND	-4.33	120.48	124.45
25	B	601	CLA	O2D-CGD-O1D	-4.32	115.40	123.84
25	C	509	CLA	CMB-C2B-C3B	4.31	132.75	124.68
30	D	409	SQD	C1-C2-C3	-4.29	101.06	110.00
26	D	402	PHO	C1-C2-C3	-4.29	118.63	126.04
25	B	608	CLA	CMB-C2B-C1B	-4.28	121.88	128.46
30	a	613	SQD	C1-C2-C3	-4.28	101.08	110.00
28	d	406	PL9	C7-C3-C4	4.27	120.35	116.88
25	C	510	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
25	C	504	CLA	CMB-C2B-C1B	-4.23	121.96	128.46
25	A	607	CLA	O2D-CGD-O1D	-4.22	115.58	123.84
25	B	610	CLA	C4A-NA-C1A	4.22	108.60	106.71
30	A	613	SQD	O9-S-O7	-4.21	99.39	113.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	C	518	DGD	O3G-C3G-C2G	-4.20	100.78	110.90
25	B	607	CLA	CMB-C2B-C3B	4.19	132.52	124.68
25	C	505	CLA	C4A-NA-C1A	4.19	108.59	106.71
25	a	612	CLA	C4A-NA-C1A	4.17	108.58	106.71
25	c	504	CLA	C4A-NA-C1A	4.17	108.58	106.71
25	b	604	CLA	CMB-C2B-C1B	-4.17	122.06	128.46
34	e	102	LHG	O4-P-O5	4.16	132.80	112.24
25	B	603	CLA	CMB-C2B-C1B	-4.16	122.07	128.46
31	H	102	DGD	O3G-C3G-C2G	-4.13	100.95	110.90
34	D	410	LHG	O4-P-O5	4.12	132.63	112.24
25	c	513	CLA	CMB-C2B-C1B	-4.12	122.13	128.46
30	B	622	SQD	C1-O5-C5	-4.12	105.60	113.69
25	B	613	CLA	CMB-C2B-C3B	4.12	132.39	124.68
34	D	411	LHG	O4-P-O5	4.12	132.59	112.24
25	b	611	CLA	O2D-CGD-O1D	-4.11	115.80	123.84
34	E	101	LHG	O4-P-O5	4.09	132.47	112.24
25	b	612	CLA	CMB-C2B-C3B	4.09	132.33	124.68
30	f	101	SQD	O5-C5-C4	4.07	117.09	109.69
25	b	604	CLA	C1-C2-C3	-4.07	119.01	126.04
25	a	612	CLA	CMB-C2B-C1B	-4.06	122.22	128.46
34	d	409	LHG	O4-P-O5	4.05	132.24	112.24
25	a	607	CLA	O2D-CGD-O1D	-4.05	115.93	123.84
30	L	101	SQD	O7-S-C6	4.04	111.74	106.94
33	d	401	BCT	O2-C-O1	4.04	130.01	119.55
25	b	607	CLA	CMB-C2B-C3B	4.03	132.22	124.68
34	D	413	LHG	O4-P-O5	4.03	132.17	112.24
25	d	404	CLA	CMB-C2B-C3B	4.03	132.22	124.68
25	B	612	CLA	CMB-C2B-C1B	-4.03	122.28	128.46
30	A	613	SQD	C1-C2-C3	-4.02	101.63	110.00
25	B	604	CLA	C1-C2-C3	-4.01	119.10	126.04
30	f	101	SQD	O9-S-O7	-4.01	100.06	113.95
25	b	607	CLA	C1B-CHB-C4A	-4.01	122.19	130.12
29	m	101	LMG	O1-C7-C8	-3.99	101.27	110.90
25	b	605	CLA	O2D-CGD-O1D	-3.98	116.06	123.84
25	b	603	CLA	CMB-C2B-C1B	-3.98	122.35	128.46
25	B	614	CLA	C4A-NA-C1A	3.96	108.49	106.71
25	B	611	CLA	O2D-CGD-O1D	-3.96	116.10	123.84
25	C	507	CLA	CMB-C2B-C1B	-3.96	122.38	128.46
25	c	509	CLA	O2A-CGA-O1A	-3.96	113.61	123.59
25	c	506	CLA	CMB-C2B-C1B	-3.96	122.39	128.46
25	b	608	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
25	C	506	CLA	CMB-C2B-C1B	-3.93	122.42	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	a	606	CLA	CMB-C2B-C1B	-3.93	122.43	128.46
34	L	102	LHG	O4-P-O5	3.93	131.65	112.24
30	f	101	SQD	O6-C1-C2	3.93	114.43	108.30
30	a	613	SQD	O7-S-C6	3.92	111.60	106.94
31	c	516	DGD	O3G-C3G-C2G	-3.92	101.45	110.90
25	c	510	CLA	O2D-CGD-O1D	-3.91	116.19	123.84
25	a	607	CLA	CMB-C2B-C1B	-3.86	122.53	128.46
34	l	101	LHG	O4-P-O5	3.86	131.31	112.24
36	V	201	HEC	CBD-CAD-C3D	-3.85	106.06	112.62
34	d	407	LHG	O4-P-O5	3.84	131.23	112.24
30	D	409	SQD	O9-S-C6	3.84	111.50	106.94
33	D	401	BCT	O2-C-O1	3.84	129.50	119.55
25	A	609	CLA	CMB-C2B-C3B	3.83	131.85	124.68
25	b	609	CLA	CMB-C2B-C1B	-3.83	122.58	128.46
25	d	404	CLA	C4A-NA-C1A	3.81	108.42	106.71
29	b	622	LMG	O1-C1-C2	-3.81	102.35	108.30
25	c	501	CLA	CMB-C2B-C1B	-3.81	122.61	128.46
25	c	510	CLA	CMB-C2B-C1B	-3.78	122.66	128.46
35	F	101	HEM	CBD-CAD-C3D	-3.78	102.13	112.63
25	a	609	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
25	B	613	CLA	C4A-NA-C1A	3.76	108.40	106.71
25	B	603	CLA	CMB-C2B-C3B	3.75	131.70	124.68
30	A	614	SQD	O47-C7-C8	3.75	119.59	111.50
25	b	613	CLA	CMB-C2B-C3B	3.75	131.69	124.68
25	c	502	CLA	O2D-CGD-O1D	-3.75	116.51	123.84
25	A	606	CLA	CHB-C4A-NA	3.75	129.69	124.51
25	A	607	CLA	CMB-C2B-C1B	-3.73	122.72	128.46
25	B	603	CLA	O2D-CGD-O1D	-3.73	116.54	123.84
25	b	601	CLA	CMB-C2B-C1B	-3.73	122.73	128.46
25	b	606	CLA	CMB-C2B-C1B	-3.73	122.73	128.46
25	b	602	CLA	CMB-C2B-C1B	-3.71	122.76	128.46
30	L	101	SQD	O5-C5-C4	3.71	116.43	109.69
25	B	614	CLA	O2D-CGD-O1D	-3.70	116.61	123.84
26	d	402	PHO	CMB-C2B-C3B	3.69	131.59	124.68
25	b	612	CLA	C1-C2-C3	-3.69	119.66	126.04
25	b	607	CLA	C4A-NA-C1A	3.69	108.37	106.71
30	D	409	SQD	O5-C1-C2	-3.69	102.54	110.35
25	B	602	CLA	CMB-C2B-C1B	-3.68	122.81	128.46
25	B	612	CLA	CMB-C2B-C3B	3.67	131.54	124.68
25	B	608	CLA	CMB-C2B-C3B	3.66	131.53	124.68
25	c	509	CLA	CMB-C2B-C1B	-3.65	122.85	128.46
25	C	507	CLA	O2D-CGD-O1D	-3.65	116.70	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	613	CLA	C1-C2-C3	-3.64	119.74	126.04
25	b	603	CLA	C1B-CHB-C4A	-3.63	122.93	130.12
25	C	501	CLA	CHD-C1D-ND	-3.63	121.12	124.45
25	D	404	CLA	C1-C2-C3	-3.62	119.78	126.04
30	L	101	SQD	O8-S-C6	3.62	111.51	105.74
31	c	518	DGD	O3G-C3G-C2G	-3.62	102.17	110.90
25	C	510	CLA	CMB-C2B-C3B	3.62	131.45	124.68
26	d	402	PHO	O1D-CGD-CBD	3.61	130.75	124.74
25	C	505	CLA	O2D-CGD-O1D	-3.61	116.79	123.84
25	c	512	CLA	O2D-CGD-O1D	-3.60	116.80	123.84
26	d	402	PHO	O2D-CGD-O1D	-3.59	116.82	123.84
25	B	614	CLA	CMB-C2B-C1B	-3.59	122.95	128.46
25	B	604	CLA	O2D-CGD-O1D	-3.59	116.82	123.84
25	C	512	CLA	CMB-C2B-C1B	-3.58	122.96	128.46
25	b	606	CLA	O2D-CGD-CBD	3.58	117.63	111.27
25	a	607	CLA	CHB-C4A-NA	3.57	129.45	124.51
25	C	508	CLA	CHD-C1D-ND	-3.57	121.17	124.45
28	a	611	PL9	C7-C3-C2	-3.56	118.62	123.30
25	C	513	CLA	O2D-CGD-O1D	-3.56	116.88	123.84
28	A	611	PL9	C7-C8-C9	-3.56	120.87	126.79
30	B	622	SQD	O9-S-O7	-3.55	101.65	113.95
25	b	615	CLA	CMB-C2B-C1B	-3.55	123.00	128.46
25	c	512	CLA	C1-C2-C3	-3.55	119.90	126.04
25	c	501	CLA	O2D-CGD-O1D	-3.55	116.90	123.84
25	b	616	CLA	O2D-CGD-CBD	3.55	117.57	111.27
28	d	406	PL9	C40-C39-C41	3.54	121.22	115.27
25	b	605	CLA	CMB-C2B-C1B	-3.53	123.03	128.46
31	C	516	DGD	O6D-C1D-O3G	-3.53	101.62	109.97
25	a	609	CLA	CMB-C2B-C3B	3.53	131.27	124.68
31	h	102	DGD	C1E-O6E-C5E	3.52	120.60	113.69
30	L	101	SQD	O9-S-O7	-3.52	101.77	113.95
25	B	602	CLA	O2D-CGD-CBD	3.52	117.52	111.27
31	h	102	DGD	O3G-C3G-C2G	-3.52	102.41	110.90
25	c	508	CLA	CMB-C2B-C1B	-3.51	123.07	128.46
25	B	611	CLA	O2D-CGD-CBD	3.51	117.50	111.27
25	b	612	CLA	O2D-CGD-O1D	-3.50	116.99	123.84
30	D	409	SQD	O9-S-O7	-3.50	101.82	113.95
36	v	201	HEC	CBA-CAA-C2A	-3.50	106.71	112.60
25	b	612	CLA	C1B-CHB-C4A	-3.49	123.20	130.12
25	B	608	CLA	O2D-CGD-O1D	-3.49	117.01	123.84
25	A	607	CLA	CHD-C1D-ND	-3.49	121.25	124.45
25	c	504	CLA	CMB-C2B-C3B	3.48	131.20	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	511	CLA	CMB-C2B-C1B	-3.48	123.11	128.46
31	C	517	DGD	O3G-C3G-C2G	-3.48	102.49	110.90
25	b	604	CLA	CMB-C2B-C3B	3.47	131.18	124.68
25	C	503	CLA	CMB-C2B-C1B	-3.47	123.13	128.46
31	c	518	DGD	O6D-C1D-O3G	-3.47	101.76	109.97
25	b	613	CLA	O2D-CGD-O1D	-3.47	117.06	123.84
25	b	614	CLA	CHD-C1D-ND	-3.47	121.27	124.45
28	d	406	PL9	C37-C38-C39	-3.47	119.31	127.66
25	b	614	CLA	CMB-C2B-C1B	-3.47	123.14	128.46
25	A	609	CLA	CHD-C1D-ND	-3.46	121.27	124.45
25	c	511	CLA	CMB-C2B-C1B	-3.46	123.14	128.46
25	C	505	CLA	CMB-C2B-C3B	3.46	131.15	124.68
30	A	613	SQD	O5-C1-C2	-3.46	103.03	110.35
25	D	404	CLA	CMB-C2B-C1B	-3.46	123.15	128.46
25	B	604	CLA	CMB-C2B-C1B	-3.45	123.17	128.46
25	b	606	CLA	CMB-C2B-C3B	3.45	131.12	124.68
27	B	617	BCR	C2-C1-C6	3.44	115.78	110.48
25	D	405	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
28	A	611	PL9	C7-C3-C2	-3.43	118.79	123.30
25	a	612	CLA	CMB-C2B-C3B	3.42	131.07	124.68
25	D	403	CLA	CMB-C2B-C3B	3.42	131.07	124.68
25	D	403	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
25	D	403	CLA	CHD-C1D-ND	-3.41	121.32	124.45
25	B	610	CLA	O2D-CGD-CBD	3.41	117.32	111.27
30	f	101	SQD	O47-C7-C8	3.41	120.30	110.80
25	b	608	CLA	CMB-C2B-C3B	3.40	131.04	124.68
30	L	101	SQD	C1-C2-C3	-3.40	102.91	110.00
25	B	611	CLA	CMB-C2B-C1B	-3.40	123.24	128.46
25	C	512	CLA	O2D-CGD-O1D	-3.40	117.20	123.84
25	c	513	CLA	CMB-C2B-C3B	3.39	131.03	124.68
25	c	509	CLA	CHB-C4A-NA	3.39	129.20	124.51
25	b	602	CLA	O2D-CGD-O1D	-3.39	117.21	123.84
27	K	101	BCR	C15-C16-C17	-3.39	116.53	123.47
35	e	101	HEM	CBD-CAD-C3D	-3.38	103.22	112.63
25	b	616	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
25	C	508	CLA	CMB-C2B-C3B	3.38	131.00	124.68
30	a	613	SQD	O9-S-O7	-3.37	102.27	113.95
25	A	607	CLA	CMB-C2B-C3B	3.37	130.99	124.68
25	B	611	CLA	CMB-C2B-C3B	3.37	130.99	124.68
31	C	516	DGD	O3G-C3G-C2G	-3.36	102.79	110.90
34	D	413	LHG	O8-C23-C24	3.35	122.44	111.91
25	c	509	CLA	CMB-C2B-C3B	3.35	130.95	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	513	CLA	CMB-C2B-C1B	-3.35	123.31	128.46
25	c	505	CLA	O2D-CGD-O1D	-3.35	117.29	123.84
25	C	510	CLA	O2D-CGD-O1D	-3.35	117.29	123.84
26	A	608	PHO	O2D-CGD-CBD	3.34	115.23	111.00
25	a	612	CLA	O2D-CGD-O1D	-3.34	117.31	123.84
25	c	501	CLA	CMB-C2B-C3B	3.33	130.91	124.68
27	c	514	BCR	C24-C23-C22	-3.33	121.21	126.23
25	b	608	CLA	O2D-CGD-O1D	-3.33	117.33	123.84
25	C	506	CLA	CMB-C2B-C3B	3.32	130.89	124.68
26	a	608	PHO	C1-C2-C3	-3.32	120.31	126.04
31	C	518	DGD	O6D-C1D-O3G	-3.31	102.14	109.97
30	t	102	SQD	O48-C23-C24	3.31	122.28	111.91
35	e	101	HEM	CBA-CAA-C2A	-3.31	106.98	112.62
25	B	616	CLA	O2D-CGD-O1D	-3.31	117.38	123.84
25	a	606	CLA	CMB-C2B-C3B	3.30	130.85	124.68
25	b	611	CLA	CMB-C2B-C1B	-3.30	123.40	128.46
25	b	608	CLA	CHB-C4A-NA	3.29	129.06	124.51
25	b	608	CLA	O2D-CGD-CBD	3.29	117.11	111.27
25	B	616	CLA	CMB-C2B-C1B	-3.27	123.43	128.46
25	b	603	CLA	CHD-C1D-ND	-3.27	121.45	124.45
27	B	618	BCR	C15-C14-C13	-3.26	122.65	127.31
27	H	101	BCR	C16-C15-C14	-3.26	116.79	123.47
25	B	602	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
25	b	603	CLA	CMB-C2B-C3B	3.26	130.78	124.68
25	d	403	CLA	O2D-CGD-O1D	-3.26	117.47	123.84
34	d	407	LHG	O8-C23-O10	-3.25	115.40	123.59
25	b	610	CLA	C1B-CHB-C4A	-3.25	123.69	130.12
30	f	101	SQD	O7-S-C6	3.25	110.80	106.94
25	b	611	CLA	O2D-CGD-CBD	3.24	117.03	111.27
25	b	614	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
25	b	601	CLA	CHD-C1D-ND	-3.24	121.48	124.45
27	T	101	BCR	C3-C4-C5	-3.24	108.30	114.08
25	C	512	CLA	C1-C2-C3	-3.23	120.45	126.04
25	a	607	CLA	CMB-C2B-C3B	3.23	130.72	124.68
25	b	602	CLA	CMB-C2B-C3B	3.23	130.72	124.68
25	d	403	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
27	b	617	BCR	C2-C1-C6	3.23	115.45	110.48
25	b	610	CLA	C1-C2-C3	-3.22	120.47	126.04
25	C	502	CLA	C4A-NA-C1A	3.22	108.15	106.71
30	L	101	SQD	C3-C4-C5	3.21	115.97	110.24
30	L	101	SQD	O48-C23-C24	3.21	121.98	111.91
25	D	405	CLA	CMB-C2B-C3B	3.21	130.68	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	D	405	CLA	CHB-C4A-NA	3.20	128.94	124.51
25	C	503	CLA	CMB-C2B-C3B	3.20	130.66	124.68
27	A	610	BCR	C27-C26-C25	3.19	127.37	122.73
27	C	514	BCR	C15-C16-C17	-3.19	116.94	123.47
36	v	201	HEC	CMB-C2B-C1B	-3.18	123.58	128.46
25	c	505	CLA	O2D-CGD-CBD	3.18	116.91	111.27
25	B	609	CLA	CMB-C2B-C1B	-3.18	123.58	128.46
25	c	506	CLA	CMB-C2B-C3B	3.17	130.61	124.68
25	c	502	CLA	CMB-C2B-C1B	-3.17	123.59	128.46
25	b	612	CLA	O2A-CGA-O1A	-3.17	115.60	123.59
25	c	509	CLA	CHD-C1D-ND	-3.16	121.55	124.45
32	C	520	STE	C3-C2-C1	-3.16	106.51	114.47
25	c	512	CLA	CHB-C4A-NA	3.16	128.88	124.51
27	h	101	BCR	C3-C4-C5	-3.16	108.44	114.08
25	B	610	CLA	O2A-CGA-O1A	-3.15	115.63	123.59
36	V	201	HEC	C1D-C2D-C3D	-3.15	104.80	107.00
25	b	609	CLA	CMB-C2B-C3B	3.15	130.57	124.68
26	A	608	PHO	CMB-C2B-C3B	3.15	130.57	124.68
25	b	601	CLA	O2D-CGD-O1D	-3.15	117.68	123.84
31	h	102	DGD	C1D-C2D-C3D	-3.15	103.44	110.00
25	c	507	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
34	D	413	LHG	O8-C23-O10	-3.14	115.67	123.59
25	C	507	CLA	CMB-C2B-C3B	3.14	130.55	124.68
25	b	616	CLA	CHB-C4A-NA	3.14	128.85	124.51
25	B	610	CLA	CHB-C4A-NA	3.13	128.84	124.51
25	b	602	CLA	CHB-C4A-NA	3.13	128.84	124.51
25	B	603	CLA	O2D-CGD-CBD	3.12	116.81	111.27
27	c	515	BCR	C11-C10-C9	-3.12	122.86	127.31
27	B	617	BCR	C3-C4-C5	-3.12	108.50	114.08
25	D	404	CLA	O2D-CGD-O1D	-3.12	117.74	123.84
30	a	613	SQD	O48-C23-C24	3.12	121.69	111.91
25	c	503	CLA	CHB-C4A-NA	3.12	128.82	124.51
25	b	605	CLA	C1-C2-C3	-3.12	120.66	126.04
25	c	503	CLA	O2D-CGD-O1D	-3.11	117.76	123.84
30	a	613	SQD	C44-O6-C1	-3.10	107.68	113.74
25	B	608	CLA	O2A-C1-C2	-3.10	100.48	108.64
27	b	618	BCR	C15-C14-C13	-3.10	122.88	127.31
26	D	402	PHO	OBD-CAD-CBD	-3.10	121.27	125.82
27	D	406	BCR	C2-C1-C6	3.10	115.25	110.48
25	b	603	CLA	O2D-CGD-CBD	3.10	116.78	111.27
25	b	614	CLA	C4A-NA-C1A	3.10	108.10	106.71
25	B	610	CLA	CHD-C1D-ND	-3.10	121.61	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	616	CLA	CMB-C2B-C3B	3.09	130.47	124.68
31	H	102	DGD	O2D-C2D-C1D	-3.09	102.55	110.05
26	D	402	PHO	CMB-C2B-C3B	3.09	130.45	124.68
25	A	609	CLA	C1B-CHB-C4A	-3.08	124.02	130.12
25	B	606	CLA	CMB-C2B-C1B	-3.07	123.74	128.46
25	b	612	CLA	C4A-NA-C1A	3.07	108.08	106.71
25	C	501	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
25	B	602	CLA	CMB-C2B-C3B	3.05	130.39	124.68
25	c	502	CLA	CHD-C1D-ND	-3.05	121.65	124.45
25	a	606	CLA	O2D-CGD-O1D	-3.05	117.88	123.84
25	c	508	CLA	CHD-C1D-ND	-3.04	121.66	124.45
25	C	512	CLA	CMB-C2B-C3B	3.04	130.37	124.68
30	a	613	SQD	O47-C7-C8	3.04	118.05	111.50
25	D	404	CLA	CMB-C2B-C3B	3.04	130.36	124.68
31	c	517	DGD	O6D-C1D-O3G	-3.04	102.78	109.97
25	b	609	CLA	C1B-CHB-C4A	-3.03	124.12	130.12
25	b	604	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
30	a	613	SQD	C3-C4-C5	3.03	115.64	110.24
27	b	617	BCR	C11-C10-C9	-3.03	122.99	127.31
25	a	609	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
26	A	608	PHO	O2D-CGD-O1D	-3.02	117.93	123.84
28	d	406	PL9	C7-C3-C2	-3.02	119.33	123.30
25	a	609	CLA	C4A-NA-C1A	3.01	108.06	106.71
31	c	517	DGD	O3G-C1D-C2D	-3.01	103.60	108.30
25	c	503	CLA	CHD-C1D-ND	-3.01	121.69	124.45
25	b	601	CLA	CHB-C4A-NA	3.01	128.68	124.51
31	C	516	DGD	O5D-C6D-C5D	-3.01	103.48	109.05
25	d	403	CLA	CMB-C2B-C3B	3.00	130.30	124.68
25	c	502	CLA	C1-C2-C3	-3.00	120.85	126.04
29	c	523	LMG	O6-C1-O1	-3.00	102.87	109.97
30	D	409	SQD	O48-C23-C24	3.00	121.31	111.91
35	F	101	HEM	CBA-CAA-C2A	-2.99	107.52	112.62
25	C	506	CLA	O2A-CGA-O1A	-2.99	116.06	123.59
35	e	101	HEM	C3B-C2B-C1B	2.98	108.70	106.49
25	c	505	CLA	CMB-C2B-C1B	-2.98	123.89	128.46
30	B	622	SQD	C3-C4-C5	2.98	115.55	110.24
25	C	509	CLA	CHB-C4A-NA	2.98	128.63	124.51
25	C	503	CLA	CHD-C1D-ND	-2.97	121.72	124.45
25	B	612	CLA	O2D-CGD-CBD	2.97	116.55	111.27
30	A	613	SQD	O8-S-C6	2.97	110.47	105.74
25	b	616	CLA	CMB-C2B-C3B	2.97	130.23	124.68
25	b	610	CLA	CHB-C4A-NA	2.97	128.62	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	607	CLA	O2A-CGA-O1A	-2.97	116.10	123.59
26	a	608	PHO	CMB-C2B-C3B	2.97	130.23	124.68
25	B	609	CLA	O2D-CGD-O1D	-2.97	118.04	123.84
25	B	602	CLA	CHB-C4A-NA	2.96	128.61	124.51
25	b	613	CLA	C2D-C1D-ND	-2.96	107.92	110.10
25	c	508	CLA	CMB-C2B-C3B	2.96	130.21	124.68
25	B	605	CLA	CHD-C1D-ND	-2.95	121.74	124.45
27	t	101	BCR	C11-C10-C9	-2.95	123.10	127.31
27	h	101	BCR	C27-C26-C25	2.95	127.01	122.73
25	B	609	CLA	CHD-C1D-ND	-2.95	121.75	124.45
27	C	514	BCR	C2-C1-C6	2.94	115.01	110.48
30	B	622	SQD	O48-C23-C24	2.94	121.13	111.91
29	c	519	LMG	O6-C1-O1	-2.94	103.02	109.97
25	c	510	CLA	CMB-C2B-C3B	2.94	130.17	124.68
29	b	622	LMG	O2-C2-C1	-2.94	102.91	110.05
28	D	407	PL9	C36-C34-C33	-2.93	115.19	121.12
25	b	605	CLA	O1D-CGD-CBD	2.93	130.47	124.48
34	d	407	LHG	O8-C23-C24	2.92	121.08	111.91
25	d	404	CLA	C1B-CHB-C4A	-2.92	124.33	130.12
31	A	615	DGD	O5D-C6D-C5D	-2.92	103.64	109.05
25	C	508	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
25	a	609	CLA	CHB-C4A-NA	2.92	128.55	124.51
25	b	614	CLA	C1B-CHB-C4A	-2.92	124.34	130.12
25	b	615	CLA	CMB-C2B-C3B	2.92	130.13	124.68
25	c	501	CLA	O2D-CGD-CBD	2.91	116.45	111.27
36	v	201	HEC	CMC-C2C-C1C	-2.91	123.99	128.46
30	A	613	SQD	C44-O6-C1	-2.91	108.05	113.74
30	A	613	SQD	O48-C23-C24	2.91	121.04	111.91
25	c	513	CLA	CHB-C4A-NA	2.91	128.53	124.51
31	C	517	DGD	O6D-C1D-O3G	-2.91	103.09	109.97
29	C	519	LMG	O6-C1-O1	-2.90	103.11	109.97
27	k	102	BCR	C24-C23-C22	-2.90	121.86	126.23
25	c	506	CLA	C1B-CHB-C4A	-2.90	124.38	130.12
27	B	618	BCR	C2-C1-C6	2.89	114.93	110.48
34	D	411	LHG	O8-C23-C24	2.89	120.97	111.91
25	c	502	CLA	CMB-C2B-C3B	2.89	130.08	124.68
30	L	101	SQD	O9-S-C6	2.88	110.36	106.94
25	D	403	CLA	CHB-C4A-NA	2.88	128.49	124.51
25	b	608	CLA	C1B-CHB-C4A	-2.88	124.42	130.12
27	a	610	BCR	C15-C14-C13	-2.88	123.20	127.31
30	A	613	SQD	O9-S-C6	2.88	110.36	106.94
25	B	601	CLA	CAA-C2A-C3A	-2.88	104.90	112.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	504	CLA	CHD-C1D-ND	-2.87	121.81	124.45
27	D	406	BCR	C3-C4-C5	-2.87	108.94	114.08
28	d	406	PL9	C27-C28-C29	-2.87	120.74	127.66
25	c	511	CLA	CMB-C2B-C3B	2.87	130.05	124.68
25	C	504	CLA	CMB-C2B-C3B	2.87	130.04	124.68
25	c	505	CLA	CHD-C1D-ND	-2.87	121.82	124.45
27	k	101	BCR	C33-C5-C6	-2.87	121.31	124.53
25	D	405	CLA	CHD-C1D-ND	-2.87	121.82	124.45
25	c	503	CLA	CMB-C2B-C1B	-2.87	124.06	128.46
27	t	101	BCR	C33-C5-C6	-2.86	121.31	124.53
29	m	101	LMG	C1-O6-C5	-2.86	108.06	113.69
25	B	610	CLA	C1-C2-C3	-2.86	121.09	126.04
31	C	518	DGD	O3G-C1D-C2D	-2.86	103.84	108.30
25	B	615	CLA	CHB-C4A-NA	2.86	128.47	124.51
25	b	605	CLA	CMB-C2B-C3B	2.86	130.02	124.68
25	b	610	CLA	CAA-CBA-CGA	-2.86	104.91	113.25
28	d	406	PL9	C20-C19-C21	2.86	120.08	115.27
31	c	516	DGD	O3E-C3E-C2E	-2.85	103.76	110.35
27	T	101	BCR	C2-C1-C6	2.85	114.87	110.48
25	C	513	CLA	CMB-C2B-C3B	2.84	130.00	124.68
25	b	601	CLA	CMB-C2B-C3B	2.84	130.00	124.68
29	d	411	LMG	O6-C1-O1	-2.84	103.24	109.97
26	d	402	PHO	CMC-C2C-C3C	2.84	130.30	124.94
34	e	102	LHG	O8-C23-C24	2.84	120.83	111.91
27	t	101	BCR	C7-C8-C9	-2.83	121.96	126.23
25	c	512	CLA	CHD-C1D-ND	-2.83	121.85	124.45
27	c	514	BCR	C2-C1-C6	2.83	114.84	110.48
25	A	609	CLA	CHB-C4A-NA	2.82	128.41	124.51
32	L	103	STE	O2-C1-C2	2.82	123.09	114.03
25	D	405	CLA	C1-C2-C3	-2.82	121.17	126.04
25	B	615	CLA	C6-C7-C8	-2.82	106.81	115.92
25	a	612	CLA	CHD-C1D-ND	-2.81	121.87	124.45
31	H	102	DGD	C1D-C2D-C3D	-2.81	104.14	110.00
25	B	601	CLA	CMB-C2B-C1B	-2.81	124.14	128.46
25	a	609	CLA	O2D-CGD-CBD	2.81	116.26	111.27
25	B	609	CLA	O2A-CGA-O1A	-2.81	116.51	123.59
29	C	519	LMG	O1-C7-C8	-2.80	104.14	110.90
30	L	101	SQD	O2-C2-C1	2.80	116.85	110.05
25	b	609	CLA	CHB-C4A-NA	2.80	128.38	124.51
25	C	502	CLA	CHD-C1D-ND	-2.80	121.88	124.45
25	B	615	CLA	O2D-CGD-O1D	-2.80	118.37	123.84
27	b	619	BCR	C11-C10-C9	-2.79	123.32	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	K	102	BCR	C33-C5-C6	-2.79	121.39	124.53
28	d	406	PL9	C42-C43-C44	-2.79	120.94	127.66
25	B	616	CLA	C1B-CHB-C4A	-2.79	124.59	130.12
25	a	612	CLA	O2D-CGD-CBD	2.78	116.22	111.27
27	B	618	BCR	C27-C26-C25	2.78	126.77	122.73
25	B	608	CLA	O2D-CGD-CBD	2.78	116.21	111.27
25	b	614	CLA	C1-C2-C3	-2.78	121.23	126.04
35	e	101	HEM	C4D-ND-C1D	2.78	107.94	105.07
25	B	614	CLA	CMB-C2B-C3B	2.78	129.88	124.68
29	D	408	LMG	O6-C1-O1	-2.78	103.39	109.97
25	b	614	CLA	CMB-C2B-C3B	2.78	129.87	124.68
30	f	101	SQD	C3-C4-C5	2.77	115.19	110.24
25	D	405	CLA	O2D-CGD-O1D	-2.77	118.42	123.84
25	b	611	CLA	CHB-C4A-NA	2.77	128.34	124.51
25	a	607	CLA	O2A-CGA-O1A	-2.77	116.60	123.59
30	A	614	SQD	C45-O47-C7	-2.76	114.32	117.88
28	a	611	PL9	C20-C19-C21	2.76	119.92	115.27
25	b	606	CLA	C1-C2-C3	-2.76	121.27	126.04
25	c	507	CLA	CMB-C2B-C3B	2.76	129.84	124.68
27	K	101	BCR	C33-C5-C6	-2.76	121.43	124.53
25	c	507	CLA	CHD-C1D-ND	-2.76	121.92	124.45
27	b	618	BCR	C11-C10-C9	-2.75	123.38	127.31
29	b	622	LMG	C1-O6-C5	-2.75	108.29	113.69
34	D	413	LHG	C11-C10-C9	-2.75	100.46	114.42
25	D	403	CLA	O2D-CGD-CBD	2.75	116.16	111.27
25	d	403	CLA	CHB-C4A-NA	2.75	128.31	124.51
25	B	606	CLA	CMB-C2B-C3B	2.75	129.82	124.68
31	h	102	DGD	C3D-C4D-C5D	-2.75	105.34	110.24
31	c	516	DGD	O6D-C1D-O3G	-2.75	103.47	109.97
25	D	405	CLA	C1B-CHB-C4A	-2.74	124.69	130.12
34	L	102	LHG	O8-C23-C24	2.74	120.51	111.91
28	a	611	PL9	C37-C38-C39	-2.74	121.06	127.66
27	D	406	BCR	C7-C8-C9	-2.74	122.10	126.23
25	C	504	CLA	CED-O2D-CGD	2.74	122.13	115.94
27	D	406	BCR	C27-C26-C25	2.73	126.70	122.73
30	a	613	SQD	O8-S-C6	2.73	110.09	105.74
25	C	501	CLA	C4D-CHA-C1A	2.73	124.57	121.25
25	B	604	CLA	CHB-C4A-NA	2.73	128.28	124.51
30	B	622	SQD	O8-S-C6	2.72	110.08	105.74
25	b	610	CLA	CMB-C2B-C3B	2.72	129.76	124.68
27	h	101	BCR	C2-C1-C6	2.71	114.66	110.48
27	a	610	BCR	C2-C1-C6	2.71	114.66	110.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	K	102	BCR	C27-C26-C25	2.71	126.67	122.73
32	J	101	STE	C3-C2-C1	-2.71	107.64	114.47
25	b	610	CLA	CMB-C2B-C1B	-2.71	124.30	128.46
25	b	603	CLA	O2A-CGA-O1A	-2.70	116.77	123.59
36	V	201	HEC	CMC-C2C-C3C	2.70	129.00	125.82
30	f	101	SQD	C1-C2-C3	-2.70	104.37	110.00
30	t	102	SQD	C9-C8-C7	-2.70	103.79	113.62
34	D	410	LHG	O8-C23-C24	2.70	120.39	111.91
25	A	606	CLA	CMB-C2B-C1B	-2.70	124.31	128.46
28	D	407	PL9	C12-C13-C14	-2.70	121.16	127.66
25	B	612	CLA	CHB-C4A-NA	2.70	128.24	124.51
25	C	511	CLA	CMB-C2B-C3B	2.70	129.73	124.68
25	b	607	CLA	CHD-C1D-ND	-2.70	121.98	124.45
27	c	515	BCR	C27-C26-C25	2.69	126.64	122.73
25	b	606	CLA	CHD-C1D-ND	-2.69	121.98	124.45
29	m	101	LMG	O8-C28-O10	-2.69	116.81	123.59
25	B	612	CLA	C1B-CHB-C4A	-2.69	124.79	130.12
25	c	504	CLA	O2A-CGA-O1A	-2.69	116.81	123.59
25	B	611	CLA	CHB-C4A-NA	2.69	128.23	124.51
34	d	408	LHG	O8-C23-C24	2.69	120.33	111.91
32	d	413	STE	C3-C2-C1	-2.69	107.70	114.47
25	B	605	CLA	C1B-CHB-C4A	-2.69	124.80	130.12
30	B	622	SQD	C46-C45-C44	-2.68	105.44	111.79
25	C	509	CLA	O2D-CGD-O1D	-2.68	118.59	123.84
25	c	509	CLA	C1B-CHB-C4A	-2.68	124.80	130.12
27	d	405	BCR	C27-C26-C25	2.68	126.62	122.73
28	A	611	PL9	C20-C19-C21	2.68	119.78	115.27
31	h	102	DGD	C4E-C3E-C2E	-2.67	106.15	110.82
28	a	611	PL9	C7-C8-C9	-2.67	122.34	126.79
25	b	610	CLA	O2D-CGD-O1D	-2.67	118.62	123.84
25	C	502	CLA	CMB-C2B-C1B	-2.67	124.36	128.46
27	k	102	BCR	C33-C5-C6	-2.67	121.53	124.53
27	B	619	BCR	C11-C10-C9	-2.66	123.51	127.31
25	B	607	CLA	C1B-CHB-C4A	-2.66	124.84	130.12
25	B	605	CLA	CHB-C4A-NA	2.66	128.19	124.51
25	c	513	CLA	O2D-CGD-O1D	-2.66	118.64	123.84
31	h	102	DGD	O6D-C1D-O3G	-2.66	103.67	109.97
25	a	612	CLA	C1-C2-C3	-2.66	121.44	126.04
34	d	409	LHG	O8-C23-C24	2.66	120.25	111.91
25	b	615	CLA	C1B-CHB-C4A	-2.66	124.86	130.12
27	T	101	BCR	C27-C26-C25	2.65	126.58	122.73
27	K	101	BCR	C24-C23-C22	-2.65	122.23	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	C	518	DGD	O6E-C5E-C4E	2.65	114.51	109.69
25	c	508	CLA	C1-C2-C3	-2.65	121.46	126.04
25	B	602	CLA	O2A-CGA-O1A	-2.65	116.90	123.59
25	B	604	CLA	CMB-C2B-C3B	2.65	129.64	124.68
25	A	607	CLA	CHB-C4A-NA	2.65	128.18	124.51
28	D	407	PL9	C7-C8-C9	-2.65	122.39	126.79
25	b	612	CLA	CHB-C4A-NA	2.65	128.17	124.51
25	C	503	CLA	C1B-CHB-C4A	-2.64	124.88	130.12
26	D	402	PHO	O2D-CGD-O1D	-2.64	118.67	123.84
27	C	514	BCR	C15-C14-C13	-2.64	123.54	127.31
27	K	101	BCR	C7-C8-C9	-2.64	122.25	126.23
25	C	509	CLA	CHD-C4C-NC	2.64	128.36	124.20
25	B	610	CLA	CAC-C3C-C4C	2.64	128.23	124.81
31	c	518	DGD	CDB-CCB-CBB	-2.64	101.05	114.42
25	b	604	CLA	CHB-C4A-NA	2.64	128.16	124.51
25	C	501	CLA	O2A-CGA-O1A	-2.63	116.95	123.59
27	A	610	BCR	C11-C10-C9	-2.63	123.55	127.31
31	h	102	DGD	CDB-CCB-CBB	-2.63	101.06	114.42
34	d	408	LHG	C20-C19-C18	-2.63	101.07	114.42
25	c	510	CLA	CHB-C4A-NA	2.63	128.14	124.51
25	A	609	CLA	O2D-CGD-O1D	-2.63	118.70	123.84
25	c	509	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
25	D	403	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
25	b	613	CLA	O2D-CGD-CBD	2.62	115.93	111.27
25	C	509	CLA	C1B-CHB-C4A	-2.62	124.92	130.12
25	a	606	CLA	CHB-C4A-NA	2.62	128.14	124.51
29	b	622	LMG	O7-C10-O9	-2.62	117.37	123.70
25	c	507	CLA	CHB-C4A-NA	2.62	128.14	124.51
25	a	606	CLA	O2A-CGA-O1A	-2.62	116.98	123.59
31	C	517	DGD	O2D-C2D-C1D	-2.62	103.69	110.05
31	C	516	DGD	CDB-CCB-CBB	-2.62	101.14	114.42
31	A	615	DGD	C3G-C2G-C1G	-2.62	105.60	111.79
31	c	516	DGD	CDB-CCB-CBB	-2.61	101.16	114.42
25	B	611	CLA	C1-C2-C3	-2.61	121.53	126.04
31	h	102	DGD	O6E-C5E-C6E	-2.61	99.95	106.44
25	a	612	CLA	C1B-CHB-C4A	-2.61	124.95	130.12
27	a	610	BCR	C27-C26-C25	2.60	126.51	122.73
34	d	408	LHG	C18-C17-C16	-2.60	101.22	114.42
25	b	616	CLA	C1B-CHB-C4A	-2.60	124.97	130.12
30	f	101	SQD	O5-C1-C2	-2.60	104.84	110.35
25	B	609	CLA	C1B-CHB-C4A	-2.60	124.97	130.12
25	b	615	CLA	CHD-C1D-ND	-2.60	122.07	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	502	CLA	C1B-CHB-C4A	-2.59	124.98	130.12
31	c	517	DGD	O3D-C3D-C4D	-2.59	104.35	110.35
28	D	407	PL9	C27-C28-C29	-2.59	121.42	127.66
25	B	613	CLA	CHD-C1D-ND	-2.59	122.07	124.45
25	b	602	CLA	O2D-CGD-CBD	2.59	115.86	111.27
25	B	606	CLA	CHD-C1D-ND	-2.59	122.08	124.45
25	a	607	CLA	CHD-C1D-ND	-2.59	122.08	124.45
31	C	518	DGD	CDB-CCB-CBB	-2.58	101.30	114.42
25	B	606	CLA	CGD-CBD-CAD	-2.58	102.37	110.73
28	A	611	PL9	C22-C23-C24	-2.58	121.44	127.66
28	d	406	PL9	C50-C49-C48	-2.58	115.19	122.65
25	d	403	CLA	O2D-CGD-CBD	2.58	115.85	111.27
34	D	410	LHG	O8-C23-O10	-2.58	117.09	123.59
25	B	609	CLA	CMB-C2B-C3B	2.58	129.50	124.68
25	C	512	CLA	C2D-C1D-ND	-2.58	108.20	110.10
28	D	407	PL9	C22-C23-C24	-2.58	121.46	127.66
34	D	410	LHG	C20-C19-C18	-2.58	101.35	114.42
25	D	405	CLA	O2A-CGA-O1A	-2.57	117.10	123.59
25	c	513	CLA	C1B-CHB-C4A	-2.57	125.02	130.12
25	B	603	CLA	O2A-CGA-O1A	-2.57	117.10	123.59
31	A	615	DGD	O6D-C1D-O3G	-2.57	103.88	109.97
29	m	101	LMG	O3-C3-C2	-2.57	104.40	110.35
25	C	510	CLA	CHB-C4A-NA	2.57	128.07	124.51
31	c	517	DGD	O5D-C6D-C5D	-2.57	104.29	109.05
25	b	605	CLA	O2A-CGA-O1A	-2.57	117.11	123.59
25	b	606	CLA	CHB-C4A-NA	2.57	128.06	124.51
25	C	506	CLA	O2D-CGD-O1D	-2.57	118.82	123.84
28	d	406	PL9	C8-C7-C3	2.57	119.24	111.98
31	c	518	DGD	C1D-C2D-C3D	-2.57	104.65	110.00
25	c	511	CLA	O2D-CGD-O1D	-2.56	118.83	123.84
29	M	101	LMG	O3-C3-C2	-2.56	104.42	110.35
27	B	619	BCR	C34-C9-C10	-2.56	119.33	122.92
31	C	517	DGD	C1D-C2D-C3D	-2.56	104.66	110.00
35	F	101	HEM	C4C-CHD-C1D	2.56	125.94	122.56
36	V	201	HEC	CBA-CAA-C2A	-2.56	108.29	112.60
25	D	403	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
28	d	406	PL9	C36-C34-C33	-2.56	115.94	121.12
25	a	609	CLA	CHD-C1D-ND	-2.56	122.11	124.45
25	c	501	CLA	O2A-CGA-O1A	-2.56	117.14	123.59
26	a	608	PHO	O2D-CGD-O1D	-2.55	118.84	123.84
27	c	515	BCR	C2-C1-C6	2.55	114.41	110.48
25	d	404	CLA	CHD-C1D-ND	-2.55	122.11	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	606	CLA	O2D-CGD-O1D	-2.55	118.85	123.84
30	D	409	SQD	O7-S-C6	2.55	109.97	106.94
28	a	611	PL9	C22-C23-C24	-2.55	121.52	127.66
25	B	603	CLA	CHD-C1D-ND	-2.55	122.11	124.45
25	b	609	CLA	CHD-C1D-ND	-2.55	122.11	124.45
25	a	612	CLA	CHB-C4A-NA	2.55	128.04	124.51
29	A	612	LMG	C38-C37-C36	-2.55	101.48	114.42
31	h	102	DGD	C3G-C2G-C1G	-2.55	105.76	111.79
25	B	606	CLA	CHB-C4A-NA	2.55	128.04	124.51
25	b	613	CLA	O2A-CGA-O1A	-2.55	117.17	123.59
25	c	508	CLA	O2A-CGA-O1A	-2.55	117.17	123.59
31	c	517	DGD	CBB-CAB-C9B	-2.54	101.53	114.42
25	B	612	CLA	O2A-CGA-O1A	-2.54	117.18	123.59
25	B	602	CLA	CHD-C1D-ND	-2.54	122.12	124.45
27	b	618	BCR	C2-C1-C6	2.54	114.39	110.48
31	c	517	DGD	O2D-C2D-C1D	-2.54	103.88	110.05
27	H	101	BCR	C27-C26-C25	2.54	126.41	122.73
25	c	503	CLA	CMB-C2B-C3B	2.53	129.42	124.68
27	K	101	BCR	C35-C13-C14	-2.53	119.38	122.92
25	B	610	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
25	C	507	CLA	CHB-C4A-NA	2.53	128.01	124.51
31	A	615	DGD	CDB-CCB-CBB	-2.53	101.58	114.42
25	B	610	CLA	CMB-C2B-C1B	-2.53	124.58	128.46
31	A	615	DGD	O2D-C2D-C1D	-2.53	103.91	110.05
27	C	515	BCR	C27-C26-C25	2.53	126.40	122.73
27	b	619	BCR	C27-C26-C25	2.52	126.39	122.73
25	b	611	CLA	CMB-C2B-C3B	2.52	129.40	124.68
25	B	605	CLA	O2A-CGA-O1A	-2.52	117.23	123.59
27	B	617	BCR	C11-C10-C9	-2.52	123.71	127.31
25	C	513	CLA	CHD-C1D-ND	-2.52	122.14	124.45
25	b	602	CLA	C1B-CHB-C4A	-2.52	125.13	130.12
25	C	501	CLA	C2D-C1D-ND	-2.52	108.25	110.10
27	b	617	BCR	C3-C4-C5	-2.51	109.59	114.08
34	E	101	LHG	O8-C23-C24	2.51	119.79	111.91
25	b	608	CLA	CHD-C4C-NC	2.51	128.16	124.20
29	M	101	LMG	O6-C1-O1	-2.51	104.03	109.97
25	B	613	CLA	O2A-C1-C2	-2.51	102.04	108.64
25	b	605	CLA	CHD-C1D-ND	-2.51	122.15	124.45
27	D	406	BCR	C30-C25-C26	-2.51	119.08	122.61
25	C	502	CLA	O2D-CGD-O1D	-2.51	118.94	123.84
28	A	611	PL9	O1-C4-C3	-2.51	117.96	120.72
30	A	614	SQD	O48-C23-C24	2.51	119.77	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	505	CLA	C1-C2-C3	-2.51	121.71	126.04
25	c	507	CLA	O2D-CGD-O1D	-2.50	118.94	123.84
25	c	504	CLA	CHD-C1D-ND	-2.50	122.15	124.45
30	D	409	SQD	O2-C2-C1	2.50	116.12	110.05
27	B	617	BCR	C15-C16-C17	-2.50	118.35	123.47
30	B	622	SQD	O5-C5-C4	2.50	114.23	109.69
27	d	405	BCR	C38-C26-C25	-2.50	121.72	124.53
27	t	101	BCR	C15-C16-C17	-2.50	118.36	123.47
35	e	101	HEM	C1B-NB-C4B	2.50	107.65	105.07
29	c	521	LMG	C40-C39-C38	-2.50	101.75	114.42
31	c	517	DGD	CDB-CCB-CBB	-2.50	101.76	114.42
32	M	102	STE	C3-C2-C1	-2.50	108.18	114.47
25	B	609	CLA	C1-C2-C3	-2.49	121.73	126.04
29	A	612	LMG	C40-C39-C38	-2.49	101.77	114.42
25	C	505	CLA	O2A-CGA-O1A	-2.49	117.30	123.59
31	C	518	DGD	O5D-C6D-C5D	-2.49	104.44	109.05
27	b	619	BCR	C15-C16-C17	-2.49	118.37	123.47
28	A	611	PL9	O2-C1-C2	-2.49	116.08	121.78
25	b	605	CLA	CHB-C4A-NA	2.49	127.95	124.51
25	C	501	CLA	O2D-CGD-O1D	-2.49	118.98	123.84
27	C	515	BCR	C15-C16-C17	-2.48	118.39	123.47
27	B	619	BCR	C2-C1-C6	2.48	114.30	110.48
25	b	602	CLA	C16-C15-C13	-2.48	107.90	115.92
31	c	518	DGD	C3G-C2G-C1G	-2.48	105.92	111.79
28	A	611	PL9	C12-C13-C14	-2.48	121.70	127.66
27	C	514	BCR	C7-C8-C9	-2.48	122.50	126.23
25	B	612	CLA	C1-C2-C3	-2.47	121.76	126.04
29	c	523	LMG	C40-C39-C38	-2.47	101.87	114.42
27	H	101	BCR	C24-C23-C22	-2.47	122.50	126.23
25	b	610	CLA	O2A-CGA-O1A	-2.47	117.35	123.59
25	c	512	CLA	O2A-CGA-O1A	-2.47	117.36	123.59
29	m	101	LMG	C40-C39-C38	-2.46	101.92	114.42
25	b	608	CLA	CHD-C1D-ND	-2.46	122.19	124.45
28	D	407	PL9	C20-C19-C21	2.46	119.41	115.27
25	b	604	CLA	O2D-CGD-CBD	2.46	115.64	111.27
31	c	518	DGD	O6E-C1E-O5D	-2.46	104.16	109.97
31	H	102	DGD	O3D-C3D-C4D	-2.46	104.67	110.35
25	C	501	CLA	CHD-C1D-C2D	2.46	130.63	125.48
31	A	615	DGD	C4E-C3E-C2E	-2.46	106.54	110.82
25	C	502	CLA	CHA-C1A-NA	-2.45	120.78	126.40
27	K	101	BCR	C11-C10-C9	-2.45	123.81	127.31
29	m	101	LMG	O6-C1-O1	-2.45	104.17	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	D	404	CLA	C4-C3-C5	2.45	119.39	115.27
27	K	101	BCR	C15-C14-C13	-2.45	123.82	127.31
29	M	101	LMG	C38-C37-C36	-2.45	102.01	114.42
31	C	518	DGD	O3E-C3E-C2E	-2.44	104.70	110.35
25	c	507	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
29	D	412	LMG	O1-C7-C8	-2.44	105.30	111.78
26	A	608	PHO	O2A-C1-C2	2.44	115.05	108.64
25	D	404	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	a	607	CLA	C1B-CHB-C4A	-2.44	125.29	130.12
28	D	407	PL9	C8-C7-C3	2.44	118.87	111.98
29	d	411	LMG	C40-C39-C38	-2.44	102.05	114.42
34	D	410	LHG	C27-C26-C25	-2.44	102.05	114.42
27	b	618	BCR	C35-C13-C14	-2.44	119.51	122.92
25	c	505	CLA	CMB-C2B-C3B	2.44	129.24	124.68
29	D	408	LMG	O2-C2-C1	-2.43	104.13	110.05
25	b	602	CLA	CHD-C1D-ND	-2.43	122.22	124.45
31	A	615	DGD	O3G-C3G-C2G	-2.43	105.03	110.90
27	h	101	BCR	C15-C16-C17	-2.43	118.49	123.47
28	A	611	PL9	C40-C39-C41	2.43	119.36	115.27
25	b	604	CLA	C11-C12-C13	-2.43	108.06	115.92
34	L	102	LHG	C5-O7-C7	-2.43	111.80	117.79
28	D	407	PL9	C31-C32-C33	-2.43	103.90	111.88
25	C	512	CLA	O2A-CGA-O1A	-2.43	117.47	123.59
30	f	101	SQD	O48-C23-C24	2.43	119.52	111.91
27	B	619	BCR	C29-C30-C25	2.43	114.22	110.48
27	H	101	BCR	C2-C1-C6	2.42	114.21	110.48
27	h	101	BCR	C11-C10-C9	-2.42	123.85	127.31
25	C	501	CLA	CMB-C2B-C3B	2.42	129.21	124.68
29	c	521	LMG	O6-C1-O1	-2.42	104.24	109.97
29	c	519	LMG	C38-C37-C36	-2.42	102.14	114.42
28	d	406	PL9	C22-C23-C24	-2.42	121.83	127.66
27	B	618	BCR	C33-C5-C6	-2.42	121.81	124.53
34	e	102	LHG	C11-C10-C9	-2.42	102.16	114.42
31	c	516	DGD	O5D-C6D-C5D	-2.42	104.58	109.05
25	a	609	CLA	O2A-CGA-O1A	-2.42	117.49	123.59
28	D	407	PL9	C40-C39-C41	2.41	119.33	115.27
30	f	101	SQD	C1-O5-C5	-2.41	108.95	113.69
25	b	615	CLA	O2D-CGD-O1D	-2.41	119.13	123.84
31	C	517	DGD	CDB-CCB-CBB	-2.41	102.19	114.42
25	B	616	CLA	CHB-C4A-NA	2.41	127.84	124.51
34	d	407	LHG	C20-C19-C18	-2.41	102.21	114.42
34	d	408	LHG	C27-C26-C25	-2.41	102.21	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	c	514	BCR	C33-C5-C6	-2.40	121.83	124.53
25	C	512	CLA	CHB-C4A-NA	2.40	127.83	124.51
35	e	101	HEM	CHB-C1B-NB	2.40	127.34	124.38
27	C	514	BCR	C33-C5-C6	-2.39	121.84	124.53
25	C	506	CLA	C1B-CHB-C4A	-2.39	125.38	130.12
31	c	518	DGD	O3E-C3E-C2E	-2.39	104.82	110.35
27	C	514	BCR	C11-C10-C9	-2.39	123.90	127.31
25	A	607	CLA	O2A-CGA-O1A	-2.39	117.56	123.59
25	c	510	CLA	O2A-CGA-O1A	-2.39	117.56	123.59
25	A	606	CLA	O2A-CGA-O1A	-2.39	117.56	123.59
27	B	618	BCR	C35-C13-C14	-2.39	119.58	122.92
27	C	514	BCR	C27-C26-C25	2.39	126.20	122.73
28	D	407	PL9	C30-C29-C31	-2.39	111.25	115.27
27	c	514	BCR	C27-C26-C25	2.39	126.19	122.73
25	c	503	CLA	C4-C3-C5	2.38	119.28	115.27
25	b	602	CLA	C1-C2-C3	-2.38	121.92	126.04
25	b	613	CLA	CHA-C1A-NA	-2.38	120.94	126.40
34	D	410	LHG	C18-C17-C16	-2.38	102.33	114.42
25	b	604	CLA	CAA-CBA-CGA	-2.38	106.29	113.25
34	l	101	LHG	O8-C23-C24	2.38	119.38	111.91
25	B	607	CLA	C2A-C1A-CHA	2.38	128.02	123.86
25	C	508	CLA	CHD-C1D-C2D	2.38	130.47	125.48
31	c	516	DGD	C5B-C4B-C3B	-2.38	102.35	114.42
31	H	102	DGD	C3E-C4E-C5E	-2.38	106.00	110.24
25	B	601	CLA	C2A-C1A-CHA	2.38	128.01	123.86
31	H	102	DGD	CDB-CCB-CBB	-2.38	102.36	114.42
26	A	608	PHO	O2A-CGA-O1A	-2.37	117.60	123.59
25	b	611	CLA	C2D-C1D-ND	-2.37	108.36	110.10
34	l	101	LHG	C5-O7-C7	-2.37	111.95	117.79
25	B	615	CLA	C16-C15-C13	-2.37	108.25	115.92
27	b	619	BCR	C37-C22-C21	-2.37	119.60	122.92
25	C	508	CLA	C2D-C1D-ND	-2.37	108.36	110.10
25	B	601	CLA	O1D-CGD-CBD	2.37	129.33	124.48
27	b	618	BCR	C27-C26-C25	2.37	126.17	122.73
25	B	604	CLA	C2D-C1D-ND	-2.37	108.36	110.10
35	e	101	HEM	CAB-C3B-C2B	-2.37	120.81	128.60
28	a	611	PL9	O1-C4-C3	-2.37	118.11	120.72
25	C	505	CLA	C11-C10-C8	-2.37	108.27	115.92
25	c	508	CLA	CHB-C4A-NA	2.36	127.78	124.51
25	B	605	CLA	O2D-CGD-O1D	-2.36	119.22	123.84
25	d	404	CLA	CHB-C4A-NA	2.36	127.77	124.51
25	b	607	CLA	O2A-CGA-O1A	-2.36	117.64	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	c	517	DGD	C6D-O5D-C1E	2.36	118.34	113.74
34	D	411	LHG	O8-C23-O10	-2.35	117.65	123.59
28	A	611	PL9	O2-C1-C6	2.35	124.67	120.59
25	C	511	CLA	CHB-C4A-NA	2.35	127.77	124.51
27	K	101	BCR	C2-C1-C6	2.35	114.10	110.48
26	D	402	PHO	O1D-CGD-CBD	2.35	128.65	124.74
31	a	614	DGD	CAB-C9B-C8B	-2.35	102.51	114.42
31	a	614	DGD	C6B-C5B-C4B	-2.35	102.52	114.42
29	C	519	LMG	C40-C39-C38	-2.34	102.52	114.42
25	B	612	CLA	CHD-C1D-ND	-2.34	122.30	124.45
29	d	411	LMG	O3-C3-C2	-2.34	104.93	110.35
34	D	413	LHG	C20-C19-C18	-2.34	102.54	114.42
25	C	507	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
31	A	615	DGD	C1E-O6E-C5E	2.34	118.28	113.69
25	b	612	CLA	CAC-C3C-C4C	2.34	127.85	124.81
30	t	102	SQD	O48-C23-O10	-2.34	117.69	123.59
27	a	610	BCR	C3-C4-C5	-2.34	109.91	114.08
34	e	102	LHG	C20-C19-C18	-2.34	102.57	114.42
32	t	103	STE	C3-C2-C1	-2.33	108.59	114.47
25	b	612	CLA	O1D-CGD-CBD	2.33	129.26	124.48
27	A	610	BCR	C33-C5-C6	-2.33	121.91	124.53
25	A	607	CLA	O1D-CGD-CBD	2.33	129.26	124.48
31	H	102	DGD	C7B-C6B-C5B	-2.33	102.59	114.42
30	A	613	SQD	O5-C5-C4	2.33	113.93	109.69
25	c	502	CLA	O2A-CGA-O1A	-2.33	117.71	123.59
32	C	521	STE	C3-C2-C1	-2.33	108.60	114.47
25	c	504	CLA	C1-C2-C3	-2.33	122.01	126.04
25	B	614	CLA	O2D-CGD-CBD	2.33	115.41	111.27
25	c	506	CLA	O2D-CGD-O1D	-2.33	119.29	123.84
34	E	101	LHG	C11-C10-C9	-2.33	102.62	114.42
29	c	523	LMG	C38-C37-C36	-2.33	102.62	114.42
25	C	504	CLA	CHD-C4C-NC	2.32	127.87	124.20
25	C	501	CLA	O2D-CGD-CBD	2.32	115.40	111.27
25	C	513	CLA	O2A-CGA-O1A	-2.32	117.73	123.59
31	H	102	DGD	CAB-C9B-C8B	-2.32	102.64	114.42
27	B	619	BCR	C37-C22-C21	-2.32	119.67	122.92
25	A	606	CLA	CMB-C2B-C3B	2.32	129.02	124.68
29	d	411	LMG	O1-C7-C8	-2.32	105.31	110.90
25	C	503	CLA	C1-O2A-CGA	2.32	122.53	116.44
34	E	101	LHG	C20-C19-C18	-2.32	102.67	114.42
25	B	614	CLA	CHB-C4A-NA	2.31	127.71	124.51
26	D	402	PHO	CMD-C2D-C3D	2.31	129.00	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	609	CLA	O2A-CGA-O1A	-2.31	117.76	123.59
31	h	102	DGD	O3E-C3E-C2E	-2.31	105.00	110.35
28	a	611	PL9	O2-C1-C2	-2.31	116.48	121.78
27	t	101	BCR	C27-C26-C25	2.31	126.09	122.73
31	c	516	DGD	O2D-C2D-C1D	-2.31	104.43	110.05
36	v	201	HEC	C1D-C2D-C3D	-2.31	105.39	107.00
34	D	413	LHG	C18-C17-C16	-2.31	102.71	114.42
27	b	617	BCR	C27-C26-C25	2.31	126.08	122.73
31	C	516	DGD	CAB-C9B-C8B	-2.31	102.71	114.42
28	a	611	PL9	C40-C39-C41	2.31	119.15	115.27
34	D	410	LHG	C11-C10-C9	-2.31	102.72	114.42
25	B	602	CLA	C1-C2-C3	-2.31	122.06	126.04
34	d	407	LHG	C11-C10-C9	-2.30	102.73	114.42
25	c	503	CLA	O2A-CGA-O1A	-2.30	117.78	123.59
27	A	610	BCR	C2-C1-C6	2.30	114.02	110.48
25	d	404	CLA	O2D-CGD-O1D	-2.30	119.34	123.84
25	c	512	CLA	C1B-CHB-C4A	-2.30	125.57	130.12
34	L	102	LHG	C20-C19-C18	-2.30	102.76	114.42
30	f	101	SQD	O8-S-C6	2.29	109.40	105.74
25	b	613	CLA	CHB-C4A-NA	2.29	127.68	124.51
25	A	609	CLA	O2D-CGD-CBD	2.29	115.34	111.27
27	k	101	BCR	C7-C8-C9	-2.29	122.77	126.23
36	V	201	HEC	CAD-CBD-CGD	-2.29	107.33	113.76
28	D	407	PL9	O1-C4-C3	-2.29	118.20	120.72
29	c	521	LMG	C38-C37-C36	-2.29	102.81	114.42
31	a	614	DGD	CDB-CCB-CBB	-2.29	102.81	114.42
25	b	614	CLA	CHD-C1D-C2D	2.29	130.28	125.48
25	a	609	CLA	C1B-CHB-C4A	-2.29	125.59	130.12
32	t	103	STE	O2-C1-C2	2.28	121.37	114.03
25	c	510	CLA	O2D-CGD-CBD	2.28	115.33	111.27
25	b	601	CLA	O2A-CGA-O1A	-2.28	117.83	123.59
25	B	606	CLA	C1-C2-C3	-2.28	122.10	126.04
35	e	101	HEM	CMC-C2C-C3C	2.28	128.95	124.68
25	B	606	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
25	A	609	CLA	CHC-C1C-NC	2.28	127.66	124.20
25	C	506	CLA	CHB-C4A-NA	2.28	127.66	124.51
28	D	407	PL9	C7-C3-C2	-2.28	120.30	123.30
25	b	612	CLA	C11-C12-C13	-2.28	108.56	115.92
26	d	402	PHO	C16-C15-C13	-2.28	108.56	115.92
34	L	102	LHG	C11-C10-C9	-2.28	102.87	114.42
25	b	607	CLA	CHB-C4A-NA	2.28	127.66	124.51
25	b	610	CLA	O1D-CGD-CBD	2.28	129.14	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	H	102	DGD	C3D-C4D-C5D	-2.27	106.18	110.24
25	C	508	CLA	O2D-CGD-CBD	2.27	115.31	111.27
31	c	518	DGD	CAB-C9B-C8B	-2.27	102.89	114.42
29	c	521	LMG	O8-C28-O10	-2.27	117.86	123.59
29	A	612	LMG	O8-C28-O10	-2.27	117.86	123.59
25	c	512	CLA	O1D-CGD-CBD	2.27	129.13	124.48
25	B	611	CLA	CHD-C1D-ND	-2.27	122.37	124.45
25	b	616	CLA	CHD-C1D-ND	-2.27	122.37	124.45
25	B	601	CLA	CHB-C4A-NA	2.27	127.64	124.51
31	h	102	DGD	CBB-CAB-C9B	-2.27	102.92	114.42
29	m	101	LMG	O7-C10-O9	-2.26	118.23	123.70
25	b	614	CLA	C2D-C1D-ND	-2.26	108.44	110.10
25	b	608	CLA	CHD-C4C-C3C	-2.26	121.52	124.84
25	c	510	CLA	C2D-C1D-ND	-2.26	108.44	110.10
29	B	621	LMG	C38-C37-C36	-2.26	102.95	114.42
25	b	614	CLA	O2A-CGA-O1A	-2.26	117.89	123.59
25	C	508	CLA	C3C-C4C-NC	-2.26	108.04	110.57
25	B	602	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	c	503	CLA	C1-C2-C3	-2.26	122.14	126.04
25	b	603	CLA	CHB-C4A-NA	2.26	127.63	124.51
29	m	101	LMG	C9-C8-C7	-2.26	106.45	111.79
27	K	101	BCR	C27-C26-C25	2.26	126.01	122.73
31	C	516	DGD	C6D-O5D-C1E	2.26	118.15	113.74
29	c	519	LMG	O3-C3-C2	-2.26	105.13	110.35
25	B	615	CLA	CMB-C2B-C1B	-2.26	125.00	128.46
25	C	503	CLA	O2D-CGD-O1D	-2.26	119.43	123.84
27	B	618	BCR	C3-C4-C5	-2.25	110.05	114.08
25	c	512	CLA	CMB-C2B-C3B	2.25	128.89	124.68
25	d	403	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
29	M	101	LMG	C40-C39-C38	-2.25	103.00	114.42
25	c	506	CLA	C2D-C1D-ND	-2.25	108.45	110.10
25	D	404	CLA	O2A-CGA-O1A	-2.25	117.91	123.59
25	B	615	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
25	c	503	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
25	A	607	CLA	C1-C2-C3	-2.25	122.15	126.04
25	B	609	CLA	CHB-C4A-NA	2.25	127.62	124.51
31	C	517	DGD	C5B-C4B-C3B	-2.25	103.01	114.42
25	b	602	CLA	C11-C10-C8	-2.25	108.66	115.92
25	B	601	CLA	O2D-CGD-CBD	2.25	115.26	111.27
34	D	411	LHG	C11-C10-C9	-2.25	103.02	114.42
29	M	101	LMG	O8-C28-O10	-2.25	117.93	123.59
25	C	510	CLA	O2D-CGD-CBD	2.24	115.25	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	606	CLA	CHD-C4C-NC	2.24	127.73	124.20
29	M	101	LMG	O7-C10-O9	-2.24	118.29	123.70
27	C	515	BCR	C2-C1-C6	2.24	113.93	110.48
29	b	622	LMG	C40-C39-C38	-2.24	103.06	114.42
27	c	515	BCR	C15-C16-C17	-2.24	118.89	123.47
27	t	101	BCR	C28-C27-C26	-2.24	110.08	114.08
25	C	503	CLA	CHB-C4A-NA	2.23	127.60	124.51
25	c	505	CLA	C16-C15-C13	-2.23	108.71	115.92
29	D	408	LMG	O1-C7-C8	-2.23	105.52	110.90
25	C	508	CLA	CHB-C4A-NA	2.23	127.59	124.51
25	b	606	CLA	O2A-CGA-O1A	-2.23	117.97	123.59
25	c	508	CLA	O2D-CGD-O1D	-2.23	119.48	123.84
27	D	406	BCR	C24-C23-C22	-2.23	122.87	126.23
31	a	614	DGD	C7B-C6B-C5B	-2.23	103.12	114.42
31	c	518	DGD	O5D-C6D-C5D	-2.23	104.93	109.05
29	D	408	LMG	C38-C37-C36	-2.23	103.12	114.42
27	b	617	BCR	C15-C16-C17	-2.23	118.92	123.47
27	B	617	BCR	C27-C26-C25	2.23	125.96	122.73
25	b	609	CLA	O1D-CGD-CBD	2.23	129.04	124.48
29	C	519	LMG	C38-C37-C36	-2.22	103.13	114.42
25	B	603	CLA	C1B-CHB-C4A	-2.22	125.71	130.12
32	c	522	STE	C3-C2-C1	-2.22	108.87	114.47
25	C	508	CLA	C1D-ND-C4D	2.22	107.91	106.33
25	c	512	CLA	CMB-C2B-C1B	-2.22	125.05	128.46
34	l	101	LHG	C11-C10-C9	-2.22	103.16	114.42
27	B	617	BCR	C33-C5-C6	-2.21	122.04	124.53
32	d	412	STE	O2-C1-C2	2.21	121.14	114.03
25	b	608	CLA	CAC-C3C-C2C	2.21	131.31	127.53
29	c	519	LMG	C40-C39-C38	-2.21	103.19	114.42
25	D	403	CLA	CHD-C1D-C2D	2.21	130.12	125.48
25	a	607	CLA	O1D-CGD-CBD	2.21	129.01	124.48
31	c	518	DGD	C3D-C4D-C5D	-2.21	106.30	110.24
25	b	604	CLA	CBA-CAA-C2A	-2.21	107.34	113.86
25	C	504	CLA	O2A-CGA-O1A	-2.21	118.02	123.59
25	C	513	CLA	CHB-C4A-NA	2.21	127.56	124.51
25	b	613	CLA	C1B-CHB-C4A	-2.21	125.74	130.12
29	d	411	LMG	O2-C2-C1	-2.21	104.69	110.05
31	c	516	DGD	C3G-C2G-C1G	-2.21	106.57	111.79
27	K	102	BCR	C15-C14-C13	-2.20	124.17	127.31
34	l	101	LHG	O8-C23-O10	-2.20	118.04	123.59
25	B	602	CLA	C2D-C1D-ND	-2.20	108.48	110.10
25	A	607	CLA	C1B-CHB-C4A	-2.20	125.76	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	a	609	CLA	C1-C2-C3	-2.20	122.24	126.04
29	m	101	LMG	C38-C37-C36	-2.20	103.26	114.42
29	b	622	LMG	C3-C4-C5	-2.20	106.32	110.24
28	D	407	PL9	C37-C38-C39	-2.20	122.37	127.66
29	c	521	LMG	O7-C10-O9	-2.20	118.39	123.70
25	B	614	CLA	CHA-C1A-NA	-2.20	121.37	126.40
25	A	606	CLA	C7-C6-C5	-2.20	107.39	113.36
25	b	606	CLA	C1B-CHB-C4A	-2.20	125.77	130.12
25	A	607	CLA	O2D-CGD-CBD	2.19	115.16	111.27
25	B	601	CLA	CHA-C4D-ND	2.19	137.08	132.50
29	d	411	LMG	C38-C37-C36	-2.19	103.31	114.42
31	h	102	DGD	O6E-C5E-C4E	2.19	113.67	109.69
25	c	508	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	C	502	CLA	CMB-C2B-C3B	2.19	128.77	124.68
25	B	607	CLA	C1-C2-C3	-2.19	122.26	126.04
25	B	612	CLA	O1D-CGD-CBD	2.19	128.96	124.48
25	C	507	CLA	O2D-CGD-CBD	2.19	115.15	111.27
25	B	613	CLA	CHB-C4A-NA	2.18	127.53	124.51
27	B	619	BCR	C1-C6-C5	-2.18	119.54	122.61
25	b	615	CLA	CHB-C4A-NA	2.18	127.53	124.51
25	c	511	CLA	CHB-C4A-NA	2.18	127.53	124.51
27	k	102	BCR	C27-C26-C25	2.18	125.89	122.73
25	a	606	CLA	O1D-CGD-CBD	2.18	128.94	124.48
31	A	615	DGD	CAB-C9B-C8B	-2.18	103.38	114.42
25	a	609	CLA	CAA-CBA-CGA	-2.17	106.90	113.25
29	A	612	LMG	O6-C1-O1	-2.17	104.82	109.97
30	A	613	SQD	O5-C1-O6	2.17	115.12	109.97
25	b	616	CLA	O2A-CGA-O1A	-2.17	118.11	123.59
29	D	412	LMG	O7-C10-O9	-2.17	118.46	123.70
29	D	408	LMG	O3-C3-C2	-2.17	105.33	110.35
27	k	101	BCR	C27-C26-C25	2.17	125.88	122.73
31	C	516	DGD	C6B-C5B-C4B	-2.17	103.43	114.42
25	B	616	CLA	O2D-CGD-CBD	2.16	115.11	111.27
27	a	610	BCR	C38-C26-C27	-2.16	109.46	113.62
35	e	101	HEM	C4B-CHC-C1C	2.16	125.41	122.56
31	A	615	DGD	C8B-C7B-C6B	-2.16	103.46	114.42
25	d	404	CLA	O2A-CGA-O1A	-2.16	118.14	123.59
28	D	407	PL9	C36-C37-C38	-2.16	104.78	111.88
25	B	610	CLA	C11-C10-C8	-2.16	108.94	115.92
25	C	502	CLA	O1D-CGD-CBD	2.16	128.90	124.48
36	V	201	HEC	CMB-C2B-C1B	-2.16	125.15	128.46
32	b	625	STE	O2-C1-C2	2.16	120.96	114.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	614	CLA	C1B-CHB-C4A	-2.16	125.85	130.12
30	L	101	SQD	C9-C8-C7	-2.16	105.78	113.62
29	A	612	LMG	C1-O6-C5	-2.15	109.46	113.69
25	C	512	CLA	C1B-CHB-C4A	-2.15	125.85	130.12
34	E	101	LHG	C18-C17-C16	-2.15	103.50	114.42
25	b	610	CLA	CHD-C1D-ND	-2.15	122.48	124.45
32	t	104	STE	C3-C2-C1	-2.15	109.05	114.47
25	C	504	CLA	O2D-CGD-O1D	-2.15	119.64	123.84
25	C	505	CLA	O2D-CGD-CBD	2.15	115.08	111.27
30	L	101	SQD	O5-C1-C2	-2.14	105.82	110.35
32	J	101	STE	O2-C1-C2	2.14	120.91	114.03
25	B	611	CLA	CHD-C4C-NC	2.14	127.57	124.20
31	C	517	DGD	CAB-C9B-C8B	-2.14	103.57	114.42
28	d	406	PL9	C46-C47-C48	-2.14	104.86	111.88
28	d	406	PL9	C31-C29-C28	2.14	125.44	121.12
25	b	609	CLA	C7-C6-C5	-2.14	107.55	113.36
25	C	502	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
25	d	404	CLA	C1-C2-C3	-2.14	122.35	126.04
27	A	610	BCR	C7-C8-C9	-2.14	123.01	126.23
25	a	607	CLA	O2D-CGD-CBD	2.14	115.06	111.27
27	c	514	BCR	C3-C4-C5	-2.13	110.27	114.08
25	c	502	CLA	O2D-CGD-CBD	2.13	115.06	111.27
25	b	603	CLA	CHA-C4D-ND	2.13	136.96	132.50
31	H	102	DGD	C5B-C4B-C3B	-2.13	103.61	114.42
25	C	513	CLA	C2D-C1D-ND	-2.13	108.53	110.10
25	B	601	CLA	CAA-CBA-CGA	-2.13	107.03	113.25
25	B	601	CLA	CHA-C1A-NA	-2.13	121.53	126.40
25	C	512	CLA	CHA-C1A-NA	-2.13	121.53	126.40
31	h	102	DGD	C7B-C6B-C5B	-2.13	103.63	114.42
31	C	517	DGD	C6D-O5D-C1E	2.13	117.89	113.74
25	B	612	CLA	CED-O2D-CGD	-2.13	111.13	115.94
34	l	101	LHG	C20-C19-C18	-2.13	103.64	114.42
25	b	603	CLA	O1D-CGD-CBD	2.12	128.83	124.48
35	e	101	HEM	C2C-C3C-C4C	2.12	108.38	106.90
25	b	613	CLA	CHA-C4D-ND	2.12	136.94	132.50
35	e	101	HEM	CHC-C4B-C3B	2.12	127.82	124.57
29	c	523	LMG	O7-C10-O9	-2.12	118.58	123.70
25	a	606	CLA	C2A-C1A-CHA	2.12	127.56	123.86
27	C	514	BCR	C3-C4-C5	-2.12	110.30	114.08
32	b	621	STE	C3-C2-C1	-2.12	109.14	114.47
31	H	102	DGD	O3E-C3E-C2E	-2.12	105.46	110.35
34	d	408	LHG	O8-C23-O10	-2.12	118.25	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	a	608	PHO	CMD-C2D-C3D	2.11	128.63	124.68
25	C	504	CLA	O2D-CGD-CBD	2.11	115.02	111.27
27	b	618	BCR	C8-C7-C6	-2.11	121.27	127.20
28	d	406	PL9	O1-C4-C3	-2.11	118.39	120.72
31	h	102	DGD	CAB-C9B-C8B	-2.11	103.70	114.42
25	c	510	CLA	C16-C15-C13	-2.11	109.09	115.92
30	B	622	SQD	O5-C1-C2	-2.11	105.88	110.35
27	c	514	BCR	C15-C14-C13	-2.11	124.30	127.31
31	C	516	DGD	O2E-C2E-C1E	-2.11	104.92	110.05
27	B	618	BCR	C30-C25-C26	-2.11	119.64	122.61
28	A	611	PL9	C36-C34-C33	-2.11	116.85	121.12
25	c	501	CLA	CHB-C4A-NA	2.11	127.43	124.51
25	B	604	CLA	CAA-CBA-CGA	-2.11	107.10	113.25
25	B	609	CLA	C7-C6-C5	-2.10	107.64	113.36
25	C	511	CLA	C1B-CHB-C4A	-2.10	125.95	130.12
25	B	605	CLA	CHD-C4C-NC	2.10	127.52	124.20
31	c	516	DGD	CBB-CAB-C9B	-2.10	103.75	114.42
34	l	101	LHG	C27-C26-C25	-2.10	103.75	114.42
29	D	408	LMG	O1-C1-C2	-2.10	105.02	108.30
25	D	404	CLA	O2D-CGD-CBD	2.10	115.00	111.27
27	k	102	BCR	C28-C27-C26	-2.10	110.33	114.08
31	c	518	DGD	C8B-C7B-C6B	-2.10	103.76	114.42
25	D	403	CLA	C2D-C1D-ND	-2.10	108.56	110.10
26	d	402	PHO	CMA-C3A-C4A	-2.10	109.78	114.38
27	T	101	BCR	C7-C8-C9	-2.10	123.06	126.23
34	d	407	LHG	C18-C17-C16	-2.10	103.78	114.42
28	d	406	PL9	C12-C13-C14	-2.10	122.61	127.66
25	B	608	CLA	CHD-C1D-ND	-2.10	122.53	124.45
32	B	624	STE	O2-C1-C2	2.10	120.76	114.03
25	b	608	CLA	C2A-C1A-CHA	2.09	127.52	123.86
25	b	611	CLA	CHD-C1D-ND	-2.09	122.53	124.45
27	k	102	BCR	C11-C10-C9	-2.09	124.32	127.31
25	b	609	CLA	C3C-C4C-NC	-2.09	108.22	110.57
25	c	509	CLA	C11-C12-C13	-2.09	109.16	115.92
27	h	101	BCR	C20-C21-C22	-2.09	124.33	127.31
26	a	608	PHO	O2A-CGA-O1A	-2.09	118.32	123.59
29	A	612	LMG	O3-C3-C2	-2.09	105.52	110.35
25	b	608	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
27	A	610	BCR	C37-C22-C21	-2.09	120.00	122.92
25	a	607	CLA	C2D-C1D-ND	-2.09	108.56	110.10
31	C	517	DGD	O5D-C6D-C5D	-2.09	105.19	109.05
25	b	605	CLA	CHC-C1C-NC	2.09	127.37	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	C	518	DGD	C7B-C6B-C5B	-2.09	103.83	114.42
29	c	521	LMG	C42-C41-C40	-2.08	103.84	114.42
31	C	516	DGD	O3E-C3E-C2E	-2.08	105.53	110.35
25	c	511	CLA	C2A-C1A-CHA	2.08	127.50	123.86
25	C	507	CLA	C1-C2-C3	-2.08	122.44	126.04
25	B	613	CLA	CHA-C1A-NA	-2.08	121.63	126.40
30	a	613	SQD	O5-C5-C4	2.08	113.47	109.69
29	c	521	LMG	O2-C2-C1	-2.08	104.99	110.05
31	A	615	DGD	C5B-C4B-C3B	-2.08	103.86	114.42
31	C	516	DGD	C3G-C2G-C1G	-2.08	106.87	111.79
27	c	514	BCR	C7-C8-C9	-2.08	123.10	126.23
27	B	619	BCR	C15-C16-C17	-2.08	119.22	123.47
31	c	518	DGD	O5E-C6E-C5E	-2.08	104.17	111.29
31	c	516	DGD	C4E-C3E-C2E	-2.07	107.20	110.82
25	C	512	CLA	O2D-CGD-CBD	2.07	114.95	111.27
32	B	624	STE	C3-C2-C1	-2.07	109.25	114.47
25	A	607	CLA	CHD-C1D-C2D	2.07	129.82	125.48
25	b	602	CLA	C4-C3-C5	2.07	118.75	115.27
25	C	511	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
31	c	517	DGD	C7B-C6B-C5B	-2.07	103.93	114.42
25	B	614	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
34	l	101	LHG	C29-C28-C27	-2.07	103.93	114.42
25	C	507	CLA	CAA-CBA-CGA	-2.07	107.22	113.25
32	R	101	STE	O2-C1-C2	2.07	120.67	114.03
31	c	517	DGD	O6E-C1E-O5D	-2.06	105.09	109.97
28	a	611	PL9	C27-C28-C29	-2.06	122.69	127.66
31	a	614	DGD	C1G-C2G-C3G	-2.06	106.98	111.80
25	b	612	CLA	CHA-C1A-NA	-2.06	121.68	126.40
29	A	612	LMG	O1-C7-C8	-2.06	105.93	110.90
31	A	615	DGD	O6E-C5E-C4E	2.06	113.44	109.69
29	A	612	LMG	C36-C35-C34	-2.06	103.97	114.42
31	c	518	DGD	CBB-CAB-C9B	-2.06	103.97	114.42
25	C	513	CLA	O2D-CGD-CBD	2.06	114.92	111.27
31	c	517	DGD	C3E-C4E-C5E	-2.06	106.57	110.24
31	A	615	DGD	O5E-C6E-C5E	-2.06	104.24	111.29
27	h	101	BCR	C38-C26-C25	-2.06	122.22	124.53
25	c	510	CLA	C1B-CHB-C4A	-2.06	126.05	130.12
27	t	101	BCR	C35-C13-C12	2.06	121.31	118.08
25	B	610	CLA	CMB-C2B-C3B	2.06	128.52	124.68
25	B	613	CLA	CED-O2D-CGD	2.05	120.58	115.94
35	e	101	HEM	CHA-C4D-ND	2.05	126.92	124.38
25	C	509	CLA	CHD-C1D-C2D	2.05	129.78	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	608	CLA	CHB-C4A-NA	2.05	127.35	124.51
25	d	403	CLA	O2A-CGA-O1A	-2.05	118.41	123.59
34	d	407	LHG	C27-C26-C25	-2.05	104.02	114.42
29	M	101	LMG	O2-C2-C1	-2.05	105.07	110.05
25	c	507	CLA	O2A-CGA-O1A	-2.05	118.42	123.59
31	C	518	DGD	CAB-C9B-C8B	-2.05	104.03	114.42
25	B	613	CLA	C1B-CHB-C4A	-2.05	126.06	130.12
25	B	606	CLA	CHA-C1A-NA	-2.05	121.71	126.40
25	C	501	CLA	C1B-CHB-C4A	-2.05	126.06	130.12
27	T	101	BCR	C31-C1-C6	2.04	113.61	110.30
25	B	601	CLA	CMB-C2B-C3B	2.04	128.50	124.68
25	b	607	CLA	C1D-CHD-C4C	-2.04	121.65	126.06
28	D	407	PL9	C50-C49-C48	-2.04	116.75	122.65
31	C	517	DGD	C7B-C6B-C5B	-2.04	104.06	114.42
31	c	518	DGD	C4D-C3D-C2D	-2.04	107.26	110.82
31	C	517	DGD	C4E-C3E-C2E	-2.04	107.26	110.82
25	b	614	CLA	C3C-C4C-NC	-2.04	108.28	110.57
25	b	604	CLA	C2A-C1A-CHA	2.04	127.42	123.86
25	C	505	CLA	CHA-C1A-NA	-2.04	121.73	126.40
25	B	604	CLA	O2D-CGD-CBD	2.04	114.89	111.27
31	A	615	DGD	CBB-CAB-C9B	-2.04	104.08	114.42
31	c	518	DGD	O6E-C5E-C4E	2.04	113.39	109.69
25	c	505	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
27	h	101	BCR	C7-C8-C9	-2.03	123.16	126.23
25	B	616	CLA	CHD-C1D-ND	-2.03	122.59	124.45
25	B	603	CLA	CHB-C4A-NA	2.03	127.32	124.51
31	A	615	DGD	CFB-CEB-CDB	-2.03	104.12	114.42
34	d	409	LHG	C27-C26-C25	-2.03	104.13	114.42
27	k	102	BCR	C15-C14-C13	-2.03	124.42	127.31
25	B	608	CLA	C1B-CHB-C4A	-2.03	126.10	130.12
27	t	101	BCR	C16-C15-C14	-2.03	119.33	123.47
25	b	611	CLA	C1B-CHB-C4A	-2.02	126.11	130.12
29	C	519	LMG	O8-C28-O10	-2.02	118.48	123.59
25	B	604	CLA	C3A-C2A-C1A	2.02	104.37	101.34
29	c	519	LMG	O6-C5-C4	2.02	113.37	109.69
25	c	508	CLA	CHD-C4C-NC	2.02	127.39	124.20
25	C	511	CLA	C2D-C1D-ND	-2.02	108.61	110.10
30	D	409	SQD	O4-C4-C3	-2.02	105.67	110.35
25	C	508	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
25	b	601	CLA	C3C-C4C-NC	-2.02	108.30	110.57
25	C	505	CLA	C4D-CHA-C1A	-2.02	118.79	121.25
34	e	102	LHG	C5-O7-C7	-2.02	112.82	117.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	c	521	LMG	O3-C3-C2	-2.02	105.68	110.35
25	b	608	CLA	C3B-C4B-NB	-2.02	106.60	109.21
25	b	603	CLA	C7-C6-C5	-2.02	107.87	113.36
34	E	101	LHG	C27-C26-C25	-2.02	104.17	114.42
25	B	602	CLA	CGD-CBD-CAD	-2.02	104.19	110.73
25	B	606	CLA	C2A-C1A-CHA	2.02	127.39	123.86
26	D	402	PHO	CMC-C2C-C3C	2.02	128.75	124.94
26	a	608	PHO	O2D-CGD-CBD	2.02	113.55	111.00
25	b	605	CLA	C4-C3-C5	2.02	118.67	115.27
25	c	505	CLA	CHB-C4A-NA	2.01	127.30	124.51
25	C	504	CLA	CHB-C4A-NA	2.01	127.29	124.51
25	C	505	CLA	CHB-C4A-NA	2.01	127.29	124.51
31	C	518	DGD	CBB-CAB-C9B	-2.01	104.22	114.42
29	C	519	LMG	O3-C3-C2	-2.01	105.70	110.35
31	C	518	DGD	O4D-C4D-C5D	-2.01	104.31	109.30
27	c	514	BCR	C20-C21-C22	-2.01	124.45	127.31
25	B	613	CLA	O2D-CGD-O1D	-2.01	119.92	123.84
25	B	615	CLA	CHD-C1D-ND	-2.00	122.61	124.45
34	e	102	LHG	C18-C17-C16	-2.00	104.25	114.42
34	d	408	LHG	C15-C14-C13	-2.00	104.25	114.42
29	d	411	LMG	C6-C5-C4	-2.00	108.31	113.00
28	d	406	PL9	O2-C1-C2	-2.00	117.20	121.78
25	a	607	CLA	CHA-C1A-NA	-2.00	121.82	126.40

All (63) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
25	A	606	CLA	ND
25	A	609	CLA	ND
25	B	601	CLA	ND
25	B	602	CLA	ND
25	B	603	CLA	ND
25	B	604	CLA	ND
25	B	605	CLA	ND
25	B	606	CLA	ND
25	B	607	CLA	ND
25	B	608	CLA	ND
25	B	610	CLA	ND
25	B	611	CLA	ND
25	B	612	CLA	ND
25	B	613	CLA	ND
25	B	614	CLA	ND

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Mol	Chain	Res	Type	Atom
25	B	615	CLA	ND
25	B	616	CLA	ND
25	C	501	CLA	ND
25	C	502	CLA	ND
25	C	503	CLA	ND
25	C	504	CLA	ND
25	C	505	CLA	ND
25	C	506	CLA	ND
25	C	507	CLA	ND
25	C	509	CLA	ND
25	C	510	CLA	ND
25	C	511	CLA	ND
25	C	512	CLA	ND
25	C	513	CLA	ND
25	D	403	CLA	ND
25	D	405	CLA	ND
25	a	606	CLA	ND
25	a	607	CLA	ND
25	a	609	CLA	ND
25	a	612	CLA	ND
25	b	601	CLA	ND
25	b	602	CLA	ND
25	b	603	CLA	ND
25	b	604	CLA	ND
25	b	605	CLA	ND
25	b	606	CLA	ND
25	b	607	CLA	ND
25	b	608	CLA	ND
25	b	609	CLA	ND
25	b	610	CLA	ND
25	b	611	CLA	ND
25	b	612	CLA	ND
25	b	613	CLA	ND
25	b	614	CLA	ND
25	b	615	CLA	ND
25	b	616	CLA	ND
25	c	501	CLA	ND
25	c	504	CLA	ND
25	c	505	CLA	ND
25	c	506	CLA	ND
25	c	507	CLA	ND
25	c	509	CLA	ND

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Mol	Chain	Res	Type	Atom
25	c	510	CLA	ND
25	c	511	CLA	ND
25	c	512	CLA	ND
25	c	513	CLA	ND
25	d	403	CLA	ND
25	d	404	CLA	ND

All (1988) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
25	A	607	CLA	CHA-CBD-CGD-O1D
25	A	607	CLA	CHA-CBD-CGD-O2D
25	B	601	CLA	C11-C12-C13-C14
25	B	604	CLA	C2-C3-C5-C6
25	B	604	CLA	C4-C3-C5-C6
25	B	606	CLA	CHA-CBD-CGD-O1D
25	B	606	CLA	CHA-CBD-CGD-O2D
25	B	612	CLA	CHA-CBD-CGD-O1D
25	B	613	CLA	C2-C3-C5-C6
25	B	613	CLA	C4-C3-C5-C6
25	B	614	CLA	CHA-CBD-CGD-O1D
25	B	614	CLA	C4-C3-C5-C6
25	C	504	CLA	C2-C3-C5-C6
25	C	504	CLA	C4-C3-C5-C6
25	C	508	CLA	CHA-CBD-CGD-O1D
25	C	508	CLA	CHA-CBD-CGD-O2D
25	D	403	CLA	CHA-CBD-CGD-O1D
25	D	403	CLA	CHA-CBD-CGD-O2D
25	a	607	CLA	CHA-CBD-CGD-O1D
25	a	612	CLA	CHA-CBD-CGD-O2D
25	b	601	CLA	C1A-C2A-CAA-CBA
25	b	601	CLA	CBD-CGD-O2D-CED
25	b	605	CLA	C2-C3-C5-C6
25	b	605	CLA	C4-C3-C5-C6
25	b	606	CLA	C14-C13-C15-C16
25	b	611	CLA	C14-C13-C15-C16
25	b	614	CLA	CHA-CBD-CGD-O1D
25	b	614	CLA	CHA-CBD-CGD-O2D
25	b	614	CLA	CAD-CBD-CGD-O1D
25	b	614	CLA	CBD-CGD-O2D-CED
25	b	614	CLA	C2-C3-C5-C6
25	b	614	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
25	c	502	CLA	CHA-CBD-CGD-O1D
25	c	502	CLA	CHA-CBD-CGD-O2D
25	c	508	CLA	CHA-CBD-CGD-O1D
25	c	508	CLA	CHA-CBD-CGD-O2D
27	B	617	BCR	C1-C6-C7-C8
27	B	617	BCR	C7-C8-C9-C34
27	B	618	BCR	C7-C8-C9-C34
27	B	618	BCR	C37-C22-C23-C24
27	B	619	BCR	C11-C12-C13-C35
27	B	619	BCR	C17-C18-C19-C20
27	B	619	BCR	C20-C21-C22-C37
27	D	406	BCR	C7-C8-C9-C10
27	D	406	BCR	C16-C17-C18-C36
27	D	406	BCR	C23-C24-C25-C26
27	H	101	BCR	C23-C24-C25-C30
27	K	101	BCR	C11-C12-C13-C35
27	K	102	BCR	C7-C8-C9-C34
27	K	102	BCR	C37-C22-C23-C24
27	T	101	BCR	C1-C6-C7-C8
27	T	101	BCR	C5-C6-C7-C8
27	T	101	BCR	C7-C8-C9-C10
27	T	101	BCR	C7-C8-C9-C34
27	b	617	BCR	C21-C22-C23-C24
27	b	618	BCR	C7-C8-C9-C34
27	b	618	BCR	C20-C21-C22-C37
27	b	619	BCR	C35-C13-C14-C15
27	b	619	BCR	C37-C22-C23-C24
27	c	514	BCR	C11-C12-C13-C35
27	c	514	BCR	C18-C19-C20-C21
27	c	515	BCR	C20-C21-C22-C37
27	d	405	BCR	C20-C21-C22-C37
27	d	405	BCR	C37-C22-C23-C24
27	d	405	BCR	C22-C23-C24-C25
27	k	101	BCR	C5-C6-C7-C8
27	k	101	BCR	C17-C18-C19-C20
27	k	102	BCR	C20-C21-C22-C37
27	k	102	BCR	C23-C24-C25-C30
27	t	101	BCR	C1-C6-C7-C8
27	t	101	BCR	C5-C6-C7-C8
27	t	101	BCR	C7-C8-C9-C10
27	t	101	BCR	C7-C8-C9-C34
27	t	101	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
28	A	611	PL9	C22-C23-C24-C26
28	A	611	PL9	C37-C38-C39-C40
28	A	611	PL9	C38-C39-C41-C42
28	A	611	PL9	C45-C44-C46-C47
28	A	611	PL9	C47-C48-C49-C51
28	D	407	PL9	C32-C33-C34-C35
28	D	407	PL9	C33-C34-C36-C37
28	D	407	PL9	C42-C43-C44-C46
28	a	611	PL9	C12-C13-C14-C15
28	a	611	PL9	C12-C13-C14-C16
28	a	611	PL9	C20-C19-C21-C22
28	a	611	PL9	C19-C21-C22-C23
28	a	611	PL9	C22-C23-C24-C25
28	a	611	PL9	C22-C23-C24-C26
28	a	611	PL9	C39-C41-C42-C43
28	a	611	PL9	C42-C43-C44-C46
28	a	611	PL9	C47-C48-C49-C51
28	d	406	PL9	C32-C33-C34-C36
28	d	406	PL9	C42-C43-C44-C45
28	d	406	PL9	C42-C43-C44-C46
28	d	406	PL9	C47-C48-C49-C50
29	A	612	LMG	O6-C1-O1-C7
29	A	612	LMG	O9-C10-O7-C8
29	C	519	LMG	C11-C10-O7-C8
29	D	412	LMG	O1-C7-C8-C9
29	D	412	LMG	O1-C7-C8-O7
29	D	412	LMG	C11-C10-O7-C8
29	b	622	LMG	O9-C10-O7-C8
29	b	622	LMG	C11-C10-O7-C8
29	c	523	LMG	O6-C1-O1-C7
29	m	101	LMG	C2-C1-O1-C7
29	m	101	LMG	O6-C1-O1-C7
30	A	613	SQD	C2-C1-O6-C44
30	A	613	SQD	O5-C1-O6-C44
30	B	622	SQD	C2-C1-O6-C44
30	B	622	SQD	O5-C1-O6-C44
30	B	622	SQD	O6-C44-C45-O47
30	B	622	SQD	O49-C7-O47-C45
30	B	622	SQD	C8-C7-O47-C45
30	D	409	SQD	C2-C1-O6-C44
30	D	409	SQD	O5-C1-O6-C44
30	L	101	SQD	C8-C7-O47-C45

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Mol	Chain	Res	Type	Atoms
30	L	101	SQD	O10-C23-O48-C46
30	L	101	SQD	C24-C23-O48-C46
30	a	613	SQD	O6-C44-C45-O47
30	a	613	SQD	C5-C6-S-O7
30	a	613	SQD	C5-C6-S-O8
30	a	613	SQD	C5-C6-S-O9
30	f	101	SQD	C2-C1-O6-C44
30	f	101	SQD	O5-C1-O6-C44
30	t	102	SQD	O6-C44-C45-C46
30	t	102	SQD	O6-C44-C45-O47
30	t	102	SQD	C8-C7-O47-C45
31	A	615	DGD	O1B-C1B-O2G-C2G
31	a	614	DGD	C2B-C1B-O2G-C2G
34	D	410	LHG	O1-C1-C2-O2
34	D	410	LHG	O1-C1-C2-C3
34	D	410	LHG	C1-C2-C3-O3
34	D	410	LHG	C3-O3-P-O4
34	D	410	LHG	C3-O3-P-O6
34	D	410	LHG	C4-O6-P-O4
34	D	411	LHG	O1-C1-C2-O2
34	D	411	LHG	O1-C1-C2-C3
34	D	411	LHG	C3-O3-P-O5
34	D	411	LHG	C3-O3-P-O6
34	D	413	LHG	O1-C1-C2-C3
34	D	413	LHG	C3-O3-P-O4
34	E	101	LHG	O1-C1-C2-O2
34	E	101	LHG	O1-C1-C2-C3
34	E	101	LHG	C4-O6-P-O4
34	L	102	LHG	C4-O6-P-O4
34	d	407	LHG	O1-C1-C2-C3
34	d	407	LHG	C1-C2-C3-O3
34	d	408	LHG	O1-C1-C2-C3
34	d	408	LHG	C3-O3-P-O5
34	d	408	LHG	C4-O6-P-O4
34	e	102	LHG	O1-C1-C2-C3
34	e	102	LHG	C3-O3-P-O4
34	e	102	LHG	C4-O6-P-O5
34	e	102	LHG	O10-C23-O8-C6
34	e	102	LHG	C24-C23-O8-C6
34	l	101	LHG	C4-O6-P-O5
29	c	519	LMG	C11-C10-O7-C8
25	B	601	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
25	B	601	CLA	CBD-CGD-O2D-CED
25	c	513	CLA	CBD-CGD-O2D-CED
29	c	523	LMG	O10-C28-O8-C9
25	b	601	CLA	O1D-CGD-O2D-CED
25	b	614	CLA	O1D-CGD-O2D-CED
29	c	523	LMG	C29-C28-O8-C9
28	d	406	PL9	C47-C48-C49-C51
26	d	402	PHO	CBD-CGD-O2D-CED
30	f	101	SQD	O10-C23-O48-C46
25	c	503	CLA	CBD-CGD-O2D-CED
29	D	412	LMG	O9-C10-O7-C8
29	c	521	LMG	O9-C10-O7-C8
30	L	101	SQD	O49-C7-O47-C45
30	f	101	SQD	O49-C7-O47-C45
30	t	102	SQD	O49-C7-O47-C45
31	a	614	DGD	O1B-C1B-O2G-C2G
25	B	604	CLA	C3-C5-C6-C7
25	B	605	CLA	C3-C5-C6-C7
25	B	614	CLA	C3-C5-C6-C7
25	B	616	CLA	C3-C5-C6-C7
25	b	613	CLA	C3-C5-C6-C7
25	b	614	CLA	C3-C5-C6-C7
30	f	101	SQD	C24-C23-O48-C46
29	A	612	LMG	C11-C10-O7-C8
31	A	615	DGD	C2B-C1B-O2G-C2G
29	c	519	LMG	O9-C10-O7-C8
29	c	521	LMG	O10-C28-O8-C9
25	B	605	CLA	C4-C3-C5-C6
25	C	503	CLA	C4-C3-C5-C6
28	a	611	PL9	C35-C34-C36-C37
25	B	614	CLA	C2-C3-C5-C6
28	a	611	PL9	C18-C19-C21-C22
25	B	606	CLA	C2A-CAA-CBA-CGA
25	b	601	CLA	C3-C5-C6-C7
28	D	407	PL9	C42-C43-C44-C45
28	a	611	PL9	C42-C43-C44-C45
29	C	519	LMG	O9-C10-O7-C8
28	A	611	PL9	C37-C38-C39-C41
28	D	407	PL9	C32-C33-C34-C36
30	D	409	SQD	O6-C44-C45-C46
25	C	502	CLA	CBD-CGD-O2D-CED
25	C	505	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
25	C	506	CLA	CBD-CGD-O2D-CED
25	C	510	CLA	CBD-CGD-O2D-CED
25	b	615	CLA	CBD-CGD-O2D-CED
25	b	616	CLA	CBD-CGD-O2D-CED
25	c	513	CLA	O1D-CGD-O2D-CED
34	D	410	LHG	O2-C2-C3-O3
34	D	413	LHG	O2-C2-C3-O3
34	E	101	LHG	O2-C2-C3-O3
34	d	407	LHG	O2-C2-C3-O3
25	b	603	CLA	C3-C5-C6-C7
29	c	521	LMG	C29-C28-O8-C9
30	f	101	SQD	C8-C7-O47-C45
28	A	611	PL9	C47-C48-C49-C50
28	a	611	PL9	C47-C48-C49-C50
25	B	606	CLA	CBD-CGD-O2D-CED
25	B	616	CLA	CBD-CGD-O2D-CED
25	a	607	CLA	CBD-CGD-O2D-CED
31	h	102	DGD	O6E-C5E-C6E-O5E
29	D	408	LMG	C17-C18-C19-C20
32	B	624	STE	C4-C5-C6-C7
30	L	101	SQD	C14-C15-C16-C17
34	E	101	LHG	C32-C33-C34-C35
25	C	512	CLA	C3-C5-C6-C7
31	A	615	DGD	C4E-C5E-C6E-O5E
28	D	407	PL9	C47-C48-C49-C51
25	A	609	CLA	C4-C3-C5-C6
25	c	507	CLA	C4-C3-C5-C6
28	A	611	PL9	C20-C19-C21-C22
28	A	611	PL9	C40-C39-C41-C42
28	a	611	PL9	C25-C24-C26-C27
28	d	406	PL9	C40-C39-C41-C42
25	A	609	CLA	C2-C3-C5-C6
25	c	507	CLA	C2-C3-C5-C6
28	A	611	PL9	C18-C19-C21-C22
28	A	611	PL9	C43-C44-C46-C47
28	a	611	PL9	C23-C24-C26-C27
28	d	406	PL9	C38-C39-C41-C42
31	c	518	DGD	O1A-C1A-O1G-C1G
28	A	611	PL9	C19-C21-C22-C23
28	A	611	PL9	C29-C31-C32-C33
28	A	611	PL9	C34-C36-C37-C38
28	A	611	PL9	C44-C46-C47-C48

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Mol	Chain	Res	Type	Atoms
28	D	407	PL9	C29-C31-C32-C33
28	a	611	PL9	C24-C26-C27-C28
28	d	406	PL9	C44-C46-C47-C48
29	m	101	LMG	C29-C28-O8-C9
29	c	523	LMG	C16-C17-C18-C19
25	C	501	CLA	CBD-CGD-O2D-CED
26	d	402	PHO	O1D-CGD-O2D-CED
29	c	521	LMG	C11-C10-O7-C8
25	b	607	CLA	CBD-CGD-O2D-CED
31	c	516	DGD	C1B-C2B-C3B-C4B
34	D	413	LHG	C1-C2-C3-O3
30	D	409	SQD	O10-C23-O48-C46
25	c	506	CLA	CBA-CGA-O2A-C1
30	D	409	SQD	C24-C23-O48-C46
25	c	510	CLA	CBD-CGD-O2D-CED
25	B	602	CLA	C15-C16-C17-C18
30	D	409	SQD	C45-C46-O48-C23
30	L	101	SQD	C11-C10-C9-C8
25	C	513	CLA	C13-C15-C16-C17
25	c	507	CLA	C5-C6-C7-C8
25	B	601	CLA	C3-C5-C6-C7
29	c	519	LMG	C28-C29-C30-C31
34	e	102	LHG	C23-C24-C25-C26
29	c	523	LMG	C2-C1-O1-C7
31	A	615	DGD	O6E-C5E-C6E-O5E
25	B	605	CLA	C2-C3-C5-C6
25	C	503	CLA	C2-C3-C5-C6
25	A	607	CLA	C14-C13-C15-C16
25	B	601	CLA	C6-C7-C8-C9
25	B	607	CLA	C11-C12-C13-C14
25	B	614	CLA	C6-C7-C8-C9
25	B	614	CLA	C14-C13-C15-C16
25	C	501	CLA	C14-C13-C15-C16
25	C	502	CLA	C14-C13-C15-C16
25	C	503	CLA	C11-C10-C8-C9
25	C	507	CLA	C11-C10-C8-C9
25	C	509	CLA	C11-C10-C8-C9
25	C	512	CLA	C11-C10-C8-C9
25	D	404	CLA	C11-C10-C8-C9
25	b	601	CLA	C11-C10-C8-C9
25	b	601	CLA	C14-C13-C15-C16
25	b	605	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
25	b	613	CLA	C6-C7-C8-C9
25	b	614	CLA	C6-C7-C8-C9
25	c	503	CLA	C11-C12-C13-C14
25	c	511	CLA	C14-C13-C15-C16
25	c	512	CLA	C6-C7-C8-C9
26	A	608	PHO	C14-C13-C15-C16
25	b	606	CLA	C2A-CAA-CBA-CGA
27	B	619	BCR	C37-C22-C23-C24
27	C	514	BCR	C7-C8-C9-C34
27	d	405	BCR	C7-C8-C9-C34
27	h	101	BCR	C7-C8-C9-C34
27	k	101	BCR	C7-C8-C9-C34
29	A	612	LMG	O6-C5-C6-O5
29	B	621	LMG	C28-C29-C30-C31
30	A	614	SQD	C23-C24-C25-C26
32	C	521	STE	C1-C2-C3-C4
25	c	506	CLA	O1A-CGA-O2A-C1
25	B	602	CLA	C13-C15-C16-C17
25	C	503	CLA	C5-C6-C7-C8
25	b	607	CLA	C5-C6-C7-C8
25	c	503	CLA	C15-C16-C17-C18
29	c	519	LMG	O6-C5-C6-O5
25	c	510	CLA	C3-C5-C6-C7
25	B	613	CLA	C5-C6-C7-C8
25	C	507	CLA	C10-C11-C12-C13
25	a	606	CLA	C15-C16-C17-C18
25	a	607	CLA	C8-C10-C11-C12
25	c	511	CLA	C15-C16-C17-C18
32	X	101	STE	C3-C4-C5-C6
29	D	412	LMG	C28-C29-C30-C31
34	e	102	LHG	C7-C8-C9-C10
25	B	614	CLA	CBD-CGD-O2D-CED
31	c	517	DGD	O6E-C5E-C6E-O5E
25	B	616	CLA	C5-C6-C7-C8
25	C	506	CLA	C8-C10-C11-C12
25	C	509	CLA	C10-C11-C12-C13
25	a	609	CLA	C5-C6-C7-C8
25	b	605	CLA	C5-C6-C7-C8
25	b	614	CLA	C5-C6-C7-C8
25	c	504	CLA	C10-C11-C12-C13
25	c	511	CLA	C13-C15-C16-C17
25	c	512	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
31	h	102	DGD	C4E-C5E-C6E-O5E
28	d	406	PL9	C32-C33-C34-C35
29	c	521	LMG	C10-C11-C12-C13
29	d	411	LMG	C28-C29-C30-C31
31	A	615	DGD	C1A-C2A-C3A-C4A
31	a	614	DGD	C1A-C2A-C3A-C4A
34	d	407	LHG	C23-C24-C25-C26
25	b	613	CLA	CBD-CGD-O2D-CED
25	B	607	CLA	C8-C10-C11-C12
25	B	613	CLA	C8-C10-C11-C12
25	C	504	CLA	C8-C10-C11-C12
25	D	403	CLA	C15-C16-C17-C18
25	b	608	CLA	C8-C10-C11-C12
25	b	611	CLA	C8-C10-C11-C12
25	b	614	CLA	C13-C15-C16-C17
25	b	607	CLA	CBA-CGA-O2A-C1
25	b	603	CLA	C10-C11-C12-C13
29	C	519	LMG	C28-C29-C30-C31
25	B	601	CLA	C11-C10-C8-C7
25	B	603	CLA	C6-C7-C8-C10
25	B	611	CLA	C12-C13-C15-C16
25	C	503	CLA	C6-C7-C8-C10
25	C	503	CLA	C12-C13-C15-C16
25	C	508	CLA	C12-C13-C15-C16
25	C	513	CLA	C12-C13-C15-C16
25	b	611	CLA	C12-C13-C15-C16
25	b	615	CLA	C11-C12-C13-C15
25	c	510	CLA	C6-C7-C8-C10
25	c	512	CLA	C6-C7-C8-C10
27	k	101	BCR	C19-C20-C21-C22
25	c	512	CLA	C2A-CAA-CBA-CGA
25	c	503	CLA	O1D-CGD-O2D-CED
25	B	601	CLA	C15-C16-C17-C18
25	B	603	CLA	C5-C6-C7-C8
25	B	603	CLA	C15-C16-C17-C18
25	B	606	CLA	C8-C10-C11-C12
25	b	615	CLA	C15-C16-C17-C18
25	A	606	CLA	C2C-C3C-CAC-CBC
27	B	619	BCR	C22-C23-C24-C25
29	c	523	LMG	C4-C5-C6-O5
31	c	517	DGD	C4E-C5E-C6E-O5E
25	B	614	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
28	D	407	PL9	C34-C36-C37-C38
28	a	611	PL9	C9-C11-C12-C13
27	d	405	BCR	C18-C19-C20-C21
27	t	101	BCR	C18-C19-C20-C21
34	e	102	LHG	O2-C2-C3-O3
25	B	615	CLA	C15-C16-C17-C18
25	C	505	CLA	C10-C11-C12-C13
25	a	609	CLA	C10-C11-C12-C13
25	b	606	CLA	C15-C16-C17-C18
29	b	622	LMG	C28-C29-C30-C31
30	A	614	SQD	C7-C8-C9-C10
30	a	613	SQD	C7-C8-C9-C10
25	B	611	CLA	C13-C15-C16-C17
25	C	502	CLA	C15-C16-C17-C18
25	C	506	CLA	C15-C16-C17-C18
25	C	507	CLA	C13-C15-C16-C17
25	C	508	CLA	C10-C11-C12-C13
25	C	513	CLA	C8-C10-C11-C12
25	C	513	CLA	C15-C16-C17-C18
25	D	403	CLA	C13-C15-C16-C17
25	a	607	CLA	C13-C15-C16-C17
25	b	607	CLA	C8-C10-C11-C12
25	b	608	CLA	C2C-C3C-CAC-CBC
25	b	607	CLA	O1A-CGA-O2A-C1
31	C	518	DGD	C8A-C9A-CAA-CBA
25	A	607	CLA	C8-C10-C11-C12
25	B	607	CLA	C5-C6-C7-C8
25	B	611	CLA	C8-C10-C11-C12
25	D	404	CLA	C15-C16-C17-C18
25	b	613	CLA	C10-C11-C12-C13
25	c	506	CLA	C13-C15-C16-C17
34	D	410	LHG	C4-O6-P-O3
34	D	413	LHG	C3-O3-P-O6
34	E	101	LHG	C4-O6-P-O3
34	L	102	LHG	C4-O6-P-O3
34	e	102	LHG	C3-O3-P-O6
29	C	519	LMG	C10-C11-C12-C13
25	c	512	CLA	CBA-CGA-O2A-C1
31	c	518	DGD	C2A-C1A-O1G-C1G
34	E	101	LHG	C24-C23-O8-C6
31	C	516	DGD	C1B-C2B-C3B-C4B
34	E	101	LHG	C1-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
34	e	102	LHG	C1-C2-C3-O3
28	A	611	PL9	C12-C13-C14-C16
25	b	611	CLA	C13-C15-C16-C17
25	c	503	CLA	C5-C6-C7-C8
25	B	603	CLA	C16-C17-C18-C20
25	C	502	CLA	C16-C17-C18-C19
25	B	604	CLA	CBA-CGA-O2A-C1
29	b	622	LMG	C15-C16-C17-C18
25	b	615	CLA	C5-C6-C7-C8
29	C	519	LMG	C32-C33-C34-C35
31	C	517	DGD	C2B-C3B-C4B-C5B
31	c	516	DGD	C5B-C6B-C7B-C8B
32	d	413	STE	C2-C3-C4-C5
32	l	102	STE	C5-C6-C7-C8
25	b	616	CLA	O1D-CGD-O2D-CED
27	B	618	BCR	C16-C17-C18-C36
27	C	515	BCR	C11-C10-C9-C34
27	C	515	BCR	C16-C17-C18-C36
27	C	515	BCR	C20-C21-C22-C37
27	D	406	BCR	C11-C10-C9-C34
27	D	406	BCR	C20-C21-C22-C37
27	K	102	BCR	C20-C21-C22-C37
27	T	101	BCR	C20-C21-C22-C37
27	b	617	BCR	C35-C13-C14-C15
27	b	617	BCR	C20-C21-C22-C37
27	b	619	BCR	C20-C21-C22-C37
27	t	101	BCR	C35-C13-C14-C15
29	D	408	LMG	C13-C14-C15-C16
30	A	614	SQD	C15-C16-C17-C18
30	B	622	SQD	C16-C17-C18-C19
30	f	101	SQD	C25-C26-C27-C28
30	f	101	SQD	C28-C29-C30-C31
31	A	615	DGD	CBA-CCA-CDA-CEA
31	c	517	DGD	CCA-CDA-CEA-CFA
32	B	620	STE	C7-C8-C9-C10
32	R	101	STE	C6-C7-C8-C9
32	b	625	STE	C12-C13-C14-C15
32	l	102	STE	C7-C8-C9-C10
34	d	407	LHG	C25-C26-C27-C28
34	l	101	LHG	C34-C35-C36-C37
25	A	607	CLA	C16-C17-C18-C20
25	B	614	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
25	c	509	CLA	C16-C17-C18-C20
25	d	403	CLA	C16-C17-C18-C20
29	b	622	LMG	C16-C17-C18-C19
29	c	519	LMG	C39-C40-C41-C42
29	c	523	LMG	C14-C15-C16-C17
30	B	622	SQD	C34-C35-C36-C37
30	L	101	SQD	C29-C30-C31-C32
31	H	102	DGD	C7A-C8A-C9A-CAA
31	a	614	DGD	CBA-CCA-CDA-CEA
31	a	614	DGD	C9B-CAB-CBB-CCB
31	c	516	DGD	C4B-C5B-C6B-C7B
31	c	516	DGD	CBB-CCB-CDB-CEB
31	h	102	DGD	C7A-C8A-C9A-CAA
31	h	102	DGD	C5B-C6B-C7B-C8B
31	h	102	DGD	C6B-C7B-C8B-C9B
32	J	101	STE	C5-C6-C7-C8
32	c	520	STE	C9-C10-C11-C12
34	D	411	LHG	C9-C10-C11-C12
34	D	411	LHG	C29-C30-C31-C32
34	E	101	LHG	C17-C18-C19-C20
34	E	101	LHG	C25-C26-C27-C28
34	L	102	LHG	C12-C13-C14-C15
29	D	412	LMG	C9-C8-O7-C10
30	L	101	SQD	C46-C45-O47-C7
30	A	613	SQD	C16-C17-C18-C19
29	M	101	LMG	C19-C20-C21-C22
29	c	521	LMG	C33-C34-C35-C36
31	A	615	DGD	CCB-CDB-CEB-CFB
31	c	516	DGD	CCB-CDB-CEB-CFB
31	c	518	DGD	CCA-CDA-CEA-CFA
32	H	103	STE	C6-C7-C8-C9
32	H	103	STE	C14-C15-C16-C17
34	l	101	LHG	C15-C16-C17-C18
34	l	101	LHG	C25-C26-C27-C28
29	C	519	LMG	C11-C12-C13-C14
29	D	408	LMG	C15-C16-C17-C18
29	D	408	LMG	C38-C39-C40-C41
29	c	521	LMG	C31-C32-C33-C34
29	c	523	LMG	C30-C31-C32-C33
31	a	614	DGD	C4A-C5A-C6A-C7A
32	l	102	STE	C4-C5-C6-C7
34	D	411	LHG	C24-C25-C26-C27

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Mol	Chain	Res	Type	Atoms
32	B	623	STE	C1-C2-C3-C4
32	d	413	STE	C1-C2-C3-C4
25	b	615	CLA	O1D-CGD-O2D-CED
27	B	618	BCR	C11-C10-C9-C8
27	H	101	BCR	C11-C10-C9-C8
27	b	618	BCR	C11-C10-C9-C8
27	b	618	BCR	C20-C21-C22-C23
27	b	619	BCR	C12-C13-C14-C15
27	c	514	BCR	C20-C21-C22-C23
27	c	515	BCR	C12-C13-C14-C15
27	c	515	BCR	C20-C21-C22-C23
27	h	101	BCR	C11-C10-C9-C8
27	k	102	BCR	C20-C21-C22-C23
31	c	517	DGD	C2E-C1E-O5D-C6D
29	c	523	LMG	C15-C16-C17-C18
29	d	410	LMG	C30-C31-C32-C33
29	m	101	LMG	C16-C17-C18-C19
32	B	620	STE	C6-C7-C8-C9
32	R	101	STE	C4-C5-C6-C7
32	d	412	STE	C3-C4-C5-C6
32	t	103	STE	C5-C6-C7-C8
34	D	413	LHG	C28-C29-C30-C31
34	d	407	LHG	C28-C29-C30-C31
34	d	409	LHG	C27-C28-C29-C30
25	B	603	CLA	C13-C15-C16-C17
25	B	605	CLA	C16-C17-C18-C19
25	c	503	CLA	C16-C17-C18-C20
25	C	506	CLA	O1D-CGD-O2D-CED
30	A	614	SQD	C11-C12-C13-C14
30	a	613	SQD	C25-C26-C27-C28
31	A	615	DGD	C2B-C3B-C4B-C5B
31	C	517	DGD	C5B-C6B-C7B-C8B
31	C	518	DGD	C5A-C6A-C7A-C8A
31	c	516	DGD	C9B-CAB-CBB-CCB
32	B	623	STE	C4-C5-C6-C7
32	b	625	STE	C14-C15-C16-C17
32	d	413	STE	C4-C5-C6-C7
34	L	102	LHG	C34-C35-C36-C37
28	d	406	PL9	C13-C14-C16-C17
25	B	614	CLA	C11-C12-C13-C14
25	C	506	CLA	C11-C12-C13-C14
25	C	510	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
25	C	513	CLA	C11-C10-C8-C9
30	L	101	SQD	C7-C8-C9-C10
29	D	408	LMG	C21-C22-C23-C24
29	D	412	LMG	C33-C34-C35-C36
29	M	101	LMG	C31-C32-C33-C34
29	c	523	LMG	C18-C19-C20-C21
31	A	615	DGD	C4B-C5B-C6B-C7B
31	a	614	DGD	C2A-C3A-C4A-C5A
31	a	614	DGD	C4B-C5B-C6B-C7B
31	c	518	DGD	C9B-CAB-CBB-CCB
32	b	621	STE	C13-C14-C15-C16
32	b	624	STE	C10-C11-C12-C13
34	D	411	LHG	C25-C26-C27-C28
34	L	102	LHG	C32-C33-C34-C35
34	d	408	LHG	C11-C12-C13-C14
34	d	408	LHG	C29-C30-C31-C32
25	c	512	CLA	O1A-CGA-O2A-C1
29	D	408	LMG	C39-C40-C41-C42
29	M	101	LMG	C34-C35-C36-C37
29	c	521	LMG	C36-C37-C38-C39
29	d	411	LMG	C12-C13-C14-C15
30	a	613	SQD	C17-C18-C19-C20
30	f	101	SQD	C30-C31-C32-C33
31	C	517	DGD	C6A-C7A-C8A-C9A
31	C	518	DGD	CCA-CDA-CEA-CFA
31	H	102	DGD	CCA-CDA-CEA-CFA
31	a	614	DGD	C5A-C6A-C7A-C8A
31	c	517	DGD	CBA-CCA-CDA-CEA
31	c	518	DGD	CBA-CCA-CDA-CEA
32	b	623	STE	C9-C10-C11-C12
32	d	412	STE	C5-C6-C7-C8
34	d	409	LHG	O1-C1-C2-C3
25	b	613	CLA	C13-C15-C16-C17
29	d	410	LMG	C35-C36-C37-C38
30	A	614	SQD	C31-C32-C33-C34
30	L	101	SQD	C25-C26-C27-C28
31	A	615	DGD	C7A-C8A-C9A-CAA
31	C	517	DGD	C5A-C6A-C7A-C8A
34	d	408	LHG	C15-C16-C17-C18
34	d	408	LHG	C32-C33-C34-C35
28	D	407	PL9	C47-C48-C49-C50
29	A	612	LMG	C36-C37-C38-C39

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Mol	Chain	Res	Type	Atoms
29	C	519	LMG	C31-C32-C33-C34
29	D	408	LMG	C36-C37-C38-C39
29	c	521	LMG	C16-C17-C18-C19
29	c	521	LMG	C29-C30-C31-C32
29	c	521	LMG	C32-C33-C34-C35
29	m	101	LMG	C18-C19-C20-C21
30	A	613	SQD	C27-C28-C29-C30
30	B	622	SQD	C13-C14-C15-C16
30	B	622	SQD	C17-C18-C19-C20
30	D	409	SQD	C31-C32-C33-C34
31	H	102	DGD	C7B-C8B-C9B-CAB
31	c	516	DGD	C8A-C9A-CAA-CBA
32	b	623	STE	C10-C11-C12-C13
32	c	522	STE	C3-C4-C5-C6
34	d	408	LHG	C10-C11-C12-C13
34	d	409	LHG	C32-C33-C34-C35
34	e	102	LHG	C11-C10-C9-C8
34	e	102	LHG	C11-C12-C13-C14
31	c	516	DGD	O6E-C5E-C6E-O5E
25	b	602	CLA	C16-C17-C18-C20
29	b	622	LMG	O6-C1-O1-C7
31	c	517	DGD	O6E-C1E-O5D-C6D
25	c	503	CLA	C8-C10-C11-C12
29	D	412	LMG	C11-C12-C13-C14
29	c	519	LMG	C37-C38-C39-C40
29	c	523	LMG	C31-C32-C33-C34
29	d	410	LMG	C38-C39-C40-C41
30	B	622	SQD	C9-C10-C11-C12
31	c	516	DGD	C3B-C4B-C5B-C6B
32	H	103	STE	C2-C3-C4-C5
32	b	625	STE	C10-C11-C12-C13
34	D	411	LHG	C11-C12-C13-C14
34	d	407	LHG	C15-C16-C17-C18
34	d	408	LHG	C28-C29-C30-C31
25	C	502	CLA	O1D-CGD-O2D-CED
29	b	622	LMG	C23-C24-C25-C26
30	B	622	SQD	C28-C29-C30-C31
30	D	409	SQD	C32-C33-C34-C35
30	a	613	SQD	C28-C29-C30-C31
31	c	518	DGD	C5B-C6B-C7B-C8B
31	h	102	DGD	C2B-C3B-C4B-C5B
32	H	103	STE	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
32	c	520	STE	C6-C7-C8-C9
34	d	409	LHG	C26-C27-C28-C29
25	b	612	CLA	C15-C16-C17-C18
25	B	604	CLA	O1A-CGA-O2A-C1
29	B	621	LMG	C16-C17-C18-C19
29	D	408	LMG	C18-C19-C20-C21
29	b	622	LMG	C31-C32-C33-C34
30	D	409	SQD	C25-C26-C27-C28
32	I	101	STE	C11-C10-C9-C8
32	c	520	STE	C11-C12-C13-C14
25	C	511	CLA	CBA-CGA-O2A-C1
30	t	102	SQD	C11-C12-C13-C14
32	a	616	STE	C4-C5-C6-C7
32	b	624	STE	C11-C12-C13-C14
32	d	413	STE	C11-C12-C13-C14
34	D	413	LHG	C27-C28-C29-C30
25	C	510	CLA	O1D-CGD-O2D-CED
25	b	601	CLA	C3A-C2A-CAA-CBA
25	c	512	CLA	C3A-C2A-CAA-CBA
30	B	622	SQD	C33-C34-C35-C36
31	H	102	DGD	C3B-C4B-C5B-C6B
31	h	102	DGD	C3B-C4B-C5B-C6B
32	M	102	STE	C2-C3-C4-C5
32	a	615	STE	C5-C6-C7-C8
32	a	616	STE	C5-C6-C7-C8
34	L	102	LHG	C27-C28-C29-C30
34	e	102	LHG	C17-C18-C19-C20
25	B	616	CLA	O1D-CGD-O2D-CED
25	b	601	CLA	C16-C17-C18-C20
25	c	509	CLA	C16-C17-C18-C19
25	d	403	CLA	C16-C17-C18-C19
29	A	612	LMG	C16-C17-C18-C19
29	C	519	LMG	C17-C18-C19-C20
29	D	408	LMG	C20-C21-C22-C23
29	c	519	LMG	C31-C32-C33-C34
29	c	521	LMG	C11-C12-C13-C14
30	B	622	SQD	C11-C12-C13-C14
30	L	101	SQD	C16-C17-C18-C19
31	c	516	DGD	C8B-C9B-CAB-CBB
32	L	103	STE	C5-C6-C7-C8
34	D	413	LHG	C11-C12-C13-C14
34	d	408	LHG	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
34	d	409	LHG	C24-C25-C26-C27
25	D	404	CLA	CBD-CGD-O2D-CED
25	c	512	CLA	CBD-CGD-O2D-CED
29	c	523	LMG	C13-C14-C15-C16
30	a	613	SQD	C29-C30-C31-C32
32	X	101	STE	C4-C5-C6-C7
32	b	623	STE	C11-C10-C9-C8
32	d	413	STE	C3-C4-C5-C6
27	b	619	BCR	C14-C15-C16-C17
32	b	621	STE	C14-C15-C16-C17
25	B	601	CLA	C4-C3-C5-C6
25	C	505	CLA	C4-C3-C5-C6
25	C	506	CLA	C4-C3-C5-C6
25	D	405	CLA	C4-C3-C5-C6
25	c	505	CLA	C4-C3-C5-C6
25	B	601	CLA	C2-C3-C5-C6
25	C	505	CLA	C2-C3-C5-C6
25	C	506	CLA	C2-C3-C5-C6
28	d	406	PL9	C43-C44-C46-C47
34	e	102	LHG	C8-C7-O7-C5
29	b	622	LMG	C11-C12-C13-C14
30	t	102	SQD	C11-C10-C9-C8
31	c	516	DGD	CAB-CBB-CCB-CDB
32	C	520	STE	C5-C6-C7-C8
32	X	101	STE	C5-C6-C7-C8
34	D	413	LHG	O1-C1-C2-O2
34	d	407	LHG	O1-C1-C2-O2
34	d	408	LHG	O1-C1-C2-O2
29	M	101	LMG	C35-C36-C37-C38
29	c	521	LMG	C30-C31-C32-C33
30	A	614	SQD	C18-C19-C20-C21
31	C	516	DGD	C5B-C6B-C7B-C8B
32	J	101	STE	C6-C7-C8-C9
32	b	621	STE	C6-C7-C8-C9
34	L	102	LHG	C31-C32-C33-C34
34	l	101	LHG	C9-C10-C11-C12
34	l	101	LHG	C27-C28-C29-C30
31	a	614	DGD	C1B-C2B-C3B-C4B
25	B	603	CLA	C16-C17-C18-C19
25	B	614	CLA	C16-C17-C18-C20
29	B	621	LMG	C29-C30-C31-C32
30	a	613	SQD	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
31	a	614	DGD	CCB-CDB-CEB-CFB
31	A	615	DGD	C2A-C3A-C4A-C5A
31	c	518	DGD	C2A-C3A-C4A-C5A
29	A	612	LMG	C17-C18-C19-C20
29	M	101	LMG	C13-C14-C15-C16
31	C	518	DGD	C2B-C3B-C4B-C5B
29	C	519	LMG	C30-C31-C32-C33
32	L	103	STE	C6-C7-C8-C9
25	B	615	CLA	C13-C15-C16-C17
25	D	404	CLA	C10-C11-C12-C13
25	c	505	CLA	C10-C11-C12-C13
25	C	511	CLA	O1A-CGA-O2A-C1
29	m	101	LMG	O10-C28-O8-C9
29	d	411	LMG	C14-C15-C16-C17
31	c	517	DGD	C6A-C7A-C8A-C9A
32	X	101	STE	C11-C12-C13-C14
29	D	408	LMG	C28-C29-C30-C31
27	B	617	BCR	C5-C6-C7-C8
27	D	406	BCR	C23-C24-C25-C30
27	H	101	BCR	C23-C24-C25-C26
27	K	101	BCR	C5-C6-C7-C8
27	K	102	BCR	C1-C6-C7-C8
27	K	102	BCR	C5-C6-C7-C8
27	d	405	BCR	C23-C24-C25-C26
27	d	405	BCR	C23-C24-C25-C30
27	k	101	BCR	C1-C6-C7-C8
27	k	102	BCR	C23-C24-C25-C26
32	H	103	STE	C11-C12-C13-C14
31	a	614	DGD	C2A-C1A-O1G-C1G
25	B	607	CLA	C10-C11-C12-C13
25	B	612	CLA	C10-C11-C12-C13
25	a	607	CLA	C15-C16-C17-C18
25	c	505	CLA	C5-C6-C7-C8
30	a	613	SQD	C34-C35-C36-C37
30	t	102	SQD	C17-C18-C19-C20
32	C	520	STE	C4-C5-C6-C7
32	X	101	STE	C9-C10-C11-C12
34	D	410	LHG	C12-C13-C14-C15
25	a	607	CLA	O1D-CGD-O2D-CED
32	B	620	STE	C1-C2-C3-C4
30	a	613	SQD	C24-C25-C26-C27
30	f	101	SQD	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
31	H	102	DGD	C5A-C6A-C7A-C8A
32	b	624	STE	C11-C10-C9-C8
34	d	407	LHG	C11-C10-C9-C8
25	C	503	CLA	C15-C16-C17-C18
25	C	509	CLA	C13-C15-C16-C17
25	c	511	CLA	C10-C11-C12-C13
29	D	408	LMG	C31-C32-C33-C34
29	M	101	LMG	C12-C13-C14-C15
31	A	615	DGD	C5B-C6B-C7B-C8B
32	c	520	STE	C12-C13-C14-C15
32	t	104	STE	C7-C8-C9-C10
34	L	102	LHG	C13-C14-C15-C16
25	c	510	CLA	C4-C3-C5-C6
28	d	406	PL9	C15-C14-C16-C17
28	d	406	PL9	C20-C19-C21-C22
28	d	406	PL9	C45-C44-C46-C47
25	A	607	CLA	C12-C13-C15-C16
25	B	609	CLA	C11-C12-C13-C15
25	B	614	CLA	C11-C12-C13-C15
25	B	615	CLA	C11-C10-C8-C7
25	B	615	CLA	C11-C12-C13-C15
25	C	502	CLA	C12-C13-C15-C16
25	C	503	CLA	C11-C10-C8-C7
25	C	506	CLA	C11-C12-C13-C15
25	C	510	CLA	C2-C3-C5-C6
25	C	510	CLA	C6-C7-C8-C10
25	C	511	CLA	C6-C7-C8-C10
25	C	513	CLA	C11-C10-C8-C7
25	a	607	CLA	C11-C10-C8-C7
25	b	607	CLA	C6-C7-C8-C10
25	b	614	CLA	C6-C7-C8-C10
25	c	502	CLA	C11-C12-C13-C15
25	c	504	CLA	C11-C10-C8-C7
25	c	505	CLA	C11-C10-C8-C7
25	c	508	CLA	C12-C13-C15-C16
25	c	510	CLA	C2-C3-C5-C6
31	A	615	DGD	CCA-CDA-CEA-CFA
34	l	101	LHG	C17-C18-C19-C20
25	B	605	CLA	C16-C17-C18-C20
30	A	613	SQD	O49-C7-O47-C45
30	A	613	SQD	C7-C8-C9-C10
30	A	613	SQD	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
31	c	517	DGD	C1B-C2B-C3B-C4B
32	b	623	STE	C1-C2-C3-C4
25	C	501	CLA	CBA-CGA-O2A-C1
30	B	622	SQD	C24-C23-O48-C46
30	a	613	SQD	C11-C10-C9-C8
32	R	101	STE	C2-C3-C4-C5
25	C	501	CLA	C2A-CAA-CBA-CGA
25	b	611	CLA	C15-C16-C17-C18
31	a	614	DGD	CEA-CFA-CGA-CHA
34	L	102	LHG	C11-C12-C13-C14
32	C	521	STE	C5-C6-C7-C8
32	a	616	STE	C3-C4-C5-C6
32	b	621	STE	C3-C4-C5-C6
29	b	622	LMG	C13-C14-C15-C16
30	A	613	SQD	C34-C35-C36-C37
31	C	518	DGD	C3A-C4A-C5A-C6A
32	j	101	STE	C6-C7-C8-C9
34	L	102	LHG	C15-C16-C17-C18
25	b	602	CLA	C3-C5-C6-C7
25	b	614	CLA	C16-C17-C18-C20
25	A	606	CLA	C4C-C3C-CAC-CBC
29	A	612	LMG	C11-C12-C13-C14
29	M	101	LMG	C29-C30-C31-C32
29	M	101	LMG	C33-C34-C35-C36
31	H	102	DGD	CCB-CDB-CEB-CFB
31	c	518	DGD	C9A-CAA-CBA-CCA
32	b	625	STE	C4-C5-C6-C7
34	D	413	LHG	C14-C15-C16-C17
34	d	407	LHG	C30-C31-C32-C33
29	c	523	LMG	C11-C10-O7-C8
30	A	613	SQD	C8-C7-O47-C45
34	e	102	LHG	O6-C4-C5-O7
29	c	523	LMG	O6-C5-C6-O5
27	B	618	BCR	C10-C11-C12-C13
30	A	613	SQD	C10-C11-C12-C13
31	c	516	DGD	C7A-C8A-C9A-CAA
31	h	102	DGD	CCA-CDA-CEA-CFA
32	b	624	STE	C14-C15-C16-C17
25	b	609	CLA	CBD-CGD-O2D-CED
31	C	518	DGD	C9A-CAA-CBA-CCA
34	e	102	LHG	O9-C7-O7-C5
29	D	412	LMG	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
29	c	519	LMG	C30-C31-C32-C33
31	c	517	DGD	CAA-CBA-CCA-CDA
29	b	622	LMG	C2-C1-O1-C7
31	A	615	DGD	O2G-C2G-C3G-O3G
29	d	411	LMG	O6-C5-C6-O5
31	C	516	DGD	O6E-C5E-C6E-O5E
29	m	101	LMG	C12-C13-C14-C15
25	b	615	CLA	C16-C17-C18-C19
25	c	503	CLA	C16-C17-C18-C19
29	D	412	LMG	C34-C35-C36-C37
25	C	512	CLA	C13-C15-C16-C17
25	C	510	CLA	C4-C3-C5-C6
28	D	407	PL9	C15-C14-C16-C17
28	d	406	PL9	C4-C3-C7-C8
31	H	102	DGD	C9A-CAA-CBA-CCA
31	c	518	DGD	CCB-CDB-CEB-CFB
32	a	615	STE	C3-C4-C5-C6
25	B	603	CLA	C6-C7-C8-C9
25	B	604	CLA	C11-C10-C8-C9
25	B	604	CLA	C11-C12-C13-C14
25	B	606	CLA	C11-C10-C8-C9
25	B	609	CLA	C11-C12-C13-C14
25	B	615	CLA	C11-C12-C13-C14
25	C	506	CLA	C14-C13-C15-C16
25	C	511	CLA	C6-C7-C8-C9
25	a	607	CLA	C11-C10-C8-C9
25	b	605	CLA	C11-C12-C13-C14
25	b	607	CLA	C6-C7-C8-C9
25	b	616	CLA	C11-C10-C8-C9
25	c	502	CLA	C11-C12-C13-C14
25	c	504	CLA	C11-C10-C8-C9
25	c	505	CLA	C11-C10-C8-C9
25	c	508	CLA	C14-C13-C15-C16
30	B	622	SQD	C25-C26-C27-C28
31	A	615	DGD	C7B-C8B-C9B-CAB
32	B	620	STE	C2-C3-C4-C5
25	b	609	CLA	C3-C5-C6-C7
25	c	501	CLA	C2A-CAA-CBA-CGA
29	d	410	LMG	C11-C12-C13-C14
30	A	614	SQD	C27-C28-C29-C30
34	l	101	LHG	C7-C8-C9-C10
25	C	505	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
25	b	613	CLA	C5-C6-C7-C8
32	C	522	STE	C5-C6-C7-C8
25	C	501	CLA	O1A-CGA-O2A-C1
25	B	604	CLA	C1A-C2A-CAA-CBA
25	b	609	CLA	C1A-C2A-CAA-CBA
25	c	508	CLA	C1A-C2A-CAA-CBA
25	c	512	CLA	C1A-C2A-CAA-CBA
25	A	607	CLA	C16-C17-C18-C19
25	C	502	CLA	C16-C17-C18-C20
25	b	602	CLA	C16-C17-C18-C19
25	b	615	CLA	C16-C17-C18-C20
31	c	517	DGD	C8B-C9B-CAB-CBB
34	D	411	LHG	C16-C17-C18-C19
25	c	510	CLA	O1D-CGD-O2D-CED
25	b	610	CLA	C5-C6-C7-C8
25	b	610	CLA	C13-C15-C16-C17
25	b	612	CLA	C10-C11-C12-C13
34	d	408	LHG	C4-O6-P-O3
30	f	101	SQD	C27-C28-C29-C30
34	D	413	LHG	C29-C30-C31-C32
30	B	622	SQD	C23-C24-C25-C26
32	t	104	STE	C1-C2-C3-C4
25	B	612	CLA	CBD-CGD-O2D-CED
31	C	516	DGD	C6A-C7A-C8A-C9A
31	a	614	DGD	C9A-CAA-CBA-CCA
29	c	523	LMG	C37-C38-C39-C40
30	A	614	SQD	C14-C15-C16-C17
30	D	409	SQD	C30-C31-C32-C33
31	c	518	DGD	C3A-C4A-C5A-C6A
25	b	614	CLA	C16-C17-C18-C19
34	D	410	LHG	C13-C14-C15-C16
34	d	407	LHG	C16-C17-C18-C19
30	A	613	SQD	C9-C10-C11-C12
31	C	517	DGD	C8B-C9B-CAB-CBB
29	D	412	LMG	C16-C17-C18-C19
29	b	622	LMG	C18-C19-C20-C21
29	b	622	LMG	C22-C23-C24-C25
30	t	102	SQD	C16-C17-C18-C19
31	a	614	DGD	C6B-C7B-C8B-C9B
32	a	615	STE	C2-C3-C4-C5
31	c	516	DGD	C6B-C7B-C8B-C9B
34	l	101	LHG	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
32	b	626	STE	C4-C5-C6-C7
32	c	522	STE	C5-C6-C7-C8
32	d	412	STE	C11-C12-C13-C14
29	c	521	LMG	C7-C8-C9-O8
30	B	622	SQD	O6-C44-C45-C46
34	d	409	LHG	C30-C31-C32-C33
34	l	101	LHG	C33-C34-C35-C36
32	M	102	STE	C11-C10-C9-C8
34	D	411	LHG	C11-C10-C9-C8
31	C	517	DGD	C2G-C3G-O3G-C1D
31	c	517	DGD	C5D-C6D-O5D-C1E
31	C	516	DGD	CCB-CDB-CEB-CFB
31	c	517	DGD	CDB-CEB-CFB-CGB
34	l	101	LHG	C32-C33-C34-C35
29	D	408	LMG	C11-C12-C13-C14
29	d	410	LMG	C32-C33-C34-C35
30	f	101	SQD	C35-C36-C37-C38
32	L	103	STE	C7-C8-C9-C10
25	B	614	CLA	O1D-CGD-O2D-CED
29	c	523	LMG	C19-C20-C21-C22
32	B	620	STE	C11-C12-C13-C14
32	d	413	STE	C15-C16-C17-C18
25	B	610	CLA	C16-C17-C18-C20
30	L	101	SQD	C27-C28-C29-C30
30	a	613	SQD	C19-C20-C21-C22
32	t	104	STE	C13-C14-C15-C16
29	B	621	LMG	C31-C32-C33-C34
34	E	101	LHG	C24-C25-C26-C27
34	d	409	LHG	C35-C36-C37-C38
25	C	512	CLA	C8-C10-C11-C12
32	c	520	STE	C1-C2-C3-C4
29	c	523	LMG	C11-C12-C13-C14
34	D	411	LHG	C30-C31-C32-C33
31	a	614	DGD	CFB-CGB-CHB-CIB
32	b	624	STE	C15-C16-C17-C18
25	A	606	CLA	C15-C16-C17-C18
25	C	505	CLA	C15-C16-C17-C18
25	D	405	CLA	C10-C11-C12-C13
25	b	608	CLA	C13-C15-C16-C17
26	A	608	PHO	C4-C3-C5-C6
29	d	411	LMG	C38-C39-C40-C41
31	C	516	DGD	C4B-C5B-C6B-C7B

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Mol	Chain	Res	Type	Atoms
32	a	615	STE	C4-C5-C6-C7
25	c	506	CLA	C16-C17-C18-C20
29	D	408	LMG	O6-C5-C6-O5
29	c	519	LMG	C34-C35-C36-C37
34	D	411	LHG	C34-C35-C36-C37
34	d	407	LHG	C18-C19-C20-C21
25	C	505	CLA	C5-C6-C7-C8
29	c	523	LMG	C33-C34-C35-C36
30	t	102	SQD	C10-C11-C12-C13
31	C	518	DGD	C4B-C5B-C6B-C7B
31	c	517	DGD	C8A-C9A-CAA-CBA
25	b	601	CLA	C2A-CAA-CBA-CGA
29	M	101	LMG	C40-C41-C42-C43
31	A	615	DGD	CEB-CFB-CGB-CHB
29	b	622	LMG	O6-C5-C6-O5
29	b	622	LMG	C34-C35-C36-C37
31	c	518	DGD	CDA-CEA-CFA-CGA
32	C	521	STE	C6-C7-C8-C9
29	d	410	LMG	C34-C35-C36-C37
29	d	410	LMG	C40-C41-C42-C43
34	D	410	LHG	C35-C36-C37-C38
34	l	101	LHG	C24-C23-O8-C6
25	b	601	CLA	C10-C11-C12-C13
34	d	409	LHG	C25-C26-C27-C28
25	C	501	CLA	O1D-CGD-O2D-CED
25	b	607	CLA	O1D-CGD-O2D-CED
25	b	609	CLA	O1D-CGD-O2D-CED
25	b	613	CLA	O1D-CGD-O2D-CED
31	a	614	DGD	O1A-C1A-O1G-C1G
29	M	101	LMG	C39-C40-C41-C42
31	a	614	DGD	CBB-CCB-CDB-CEB
32	t	104	STE	C9-C10-C11-C12
34	D	411	LHG	C17-C18-C19-C20
25	B	605	CLA	C13-C15-C16-C17
25	B	614	CLA	C13-C15-C16-C17
27	d	405	BCR	C20-C21-C22-C23
34	D	410	LHG	C10-C11-C12-C13
34	d	408	LHG	C33-C34-C35-C36
29	A	612	LMG	O1-C7-C8-O7
30	a	613	SQD	C33-C34-C35-C36
31	c	516	DGD	CBA-CCA-CDA-CEA
31	c	516	DGD	CDB-CEB-CFB-CGB

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Mol	Chain	Res	Type	Atoms
25	b	614	CLA	C8-C10-C11-C12
30	B	622	SQD	O10-C23-O48-C46
25	B	606	CLA	O1D-CGD-O2D-CED
25	b	608	CLA	C4C-C3C-CAC-CBC
34	D	413	LHG	C19-C20-C21-C22
34	d	407	LHG	C14-C15-C16-C17
29	M	101	LMG	C38-C39-C40-C41
29	c	521	LMG	C15-C16-C17-C18
30	a	613	SQD	C18-C19-C20-C21
25	B	601	CLA	C11-C12-C13-C15
25	B	604	CLA	C11-C10-C8-C7
25	B	604	CLA	C11-C12-C13-C15
25	B	604	CLA	C12-C13-C15-C16
25	B	616	CLA	C6-C7-C8-C10
25	C	501	CLA	C12-C13-C15-C16
25	C	504	CLA	C11-C10-C8-C7
25	C	505	CLA	C6-C7-C8-C10
25	C	505	CLA	C12-C13-C15-C16
25	C	506	CLA	C12-C13-C15-C16
25	C	507	CLA	C11-C10-C8-C7
25	C	509	CLA	C11-C10-C8-C7
25	C	510	CLA	C12-C13-C15-C16
25	C	512	CLA	C11-C10-C8-C7
25	C	512	CLA	C11-C12-C13-C15
25	D	405	CLA	C2-C3-C5-C6
25	b	601	CLA	C11-C10-C8-C7
25	b	604	CLA	C12-C13-C15-C16
25	b	605	CLA	C11-C10-C8-C7
25	b	605	CLA	C11-C12-C13-C15
25	b	605	CLA	C12-C13-C15-C16
25	b	606	CLA	C12-C13-C15-C16
25	b	609	CLA	C12-C13-C15-C16
25	b	613	CLA	C6-C7-C8-C10
25	b	614	CLA	C11-C12-C13-C15
25	c	506	CLA	C6-C7-C8-C10
25	c	506	CLA	C11-C12-C13-C15
25	c	510	CLA	C12-C13-C15-C16
25	c	512	CLA	C12-C13-C15-C16
25	B	601	CLA	CAA-CBA-CGA-O2A
29	A	612	LMG	C13-C14-C15-C16
29	c	523	LMG	C34-C35-C36-C37
34	E	101	LHG	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
25	B	602	CLA	C6-C7-C8-C9
25	B	604	CLA	C14-C13-C15-C16
25	B	611	CLA	C14-C13-C15-C16
25	B	616	CLA	C6-C7-C8-C9
25	C	504	CLA	C11-C10-C8-C9
25	C	505	CLA	C14-C13-C15-C16
25	C	508	CLA	C14-C13-C15-C16
25	C	510	CLA	C11-C10-C8-C9
25	C	510	CLA	C14-C13-C15-C16
25	C	512	CLA	C11-C12-C13-C14
25	C	513	CLA	C14-C13-C15-C16
25	D	405	CLA	C11-C12-C13-C14
25	a	607	CLA	C6-C7-C8-C9
25	b	604	CLA	C11-C12-C13-C14
25	b	604	CLA	C14-C13-C15-C16
25	b	605	CLA	C14-C13-C15-C16
25	b	607	CLA	C11-C10-C8-C9
25	b	607	CLA	C11-C12-C13-C14
25	b	615	CLA	C11-C12-C13-C14
25	c	506	CLA	C11-C12-C13-C14
25	c	512	CLA	C14-C13-C15-C16
26	D	402	PHO	C14-C13-C15-C16
26	A	608	PHO	CBD-CGD-O2D-CED
29	C	519	LMG	C37-C38-C39-C40
30	B	622	SQD	C19-C20-C21-C22
34	d	408	LHG	C16-C17-C18-C19
25	B	601	CLA	C2A-CAA-CBA-CGA
29	A	612	LMG	C14-C15-C16-C17
25	b	603	CLA	CBD-CGD-O2D-CED
27	b	619	BCR	C7-C8-C9-C34
25	c	511	CLA	C16-C17-C18-C20
31	C	516	DGD	C9B-CAB-CBB-CCB
32	b	621	STE	C5-C6-C7-C8
29	B	621	LMG	C17-C18-C19-C20
31	C	517	DGD	CDA-CEA-CFA-CGA
32	C	522	STE	C6-C7-C8-C9
34	e	102	LHG	C14-C15-C16-C17
25	c	512	CLA	O1D-CGD-O2D-CED
29	D	408	LMG	C14-C15-C16-C17
32	H	103	STE	C1-C2-C3-C4
25	b	612	CLA	C13-C15-C16-C17
25	b	616	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
29	c	521	LMG	C37-C38-C39-C40
31	a	614	DGD	CAB-CBB-CCB-CDB
27	T	101	BCR	C6-C7-C8-C9
25	c	511	CLA	CBD-CGD-O2D-CED
30	t	102	SQD	C12-C13-C14-C15
31	a	614	DGD	C3A-C4A-C5A-C6A
30	L	101	SQD	O5-C1-O6-C44
25	B	606	CLA	C15-C16-C17-C18
25	C	506	CLA	C13-C15-C16-C17
34	e	102	LHG	O6-C4-C5-C6
34	l	101	LHG	O6-C4-C5-C6
25	a	607	CLA	C3-C5-C6-C7
28	A	611	PL9	C9-C11-C12-C13
32	C	522	STE	C7-C8-C9-C10
32	c	520	STE	C4-C5-C6-C7
31	c	517	DGD	C1A-C2A-C3A-C4A
29	d	411	LMG	C32-C33-C34-C35
32	c	520	STE	C3-C4-C5-C6
34	e	102	LHG	C16-C17-C18-C19
25	b	607	CLA	C10-C11-C12-C13
29	c	523	LMG	C39-C40-C41-C42
29	m	101	LMG	C13-C14-C15-C16
32	L	103	STE	C1-C2-C3-C4
29	D	412	LMG	C30-C31-C32-C33
29	m	101	LMG	C14-C15-C16-C17
31	c	517	DGD	C5B-C6B-C7B-C8B
32	B	624	STE	C3-C4-C5-C6
32	I	101	STE	C10-C11-C12-C13
34	D	413	LHG	C25-C26-C27-C28
34	d	408	LHG	C34-C35-C36-C37
26	A	608	PHO	C15-C16-C17-C18
25	A	609	CLA	CBA-CGA-O2A-C1
30	f	101	SQD	C23-C24-C25-C26
25	a	607	CLA	C3A-C2A-CAA-CBA
25	b	609	CLA	C3A-C2A-CAA-CBA
30	D	409	SQD	C45-C44-O6-C1
32	d	413	STE	C14-C15-C16-C17
34	D	410	LHG	C25-C26-C27-C28
25	b	601	CLA	C16-C17-C18-C19
26	A	608	PHO	O1D-CGD-O2D-CED
30	t	102	SQD	C28-C29-C30-C31
32	b	621	STE	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
25	B	612	CLA	C8-C10-C11-C12
29	C	519	LMG	O1-C7-C8-C9
29	c	523	LMG	O1-C7-C8-C9
30	a	613	SQD	O6-C44-C45-C46
31	A	615	DGD	O1G-C1G-C2G-C3G
31	A	615	DGD	C1G-C2G-C3G-O3G
31	c	516	DGD	O1G-C1G-C2G-C3G
32	B	623	STE	C3-C4-C5-C6
32	M	103	STE	C4-C5-C6-C7
25	D	404	CLA	C2C-C3C-CAC-CBC
30	A	614	SQD	C19-C20-C21-C22
34	l	101	LHG	C26-C27-C28-C29
30	L	101	SQD	C19-C20-C21-C22
32	d	412	STE	C2-C3-C4-C5
32	b	625	STE	C6-C7-C8-C9
28	D	407	PL9	C40-C39-C41-C42
28	a	611	PL9	C30-C29-C31-C32
25	B	610	CLA	C16-C17-C18-C19
25	c	511	CLA	C16-C17-C18-C19
25	c	505	CLA	C2-C3-C5-C6
26	A	608	PHO	C2-C3-C5-C6
29	A	612	LMG	C37-C38-C39-C40
32	B	620	STE	C4-C5-C6-C7
29	B	621	LMG	C34-C35-C36-C37
32	t	104	STE	C4-C5-C6-C7
34	e	102	LHG	C27-C28-C29-C30
34	e	102	LHG	O1-C1-C2-O2
25	C	512	CLA	C10-C11-C12-C13
32	B	624	STE	C7-C8-C9-C10
34	L	102	LHG	C18-C19-C20-C21
25	C	513	CLA	CBA-CGA-O2A-C1
25	d	404	CLA	CBA-CGA-O2A-C1
25	D	404	CLA	O1D-CGD-O2D-CED
34	E	101	LHG	O10-C23-O8-C6
29	b	622	LMG	C38-C39-C40-C41
29	m	101	LMG	C30-C31-C32-C33
32	B	620	STE	C12-C13-C14-C15
32	d	412	STE	C12-C13-C14-C15
34	D	410	LHG	C33-C34-C35-C36
30	D	409	SQD	C27-C28-C29-C30
30	t	102	SQD	C14-C15-C16-C17
32	X	101	STE	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
32	c	520	STE	C10-C11-C12-C13
31	c	516	DGD	O6D-C5D-C6D-O5D
29	c	521	LMG	O7-C8-C9-O8
29	m	101	LMG	O1-C7-C8-O7
29	M	101	LMG	C29-C28-O8-C9
31	C	516	DGD	O1G-C1A-C2A-C3A
29	c	523	LMG	C36-C37-C38-C39
30	B	622	SQD	C35-C36-C37-C38
31	c	518	DGD	C6B-C7B-C8B-C9B
34	L	102	LHG	C33-C34-C35-C36
25	C	508	CLA	C16-C17-C18-C19
34	d	409	LHG	C34-C35-C36-C37
29	C	519	LMG	O6-C1-O1-C7
25	B	609	CLA	C15-C16-C17-C18
25	B	613	CLA	CBD-CGD-O2D-CED
29	M	101	LMG	C37-C38-C39-C40
31	C	516	DGD	CDB-CEB-CFB-CGB
32	B	620	STE	C9-C10-C11-C12
32	d	413	STE	C12-C13-C14-C15
34	d	408	LHG	C18-C19-C20-C21
25	B	613	CLA	C2-C1-O2A-CGA
29	b	622	LMG	C24-C25-C26-C27
30	A	613	SQD	C29-C30-C31-C32
31	H	102	DGD	O2G-C1B-C2B-C3B
32	c	522	STE	C1-C2-C3-C4
25	B	602	CLA	C11-C12-C13-C14
25	B	607	CLA	C14-C13-C15-C16
25	C	503	CLA	C14-C13-C15-C16
25	C	509	CLA	C14-C13-C15-C16
25	c	505	CLA	C6-C7-C8-C9
25	c	507	CLA	C6-C7-C8-C9
25	c	510	CLA	C11-C12-C13-C14
29	D	412	LMG	C37-C38-C39-C40
29	c	521	LMG	C17-C18-C19-C20
32	b	620	STE	C11-C12-C13-C14
34	L	102	LHG	C25-C26-C27-C28
34	d	407	LHG	C9-C10-C11-C12
27	B	618	BCR	C23-C24-C25-C26
27	B	618	BCR	C23-C24-C25-C30
27	C	514	BCR	C1-C6-C7-C8
27	C	514	BCR	C5-C6-C7-C8
27	K	101	BCR	C1-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
27	b	617	BCR	C1-C6-C7-C8
27	b	617	BCR	C5-C6-C7-C8
27	c	514	BCR	C1-C6-C7-C8
27	c	514	BCR	C23-C24-C25-C26
27	c	514	BCR	C23-C24-C25-C30
27	h	101	BCR	C23-C24-C25-C26
27	h	101	BCR	C23-C24-C25-C30
25	B	611	CLA	C15-C16-C17-C18
25	C	509	CLA	C8-C10-C11-C12
30	f	101	SQD	C34-C35-C36-C37
31	c	517	DGD	C3A-C4A-C5A-C6A
32	I	101	STE	C1-C2-C3-C4
32	b	620	STE	C5-C6-C7-C8
27	C	515	BCR	C7-C8-C9-C34
29	M	101	LMG	C11-C12-C13-C14
27	T	101	BCR	C21-C22-C23-C24
30	a	613	SQD	C14-C15-C16-C17
32	b	620	STE	C7-C8-C9-C10
29	B	621	LMG	C35-C36-C37-C38
25	B	607	CLA	C16-C17-C18-C20
31	H	102	DGD	C1A-C2A-C3A-C4A
32	c	520	STE	C2-C3-C4-C5
25	b	601	CLA	C8-C10-C11-C12
25	c	507	CLA	C8-C10-C11-C12
34	E	101	LHG	O6-C4-C5-C6
29	b	622	LMG	C12-C13-C14-C15
29	b	622	LMG	C32-C33-C34-C35
34	D	413	LHG	C24-C25-C26-C27
25	B	601	CLA	C6-C7-C8-C10
25	B	602	CLA	C11-C12-C13-C15
25	B	604	CLA	C6-C7-C8-C10
25	B	607	CLA	C12-C13-C15-C16
25	B	608	CLA	C6-C7-C8-C10
25	B	613	CLA	C12-C13-C15-C16
25	B	614	CLA	C6-C7-C8-C10
25	B	614	CLA	C12-C13-C15-C16
25	C	510	CLA	C11-C10-C8-C7
25	a	607	CLA	C6-C7-C8-C10
25	a	607	CLA	C12-C13-C15-C16
25	b	601	CLA	C11-C12-C13-C15
25	b	601	CLA	C12-C13-C15-C16
25	b	604	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
25	b	607	CLA	C11-C12-C13-C15
25	b	612	CLA	C12-C13-C15-C16
25	b	615	CLA	C11-C10-C8-C7
25	b	616	CLA	C11-C10-C8-C7
25	c	505	CLA	C6-C7-C8-C10
25	c	510	CLA	C11-C10-C8-C7
25	c	511	CLA	C6-C7-C8-C10
25	c	511	CLA	C12-C13-C15-C16
30	a	613	SQD	C27-C28-C29-C30
25	B	602	CLA	C16-C17-C18-C20
32	B	620	STE	C3-C4-C5-C6
32	B	620	STE	C5-C6-C7-C8
34	E	101	LHG	C30-C31-C32-C33
29	c	523	LMG	O9-C10-O7-C8
31	A	615	DGD	C2A-C1A-O1G-C1G
29	B	621	LMG	C37-C38-C39-C40
29	m	101	LMG	C36-C37-C38-C39
32	X	101	STE	C10-C11-C12-C13
25	B	606	CLA	C5-C6-C7-C8
25	b	615	CLA	C13-C15-C16-C17
32	a	616	STE	C2-C3-C4-C5
27	A	610	BCR	C35-C13-C14-C15
27	A	610	BCR	C20-C21-C22-C37
27	a	610	BCR	C20-C21-C22-C37
27	k	101	BCR	C20-C21-C22-C37
29	c	521	LMG	C38-C39-C40-C41
30	L	101	SQD	C28-C29-C30-C31
29	D	412	LMG	C36-C37-C38-C39
29	b	622	LMG	C35-C36-C37-C38
25	c	507	CLA	C15-C16-C17-C18
30	L	101	SQD	C11-C12-C13-C14
31	C	517	DGD	CBA-CCA-CDA-CEA
31	H	102	DGD	C6B-C7B-C8B-C9B
35	e	101	HEM	C2A-CAA-CBA-CGA
29	d	411	LMG	C34-C35-C36-C37
25	C	501	CLA	CAD-CBD-CGD-O2D
25	C	503	CLA	CAD-CBD-CGD-O2D
25	C	505	CLA	CAD-CBD-CGD-O2D
25	b	601	CLA	CAD-CBD-CGD-O2D
25	b	610	CLA	CAD-CBD-CGD-O2D
25	b	614	CLA	CAD-CBD-CGD-O2D
25	c	512	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
26	a	608	PHO	CAD-CBD-CGD-O2D
30	A	614	SQD	C28-C29-C30-C31
25	b	602	CLA	C15-C16-C17-C18
25	c	503	CLA	CBA-CGA-O2A-C1
31	C	517	DGD	O6E-C1E-O5D-C6D
25	c	509	CLA	C13-C15-C16-C17
31	A	615	DGD	C5A-C6A-C7A-C8A
34	d	407	LHG	C10-C11-C12-C13
30	a	613	SQD	C23-C24-C25-C26
29	c	521	LMG	O1-C7-C8-C9
29	m	101	LMG	O1-C7-C8-C9
31	C	516	DGD	O1G-C1G-C2G-C3G
25	C	513	CLA	O1A-CGA-O2A-C1
34	D	413	LHG	C32-C33-C34-C35
34	E	101	LHG	O6-C4-C5-O7
34	l	101	LHG	O6-C4-C5-O7
29	A	612	LMG	C35-C36-C37-C38
27	K	101	BCR	C14-C15-C16-C17
32	H	103	STE	C5-C6-C7-C8
25	c	506	CLA	C16-C17-C18-C19
34	l	101	LHG	C31-C32-C33-C34
34	E	101	LHG	O9-C7-O7-C5
25	B	612	CLA	CHA-CBD-CGD-O2D
25	B	614	CLA	CHA-CBD-CGD-O2D
25	B	616	CLA	CHA-CBD-CGD-O1D
25	C	502	CLA	CHA-CBD-CGD-O1D
25	C	502	CLA	CHA-CBD-CGD-O2D
25	C	504	CLA	CHA-CBD-CGD-O1D
25	C	504	CLA	CHA-CBD-CGD-O2D
25	a	607	CLA	CHA-CBD-CGD-O2D
25	a	612	CLA	CHA-CBD-CGD-O1D
25	c	504	CLA	CHA-CBD-CGD-O1D
25	c	507	CLA	CHA-CBD-CGD-O1D
25	d	404	CLA	O1A-CGA-O2A-C1
27	b	617	BCR	C12-C13-C14-C15
31	C	517	DGD	C2E-C1E-O5D-C6D
29	C	519	LMG	O1-C7-C8-O7
29	c	523	LMG	O1-C7-C8-O7
30	L	101	SQD	O6-C44-C45-O47
31	A	615	DGD	O1G-C1G-C2G-O2G
31	C	516	DGD	O1G-C1G-C2G-O2G
31	c	516	DGD	O1G-C1G-C2G-O2G

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Mol	Chain	Res	Type	Atoms
32	b	621	STE	C11-C12-C13-C14
34	E	101	LHG	C11-C10-C9-C8
25	A	609	CLA	O1A-CGA-O2A-C1
32	B	625	STE	C11-C10-C9-C8
25	B	612	CLA	C16-C17-C18-C19
25	D	404	CLA	C16-C17-C18-C19
34	d	409	LHG	O1-C1-C2-O2
25	B	612	CLA	O1D-CGD-O2D-CED
30	t	102	SQD	C30-C31-C32-C33
31	A	615	DGD	CEA-CFA-CGA-CHA
25	c	502	CLA	C3-C5-C6-C7
31	c	516	DGD	C6A-C7A-C8A-C9A
30	L	101	SQD	C23-C24-C25-C26
28	A	611	PL9	C4-C3-C7-C8
28	a	611	PL9	C4-C3-C7-C8
29	A	612	LMG	C32-C33-C34-C35
25	a	609	CLA	C6-C7-C8-C9
25	b	601	CLA	C11-C12-C13-C14
25	c	511	CLA	C11-C10-C8-C9
29	c	521	LMG	C39-C40-C41-C42
31	C	516	DGD	CBA-CCA-CDA-CEA
31	C	517	DGD	CBB-CCB-CDB-CEB
31	c	516	DGD	C5A-C6A-C7A-C8A
31	C	516	DGD	CAB-CBB-CCB-CDB
25	b	604	CLA	C15-C16-C17-C18
27	H	101	BCR	C7-C8-C9-C34
29	m	101	LMG	C34-C35-C36-C37
30	B	622	SQD	C29-C30-C31-C32
31	c	516	DGD	C4A-C5A-C6A-C7A
25	C	507	CLA	C15-C16-C17-C18
31	C	516	DGD	C4A-C5A-C6A-C7A
27	K	101	BCR	C11-C12-C13-C14
25	C	503	CLA	C1A-C2A-CAA-CBA
25	a	609	CLA	C1A-C2A-CAA-CBA
29	M	101	LMG	C28-C29-C30-C31
25	B	602	CLA	C16-C17-C18-C19
25	B	613	CLA	C16-C17-C18-C19
25	C	509	CLA	C16-C17-C18-C19
25	b	608	CLA	C16-C17-C18-C19
29	A	612	LMG	C31-C32-C33-C34
25	b	616	CLA	C2-C1-O2A-CGA
25	c	513	CLA	C2-C1-O2A-CGA

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Mol	Chain	Res	Type	Atoms
25	B	612	CLA	CBA-CGA-O2A-C1
34	d	408	LHG	C3-O3-P-O6
29	c	523	LMG	C10-C11-C12-C13
32	b	620	STE	C15-C16-C17-C18
30	A	614	SQD	C10-C11-C12-C13
34	E	101	LHG	C18-C19-C20-C21
25	c	503	CLA	O1A-CGA-O2A-C1
34	D	410	LHG	C4-O6-P-O5
34	D	413	LHG	C3-O3-P-O5
34	E	101	LHG	C4-O6-P-O5
34	L	102	LHG	C4-O6-P-O5
25	C	513	CLA	C16-C17-C18-C19
25	b	607	CLA	C16-C17-C18-C20
25	c	512	CLA	C16-C17-C18-C19
25	B	607	CLA	CBA-CGA-O2A-C1
29	D	408	LMG	C30-C31-C32-C33
29	D	408	LMG	C37-C38-C39-C40
29	m	101	LMG	C32-C33-C34-C35
31	C	518	DGD	CBB-CCB-CDB-CEB
32	X	101	STE	C7-C8-C9-C10
34	D	411	LHG	C27-C28-C29-C30
34	L	102	LHG	C30-C31-C32-C33
25	B	603	CLA	C2A-CAA-CBA-CGA
32	I	101	STE	C3-C4-C5-C6
30	A	613	SQD	C14-C15-C16-C17
30	A	613	SQD	C24-C25-C26-C27
31	C	518	DGD	CCB-CDB-CEB-CFB
32	b	624	STE	C12-C13-C14-C15
32	b	625	STE	C2-C3-C4-C5
25	B	606	CLA	C16-C17-C18-C19
31	c	518	DGD	C4A-C5A-C6A-C7A
25	c	511	CLA	O1D-CGD-O2D-CED
25	B	601	CLA	CAD-CBD-CGD-O1D
25	B	612	CLA	CAD-CBD-CGD-O1D
25	B	614	CLA	CAD-CBD-CGD-O1D
25	C	502	CLA	CAD-CBD-CGD-O1D
25	C	504	CLA	CAD-CBD-CGD-O1D
25	c	502	CLA	CAD-CBD-CGD-O1D
25	c	504	CLA	CAD-CBD-CGD-O1D
30	B	622	SQD	O5-C5-C6-S
25	C	509	CLA	C5-C6-C7-C8
25	c	511	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
32	l	102	STE	C3-C4-C5-C6
32	a	615	STE	C1-C2-C3-C4
29	B	621	LMG	C10-C11-C12-C13
31	C	518	DGD	CDA-CEA-CFA-CGA
34	E	101	LHG	C27-C28-C29-C30
31	c	516	DGD	C4D-C5D-C6D-O5D
25	a	609	CLA	CBA-CGA-O2A-C1
34	d	408	LHG	O9-C7-O7-C5
30	A	613	SQD	C17-C18-C19-C20
32	J	101	STE	C3-C4-C5-C6
25	B	601	CLA	C12-C13-C15-C16
25	B	607	CLA	C6-C7-C8-C10
25	B	607	CLA	C11-C12-C13-C15
25	D	404	CLA	C6-C7-C8-C10
25	b	602	CLA	C6-C7-C8-C10
25	b	608	CLA	C11-C10-C8-C7
25	b	615	CLA	C12-C13-C15-C16
25	c	507	CLA	C11-C12-C13-C15
25	c	511	CLA	C11-C10-C8-C7
25	c	513	CLA	C11-C12-C13-C15
34	l	101	LHG	C23-C24-C25-C26
32	H	103	STE	C4-C5-C6-C7
25	b	604	CLA	C13-C15-C16-C17
32	X	101	STE	C6-C7-C8-C9
31	C	517	DGD	C9A-CAA-CBA-CCA
34	E	101	LHG	C13-C14-C15-C16
29	D	412	LMG	C17-C18-C19-C20
30	B	622	SQD	C26-C27-C28-C29
32	C	522	STE	C9-C10-C11-C12
29	c	521	LMG	C14-C15-C16-C17
31	a	614	DGD	CEB-CFB-CGB-CHB
31	c	517	DGD	C5A-C6A-C7A-C8A
34	d	407	LHG	C32-C33-C34-C35
29	b	622	LMG	C40-C41-C42-C43
29	D	412	LMG	C29-C30-C31-C32
31	C	518	DGD	C6A-C7A-C8A-C9A
34	D	411	LHG	C32-C33-C34-C35
31	C	517	DGD	C5D-C6D-O5D-C1E
25	c	511	CLA	C5-C6-C7-C8
32	b	624	STE	C4-C5-C6-C7
34	L	102	LHG	C35-C36-C37-C38
29	C	519	LMG	O10-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
25	c	506	CLA	C15-C16-C17-C18
28	a	611	PL9	C28-C29-C31-C32
31	a	614	DGD	CDA-CEA-CFA-CGA
25	B	604	CLA	C6-C7-C8-C9
25	B	608	CLA	C6-C7-C8-C9
25	B	613	CLA	C14-C13-C15-C16
25	C	503	CLA	C6-C7-C8-C9
25	C	508	CLA	C11-C10-C8-C9
25	D	404	CLA	C14-C13-C15-C16
25	b	609	CLA	C14-C13-C15-C16
25	b	612	CLA	C14-C13-C15-C16
25	b	615	CLA	C11-C10-C8-C9
25	c	510	CLA	C6-C7-C8-C9
25	c	510	CLA	C11-C10-C8-C9
25	c	511	CLA	C6-C7-C8-C9
25	c	513	CLA	C6-C7-C8-C9
25	d	403	CLA	C6-C7-C8-C9
27	a	610	BCR	C22-C23-C24-C25
32	c	520	STE	C5-C6-C7-C8
34	D	410	LHG	C15-C16-C17-C18
25	a	606	CLA	C16-C17-C18-C19
32	j	101	STE	C4-C5-C6-C7
25	B	607	CLA	O1A-CGA-O2A-C1
25	B	612	CLA	O1A-CGA-O2A-C1
31	h	102	DGD	O2G-C1B-C2B-C3B
29	D	412	LMG	C31-C32-C33-C34
31	c	518	DGD	C8A-C9A-CAA-CBA
25	d	404	CLA	C5-C6-C7-C8
30	L	101	SQD	C24-C25-C26-C27
34	D	410	LHG	C11-C12-C13-C14
31	H	102	DGD	C9B-CAB-CBB-CCB
25	B	601	CLA	C13-C15-C16-C17
27	d	405	BCR	C16-C17-C18-C36
30	B	622	SQD	C24-C25-C26-C27
28	d	406	PL9	C18-C19-C21-C22
25	c	506	CLA	C8-C10-C11-C12
30	a	613	SQD	C12-C13-C14-C15
34	E	101	LHG	C10-C11-C12-C13
25	b	616	CLA	C10-C11-C12-C13
25	c	505	CLA	C15-C16-C17-C18
32	b	625	STE	C5-C6-C7-C8
34	l	101	LHG	C24-C25-C26-C27

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Mol	Chain	Res	Type	Atoms
25	B	610	CLA	C2A-CAA-CBA-CGA
25	C	506	CLA	C2-C1-O2A-CGA
25	d	403	CLA	C2-C1-O2A-CGA
30	A	613	SQD	C26-C27-C28-C29
25	c	509	CLA	CAA-CBA-CGA-O2A
30	t	102	SQD	C31-C32-C33-C34
29	c	523	LMG	C12-C13-C14-C15
29	M	101	LMG	C32-C33-C34-C35
31	C	517	DGD	CAA-CBA-CCA-CDA
32	b	623	STE	C5-C6-C7-C8
32	c	520	STE	C7-C8-C9-C10
25	B	613	CLA	O1D-CGD-O2D-CED
25	b	604	CLA	C16-C17-C18-C19
34	D	410	LHG	C23-C24-C25-C26
34	D	413	LHG	C18-C19-C20-C21
27	A	610	BCR	C23-C24-C25-C26
27	B	619	BCR	C23-C24-C25-C30
27	C	514	BCR	C23-C24-C25-C30
27	C	515	BCR	C1-C6-C7-C8
27	C	515	BCR	C5-C6-C7-C8
27	K	102	BCR	C23-C24-C25-C30
27	c	514	BCR	C5-C6-C7-C8
32	b	625	STE	C11-C12-C13-C14
30	t	102	SQD	C24-C23-O48-C46
31	h	102	DGD	C9A-CAA-CBA-CCA
25	a	606	CLA	C16-C17-C18-C20
31	c	517	DGD	O6D-C1D-O3G-C3G
32	I	101	STE	C5-C6-C7-C8
27	C	514	BCR	C12-C13-C14-C15
27	D	406	BCR	C16-C17-C18-C19
27	k	101	BCR	C20-C21-C22-C23
29	C	519	LMG	C2-C1-O1-C7
25	a	609	CLA	O1A-CGA-O2A-C1
30	A	613	SQD	O47-C45-C46-O48
34	l	101	LHG	C4-O6-P-O3
29	m	101	LMG	C17-C18-C19-C20
30	t	102	SQD	C15-C16-C17-C18
32	b	625	STE	C3-C4-C5-C6
26	d	402	PHO	CHA-CBD-CGD-O2D
29	d	410	LMG	C31-C32-C33-C34
31	C	516	DGD	CDA-CEA-CFA-CGA
29	A	612	LMG	O1-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
30	L	101	SQD	O6-C44-C45-C46
25	B	613	CLA	C6-C7-C8-C10
25	D	404	CLA	C11-C12-C13-C15
25	d	403	CLA	C6-C7-C8-C10
26	D	402	PHO	C12-C13-C15-C16
31	h	102	DGD	C7B-C8B-C9B-CAB
30	a	613	SQD	C10-C11-C12-C13
25	B	607	CLA	C6-C7-C8-C9
25	C	505	CLA	C6-C7-C8-C9
25	a	607	CLA	C14-C13-C15-C16
25	b	602	CLA	C6-C7-C8-C9
25	b	608	CLA	C11-C10-C8-C9
25	c	506	CLA	C6-C7-C8-C9
25	B	612	CLA	C16-C17-C18-C20
30	a	613	SQD	C16-C17-C18-C19
29	A	612	LMG	C4-C5-C6-O5
29	d	410	LMG	C33-C34-C35-C36
32	B	625	STE	C5-C6-C7-C8
34	L	102	LHG	C11-C10-C9-C8
32	b	626	STE	C3-C4-C5-C6
25	B	614	CLA	C15-C16-C17-C18
29	d	410	LMG	C29-C30-C31-C32
32	C	521	STE	O1-C1-C2-C3
34	D	411	LHG	C2-C3-O3-P
34	d	409	LHG	C2-C3-O3-P
32	M	102	STE	C5-C6-C7-C8
34	D	413	LHG	C16-C17-C18-C19
34	E	101	LHG	C11-C12-C13-C14
34	D	413	LHG	C23-C24-C25-C26
25	b	610	CLA	C4C-C3C-CAC-CBC
25	B	613	CLA	C16-C17-C18-C20
25	C	508	CLA	C16-C17-C18-C20
25	C	513	CLA	C16-C17-C18-C20
26	A	608	PHO	CBA-CGA-O2A-C1
31	c	518	DGD	O6E-C5E-C6E-O5E
29	B	621	LMG	O7-C10-C11-C12
29	m	101	LMG	C33-C34-C35-C36
25	b	607	CLA	C16-C17-C18-C19
29	c	519	LMG	C4-C5-C6-O5
27	K	101	BCR	C13-C14-C15-C16
28	D	407	PL9	C39-C41-C42-C43
25	b	602	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
32	c	520	STE	C11-C10-C9-C8
32	d	412	STE	O2-C1-C2-C3
25	B	609	CLA	C4-C3-C5-C6
25	c	513	CLA	C4-C3-C5-C6
28	A	611	PL9	C25-C24-C26-C27
32	b	625	STE	O1-C1-C2-C3
27	C	514	BCR	C14-C15-C16-C17
25	B	609	CLA	C2-C3-C5-C6
32	t	104	STE	C12-C13-C14-C15
25	B	611	CLA	C10-C11-C12-C13
32	B	623	STE	O2-C1-C2-C3
32	b	621	STE	O2-C1-C2-C3
30	D	409	SQD	O48-C23-C24-C25
25	D	404	CLA	C2-C1-O2A-CGA
31	C	517	DGD	C4A-C5A-C6A-C7A
25	b	616	CLA	C8-C10-C11-C12
25	c	512	CLA	C16-C17-C18-C20
25	b	610	CLA	C2A-CAA-CBA-CGA
29	c	521	LMG	O1-C7-C8-O7
31	H	102	DGD	CAA-CBA-CCA-CDA
32	H	103	STE	C9-C10-C11-C12
32	t	104	STE	C10-C11-C12-C13
34	E	101	LHG	C2-C3-O3-P
29	m	101	LMG	C20-C21-C22-C23
31	H	102	DGD	CBB-CCB-CDB-CEB
25	B	602	CLA	C3A-C2A-CAA-CBA
32	M	102	STE	O1-C1-C2-C3
32	d	413	STE	C10-C11-C12-C13
32	B	623	STE	O1-C1-C2-C3
32	b	621	STE	C12-C13-C14-C15
29	C	519	LMG	C12-C13-C14-C15
25	C	511	CLA	C14-C13-C15-C16
25	D	404	CLA	C6-C7-C8-C9
25	b	603	CLA	C14-C13-C15-C16
25	b	615	CLA	C14-C13-C15-C16
25	c	512	CLA	C11-C12-C13-C14
25	d	403	CLA	C11-C10-C8-C9
32	B	624	STE	C6-C7-C8-C9
25	C	507	CLA	C8-C10-C11-C12
29	D	408	LMG	C35-C36-C37-C38
29	d	410	LMG	C36-C37-C38-C39
34	d	408	LHG	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
25	b	610	CLA	C2C-C3C-CAC-CBC
25	B	604	CLA	C15-C16-C17-C18
25	c	513	CLA	C8-C10-C11-C12
27	C	514	BCR	C20-C21-C22-C37
29	D	412	LMG	C7-C8-C9-O8
31	c	518	DGD	O1G-C1G-C2G-C3G
29	D	408	LMG	C19-C20-C21-C22
32	b	625	STE	O2-C1-C2-C3
32	c	522	STE	C2-C3-C4-C5
32	j	101	STE	C5-C6-C7-C8
34	l	101	LHG	C29-C30-C31-C32
25	C	513	CLA	O2A-C1-C2-C3
31	C	517	DGD	O6D-C1D-O3G-C3G
29	B	621	LMG	C12-C13-C14-C15
30	A	614	SQD	C33-C34-C35-C36
30	t	102	SQD	C25-C26-C27-C28
31	H	102	DGD	C6A-C7A-C8A-C9A
32	b	624	STE	C5-C6-C7-C8
29	d	411	LMG	C33-C34-C35-C36
29	B	621	LMG	O9-C10-C11-C12
29	A	612	LMG	C7-C8-O7-C10
25	B	602	CLA	C1A-C2A-CAA-CBA
25	a	607	CLA	C1A-C2A-CAA-CBA
25	c	501	CLA	C1A-C2A-CAA-CBA
29	c	521	LMG	C12-C13-C14-C15
25	B	615	CLA	C16-C17-C18-C19
25	B	611	CLA	C11-C10-C8-C7
25	C	507	CLA	C6-C7-C8-C10
25	b	607	CLA	C11-C10-C8-C7
25	b	610	CLA	C11-C12-C13-C15
25	c	508	CLA	C11-C10-C8-C7
25	c	511	CLA	C11-C12-C13-C15
26	A	608	PHO	C12-C13-C15-C16
34	E	101	LHG	C31-C32-C33-C34
29	B	621	LMG	O8-C28-C29-C30
32	X	101	STE	O1-C1-C2-C3
27	c	514	BCR	C13-C14-C15-C16
31	C	517	DGD	C8A-C9A-CAA-CBA
25	b	603	CLA	C13-C15-C16-C17
34	e	102	LHG	C4-O6-P-O3
29	B	621	LMG	O10-C28-C29-C30
32	C	521	STE	O2-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
34	d	409	LHG	C33-C34-C35-C36
30	t	102	SQD	O10-C23-O48-C46
25	c	510	CLA	C10-C11-C12-C13
34	L	102	LHG	C23-C24-C25-C26
25	b	611	CLA	C2-C3-C5-C6
32	l	102	STE	C9-C10-C11-C12
34	D	411	LHG	C26-C27-C28-C29
25	b	613	CLA	C8-C10-C11-C12
25	c	503	CLA	C10-C11-C12-C13
25	B	607	CLA	C16-C17-C18-C19
34	d	407	LHG	C34-C35-C36-C37
31	C	516	DGD	O6D-C5D-C6D-O5D
31	C	516	DGD	CCA-CDA-CEA-CFA
31	h	102	DGD	C1A-C2A-C3A-C4A
34	L	102	LHG	C7-C8-C9-C10
31	C	517	DGD	C1A-C2A-C3A-C4A
25	b	616	CLA	C11-C12-C13-C15
31	C	516	DGD	C2B-C3B-C4B-C5B
26	A	608	PHO	O1A-CGA-O2A-C1
32	b	621	STE	O1-C1-C2-C3
25	C	509	CLA	C3-C5-C6-C7
25	c	512	CLA	C4-C3-C5-C6
28	D	407	PL9	C12-C13-C14-C15
31	h	102	DGD	CDA-CEA-CFA-CGA
25	a	606	CLA	C2-C1-O2A-CGA
31	C	516	DGD	C4D-C5D-C6D-O5D
29	d	410	LMG	C39-C40-C41-C42
25	B	603	CLA	C14-C13-C15-C16
25	C	506	CLA	C6-C7-C8-C9
25	b	606	CLA	C11-C12-C13-C14
30	L	101	SQD	C9-C10-C11-C12
32	d	412	STE	O1-C1-C2-C3
25	a	609	CLA	C15-C16-C17-C18
25	B	601	CLA	CAA-CBA-CGA-O1A
31	H	102	DGD	CDB-CEB-CFB-CGB
32	b	623	STE	C7-C8-C9-C10
29	M	101	LMG	O9-C10-O7-C8
35	e	101	HEM	CAD-CBD-CGD-O1D
27	A	610	BCR	C1-C6-C7-C8
27	A	610	BCR	C5-C6-C7-C8
27	A	610	BCR	C23-C24-C25-C30
27	B	619	BCR	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
27	C	514	BCR	C23-C24-C25-C26
27	K	102	BCR	C23-C24-C25-C26
27	b	617	BCR	C23-C24-C25-C30
27	b	618	BCR	C23-C24-C25-C30
27	c	515	BCR	C1-C6-C7-C8
27	k	101	BCR	C23-C24-C25-C30
27	k	102	BCR	C1-C6-C7-C8
32	M	102	STE	C1-C2-C3-C4
32	M	102	STE	O2-C1-C2-C3
27	B	619	BCR	C15-C16-C17-C18
31	C	517	DGD	C2A-C3A-C4A-C5A
25	b	606	CLA	C4-C3-C5-C6
27	B	619	BCR	C21-C22-C23-C24
31	C	518	DGD	C3B-C4B-C5B-C6B
31	C	516	DGD	C5D-C6D-O5D-C1E
30	D	409	SQD	C23-C24-C25-C26
32	b	623	STE	O2-C1-C2-C3
36	v	201	HEC	CAD-CBD-CGD-O1D
36	v	201	HEC	CAD-CBD-CGD-O2D
32	M	102	STE	C9-C10-C11-C12
31	c	517	DGD	CBB-CCB-CDB-CEB
25	B	604	CLA	C10-C11-C12-C13
30	f	101	SQD	C32-C33-C34-C35
25	b	609	CLA	C16-C17-C18-C20
30	L	101	SQD	C26-C27-C28-C29
30	t	102	SQD	C29-C30-C31-C32
32	b	620	STE	C10-C11-C12-C13
31	a	614	DGD	O2G-C1B-C2B-C3B
25	d	403	CLA	C4-C3-C5-C6
31	C	518	DGD	CBA-CCA-CDA-CEA
25	B	606	CLA	C6-C7-C8-C10
25	C	508	CLA	C11-C10-C8-C7
25	a	609	CLA	C6-C7-C8-C10
25	c	503	CLA	C11-C10-C8-C7
28	A	611	PL9	C33-C34-C36-C37
25	B	605	CLA	CBA-CGA-O2A-C1
29	b	622	LMG	C19-C20-C21-C22
29	c	521	LMG	C41-C42-C43-C44
34	l	101	LHG	C16-C17-C18-C19
32	C	520	STE	C3-C4-C5-C6
36	V	201	HEC	CAD-CBD-CGD-O2D
32	M	103	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
27	K	101	BCR	C20-C21-C22-C37
27	k	101	BCR	C16-C17-C18-C36
25	B	607	CLA	C4-C3-C5-C6
25	b	615	CLA	C8-C10-C11-C12
25	B	606	CLA	C16-C17-C18-C20
25	B	601	CLA	C14-C13-C15-C16
25	B	605	CLA	C6-C7-C8-C9
25	B	611	CLA	C11-C12-C13-C14
25	B	613	CLA	C6-C7-C8-C9
25	C	511	CLA	C11-C10-C8-C9
25	c	507	CLA	C11-C10-C8-C9
25	c	507	CLA	C11-C12-C13-C14
25	c	513	CLA	C11-C12-C13-C14
32	c	522	STE	C6-C7-C8-C9
25	A	609	CLA	C3A-C2A-CAA-CBA
32	l	102	STE	C14-C15-C16-C17
25	B	604	CLA	CAD-CBD-CGD-O2D
25	B	610	CLA	CAD-CBD-CGD-O2D
25	B	616	CLA	CAD-CBD-CGD-O2D
25	b	604	CLA	CAD-CBD-CGD-O2D
25	b	607	CLA	CAD-CBD-CGD-O2D
25	c	505	CLA	CAD-CBD-CGD-O2D
25	c	509	CLA	CAD-CBD-CGD-O2D
29	A	612	LMG	C9-C8-O7-C10
29	M	101	LMG	C10-C11-C12-C13
34	D	413	LHG	O9-C7-O7-C5
25	B	605	CLA	O1A-CGA-O2A-C1
25	B	613	CLA	CAA-CBA-CGA-O2A
25	b	603	CLA	C8-C10-C11-C12
32	b	624	STE	C7-C8-C9-C10
28	D	407	PL9	C30-C29-C31-C32
32	c	520	STE	O2-C1-C2-C3
25	c	512	CLA	C2-C3-C5-C6
31	a	614	DGD	C8A-C9A-CAA-CBA
32	M	102	STE	C10-C11-C12-C13
27	B	618	BCR	C17-C18-C19-C20
27	k	102	BCR	C21-C22-C23-C24
26	A	608	PHO	C2C-C3C-CAC-CBC
31	C	516	DGD	C1G-C2G-C3G-O3G
31	a	614	DGD	C5B-C6B-C7B-C8B
32	X	101	STE	O2-C1-C2-C3
32	b	623	STE	O1-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
32	j	101	STE	O1-C1-C2-C3
32	j	101	STE	O2-C1-C2-C3
32	t	104	STE	O1-C1-C2-C3
25	B	616	CLA	O2A-C1-C2-C3
25	C	509	CLA	O2A-C1-C2-C3
25	D	405	CLA	O2A-C1-C2-C3
25	b	601	CLA	O2A-C1-C2-C3
25	d	403	CLA	O2A-C1-C2-C3
25	d	404	CLA	O2A-C1-C2-C3
26	A	608	PHO	O2A-C1-C2-C3
25	B	616	CLA	O1A-CGA-O2A-C1
29	c	523	LMG	C38-C39-C40-C41
34	D	413	LHG	C34-C35-C36-C37
25	B	610	CLA	C15-C16-C17-C18
25	b	612	CLA	O1A-CGA-O2A-C1
32	t	104	STE	O2-C1-C2-C3
36	V	201	HEC	CAD-CBD-CGD-O1D
25	B	615	CLA	C16-C17-C18-C20
25	B	607	CLA	CHA-CBD-CGD-O1D
25	B	607	CLA	CHA-CBD-CGD-O2D
25	C	507	CLA	CHA-CBD-CGD-O1D
25	b	610	CLA	CHA-CBD-CGD-O2D
25	b	611	CLA	CHA-CBD-CGD-O1D
25	b	611	CLA	CHA-CBD-CGD-O2D
25	b	616	CLA	CHA-CBD-CGD-O1D
25	b	616	CLA	CHA-CBD-CGD-O2D
25	c	504	CLA	CHA-CBD-CGD-O2D
25	c	506	CLA	CHA-CBD-CGD-O1D
25	c	507	CLA	CHA-CBD-CGD-O2D
32	L	103	STE	O2-C1-C2-C3
25	B	612	CLA	CAA-CBA-CGA-O2A
25	c	513	CLA	CAA-CBA-CGA-O2A
31	c	516	DGD	O2G-C1B-C2B-C3B
32	H	103	STE	C10-C11-C12-C13
25	b	603	CLA	O1D-CGD-O2D-CED
32	c	520	STE	O1-C1-C2-C3
25	D	404	CLA	C16-C17-C18-C20
25	b	601	CLA	CAA-CBA-CGA-O2A
34	E	101	LHG	C26-C27-C28-C29
29	b	622	LMG	O7-C8-C9-O8
25	D	405	CLA	C13-C15-C16-C17
25	C	506	CLA	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
31	a	614	DGD	CCA-CDA-CEA-CFA
29	d	411	LMG	C37-C38-C39-C40
34	E	101	LHG	O8-C23-C24-C25
32	d	413	STE	C13-C14-C15-C16
34	d	408	LHG	C30-C31-C32-C33
26	D	402	PHO	CHA-CBD-CGD-O2D
26	d	402	PHO	CHA-CBD-CGD-O1D
25	b	610	CLA	C3-C5-C6-C7
25	b	612	CLA	CAA-CBA-CGA-O2A
35	F	101	HEM	CAD-CBD-CGD-O1D
25	D	405	CLA	C6-C7-C8-C10
25	b	612	CLA	C11-C10-C8-C7
25	c	507	CLA	C11-C10-C8-C7
25	c	512	CLA	C11-C10-C8-C7
26	a	608	PHO	C6-C7-C8-C10
28	D	407	PL9	C4-C3-C7-C8
29	m	101	LMG	O8-C28-C29-C30
25	B	601	CLA	C11-C10-C8-C9
25	B	615	CLA	C11-C10-C8-C9
25	C	505	CLA	C11-C10-C8-C9
25	C	509	CLA	C11-C12-C13-C14
25	D	404	CLA	C11-C12-C13-C14
25	b	612	CLA	C11-C10-C8-C9
25	c	503	CLA	C11-C10-C8-C9
25	c	508	CLA	C11-C10-C8-C9
29	D	408	LMG	C12-C13-C14-C15
25	B	608	CLA	CBA-CGA-O2A-C1
30	L	101	SQD	C5-C6-S-O8
29	m	101	LMG	O6-C5-C6-O5
35	e	101	HEM	CAD-CBD-CGD-O2D
25	b	616	CLA	C11-C12-C13-C14
25	d	404	CLA	C16-C17-C18-C19
25	b	611	CLA	C4-C3-C5-C6
25	c	508	CLA	C4-C3-C5-C6
25	B	607	CLA	C2-C3-C5-C6
25	B	611	CLA	C2-C3-C5-C6
28	a	611	PL9	C38-C39-C41-C42
29	d	410	LMG	C37-C38-C39-C40
27	C	515	BCR	C17-C18-C19-C20
34	d	407	LHG	C24-C23-O8-C6
29	D	408	LMG	C16-C17-C18-C19
25	A	609	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
25	C	512	CLA	C1A-C2A-CAA-CBA
34	d	408	LHG	C19-C20-C21-C22
25	c	513	CLA	CAA-CBA-CGA-O1A
25	B	613	CLA	CAA-CBA-CGA-O1A
34	D	411	LHG	O10-C23-C24-C25
30	A	613	SQD	C44-C45-C46-O48
31	c	516	DGD	C1G-C2G-C3G-O3G
32	l	102	STE	C2-C3-C4-C5
25	a	612	CLA	C4C-C3C-CAC-CBC
25	b	613	CLA	CAA-CBA-CGA-O2A
31	C	516	DGD	O1B-C1B-C2B-C3B
31	C	517	DGD	O1B-C1B-C2B-C3B
27	B	617	BCR	C6-C7-C8-C9
34	L	102	LHG	C29-C30-C31-C32
34	d	408	LHG	C4-O6-P-O5
34	l	101	LHG	C3-O3-P-O4
25	C	505	CLA	C16-C17-C18-C19
29	C	519	LMG	C19-C20-C21-C22
31	c	516	DGD	O6E-C1E-O5D-C6D
27	b	617	BCR	C23-C24-C25-C26
27	b	618	BCR	C23-C24-C25-C26
27	b	619	BCR	C23-C24-C25-C30
27	k	102	BCR	C5-C6-C7-C8
32	M	103	STE	C6-C7-C8-C9
25	B	612	CLA	CAA-CBA-CGA-O1A
25	b	601	CLA	CAA-CBA-CGA-O1A
32	d	413	STE	C7-C8-C9-C10
32	L	103	STE	O1-C1-C2-C3
25	B	608	CLA	C16-C17-C18-C19
25	B	616	CLA	CBA-CGA-O2A-C1
25	b	614	CLA	C2A-CAA-CBA-CGA
29	M	101	LMG	O8-C28-C29-C30
25	d	403	CLA	C2C-C3C-CAC-CBC
34	E	101	LHG	O10-C23-C24-C25
25	c	509	CLA	C4-C3-C5-C6
28	a	611	PL9	C45-C44-C46-C47
25	B	603	CLA	CAD-CBD-CGD-O1D
25	B	607	CLA	CAD-CBD-CGD-O1D
25	B	609	CLA	CAD-CBD-CGD-O1D
25	b	605	CLA	CAD-CBD-CGD-O1D
25	b	609	CLA	CAD-CBD-CGD-O1D
25	b	611	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
25	c	506	CLA	CAD-CBD-CGD-O1D
29	C	519	LMG	O9-C10-C11-C12
29	d	411	LMG	O9-C10-C11-C12
32	R	101	STE	C5-C6-C7-C8
25	B	609	CLA	C14-C13-C15-C16
25	B	613	CLA	C11-C12-C13-C14
25	C	507	CLA	C6-C7-C8-C9
25	D	405	CLA	C6-C7-C8-C9
25	a	612	CLA	C11-C12-C13-C14
25	b	610	CLA	C11-C12-C13-C14
25	b	613	CLA	C11-C10-C8-C9
25	c	502	CLA	C6-C7-C8-C9
25	c	506	CLA	C11-C10-C8-C9
25	c	512	CLA	C11-C10-C8-C9
25	d	404	CLA	C11-C12-C13-C14
32	t	103	STE	O2-C1-C2-C3
35	F	101	HEM	CAD-CBD-CGD-O2D
25	B	608	CLA	O1A-CGA-O2A-C1
29	D	412	LMG	C12-C13-C14-C15
29	b	622	LMG	O8-C28-C29-C30
32	C	522	STE	C4-C5-C6-C7
25	c	501	CLA	CAA-CBA-CGA-O2A
31	C	516	DGD	O2G-C1B-C2B-C3B
34	D	411	LHG	O8-C23-C24-C25
34	e	102	LHG	O8-C23-C24-C25
25	B	601	CLA	C8-C10-C11-C12
25	d	404	CLA	C8-C10-C11-C12
31	C	517	DGD	C6B-C7B-C8B-C9B
34	D	413	LHG	C33-C34-C35-C36
25	B	611	CLA	C4-C3-C5-C6
25	c	504	CLA	C4-C3-C5-C6
25	B	601	CLA	C5-C6-C7-C8
29	M	101	LMG	C30-C31-C32-C33
25	C	506	CLA	C6-C7-C8-C10
25	C	509	CLA	C11-C12-C13-C15
25	D	404	CLA	C11-C10-C8-C7
25	D	404	CLA	C12-C13-C15-C16
25	b	602	CLA	C11-C12-C13-C15
25	b	606	CLA	C6-C7-C8-C10
25	c	506	CLA	C11-C10-C8-C7
25	c	513	CLA	C2-C3-C5-C6
25	c	513	CLA	C6-C7-C8-C10

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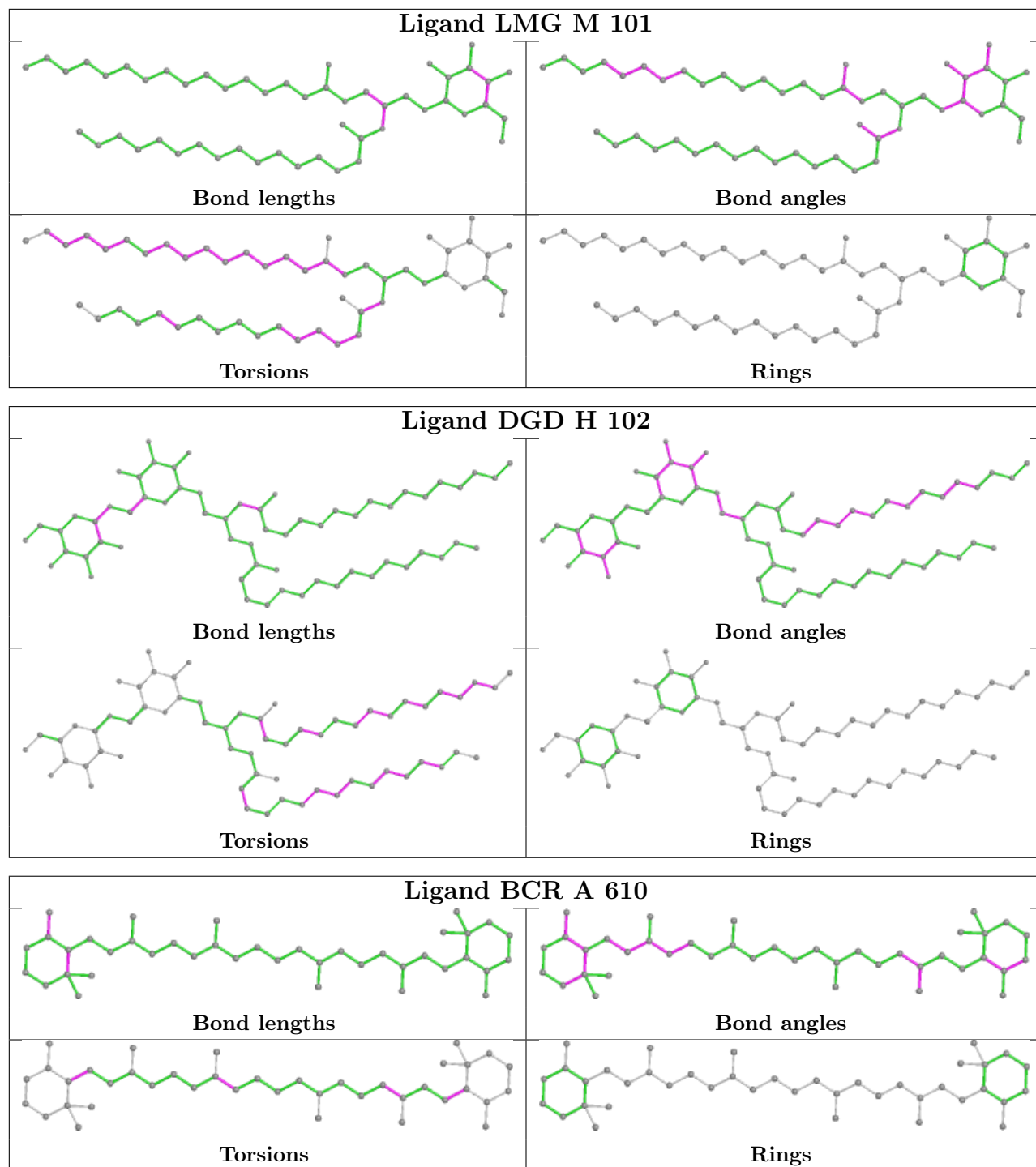
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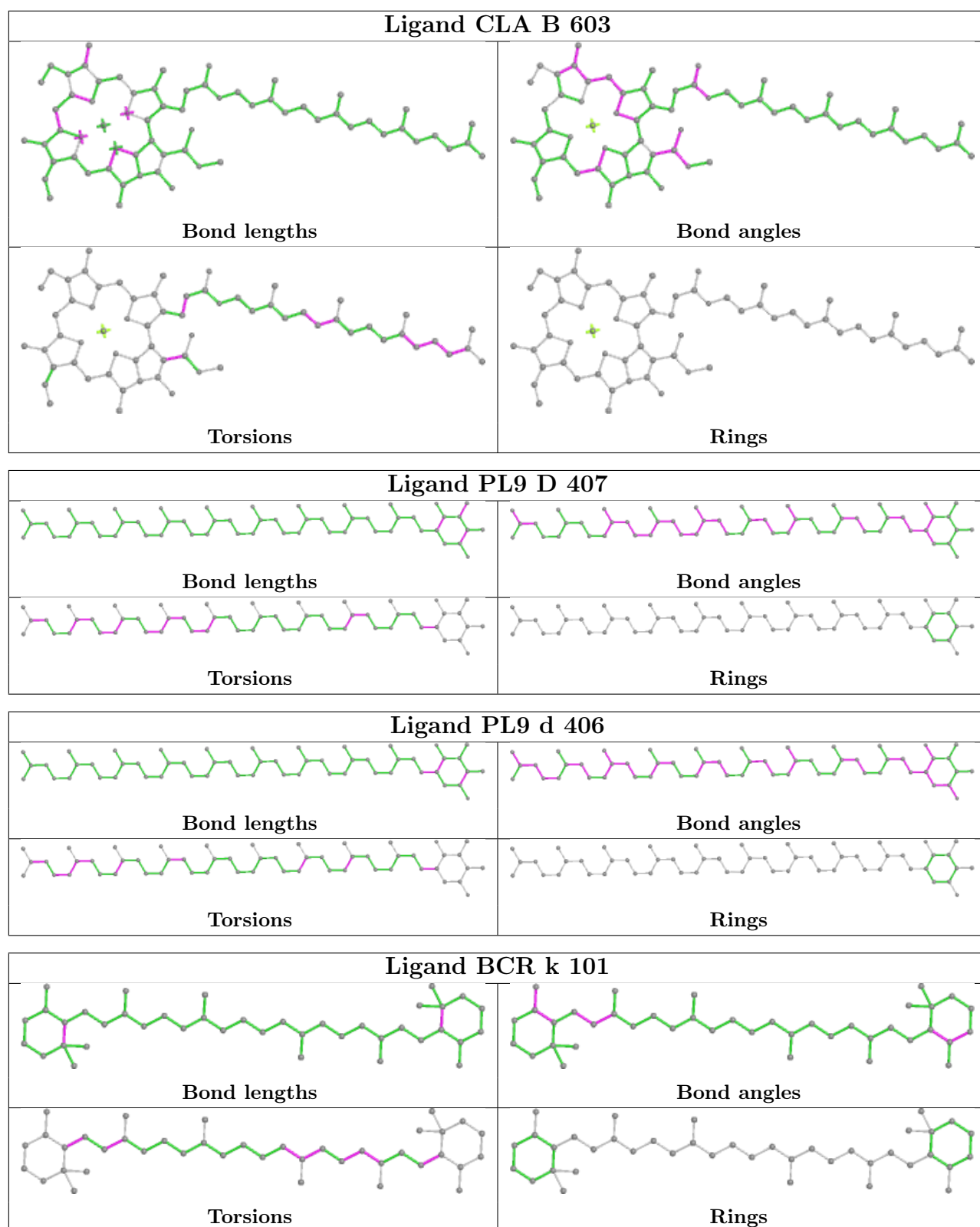
Mol	Chain	Res	Type	Atoms
26	a	608	PHO	C3A-C2A-CAA-CBA
28	D	407	PL9	C43-C44-C46-C47
30	A	614	SQD	C29-C30-C31-C32
31	c	516	DGD	O1G-C1A-C2A-C3A
34	L	102	LHG	O7-C7-C8-C9
34	d	409	LHG	O8-C23-C24-C25
26	a	608	PHO	C8-C10-C11-C12
25	b	612	CLA	CBA-CGA-O2A-C1
25	b	612	CLA	CAA-CBA-CGA-O1A
25	c	501	CLA	CAA-CBA-CGA-O1A
29	D	408	LMG	O7-C10-C11-C12
30	A	613	SQD	O47-C7-C8-C9
25	b	615	CLA	C10-C11-C12-C13
25	c	510	CLA	C5-C6-C7-C8
31	C	518	DGD	C4E-C5E-C6E-O5E
30	a	613	SQD	O47-C7-C8-C9
25	b	613	CLA	CAA-CBA-CGA-O1A
32	t	103	STE	O1-C1-C2-C3
25	b	604	CLA	C4C-C3C-CAC-CBC
26	d	402	PHO	C8-C10-C11-C12
25	a	612	CLA	C2C-C3C-CAC-CBC
34	d	408	LHG	C31-C32-C33-C34
31	A	615	DGD	O1B-C1B-C2B-C3B
31	h	102	DGD	O1B-C1B-C2B-C3B

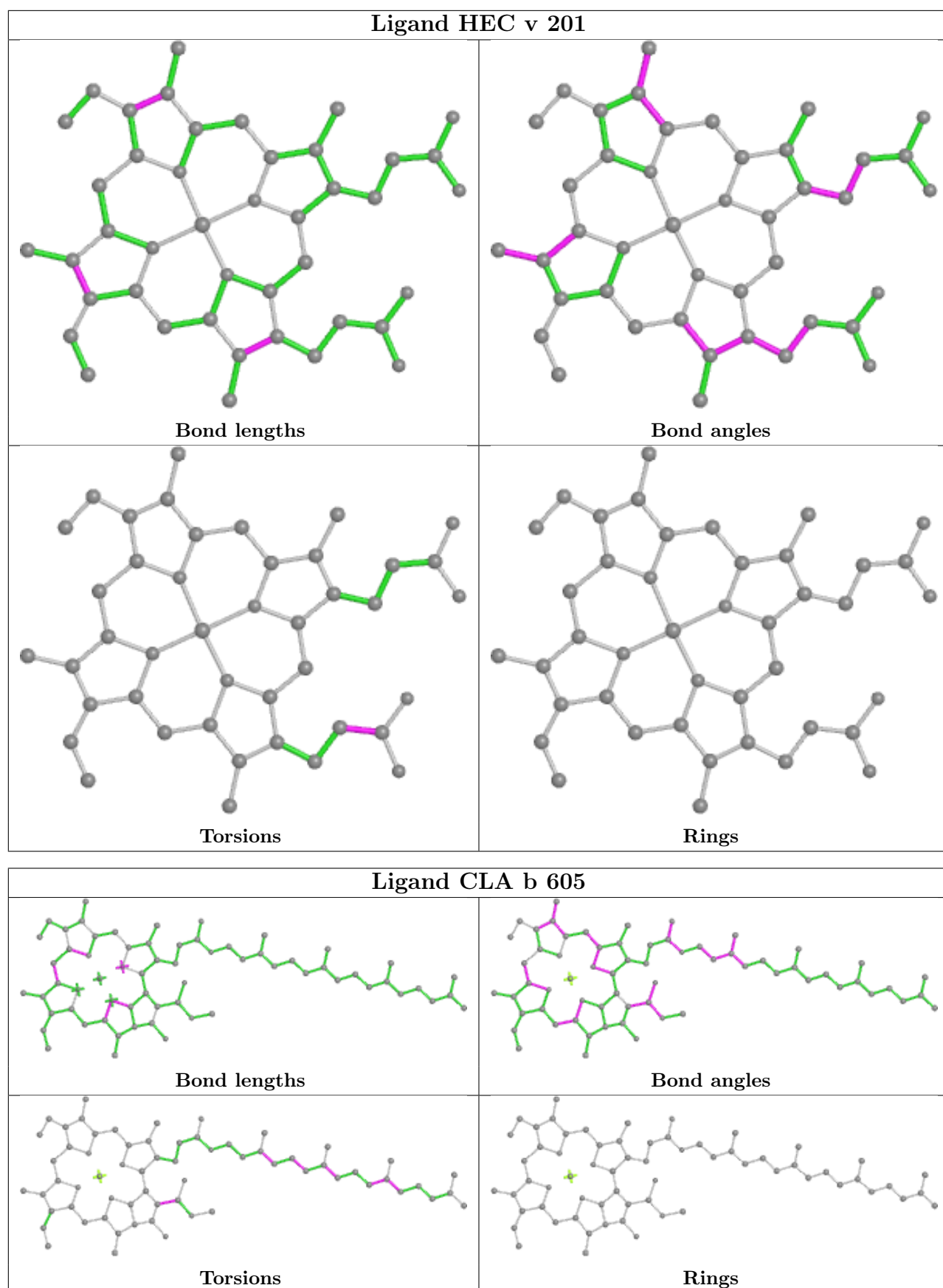
There are no ring outliers.

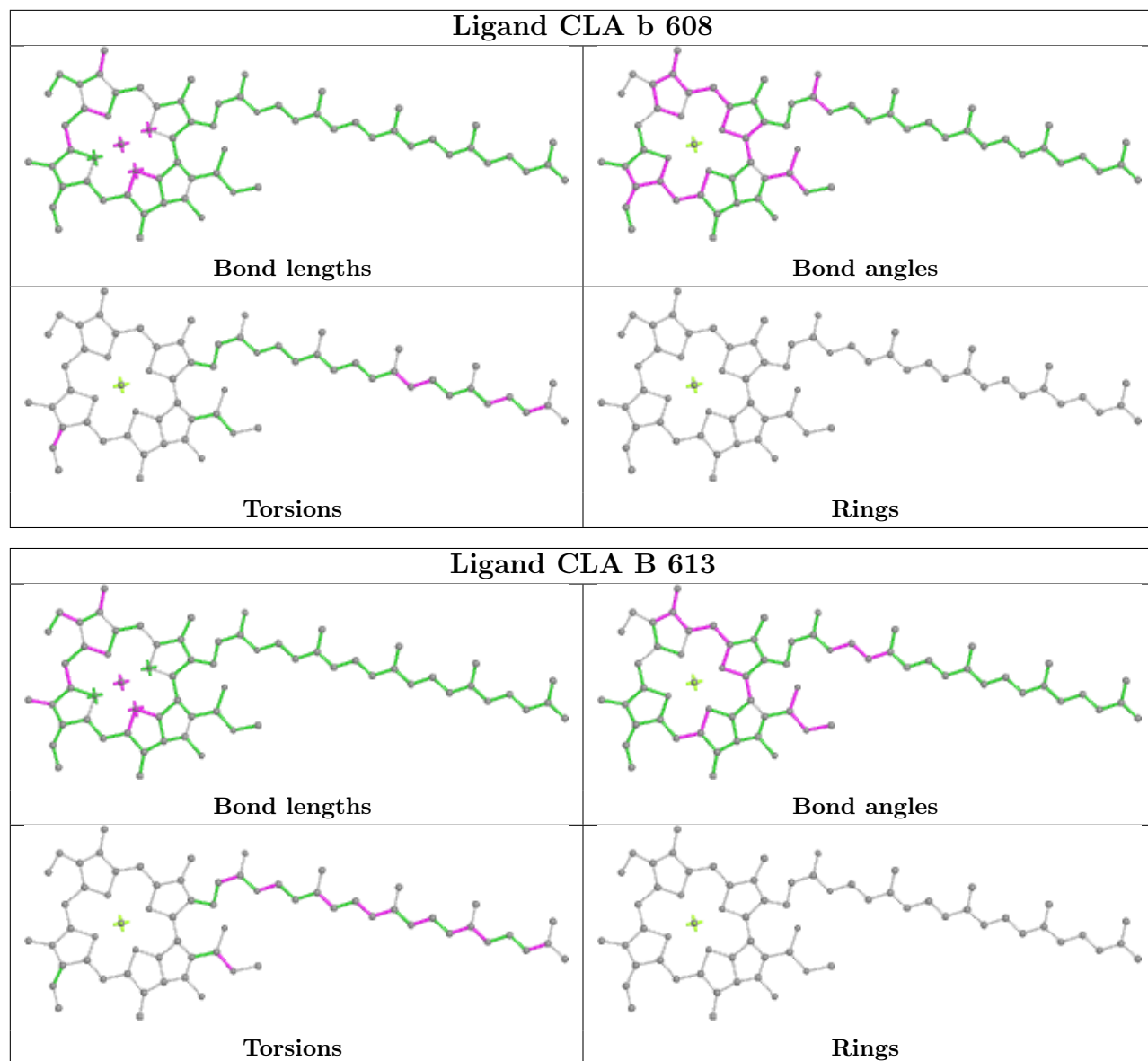
No monomer is involved in short contacts.

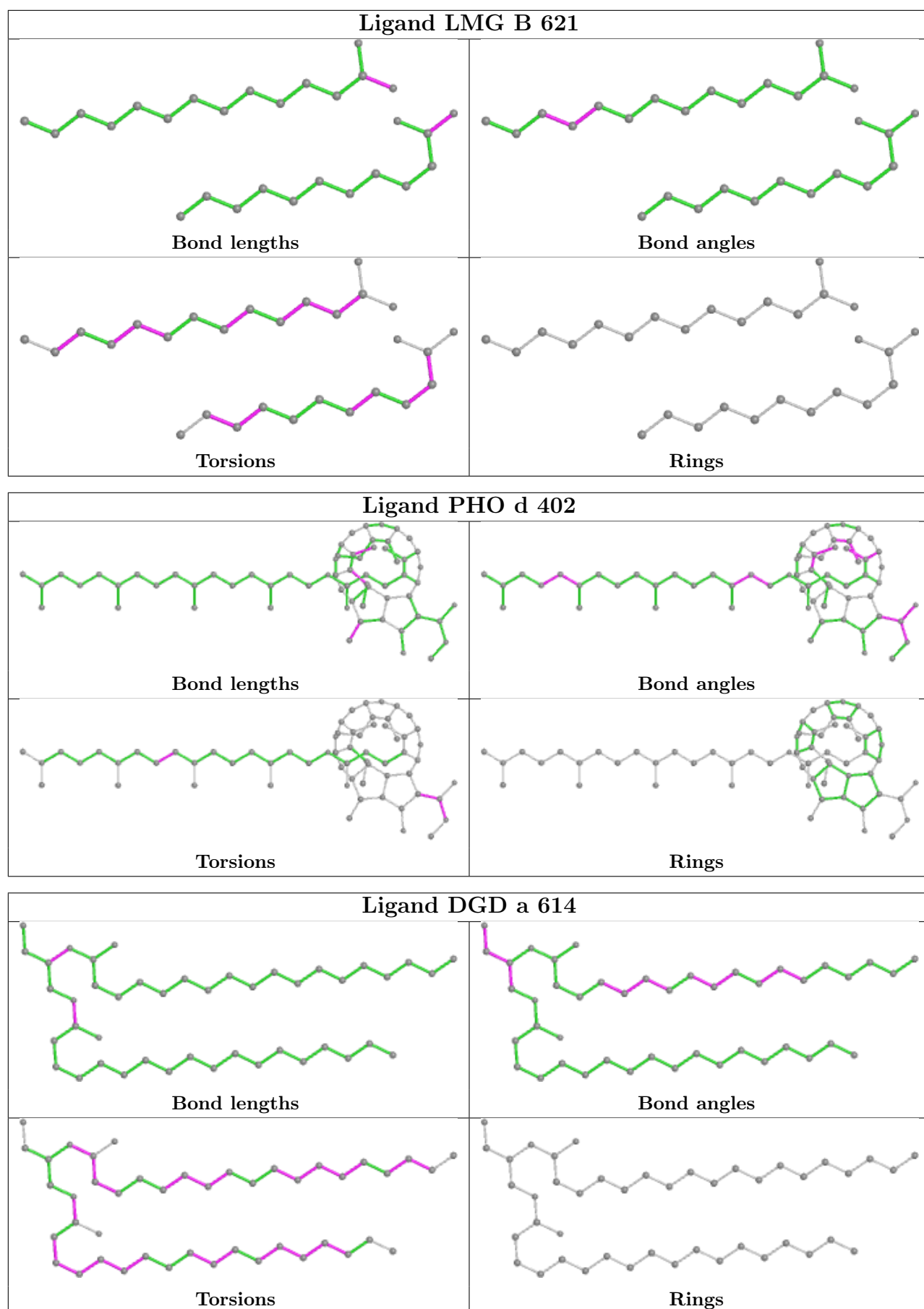
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

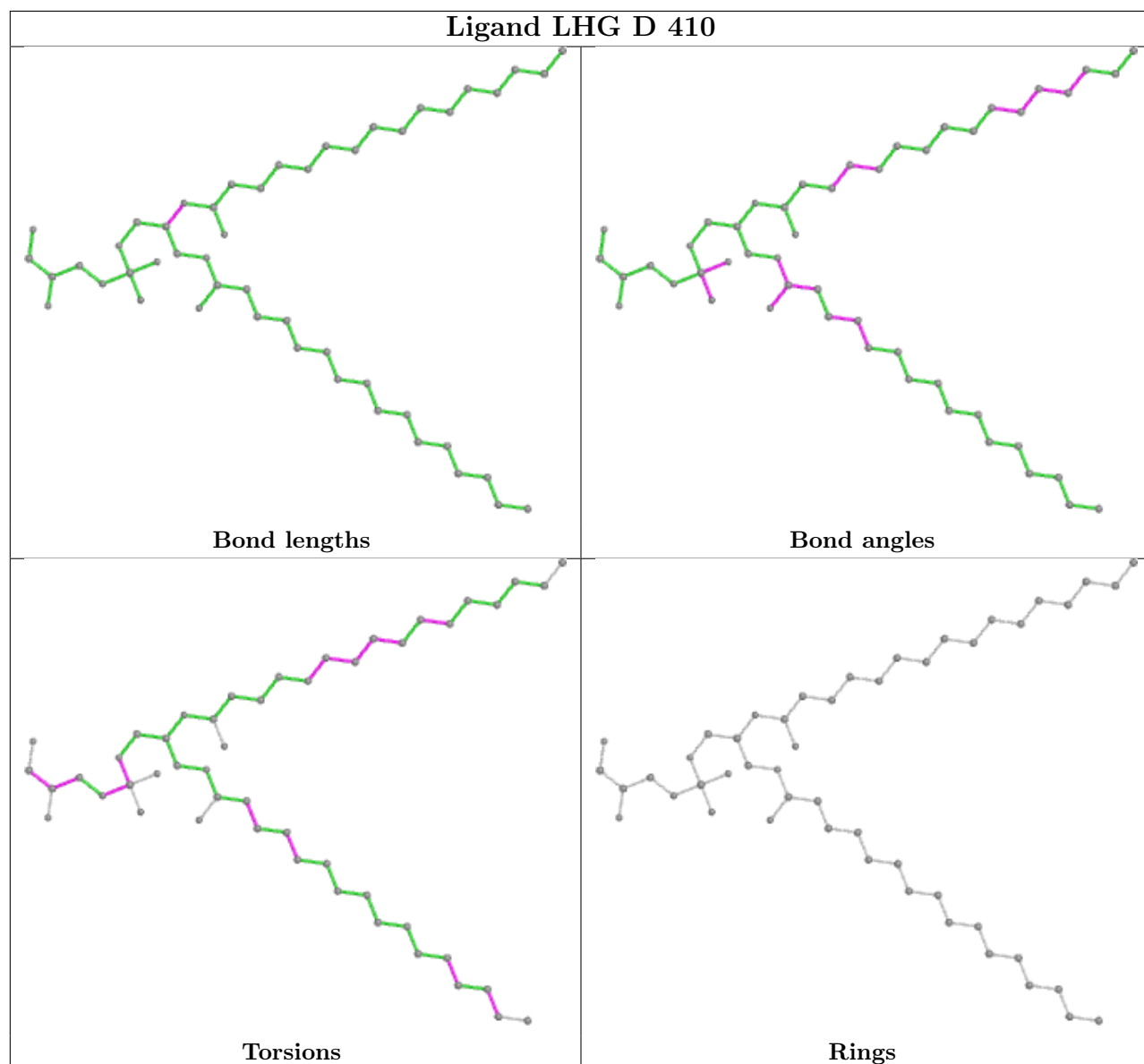
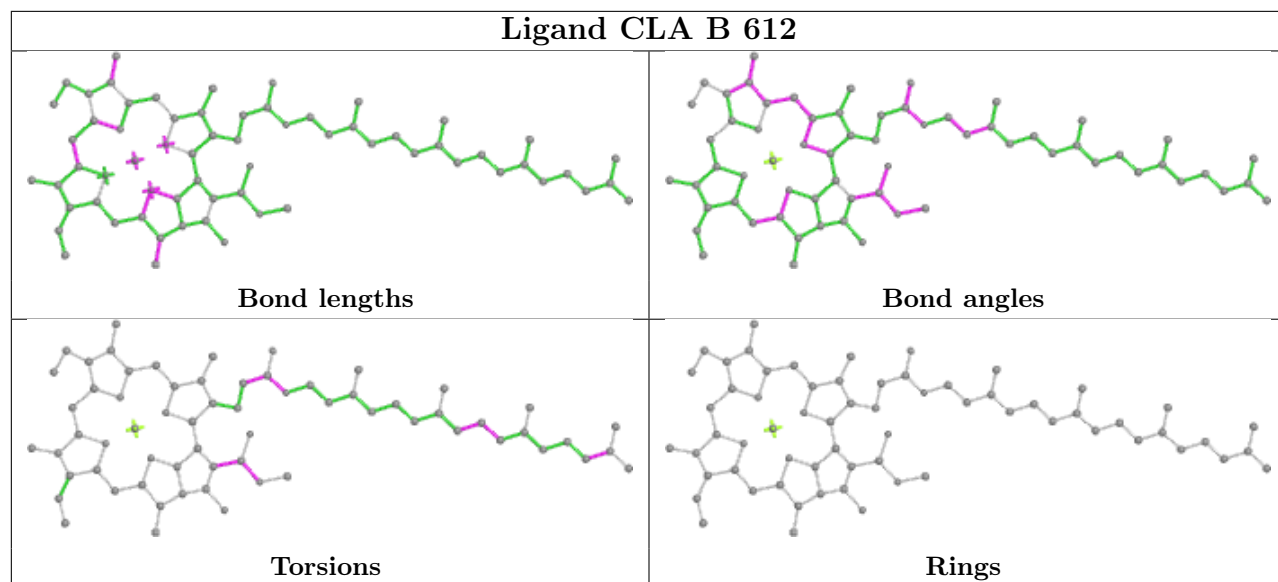


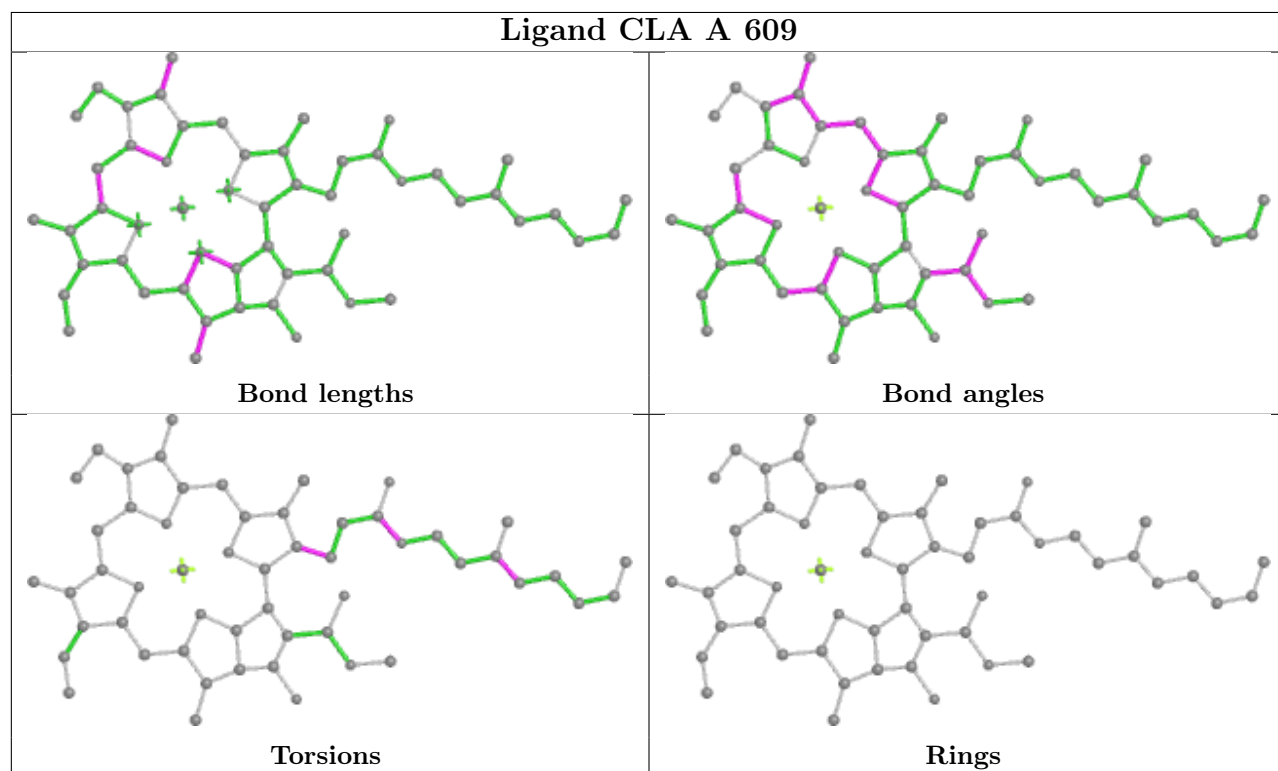
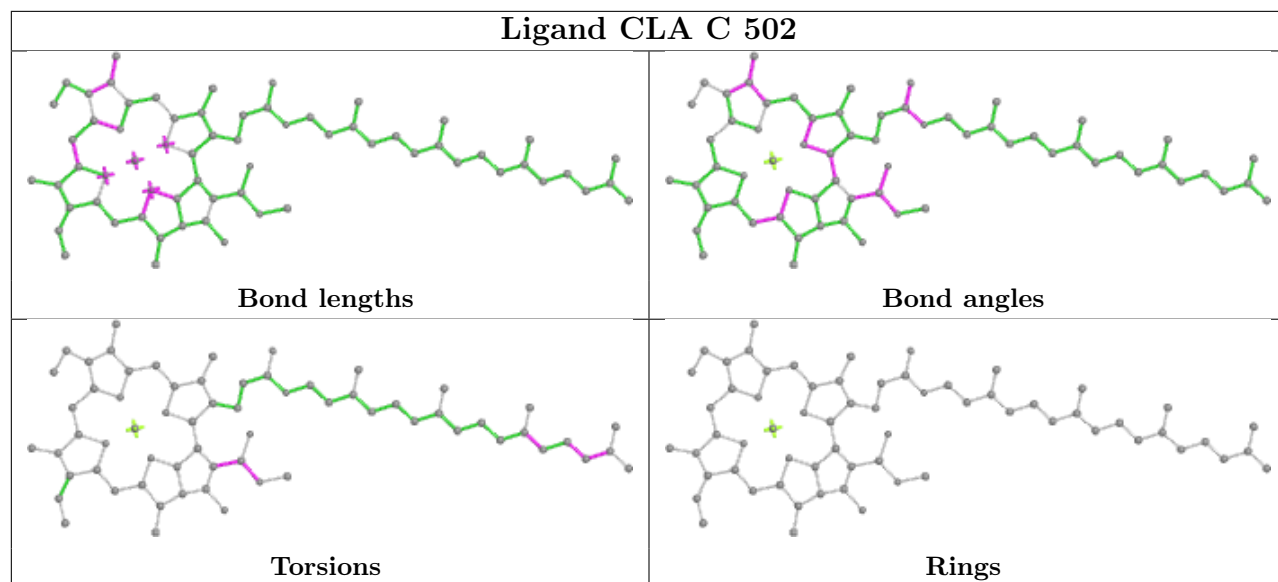


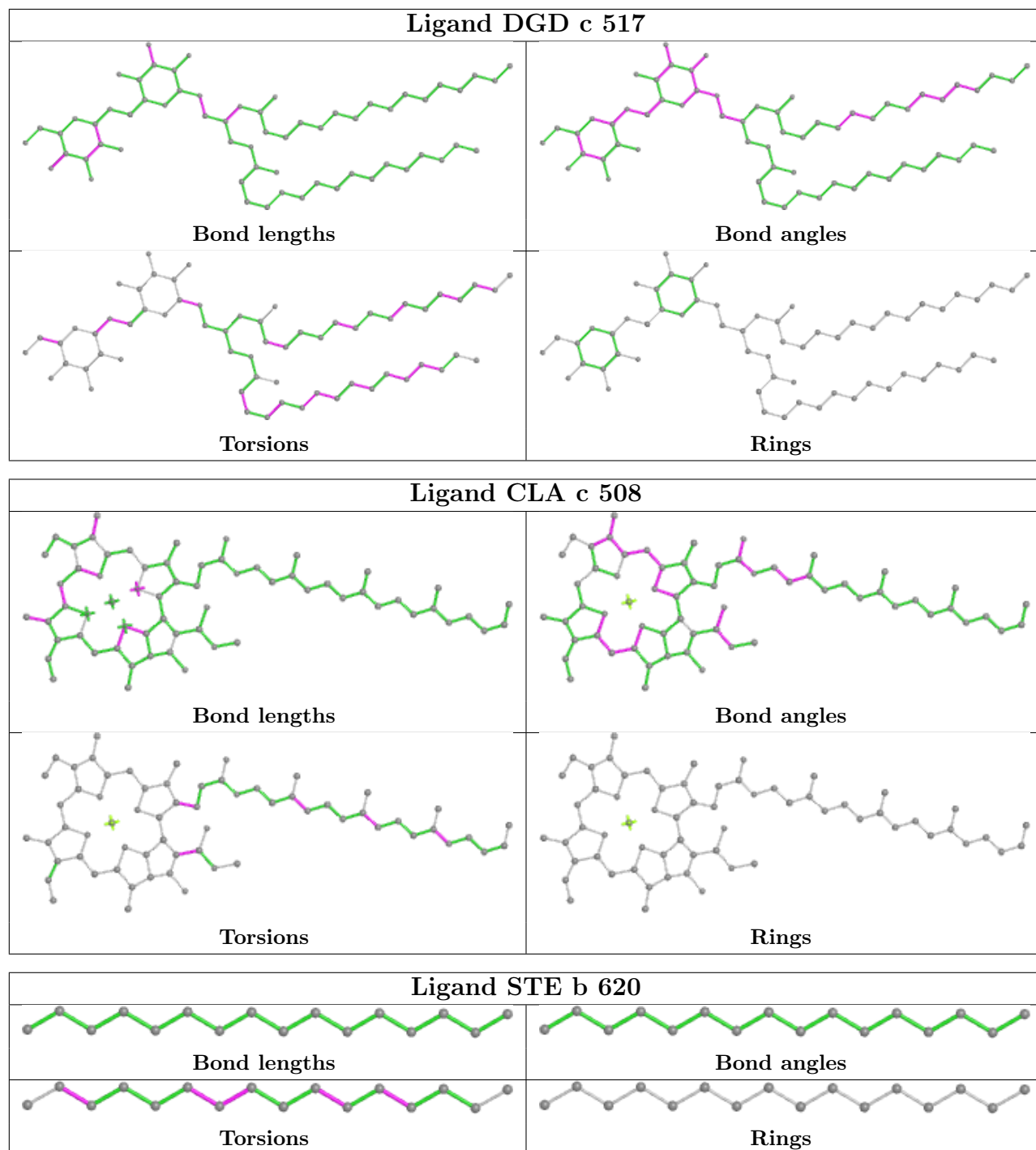


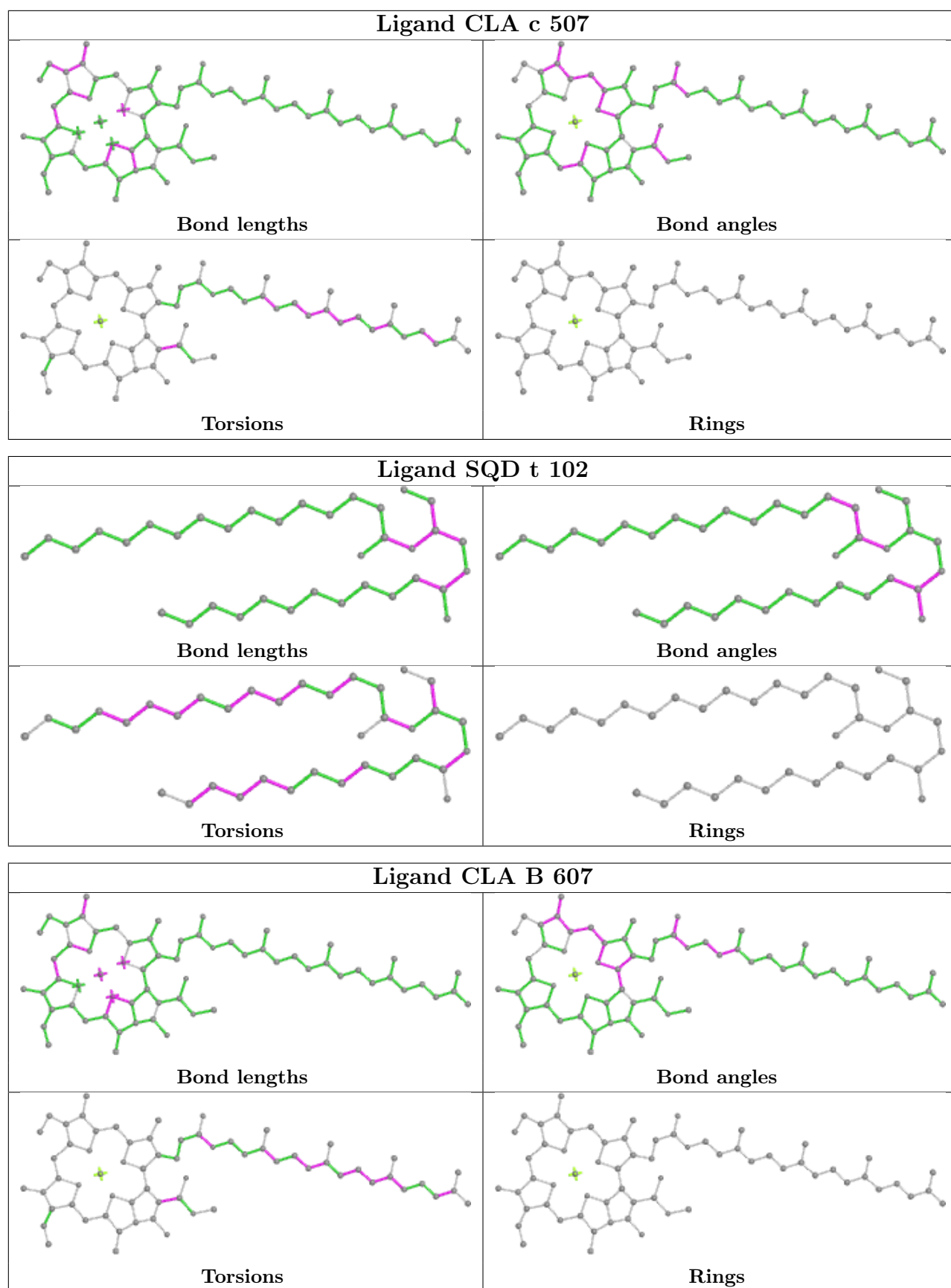


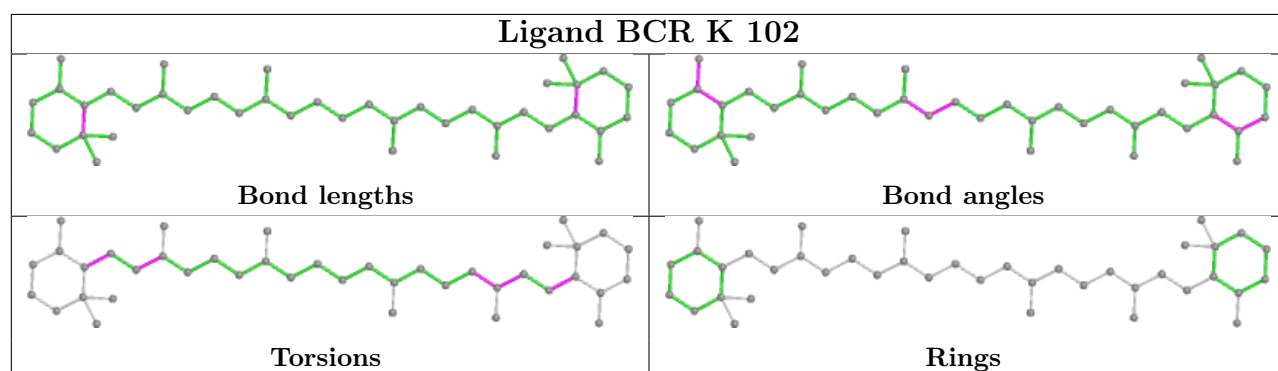
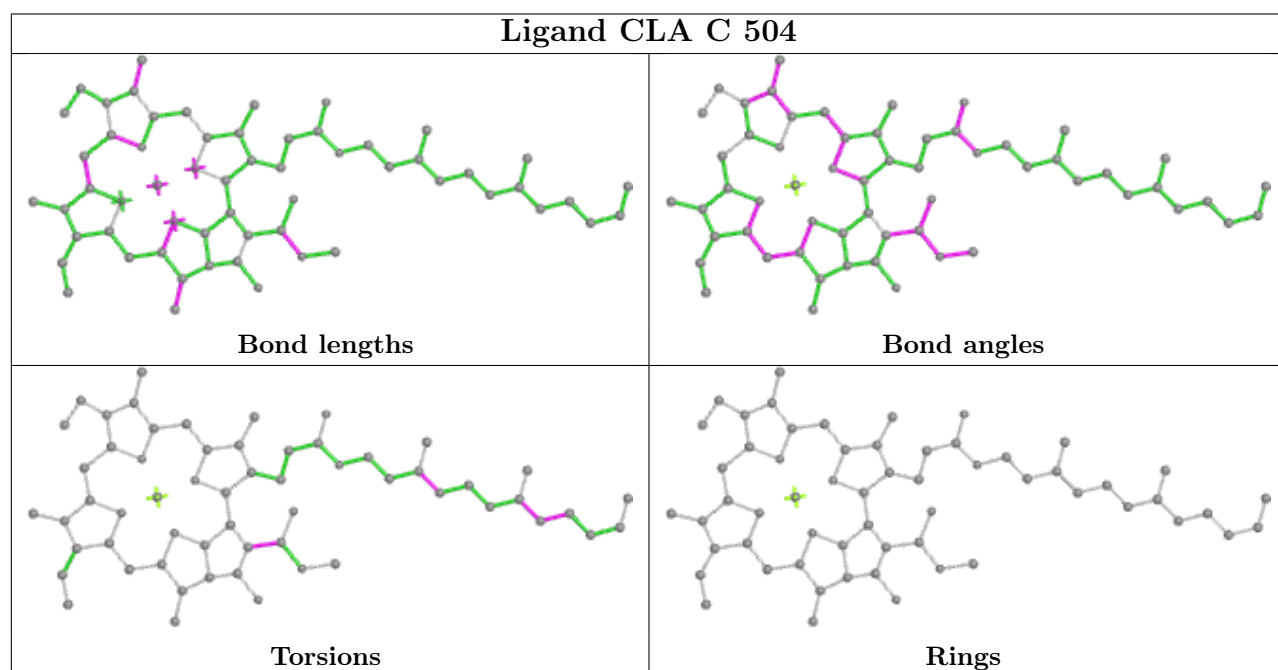
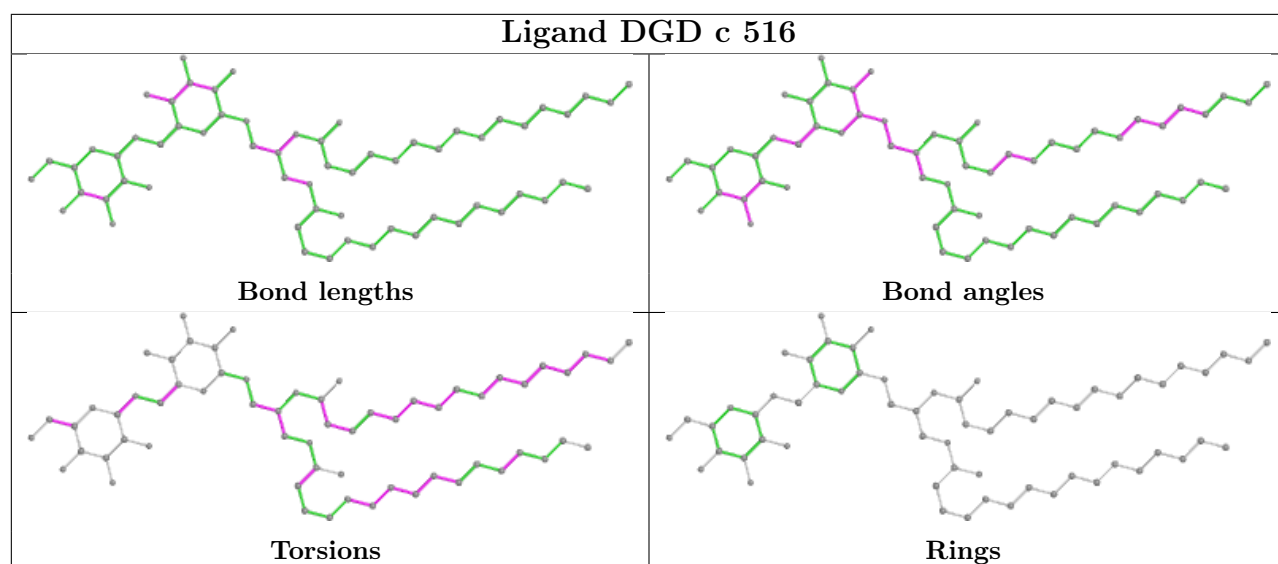


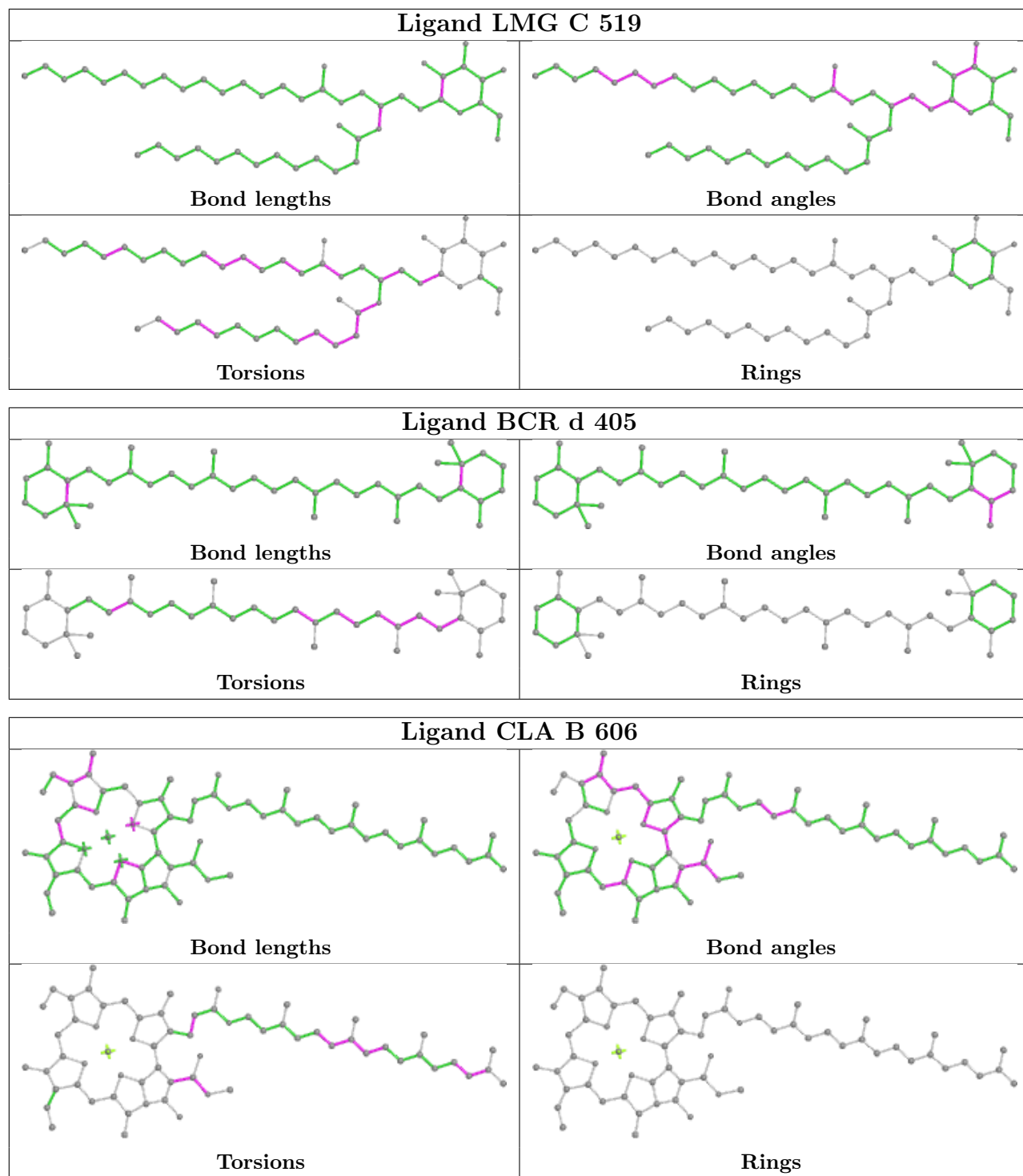


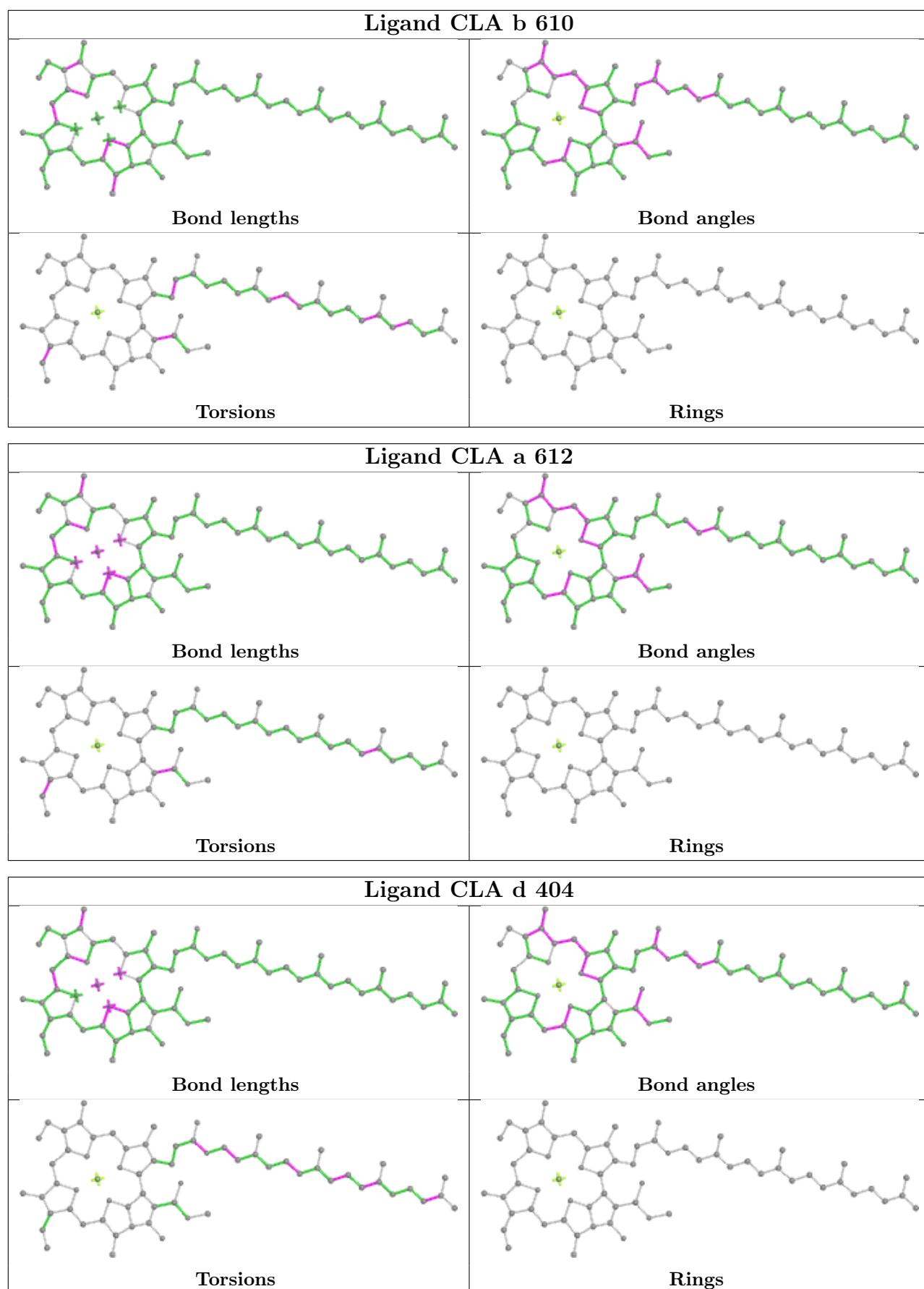


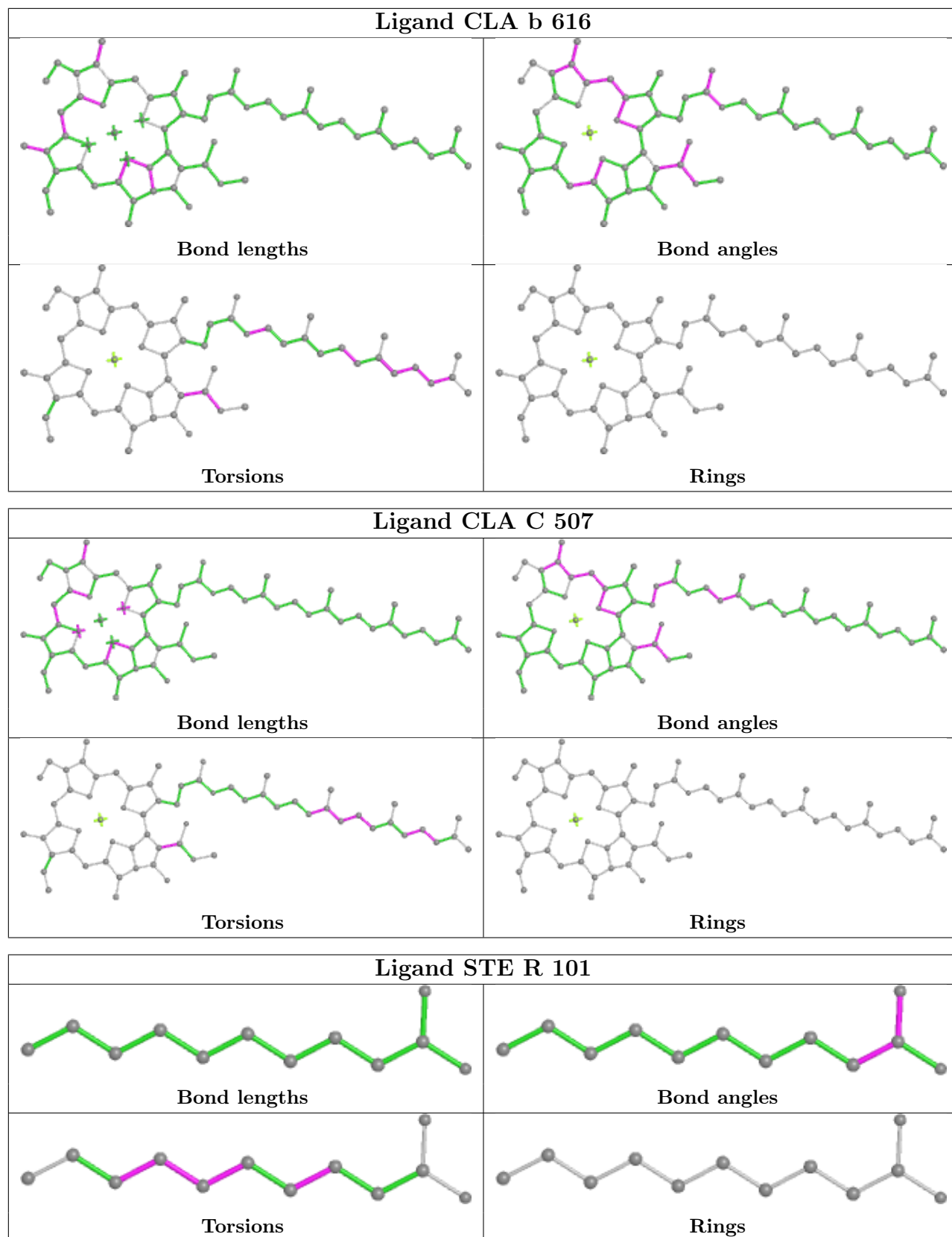


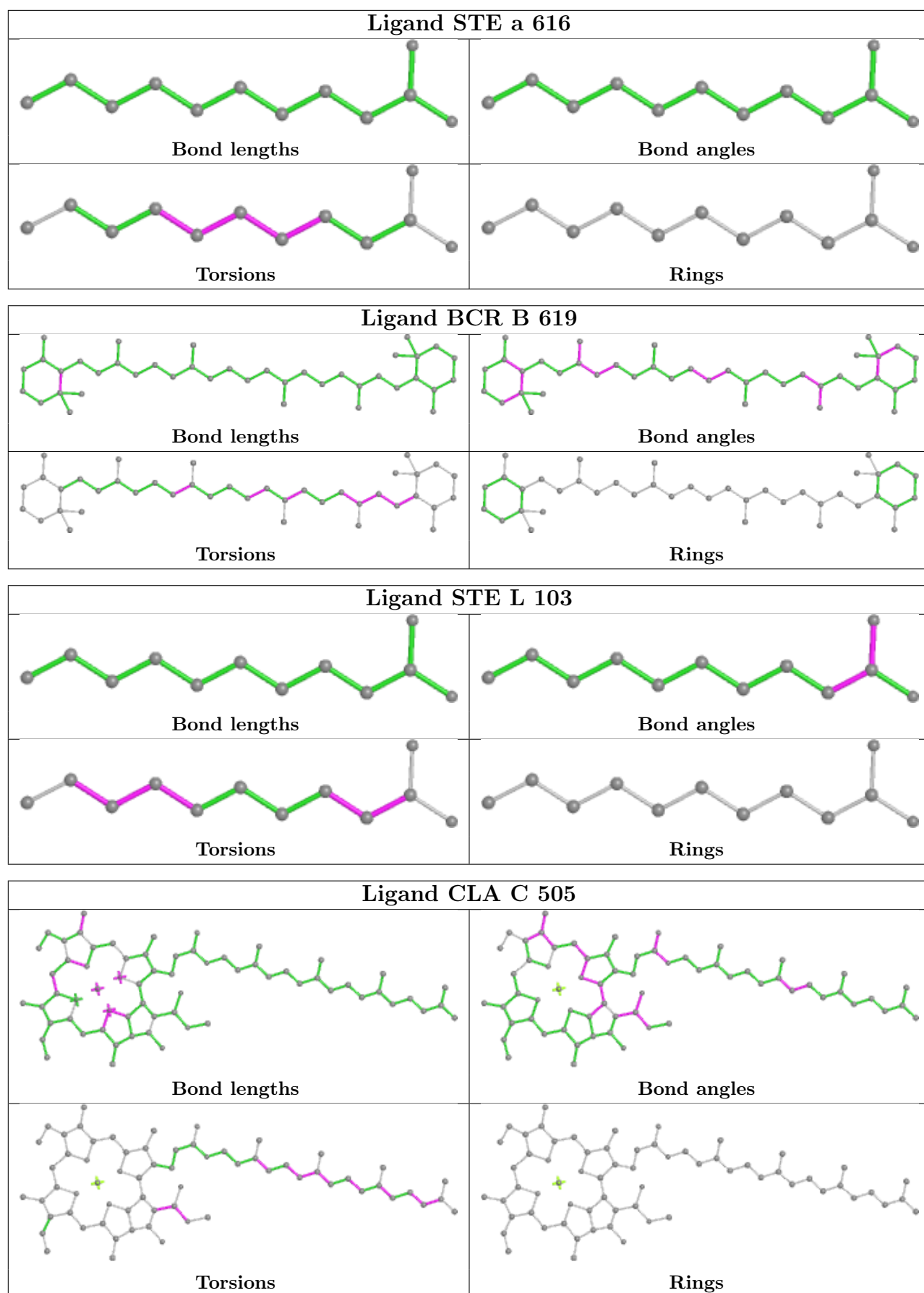


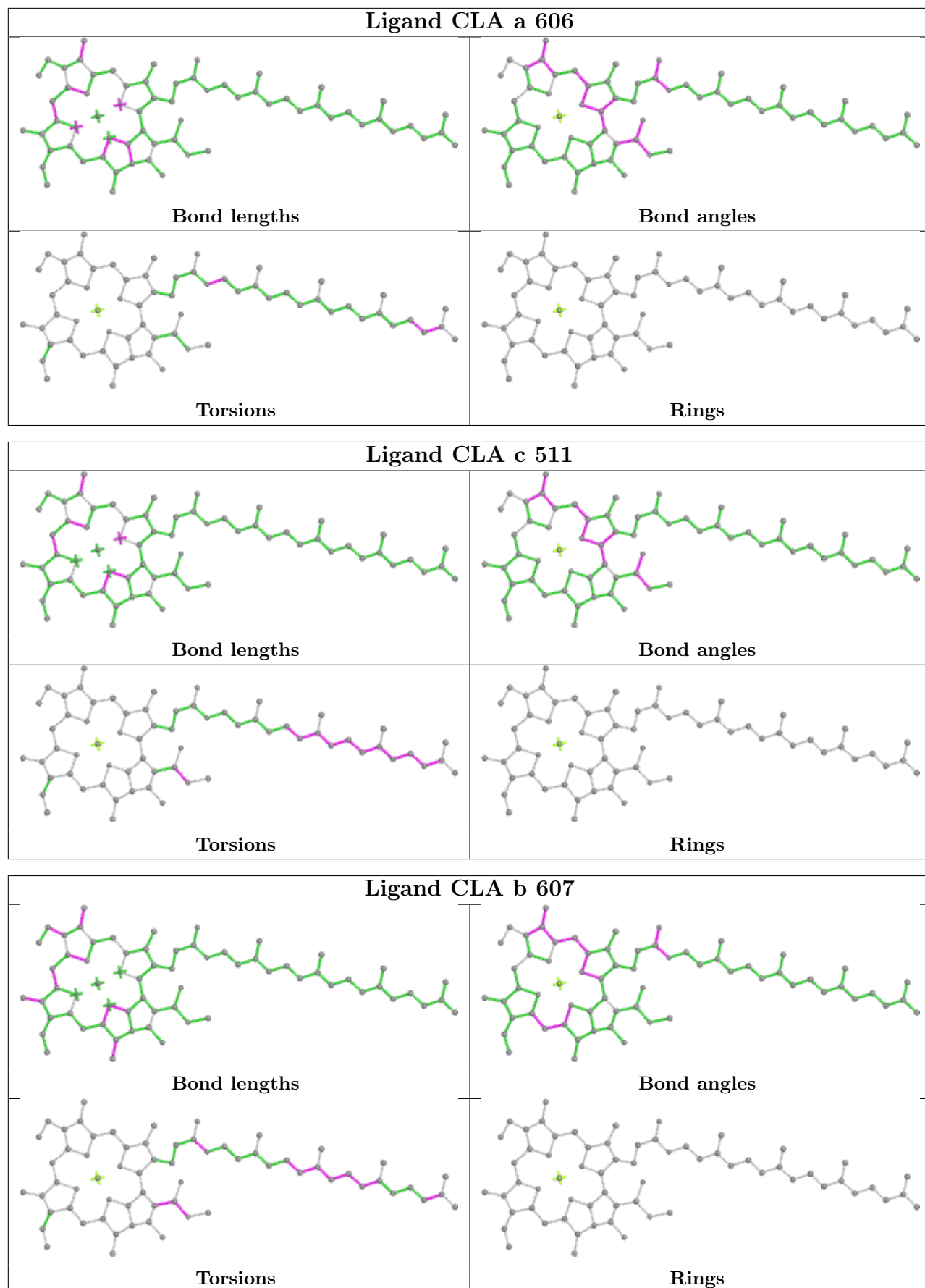


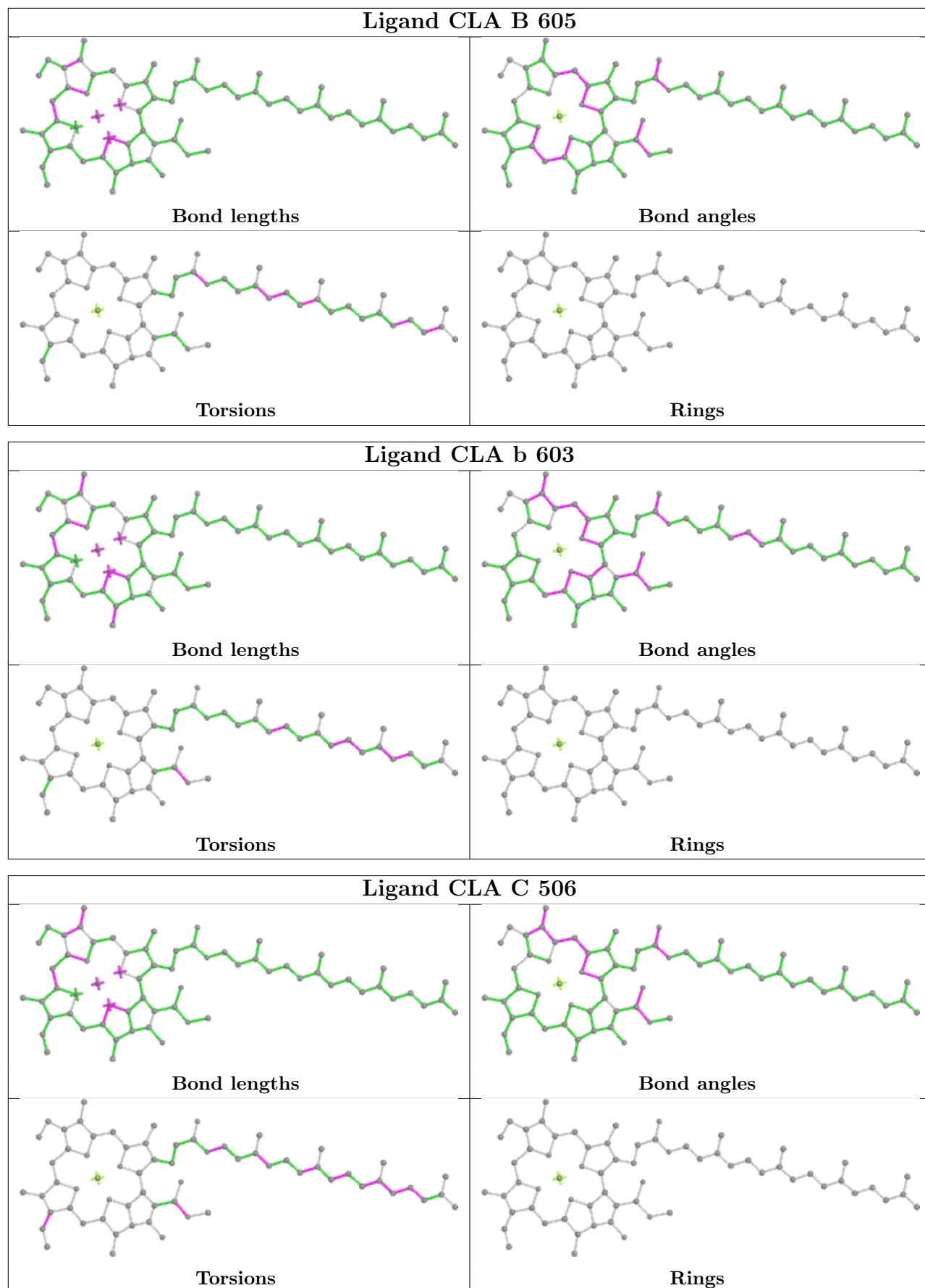


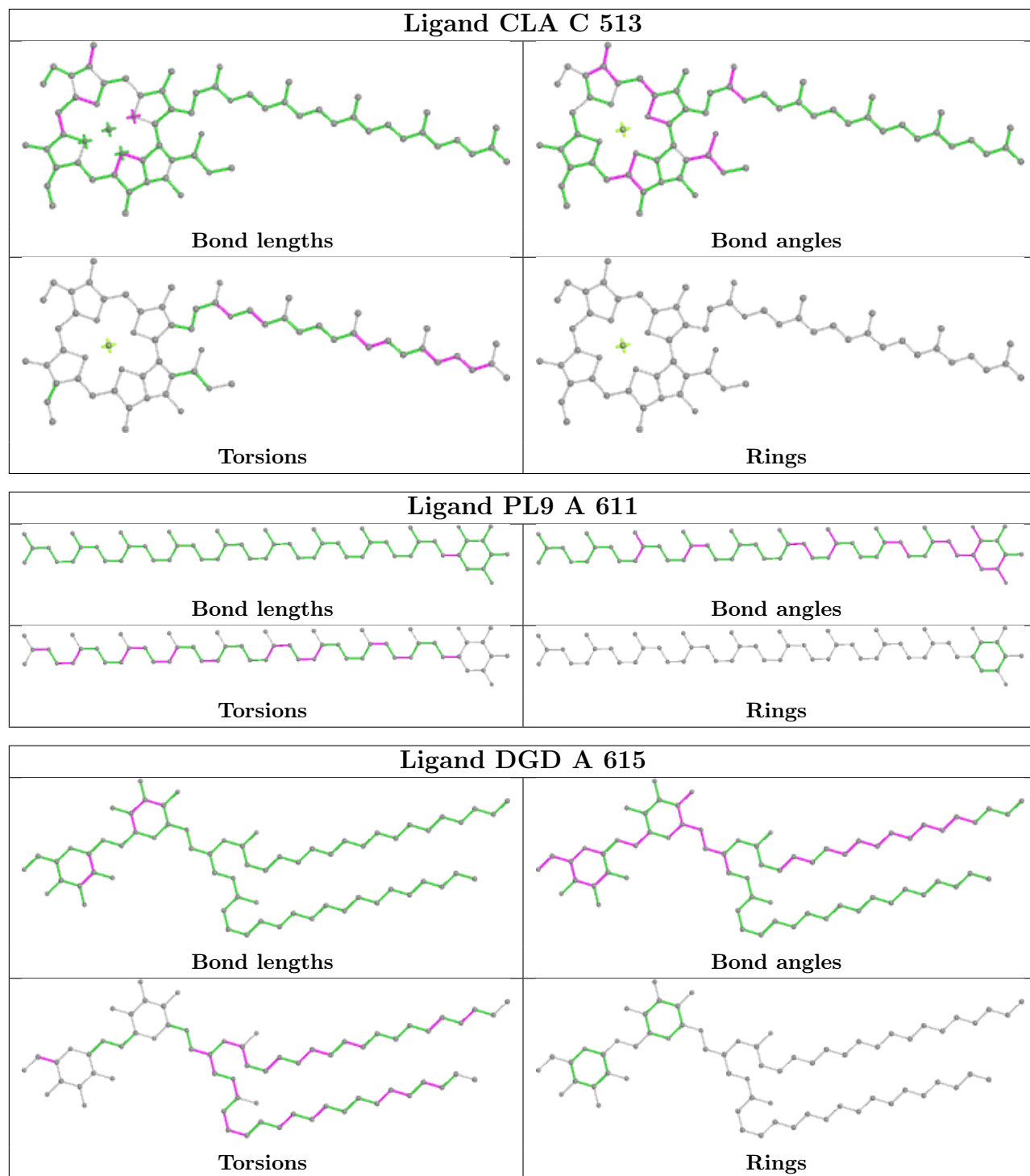


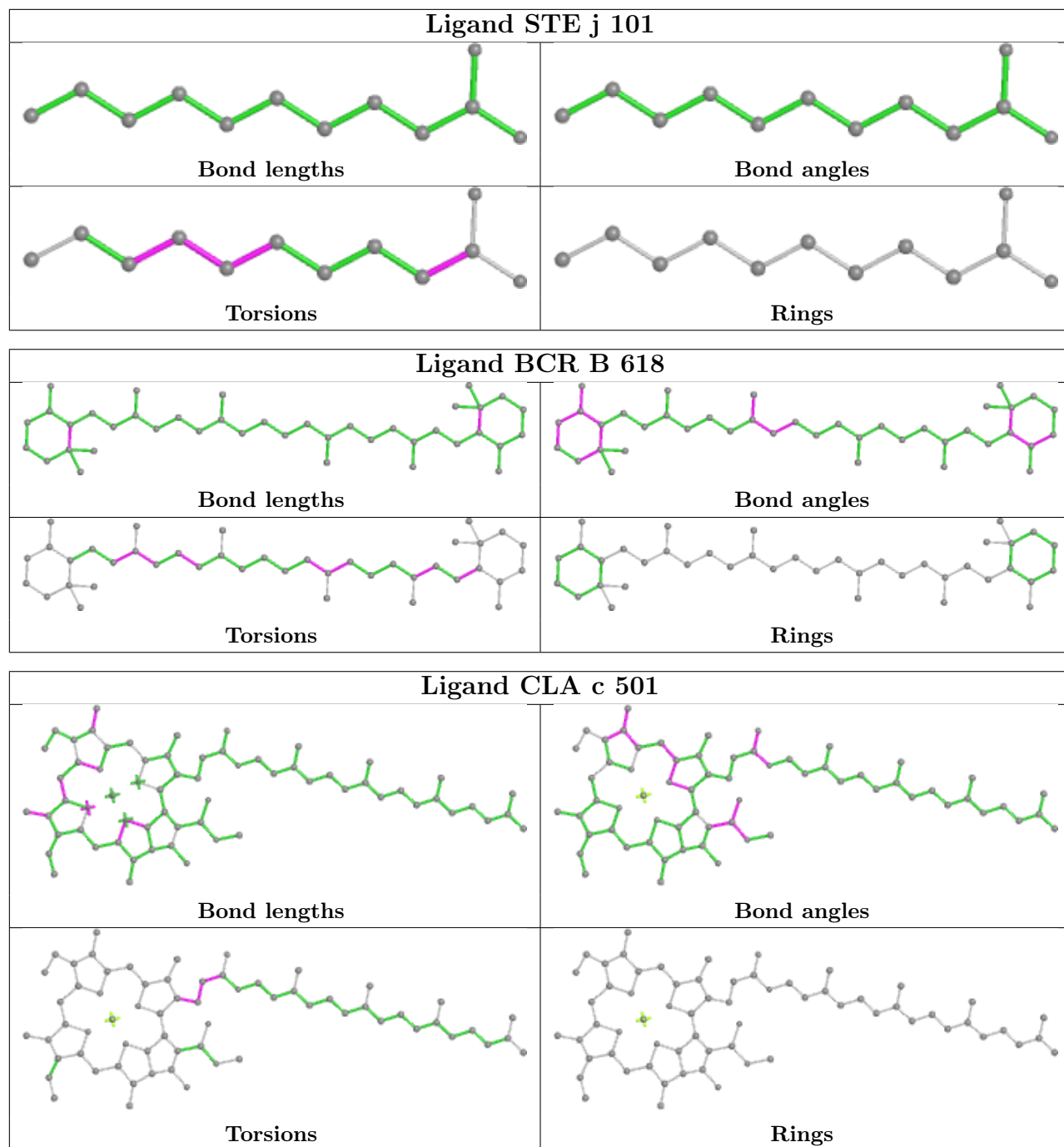


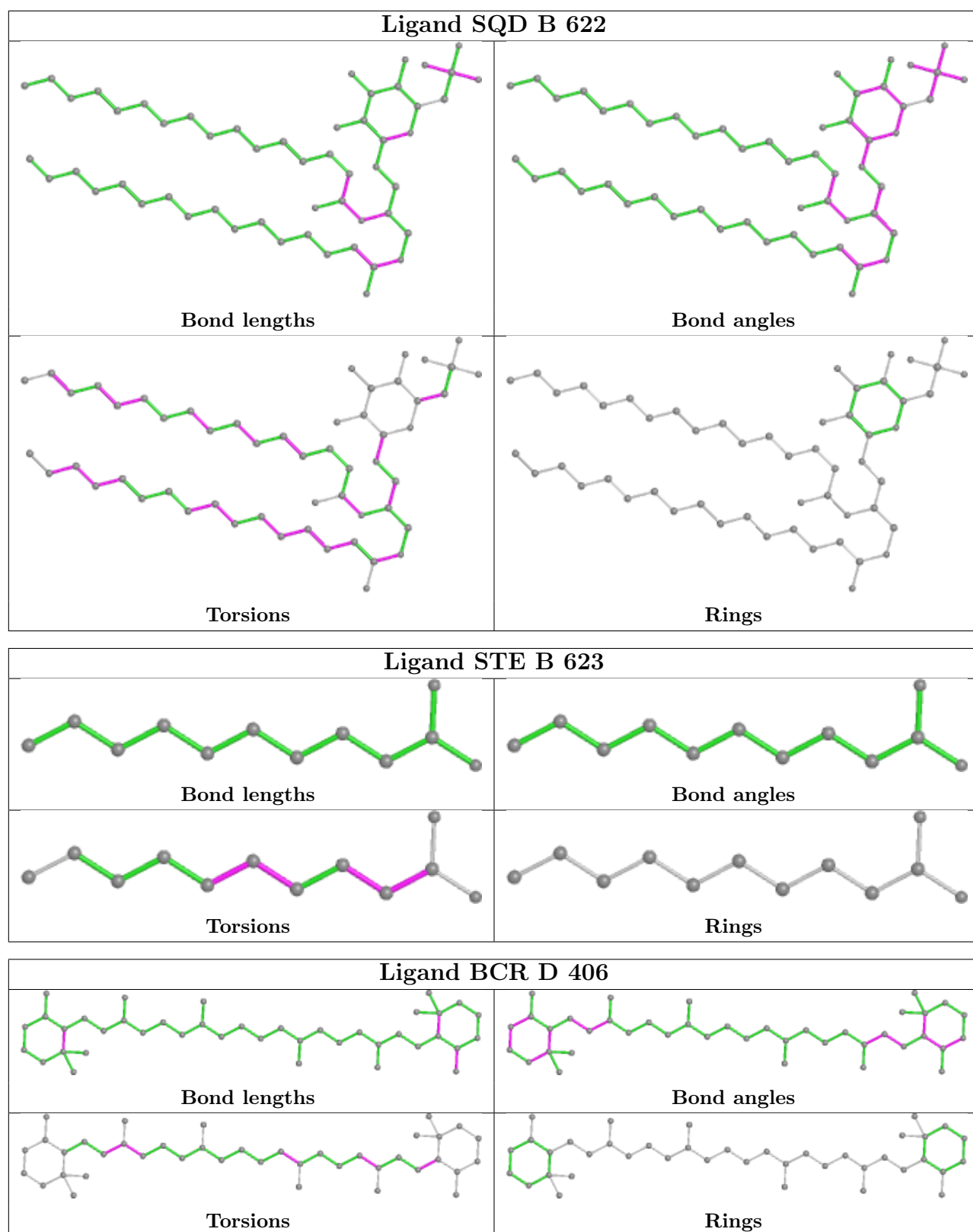


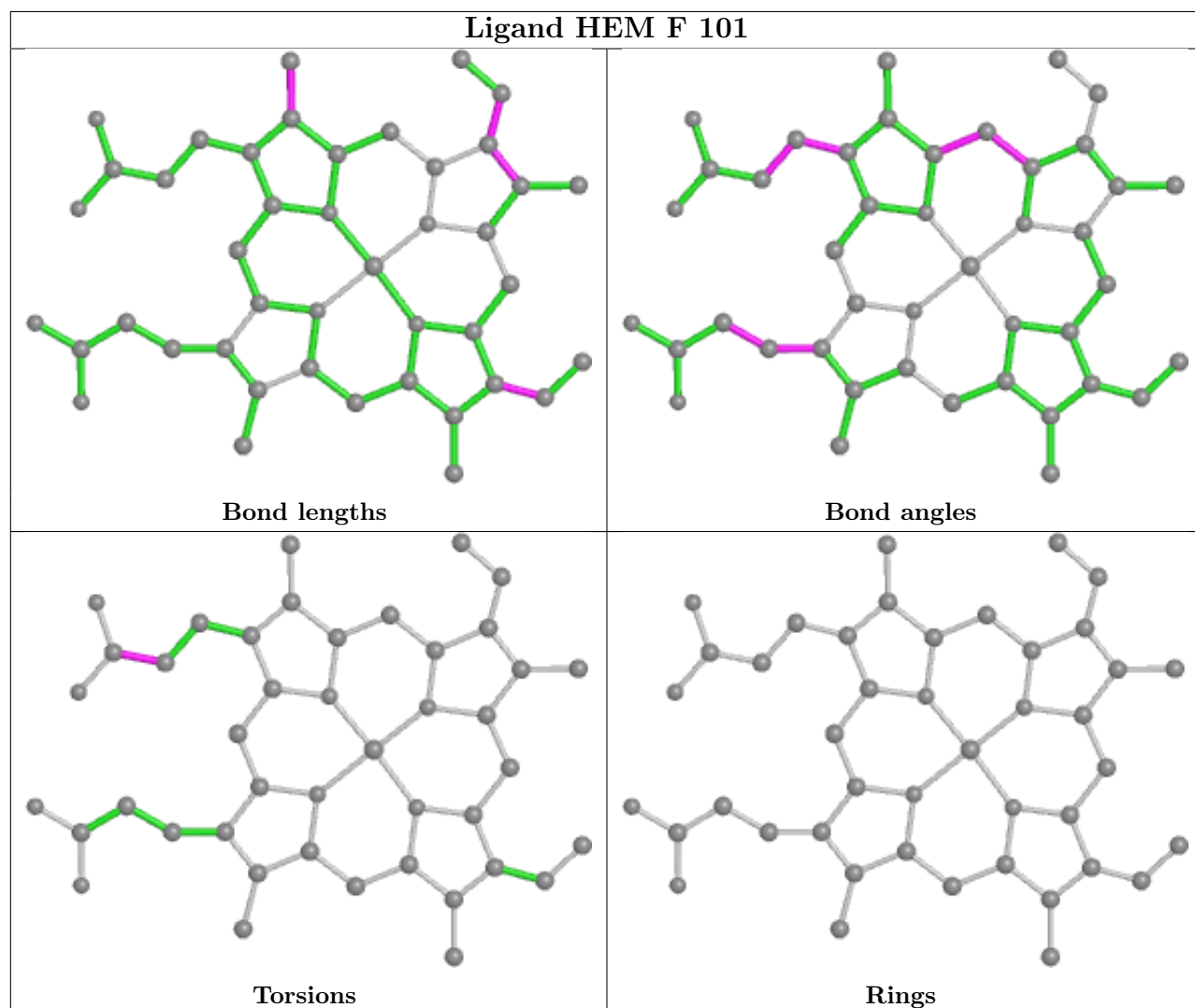
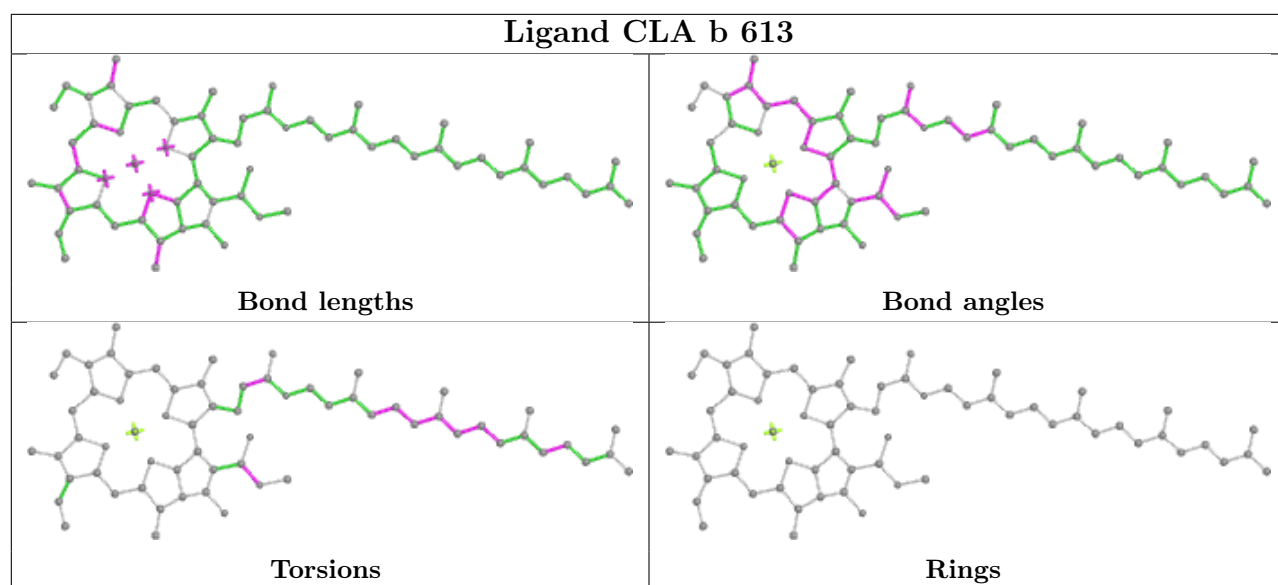


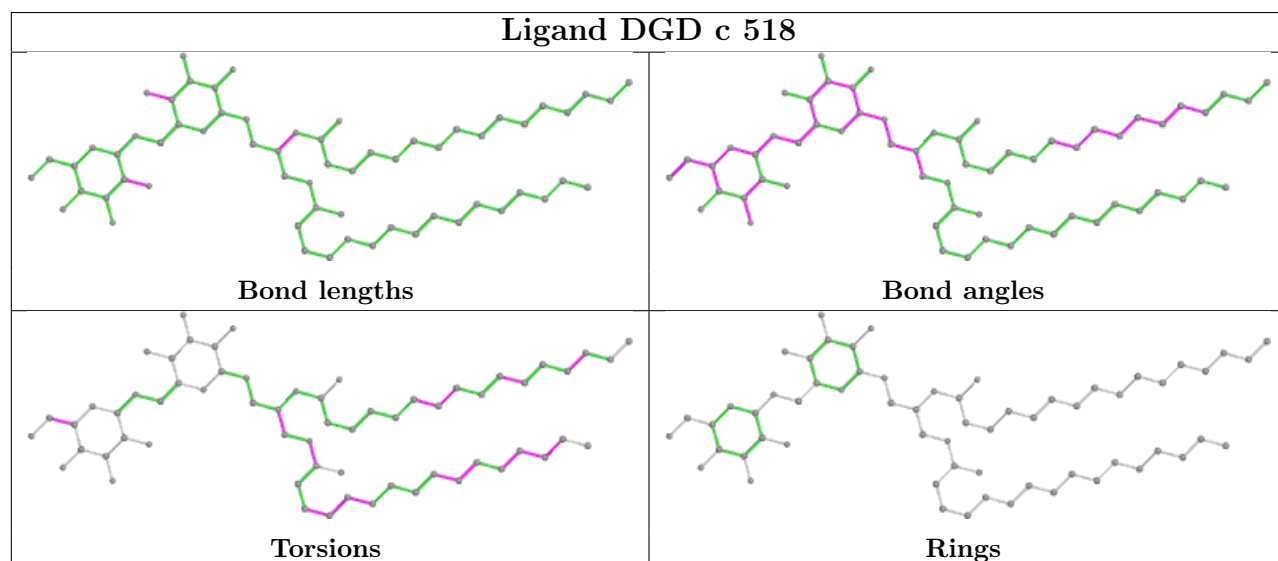
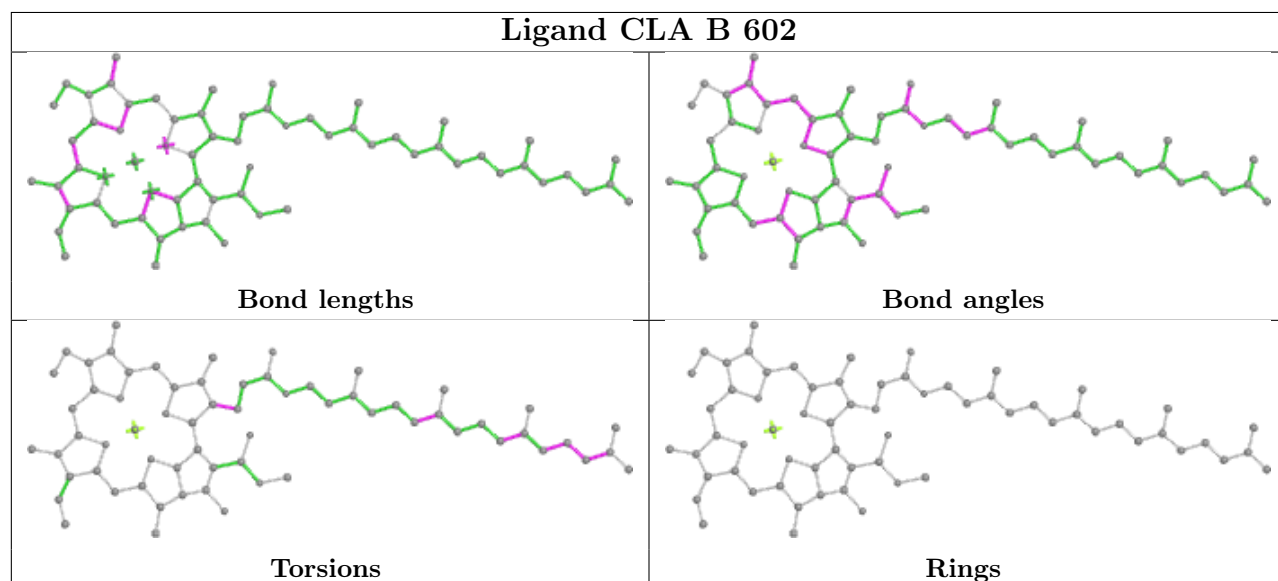
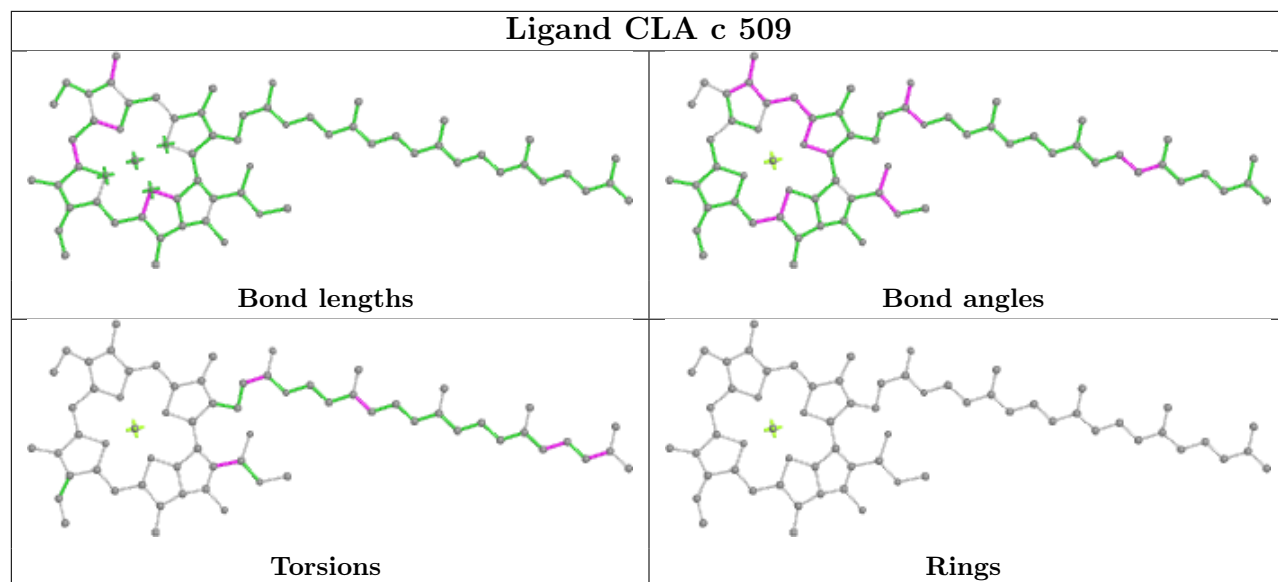


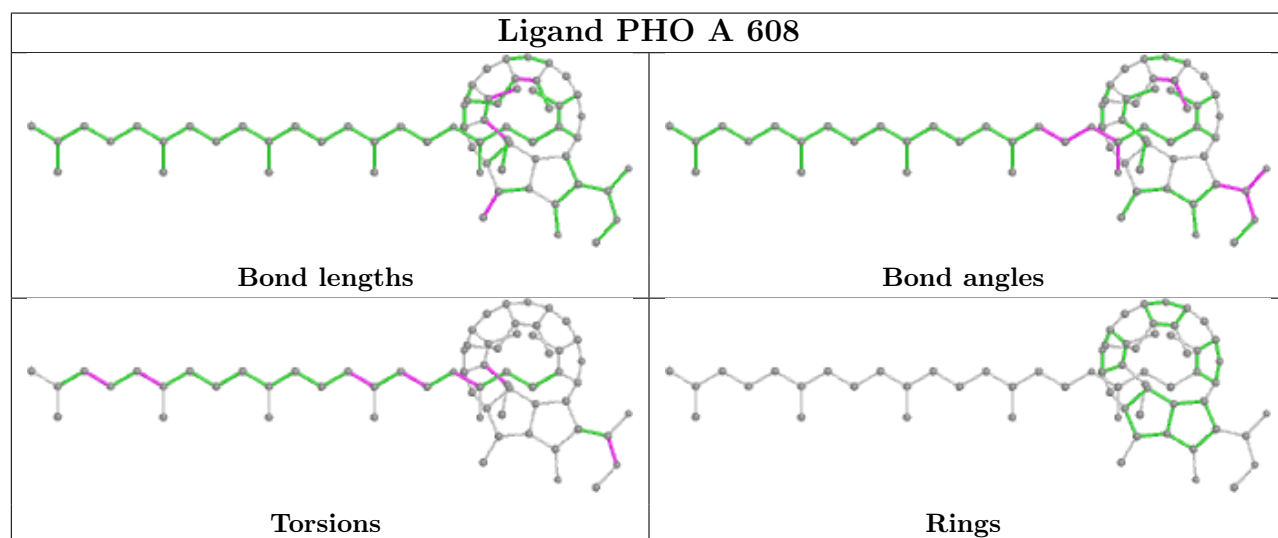
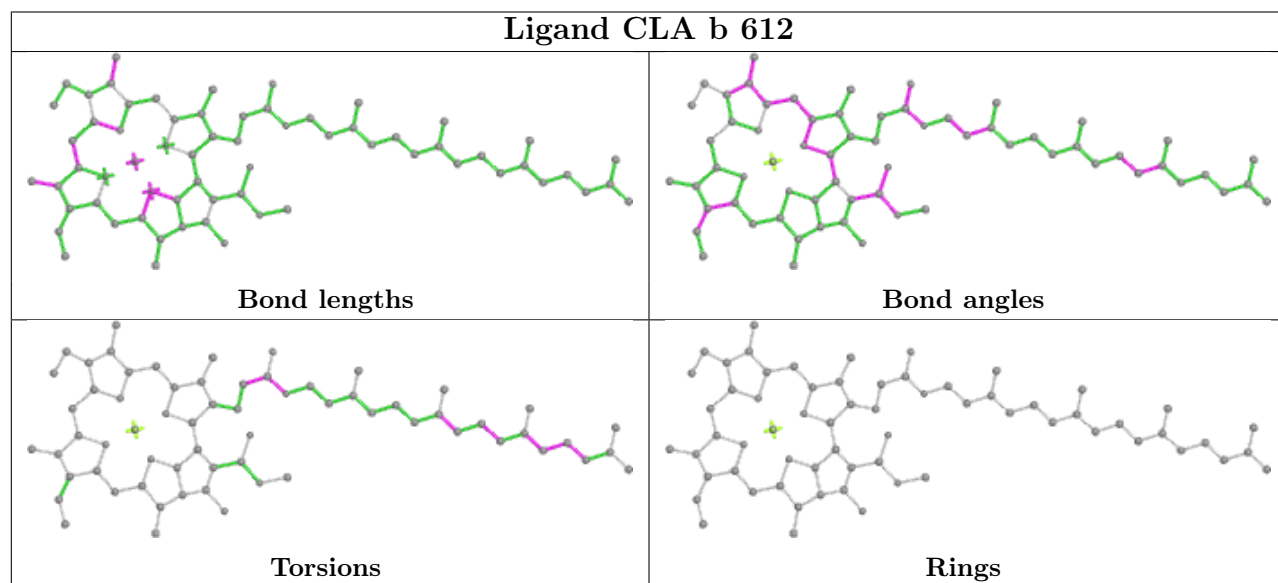
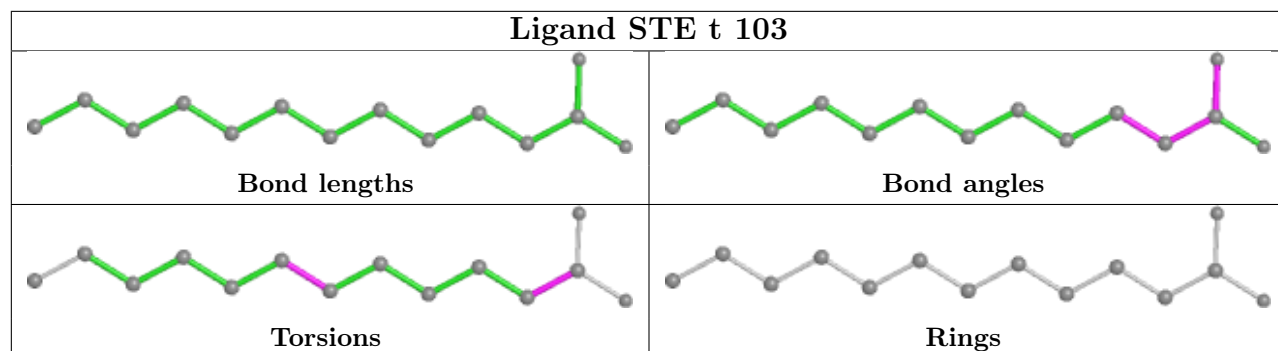


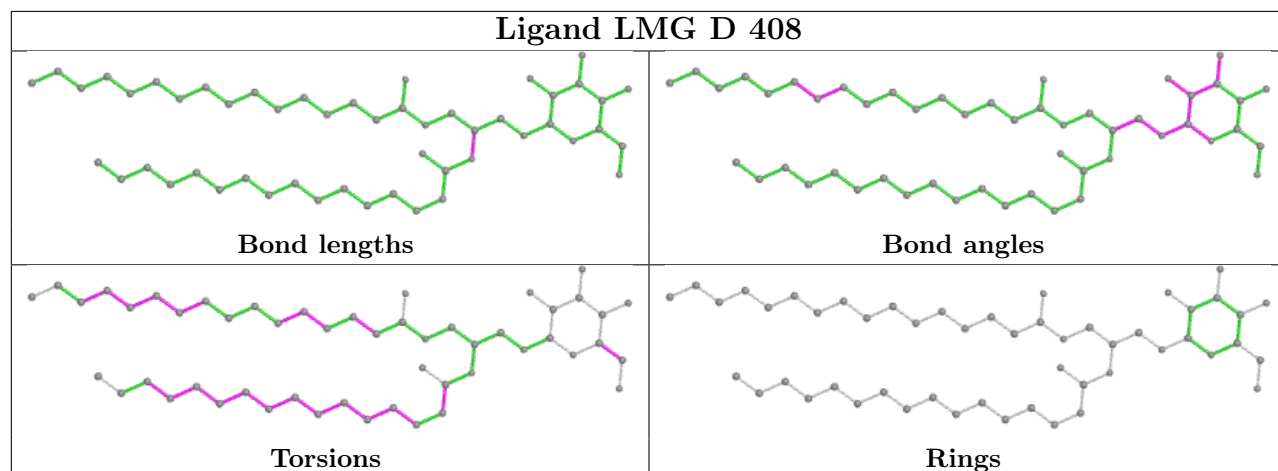
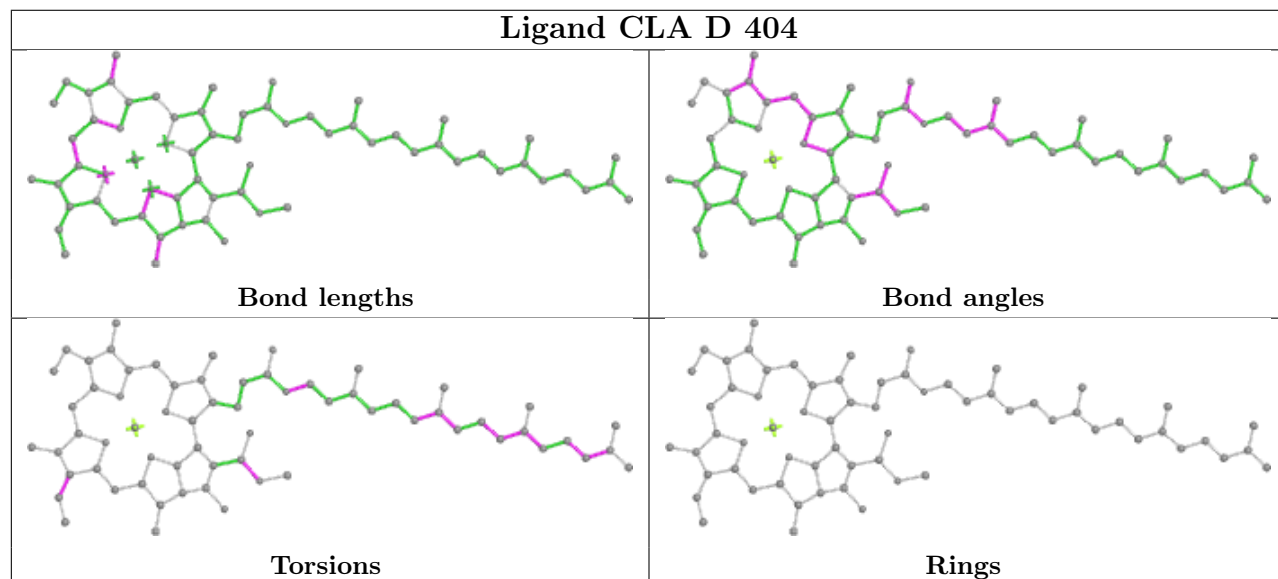
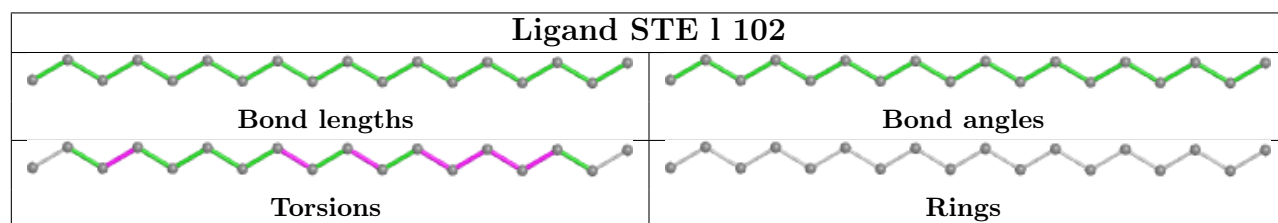
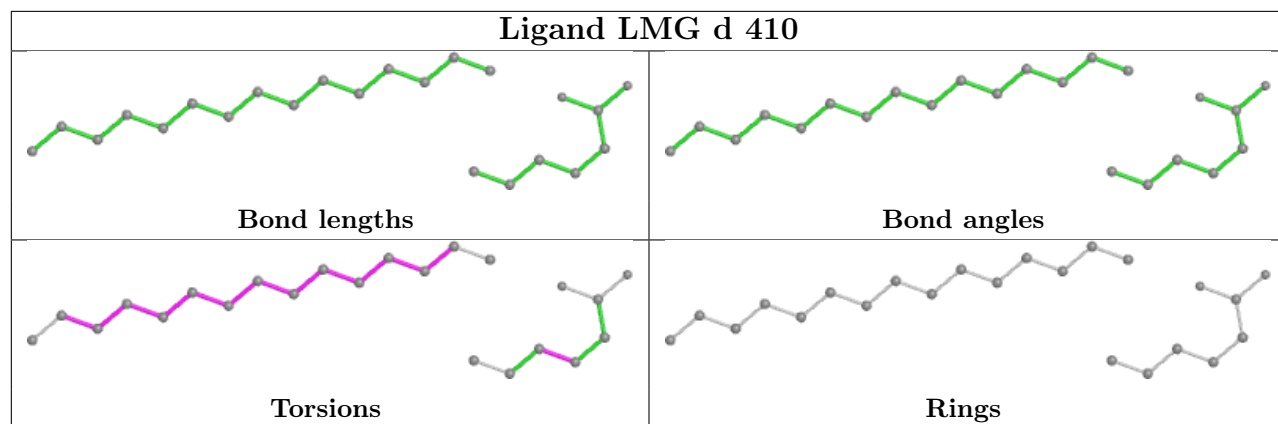


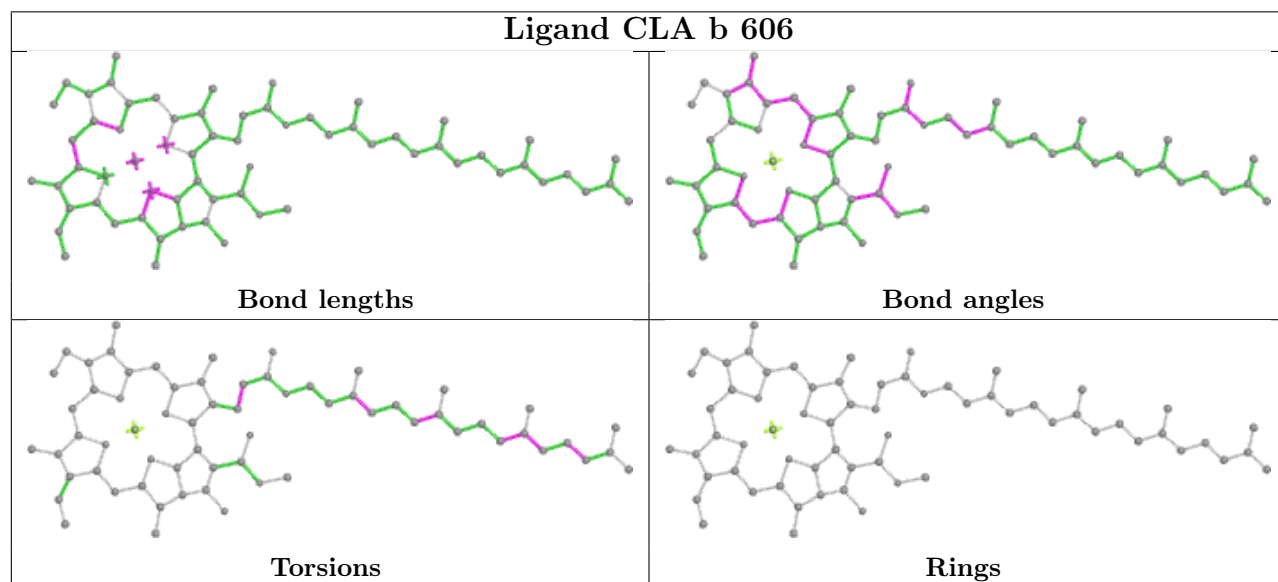
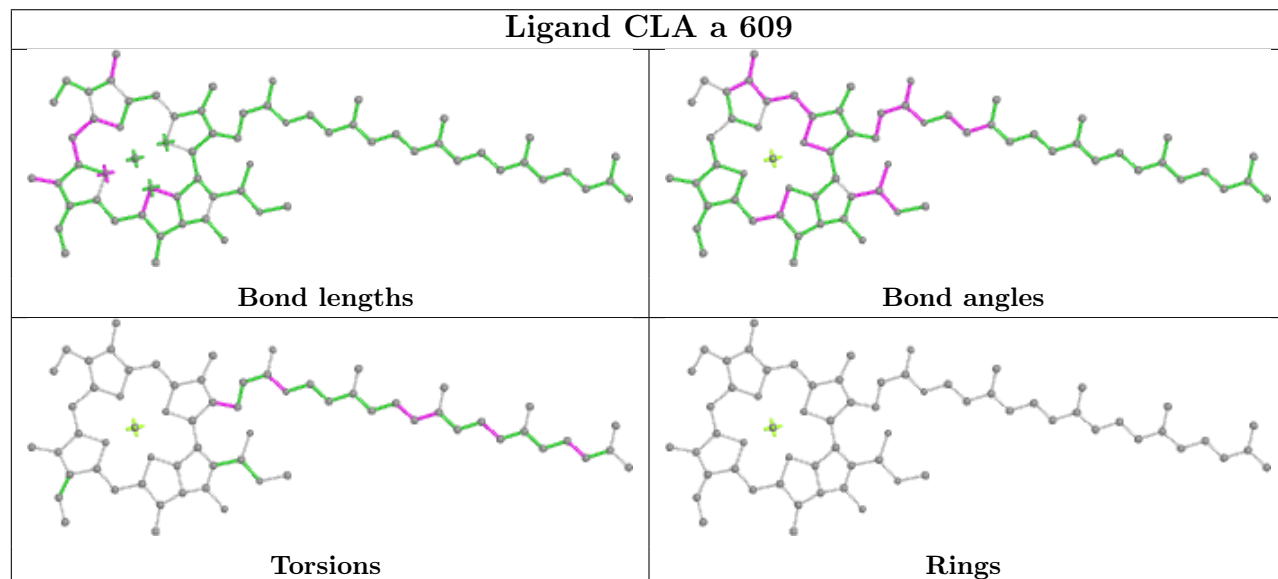
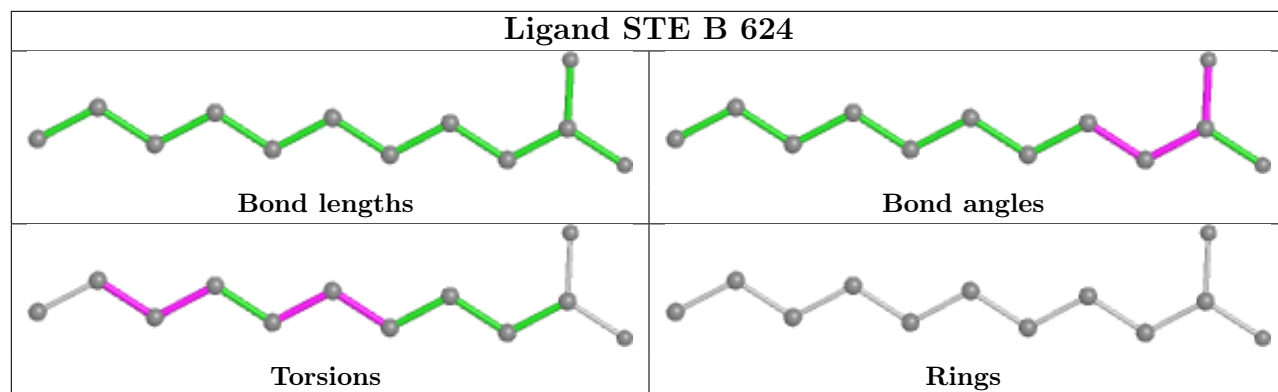


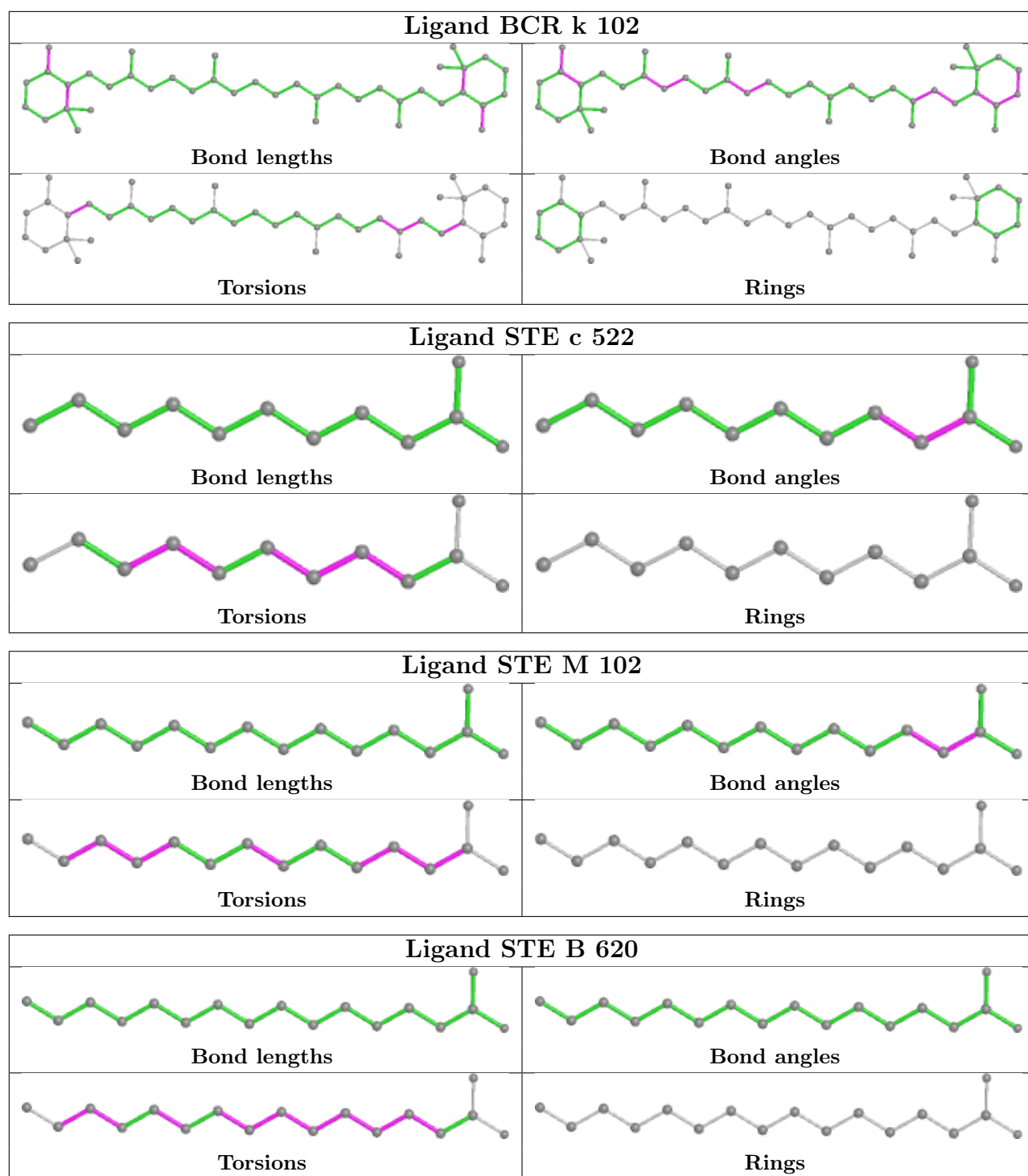


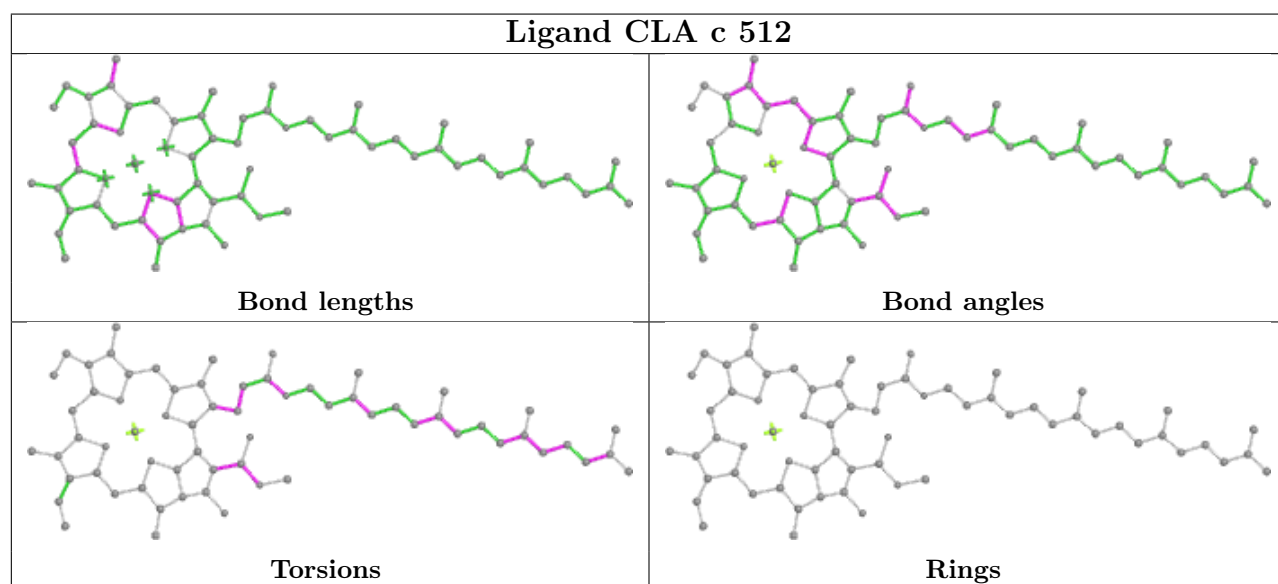
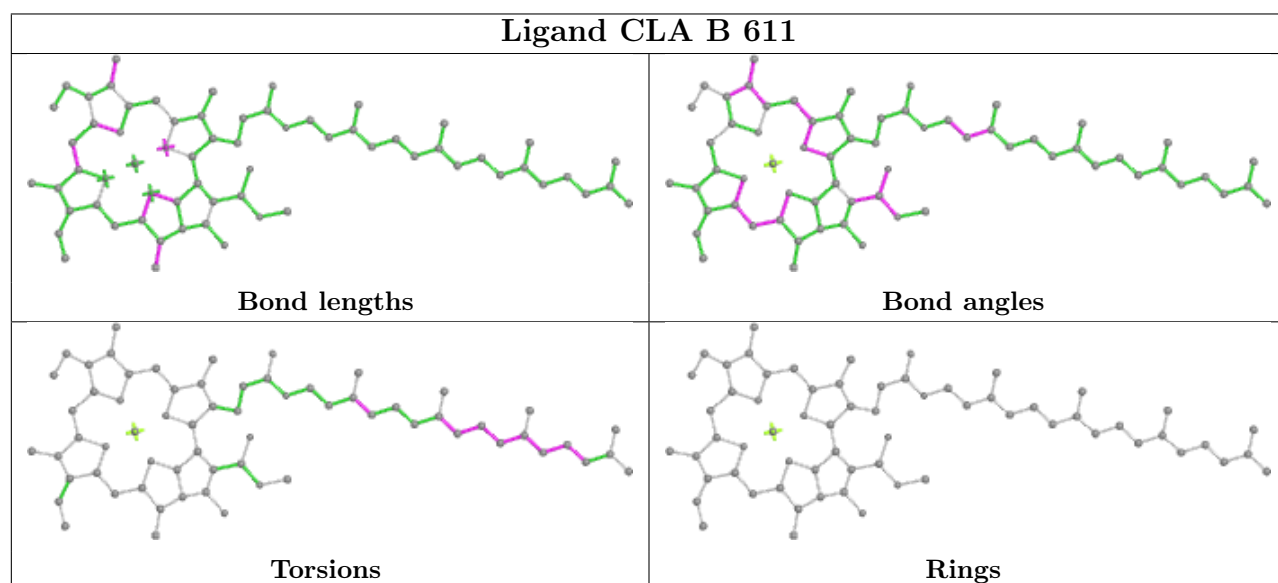
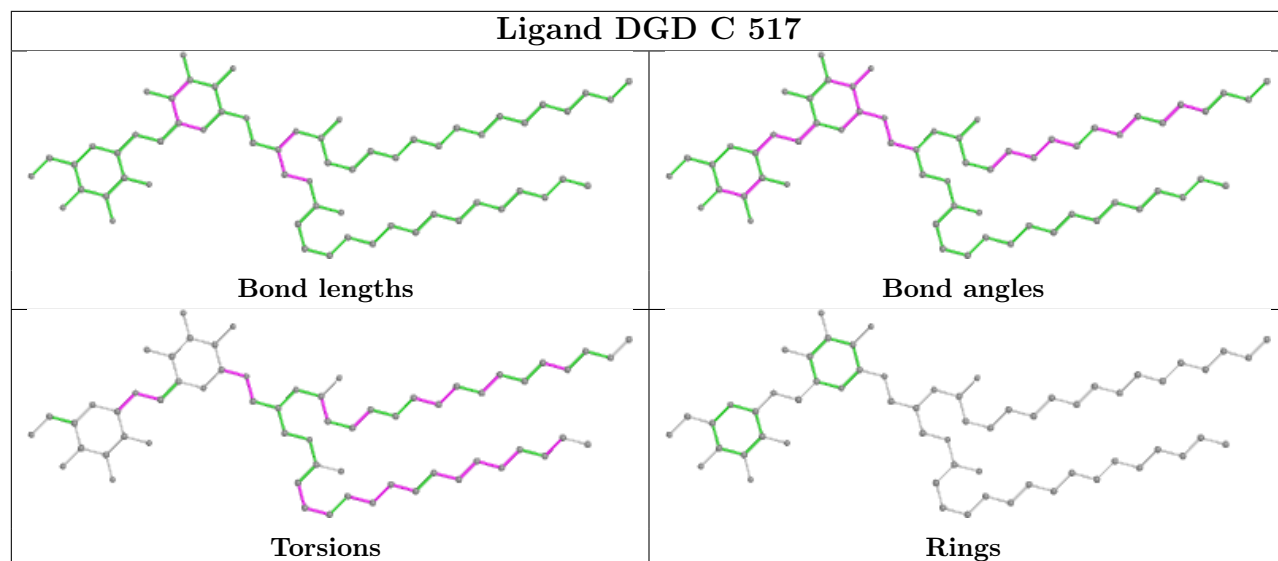


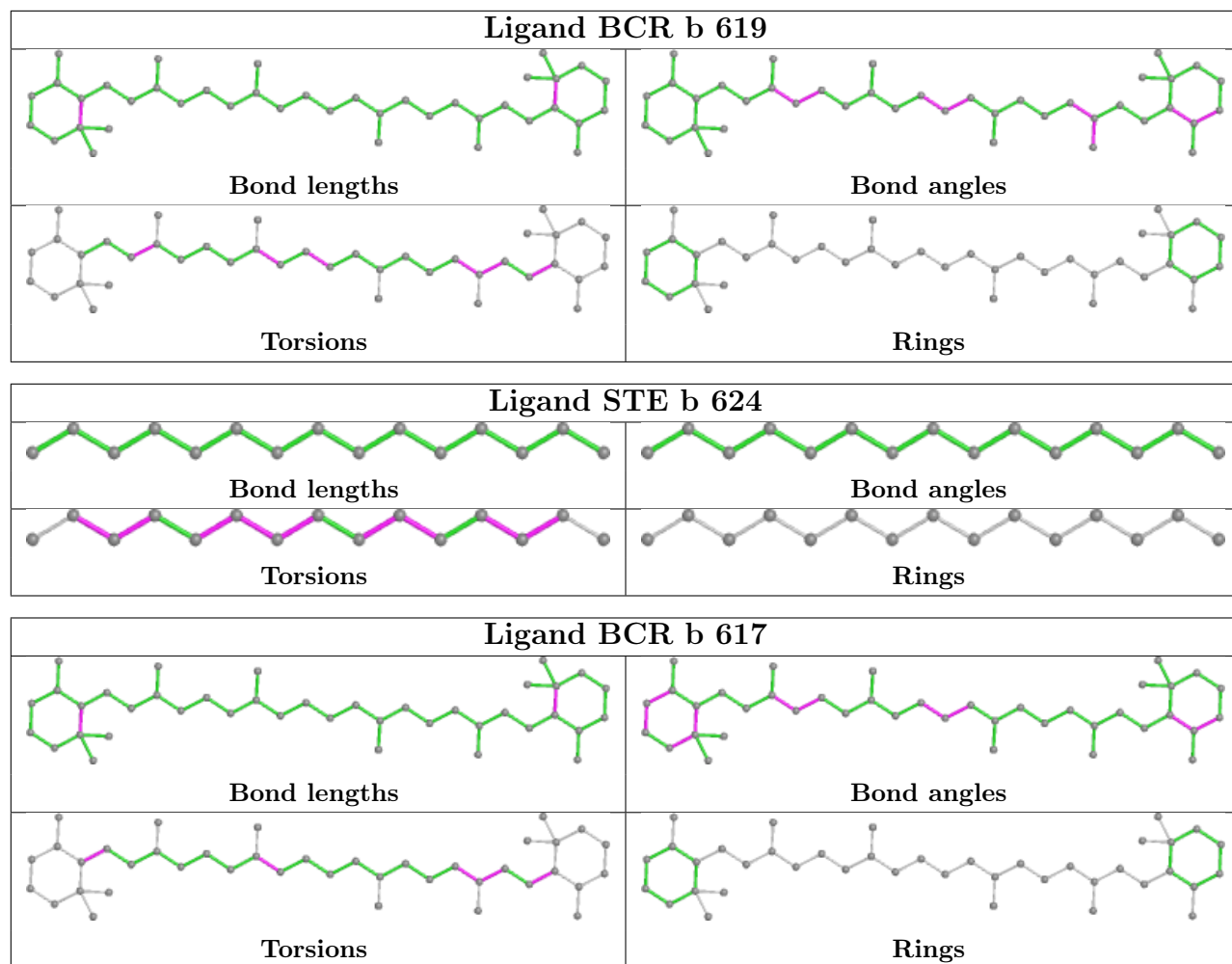


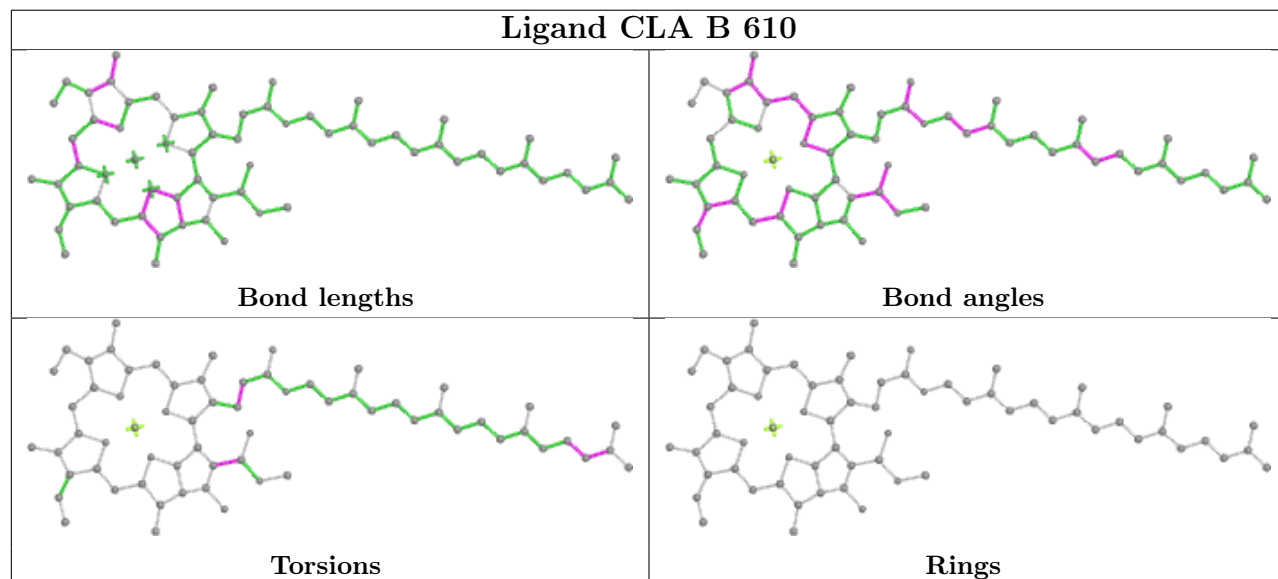
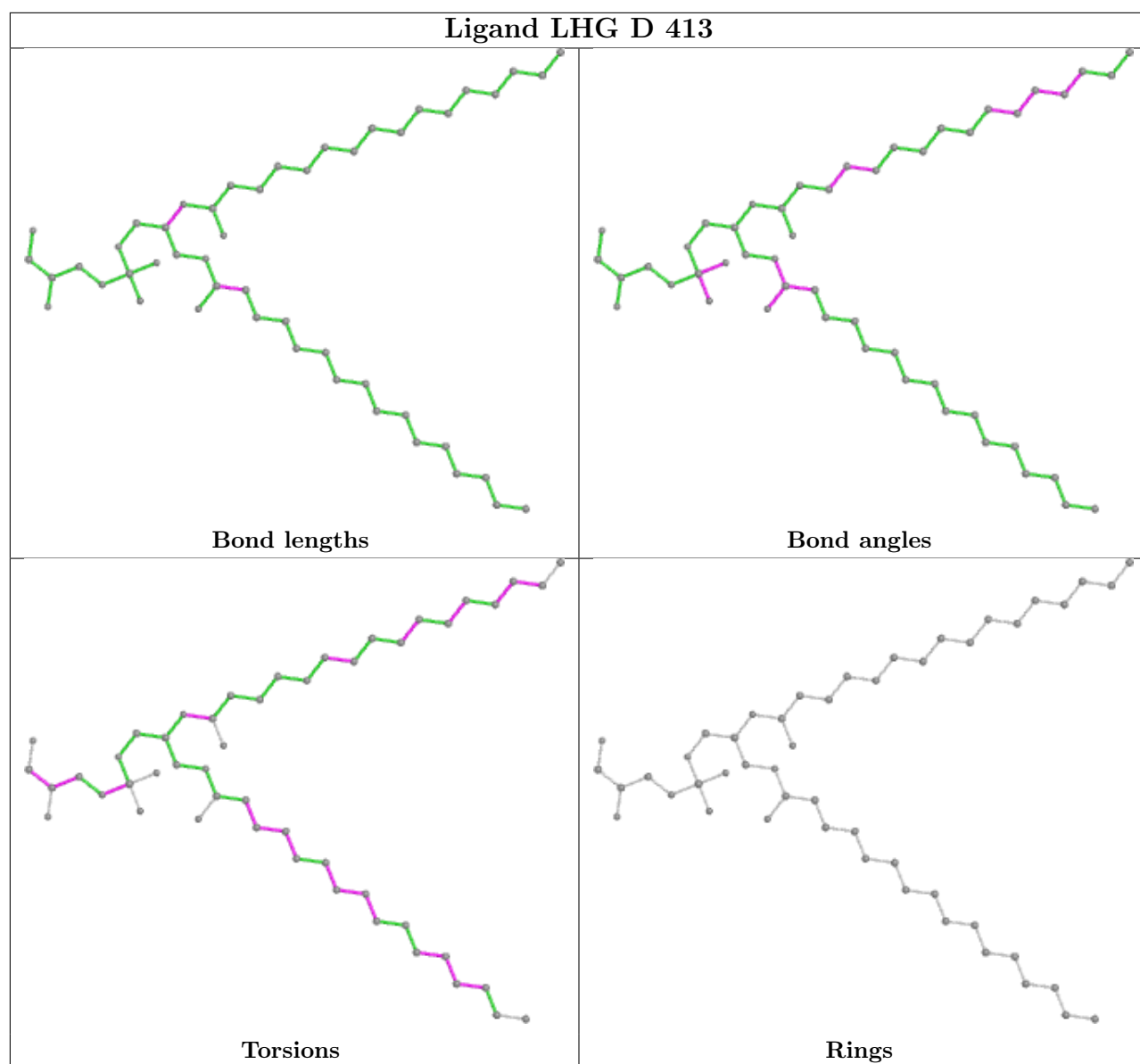


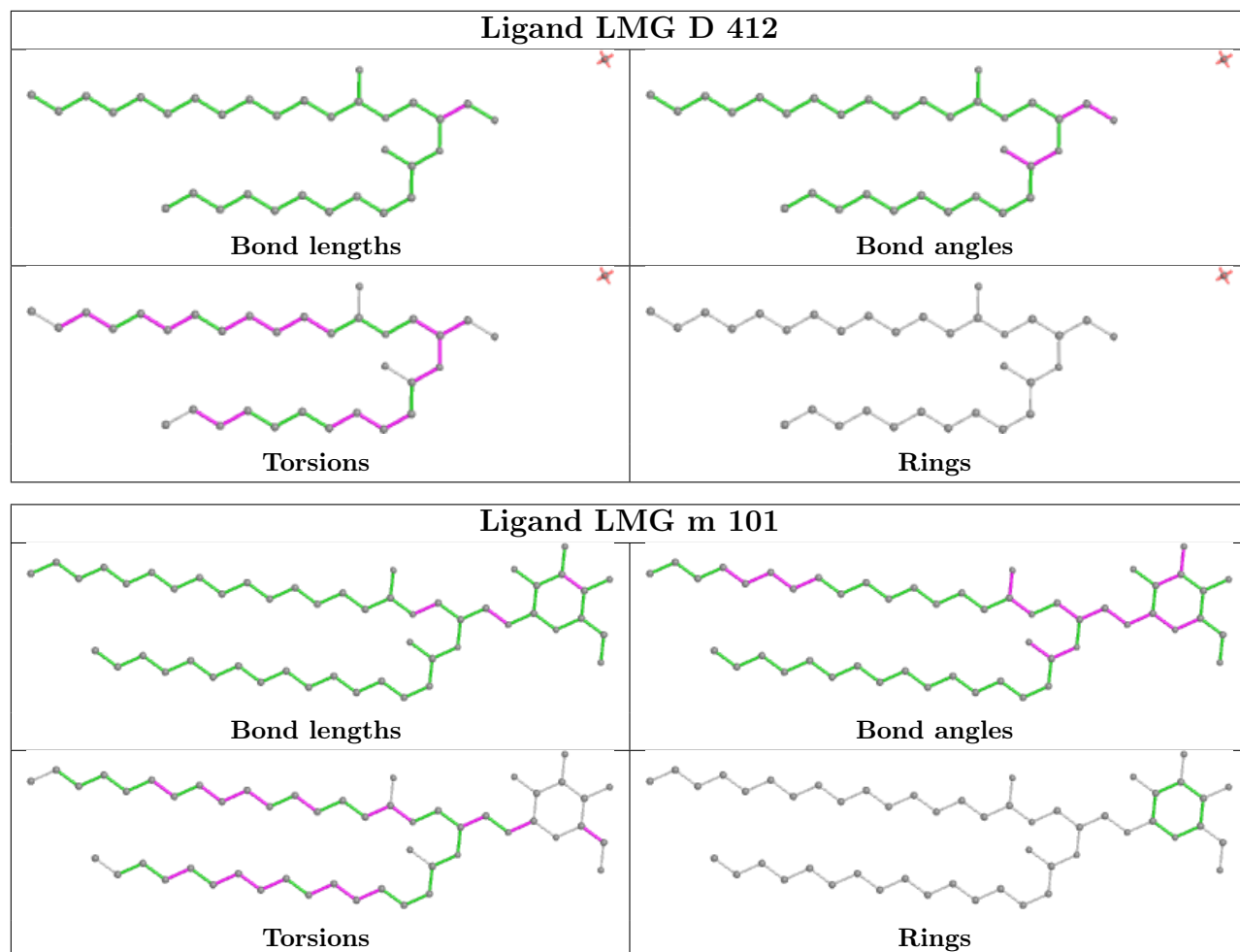


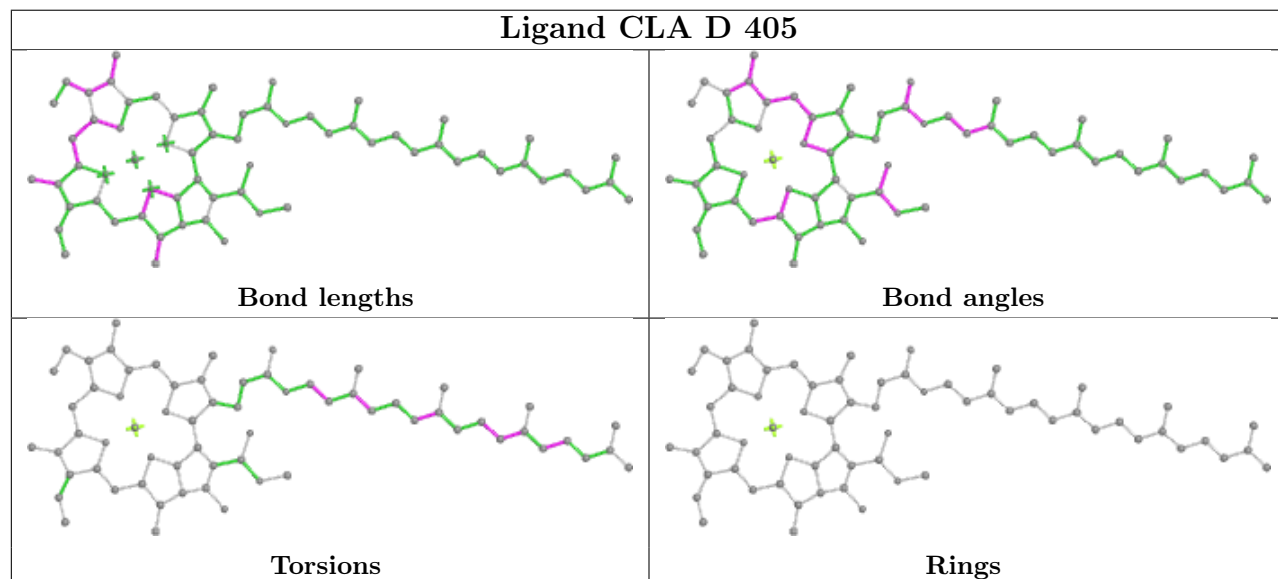
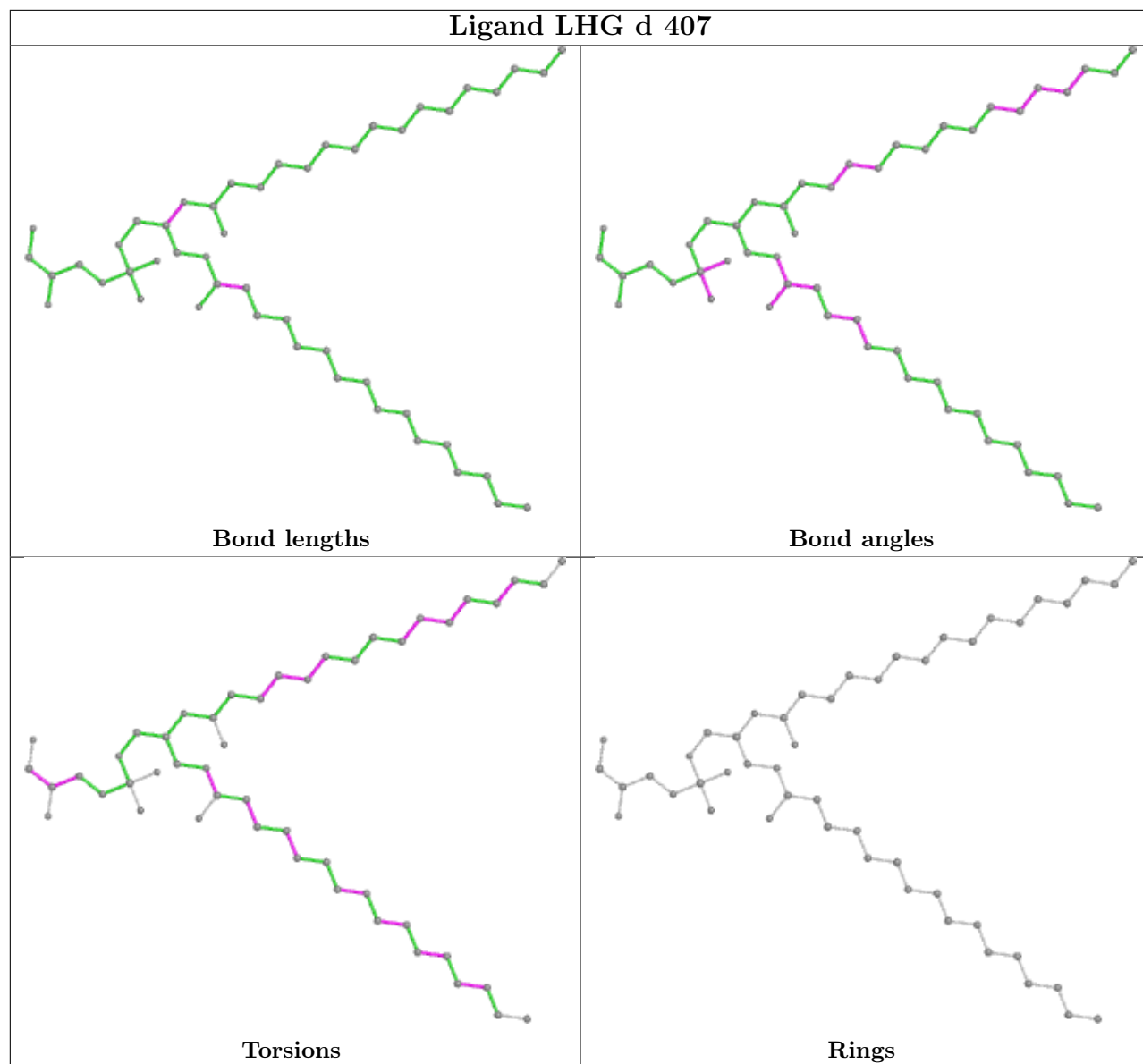


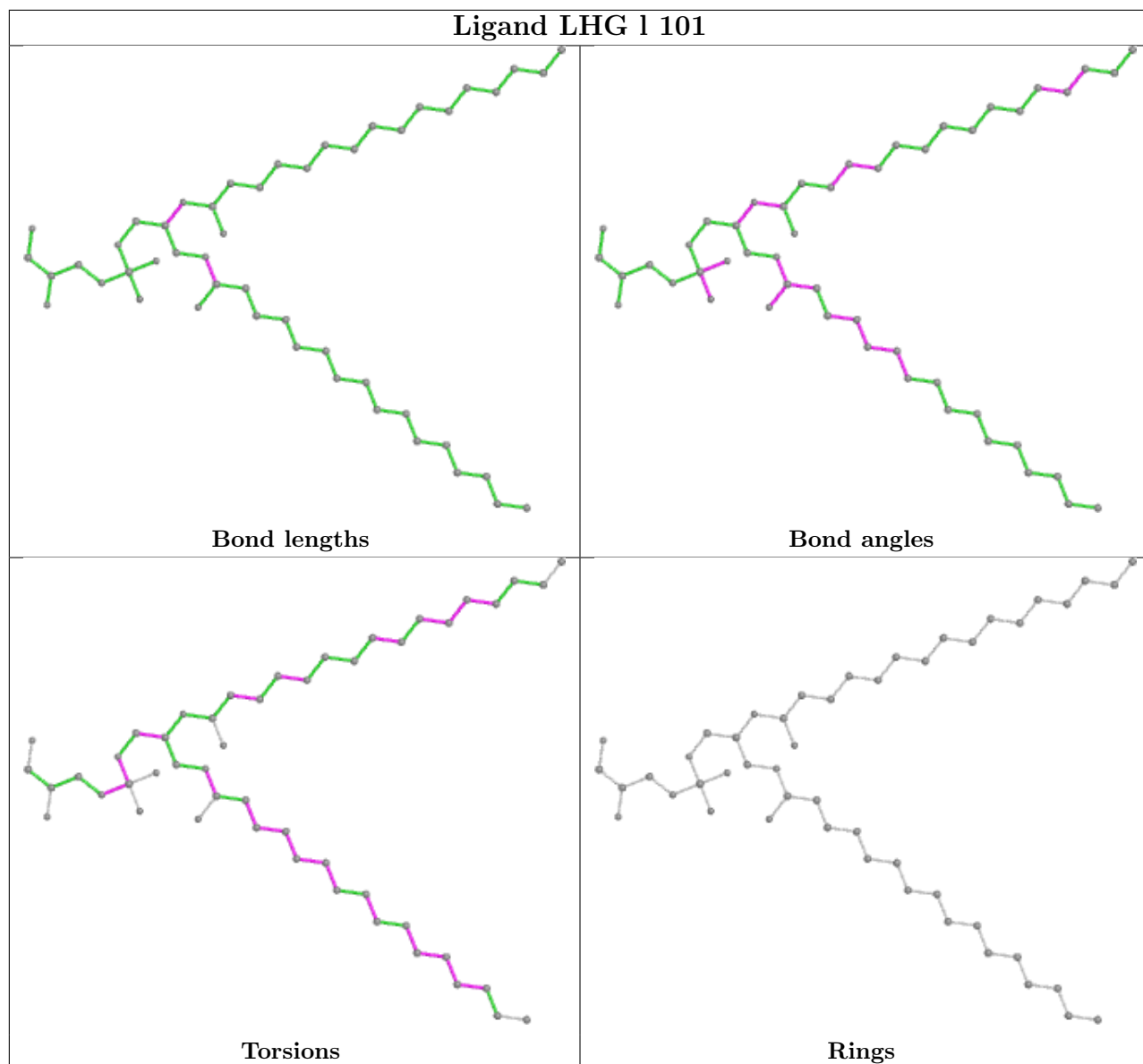
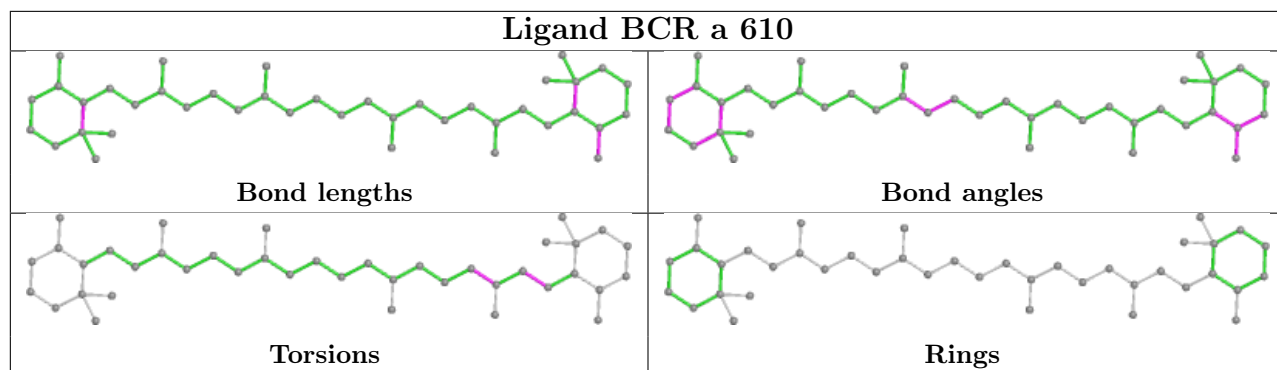


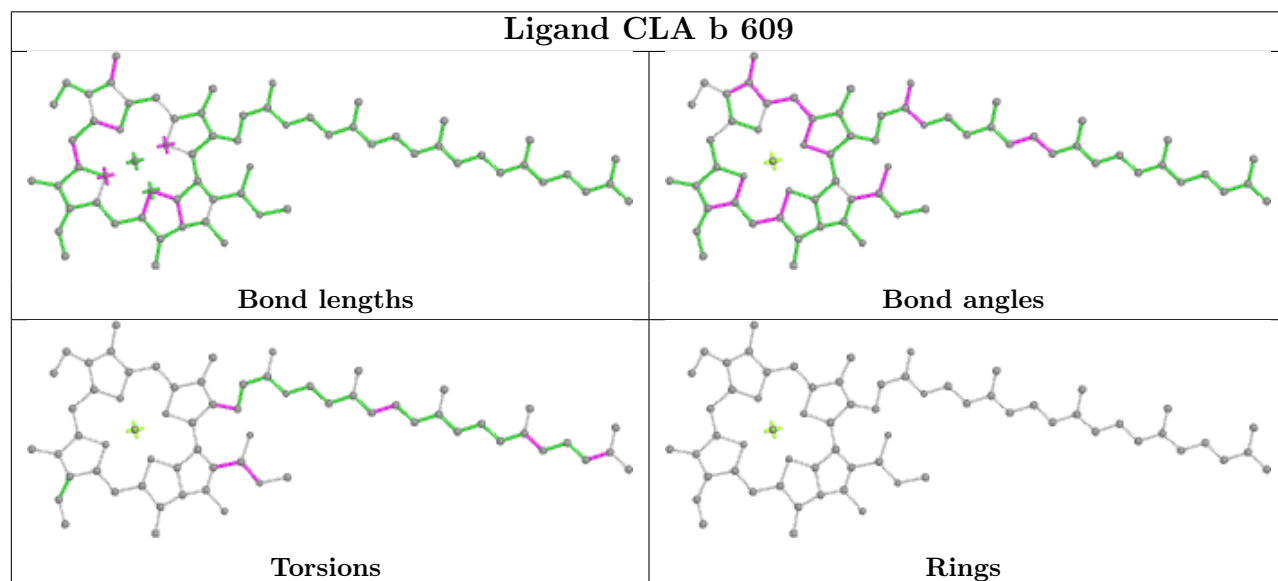
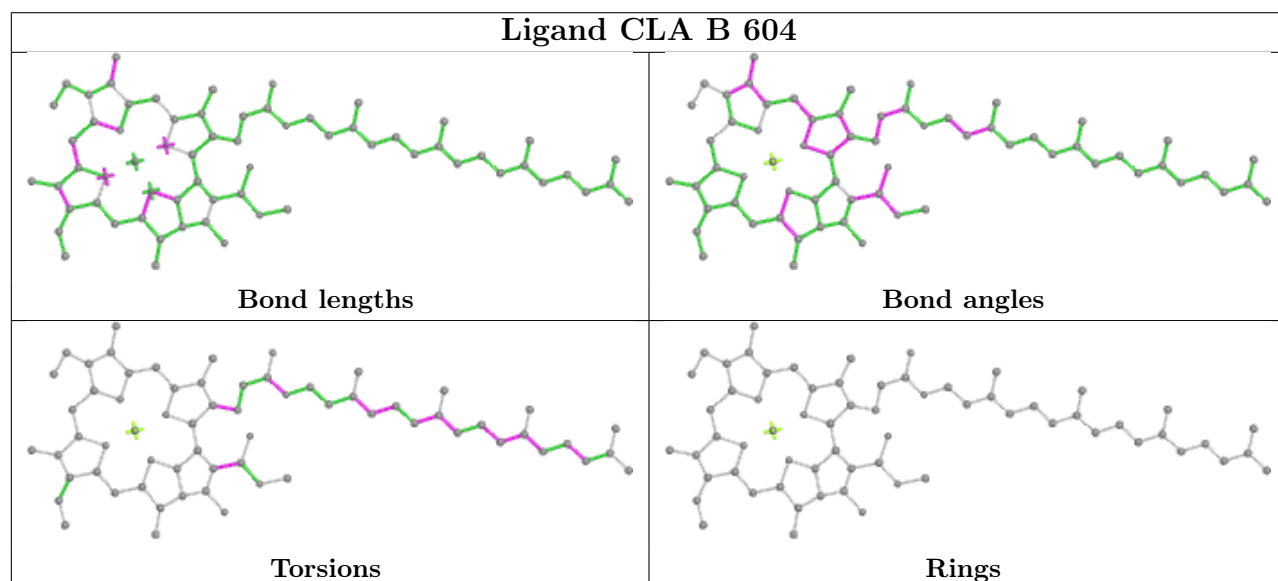
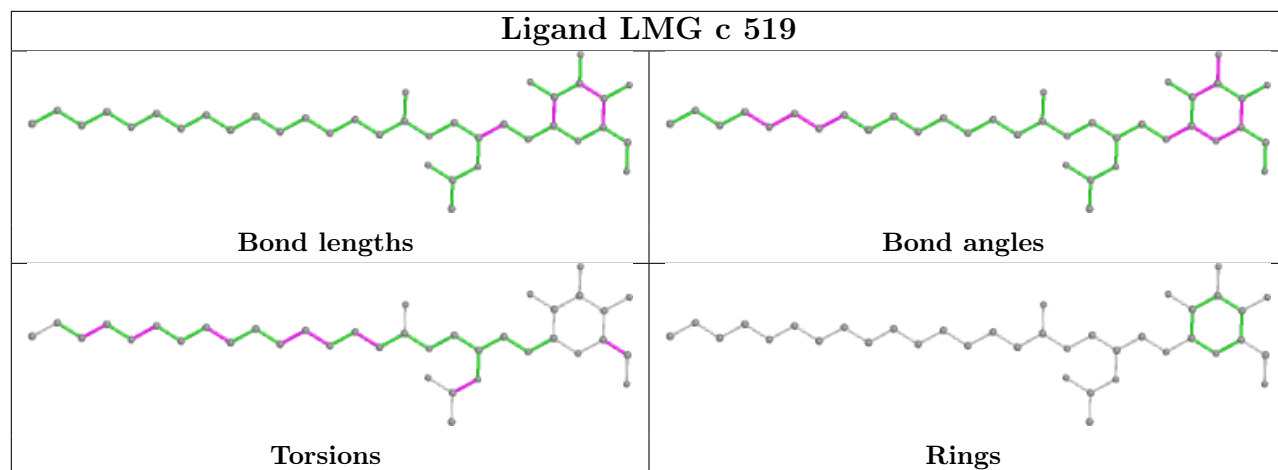


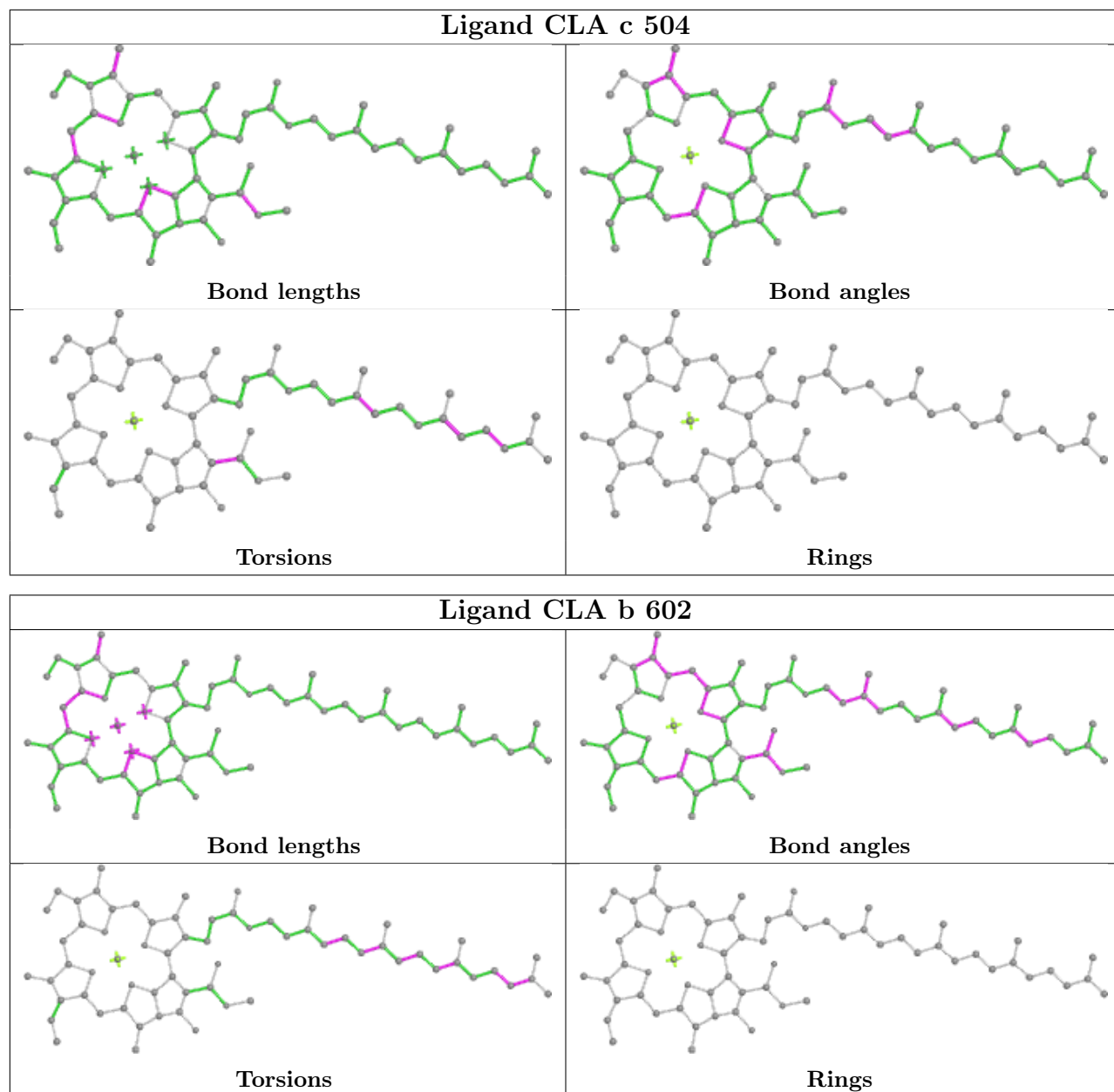


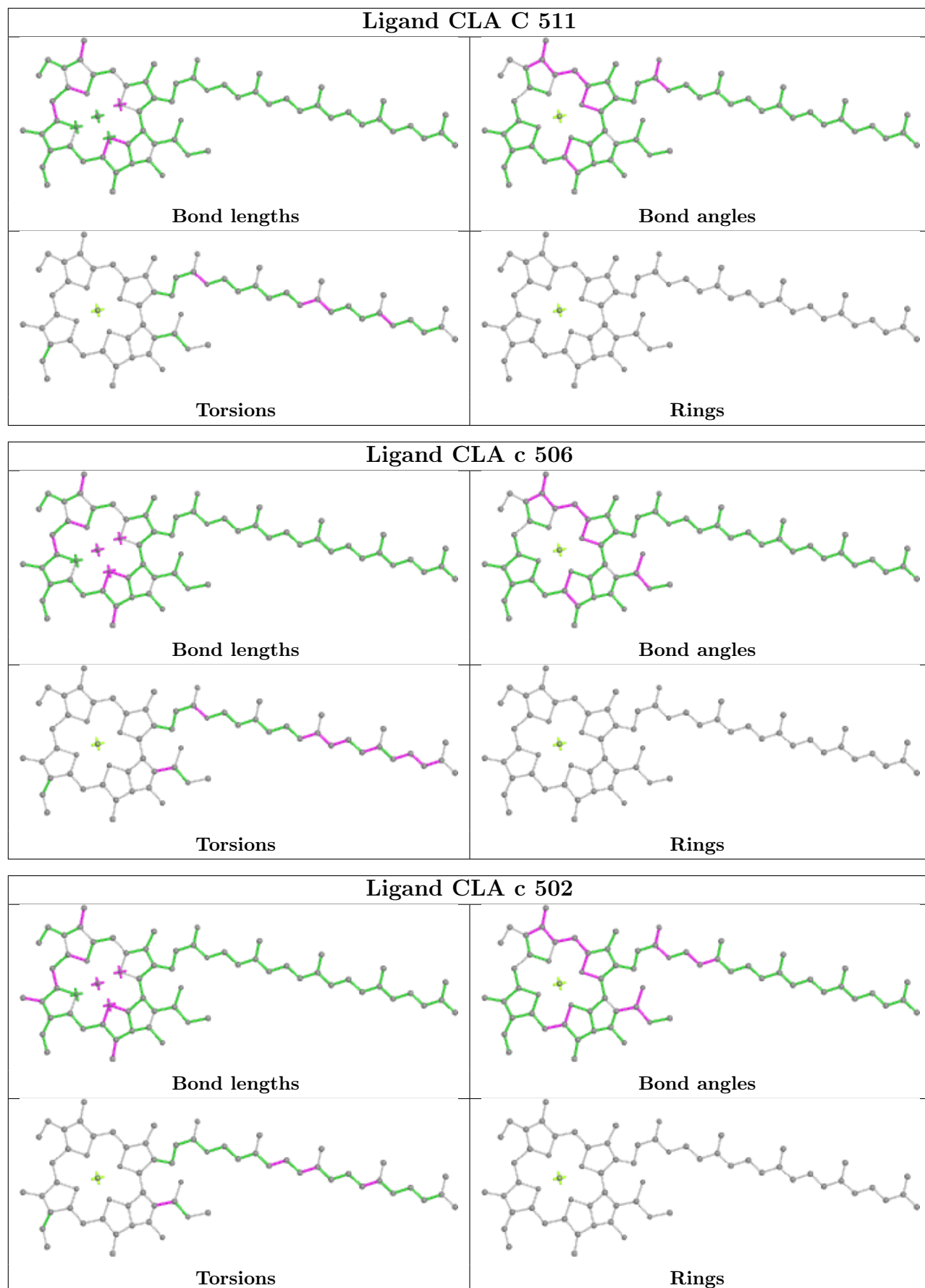


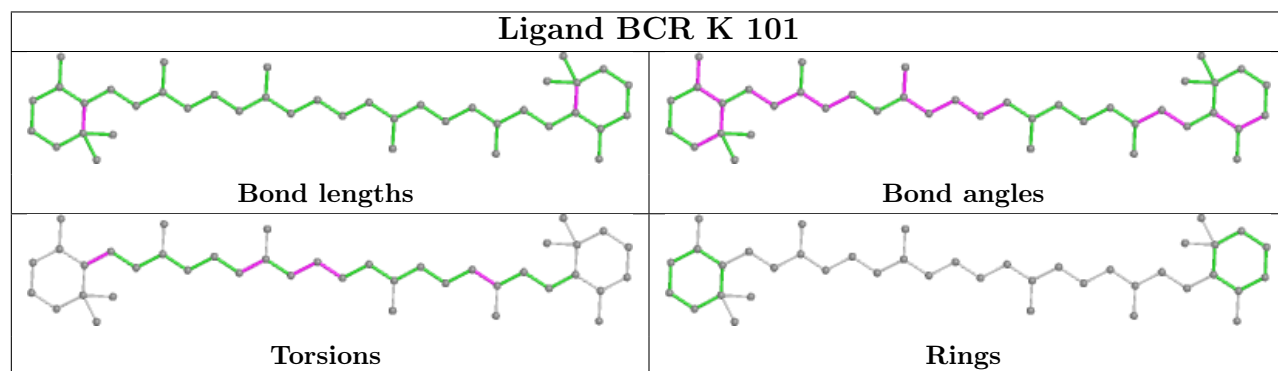
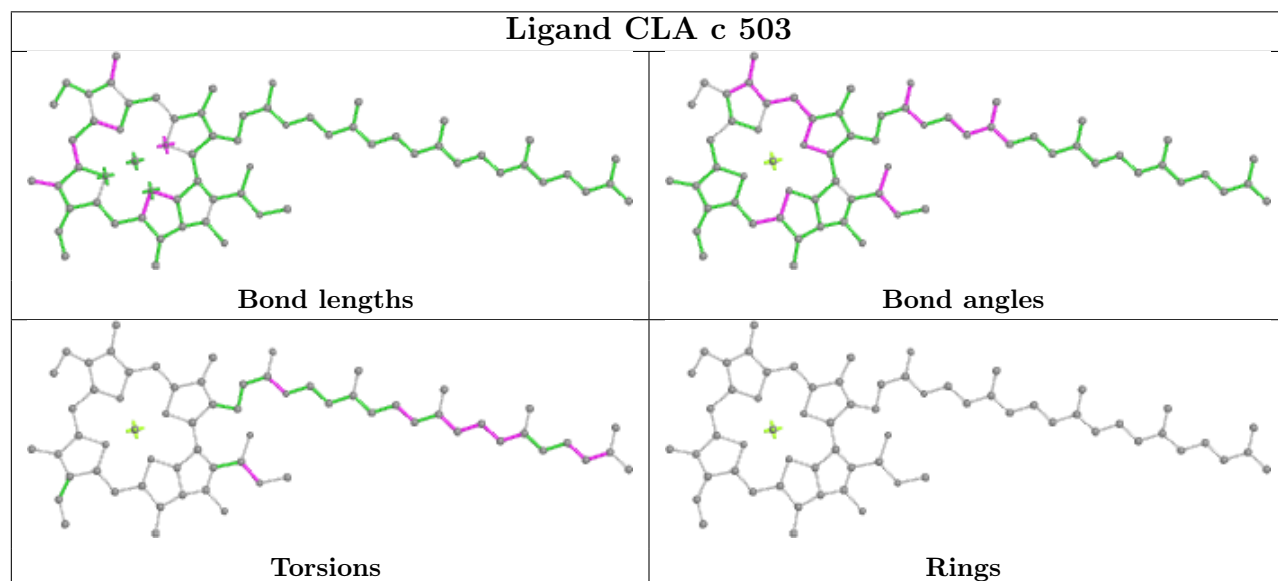
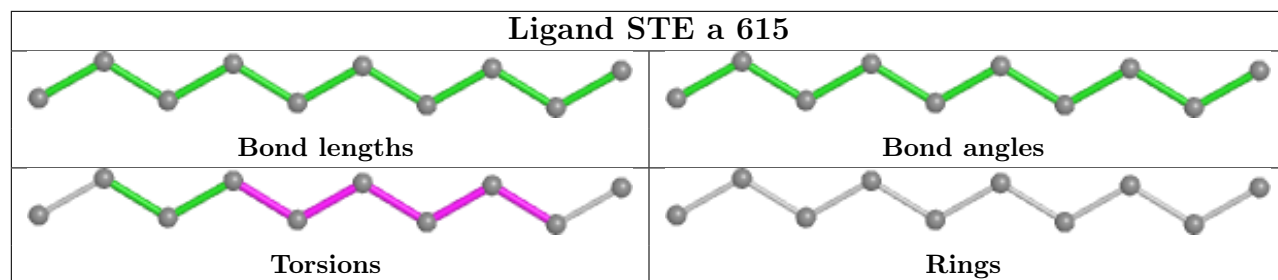


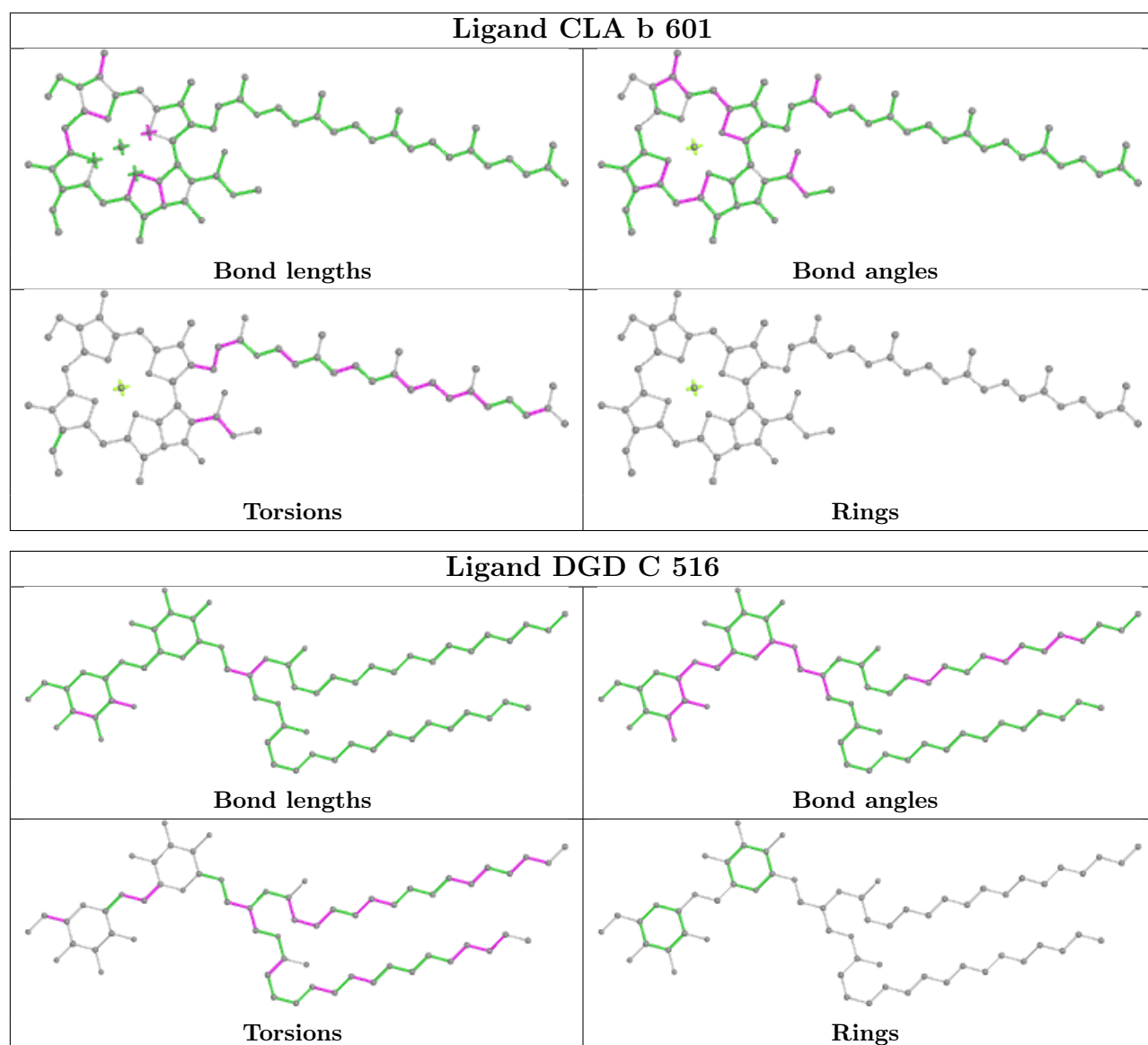


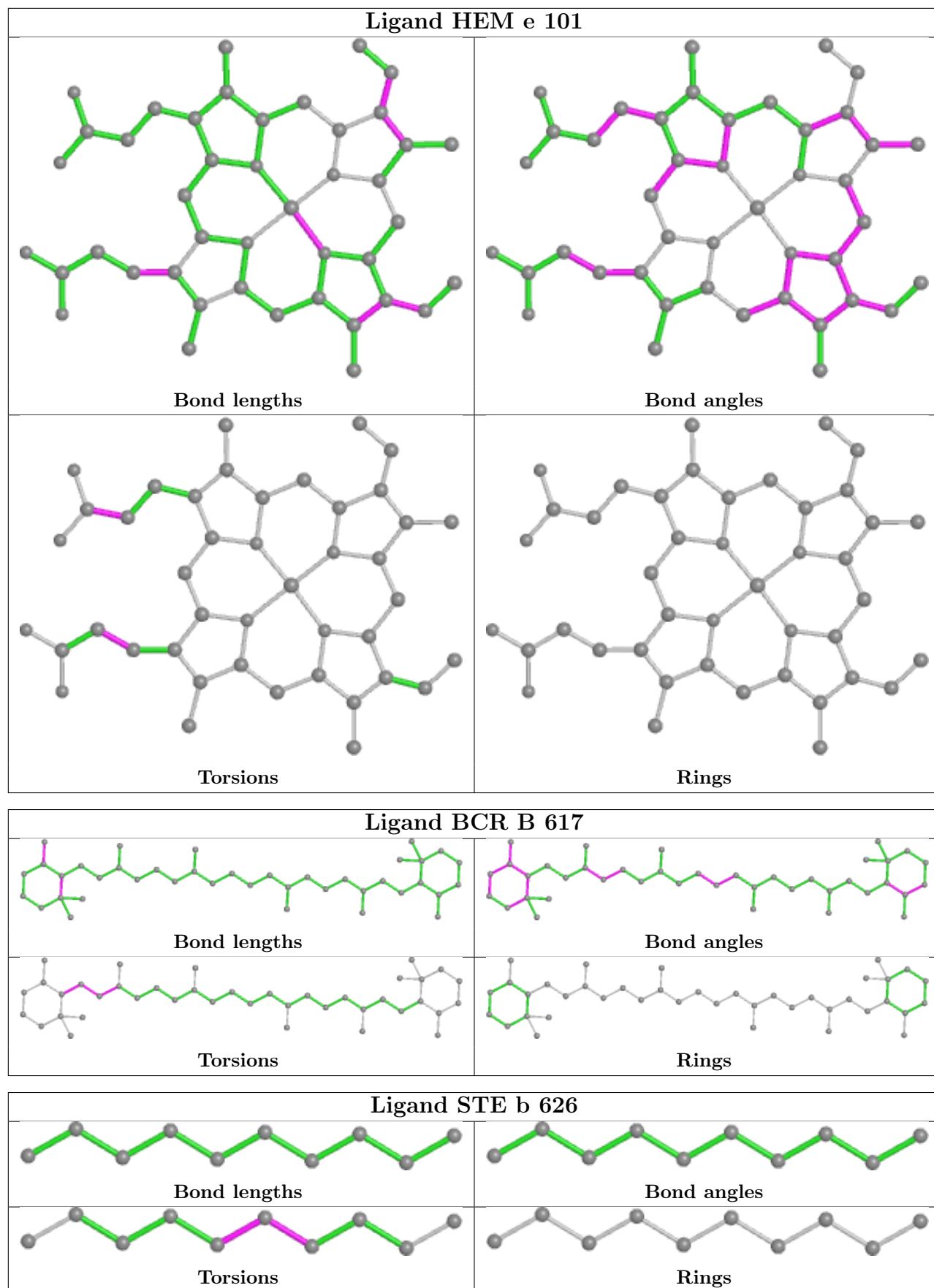


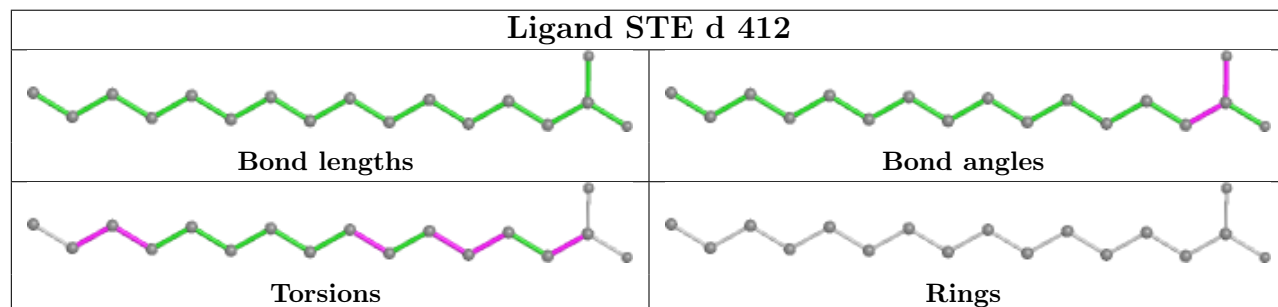
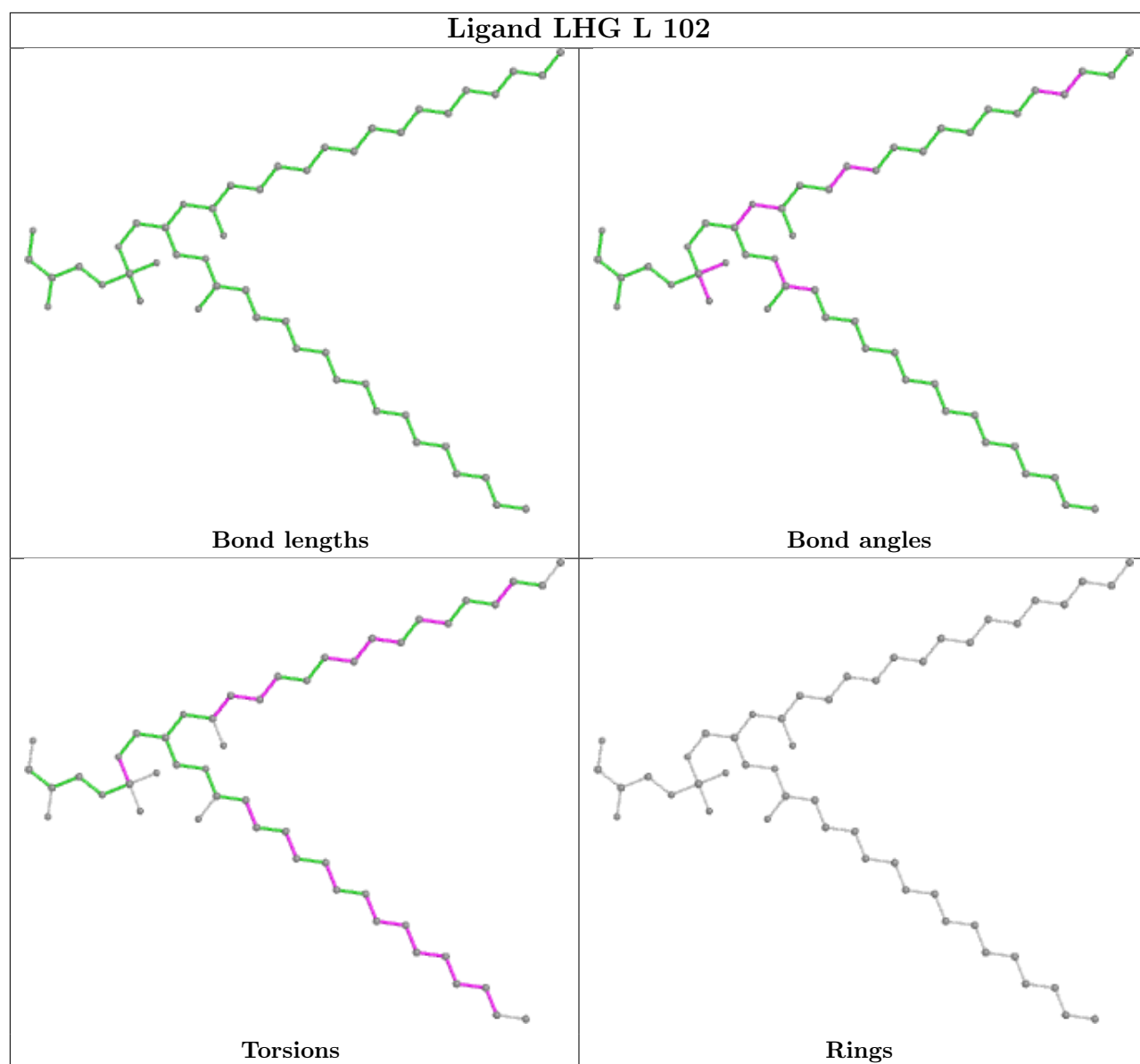


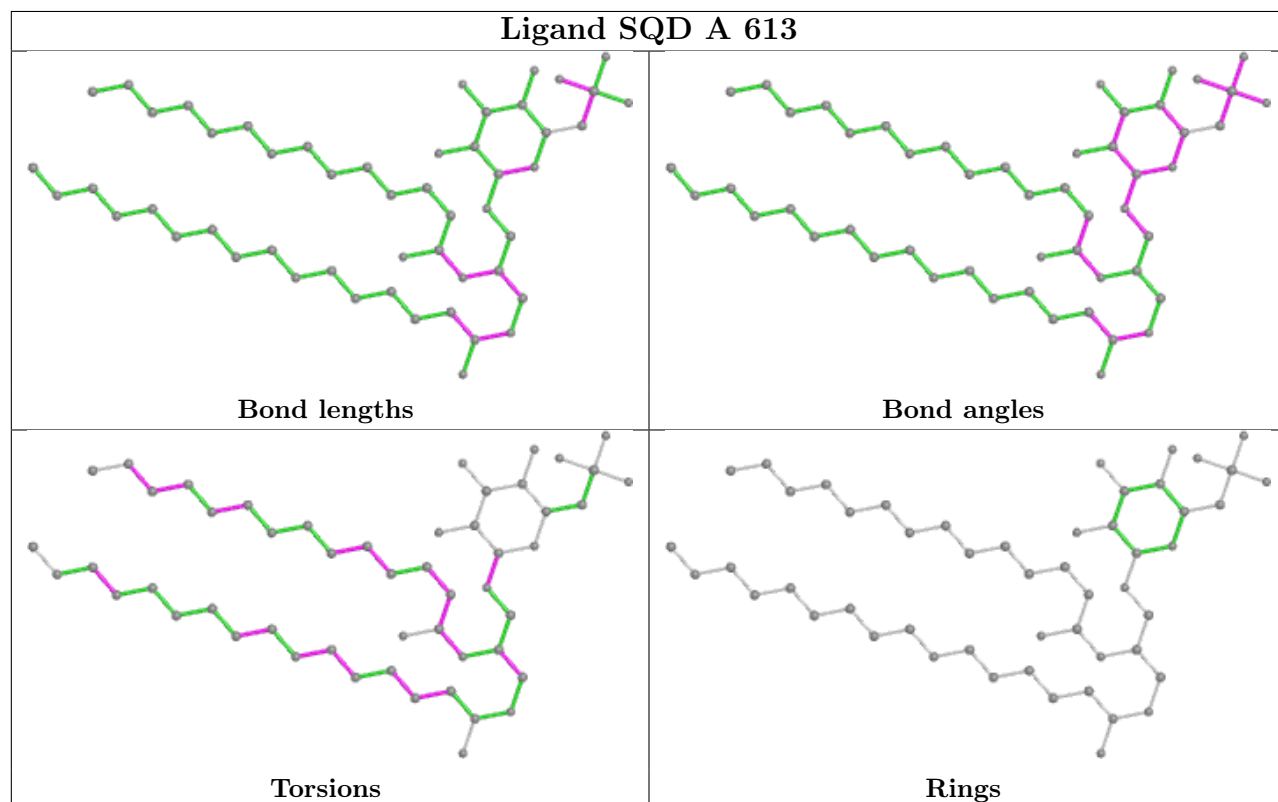
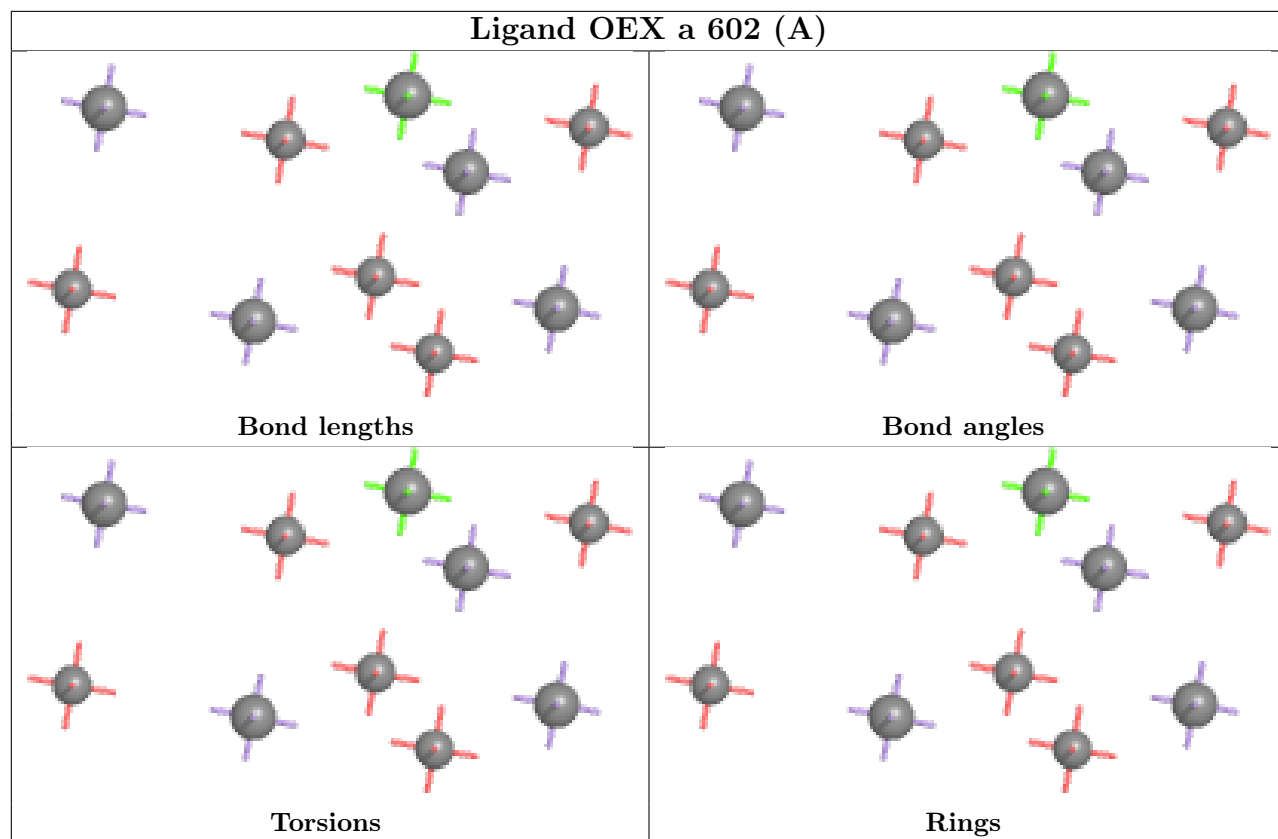


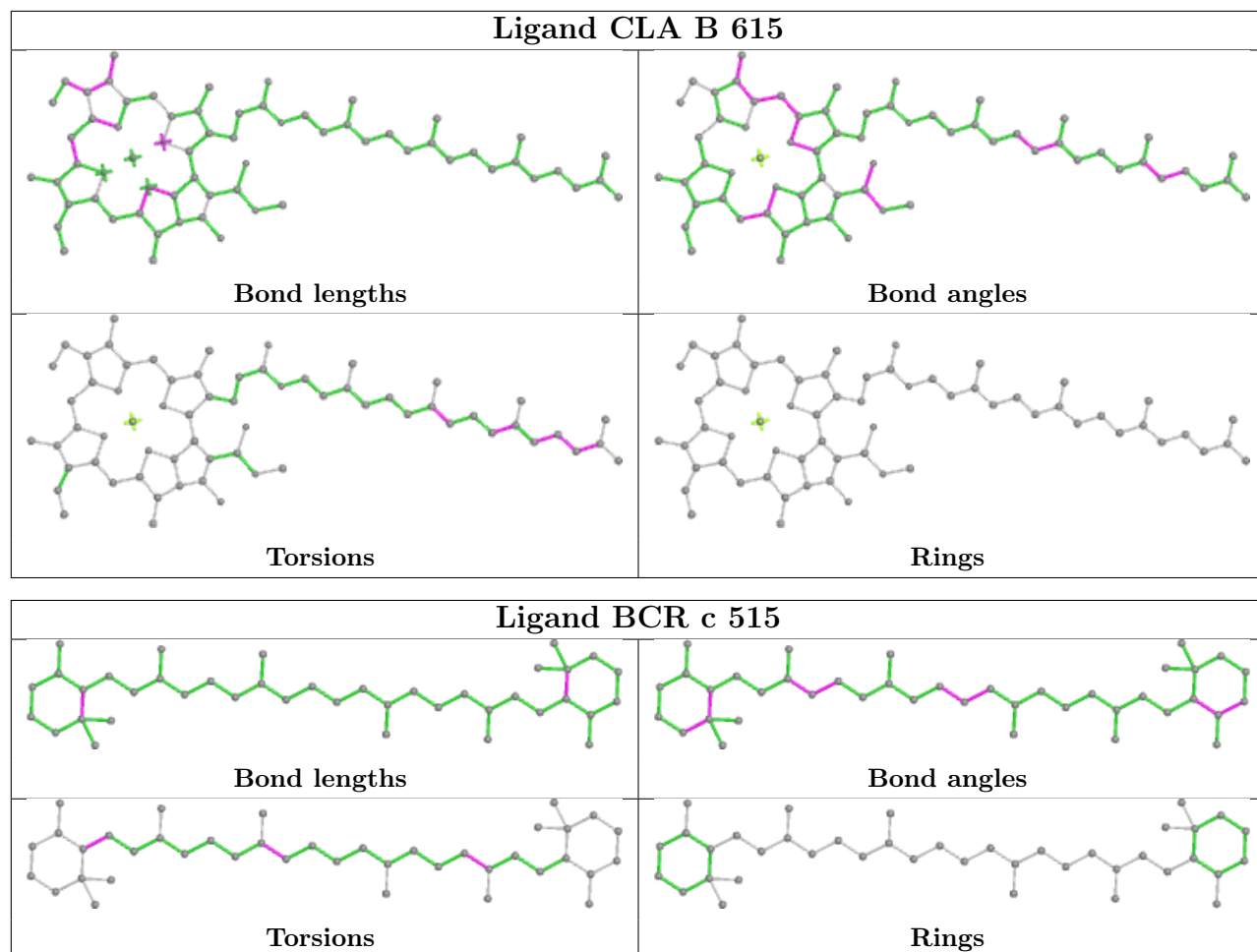


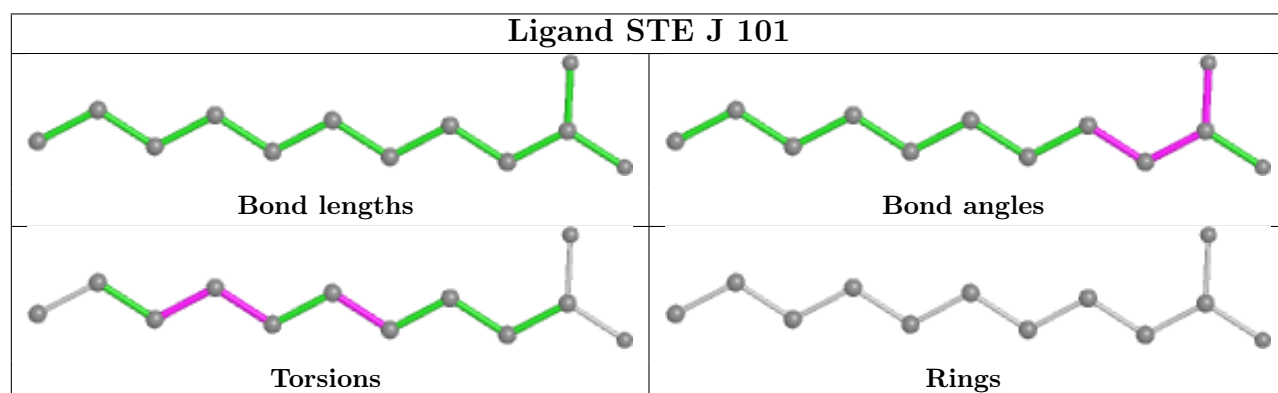
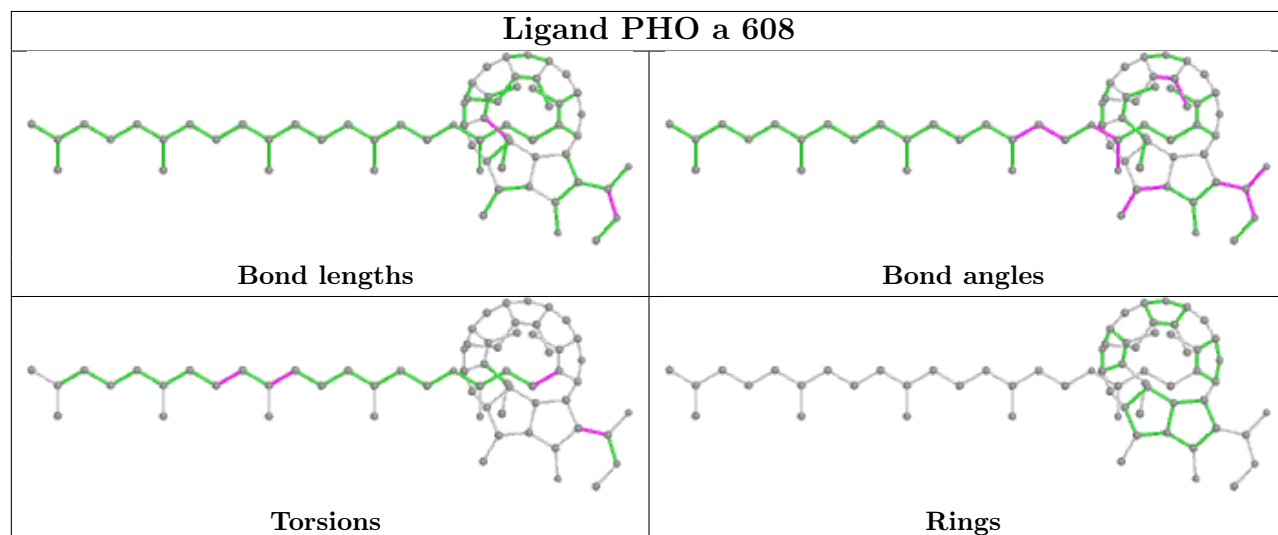
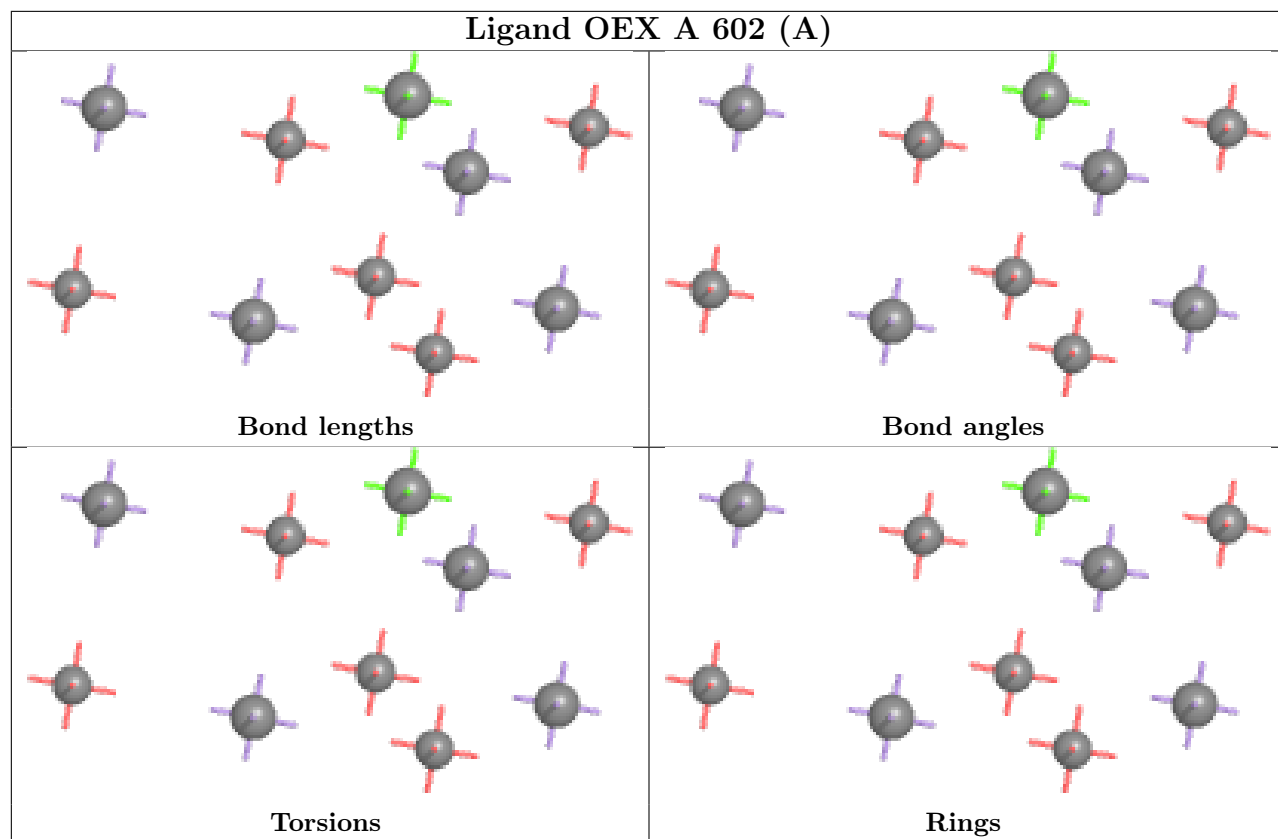


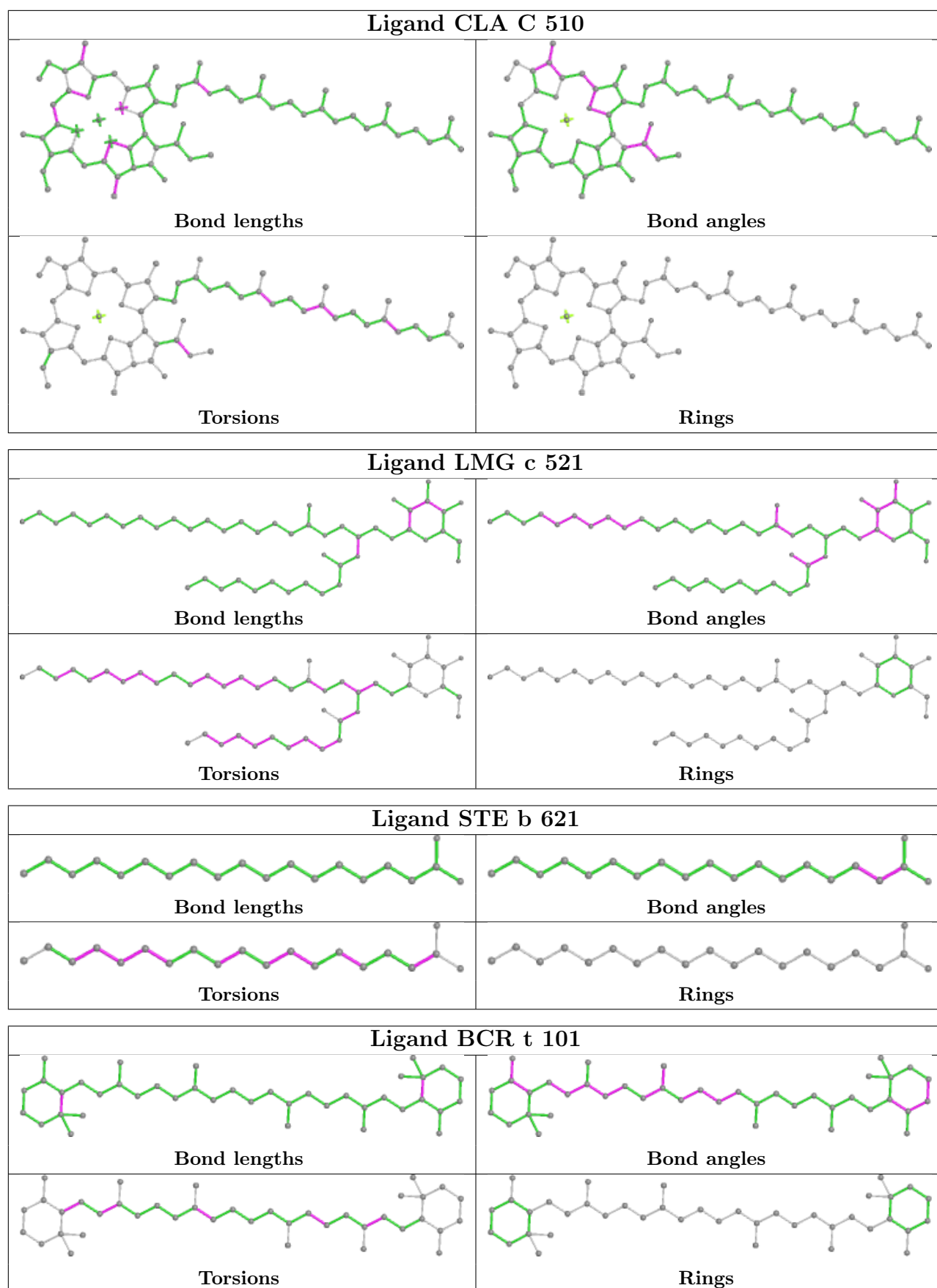


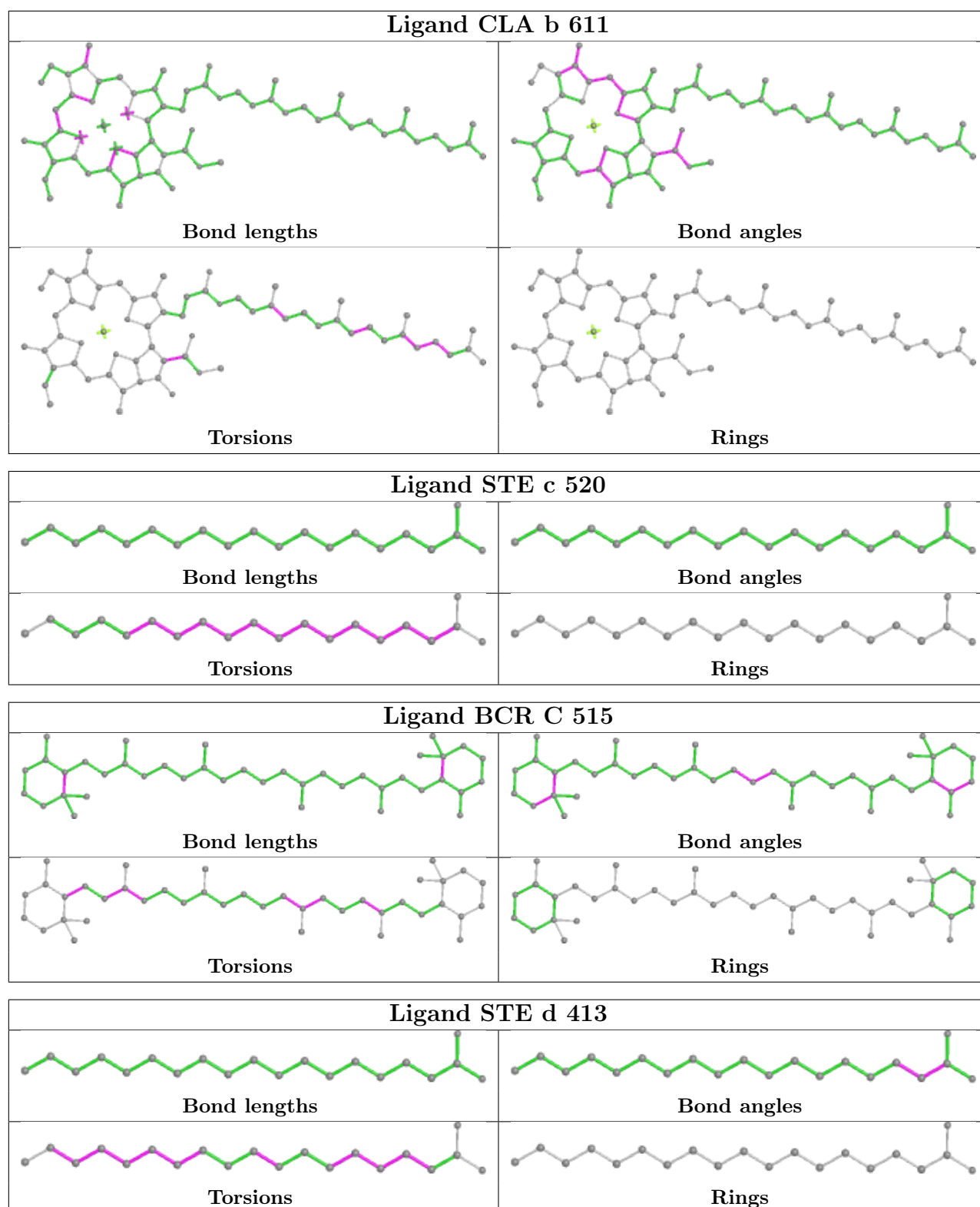


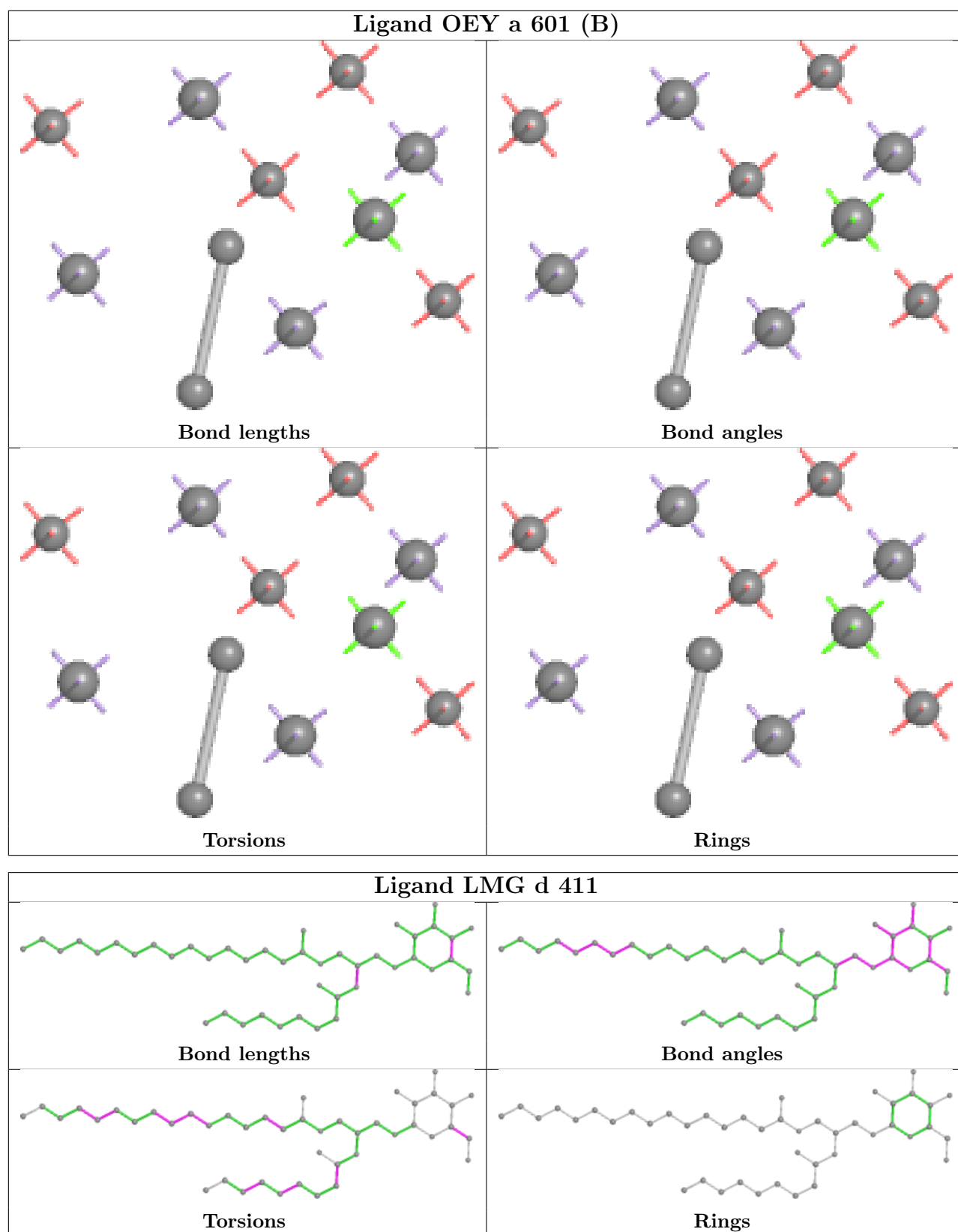


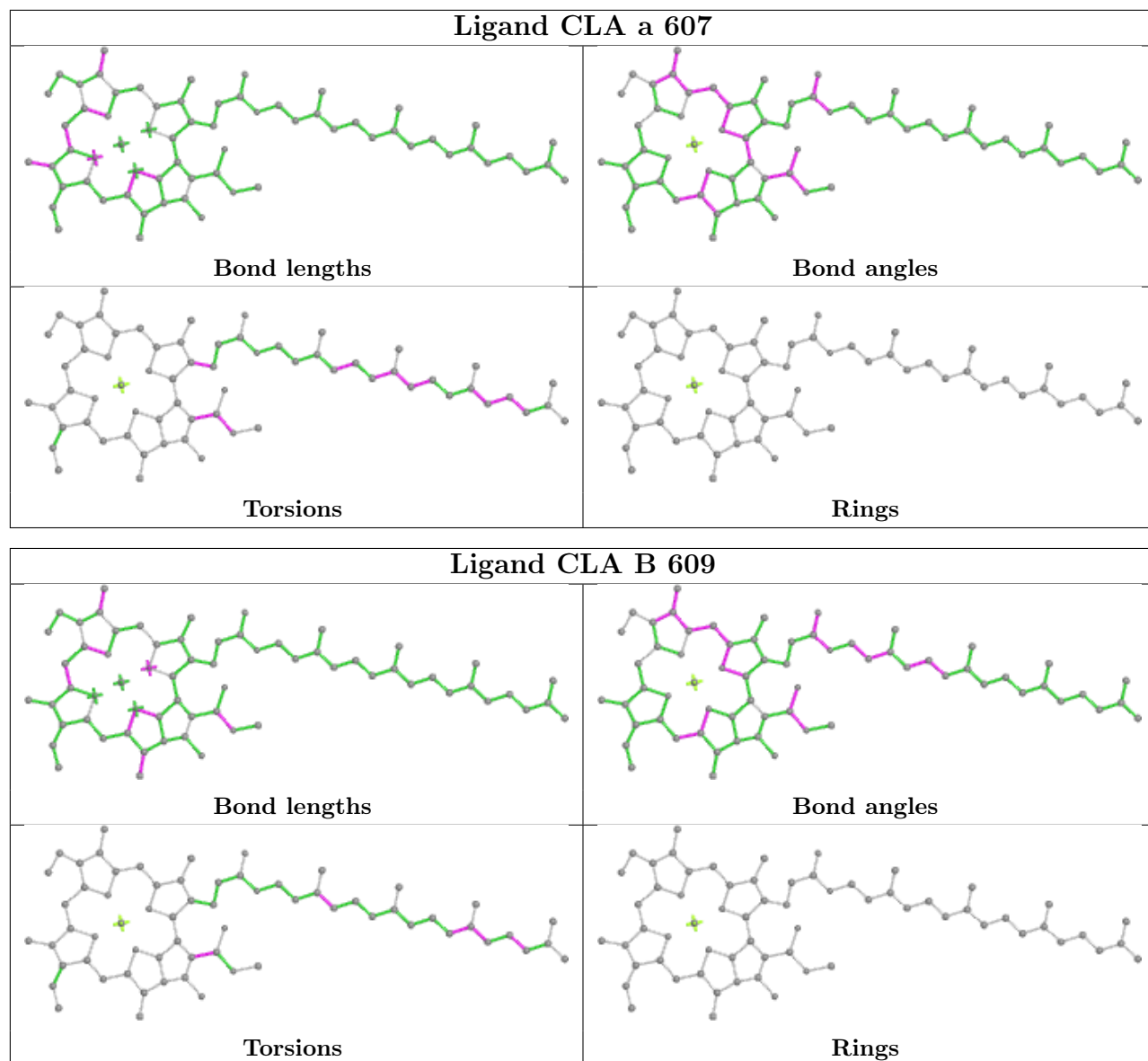


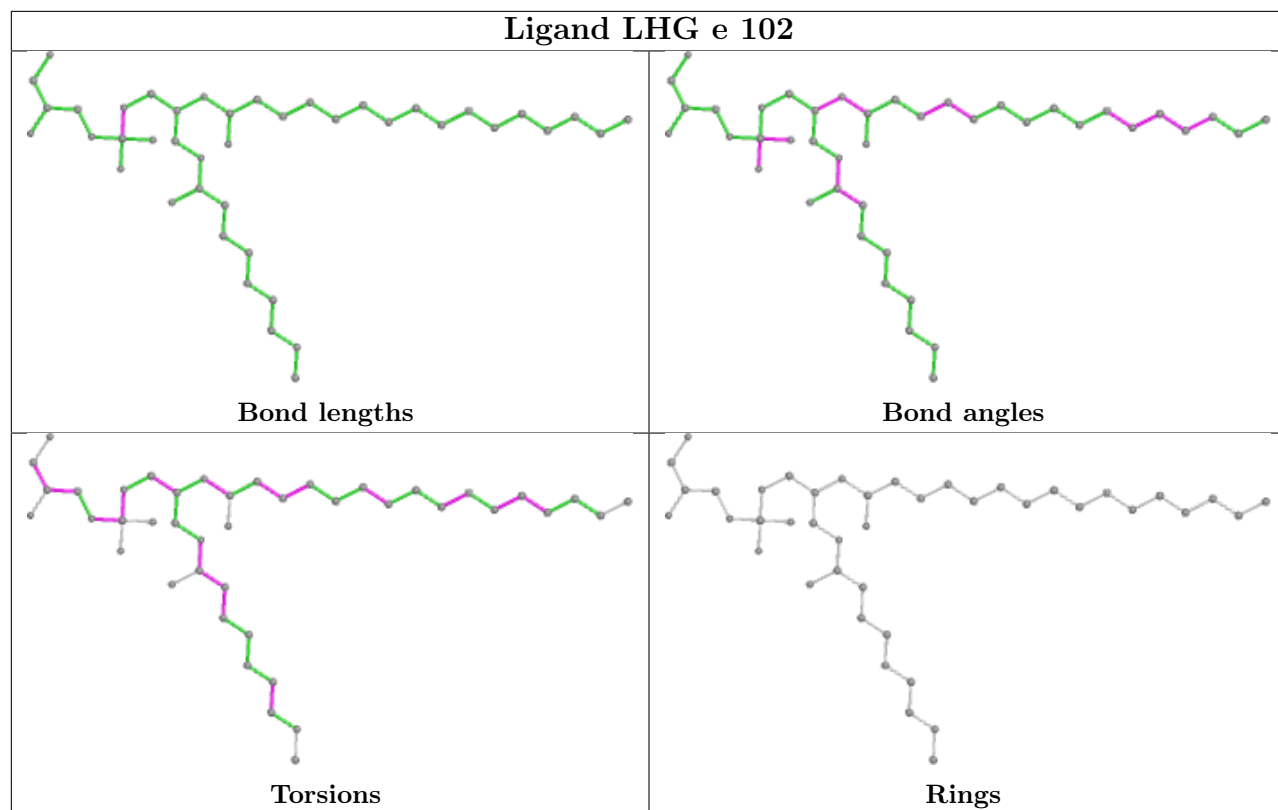


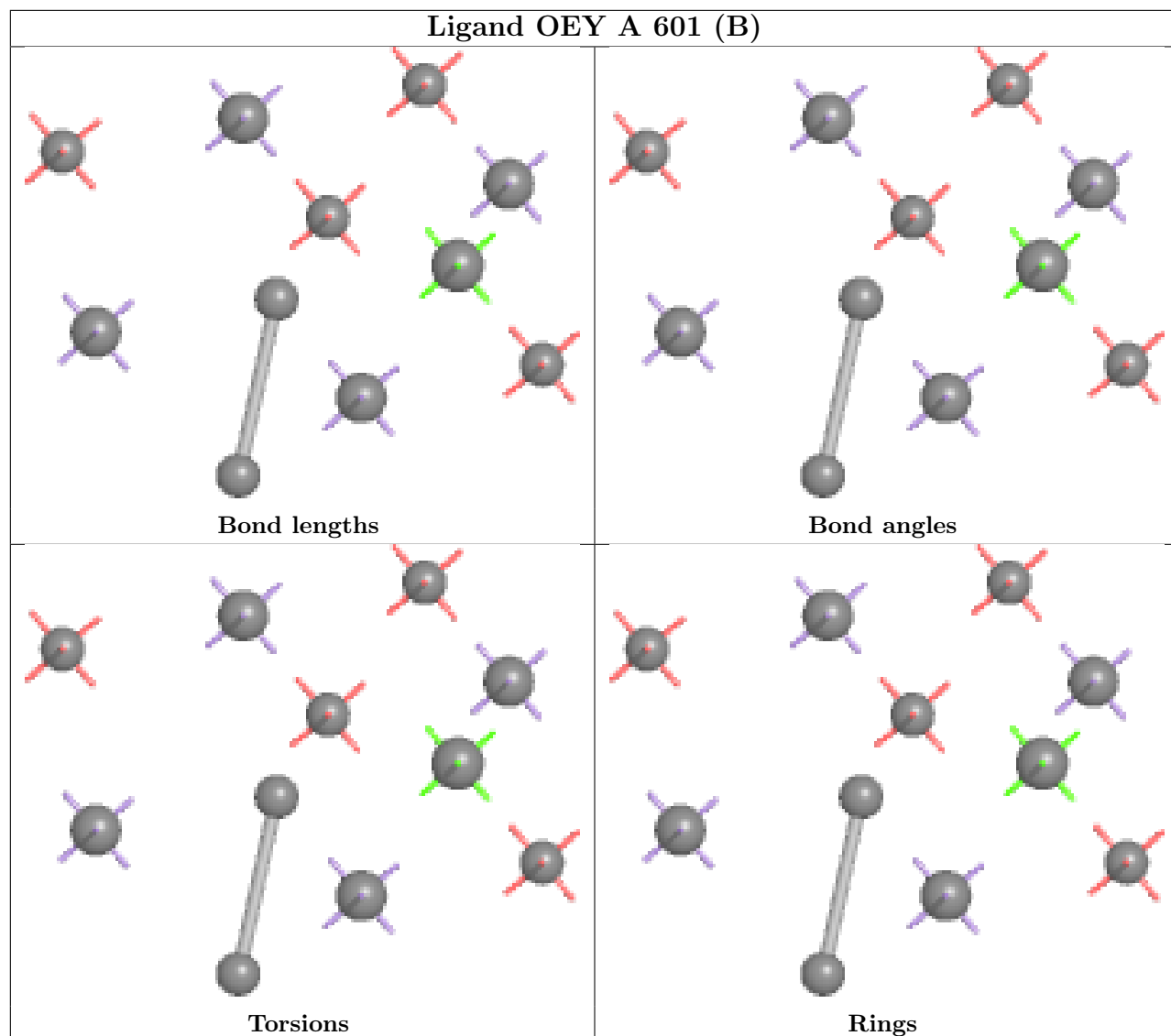


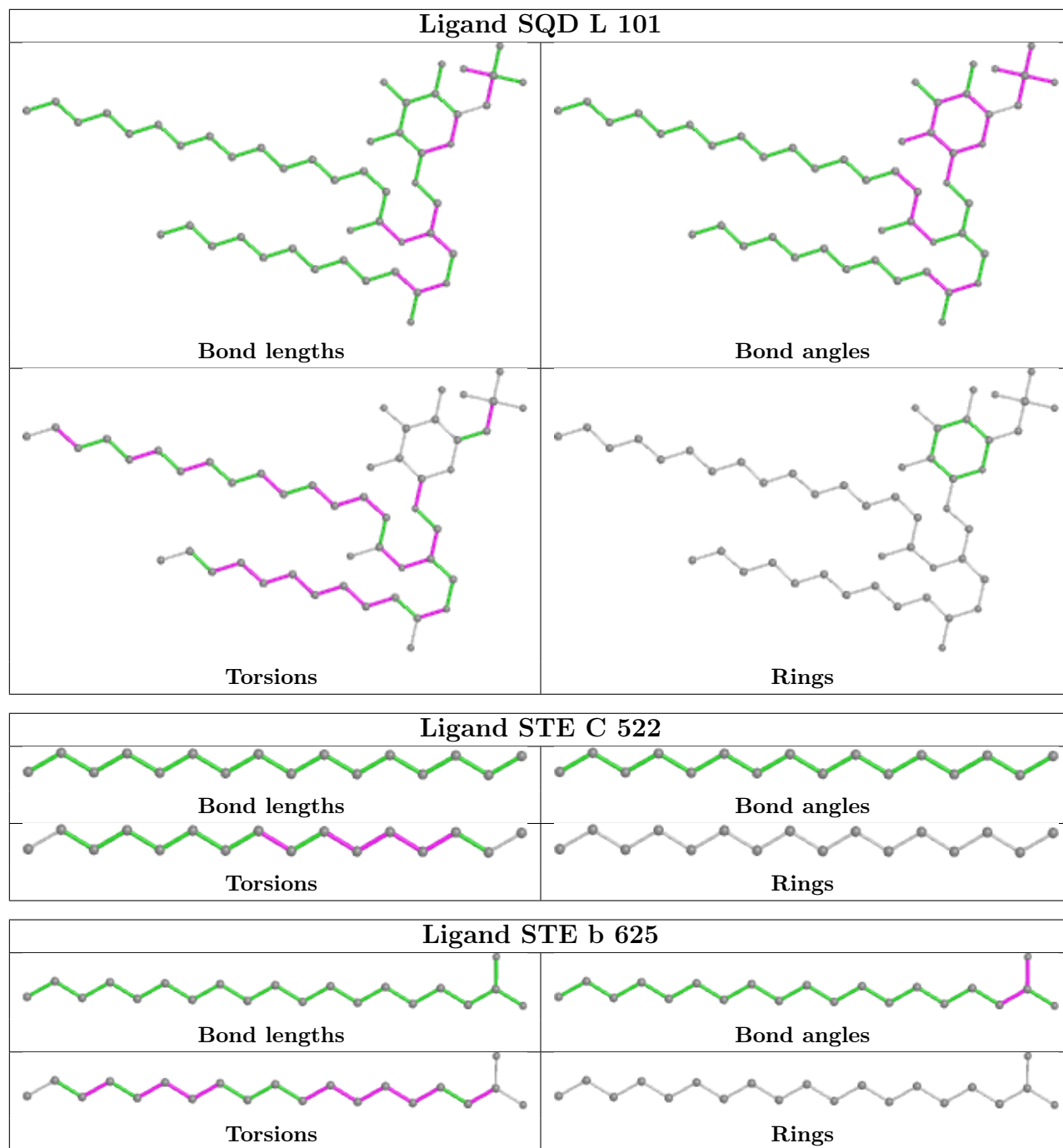


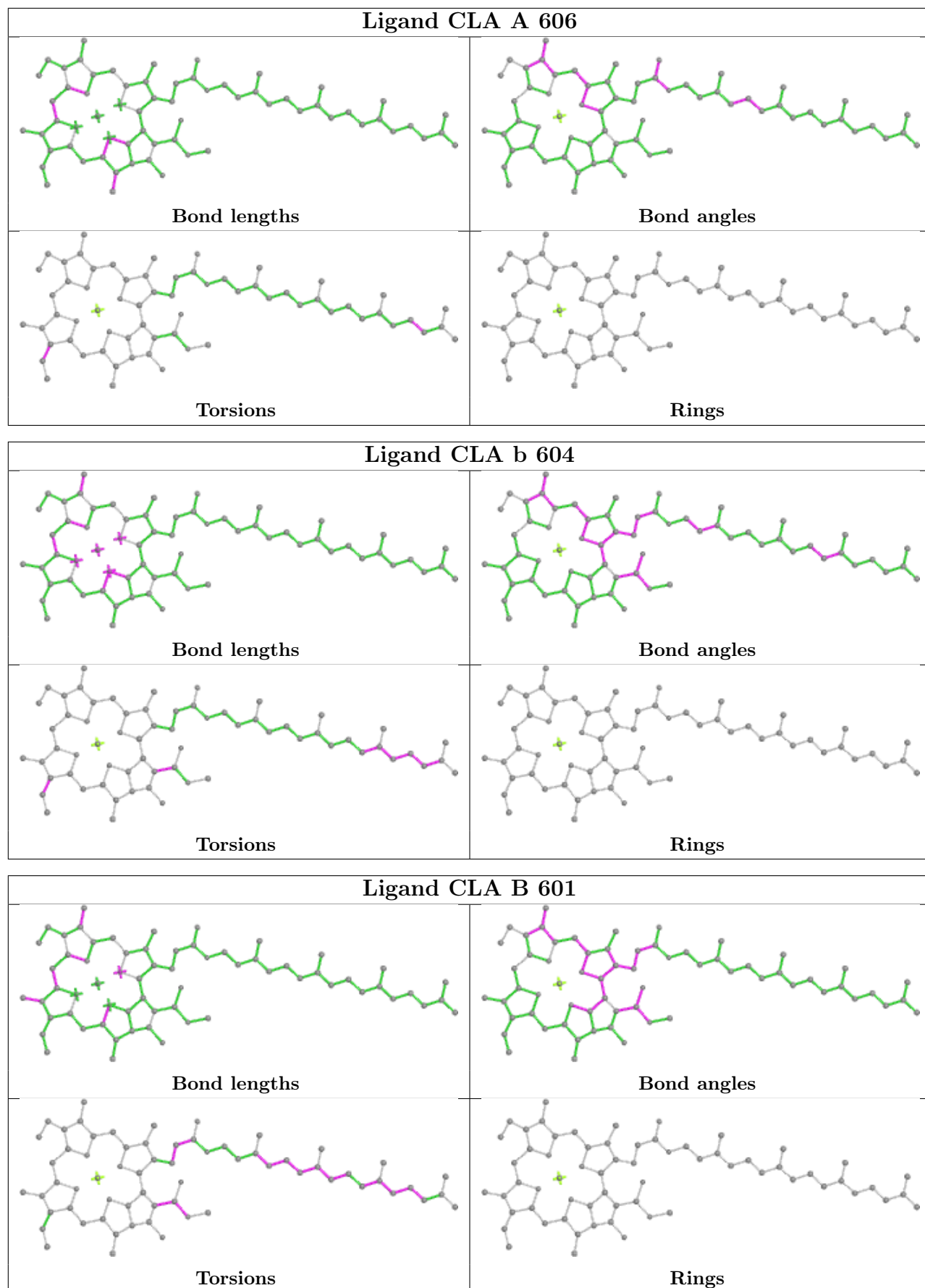


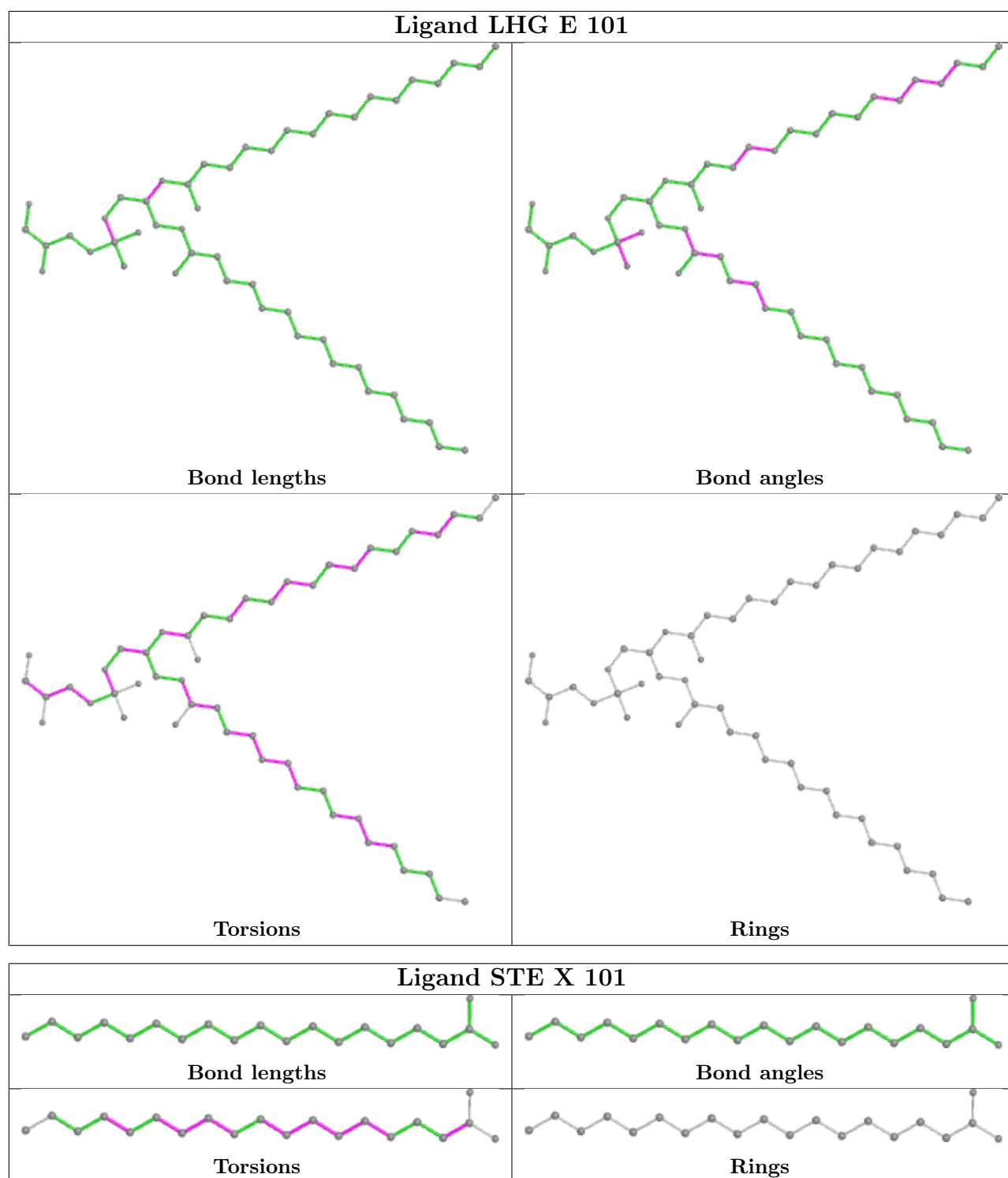


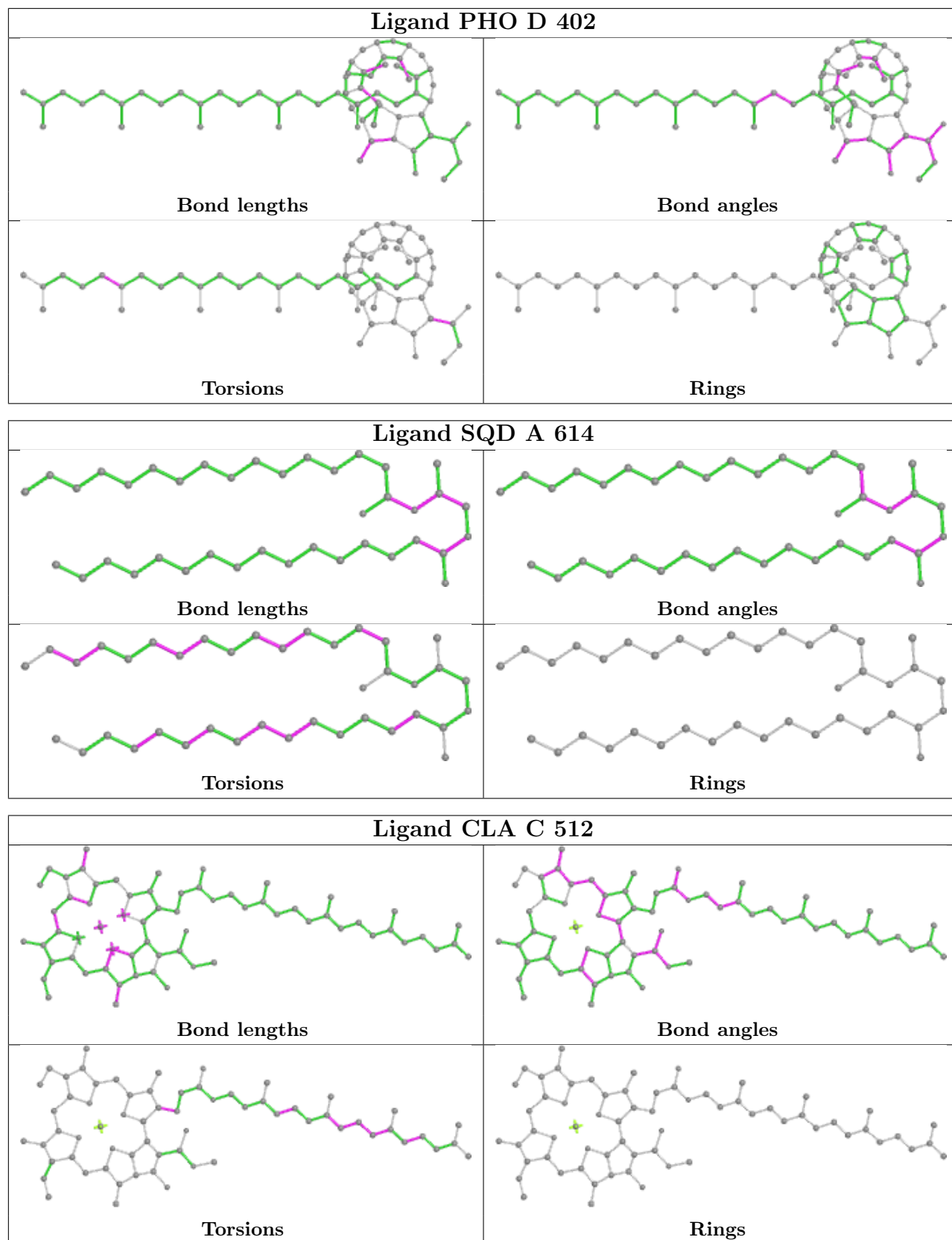


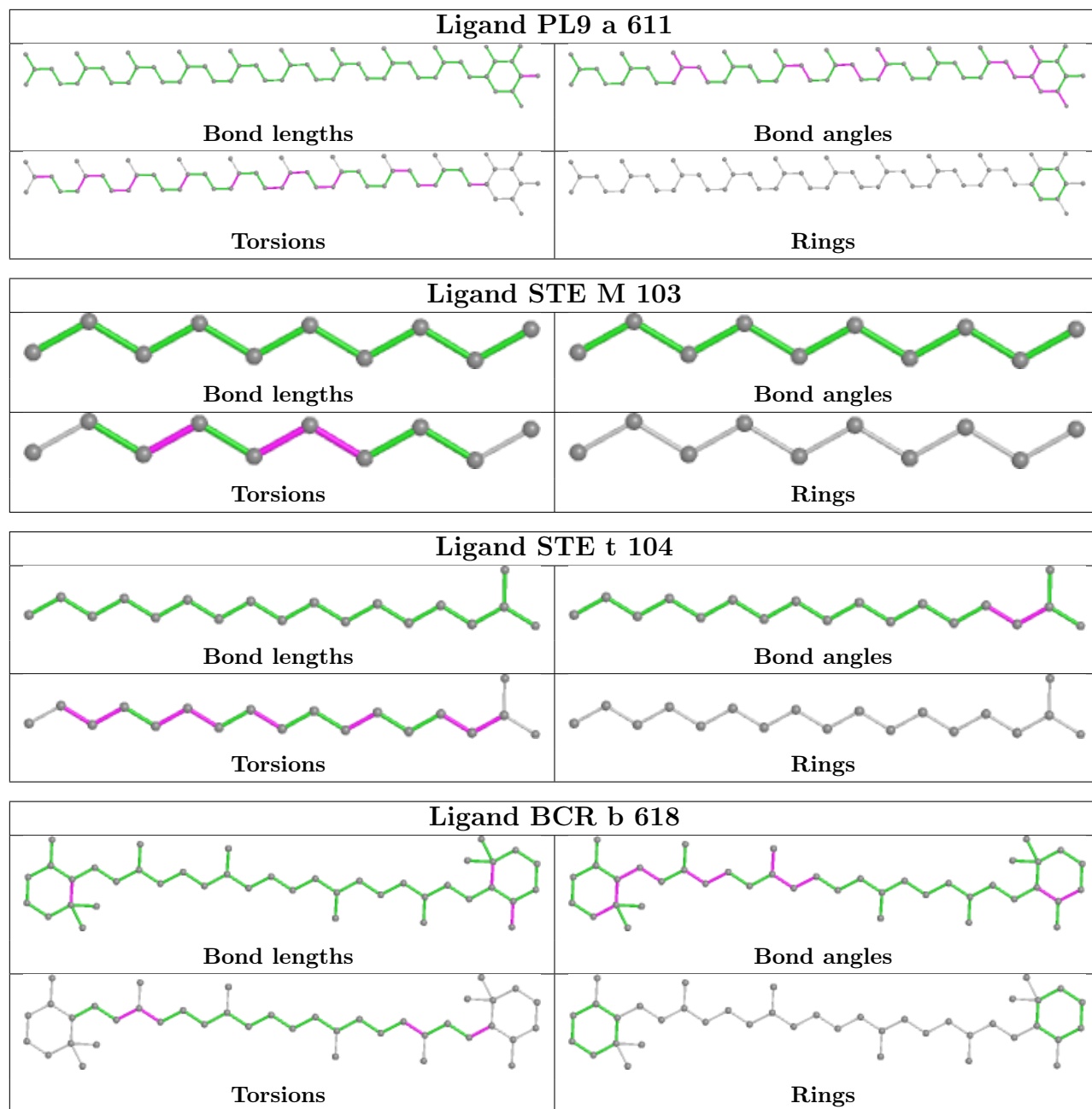


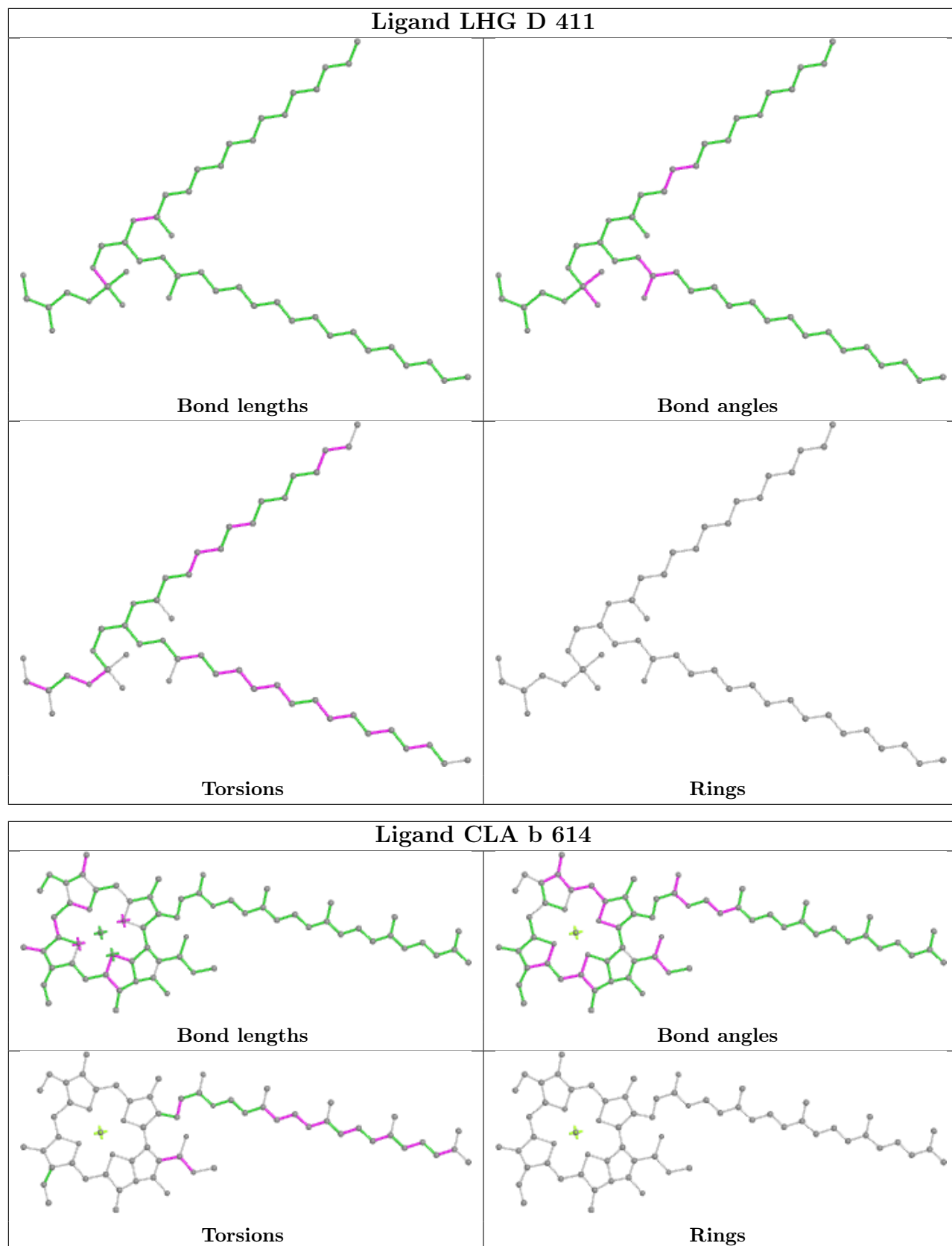


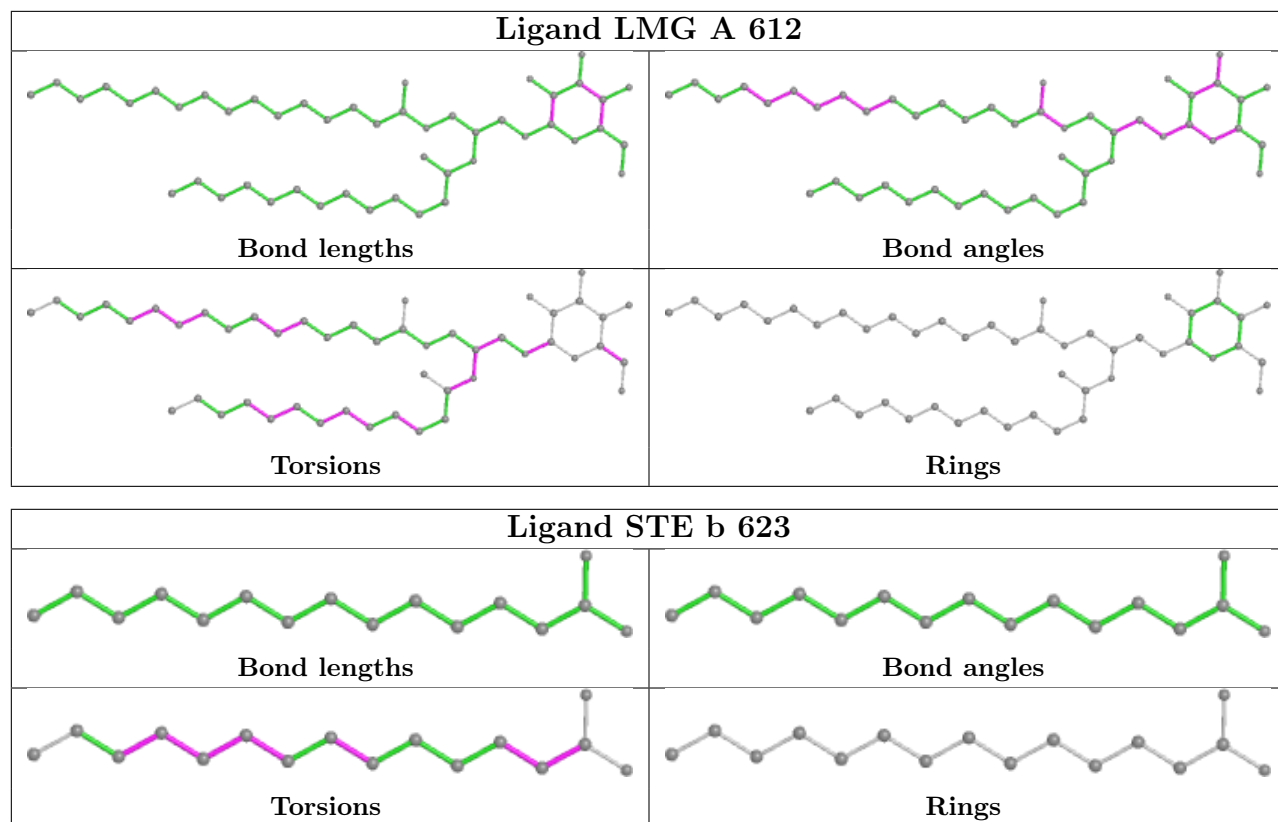


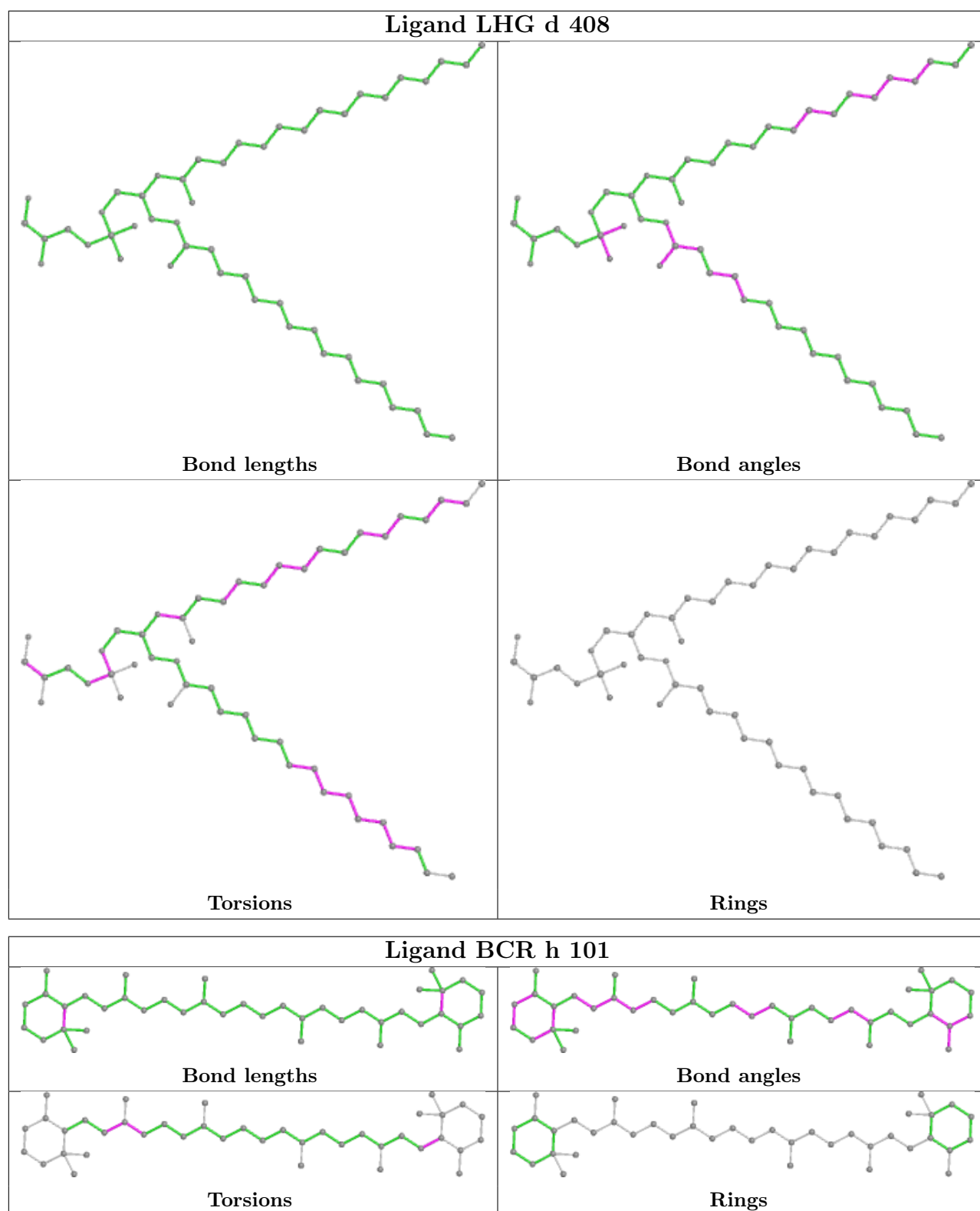


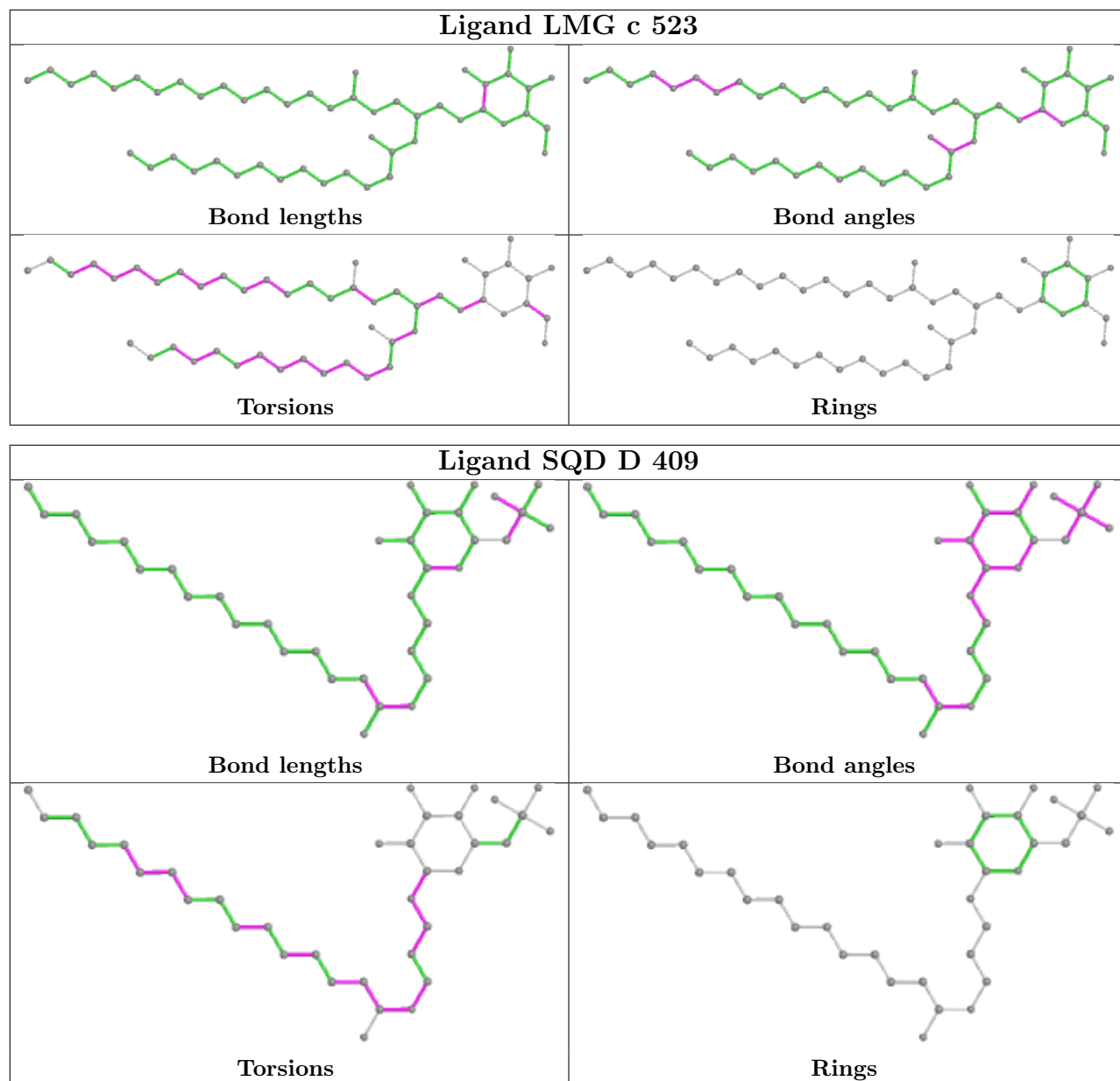


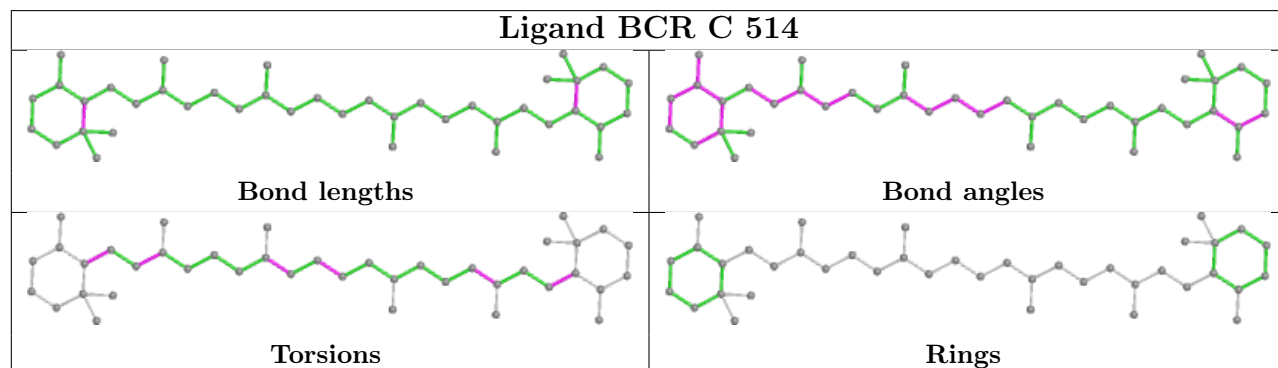
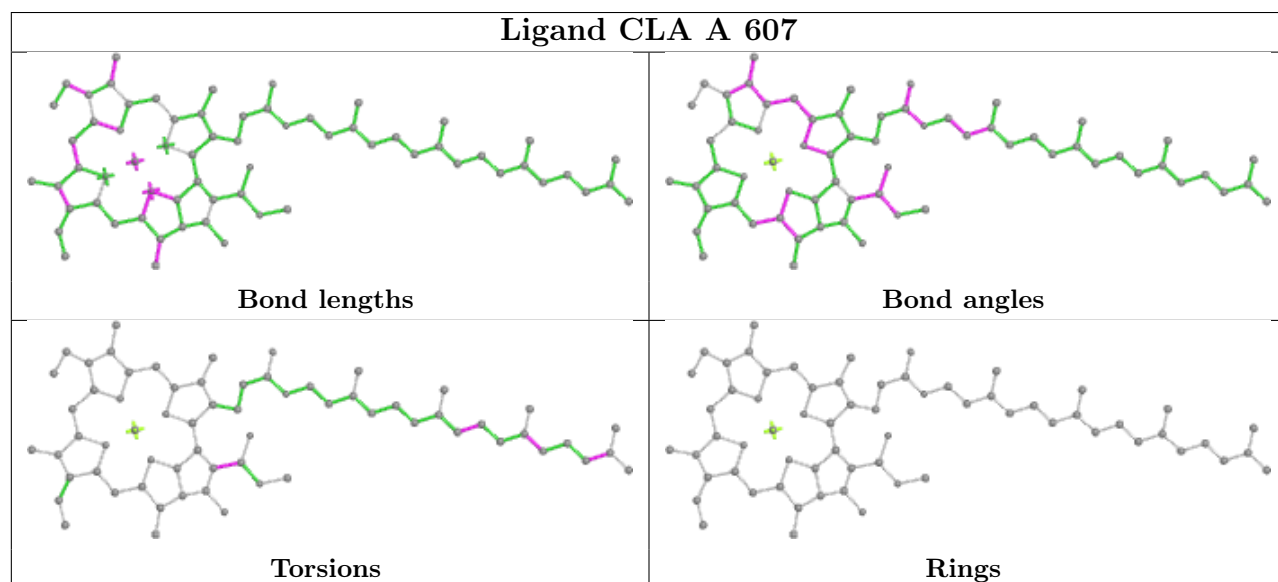
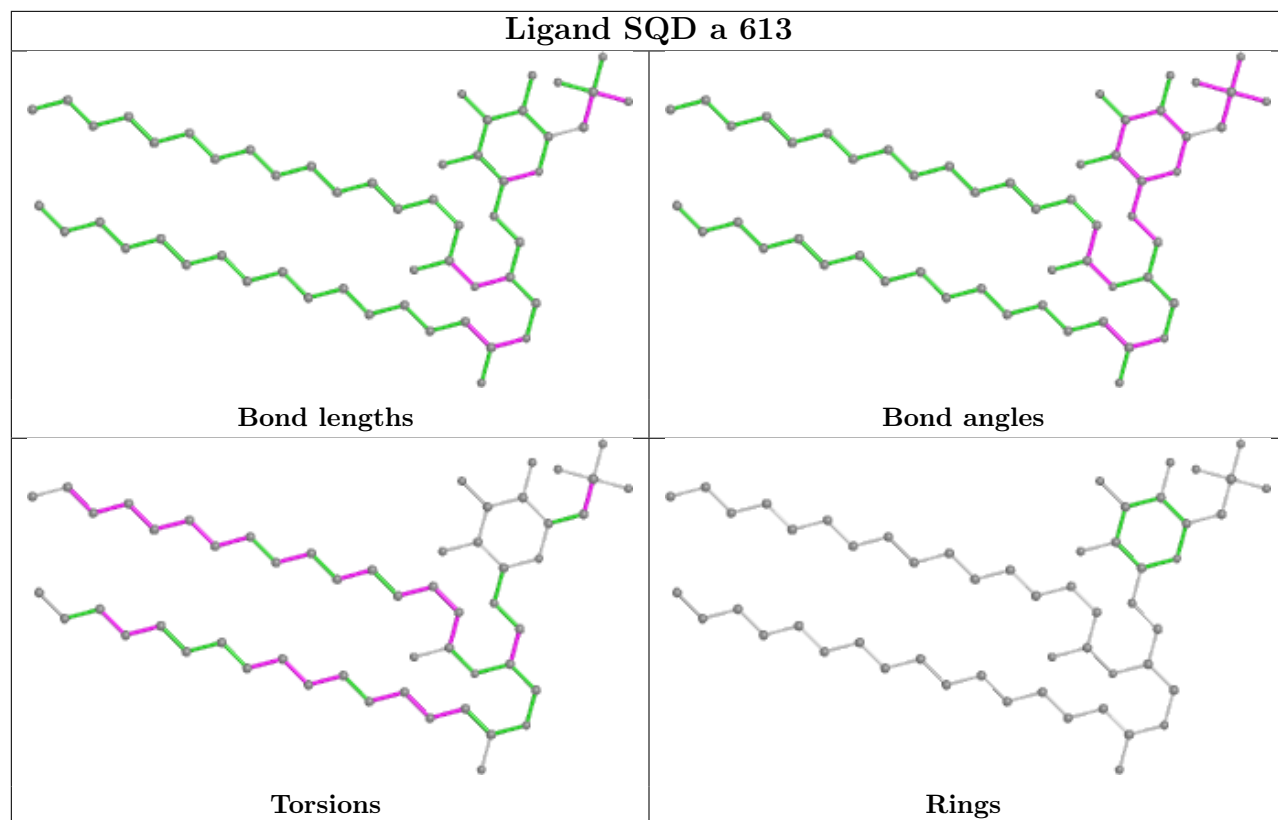


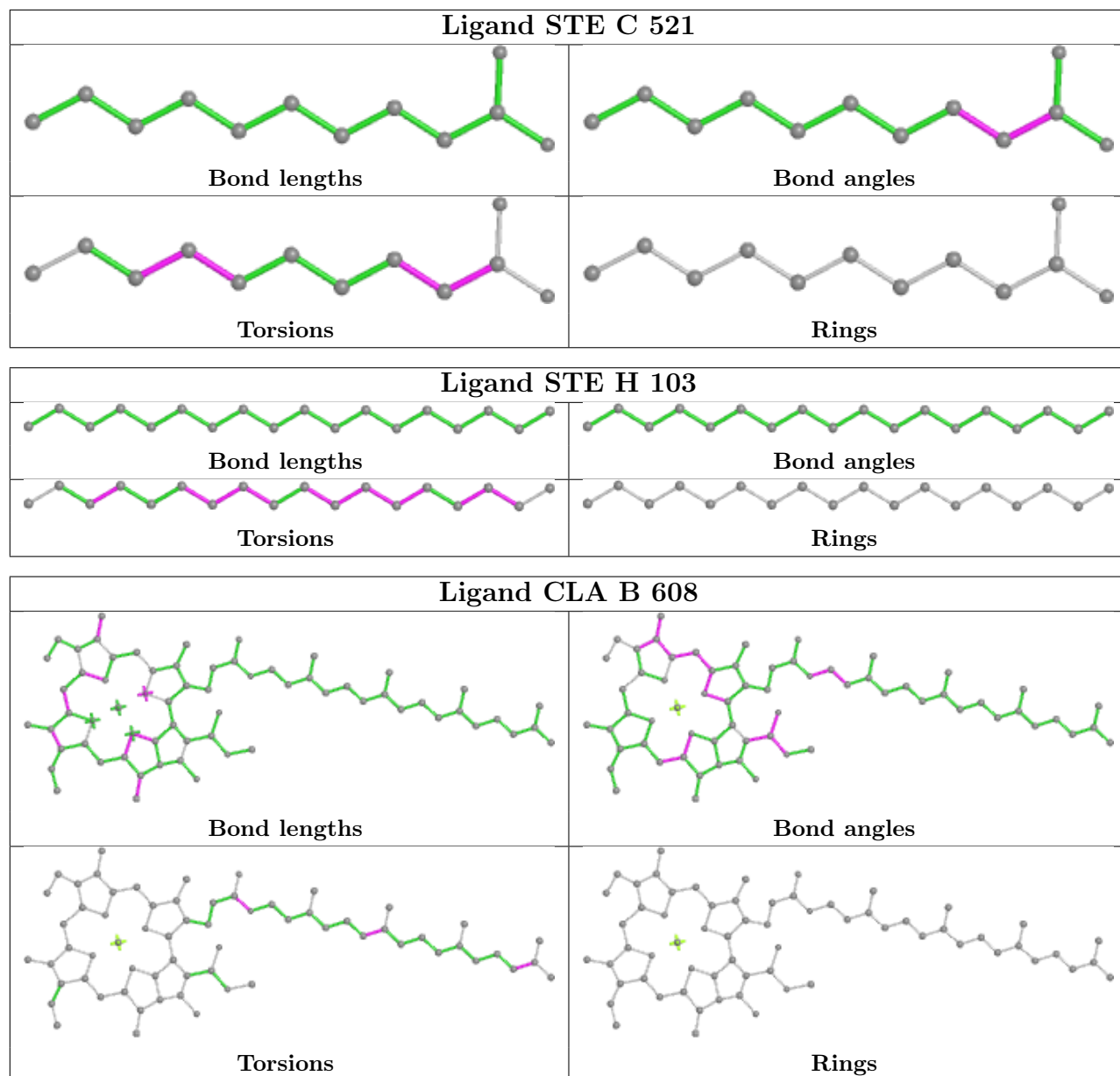


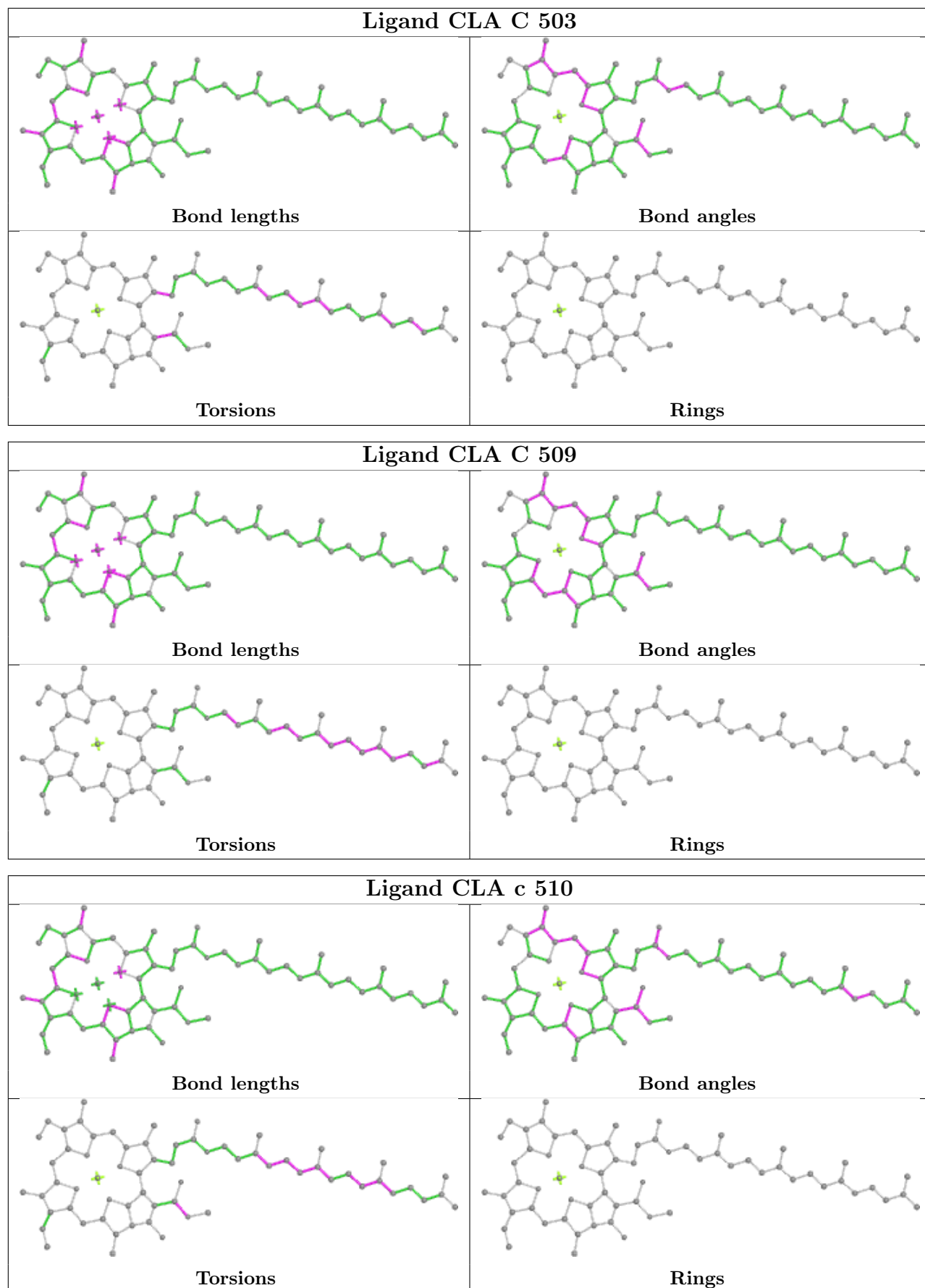


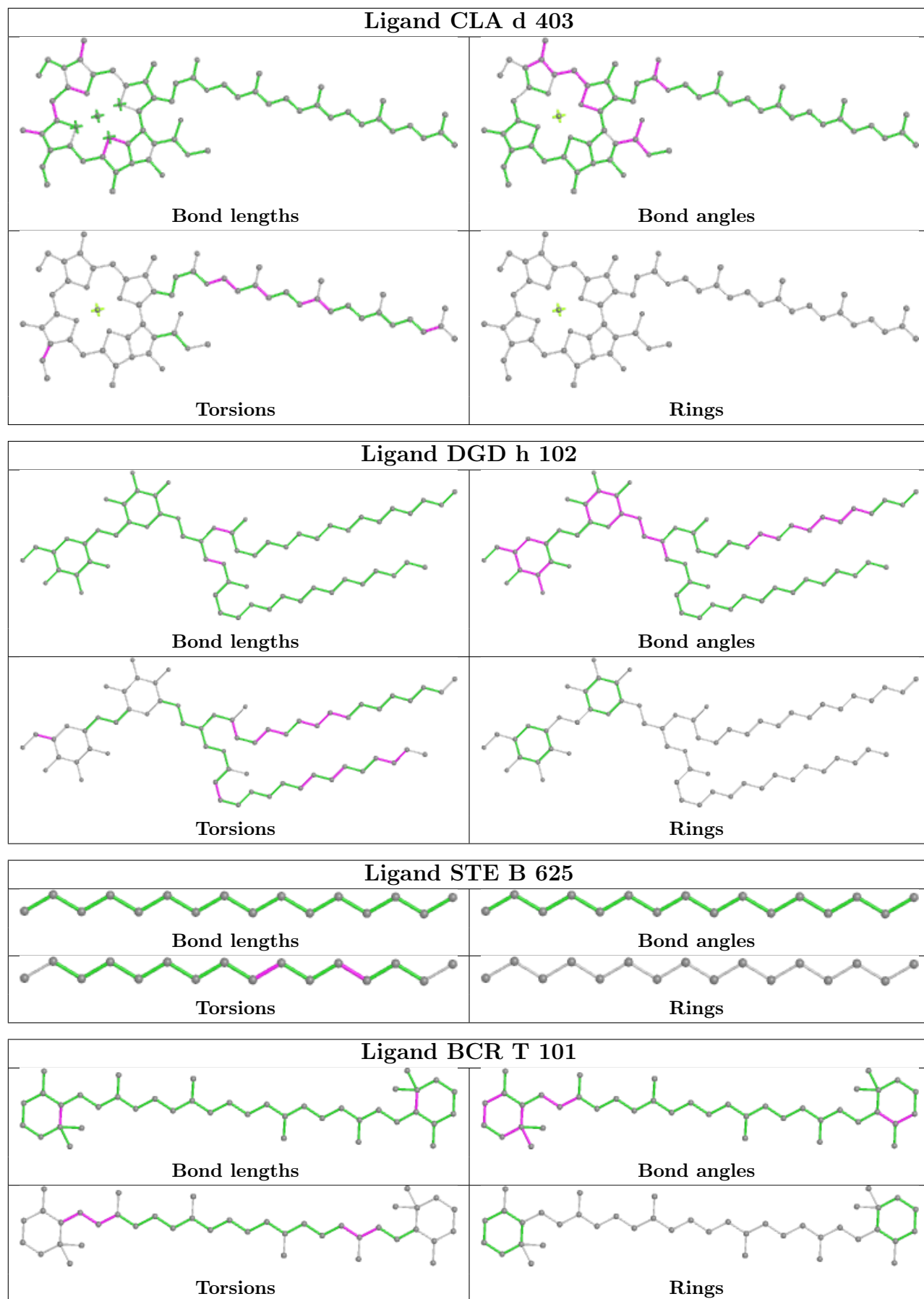


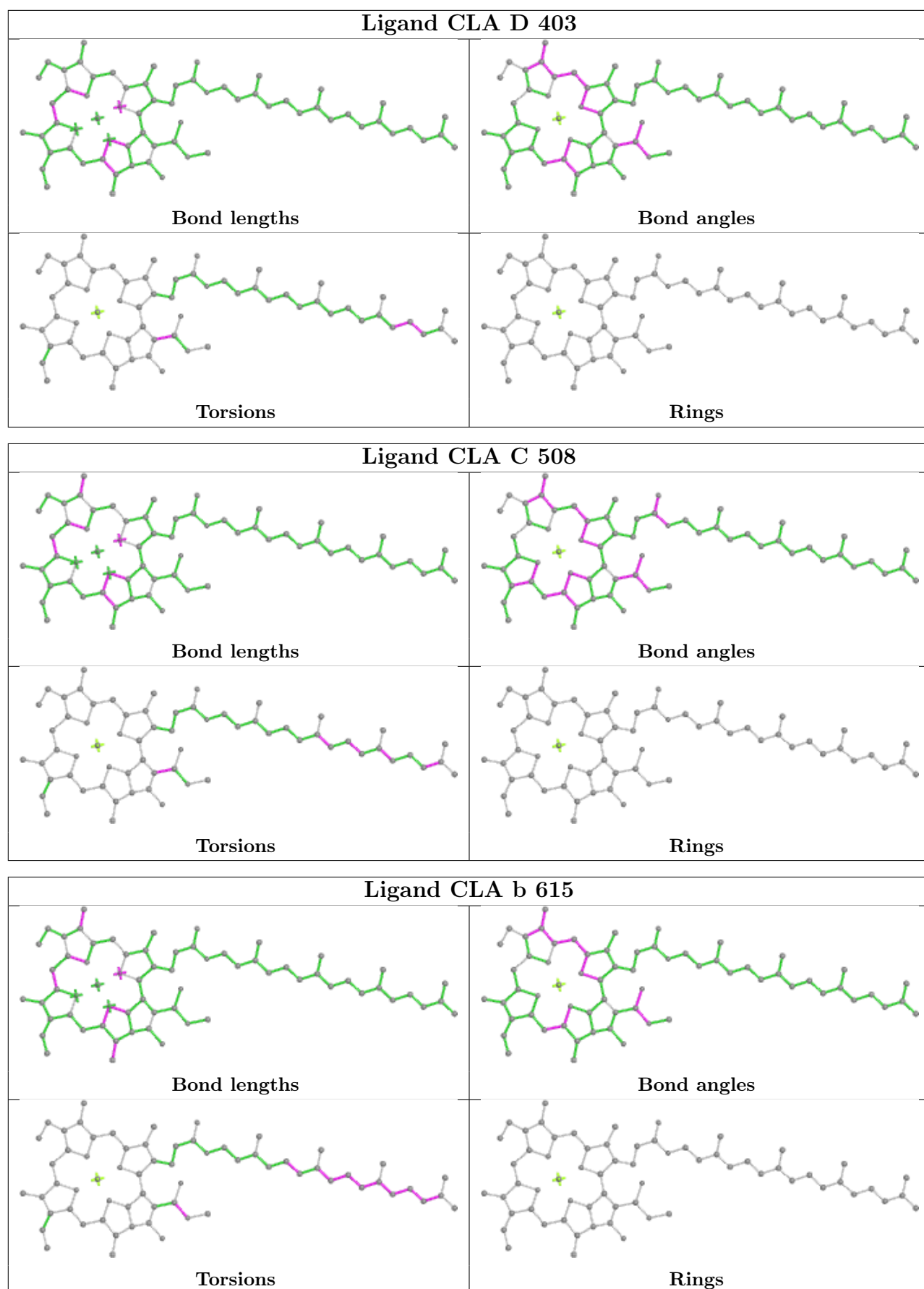


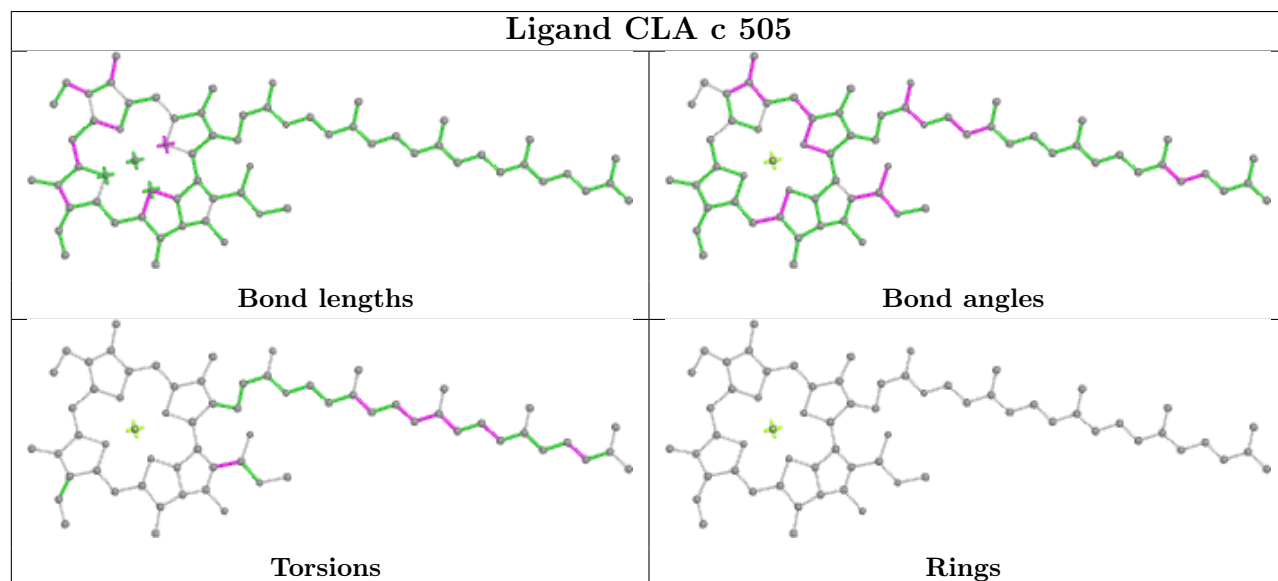
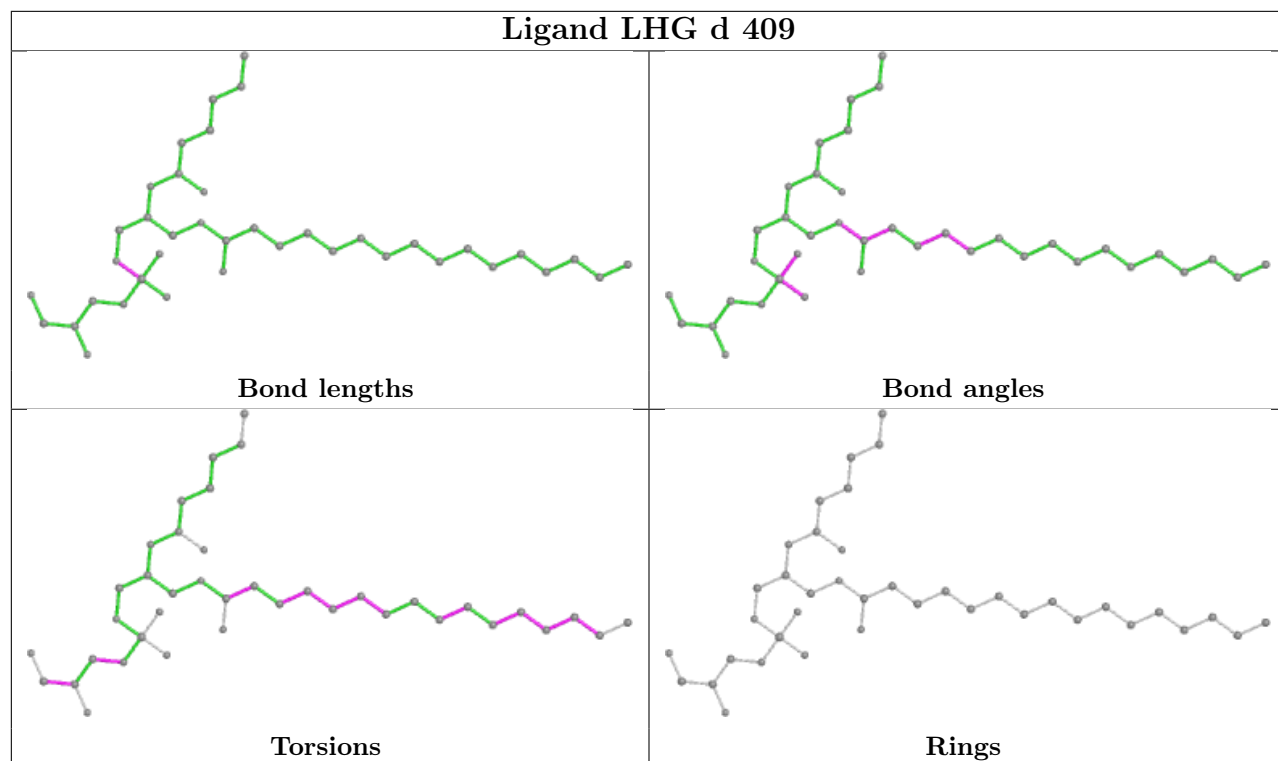
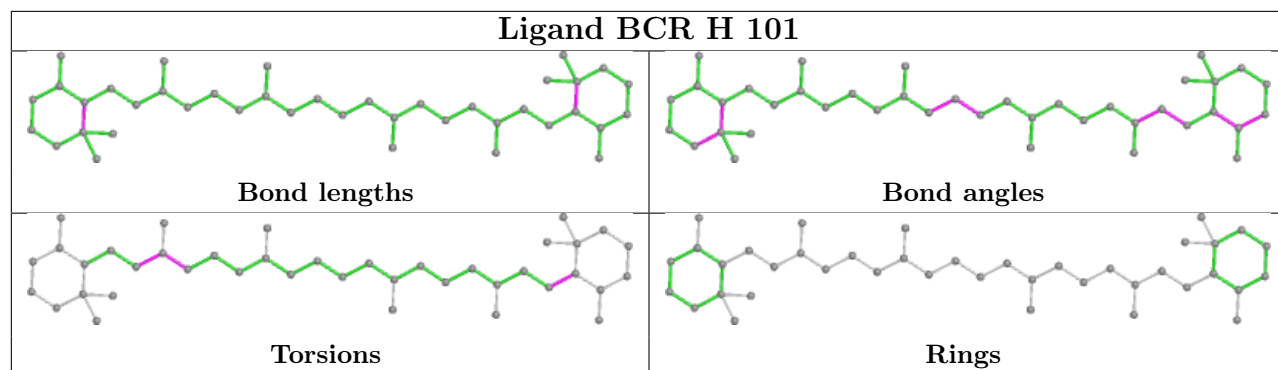


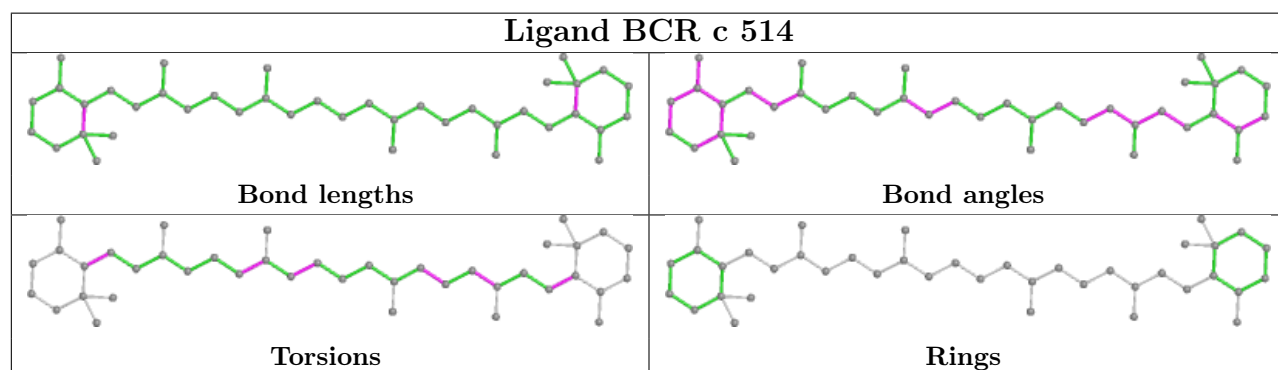
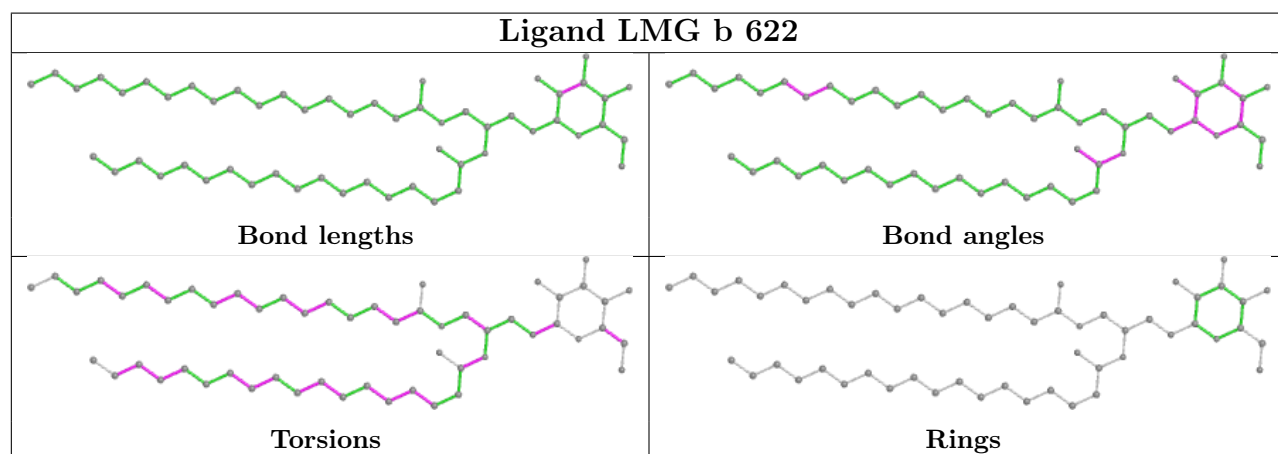
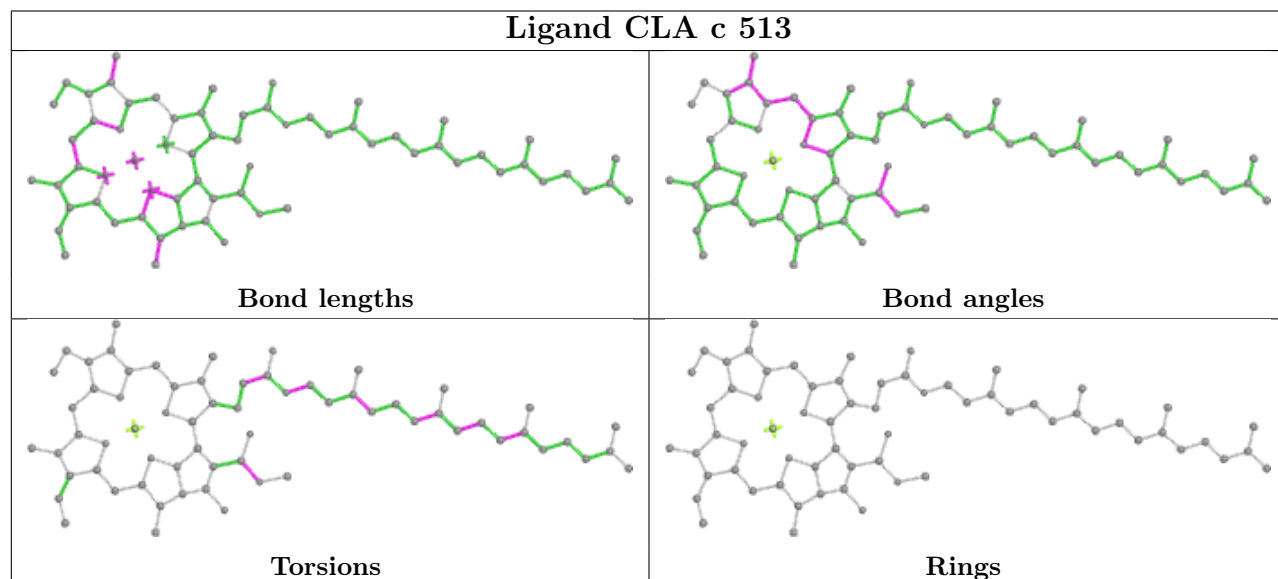
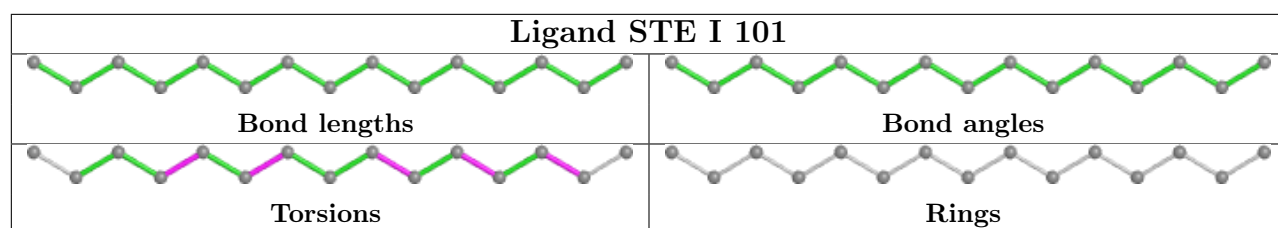


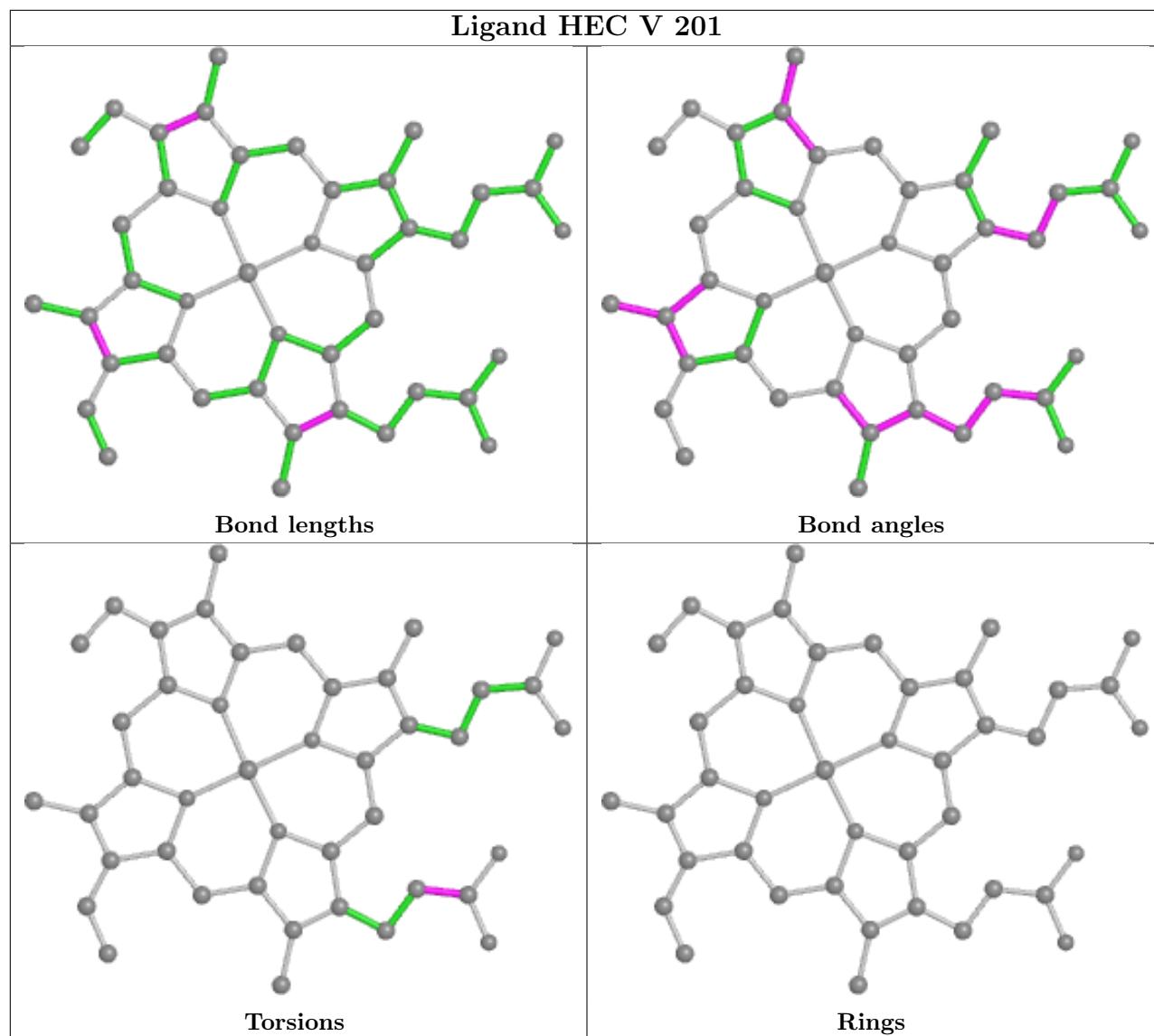


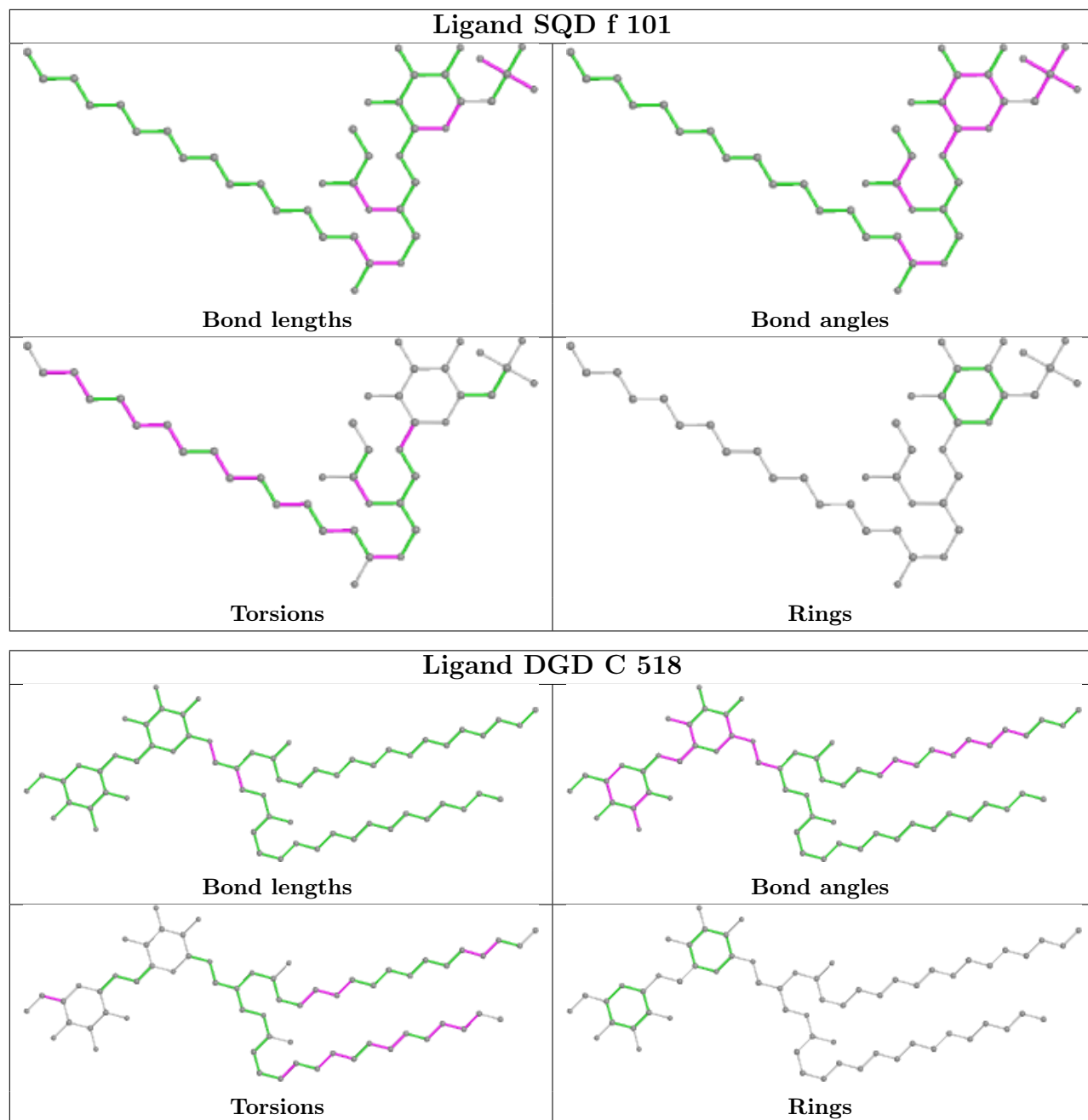


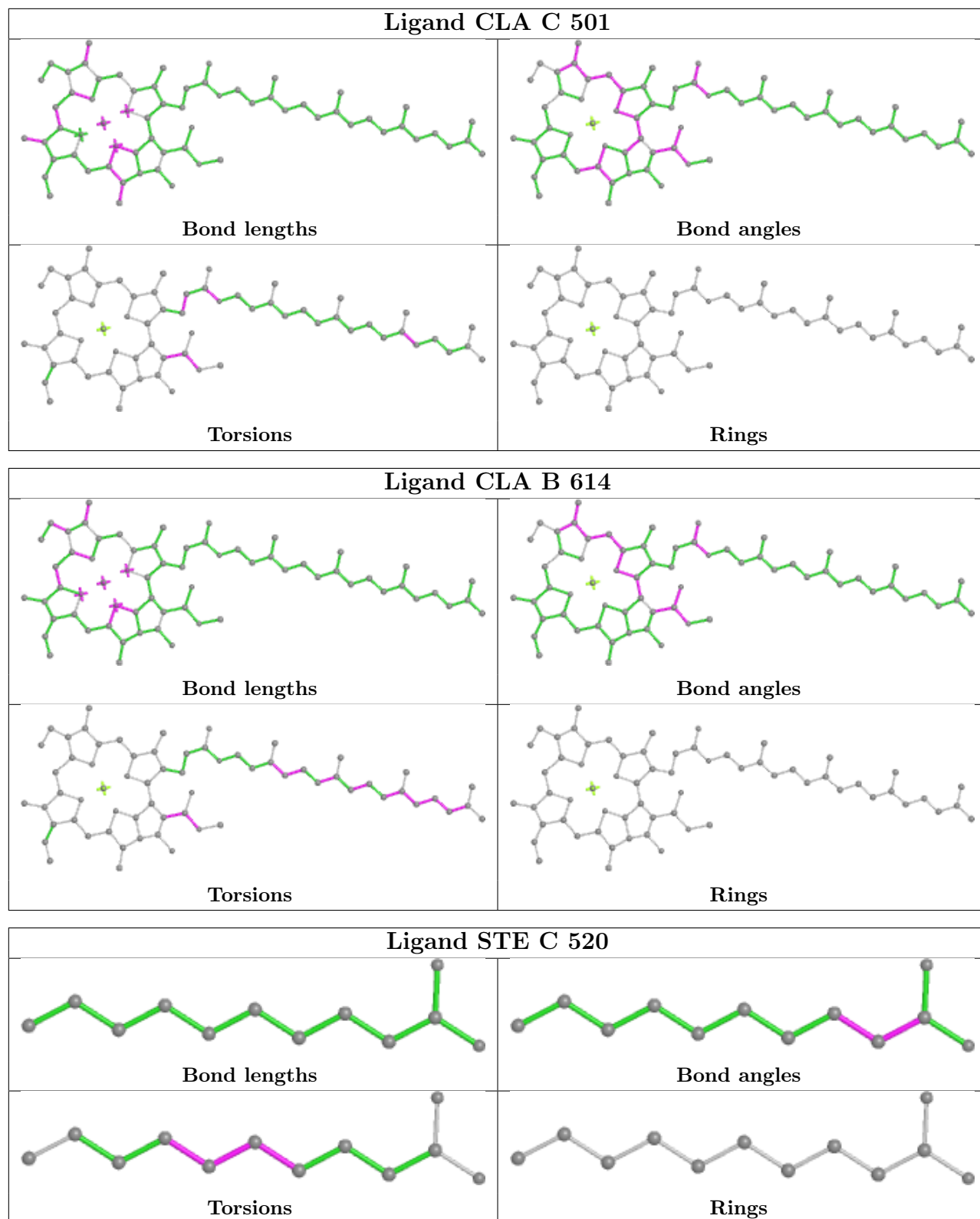


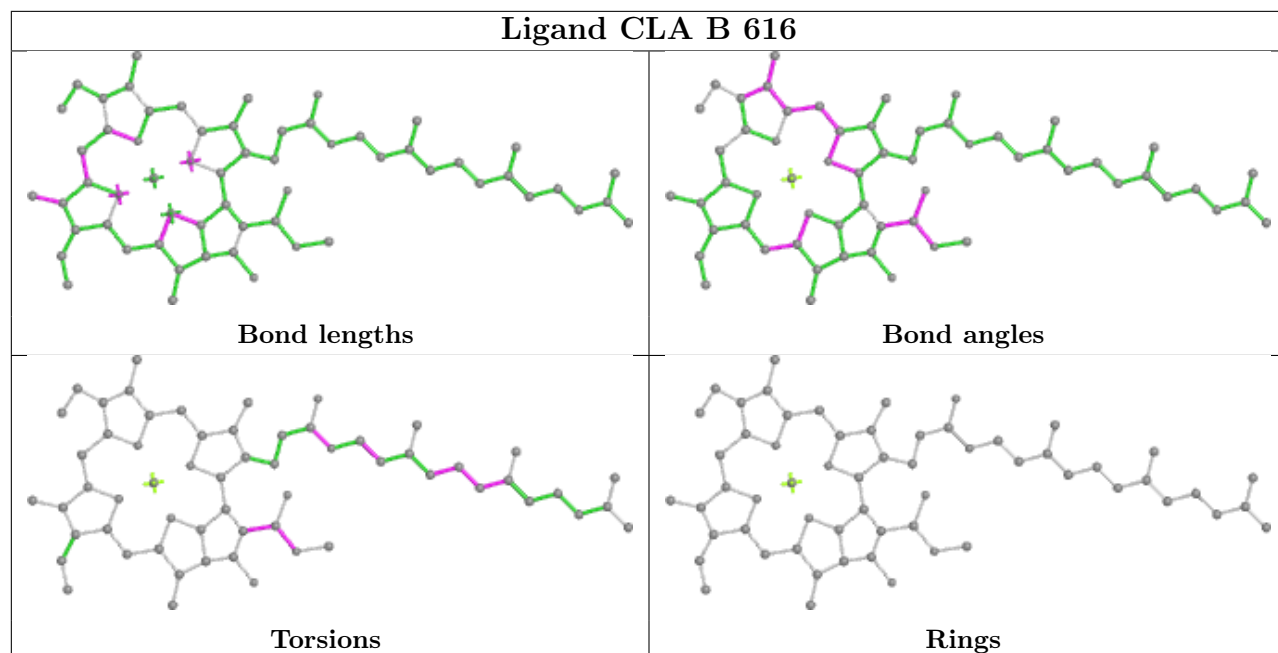












5.7 Other polymers [i](#)

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, 95th 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 ²)	Q<0.9
1	A	334/344 (97%)	-0.30	3 (0%) 84 88	24, 31, 50, 83	0
1	a	334/344 (97%)	-0.29	1 (0%) 94 95	26, 33, 59, 81	0
2	B	505/510 (99%)	-0.28	9 (1%) 68 75	26, 35, 63, 86	0
2	b	505/510 (99%)	-0.12	15 (2%) 50 59	28, 39, 70, 108	0
3	C	442/461 (95%)	-0.22	2 (0%) 91 93	28, 38, 54, 78	0
3	c	451/461 (97%)	-0.07	12 (2%) 54 63	29, 42, 63, 101	0
4	D	341/352 (96%)	-0.27	0 100 100	25, 33, 49, 81	0
4	d	341/352 (96%)	-0.24	1 (0%) 94 95	26, 37, 61, 83	0
5	E	82/84 (97%)	0.12	6 (7%) 15 21	35, 54, 70, 84	0
5	e	82/84 (97%)	0.34	4 (4%) 29 38	41, 60, 81, 90	0
6	F	34/45 (75%)	-0.37	1 (2%) 51 61	38, 46, 62, 86	0
6	f	34/45 (75%)	-0.26	1 (2%) 51 61	45, 53, 79, 90	0
7	H	65/66 (98%)	-0.05	1 (1%) 73 79	34, 42, 57, 74	0
7	h	63/66 (95%)	0.32	4 (6%) 20 27	43, 53, 64, 67	0
8	I	35/38 (92%)	-0.27	1 (2%) 51 61	34, 41, 66, 78	0
8	i	35/38 (92%)	-0.14	2 (5%) 23 32	35, 42, 70, 89	0
9	J	36/40 (90%)	0.06	3 (8%) 11 15	36, 50, 82, 91	0
9	j	36/40 (90%)	0.31	4 (11%) 5 7	40, 57, 91, 102	0
10	K	37/46 (80%)	0.20	1 (2%) 54 63	44, 52, 66, 72	0
10	k	37/46 (80%)	-0.06	1 (2%) 54 63	53, 57, 76, 83	0
11	L	37/37 (100%)	-0.28	0 100 100	27, 32, 61, 64	0
11	l	36/37 (97%)	-0.27	2 (5%) 24 33	28, 33, 72, 92	0
12	M	32/36 (88%)	-0.05	0 100 100	30, 35, 62, 72	0
12	m	31/36 (86%)	-0.17	0 100 100	30, 36, 57, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	244/272 (89%)	0.07	15 (6%) 21 28	29, 45, 82, 141	0
13	o	244/272 (89%)	0.04	16 (6%) 18 24	30, 44, 79, 131	0
14	T	29/32 (90%)	-0.22	1 (3%) 45 53	29, 34, 60, 78	0
14	t	29/32 (90%)	-0.16	2 (6%) 16 23	31, 35, 70, 88	0
15	U	97/134 (72%)	-0.18	2 (2%) 63 71	34, 46, 71, 98	0
15	u	97/134 (72%)	-0.32	0 100 100	34, 43, 58, 83	0
16	V	137/163 (84%)	-0.39	0 100 100	32, 43, 56, 76	0
16	v	137/163 (84%)	-0.02	3 (2%) 62 69	37, 49, 71, 88	0
17	Y	27/46 (58%)	1.20	7 (25%) 0 0	52, 71, 95, 98	0
17	y	30/46 (65%)	0.55	2 (6%) 17 24	64, 77, 85, 100	0
18	X	38/41 (92%)	0.11	2 (5%) 26 35	44, 52, 68, 71	0
18	x	39/41 (95%)	0.25	5 (12%) 3 5	50, 61, 85, 100	0
19	Z	62/62 (100%)	0.83	15 (24%) 0 0	55, 69, 112, 127	0
19	z	62/62 (100%)	0.84	8 (12%) 3 5	63, 77, 115, 117	0
20	R	34/41 (82%)	1.54	12 (35%) 0 0	61, 70, 81, 89	0
20	r	31/41 (75%)	3.15	22 (70%) 0 0	72, 88, 113, 121	0
All	All	5302/5700 (93%)	-0.09	186 (3%) 44 52	24, 40, 75, 141	0

All (186) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	o	58	ASN	9.0
13	O	60	ARG	7.4
19	Z	33	TRP	7.0
13	o	3	GLN	6.7
18	X	2	THR	6.7
13	O	3	GLN	6.6
20	r	28	VAL	6.6
20	r	26	TYR	6.4
5	e	79	PHE	6.4
13	O	4	THR	6.3
20	r	29	LYS	5.9
2	b	495	PHE	5.7
3	c	23	ALA	5.6
19	z	33	TRP	5.6
13	o	56	PRO	5.5

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Mol	Chain	Res	Type	RSRZ
2	b	127	ARG	5.2
19	Z	32	ASP	5.1
20	R	3	TRP	5.1
20	r	3	TRP	5.1
3	c	143	TYR	5.1
13	o	61	GLN	5.1
19	Z	62	VAL	4.9
13	O	56	PRO	4.9
14	T	30	THR	4.9
20	r	24	LEU	4.8
20	r	13	LEU	4.8
20	r	14	LEU	4.7
13	o	62	GLU	4.7
20	r	25	PRO	4.7
9	j	6	GLY	4.7
13	O	62	GLU	4.6
13	o	4	THR	4.6
13	O	59	LYS	4.6
13	o	60	ARG	4.6
9	j	5	GLY	4.5
20	r	2	ASP	4.5
13	o	57	LYS	4.5
1	A	13	LEU	4.3
3	c	24	THR	4.3
13	o	59	LYS	4.2
18	x	38	GLN	4.1
5	E	79	PHE	4.0
19	z	3	ILE	4.0
13	O	57	LYS	4.0
20	r	31	VAL	4.0
9	j	7	ARG	3.9
20	R	21	ARG	3.9
7	h	6	TRP	3.8
20	R	6	LEU	3.8
18	x	2	THR	3.7
19	z	35	ARG	3.7
9	J	5	GLY	3.7
20	r	7	VAL	3.7
14	t	30	THR	3.7
9	j	8	ILE	3.6
1	A	11	ALA	3.6
19	Z	41	PHE	3.6

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Mol	Chain	Res	Type	RSRZ
1	a	11	ALA	3.6
6	F	12	SER	3.6
13	O	58	ASN	3.5
17	Y	20	ALA	3.5
20	r	9	LEU	3.5
17	y	40	ALA	3.4
20	r	18	TRP	3.4
2	b	491	VAL	3.4
19	Z	3	ILE	3.4
19	Z	40	ILE	3.4
2	B	294	SER	3.3
3	c	147	PHE	3.3
2	b	289	GLN	3.3
9	J	7	ARG	3.3
5	E	3	GLY	3.3
9	J	6	GLY	3.3
19	Z	35	ARG	3.3
2	b	161	LEU	3.3
14	t	29	ILE	3.2
17	Y	40	ALA	3.2
19	z	62	VAL	3.2
18	X	3	ILE	3.2
8	i	36	ASP	3.1
3	c	29	GLU	3.1
20	r	19	ALA	3.1
3	c	262	ARG	3.1
20	R	28	VAL	3.1
19	Z	38	GLN	3.0
20	R	14	LEU	3.0
20	r	10	LEU	3.0
13	o	246	ALA	3.0
20	r	6	LEU	3.0
3	c	146	PHE	3.0
20	r	27	ALA	3.0
2	b	506	ARG	2.9
16	v	16	GLY	2.9
2	B	495	PHE	2.9
19	z	41	PHE	2.9
13	O	61	GLN	2.9
17	Y	22	LEU	2.9
17	Y	43	ARG	2.9
5	E	84	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
13	o	5	LEU	2.9
7	h	21	VAL	2.8
20	r	21	ARG	2.8
20	r	32	GLN	2.8
5	e	61	ARG	2.7
19	Z	1	MET	2.7
13	O	63	ALA	2.7
20	R	32	GLN	2.7
3	C	146	PHE	2.7
17	y	37	PHE	2.7
19	Z	31	GLN	2.7
10	k	17	ILE	2.6
2	B	505	ARG	2.6
6	f	12	SER	2.6
17	Y	21	GLN	2.6
19	z	30	PRO	2.6
19	Z	7	LEU	2.6
19	Z	61	VAL	2.6
20	R	29	LYS	2.6
19	Z	42	LEU	2.5
13	o	63	ALA	2.5
5	e	82	GLN	2.5
3	C	143	TYR	2.5
19	Z	30	PRO	2.5
20	R	20	VAL	2.5
3	c	261	ARG	2.5
20	R	2	ASP	2.5
19	z	4	LEU	2.4
20	R	31	VAL	2.4
13	O	246	ALA	2.4
5	E	83	LEU	2.4
2	b	374	ASN	2.4
7	h	25	TRP	2.4
18	x	39	ARG	2.4
13	O	54	GLU	2.3
15	U	68	THR	2.3
13	o	54	GLU	2.3
16	v	21	LEU	2.3
4	d	227[A]	GLU	2.3
19	z	60	PHE	2.3
5	E	61	ARG	2.3
13	o	245	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
2	b	295	GLY	2.3
7	H	65	LEU	2.3
13	o	207	ARG	2.3
20	r	5	VAL	2.3
20	r	12	VAL	2.3
8	i	34	ARG	2.3
20	r	4	ARG	2.3
17	Y	25	ILE	2.2
11	l	7	ARG	2.2
2	b	126	PRO	2.2
11	l	3	PRO	2.2
2	B	490	GLN	2.2
18	x	40	SER	2.2
2	B	485	GLU	2.2
2	B	496	TYR	2.2
15	U	8	GLU	2.2
2	b	505	ARG	2.2
16	v	17	LYS	2.2
8	I	34	ARG	2.2
13	O	5	LEU	2.1
2	b	485	GLU	2.1
1	A	12	ASN	2.1
2	B	295	GLY	2.1
20	R	26	TYR	2.1
2	B	293	ALA	2.1
5	e	71	GLU	2.1
3	c	25	ASN	2.1
2	b	86	ILE	2.1
2	b	490	GLN	2.1
3	c	52	ALA	2.1
5	E	82	GLN	2.1
7	h	10	ILE	2.1
13	O	35	SER	2.1
2	b	373	LYS	2.1
10	K	10	LYS	2.1
13	o	132	ASN	2.0
3	c	191	PRO	2.0
20	R	24	LEU	2.0
3	c	55	ALA	2.0
19	Z	60	PHE	2.0
13	O	32	ILE	2.0
18	x	3	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
17	Y	23	THR	2.0
2	b	237	VAL	2.0
2	B	127	ARG	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, 95th 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 ²)	Q<0.9
14	FME	t	1	10/11	0.91	0.11	35,42,63,65	0
12	FME	m	1	10/11	0.93	0.18	32,53,69,70	0
14	FME	T	1	10/11	0.94	0.12	36,44,53,66	0
8	FME	i	1	10/11	0.94	0.15	38,52,60,65	0
12	FME	M	1	10/11	0.95	0.19	41,53,66,68	0
8	FME	I	1	10/11	0.97	0.14	39,52,59,61	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [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, 95th 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 ²)	Q<0.9
32	STE	H	103	18/20	0.70	0.28	56,63,72,72	0
32	STE	a	616	12/20	0.71	0.20	41,57,67,73	0
29	LMG	D	412	33/55	0.74	0.20	36,52,75,79	0
32	STE	c	522	12/20	0.77	0.22	58,68,79,85	0
29	LMG	d	410	23/55	0.78	0.27	51,61,75,75	0
32	STE	R	101	12/20	0.78	0.25	61,68,87,87	0
31	DGD	a	614	44/66	0.78	0.18	40,54,74,82	0
32	STE	B	625	16/20	0.78	0.26	46,60,71,71	0
32	STE	b	621	20/20	0.80	0.19	42,56,70,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	STE	b	623	16/20	0.80	0.20	50,60,78,82	0
32	STE	X	101	20/20	0.80	0.17	38,48,68,69	0
32	STE	I	101	15/20	0.81	0.16	43,53,69,73	0
32	STE	C	520	12/20	0.81	0.14	38,44,61,64	0
29	LMG	b	622	55/55	0.81	0.26	53,66,81,85	0
32	STE	b	625	20/20	0.81	0.18	49,58,70,73	0
32	STE	a	615	10/20	0.81	0.20	43,51,57,58	0
32	STE	C	522	16/20	0.82	0.15	44,49,57,59	0
28	PL9	a	611	55/55	0.82	0.23	45,63,78,82	0
29	LMG	c	521	48/55	0.82	0.25	41,68,89,92	0
32	STE	L	103	12/20	0.82	0.16	48,53,65,67	0
32	STE	l	102	18/20	0.82	0.16	32,44,65,68	0
28	PL9	A	611	55/55	0.83	0.25	43,59,72,76	0
32	STE	c	520	20/20	0.83	0.22	50,54,77,81	0
32	STE	B	620	17/20	0.83	0.16	39,49,62,64	0
32	STE	d	413	20/20	0.83	0.22	45,55,66,67	0
32	STE	M	103	10/20	0.83	0.18	30,45,53,58	0
32	STE	t	104	18/20	0.83	0.16	43,52,77,83	0
25	CLA	b	601	65/65	0.84	0.18	46,66,83,93	0
32	STE	b	620	16/20	0.84	0.20	38,49,62,63	0
27	BCR	H	101	40/40	0.84	0.16	33,44,52,55	0
30	SQD	t	102	36/54	0.84	0.17	34,53,67,70	0
31	DGD	A	615	66/66	0.84	0.18	47,59,68,71	0
34	LHG	E	101	49/49	0.84	0.21	46,74,91,94	0
27	BCR	h	101	40/40	0.86	0.14	40,52,63,66	0
29	LMG	c	519	37/55	0.86	0.17	47,62,72,74	0
29	LMG	B	621	28/55	0.86	0.16	37,49,60,61	0
29	LMG	c	523	49/55	0.86	0.16	36,50,78,82	0
29	LMG	C	519	48/55	0.86	0.18	44,62,77,82	0
27	BCR	K	102	40/40	0.86	0.15	40,50,58,62	0
32	STE	b	626	10/20	0.87	0.21	47,49,57,58	0
32	STE	B	624	12/20	0.87	0.35	51,55,65,71	0
32	STE	J	101	12/20	0.87	0.11	50,59,67,68	0
32	STE	d	412	17/20	0.87	0.15	44,54,69,70	0
25	CLA	c	513	65/65	0.87	0.19	48,62,83,88	0
29	LMG	A	612	48/55	0.87	0.15	43,54,65,71	0
30	SQD	B	622	54/54	0.87	0.17	38,58,78,81	0
30	SQD	L	101	49/54	0.87	0.16	37,53,76,83	0
34	LHG	e	102	42/49	0.87	0.26	62,79,89,95	0
27	BCR	D	406	40/40	0.88	0.16	32,43,69,72	0
29	LMG	m	101	51/55	0.88	0.13	33,47,64,67	0
30	SQD	A	614	39/54	0.88	0.17	39,53,69,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
32	STE	B	623	12/20	0.88	0.14	37,49,57,59	0
25	CLA	c	512	65/65	0.88	0.15	41,55,79,83	0
32	STE	t	103	14/20	0.88	0.12	39,46,53,62	0
32	STE	M	102	15/20	0.88	0.16	40,46,55,60	0
27	BCR	k	101	40/40	0.88	0.14	52,61,69,72	0
29	LMG	M	101	51/55	0.88	0.13	30,49,64,69	0
25	CLA	C	513	65/65	0.89	0.17	48,56,82,87	0
27	BCR	d	405	40/40	0.89	0.13	43,49,83,87	0
32	STE	j	101	12/20	0.89	0.13	51,59,64,67	0
32	STE	C	521	12/20	0.89	0.14	44,51,56,56	0
30	SQD	f	101	41/54	0.90	0.17	63,74,84,88	0
25	CLA	C	512	65/65	0.90	0.16	35,46,77,84	0
27	BCR	k	102	40/40	0.90	0.20	49,53,60,67	0
25	CLA	B	601	65/65	0.90	0.13	38,54,75,79	0
31	DGD	H	102	62/66	0.91	0.12	31,41,52,54	0
25	CLA	b	616	60/65	0.91	0.13	31,42,75,83	0
32	STE	b	624	15/20	0.91	0.14	45,52,70,74	0
31	DGD	C	517	62/66	0.92	0.13	35,46,84,99	0
27	BCR	B	618	40/40	0.92	0.13	28,38,49,52	0
27	BCR	C	514	40/40	0.92	0.12	31,39,45,54	0
25	CLA	C	502	65/65	0.92	0.13	31,38,46,54	0
25	CLA	c	502	65/65	0.92	0.13	33,40,48,57	0
27	BCR	K	101	40/40	0.92	0.13	37,54,60,63	0
25	CLA	c	508	64/65	0.92	0.14	35,43,81,94	0
27	BCR	b	619	40/40	0.92	0.12	33,47,61,63	0
29	LMG	D	408	51/55	0.92	0.15	34,46,66,70	0
27	BCR	c	514	40/40	0.92	0.13	48,57,63,67	0
25	CLA	a	609	65/65	0.92	0.12	23,30,69,73	0
25	CLA	B	606	65/65	0.92	0.12	27,37,57,68	0
29	LMG	d	411	44/55	0.93	0.12	43,52,72,79	0
25	CLA	c	506	65/65	0.93	0.12	40,46,72,75	0
27	BCR	b	618	40/40	0.93	0.11	25,36,47,48	0
25	CLA	C	511	65/65	0.93	0.11	31,46,58,60	0
30	SQD	D	409	36/54	0.93	0.15	45,62,74,79	0
25	CLA	C	501	65/65	0.93	0.13	27,35,44,46	0
30	SQD	a	613	54/54	0.93	0.15	38,55,77,82	0
25	CLA	b	614	65/65	0.93	0.14	30,38,66,71	0
25	CLA	b	615	65/65	0.93	0.12	28,38,50,54	0
25	CLA	B	616	60/65	0.93	0.14	28,36,71,73	0
25	CLA	D	405	65/65	0.93	0.13	27,33,90,96	0
31	DGD	C	518	62/66	0.93	0.12	33,43,68,70	0
27	BCR	t	101	40/40	0.93	0.10	27,38,45,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
25	CLA	c	503	65/65	0.93	0.14	36,44,48,54	0
31	DGD	c	517	62/66	0.93	0.12	42,48,78,81	0
25	CLA	c	504	60/65	0.93	0.10	29,43,64,72	0
31	DGD	h	102	62/66	0.94	0.11	32,44,53,56	0
25	CLA	C	508	65/65	0.94	0.11	32,38,86,92	0
25	CLA	c	505	65/65	0.94	0.14	32,38,54,55	0
28	PL9	D	407	55/55	0.94	0.11	23,31,40,43	0
25	CLA	C	510	65/65	0.94	0.12	31,42,51,67	0
25	CLA	c	507	65/65	0.94	0.12	34,41,51,56	0
25	CLA	A	609	54/65	0.94	0.10	25,30,57,59	0
25	CLA	c	510	65/65	0.94	0.14	36,45,51,58	0
25	CLA	c	511	65/65	0.94	0.12	41,55,63,66	0
25	CLA	B	609	65/65	0.94	0.13	27,38,47,55	0
25	CLA	B	614	65/65	0.94	0.16	25,33,63,67	0
25	CLA	d	404	65/65	0.94	0.12	33,41,71,83	0
27	BCR	B	617	40/40	0.94	0.11	26,39,45,49	0
25	CLA	B	615	65/65	0.94	0.11	28,36,53,59	0
27	BCR	B	619	40/40	0.94	0.10	31,40,53,54	0
25	CLA	A	607	65/65	0.94	0.13	23,33,70,78	0
27	BCR	C	515	40/40	0.94	0.15	35,47,57,62	0
25	CLA	B	602	65/65	0.94	0.14	30,37,48,56	0
25	CLA	b	602	65/65	0.94	0.13	30,40,52,56	0
25	CLA	b	604	65/65	0.94	0.12	26,33,58,73	0
25	CLA	b	606	65/65	0.94	0.11	30,38,62,71	0
27	BCR	T	101	40/40	0.94	0.09	31,40,46,50	0
27	BCR	b	617	40/40	0.94	0.12	35,43,49,51	0
25	CLA	b	609	65/65	0.94	0.13	30,42,55,66	0
25	CLA	b	613	65/65	0.94	0.15	25,31,66,71	0
25	CLA	B	604	65/65	0.94	0.12	24,31,59,63	0
31	DGD	C	516	62/66	0.94	0.12	26,34,66,70	0
27	BCR	c	515	40/40	0.94	0.11	33,45,54,56	0
25	CLA	C	503	65/65	0.94	0.14	34,42,46,51	0
25	CLA	C	505	65/65	0.94	0.15	23,36,60,62	0
25	CLA	C	506	65/65	0.94	0.12	32,43,72,77	0
31	DGD	c	516	62/66	0.94	0.11	30,41,60,64	0
25	CLA	C	507	65/65	0.94	0.12	29,37,49,56	0
34	LHG	d	407	49/49	0.94	0.14	33,46,62,63	0
31	DGD	c	518	62/66	0.94	0.13	34,46,69,77	0
28	PL9	d	406	55/55	0.95	0.12	23,34,38,42	0
25	CLA	a	612	65/65	0.95	0.10	24,31,38,46	0
25	CLA	C	509	65/65	0.95	0.15	32,39,52,56	0
25	CLA	B	603	65/65	0.95	0.14	23,31,46,51	0

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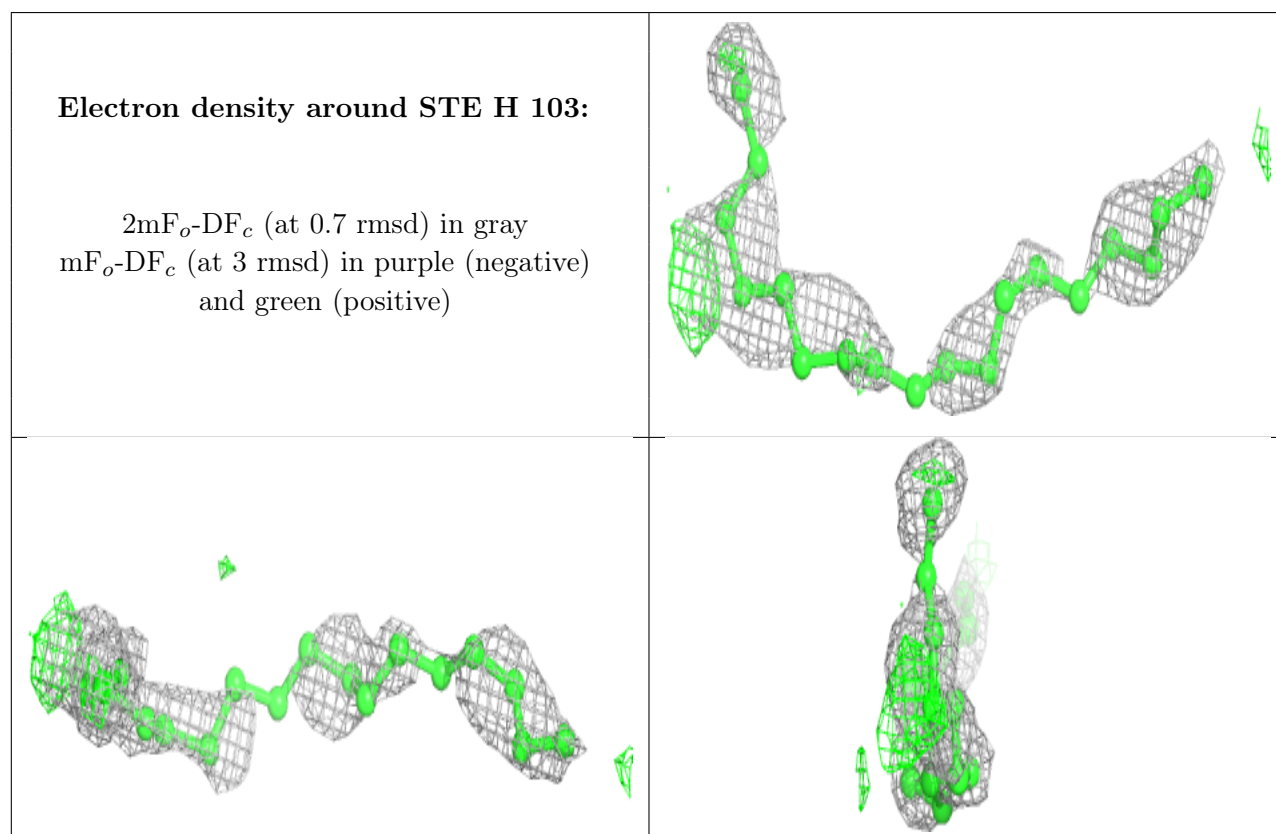
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
25	CLA	b	603	65/65	0.95	0.12	26,32,58,66	0
25	CLA	C	504	59/65	0.95	0.11	31,38,68,74	0
24	CL	a	605	1/1	0.95	0.06	38,38,38,38	0
25	CLA	b	608	65/65	0.95	0.12	33,39,54,58	0
25	CLA	c	509	65/65	0.95	0.15	37,45,57,59	0
25	CLA	B	610	65/65	0.95	0.13	23,31,38,41	0
25	CLA	b	610	65/65	0.95	0.17	29,36,44,53	0
25	CLA	b	611	65/65	0.95	0.12	25,33,48,51	0
25	CLA	b	612	65/65	0.95	0.15	21,34,39,47	0
25	CLA	d	403	65/65	0.95	0.10	25,33,49,61	0
30	SQD	A	613	52/54	0.95	0.15	36,52,71,78	0
25	CLA	B	612	65/65	0.95	0.14	24,31,37,46	0
26	PHO	a	608	64/64	0.95	0.12	24,30,36,41	0
26	PHO	d	402	64/64	0.95	0.10	32,38,44,46	0
27	BCR	A	610	40/40	0.95	0.09	24,33,38,41	0
34	LHG	D	411	47/49	0.95	0.12	30,42,63,74	0
34	LHG	D	413	49/49	0.95	0.13	30,39,58,61	0
25	CLA	a	606	65/65	0.95	0.10	23,30,37,48	0
34	LHG	L	102	49/49	0.95	0.14	30,38,48,57	0
25	CLA	a	607	65/65	0.95	0.12	28,38,82,87	0
34	LHG	d	409	39/49	0.95	0.12	36,43,58,59	0
25	CLA	B	613	65/65	0.95	0.12	22,29,60,64	0
34	LHG	l	101	49/49	0.95	0.11	28,41,49,52	0
25	CLA	B	605	65/65	0.96	0.13	25,31,42,46	0
25	CLA	D	403	65/65	0.96	0.09	21,29,38,41	0
25	CLA	D	404	65/65	0.96	0.11	22,28,48,52	0
26	PHO	A	608	64/64	0.96	0.10	23,29,35,38	0
26	PHO	D	402	64/64	0.96	0.14	27,34,39,41	0
25	CLA	A	606	65/65	0.96	0.09	20,28,39,42	0
27	BCR	a	610	40/40	0.96	0.08	23,33,43,49	0
25	CLA	B	611	65/65	0.96	0.14	23,30,43,47	0
25	CLA	b	605	65/65	0.96	0.12	24,34,43,50	0
25	CLA	B	607	65/65	0.96	0.10	21,30,55,65	0
34	LHG	d	408	49/49	0.96	0.12	30,39,46,48	0
25	CLA	b	607	65/65	0.96	0.12	23,31,58,62	0
25	CLA	c	501	65/65	0.96	0.12	32,37,48,50	0
25	CLA	B	608	65/65	0.96	0.12	26,32,48,53	0
35	HEM	F	101	43/43	0.96	0.10	37,49,58,66	0
35	HEM	e	101	43/43	0.96	0.13	53,59,76,87	0
34	LHG	D	410	49/49	0.97	0.11	30,36,46,55	0
24	CL	a	604	1/1	0.97	0.04	38,38,38,38	0
24	CL	A	604	1/1	0.97	0.08	36,36,36,36	0

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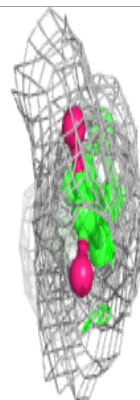
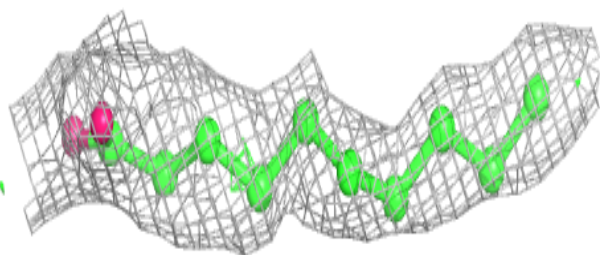
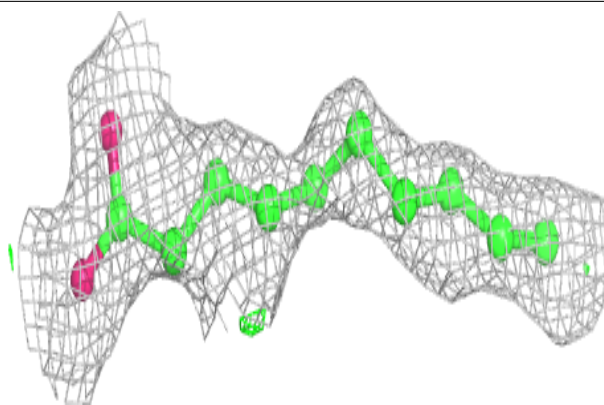
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
33	BCT	d	401	4/4	0.97	0.15	36,36,40,46	0
36	HEC	V	201	43/43	0.97	0.11	28,34,39,49	0
36	HEC	v	201	43/43	0.97	0.11	32,38,45,48	0
33	BCT	D	401	4/4	0.98	0.15	35,35,38,38	0
21	OEY	A	601[B]	11/11	0.98	0.12	29,32,34,34	11
22	OEX	A	602[A]	10/10	0.98	0.12	26,36,38,39	10
22	OEX	a	602[A]	10/10	0.98	0.10	29,35,38,43	10
23	FE2	A	603	1/1	0.99	0.06	34,34,34,34	0
23	FE2	a	603	1/1	0.99	0.04	36,36,36,36	0
21	OEY	a	601[B]	11/11	0.99	0.09	28,32,34,35	11
24	CL	A	605	1/1	0.99	0.03	36,36,36,36	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.

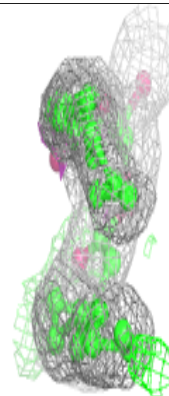
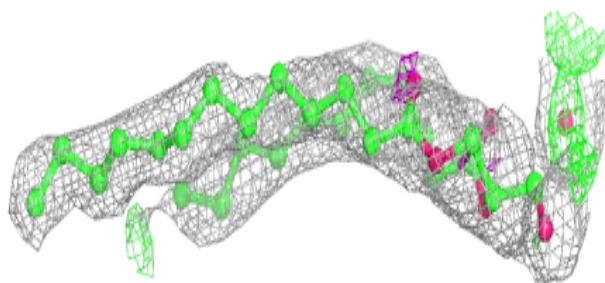
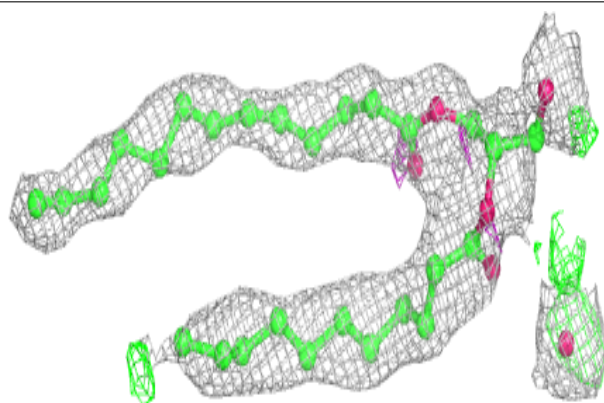


Electron density around STE a 616:

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

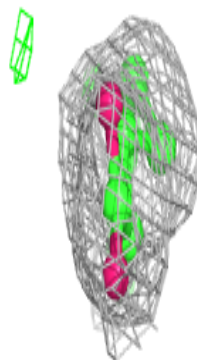
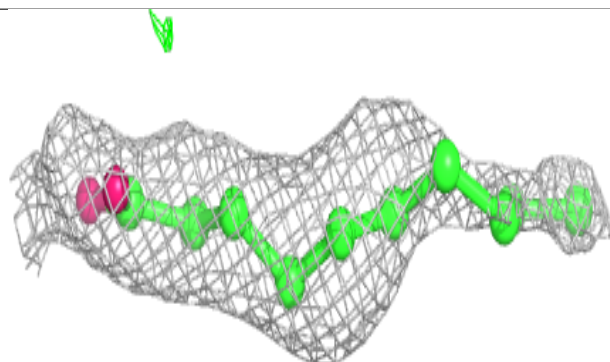
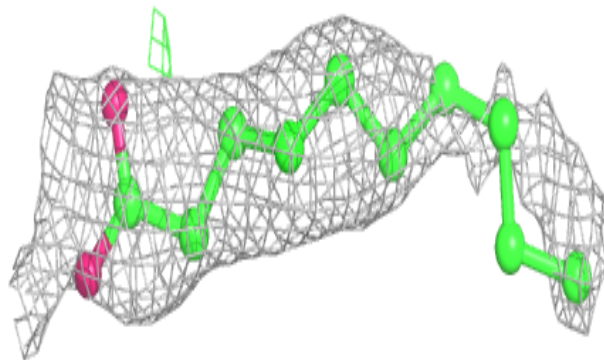
**Electron density around LMG D 412:**

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

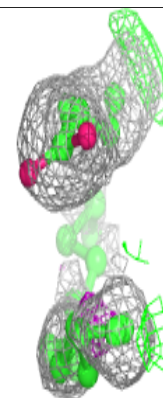
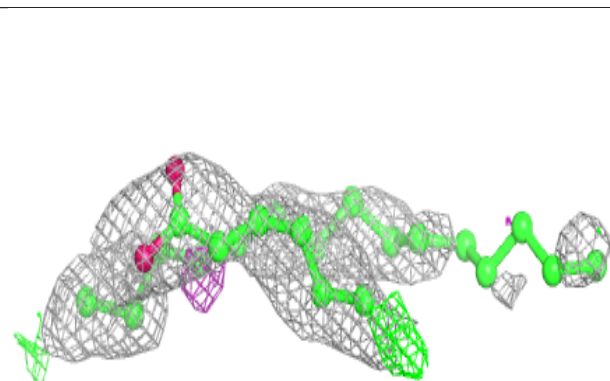
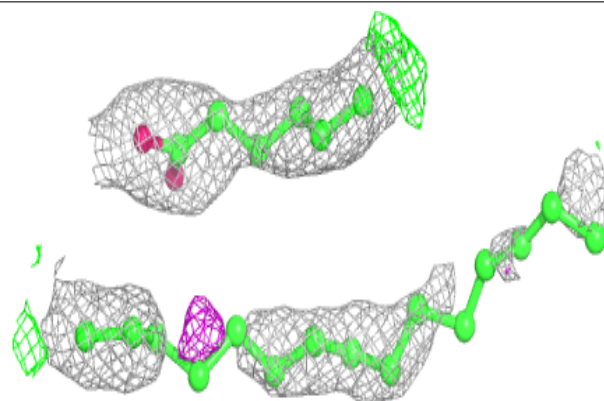


Electron density around STE c 522:

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

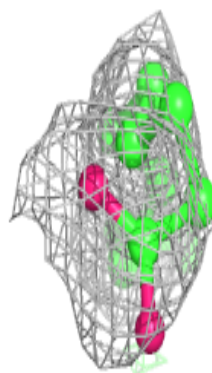
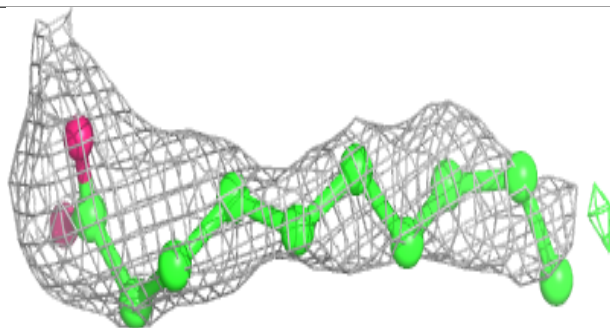
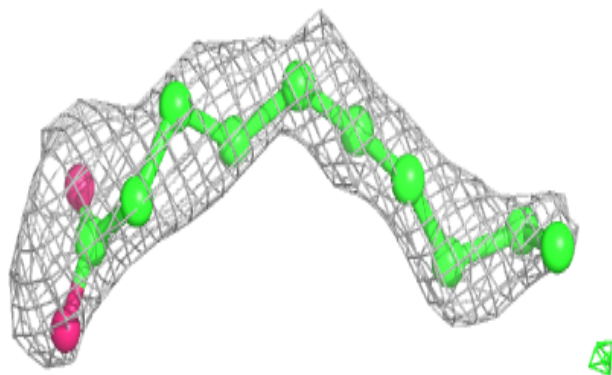
**Electron density around LMG d 410:**

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

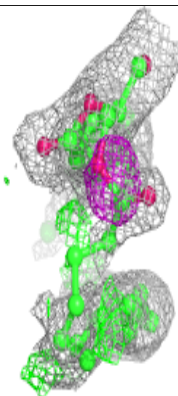
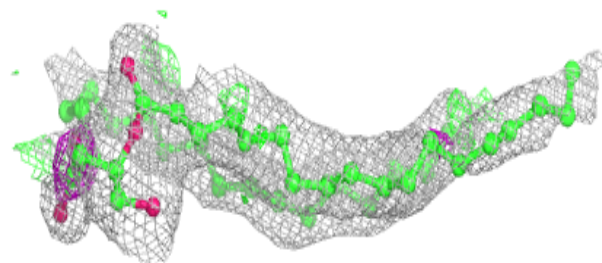
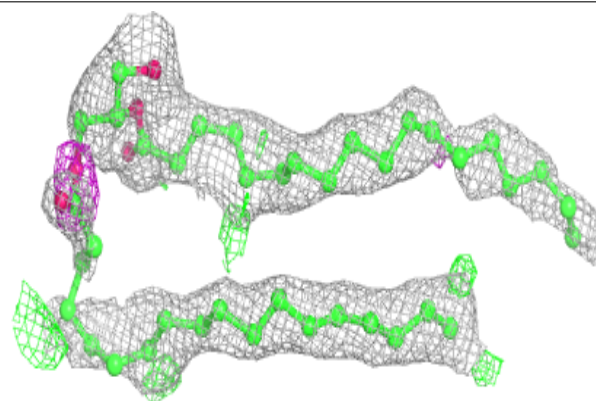


Electron density around STE R 101:

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

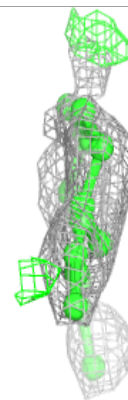
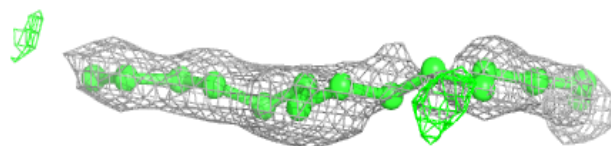
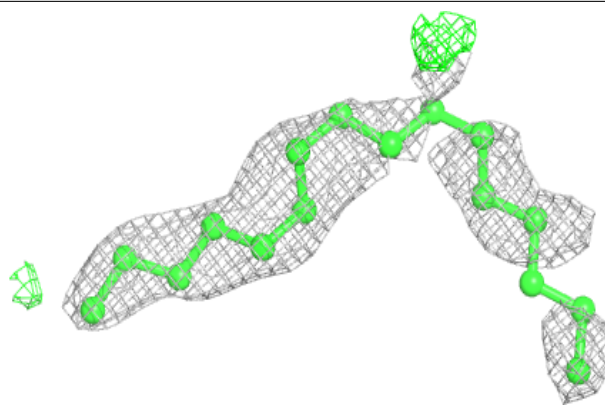
**Electron density around DGD a 614:**

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

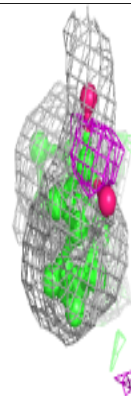
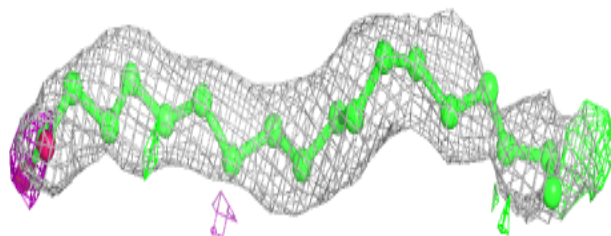
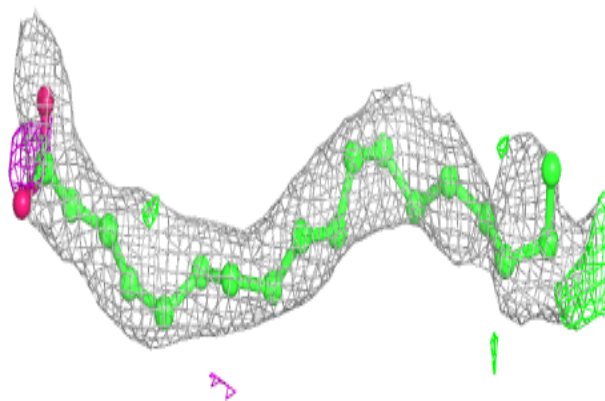


Electron density around STE B 625:

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

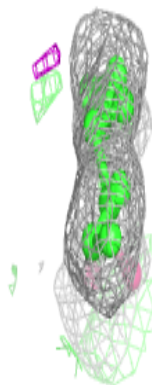
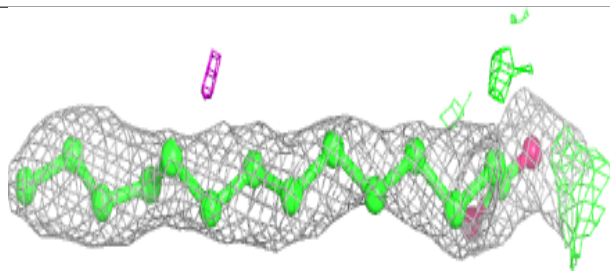
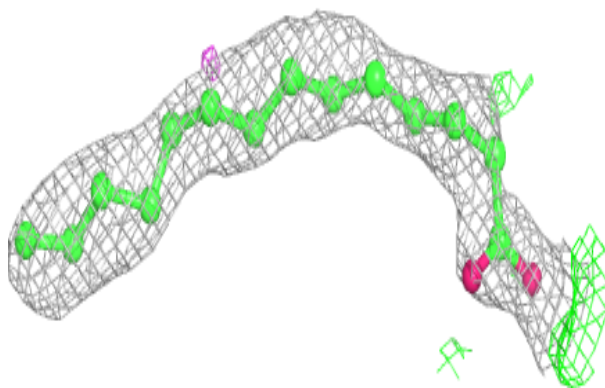
**Electron density around STE b 621:**

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

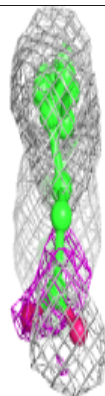
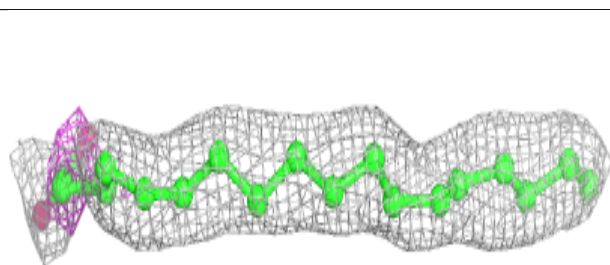
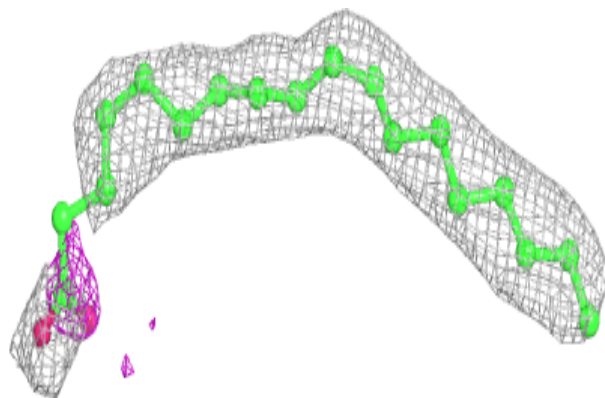


Electron density around STE b 623:

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

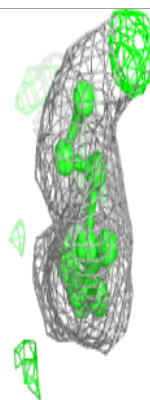
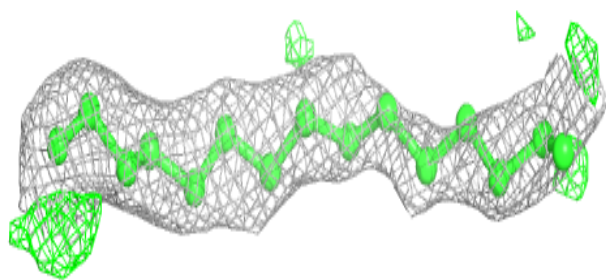
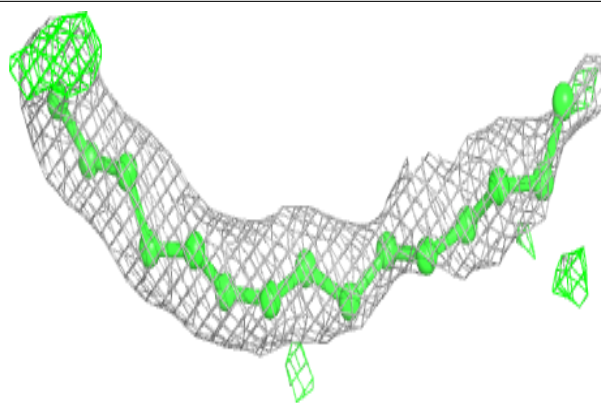
**Electron density around STE X 101:**

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

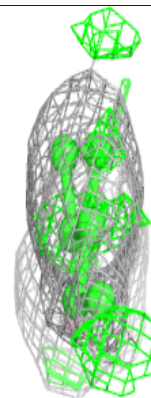
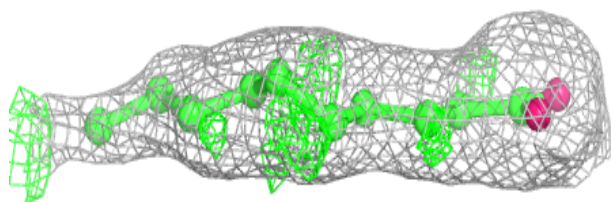
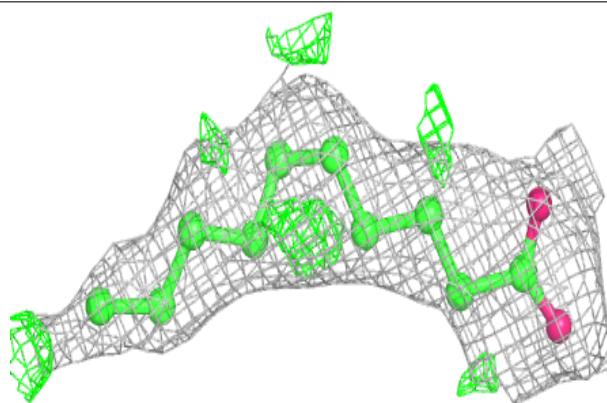


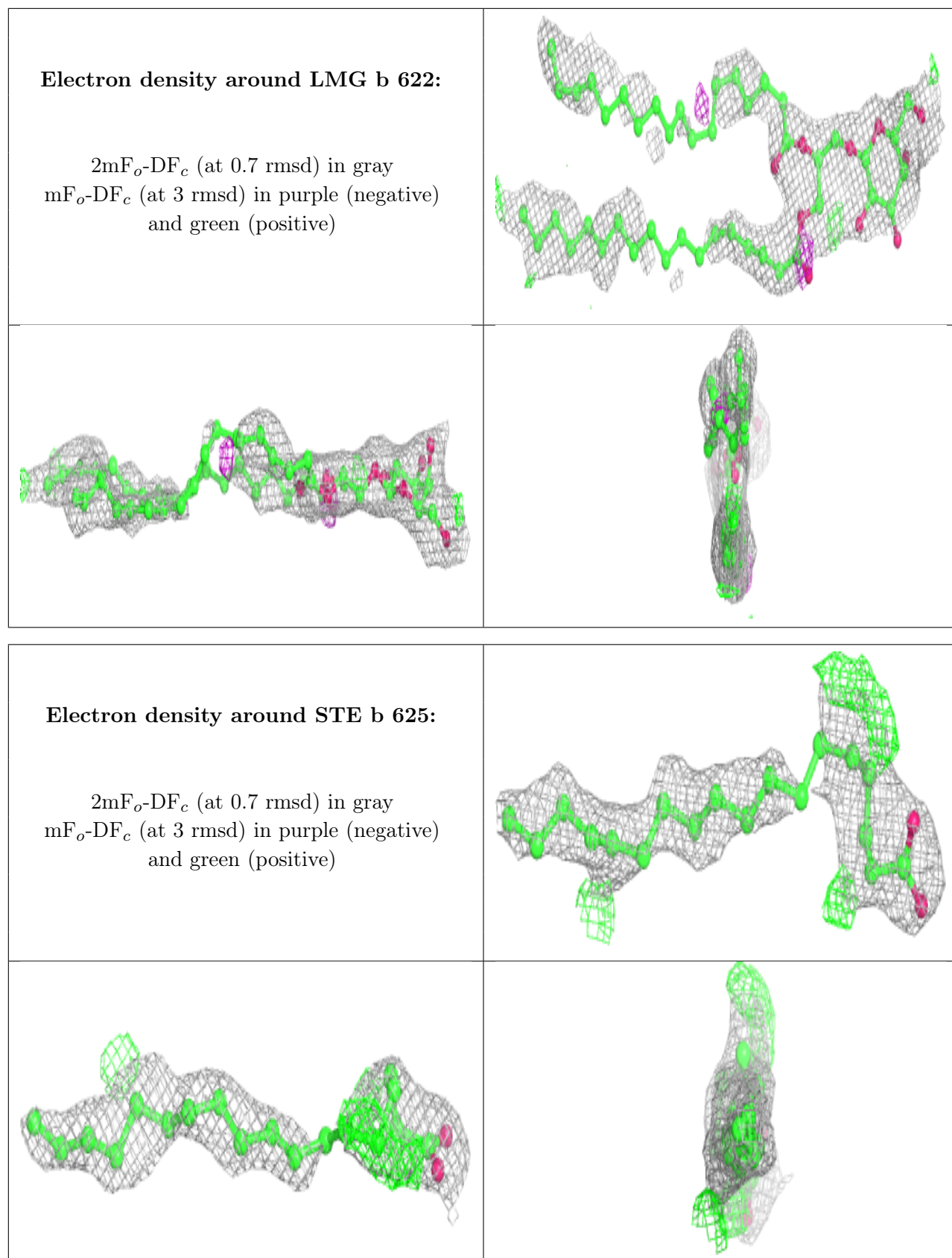
Electron density around STE I 101:

$2mF_o-DF_c$ (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:**

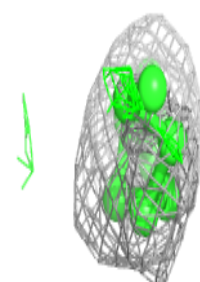
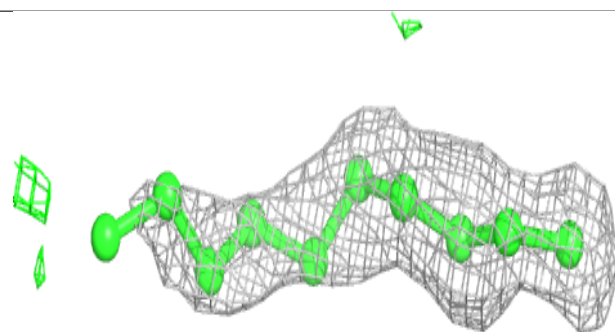
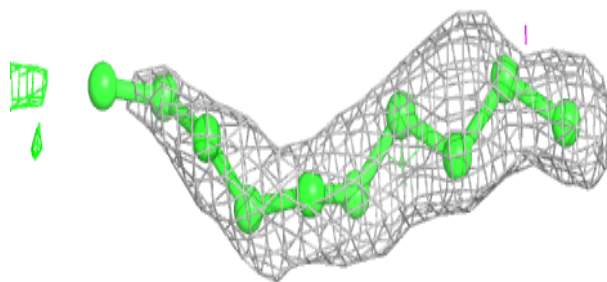
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



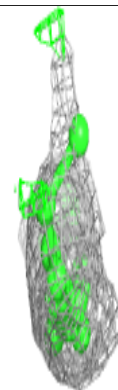
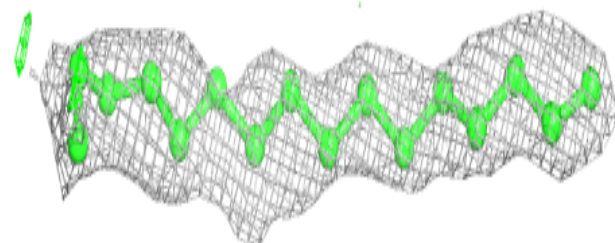
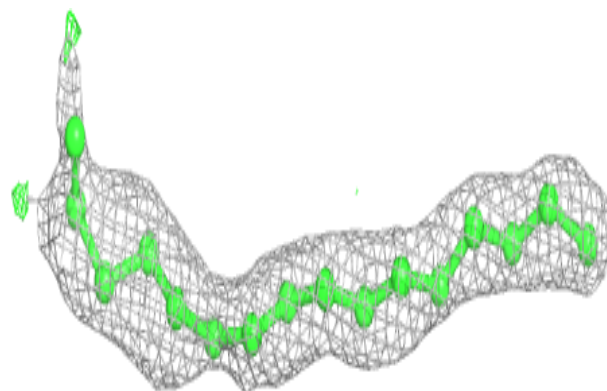


Electron density around STE a 615:

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

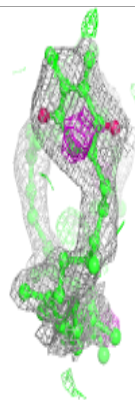
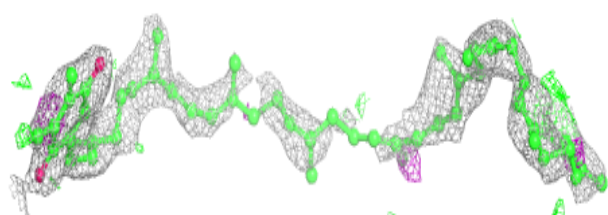
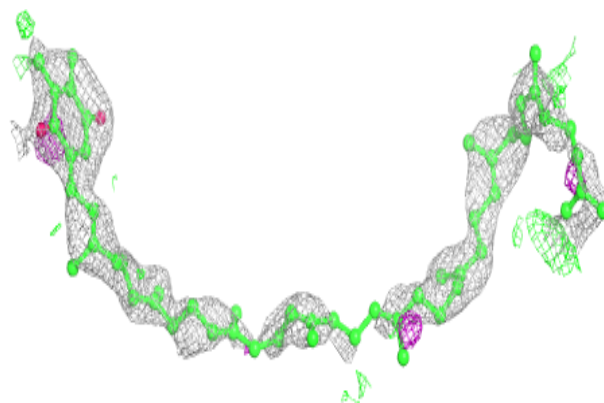
**Electron density around STE C 522:**

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

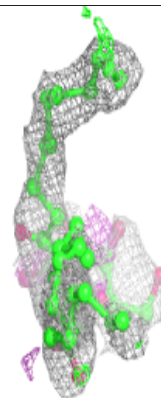
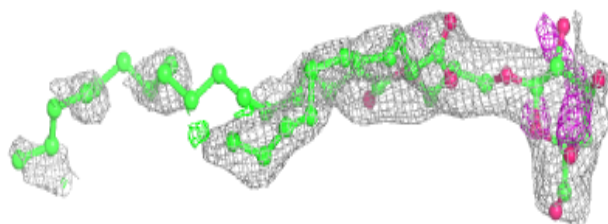
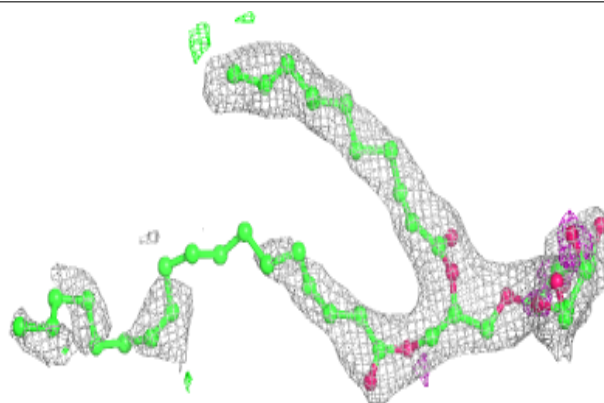


Electron density around PL9 a 611:

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

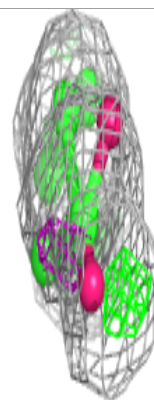
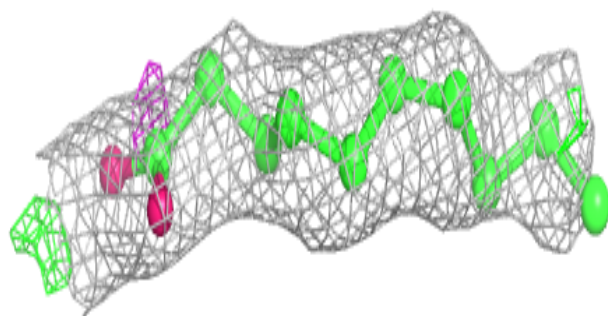
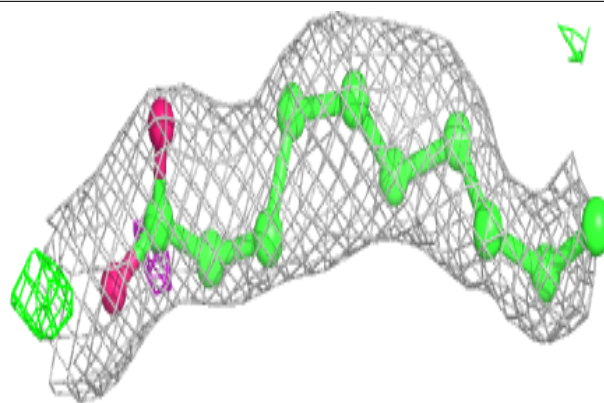
**Electron density around LMG c 521:**

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

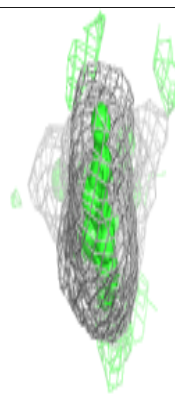
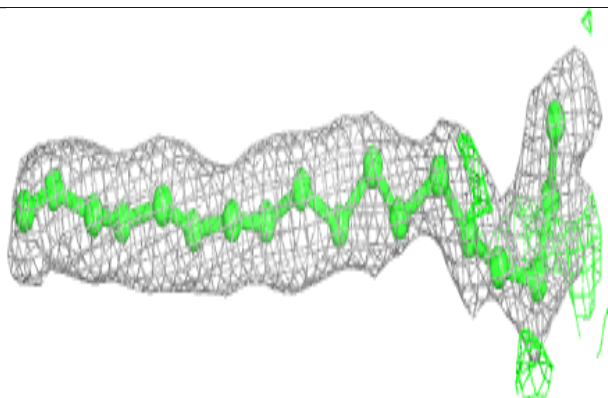
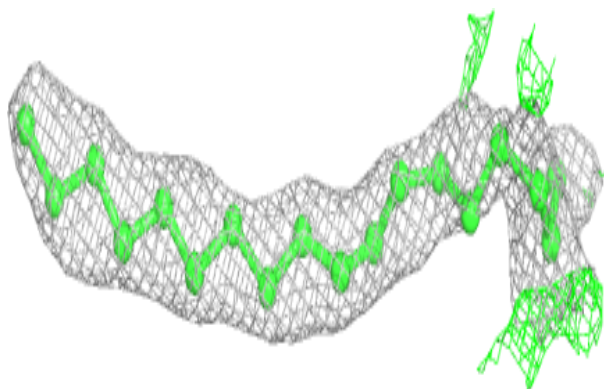


Electron density around STE L 103:

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

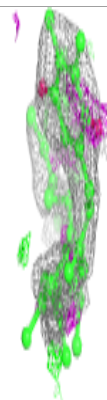
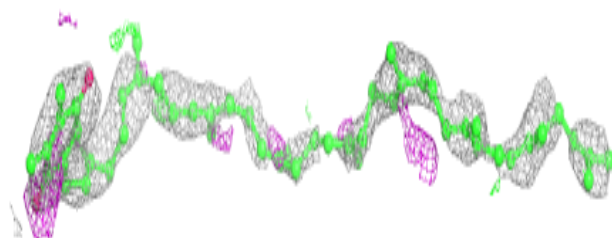
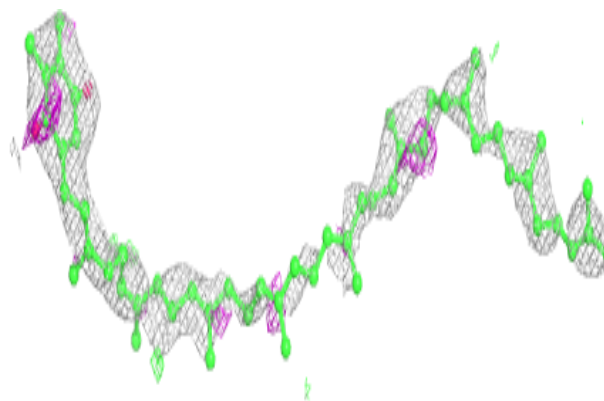
**Electron density around STE I 102:**

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

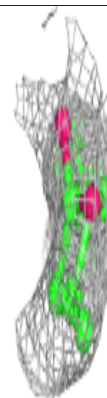
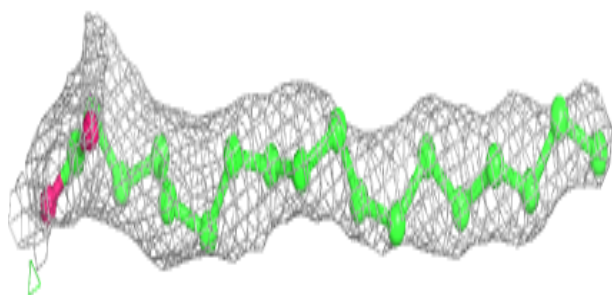
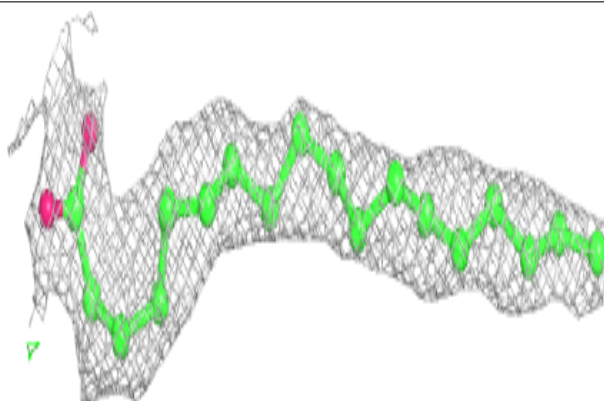


Electron density around PL9 A 611:

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

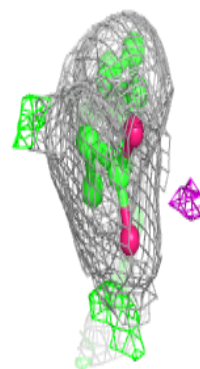
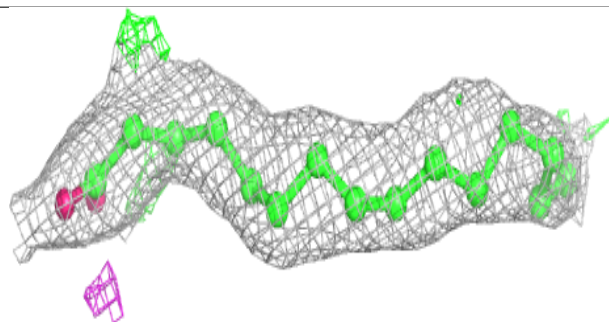
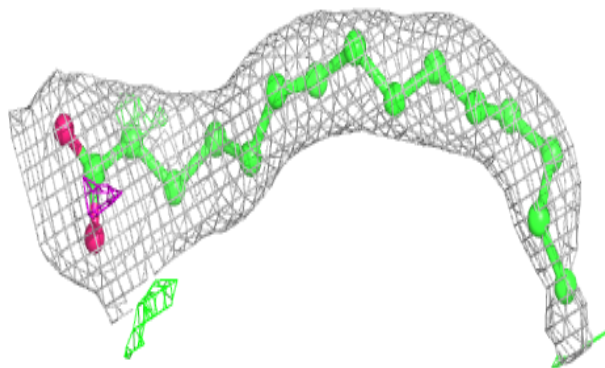
**Electron density around STE c 520:**

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

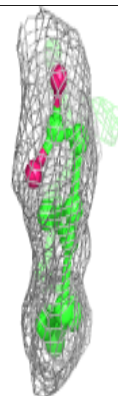
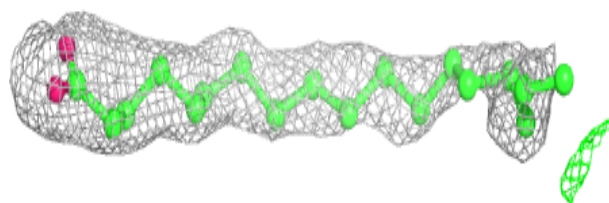
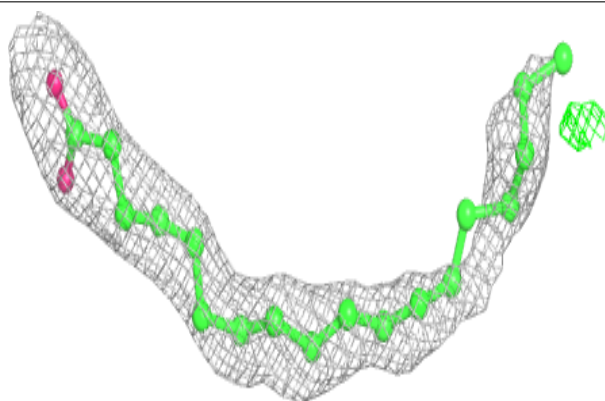


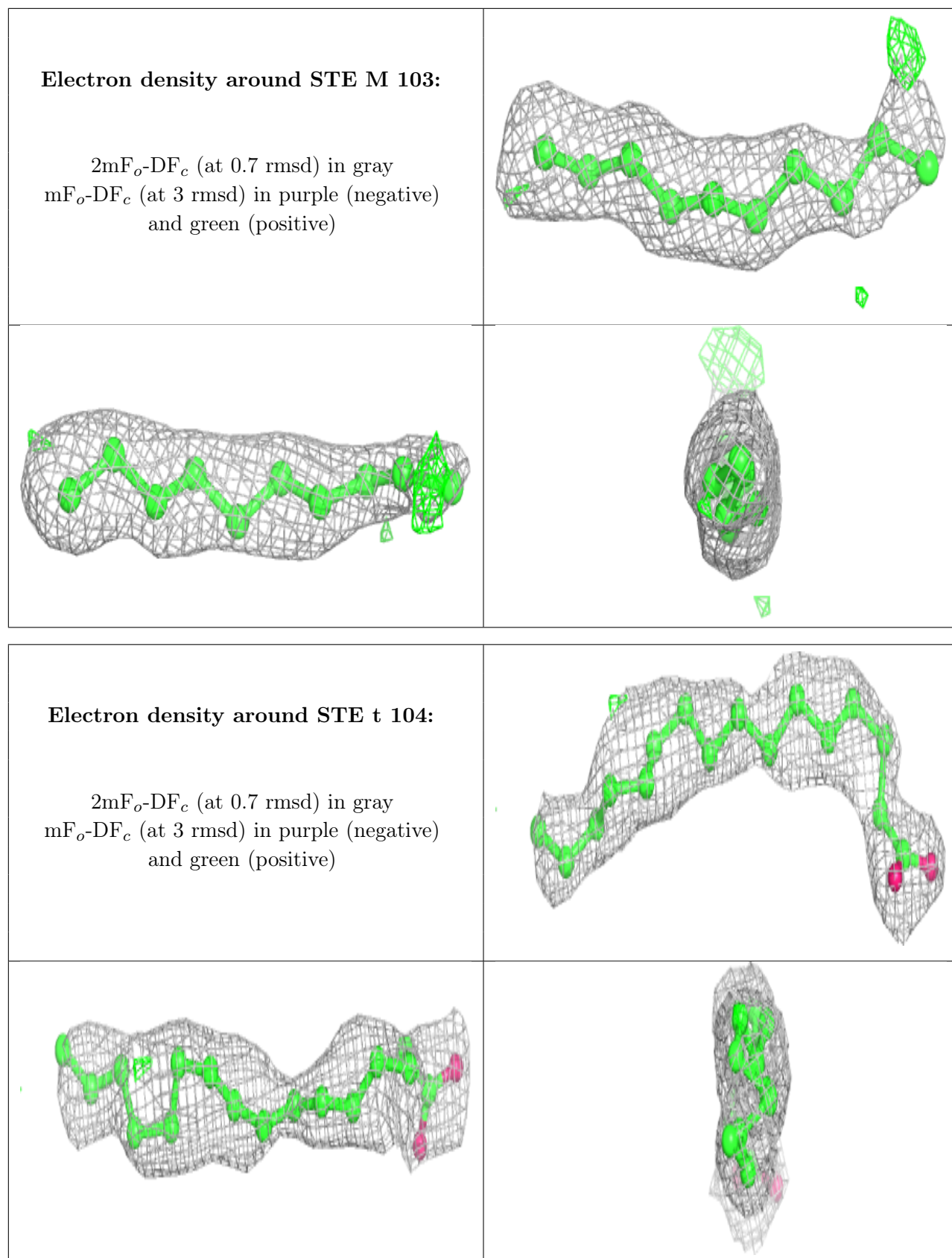
Electron density around STE B 620:

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

**Electron density around STE d 413:**

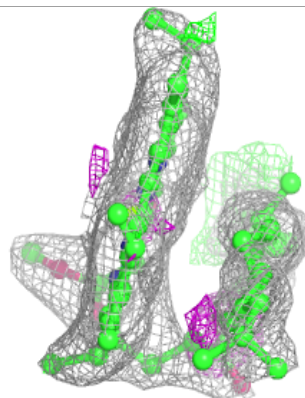
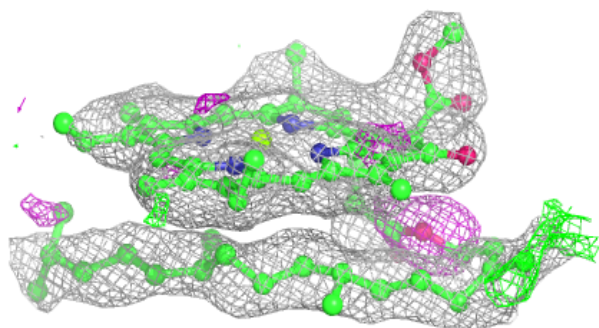
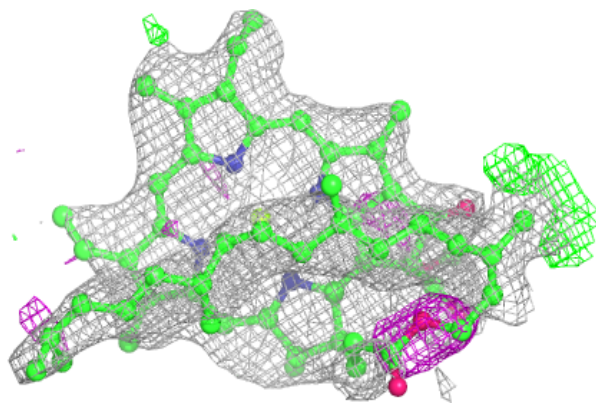
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



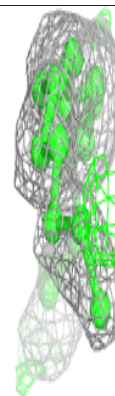
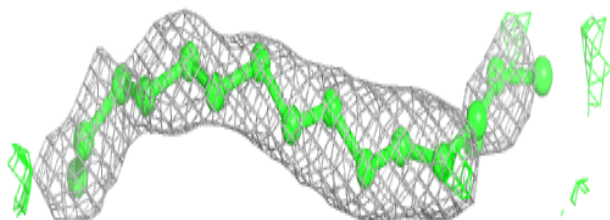
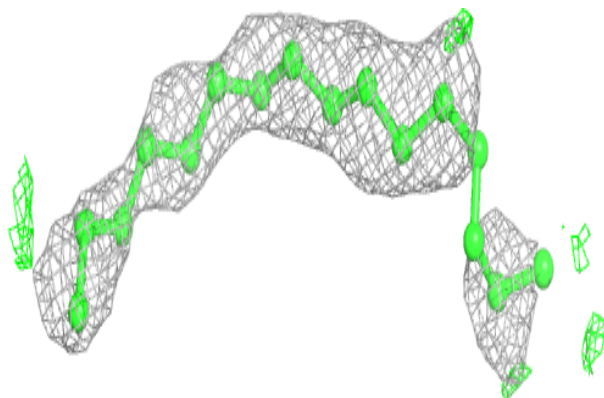


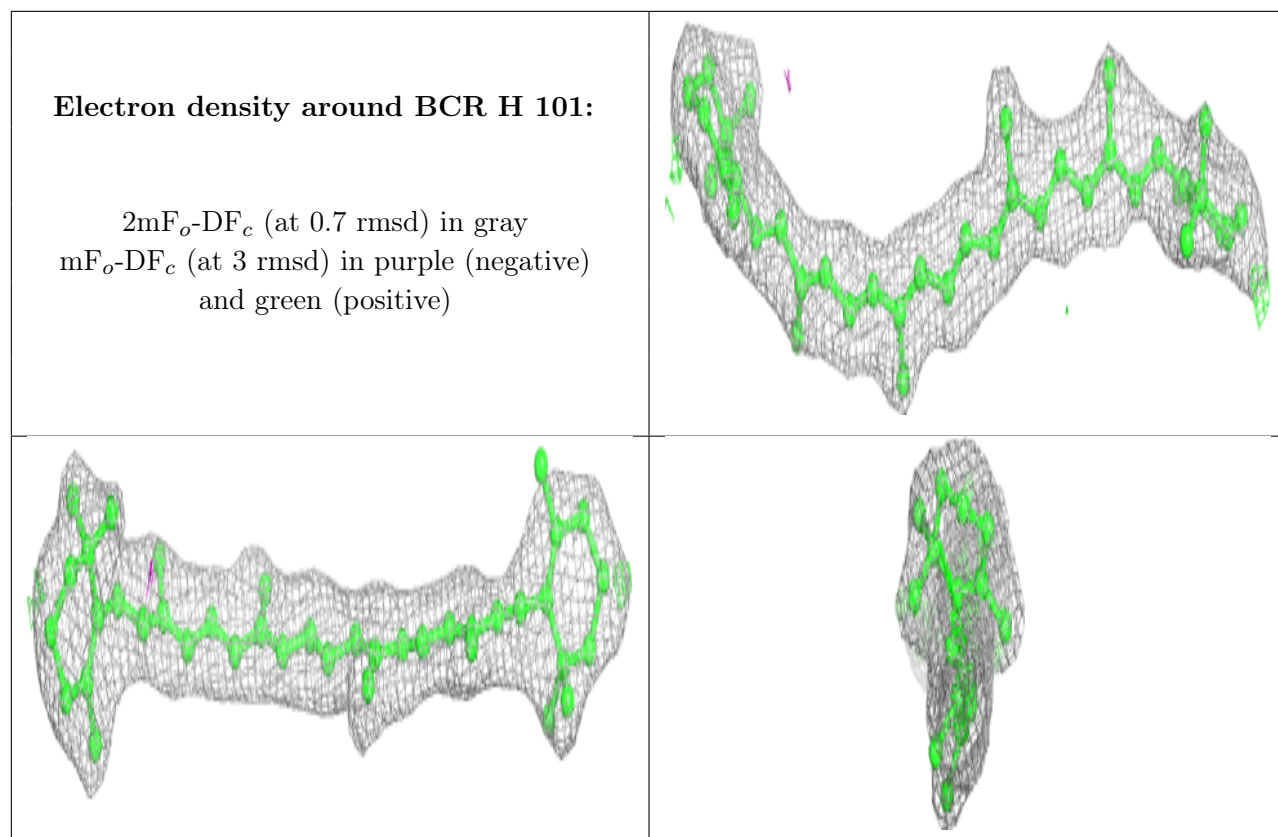
Electron density around CLA b 601:

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

**Electron density around STE b 620:**

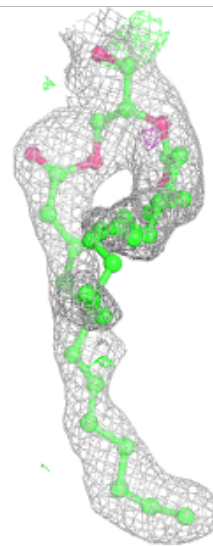
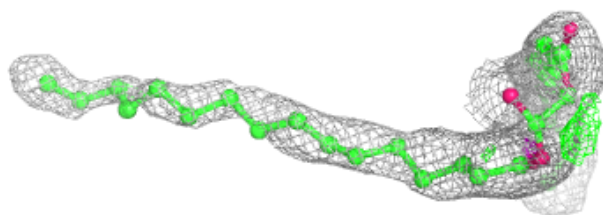
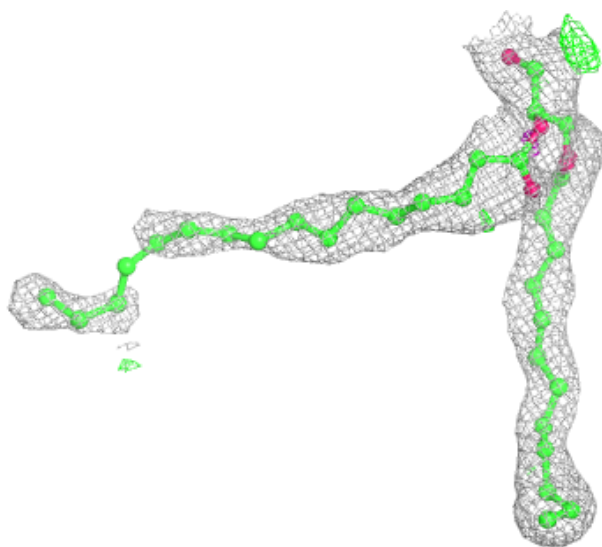
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

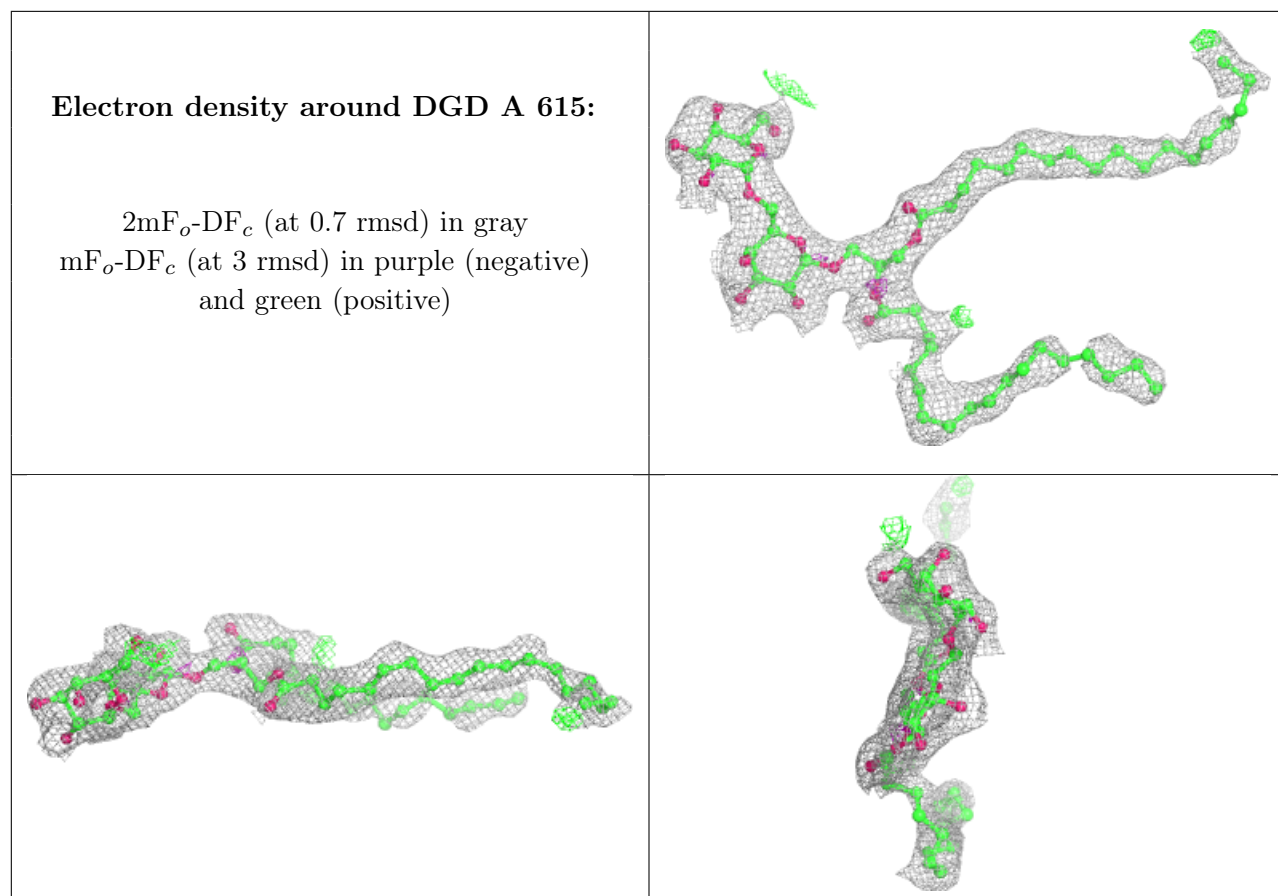




Electron density around SQD t 102:

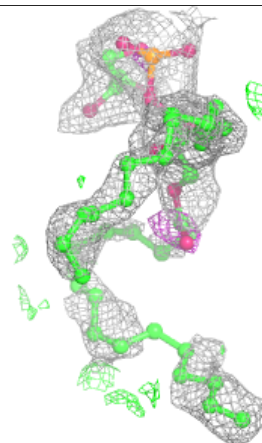
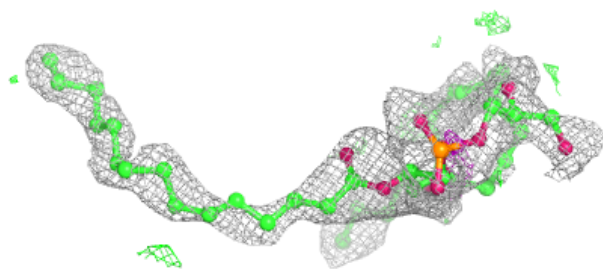
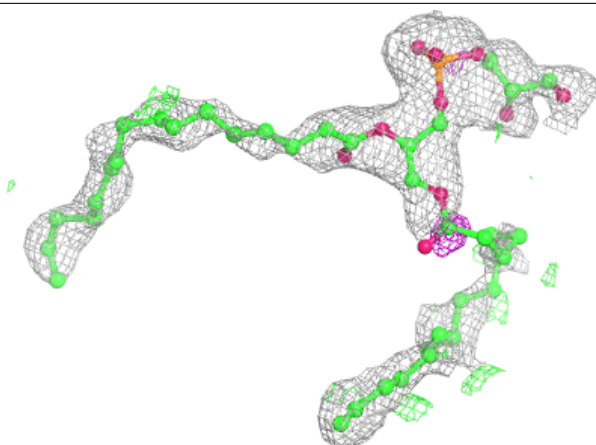
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



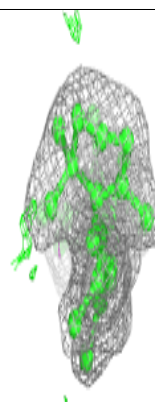
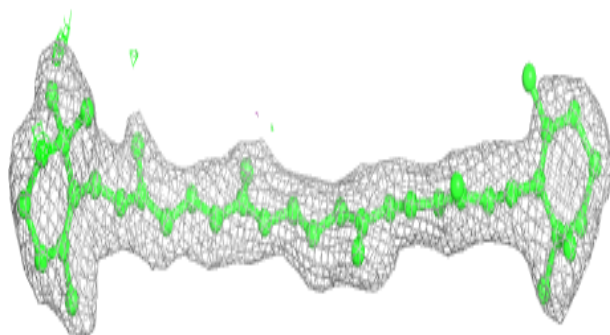
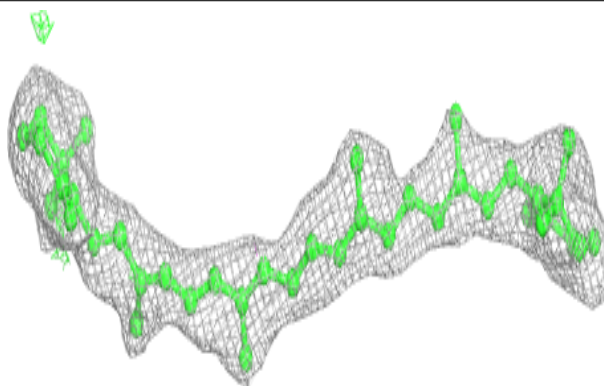


Electron density around LHG E 101:

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

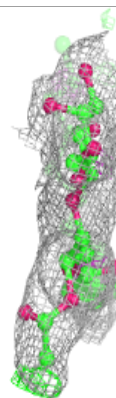
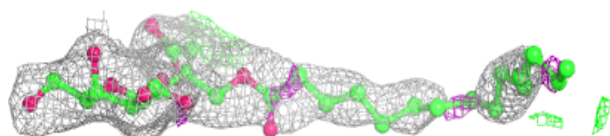
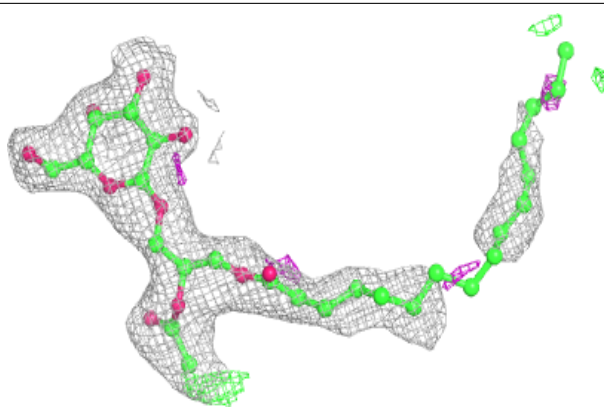
**Electron density around BCR h 101:**

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

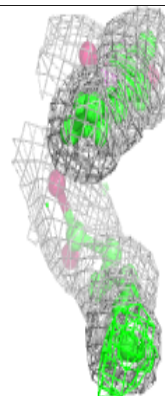
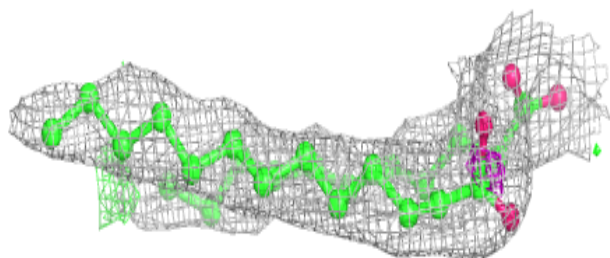
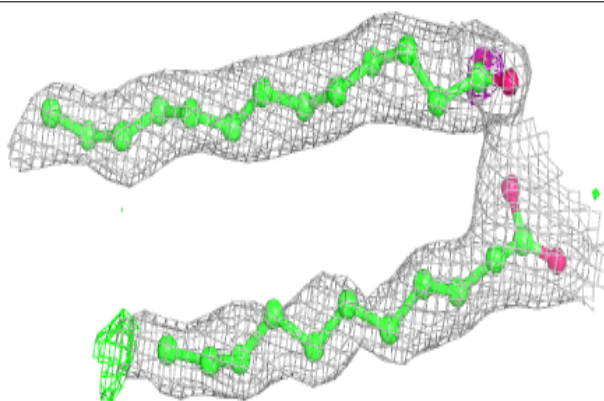


Electron density around LMG c 519:

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

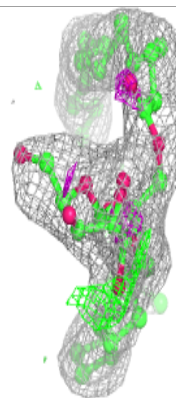
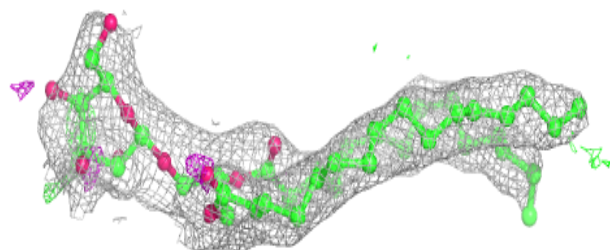
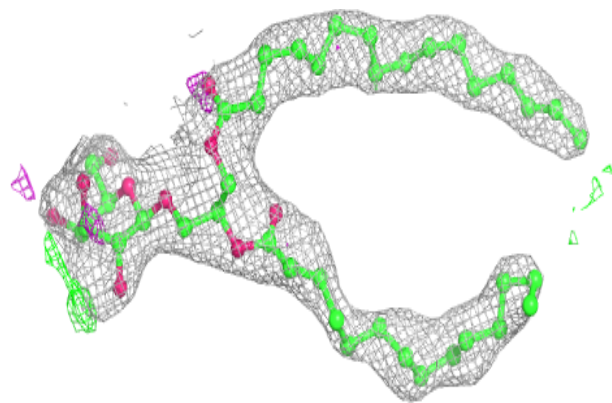
**Electron density around LMG B 621:**

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



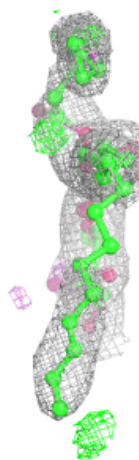
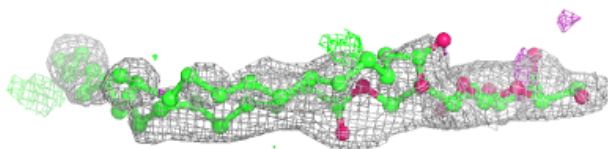
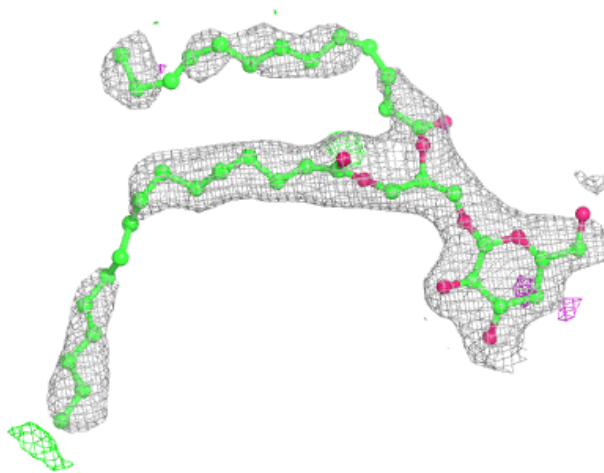
Electron density around LMG c 523:

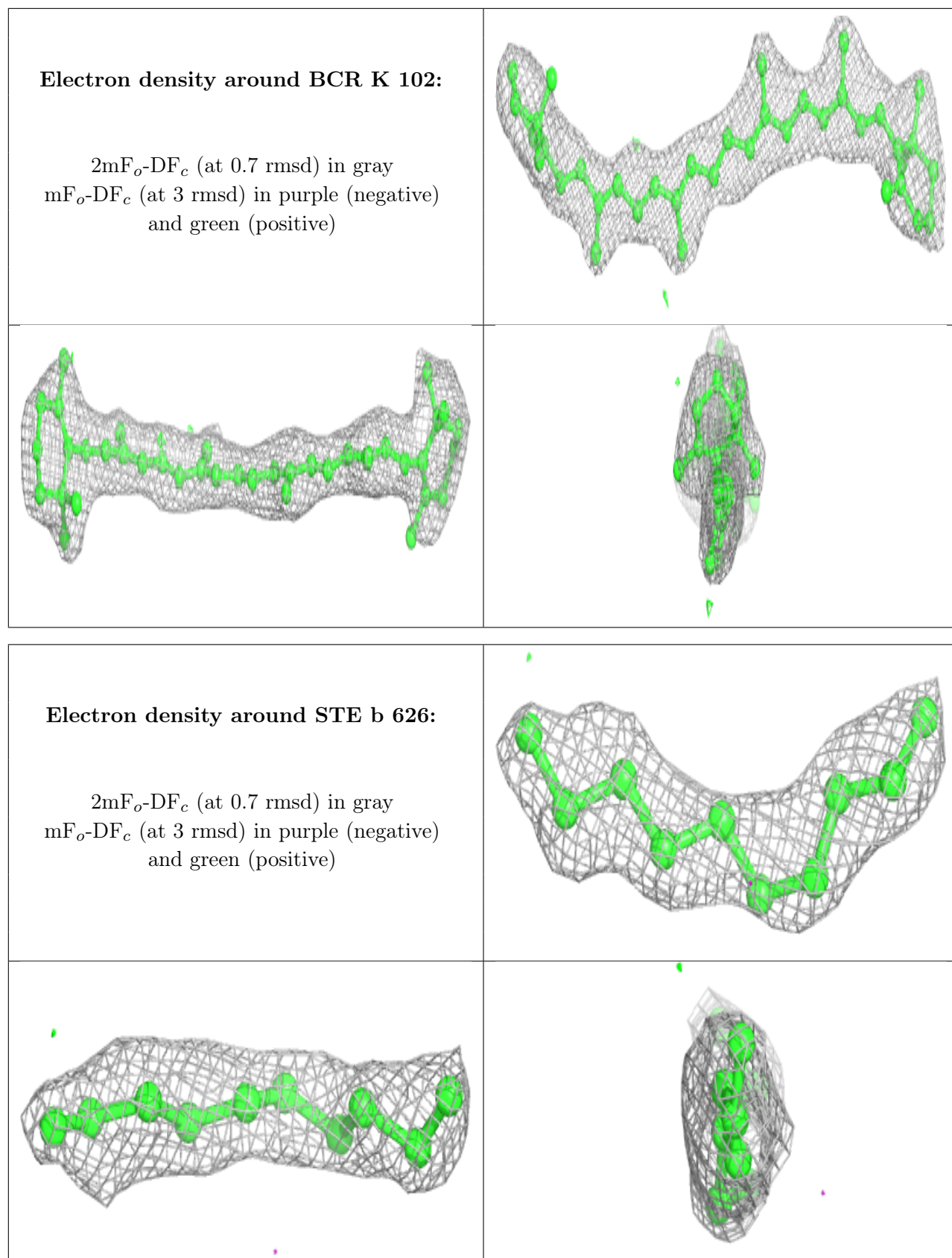
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around LMG C 519:

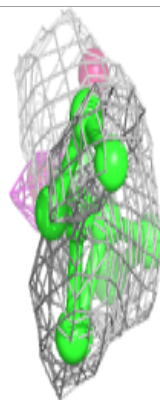
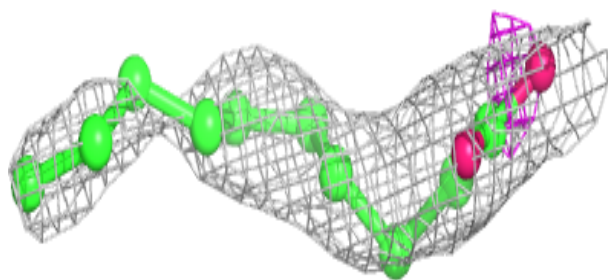
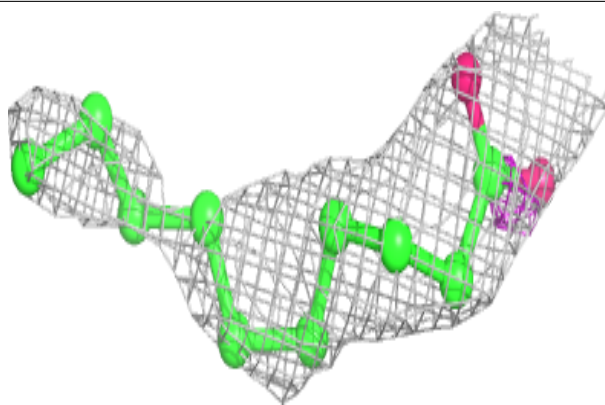
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



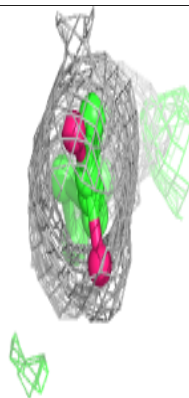
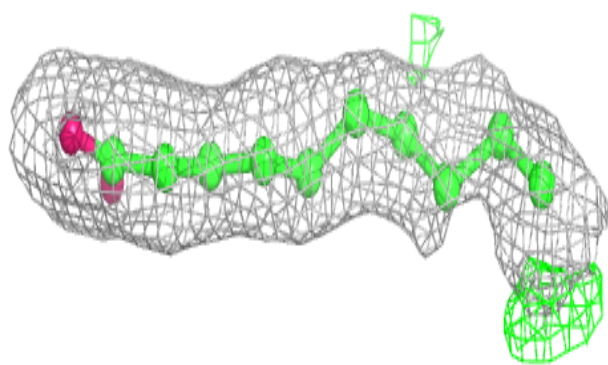
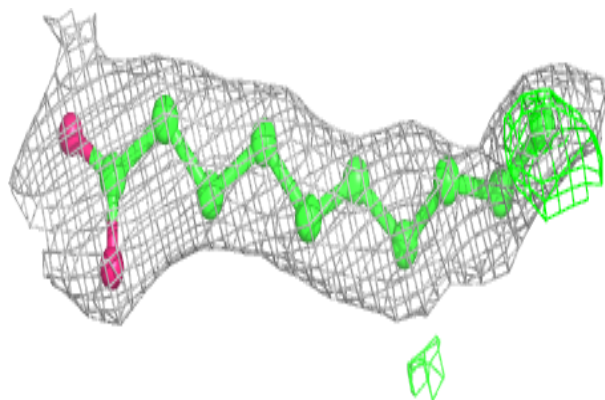


Electron density around STE B 624:

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

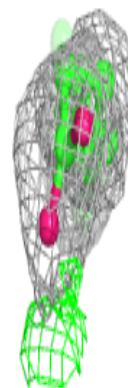
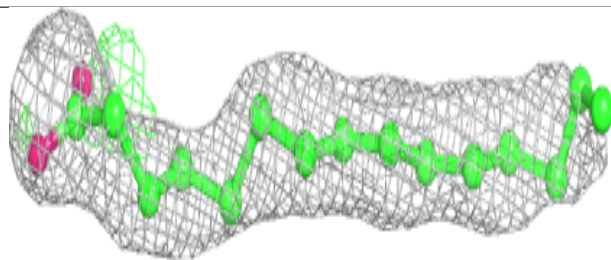
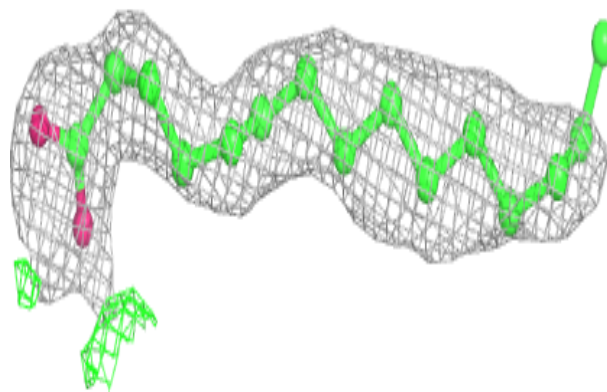
**Electron density around STE J 101:**

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

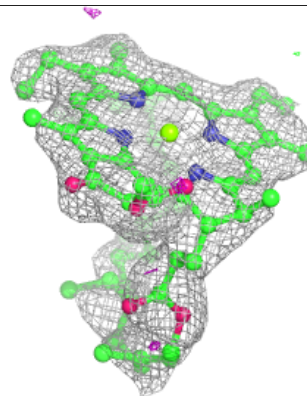
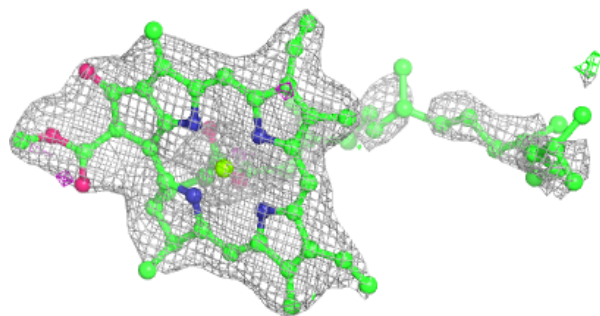
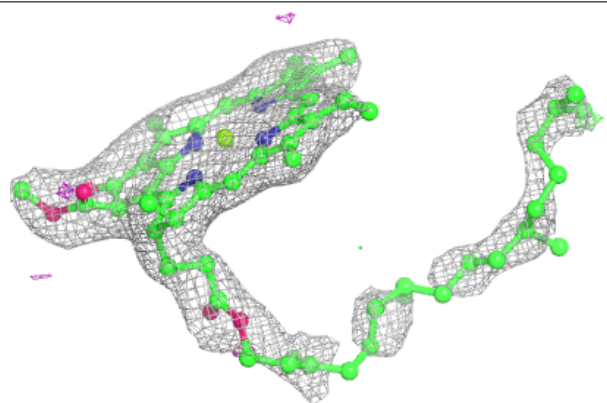


Electron density around STE d 412:

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

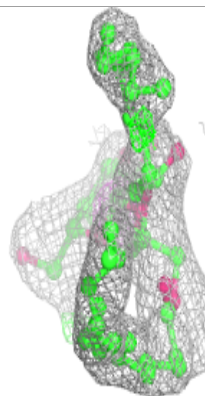
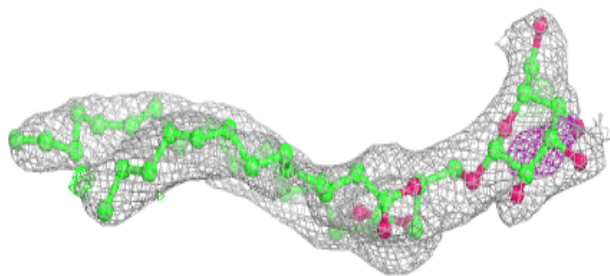
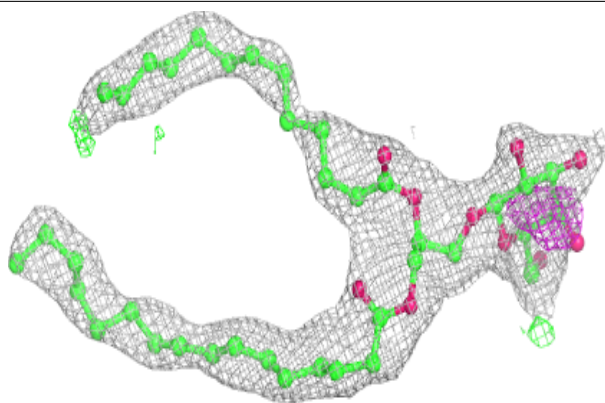
**Electron density around CLA c 513:**

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

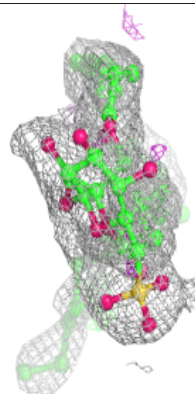
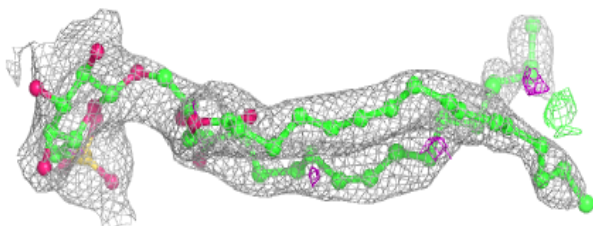
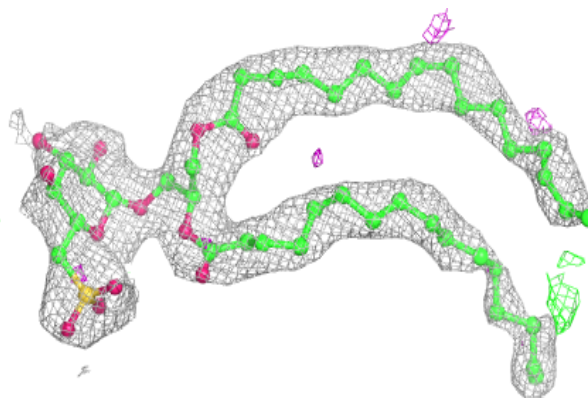


Electron density around LMG A 612:

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

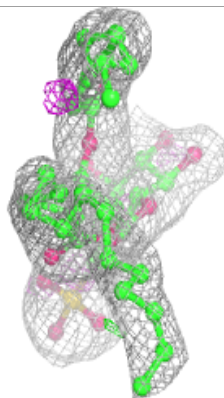
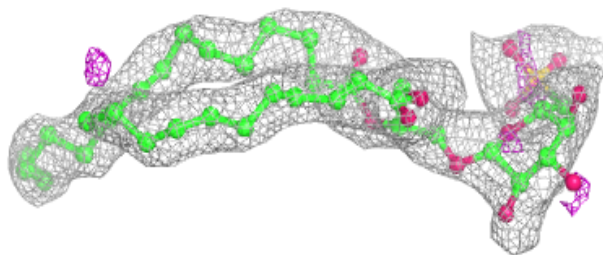
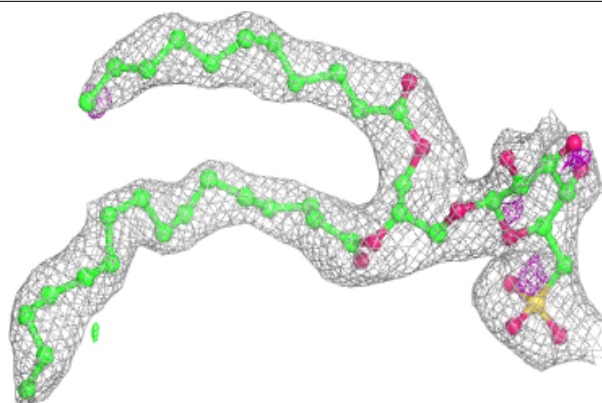
**Electron density around SQD B 622:**

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

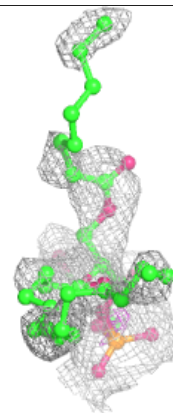
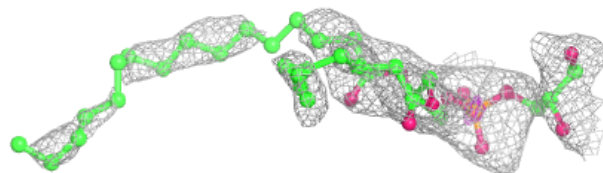
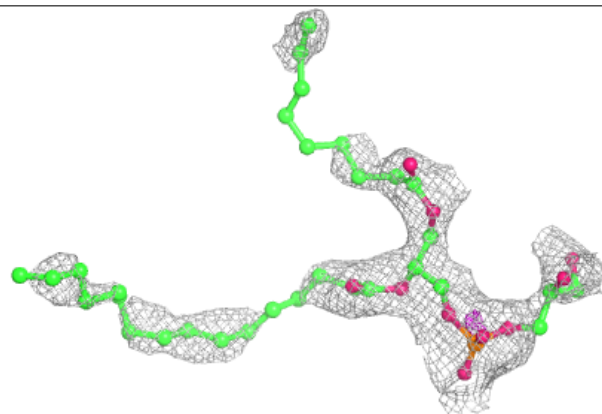


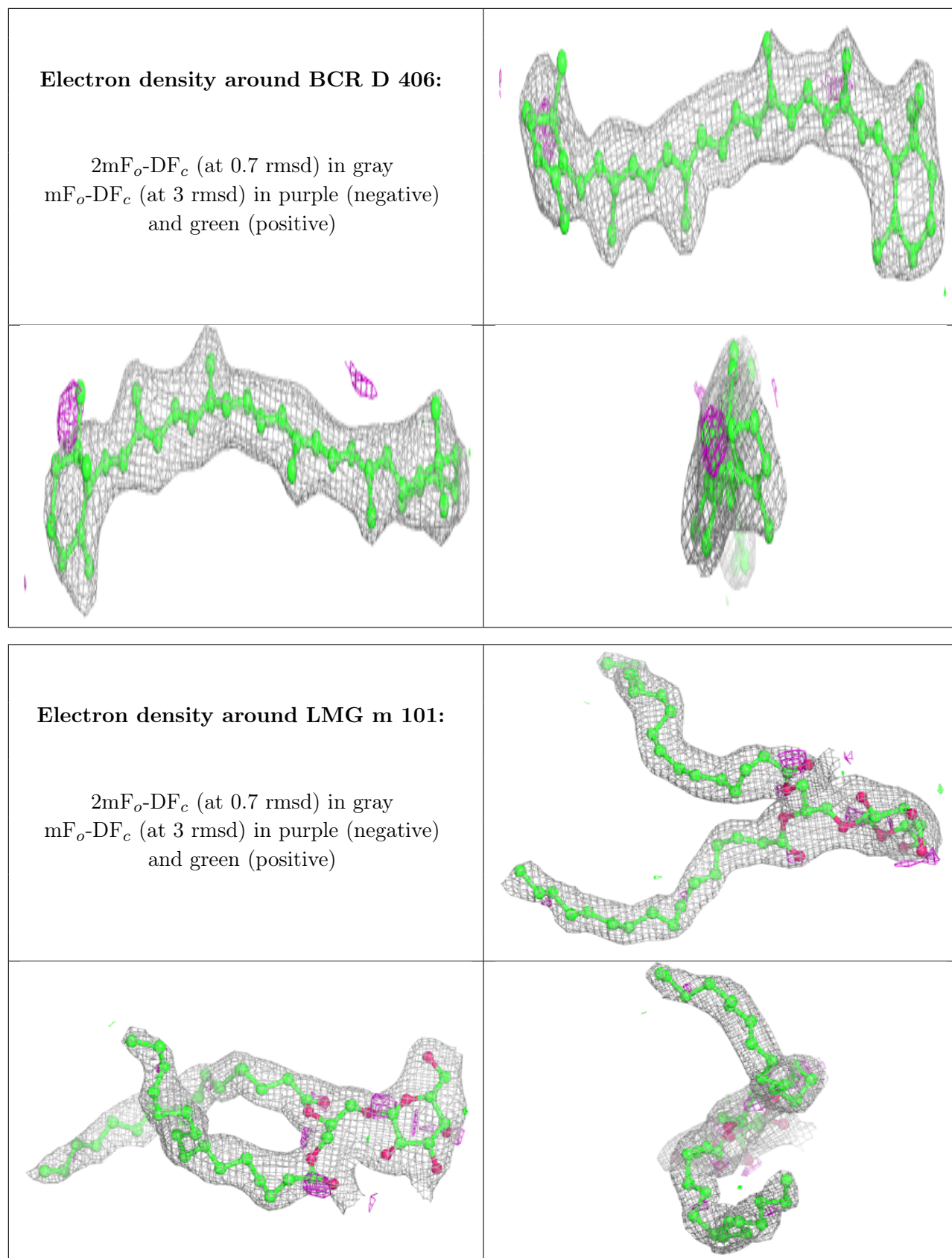
Electron density around SQD L 101:

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

**Electron density around LHG e 102:**

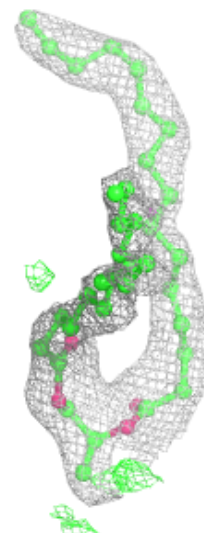
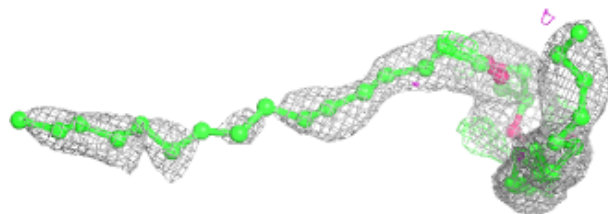
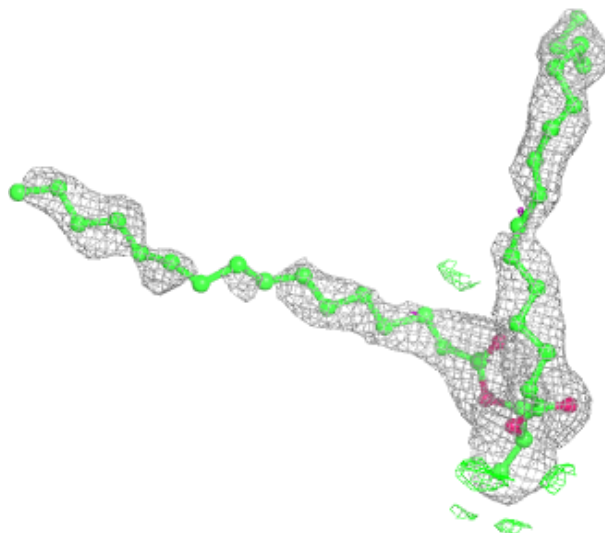
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





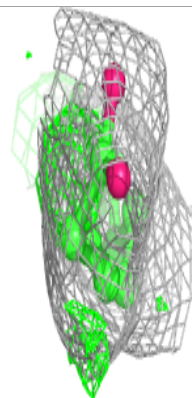
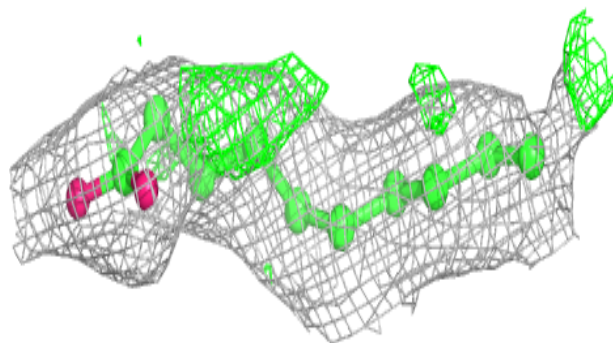
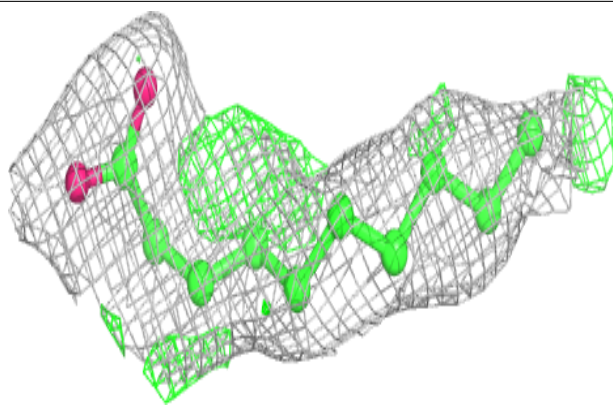
Electron density around SQD A 614:

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



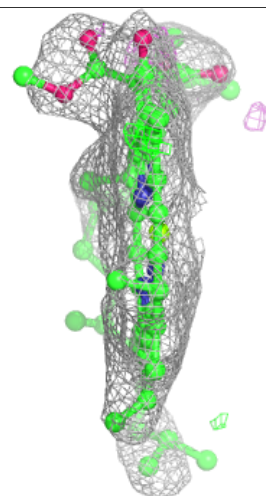
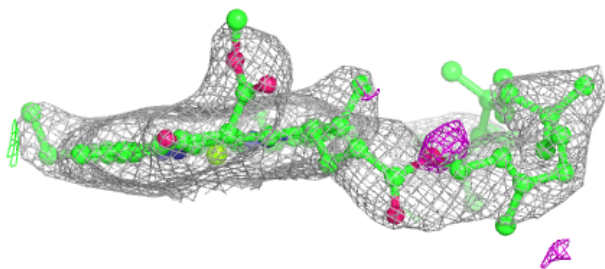
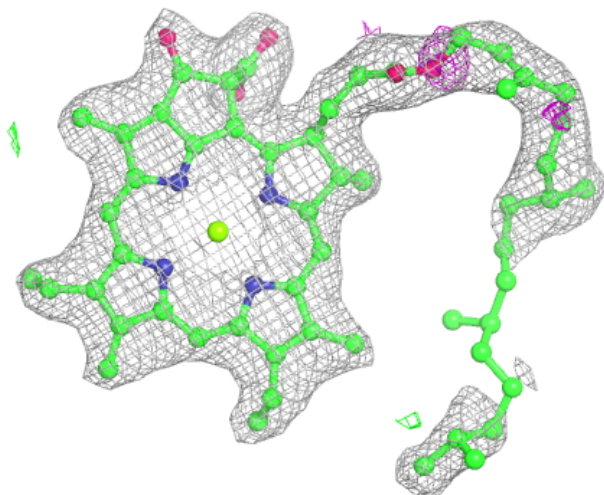
Electron density around STE B 623:

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



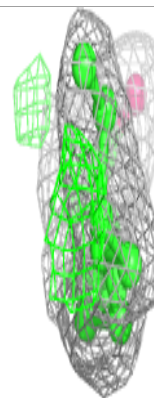
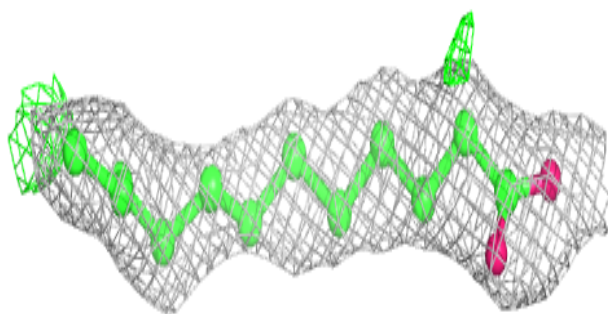
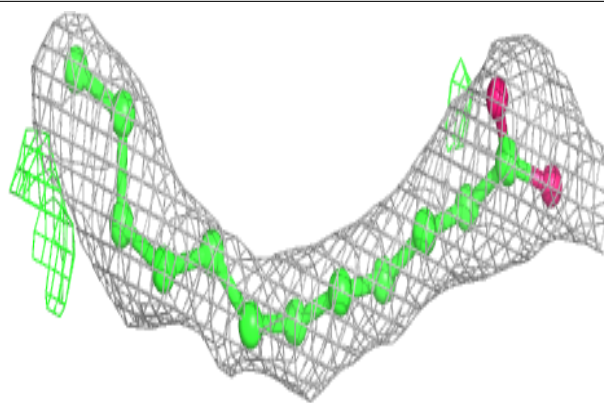
Electron density around CLA c 512:

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

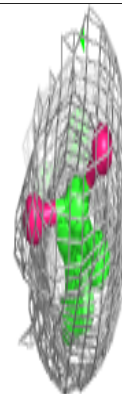
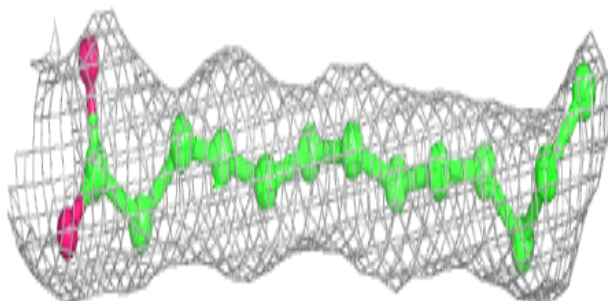
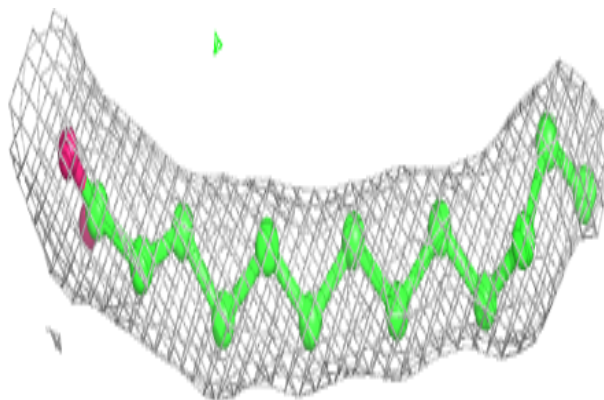


Electron density around STE t 103:

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

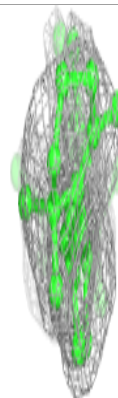
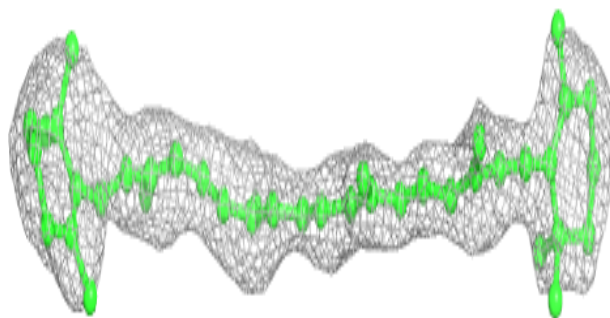
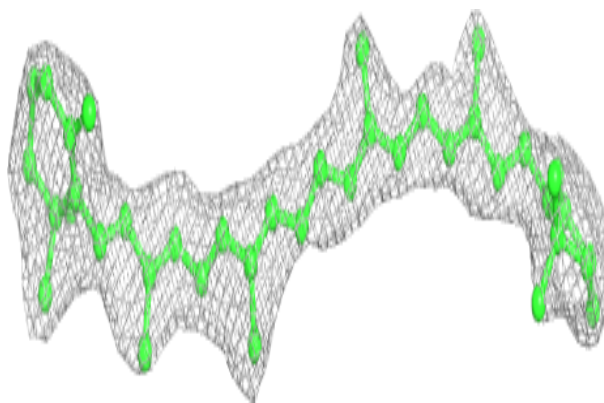
**Electron density around STE M 102:**

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

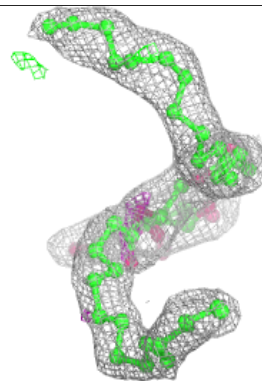
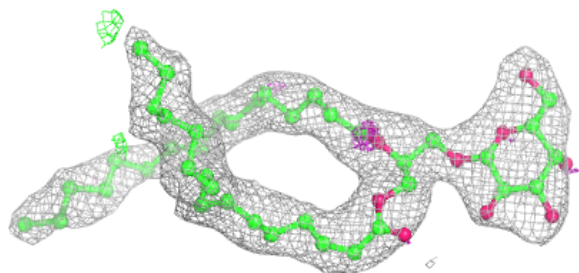
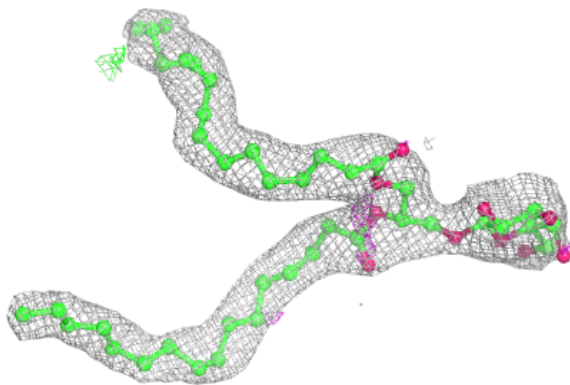


Electron density around BCR k 101:

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

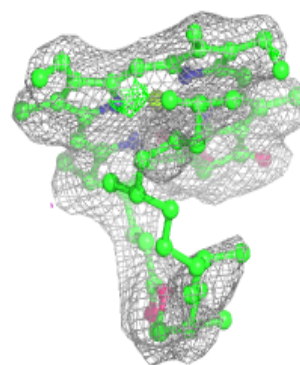
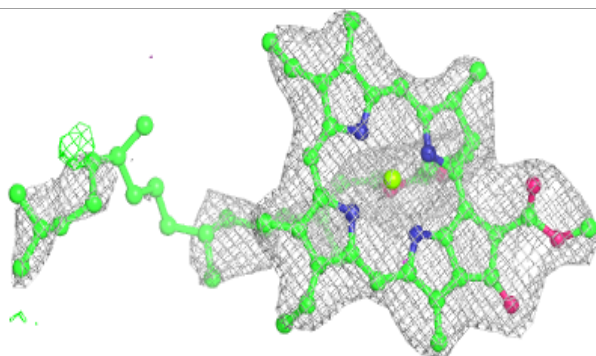
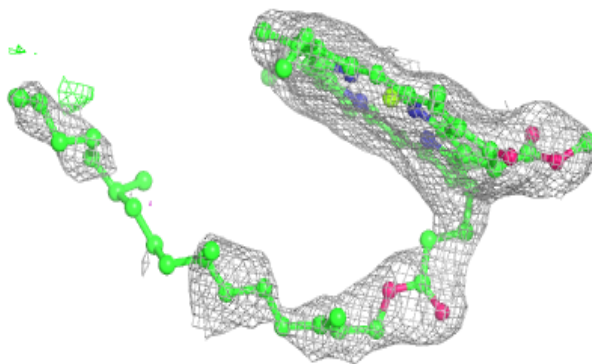
**Electron density around LMG M 101:**

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

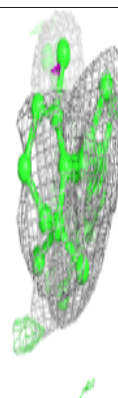
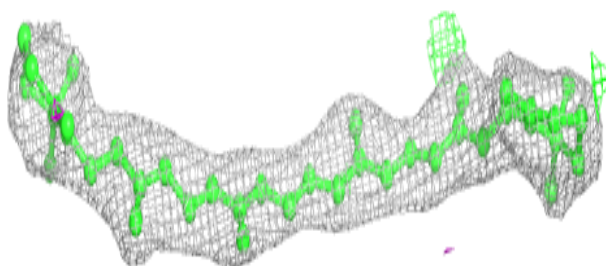
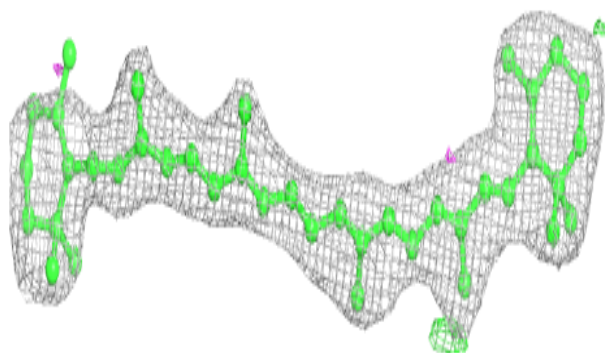


Electron density around CLA C 513:

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

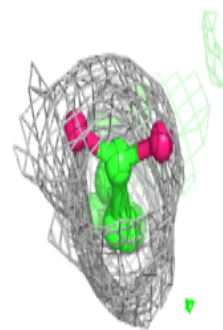
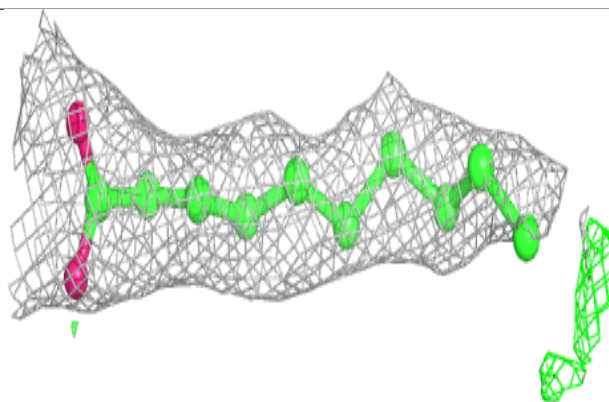
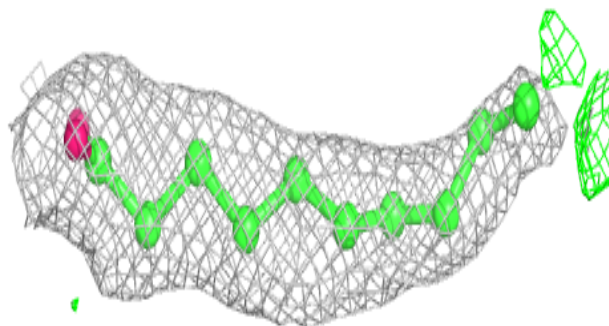
**Electron density around BCR d 405:**

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

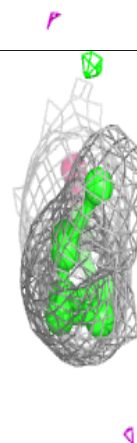
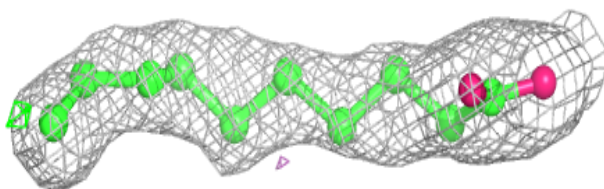
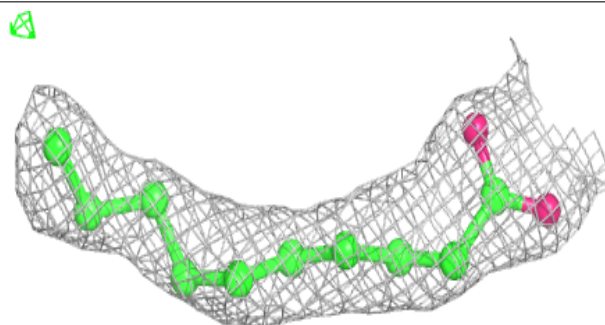


Electron density around STE j 101:

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

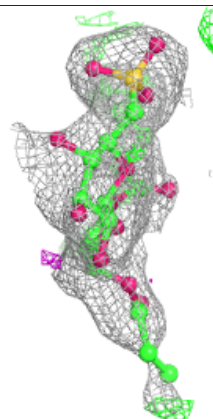
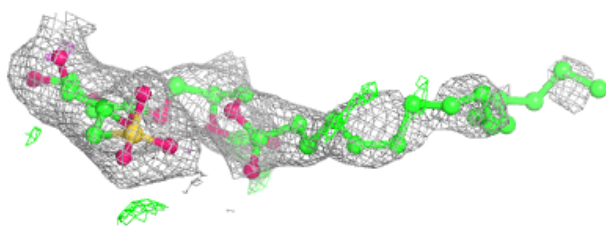
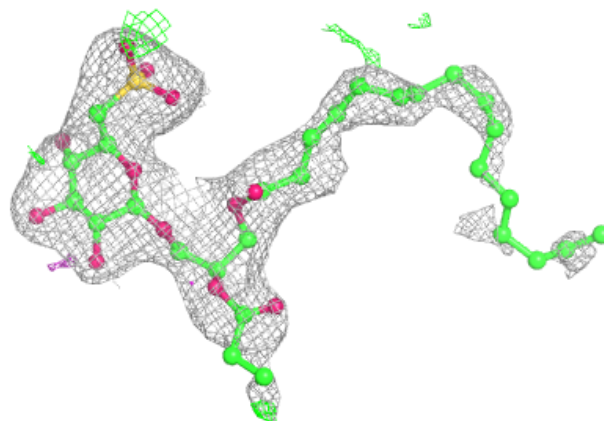
**Electron density around STE C 521:**

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



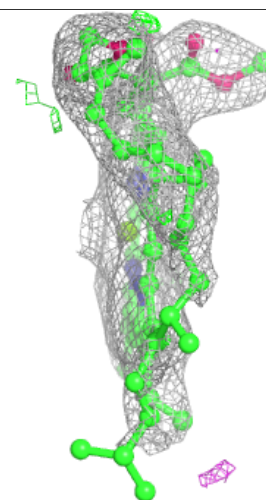
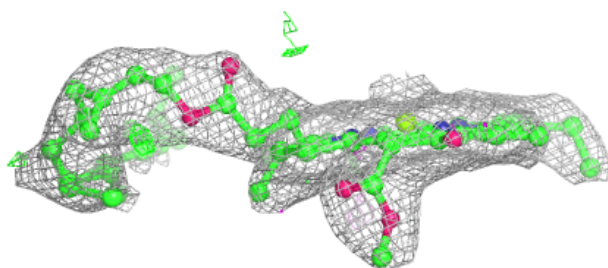
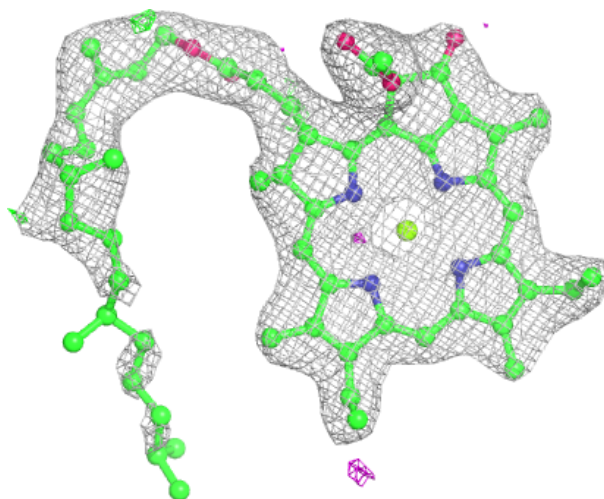
Electron density around SQD f 101:

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



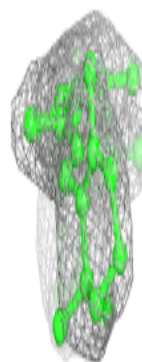
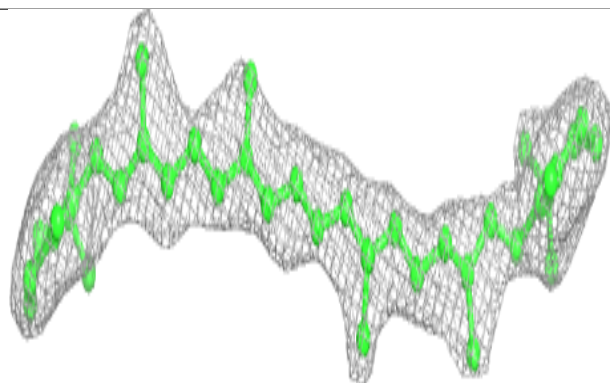
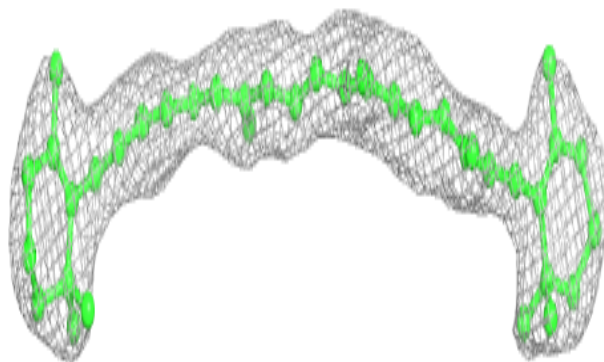
Electron density around CLA C 512:

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

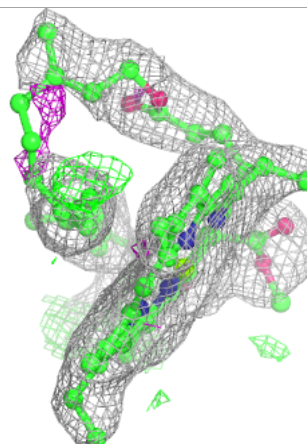
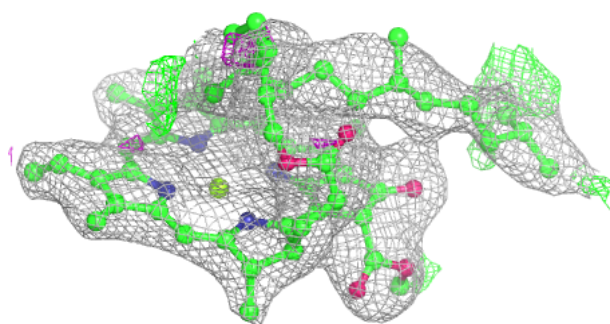
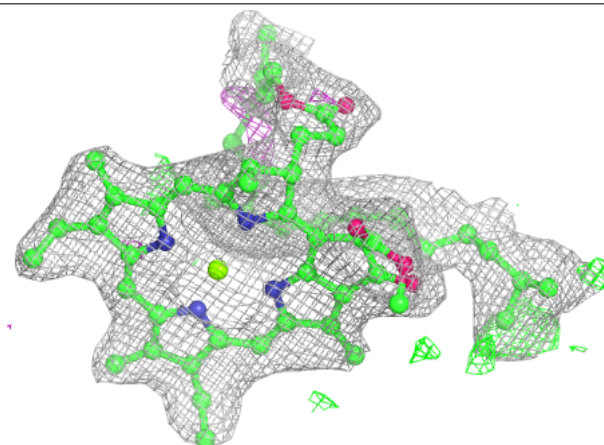


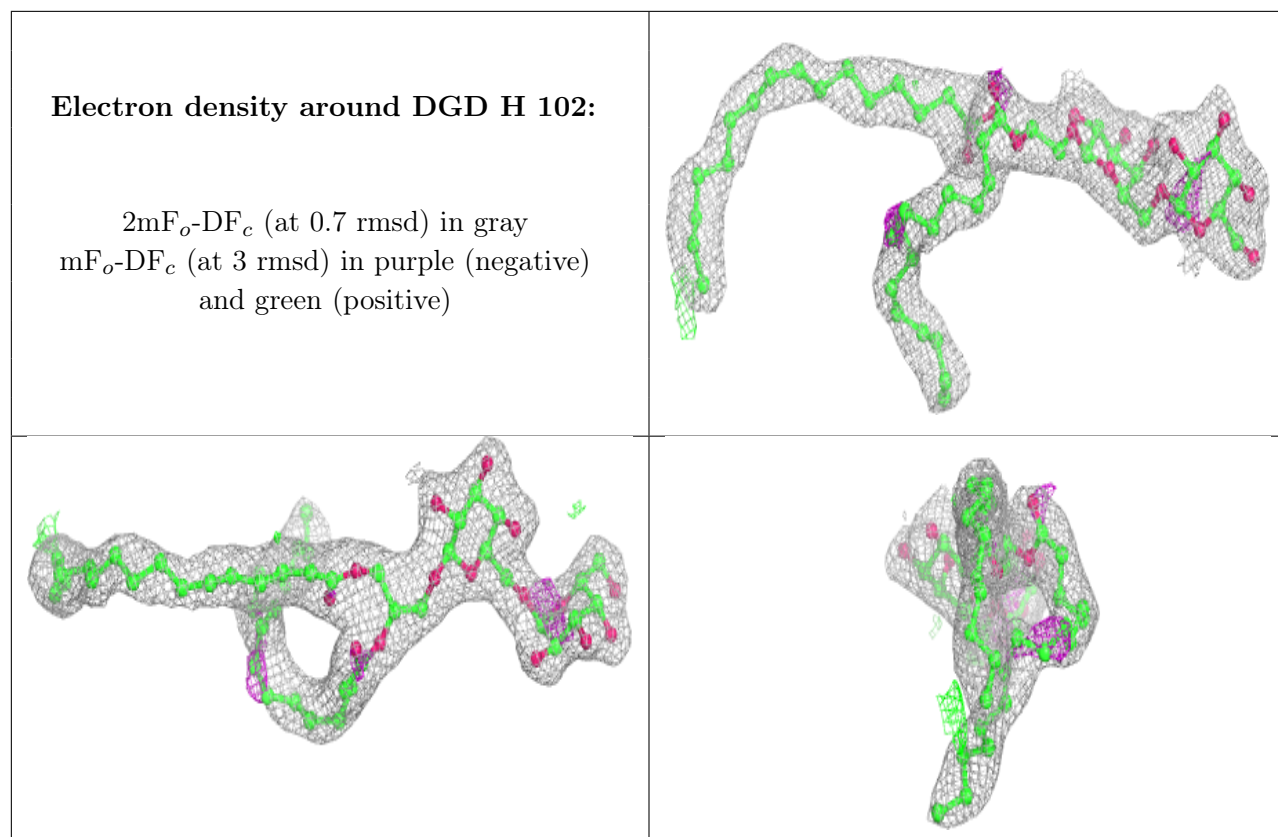
Electron density around BCR k 102:

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

**Electron density around CLA B 601:**

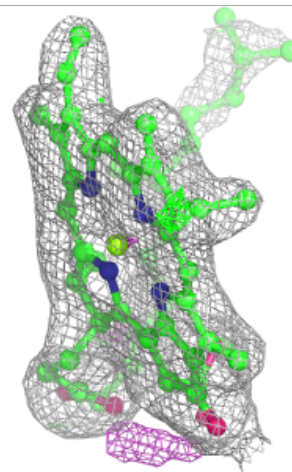
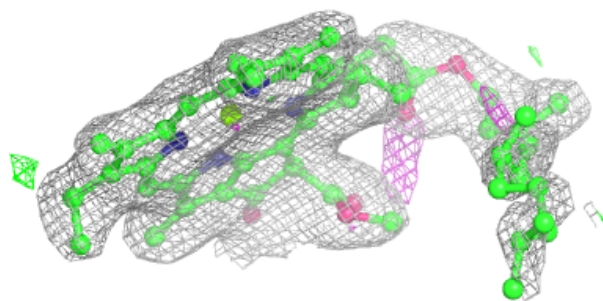
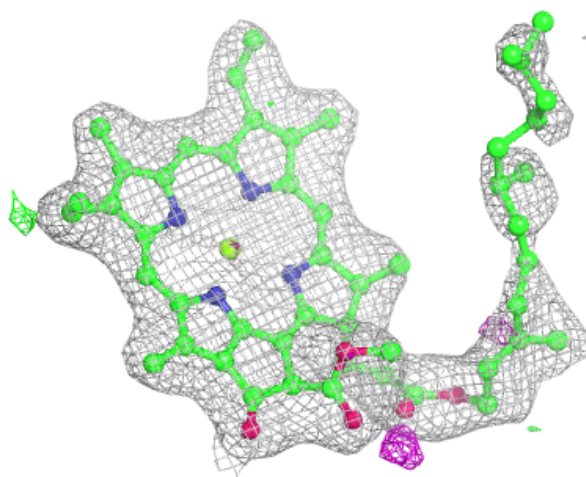
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





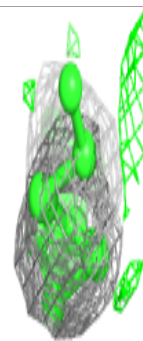
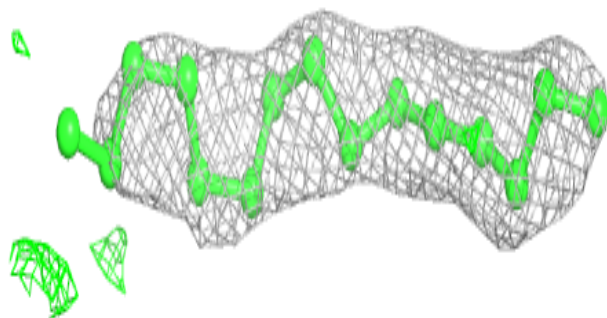
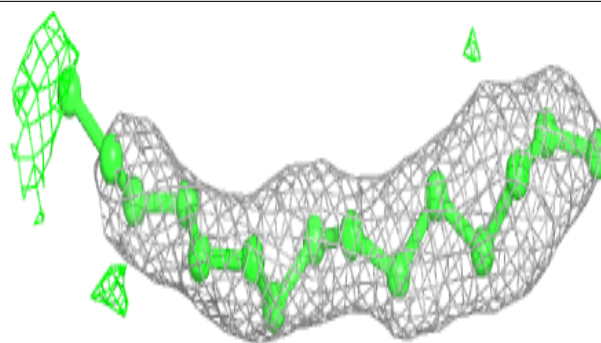
Electron density around CLA b 616:

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

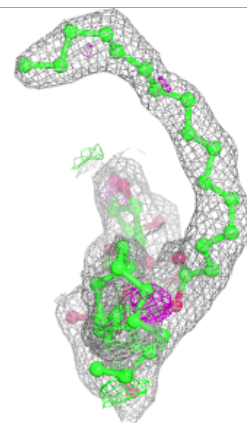
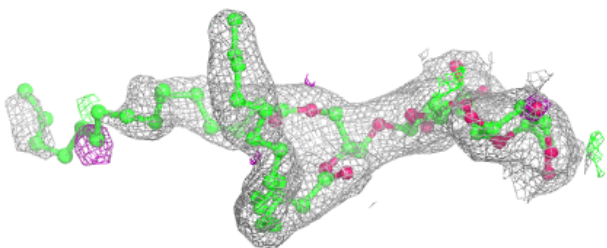
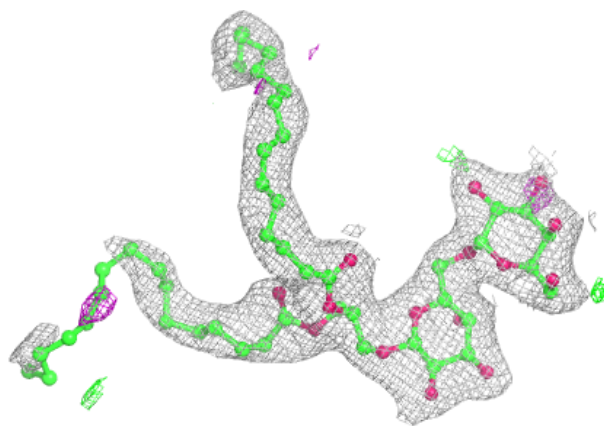


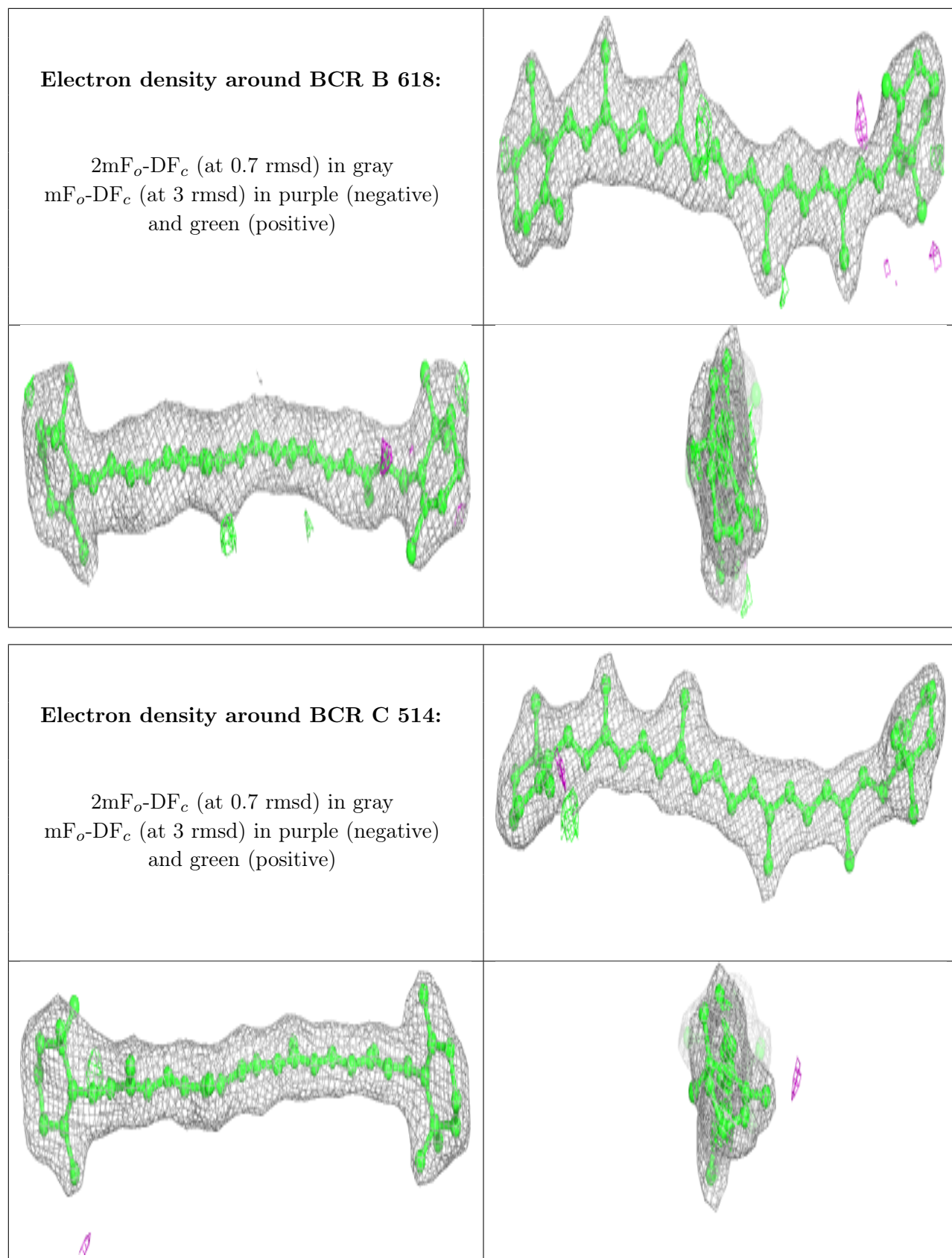
Electron density around STE b 624:

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

**Electron density around DGD C 517:**

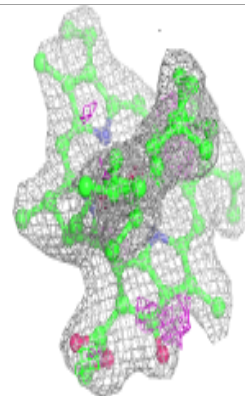
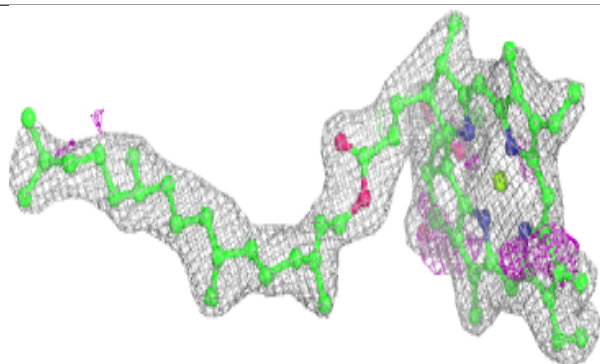
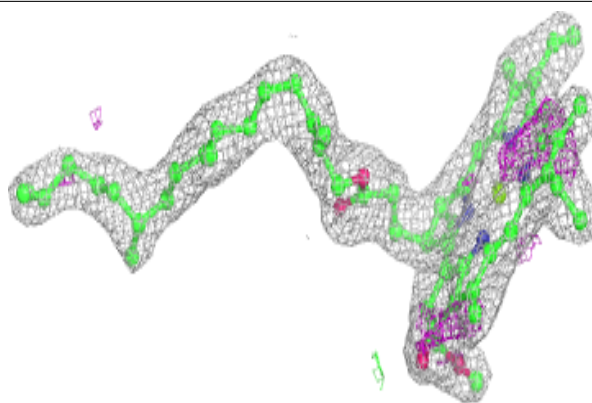
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



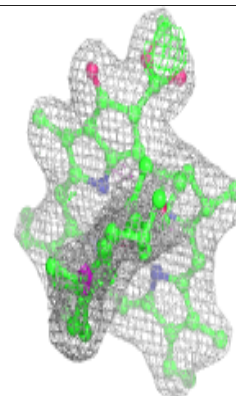
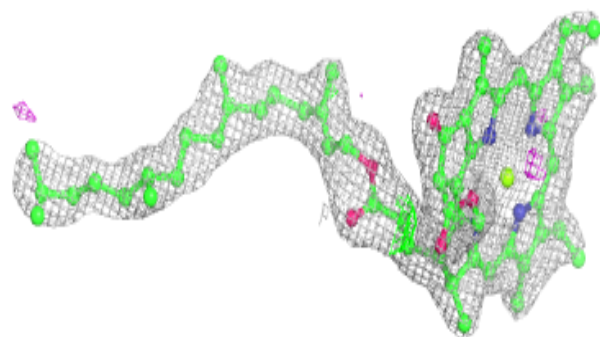
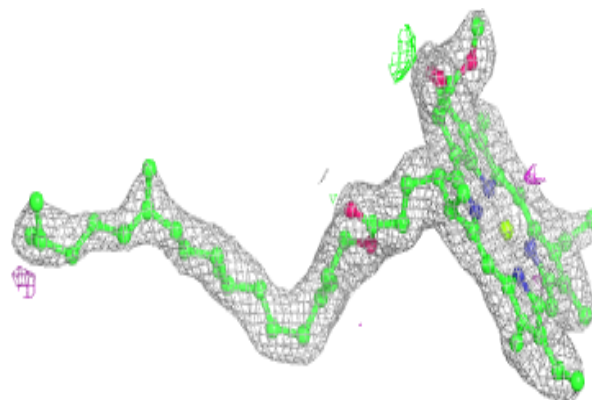


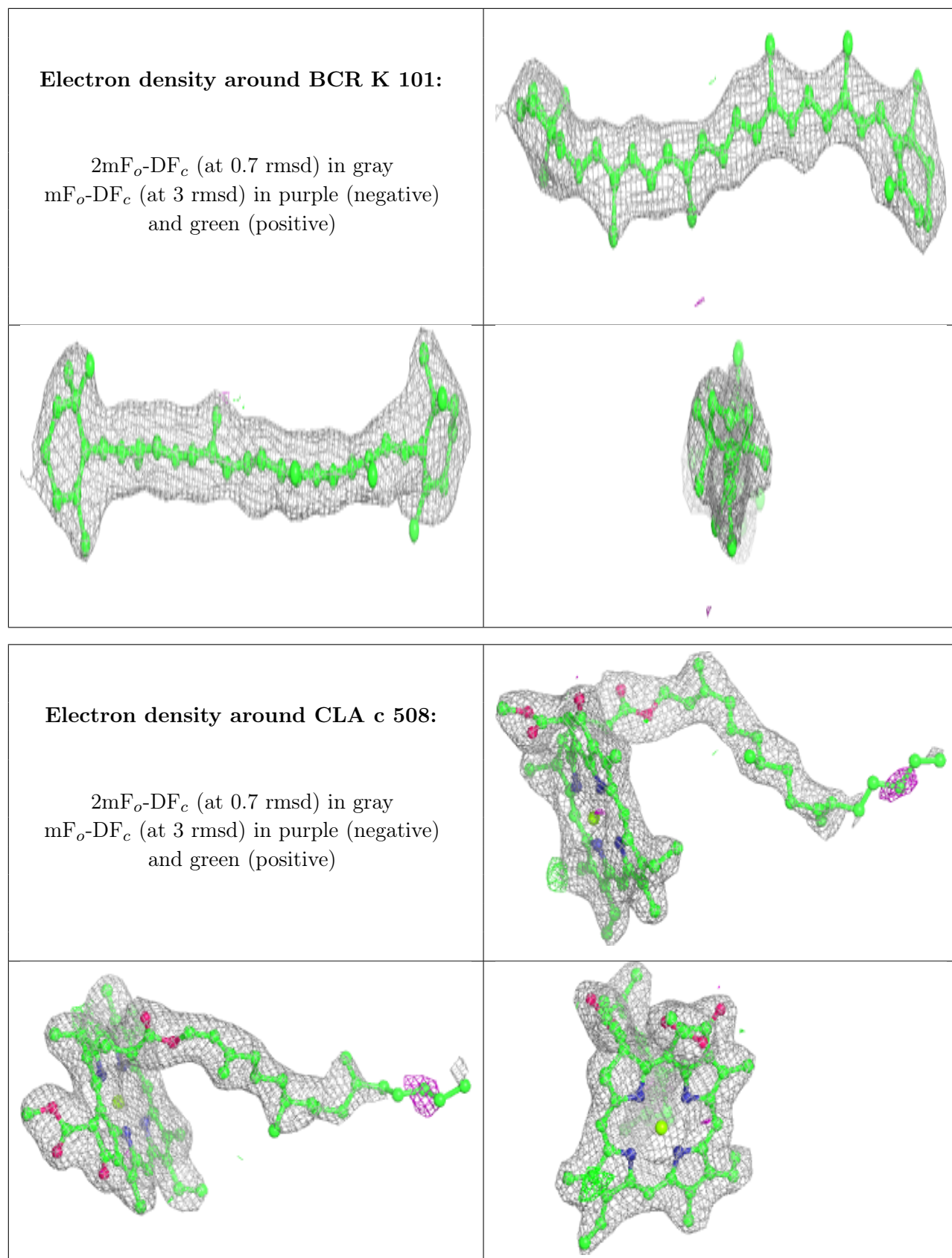
Electron density around CLA C 502:

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

**Electron density around CLA c 502:**

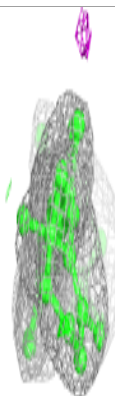
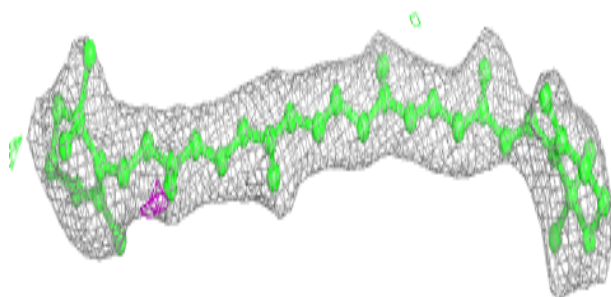
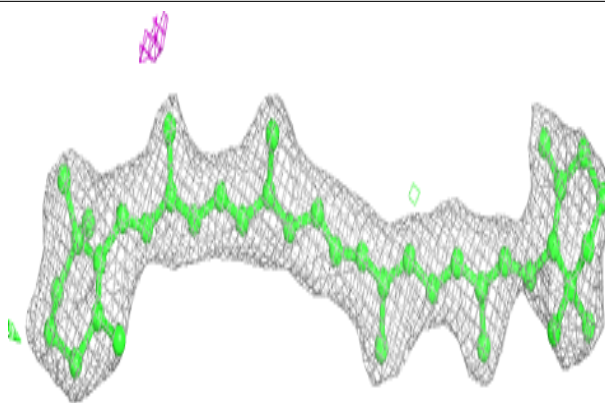
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



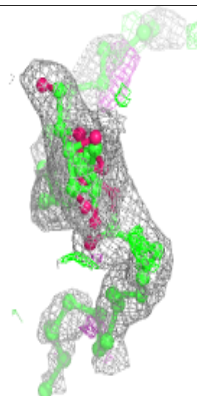
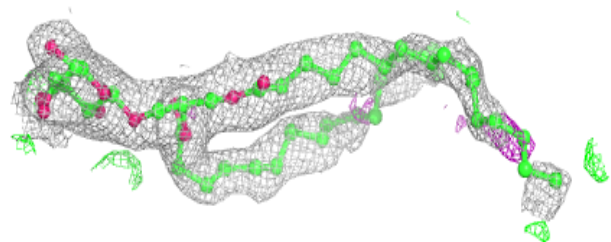
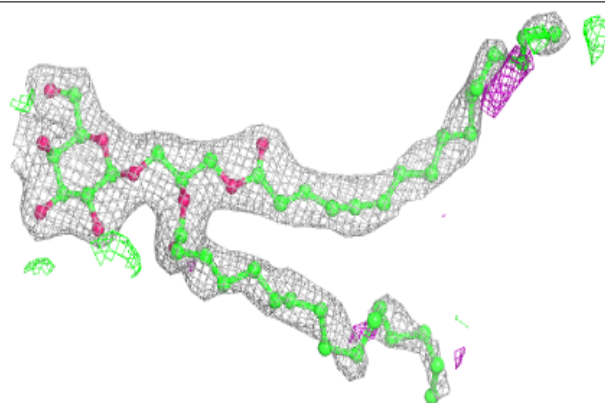


Electron density around BCR b 619:

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

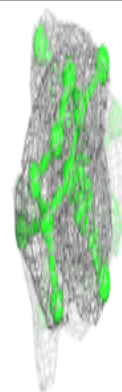
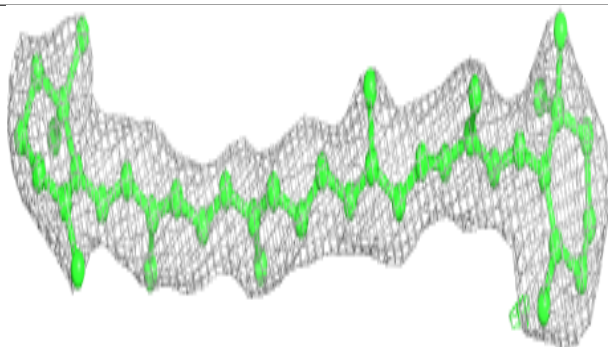
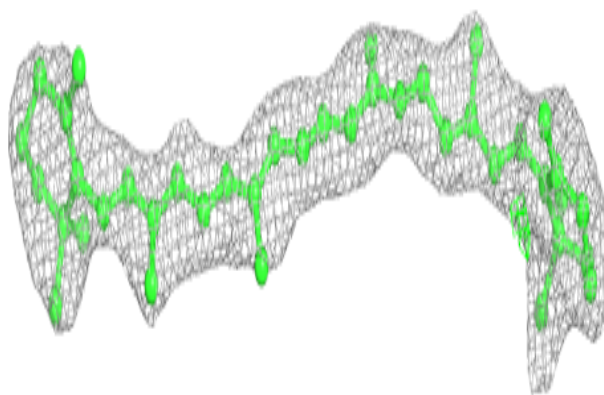
**Electron density around LMG D 408:**

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



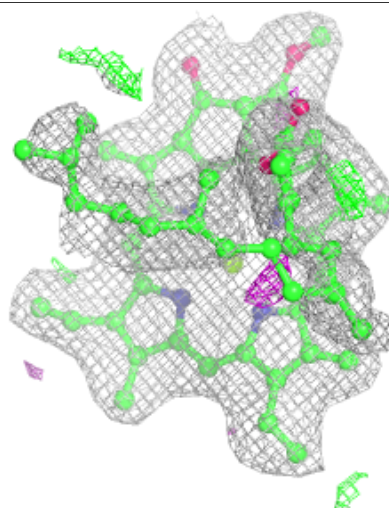
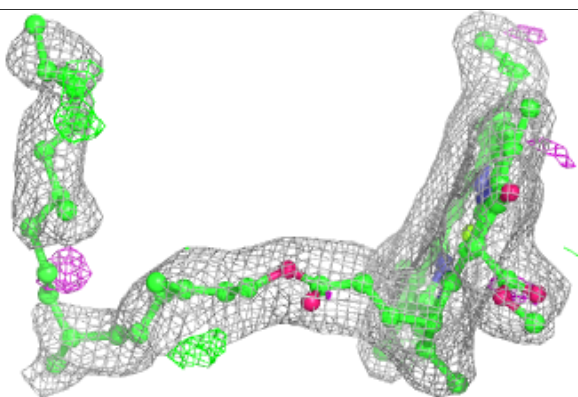
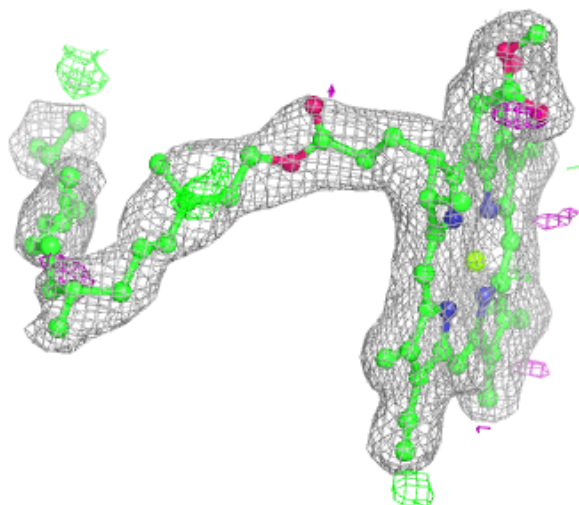
Electron density around BCR c 514:

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



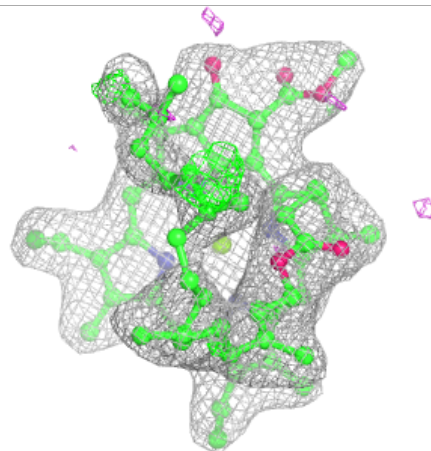
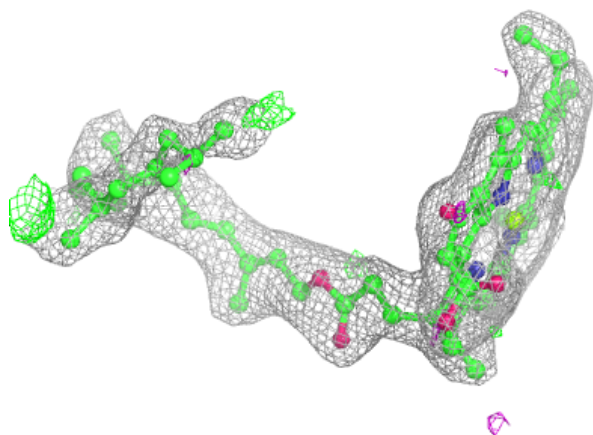
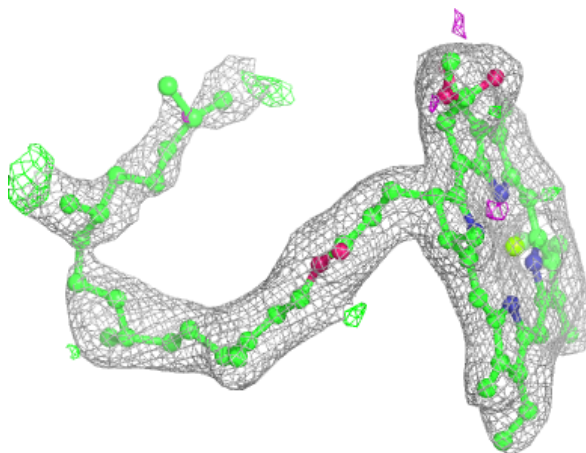
Electron density around CLA a 609:

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

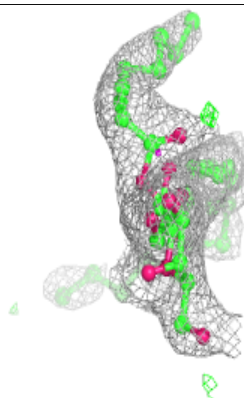
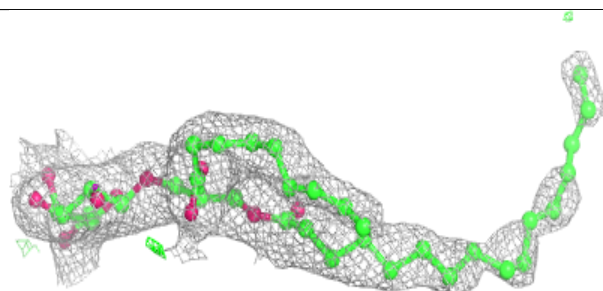
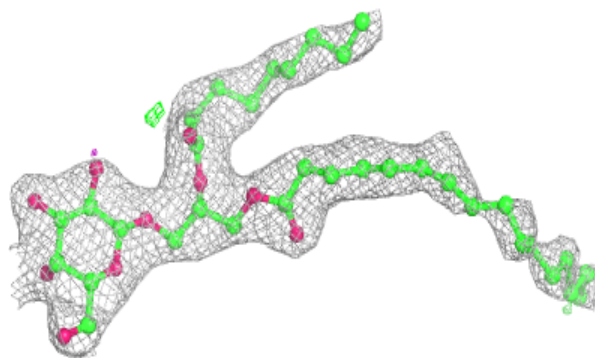


Electron density around CLA B 606:

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

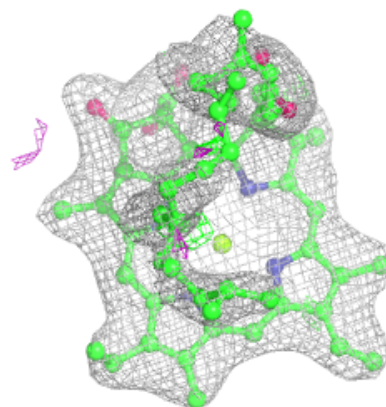
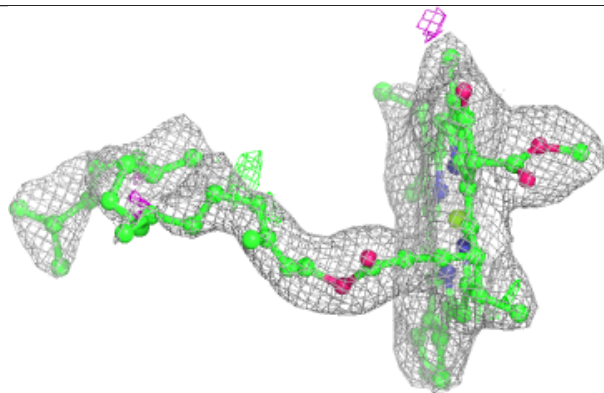
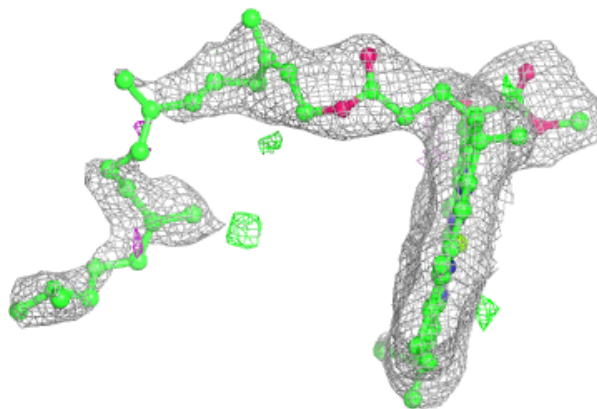
**Electron density around LMG d 411:**

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

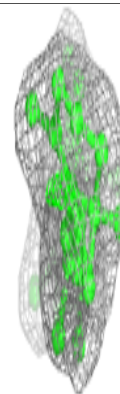
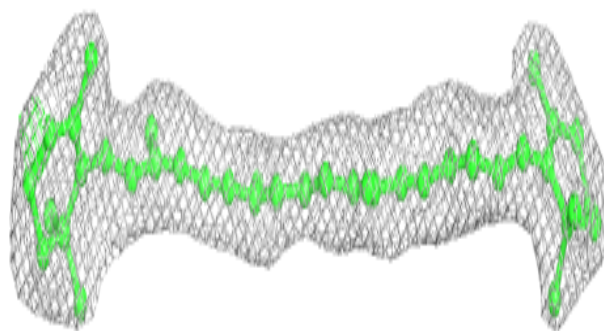
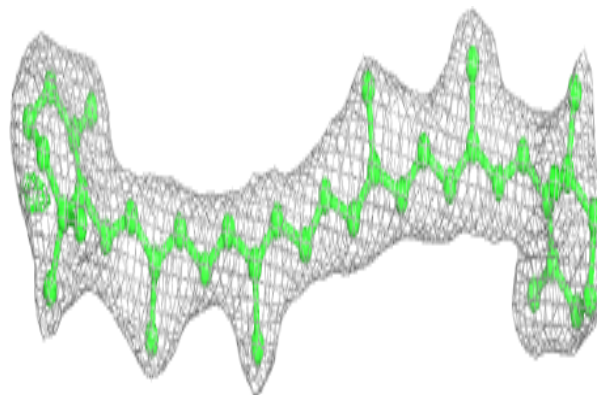


Electron density around CLA c 506:

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

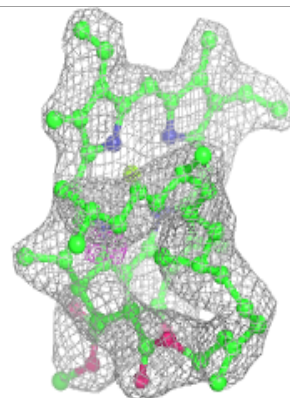
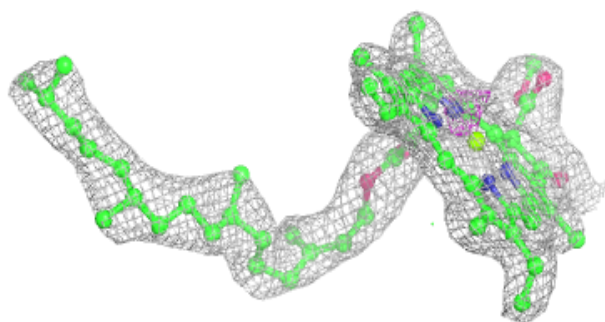
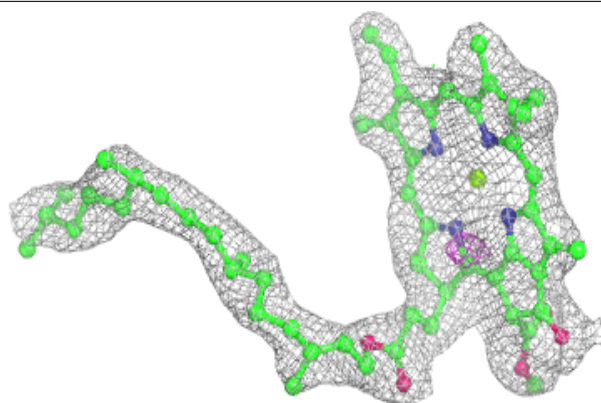
**Electron density around BCR b 618:**

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

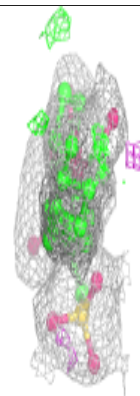
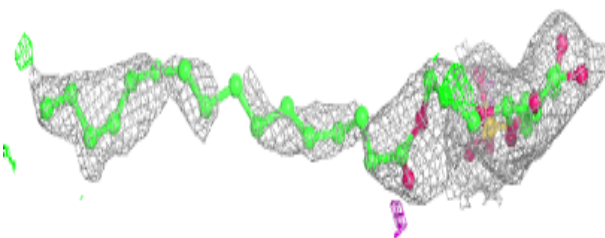
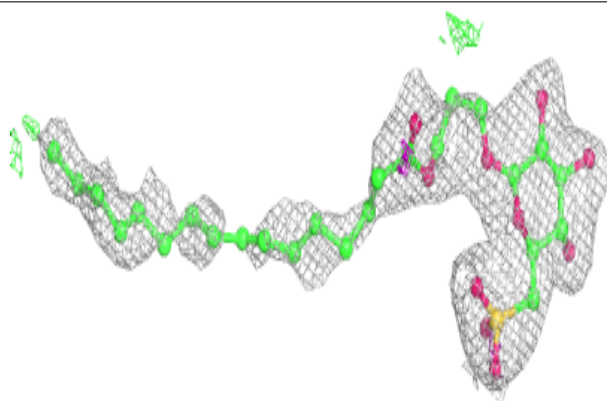


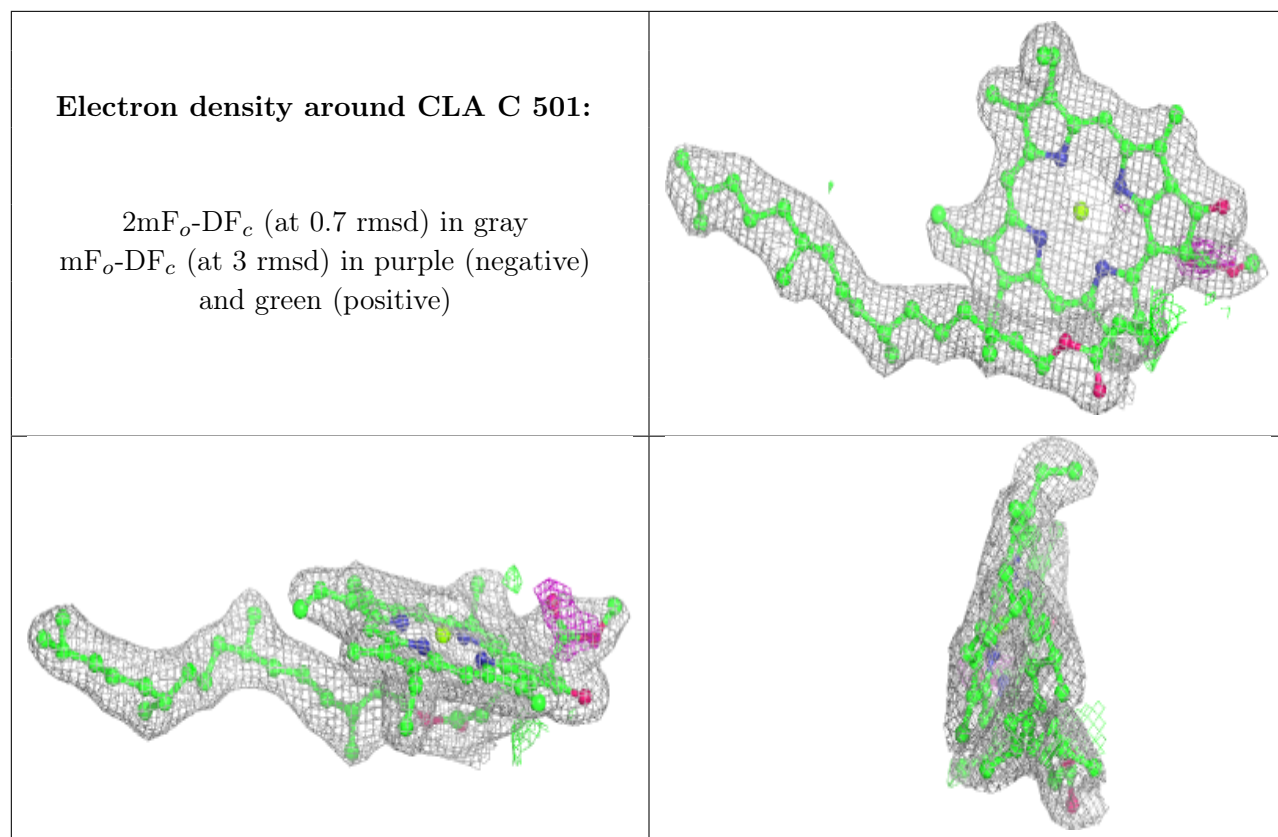
Electron density around CLA C 511:

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

**Electron density around SQD D 409:**

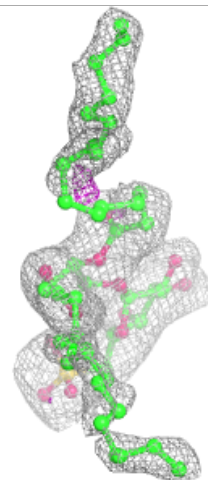
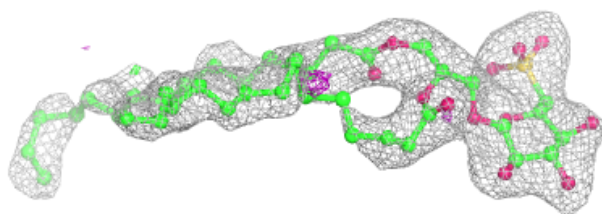
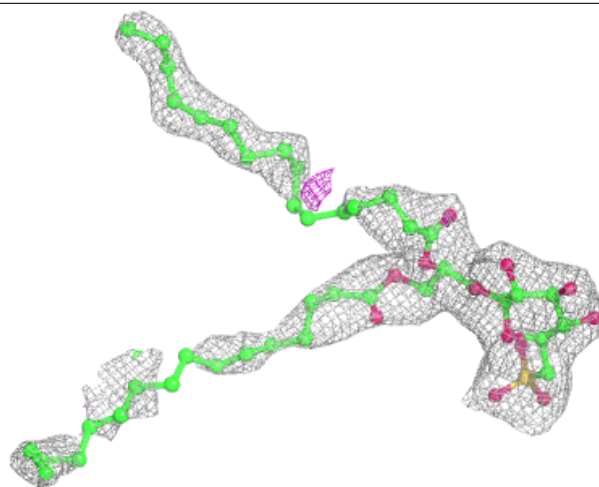
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





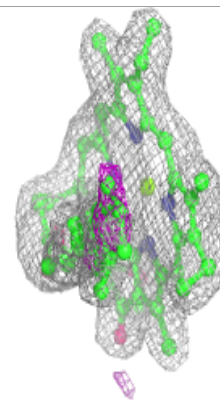
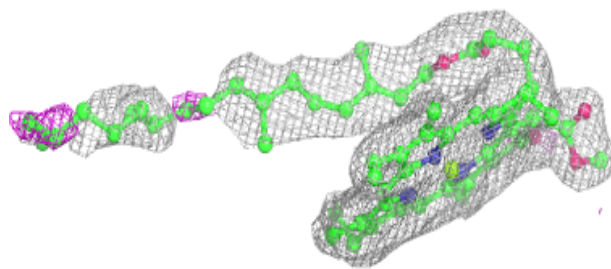
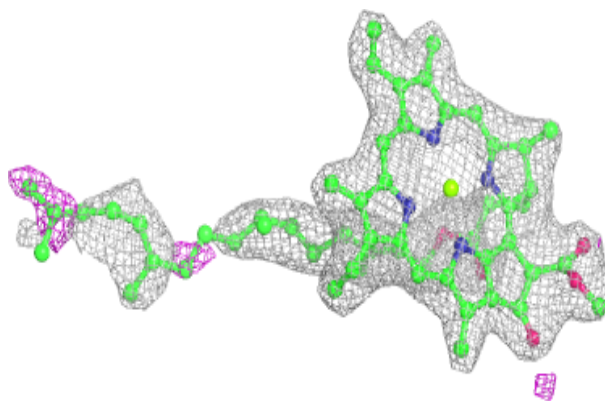
Electron density around SQD a 613:

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



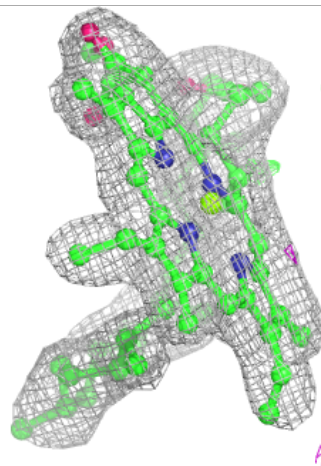
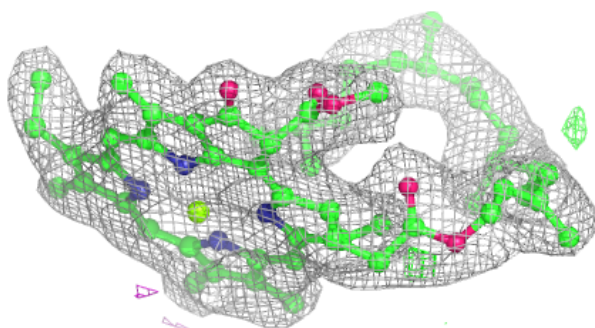
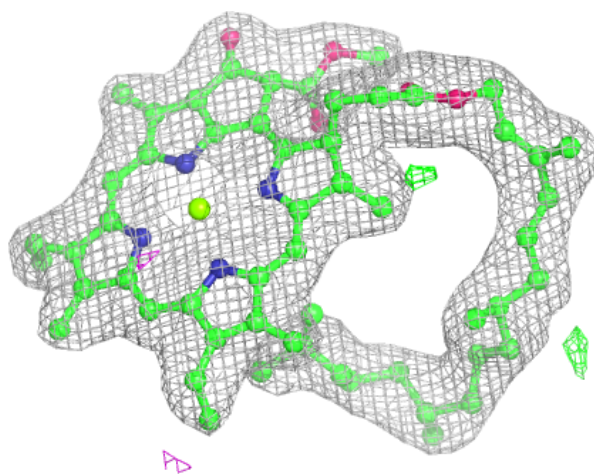
Electron density around CLA b 614:

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



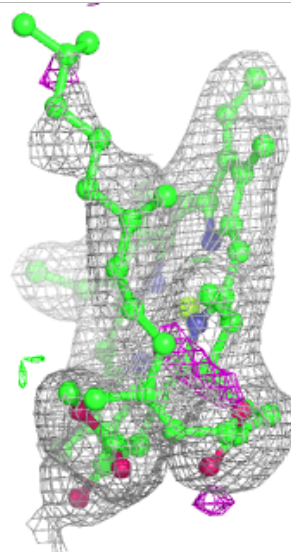
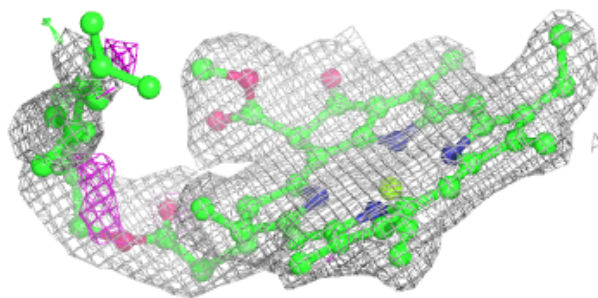
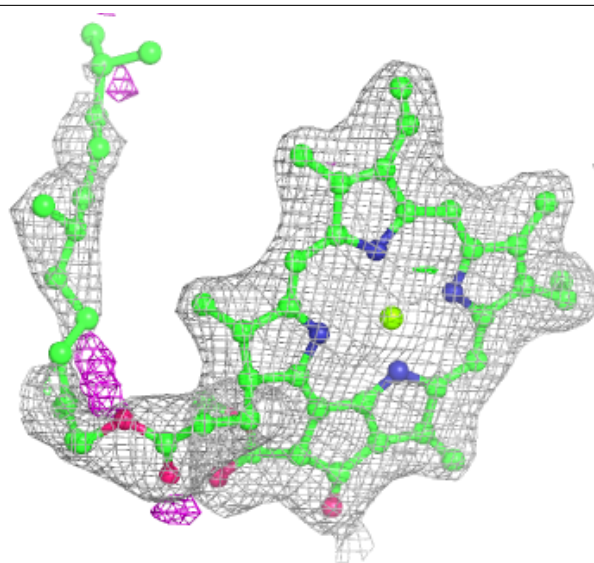
Electron density around CLA b 615:

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



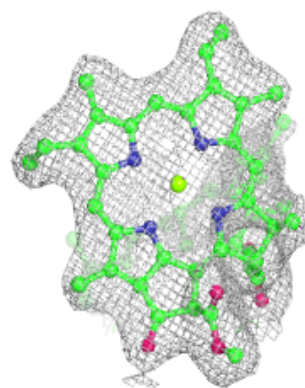
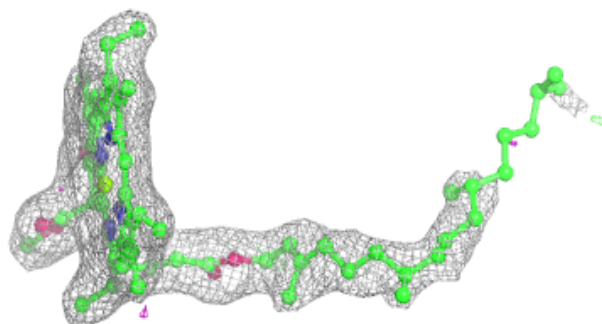
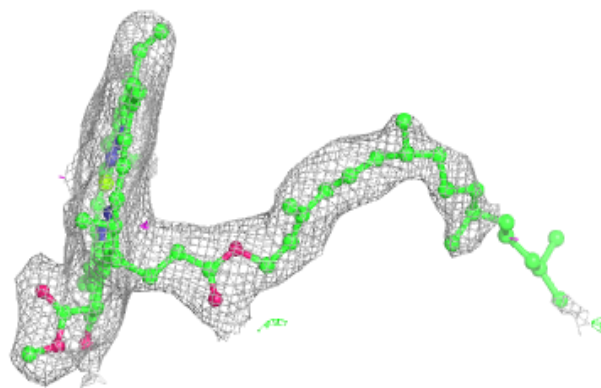
Electron density around CLA B 616:

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

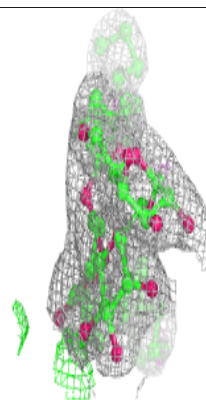
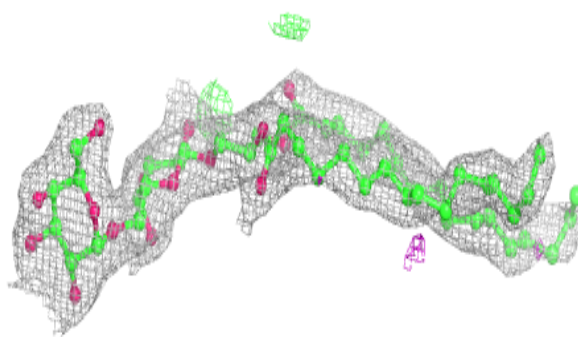
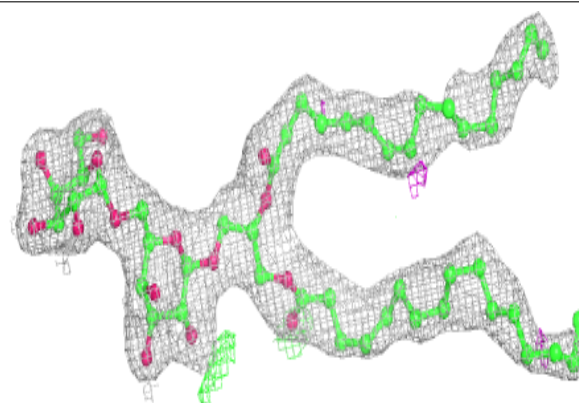


Electron density around CLA D 405:

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

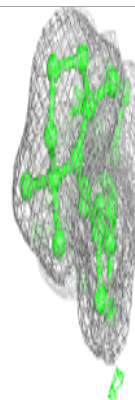
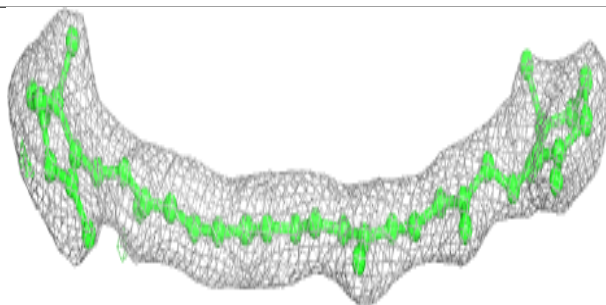
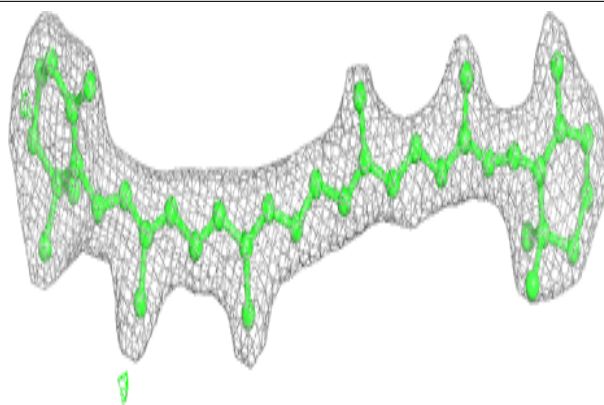
**Electron density around DGD C 518:**

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



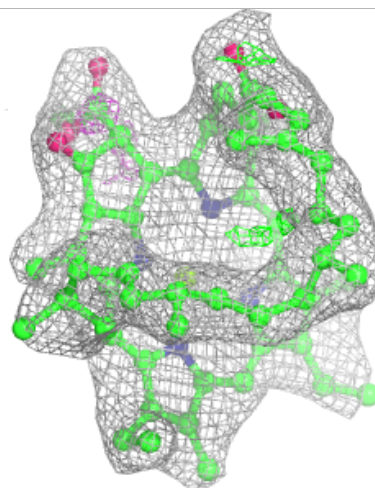
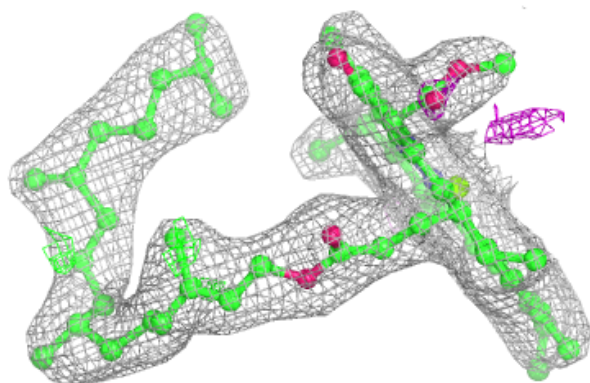
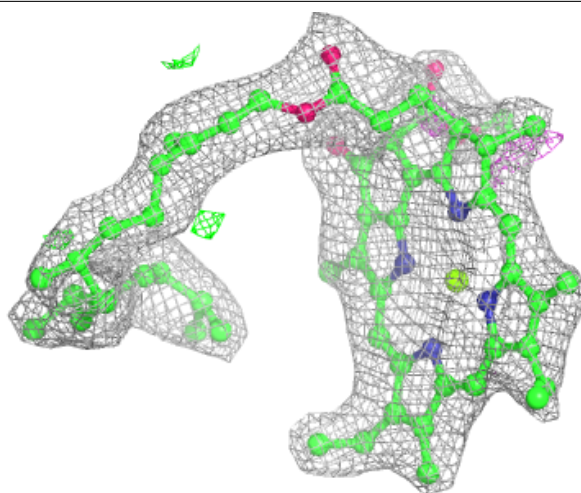
Electron density around BCR t 101:

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



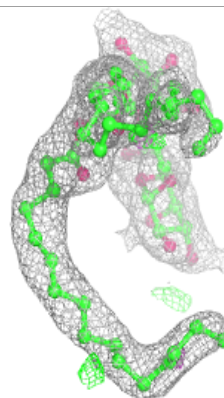
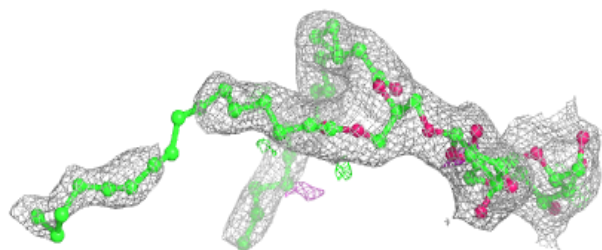
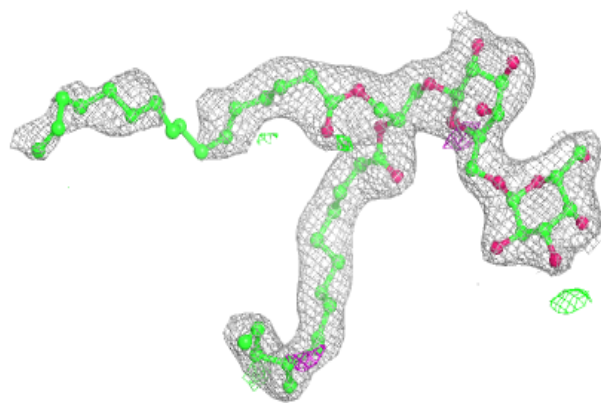
Electron density around CLA c 503:

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

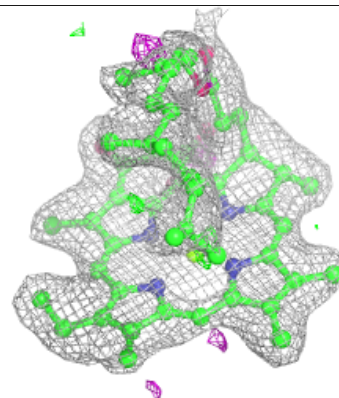
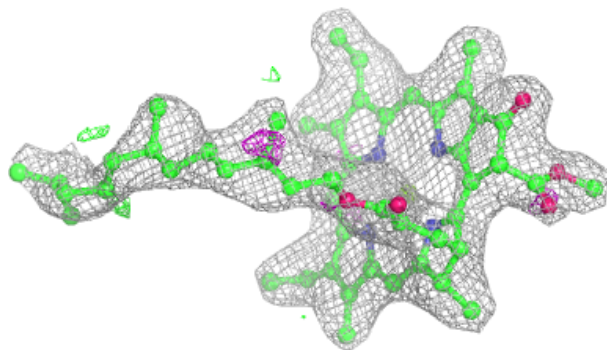
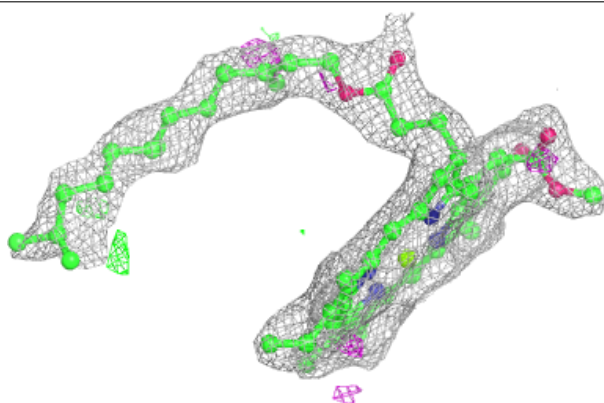


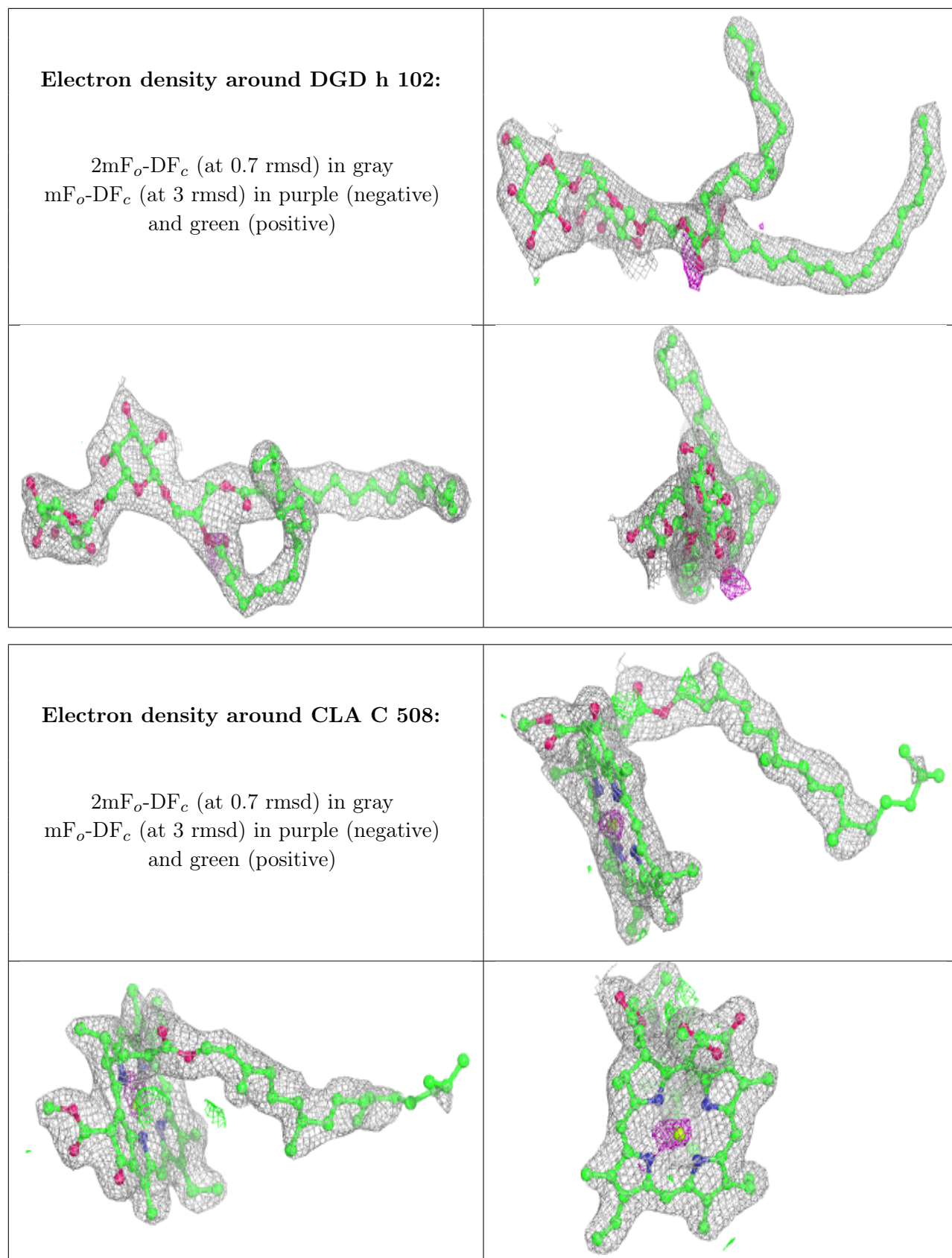
Electron density around DGD c 517:

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

**Electron density around CLA c 504:**

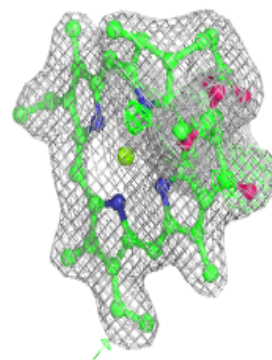
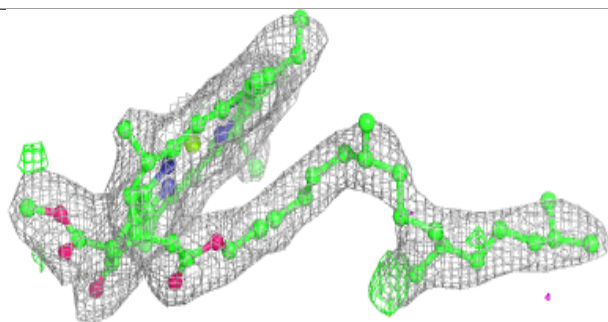
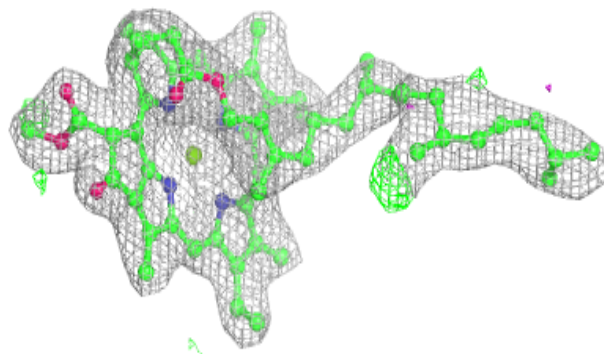
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



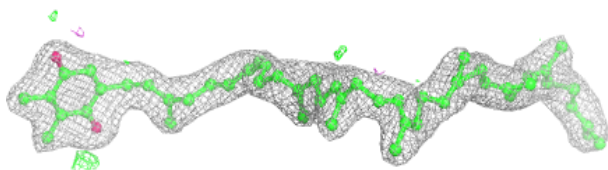
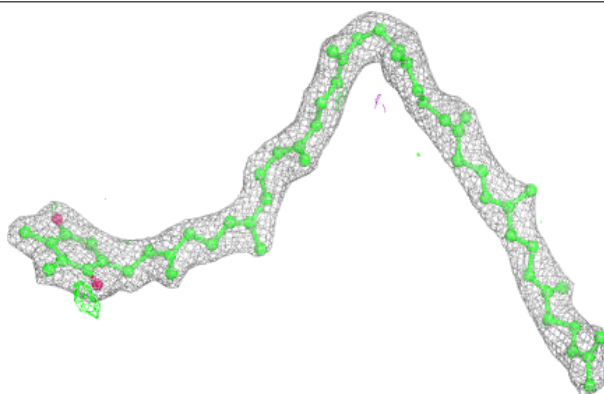


Electron density around CLA c 505:

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

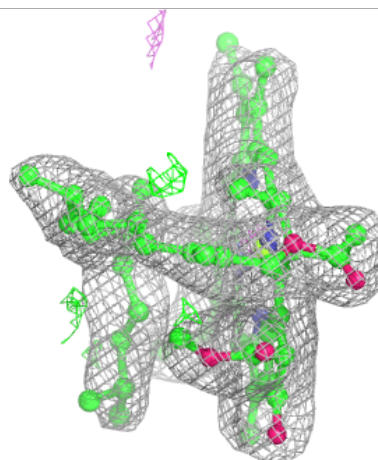
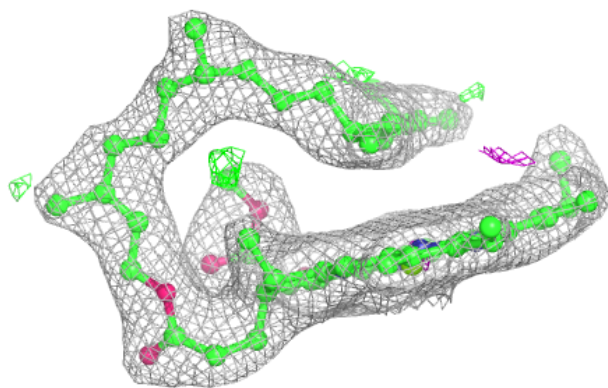
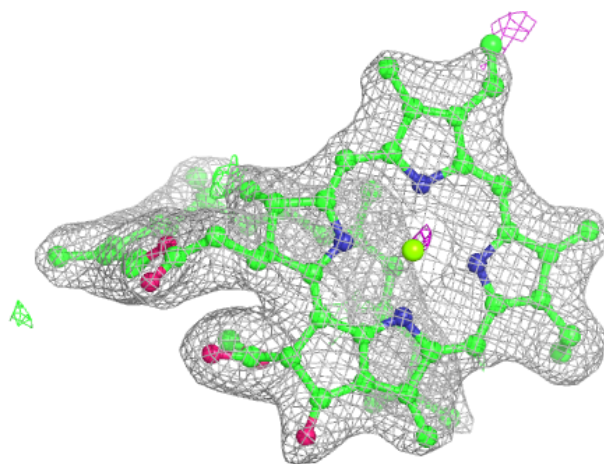
**Electron density around PL9 D 407:**

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



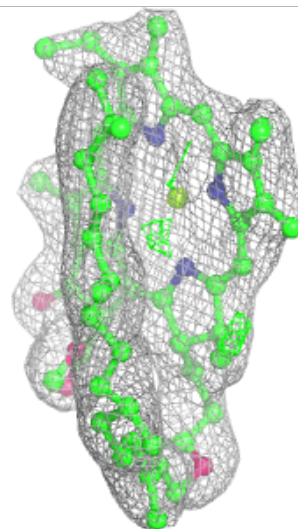
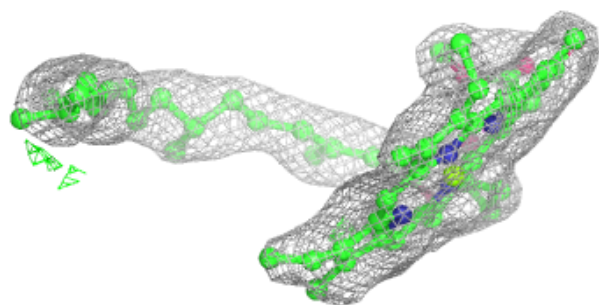
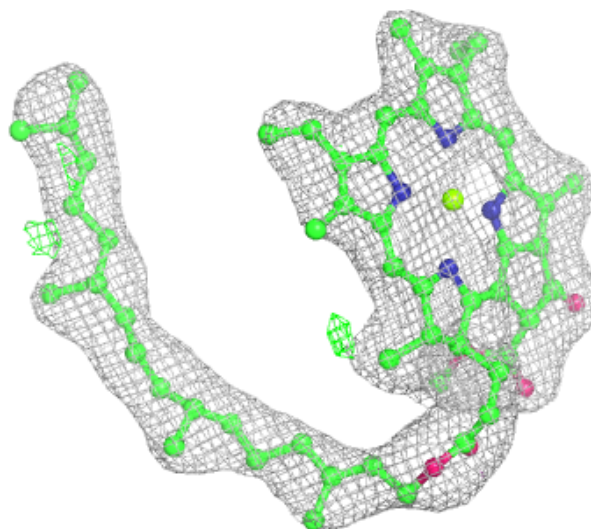
Electron density around CLA C 510:

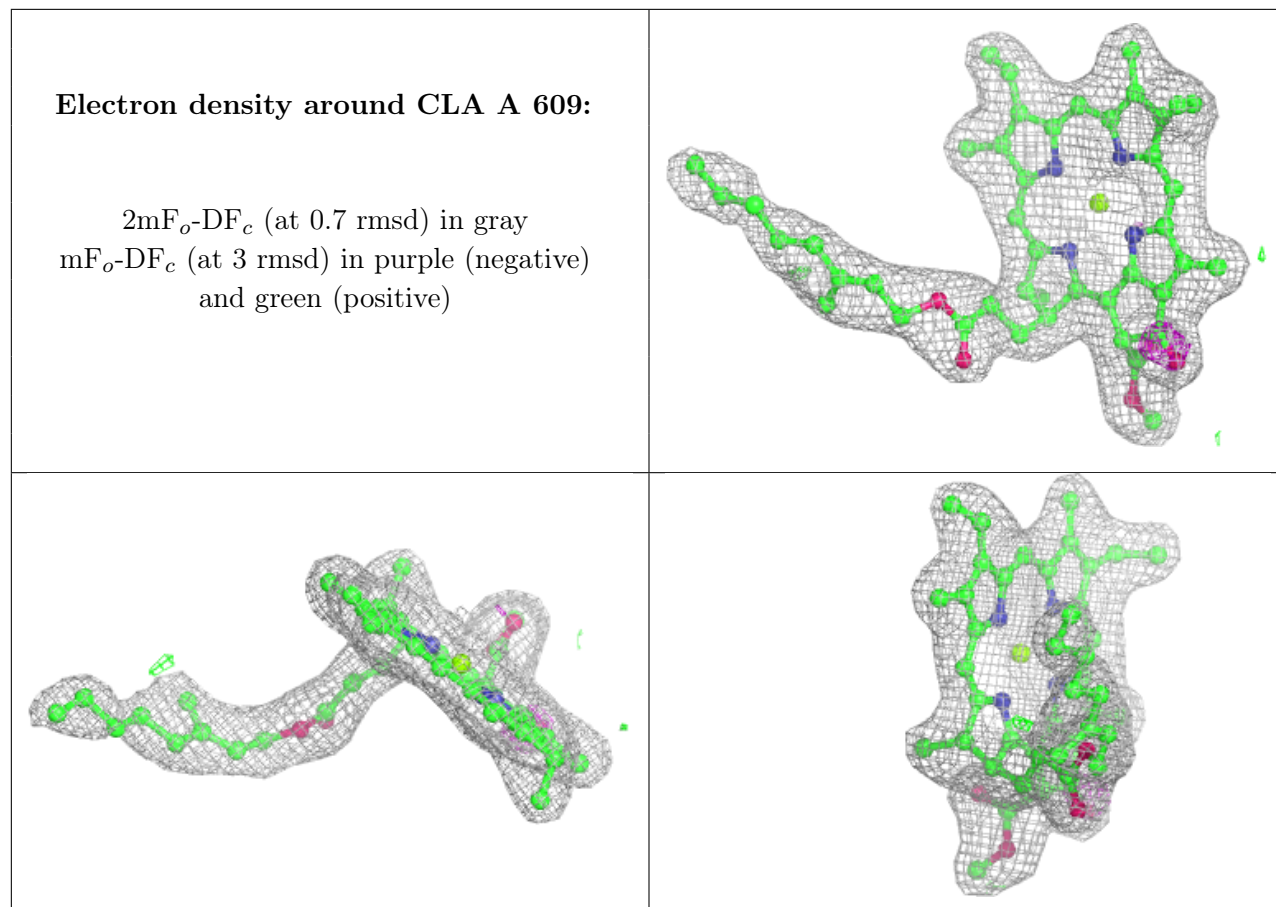
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CLA c 507:

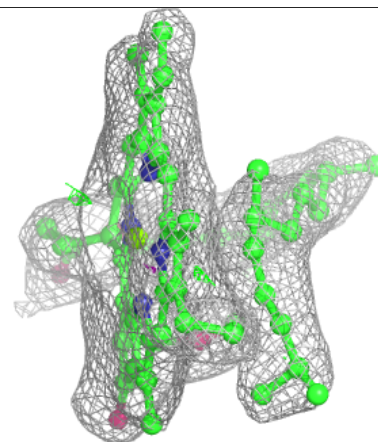
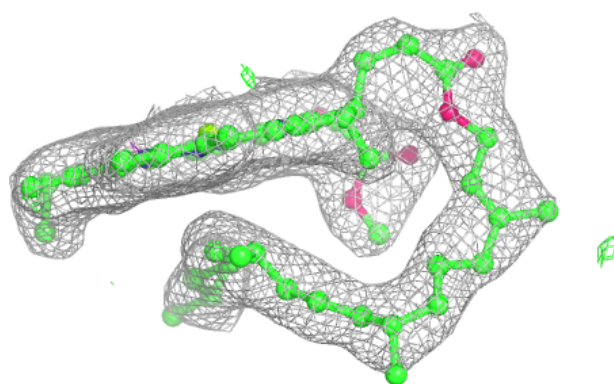
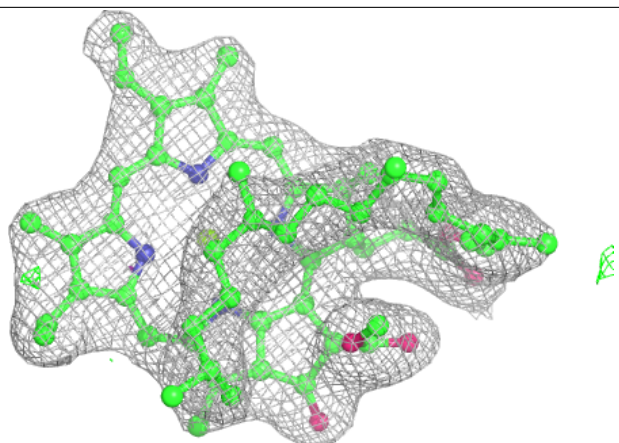
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



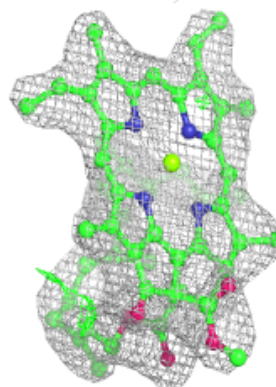
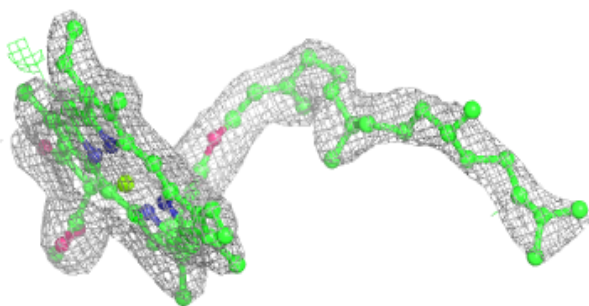
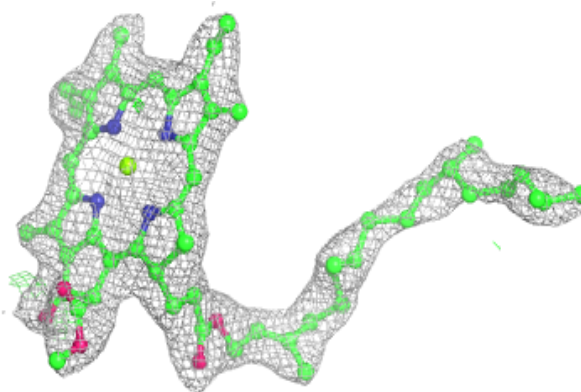


Electron density around CLA c 510:

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

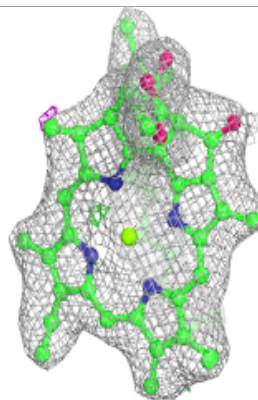
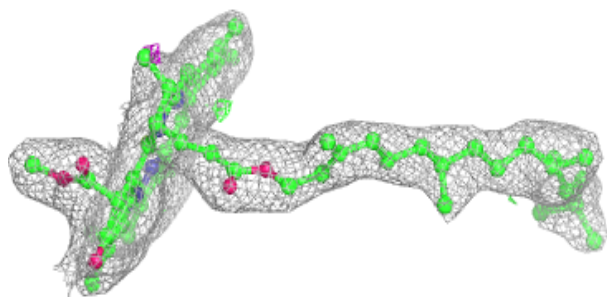
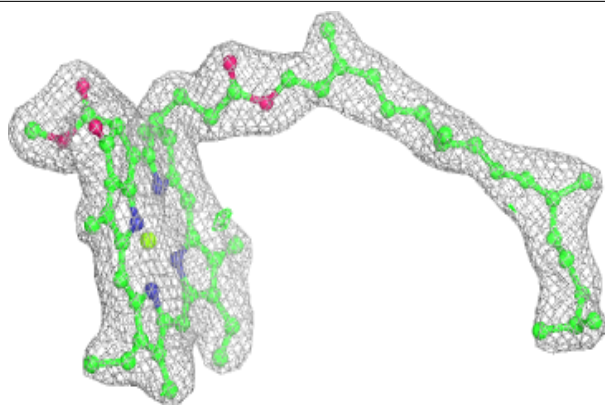
**Electron density around CLA c 511:**

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

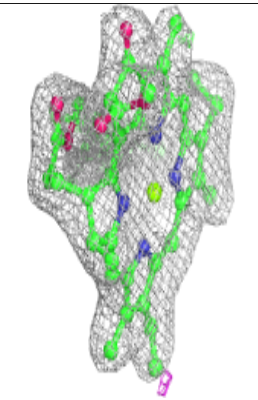
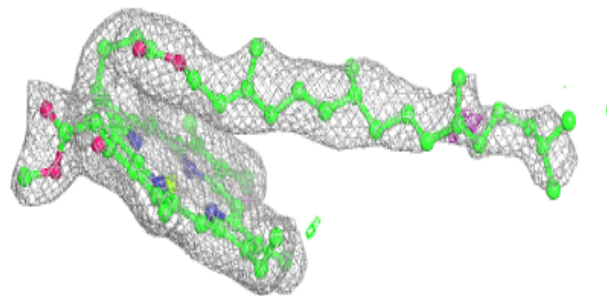
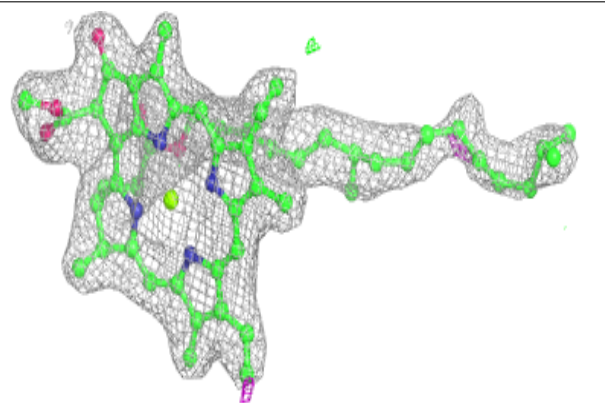


Electron density around CLA B 609:

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

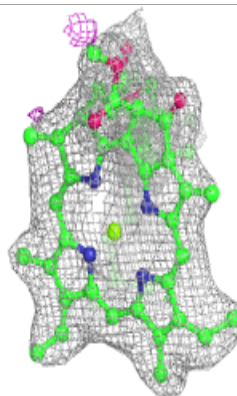
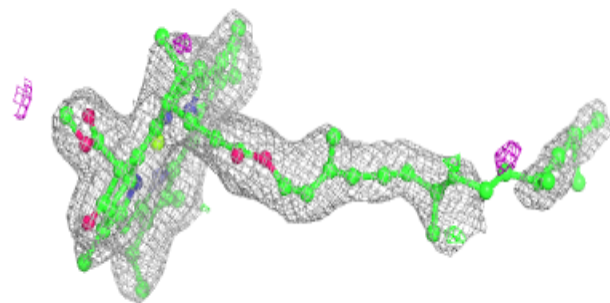
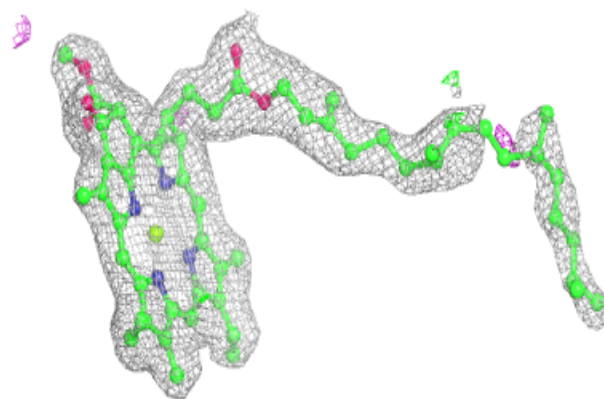
**Electron density around CLA B 614:**

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

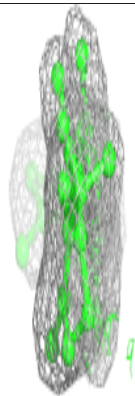
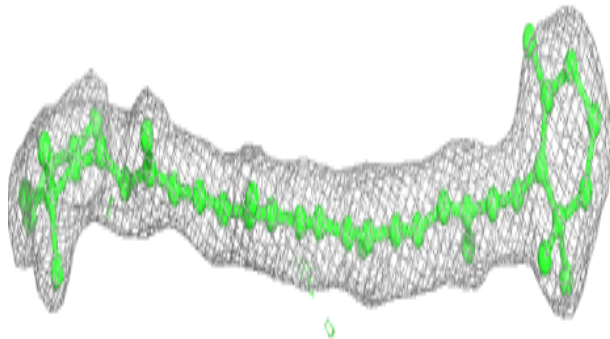
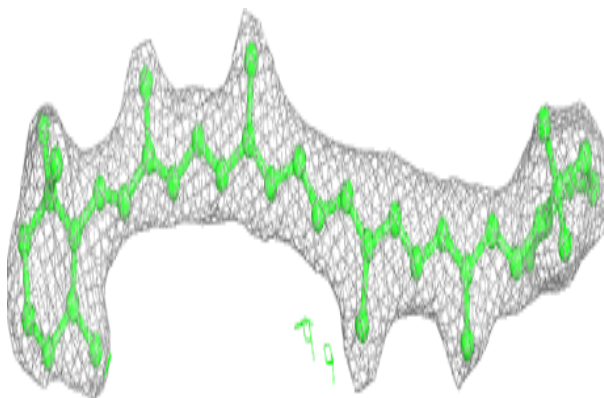


Electron density around CLA d 404:

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

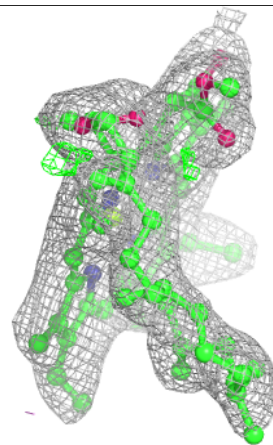
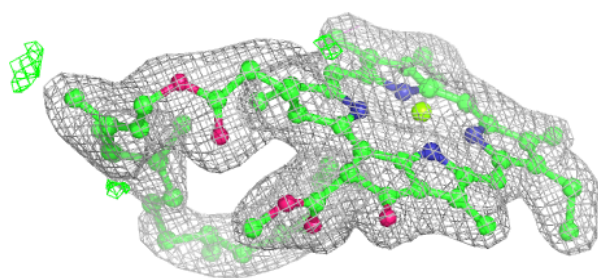
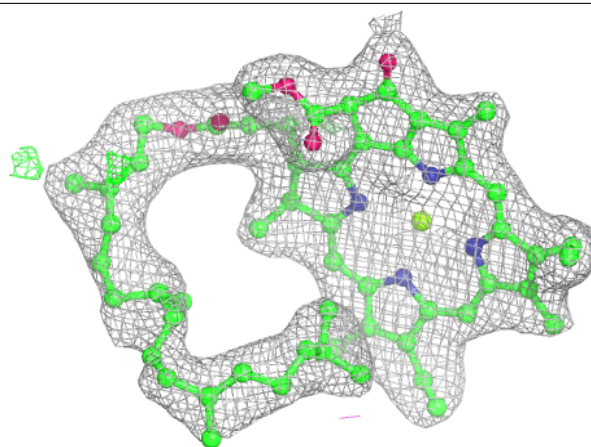
**Electron density around BCR B 617:**

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

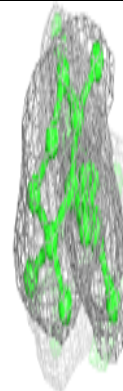
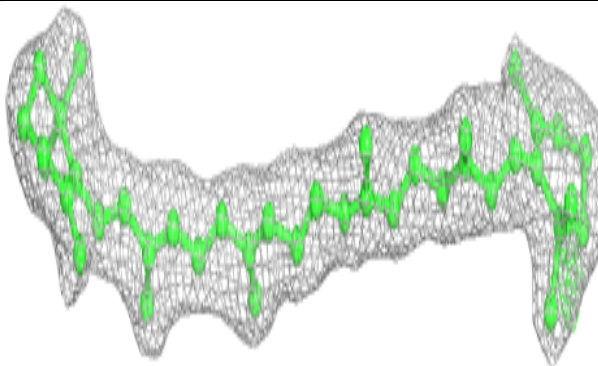
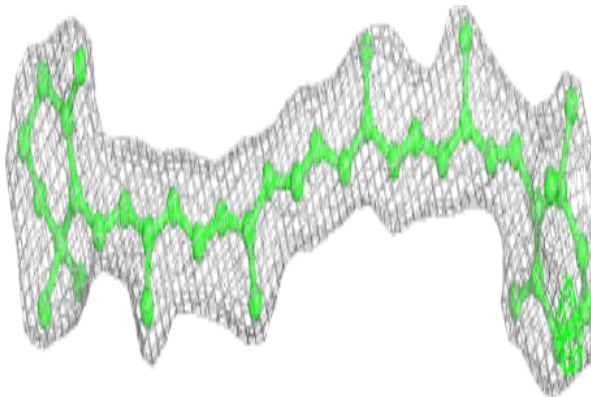


Electron density around CLA B 615:

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

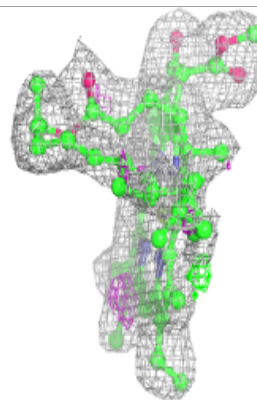
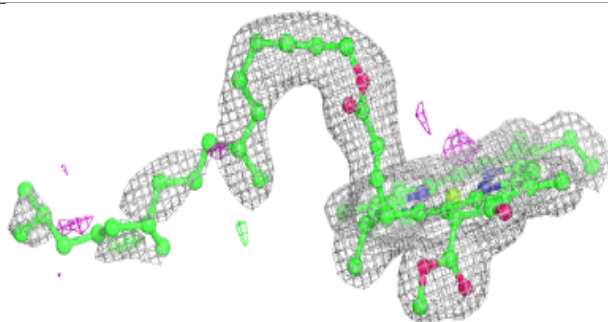
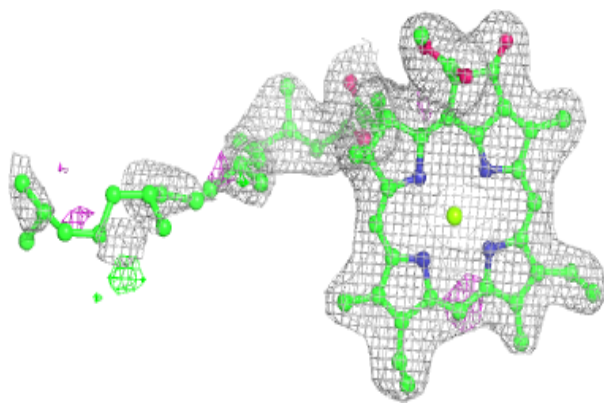
**Electron density around BCR B 619:**

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

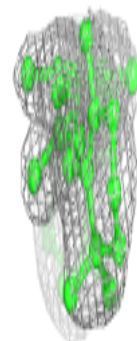
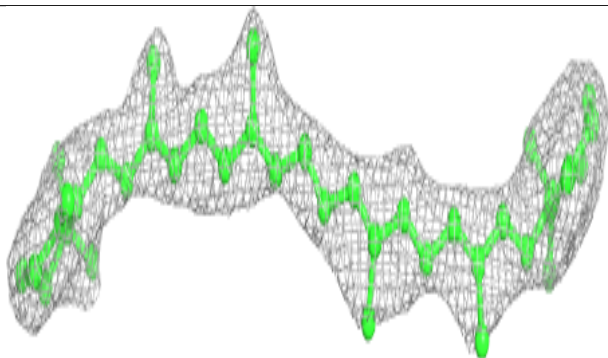
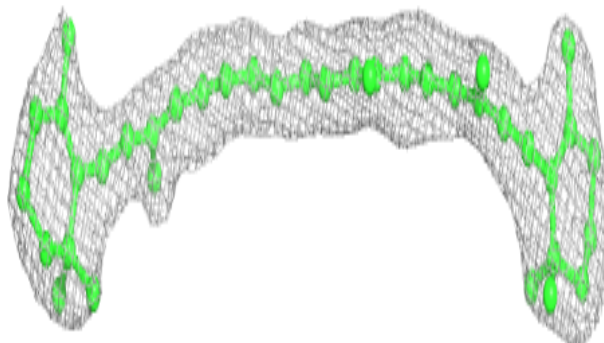


Electron density around CLA A 607:

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

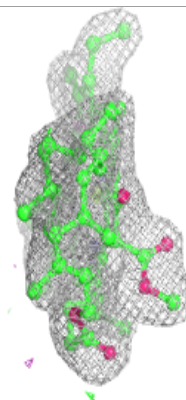
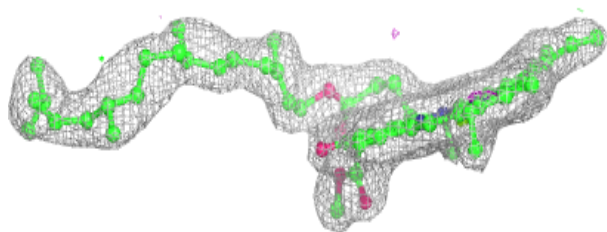
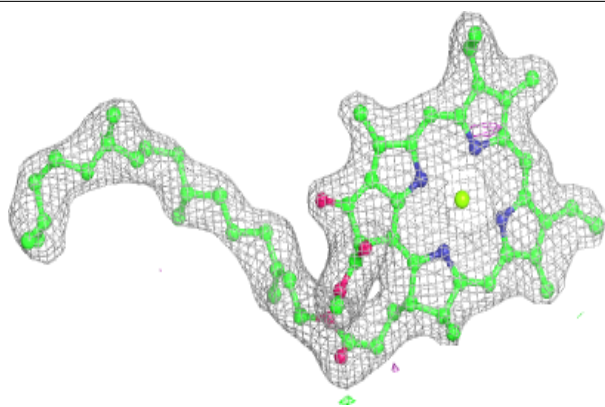
**Electron density around BCR C 515:**

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

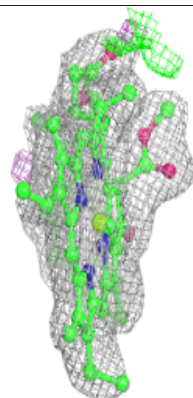
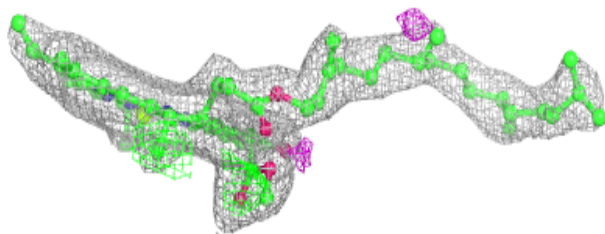
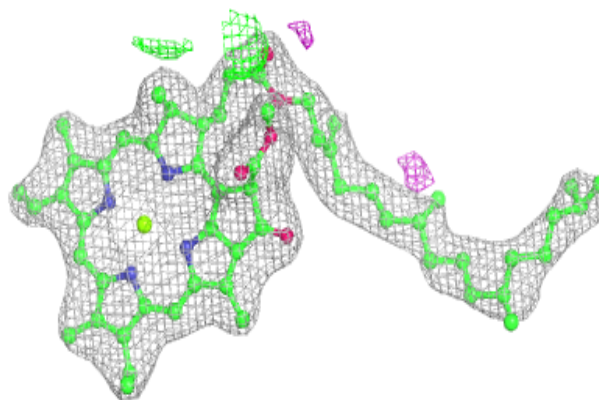


Electron density around CLA B 602:

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

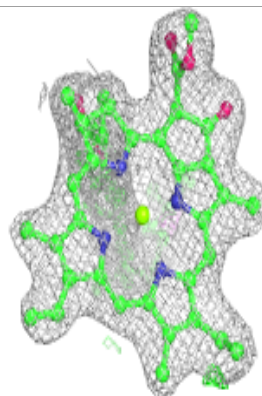
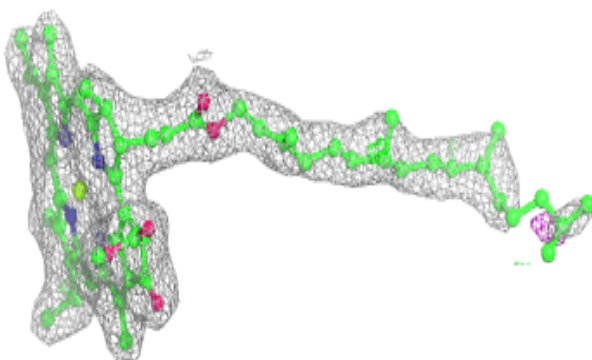
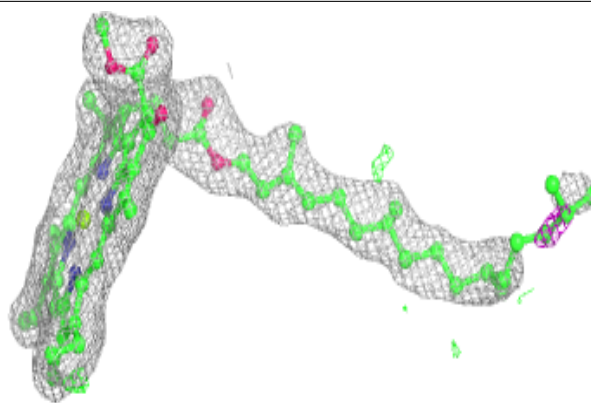
**Electron density around CLA b 602:**

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

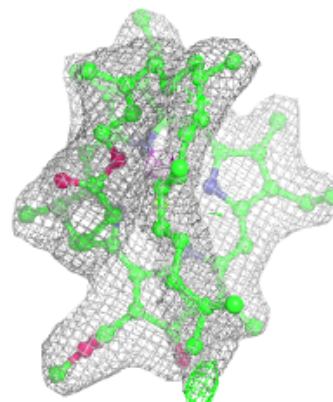
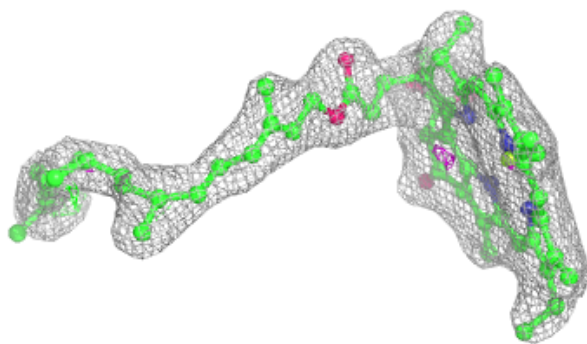
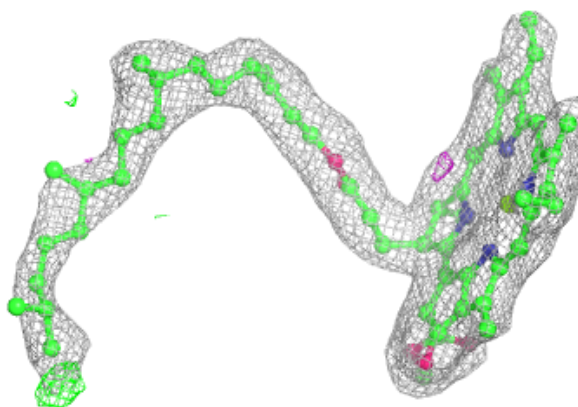


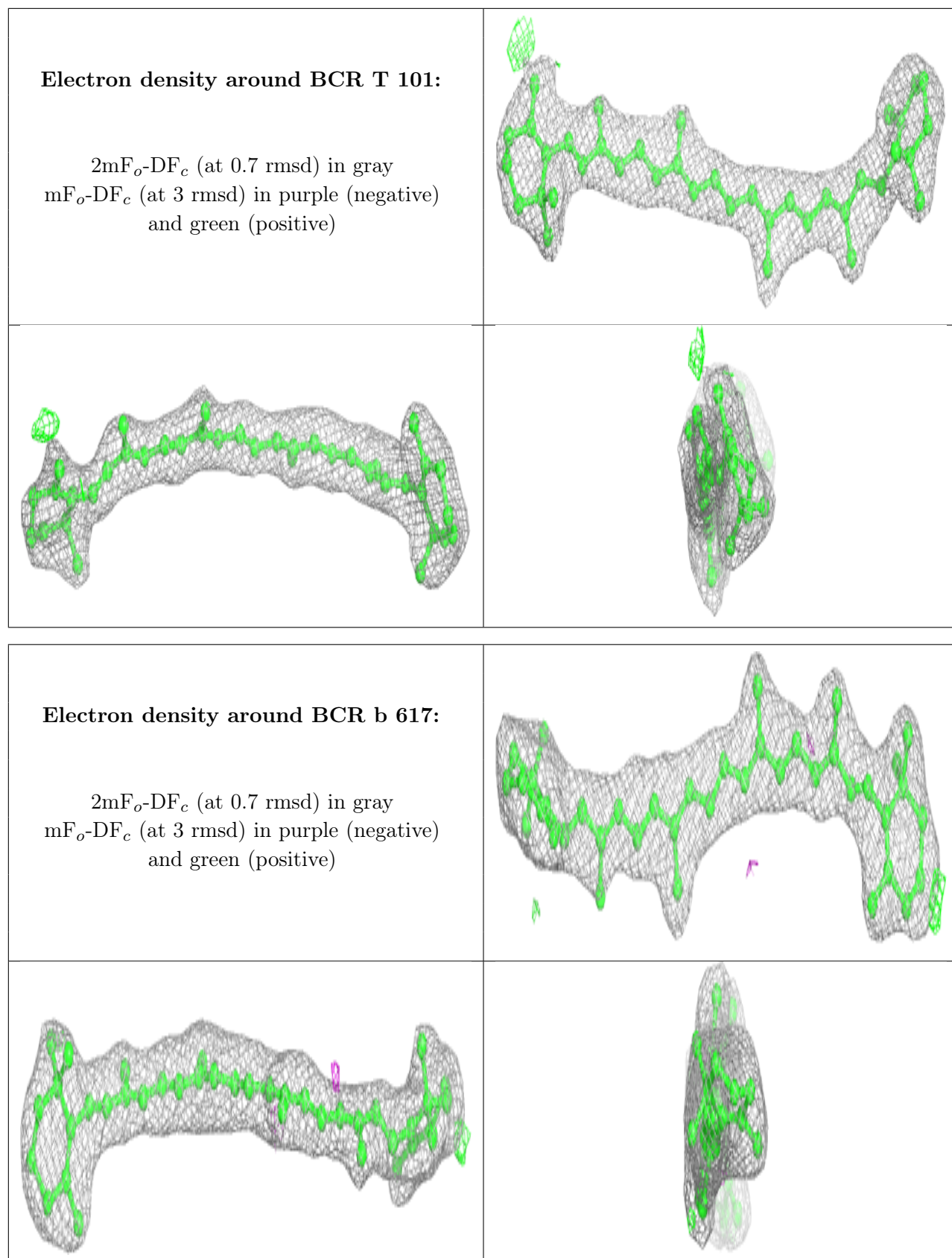
Electron density around CLA b 604:

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

**Electron density around CLA b 606:**

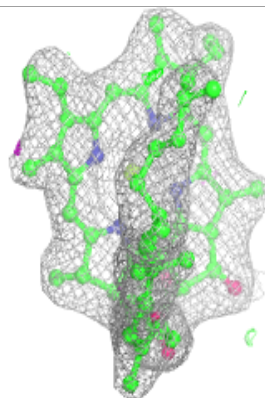
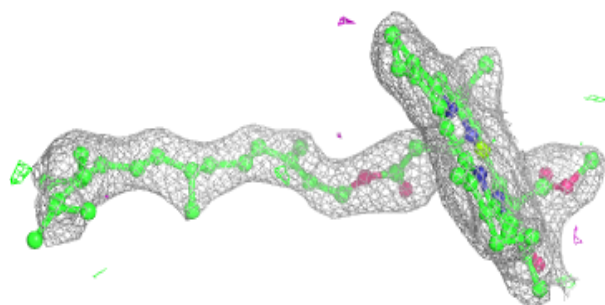
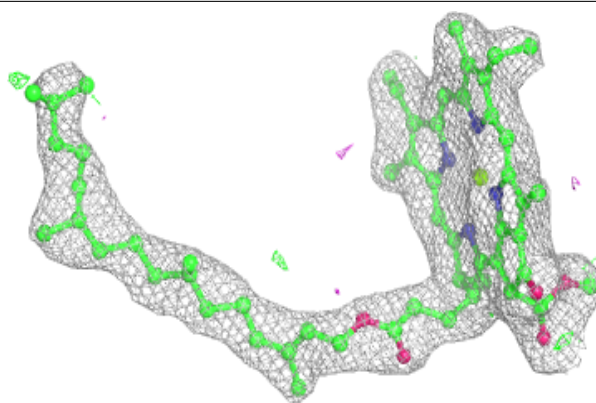
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





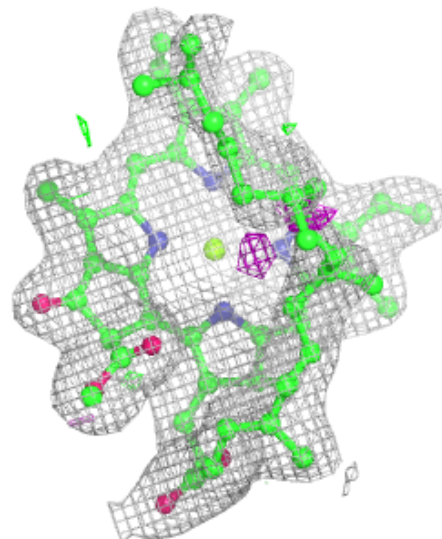
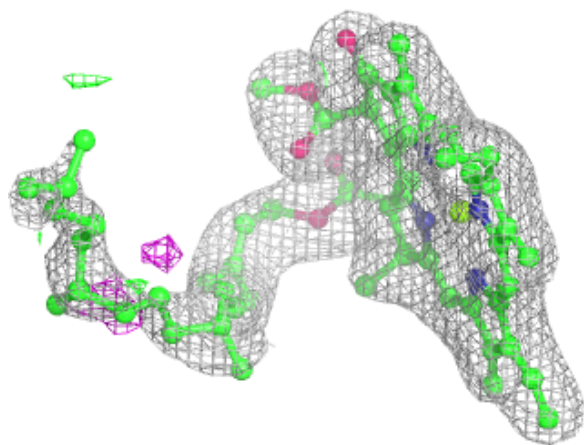
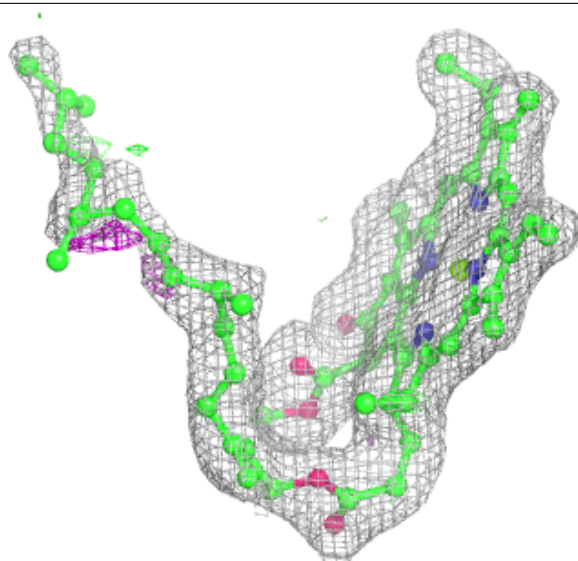
Electron density around CLA b 609:

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



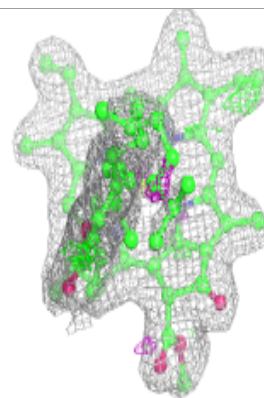
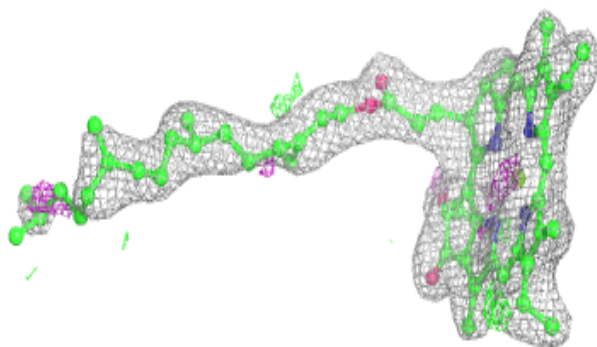
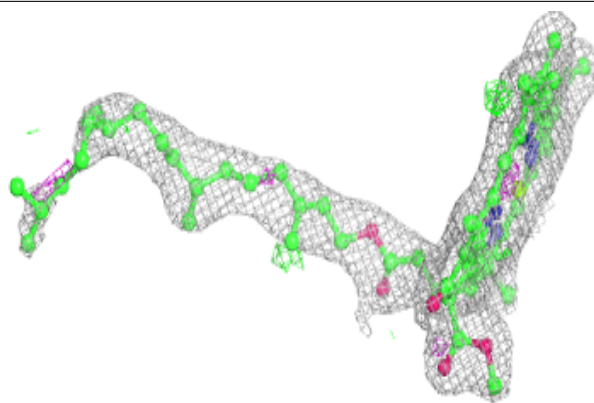
Electron density around CLA b 613:

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

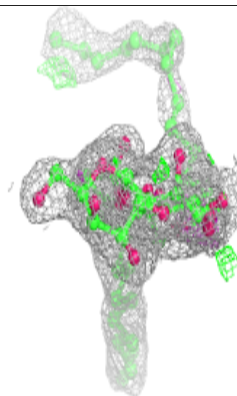
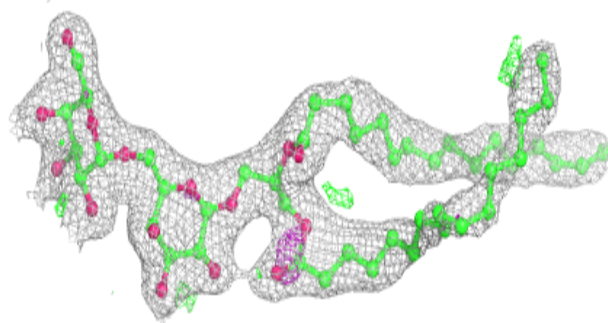
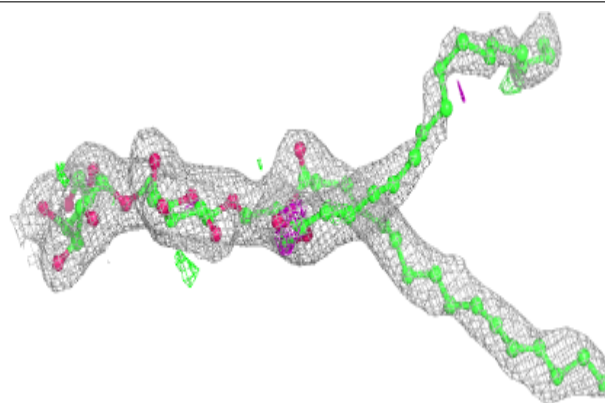


Electron density around CLA B 604:

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

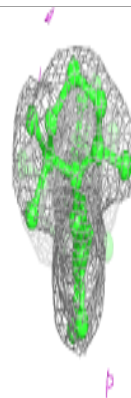
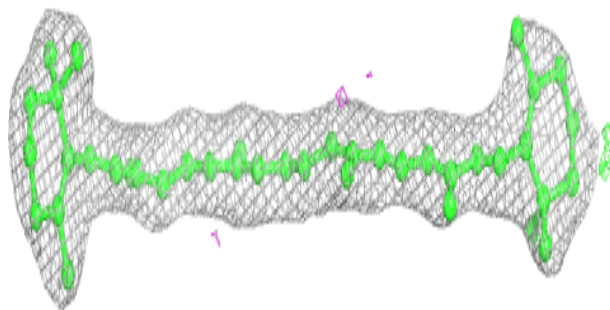
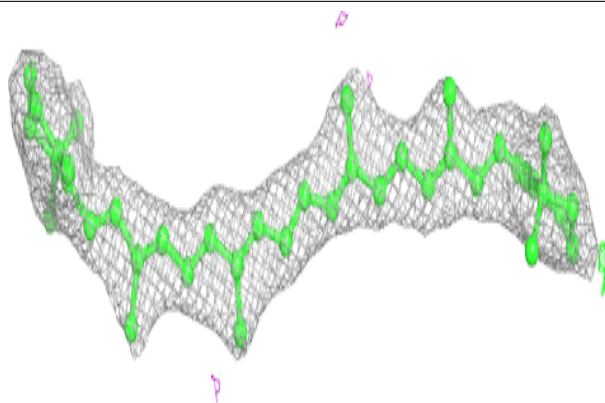
**Electron density around DGD C 516:**

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



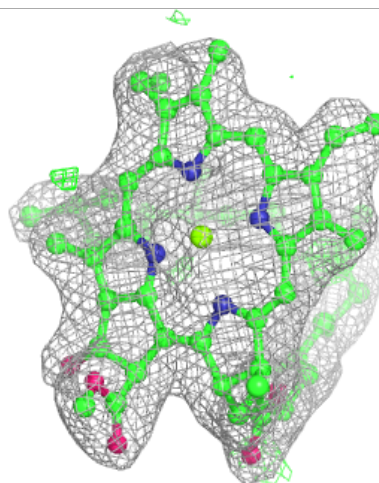
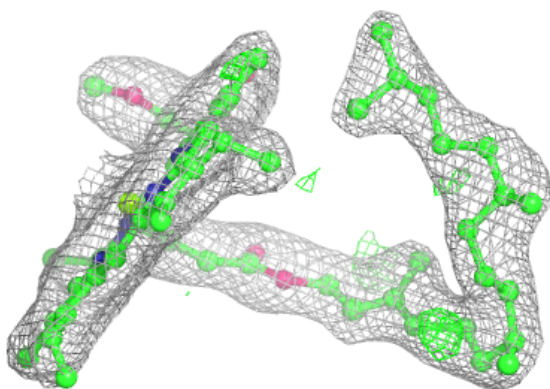
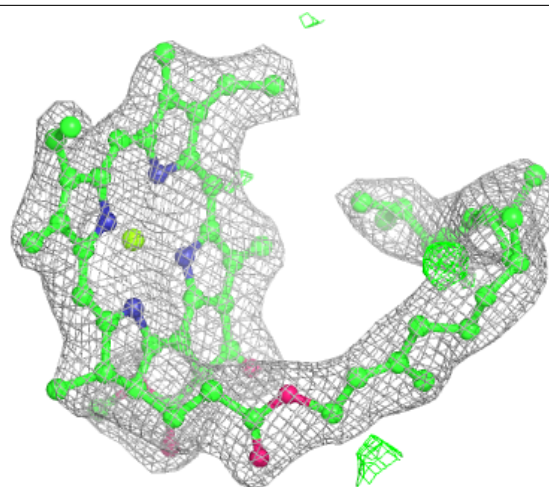
Electron density around BCR c 515:

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



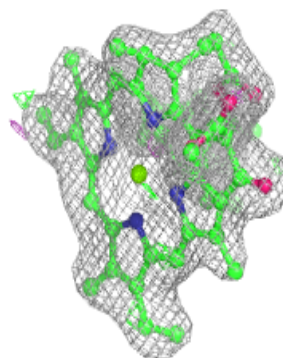
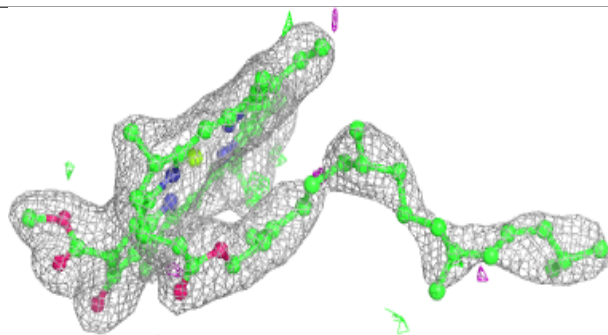
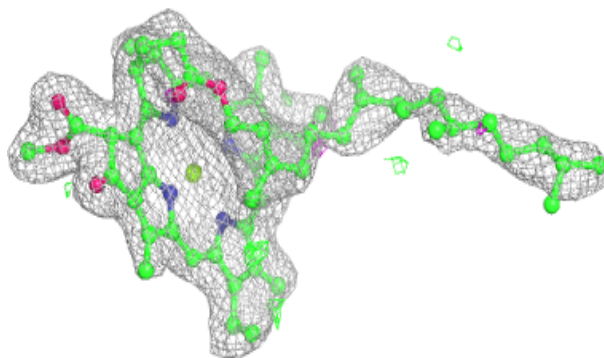
Electron density around CLA C 503:

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

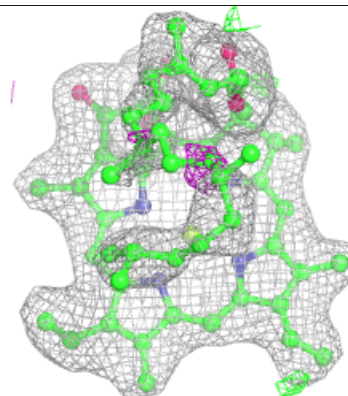
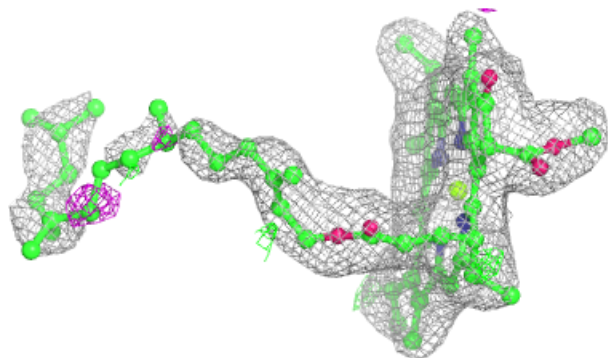
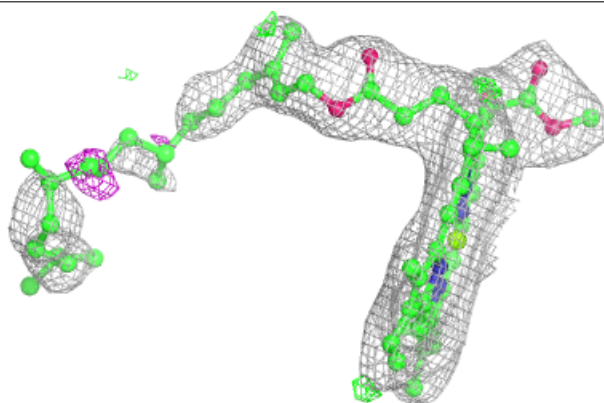


Electron density around CLA C 505:

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

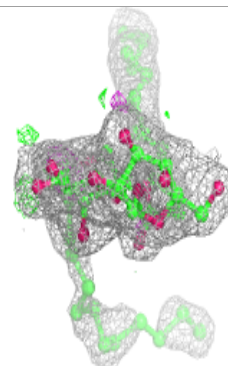
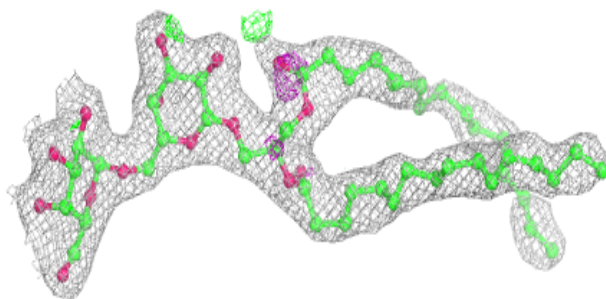
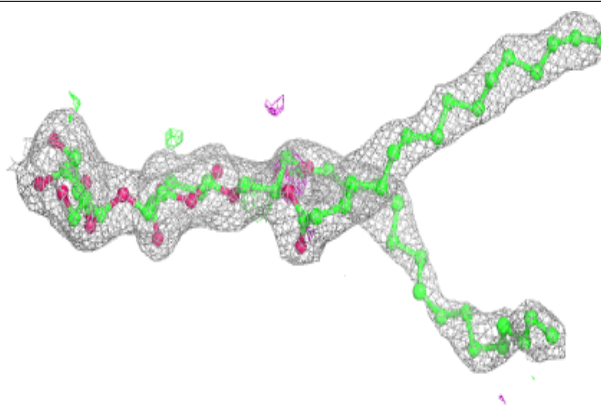
**Electron density around CLA C 506:**

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



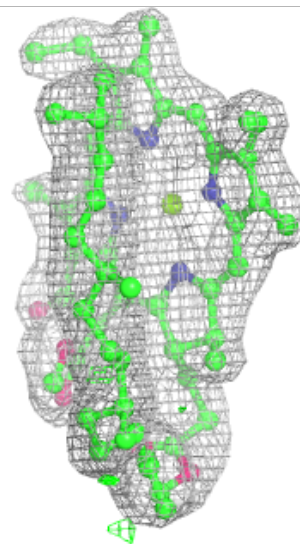
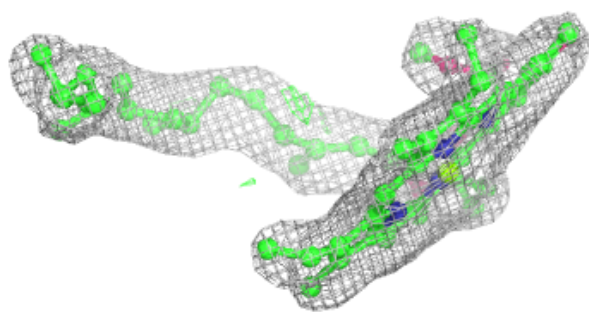
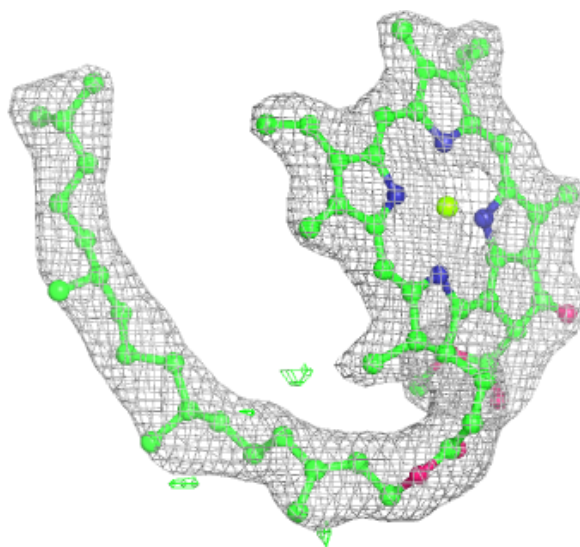
Electron density around DGD c 516:

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



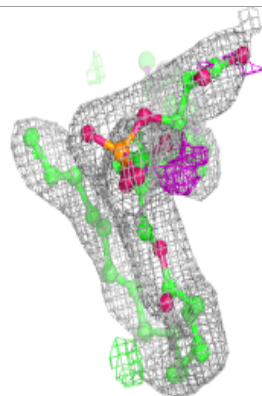
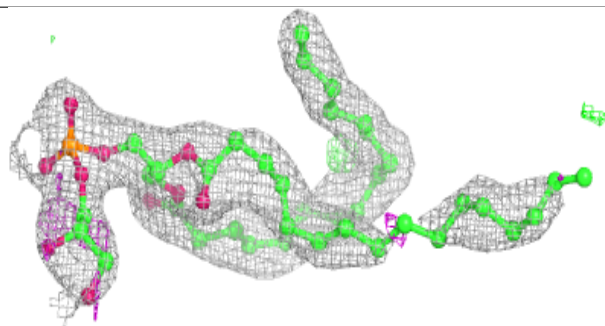
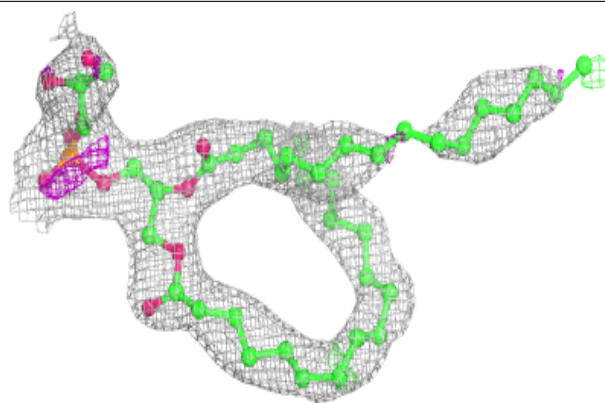
Electron density around CLA C 507:

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

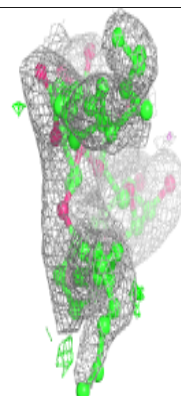
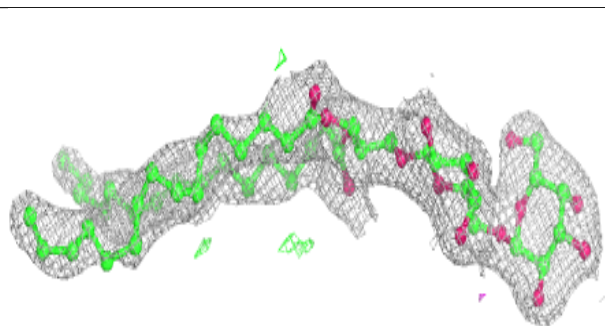
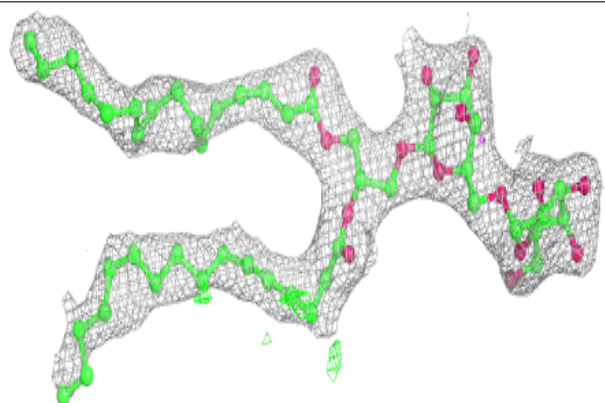


Electron density around LHG d 407:

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

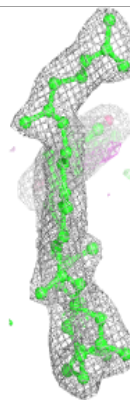
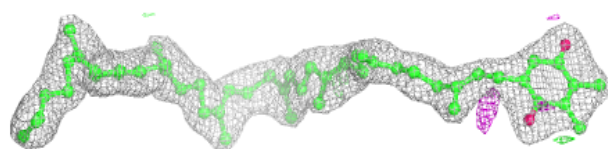
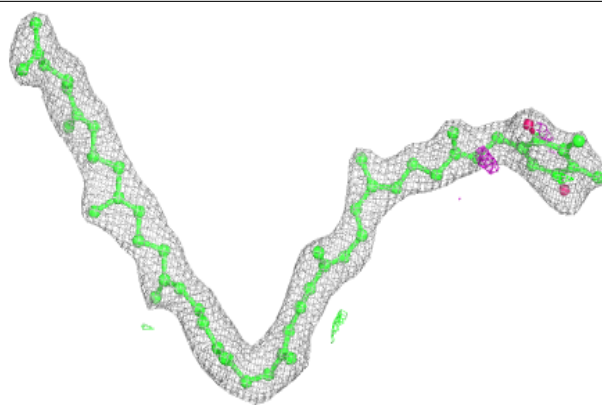
**Electron density around DGD c 518:**

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

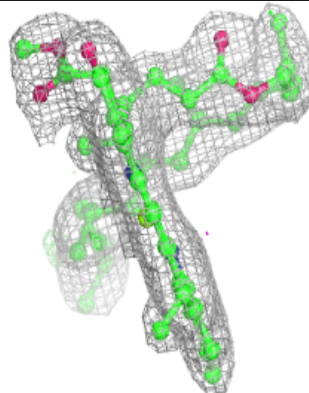
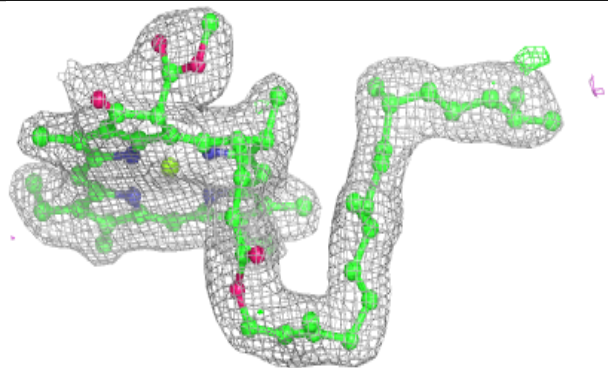
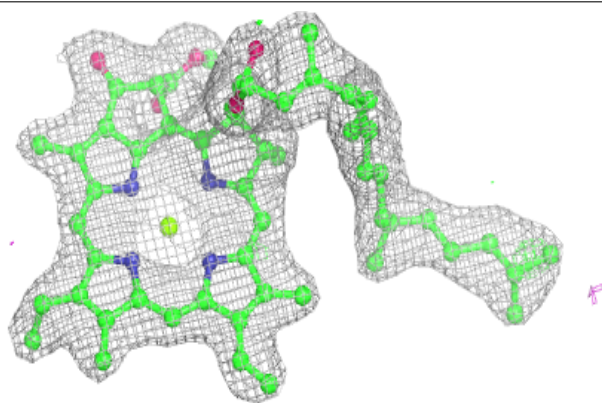


Electron density around PL9 d 406:

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

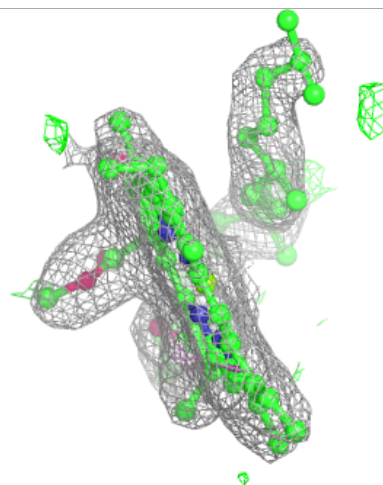
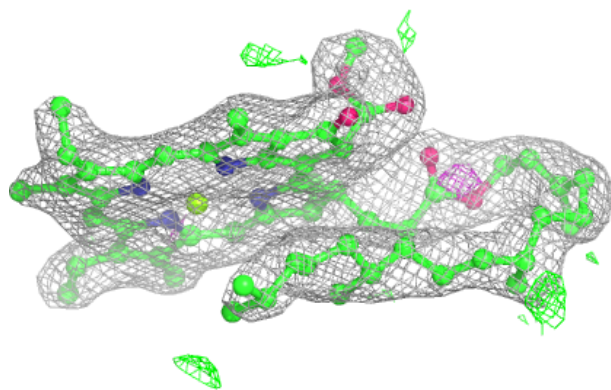
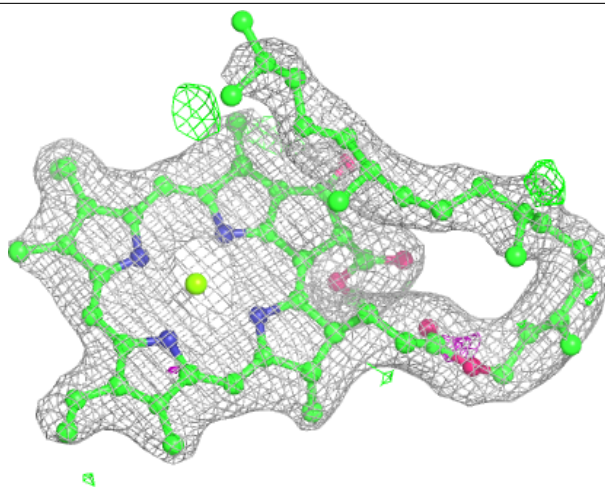
**Electron density around CLA a 612:**

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



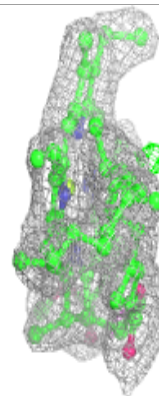
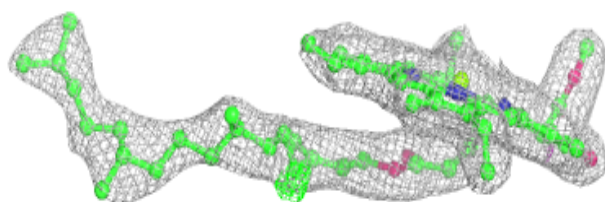
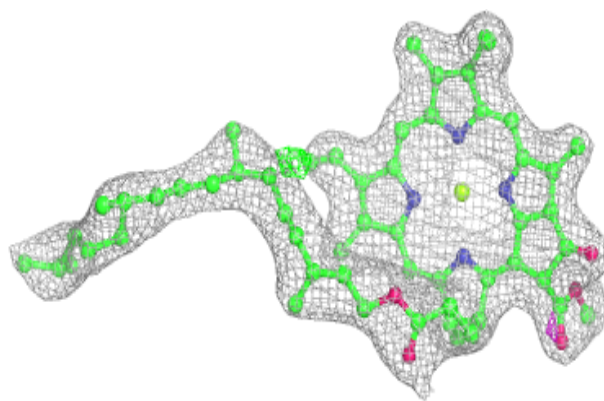
Electron density around CLA C 509:

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

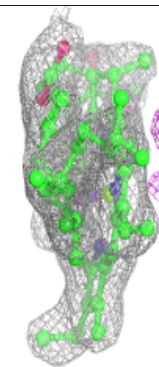
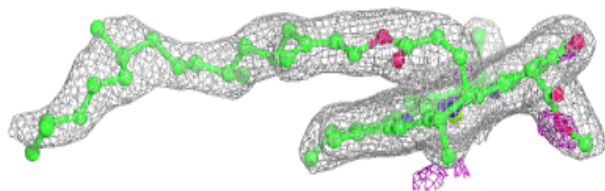
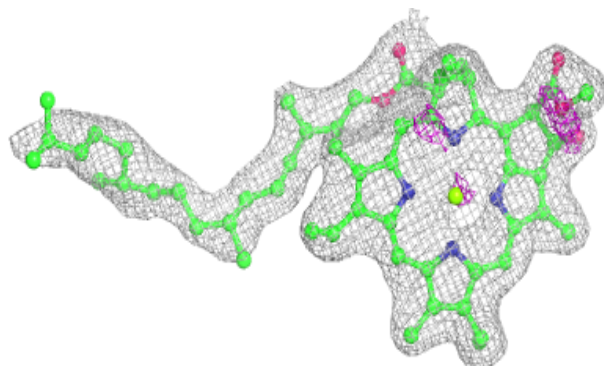


Electron density around CLA B 603:

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

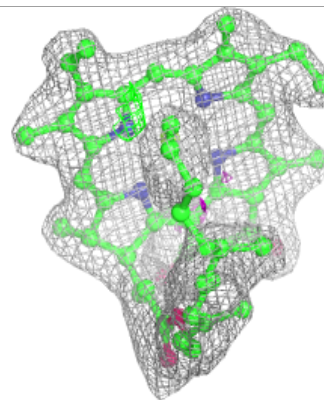
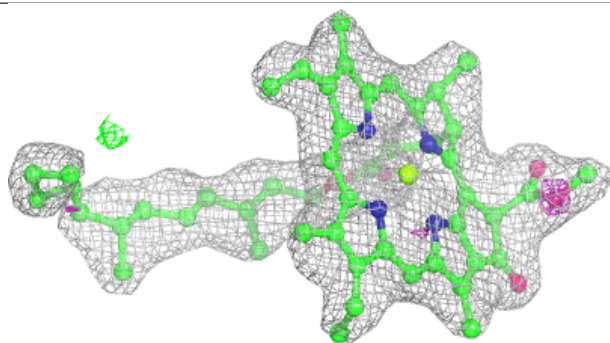
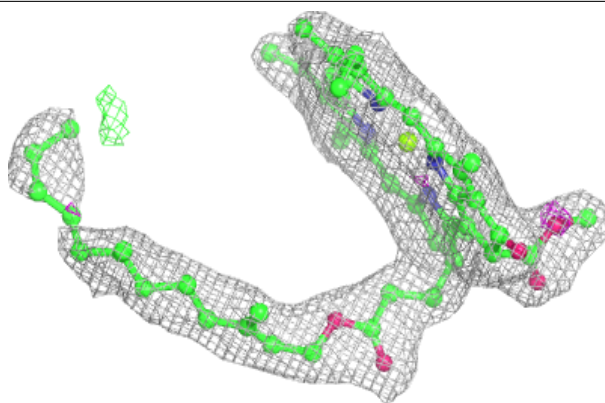
**Electron density around CLA b 603:**

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

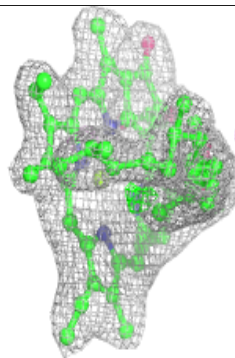
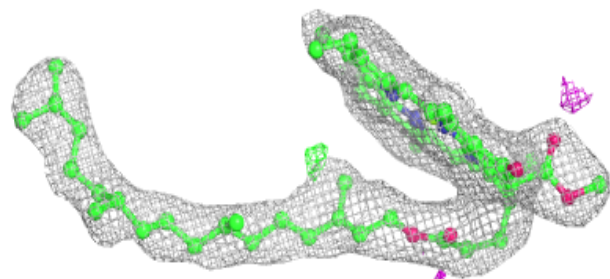
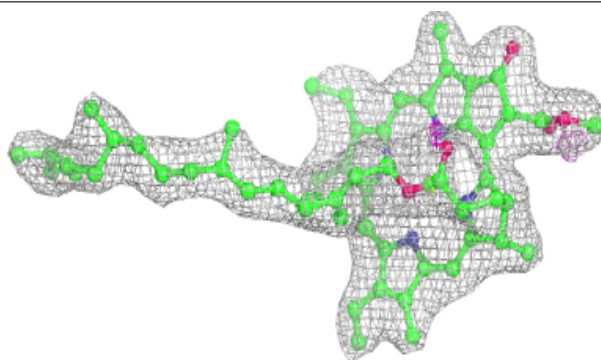


Electron density around CLA C 504:

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

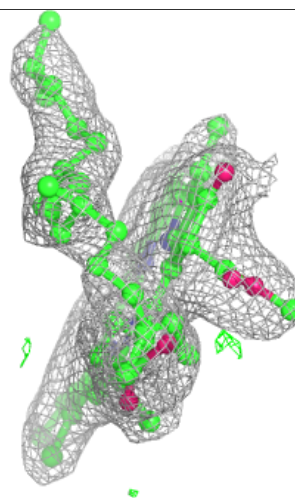
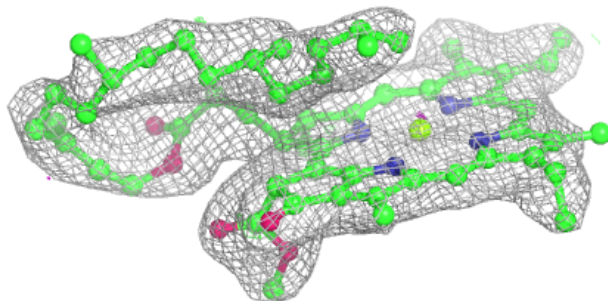
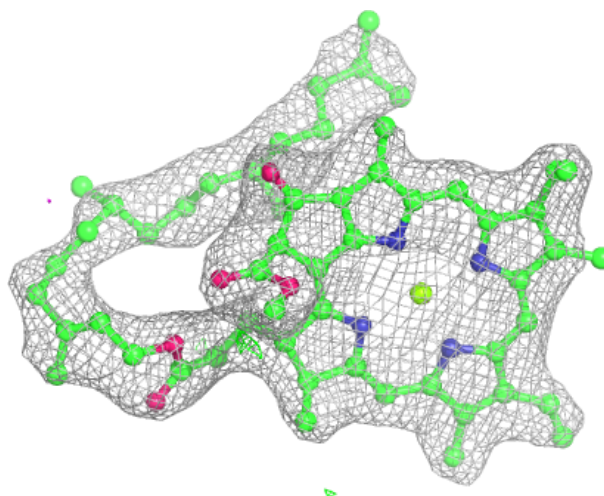
**Electron density around CLA b 608:**

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



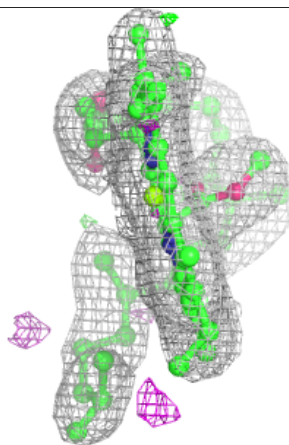
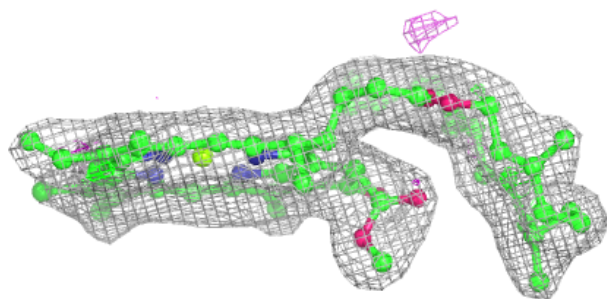
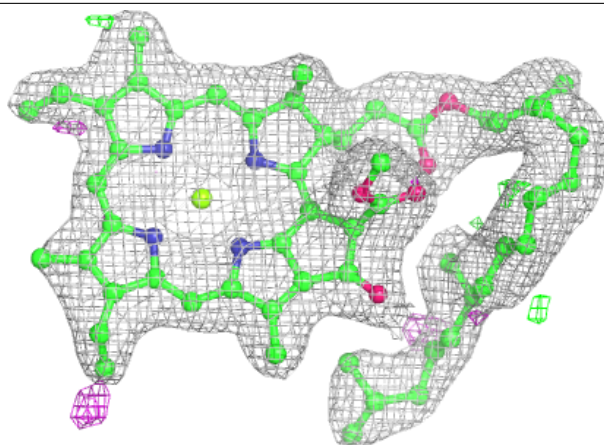
Electron density around CLA c 509:

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



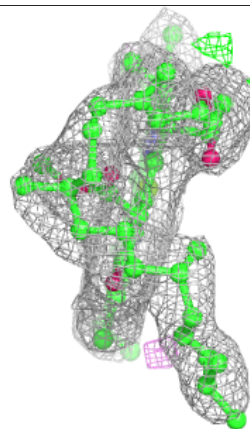
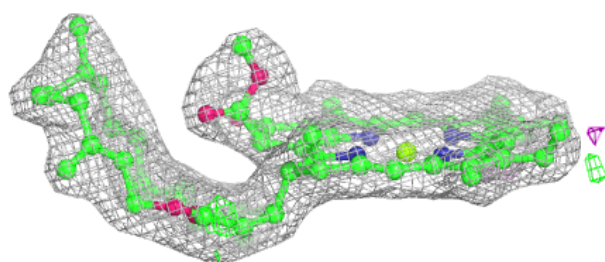
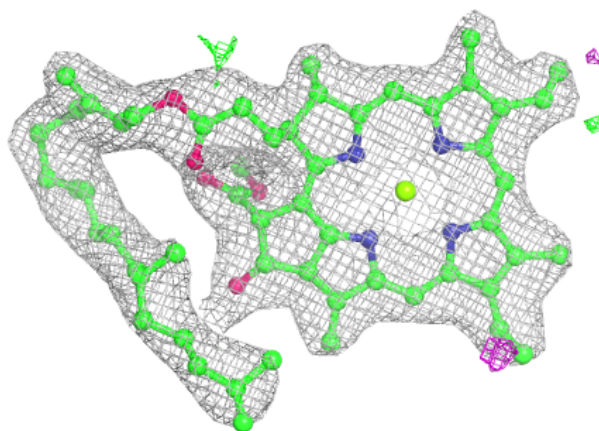
Electron density around CLA B 610:

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



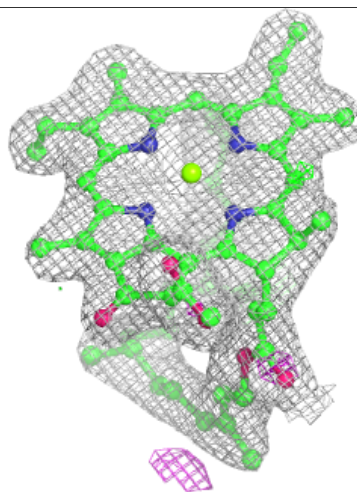
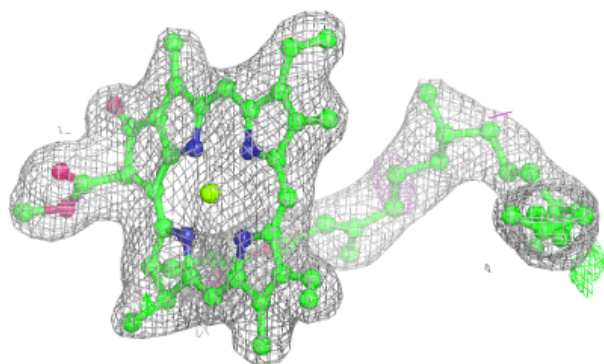
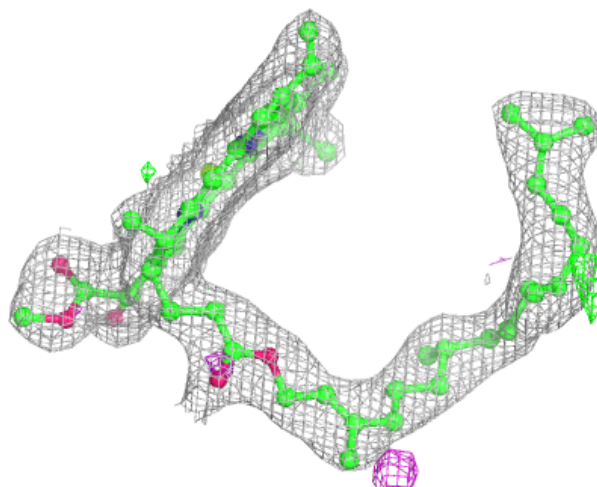
Electron density around CLA b 610:

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



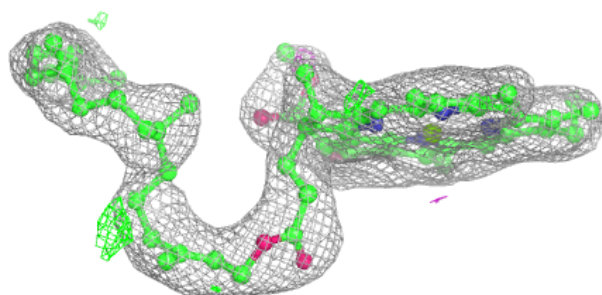
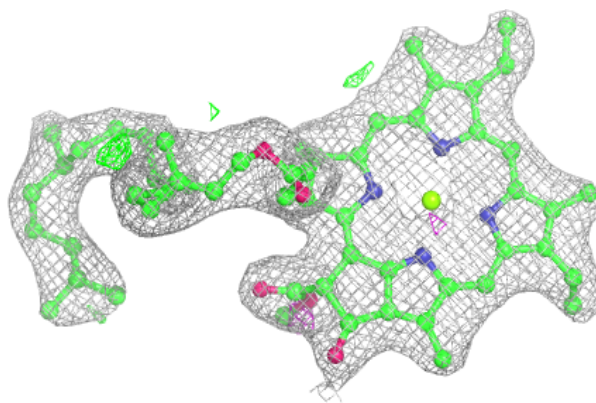
Electron density around CLA b 611:

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

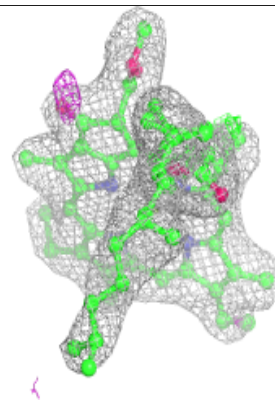
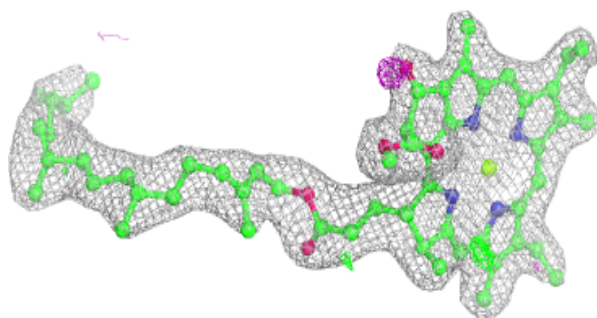
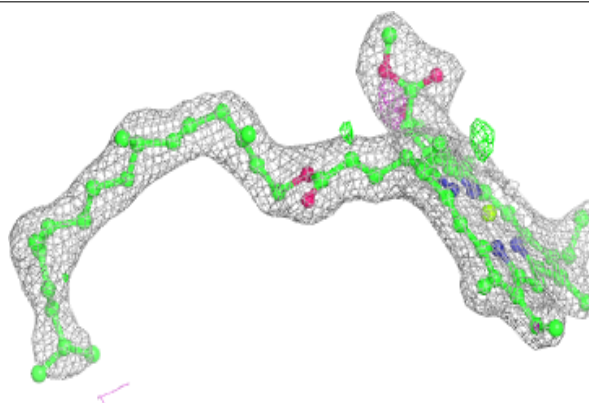


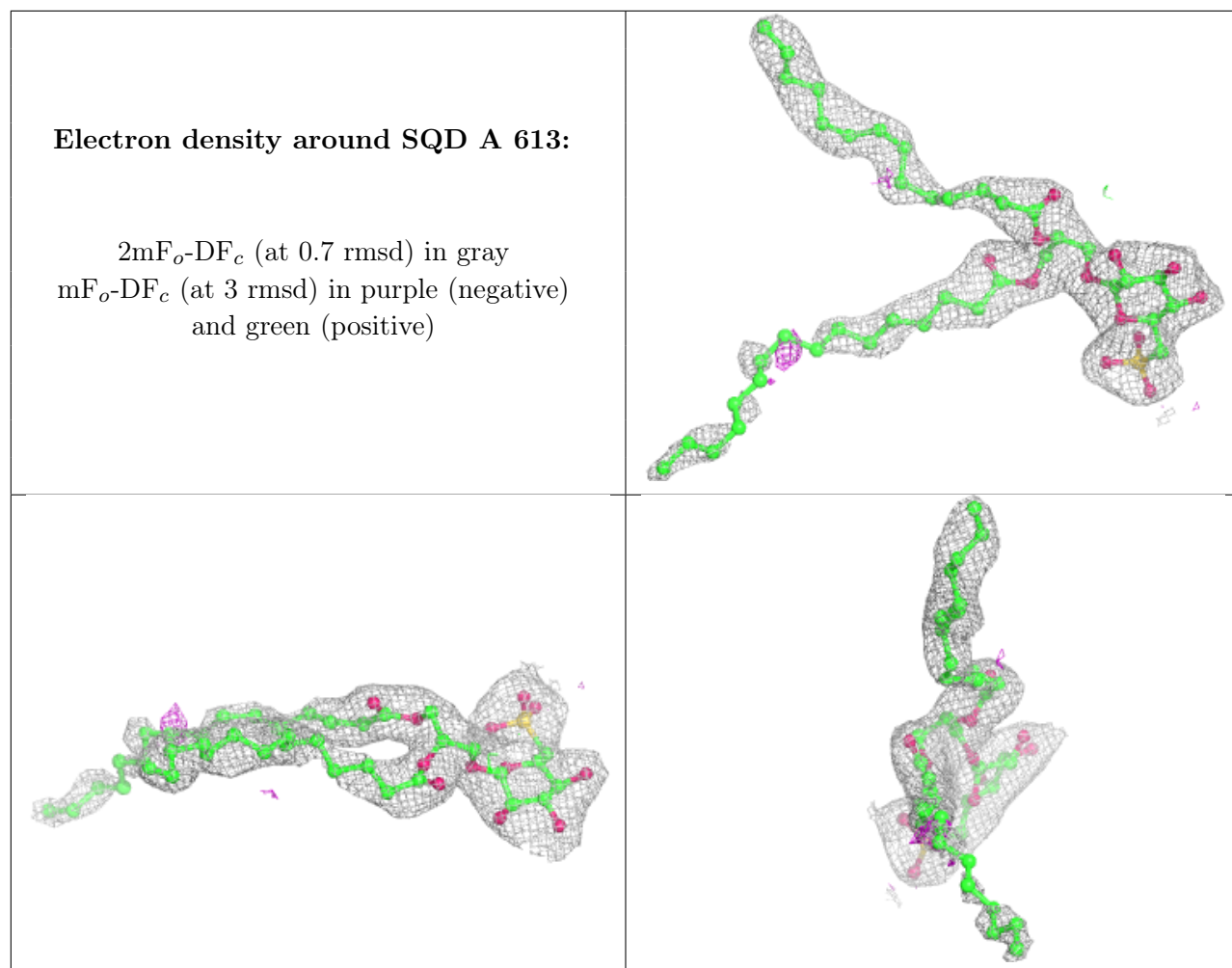
Electron density around CLA b 612:

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

**Electron density around CLA d 403:**

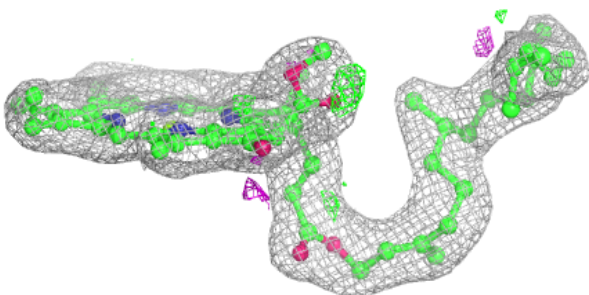
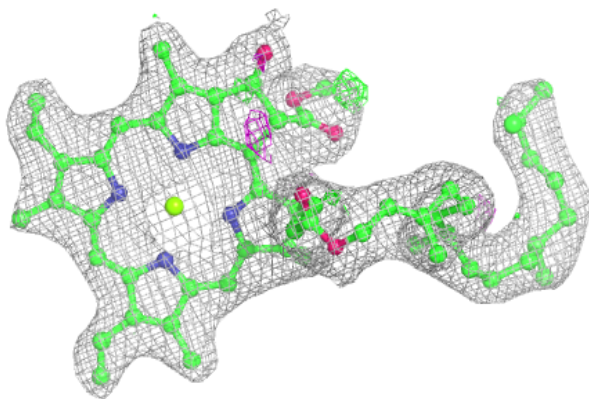
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



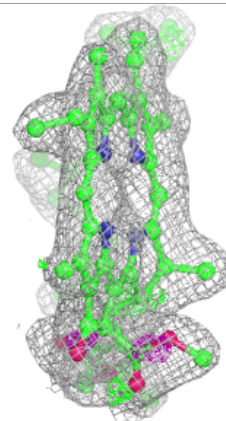
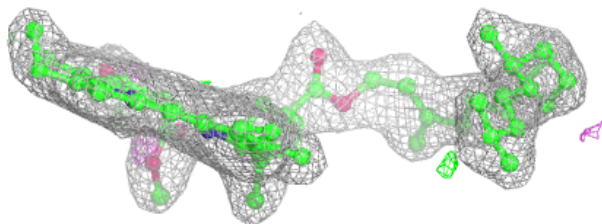
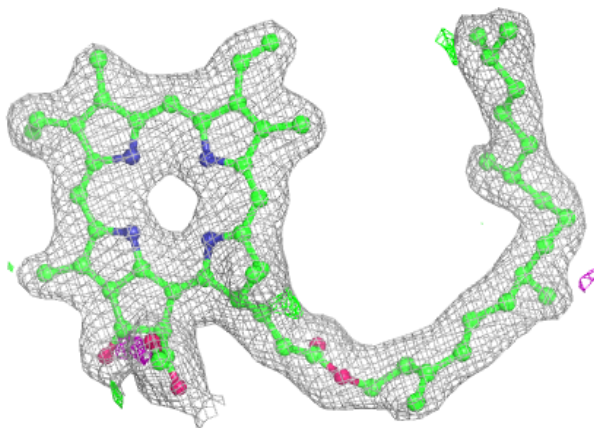


Electron density around CLA B 612:

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

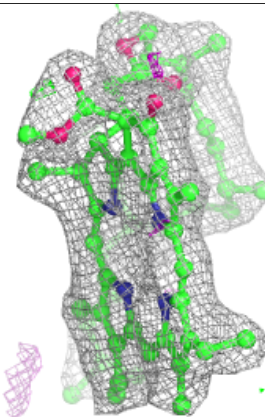
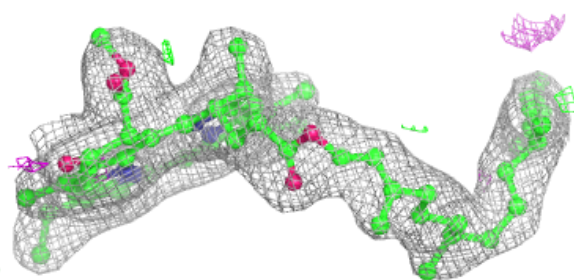
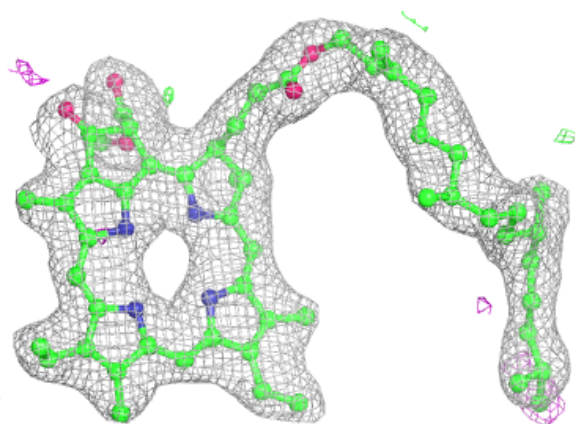
**Electron density around PHO a 608:**

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

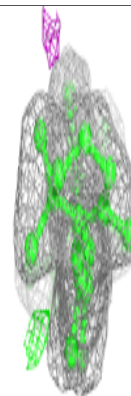
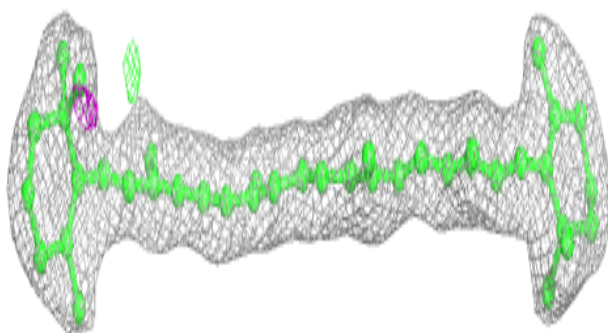
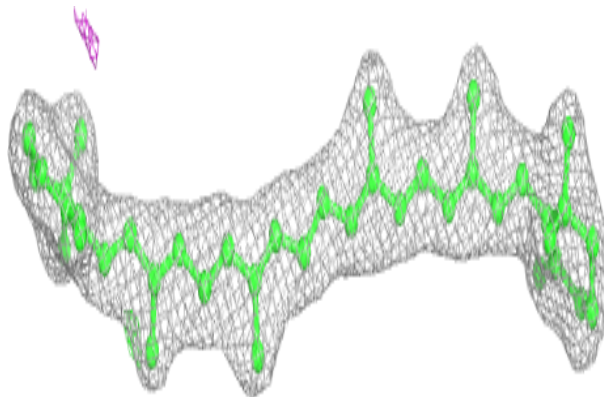


Electron density around PHO d 402:

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

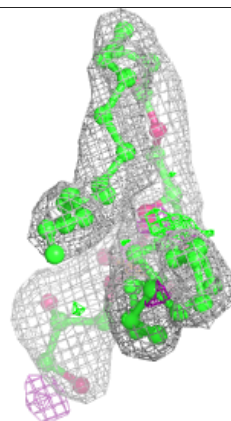
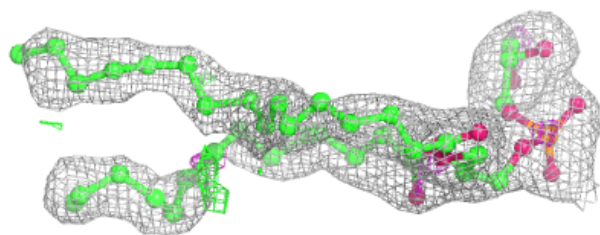
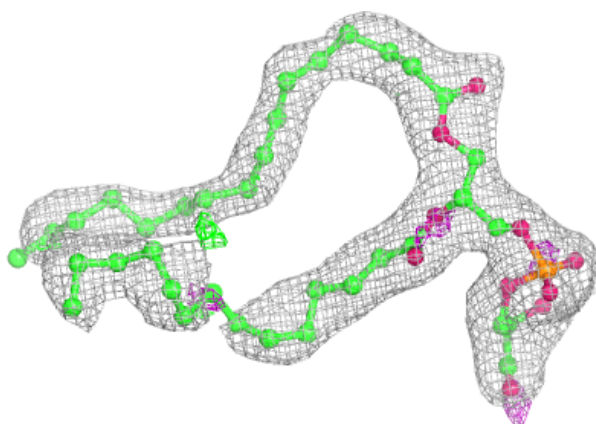
**Electron density around BCR A 610:**

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

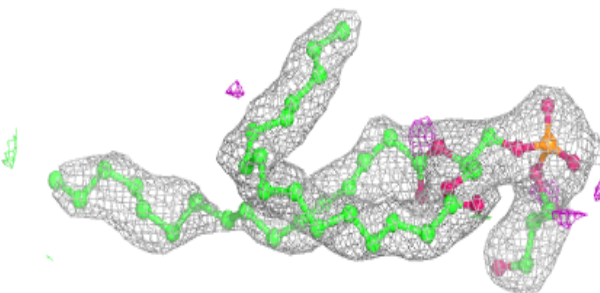
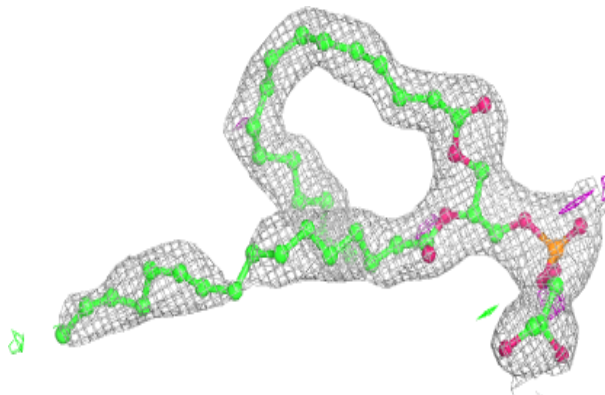


Electron density around LHG D 411:

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

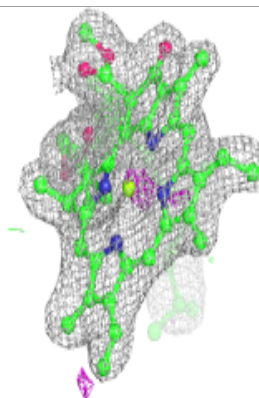
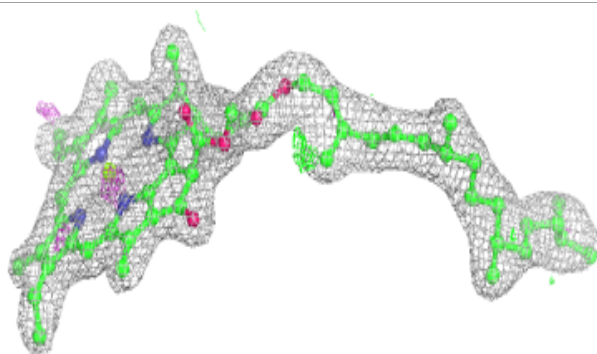
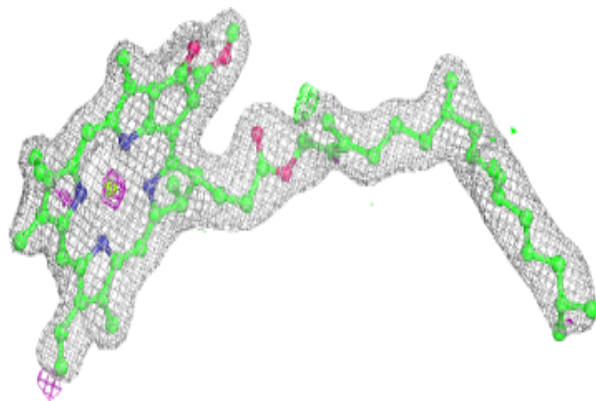
**Electron density around LHG D 413:**

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



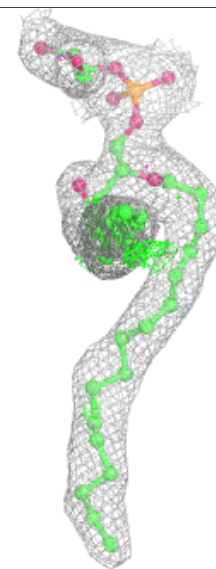
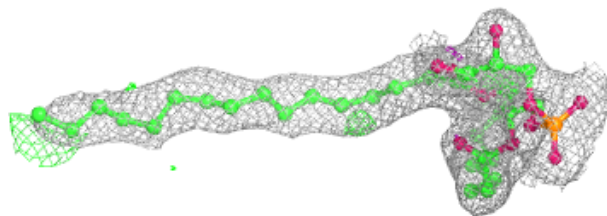
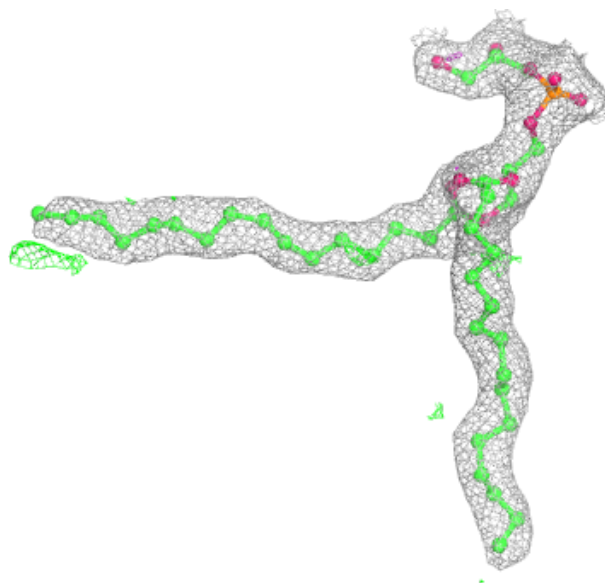
Electron density around CLA a 606:

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



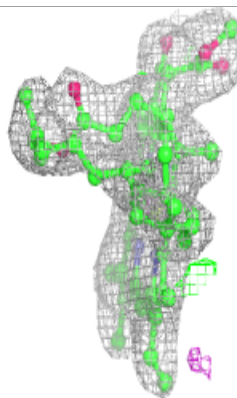
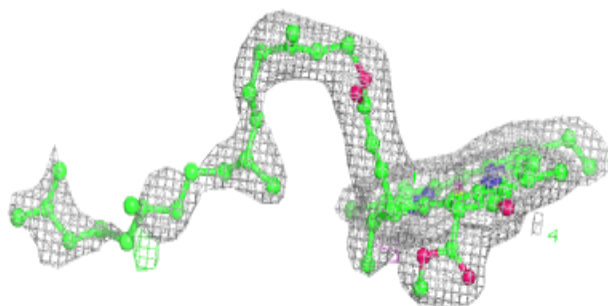
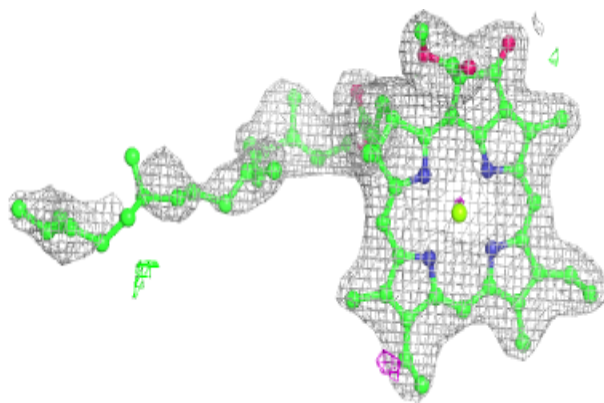
Electron density around LHG L 102:

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

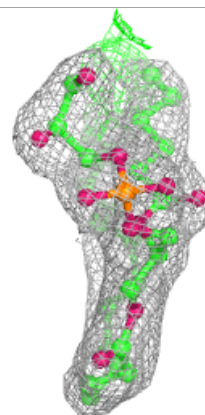
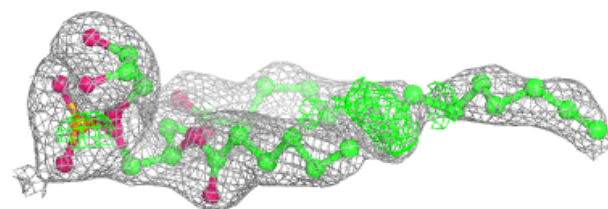
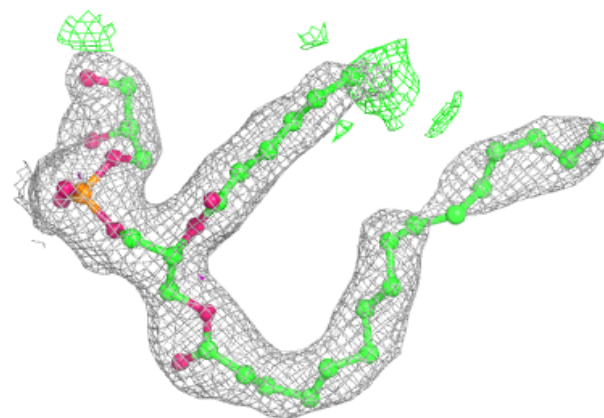


Electron density around CLA a 607:

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

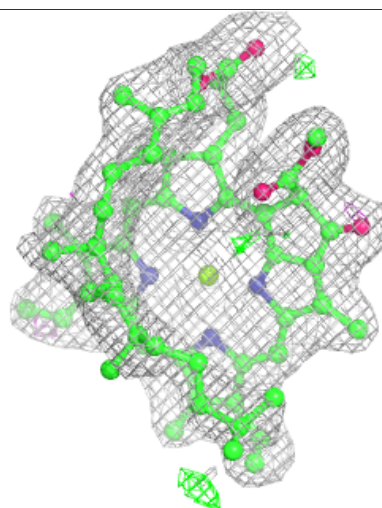
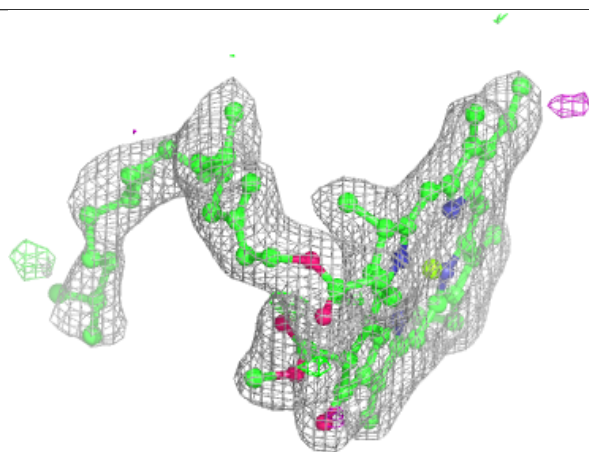
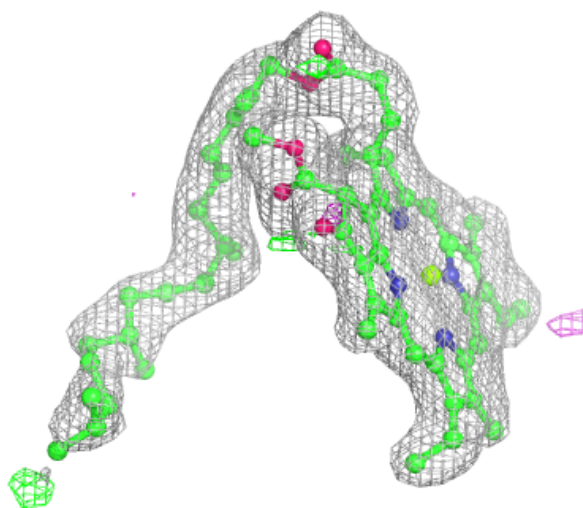
**Electron density around LHG d 409:**

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



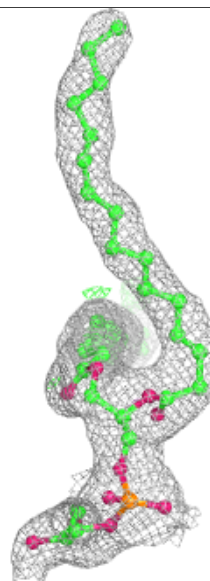
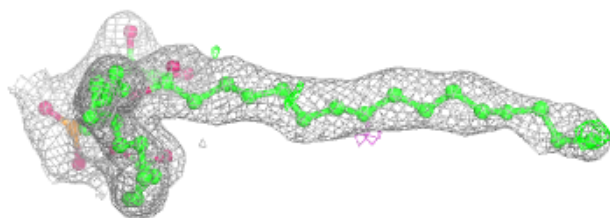
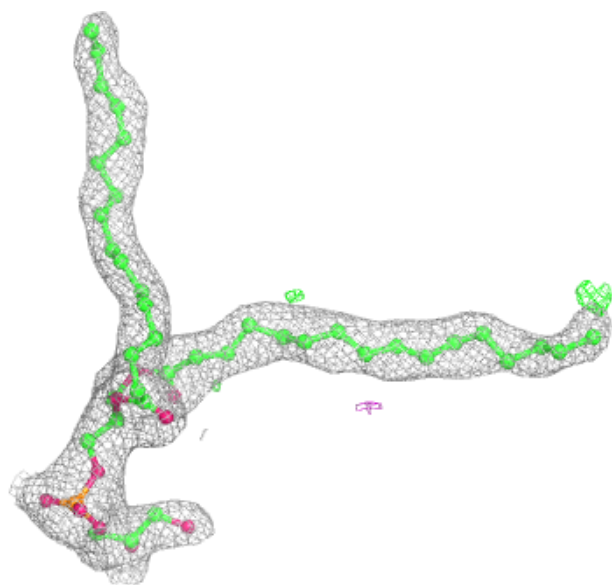
Electron density around CLA B 613:

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



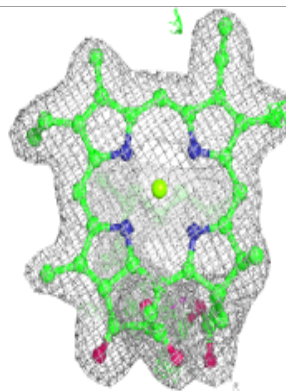
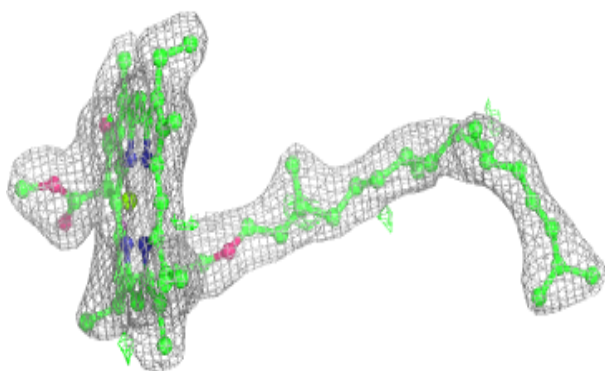
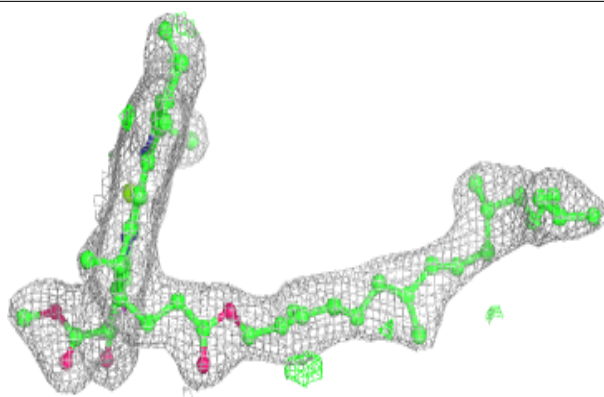
Electron density around LHG 1 101:

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

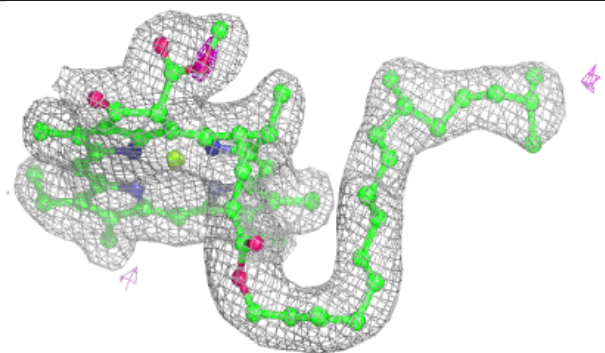
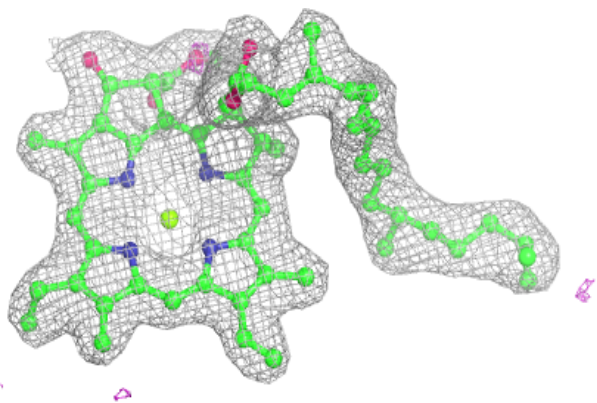


Electron density around CLA B 605:

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

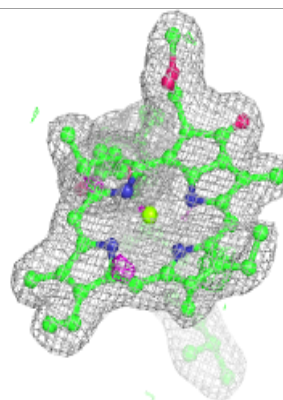
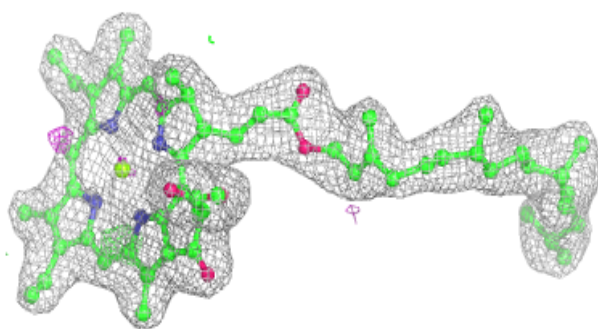
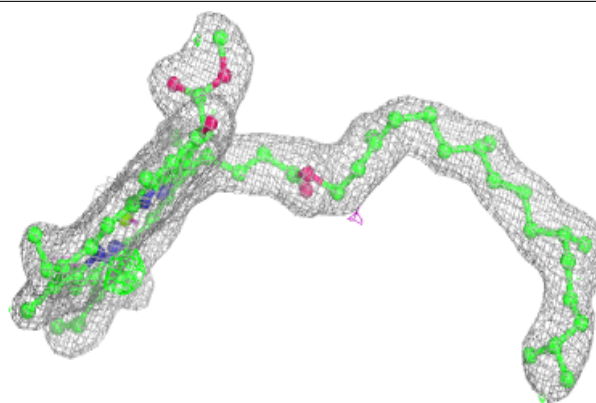
**Electron density around CLA D 403:**

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

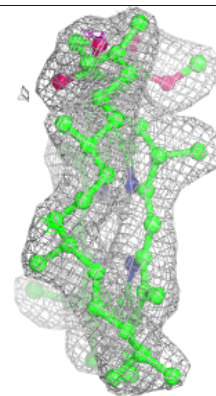
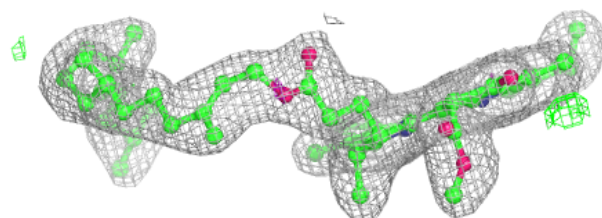
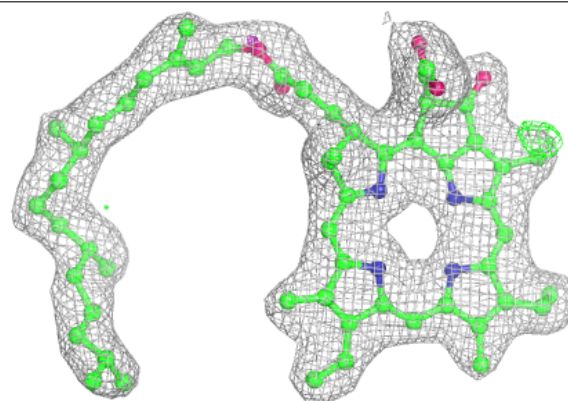


Electron density around CLA D 404:

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

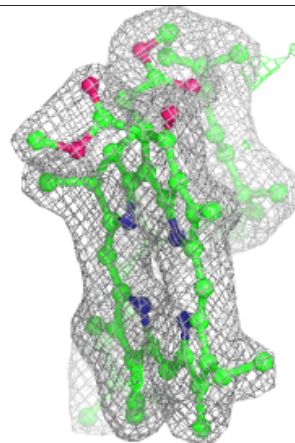
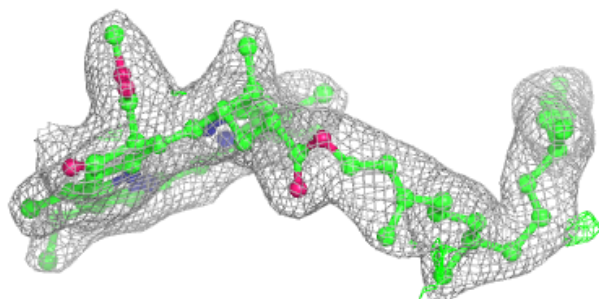
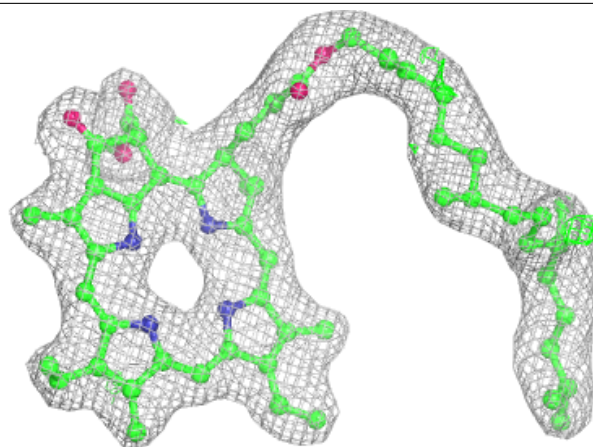
**Electron density around PHO A 608:**

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

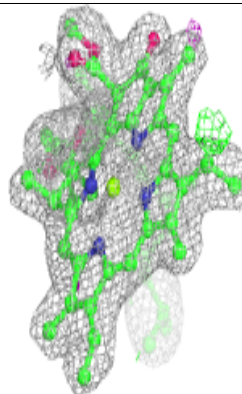
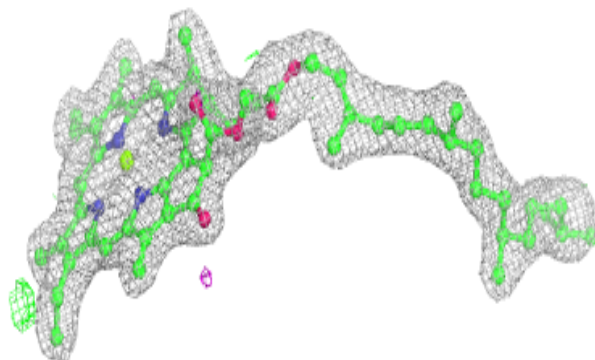
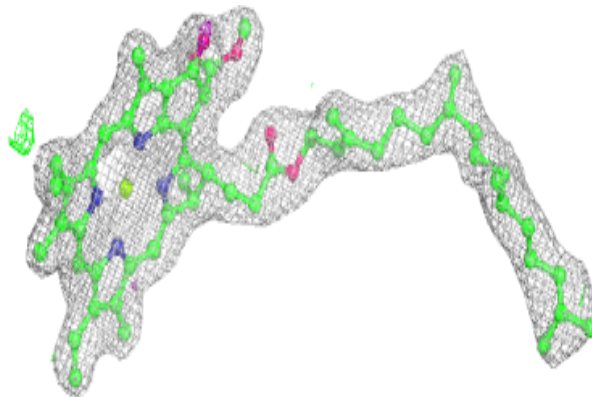


Electron density around PHO D 402:

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

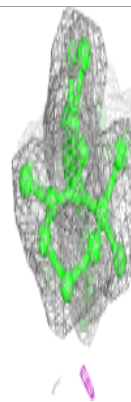
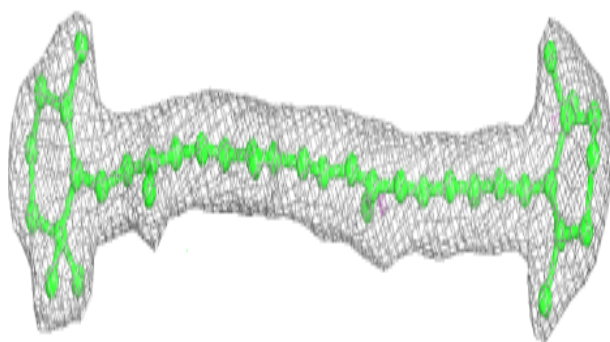
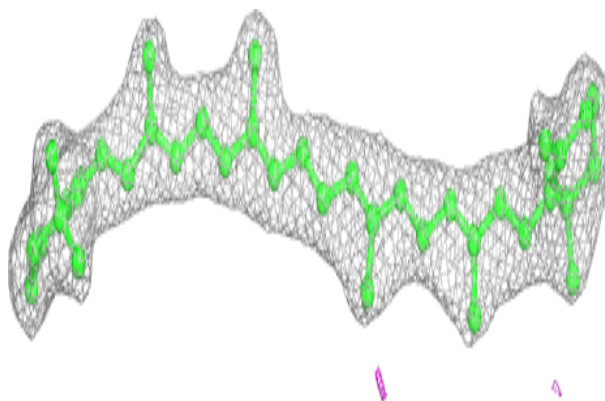
**Electron density around CLA A 606:**

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



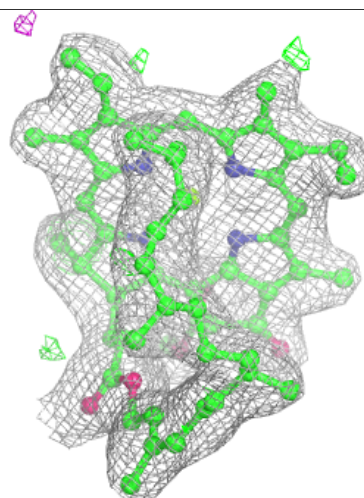
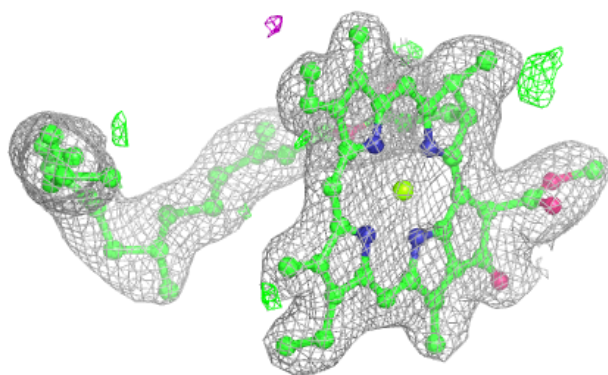
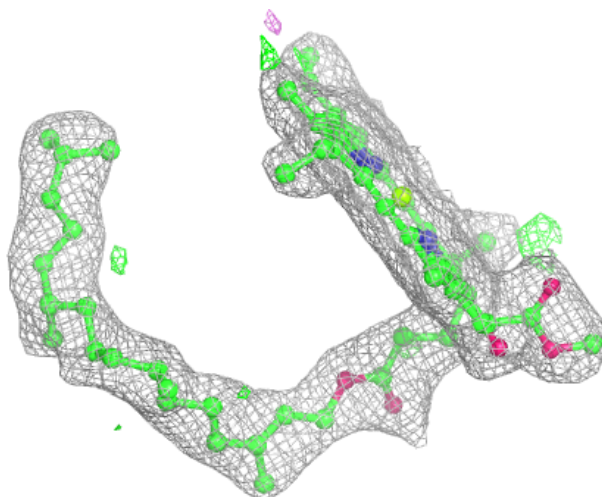
Electron density around BCR a 610:

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



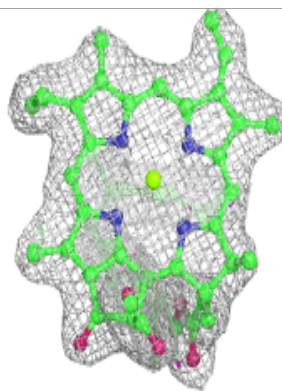
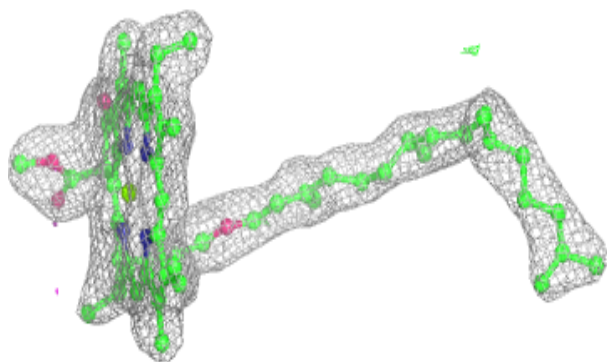
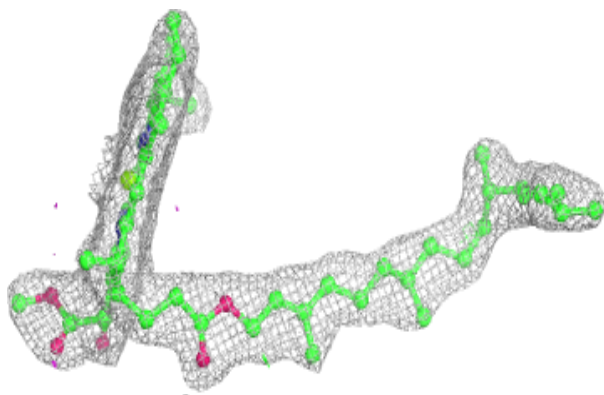
Electron density around CLA B 611:

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

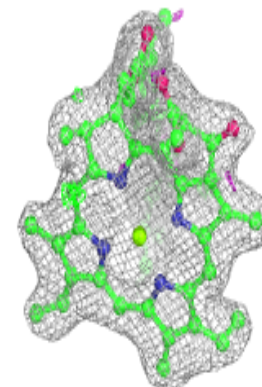
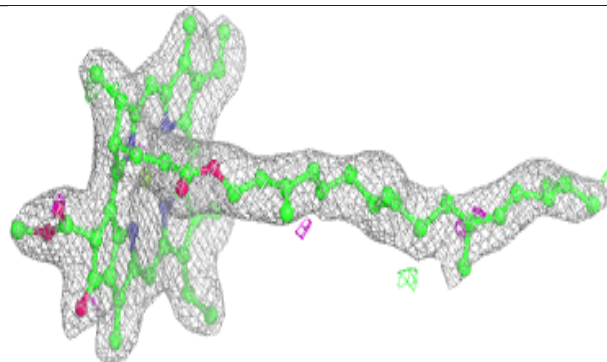
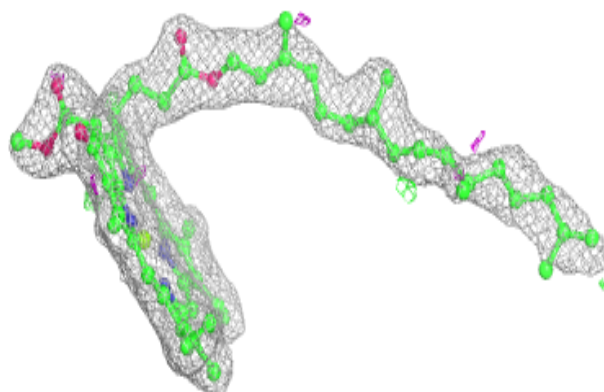


Electron density around CLA b 605:

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

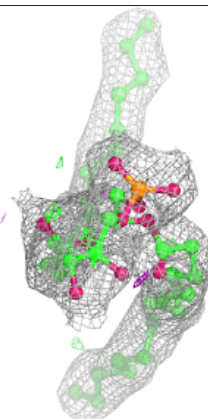
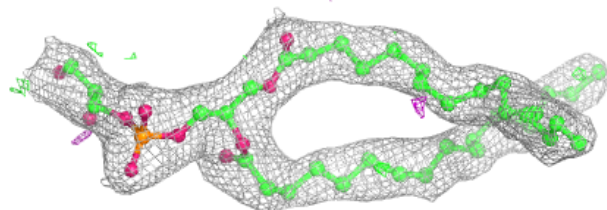
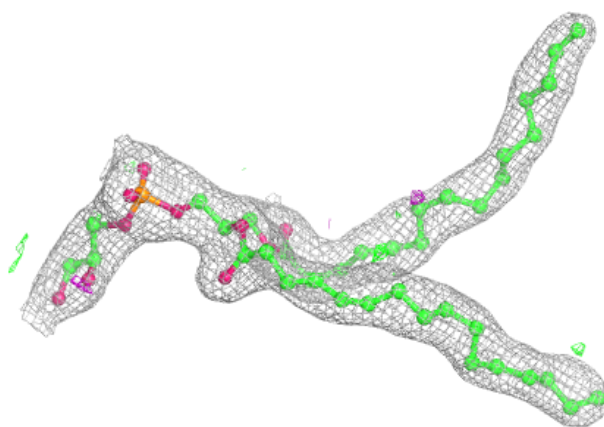
**Electron density around CLA B 607:**

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

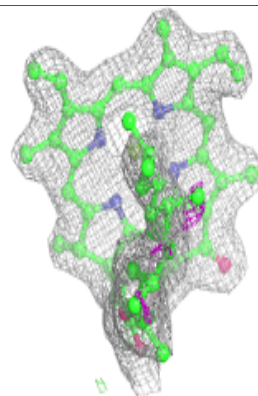
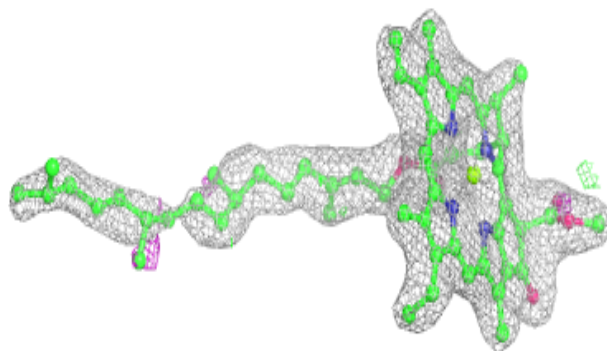
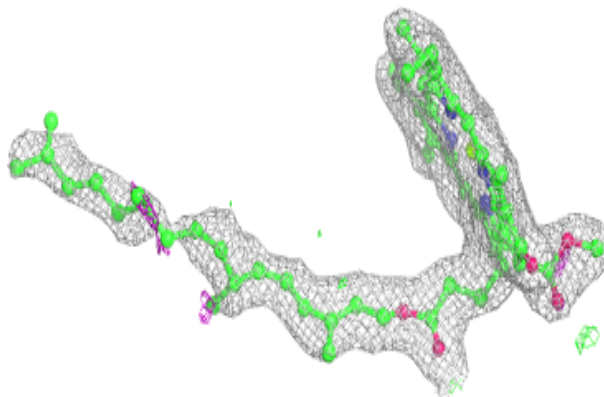


Electron density around LHG d 408:

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

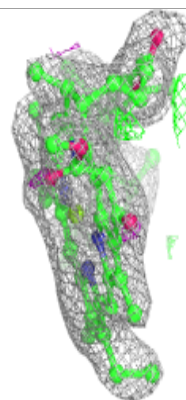
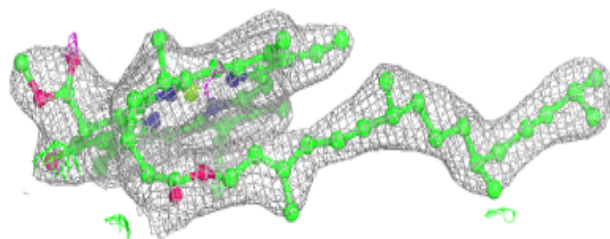
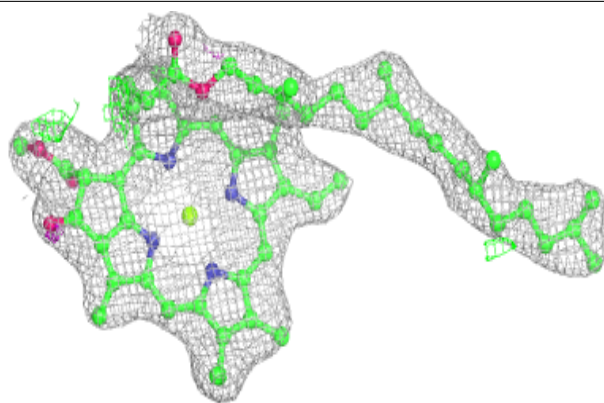
**Electron density around CLA b 607:**

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

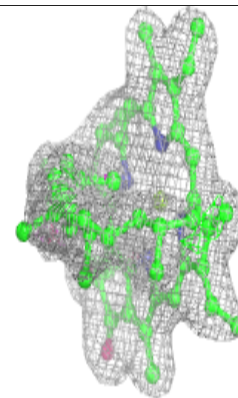
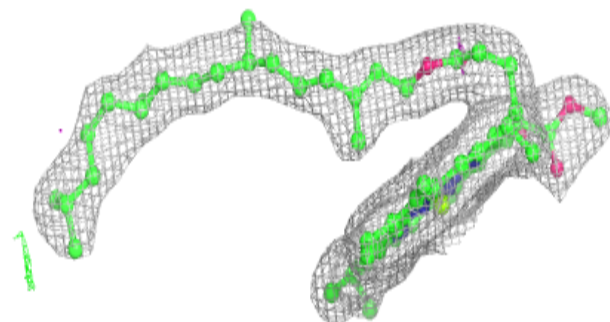
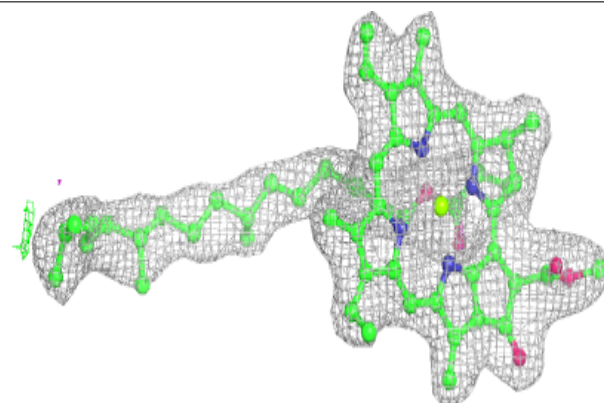


Electron density around CLA c 501:

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

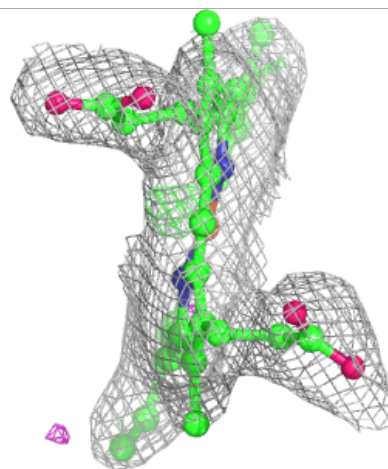
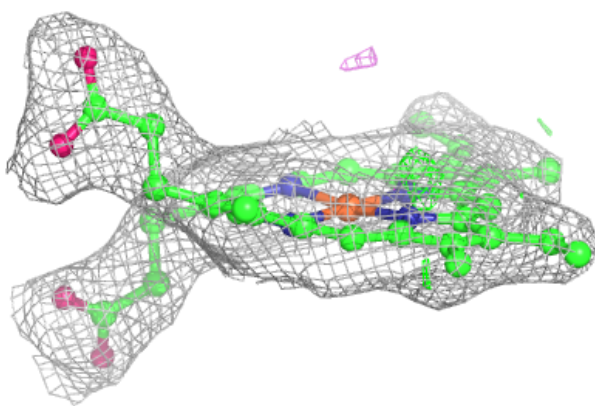
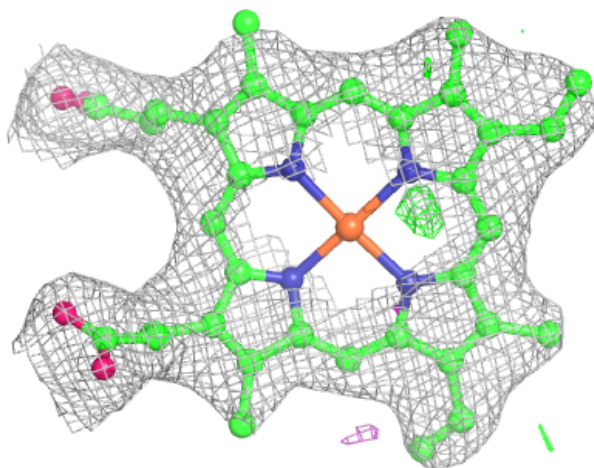
**Electron density around CLA B 608:**

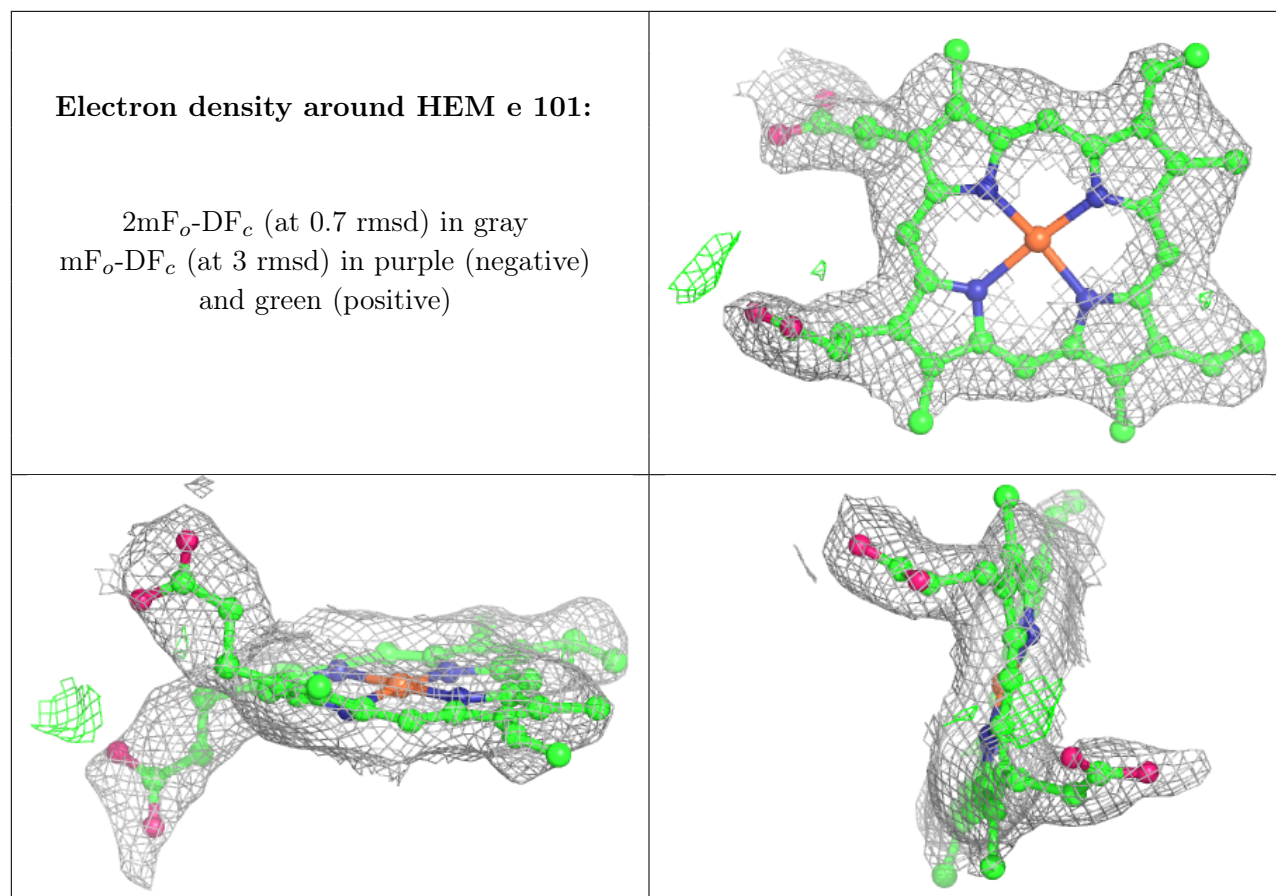
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

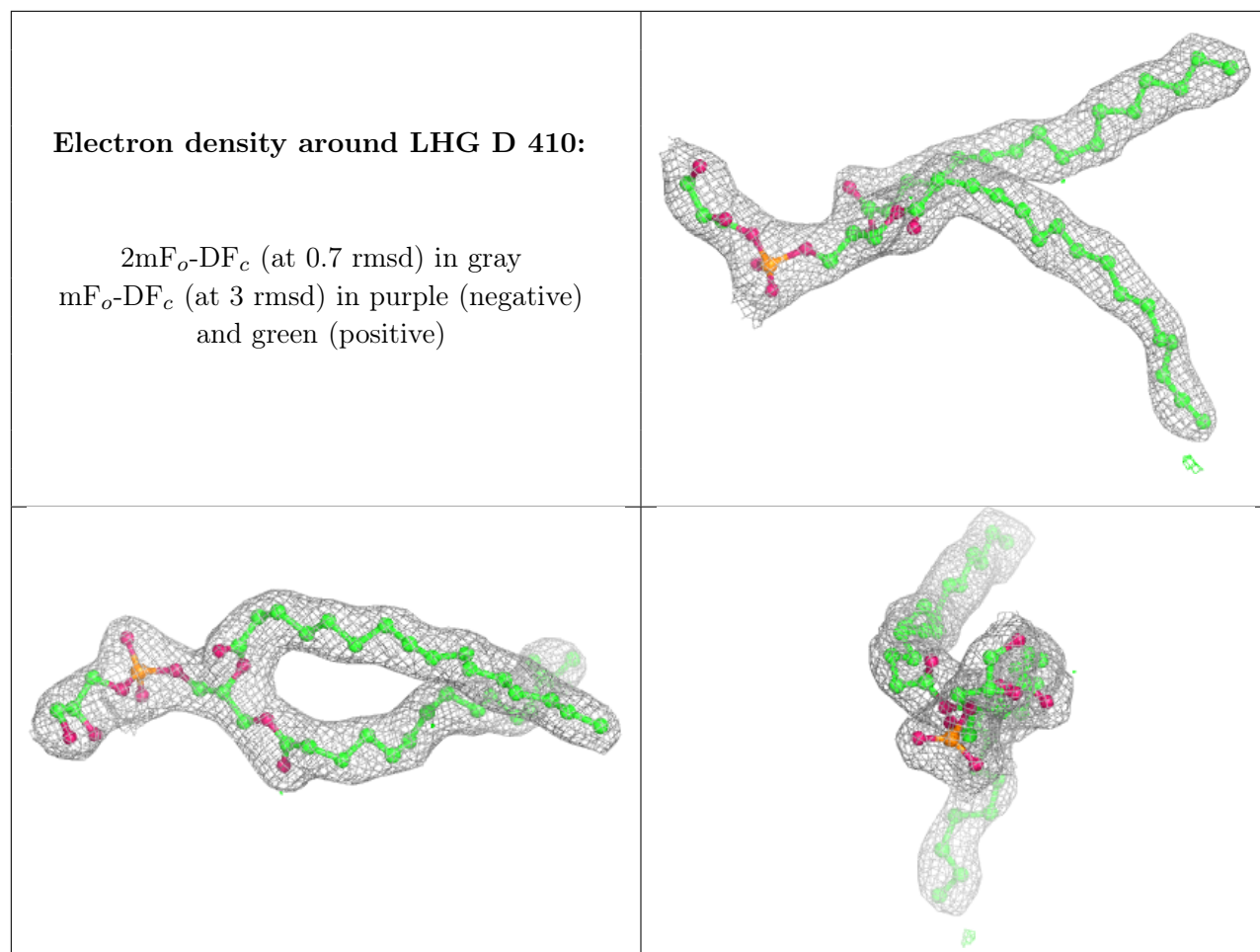


Electron density around HEM F 101:

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

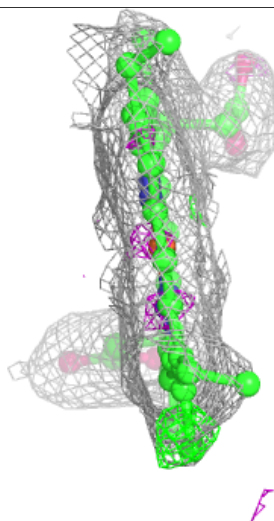
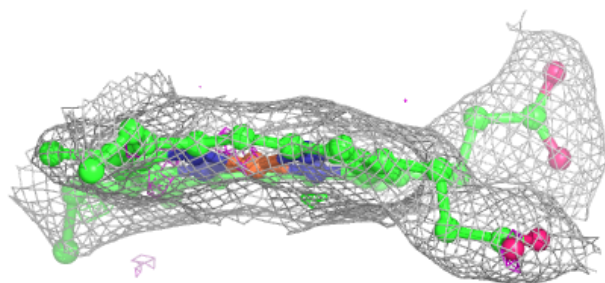
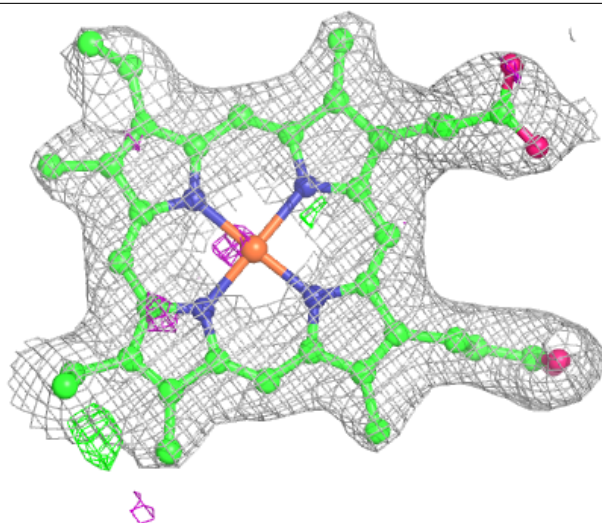






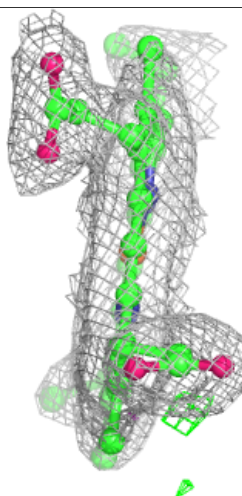
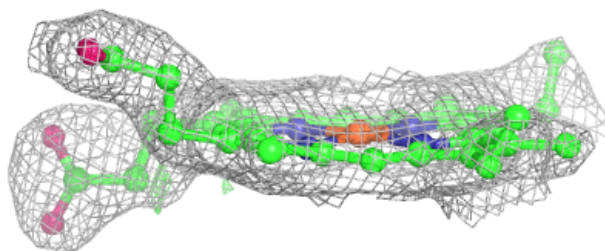
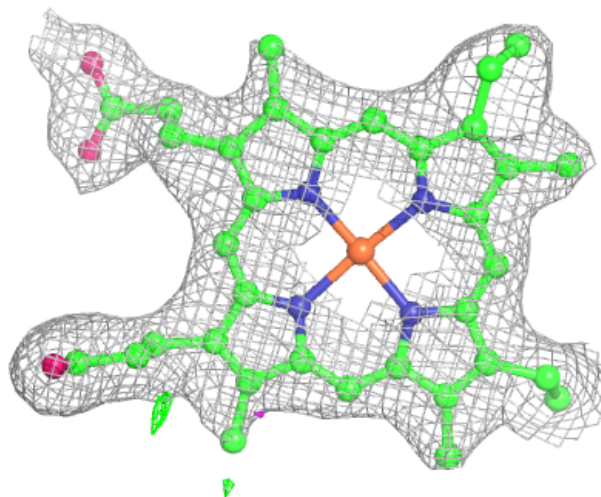
Electron density around HEC V 201:

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



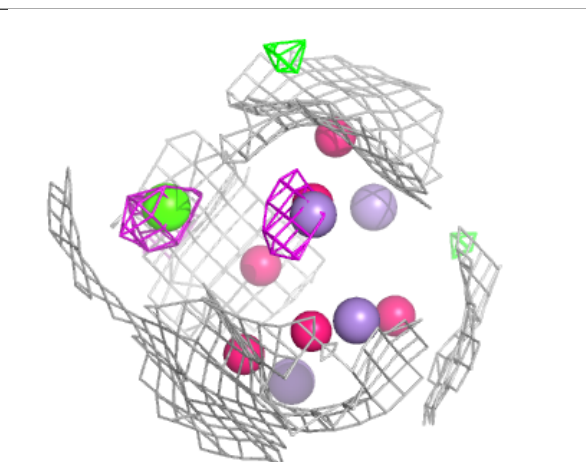
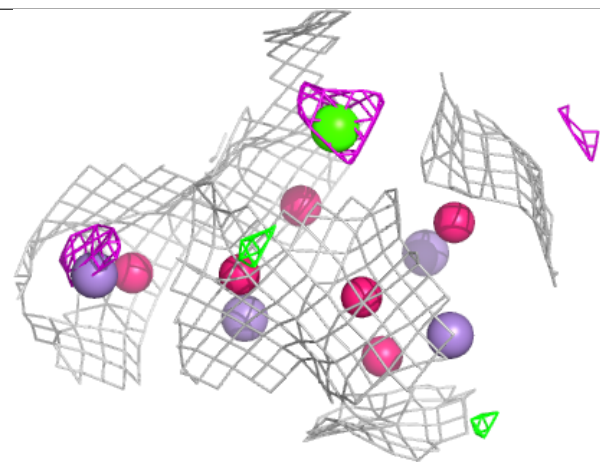
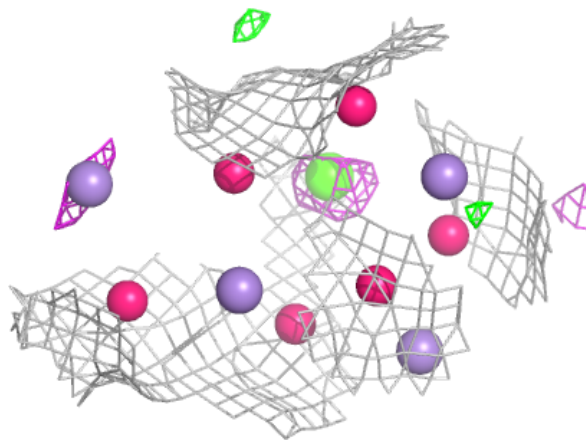
Electron density around HEC v 201:

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



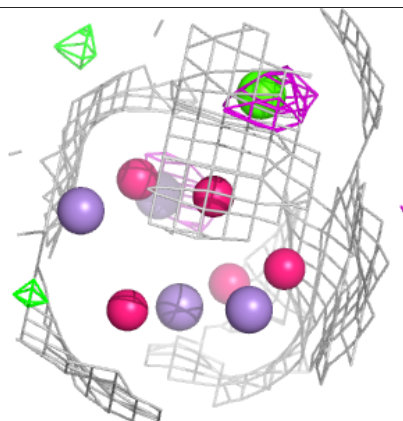
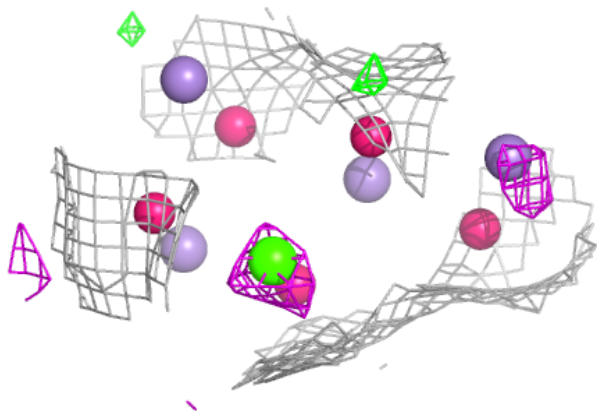
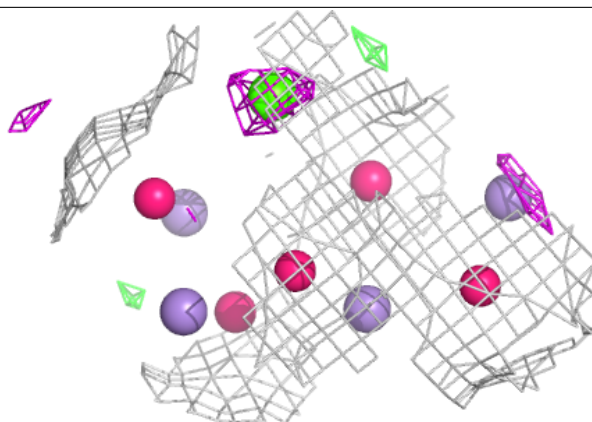
Electron density around OEY A 601 (B):

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



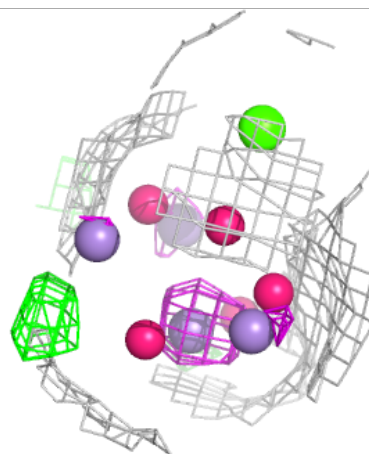
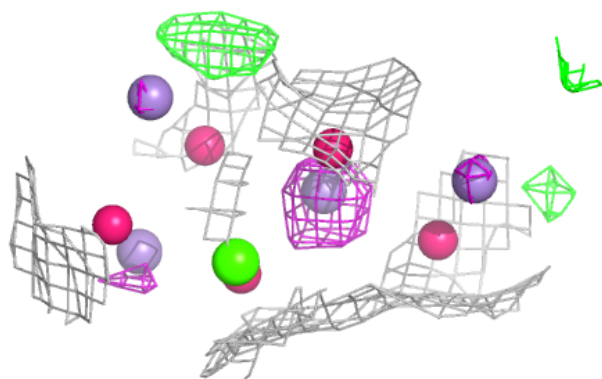
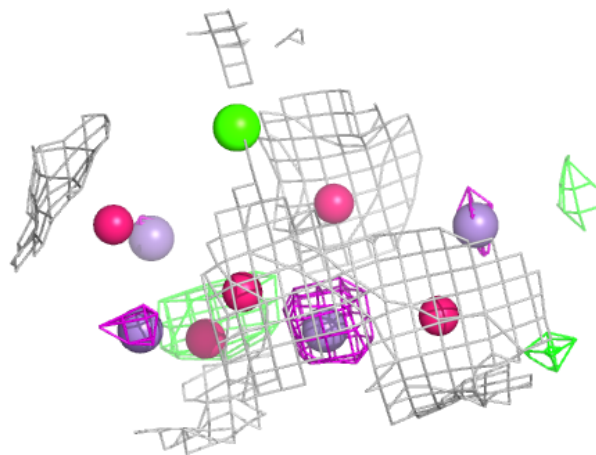
Electron density around OEX A 602 (A):

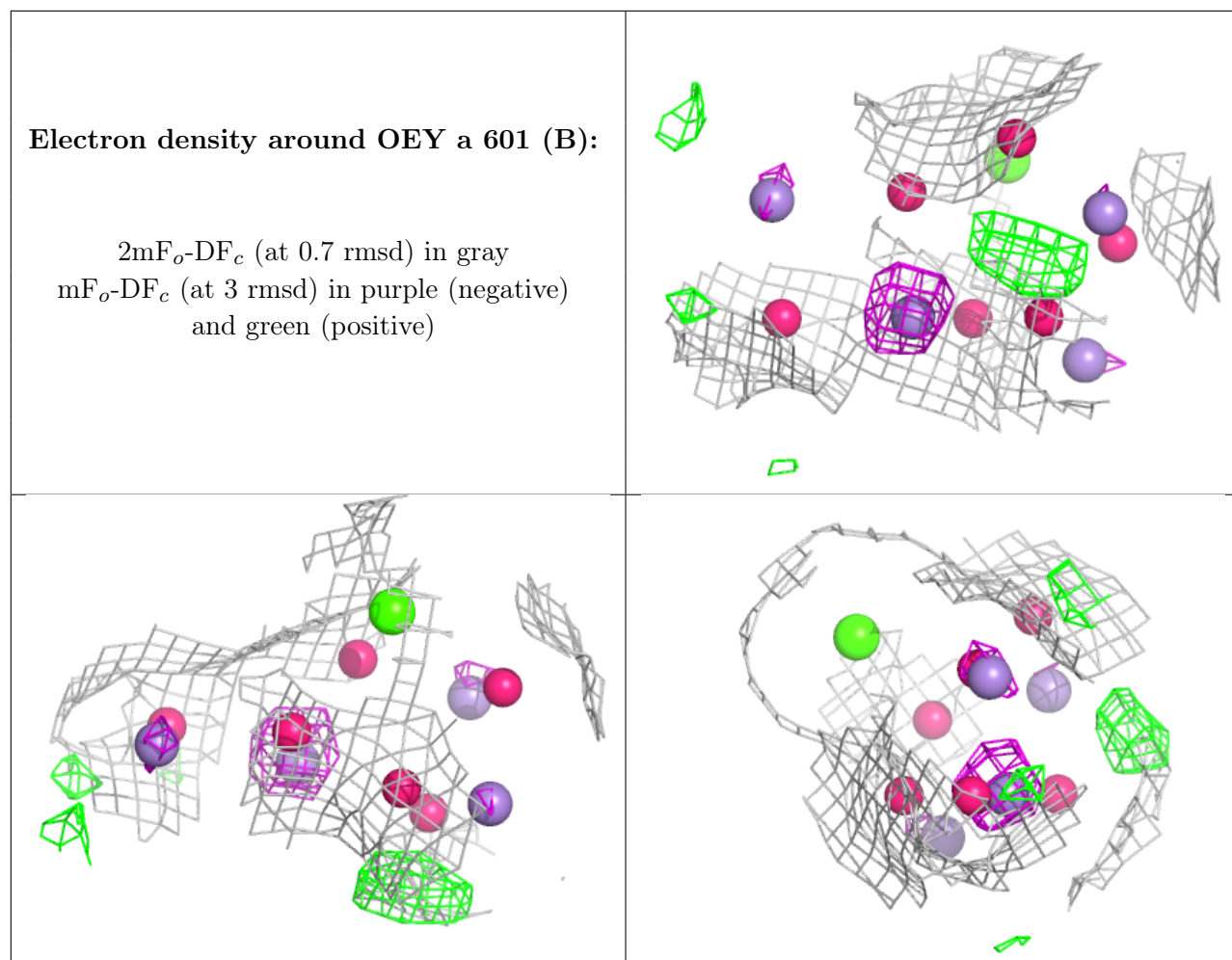
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around OEX a 602 (A):

$2mF_o-DF_c$ (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.