Full wwPDB X-ray Structure Validation Report (i)

Aug 9, 2023 – 01:57 PM EDT

PDB ID	:	8F4K
Title	:	RT XFEL structure of the three-flash state of Photosystem II (3F, S0-rich) at 2.16 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	:	2.16 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 (i) 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 (1)) were used in the production of this report:

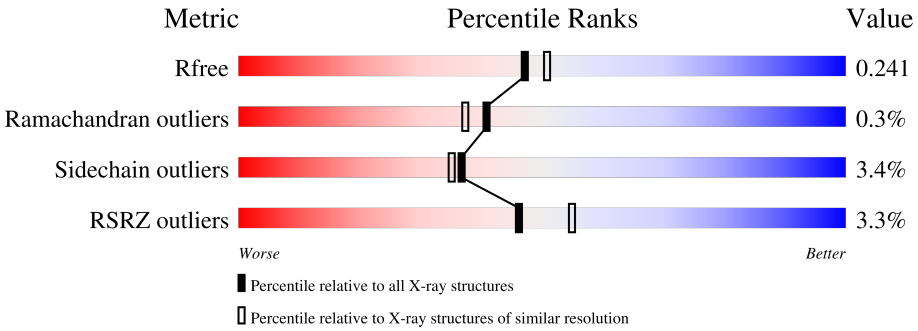
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.16 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 <=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	% 96%
1	a	344	94%

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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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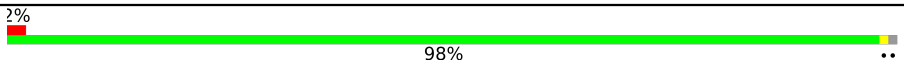
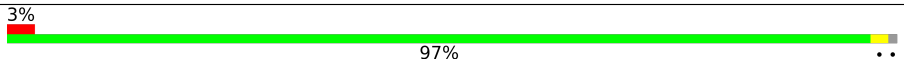
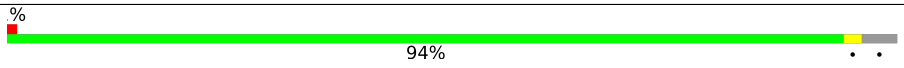
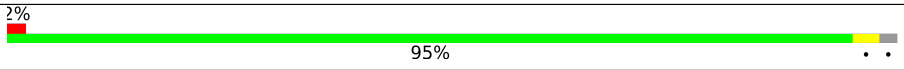
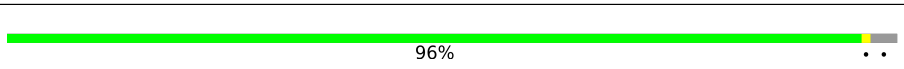
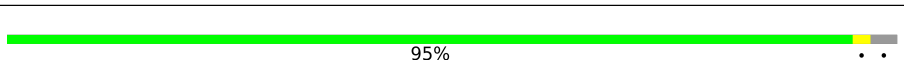
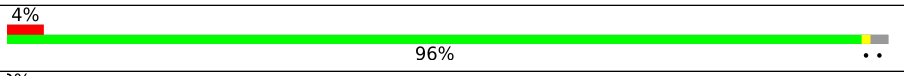
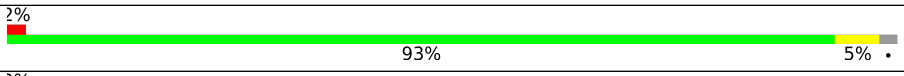
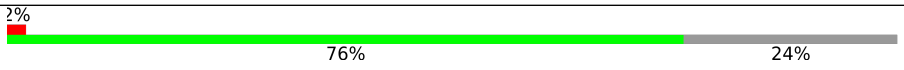
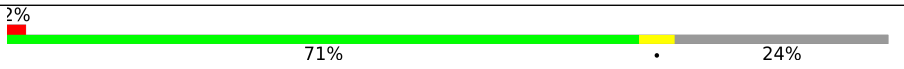
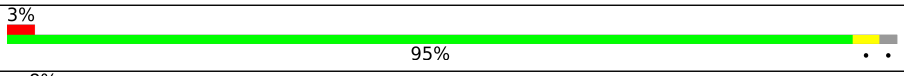
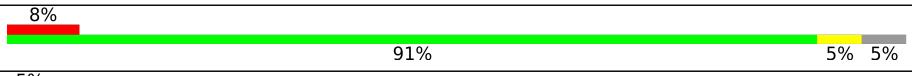
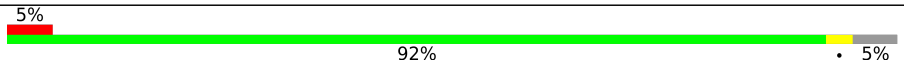
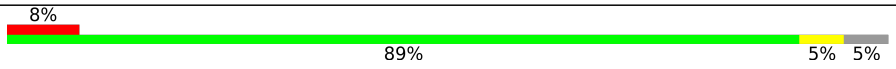
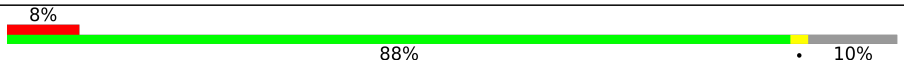
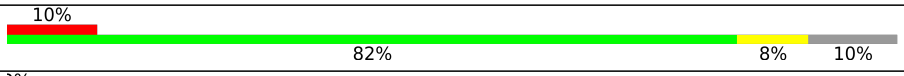
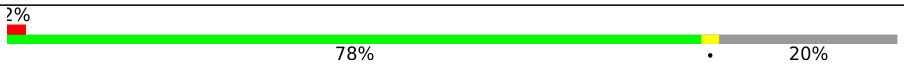
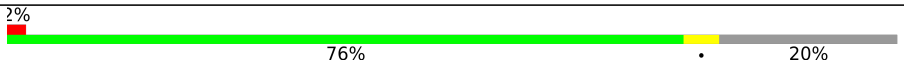
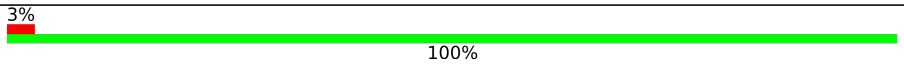
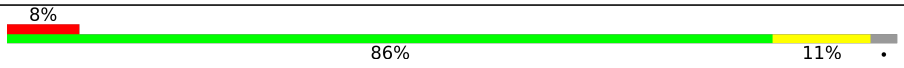
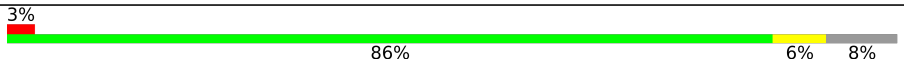
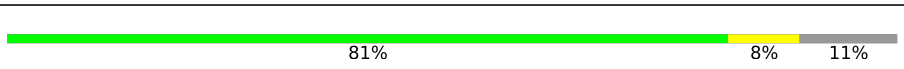
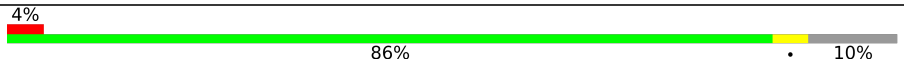
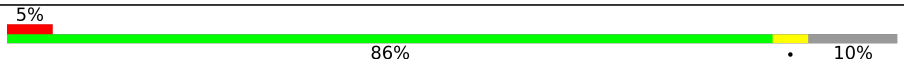
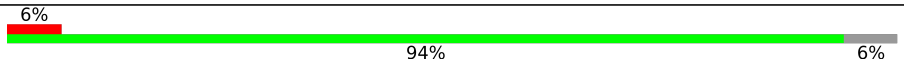
Mol	Chain	Length	Quality of chain
2	B	510	
2	b	510	
3	C	461	
3	c	461	
4	D	352	
4	d	352	
5	E	84	
5	e	84	
6	F	45	
6	f	45	
7	H	66	
7	h	66	
8	I	38	
8	i	38	
9	J	40	
9	j	40	
10	K	46	
10	k	46	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	272	
13	o	272	
14	T	32	

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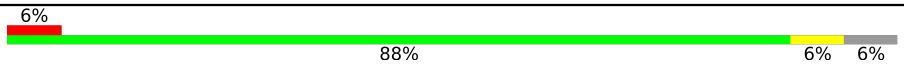
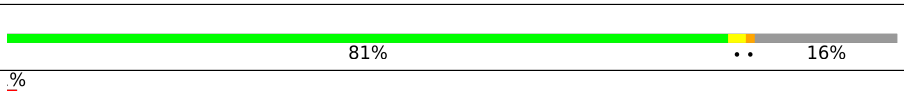
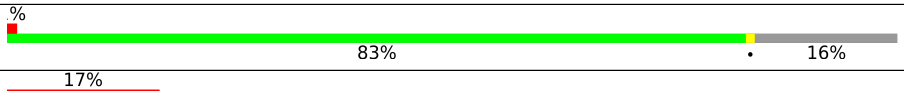
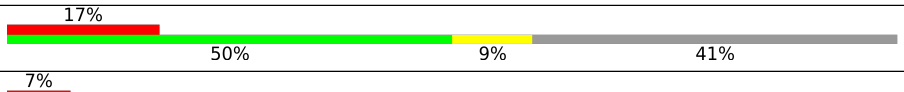
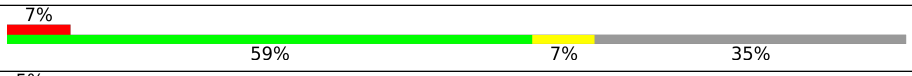
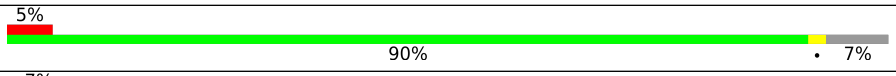
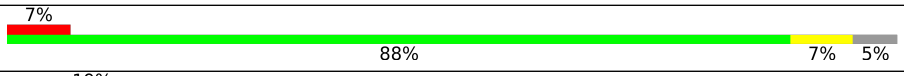
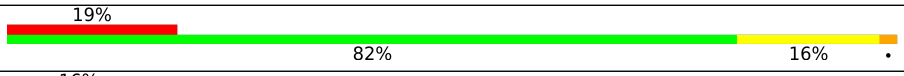
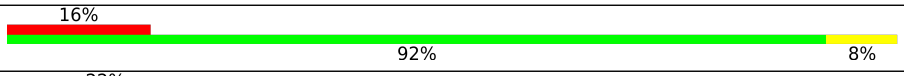
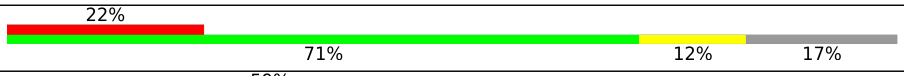
Mol	Chain	Length	Quality of chain
14	t	32	
15	U	134	
15	u	134	
16	V	163	
16	v	163	
17	Y	46	
17	y	46	
18	X	41	
18	x	41	
19	Z	62	
19	z	62	
20	R	41	
20	r	41	

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	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	-	-	-
25	CLA	B	609	X	-	-	-
25	CLA	B	610	X	-	-	-
25	CLA	B	611	X	-	-	-
25	CLA	B	612	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	B	613	X	-	-	-
25	CLA	B	614	X	-	-	-
25	CLA	B	615	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	508	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	H	101	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	-	-	-
25	CLA	b	608	X	-	-	-
25	CLA	b	609	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	-	-	-
25	CLA	b	615	X	-	-	-
25	CLA	c	501	X	-	-	-
25	CLA	c	502	X	-	-	-
25	CLA	c	504	X	-	-	-
25	CLA	c	505	X	-	-	-
25	CLA	c	506	X	-	-	-
25	CLA	c	507	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
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	401	X	-	-	-
25	CLA	d	403	X	-	-	-
25	CLA	d	404	X	-	-	-
25	CLA	h	101	X	-	-	-

2 Entry composition

There are 37 unique types of molecules in this entry. The entry contains 53024 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
1	A	334	Total	C	N	O	S	0	64	0
			3113	2030	513	551	19			
1	a	334	Total	C	N	O	S	0	64	0
			3110	2027	513	551	19			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	442	Total	C	N	O	S	0	11	0
			3509	2302	586	607	14			
3	c	451	Total	C	N	O	S	0	12	0
			3583	2343	602	624	14			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	341	Total	C	N	O	S	0	2	0
			2731	1809	446	464	12			
4	d	341	Total	C	N	O	S	0	3	0
			2737	1813	446	466	12			

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

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

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

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

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

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

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

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

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I	1	FME	-	initiating methionine	UNP Q8DJZ6
i	1	FME	-	initiating methionine	UNP Q8DJZ6

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

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

- 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			
10	k	37	Total	C	N	O	0	0	0
			293	204	43	46			

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

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

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

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

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

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

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

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

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
T	1	FME	-	initiating methionine	UNP Q8DIQ0

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Chain	Residue	Modelled	Actual	Comment	Reference
t	1	FME	-	initiating methionine	UNP Q8DIQ0

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

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

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

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

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

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

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

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

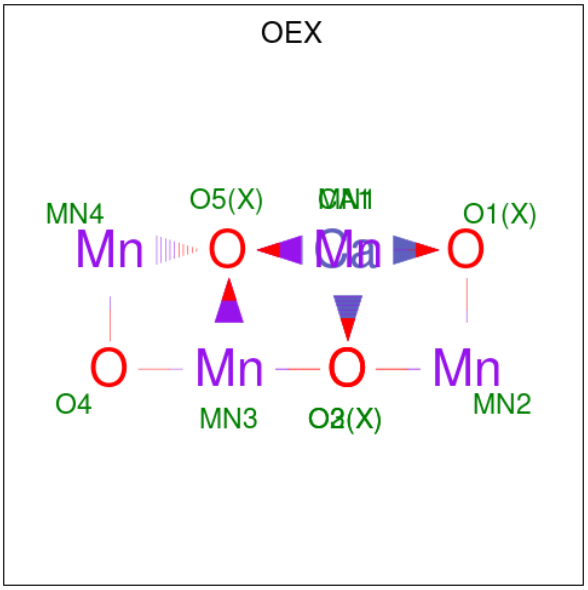
- Molecule 19 is a protein called Photosystem II reaction center protein Z.

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

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

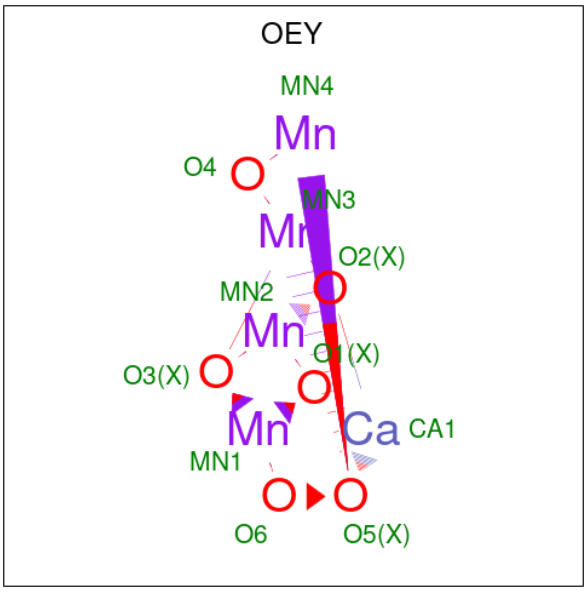
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	34	Total 271	C 184	N 47	O 40	0	0	0
20	r	31	Total 246	C 166	N 43	O 37	0	0	0

- Molecule 21 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
21	A	1	Total 10	Ca 1	Mn 4	O 5	0	1
21	a	1	Total 10	Ca 1	Mn 4	O 5	0	1

- Molecule 22 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
22	A	1	Total	Ca	Mn	O	0	1
			11	1	4	6		
22	a	1	Total	Ca	Mn	O	0	1
			11	1	4	6		

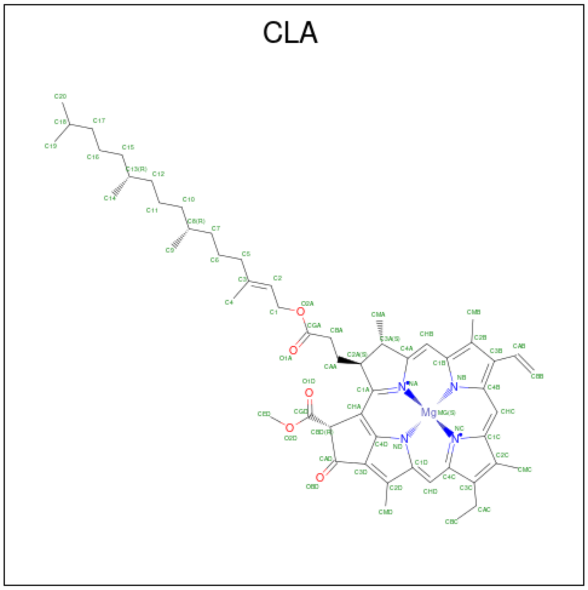
- Molecule 23 is FE (II) ION (three-letter code: FE2) (formula: Fe).

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

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

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

- Molecule 25 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



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

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

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

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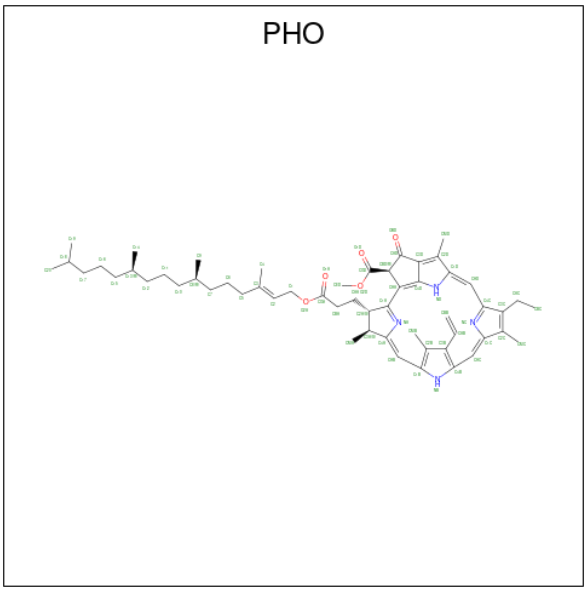
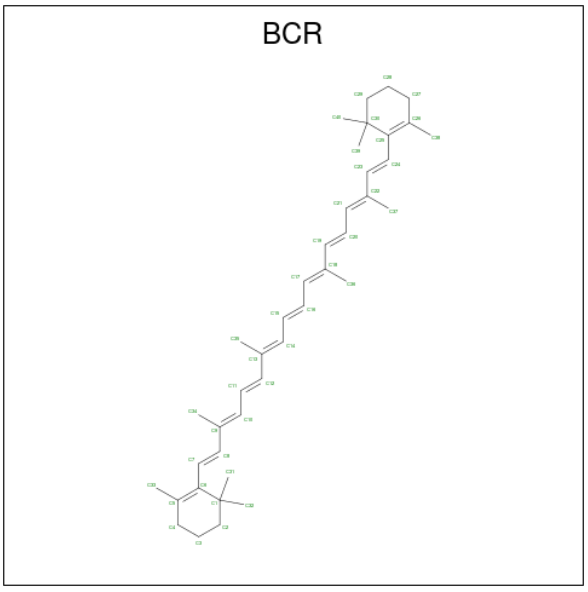
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	c	1	Total 60	C 50	Mg 1	N 4	O 5	0	0
25	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c	1	Total 64	C 54	Mg 1	N 4	O 5	0	0
25	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	c	1	Total 65	C 55	Mg 1	N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

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



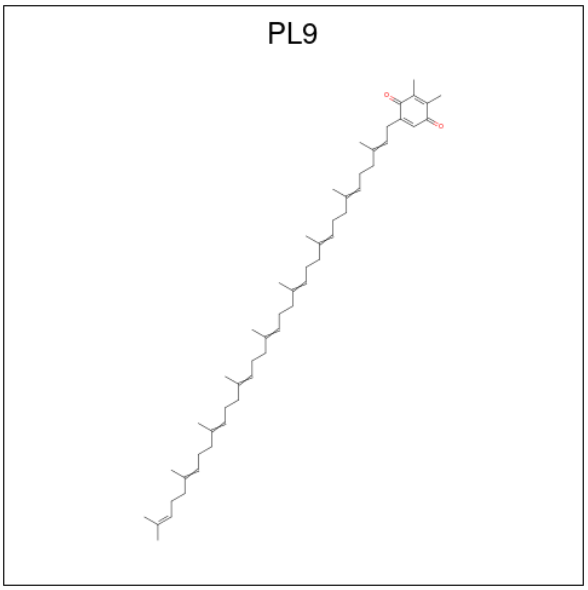
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
26	A	1	Total	C	N	O	0	0
			64	55	4	5		
26	D	1	Total	C	N	O	0	0
			64	55	4	5		
26	a	1	Total	C	N	O	0	0
			64	55	4	5		
26	d	1	Total	C	N	O	0	0
			64	55	4	5		

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



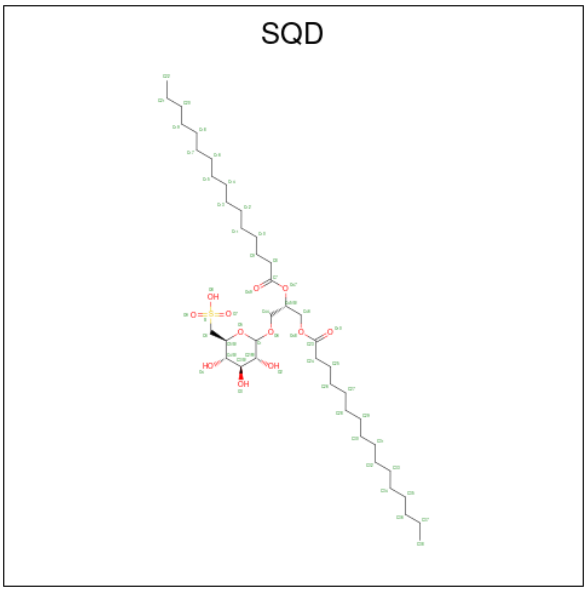
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	C	1	Total C 40 40	0	0
27	D	1	Total C 40 40	0	0
27	H	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	T	1	Total C 40 40	0	0
27	Y	1	Total C 40 40	0	0
27	Z	1	Total 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
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	c	1	Total C 40 40	0	0
27	d	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	x	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: $C_{53}H_{80}O_2$).



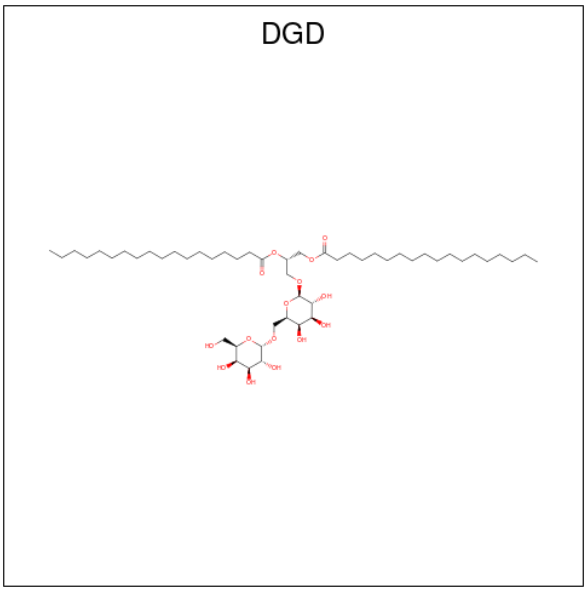
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O 55 53 2	0	0
28	D	1	Total C O 55 53 2	0	0
28	a	1	Total C O 55 53 2	0	0
28	d	1	Total C O 55 53 2	0	0

- Molecule 29 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



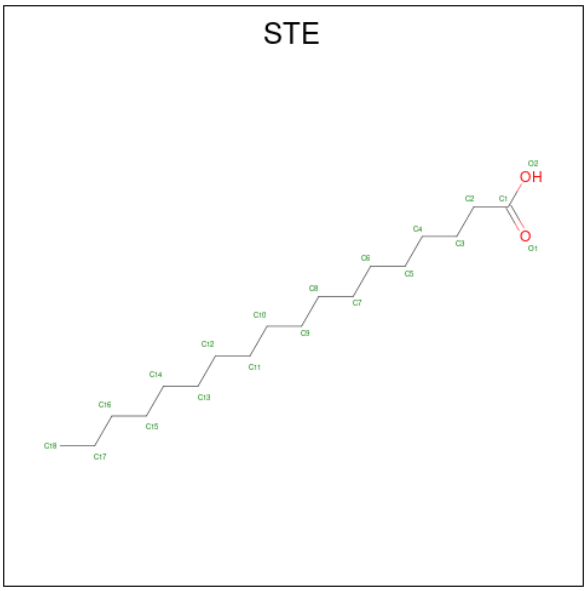
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A	1	Total C O S 52 39 12 1	0	0
29	B	1	Total C O S 54 41 12 1	0	0
29	D	1	Total C O S 36 25 10 1	0	0
29	T	1	Total C O 39 35 4	0	0
29	a	1	Total C O S 54 41 12 1	0	0
29	a	1	Total C O 36 31 5	0	0
29	b	1	Total C O S 49 36 12 1	0	0
29	f	1	Total C O S 41 28 12 1	0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

- Molecule 30 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



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

- Molecule 31 is STEARIC ACID (three-letter code: STE) (formula: $C_{18}H_{36}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	B	1	Total C O 17 15 2	0	0
31	B	1	Total C O 12 10 2	0	0
31	B	1	Total C O 18 16 2	0	0
31	B	1	Total C O 12 10 2	0	0
31	B	1	Total C 16 16	0	0
31	C	1	Total C O 12 10 2	0	0
31	C	1	Total C O 12 10 2	0	0
31	C	1	Total C 16 16	0	0
31	D	1	Total C O 20 18 2	0	0
31	E	1	Total C O 12 10 2	0	0
31	H	1	Total C 18 18	0	0
31	I	1	Total C 15 15	0	0
31	J	1	Total C O 12 10 2	0	0
31	M	1	Total C O 15 13 2	0	0

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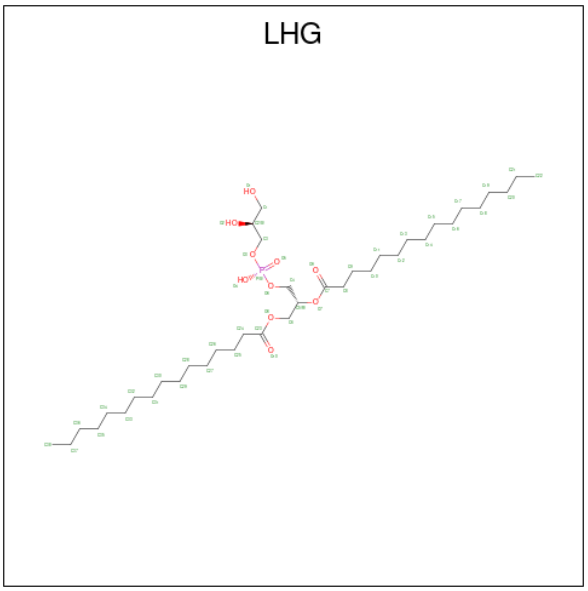
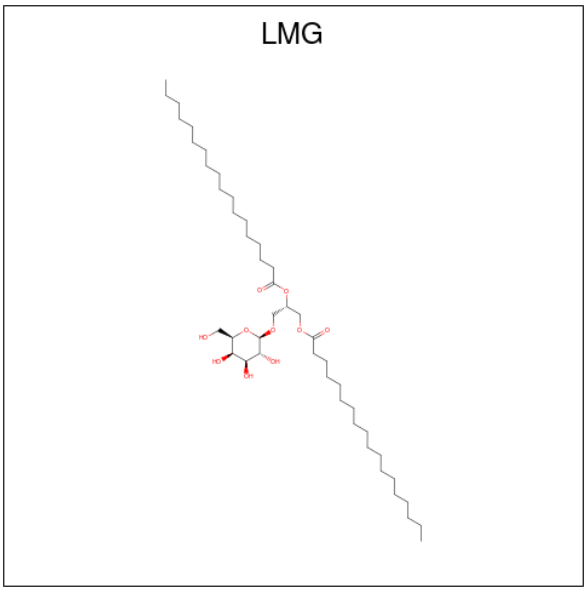
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	M	1	Total C 10 10	0	0
31	M	1	Total C 15 15	0	0
31	T	1	Total C 16 16	0	0
31	a	1	Total C O 12 10 2	0	0
31	b	1	Total C O 20 18 2	0	0
31	b	1	Total C O 16 14 2	0	0
31	b	1	Total C O 20 18 2	0	0
31	b	1	Total C 10 10	0	0
31	c	1	Total C O 20 18 2	0	0
31	c	1	Total C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

- Molecule 32 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



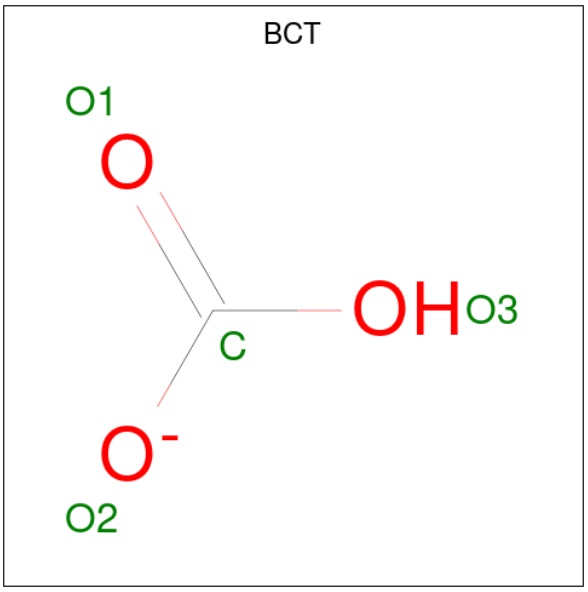
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
32	B	1	Total	C	O	P	0	0
			49	38	10	1		
32	D	1	Total	C	O	P	0	0
			49	38	10	1		
32	D	1	Total	C	O	P	0	0
			47	36	10	1		
32	E	1	Total	C	O	P	0	0
			49	38	10	1		
32	L	1	Total	C	O	P	0	0
			49	38	10	1		
32	b	1	Total	C	O	P	0	0
			49	38	10	1		
32	d	1	Total	C	O	P	0	0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

- Molecule 33 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



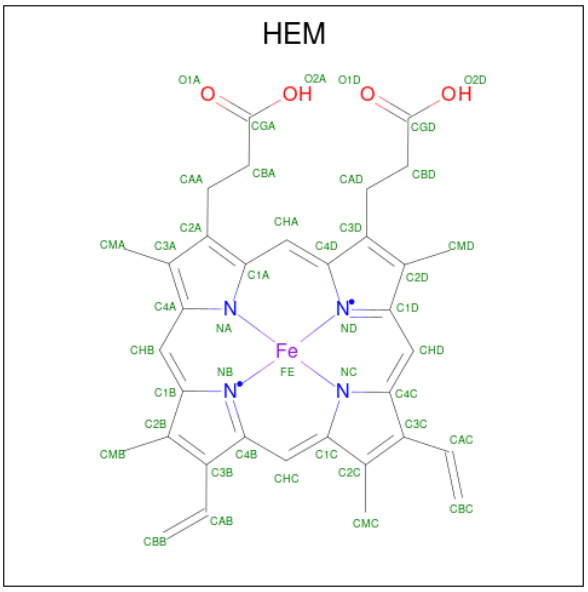
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	C	1	Total C O 48 38 10	0	0
33	C	1	Total C O 48 38 10	0	0
33	D	1	Total C O 51 41 10	0	0
33	D	1	Total C O 33 27 6	0	0
33	D	1	Total C O 28 24 4	0	0
33	M	1	Total C O 51 41 10	0	0
33	b	1	Total C O 51 41 10	0	0
33	b	1	Total C O 55 45 10	0	0
33	c	1	Total C O 37 27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

- Molecule 34 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	D	1	Total C O 4 1 3	0	0
34	a	1	Total C O 4 1 3	0	0

- 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 43 34 1 4 4	0	0

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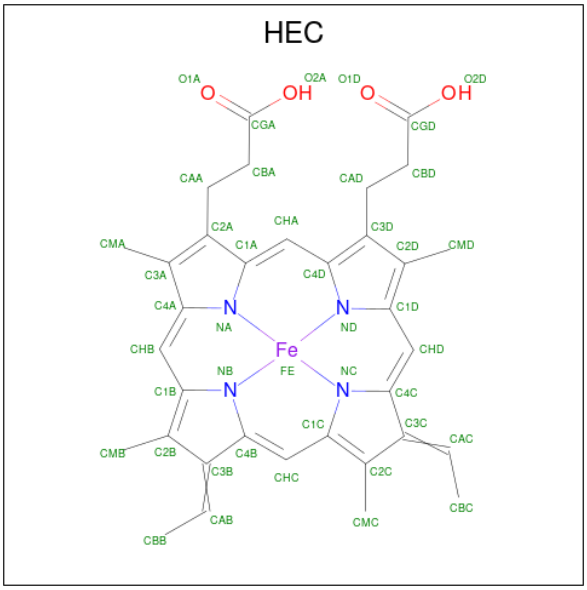
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
35	e	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- 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	121	Total	O	0	4
			125	125		
37	B	161	Total	O	0	0
			161	161		
37	C	150	Total	O	0	0
			150	150		
37	D	112	Total	O	0	0
			112	112		
37	E	20	Total	O	0	0
			20	20		
37	F	7	Total	O	0	0
			7	7		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	H	28	Total O 28 28	0	0
37	I	20	Total O 20 20	0	0
37	J	17	Total O 17 17	0	0
37	K	4	Total O 4 4	0	0
37	L	8	Total O 8 8	0	0
37	M	3	Total O 3 3	0	0
37	O	76	Total O 76 76	0	0
37	T	9	Total O 9 9	0	0
37	U	32	Total O 32 32	0	0
37	V	52	Total O 52 52	0	0
37	X	7	Total O 7 7	0	0
37	Z	2	Total O 2 2	0	0
37	R	7	Total O 7 7	0	0
37	a	102	Total O 106 106	0	4
37	b	163	Total O 163 163	0	0
37	c	145	Total O 145 145	0	0
37	d	93	Total O 93 93	0	0
37	e	18	Total O 18 18	0	0
37	f	8	Total O 8 8	0	0
37	h	18	Total O 18 18	0	0
37	i	11	Total O 11 11	0	0

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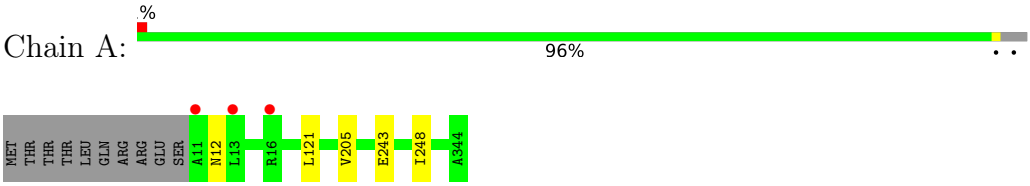
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	j	6	Total O 6 6	0	0
37	k	4	Total O 4 4	0	0
37	l	5	Total O 5 5	0	0
37	m	6	Total O 6 6	0	0
37	o	79	Total O 79 79	0	0
37	t	9	Total O 9 9	0	0
37	u	39	Total O 39 39	0	0
37	v	46	Total O 46 46	0	0
37	y	3	Total O 3 3	0	0
37	x	2	Total O 2 2	0	0
37	z	8	Total O 8 8	0	0
37	r	8	Total O 8 8	0	0

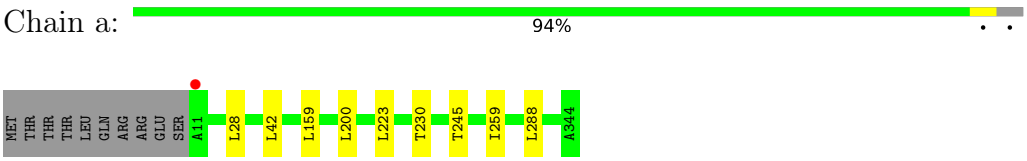
3 Residue-property plots (i)

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.

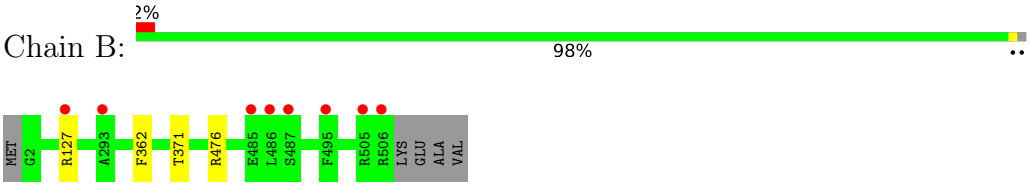
• Molecule 1: Photosystem II protein D1 1



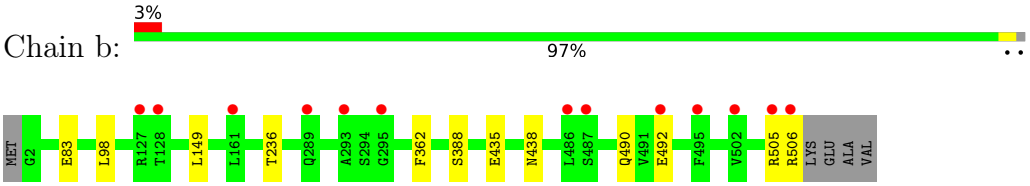
• Molecule 1: Photosystem II protein D1 1



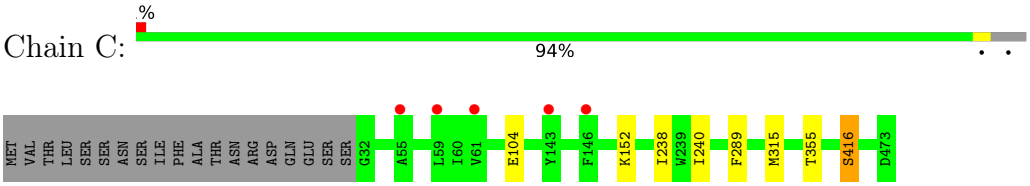
• Molecule 2: Photosystem II CP47 reaction center protein



• Molecule 2: Photosystem II CP47 reaction center protein

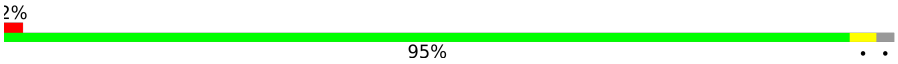


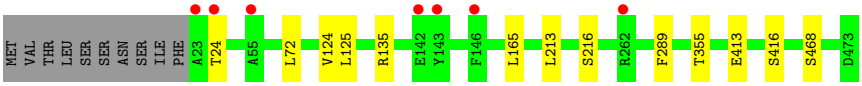
• Molecule 3: Photosystem II CP43 reaction center protein



• Molecule 3: Photosystem II CP43 reaction center protein

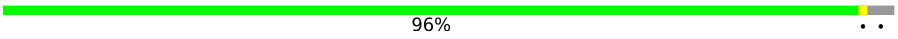
Chain c:

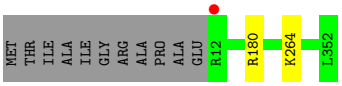




• Molecule 4: Photosystem II D2 protein

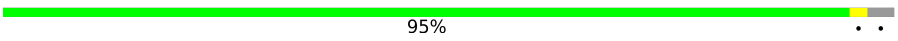
Chain D:

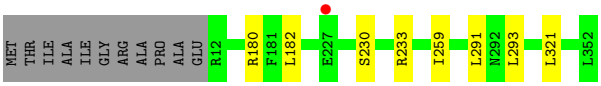




• Molecule 4: Photosystem II D2 protein

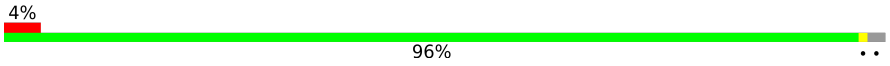
Chain d:

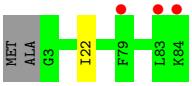




• Molecule 5: Cytochrome b559 subunit alpha

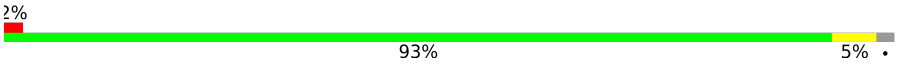
Chain E:

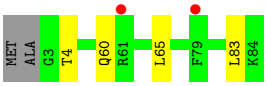




• Molecule 5: Cytochrome b559 subunit alpha

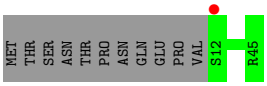
Chain e:





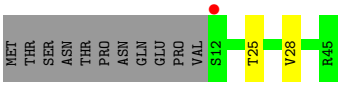
• Molecule 6: Cytochrome b559 subunit beta

Chain F:



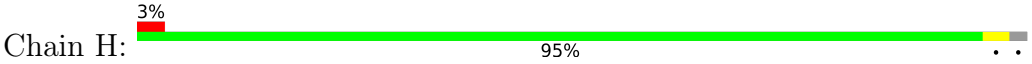
• Molecule 6: Cytochrome b559 subunit beta

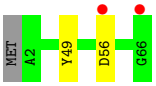
Chain f:



• Molecule 7: Photosystem II reaction center protein H

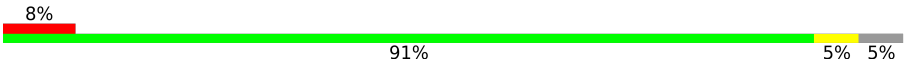
Chain H:

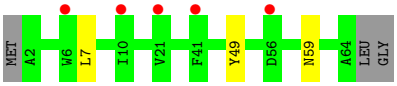




• Molecule 7: Photosystem II reaction center protein H

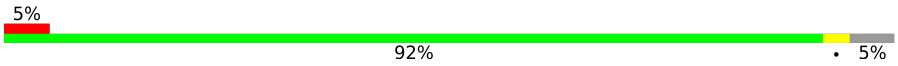
Chain h:

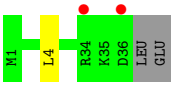




• Molecule 8: Photosystem II reaction center protein I

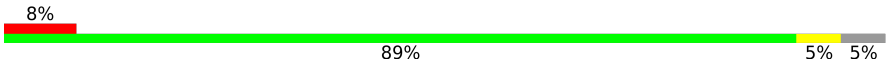
Chain I:

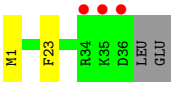




• Molecule 8: Photosystem II reaction center protein I

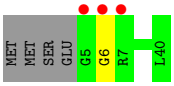
Chain i:





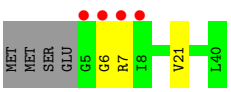
• Molecule 9: Photosystem II reaction center protein J

Chain J:



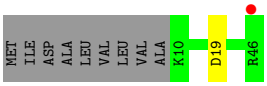
• Molecule 9: Photosystem II reaction center protein J

Chain j:



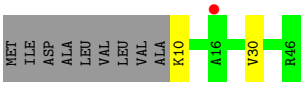
• Molecule 10: Photosystem II reaction center protein K

Chain K:



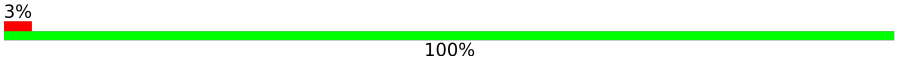
• Molecule 10: Photosystem II reaction center protein K

Chain k:



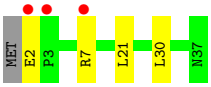
• Molecule 11: Photosystem II reaction center protein L

Chain L:



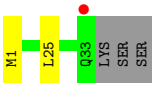
• Molecule 11: Photosystem II reaction center protein L

Chain l:



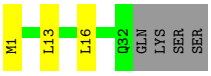
• Molecule 12: Photosystem II reaction center protein M

Chain M:



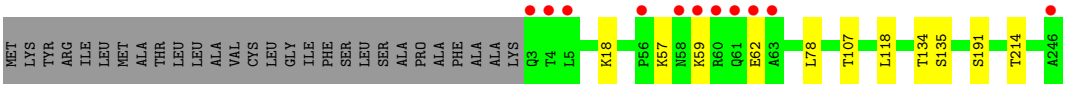
• Molecule 12: Photosystem II reaction center protein M

Chain m:



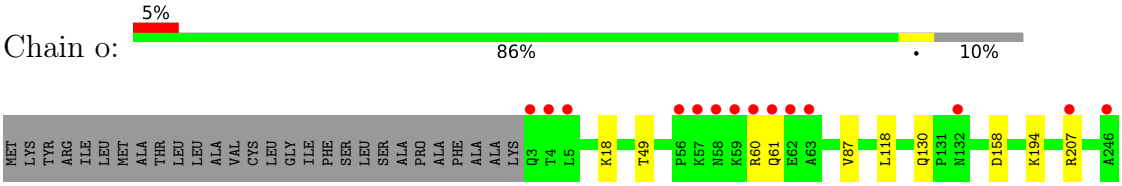
• Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:



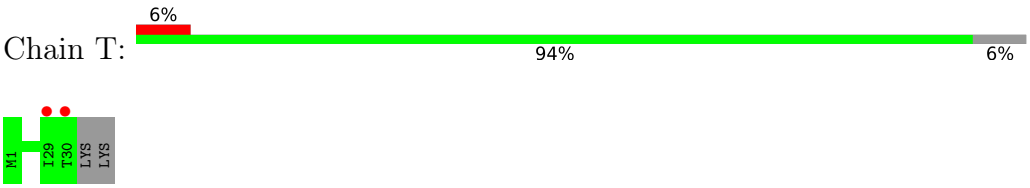
• Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:



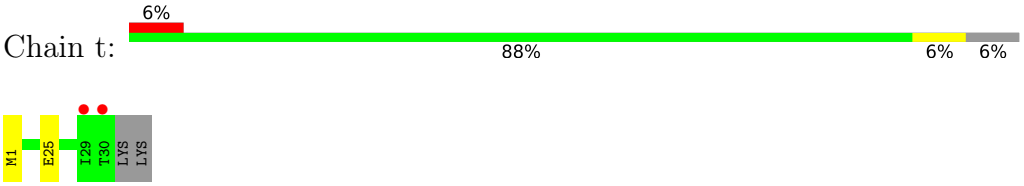
• Molecule 14: Photosystem II reaction center protein T

Chain T:



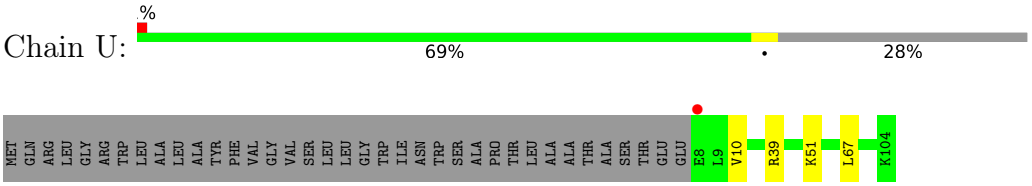
• Molecule 14: Photosystem II reaction center protein T

Chain t:



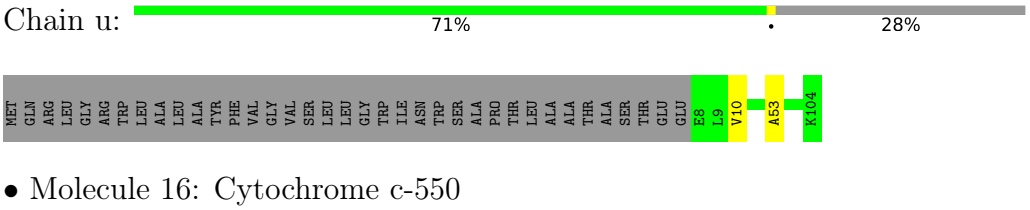
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:



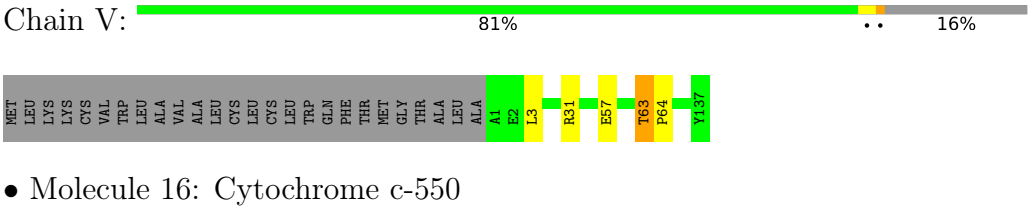
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:



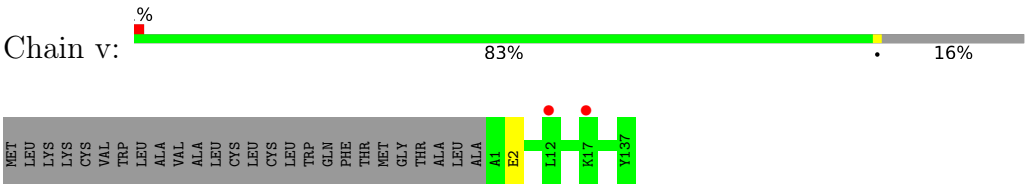
• Molecule 16: Cytochrome c-550

Chain V:



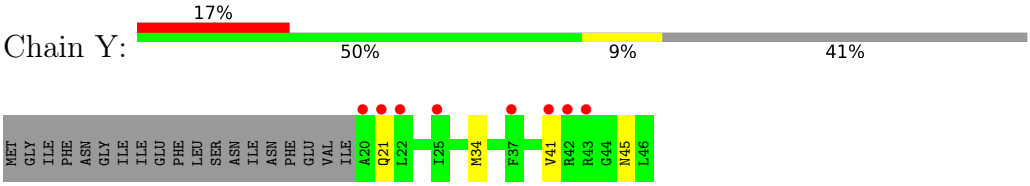
• Molecule 16: Cytochrome c-550

Chain v:



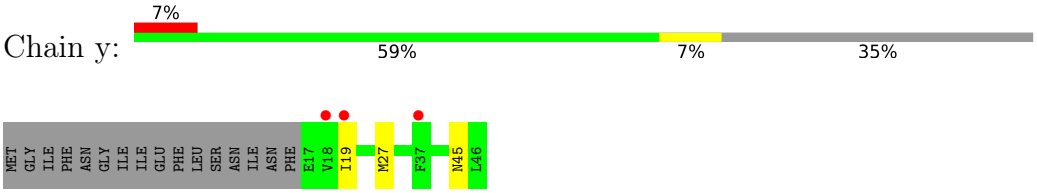
• Molecule 17: Photosystem II reaction center protein Ycf12

Chain Y:



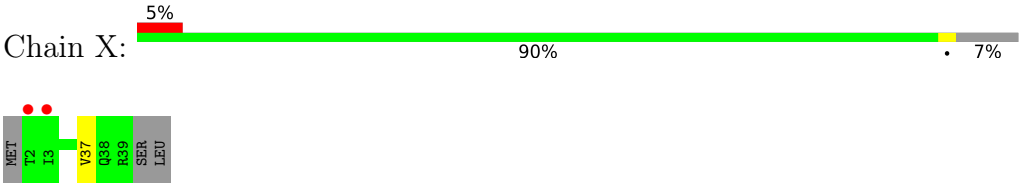
• Molecule 17: Photosystem II reaction center protein Ycf12

Chain y:



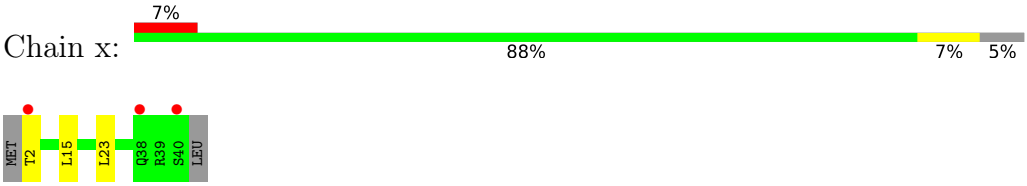
• Molecule 18: Photosystem II reaction center X protein

Chain X:



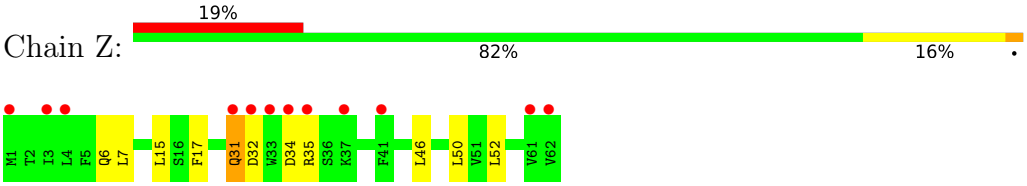
• Molecule 18: Photosystem II reaction center X protein

Chain x:



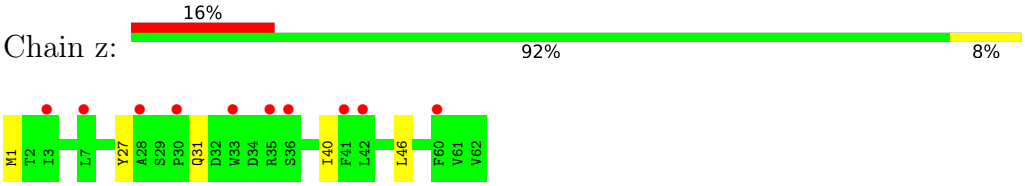
• Molecule 19: Photosystem II reaction center protein Z

Chain Z:



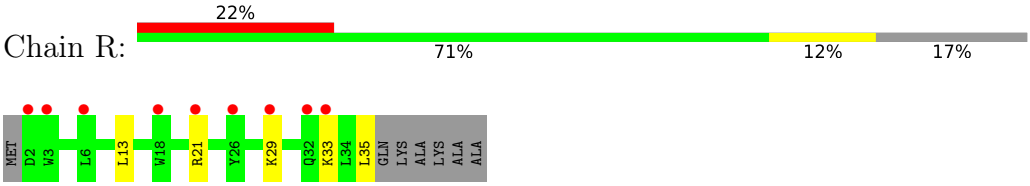
• Molecule 19: Photosystem II reaction center protein Z

Chain z:

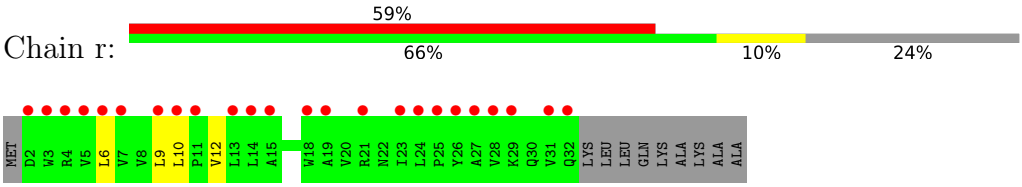


• Molecule 20: Photosystem II protein Y

Chain R:



• Molecule 20: Photosystem II protein Y



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	116.99Å 221.75Å 307.96Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	33.52 – 2.16 33.52 – 2.16	Depositor EDS
% Data completeness (in resolution range)	99.1 (33.52-2.16) 84.7 (33.52-2.16)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.39 (at 2.16Å)	Xtriage
Refinement program	PHENIX 1.19.2_4158	Depositor
R, R_{free}	0.185 , 0.241 0.186 , 0.241	Depositor DCC
R_{free} test set	3779 reflections (0.89%)	wwPDB-VP
Wilson B-factor (Å^2)	29.9	Xtriage
Anisotropy	0.180	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 66.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.47$, $< L^2 > = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	53024	wwPDB-VP
Average B, all atoms (Å^2)	46.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.65% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ 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: HEM, STE, OEY, SQD, LMG, BCT, LHG, OEX, HEC, CLA, BCR, DGD, PL9, FME, CL, PHO, FE2

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	0.42	0/3212	0.57	0/4376
1	a	0.39	0/3209	0.57	0/4372
2	B	0.41	0/4155	0.58	0/5661
2	b	0.39	0/4118	0.57	0/5611
3	C	0.40	0/3625	0.56	0/4935
3	c	0.38	0/3705	0.54	0/5042
4	D	0.43	0/2825	0.57	0/3847
4	d	0.41	0/2834	0.58	0/3859
5	E	0.36	0/688	0.52	0/940
5	e	0.32	0/683	0.54	0/932
6	F	0.36	0/284	0.50	0/387
6	f	0.35	0/284	0.55	0/387
7	H	0.43	0/523	0.60	0/713
7	h	0.39	0/511	0.56	0/697
8	I	0.42	0/293	0.56	0/396
8	i	0.43	0/293	0.58	0/396
9	J	0.37	0/263	0.52	0/356
9	j	0.33	0/263	0.51	0/356
10	K	0.35	0/303	0.52	0/416
10	k	0.36	0/303	0.53	0/416
11	L	0.38	0/311	0.58	0/422
11	l	0.40	0/303	0.60	0/412
12	M	0.38	0/249	0.55	0/341
12	m	0.43	0/244	0.56	0/334
13	O	0.38	0/1904	0.62	0/2585
13	o	0.40	0/1905	0.63	1/2583 (0.0%)
14	T	0.50	0/257	0.58	0/349
14	t	0.48	0/255	0.55	0/346
15	U	0.37	0/785	0.58	0/1064
15	u	0.38	0/785	0.59	0/1064
16	V	0.37	0/1085	0.60	1/1473 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
16	v	0.34	0/1085	0.55	0/1473
17	Y	0.30	0/197	0.54	0/264
17	y	0.28	0/219	0.44	0/294
18	X	0.36	0/284	0.52	0/384
18	x	0.31	0/289	0.44	0/391
19	Z	0.32	0/490	0.46	0/669
19	z	0.31	0/488	0.43	0/666
20	R	0.34	0/277	0.66	0/380
20	r	0.32	0/252	0.51	0/347
All	All	0.39	0/44038	0.57	2/59936 (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 (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	V	63	THR	C-N-CD	-5.42	108.69	120.60
13	o	158	ASP	CB-CG-OD1	5.22	123.00	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 (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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%)	391 (99%)	4 (1%)	0	100 100
1	a	395/344 (115%)	387 (98%)	7 (2%)	1 (0%)	41 37
2	B	507/510 (99%)	501 (99%)	6 (1%)	0	100 100
2	b	503/510 (99%)	491 (98%)	12 (2%)	0	100 100
3	C	451/461 (98%)	441 (98%)	9 (2%)	1 (0%)	47 46
3	c	461/461 (100%)	448 (97%)	12 (3%)	1 (0%)	47 46
4	D	340/352 (97%)	331 (97%)	9 (3%)	0	100 100
4	d	341/352 (97%)	330 (97%)	11 (3%)	0	100 100
5	E	81/84 (96%)	80 (99%)	1 (1%)	0	100 100
5	e	80/84 (95%)	80 (100%)	0	0	100 100
6	F	32/45 (71%)	32 (100%)	0	0	100 100
6	f	32/45 (71%)	32 (100%)	0	0	100 100
7	H	63/66 (96%)	58 (92%)	5 (8%)	0	100 100
7	h	61/66 (92%)	58 (95%)	3 (5%)	0	100 100
8	I	34/38 (90%)	32 (94%)	2 (6%)	0	100 100
8	i	34/38 (90%)	32 (94%)	2 (6%)	0	100 100
9	J	34/40 (85%)	31 (91%)	2 (6%)	1 (3%)	4 1
9	j	34/40 (85%)	31 (91%)	2 (6%)	1 (3%)	4 1
10	K	35/46 (76%)	33 (94%)	2 (6%)	0	100 100
10	k	35/46 (76%)	35 (100%)	0	0	100 100
11	L	35/37 (95%)	35 (100%)	0	0	100 100
11	l	34/37 (92%)	34 (100%)	0	0	100 100
12	M	31/36 (86%)	31 (100%)	0	0	100 100
12	m	30/36 (83%)	27 (90%)	3 (10%)	0	100 100
13	O	243/272 (89%)	231 (95%)	8 (3%)	4 (2%)	9 4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
13	o	242/272 (89%)	234 (97%)	7 (3%)	1 (0%)	34 29
14	T	28/32 (88%)	28 (100%)	0	0	100 100
14	t	28/32 (88%)	28 (100%)	0	0	100 100
15	U	95/134 (71%)	91 (96%)	4 (4%)	0	100 100
15	u	95/134 (71%)	91 (96%)	3 (3%)	1 (1%)	14 8
16	V	135/163 (83%)	131 (97%)	3 (2%)	1 (1%)	22 15
16	v	135/163 (83%)	130 (96%)	5 (4%)	0	100 100
17	Y	25/46 (54%)	22 (88%)	2 (8%)	1 (4%)	3 0
17	y	28/46 (61%)	25 (89%)	3 (11%)	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%)	53 (88%)	6 (10%)	1 (2%)	9 3
19	z	60/62 (97%)	57 (95%)	3 (5%)	0	100 100
20	R	32/41 (78%)	31 (97%)	1 (3%)	0	100 100
20	r	29/41 (71%)	29 (100%)	0	0	100 100
All	All	5386/5700 (94%)	5234 (97%)	138 (3%)	14 (0%)	41 37

All (14) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
16	V	64	PRO
19	Z	31	GLN
13	O	62	GLU
13	O	134	THR
17	Y	45	ASN
3	c	416	SER
15	u	53	ALA
9	j	6	GLY
13	o	61	GLN
9	J	6	GLY
13	O	57	LYS
13	O	59	LYS
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%)	317 (98%)	5 (2%)	62 67
1	a	321/280 (115%)	312 (97%)	9 (3%)	43 44
2	B	407/407 (100%)	403 (99%)	4 (1%)	76 81
2	b	402/407 (99%)	390 (97%)	12 (3%)	41 40
3	C	353/362 (98%)	344 (98%)	9 (2%)	47 49
3	c	362/362 (100%)	348 (96%)	14 (4%)	32 30
4	D	277/283 (98%)	275 (99%)	2 (1%)	84 89
4	d	278/283 (98%)	270 (97%)	8 (3%)	42 42
5	E	72/73 (99%)	70 (97%)	2 (3%)	43 44
5	e	71/73 (97%)	67 (94%)	4 (6%)	21 16
6	F	28/39 (72%)	28 (100%)	0	100 100
6	f	28/39 (72%)	26 (93%)	2 (7%)	14 9
7	H	54/55 (98%)	52 (96%)	2 (4%)	34 32
7	h	53/55 (96%)	50 (94%)	3 (6%)	20 16
8	I	32/34 (94%)	31 (97%)	1 (3%)	40 39
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%)	29 (97%)	1 (3%)	38 37
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%)	26 (93%)	2 (7%)	14 9
13	O	206/228 (90%)	199 (97%)	7 (3%)	37 35
13	o	207/228 (91%)	199 (96%)	8 (4%)	32 30

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
14	T	26/28 (93%)	26 (100%)	0	100 100
14	t	25/28 (89%)	24 (96%)	1 (4%)	31 29
15	U	84/112 (75%)	80 (95%)	4 (5%)	25 22
15	u	84/112 (75%)	83 (99%)	1 (1%)	71 76
16	V	117/138 (85%)	114 (97%)	3 (3%)	46 47
16	v	117/138 (85%)	116 (99%)	1 (1%)	78 83
17	Y	19/37 (51%)	16 (84%)	3 (16%)	2 1
17	y	22/37 (60%)	19 (86%)	3 (14%)	3 1
18	X	31/34 (91%)	30 (97%)	1 (3%)	39 38
18	x	31/34 (91%)	28 (90%)	3 (10%)	8 4
19	Z	52/52 (100%)	41 (79%)	11 (21%)	1 0
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%)	4300 (97%)	150 (3%)	37 35

All (150) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	12	ASN
1	A	121	LEU
1	A	205	VAL
1	A	243	GLU
1	A	248	ILE
2	B	127	ARG
2	B	362	PHE
2	B	371	THR
2	B	476	ARG
3	C	104	GLU
3	C	152	LYS
3	C	238	ILE
3	C	240	ILE
3	C	289	PHE
3	C	315	MET
3	C	355[A]	THR
3	C	355[B]	THR
3	C	416	SER

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Mol	Chain	Res	Type
4	D	180	ARG
4	D	264	LYS
5	E	22[A]	ILE
5	E	22[B]	ILE
7	H	49	TYR
7	H	56	ASP
8	I	4	LEU
10	K	19	ASP
12	M	25	LEU
13	O	18	LYS
13	O	78	LEU
13	O	107	THR
13	O	118	LEU
13	O	135	SER
13	O	191	SER
13	O	214	THR
15	U	10	VAL
15	U	39	ARG
15	U	51	LYS
15	U	67	LEU
16	V	3	LEU
16	V	31	ARG
16	V	57	GLU
17	Y	21	GLN
17	Y	34	MET
17	Y	41	VAL
18	X	37	VAL
19	Z	6	GLN
19	Z	7	LEU
19	Z	15	LEU
19	Z	17	PHE
19	Z	31	GLN
19	Z	32	ASP
19	Z	34	ASP
19	Z	35	ARG
19	Z	46	LEU
19	Z	50	LEU
19	Z	52	LEU
20	R	13	LEU
20	R	21	ARG
20	R	29	LYS
20	R	33	LYS

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Mol	Chain	Res	Type
20	R	35	LEU
1	a	28	LEU
1	a	42	LEU
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	98	LEU
2	b	149	LEU
2	b	236	THR
2	b	362	PHE
2	b	388	SER
2	b	435	GLU
2	b	438	ASN
2	b	490	GLN
2	b	492	GLU
2	b	505	ARG
2	b	506	ARG
3	c	24	THR
3	c	72	LEU
3	c	124	VAL
3	c	125	LEU
3	c	135	ARG
3	c	165	LEU
3	c	213	LEU
3	c	216	SER
3	c	289	PHE
3	c	355[A]	THR
3	c	355[B]	THR
3	c	413[A]	GLU
3	c	413[B]	GLU
3	c	468	SER
4	d	180	ARG
4	d	182	LEU
4	d	230	SER
4	d	233	ARG
4	d	259	ILE
4	d	291	LEU

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Mol	Chain	Res	Type
4	d	293	LEU
4	d	321	LEU
5	e	4	THR
5	e	60	GLN
5	e	65	LEU
5	e	83	LEU
6	f	25	THR
6	f	28	VAL
7	h	7	LEU
7	h	49	TYR
7	h	59	ASN
8	i	23	PHE
9	j	7	ARG
9	j	21	VAL
10	k	10	LYS
10	k	30	VAL
11	l	2	GLU
11	l	7	ARG
11	l	21	LEU
11	l	30	LEU
12	m	13	LEU
12	m	16	LEU
13	o	18	LYS
13	o	49	THR
13	o	60	ARG
13	o	87	VAL
13	o	118	LEU
13	o	130	GLN
13	o	194	LYS
13	o	207	ARG
14	t	25	GLU
15	u	10	VAL
16	v	2	GLU
17	y	19	ILE
17	y	27	MET
17	y	45	ASN
18	x	2	THR
18	x	15	LEU
18	x	23	LEU
19	z	1	MET
19	z	27	TYR
19	z	31	GLN

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Mol	Chain	Res	Type
19	z	40	ILE
19	z	46	LEU
20	r	6	LEU
20	r	9	LEU
20	r	10	LEU
20	r	12	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (17) such sidechains are listed below:

Mol	Chain	Res	Type
13	O	88	ASN
13	O	132	ASN
15	U	81	HIS
17	Y	21	GLN
1	a	19	ASN
1	a	266	ASN
2	b	179	GLN
2	b	490	GLN
3	c	378	ASN
4	d	61	HIS
5	e	60	GLN
5	e	82	GLN
7	h	59	ASN
12	m	5	GLN
15	u	81	HIS
19	z	31	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 (i)

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	$\#\|Z\| > 2$
12	FME	M	1	12	8,9,10	1.01	1 (12%)	7,9,11	1.10	1 (14%)
8	FME	i	1	8	8,9,10	0.98	0	7,9,11	1.21	1 (14%)
8	FME	I	1	8	8,9,10	0.99	0	7,9,11	0.75	0
14	FME	t	1	14	8,9,10	1.10	1 (12%)	7,9,11	0.97	0
14	FME	T	1	14	8,9,10	0.98	0	7,9,11	0.72	0
12	FME	m	1	12	8,9,10	0.98	1 (12%)	7,9,11	0.62	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
12	FME	M	1	12	-	4/7/9/11	-
8	FME	i	1	8	-	0/7/9/11	-
8	FME	I	1	8	-	0/7/9/11	-
14	FME	t	1	14	-	2/7/9/11	-
14	FME	T	1	14	-	2/7/9/11	-
12	FME	m	1	12	-	0/7/9/11	-

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	t	1	FME	CA-N	-2.28	1.43	1.46
12	M	1	FME	CA-N	-2.09	1.43	1.46
12	m	1	FME	CA-N	-2.05	1.43	1.46

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	i	1	FME	C-CA-N	2.75	114.70	109.73
12	M	1	FME	CG-CB-CA	-2.01	107.38	112.95

There are no chirality outliers.

All (8) torsion outliers are listed below:

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

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	$\#\|Z\| > 2$
25	CLA	b	601	-	65,73,73	1.48	7 (10%)	76,113,113	1.52	13 (17%)
31	STE	B	619	-	16,16,19	0.70	0	16,16,19	1.03	0
25	CLA	b	607	-	65,73,73	1.67	8 (12%)	76,113,113	1.47	12 (15%)
32	LHG	E	101	-	48,48,48	0.73	1 (2%)	51,54,54	1.18	5 (9%)
25	CLA	C	501	-	65,73,73	1.71	9 (13%)	76,113,113	1.50	13 (17%)
25	CLA	d	401	37	65,73,73	1.58	6 (9%)	76,113,113	1.39	10 (13%)
26	PHO	A	608	-	51,69,69	0.96	2 (3%)	47,99,99	1.26	5 (10%)
26	PHO	d	402	-	51,69,69	0.97	3 (5%)	47,99,99	1.38	7 (14%)
32	LHG	L	101	-	48,48,48	0.74	1 (2%)	51,54,54	1.17	2 (3%)
25	CLA	B	612	-	65,73,73	1.70	6 (9%)	76,113,113	1.57	13 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	B	610	-	65,73,73	1.50	8 (12%)	76,113,113	1.56	12 (15%)
25	CLA	c	503	-	65,73,73	1.49	9 (13%)	76,113,113	1.46	10 (13%)
25	CLA	A	606	-	65,73,73	1.34	6 (9%)	76,113,113	1.28	7 (9%)
25	CLA	C	506	-	65,73,73	1.71	10 (15%)	76,113,113	1.42	8 (10%)
25	CLA	b	604	-	65,73,73	1.57	6 (9%)	76,113,113	1.60	12 (15%)
25	CLA	c	511	3	65,73,73	1.63	6 (9%)	76,113,113	1.52	6 (7%)
32	LHG	l	101	-	48,48,48	0.64	0	51,54,54	1.21	7 (13%)
27	BCR	c	514	-	41,41,41	1.03	2 (4%)	56,56,56	1.24	6 (10%)
25	CLA	B	607	-	65,73,73	1.64	10 (15%)	76,113,113	1.48	9 (11%)
25	CLA	b	610	-	65,73,73	1.42	9 (13%)	76,113,113	1.51	11 (14%)
29	SQD	b	619	-	48,49,54	1.60	9 (18%)	57,60,65	1.96	14 (24%)
30	DGD	a	615	-	43,43,67	0.84	2 (4%)	45,45,81	1.44	6 (13%)
26	PHO	D	402	-	51,69,69	1.01	4 (7%)	47,99,99	1.48	8 (17%)
21	OEX	A	601[B]	3,1,37	0,15,15	-	-	-		
25	CLA	c	502	-	65,73,73	1.49	7 (10%)	76,113,113	1.46	10 (13%)
25	CLA	A	607	37	65,73,73	1.56	5 (7%)	76,113,113	1.39	10 (13%)
32	LHG	d	407	-	48,48,48	0.61	0	51,54,54	1.18	3 (5%)
31	STE	a	616	-	11,11,19	0.83	0	11,11,19	1.02	0
22	OEY	a	602[A]	3,1,37	0,16,16	-	-	-		
25	CLA	D	404	-	65,73,73	1.52	11 (16%)	76,113,113	1.45	10 (13%)
30	DGD	c	517	-	63,63,67	1.01	7 (11%)	77,77,81	1.37	8 (10%)
36	HEC	V	201	16	32,50,50	2.07	3 (9%)	24,82,82	1.90	6 (25%)
27	BCR	Y	101	-	41,41,41	1.06	2 (4%)	56,56,56	1.24	4 (7%)
33	LMG	c	522	-	48,48,55	0.88	3 (6%)	56,56,63	1.26	8 (14%)
27	BCR	B	618	-	41,41,41	0.97	1 (2%)	56,56,56	1.35	9 (16%)
33	LMG	b	620	-	51,51,55	0.93	4 (7%)	59,59,63	1.53	9 (15%)
32	LHG	D	410	-	46,46,48	0.91	2 (4%)	49,52,54	1.17	6 (12%)
27	BCR	B	616	-	41,41,41	1.07	3 (7%)	56,56,56	1.23	6 (10%)
25	CLA	b	611	-	65,73,73	1.43	7 (10%)	76,113,113	1.52	13 (17%)
31	STE	B	625	-	15,15,19	0.33	0	14,14,19	0.94	0
25	CLA	C	512	-	65,73,73	1.60	8 (12%)	76,113,113	1.36	9 (11%)
25	CLA	a	607	-	65,73,73	1.55	8 (12%)	76,113,113	1.44	10 (13%)
25	CLA	b	615	-	60,68,73	1.56	6 (10%)	70,107,113	1.60	8 (11%)
25	CLA	B	615	-	60,68,73	1.55	9 (15%)	70,107,113	1.57	10 (14%)
31	STE	C	521	-	11,11,19	0.69	0	11,11,19	1.28	1 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
30	DGD	A	614	-	67,67,67	1.16	8 (11%)	81,81,81	1.30	11 (13%)
32	LHG	e	102	-	41,41,48	0.80	1 (2%)	44,47,54	1.31	5 (11%)
33	LMG	b	622	-	55,55,55	0.82	1 (1%)	63,63,63	1.38	8 (12%)
30	DGD	c	519	-	63,63,67	0.88	3 (4%)	77,77,81	1.45	14 (18%)
31	STE	m	101	-	11,11,19	0.68	0	11,11,19	1.53	2 (18%)
31	STE	c	521	-	19,19,19	0.63	0	19,19,19	0.95	0
31	STE	M	104	-	14,14,19	0.35	0	13,13,19	0.82	0
25	CLA	B	602	-	65,73,73	1.55	9 (13%)	76,113,113	1.37	11 (14%)
27	BCR	B	617	-	41,41,41	0.98	2 (4%)	56,56,56	1.25	6 (10%)
29	SQD	T	103	-	38,38,54	1.72	5 (13%)	40,40,65	1.24	4 (10%)
25	CLA	B	614	-	65,73,73	1.62	8 (12%)	76,113,113	1.33	9 (11%)
31	STE	C	522	-	15,15,19	0.38	0	14,14,19	0.70	0
27	BCR	b	618	-	41,41,41	0.96	2 (4%)	56,56,56	1.21	4 (7%)
25	CLA	C	508	-	65,73,73	1.66	9 (13%)	76,113,113	1.49	6 (7%)
32	LHG	B	620	-	48,48,48	0.81	1 (2%)	51,54,54	1.34	7 (13%)
31	STE	B	623	-	17,17,19	0.55	0	17,17,19	1.23	1 (5%)
25	CLA	B	606	37	65,73,73	1.53	9 (13%)	76,113,113	1.56	10 (13%)
26	PHO	a	608	-	51,69,69	0.95	2 (3%)	47,99,99	1.22	5 (10%)
31	STE	b	626	-	9,9,19	0.33	0	8,8,19	0.77	0
33	LMG	d	409	-	21,21,55	0.48	0	20,20,63	1.23	2 (10%)
30	DGD	c	518	-	63,63,67	1.03	1 (1%)	77,77,81	1.40	10 (12%)
27	BCR	a	610	-	41,41,41	0.94	2 (4%)	56,56,56	1.10	3 (5%)
31	STE	C	520	-	11,11,19	0.68	0	11,11,19	1.50	1 (9%)
29	SQD	a	613	-	53,54,54	1.52	8 (15%)	62,65,65	1.88	13 (20%)
33	LMG	c	520	-	37,37,55	0.96	1 (2%)	45,45,63	1.31	5 (11%)
32	LHG	d	408	-	38,38,48	0.75	1 (2%)	41,44,54	1.13	3 (7%)
25	CLA	h	101	37	65,73,73	1.61	9 (13%)	76,113,113	1.51	8 (10%)
22	OEY	A	602[A]	3,1,37	0,16,16	-	-	-		
31	STE	I	101	-	14,14,19	0.41	0	13,13,19	0.64	0
25	CLA	H	101	37	65,73,73	1.61	9 (13%)	76,113,113	1.37	11 (14%)
27	BCR	b	617	-	41,41,41	1.11	2 (4%)	56,56,56	1.26	7 (12%)
30	DGD	C	517	-	63,63,67	1.01	6 (9%)	77,77,81	1.44	14 (18%)
25	CLA	d	403	-	65,73,73	1.43	8 (12%)	76,113,113	1.27	9 (11%)
27	BCR	c	515	-	41,41,41	1.05	3 (7%)	56,56,56	1.26	6 (10%)
33	LMG	C	519	-	48,48,55	0.85	0	56,56,63	1.33	8 (14%)
29	SQD	B	621	-	53,54,54	1.56	9 (16%)	62,65,65	1.80	12 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
29	SQD	f	101	-	40,41,54	1.67	8 (20%)	49,52,65	1.95	12 (24%)
25	CLA	D	403	-	65,73,73	1.57	6 (9%)	76,113,113	1.34	10 (13%)
25	CLA	c	508	-	64,72,73	1.71	8 (12%)	74,111,113	1.45	9 (12%)
25	CLA	b	612	-	65,73,73	1.60	8 (12%)	76,113,113	1.53	12 (15%)
27	BCR	x	101	-	41,41,41	0.97	1 (2%)	56,56,56	1.15	3 (5%)
25	CLA	B	603	-	65,73,73	1.59	7 (10%)	76,113,113	1.62	9 (11%)
25	CLA	b	608	-	65,73,73	1.59	8 (12%)	76,113,113	1.30	8 (10%)
25	CLA	A	609	-	54,62,73	1.65	6 (11%)	62,99,113	1.49	9 (14%)
33	LMG	C	515	-	48,48,55	0.94	2 (4%)	56,56,63	1.32	6 (10%)
28	PL9	D	406	-	55,55,55	0.99	5 (9%)	68,69,69	1.56	15 (22%)
30	DGD	C	516	-	63,63,67	1.09	8 (12%)	77,77,81	1.33	9 (11%)
25	CLA	b	602	-	65,73,73	1.59	8 (12%)	76,113,113	1.57	9 (11%)
25	CLA	C	513	-	65,73,73	1.53	6 (9%)	76,113,113	1.45	9 (11%)
27	BCR	A	610	-	41,41,41	0.93	2 (4%)	56,56,56	1.36	6 (10%)
25	CLA	b	605	-	65,73,73	1.69	7 (10%)	76,113,113	1.62	8 (10%)
25	CLA	c	513	-	65,73,73	1.52	6 (9%)	76,113,113	1.39	7 (9%)
31	STE	B	622	-	11,11,19	0.64	0	11,11,19	1.33	1 (9%)
27	BCR	C	514	-	41,41,41	1.04	2 (4%)	56,56,56	1.26	5 (8%)
31	STE	t	102	-	13,13,19	0.67	0	13,13,19	1.29	2 (15%)
29	SQD	A	613	-	51,52,54	1.57	7 (13%)	60,63,65	1.91	11 (18%)
33	LMG	D	407	-	51,51,55	0.77	2 (3%)	59,59,63	1.35	5 (8%)
31	STE	b	621	-	19,19,19	0.61	0	19,19,19	1.05	1 (5%)
31	STE	d	411	-	16,16,19	0.63	0	16,16,19	1.22	1 (6%)
25	CLA	C	505	-	65,73,73	1.74	7 (10%)	76,113,113	1.33	6 (7%)
25	CLA	B	609	37	65,73,73	1.47	6 (9%)	76,113,113	1.47	12 (15%)
27	BCR	b	616	-	41,41,41	1.02	3 (7%)	56,56,56	1.27	8 (14%)
33	LMG	D	412	-	26,26,55	0.54	0	26,26,63	1.36	1 (3%)
31	STE	b	625	-	19,19,19	0.58	0	19,19,19	1.12	1 (5%)
25	CLA	C	510	-	65,73,73	1.56	8 (12%)	76,113,113	1.45	8 (10%)
25	CLA	B	613	-	65,73,73	1.63	7 (10%)	76,113,113	1.31	9 (11%)
36	HEC	v	201	16	32,50,50	2.22	3 (9%)	24,82,82	1.89	5 (20%)
27	BCR	k	101	-	41,41,41	1.06	3 (7%)	56,56,56	1.04	2 (3%)
33	LMG	c	524	-	49,49,55	0.86	4 (8%)	57,57,63	1.34	6 (10%)
31	STE	J	101	-	11,11,19	0.69	0	11,11,19	1.19	1 (9%)
33	LMG	D	411	-	31,31,55	0.65	0	33,33,63	1.24	2 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	B	605	-	65,73,73	1.62	9 (13%)	76,113,113	1.55	11 (14%)
25	CLA	a	612	37	65,73,73	1.57	7 (10%)	76,113,113	1.42	12 (15%)
31	STE	B	624	-	11,11,19	0.63	0	11,11,19	1.29	1 (9%)
31	STE	c	523	-	11,11,19	0.74	0	11,11,19	1.21	1 (9%)
25	CLA	c	504	37	60,68,73	1.53	6 (10%)	70,107,113	1.46	9 (12%)
25	CLA	C	502	-	65,73,73	1.69	7 (10%)	76,113,113	1.40	10 (13%)
25	CLA	d	404	-	65,73,73	1.58	6 (9%)	76,113,113	1.34	9 (11%)
28	PL9	A	611	-	55,55,55	0.93	1 (1%)	68,69,69	1.46	9 (13%)
32	LHG	b	623	-	48,48,48	0.71	2 (4%)	51,54,54	1.29	7 (13%)
27	BCR	d	405	-	41,41,41	1.05	2 (4%)	56,56,56	1.15	6 (10%)
30	DGD	C	518	-	63,63,67	0.92	3 (4%)	77,77,81	1.43	7 (9%)
35	HEM	F	101	5,6	41,50,50	1.50	4 (9%)	45,82,82	1.33	7 (15%)
27	BCR	t	101	-	41,41,41	0.92	1 (2%)	56,56,56	1.33	7 (12%)
31	STE	D	413	-	19,19,19	0.60	0	19,19,19	1.07	0
25	CLA	c	509	-	65,73,73	1.45	6 (9%)	76,113,113	1.48	8 (10%)
25	CLA	B	601	-	65,73,73	1.51	7 (10%)	76,113,113	1.49	9 (11%)
25	CLA	C	503	-	65,73,73	1.65	9 (13%)	76,113,113	1.59	13 (17%)
25	CLA	C	509	-	65,73,73	1.62	9 (13%)	76,113,113	1.55	8 (10%)
25	CLA	B	604	-	65,73,73	1.56	7 (10%)	76,113,113	1.33	8 (10%)
25	CLA	B	608	-	65,73,73	1.45	10 (15%)	76,113,113	1.37	8 (10%)
31	STE	b	624	-	15,15,19	0.73	0	15,15,19	0.97	0
25	CLA	A	612	37	65,73,73	1.43	7 (10%)	76,113,113	1.27	8 (10%)
31	STE	E	102	-	11,11,19	0.75	0	11,11,19	1.18	1 (9%)
30	DGD	H	103	-	63,63,67	1.14	4 (6%)	77,77,81	1.36	9 (11%)
31	STE	T	102	-	15,15,19	0.34	0	14,14,19	0.95	0
31	STE	x	102	-	19,19,19	0.63	0	19,19,19	1.02	1 (5%)
21	OEX	a	601[B]	3,1,37	0,15,15	-	-	-		
33	LMG	M	101	-	51,51,55	0.85	0	59,59,63	1.38	7 (11%)
32	LHG	D	409	-	48,48,48	0.69	1 (2%)	51,54,54	1.22	6 (11%)
27	BCR	K	101	-	41,41,41	1.08	2 (4%)	56,56,56	1.25	7 (12%)
25	CLA	c	507	37	65,73,73	1.62	10 (15%)	76,113,113	1.41	9 (11%)
25	CLA	b	606	37	65,73,73	1.57	8 (12%)	76,113,113	1.39	9 (11%)
25	CLA	c	512	-	65,73,73	1.56	9 (13%)	76,113,113	1.41	10 (13%)
29	SQD	a	614	-	35,35,54	1.72	5 (14%)	37,37,65	1.35	3 (8%)
31	STE	t	103	-	9,9,19	0.45	0	8,8,19	0.55	0
27	BCR	Z	101	-	41,41,41	1.06	2 (4%)	56,56,56	1.27	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	c	510	-	65,73,73	1.51	8 (12%)	76,113,113	1.50	9 (11%)
25	CLA	C	504	37	59,67,73	1.67	7 (11%)	68,105,113	1.44	10 (14%)
25	CLA	B	611	-	65,73,73	1.47	7 (10%)	76,113,113	1.62	12 (15%)
27	BCR	H	102	-	41,41,41	0.94	1 (2%)	56,56,56	1.26	6 (10%)
25	CLA	b	603	-	65,73,73	1.49	7 (10%)	76,113,113	1.78	13 (17%)
25	CLA	b	609	37	65,73,73	1.58	9 (13%)	76,113,113	1.48	14 (18%)
25	CLA	b	614	-	65,73,73	1.64	10 (15%)	76,113,113	1.37	7 (9%)
25	CLA	c	506	-	65,73,73	1.64	8 (12%)	76,113,113	1.38	5 (6%)
29	SQD	D	408	-	35,36,54	1.50	7 (20%)	42,45,65	2.49	12 (28%)
30	DGD	h	102	-	63,63,67	0.96	5 (7%)	77,77,81	1.42	9 (11%)
25	CLA	b	613	-	65,73,73	1.60	7 (10%)	76,113,113	1.38	9 (11%)
25	CLA	c	501	-	65,73,73	1.52	7 (10%)	76,113,113	1.55	12 (15%)
31	STE	H	104	-	17,17,19	0.41	0	16,16,19	0.66	0
28	PL9	a	611	-	55,55,55	0.68	0	68,69,69	1.64	14 (20%)
31	STE	M	102	-	14,14,19	0.63	0	14,14,19	1.14	1 (7%)
25	CLA	C	507	37	65,73,73	1.45	7 (10%)	76,113,113	1.53	9 (11%)
34	BCT	D	401	23	2,3,3	1.14	0	2,3,3	3.15	1 (50%)
27	BCR	T	101	-	41,41,41	0.96	2 (4%)	56,56,56	1.21	4 (7%)
27	BCR	D	405	-	41,41,41	1.04	2 (4%)	56,56,56	1.15	4 (7%)
35	HEM	e	101	5,6	41,50,50	1.45	5 (12%)	45,82,82	1.67	9 (20%)
25	CLA	C	511	3	65,73,73	1.54	7 (10%)	76,113,113	1.42	9 (11%)
34	BCT	a	606	23	2,3,3	1.33	0	2,3,3	2.87	1 (50%)
31	STE	M	103	-	9,9,19	0.36	0	8,8,19	0.70	0
28	PL9	d	406	-	55,55,55	1.11	3 (5%)	68,69,69	1.57	13 (19%)
27	BCR	c	516	-	41,41,41	1.02	3 (7%)	56,56,56	1.20	6 (10%)
25	CLA	a	609	-	65,73,73	1.56	9 (13%)	76,113,113	1.32	10 (13%)
33	LMG	d	410	-	44,44,55	0.87	2 (4%)	52,52,63	1.34	6 (11%)
31	STE	j	101	-	11,11,19	0.71	0	11,11,19	1.28	1 (9%)
25	CLA	c	505	-	65,73,73	1.52	7 (10%)	76,113,113	1.35	7 (9%)
31	STE	l	102	-	17,17,19	0.34	0	16,16,19	0.83	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
25	CLA	b	601	-	1/1/15/20	11/37/115/115	-
31	STE	B	619	-	-	6/14/14/17	-
25	CLA	b	607	-	1/1/15/20	7/37/115/115	-
32	LHG	E	101	-	-	24/53/53/53	-
25	CLA	C	501	-	1/1/15/20	7/37/115/115	-
25	CLA	d	401	37	1/1/15/20	13/37/115/115	-
26	PHO	A	608	-	-	5/37/103/103	0/5/6/6
26	PHO	d	402	-	-	8/37/103/103	0/5/6/6
32	LHG	L	101	-	-	24/53/53/53	-
25	CLA	B	612	-	1/1/15/20	19/37/115/115	-
25	CLA	B	610	-	1/1/15/20	4/37/115/115	-
25	CLA	c	503	-	-	14/37/115/115	-
25	CLA	A	606	-	1/1/15/20	11/37/115/115	-
25	CLA	C	506	-	1/1/15/20	13/37/115/115	-
25	CLA	b	604	-	1/1/15/20	9/37/115/115	-
25	CLA	c	511	3	1/1/15/20	10/37/115/115	-
32	LHG	l	101	-	-	19/53/53/53	-
27	BCR	c	514	-	-	9/29/63/63	0/2/2/2
25	CLA	B	607	-	1/1/15/20	4/37/115/115	-
25	CLA	b	610	-	1/1/15/20	5/37/115/115	-
29	SQD	b	619	-	-	17/44/64/69	0/1/1/1
30	DGD	a	615	-	-	24/45/45/95	-
26	PHO	D	402	-	-	3/37/103/103	0/5/6/6
25	CLA	c	502	-	1/1/15/20	5/37/115/115	-
25	CLA	A	607	37	1/1/15/20	11/37/115/115	-
32	LHG	d	407	-	-	20/53/53/53	-
31	STE	a	616	-	-	2/9/9/17	-
25	CLA	D	404	-	-	6/37/115/115	-
30	DGD	c	517	-	-	28/51/91/95	0/2/2/2
36	HEC	V	201	16	-	2/10/54/54	-
27	BCR	Y	101	-	-	9/29/63/63	0/2/2/2
33	LMG	c	522	-	-	23/43/63/70	0/1/1/1
27	BCR	B	618	-	-	7/29/63/63	0/2/2/2
33	LMG	b	620	-	-	15/46/66/70	0/1/1/1
32	LHG	D	410	-	-	17/51/51/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	BCR	B	616	-	-	4/29/63/63	0/2/2/2
25	CLA	b	611	-	1/1/15/20	9/37/115/115	-
31	STE	B	625	-	-	8/13/13/17	-
25	CLA	C	512	-	1/1/15/20	12/37/115/115	-
25	CLA	a	607	-	1/1/15/20	6/37/115/115	-
25	CLA	b	615	-	1/1/14/20	9/31/109/115	-
25	CLA	B	615	-	1/1/14/20	7/31/109/115	-
31	STE	C	521	-	-	2/9/9/17	-
30	DGD	A	614	-	-	26/55/95/95	0/2/2/2
32	LHG	e	102	-	-	22/46/46/53	-
33	LMG	b	622	-	-	18/50/70/70	0/1/1/1
30	DGD	c	519	-	-	16/51/91/95	0/2/2/2
31	STE	m	101	-	-	3/9/9/17	-
31	STE	c	521	-	-	12/17/17/17	-
31	STE	M	104	-	-	8/12/12/17	-
27	BCR	B	617	-	-	5/29/63/63	0/2/2/2
25	CLA	B	602	-	1/1/15/20	13/37/115/115	-
29	SQD	T	103	-	-	13/39/39/69	-
25	CLA	B	614	-	1/1/15/20	9/37/115/115	-
31	STE	C	522	-	-	3/13/13/17	-
27	BCR	b	618	-	-	6/29/63/63	0/2/2/2
25	CLA	C	508	-	1/1/15/20	9/37/115/115	-
32	LHG	B	620	-	-	15/53/53/53	-
31	STE	B	623	-	-	10/15/15/17	-
25	CLA	B	606	37	1/1/15/20	14/37/115/115	-
26	PHO	a	608	-	-	7/37/103/103	0/5/6/6
31	STE	b	626	-	-	5/7/7/17	-
33	LMG	d	409	-	-	10/17/17/70	-
30	DGD	c	518	-	-	15/51/91/95	0/2/2/2
27	BCR	a	610	-	-	3/29/63/63	0/2/2/2
31	STE	C	520	-	-	5/9/9/17	-
29	SQD	a	613	-	-	25/49/69/69	0/1/1/1
33	LMG	c	520	-	-	22/31/51/70	0/1/1/1
32	LHG	d	408	-	-	14/43/43/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	h	101	37	1/1/15/20	18/37/115/115	-
31	STE	I	101	-	-	6/12/12/17	-
25	CLA	H	101	37	1/1/15/20	18/37/115/115	-
27	BCR	b	617	-	-	6/29/63/63	0/2/2/2
30	DGD	C	517	-	-	23/51/91/95	0/2/2/2
25	CLA	d	403	-	1/1/15/20	10/37/115/115	-
27	BCR	c	515	-	-	7/29/63/63	0/2/2/2
33	LMG	C	519	-	-	23/43/63/70	0/1/1/1
29	SQD	B	621	-	-	30/49/69/69	0/1/1/1
29	SQD	f	101	-	-	16/36/56/69	0/1/1/1
25	CLA	D	403	-	1/1/15/20	9/37/115/115	-
25	CLA	c	508	-	-	8/36/114/115	-
25	CLA	b	612	-	1/1/15/20	12/37/115/115	-
27	BCR	x	101	-	-	10/29/63/63	0/2/2/2
25	CLA	B	603	-	1/1/15/20	11/37/115/115	-
25	CLA	b	608	-	1/1/15/20	3/37/115/115	-
25	CLA	A	609	-	1/1/12/20	4/24/102/115	-
33	LMG	C	515	-	-	25/43/63/70	0/1/1/1
28	PL9	D	406	-	-	7/53/73/73	0/1/1/1
30	DGD	C	516	-	-	25/51/91/95	0/2/2/2
25	CLA	b	602	-	1/1/15/20	7/37/115/115	-
25	CLA	C	513	-	1/1/15/20	13/37/115/115	-
27	BCR	A	610	-	-	6/29/63/63	0/2/2/2
25	CLA	b	605	-	1/1/15/20	9/37/115/115	-
25	CLA	c	513	-	1/1/15/20	8/37/115/115	-
31	STE	B	622	-	-	6/9/9/17	-
27	BCR	C	514	-	-	6/29/63/63	0/2/2/2
31	STE	t	102	-	-	6/11/11/17	-
29	SQD	A	613	-	-	18/47/67/69	0/1/1/1
33	LMG	D	407	-	-	15/46/66/70	0/1/1/1
31	STE	b	621	-	-	10/17/17/17	-
31	STE	d	411	-	-	11/14/14/17	-
25	CLA	C	505	-	1/1/15/20	15/37/115/115	-
25	CLA	B	609	37	1/1/15/20	6/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	BCR	b	616	-	-	5/29/63/63	0/2/2/2
33	LMG	D	412	-	-	15/22/22/70	-
31	STE	b	625	-	-	11/17/17/17	-
25	CLA	C	510	-	1/1/15/20	15/37/115/115	-
25	CLA	B	613	-	1/1/15/20	10/37/115/115	-
36	HEC	v	201	16	-	2/10/54/54	-
27	BCR	k	101	-	-	9/29/63/63	0/2/2/2
33	LMG	c	524	-	-	26/44/64/70	0/1/1/1
31	STE	J	101	-	-	6/9/9/17	-
33	LMG	D	411	-	-	16/33/33/70	-
25	CLA	B	605	-	1/1/15/20	14/37/115/115	-
25	CLA	a	612	37	1/1/15/20	15/37/115/115	-
31	STE	B	624	-	-	4/9/9/17	-
31	STE	c	523	-	-	3/9/9/17	-
25	CLA	c	504	37	1/1/14/20	11/31/109/115	-
25	CLA	C	502	-	1/1/15/20	7/37/115/115	-
25	CLA	d	404	-	1/1/15/20	8/37/115/115	-
28	PL9	A	611	-	-	29/53/73/73	0/1/1/1
32	LHG	b	623	-	-	22/53/53/53	-
27	BCR	d	405	-	-	10/29/63/63	0/2/2/2
30	DGD	C	518	-	-	20/51/91/95	0/2/2/2
35	HEM	F	101	5,6	-	2/12/54/54	-
27	BCR	t	101	-	-	7/29/63/63	0/2/2/2
31	STE	D	413	-	-	9/17/17/17	-
25	CLA	c	509	-	1/1/15/20	8/37/115/115	-
25	CLA	B	601	-	1/1/15/20	10/37/115/115	-
25	CLA	C	503	-	1/1/15/20	5/37/115/115	-
25	CLA	C	509	-	1/1/15/20	15/37/115/115	-
25	CLA	B	604	-	1/1/15/20	11/37/115/115	-
25	CLA	B	608	-	-	5/37/115/115	-
31	STE	b	624	-	-	12/13/13/17	-
25	CLA	A	612	37	1/1/15/20	11/37/115/115	-
31	STE	E	102	-	-	5/9/9/17	-
30	DGD	H	103	-	-	16/51/91/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	STE	T	102	-	-	8/13/13/17	-
31	STE	x	102	-	-	10/17/17/17	-
33	LMG	M	101	-	-	28/46/66/70	0/1/1/1
32	LHG	D	409	-	-	26/53/53/53	-
27	BCR	K	101	-	-	9/29/63/63	0/2/2/2
25	CLA	c	507	37	1/1/15/20	9/37/115/115	-
25	CLA	b	606	37	1/1/15/20	20/37/115/115	-
25	CLA	c	512	-	1/1/15/20	24/37/115/115	-
29	SQD	a	614	-	-	16/37/37/69	-
31	STE	t	103	-	-	3/7/7/17	-
27	BCR	Z	101	-	-	12/29/63/63	0/2/2/2
25	CLA	c	510	-	1/1/15/20	11/37/115/115	-
25	CLA	C	504	37	1/1/13/20	9/30/108/115	-
25	CLA	B	611	-	1/1/15/20	10/37/115/115	-
27	BCR	H	102	-	-	3/29/63/63	0/2/2/2
25	CLA	b	603	-	1/1/15/20	10/37/115/115	-
25	CLA	b	609	37	1/1/15/20	6/37/115/115	-
25	CLA	b	614	-	1/1/15/20	9/37/115/115	-
25	CLA	c	506	-	1/1/15/20	18/37/115/115	-
29	SQD	D	408	-	-	12/28/48/69	0/1/1/1
30	DGD	h	102	-	-	16/51/91/95	0/2/2/2
25	CLA	b	613	-	1/1/15/20	14/37/115/115	-
25	CLA	c	501	-	1/1/15/20	3/37/115/115	-
31	STE	H	104	-	-	7/15/15/17	-
28	PL9	a	611	-	-	28/53/73/73	0/1/1/1
31	STE	M	102	-	-	7/12/12/17	-
25	CLA	C	507	37	1/1/15/20	7/37/115/115	-
27	BCR	T	101	-	-	11/29/63/63	0/2/2/2
27	BCR	D	405	-	-	6/29/63/63	0/2/2/2
35	HEM	e	101	5,6	-	2/12/54/54	-
25	CLA	C	511	3	1/1/15/20	5/37/115/115	-
31	STE	M	103	-	-	3/7/7/17	-
28	PL9	d	406	-	-	8/53/73/73	0/1/1/1
27	BCR	c	516	-	-	9/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	a	609	-	1/1/15/20	12/37/115/115	-
33	LMG	d	410	-	-	11/39/59/70	0/1/1/1
31	STE	j	101	-	-	3/9/9/17	-
25	CLA	c	505	-	1/1/15/20	9/37/115/115	-
31	STE	l	102	-	-	10/15/15/17	-

All (751) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	607	CLA	C4B-NB	8.61	1.42	1.35
25	b	613	CLA	C4B-NB	8.32	1.42	1.35
25	b	605	CLA	MG-NA	8.32	2.26	2.06
25	B	614	CLA	C4B-NB	8.27	1.42	1.35
25	C	504	CLA	C4B-NB	8.26	1.42	1.35
25	b	604	CLA	C4B-NB	8.21	1.42	1.35
25	C	505	CLA	C4B-NB	8.20	1.42	1.35
25	d	401	CLA	C4B-NB	8.12	1.42	1.35
25	d	404	CLA	C4B-NB	8.12	1.42	1.35
25	A	607	CLA	C4B-NB	8.09	1.42	1.35
25	b	606	CLA	C4B-NB	8.05	1.42	1.35
25	B	613	CLA	C4B-NB	8.02	1.42	1.35
25	C	503	CLA	C4B-NB	8.00	1.42	1.35
25	H	101	CLA	C4B-NB	7.96	1.42	1.35
25	a	609	CLA	C4B-NB	7.90	1.42	1.35
25	c	508	CLA	C4B-NB	7.88	1.42	1.35
25	B	601	CLA	C4B-NB	7.86	1.42	1.35
25	C	510	CLA	C4B-NB	7.63	1.42	1.35
25	C	501	CLA	C4B-NB	7.57	1.42	1.35
25	c	504	CLA	C4B-NB	7.55	1.41	1.35
25	b	608	CLA	C4B-NB	7.50	1.41	1.35
25	C	511	CLA	C4B-NB	7.50	1.41	1.35
25	c	512	CLA	C4B-NB	7.50	1.41	1.35
25	c	513	CLA	C4B-NB	7.48	1.41	1.35
25	b	607	CLA	C4B-NB	7.48	1.41	1.35
25	b	612	CLA	C4B-NB	7.48	1.41	1.35
25	C	506	CLA	C4B-NB	7.43	1.41	1.35
25	b	615	CLA	C4B-NB	7.41	1.41	1.35
25	A	609	CLA	C4B-NB	7.36	1.41	1.35
25	h	101	CLA	C4B-NB	7.35	1.41	1.35
25	c	507	CLA	C4B-NB	7.33	1.41	1.35
25	c	506	CLA	C4B-NB	7.31	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	611	CLA	C4B-NB	7.29	1.41	1.35
36	v	201	HEC	C2B-C3B	-7.28	1.33	1.40
25	b	603	CLA	C4B-NB	7.25	1.41	1.35
25	B	609	CLA	C4B-NB	7.25	1.41	1.35
25	b	602	CLA	C4B-NB	7.19	1.41	1.35
25	C	502	CLA	C4B-NB	7.18	1.41	1.35
25	c	505	CLA	C4B-NB	7.15	1.41	1.35
25	C	509	CLA	C4B-NB	7.15	1.41	1.35
25	C	508	CLA	C4B-NB	7.15	1.41	1.35
25	c	501	CLA	C4B-NB	7.07	1.41	1.35
25	c	502	CLA	C4B-NB	7.07	1.41	1.35
25	a	607	CLA	C4B-NB	7.01	1.41	1.35
25	B	605	CLA	C4B-NB	6.99	1.41	1.35
25	b	601	CLA	C4B-NB	6.91	1.41	1.35
25	B	608	CLA	C4B-NB	6.90	1.41	1.35
25	A	612	CLA	C4B-NB	6.88	1.41	1.35
25	B	602	CLA	C4B-NB	6.88	1.41	1.35
25	D	403	CLA	C4B-NB	6.86	1.41	1.35
25	c	509	CLA	C4B-NB	6.82	1.41	1.35
25	c	511	CLA	C4B-NB	6.81	1.41	1.35
25	C	512	CLA	C4B-NB	6.79	1.41	1.35
25	b	614	CLA	C4B-NB	6.79	1.41	1.35
25	C	513	CLA	C4B-NB	6.78	1.41	1.35
25	c	510	CLA	C4B-NB	6.78	1.41	1.35
25	C	502	CLA	MG-NA	6.75	2.22	2.06
25	B	604	CLA	C4B-NB	6.73	1.41	1.35
25	b	609	CLA	C4B-NB	6.73	1.41	1.35
25	C	507	CLA	C4B-NB	6.66	1.41	1.35
25	B	612	CLA	C4B-NB	6.62	1.41	1.35
25	B	603	CLA	C4B-NB	6.52	1.41	1.35
36	V	201	HEC	C2B-C3B	-6.48	1.34	1.40
25	c	503	CLA	C4B-NB	6.44	1.41	1.35
25	B	615	CLA	C4B-NB	6.43	1.40	1.35
25	B	605	CLA	MG-NA	6.35	2.21	2.06
25	B	606	CLA	C4B-NB	6.34	1.40	1.35
25	a	612	CLA	C4B-NB	6.28	1.40	1.35
25	b	610	CLA	C4B-NB	6.25	1.40	1.35
25	b	605	CLA	C4B-NB	6.21	1.40	1.35
25	d	403	CLA	C4B-NB	6.21	1.40	1.35
25	D	404	CLA	C4B-NB	6.17	1.40	1.35
25	b	614	CLA	MG-NA	6.16	2.20	2.06
25	c	511	CLA	MG-NA	6.16	2.20	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	612	CLA	MG-ND	-6.05	1.93	2.05
25	C	501	CLA	MG-NA	6.05	2.20	2.06
25	C	506	CLA	MG-ND	-6.02	1.93	2.05
25	C	508	CLA	MG-NA	6.02	2.20	2.06
25	b	611	CLA	C4B-NB	5.88	1.40	1.35
25	B	610	CLA	C4B-NB	5.73	1.40	1.35
36	v	201	HEC	C3C-C2C	-5.72	1.34	1.40
25	B	603	CLA	MG-NC	5.68	2.19	2.06
25	A	606	CLA	C4B-NB	5.53	1.40	1.35
25	C	505	CLA	MG-NA	5.51	2.19	2.06
29	T	103	SQD	O47-C45	-5.48	1.37	1.47
25	D	403	CLA	MG-NA	5.45	2.19	2.06
25	c	508	CLA	MG-NC	5.41	2.19	2.06
25	C	512	CLA	MG-NA	5.23	2.18	2.06
25	b	602	CLA	MG-NA	5.12	2.18	2.06
36	v	201	HEC	C3D-C2D	5.12	1.52	1.37
36	V	201	HEC	C3D-C2D	5.11	1.52	1.37
25	b	612	CLA	MG-NA	5.07	2.18	2.06
25	h	101	CLA	MG-NA	5.02	2.18	2.06
29	b	619	SQD	O48-C23	4.99	1.47	1.33
36	V	201	HEC	C3C-C2C	-4.97	1.35	1.40
25	B	604	CLA	MG-NA	4.93	2.18	2.06
29	B	621	SQD	O48-C23	4.90	1.47	1.33
25	C	509	CLA	MG-NA	4.87	2.17	2.06
35	F	101	HEM	C3C-C2C	-4.87	1.33	1.40
25	B	612	CLA	C1D-ND	4.87	1.43	1.37
29	a	613	SQD	O48-C23	4.85	1.47	1.33
25	B	613	CLA	MG-ND	-4.80	1.96	2.05
29	T	103	SQD	O48-C23	4.75	1.47	1.33
29	D	408	SQD	O48-C23	4.72	1.47	1.33
25	c	506	CLA	MG-ND	-4.72	1.96	2.05
25	C	513	CLA	MG-NA	4.71	2.17	2.06
29	A	613	SQD	O48-C23	4.70	1.47	1.33
29	a	614	SQD	O48-C23	4.64	1.46	1.33
25	b	607	CLA	MG-NA	4.60	2.17	2.06
29	f	101	SQD	O48-C23	4.58	1.46	1.33
25	d	403	CLA	C1D-ND	4.58	1.43	1.37
25	C	501	CLA	C1D-ND	4.44	1.43	1.37
25	c	507	CLA	MG-NA	4.42	2.16	2.06
25	a	612	CLA	MG-NA	4.40	2.16	2.06
25	b	609	CLA	C1D-ND	4.35	1.43	1.37
25	B	612	CLA	MG-NA	4.29	2.16	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	612	CLA	C1D-ND	4.23	1.43	1.37
25	H	101	CLA	MG-NA	4.22	2.16	2.06
25	c	507	CLA	C1D-ND	4.21	1.43	1.37
25	B	610	CLA	MG-ND	4.18	2.14	2.05
25	D	404	CLA	C1D-ND	4.17	1.42	1.37
25	B	606	CLA	C1D-ND	4.17	1.42	1.37
25	c	508	CLA	C1D-ND	4.15	1.42	1.37
29	a	614	SQD	O47-C7	4.13	1.45	1.34
25	b	609	CLA	MG-NA	4.12	2.16	2.06
25	b	604	CLA	C1D-ND	4.11	1.42	1.37
25	c	505	CLA	MG-NA	4.11	2.16	2.06
25	b	601	CLA	C1D-ND	4.11	1.42	1.37
25	C	513	CLA	C1D-ND	4.11	1.42	1.37
28	d	406	PL9	C3-C4	-4.10	1.42	1.49
25	b	615	CLA	C1D-ND	4.08	1.42	1.37
25	A	606	CLA	C4D-ND	-4.07	1.32	1.37
25	d	401	CLA	C4D-ND	-4.07	1.32	1.37
25	b	612	CLA	C1D-ND	4.03	1.42	1.37
25	B	606	CLA	MG-ND	-4.02	1.97	2.05
25	b	607	CLA	C1D-ND	3.99	1.42	1.37
25	C	510	CLA	MG-NA	3.99	2.15	2.06
25	a	607	CLA	C1D-ND	3.99	1.42	1.37
25	c	510	CLA	MG-NA	3.98	2.15	2.06
25	c	512	CLA	C1D-ND	3.95	1.42	1.37
25	C	502	CLA	C1D-ND	3.93	1.42	1.37
25	b	607	CLA	MG-ND	-3.93	1.98	2.05
27	b	617	BCR	C30-C25	-3.92	1.48	1.53
25	C	504	CLA	MG-NA	3.92	2.15	2.06
25	C	506	CLA	C1D-ND	3.92	1.42	1.37
25	B	604	CLA	C1D-ND	3.90	1.42	1.37
25	B	608	CLA	C1D-ND	3.90	1.42	1.37
25	B	615	CLA	C1D-ND	3.87	1.42	1.37
35	e	101	HEM	C3C-CAC	3.87	1.55	1.47
25	c	511	CLA	C1D-ND	3.86	1.42	1.37
25	a	609	CLA	C1D-ND	3.86	1.42	1.37
25	B	602	CLA	MG-NA	3.83	2.15	2.06
25	c	506	CLA	C1D-ND	3.83	1.42	1.37
25	a	607	CLA	MG-NC	3.83	2.15	2.06
25	b	603	CLA	C4D-ND	-3.81	1.32	1.37
25	A	607	CLA	CHC-C1C	3.81	1.44	1.35
25	d	401	CLA	CHC-C1C	3.80	1.44	1.35
25	b	611	CLA	C1D-ND	3.80	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	510	CLA	C1D-ND	3.77	1.42	1.37
25	b	608	CLA	C1D-ND	3.76	1.42	1.37
25	C	505	CLA	C1D-ND	3.76	1.42	1.37
25	c	501	CLA	C1D-ND	3.75	1.42	1.37
25	b	607	CLA	CHC-C1C	3.74	1.44	1.35
25	H	101	CLA	C1D-ND	3.74	1.42	1.37
25	b	610	CLA	MG-NA	3.74	2.15	2.06
25	C	508	CLA	C1D-ND	3.74	1.42	1.37
25	C	512	CLA	MG-ND	-3.73	1.98	2.05
25	c	513	CLA	C1D-ND	3.72	1.42	1.37
25	c	509	CLA	C1D-ND	3.71	1.42	1.37
25	c	503	CLA	C1D-ND	3.71	1.42	1.37
25	B	613	CLA	C4D-ND	-3.70	1.32	1.37
25	C	510	CLA	CHC-C1C	3.70	1.44	1.35
25	A	609	CLA	C1D-ND	3.70	1.42	1.37
25	A	607	CLA	C4D-ND	-3.69	1.32	1.37
25	c	513	CLA	CHC-C1C	3.68	1.44	1.35
25	C	505	CLA	MG-ND	-3.67	1.98	2.05
25	B	614	CLA	MG-NA	3.65	2.14	2.06
25	b	602	CLA	C1D-ND	3.65	1.42	1.37
25	C	503	CLA	C4D-ND	-3.64	1.32	1.37
25	C	505	CLA	CHC-C1C	3.64	1.44	1.35
25	C	512	CLA	C1D-ND	3.62	1.42	1.37
25	C	504	CLA	CHC-C1C	3.62	1.44	1.35
29	A	613	SQD	O47-C7	3.62	1.44	1.34
29	B	621	SQD	O47-C7	3.61	1.44	1.34
25	d	401	CLA	C1D-ND	3.60	1.42	1.37
25	h	101	CLA	C1D-ND	3.58	1.42	1.37
25	B	604	CLA	C4D-ND	-3.58	1.32	1.37
25	C	504	CLA	C1D-ND	3.58	1.42	1.37
25	C	501	CLA	CHC-C1C	3.58	1.44	1.35
25	b	615	CLA	C4D-ND	-3.57	1.32	1.37
25	B	603	CLA	C1D-ND	3.57	1.42	1.37
35	e	101	HEM	C3C-C2C	-3.56	1.35	1.40
25	C	509	CLA	C1D-ND	3.56	1.42	1.37
25	B	611	CLA	MG-NA	3.56	2.14	2.06
25	C	503	CLA	C1D-ND	3.55	1.42	1.37
27	C	514	BCR	C1-C6	-3.55	1.48	1.53
25	B	611	CLA	CHC-C1C	3.55	1.44	1.35
28	A	611	PL9	C7-C3	-3.55	1.47	1.51
25	b	604	CLA	C4D-ND	-3.54	1.32	1.37
25	b	608	CLA	MG-NC	3.54	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	609	CLA	MG-ND	-3.54	1.98	2.05
25	B	601	CLA	C1D-ND	3.54	1.42	1.37
25	C	506	CLA	MG-NA	3.54	2.14	2.06
25	b	606	CLA	C1D-ND	3.53	1.42	1.37
25	c	501	CLA	CHC-C1C	3.53	1.44	1.35
25	B	610	CLA	CHC-C1C	3.52	1.44	1.35
30	a	615	DGD	O1G-C1A	3.51	1.43	1.33
25	c	503	CLA	MG-NC	3.51	2.14	2.06
25	D	403	CLA	C1D-ND	3.50	1.42	1.37
25	b	605	CLA	C1D-ND	3.50	1.42	1.37
25	B	605	CLA	CHC-C1C	3.49	1.43	1.35
25	c	506	CLA	MG-NA	3.49	2.14	2.06
35	F	101	HEM	C3C-CAC	3.48	1.54	1.47
25	c	506	CLA	CHC-C1C	3.48	1.43	1.35
25	B	609	CLA	CHC-C1C	3.48	1.43	1.35
25	C	503	CLA	CHC-C1C	3.48	1.43	1.35
25	c	509	CLA	C4D-ND	-3.47	1.32	1.37
25	c	512	CLA	MG-ND	-3.47	1.98	2.05
25	C	511	CLA	C1D-ND	3.47	1.42	1.37
29	f	101	SQD	O47-C7	3.47	1.44	1.34
27	B	616	BCR	C1-C6	-3.47	1.49	1.53
25	b	613	CLA	C1D-ND	3.46	1.42	1.37
25	a	607	CLA	C4D-ND	-3.45	1.32	1.37
25	b	610	CLA	C1D-ND	3.45	1.42	1.37
25	A	609	CLA	C4D-ND	-3.44	1.33	1.37
25	c	503	CLA	C4D-ND	-3.44	1.33	1.37
25	c	508	CLA	CHC-C1C	3.43	1.43	1.35
25	B	615	CLA	MG-NA	3.43	2.14	2.06
25	c	503	CLA	CHC-C1C	3.43	1.43	1.35
25	D	404	CLA	MG-NA	3.42	2.14	2.06
25	c	511	CLA	CHC-C1C	3.42	1.43	1.35
25	B	607	CLA	C1D-ND	3.42	1.42	1.37
25	A	607	CLA	C1D-ND	3.42	1.42	1.37
25	c	501	CLA	C4D-ND	-3.41	1.33	1.37
25	c	508	CLA	C4D-ND	-3.41	1.33	1.37
25	b	606	CLA	CHC-C1C	3.40	1.43	1.35
29	T	103	SQD	O47-C7	3.39	1.43	1.34
25	C	512	CLA	CHC-C1C	3.39	1.43	1.35
25	b	604	CLA	CHC-C1C	3.38	1.43	1.35
29	b	619	SQD	O47-C7	3.37	1.43	1.34
25	d	404	CLA	C1D-ND	3.37	1.41	1.37
29	a	614	SQD	C24-C23	3.36	1.60	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	a	613	SQD	O47-C7	3.36	1.43	1.34
25	c	512	CLA	CHC-C1C	3.35	1.43	1.35
25	h	101	CLA	CHC-C1C	3.35	1.43	1.35
30	H	103	DGD	C4D-C5D	3.35	1.60	1.53
25	A	612	CLA	C1D-ND	3.35	1.41	1.37
25	B	614	CLA	C1D-ND	3.35	1.41	1.37
27	c	515	BCR	C1-C6	-3.35	1.49	1.53
29	f	101	SQD	C24-C23	3.35	1.60	1.50
25	D	403	CLA	C4D-ND	-3.34	1.33	1.37
25	b	614	CLA	C1D-ND	3.34	1.41	1.37
25	B	614	CLA	CHC-C1C	3.32	1.43	1.35
25	C	509	CLA	C4D-ND	-3.31	1.33	1.37
25	b	603	CLA	MG-NA	3.31	2.14	2.06
25	B	602	CLA	C1D-ND	3.31	1.41	1.37
32	D	410	LHG	P-O6	3.30	1.72	1.59
25	c	509	CLA	CHC-C1C	3.29	1.43	1.35
25	c	505	CLA	CHC-C1C	3.29	1.43	1.35
25	B	610	CLA	C1D-ND	3.29	1.41	1.37
25	a	612	CLA	C4D-ND	-3.29	1.33	1.37
25	c	502	CLA	C4D-ND	-3.29	1.33	1.37
25	c	504	CLA	C1D-ND	3.29	1.41	1.37
29	a	613	SQD	O47-C45	-3.28	1.38	1.46
25	B	610	CLA	MG-NA	3.28	2.14	2.06
25	D	403	CLA	CHC-C1C	3.28	1.43	1.35
25	H	101	CLA	CHC-C1C	3.27	1.43	1.35
25	b	611	CLA	MG-ND	-3.27	1.99	2.05
25	B	603	CLA	C4D-ND	-3.26	1.33	1.37
25	C	503	CLA	MG-ND	3.26	2.12	2.05
25	a	607	CLA	CHC-C1C	3.25	1.43	1.35
29	D	408	SQD	C24-C23	3.25	1.60	1.50
29	f	101	SQD	O47-C45	-3.24	1.38	1.46
25	d	404	CLA	CHC-C1C	3.24	1.43	1.35
25	C	511	CLA	C4D-ND	-3.23	1.33	1.37
25	C	509	CLA	CHC-C1C	3.23	1.43	1.35
25	B	603	CLA	CHC-C1C	3.22	1.43	1.35
25	b	614	CLA	CHC-C1C	3.22	1.43	1.35
27	k	101	BCR	C1-C6	-3.22	1.49	1.53
29	B	621	SQD	O47-C45	-3.22	1.38	1.46
25	B	607	CLA	MG-ND	-3.21	1.99	2.05
28	d	406	PL9	C6-C1	-3.21	1.42	1.48
25	B	605	CLA	C1D-ND	3.20	1.41	1.37
32	B	620	LHG	O7-C5	-3.20	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	610	CLA	C4D-ND	-3.19	1.33	1.37
25	A	612	CLA	CHC-C1C	3.19	1.43	1.35
25	C	511	CLA	MG-NA	3.18	2.13	2.06
29	A	613	SQD	C24-C23	3.18	1.60	1.50
25	a	609	CLA	C4D-ND	-3.18	1.33	1.37
25	d	404	CLA	C4D-ND	-3.18	1.33	1.37
27	K	101	BCR	C30-C25	-3.17	1.49	1.53
25	b	615	CLA	CHC-C1C	3.17	1.43	1.35
25	c	510	CLA	CHC-C1C	3.17	1.43	1.35
25	B	602	CLA	CHC-C1C	3.17	1.43	1.35
25	C	507	CLA	C1D-ND	3.17	1.41	1.37
25	B	611	CLA	C1D-ND	3.16	1.41	1.37
25	b	613	CLA	CHC-C1C	3.15	1.43	1.35
25	c	502	CLA	C1D-ND	3.13	1.41	1.37
25	B	601	CLA	CHC-C1C	3.13	1.43	1.35
25	b	608	CLA	CHC-C1C	3.12	1.43	1.35
25	C	507	CLA	MG-NC	3.12	2.13	2.06
25	c	505	CLA	C4D-ND	-3.11	1.33	1.37
27	c	514	BCR	C1-C6	-3.11	1.49	1.53
25	C	506	CLA	CHC-C1C	3.10	1.42	1.35
25	C	502	CLA	CHC-C1C	3.09	1.42	1.35
29	T	103	SQD	C24-C23	3.09	1.59	1.50
25	B	613	CLA	CHC-C1C	3.09	1.42	1.35
27	Z	101	BCR	C30-C25	-3.09	1.49	1.53
25	A	606	CLA	C1D-ND	3.09	1.41	1.37
25	b	603	CLA	CHC-C1C	3.08	1.42	1.35
25	B	607	CLA	C4D-ND	-3.08	1.33	1.37
25	c	502	CLA	CHC-C1C	3.08	1.42	1.35
25	C	503	CLA	MG-NA	3.07	2.13	2.06
25	B	602	CLA	MG-ND	3.07	2.11	2.05
27	Y	101	BCR	C30-C25	-3.07	1.49	1.53
27	Y	101	BCR	C1-C6	-3.07	1.49	1.53
27	d	405	BCR	C1-C6	-3.07	1.49	1.53
29	a	613	SQD	C24-C23	3.06	1.59	1.50
25	c	513	CLA	C4D-ND	-3.06	1.33	1.37
29	b	619	SQD	O5-C1	3.06	1.49	1.41
25	B	612	CLA	C4D-ND	-3.06	1.33	1.37
25	b	608	CLA	C4D-ND	-3.05	1.33	1.37
33	b	620	LMG	O1-C7	-3.05	1.38	1.43
25	b	606	CLA	MG-NA	3.05	2.13	2.06
25	b	611	CLA	CHC-C1C	3.05	1.42	1.35
25	B	606	CLA	C4D-ND	-3.05	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	609	CLA	C3B-C2B	-3.04	1.36	1.40
27	Z	101	BCR	C1-C6	-3.03	1.49	1.53
25	C	511	CLA	CHC-C1C	3.03	1.42	1.35
30	A	614	DGD	C4D-C5D	3.03	1.59	1.53
25	C	508	CLA	C4D-ND	-3.03	1.33	1.37
25	b	613	CLA	C4D-ND	-3.03	1.33	1.37
29	A	613	SQD	O47-C45	-3.03	1.39	1.46
25	c	507	CLA	CHC-C1C	3.02	1.42	1.35
25	c	507	CLA	C4D-ND	-3.02	1.33	1.37
29	b	619	SQD	O47-C45	-3.01	1.39	1.46
25	c	513	CLA	MG-NA	3.01	2.13	2.06
25	c	504	CLA	CHC-C1C	3.00	1.42	1.35
25	B	604	CLA	CHC-C1C	3.00	1.42	1.35
25	C	507	CLA	CHC-C1C	2.99	1.42	1.35
25	C	513	CLA	CHC-C1C	2.99	1.42	1.35
30	C	516	DGD	O2G-C2G	-2.97	1.39	1.46
25	c	504	CLA	C4D-ND	-2.97	1.33	1.37
25	C	502	CLA	C4D-ND	-2.97	1.33	1.37
27	D	405	BCR	C30-C25	-2.97	1.49	1.53
25	b	601	CLA	CHC-C1C	2.96	1.42	1.35
25	a	612	CLA	CHC-C1C	2.96	1.42	1.35
25	b	610	CLA	CHC-C1C	2.95	1.42	1.35
25	B	607	CLA	MG-NA	2.95	2.13	2.06
25	B	609	CLA	C1D-ND	2.95	1.41	1.37
29	B	621	SQD	C24-C23	2.95	1.59	1.50
27	B	616	BCR	C30-C25	-2.95	1.49	1.53
29	a	614	SQD	O47-C45	-2.95	1.39	1.46
29	f	101	SQD	O5-C1	2.95	1.49	1.41
27	d	405	BCR	C30-C25	-2.95	1.49	1.53
25	B	609	CLA	CMB-C2B	-2.95	1.45	1.51
25	B	614	CLA	C4D-ND	-2.94	1.33	1.37
25	C	510	CLA	C4D-ND	-2.94	1.33	1.37
25	A	606	CLA	CHC-C1C	2.94	1.42	1.35
25	C	508	CLA	CHC-C1C	2.94	1.42	1.35
25	c	508	CLA	MG-ND	2.92	2.11	2.05
35	F	101	HEM	CAB-C3B	2.92	1.55	1.47
25	c	505	CLA	C1D-ND	2.92	1.41	1.37
25	c	510	CLA	C4D-ND	-2.91	1.33	1.37
25	B	609	CLA	C4D-ND	-2.90	1.33	1.37
25	b	609	CLA	C4D-ND	-2.90	1.33	1.37
25	A	609	CLA	CHC-C1C	2.90	1.42	1.35
25	C	510	CLA	C1D-ND	2.89	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	608	CLA	CMB-C2B	-2.89	1.45	1.51
25	B	606	CLA	CHC-C1C	2.89	1.42	1.35
25	b	606	CLA	C4D-ND	-2.89	1.33	1.37
29	A	613	SQD	O5-C1	2.89	1.49	1.41
27	D	405	BCR	C1-C6	-2.88	1.49	1.53
25	c	511	CLA	C4D-ND	-2.87	1.33	1.37
25	A	612	CLA	C4D-ND	-2.86	1.33	1.37
25	b	603	CLA	C1D-ND	2.86	1.41	1.37
25	b	605	CLA	CHC-C1C	2.86	1.42	1.35
29	D	408	SQD	O5-C1	2.84	1.49	1.41
25	C	512	CLA	C4D-ND	-2.84	1.33	1.37
27	c	516	BCR	C30-C25	-2.84	1.49	1.53
25	b	601	CLA	C4D-ND	-2.83	1.33	1.37
25	b	611	CLA	C4D-ND	-2.83	1.33	1.37
25	B	611	CLA	C4D-ND	-2.82	1.33	1.37
25	C	505	CLA	C4D-ND	-2.82	1.33	1.37
27	H	102	BCR	C30-C25	-2.82	1.49	1.53
25	B	607	CLA	CHC-C1C	2.82	1.42	1.35
25	B	615	CLA	C4D-ND	-2.81	1.33	1.37
25	d	403	CLA	C4D-ND	-2.81	1.33	1.37
25	C	507	CLA	MG-NA	2.81	2.12	2.06
27	K	101	BCR	C1-C6	-2.81	1.49	1.53
30	A	614	DGD	O5D-C1E	2.80	1.45	1.40
29	B	621	SQD	O5-C1	2.80	1.49	1.41
25	B	602	CLA	C4D-ND	-2.79	1.33	1.37
30	C	516	DGD	C3D-C2D	2.79	1.59	1.52
25	B	615	CLA	CHC-C1C	2.78	1.42	1.35
25	C	513	CLA	C4D-ND	-2.78	1.33	1.37
29	b	619	SQD	C24-C23	2.77	1.58	1.50
25	b	612	CLA	CHC-C1C	2.77	1.42	1.35
30	c	518	DGD	C4D-C3D	2.77	1.59	1.52
25	b	606	CLA	CMB-C2B	-2.76	1.45	1.51
25	c	501	CLA	MG-NC	2.75	2.12	2.06
27	c	516	BCR	C1-C6	-2.75	1.50	1.53
25	C	503	CLA	MG-NC	2.75	2.12	2.06
30	A	614	DGD	C4E-C5E	2.75	1.58	1.53
25	b	609	CLA	CHC-C1C	2.75	1.42	1.35
27	b	618	BCR	C1-C6	-2.74	1.50	1.53
25	b	605	CLA	C4D-ND	-2.74	1.33	1.37
25	b	602	CLA	CHC-C1C	2.73	1.42	1.35
27	T	101	BCR	C1-C6	-2.73	1.50	1.53
27	b	617	BCR	C1-C6	-2.73	1.50	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	k	101	BCR	C30-C25	-2.73	1.50	1.53
25	D	404	CLA	C4D-ND	-2.71	1.34	1.37
25	C	511	CLA	CMB-C2B	-2.70	1.46	1.51
25	b	601	CLA	MG-ND	-2.69	2.00	2.05
25	B	612	CLA	CHC-C1C	2.69	1.41	1.35
27	b	616	BCR	C30-C25	-2.68	1.50	1.53
30	C	516	DGD	C4E-C3E	2.68	1.59	1.52
25	B	613	CLA	C1D-ND	2.68	1.41	1.37
25	b	602	CLA	CMD-C2D	-2.68	1.45	1.50
27	A	610	BCR	C1-C6	-2.67	1.50	1.53
30	A	614	DGD	C6E-C5E	2.67	1.60	1.51
29	a	613	SQD	O5-C1	2.66	1.48	1.41
33	C	515	LMG	C4-C3	2.66	1.59	1.52
26	d	402	PHO	CAC-C3C	-2.66	1.47	1.52
25	b	613	CLA	CMB-C2B	-2.66	1.46	1.51
33	b	620	LMG	O7-C8	-2.66	1.39	1.46
25	C	507	CLA	C4D-ND	-2.66	1.34	1.37
25	D	404	CLA	CMB-C2B	-2.64	1.46	1.51
25	B	613	CLA	MG-NC	2.64	2.12	2.06
27	b	616	BCR	C1-C6	-2.64	1.50	1.53
28	D	406	PL9	C52-C5	-2.64	1.45	1.50
28	D	406	PL9	C6-C1	-2.63	1.43	1.48
25	B	605	CLA	C4D-ND	-2.63	1.34	1.37
25	A	612	CLA	MG-NA	2.62	2.12	2.06
25	b	612	CLA	CMB-C2B	-2.61	1.46	1.51
32	e	102	LHG	P-O6	2.60	1.69	1.59
25	b	604	CLA	MG-NA	2.60	2.12	2.06
25	B	614	CLA	CMB-C2B	-2.60	1.46	1.51
33	b	620	LMG	C4-C3	2.59	1.58	1.52
25	H	101	CLA	CMB-C2B	-2.59	1.46	1.51
27	B	617	BCR	C30-C25	-2.59	1.50	1.53
25	a	607	CLA	CMB-C2B	-2.59	1.46	1.51
25	B	608	CLA	CHC-C1C	2.59	1.41	1.35
28	d	406	PL9	C31-C29	-2.57	1.45	1.51
30	h	102	DGD	O1G-C1G	-2.57	1.39	1.45
32	E	101	LHG	P-O6	2.57	1.69	1.59
25	D	404	CLA	MG-ND	-2.57	2.00	2.05
26	a	608	PHO	CAC-C3C	-2.57	1.47	1.52
28	D	406	PL9	C3-C4	-2.56	1.45	1.49
30	C	517	DGD	O1G-C1G	-2.56	1.39	1.45
25	d	403	CLA	CHC-C1C	2.56	1.41	1.35
27	x	101	BCR	C30-C25	-2.56	1.50	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	C	517	DGD	C4D-C3D	2.55	1.58	1.52
30	A	614	DGD	C1E-C2E	2.55	1.59	1.52
33	C	515	LMG	C4-C5	2.55	1.58	1.53
25	b	603	CLA	CMB-C2B	-2.55	1.46	1.51
25	c	510	CLA	CMB-C2B	-2.55	1.46	1.51
25	c	512	CLA	C4D-ND	-2.54	1.34	1.37
25	c	506	CLA	C4D-ND	-2.54	1.34	1.37
27	c	514	BCR	C30-C25	-2.54	1.50	1.53
33	c	520	LMG	C4-C5	2.54	1.58	1.53
25	B	605	CLA	C3B-CAB	-2.54	1.42	1.47
25	d	403	CLA	MG-NA	2.54	2.12	2.06
30	H	103	DGD	C1E-C2E	2.53	1.59	1.52
25	B	601	CLA	C4D-ND	-2.53	1.34	1.37
30	C	517	DGD	O2G-C2G	-2.53	1.40	1.46
27	t	101	BCR	C30-C25	-2.53	1.50	1.53
25	H	101	CLA	C4D-ND	-2.53	1.34	1.37
25	d	404	CLA	CMB-C2B	-2.52	1.46	1.51
25	B	601	CLA	MG-NC	2.52	2.12	2.06
25	C	501	CLA	C4D-ND	-2.52	1.34	1.37
30	c	517	DGD	O4D-C4D	-2.52	1.37	1.43
26	D	402	PHO	CAC-C3C	-2.51	1.47	1.52
25	b	605	CLA	C1B-NB	2.49	1.37	1.35
25	D	404	CLA	CHC-C1C	2.49	1.41	1.35
25	B	602	CLA	CMD-C2D	-2.49	1.45	1.50
25	A	606	CLA	MG-NA	2.49	2.12	2.06
25	b	614	CLA	CMD-C2D	-2.48	1.45	1.50
25	b	602	CLA	CMB-C2B	-2.48	1.46	1.51
27	B	618	BCR	C1-C6	-2.48	1.50	1.53
25	b	609	CLA	CMB-C2B	-2.48	1.46	1.51
33	d	410	LMG	C4-C5	2.47	1.58	1.53
25	B	609	CLA	C3B-C2B	-2.46	1.37	1.40
25	b	611	CLA	CMB-C2B	-2.45	1.46	1.51
30	C	517	DGD	C1E-C2E	2.45	1.59	1.52
25	B	605	CLA	CMB-C2B	-2.45	1.46	1.51
25	c	507	CLA	C3B-CAB	-2.44	1.43	1.47
25	b	612	CLA	CMD-C2D	-2.44	1.45	1.50
26	D	402	PHO	CMC-C2C	-2.44	1.45	1.51
25	C	507	CLA	CMB-C2B	-2.44	1.46	1.51
25	C	510	CLA	CMB-C2B	-2.44	1.46	1.51
25	c	507	CLA	CMB-C2B	-2.44	1.46	1.51
25	b	610	CLA	C4D-ND	-2.44	1.34	1.37
25	c	509	CLA	MG-NC	2.43	2.12	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	506	CLA	C4D-ND	-2.43	1.34	1.37
35	e	101	HEM	CAB-C3B	2.43	1.54	1.47
25	c	512	CLA	CMB-C2B	-2.43	1.46	1.51
27	a	610	BCR	C1-C6	-2.43	1.50	1.53
30	a	615	DGD	C1G-C2G	2.42	1.58	1.50
26	A	608	PHO	CMC-C2C	-2.42	1.45	1.51
25	B	608	CLA	MG-NA	2.42	2.12	2.06
25	b	614	CLA	CMB-C2B	-2.42	1.46	1.51
25	b	613	CLA	CMC-C2C	-2.42	1.45	1.50
25	C	509	CLA	CMB-C2B	-2.42	1.46	1.51
25	c	506	CLA	CMB-C2B	-2.42	1.46	1.51
27	a	610	BCR	C30-C25	-2.42	1.50	1.53
30	C	518	DGD	O3G-C3G	-2.42	1.39	1.43
25	b	615	CLA	CMB-C2B	-2.42	1.46	1.51
30	c	517	DGD	O2G-C2G	-2.41	1.40	1.46
25	d	401	CLA	CMB-C2B	-2.41	1.46	1.51
29	a	614	SQD	C44-C45	2.41	1.57	1.51
25	B	614	CLA	C3B-C2B	-2.41	1.37	1.40
25	B	608	CLA	C4D-ND	-2.41	1.34	1.37
25	B	601	CLA	CMB-C2B	-2.41	1.46	1.51
25	C	502	CLA	CMB-C2B	-2.40	1.46	1.51
29	b	619	SQD	O9-S	2.40	1.52	1.45
25	C	501	CLA	CMD-C2D	-2.40	1.45	1.50
29	A	613	SQD	O9-S	2.39	1.52	1.45
25	b	607	CLA	C4D-ND	-2.39	1.34	1.37
33	c	524	LMG	C1-C2	2.39	1.59	1.52
27	b	618	BCR	C30-C25	-2.39	1.50	1.53
26	a	608	PHO	O2D-CGD	2.39	1.39	1.33
25	b	612	CLA	C4D-ND	-2.38	1.34	1.37
30	h	102	DGD	C4E-C3E	2.38	1.58	1.52
26	d	402	PHO	CMC-C2C	-2.38	1.45	1.51
25	a	609	CLA	CHC-C1C	2.38	1.41	1.35
28	D	406	PL9	C7-C3	-2.37	1.48	1.51
25	h	101	CLA	C4D-ND	-2.37	1.34	1.37
27	B	617	BCR	C1-C6	-2.36	1.50	1.53
25	b	614	CLA	C4D-ND	-2.36	1.34	1.37
25	b	611	CLA	CMC-C2C	-2.36	1.45	1.50
25	C	506	CLA	CMB-C2B	-2.36	1.46	1.51
29	T	103	SQD	C46-C45	2.36	1.56	1.50
30	C	516	DGD	C3G-C2G	2.36	1.57	1.50
25	B	615	CLA	CMB-C2B	-2.36	1.46	1.51
33	c	522	LMG	C4-C5	2.36	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	609	CLA	CMC-C2C	-2.36	1.45	1.50
30	C	516	DGD	C4D-C3D	2.35	1.58	1.52
25	c	508	CLA	CMB-C2B	-2.35	1.46	1.51
30	C	516	DGD	O5D-C1E	2.35	1.44	1.40
30	A	614	DGD	C4D-C3D	2.34	1.58	1.52
27	C	514	BCR	C30-C25	-2.34	1.50	1.53
25	d	404	CLA	MG-ND	-2.34	2.01	2.05
25	B	607	CLA	MG-NC	2.34	2.11	2.06
33	c	524	LMG	O8-C9	-2.34	1.39	1.45
25	b	608	CLA	MG-ND	-2.34	2.01	2.05
33	d	410	LMG	O1-C7	-2.34	1.39	1.43
27	c	515	BCR	C30-C25	-2.34	1.50	1.53
29	B	621	SQD	O9-S	2.33	1.51	1.45
33	c	524	LMG	O7-C8	-2.33	1.40	1.46
25	D	404	CLA	CMD-C2D	-2.32	1.45	1.50
25	B	607	CLA	CMD-C2D	-2.32	1.45	1.50
25	c	505	CLA	CMB-C2B	-2.32	1.46	1.51
32	L	101	LHG	O7-C5	-2.32	1.40	1.46
25	c	504	CLA	CMB-C2B	-2.31	1.46	1.51
25	C	502	CLA	CMC-C2C	-2.31	1.45	1.50
35	e	101	HEM	C3B-C2B	-2.30	1.32	1.37
25	C	508	CLA	CMB-C2B	-2.30	1.46	1.51
32	b	623	LHG	O7-C5	-2.30	1.40	1.46
25	C	504	CLA	CMB-C2B	-2.30	1.46	1.51
25	B	606	CLA	MG-NA	2.30	2.11	2.06
25	C	501	CLA	C3B-C2B	-2.30	1.37	1.40
25	c	503	CLA	C3B-C2B	-2.30	1.37	1.40
25	C	508	CLA	MG-ND	-2.30	2.01	2.05
25	C	511	CLA	MG-ND	-2.29	2.01	2.05
25	b	602	CLA	C4D-ND	-2.29	1.34	1.37
29	f	101	SQD	O7-S	2.29	1.51	1.45
25	B	613	CLA	CMB-C2B	-2.29	1.46	1.51
25	a	607	CLA	MG-NA	2.29	2.11	2.06
25	D	403	CLA	CMB-C2B	-2.28	1.46	1.51
25	h	101	CLA	CMB-C2B	-2.28	1.46	1.51
29	A	613	SQD	C8-C7	2.28	1.57	1.50
25	C	504	CLA	C4D-ND	-2.28	1.34	1.37
25	d	403	CLA	CMB-C2B	-2.28	1.46	1.51
25	c	503	CLA	CMB-C2B	-2.28	1.46	1.51
25	B	605	CLA	C3B-C2B	-2.27	1.37	1.40
25	c	501	CLA	CMB-C2B	-2.27	1.46	1.51
25	B	602	CLA	CMB-C2B	-2.27	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	c	517	DGD	O1G-C1G	-2.26	1.40	1.45
25	B	604	CLA	CMB-C2B	-2.26	1.46	1.51
25	b	615	CLA	CMC-C2C	-2.26	1.46	1.50
25	C	513	CLA	CMB-C2B	-2.26	1.46	1.51
25	c	513	CLA	CMB-C2B	-2.26	1.46	1.51
25	B	608	CLA	CMD-C2D	-2.26	1.46	1.50
25	C	512	CLA	CMD-C2D	-2.25	1.46	1.50
25	B	603	CLA	MG-NA	2.25	2.11	2.06
25	b	606	CLA	CMD-C2D	-2.25	1.46	1.50
30	h	102	DGD	C1E-C2E	2.25	1.59	1.52
25	c	509	CLA	CMB-C2B	-2.25	1.47	1.51
30	H	103	DGD	C4E-C5E	2.24	1.57	1.53
30	c	517	DGD	C6D-C5D	2.24	1.58	1.51
29	b	619	SQD	C46-C45	2.24	1.57	1.50
32	D	410	LHG	O7-C7	2.23	1.40	1.34
33	D	407	LMG	C4-C5	2.23	1.57	1.53
27	b	616	BCR	C33-C5	-2.23	1.47	1.50
30	C	517	DGD	O6D-C5D	-2.23	1.38	1.44
25	a	609	CLA	CMB-C2B	-2.23	1.47	1.51
25	b	606	CLA	CMC-C2C	-2.22	1.46	1.50
30	C	516	DGD	O2E-C2E	-2.22	1.37	1.43
33	c	522	LMG	C3-C2	2.22	1.58	1.52
30	C	518	DGD	O2G-C2G	-2.22	1.41	1.46
25	B	606	CLA	CMC-C2C	-2.22	1.46	1.50
26	A	608	PHO	CAC-C3C	-2.22	1.48	1.52
25	b	614	CLA	MG-ND	-2.22	2.01	2.05
25	C	512	CLA	CMB-C2B	-2.22	1.47	1.51
32	d	408	LHG	O8-C23	2.21	1.39	1.33
30	c	517	DGD	C3G-C2G	2.21	1.57	1.50
25	B	602	CLA	CMC-C2C	-2.21	1.46	1.50
26	D	402	PHO	CMD-C2D	-2.21	1.46	1.51
25	b	607	CLA	CMB-C2B	-2.21	1.47	1.51
25	h	101	CLA	CMC-C2C	-2.21	1.46	1.50
25	c	504	CLA	MG-ND	-2.21	2.01	2.05
25	B	615	CLA	C4B-CHC	-2.20	1.34	1.41
30	A	614	DGD	C3E-C2E	2.20	1.57	1.52
30	c	517	DGD	C4E-C3E	2.20	1.57	1.52
25	B	607	CLA	CMB-C2B	-2.20	1.47	1.51
25	b	610	CLA	CMB-C2B	-2.20	1.47	1.51
25	c	502	CLA	MG-ND	2.20	2.10	2.05
33	b	622	LMG	C3-C2	2.19	1.57	1.52
25	B	610	CLA	CMB-C2B	-2.19	1.47	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	506	CLA	CMC-C2C	-2.19	1.46	1.50
25	C	509	CLA	MG-ND	2.19	2.10	2.05
25	c	506	CLA	CMD-C2D	-2.19	1.46	1.50
30	c	517	DGD	C4D-C5D	2.19	1.57	1.53
25	b	612	CLA	C3C-C2C	2.19	1.41	1.36
25	c	512	CLA	C1D-C2D	2.19	1.49	1.45
25	b	610	CLA	CMC-C2C	-2.19	1.46	1.50
29	f	101	SQD	O9-S	2.18	1.51	1.45
25	B	611	CLA	CMC-C2C	-2.18	1.46	1.50
25	D	404	CLA	CMC-C2C	-2.18	1.46	1.50
25	a	607	CLA	CMC-C2C	-2.18	1.46	1.50
25	C	509	CLA	CMD-C2D	-2.17	1.46	1.50
25	b	609	CLA	C3B-CAB	-2.17	1.43	1.47
25	h	101	CLA	C1B-NB	2.17	1.37	1.35
25	B	606	CLA	CMB-C2B	-2.17	1.47	1.51
29	D	408	SQD	O7-S	2.16	1.51	1.45
29	f	101	SQD	O5-C5	2.16	1.49	1.44
30	C	516	DGD	C3E-C2E	2.16	1.57	1.52
30	A	614	DGD	C3G-C2G	2.16	1.57	1.50
25	b	614	CLA	CMC-C2C	-2.16	1.46	1.50
25	C	509	CLA	O2D-CGD	2.16	1.38	1.33
25	A	607	CLA	CMB-C2B	-2.16	1.47	1.51
25	A	609	CLA	CMC-C2C	-2.16	1.46	1.50
25	h	101	CLA	C3D-C4D	2.16	1.49	1.44
25	C	503	CLA	CMB-C2B	-2.15	1.47	1.51
29	a	613	SQD	O7-S	2.15	1.51	1.45
29	B	621	SQD	C8-C7	2.15	1.57	1.50
26	D	402	PHO	CMB-C2B	-2.15	1.46	1.51
32	b	623	LHG	P-O6	2.15	1.68	1.59
25	D	404	CLA	C4B-CHC	-2.15	1.35	1.41
29	D	408	SQD	O9-S	2.15	1.51	1.45
30	H	103	DGD	O2D-C2D	-2.15	1.37	1.43
35	F	101	HEM	CAA-C2A	2.15	1.55	1.52
25	d	403	CLA	CMD-C2D	-2.14	1.46	1.50
25	c	507	CLA	C3B-C2B	-2.14	1.37	1.40
25	c	502	CLA	CMD-C2D	-2.14	1.46	1.50
25	A	609	CLA	CMB-C2B	-2.14	1.47	1.51
29	B	621	SQD	O7-S	2.14	1.51	1.45
25	H	101	CLA	C3B-C2B	-2.14	1.37	1.40
25	B	611	CLA	CMB-C2B	-2.13	1.47	1.51
25	C	506	CLA	CMD-C2D	-2.13	1.46	1.50
30	C	517	DGD	O3E-C3E	-2.13	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	511	CLA	CMB-C2B	-2.12	1.47	1.51
25	c	507	CLA	C3D-C4D	2.12	1.49	1.44
25	c	505	CLA	C3B-CAB	-2.12	1.43	1.47
25	c	512	CLA	CMD-C2D	-2.12	1.46	1.50
25	a	612	CLA	MG-NC	-2.12	2.01	2.06
33	D	407	LMG	O3-C3	-2.12	1.38	1.43
25	C	506	CLA	C3B-C2B	-2.12	1.37	1.40
25	b	601	CLA	CMB-C2B	-2.12	1.47	1.51
25	B	610	CLA	CMD-C2D	-2.12	1.46	1.50
33	c	524	LMG	C4-C3	2.11	1.57	1.52
29	D	408	SQD	O5-C5	2.11	1.49	1.44
25	c	503	CLA	CMC-C2C	-2.11	1.46	1.50
25	D	404	CLA	C3B-C2B	-2.11	1.37	1.40
29	B	621	SQD	C46-C45	2.11	1.57	1.50
25	b	604	CLA	CMB-C2B	-2.11	1.47	1.51
25	A	612	CLA	CMD-C2D	-2.11	1.46	1.50
25	b	610	CLA	CMD-C2D	-2.11	1.46	1.50
29	b	619	SQD	C6-S	2.11	1.85	1.77
25	c	510	CLA	CMC-C2C	-2.10	1.46	1.50
28	D	406	PL9	C31-C29	-2.10	1.46	1.51
25	B	615	CLA	CMD-C2D	-2.10	1.46	1.50
25	H	101	CLA	C3B-CAB	-2.10	1.43	1.47
25	C	508	CLA	CMD-C2D	-2.10	1.46	1.50
25	C	508	CLA	C1D-C2D	2.10	1.49	1.45
25	b	609	CLA	CMD-C2D	-2.09	1.46	1.50
25	C	503	CLA	C3B-CAB	-2.09	1.43	1.47
27	A	610	BCR	C33-C5	-2.09	1.47	1.50
27	B	616	BCR	C33-C5	-2.09	1.47	1.50
25	c	510	CLA	CMD-C2D	-2.08	1.46	1.50
25	C	510	CLA	CMC-C2C	-2.08	1.46	1.50
26	d	402	PHO	CMD-C2D	-2.08	1.46	1.51
25	B	608	CLA	CMB-C2B	-2.08	1.47	1.51
25	C	505	CLA	C1B-NB	2.08	1.37	1.35
25	B	608	CLA	CMC-C2C	-2.07	1.46	1.50
25	b	614	CLA	C3B-C2B	-2.07	1.37	1.40
25	c	501	CLA	MG-NA	2.07	2.11	2.06
25	B	614	CLA	MG-NC	2.07	2.11	2.06
25	B	603	CLA	CMB-C2B	-2.07	1.47	1.51
25	b	607	CLA	C1B-NB	2.07	1.37	1.35
25	c	512	CLA	C3B-C2B	-2.07	1.37	1.40
25	d	401	CLA	C3B-C2B	-2.07	1.37	1.40
25	c	507	CLA	CMC-C2C	-2.07	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	501	CLA	C1D-C2D	2.06	1.49	1.45
32	D	409	LHG	P-O6	2.06	1.67	1.59
27	k	101	BCR	C33-C5	-2.06	1.47	1.50
25	b	603	CLA	CMC-C2C	-2.05	1.46	1.50
27	c	515	BCR	C38-C26	-2.05	1.47	1.50
25	B	605	CLA	CMD-C2D	-2.05	1.46	1.50
25	b	610	CLA	C3B-C2B	-2.05	1.37	1.40
25	b	608	CLA	CMD-C2D	-2.05	1.46	1.50
25	d	403	CLA	C4B-CHC	-2.05	1.35	1.41
25	C	510	CLA	CMD-C2D	-2.05	1.46	1.50
30	C	518	DGD	O1G-C1G	-2.05	1.40	1.45
25	A	612	CLA	CMB-C2B	-2.05	1.47	1.51
25	a	612	CLA	CMB-C2B	-2.05	1.47	1.51
25	c	502	CLA	CMB-C2B	-2.05	1.47	1.51
25	B	608	CLA	C4B-CHC	-2.05	1.35	1.41
25	A	606	CLA	C1B-NB	2.04	1.37	1.35
25	B	606	CLA	C3D-C4D	2.04	1.48	1.44
33	c	522	LMG	C1-C2	2.04	1.58	1.52
25	C	501	CLA	CMB-C2B	-2.04	1.47	1.51
27	T	101	BCR	C38-C26	-2.04	1.47	1.50
25	b	602	CLA	C3D-C4D	2.04	1.48	1.44
30	h	102	DGD	C4E-C5E	2.04	1.57	1.53
25	B	604	CLA	CMC-C2C	-2.03	1.46	1.50
25	C	504	CLA	CMC-C2C	-2.03	1.46	1.50
29	D	408	SQD	C6-S	2.03	1.84	1.77
25	b	605	CLA	CMB-C2B	-2.03	1.47	1.51
25	c	503	CLA	CMD-C2D	-2.03	1.46	1.50
25	a	609	CLA	CMD-C2D	-2.03	1.46	1.50
30	h	102	DGD	O3D-C3D	-2.02	1.38	1.43
30	c	519	DGD	C6D-C5D	2.02	1.57	1.51
29	a	613	SQD	C6-S	2.02	1.84	1.77
27	c	516	BCR	C38-C26	-2.01	1.47	1.50
29	b	619	SQD	O7-S	2.01	1.51	1.45
25	b	613	CLA	O2D-CGD	2.01	1.38	1.33
25	B	601	CLA	C1D-C2D	2.01	1.49	1.45
25	B	615	CLA	CMC-C2C	-2.01	1.46	1.50
25	B	608	CLA	O2D-CGD	2.01	1.38	1.33
30	c	519	DGD	O4E-C4E	-2.01	1.38	1.43
33	b	620	LMG	C9-C8	2.01	1.56	1.50
25	c	508	CLA	CMD-C2D	-2.01	1.46	1.50
35	e	101	HEM	FE-NB	2.01	2.06	1.96
25	a	609	CLA	C3B-C2B	-2.01	1.37	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	c	519	DGD	C4D-C5D	2.01	1.57	1.53
25	H	101	CLA	C3C-C2C	2.00	1.41	1.36
25	B	607	CLA	C3B-CAB	-2.00	1.43	1.47
25	b	601	CLA	C1D-C2D	2.00	1.49	1.45
29	a	613	SQD	O9-S	2.00	1.50	1.45

All (1220) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	511	CLA	C4A-NA-C1A	8.78	110.66	106.71
25	C	507	CLA	C4A-NA-C1A	8.61	110.58	106.71
25	B	603	CLA	C4A-NA-C1A	8.10	110.35	106.71
25	b	603	CLA	C4A-NA-C1A	8.02	110.31	106.71
25	h	101	CLA	C4A-NA-C1A	8.01	110.31	106.71
25	B	606	CLA	C4A-NA-C1A	7.72	110.18	106.71
25	C	506	CLA	C4A-NA-C1A	7.66	110.15	106.71
29	D	408	SQD	C1-O5-C5	-7.45	99.07	113.69
25	c	509	CLA	C4A-NA-C1A	7.38	110.02	106.71
25	b	604	CLA	C4A-NA-C1A	7.38	110.02	106.71
25	c	501	CLA	C4A-NA-C1A	7.33	110.00	106.71
25	B	605	CLA	C4A-NA-C1A	7.29	109.98	106.71
25	c	507	CLA	C4A-NA-C1A	7.23	109.96	106.71
25	b	605	CLA	C4A-NA-C1A	7.22	109.95	106.71
25	b	610	CLA	C4A-NA-C1A	7.16	109.93	106.71
25	C	509	CLA	C4A-NA-C1A	7.10	109.90	106.71
25	C	513	CLA	C4A-NA-C1A	6.99	109.85	106.71
25	C	501	CLA	C4A-NA-C1A	6.92	109.81	106.71
25	b	615	CLA	C4A-NA-C1A	6.85	109.79	106.71
25	c	510	CLA	C4A-NA-C1A	6.79	109.76	106.71
25	B	614	CLA	C4A-NA-C1A	6.70	109.72	106.71
29	a	613	SQD	O6-C1-C2	6.70	118.77	108.30
25	C	503	CLA	C4A-NA-C1A	6.69	109.72	106.71
25	B	615	CLA	C4A-NA-C1A	6.60	109.67	106.71
25	C	511	CLA	C4A-NA-C1A	6.50	109.63	106.71
29	D	408	SQD	O6-C1-C2	6.48	118.43	108.30
25	b	606	CLA	C4A-NA-C1A	6.46	109.61	106.71
25	c	503	CLA	C4A-NA-C1A	6.45	109.61	106.71
25	b	602	CLA	C4A-NA-C1A	6.44	109.60	106.71
28	a	611	PL9	C7-C3-C4	6.39	122.07	116.88
25	C	502	CLA	C4A-NA-C1A	6.37	109.57	106.71
25	B	612	CLA	C4A-NA-C1A	6.22	109.50	106.71
25	C	508	CLA	C4A-NA-C1A	6.15	109.47	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b	613	CLA	C4A-NA-C1A	6.10	109.45	106.71
25	c	513	CLA	C4A-NA-C1A	6.07	109.44	106.71
36	v	201	HEC	CBD-CAD-C3D	-6.05	102.30	112.62
29	b	619	SQD	O6-C1-C2	6.01	117.68	108.30
25	b	609	CLA	C4A-NA-C1A	5.97	109.39	106.71
25	B	608	CLA	C4A-NA-C1A	5.89	109.35	106.71
25	B	607	CLA	CMB-C2B-C1B	-5.88	119.43	128.46
25	b	614	CLA	C4A-NA-C1A	5.87	109.35	106.71
25	c	506	CLA	C4A-NA-C1A	5.83	109.33	106.71
29	A	613	SQD	C1-O5-C5	-5.76	102.38	113.69
29	A	613	SQD	O6-C1-C2	5.65	117.12	108.30
25	c	502	CLA	C4A-NA-C1A	5.64	109.24	106.71
25	B	610	CLA	C4A-NA-C1A	5.61	109.23	106.71
25	d	401	CLA	C4A-NA-C1A	5.61	109.23	106.71
25	B	611	CLA	C4A-NA-C1A	5.60	109.22	106.71
25	b	612	CLA	C4A-NA-C1A	5.59	109.22	106.71
25	c	508	CLA	C4A-NA-C1A	5.51	109.18	106.71
25	c	504	CLA	C4A-NA-C1A	5.48	109.17	106.71
25	a	607	CLA	C4A-NA-C1A	5.39	109.13	106.71
29	a	613	SQD	C1-O5-C5	-5.38	103.12	113.69
25	c	505	CLA	C4A-NA-C1A	5.38	109.13	106.71
29	a	614	SQD	O47-C7-C8	5.38	123.09	111.50
25	C	510	CLA	CMB-C2B-C1B	-5.35	120.25	128.46
29	B	621	SQD	O7-S-C6	5.26	113.19	106.94
25	C	510	CLA	C4A-NA-C1A	5.17	109.03	106.71
25	C	505	CLA	C4A-NA-C1A	5.16	109.03	106.71
25	B	604	CLA	C4A-NA-C1A	5.14	109.02	106.71
35	e	101	HEM	CBA-CAA-C2A	-5.13	103.86	112.62
25	A	606	CLA	C4A-NA-C1A	5.10	109.00	106.71
25	C	504	CLA	CMB-C2B-C1B	-5.08	120.65	128.46
29	D	408	SQD	C1-C2-C3	-4.99	99.61	110.00
25	c	512	CLA	C4A-NA-C1A	4.96	108.94	106.71
25	b	612	CLA	CMB-C2B-C1B	-4.95	120.85	128.46
25	B	611	CLA	CMB-C2B-C1B	-4.95	120.86	128.46
29	f	101	SQD	O7-S-C6	4.94	112.81	106.94
25	C	512	CLA	C4A-NA-C1A	4.94	108.92	106.71
29	D	408	SQD	O9-S-C6	4.87	112.73	106.94
25	D	404	CLA	C4A-NA-C1A	4.87	108.89	106.71
29	B	621	SQD	O47-C7-C8	4.86	121.98	111.50
25	a	612	CLA	C4A-NA-C1A	4.86	108.89	106.71
30	C	518	DGD	O3G-C3G-C2G	-4.85	99.20	110.90
25	C	508	CLA	CMB-C2B-C1B	-4.84	121.02	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	613	CLA	C4A-NA-C1A	4.82	108.87	106.71
25	b	605	CLA	CMB-C2B-C1B	-4.80	121.08	128.46
29	A	613	SQD	O47-C7-C8	4.78	121.81	111.50
25	c	504	CLA	CMB-C2B-C1B	-4.78	121.12	128.46
25	B	607	CLA	C4A-NA-C1A	4.78	108.85	106.71
25	B	601	CLA	C4A-NA-C1A	4.77	108.85	106.71
25	D	403	CLA	C4A-NA-C1A	4.74	108.84	106.71
25	d	404	CLA	CMB-C2B-C1B	-4.71	121.22	128.46
26	D	402	PHO	C1-C2-C3	-4.70	117.92	126.04
25	b	605	CLA	O2D-CGD-O1D	-4.70	114.65	123.84
25	B	606	CLA	CMB-C2B-C1B	-4.69	121.25	128.46
28	D	406	PL9	C7-C3-C4	4.67	120.68	116.88
25	B	607	CLA	CMB-C2B-C3B	4.67	133.42	124.68
25	H	101	CLA	C4A-NA-C1A	4.64	108.79	106.71
30	a	615	DGD	O3G-C3G-C2G	-4.62	99.54	111.78
25	A	609	CLA	CMB-C2B-C1B	-4.57	121.44	128.46
25	b	608	CLA	C4A-NA-C1A	4.54	108.75	106.71
25	b	602	CLA	CMB-C2B-C1B	-4.51	121.53	128.46
25	B	602	CLA	C4A-NA-C1A	4.51	108.73	106.71
25	C	510	CLA	CMB-C2B-C3B	4.50	133.10	124.68
29	b	619	SQD	O7-S-C6	4.48	112.26	106.94
25	c	513	CLA	CMB-C2B-C1B	-4.47	121.59	128.46
28	d	406	PL9	C7-C3-C4	4.44	120.48	116.88
25	b	608	CLA	CMB-C2B-C1B	-4.43	121.66	128.46
25	b	615	CLA	CMB-C2B-C1B	-4.42	121.67	128.46
25	c	510	CLA	CMB-C2B-C1B	-4.39	121.72	128.46
25	b	607	CLA	CMB-C2B-C1B	-4.38	121.73	128.46
25	C	509	CLA	CMB-C2B-C1B	-4.37	121.75	128.46
25	b	601	CLA	C4A-NA-C1A	4.36	108.66	106.71
25	B	611	CLA	CMB-C2B-C3B	4.35	132.82	124.68
29	f	101	SQD	O6-C1-C2	4.34	115.07	108.30
25	b	615	CLA	O2D-CGD-O1D	-4.32	115.39	123.84
25	b	607	CLA	C4A-NA-C1A	4.30	108.64	106.71
25	A	612	CLA	CMB-C2B-C1B	-4.27	121.91	128.46
25	b	603	CLA	C1-C2-C3	-4.26	118.67	126.04
32	B	620	LHG	O4-P-O5	4.25	133.24	112.24
25	b	602	CLA	O2D-CGD-O1D	-4.24	115.54	123.84
30	C	517	DGD	O3G-C3G-C2G	-4.22	100.71	110.90
29	f	101	SQD	O9-S-C6	4.22	111.95	106.94
29	f	101	SQD	O9-S-O7	-4.22	99.36	113.95
28	a	611	PL9	C7-C3-C2	-4.20	117.78	123.30
25	A	607	CLA	C4A-NA-C1A	4.19	108.59	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	d	407	LHG	O4-P-O5	4.17	132.88	112.24
25	A	609	CLA	C4A-NA-C1A	4.17	108.58	106.71
25	B	601	CLA	O2D-CGD-CBD	4.17	118.67	111.27
25	b	604	CLA	O2D-CGD-O1D	-4.16	115.71	123.84
30	h	102	DGD	O3G-C3G-C2G	-4.16	100.87	110.90
33	b	620	LMG	O1-C1-C2	-4.15	101.82	108.30
32	e	102	LHG	O4-P-O5	4.15	132.75	112.24
30	c	519	DGD	O3G-C3G-C2G	-4.15	100.90	110.90
29	B	621	SQD	C3-C4-C5	4.13	117.61	110.24
25	b	605	CLA	CMB-C2B-C3B	4.13	132.40	124.68
30	H	103	DGD	O3G-C3G-C2G	-4.12	100.96	110.90
25	c	501	CLA	O2D-CGD-O1D	-4.11	115.80	123.84
25	B	606	CLA	CMB-C2B-C3B	4.11	132.36	124.68
34	D	401	BCT	O2-C-O1	4.11	130.20	119.55
32	E	101	LHG	O4-P-O5	4.10	132.52	112.24
25	B	610	CLA	CMB-C2B-C1B	-4.09	122.18	128.46
25	c	502	CLA	CHD-C1D-ND	-4.08	120.70	124.45
25	b	611	CLA	CMB-C2B-C1B	-4.08	122.19	128.46
25	b	603	CLA	CMB-C2B-C1B	-4.07	122.20	128.46
25	d	403	CLA	C4A-NA-C1A	4.07	108.54	106.71
25	B	601	CLA	CMB-C2B-C1B	-4.06	122.23	128.46
25	b	609	CLA	CAC-C3C-C4C	4.06	130.07	124.81
25	c	506	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
25	C	505	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
25	B	613	CLA	O2D-CGD-O1D	-4.04	115.94	123.84
25	C	504	CLA	C4A-NA-C1A	4.03	108.52	106.71
28	A	611	PL9	C7-C3-C4	4.02	120.14	116.88
25	B	611	CLA	O2D-CGD-O1D	-4.02	115.99	123.84
30	c	518	DGD	O3G-C3G-C2G	-4.01	101.22	110.90
25	A	612	CLA	CMB-C2B-C3B	4.00	132.17	124.68
25	C	508	CLA	CMB-C2B-C3B	4.00	132.16	124.68
28	d	406	PL9	C22-C23-C24	-4.00	118.03	127.66
32	L	101	LHG	O4-P-O5	4.00	131.99	112.24
25	b	612	CLA	CMB-C2B-C3B	3.98	132.13	124.68
25	B	611	CLA	C1-C2-C3	-3.98	119.16	126.04
32	b	623	LHG	O4-P-O5	3.98	131.92	112.24
25	b	611	CLA	C1-C2-C3	-3.97	119.17	126.04
26	d	402	PHO	C1-C2-C3	-3.97	119.18	126.04
29	a	613	SQD	O47-C7-C8	3.97	120.05	111.50
25	D	404	CLA	CMB-C2B-C1B	-3.96	122.38	128.46
34	a	606	BCT	O2-C-O1	3.96	129.82	119.55
25	B	603	CLA	CMB-C2B-C1B	-3.96	122.38	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	f	101	SQD	C1-O5-C5	-3.96	105.92	113.69
25	B	615	CLA	CMB-C2B-C1B	-3.96	122.39	128.46
25	C	509	CLA	CHD-C1D-ND	-3.95	120.82	124.45
25	c	504	CLA	CMB-C2B-C3B	3.95	132.07	124.68
25	b	610	CLA	O2D-CGD-O1D	-3.95	116.12	123.84
32	D	410	LHG	O4-P-O5	3.94	131.73	112.24
25	d	404	CLA	CMB-C2B-C3B	3.94	132.05	124.68
25	c	508	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
29	B	621	SQD	O6-C1-C2	3.92	114.42	108.30
25	b	601	CLA	O2D-CGD-O1D	-3.92	116.18	123.84
25	A	609	CLA	CMB-C2B-C3B	3.92	132.00	124.68
25	c	502	CLA	CMB-C2B-C1B	-3.91	122.46	128.46
29	A	613	SQD	O9-S-O7	-3.90	100.44	113.95
25	a	607	CLA	CMB-C2B-C1B	-3.90	122.47	128.46
25	B	610	CLA	CHD-C1D-ND	-3.90	120.87	124.45
32	l	101	LHG	O4-P-O5	3.89	131.49	112.24
25	d	403	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
32	d	408	LHG	O4-P-O5	3.89	131.45	112.24
29	D	408	SQD	O7-S-C6	3.88	111.55	106.94
30	c	517	DGD	O3G-C3G-C2G	-3.87	101.56	110.90
25	B	609	CLA	O2D-CGD-O1D	-3.86	116.29	123.84
35	e	101	HEM	CBD-CAD-C3D	-3.86	101.90	112.63
26	A	608	PHO	CMB-C2B-C3B	3.86	131.90	124.68
29	A	613	SQD	O7-S-C6	3.85	111.52	106.94
32	D	409	LHG	O4-P-O5	3.85	131.25	112.24
25	B	610	CLA	CMB-C2B-C3B	3.84	131.87	124.68
25	C	512	CLA	CMB-C2B-C1B	-3.84	122.56	128.46
25	b	607	CLA	CMB-C2B-C3B	3.83	131.85	124.68
25	h	101	CLA	CMB-C2B-C1B	-3.83	122.58	128.46
25	b	615	CLA	CMB-C2B-C3B	3.83	131.85	124.68
29	D	408	SQD	C44-O6-C1	3.81	120.16	113.84
25	a	609	CLA	C4A-NA-C1A	3.81	108.42	106.71
25	C	509	CLA	CMB-C2B-C3B	3.80	131.79	124.68
27	B	616	BCR	C2-C1-C6	3.80	116.33	110.48
25	C	511	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
25	B	602	CLA	CMB-C2B-C1B	-3.77	122.68	128.46
29	b	619	SQD	C3-C4-C5	3.76	116.95	110.24
25	b	611	CLA	CMB-C2B-C3B	3.75	131.69	124.68
36	V	201	HEC	CBD-CAD-C3D	-3.74	106.24	112.62
25	B	609	CLA	CHB-C4A-NA	3.74	129.68	124.51
25	c	513	CLA	CMB-C2B-C3B	3.73	131.66	124.68
29	a	613	SQD	O7-S-C6	3.72	111.36	106.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	604	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
25	H	101	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
25	c	512	CLA	C1-C2-C3	-3.70	119.65	126.04
36	V	201	HEC	CMC-C2C-C1C	-3.69	122.78	128.46
29	D	408	SQD	O5-C1-O6	3.69	118.72	109.97
29	a	613	SQD	O9-S-O7	-3.69	101.17	113.95
27	B	617	BCR	C35-C13-C14	-3.69	117.76	122.92
25	B	601	CLA	CMB-C2B-C3B	3.68	131.57	124.68
25	C	504	CLA	CMB-C2B-C3B	3.67	131.55	124.68
25	b	611	CLA	C4A-NA-C1A	3.67	108.36	106.71
25	c	511	CLA	CMB-C2B-C1B	-3.65	122.85	128.46
25	b	602	CLA	CMB-C2B-C3B	3.64	131.49	124.68
25	d	404	CLA	C4A-NA-C1A	3.63	108.34	106.71
26	d	402	PHO	CMB-C2B-C3B	3.63	131.47	124.68
33	b	620	LMG	O1-C7-C8	-3.63	102.14	110.90
25	A	607	CLA	CMB-C2B-C1B	-3.63	122.89	128.46
25	b	604	CLA	O1D-CGD-CBD	3.62	131.90	124.48
25	c	509	CLA	O2A-CGA-O1A	-3.61	114.48	123.59
25	c	505	CLA	CMB-C2B-C1B	-3.61	122.92	128.46
25	c	510	CLA	CMB-C2B-C3B	3.60	131.42	124.68
25	d	401	CLA	CHB-C4A-NA	3.59	129.48	124.51
25	C	503	CLA	CHD-C1D-ND	-3.59	121.16	124.45
29	B	621	SQD	O48-C23-C24	3.57	123.10	111.91
29	D	408	SQD	O9-S-O7	-3.57	101.60	113.95
25	c	512	CLA	CHD-C1D-ND	-3.57	121.18	124.45
29	A	613	SQD	O5-C1-C2	-3.56	102.81	110.35
25	B	603	CLA	O2D-CGD-O1D	-3.55	116.90	123.84
25	b	611	CLA	O2D-CGD-O1D	-3.55	116.91	123.84
29	f	101	SQD	O47-C7-C8	3.54	120.68	110.80
25	C	513	CLA	CMB-C2B-C1B	-3.54	123.03	128.46
25	B	608	CLA	CMB-C2B-C1B	-3.54	123.03	128.46
28	A	611	PL9	C7-C8-C9	-3.53	120.91	126.79
25	B	612	CLA	C1-C2-C3	-3.53	119.94	126.04
25	B	601	CLA	O2D-CGD-O1D	-3.53	116.94	123.84
29	b	619	SQD	C1-O5-C5	-3.53	106.77	113.69
25	d	403	CLA	CMB-C2B-C3B	3.51	131.25	124.68
29	b	619	SQD	O47-C7-C8	3.51	119.07	111.50
25	b	601	CLA	CHB-C4A-NA	3.51	129.37	124.51
25	B	609	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
25	B	612	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
25	B	615	CLA	CMB-C2B-C3B	3.49	131.21	124.68
29	A	613	SQD	C1-C2-C3	-3.49	102.73	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	602	CLA	O2D-CGD-O1D	-3.49	117.02	123.84
25	D	404	CLA	CMB-C2B-C3B	3.48	131.19	124.68
29	A	613	SQD	O8-S-C6	3.48	111.29	105.74
25	B	609	CLA	C1B-CHB-C4A	-3.48	123.22	130.12
25	C	506	CLA	CMB-C2B-C1B	-3.47	123.13	128.46
25	B	604	CLA	CHD-C1D-ND	-3.47	121.27	124.45
25	C	502	CLA	CMB-C2B-C1B	-3.46	123.14	128.46
25	b	606	CLA	CMB-C2B-C1B	-3.46	123.15	128.46
25	B	605	CLA	CMB-C2B-C1B	-3.45	123.15	128.46
25	C	503	CLA	O2D-CGD-O1D	-3.45	117.10	123.84
25	C	503	CLA	CMB-C2B-C1B	-3.44	123.17	128.46
25	D	403	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	b	614	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
29	B	621	SQD	O9-S-O7	-3.43	102.09	113.95
29	b	619	SQD	O48-C23-C24	3.42	122.65	111.91
27	C	514	BCR	C35-C13-C14	-3.42	118.14	122.92
25	b	603	CLA	O2D-CGD-O1D	-3.42	117.16	123.84
25	B	612	CLA	CMB-C2B-C3B	3.41	131.05	124.68
27	A	610	BCR	C11-C10-C9	-3.40	122.46	127.31
27	t	101	BCR	C3-C4-C5	-3.39	108.02	114.08
27	T	101	BCR	C2-C1-C6	3.39	115.70	110.48
27	C	514	BCR	C15-C14-C13	-3.38	122.49	127.31
25	c	513	CLA	O2D-CGD-O1D	-3.37	117.24	123.84
25	c	509	CLA	CMB-C2B-C1B	-3.37	123.29	128.46
25	C	505	CLA	CMB-C2B-C3B	3.36	130.97	124.68
36	V	201	HEC	C1D-C2D-C3D	-3.36	104.66	107.00
33	b	622	LMG	C1-O6-C5	-3.36	107.09	113.69
25	b	608	CLA	CMB-C2B-C3B	3.36	130.96	124.68
29	T	103	SQD	O47-C7-C8	3.36	118.73	111.50
26	D	402	PHO	O1D-CGD-CBD	3.35	130.32	124.74
25	B	603	CLA	CMB-C2B-C3B	3.35	130.94	124.68
25	B	601	CLA	CHB-C4A-NA	3.35	129.14	124.51
25	c	502	CLA	CMB-C2B-C3B	3.35	130.94	124.68
25	B	613	CLA	CMB-C2B-C1B	-3.34	123.32	128.46
25	c	508	CLA	O2D-CGD-O1D	-3.34	117.30	123.84
25	C	501	CLA	O2D-CGD-O1D	-3.33	117.33	123.84
27	b	616	BCR	C2-C1-C6	3.33	115.60	110.48
25	A	606	CLA	CHB-C4A-NA	3.33	129.11	124.51
25	b	613	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
30	c	518	DGD	O6D-C1D-O3G	-3.31	102.13	109.97
25	C	507	CLA	O2D-CGD-O1D	-3.31	117.36	123.84
25	c	504	CLA	O2D-CGD-O1D	-3.30	117.38	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	a	607	CLA	CMB-C2B-C3B	3.30	130.85	124.68
25	b	603	CLA	CMB-C2B-C3B	3.29	130.84	124.68
25	b	612	CLA	C1-C2-C3	-3.29	120.36	126.04
29	b	619	SQD	O8-S-C6	3.28	110.97	105.74
25	b	605	CLA	O2D-CGD-CBD	3.28	117.09	111.27
28	d	406	PL9	C37-C38-C39	-3.27	119.78	127.66
25	c	506	CLA	CMB-C2B-C3B	3.27	130.80	124.68
25	b	602	CLA	C1B-CHB-C4A	-3.27	123.64	130.12
25	A	612	CLA	C4A-NA-C1A	3.27	108.17	106.71
30	H	103	DGD	C3E-C4E-C5E	-3.25	104.43	110.24
27	b	617	BCR	C15-C14-C13	-3.25	122.67	127.31
25	B	607	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
25	C	508	CLA	CHD-C1D-ND	-3.24	121.48	124.45
25	c	508	CLA	C1-C2-C3	-3.24	120.44	126.04
25	b	603	CLA	CHB-C4A-NA	3.24	128.99	124.51
29	a	613	SQD	C1-C2-C3	-3.24	103.26	110.00
25	A	612	CLA	CHD-C1D-ND	-3.23	121.49	124.45
29	a	613	SQD	O8-S-C6	3.22	110.88	105.74
25	C	504	CLA	CHD-C1D-ND	-3.22	121.49	124.45
25	C	502	CLA	O2D-CGD-O1D	-3.22	117.54	123.84
28	d	406	PL9	C36-C34-C33	-3.22	114.60	121.12
25	a	612	CLA	O2D-CGD-O1D	-3.22	117.55	123.84
28	d	406	PL9	C40-C39-C41	3.22	120.68	115.27
25	b	601	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
25	b	601	CLA	C1-C2-C3	-3.21	120.49	126.04
25	c	509	CLA	CMB-C2B-C3B	3.20	130.67	124.68
25	c	508	CLA	CMB-C2B-C3B	3.20	130.67	124.68
25	c	510	CLA	O2D-CGD-O1D	-3.20	117.59	123.84
26	a	608	PHO	C1-C2-C3	-3.20	120.52	126.04
25	B	606	CLA	CHB-C4A-NA	3.19	128.93	124.51
25	C	503	CLA	CMB-C2B-C3B	3.19	130.65	124.68
25	B	605	CLA	O2D-CGD-O1D	-3.19	117.60	123.84
32	B	620	LHG	O8-C23-C24	3.19	121.91	111.91
25	A	609	CLA	O2D-CGD-O1D	-3.19	117.61	123.84
25	A	607	CLA	O2D-CGD-O1D	-3.18	117.61	123.84
29	f	101	SQD	O5-C5-C4	3.18	115.47	109.69
30	C	517	DGD	O5D-C6D-C5D	-3.18	103.16	109.05
25	A	607	CLA	CHD-C1D-ND	-3.18	121.53	124.45
25	b	603	CLA	CHD-C1D-ND	-3.18	121.53	124.45
25	b	604	CLA	C1-C2-C3	-3.17	120.55	126.04
32	b	623	LHG	O8-C23-C24	3.17	121.87	111.91
25	C	512	CLA	O2D-CGD-O1D	-3.17	117.64	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	601	CLA	O2A-CGA-O1A	-3.17	115.59	123.59
26	D	402	PHO	CMB-C2B-C3B	3.17	130.60	124.68
25	A	606	CLA	CMB-C2B-C1B	-3.17	123.60	128.46
25	B	602	CLA	CMB-C2B-C3B	3.16	130.60	124.68
25	b	612	CLA	O2D-CGD-O1D	-3.15	117.67	123.84
30	A	614	DGD	O6D-C1D-O3G	-3.15	102.51	109.97
25	A	607	CLA	C1-C2-C3	-3.15	120.59	126.04
33	b	620	LMG	O6-C1-O1	-3.15	102.51	109.97
25	c	505	CLA	CMB-C2B-C3B	3.15	130.57	124.68
25	b	613	CLA	O2A-CGA-O1A	-3.15	115.65	123.59
25	C	512	CLA	CMB-C2B-C3B	3.15	130.56	124.68
33	d	410	LMG	O6-C1-O1	-3.15	102.52	109.97
25	B	607	CLA	O2D-CGD-CBD	3.14	116.85	111.27
25	h	101	CLA	CMB-C2B-C3B	3.13	130.53	124.68
33	D	407	LMG	O6-C1-O1	-3.12	102.59	109.97
25	B	608	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
30	C	516	DGD	O3G-C3G-C2G	-3.11	103.39	110.90
27	B	618	BCR	C2-C1-C6	3.11	115.27	110.48
25	B	609	CLA	CMB-C2B-C3B	3.11	130.50	124.68
25	c	503	CLA	CHD-C1D-ND	-3.11	121.60	124.45
25	b	601	CLA	O2D-CGD-CBD	3.11	116.79	111.27
25	A	607	CLA	CMB-C2B-C3B	3.11	130.49	124.68
35	F	101	HEM	CBD-CAD-C3D	-3.11	104.00	112.63
25	D	404	CLA	O2D-CGD-O1D	-3.11	117.77	123.84
27	A	610	BCR	C27-C26-C25	3.10	127.24	122.73
25	b	611	CLA	C11-C10-C8	-3.10	105.90	115.92
25	b	601	CLA	CMB-C2B-C3B	3.10	130.47	124.68
29	a	613	SQD	O48-C23-C24	3.09	121.62	111.91
25	h	101	CLA	CHD-C1D-ND	-3.08	121.62	124.45
31	b	625	STE	C3-C2-C1	-3.08	106.70	114.47
25	a	609	CLA	O2D-CGD-CBD	3.08	116.74	111.27
25	B	611	CLA	O2A-CGA-O1A	-3.08	115.83	123.59
25	d	401	CLA	CHD-C1D-ND	-3.07	121.63	124.45
29	b	619	SQD	O9-S-O7	-3.07	103.31	113.95
25	b	615	CLA	CHB-C4A-NA	3.07	128.75	124.51
25	h	101	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
27	D	405	BCR	C7-C8-C9	-3.06	121.61	126.23
25	c	503	CLA	CHB-C4A-NA	3.06	128.74	124.51
25	A	606	CLA	CMB-C2B-C3B	3.06	130.40	124.68
25	B	609	CLA	C4A-NA-C1A	3.06	108.08	106.71
25	b	606	CLA	O2D-CGD-O1D	-3.05	117.87	123.84
27	b	617	BCR	C11-C10-C9	-3.05	122.95	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	c	509	CLA	CHB-C4A-NA	3.04	128.72	124.51
30	C	518	DGD	O6D-C1D-O3G	-3.04	102.78	109.97
25	c	501	CLA	O2D-CGD-CBD	3.03	116.66	111.27
27	T	101	BCR	C3-C4-C5	-3.03	108.66	114.08
25	B	601	CLA	C1B-CHB-C4A	-3.03	124.11	130.12
25	C	513	CLA	CMB-C2B-C3B	3.03	130.35	124.68
27	Z	101	BCR	C15-C16-C17	-3.03	117.27	123.47
25	D	403	CLA	C4-C3-C5	3.02	120.36	115.27
29	a	613	SQD	C44-O6-C1	-3.02	107.83	113.74
25	a	612	CLA	CHD-C1D-ND	-3.02	121.68	124.45
25	B	608	CLA	CMB-C2B-C3B	3.02	130.33	124.68
25	A	609	CLA	CHD-C1D-ND	-3.02	121.68	124.45
31	m	101	STE	O2-C1-C2	3.02	123.73	114.03
25	b	613	CLA	CHB-C4A-NA	3.01	128.68	124.51
25	b	611	CLA	C1B-CHB-C4A	-3.01	124.16	130.12
25	c	505	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
25	B	615	CLA	C1B-CHB-C4A	-2.99	124.19	130.12
31	x	102	STE	C3-C2-C1	-2.99	106.93	114.47
25	c	501	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
25	a	609	CLA	CHB-C4A-NA	2.99	128.65	124.51
25	B	605	CLA	CMB-C2B-C3B	2.99	130.27	124.68
30	c	518	DGD	CDB-CCB-CBB	-2.99	99.26	114.42
25	B	614	CLA	CHB-C4A-NA	2.99	128.64	124.51
25	b	612	CLA	O2D-CGD-CBD	2.99	116.58	111.27
25	b	610	CLA	O2D-CGD-CBD	2.98	116.57	111.27
33	D	411	LMG	O1-C7-C8	-2.98	103.87	111.78
25	C	511	CLA	CMB-C2B-C3B	2.98	130.26	124.68
25	c	507	CLA	CMB-C2B-C1B	-2.98	123.88	128.46
26	d	402	PHO	CMC-C2C-C3C	2.98	130.56	124.94
30	h	102	DGD	O6D-C1D-O3G	-2.98	102.92	109.97
32	D	409	LHG	O8-C23-C24	2.97	121.24	111.91
27	B	616	BCR	C3-C4-C5	-2.96	108.79	114.08
25	c	511	CLA	CMB-C2B-C3B	2.96	130.21	124.68
25	c	503	CLA	CMB-C2B-C1B	-2.96	123.92	128.46
35	e	101	HEM	C4B-CHC-C1C	2.96	126.46	122.56
25	c	512	CLA	O2D-CGD-O1D	-2.96	118.06	123.84
25	a	612	CLA	CHB-C4A-NA	2.94	128.58	124.51
25	B	615	CLA	C1-O2A-CGA	2.94	124.16	116.44
25	b	610	CLA	CMB-C2B-C1B	-2.94	123.95	128.46
25	c	507	CLA	O2D-CGD-O1D	-2.94	118.09	123.84
25	b	607	CLA	CHB-C4A-NA	2.93	128.57	124.51
25	C	503	CLA	O2A-C1-C2	-2.93	100.94	108.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	b	622	LMG	C3-C4-C5	-2.93	105.02	110.24
27	D	405	BCR	C2-C1-C6	2.92	114.98	110.48
25	c	512	CLA	CHB-C4A-NA	2.92	128.55	124.51
30	C	517	DGD	O6D-C1D-O3G	-2.92	103.07	109.97
30	h	102	DGD	C1D-C2D-C3D	-2.92	103.92	110.00
25	b	604	CLA	CMB-C2B-C1B	-2.91	123.99	128.46
29	A	613	SQD	O48-C23-C24	2.91	121.03	111.91
26	D	402	PHO	O2D-CGD-O1D	-2.91	118.16	123.84
36	v	201	HEC	CBA-CAA-C2A	-2.90	107.71	112.60
25	B	612	CLA	CAC-C3C-C4C	2.90	128.58	124.81
27	H	102	BCR	C27-C26-C25	2.90	126.95	122.73
29	B	621	SQD	O5-C5-C4	2.90	114.97	109.69
29	B	621	SQD	O8-S-C6	2.90	110.36	105.74
25	B	611	CLA	C11-C12-C13	-2.90	106.54	115.92
25	A	607	CLA	CHB-C4A-NA	2.90	128.52	124.51
25	b	607	CLA	O2D-CGD-CBD	2.89	116.41	111.27
30	c	519	DGD	O6D-C1D-O3G	-2.89	103.12	109.97
27	B	618	BCR	C34-C9-C10	-2.89	118.87	122.92
25	B	612	CLA	C1B-CHB-C4A	-2.89	124.39	130.12
25	a	607	CLA	O2A-CGA-O1A	-2.89	116.30	123.59
27	B	617	BCR	C15-C14-C13	-2.89	123.19	127.31
25	B	609	CLA	O2A-CGA-O1A	-2.88	116.33	123.59
35	F	101	HEM	C4B-CHC-C1C	2.88	126.35	122.56
25	b	615	CLA	C1B-CHB-C4A	-2.87	124.43	130.12
27	c	514	BCR	C33-C5-C6	-2.87	121.30	124.53
29	D	408	SQD	O8-S-C6	2.87	110.32	105.74
27	t	101	BCR	C2-C1-C6	2.87	114.90	110.48
25	c	513	CLA	CHB-C4A-NA	2.87	128.48	124.51
29	a	614	SQD	O48-C23-C24	2.85	120.86	111.91
25	d	401	CLA	O2D-CGD-O1D	-2.85	118.26	123.84
32	b	623	LHG	O8-C23-O10	-2.85	116.40	123.59
31	C	520	STE	C3-C2-C1	-2.85	107.30	114.47
25	C	511	CLA	CHB-C4A-NA	2.85	128.45	124.51
25	C	505	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
32	l	101	LHG	O8-C23-C24	2.83	120.80	111.91
36	V	201	HEC	CMB-C2B-C1B	-2.83	124.11	128.46
25	a	609	CLA	CMB-C2B-C1B	-2.83	124.11	128.46
25	B	603	CLA	C2D-C1D-ND	-2.83	108.02	110.10
25	A	609	CLA	O2D-CGD-CBD	2.83	116.29	111.27
25	A	609	CLA	C1B-CHB-C4A	-2.82	124.52	130.12
32	d	407	LHG	O8-C23-C24	2.82	120.77	111.91
30	C	516	DGD	O6D-C1D-O3G	-2.82	103.30	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	Z	101	BCR	C24-C23-C22	-2.81	121.99	126.23
25	c	509	CLA	O2D-CGD-O1D	-2.81	118.35	123.84
25	c	502	CLA	O2A-CGA-O1A	-2.81	116.51	123.59
25	B	610	CLA	O2D-CGD-O1D	-2.81	118.35	123.84
25	b	614	CLA	CMB-C2B-C3B	2.81	129.93	124.68
25	a	607	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
25	C	512	CLA	CHB-C4A-NA	2.80	128.38	124.51
30	A	614	DGD	C3G-C2G-C1G	-2.80	105.17	111.79
25	b	609	CLA	C1-C2-C3	-2.80	121.20	126.04
27	c	514	BCR	C11-C10-C9	-2.80	123.32	127.31
25	C	502	CLA	CMB-C2B-C3B	2.79	129.91	124.68
25	C	513	CLA	CHB-C4A-NA	2.79	128.38	124.51
28	a	611	PL9	C22-C23-C24	-2.79	120.94	127.66
25	c	504	CLA	O2A-CGA-O1A	-2.79	116.56	123.59
25	A	612	CLA	CHB-C4A-NA	2.79	128.37	124.51
30	A	614	DGD	CDB-CCB-CBB	-2.79	100.28	114.42
31	C	521	STE	C3-C2-C1	-2.78	107.45	114.47
33	b	622	LMG	O7-C10-O9	-2.78	116.97	123.70
25	B	610	CLA	CHB-C4A-NA	2.78	128.36	124.51
32	e	102	LHG	O8-C23-C24	2.78	120.63	111.91
27	c	515	BCR	C15-C16-C17	-2.78	117.78	123.47
25	b	609	CLA	C1B-CHB-C4A	-2.78	124.62	130.12
25	a	609	CLA	O2D-CGD-O1D	-2.78	118.41	123.84
30	c	517	DGD	C3G-C2G-C1G	-2.77	105.22	111.79
25	D	404	CLA	CHB-C4A-NA	2.77	128.35	124.51
25	b	606	CLA	C1B-CHB-C4A	-2.77	124.63	130.12
36	v	201	HEC	CMC-C2C-C1C	-2.77	124.21	128.46
25	b	604	CLA	CHB-C4A-NA	2.76	128.33	124.51
25	d	401	CLA	CMB-C2B-C1B	-2.76	124.22	128.46
25	C	501	CLA	O2D-CGD-CBD	2.76	116.17	111.27
33	C	515	LMG	C1-O6-C5	-2.76	108.28	113.69
25	B	614	CLA	O2D-CGD-O1D	-2.75	118.45	123.84
25	C	507	CLA	CMB-C2B-C1B	-2.75	124.23	128.46
30	c	519	DGD	C3G-C2G-C1G	-2.75	105.28	111.79
25	H	101	CLA	CAA-CBA-CGA	-2.75	105.21	113.25
25	B	605	CLA	CHB-C4A-NA	2.75	128.31	124.51
25	B	613	CLA	CMB-C2B-C3B	2.75	129.82	124.68
27	c	515	BCR	C11-C10-C9	-2.75	123.39	127.31
28	D	406	PL9	C20-C19-C21	2.75	119.89	115.27
26	a	608	PHO	CMB-C2B-C3B	2.75	129.82	124.68
25	c	505	CLA	O2D-CGD-CBD	2.75	116.15	111.27
28	A	611	PL9	C7-C3-C2	-2.74	119.69	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	513	CLA	O2A-CGA-O1A	-2.74	116.68	123.59
29	B	621	SQD	C1-O5-C5	-2.74	108.31	113.69
25	b	606	CLA	CMB-C2B-C3B	2.73	129.79	124.68
29	D	408	SQD	O48-C23-C24	2.73	120.49	111.91
25	b	610	CLA	C1-C2-C3	-2.73	121.32	126.04
29	f	101	SQD	O5-C1-C2	-2.73	104.57	110.35
25	B	611	CLA	CHB-C4A-NA	2.73	128.28	124.51
25	d	403	CLA	O2D-CGD-O1D	-2.73	118.50	123.84
25	b	613	CLA	CHD-C1D-ND	-2.73	121.95	124.45
28	A	611	PL9	C36-C34-C33	-2.73	115.60	121.12
27	c	516	BCR	C24-C23-C22	-2.72	122.12	126.23
25	C	506	CLA	C1-C2-C3	-2.72	121.33	126.04
30	C	518	DGD	C3G-C2G-C1G	-2.72	105.35	111.79
25	b	602	CLA	O2A-CGA-O1A	-2.72	116.72	123.59
29	b	619	SQD	O5-C5-C4	2.72	114.64	109.69
32	E	101	LHG	O8-C23-C24	2.72	120.45	111.91
25	B	608	CLA	O2A-CGA-O1A	-2.72	116.73	123.59
25	b	601	CLA	C1B-CHB-C4A	-2.72	124.73	130.12
25	c	503	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
31	j	101	STE	O2-C1-C2	2.72	122.77	114.03
25	B	609	CLA	O2D-CGD-CBD	2.72	116.09	111.27
25	b	615	CLA	O1D-CGD-CBD	2.72	130.04	124.48
27	K	101	BCR	C15-C14-C13	-2.71	123.44	127.31
25	D	403	CLA	O2A-CGA-O1A	-2.71	116.75	123.59
25	d	401	CLA	O2A-CGA-O1A	-2.71	116.75	123.59
25	c	508	CLA	O2A-CGA-O1A	-2.71	116.76	123.59
30	C	517	DGD	O3G-C1D-C2D	-2.71	104.08	108.30
25	C	508	CLA	O2D-CGD-O1D	-2.70	118.55	123.84
25	b	602	CLA	CHD-C1D-ND	-2.70	121.97	124.45
29	f	101	SQD	C1-C2-C3	-2.70	104.37	110.00
25	b	614	CLA	CHB-C4A-NA	2.70	128.25	124.51
30	h	102	DGD	C7B-C6B-C5B	-2.70	100.71	114.42
25	B	603	CLA	CHB-C4A-NA	2.70	128.24	124.51
25	B	605	CLA	C4-C3-C5	2.70	119.81	115.27
25	C	508	CLA	O2D-CGD-CBD	2.70	116.06	111.27
27	B	618	BCR	C15-C16-C17	-2.70	117.95	123.47
25	c	512	CLA	O2A-CGA-O1A	-2.70	116.79	123.59
30	A	614	DGD	O3G-C3G-C2G	-2.70	104.40	110.90
33	c	520	LMG	O8-C28-O10	-2.69	116.80	123.59
33	C	519	LMG	O6-C1-O1	-2.69	103.61	109.97
25	D	403	CLA	CMB-C2B-C3B	2.68	129.70	124.68
28	D	406	PL9	C40-C39-C41	2.68	119.78	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	A	610	BCR	C15-C16-C17	-2.68	117.98	123.47
35	F	101	HEM	CBA-CAA-C2A	-2.68	108.05	112.62
30	c	519	DGD	O5D-C6D-C5D	-2.68	104.09	109.05
33	d	410	LMG	O1-C1-C2	-2.68	104.12	108.30
25	c	508	CLA	O2D-CGD-CBD	2.68	116.03	111.27
28	A	611	PL9	O1-C4-C3	-2.68	117.77	120.72
25	D	404	CLA	C2D-C1D-ND	-2.68	108.13	110.10
28	D	406	PL9	C27-C28-C29	-2.68	121.22	127.66
25	C	513	CLA	O2D-CGD-O1D	-2.67	118.61	123.84
25	b	611	CLA	CAC-C3C-C4C	2.67	128.27	124.81
25	h	101	CLA	CHB-C4A-NA	2.67	128.20	124.51
27	c	515	BCR	C27-C26-C25	2.67	126.60	122.73
25	C	503	CLA	C4-C3-C5	2.67	119.76	115.27
25	d	404	CLA	O2D-CGD-O1D	-2.67	118.62	123.84
25	C	509	CLA	CED-O2D-CGD	2.67	121.97	115.94
25	d	404	CLA	CHB-C4A-NA	2.66	128.20	124.51
25	b	613	CLA	C1-C2-C3	-2.66	121.44	126.04
27	b	617	BCR	C24-C23-C22	-2.66	122.21	126.23
27	Y	101	BCR	C27-C26-C25	2.66	126.59	122.73
25	A	607	CLA	C1B-CHB-C4A	-2.66	124.85	130.12
27	T	101	BCR	C27-C26-C25	2.66	126.59	122.73
25	C	506	CLA	CMB-C2B-C3B	2.66	129.65	124.68
33	c	524	LMG	C1-O6-C5	-2.66	108.47	113.69
25	b	607	CLA	C1B-CHB-C4A	-2.66	124.86	130.12
25	a	612	CLA	CMB-C2B-C1B	-2.66	124.38	128.46
25	C	510	CLA	CHD-C1D-ND	-2.66	122.01	124.45
25	C	501	CLA	CHD-C1D-ND	-2.65	122.02	124.45
25	A	606	CLA	C1B-CHB-C4A	-2.65	124.87	130.12
27	B	617	BCR	C27-C26-C25	2.65	126.57	122.73
30	c	518	DGD	O2D-C2D-C1D	-2.65	103.62	110.05
25	b	614	CLA	CHD-C1D-ND	-2.64	122.02	124.45
25	B	613	CLA	CHB-C4A-NA	2.64	128.17	124.51
27	B	617	BCR	C2-C1-C6	2.64	114.55	110.48
33	d	410	LMG	O2-C2-C1	-2.64	103.63	110.05
27	b	618	BCR	C11-C10-C9	-2.64	123.55	127.31
29	b	619	SQD	C4-C3-C2	2.64	115.42	110.82
30	C	516	DGD	CDB-CCB-CBB	-2.63	101.05	114.42
25	c	502	CLA	O2D-CGD-O1D	-2.63	118.69	123.84
29	B	621	SQD	C4-C3-C2	2.63	115.41	110.82
25	b	612	CLA	C1B-CHB-C4A	-2.62	124.92	130.12
25	c	505	CLA	O2A-CGA-O1A	-2.62	116.97	123.59
25	A	612	CLA	C1B-CHB-C4A	-2.62	124.93	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b	604	CLA	O2A-CGA-O1A	-2.62	116.98	123.59
25	c	501	CLA	CMB-C2B-C3B	2.62	129.58	124.68
30	C	518	DGD	CDB-CCB-CBB	-2.62	101.13	114.42
26	A	608	PHO	CMC-C2C-C3C	2.62	129.88	124.94
25	c	507	CLA	CMB-C2B-C3B	2.62	129.57	124.68
27	Z	101	BCR	C15-C14-C13	-2.62	123.58	127.31
25	a	609	CLA	CMB-C2B-C3B	2.62	129.57	124.68
25	C	510	CLA	C1B-CHB-C4A	-2.61	124.94	130.12
28	a	611	PL9	C37-C38-C39	-2.61	121.36	127.66
27	d	405	BCR	C38-C26-C25	-2.61	121.59	124.53
25	b	611	CLA	CHB-C4A-NA	2.61	128.13	124.51
25	B	606	CLA	C1B-CHB-C4A	-2.61	124.95	130.12
25	c	507	CLA	C1B-CHB-C4A	-2.61	124.95	130.12
33	d	410	LMG	C40-C39-C38	-2.61	101.18	114.42
25	B	611	CLA	O1D-CGD-CBD	2.61	129.82	124.48
32	d	408	LHG	O8-C23-C24	2.61	120.09	111.91
25	C	507	CLA	CMB-C2B-C3B	2.61	129.56	124.68
33	b	620	LMG	O3-C3-C2	-2.61	104.32	110.35
25	C	513	CLA	CHD-C1D-ND	-2.60	122.06	124.45
25	b	606	CLA	CHB-C4A-NA	2.60	128.11	124.51
29	B	621	SQD	C25-C24-C23	-2.60	104.16	113.62
28	d	406	PL9	O1-C4-C3	-2.60	117.86	120.72
27	H	102	BCR	C16-C15-C14	-2.60	118.15	123.47
25	C	509	CLA	CHB-C4A-NA	2.60	128.11	124.51
25	c	506	CLA	C2D-C1D-ND	-2.60	108.19	110.10
25	a	612	CLA	C1-C2-C3	-2.60	121.55	126.04
25	c	510	CLA	C16-C15-C13	-2.59	107.53	115.92
30	H	103	DGD	C4E-C3E-C2E	-2.59	106.30	110.82
25	B	612	CLA	O2D-CGD-O1D	-2.59	118.77	123.84
25	C	510	CLA	O2D-CGD-O1D	-2.59	118.77	123.84
25	C	512	CLA	O2A-CGA-O1A	-2.59	117.06	123.59
27	K	101	BCR	C24-C23-C22	-2.59	122.32	126.23
26	a	608	PHO	CMC-C2C-C3C	2.58	129.81	124.94
30	C	517	DGD	O2D-C2D-C1D	-2.58	103.77	110.05
25	c	503	CLA	C4-C3-C5	2.58	119.61	115.27
28	d	406	PL9	C42-C43-C44	-2.58	121.45	127.66
25	A	606	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
30	H	103	DGD	O2D-C2D-C1D	-2.58	103.79	110.05
36	V	201	HEC	CMC-C2C-C3C	2.58	128.85	125.82
25	b	605	CLA	C1B-CHB-C4A	-2.58	125.02	130.12
25	b	613	CLA	CMB-C2B-C3B	2.58	129.50	124.68
32	B	620	LHG	C11-C10-C9	-2.57	101.36	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	c	515	BCR	C2-C1-C6	2.57	114.44	110.48
25	c	510	CLA	C1-C2-C3	-2.57	121.60	126.04
29	b	619	SQD	O9-S-C6	2.57	109.99	106.94
31	t	102	STE	C3-C2-C1	-2.57	108.00	114.47
27	H	102	BCR	C24-C23-C22	-2.57	122.36	126.23
25	C	506	CLA	O2D-CGD-O1D	-2.57	118.82	123.84
30	H	103	DGD	CDB-CCB-CBB	-2.57	101.39	114.42
32	L	101	LHG	C20-C19-C18	-2.57	101.40	114.42
25	c	511	CLA	O2D-CGD-O1D	-2.57	118.82	123.84
28	A	611	PL9	C22-C23-C24	-2.56	121.49	127.66
30	c	519	DGD	CDB-CCB-CBB	-2.56	101.41	114.42
35	e	101	HEM	CHB-C1B-NB	2.56	127.55	124.38
29	D	408	SQD	C46-C45-C44	-2.56	105.17	113.70
25	b	610	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	H	101	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
25	b	604	CLA	C4-C3-C5	2.55	119.56	115.27
25	c	503	CLA	CMB-C2B-C3B	2.55	129.44	124.68
28	D	406	PL9	O1-C4-C3	-2.55	117.92	120.72
25	d	403	CLA	C1-C2-C3	-2.55	121.64	126.04
25	B	612	CLA	O2A-C1-C2	-2.55	101.94	108.64
28	a	611	PL9	C20-C19-C21	2.54	119.55	115.27
27	Y	101	BCR	C16-C15-C14	-2.54	118.28	123.47
27	x	101	BCR	C2-C1-C6	2.54	114.39	110.48
25	b	609	CLA	CMB-C2B-C1B	-2.54	124.56	128.46
25	d	401	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
27	Y	101	BCR	C33-C5-C6	-2.53	121.68	124.53
30	C	516	DGD	O2D-C2D-C1D	-2.53	103.90	110.05
33	M	101	LMG	C38-C37-C36	-2.53	101.58	114.42
28	A	611	PL9	C40-C39-C41	2.53	119.52	115.27
36	v	201	HEC	C1D-C2D-C3D	-2.52	105.24	107.00
25	B	609	CLA	CHD-C1D-ND	-2.52	122.14	124.45
25	B	602	CLA	CHD-C4C-NC	2.52	128.18	124.20
25	d	404	CLA	O2A-CGA-O1A	-2.52	117.23	123.59
25	c	509	CLA	C1B-CHB-C4A	-2.52	125.12	130.12
33	b	622	LMG	O1-C1-C2	-2.52	104.37	108.30
25	c	508	CLA	CHD-C1D-ND	-2.52	122.14	124.45
28	D	406	PL9	C37-C38-C39	-2.52	121.60	127.66
27	C	514	BCR	C2-C1-C6	2.51	114.35	110.48
25	b	605	CLA	O2A-CGA-O1A	-2.51	117.25	123.59
25	B	604	CLA	O2A-CGA-O1A	-2.51	117.25	123.59
25	b	614	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
25	B	615	CLA	O2D-CGD-O1D	-2.51	118.93	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	f	101	SQD	O48-C23-C24	2.51	119.78	111.91
25	d	404	CLA	CHD-C1D-ND	-2.51	122.15	124.45
25	c	501	CLA	O2A-CGA-O1A	-2.51	117.27	123.59
31	B	624	STE	O2-C1-C2	2.51	122.08	114.03
25	c	504	CLA	O2D-CGD-CBD	2.51	115.72	111.27
25	A	612	CLA	O2D-CGD-O1D	-2.50	118.94	123.84
25	B	601	CLA	CHD-C1D-ND	-2.50	122.15	124.45
25	b	609	CLA	O2A-CGA-O1A	-2.50	117.27	123.59
25	D	403	CLA	O2D-CGD-O1D	-2.50	118.94	123.84
25	B	605	CLA	CHD-C1D-ND	-2.50	122.15	124.45
25	c	501	CLA	C2D-C1D-ND	-2.50	108.26	110.10
25	a	607	CLA	C11-C12-C13	-2.50	107.83	115.92
30	c	518	DGD	O5D-C6D-C5D	-2.50	104.42	109.05
30	A	614	DGD	O6D-C5D-C6D	-2.50	101.62	106.67
28	d	406	PL9	C7-C3-C2	-2.50	120.02	123.30
33	C	519	LMG	O2-C2-C1	-2.50	103.98	110.05
28	a	611	PL9	C40-C39-C41	2.50	119.47	115.27
30	C	517	DGD	C4E-C3E-C2E	-2.50	106.47	110.82
25	b	607	CLA	O2D-CGD-O1D	-2.49	118.96	123.84
26	D	402	PHO	CMC-C2C-C3C	2.49	129.64	124.94
27	C	514	BCR	C27-C26-C25	2.49	126.35	122.73
36	V	201	HEC	CBA-CAA-C2A	-2.49	108.41	112.60
32	e	102	LHG	C11-C10-C9	-2.49	101.79	114.42
25	D	404	CLA	O2A-CGA-O1A	-2.49	117.31	123.59
27	Z	101	BCR	C27-C26-C25	2.49	126.34	122.73
28	a	611	PL9	C45-C44-C46	-2.48	111.09	115.27
26	d	402	PHO	O2D-CGD-O1D	-2.48	118.98	123.84
27	d	405	BCR	C27-C26-C25	2.48	126.34	122.73
30	c	517	DGD	CDB-CCB-CBB	-2.48	101.82	114.42
25	c	502	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
25	B	606	CLA	C2A-C1A-CHA	2.48	128.19	123.86
26	d	402	PHO	CMA-C3A-C4A	-2.48	108.95	114.38
30	C	517	DGD	C1D-C2D-C3D	-2.48	104.84	110.00
25	b	602	CLA	O2D-CGD-CBD	2.48	115.67	111.27
27	t	101	BCR	C29-C30-C25	2.48	114.29	110.48
27	A	610	BCR	C33-C5-C6	-2.47	121.75	124.53
27	x	101	BCR	C27-C26-C25	2.47	126.32	122.73
30	c	517	DGD	O6D-C1D-O3G	-2.47	104.12	109.97
25	a	612	CLA	O2D-CGD-CBD	2.47	115.66	111.27
30	h	102	DGD	O3E-C3E-C2E	-2.47	104.64	110.35
32	B	620	LHG	C18-C17-C16	-2.47	101.89	114.42
25	B	615	CLA	C2D-C1D-ND	-2.47	108.29	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	C	519	LMG	C40-C39-C38	-2.47	101.90	114.42
25	C	501	CLA	C2D-C1D-ND	-2.47	108.29	110.10
27	Z	101	BCR	C2-C1-C6	2.47	114.28	110.48
27	A	610	BCR	C2-C1-C6	2.46	114.27	110.48
25	H	101	CLA	CHD-C1D-ND	-2.46	122.19	124.45
27	k	101	BCR	C27-C26-C25	2.46	126.30	122.73
25	b	603	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
25	B	602	CLA	CHD-C1D-ND	-2.46	122.20	124.45
25	a	607	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
25	B	610	CLA	CHD-C4C-NC	2.46	128.07	124.20
25	B	609	CLA	CAC-C3C-C4C	2.45	127.99	124.81
32	b	623	LHG	C11-C10-C9	-2.45	101.97	114.42
27	b	616	BCR	C27-C26-C25	2.45	126.29	122.73
25	C	507	CLA	O2A-CGA-O1A	-2.45	117.41	123.59
29	a	613	SQD	O9-S-C6	2.45	109.85	106.94
27	K	101	BCR	C27-C26-C25	2.45	126.29	122.73
27	b	617	BCR	C8-C7-C6	-2.45	120.33	127.20
25	b	604	CLA	CHD-C1D-ND	-2.44	122.21	124.45
25	C	512	CLA	O2D-CGD-CBD	2.44	115.61	111.27
25	B	611	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	b	601	CLA	O2A-CGA-O1A	-2.44	117.43	123.59
30	c	517	DGD	C4D-C3D-C2D	-2.44	106.56	110.82
30	C	516	DGD	C5B-C4B-C3B	-2.44	102.04	114.42
25	C	511	CLA	O2A-CGA-O1A	-2.44	117.44	123.59
28	D	406	PL9	C42-C43-C44	-2.44	121.79	127.66
25	c	513	CLA	C1B-CHB-C4A	-2.44	125.29	130.12
35	e	101	HEM	C1B-NB-C4B	2.43	107.59	105.07
27	Z	101	BCR	C33-C5-C6	-2.43	121.79	124.53
30	c	518	DGD	CBB-CAB-C9B	-2.43	102.07	114.42
25	C	502	CLA	CHD-C1D-ND	-2.43	122.22	124.45
25	a	607	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	b	610	CLA	CMB-C2B-C3B	2.43	129.22	124.68
26	d	402	PHO	O1D-CGD-CBD	2.43	128.79	124.74
25	D	404	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
30	a	615	DGD	CDB-CCB-CBB	-2.43	102.11	114.42
27	c	516	BCR	C27-C26-C25	2.43	126.25	122.73
27	a	610	BCR	C27-C26-C25	2.42	126.25	122.73
27	k	101	BCR	C33-C5-C6	-2.42	121.81	124.53
33	C	519	LMG	O1-C7-C8	-2.42	105.06	110.90
33	M	101	LMG	C40-C39-C38	-2.42	102.14	114.42
25	C	504	CLA	O2A-CGA-O1A	-2.42	117.48	123.59
29	f	101	SQD	C3-C4-C5	2.42	114.56	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	612	CLA	C6-C5-C3	-2.42	107.11	113.45
25	c	512	CLA	CMB-C2B-C1B	-2.42	124.75	128.46
35	e	101	HEM	CAB-C3B-C2B	-2.42	120.64	128.60
27	d	405	BCR	C11-C10-C9	-2.42	123.86	127.31
33	b	620	LMG	C40-C39-C38	-2.42	102.16	114.42
28	a	611	PL9	O2-C1-C6	2.41	124.77	120.59
25	b	606	CLA	O2A-CGA-O1A	-2.41	117.50	123.59
25	C	504	CLA	CHD-C4C-NC	2.41	128.01	124.20
25	b	609	CLA	O2D-CGD-O1D	-2.41	119.12	123.84
33	c	522	LMG	C40-C39-C38	-2.41	102.17	114.42
31	b	621	STE	C3-C2-C1	-2.41	108.39	114.47
27	D	405	BCR	C27-C26-C25	2.41	126.23	122.73
27	c	514	BCR	C27-C26-C25	2.41	126.23	122.73
27	b	616	BCR	C33-C5-C6	-2.41	121.82	124.53
30	A	614	DGD	O5D-C1E-C2E	2.41	112.06	108.30
25	b	612	CLA	CHB-C4A-NA	2.41	127.84	124.51
25	H	101	CLA	O2D-CGD-CBD	2.41	115.54	111.27
35	e	101	HEM	CHC-C4B-C3B	2.41	128.25	124.57
33	C	519	LMG	C6-C5-C4	-2.40	107.38	113.00
26	a	608	PHO	O2A-CGA-O1A	-2.40	117.53	123.59
25	A	609	CLA	CHB-C4A-NA	2.40	127.83	124.51
29	A	613	SQD	O9-S-C6	2.40	109.79	106.94
25	C	506	CLA	CHB-C4A-NA	2.40	127.83	124.51
30	c	517	DGD	C6D-O5D-C1E	2.40	118.43	113.74
25	B	602	CLA	O2D-CGD-CBD	2.40	115.53	111.27
33	c	524	LMG	O1-C7-C8	-2.40	105.11	110.90
27	H	102	BCR	C2-C1-C6	2.40	114.17	110.48
28	D	406	PL9	C35-C34-C36	2.40	119.30	115.27
25	B	610	CLA	CHD-C1D-C2D	2.40	130.50	125.48
32	B	620	LHG	O8-C23-O10	-2.39	117.55	123.59
30	C	517	DGD	CDB-CCB-CBB	-2.39	102.28	114.42
28	a	611	PL9	O2-C1-C2	-2.39	116.31	121.78
33	c	522	LMG	C3-C4-C5	-2.39	105.98	110.24
27	B	618	BCR	C11-C10-C9	-2.39	123.90	127.31
33	C	515	LMG	C40-C39-C38	-2.39	102.32	114.42
27	c	514	BCR	C24-C23-C22	-2.38	122.63	126.23
28	A	611	PL9	O2-C1-C2	-2.38	116.32	121.78
27	B	616	BCR	C29-C30-C25	2.38	114.15	110.48
28	D	406	PL9	C7-C3-C2	-2.38	120.17	123.30
25	b	601	CLA	CHD-C1D-ND	-2.38	122.27	124.45
25	A	606	CLA	O2A-CGA-O1A	-2.38	117.59	123.59
33	d	410	LMG	O1-C7-C8	-2.38	105.16	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	b	609	CLA	CAA-CBA-CGA	-2.38	106.31	113.25
25	B	612	CLA	C2A-C1A-CHA	2.37	128.01	123.86
25	C	501	CLA	O2A-CGA-O1A	-2.37	117.61	123.59
27	b	618	BCR	C29-C30-C25	2.37	114.13	110.48
33	c	520	LMG	C38-C37-C36	-2.37	102.39	114.42
32	D	409	LHG	C11-C10-C9	-2.37	102.39	114.42
33	c	524	LMG	O6-C1-O1	-2.37	104.36	109.97
33	D	412	LMG	C38-C37-C36	-2.37	102.39	114.42
25	B	609	CLA	CHC-C1C-NC	2.37	127.80	124.20
25	a	612	CLA	CMB-C2B-C3B	2.37	129.11	124.68
33	D	407	LMG	C38-C37-C36	-2.37	102.41	114.42
33	b	622	LMG	O2-C2-C1	-2.37	104.30	110.05
32	b	623	LHG	C27-C26-C25	-2.37	102.42	114.42
33	c	520	LMG	C40-C39-C38	-2.36	102.42	114.42
29	T	103	SQD	O48-C23-C24	2.36	119.33	111.91
25	b	613	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
25	c	507	CLA	O2A-CGA-O1A	-2.36	117.64	123.59
33	C	515	LMG	C38-C37-C36	-2.36	102.46	114.42
32	l	101	LHG	C18-C17-C16	-2.36	102.47	114.42
29	f	101	SQD	O8-S-C6	2.36	109.49	105.74
25	b	609	CLA	CMB-C2B-C3B	2.35	129.08	124.68
25	B	613	CLA	C1B-CHB-C4A	-2.35	125.45	130.12
25	C	510	CLA	O2A-CGA-O1A	-2.35	117.65	123.59
25	C	511	CLA	O2D-CGD-O1D	-2.35	119.24	123.84
32	l	101	LHG	C5-O7-C7	-2.35	112.01	117.79
25	C	506	CLA	O2A-CGA-O1A	-2.35	117.67	123.59
25	c	508	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
25	B	608	CLA	CHB-C4A-NA	2.35	127.76	124.51
25	b	601	CLA	C4-C3-C5	2.34	119.21	115.27
29	a	613	SQD	C3-C4-C5	2.34	114.42	110.24
25	c	509	CLA	CHD-C1D-ND	-2.34	122.30	124.45
30	h	102	DGD	CDB-CCB-CBB	-2.34	102.55	114.42
32	E	101	LHG	C11-C10-C9	-2.34	102.55	114.42
28	D	406	PL9	C22-C23-C24	-2.34	122.03	127.66
25	B	612	CLA	CHB-C4A-NA	2.34	127.75	124.51
27	b	616	BCR	C11-C10-C9	-2.34	123.97	127.31
30	a	615	DGD	C5B-C4B-C3B	-2.34	102.56	114.42
33	c	522	LMG	O2-C2-C1	-2.34	104.37	110.05
28	A	611	PL9	C20-C19-C21	2.34	119.20	115.27
31	B	623	STE	C3-C2-C1	-2.33	108.59	114.47
31	m	101	STE	C3-C2-C1	-2.33	108.60	114.47
32	e	102	LHG	C20-C19-C18	-2.33	102.61	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	D	409	LHG	C20-C19-C18	-2.33	102.61	114.42
25	b	603	CLA	O2D-CGD-CBD	2.33	115.40	111.27
27	K	101	BCR	C15-C16-C17	-2.32	118.71	123.47
28	a	611	PL9	C27-C28-C29	-2.32	122.06	127.66
25	d	404	CLA	C1B-CHB-C4A	-2.32	125.51	130.12
25	b	610	CLA	C2D-C1D-ND	-2.32	108.39	110.10
25	b	607	CLA	CAC-C3C-C2C	2.32	131.50	127.53
29	b	619	SQD	C9-C8-C7	-2.32	105.18	113.62
25	B	605	CLA	C1B-CHB-C4A	-2.32	125.52	130.12
25	B	613	CLA	O2D-CGD-CBD	2.32	115.39	111.27
27	K	101	BCR	C35-C13-C14	-2.32	119.67	122.92
31	M	102	STE	C3-C2-C1	-2.32	108.63	114.47
33	C	515	LMG	O1-C7-C8	-2.32	105.31	110.90
25	b	612	CLA	O2A-CGA-O1A	-2.32	117.74	123.59
27	b	617	BCR	C27-C26-C25	2.32	126.09	122.73
29	D	408	SQD	C3-C4-C5	2.32	114.37	110.24
25	B	603	CLA	C6-C5-C3	-2.31	107.39	113.45
25	C	501	CLA	CMB-C2B-C1B	-2.31	124.91	128.46
25	c	512	CLA	CHC-C1C-NC	2.31	127.71	124.20
25	h	101	CLA	C1B-CHB-C4A	-2.31	125.54	130.12
25	c	504	CLA	C1-C2-C3	-2.31	122.05	126.04
30	C	516	DGD	CAB-C9B-C8B	-2.31	102.71	114.42
25	C	507	CLA	CHB-C4A-NA	2.31	127.70	124.51
25	C	512	CLA	C1-C2-C3	-2.31	122.05	126.04
30	A	614	DGD	C8B-C7B-C6B	-2.31	102.72	114.42
25	B	608	CLA	C1B-CHB-C4A	-2.31	125.55	130.12
30	C	517	DGD	C3E-C4E-C5E	-2.30	106.13	110.24
33	b	622	LMG	C40-C39-C38	-2.30	102.73	114.42
25	B	612	CLA	CHA-C1A-NA	-2.30	121.12	126.40
25	d	401	CLA	O2D-CGD-CBD	2.30	115.36	111.27
25	C	511	CLA	C1-C2-C3	-2.30	122.07	126.04
28	D	406	PL9	C12-C13-C14	-2.30	122.13	127.66
33	d	410	LMG	C38-C37-C36	-2.30	102.77	114.42
33	M	101	LMG	C1-O6-C5	-2.30	109.18	113.69
25	B	604	CLA	O1D-CGD-CBD	2.29	129.17	124.48
25	c	510	CLA	CHB-C4A-NA	2.29	127.68	124.51
27	c	516	BCR	C33-C5-C6	-2.29	121.96	124.53
25	c	501	CLA	CHD-C1D-ND	-2.29	122.35	124.45
29	T	103	SQD	C45-O47-C7	-2.29	114.94	117.88
25	B	603	CLA	C1-C2-C3	-2.29	122.09	126.04
25	C	512	CLA	C1B-CHB-C4A	-2.28	125.59	130.12
28	D	406	PL9	C41-C39-C38	-2.28	116.50	121.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	c	517	DGD	C4E-C3E-C2E	-2.28	106.84	110.82
25	C	502	CLA	C4D-CHA-C1A	2.28	124.02	121.25
31	d	411	STE	O2-C1-C2	2.28	121.35	114.03
27	C	514	BCR	C15-C16-C17	-2.28	118.81	123.47
25	b	612	CLA	C7-C6-C5	-2.28	107.17	113.36
27	Y	101	BCR	C8-C7-C6	-2.28	120.81	127.20
25	B	606	CLA	O2A-CGA-O1A	-2.28	117.85	123.59
25	B	607	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
25	C	503	CLA	O1D-CGD-CBD	2.27	129.14	124.48
33	b	622	LMG	O6-C5-C6	2.27	112.09	106.44
25	A	607	CLA	O2D-CGD-CBD	2.27	115.31	111.27
33	C	519	LMG	C38-C37-C36	-2.27	102.91	114.42
30	A	614	DGD	CBB-CAB-C9B	-2.27	102.91	114.42
27	B	618	BCR	C1-C6-C5	-2.27	119.42	122.61
25	C	504	CLA	CED-O2D-CGD	2.27	121.06	115.94
25	C	503	CLA	C7-C6-C5	-2.27	107.20	113.36
25	c	504	CLA	CHD-C1D-ND	-2.27	122.37	124.45
25	B	614	CLA	O2A-CGA-O1A	-2.26	117.88	123.59
25	B	615	CLA	O2A-C1-C2	2.26	114.58	108.64
25	B	602	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	C	501	CLA	C3C-C4C-NC	-2.26	108.03	110.57
35	F	101	HEM	CHC-C4B-NB	2.26	126.89	124.43
29	b	619	SQD	O5-C1-C2	-2.26	105.57	110.35
25	a	609	CLA	O2A-CGA-O1A	-2.26	117.89	123.59
27	c	514	BCR	C2-C1-C6	2.26	113.95	110.48
27	b	616	BCR	C15-C14-C13	-2.25	124.09	127.31
25	c	501	CLA	C3C-C4C-NC	-2.25	108.04	110.57
25	b	608	CLA	C1B-CHB-C4A	-2.25	125.65	130.12
35	e	101	HEM	C3B-C2B-C1B	2.25	108.16	106.49
27	Z	101	BCR	C35-C13-C14	-2.25	119.77	122.92
33	b	620	LMG	O7-C10-O9	-2.25	118.27	123.70
26	a	608	PHO	C1A-C2A-C3A	-2.25	100.70	102.84
25	H	101	CLA	O2A-CGA-O1A	-2.24	117.93	123.59
25	b	611	CLA	C16-C15-C13	-2.24	108.67	115.92
25	B	612	CLA	O2A-CGA-O1A	-2.24	117.93	123.59
25	b	609	CLA	CAC-C3C-C2C	-2.24	123.69	127.53
25	H	101	CLA	C4-C3-C5	2.24	119.04	115.27
30	a	615	DGD	CFB-CEB-CDB	-2.24	103.06	114.42
25	C	503	CLA	C1B-CHB-C4A	-2.24	125.68	130.12
25	b	611	CLA	O2A-CGA-O1A	-2.24	117.95	123.59
27	c	516	BCR	C11-C10-C9	-2.24	124.12	127.31
25	b	611	CLA	CHD-C1D-ND	-2.24	122.40	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	C	507	CLA	C1-C2-C3	-2.23	122.18	126.04
25	c	501	CLA	C1B-CHB-C4A	-2.23	125.69	130.12
33	D	407	LMG	O3-C3-C2	-2.23	105.19	110.35
27	b	618	BCR	C27-C26-C25	2.23	125.97	122.73
32	B	620	LHG	C20-C19-C18	-2.23	103.11	114.42
32	D	410	LHG	C27-C26-C25	-2.23	103.11	114.42
27	D	405	BCR	C3-C4-C5	-2.23	110.10	114.08
32	D	409	LHG	C27-C26-C25	-2.23	103.12	114.42
31	t	102	STE	O2-C1-C2	2.23	121.18	114.03
25	d	401	CLA	CHC-C1C-NC	2.23	127.58	124.20
25	B	605	CLA	O2D-CGD-CBD	2.22	115.22	111.27
27	x	101	BCR	C15-C14-C13	-2.22	124.14	127.31
25	B	602	CLA	O2A-CGA-O1A	-2.22	117.98	123.59
27	H	102	BCR	C35-C13-C14	-2.22	119.81	122.92
33	b	620	LMG	C38-C37-C36	-2.22	103.16	114.42
27	B	618	BCR	C37-C22-C21	-2.22	119.82	122.92
25	b	609	CLA	CHB-C4A-NA	2.22	127.58	124.51
25	B	615	CLA	CHB-C4A-NA	2.22	127.58	124.51
25	c	504	CLA	CHB-C4A-NA	2.21	127.57	124.51
25	C	510	CLA	O2D-CGD-CBD	2.21	115.20	111.27
30	c	518	DGD	C8B-C7B-C6B	-2.21	103.19	114.42
25	H	101	CLA	CMB-C2B-C1B	-2.21	125.07	128.46
25	b	607	CLA	C2A-C1A-CHA	2.21	127.72	123.86
28	a	611	PL9	C35-C34-C36	2.21	118.99	115.27
25	C	503	CLA	CHB-C4A-NA	2.21	127.57	124.51
28	d	406	PL9	C27-C28-C29	-2.21	122.34	127.66
25	b	601	CLA	CAC-C3C-C4C	2.21	127.67	124.81
25	D	403	CLA	C1B-CHB-C4A	-2.21	125.75	130.12
25	B	614	CLA	CMB-C2B-C1B	-2.21	125.07	128.46
25	B	605	CLA	O2A-CGA-O1A	-2.20	118.03	123.59
25	C	502	CLA	O2A-CGA-O1A	-2.20	118.03	123.59
26	A	608	PHO	C1B-NB-C4B	2.20	111.61	107.09
25	b	609	CLA	C11-C10-C8	-2.20	108.80	115.92
33	D	411	LMG	C38-C37-C36	-2.20	103.25	114.42
25	B	611	CLA	C16-C15-C13	-2.20	108.81	115.92
27	c	515	BCR	C35-C13-C14	-2.20	119.84	122.92
36	v	201	HEC	CMB-C2B-C1B	-2.20	125.09	128.46
25	c	510	CLA	C1B-CHB-C4A	-2.19	125.77	130.12
25	C	511	CLA	C1B-CHB-C4A	-2.19	125.77	130.12
27	b	617	BCR	C35-C13-C14	-2.19	119.86	122.92
33	d	409	LMG	C38-C37-C36	-2.19	103.31	114.42
25	B	606	CLA	CED-O2D-CGD	2.19	120.88	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	C	517	DGD	C6D-O5D-C1E	2.19	118.01	113.74
27	d	405	BCR	C3-C4-C5	-2.19	110.17	114.08
29	b	619	SQD	C1-C2-C3	-2.18	105.45	110.00
25	C	501	CLA	C11-C12-C13	-2.18	108.86	115.92
25	b	601	CLA	C2D-C1D-ND	-2.18	108.50	110.10
25	B	604	CLA	CHD-C4C-NC	2.18	127.64	124.20
25	B	607	CLA	CHA-C1A-NA	-2.18	121.40	126.40
25	C	504	CLA	O2D-CGD-O1D	-2.18	119.57	123.84
25	c	510	CLA	C4-C3-C5	2.18	118.94	115.27
27	t	101	BCR	C30-C25-C26	-2.18	119.54	122.61
25	B	614	CLA	C6-C7-C8	-2.18	108.88	115.92
25	b	614	CLA	O2A-CGA-O1A	-2.17	118.10	123.59
25	C	504	CLA	CHB-C4A-NA	2.17	127.52	124.51
25	C	507	CLA	C2A-C1A-CHA	2.17	127.65	123.86
32	E	101	LHG	C20-C19-C18	-2.17	103.41	114.42
25	b	604	CLA	CMB-C2B-C3B	2.17	128.74	124.68
28	D	406	PL9	C36-C34-C33	-2.17	116.73	121.12
25	B	611	CLA	CHD-C1D-ND	-2.17	122.46	124.45
30	H	103	DGD	CAB-C9B-C8B	-2.17	103.42	114.42
27	b	616	BCR	C24-C23-C22	-2.17	122.96	126.23
30	C	516	DGD	C6D-O5D-C1E	2.17	117.97	113.74
25	b	608	CLA	CHB-C4A-NA	2.17	127.51	124.51
25	b	613	CLA	O2D-CGD-O1D	-2.16	119.61	123.84
25	b	603	CLA	CBA-CAA-C2A	-2.16	107.48	113.86
25	A	609	CLA	CHD-C4C-NC	2.16	127.61	124.20
25	C	501	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
25	c	511	CLA	CHB-C4A-NA	2.16	127.50	124.51
33	c	524	LMG	C40-C39-C38	-2.16	103.47	114.42
25	c	502	CLA	O2D-CGD-CBD	2.16	115.10	111.27
33	c	522	LMG	O7-C10-O9	-2.16	118.49	123.70
30	H	103	DGD	O6D-C1D-O3G	-2.16	104.87	109.97
27	A	610	BCR	C38-C26-C25	-2.15	122.11	124.53
25	b	610	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
30	C	517	DGD	C5B-C4B-C3B	-2.15	103.50	114.42
25	c	507	CLA	CHB-C4A-NA	2.15	127.49	124.51
26	A	608	PHO	C1-C2-C3	-2.15	122.32	126.04
28	d	406	PL9	C46-C47-C48	-2.15	104.81	111.88
33	d	409	LMG	O7-C10-O9	-2.15	117.94	123.30
25	d	401	CLA	CMB-C2B-C3B	2.15	128.70	124.68
29	a	613	SQD	O5-C1-C2	-2.15	105.80	110.35
25	d	403	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
25	b	615	CLA	CHD-C1D-ND	-2.15	122.48	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	B	605	CLA	CHD-C4C-NC	2.15	127.59	124.20
25	C	502	CLA	CHA-C1A-NA	-2.15	121.48	126.40
30	h	102	DGD	O6E-C5E-C4E	2.15	113.59	109.69
30	A	614	DGD	CAB-C9B-C8B	-2.15	103.53	114.42
33	c	522	LMG	O8-C28-O10	-2.15	118.18	123.59
27	c	514	BCR	C7-C8-C9	-2.14	123.00	126.23
25	c	513	CLA	O2D-CGD-CBD	2.14	115.08	111.27
33	c	522	LMG	O6-C1-O1	-2.14	104.90	109.97
27	d	405	BCR	C24-C23-C22	-2.14	123.00	126.23
25	B	609	CLA	C1-C2-C3	-2.14	122.34	126.04
30	c	519	DGD	O3G-C1D-C2D	-2.14	104.96	108.30
25	b	612	CLA	C16-C15-C13	-2.14	109.00	115.92
25	B	606	CLA	C4-C3-C5	2.14	118.87	115.27
25	B	615	CLA	CHD-C1D-ND	-2.14	122.49	124.45
30	C	518	DGD	C6D-C5D-C4D	2.14	116.56	112.09
25	C	513	CLA	C2A-C1A-CHA	2.14	127.59	123.86
25	B	610	CLA	C1-C2-C3	-2.14	122.35	126.04
29	B	621	SQD	O5-C1-C2	-2.14	105.83	110.35
25	B	604	CLA	CHD-C1D-C2D	2.14	129.96	125.48
30	c	518	DGD	O2E-C2E-C1E	-2.13	104.86	110.05
27	B	617	BCR	C3-C4-C5	-2.13	110.27	114.08
25	b	607	CLA	CHA-C1A-NA	-2.13	121.51	126.40
25	d	404	CLA	CHA-C1A-NA	-2.13	121.51	126.40
25	C	505	CLA	CHB-C4A-NA	2.13	127.46	124.51
33	C	519	LMG	O7-C10-O9	-2.13	118.55	123.70
33	c	520	LMG	O3-C3-C2	-2.13	105.42	110.35
27	B	616	BCR	C27-C26-C25	2.13	125.82	122.73
25	B	610	CLA	C1B-CHB-C4A	-2.13	125.90	130.12
25	b	608	CLA	CHA-C1A-NA	-2.13	121.52	126.40
25	b	611	CLA	O1D-CGD-CBD	2.13	128.84	124.48
32	b	623	LHG	C20-C19-C18	-2.13	103.63	114.42
27	t	101	BCR	C31-C1-C6	2.13	113.75	110.30
33	C	515	LMG	O3-C3-C2	-2.13	105.43	110.35
31	c	523	STE	O2-C1-C2	2.12	120.86	114.03
25	h	101	CLA	O2D-CGD-CBD	2.12	115.04	111.27
25	B	608	CLA	CHA-C1A-NA	-2.12	121.53	126.40
27	d	405	BCR	C2-C1-C6	2.12	113.75	110.48
30	A	614	DGD	O2D-C2D-C1D	-2.12	104.89	110.05
25	B	614	CLA	C1B-CHB-C4A	-2.12	125.92	130.12
25	C	504	CLA	CHA-C1A-NA	-2.12	121.54	126.40
32	E	101	LHG	C27-C26-C25	-2.12	103.67	114.42
28	d	406	PL9	C31-C32-C33	-2.12	104.92	111.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	H	103	DGD	C3G-C2G-C1G	-2.12	106.78	111.79
25	c	501	CLA	C1-C2-C3	-2.12	122.38	126.04
25	a	609	CLA	O2A-C1-C2	-2.12	103.08	108.64
33	c	520	LMG	O6-C1-O1	-2.11	104.97	109.97
25	b	608	CLA	O2A-CGA-O1A	-2.11	118.26	123.59
33	c	522	LMG	C42-C41-C40	-2.11	103.70	114.42
30	h	102	DGD	C3G-C2G-C1G	-2.11	106.79	111.79
27	B	617	BCR	C30-C25-C26	-2.11	119.64	122.61
26	D	402	PHO	C1B-NB-C4B	2.11	111.43	107.09
30	c	518	DGD	O2G-C1B-O1B	-2.11	118.60	123.70
26	d	402	PHO	O2A-CGA-O1A	-2.11	118.27	123.59
25	c	502	CLA	CHD-C1D-C2D	2.11	129.91	125.48
32	l	101	LHG	C27-C26-C25	-2.11	103.72	114.42
25	C	509	CLA	CHD-C4C-NC	2.11	127.53	124.20
25	b	612	CLA	CHD-C1D-ND	-2.11	122.52	124.45
25	d	403	CLA	O2D-CGD-CBD	2.11	115.01	111.27
27	T	101	BCR	C35-C13-C14	-2.11	119.97	122.92
27	t	101	BCR	C11-C10-C9	-2.11	124.30	127.31
25	b	606	CLA	O1D-CGD-CBD	2.11	128.79	124.48
30	C	516	DGD	C7B-C6B-C5B	-2.11	103.74	114.42
26	D	402	PHO	CMA-C3A-C4A	-2.11	109.77	114.38
27	c	516	BCR	C38-C26-C25	-2.10	122.17	124.53
25	b	603	CLA	C1B-CHB-C4A	-2.10	125.96	130.12
25	b	604	CLA	CHD-C4C-NC	2.10	127.51	124.20
25	c	512	CLA	CMB-C2B-C3B	2.10	128.61	124.68
33	M	101	LMG	C8-O7-C10	2.10	122.96	117.79
32	D	410	LHG	O8-C23-C24	2.10	118.49	111.91
25	H	101	CLA	C1-C2-C3	-2.10	122.42	126.04
25	b	603	CLA	C1D-ND-C4D	2.10	107.82	106.33
25	D	403	CLA	C1-C2-C3	-2.10	122.42	126.04
28	d	406	PL9	C7-C8-C9	-2.10	123.30	126.79
33	D	407	LMG	O1-C1-C2	-2.10	105.03	108.30
25	b	602	CLA	O1D-CGD-CBD	2.09	128.77	124.48
25	B	613	CLA	CHD-C1D-ND	-2.09	122.53	124.45
25	c	501	CLA	CHB-C4A-NA	2.09	127.41	124.51
25	b	606	CLA	C6-C7-C8	-2.09	109.16	115.92
30	h	102	DGD	CBB-CAB-C9B	-2.09	103.81	114.42
25	B	614	CLA	C4-C3-C5	2.09	118.79	115.27
25	a	612	CLA	C1B-CHB-C4A	-2.09	125.98	130.12
32	l	101	LHG	C20-C19-C18	-2.09	103.82	114.42
29	a	614	SQD	O48-C23-O10	-2.09	118.32	123.59
30	c	519	DGD	CBB-CAB-C9B	-2.09	103.83	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	B	618	BCR	C29-C30-C25	2.09	113.69	110.48
35	F	101	HEM	C1B-NB-C4B	2.09	107.23	105.07
25	B	614	CLA	CHD-C1D-ND	-2.09	122.54	124.45
25	a	607	CLA	C11-C10-C8	-2.09	109.18	115.92
25	b	610	CLA	CHD-C1D-ND	-2.08	122.54	124.45
30	c	519	DGD	O3E-C3E-C2E	-2.08	105.53	110.35
33	b	620	LMG	O2-C2-C1	-2.08	104.98	110.05
27	t	101	BCR	C27-C26-C25	2.08	125.76	122.73
33	D	407	LMG	O1-C7-C8	-2.08	105.88	110.90
25	b	603	CLA	C11-C10-C8	-2.08	109.19	115.92
25	B	607	CLA	C11-C12-C13	-2.08	109.19	115.92
33	M	101	LMG	C31-C30-C29	-2.08	105.72	113.19
35	F	101	HEM	C4D-ND-C1D	2.08	107.22	105.07
25	b	609	CLA	CHA-C4D-ND	2.08	136.85	132.50
25	b	609	CLA	CHA-C1A-NA	-2.08	121.64	126.40
28	D	406	PL9	C7-C8-C9	-2.08	123.34	126.79
32	D	410	LHG	C11-C10-C9	-2.08	103.89	114.42
32	d	407	LHG	O8-C23-O10	-2.08	118.36	123.59
25	D	403	CLA	C6-C5-C3	2.07	118.89	113.45
27	B	618	BCR	C33-C5-C6	-2.07	122.20	124.53
27	Z	101	BCR	C11-C10-C9	-2.07	124.35	127.31
32	D	409	LHG	C18-C17-C16	-2.07	103.90	114.42
33	b	620	LMG	C22-C21-C20	-2.07	103.91	114.42
33	c	522	LMG	C38-C37-C36	-2.07	103.91	114.42
25	C	502	CLA	O1D-CGD-CBD	2.07	128.72	124.48
30	C	517	DGD	CAB-C9B-C8B	-2.07	103.92	114.42
25	c	503	CLA	C1-C2-C3	-2.07	122.46	126.04
25	H	101	CLA	CMB-C2B-C3B	2.07	128.55	124.68
33	M	101	LMG	O6-C1-O1	-2.07	105.08	109.97
35	F	101	HEM	O2D-CGD-CBD	2.07	120.67	114.03
25	B	604	CLA	CMB-C2B-C1B	-2.07	125.29	128.46
25	C	513	CLA	O1D-CGD-CBD	2.07	128.71	124.48
30	A	614	DGD	C5B-C4B-C3B	-2.06	103.94	114.42
30	c	519	DGD	CAB-C9B-C8B	-2.06	103.94	114.42
25	b	604	CLA	O1A-CGA-CBA	2.06	131.79	123.73
28	a	611	PL9	C32-C33-C34	-2.06	122.69	127.66
25	C	501	CLA	CAA-CBA-CGA	-2.06	107.22	113.25
25	b	605	CLA	CHD-C1D-ND	-2.06	122.56	124.45
30	C	516	DGD	O2E-C2E-C1E	-2.06	105.03	110.05
30	c	519	DGD	O2D-C2D-C1D	-2.06	105.03	110.05
33	C	519	LMG	O3-C3-C2	-2.06	105.58	110.35
30	c	518	DGD	C1D-O6D-C5D	-2.06	109.64	113.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	A	608	PHO	O2D-CGD-O1D	-2.06	119.81	123.84
32	e	102	LHG	C18-C17-C16	-2.06	103.97	114.42
25	c	511	CLA	C2A-C1A-CHA	2.06	127.46	123.86
27	a	610	BCR	C11-C10-C9	-2.06	124.37	127.31
25	c	503	CLA	C1B-CHB-C4A	-2.06	126.04	130.12
25	C	509	CLA	CHD-C1D-C2D	2.06	129.80	125.48
30	c	519	DGD	C1D-C2D-C3D	-2.06	105.71	110.00
27	K	101	BCR	C2-C1-C6	2.06	113.65	110.48
28	D	406	PL9	C32-C33-C34	-2.06	122.71	127.66
28	a	611	PL9	C31-C32-C33	-2.06	105.12	111.88
25	c	503	CLA	C7-C6-C5	-2.06	107.78	113.36
30	a	615	DGD	CBB-CAB-C9B	-2.06	103.99	114.42
25	a	612	CLA	C2D-C1D-ND	-2.05	108.59	110.10
25	a	609	CLA	CHA-C1A-NA	-2.05	121.69	126.40
28	d	406	PL9	C32-C33-C34	-2.05	122.72	127.66
32	l	101	LHG	C11-C10-C9	-2.05	104.01	114.42
29	a	613	SQD	O5-C5-C4	2.05	113.42	109.69
32	D	410	LHG	C18-C17-C16	-2.05	104.01	114.42
31	B	622	STE	O2-C1-C2	2.05	120.62	114.03
30	C	517	DGD	CBB-CAB-C9B	-2.05	104.02	114.42
25	D	403	CLA	CHD-C1D-ND	-2.05	122.57	124.45
32	B	620	LHG	C27-C26-C25	-2.05	104.03	114.42
25	c	502	CLA	CHD-C4C-NC	2.05	127.43	124.20
30	C	517	DGD	O2G-C1B-O1B	-2.05	118.75	123.70
27	b	616	BCR	C35-C13-C14	-2.05	120.06	122.92
25	d	403	CLA	O2A-CGA-O1A	-2.05	118.43	123.59
27	c	515	BCR	C33-C5-C6	-2.05	122.23	124.53
25	B	613	CLA	O1D-CGD-CBD	2.05	128.67	124.48
27	K	101	BCR	C11-C10-C9	-2.04	124.39	127.31
27	a	610	BCR	C8-C7-C6	-2.04	121.46	127.20
32	D	410	LHG	O10-C23-C24	-2.04	115.76	123.73
25	C	505	CLA	C11-C12-C13	-2.04	109.31	115.92
27	b	616	BCR	C34-C9-C10	-2.04	120.06	122.92
25	A	607	CLA	O2A-CGA-O1A	-2.04	118.44	123.59
25	D	404	CLA	CHA-C4D-ND	2.04	136.77	132.50
30	H	103	DGD	C1D-O6D-C5D	-2.04	109.68	113.69
25	C	501	CLA	CHA-C4D-ND	2.04	136.76	132.50
27	c	516	BCR	C2-C1-C6	2.04	113.62	110.48
27	b	618	BCR	C16-C17-C18	-2.04	124.40	127.31
25	B	602	CLA	C2D-C1D-ND	-2.04	108.60	110.10
30	C	518	DGD	CBB-CAB-C9B	-2.04	104.08	114.42
25	A	612	CLA	C16-C15-C13	-2.04	109.33	115.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	B	616	BCR	C24-C23-C22	-2.04	123.16	126.23
30	a	615	DGD	C1G-C2G-C3G	-2.03	107.04	111.80
25	C	506	CLA	CHA-C1A-NA	-2.03	121.74	126.40
32	d	408	LHG	C27-C26-C25	-2.03	104.10	114.42
27	H	102	BCR	C30-C25-C26	-2.03	119.75	122.61
25	B	606	CLA	CHA-C1A-NA	-2.03	121.74	126.40
25	B	610	CLA	C3C-C4C-NC	-2.03	108.29	110.57
25	c	507	CLA	C2A-C1A-CHA	2.03	127.41	123.86
30	c	519	DGD	C5B-C4B-C3B	-2.03	104.12	114.42
30	c	519	DGD	O6E-C1E-O5D	-2.03	105.17	109.97
25	B	603	CLA	O2D-CGD-CBD	2.03	114.87	111.27
25	b	607	CLA	C11-C10-C8	-2.03	109.36	115.92
25	a	612	CLA	C3C-C4C-NC	-2.03	108.30	110.57
25	B	602	CLA	C3C-C4C-NC	-2.03	108.30	110.57
26	D	402	PHO	CMD-C2D-C3D	2.03	128.47	124.68
25	c	512	CLA	O1D-CGD-CBD	2.03	128.63	124.48
25	a	612	CLA	CHD-C1D-C2D	2.03	129.73	125.48
25	c	505	CLA	CHA-C1A-NA	-2.02	121.76	126.40
25	B	607	CLA	C6-C7-C8	-2.02	109.38	115.92
25	a	609	CLA	CMD-C2D-C3D	2.02	132.27	127.61
33	c	524	LMG	C9-C8-C7	-2.02	107.00	111.79
25	a	607	CLA	C4-C3-C5	2.02	118.67	115.27
25	C	503	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
25	b	608	CLA	O1D-CGD-CBD	2.02	128.62	124.48
25	c	507	CLA	O2D-CGD-CBD	2.02	114.86	111.27
25	c	506	CLA	O2D-CGD-O1D	-2.02	119.89	123.84
33	C	515	LMG	C1-C2-C3	-2.02	105.79	110.00
30	c	517	DGD	CBB-CAB-C9B	-2.02	104.18	114.42
35	e	101	HEM	C4D-ND-C1D	2.02	107.16	105.07
32	b	623	LHG	C18-C17-C16	-2.02	104.18	114.42
25	b	610	CLA	C1B-CHB-C4A	-2.02	126.12	130.12
25	C	503	CLA	CHD-C1D-C2D	2.02	129.71	125.48
27	b	617	BCR	C38-C26-C25	-2.02	122.27	124.53
29	T	103	SQD	C9-C8-C7	-2.01	106.30	113.62
25	d	403	CLA	CBA-CAA-C2A	-2.01	107.92	113.86
30	C	518	DGD	O3E-C3E-C2E	-2.01	105.69	110.35
25	C	502	CLA	CHA-C4D-ND	2.01	136.71	132.50
27	B	616	BCR	C33-C5-C6	-2.01	122.27	124.53
33	M	101	LMG	C22-C21-C20	-2.01	104.22	114.42
25	C	507	CLA	CHD-C1D-ND	-2.01	122.61	124.45
31	E	102	STE	C3-C2-C1	-2.01	109.41	114.47
29	A	613	SQD	O47-C7-O49	-2.01	118.85	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	J	101	STE	O2-C1-C2	2.01	120.48	114.03
30	c	519	DGD	C7A-C6A-C5A	-2.01	104.23	114.42
28	a	611	PL9	C7-C8-C9	-2.01	123.45	126.79
27	B	618	BCR	C35-C13-C14	-2.01	120.11	122.92
33	b	622	LMG	C24-C23-C22	-2.00	104.25	114.42
25	C	501	CLA	CHD-C1D-C2D	2.00	129.69	125.48
33	c	524	LMG	O8-C28-O10	-2.00	118.54	123.59
25	C	511	CLA	C4-C3-C5	2.00	118.64	115.27
25	B	610	CLA	C2D-C1D-ND	-2.00	108.63	110.10
25	b	607	CLA	C3B-C4B-NB	-2.00	106.62	109.21
25	D	404	CLA	CHA-C1A-NA	-2.00	121.81	126.40

All (66) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
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	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	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	508	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	H	101	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	c	501	CLA	ND
25	c	502	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	401	CLA	ND
25	d	403	CLA	ND
25	d	404	CLA	ND
25	h	101	CLA	ND

All (1981) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
25	A	612	CLA	CHA-CBD-CGD-O1D
25	A	612	CLA	CHA-CBD-CGD-O2D
25	B	605	CLA	C12-C13-C15-C16
25	B	606	CLA	C4-C3-C5-C6
25	B	613	CLA	CAD-CBD-CGD-O1D
25	B	613	CLA	CAD-CBD-CGD-O2D
25	B	615	CLA	C2-C3-C5-C6
25	B	615	CLA	C4-C3-C5-C6
25	C	502	CLA	CHA-CBD-CGD-O1D
25	C	502	CLA	CHA-CBD-CGD-O2D
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	H	101	CLA	C1A-C2A-CAA-CBA
25	H	101	CLA	CAD-CBD-CGD-O1D
25	H	101	CLA	CAD-CBD-CGD-O2D
25	b	605	CLA	CHA-CBD-CGD-O1D
25	b	613	CLA	CAD-CBD-CGD-O1D
25	b	613	CLA	CAD-CBD-CGD-O2D
25	b	613	CLA	C2-C3-C5-C6
25	b	613	CLA	C4-C3-C5-C6
25	c	506	CLA	C2-C3-C5-C6
25	c	506	CLA	C4-C3-C5-C6
25	c	507	CLA	C2-C3-C5-C6
25	c	507	CLA	C4-C3-C5-C6
25	c	508	CLA	CHA-CBD-CGD-O1D
25	c	508	CLA	CHA-CBD-CGD-O2D
25	c	509	CLA	C6-C7-C8-C9
25	c	512	CLA	C2A-CAA-CBA-CGA
25	c	512	CLA	C6-C7-C8-C9
25	d	401	CLA	CHA-CBD-CGD-O1D
25	d	401	CLA	CHA-CBD-CGD-O2D
25	d	404	CLA	C6-C7-C8-C9
27	A	610	BCR	C20-C21-C22-C37
27	B	616	BCR	C1-C6-C7-C8
27	B	618	BCR	C11-C12-C13-C35
27	B	618	BCR	C37-C22-C23-C24
27	C	514	BCR	C7-C8-C9-C34
27	C	514	BCR	C11-C12-C13-C14
27	C	514	BCR	C11-C12-C13-C35
27	C	514	BCR	C23-C24-C25-C30
27	D	405	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
27	D	405	BCR	C23-C24-C25-C26
27	H	102	BCR	C23-C24-C25-C30
27	K	101	BCR	C1-C6-C7-C8
27	K	101	BCR	C18-C19-C20-C21
27	K	101	BCR	C20-C21-C22-C37
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	C11-C12-C13-C14
27	Y	101	BCR	C7-C8-C9-C34
27	Y	101	BCR	C20-C21-C22-C37
27	Y	101	BCR	C37-C22-C23-C24
27	Z	101	BCR	C7-C8-C9-C34
27	Z	101	BCR	C11-C12-C13-C14
27	b	616	BCR	C21-C22-C23-C24
27	b	617	BCR	C7-C8-C9-C34
27	b	618	BCR	C11-C12-C13-C35
27	b	618	BCR	C37-C22-C23-C24
27	c	515	BCR	C7-C8-C9-C10
27	c	515	BCR	C7-C8-C9-C34
27	d	405	BCR	C7-C8-C9-C34
27	d	405	BCR	C21-C22-C23-C24
27	d	405	BCR	C37-C22-C23-C24
27	k	101	BCR	C7-C8-C9-C10
27	k	101	BCR	C7-C8-C9-C34
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	C36-C18-C19-C20
27	x	101	BCR	C7-C8-C9-C34
28	A	611	PL9	C12-C11-C9-C8
28	A	611	PL9	C22-C23-C24-C26
28	A	611	PL9	C24-C26-C27-C28
28	A	611	PL9	C27-C28-C29-C30
28	A	611	PL9	C32-C33-C34-C36
28	A	611	PL9	C37-C38-C39-C41
28	D	406	PL9	C32-C33-C34-C35
28	D	406	PL9	C32-C33-C34-C36
28	D	406	PL9	C38-C39-C41-C42
28	a	611	PL9	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
28	a	611	PL9	C12-C13-C14-C16
28	a	611	PL9	C17-C18-C19-C20
28	a	611	PL9	C20-C19-C21-C22
28	a	611	PL9	C22-C23-C24-C25
28	a	611	PL9	C22-C23-C24-C26
28	a	611	PL9	C23-C24-C26-C27
28	a	611	PL9	C24-C26-C27-C28
28	a	611	PL9	C35-C34-C36-C37
28	a	611	PL9	C37-C38-C39-C40
28	a	611	PL9	C37-C38-C39-C41
28	a	611	PL9	C41-C42-C43-C44
28	a	611	PL9	C42-C43-C44-C45
28	a	611	PL9	C42-C43-C44-C46
28	a	611	PL9	C47-C48-C49-C50
28	a	611	PL9	C47-C48-C49-C51
28	d	406	PL9	C32-C33-C34-C36
28	d	406	PL9	C42-C43-C44-C46
29	B	621	SQD	C2-C1-O6-C44
29	B	621	SQD	O5-C1-O6-C44
29	B	621	SQD	O6-C44-C45-O47
29	B	621	SQD	O49-C7-O47-C45
29	B	621	SQD	C8-C7-O47-C45
29	D	408	SQD	C2-C1-O6-C44
29	a	613	SQD	O6-C44-C45-O47
29	a	614	SQD	O6-C44-C45-C46
29	a	614	SQD	O6-C44-C45-O47
29	a	614	SQD	O49-C7-O47-C45
29	b	619	SQD	C8-C7-O47-C45
29	f	101	SQD	C2-C1-O6-C44
29	f	101	SQD	O5-C1-O6-C44
30	A	614	DGD	O1B-C1B-O2G-C2G
30	A	614	DGD	O2G-C2G-C3G-O3G
32	B	620	LHG	C1-C2-C3-O3
32	B	620	LHG	C3-O3-P-O5
32	B	620	LHG	C3-O3-P-O6
32	D	409	LHG	O1-C1-C2-C3
32	D	409	LHG	C3-O3-P-O4
32	D	409	LHG	C3-O3-P-O5
32	D	409	LHG	C3-O3-P-O6
32	D	409	LHG	C4-O6-P-O4
32	D	409	LHG	C4-O6-P-O5
32	L	101	LHG	C3-O3-P-O4

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Mol	Chain	Res	Type	Atoms
32	L	101	LHG	C4-O6-P-O4
32	b	623	LHG	O1-C1-C2-C3
32	b	623	LHG	C1-C2-C3-O3
32	b	623	LHG	C3-O3-P-O5
32	b	623	LHG	C3-O3-P-O6
32	d	407	LHG	O1-C1-C2-C3
32	d	407	LHG	C1-C2-C3-O3
32	d	408	LHG	C4-O6-P-O4
32	e	102	LHG	C1-C2-C3-O3
32	e	102	LHG	C3-O3-P-O5
32	e	102	LHG	O6-C4-C5-O7
32	e	102	LHG	O10-C23-O8-C6
32	l	101	LHG	C3-O3-P-O4
32	l	101	LHG	C4-O6-P-O3
32	l	101	LHG	C4-O6-P-O4
32	l	101	LHG	C4-O6-P-O5
33	C	515	LMG	O6-C1-O1-C7
33	C	515	LMG	O1-C7-C8-O7
33	C	515	LMG	O9-C10-O7-C8
33	b	622	LMG	C11-C10-O7-C8
33	c	520	LMG	C11-C10-O7-C8
33	c	524	LMG	O6-C1-O1-C7
25	C	509	CLA	CBD-CGD-O2D-CED
25	b	615	CLA	CBD-CGD-O2D-CED
25	c	502	CLA	CBD-CGD-O2D-CED
26	d	402	PHO	CBD-CGD-O2D-CED
29	D	408	SQD	O10-C23-O48-C46
29	b	619	SQD	O10-C23-O48-C46
33	M	101	LMG	O10-C28-O8-C9
29	b	619	SQD	C24-C23-O48-C46
32	e	102	LHG	C24-C23-O8-C6
25	C	513	CLA	CBD-CGD-O2D-CED
25	c	512	CLA	CBD-CGD-O2D-CED
25	h	101	CLA	CBD-CGD-O2D-CED
29	f	101	SQD	O10-C23-O48-C46
32	E	101	LHG	O10-C23-O8-C6
33	c	522	LMG	O10-C28-O8-C9
33	c	524	LMG	O10-C28-O8-C9
33	c	520	LMG	O9-C10-O7-C8
26	d	402	PHO	O1D-CGD-O2D-CED
25	b	612	CLA	CBD-CGD-O2D-CED
25	c	510	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
25	c	511	CLA	CBD-CGD-O2D-CED
29	b	619	SQD	O49-C7-O47-C45
33	D	411	LMG	O9-C10-O7-C8
33	b	622	LMG	O9-C10-O7-C8
33	c	522	LMG	O9-C10-O7-C8
25	B	607	CLA	C3-C5-C6-C7
25	b	613	CLA	C3-C5-C6-C7
25	d	404	CLA	C3-C5-C6-C7
25	h	101	CLA	C3-C5-C6-C7
29	D	408	SQD	C24-C23-O48-C46
29	a	614	SQD	C8-C7-O47-C45
30	A	614	DGD	C2B-C1B-O2G-C2G
33	C	515	LMG	C11-C10-O7-C8
33	D	411	LMG	C11-C10-O7-C8
33	c	522	LMG	C11-C10-O7-C8
28	A	611	PL9	C45-C44-C46-C47
28	A	611	PL9	C38-C39-C41-C42
28	a	611	PL9	C33-C34-C36-C37
25	C	510	CLA	C3-C5-C6-C7
29	f	101	SQD	C24-C23-O48-C46
32	E	101	LHG	C24-C23-O8-C6
33	c	524	LMG	C29-C28-O8-C9
28	A	611	PL9	C37-C38-C39-C40
25	c	502	CLA	O1D-CGD-O2D-CED
28	A	611	PL9	C7-C8-C9-C11
28	A	611	PL9	C27-C28-C29-C31
29	B	621	SQD	C11-C10-C9-C8
25	b	607	CLA	C2C-C3C-CAC-CBC
25	B	612	CLA	CBD-CGD-O2D-CED
25	C	501	CLA	CBD-CGD-O2D-CED
25	C	510	CLA	CBD-CGD-O2D-CED
25	C	511	CLA	CBD-CGD-O2D-CED
25	b	605	CLA	CBD-CGD-O2D-CED
25	c	504	CLA	CBD-CGD-O2D-CED
25	c	513	CLA	CBD-CGD-O2D-CED
32	b	623	LHG	O2-C2-C3-O3
32	e	102	LHG	O2-C2-C3-O3
25	B	604	CLA	C3-C5-C6-C7
25	B	606	CLA	C3-C5-C6-C7
25	B	615	CLA	C3-C5-C6-C7
25	b	614	CLA	C3-C5-C6-C7
25	C	513	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
33	M	101	LMG	C29-C28-O8-C9
33	c	522	LMG	C29-C28-O8-C9
25	b	615	CLA	O1D-CGD-O2D-CED
32	d	408	LHG	C24-C25-C26-C27
33	C	515	LMG	O6-C5-C6-O5
25	c	501	CLA	CBD-CGD-O2D-CED
25	c	510	CLA	C3-C5-C6-C7
25	c	506	CLA	CBA-CGA-O2A-C1
30	c	519	DGD	O1A-C1A-O1G-C1G
28	D	406	PL9	C47-C48-C49-C50
28	d	406	PL9	C47-C48-C49-C51
25	A	609	CLA	C4-C3-C5-C6
28	A	611	PL9	C20-C19-C21-C22
28	A	611	PL9	C40-C39-C41-C42
25	A	609	CLA	C2-C3-C5-C6
25	B	606	CLA	C2-C3-C5-C6
28	A	611	PL9	C18-C19-C21-C22
28	a	611	PL9	C18-C19-C21-C22
25	B	605	CLA	C2A-CAA-CBA-CGA
25	b	605	CLA	C2A-CAA-CBA-CGA
25	C	509	CLA	O1D-CGD-O2D-CED
25	h	101	CLA	O1D-CGD-O2D-CED
25	C	513	CLA	O1A-CGA-O2A-C1
25	c	506	CLA	O1A-CGA-O2A-C1
28	A	611	PL9	C19-C21-C22-C23
28	A	611	PL9	C34-C36-C37-C38
28	A	611	PL9	C44-C46-C47-C48
28	a	611	PL9	C9-C11-C12-C13
28	a	611	PL9	C14-C16-C17-C18
28	a	611	PL9	C34-C36-C37-C38
29	B	621	SQD	C24-C23-O48-C46
33	c	520	LMG	O6-C5-C6-O5
33	M	101	LMG	O6-C5-C6-O5
33	c	524	LMG	C4-C5-C6-O5
31	b	621	STE	C11-C12-C13-C14
33	d	410	LMG	C10-C11-C12-C13
29	B	621	SQD	O10-C23-O48-C46
25	H	101	CLA	CBA-CGA-O2A-C1
25	b	606	CLA	CBA-CGA-O2A-C1
25	c	512	CLA	CBA-CGA-O2A-C1
25	c	511	CLA	C15-C16-C17-C18
31	x	102	STE	C1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
25	B	604	CLA	C13-C15-C16-C17
25	b	610	CLA	C8-C10-C11-C12
25	c	511	CLA	C13-C15-C16-C17
32	B	620	LHG	O2-C2-C3-O3
32	D	409	LHG	O2-C2-C3-O3
32	d	407	LHG	O2-C2-C3-O3
31	d	411	STE	C1-C2-C3-C4
33	c	524	LMG	C2-C1-O1-C7
25	A	607	CLA	C14-C13-C15-C16
25	B	602	CLA	C11-C12-C13-C14
25	B	606	CLA	C11-C12-C13-C14
25	B	613	CLA	C14-C13-C15-C16
25	C	502	CLA	C14-C13-C15-C16
25	C	503	CLA	C11-C10-C8-C9
25	C	509	CLA	C11-C10-C8-C9
25	C	512	CLA	C11-C10-C8-C9
25	H	101	CLA	C11-C12-C13-C14
25	b	601	CLA	C11-C10-C8-C9
25	b	606	CLA	C11-C10-C8-C9
25	b	606	CLA	C14-C13-C15-C16
25	b	613	CLA	C6-C7-C8-C9
25	b	614	CLA	C6-C7-C8-C9
25	b	615	CLA	C6-C7-C8-C9
25	c	504	CLA	C6-C7-C8-C9
25	c	511	CLA	C14-C13-C15-C16
25	h	101	CLA	C14-C13-C15-C16
25	c	512	CLA	O1D-CGD-O2D-CED
25	C	506	CLA	C13-C15-C16-C17
27	T	101	BCR	C37-C22-C23-C24
25	C	513	CLA	O1D-CGD-O2D-CED
33	C	519	LMG	C11-C10-O7-C8
30	H	103	DGD	C2B-C3B-C4B-C5B
32	d	408	LHG	C23-C24-C25-C26
33	b	620	LMG	C10-C11-C12-C13
25	b	606	CLA	C8-C10-C11-C12
25	c	512	CLA	C15-C16-C17-C18
25	a	612	CLA	CBD-CGD-O2D-CED
25	C	509	CLA	C10-C11-C12-C13
25	a	607	CLA	C15-C16-C17-C18
25	b	613	CLA	C13-C15-C16-C17
32	E	101	LHG	C7-C8-C9-C10
33	D	411	LMG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
33	c	520	LMG	C28-C29-C30-C31
33	d	410	LMG	C28-C29-C30-C31
25	A	612	CLA	C13-C15-C16-C17
25	C	503	CLA	C5-C6-C7-C8
25	C	509	CLA	C8-C10-C11-C12
25	C	512	CLA	C8-C10-C11-C12
25	b	610	CLA	C13-C15-C16-C17
33	M	101	LMG	C4-C5-C6-O5
28	A	611	PL9	C7-C8-C9-C10
29	B	621	SQD	C23-C24-C25-C26
29	b	619	SQD	C7-C8-C9-C10
29	f	101	SQD	C23-C24-C25-C26
30	a	615	DGD	C1A-C2A-C3A-C4A
30	c	517	DGD	C1A-C2A-C3A-C4A
31	B	619	STE	C1-C2-C3-C4
32	b	623	LHG	C23-C24-C25-C26
32	d	408	LHG	C7-C8-C9-C10
32	l	101	LHG	C23-C24-C25-C26
33	C	519	LMG	C28-C29-C30-C31
33	D	407	LMG	C10-C11-C12-C13
33	D	412	LMG	C28-C29-C30-C31
33	b	622	LMG	C28-C29-C30-C31
33	c	524	LMG	O6-C5-C6-O5
25	B	612	CLA	C5-C6-C7-C8
25	B	612	CLA	C8-C10-C11-C12
25	C	509	CLA	C5-C6-C7-C8
25	b	612	CLA	C10-C11-C12-C13
25	A	606	CLA	C2C-C3C-CAC-CBC
25	b	607	CLA	C4C-C3C-CAC-CBC
29	a	613	SQD	C11-C12-C13-C14
30	C	517	DGD	C8A-C9A-CAA-CBA
30	c	517	DGD	O6E-C5E-C6E-O5E
25	B	615	CLA	C2-C1-O2A-CGA
25	B	605	CLA	C13-C15-C16-C17
25	B	613	CLA	C5-C6-C7-C8
25	C	505	CLA	C5-C6-C7-C8
25	C	510	CLA	C15-C16-C17-C18
25	C	512	CLA	C10-C11-C12-C13
25	b	603	CLA	C15-C16-C17-C18
25	c	508	CLA	C13-C15-C16-C17
25	h	101	CLA	C8-C10-C11-C12
30	c	518	DGD	C1B-C2B-C3B-C4B

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Mol	Chain	Res	Type	Atoms
31	b	624	STE	C1-C2-C3-C4
25	B	615	CLA	C5-C6-C7-C8
25	c	506	CLA	C13-C15-C16-C17
25	A	607	CLA	C6-C7-C8-C10
25	B	607	CLA	C6-C7-C8-C10
25	C	506	CLA	C11-C12-C13-C15
25	C	508	CLA	C12-C13-C15-C16
25	C	512	CLA	C11-C10-C8-C7
25	a	612	CLA	C11-C12-C13-C15
25	a	612	CLA	C12-C13-C15-C16
25	b	602	CLA	C11-C10-C8-C7
25	b	614	CLA	C11-C12-C13-C15
25	c	505	CLA	C11-C10-C8-C7
33	M	101	LMG	C10-C11-C12-C13
25	b	612	CLA	O1D-CGD-O2D-CED
25	c	510	CLA	O1D-CGD-O2D-CED
25	c	511	CLA	O1D-CGD-O2D-CED
25	C	504	CLA	C8-C10-C11-C12
25	C	512	CLA	C13-C15-C16-C17
30	a	615	DGD	C2B-C3B-C4B-C5B
25	H	101	CLA	O1A-CGA-O2A-C1
25	b	606	CLA	O1A-CGA-O2A-C1
25	c	512	CLA	O1A-CGA-O2A-C1
26	a	608	PHO	CBD-CGD-O2D-CED
25	c	503	CLA	C5-C6-C7-C8
25	c	510	CLA	C10-C11-C12-C13
25	d	404	CLA	C10-C11-C12-C13
28	A	611	PL9	C9-C11-C12-C13
28	A	611	PL9	C29-C31-C32-C33
28	a	611	PL9	C39-C41-C42-C43
32	B	620	LHG	C7-C8-C9-C10
27	A	610	BCR	C18-C19-C20-C21
27	B	618	BCR	C10-C11-C12-C13
27	K	101	BCR	C10-C11-C12-C13
27	c	515	BCR	C18-C19-C20-C21
27	t	101	BCR	C18-C19-C20-C21
25	B	608	CLA	C15-C16-C17-C18
25	b	604	CLA	C5-C6-C7-C8
25	b	606	CLA	C5-C6-C7-C8
25	b	614	CLA	C10-C11-C12-C13
25	B	602	CLA	C8-C10-C11-C12
25	B	603	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
25	B	611	CLA	C13-C15-C16-C17
25	C	509	CLA	C13-C15-C16-C17
25	b	601	CLA	C10-C11-C12-C13
25	b	614	CLA	C15-C16-C17-C18
25	c	506	CLA	C8-C10-C11-C12
25	c	509	CLA	C10-C11-C12-C13
25	c	512	CLA	C13-C15-C16-C17
25	B	606	CLA	C8-C10-C11-C12
25	C	505	CLA	C10-C11-C12-C13
25	C	513	CLA	C13-C15-C16-C17
25	H	101	CLA	C5-C6-C7-C8
25	b	613	CLA	C5-C6-C7-C8
25	b	613	CLA	C8-C10-C11-C12
32	D	409	LHG	C4-O6-P-O3
32	D	410	LHG	C3-O3-P-O6
33	c	522	LMG	C10-C11-C12-C13
25	b	603	CLA	C3-C5-C6-C7
30	c	519	DGD	C2A-C1A-O1G-C1G
25	A	607	CLA	C15-C16-C17-C18
25	c	511	CLA	C16-C17-C18-C20
25	b	612	CLA	C8-C10-C11-C12
25	d	401	CLA	C8-C10-C11-C12
27	d	405	BCR	C14-C15-C16-C17
25	b	606	CLA	C10-C11-C12-C13
25	b	614	CLA	C13-C15-C16-C17
30	H	103	DGD	C9B-CAB-CBB-CCB
30	c	517	DGD	C8B-C9B-CAB-CBB
31	M	102	STE	C3-C4-C5-C6
31	b	625	STE	C12-C13-C14-C15
32	b	623	LHG	C18-C19-C20-C21
33	M	101	LMG	C18-C19-C20-C21
33	c	524	LMG	C18-C19-C20-C21
25	a	609	CLA	C5-C6-C7-C8
25	b	615	CLA	C10-C11-C12-C13
27	B	618	BCR	C16-C17-C18-C36
27	D	405	BCR	C20-C21-C22-C37
27	H	102	BCR	C20-C21-C22-C37
27	T	101	BCR	C35-C13-C14-C15
27	Y	101	BCR	C16-C17-C18-C36
27	b	616	BCR	C20-C21-C22-C37
27	b	618	BCR	C16-C17-C18-C36
27	b	618	BCR	C20-C21-C22-C37

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Mol	Chain	Res	Type	Atoms
27	c	514	BCR	C16-C17-C18-C36
27	c	515	BCR	C16-C17-C18-C36
27	c	516	BCR	C20-C21-C22-C37
27	d	405	BCR	C16-C17-C18-C36
27	k	101	BCR	C20-C21-C22-C37
30	C	518	DGD	C9A-CAA-CBA-CCA
30	c	517	DGD	CAA-CBA-CCA-CDA
31	D	413	STE	C5-C6-C7-C8
31	I	101	STE	C10-C11-C12-C13
31	T	102	STE	C7-C8-C9-C10
31	b	621	STE	C14-C15-C16-C17
31	l	102	STE	C3-C4-C5-C6
31	l	102	STE	C14-C15-C16-C17
31	x	102	STE	C5-C6-C7-C8
32	D	410	LHG	C30-C31-C32-C33
32	L	101	LHG	C27-C28-C29-C30
33	C	519	LMG	C18-C19-C20-C21
33	D	412	LMG	C30-C31-C32-C33
33	c	522	LMG	C30-C31-C32-C33
33	c	522	LMG	C36-C37-C38-C39
25	B	603	CLA	C16-C17-C18-C19
25	B	605	CLA	C16-C17-C18-C19
25	c	512	CLA	C16-C17-C18-C20
25	d	403	CLA	C16-C17-C18-C20
29	B	621	SQD	C13-C14-C15-C16
30	A	614	DGD	C2A-C3A-C4A-C5A
30	A	614	DGD	C8B-C9B-CAB-CBB
30	C	518	DGD	C6A-C7A-C8A-C9A
30	a	615	DGD	C4A-C5A-C6A-C7A
30	a	615	DGD	C8A-C9A-CAA-CBA
31	c	521	STE	C9-C10-C11-C12
31	t	102	STE	C11-C10-C9-C8
33	b	620	LMG	C30-C31-C32-C33
33	c	524	LMG	C15-C16-C17-C18
29	b	619	SQD	C46-C45-O47-C7
25	C	510	CLA	O1D-CGD-O2D-CED
30	a	615	DGD	O1B-C1B-O2G-C2G
32	e	102	LHG	O9-C7-O7-C5
25	h	101	CLA	C13-C15-C16-C17
29	D	408	SQD	C30-C31-C32-C33
29	f	101	SQD	C32-C33-C34-C35
30	A	614	DGD	CCB-CDB-CEB-CFB

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Mol	Chain	Res	Type	Atoms
30	a	615	DGD	CBB-CCB-CDB-CEB
31	B	622	STE	C2-C3-C4-C5
32	D	410	LHG	C34-C35-C36-C37
32	l	101	LHG	C15-C16-C17-C18
33	C	515	LMG	C29-C30-C31-C32
33	c	524	LMG	C32-C33-C34-C35
33	d	409	LMG	C33-C34-C35-C36
29	A	613	SQD	C11-C10-C9-C8
29	A	613	SQD	C12-C13-C14-C15
29	a	613	SQD	C29-C30-C31-C32
29	b	619	SQD	C29-C30-C31-C32
29	f	101	SQD	C28-C29-C30-C31
29	f	101	SQD	C30-C31-C32-C33
30	C	518	DGD	CAA-CBA-CCA-CDA
30	c	517	DGD	C7A-C8A-C9A-CAA
30	c	519	DGD	C8B-C9B-CAB-CBB
31	B	622	STE	C3-C4-C5-C6
31	I	101	STE	C2-C3-C4-C5
31	I	101	STE	C9-C10-C11-C12
31	M	102	STE	C6-C7-C8-C9
31	M	102	STE	C7-C8-C9-C10
32	d	408	LHG	C32-C33-C34-C35
33	M	101	LMG	C32-C33-C34-C35
33	M	101	LMG	C33-C34-C35-C36
33	b	620	LMG	C17-C18-C19-C20
33	c	522	LMG	C16-C17-C18-C19
33	d	410	LMG	C32-C33-C34-C35
33	d	410	LMG	C33-C34-C35-C36
25	c	504	CLA	O1D-CGD-O2D-CED
32	D	410	LHG	O2-C2-C3-O3
30	c	517	DGD	CBB-CCB-CDB-CEB
30	c	518	DGD	CAB-CBB-CCB-CDB
31	D	413	STE	C11-C12-C13-C14
31	b	621	STE	C10-C11-C12-C13
33	b	620	LMG	C18-C19-C20-C21
33	c	522	LMG	C33-C34-C35-C36
25	b	601	CLA	C3-C5-C6-C7
25	c	507	CLA	C3-C5-C6-C7
29	A	613	SQD	C7-C8-C9-C10
30	A	614	DGD	C1A-C2A-C3A-C4A
27	A	610	BCR	C20-C21-C22-C23
27	B	617	BCR	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
27	B	618	BCR	C12-C13-C14-C15
27	B	618	BCR	C16-C17-C18-C19
27	Z	101	BCR	C11-C10-C9-C8
27	b	618	BCR	C16-C17-C18-C19
27	k	101	BCR	C20-C21-C22-C23
27	x	101	BCR	C11-C10-C9-C8
30	C	517	DGD	C2E-C1E-O5D-C6D
30	c	518	DGD	C2E-C1E-O5D-C6D
33	C	515	LMG	C2-C1-O1-C7
29	a	613	SQD	C30-C31-C32-C33
30	c	519	DGD	C3A-C4A-C5A-C6A
30	c	519	DGD	CCA-CDA-CEA-CFA
30	c	519	DGD	C4B-C5B-C6B-C7B
30	h	102	DGD	C9A-CAA-CBA-CCA
30	h	102	DGD	CAB-CBB-CCB-CDB
31	b	625	STE	C10-C11-C12-C13
33	D	407	LMG	C12-C13-C14-C15
33	M	101	LMG	C36-C37-C38-C39
33	c	524	LMG	C31-C32-C33-C34
33	c	524	LMG	C38-C39-C40-C41
25	B	604	CLA	C16-C17-C18-C20
25	C	510	CLA	C16-C17-C18-C19
28	A	611	PL9	C22-C23-C24-C25
30	H	103	DGD	C3B-C4B-C5B-C6B
30	c	517	DGD	C3A-C4A-C5A-C6A
31	b	624	STE	C3-C4-C5-C6
31	x	102	STE	C3-C4-C5-C6
32	l	101	LHG	C17-C18-C19-C20
33	C	519	LMG	C32-C33-C34-C35
33	D	412	LMG	C36-C37-C38-C39
33	d	409	LMG	C32-C33-C34-C35
25	A	606	CLA	C11-C10-C8-C9
25	A	606	CLA	C14-C13-C15-C16
25	B	603	CLA	C11-C10-C8-C9
25	B	605	CLA	C14-C13-C15-C16
25	C	505	CLA	C11-C10-C8-C9
25	C	505	CLA	C14-C13-C15-C16
25	b	602	CLA	C11-C10-C8-C9
25	b	604	CLA	C11-C12-C13-C14
25	c	503	CLA	C11-C12-C13-C14
25	c	507	CLA	C14-C13-C15-C16
25	c	512	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
25	d	403	CLA	C6-C7-C8-C9
29	T	103	SQD	C13-C14-C15-C16
29	a	613	SQD	C34-C35-C36-C37
29	a	614	SQD	C10-C11-C12-C13
30	C	517	DGD	C6B-C7B-C8B-C9B
30	c	517	DGD	C6B-C7B-C8B-C9B
30	h	102	DGD	CCA-CDA-CEA-CFA
30	h	102	DGD	C2B-C3B-C4B-C5B
31	E	102	STE	C5-C6-C7-C8
31	H	104	STE	C14-C15-C16-C17
31	I	101	STE	C7-C8-C9-C10
31	b	624	STE	C5-C6-C7-C8
31	b	626	STE	C5-C6-C7-C8
31	d	411	STE	C5-C6-C7-C8
31	x	102	STE	C7-C8-C9-C10
32	D	409	LHG	C11-C12-C13-C14
32	L	101	LHG	C11-C12-C13-C14
32	L	101	LHG	C12-C13-C14-C15
32	L	101	LHG	C32-C33-C34-C35
32	L	101	LHG	C33-C34-C35-C36
32	b	623	LHG	C16-C17-C18-C19
32	d	407	LHG	C10-C11-C12-C13
33	C	519	LMG	C31-C32-C33-C34
33	c	522	LMG	C15-C16-C17-C18
33	c	522	LMG	C31-C32-C33-C34
33	d	409	LMG	C38-C39-C40-C41
30	C	518	DGD	C4A-C5A-C6A-C7A
30	H	103	DGD	C5B-C6B-C7B-C8B
31	B	619	STE	C7-C8-C9-C10
31	M	104	STE	C7-C8-C9-C10
31	d	411	STE	C9-C10-C11-C12
32	e	102	LHG	C24-C25-C26-C27
33	D	407	LMG	C15-C16-C17-C18
33	D	412	LMG	C31-C32-C33-C34
33	c	520	LMG	C36-C37-C38-C39
32	d	408	LHG	O1-C1-C2-C3
25	C	512	CLA	C3-C5-C6-C7
25	D	404	CLA	C10-C11-C12-C13
30	c	519	DGD	CBA-CCA-CDA-CEA
31	D	413	STE	C4-C5-C6-C7
31	H	104	STE	C4-C5-C6-C7
31	c	521	STE	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
33	c	522	LMG	C39-C40-C41-C42
33	d	409	LMG	C31-C32-C33-C34
29	D	408	SQD	C25-C26-C27-C28
29	a	613	SQD	C13-C14-C15-C16
29	b	619	SQD	C13-C14-C15-C16
30	c	517	DGD	C2A-C3A-C4A-C5A
30	c	517	DGD	C8A-C9A-CAA-CBA
31	C	522	STE	C4-C5-C6-C7
31	M	103	STE	C4-C5-C6-C7
31	c	521	STE	C6-C7-C8-C9
31	d	411	STE	C10-C11-C12-C13
31	d	411	STE	C11-C12-C13-C14
32	D	409	LHG	C10-C11-C12-C13
32	D	410	LHG	C11-C12-C13-C14
32	L	101	LHG	C17-C18-C19-C20
32	d	408	LHG	C27-C28-C29-C30
32	l	101	LHG	C11-C12-C13-C14
33	M	101	LMG	C21-C22-C23-C24
33	b	620	LMG	C34-C35-C36-C37
33	b	622	LMG	C16-C17-C18-C19
33	c	524	LMG	C39-C40-C41-C42
33	d	409	LMG	C36-C37-C38-C39
25	A	612	CLA	C16-C17-C18-C20
25	B	608	CLA	C16-C17-C18-C19
25	B	608	CLA	C16-C17-C18-C20
25	b	601	CLA	C16-C17-C18-C19
25	b	601	CLA	C16-C17-C18-C20
25	b	606	CLA	C16-C17-C18-C19
25	b	606	CLA	C16-C17-C18-C20
25	c	512	CLA	C16-C17-C18-C19
30	C	517	DGD	O6E-C1E-O5D-C6D
30	c	518	DGD	O6E-C1E-O5D-C6D
30	C	517	DGD	C7B-C8B-C9B-CAB
30	c	519	DGD	C9A-CAA-CBA-CCA
31	H	104	STE	C10-C11-C12-C13
31	T	102	STE	C6-C7-C8-C9
32	D	410	LHG	C24-C25-C26-C27
32	l	101	LHG	C24-C25-C26-C27
32	l	101	LHG	C28-C29-C30-C31
33	M	101	LMG	C20-C21-C22-C23
33	b	622	LMG	C40-C41-C42-C43
29	D	408	SQD	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
29	a	613	SQD	C24-C25-C26-C27
30	A	614	DGD	CEA-CFA-CGA-CHA
30	C	518	DGD	C5A-C6A-C7A-C8A
30	C	518	DGD	CBA-CCA-CDA-CEA
30	a	615	DGD	CBA-CCA-CDA-CEA
31	t	103	STE	C2-C3-C4-C5
32	b	623	LHG	C32-C33-C34-C35
32	d	407	LHG	C29-C30-C31-C32
33	D	407	LMG	C17-C18-C19-C20
33	b	622	LMG	C17-C18-C19-C20
29	A	613	SQD	C16-C17-C18-C19
32	B	620	LHG	C27-C28-C29-C30
32	D	409	LHG	C33-C34-C35-C36
32	e	102	LHG	C11-C10-C9-C8
33	C	515	LMG	C35-C36-C37-C38
33	D	407	LMG	C39-C40-C41-C42
33	C	519	LMG	C29-C28-O8-C9
32	D	409	LHG	C30-C31-C32-C33
25	B	612	CLA	O1D-CGD-O2D-CED
25	C	511	CLA	O1D-CGD-O2D-CED
25	c	512	CLA	C3A-C2A-CAA-CBA
26	d	402	PHO	C3A-C2A-CAA-CBA
25	B	609	CLA	C13-C15-C16-C17
29	A	613	SQD	C14-C15-C16-C17
30	C	516	DGD	C2A-C3A-C4A-C5A
30	C	517	DGD	C9A-CAA-CBA-CCA
31	B	625	STE	C5-C6-C7-C8
32	D	409	LHG	C14-C15-C16-C17
32	d	407	LHG	C33-C34-C35-C36
33	D	412	LMG	C29-C30-C31-C32
30	C	518	DGD	C1A-C2A-C3A-C4A
25	B	603	CLA	C16-C17-C18-C20
25	B	605	CLA	C16-C17-C18-C20
29	B	621	SQD	C9-C10-C11-C12
29	a	614	SQD	C14-C15-C16-C17
30	C	518	DGD	C3A-C4A-C5A-C6A
31	j	101	STE	C2-C3-C4-C5
33	c	524	LMG	C36-C37-C38-C39
33	D	411	LMG	C7-C8-C9-O8
30	c	517	DGD	C4B-C5B-C6B-C7B
31	C	520	STE	C6-C7-C8-C9
31	T	102	STE	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
29	a	613	SQD	C28-C29-C30-C31
31	M	104	STE	C14-C15-C16-C17
31	x	102	STE	C4-C5-C6-C7
33	d	409	LMG	C35-C36-C37-C38
30	a	615	DGD	C2A-C1A-O1G-C1G
28	a	611	PL9	C38-C39-C41-C42
29	T	103	SQD	C8-C7-O47-C45
31	B	623	STE	C5-C6-C7-C8
32	E	101	LHG	C24-C25-C26-C27
32	L	101	LHG	C9-C10-C11-C12
33	c	520	LMG	C35-C36-C37-C38
32	D	409	LHG	O1-C1-C2-O2
32	b	623	LHG	O1-C1-C2-O2
32	d	407	LHG	O1-C1-C2-O2
25	C	513	CLA	C10-C11-C12-C13
29	b	619	SQD	C16-C17-C18-C19
30	C	517	DGD	C6A-C7A-C8A-C9A
30	H	103	DGD	C6A-C7A-C8A-C9A
30	H	103	DGD	CBA-CCA-CDA-CEA
30	h	102	DGD	C3A-C4A-C5A-C6A
31	D	413	STE	C6-C7-C8-C9
32	L	101	LHG	C16-C17-C18-C19
32	d	407	LHG	C11-C12-C13-C14
33	b	622	LMG	C12-C13-C14-C15
33	b	622	LMG	C31-C32-C33-C34
33	c	524	LMG	C30-C31-C32-C33
32	D	410	LHG	O10-C23-O8-C6
25	B	611	CLA	C16-C17-C18-C20
25	H	101	CLA	C16-C17-C18-C20
25	b	605	CLA	C10-C11-C12-C13
30	c	519	DGD	CCB-CDB-CEB-CFB
29	D	408	SQD	C28-C29-C30-C31
29	a	614	SQD	C24-C25-C26-C27
31	D	413	STE	C9-C10-C11-C12
31	x	102	STE	C11-C10-C9-C8
32	E	101	LHG	C27-C28-C29-C30
29	B	621	SQD	C17-C18-C19-C20
30	C	517	DGD	C4B-C5B-C6B-C7B
31	b	621	STE	C3-C4-C5-C6
32	l	101	LHG	C9-C10-C11-C12
32	l	101	LHG	C34-C35-C36-C37
33	d	409	LMG	C39-C40-C41-C42

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Mol	Chain	Res	Type	Atoms
29	T	103	SQD	O49-C7-O47-C45
25	b	615	CLA	C2-C1-O2A-CGA
25	c	506	CLA	C2-C1-O2A-CGA
28	A	611	PL9	C42-C43-C44-C46
29	A	613	SQD	C34-C35-C36-C37
29	B	621	SQD	C11-C12-C13-C14
30	A	614	DGD	CCA-CDA-CEA-CFA
30	C	516	DGD	C2B-C3B-C4B-C5B
31	b	626	STE	C6-C7-C8-C9
33	C	519	LMG	C16-C17-C18-C19
33	c	522	LMG	C34-C35-C36-C37
29	a	613	SQD	C26-C27-C28-C29
29	f	101	SQD	C25-C26-C27-C28
30	c	517	DGD	CAB-CBB-CCB-CDB
31	B	623	STE	C6-C7-C8-C9
32	B	620	LHG	C29-C30-C31-C32
33	D	411	LMG	C34-C35-C36-C37
33	c	524	LMG	C12-C13-C14-C15
25	c	506	CLA	C16-C17-C18-C20
32	E	101	LHG	C23-C24-C25-C26
27	B	616	BCR	C5-C6-C7-C8
27	D	405	BCR	C23-C24-C25-C30
27	H	102	BCR	C23-C24-C25-C26
27	K	101	BCR	C5-C6-C7-C8
27	Y	101	BCR	C1-C6-C7-C8
27	Y	101	BCR	C5-C6-C7-C8
27	k	101	BCR	C1-C6-C7-C8
27	k	101	BCR	C5-C6-C7-C8
32	D	410	LHG	C9-C10-C11-C12
33	c	524	LMG	C11-C12-C13-C14
25	B	606	CLA	C15-C16-C17-C18
25	a	609	CLA	C10-C11-C12-C13
25	b	610	CLA	C15-C16-C17-C18
25	c	506	CLA	C5-C6-C7-C8
25	c	510	CLA	C5-C6-C7-C8
32	e	102	LHG	C8-C7-O7-C5
29	b	619	SQD	C10-C11-C12-C13
30	H	103	DGD	C4B-C5B-C6B-C7B
32	E	101	LHG	C16-C17-C18-C19
33	C	519	LMG	C15-C16-C17-C18
25	b	606	CLA	CBD-CGD-O2D-CED
32	B	620	LHG	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
30	A	614	DGD	C2B-C3B-C4B-C5B
32	D	410	LHG	C32-C33-C34-C35
32	b	623	LHG	C14-C15-C16-C17
25	A	607	CLA	C8-C10-C11-C12
25	c	513	CLA	O1D-CGD-O2D-CED
30	H	103	DGD	C5A-C6A-C7A-C8A
31	b	624	STE	C6-C7-C8-C9
31	t	102	STE	C4-C5-C6-C7
32	d	407	LHG	C32-C33-C34-C35
25	B	602	CLA	C4-C3-C5-C6
25	C	505	CLA	C4-C3-C5-C6
28	a	611	PL9	C25-C24-C26-C27
25	A	606	CLA	C11-C10-C8-C7
25	A	606	CLA	C12-C13-C15-C16
25	B	601	CLA	C11-C12-C13-C15
25	B	603	CLA	C11-C10-C8-C7
25	C	505	CLA	C2-C3-C5-C6
25	b	601	CLA	C6-C7-C8-C10
25	b	601	CLA	C11-C10-C8-C7
25	b	604	CLA	C11-C12-C13-C15
25	b	606	CLA	C11-C10-C8-C7
25	b	612	CLA	C12-C13-C15-C16
25	c	512	CLA	C11-C12-C13-C15
25	d	403	CLA	C6-C7-C8-C10
25	d	404	CLA	C11-C12-C13-C15
31	H	104	STE	C12-C13-C14-C15
32	b	623	LHG	C27-C28-C29-C30
32	d	408	LHG	C26-C27-C28-C29
32	l	101	LHG	C26-C27-C28-C29
33	c	520	LMG	C37-C38-C39-C40
25	b	603	CLA	C10-C11-C12-C13
25	d	403	CLA	C16-C17-C18-C19
32	b	623	LHG	C7-C8-C9-C10
32	l	101	LHG	C7-C8-C9-C10
30	c	517	DGD	CCB-CDB-CEB-CFB
31	B	619	STE	C6-C7-C8-C9
31	b	624	STE	C11-C10-C9-C8
32	E	101	LHG	C32-C33-C34-C35
25	B	606	CLA	C10-C11-C12-C13
25	c	503	CLA	C13-C15-C16-C17
25	c	512	CLA	C8-C10-C11-C12
30	c	518	DGD	CCB-CDB-CEB-CFB

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Mol	Chain	Res	Type	Atoms
30	c	519	DGD	C5B-C6B-C7B-C8B
31	T	102	STE	C12-C13-C14-C15
28	A	611	PL9	C47-C48-C49-C51
30	A	614	DGD	CBA-CCA-CDA-CEA
30	C	516	DGD	C5A-C6A-C7A-C8A
29	B	621	SQD	C19-C20-C21-C22
29	D	408	SQD	C34-C35-C36-C37
30	C	518	DGD	CCB-CDB-CEB-CFB
31	H	104	STE	C5-C6-C7-C8
31	l	102	STE	C12-C13-C14-C15
31	m	101	STE	C5-C6-C7-C8
29	b	619	SQD	C18-C19-C20-C21
32	D	409	LHG	C25-C26-C27-C28
32	E	101	LHG	C11-C10-C9-C8
32	L	101	LHG	C30-C31-C32-C33
33	C	519	LMG	C30-C31-C32-C33
25	C	513	CLA	C16-C17-C18-C19
30	c	518	DGD	O6D-C1D-O3G-C3G
33	C	519	LMG	O6-C1-O1-C7
33	M	101	LMG	O6-C1-O1-C7
33	c	520	LMG	O6-C1-O1-C7
25	A	612	CLA	C15-C16-C17-C18
25	b	601	CLA	C5-C6-C7-C8
25	c	503	CLA	C15-C16-C17-C18
30	A	614	DGD	C1B-C2B-C3B-C4B
32	E	101	LHG	C8-C7-O7-C5
27	A	610	BCR	C10-C11-C12-C13
27	c	514	BCR	C18-C19-C20-C21
32	b	623	LHG	C15-C16-C17-C18
33	c	520	LMG	C38-C39-C40-C41
25	B	605	CLA	CBD-CGD-O2D-CED
33	c	524	LMG	C37-C38-C39-C40
31	T	102	STE	C9-C10-C11-C12
31	b	621	STE	C6-C7-C8-C9
31	b	624	STE	C9-C10-C11-C12
32	b	623	LHG	C10-C11-C12-C13
33	M	101	LMG	C31-C32-C33-C34
33	b	622	LMG	C13-C14-C15-C16
33	d	409	LMG	C34-C35-C36-C37
33	C	519	LMG	C2-C1-O1-C7
25	B	602	CLA	C15-C16-C17-C18
29	A	613	SQD	O6-C44-C45-O47

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Mol	Chain	Res	Type	Atoms
30	C	516	DGD	C3B-C4B-C5B-C6B
30	C	517	DGD	C5A-C6A-C7A-C8A
31	B	622	STE	C4-C5-C6-C7
31	B	623	STE	C4-C5-C6-C7
33	C	515	LMG	C33-C34-C35-C36
25	c	511	CLA	C16-C17-C18-C19
29	B	621	SQD	C15-C16-C17-C18
29	a	613	SQD	C27-C28-C29-C30
31	C	521	STE	C5-C6-C7-C8
31	C	522	STE	C11-C10-C9-C8
31	b	621	STE	C5-C6-C7-C8
25	C	505	CLA	C15-C16-C17-C18
25	b	605	CLA	O1D-CGD-O2D-CED
25	b	610	CLA	C4-C3-C5-C6
28	d	406	PL9	C15-C14-C16-C17
28	d	406	PL9	C30-C29-C31-C32
25	B	602	CLA	C2-C3-C5-C6
25	B	604	CLA	C2-C3-C5-C6
25	b	610	CLA	C2-C3-C5-C6
28	d	406	PL9	C28-C29-C31-C32
31	C	521	STE	C4-C5-C6-C7
31	b	625	STE	C5-C6-C7-C8
33	D	407	LMG	C31-C32-C33-C34
25	A	607	CLA	C6-C7-C8-C9
25	B	601	CLA	C11-C12-C13-C14
25	B	607	CLA	C6-C7-C8-C9
25	C	506	CLA	C6-C7-C8-C9
25	C	506	CLA	C11-C12-C13-C14
25	a	612	CLA	C11-C12-C13-C14
25	b	601	CLA	C6-C7-C8-C9
25	b	608	CLA	C6-C7-C8-C9
25	b	612	CLA	C6-C7-C8-C9
25	b	612	CLA	C14-C13-C15-C16
25	b	614	CLA	C11-C12-C13-C14
25	c	506	CLA	C11-C12-C13-C14
33	b	622	LMG	O6-C5-C6-O5
32	B	620	LHG	C11-C12-C13-C14
25	h	101	CLA	C2A-CAA-CBA-CGA
29	A	613	SQD	C11-C12-C13-C14
29	b	619	SQD	C25-C26-C27-C28
30	c	518	DGD	C7A-C8A-C9A-CAA
33	C	519	LMG	C38-C39-C40-C41

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Mol	Chain	Res	Type	Atoms
27	Z	101	BCR	C11-C12-C13-C35
31	B	624	STE	C2-C3-C4-C5
25	C	503	CLA	C1A-C2A-CAA-CBA
25	C	513	CLA	C1A-C2A-CAA-CBA
25	c	508	CLA	C1A-C2A-CAA-CBA
25	c	512	CLA	C1A-C2A-CAA-CBA
25	c	513	CLA	C1A-C2A-CAA-CBA
25	C	513	CLA	C16-C17-C18-C20
25	D	404	CLA	C16-C17-C18-C19
25	h	101	CLA	C16-C17-C18-C20
33	C	519	LMG	O9-C10-O7-C8
29	B	621	SQD	C32-C33-C34-C35
29	T	103	SQD	C18-C19-C20-C21
30	a	615	DGD	CCB-CDB-CEB-CFB
25	b	602	CLA	C10-C11-C12-C13
32	L	101	LHG	C3-O3-P-O6
32	e	102	LHG	C3-O3-P-O6
31	J	101	STE	C6-C7-C8-C9
30	H	103	DGD	C1A-C2A-C3A-C4A
31	J	101	STE	C1-C2-C3-C4
28	A	611	PL9	C47-C48-C49-C50
28	d	406	PL9	C47-C48-C49-C50
31	d	411	STE	C4-C5-C6-C7
25	b	612	CLA	C13-C15-C16-C17
29	a	613	SQD	C17-C18-C19-C20
31	C	520	STE	C3-C4-C5-C6
30	c	517	DGD	C2B-C3B-C4B-C5B
33	b	622	LMG	C38-C39-C40-C41
25	B	604	CLA	C16-C17-C18-C19
25	C	510	CLA	C16-C17-C18-C20
25	b	611	CLA	C16-C17-C18-C20
25	c	503	CLA	C16-C17-C18-C20
29	a	614	SQD	C17-C18-C19-C20
32	l	101	LHG	C14-C15-C16-C17
29	b	619	SQD	C9-C10-C11-C12
31	b	621	STE	C11-C10-C9-C8
33	D	407	LMG	C30-C31-C32-C33
25	D	403	CLA	C3-C5-C6-C7
29	T	103	SQD	C9-C10-C11-C12
32	E	101	LHG	C30-C31-C32-C33
33	C	515	LMG	C38-C39-C40-C41
33	D	411	LMG	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
33	c	522	LMG	C13-C14-C15-C16
25	c	513	CLA	C10-C11-C12-C13
31	x	102	STE	C9-C10-C11-C12
33	b	620	LMG	C12-C13-C14-C15
29	A	613	SQD	C8-C7-O47-C45
30	a	615	DGD	O1A-C1A-O1G-C1G
29	b	619	SQD	C12-C13-C14-C15
30	A	614	DGD	C5B-C6B-C7B-C8B
30	h	102	DGD	C6B-C7B-C8B-C9B
31	B	623	STE	C12-C13-C14-C15
31	B	625	STE	C11-C10-C9-C8
31	b	626	STE	C7-C8-C9-C10
25	B	601	CLA	C15-C16-C17-C18
25	c	501	CLA	C2A-CAA-CBA-CGA
25	a	612	CLA	C16-C17-C18-C19
29	B	621	SQD	O6-C44-C45-C46
30	A	614	DGD	O1G-C1G-C2G-C3G
31	T	102	STE	C3-C4-C5-C6
32	E	101	LHG	C4-C5-C6-O8
32	E	101	LHG	C25-C26-C27-C28
33	C	515	LMG	O1-C7-C8-C9
33	C	519	LMG	O1-C7-C8-C9
33	b	622	LMG	C11-C12-C13-C14
33	c	522	LMG	C7-C8-C9-O8
33	c	524	LMG	C7-C8-C9-O8
25	c	503	CLA	CBA-CGA-O2A-C1
25	b	614	CLA	C8-C10-C11-C12
29	f	101	SQD	C33-C34-C35-C36
31	l	102	STE	C15-C16-C17-C18
31	x	102	STE	C2-C3-C4-C5
33	c	520	LMG	C30-C31-C32-C33
30	C	517	DGD	C2G-C3G-O3G-C1D
30	C	517	DGD	C5D-C6D-O5D-C1E
30	c	518	DGD	C5D-C6D-O5D-C1E
25	C	501	CLA	O1D-CGD-O2D-CED
25	A	606	CLA	C4C-C3C-CAC-CBC
30	C	516	DGD	C6B-C7B-C8B-C9B
30	c	517	DGD	C9B-CAB-CBB-CCB
32	B	620	LHG	C28-C29-C30-C31
30	h	102	DGD	O6E-C5E-C6E-O5E
30	a	615	DGD	CFB-CGB-CHB-CIB
31	B	624	STE	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
32	D	409	LHG	C35-C36-C37-C38
29	B	621	SQD	C7-C8-C9-C10
30	H	103	DGD	C7A-C8A-C9A-CAA
33	D	411	LMG	C36-C37-C38-C39
31	d	411	STE	C12-C13-C14-C15
33	C	515	LMG	C16-C17-C18-C19
30	C	516	DGD	O6E-C5E-C6E-O5E
33	d	410	LMG	O6-C5-C6-O5
30	a	615	DGD	C2A-C3A-C4A-C5A
33	D	407	LMG	C35-C36-C37-C38
33	D	407	LMG	C37-C38-C39-C40
33	D	412	LMG	C37-C38-C39-C40
29	A	613	SQD	C17-C18-C19-C20
29	a	614	SQD	C31-C32-C33-C34
31	b	624	STE	C7-C8-C9-C10
25	c	510	CLA	C8-C10-C11-C12
27	Z	101	BCR	C16-C17-C18-C36
33	D	407	LMG	O6-C5-C6-O5
32	b	623	LHG	C31-C32-C33-C34
25	C	510	CLA	C2-C3-C5-C6
25	H	101	CLA	C16-C17-C18-C19
25	b	611	CLA	C16-C17-C18-C19
25	C	505	CLA	CBA-CGA-O2A-C1
30	A	614	DGD	CFA-CGA-CHA-CIA
32	E	101	LHG	C17-C18-C19-C20
33	C	515	LMG	C36-C37-C38-C39
33	c	524	LMG	C14-C15-C16-C17
31	b	625	STE	C11-C10-C9-C8
32	e	102	LHG	C12-C13-C14-C15
33	M	101	LMG	C38-C39-C40-C41
33	D	411	LMG	C9-C8-O7-C10
25	C	505	CLA	O1A-CGA-O2A-C1
31	b	624	STE	C4-C5-C6-C7
32	L	101	LHG	C10-C11-C12-C13
33	C	515	LMG	C12-C13-C14-C15
26	a	608	PHO	O1D-CGD-O2D-CED
25	B	612	CLA	C15-C16-C17-C18
33	b	620	LMG	C29-C28-O8-C9
25	D	404	CLA	C16-C17-C18-C20
25	a	612	CLA	C16-C17-C18-C20
30	C	518	DGD	O6D-C5D-C6D-O5D
29	B	621	SQD	C35-C36-C37-C38

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Mol	Chain	Res	Type	Atoms
32	D	410	LHG	C28-C29-C30-C31
25	B	605	CLA	O1D-CGD-O2D-CED
29	B	621	SQD	C10-C11-C12-C13
33	c	522	LMG	C11-C12-C13-C14
25	B	605	CLA	C8-C10-C11-C12
25	c	506	CLA	C15-C16-C17-C18
27	B	616	BCR	C12-C13-C14-C15
27	T	101	BCR	C12-C13-C14-C15
27	Z	101	BCR	C20-C21-C22-C23
27	c	516	BCR	C11-C10-C9-C8
30	c	518	DGD	C2D-C1D-O3G-C3G
31	b	625	STE	C4-C5-C6-C7
31	t	103	STE	C6-C7-C8-C9
33	M	101	LMG	O1-C7-C8-O7
30	A	614	DGD	C2A-C1A-O1G-C1G
31	H	104	STE	C11-C12-C13-C14
32	D	409	LHG	C29-C30-C31-C32
32	d	407	LHG	C12-C13-C14-C15
25	B	602	CLA	C10-C11-C12-C13
25	B	613	CLA	C13-C15-C16-C17
25	c	503	CLA	O1A-CGA-O2A-C1
25	c	501	CLA	O1D-CGD-O2D-CED
31	M	104	STE	C12-C13-C14-C15
33	b	620	LMG	C32-C33-C34-C35
33	c	522	LMG	C38-C39-C40-C41
25	C	510	CLA	C4-C3-C5-C6
30	C	516	DGD	C4B-C5B-C6B-C7B
31	J	101	STE	C7-C8-C9-C10
33	C	519	LMG	C19-C20-C21-C22
25	A	607	CLA	C12-C13-C15-C16
25	A	612	CLA	C11-C12-C13-C15
25	B	609	CLA	C11-C10-C8-C7
25	B	614	CLA	C11-C12-C13-C15
25	C	502	CLA	C12-C13-C15-C16
25	C	504	CLA	C11-C10-C8-C7
25	C	505	CLA	C11-C10-C8-C7
25	C	505	CLA	C12-C13-C15-C16
25	C	506	CLA	C6-C7-C8-C10
25	C	508	CLA	C11-C10-C8-C7
25	D	403	CLA	C6-C7-C8-C10
25	a	607	CLA	C12-C13-C15-C16
25	a	609	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
25	b	603	CLA	C11-C10-C8-C7
25	b	603	CLA	C11-C12-C13-C15
25	b	603	CLA	C12-C13-C15-C16
25	b	604	CLA	C12-C13-C15-C16
25	b	606	CLA	C6-C7-C8-C10
25	b	608	CLA	C12-C13-C15-C16
25	b	612	CLA	C6-C7-C8-C10
25	b	613	CLA	C6-C7-C8-C10
25	b	615	CLA	C6-C7-C8-C10
25	c	504	CLA	C11-C10-C8-C7
25	c	506	CLA	C11-C12-C13-C15
25	c	509	CLA	C6-C7-C8-C10
25	c	512	CLA	C11-C10-C8-C7
25	d	401	CLA	C6-C7-C8-C10
25	h	101	CLA	C11-C12-C13-C15
31	B	625	STE	C6-C7-C8-C9
25	A	612	CLA	C11-C12-C13-C14
25	B	603	CLA	C11-C12-C13-C14
25	B	612	CLA	C11-C12-C13-C14
25	B	614	CLA	C11-C12-C13-C14
25	C	506	CLA	C14-C13-C15-C16
25	C	508	CLA	C11-C10-C8-C9
25	D	404	CLA	C6-C7-C8-C9
25	a	609	CLA	C6-C7-C8-C9
25	b	603	CLA	C11-C12-C13-C14
25	b	603	CLA	C14-C13-C15-C16
25	b	606	CLA	C6-C7-C8-C9
25	b	606	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
25	c	512	CLA	C14-C13-C15-C16
25	d	401	CLA	C6-C7-C8-C9
25	d	404	CLA	C11-C12-C13-C14
25	h	101	CLA	C11-C12-C13-C14
32	e	102	LHG	C23-C24-C25-C26
29	D	408	SQD	C27-C28-C29-C30
29	a	613	SQD	C24-C23-O48-C46
33	c	520	LMG	C29-C28-O8-C9
30	C	516	DGD	CDA-CEA-CFA-CGA
31	c	521	STE	C4-C5-C6-C7
32	d	408	LHG	C35-C36-C37-C38

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Mol	Chain	Res	Type	Atoms
33	c	522	LMG	C42-C43-C44-C45
27	x	101	BCR	C11-C12-C13-C14
29	B	621	SQD	C16-C17-C18-C19
32	B	620	LHG	C32-C33-C34-C35
25	C	509	CLA	C3-C5-C6-C7
25	B	611	CLA	C10-C11-C12-C13
25	a	612	CLA	C10-C11-C12-C13
25	c	513	CLA	C8-C10-C11-C12
30	C	518	DGD	C2A-C3A-C4A-C5A
30	h	102	DGD	C9B-CAB-CBB-CCB
32	D	409	LHG	C34-C35-C36-C37
28	a	611	PL9	C17-C18-C19-C21
31	B	622	STE	C7-C8-C9-C10
31	B	625	STE	C3-C4-C5-C6
33	c	520	LMG	C4-C5-C6-O5
30	C	517	DGD	C9B-CAB-CBB-CCB
25	B	614	CLA	C13-C15-C16-C17
25	D	404	CLA	C5-C6-C7-C8
32	D	409	LHG	O6-C4-C5-C6
30	H	103	DGD	C4A-C5A-C6A-C7A
29	a	613	SQD	C7-C8-C9-C10
30	C	517	DGD	C8B-C9B-CAB-CBB
31	D	413	STE	C14-C15-C16-C17
31	m	101	STE	C4-C5-C6-C7
33	D	411	LMG	C14-C15-C16-C17
25	C	507	CLA	C10-C11-C12-C13
25	c	503	CLA	C8-C10-C11-C12
25	B	604	CLA	C4-C3-C5-C6
25	B	612	CLA	C4-C3-C5-C6
31	M	102	STE	C1-C2-C3-C4
33	M	101	LMG	C28-C29-C30-C31
25	b	606	CLA	C13-C15-C16-C17
31	a	616	STE	C4-C5-C6-C7
25	a	612	CLA	O1D-CGD-O2D-CED
25	d	401	CLA	C3-C5-C6-C7
31	c	521	STE	C2-C3-C4-C5
31	t	102	STE	C3-C4-C5-C6
25	a	609	CLA	CBA-CGA-O2A-C1
30	C	516	DGD	O6D-C5D-C6D-O5D
29	b	619	SQD	C14-C15-C16-C17
25	c	513	CLA	C3A-C2A-CAA-CBA
31	C	520	STE	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
31	M	102	STE	C4-C5-C6-C7
32	e	102	LHG	C18-C19-C20-C21
33	c	520	LMG	C40-C41-C42-C43
25	b	602	CLA	CBD-CGD-O2D-CED
29	f	101	SQD	C31-C32-C33-C34
30	A	614	DGD	C7B-C8B-C9B-CAB
30	a	615	DGD	C6B-C7B-C8B-C9B
31	B	623	STE	C9-C10-C11-C12
33	b	622	LMG	C18-C19-C20-C21
30	a	615	DGD	C3A-C4A-C5A-C6A
25	b	604	CLA	C15-C16-C17-C18
25	b	611	CLA	C15-C16-C17-C18
25	c	507	CLA	C15-C16-C17-C18
29	A	613	SQD	O6-C44-C45-C46
33	M	101	LMG	O1-C7-C8-C9
33	M	101	LMG	C7-C8-C9-O8
33	c	520	LMG	O1-C7-C8-C9
33	c	520	LMG	C7-C8-C9-O8
31	D	413	STE	C12-C13-C14-C15
32	B	620	LHG	C25-C26-C27-C28
33	C	515	LMG	C14-C15-C16-C17
32	d	407	LHG	C13-C14-C15-C16
33	b	620	LMG	O6-C5-C6-O5
30	c	517	DGD	O6D-C5D-C6D-O5D
30	A	614	DGD	C4B-C5B-C6B-C7B
33	C	519	LMG	C40-C41-C42-C43
33	D	411	LMG	C13-C14-C15-C16
30	C	518	DGD	C2B-C3B-C4B-C5B
30	C	518	DGD	C4B-C5B-C6B-C7B
25	B	613	CLA	C4-C3-C5-C6
25	C	506	CLA	C16-C17-C18-C20
25	c	506	CLA	C16-C17-C18-C19
32	L	101	LHG	C13-C14-C15-C16
25	B	608	CLA	C13-C15-C16-C17
33	C	515	LMG	C4-C5-C6-O5
30	C	518	DGD	CCA-CDA-CEA-CFA
31	M	102	STE	C9-C10-C11-C12
32	E	101	LHG	C31-C32-C33-C34
29	a	613	SQD	C32-C33-C34-C35
30	A	614	DGD	CAB-CBB-CCB-CDB
33	C	515	LMG	C29-C28-O8-C9
32	L	101	LHG	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
25	h	101	CLA	C16-C17-C18-C19
31	B	619	STE	C2-C3-C4-C5
33	M	101	LMG	C11-C12-C13-C14
32	B	620	LHG	C19-C20-C21-C22
31	B	625	STE	C4-C5-C6-C7
32	L	101	LHG	C31-C32-C33-C34
30	C	516	DGD	C4D-C5D-C6D-O5D
29	f	101	SQD	O6-C44-C45-O47
33	M	101	LMG	O7-C8-C9-O8
33	c	520	LMG	O1-C7-C8-O7
33	c	522	LMG	O7-C8-C9-O8
32	E	101	LHG	C33-C34-C35-C36
33	D	411	LMG	C37-C38-C39-C40
25	C	508	CLA	C16-C17-C18-C19
25	c	503	CLA	C16-C17-C18-C19
25	C	504	CLA	C11-C12-C13-C14
31	M	104	STE	C11-C12-C13-C14
29	D	408	SQD	O5-C1-O6-C44
30	C	516	DGD	O6E-C1E-O5D-C6D
25	B	614	CLA	C10-C11-C12-C13
28	A	611	PL9	C39-C41-C42-C43
29	T	103	SQD	C15-C16-C17-C18
31	j	101	STE	C4-C5-C6-C7
32	L	101	LHG	C18-C19-C20-C21
32	b	623	LHG	C17-C18-C19-C20
29	A	613	SQD	O49-C7-O47-C45
25	d	403	CLA	C2-C1-O2A-CGA
28	D	406	PL9	C47-C48-C49-C51
29	a	613	SQD	C9-C10-C11-C12
30	A	614	DGD	C5A-C6A-C7A-C8A
30	C	518	DGD	C3B-C4B-C5B-C6B
30	a	615	DGD	CAB-CBB-CCB-CDB
31	B	623	STE	C13-C14-C15-C16
31	M	104	STE	C11-C10-C9-C8
33	D	412	LMG	C32-C33-C34-C35
25	b	611	CLA	C10-C11-C12-C13
25	B	601	CLA	C6-C7-C8-C9
25	B	605	CLA	C11-C12-C13-C14
25	B	606	CLA	C6-C7-C8-C9
25	C	510	CLA	C11-C10-C8-C9
25	C	511	CLA	C6-C7-C8-C9
25	C	512	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
25	C	512	CLA	C11-C12-C13-C14
25	C	513	CLA	C11-C10-C8-C9
25	a	612	CLA	C14-C13-C15-C16
25	b	608	CLA	C14-C13-C15-C16
25	d	401	CLA	C11-C10-C8-C9
25	d	401	CLA	C11-C12-C13-C14
30	c	518	DGD	C9A-CAA-CBA-CCA
30	c	519	DGD	CDA-CEA-CFA-CGA
31	c	521	STE	C7-C8-C9-C10
32	d	407	LHG	C25-C26-C27-C28
33	M	101	LMG	C14-C15-C16-C17
33	C	515	LMG	C30-C31-C32-C33
25	B	607	CLA	C15-C16-C17-C18
25	h	101	CLA	C10-C11-C12-C13
29	a	613	SQD	O10-C23-O48-C46
29	f	101	SQD	C24-C25-C26-C27
31	c	521	STE	C10-C11-C12-C13
32	B	620	LHG	C18-C19-C20-C21
32	e	102	LHG	C27-C28-C29-C30
33	C	519	LMG	C37-C38-C39-C40
25	A	612	CLA	C16-C17-C18-C19
25	B	611	CLA	C16-C17-C18-C19
27	B	617	BCR	C23-C24-C25-C26
27	B	617	BCR	C23-C24-C25-C30
27	C	514	BCR	C23-C24-C25-C26
27	b	616	BCR	C1-C6-C7-C8
27	c	514	BCR	C5-C6-C7-C8
27	c	514	BCR	C23-C24-C25-C26
27	c	514	BCR	C23-C24-C25-C30
27	d	405	BCR	C23-C24-C25-C26
27	d	405	BCR	C23-C24-C25-C30
27	x	101	BCR	C23-C24-C25-C26
27	x	101	BCR	C23-C24-C25-C30
25	A	606	CLA	C13-C15-C16-C17
31	c	523	STE	C5-C6-C7-C8
33	b	622	LMG	C39-C40-C41-C42
27	K	101	BCR	C37-C22-C23-C24
27	T	101	BCR	C11-C12-C13-C35
32	l	101	LHG	C32-C33-C34-C35
27	B	617	BCR	C17-C18-C19-C20
27	Z	101	BCR	C17-C18-C19-C20
33	C	515	LMG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
32	d	407	LHG	C9-C10-C11-C12
32	e	102	LHG	C28-C29-C30-C31
32	d	407	LHG	C14-C15-C16-C17
25	B	614	CLA	C16-C17-C18-C19
30	C	516	DGD	C6A-C7A-C8A-C9A
33	D	407	LMG	C19-C20-C21-C22
32	e	102	LHG	C15-C16-C17-C18
32	e	102	LHG	O6-C4-C5-C6
32	b	623	LHG	C25-C26-C27-C28
32	d	408	LHG	C29-C30-C31-C32
25	B	603	CLA	C11-C12-C13-C15
25	B	605	CLA	C11-C12-C13-C15
25	B	606	CLA	C12-C13-C15-C16
25	B	609	CLA	C11-C12-C13-C15
25	B	612	CLA	C12-C13-C15-C16
25	B	614	CLA	C12-C13-C15-C16
25	C	503	CLA	C11-C10-C8-C7
25	C	506	CLA	C12-C13-C15-C16
25	C	510	CLA	C11-C10-C8-C7
25	C	512	CLA	C11-C12-C13-C15
25	C	513	CLA	C11-C10-C8-C7
25	D	404	CLA	C6-C7-C8-C10
25	H	101	CLA	C12-C13-C15-C16
25	b	606	CLA	C11-C12-C13-C15
25	c	503	CLA	C11-C10-C8-C7
25	c	503	CLA	C11-C12-C13-C15
25	c	505	CLA	C6-C7-C8-C10
25	c	508	CLA	C12-C13-C15-C16
25	c	511	CLA	C12-C13-C15-C16
25	c	512	CLA	C6-C7-C8-C10
25	c	512	CLA	C12-C13-C15-C16
25	d	401	CLA	C11-C10-C8-C7
25	d	401	CLA	C11-C12-C13-C15
25	h	101	CLA	C12-C13-C15-C16
30	C	517	DGD	C3A-C4A-C5A-C6A
31	a	616	STE	C6-C7-C8-C9
25	B	604	CLA	C8-C10-C11-C12
27	Z	101	BCR	C13-C14-C15-C16
29	B	621	SQD	C33-C34-C35-C36
25	c	513	CLA	C2A-CAA-CBA-CGA
31	E	102	STE	C7-C8-C9-C10
27	B	617	BCR	C20-C21-C22-C37

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Mol	Chain	Res	Type	Atoms
27	B	618	BCR	C20-C21-C22-C37
27	C	514	BCR	C20-C21-C22-C37
27	K	101	BCR	C11-C10-C9-C34
27	K	101	BCR	C16-C17-C18-C36
27	Y	101	BCR	C35-C13-C14-C15
27	b	617	BCR	C20-C21-C22-C37
27	c	515	BCR	C35-C13-C14-C15
27	d	405	BCR	C20-C21-C22-C37
27	x	101	BCR	C20-C21-C22-C37
33	D	411	LMG	C30-C31-C32-C33
25	B	601	CLA	C13-C15-C16-C17
25	b	607	CLA	C5-C6-C7-C8
29	b	619	SQD	C26-C27-C28-C29
31	M	103	STE	C5-C6-C7-C8
32	L	101	LHG	C28-C29-C30-C31
31	l	102	STE	C7-C8-C9-C10
25	B	609	CLA	CAD-CBD-CGD-O2D
25	C	505	CLA	CAD-CBD-CGD-O2D
25	C	510	CLA	CAD-CBD-CGD-O2D
25	b	609	CLA	CAD-CBD-CGD-O2D
25	c	513	CLA	CAD-CBD-CGD-O2D
33	M	101	LMG	C7-C8-O7-C10
31	T	102	STE	C10-C11-C12-C13
33	d	410	LMG	C14-C15-C16-C17
30	h	102	DGD	O2G-C1B-C2B-C3B
29	a	613	SQD	O6-C44-C45-C46
30	A	614	DGD	C1G-C2G-C3G-O3G
30	C	516	DGD	O1G-C1G-C2G-C3G
32	d	408	LHG	C2-C3-O3-P
32	L	101	LHG	C5-C6-O8-C23
30	a	615	DGD	C2B-C1B-O2G-C2G
33	M	101	LMG	C40-C41-C42-C43
32	D	409	LHG	O6-C4-C5-O7
25	C	510	CLA	C13-C15-C16-C17
30	C	517	DGD	C4A-C5A-C6A-C7A
30	a	615	DGD	C6A-C7A-C8A-C9A
31	H	104	STE	C7-C8-C9-C10
32	b	623	LHG	C33-C34-C35-C36
25	b	609	CLA	C2A-CAA-CBA-CGA
25	C	506	CLA	C16-C17-C18-C19
25	c	505	CLA	C16-C17-C18-C20
30	C	516	DGD	O1B-C1B-O2G-C2G

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Mol	Chain	Res	Type	Atoms
25	B	606	CLA	CHA-CBD-CGD-O1D
25	B	611	CLA	CHA-CBD-CGD-O1D
25	B	611	CLA	CHA-CBD-CGD-O2D
25	C	504	CLA	CHA-CBD-CGD-O1D
25	C	504	CLA	CHA-CBD-CGD-O2D
25	C	505	CLA	CHA-CBD-CGD-O1D
25	c	504	CLA	CHA-CBD-CGD-O1D
25	c	504	CLA	CHA-CBD-CGD-O2D
25	c	507	CLA	CHA-CBD-CGD-O1D
25	h	101	CLA	CHA-CBD-CGD-O1D
25	h	101	CLA	CHA-CBD-CGD-O2D
25	a	609	CLA	O1A-CGA-O2A-C1
33	D	407	LMG	C38-C39-C40-C41
27	D	405	BCR	C16-C17-C18-C19
33	c	522	LMG	C4-C5-C6-O5
32	D	409	LHG	C11-C10-C9-C8
32	E	101	LHG	O7-C5-C6-O8
33	C	519	LMG	O1-C7-C8-O7
33	c	520	LMG	O7-C8-C9-O8
33	c	524	LMG	O7-C8-C9-O8
25	H	101	CLA	C15-C16-C17-C18
25	C	506	CLA	C4-C3-C5-C6
25	c	512	CLA	C4-C3-C5-C6
30	C	517	DGD	CDA-CEA-CFA-CGA
28	A	611	PL9	C4-C3-C7-C8
28	d	406	PL9	C4-C3-C7-C8
30	C	517	DGD	CBA-CCA-CDA-CEA
25	C	510	CLA	C14-C13-C15-C16
25	H	101	CLA	C14-C13-C15-C16
25	c	505	CLA	C6-C7-C8-C9
33	M	101	LMG	C37-C38-C39-C40
33	d	410	LMG	C30-C31-C32-C33
30	h	102	DGD	C6A-C7A-C8A-C9A
33	b	620	LMG	C38-C39-C40-C41
27	B	616	BCR	C7-C8-C9-C34
33	d	410	LMG	C37-C38-C39-C40
29	a	614	SQD	C9-C10-C11-C12
27	Z	101	BCR	C7-C8-C9-C10
25	B	603	CLA	C1A-C2A-CAA-CBA
25	c	503	CLA	C1A-C2A-CAA-CBA
25	c	506	CLA	C1A-C2A-CAA-CBA
30	a	615	DGD	CEB-CFB-CGB-CHB

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Mol	Chain	Res	Type	Atoms
33	c	520	LMG	C39-C40-C41-C42
27	T	101	BCR	C9-C10-C11-C12
25	b	606	CLA	O1D-CGD-O2D-CED
31	b	621	STE	C9-C10-C11-C12
31	b	625	STE	C7-C8-C9-C10
25	c	512	CLA	C2-C3-C5-C6
29	T	103	SQD	C10-C11-C12-C13
30	c	517	DGD	C6A-C7A-C8A-C9A
33	C	519	LMG	C11-C12-C13-C14
32	D	410	LHG	C3-O3-P-O5
25	C	507	CLA	C16-C17-C18-C19
29	b	619	SQD	O5-C1-O6-C44
32	d	408	LHG	C24-C23-O8-C6
31	j	101	STE	C5-C6-C7-C8
33	D	411	LMG	C15-C16-C17-C18
33	D	412	LMG	C13-C14-C15-C16
25	b	605	CLA	C3-C5-C6-C7
25	b	605	CLA	C15-C16-C17-C18
31	C	520	STE	C2-C3-C4-C5
30	c	518	DGD	C4E-C5E-C6E-O5E
25	b	613	CLA	C16-C17-C18-C19
29	a	614	SQD	C29-C30-C31-C32
31	E	102	STE	C6-C7-C8-C9
25	B	611	CLA	CAD-CBD-CGD-O1D
25	C	502	CLA	CAD-CBD-CGD-O1D
25	C	504	CLA	CAD-CBD-CGD-O1D
25	C	513	CLA	CAD-CBD-CGD-O1D
25	c	504	CLA	CAD-CBD-CGD-O1D
25	h	101	CLA	CAD-CBD-CGD-O1D
30	c	517	DGD	C4D-C5D-C6D-O5D
25	B	610	CLA	C15-C16-C17-C18
33	D	412	LMG	C34-C35-C36-C37
30	C	517	DGD	C7A-C8A-C9A-CAA
30	c	517	DGD	C3B-C4B-C5B-C6B
30	c	519	DGD	C3B-C4B-C5B-C6B
25	B	602	CLA	C11-C12-C13-C15
25	B	604	CLA	C11-C10-C8-C7
25	B	606	CLA	C11-C12-C13-C15
25	B	612	CLA	C6-C7-C8-C10
25	B	615	CLA	C6-C7-C8-C10
25	C	507	CLA	C11-C12-C13-C15
25	H	101	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
25	H	101	CLA	C11-C12-C13-C15
25	a	607	CLA	C11-C12-C13-C15
25	b	614	CLA	C6-C7-C8-C10
25	c	510	CLA	C12-C13-C15-C16
25	d	401	CLA	C12-C13-C15-C16
25	d	403	CLA	C11-C12-C13-C15
25	d	404	CLA	C6-C7-C8-C10
26	a	608	PHO	C6-C7-C8-C10
30	c	517	DGD	C1B-C2B-C3B-C4B
35	e	101	HEM	C2A-CAA-CBA-CGA
32	l	101	LHG	C30-C31-C32-C33
26	D	402	PHO	O1D-CGD-O2D-CED
30	C	517	DGD	CDB-CEB-CFB-CGB
25	a	609	CLA	C15-C16-C17-C18
31	B	624	STE	C1-C2-C3-C4
31	m	101	STE	C3-C4-C5-C6
33	c	524	LMG	C19-C20-C21-C22
30	C	517	DGD	C2A-C3A-C4A-C5A
31	b	624	STE	C10-C11-C12-C13
25	B	602	CLA	C5-C6-C7-C8
25	c	504	CLA	C11-C12-C13-C15
30	A	614	DGD	C8A-C9A-CAA-CBA
30	C	516	DGD	O1G-C1G-C2G-O2G
33	D	411	LMG	O7-C8-C9-O8
33	b	622	LMG	C15-C16-C17-C18
32	E	101	LHG	C35-C36-C37-C38
33	C	515	LMG	C37-C38-C39-C40
25	b	609	CLA	C2C-C3C-CAC-CBC
25	B	605	CLA	C15-C16-C17-C18
25	b	609	CLA	C13-C15-C16-C17
29	A	613	SQD	C25-C26-C27-C28
33	M	101	LMG	C13-C14-C15-C16
25	B	604	CLA	C6-C7-C8-C9
25	B	606	CLA	C14-C13-C15-C16
25	B	609	CLA	C11-C12-C13-C14
25	B	612	CLA	C14-C13-C15-C16
25	B	614	CLA	C14-C13-C15-C16
25	C	504	CLA	C11-C10-C8-C9
25	C	508	CLA	C14-C13-C15-C16
25	c	507	CLA	C6-C7-C8-C9
25	c	510	CLA	C14-C13-C15-C16
25	c	512	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
25	h	101	CLA	C11-C10-C8-C9
26	a	608	PHO	C11-C10-C8-C9
31	D	413	STE	C10-C11-C12-C13
29	T	103	SQD	C32-C33-C34-C35
28	a	611	PL9	C19-C21-C22-C23
31	b	625	STE	C1-C2-C3-C4
25	B	603	CLA	O1A-CGA-O2A-C1
32	D	410	LHG	C29-C30-C31-C32
32	d	407	LHG	C26-C27-C28-C29
30	C	518	DGD	CAB-CBB-CCB-CDB
25	C	513	CLA	C15-C16-C17-C18
30	a	615	DGD	C8B-C9B-CAB-CBB
27	b	617	BCR	C35-C13-C14-C15
28	a	611	PL9	C30-C29-C31-C32
31	l	102	STE	C10-C11-C12-C13
25	C	506	CLA	C2-C3-C5-C6
25	B	601	CLA	C16-C17-C18-C20
25	b	613	CLA	C16-C17-C18-C20
32	d	407	LHG	C31-C32-C33-C34
25	c	509	CLA	C8-C10-C11-C12
33	M	101	LMG	C17-C18-C19-C20
33	C	515	LMG	C9-C8-O7-C10
25	B	601	CLA	C2A-CAA-CBA-CGA
30	c	518	DGD	O1B-C1B-O2G-C2G
25	B	612	CLA	C2-C1-O2A-CGA
25	b	607	CLA	C2-C1-O2A-CGA
30	H	103	DGD	O2G-C1B-C2B-C3B
25	c	509	CLA	O1D-CGD-O2D-CED
33	C	515	LMG	C34-C35-C36-C37
29	a	613	SQD	C16-C17-C18-C19
32	E	101	LHG	C29-C30-C31-C32
29	T	103	SQD	C24-C23-O48-C46
25	B	612	CLA	C16-C17-C18-C19
25	C	507	CLA	C16-C17-C18-C20
27	Y	101	BCR	C23-C24-C25-C30
27	b	616	BCR	C5-C6-C7-C8
27	b	617	BCR	C23-C24-C25-C26
27	b	617	BCR	C23-C24-C25-C30
27	c	514	BCR	C1-C6-C7-C8
27	c	516	BCR	C5-C6-C7-C8
33	b	620	LMG	C16-C17-C18-C19
25	B	603	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
32	l	101	LHG	C29-C30-C31-C32
25	B	610	CLA	C16-C17-C18-C20
25	B	614	CLA	C16-C17-C18-C20
26	A	608	PHO	C16-C17-C18-C20
33	D	407	LMG	C33-C34-C35-C36
25	c	505	CLA	C15-C16-C17-C18
27	A	610	BCR	C11-C10-C9-C8
27	x	101	BCR	C16-C17-C18-C19
30	C	516	DGD	C2E-C1E-O5D-C6D
33	M	101	LMG	C2-C1-O1-C7
33	c	520	LMG	C2-C1-O1-C7
33	c	520	LMG	C31-C32-C33-C34
29	T	103	SQD	O10-C23-O48-C46
33	c	522	LMG	O6-C5-C6-O5
30	A	614	DGD	O1G-C1G-C2G-O2G
31	l	102	STE	C13-C14-C15-C16
32	d	407	LHG	C3-O3-P-O6
25	c	505	CLA	C10-C11-C12-C13
31	M	102	STE	C11-C10-C9-C8
26	d	402	PHO	CHA-CBD-CGD-O2D
31	l	102	STE	C11-C12-C13-C14
32	b	623	LHG	C11-C10-C9-C8
26	D	402	PHO	CBD-CGD-O2D-CED
25	C	510	CLA	C12-C13-C15-C16
25	C	511	CLA	C6-C7-C8-C10
25	a	609	CLA	C6-C7-C8-C10
33	c	520	LMG	C32-C33-C34-C35
25	B	604	CLA	C11-C10-C8-C9
25	B	612	CLA	C6-C7-C8-C9
25	B	615	CLA	C6-C7-C8-C9
25	D	403	CLA	C6-C7-C8-C9
25	a	609	CLA	C14-C13-C15-C16
25	b	603	CLA	C11-C10-C8-C9
25	b	604	CLA	C14-C13-C15-C16
25	d	403	CLA	C11-C12-C13-C14
27	Z	101	BCR	C15-C16-C17-C18
27	c	516	BCR	C13-C14-C15-C16
25	B	610	CLA	C16-C17-C18-C19
31	b	626	STE	C3-C4-C5-C6
30	c	519	DGD	CBB-CCB-CDB-CEB
32	L	101	LHG	C7-C8-C9-C10
32	d	408	LHG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
25	B	601	CLA	C16-C17-C18-C19
25	A	612	CLA	C4C-C3C-CAC-CBC
30	C	516	DGD	CCB-CDB-CEB-CFB
31	b	624	STE	C11-C12-C13-C14
31	l	102	STE	C5-C6-C7-C8
25	B	613	CLA	C8-C10-C11-C12
31	B	624	STE	C4-C5-C6-C7
32	E	101	LHG	C18-C19-C20-C21
25	c	512	CLA	C5-C6-C7-C8
25	c	509	CLA	CAA-CBA-CGA-O2A
25	B	612	CLA	C2-C3-C5-C6
29	f	101	SQD	C27-C28-C29-C30
33	C	519	LMG	O10-C28-O8-C9
25	c	511	CLA	C8-C10-C11-C12
31	t	103	STE	C4-C5-C6-C7
29	f	101	SQD	C34-C35-C36-C37
31	d	411	STE	C6-C7-C8-C9
33	b	622	LMG	C24-C25-C26-C27
25	c	504	CLA	C11-C12-C13-C14
30	C	517	DGD	O6D-C1D-O3G-C3G
27	c	514	BCR	C19-C20-C21-C22
27	k	101	BCR	C19-C20-C21-C22
29	A	613	SQD	C29-C30-C31-C32
31	I	101	STE	C5-C6-C7-C8
29	D	408	SQD	C44-C45-C46-O48
33	b	620	LMG	C15-C16-C17-C18
30	H	103	DGD	C4D-C5D-C6D-O5D
30	a	615	DGD	CAA-CBA-CCA-CDA
30	C	517	DGD	CCA-CDA-CEA-CFA
25	b	604	CLA	C4-C3-C5-C6
31	b	625	STE	O1-C1-C2-C3
25	B	603	CLA	C10-C11-C12-C13
25	C	509	CLA	C15-C16-C17-C18
26	A	608	PHO	C2-C3-C5-C6
29	a	613	SQD	C10-C11-C12-C13
30	H	103	DGD	CDA-CEA-CFA-CGA
31	B	622	STE	O1-C1-C2-C3
25	H	101	CLA	C2-C1-O2A-CGA
31	b	626	STE	C1-C2-C3-C4
25	d	401	CLA	O1D-CGD-O2D-CED
31	c	523	STE	C7-C8-C9-C10
25	B	613	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
25	C	501	CLA	C2A-CAA-CBA-CGA
30	c	519	DGD	C6B-C7B-C8B-C9B
32	D	410	LHG	C2-C3-O3-P
30	C	516	DGD	O1A-C1A-C2A-C3A
32	D	410	LHG	C11-C10-C9-C8
25	H	101	CLA	C3A-C2A-CAA-CBA
35	F	101	HEM	CAD-CBD-CGD-O1D
25	C	508	CLA	C16-C17-C18-C20
30	C	516	DGD	C8A-C9A-CAA-CBA
32	D	409	LHG	C13-C14-C15-C16
26	A	608	PHO	C4-C3-C5-C6
25	c	509	CLA	CBD-CGD-O2D-CED
28	a	611	PL9	C4-C3-C7-C8
25	A	612	CLA	C2C-C3C-CAC-CBC
29	T	103	SQD	C16-C17-C18-C19
25	B	602	CLA	C11-C10-C8-C9
25	B	605	CLA	C11-C10-C8-C9
25	C	507	CLA	C11-C12-C13-C14
25	c	503	CLA	C11-C10-C8-C9
25	d	401	CLA	C14-C13-C15-C16
26	D	402	PHO	C6-C7-C8-C9
29	A	613	SQD	C9-C10-C11-C12
29	B	621	SQD	C28-C29-C30-C31
31	c	521	STE	C3-C4-C5-C6
29	B	621	SQD	C14-C15-C16-C17
33	c	520	LMG	C34-C35-C36-C37
27	T	101	BCR	C16-C17-C18-C36
27	a	610	BCR	C35-C13-C14-C15
27	a	610	BCR	C20-C21-C22-C37
30	C	518	DGD	O1G-C1G-C2G-C3G
30	c	517	DGD	O1G-C1G-C2G-C3G
31	b	625	STE	O2-C1-C2-C3
36	V	201	HEC	CAD-CBD-CGD-O1D
25	d	404	CLA	C16-C17-C18-C19
30	c	517	DGD	O6E-C1E-O5D-C6D
33	M	101	LMG	C34-C35-C36-C37
27	x	101	BCR	C11-C12-C13-C35
31	b	621	STE	O1-C1-C2-C3
30	C	518	DGD	O6E-C5E-C6E-O5E
30	a	615	DGD	C5B-C6B-C7B-C8B
25	C	506	CLA	C15-C16-C17-C18
25	C	502	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
25	B	601	CLA	C1A-C2A-CAA-CBA
31	C	520	STE	C7-C8-C9-C10
25	C	505	CLA	C6-C7-C8-C10
25	C	509	CLA	C11-C10-C8-C7
25	C	509	CLA	C11-C12-C13-C15
25	D	403	CLA	C11-C12-C13-C15
25	D	403	CLA	C12-C13-C15-C16
25	b	602	CLA	C11-C12-C13-C15
25	b	605	CLA	C11-C10-C8-C7
30	h	102	DGD	C7B-C8B-C9B-CAB
25	B	610	CLA	C8-C10-C11-C12
31	B	622	STE	O2-C1-C2-C3
33	D	412	LMG	O9-C10-C11-C12
27	a	610	BCR	C19-C20-C21-C22
27	c	516	BCR	C15-C16-C17-C18
31	b	625	STE	C11-C12-C13-C14
33	C	515	LMG	C17-C18-C19-C20
35	F	101	HEM	CAD-CBD-CGD-O2D
31	x	102	STE	C12-C13-C14-C15
30	h	102	DGD	C4B-C5B-C6B-C7B
33	b	622	LMG	C32-C33-C34-C35
25	C	508	CLA	C10-C11-C12-C13
33	D	411	LMG	C10-C11-C12-C13
30	c	517	DGD	O1G-C1A-C2A-C3A
30	A	614	DGD	CEB-CFB-CGB-CHB
31	c	521	STE	C5-C6-C7-C8
32	D	410	LHG	C15-C16-C17-C18
33	C	515	LMG	C18-C19-C20-C21
30	c	517	DGD	CDB-CEB-CFB-CGB
32	l	101	LHG	O6-C4-C5-C6
31	B	625	STE	C11-C12-C13-C14
33	c	524	LMG	C33-C34-C35-C36
27	b	616	BCR	C12-C13-C14-C15
27	d	405	BCR	C16-C17-C18-C19
31	B	623	STE	O2-C1-C2-C3
30	h	102	DGD	CBA-CCA-CDA-CEA
31	c	523	STE	C2-C3-C4-C5
33	c	522	LMG	C29-C30-C31-C32
29	a	613	SQD	O47-C45-C46-O48
30	C	518	DGD	C7A-C8A-C9A-CAA
27	c	514	BCR	C15-C16-C17-C18
25	a	609	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
25	B	612	CLA	C13-C15-C16-C17
31	E	102	STE	C3-C4-C5-C6
28	D	406	PL9	C24-C26-C27-C28
32	D	409	LHG	C1-C2-C3-O3
32	D	410	LHG	C1-C2-C3-O3
33	D	412	LMG	O7-C10-C11-C12
32	d	407	LHG	C28-C29-C30-C31
33	C	519	LMG	C36-C37-C38-C39
25	b	602	CLA	O1D-CGD-O2D-CED
33	D	407	LMG	C11-C12-C13-C14
25	D	403	CLA	C2-C1-O2A-CGA
32	b	623	LHG	C19-C20-C21-C22
32	d	408	LHG	C9-C10-C11-C12
25	C	501	CLA	C11-C10-C8-C9
25	b	609	CLA	C14-C13-C15-C16
25	c	506	CLA	C6-C7-C8-C9
25	A	607	CLA	C3-C5-C6-C7
26	d	402	PHO	C1A-C2A-CAA-CBA
31	M	104	STE	C13-C14-C15-C16
29	B	621	SQD	C25-C26-C27-C28
29	T	103	SQD	C25-C26-C27-C28
32	D	409	LHG	C15-C16-C17-C18
33	C	515	LMG	C39-C40-C41-C42
33	D	412	LMG	C17-C18-C19-C20
25	b	611	CLA	C8-C10-C11-C12
31	B	623	STE	O1-C1-C2-C3
31	t	102	STE	O1-C1-C2-C3
31	t	102	STE	O2-C1-C2-C3
27	A	610	BCR	C1-C6-C7-C8
27	Z	101	BCR	C1-C6-C7-C8
27	b	618	BCR	C23-C24-C25-C30
27	c	515	BCR	C1-C6-C7-C8
27	c	515	BCR	C23-C24-C25-C30
27	c	516	BCR	C1-C6-C7-C8
27	c	516	BCR	C23-C24-C25-C30
27	k	101	BCR	C23-C24-C25-C30
27	x	101	BCR	C1-C6-C7-C8
30	C	516	DGD	O1G-C1A-C2A-C3A
36	V	201	HEC	CAD-CBD-CGD-O2D
36	v	201	HEC	CAD-CBD-CGD-O2D
31	M	103	STE	C1-C2-C3-C4
30	h	102	DGD	C7A-C8A-C9A-CAA

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Mol	Chain	Res	Type	Atoms
25	d	403	CLA	C4-C3-C5-C6
30	A	614	DGD	C6A-C7A-C8A-C9A
32	L	101	LHG	C25-C26-C27-C28
33	d	410	LMG	C34-C35-C36-C37
30	H	103	DGD	O1B-C1B-C2B-C3B
30	c	517	DGD	C5D-C6D-O5D-C1E
33	c	524	LMG	C8-C7-O1-C1
30	c	518	DGD	C7B-C8B-C9B-CAB
33	D	412	LMG	C12-C13-C14-C15
36	v	201	HEC	CAD-CBD-CGD-O1D
25	b	607	CLA	C16-C17-C18-C19
25	A	606	CLA	C15-C16-C17-C18
25	C	507	CLA	C5-C6-C7-C8
31	B	623	STE	C11-C12-C13-C14
33	b	622	LMG	C19-C20-C21-C22
31	T	102	STE	C15-C16-C17-C18
33	C	519	LMG	C33-C34-C35-C36
25	B	605	CLA	C6-C7-C8-C10
25	C	512	CLA	C6-C7-C8-C10
28	D	406	PL9	C33-C34-C36-C37
31	b	621	STE	O2-C1-C2-C3
32	E	101	LHG	C15-C16-C17-C18
31	d	411	STE	C7-C8-C9-C10
33	D	411	LMG	O1-C7-C8-O7
25	B	612	CLA	C16-C17-C18-C20
31	E	102	STE	C4-C5-C6-C7
31	J	101	STE	C3-C4-C5-C6
31	M	104	STE	C15-C16-C17-C18
30	c	517	DGD	O1G-C1G-C2G-O2G
25	c	504	CLA	C8-C10-C11-C12
31	c	521	STE	O1-C1-C2-C3
31	c	521	STE	O2-C1-C2-C3
25	b	612	CLA	C4-C3-C5-C6
25	c	508	CLA	C4-C3-C5-C6
28	A	611	PL9	C15-C14-C16-C17
32	b	623	LHG	C9-C10-C11-C12
33	D	412	LMG	O10-C28-C29-C30
25	B	613	CLA	C2-C3-C5-C6
25	b	604	CLA	C2-C3-C5-C6
29	a	613	SQD	O47-C7-C8-C9
25	C	505	CLA	C6-C7-C8-C9
25	C	507	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
25	C	509	CLA	C11-C12-C13-C14
25	D	403	CLA	C11-C12-C13-C14
25	H	101	CLA	C11-C10-C8-C9
25	a	607	CLA	C11-C12-C13-C14
25	a	607	CLA	C14-C13-C15-C16
25	c	502	CLA	C11-C12-C13-C14
32	e	102	LHG	C14-C15-C16-C17
25	A	609	CLA	C3A-C2A-CAA-CBA
31	I	101	STE	C1-C2-C3-C4
31	M	104	STE	C10-C11-C12-C13
25	B	602	CLA	CAD-CBD-CGD-O2D
25	B	604	CLA	CAD-CBD-CGD-O2D
25	C	501	CLA	CAD-CBD-CGD-O2D
25	C	503	CLA	CAD-CBD-CGD-O2D
25	b	603	CLA	CAD-CBD-CGD-O2D
25	b	611	CLA	CAD-CBD-CGD-O2D
25	c	503	CLA	CAD-CBD-CGD-O2D
25	c	505	CLA	CAD-CBD-CGD-O2D
25	c	512	CLA	CAD-CBD-CGD-O2D
26	a	608	PHO	CAD-CBD-CGD-O2D
30	a	615	DGD	C1G-C2G-O2G-C1B
30	c	517	DGD	C5B-C6B-C7B-C8B
25	C	510	CLA	C8-C10-C11-C12
25	c	506	CLA	C10-C11-C12-C13
27	Z	101	BCR	C6-C7-C8-C9
26	d	402	PHO	C8-C10-C11-C12
33	c	522	LMG	O6-C1-O1-C7
29	a	614	SQD	C18-C19-C20-C21
25	b	615	CLA	O1A-CGA-O2A-C1
27	K	101	BCR	C11-C12-C13-C14
30	c	518	DGD	O6E-C5E-C6E-O5E
29	f	101	SQD	O6-C44-C45-C46
30	C	516	DGD	C1G-C2G-C3G-O3G
32	e	102	LHG	C19-C20-C21-C22
25	a	612	CLA	C2C-C3C-CAC-CBC
25	C	502	CLA	C10-C11-C12-C13
25	C	509	CLA	O2A-C1-C2-C3
25	C	512	CLA	O2A-C1-C2-C3
26	A	608	PHO	O2A-C1-C2-C3
26	a	608	PHO	O2A-C1-C2-C3
31	x	102	STE	C14-C15-C16-C17
25	B	602	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
25	b	601	CLA	C2A-CAA-CBA-CGA
29	a	614	SQD	C25-C26-C27-C28
33	D	407	LMG	C22-C23-C24-C25
29	A	613	SQD	O47-C7-C8-C9
31	B	619	STE	C4-C5-C6-C7
33	c	524	LMG	O9-C10-O7-C8
25	A	607	CLA	CHA-CBD-CGD-O1D
25	A	607	CLA	CHA-CBD-CGD-O2D
25	B	606	CLA	CHA-CBD-CGD-O2D
25	C	509	CLA	CHA-CBD-CGD-O1D
25	C	509	CLA	CHA-CBD-CGD-O2D
25	H	101	CLA	CHA-CBD-CGD-O2D
25	a	612	CLA	CHA-CBD-CGD-O1D
25	a	612	CLA	CHA-CBD-CGD-O2D
25	b	605	CLA	CHA-CBD-CGD-O2D
25	b	606	CLA	CHA-CBD-CGD-O1D
25	b	613	CLA	CHA-CBD-CGD-O1D
25	b	613	CLA	CHA-CBD-CGD-O2D
25	b	615	CLA	CHA-CBD-CGD-O1D
25	c	507	CLA	CHA-CBD-CGD-O2D
25	c	509	CLA	CHA-CBD-CGD-O2D
25	c	510	CLA	CHA-CBD-CGD-O1D
25	a	607	CLA	C13-C15-C16-C17
30	A	614	DGD	CBB-CCB-CDB-CEB
25	D	403	CLA	C13-C15-C16-C17
31	b	625	STE	C2-C3-C4-C5
30	a	615	DGD	O1G-C1G-C2G-O2G
31	t	102	STE	C7-C8-C9-C10
33	d	409	LMG	C40-C41-C42-C43
25	c	510	CLA	C15-C16-C17-C18
25	B	611	CLA	CAA-CBA-CGA-O2A
25	b	612	CLA	CAA-CBA-CGA-O2A
32	D	410	LHG	O8-C23-C24-C25
29	B	621	SQD	C45-C46-O48-C23
26	d	402	PHO	CHA-CBD-CGD-O1D
25	d	404	CLA	C8-C10-C11-C12
25	b	615	CLA	CBA-CGA-O2A-C1
33	b	620	LMG	O8-C28-C29-C30
30	H	103	DGD	C3A-C4A-C5A-C6A
25	B	614	CLA	C6-C7-C8-C10
25	b	607	CLA	C11-C10-C8-C7
25	b	611	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
25	c	502	CLA	C11-C12-C13-C15
25	c	508	CLA	C2-C3-C5-C6
29	B	621	SQD	O47-C7-C8-C9
25	a	609	CLA	C11-C10-C8-C9
25	c	511	CLA	C6-C7-C8-C9
26	a	608	PHO	C6-C7-C8-C9
30	C	518	DGD	C1B-C2B-C3B-C4B
25	B	612	CLA	CAA-CBA-CGA-O2A
32	D	409	LHG	C12-C13-C14-C15
33	b	620	LMG	C11-C10-O7-C8
32	e	102	LHG	C7-C8-C9-C10
31	B	625	STE	C13-C14-C15-C16
32	L	101	LHG	C24-C25-C26-C27
31	J	101	STE	O2-C1-C2-C3
29	a	613	SQD	O49-C7-C8-C9
25	A	606	CLA	C16-C17-C18-C20
32	E	101	LHG	O7-C7-C8-C9
33	d	410	LMG	O7-C10-C11-C12
31	B	625	STE	C12-C13-C14-C15
27	c	514	BCR	C17-C18-C19-C20
27	c	516	BCR	C17-C18-C19-C20
27	d	405	BCR	C7-C8-C9-C10
25	A	609	CLA	C1A-C2A-CAA-CBA
25	C	511	CLA	C1A-C2A-CAA-CBA
25	C	512	CLA	C1A-C2A-CAA-CBA
25	d	403	CLA	C1A-C2A-CAA-CBA
29	D	408	SQD	C31-C32-C33-C34
30	h	102	DGD	CCB-CDB-CEB-CFB
31	l	102	STE	C9-C10-C11-C12
32	d	407	LHG	C24-C25-C26-C27
25	c	502	CLA	O1A-CGA-O2A-C1
25	A	606	CLA	C2-C1-O2A-CGA
30	c	517	DGD	O1B-C1B-C2B-C3B
32	E	101	LHG	O9-C7-C8-C9
33	c	524	LMG	O10-C28-C29-C30
29	B	621	SQD	C31-C32-C33-C34
33	c	524	LMG	O1-C7-C8-C9
29	T	103	SQD	C28-C29-C30-C31
29	a	613	SQD	C12-C13-C14-C15
25	a	612	CLA	C4C-C3C-CAC-CBC
33	d	409	LMG	O7-C10-C11-C12
25	b	611	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
30	C	516	DGD	O1B-C1B-C2B-C3B
28	A	611	PL9	C43-C44-C46-C47
32	L	101	LHG	C3-O3-P-O5
32	d	407	LHG	C3-O3-P-O5
25	B	611	CLA	CAA-CBA-CGA-O1A
25	b	607	CLA	C13-C15-C16-C17
27	Y	101	BCR	C23-C24-C25-C26
27	b	617	BCR	C1-C6-C7-C8
27	c	516	BCR	C23-C24-C25-C26
27	x	101	BCR	C5-C6-C7-C8
32	E	101	LHG	C12-C13-C14-C15
29	B	621	SQD	O49-C7-C8-C9
30	a	615	DGD	C4B-C5B-C6B-C7B
32	D	409	LHG	C17-C18-C19-C20
25	B	613	CLA	C16-C17-C18-C20
29	A	613	SQD	O49-C7-C8-C9
33	b	620	LMG	O10-C28-C29-C30
30	C	516	DGD	CAB-CBB-CCB-CDB
31	d	411	STE	O2-C1-C2-C3
30	c	518	DGD	C1A-C2A-C3A-C4A
28	A	611	PL9	C25-C24-C26-C27
32	e	102	LHG	C9-C10-C11-C12
25	d	403	CLA	C2-C3-C5-C6
25	A	607	CLA	CAD-CBD-CGD-O1D
25	B	606	CLA	CAD-CBD-CGD-O1D
25	B	608	CLA	CAD-CBD-CGD-O1D
25	C	506	CLA	CAD-CBD-CGD-O1D
25	b	606	CLA	CAD-CBD-CGD-O1D
25	c	506	CLA	CAD-CBD-CGD-O1D
25	c	510	CLA	CAD-CBD-CGD-O1D
29	B	621	SQD	O5-C5-C6-S
29	a	613	SQD	C19-C20-C21-C22
29	a	613	SQD	C25-C26-C27-C28
30	h	102	DGD	C2A-C3A-C4A-C5A
31	D	413	STE	C11-C10-C9-C8
25	B	609	CLA	C8-C10-C11-C12
25	B	612	CLA	C10-C11-C12-C13
25	A	606	CLA	C6-C7-C8-C9
25	a	612	CLA	C6-C7-C8-C9
25	b	602	CLA	C6-C7-C8-C9
30	c	519	DGD	C7B-C8B-C9B-CAB
33	C	519	LMG	C39-C40-C41-C42

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Mol	Chain	Res	Type	Atoms
25	B	602	CLA	C13-C15-C16-C17
25	b	609	CLA	C5-C6-C7-C8
30	C	516	DGD	CDB-CEB-CFB-CGB
31	B	623	STE	C7-C8-C9-C10
30	C	517	DGD	C2B-C3B-C4B-C5B
25	B	611	CLA	C8-C10-C11-C12
25	b	601	CLA	C15-C16-C17-C18
31	J	101	STE	O1-C1-C2-C3
29	a	614	SQD	C11-C12-C13-C14
31	b	624	STE	C2-C3-C4-C5
31	c	521	STE	C1-C2-C3-C4
31	B	619	STE	C11-C10-C9-C8
30	C	516	DGD	O2G-C1B-C2B-C3B
30	c	519	DGD	O1G-C1A-C2A-C3A
31	d	411	STE	O1-C1-C2-C3
25	c	505	CLA	C16-C17-C18-C19
25	b	604	CLA	C10-C11-C12-C13
31	C	522	STE	C12-C13-C14-C15
25	A	612	CLA	C12-C13-C15-C16
25	B	601	CLA	C3A-C2A-CAA-CBA
25	B	602	CLA	C12-C13-C15-C16
25	C	501	CLA	C11-C10-C8-C7
25	a	609	CLA	C11-C10-C8-C7
25	a	612	CLA	C6-C7-C8-C10
25	b	606	CLA	C12-C13-C15-C16
25	c	506	CLA	C6-C7-C8-C10
33	D	412	LMG	O8-C28-C29-C30
35	e	101	HEM	CAA-CBA-CGA-O2A
33	d	410	LMG	C38-C39-C40-C41
25	h	101	CLA	CAA-CBA-CGA-O2A
27	k	101	BCR	C17-C18-C19-C20
27	t	101	BCR	C17-C18-C19-C20
25	B	612	CLA	CAA-CBA-CGA-O1A
27	D	405	BCR	C19-C20-C21-C22
26	A	608	PHO	C16-C17-C18-C19
32	L	101	LHG	O7-C7-C8-C9
25	b	611	CLA	CAA-CBA-CGA-O1A
25	b	612	CLA	CAA-CBA-CGA-O1A
31	b	624	STE	O1-C1-C2-C3
29	a	614	SQD	C16-C17-C18-C19
25	c	507	CLA	CAA-CBA-CGA-O2A
26	d	402	PHO	C2A-CAA-CBA-CGA

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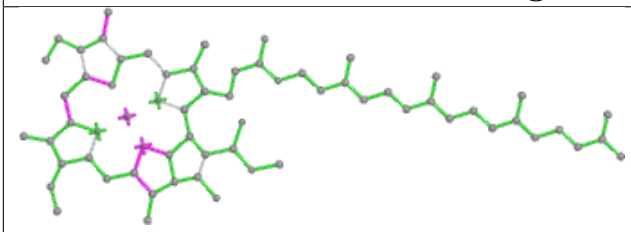
Mol	Chain	Res	Type	Atoms
25	C	501	CLA	C16-C17-C18-C20
25	A	607	CLA	C4C-C3C-CAC-CBC
25	D	403	CLA	C15-C16-C17-C18
29	A	613	SQD	C15-C16-C17-C18
32	B	620	LHG	C24-C25-C26-C27
29	a	614	SQD	O48-C23-C24-C25

There are no ring outliers.

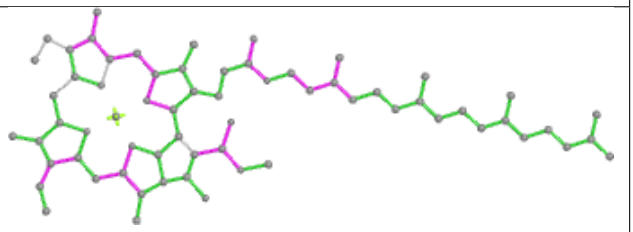
No monomer is involved in short contacts.

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 then 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.

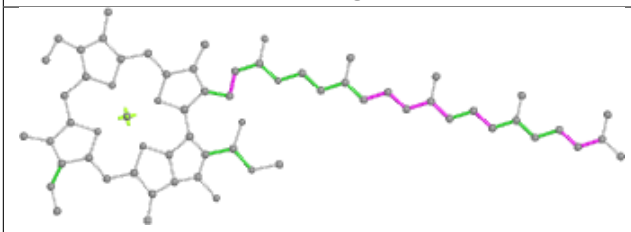
Ligand CLA b 601



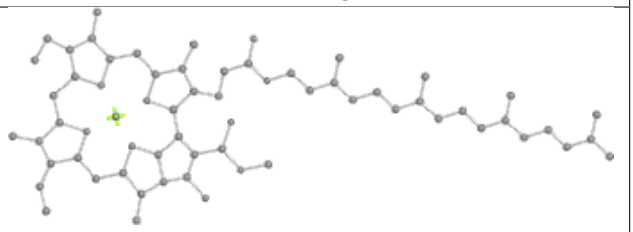
Bond lengths



Bond angles

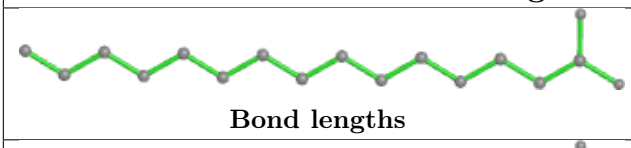


Torsions

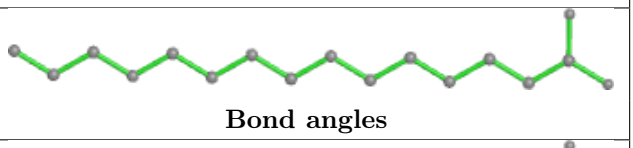


Rings

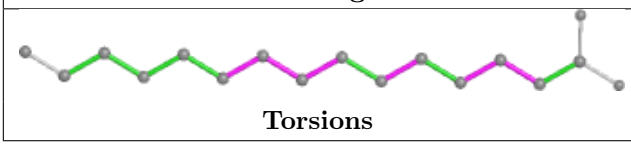
Ligand STE B 619



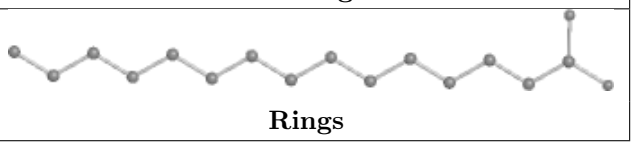
Bond lengths



Bond angles

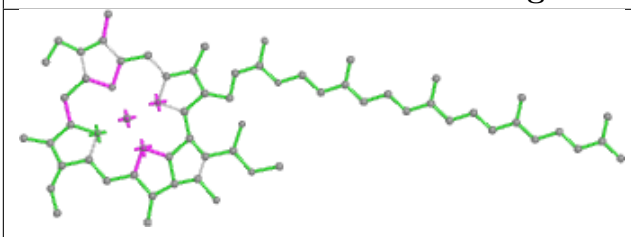


Torsions



Rings

Ligand CLA b 607



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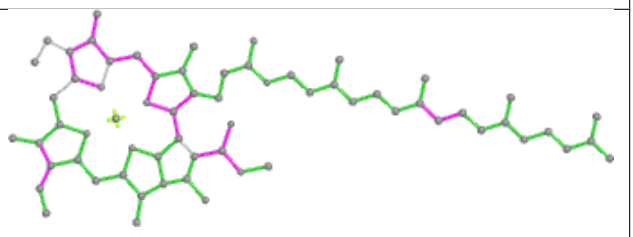
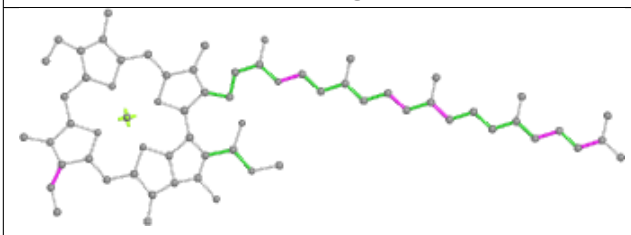


Bond angles



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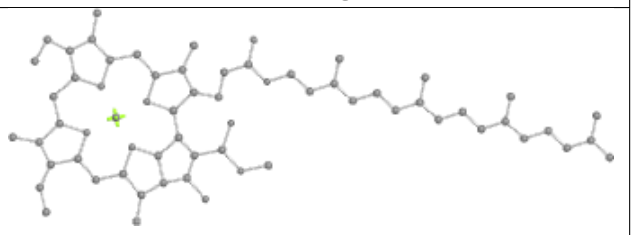
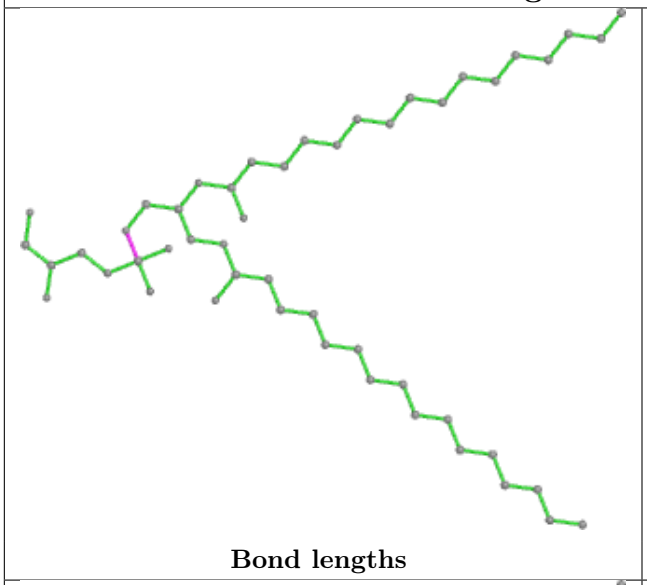


Rings

Ligand LHG E 101



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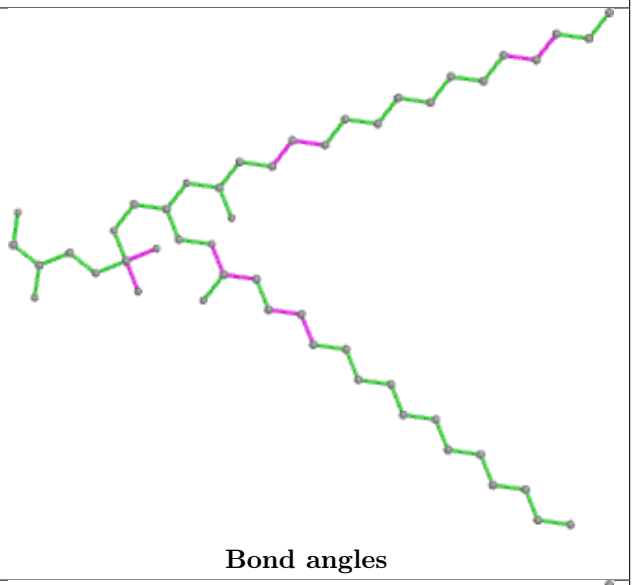
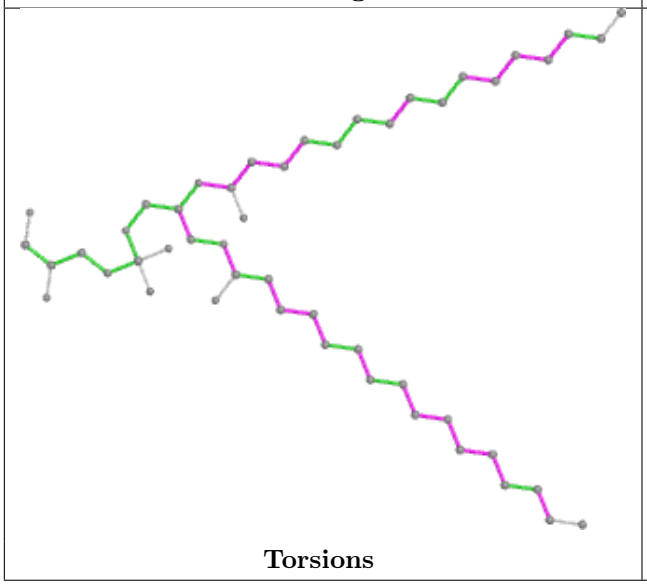


Bond angles



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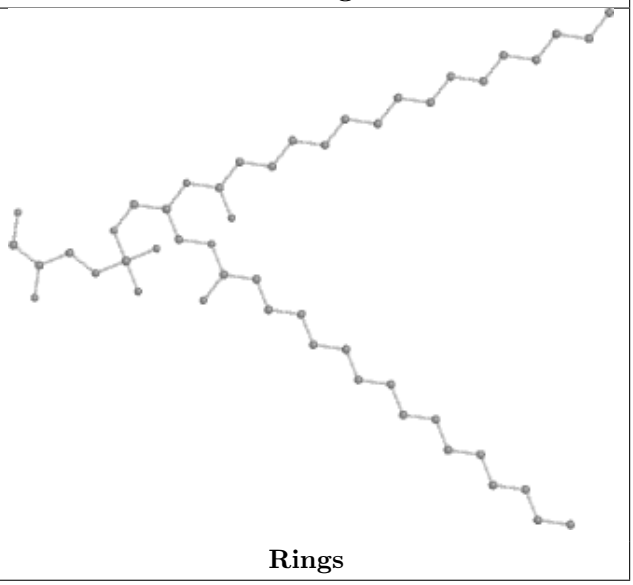
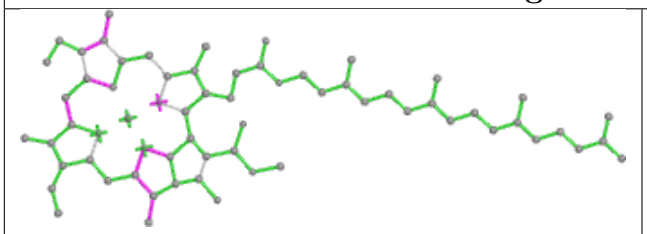


Rings

Ligand CLA C 501



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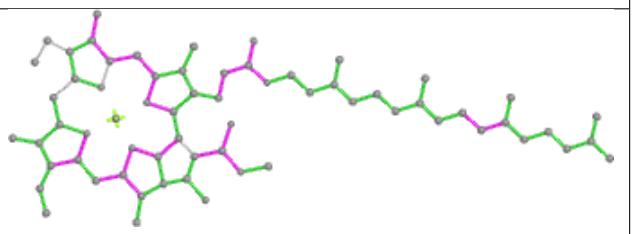
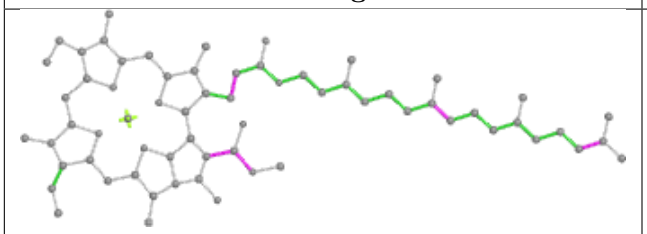
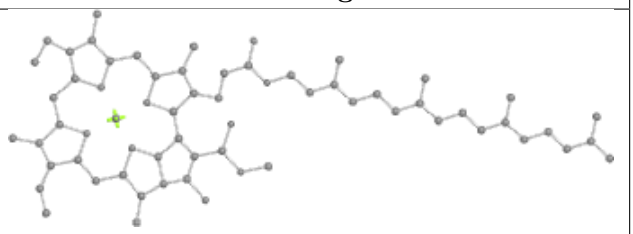


Bond angles

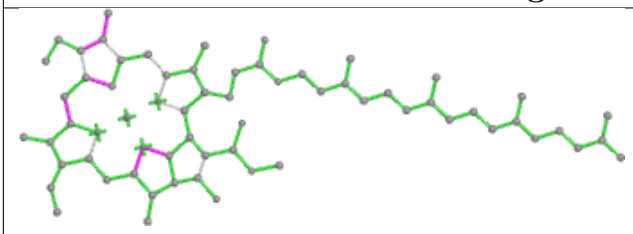


Torsions



Rings

Ligand CLA d 401



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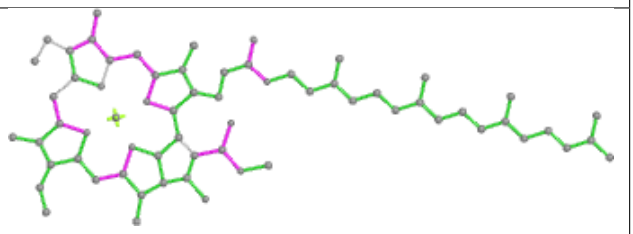
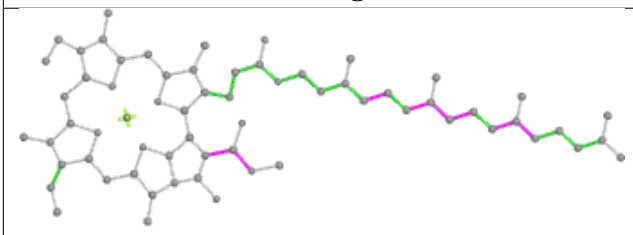


Bond angles



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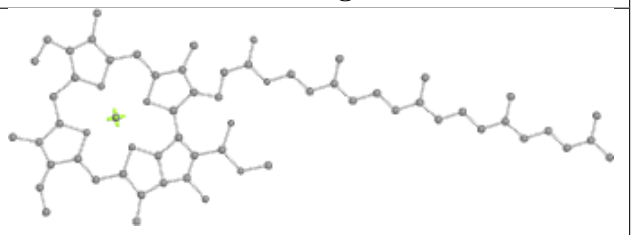
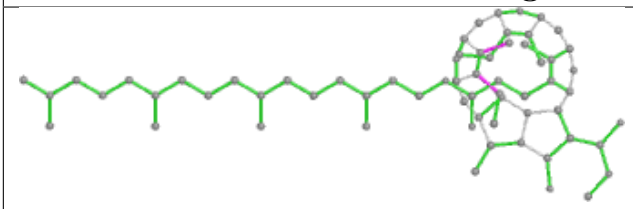


Rings

Ligand PHO A 608



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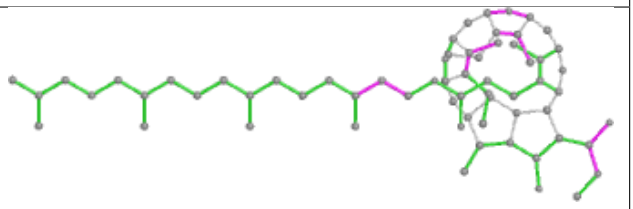
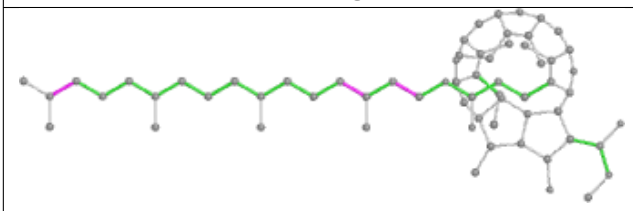


Bond angles



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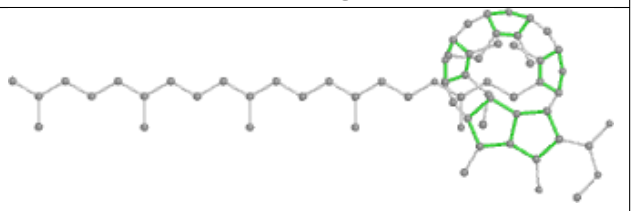
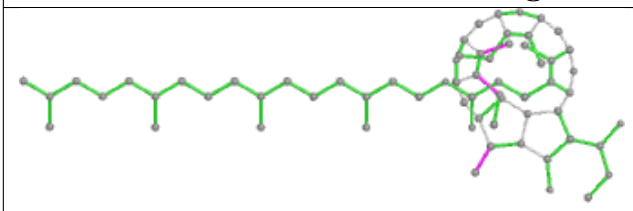
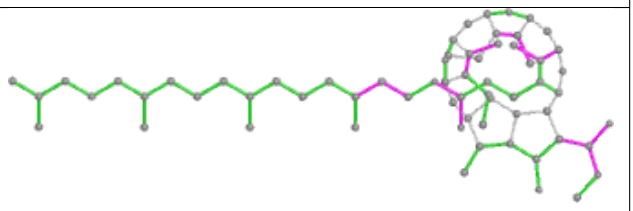


Rings

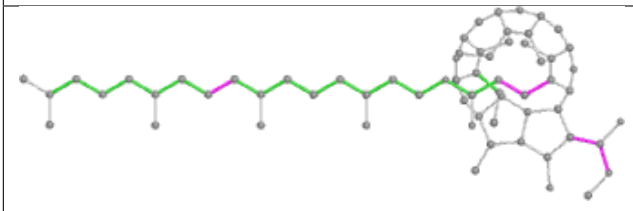
Ligand PHO d 402



Bond lengths



Bond angles



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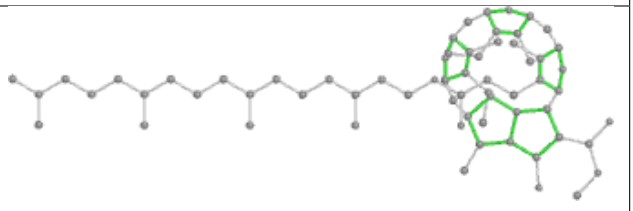
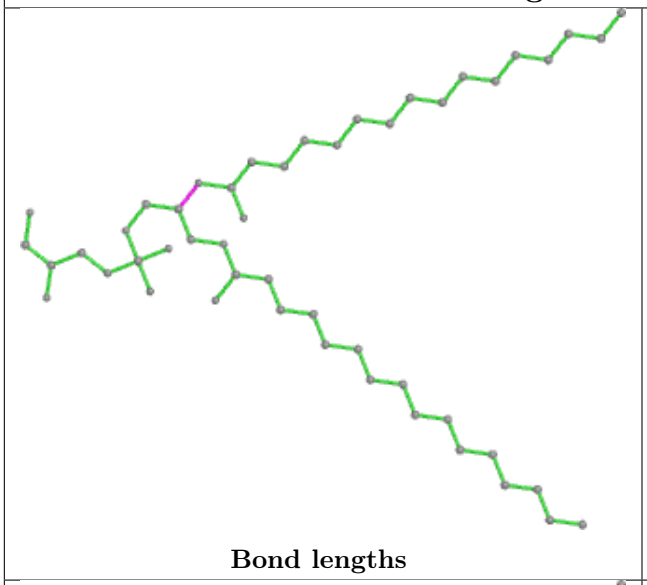


Rings

Ligand LHG L 101



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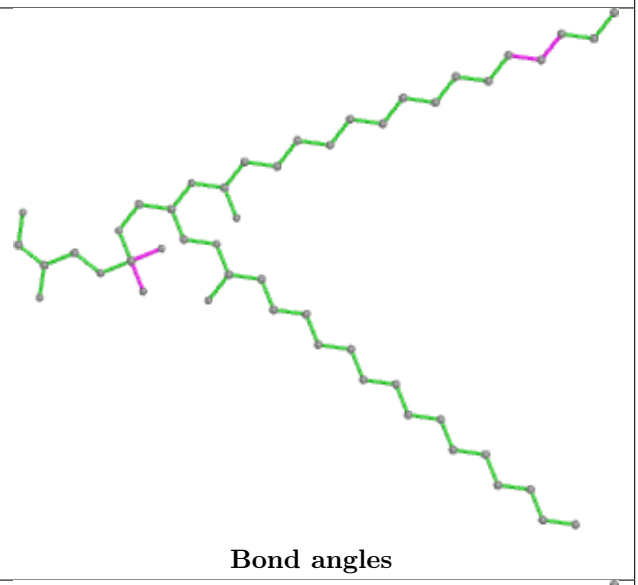
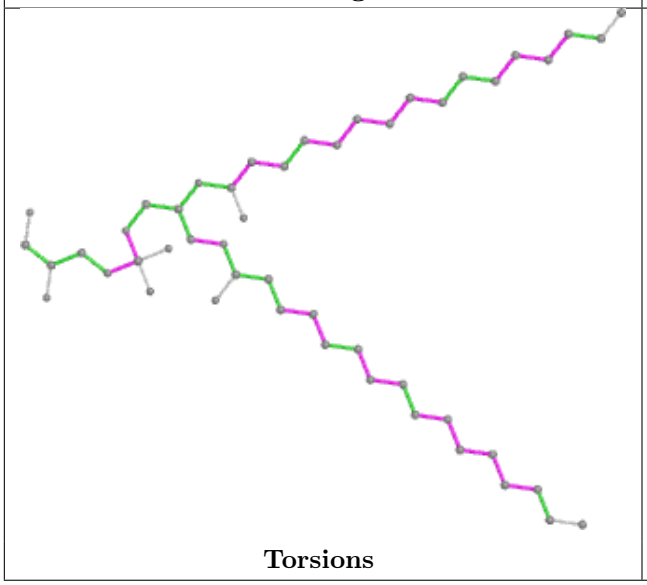


Bond angles



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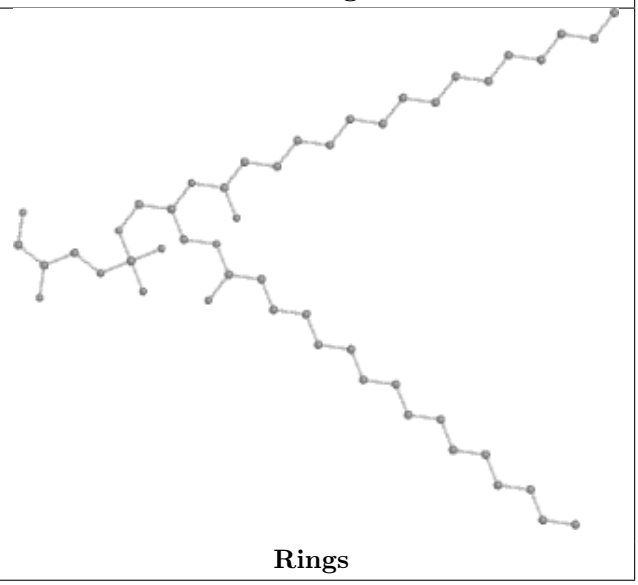
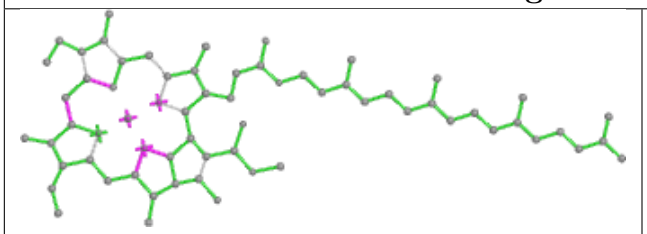
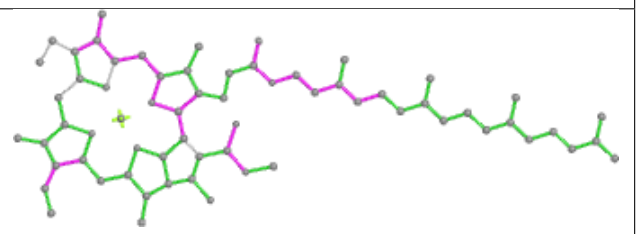


Rings

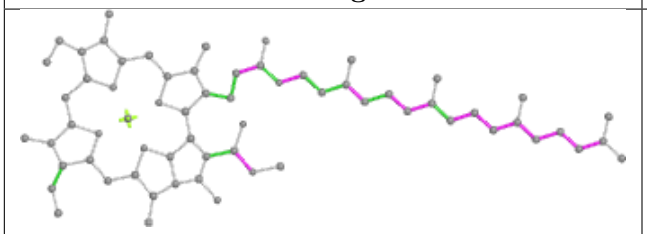
Ligand CLA B 612



Bond lengths



Bond angles



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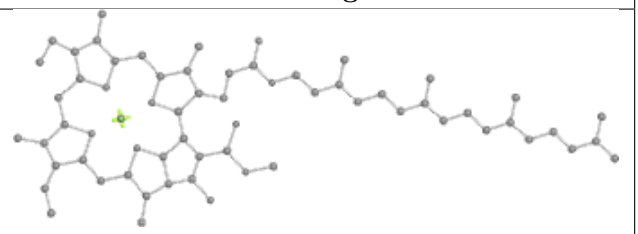
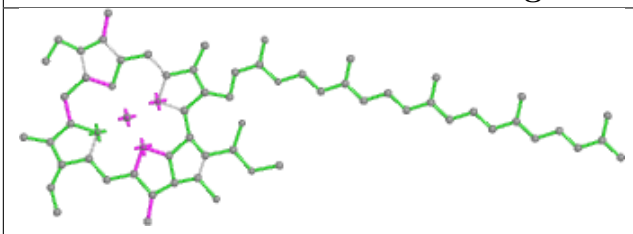
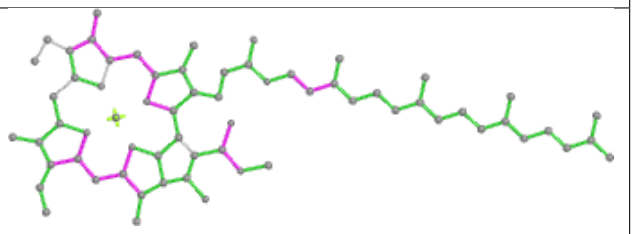


Rings

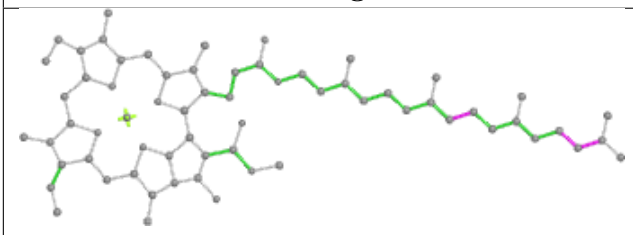
Ligand CLA B 610



Bond lengths



Bond angles



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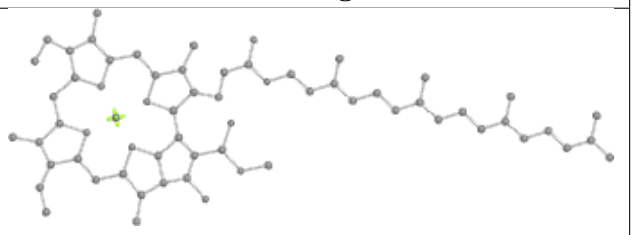
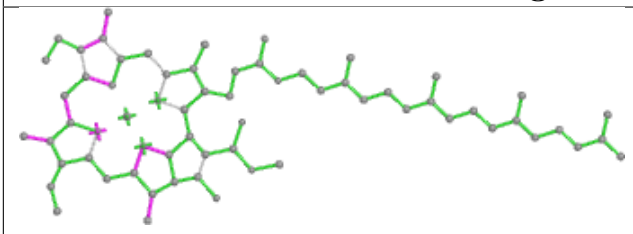


Rings

Ligand CLA c 503



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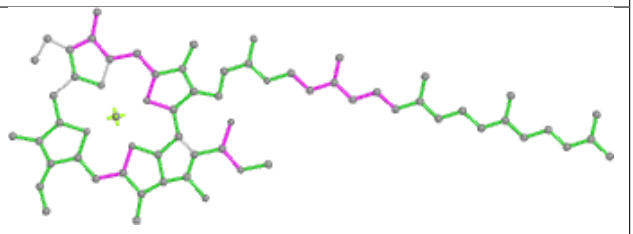
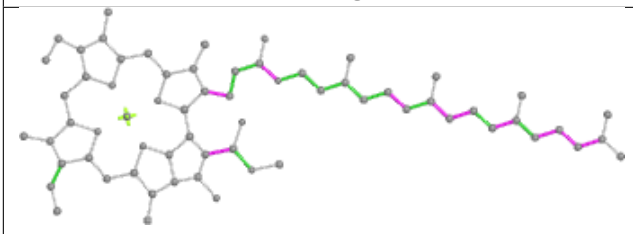


Bond angles



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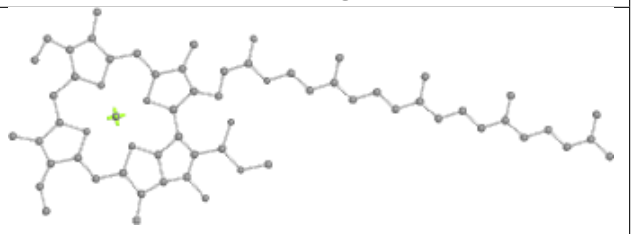
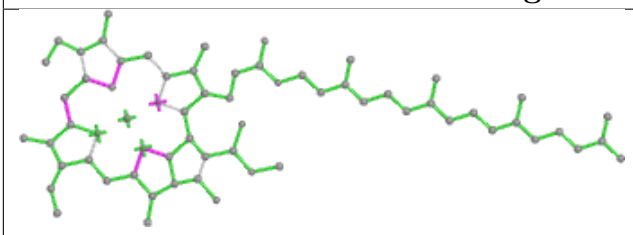


Rings

Ligand CLA A 606



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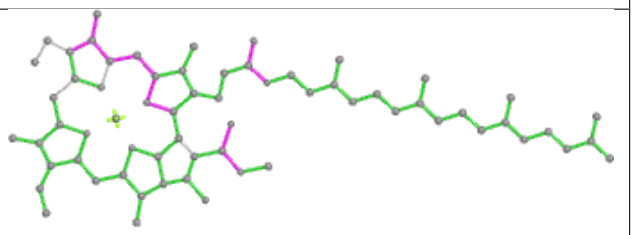
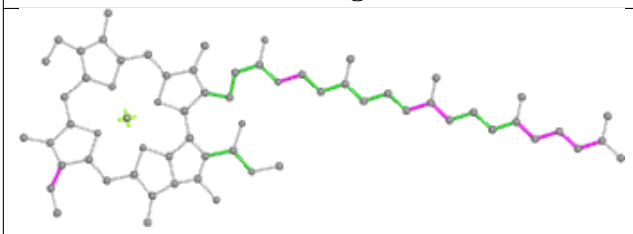
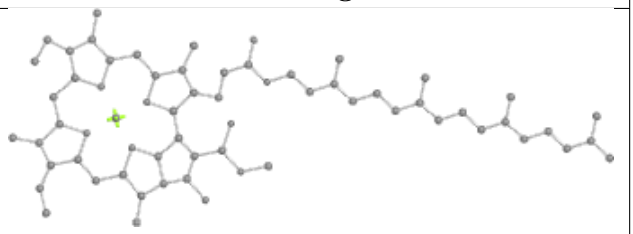


Bond angles

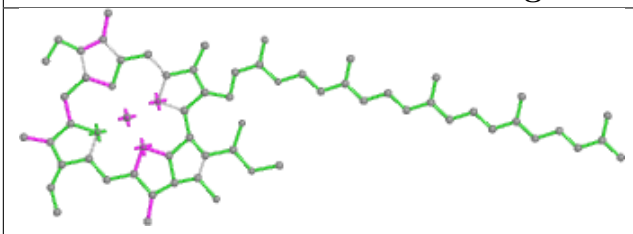


Torsions

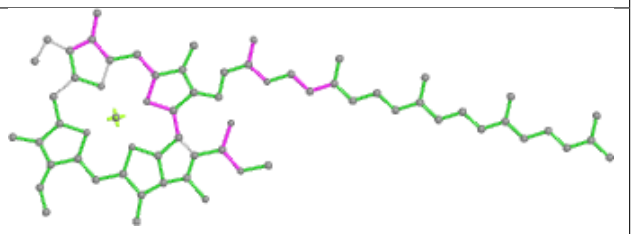


Rings

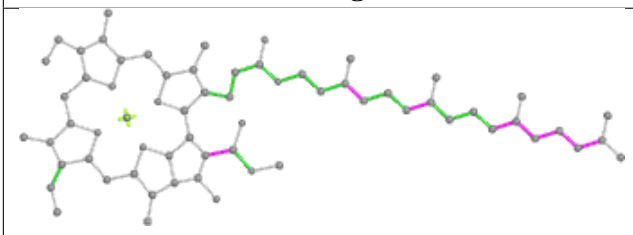
Ligand CLA C 506



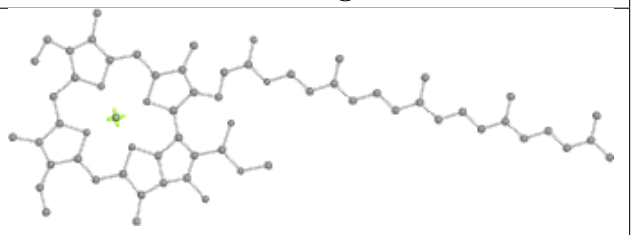
Bond lengths



Bond angles

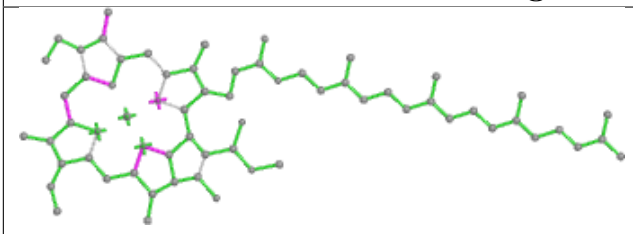


Torsions

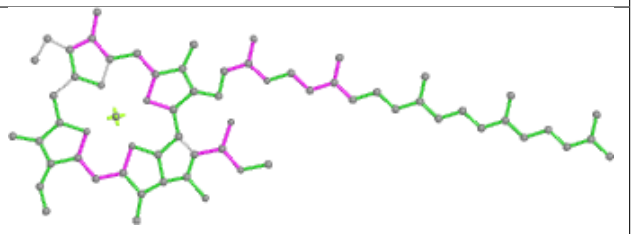


Rings

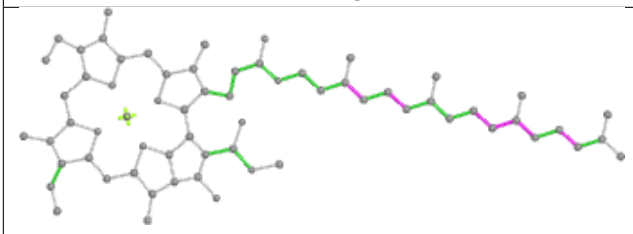
Ligand CLA b 604



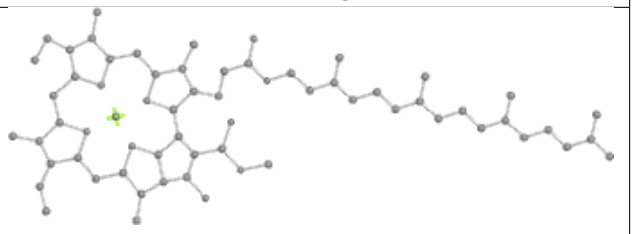
Bond lengths



Bond angles

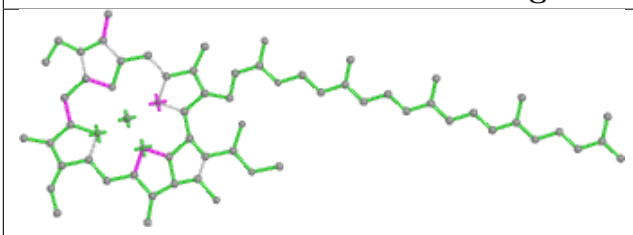


Torsions

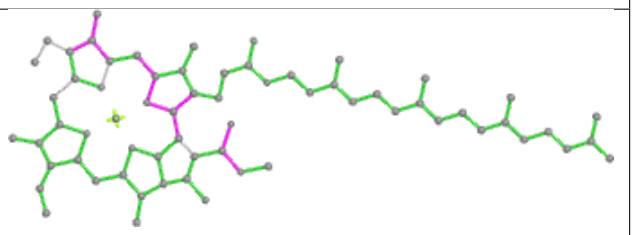


Rings

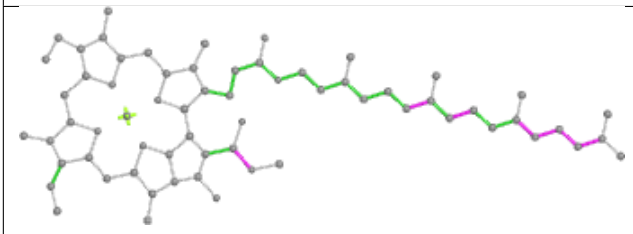
Ligand CLA c 511



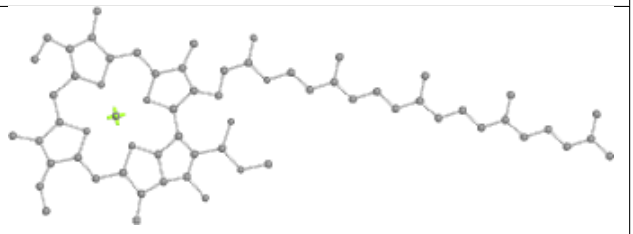
Bond lengths



Bond angles

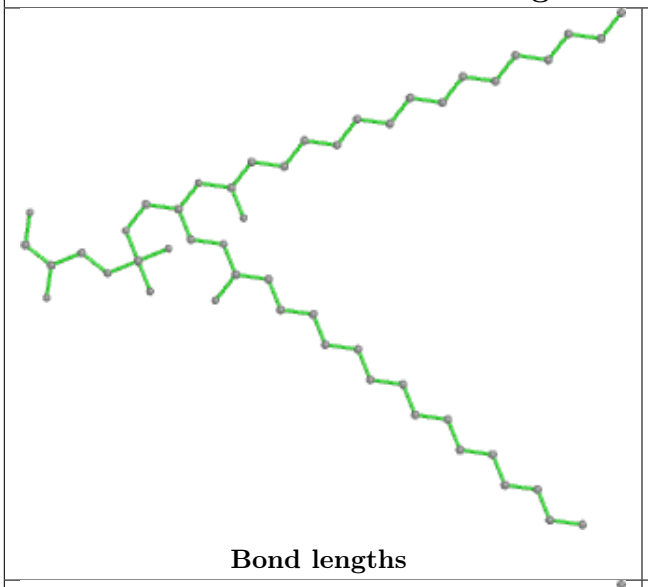


Torsions

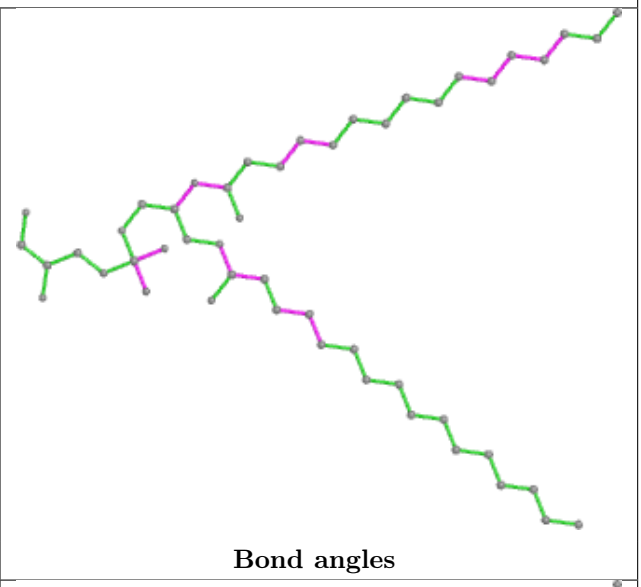


Rings

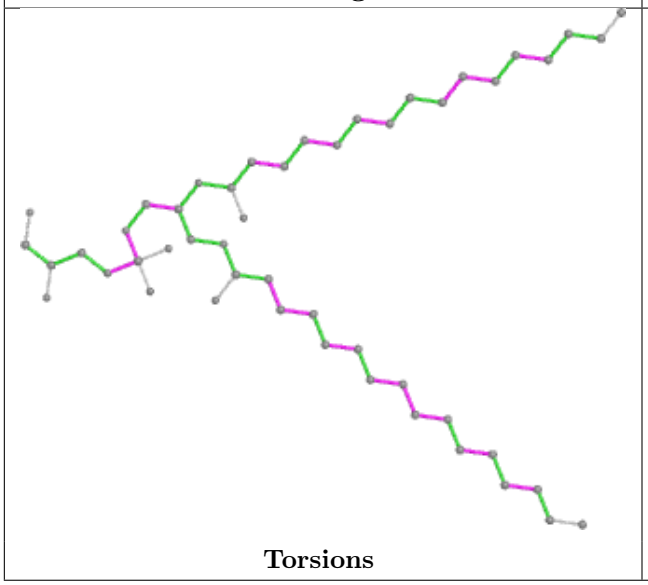
Ligand LHG l 101



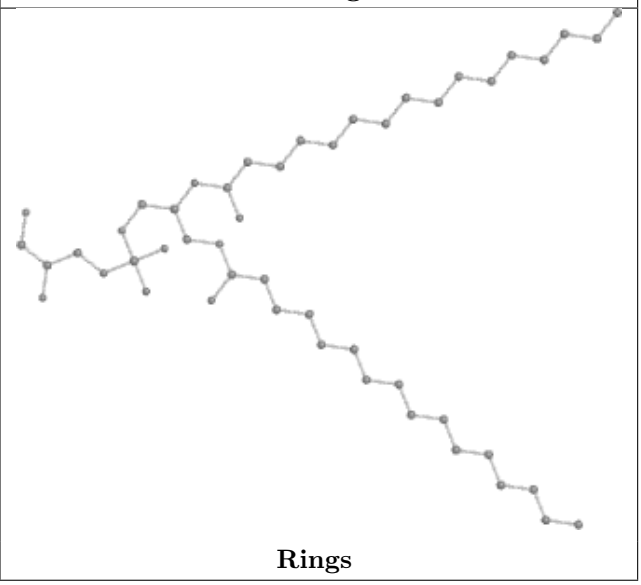
Bond lengths



Bond angles

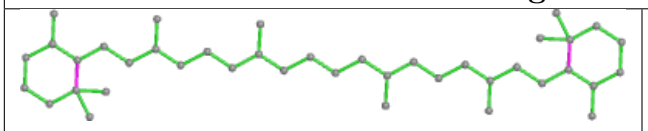


Torsions



Rings

Ligand BCR c 514



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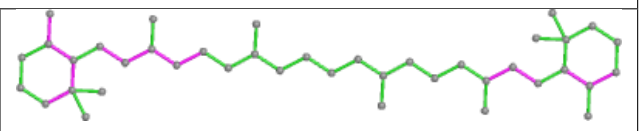

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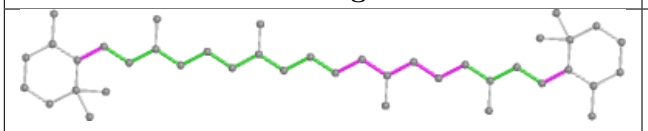

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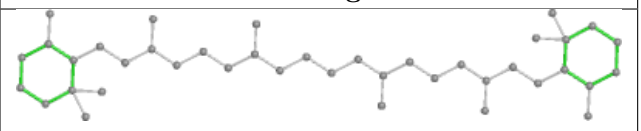
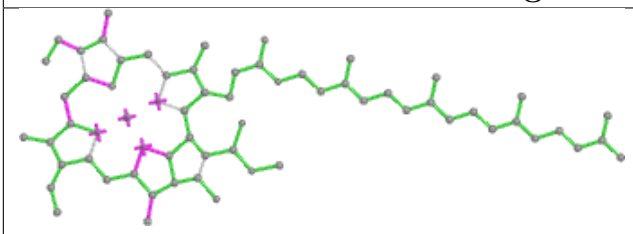


Rings

Ligand CLA B 607



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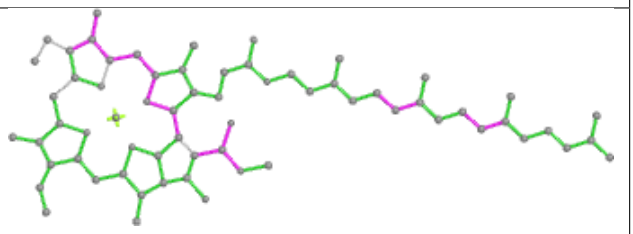
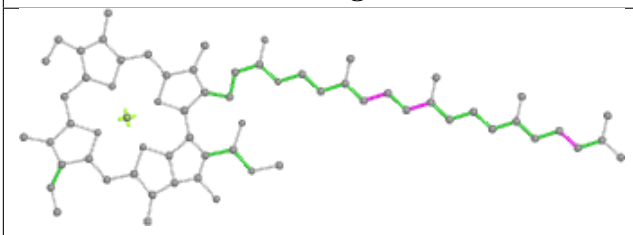


Bond angles



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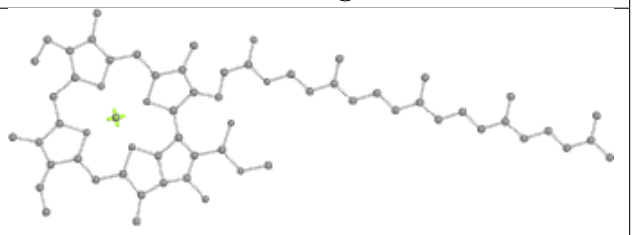
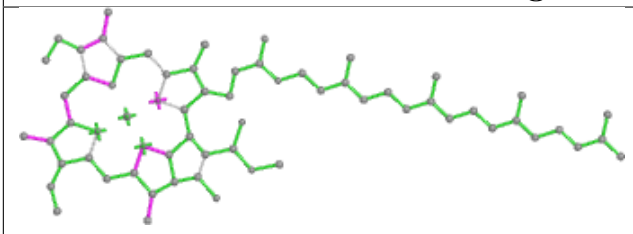


Rings

Ligand CLA b 610



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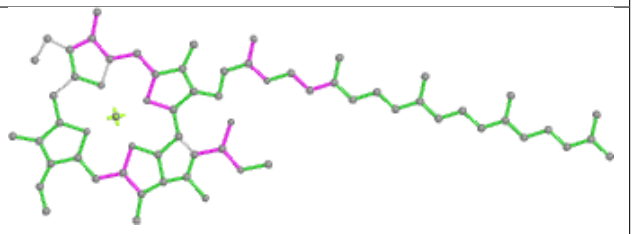
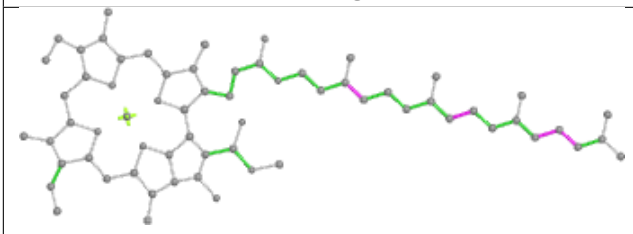


Bond angles



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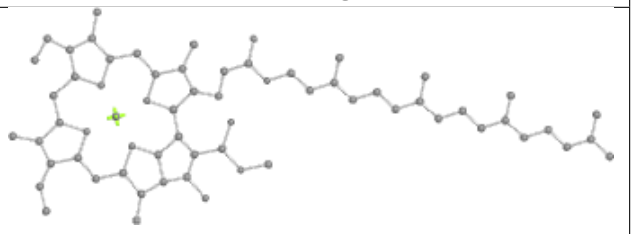
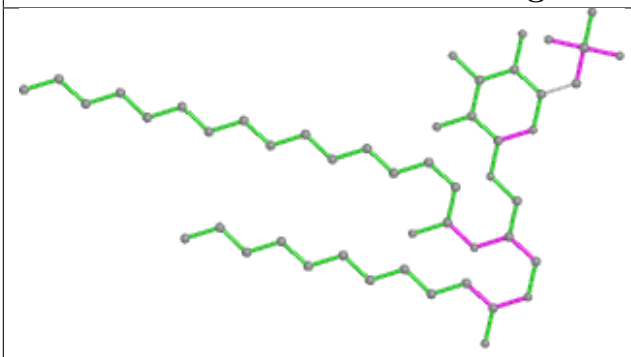


Rings

Ligand SQD b 619



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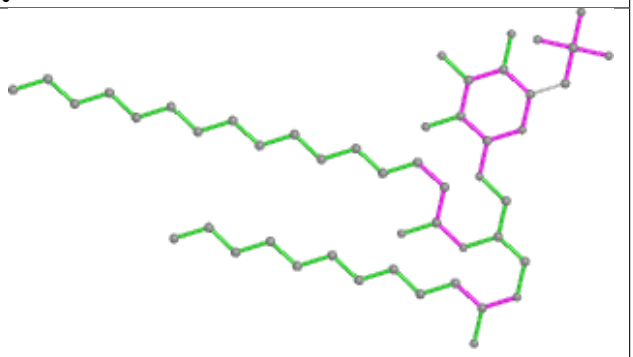

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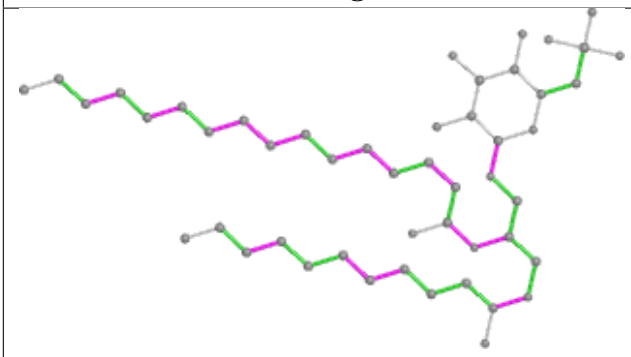

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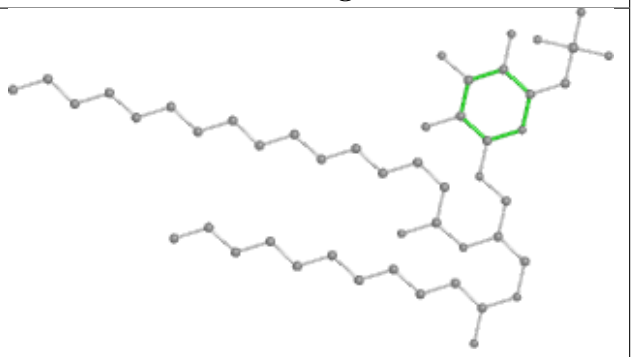
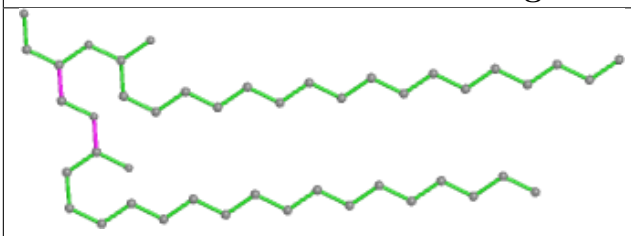


Rings

Ligand DGD a 615



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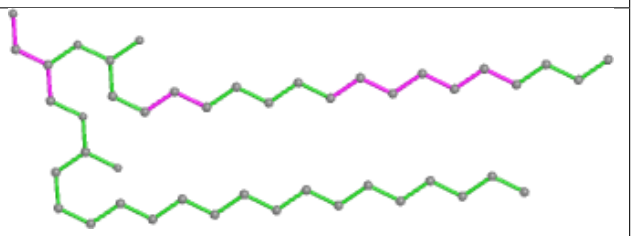

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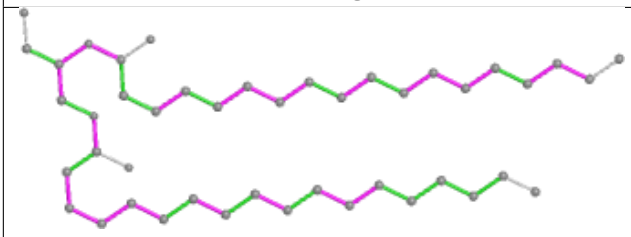

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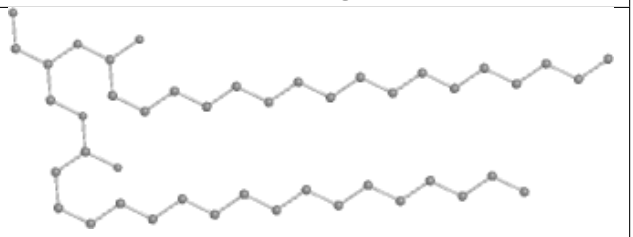
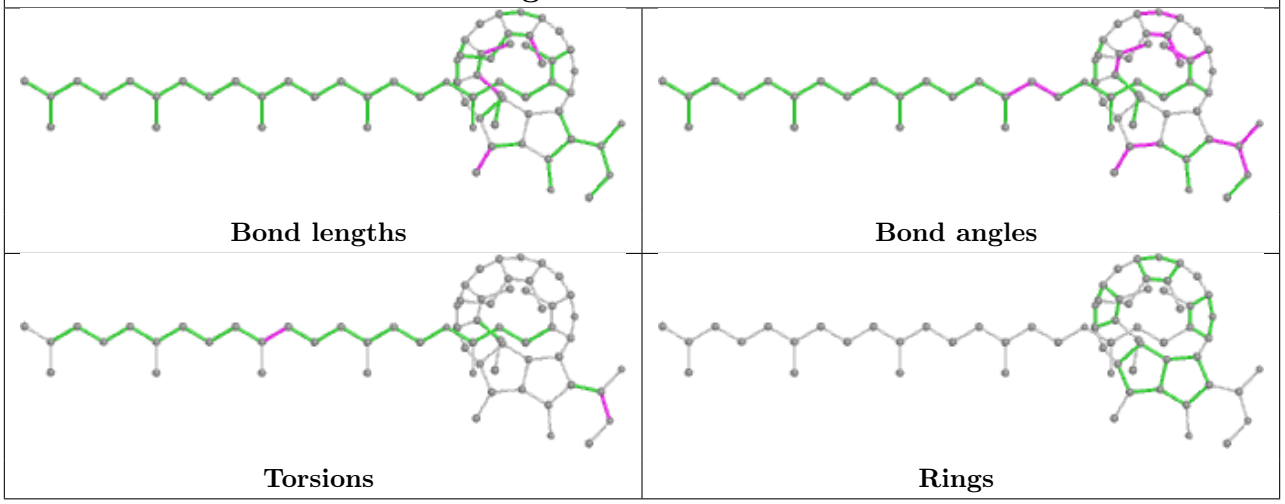
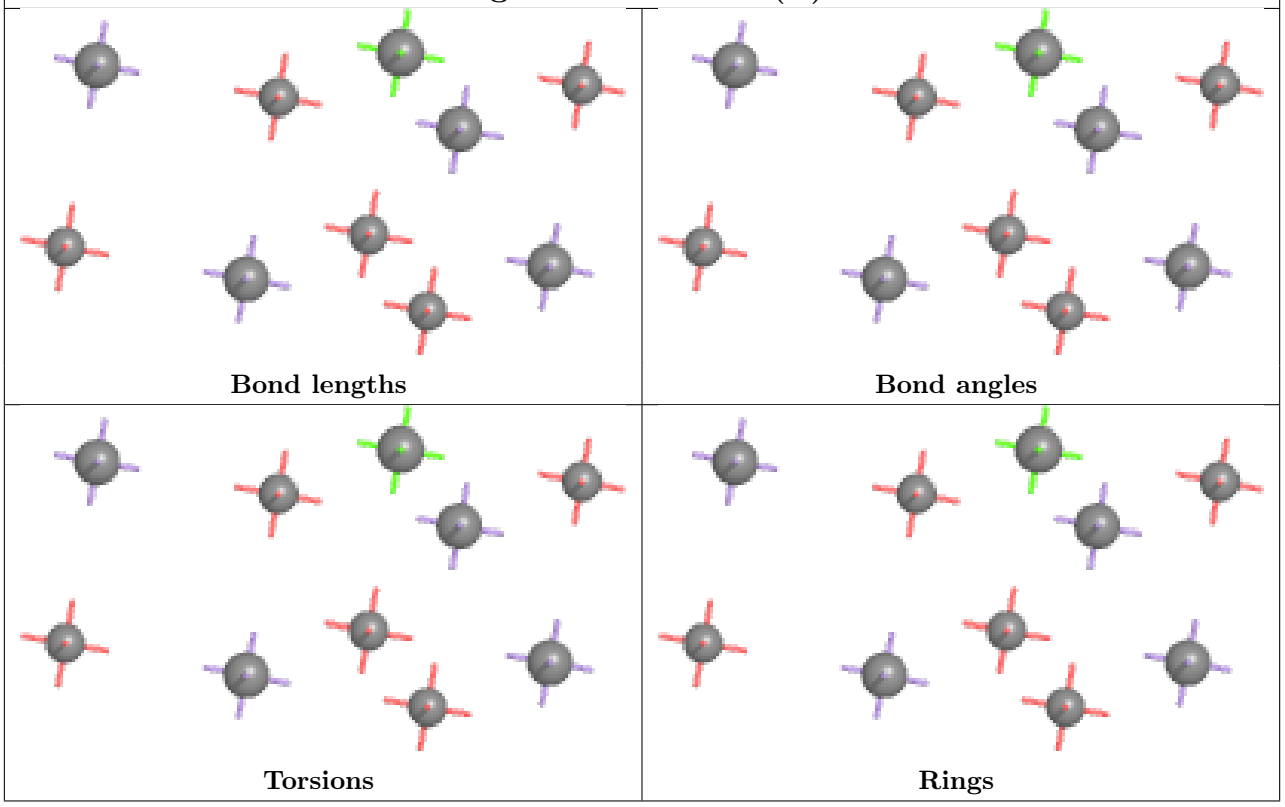


Rings

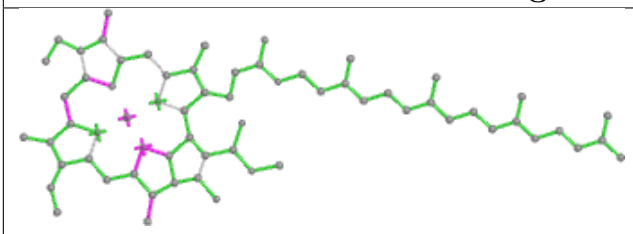
Ligand PHO D 402



Ligand OEX A 601 (B)



Ligand CLA c 502



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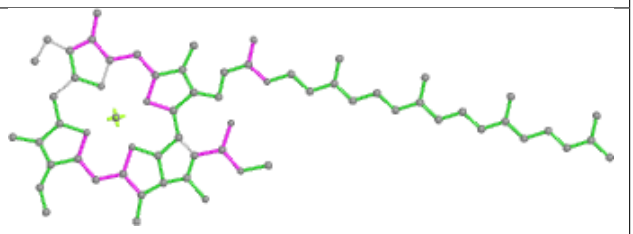
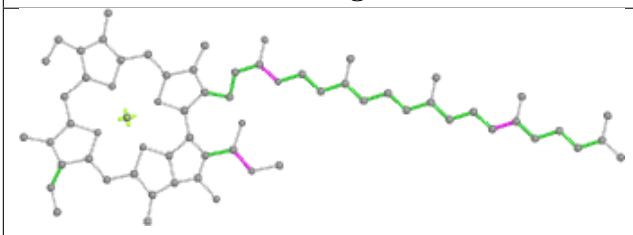


Bond angles



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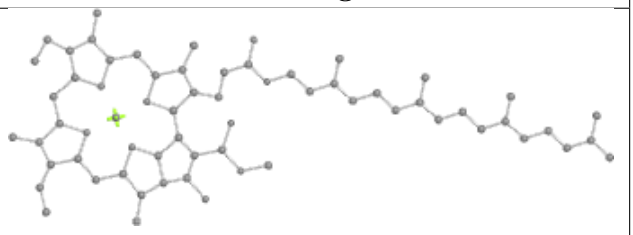
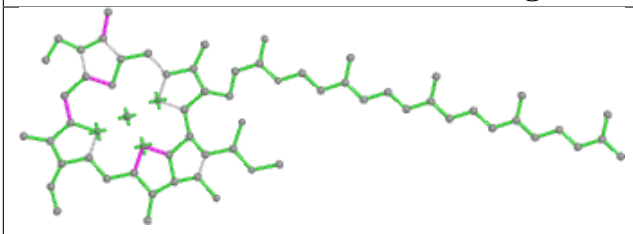


Rings

Ligand CLA A 607



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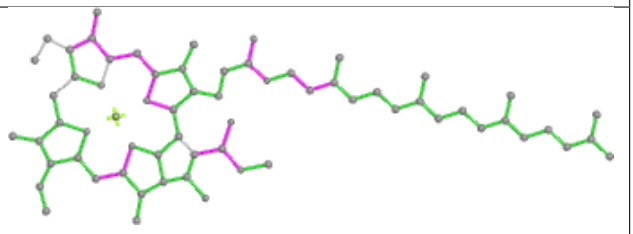
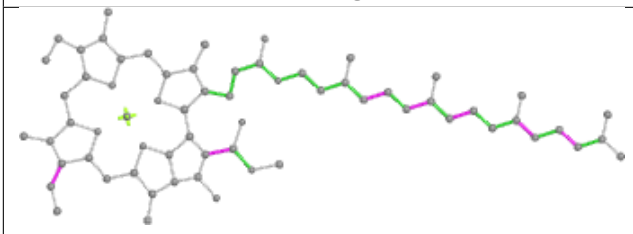


Bond angles



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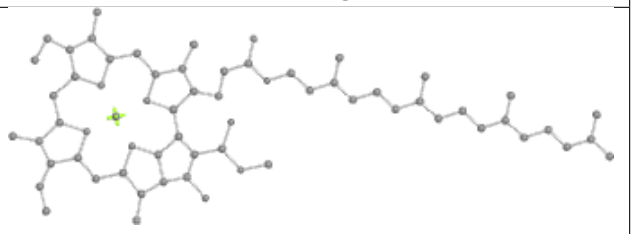
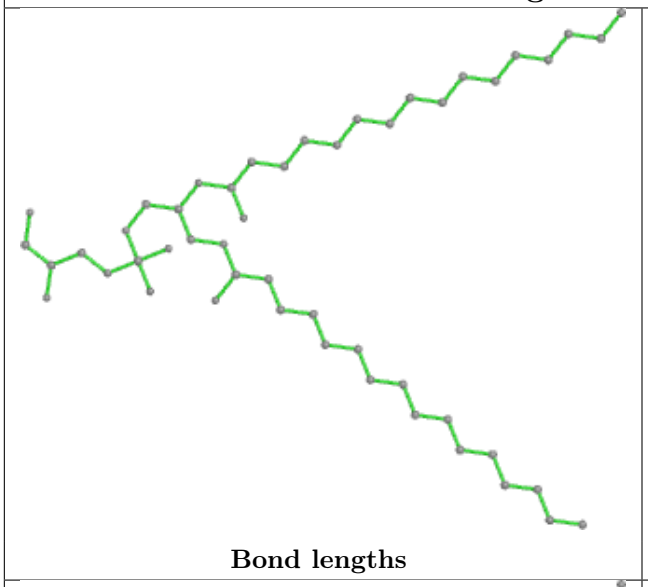


Rings

Ligand LHG d 407



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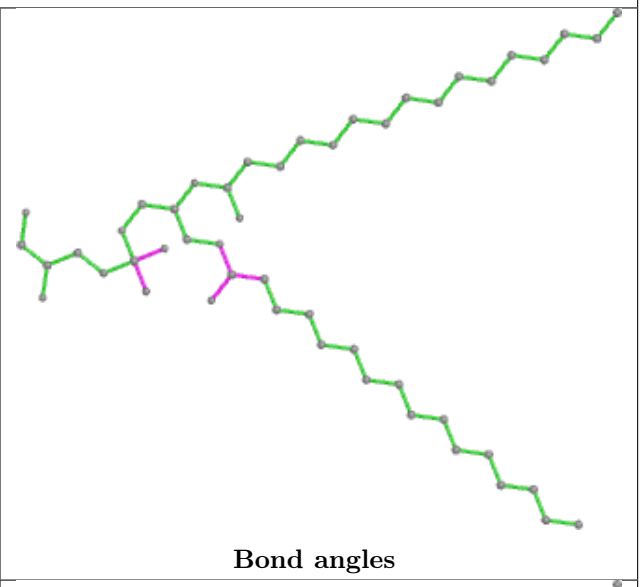
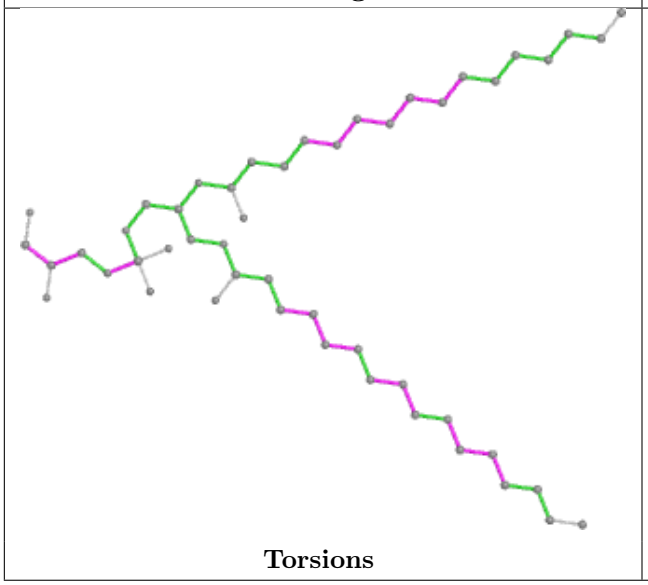


Bond angles



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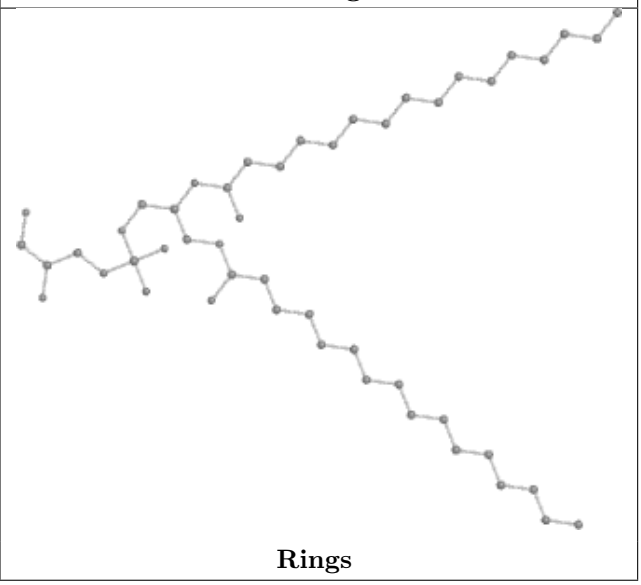
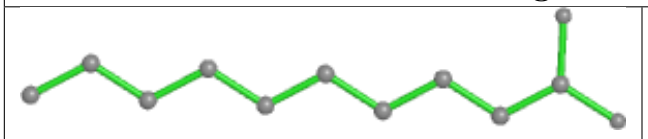


Rings

Ligand STE a 616



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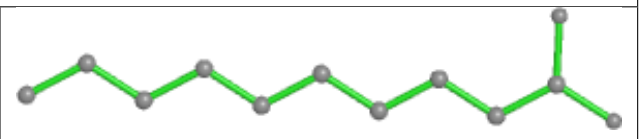
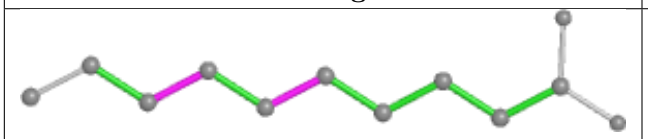


Bond angles



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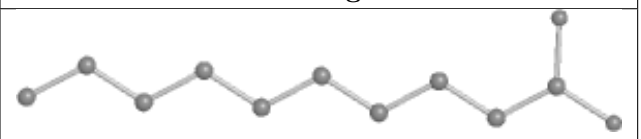
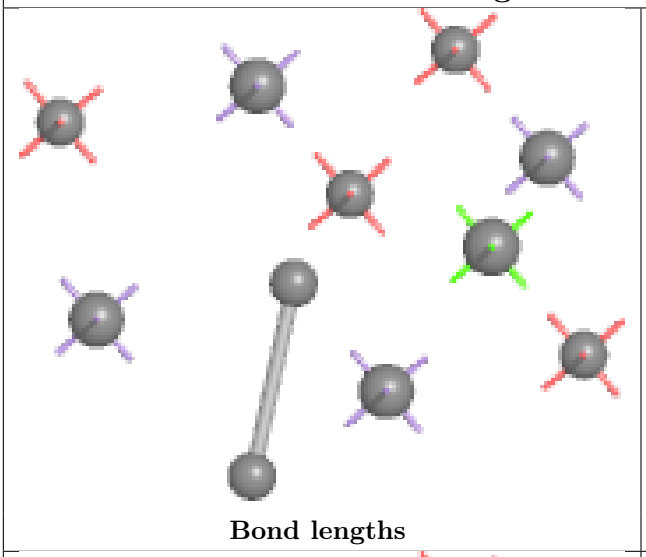


Rings

Ligand OEY a 602 (A)



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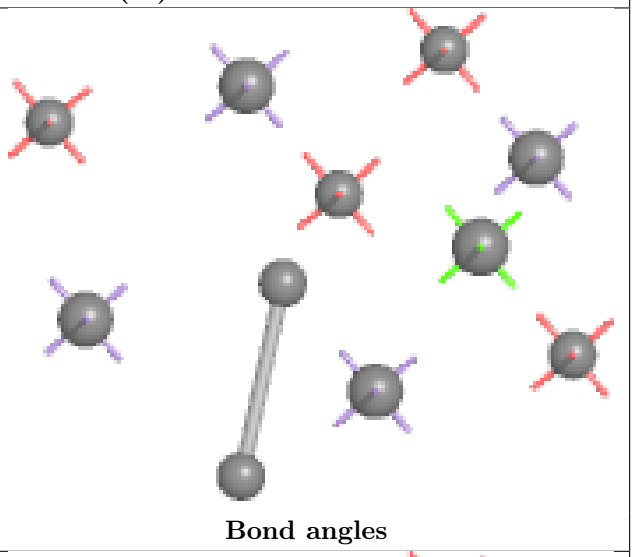
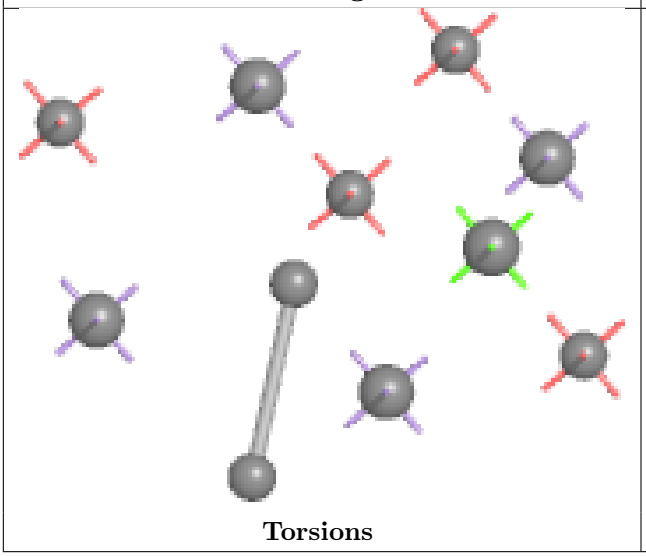


Bond angles



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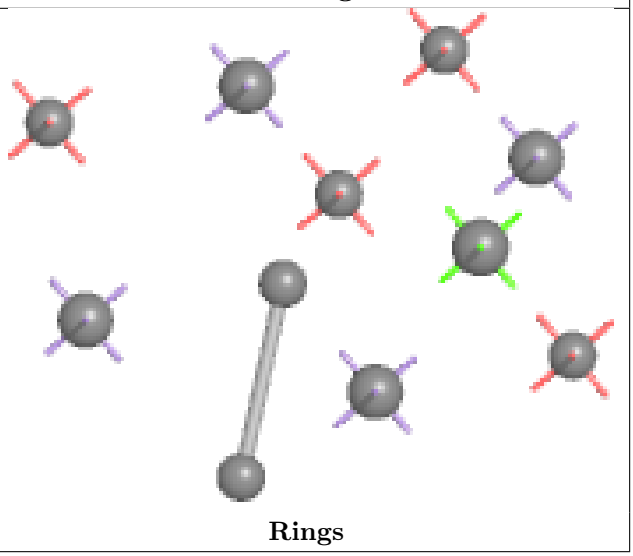
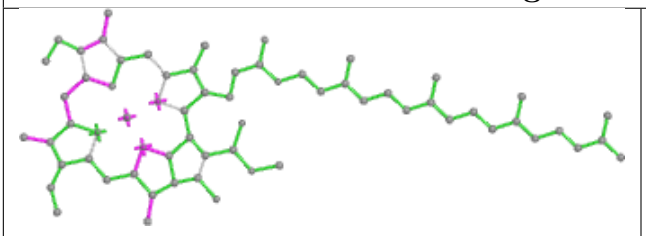


Rings

Ligand CLA D 404



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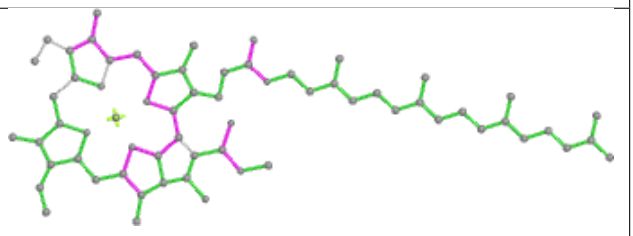
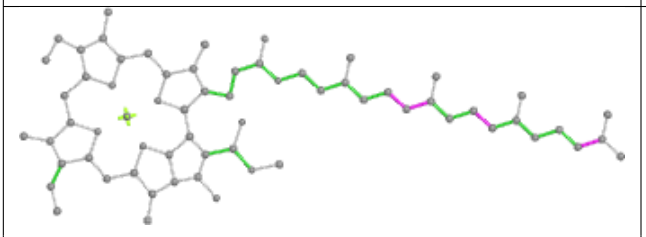


Bond angles



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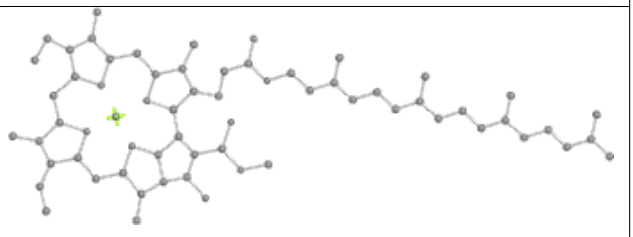
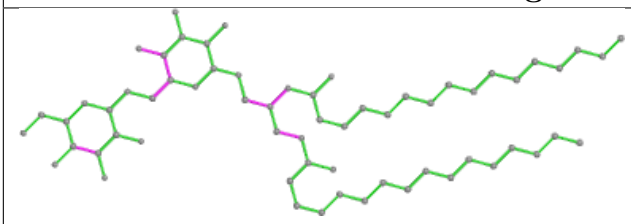
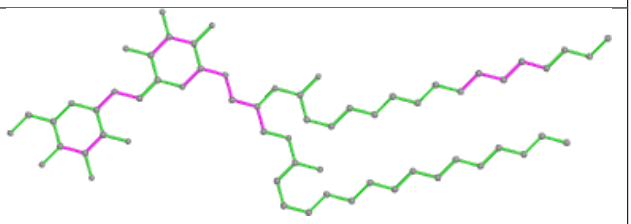


Rings

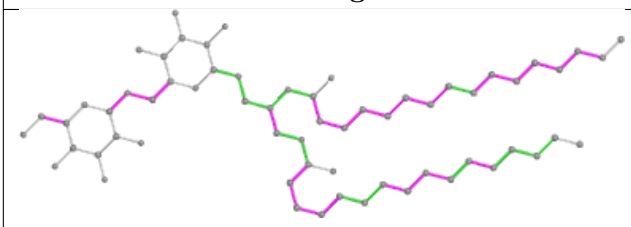
Ligand DGD c 517



Bond lengths



Bond angles



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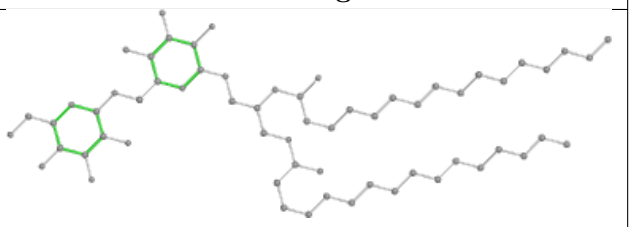
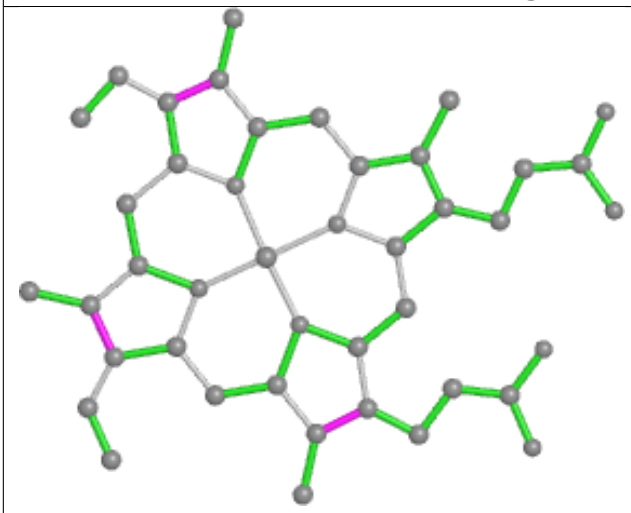


Rings

Ligand HEC V 201



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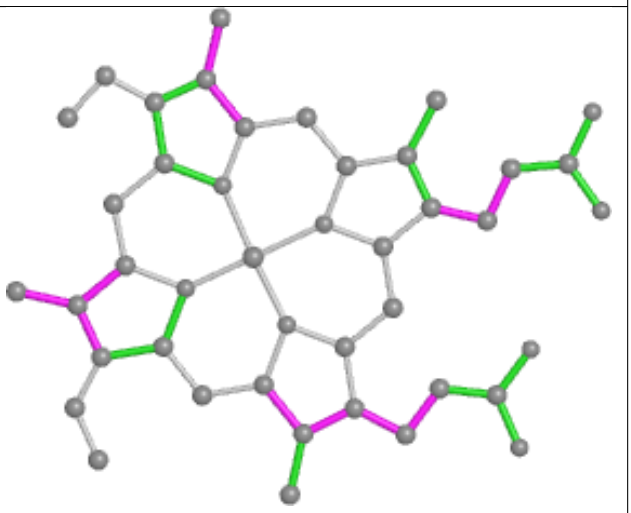
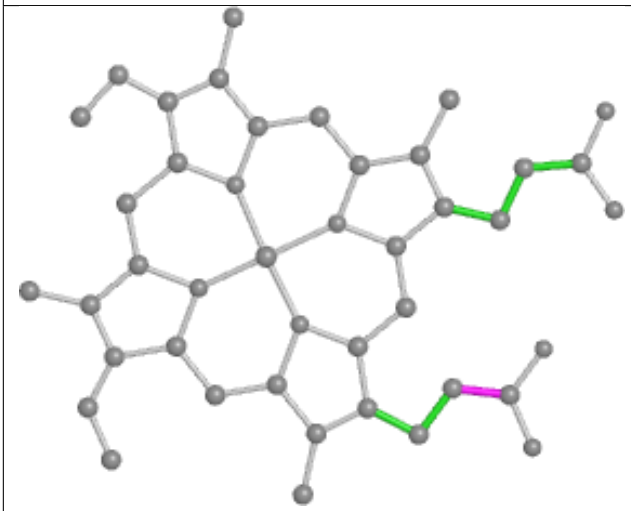


Bond angles



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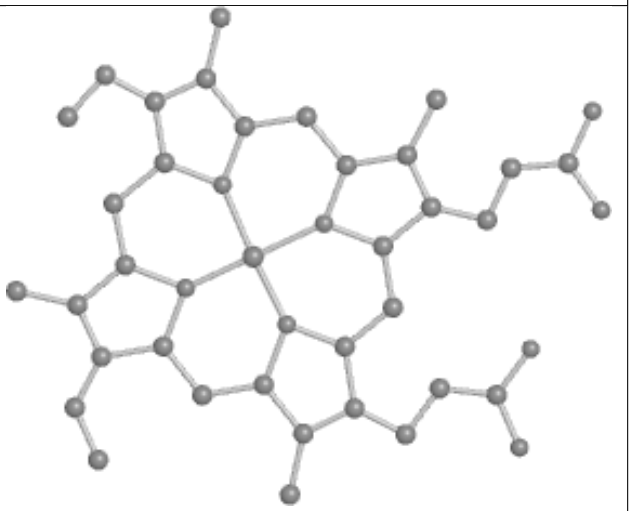
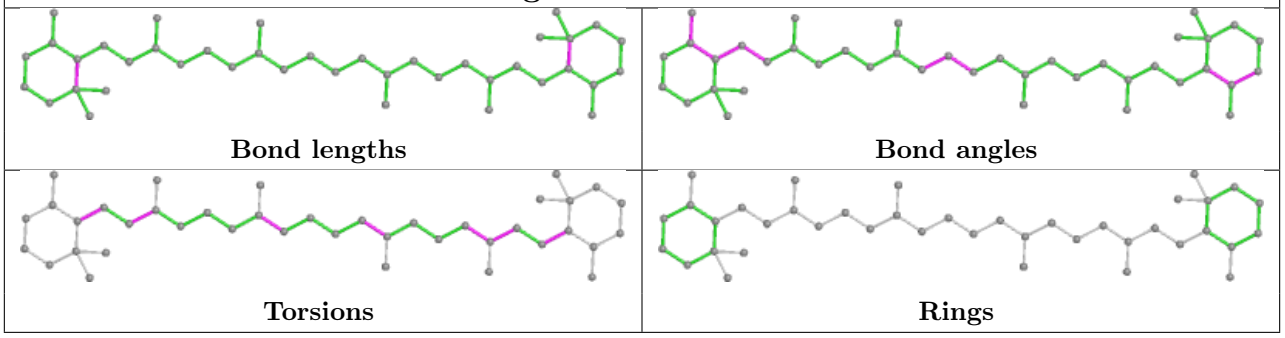
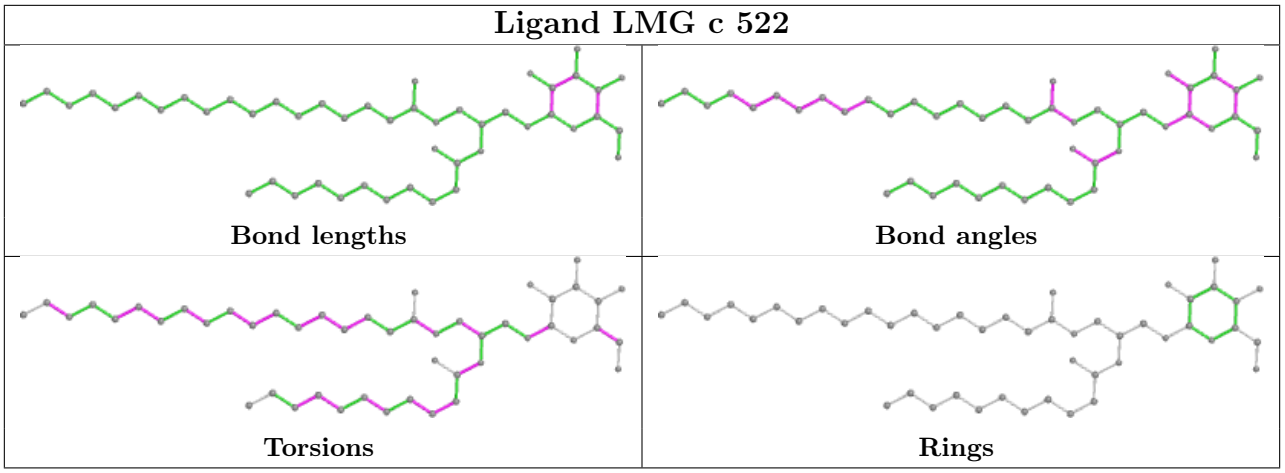


Rings

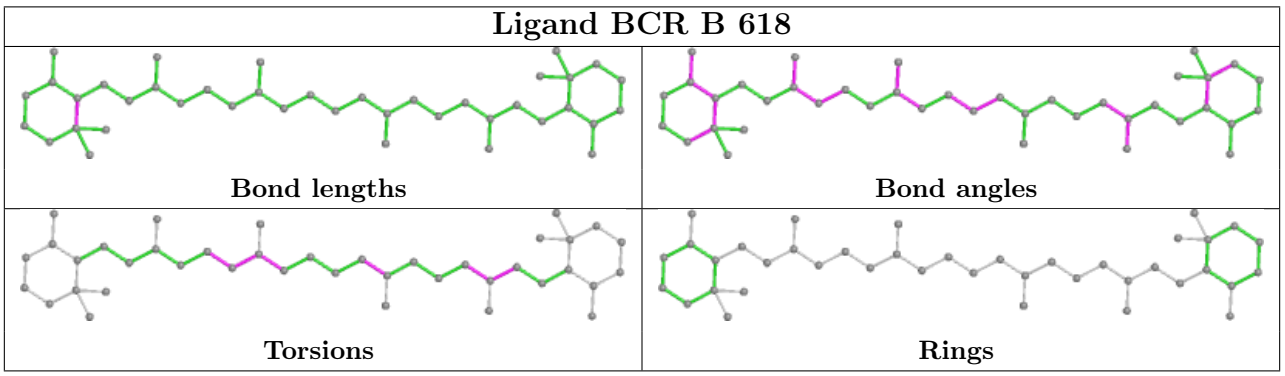
Ligand BCR Y 101



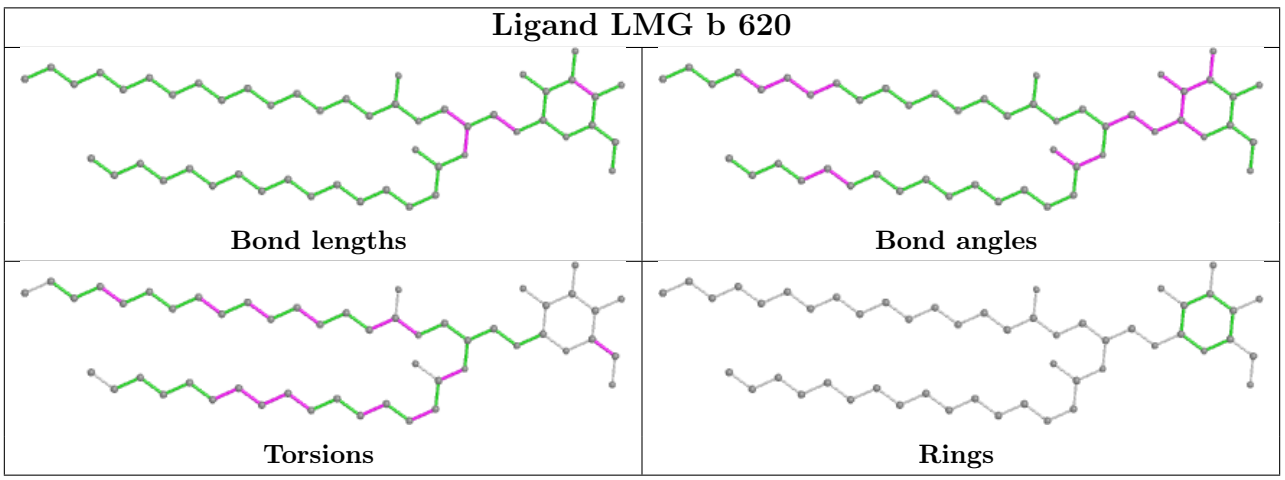
Ligand LMG c 522



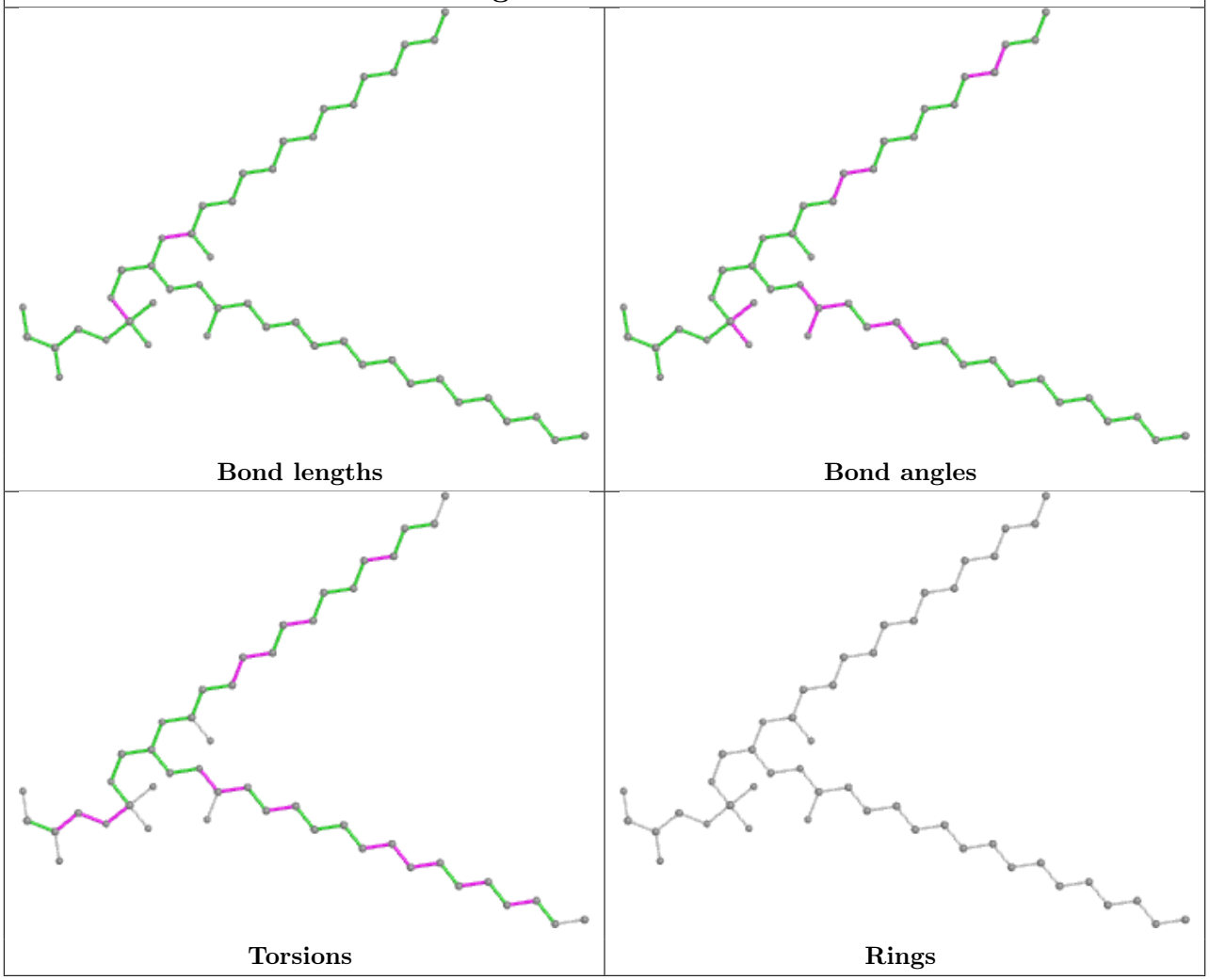
Ligand BCR B 618



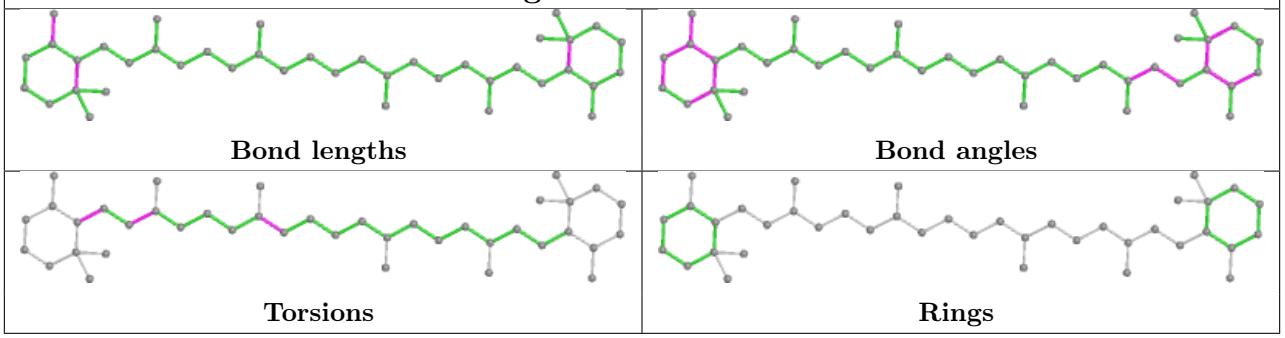
Ligand LMG b 620



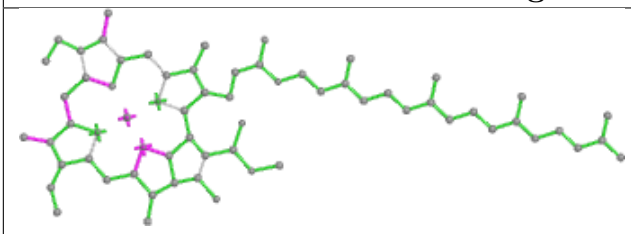
Ligand LHG D 410



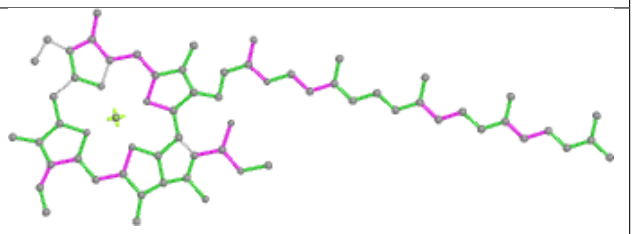
Ligand BCR B 616



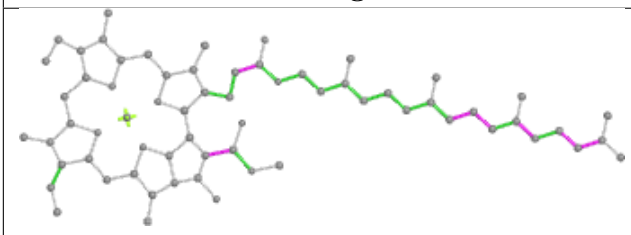
Ligand CLA b 611



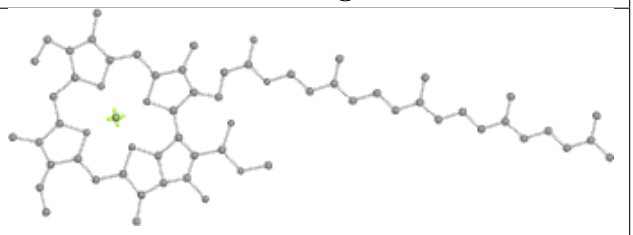
Bond lengths



Bond angles



Torsions

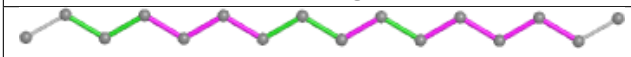


Rings

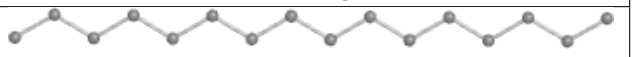
Ligand STE B 625

Bond lengths

Bond angles

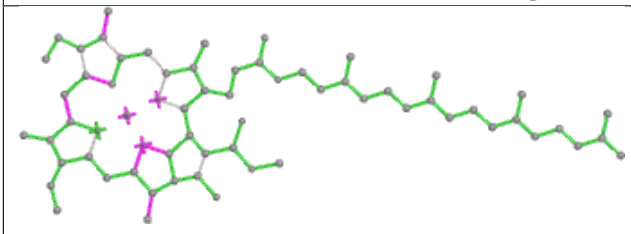


Torsions

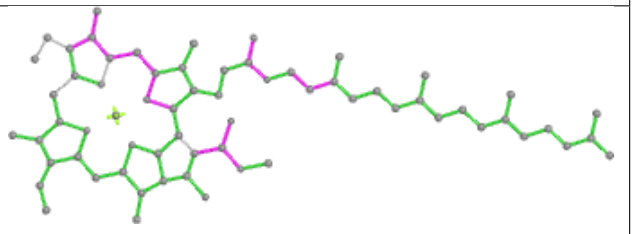


Rings

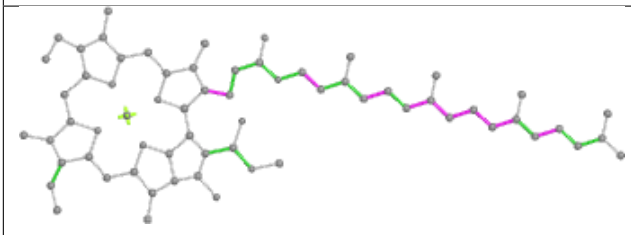
Ligand CLA C 512



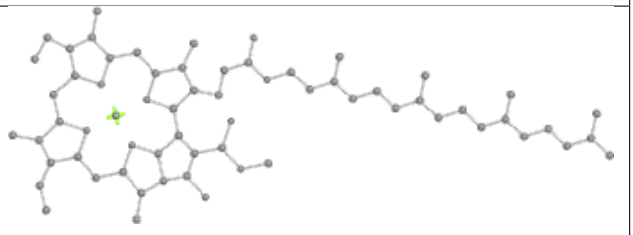
Bond lengths



Bond angles

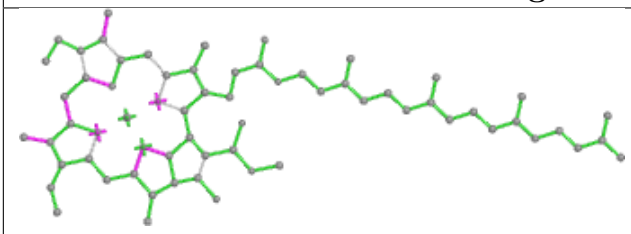


Torsions

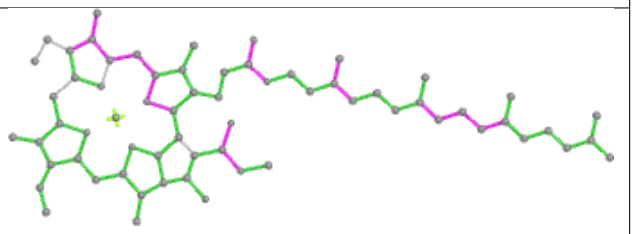


Rings

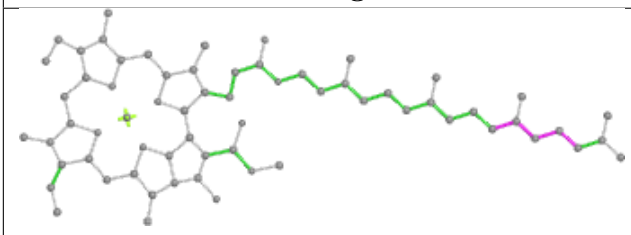
Ligand CLA a 607



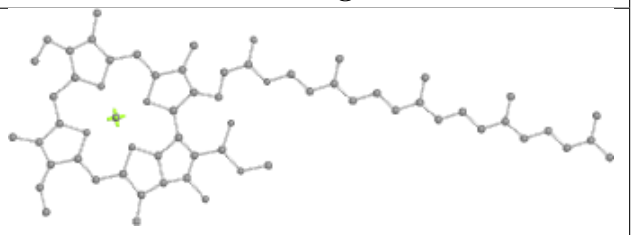
Bond lengths



Bond angles

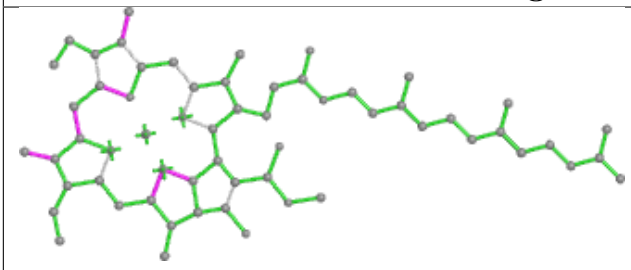


Torsions

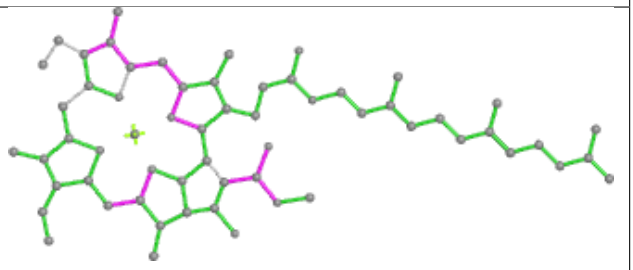


Rings

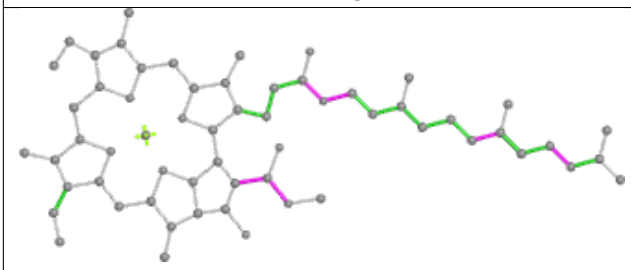
Ligand CLA b 615



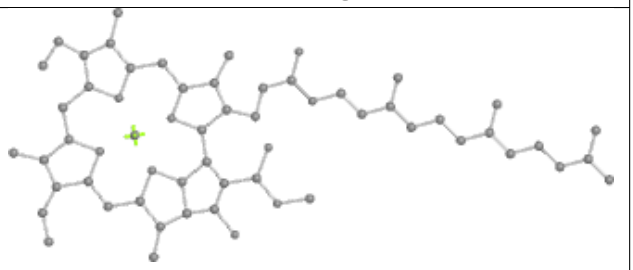
Bond lengths



Bond angles

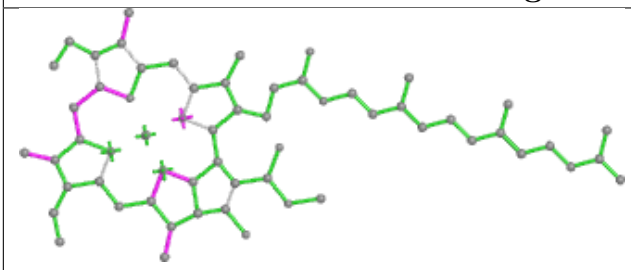


Torsions

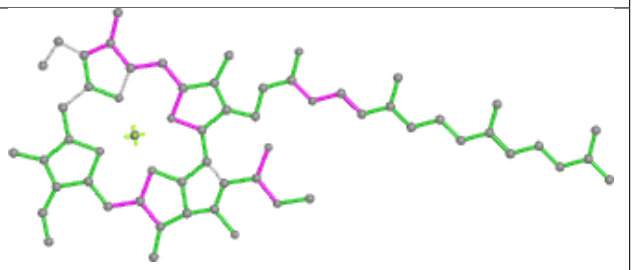


Rings

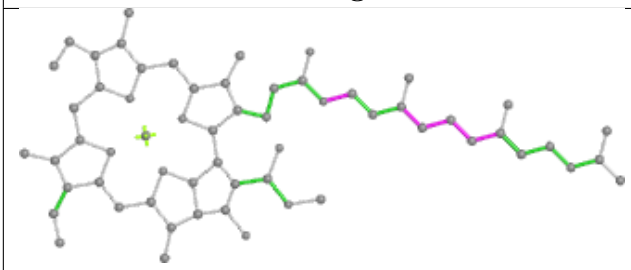
Ligand CLA B 615



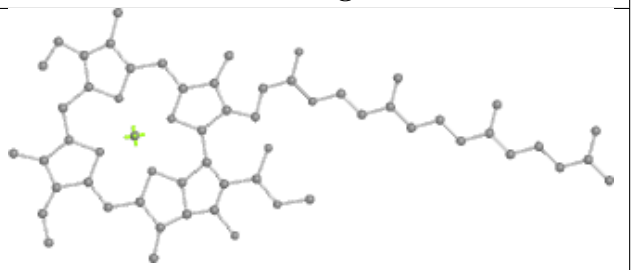
Bond lengths



Bond angles

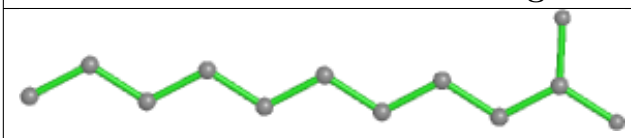


Torsions

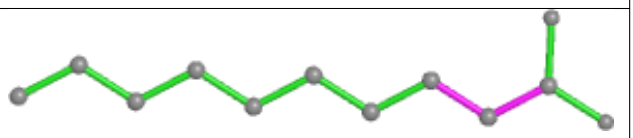


Rings

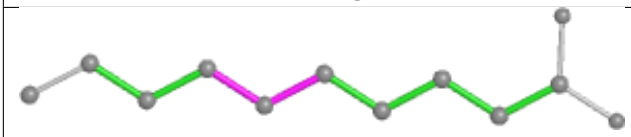
Ligand STE C 521



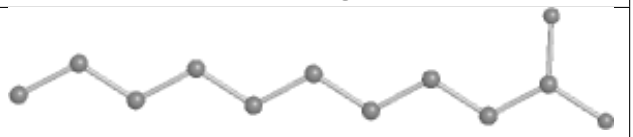
Bond lengths



Bond angles

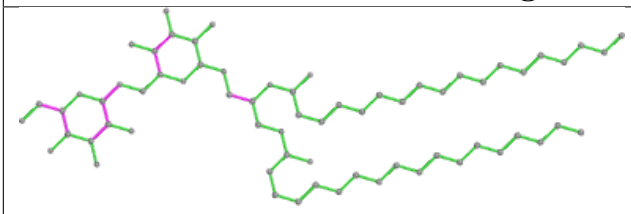


Torsions

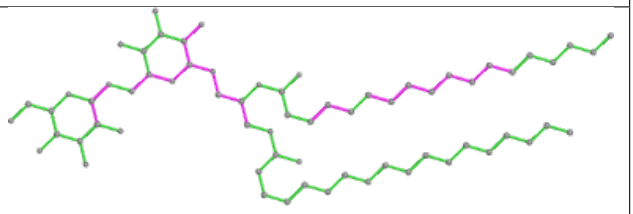


Rings

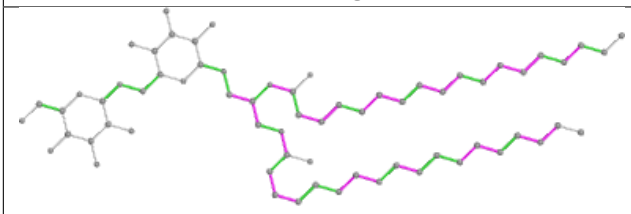
Ligand DGD A 614



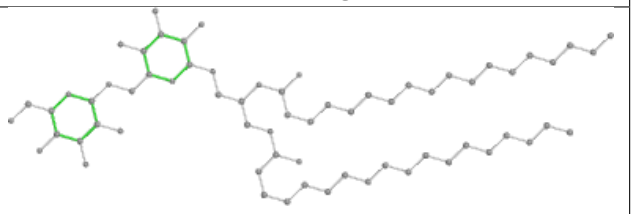
Bond lengths



Bond angles

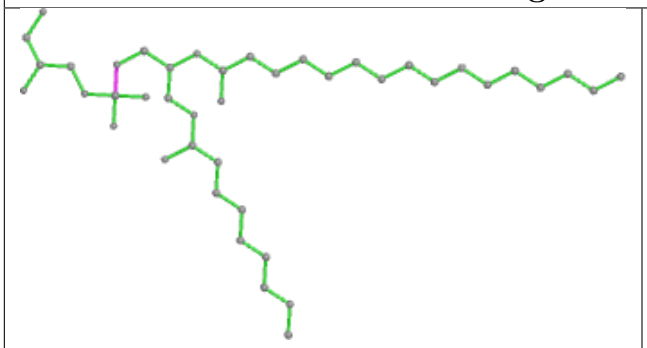


Torsions

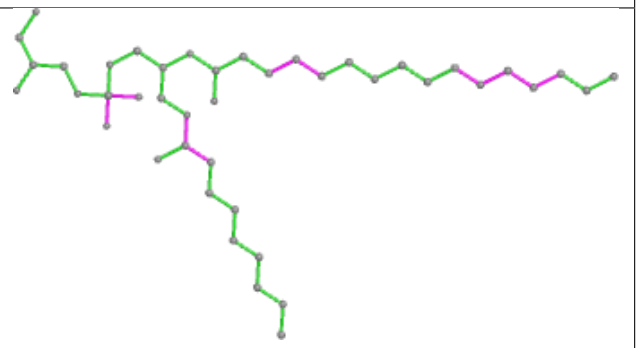


Rings

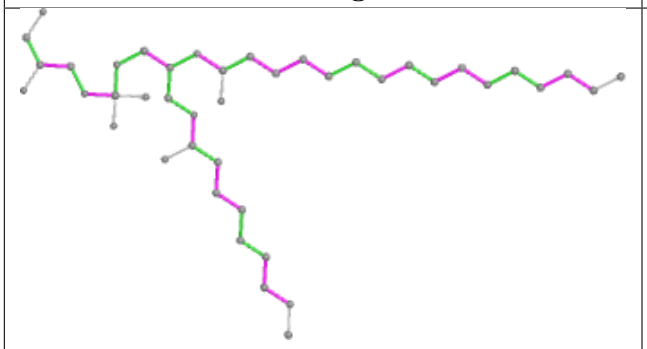
Ligand LHG e 102



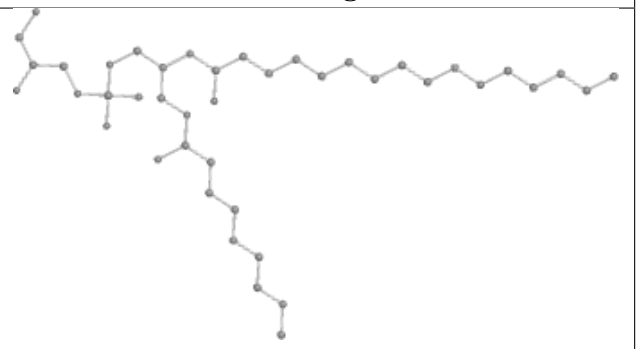
Bond lengths



Bond angles

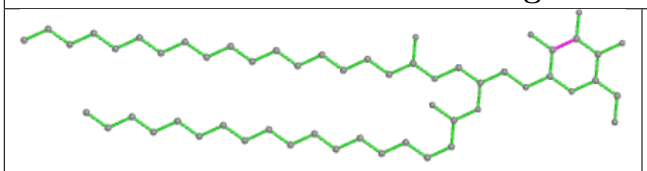


Torsions

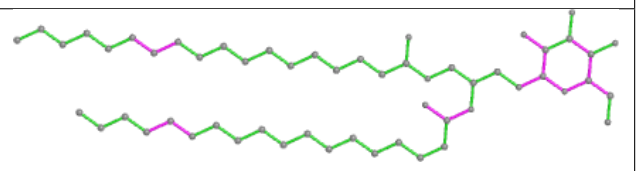


Rings

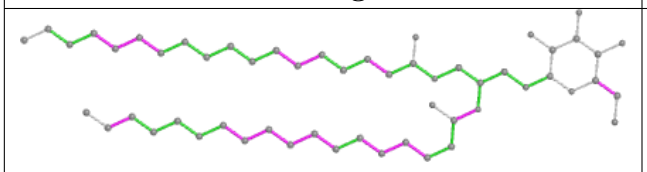
Ligand LMG b 622



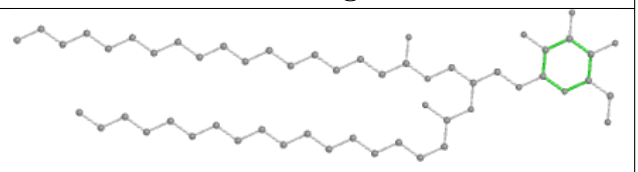
Bond lengths



Bond angles

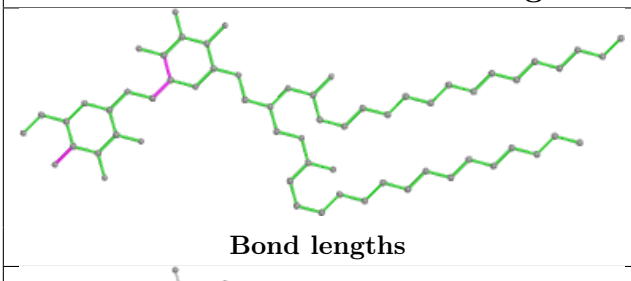


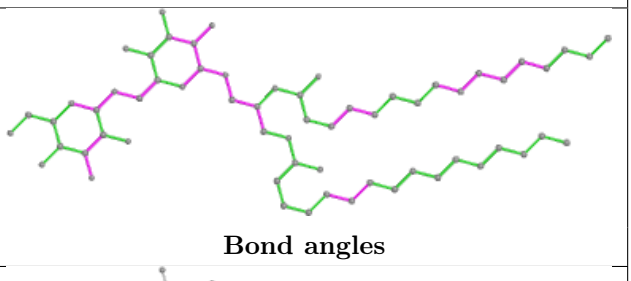
Torsions

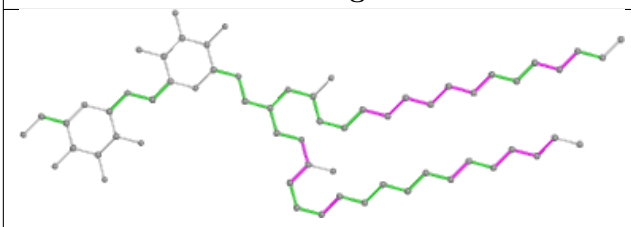


Rings

Ligand DGD c 519


Bond lengths


Bond angles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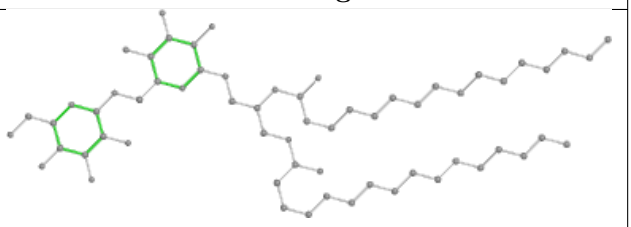
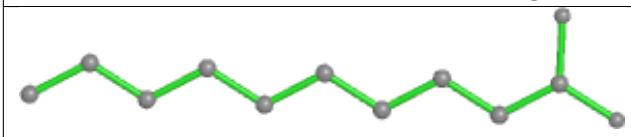
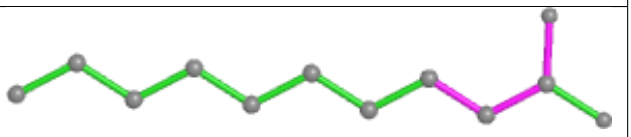
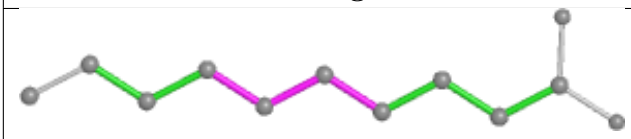
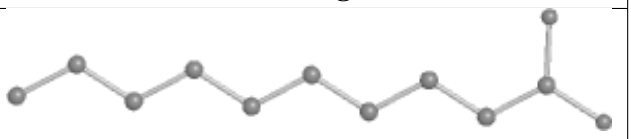

Rings

Ligand STE m 101

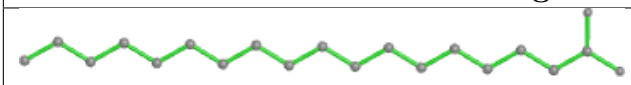

Bond lengths

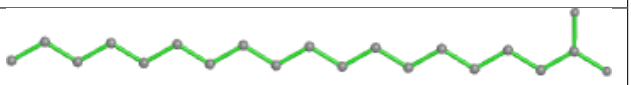

Bond angles

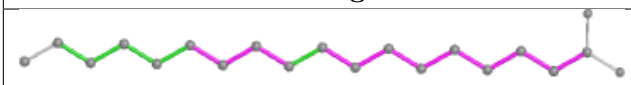

Torsions

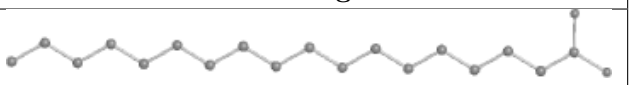

Rings

Ligand STE c 521


Bond lengths


Bond angles

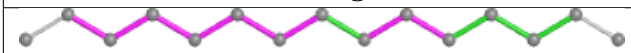

Torsions

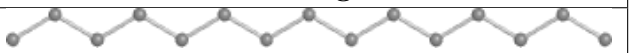

Rings

Ligand STE M 104

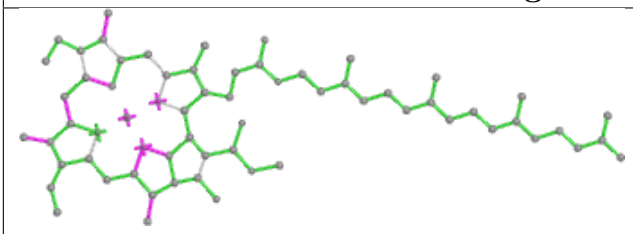

Bond lengths


Bond angles

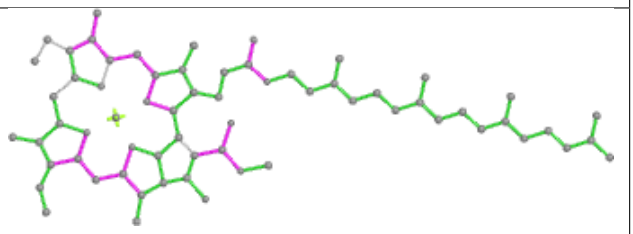

Torsions


Rings

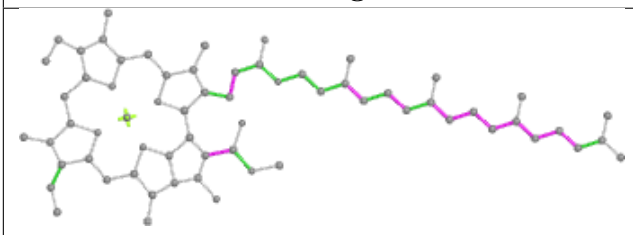
Ligand CLA B 602



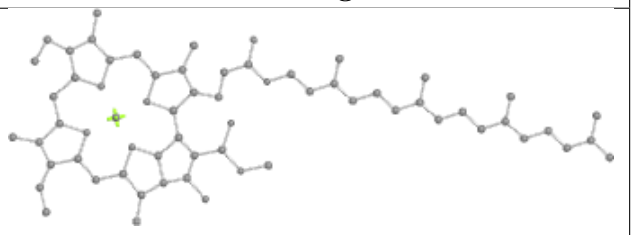
Bond lengths



Bond angles

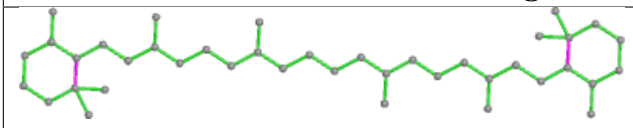


Torsions

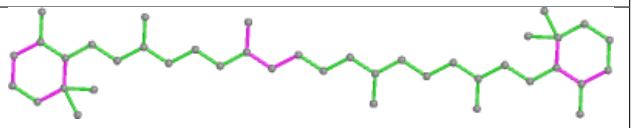


Rings

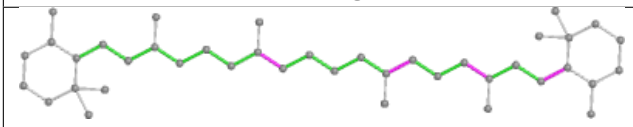
Ligand BCR B 617



Bond lengths



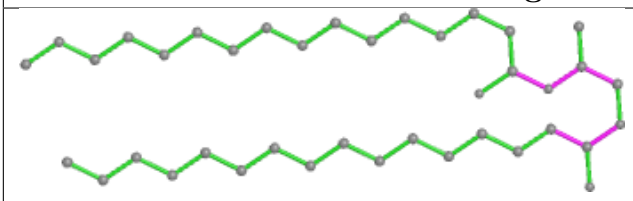
Bond angles



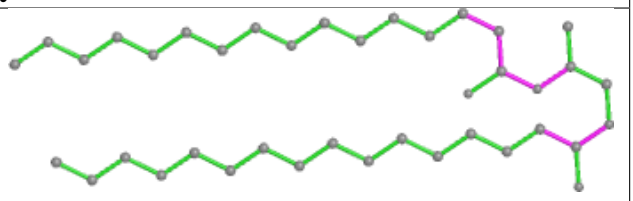
Torsions

Rings

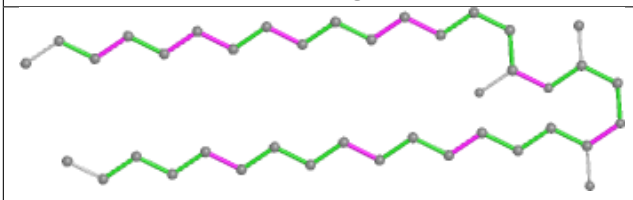
Ligand SQD T 103



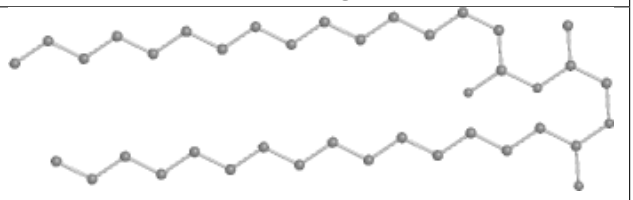
Bond lengths



Bond angles

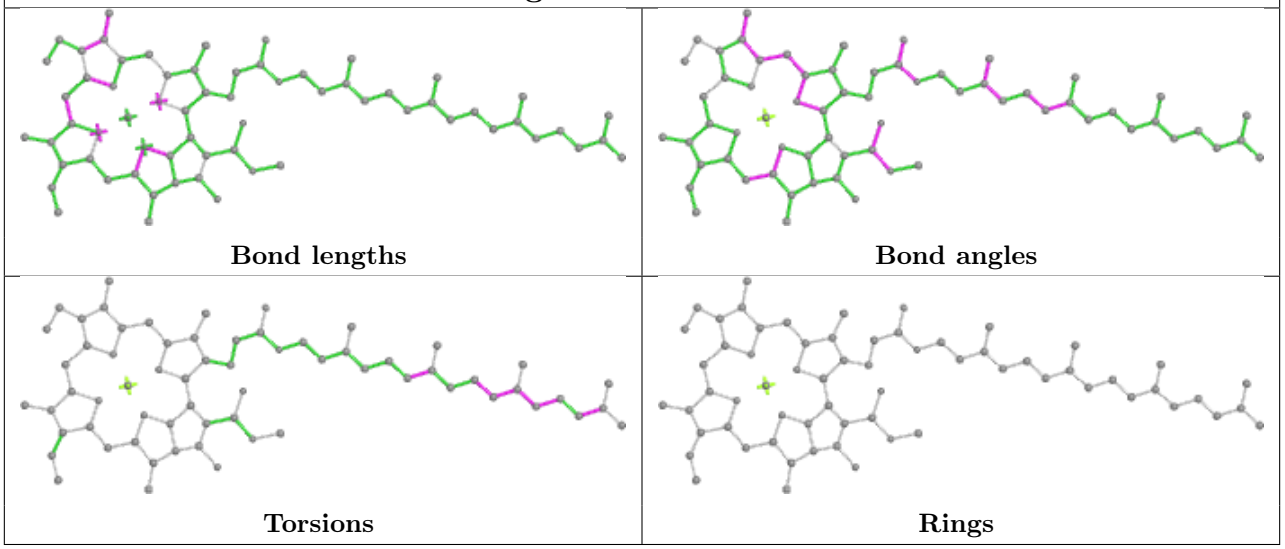


Torsions

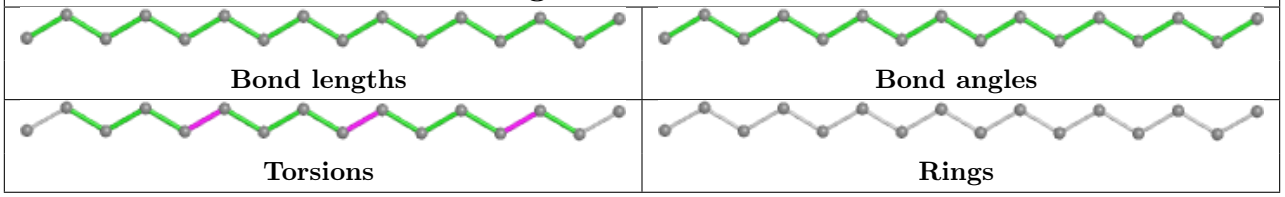


Rings

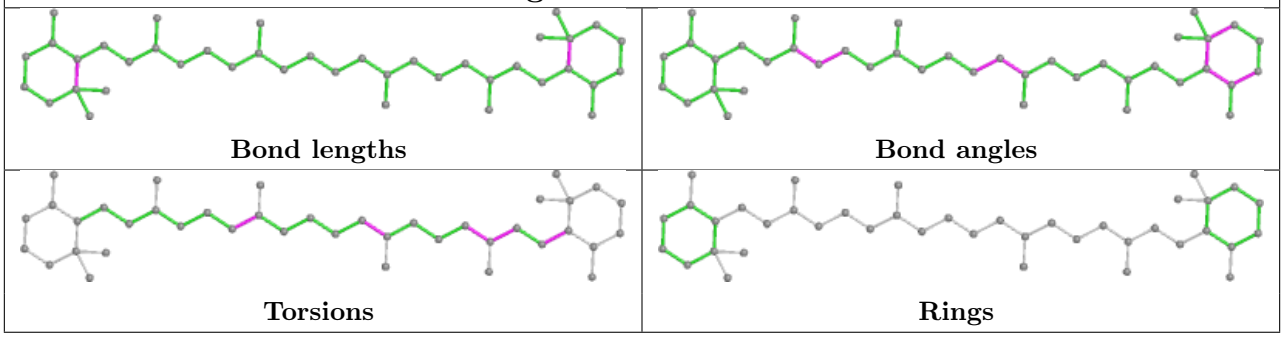
Ligand CLA B 614



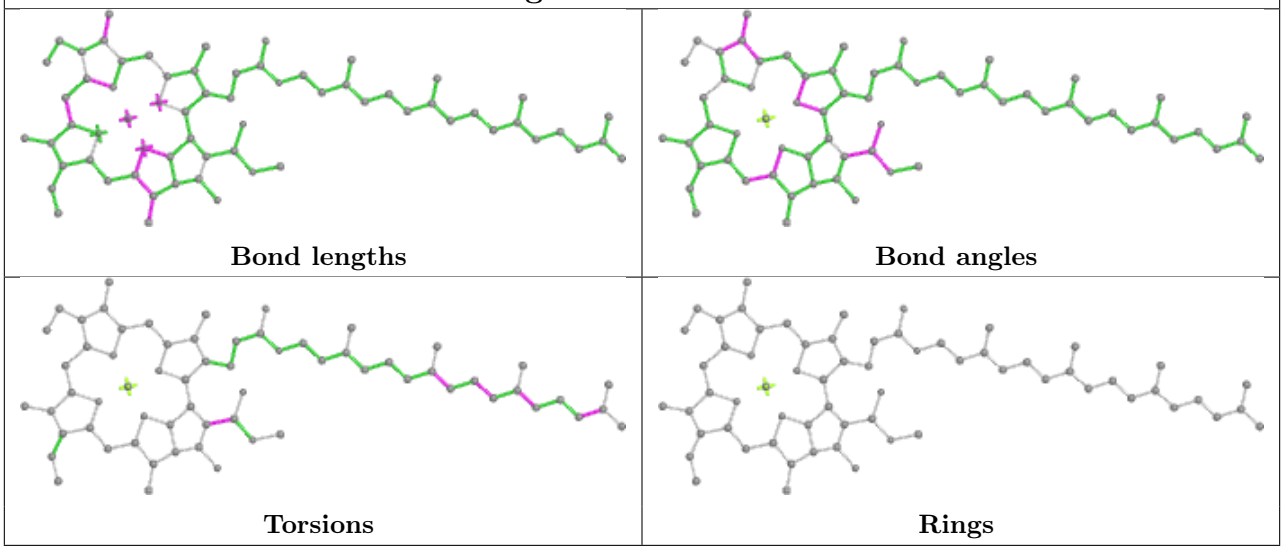
Ligand STE C 522



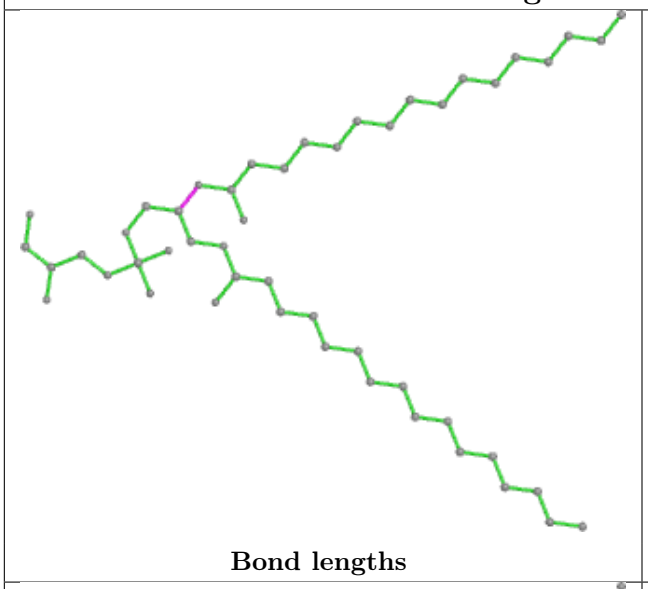
Ligand BCR b 618



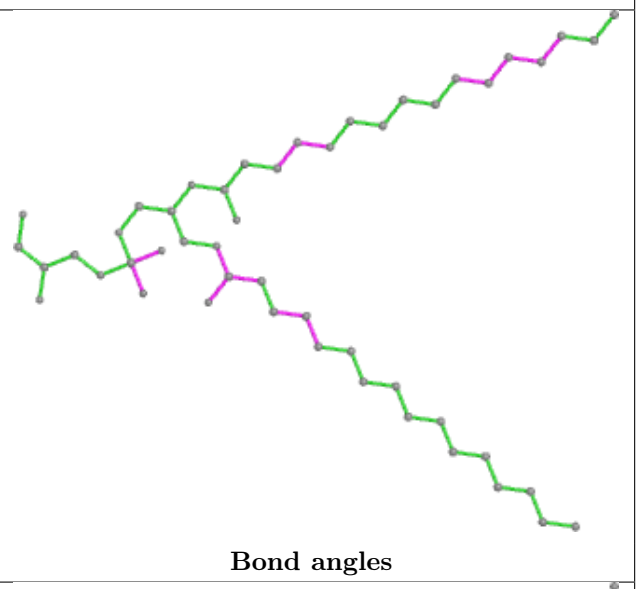
Ligand CLA C 508



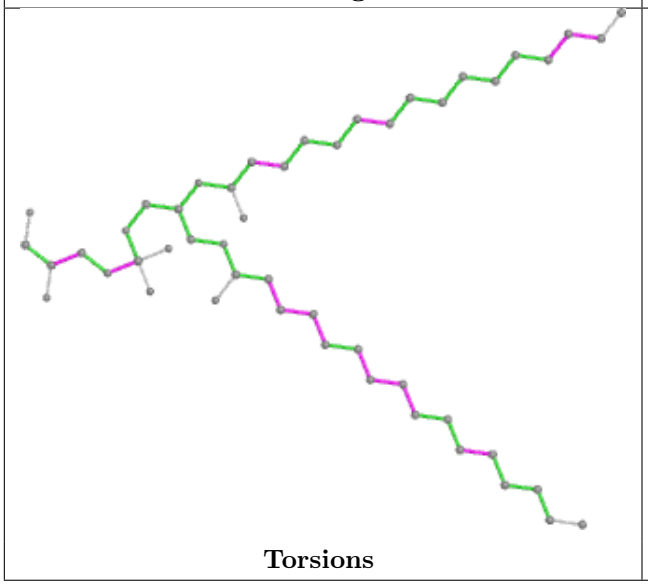
Ligand LHG B 620



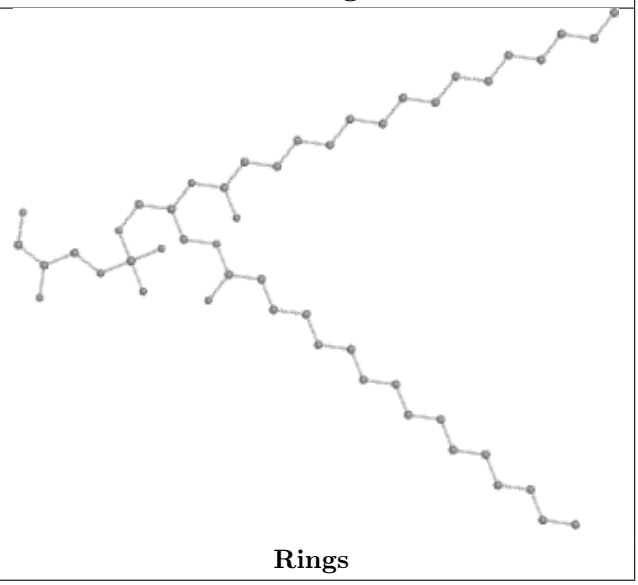
Bond lengths



Bond angles

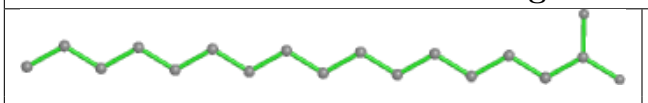


Torsions

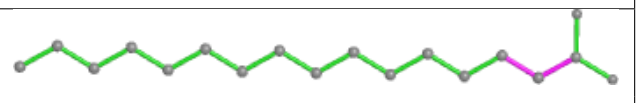


Rings

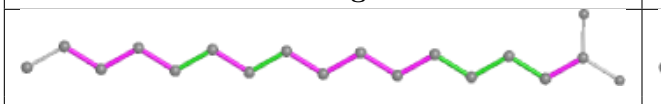
Ligand STE B 623



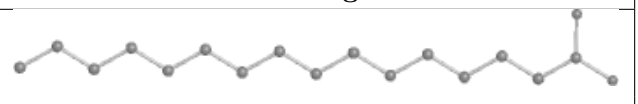
Bond lengths



Bond angles

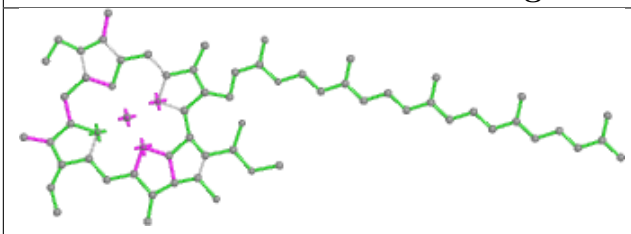


Torsions

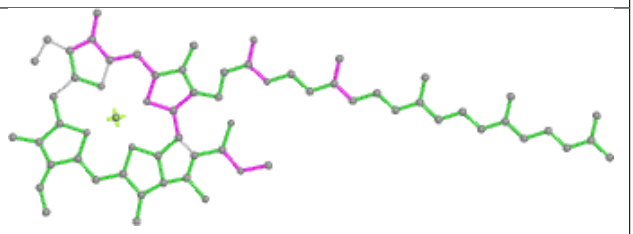


Rings

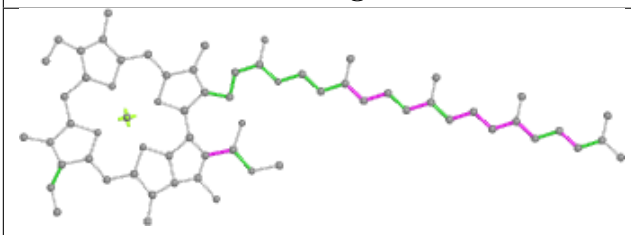
Ligand CLA B 606



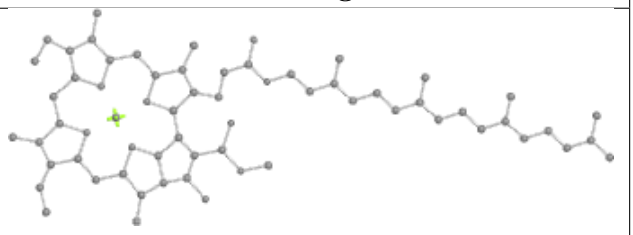
Bond lengths



Bond angles

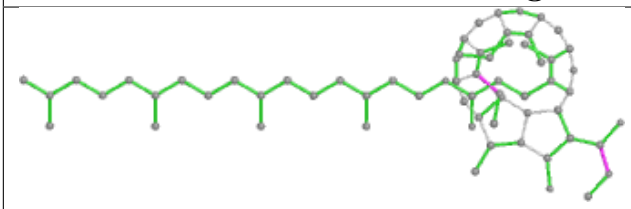


Torsions

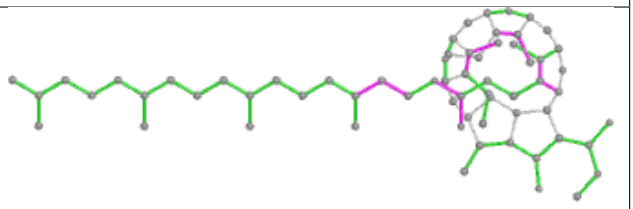


Rings

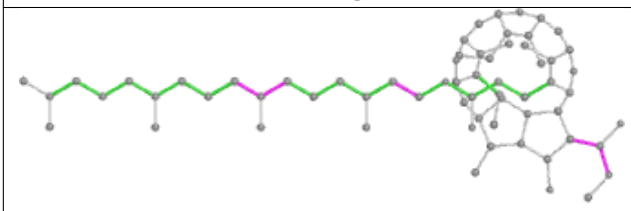
Ligand PHO a 608



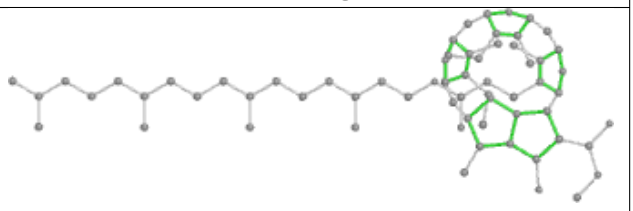
Bond lengths



Bond angles

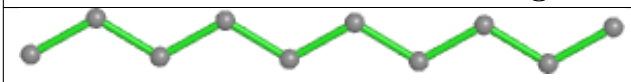


Torsions

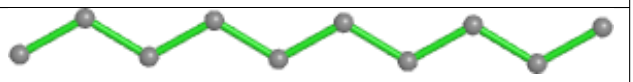


Rings

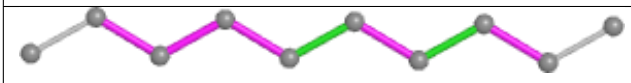
Ligand STE b 626



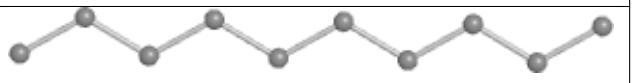
Bond lengths



Bond angles

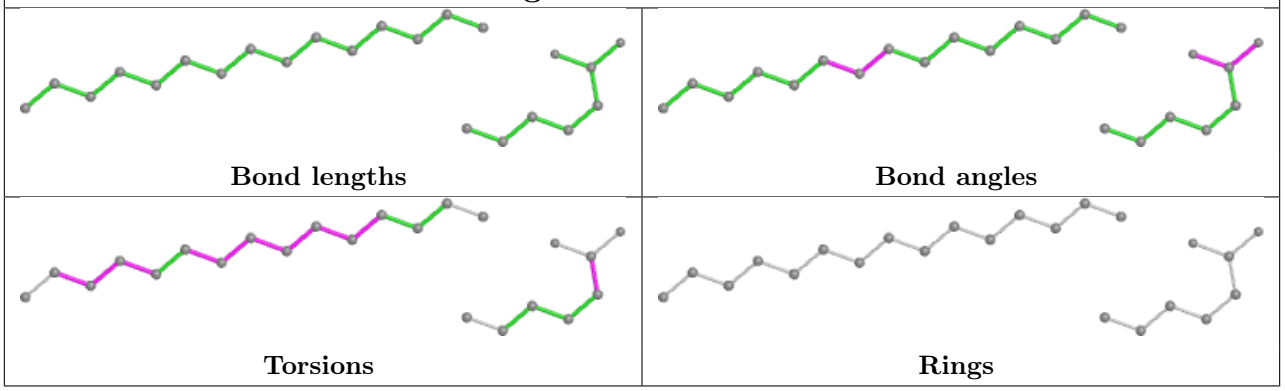


Torsions

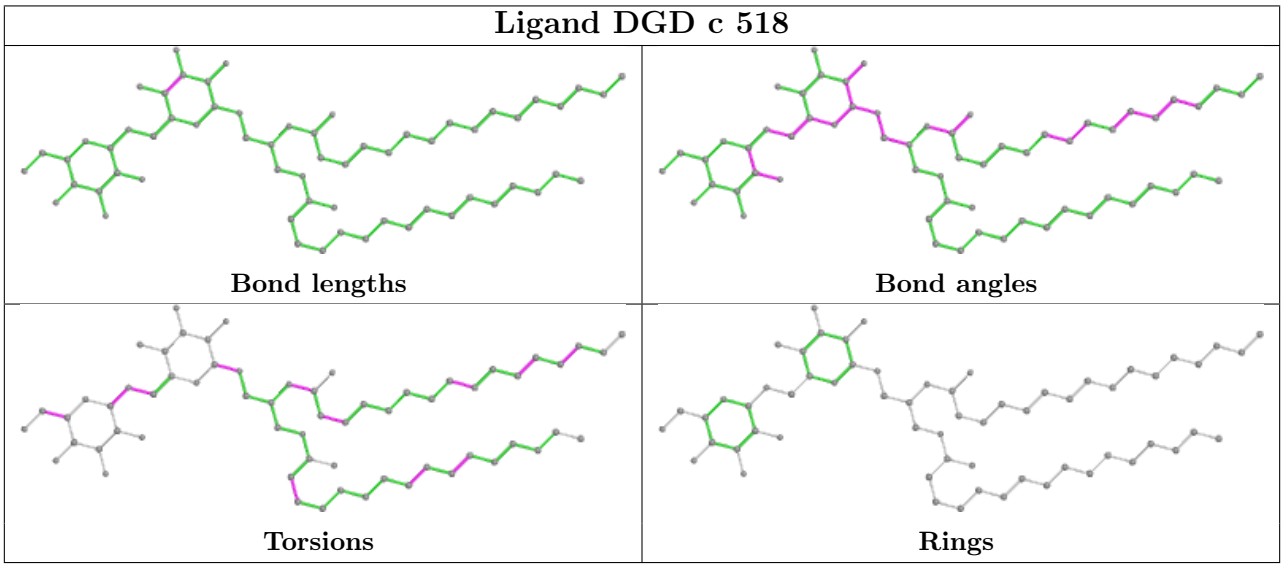


Rings

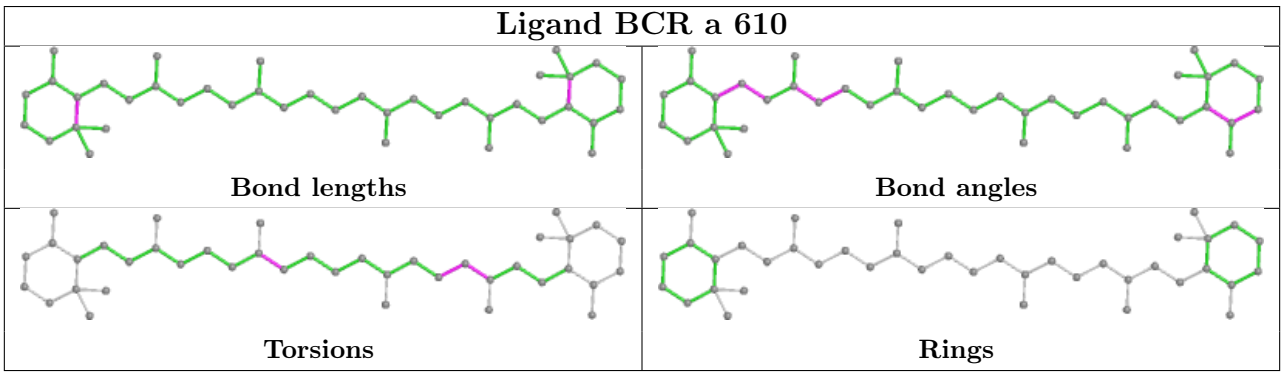
Ligand LMG d 409



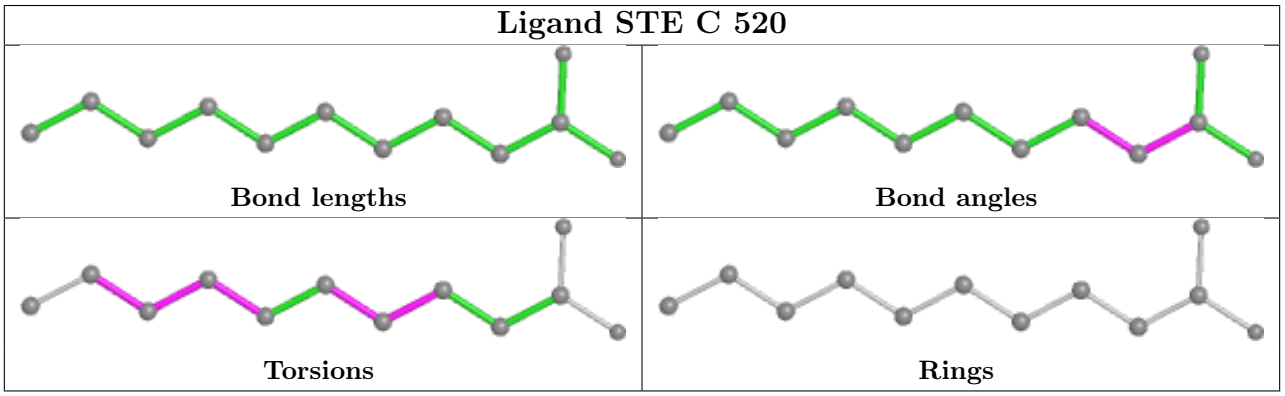
Ligand DGD c 518



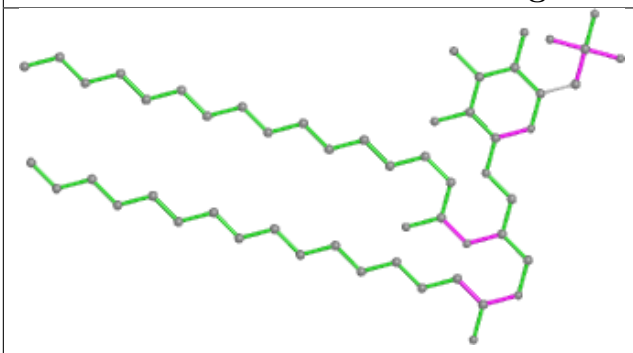
Ligand BCR a 610



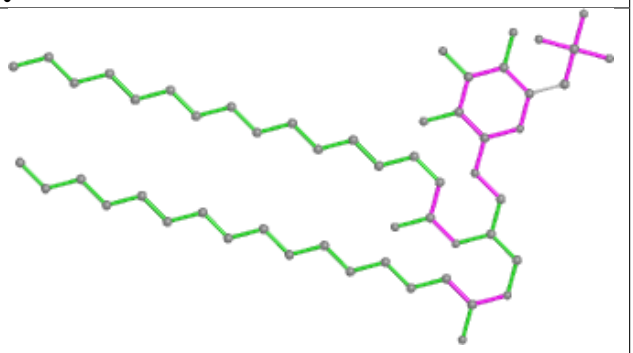
Ligand STE C 520



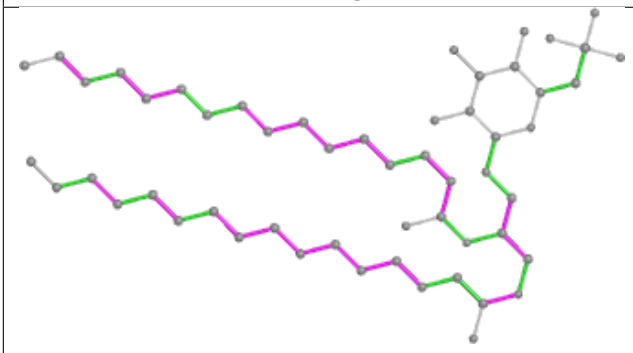
Ligand SQD a 613



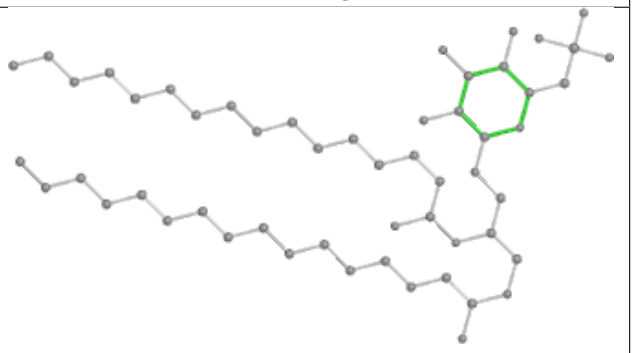
Bond lengths



Bond angles

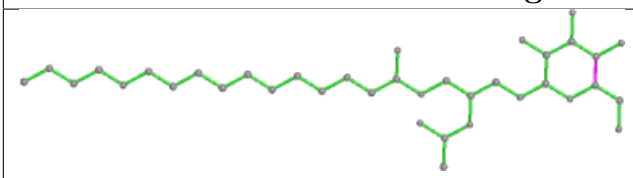


Torsions



Rings

Ligand LMG c 520



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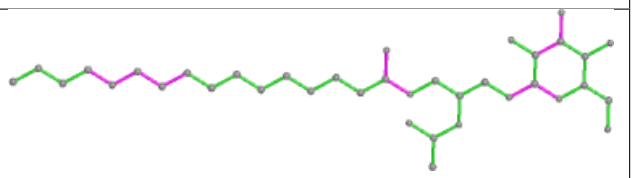
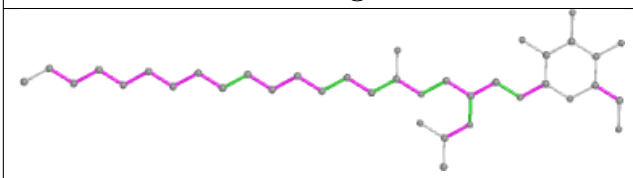
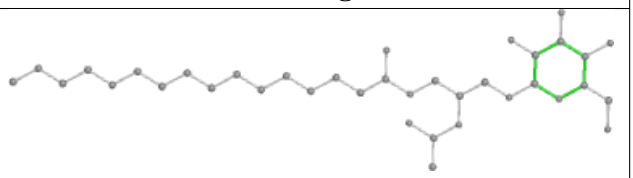


Bond angles

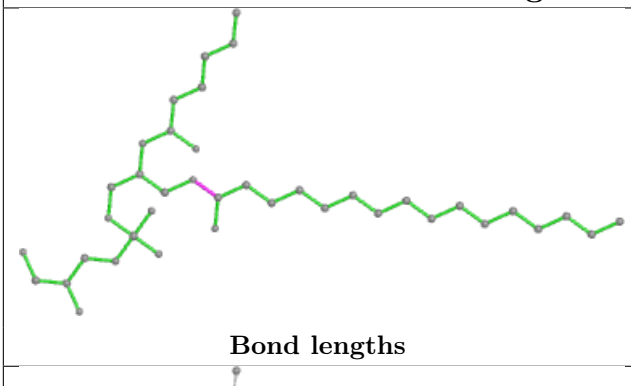


Torsions

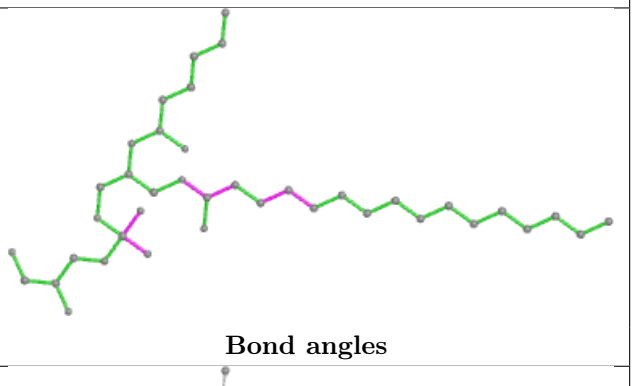


Rings

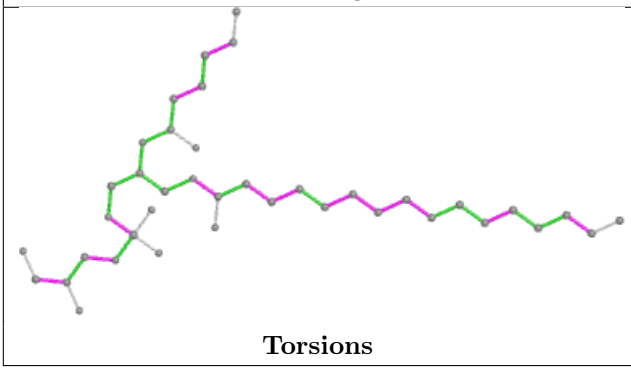
Ligand LHG d 408



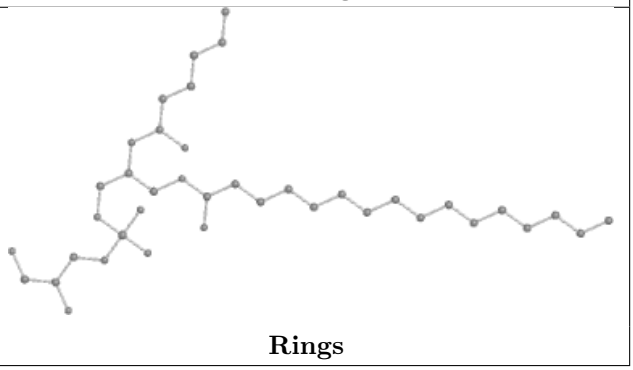
Bond lengths



Bond angles

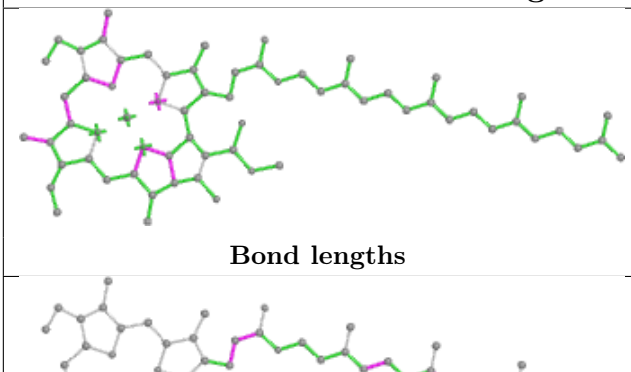


Torsions

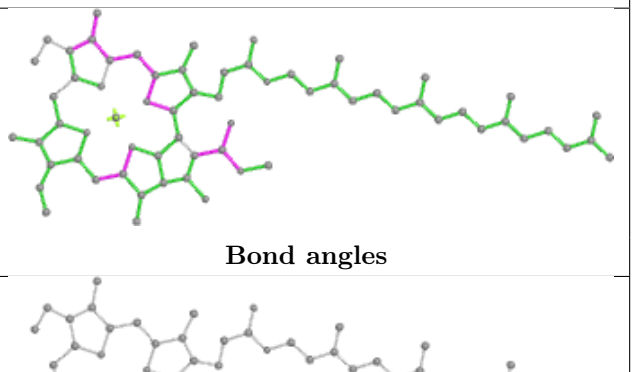


Rings

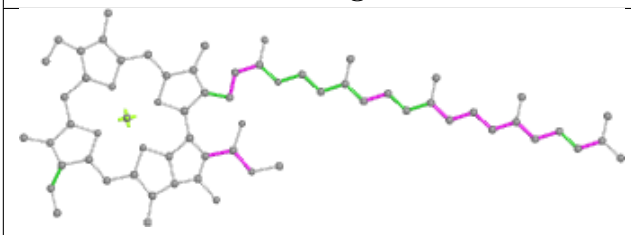
Ligand CLA h 101



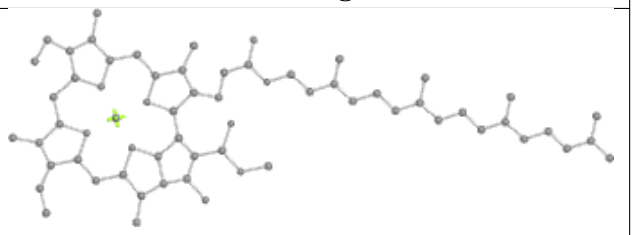
Bond lengths



Bond angles

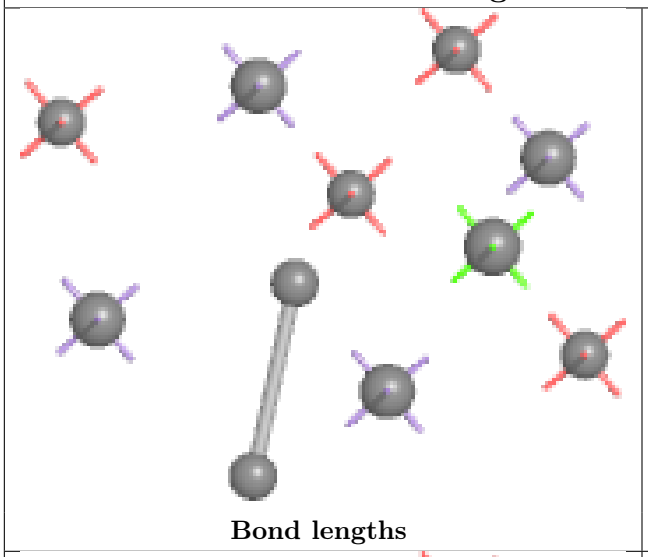


Torsions

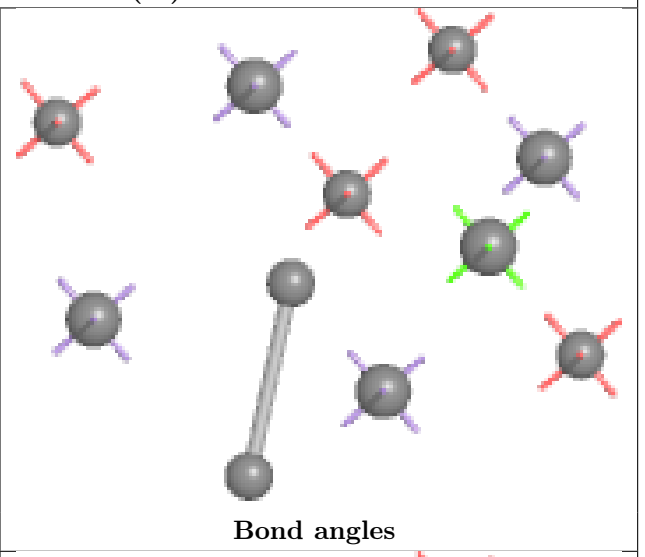


Rings

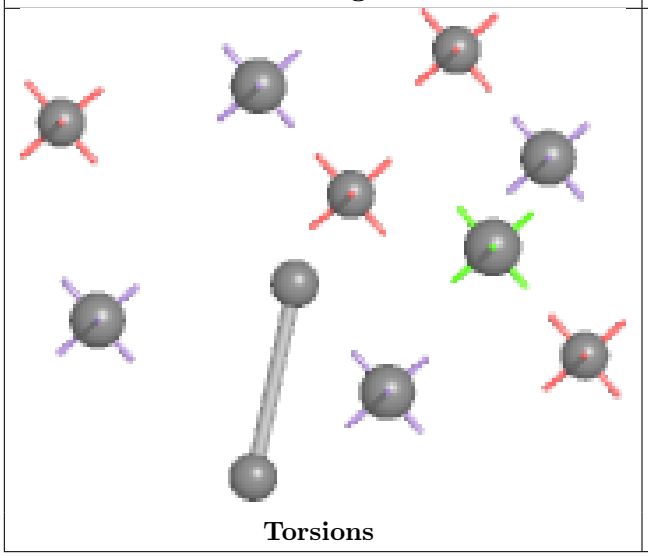
Ligand OEY A 602 (A)



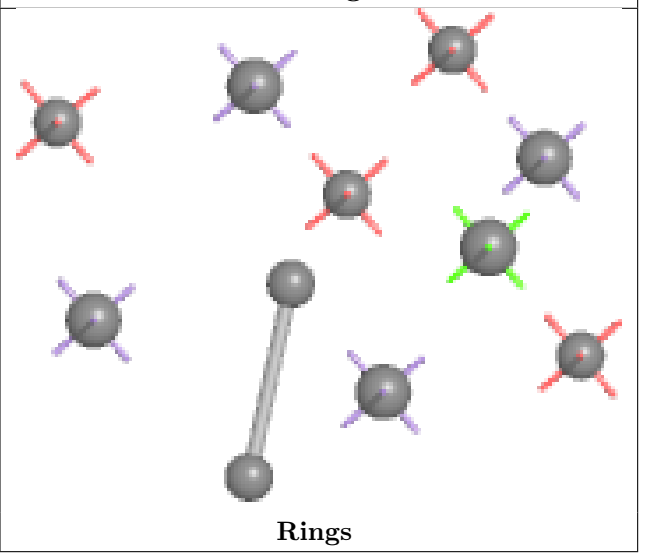
Bond lengths



Bond angles



Torsions



Rings

Ligand STE I 101

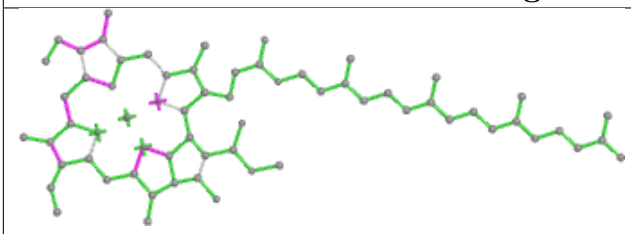
Bond lengths

Bond angles

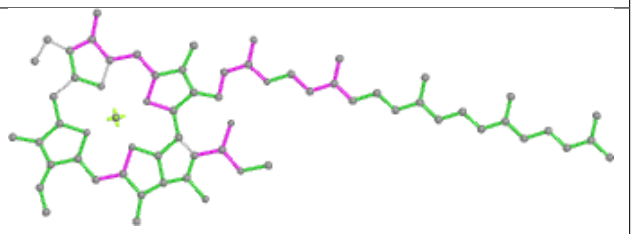
Torsions

Rings

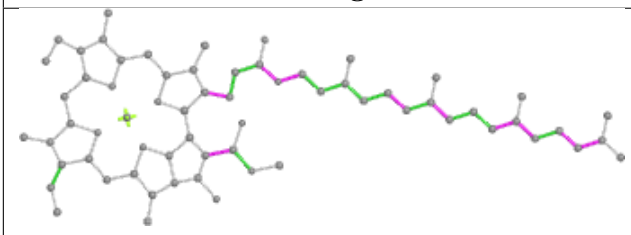
Ligand CLA H 101



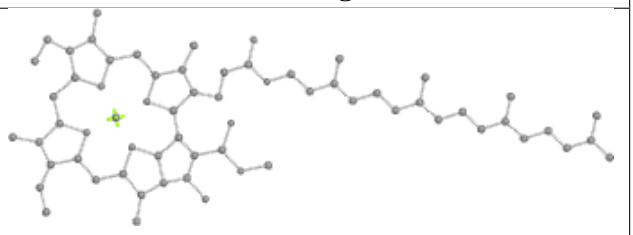
Bond lengths



Bond angles

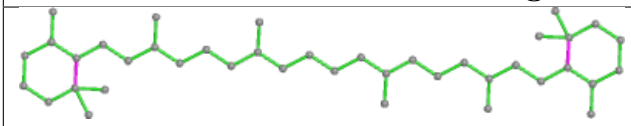


Torsions



Rings

Ligand BCR b 617



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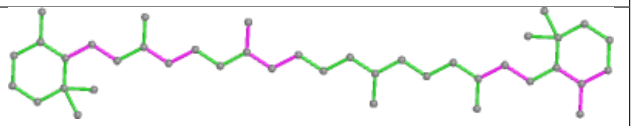
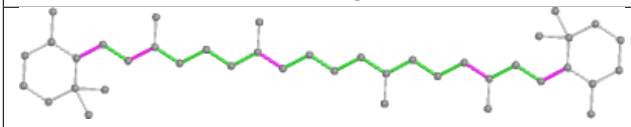


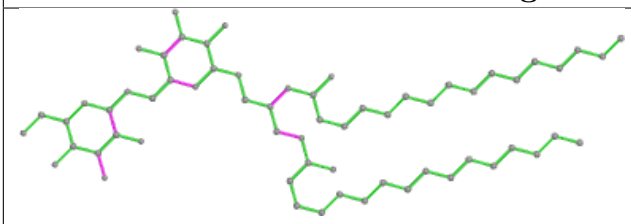
Bond angles



Torsions

Rings

Ligand DGD C 517



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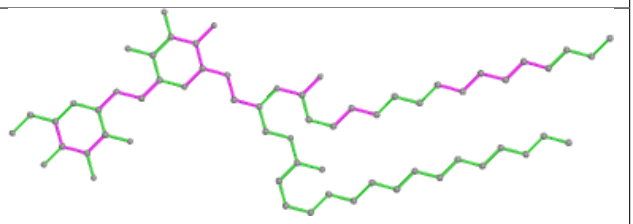
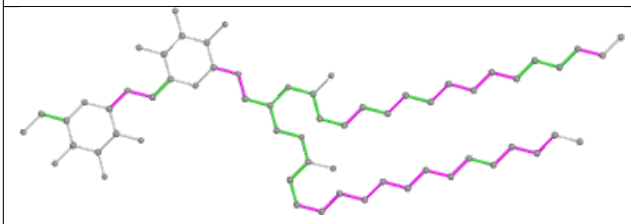
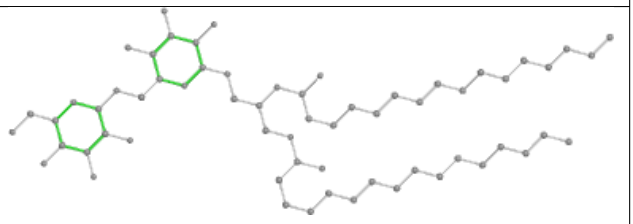


Bond angles

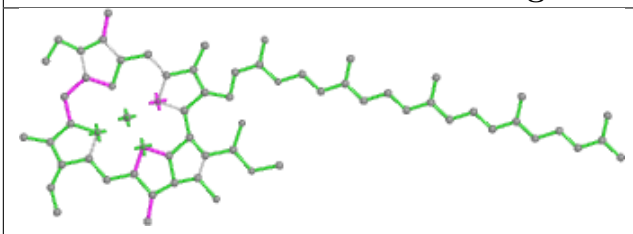


Torsions



Rings

Ligand CLA d 403



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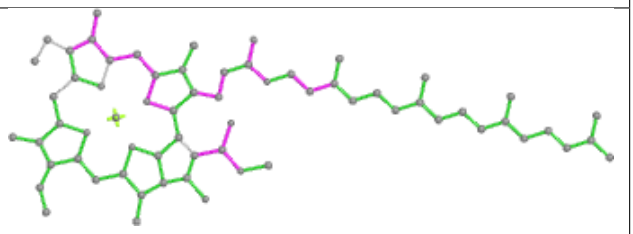
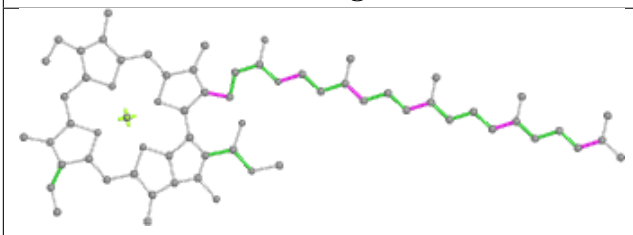
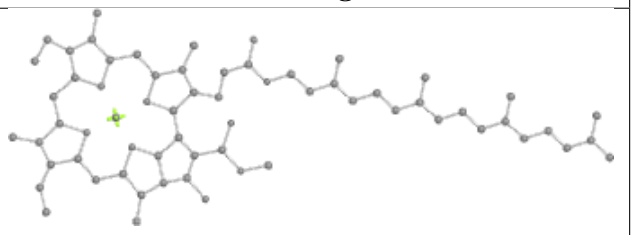


Bond angles

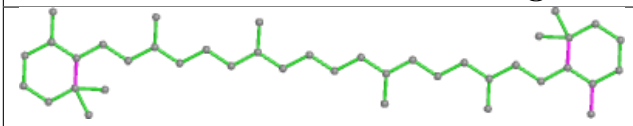


Torsions



Rings

Ligand BCR c 515



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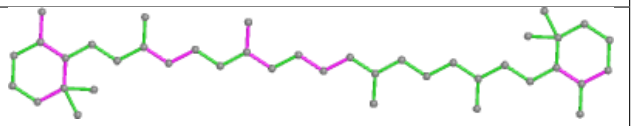
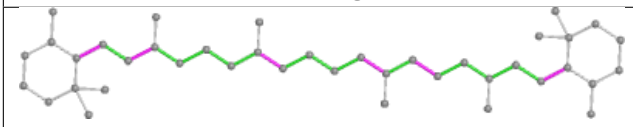


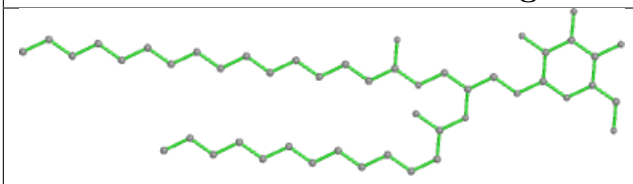
Bond angles



Torsions

Rings

Ligand LMG C 519



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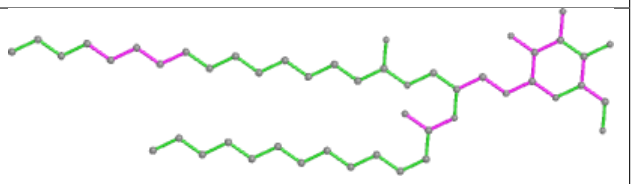
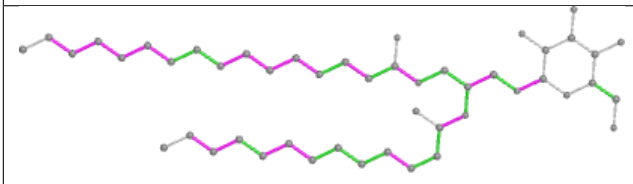


Bond angles



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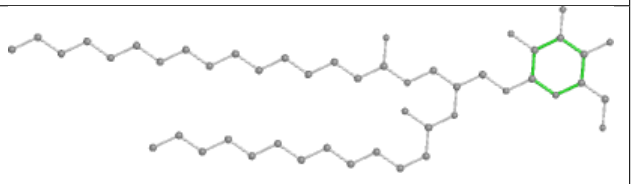
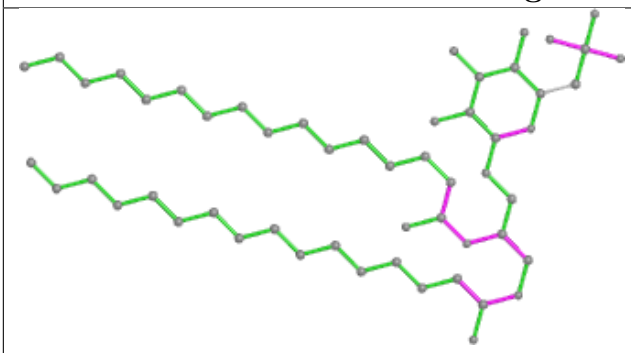


Rings

Ligand SQD B 621



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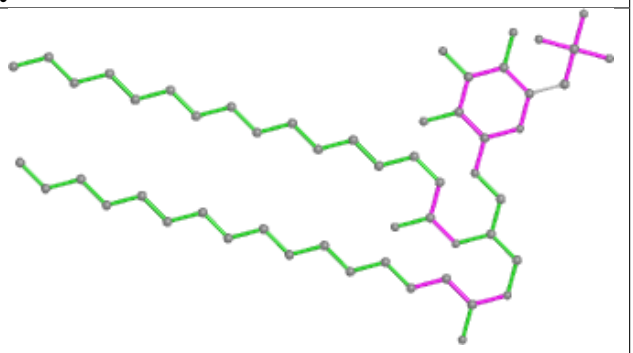
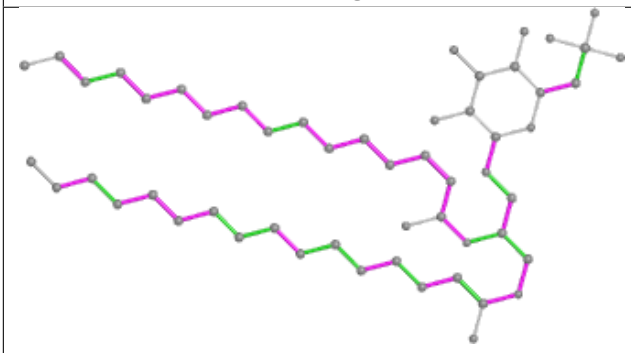


Bond angles



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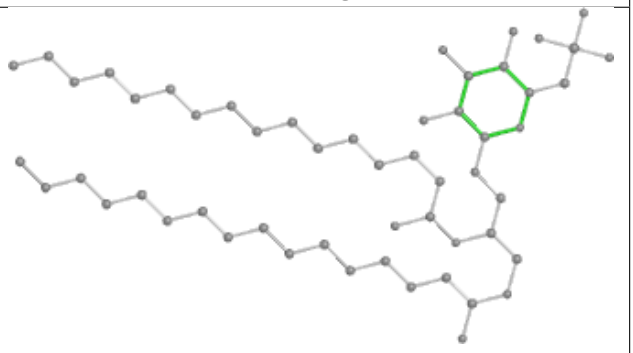
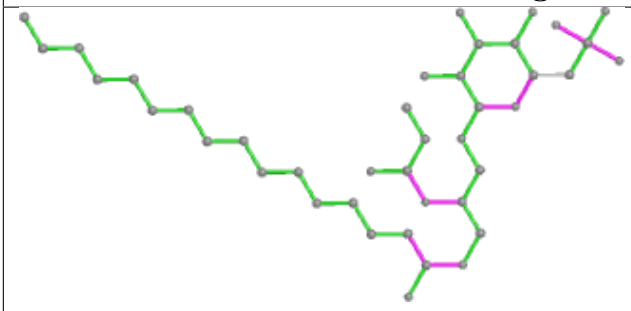


Rings

Ligand SQD f 101



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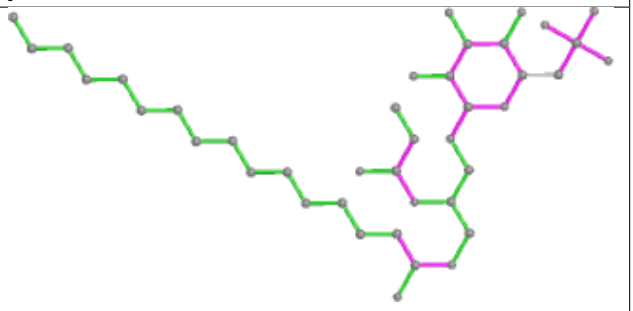
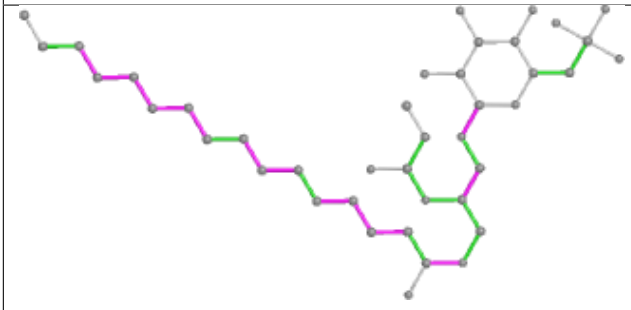


Bond angles



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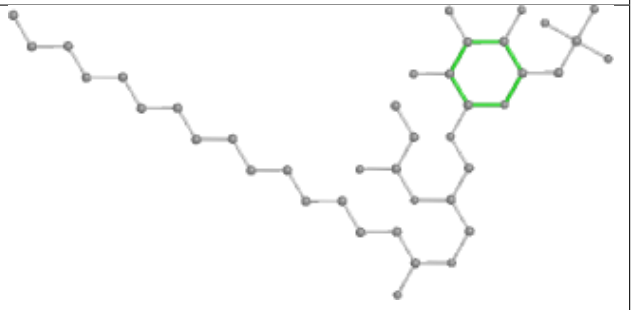
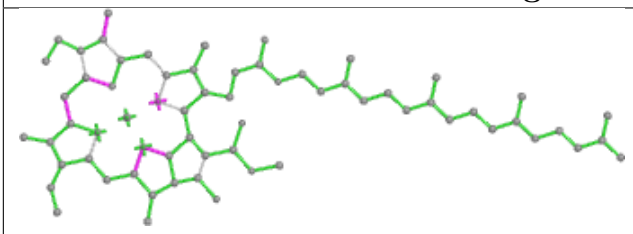


Rings

Ligand CLA D 403



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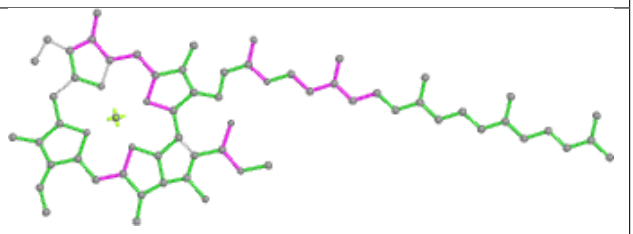
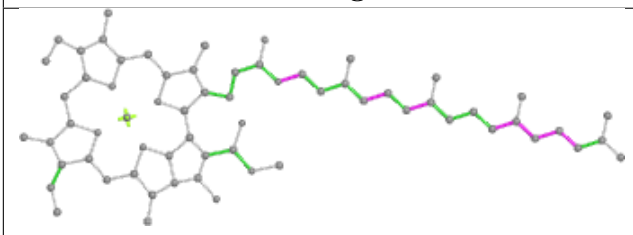


Bond angles



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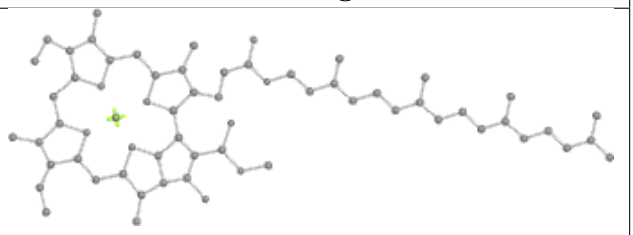
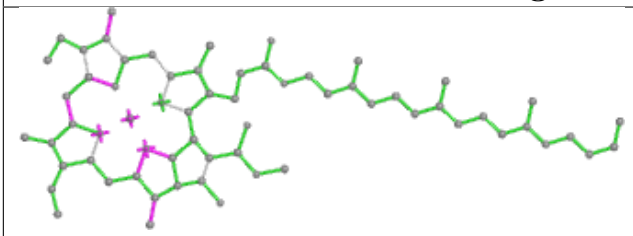
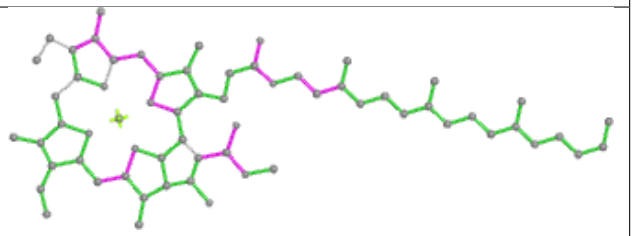


Rings

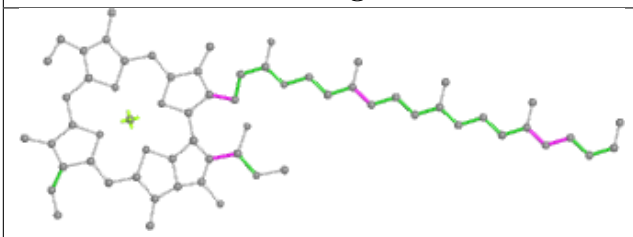
Ligand CLA c 508



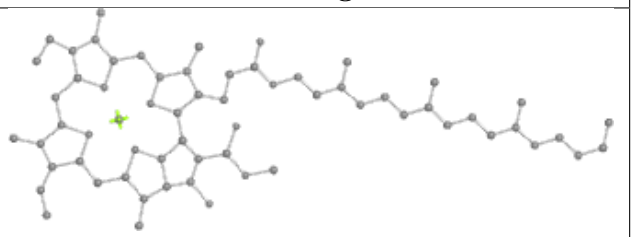
Bond lengths



Bond angles

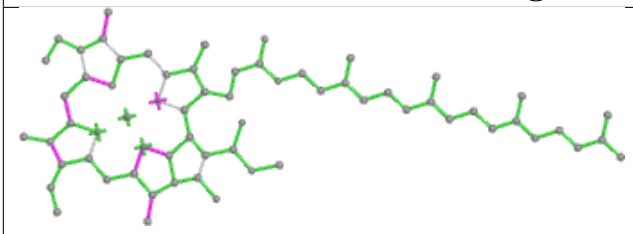


Torsions



Rings

Ligand CLA b 612



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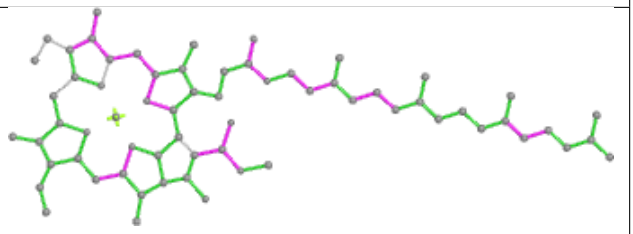
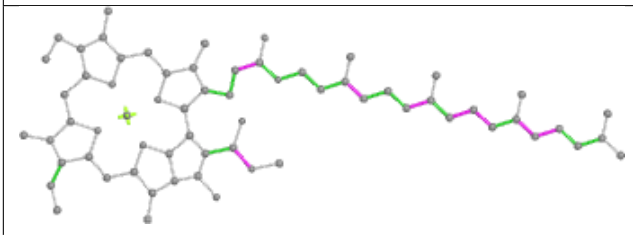


Bond angles



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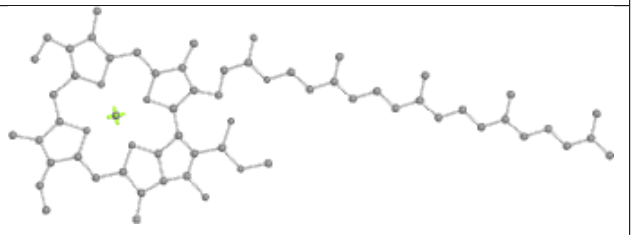
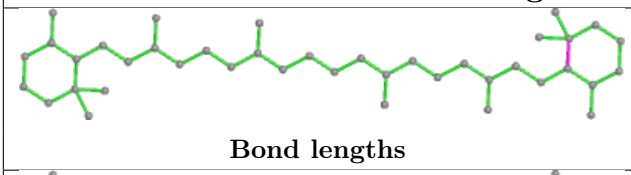


Rings

Ligand BCR x 101



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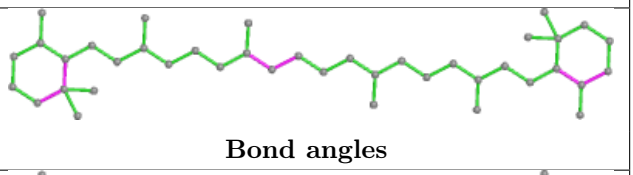
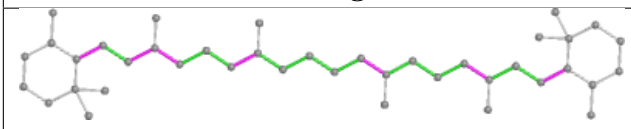


Bond angles



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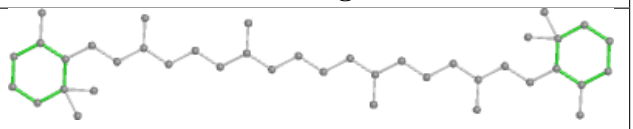
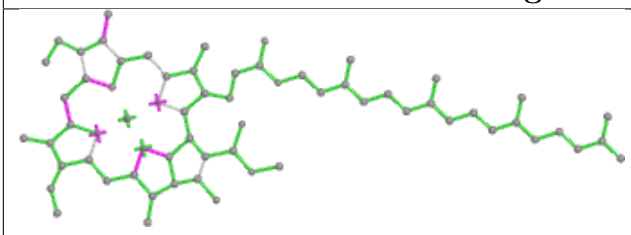
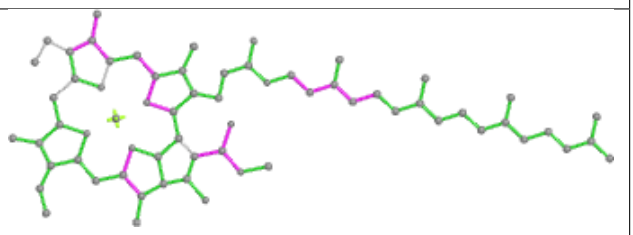


Rings

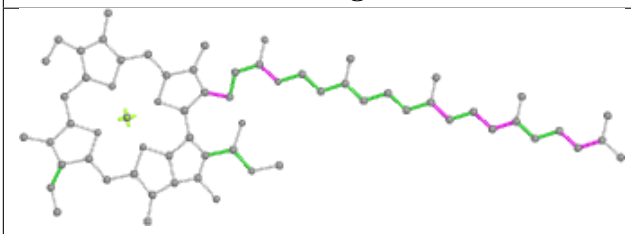
Ligand CLA B 603



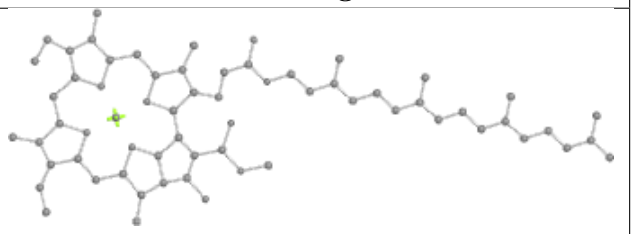
Bond lengths



Bond angles

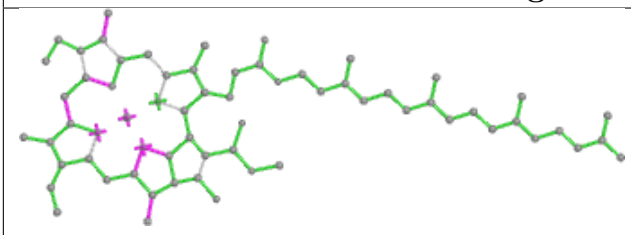


Torsions

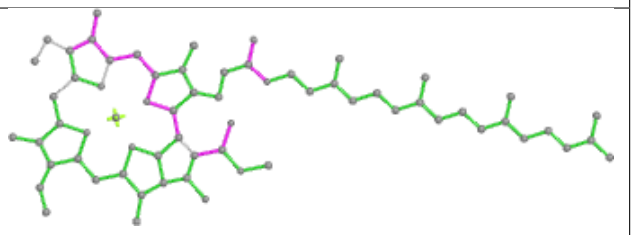


Rings

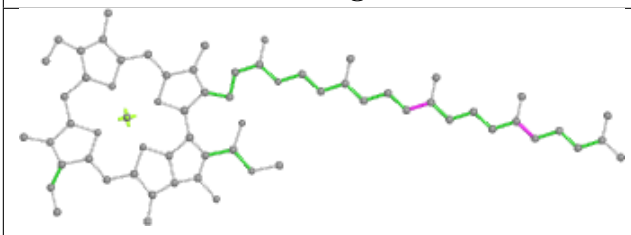
Ligand CLA b 608



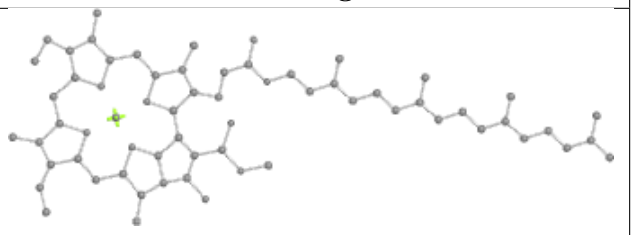
Bond lengths



Bond angles

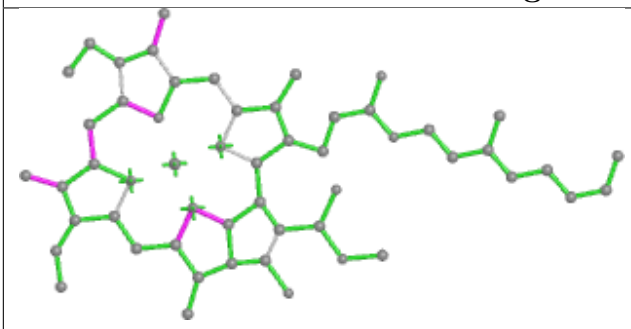


Torsions

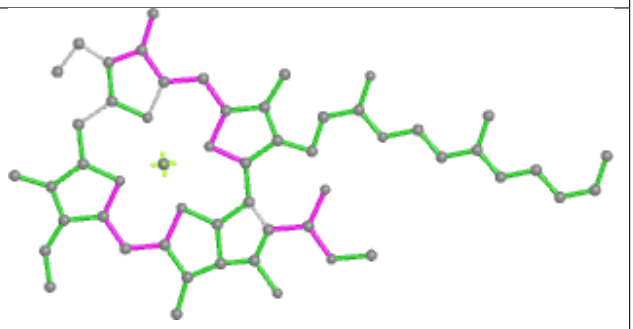


Rings

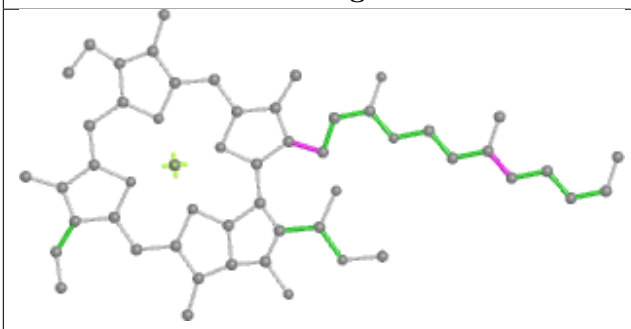
Ligand CLA A 609



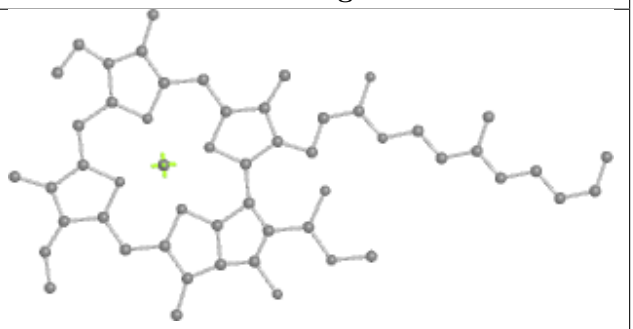
Bond lengths



Bond angles

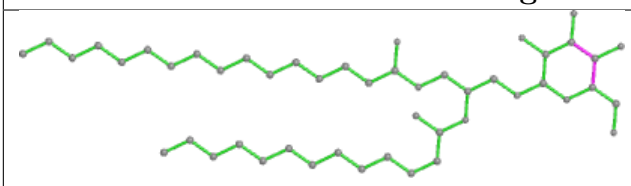


Torsions

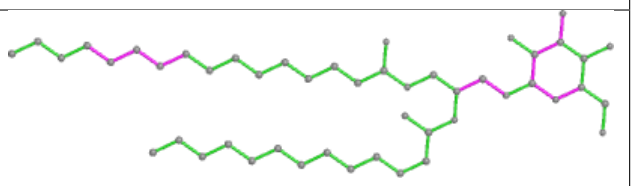


Rings

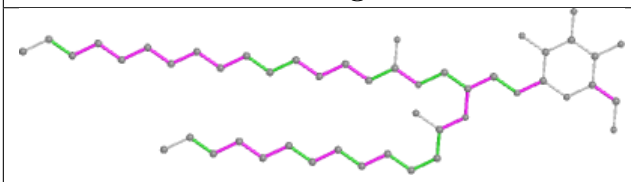
Ligand LMG C 515



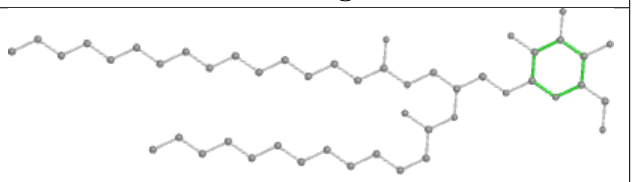
Bond lengths



Bond angles

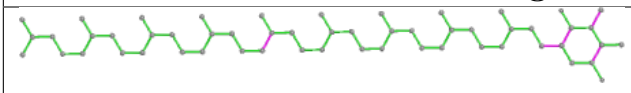


Torsions



Rings

Ligand PL9 D 406



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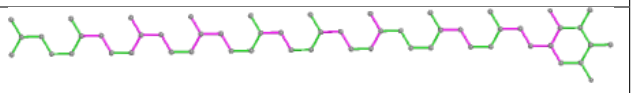
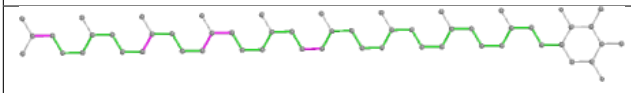
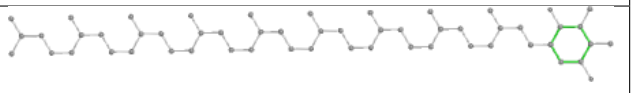


Bond angles

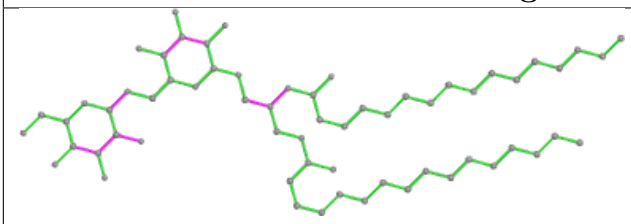


Torsions



Rings

Ligand DGD C 516



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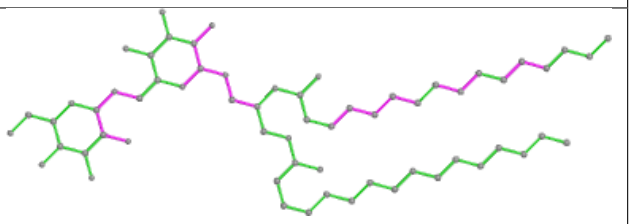
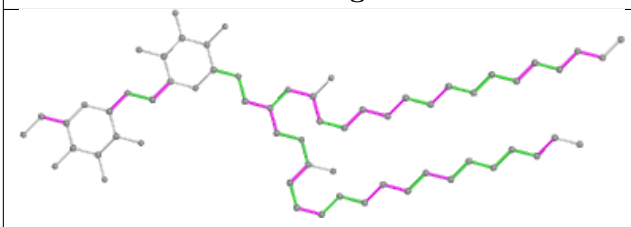


Bond angles



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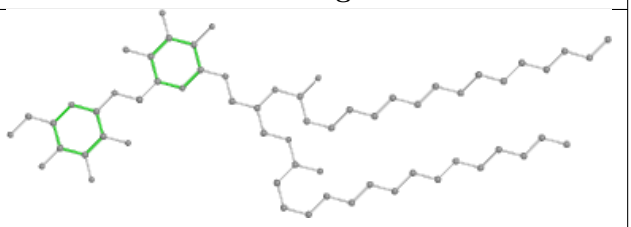
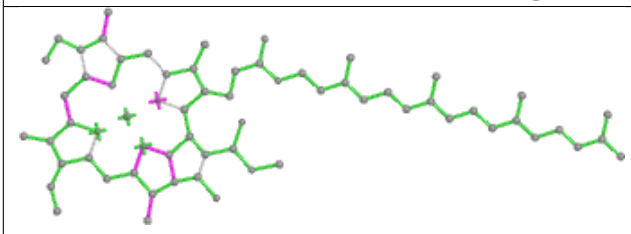


Rings

Ligand CLA b 602



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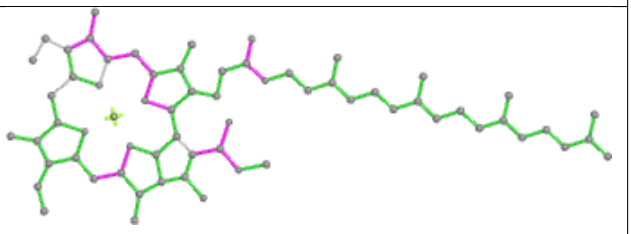
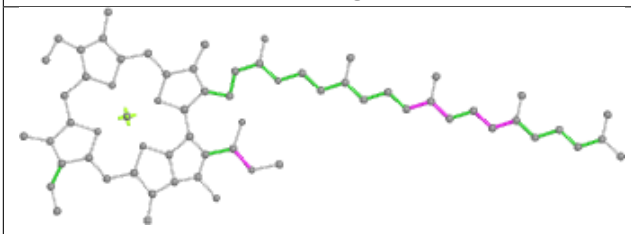


Bond angles



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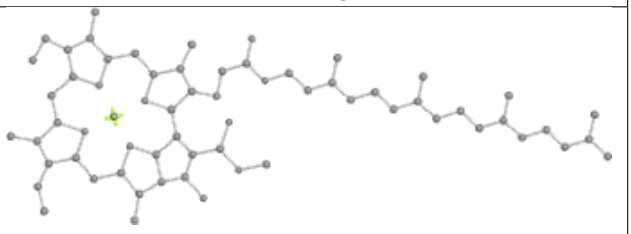
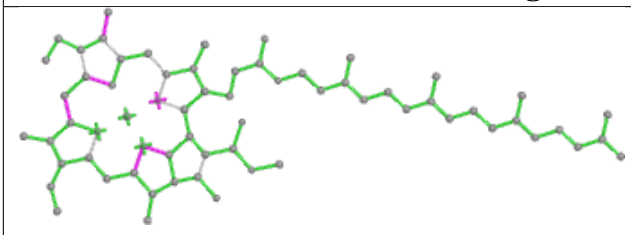


Rings

Ligand CLA C 513



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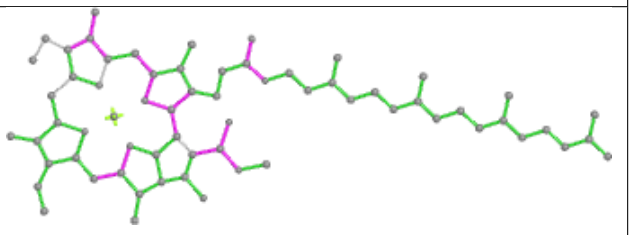
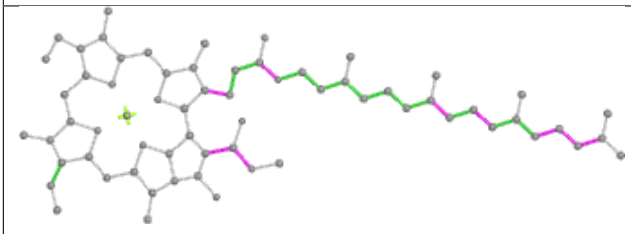


Bond angles



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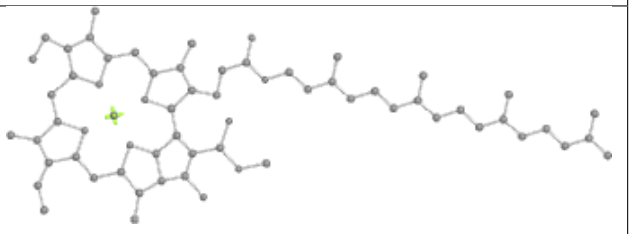
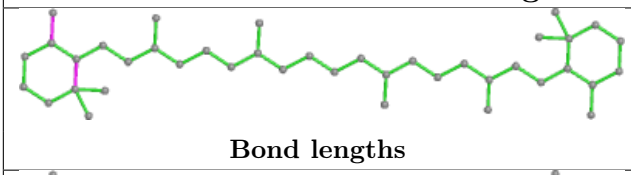


Rings

Ligand BCR A 610



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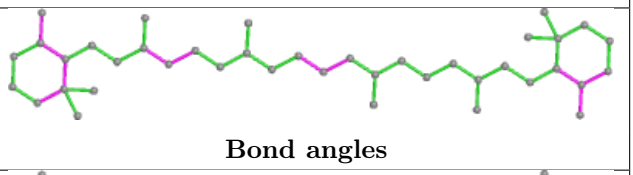
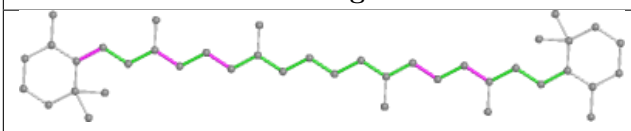


Bond angles



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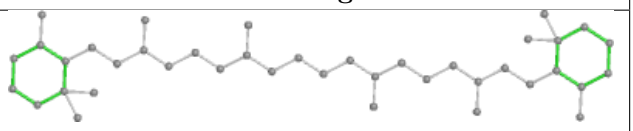
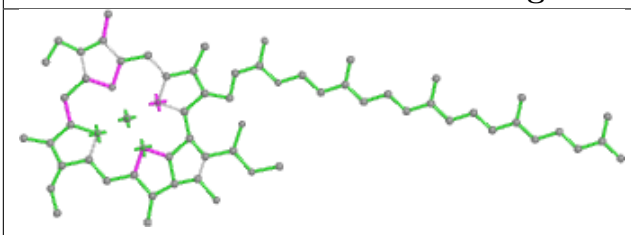


Rings

Ligand CLA b 605



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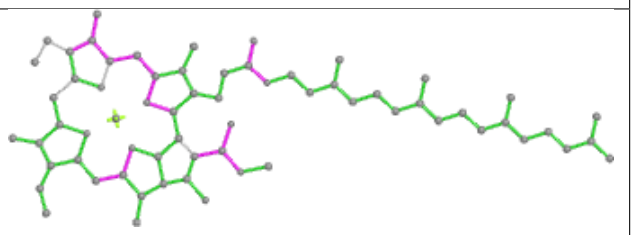
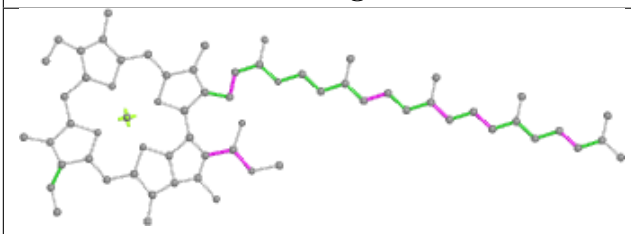


Bond angles



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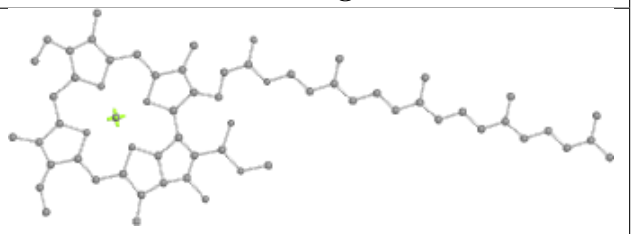
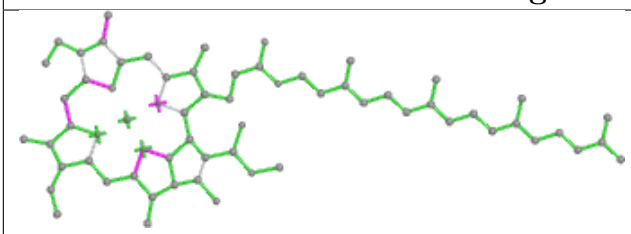


Rings

Ligand CLA c 513



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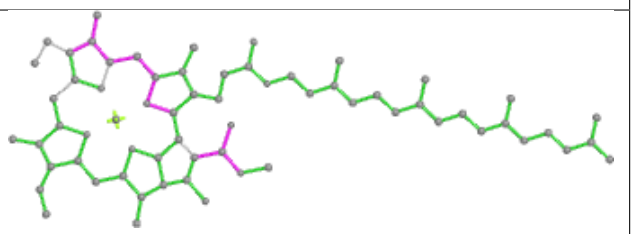
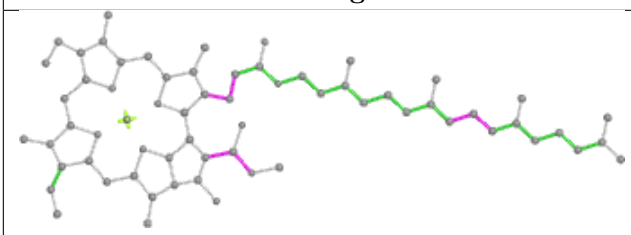


Bond angles



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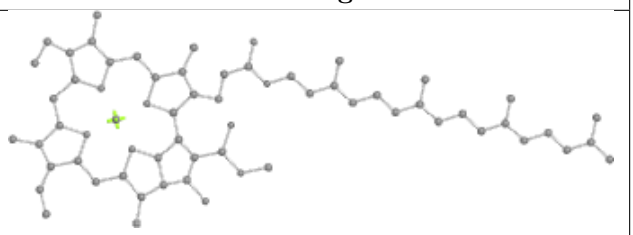
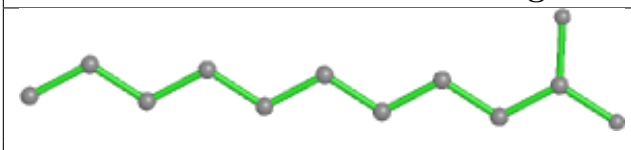


Rings

Ligand STE B 622



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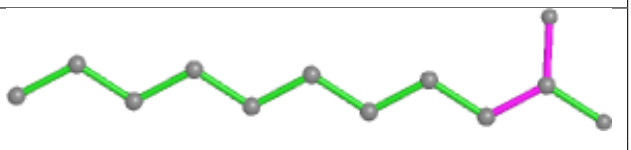
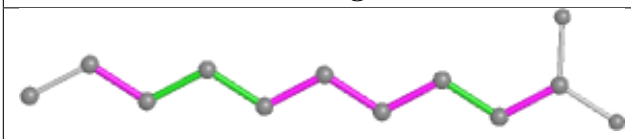
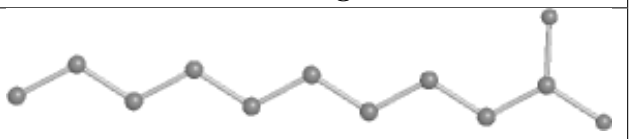


Bond angles

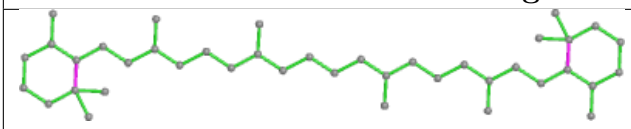


Torsions



Rings

Ligand BCR C 514



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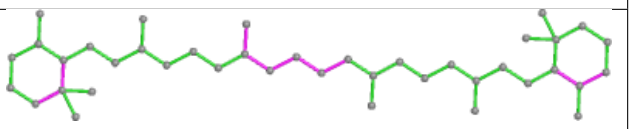
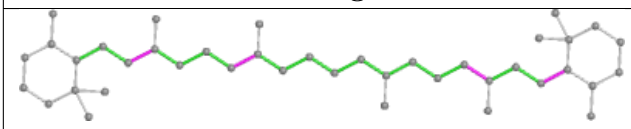


Bond angles



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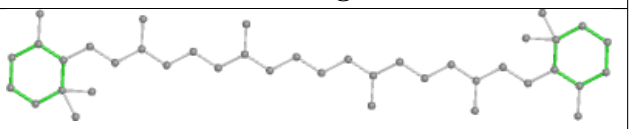
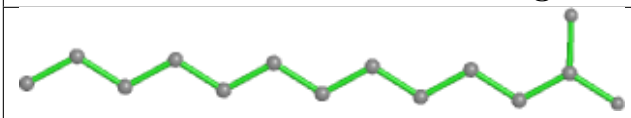


Rings

Ligand STE t 102



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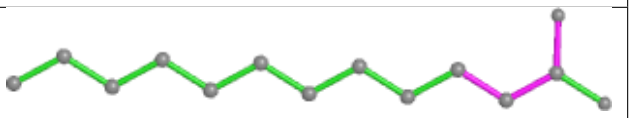
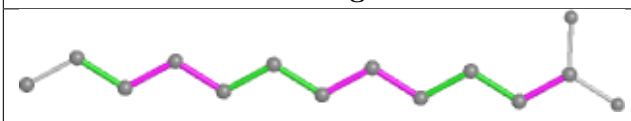
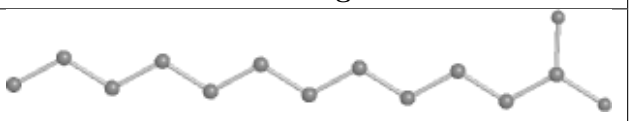


Bond angles

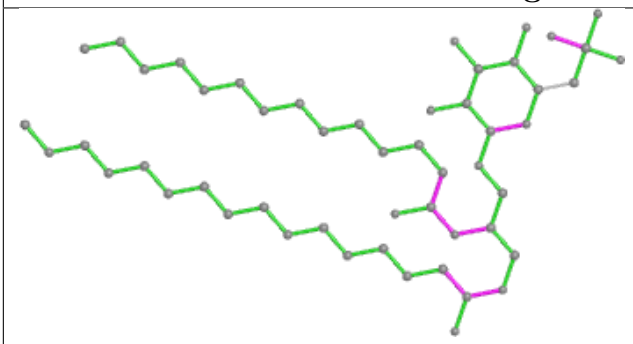


Torsions



Rings

Ligand SQD A 613



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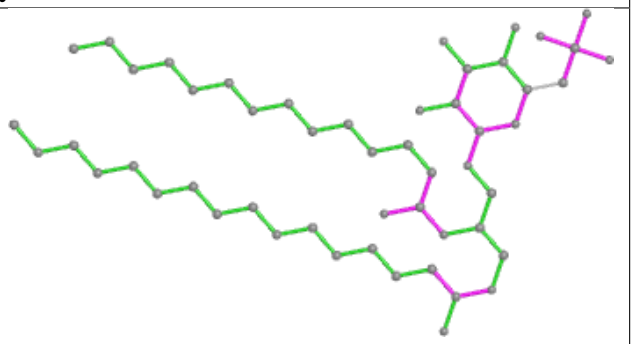
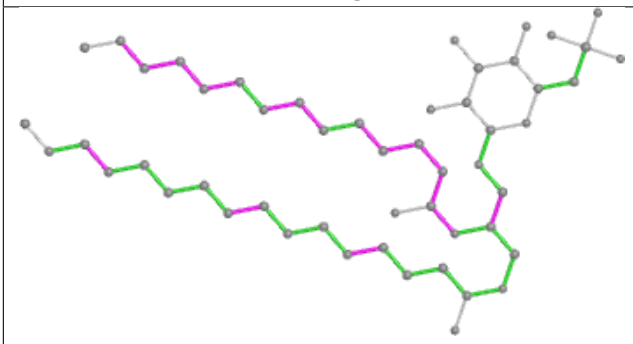


Bond angles



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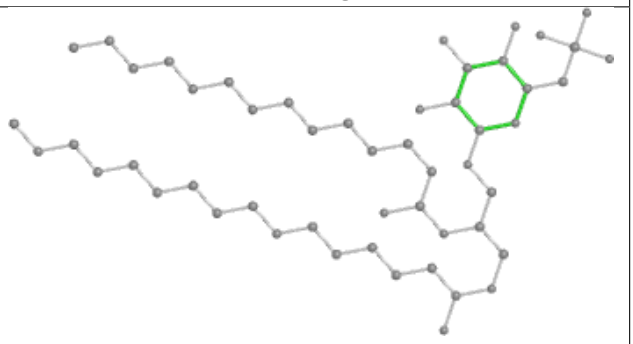
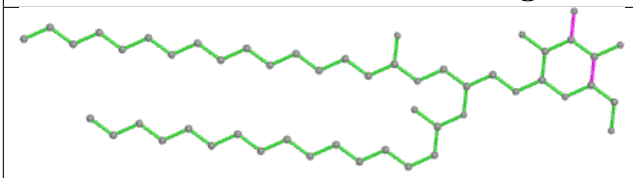


Rings

Ligand LMG D 407



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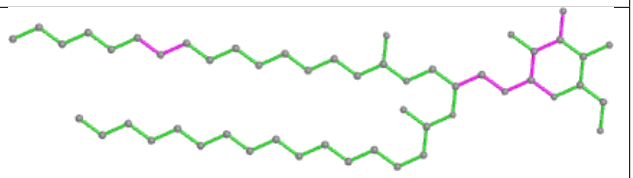
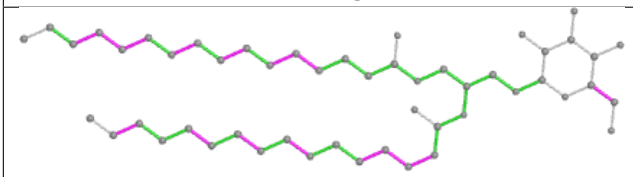
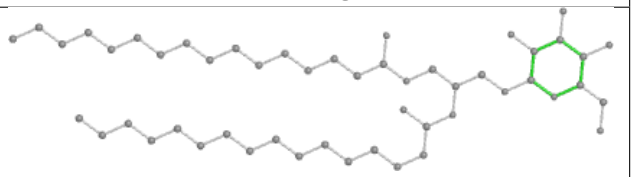


Bond angles

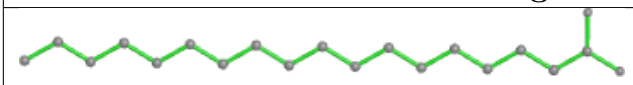


Torsions



Rings

Ligand STE b 621



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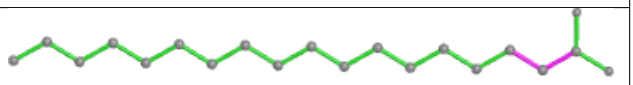
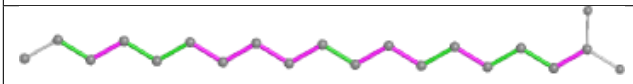
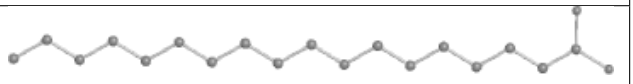


Bond angles

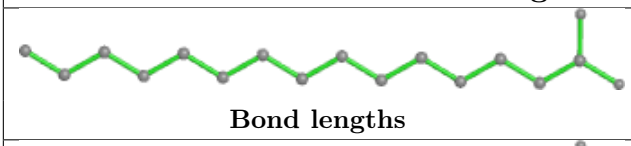


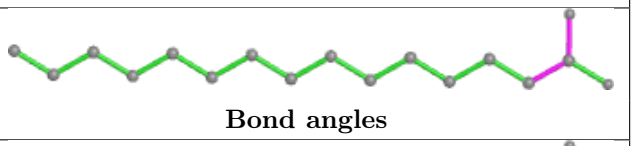
Torsions

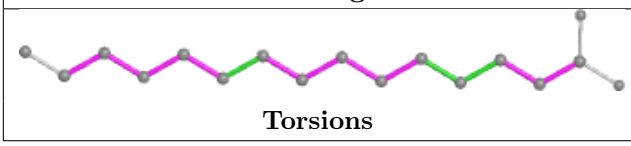


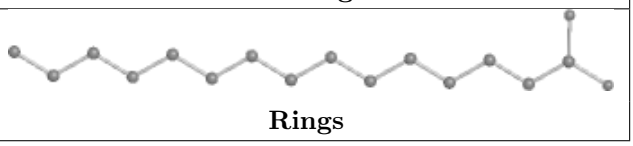
Rings

Ligand STE d 411

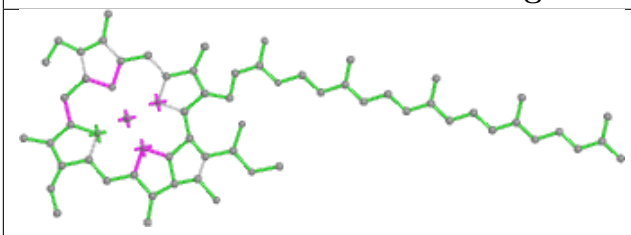

Bond lengths

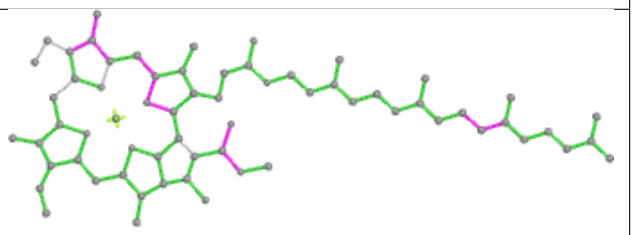

Bond angles

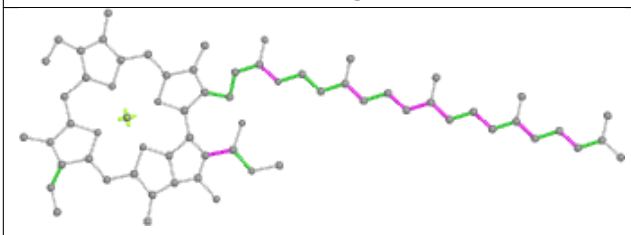

Torsions

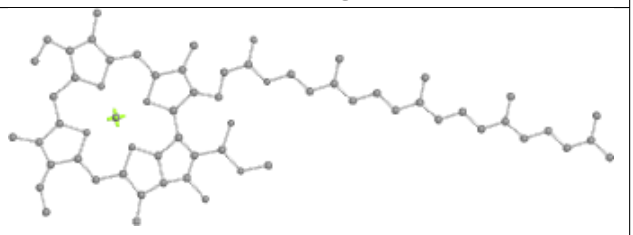

Rings

Ligand CLA C 505

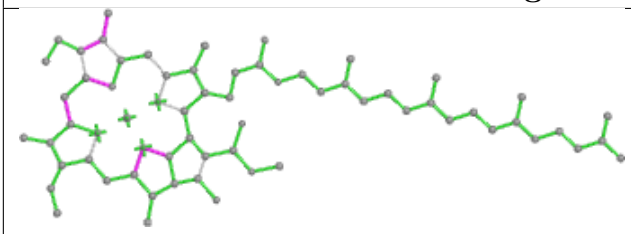

Bond lengths

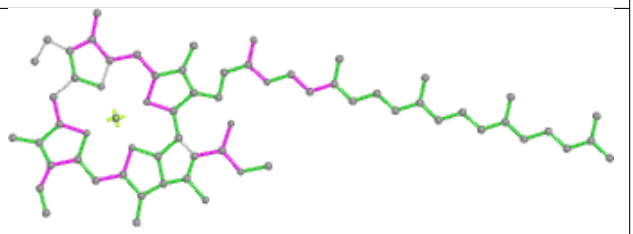

Bond angles

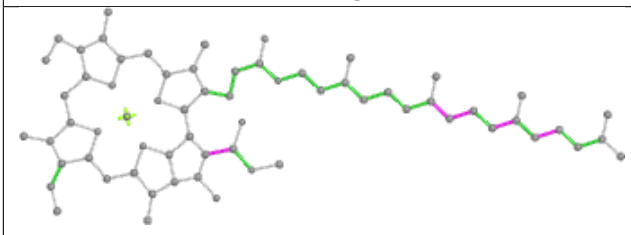

Torsions

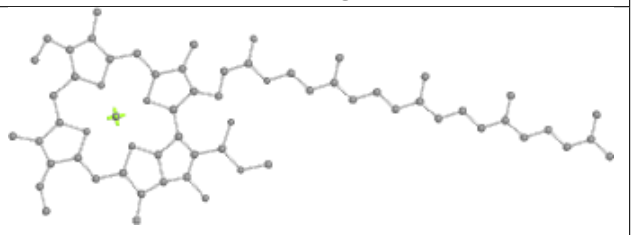

Rings

Ligand CLA B 609

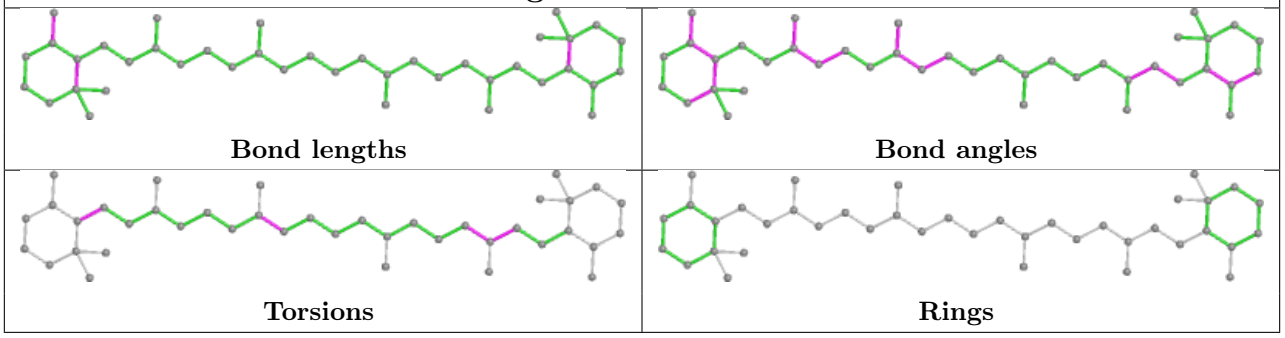

Bond lengths


Bond angles

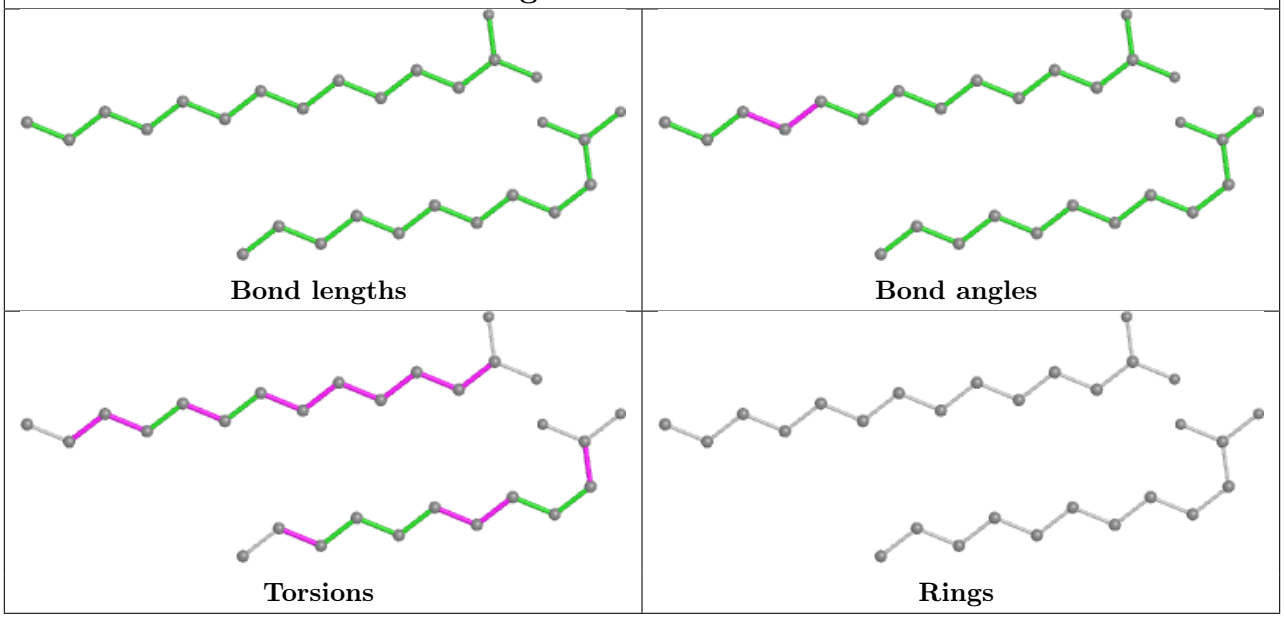

Torsions


Rings

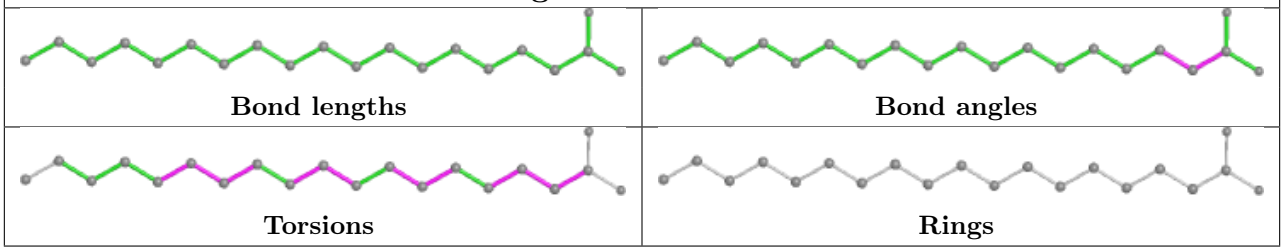
Ligand BCR b 616



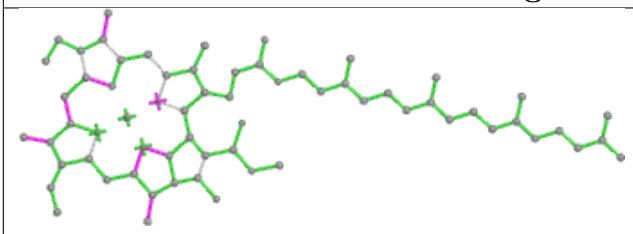
Ligand LMG D 412



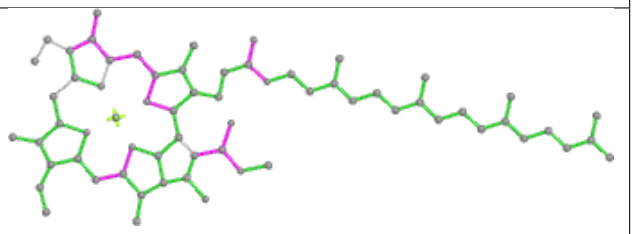
Ligand STE b 625



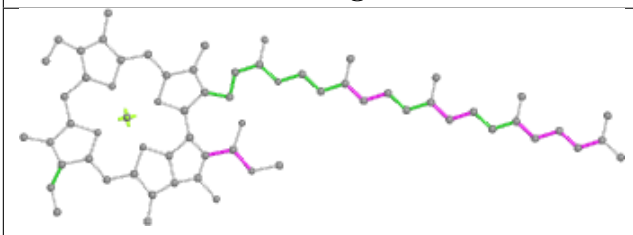
Ligand CLA C 510



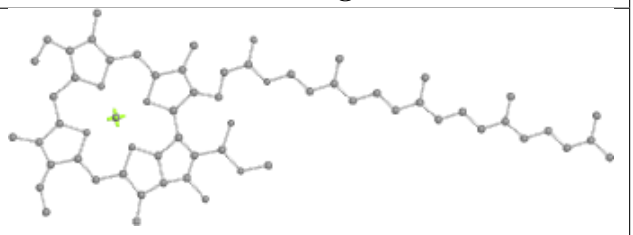
Bond lengths



Bond angles

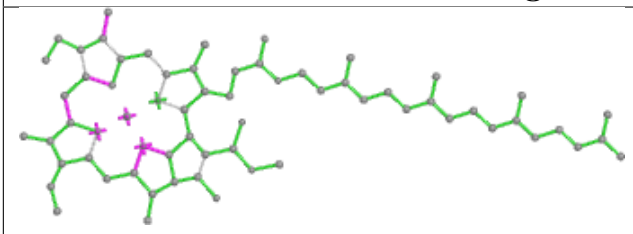


Torsions

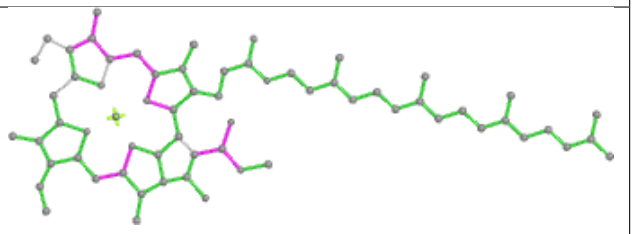


Rings

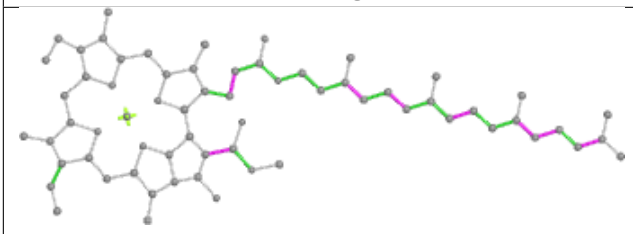
Ligand CLA B 613



Bond lengths



Bond angles



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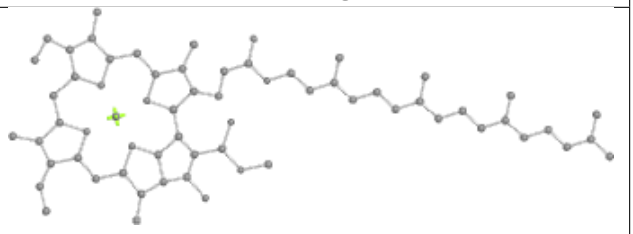
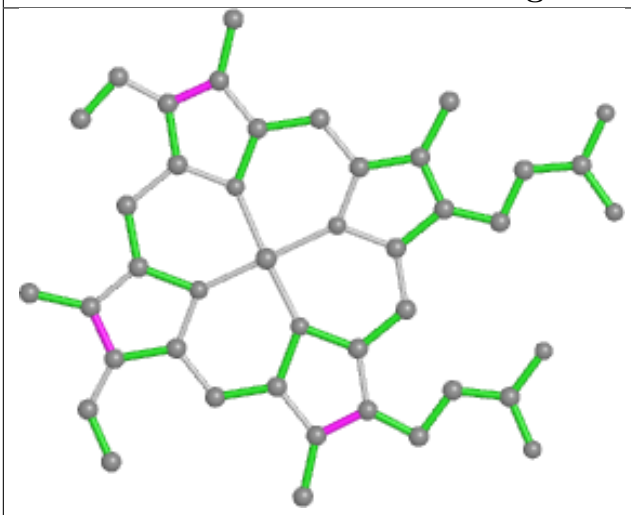


Rings

Ligand HEC v 201



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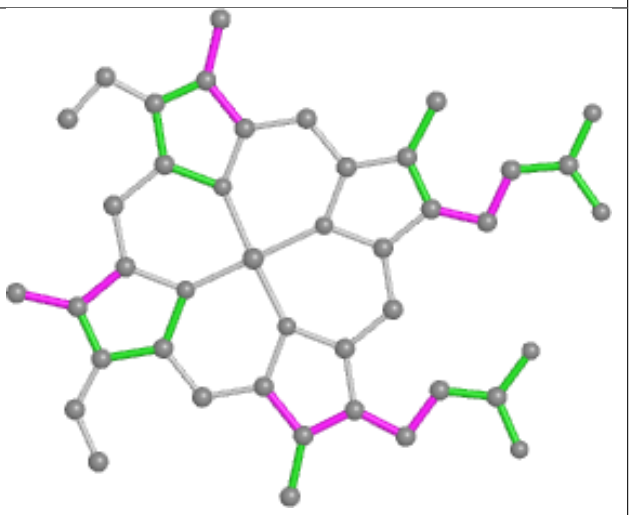
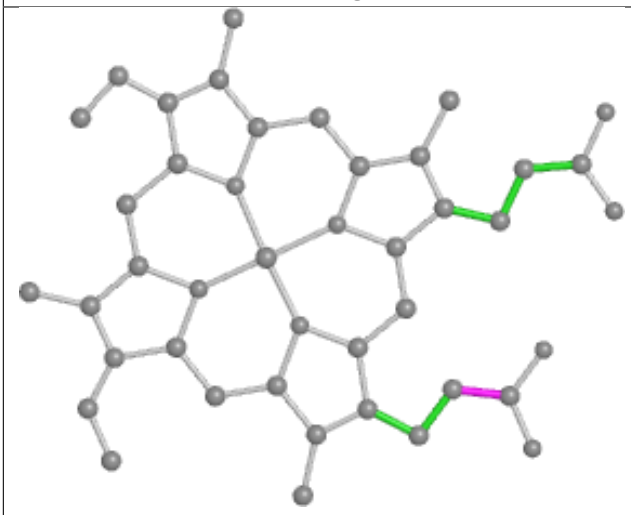


Bond angles



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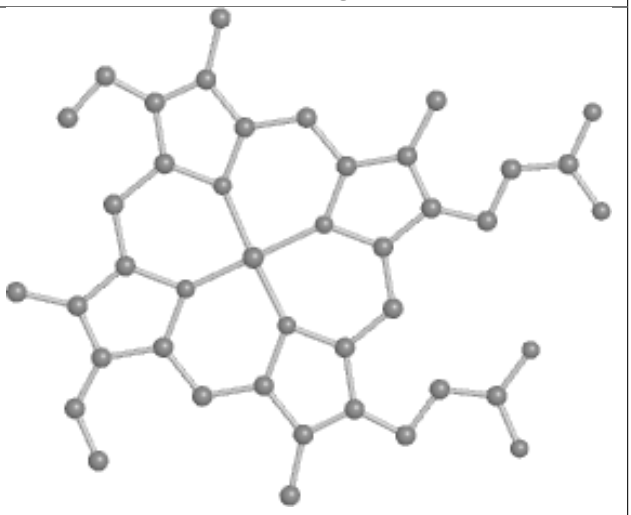
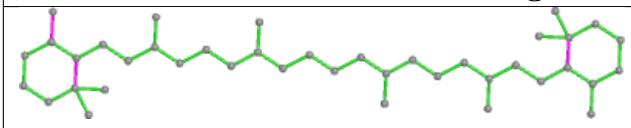


Rings

Ligand BCR k 101



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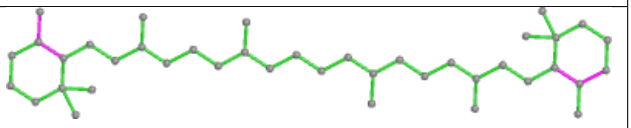
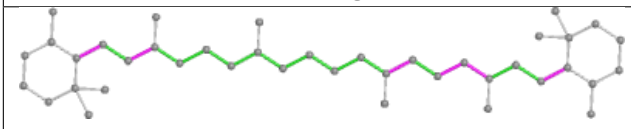


Bond angles



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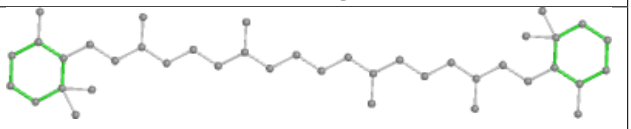
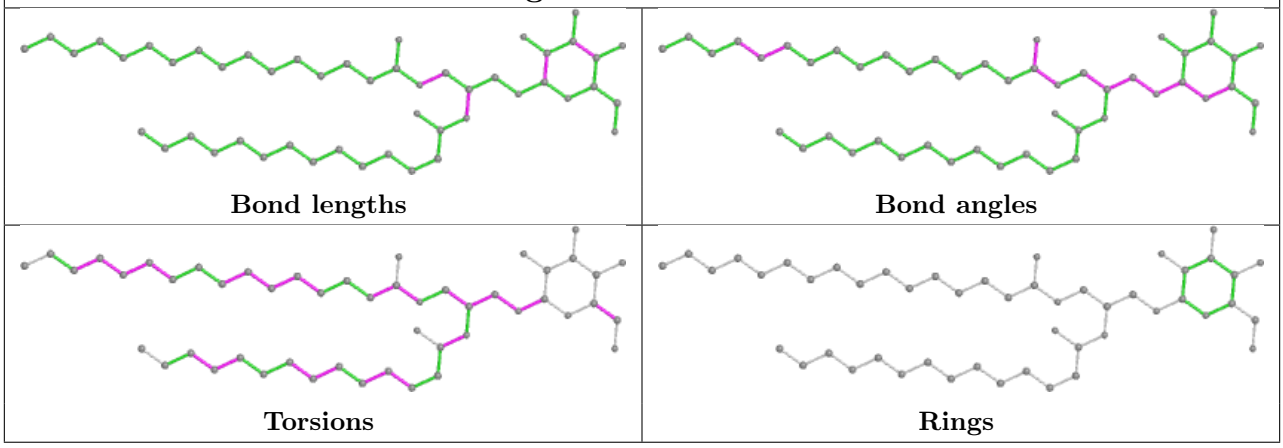
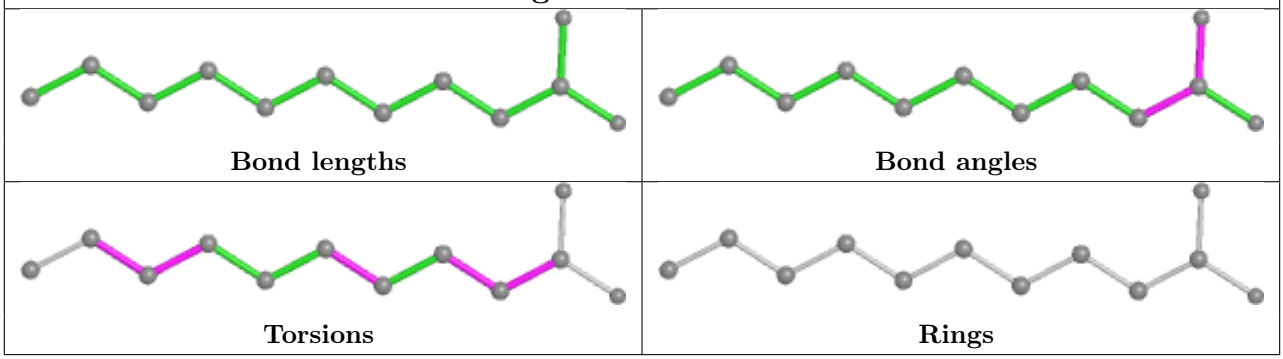


Rings

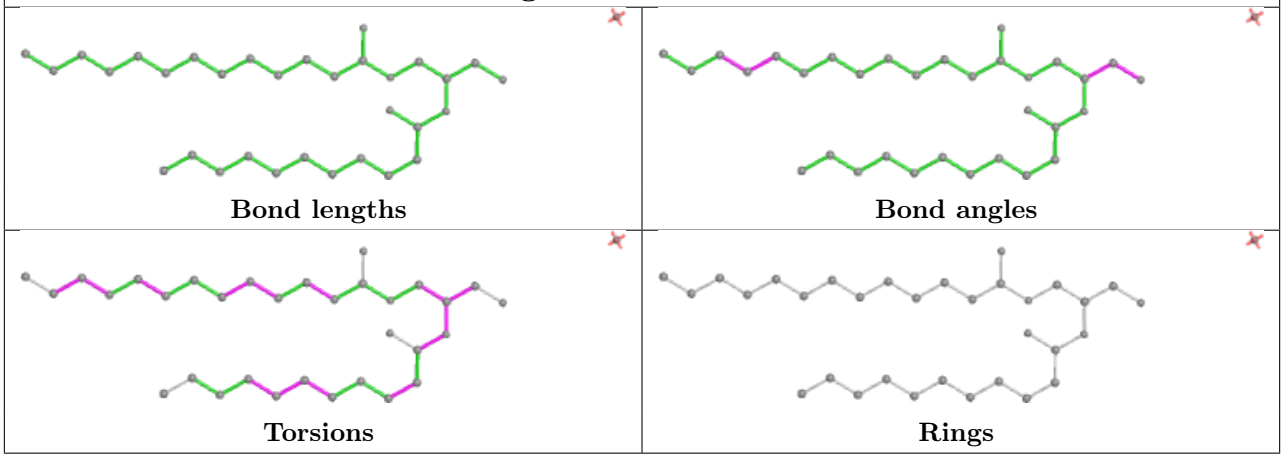
Ligand LMG c 524



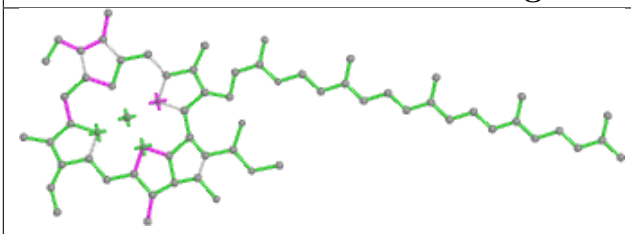
Ligand STE J 101



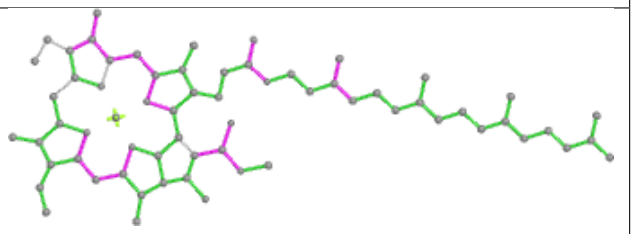
Ligand LMG D 411



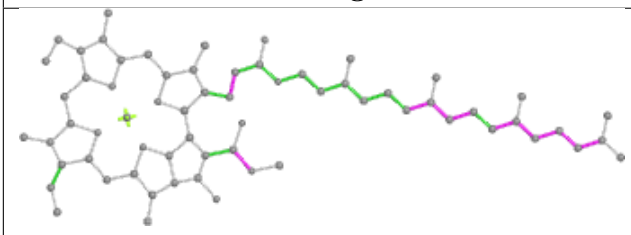
Ligand CLA B 605



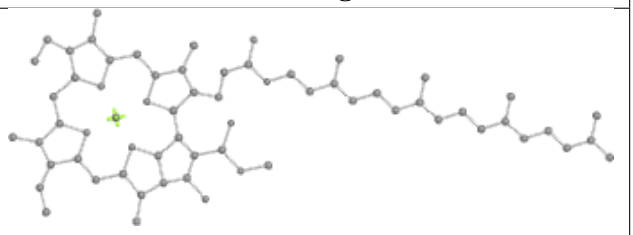
Bond lengths



Bond angles

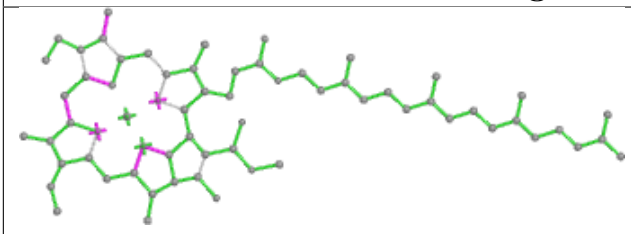


Torsions



Rings

Ligand CLA a 612



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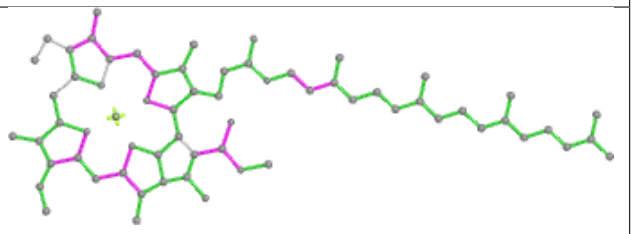
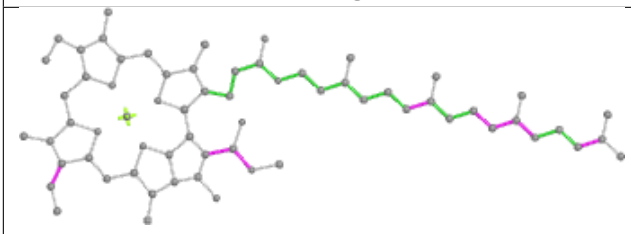
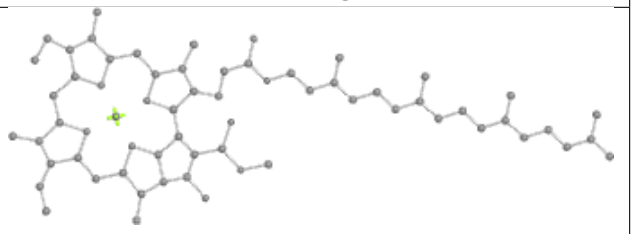


Bond angles

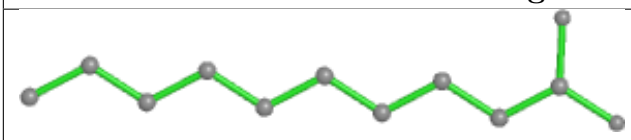


Torsions



Rings

Ligand STE B 624



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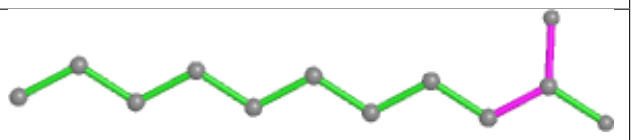
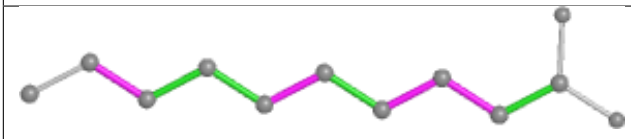


Bond angles



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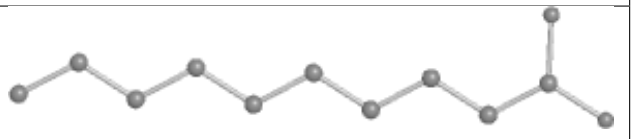
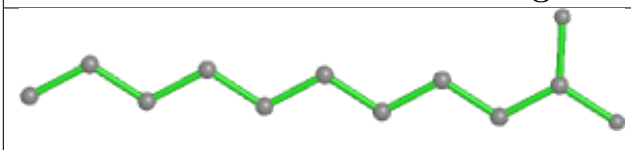


Rings

Ligand STE c 523



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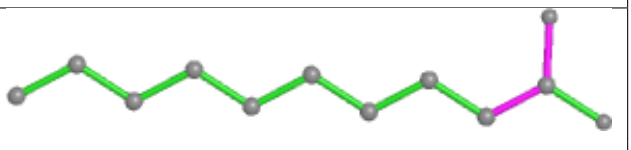
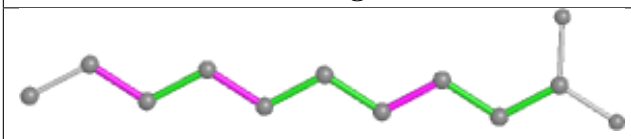


Bond angles



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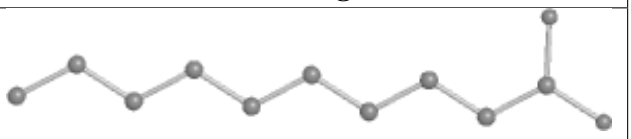
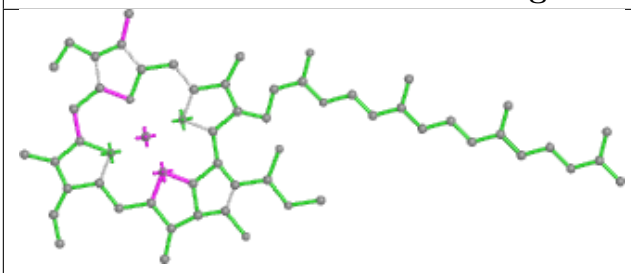
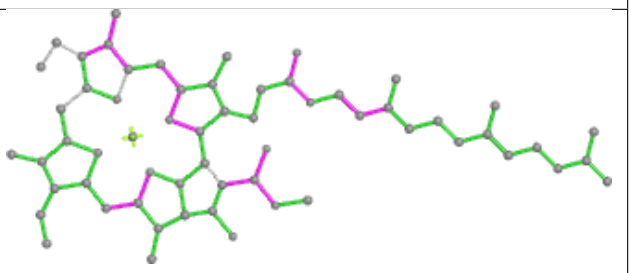


Rings

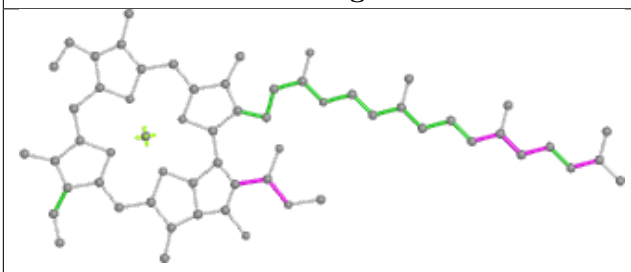
Ligand CLA c 504



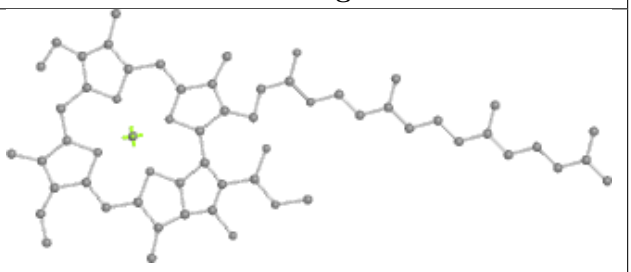
Bond lengths



Bond angles

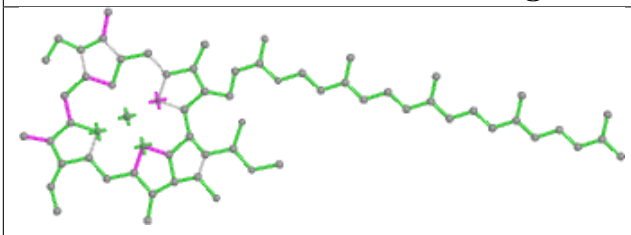


Torsions

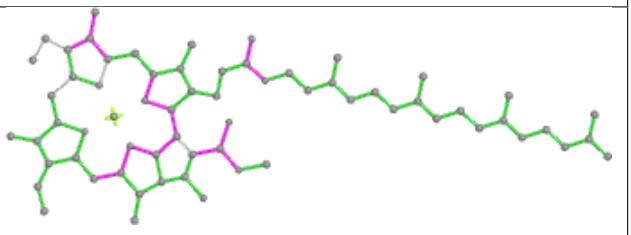


Rings

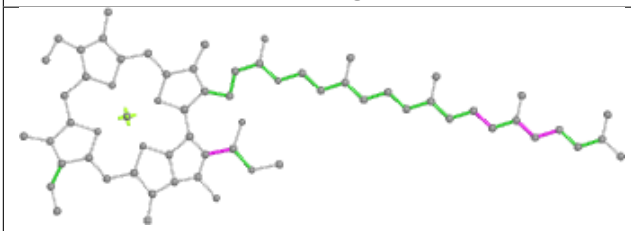
Ligand CLA C 502



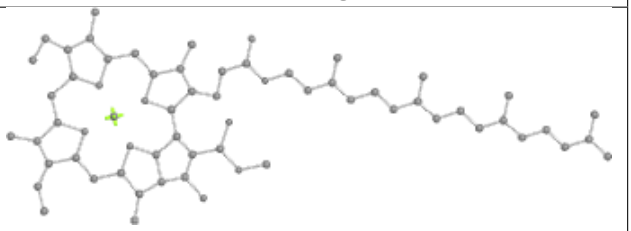
Bond lengths



Bond angles

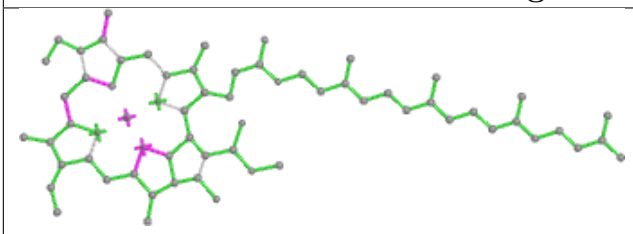


Torsions

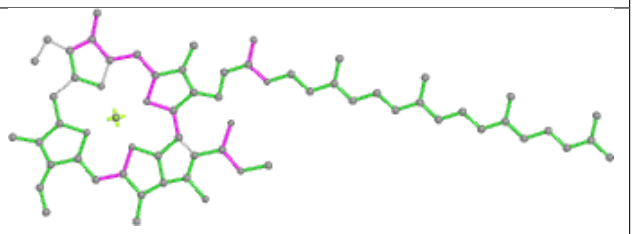


Rings

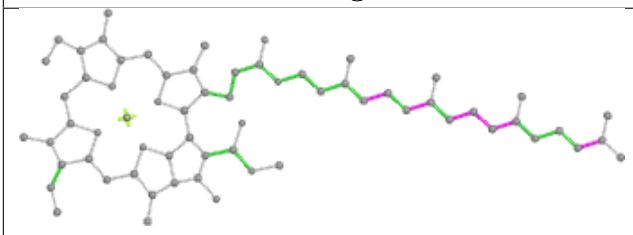
Ligand CLA d 404



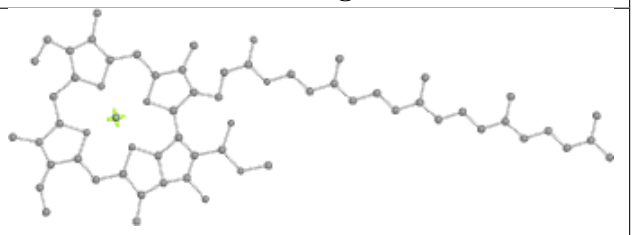
Bond lengths



Bond angles

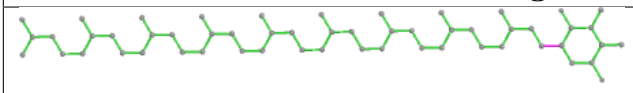


Torsions

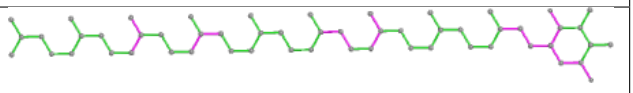


Rings

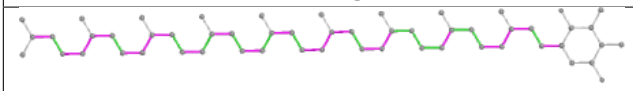
Ligand PL9 A 611



Bond lengths



Bond angles



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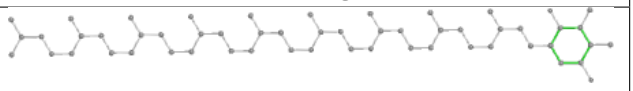
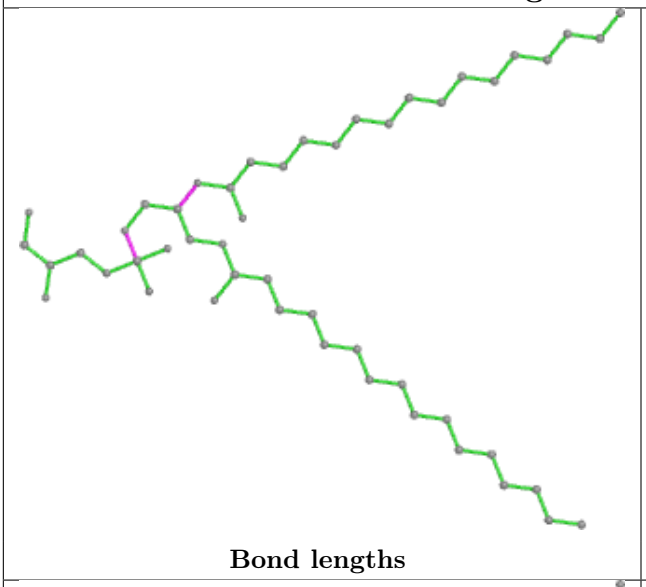


Rings

Ligand LHG b 623



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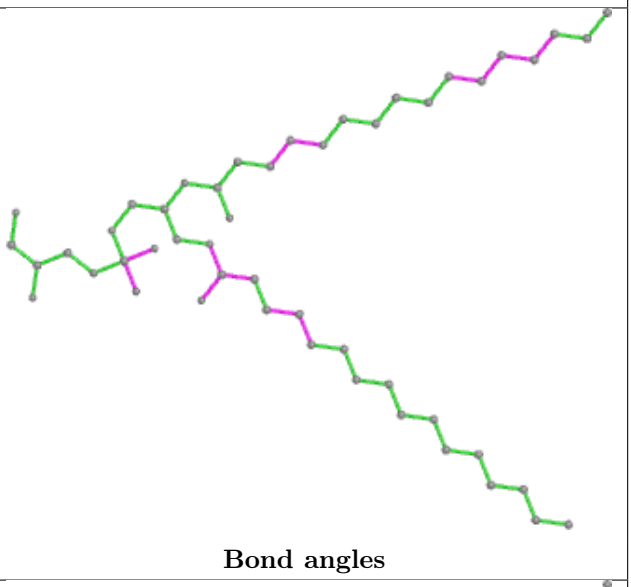
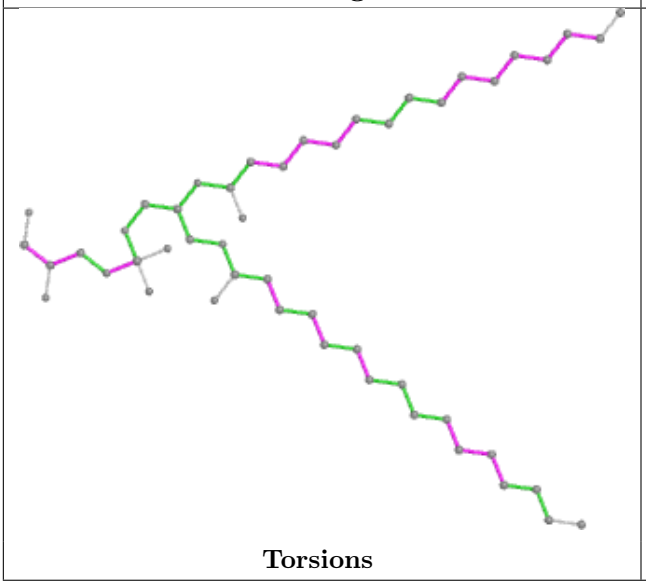


Bond angles



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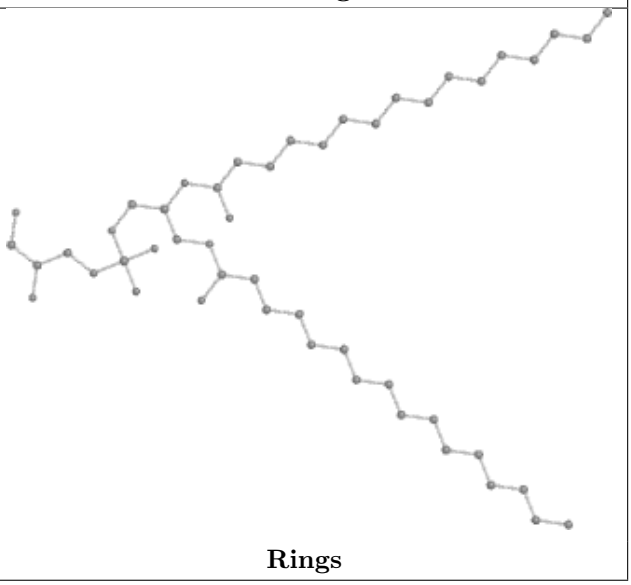
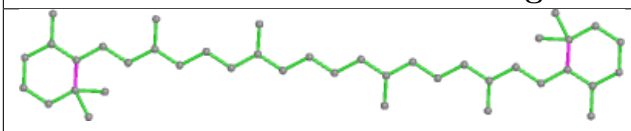


Rings

Ligand BCR d 405



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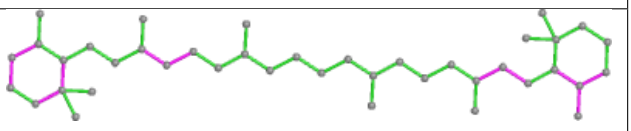
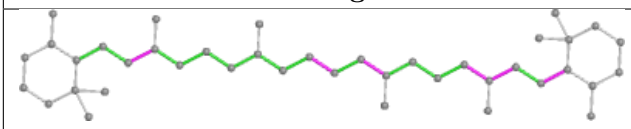


Bond angles



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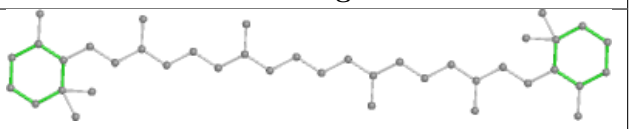
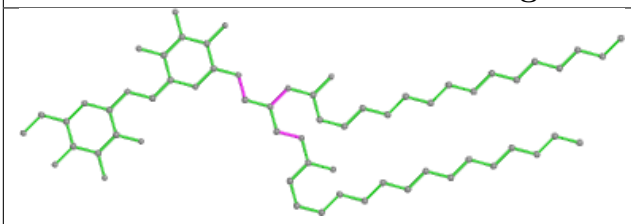


Rings

Ligand DGD C 518



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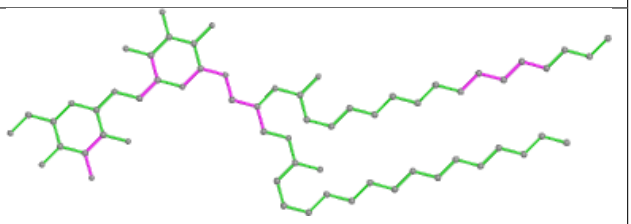

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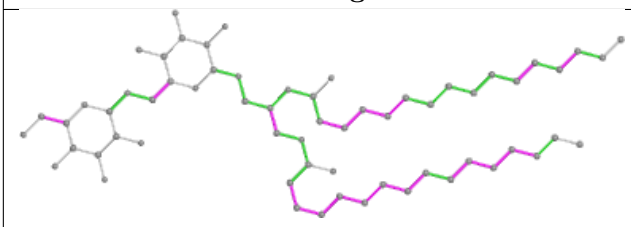

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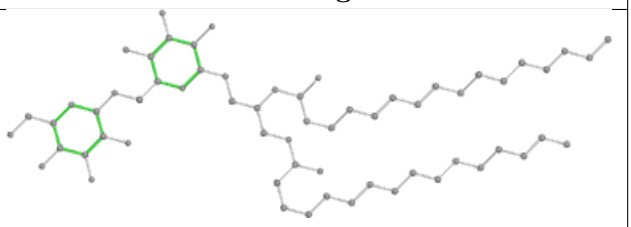
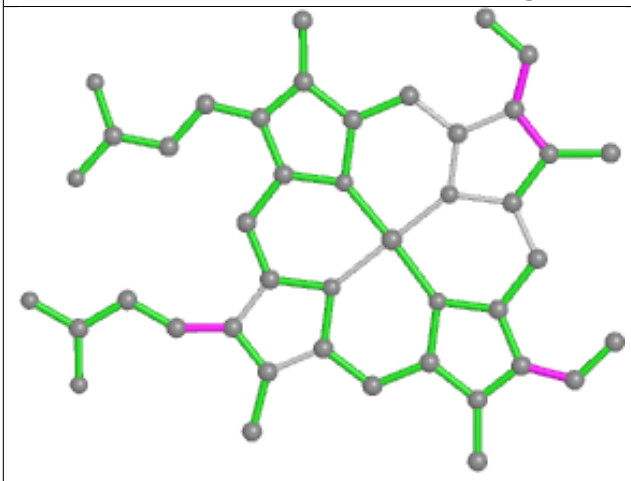


Rings

Ligand HEM F 101



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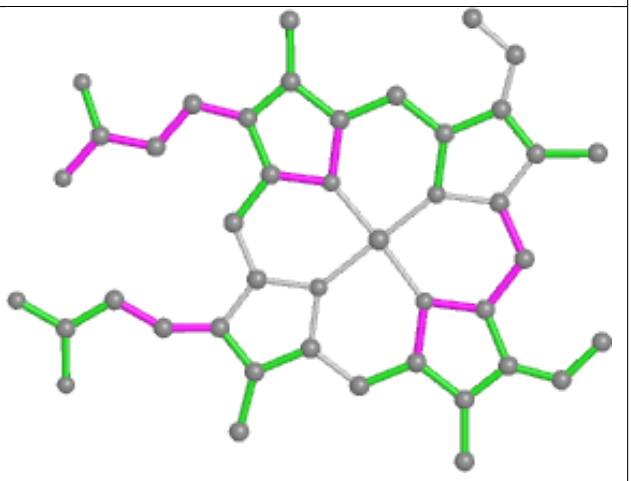
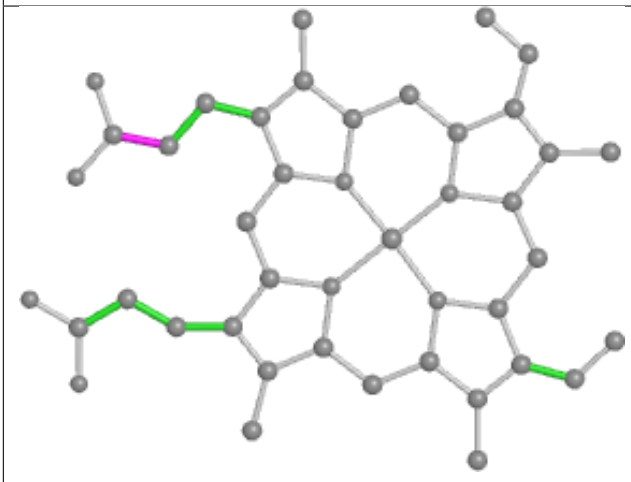


Bond angles



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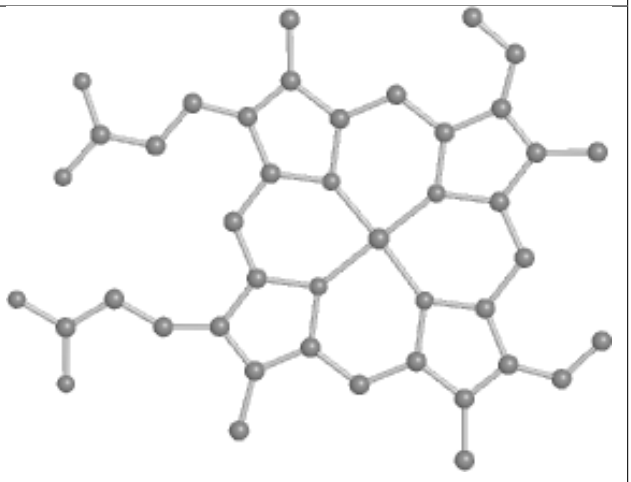
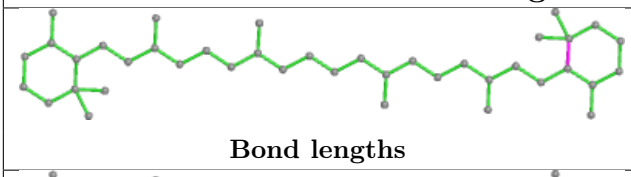


Rings

Ligand BCR t 101



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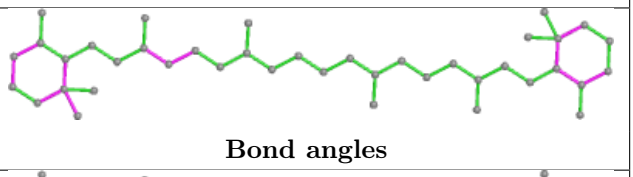
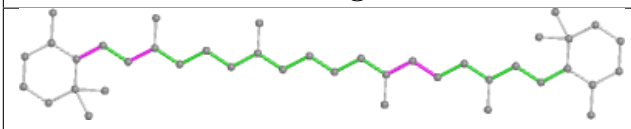


Bond angles



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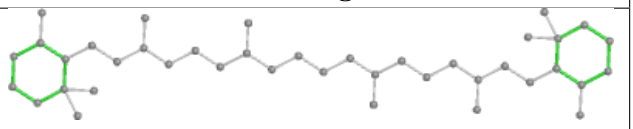
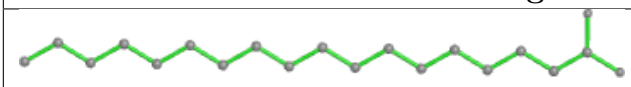


Rings

Ligand STE D 413



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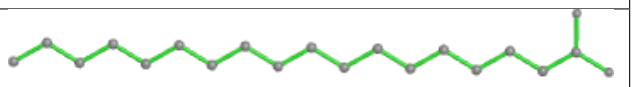
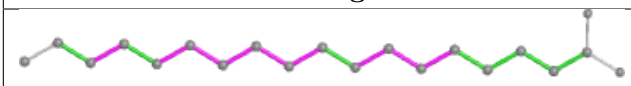


Bond angles



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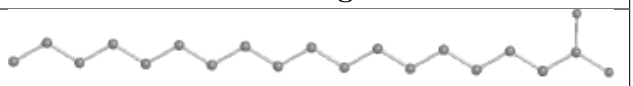
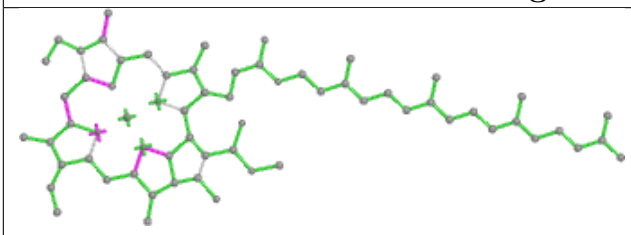


Rings

Ligand CLA c 509



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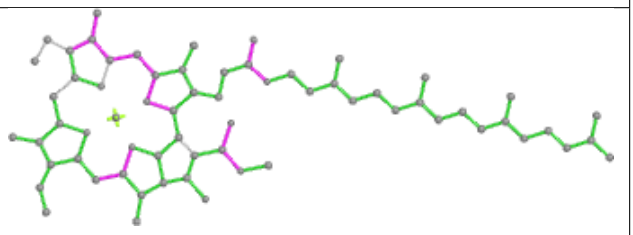
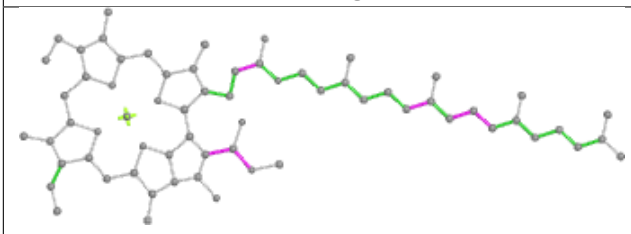


Bond angles



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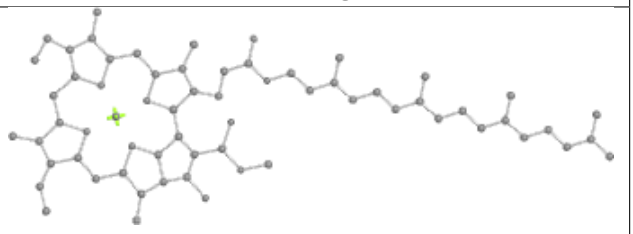
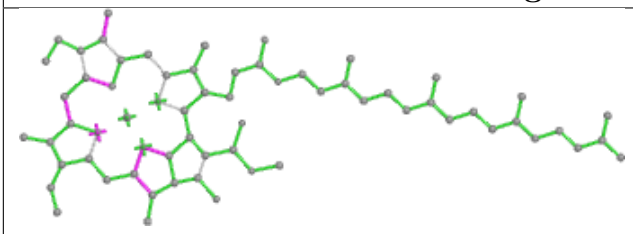


Rings

Ligand CLA B 601



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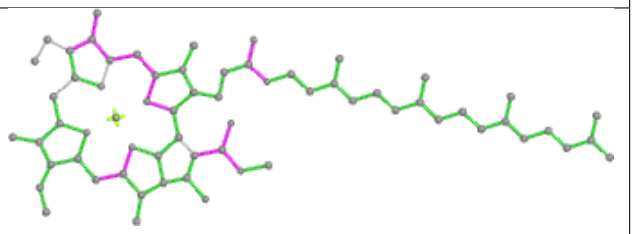
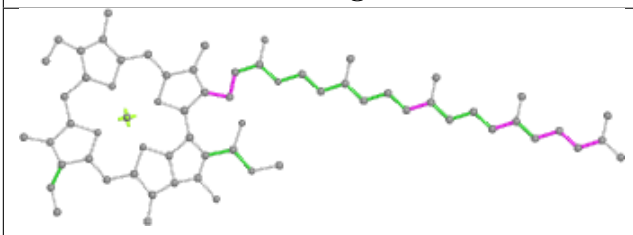


Bond angles



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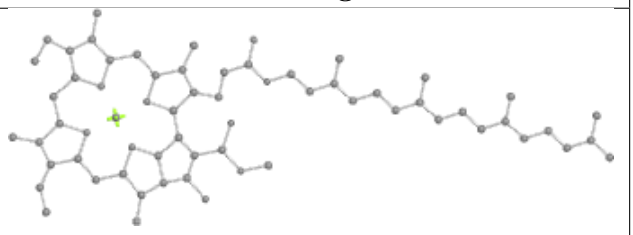
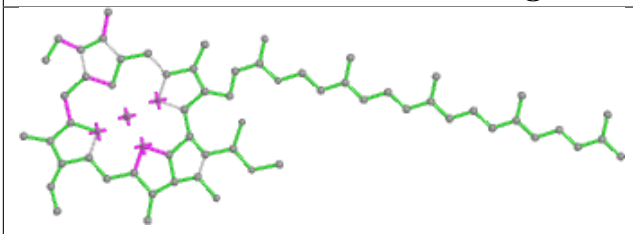


Rings

Ligand CLA C 503



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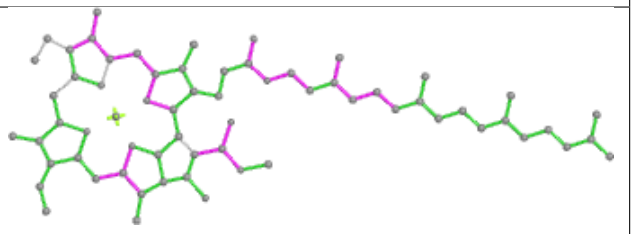
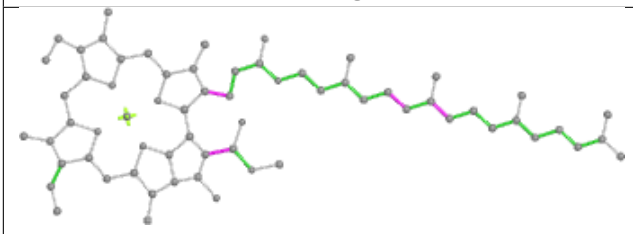


Bond angles



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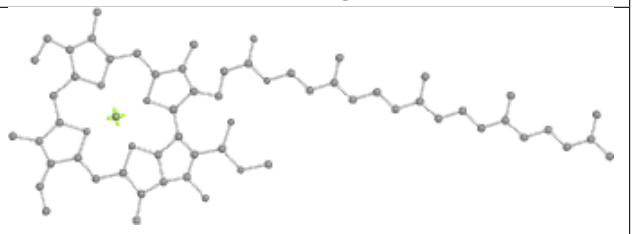
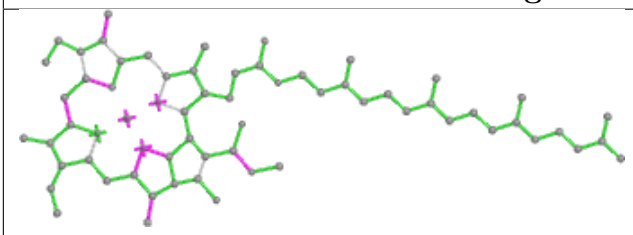


Rings

Ligand CLA C 509



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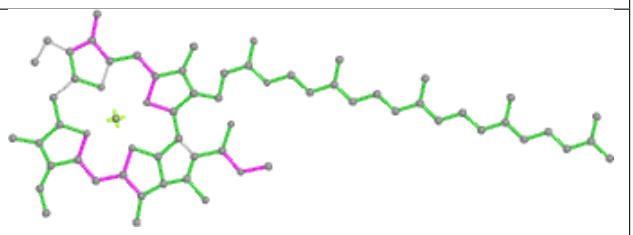
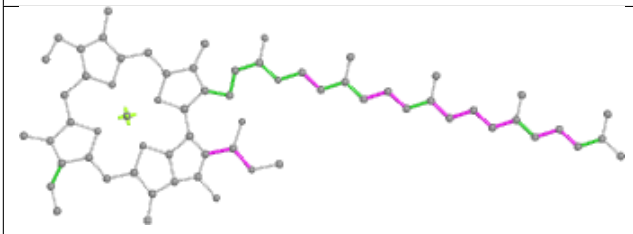


Bond angles



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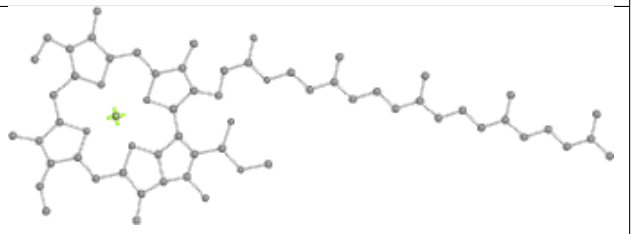
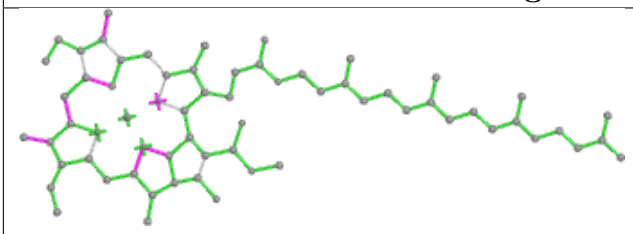


Rings

Ligand CLA B 604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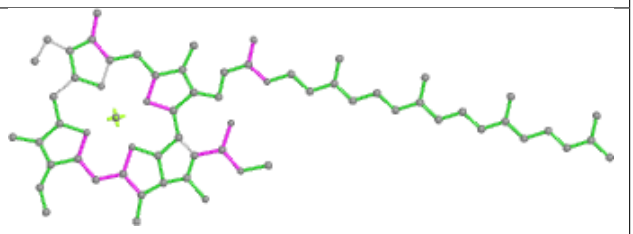
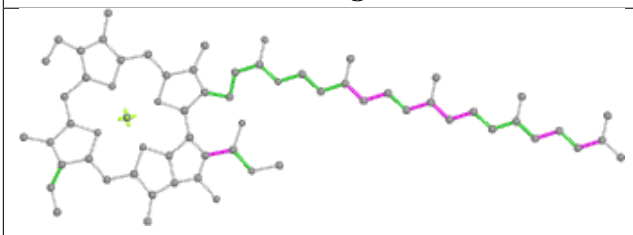

Bond angles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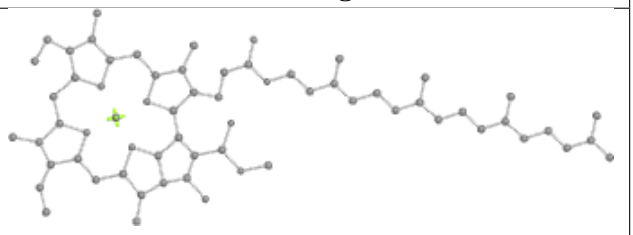
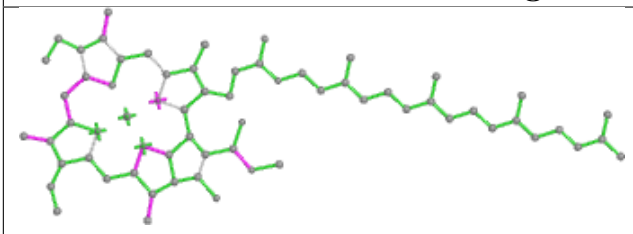
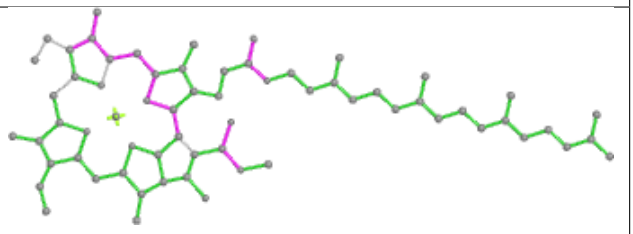
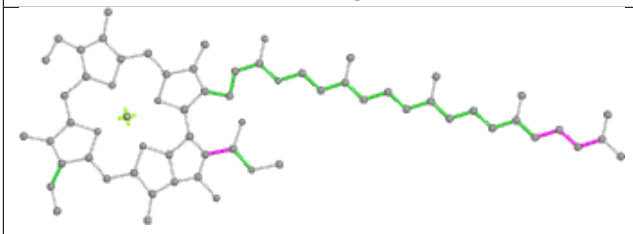

Rings

Ligand CLA B 608


Bond lengths


Bond angles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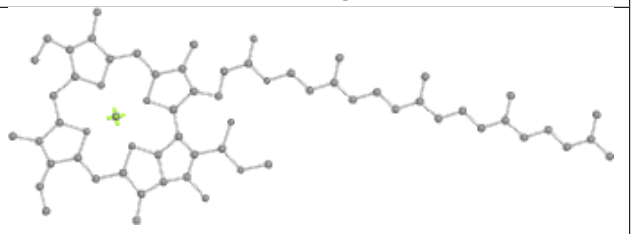
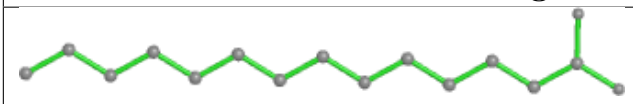
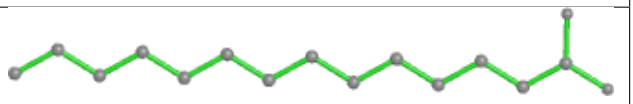
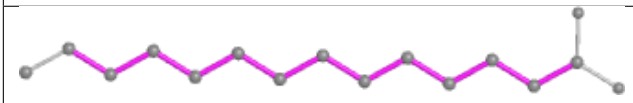

Rings

Ligand STE b 624


Bond lengths


Bond angles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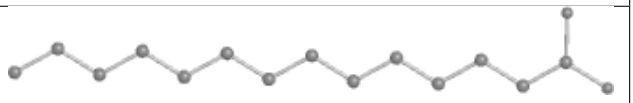
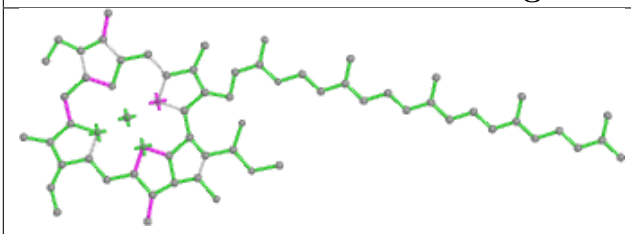
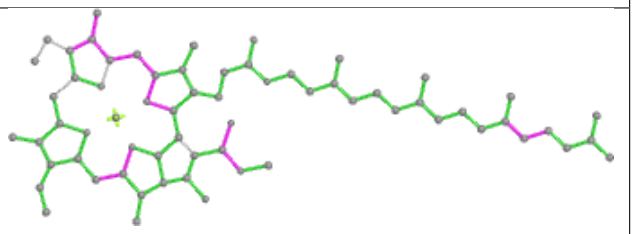

Rings

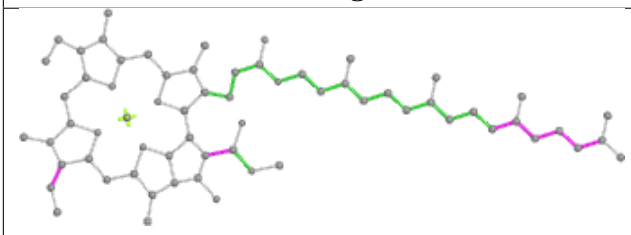
Ligand CLA A 612



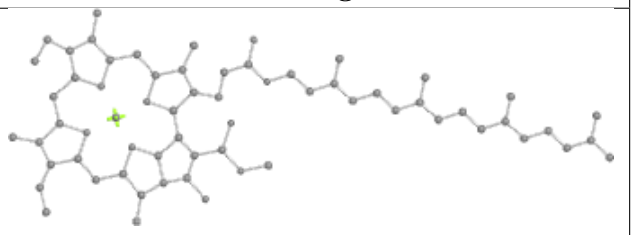
Bond lengths



Bond angles

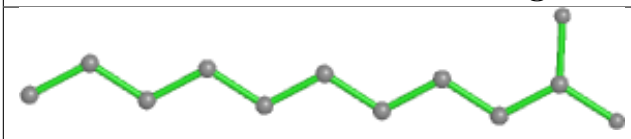


Torsions

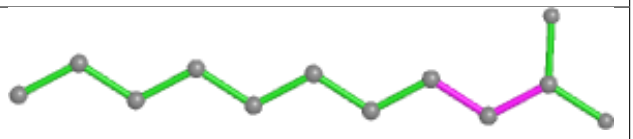


Rings

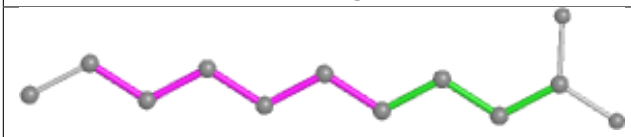
Ligand STE E 102



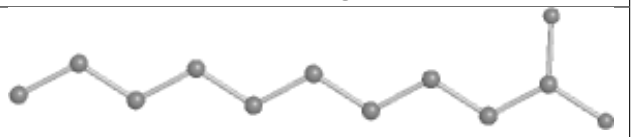
Bond lengths



Bond angles

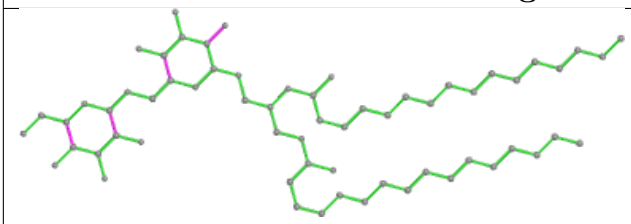


Torsions

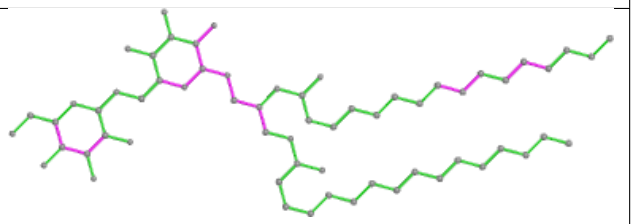


Rings

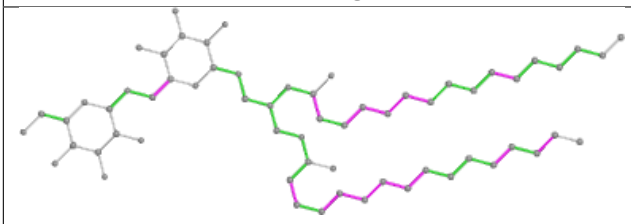
Ligand DGD H 103



Bond lengths



Bond angles



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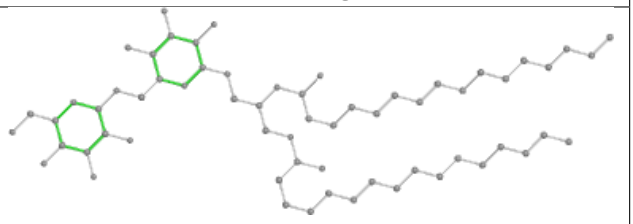
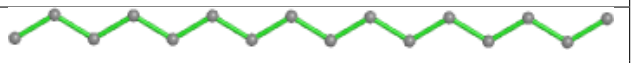


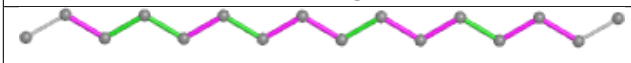
Rings

Ligand STE T 102

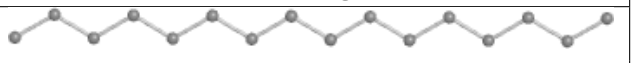
Bond lengths



Bond angles

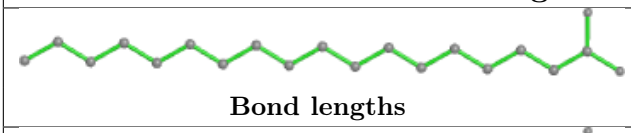


Torsions

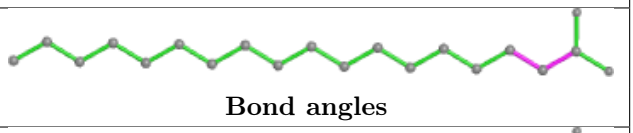


Rings

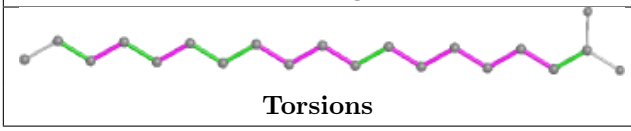
Ligand STE x 102



Bond lengths



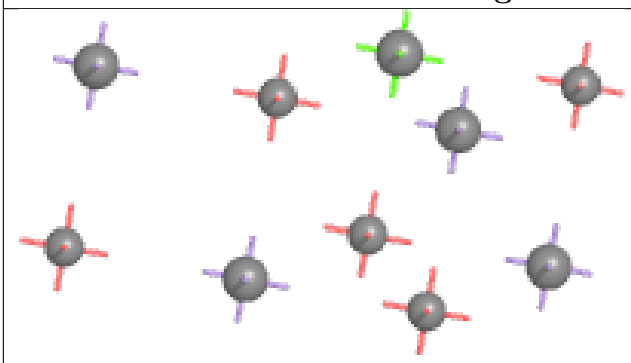
Bond angles



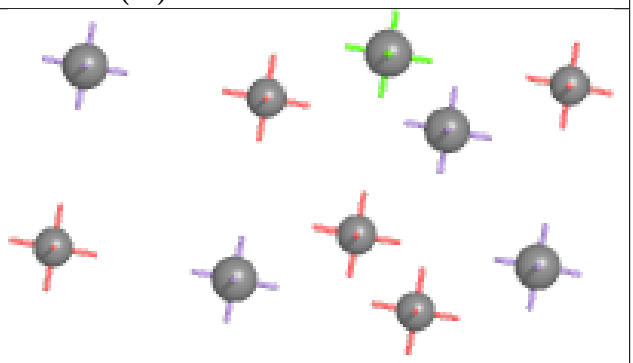
Torsions

Rings

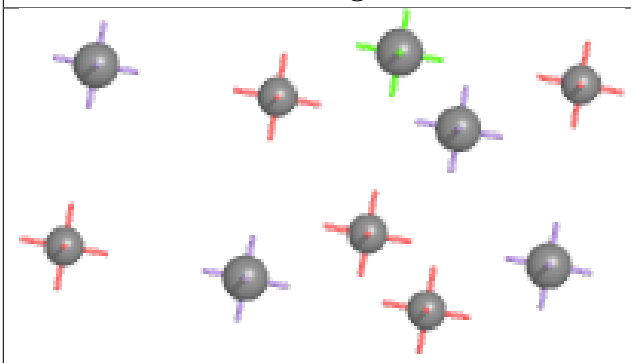
Ligand OEX a 601 (B)



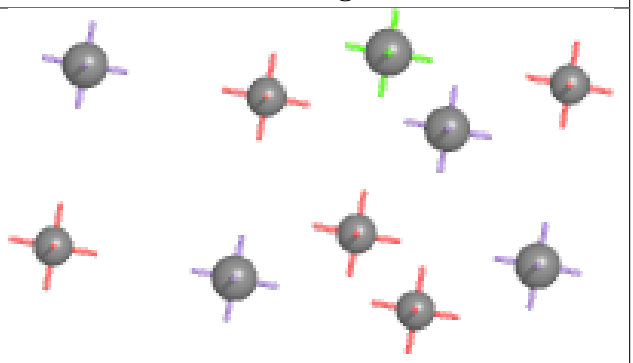
Bond lengths



Bond angles

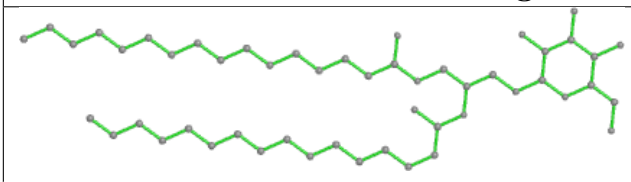


Torsions



Rings

Ligand LMG M 101



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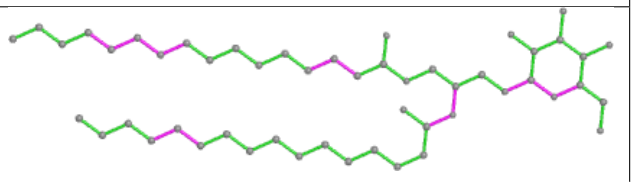
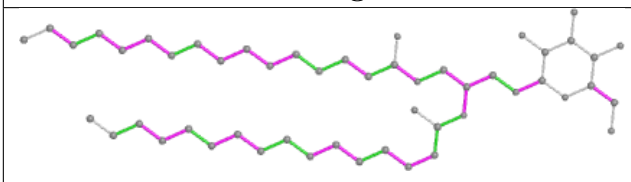
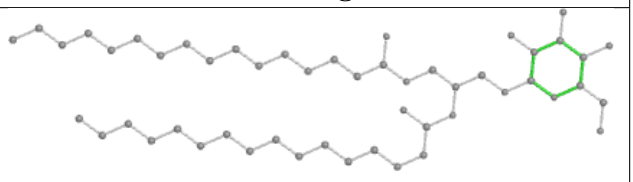


Bond angles

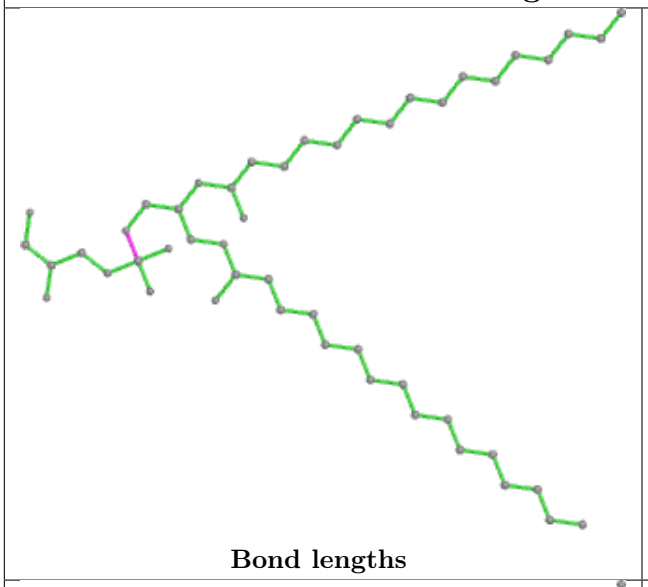


Torsions

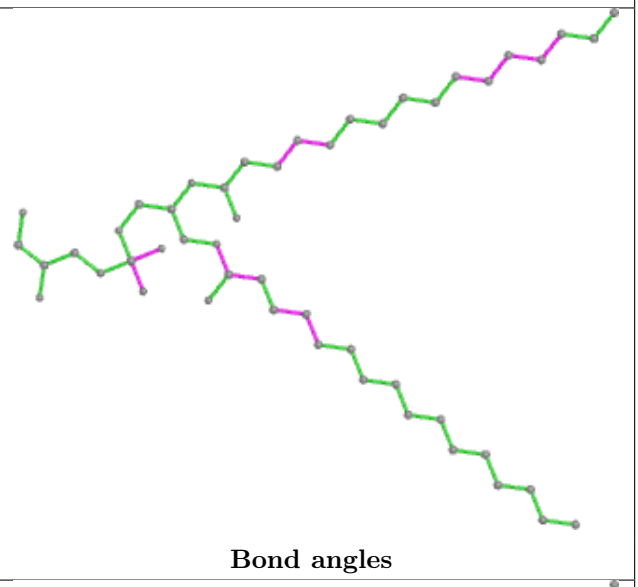


Rings

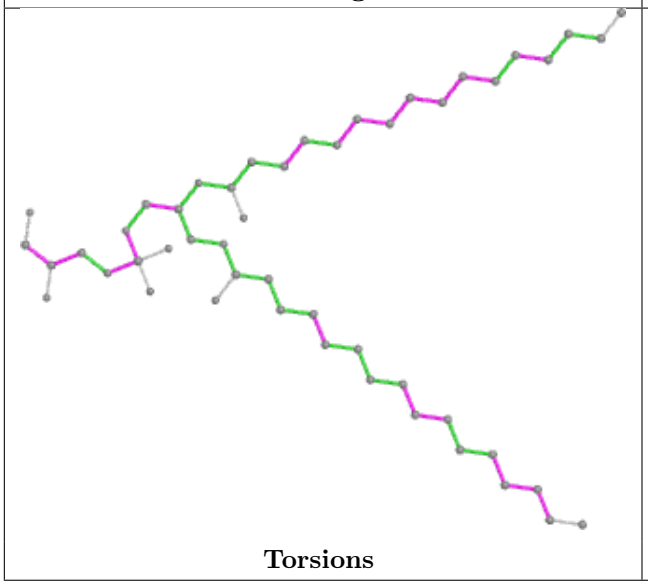
Ligand LHG D 409



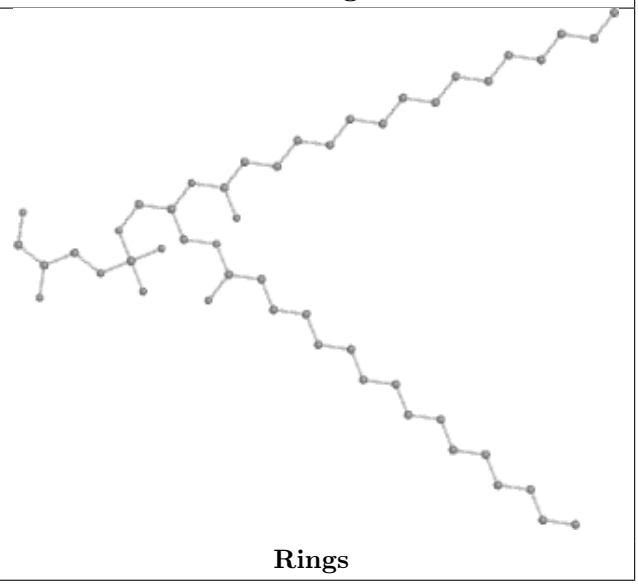
Bond lengths



Bond angles

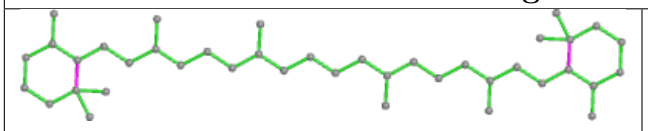


Torsions

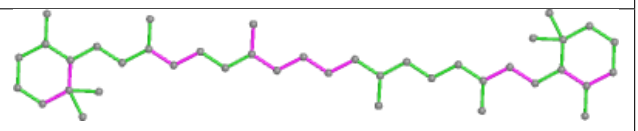


Rings

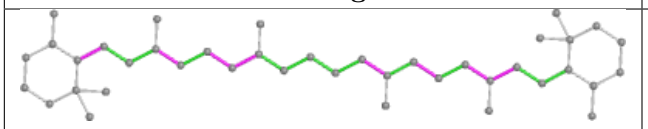
Ligand BCR K 101



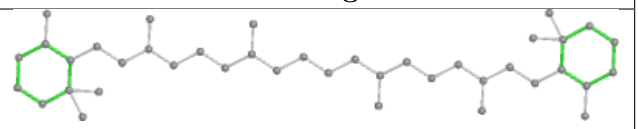
Bond lengths



Bond angles

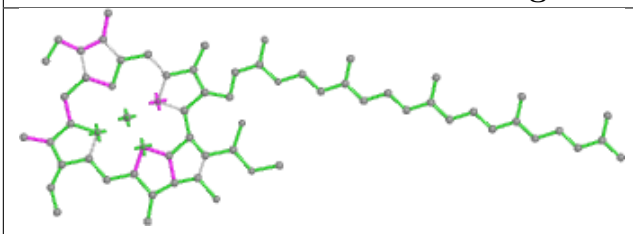


Torsions

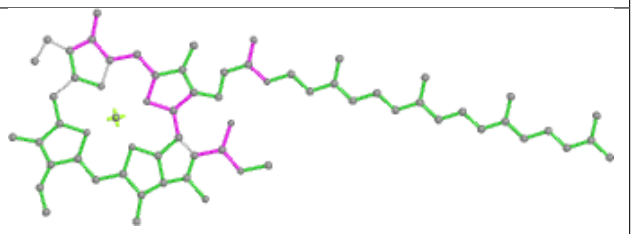


Rings

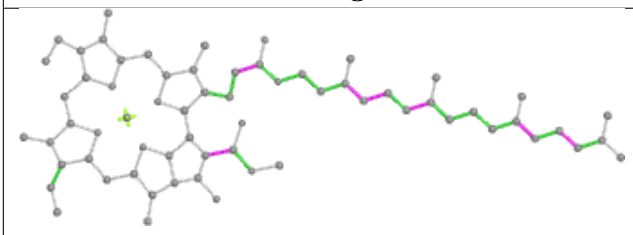
Ligand CLA c 507



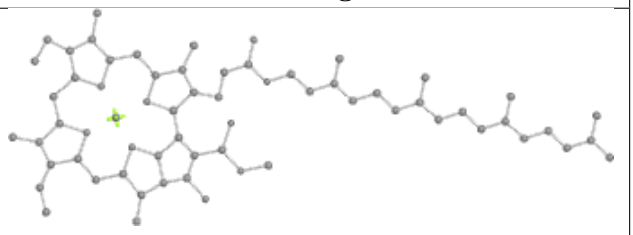
Bond lengths



Bond angles

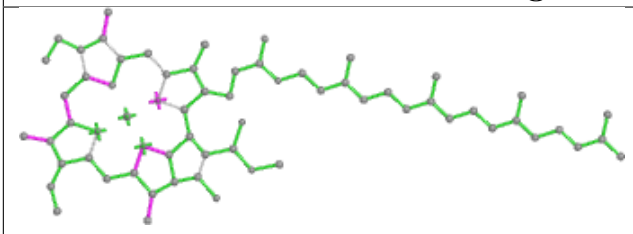


Torsions

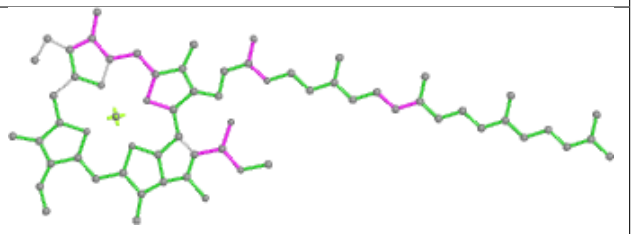


Rings

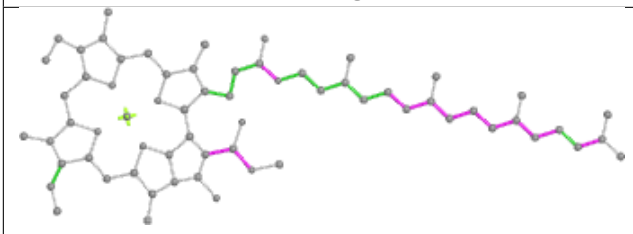
Ligand CLA b 606



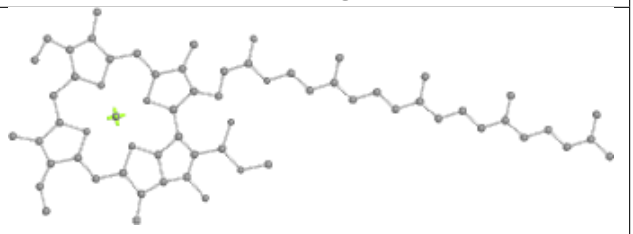
Bond lengths



Bond angles

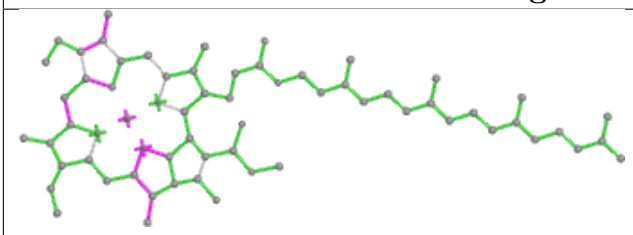


Torsions

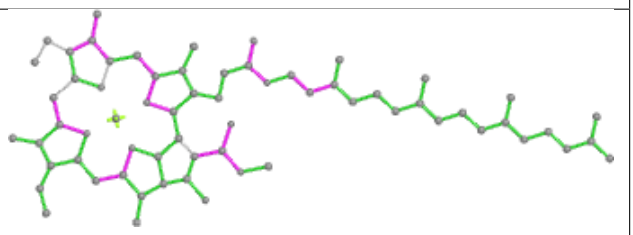


Rings

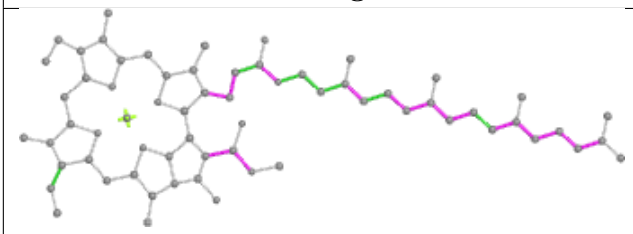
Ligand CLA c 512



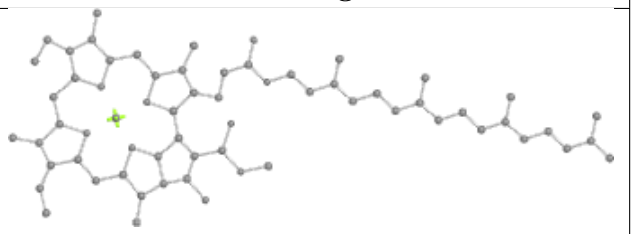
Bond lengths



Bond angles

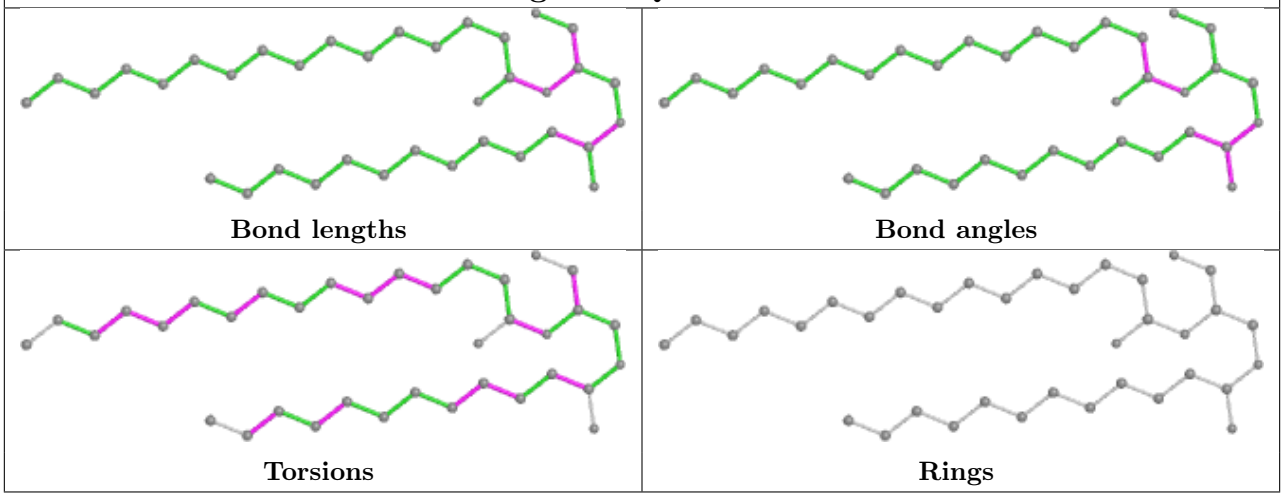


Torsions

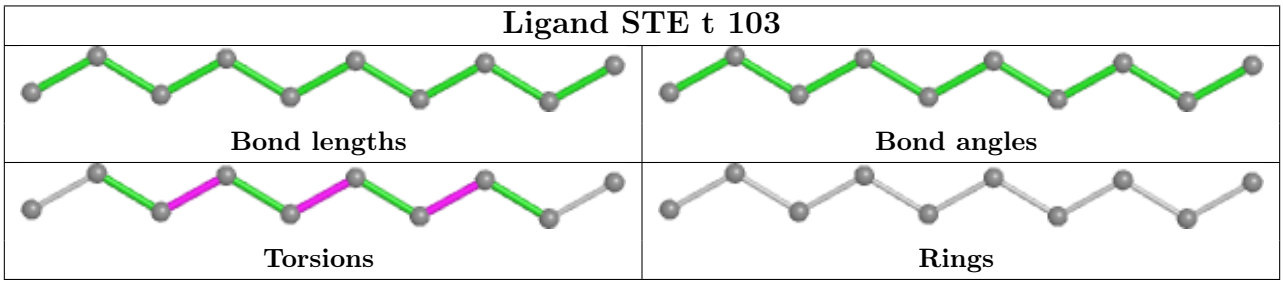


Rings

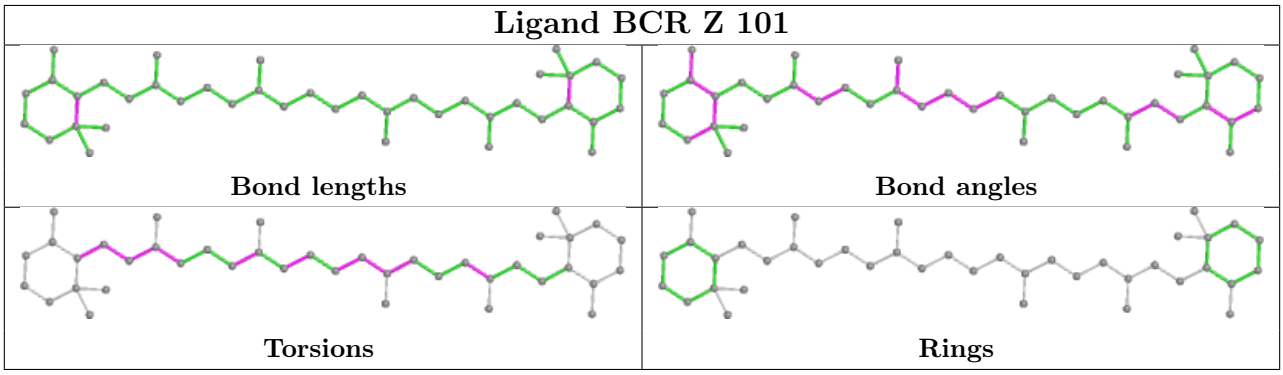
Ligand SQD a 614



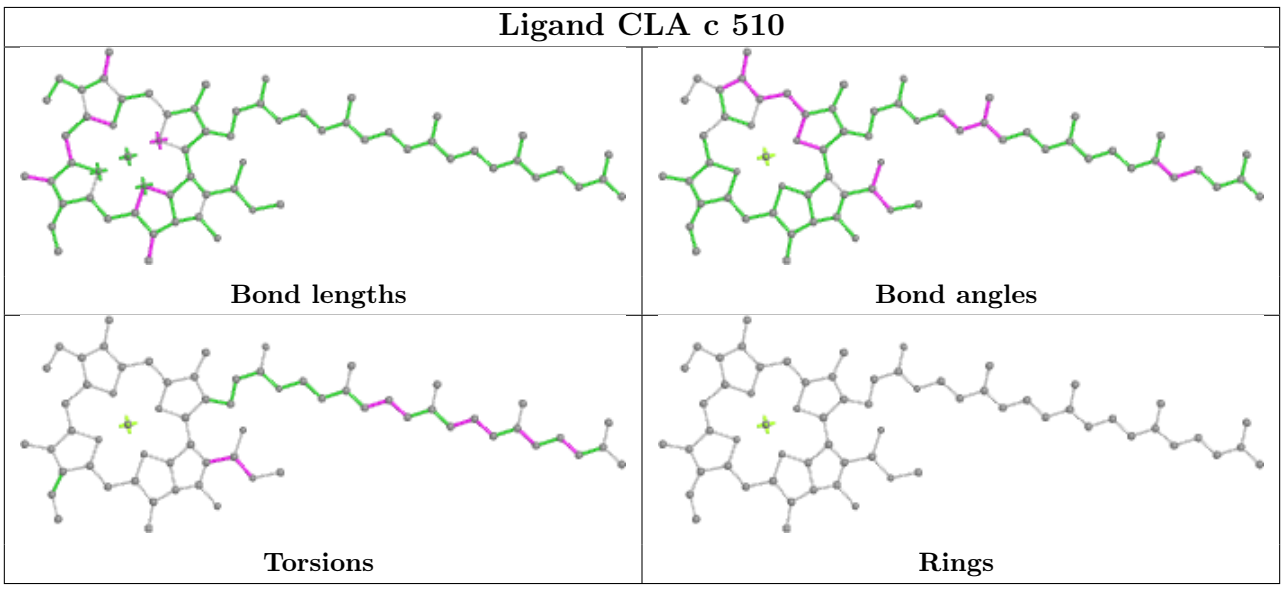
Ligand STE t 103



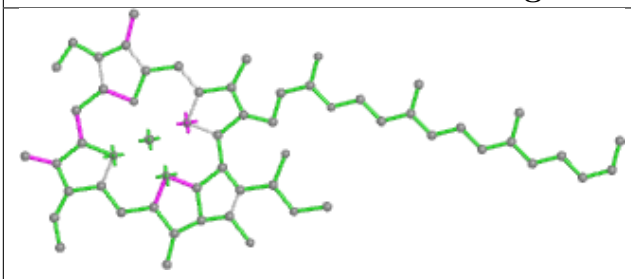
Ligand BCR Z 101



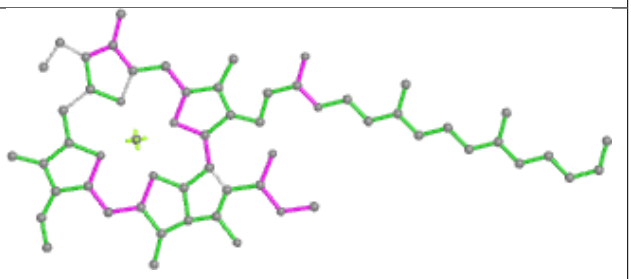
Ligand CLA c 510



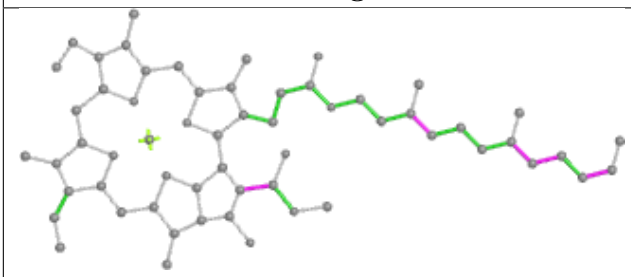
Ligand CLA C 504



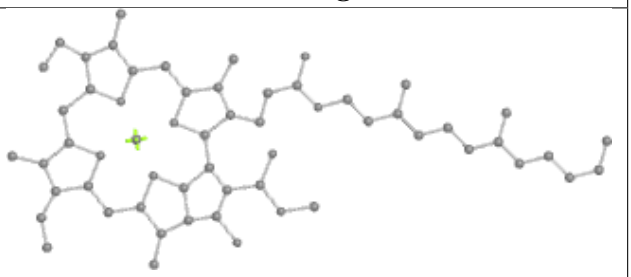
Bond lengths



Bond angles

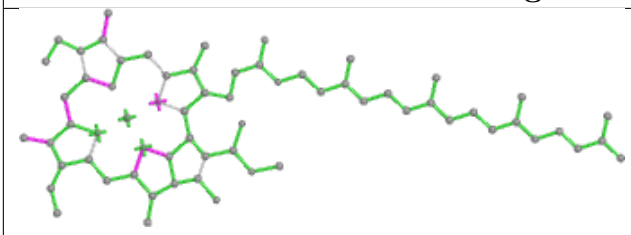


Torsions

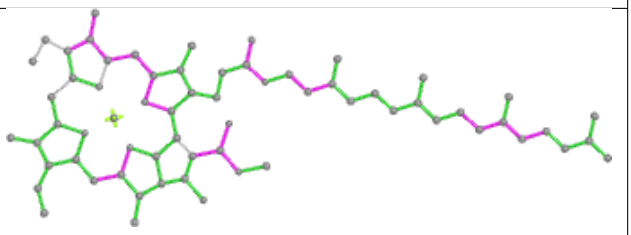


Rings

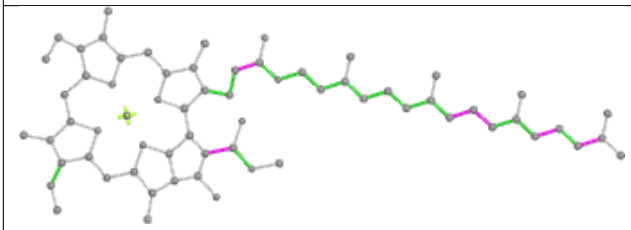
Ligand CLA B 611



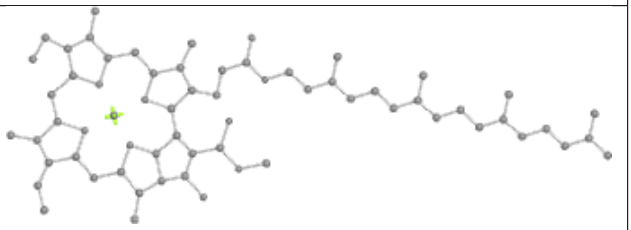
Bond lengths



Bond angles

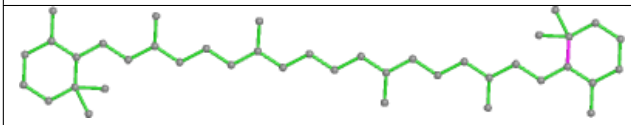


Torsions

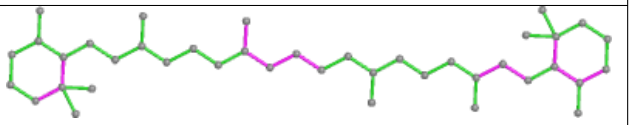


Rings

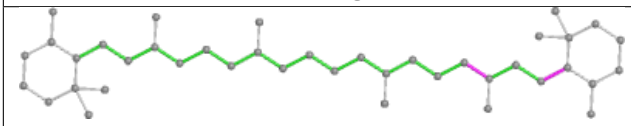
Ligand BCR H 102



Bond lengths



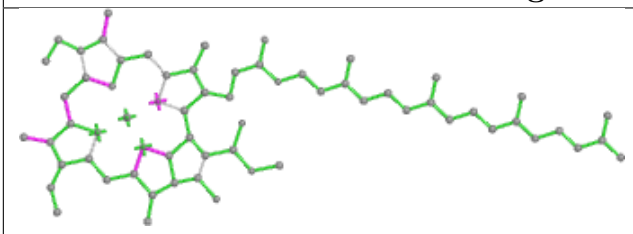
Bond angles



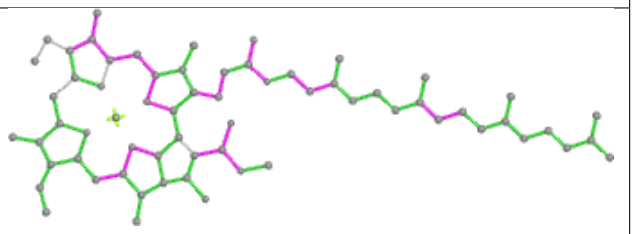
Torsions

Rings

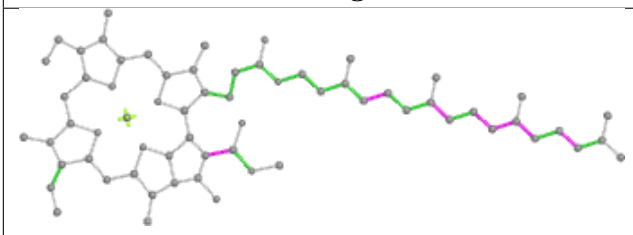
Ligand CLA b 603



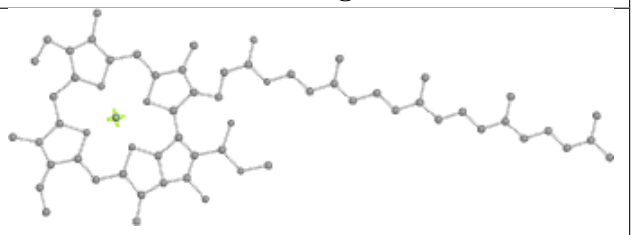
Bond lengths



Bond angles

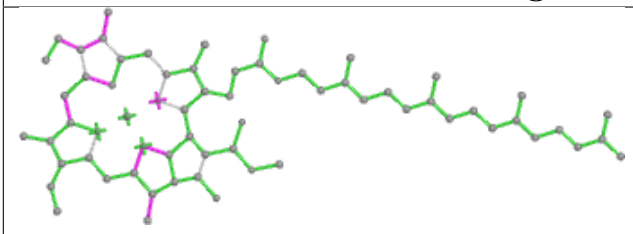


Torsions

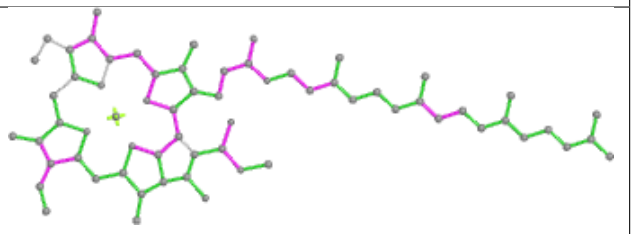


Rings

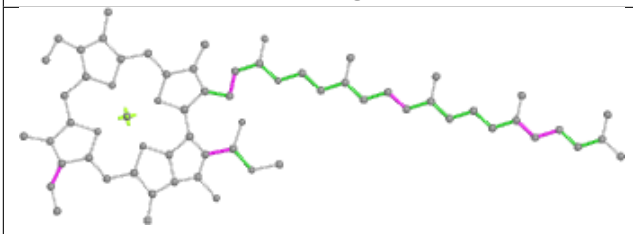
Ligand CLA b 609



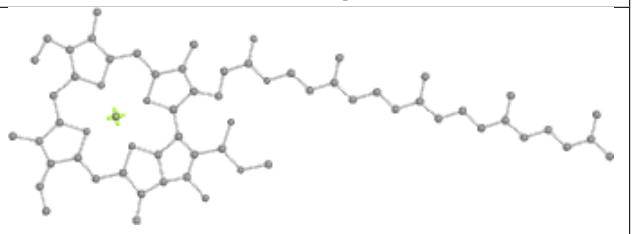
Bond lengths



Bond angles

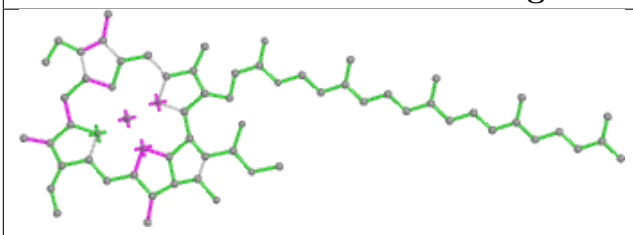


Torsions



Rings

Ligand CLA b 614



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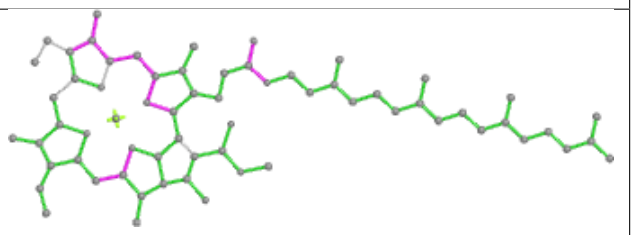
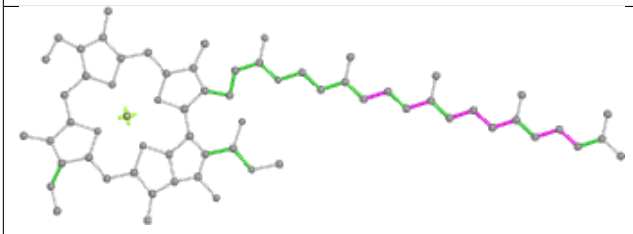
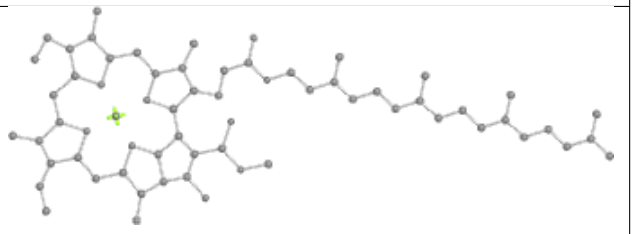


Bond angles

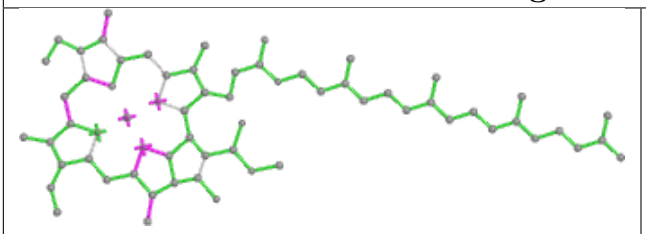


Torsions

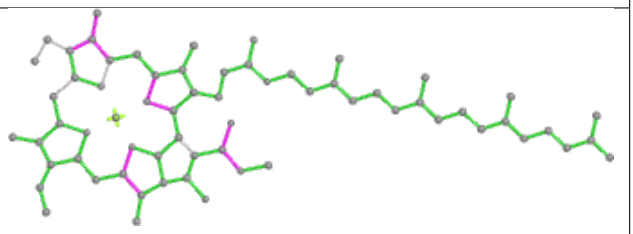


Rings

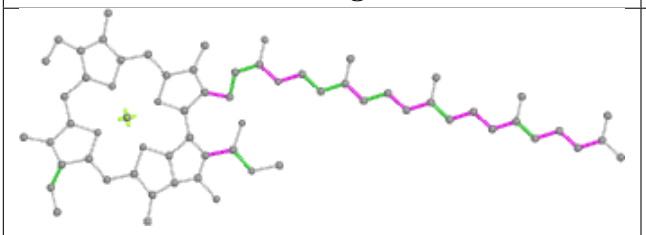
Ligand CLA c 506



Bond lengths



Bond angles



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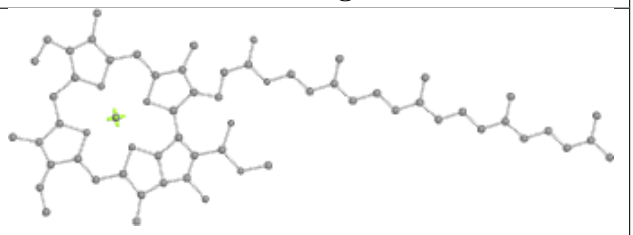
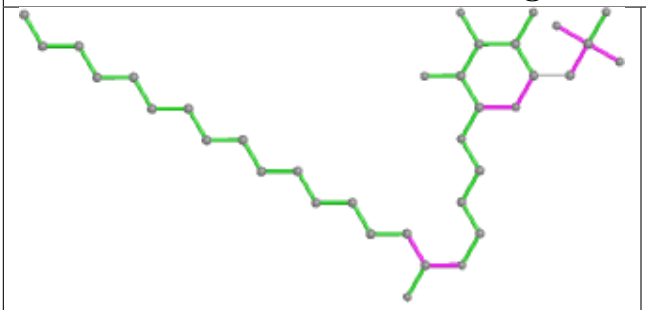


Rings

Ligand SQD D 408



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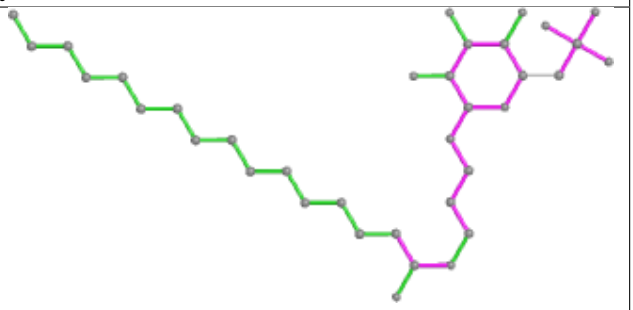
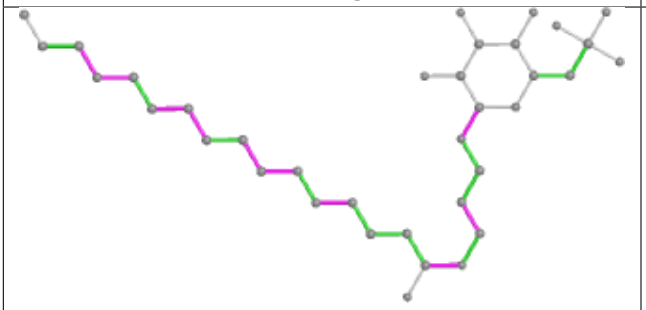


Bond angles



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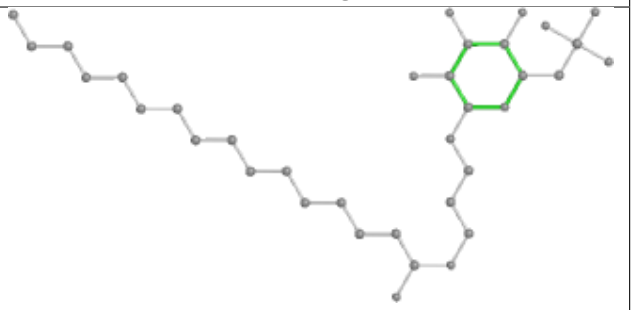
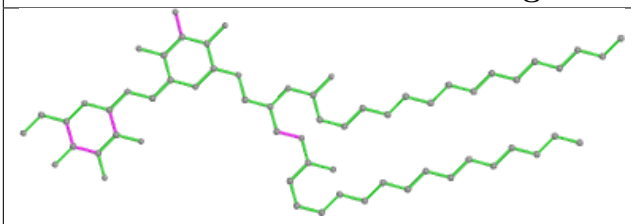


Rings

Ligand DGD h 102



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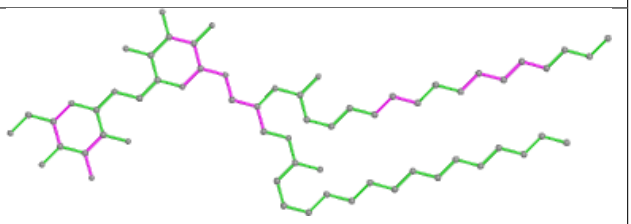
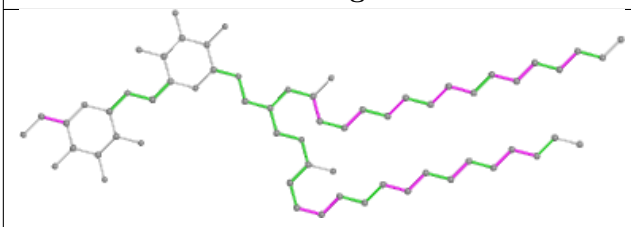
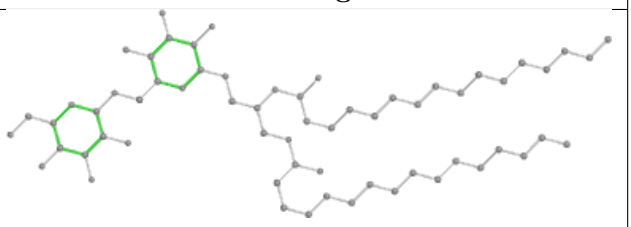


Bond angles

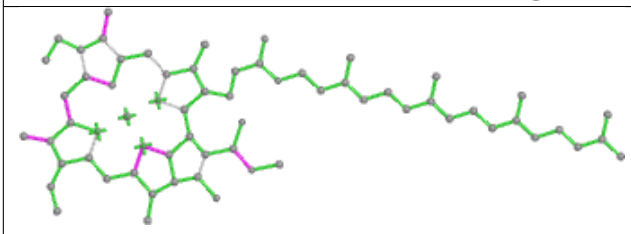


Torsions

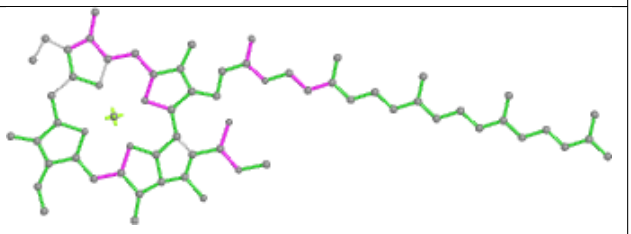


Rings

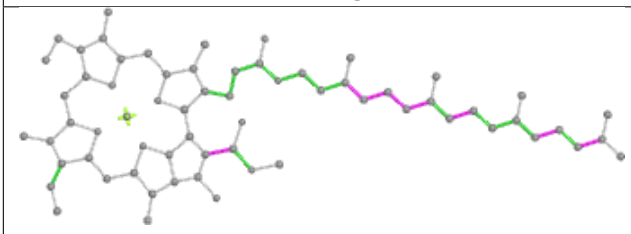
Ligand CLA b 613



Bond lengths



Bond angles



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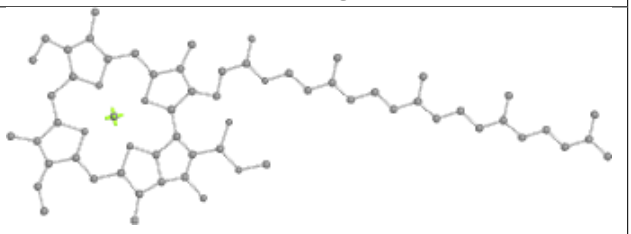
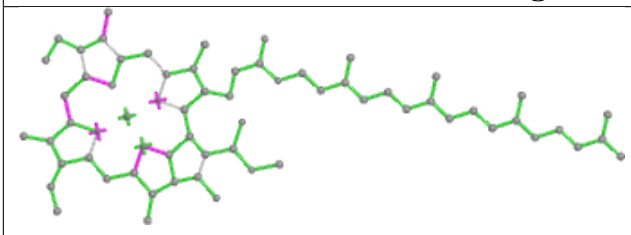
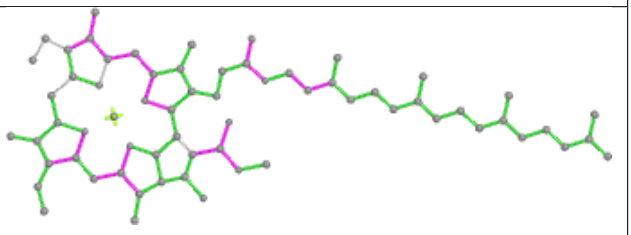


Rings

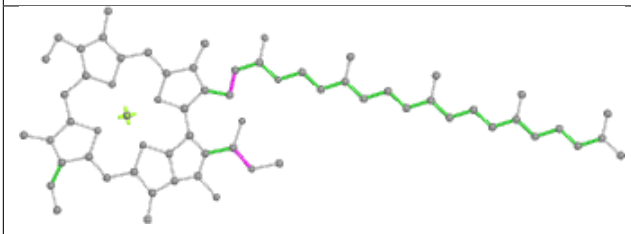
Ligand CLA c 501



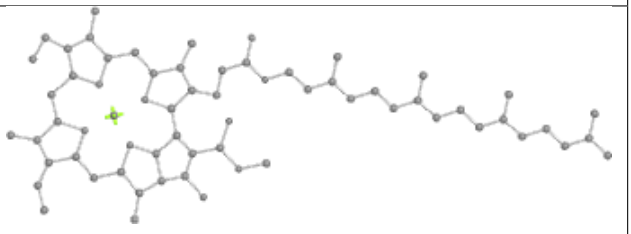
Bond lengths



Bond angles

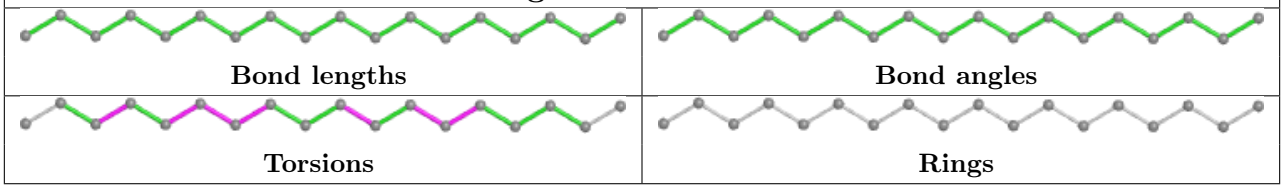


Torsions

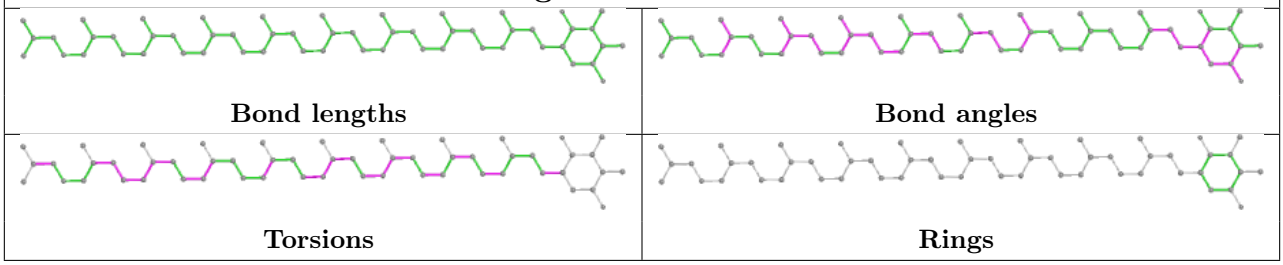


Rings

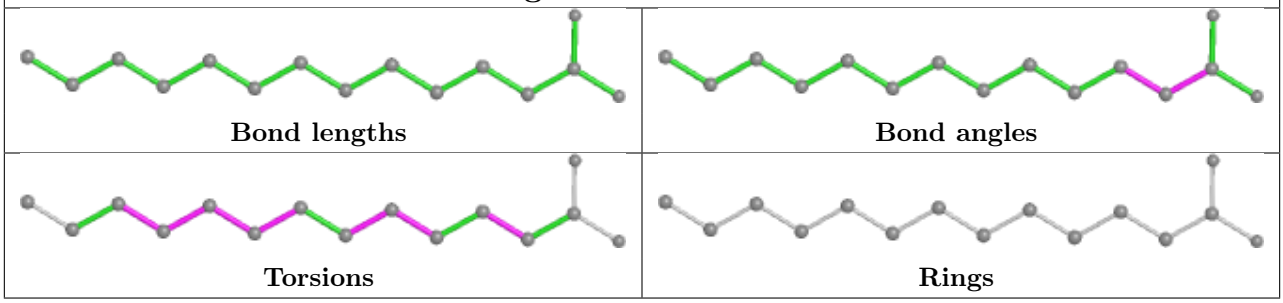
Ligand STE H 104



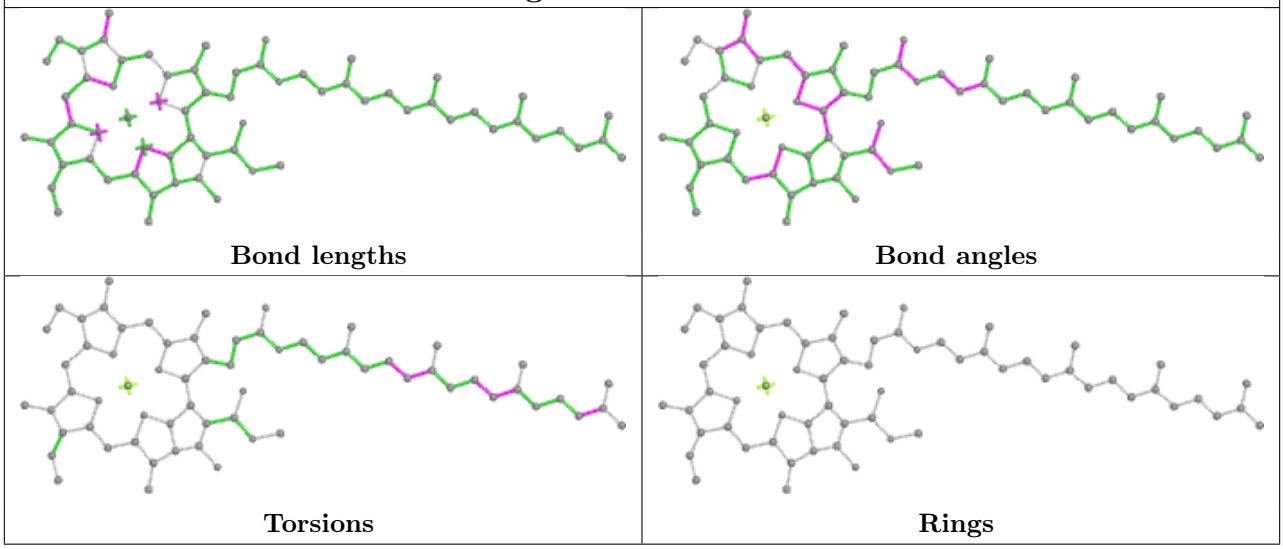
Ligand PL9 a 611



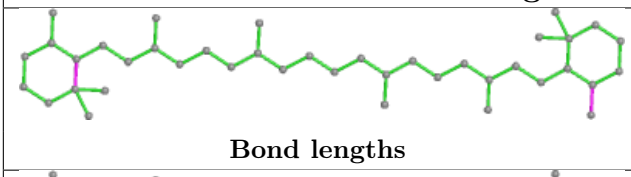
Ligand STE M 102



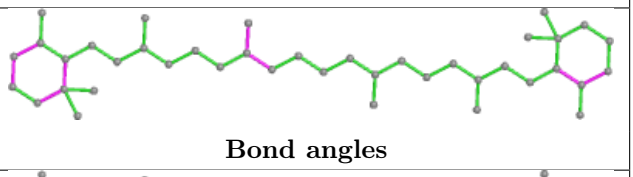
Ligand CLA C 507



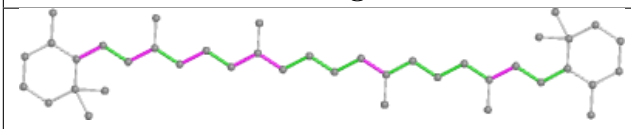
Ligand BCR T 101



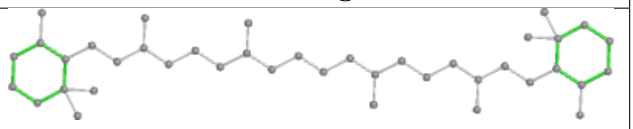
Bond lengths



Bond angles

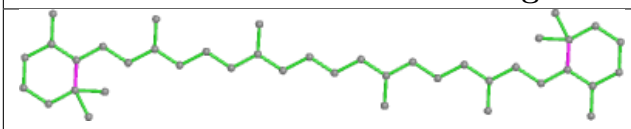


Torsions



Rings

Ligand BCR D 405



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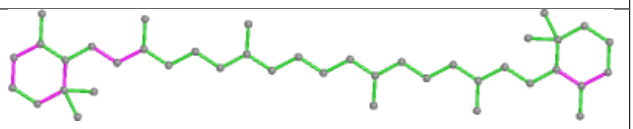
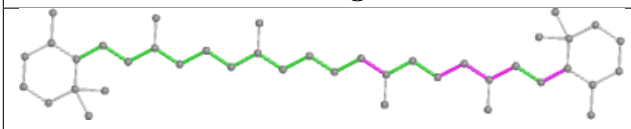


Bond angles



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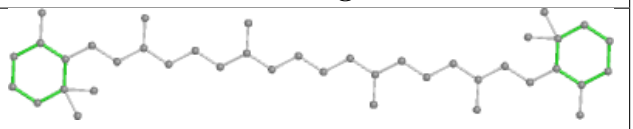
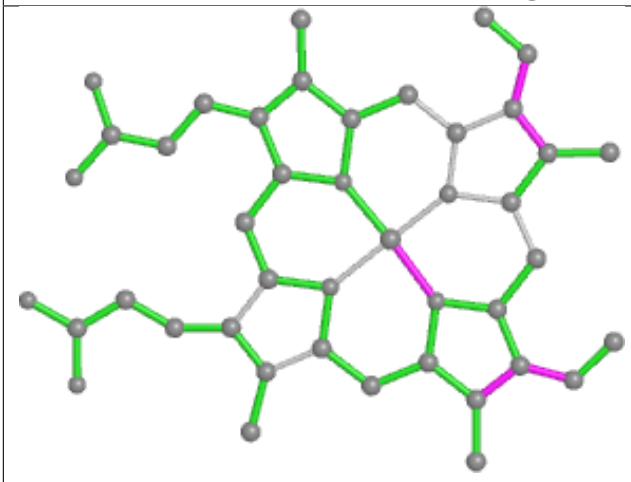
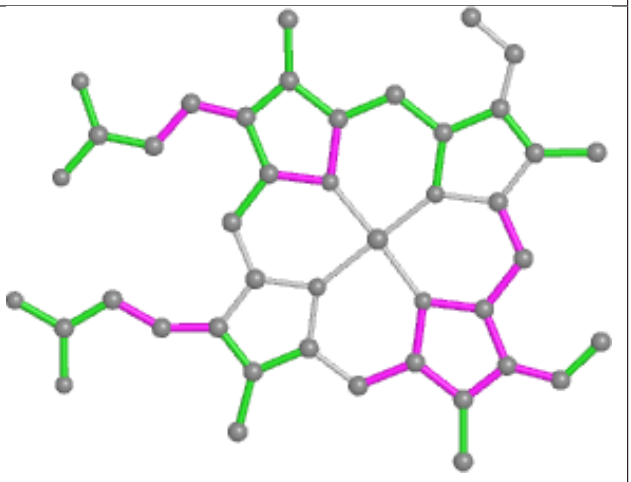


Rings

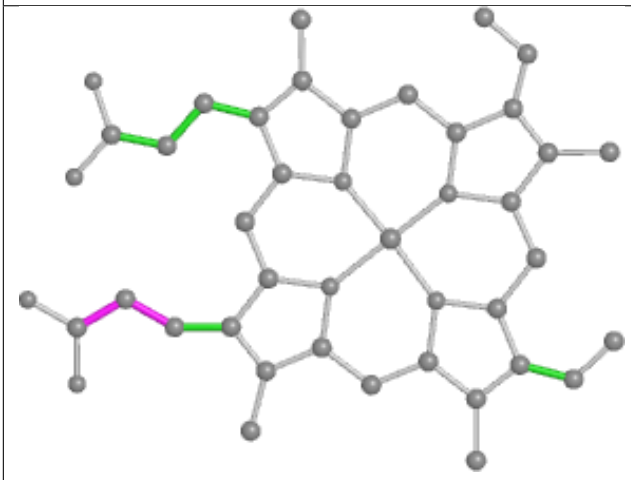
Ligand HEM e 101



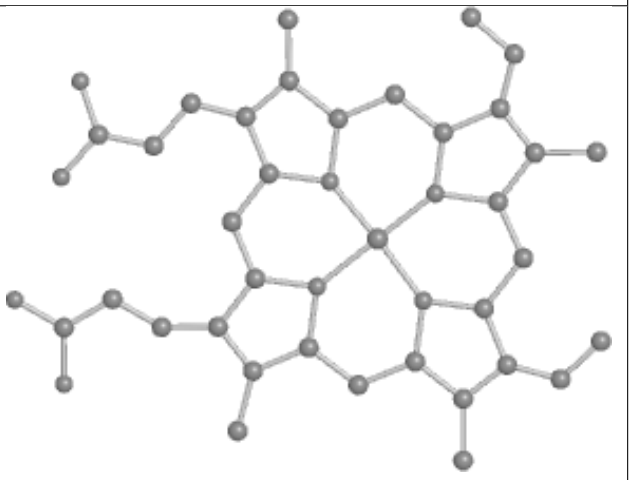
Bond lengths



Bond angles

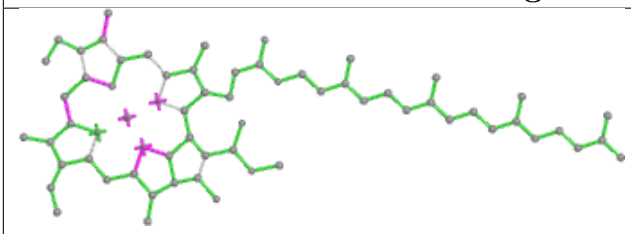


Torsions

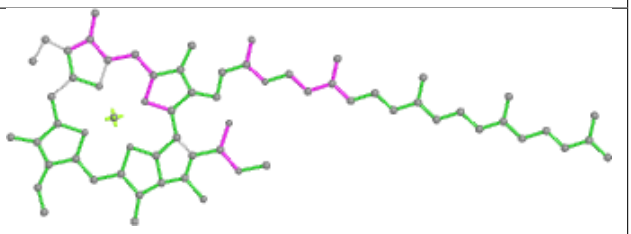


Rings

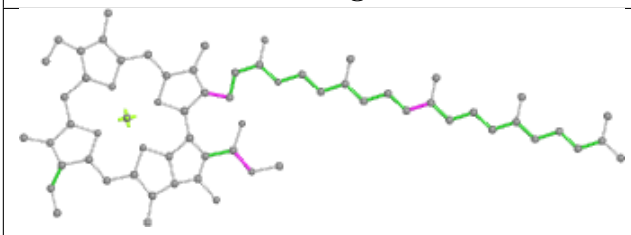
Ligand CLA C 511



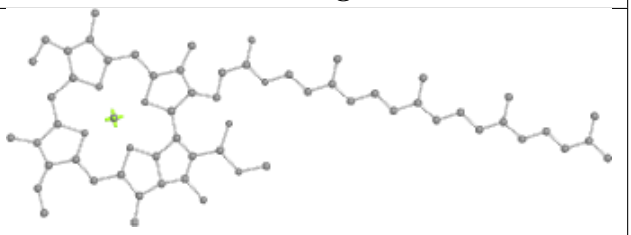
Bond lengths



Bond angles

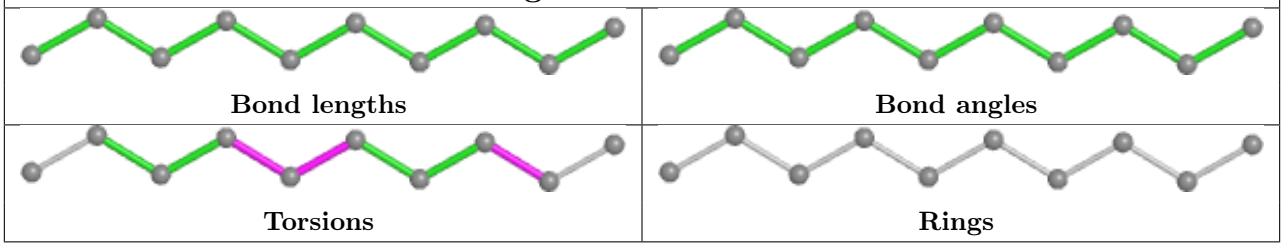


Torsions

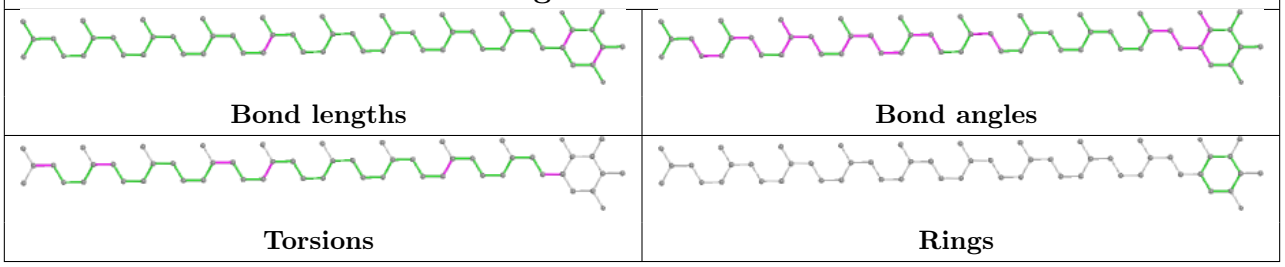


Rings

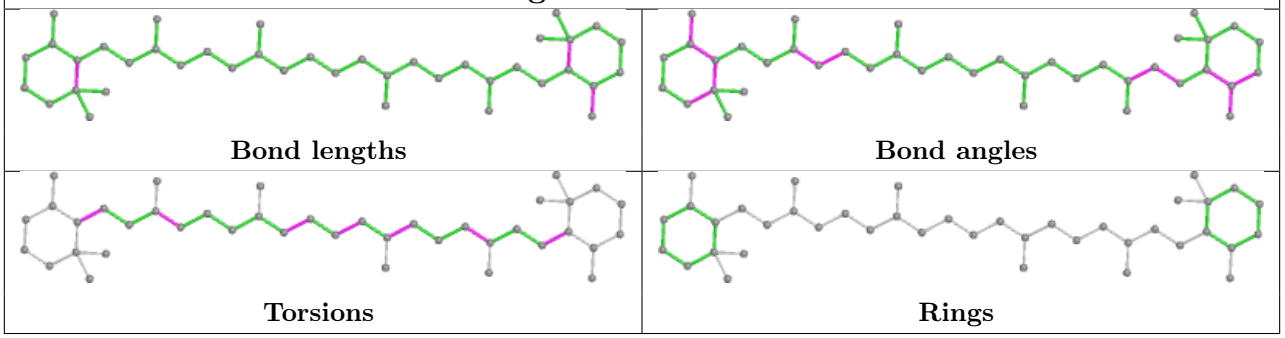
Ligand STE M 103



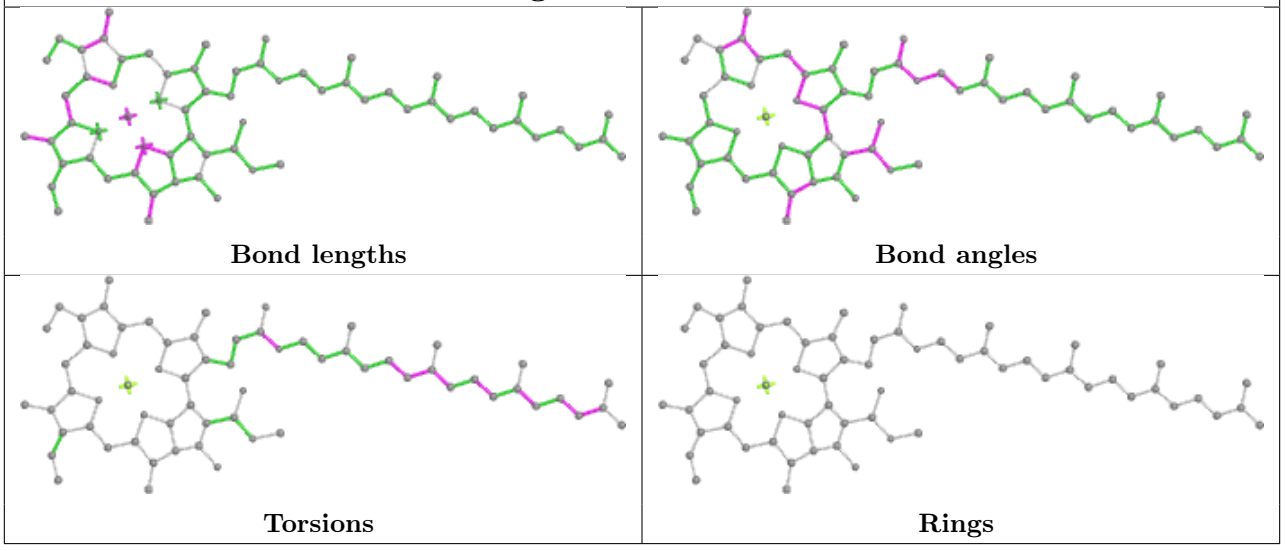
Ligand PL9 d 406



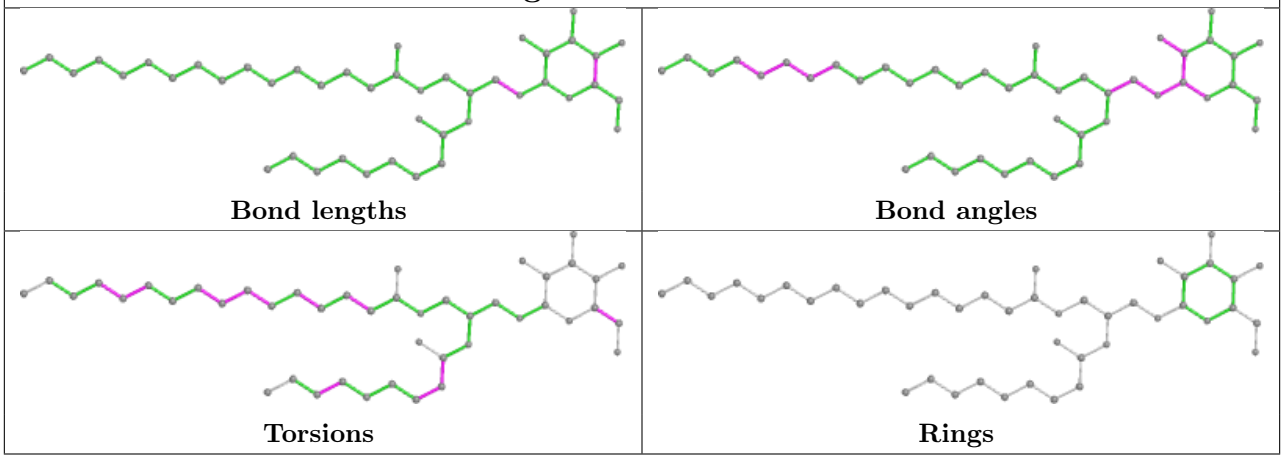
Ligand BCR c 516



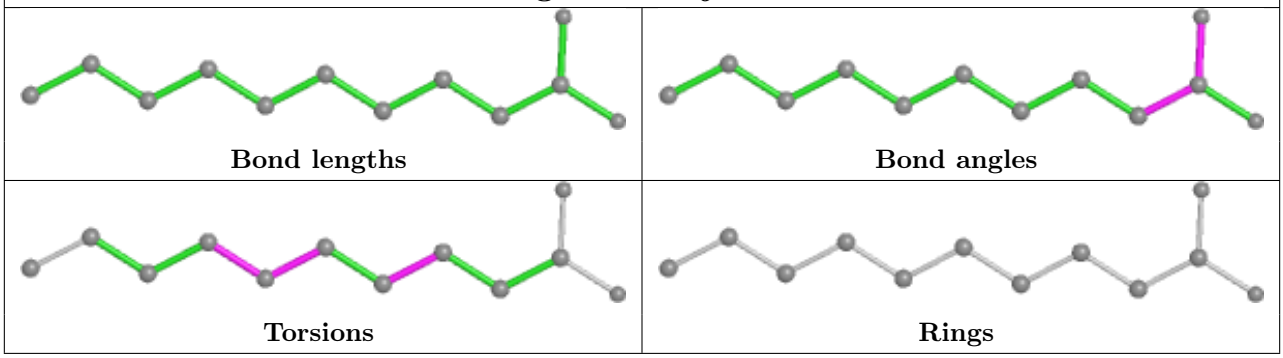
Ligand CLA a 609



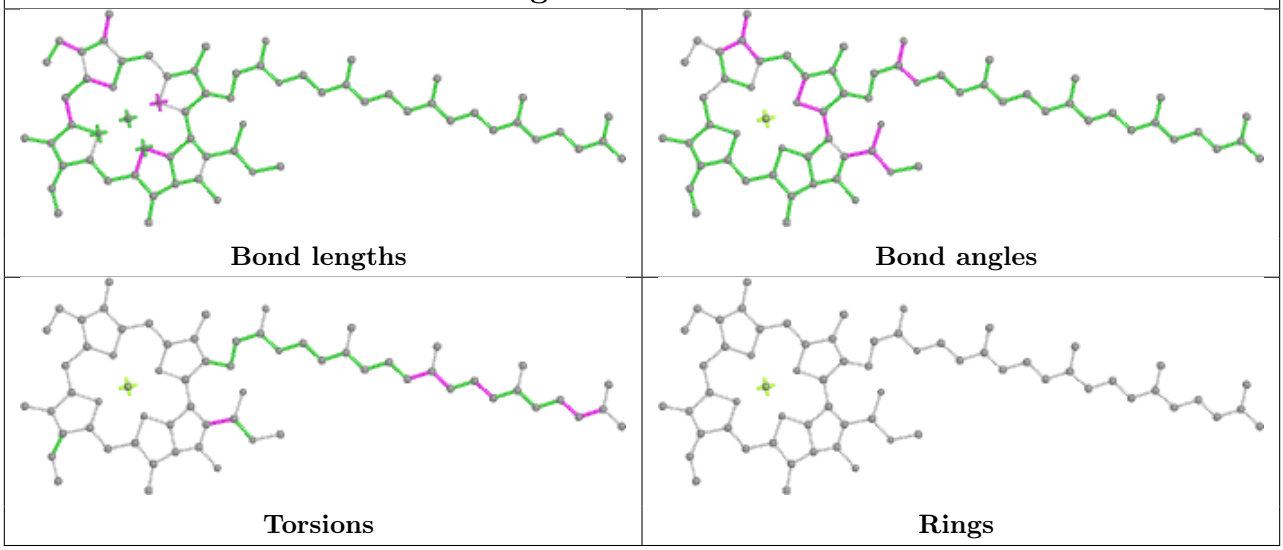
Ligand LMG d 410



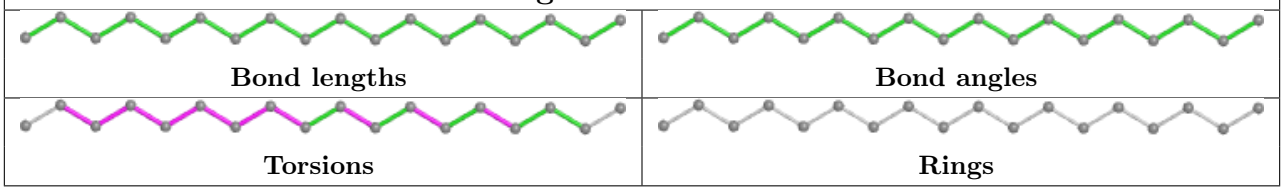
Ligand STE j 101



Ligand CLA c 505



Ligand STE l 102



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

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} 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%)	-0.25	3 (0%) 84 88	28, 34, 54, 92	0
1	a	334/344 (97%)	-0.28	1 (0%) 94 95	29, 36, 60, 81	0
2	B	505/510 (99%)	-0.27	8 (1%) 72 77	29, 38, 66, 91	0
2	b	505/510 (99%)	-0.12	13 (2%) 56 64	30, 41, 73, 115	0
3	C	442/461 (95%)	-0.19	5 (1%) 80 85	30, 41, 55, 78	0
3	c	451/461 (97%)	-0.11	7 (1%) 72 77	31, 44, 63, 104	0
4	D	341/352 (96%)	-0.23	1 (0%) 94 95	26, 35, 52, 77	0
4	d	341/352 (96%)	-0.20	1 (0%) 94 95	28, 39, 63, 82	0
5	E	82/84 (97%)	0.08	3 (3%) 41 49	39, 55, 72, 86	0
5	e	82/84 (97%)	0.19	2 (2%) 59 67	44, 62, 81, 90	0
6	F	34/45 (75%)	-0.28	1 (2%) 51 61	40, 50, 63, 89	0
6	f	34/45 (75%)	-0.07	1 (2%) 51 61	47, 54, 79, 88	0
7	H	65/66 (98%)	0.10	2 (3%) 49 58	39, 44, 60, 74	0
7	h	63/66 (95%)	0.30	5 (7%) 12 17	45, 54, 64, 70	0
8	I	35/38 (92%)	-0.20	2 (5%) 23 32	37, 44, 70, 89	0
8	i	35/38 (92%)	0.00	3 (8%) 10 15	34, 44, 74, 88	0
9	J	36/40 (90%)	0.06	3 (8%) 11 15	42, 55, 78, 87	0
9	j	36/40 (90%)	0.28	4 (11%) 5 7	44, 57, 90, 100	0
10	K	37/46 (80%)	0.22	1 (2%) 54 63	47, 56, 74, 85	0
10	k	37/46 (80%)	-0.03	1 (2%) 54 63	52, 59, 73, 83	0
11	L	37/37 (100%)	-0.25	1 (2%) 54 63	30, 34, 65, 75	0
11	l	36/37 (97%)	-0.25	3 (8%) 11 15	30, 35, 69, 92	0
12	M	32/36 (88%)	0.01	1 (3%) 49 58	32, 37, 58, 75	0
12	m	31/36 (86%)	-0.02	0 100 100	32, 38, 56, 66	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	O	244/272 (89%)	0.03	11 (4%) 33 42	31, 46, 83, 138	0
13	o	244/272 (89%)	-0.04	14 (5%) 23 32	31, 45, 85, 119	0
14	T	29/32 (90%)	-0.32	2 (6%) 16 23	31, 36, 62, 74	0
14	t	29/32 (90%)	-0.29	2 (6%) 16 23	32, 36, 75, 92	0
15	U	97/134 (72%)	-0.15	1 (1%) 82 86	36, 48, 71, 92	0
15	u	97/134 (72%)	-0.32	0 100 100	35, 44, 60, 89	0
16	V	137/163 (84%)	-0.43	0 100 100	35, 44, 58, 80	0
16	v	137/163 (84%)	-0.09	2 (1%) 73 79	37, 51, 69, 84	0
17	Y	27/46 (58%)	1.23	8 (29%) 0 0	58, 73, 96, 106	0
17	y	30/46 (65%)	0.57	3 (10%) 7 11	66, 78, 96, 104	0
18	X	38/41 (92%)	0.13	2 (5%) 26 35	43, 55, 72, 81	0
18	x	39/41 (95%)	0.30	3 (7%) 13 18	53, 63, 87, 101	0
19	Z	62/62 (100%)	0.96	12 (19%) 1 1	57, 71, 119, 132	0
19	z	62/62 (100%)	0.78	10 (16%) 1 2	64, 74, 112, 125	0
20	R	34/41 (82%)	1.49	9 (26%) 0 0	65, 72, 85, 92	0
20	r	31/41 (75%)	3.33	24 (77%) 0 0	76, 92, 110, 126	0
All	All	5302/5700 (93%)	-0.08	175 (3%) 46 55	26, 43, 76, 138	0

All (175) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	o	58	ASN	8.3
19	Z	33	TRP	6.9
3	c	23	ALA	6.6
20	r	29	LYS	6.5
13	o	3	GLN	6.4
9	j	6	GLY	5.8
13	O	3	GLN	5.8
20	r	26	TYR	5.8
9	j	5	GLY	5.6
2	b	495	PHE	5.3
19	z	33	TRP	5.3
20	r	14	LEU	5.3
20	r	25	PRO	5.1
20	r	28	VAL	5.1
13	O	59	LYS	5.1

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Mol	Chain	Res	Type	RSRZ
20	r	2	ASP	5.0
18	X	2	THR	5.0
20	r	3	TRP	5.0
13	o	4	THR	4.9
20	R	32	GLN	4.8
19	Z	32	ASP	4.8
1	A	13	LEU	4.7
13	O	60	ARG	4.7
19	Z	62	VAL	4.7
20	r	32	GLN	4.7
8	i	36	ASP	4.7
20	r	18	TRP	4.6
20	r	6	LEU	4.6
17	Y	22	LEU	4.6
17	Y	25	ILE	4.5
13	o	57	LYS	4.5
20	r	10	LEU	4.4
20	R	6	LEU	4.4
13	o	62	GLU	4.3
13	O	62	GLU	4.2
1	A	11	ALA	4.2
5	E	83	LEU	4.2
13	O	4	THR	4.1
2	b	127	ARG	4.1
13	o	60	ARG	4.1
20	R	3	TRP	4.0
5	E	79	PHE	4.0
18	X	3	ILE	4.0
3	c	143	TYR	3.9
19	Z	61	VAL	3.9
19	z	35	ARG	3.8
20	R	2	ASP	3.8
5	e	79	PHE	3.8
19	Z	4	LEU	3.7
3	c	24	THR	3.7
17	Y	20	ALA	3.7
13	o	61	GLN	3.6
20	r	13	LEU	3.6
20	r	24	LEU	3.6
20	r	9	LEU	3.6
14	t	30	THR	3.5
13	O	56	PRO	3.5

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Mol	Chain	Res	Type	RSRZ
13	O	246	ALA	3.5
9	j	7	ARG	3.5
19	Z	35	ARG	3.4
2	b	487	SER	3.4
13	o	56	PRO	3.4
6	f	12	SER	3.3
19	Z	34	ASP	3.3
19	z	30	PRO	3.3
13	o	59	LYS	3.3
19	z	60	PHE	3.3
9	j	8	ILE	3.3
7	H	66	GLY	3.2
12	M	33	GLN	3.2
20	r	15	ALA	3.2
2	b	502	VAL	3.2
5	e	61	ARG	3.2
9	J	7	ARG	3.2
17	Y	43	ARG	3.1
7	h	6	TRP	3.1
13	o	207	ARG	3.1
2	B	495	PHE	3.1
20	r	4	ARG	3.1
20	R	29	LYS	3.0
3	c	142	GLU	3.0
20	R	18	TRP	3.0
14	T	29	ILE	3.0
11	l	3	PRO	3.0
8	I	36	ASP	3.0
9	J	5	GLY	3.0
19	Z	41	PHE	3.0
18	x	2	THR	3.0
19	Z	37	LYS	3.0
13	O	5	LEU	2.9
20	r	31	VAL	2.9
19	Z	3	ILE	2.9
9	J	6	GLY	2.9
3	c	146	PHE	2.8
2	b	506	ARG	2.8
2	b	295	GLY	2.8
19	z	7	LEU	2.8
19	Z	1	MET	2.7
20	r	7	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
14	t	29	ILE	2.7
19	z	3	ILE	2.7
18	x	38	GLN	2.7
8	i	34	ARG	2.7
2	b	289	GLN	2.7
17	y	18	VAL	2.7
20	r	5	VAL	2.7
20	r	23	ILE	2.6
13	o	63	ALA	2.6
20	R	33	LYS	2.6
2	B	293	ALA	2.6
18	x	40	SER	2.6
3	C	146	PHE	2.6
2	B	505	ARG	2.5
13	O	58	ASN	2.5
6	F	12	SER	2.5
14	T	30	THR	2.5
13	O	61	GLN	2.5
20	r	19	ALA	2.5
17	y	19	ILE	2.5
3	c	262	ARG	2.5
2	B	506	ARG	2.5
19	Z	31	GLN	2.5
13	O	63	ALA	2.5
17	Y	21	GLN	2.4
13	o	246	ALA	2.4
20	r	21	ARG	2.4
13	o	5	LEU	2.4
5	E	84	LYS	2.4
20	r	11	PRO	2.4
2	b	161	LEU	2.4
10	K	46	ARG	2.4
1	A	16	ARG	2.3
2	b	486	LEU	2.3
2	b	505	ARG	2.3
11	l	2	GLU	2.3
3	C	55	ALA	2.3
2	B	487	SER	2.3
4	D	12	ARG	2.3
1	a	11	ALA	2.3
17	Y	37	PHE	2.3
20	R	21	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
16	v	17	LYS	2.2
10	k	16	ALA	2.2
8	i	35	LYS	2.2
4	d	227[A]	GLU	2.2
7	H	56	ASP	2.2
2	b	293	ALA	2.2
2	B	485	GLU	2.2
7	h	10	ILE	2.2
20	r	27	ALA	2.2
8	I	34	ARG	2.2
13	o	132	ASN	2.1
20	R	26	TYR	2.1
17	y	37	PHE	2.1
3	C	143	TYR	2.1
7	h	56	ASP	2.1
16	v	12	LEU	2.1
3	C	61	VAL	2.1
19	z	36	SER	2.1
17	Y	42	ARG	2.1
2	B	486	LEU	2.1
19	z	41	PHE	2.1
15	U	8	GLU	2.1
7	h	21	VAL	2.1
11	L	3	PRO	2.1
11	l	7	ARG	2.1
2	b	128	THR	2.1
3	c	55	ALA	2.1
7	h	41	PHE	2.1
2	b	492	GLU	2.0
3	C	59	LEU	2.0
2	B	127	ARG	2.0
19	z	42	LEU	2.0
19	z	28	ALA	2.0
17	Y	41	VAL	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} 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	0.12	37,41,52,69	0
14	FME	T	1	10/11	0.92	0.11	39,43,55,62	0
12	FME	M	1	10/11	0.92	0.14	40,54,65,70	0
12	FME	m	1	10/11	0.94	0.15	31,45,64,68	0
8	FME	i	1	10/11	0.96	0.19	44,51,53,54	0
8	FME	I	1	10/11	0.97	0.10	42,46,52,55	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, 95^{th} 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
31	STE	E	102	12/20	0.68	0.34	62,72,82,85	0
31	STE	H	104	18/20	0.69	0.33	53,65,74,79	0
31	STE	c	521	20/20	0.74	0.23	44,57,80,82	0
33	LMG	D	411	33/55	0.75	0.21	40,56,72,74	0
31	STE	c	523	12/20	0.77	0.27	60,71,84,87	0
30	DGD	a	615	44/66	0.77	0.17	37,52,71,73	0
32	LHG	e	102	42/49	0.79	0.22	61,81,102,104	0
31	STE	d	411	17/20	0.79	0.19	45,55,69,71	0
31	STE	B	625	16/20	0.80	0.26	43,57,63,66	0
31	STE	B	623	18/20	0.80	0.17	42,48,81,84	0
31	STE	b	625	20/20	0.81	0.20	45,51,64,70	0
31	STE	b	624	16/20	0.81	0.19	54,59,76,79	0
33	LMG	b	622	55/55	0.81	0.29	50,67,82,84	0
33	LMG	d	409	23/55	0.81	0.21	51,63,69,70	0
31	STE	M	102	15/20	0.82	0.17	46,48,61,65	0
31	STE	x	102	20/20	0.82	0.21	48,56,62,63	0
31	STE	a	616	12/20	0.82	0.21	53,62,68,70	0
29	SQD	a	614	36/54	0.83	0.17	33,56,70,76	0
31	STE	T	102	16/20	0.83	0.18	41,47,60,63	0
31	STE	t	103	10/20	0.83	0.28	42,55,59,59	0
33	LMG	c	522	48/55	0.83	0.23	43,71,91,96	0
28	PL9	A	611	55/55	0.83	0.27	40,60,74,83	0
31	STE	C	522	16/20	0.84	0.14	43,52,58,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
31	STE	D	413	20/20	0.84	0.17	38,51,73,83	0
32	LHG	E	101	49/49	0.84	0.21	51,76,99,106	0
31	STE	m	101	12/20	0.84	0.18	54,58,69,70	0
31	STE	B	619	17/20	0.85	0.14	42,50,66,69	0
27	BCR	H	102	40/40	0.85	0.15	36,47,56,62	0
31	STE	j	101	12/20	0.85	0.14	51,59,67,68	0
30	DGD	A	614	66/66	0.85	0.17	51,58,67,73	0
31	STE	I	101	15/20	0.85	0.14	45,50,65,70	0
29	SQD	T	103	39/54	0.85	0.20	39,56,79,80	0
31	STE	M	104	15/20	0.86	0.15	43,54,69,75	0
31	STE	b	626	10/20	0.86	0.22	46,50,57,57	0
29	SQD	b	619	49/54	0.86	0.16	42,57,78,80	0
25	CLA	h	101	65/65	0.86	0.17	55,68,83,89	0
33	LMG	c	524	49/55	0.86	0.14	40,55,72,79	0
28	PL9	a	611	55/55	0.86	0.21	49,64,73,77	0
25	CLA	c	512	65/65	0.87	0.16	44,59,83,89	0
33	LMG	M	101	51/55	0.87	0.14	32,47,63,65	0
31	STE	B	624	12/20	0.87	0.33	46,54,64,67	0
29	SQD	B	621	54/54	0.87	0.19	39,61,82,91	0
31	STE	b	621	20/20	0.87	0.21	42,51,67,68	0
33	LMG	C	515	48/55	0.87	0.16	42,55,67,75	0
31	STE	M	103	10/20	0.88	0.18	30,45,57,63	0
25	CLA	C	512	65/65	0.88	0.16	43,53,74,86	0
27	BCR	Y	101	40/40	0.88	0.13	46,56,63,65	0
27	BCR	c	516	40/40	0.88	0.19	47,53,61,69	0
31	STE	J	101	12/20	0.89	0.12	54,60,72,72	0
33	LMG	D	412	28/55	0.89	0.15	36,47,59,65	0
27	BCR	k	101	40/40	0.89	0.13	51,61,71,73	0
33	LMG	b	620	51/55	0.89	0.12	36,49,65,66	0
27	BCR	x	101	40/40	0.89	0.14	43,55,66,69	0
33	LMG	c	520	37/55	0.89	0.16	48,61,74,78	0
31	STE	C	520	12/20	0.89	0.14	38,42,57,61	0
25	CLA	H	101	65/65	0.89	0.15	42,55,81,96	0
33	LMG	C	519	48/55	0.89	0.16	48,67,78,86	0
31	STE	C	521	12/20	0.90	0.12	46,53,59,63	0
25	CLA	c	513	65/65	0.90	0.17	41,61,87,92	0
27	BCR	d	405	40/40	0.90	0.13	39,49,81,89	0
25	CLA	C	513	65/65	0.90	0.16	47,55,82,86	0
30	DGD	H	103	62/66	0.90	0.13	35,43,52,58	0
27	BCR	c	514	40/40	0.90	0.16	49,60,68,71	0
29	SQD	f	101	41/54	0.91	0.16	63,77,86,93	0
27	BCR	Z	101	40/40	0.91	0.14	49,56,63,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	a	609	65/65	0.91	0.13	23,35,70,74	0
25	CLA	b	615	60/65	0.91	0.14	34,44,71,75	0
31	STE	l	102	18/20	0.91	0.14	34,45,68,72	0
30	DGD	h	102	62/66	0.91	0.13	37,47,54,59	0
31	STE	t	102	14/20	0.91	0.11	38,48,52,56	0
27	BCR	D	405	40/40	0.91	0.12	33,46,70,78	0
31	STE	B	622	12/20	0.91	0.11	42,52,59,66	0
25	CLA	c	502	65/65	0.91	0.14	37,44,54,62	0
25	CLA	B	615	60/65	0.91	0.14	31,39,74,77	0
30	DGD	c	519	62/66	0.92	0.14	34,49,71,78	0
25	CLA	c	508	64/65	0.92	0.14	36,46,77,98	0
33	LMG	D	407	51/55	0.92	0.16	35,49,69,72	0
25	CLA	C	502	65/65	0.92	0.12	36,42,52,59	0
28	PL9	D	406	55/55	0.92	0.13	24,34,42,47	0
30	DGD	c	518	62/66	0.92	0.12	41,49,78,82	0
25	CLA	c	503	65/65	0.93	0.15	39,47,52,53	0
25	CLA	c	506	65/65	0.93	0.12	38,45,71,75	0
25	CLA	c	507	65/65	0.93	0.13	35,44,54,62	0
25	CLA	B	603	65/65	0.93	0.12	25,34,58,62	0
25	CLA	B	605	65/65	0.93	0.12	26,39,59,63	0
25	CLA	D	404	65/65	0.93	0.12	29,39,86,94	0
25	CLA	d	404	65/65	0.93	0.13	34,43,76,78	0
25	CLA	C	503	65/65	0.93	0.12	37,44,50,59	0
29	SQD	D	408	36/54	0.93	0.14	53,65,78,82	0
27	BCR	A	610	40/40	0.93	0.09	28,34,40,42	0
29	SQD	a	613	54/54	0.93	0.14	46,61,75,81	0
27	BCR	B	618	40/40	0.93	0.10	35,44,52,54	0
27	BCR	C	514	40/40	0.93	0.12	35,42,52,53	0
25	CLA	C	505	65/65	0.93	0.14	30,39,54,60	0
25	CLA	b	613	65/65	0.93	0.13	31,41,61,73	0
30	DGD	C	516	62/66	0.93	0.14	29,38,67,72	0
27	BCR	K	101	40/40	0.93	0.16	43,52,57,59	0
25	CLA	b	614	65/65	0.93	0.12	31,41,52,54	0
25	CLA	C	506	65/65	0.93	0.13	30,43,74,79	0
27	BCR	b	617	40/40	0.93	0.10	32,40,49,53	0
27	BCR	b	618	40/40	0.93	0.11	34,47,58,62	0
25	CLA	C	511	65/65	0.93	0.14	38,51,61,67	0
33	LMG	d	410	44/55	0.93	0.13	41,49,68,79	0
25	CLA	C	501	65/65	0.94	0.12	29,36,45,53	0
25	CLA	c	509	65/65	0.94	0.16	41,48,59,62	0
25	CLA	c	510	65/65	0.94	0.15	40,48,55,63	0
28	PL9	d	406	55/55	0.94	0.12	29,35,40,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
29	SQD	A	613	52/54	0.94	0.12	34,53,74,76	0
25	CLA	c	511	65/65	0.94	0.13	47,55,63,66	0
25	CLA	A	607	65/65	0.94	0.13	28,37,84,87	0
25	CLA	A	609	54/65	0.94	0.11	26,32,59,61	0
25	CLA	d	401	65/65	0.94	0.13	33,40,73,82	0
25	CLA	B	608	65/65	0.94	0.12	28,39,48,52	0
25	CLA	b	601	65/65	0.94	0.14	32,43,50,53	0
26	PHO	a	608	64/64	0.94	0.13	29,34,38,43	0
25	CLA	b	602	65/65	0.94	0.13	29,37,58,66	0
27	BCR	B	616	40/40	0.94	0.10	32,40,47,50	0
30	DGD	C	517	62/66	0.94	0.11	37,49,86,99	0
30	DGD	C	518	62/66	0.94	0.12	33,46,68,75	0
27	BCR	B	617	40/40	0.94	0.10	27,36,47,49	0
25	CLA	b	603	65/65	0.94	0.12	28,34,59,72	0
30	DGD	c	517	62/66	0.94	0.12	31,39,61,70	0
32	LHG	D	410	47/49	0.94	0.13	33,43,68,78	0
25	CLA	b	605	65/65	0.94	0.11	31,39,60,63	0
25	CLA	b	607	65/65	0.94	0.13	32,42,54,57	0
25	CLA	b	608	65/65	0.94	0.13	34,45,56,67	0
25	CLA	b	610	65/65	0.94	0.12	28,37,44,50	0
27	BCR	T	101	40/40	0.94	0.10	32,40,54,59	0
25	CLA	B	613	65/65	0.94	0.14	28,36,64,70	0
25	CLA	C	507	65/65	0.94	0.14	31,40,50,55	0
27	BCR	b	616	40/40	0.94	0.12	31,42,49,51	0
25	CLA	C	508	65/65	0.94	0.12	35,44,87,96	0
25	CLA	C	509	65/65	0.94	0.17	33,43,54,62	0
25	CLA	C	510	65/65	0.94	0.13	33,44,53,57	0
25	CLA	c	504	60/65	0.94	0.12	37,47,76,79	0
25	CLA	c	505	65/65	0.94	0.15	33,41,54,59	0
25	CLA	B	614	65/65	0.94	0.10	29,38,57,65	0
25	CLA	B	602	65/65	0.94	0.14	24,34,49,56	0
25	CLA	A	606	65/65	0.95	0.10	22,29,39,46	0
25	CLA	b	611	65/65	0.95	0.15	27,36,43,49	0
25	CLA	b	612	65/65	0.95	0.13	24,34,57,65	0
25	CLA	a	607	65/65	0.95	0.10	26,33,39,42	0
27	BCR	a	610	40/40	0.95	0.08	24,32,42,46	0
32	LHG	B	620	49/49	0.95	0.12	36,43,55,59	0
25	CLA	B	601	65/65	0.95	0.13	30,39,51,53	0
25	CLA	d	403	65/65	0.95	0.11	27,35,50,61	0
32	LHG	b	623	49/49	0.95	0.13	37,47,58,62	0
25	CLA	a	612	65/65	0.95	0.11	28,33,39,43	0
32	LHG	l	101	49/49	0.95	0.11	33,43,50,53	0

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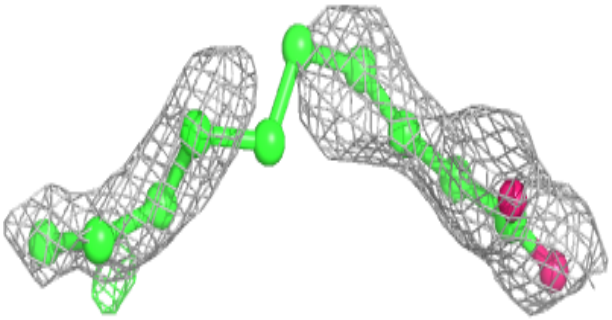
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	CLA	c	501	65/65	0.95	0.14	28,41,48,52	0
27	BCR	c	515	40/40	0.95	0.11	33,46,52,58	0
26	PHO	A	608	64/64	0.95	0.10	24,30,36,40	0
25	CLA	B	609	65/65	0.95	0.13	25,33,41,43	0
26	PHO	d	402	64/64	0.95	0.10	32,40,45,49	0
27	BCR	t	101	40/40	0.95	0.10	30,39,48,51	0
25	CLA	B	610	65/65	0.95	0.13	25,33,44,48	0
25	CLA	B	611	65/65	0.95	0.14	25,33,41,44	0
25	CLA	b	604	65/65	0.95	0.11	26,36,44,49	0
25	CLA	C	504	59/65	0.95	0.10	35,41,63,67	0
25	CLA	B	612	65/65	0.95	0.13	24,33,58,64	0
25	CLA	B	604	65/65	0.95	0.13	25,32,42,46	0
25	CLA	b	609	65/65	0.95	0.18	30,38,48,57	0
35	HEM	F	101	43/43	0.95	0.12	46,52,61,71	0
32	LHG	L	101	49/49	0.96	0.13	30,39,47,58	0
25	CLA	b	606	65/65	0.96	0.11	27,35,50,60	0
32	LHG	d	407	49/49	0.96	0.12	30,41,48,53	0
32	LHG	d	408	39/49	0.96	0.10	34,46,57,58	0
25	CLA	B	607	65/65	0.96	0.11	25,35,48,52	0
25	CLA	D	403	65/65	0.96	0.10	25,31,46,50	0
26	PHO	D	402	64/64	0.96	0.13	26,35,40,43	0
32	LHG	D	409	49/49	0.96	0.10	30,38,46,48	0
25	CLA	A	612	65/65	0.96	0.09	23,30,42,47	0
25	CLA	B	606	65/65	0.96	0.10	20,33,52,59	0
35	HEM	e	101	43/43	0.96	0.12	52,59,73,80	0
36	HEC	V	201	43/43	0.96	0.12	32,38,45,51	0
24	CL	a	604	1/1	0.97	0.05	34,34,34,34	0
34	BCT	D	401	4/4	0.97	0.15	33,38,41,42	0
34	BCT	a	606	4/4	0.97	0.15	38,40,49,51	0
36	HEC	v	201	43/43	0.97	0.12	36,41,47,50	0
21	OEX	A	601[B]	10/10	0.98	0.11	29,32,32,36	10
24	CL	a	605	1/1	0.98	0.07	35,35,35,35	0
21	OEX	a	601[B]	10/10	0.98	0.09	29,32,36,36	10
22	OEY	A	602[A]	11/11	0.98	0.11	32,36,39,40	11
22	OEY	a	602[A]	11/11	0.98	0.10	35,37,40,43	11
24	CL	A	605	1/1	0.98	0.03	33,33,33,33	0
23	FE2	a	603	1/1	0.99	0.04	39,39,39,39	0
24	CL	A	604	1/1	0.99	0.05	33,33,33,33	0
23	FE2	A	603	1/1	0.99	0.09	35,35,35,35	0

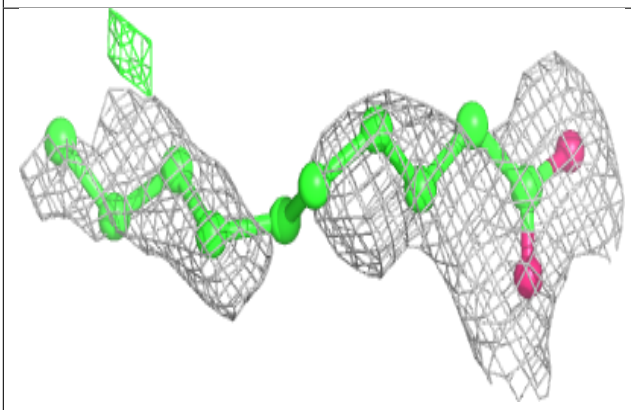
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different

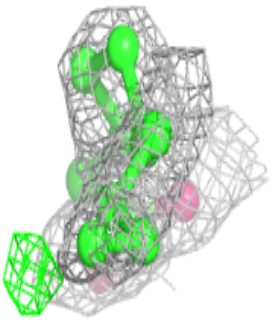
orientation to approximate a three-dimensional view.

Electron density around STE E 102:

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

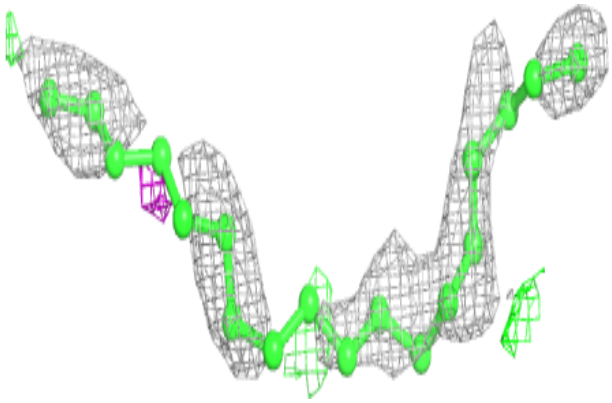


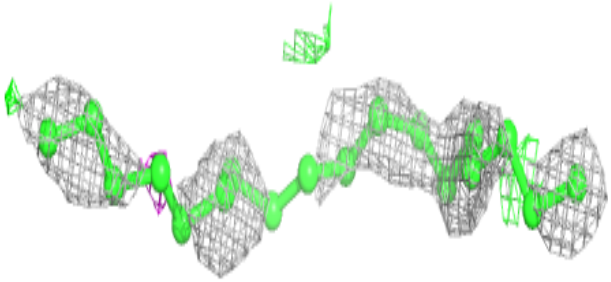


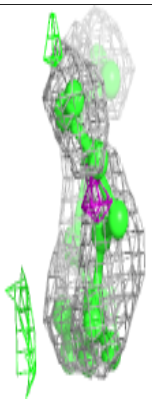


Electron density around STE H 104:

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

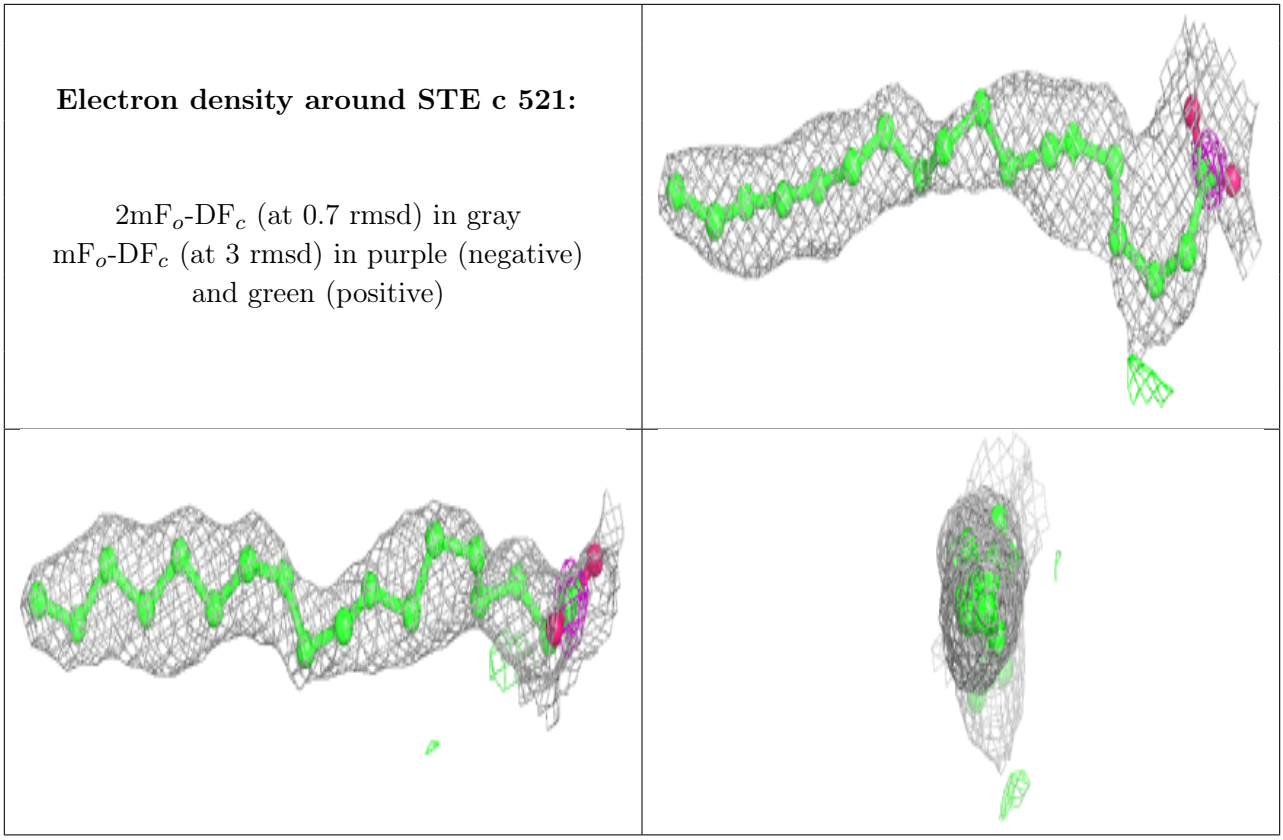






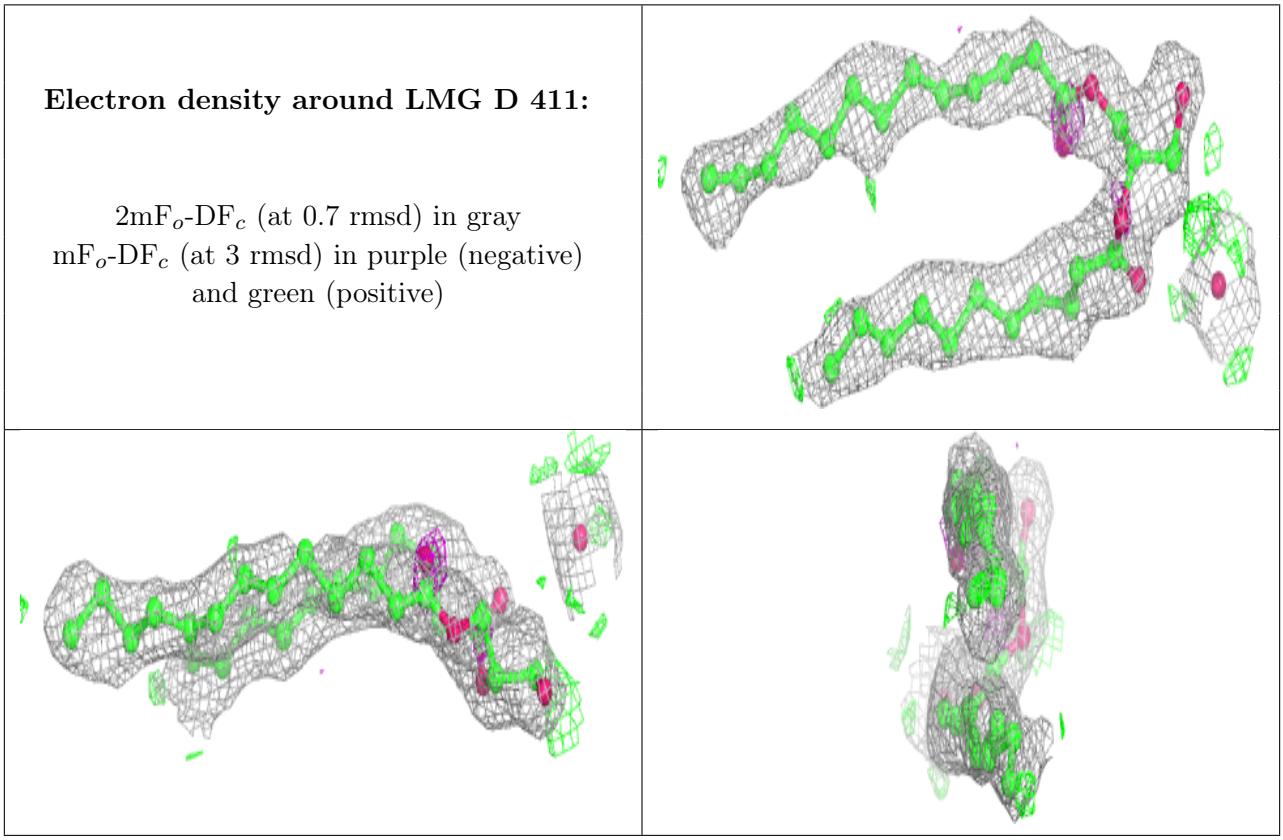
Electron density around STE c 521:

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



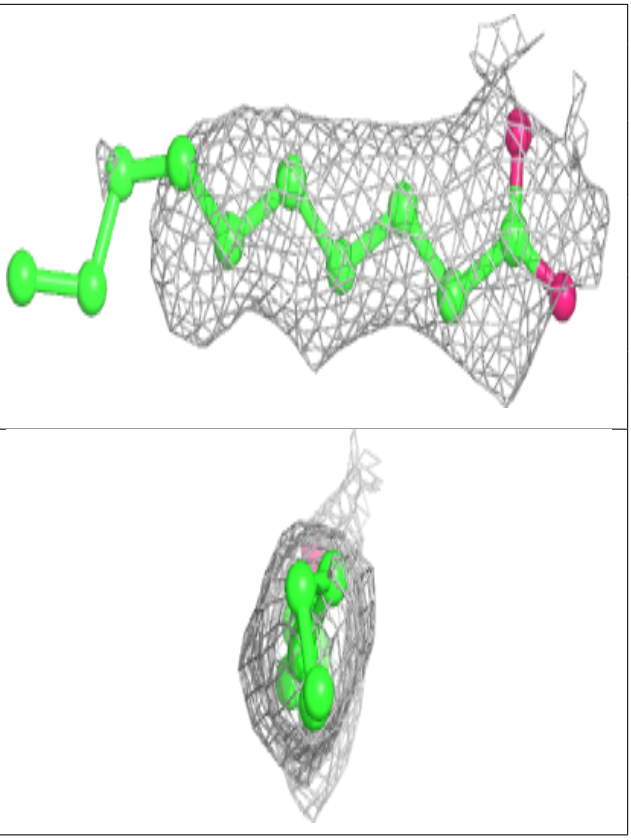
Electron density around LMG D 411:

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



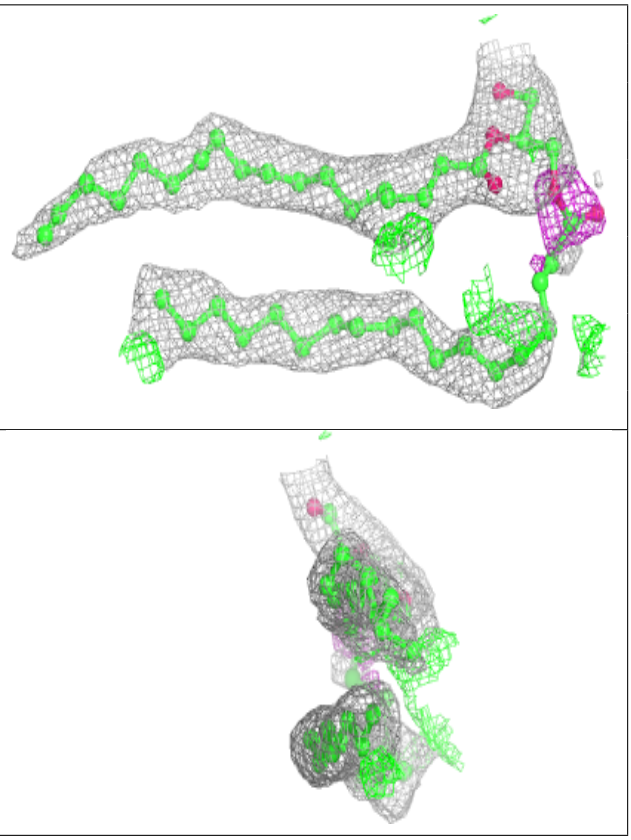
Electron density around STE c 523:

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



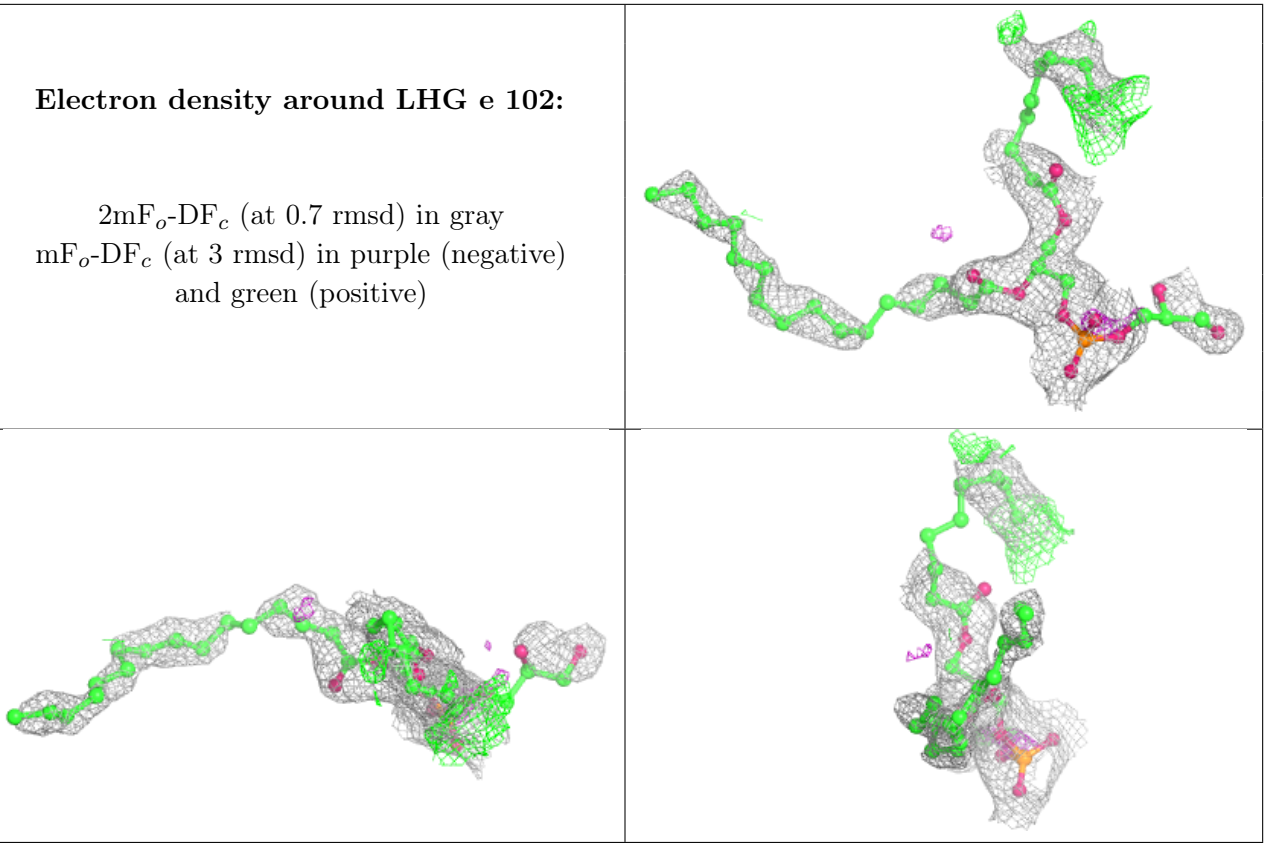
Electron density around DGD a 615:

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



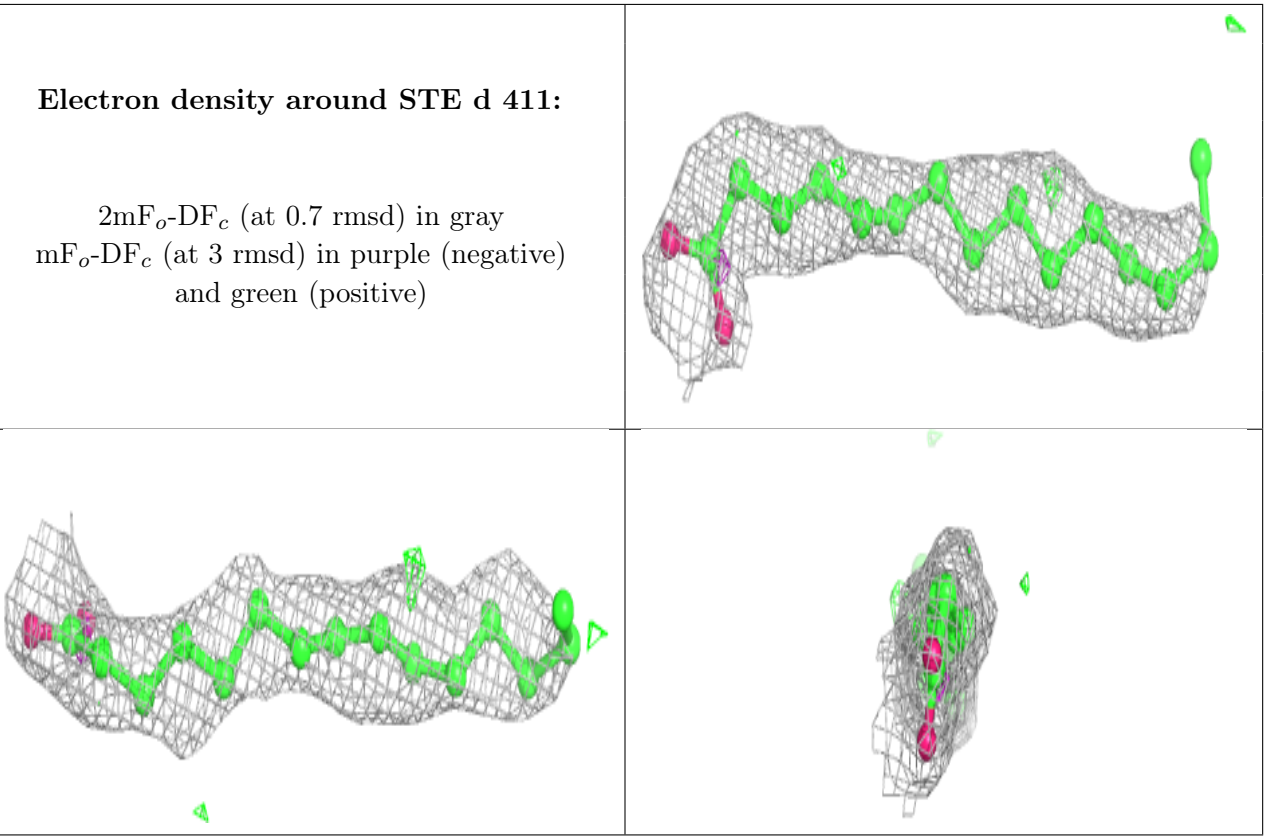
Electron density around LHG e 102:

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



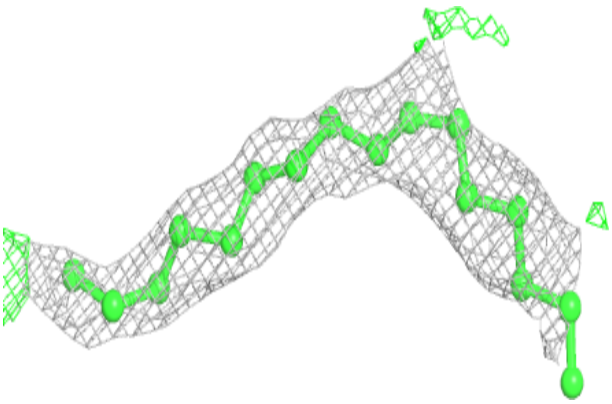
Electron density around STE d 411:

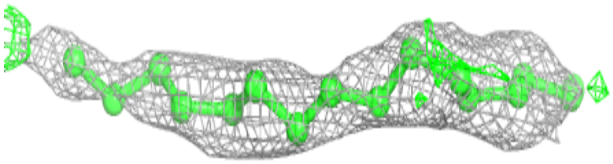
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

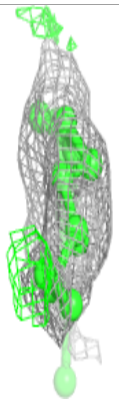


Electron density around STE B 625:

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

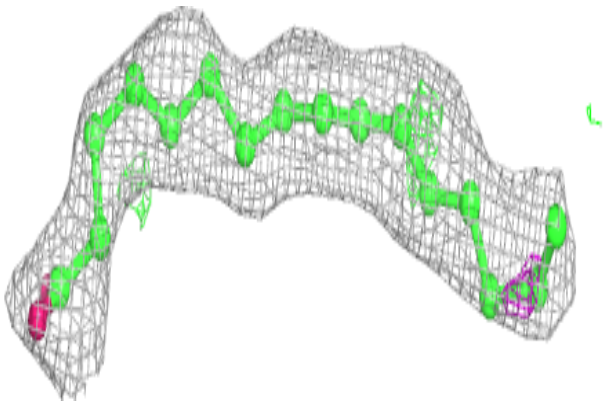


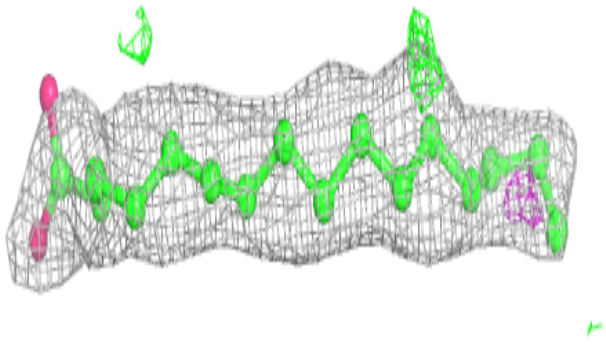


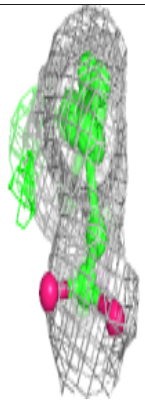


Electron density around STE B 623:

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

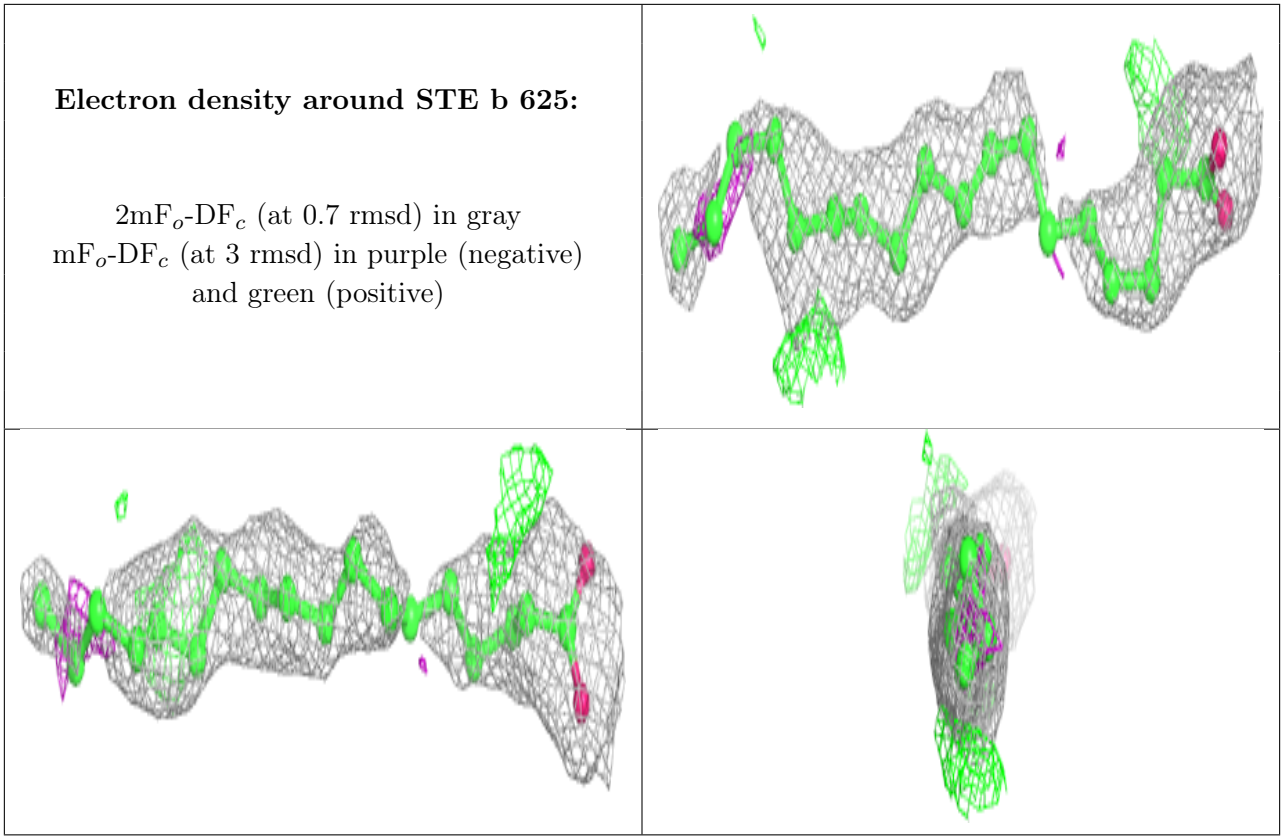






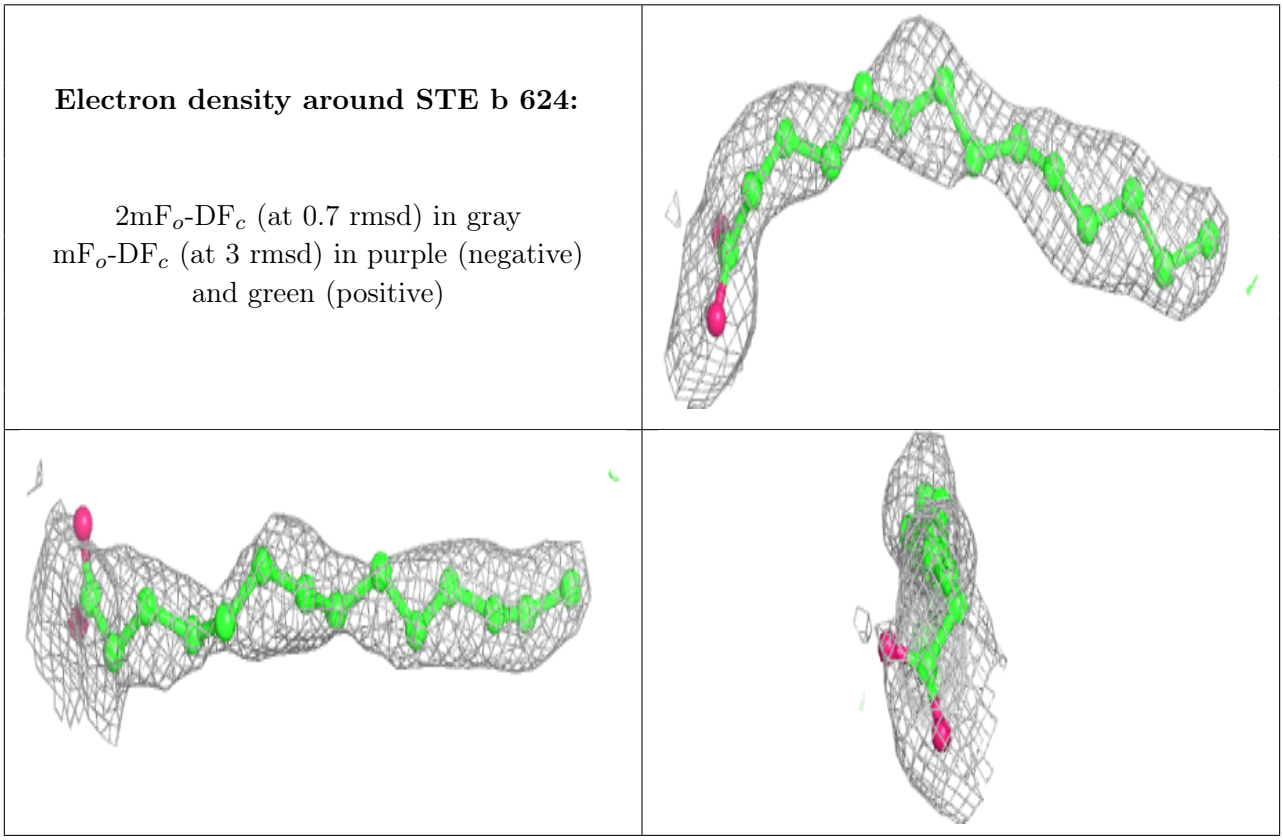
Electron density around STE b 625:

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



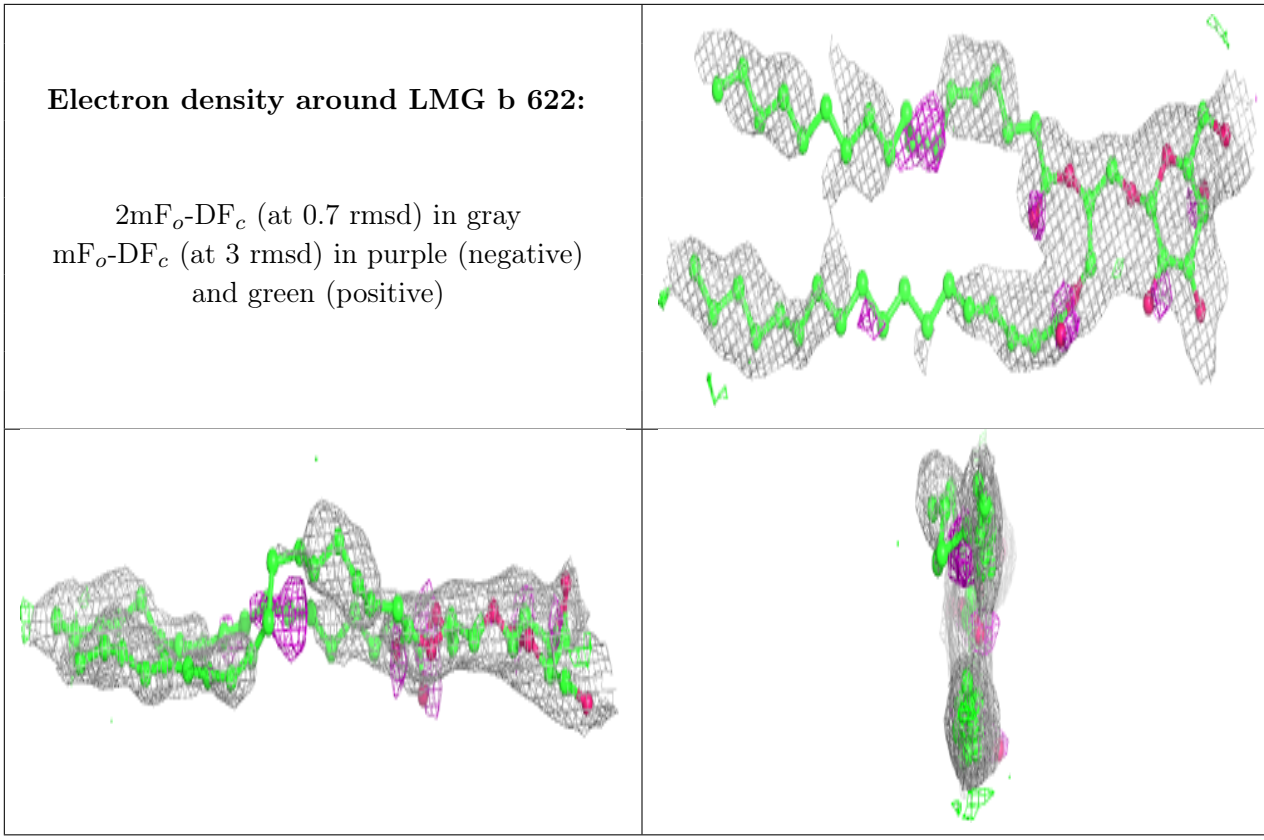
Electron density around STE b 624:

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



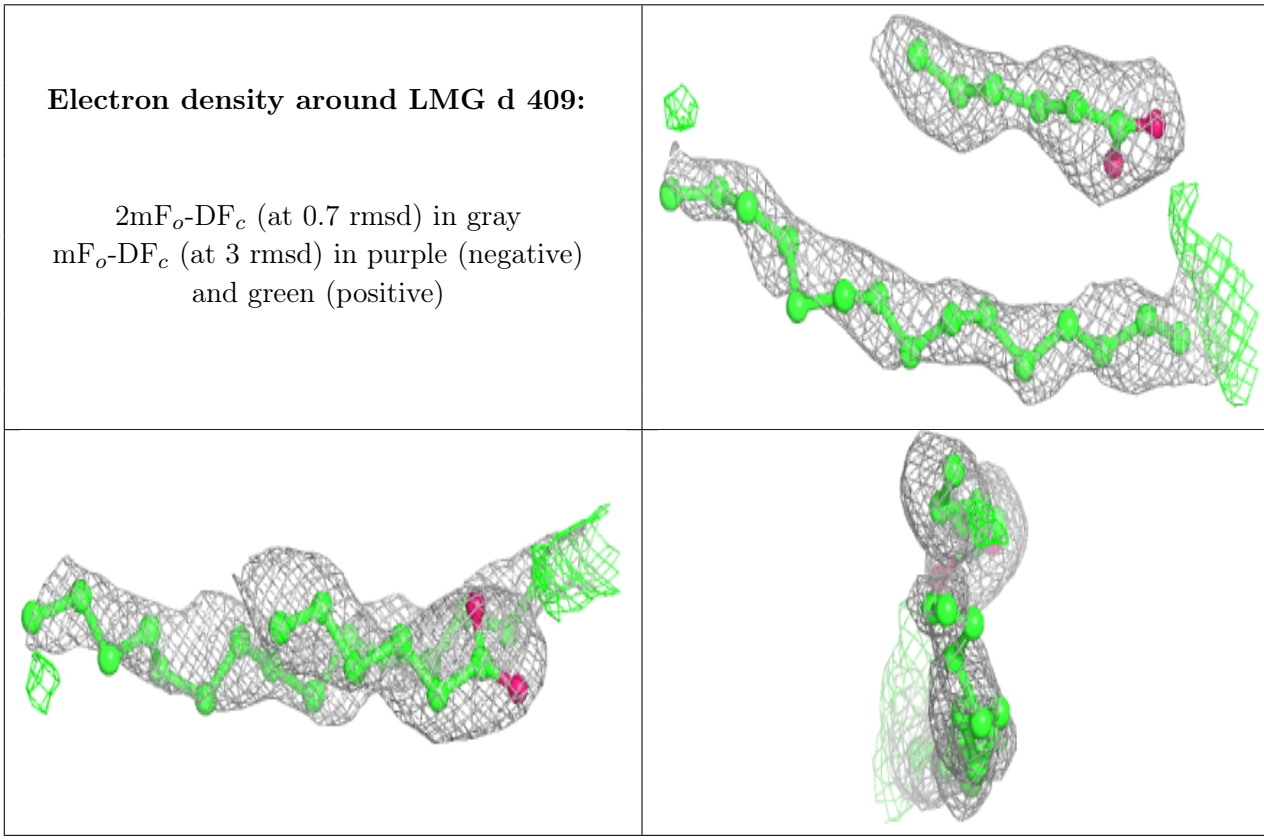
Electron density around LMG b 622:

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



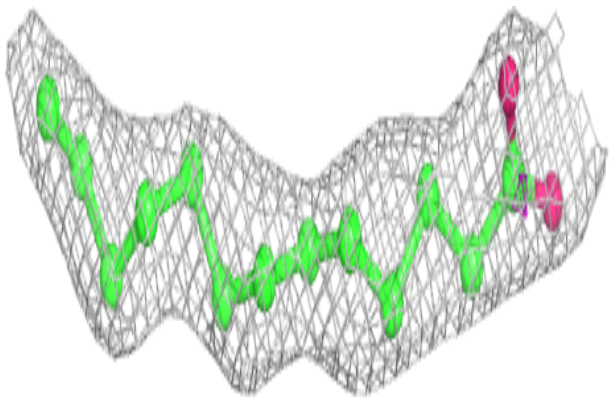
Electron density around LMG d 409:

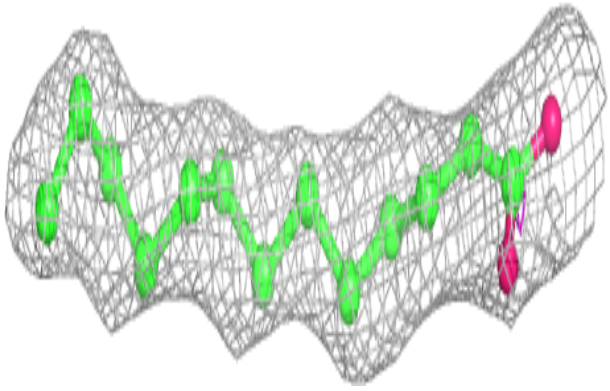
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

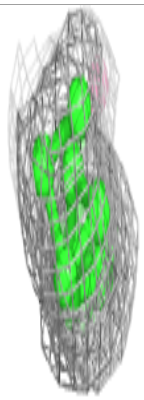


Electron density around STE M 102:

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

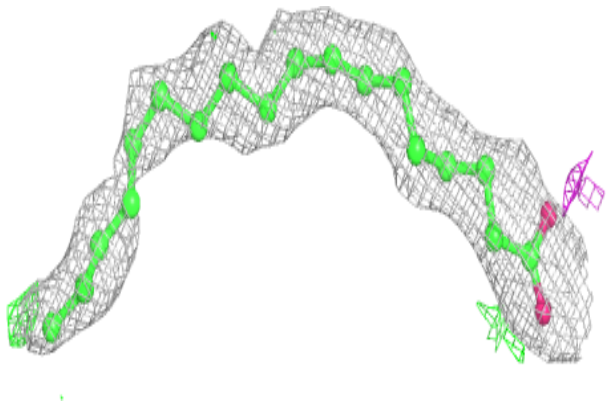


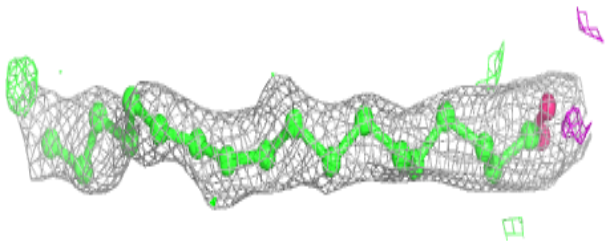


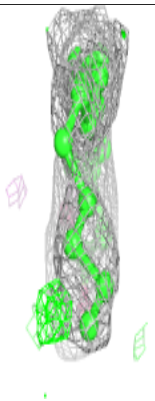


Electron density around STE x 102:

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

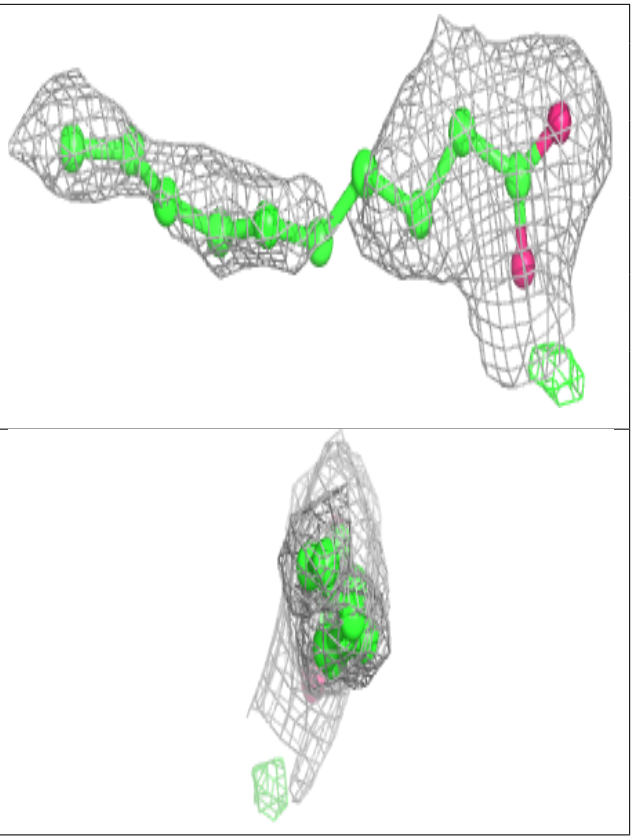


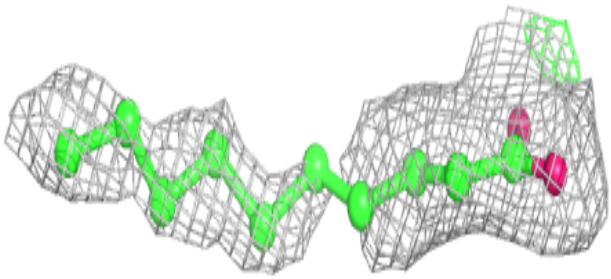




Electron density around STE a 616:

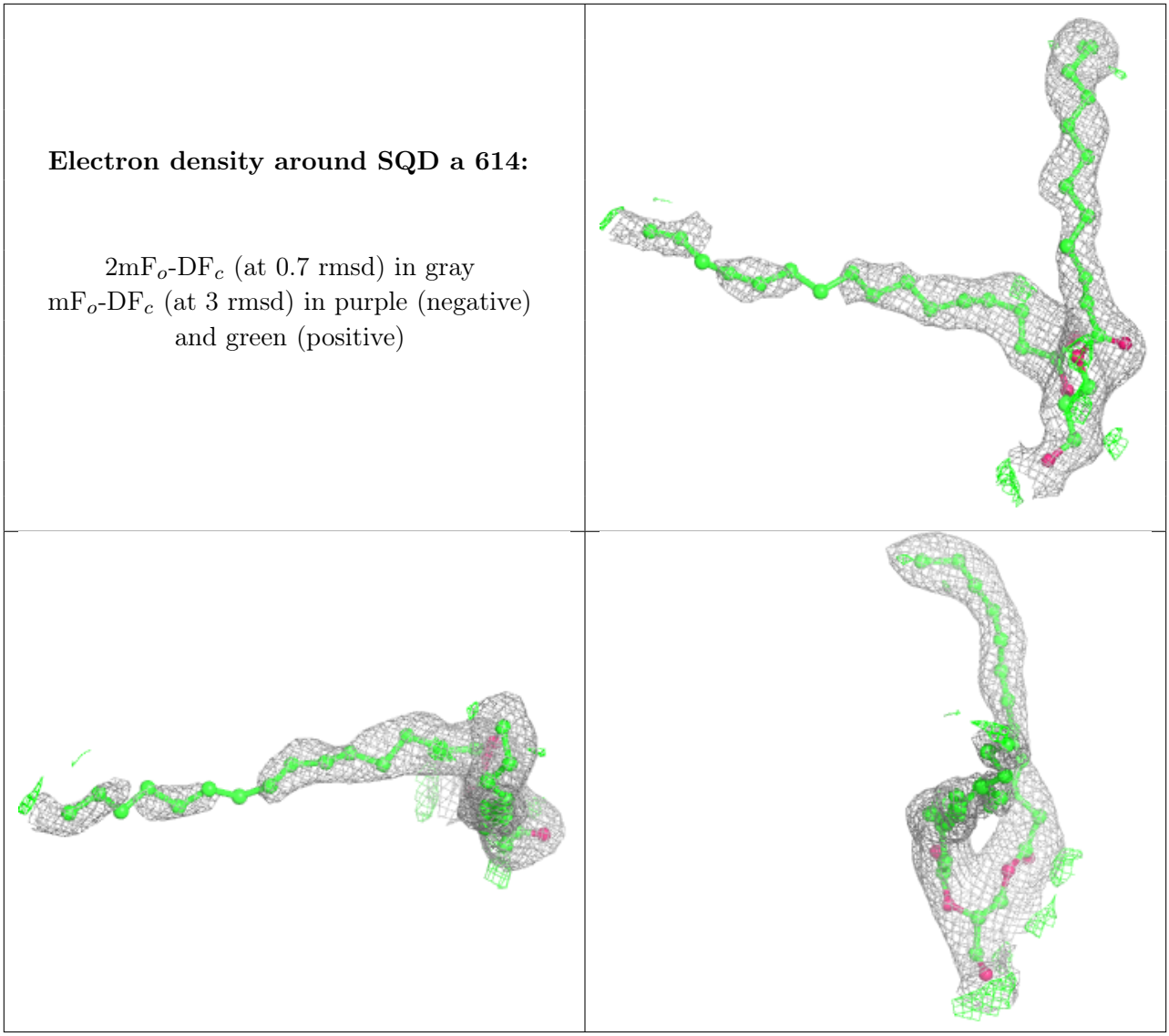
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





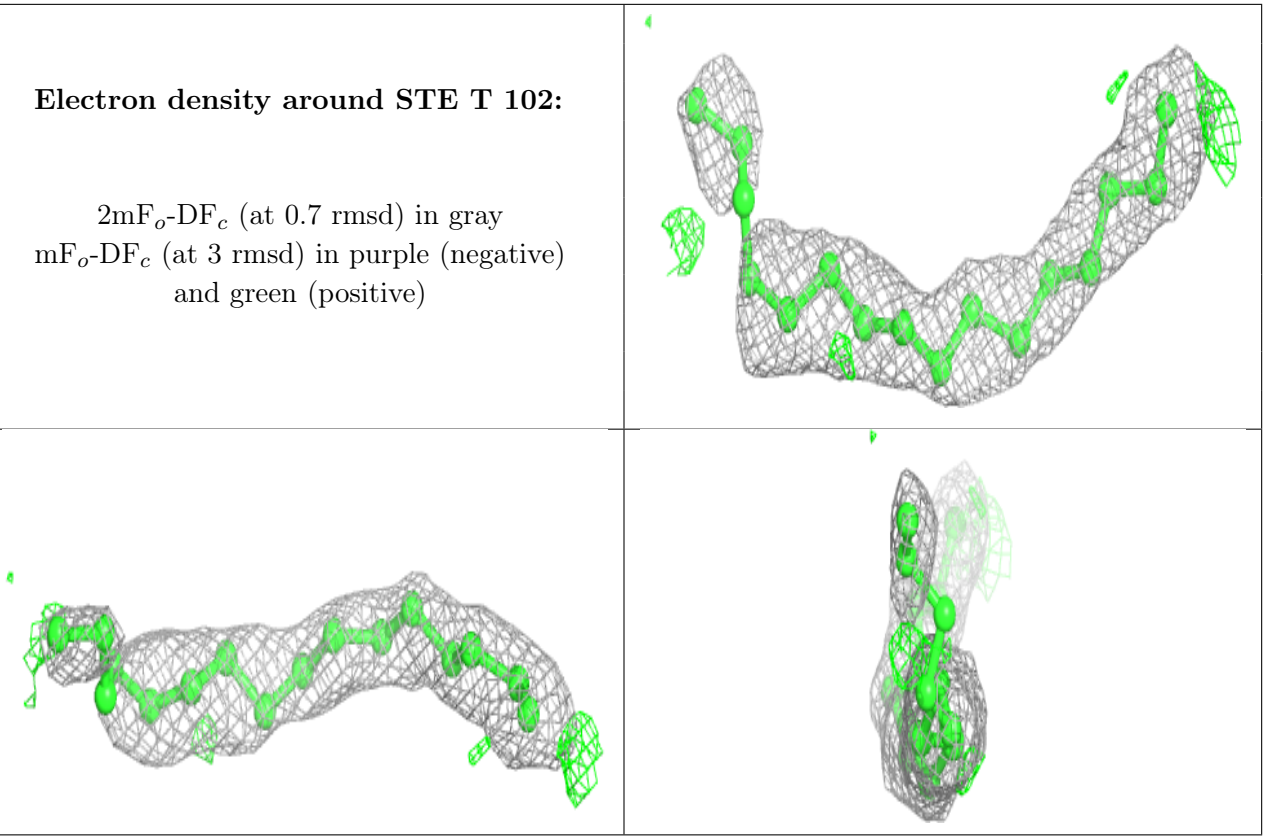
Electron density around SQD a 614:

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



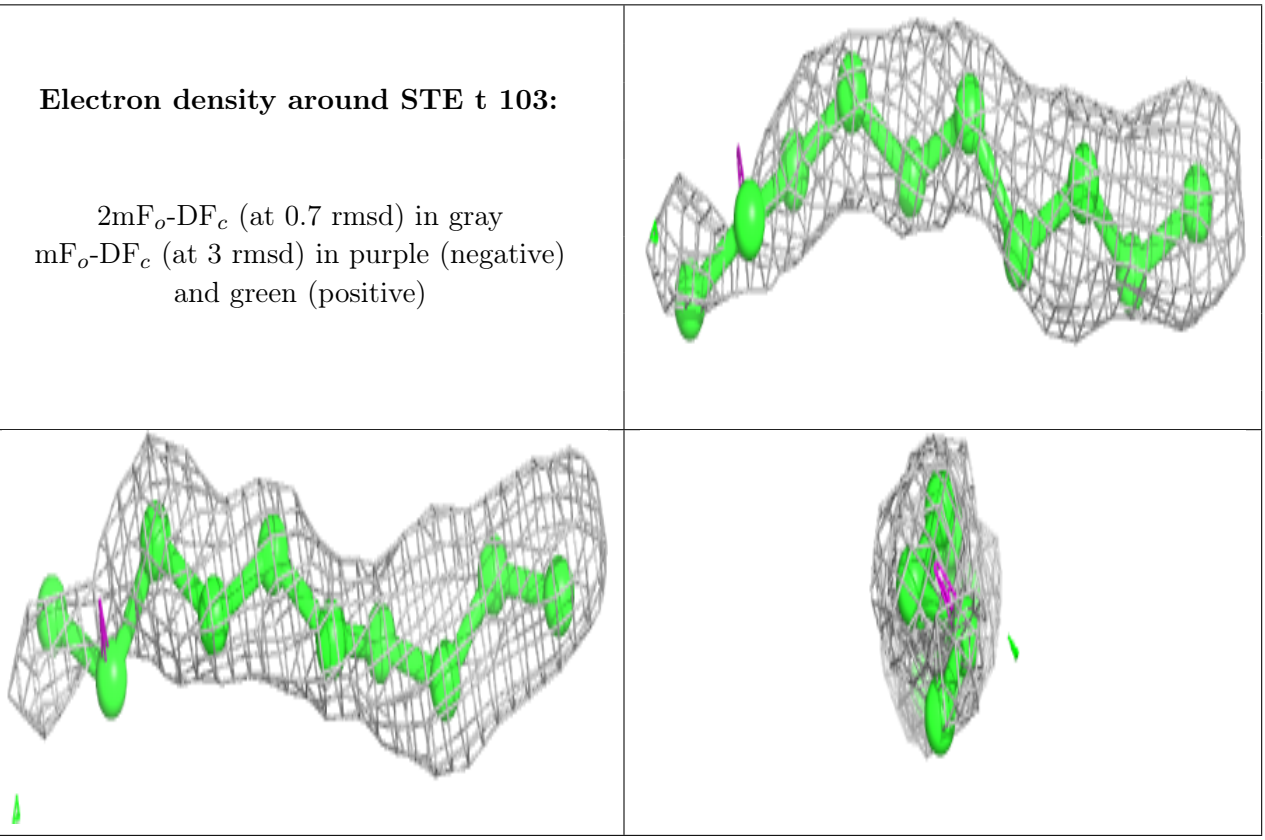
Electron density around STE T 102:

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



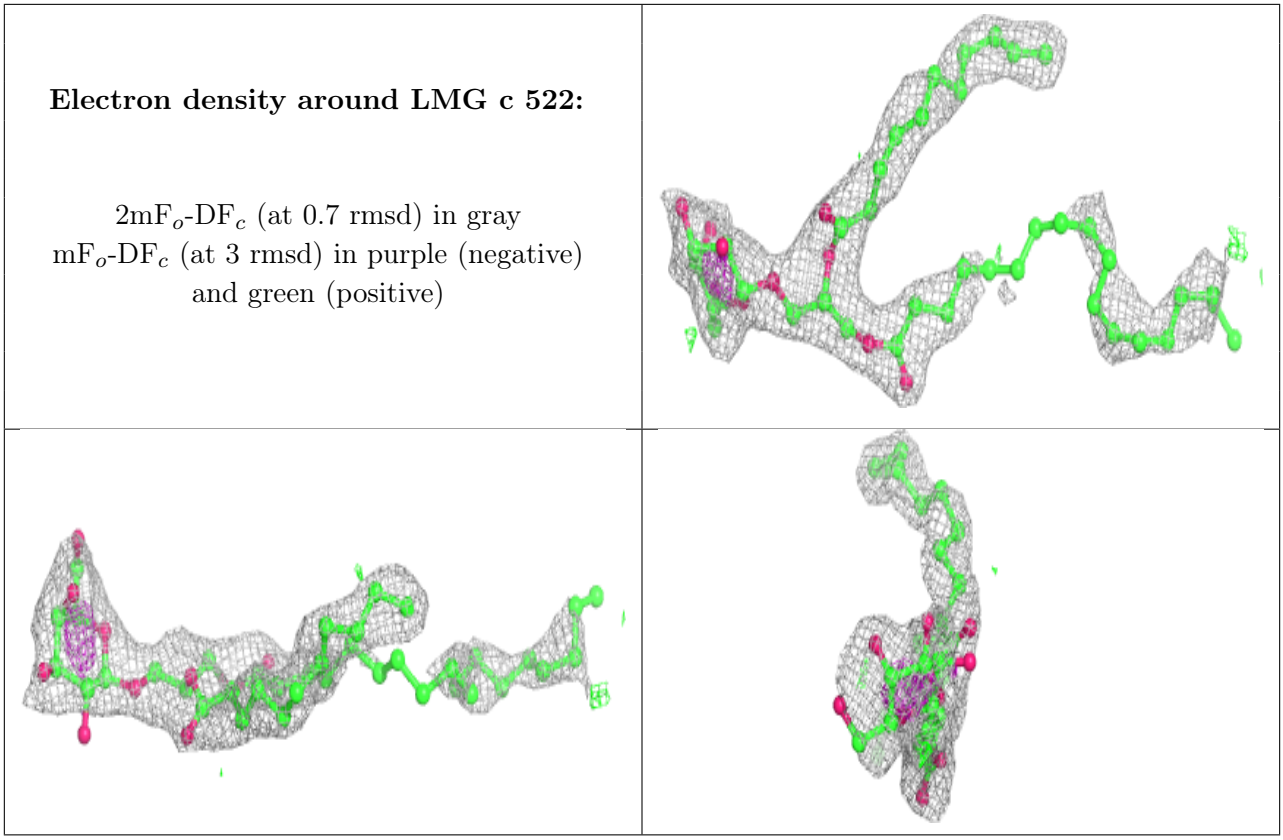
Electron density around STE t 103:

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



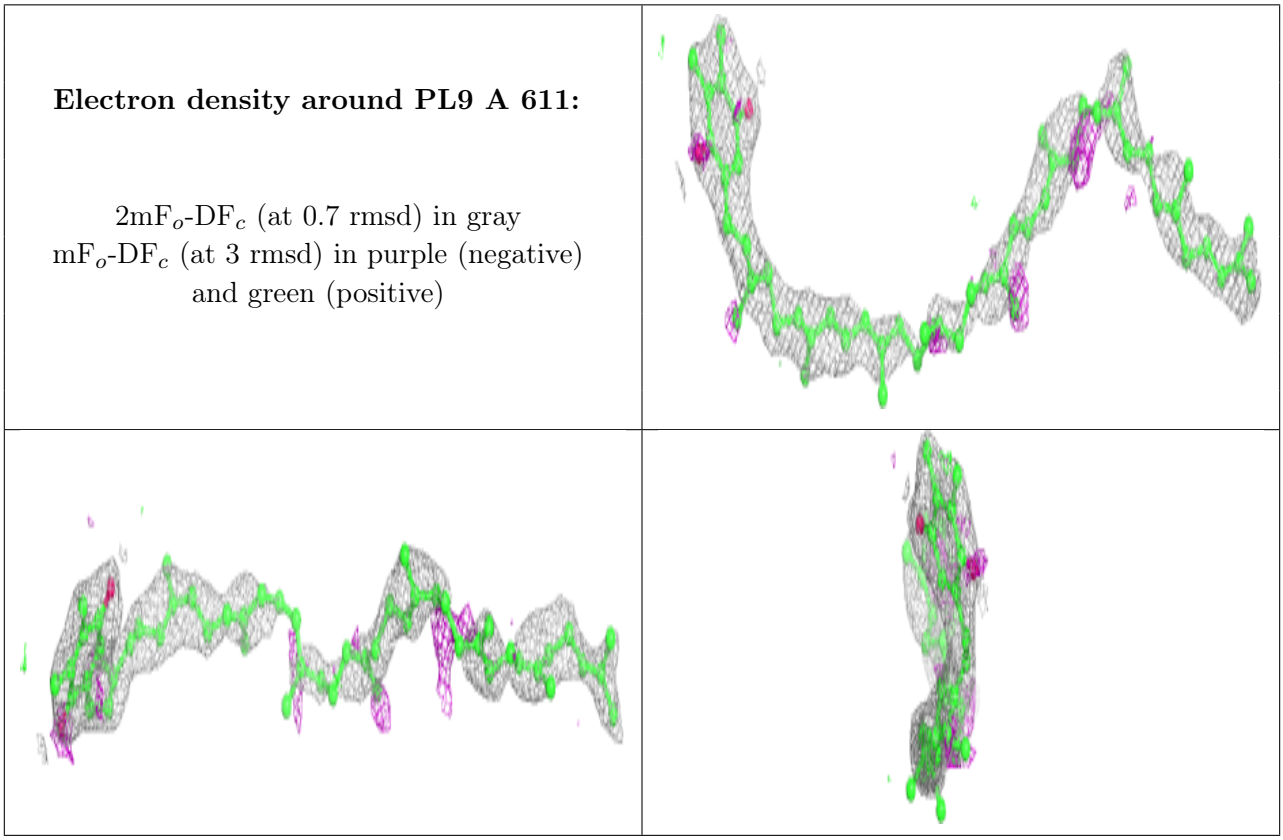
Electron density around LMG c 522:

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



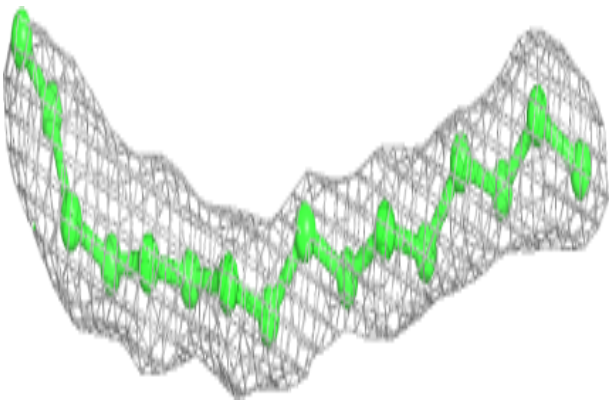
Electron density around PL9 A 611:

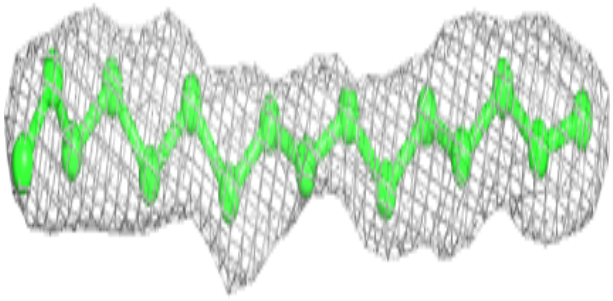
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

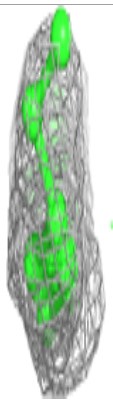


Electron density around STE C 522:

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

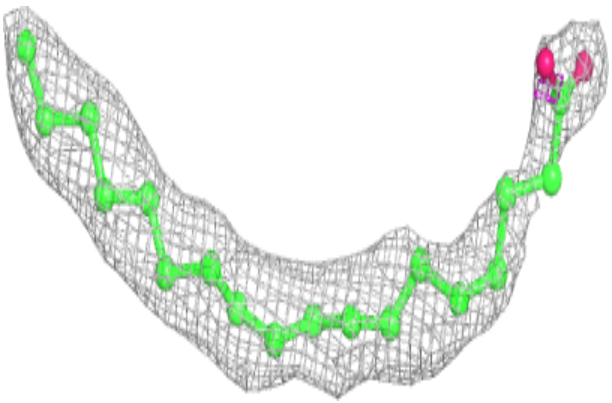


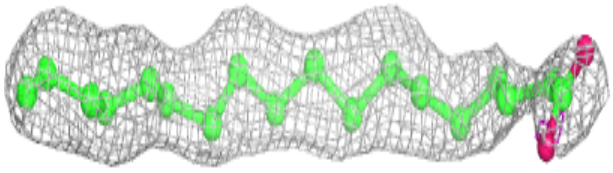


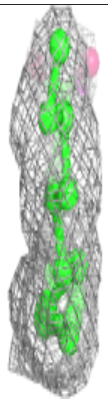


Electron density around STE D 413:

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

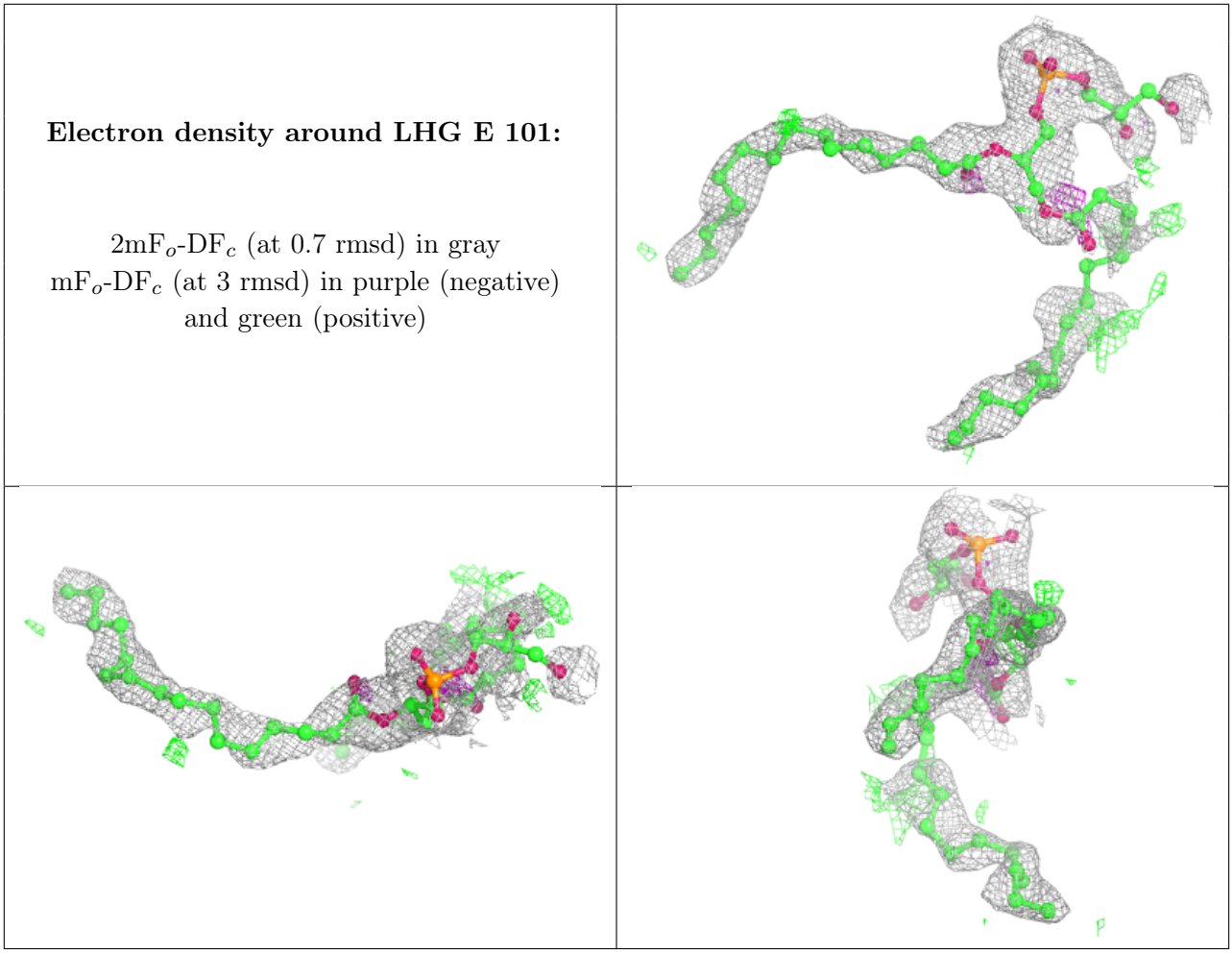






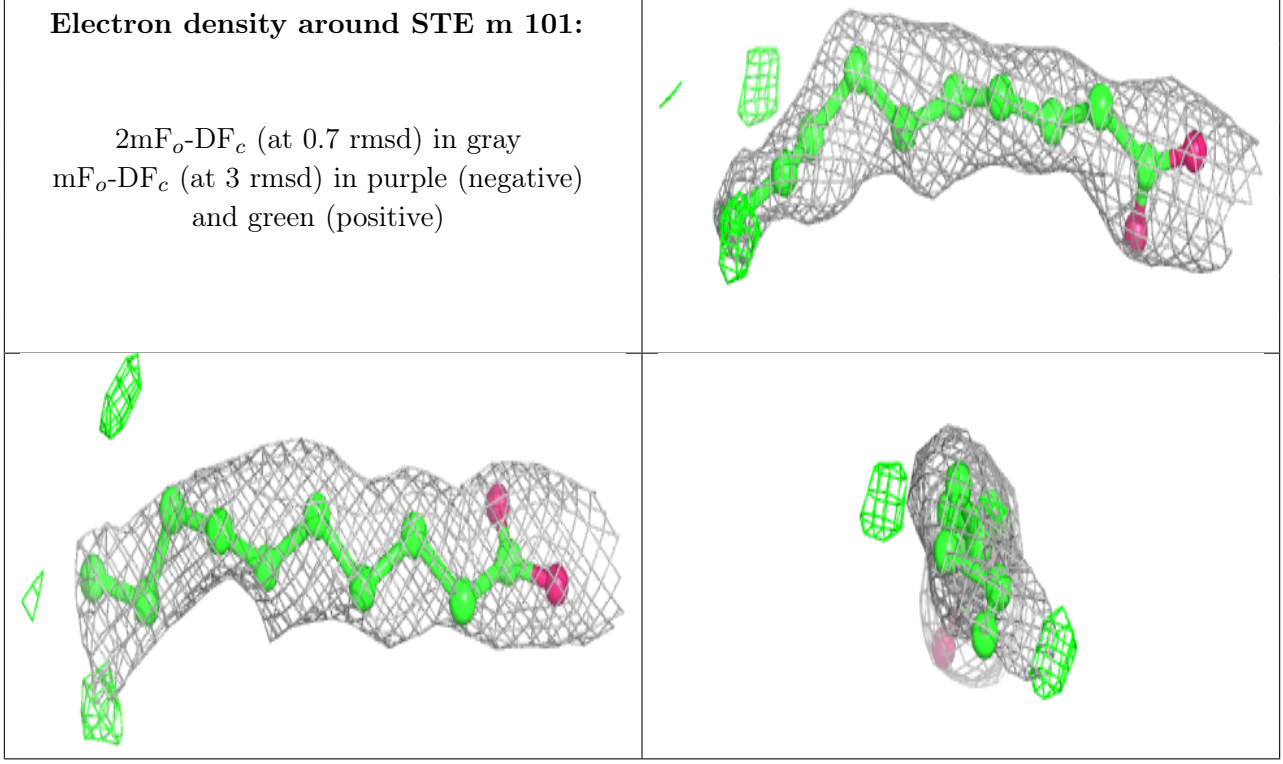
Electron density around LHG E 101:

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



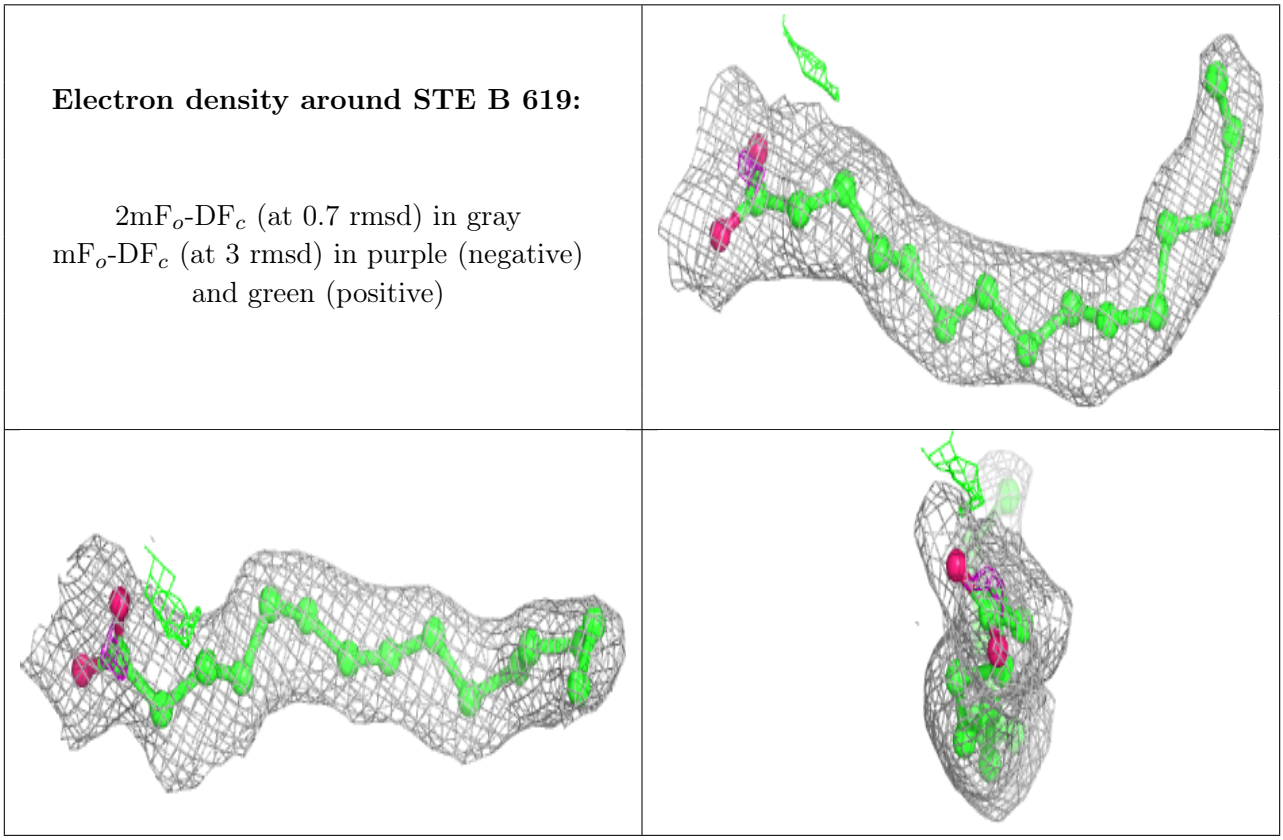
Electron density around STE m 101:

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



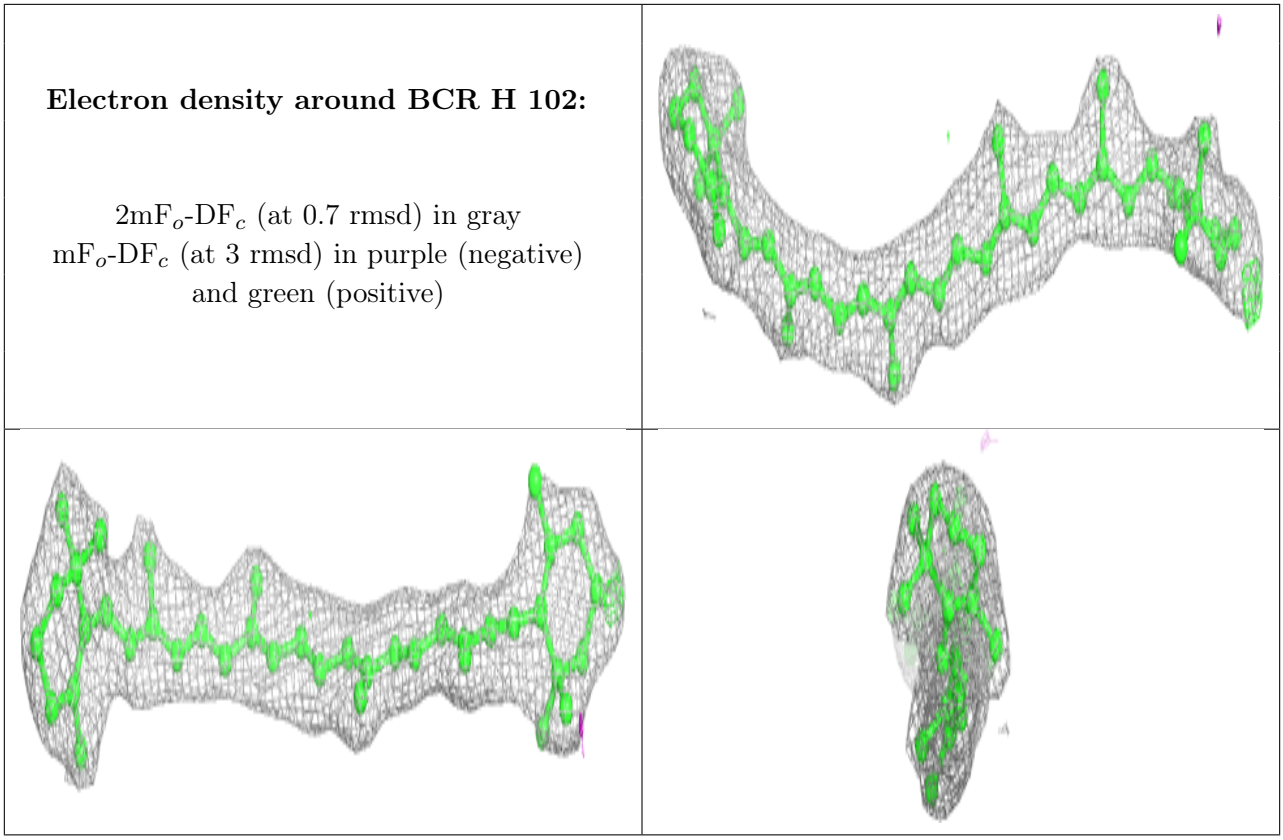
Electron density around STE B 619:

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



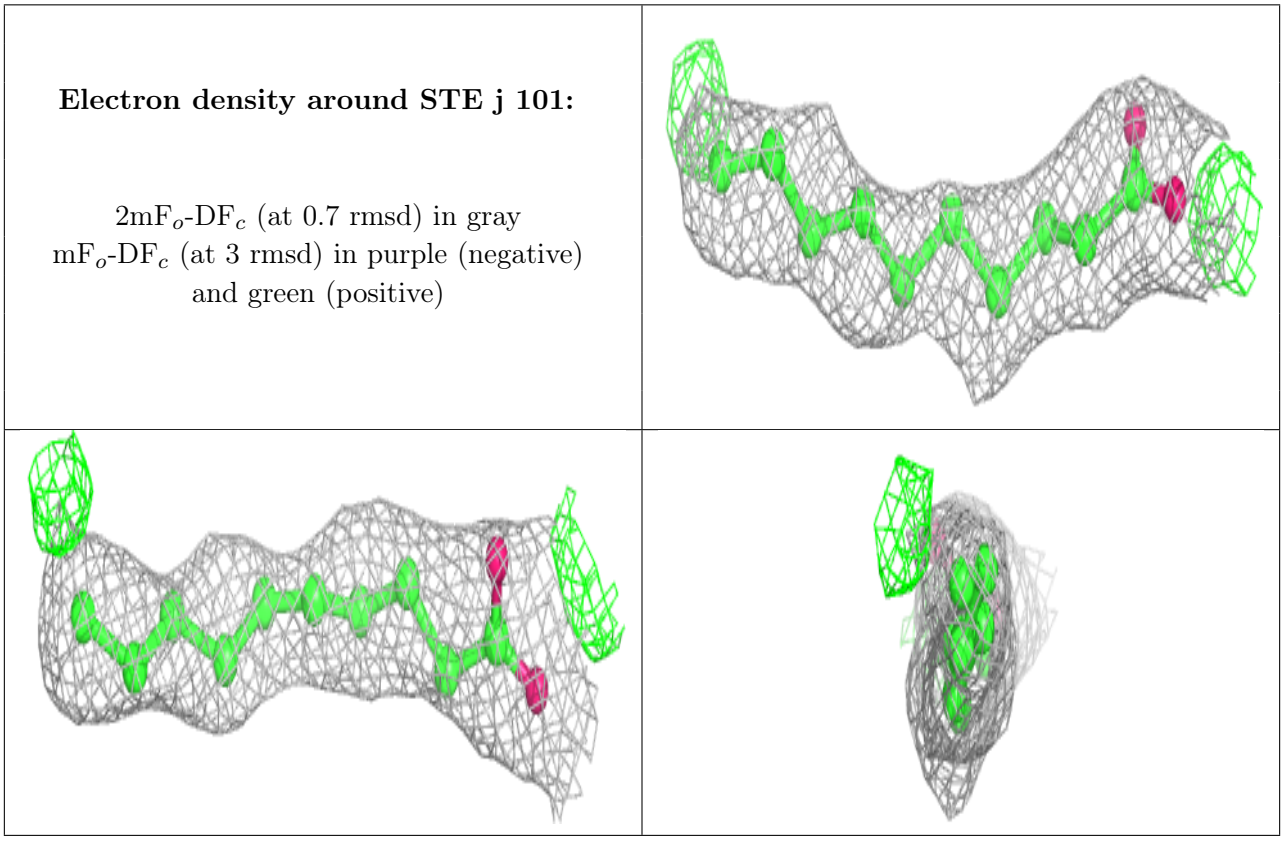
Electron density around BCR H 102:

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



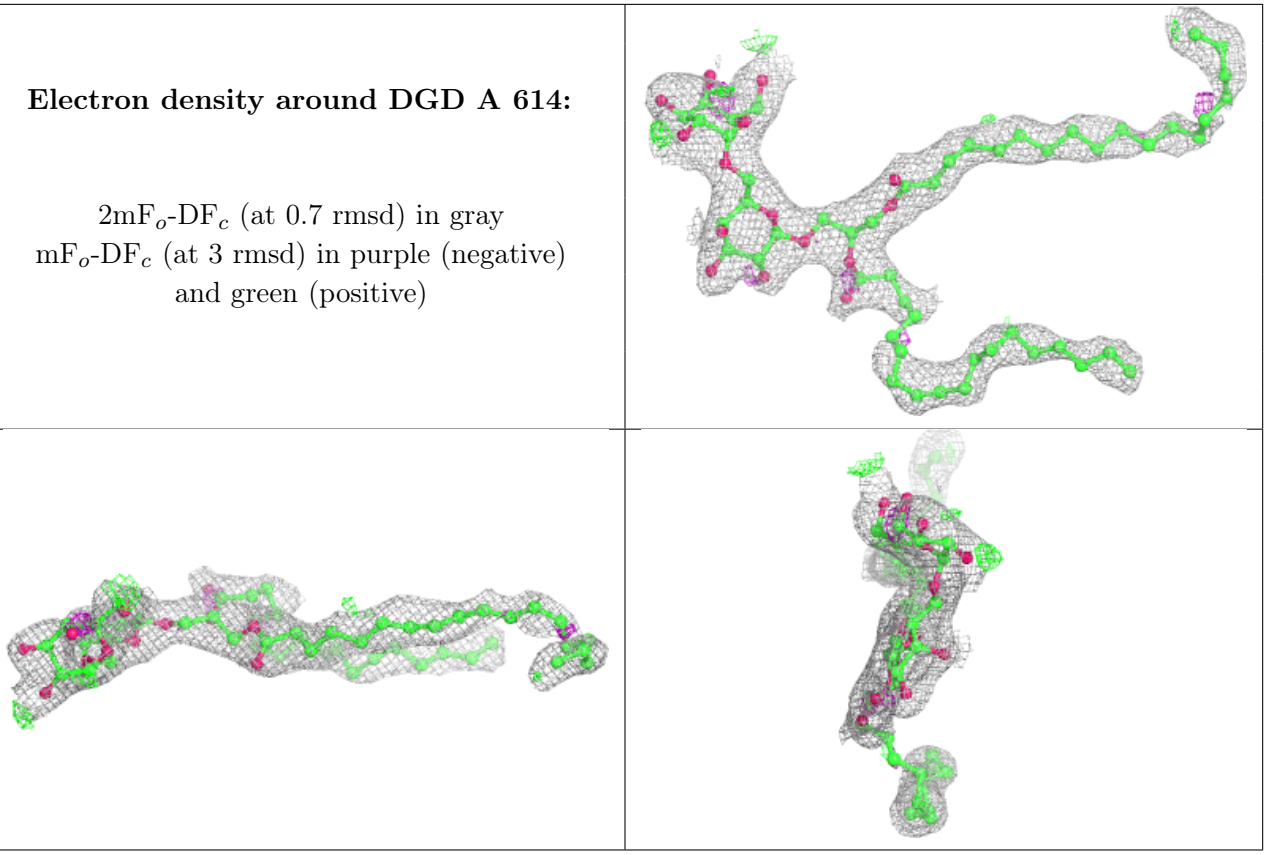
Electron density around STE j 101:

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



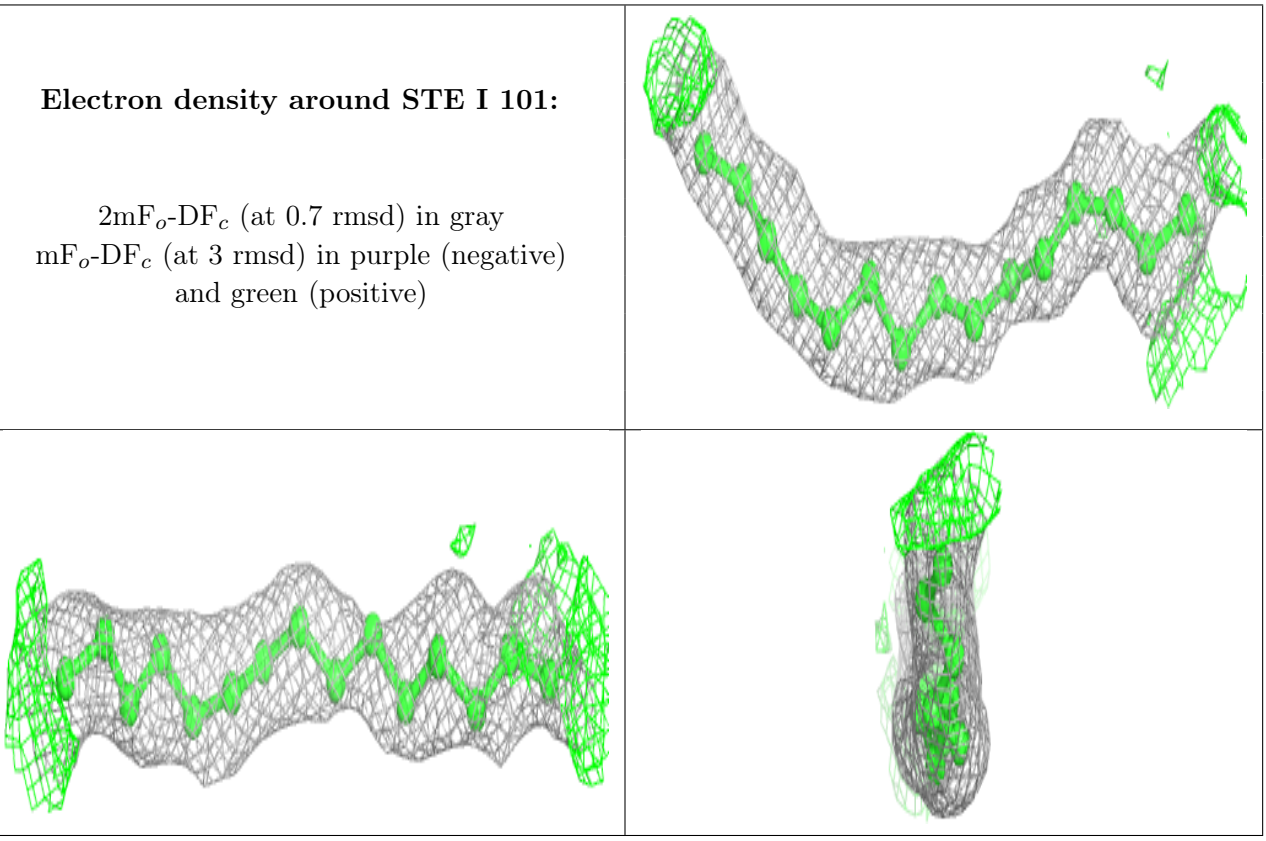
Electron density around DGD A 614:

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



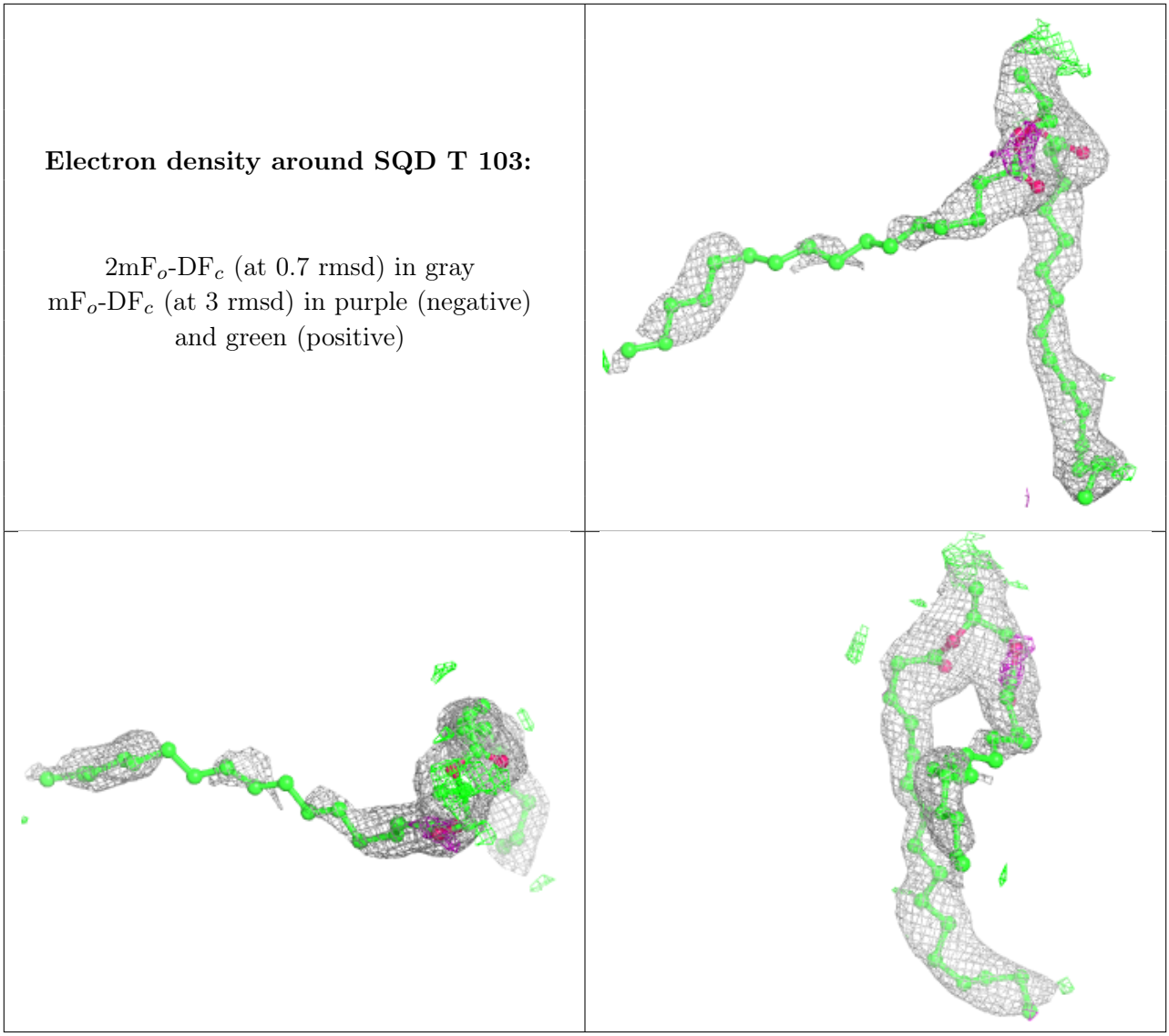
Electron density around STE I 101:

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



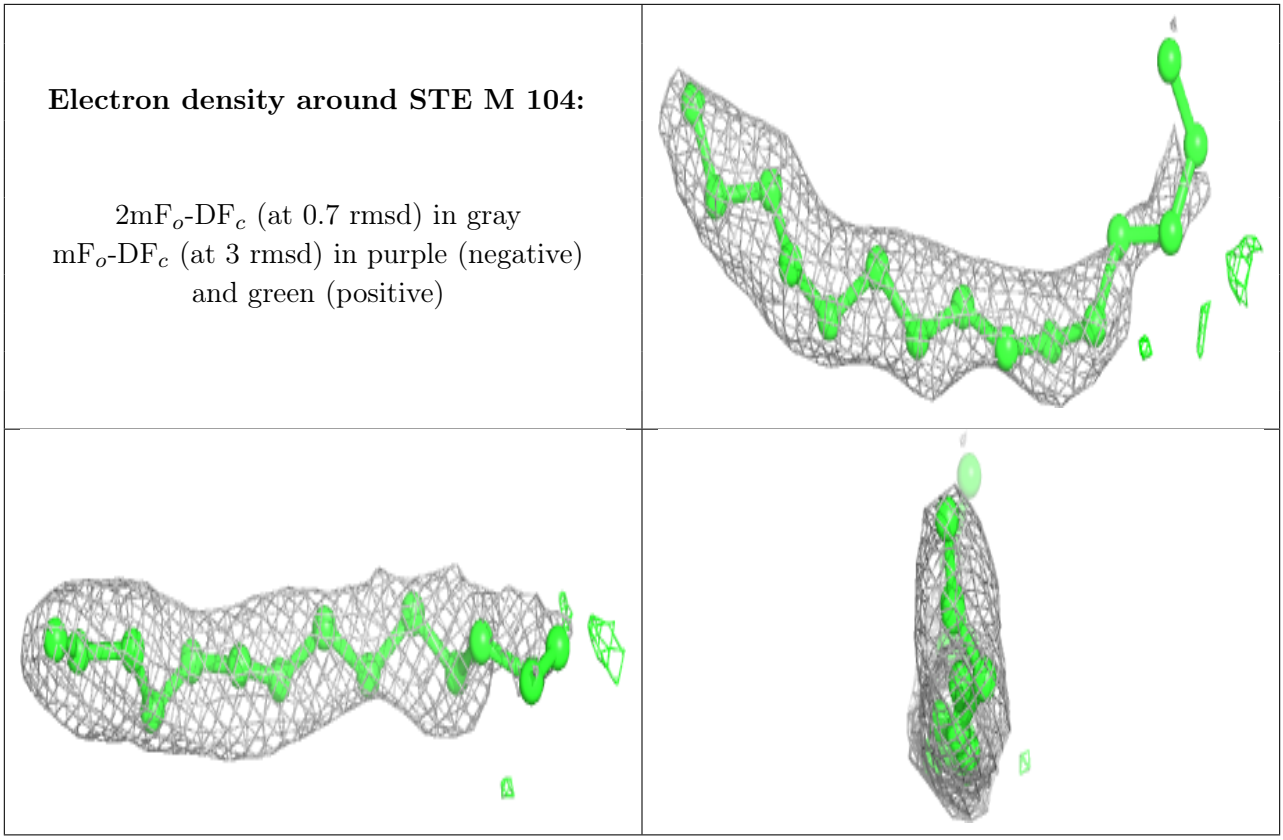
Electron density around SQD T 103:

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



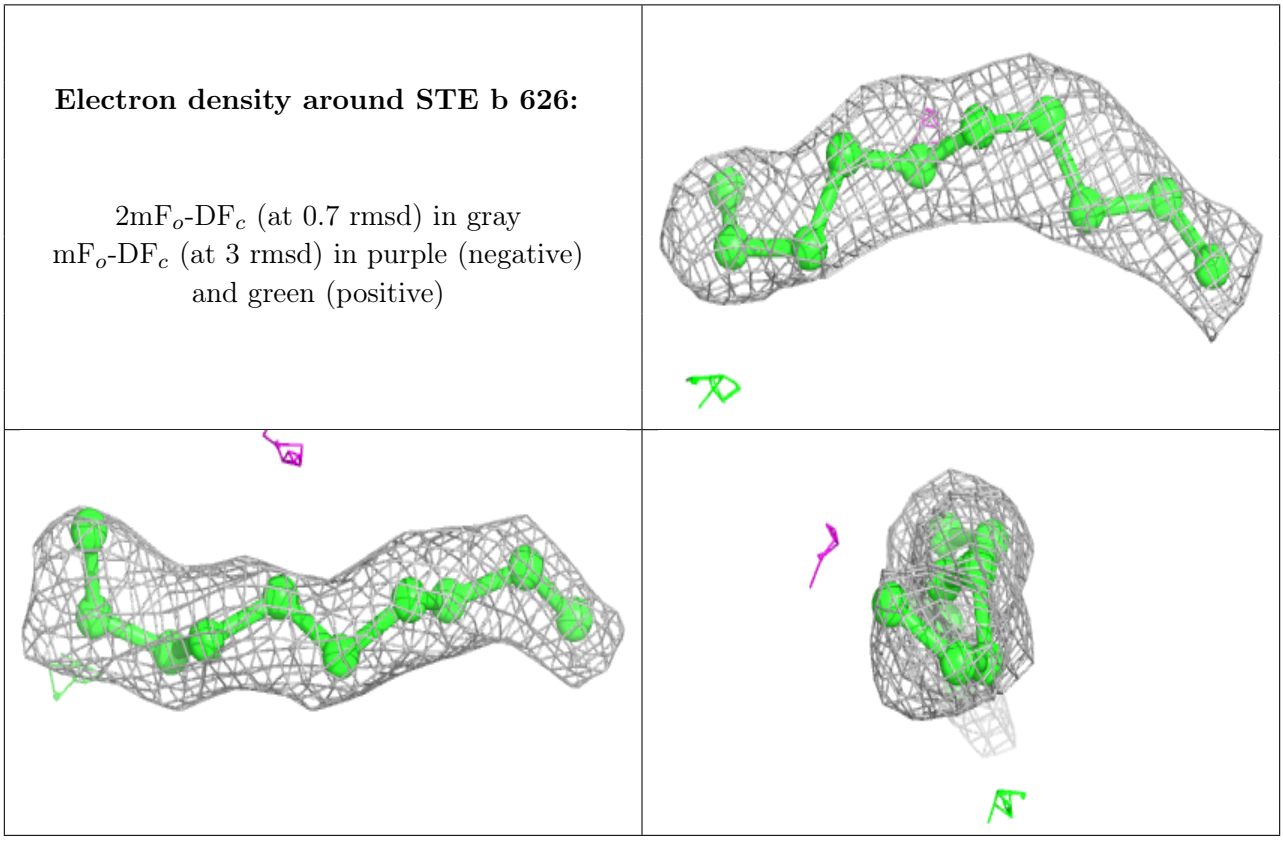
Electron density around STE M 104:

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



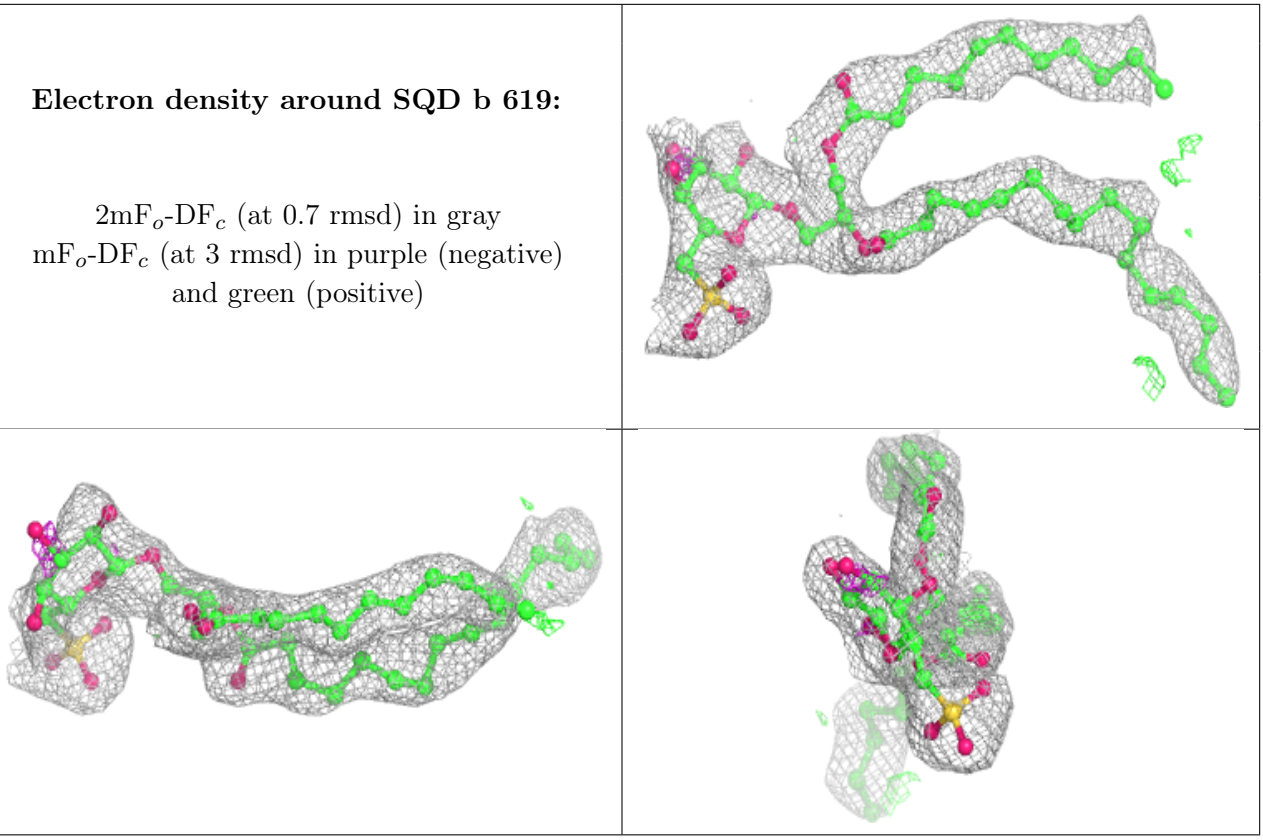
Electron density around STE b 626:

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



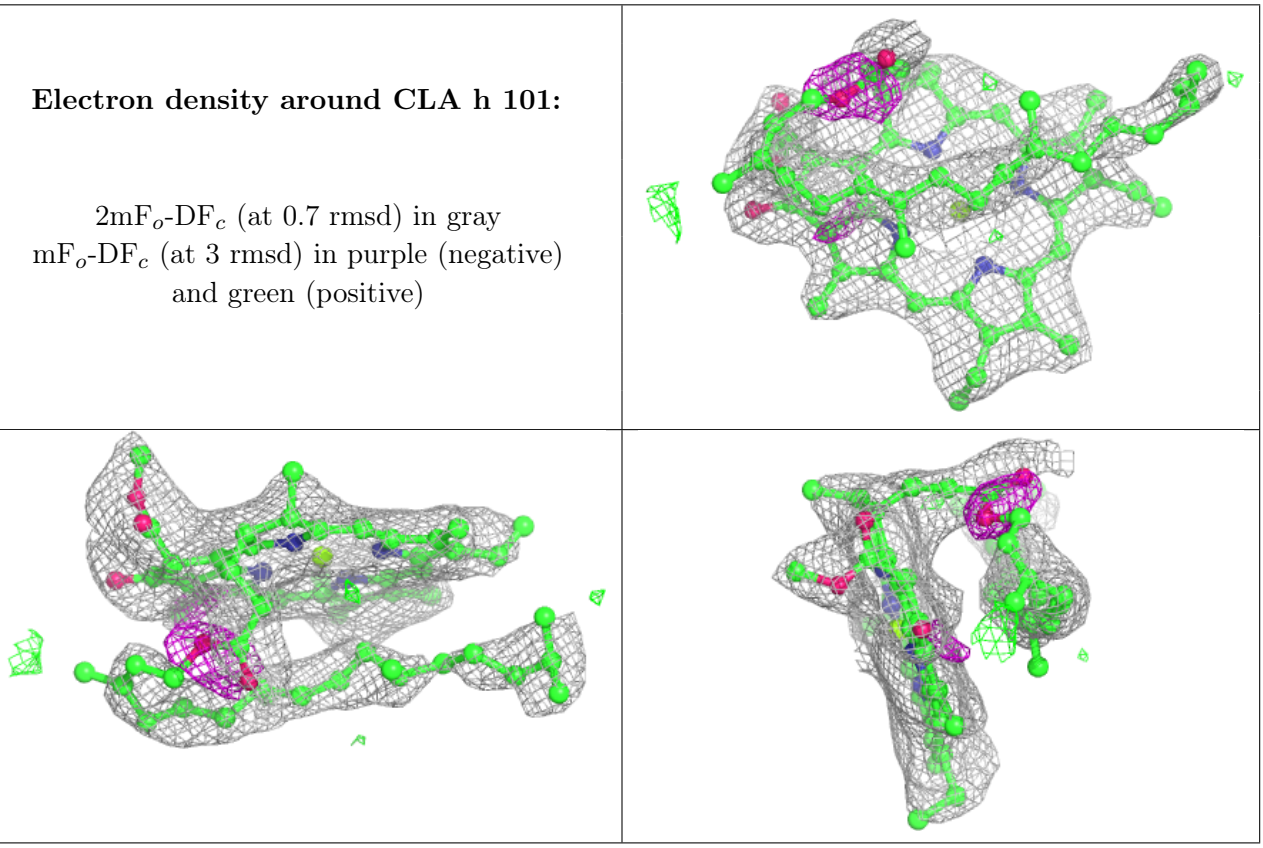
Electron density around SQD b 619:

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



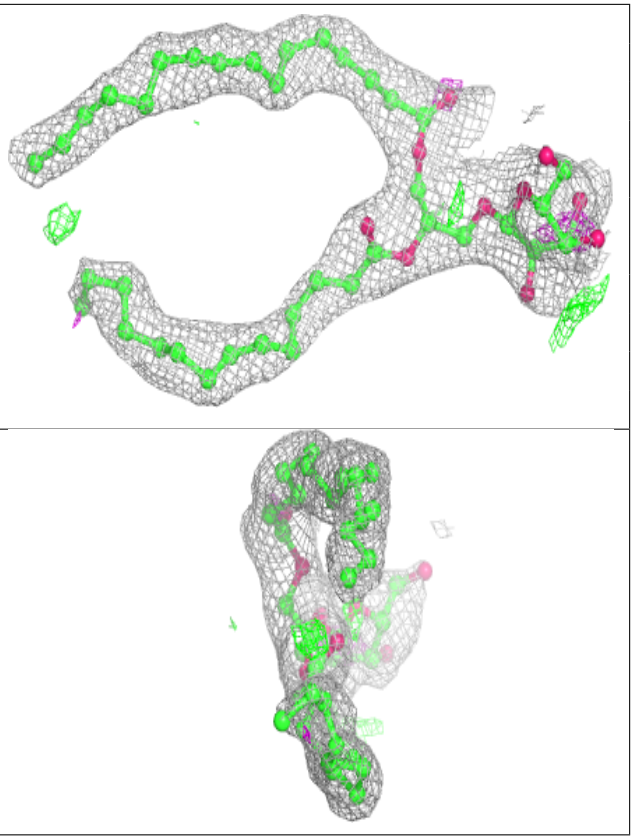
Electron density around CLA h 101:

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



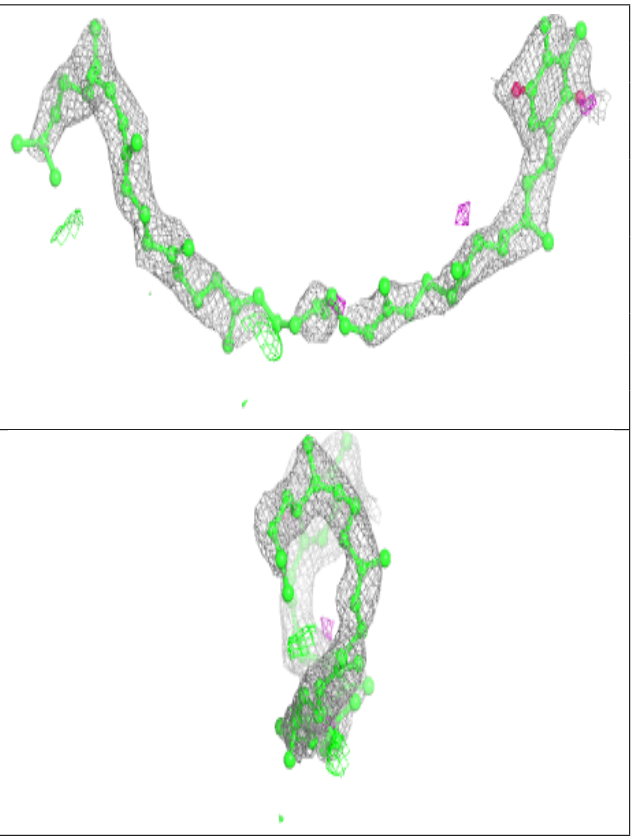
Electron density around LMG c 524:

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



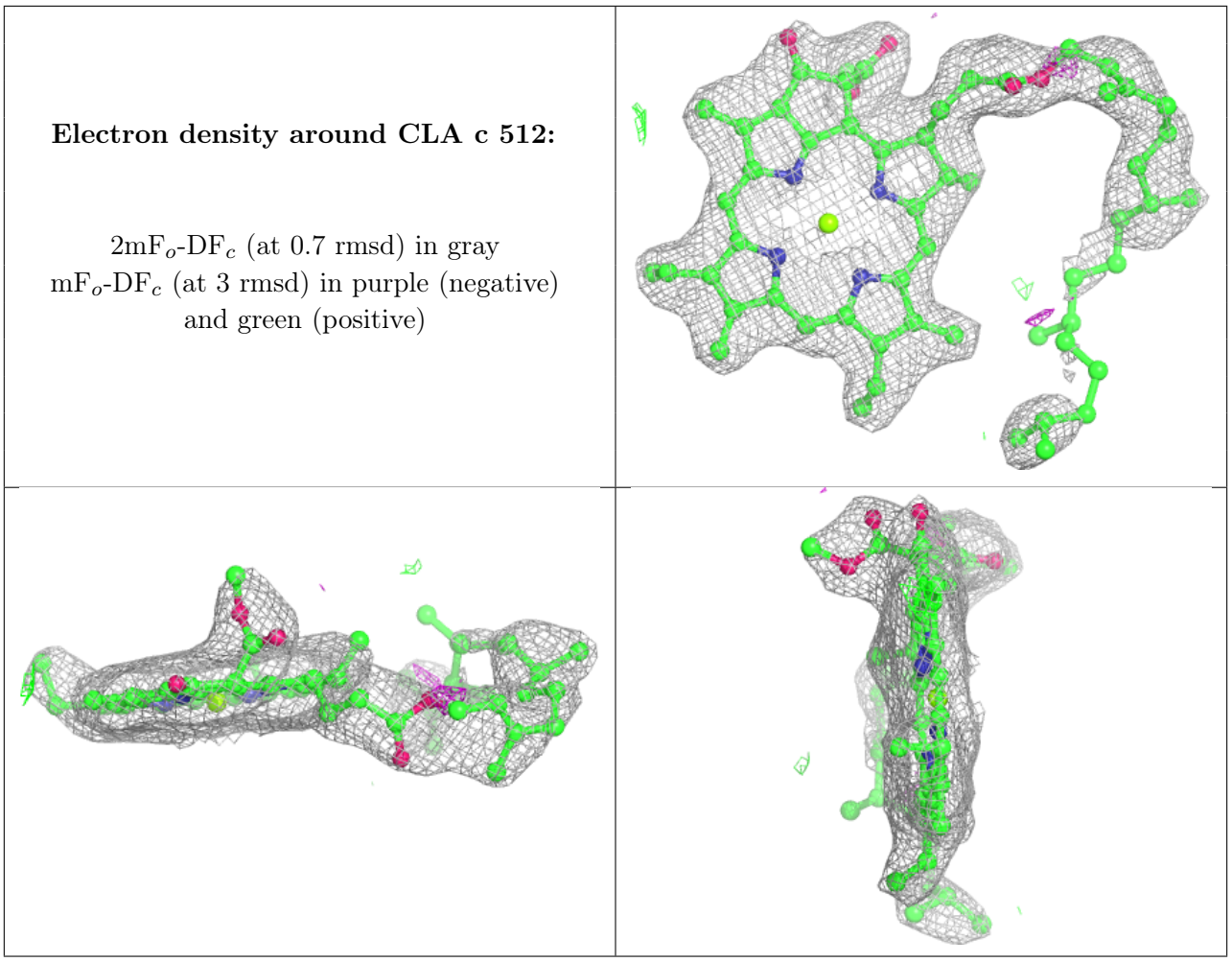
Electron density around PL9 a 611:

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



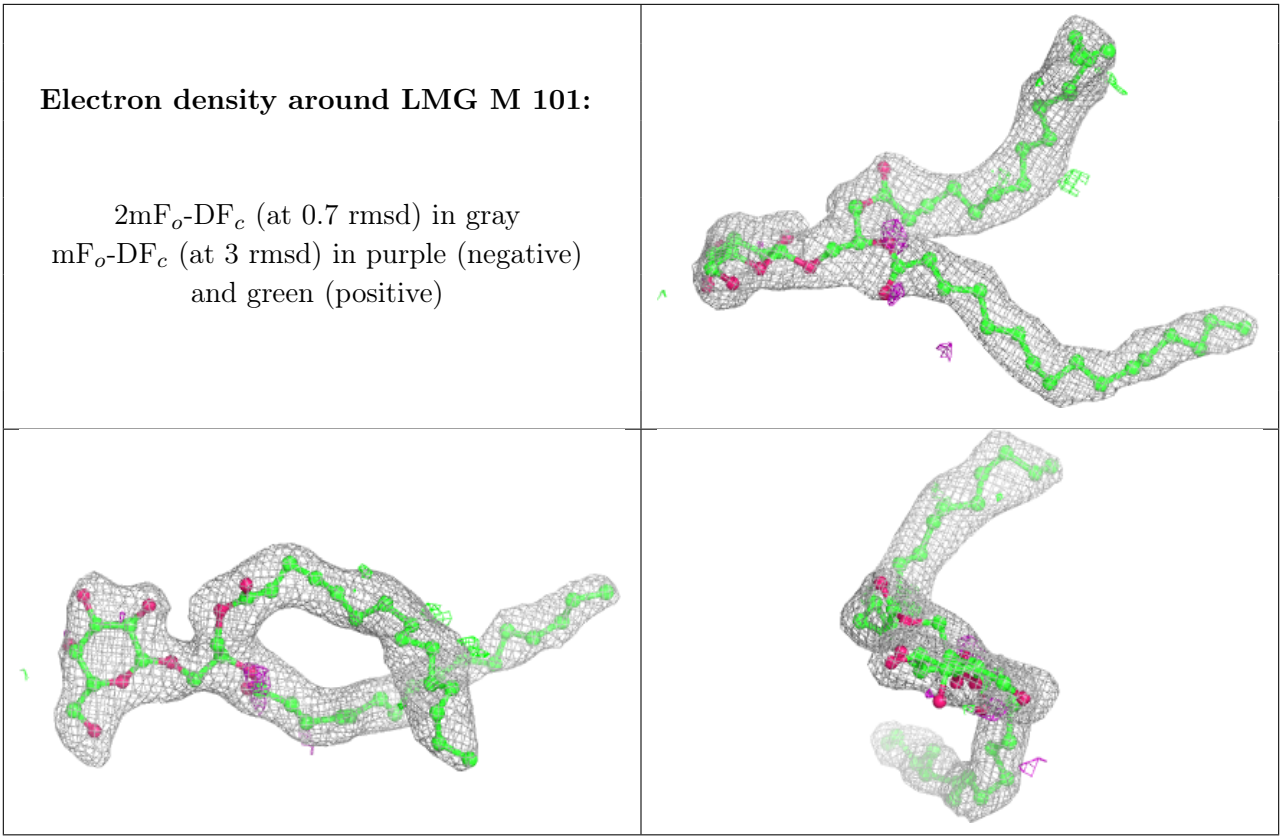
Electron density around CLA c 512:

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



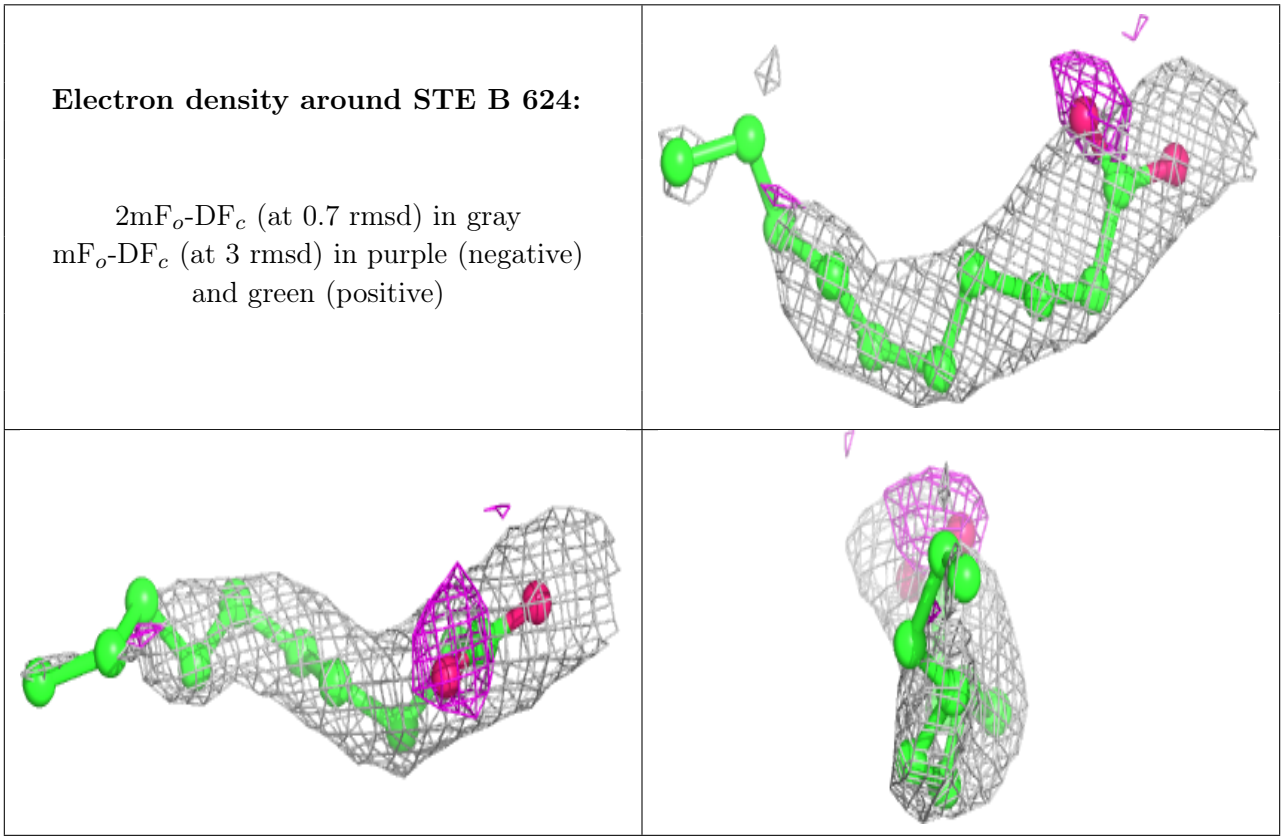
Electron density around LMG M 101:

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



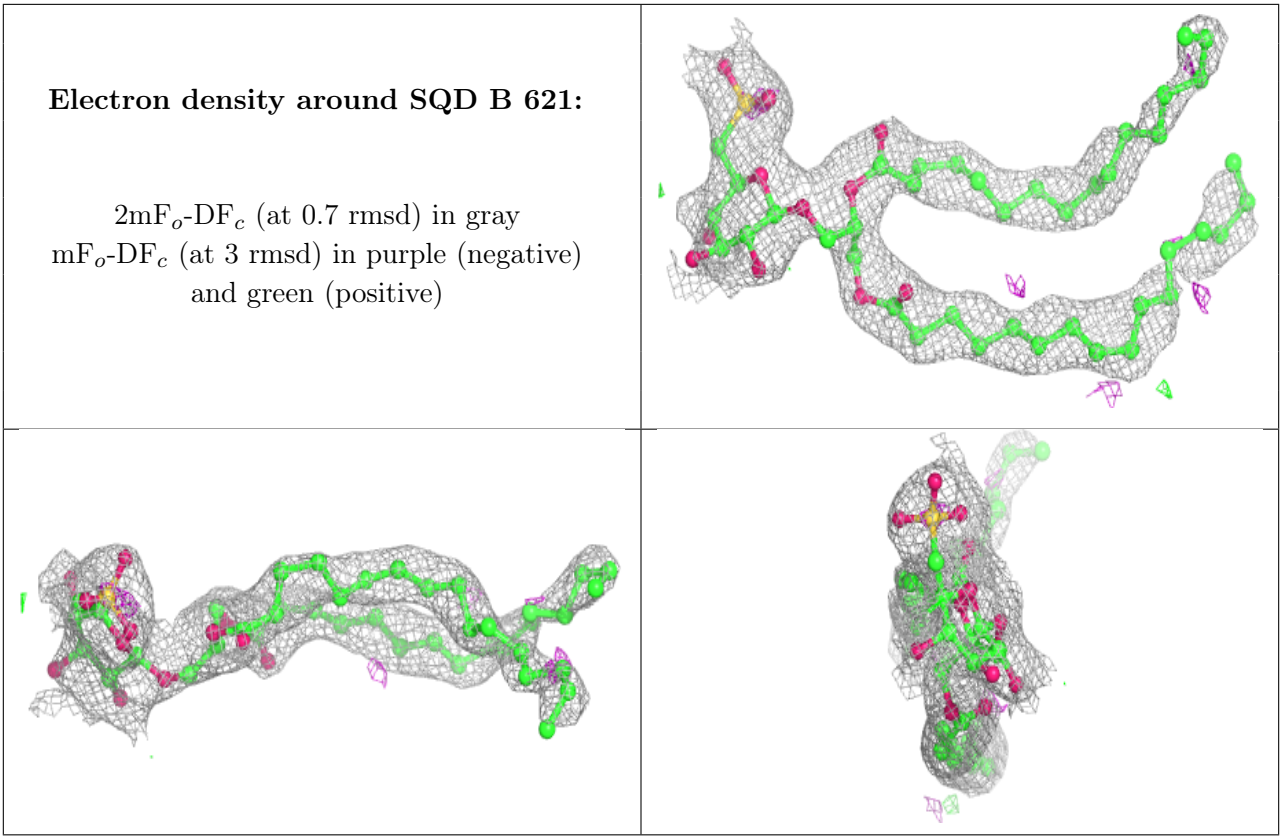
Electron density around STE B 624:

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



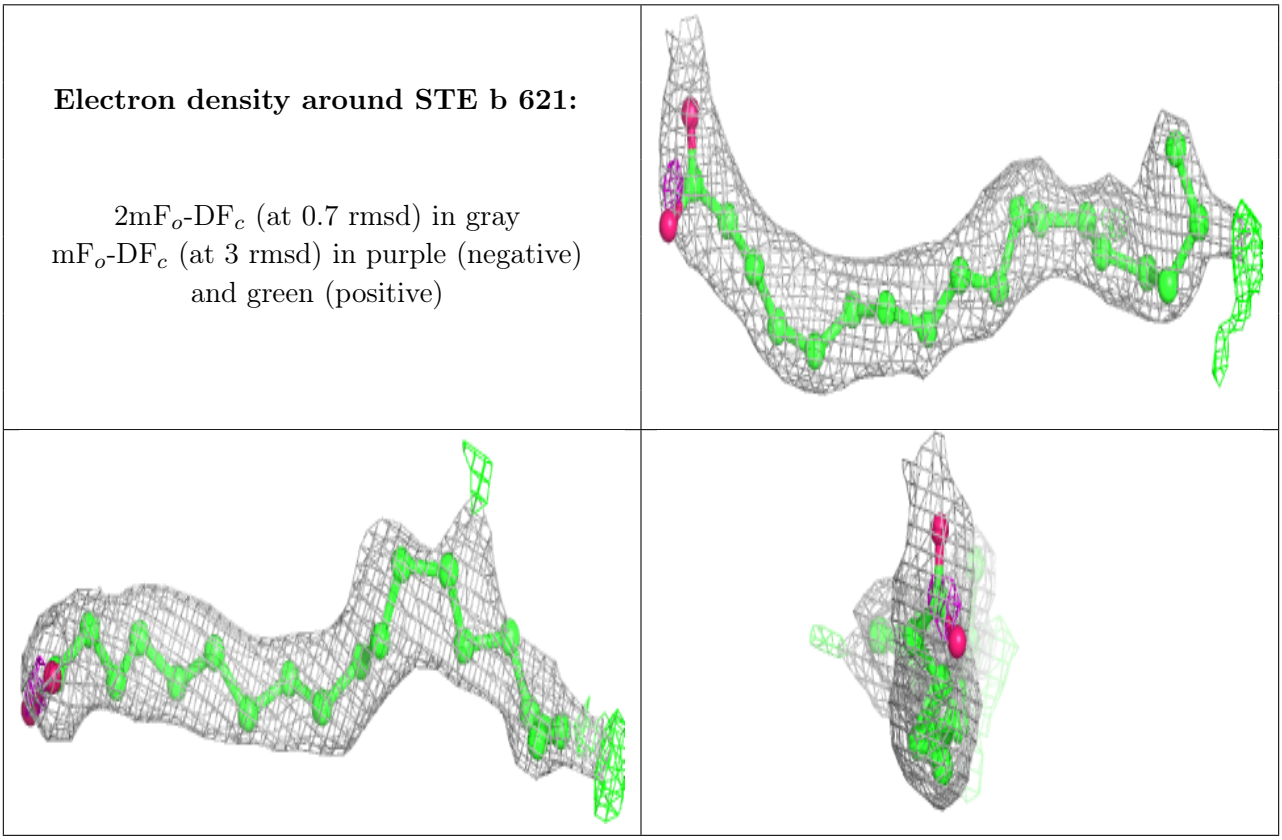
Electron density around SQD B 621:

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



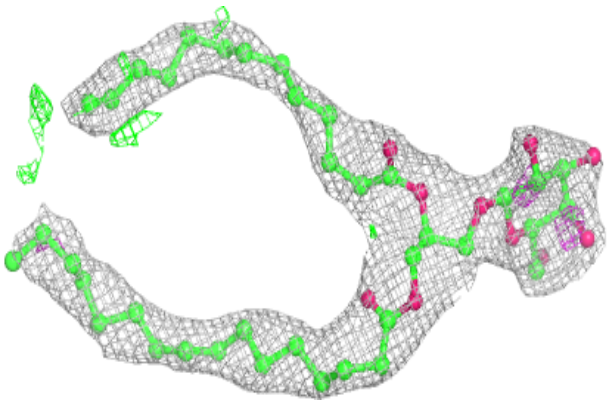
Electron density around STE b 621:

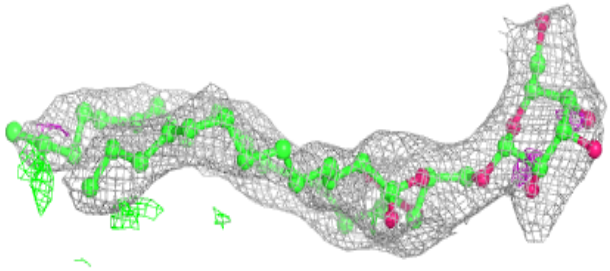
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

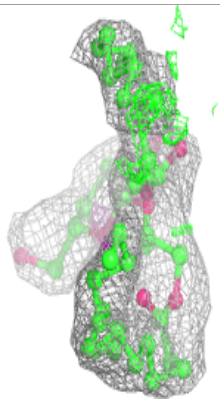


Electron density around LMG C 515:

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

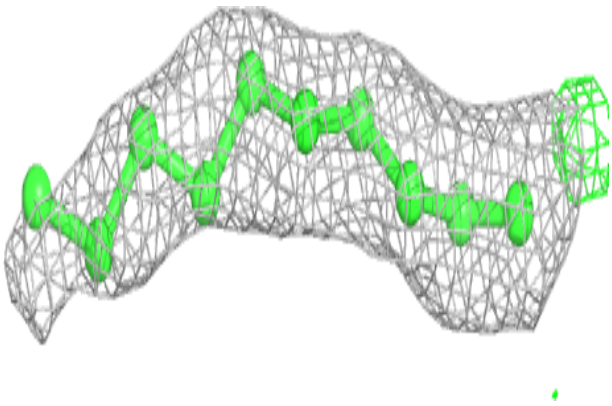


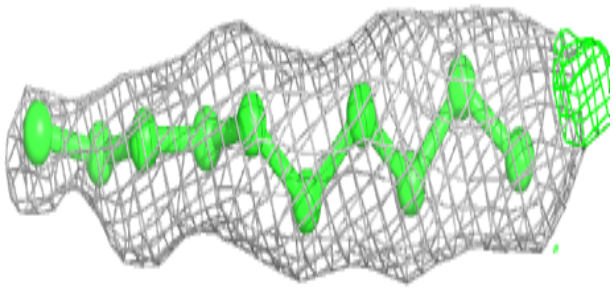


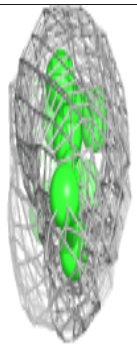


Electron density around STE M 103:

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

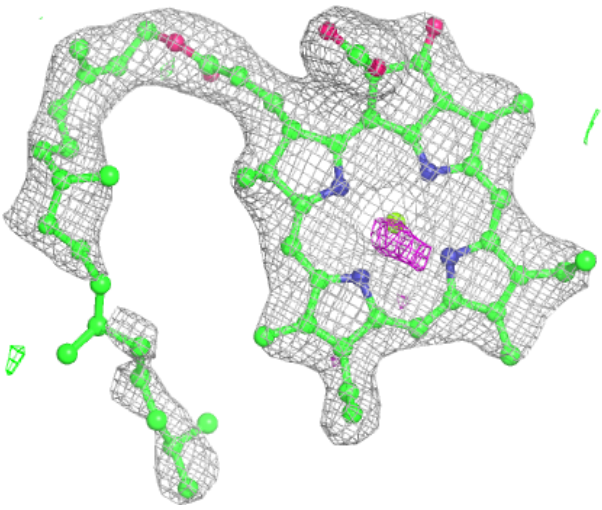


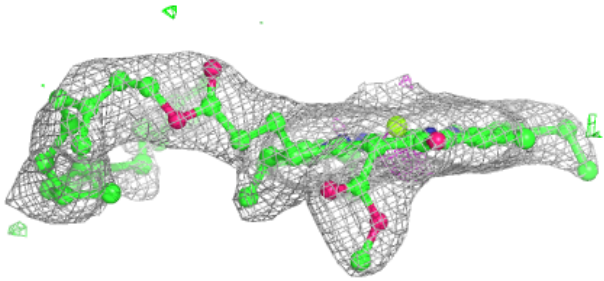


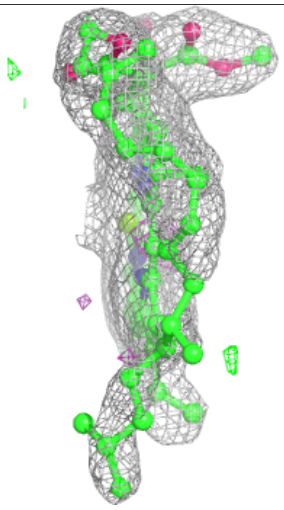


Electron density around CLA C 512:

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

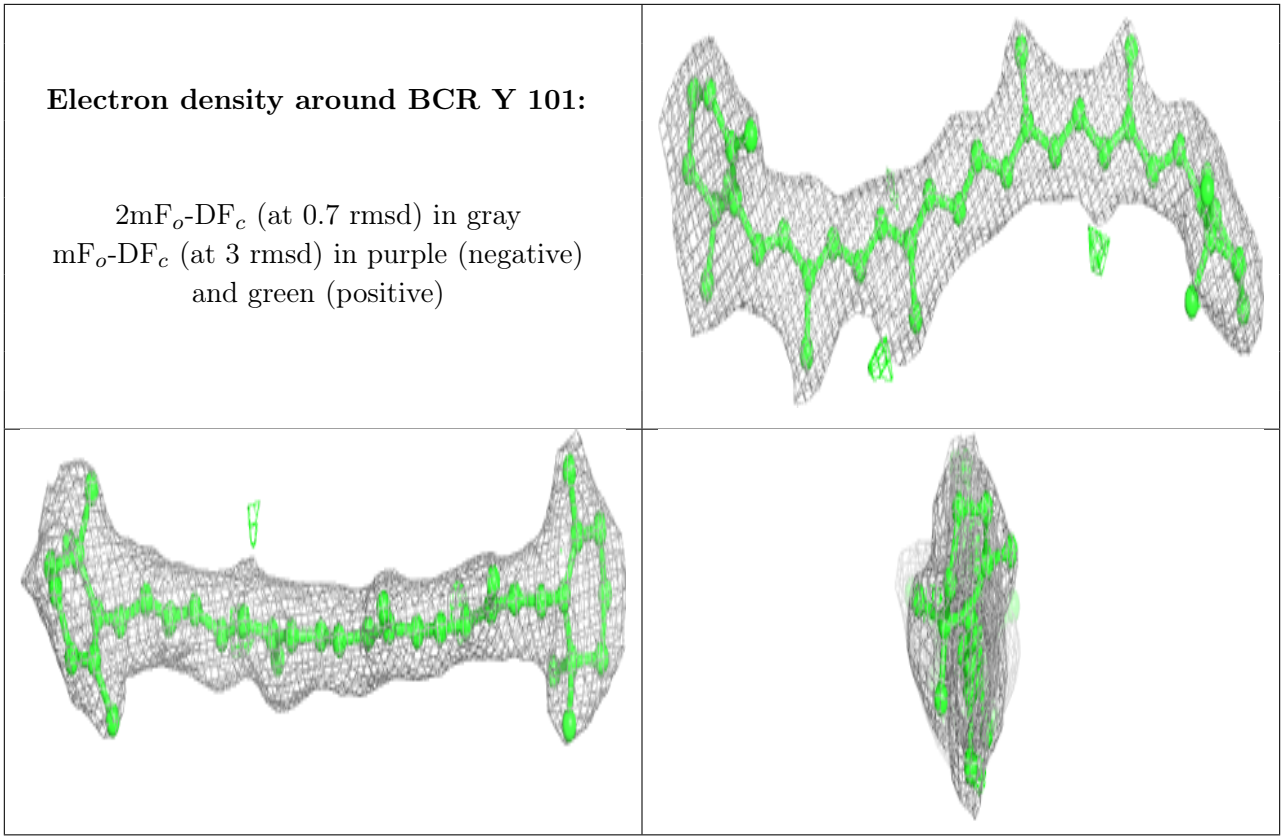






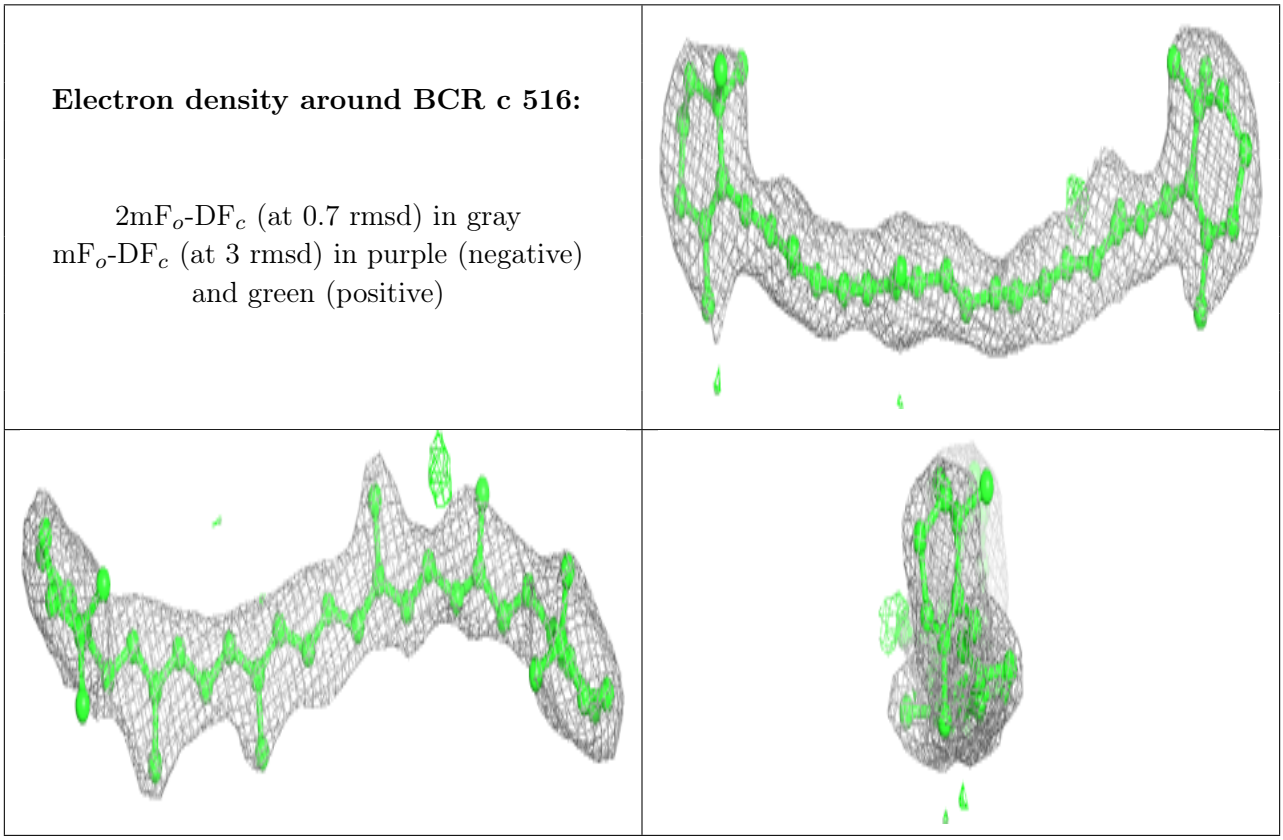
Electron density around BCR Y 101:

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



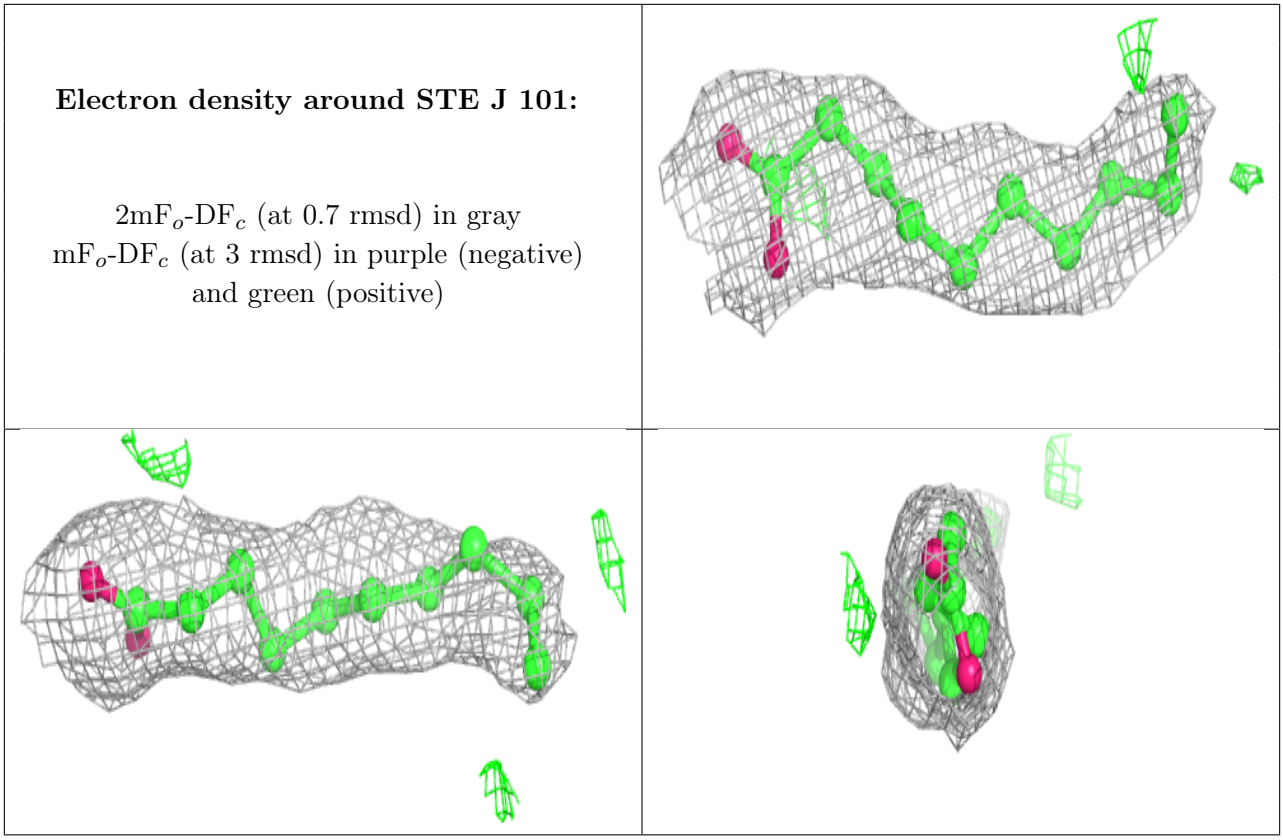
Electron density around BCR c 516:

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



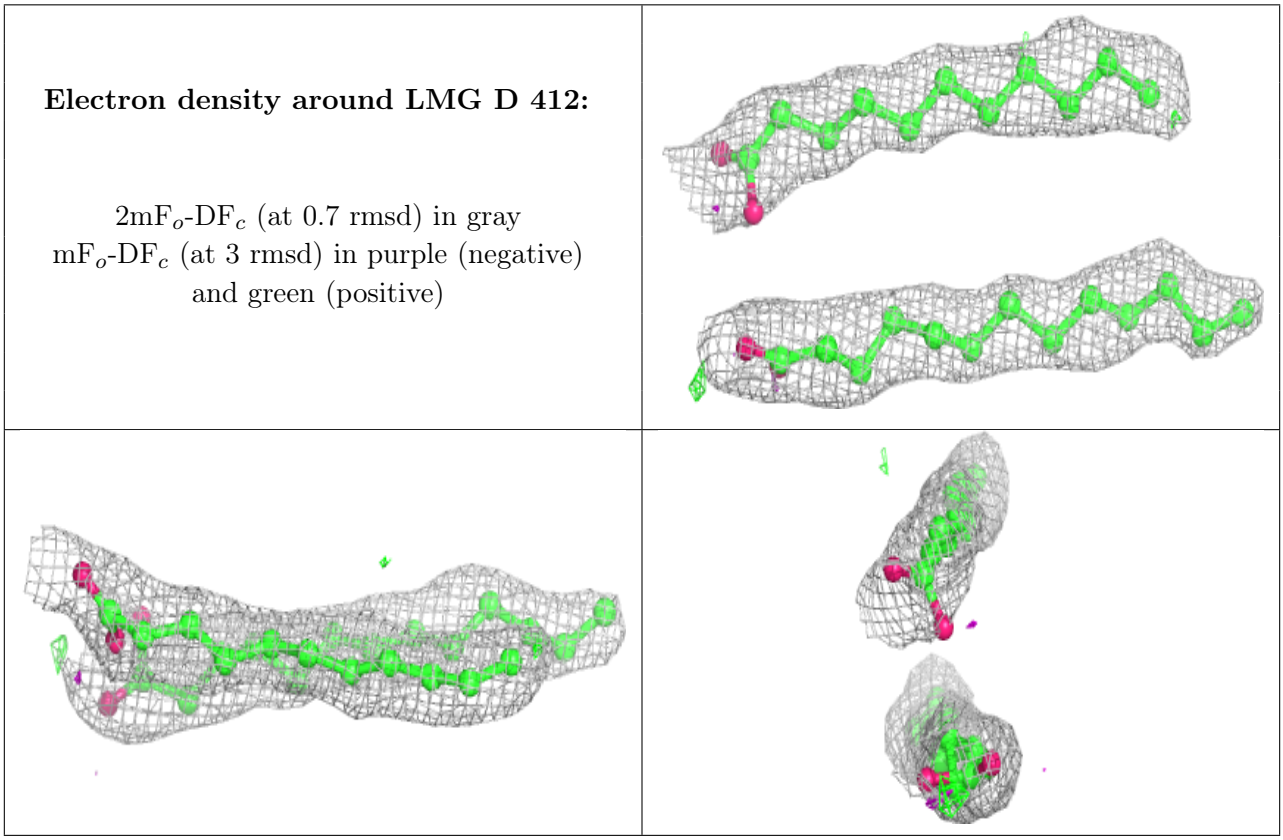
Electron density around STE J 101:

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



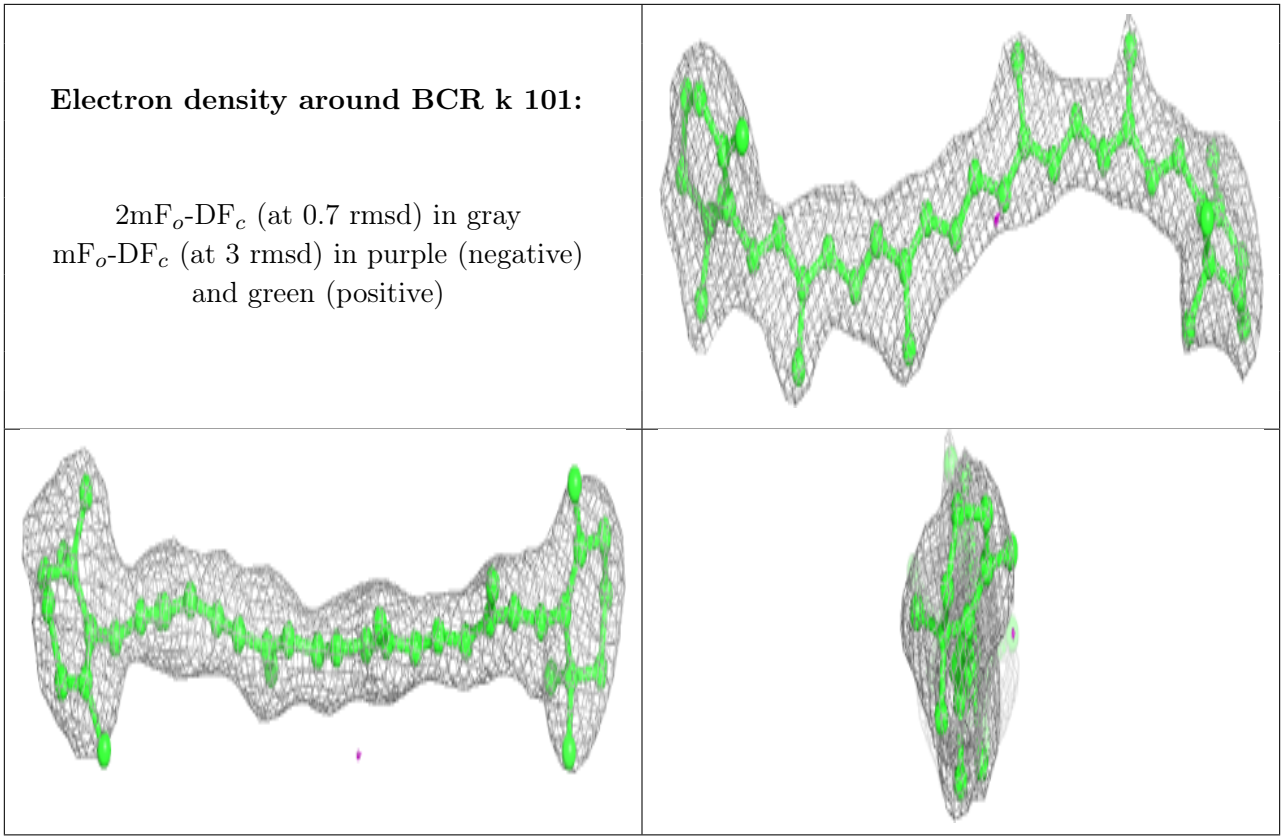
Electron density around LMG D 412:

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



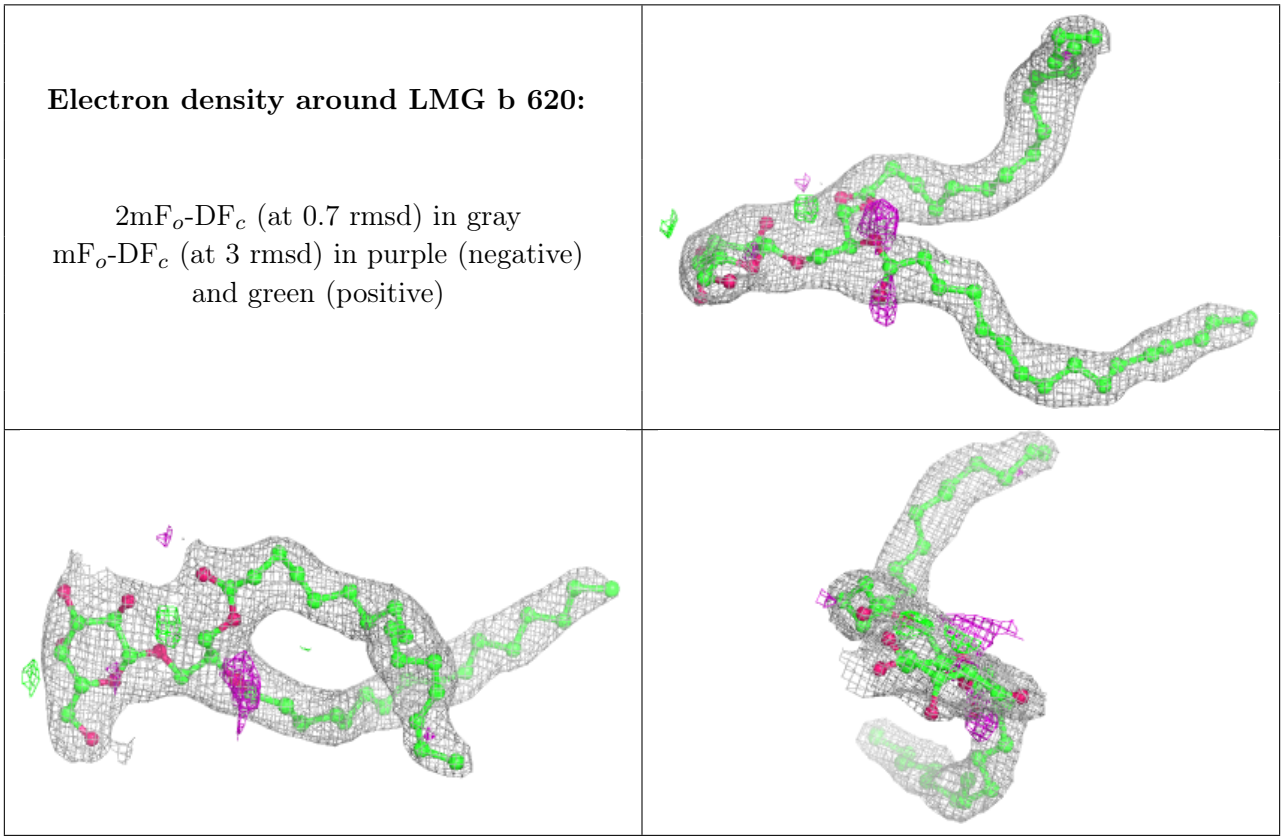
Electron density around BCR k 101:

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



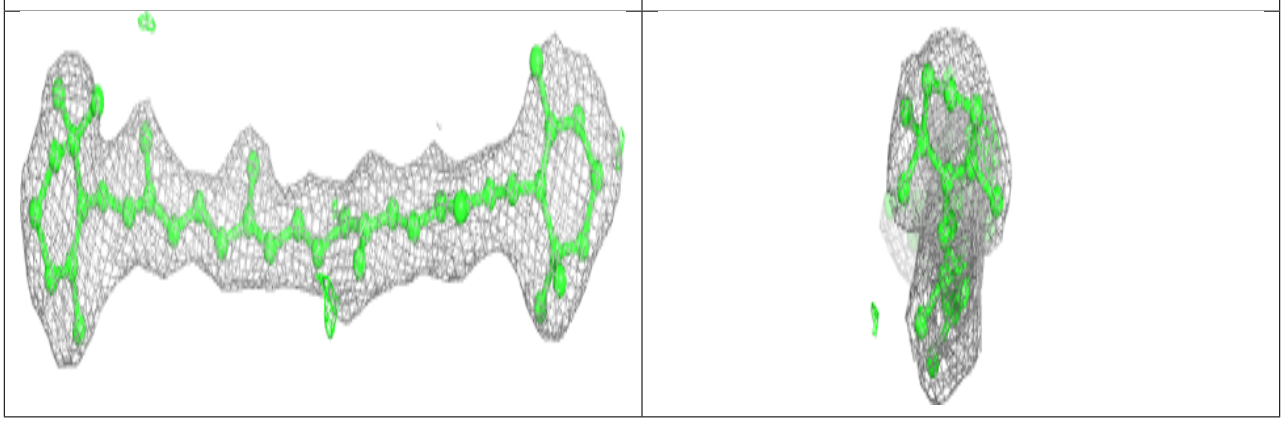
Electron density around LMG b 620:

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



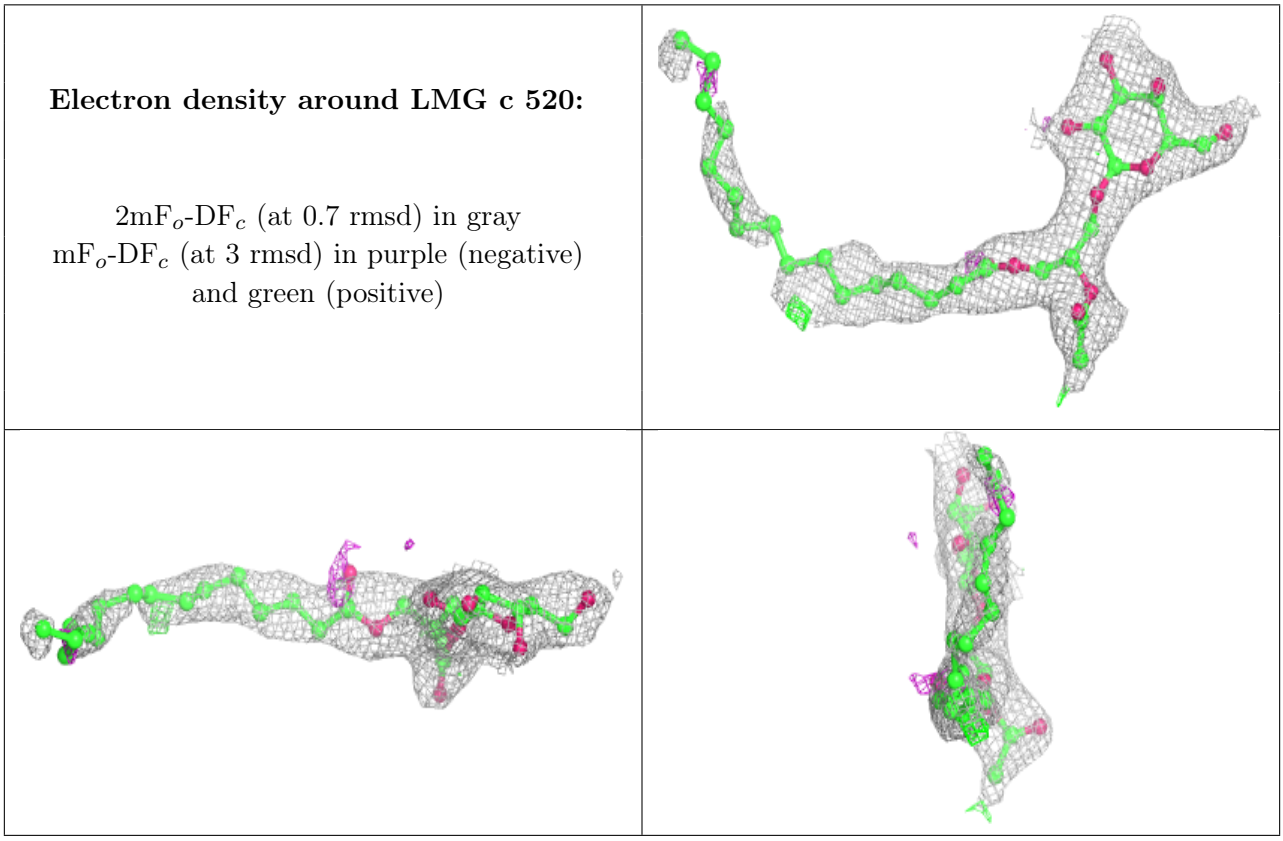
Electron density around BCR x 101:

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



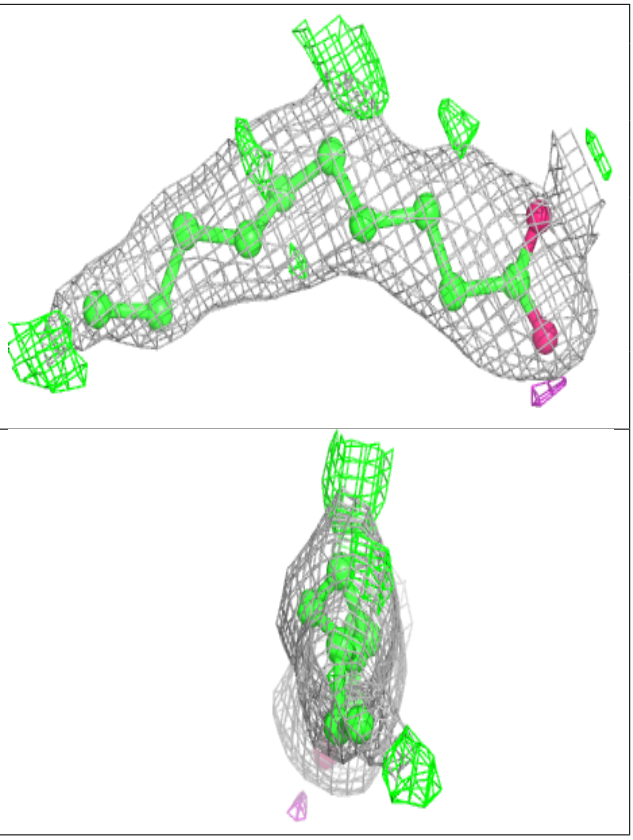
Electron density around LMG c 520:

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



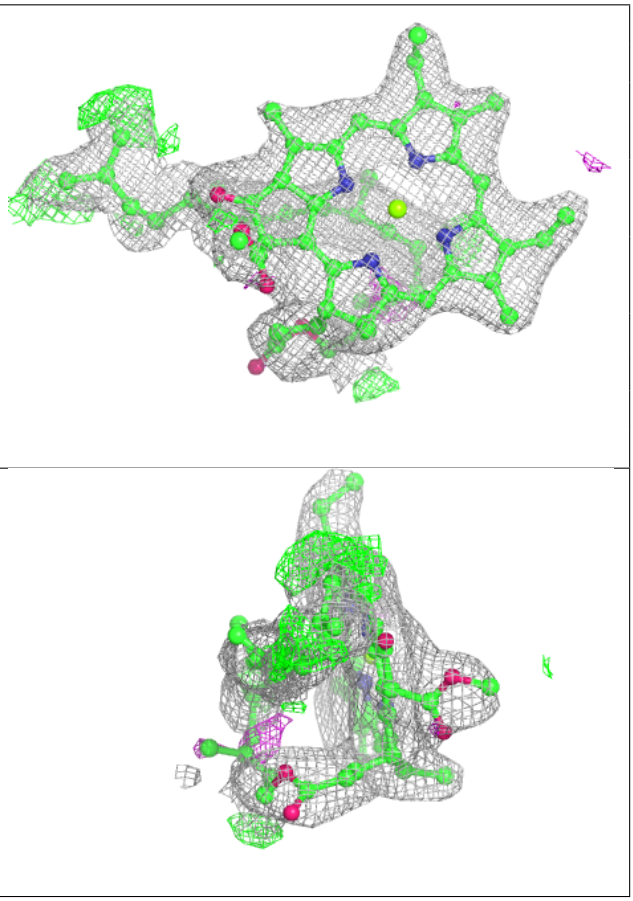
Electron density around STE C 520:

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



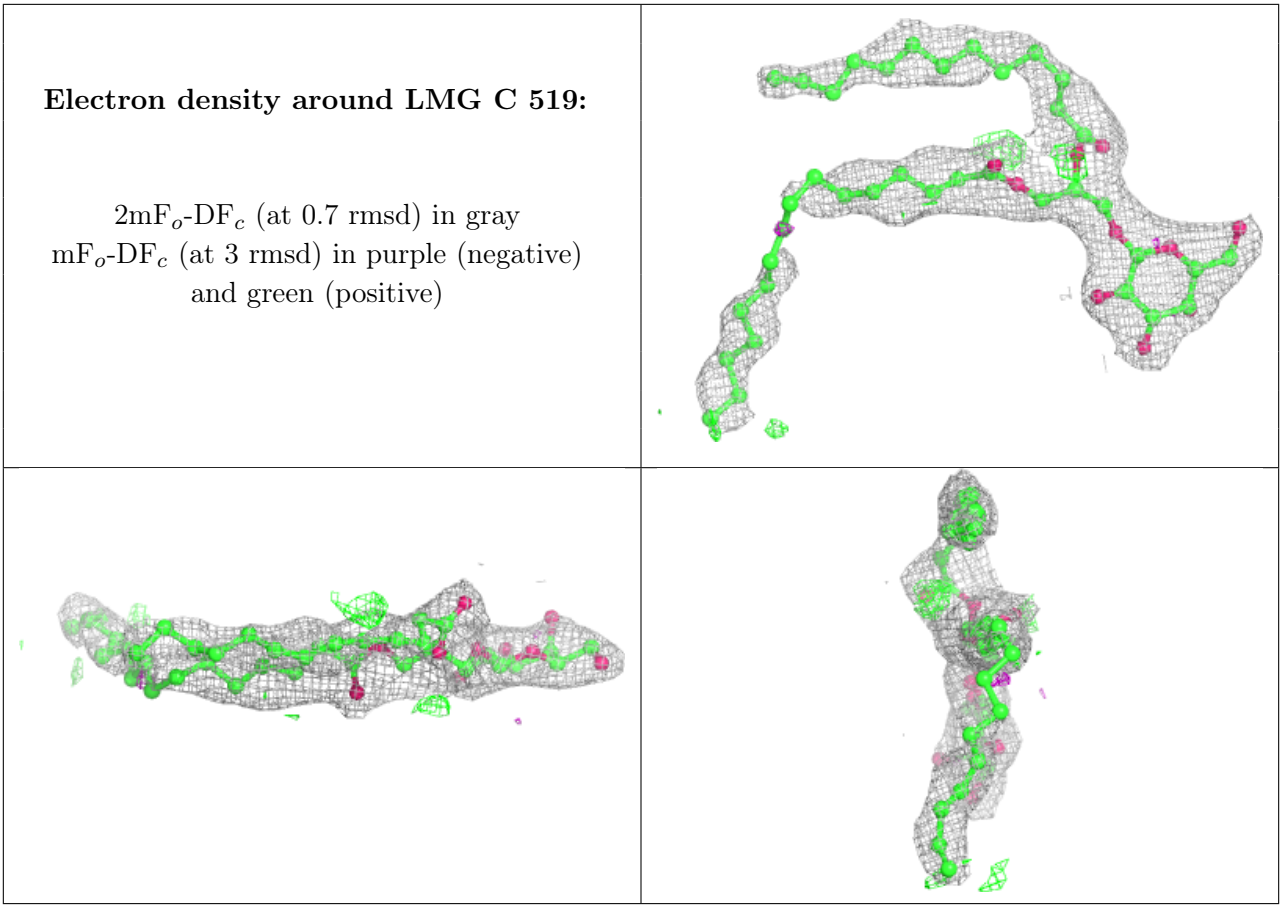
Electron density around CLA H 101:

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



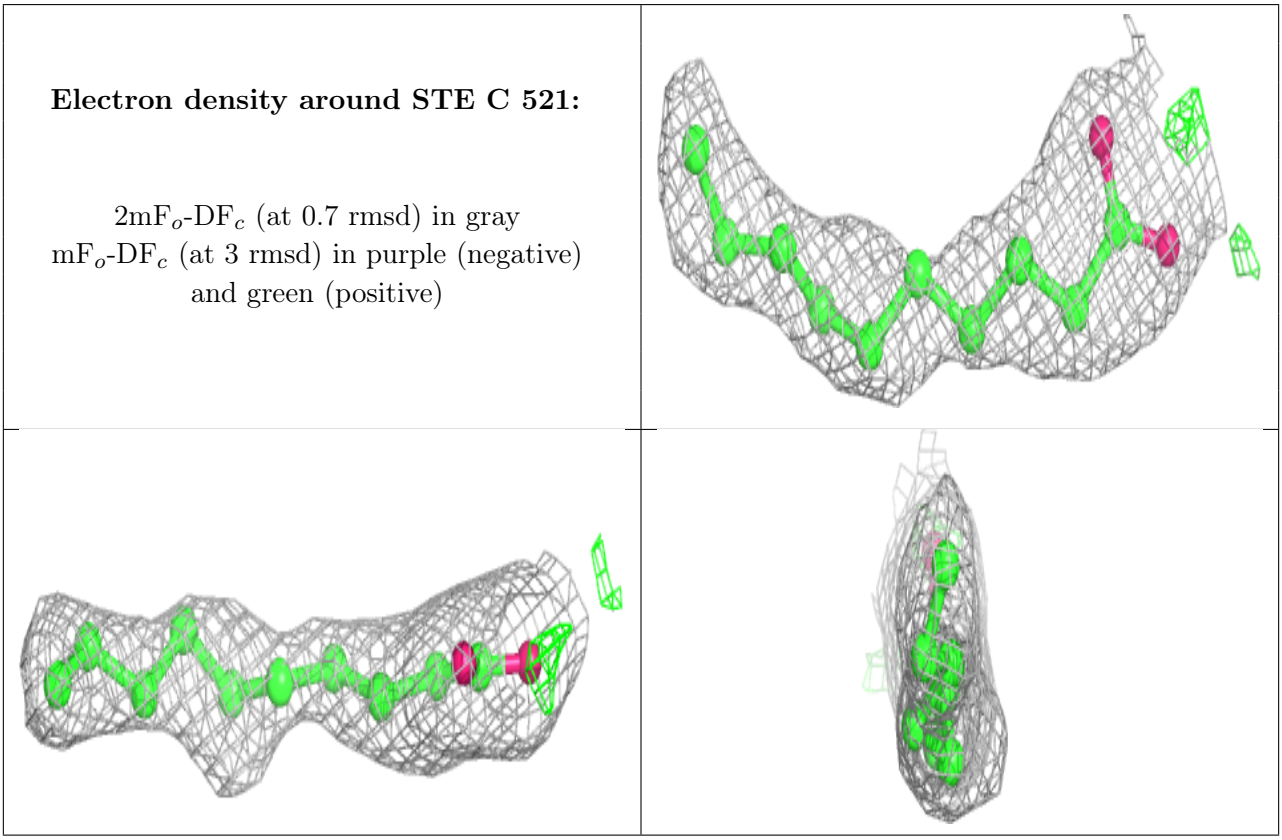
Electron density around LMG C 519:

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



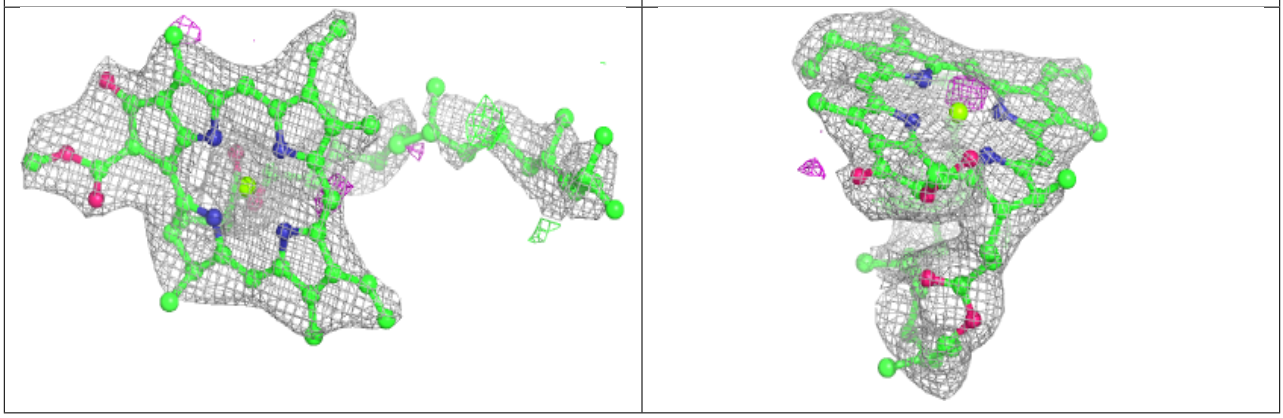
Electron density around STE C 521:

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



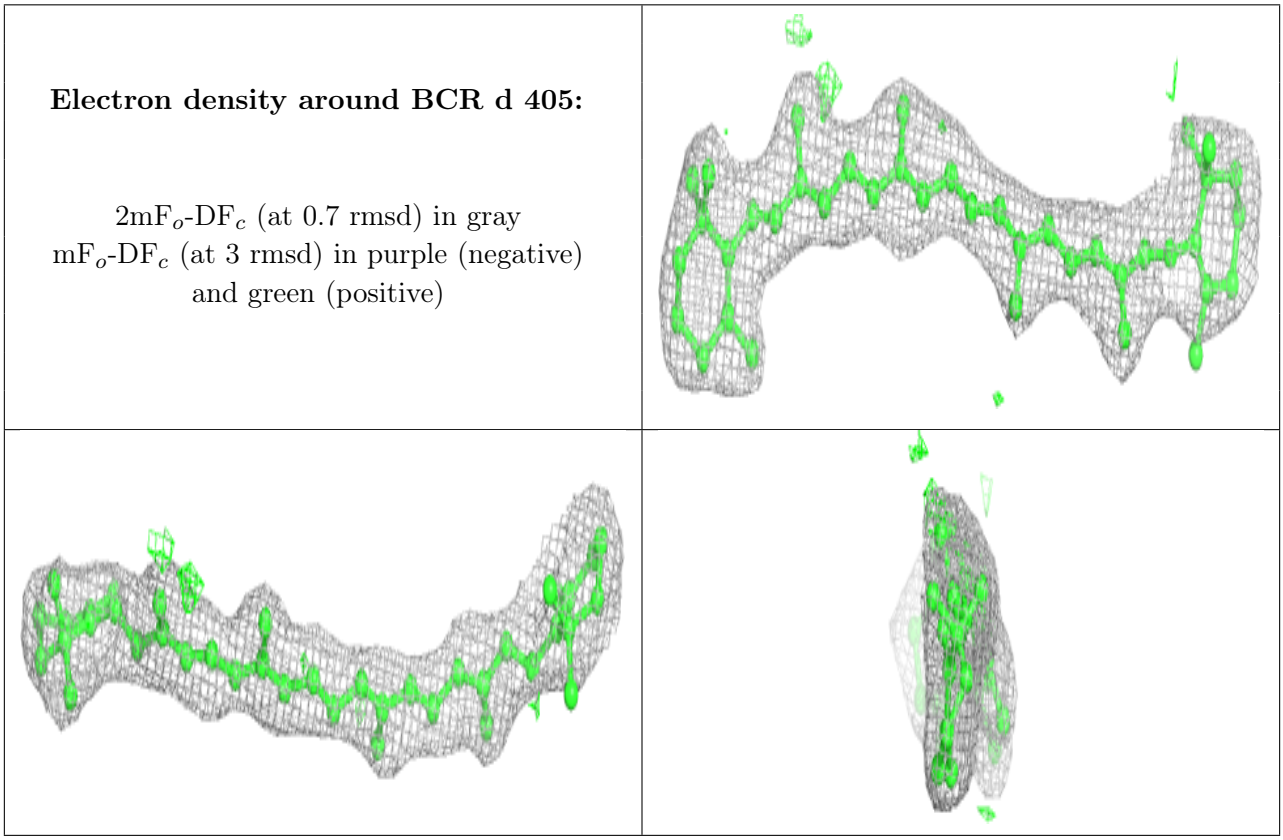
Electron density around CLA c 513:

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



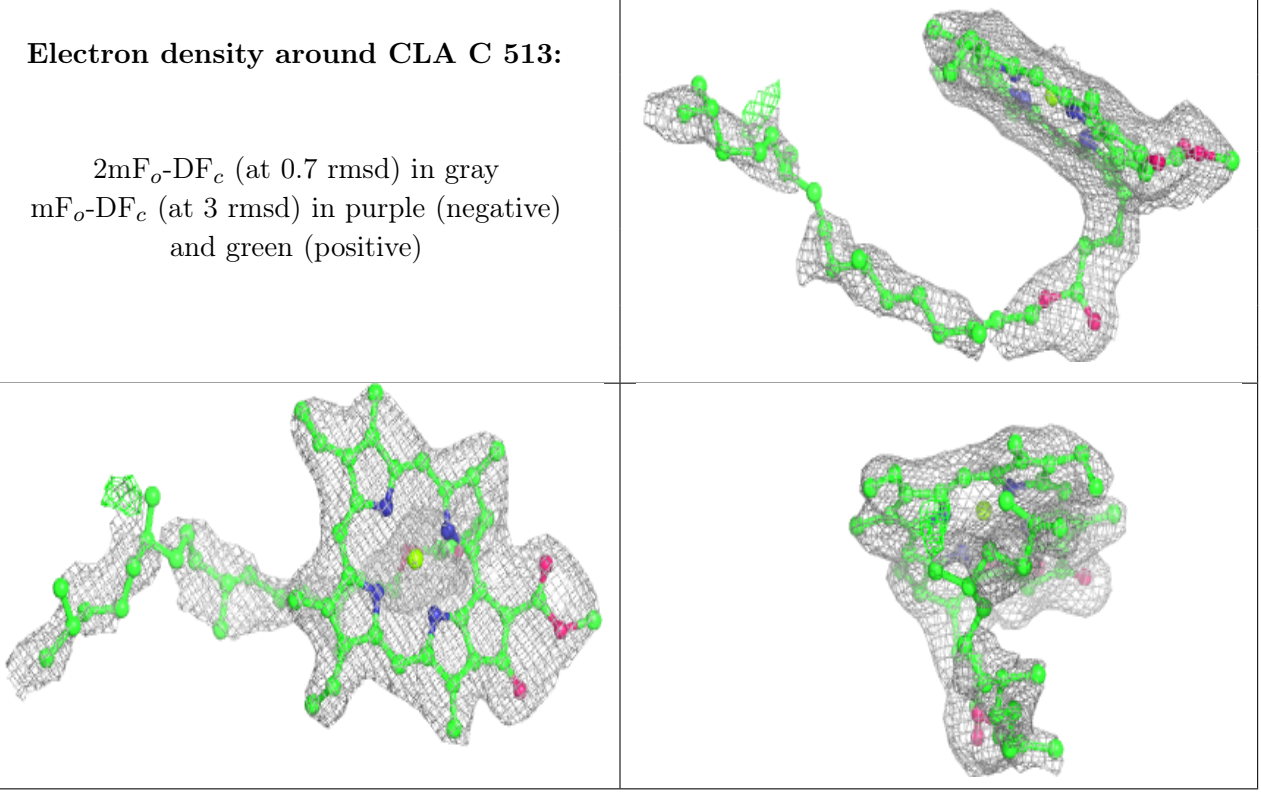
Electron density around BCR d 405:

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



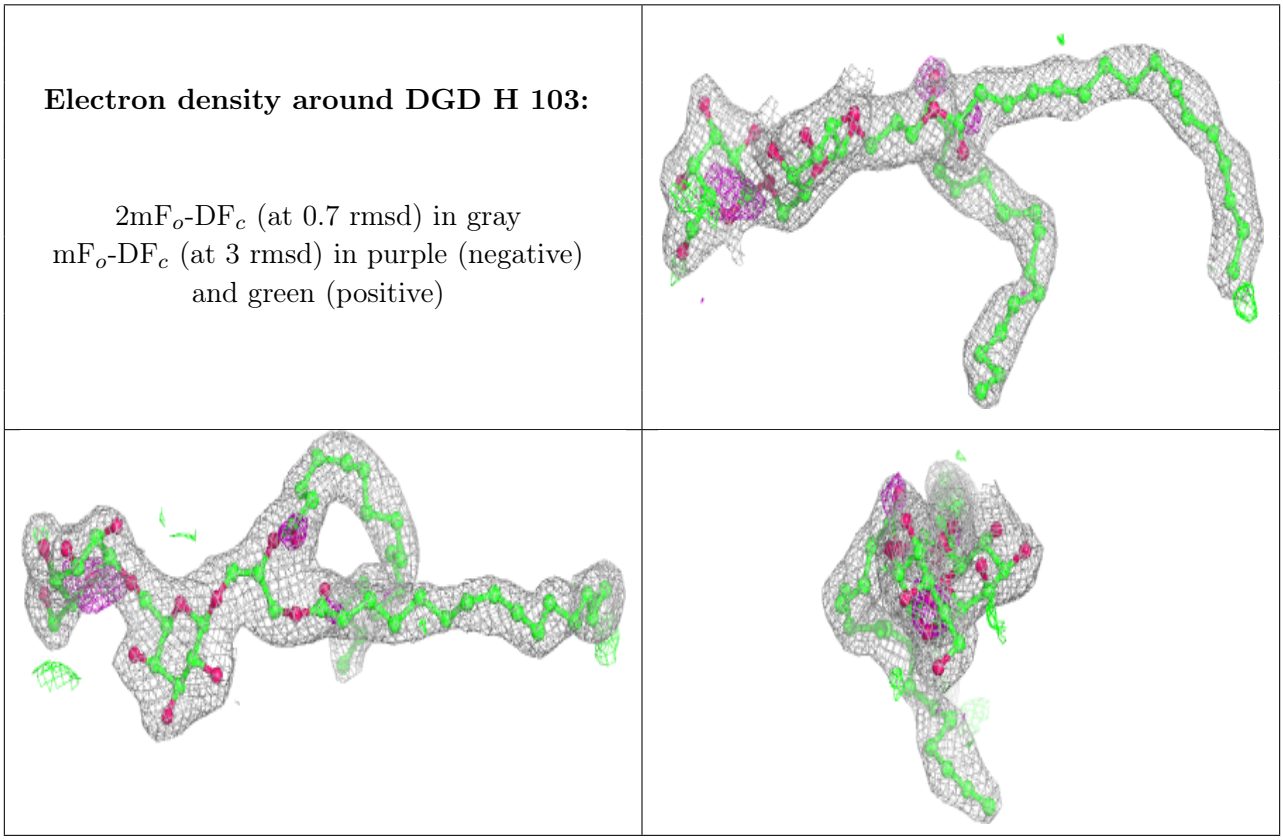
Electron density around CLA C 513:

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



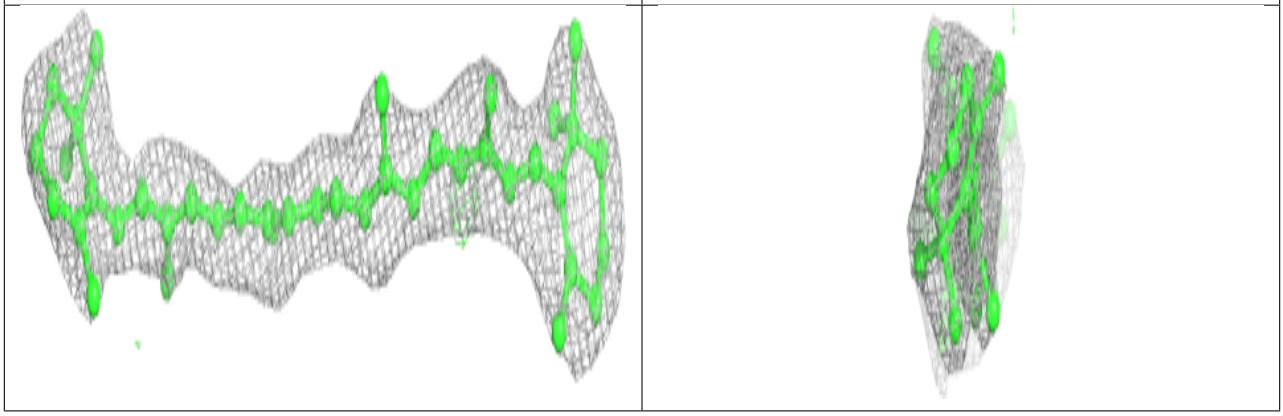
Electron density around DGD H 103:

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



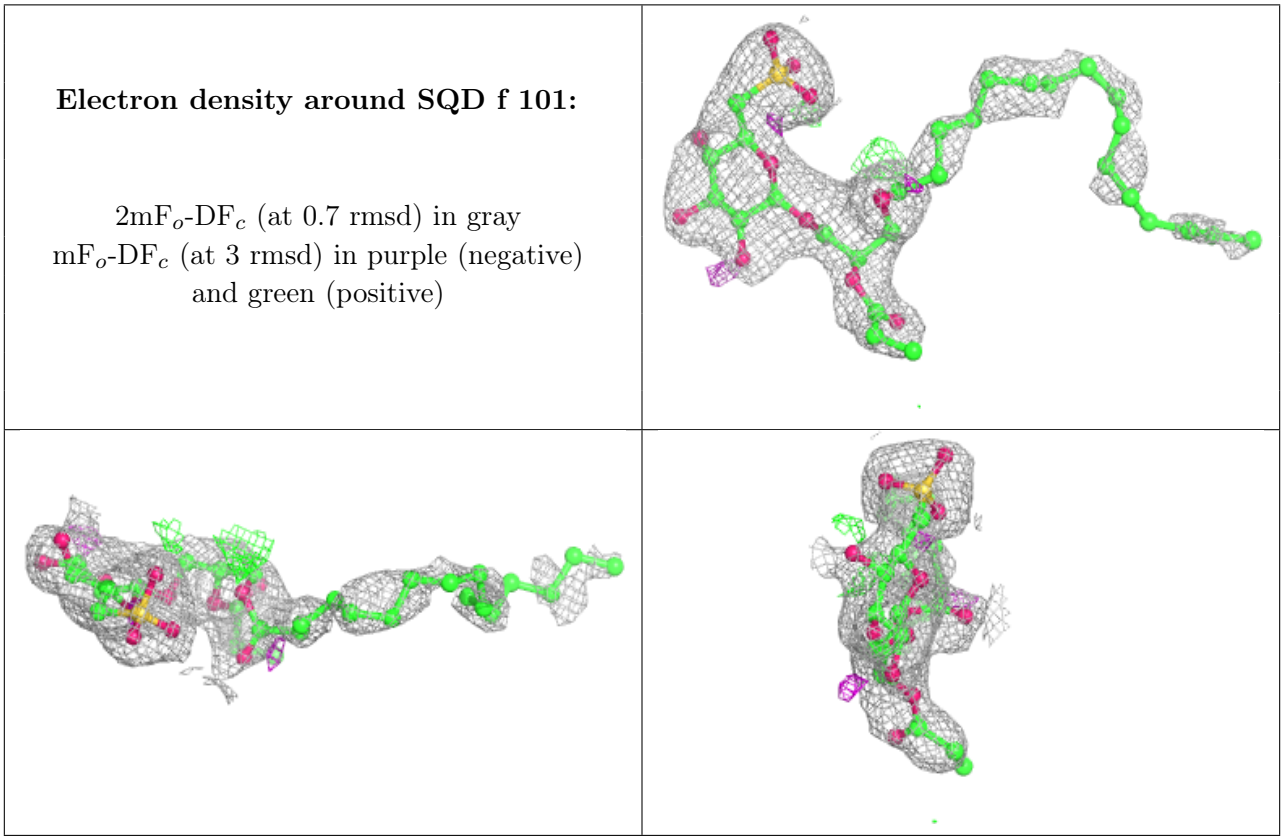
Electron density around BCR c 514:

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



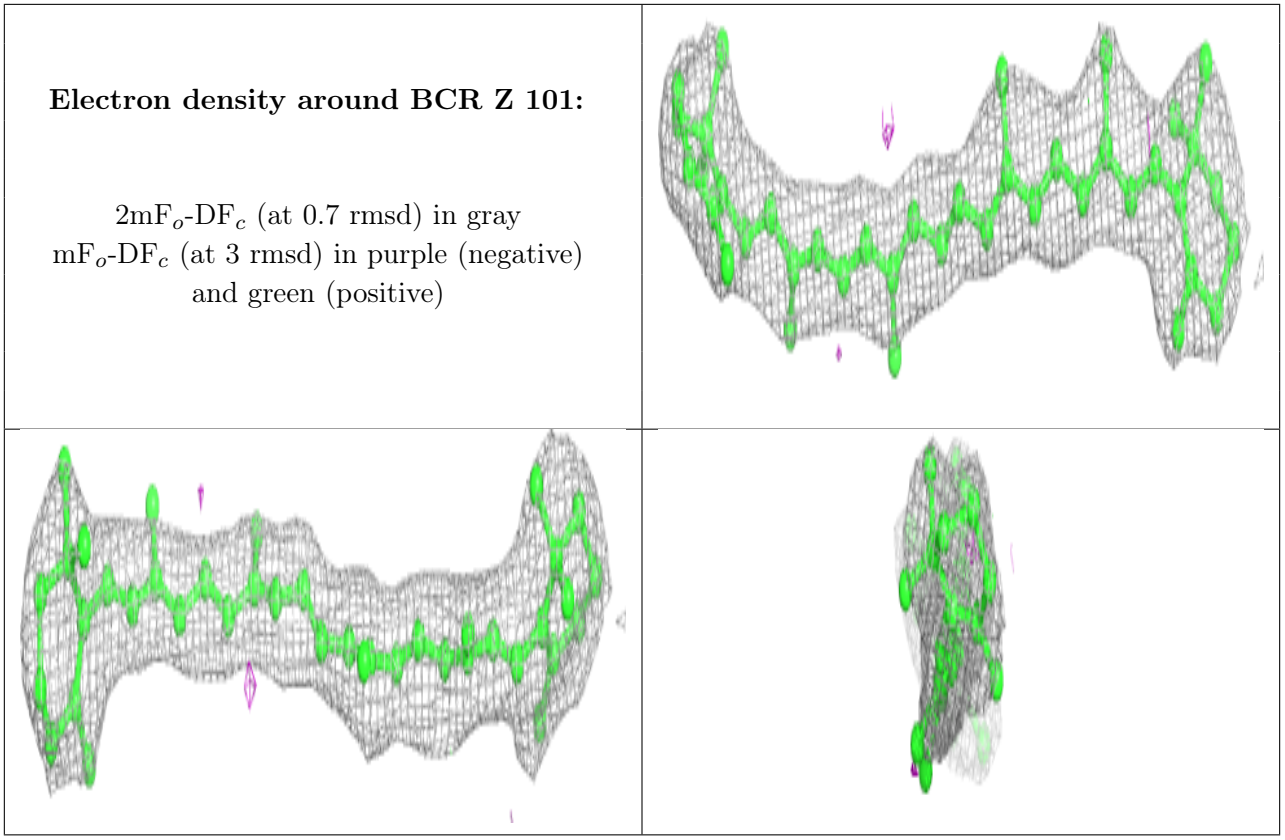
Electron density around SQD f 101:

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



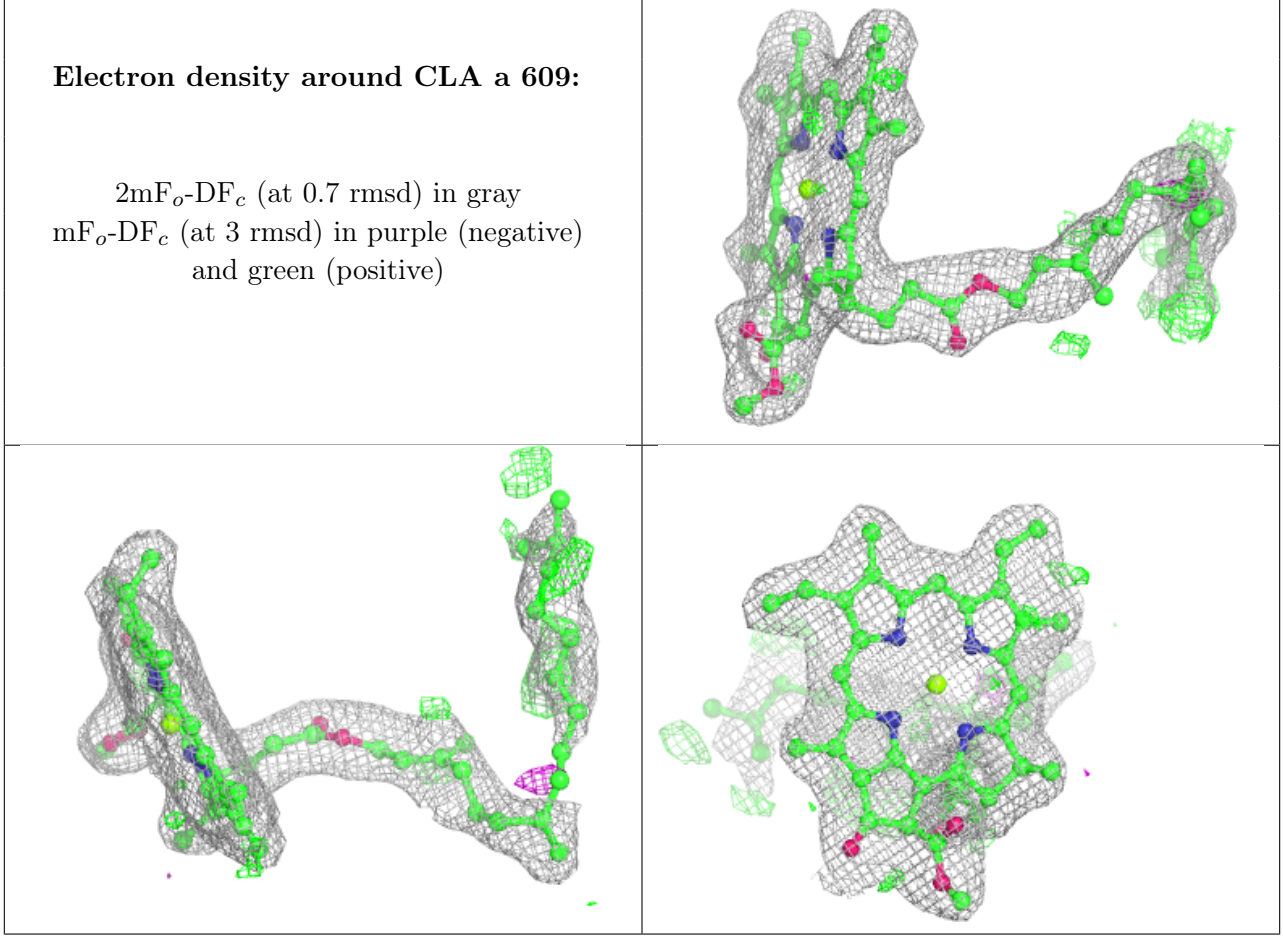
Electron density around BCR Z 101:

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



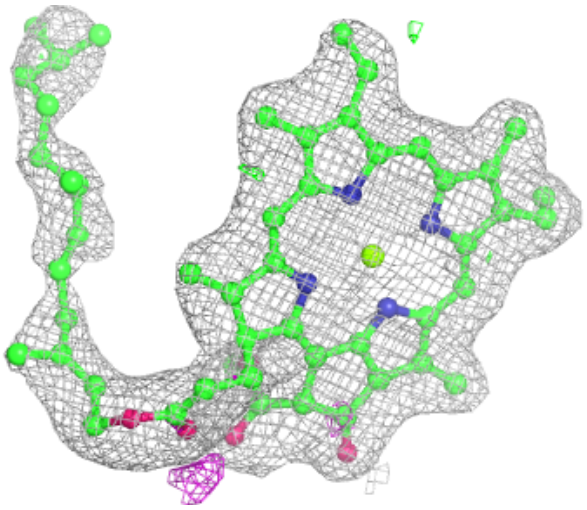
Electron density around CLA a 609:

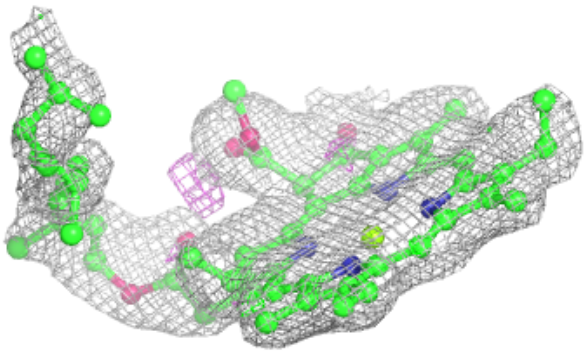
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

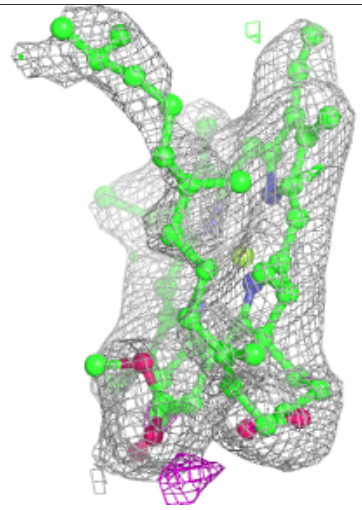


Electron density around CLA b 615:

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

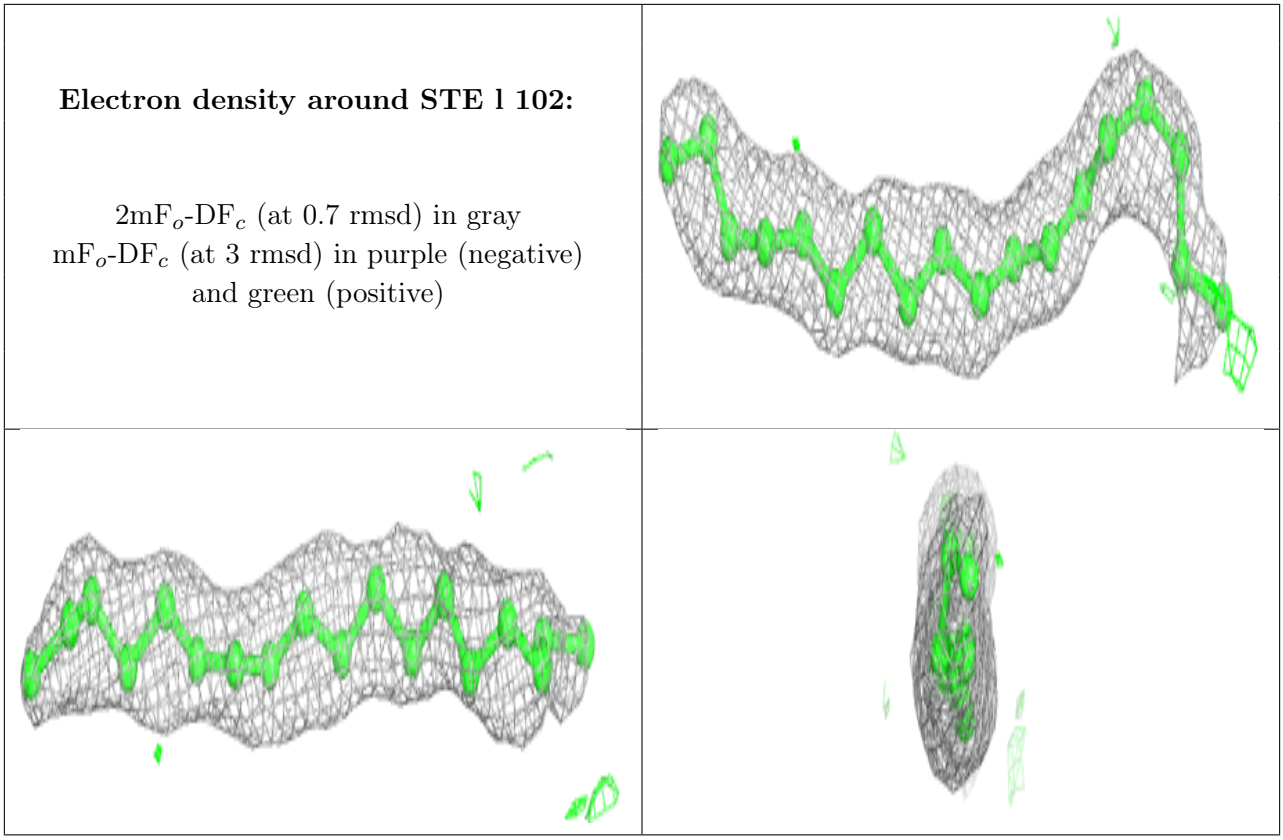






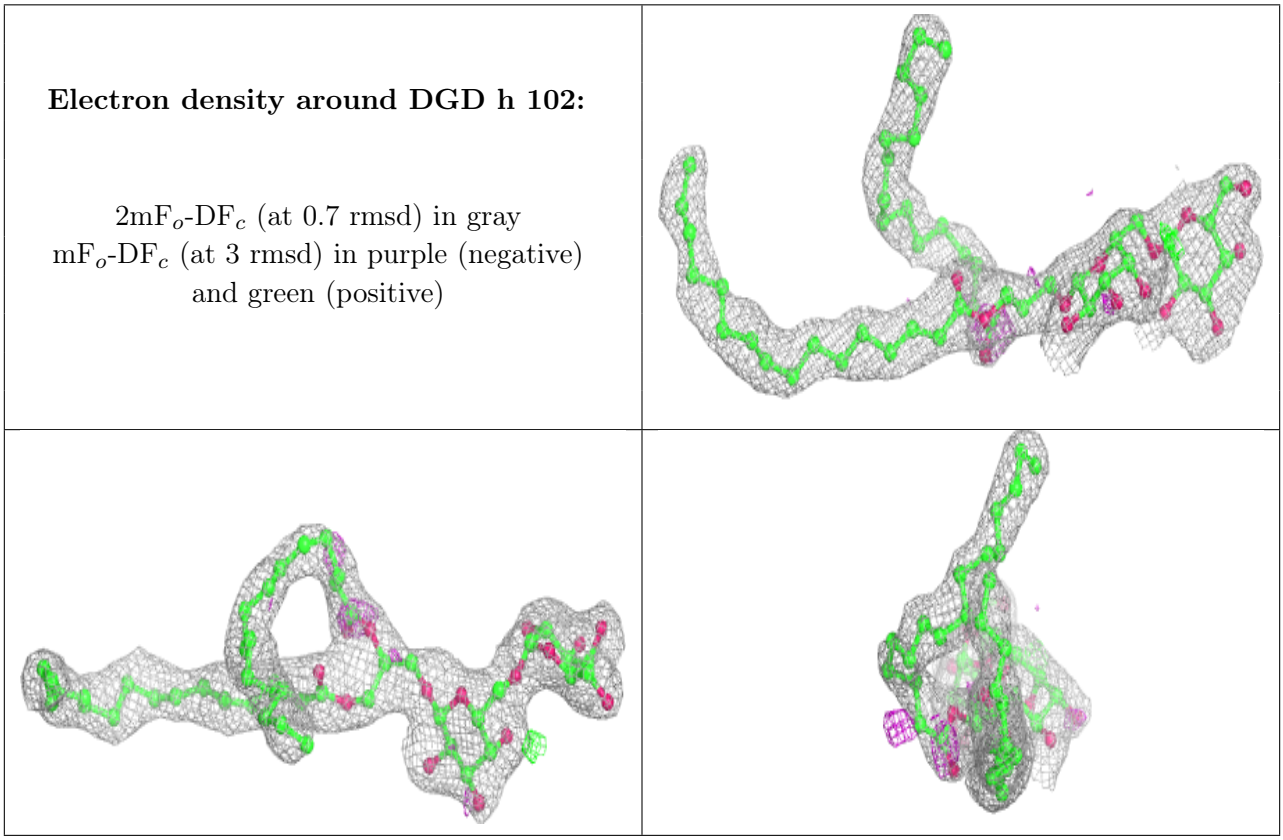
Electron density around STE l 102:

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



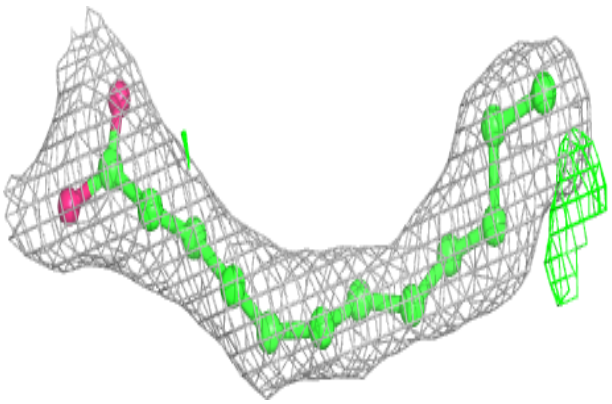
Electron density around DGD h 102:

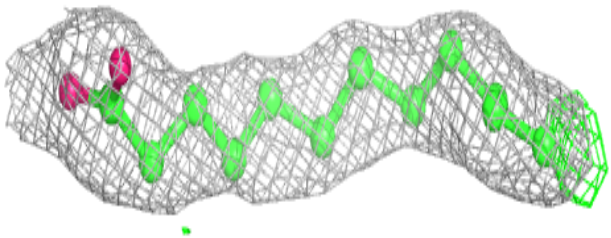
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

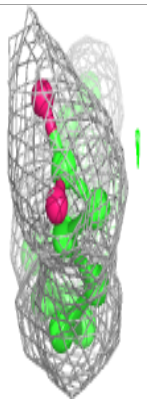


Electron density around STE t 102:

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

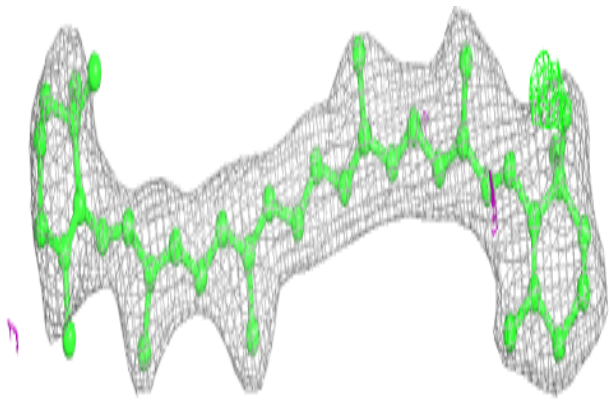


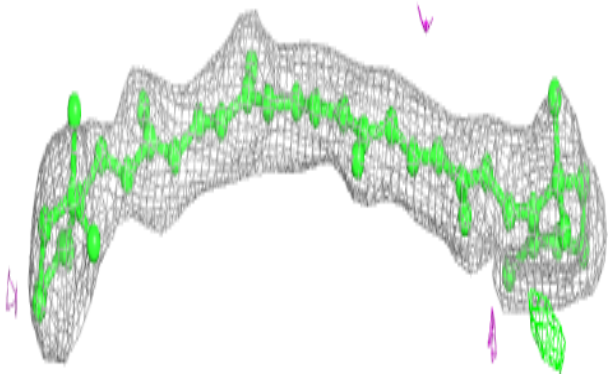


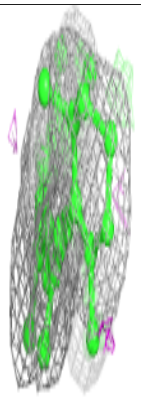


Electron density around BCR D 405:

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

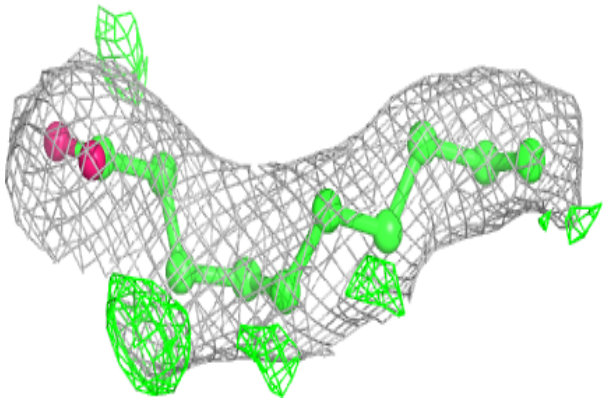


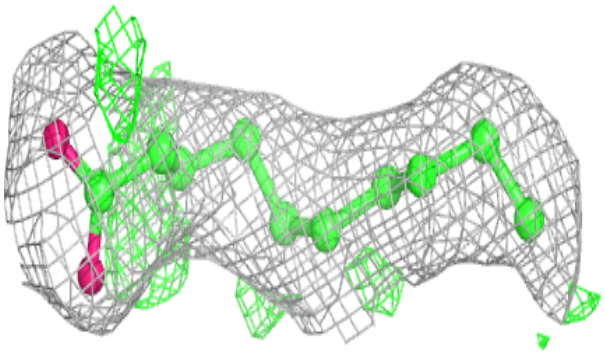


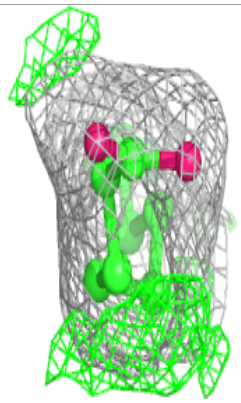


Electron density around STE B 622:

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

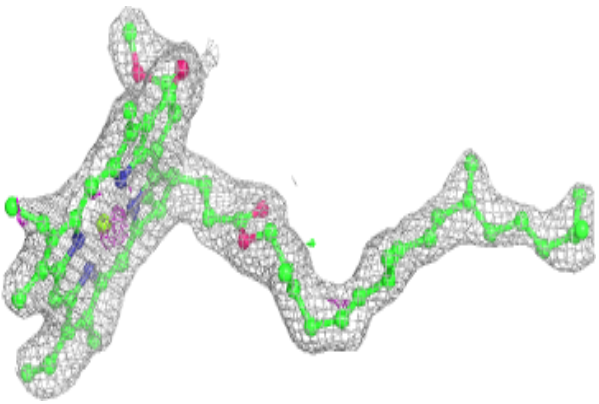


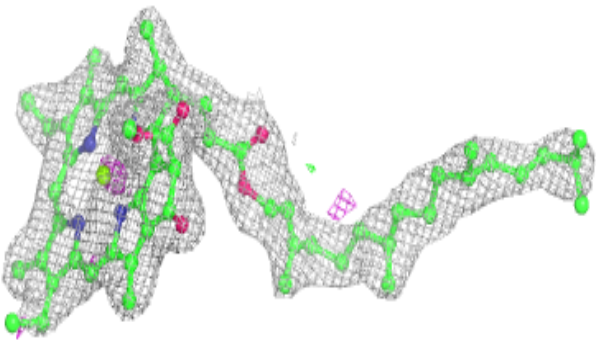


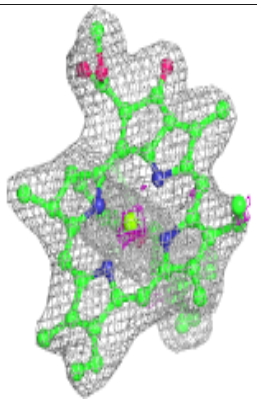


Electron density around CLA c 502:

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

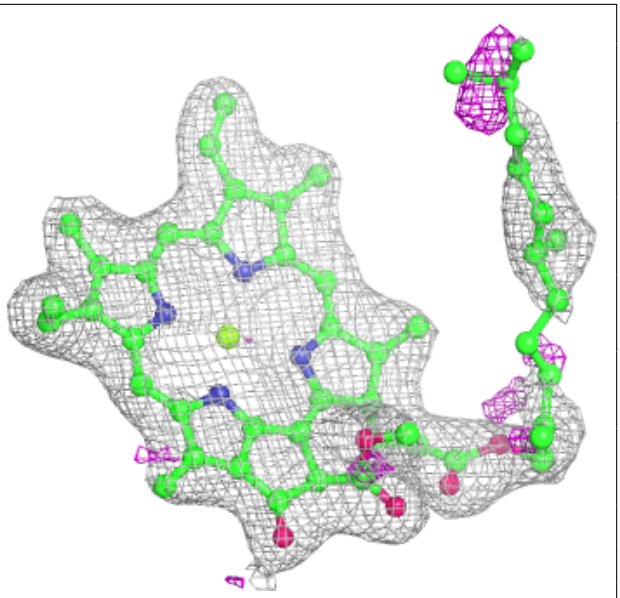


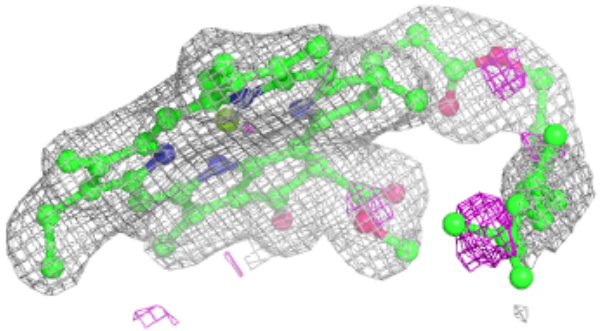


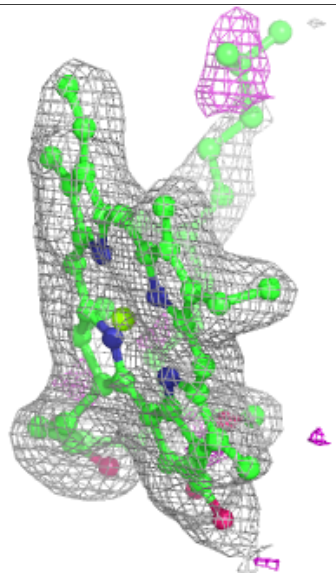


Electron density around CLA B 615:

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

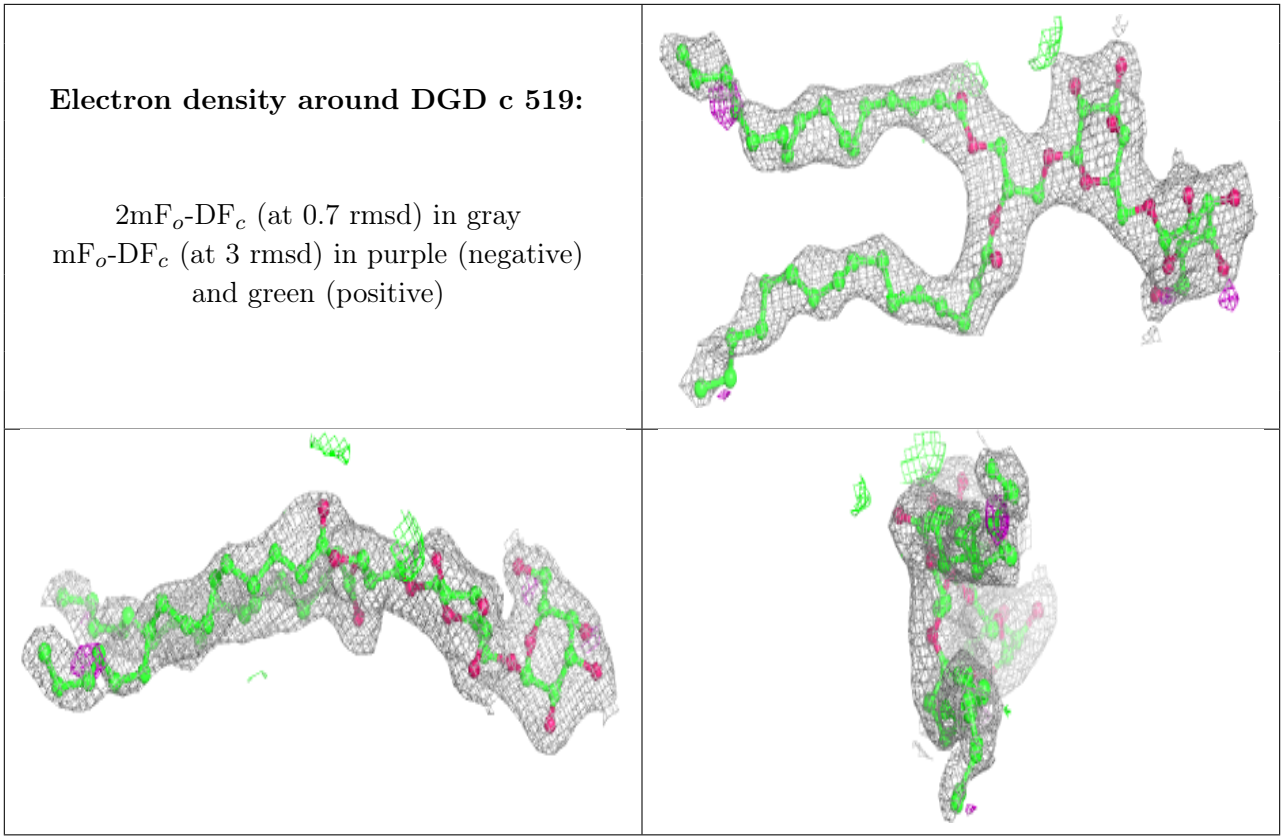






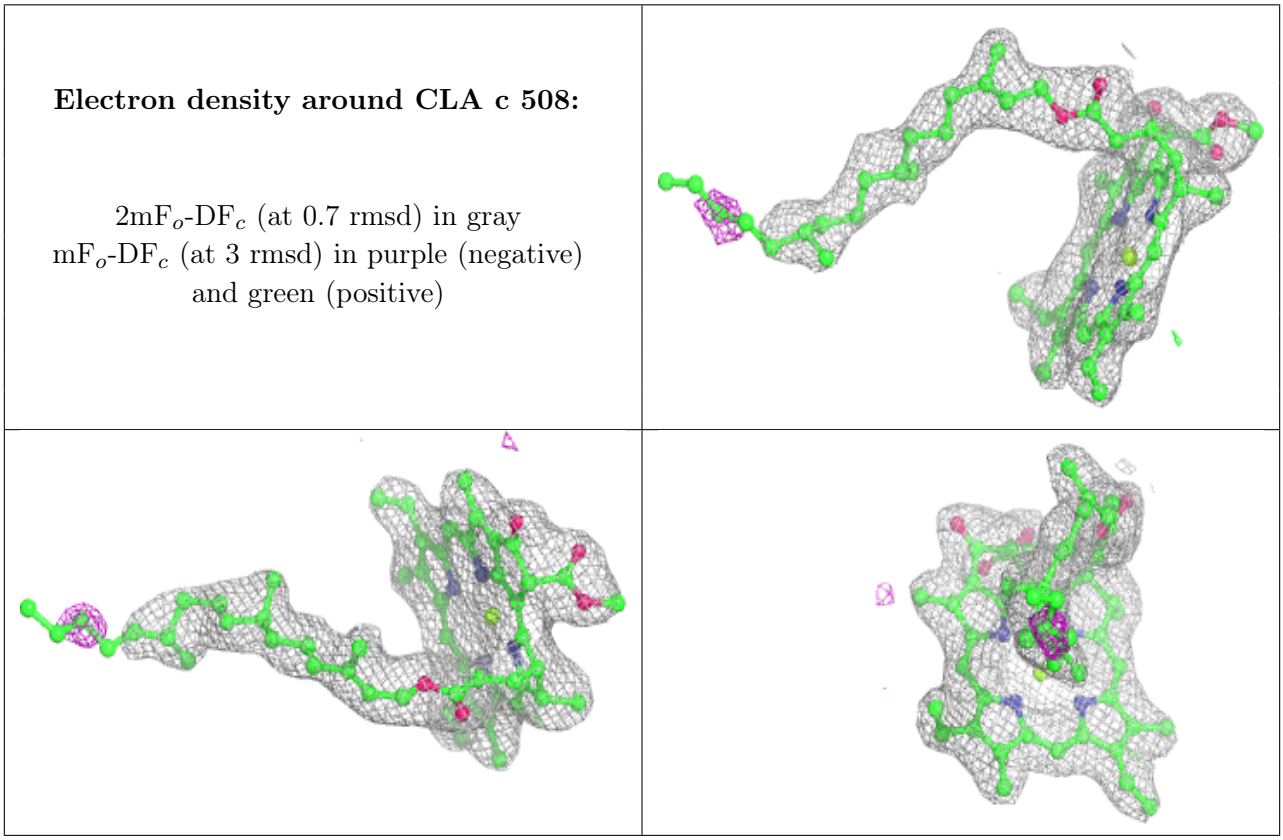
Electron density around DGD c 519:

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



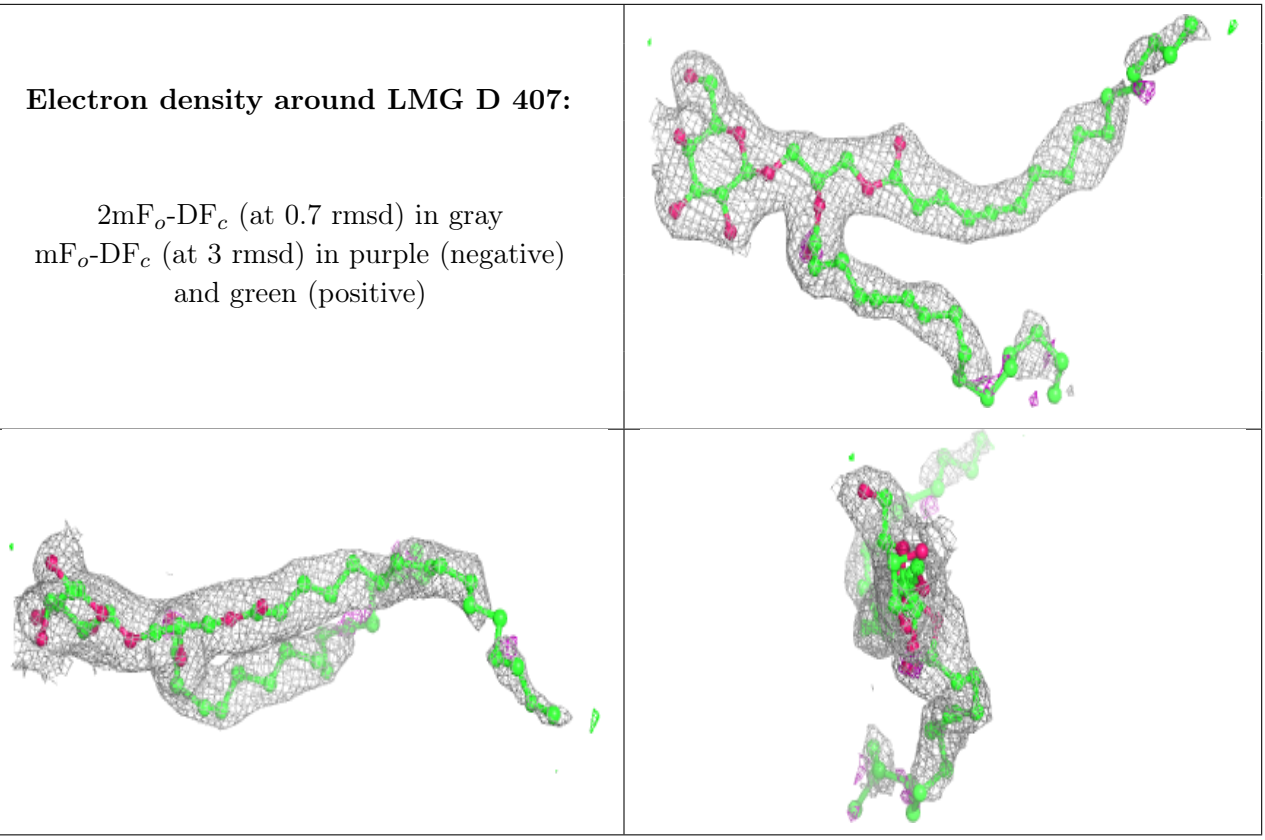
Electron density around CLA c 508:

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



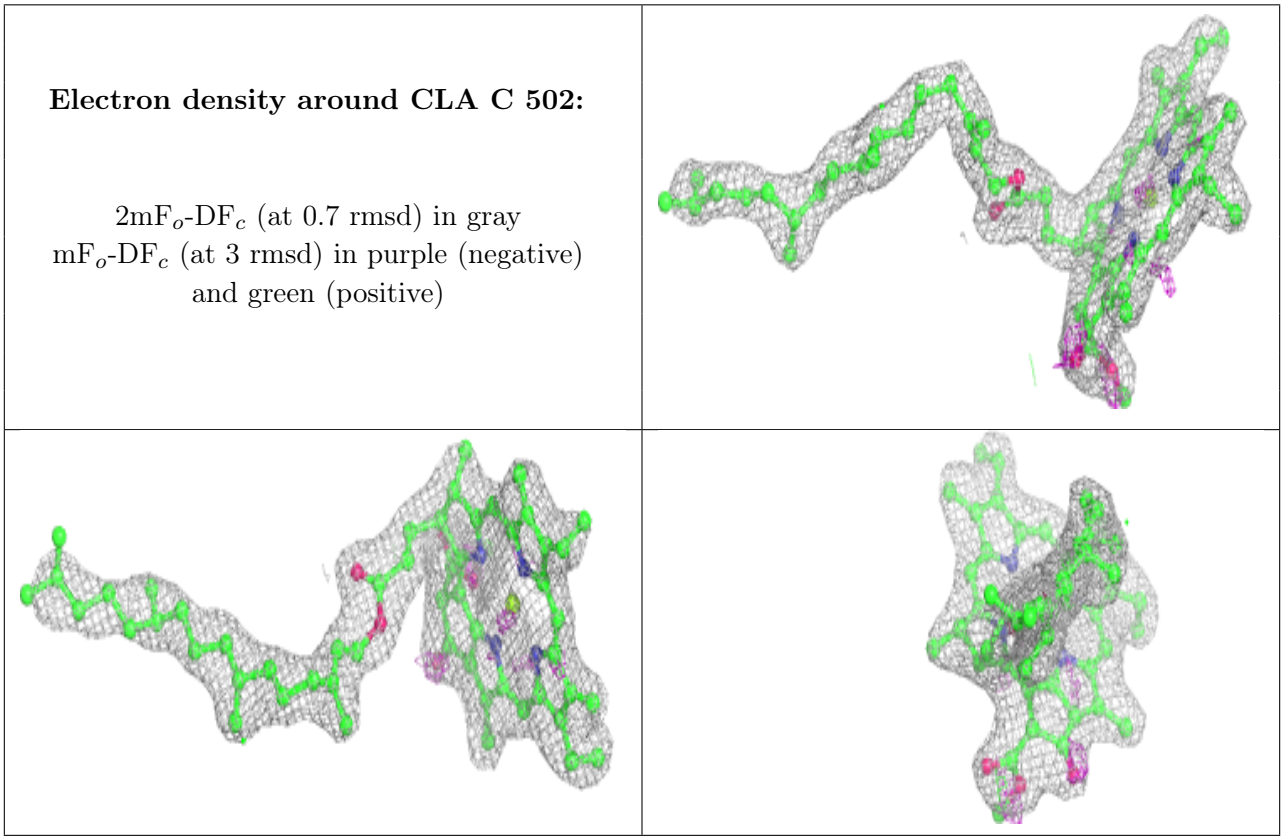
Electron density around LMG D 407:

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



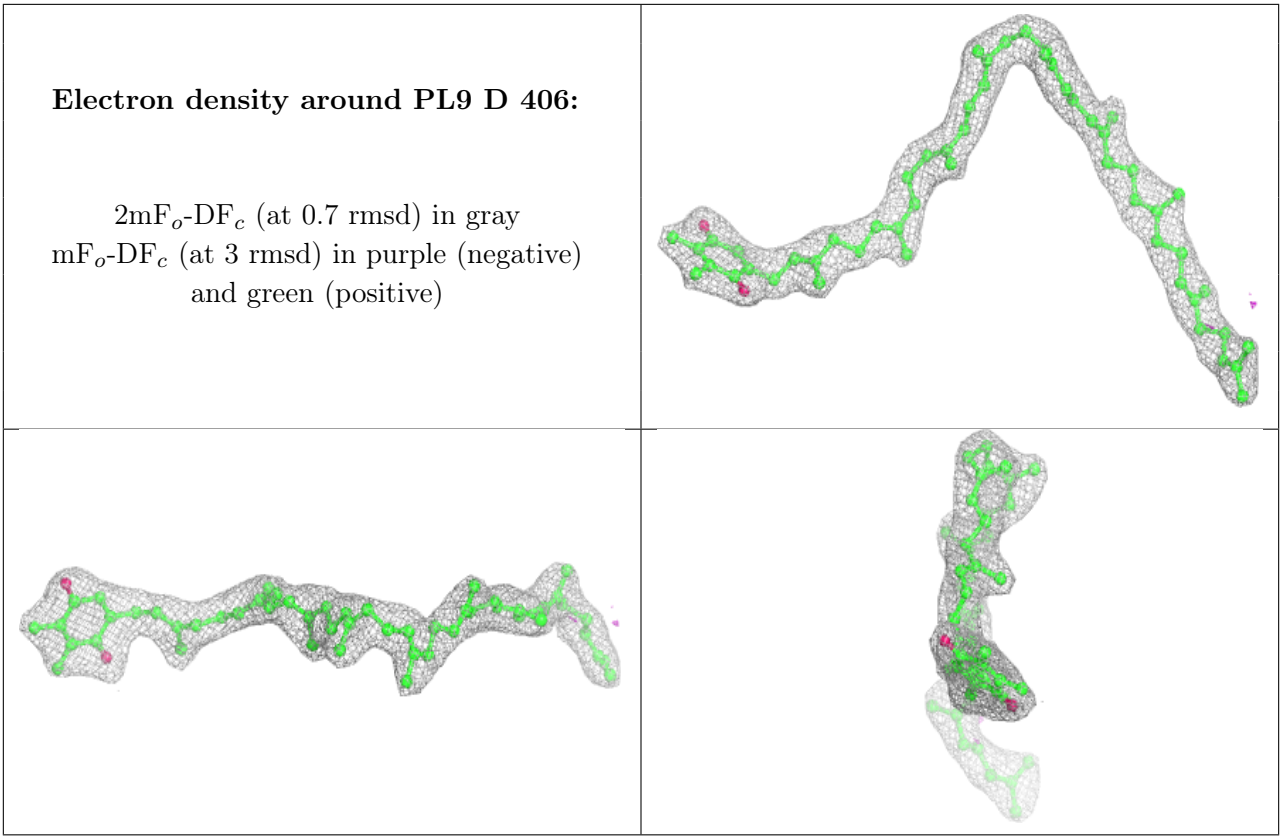
Electron density around CLA C 502:

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



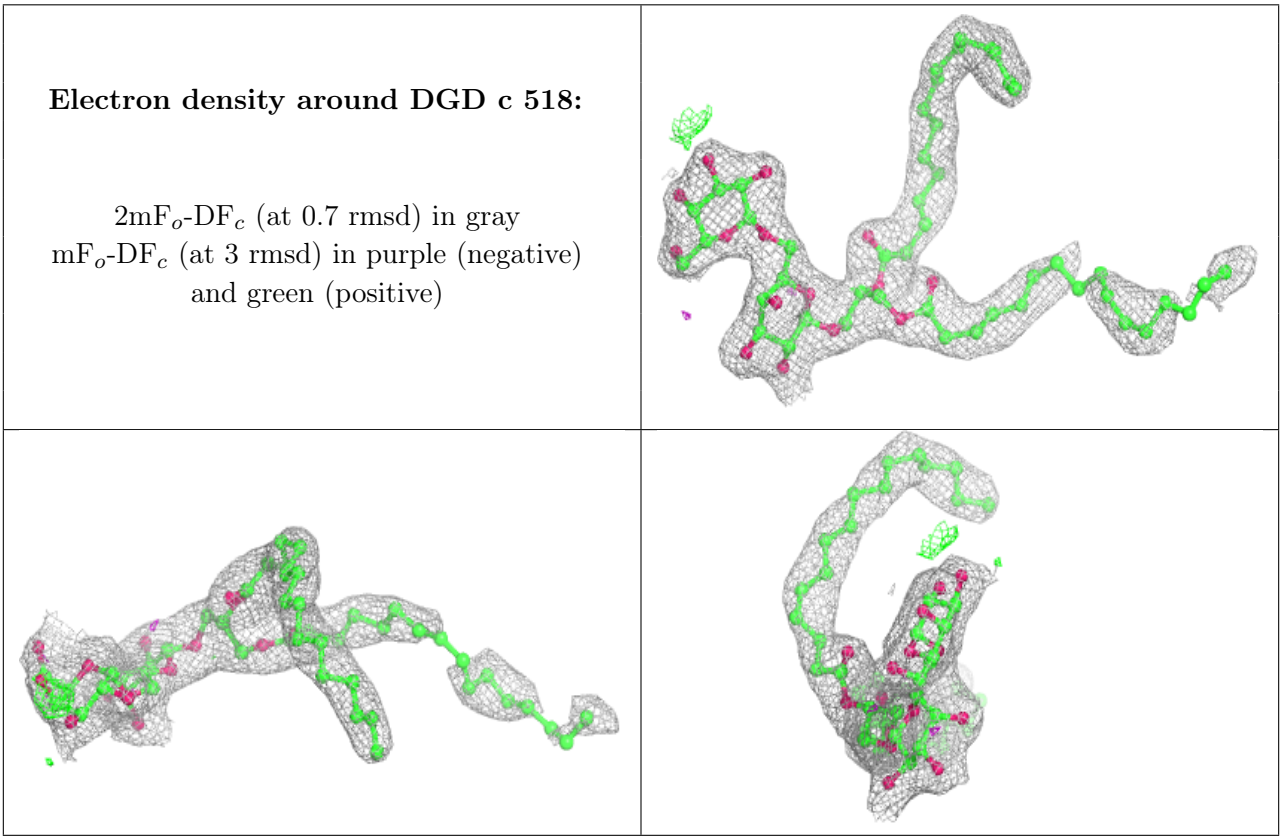
Electron density around PL9 D 406:

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



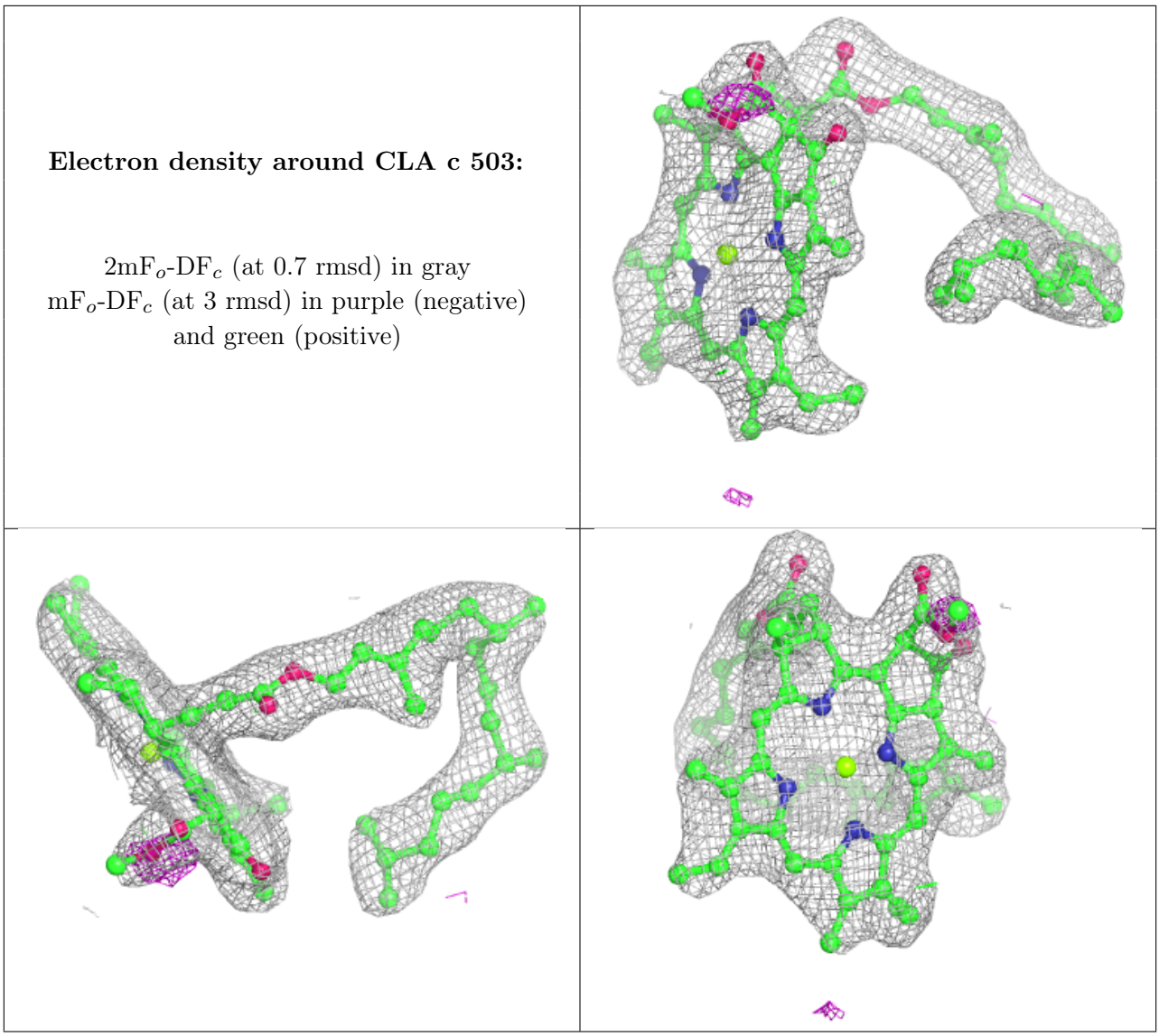
Electron density around DGD c 518:

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



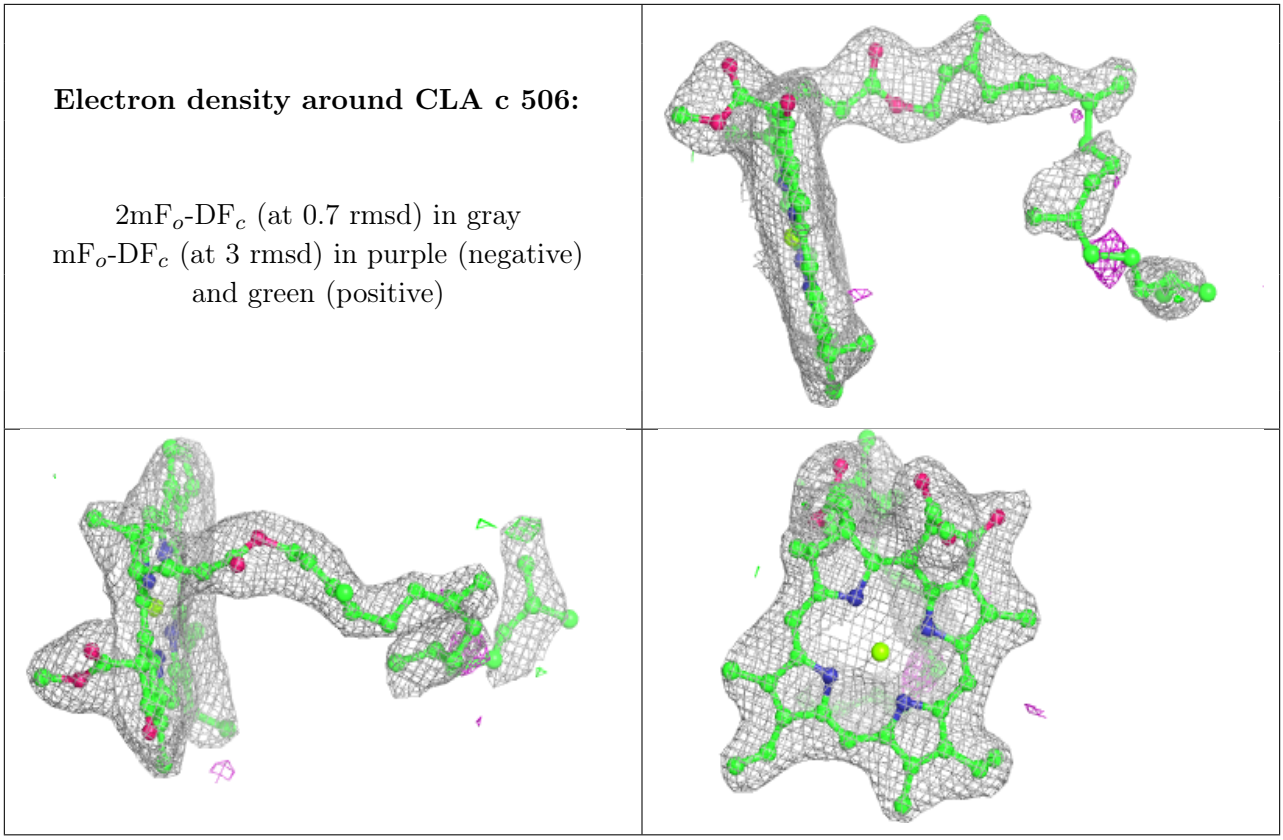
Electron density around CLA c 503:

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



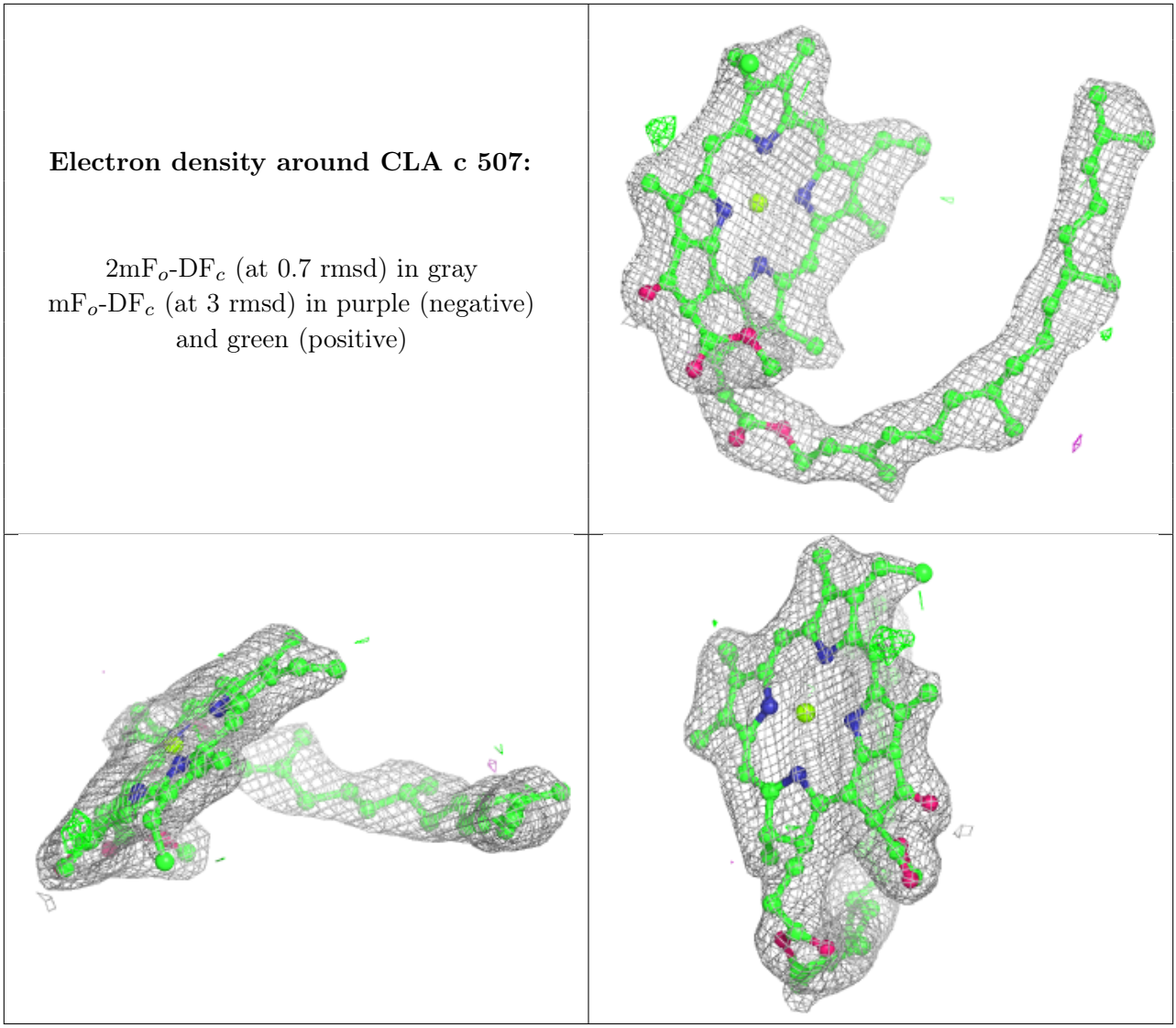
Electron density around CLA c 506:

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



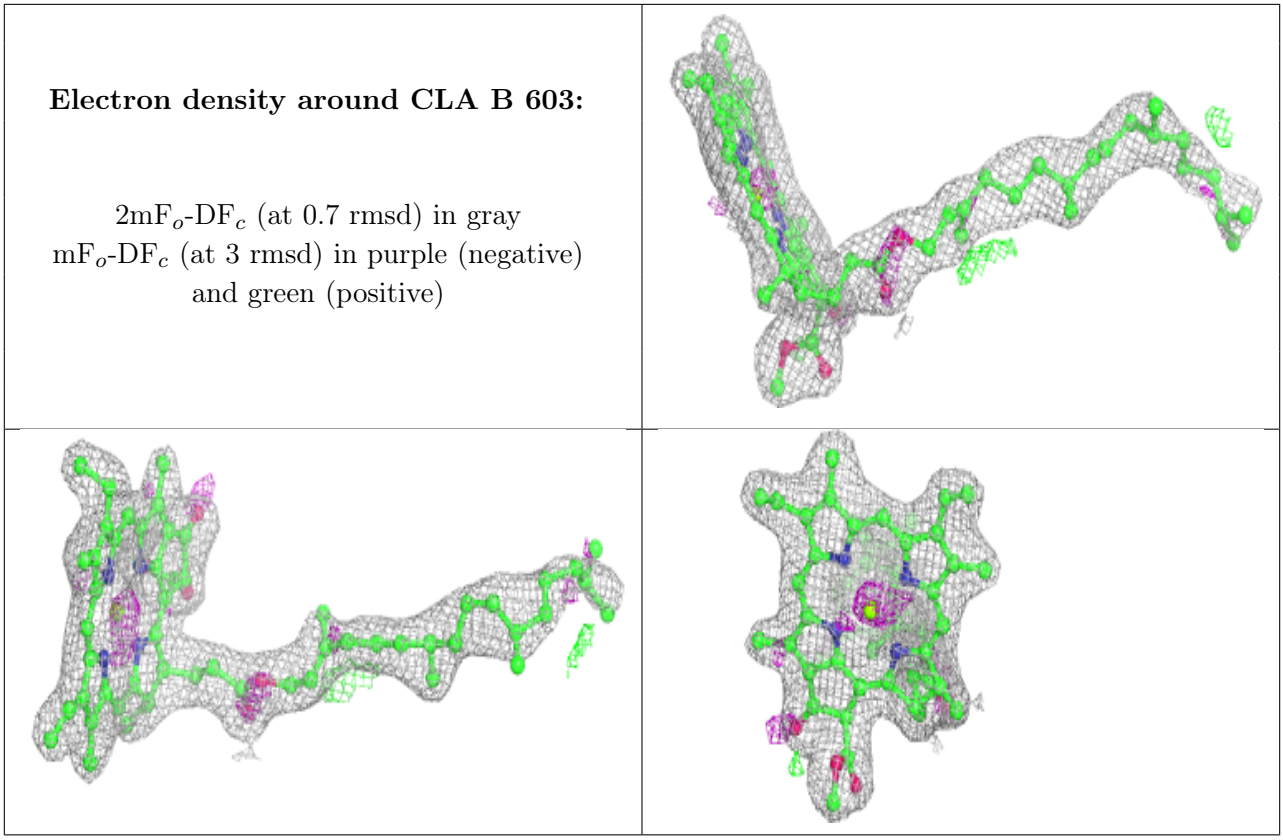
Electron density around CLA c 507:

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



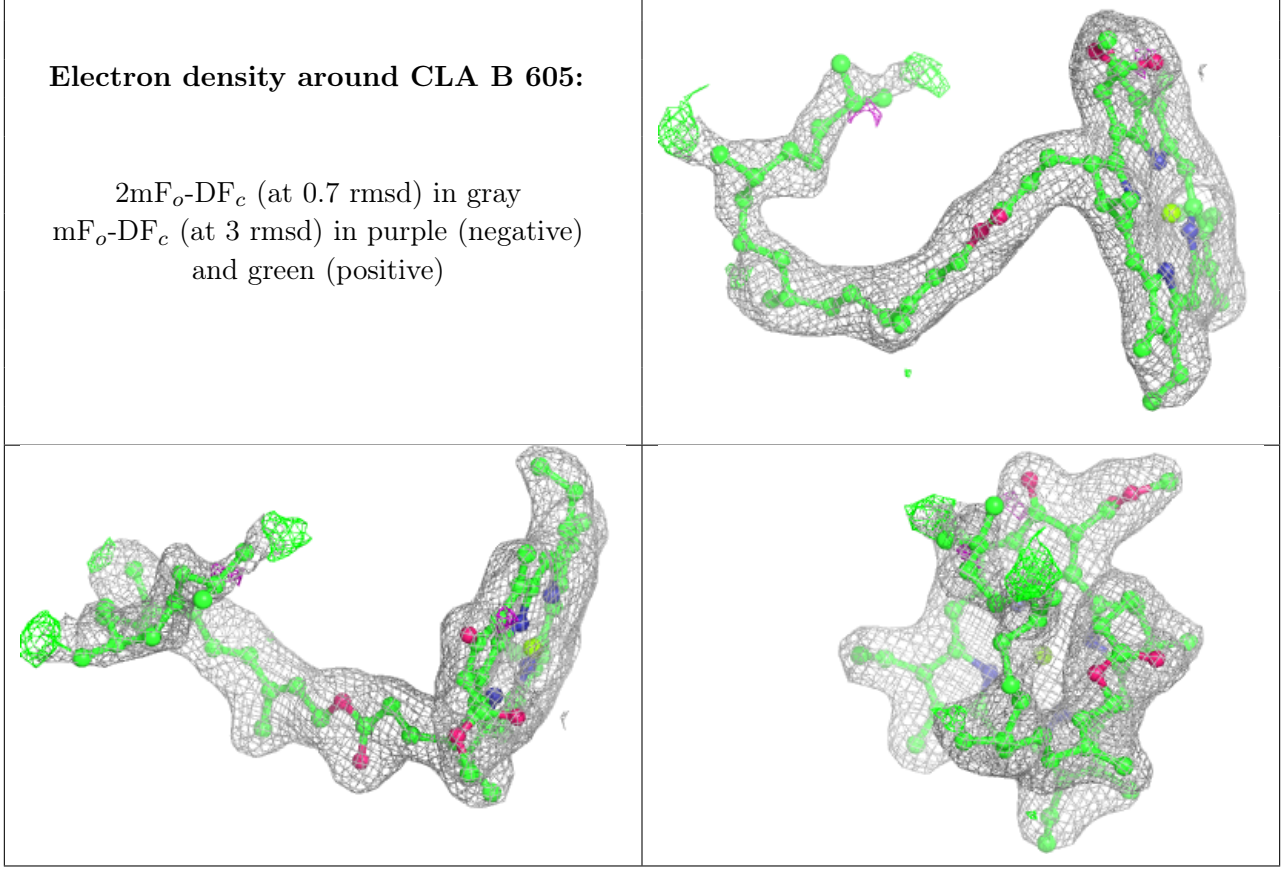
Electron density around CLA B 603:

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



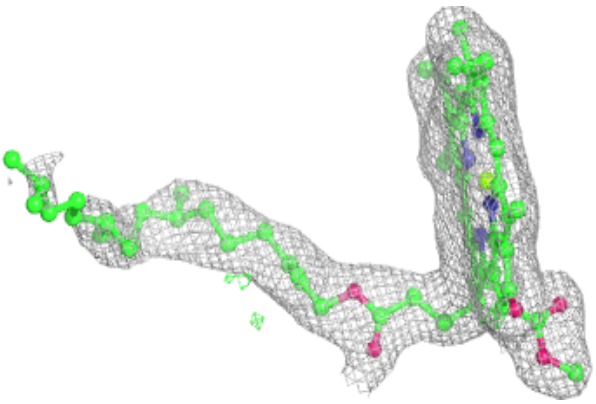
Electron density around CLA B 605:

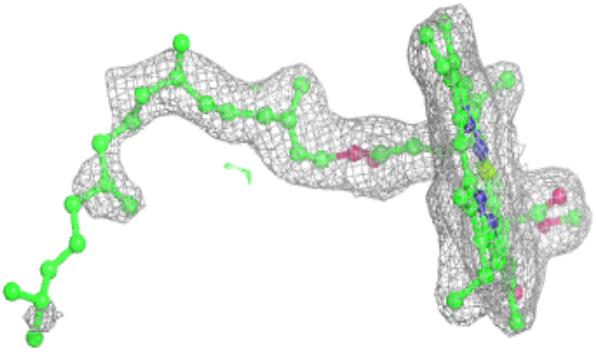
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

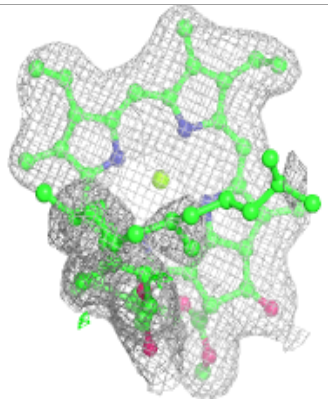


Electron density around CLA D 404:

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

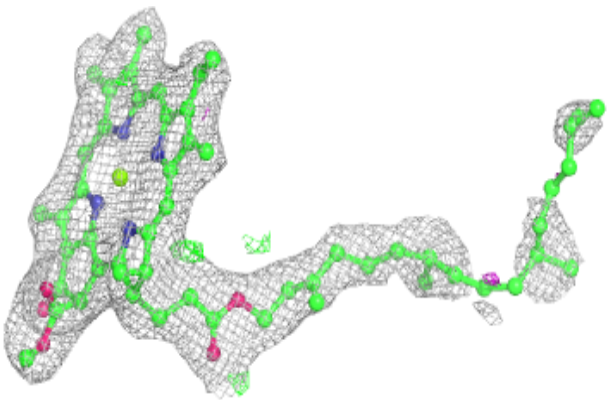


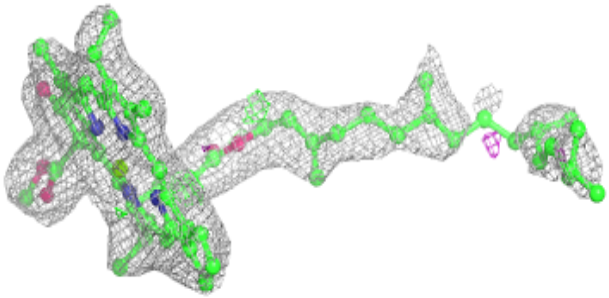


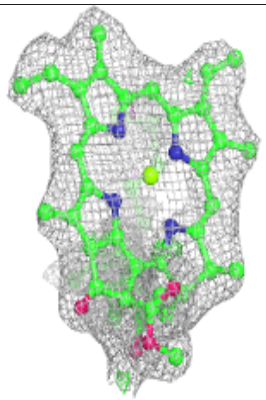


Electron density around CLA d 404:

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

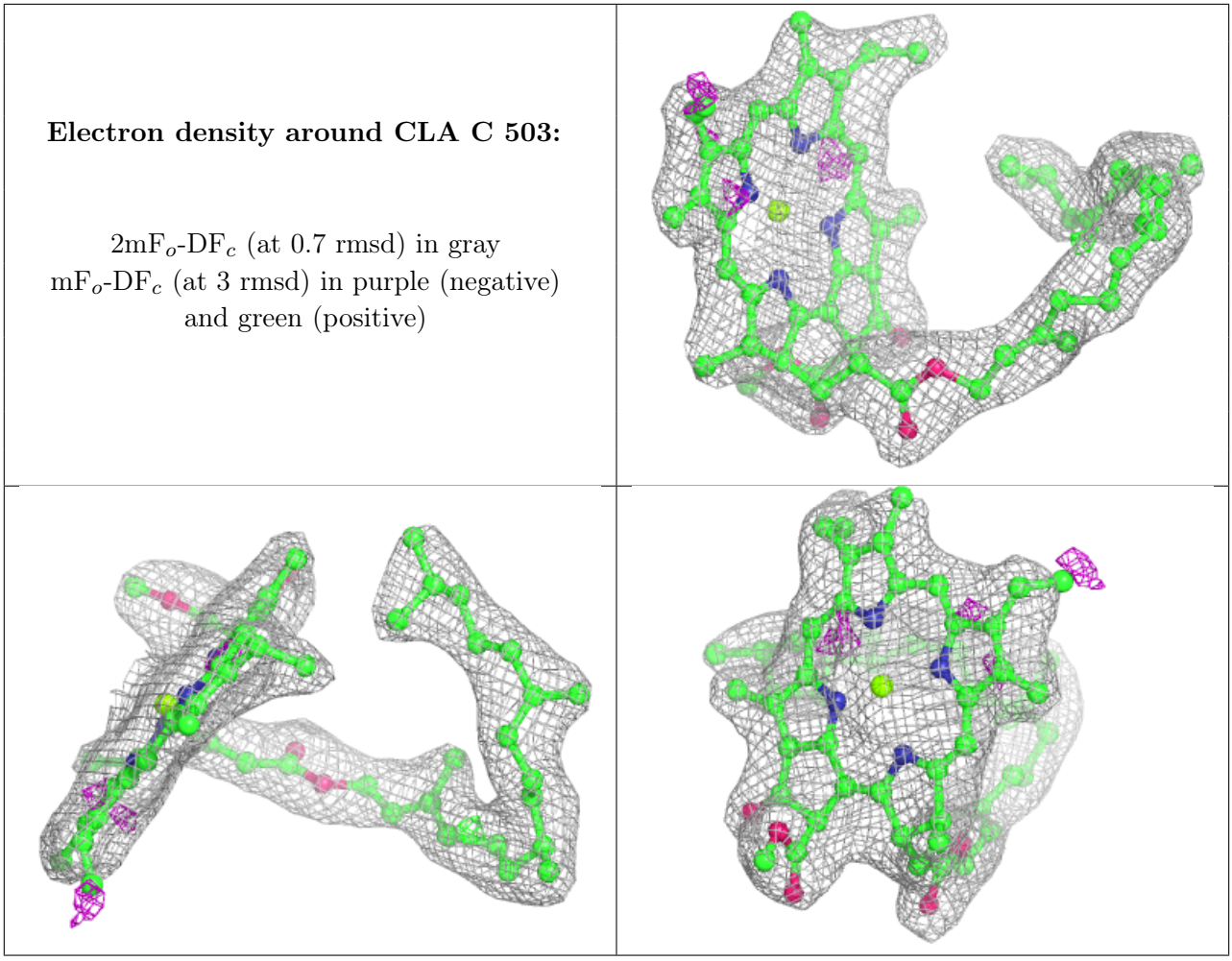






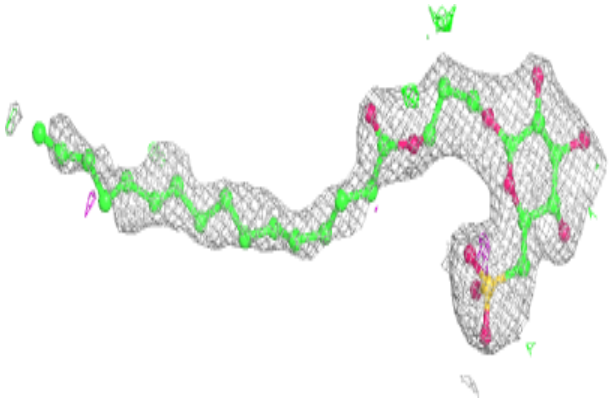
Electron density around CLA C 503:

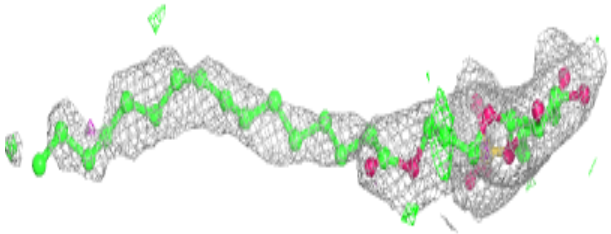
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

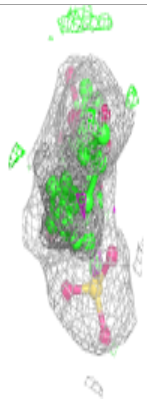


Electron density around SQD D 408:

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

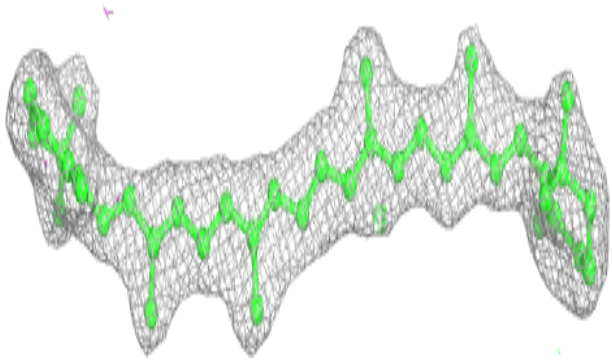


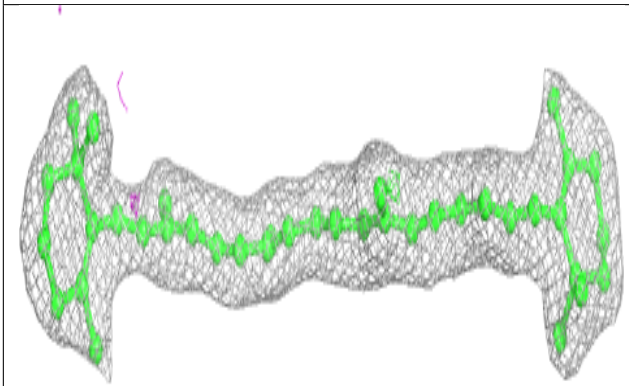


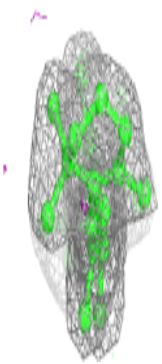


Electron density around BCR A 610:

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

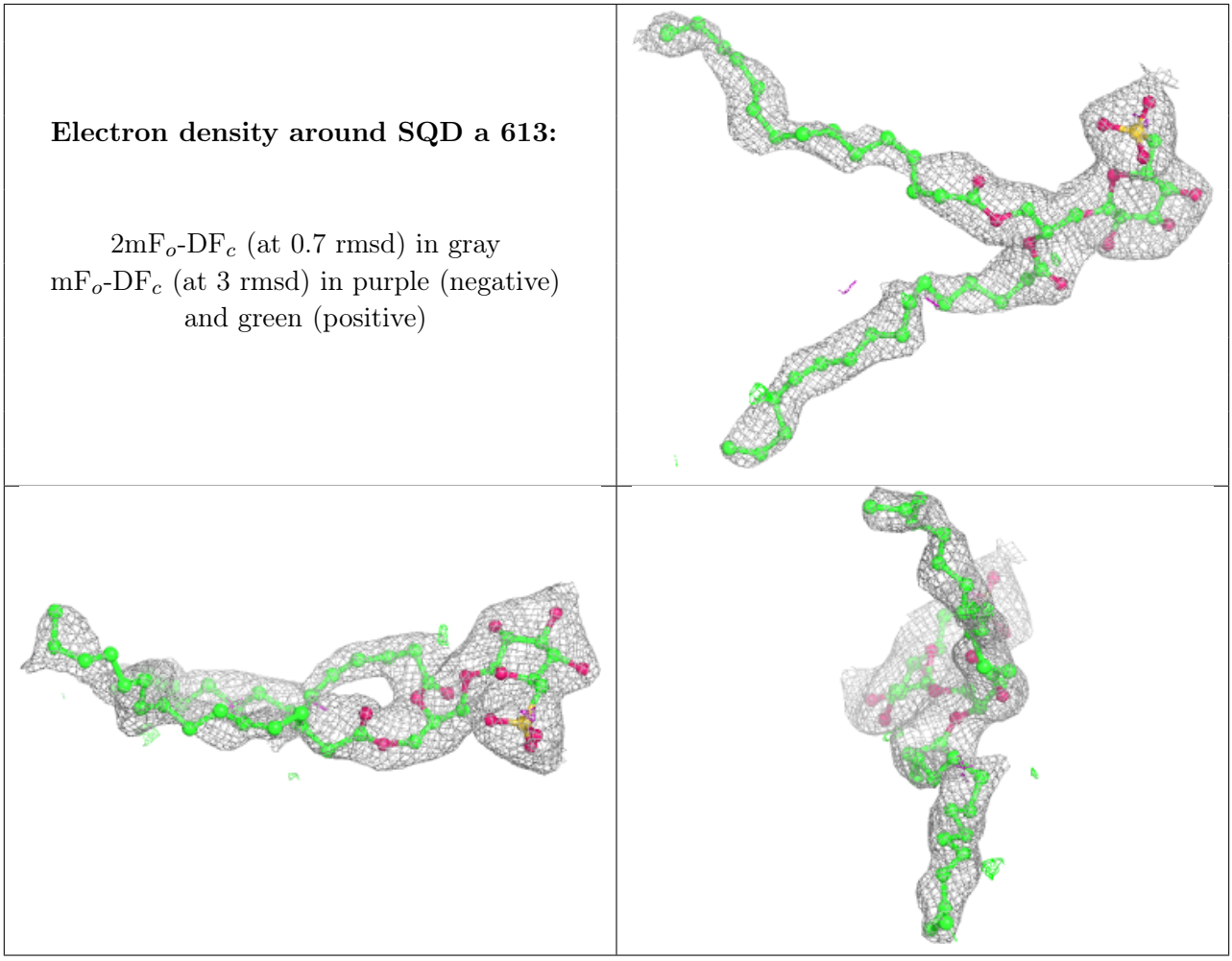






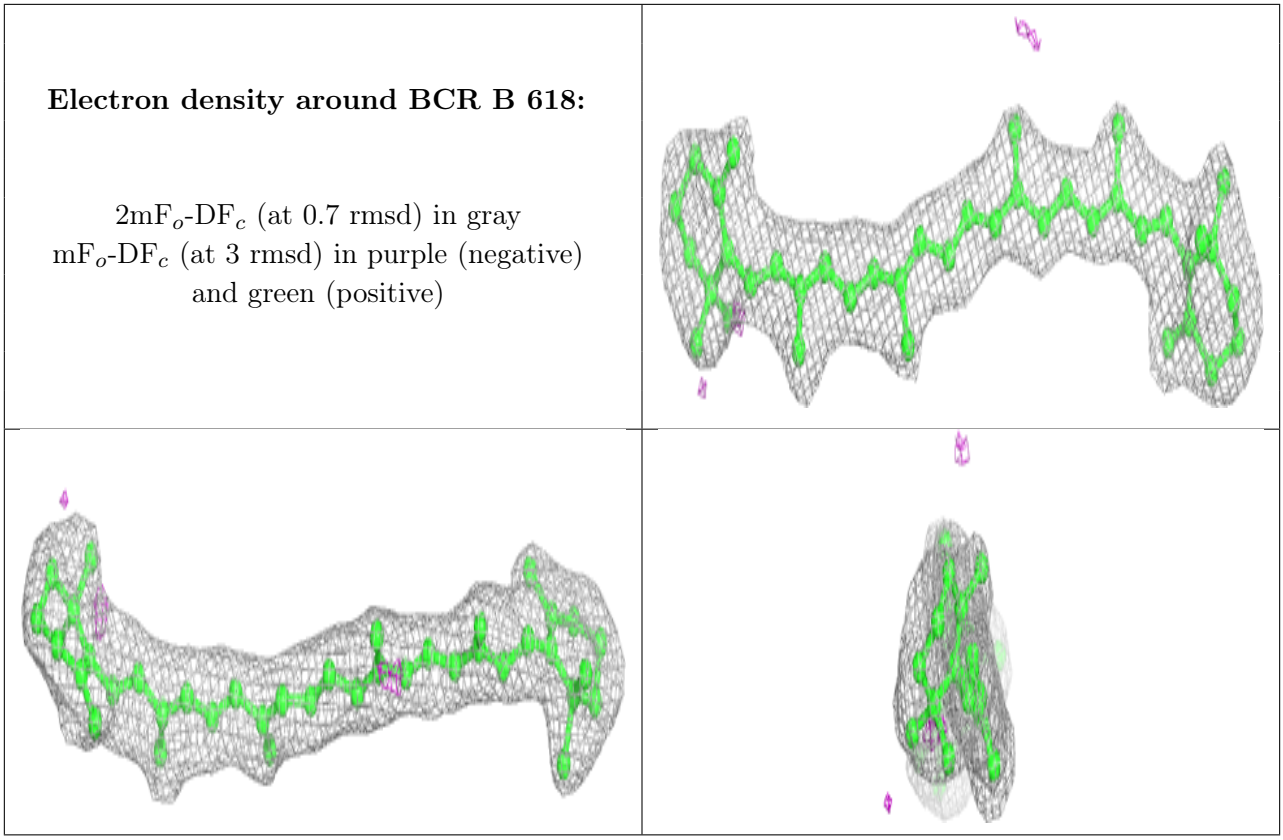
Electron density around SQD a 613:

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



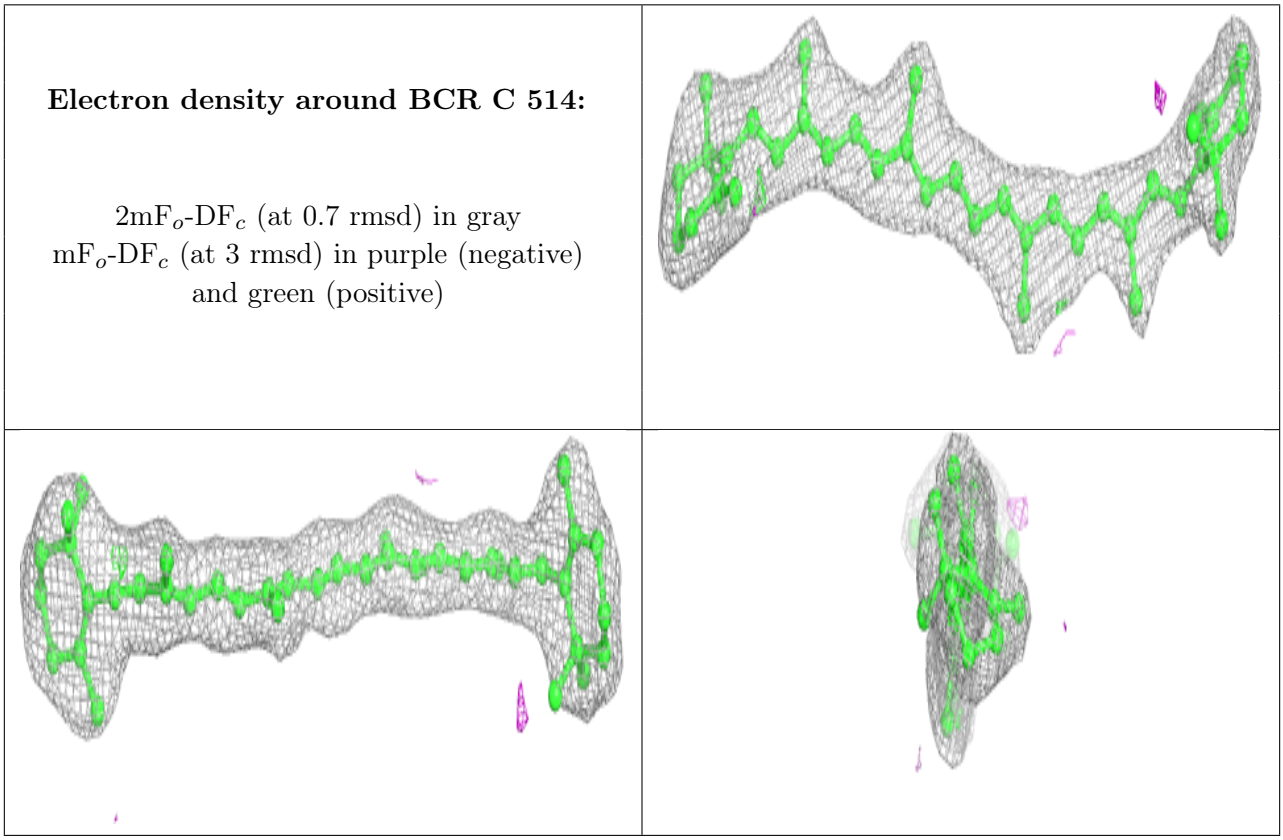
Electron density around BCR B 618:

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



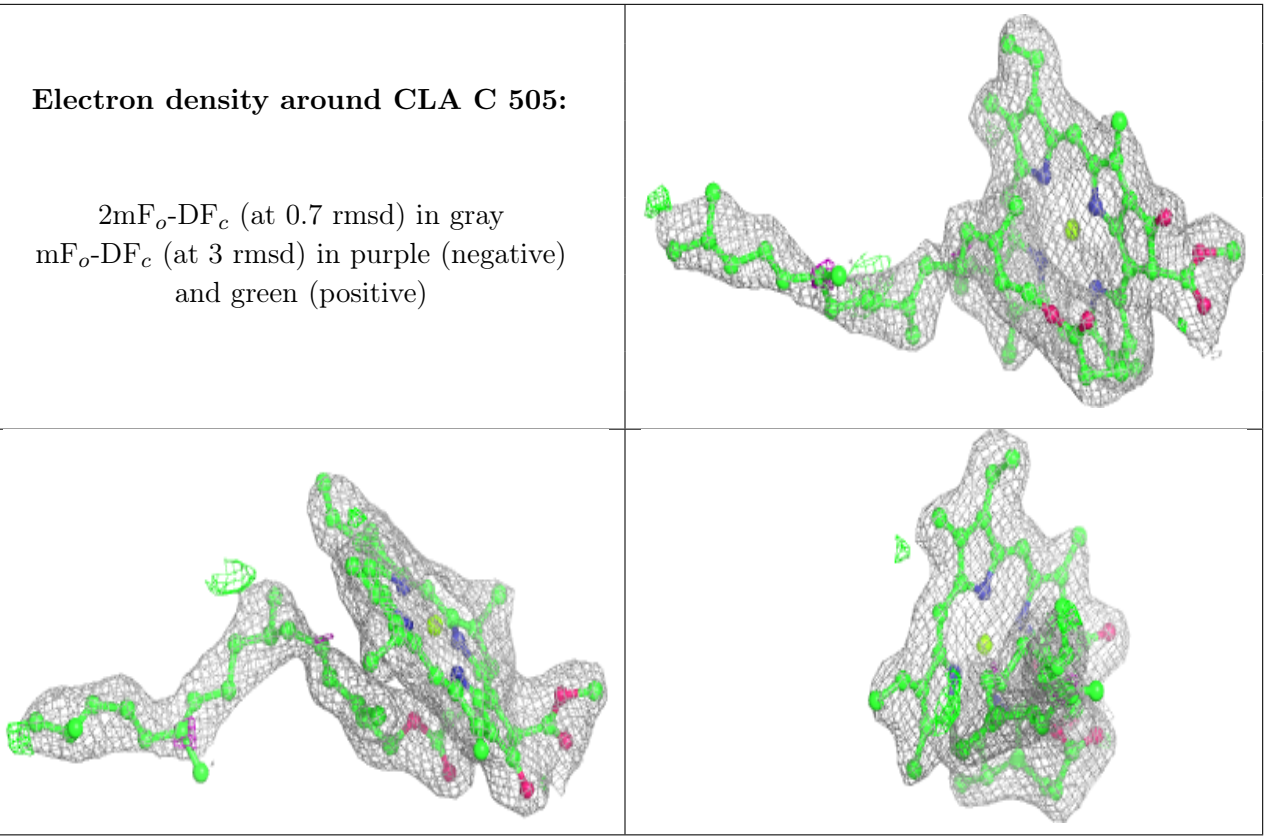
Electron density around BCR C 514:

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



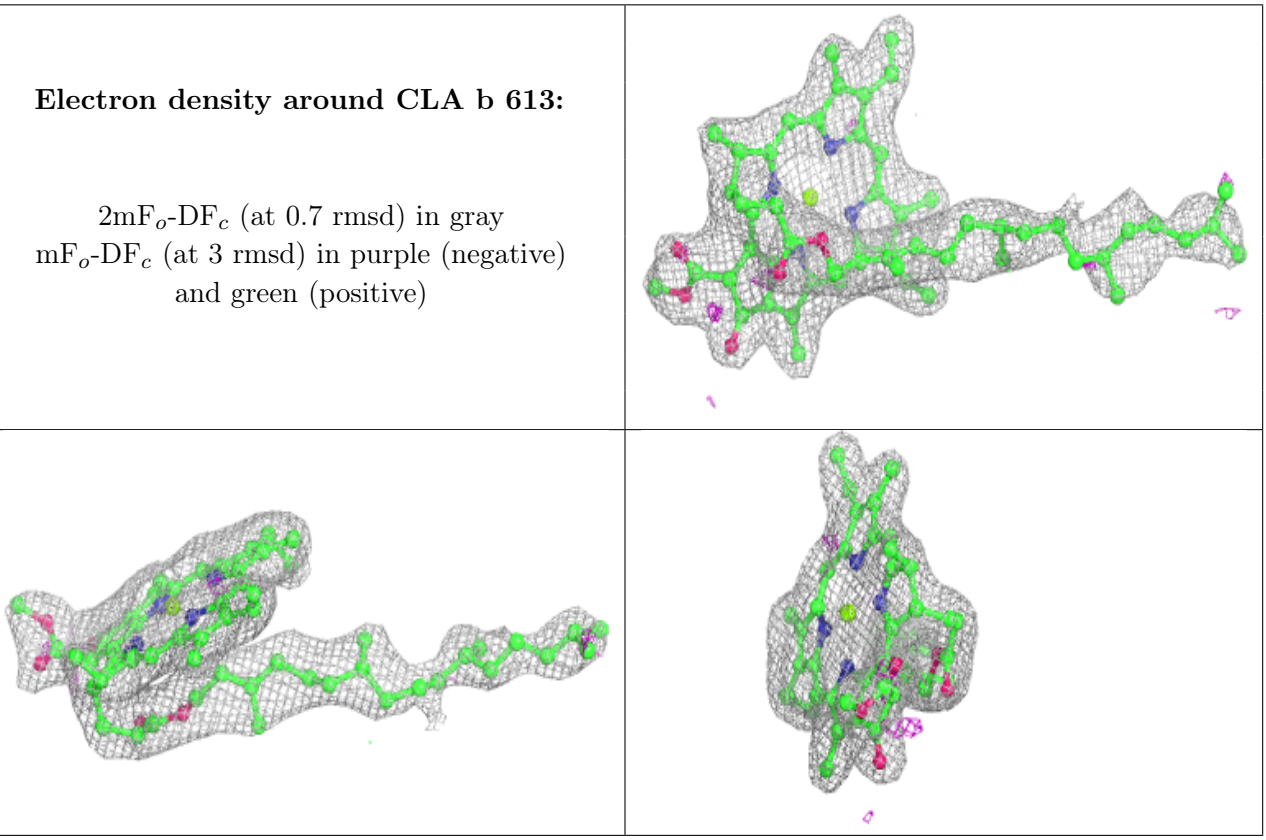
Electron density around CLA C 505:

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



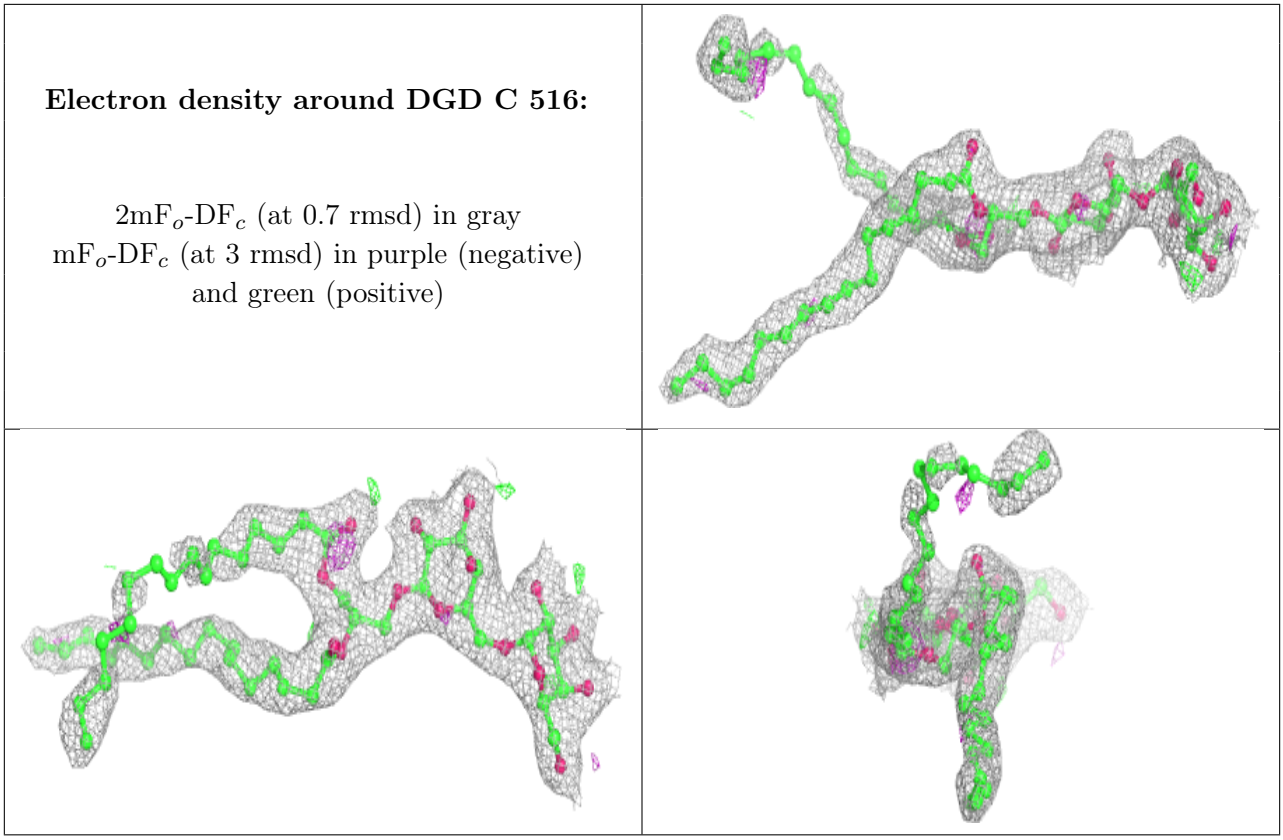
Electron density around CLA b 613:

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



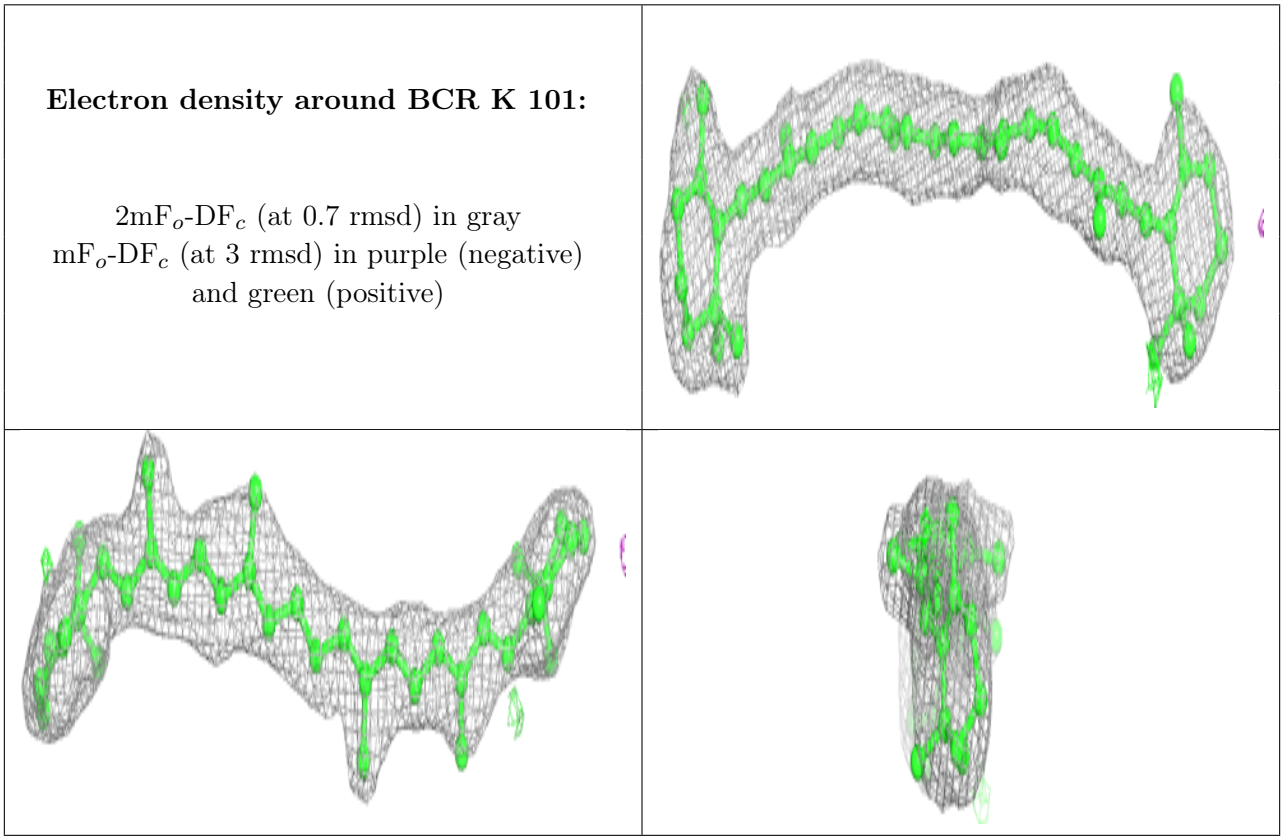
Electron density around DGD C 516:

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



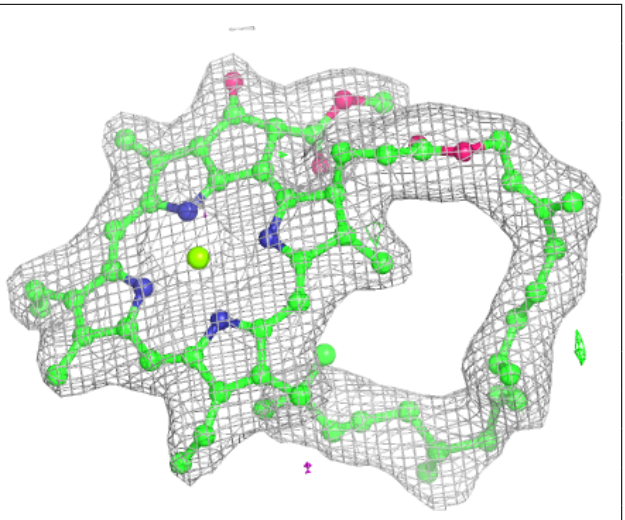
Electron density around BCR K 101:

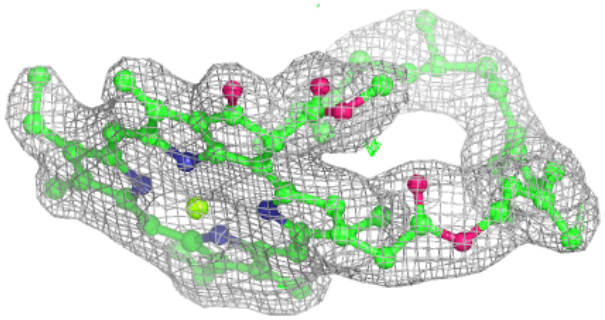
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

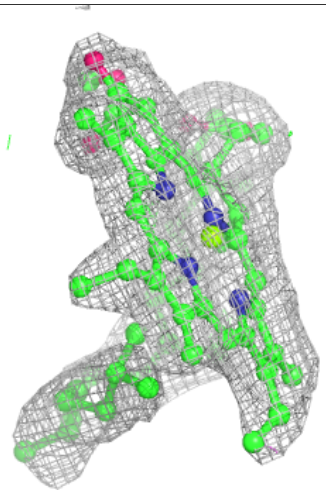


Electron density around CLA b 614:

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

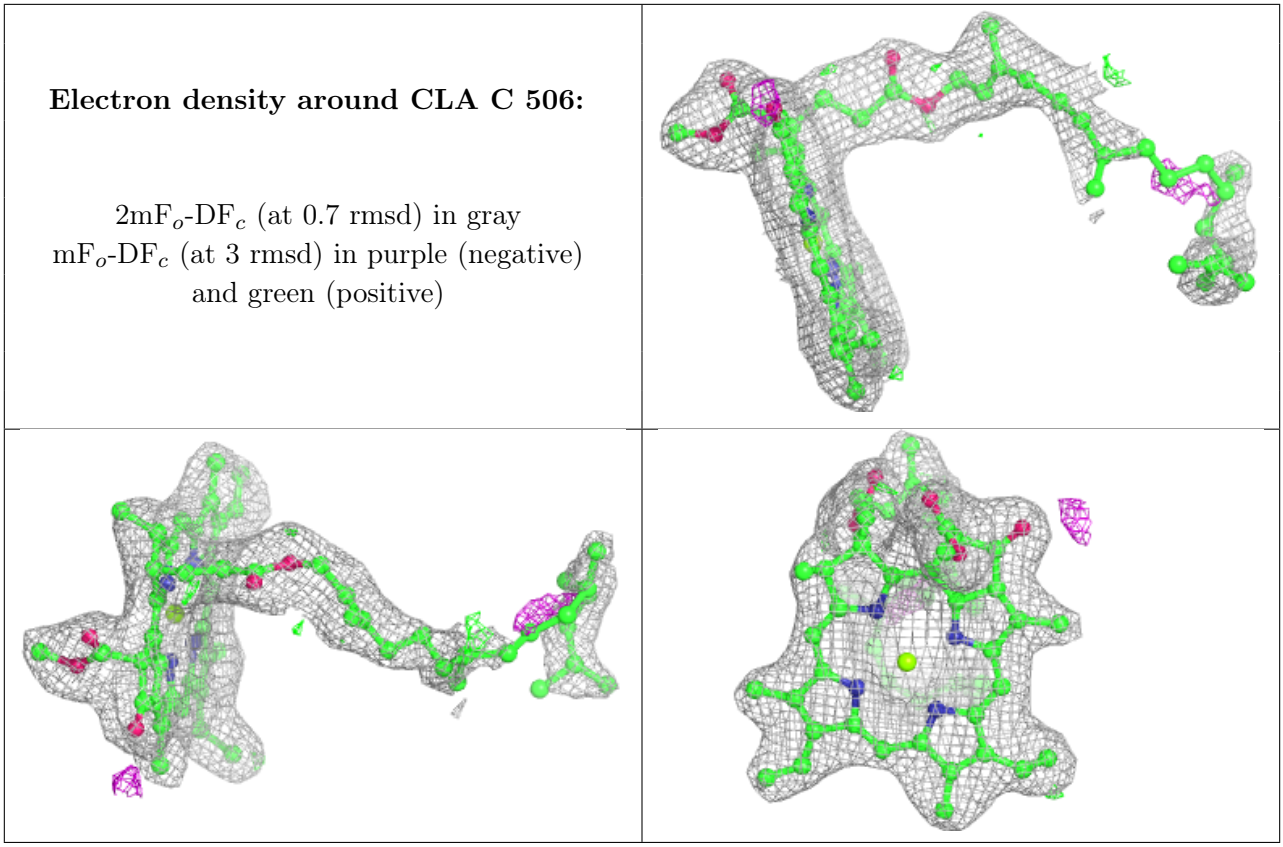






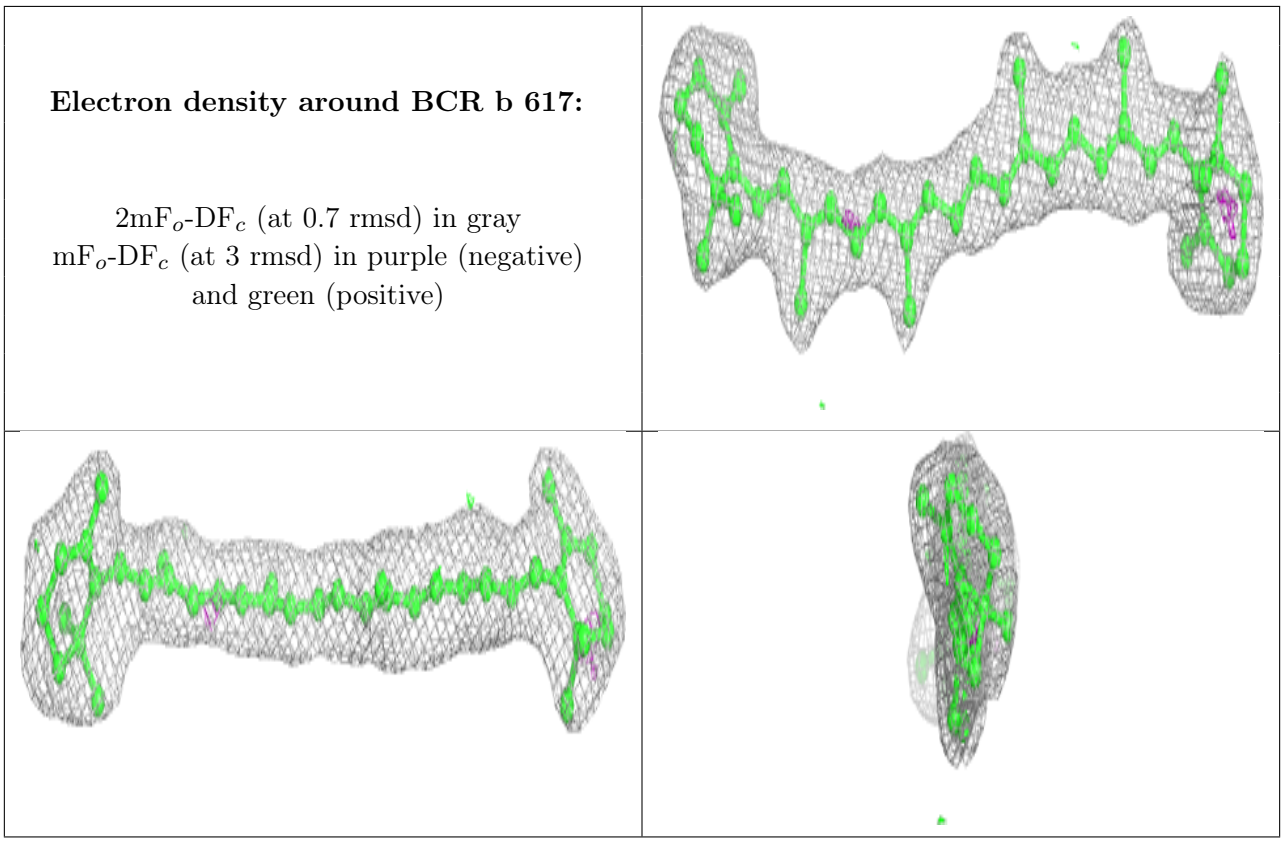
Electron density around CLA C 506:

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



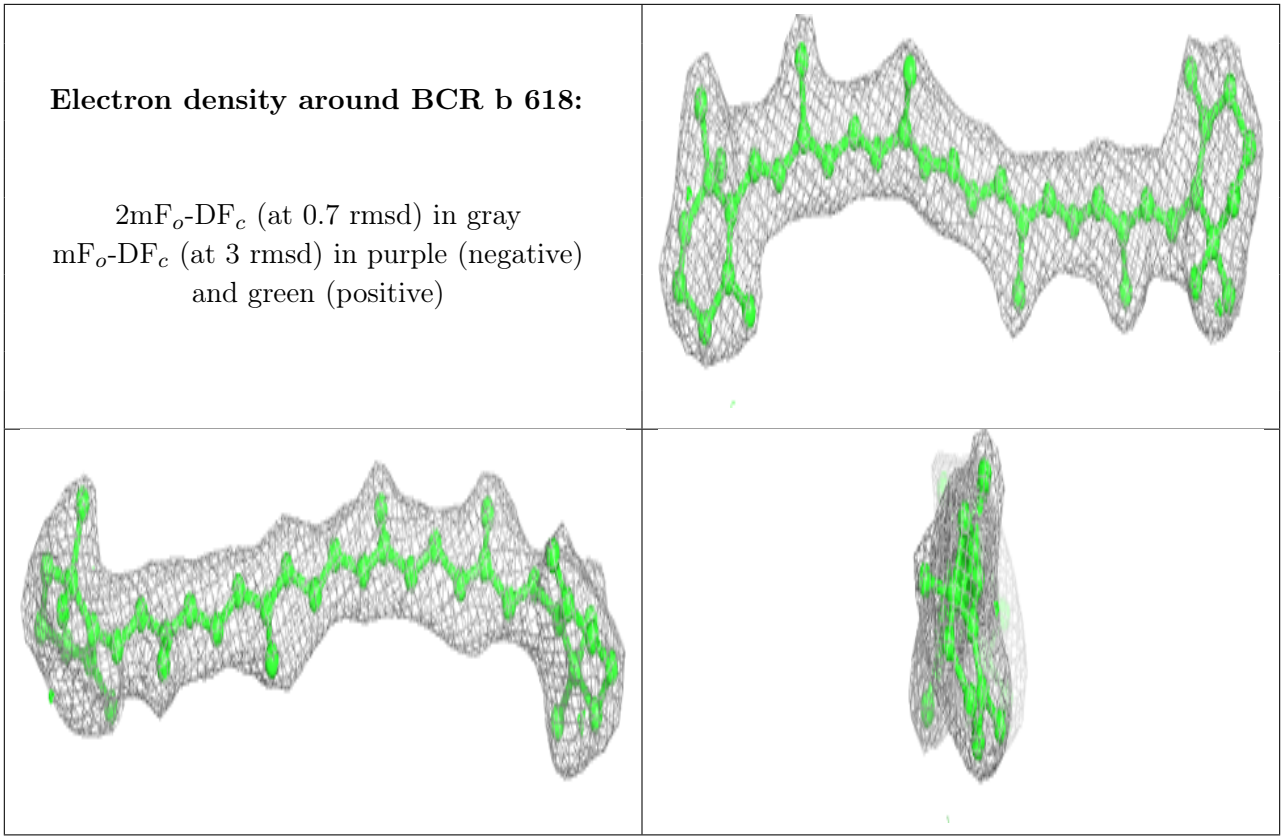
Electron density around BCR b 617:

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



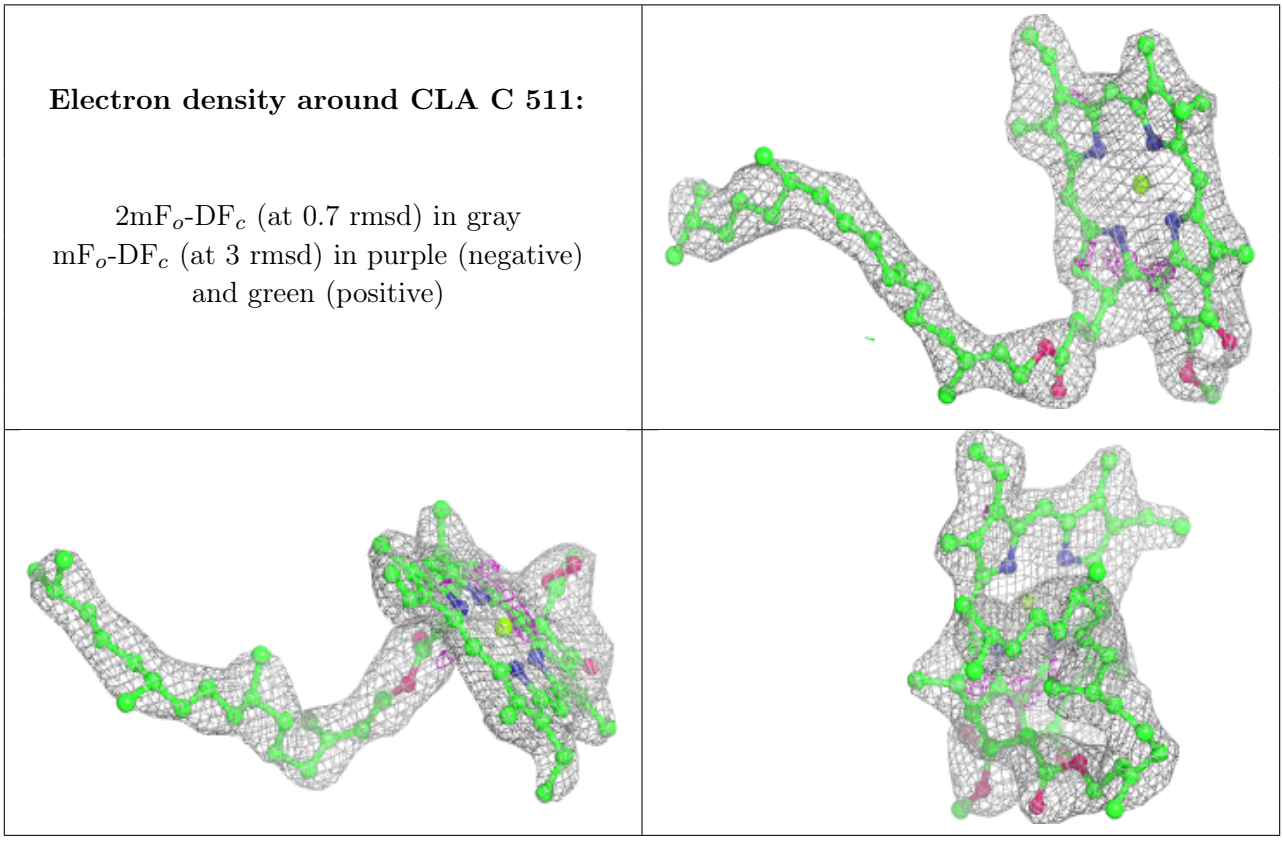
Electron density around BCR b 618:

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



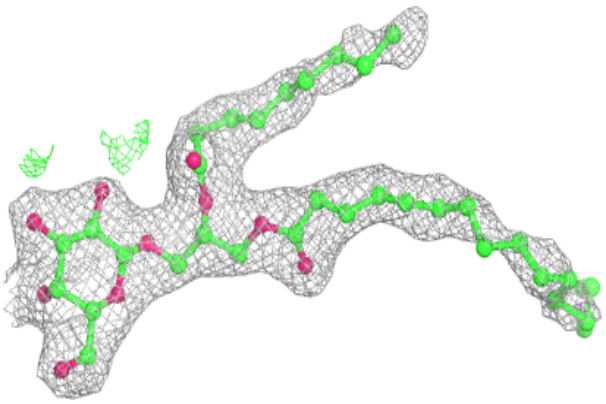
Electron density around CLA C 511:

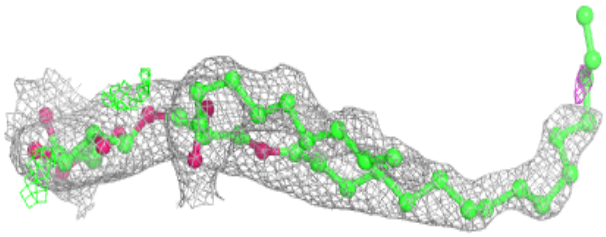
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

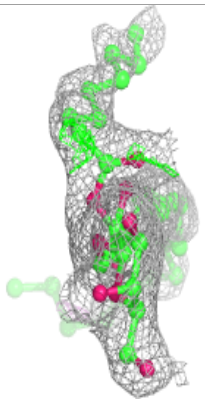


Electron density around LMG d 410:

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

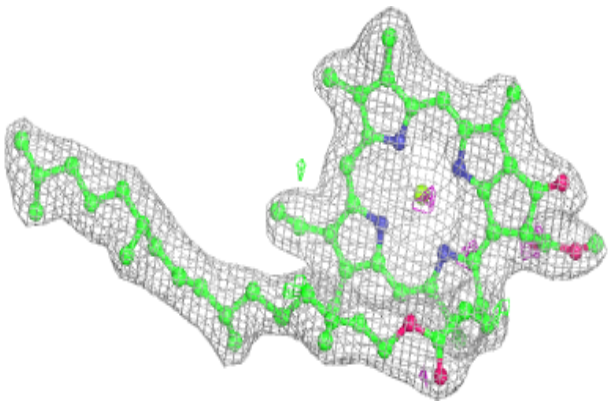


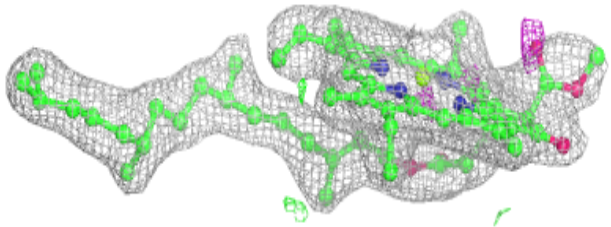


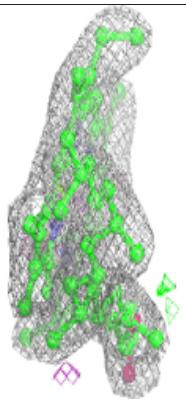


Electron density around CLA C 501:

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

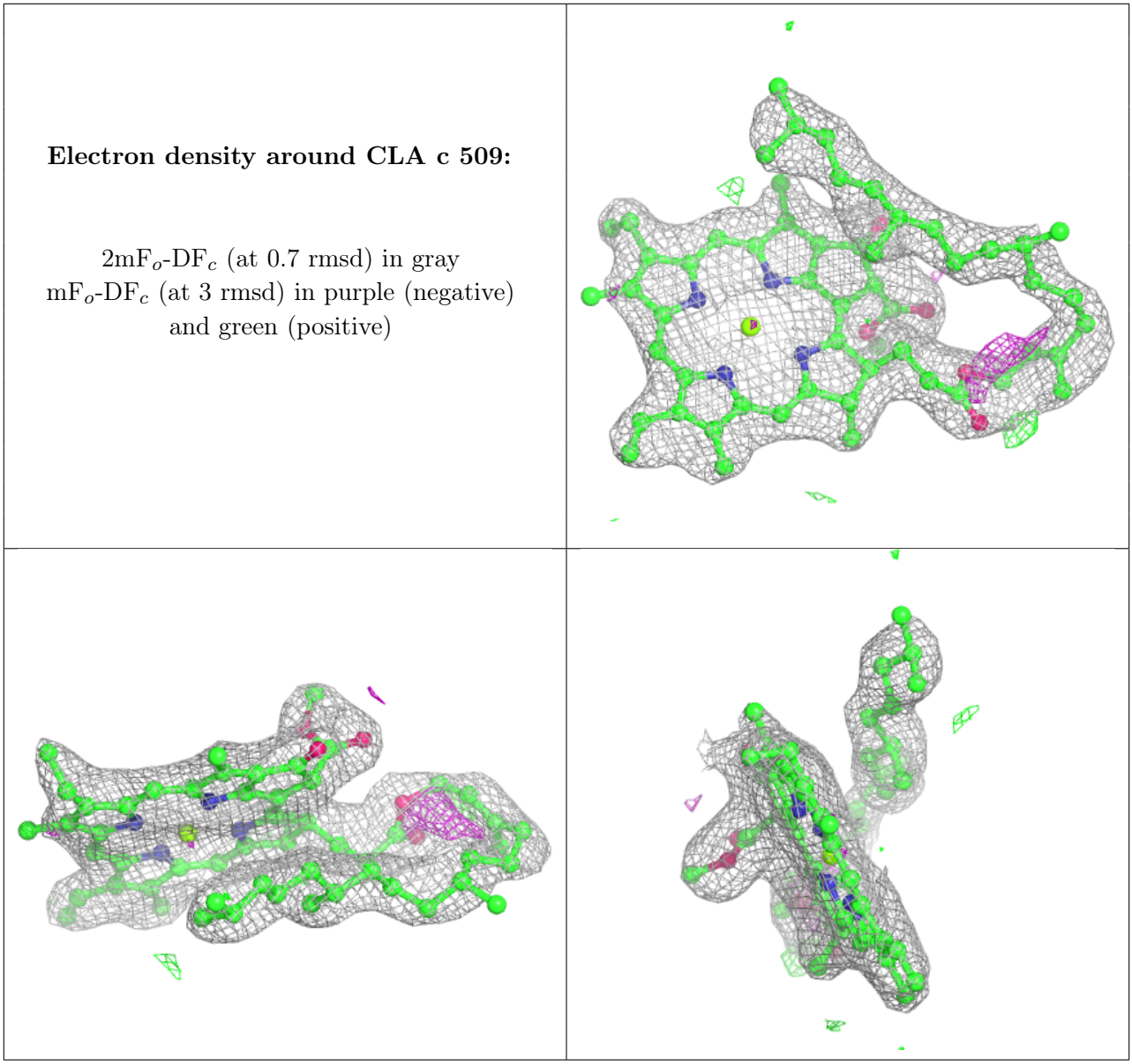






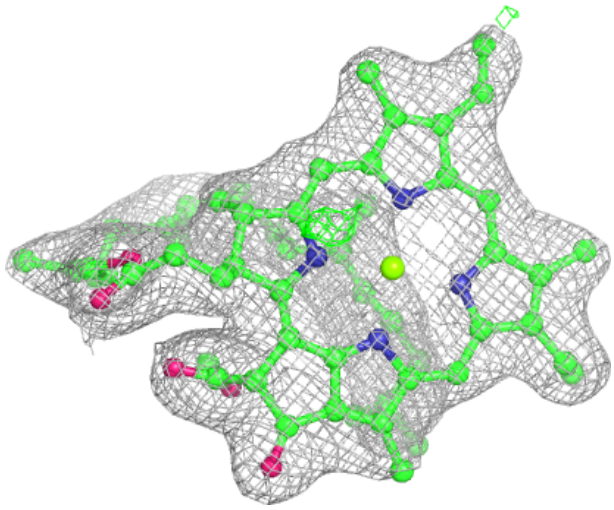
Electron density around CLA c 509:

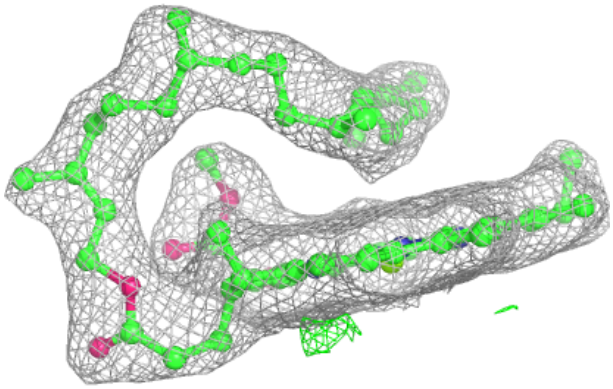
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

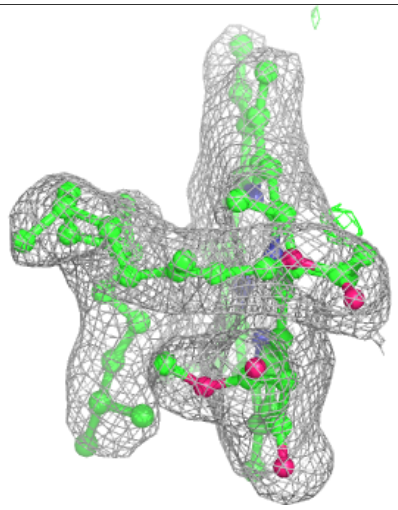


Electron density around CLA c 510:

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

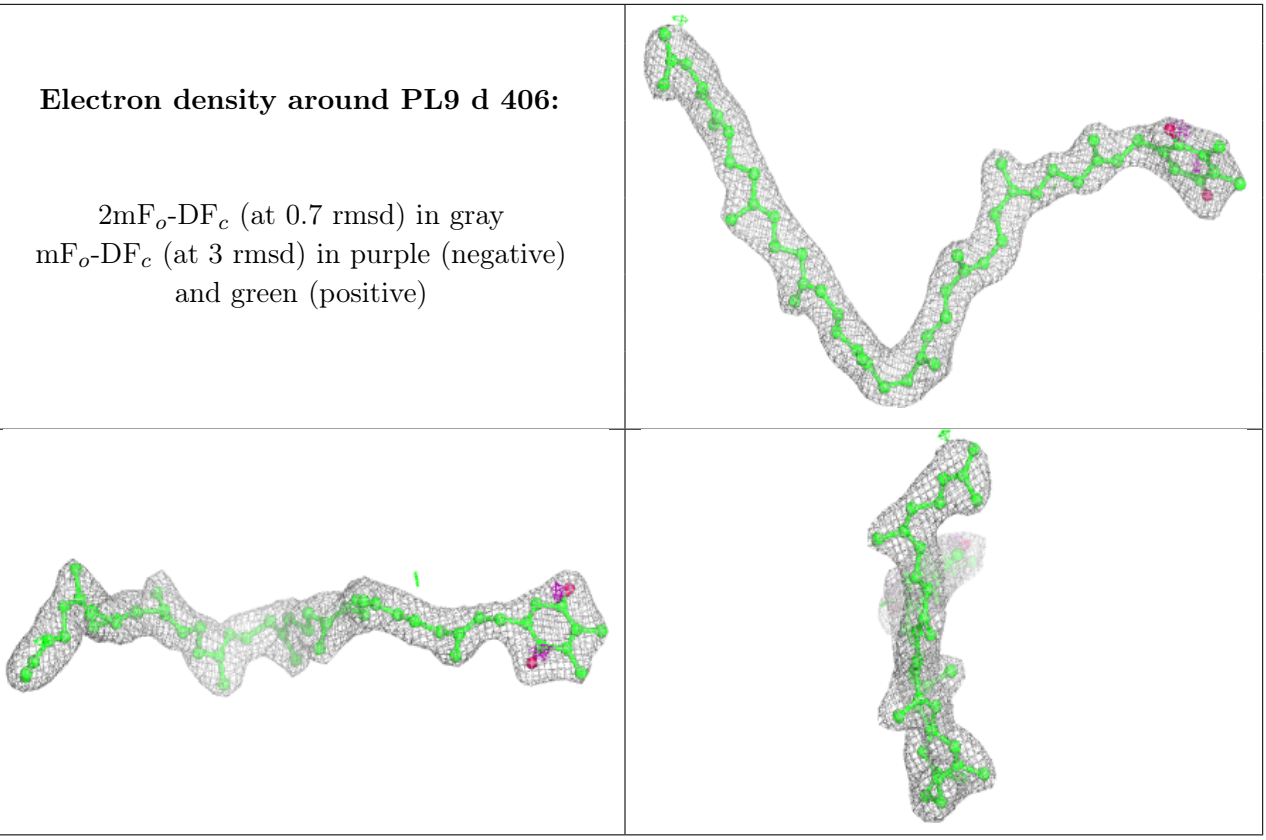






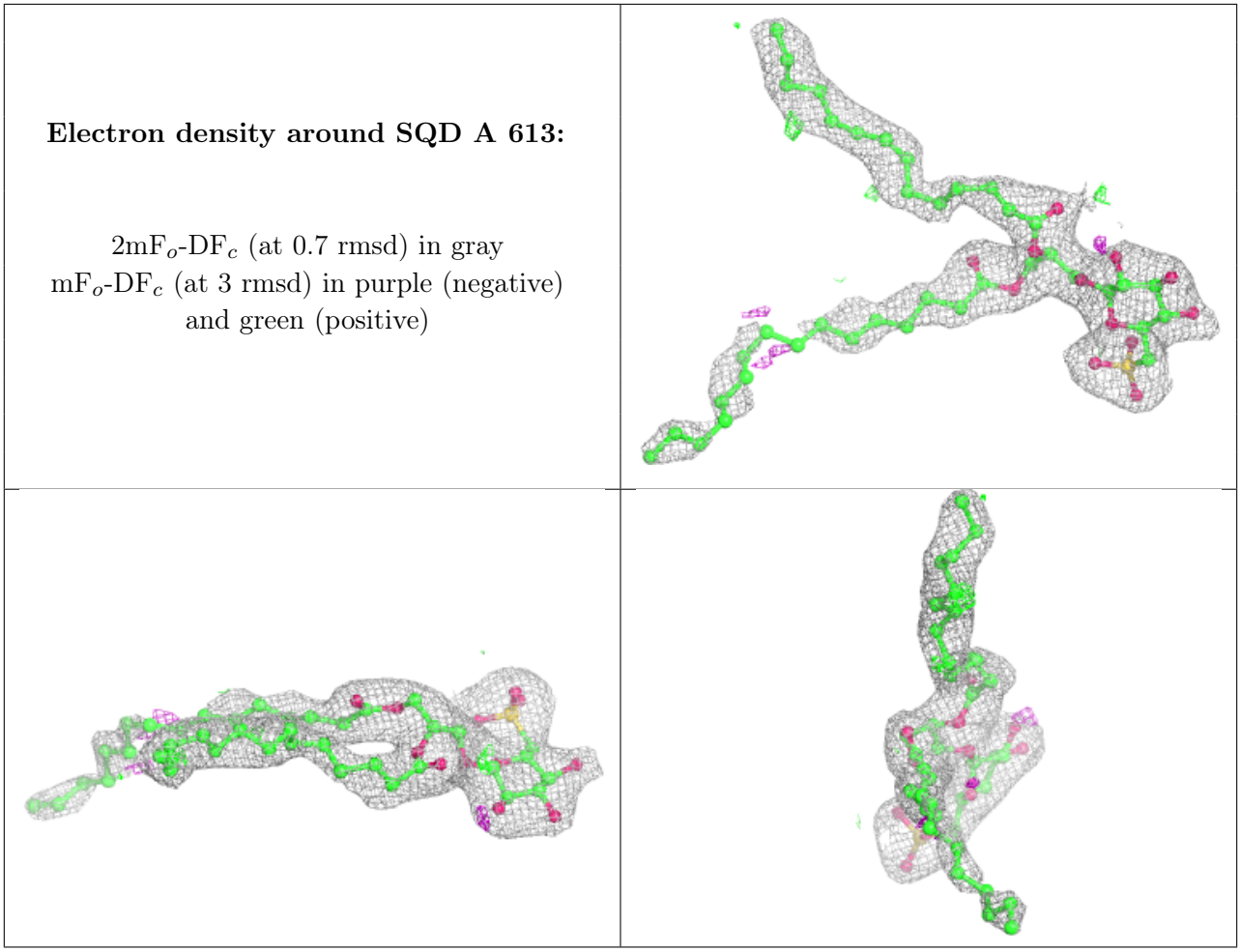
Electron density around PL9 d 406:

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



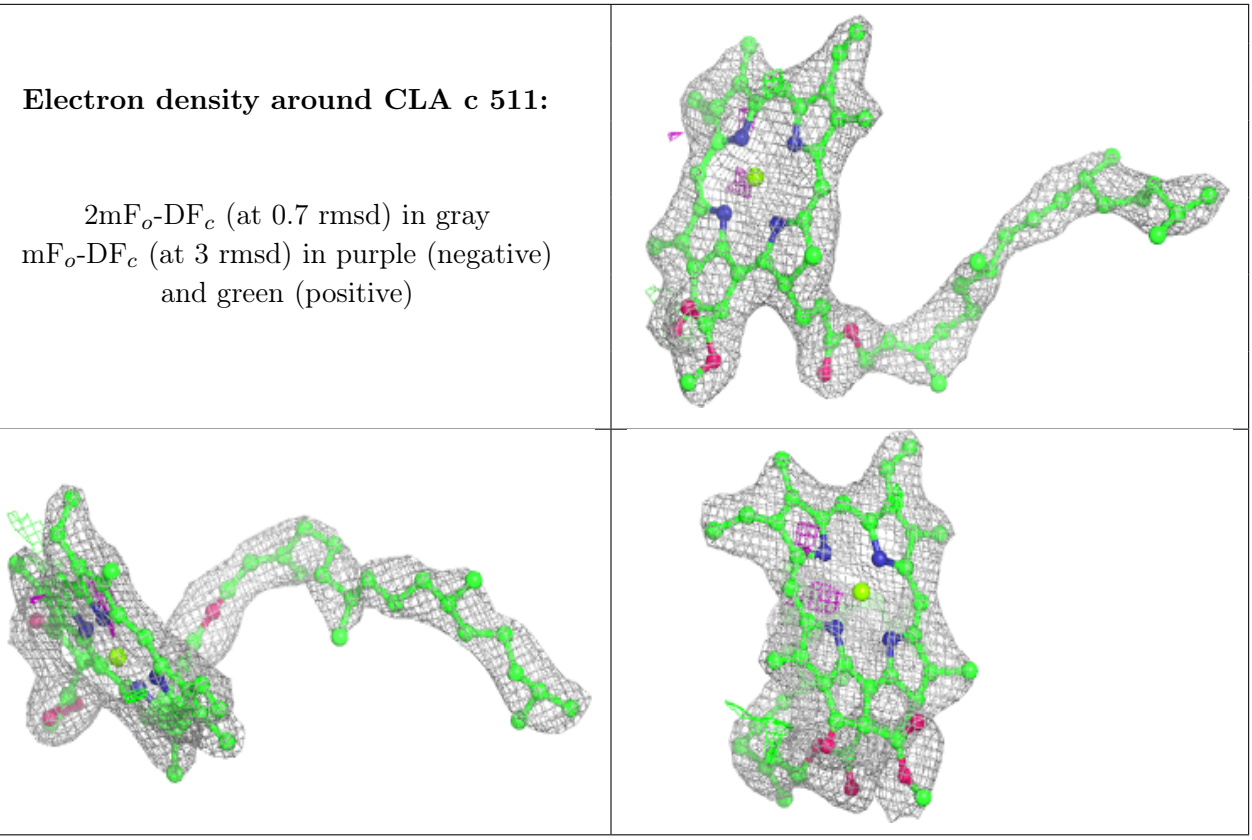
Electron density around SQD A 613:

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



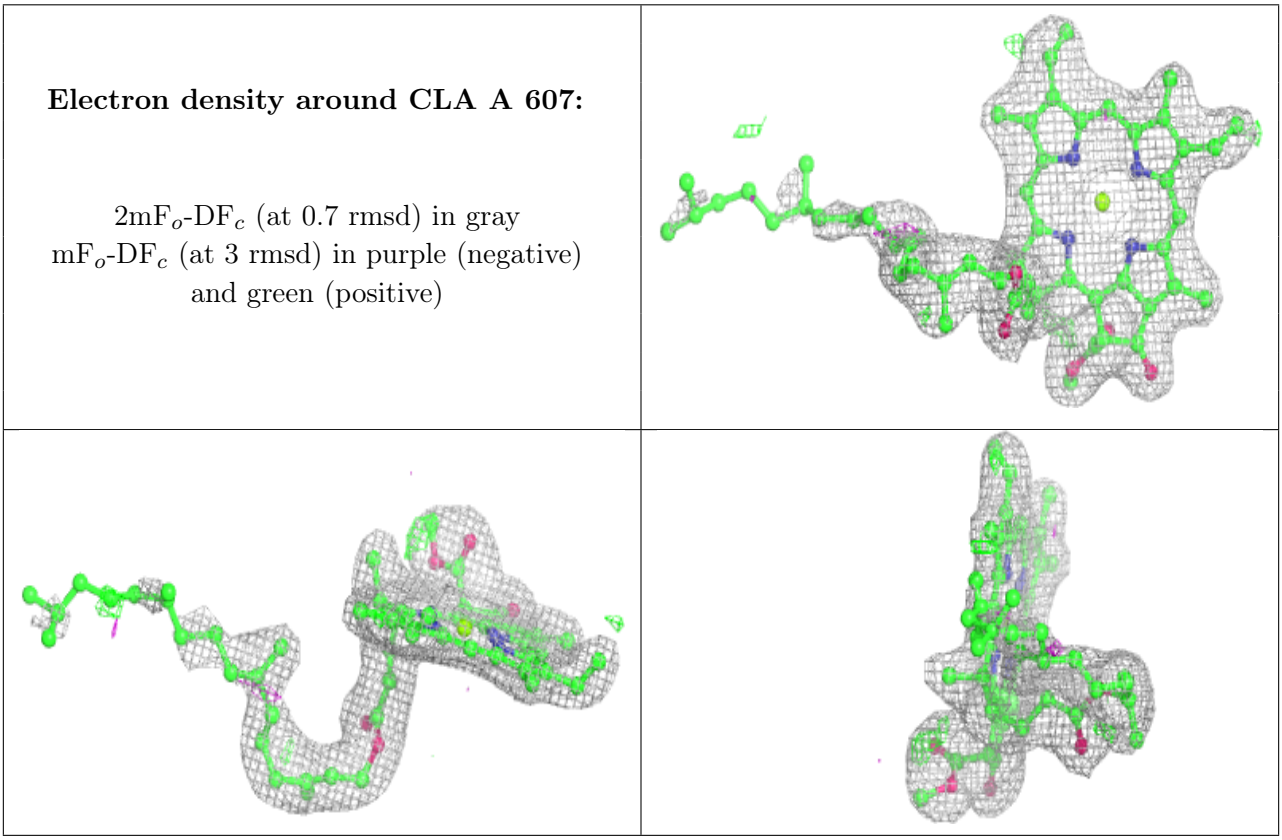
Electron density around CLA c 511:

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



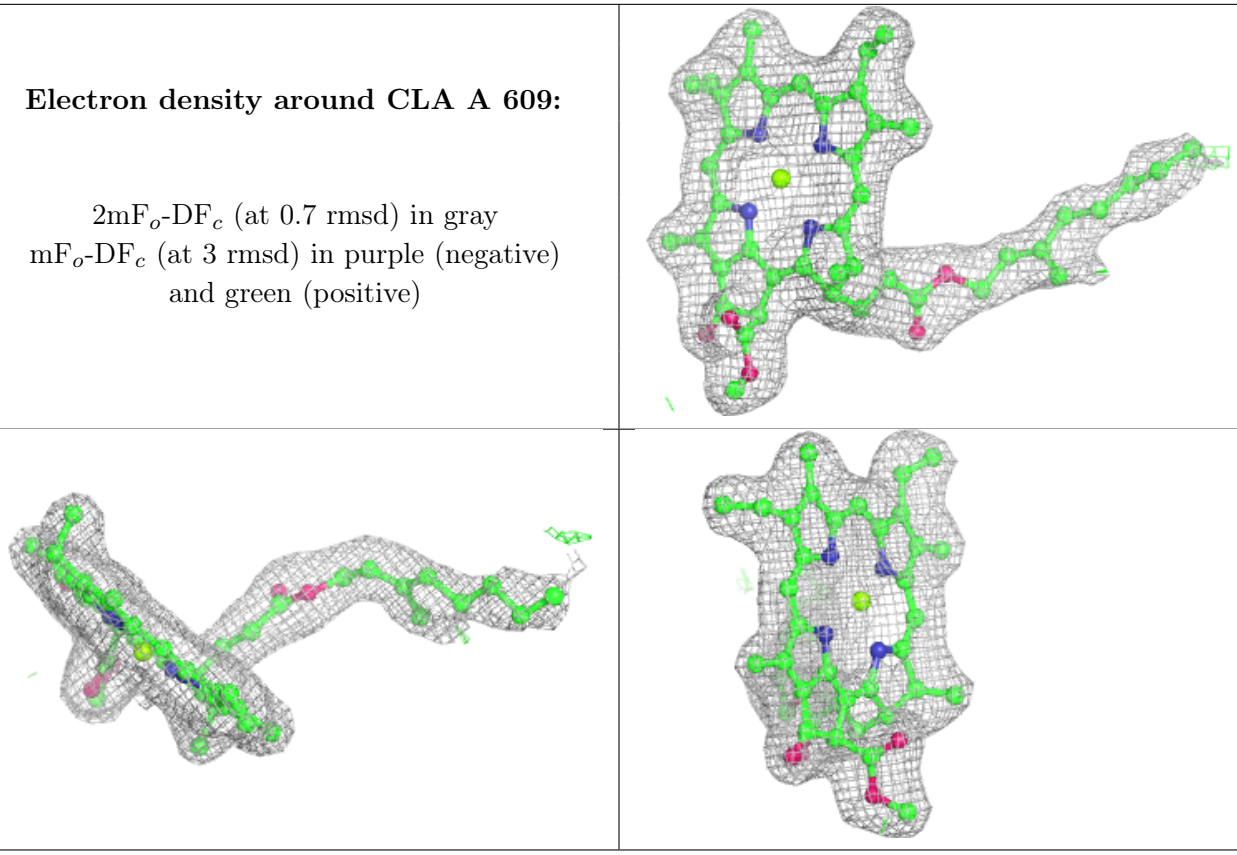
Electron density around CLA A 607:

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



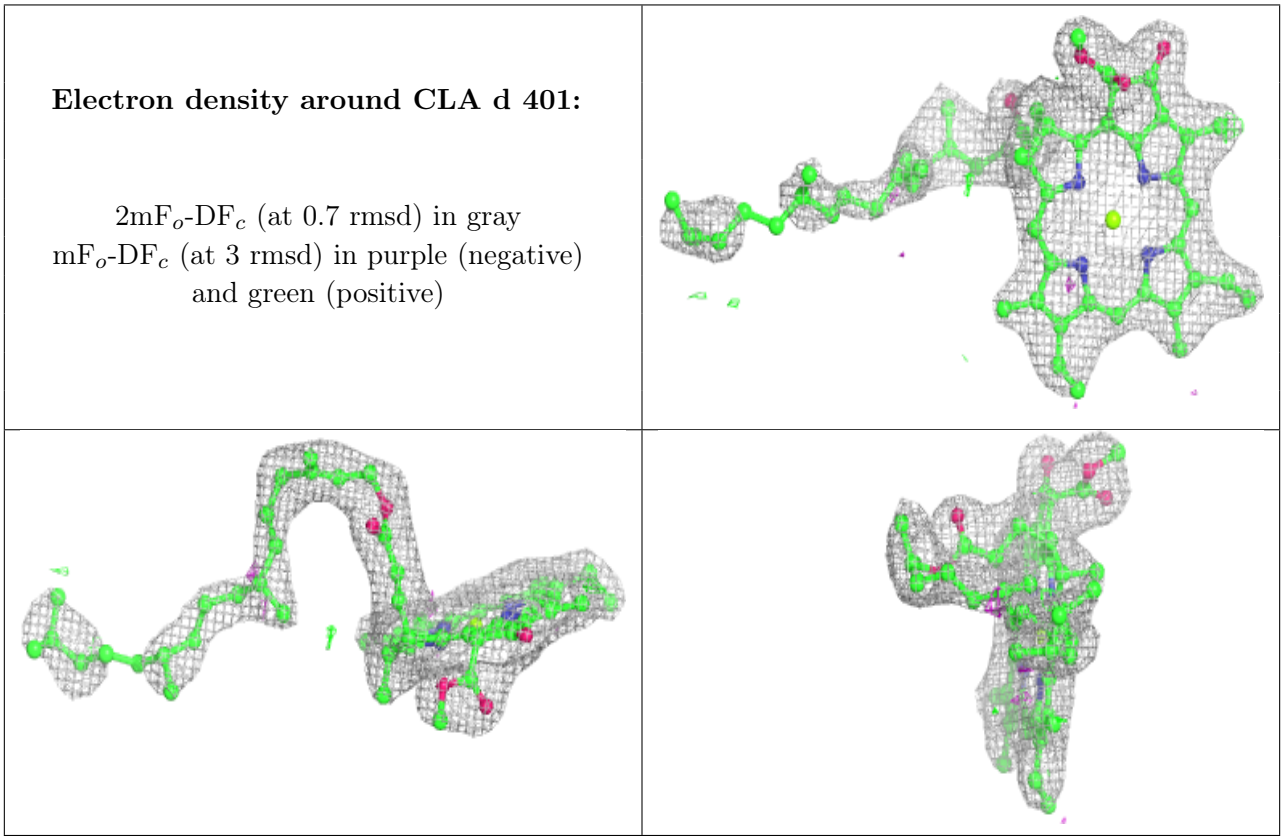
Electron density around CLA A 609:

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



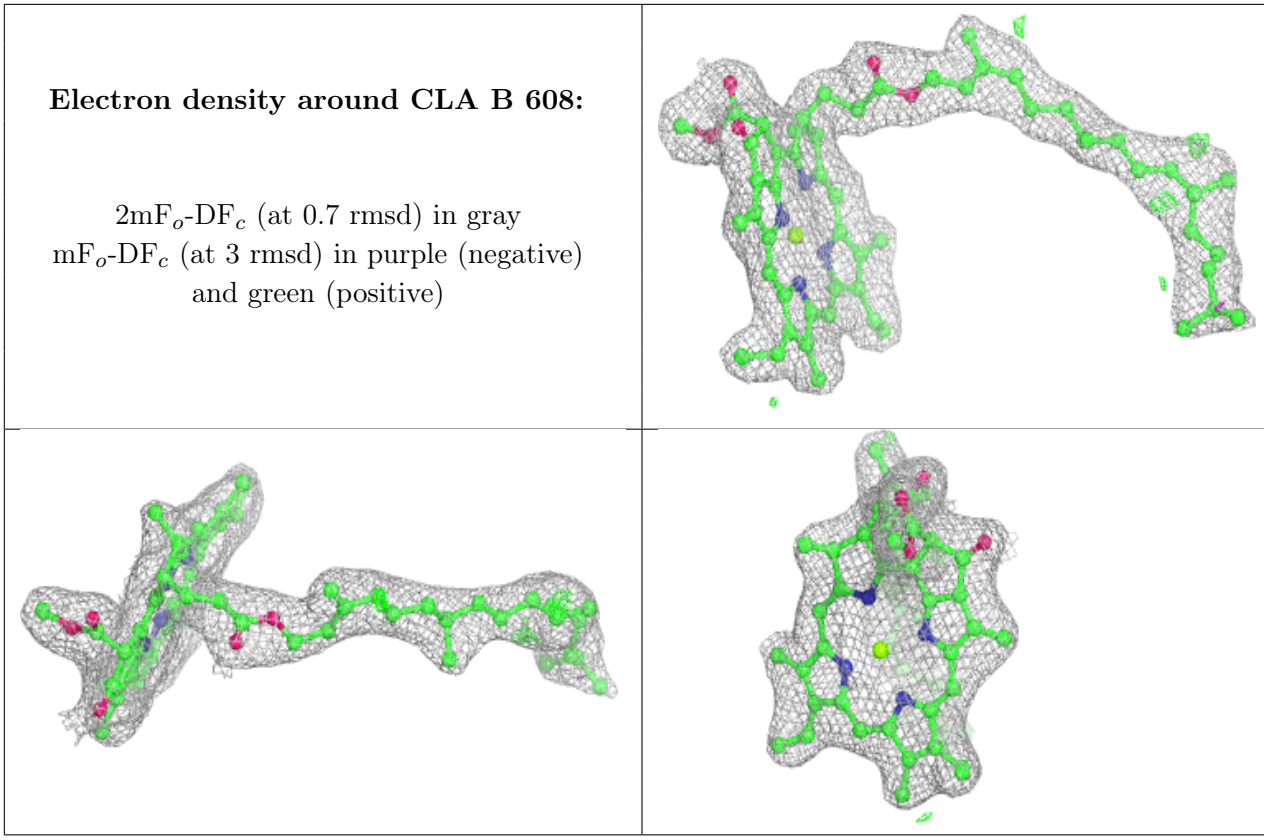
Electron density around CLA d 401:

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



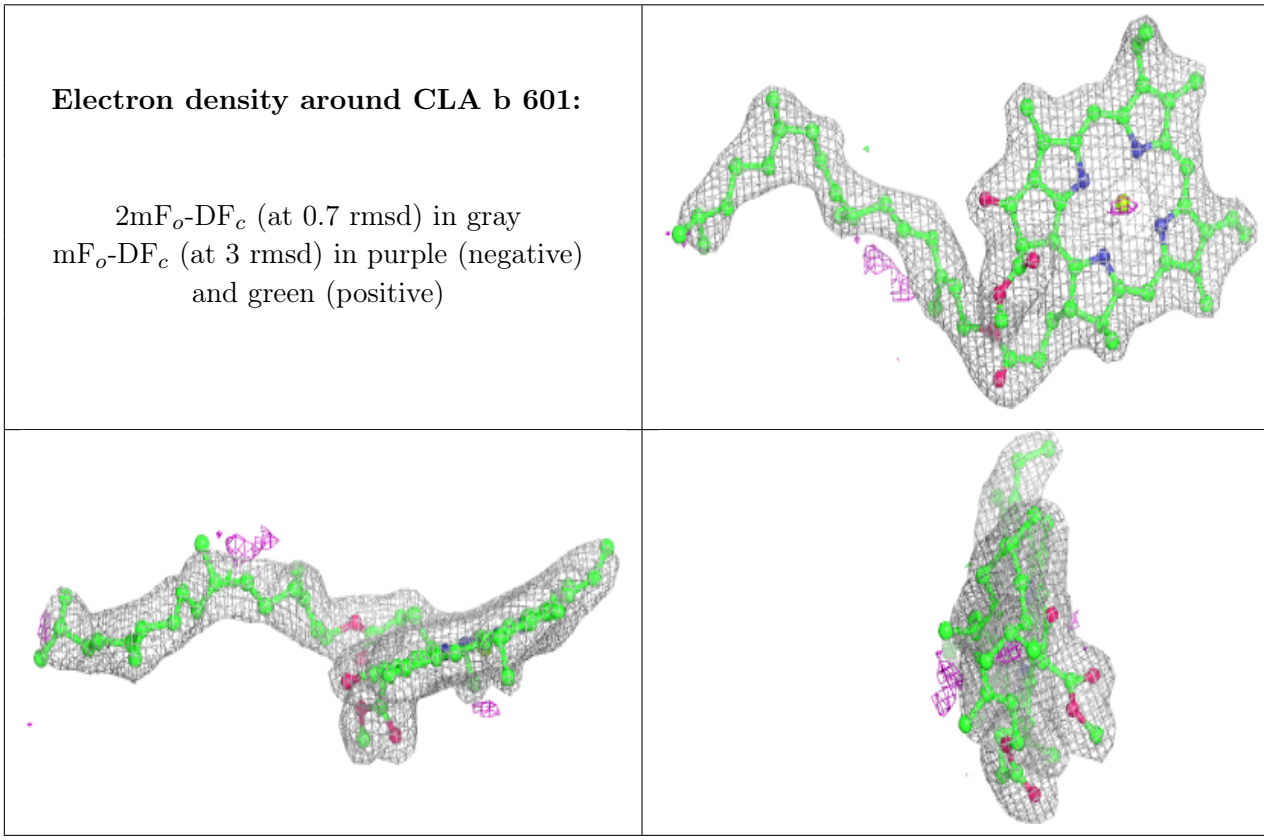
Electron density around CLA B 608:

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



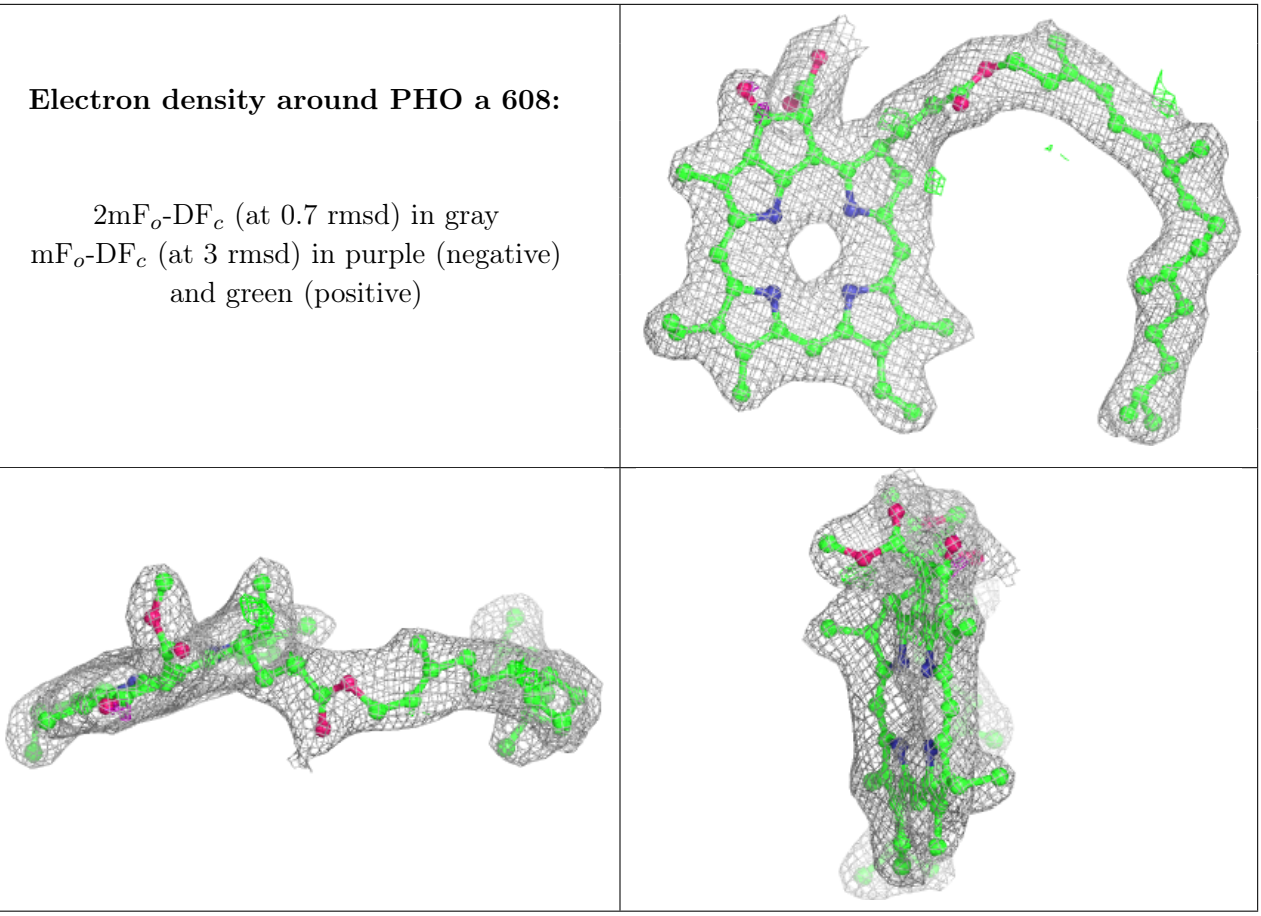
Electron density around CLA b 601:

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



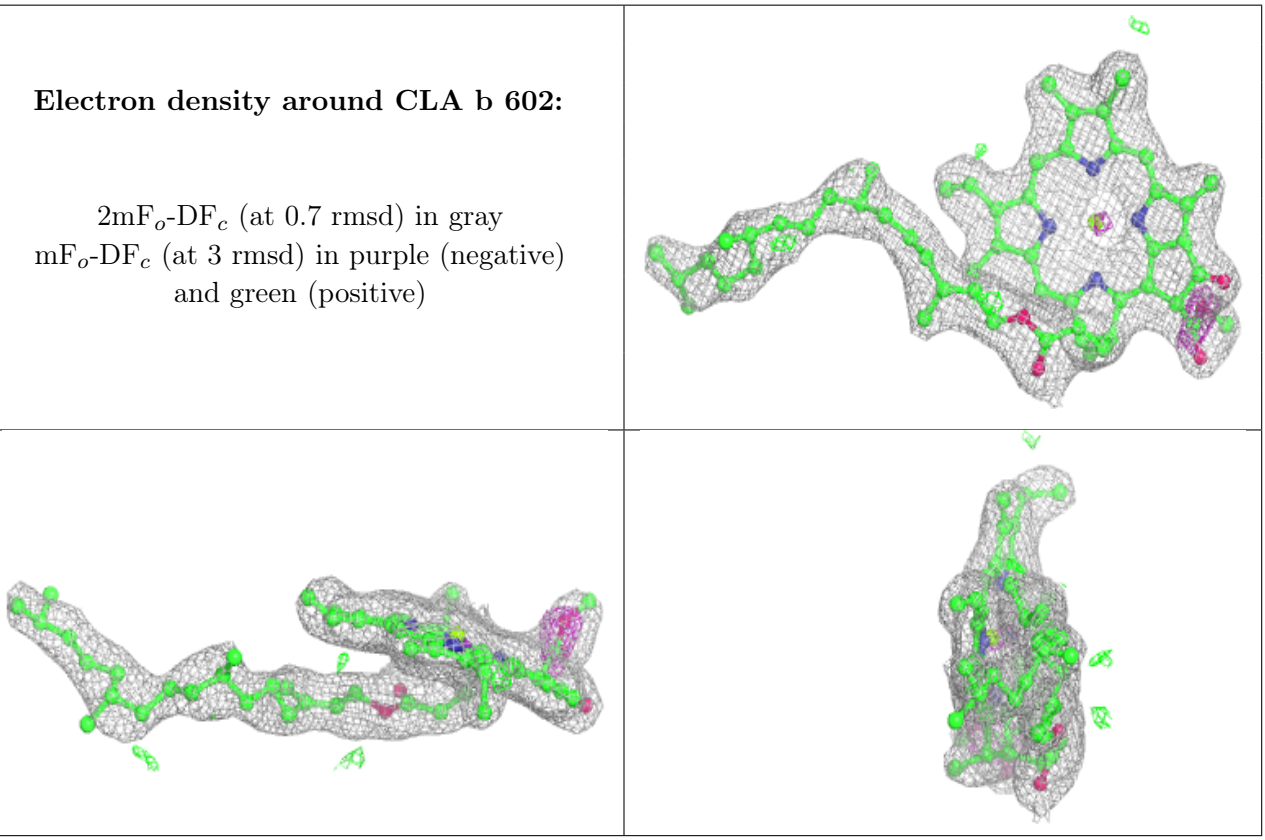
Electron density around PHO a 608:

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



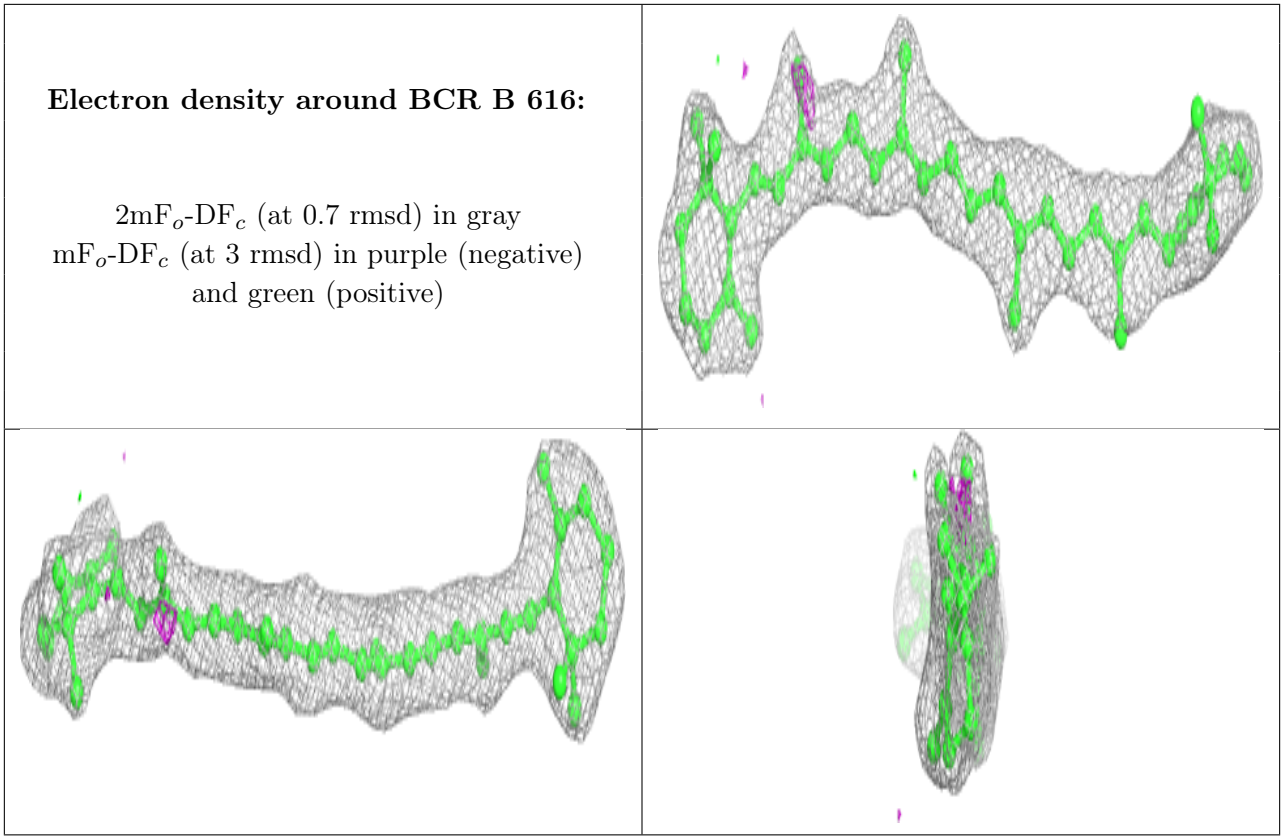
Electron density around CLA b 602:

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



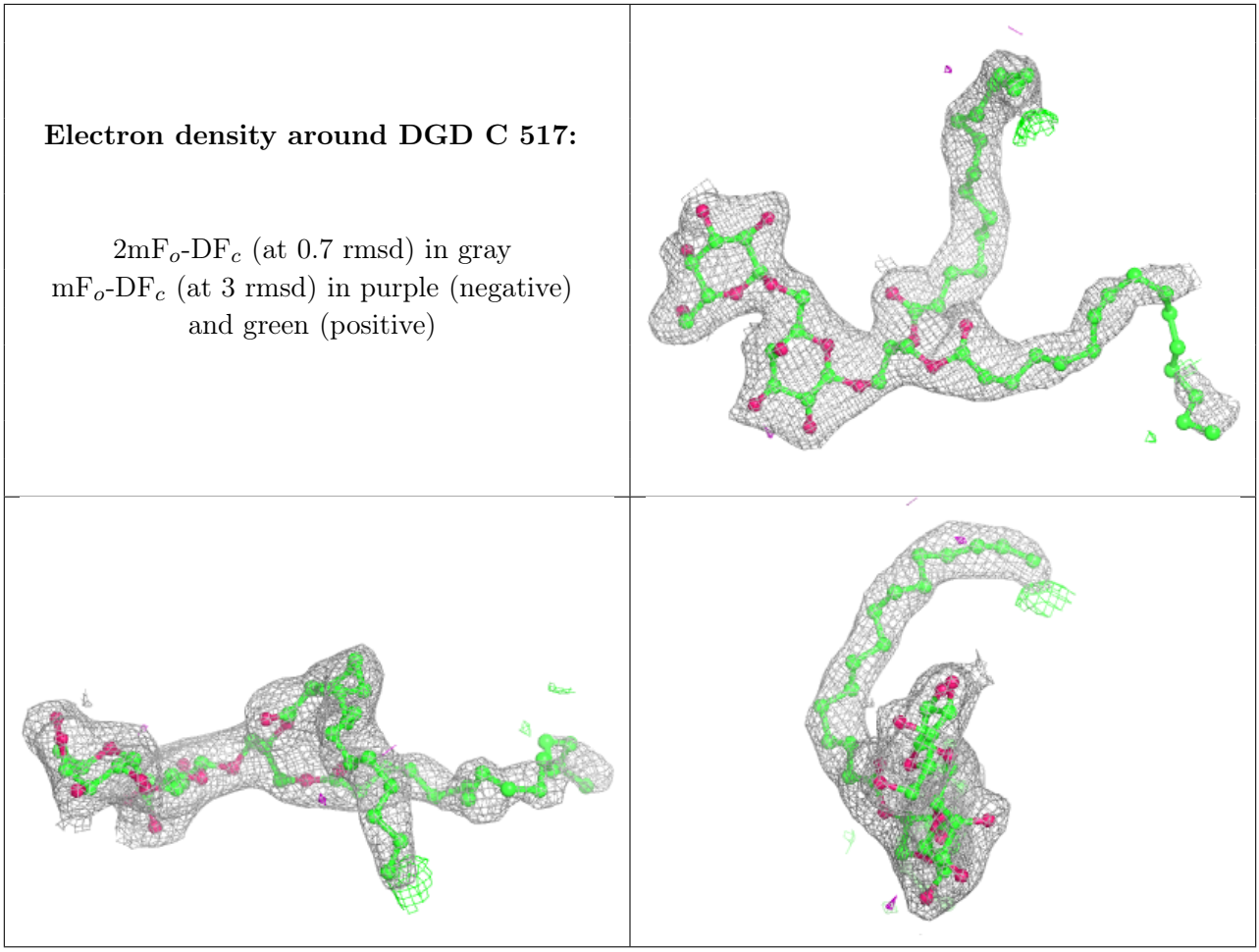
Electron density around BCR B 616:

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



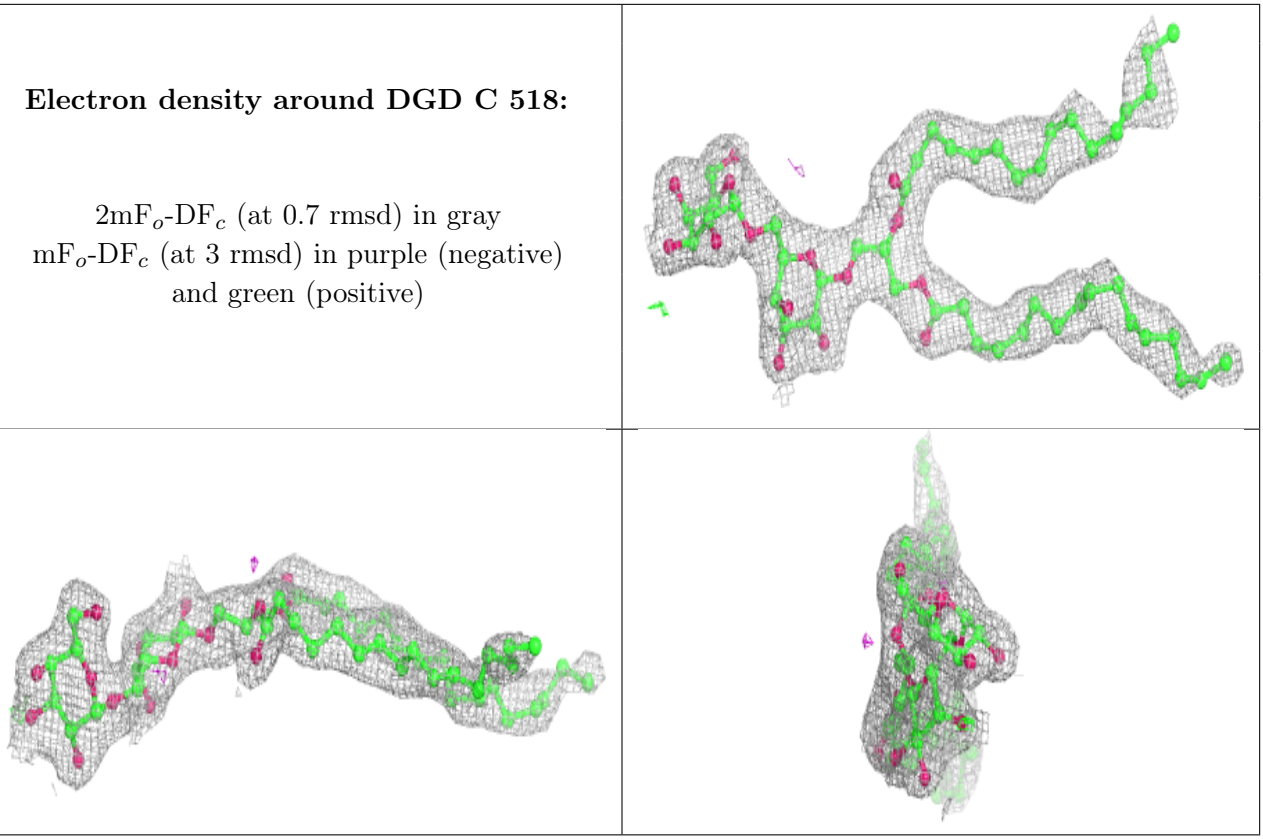
Electron density around DGD C 517:

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



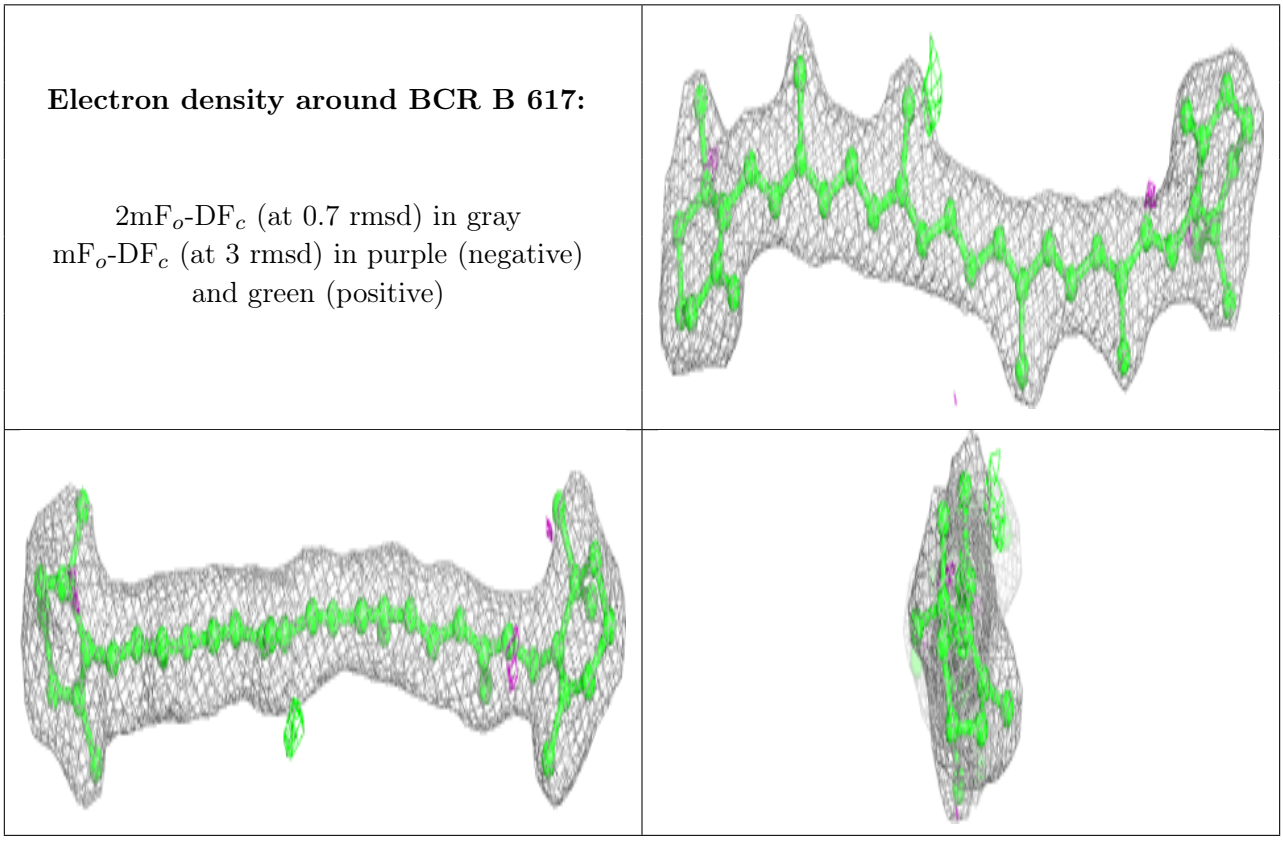
Electron density around DGD C 518:

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



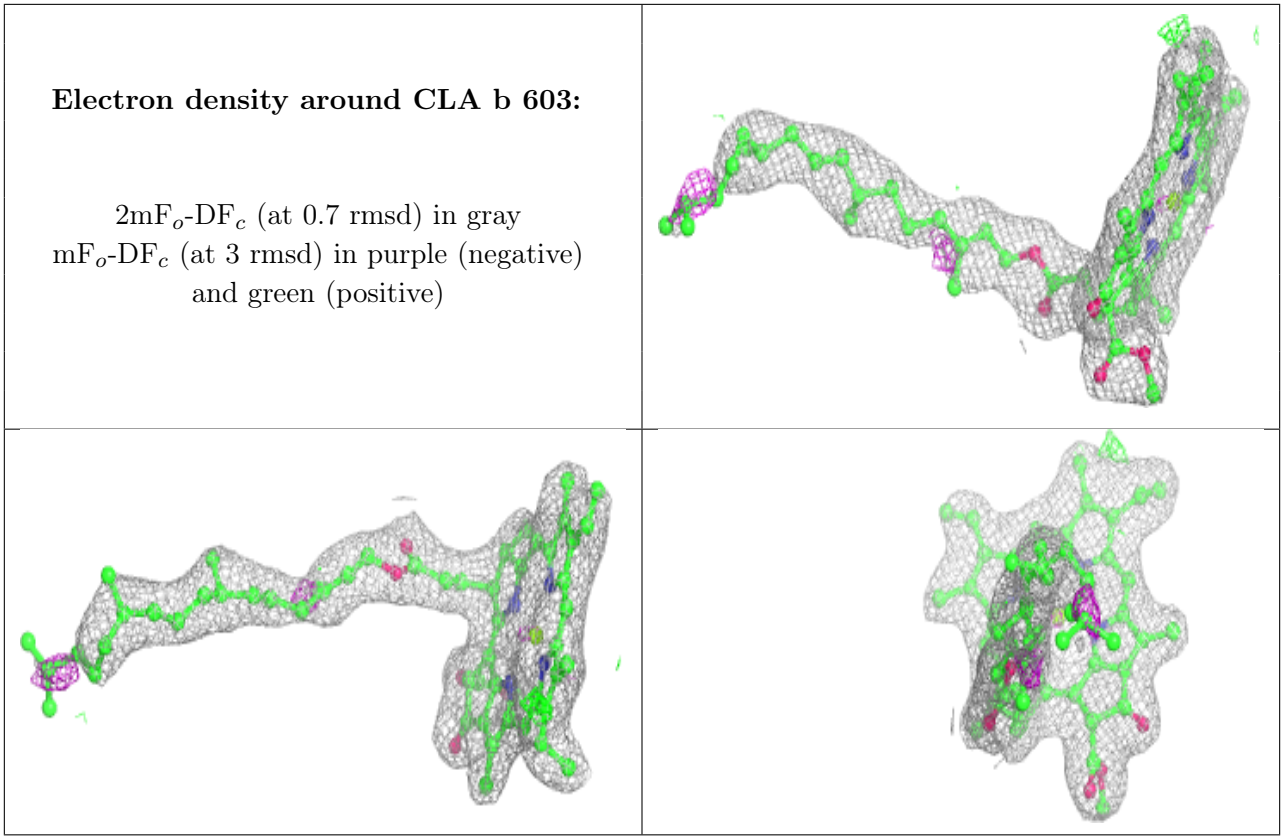
Electron density around BCR B 617:

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



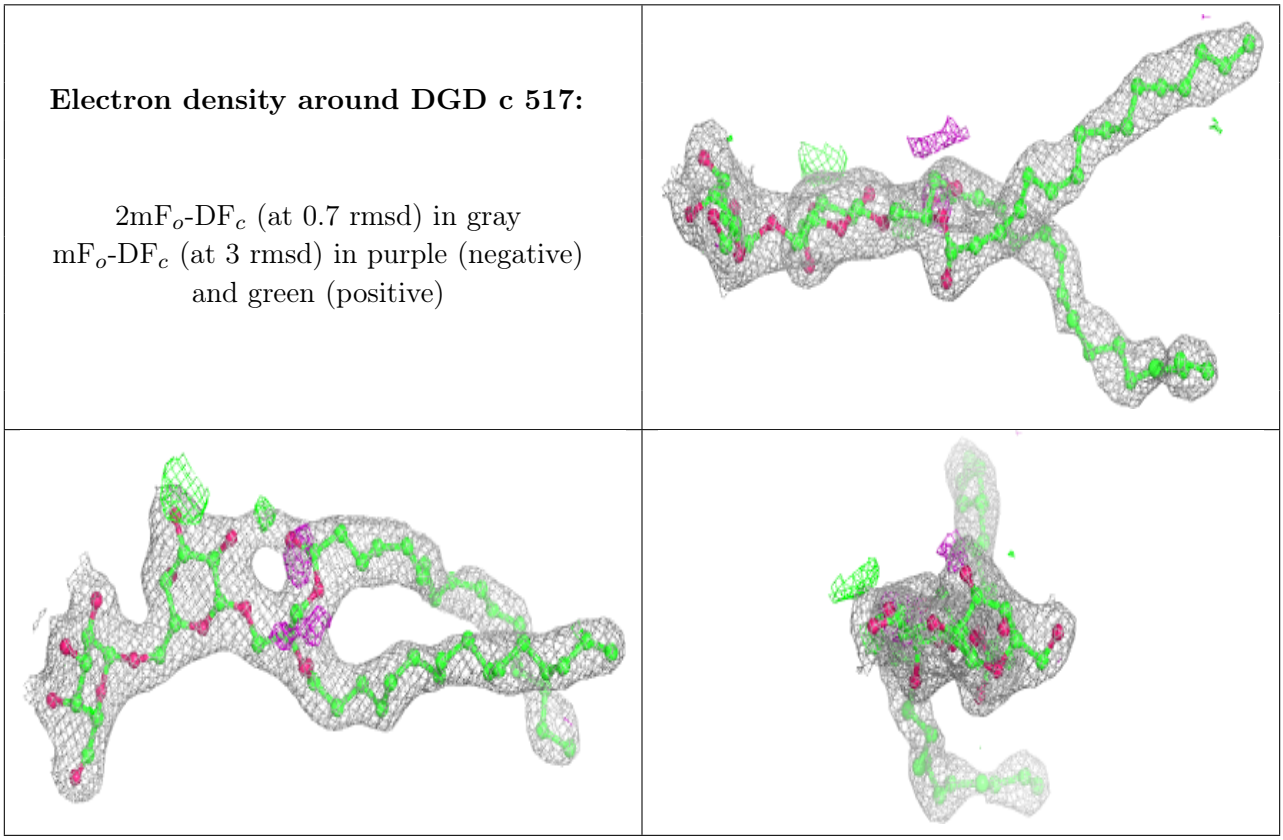
Electron density around CLA b 603:

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



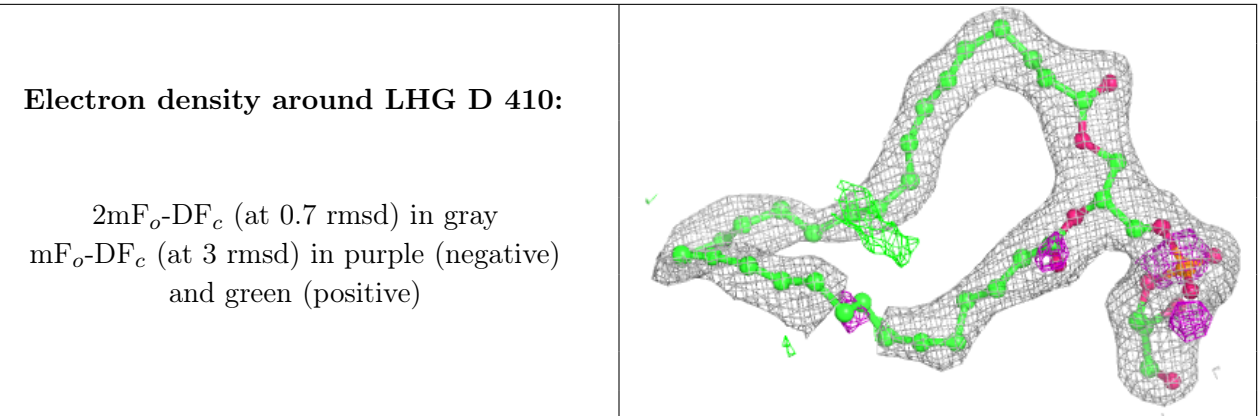
Electron density around DGD c 517:

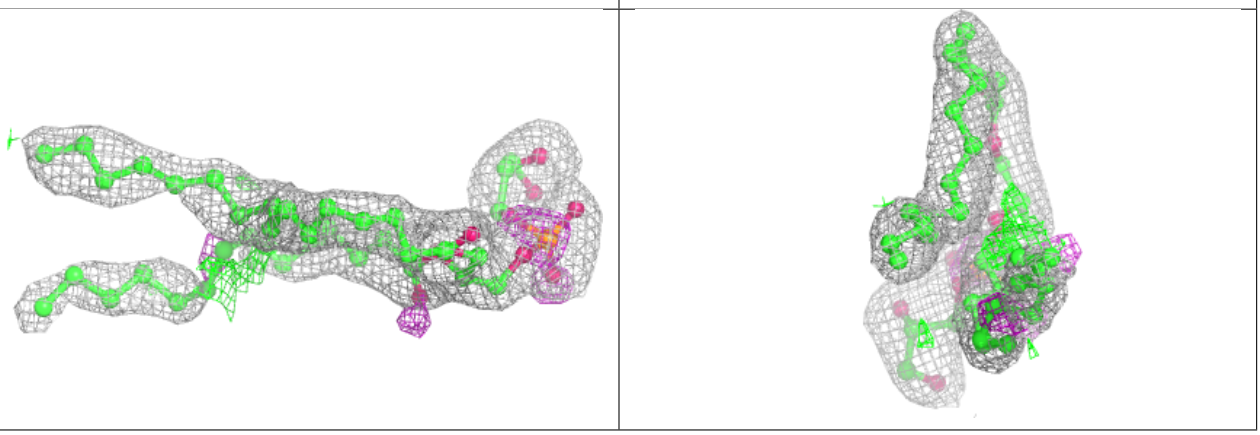
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around LHG D 410:

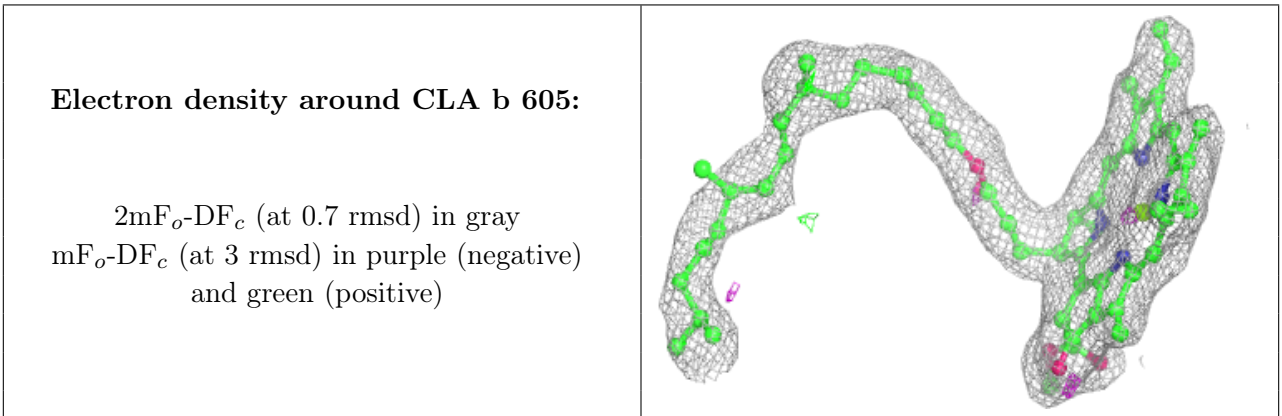
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

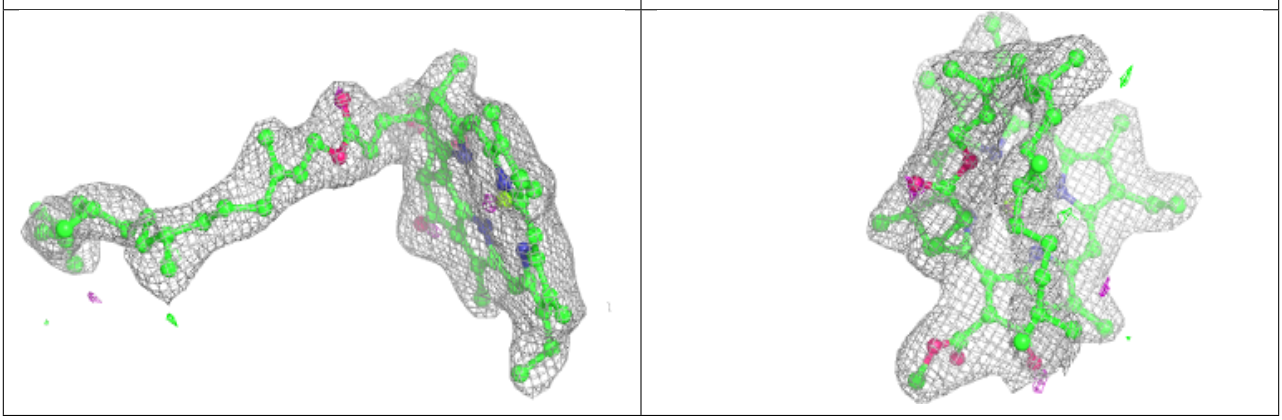




Electron density around CLA b 605:

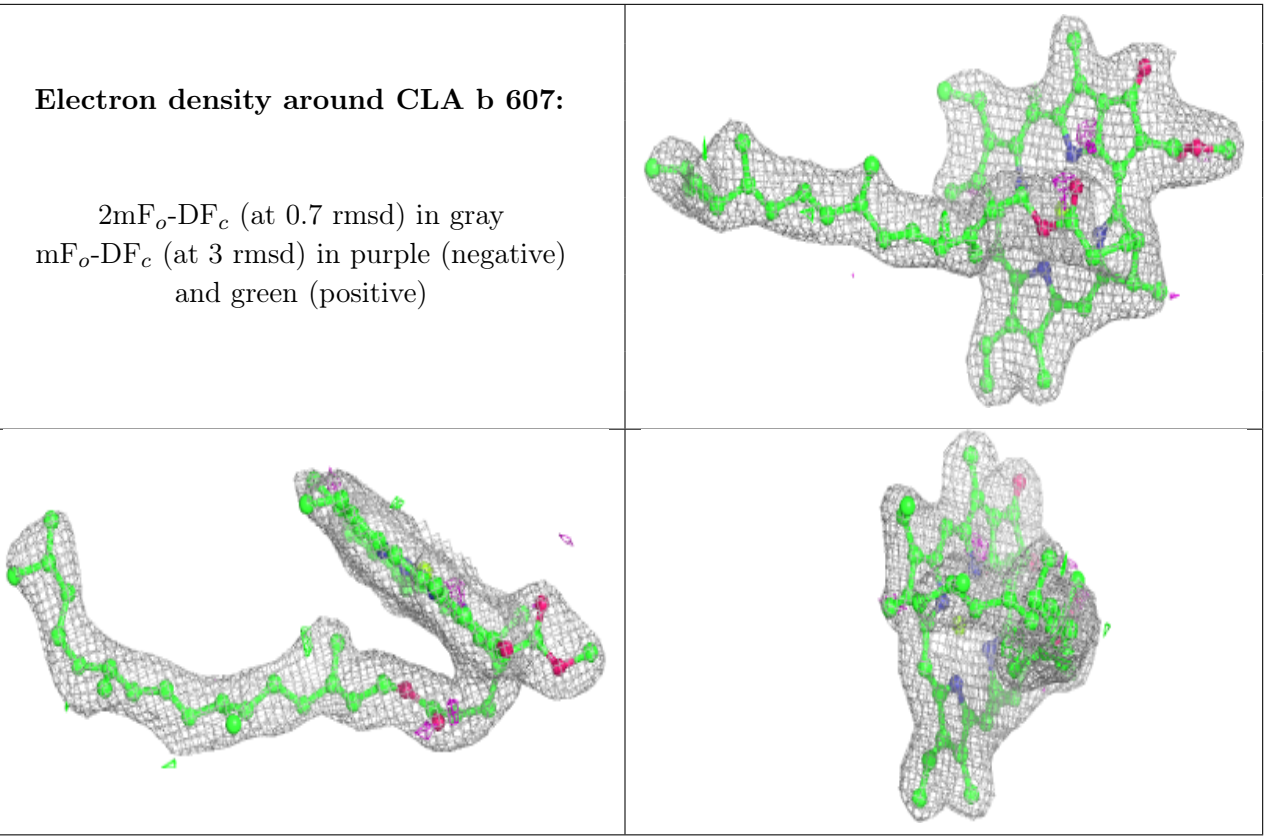
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





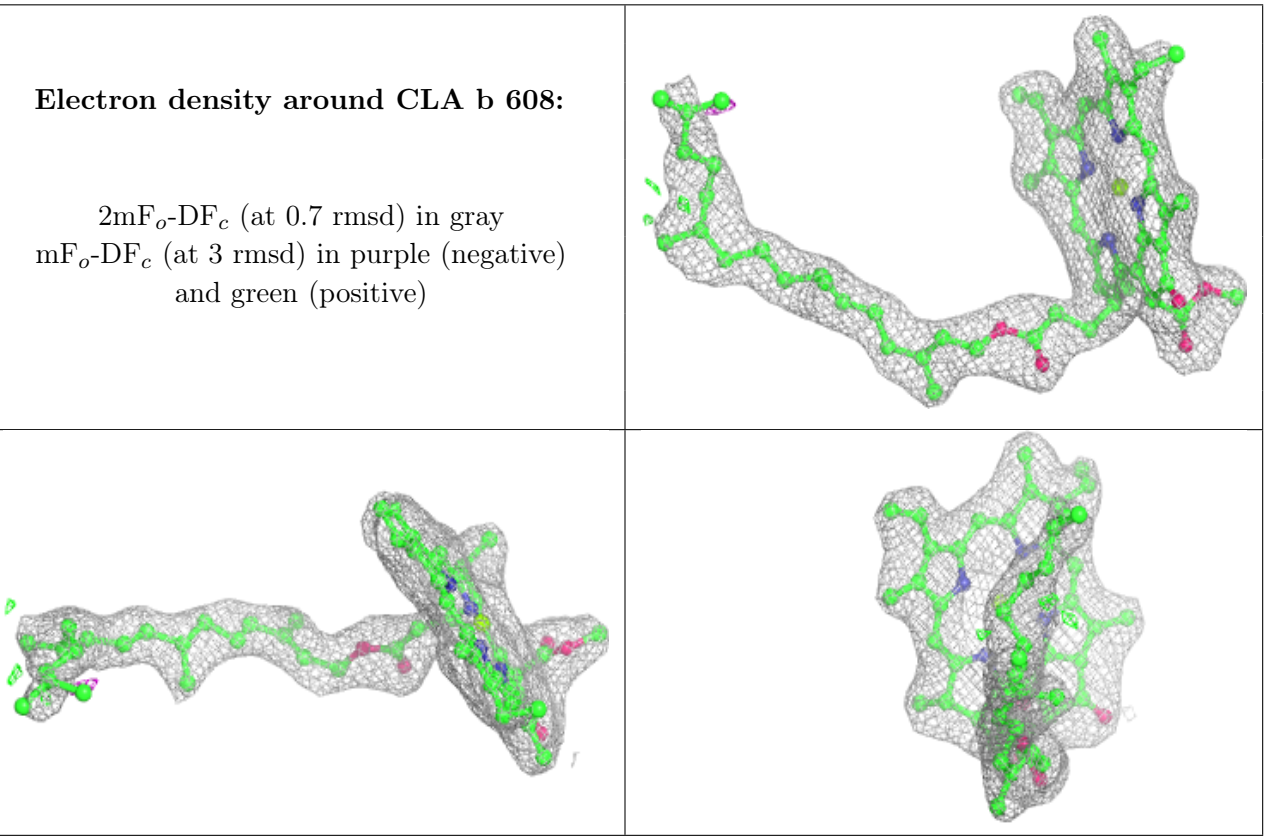
Electron density around CLA b 607:

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



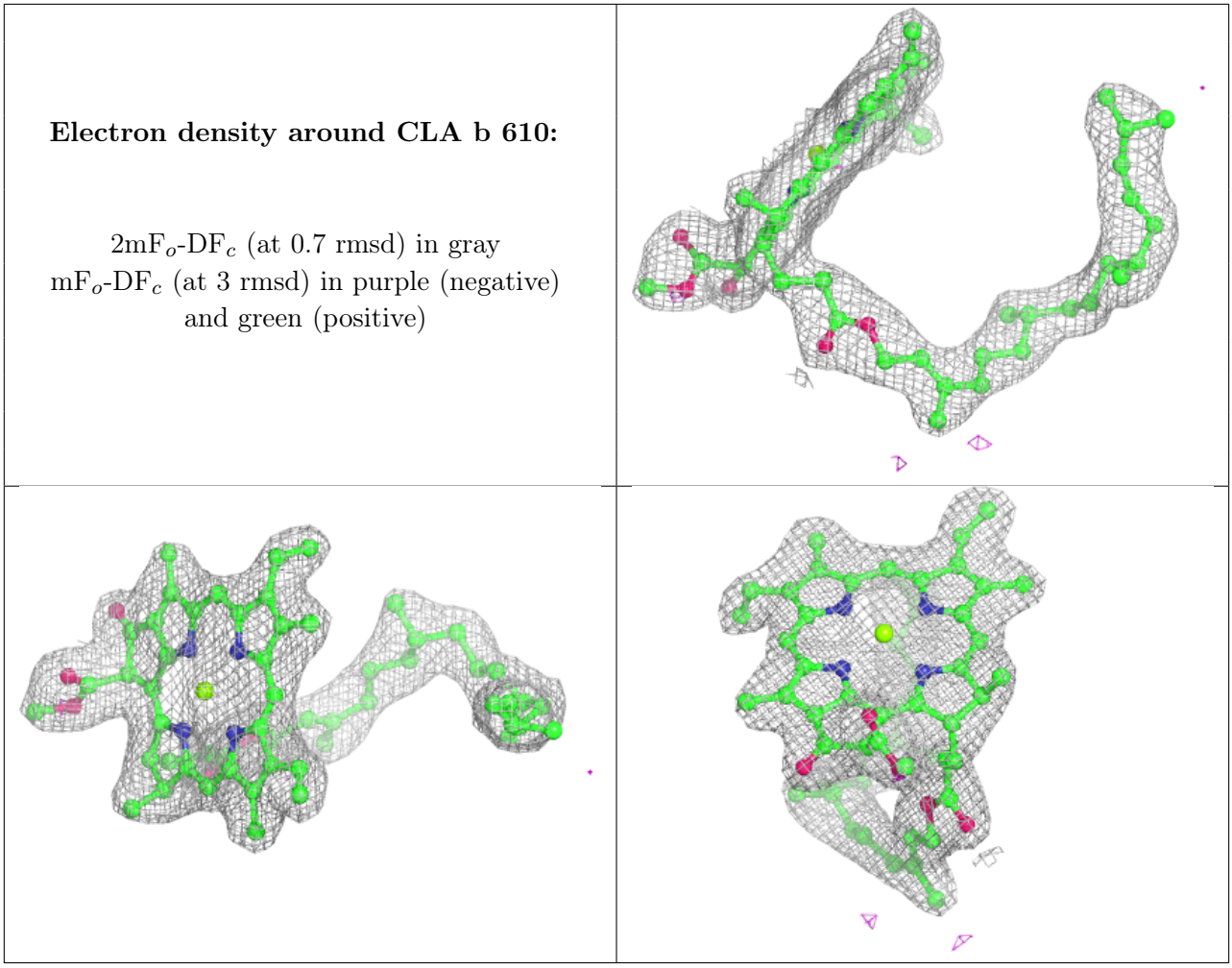
Electron density around CLA b 608:

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



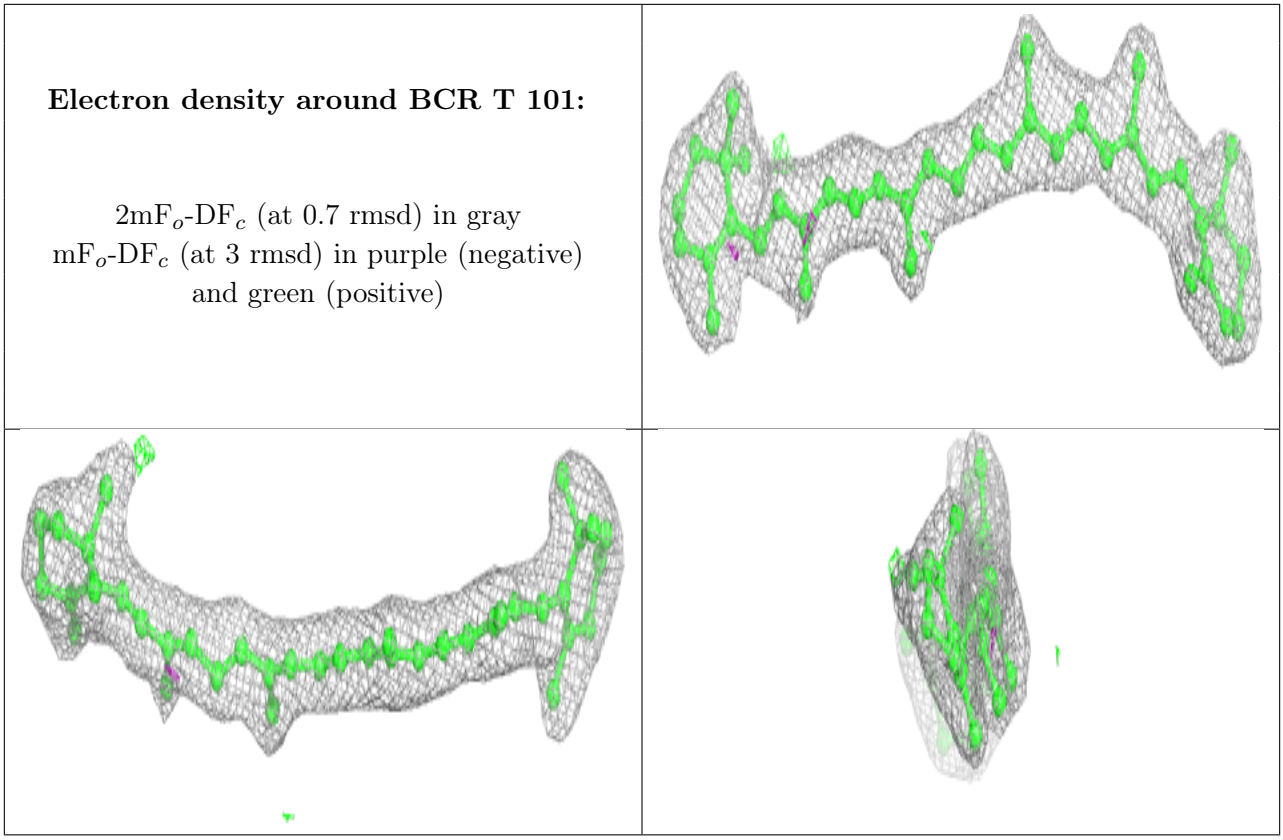
Electron density around CLA b 610:

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



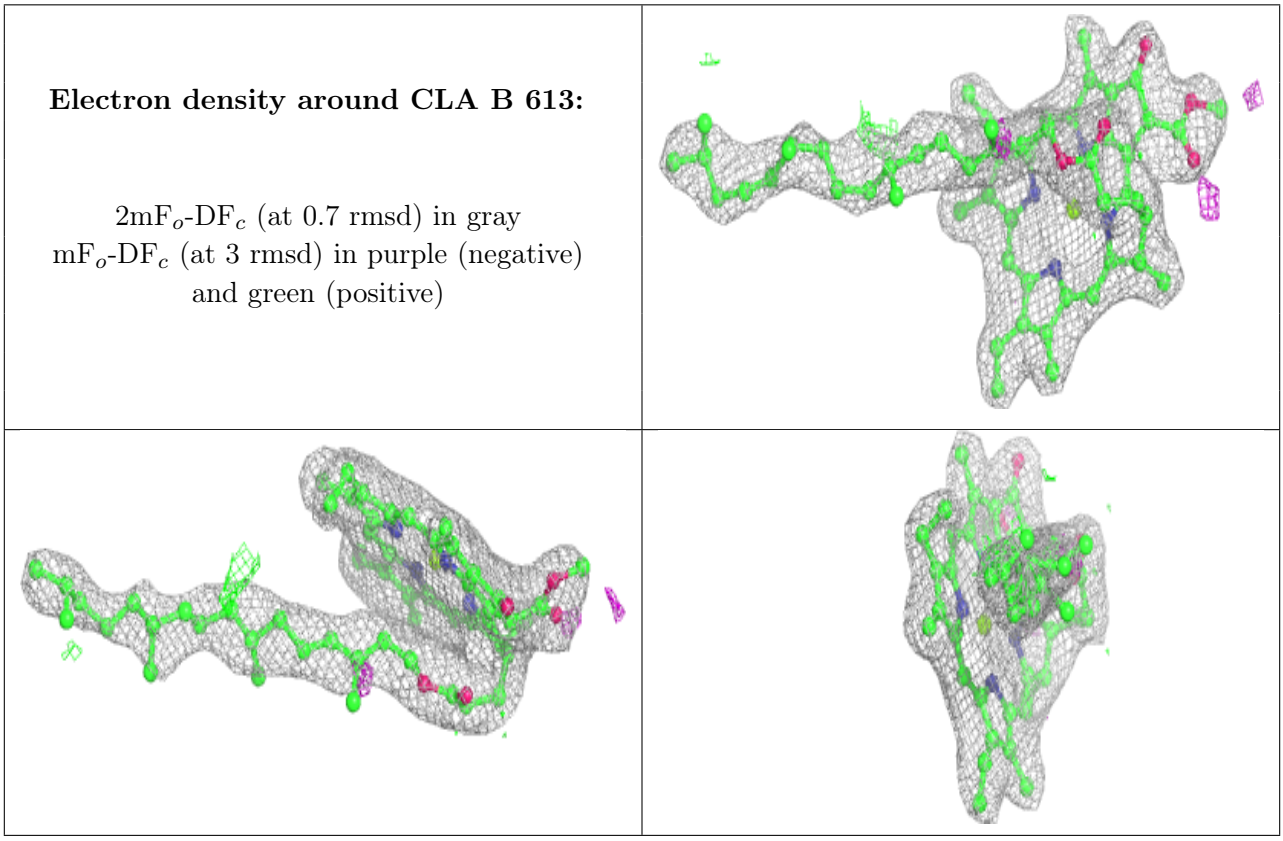
Electron density around BCR T 101:

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



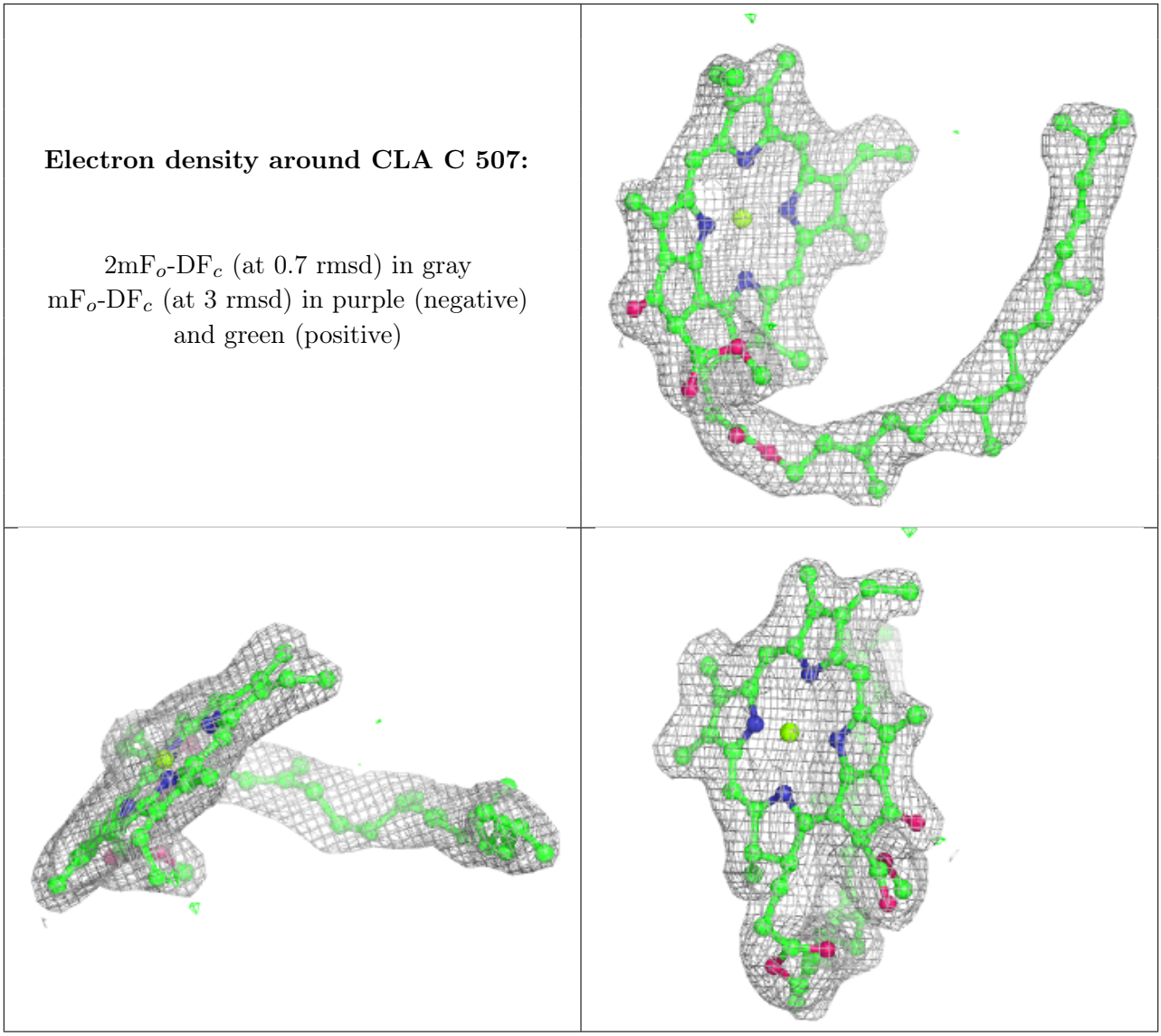
Electron density around CLA B 613:

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



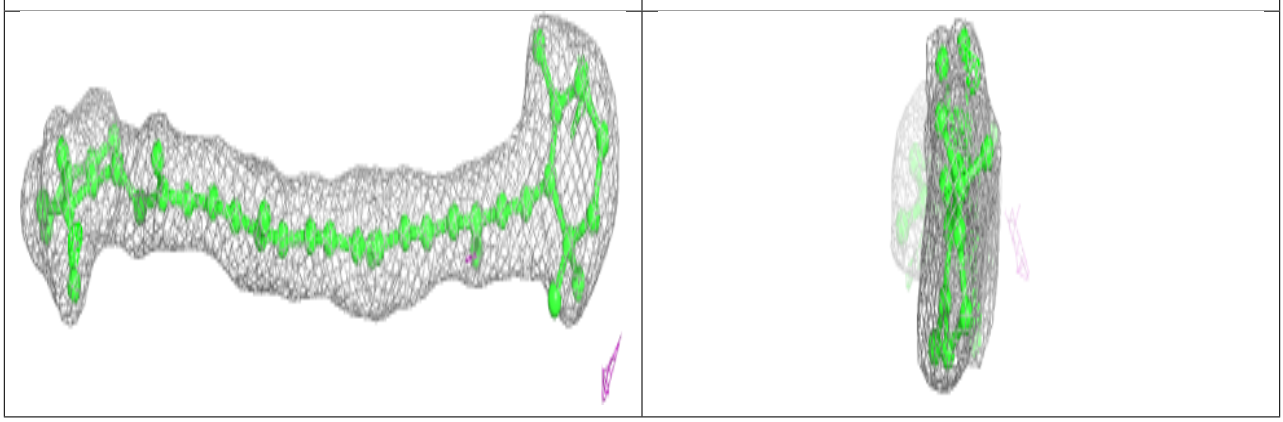
Electron density around CLA C 507:

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



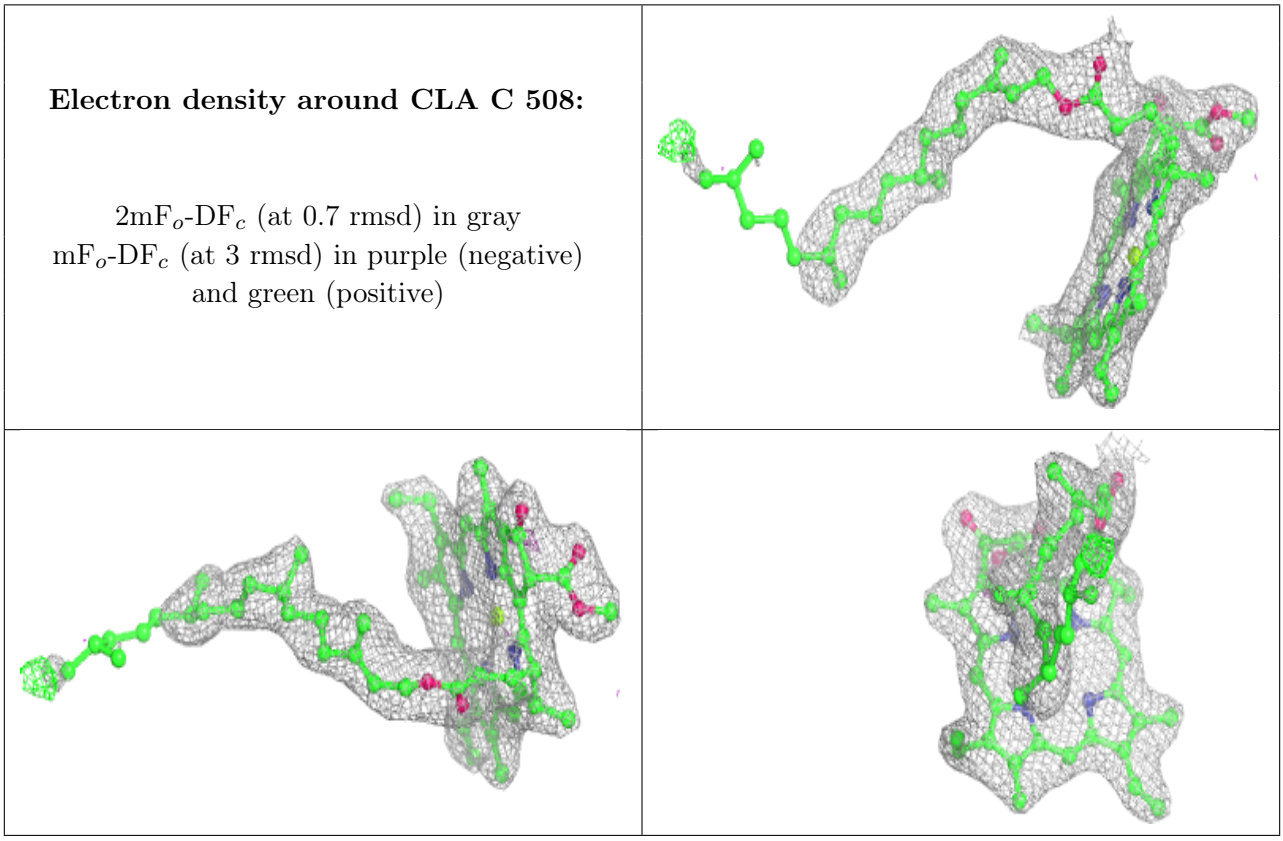
Electron density around BCR b 616:

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



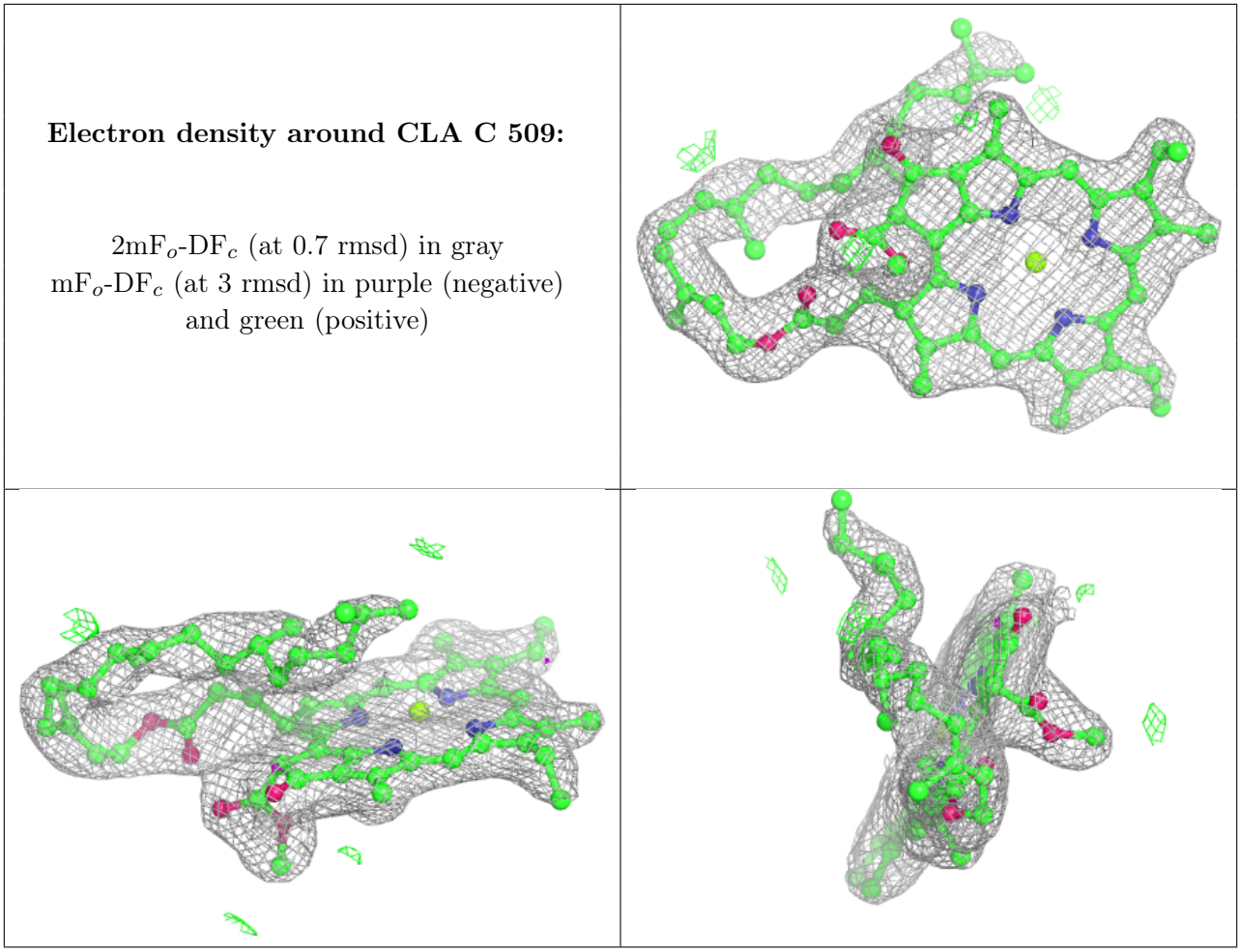
Electron density around CLA C 508:

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



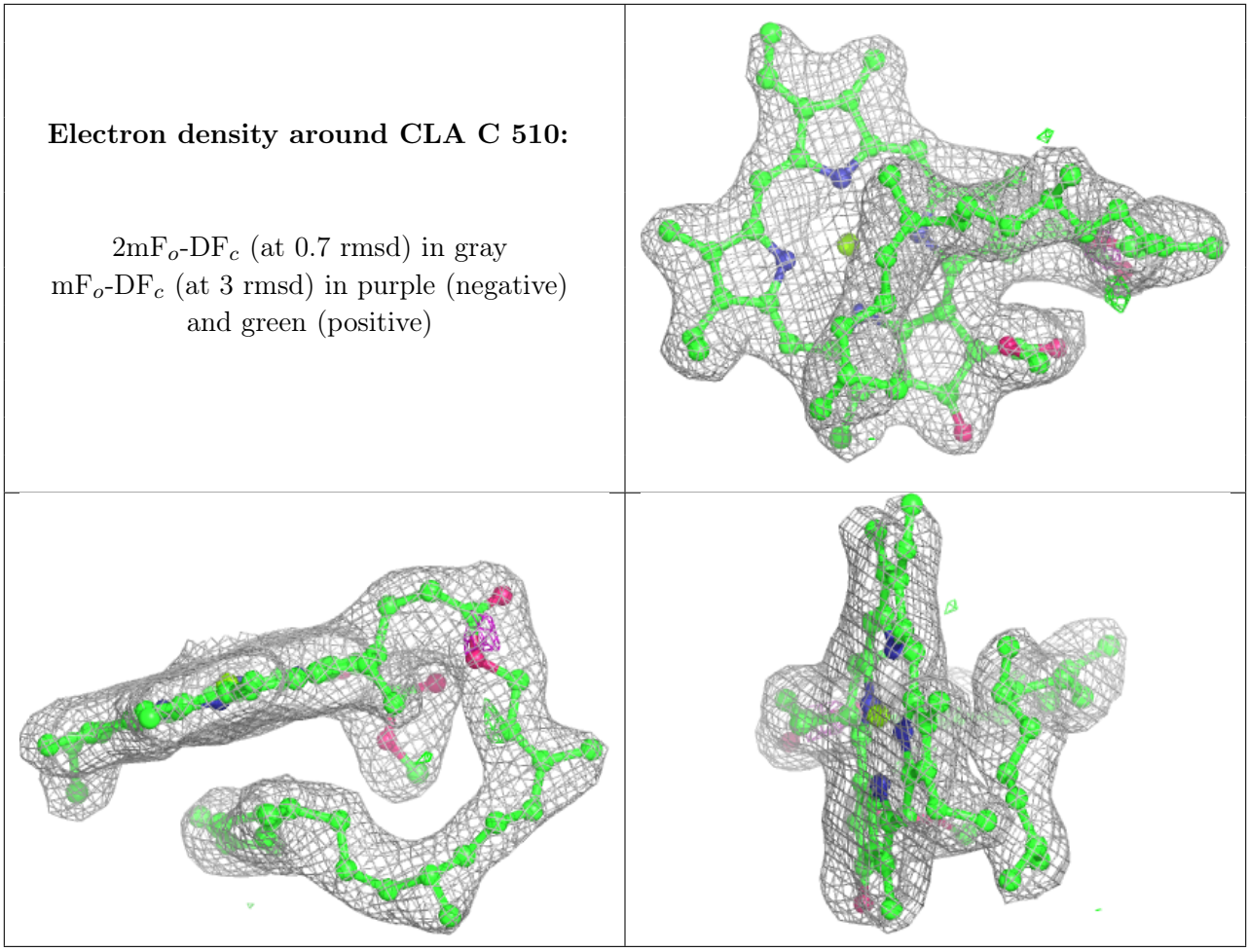
Electron density around CLA C 509:

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



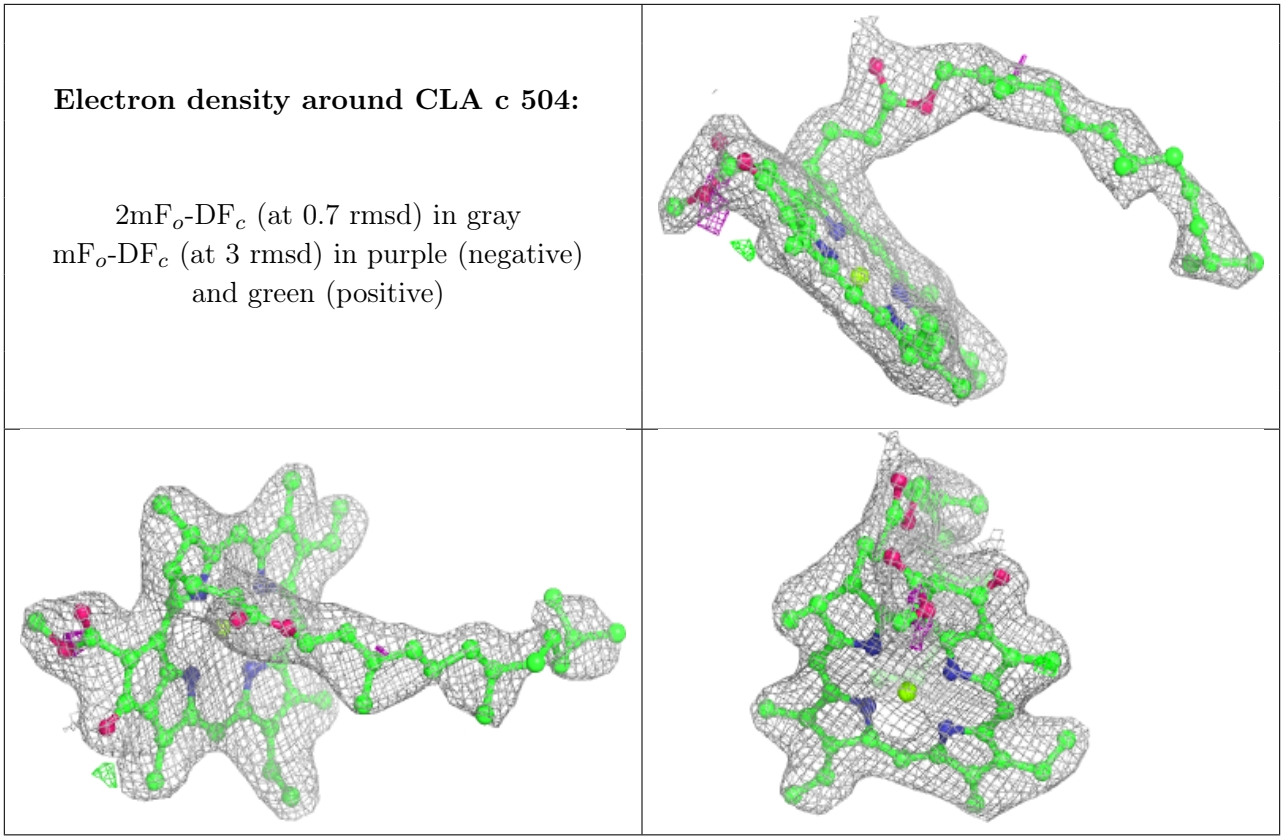
Electron density around CLA C 510:

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



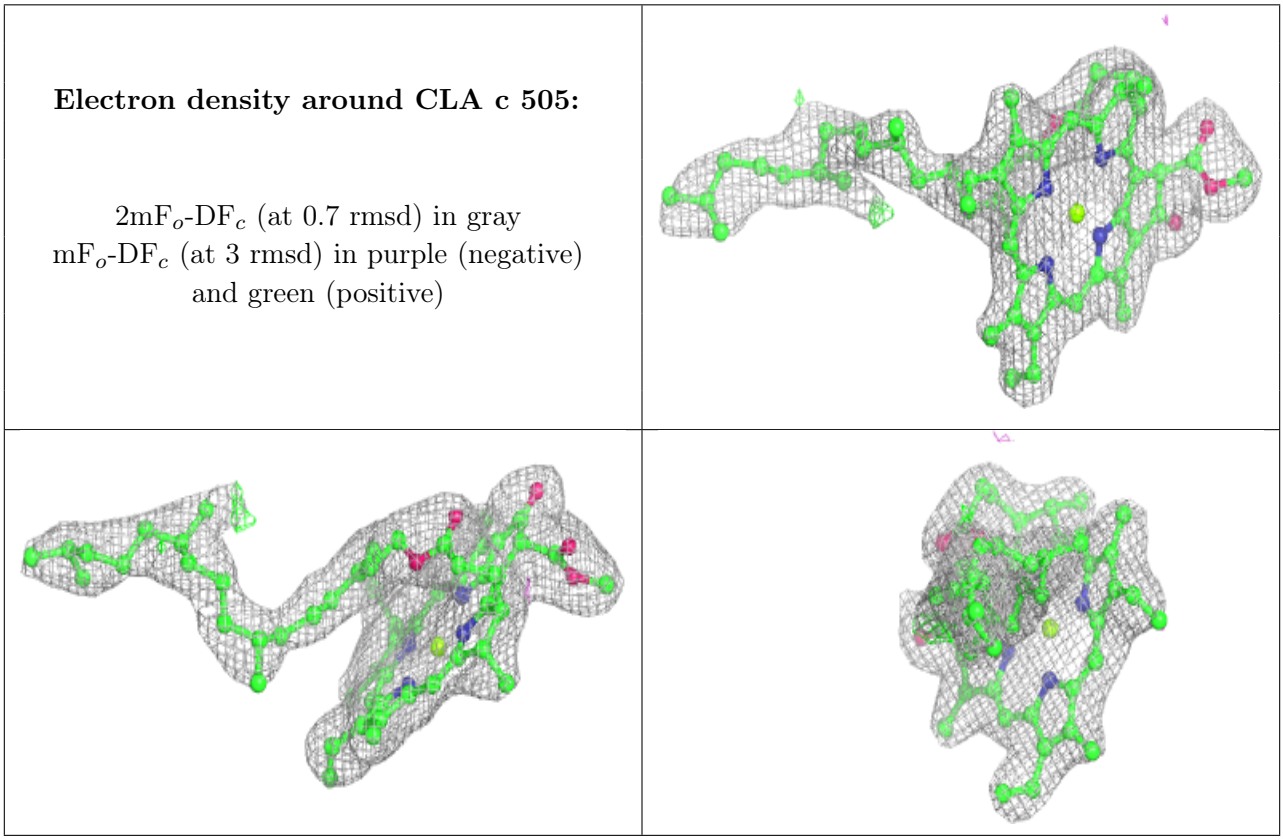
Electron density around CLA c 504:

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



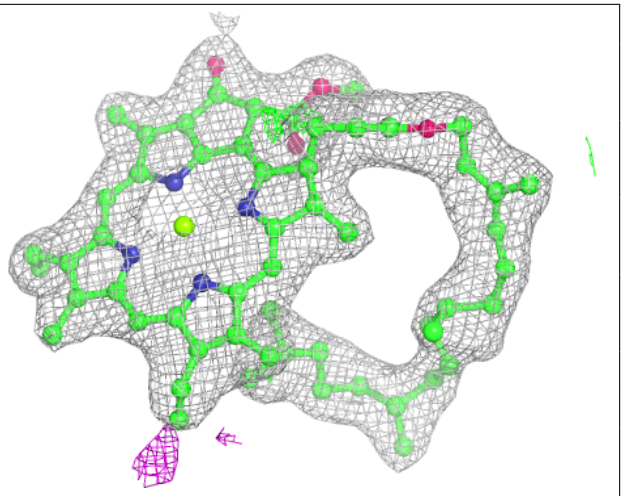
Electron density around CLA c 505:

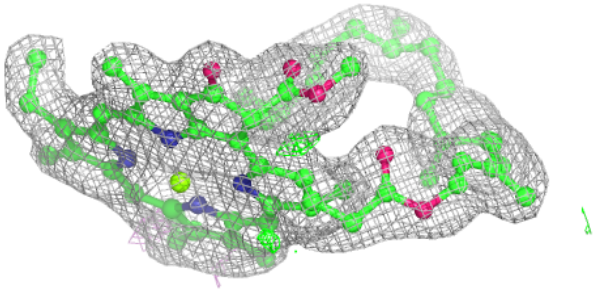
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

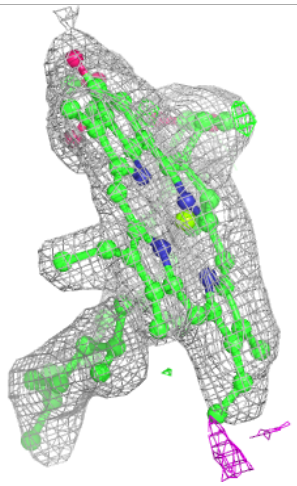


Electron density around CLA B 614:

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

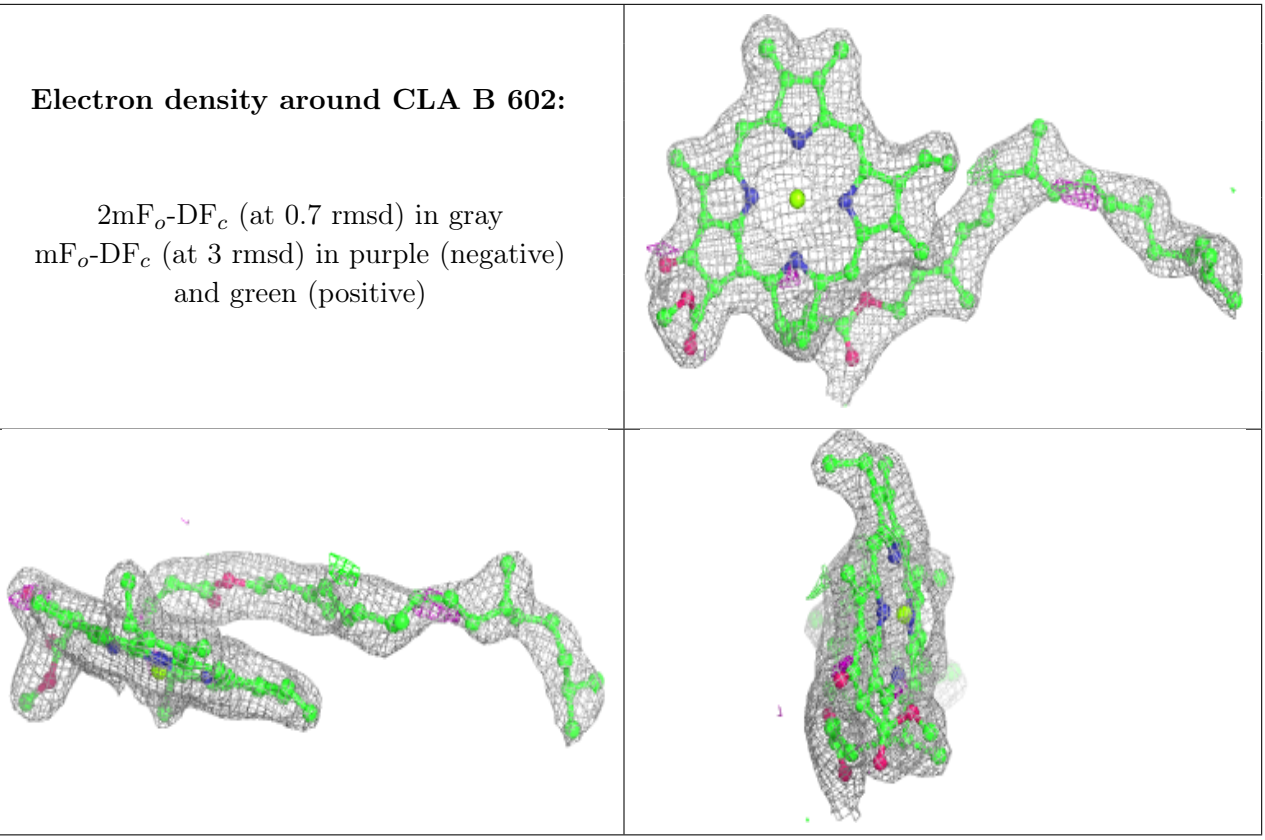






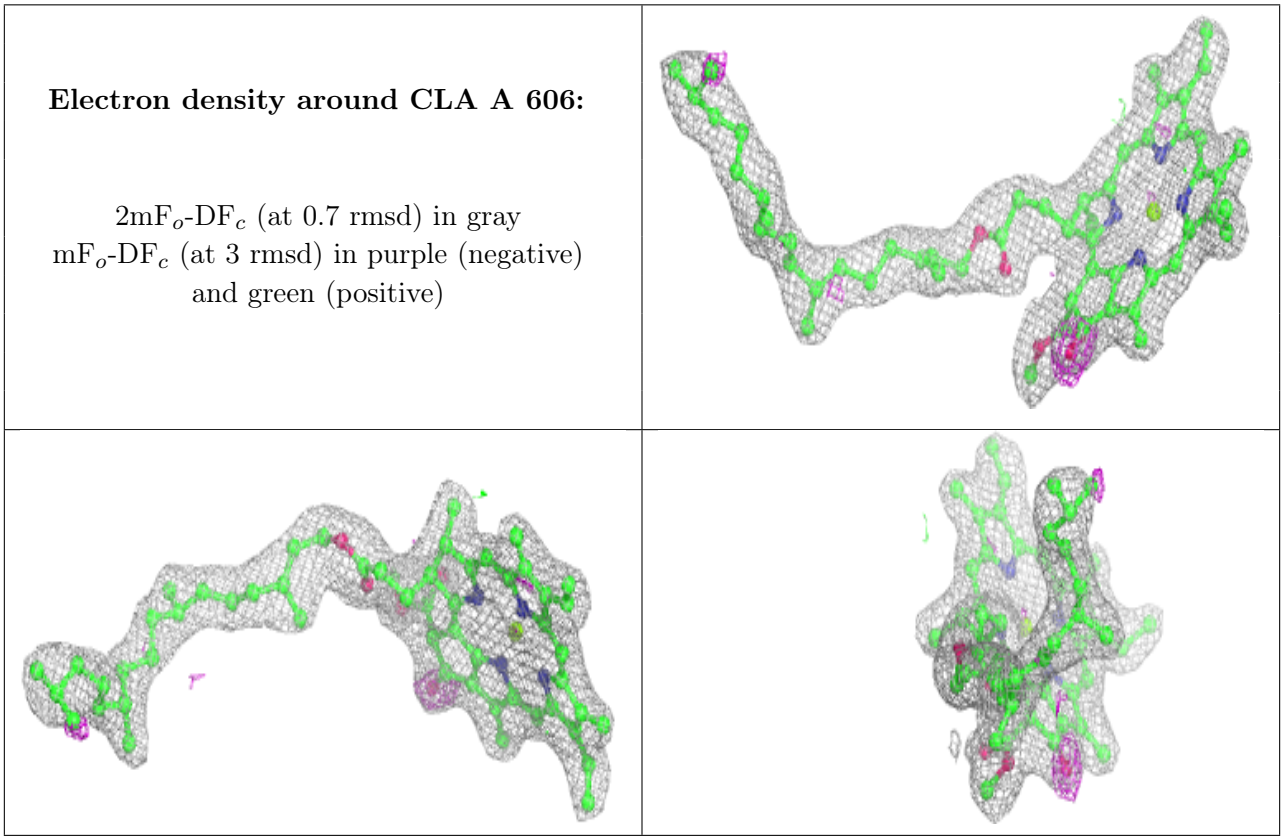
Electron density around CLA B 602:

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



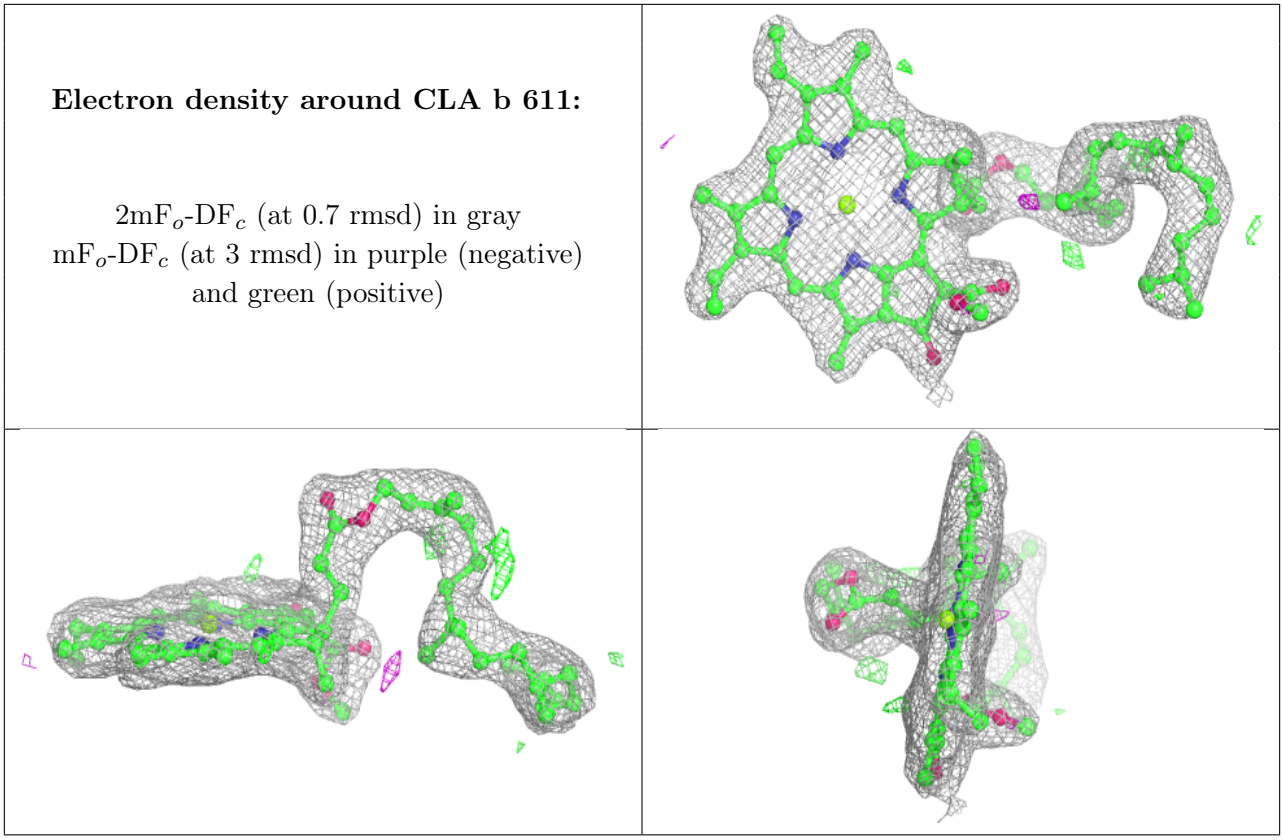
Electron density around CLA A 606:

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



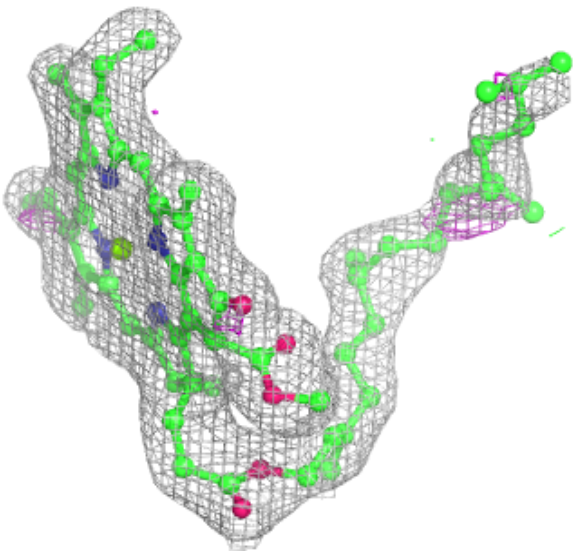
Electron density around CLA b 611:

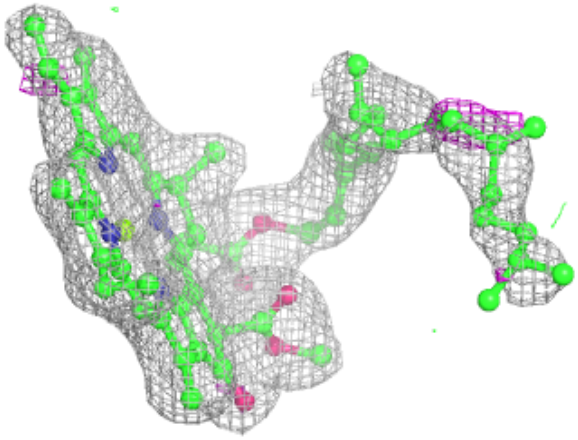
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

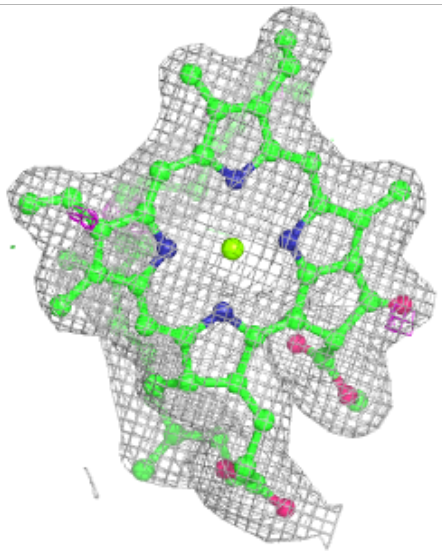


Electron density around CLA b 612:

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

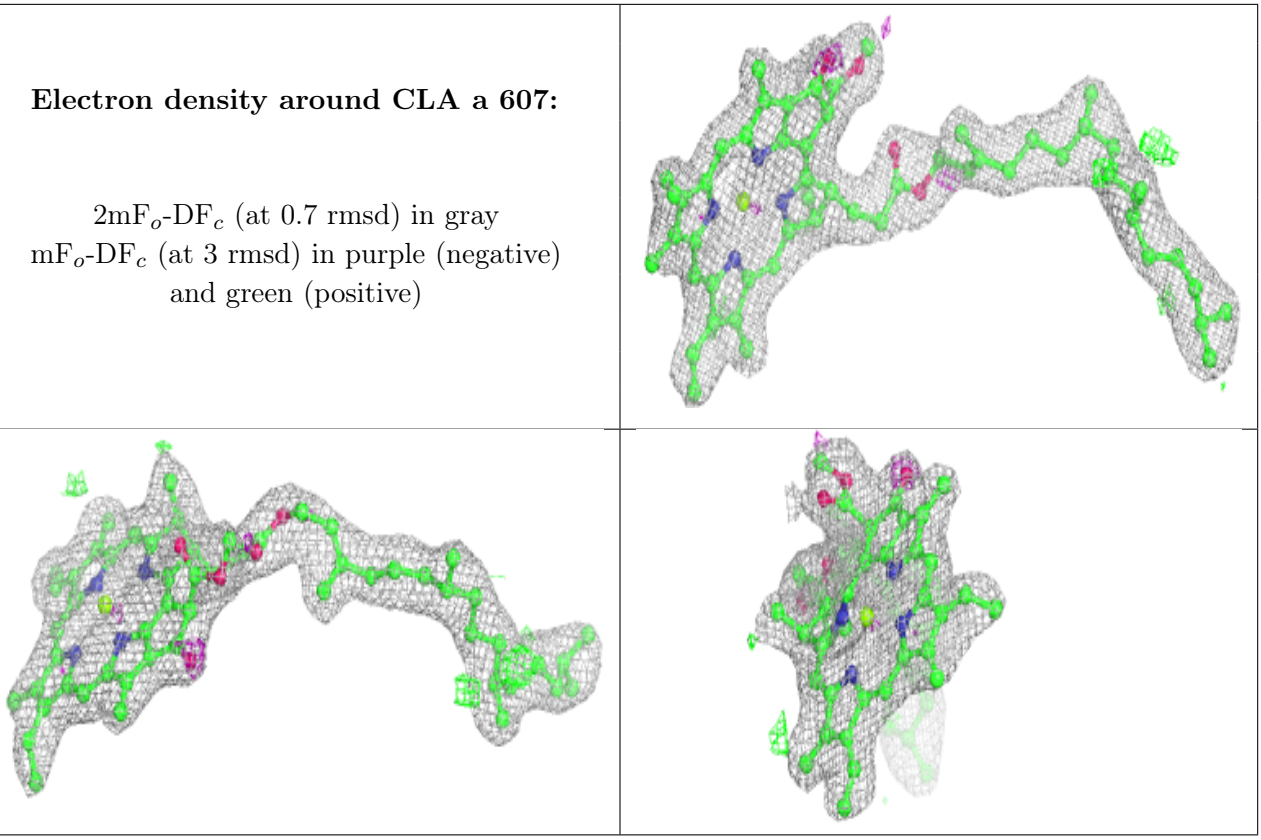






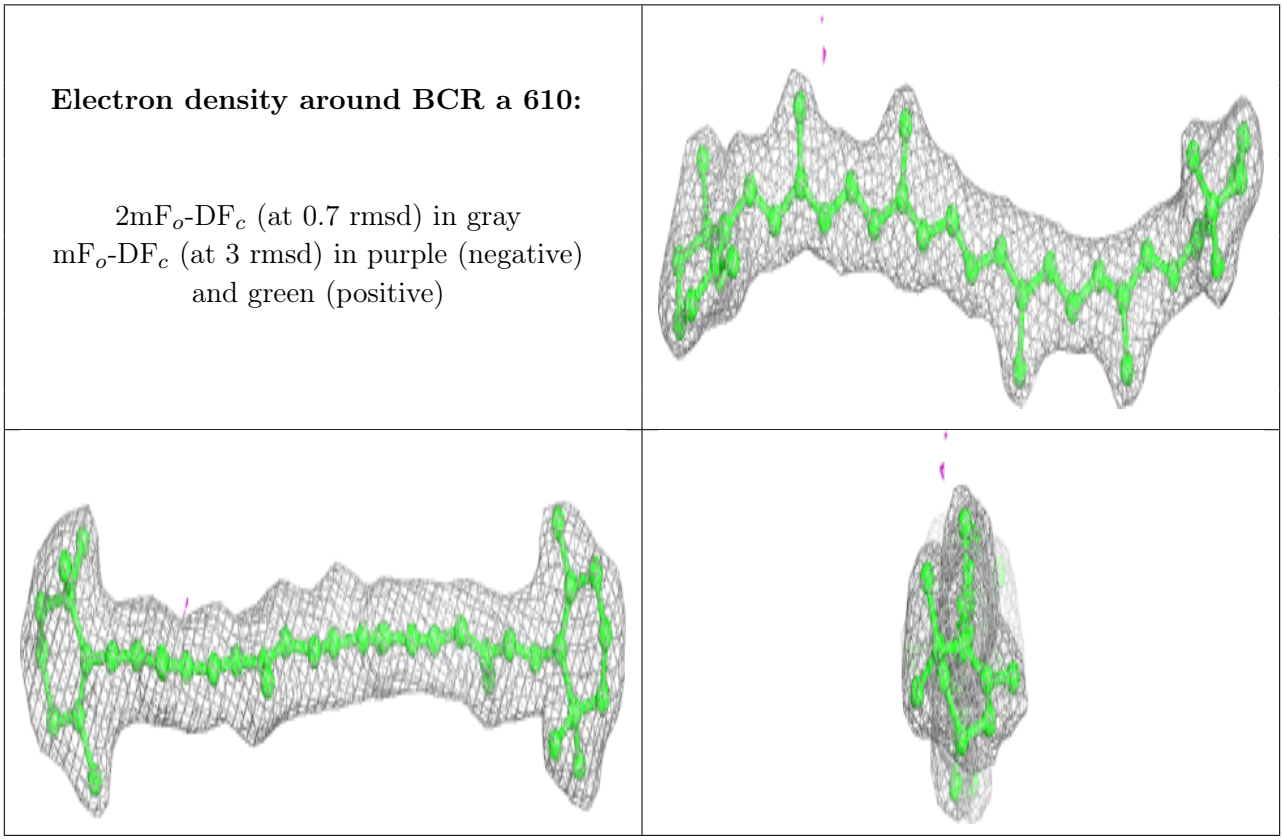
Electron density around CLA a 607:

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



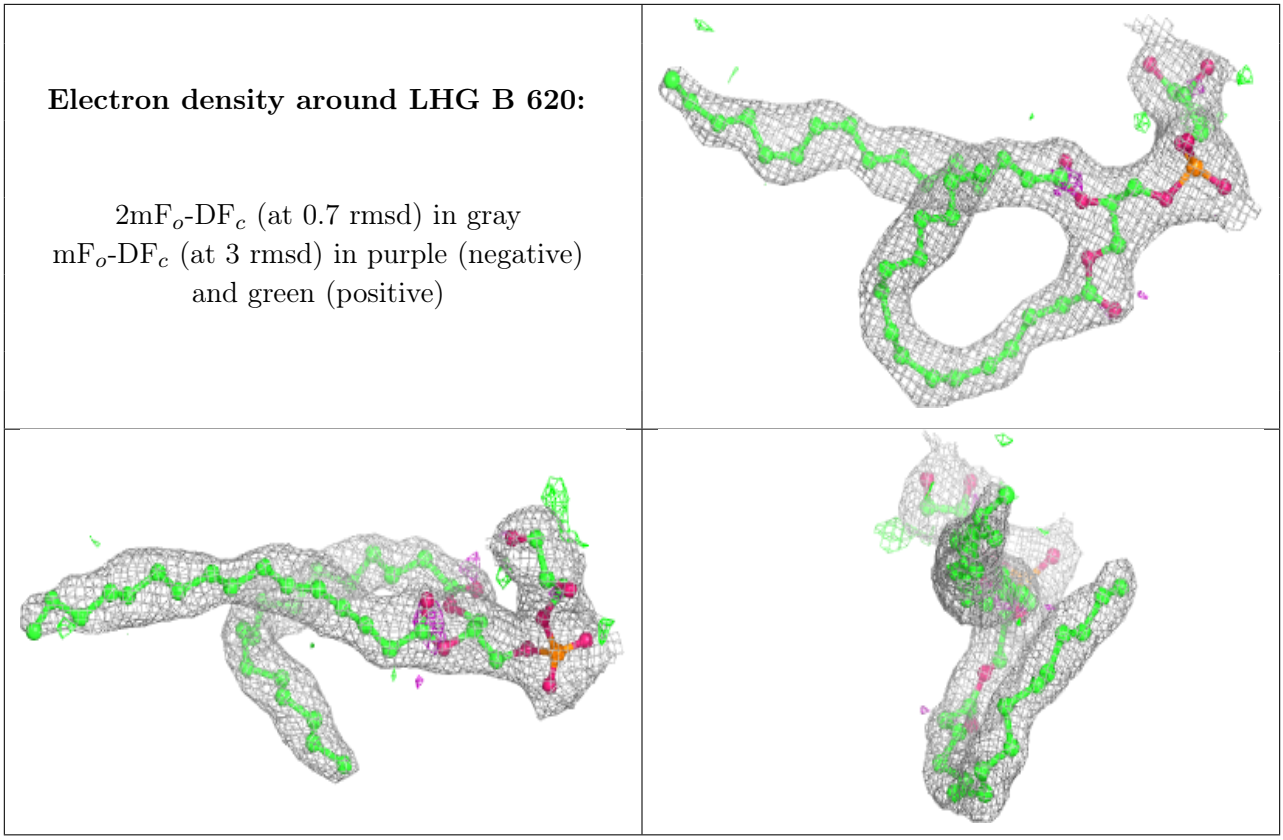
Electron density around BCR a 610:

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



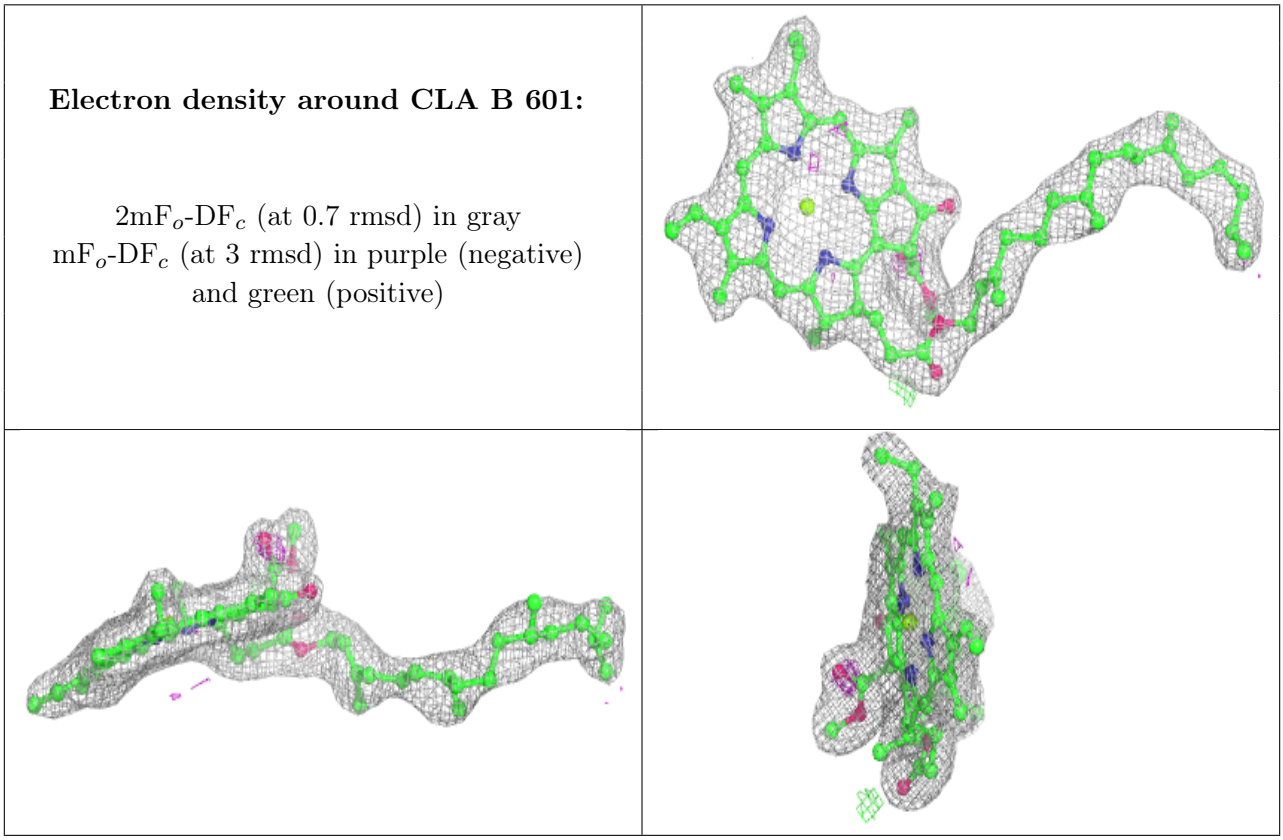
Electron density around LHG B 620:

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



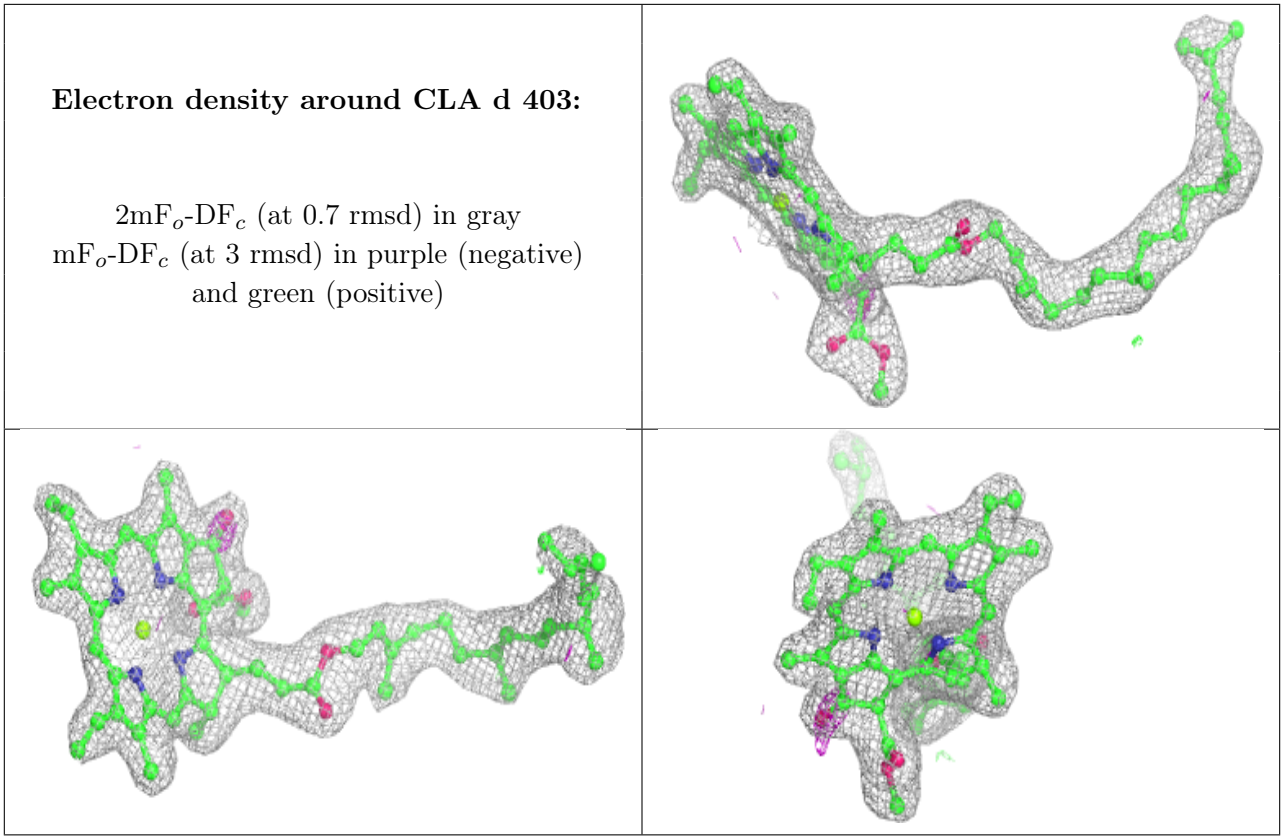
Electron density around CLA B 601:

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



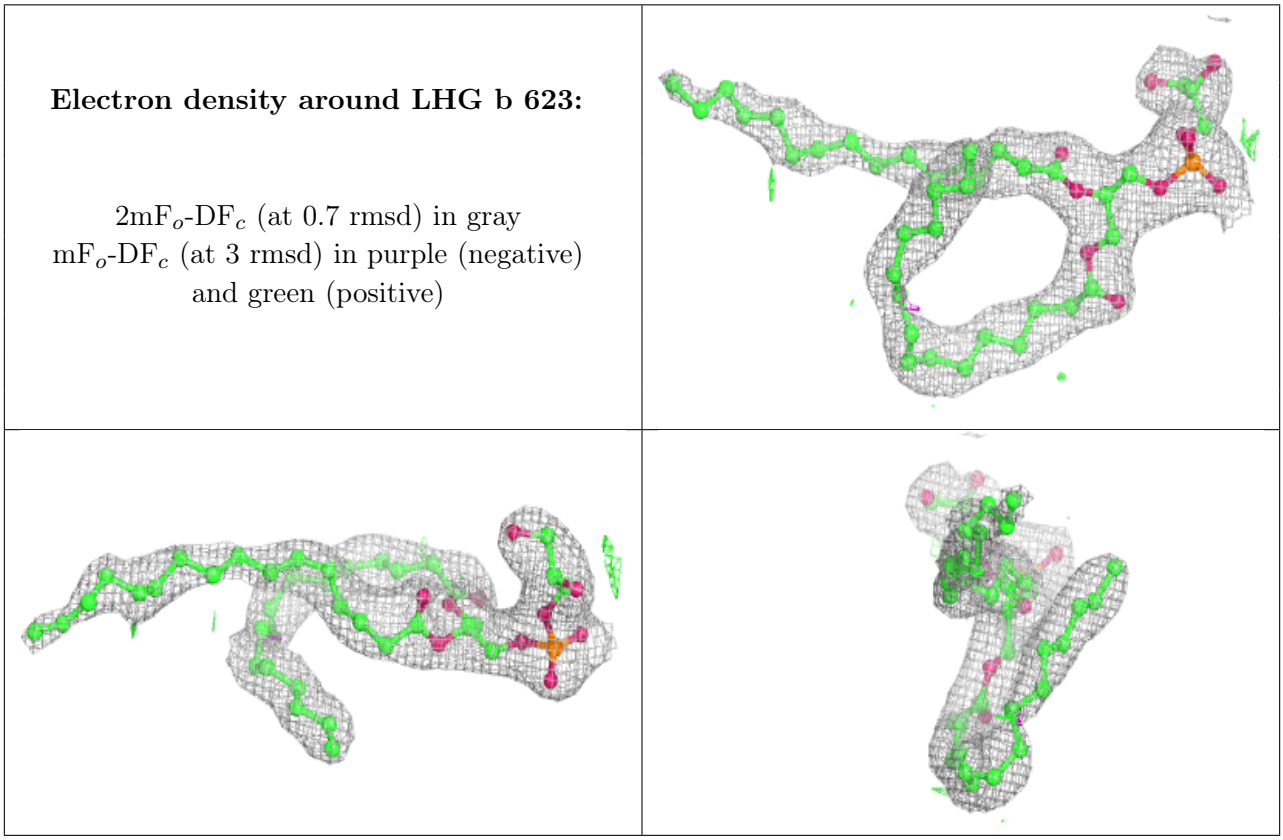
Electron density around CLA d 403:

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



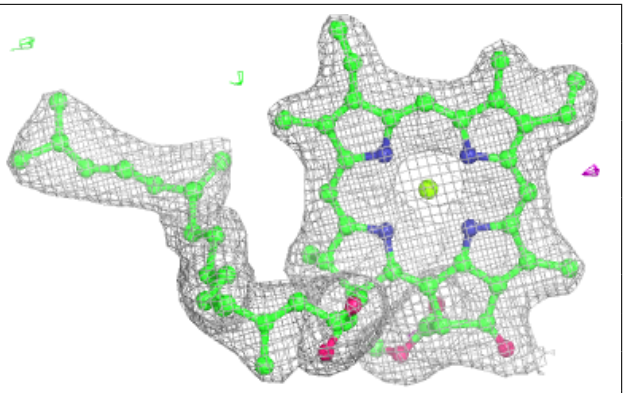
Electron density around LHG b 623:

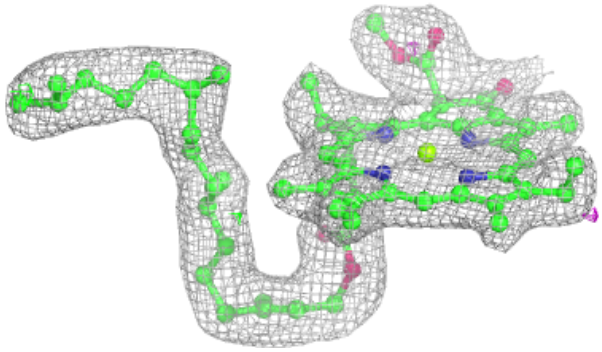
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

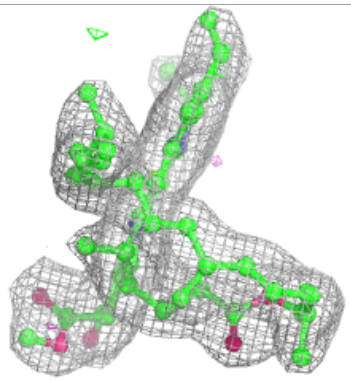


Electron density around CLA a 612:

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

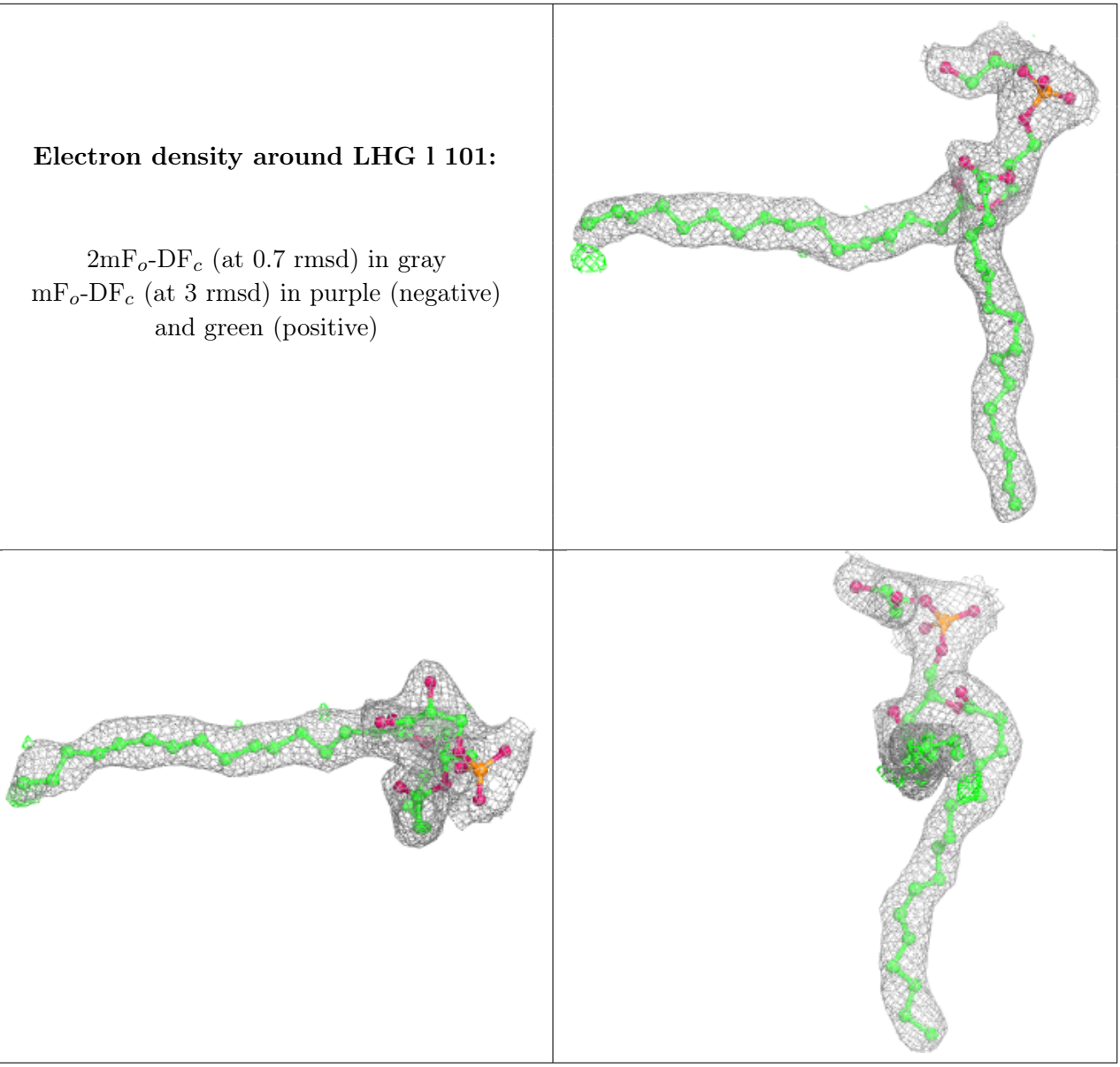






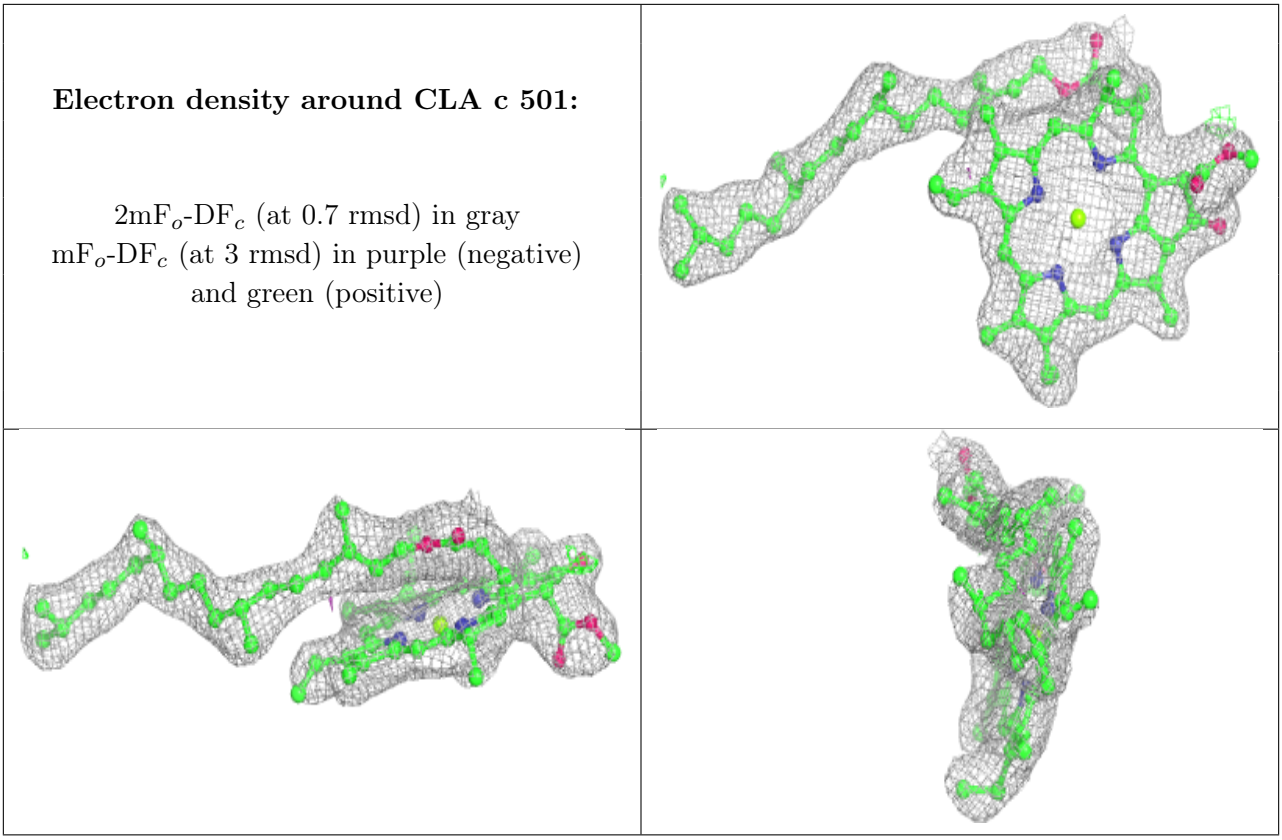
Electron density around LHG l 101:

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



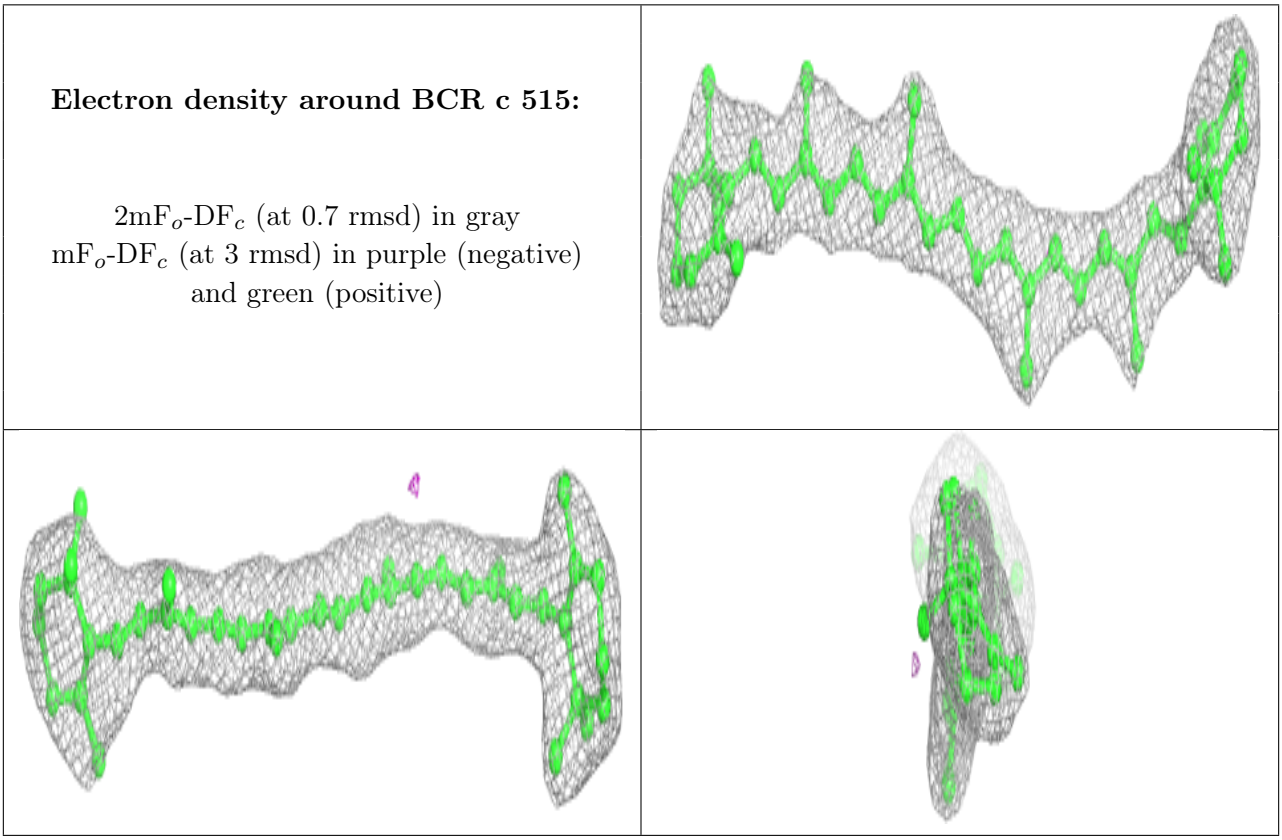
Electron density around CLA c 501:

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



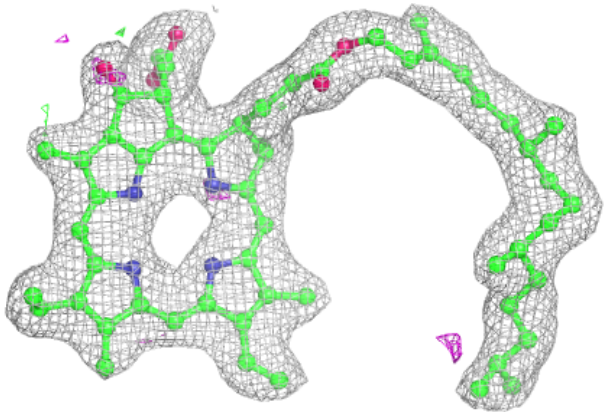
Electron density around BCR c 515:

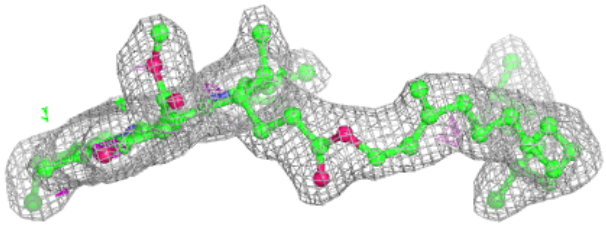
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

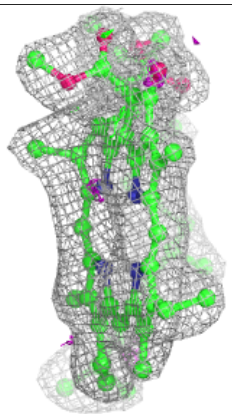


Electron density around PHO A 608:

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

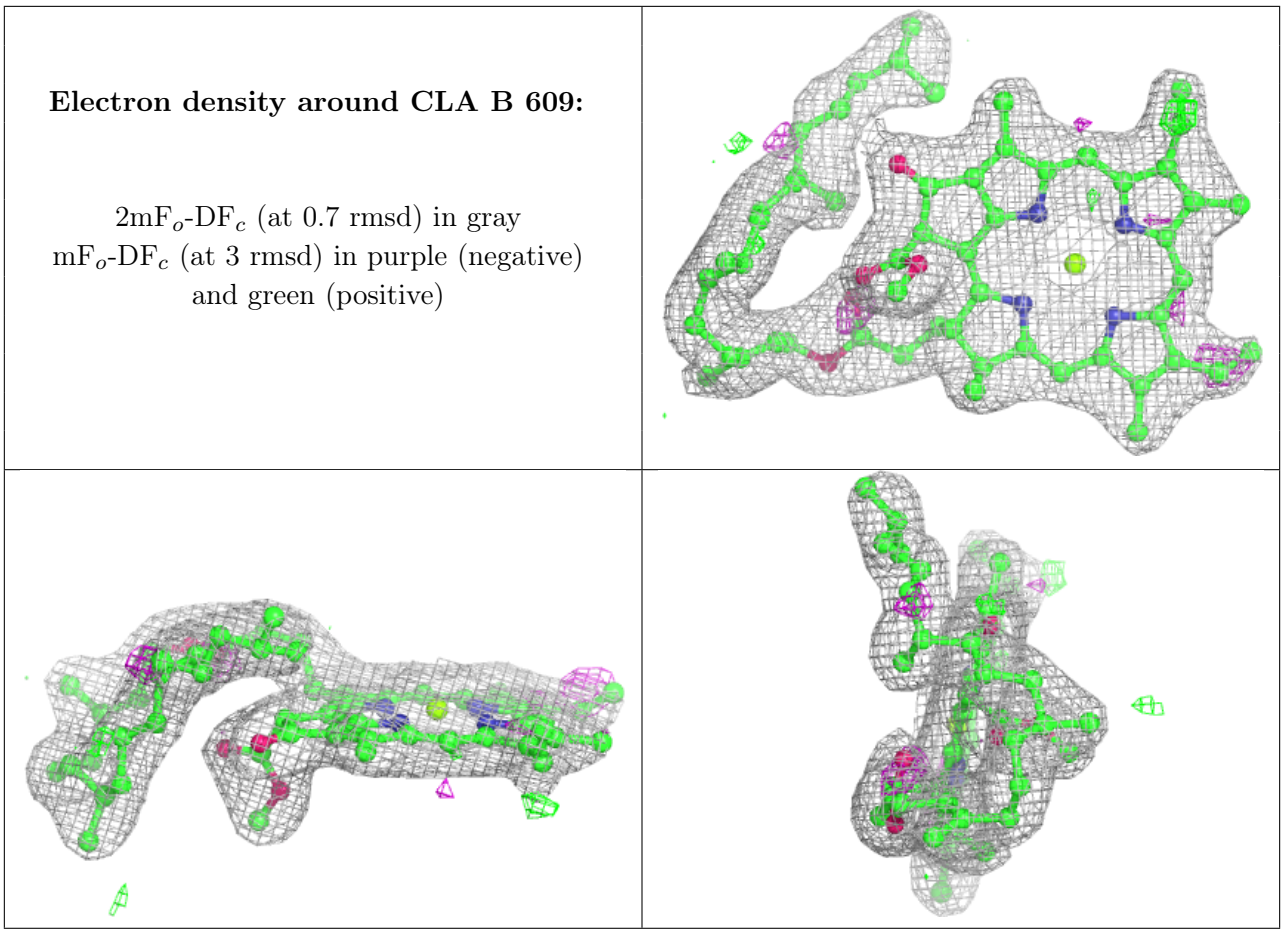






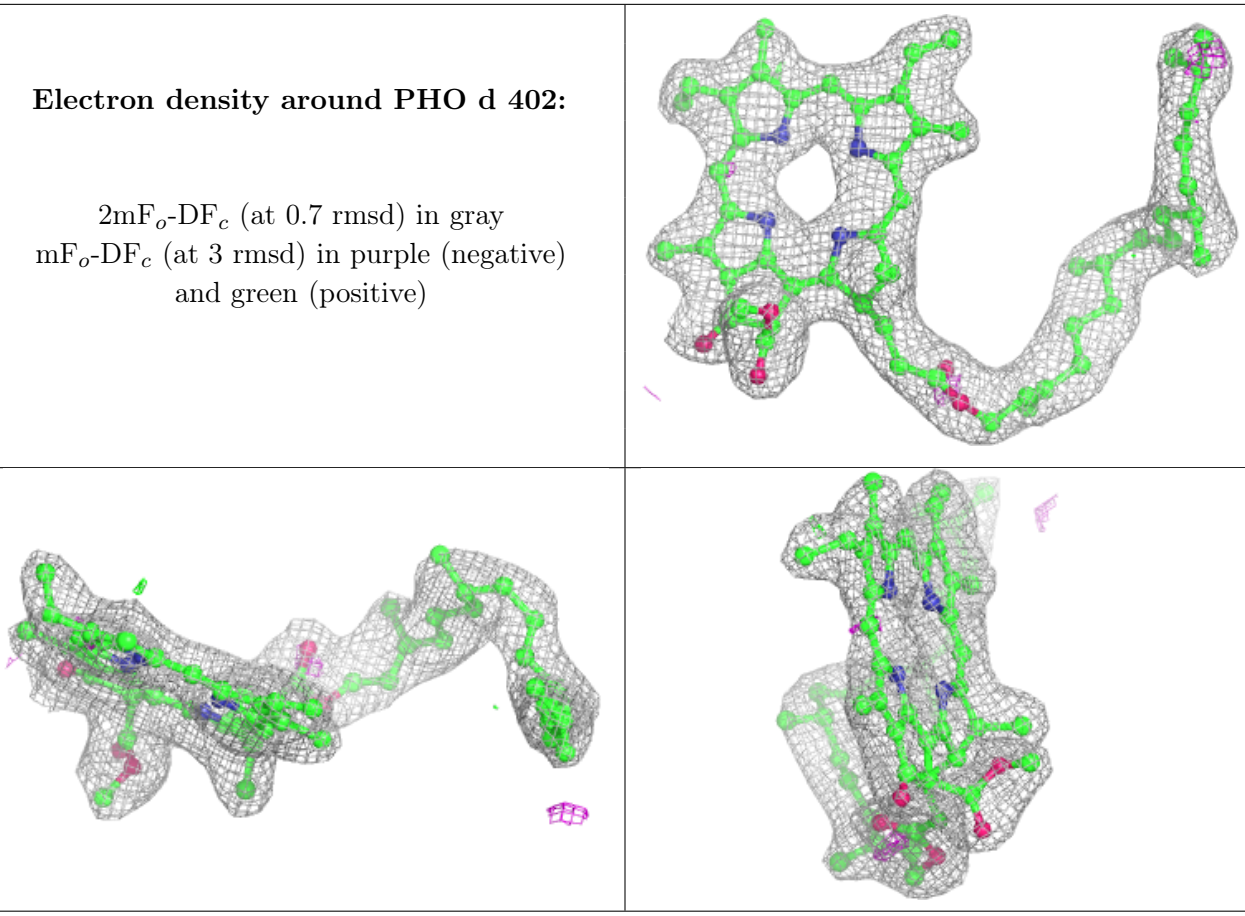
Electron density around CLA B 609:

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



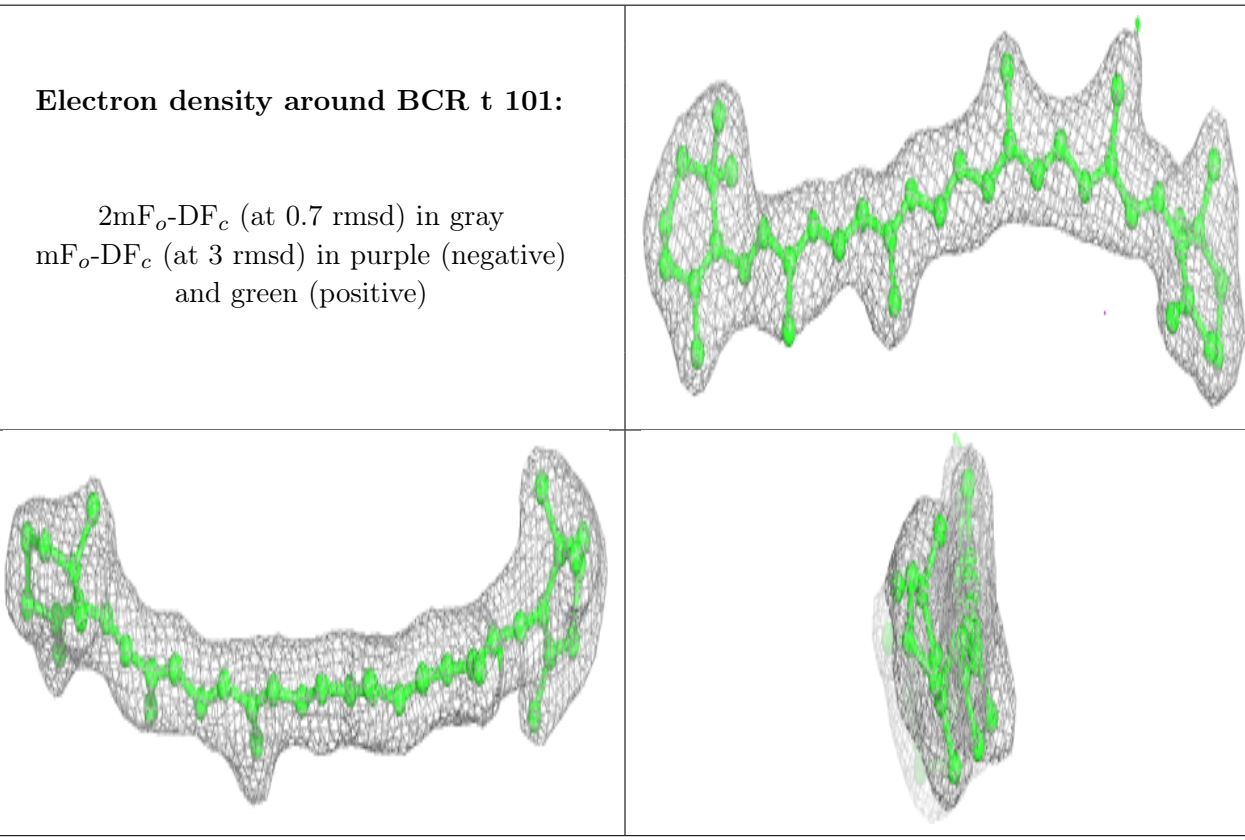
Electron density around PHO d 402:

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



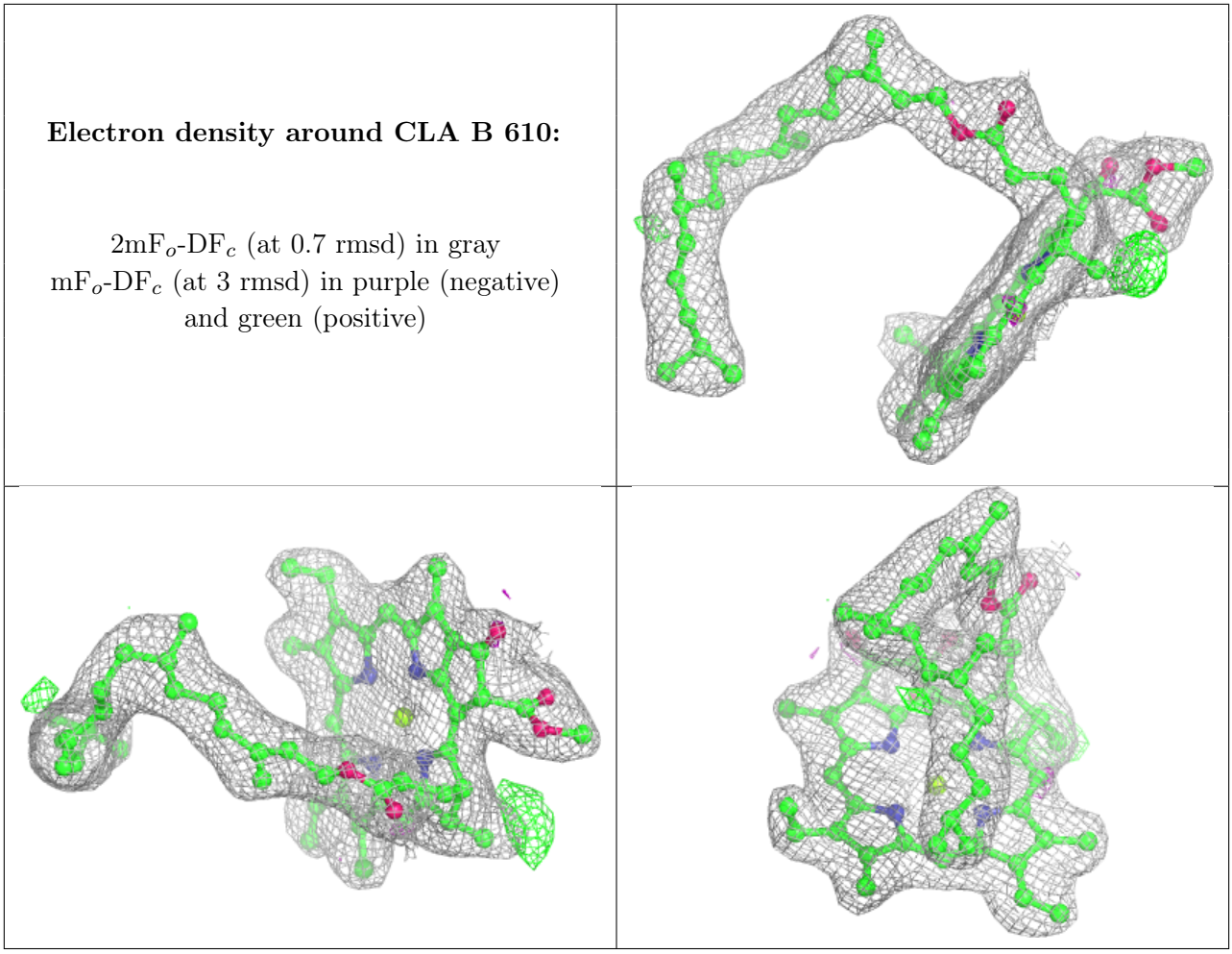
Electron density around BCR t 101:

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



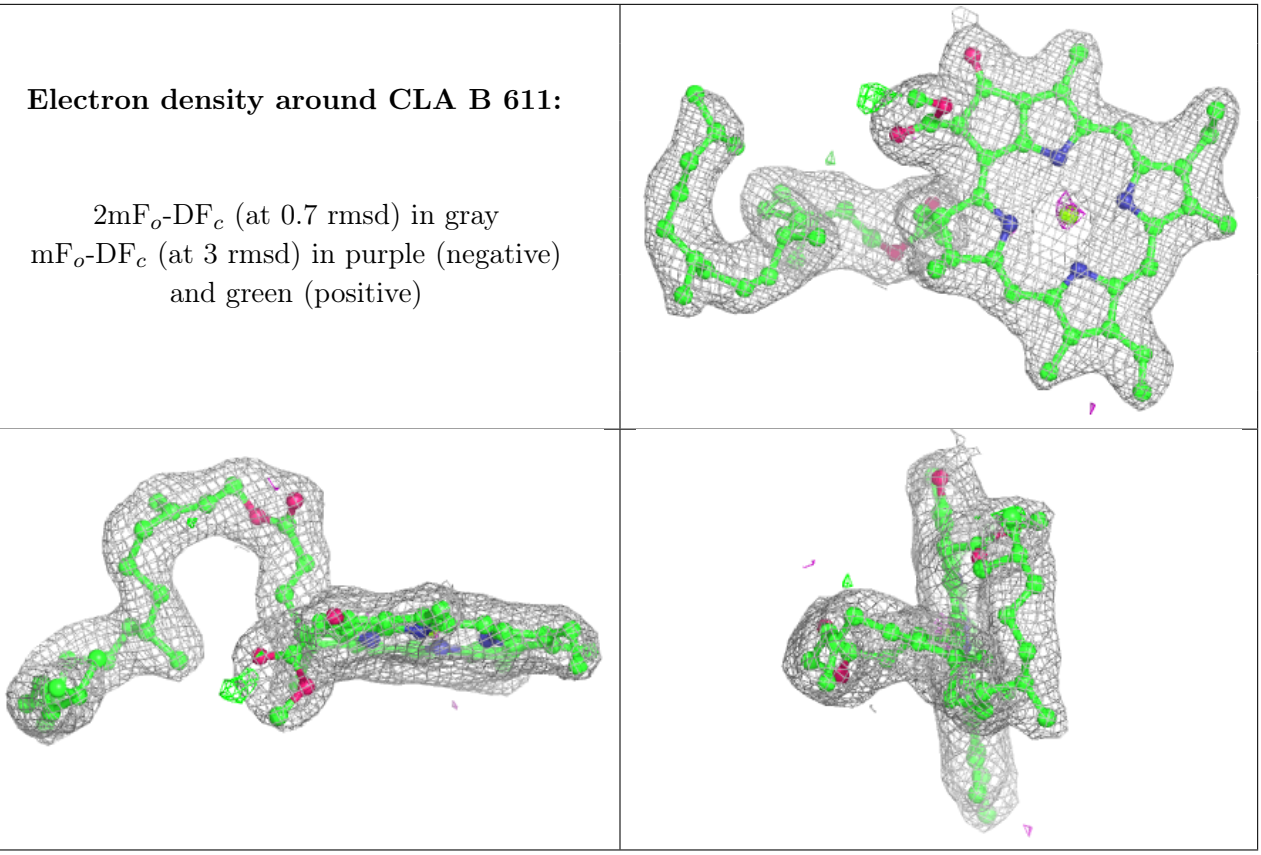
Electron density around CLA B 610:

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



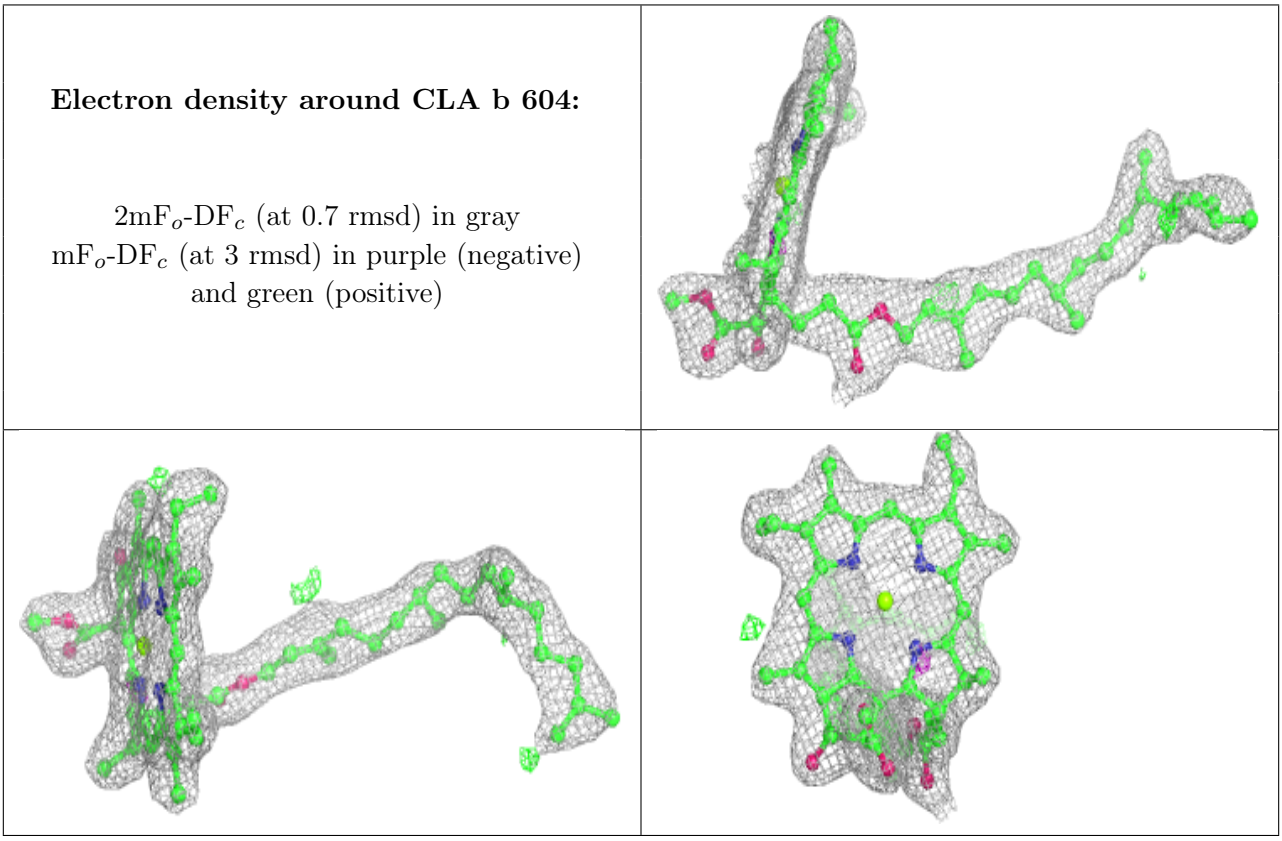
Electron density around CLA B 611:

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



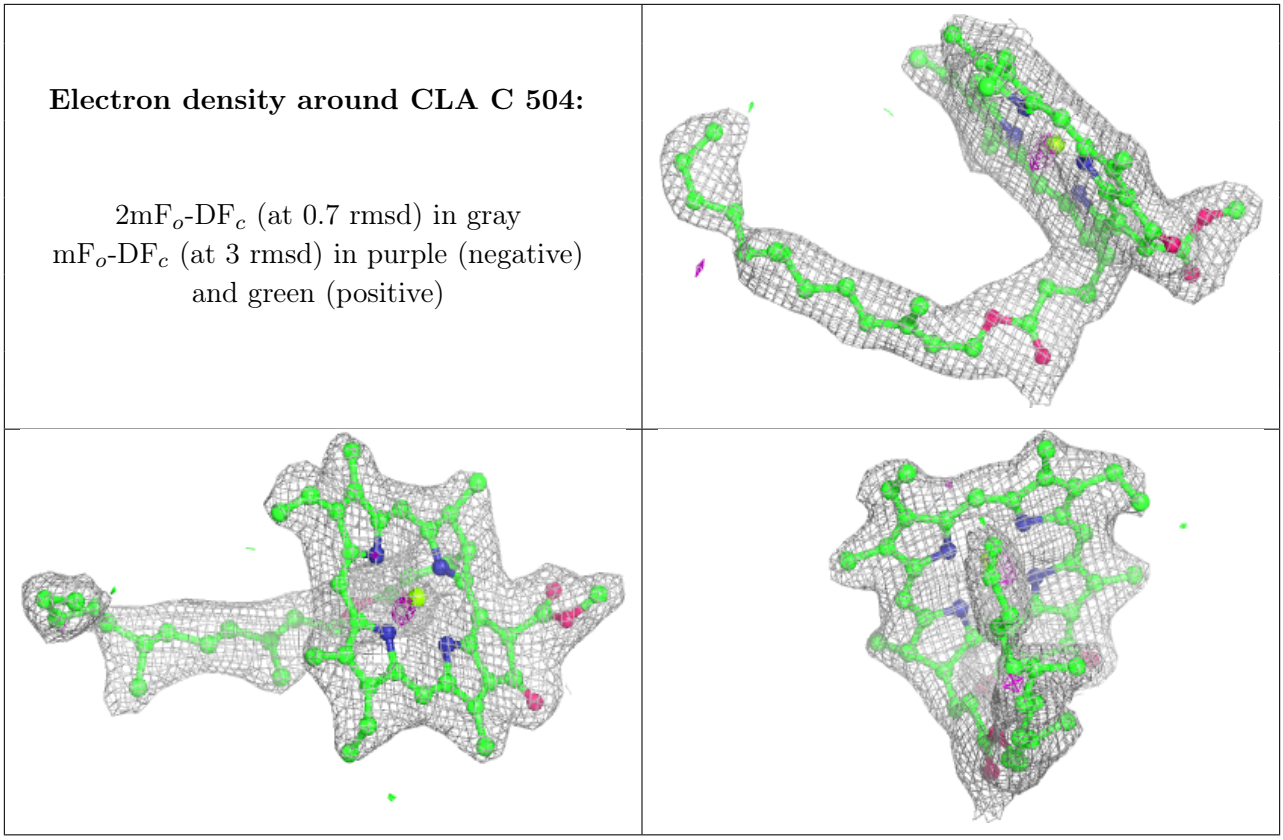
Electron density around CLA b 604:

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



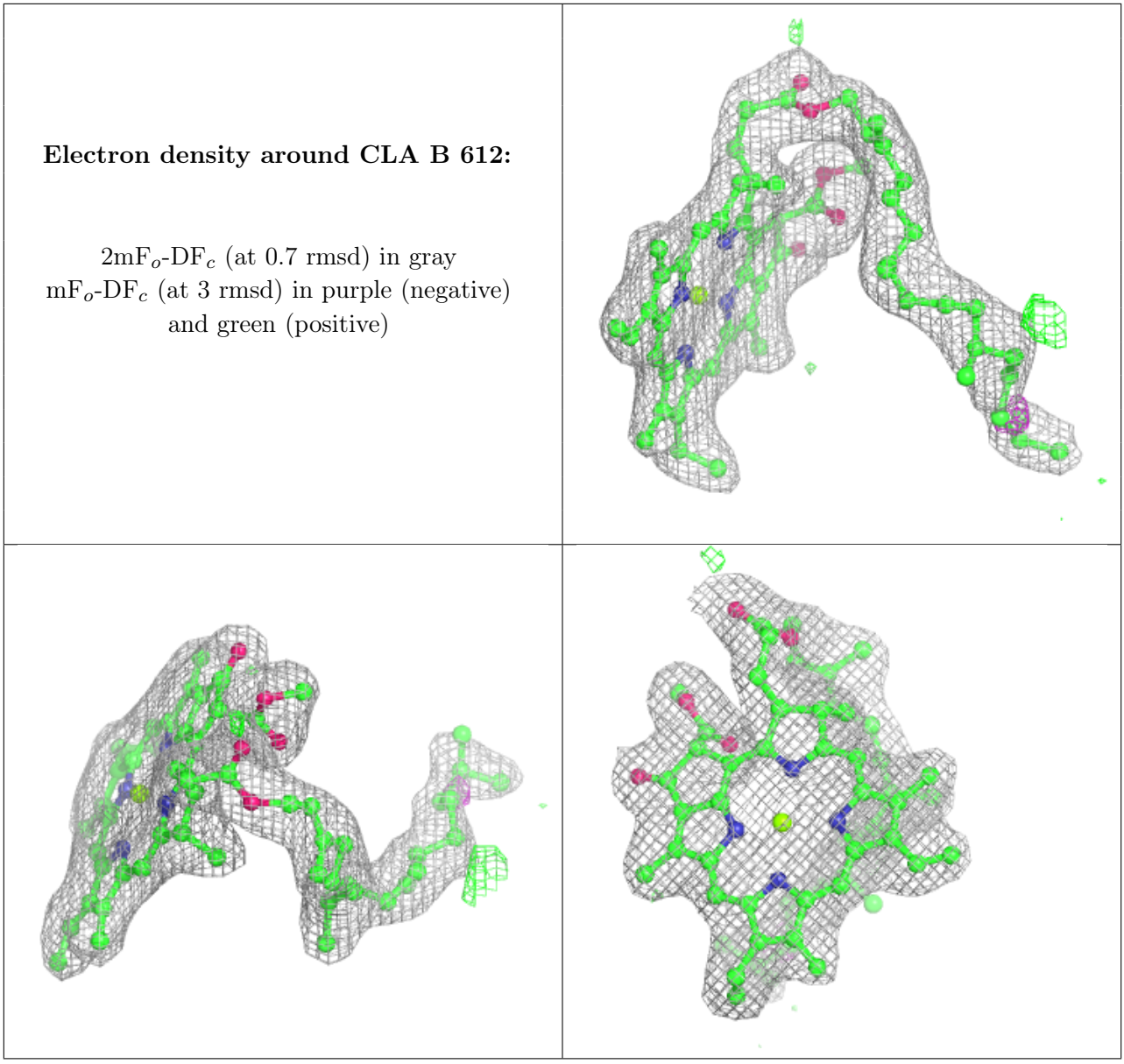
Electron density around CLA C 504:

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



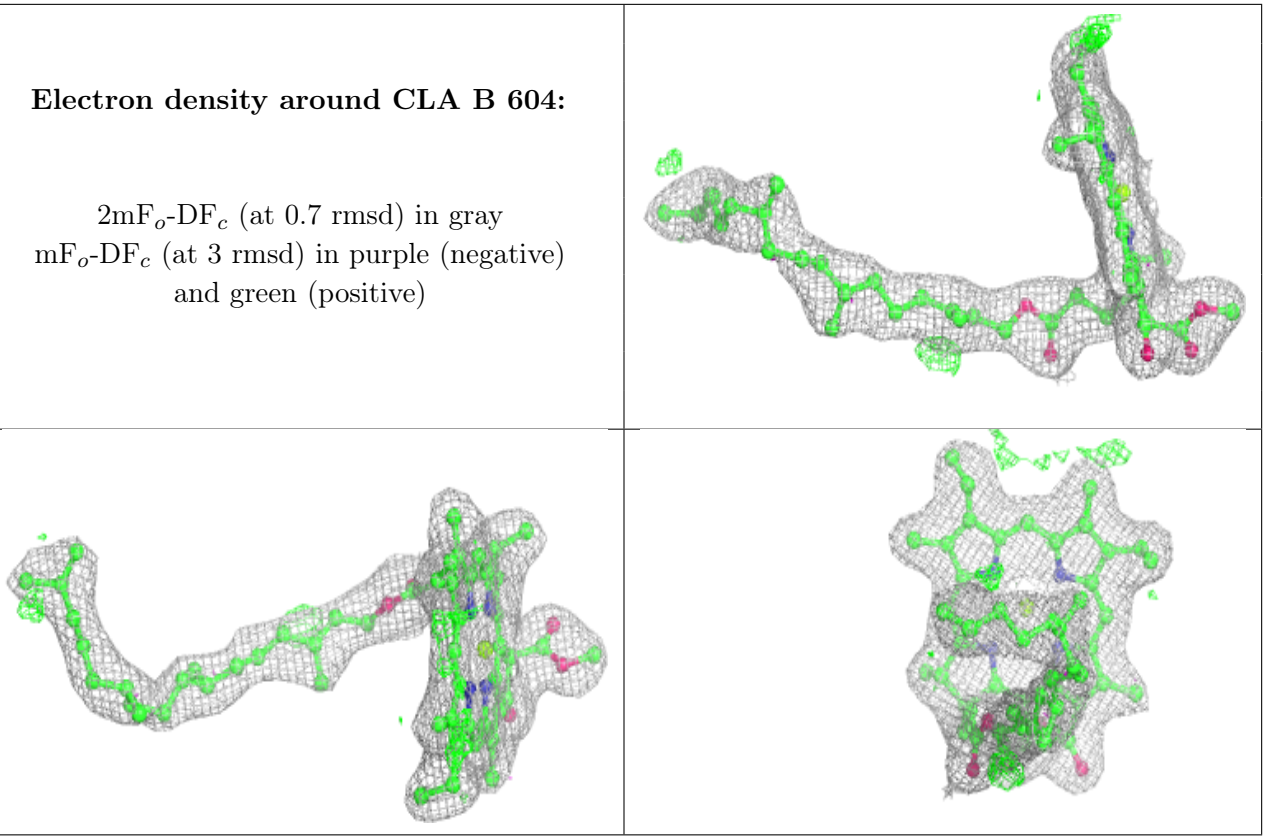
Electron density around CLA B 612:

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



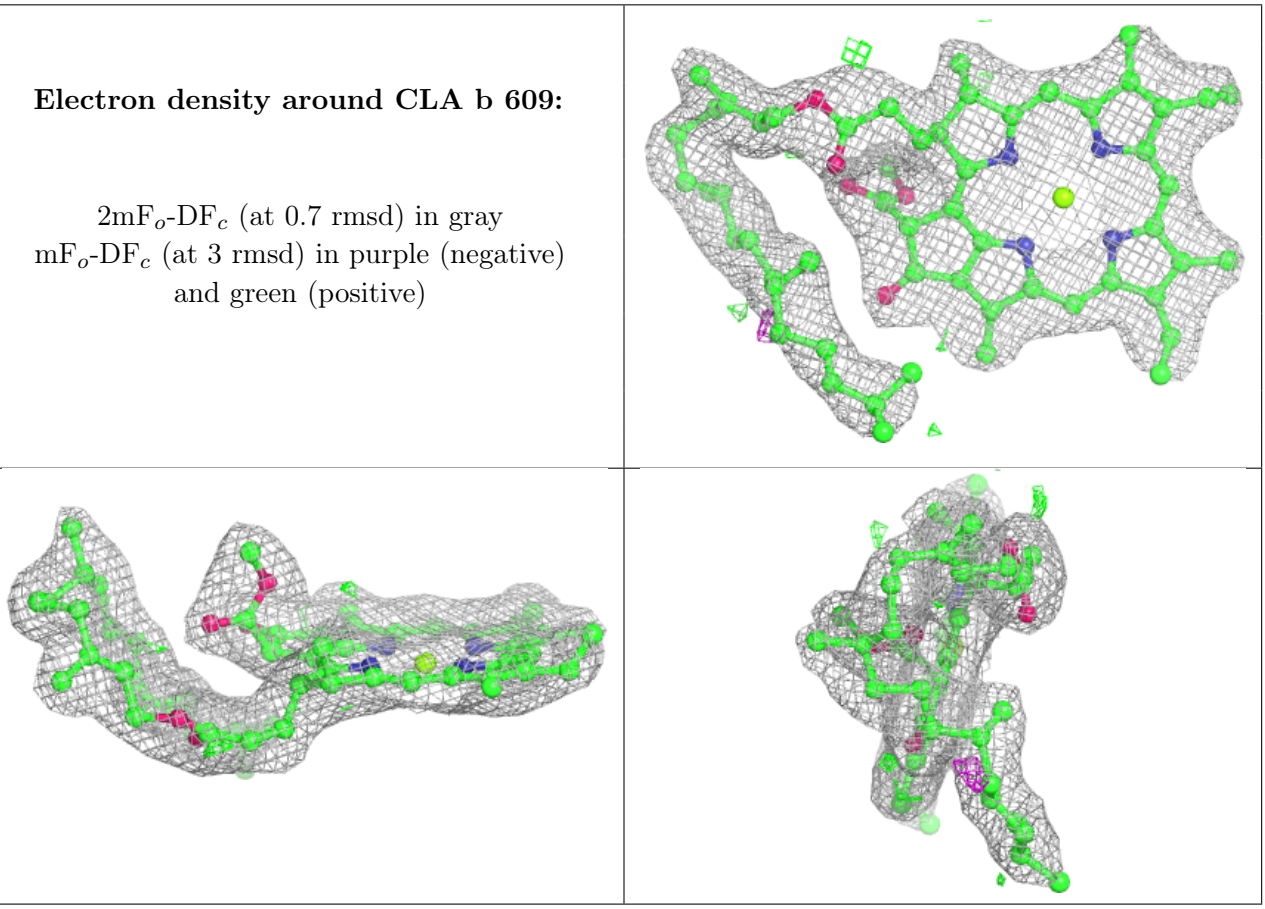
Electron density around CLA B 604:

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



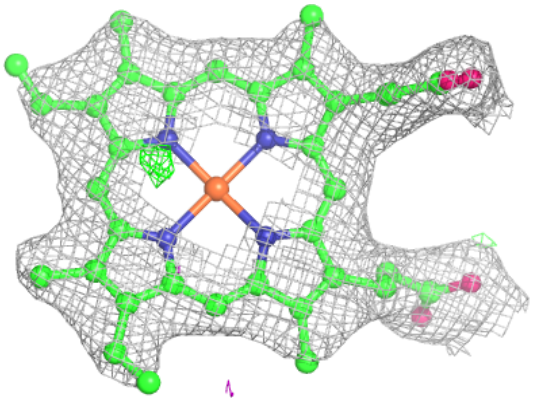
Electron density around CLA b 609:

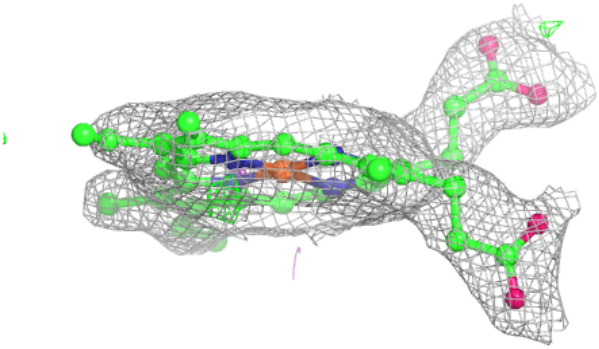
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

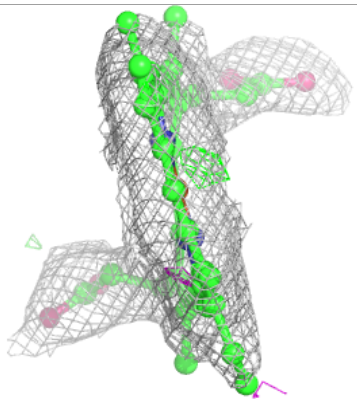


Electron density around HEM F 101:

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

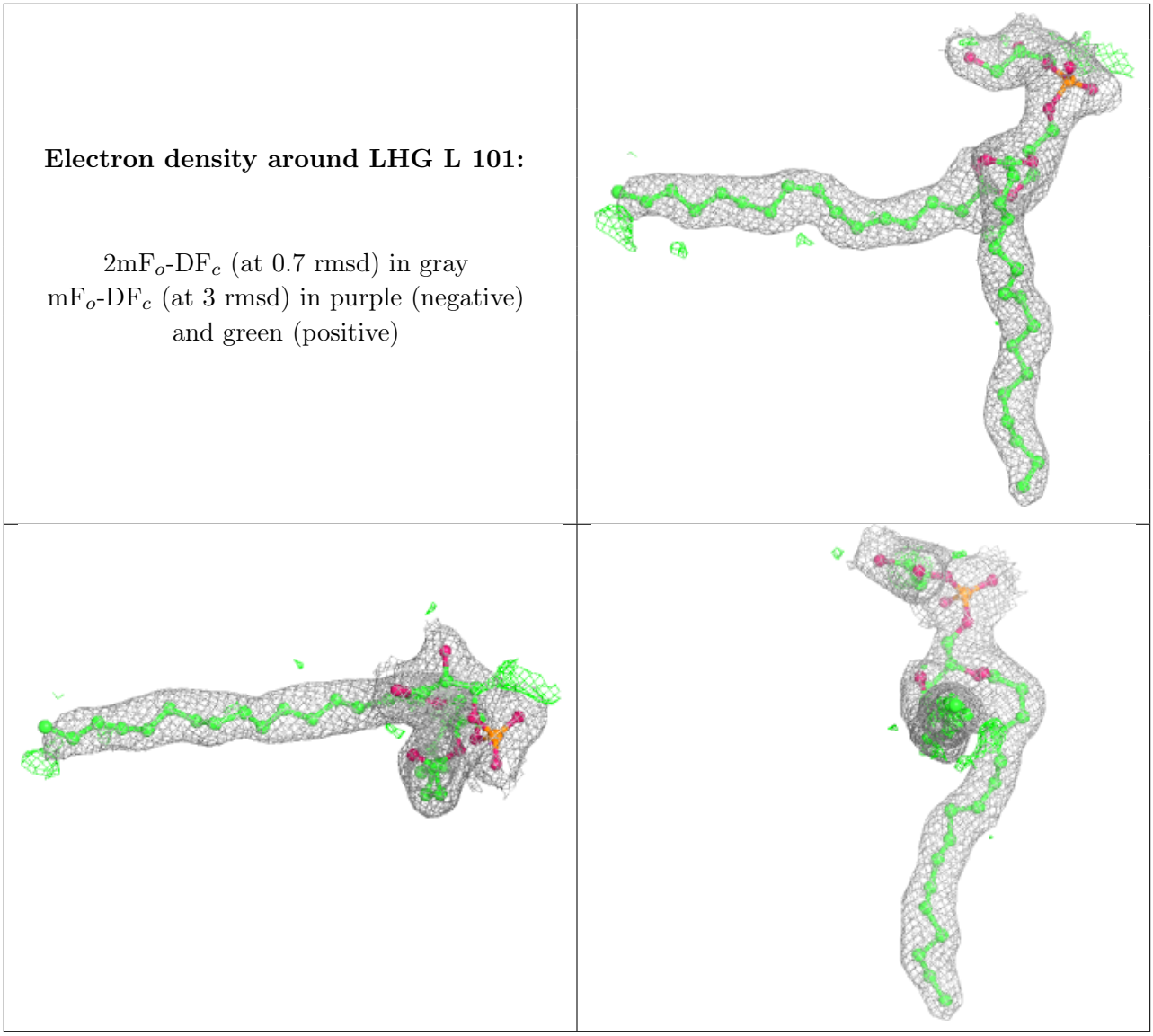






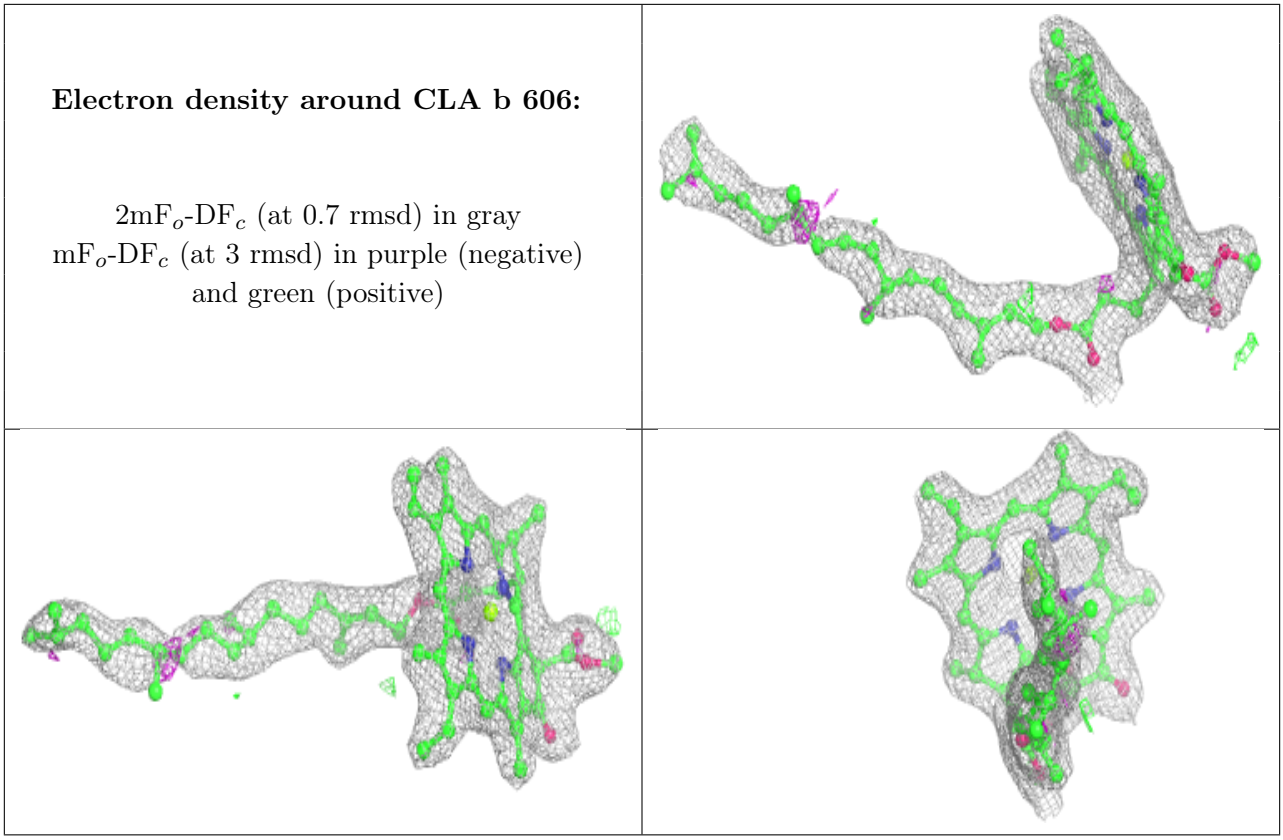
Electron density around LHG L 101:

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



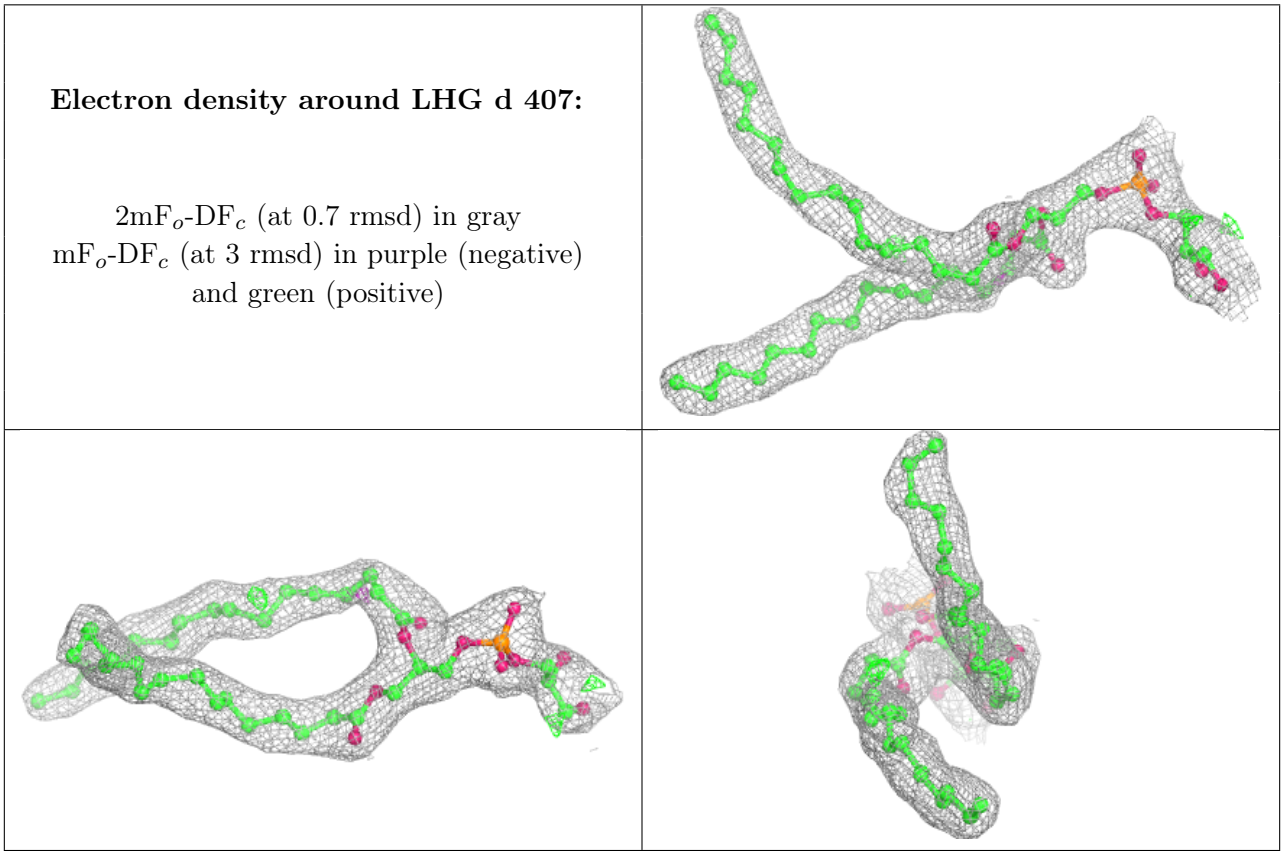
Electron density around CLA b 606:

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



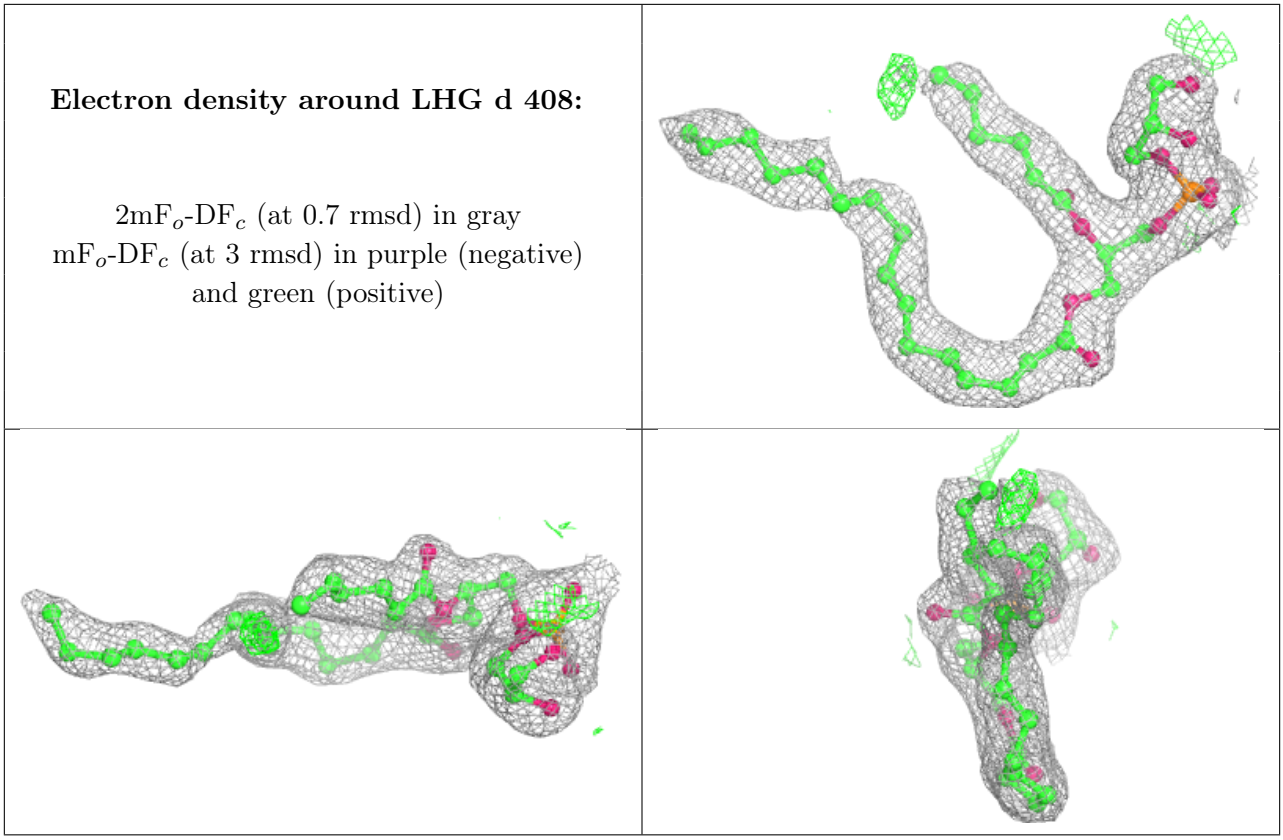
Electron density around LHG d 407:

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



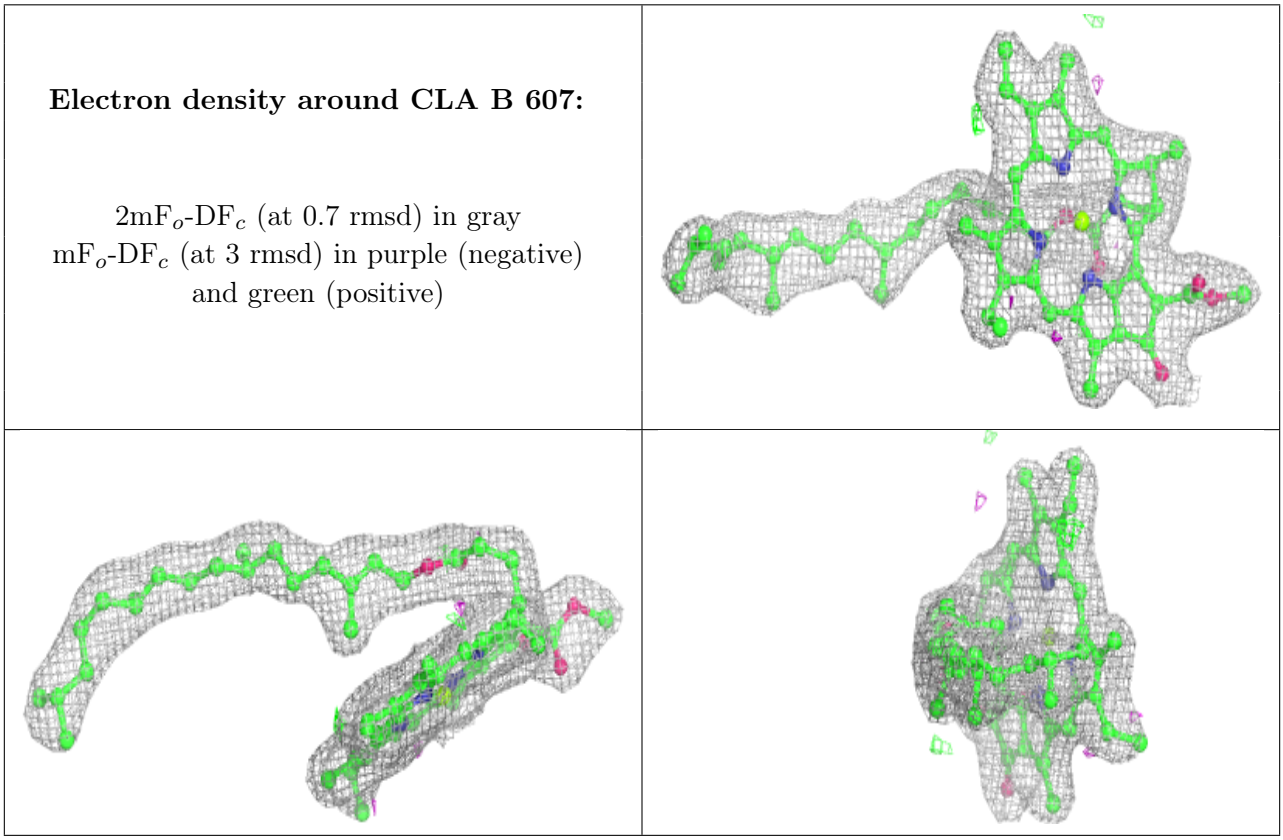
Electron density around LHG d 408:

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



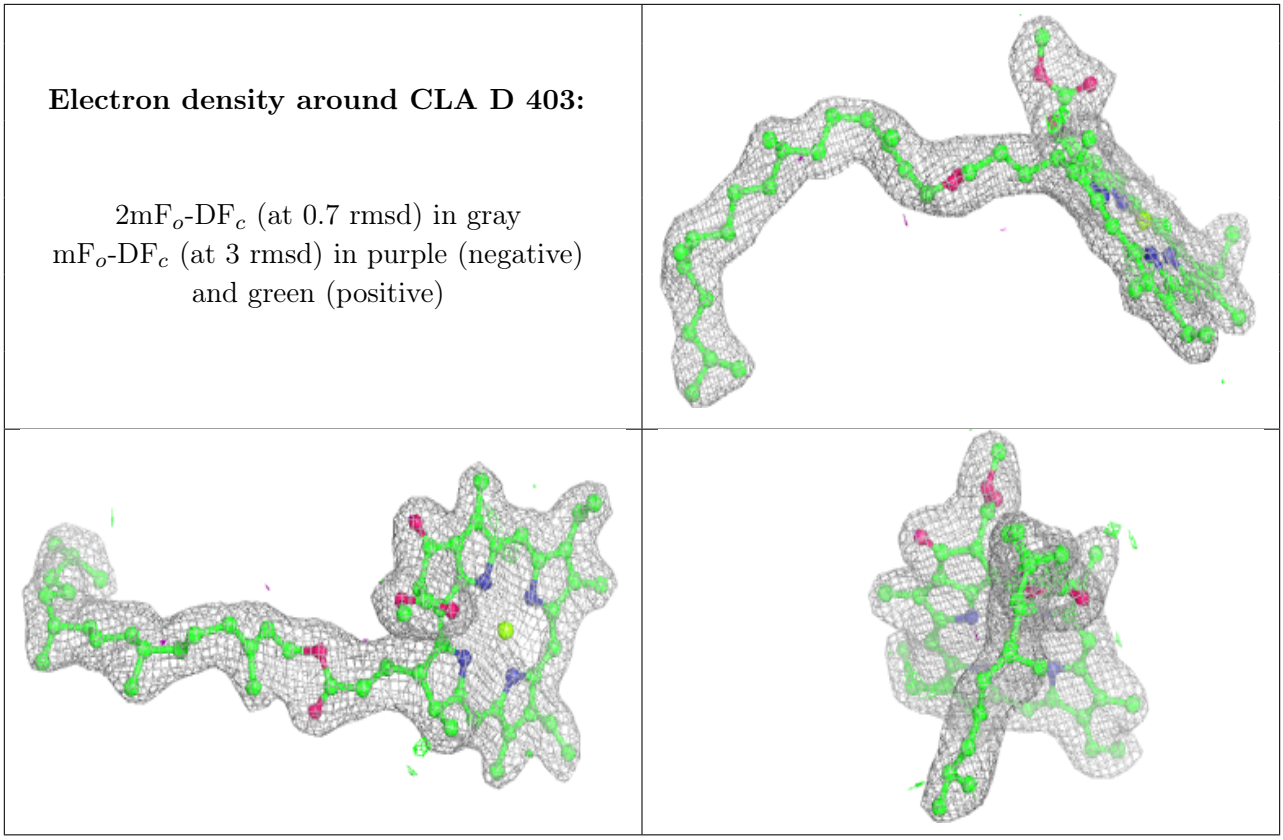
Electron density around CLA B 607:

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



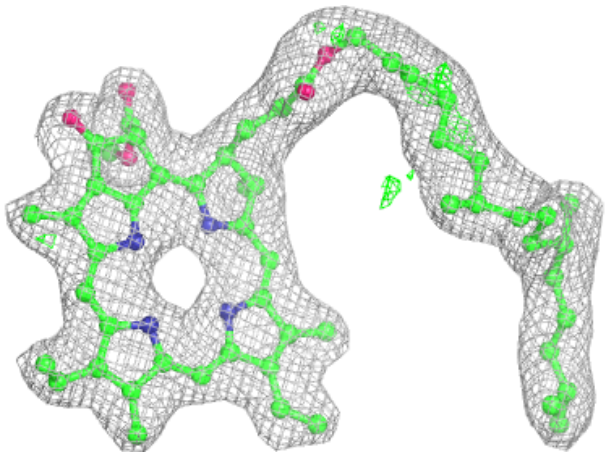
Electron density around CLA D 403:

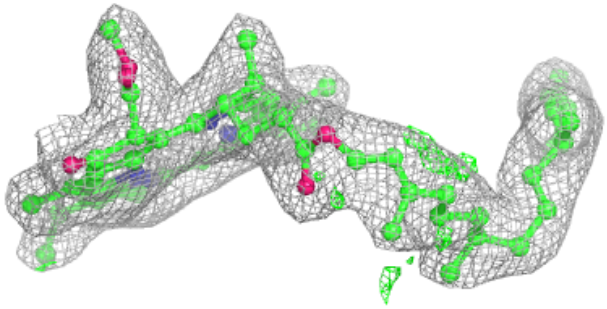
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

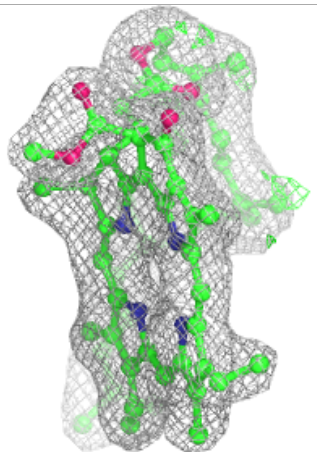


Electron density around PHO D 402:

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

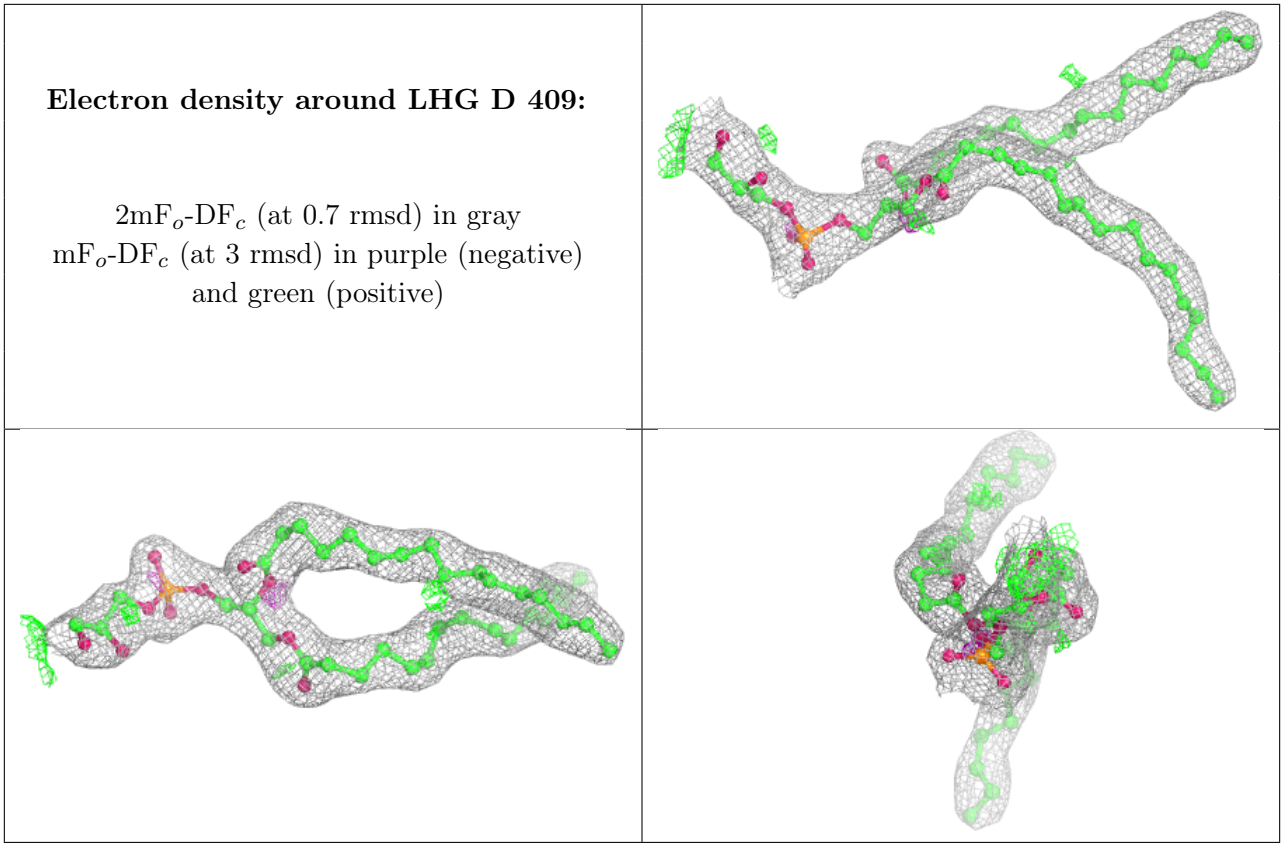






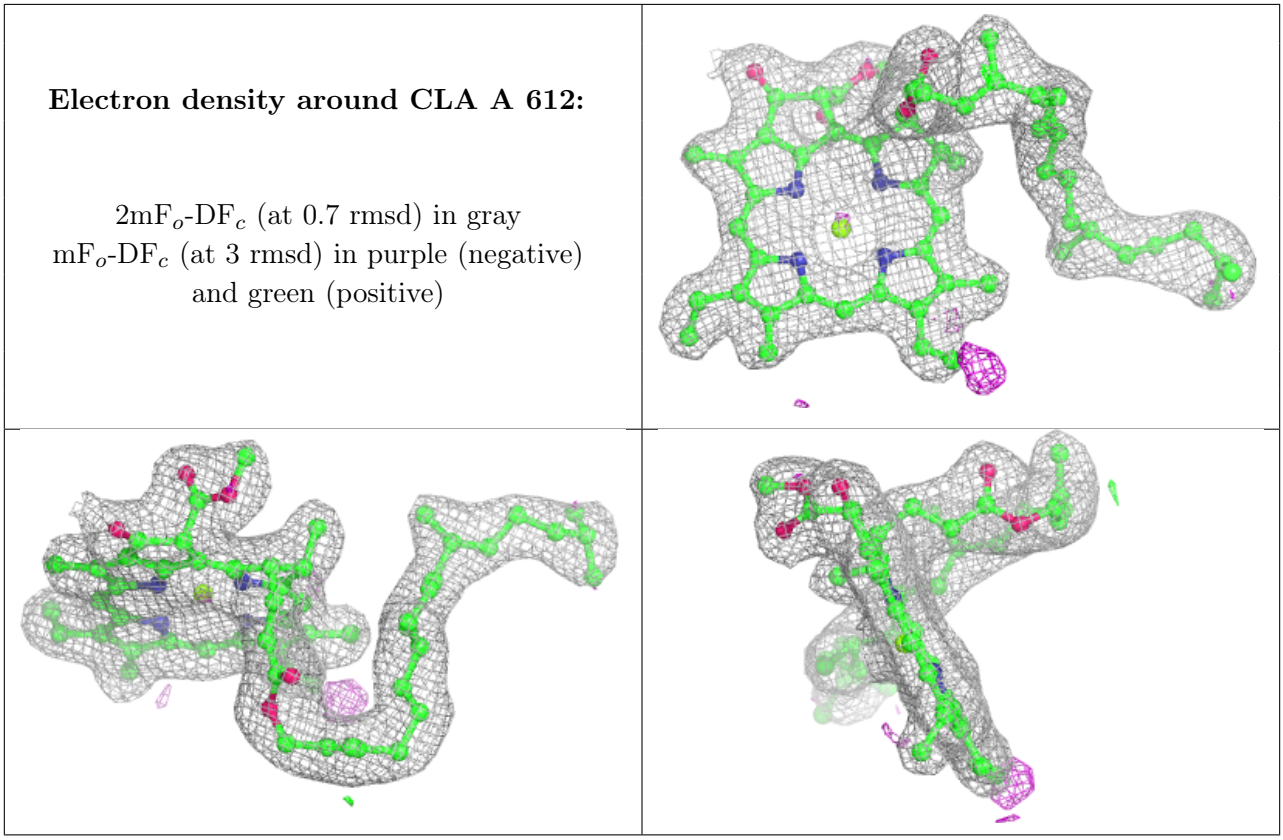
Electron density around LHG D 409:

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



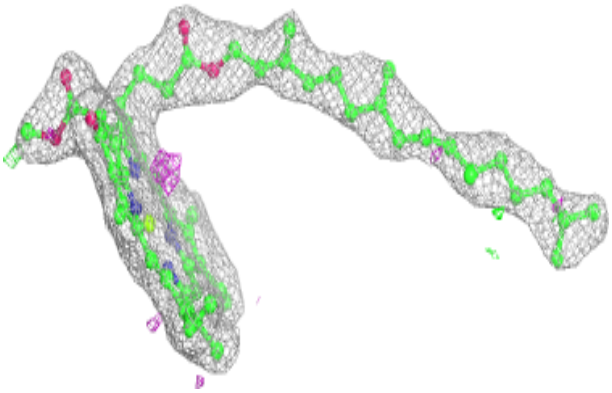
Electron density around CLA A 612:

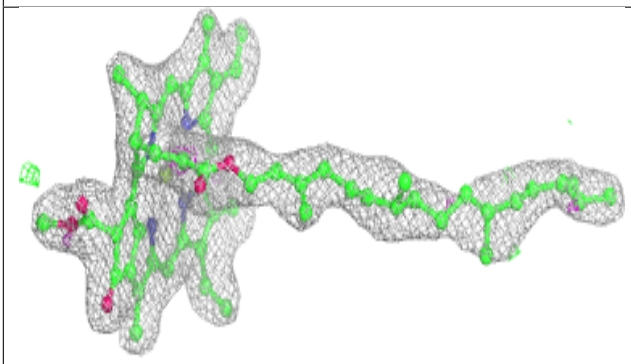
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

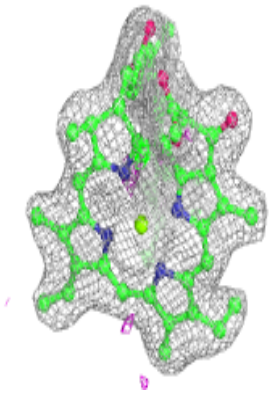


Electron density around CLA B 606:

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

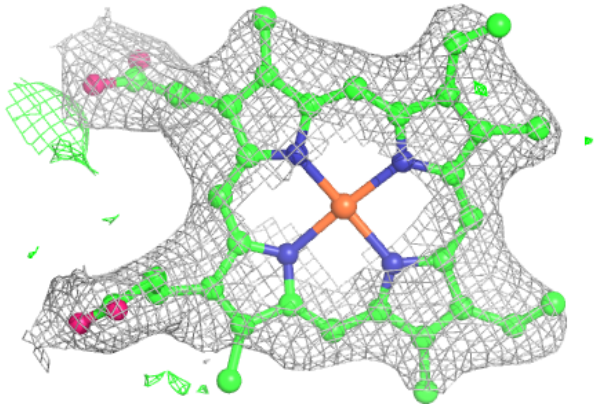


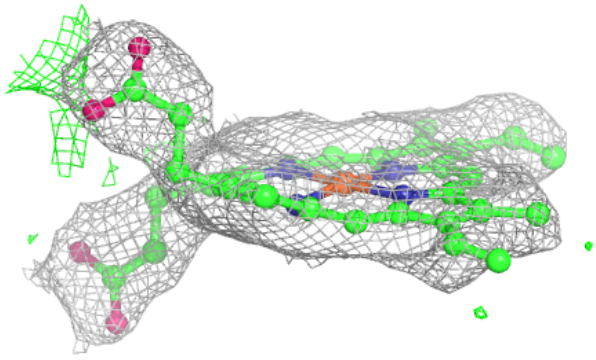


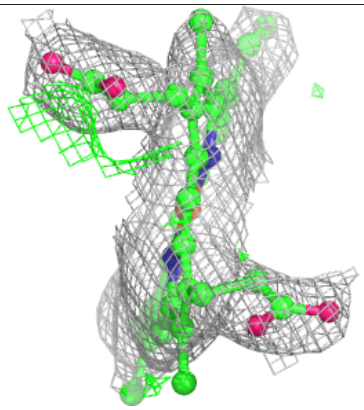


Electron density around HEM e 101:

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

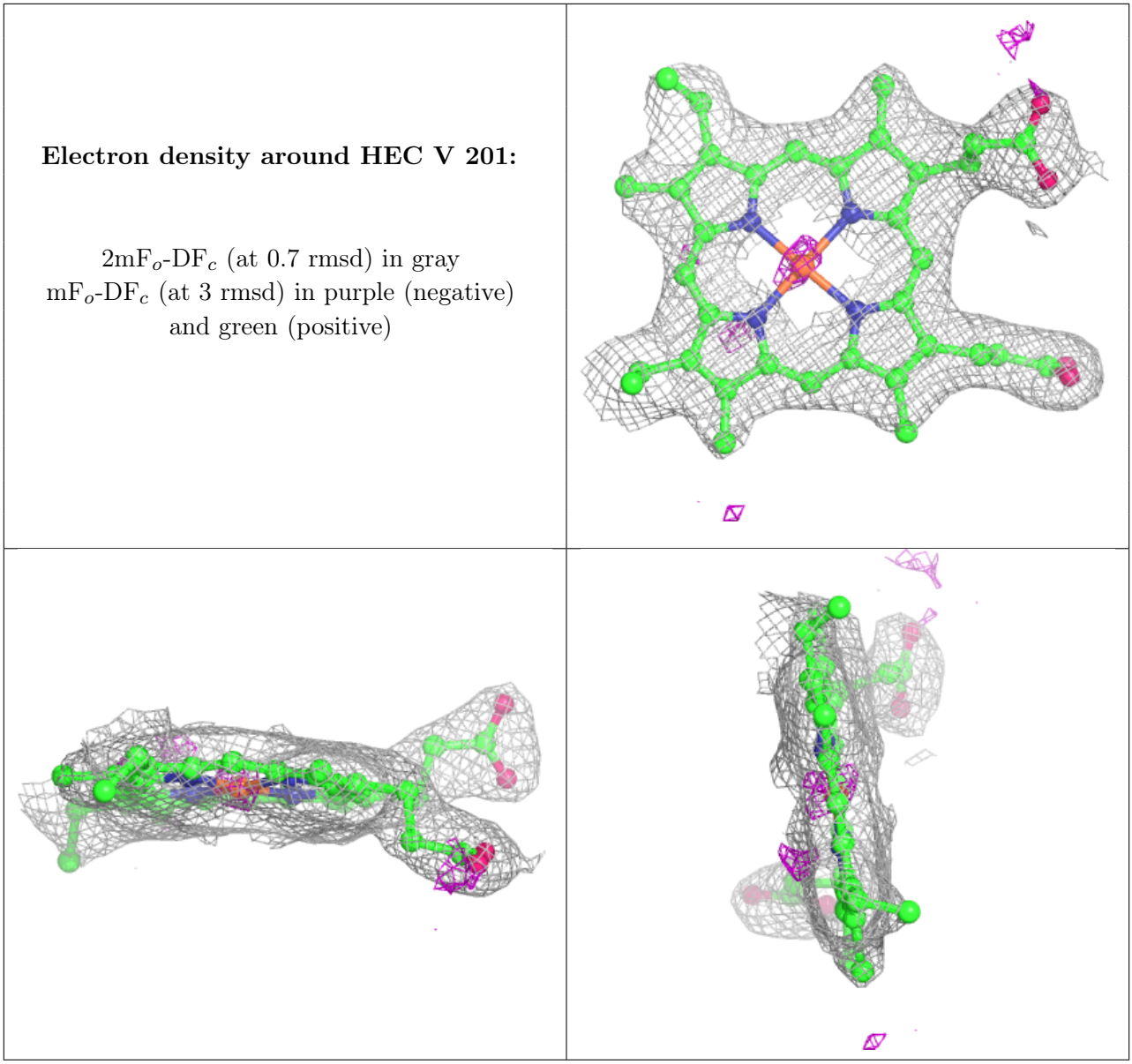






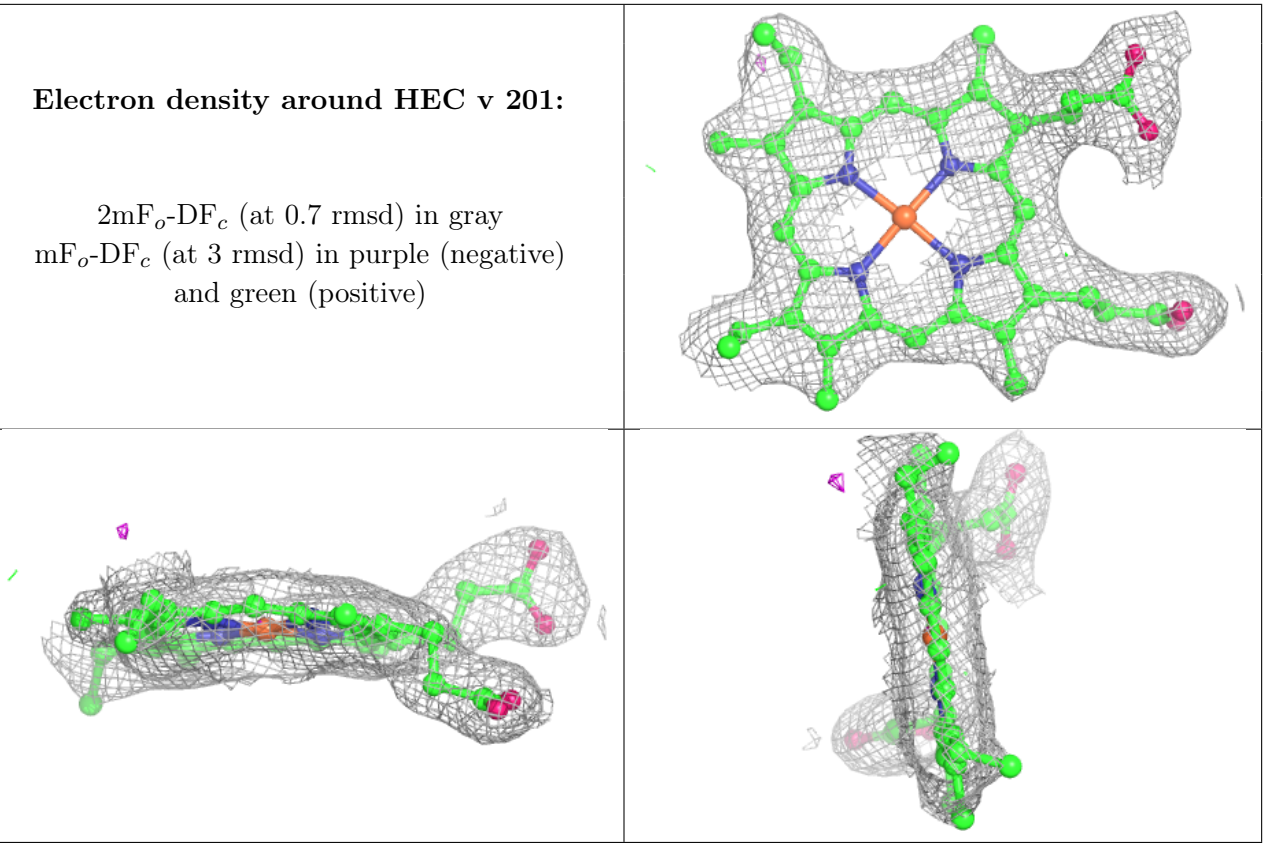
Electron density around HEC V 201:

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



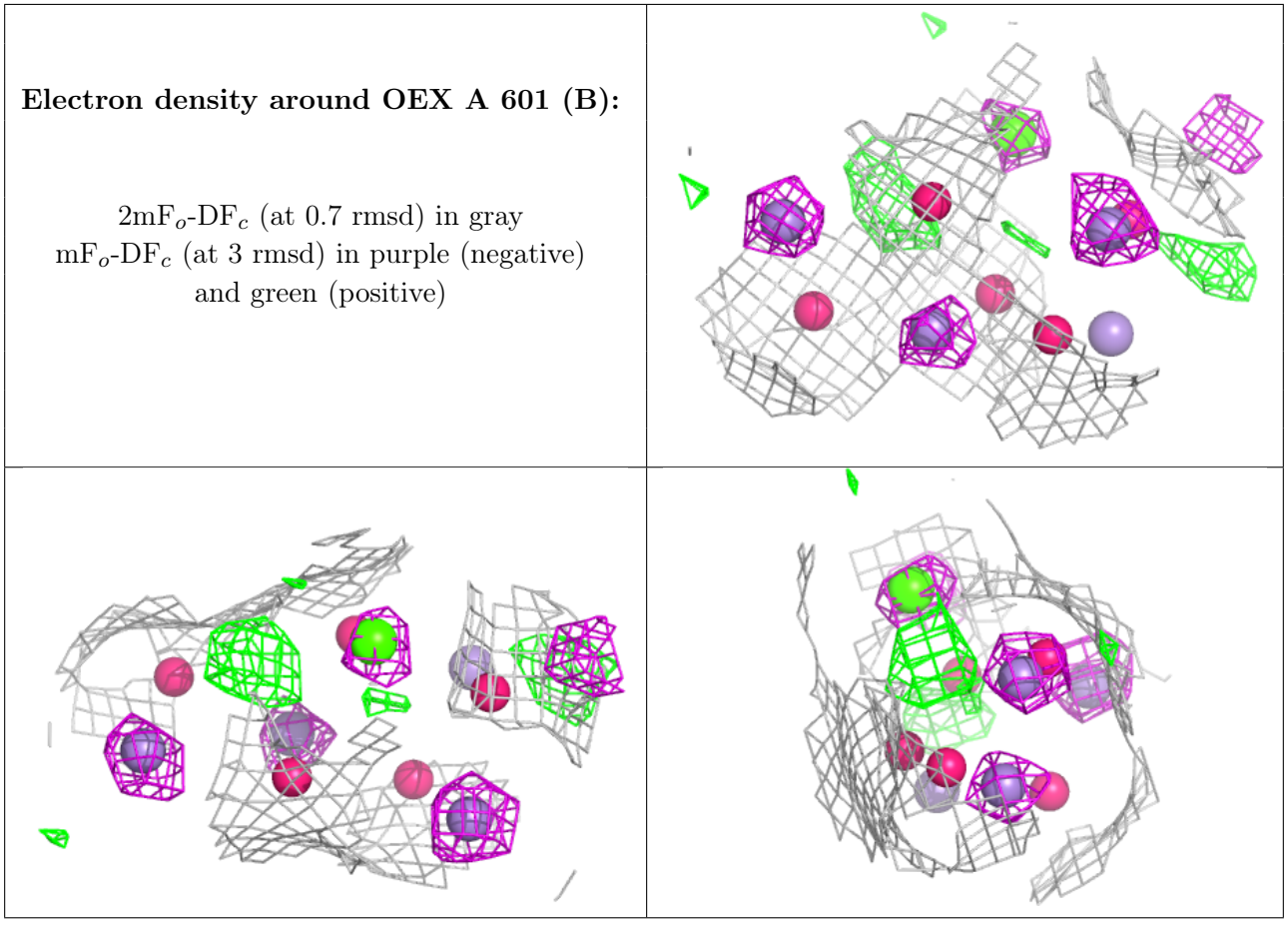
Electron density around HEC v 201:

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



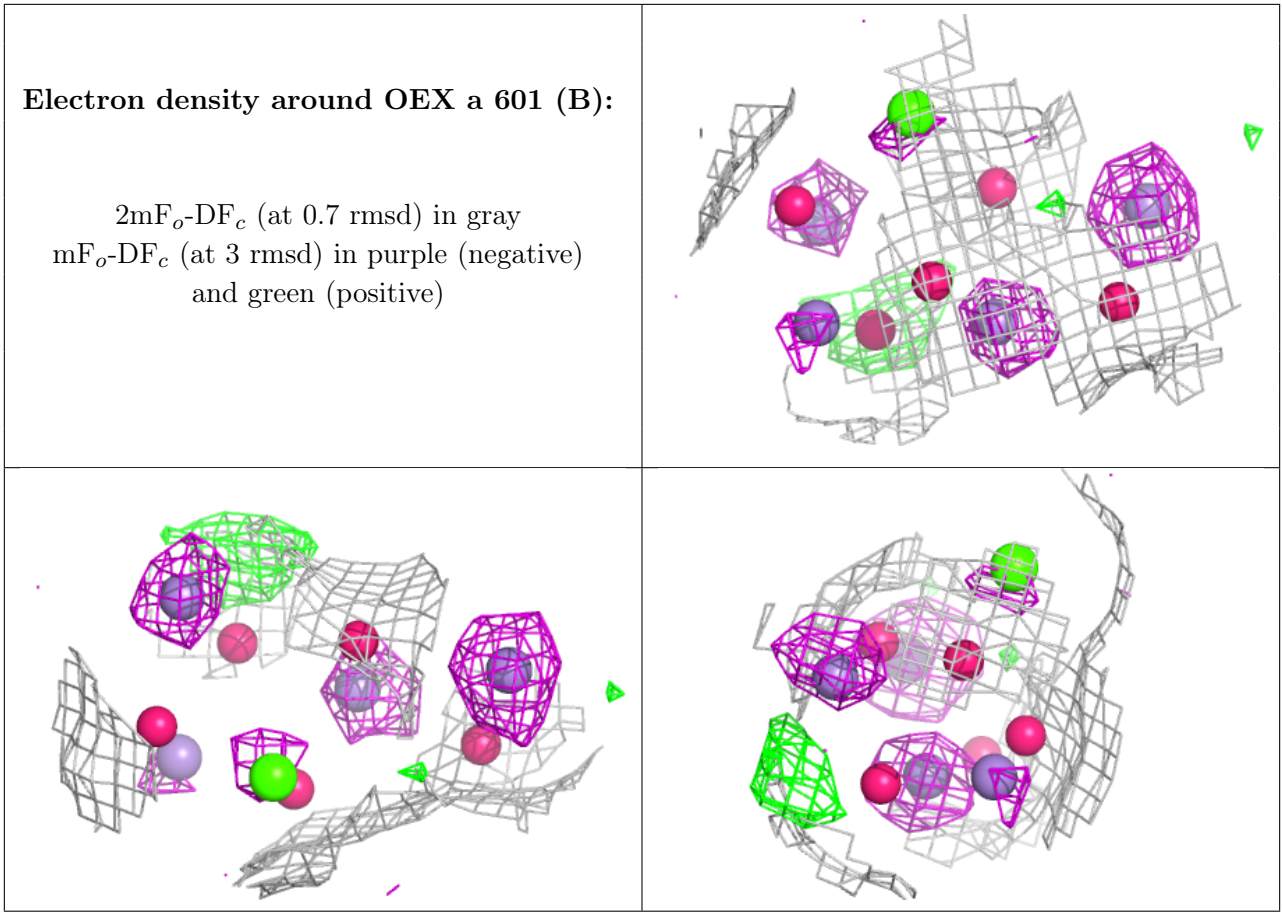
Electron density around OEX A 601 (B):

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



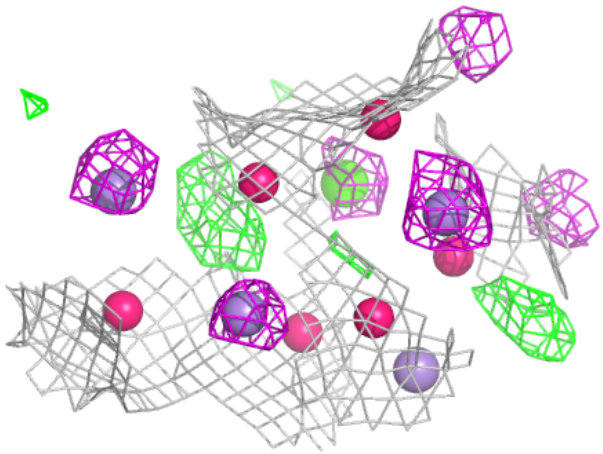
Electron density around OEX a 601 (B):

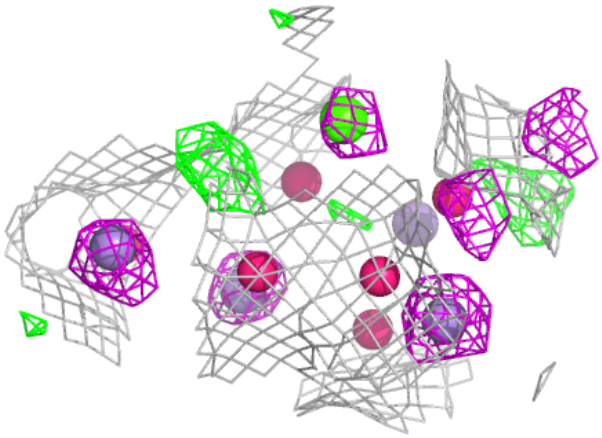
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

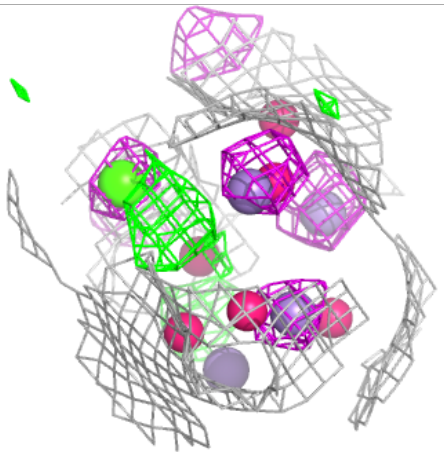


Electron density around OEY A 602 (A):

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

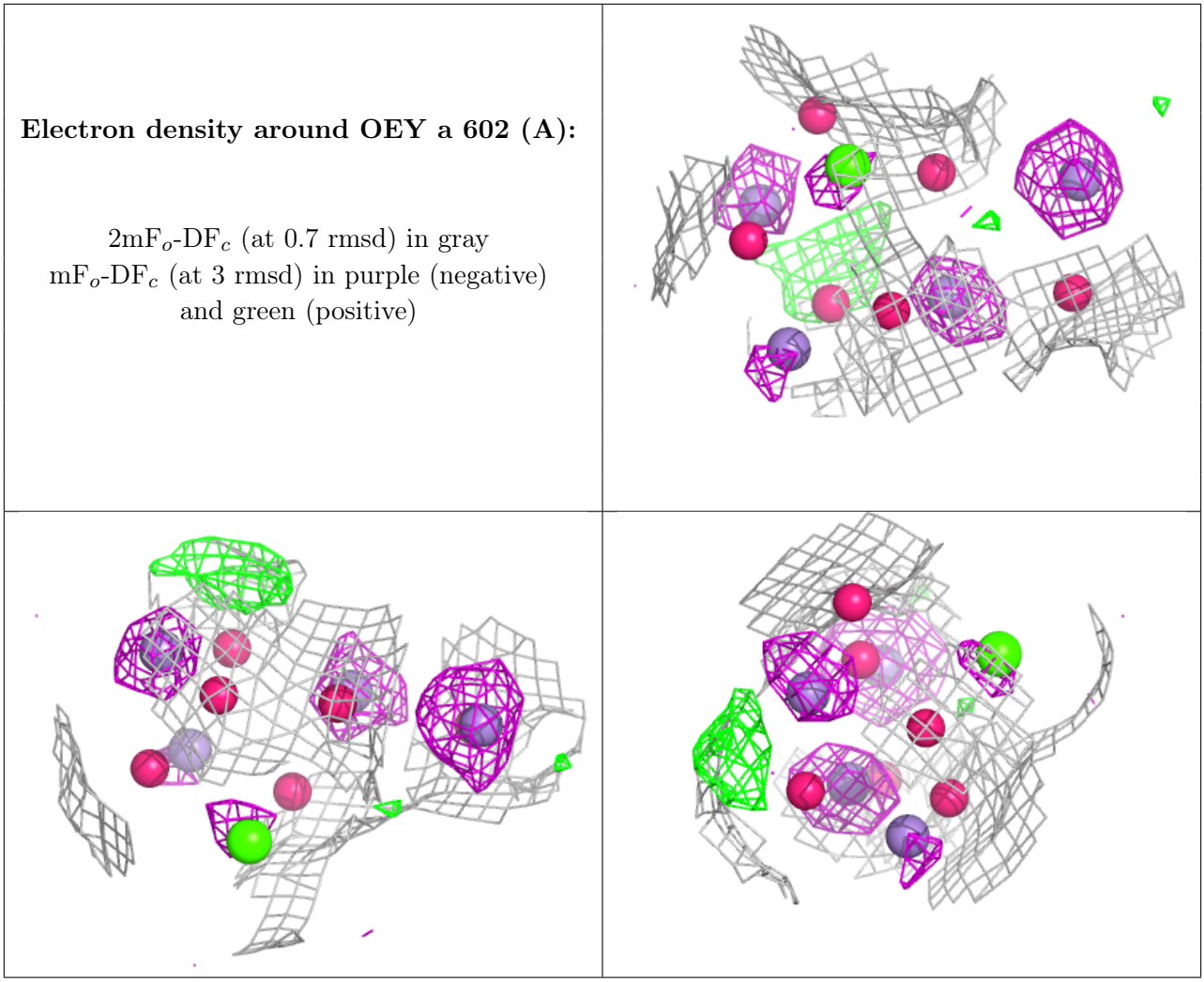






Electron density around OEY a 602 (A):

$2mF_o$-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

There are no such residues in this entry.