Full wwPDB X-ray Structure Validation Report (i)

Oct 8, 2023 – 08:32 PM EDT

PDB ID	:	6W1V
Title	:	RT XFEL structure of the two-flash state of Photosystem II (2F, S3-rich) at 2.09 Angstrom resolution
Authors	:	Ibrahim, M.; Fransson, T.; Chatterjee, R.; Cheah, M.H.; Hussein, R.; Lassalle, L.; Sutherlin, K.D.; Young, I.D.; Fuller, F.D.; Gul, S.; Kim, I.-S.; Simon, P.S.; de Lichtenberg, C.; Chernev, P.; Bogacz, I.; Pham, C.; Orville, A.M.; Saichek, N.; Northen, T.R.; Batyuk, A.; Carbajo, S.; Alonso-Mori, R.; Tono, K.; Owada, S.; Bhowmick, A.; Bolotovski, R.; Mendez, D.; Moriarty, N.W.; Holton, J.M.; Dobbek, H.; Brewster, A.S.; Adams, P.D.; Sauter, N.K.; Bergmann, U.; Zouni, A.; Messinger, J.; Kern, J.; Yachandra, V.K.; Yano, J.
Deposited on	:	2020-03-04
Resolution	:	2.09 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 (i)) were used in the production of this report:

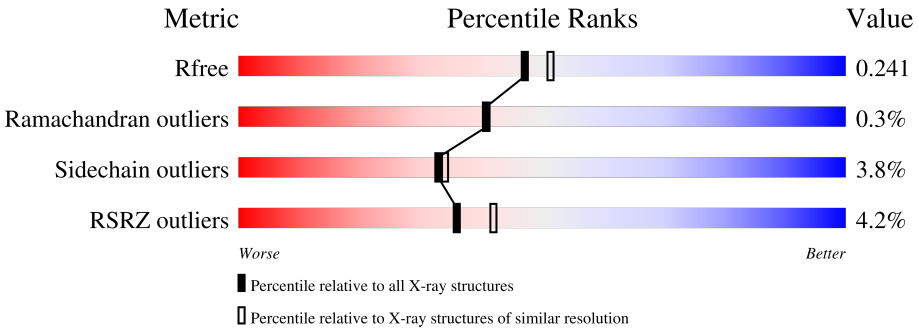
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)

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 2.09 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	5197 (2.10-2.10)
Ramachandran outliers	138981	5647 (2.10-2.10)
Sidechain outliers	138945	5648 (2.10-2.10)
RSRZ outliers	127900	5083 (2.10-2.10)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for >=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	97%
1	a	344	94%
2	B	510	2% 97%

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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)	:	2.35.1

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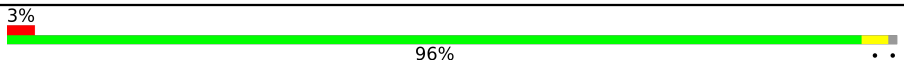
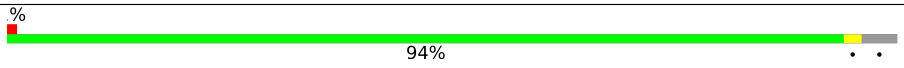
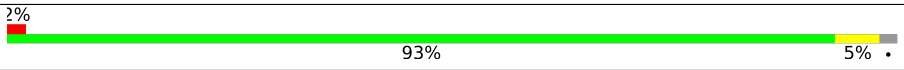
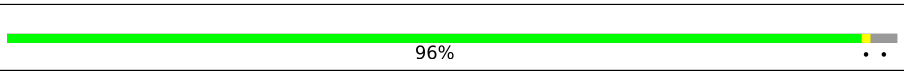
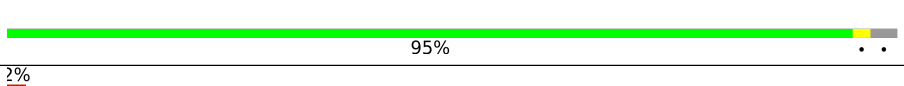
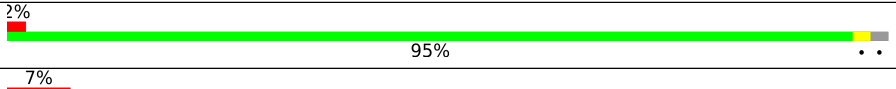
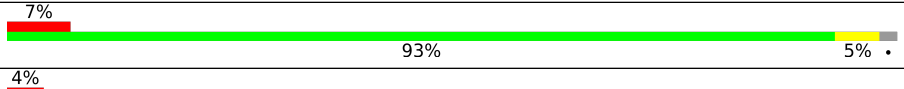
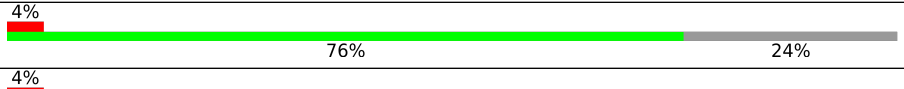
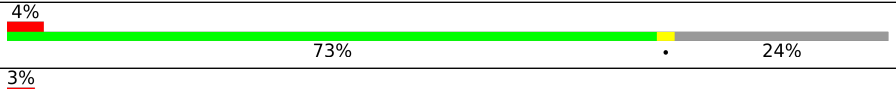
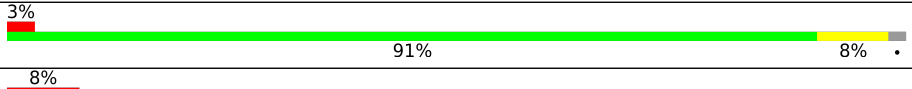
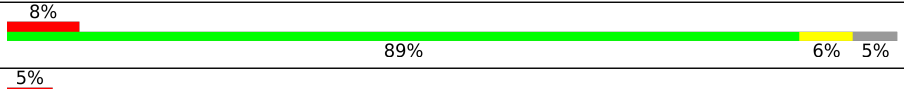
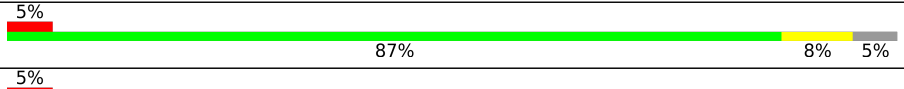
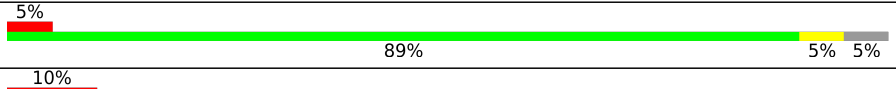
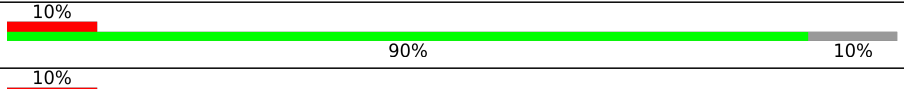
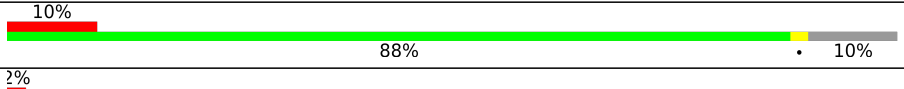
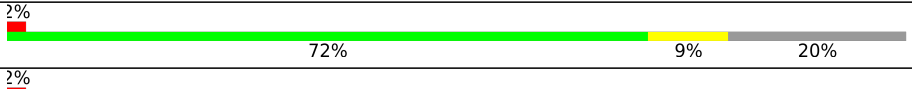
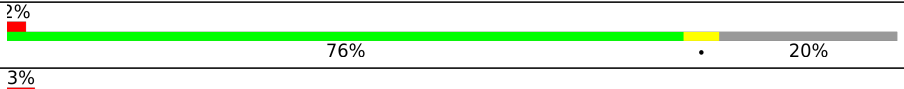
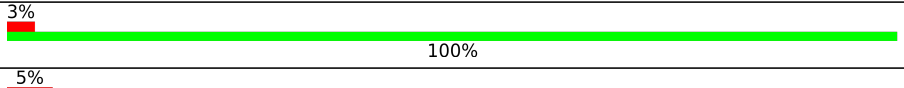
Mol	Chain	Length	Quality of chain
2	b	510	
3	C	461	
3	c	461	
4	D	352	
4	d	352	
5	E	84	
5	e	84	
6	F	45	
6	f	45	
7	H	66	
7	h	66	
8	I	38	
8	i	38	
9	J	40	
9	j	40	
10	K	46	
10	k	46	
11	L	37	
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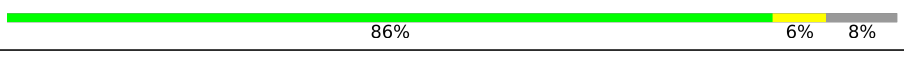
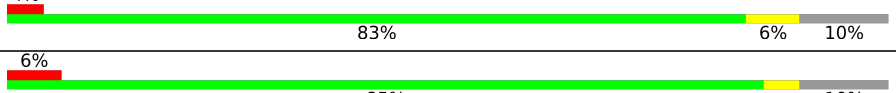
12	M	36	
12	m	36	
13	O	272	
13	o	272	
14	R	41	
14	r	41	

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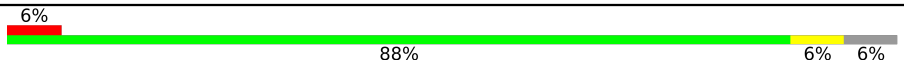
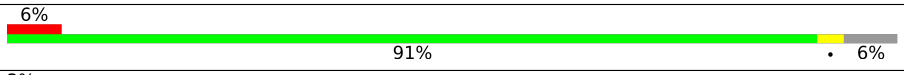
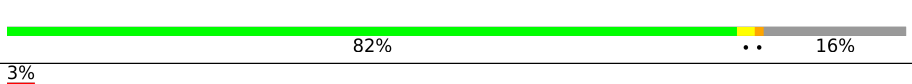
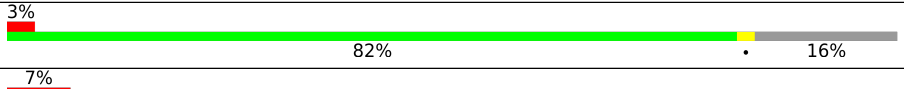
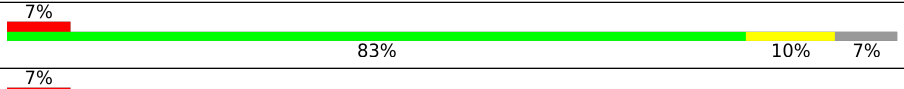
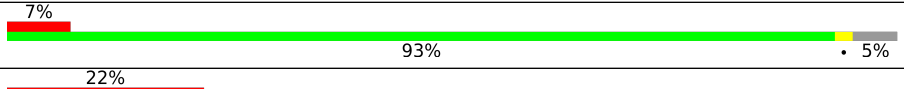
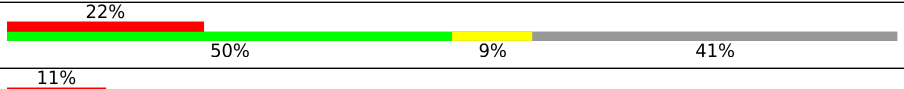
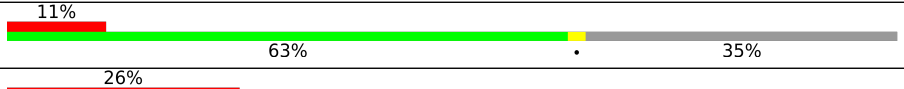
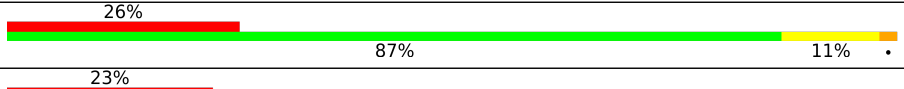
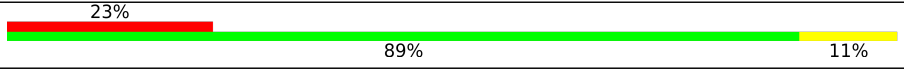
Mol	Chain	Length	Quality of chain
15	T	32	
15	t	32	
16	U	134	
16	u	134	
17	V	163	
17	v	163	
18	X	41	
18	x	41	
19	Y	46	
19	y	46	
20	Z	62	
20	z	62	

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
22	CLA	A	402	X	-	-	-
22	CLA	A	404	X	-	-	-
22	CLA	B	702	X	-	-	-
22	CLA	B	703	X	-	-	-
22	CLA	B	704	X	-	-	-
22	CLA	B	705	X	-	-	-
22	CLA	B	706	X	-	-	-
22	CLA	B	707	X	-	-	-
22	CLA	B	708	X	-	-	-
22	CLA	B	710	X	-	-	-
22	CLA	B	712	X	-	-	-
22	CLA	B	713	X	-	-	-
22	CLA	B	714	X	-	-	-
22	CLA	B	715	X	-	-	-
22	CLA	B	716	X	-	-	-
22	CLA	C	502	X	-	-	-
22	CLA	C	504	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	C	505	X	-	-	-
22	CLA	C	506	X	-	-	-
22	CLA	C	507	X	-	-	-
22	CLA	C	508	X	-	-	-
22	CLA	C	510	X	-	-	-
22	CLA	C	511	X	-	-	-
22	CLA	C	512	X	-	-	-
22	CLA	C	513	X	-	-	-
22	CLA	C	514	X	-	-	-
22	CLA	D	401	X	-	-	-
22	CLA	D	402	X	-	-	-
22	CLA	H	102	X	-	-	-
22	CLA	a	401	X	-	-	-
22	CLA	a	406	X	-	-	-
22	CLA	b	701	X	-	-	-
22	CLA	b	703	X	-	-	-
22	CLA	b	704	X	-	-	-
22	CLA	b	705	X	-	-	-
22	CLA	b	706	X	-	-	-
22	CLA	b	707	X	-	-	-
22	CLA	b	708	X	-	-	-
22	CLA	b	709	X	-	-	-
22	CLA	b	710	X	-	-	-
22	CLA	b	711	X	-	-	-
22	CLA	b	712	X	-	-	-
22	CLA	b	713	X	-	-	-
22	CLA	b	714	X	-	-	-
22	CLA	b	715	X	-	-	-
22	CLA	b	716	X	-	-	-
22	CLA	c	502	X	-	-	-
22	CLA	c	503	X	-	-	-
22	CLA	c	504	X	-	-	-
22	CLA	c	505	X	-	-	-
22	CLA	c	506	X	-	-	-
22	CLA	c	507	X	-	-	-
22	CLA	c	508	X	-	-	-
22	CLA	c	510	X	-	-	-
22	CLA	c	511	X	-	-	-
22	CLA	c	512	X	-	-	-
22	CLA	c	513	X	-	-	-
22	CLA	c	514	X	-	-	-

2 Entry composition (i)

There are 36 unique types of molecules in this entry. The entry contains 106211 atoms, of which 52744 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	H	N	O	S	0	66	0
			6084	2030	2971	513	551	19			
1	a	334	Total	C	H	N	O	S	0	66	0
			6072	2027	2962	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	H	N	O	S	0	5	0
			7864	2631	3859	666	695	13			
2	b	505	Total	C	H	N	O	S	0	0	0
			7800	2610	3822	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	H	N	O	S	0	14	0
			6928	2302	3419	586	607	14			
3	c	451	Total	C	H	N	O	S	0	14	0
			7073	2343	3490	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	H	N	O	S	0	2	0
			5360	1809	2629	446	464	12			
4	d	341	Total	C	H	N	O	S	0	3	0
			5372	1813	2635	446	466	12			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	82	Total	C	H	N	O	0	1	0
			1316	436	650	107	123			
5	e	82	Total	C	H	N	O	0	0	0
			1311	434	647	108	122			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
6	F	34	Total	C	H	N	O	S	0	0	0
			556	187	281	45	42	1			
6	f	34	Total	C	H	N	O	S	0	0	0
			556	187	281	45	42	1			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
7	H	65	Total	C	H	N	O	S	0	0	0
			1042	341	532	82	85	2			
7	h	63	Total	C	H	N	O	S	0	0	0
			1016	333	518	80	83	2			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
8	I	36	Total	C	H	N	O	S	0	0	0
			607	200	311	46	49	1			
8	i	36	Total	C	H	N	O	S	0	0	0
			607	200	311	46	49	1			

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	C	H	N	O	S	0	0	0
			525	174	268	40	42	1			
9	j	36	Total	C	H	N	O	S	0	0	0
			525	174	268	40	42	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	K	37	Total	C	H	N	O	0	0	0
			598	204	305	43	46			
10	k	37	Total	C	H	N	O	0	0	0
			598	204	305	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	H	N	O	S	0	0	0
			620	202	316	48	53	1			
11	l	36	Total	C	H	N	O		0	0	0
			600	197	304	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	H	N	O	S	0	0	0
			525	171	269	37	47	1			
12	m	32	Total	C	H	N	O	S	0	0	0
			518	168	267	36	46	1			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	1	FME	-	initiating methionine	UNP Q8DHA7
m	1	FME	-	initiating methionine	UNP Q8DHA7

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
13	O	244	Total	C	H	N	O	S	0	1	0
			3698	1168	1828	313	385	4			
13	o	244	Total	C	H	N	O	S	0	0	0
			3718	1170	1844	317	383	4			

- Molecule 14 is a protein called Photosystem II protein Y.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	R	34	Total	C	H	N	O	0	0	0
			569	184	298	47	40			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	r	31	Total	C	H	N	O	0	0	0
			490	162	250	42	36			

- Molecule 15 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
15	T	30	Total	C	H	N	O	S	0	0	0
			519	181	261	36	39	2			
15	t	30	Total	C	H	N	O	S	0	0	0
			512	180	256	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
t	1	FME	-	initiating methionine	UNP Q8DIQ0

- Molecule 16 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	U	97	Total	C	H	N	O	0	0	0
			1546	491	772	129	154			
16	u	97	Total	C	H	N	O	0	0	0
			1546	491	772	129	154			

- Molecule 17 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
17	V	137	Total	C	H	N	O	S	0	0	0
			2132	675	1068	177	208	4			
17	v	137	Total	C	H	N	O	S	0	0	0
			2132	675	1068	177	208	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	38	Total	C	H	N	O	0	0	0
			593	188	312	45	48			
18	x	39	Total	C	H	N	O	0	0	0
			602	191	316	46	49			

- Molecule 19 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
19	Y	27	Total	C	H	N	O	S	0	0	0
			413	128	217	35	30	3			
19	y	30	Total	C	H	N	O	S	0	0	0
			459	144	241	35	36	3			

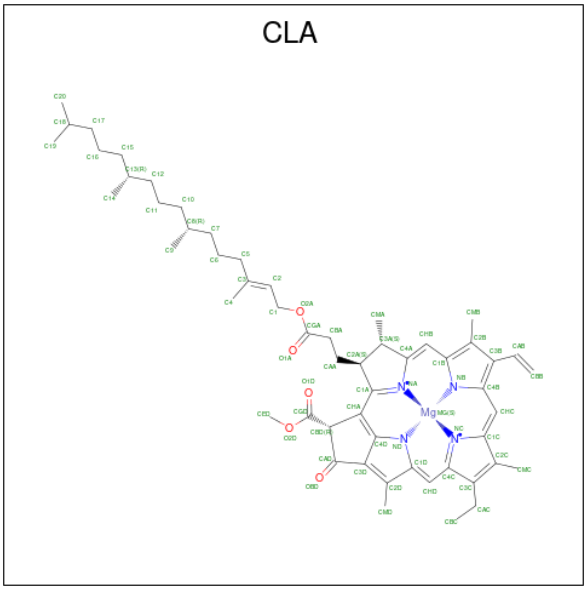
- Molecule 20 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
20	Z	62	Total	C	H	N	O	S	0	0	0
			995	328	516	72	77	2			
20	z	62	Total	C	H	N	O	S	0	0	0
			986	326	509	72	77	2			

- Molecule 21 is FE (II) ION (three-letter code: FE2) (formula: Fe).

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

- Molecule 22 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
22	A	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	A	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	A	1	Total C H Mg N O 102 44 48 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	B	1	Total C H Mg N O 119 50 59 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 117 49 58 1 4 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	C	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	D	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	D	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	D	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	H	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	a	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	a	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	a	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	a	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	b	1	Total C H Mg N O 119 50 59 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	c	1	Total C H Mg N O 119 50 59 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0
22	c	1	Total C H Mg N O 132 54 68 1 4 5	0	0
22	c	1	Total C H Mg N O 137 55 72 1 4 5	0	0

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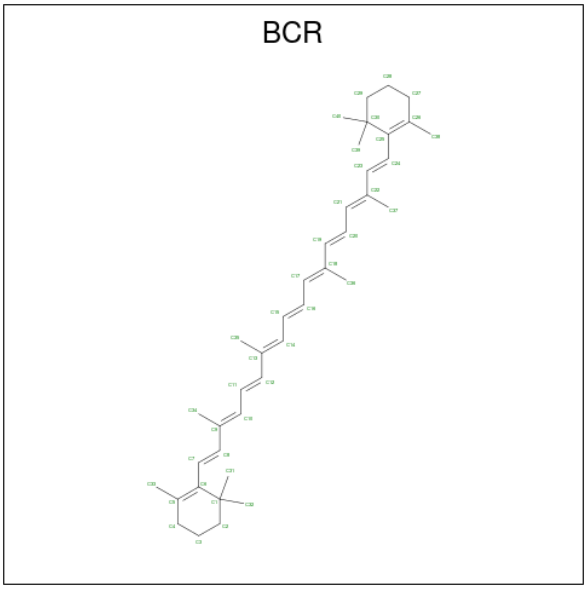
Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	c	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	d	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		
22	d	1	Total	C	H	Mg	N	O	0	0
			137	55	72	1	4	5		

- Molecule 23 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
23	A	1	Total	C	H	0	0
			96	40	56		
23	B	1	Total	C	H	0	0
			96	40	56		
23	B	1	Total	C	H	0	0
			96	40	56		
23	B	1	Total	C	H	0	0
			96	40	56		
23	C	1	Total	C	H	0	0
			96	40	56		

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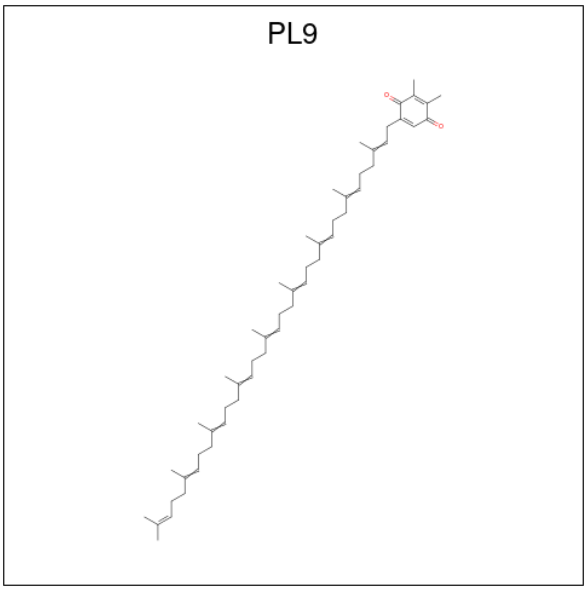
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	C	1	Total C H 96 40 56	0	0
23	D	1	Total C H 96 40 56	0	0
23	H	1	Total C H 96 40 56	0	0
23	K	1	Total C H 96 40 56	0	0
23	T	1	Total C H 96 40 56	0	0
23	Y	1	Total C H 96 40 56	0	0
23	a	1	Total C H 96 40 56	0	0
23	b	1	Total C H 96 40 56	0	0
23	b	1	Total C H 96 40 56	0	0
23	b	1	Total C H 96 40 56	0	0
23	c	1	Total C H 96 40 56	0	0
23	c	1	Total C H 96 40 56	0	0
23	d	1	Total C H 96 40 56	0	0
23	h	1	Total C H 96 40 56	0	0
23	k	1	Total C H 96 40 56	0	0
23	k	1	Total C H 96 40 56	0	0
23	t	1	Total C H 96 40 56	0	0

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

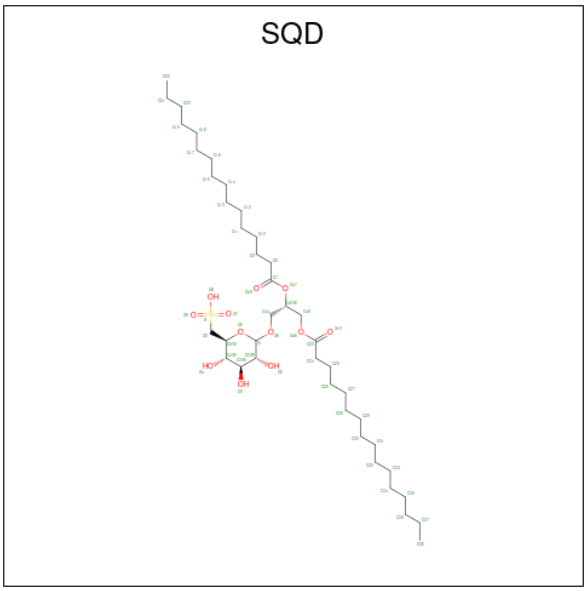
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	A	2	Total Cl 2 2	0	0
24	a	2	Total Cl 2 2	0	0

- Molecule 25 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: $C_{53}H_{80}O_2$).



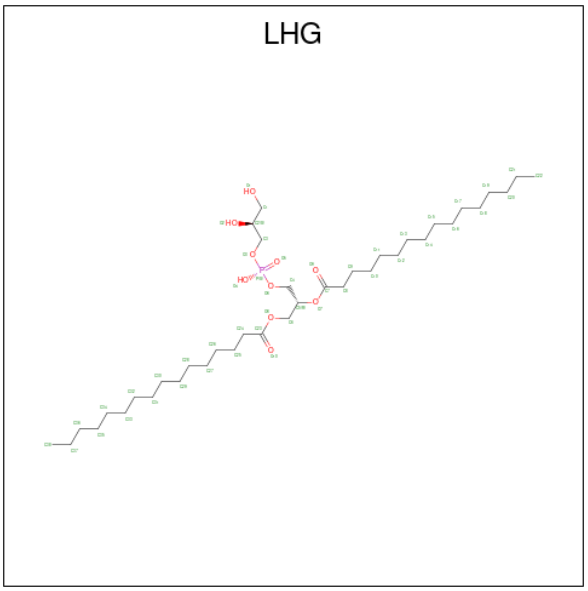
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
25	A	1	Total	C	H	O	0	0
			135	53	80	2		
25	D	1	Total	C	H	O	0	0
			135	53	80	2		
25	a	1	Total	C	H	O	0	0
			135	53	80	2		
25	d	1	Total	C	H	O	0	0
			135	53	80	2		

- Molecule 26 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



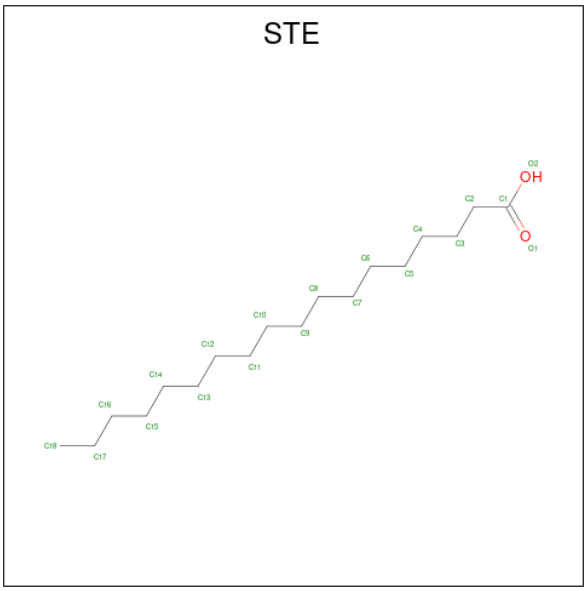
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C H O S 123 39 71 12 1	0	0
26	A	1	Total C H O 104 35 65 4	0	0
26	B	1	Total C H O S 132 41 78 12 1	0	0
26	D	1	Total C H O S 82 25 46 10 1	0	0
26	a	1	Total C H O S 131 41 77 12 1	0	0
26	a	1	Total C H O 92 31 56 5	0	0
26	b	1	Total C H O S 114 36 65 12 1	0	0
26	f	1	Total C H O S 89 28 48 12 1	0	0

- Molecule 27 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
27	A	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
27	B	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
27	D	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
27	D	1	Total	C	H	O	P	0	0
			114	36	67	10	1		
27	L	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
27	a	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
27	a	1	Total	C	H	O	P	0	0
			99	31	57	10	1		
27	d	1	Total	C	H	O	P	0	0
			123	38	74	10	1		
27	d	1	Total	C	H	O	P	0	0
			90	28	51	10	1		
27	l	1	Total	C	H	O	P	0	0
			123	38	74	10	1		

- Molecule 28 is STEARIC ACID (three-letter code: STE) (formula: $C_{18}H_{36}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C H 47 16 31	0	0
28	A	1	Total C H 11 5 6	0	0
28	B	1	Total C H O 28 10 16 2	0	0
28	B	1	Total C H O 43 15 26 2	0	0
28	B	1	Total C H O 28 10 16 2	0	0
28	B	1	Total C H O 46 16 28 2	0	0
28	B	1	Total C H 47 16 31	0	0
28	C	1	Total C H O 28 10 16 2	0	0
28	C	1	Total C H 47 16 31	0	0
28	C	1	Total C H O 28 10 16 2	0	0
28	E	1	Total C H O 28 10 16 2	0	0
28	E	1	Total C H 17 7 10	0	0
28	H	1	Total C H 53 18 35	0	0
28	H	1	Total C H 20 8 12	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	I	1	Total C H 41 15 26	0	0
28	J	1	Total C H O 28 10 16 2	0	0
28	M	1	Total C H O 37 13 22 2	0	0
28	M	1	Total C H 26 10 16	0	0
28	T	1	Total C H 44 15 29	0	0
28	X	1	Total C H O 55 18 35 2	0	0
28	Z	1	Total C H 20 8 12	0	0
28	a	1	Total C H 26 10 16	0	0
28	a	1	Total C H O 28 10 16 2	0	0
28	a	1	Total C H 41 15 26	0	0
28	b	1	Total C H O 55 18 35 2	0	0
28	b	1	Total C H O 40 14 24 2	0	0
28	b	1	Total C H O 55 18 35 2	0	0
28	b	1	Total C H 26 10 16	0	0
28	b	1	Total C H O 55 18 35 2	0	0
28	c	1	Total C H O 28 10 16 2	0	0
28	c	1	Total C H O 55 18 35 2	0	0
28	d	1	Total C H O 43 15 26 2	0	0
28	h	1	Total C H 41 14 27	0	0
28	j	1	Total C H O 28 10 16 2	0	0
28	l	1	Total C H 53 18 35	0	0

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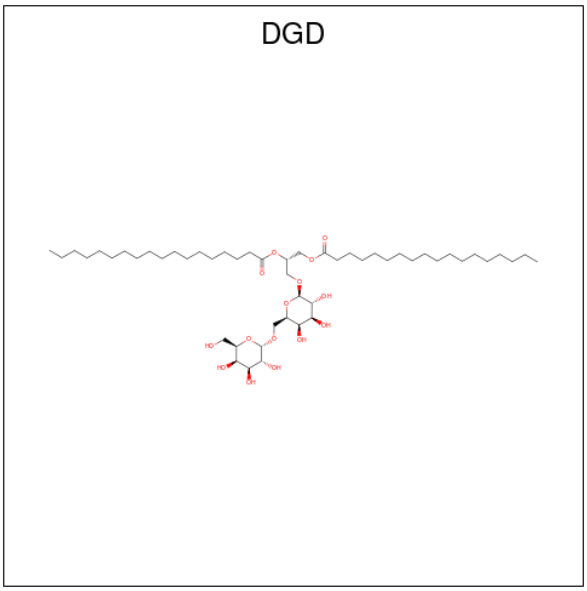
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
28	m	1	Total	C	H	O	0	0
			28	10	16	2		
28	t	1	Total	C	H	O	0	0
			34	12	20	2		
28	x	1	Total	C	H	O	0	0
			55	18	35	2		

- Molecule 29 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
29	A	1	Total	C	H	O	0	0
			162	51	96	15		
29	C	1	Total	C	H	O	0	0
			143	47	81	15		
29	C	1	Total	C	H	O	0	0
			144	47	82	15		
29	C	1	Total	C	H	O	0	0
			144	47	82	15		
29	H	1	Total	C	H	O	0	0
			143	47	81	15		
29	c	1	Total	C	H	O	0	0
			144	47	82	15		
29	c	1	Total	C	H	O	0	0
			143	47	81	15		
29	c	1	Total	C	H	O	0	0
			142	47	80	15		

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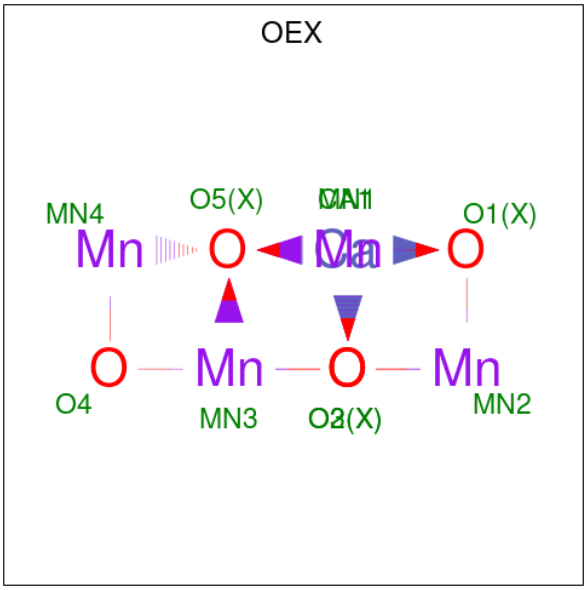
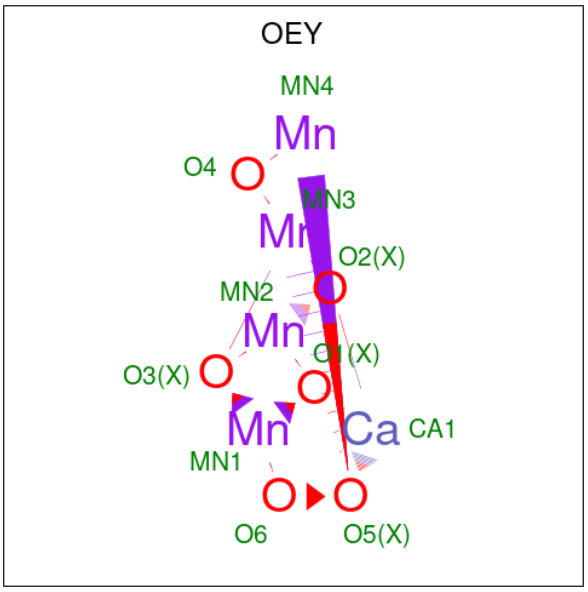
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
29	h	1	Total	C	H	O	0	0
			142	47	80	15		

- Molecule 30 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: $CaMn_4O_5$).



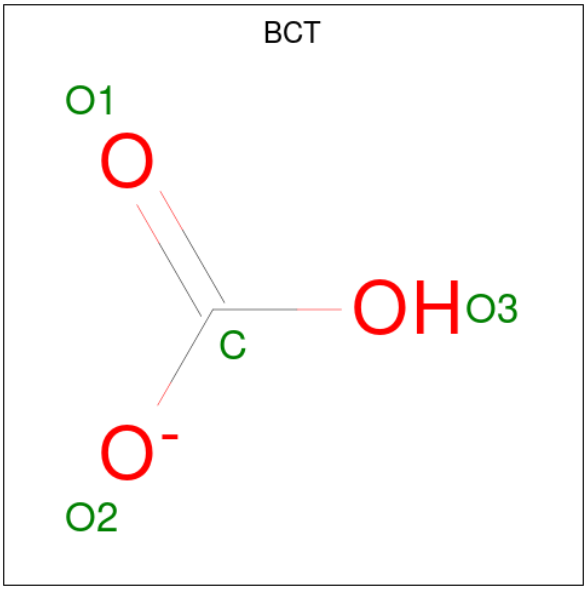
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	Ca	Mn	O	0	1
			10	1	4	5		
30	a	1	Total	Ca	Mn	O	0	1
			10	1	4	5		

- Molecule 31 is CA-MN4-O6 CLUSTER (three-letter code: OEY) (formula: $CaMn_4O_6$).



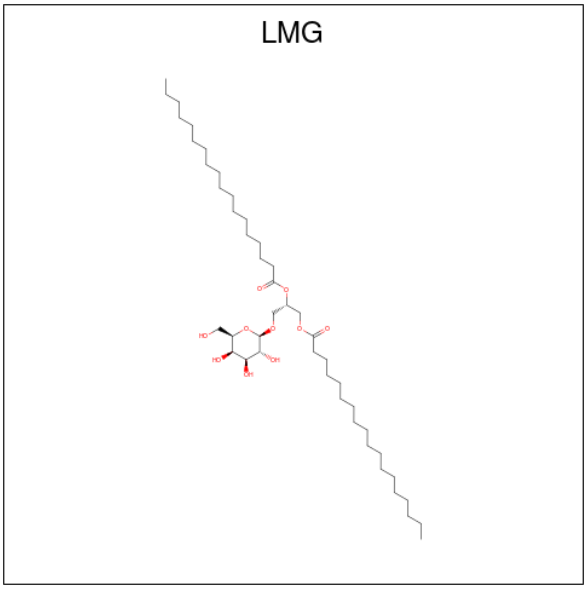
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	A	1	Total	Ca	Mn	O	0	1
			11	1	4	6		
31	a	1	Total	Ca	Mn	O	0	1
			11	1	4	6		

- Molecule 32 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
32	A	1	Total	C	H	O	0	0
			5	1	1	3		
32	a	1	Total	C	H	O	0	0
			5	1	1	3		

- 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	B	1	Total	C	H	O	0	0
			68	24	40	4		
33	C	1	Total	C	H	O	0	0
			114	38	66	10		
33	C	1	Total	C	H	O	0	0
			114	38	66	10		
33	D	1	Total	C	H	O	0	0
			123	41	72	10		
33	D	1	Total	C	H	O	0	0
			77	27	45	5		
33	M	1	Total	C	H	O	0	0
			123	41	72	10		
33	a	1	Total	C	H	O	0	0
			141	45	86	10		
33	b	1	Total	C	H	O	0	0
			123	41	72	10		
33	b	1	Total	C	H	O	0	0
			141	45	86	10		
33	c	1	Total	C	H	O	0	0
			81	27	44	10		
33	c	1	Total	C	H	O	0	0
			117	38	69	10		
33	c	1	Total	C	H	O	0	0
			117	39	68	10		

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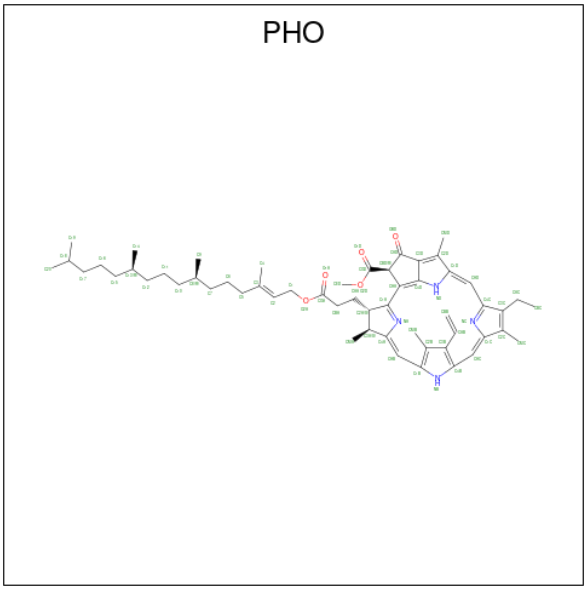
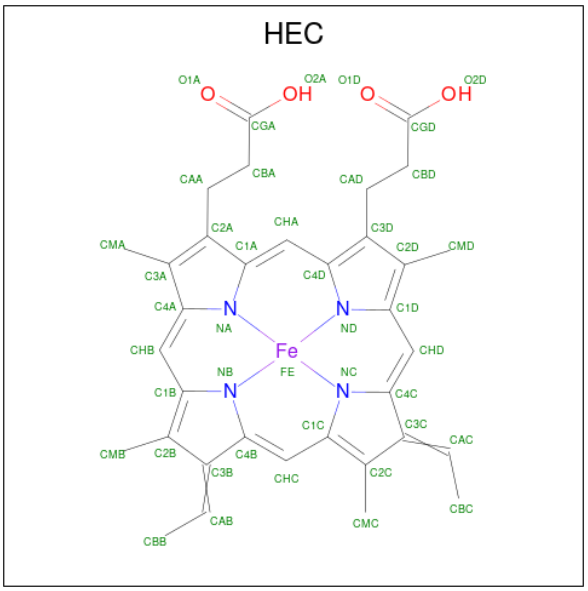
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	d	1	Total	C	H	O	0	0
			102	34	58	10		

- Molecule 34 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
34	D	1	Total	C	H	N	O	0	0
			138	55	74	4	5		
34	D	1	Total	C	H	N	O	0	0
			138	55	74	4	5		
34	a	1	Total	C	H	N	O	0	0
			138	55	74	4	5		
34	d	1	Total	C	H	N	O	0	0
			138	55	74	4	5		

- Molecule 35 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



Mol	Chain	Residues	Atoms						ZeroOcc	AltConf
35	E	1	Total	C	Fe	H	N	O	0	0
			75	34	1	32	4	4		
35	V	1	Total	C	Fe	H	N	O	0	0
			73	34	1	30	4	4		
35	e	1	Total	C	Fe	H	N	O	0	0
			75	34	1	32	4	4		
35	v	1	Total	C	Fe	H	N	O	0	0
			73	34	1	30	4	4		

- Molecule 36 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
36	A	145	Total	O	0	8
			145	145		
36	B	233	Total	O	0	0
			233	233		
36	C	168	Total	O	0	0
			168	168		
36	D	115	Total	O	0	0
			115	115		
36	E	37	Total	O	0	0
			37	37		
36	F	6	Total	O	0	0
			6	6		
36	H	35	Total	O	0	0
			35	35		
36	I	20	Total	O	0	0
			20	20		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	J	15	Total O 15 15	0	0
36	K	3	Total O 3 3	0	0
36	L	9	Total O 9 9	0	0
36	M	8	Total O 8 8	0	0
36	O	106	Total O 106 106	0	0
36	R	3	Total O 3 3	0	0
36	T	9	Total O 9 9	0	0
36	U	53	Total O 53 53	0	0
36	V	63	Total O 63 63	0	0
36	X	17	Total O 17 17	0	0
36	Y	3	Total O 3 3	0	0
36	a	130	Total O 130 130	0	8
36	b	193	Total O 193 193	0	0
36	c	169	Total O 169 169	0	0
36	d	106	Total O 106 106	0	0
36	e	23	Total O 23 23	0	0
36	f	4	Total O 4 4	0	0
36	h	22	Total O 22 22	0	0
36	i	17	Total O 17 17	0	0
36	j	7	Total O 7 7	0	0
36	k	4	Total O 4 4	0	0

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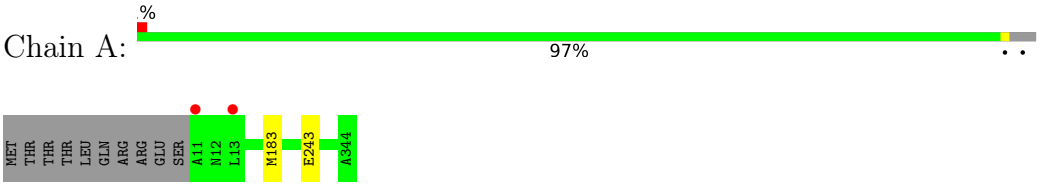
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	l	12	Total O 12 12	0	0
36	m	5	Total O 5 5	0	0
36	o	97	Total O 97 97	0	0
36	r	8	Total O 8 8	0	0
36	t	7	Total O 7 7	0	0
36	u	63	Total O 63 63	0	0
36	v	64	Total O 64 64	0	0
36	x	7	Total O 7 7	0	0
36	y	8	Total O 8 8	0	0
36	z	8	Total O 8 8	0	0

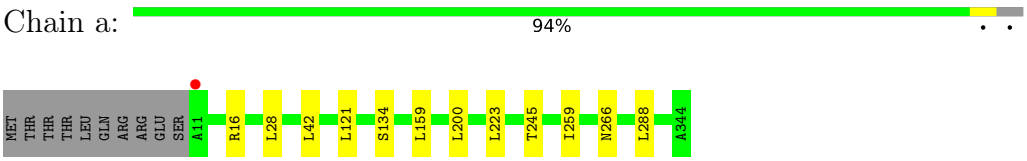
3 Residue-property plots (i)

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.

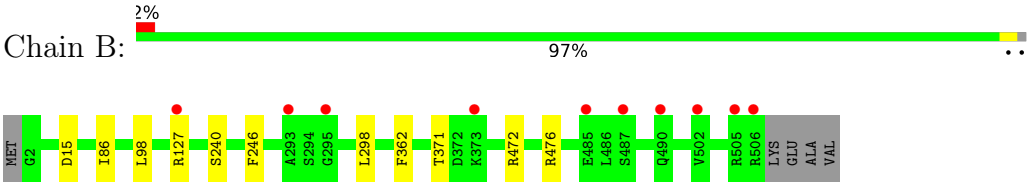
• Molecule 1: Photosystem II protein D1 1



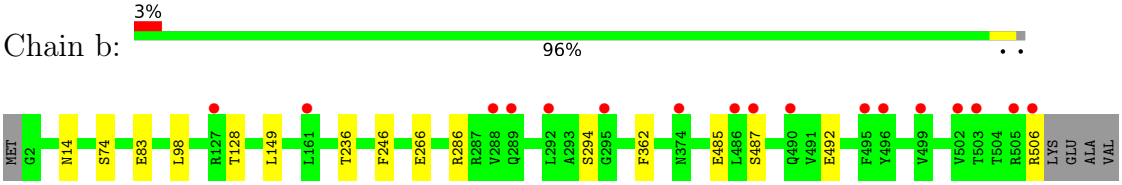
• Molecule 1: Photosystem II protein D1 1



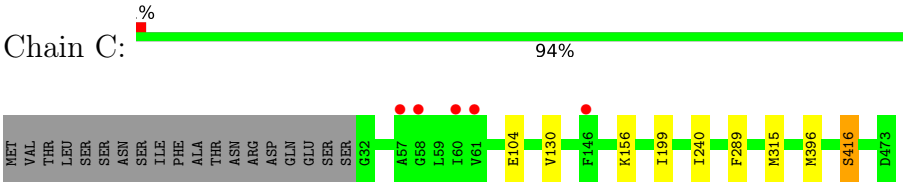
• Molecule 2: Photosystem II CP47 reaction center protein



• Molecule 2: Photosystem II CP47 reaction center protein

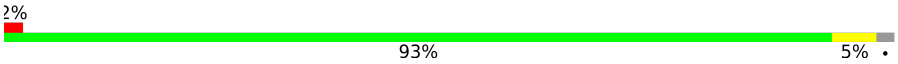


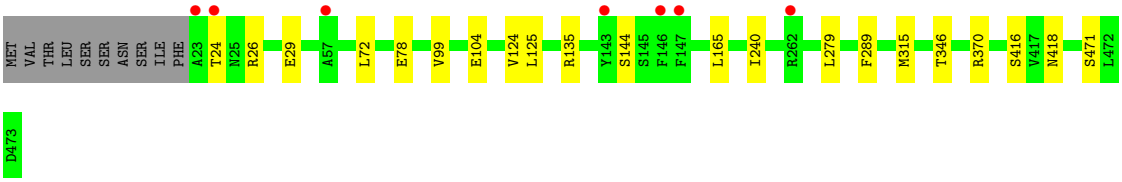
• Molecule 3: Photosystem II CP43 reaction center protein



• Molecule 3: Photosystem II CP43 reaction center protein

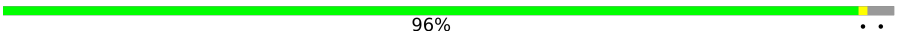
Chain c:

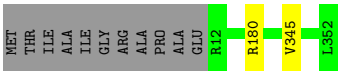




• Molecule 4: Photosystem II D2 protein

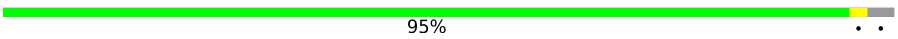
Chain D:

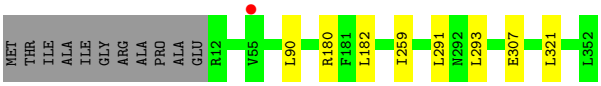




• Molecule 4: Photosystem II D2 protein

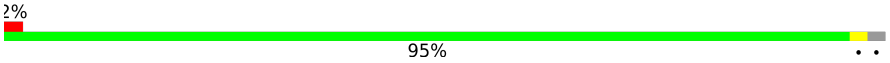
Chain d:





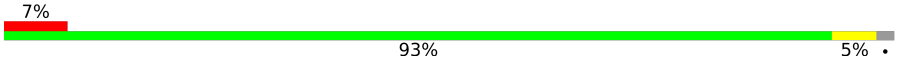
• Molecule 5: Cytochrome b559 subunit alpha

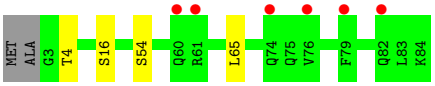
Chain E:



• Molecule 5: Cytochrome b559 subunit alpha

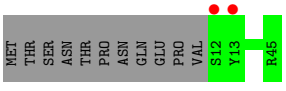
Chain e:





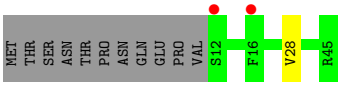
• Molecule 6: Cytochrome b559 subunit beta

Chain F:

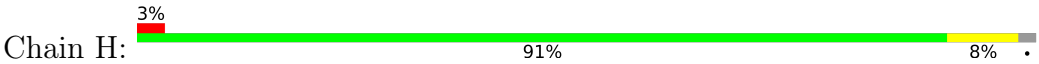


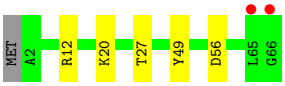
• Molecule 6: Cytochrome b559 subunit beta

Chain f:

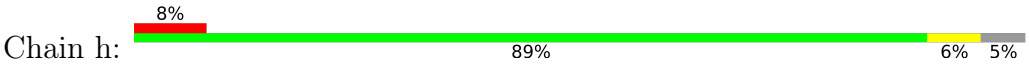


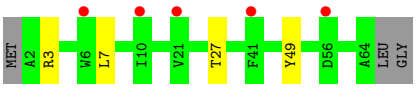
• Molecule 7: Photosystem II reaction center protein H



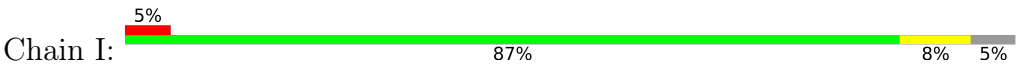


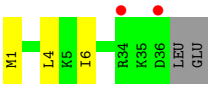
• Molecule 7: Photosystem II reaction center protein H



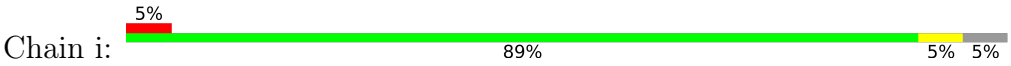


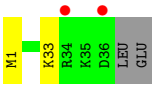
• Molecule 8: Photosystem II reaction center protein I



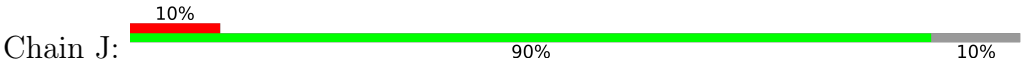


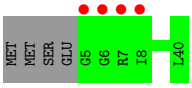
• Molecule 8: Photosystem II reaction center protein I



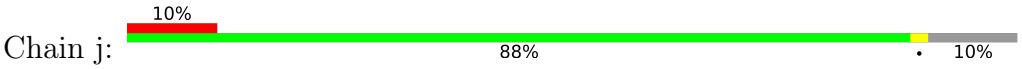


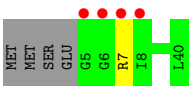
• Molecule 9: Photosystem II reaction center protein J





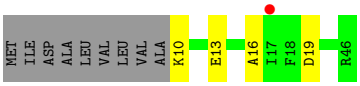
• Molecule 9: Photosystem II reaction center protein J





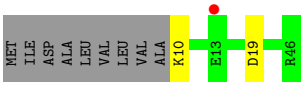
• Molecule 10: Photosystem II reaction center protein K

Chain K:



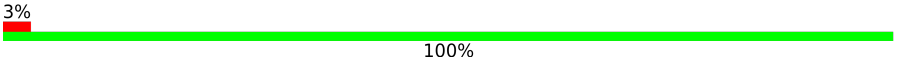
• Molecule 10: Photosystem II reaction center protein K

Chain k:



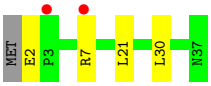
• Molecule 11: Photosystem II reaction center protein L

Chain L:



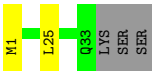
• Molecule 11: Photosystem II reaction center protein L

Chain l:



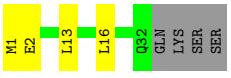
• Molecule 12: Photosystem II reaction center protein M

Chain M:



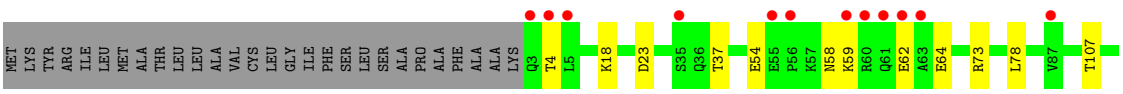
• Molecule 12: Photosystem II reaction center protein M

Chain m:



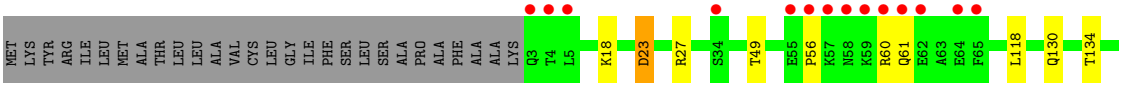
• Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:



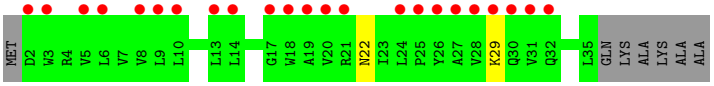
• Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:



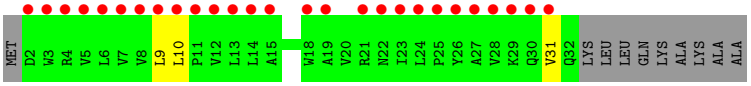
• Molecule 14: Photosystem II protein Y

Chain R:



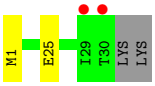
• Molecule 14: Photosystem II protein Y

Chain r:



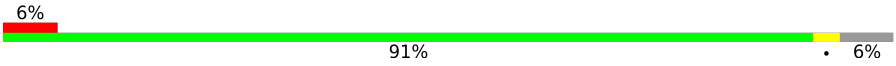
• Molecule 15: Photosystem II reaction center protein T

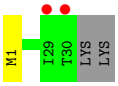
Chain T:



• Molecule 15: Photosystem II reaction center protein T

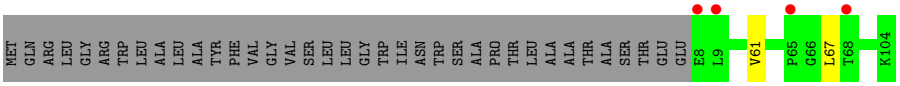
Chain t:





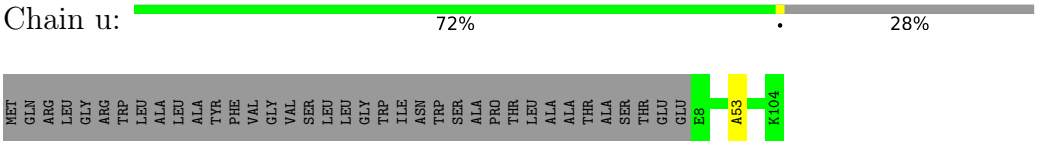
• Molecule 16: Photosystem II 12 kDa extrinsic protein

Chain U:



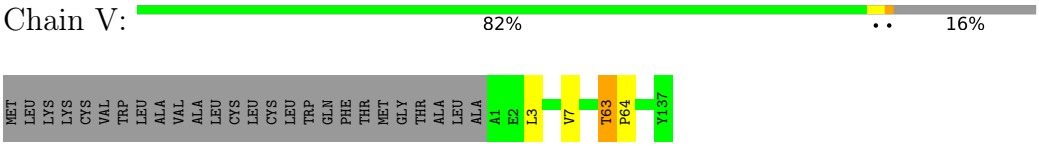
• Molecule 16: Photosystem II 12 kDa extrinsic protein

Chain u:



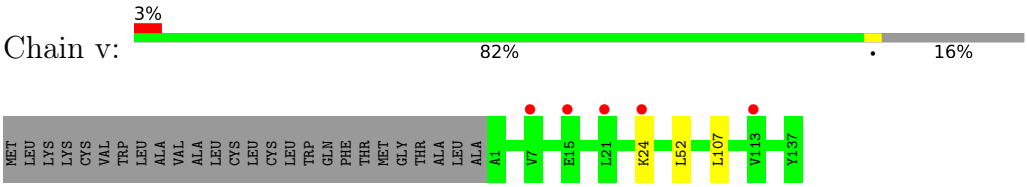
• Molecule 17: Cytochrome c-550

Chain V:



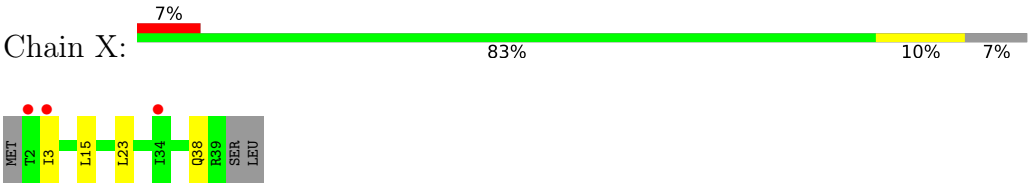
• Molecule 17: Cytochrome c-550

Chain v:



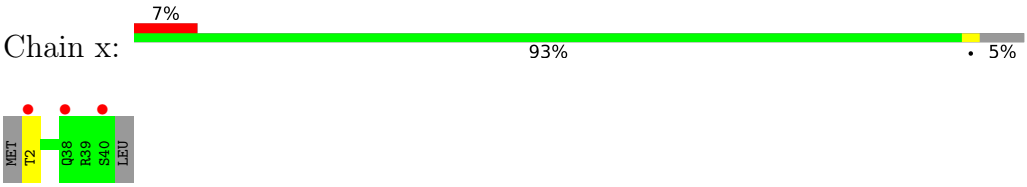
• Molecule 18: Photosystem II reaction center X protein

Chain X:



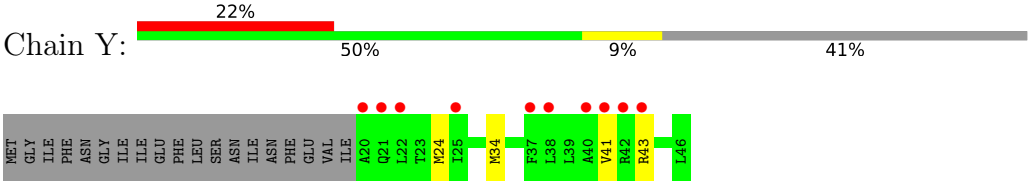
• Molecule 18: Photosystem II reaction center X protein

Chain x:



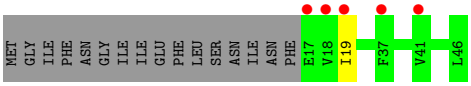
• Molecule 19: Photosystem II reaction center protein Ycf12

Chain Y:

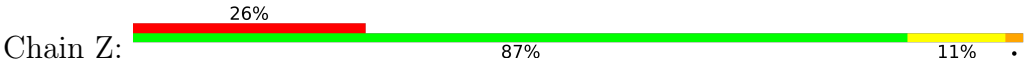


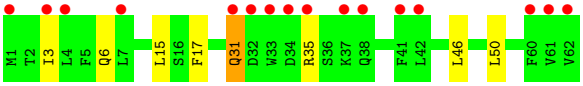
• Molecule 19: Photosystem II reaction center protein Ycf12

Chain y:

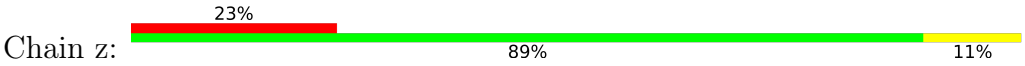


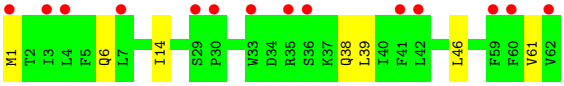
• Molecule 20: Photosystem II reaction center protein Z





• Molecule 20: Photosystem II reaction center protein Z





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	116.96Å 221.65Å 307.79Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	33.65 – 2.09 33.65 – 2.09	Depositor EDS
% Data completeness (in resolution range)	99.6 (33.65-2.09) 84.9 (33.65-2.09)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.75 (at 2.08Å)	Xtriage
Refinement program	PHENIX 1.17.1_3660	Depositor
R, R_{free}	0.182 , 0.241 0.182 , 0.241	Depositor DCC
R_{free} test set	4165 reflections (0.89%)	wwPDB-VP
Wilson B-factor (Å^2)	26.4	Xtriage
Anisotropy	0.198	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 66.1	EDS
L-test for twinning[2]	$< \|L\| > = 0.45$, $< L^2 > = 0.28$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	106211	wwPDB-VP
Average B, all atoms (Å^2)	47.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.43% 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: DGD, STE, OEY, LMG, FME, BCT, HEC, FE2, OEX, CLA, SQD, CL, PL9, BCR, LHG, PHO

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	0.62	0/3227	0.68	2/4397 (0.0%)
1	a	0.62	0/3224	0.68	0/4393
2	B	0.64	0/4161	0.71	1/5669 (0.0%)
2	b	0.64	0/4118	0.68	0/5611
3	C	0.64	0/3647	0.67	1/4965 (0.0%)
3	c	0.60	0/3719	0.68	1/5061 (0.0%)
4	D	0.67	0/2825	0.70	0/3847
4	d	0.65	0/2834	0.71	0/3859
5	E	0.53	0/688	0.58	0/940
5	e	0.49	0/683	0.55	0/932
6	F	0.51	0/284	0.51	0/387
6	f	0.48	0/284	0.62	0/387
7	H	0.65	0/523	0.68	0/713
7	h	0.58	0/511	0.67	0/697
8	I	0.60	0/293	0.61	0/396
8	i	0.68	0/293	0.61	0/396
9	J	0.54	0/263	0.61	0/356
9	j	0.56	0/263	0.59	0/356
10	K	0.55	0/303	0.60	0/416
10	k	0.53	0/303	0.65	0/416
11	L	0.64	0/311	0.72	0/422
11	l	0.68	0/303	0.74	0/412
12	M	0.65	0/249	0.67	0/341
12	m	0.70	0/244	0.67	0/334
13	O	0.61	0/1904	0.73	1/2585 (0.0%)
13	o	0.61	0/1905	0.73	1/2583 (0.0%)
14	R	0.44	0/277	0.60	0/380
14	r	0.41	0/246	0.60	0/339
15	T	0.75	0/257	0.72	0/349
15	t	0.71	0/255	0.64	0/346
16	U	0.58	0/785	0.68	0/1064
16	u	0.62	0/785	0.74	0/1064

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
17	V	0.60	0/1085	0.73	1/1473 (0.1%)
17	v	0.58	0/1085	0.67	0/1473
18	X	0.50	0/284	0.60	0/384
18	x	0.41	0/289	0.55	0/391
19	Y	0.43	0/197	0.56	0/264
19	y	0.38	0/219	0.55	0/294
20	Z	0.49	0/490	0.62	0/669
20	z	0.40	0/488	0.51	0/666
All	All	0.61	0/44104	0.68	8/60027 (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
17	V	0	1

There are no bond length outliers.

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	V	63	THR	C-N-CD	-7.20	104.76	120.60
2	B	15	ASP	CB-CG-OD2	-6.76	112.21	118.30
3	C	396	MET	CG-SD-CE	-5.43	91.51	100.20
1	A	183[A]	MET	CA-CB-CG	5.29	122.29	113.30
1	A	183[B]	MET	CA-CB-CG	5.29	122.29	113.30
13	O	158	ASP	CB-CG-OD1	5.28	123.05	118.30
3	c	370	ARG	NE-CZ-NH2	5.10	122.85	120.30
13	o	27	ARG	NE-CZ-NH1	5.05	122.82	120.30

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
17	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	397/344 (115%)	387 (98%)	10 (2%)	0	100	100
1	a	397/344 (115%)	387 (98%)	9 (2%)	1 (0%)	41	41
2	B	508/510 (100%)	500 (98%)	8 (2%)	0	100	100
2	b	503/510 (99%)	491 (98%)	11 (2%)	1 (0%)	47	49
3	C	454/461 (98%)	440 (97%)	13 (3%)	1 (0%)	47	49
3	c	463/461 (100%)	447 (96%)	15 (3%)	1 (0%)	47	49
4	D	340/352 (97%)	332 (98%)	8 (2%)	0	100	100
4	d	341/352 (97%)	330 (97%)	11 (3%)	0	100	100
5	E	81/84 (96%)	79 (98%)	2 (2%)	0	100	100
5	e	80/84 (95%)	75 (94%)	5 (6%)	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	32/45 (71%)	31 (97%)	1 (3%)	0	100	100
7	H	63/66 (96%)	59 (94%)	3 (5%)	1 (2%)	9	5
7	h	61/66 (92%)	58 (95%)	3 (5%)	0	100	100
8	I	34/38 (90%)	33 (97%)	1 (3%)	0	100	100
8	i	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
9	J	34/40 (85%)	33 (97%)	1 (3%)	0	100	100
9	j	34/40 (85%)	34 (100%)	0	0	100	100
10	K	35/46 (76%)	33 (94%)	1 (3%)	1 (3%)	4	1
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%)	28 (93%)	2 (7%)	0	100	100
13	O	243/272 (89%)	228 (94%)	11 (4%)	4 (2%)	9	5

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
13	o	242/272 (89%)	228 (94%)	12 (5%)	2 (1%)	19 15
14	R	32/41 (78%)	27 (84%)	5 (16%)	0	100 100
14	r	29/41 (71%)	27 (93%)	1 (3%)	1 (3%)	3 1
15	T	28/32 (88%)	28 (100%)	0	0	100 100
15	t	28/32 (88%)	28 (100%)	0	0	100 100
16	U	95/134 (71%)	92 (97%)	3 (3%)	0	100 100
16	u	95/134 (71%)	91 (96%)	3 (3%)	1 (1%)	14 9
17	V	135/163 (83%)	129 (96%)	5 (4%)	1 (1%)	22 18
17	v	135/163 (83%)	130 (96%)	5 (4%)	0	100 100
18	X	36/41 (88%)	35 (97%)	1 (3%)	0	100 100
18	x	37/41 (90%)	35 (95%)	2 (5%)	0	100 100
19	Y	25/46 (54%)	23 (92%)	1 (4%)	1 (4%)	3 1
19	y	28/46 (61%)	25 (89%)	3 (11%)	0	100 100
20	Z	60/62 (97%)	54 (90%)	5 (8%)	1 (2%)	9 4
20	z	60/62 (97%)	56 (93%)	3 (5%)	1 (2%)	9 4
All	All	5396/5700 (95%)	5212 (97%)	166 (3%)	18 (0%)	41 41

All (18) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
10	K	16	ALA
13	O	59	LYS
17	V	64	PRO
14	r	31	VAL
13	O	62	GLU
3	c	416	SER
16	u	53	ALA
19	Y	43	ARG
2	b	294	SER
20	Z	31	GLN
13	O	138	THR
13	o	23	ASP
7	H	12	ARG
13	O	73	ARG
1	a	259	ILE
13	o	56	PRO

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Mol	Chain	Res	Type
20	z	61	VAL

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	324/280 (116%)	323 (100%)	1 (0%)	92 95
1	a	323/280 (115%)	311 (96%)	12 (4%)	34 35
2	B	408/407 (100%)	398 (98%)	10 (2%)	47 52
2	b	402/407 (99%)	387 (96%)	15 (4%)	34 35
3	C	356/362 (98%)	348 (98%)	8 (2%)	52 57
3	c	364/362 (101%)	345 (95%)	19 (5%)	23 21
4	D	277/283 (98%)	275 (99%)	2 (1%)	84 88
4	d	278/283 (98%)	270 (97%)	8 (3%)	42 46
5	E	72/73 (99%)	69 (96%)	3 (4%)	30 30
5	e	71/73 (97%)	67 (94%)	4 (6%)	21 18
6	F	28/39 (72%)	28 (100%)	0	100 100
6	f	28/39 (72%)	27 (96%)	1 (4%)	35 36
7	H	54/55 (98%)	50 (93%)	4 (7%)	13 10
7	h	53/55 (96%)	49 (92%)	4 (8%)	13 10
8	I	32/34 (94%)	30 (94%)	2 (6%)	18 15
8	i	32/34 (94%)	31 (97%)	1 (3%)	40 43
9	J	24/28 (86%)	24 (100%)	0	100 100
9	j	24/28 (86%)	23 (96%)	1 (4%)	30 30
10	K	30/37 (81%)	27 (90%)	3 (10%)	7 5
10	k	30/37 (81%)	28 (93%)	2 (7%)	16 13
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 36

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
12	m	28/32 (88%)	25 (89%)	3 (11%)	6 3
13	O	206/228 (90%)	194 (94%)	12 (6%)	20 17
13	o	207/228 (91%)	197 (95%)	10 (5%)	25 24
14	R	28/33 (85%)	26 (93%)	2 (7%)	14 11
14	r	23/33 (70%)	21 (91%)	2 (9%)	10 7
15	T	26/28 (93%)	25 (96%)	1 (4%)	33 34
15	t	25/28 (89%)	25 (100%)	0	100 100
16	U	84/112 (75%)	82 (98%)	2 (2%)	49 53
16	u	84/112 (75%)	84 (100%)	0	100 100
17	V	117/138 (85%)	115 (98%)	2 (2%)	60 67
17	v	117/138 (85%)	114 (97%)	3 (3%)	46 50
18	X	31/34 (91%)	27 (87%)	4 (13%)	4 2
18	x	31/34 (91%)	30 (97%)	1 (3%)	39 41
19	Y	19/37 (51%)	16 (84%)	3 (16%)	2 1
19	y	22/37 (60%)	21 (96%)	1 (4%)	27 27
20	Z	52/52 (100%)	44 (85%)	8 (15%)	2 1
20	z	51/52 (98%)	45 (88%)	6 (12%)	5 2
All	All	4458/4654 (96%)	4293 (96%)	165 (4%)	33 35

All (165) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	243	GLU
2	B	86	ILE
2	B	98	LEU
2	B	127	ARG
2	B	240	SER
2	B	246	PHE
2	B	298	LEU
2	B	362	PHE
2	B	371	THR
2	B	472	ARG
2	B	476	ARG
3	C	104	GLU
3	C	130	VAL
3	C	156	LYS

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Mol	Chain	Res	Type
3	C	199	ILE
3	C	240	ILE
3	C	289	PHE
3	C	315	MET
3	C	416	SER
4	D	180	ARG
4	D	345	VAL
5	E	16	SER
5	E	22[A]	ILE
5	E	22[B]	ILE
7	H	20	LYS
7	H	27	THR
7	H	49	TYR
7	H	56	ASP
8	I	4	LEU
8	I	6	ILE
10	K	10	LYS
10	K	13	GLU
10	K	19	ASP
12	M	25	LEU
13	O	4	THR
13	O	18	LYS
13	O	23	ASP
13	O	37	THR
13	O	54	GLU
13	O	58	ASN
13	O	64	GLU
13	O	78	LEU
13	O	107	THR
13	O	118	LEU
13	O	178	LYS
13	O	214	THR
14	R	22	ASN
14	R	29	LYS
15	T	25	GLU
16	U	61	VAL
16	U	67	LEU
17	V	3	LEU
17	V	7	VAL
18	X	3	ILE
18	X	15	LEU
18	X	23	LEU

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Mol	Chain	Res	Type
18	X	38	GLN
19	Y	24	MET
19	Y	34	MET
19	Y	41	VAL
20	Z	3	ILE
20	Z	6	GLN
20	Z	15	LEU
20	Z	17	PHE
20	Z	31	GLN
20	Z	35	ARG
20	Z	46	LEU
20	Z	50	LEU
1	a	16	ARG
1	a	28	LEU
1	a	42	LEU
1	a	121	LEU
1	a	134	SER
1	a	159[A]	LEU
1	a	159[B]	LEU
1	a	200	LEU
1	a	223	LEU
1	a	245	THR
1	a	266	ASN
1	a	288	LEU
2	b	14	ASN
2	b	74	SER
2	b	83	GLU
2	b	98	LEU
2	b	128	THR
2	b	149	LEU
2	b	236	THR
2	b	246	PHE
2	b	266	GLU
2	b	286	ARG
2	b	362	PHE
2	b	485	GLU
2	b	487	SER
2	b	492	GLU
2	b	506	ARG
3	c	24	THR
3	c	26	ARG
3	c	29	GLU

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Mol	Chain	Res	Type
3	c	72	LEU
3	c	78	GLU
3	c	99	VAL
3	c	104	GLU
3	c	124	VAL
3	c	125	LEU
3	c	135	ARG
3	c	144	SER
3	c	165	LEU
3	c	240	ILE
3	c	279	LEU
3	c	289	PHE
3	c	315	MET
3	c	346	THR
3	c	418	ASN
3	c	471	SER
4	d	90	LEU
4	d	180	ARG
4	d	182	LEU
4	d	259	ILE
4	d	291	LEU
4	d	293	LEU
4	d	307	GLU
4	d	321	LEU
5	e	4	THR
5	e	16	SER
5	e	54	SER
5	e	65	LEU
6	f	28	VAL
7	h	3	ARG
7	h	7	LEU
7	h	27	THR
7	h	49	TYR
8	i	33	LYS
9	j	7	ARG
10	k	10	LYS
10	k	19	ASP
11	l	2	GLU
11	l	7	ARG
11	l	21	LEU
11	l	30	LEU
12	m	2	GLU

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Mol	Chain	Res	Type
12	m	13	LEU
12	m	16	LEU
13	o	18	LYS
13	o	23	ASP
13	o	49	THR
13	o	60	ARG
13	o	61	GLN
13	o	118	LEU
13	o	130	GLN
13	o	134	THR
13	o	164	LEU
13	o	207	ARG
14	r	9	LEU
14	r	10	LEU
17	v	24	LYS
17	v	52	LEU
17	v	107	LEU
18	x	2	THR
19	y	19	ILE
20	z	1	MET
20	z	6	GLN
20	z	14	ILE
20	z	38	GLN
20	z	39	LEU
20	z	46	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (16) such sidechains are listed below:

Mol	Chain	Res	Type
4	D	61	HIS
13	O	3	GLN
13	O	36	GLN
13	O	82	GLN
13	O	88	ASN
18	X	38	GLN
20	Z	6	GLN
20	Z	31	GLN
1	a	19	ASN
1	a	234	ASN
1	a	266	ASN
12	m	5	GLN
13	o	61	GLN

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Mol	Chain	Res	Type
13	o	200	ASN
16	u	78	ASN
18	x	33	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	1.11	1 (12%)	7,9,11	0.99	0
8	FME	I	1	8	8,9,10	1.01	1 (12%)	7,9,11	0.91	0
8	FME	i	1	8	8,9,10	1.09	1 (12%)	7,9,11	1.96	3 (42%)
12	FME	m	1	12	8,9,10	1.17	1 (12%)	7,9,11	1.47	2 (28%)
15	FME	T	1	15	8,9,10	1.17	1 (12%)	7,9,11	1.25	1 (14%)
15	FME	t	1	15	8,9,10	1.45	1 (12%)	7,9,11	0.60	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	-	1/7/9/11	-
8	FME	I	1	8	-	1/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-
12	FME	m	1	12	-	0/7/9/11	-
15	FME	T	1	15	-	4/7/9/11	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	FME	t	1	15	-	2/7/9/11	-

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	t	1	FME	CA-N	-2.92	1.42	1.46
12	m	1	FME	CA-N	-2.67	1.42	1.46
8	i	1	FME	CA-N	-2.37	1.43	1.46
15	T	1	FME	CB-CA	2.36	1.57	1.53
12	M	1	FME	CA-N	-2.29	1.43	1.46
8	I	1	FME	CA-N	-2.27	1.43	1.46

All (6) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	i	1	FME	CA-N-CN	-3.44	117.53	122.82
8	i	1	FME	C-CA-N	2.52	114.27	109.73
8	i	1	FME	O1-CN-N	-2.25	119.35	125.27
12	m	1	FME	CA-N-CN	-2.22	119.40	122.82
12	m	1	FME	C-CA-N	-2.12	105.91	109.73
15	T	1	FME	O1-CN-N	-2.07	119.83	125.27

There are no chirality outliers.

All (9) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
12	M	1	FME	CB-CA-N-CN
15	T	1	FME	C-CA-CB-CG
15	T	1	FME	O-C-CA-CB
15	t	1	FME	O-C-CA-CB
15	T	1	FME	CB-CG-SD-CE
15	t	1	FME	CB-CG-SD-CE
15	T	1	FME	N-CA-CB-CG
8	I	1	FME	C-CA-CB-CG
8	i	1	FME	C-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 194 ligands modelled in this entry, 6 are monoatomic - leaving 188 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	$\#\|Z\| > 2$
22	CLA	c	503	-	65,73,73	1.53	11 (16%)	76,113,113	1.53	11 (14%)
33	LMG	D	408	-	51,51,55	1.00	4 (7%)	59,59,63	1.27	6 (10%)
34	PHO	a	405	-	51,69,69	1.04	3 (5%)	47,99,99	1.28	6 (12%)
22	CLA	B	713	-	65,73,73	1.52	10 (15%)	76,113,113	1.50	12 (15%)
22	CLA	H	102	36	65,73,73	1.99	11 (16%)	76,113,113	1.62	15 (19%)
22	CLA	a	403	-	65,73,73	1.62	8 (12%)	76,113,113	1.60	13 (17%)
22	CLA	b	707	36	65,73,73	1.78	12 (18%)	76,113,113	1.37	11 (14%)
22	CLA	c	513	-	65,73,73	1.49	9 (13%)	76,113,113	1.45	10 (13%)
30	OEX	a	420[A]	3,36,1	0,15,15	-	-	-		
33	LMG	C	516	-	48,48,55	0.96	3 (6%)	56,56,63	1.36	6 (10%)
31	OEY	a	421[B]	3,36,1	0,16,16	-	-	-		
22	CLA	d	401	-	65,73,73	1.35	8 (12%)	76,113,113	1.41	9 (11%)
33	LMG	B	721	-	26,26,55	0.75	0	26,26,63	1.33	2 (7%)
22	CLA	B	704	-	65,73,73	1.48	6 (9%)	76,113,113	1.84	13 (17%)
28	STE	B	726	-	15,15,19	0.47	0	14,14,19	0.65	0
27	LHG	a	414	-	41,41,48	0.79	1 (2%)	44,47,54	1.23	3 (6%)
29	DGD	c	517	-	63,63,67	1.17	6 (9%)	77,77,81	1.35	10 (12%)
22	CLA	c	506	-	65,73,73	1.44	8 (12%)	76,113,113	1.37	10 (13%)
23	BCR	B	717	-	41,41,41	1.11	3 (7%)	56,56,56	1.29	6 (10%)
22	CLA	b	712	-	65,73,73	1.41	9 (13%)	76,113,113	1.49	10 (13%)
23	BCR	a	407	-	41,41,41	1.10	4 (9%)	56,56,56	1.43	14 (25%)
27	LHG	D	410	-	48,48,48	0.91	3 (6%)	51,54,54	1.21	5 (9%)
23	BCR	d	403	-	41,41,41	1.04	2 (4%)	56,56,56	1.28	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
27	LHG	L	101	-	48,48,48	0.83	2 (4%)	51,54,54	1.24	4 (7%)
32	BCT	A	417	21	2,3,3	1.05	0	2,3,3	3.83	2 (100%)
22	CLA	C	512	3	65,73,73	1.64	10 (15%)	76,113,113	1.34	8 (10%)
28	STE	B	701	-	11,11,19	0.97	0	11,11,19	1.05	1 (9%)
29	DGD	C	517	-	63,63,67	1.09	4 (6%)	77,77,81	1.31	11 (14%)
30	OEX	A	415[A]	3,36,1	0,15,15	-	-	-		
23	BCR	A	405	-	41,41,41	1.13	3 (7%)	56,56,56	1.40	8 (14%)
23	BCR	C	515	-	41,41,41	1.23	3 (7%)	56,56,56	1.36	8 (14%)
23	BCR	b	718	-	41,41,41	1.18	3 (7%)	56,56,56	1.28	6 (10%)
28	STE	A	411	-	15,15,19	0.49	0	14,14,19	0.70	0
28	STE	h	703	-	13,13,19	0.41	0	12,12,19	0.72	0
23	BCR	Y	101	-	41,41,41	0.97	2 (4%)	56,56,56	1.16	3 (5%)
28	STE	b	722	-	19,19,19	0.62	0	19,19,19	0.89	0
28	STE	B	720	-	16,16,19	0.63	0	16,16,19	1.36	2 (12%)
22	CLA	B	710	36	65,73,73	1.62	9 (13%)	76,113,113	1.49	9 (11%)
28	STE	Z	101	-	7,7,19	0.41	0	6,6,19	0.51	0
29	DGD	C	519	-	63,63,67	0.94	4 (6%)	77,77,81	1.43	13 (16%)
22	CLA	b	706	-	65,73,73	1.71	9 (13%)	76,113,113	1.64	10 (13%)
23	BCR	c	516	-	41,41,41	1.20	3 (7%)	56,56,56	1.45	10 (17%)
22	CLA	b	703	-	65,73,73	1.58	10 (15%)	76,113,113	1.62	13 (17%)
22	CLA	A	402	-	65,73,73	1.41	8 (12%)	76,113,113	1.40	8 (10%)
22	CLA	a	404	36	65,73,73	1.63	7 (10%)	76,113,113	1.54	11 (14%)
22	CLA	B	702	-	65,73,73	1.65	7 (10%)	76,113,113	1.57	12 (15%)
22	CLA	c	504	-	65,73,73	1.52	10 (15%)	76,113,113	1.63	8 (10%)
22	CLA	B	705	-	65,73,73	1.45	7 (10%)	76,113,113	1.45	12 (15%)
25	PL9	d	404	-	55,55,55	1.44	7 (12%)	68,69,69	1.78	15 (22%)
34	PHO	D	407	-	51,69,69	1.15	7 (13%)	47,99,99	1.47	8 (17%)
29	DGD	c	518	-	63,63,67	1.26	9 (14%)	77,77,81	1.43	11 (14%)
26	SQD	b	720	-	48,49,54	1.00	2 (4%)	57,60,65	2.16	14 (24%)
25	PL9	A	408	-	55,55,55	1.16	3 (5%)	68,69,69	1.59	17 (25%)
28	STE	E	101	-	11,11,19	0.93	0	11,11,19	0.85	0
22	CLA	C	508	36	65,73,73	1.47	7 (10%)	76,113,113	1.63	11 (14%)
28	STE	E	102	-	6,6,19	0.40	0	5,5,19	0.54	0
28	STE	I	101	-	14,14,19	0.61	0	13,13,19	0.35	0
27	LHG	d	407	-	38,38,48	0.88	3 (7%)	41,44,54	1.08	2 (4%)
28	STE	t	702	-	13,13,19	0.61	0	13,13,19	1.25	2 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
22	CLA	b	705	-	65,73,73	1.60	8 (12%)	76,113,113	1.59	11 (14%)
23	BCR	t	701	-	41,41,41	1.08	3 (7%)	56,56,56	1.39	6 (10%)
28	STE	X	101	-	19,19,19	0.54	0	19,19,19	1.28	2 (10%)
22	CLA	c	508	36	65,73,73	1.47	7 (10%)	76,113,113	1.41	13 (17%)
28	STE	l	102	-	17,17,19	0.46	0	16,16,19	0.69	0
33	LMG	D	412	-	31,31,55	1.18	3 (9%)	33,33,63	1.08	2 (6%)
33	LMG	b	723	-	55,55,55	1.09	5 (9%)	63,63,63	1.46	10 (15%)
22	CLA	B	708	-	65,73,73	1.46	13 (20%)	76,113,113	1.77	14 (18%)
22	CLA	b	702	-	65,73,73	1.48	9 (13%)	76,113,113	1.63	13 (17%)
23	BCR	D	404	-	41,41,41	1.10	2 (4%)	56,56,56	1.23	5 (8%)
27	LHG	d	406	-	48,48,48	0.76	1 (2%)	51,54,54	1.10	4 (7%)
29	DGD	A	413	-	67,67,67	1.21	9 (13%)	81,81,81	1.55	15 (18%)
28	STE	c	521	-	19,19,19	0.68	0	19,19,19	0.99	1 (5%)
31	OEY	A	416[B]	3,36,1	0,16,16	-	-	-		
33	LMG	b	721	-	51,51,55	0.96	4 (7%)	59,59,63	1.44	7 (11%)
28	STE	C	523	-	11,11,19	0.83	0	11,11,19	1.03	1 (9%)
23	BCR	b	717	-	41,41,41	1.15	4 (9%)	56,56,56	1.51	12 (21%)
23	BCR	k	101	-	41,41,41	1.04	3 (7%)	56,56,56	1.09	3 (5%)
22	CLA	b	714	-	65,73,73	1.62	8 (12%)	76,113,113	1.47	10 (13%)
28	STE	j	101	-	11,11,19	0.79	0	11,11,19	1.51	2 (18%)
33	LMG	c	523	-	49,49,55	1.00	2 (4%)	57,57,63	1.30	6 (10%)
22	CLA	B	709	-	65,73,73	1.48	11 (16%)	76,113,113	1.25	9 (11%)
25	PL9	a	411	-	55,55,55	0.87	1 (1%)	68,69,69	1.64	11 (16%)
22	CLA	a	401	36	65,73,73	1.64	7 (10%)	76,113,113	1.67	11 (14%)
27	LHG	a	412	-	48,48,48	0.85	1 (2%)	51,54,54	1.36	5 (9%)
23	BCR	b	719	-	41,41,41	1.07	2 (4%)	56,56,56	1.43	7 (12%)
29	DGD	c	519	-	63,63,67	1.29	9 (14%)	77,77,81	1.40	13 (16%)
23	BCR	B	719	-	41,41,41	1.09	1 (2%)	56,56,56	1.47	8 (14%)
22	CLA	b	709	-	65,73,73	1.66	8 (12%)	76,113,113	1.49	9 (11%)
22	CLA	c	514	-	65,73,73	1.44	7 (10%)	76,113,113	1.40	10 (13%)
33	LMG	d	408	-	44,44,55	1.13	6 (13%)	52,52,63	1.45	8 (15%)
22	CLA	d	402	-	65,73,73	1.57	10 (15%)	76,113,113	1.31	9 (11%)
22	CLA	c	512	3	65,73,73	1.80	10 (15%)	76,113,113	1.60	7 (9%)
28	STE	d	409	-	16,16,19	0.72	0	16,16,19	1.33	2 (12%)
22	CLA	C	506	-	65,73,73	1.40	6 (9%)	76,113,113	1.35	9 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
22	CLA	C	513	-	65,73,73	1.82	11 (16%)	76,113,113	1.52	13 (17%)
22	CLA	C	502	-	65,73,73	1.58	13 (20%)	76,113,113	1.44	10 (13%)
25	PL9	D	405	-	55,55,55	1.37	7 (12%)	68,69,69	1.80	14 (20%)
22	CLA	A	403	36	65,73,73	1.56	7 (10%)	76,113,113	1.39	10 (13%)
22	CLA	b	713	-	65,73,73	1.53	10 (15%)	76,113,113	1.68	13 (17%)
26	SQD	A	409	-	51,52,54	1.01	4 (7%)	60,63,65	2.08	17 (28%)
22	CLA	B	711	-	65,73,73	1.47	9 (13%)	76,113,113	1.45	10 (13%)
22	CLA	c	510	-	65,73,73	1.56	9 (13%)	76,113,113	1.80	11 (14%)
22	CLA	B	714	-	65,73,73	1.53	9 (13%)	76,113,113	1.21	8 (10%)
28	STE	C	522	-	15,15,19	0.45	0	14,14,19	0.81	0
29	DGD	H	103	-	63,63,67	1.34	9 (14%)	77,77,81	1.48	10 (12%)
23	BCR	C	501	-	41,41,41	1.04	2 (4%)	56,56,56	1.16	4 (7%)
22	CLA	b	708	-	65,73,73	1.59	10 (15%)	76,113,113	1.53	13 (17%)
22	CLA	b	704	-	65,73,73	1.54	7 (10%)	76,113,113	1.79	15 (19%)
34	PHO	d	405	-	51,69,69	1.14	5 (9%)	47,99,99	1.32	7 (14%)
26	SQD	D	409	-	35,36,54	0.98	4 (11%)	42,45,65	2.05	12 (28%)
23	BCR	K	101	-	41,41,41	1.08	2 (4%)	56,56,56	1.45	10 (17%)
22	CLA	B	707	36	65,73,73	1.59	13 (20%)	76,113,113	1.54	5 (6%)
22	CLA	b	701	36	65,73,73	1.66	10 (15%)	76,113,113	1.63	10 (13%)
22	CLA	D	403	-	65,73,73	1.42	11 (16%)	76,113,113	1.64	12 (15%)
27	LHG	D	411	-	46,46,48	1.21	5 (10%)	49,52,54	1.24	5 (10%)
22	CLA	D	401	-	65,73,73	1.59	12 (18%)	76,113,113	1.27	8 (10%)
34	PHO	D	406	-	51,69,69	1.07	6 (11%)	47,99,99	1.38	7 (14%)
22	CLA	c	507	-	65,73,73	1.46	12 (18%)	76,113,113	1.51	12 (15%)
28	STE	B	724	-	11,11,19	0.72	0	11,11,19	1.21	1 (9%)
22	CLA	B	715	-	65,73,73	1.93	10 (15%)	76,113,113	1.56	12 (15%)
35	HEC	E	103	5,6	32,50,50	2.19	3 (9%)	24,82,82	2.17	7 (29%)
22	CLA	b	710	36	65,73,73	1.50	11 (16%)	76,113,113	1.37	12 (15%)
33	LMG	C	520	-	48,48,55	1.00	3 (6%)	56,56,63	1.35	8 (14%)
29	DGD	C	518	-	63,63,67	1.35	6 (9%)	77,77,81	1.49	12 (15%)
23	BCR	k	102	-	41,41,41	1.00	2 (4%)	56,56,56	1.19	5 (8%)
28	STE	H	105	-	7,7,19	0.42	0	6,6,19	0.59	0
28	STE	b	726	-	9,9,19	0.53	0	8,8,19	0.43	0
22	CLA	C	507	-	65,73,73	1.51	8 (12%)	76,113,113	1.38	10 (13%)
28	STE	b	727	-	19,19,19	0.50	0	19,19,19	1.21	2 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	STE	B	725	-	17,17,19	0.74	0	17,17,19	0.85	0
28	STE	a	418	-	14,14,19	0.45	0	13,13,19	0.71	0
35	HEC	e	101	5,6	32,50,50	2.28	4 (12%)	24,82,82	2.28	5 (20%)
29	DGD	h	702	-	63,63,67	1.22	7 (11%)	77,77,81	1.58	17 (22%)
22	CLA	A	404	-	54,62,73	1.85	9 (16%)	62,99,113	1.76	14 (22%)
23	BCR	h	701	-	41,41,41	1.06	2 (4%)	56,56,56	1.24	5 (8%)
28	STE	J	101	-	11,11,19	0.59	0	11,11,19	1.52	2 (18%)
28	STE	H	104	-	17,17,19	0.50	0	16,16,19	0.58	0
22	CLA	B	706	-	65,73,73	1.57	9 (13%)	76,113,113	1.60	12 (15%)
22	CLA	B	703	-	65,73,73	1.59	12 (18%)	76,113,113	1.32	9 (11%)
22	CLA	C	503	-	65,73,73	1.60	10 (15%)	76,113,113	1.34	8 (10%)
22	CLA	D	402	36	65,73,73	1.59	9 (13%)	76,113,113	1.25	7 (9%)
28	STE	M	103	-	9,9,19	0.47	0	8,8,19	0.64	0
32	BCT	a	410	21	2,3,3	1.34	0	2,3,3	3.23	2 (100%)
33	LMG	c	520	-	37,37,55	1.22	5 (13%)	45,45,63	1.29	4 (8%)
22	CLA	C	505	36	59,67,73	1.52	8 (13%)	68,105,113	1.32	9 (13%)
26	SQD	B	723	-	53,54,54	0.95	2 (3%)	62,65,65	1.70	11 (17%)
22	CLA	c	511	-	65,73,73	1.37	8 (12%)	76,113,113	1.59	12 (15%)
33	LMG	a	419	-	55,55,55	1.31	7 (12%)	63,63,63	1.33	4 (6%)
28	STE	M	102	-	14,14,19	0.69	0	14,14,19	1.09	0
28	STE	b	724	-	15,15,19	0.77	0	15,15,19	0.97	1 (6%)
27	LHG	B	722	-	48,48,48	1.05	3 (6%)	51,54,54	1.35	5 (9%)
22	CLA	C	510	-	65,73,73	1.57	12 (18%)	76,113,113	1.53	10 (13%)
33	LMG	c	522	-	48,48,55	1.21	4 (8%)	56,56,63	1.24	8 (14%)
22	CLA	c	505	36	60,68,73	1.66	9 (15%)	70,107,113	1.55	7 (10%)
22	CLA	a	406	-	65,73,73	1.64	10 (15%)	76,113,113	1.35	9 (11%)
26	SQD	a	413	-	53,54,54	0.99	7 (13%)	62,65,65	1.87	12 (19%)
26	SQD	f	101	-	40,41,54	1.13	5 (12%)	49,52,65	1.77	13 (26%)
27	LHG	A	410	-	48,48,48	0.79	2 (4%)	51,54,54	1.21	4 (7%)
35	HEC	V	201	17	32,50,50	2.04	3 (9%)	24,82,82	2.23	6 (25%)
22	CLA	c	509	-	64,72,73	1.48	8 (12%)	74,111,113	1.70	13 (17%)
22	CLA	C	511	-	65,73,73	1.56	8 (12%)	76,113,113	1.38	7 (9%)
22	CLA	c	502	-	65,73,73	1.46	9 (13%)	76,113,113	1.53	8 (10%)
23	BCR	B	718	-	41,41,41	1.11	3 (7%)	56,56,56	1.42	7 (12%)
22	CLA	b	711	-	65,73,73	1.48	7 (10%)	76,113,113	1.63	11 (14%)
22	CLA	C	509	-	65,73,73	1.70	8 (12%)	76,113,113	1.57	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
22	CLA	C	504	-	65,73,73	1.94	8 (12%)	76,113,113	1.77	16 (21%)
28	STE	C	521	-	11,11,19	0.86	0	11,11,19	1.39	3 (27%)
22	CLA	B	712	-	65,73,73	1.31	4 (6%)	76,113,113	1.60	15 (19%)
28	STE	A	414	-	4,4,19	0.48	0	3,3,19	0.35	0
23	BCR	c	515	-	41,41,41	1.09	2 (4%)	56,56,56	1.25	7 (12%)
28	STE	m	101	-	11,11,19	0.79	0	11,11,19	1.41	2 (18%)
28	STE	a	417	-	11,11,19	0.87	0	11,11,19	1.02	0
27	LHG	l	101	-	48,48,48	0.72	1 (2%)	51,54,54	1.12	5 (9%)
26	SQD	A	412	-	38,38,54	1.05	3 (7%)	40,40,65	1.12	3 (7%)
28	STE	x	101	-	19,19,19	0.77	0	19,19,19	0.76	1 (5%)
35	HEC	v	201	17	32,50,50	2.22	5 (15%)	24,82,82	1.62	5 (20%)
22	CLA	B	716	-	60,68,73	1.55	10 (16%)	70,107,113	1.71	13 (18%)
26	SQD	a	415	-	35,35,54	1.10	2 (5%)	37,37,65	1.34	4 (10%)
28	STE	T	702	-	14,14,19	0.48	0	13,13,19	0.58	0
23	BCR	T	701	-	41,41,41	1.06	3 (7%)	56,56,56	1.32	7 (12%)
28	STE	b	725	-	19,19,19	0.76	0	19,19,19	0.99	1 (5%)
28	STE	c	501	-	11,11,19	0.76	0	11,11,19	1.10	1 (9%)
22	CLA	b	715	-	65,73,73	1.63	10 (15%)	76,113,113	1.48	11 (14%)
23	BCR	H	101	-	41,41,41	1.04	1 (2%)	56,56,56	1.28	6 (10%)
22	CLA	b	716	-	60,68,73	1.66	11 (18%)	70,107,113	1.60	9 (12%)
28	STE	a	416	-	9,9,19	0.57	0	8,8,19	0.31	0
33	LMG	M	101	-	51,51,55	1.00	3 (5%)	59,59,63	1.41	8 (13%)
22	CLA	C	514	-	65,73,73	1.59	8 (12%)	76,113,113	1.66	12 (15%)

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
22	CLA	c	503	-	1/1/20/20	5/37/115/115	-
33	LMG	D	408	-	-	13/46/66/70	0/1/1/1
34	PHO	a	405	-	-	7/37/103/103	0/5/6/6
22	CLA	B	713	-	1/1/20/20	15/37/115/115	-
22	CLA	H	102	36	1/1/20/20	16/37/115/115	-
22	CLA	a	403	-	-	8/37/115/115	-
22	CLA	b	707	36	1/1/20/20	16/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	c	513	-	1/1/20/20	19/37/115/115	-
33	LMG	C	516	-	-	18/43/63/70	0/1/1/1
22	CLA	d	401	-	-	8/37/115/115	-
33	LMG	B	721	-	-	13/22/22/70	-
22	CLA	B	704	-	1/1/20/20	13/37/115/115	-
28	STE	B	726	-	-	5/13/13/17	-
27	LHG	a	414	-	-	20/46/46/53	-
29	DGD	c	517	-	-	22/51/91/95	0/2/2/2
22	CLA	c	506	-	1/1/20/20	12/37/115/115	-
23	BCR	B	717	-	-	8/29/63/63	0/2/2/2
22	CLA	b	712	-	1/1/20/20	6/37/115/115	-
23	BCR	a	407	-	-	3/29/63/63	0/2/2/2
27	LHG	D	410	-	-	18/53/53/53	-
23	BCR	d	403	-	-	10/29/63/63	0/2/2/2
27	LHG	L	101	-	-	20/53/53/53	-
22	CLA	C	512	3	1/1/20/20	6/37/115/115	-
28	STE	B	701	-	-	4/9/9/17	-
29	DGD	C	517	-	-	21/51/91/95	0/2/2/2
23	BCR	A	405	-	-	5/29/63/63	0/2/2/2
23	BCR	C	515	-	-	6/29/63/63	0/2/2/2
23	BCR	b	718	-	-	3/29/63/63	0/2/2/2
28	STE	A	411	-	-	7/13/13/17	-
28	STE	h	703	-	-	6/11/11/17	-
23	BCR	Y	101	-	-	6/29/63/63	0/2/2/2
28	STE	b	722	-	-	10/17/17/17	-
28	STE	B	720	-	-	9/14/14/17	-
22	CLA	B	710	36	1/1/20/20	6/37/115/115	-
28	STE	Z	101	-	-	3/5/5/17	-
29	DGD	C	519	-	-	15/51/91/95	0/2/2/2
22	CLA	b	706	-	1/1/20/20	12/37/115/115	-
23	BCR	c	516	-	-	3/29/63/63	0/2/2/2
22	CLA	b	703	-	1/1/20/20	8/37/115/115	-
22	CLA	A	402	-	1/1/20/20	7/37/115/115	-
22	CLA	a	404	36	-	4/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	c	504	-	1/1/20/20	9/37/115/115	-
22	CLA	B	702	-	1/1/20/20	8/37/115/115	-
22	CLA	B	705	-	1/1/20/20	8/37/115/115	-
25	PL9	d	404	-	-	18/53/73/73	0/1/1/1
34	PHO	D	407	-	-	2/37/103/103	0/5/6/6
29	DGD	c	518	-	-	27/51/91/95	0/2/2/2
26	SQD	b	720	-	-	21/44/64/69	0/1/1/1
25	PL9	A	408	-	-	22/53/73/73	0/1/1/1
28	STE	E	101	-	-	5/9/9/17	-
22	CLA	C	508	36	1/1/20/20	9/37/115/115	-
28	STE	E	102	-	-	1/4/4/17	-
28	STE	I	101	-	-	4/12/12/17	-
27	LHG	d	407	-	-	11/43/43/53	-
28	STE	t	702	-	-	4/11/11/17	-
22	CLA	b	705	-	1/1/20/20	11/37/115/115	-
23	BCR	t	701	-	-	9/29/63/63	0/2/2/2
28	STE	X	101	-	-	9/17/17/17	-
22	CLA	c	508	36	1/1/20/20	1/37/115/115	-
28	STE	l	102	-	-	5/15/15/17	-
33	LMG	D	412	-	-	14/33/33/70	-
33	LMG	b	723	-	-	21/50/70/70	0/1/1/1
22	CLA	B	708	-	1/1/20/20	3/37/115/115	-
22	CLA	b	702	-	-	8/37/115/115	-
23	BCR	D	404	-	-	10/29/63/63	0/2/2/2
27	LHG	d	406	-	-	14/53/53/53	-
29	DGD	A	413	-	-	27/55/95/95	0/2/2/2
28	STE	c	521	-	-	7/17/17/17	-
33	LMG	b	721	-	-	14/46/66/70	0/1/1/1
28	STE	C	523	-	-	6/9/9/17	-
23	BCR	b	717	-	-	8/29/63/63	0/2/2/2
23	BCR	k	101	-	-	14/29/63/63	0/2/2/2
22	CLA	b	714	-	1/1/20/20	15/37/115/115	-
28	STE	j	101	-	-	2/9/9/17	-
33	LMG	c	523	-	-	20/44/64/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	B	709	-	-	4/37/115/115	-
25	PL9	a	411	-	-	20/53/73/73	0/1/1/1
22	CLA	a	401	36	1/1/20/20	6/37/115/115	-
27	LHG	a	412	-	-	25/53/53/53	-
23	BCR	b	719	-	-	5/29/63/63	0/2/2/2
29	DGD	c	519	-	-	18/51/91/95	0/2/2/2
23	BCR	B	719	-	-	1/29/63/63	0/2/2/2
22	CLA	b	709	-	1/1/20/20	12/37/115/115	-
22	CLA	c	514	-	1/1/20/20	9/37/115/115	-
33	LMG	d	408	-	-	12/39/59/70	0/1/1/1
22	CLA	d	402	-	-	7/37/115/115	-
22	CLA	c	512	3	1/1/20/20	12/37/115/115	-
28	STE	d	409	-	-	6/14/14/17	-
22	CLA	C	506	-	1/1/20/20	18/37/115/115	-
22	CLA	C	513	-	1/1/20/20	15/37/115/115	-
22	CLA	C	502	-	1/1/20/20	4/37/115/115	-
25	PL9	D	405	-	-	14/53/73/73	0/1/1/1
22	CLA	A	403	36	-	10/37/115/115	-
22	CLA	b	713	-	1/1/20/20	5/37/115/115	-
26	SQD	A	409	-	-	22/47/67/69	0/1/1/1
22	CLA	B	711	-	-	8/37/115/115	-
22	CLA	c	510	-	1/1/20/20	11/37/115/115	-
22	CLA	B	714	-	1/1/20/20	12/37/115/115	-
28	STE	C	522	-	-	3/13/13/17	-
29	DGD	H	103	-	-	18/51/91/95	0/2/2/2
23	BCR	C	501	-	-	12/29/63/63	0/2/2/2
22	CLA	b	708	-	1/1/20/20	9/37/115/115	-
22	CLA	b	704	-	1/1/20/20	10/37/115/115	-
34	PHO	d	405	-	-	6/37/103/103	0/5/6/6
26	SQD	D	409	-	-	6/28/48/69	0/1/1/1
23	BCR	K	101	-	-	8/29/63/63	0/2/2/2
22	CLA	B	707	36	1/1/20/20	7/37/115/115	-
22	CLA	b	701	36	1/1/20/20	9/37/115/115	-
22	CLA	D	403	-	-	8/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	LHG	D	411	-	-	21/51/51/53	-
22	CLA	D	401	-	1/1/20/20	5/37/115/115	-
34	PHO	D	406	-	-	6/37/103/103	0/5/6/6
22	CLA	c	507	-	1/1/20/20	15/37/115/115	-
28	STE	B	724	-	-	4/9/9/17	-
22	CLA	B	715	-	1/1/20/20	5/37/115/115	-
35	HEC	E	103	5,6	-	2/10/54/54	-
22	CLA	b	710	36	1/1/20/20	6/37/115/115	-
33	LMG	C	520	-	-	20/43/63/70	0/1/1/1
29	DGD	C	518	-	-	15/51/91/95	0/2/2/2
23	BCR	k	102	-	-	4/29/63/63	0/2/2/2
28	STE	H	105	-	-	3/5/5/17	-
28	STE	b	726	-	-	4/7/7/17	-
22	CLA	C	507	-	1/1/20/20	12/37/115/115	-
28	STE	b	727	-	-	9/17/17/17	-
28	STE	B	725	-	-	6/15/15/17	-
28	STE	a	418	-	-	4/12/12/17	-
35	HEC	e	101	5,6	-	2/10/54/54	-
29	DGD	h	702	-	-	14/51/91/95	0/2/2/2
22	CLA	A	404	-	1/1/17/20	4/24/102/115	-
23	BCR	h	701	-	-	9/29/63/63	0/2/2/2
28	STE	J	101	-	-	4/9/9/17	-
28	STE	H	104	-	-	6/15/15/17	-
22	CLA	B	706	-	1/1/20/20	6/37/115/115	-
22	CLA	B	703	-	1/1/20/20	12/37/115/115	-
22	CLA	D	402	36	1/1/20/20	9/37/115/115	-
22	CLA	C	503	-	-	10/37/115/115	-
28	STE	M	103	-	-	4/7/7/17	-
33	LMG	c	520	-	-	12/31/51/70	0/1/1/1
22	CLA	C	505	36	1/1/18/20	5/30/108/115	-
26	SQD	B	723	-	-	28/49/69/69	0/1/1/1
22	CLA	c	511	-	1/1/20/20	10/37/115/115	-
33	LMG	a	419	-	-	23/50/70/70	0/1/1/1
28	STE	M	102	-	-	5/12/12/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	STE	b	724	-	-	12/13/13/17	-
27	LHG	B	722	-	-	17/53/53/53	-
22	CLA	C	510	-	1/1/20/20	13/37/115/115	-
33	LMG	c	522	-	-	25/43/63/70	0/1/1/1
22	CLA	c	505	36	1/1/19/20	8/31/109/115	-
22	CLA	a	406	-	1/1/20/20	10/37/115/115	-
26	SQD	a	413	-	-	23/49/69/69	0/1/1/1
26	SQD	f	101	-	-	14/36/56/69	0/1/1/1
27	LHG	A	410	-	-	28/53/53/53	-
35	HEC	V	201	17	-	2/10/54/54	-
22	CLA	c	509	-	-	7/36/114/115	-
22	CLA	C	511	-	1/1/20/20	9/37/115/115	-
22	CLA	c	502	-	1/1/20/20	4/37/115/115	-
23	BCR	B	718	-	-	7/29/63/63	0/2/2/2
22	CLA	b	711	-	1/1/20/20	9/37/115/115	-
22	CLA	C	509	-	-	7/37/115/115	-
22	CLA	C	504	-	1/1/20/20	8/37/115/115	-
28	STE	C	521	-	-	2/9/9/17	-
22	CLA	B	712	-	1/1/20/20	8/37/115/115	-
28	STE	A	414	-	-	1/2/2/17	-
23	BCR	c	515	-	-	11/29/63/63	0/2/2/2
28	STE	m	101	-	-	2/9/9/17	-
28	STE	a	417	-	-	4/9/9/17	-
27	LHG	l	101	-	-	23/53/53/53	-
26	SQD	A	412	-	-	14/39/39/69	-
28	STE	x	101	-	-	11/17/17/17	-
35	HEC	v	201	17	-	2/10/54/54	-
22	CLA	B	716	-	1/1/19/20	12/31/109/115	-
26	SQD	a	415	-	-	19/37/37/69	-
28	STE	T	702	-	-	8/12/12/17	-
23	BCR	T	701	-	-	4/29/63/63	0/2/2/2
28	STE	b	725	-	-	8/17/17/17	-
28	STE	c	501	-	-	4/9/9/17	-
22	CLA	b	715	-	1/1/20/20	10/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	BCR	H	101	-	-	5/29/63/63	0/2/2/2
22	CLA	b	716	-	1/1/19/20	12/31/109/115	-
28	STE	a	416	-	-	4/7/7/17	-
33	LMG	M	101	-	-	22/46/66/70	0/1/1/1
22	CLA	C	514	-	1/1/20/20	16/37/115/115	-

All (911) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	715	CLA	C4B-NB	9.40	1.43	1.35
22	b	714	CLA	C4B-NB	8.75	1.43	1.35
22	c	512	CLA	C4B-NB	8.49	1.42	1.35
22	B	702	CLA	C4B-NB	8.18	1.42	1.35
22	b	709	CLA	C4B-NB	8.06	1.42	1.35
22	C	504	CLA	MG-NA	8.03	2.25	2.06
22	H	102	CLA	C4B-NB	7.97	1.42	1.35
22	b	704	CLA	C4B-NB	7.93	1.42	1.35
22	B	710	CLA	C4B-NB	7.84	1.42	1.35
22	C	504	CLA	C4B-NB	7.74	1.42	1.35
22	b	701	CLA	C4B-NB	7.74	1.42	1.35
22	c	505	CLA	C4B-NB	7.56	1.42	1.35
35	e	101	HEC	C2B-C3B	-7.55	1.32	1.40
22	C	507	CLA	C4B-NB	7.54	1.41	1.35
22	c	514	CLA	C4B-NB	7.46	1.41	1.35
22	b	708	CLA	C4B-NB	7.40	1.41	1.35
22	A	404	CLA	C4B-NB	7.32	1.41	1.35
22	B	714	CLA	C4B-NB	7.24	1.41	1.35
22	a	404	CLA	C4B-NB	7.22	1.41	1.35
22	C	512	CLA	C4B-NB	7.18	1.41	1.35
35	v	201	HEC	C2B-C3B	-7.12	1.33	1.40
22	C	502	CLA	C4B-NB	7.09	1.41	1.35
22	d	402	CLA	C4B-NB	7.07	1.41	1.35
35	V	201	HEC	C2B-C3B	-7.03	1.33	1.40
22	c	502	CLA	C4B-NB	6.98	1.41	1.35
22	b	715	CLA	C4B-NB	6.97	1.41	1.35
22	C	511	CLA	C4B-NB	6.94	1.41	1.35
22	C	514	CLA	C4B-NB	6.94	1.41	1.35
22	C	513	CLA	MG-ND	-6.94	1.92	2.05
22	H	102	CLA	MG-NA	6.91	2.22	2.06
22	B	706	CLA	C4B-NB	6.88	1.41	1.35
22	C	513	CLA	C4B-NB	6.84	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	a	401	CLA	C4B-NB	6.81	1.41	1.35
22	C	509	CLA	C4B-NB	6.81	1.41	1.35
22	b	716	CLA	C4B-NB	6.79	1.41	1.35
22	c	508	CLA	C4B-NB	6.78	1.41	1.35
22	a	403	CLA	C4B-NB	6.76	1.41	1.35
22	b	707	CLA	MG-ND	-6.72	1.92	2.05
22	C	509	CLA	MG-NA	6.69	2.22	2.06
22	c	503	CLA	C4B-NB	6.68	1.41	1.35
22	A	403	CLA	C4B-NB	6.63	1.41	1.35
22	c	513	CLA	C4B-NB	6.63	1.41	1.35
22	a	406	CLA	C4B-NB	6.59	1.41	1.35
22	D	402	CLA	C4B-NB	6.56	1.41	1.35
35	E	103	HEC	C3C-C2C	-6.53	1.33	1.40
22	c	510	CLA	C4B-NB	6.52	1.41	1.35
22	C	510	CLA	C4B-NB	6.51	1.41	1.35
22	c	509	CLA	C4B-NB	6.49	1.41	1.35
22	A	404	CLA	MG-ND	-6.48	1.92	2.05
22	C	505	CLA	C4B-NB	6.47	1.41	1.35
22	c	504	CLA	C4B-NB	6.43	1.40	1.35
35	E	103	HEC	C2B-C3B	-6.41	1.34	1.40
22	c	506	CLA	C4B-NB	6.28	1.40	1.35
22	b	705	CLA	MG-ND	6.21	2.18	2.05
22	B	715	CLA	MG-NA	6.12	2.20	2.06
22	b	705	CLA	C4B-NB	6.12	1.40	1.35
22	b	710	CLA	C4B-NB	6.11	1.40	1.35
22	a	401	CLA	MG-NA	6.10	2.20	2.06
35	e	101	HEC	C3C-C2C	-6.08	1.34	1.40
22	H	102	CLA	MG-ND	-6.08	1.93	2.05
22	b	706	CLA	MG-NA	6.06	2.20	2.06
22	a	406	CLA	MG-ND	-6.02	1.93	2.05
22	b	713	CLA	MG-NA	5.95	2.20	2.06
22	C	503	CLA	C4B-NB	5.92	1.40	1.35
22	B	704	CLA	MG-NC	5.90	2.20	2.06
22	b	702	CLA	C4B-NB	5.86	1.40	1.35
22	b	707	CLA	C4B-NB	5.82	1.40	1.35
22	b	706	CLA	C4B-NB	5.77	1.40	1.35
22	b	703	CLA	MG-NA	5.76	2.20	2.06
22	b	711	CLA	C4B-NB	5.76	1.40	1.35
22	C	503	CLA	MG-NA	5.72	2.19	2.06
22	C	508	CLA	C4B-NB	5.71	1.40	1.35
22	b	711	CLA	MG-NA	5.71	2.19	2.06
22	b	712	CLA	MG-ND	-5.67	1.94	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	703	CLA	C4B-NB	5.66	1.40	1.35
22	B	705	CLA	C4B-NB	5.60	1.40	1.35
22	C	506	CLA	C4B-NB	5.57	1.40	1.35
22	b	707	CLA	MG-NA	5.55	2.19	2.06
35	v	201	HEC	C3C-C2C	-5.54	1.35	1.40
22	B	716	CLA	MG-NA	5.53	2.19	2.06
22	D	401	CLA	C4B-NB	5.52	1.40	1.35
22	D	401	CLA	MG-NA	5.44	2.19	2.06
22	B	709	CLA	C4B-NB	5.41	1.40	1.35
22	c	507	CLA	C4B-NB	5.38	1.40	1.35
35	V	201	HEC	C3C-C2C	-5.36	1.35	1.40
22	b	713	CLA	C4B-NB	5.29	1.39	1.35
22	B	713	CLA	C4B-NB	5.27	1.39	1.35
22	c	511	CLA	C4B-NB	5.27	1.39	1.35
22	B	703	CLA	C4B-NB	5.23	1.39	1.35
22	C	513	CLA	MG-NA	5.18	2.18	2.06
22	a	404	CLA	C1D-ND	5.17	1.44	1.37
22	B	716	CLA	C4B-NB	5.16	1.39	1.35
22	B	711	CLA	C4B-NB	5.13	1.39	1.35
22	b	706	CLA	C1D-ND	5.07	1.44	1.37
33	a	419	LMG	C4-C5	5.07	1.63	1.53
22	D	403	CLA	C4B-NB	5.07	1.39	1.35
22	a	403	CLA	MG-NC	5.06	2.18	2.06
22	B	703	CLA	MG-ND	5.02	2.15	2.05
22	C	512	CLA	MG-NA	5.01	2.18	2.06
35	e	101	HEC	C3D-C2D	4.98	1.52	1.37
22	B	704	CLA	C4B-NB	4.94	1.39	1.35
22	B	713	CLA	MG-ND	-4.89	1.96	2.05
22	C	508	CLA	MG-NA	4.88	2.17	2.06
35	E	103	HEC	C3D-C2D	4.82	1.52	1.37
22	B	710	CLA	C3B-C2B	-4.75	1.33	1.40
25	A	408	PL9	C7-C3	-4.75	1.46	1.51
35	v	201	HEC	C3D-C2D	4.73	1.51	1.37
22	B	708	CLA	C4B-NB	4.70	1.39	1.35
22	c	510	CLA	MG-ND	4.68	2.15	2.05
23	C	515	BCR	C1-C6	-4.68	1.47	1.53
22	c	512	CLA	MG-NA	4.66	2.17	2.06
22	A	402	CLA	C4B-NB	4.66	1.39	1.35
22	c	505	CLA	MG-NC	4.62	2.17	2.06
22	b	709	CLA	MG-ND	-4.61	1.96	2.05
22	B	712	CLA	C4B-NB	4.57	1.39	1.35
22	b	715	CLA	MG-NA	4.57	2.17	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	d	404	PL9	C6-C1	-4.56	1.40	1.48
22	B	707	CLA	MG-NA	4.55	2.17	2.06
22	A	402	CLA	MG-NA	4.53	2.17	2.06
22	d	402	CLA	MG-ND	-4.51	1.96	2.05
22	a	404	CLA	MG-NC	4.48	2.16	2.06
22	B	707	CLA	C4B-NB	4.42	1.39	1.35
22	b	701	CLA	C1D-ND	4.40	1.43	1.37
22	A	403	CLA	C1D-ND	4.39	1.43	1.37
29	c	518	DGD	C4D-C3D	4.39	1.63	1.52
29	C	518	DGD	C4D-C3D	4.38	1.63	1.52
25	d	404	PL9	C3-C4	-4.36	1.42	1.49
22	b	702	CLA	MG-NC	-4.35	1.95	2.06
33	c	523	LMG	C4-C5	4.35	1.62	1.53
22	b	705	CLA	C4D-ND	-4.33	1.31	1.37
22	D	402	CLA	MG-NA	4.30	2.16	2.06
22	C	514	CLA	C1D-ND	4.29	1.43	1.37
22	C	514	CLA	MG-NA	4.27	2.16	2.06
22	c	509	CLA	C4D-ND	-4.26	1.31	1.37
25	d	404	PL9	C46-C44	-4.26	1.42	1.51
22	B	705	CLA	C4D-ND	-4.26	1.31	1.37
22	c	508	CLA	C4D-ND	-4.24	1.31	1.37
22	b	716	CLA	MG-ND	4.23	2.14	2.05
22	C	508	CLA	MG-NC	-4.23	1.96	2.06
22	c	506	CLA	C4D-ND	-4.22	1.31	1.37
22	C	504	CLA	MG-ND	4.19	2.14	2.05
27	B	722	LHG	O7-C5	-4.19	1.36	1.46
22	a	403	CLA	C1D-ND	4.17	1.42	1.37
22	B	707	CLA	C1D-ND	4.13	1.42	1.37
35	V	201	HEC	C3D-C2D	4.07	1.49	1.37
22	B	706	CLA	C3B-C2B	-4.07	1.34	1.40
22	B	709	CLA	C1D-ND	4.07	1.42	1.37
22	c	512	CLA	MG-NC	4.03	2.15	2.06
22	C	511	CLA	MG-NC	4.03	2.15	2.06
22	B	708	CLA	MG-NA	4.02	2.15	2.06
22	B	713	CLA	C4D-ND	-4.01	1.32	1.37
22	b	702	CLA	C4D-ND	-4.01	1.32	1.37
22	b	709	CLA	C1D-ND	4.00	1.42	1.37
22	B	702	CLA	C4D-ND	-3.99	1.32	1.37
22	b	712	CLA	C4B-NB	3.98	1.38	1.35
22	c	507	CLA	MG-ND	-3.96	1.97	2.05
23	B	718	BCR	C30-C25	-3.95	1.48	1.53
29	H	103	DGD	O5D-C1E	3.95	1.46	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	d	401	CLA	C4B-NB	3.95	1.38	1.35
34	d	405	PHO	CAC-C3C	-3.94	1.45	1.52
22	B	712	CLA	C4D-ND	-3.92	1.32	1.37
25	D	405	PL9	C52-C5	-3.91	1.42	1.50
23	c	515	BCR	C1-C6	-3.90	1.48	1.53
22	c	512	CLA	CHC-C1C	3.89	1.44	1.35
23	A	405	BCR	C1-C6	-3.88	1.48	1.53
29	h	702	DGD	O2D-C2D	-3.87	1.33	1.43
25	D	405	PL9	C6-C1	-3.87	1.41	1.48
22	B	714	CLA	C4D-ND	-3.86	1.32	1.37
22	D	403	CLA	MG-NA	3.86	2.15	2.06
22	B	709	CLA	C4D-ND	-3.85	1.32	1.37
22	b	710	CLA	C3B-C2B	-3.84	1.35	1.40
29	c	517	DGD	O2G-C2G	-3.84	1.37	1.46
23	c	516	BCR	C30-C25	-3.83	1.48	1.53
22	c	504	CLA	C4D-ND	-3.83	1.32	1.37
22	C	512	CLA	MG-ND	-3.82	1.98	2.05
22	A	404	CLA	C1D-ND	3.81	1.42	1.37
22	C	504	CLA	C1D-ND	3.81	1.42	1.37
22	B	711	CLA	CHC-C1C	3.81	1.44	1.35
22	C	503	CLA	C4D-ND	-3.80	1.32	1.37
22	b	701	CLA	MG-NC	3.78	2.15	2.06
22	b	710	CLA	C4D-ND	-3.77	1.32	1.37
22	b	716	CLA	C1D-ND	3.77	1.42	1.37
22	b	706	CLA	MG-NC	3.77	2.15	2.06
22	B	712	CLA	C1D-ND	3.77	1.42	1.37
22	B	711	CLA	C1D-ND	3.75	1.42	1.37
22	C	510	CLA	MG-ND	3.74	2.13	2.05
22	d	401	CLA	C1D-ND	3.74	1.42	1.37
22	B	702	CLA	C1D-ND	3.73	1.42	1.37
22	B	707	CLA	C1B-NB	3.73	1.38	1.35
22	d	401	CLA	C4D-ND	-3.73	1.32	1.37
22	B	703	CLA	C4D-ND	-3.72	1.32	1.37
22	c	503	CLA	C4D-ND	-3.72	1.32	1.37
22	D	403	CLA	C1D-ND	3.72	1.42	1.37
22	b	715	CLA	CMB-C2B	-3.71	1.43	1.51
23	b	718	BCR	C30-C25	-3.71	1.48	1.53
22	H	102	CLA	C3B-C2B	-3.70	1.35	1.40
33	a	419	LMG	C4-C3	3.70	1.61	1.52
22	b	708	CLA	MG-NC	3.69	2.15	2.06
23	K	101	BCR	C30-C25	-3.67	1.48	1.53
26	b	720	SQD	O48-C23	3.67	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	504	CLA	C4D-ND	-3.66	1.32	1.37
22	A	403	CLA	C4D-ND	-3.66	1.32	1.37
22	C	506	CLA	CHC-C1C	3.66	1.44	1.35
22	C	511	CLA	C4D-ND	-3.65	1.32	1.37
22	B	714	CLA	C1D-ND	3.64	1.42	1.37
29	c	518	DGD	O2E-C2E	-3.64	1.34	1.43
29	H	103	DGD	O1G-C1G	-3.64	1.36	1.45
22	b	708	CLA	CHC-C1C	3.64	1.44	1.35
22	B	706	CLA	MG-NA	3.63	2.14	2.06
22	B	703	CLA	MG-NC	3.63	2.14	2.06
22	B	715	CLA	CMB-C2B	-3.60	1.44	1.51
33	b	723	LMG	C1-C2	3.60	1.62	1.52
22	a	401	CLA	C4D-ND	-3.59	1.32	1.37
22	d	402	CLA	C1D-ND	3.58	1.42	1.37
22	b	710	CLA	C1D-ND	3.58	1.42	1.37
22	D	402	CLA	C1D-ND	3.58	1.42	1.37
22	c	512	CLA	C1D-ND	3.56	1.42	1.37
26	B	723	SQD	O47-C7	3.56	1.44	1.34
22	c	508	CLA	C1D-ND	3.56	1.42	1.37
29	A	413	DGD	O5D-C6D	-3.56	1.37	1.43
22	B	703	CLA	C3B-C2B	-3.55	1.35	1.40
22	H	102	CLA	C1D-ND	3.55	1.42	1.37
33	c	522	LMG	O1-C1	3.55	1.46	1.40
22	D	401	CLA	MG-NC	-3.55	1.97	2.06
26	a	415	SQD	O47-C7	3.53	1.44	1.34
22	B	715	CLA	CHC-C1C	3.53	1.44	1.35
22	C	505	CLA	C1D-ND	3.52	1.42	1.37
29	c	519	DGD	C6D-C5D	3.51	1.62	1.51
22	c	510	CLA	MG-NA	-3.51	1.97	2.06
26	f	101	SQD	O48-C23	3.50	1.43	1.33
22	B	706	CLA	C4D-ND	-3.50	1.32	1.37
22	B	710	CLA	CHC-C1C	3.50	1.43	1.35
22	c	510	CLA	C4D-ND	-3.50	1.32	1.37
26	A	412	SQD	O47-C45	-3.49	1.41	1.47
22	C	511	CLA	CHC-C1C	3.49	1.43	1.35
33	D	412	LMG	C7-C8	3.48	1.59	1.51
23	B	719	BCR	C1-C6	-3.47	1.49	1.53
29	c	519	DGD	C4E-C5E	-3.47	1.45	1.53
22	C	509	CLA	C4D-ND	-3.47	1.32	1.37
22	B	715	CLA	C1D-ND	3.45	1.42	1.37
22	b	713	CLA	CMB-C2B	-3.45	1.44	1.51
23	H	101	BCR	C30-C25	-3.45	1.49	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	708	CLA	C1D-ND	3.45	1.42	1.37
29	c	519	DGD	O5D-C1E	3.44	1.46	1.40
29	C	518	DGD	O3G-C3G	-3.44	1.37	1.43
22	B	710	CLA	CMB-C2B	-3.44	1.44	1.51
23	c	516	BCR	C1-C6	-3.43	1.49	1.53
22	c	509	CLA	CHC-C1C	3.43	1.43	1.35
23	b	717	BCR	C30-C25	-3.40	1.49	1.53
27	D	411	LHG	P-O6	3.40	1.73	1.59
22	C	502	CLA	C4D-ND	-3.40	1.33	1.37
22	b	716	CLA	MG-NC	3.39	2.14	2.06
23	b	718	BCR	C1-C6	-3.38	1.49	1.53
22	H	102	CLA	CHC-C1C	3.38	1.43	1.35
22	c	502	CLA	C4D-ND	-3.38	1.33	1.37
22	c	505	CLA	C4D-ND	-3.37	1.33	1.37
22	B	707	CLA	C4D-ND	-3.37	1.33	1.37
22	C	511	CLA	C1D-ND	3.36	1.41	1.37
22	b	706	CLA	CHC-C1C	3.36	1.43	1.35
22	b	715	CLA	MG-ND	-3.36	1.99	2.05
22	C	513	CLA	CHC-C1C	3.36	1.43	1.35
23	b	717	BCR	C1-C6	-3.35	1.49	1.53
22	B	715	CLA	MG-NC	3.35	2.14	2.06
22	D	401	CLA	CMD-C2D	-3.34	1.43	1.50
22	B	708	CLA	C1D-ND	3.34	1.41	1.37
22	a	403	CLA	CHC-C1C	3.34	1.43	1.35
22	c	505	CLA	CHC-C1C	3.34	1.43	1.35
22	C	510	CLA	C1D-ND	3.33	1.41	1.37
22	B	712	CLA	CHC-C1C	3.33	1.43	1.35
22	b	713	CLA	C1D-ND	3.33	1.41	1.37
22	c	514	CLA	C4D-ND	-3.33	1.33	1.37
22	C	503	CLA	CHC-C1C	3.33	1.43	1.35
22	b	707	CLA	MG-NC	-3.32	1.98	2.06
22	b	704	CLA	C4D-ND	-3.32	1.33	1.37
22	C	506	CLA	C4D-ND	-3.32	1.33	1.37
22	c	512	CLA	C4D-ND	-3.32	1.33	1.37
22	b	716	CLA	C4D-ND	-3.31	1.33	1.37
22	b	704	CLA	C1D-ND	3.31	1.41	1.37
22	c	511	CLA	CMB-C2B	-3.30	1.44	1.51
22	C	505	CLA	C4D-ND	-3.30	1.33	1.37
22	c	511	CLA	C4D-ND	-3.30	1.33	1.37
22	B	704	CLA	MG-NA	3.30	2.14	2.06
26	b	720	SQD	O47-C7	3.30	1.43	1.34
22	C	505	CLA	CHC-C1C	3.29	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	506	CLA	CHC-C1C	3.28	1.43	1.35
22	b	704	CLA	CHC-C1C	3.28	1.43	1.35
22	C	509	CLA	CHC-C1C	3.28	1.43	1.35
23	b	719	BCR	C30-C25	-3.27	1.49	1.53
26	A	412	SQD	O48-C23	3.27	1.42	1.33
33	D	412	LMG	C9-C8	3.27	1.60	1.50
22	b	714	CLA	CMC-C2C	-3.27	1.43	1.50
23	Y	101	BCR	C30-C25	-3.27	1.49	1.53
22	b	708	CLA	CMB-C2B	-3.27	1.44	1.51
29	A	413	DGD	C3E-C2E	3.26	1.60	1.52
22	b	709	CLA	CMB-C2B	-3.26	1.44	1.51
23	D	404	BCR	C1-C6	-3.25	1.49	1.53
29	C	518	DGD	O5D-C1E	3.25	1.45	1.40
22	C	507	CLA	C1D-ND	3.24	1.41	1.37
22	c	510	CLA	C1D-ND	3.24	1.41	1.37
22	C	504	CLA	CHC-C1C	3.24	1.43	1.35
22	c	502	CLA	C1D-ND	3.23	1.41	1.37
22	b	703	CLA	C1D-ND	3.23	1.41	1.37
22	a	406	CLA	CMC-C2C	-3.22	1.44	1.50
29	C	518	DGD	C1E-C2E	3.22	1.61	1.52
22	b	715	CLA	C1D-ND	3.22	1.41	1.37
22	b	706	CLA	C4D-ND	-3.22	1.33	1.37
29	A	413	DGD	C6E-C5E	3.21	1.62	1.51
22	A	404	CLA	C4D-ND	-3.21	1.33	1.37
27	D	411	LHG	O3-C3	-3.21	1.32	1.44
22	c	513	CLA	CHC-C1C	3.20	1.43	1.35
27	D	410	LHG	P-O3	3.20	1.72	1.59
23	h	701	BCR	C1-C6	-3.20	1.49	1.53
33	c	520	LMG	C1-C2	3.19	1.61	1.52
22	C	509	CLA	C1B-NB	3.18	1.38	1.35
22	C	502	CLA	MG-ND	-3.18	1.99	2.05
34	D	407	PHO	CAC-C3C	-3.17	1.46	1.52
22	b	703	CLA	C4D-ND	-3.17	1.33	1.37
22	c	513	CLA	C4D-ND	-3.16	1.33	1.37
22	B	713	CLA	MG-NA	3.16	2.13	2.06
29	C	518	DGD	O5D-C6D	-3.16	1.38	1.43
22	c	506	CLA	MG-ND	3.16	2.12	2.05
22	C	507	CLA	CHC-C1C	3.15	1.43	1.35
22	D	401	CLA	C1D-ND	3.15	1.41	1.37
22	H	102	CLA	CMC-C2C	-3.14	1.44	1.50
23	t	701	BCR	C30-C25	-3.14	1.49	1.53
22	d	401	CLA	CMB-C2B	-3.13	1.45	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	706	CLA	CHC-C1C	3.13	1.43	1.35
22	H	102	CLA	CMB-C2B	-3.13	1.45	1.51
23	B	717	BCR	C1-C6	-3.12	1.49	1.53
25	D	405	PL9	C21-C19	-3.12	1.44	1.51
22	B	702	CLA	CHC-C1C	3.12	1.43	1.35
22	b	707	CLA	C1D-ND	3.11	1.41	1.37
29	C	517	DGD	O2E-C2E	-3.11	1.35	1.43
22	b	709	CLA	C4D-ND	-3.11	1.33	1.37
22	b	701	CLA	CHC-C1C	3.11	1.42	1.35
33	c	522	LMG	C3-C2	3.10	1.60	1.52
22	A	402	CLA	CHC-C1C	3.10	1.42	1.35
29	h	702	DGD	O2G-C2G	-3.10	1.38	1.46
26	D	409	SQD	O48-C23	3.10	1.42	1.33
22	c	511	CLA	C1D-ND	3.09	1.41	1.37
27	d	407	LHG	P-O6	3.09	1.71	1.59
29	A	413	DGD	C1E-C2E	3.08	1.61	1.52
22	a	406	CLA	C1C-NC	-3.08	1.33	1.37
23	k	101	BCR	C1-C6	-3.07	1.49	1.53
22	C	506	CLA	MG-NA	3.07	2.13	2.06
22	B	705	CLA	CHC-C1C	3.07	1.42	1.35
22	C	509	CLA	C1D-ND	3.07	1.41	1.37
26	a	415	SQD	O48-C23	3.07	1.42	1.33
29	h	702	DGD	C1E-C2E	3.06	1.61	1.52
22	C	514	CLA	C4D-ND	-3.06	1.33	1.37
34	D	406	PHO	CAC-C3C	-3.05	1.46	1.52
22	B	706	CLA	MG-ND	3.05	2.11	2.05
22	C	514	CLA	MG-ND	-3.05	1.99	2.05
22	C	513	CLA	C1D-ND	3.04	1.41	1.37
22	b	714	CLA	CHC-C1C	3.04	1.42	1.35
22	b	711	CLA	CHC-C1C	3.04	1.42	1.35
33	a	419	LMG	O8-C9	-3.04	1.38	1.45
27	a	412	LHG	O7-C5	-3.04	1.39	1.46
22	C	512	CLA	CMB-C2B	-3.03	1.45	1.51
22	B	711	CLA	CMB-C2B	-3.03	1.45	1.51
22	C	514	CLA	CHC-C1C	3.03	1.42	1.35
22	b	702	CLA	CHC-C1C	3.02	1.42	1.35
22	B	708	CLA	MG-NC	3.02	2.13	2.06
22	c	503	CLA	CHC-C1C	3.02	1.42	1.35
33	c	520	LMG	C3-C2	3.02	1.60	1.52
22	B	708	CLA	CMD-C2D	-3.02	1.44	1.50
27	D	411	LHG	O8-C6	-3.01	1.38	1.45
22	b	714	CLA	C4D-ND	-3.01	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	f	101	SQD	O47-C7	3.00	1.42	1.34
22	c	504	CLA	C1D-ND	3.00	1.41	1.37
22	c	507	CLA	CHC-C1C	2.99	1.42	1.35
22	D	402	CLA	CHC-C1C	2.99	1.42	1.35
22	a	404	CLA	CHC-C1C	2.99	1.42	1.35
23	B	717	BCR	C30-C25	-2.99	1.49	1.53
22	b	707	CLA	C3B-C2B	-2.99	1.36	1.40
22	B	714	CLA	C3B-C2B	-2.99	1.36	1.40
22	B	703	CLA	CHC-C1C	2.99	1.42	1.35
22	d	401	CLA	CHC-C1C	2.98	1.42	1.35
22	c	514	CLA	CHC-C1C	2.98	1.42	1.35
22	B	711	CLA	CMD-C2D	-2.98	1.44	1.50
22	c	513	CLA	C3B-C2B	-2.98	1.36	1.40
33	D	408	LMG	C4-C5	2.98	1.59	1.53
22	B	709	CLA	CMD-C2D	-2.97	1.44	1.50
22	c	514	CLA	CMB-C2B	-2.97	1.45	1.51
22	B	702	CLA	CMB-C2B	-2.97	1.45	1.51
33	c	520	LMG	O1-C1	2.96	1.45	1.40
22	B	706	CLA	C3B-CAB	-2.96	1.41	1.47
22	C	508	CLA	CHC-C1C	2.95	1.42	1.35
22	B	716	CLA	C1D-ND	2.95	1.41	1.37
22	b	705	CLA	MG-NA	2.94	2.13	2.06
22	B	704	CLA	CHC-C1C	2.94	1.42	1.35
22	C	510	CLA	C4D-ND	-2.94	1.33	1.37
22	B	710	CLA	C1D-ND	2.93	1.41	1.37
22	D	402	CLA	C4D-ND	-2.93	1.33	1.37
22	c	506	CLA	C3B-C2B	-2.93	1.36	1.40
22	A	403	CLA	C3B-C2B	-2.92	1.36	1.40
26	a	413	SQD	O48-C23	2.92	1.41	1.33
22	A	404	CLA	MG-NA	-2.91	1.99	2.06
33	c	522	LMG	C1-C2	2.91	1.60	1.52
22	a	403	CLA	CMB-C2B	-2.91	1.45	1.51
22	B	716	CLA	C4D-ND	-2.91	1.33	1.37
22	C	507	CLA	C4D-ND	-2.90	1.33	1.37
23	C	515	BCR	C36-C18	-2.90	1.44	1.50
22	B	707	CLA	CHC-C1C	2.90	1.42	1.35
26	A	412	SQD	O47-C7	2.90	1.42	1.34
22	b	711	CLA	C4D-ND	-2.89	1.33	1.37
23	T	701	BCR	C30-C25	-2.89	1.49	1.53
22	b	702	CLA	C1D-ND	2.89	1.41	1.37
22	c	505	CLA	CMD-C2D	-2.88	1.44	1.50
23	d	403	BCR	C30-C25	-2.88	1.49	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	719	BCR	C1-C6	-2.88	1.49	1.53
22	D	403	CLA	CMC-C2C	-2.87	1.44	1.50
22	C	506	CLA	C1D-ND	2.86	1.41	1.37
22	b	707	CLA	CHC-C1C	2.86	1.42	1.35
22	C	502	CLA	C1D-ND	2.85	1.41	1.37
25	a	411	PL9	C53-C6	-2.84	1.44	1.50
26	A	409	SQD	O47-C7	2.84	1.42	1.34
23	h	701	BCR	C30-C25	-2.84	1.49	1.53
22	c	514	CLA	C1D-ND	2.84	1.41	1.37
29	c	517	DGD	O6D-C1D	2.84	1.49	1.41
22	a	401	CLA	CHC-C1C	2.83	1.42	1.35
22	b	715	CLA	CMD-C2D	-2.83	1.44	1.50
22	b	715	CLA	CHC-C1C	2.83	1.42	1.35
23	C	501	BCR	C30-C25	-2.82	1.49	1.53
22	a	406	CLA	CMD-C2D	-2.82	1.44	1.50
22	B	715	CLA	C4D-ND	-2.82	1.33	1.37
22	c	503	CLA	C1D-ND	2.82	1.41	1.37
33	b	723	LMG	O7-C8	-2.82	1.39	1.46
22	C	504	CLA	CMB-C2B	-2.82	1.45	1.51
22	C	512	CLA	CHC-C1C	2.81	1.42	1.35
34	a	405	PHO	CBD-CGD	-2.81	1.48	1.52
26	A	409	SQD	O48-C23	2.81	1.41	1.33
22	C	505	CLA	MG-NC	2.80	2.12	2.06
23	c	515	BCR	C30-C25	-2.80	1.49	1.53
22	B	703	CLA	CMC-C2C	-2.80	1.44	1.50
22	C	502	CLA	CHC-C1C	2.80	1.42	1.35
22	c	506	CLA	C1D-ND	2.80	1.41	1.37
22	c	502	CLA	MG-NC	2.80	2.12	2.06
34	D	407	PHO	CHA-CBD	-2.80	1.49	1.52
22	C	510	CLA	CMB-C2B	-2.80	1.45	1.51
22	a	401	CLA	C1D-ND	2.79	1.41	1.37
29	c	517	DGD	C4E-C3E	2.79	1.59	1.52
22	b	712	CLA	CMB-C2B	-2.78	1.45	1.51
33	a	419	LMG	C3-C2	2.78	1.59	1.52
22	b	707	CLA	CMB-C2B	-2.78	1.45	1.51
22	B	708	CLA	C4D-ND	-2.78	1.33	1.37
22	a	404	CLA	CMB-C2B	-2.78	1.45	1.51
33	b	721	LMG	O7-C8	-2.78	1.39	1.46
22	C	503	CLA	C3B-C2B	-2.77	1.36	1.40
22	B	711	CLA	C4D-ND	-2.77	1.33	1.37
29	H	103	DGD	C1E-C2E	2.77	1.60	1.52
22	B	709	CLA	MG-ND	2.77	2.11	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	c	519	DGD	O4E-C4E	-2.77	1.36	1.43
22	c	504	CLA	MG-NA	2.76	2.12	2.06
22	c	504	CLA	MG-ND	-2.76	2.00	2.05
22	B	716	CLA	CMB-C2B	-2.76	1.45	1.51
22	C	507	CLA	MG-ND	-2.76	2.00	2.05
34	a	405	PHO	O2D-CGD	2.75	1.39	1.33
22	a	406	CLA	CMB-C2B	-2.75	1.45	1.51
22	b	714	CLA	C1D-ND	2.75	1.41	1.37
22	c	513	CLA	C1D-ND	2.75	1.41	1.37
22	c	510	CLA	CHC-C1C	2.75	1.42	1.35
22	b	715	CLA	C4D-ND	-2.75	1.33	1.37
27	B	722	LHG	C24-C23	2.74	1.58	1.50
22	B	709	CLA	C3B-CAB	-2.74	1.42	1.47
22	B	705	CLA	C3B-C2B	-2.74	1.36	1.40
29	c	518	DGD	C6E-C5E	2.74	1.61	1.51
22	B	704	CLA	C1D-ND	2.74	1.41	1.37
22	c	504	CLA	CHC-C1C	2.73	1.42	1.35
22	B	709	CLA	O2D-CGD	2.73	1.39	1.33
29	c	519	DGD	O2D-C2D	-2.72	1.36	1.43
22	c	507	CLA	C4B-CHC	-2.72	1.33	1.41
22	c	508	CLA	CMB-C2B	-2.72	1.46	1.51
22	c	507	CLA	C4D-ND	-2.72	1.34	1.37
22	C	513	CLA	C4D-ND	-2.72	1.34	1.37
33	b	723	LMG	C3-C2	2.72	1.59	1.52
23	T	701	BCR	C38-C26	-2.71	1.46	1.50
27	D	411	LHG	C3-C2	2.71	1.60	1.51
22	C	514	CLA	CMC-C2C	-2.71	1.45	1.50
27	A	410	LHG	P-O6	2.71	1.70	1.59
22	b	705	CLA	CMB-C2B	-2.71	1.46	1.51
22	B	704	CLA	C4D-ND	-2.71	1.34	1.37
33	d	408	LMG	O8-C9	-2.70	1.39	1.45
22	b	706	CLA	C1B-NB	2.70	1.37	1.35
22	b	708	CLA	C4D-ND	-2.70	1.34	1.37
29	h	702	DGD	C4E-C3E	2.70	1.59	1.52
22	a	403	CLA	C4D-ND	-2.69	1.34	1.37
22	D	402	CLA	MG-NC	2.69	2.12	2.06
27	D	411	LHG	C8-C7	-2.69	1.42	1.50
23	k	101	BCR	C30-C25	-2.69	1.50	1.53
22	B	706	CLA	C1D-ND	2.68	1.41	1.37
22	c	509	CLA	C1D-ND	2.68	1.41	1.37
22	B	713	CLA	CMD-C2D	-2.68	1.45	1.50
22	b	712	CLA	C4D-ND	-2.68	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	D	406	PHO	CBD-CGD	-2.67	1.48	1.52
22	c	504	CLA	CMC-C2C	-2.67	1.45	1.50
22	D	402	CLA	MG-ND	2.67	2.11	2.05
33	b	723	LMG	O6-C1	2.66	1.48	1.41
22	B	707	CLA	CMC-C2C	-2.66	1.45	1.50
33	C	520	LMG	C4-C5	2.66	1.58	1.53
22	D	401	CLA	C4D-ND	-2.66	1.34	1.37
22	b	714	CLA	CMB-C2B	-2.66	1.46	1.51
23	D	404	BCR	C30-C25	-2.66	1.50	1.53
35	v	201	HEC	CAA-C2A	2.66	1.56	1.52
22	D	403	CLA	CMB-C2B	-2.65	1.46	1.51
23	Y	101	BCR	C1-C6	-2.65	1.50	1.53
22	b	716	CLA	CHC-C1C	2.64	1.41	1.35
22	c	502	CLA	CHC-C1C	2.64	1.41	1.35
22	b	701	CLA	C4D-ND	-2.64	1.34	1.37
22	B	703	CLA	C3B-CAB	-2.64	1.42	1.47
22	b	711	CLA	CMD-C2D	-2.64	1.45	1.50
22	B	714	CLA	CHC-C1C	2.64	1.41	1.35
34	D	407	PHO	C3A-C2A	-2.64	1.52	1.54
33	d	408	LMG	C4-C5	2.63	1.58	1.53
26	A	409	SQD	O2-C2	-2.63	1.36	1.43
33	b	723	LMG	O1-C7	-2.63	1.38	1.43
22	b	705	CLA	CMD-C2D	-2.63	1.45	1.50
22	b	710	CLA	CMB-C2B	-2.62	1.46	1.51
22	b	704	CLA	MG-NA	2.62	2.12	2.06
29	H	103	DGD	O2D-C2D	-2.62	1.36	1.43
22	C	510	CLA	CMD-C2D	-2.62	1.45	1.50
29	H	103	DGD	C4D-C5D	2.61	1.58	1.53
22	D	403	CLA	C4D-ND	-2.61	1.34	1.37
23	a	407	BCR	C1-C6	-2.61	1.50	1.53
33	D	408	LMG	C9-C8	2.61	1.58	1.50
22	a	406	CLA	C4B-CHC	-2.61	1.33	1.41
22	c	503	CLA	C3B-CAB	-2.61	1.42	1.47
29	c	519	DGD	O6D-C5D	-2.61	1.38	1.44
22	B	703	CLA	C1B-NB	2.61	1.37	1.35
29	c	518	DGD	C3E-C2E	2.61	1.59	1.52
22	C	510	CLA	CHC-C1C	2.60	1.41	1.35
26	B	723	SQD	O48-C23	2.59	1.40	1.33
22	b	712	CLA	C1D-ND	2.59	1.41	1.37
23	C	501	BCR	C1-C6	-2.59	1.50	1.53
33	C	520	LMG	O7-C8	-2.59	1.40	1.46
22	C	513	CLA	CMB-C2B	-2.59	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	704	CLA	CMB-C2B	-2.59	1.46	1.51
22	d	402	CLA	C4D-ND	-2.58	1.34	1.37
22	C	508	CLA	CMD-C2D	-2.58	1.45	1.50
22	C	502	CLA	C3B-C2B	-2.58	1.36	1.40
22	B	710	CLA	C4D-ND	-2.57	1.34	1.37
22	c	503	CLA	C3B-C2B	-2.57	1.36	1.40
22	a	401	CLA	MG-ND	2.57	2.10	2.05
22	c	508	CLA	C3B-C2B	-2.57	1.36	1.40
22	c	503	CLA	CMD-C2D	-2.57	1.45	1.50
22	C	510	CLA	O2D-CGD	2.57	1.39	1.33
29	c	517	DGD	C1G-C2G	2.56	1.58	1.50
22	B	714	CLA	C3B-CAB	-2.56	1.42	1.47
22	a	404	CLA	C4D-ND	-2.56	1.34	1.37
29	h	702	DGD	O4D-C4D	-2.56	1.36	1.43
22	c	510	CLA	CMB-C2B	-2.56	1.46	1.51
22	c	507	CLA	C1D-ND	2.56	1.40	1.37
22	C	514	CLA	CMB-C2B	-2.56	1.46	1.51
22	B	707	CLA	CMB-C2B	-2.56	1.46	1.51
26	a	413	SQD	O47-C7	2.55	1.41	1.34
22	a	406	CLA	C1D-ND	2.55	1.40	1.37
22	B	706	CLA	CMB-C2B	-2.55	1.46	1.51
22	b	716	CLA	CMB-C2B	-2.55	1.46	1.51
22	A	403	CLA	CHC-C1C	2.55	1.41	1.35
22	B	709	CLA	CHC-C1C	2.55	1.41	1.35
22	C	512	CLA	C4D-ND	-2.54	1.34	1.37
22	C	508	CLA	CMB-C2B	-2.53	1.46	1.51
22	b	710	CLA	CMD-C2D	-2.53	1.45	1.50
22	b	705	CLA	CHC-C1C	2.53	1.41	1.35
22	C	502	CLA	C1C-NC	-2.53	1.34	1.37
23	d	403	BCR	C1-C6	-2.53	1.50	1.53
22	A	402	CLA	C1D-ND	2.52	1.40	1.37
25	D	405	PL9	C11-C9	-2.52	1.46	1.51
22	B	715	CLA	C3B-C2B	-2.52	1.36	1.40
34	D	406	PHO	CHA-CBD	-2.52	1.49	1.52
25	A	408	PL9	C21-C19	2.51	1.56	1.51
22	D	403	CLA	CMD-C2D	-2.51	1.45	1.50
22	c	503	CLA	CMB-C2B	-2.51	1.46	1.51
22	A	403	CLA	CMB-C2B	-2.51	1.46	1.51
22	d	402	CLA	CHC-C1C	2.51	1.41	1.35
22	c	503	CLA	MG-NA	2.51	2.12	2.06
29	C	519	DGD	O2G-C2G	-2.51	1.40	1.46
22	b	703	CLA	CHC-C1C	2.50	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	c	518	DGD	C6D-C5D	2.50	1.59	1.51
33	b	721	LMG	O6-C1	2.50	1.48	1.41
22	b	703	CLA	CMB-C2B	-2.50	1.46	1.51
22	c	513	CLA	CMB-C2B	-2.50	1.46	1.51
22	C	513	CLA	CMD-C2D	-2.49	1.45	1.50
22	B	708	CLA	C3D-C4D	2.49	1.49	1.44
33	C	516	LMG	C4-C3	2.49	1.58	1.52
22	b	716	CLA	C3B-CAB	-2.49	1.42	1.47
34	d	405	PHO	CMC-C2C	-2.49	1.45	1.51
29	c	517	DGD	O6E-C5E	-2.49	1.38	1.44
22	D	403	CLA	C3B-C2B	-2.49	1.36	1.40
29	C	518	DGD	C4E-C5E	2.48	1.58	1.53
22	d	401	CLA	MG-NA	2.48	2.12	2.06
22	b	706	CLA	CMD-C2D	-2.48	1.45	1.50
29	c	519	DGD	C2A-C1A	-2.47	1.43	1.50
23	t	701	BCR	C27-C26	-2.47	1.46	1.51
23	T	701	BCR	C1-C6	-2.47	1.50	1.53
22	B	710	CLA	C3B-CAB	-2.47	1.42	1.47
22	b	702	CLA	CAC-C3C	-2.47	1.44	1.51
22	b	710	CLA	CMC-C2C	-2.47	1.45	1.50
29	A	413	DGD	C4D-C5D	2.47	1.58	1.53
22	B	709	CLA	MG-NA	2.47	2.12	2.06
22	c	505	CLA	C1D-ND	2.47	1.40	1.37
33	M	101	LMG	O4-C4	-2.46	1.37	1.43
22	c	504	CLA	C3B-C2B	-2.46	1.37	1.40
33	D	408	LMG	O1-C1	2.46	1.44	1.40
22	b	712	CLA	CHC-C1C	2.46	1.41	1.35
22	b	704	CLA	CMD-C2D	-2.46	1.45	1.50
22	b	712	CLA	MG-NC	-2.46	2.00	2.06
22	B	716	CLA	CMC-C2C	-2.45	1.45	1.50
33	d	408	LMG	O7-C8	-2.45	1.40	1.46
22	c	513	CLA	CMC-C2C	-2.44	1.45	1.50
29	c	517	DGD	C6D-C5D	2.44	1.59	1.51
26	a	413	SQD	O4-C4	-2.44	1.37	1.43
22	C	502	CLA	C1B-NB	-2.44	1.33	1.35
33	a	419	LMG	O7-C10	2.44	1.41	1.34
22	c	507	CLA	C3B-C2B	-2.43	1.37	1.40
25	d	404	PL9	C41-C39	-2.43	1.46	1.51
22	B	705	CLA	CMC-C2C	-2.43	1.45	1.50
22	C	512	CLA	C4B-CHC	-2.43	1.34	1.41
34	d	405	PHO	CMD-C2D	-2.43	1.45	1.51
22	C	510	CLA	MG-NC	-2.42	2.00	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	509	CLA	CMB-C2B	-2.42	1.46	1.51
22	b	708	CLA	C1D-C2D	2.42	1.50	1.45
22	B	707	CLA	CMD-C2D	-2.42	1.45	1.50
22	B	715	CLA	C3B-CAB	-2.42	1.43	1.47
25	A	408	PL9	C21-C22	2.41	1.61	1.53
22	B	708	CLA	C1D-C2D	2.41	1.50	1.45
22	a	401	CLA	CMB-C2B	-2.41	1.46	1.51
22	c	513	CLA	CMD-C2D	-2.41	1.45	1.50
22	C	507	CLA	C3B-C2B	-2.41	1.37	1.40
22	C	502	CLA	MG-NC	2.41	2.12	2.06
22	B	709	CLA	C4B-CHC	-2.40	1.34	1.41
22	b	714	CLA	MG-ND	-2.40	2.01	2.05
34	a	405	PHO	C3B-C2B	-2.40	1.37	1.40
22	C	513	CLA	C1D-C2D	2.40	1.50	1.45
22	A	402	CLA	C3B-C2B	-2.40	1.37	1.40
22	C	512	CLA	C1D-ND	2.40	1.40	1.37
22	c	508	CLA	C3B-CAB	-2.40	1.43	1.47
23	B	717	BCR	C33-C5	-2.40	1.47	1.50
22	B	705	CLA	C1C-NC	-2.39	1.34	1.37
22	B	714	CLA	C1A-CHA	-2.39	1.33	1.43
22	a	404	CLA	CMC-C2C	-2.39	1.45	1.50
22	b	706	CLA	C3B-C2B	-2.39	1.37	1.40
22	B	714	CLA	CMB-C2B	-2.39	1.46	1.51
22	C	503	CLA	MG-NC	-2.39	2.00	2.06
22	B	711	CLA	MG-NC	2.39	2.11	2.06
22	C	513	CLA	C3B-C2B	-2.38	1.37	1.40
34	D	407	PHO	CMB-C2B	-2.38	1.45	1.51
29	C	517	DGD	O2G-C2G	-2.38	1.40	1.46
22	B	713	CLA	CHC-C1C	2.37	1.41	1.35
22	b	702	CLA	C4B-CHC	-2.37	1.34	1.41
22	c	512	CLA	CMB-C2B	-2.37	1.46	1.51
22	B	702	CLA	C3D-C4D	2.37	1.49	1.44
29	H	103	DGD	O6E-C1E	2.36	1.47	1.41
33	D	408	LMG	O2-C2	-2.36	1.37	1.43
22	D	401	CLA	C4B-CHC	-2.36	1.34	1.41
22	B	708	CLA	C3B-CAB	-2.36	1.43	1.47
22	c	505	CLA	MG-ND	-2.36	2.01	2.05
22	c	508	CLA	C4B-CHC	-2.35	1.34	1.41
22	a	406	CLA	CHC-C1C	2.35	1.41	1.35
27	l	101	LHG	C24-C23	-2.35	1.43	1.50
22	A	402	CLA	C5-C3	-2.35	1.46	1.51
22	C	507	CLA	C3B-CAB	-2.35	1.43	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	708	CLA	CAC-C3C	-2.35	1.45	1.51
22	b	710	CLA	C3B-CAB	-2.35	1.43	1.47
22	B	716	CLA	C3B-C2B	-2.35	1.37	1.40
29	h	702	DGD	O2E-C2E	-2.34	1.37	1.43
22	C	503	CLA	CMB-C2B	-2.34	1.46	1.51
22	B	713	CLA	C3B-C2B	-2.34	1.37	1.40
22	C	505	CLA	C3B-C2B	-2.34	1.37	1.40
22	c	507	CLA	C3B-CAB	-2.34	1.43	1.47
29	C	519	DGD	O6D-C5D	-2.33	1.38	1.44
23	t	701	BCR	C38-C26	-2.33	1.47	1.50
22	b	709	CLA	CHC-C1C	2.33	1.40	1.35
23	B	718	BCR	C33-C5	-2.33	1.47	1.50
22	a	403	CLA	CMC-C2C	-2.33	1.45	1.50
22	b	708	CLA	C3B-CAB	-2.32	1.43	1.47
22	b	707	CLA	CMD-C2D	-2.32	1.45	1.50
25	d	404	PL9	C53-C6	-2.32	1.45	1.50
22	b	713	CLA	C4D-ND	-2.32	1.34	1.37
22	c	511	CLA	CHC-C1C	2.32	1.40	1.35
34	d	405	PHO	CBD-CGD	-2.32	1.49	1.52
22	C	508	CLA	C1D-ND	2.32	1.40	1.37
22	b	703	CLA	C3B-CAB	-2.32	1.43	1.47
22	c	502	CLA	CMB-C2B	-2.31	1.46	1.51
22	B	707	CLA	CMA-C3A	-2.31	1.48	1.53
22	b	711	CLA	C4B-CHC	-2.31	1.34	1.41
22	D	401	CLA	MG-ND	-2.31	2.01	2.05
22	c	505	CLA	CMC-C2C	-2.31	1.45	1.50
29	H	103	DGD	O3E-C3E	-2.31	1.37	1.43
22	B	716	CLA	CMD-C2D	-2.31	1.45	1.50
22	b	713	CLA	CMC-C2C	-2.31	1.45	1.50
22	B	714	CLA	MG-NA	2.31	2.11	2.06
23	k	102	BCR	C1-C6	-2.31	1.50	1.53
23	k	102	BCR	C30-C25	-2.30	1.50	1.53
22	B	705	CLA	CMB-C2B	-2.30	1.46	1.51
22	D	402	CLA	C1D-C2D	2.30	1.49	1.45
22	d	402	CLA	CMB-C2B	-2.30	1.46	1.51
25	d	404	PL9	C26-C24	-2.30	1.46	1.51
22	C	502	CLA	CMD-C2D	-2.30	1.45	1.50
22	c	507	CLA	CMD-C2D	-2.29	1.45	1.50
22	B	715	CLA	CAC-C3C	-2.29	1.45	1.51
27	D	410	LHG	O7-C5	-2.28	1.40	1.46
29	c	518	DGD	O3E-C3E	-2.28	1.37	1.43
23	B	718	BCR	C36-C18	-2.28	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	507	CLA	CAC-C3C	-2.28	1.45	1.51
22	c	507	CLA	CMA-C3A	-2.28	1.48	1.53
33	b	721	LMG	C4-C3	2.28	1.58	1.52
33	c	522	LMG	C9-C8	2.28	1.57	1.50
22	d	402	CLA	C1B-NB	2.27	1.37	1.35
22	A	404	CLA	C3B-CAB	-2.27	1.43	1.47
23	K	101	BCR	C1-C6	-2.27	1.50	1.53
22	B	716	CLA	C3B-CAB	-2.27	1.43	1.47
22	b	712	CLA	CMC-C2C	-2.27	1.46	1.50
22	C	502	CLA	CMC-C2C	-2.27	1.46	1.50
22	d	402	CLA	O2D-CGD	2.27	1.38	1.33
34	D	407	PHO	CMC-C2C	-2.26	1.46	1.51
22	a	403	CLA	MG-ND	-2.26	2.01	2.05
22	c	511	CLA	CMD-C2D	-2.26	1.46	1.50
34	d	405	PHO	C3B-CAB	-2.26	1.43	1.47
22	b	703	CLA	CMD-C2D	-2.26	1.46	1.50
23	b	717	BCR	C36-C18	-2.26	1.46	1.50
22	A	402	CLA	C4D-ND	-2.26	1.34	1.37
23	b	718	BCR	C36-C18	-2.25	1.46	1.50
22	b	703	CLA	C4B-CHC	-2.25	1.34	1.41
22	b	713	CLA	C4B-CHC	-2.25	1.34	1.41
22	B	703	CLA	CMD-C2D	-2.25	1.46	1.50
33	M	101	LMG	C4-C3	2.25	1.58	1.52
22	A	404	CLA	CMD-C2D	-2.25	1.46	1.50
22	B	713	CLA	C4-C3	-2.25	1.44	1.50
22	B	708	CLA	CHC-C1C	2.24	1.40	1.35
22	c	506	CLA	C3B-CAB	-2.24	1.43	1.47
23	b	717	BCR	C33-C5	-2.24	1.47	1.50
22	b	701	CLA	C1B-NB	2.24	1.37	1.35
29	c	519	DGD	O2G-C2G	-2.24	1.41	1.46
22	a	406	CLA	C4D-ND	-2.23	1.34	1.37
22	D	403	CLA	C4B-CHC	-2.23	1.34	1.41
22	C	505	CLA	C1B-NB	-2.23	1.33	1.35
26	f	101	SQD	O3-C3	-2.23	1.37	1.43
22	H	102	CLA	C4D-ND	-2.23	1.34	1.37
22	c	504	CLA	CMB-C2B	-2.23	1.47	1.51
22	B	708	CLA	CMB-C2B	-2.22	1.47	1.51
23	k	101	BCR	C38-C26	-2.22	1.47	1.50
26	D	409	SQD	O3-C3	-2.22	1.37	1.43
27	A	410	LHG	O7-C5	-2.21	1.41	1.46
33	a	419	LMG	C12-C11	2.21	1.60	1.52
22	B	710	CLA	C1A-CHA	-2.21	1.33	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	d	407	LHG	C6-C5	2.21	1.57	1.50
22	C	511	CLA	MG-NA	2.21	2.11	2.06
22	b	716	CLA	CMD-C2D	-2.21	1.46	1.50
22	C	511	CLA	CMC-C2C	-2.20	1.46	1.50
29	A	413	DGD	C4D-C3D	2.20	1.57	1.52
22	H	102	CLA	CMD-C2D	-2.20	1.46	1.50
22	b	710	CLA	C3D-C4D	2.20	1.49	1.44
27	a	414	LHG	P-O6	2.20	1.68	1.59
25	D	405	PL9	C7-C3	-2.20	1.49	1.51
22	c	507	CLA	CMB-C2B	-2.19	1.47	1.51
22	D	401	CLA	CMB-C2B	-2.19	1.47	1.51
22	B	708	CLA	CMA-C3A	-2.19	1.48	1.53
22	C	502	CLA	C1D-C2D	2.19	1.49	1.45
22	c	512	CLA	CMC-C2C	-2.19	1.46	1.50
26	a	413	SQD	O2-C2	-2.19	1.37	1.43
23	c	516	BCR	C33-C5	-2.19	1.47	1.50
29	c	518	DGD	O5D-C1E	2.19	1.43	1.40
23	a	407	BCR	C38-C26	-2.19	1.47	1.50
22	b	703	CLA	MG-ND	2.19	2.10	2.05
22	c	503	CLA	C4B-CHC	-2.19	1.34	1.41
33	C	516	LMG	O6-C5	-2.18	1.39	1.44
22	b	701	CLA	CMB-C2B	-2.18	1.47	1.51
22	b	709	CLA	MG-NA	2.18	2.11	2.06
33	c	520	LMG	C7-C8	2.18	1.57	1.50
22	D	403	CLA	C3D-C4D	2.18	1.49	1.44
27	D	410	LHG	O8-C6	-2.18	1.40	1.45
22	c	513	CLA	MG-NC	-2.18	2.01	2.06
25	D	405	PL9	C37-C38	-2.18	1.43	1.50
22	b	707	CLA	C4D-ND	-2.18	1.34	1.37
27	L	101	LHG	O8-C23	2.17	1.39	1.33
22	c	511	CLA	MG-NA	2.17	2.11	2.06
22	b	707	CLA	C3B-CAB	-2.17	1.43	1.47
27	d	407	LHG	O8-C23	2.17	1.39	1.33
22	c	509	CLA	CMC-C2C	-2.17	1.46	1.50
22	C	504	CLA	C3B-CAB	-2.17	1.43	1.47
22	C	510	CLA	O2A-CGA	2.17	1.39	1.33
22	C	509	CLA	C3D-C4D	2.16	1.49	1.44
22	c	505	CLA	CMB-C2B	-2.16	1.47	1.51
22	H	102	CLA	C1C-NC	-2.16	1.34	1.37
22	D	401	CLA	C1A-CHA	-2.16	1.34	1.43
22	B	707	CLA	C3B-C2B	-2.16	1.37	1.40
22	b	702	CLA	CMD-C2D	-2.16	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	f	101	SQD	O2-C2	-2.16	1.37	1.43
22	b	714	CLA	CAC-C3C	-2.16	1.45	1.51
26	A	409	SQD	O4-C4	-2.16	1.37	1.43
22	c	506	CLA	CMC-C2C	-2.15	1.46	1.50
22	B	713	CLA	C5-C3	-2.15	1.46	1.51
22	c	514	CLA	C3B-C2B	-2.15	1.37	1.40
22	A	403	CLA	CMD-C2D	-2.15	1.46	1.50
29	c	518	DGD	O3D-C3D	-2.15	1.37	1.43
29	H	103	DGD	C3E-C2E	2.15	1.57	1.52
22	B	710	CLA	CMA-C3A	-2.14	1.48	1.53
22	b	710	CLA	C4C-C3C	2.14	1.48	1.45
26	f	101	SQD	O4-C4	-2.14	1.37	1.43
22	c	503	CLA	CMC-C2C	-2.14	1.46	1.50
22	B	707	CLA	CAC-C3C	-2.14	1.45	1.51
29	C	517	DGD	C4D-C3D	2.14	1.57	1.52
33	d	408	LMG	O3-C3	-2.14	1.37	1.43
22	C	511	CLA	CMD-C2D	-2.13	1.46	1.50
22	C	502	CLA	CMB-C2B	-2.13	1.47	1.51
22	b	701	CLA	O2A-CGA	2.13	1.39	1.33
22	B	702	CLA	C1D-C2D	2.13	1.49	1.45
22	C	505	CLA	CMB-C2B	-2.13	1.47	1.51
22	b	705	CLA	C3B-CAB	-2.13	1.43	1.47
33	d	408	LMG	O1-C7	-2.13	1.39	1.43
34	D	406	PHO	CMD-C2D	-2.13	1.46	1.51
22	C	510	CLA	CMC-C2C	-2.13	1.46	1.50
33	d	408	LMG	O6-C5	-2.12	1.39	1.44
22	c	510	CLA	C3B-C2B	-2.12	1.37	1.40
22	D	403	CLA	CHC-C1C	2.12	1.40	1.35
22	c	504	CLA	O2D-CGD	2.12	1.38	1.33
22	b	716	CLA	CMC-C2C	-2.11	1.46	1.50
23	C	515	BCR	C30-C25	-2.11	1.50	1.53
27	L	101	LHG	O2-C2	2.11	1.49	1.43
22	B	709	CLA	C3B-C2B	-2.11	1.37	1.40
33	c	523	LMG	C1-C2	2.11	1.58	1.52
29	C	519	DGD	C2A-C1A	-2.11	1.44	1.50
22	b	713	CLA	CMD-C2D	-2.11	1.46	1.50
22	d	401	CLA	CMC-C2C	-2.11	1.46	1.50
29	A	413	DGD	C4E-C5E	2.11	1.57	1.53
22	C	506	CLA	CMC-C2C	-2.11	1.46	1.50
22	c	502	CLA	CMC-C2C	-2.10	1.46	1.50
26	a	413	SQD	O3-C3	-2.10	1.38	1.43
22	b	712	CLA	CMD-C2D	-2.10	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	405	BCR	C38-C26	-2.10	1.47	1.50
22	d	401	CLA	CMD-C2D	-2.10	1.46	1.50
33	D	412	LMG	O8-C28	2.10	1.39	1.33
22	B	711	CLA	C1B-NB	-2.10	1.33	1.35
22	c	510	CLA	C3B-CAB	-2.10	1.43	1.47
35	e	101	HEC	C4B-C3B	2.10	1.46	1.43
22	C	509	CLA	C1D-C2D	2.10	1.49	1.45
22	d	402	CLA	CMC-C2C	-2.09	1.46	1.50
22	C	513	CLA	C5-C3	-2.09	1.46	1.51
22	b	708	CLA	C3C-C2C	2.09	1.41	1.36
22	C	507	CLA	CMB-C2B	-2.09	1.47	1.51
22	d	402	CLA	C1A-CHA	-2.09	1.34	1.43
33	b	721	LMG	C1-C2	2.09	1.58	1.52
22	B	711	CLA	MG-ND	2.09	2.09	2.05
34	D	406	PHO	CMC-C2C	-2.09	1.46	1.51
22	C	512	CLA	CMC-C2C	-2.09	1.46	1.50
29	C	517	DGD	C4E-C3E	2.09	1.57	1.52
25	D	405	PL9	C3-C4	-2.08	1.46	1.49
29	A	413	DGD	C3G-C2G	2.08	1.57	1.50
22	B	707	CLA	MG-NC	2.08	2.11	2.06
33	c	520	LMG	O7-C10	2.08	1.39	1.35
22	b	708	CLA	C3D-C4D	2.08	1.48	1.44
22	C	510	CLA	MG-NA	2.08	2.11	2.06
22	c	502	CLA	C3B-C2B	-2.08	1.37	1.40
22	B	713	CLA	CMB-C2B	-2.08	1.47	1.51
23	A	405	BCR	C33-C5	-2.08	1.47	1.50
33	a	419	LMG	C6-C5	2.08	1.58	1.51
29	A	413	DGD	O3G-C1D	2.08	1.43	1.40
29	h	702	DGD	O3G-C1D	2.08	1.43	1.40
22	C	503	CLA	CAC-C3C	-2.07	1.45	1.51
22	C	512	CLA	C1B-NB	2.07	1.37	1.35
22	c	509	CLA	CMA-C3A	-2.07	1.48	1.53
23	a	407	BCR	C35-C13	-2.07	1.46	1.50
33	M	101	LMG	C4-C5	2.07	1.57	1.53
22	D	401	CLA	CHC-C1C	2.07	1.40	1.35
26	D	409	SQD	O2-C2	-2.07	1.38	1.43
22	b	713	CLA	CAC-C3C	-2.07	1.45	1.51
29	c	519	DGD	C1D-C2D	2.06	1.58	1.52
25	d	404	PL9	C37-C38	-2.06	1.43	1.50
22	b	711	CLA	C3C-C2C	2.06	1.41	1.36
22	A	404	CLA	C4B-CHC	-2.06	1.35	1.41
22	b	701	CLA	CMD-C2D	-2.06	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	715	CLA	C3B-C2B	-2.05	1.37	1.40
22	c	512	CLA	C3B-CAB	-2.05	1.43	1.47
29	c	518	DGD	C1E-C2E	2.05	1.58	1.52
22	C	503	CLA	MG-ND	-2.05	2.01	2.05
22	c	502	CLA	C4B-CHC	-2.05	1.35	1.41
23	a	407	BCR	C21-C22	-2.05	1.33	1.35
22	A	402	CLA	C1C-NC	-2.05	1.34	1.37
34	D	407	PHO	C3B-C2B	-2.05	1.37	1.40
22	c	512	CLA	C1B-NB	2.05	1.37	1.35
22	b	709	CLA	C3D-C4D	2.04	1.48	1.44
33	C	516	LMG	C4-C5	2.04	1.57	1.53
34	D	406	PHO	CMB-C2B	-2.03	1.46	1.51
29	H	103	DGD	C4E-C5E	2.03	1.57	1.53
27	B	722	LHG	P-O6	2.03	1.67	1.59
22	b	702	CLA	CMB-C2B	-2.03	1.47	1.51
22	b	713	CLA	CAA-C2A	-2.03	1.50	1.54
22	b	707	CLA	C1A-CHA	-2.03	1.34	1.43
22	b	715	CLA	C4B-CHC	-2.03	1.35	1.41
26	a	413	SQD	O5-C5	-2.03	1.39	1.44
22	C	503	CLA	CMC-C2C	-2.03	1.46	1.50
34	D	407	PHO	CMD-C2D	-2.02	1.46	1.51
35	v	201	HEC	CAD-C3D	2.02	1.55	1.52
26	a	413	SQD	O47-C45	-2.02	1.41	1.46
22	b	710	CLA	C4B-CHC	-2.02	1.35	1.41
22	c	509	CLA	CMD-C2D	-2.02	1.46	1.50
33	C	520	LMG	C6-C5	2.01	1.58	1.51
22	b	716	CLA	CAC-C3C	-2.01	1.45	1.51
22	A	404	CLA	CHC-C1C	2.01	1.40	1.35
27	d	406	LHG	O6-C4	-2.01	1.37	1.44
22	B	703	CLA	C1A-CHA	-2.01	1.34	1.43
22	D	401	CLA	CAC-C3C	-2.01	1.46	1.51
22	c	511	CLA	CAC-C3C	-2.01	1.46	1.51
22	D	402	CLA	CAC-C3C	-2.01	1.46	1.51
26	D	409	SQD	O4-C4	-2.01	1.38	1.43
22	c	514	CLA	CMC-C2C	-2.00	1.46	1.50
22	B	703	CLA	CMB-C2B	-2.00	1.47	1.51
29	C	519	DGD	O3G-C3G	-2.00	1.40	1.43
22	B	716	CLA	CHC-C1C	2.00	1.40	1.35
22	b	701	CLA	CMC-C2C	-2.00	1.46	1.50

All (1357) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	704	CLA	C4A-NA-C1A	9.79	111.11	106.71
22	c	510	CLA	C4A-NA-C1A	9.44	110.95	106.71
22	b	701	CLA	C4A-NA-C1A	9.42	110.94	106.71
22	c	512	CLA	C4A-NA-C1A	9.35	110.91	106.71
22	B	707	CLA	C4A-NA-C1A	9.06	110.78	106.71
22	c	504	CLA	C4A-NA-C1A	9.01	110.76	106.71
26	b	720	SQD	O6-C1-C2	8.58	121.70	108.30
22	a	401	CLA	C4A-NA-C1A	8.21	110.40	106.71
22	b	704	CLA	C4A-NA-C1A	8.08	110.34	106.71
26	a	413	SQD	O6-C1-C2	8.00	120.79	108.30
22	B	715	CLA	C4A-NA-C1A	7.82	110.22	106.71
22	B	706	CLA	C4A-NA-C1A	7.76	110.20	106.71
22	B	716	CLA	C4A-NA-C1A	7.58	110.11	106.71
22	H	102	CLA	C4A-NA-C1A	7.43	110.05	106.71
22	C	514	CLA	C4A-NA-C1A	7.33	110.00	106.71
22	C	504	CLA	C4A-NA-C1A	7.31	109.99	106.71
22	c	509	CLA	C4A-NA-C1A	7.17	109.93	106.71
22	C	509	CLA	C4A-NA-C1A	7.06	109.88	106.71
26	A	409	SQD	O6-C1-C2	7.04	119.29	108.30
22	C	508	CLA	C4A-NA-C1A	6.91	109.81	106.71
22	D	403	CLA	C4A-NA-C1A	6.78	109.75	106.71
22	b	713	CLA	C4A-NA-C1A	6.57	109.66	106.71
25	D	405	PL9	C7-C3-C4	6.53	122.18	116.88
22	a	403	CLA	CMB-C2B-C1B	-6.48	118.51	128.46
26	b	720	SQD	O7-S-C6	6.47	114.63	106.94
22	c	502	CLA	C4A-NA-C1A	6.39	109.58	106.71
22	c	514	CLA	C4A-NA-C1A	6.39	109.58	106.71
22	B	708	CLA	C4A-NA-C1A	6.35	109.56	106.71
35	e	101	HEC	CBD-CAD-C3D	-6.31	101.86	112.62
22	b	706	CLA	C4A-NA-C1A	6.28	109.53	106.71
22	b	709	CLA	CMB-C2B-C1B	-5.99	119.26	128.46
22	B	708	CLA	O2D-CGD-O1D	-5.94	112.23	123.84
22	b	715	CLA	CMB-C2B-C1B	-5.82	119.52	128.46
22	c	505	CLA	C4A-NA-C1A	5.82	109.32	106.71
25	a	411	PL9	C7-C3-C4	5.77	121.57	116.88
35	V	201	HEC	CBD-CAD-C3D	-5.73	102.84	112.62
22	C	502	CLA	C4A-NA-C1A	5.72	109.28	106.71
35	E	103	HEC	CBD-CAD-C3D	-5.70	102.90	112.62
22	b	711	CLA	C4A-NA-C1A	5.67	109.26	106.71
25	d	404	PL9	C40-C39-C41	5.61	124.70	115.27
26	D	409	SQD	O8-S-C6	5.60	114.66	105.74
22	c	503	CLA	C4A-NA-C1A	5.55	109.20	106.71
26	D	409	SQD	O6-C1-C2	5.54	116.95	108.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	708	CLA	O2D-CGD-CBD	5.47	120.98	111.27
22	A	404	CLA	CMB-C2B-C1B	-5.47	120.06	128.46
22	c	505	CLA	CMB-C2B-C1B	-5.43	120.12	128.46
26	A	409	SQD	O7-S-C6	5.43	113.39	106.94
22	C	512	CLA	C4A-NA-C1A	5.41	109.14	106.71
22	C	511	CLA	C4A-NA-C1A	5.39	109.13	106.71
22	b	705	CLA	CMB-C2B-C1B	-5.37	120.21	128.46
22	A	402	CLA	CMB-C2B-C1B	-5.36	120.22	128.46
22	C	503	CLA	C4A-NA-C1A	5.34	109.11	106.71
22	a	403	CLA	CMB-C2B-C3B	5.30	134.59	124.68
22	d	401	CLA	CMB-C2B-C1B	-5.30	120.33	128.46
26	A	409	SQD	O8-S-C6	5.28	114.16	105.74
22	b	716	CLA	CMB-C2B-C1B	-5.24	120.42	128.46
22	A	402	CLA	CMB-C2B-C3B	5.21	134.42	124.68
22	c	511	CLA	C4A-NA-C1A	5.20	109.04	106.71
26	B	723	SQD	O6-C1-C2	5.20	116.41	108.30
22	D	402	CLA	C4A-NA-C1A	5.19	109.04	106.71
26	D	409	SQD	O9-S-C6	5.15	113.06	106.94
22	D	403	CLA	O2D-CGD-O1D	-5.15	113.78	123.84
22	b	714	CLA	C4A-NA-C1A	5.13	109.01	106.71
22	B	716	CLA	CMB-C2B-C1B	-5.13	120.58	128.46
29	A	413	DGD	C4E-C3E-C2E	-5.12	101.89	110.82
25	D	405	PL9	C30-C29-C31	-5.12	106.67	115.27
22	c	507	CLA	C4A-NA-C1A	5.11	109.00	106.71
22	c	502	CLA	O2D-CGD-O1D	-5.10	113.87	123.84
22	b	703	CLA	CMB-C2B-C1B	-5.08	120.66	128.46
22	b	715	CLA	C4A-NA-C1A	5.01	108.96	106.71
22	C	509	CLA	CMB-C2B-C1B	-4.97	120.83	128.46
22	b	714	CLA	CHD-C1D-ND	-4.96	119.90	124.45
22	B	710	CLA	O2D-CGD-O1D	-4.92	114.22	123.84
22	B	702	CLA	CMB-C2B-C1B	-4.92	120.91	128.46
35	e	101	HEC	CBA-CAA-C2A	-4.89	104.36	112.60
35	V	201	HEC	C1D-C2D-C3D	-4.89	103.60	107.00
33	b	723	LMG	C1-O6-C5	-4.87	104.14	113.69
22	c	510	CLA	CHD-C1D-ND	-4.85	119.99	124.45
22	c	504	CLA	C11-C12-C13	-4.81	100.36	115.92
22	B	712	CLA	CMB-C2B-C1B	-4.80	121.08	128.46
25	d	404	PL9	C7-C3-C4	4.80	120.78	116.88
22	b	716	CLA	CMB-C2B-C3B	4.80	133.66	124.68
22	C	507	CLA	C4A-NA-C1A	4.80	108.86	106.71
22	b	708	CLA	C4A-NA-C1A	4.80	108.86	106.71
22	B	712	CLA	CMB-C2B-C3B	4.79	133.63	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	711	CLA	C4A-NA-C1A	4.77	108.85	106.71
22	d	401	CLA	CMB-C2B-C3B	4.74	133.55	124.68
22	C	510	CLA	C4A-NA-C1A	4.74	108.84	106.71
22	c	511	CLA	O2D-CGD-O1D	-4.73	114.60	123.84
22	C	506	CLA	C4A-NA-C1A	4.73	108.83	106.71
22	a	404	CLA	C4A-NA-C1A	4.71	108.82	106.71
22	b	702	CLA	CMB-C2B-C1B	-4.65	121.31	128.46
22	B	705	CLA	O2D-CGD-O1D	-4.62	114.80	123.84
22	C	504	CLA	CMB-C2B-C1B	-4.62	121.36	128.46
22	d	402	CLA	CMB-C2B-C1B	-4.60	121.39	128.46
22	C	514	CLA	C4-C3-C5	4.60	123.01	115.27
22	B	712	CLA	C4A-NA-C1A	4.60	108.77	106.71
22	c	509	CLA	CHD-C1D-ND	-4.60	120.23	124.45
22	A	404	CLA	CMB-C2B-C3B	4.59	133.27	124.68
26	f	101	SQD	O7-S-C6	4.59	112.39	106.94
22	a	404	CLA	CMB-C2B-C1B	-4.57	121.45	128.46
22	b	716	CLA	O2D-CGD-O1D	-4.54	114.96	123.84
26	B	723	SQD	O7-S-C6	4.54	112.33	106.94
29	H	103	DGD	O3G-C3G-C2G	-4.52	99.99	110.90
22	C	507	CLA	CMB-C2B-C1B	-4.52	121.52	128.46
22	B	702	CLA	CHD-C1D-ND	-4.51	120.31	124.45
27	L	101	LHG	O4-P-O5	4.51	134.54	112.24
22	b	708	CLA	CMB-C2B-C1B	-4.50	121.55	128.46
22	b	702	CLA	CHB-C4A-NA	4.49	130.72	124.51
25	A	408	PL9	C7-C3-C4	4.47	120.51	116.88
22	B	711	CLA	CMB-C2B-C1B	-4.47	121.60	128.46
22	b	712	CLA	CMB-C2B-C1B	-4.46	121.61	128.46
22	b	705	CLA	C4A-NA-C1A	4.45	108.71	106.71
22	B	704	CLA	CMB-C2B-C1B	-4.44	121.65	128.46
22	C	508	CLA	CMB-C2B-C1B	-4.41	121.69	128.46
22	b	702	CLA	CMB-C2B-C3B	4.41	132.92	124.68
22	B	716	CLA	CMB-C2B-C3B	4.40	132.91	124.68
22	b	706	CLA	O2D-CGD-O1D	-4.39	115.26	123.84
22	b	709	CLA	CMB-C2B-C3B	4.39	132.89	124.68
22	c	505	CLA	CMB-C2B-C3B	4.38	132.88	124.68
22	b	712	CLA	CHB-C4A-NA	4.38	130.57	124.51
22	b	711	CLA	O2D-CGD-O1D	-4.37	115.29	123.84
22	b	704	CLA	C1-C2-C3	-4.35	118.52	126.04
32	A	417	BCT	O2-C-O1	4.34	130.81	119.55
29	C	518	DGD	O5D-C6D-C5D	-4.34	101.01	109.05
22	B	702	CLA	CMB-C2B-C3B	4.32	132.76	124.68
22	B	713	CLA	C4A-NA-C1A	4.31	108.64	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	c	513	CLA	C4A-NA-C1A	4.31	108.64	106.71
22	b	706	CLA	CMB-C2B-C1B	-4.30	121.86	128.46
27	a	414	LHG	O4-P-O5	4.29	133.46	112.24
22	b	713	CLA	CMB-C2B-C1B	-4.29	121.87	128.46
35	v	201	HEC	CMC-C2C-C1C	-4.28	121.88	128.46
26	A	409	SQD	C1-C2-C3	-4.28	101.08	110.00
27	A	410	LHG	O4-P-O5	4.27	133.37	112.24
29	c	518	DGD	O3G-C3G-C2G	-4.27	100.59	110.90
22	D	403	CLA	CMB-C2B-C1B	-4.27	121.90	128.46
22	C	511	CLA	CMB-C2B-C1B	-4.27	121.90	128.46
22	d	402	CLA	CMB-C2B-C3B	4.26	132.65	124.68
22	C	511	CLA	CMB-C2B-C3B	4.24	132.62	124.68
22	b	703	CLA	CMB-C2B-C3B	4.24	132.61	124.68
22	a	406	CLA	C4A-NA-C1A	4.23	108.61	106.71
22	B	702	CLA	O2D-CGD-CBD	4.21	118.75	111.27
26	f	101	SQD	O9-S-O7	-4.21	99.39	113.95
22	b	712	CLA	C1B-CHB-C4A	-4.20	121.81	130.12
26	a	413	SQD	O8-S-C6	4.18	112.40	105.74
22	b	711	CLA	CMB-C2B-C1B	-4.15	122.09	128.46
22	c	511	CLA	CMB-C2B-C1B	-4.13	122.11	128.46
22	c	509	CLA	O2D-CGD-O1D	-4.13	115.76	123.84
33	d	408	LMG	O1-C1-C2	-4.13	101.86	108.30
27	D	411	LHG	O4-P-O5	4.12	132.61	112.24
27	a	412	LHG	O4-P-O5	4.10	132.53	112.24
23	b	717	BCR	C2-C1-C6	4.10	116.79	110.48
35	V	201	HEC	CMC-C2C-C1C	-4.09	122.18	128.46
22	b	713	CLA	C1-C2-C3	-4.06	119.02	126.04
26	a	413	SQD	C1-O5-C5	-4.04	105.75	113.69
22	C	508	CLA	CMB-C2B-C3B	4.04	132.23	124.68
22	a	401	CLA	CMB-C2B-C1B	-4.04	122.26	128.46
22	b	702	CLA	C4A-NA-C1A	4.03	108.52	106.71
22	c	506	CLA	C4A-NA-C1A	4.03	108.52	106.71
33	a	419	LMG	C1-C2-C3	-4.02	101.62	110.00
34	D	406	PHO	CMB-C2B-C3B	4.02	132.20	124.68
35	E	103	HEC	CMB-C2B-C1B	-4.02	122.29	128.46
23	b	718	BCR	C36-C18-C17	-4.00	117.32	122.92
23	b	717	BCR	C36-C18-C17	-4.00	117.33	122.92
26	B	723	SQD	O47-C7-C8	4.00	120.11	111.50
22	c	507	CLA	CMB-C2B-C1B	-3.98	122.34	128.46
22	B	705	CLA	O1D-CGD-CBD	3.98	132.64	124.48
26	A	409	SQD	O9-S-O7	-3.98	100.17	113.95
29	h	702	DGD	O3G-C3G-C2G	-3.98	101.30	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	713	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
22	C	509	CLA	CMB-C2B-C3B	3.97	132.10	124.68
26	f	101	SQD	O6-C1-C2	3.97	114.50	108.30
22	C	509	CLA	CHD-C1D-ND	-3.96	120.81	124.45
22	c	513	CLA	CHB-C4A-NA	3.96	129.99	124.51
22	C	504	CLA	C4D-CHA-C1A	3.96	126.07	121.25
22	b	703	CLA	O2D-CGD-O1D	-3.95	116.11	123.84
22	b	712	CLA	C4A-NA-C1A	3.95	108.48	106.71
22	B	705	CLA	CHD-C1D-ND	-3.95	120.83	124.45
22	C	508	CLA	O2D-CGD-O1D	-3.93	116.15	123.84
22	C	513	CLA	C4A-NA-C1A	3.93	108.47	106.71
25	a	411	PL9	C22-C23-C24	-3.93	118.20	127.66
22	B	704	CLA	CMB-C2B-C3B	3.93	132.03	124.68
27	d	407	LHG	O4-P-O5	3.92	131.60	112.24
22	b	705	CLA	C4-C3-C5	3.92	121.86	115.27
22	b	710	CLA	CAC-C3C-C4C	3.91	129.89	124.81
22	A	403	CLA	CMB-C2B-C1B	-3.91	122.45	128.46
22	B	703	CLA	C4A-NA-C1A	3.90	108.46	106.71
23	B	717	BCR	C2-C1-C6	3.90	116.48	110.48
23	B	719	BCR	C2-C1-C6	3.88	116.46	110.48
22	b	705	CLA	CMB-C2B-C3B	3.88	131.94	124.68
22	C	513	CLA	CHB-C4A-NA	3.88	129.88	124.51
29	C	519	DGD	O3G-C3G-C2G	-3.88	101.55	110.90
22	b	713	CLA	O2D-CGD-CBD	3.87	118.14	111.27
29	C	518	DGD	O3G-C3G-C2G	-3.85	101.60	110.90
22	c	509	CLA	CHB-C4A-NA	3.84	129.82	124.51
22	c	508	CLA	O2D-CGD-O1D	-3.84	116.34	123.84
22	C	514	CLA	CMB-C2B-C1B	-3.83	122.57	128.46
26	B	723	SQD	O5-C5-C4	3.83	116.65	109.69
22	C	510	CLA	CHD-C1D-ND	-3.83	120.93	124.45
27	D	410	LHG	O4-P-O5	3.83	131.18	112.24
29	C	517	DGD	O3G-C3G-C2G	-3.83	101.66	110.90
22	B	707	CLA	CMB-C2B-C1B	-3.83	122.58	128.46
22	b	707	CLA	CMB-C2B-C1B	-3.81	122.61	128.46
22	C	510	CLA	CMB-C2B-C1B	-3.81	122.61	128.46
22	B	710	CLA	C4A-NA-C1A	3.80	108.42	106.71
22	B	713	CLA	CMB-C2B-C3B	3.80	131.79	124.68
22	b	716	CLA	C4A-NA-C1A	3.79	108.41	106.71
22	b	706	CLA	CMB-C2B-C3B	3.78	131.75	124.68
22	D	403	CLA	CMB-C2B-C3B	3.78	131.74	124.68
26	A	409	SQD	C1-O5-C5	-3.77	106.28	113.69
29	H	103	DGD	C3E-C4E-C5E	-3.77	103.51	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	d	406	LHG	O4-P-O5	3.77	130.89	112.24
22	C	512	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
32	a	410	BCT	O2-C-O1	3.76	129.29	119.55
22	H	102	CLA	CAA-CBA-CGA	-3.74	102.31	113.25
22	B	709	CLA	C4A-NA-C1A	3.74	108.39	106.71
26	D	409	SQD	C1-C2-C3	-3.74	102.20	110.00
34	D	407	PHO	O1D-CGD-CBD	3.74	130.97	124.74
22	B	712	CLA	C16-C15-C13	-3.73	103.86	115.92
26	f	101	SQD	O5-C5-C4	3.72	116.45	109.69
22	b	701	CLA	CHB-C4A-NA	3.72	129.66	124.51
22	A	404	CLA	CHD-C1D-ND	-3.72	121.04	124.45
22	B	710	CLA	CHB-C4A-NA	3.72	129.65	124.51
22	c	513	CLA	C1-C2-C3	-3.72	119.61	126.04
22	b	706	CLA	O2D-CGD-CBD	3.71	117.87	111.27
26	A	409	SQD	O47-C7-C8	3.71	119.50	111.50
22	c	513	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
22	b	714	CLA	CMB-C2B-C1B	-3.70	122.77	128.46
22	b	715	CLA	CMB-C2B-C3B	3.70	131.61	124.68
22	B	710	CLA	O2D-CGD-CBD	3.68	117.81	111.27
22	c	513	CLA	CHD-C1D-ND	-3.67	121.08	124.45
22	c	510	CLA	O2A-CGA-O1A	-3.67	114.34	123.59
27	B	722	LHG	O4-P-O5	3.66	130.34	112.24
22	a	404	CLA	CMB-C2B-C3B	3.65	131.50	124.68
26	a	415	SQD	O48-C23-O10	-3.65	114.39	123.59
34	D	407	PHO	CMB-C2B-C3B	3.65	131.50	124.68
25	d	404	PL9	C36-C34-C33	-3.64	113.74	121.12
22	d	401	CLA	C4A-NA-C1A	3.64	108.34	106.71
22	c	502	CLA	CMB-C2B-C1B	-3.64	122.87	128.46
22	b	701	CLA	O2D-CGD-O1D	-3.64	116.72	123.84
22	A	404	CLA	C1B-CHB-C4A	-3.64	122.91	130.12
27	l	101	LHG	O4-P-O5	3.63	130.19	112.24
27	a	412	LHG	O8-C23-C24	3.62	123.28	111.91
25	D	405	PL9	C22-C23-C24	-3.62	118.94	127.66
26	b	720	SQD	O47-C7-C8	3.62	119.29	111.50
22	C	504	CLA	C7-C6-C5	-3.61	103.55	113.36
26	b	720	SQD	O48-C23-C24	3.61	123.23	111.91
22	b	716	CLA	O2D-CGD-CBD	3.61	117.68	111.27
22	A	404	CLA	O2D-CGD-O1D	-3.61	116.79	123.84
25	a	411	PL9	C7-C3-C2	-3.60	118.56	123.30
22	B	708	CLA	CMB-C2B-C1B	-3.60	122.92	128.46
35	E	103	HEC	CMC-C2C-C1C	-3.60	122.93	128.46
22	b	711	CLA	CHD-C1D-ND	-3.60	121.14	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	C	504	CLA	CMB-C2B-C3B	3.60	131.41	124.68
23	C	515	BCR	C36-C18-C17	-3.59	117.89	122.92
22	a	404	CLA	O2D-CGD-CBD	3.59	117.65	111.27
22	b	703	CLA	CHD-C1D-ND	-3.59	121.16	124.45
22	c	514	CLA	CMB-C2B-C1B	-3.59	122.95	128.46
22	b	711	CLA	O2D-CGD-CBD	3.59	117.64	111.27
23	b	719	BCR	C37-C22-C21	-3.59	117.90	122.92
22	B	713	CLA	C1-C2-C3	-3.58	119.86	126.04
22	C	507	CLA	CMB-C2B-C3B	3.56	131.34	124.68
28	d	409	STE	O2-C1-C2	3.56	125.47	114.03
35	E	103	HEC	CMB-C2B-C3B	3.56	130.00	125.82
22	a	404	CLA	CHB-C4A-NA	3.55	129.43	124.51
22	c	510	CLA	CHB-C4A-NA	3.55	129.42	124.51
22	b	709	CLA	C4A-NA-C1A	3.55	108.30	106.71
29	A	413	DGD	O3G-C3G-C2G	-3.54	102.36	110.90
25	A	408	PL9	C36-C34-C33	-3.54	113.96	121.12
22	b	704	CLA	CHB-C4A-NA	3.53	129.40	124.51
29	C	518	DGD	O2D-C2D-C1D	-3.53	101.47	110.05
23	B	718	BCR	C15-C14-C13	-3.53	122.27	127.31
33	a	419	LMG	C1-O6-C5	-3.53	106.76	113.69
27	B	722	LHG	O8-C23-C24	3.52	122.97	111.91
22	B	706	CLA	CHD-C1D-ND	-3.52	121.22	124.45
22	b	703	CLA	C4A-NA-C1A	3.51	108.29	106.71
22	b	712	CLA	CMB-C2B-C3B	3.51	131.25	124.68
22	D	401	CLA	CMB-C2B-C1B	-3.51	123.07	128.46
22	C	502	CLA	O2D-CGD-O1D	-3.51	116.97	123.84
22	B	712	CLA	C11-C12-C13	-3.50	104.59	115.92
22	B	705	CLA	C7-C6-C5	-3.50	103.85	113.36
29	h	702	DGD	C4E-C3E-C2E	-3.50	104.72	110.82
22	c	503	CLA	C1B-CHB-C4A	-3.49	123.20	130.12
28	j	101	STE	O2-C1-C2	3.49	125.26	114.03
35	V	201	HEC	CMC-C2C-C3C	3.49	129.93	125.82
22	b	708	CLA	CHD-C1D-ND	-3.49	121.24	124.45
34	d	405	PHO	O1D-CGD-CBD	3.48	130.54	124.74
26	a	413	SQD	O9-S-O7	-3.48	101.89	113.95
23	B	718	BCR	C29-C30-C25	3.48	115.84	110.48
35	E	103	HEC	CBA-CAA-C2A	-3.48	106.74	112.60
22	a	403	CLA	C1B-CHB-C4A	-3.47	123.25	130.12
26	a	415	SQD	O47-C7-C8	3.47	118.97	111.50
33	b	721	LMG	O1-C1-C2	-3.46	102.89	108.30
25	D	405	PL9	C7-C3-C2	-3.46	118.76	123.30
22	C	504	CLA	CHD-C1D-ND	-3.45	121.28	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	c	503	CLA	CMB-C2B-C1B	-3.45	123.16	128.46
22	C	513	CLA	C1-C2-C3	-3.45	120.08	126.04
22	B	704	CLA	CHB-C4A-NA	3.45	129.28	124.51
26	b	720	SQD	O5-C5-C4	3.44	115.94	109.69
22	c	512	CLA	O2D-CGD-O1D	-3.44	117.12	123.84
22	B	702	CLA	O2D-CGD-O1D	-3.44	117.12	123.84
22	c	503	CLA	CMB-C2B-C3B	3.43	131.09	124.68
22	b	708	CLA	CMB-C2B-C3B	3.42	131.09	124.68
22	c	505	CLA	O2D-CGD-O1D	-3.42	117.15	123.84
22	B	711	CLA	CMB-C2B-C3B	3.42	131.07	124.68
22	c	502	CLA	O2D-CGD-CBD	3.42	117.34	111.27
26	B	723	SQD	O8-S-C6	3.42	111.18	105.74
27	a	412	LHG	O8-C23-O10	-3.41	114.98	123.59
33	C	520	LMG	O1-C1-C2	-3.40	102.99	108.30
22	b	704	CLA	O2D-CGD-O1D	-3.40	117.19	123.84
23	B	718	BCR	C35-C13-C14	-3.40	118.16	122.92
22	D	401	CLA	C1B-CHB-C4A	-3.39	123.39	130.12
25	d	404	PL9	C42-C43-C44	-3.38	119.52	127.66
22	b	704	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
33	d	408	LMG	O2-C2-C1	-3.38	101.83	110.05
22	c	508	CLA	C4A-NA-C1A	3.38	108.22	106.71
22	A	403	CLA	CMB-C2B-C3B	3.36	130.97	124.68
22	B	707	CLA	CMB-C2B-C3B	3.35	130.95	124.68
22	c	507	CLA	CHB-C4A-NA	3.35	129.14	124.51
22	b	709	CLA	C1B-CHB-C4A	-3.35	123.49	130.12
22	c	507	CLA	CMB-C2B-C3B	3.34	130.94	124.68
26	b	720	SQD	O9-S-C6	3.34	110.91	106.94
22	C	511	CLA	O2D-CGD-O1D	-3.34	117.31	123.84
23	b	719	BCR	C36-C18-C17	-3.34	118.25	122.92
22	B	710	CLA	C1B-CHB-C4A	-3.34	123.51	130.12
22	B	708	CLA	CHD-C1D-ND	-3.34	121.39	124.45
22	B	711	CLA	O2D-CGD-O1D	-3.33	117.32	123.84
22	b	710	CLA	C1B-CHB-C4A	-3.33	123.52	130.12
22	c	510	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
26	B	723	SQD	O9-S-O7	-3.33	102.43	113.95
22	C	513	CLA	CHD-C1D-ND	-3.33	121.40	124.45
22	B	714	CLA	C4-C3-C5	3.32	120.86	115.27
23	D	404	BCR	C3-C4-C5	-3.32	108.15	114.08
22	c	502	CLA	CHD-C1D-ND	-3.32	121.40	124.45
22	c	511	CLA	CMB-C2B-C3B	3.32	130.88	124.68
22	C	504	CLA	O2A-C1-C2	-3.32	99.92	108.64
22	C	502	CLA	CMB-C2B-C1B	-3.32	123.37	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	C	510	CLA	CMB-C2B-C3B	3.31	130.86	124.68
22	a	406	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
22	a	401	CLA	CMC-C2C-C1C	3.30	130.07	125.04
22	B	702	CLA	C4A-NA-C1A	3.30	108.19	106.71
22	H	102	CLA	CAA-C2A-C3A	-3.30	103.75	112.78
22	B	708	CLA	CMB-C2B-C3B	3.30	130.85	124.68
25	A	408	PL9	C20-C19-C21	3.29	120.81	115.27
22	B	704	CLA	C2D-C1D-ND	-3.29	107.68	110.10
23	T	701	BCR	C7-C8-C9	-3.29	121.26	126.23
34	d	405	PHO	O2D-CGD-O1D	-3.29	117.41	123.84
22	b	711	CLA	CMB-C2B-C3B	3.29	130.83	124.68
25	a	411	PL9	C36-C34-C33	-3.29	114.47	121.12
22	b	703	CLA	C4-C3-C5	3.28	120.80	115.27
22	b	705	CLA	O2D-CGD-O1D	-3.28	117.42	123.84
28	m	101	STE	O2-C1-O1	-3.28	115.13	123.30
33	b	721	LMG	O3-C3-C2	-3.28	102.77	110.35
23	K	101	BCR	C11-C10-C9	-3.28	122.63	127.31
33	C	516	LMG	O6-C1-O1	-3.27	102.23	109.97
22	b	716	CLA	C1B-CHB-C4A	-3.27	123.64	130.12
22	B	704	CLA	O2D-CGD-O1D	-3.27	117.45	123.84
22	a	401	CLA	CMB-C2B-C3B	3.26	130.78	124.68
22	C	508	CLA	CHB-C4A-NA	3.26	129.02	124.51
22	b	702	CLA	C1B-CHB-C4A	-3.26	123.67	130.12
22	c	504	CLA	CHB-C4A-NA	3.25	129.01	124.51
22	a	406	CLA	O2A-CGA-O1A	-3.25	115.38	123.59
25	a	411	PL9	C35-C34-C36	3.24	120.73	115.27
35	e	101	HEC	CMC-C2C-C1C	-3.24	123.48	128.46
22	b	702	CLA	CHD-C1D-ND	-3.24	121.48	124.45
26	a	413	SQD	C1-C2-C3	-3.24	103.26	110.00
23	c	516	BCR	C35-C13-C14	-3.24	118.39	122.92
32	A	417	BCT	O3-C-O1	-3.23	111.16	119.55
22	D	403	CLA	O2D-CGD-CBD	3.23	117.01	111.27
34	D	407	PHO	O2D-CGD-O1D	-3.23	117.52	123.84
23	T	701	BCR	C27-C26-C25	3.22	127.41	122.73
25	d	404	PL9	C41-C39-C38	-3.22	114.60	121.12
22	b	705	CLA	CHD-C1D-ND	-3.22	121.50	124.45
22	b	707	CLA	CMB-C2B-C3B	3.21	130.69	124.68
22	C	506	CLA	CHD-C1D-ND	-3.21	121.50	124.45
22	c	503	CLA	O2D-CGD-O1D	-3.21	117.57	123.84
22	d	401	CLA	O2D-CGD-O1D	-3.20	117.57	123.84
22	D	402	CLA	CMB-C2B-C3B	3.20	130.67	124.68
22	b	713	CLA	O2D-CGD-O1D	-3.20	117.58	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	a	404	CLA	C1B-CHB-C4A	-3.20	123.78	130.12
26	a	413	SQD	O7-S-C6	3.19	110.74	106.94
29	A	413	DGD	O5D-C6D-C5D	-3.19	103.14	109.05
22	a	404	CLA	CAC-C3C-C4C	3.19	128.95	124.81
33	b	723	LMG	C3-C4-C5	-3.18	104.58	110.24
26	a	415	SQD	O48-C23-C24	3.17	121.84	111.91
22	B	710	CLA	O2A-CGA-O1A	-3.16	115.63	123.59
29	h	702	DGD	C1D-O6D-C5D	-3.15	107.50	113.69
29	c	517	DGD	O3G-C3G-C2G	-3.15	103.29	110.90
22	c	503	CLA	CHD-C1D-ND	-3.15	121.56	124.45
22	B	714	CLA	CHB-C4A-NA	3.15	128.87	124.51
22	b	707	CLA	C4-C3-C5	3.15	120.57	115.27
22	b	708	CLA	O2D-CGD-O1D	-3.14	117.69	123.84
25	d	404	PL9	C37-C38-C39	-3.14	120.10	127.66
33	c	522	LMG	C1-O6-C5	-3.13	107.53	113.69
26	A	409	SQD	O47-C7-O49	-3.12	116.15	123.70
22	A	403	CLA	CHD-C1D-ND	-3.12	121.59	124.45
22	c	506	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
22	c	503	CLA	O1D-CGD-CBD	3.11	130.84	124.48
23	A	405	BCR	C27-C26-C25	3.10	127.24	122.73
22	c	508	CLA	CMB-C2B-C1B	-3.10	123.69	128.46
22	b	702	CLA	O2D-CGD-CBD	3.10	116.78	111.27
22	b	704	CLA	CHD-C1D-ND	-3.10	121.61	124.45
23	c	516	BCR	C27-C26-C25	3.10	127.23	122.73
22	c	502	CLA	CMB-C2B-C3B	3.09	130.47	124.68
22	b	713	CLA	CMB-C2B-C3B	3.09	130.46	124.68
22	c	512	CLA	O2D-CGD-CBD	3.09	116.76	111.27
23	k	102	BCR	C2-C1-C6	3.09	115.24	110.48
22	B	714	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
33	C	520	LMG	O2-C2-C1	-3.08	102.55	110.05
23	H	101	BCR	C2-C1-C6	3.08	115.23	110.48
29	h	702	DGD	O2D-C2D-C1D	-3.08	102.56	110.05
23	B	719	BCR	C29-C30-C25	3.08	115.23	110.48
22	H	102	CLA	O2D-CGD-O1D	-3.08	117.82	123.84
23	K	101	BCR	C2-C1-C6	3.08	115.22	110.48
22	b	703	CLA	C1B-CHB-C4A	-3.08	124.03	130.12
22	c	508	CLA	C2C-C1C-NC	3.07	112.85	109.97
22	C	505	CLA	O2A-CGA-O1A	-3.07	115.85	123.59
22	B	709	CLA	CMB-C2B-C3B	3.06	130.41	124.68
26	a	413	SQD	O9-S-C6	3.06	110.58	106.94
23	B	719	BCR	C3-C4-C5	-3.06	108.61	114.08
26	b	720	SQD	O2-C2-C1	3.06	117.47	110.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	A	404	CLA	C2C-C1C-NC	3.06	112.83	109.97
22	b	715	CLA	O2D-CGD-O1D	-3.05	117.87	123.84
22	B	702	CLA	CHB-C4A-NA	3.05	128.73	124.51
26	B	723	SQD	O48-C23-O10	-3.05	115.89	123.59
34	d	405	PHO	CMC-C2C-C3C	3.05	130.69	124.94
22	B	713	CLA	C4-C3-C5	3.05	120.40	115.27
23	C	515	BCR	C15-C16-C17	-3.05	117.23	123.47
23	a	407	BCR	C2-C1-C6	3.04	115.17	110.48
22	D	402	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
22	b	703	CLA	O2D-CGD-CBD	3.04	116.67	111.27
22	B	713	CLA	CAC-C3C-C4C	3.04	128.75	124.81
22	A	404	CLA	O2D-CGD-CBD	3.03	116.66	111.27
22	C	514	CLA	CMB-C2B-C3B	3.03	130.35	124.68
22	C	514	CLA	O2D-CGD-O1D	-3.03	117.91	123.84
22	C	514	CLA	O2A-CGA-O1A	-3.02	115.98	123.59
22	B	706	CLA	O2A-CGA-O1A	-3.02	115.98	123.59
22	B	716	CLA	O2D-CGD-O1D	-3.01	117.96	123.84
22	c	514	CLA	CHB-C4A-NA	3.00	128.66	124.51
22	c	510	CLA	CMB-C2B-C3B	3.00	130.29	124.68
22	A	403	CLA	CED-O2D-CGD	-2.99	109.16	115.94
22	B	715	CLA	O2D-CGD-CBD	2.99	116.58	111.27
34	a	405	PHO	CMB-C2B-C3B	2.99	130.27	124.68
29	c	519	DGD	O3G-C3G-C2G	-2.99	103.69	110.90
28	m	101	STE	O2-C1-C2	2.99	123.63	114.03
26	a	415	SQD	O49-C7-C8	-2.98	112.10	123.73
23	c	515	BCR	C2-C1-C6	2.97	115.06	110.48
22	C	505	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
26	f	101	SQD	C1-C2-C3	-2.97	103.81	110.00
25	A	408	PL9	C7-C3-C2	-2.97	119.39	123.30
25	A	408	PL9	C25-C24-C26	2.96	120.25	115.27
22	b	714	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
22	B	713	CLA	CHB-C4A-NA	2.96	128.60	124.51
26	B	723	SQD	O48-C23-C24	2.96	121.19	111.91
33	D	408	LMG	C3-C4-C5	-2.96	104.96	110.24
22	D	401	CLA	CMB-C2B-C3B	2.96	130.21	124.68
22	C	513	CLA	O2A-CGA-O1A	-2.95	116.14	123.59
22	c	507	CLA	C1B-CHB-C4A	-2.95	124.27	130.12
22	c	514	CLA	O2D-CGD-O1D	-2.95	118.07	123.84
26	b	720	SQD	C1-C2-C3	-2.95	103.85	110.00
35	v	201	HEC	CMB-C2B-C1B	-2.95	123.93	128.46
22	c	504	CLA	CHD-C1D-ND	-2.95	121.75	124.45
23	h	701	BCR	C36-C18-C17	-2.94	118.80	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	C	518	DGD	C1D-O6D-C5D	-2.94	107.92	113.69
23	b	719	BCR	C2-C1-C6	2.94	115.01	110.48
22	c	506	CLA	CHD-C1D-ND	-2.94	121.75	124.45
29	c	517	DGD	C4E-C3E-C2E	-2.94	105.69	110.82
22	A	403	CLA	C1B-CHB-C4A	-2.94	124.30	130.12
29	H	103	DGD	O2D-C2D-C1D	-2.94	102.91	110.05
28	C	521	STE	C3-C2-C1	-2.94	107.07	114.47
22	b	714	CLA	C1B-CHB-C4A	-2.93	124.31	130.12
29	h	702	DGD	CDB-CCB-CBB	-2.93	99.55	114.42
25	D	405	PL9	C32-C33-C34	-2.93	120.61	127.66
22	b	713	CLA	CHB-C4A-NA	2.93	128.56	124.51
25	d	404	PL9	C22-C23-C24	-2.92	120.62	127.66
22	a	403	CLA	O1D-CGD-CBD	2.92	130.46	124.48
29	C	519	DGD	O6D-C1D-O3G	-2.92	103.06	109.97
22	b	702	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
23	c	516	BCR	C8-C9-C10	2.91	123.41	118.94
23	t	701	BCR	C31-C1-C6	2.91	115.03	110.30
22	B	708	CLA	C1C-C2C-C3C	-2.91	103.89	106.96
35	v	201	HEC	CBD-CAD-C3D	-2.91	107.65	112.62
22	B	714	CLA	C1B-CHB-C4A	-2.91	124.35	130.12
22	C	513	CLA	O2D-CGD-CBD	2.91	116.44	111.27
35	V	201	HEC	CMB-C2B-C1B	-2.91	123.99	128.46
22	c	511	CLA	O1D-CGD-CBD	2.91	130.44	124.48
33	D	408	LMG	O3-C3-C2	-2.91	103.63	110.35
26	a	413	SQD	C3-C4-C5	2.91	115.42	110.24
22	B	715	CLA	CHB-C4A-NA	2.90	128.53	124.51
26	A	409	SQD	O48-C23-O10	-2.90	116.27	123.59
22	C	502	CLA	O2A-CGA-O1A	-2.90	116.27	123.59
22	d	402	CLA	C1B-CHB-C4A	-2.90	124.37	130.12
22	b	710	CLA	CHB-C4A-NA	2.90	128.52	124.51
34	a	405	PHO	C1-C2-C3	-2.89	121.04	126.04
22	B	706	CLA	CHB-C4A-NA	2.89	128.51	124.51
29	C	517	DGD	C6D-O5D-C1E	2.89	119.39	113.74
35	e	101	HEC	CMB-C2B-C1B	-2.89	124.02	128.46
26	D	409	SQD	O48-C23-O10	-2.89	116.30	123.59
22	C	514	CLA	C6-C5-C3	2.89	121.03	113.45
25	D	405	PL9	C42-C43-C44	-2.89	120.70	127.66
25	D	405	PL9	C20-C19-C21	2.88	120.12	115.27
22	C	513	CLA	CMB-C2B-C1B	-2.88	124.04	128.46
23	d	403	BCR	C2-C1-C6	2.88	114.91	110.48
22	b	701	CLA	O1D-CGD-CBD	2.88	130.37	124.48
22	b	714	CLA	CHB-C4A-NA	2.88	128.49	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	C	511	CLA	C1B-CHB-C4A	-2.88	124.42	130.12
26	a	413	SQD	O47-C7-O49	-2.87	116.76	123.70
28	J	101	STE	C3-C2-C1	-2.87	107.23	114.47
22	c	507	CLA	C1-O2A-CGA	2.87	123.98	116.44
23	d	403	BCR	C27-C26-C25	2.87	126.90	122.73
22	b	706	CLA	C1B-CHB-C4A	-2.87	124.43	130.12
26	D	409	SQD	O48-C23-C24	2.87	120.91	111.91
26	B	723	SQD	C3-C4-C5	2.86	115.34	110.24
23	B	719	BCR	C15-C16-C17	-2.86	117.61	123.47
22	B	712	CLA	CHB-C4A-NA	2.86	128.47	124.51
33	b	723	LMG	O1-C7-C8	-2.86	104.01	110.90
29	h	702	DGD	O3E-C3E-C2E	-2.85	103.75	110.35
23	c	516	BCR	C15-C16-C17	-2.84	117.65	123.47
22	B	704	CLA	O2A-CGA-O1A	-2.84	116.42	123.59
22	c	507	CLA	CBC-CAC-C3C	-2.84	104.60	112.43
22	c	507	CLA	C4-C3-C2	-2.84	116.39	123.68
23	A	405	BCR	C37-C22-C21	-2.84	118.94	122.92
22	C	512	CLA	CMB-C2B-C3B	2.84	129.99	124.68
28	x	101	STE	C3-C2-C1	-2.84	107.32	114.47
26	b	720	SQD	C3-C4-C5	2.83	115.30	110.24
29	H	103	DGD	C1E-O6E-C5E	2.83	119.25	113.69
23	d	403	BCR	C38-C26-C25	-2.83	121.35	124.53
22	C	513	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
22	B	703	CLA	C3B-C4B-NB	-2.83	105.55	109.21
22	b	708	CLA	C3B-C4B-NB	-2.83	105.56	109.21
22	A	402	CLA	CHB-C4A-NA	2.83	128.42	124.51
26	b	720	SQD	O9-S-O7	-2.82	104.17	113.95
22	b	710	CLA	C1-C2-C3	-2.82	121.16	126.04
34	D	406	PHO	OBD-CAD-CBD	-2.82	121.68	125.82
34	d	405	PHO	C1-C2-C3	-2.82	121.16	126.04
22	b	710	CLA	O2A-CGA-O1A	-2.82	116.47	123.59
29	c	518	DGD	O6D-C1D-O3G	-2.82	103.30	109.97
35	e	101	HEC	CMC-C2C-C3C	-2.82	122.51	125.82
34	D	406	PHO	C5-C3-C2	2.81	126.81	121.12
27	B	722	LHG	O8-C23-O10	-2.81	116.50	123.59
26	f	101	SQD	C44-O6-C1	2.81	119.22	113.74
29	c	517	DGD	CDB-CCB-CBB	-2.81	100.18	114.42
34	a	405	PHO	OBD-CAD-CBD	-2.81	121.71	125.82
22	A	404	CLA	CHB-C4A-NA	2.80	128.39	124.51
23	a	407	BCR	C40-C30-C25	2.80	114.84	110.30
23	C	515	BCR	C37-C22-C21	-2.79	119.01	122.92
22	A	402	CLA	C4A-NA-C1A	2.79	107.96	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	b	709	CLA	O2D-CGD-O1D	-2.79	118.38	123.84
22	b	707	CLA	C1-O2A-CGA	2.79	123.76	116.44
23	h	701	BCR	C15-C16-C17	-2.79	117.77	123.47
33	M	101	LMG	C1-C2-C3	-2.78	104.20	110.00
22	C	507	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
33	D	408	LMG	O1-C1-C2	-2.78	103.96	108.30
22	c	508	CLA	CHD-C1D-ND	-2.78	121.90	124.45
26	b	720	SQD	O5-C1-C2	-2.78	104.47	110.35
22	b	716	CLA	CHD-C1D-ND	-2.78	121.90	124.45
29	c	518	DGD	C3E-C4E-C5E	-2.78	105.29	110.24
23	B	717	BCR	C29-C30-C25	2.77	114.75	110.48
22	b	716	CLA	CHB-C4A-NA	2.77	128.35	124.51
22	D	403	CLA	C1B-CHB-C4A	-2.77	124.62	130.12
22	d	401	CLA	C1B-CHB-C4A	-2.77	124.63	130.12
29	A	413	DGD	O3G-C1D-C2D	-2.77	103.98	108.30
26	A	412	SQD	O47-C7-C8	2.76	117.44	111.50
22	a	401	CLA	CHB-C4A-NA	2.76	128.32	124.51
22	b	707	CLA	C6-C7-C8	-2.75	107.03	115.92
22	b	705	CLA	O2A-C1-C2	-2.75	101.42	108.64
22	C	505	CLA	CMB-C2B-C1B	-2.74	124.25	128.46
23	B	718	BCR	C38-C26-C25	-2.74	121.45	124.53
22	C	507	CLA	O2A-CGA-O1A	-2.74	116.67	123.59
23	b	717	BCR	C29-C30-C25	2.74	114.70	110.48
33	b	721	LMG	O1-C7-C8	-2.74	104.29	110.90
22	c	514	CLA	CMB-C2B-C3B	2.74	129.80	124.68
23	c	516	BCR	C2-C1-C6	2.74	114.69	110.48
23	Y	101	BCR	C37-C22-C21	-2.73	119.09	122.92
22	B	713	CLA	C7-C6-C5	-2.73	105.95	113.36
22	b	704	CLA	C11-C12-C13	-2.73	107.11	115.92
25	a	411	PL9	C26-C24-C23	-2.73	115.60	121.12
28	d	409	STE	O2-C1-O1	-2.72	116.51	123.30
34	D	407	PHO	C1B-NB-C4B	2.72	112.69	107.09
22	B	709	CLA	CMB-C2B-C1B	-2.72	124.28	128.46
22	a	401	CLA	C2A-C1A-CHA	2.72	128.62	123.86
33	c	520	LMG	O6-C1-O1	-2.72	103.53	109.97
22	C	502	CLA	CHD-C1D-ND	-2.72	121.95	124.45
22	C	510	CLA	CED-O2D-CGD	2.72	122.09	115.94
23	C	501	BCR	C2-C1-C6	2.72	114.66	110.48
22	B	715	CLA	CMB-C2B-C1B	-2.72	124.29	128.46
28	b	725	STE	C3-C2-C1	-2.71	107.63	114.47
26	f	101	SQD	O8-S-C6	2.71	110.06	105.74
22	c	503	CLA	CED-O2D-CGD	2.71	122.07	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	c	509	CLA	CMB-C2B-C1B	-2.71	124.30	128.46
22	B	702	CLA	O2A-CGA-O1A	-2.71	116.76	123.59
22	B	716	CLA	CAA-CBA-CGA	-2.71	105.34	113.25
23	h	701	BCR	C27-C26-C25	2.71	126.66	122.73
23	A	405	BCR	C36-C18-C17	-2.70	119.13	122.92
22	c	512	CLA	CMB-C2B-C1B	-2.70	124.31	128.46
23	D	404	BCR	C2-C1-C6	2.70	114.64	110.48
22	c	510	CLA	O2D-CGD-O1D	-2.70	118.56	123.84
22	C	503	CLA	CMD-C2D-C3D	2.70	133.82	127.61
25	d	404	PL9	C47-C48-C49	-2.69	118.56	127.75
22	a	403	CLA	CHA-C4D-ND	2.69	138.12	132.50
23	B	718	BCR	C3-C4-C5	-2.68	109.28	114.08
29	C	518	DGD	O4D-C4D-C3D	2.68	116.55	110.35
33	b	723	LMG	O7-C10-O9	-2.68	117.22	123.70
22	C	510	CLA	CHB-C4A-NA	2.68	128.22	124.51
33	M	101	LMG	C1-O6-C5	-2.68	108.43	113.69
27	D	410	LHG	C18-C17-C16	-2.68	100.84	114.42
22	D	401	CLA	C1-C2-C3	-2.67	121.42	126.04
22	c	503	CLA	CHB-C4A-NA	2.67	128.21	124.51
22	C	509	CLA	O2D-CGD-O1D	-2.67	118.62	123.84
33	b	721	LMG	O7-C10-O9	-2.67	117.25	123.70
33	M	101	LMG	O7-C10-O9	-2.67	117.26	123.70
22	b	702	CLA	CHC-C1C-NC	2.67	128.25	124.20
25	D	405	PL9	C41-C39-C38	-2.66	115.73	121.12
23	k	101	BCR	C38-C26-C25	-2.66	121.54	124.53
29	C	518	DGD	C3D-C4D-C5D	-2.66	105.49	110.24
22	H	102	CLA	C1B-CHB-C4A	-2.66	124.85	130.12
22	b	708	CLA	CHB-C4A-NA	2.66	128.19	124.51
22	D	401	CLA	C4A-NA-C1A	2.66	107.90	106.71
22	B	710	CLA	CMD-C2D-C3D	2.66	133.73	127.61
22	c	510	CLA	C1B-CHB-C4A	-2.66	124.86	130.12
23	B	717	BCR	C38-C26-C25	-2.66	121.55	124.53
22	C	506	CLA	CMB-C2B-C1B	-2.65	124.39	128.46
22	b	707	CLA	C4A-NA-C1A	2.65	107.90	106.71
22	b	710	CLA	CAA-CBA-CGA	-2.65	105.52	113.25
22	C	507	CLA	O1D-CGD-CBD	2.64	129.90	124.48
29	A	413	DGD	O2D-C2D-C1D	-2.64	103.63	110.05
29	H	103	DGD	C1D-C2D-C3D	-2.64	104.50	110.00
22	C	505	CLA	C4-C3-C5	2.64	119.71	115.27
29	C	517	DGD	C4E-C3E-C2E	-2.64	106.22	110.82
29	c	519	DGD	O6D-C1D-O3G	-2.64	103.73	109.97
22	b	711	CLA	CMC-C2C-C1C	-2.64	121.03	125.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	M	101	LMG	C38-C37-C36	-2.64	101.05	114.42
23	C	515	BCR	C2-C1-C6	2.64	114.54	110.48
25	a	411	PL9	C40-C39-C41	2.63	119.70	115.27
29	h	702	DGD	C3D-C4D-C5D	-2.63	105.55	110.24
33	c	523	LMG	C1-O6-C5	-2.63	108.53	113.69
23	b	719	BCR	C12-C13-C14	-2.63	114.91	118.94
26	f	101	SQD	O47-C7-O49	-2.63	117.35	123.70
22	B	713	CLA	O2A-CGA-O1A	-2.63	116.96	123.59
22	B	715	CLA	C5-C3-C2	-2.63	115.80	121.12
23	K	101	BCR	C15-C16-C17	-2.63	118.09	123.47
22	B	706	CLA	C6-C5-C3	-2.62	106.57	113.45
22	B	703	CLA	C4-C3-C5	2.62	119.68	115.27
23	k	102	BCR	C24-C23-C22	-2.62	122.27	126.23
23	b	717	BCR	C27-C26-C25	2.62	126.54	122.73
23	b	717	BCR	C15-C14-C13	-2.62	123.57	127.31
22	B	708	CLA	C3C-C4C-NC	-2.62	107.63	110.57
22	B	713	CLA	CHA-C1A-NA	-2.62	120.40	126.40
22	c	513	CLA	CHC-C1C-NC	2.62	128.17	124.20
33	b	723	LMG	O8-C28-O10	-2.62	116.99	123.59
22	B	707	CLA	C1B-CHB-C4A	-2.61	124.94	130.12
23	H	101	BCR	C16-C15-C14	-2.60	118.14	123.47
27	B	722	LHG	C20-C19-C18	-2.60	101.21	114.42
22	b	714	CLA	CMB-C2B-C3B	2.60	129.55	124.68
23	d	403	BCR	C24-C23-C22	-2.60	122.30	126.23
25	A	408	PL9	C32-C33-C34	-2.60	121.39	127.66
23	D	404	BCR	C24-C23-C22	-2.60	122.31	126.23
22	c	507	CLA	O1D-CGD-CBD	2.60	129.80	124.48
22	b	705	CLA	O1D-CGD-CBD	2.60	129.80	124.48
23	c	516	BCR	C36-C18-C17	-2.60	119.28	122.92
22	H	102	CLA	C4-C3-C5	2.60	119.64	115.27
22	b	705	CLA	C2D-C1D-ND	-2.60	108.19	110.10
25	A	408	PL9	C35-C34-C33	-2.59	117.02	123.68
28	C	523	STE	C3-C2-C1	-2.59	107.93	114.47
32	a	410	BCT	O3-C-O1	-2.59	112.82	119.55
26	A	409	SQD	C3-C4-C5	2.59	114.86	110.24
23	b	718	BCR	C8-C7-C6	-2.59	119.93	127.20
23	b	718	BCR	C30-C25-C26	-2.59	118.97	122.61
23	d	403	BCR	C16-C15-C14	-2.59	118.17	123.47
29	A	413	DGD	C3E-C4E-C5E	-2.59	105.62	110.24
26	f	101	SQD	C45-O47-C7	2.59	124.16	117.79
22	c	509	CLA	CHD-C1D-C2D	2.59	130.90	125.48
22	C	512	CLA	CHB-C4A-NA	2.59	128.09	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	c	508	CLA	CMB-C2B-C3B	2.58	129.51	124.68
22	b	712	CLA	O1D-CGD-CBD	2.58	129.77	124.48
23	T	701	BCR	C31-C1-C6	2.58	114.49	110.30
22	B	709	CLA	C1B-CHB-C4A	-2.58	125.00	130.12
22	B	715	CLA	CHD-C1D-ND	-2.58	122.08	124.45
26	D	409	SQD	C3-C4-C5	2.58	114.84	110.24
28	B	720	STE	C3-C2-C1	-2.58	107.97	114.47
22	c	505	CLA	O2A-CGA-O1A	-2.58	117.09	123.59
22	C	505	CLA	CHD-C1D-ND	-2.58	122.09	124.45
29	C	519	DGD	CBB-CAB-C9B	-2.58	101.35	114.42
22	B	703	CLA	CMB-C2B-C3B	2.58	129.50	124.68
22	B	712	CLA	O2D-CGD-CBD	2.57	115.84	111.27
23	t	701	BCR	C1-C6-C5	-2.57	118.99	122.61
25	a	411	PL9	C37-C38-C39	-2.57	121.47	127.66
29	C	519	DGD	O2D-C2D-C1D	-2.57	103.81	110.05
22	B	714	CLA	CMB-C2B-C1B	-2.56	124.53	128.46
26	A	409	SQD	O48-C23-C24	2.56	119.95	111.91
22	C	513	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
33	a	419	LMG	C9-C8-C7	-2.56	105.73	111.79
23	a	407	BCR	C34-C9-C10	-2.56	119.34	122.92
22	b	704	CLA	CMB-C2B-C3B	2.56	129.46	124.68
22	a	406	CLA	CMB-C2B-C3B	2.55	129.46	124.68
22	b	713	CLA	C2C-C1C-NC	2.55	112.36	109.97
22	b	712	CLA	C11-C12-C13	-2.55	107.68	115.92
29	A	413	DGD	C3G-C2G-C1G	-2.55	105.77	111.79
23	Y	101	BCR	C27-C26-C25	2.54	126.43	122.73
22	C	514	CLA	CHB-C4A-NA	2.54	128.03	124.51
22	d	401	CLA	CHD-C1D-ND	-2.54	122.12	124.45
23	A	405	BCR	C16-C15-C14	-2.54	118.28	123.47
22	D	402	CLA	CHB-C4A-NA	2.54	128.02	124.51
22	C	507	CLA	C4-C3-C5	2.53	119.53	115.27
22	B	711	CLA	CHD-C1D-ND	-2.53	122.13	124.45
22	c	508	CLA	O1D-CGD-CBD	2.53	129.66	124.48
22	c	511	CLA	C1B-CHB-C4A	-2.53	125.11	130.12
29	A	413	DGD	C3G-O3G-C1D	2.53	118.68	113.74
28	B	724	STE	C3-C2-C1	-2.53	108.10	114.47
22	B	712	CLA	CHD-C4C-C3C	-2.53	121.13	124.84
29	A	413	DGD	CDB-CCB-CBB	-2.53	101.61	114.42
22	C	506	CLA	CMB-C2B-C3B	2.52	129.40	124.68
22	c	508	CLA	O2A-CGA-O1A	-2.52	117.23	123.59
22	B	709	CLA	CAC-C3C-C4C	2.52	128.08	124.81
33	d	408	LMG	O6-C1-O1	-2.52	104.01	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	a	404	CLA	C2D-C1D-ND	-2.52	108.25	110.10
22	b	704	CLA	C2D-C1D-ND	-2.52	108.25	110.10
25	a	411	PL9	C11-C12-C13	-2.52	103.60	111.88
33	d	408	LMG	C7-O1-C1	-2.52	108.82	113.74
22	B	710	CLA	CAA-C2A-C3A	-2.52	105.89	112.78
22	B	705	CLA	C4A-NA-C1A	2.52	107.84	106.71
22	d	402	CLA	C1D-ND-C4D	-2.51	104.55	106.33
22	C	504	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
22	C	512	CLA	O2D-CGD-O1D	-2.51	118.93	123.84
22	c	509	CLA	O2D-CGD-CBD	2.51	115.72	111.27
22	a	403	CLA	O2A-CGA-O1A	-2.51	117.27	123.59
22	d	402	CLA	CHD-C1D-ND	-2.51	122.15	124.45
22	C	510	CLA	CMC-C2C-C1C	-2.51	121.22	125.04
22	H	102	CLA	CHB-C4A-NA	2.51	127.98	124.51
29	h	702	DGD	C4B-C3B-C2B	-2.50	104.19	113.19
22	A	402	CLA	C11-C12-C13	-2.50	107.83	115.92
29	C	518	DGD	O6D-C1D-O3G	-2.50	104.05	109.97
22	b	701	CLA	CMB-C2B-C1B	-2.50	124.62	128.46
22	B	712	CLA	O2A-CGA-O1A	-2.50	117.28	123.59
23	k	102	BCR	C27-C26-C25	2.50	126.36	122.73
22	c	510	CLA	C11-C10-C8	-2.50	107.84	115.92
22	B	702	CLA	C16-C15-C13	-2.50	107.84	115.92
22	c	504	CLA	C7-C6-C5	-2.50	106.57	113.36
26	f	101	SQD	O9-S-C6	2.50	109.91	106.94
22	b	710	CLA	CHA-C1A-NA	-2.50	120.68	126.40
22	B	703	CLA	C1B-CHB-C4A	-2.50	125.17	130.12
22	b	712	CLA	O2D-CGD-O1D	-2.49	118.96	123.84
25	d	404	PL9	C31-C32-C33	-2.49	103.69	111.88
22	C	506	CLA	CHB-C4A-NA	2.49	127.96	124.51
23	B	718	BCR	C2-C1-C6	2.49	114.32	110.48
22	A	404	CLA	C1D-ND-C4D	-2.49	104.57	106.33
22	B	702	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
22	c	506	CLA	CMB-C2B-C1B	-2.49	124.64	128.46
22	b	702	CLA	C1-C2-C3	-2.49	121.74	126.04
29	H	103	DGD	O3G-C1D-C2D	-2.49	104.42	108.30
22	c	508	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
26	b	720	SQD	C45-O47-C7	2.49	123.91	117.79
23	t	701	BCR	C36-C18-C19	2.48	121.99	118.08
29	c	517	DGD	CAB-C9B-C8B	-2.48	101.82	114.42
29	C	517	DGD	C6B-C5B-C4B	-2.48	101.83	114.42
22	b	707	CLA	CED-O2D-CGD	2.48	121.55	115.94
22	H	102	CLA	O2A-CGA-O1A	-2.48	117.33	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	D	404	BCR	C27-C26-C25	2.48	126.33	122.73
23	T	701	BCR	C38-C26-C27	-2.48	108.86	113.62
22	d	401	CLA	C4-C3-C5	2.48	119.44	115.27
29	h	702	DGD	O5D-C6D-C5D	-2.48	104.47	109.05
23	Y	101	BCR	C15-C16-C17	-2.47	118.41	123.47
27	l	101	LHG	O8-C23-O10	-2.47	117.36	123.59
23	T	701	BCR	C2-C1-C6	2.47	114.28	110.48
22	C	506	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
22	B	706	CLA	O2D-CGD-O1D	-2.47	119.02	123.84
22	C	511	CLA	CHB-C4A-NA	2.47	127.92	124.51
29	c	517	DGD	O3G-C1D-C2D	-2.46	104.45	108.30
23	K	101	BCR	C15-C14-C13	-2.46	123.79	127.31
23	t	701	BCR	C27-C26-C25	2.46	126.31	122.73
22	b	710	CLA	C2C-C1C-NC	2.46	112.28	109.97
22	C	514	CLA	CHD-C1D-ND	-2.46	122.19	124.45
23	H	101	BCR	C38-C26-C25	-2.46	121.76	124.53
29	c	519	DGD	O5D-C1E-C2E	2.46	112.15	108.30
22	a	403	CLA	C4A-NA-C1A	2.46	107.81	106.71
33	C	516	LMG	C40-C39-C38	-2.46	101.95	114.42
25	A	408	PL9	C27-C28-C29	-2.46	121.75	127.66
23	b	718	BCR	C27-C26-C25	2.46	126.30	122.73
22	B	702	CLA	CHC-C1C-NC	2.46	127.93	124.20
26	A	409	SQD	O4-C4-C3	-2.46	104.67	110.35
33	c	523	LMG	O6-C1-O1	-2.46	104.16	109.97
22	A	403	CLA	C4A-NA-C1A	2.45	107.81	106.71
26	D	409	SQD	O9-S-O7	-2.45	105.46	113.95
22	C	511	CLA	O2D-CGD-CBD	2.45	115.62	111.27
22	A	403	CLA	O2D-CGD-O1D	-2.45	119.06	123.84
23	b	717	BCR	C3-C4-C5	-2.45	109.71	114.08
29	H	103	DGD	C3G-C2G-C1G	-2.44	106.01	111.79
22	H	102	CLA	CHA-C4D-ND	2.44	137.61	132.50
25	d	404	PL9	C35-C34-C36	2.44	119.38	115.27
28	J	101	STE	O2-C1-C2	2.44	121.87	114.03
29	A	413	DGD	C1D-C2D-C3D	-2.44	104.91	110.00
23	C	515	BCR	C38-C26-C25	-2.44	121.79	124.53
22	a	401	CLA	CMD-C2D-C3D	2.44	133.23	127.61
22	B	703	CLA	C2D-C1D-ND	-2.44	108.31	110.10
27	d	406	LHG	C11-C10-C9	-2.44	102.04	114.42
22	a	406	CLA	CAC-C3C-C4C	2.44	127.97	124.81
22	C	513	CLA	C6-C5-C3	-2.44	107.06	113.45
33	c	522	LMG	C3-C4-C5	-2.44	105.89	110.24
22	B	708	CLA	C6-C7-C8	-2.43	108.05	115.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	C	502	CLA	O2D-CGD-CBD	2.43	115.59	111.27
25	D	405	PL9	C7-C8-C9	-2.43	122.74	126.79
23	K	101	BCR	C34-C9-C10	-2.43	119.52	122.92
22	B	706	CLA	C3B-C4B-NB	-2.43	106.07	109.21
29	C	517	DGD	O1G-C1A-C2A	-2.43	104.28	111.91
33	C	516	LMG	C36-C35-C34	-2.43	102.09	114.42
34	D	406	PHO	C1A-C2A-C3A	-2.43	100.53	102.84
23	K	101	BCR	C38-C26-C25	-2.43	121.80	124.53
33	b	723	LMG	O6-C5-C6	2.43	112.47	106.44
22	C	512	CLA	CHA-C1A-NA	-2.43	120.84	126.40
22	B	712	CLA	O2D-CGD-O1D	-2.43	119.09	123.84
22	c	509	CLA	CHC-C1C-NC	2.43	127.88	124.20
22	B	712	CLA	CHD-C1D-ND	-2.43	122.22	124.45
23	K	101	BCR	C24-C23-C22	-2.42	122.58	126.23
33	M	101	LMG	C9-C8-C7	-2.42	106.06	111.79
34	D	407	PHO	C1-C2-C3	-2.42	121.86	126.04
22	C	504	CLA	C3A-C2A-C1A	2.42	104.96	101.34
23	a	407	BCR	C29-C30-C25	2.41	114.20	110.48
22	c	511	CLA	CHB-C4A-NA	2.41	127.85	124.51
23	a	407	BCR	C39-C30-C25	-2.41	106.38	110.30
22	A	404	CLA	C1C-C2C-C3C	-2.41	104.42	106.96
23	H	101	BCR	C27-C26-C25	2.41	126.23	122.73
25	D	405	PL9	C37-C38-C39	-2.41	121.86	127.66
22	a	403	CLA	CHB-C4A-NA	2.41	127.84	124.51
22	a	401	CLA	C4D-CHA-C1A	2.41	124.18	121.25
22	H	102	CLA	C1-C2-C3	-2.41	121.88	126.04
22	b	703	CLA	O2A-C1-C2	-2.41	102.31	108.64
29	c	517	DGD	O6D-C1D-O3G	-2.41	104.27	109.97
22	C	503	CLA	CMD-C2D-C1D	-2.41	120.47	124.71
23	h	701	BCR	C7-C8-C9	-2.40	122.60	126.23
22	c	512	CLA	O1A-CGA-CBA	2.40	133.11	123.73
22	B	714	CLA	CHD-C1D-ND	-2.40	122.25	124.45
25	a	411	PL9	O2-C1-C2	-2.40	116.27	121.78
35	E	103	HEC	C1D-C2D-C3D	-2.40	105.32	107.00
23	B	717	BCR	C3-C4-C5	-2.40	109.79	114.08
22	C	510	CLA	C1B-CHB-C4A	-2.40	125.36	130.12
22	C	514	CLA	C5-C3-C2	-2.40	116.26	121.12
33	D	412	LMG	O7-C10-O9	-2.40	117.90	123.70
22	C	510	CLA	C9-C8-C10	-2.40	102.60	111.29
33	c	522	LMG	O2-C2-C1	-2.40	104.22	110.05
29	h	702	DGD	C4D-C3D-C2D	-2.40	106.64	110.82
26	b	720	SQD	O10-C23-C24	-2.40	114.38	123.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	716	CLA	C4D-CHA-C1A	2.40	124.17	121.25
22	D	401	CLA	CHB-C4A-NA	2.40	127.83	124.51
26	A	412	SQD	O47-C45-C44	2.40	113.41	107.93
22	b	707	CLA	CHA-C1A-NA	-2.40	120.91	126.40
23	d	403	BCR	C33-C5-C6	-2.39	121.84	124.53
22	c	509	CLA	CHD-C4C-NC	2.39	127.97	124.20
22	a	406	CLA	C1B-CHB-C4A	-2.39	125.38	130.12
22	b	706	CLA	CHB-C4A-NA	2.39	127.82	124.51
27	a	412	LHG	C11-C10-C9	-2.39	102.28	114.42
22	c	511	CLA	C7-C6-C5	-2.39	106.86	113.36
25	A	408	PL9	O1-C4-C3	-2.39	118.09	120.72
22	b	714	CLA	CAC-C3C-C4C	2.39	127.91	124.81
23	c	515	BCR	C16-C17-C18	-2.39	123.90	127.31
22	b	709	CLA	O2A-CGA-O1A	-2.39	117.57	123.59
29	C	518	DGD	CDB-CCB-CBB	-2.39	102.31	114.42
22	C	513	CLA	O2A-C1-C2	-2.38	102.37	108.64
22	C	505	CLA	C4A-NA-C1A	2.38	107.78	106.71
33	b	723	LMG	O1-C1-C2	-2.38	104.58	108.30
26	B	723	SQD	C1-C2-C3	-2.38	105.04	110.00
22	a	403	CLA	C4-C3-C5	2.38	119.28	115.27
22	A	404	CLA	C4-C3-C5	2.38	119.27	115.27
34	D	407	PHO	CMC-C2C-C3C	2.38	129.43	124.94
22	C	504	CLA	C6-C7-C8	-2.38	108.23	115.92
26	D	409	SQD	C46-C45-C44	-2.38	105.79	113.70
22	c	506	CLA	CMB-C2B-C3B	2.38	129.12	124.68
22	b	711	CLA	CMC-C2C-C3C	2.38	132.57	126.12
22	B	703	CLA	O2A-CGA-O1A	-2.38	117.59	123.59
22	C	503	CLA	C16-C17-C18	-2.37	104.79	115.98
22	C	513	CLA	CMB-C2B-C3B	2.37	129.12	124.68
34	a	405	PHO	CMA-C3A-C4A	-2.37	109.18	114.38
23	k	101	BCR	C27-C26-C25	2.37	126.18	122.73
22	C	505	CLA	C6-C5-C3	2.37	119.68	113.45
22	c	514	CLA	CHD-C1D-ND	-2.37	122.27	124.45
22	B	716	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	d	404	PL9	C50-C49-C48	-2.37	115.80	122.65
22	c	511	CLA	C2D-C1D-ND	-2.37	108.36	110.10
33	C	516	LMG	C9-C8-C7	-2.36	106.20	111.79
29	c	519	DGD	O2G-C1B-C2B	-2.36	106.41	111.50
22	b	708	CLA	O2D-CGD-CBD	2.36	115.47	111.27
27	A	410	LHG	O8-C23-O10	-2.36	117.63	123.59
33	d	408	LMG	C31-C30-C29	-2.36	104.70	113.19
22	C	504	CLA	C5-C3-C2	-2.36	116.34	121.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	711	CLA	C7-C6-C5	-2.36	106.95	113.36
33	D	408	LMG	O2-C2-C1	-2.36	104.31	110.05
28	B	701	STE	O2-C1-O1	-2.36	117.42	123.30
22	C	509	CLA	O2D-CGD-CBD	2.36	115.46	111.27
22	b	715	CLA	O2A-CGA-O1A	-2.36	117.64	123.59
22	b	713	CLA	CHA-C1A-NA	-2.36	121.00	126.40
25	D	405	PL9	C36-C34-C33	-2.36	116.35	121.12
29	c	519	DGD	O1G-C1A-C2A	-2.36	104.51	111.91
25	A	408	PL9	O2-C1-C2	-2.36	116.38	121.78
33	c	522	LMG	O7-C10-O9	-2.35	118.01	123.70
33	d	408	LMG	C3-C4-C5	-2.35	106.04	110.24
22	b	715	CLA	CHC-C1C-NC	2.35	127.77	124.20
22	c	514	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
22	B	706	CLA	O2D-CGD-CBD	2.35	115.44	111.27
23	B	719	BCR	C8-C7-C6	-2.35	120.60	127.20
22	B	713	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
26	a	413	SQD	O48-C23-C24	2.35	119.28	111.91
22	c	506	CLA	C4D-C3D-CAD	-2.35	105.33	108.10
29	h	702	DGD	O5E-C6E-C5E	-2.35	103.25	111.29
22	C	502	CLA	C2D-C1D-ND	-2.34	108.38	110.10
29	c	517	DGD	C5B-C4B-C3B	-2.34	102.52	114.42
22	d	402	CLA	CGD-CBD-CAD	-2.34	103.14	110.73
33	c	522	LMG	C9-C8-C7	-2.34	106.25	111.79
22	D	403	CLA	CHB-C4A-NA	2.34	127.75	124.51
22	c	513	CLA	C3C-C4C-NC	-2.34	107.94	110.57
23	c	515	BCR	C24-C23-C22	-2.34	122.70	126.23
33	C	520	LMG	O1-C7-C8	-2.34	105.25	110.90
22	b	707	CLA	CHB-C4A-NA	2.34	127.75	124.51
26	D	409	SQD	O8-S-O9	-2.34	105.56	111.27
23	b	717	BCR	C15-C16-C17	-2.34	118.69	123.47
22	B	711	CLA	O2D-CGD-CBD	2.34	115.42	111.27
33	c	520	LMG	C9-C8-C7	-2.34	106.26	111.79
23	b	717	BCR	C8-C7-C6	-2.34	120.64	127.20
29	c	519	DGD	C8B-C7B-C6B	-2.34	102.56	114.42
22	c	510	CLA	CHD-C4C-NC	2.34	127.88	124.20
27	d	407	LHG	C26-C25-C24	2.33	121.58	113.19
22	C	502	CLA	CMB-C2B-C3B	2.33	129.04	124.68
22	A	404	CLA	C4A-NA-C1A	2.33	107.75	106.71
22	B	715	CLA	O2D-CGD-O1D	-2.33	119.28	123.84
22	c	509	CLA	CMB-C2B-C3B	2.33	129.04	124.68
23	d	403	BCR	C3-C4-C5	-2.33	109.92	114.08
22	b	703	CLA	C11-C12-C13	-2.33	108.39	115.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	b	717	BCR	C11-C10-C9	-2.33	123.98	127.31
23	b	719	BCR	C16-C15-C14	-2.33	118.71	123.47
22	b	711	CLA	CHB-C4A-NA	2.33	127.73	124.51
22	B	709	CLA	CAA-CBA-CGA	-2.33	106.46	113.25
28	C	521	STE	O2-C1-C2	2.32	121.50	114.03
22	a	406	CLA	O2D-CGD-O1D	-2.32	119.29	123.84
22	c	510	CLA	CHC-C1C-NC	2.32	127.73	124.20
22	D	402	CLA	CAA-C2A-C1A	-2.32	104.36	111.97
22	c	508	CLA	C7-C6-C5	-2.32	107.06	113.36
25	D	405	PL9	C12-C13-C14	-2.32	122.08	127.66
29	C	519	DGD	C7B-C6B-C5B	-2.32	102.65	114.42
29	c	518	DGD	O3G-C1D-C2D	-2.32	104.68	108.30
26	A	409	SQD	O5-C1-O6	2.32	115.46	109.97
22	a	401	CLA	O2A-CGA-O1A	-2.32	117.74	123.59
29	A	413	DGD	CBB-CAB-C9B	-2.32	102.66	114.42
22	b	713	CLA	CHA-C4D-ND	2.32	137.34	132.50
22	b	709	CLA	CHD-C1D-ND	-2.31	122.33	124.45
22	c	508	CLA	CHA-C1A-NA	-2.31	121.10	126.40
22	B	711	CLA	CHD-C4C-NC	2.31	127.85	124.20
22	b	713	CLA	C16-C15-C13	-2.31	108.45	115.92
22	C	505	CLA	CHC-C1C-NC	2.31	127.71	124.20
22	B	710	CLA	CHD-C1D-ND	-2.31	122.33	124.45
28	t	702	STE	O2-C1-C2	2.31	121.45	114.03
22	D	403	CLA	O1D-CGD-CBD	2.31	129.21	124.48
25	A	408	PL9	C20-C19-C18	-2.31	117.76	123.68
22	a	404	CLA	CMA-C3A-C4A	-2.31	105.57	111.77
23	c	516	BCR	C1-C6-C5	-2.31	119.37	122.61
33	b	723	LMG	O5-C6-C5	-2.30	103.38	111.29
22	b	705	CLA	CHD-C1D-C2D	2.30	130.31	125.48
23	D	404	BCR	C7-C8-C9	-2.30	122.76	126.23
23	b	719	BCR	C15-C16-C17	-2.30	118.76	123.47
33	a	419	LMG	C7-O1-C1	2.30	118.23	113.74
29	c	519	DGD	CDB-CCB-CBB	-2.30	102.74	114.42
22	b	714	CLA	O2A-CGA-O1A	-2.30	117.79	123.59
29	c	518	DGD	C3G-C2G-C1G	-2.30	106.35	111.79
27	A	410	LHG	C11-C10-C9	-2.30	102.76	114.42
23	b	717	BCR	C38-C26-C25	-2.30	121.95	124.53
35	v	201	HEC	CMC-C2C-C3C	2.29	128.51	125.82
22	C	508	CLA	O1D-CGD-CBD	2.29	129.17	124.48
33	b	721	LMG	O6-C1-O1	-2.29	104.55	109.97
29	C	517	DGD	CDB-CCB-CBB	-2.29	102.81	114.42
23	t	701	BCR	C15-C16-C17	-2.29	118.79	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	h	702	DGD	O6E-C5E-C4E	2.29	113.84	109.69
33	D	408	LMG	C38-C37-C36	-2.29	102.82	114.42
22	b	716	CLA	C4-C3-C5	2.29	119.11	115.27
29	C	519	DGD	C1D-C2D-C3D	-2.29	105.24	110.00
22	b	713	CLA	C7-C6-C5	-2.29	107.15	113.36
22	B	704	CLA	C1D-ND-C4D	2.28	107.96	106.33
34	D	406	PHO	CMA-C3A-C2A	-2.28	104.80	113.99
23	C	501	BCR	C15-C16-C17	-2.28	118.80	123.47
26	a	413	SQD	O48-C23-O10	-2.28	117.83	123.59
27	D	411	LHG	O8-C6-C5	-2.28	101.79	108.43
22	b	701	CLA	CMB-C2B-C3B	2.28	128.95	124.68
23	c	516	BCR	C34-C9-C10	-2.28	119.73	122.92
23	T	701	BCR	C3-C4-C5	-2.28	110.01	114.08
22	b	702	CLA	CHC-C1C-C2C	-2.28	120.43	126.72
29	h	702	DGD	C1E-O6E-C5E	2.27	118.15	113.69
23	B	719	BCR	C30-C25-C26	-2.27	119.41	122.61
22	d	401	CLA	CHA-C4D-ND	2.27	137.25	132.50
22	D	402	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
23	A	405	BCR	C38-C26-C25	-2.27	121.98	124.53
22	B	705	CLA	O2A-CGA-O1A	-2.27	117.87	123.59
22	b	707	CLA	C1B-CHB-C4A	-2.27	125.63	130.12
22	c	504	CLA	C1B-CHB-C4A	-2.27	125.63	130.12
22	C	508	CLA	C1B-CHB-C4A	-2.27	125.63	130.12
22	B	714	CLA	O1D-CGD-CBD	2.26	129.12	124.48
29	c	518	DGD	O2E-C2E-C1E	-2.26	104.55	110.05
23	k	102	BCR	C15-C16-C17	-2.26	118.84	123.47
22	b	701	CLA	C3C-C4C-NC	-2.26	108.03	110.57
22	a	401	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
29	c	519	DGD	O1G-C1G-C2G	-2.26	101.85	108.43
33	C	516	LMG	O3-C3-C2	-2.26	105.12	110.35
22	B	705	CLA	CHB-C4A-NA	2.26	127.64	124.51
22	H	102	CLA	CHD-C1D-ND	-2.26	122.38	124.45
22	b	709	CLA	O1D-CGD-CBD	2.26	129.11	124.48
22	C	505	CLA	CHB-C4A-NA	2.26	127.64	124.51
23	A	405	BCR	C2-C1-C6	2.26	113.96	110.48
22	H	102	CLA	C2A-C1A-CHA	2.26	127.81	123.86
29	A	413	DGD	O6E-C1E-O5D	-2.26	104.63	109.97
22	B	716	CLA	CHA-C4D-ND	2.26	137.22	132.50
22	D	403	CLA	CMD-C2D-C1D	-2.26	120.73	124.71
27	d	406	LHG	C18-C17-C16	-2.26	102.98	114.42
22	B	705	CLA	C4D-CHA-C1A	2.25	123.99	121.25
22	B	703	CLA	O2D-CGD-O1D	-2.25	119.43	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	b	719	BCR	C28-C27-C26	-2.25	110.06	114.08
22	b	708	CLA	O2A-C1-C2	-2.25	102.72	108.64
22	a	406	CLA	CHA-C1A-NA	-2.25	121.25	126.40
23	B	717	BCR	C36-C18-C17	-2.25	119.77	122.92
23	C	515	BCR	C27-C26-C25	2.25	125.99	122.73
29	C	519	DGD	CDB-CCB-CBB	-2.25	103.02	114.42
33	M	101	LMG	O3-C3-C2	-2.25	105.16	110.35
25	D	405	PL9	C40-C39-C41	2.25	119.05	115.27
22	A	402	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
22	c	514	CLA	C1-C2-C3	-2.24	122.16	126.04
27	a	414	LHG	O8-C23-C24	2.24	118.95	111.91
34	d	405	PHO	C1B-NB-C4B	2.24	111.70	107.09
29	H	103	DGD	C3D-C4D-C5D	-2.24	106.24	110.24
23	B	718	BCR	C27-C26-C25	2.24	125.99	122.73
22	a	403	CLA	C11-C10-C8	-2.24	108.67	115.92
22	b	705	CLA	C16-C15-C13	-2.24	108.68	115.92
22	B	715	CLA	CHA-C1A-NA	-2.24	121.27	126.40
22	C	506	CLA	CED-O2D-CGD	2.24	121.00	115.94
28	b	724	STE	O2-C1-C2	2.24	121.22	114.03
33	M	101	LMG	C6-C5-C4	-2.24	107.77	113.00
22	b	715	CLA	C1B-CHB-C4A	-2.24	125.69	130.12
26	f	101	SQD	O47-C7-C8	2.23	117.03	110.80
34	d	405	PHO	O2A-CGA-O1A	-2.23	117.95	123.59
27	a	412	LHG	O8-C6-C5	-2.23	101.94	108.43
22	a	406	CLA	CHB-C4A-NA	2.23	127.60	124.51
22	b	704	CLA	C6-C7-C8	-2.23	108.71	115.92
22	C	504	CLA	C4D-C3D-CAD	-2.23	105.47	108.10
33	c	523	LMG	C9-C8-C7	-2.23	106.52	111.79
22	C	514	CLA	C3A-C2A-C1A	2.23	104.67	101.34
22	A	403	CLA	CMD-C2D-C1D	2.23	128.64	124.71
22	b	704	CLA	CHD-C1D-C2D	2.22	130.14	125.48
22	B	704	CLA	O2D-CGD-CBD	2.22	115.21	111.27
22	B	702	CLA	CHD-C1D-C2D	2.22	130.14	125.48
23	b	717	BCR	C37-C22-C21	-2.22	119.81	122.92
22	B	713	CLA	C2A-C1A-CHA	2.22	127.74	123.86
26	D	409	SQD	O4-C4-C3	-2.22	105.22	110.35
22	b	708	CLA	C11-C10-C8	-2.22	108.75	115.92
35	V	201	HEC	O1D-CGD-CBD	-2.22	115.96	123.08
22	d	402	CLA	CHA-C1A-NA	-2.22	121.33	126.40
22	C	503	CLA	C16-C15-C13	-2.21	108.76	115.92
22	B	708	CLA	CHB-C4A-NA	2.21	127.57	124.51
23	C	501	BCR	C27-C26-C25	2.21	125.94	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	c	523	LMG	O8-C28-O10	-2.21	118.01	123.59
33	d	408	LMG	O3-C3-C2	-2.21	105.23	110.35
22	C	514	CLA	O1D-CGD-CBD	2.21	129.01	124.48
29	A	413	DGD	C8B-C7B-C6B	-2.21	103.20	114.42
22	B	709	CLA	O2A-CGA-O1A	-2.21	118.01	123.59
22	b	708	CLA	CHA-C1A-NA	-2.21	121.33	126.40
29	H	103	DGD	CDB-CCB-CBB	-2.21	103.20	114.42
22	C	507	CLA	C1B-CHB-C4A	-2.21	125.74	130.12
22	c	505	CLA	O1D-CGD-CBD	2.21	129.00	124.48
22	b	701	CLA	C2D-C1D-ND	-2.21	108.48	110.10
34	D	407	PHO	C1A-C2A-C3A	-2.21	100.74	102.84
23	H	101	BCR	C16-C17-C18	-2.21	124.16	127.31
33	d	408	LMG	O7-C10-O9	-2.21	118.37	123.70
34	a	405	PHO	O2A-CGA-O1A	-2.21	118.03	123.59
29	C	517	DGD	O6D-C1D-O3G	-2.20	104.75	109.97
22	c	505	CLA	CHD-C4C-NC	2.20	127.68	124.20
28	C	521	STE	O2-C1-O1	-2.20	117.81	123.30
22	c	503	CLA	C2D-C1D-ND	-2.20	108.48	110.10
23	c	515	BCR	C27-C26-C25	2.20	125.93	122.73
22	B	706	CLA	C4-C3-C5	2.20	118.97	115.27
22	C	502	CLA	CAA-CBA-CGA	-2.20	106.83	113.25
22	c	504	CLA	C4-C3-C5	2.20	118.97	115.27
29	H	103	DGD	CAB-C9B-C8B	-2.20	103.27	114.42
22	b	702	CLA	C4-C3-C5	2.20	118.97	115.27
23	c	516	BCR	C38-C26-C25	-2.20	122.06	124.53
25	d	404	PL9	C20-C19-C21	2.19	118.96	115.27
28	j	101	STE	O2-C1-O1	-2.19	117.83	123.30
26	D	409	SQD	C1-O5-C5	-2.19	109.38	113.69
22	D	401	CLA	O2D-CGD-CBD	2.19	115.17	111.27
33	C	520	LMG	C6-C5-C4	-2.19	107.87	113.00
33	c	522	LMG	C40-C39-C38	-2.19	103.29	114.42
29	c	518	DGD	O4D-C4D-C3D	2.19	115.42	110.35
22	C	508	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
33	b	721	LMG	C12-C11-C10	-2.19	105.65	113.62
22	B	708	CLA	C2C-C1C-NC	2.19	112.02	109.97
22	c	506	CLA	C11-C10-C8	-2.19	108.85	115.92
33	C	516	LMG	C1-C2-C3	-2.19	105.44	110.00
22	b	708	CLA	C1B-CHB-C4A	-2.19	125.79	130.12
26	B	723	SQD	C25-C24-C23	-2.19	105.67	113.62
22	d	402	CLA	O2A-CGA-O1A	-2.18	118.08	123.59
33	C	520	LMG	O3-C3-C2	-2.18	105.30	110.35
28	b	727	STE	O2-C1-C2	2.18	121.05	114.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	f	101	SQD	O5-C1-C2	-2.18	105.73	110.35
29	C	519	DGD	O3E-C3E-C2E	-2.18	105.30	110.35
22	B	708	CLA	CHD-C4C-NC	2.18	127.64	124.20
23	C	515	BCR	C34-C9-C10	-2.18	119.87	122.92
23	c	515	BCR	C36-C18-C17	-2.18	119.87	122.92
22	C	503	CLA	CHA-C1A-NA	-2.18	121.41	126.40
29	C	517	DGD	O5D-C6D-C5D	-2.18	105.02	109.05
22	C	510	CLA	C2A-C3A-C4A	2.18	105.39	101.87
22	c	512	CLA	C11-C12-C13	-2.18	108.89	115.92
29	C	519	DGD	C6D-O5D-C1E	2.18	117.99	113.74
33	C	520	LMG	C38-C37-C36	-2.18	103.38	114.42
22	b	709	CLA	CHA-C1A-NA	-2.17	121.42	126.40
22	B	712	CLA	C1B-CHB-C4A	-2.17	125.82	130.12
22	c	506	CLA	CMD-C2D-C3D	2.17	132.61	127.61
22	B	703	CLA	CHD-C4C-NC	2.17	127.62	124.20
22	a	403	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
22	c	514	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
22	b	706	CLA	CAC-C3C-C4C	-2.17	122.00	124.81
29	c	519	DGD	C5B-C4B-C3B	-2.17	103.43	114.42
22	c	509	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
22	C	504	CLA	CMA-C3A-C4A	2.17	117.59	111.77
22	C	504	CLA	C6-C5-C3	2.16	119.13	113.45
23	a	407	BCR	C11-C10-C9	-2.16	124.22	127.31
25	d	404	PL9	C7-C3-C2	-2.16	120.45	123.30
22	c	513	CLA	O1D-CGD-CBD	2.16	128.91	124.48
25	d	404	PL9	C12-C13-C14	-2.16	122.45	127.66
23	K	101	BCR	C31-C1-C6	2.16	113.80	110.30
33	c	523	LMG	C38-C37-C36	-2.16	103.47	114.42
25	A	408	PL9	C26-C24-C23	-2.16	116.75	121.12
33	B	721	LMG	O8-C28-O10	-2.16	117.92	123.30
22	c	512	CLA	CHB-C4A-NA	2.16	127.50	124.51
22	c	509	CLA	CED-O2D-CGD	-2.16	111.06	115.94
28	b	727	STE	C3-C2-C1	-2.16	109.04	114.47
27	l	101	LHG	C27-C26-C25	-2.16	103.48	114.42
29	c	517	DGD	C8B-C7B-C6B	-2.16	103.48	114.42
23	b	717	BCR	C36-C18-C19	2.15	121.47	118.08
25	D	405	PL9	C50-C49-C48	-2.15	116.42	122.65
29	C	517	DGD	CBB-CAB-C9B	-2.15	103.49	114.42
22	C	508	CLA	CAA-CBA-CGA	-2.15	106.96	113.25
33	b	721	LMG	C40-C39-C38	-2.15	103.49	114.42
23	B	717	BCR	C15-C16-C17	-2.15	119.07	123.47
22	B	705	CLA	OBD-CAD-C3D	2.15	133.70	128.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	A	402	CLA	C7-C6-C5	-2.15	107.52	113.36
27	L	101	LHG	C36-C35-C34	-2.15	103.51	114.42
27	D	411	LHG	C11-C10-C9	-2.15	103.53	114.42
22	b	715	CLA	O2D-CGD-CBD	2.14	115.08	111.27
34	D	407	PHO	CMD-C2D-C3D	2.14	128.69	124.68
22	b	701	CLA	CHD-C1D-ND	-2.14	122.48	124.45
22	b	707	CLA	C6-C5-C3	2.14	119.08	113.45
22	b	703	CLA	CHD-C1D-C2D	2.14	129.97	125.48
33	c	520	LMG	C40-C39-C38	-2.14	103.56	114.42
25	A	408	PL9	C12-C13-C14	-2.14	122.51	127.66
27	d	406	LHG	C20-C19-C18	-2.13	103.59	114.42
29	c	517	DGD	C4A-C3A-C2A	-2.13	105.52	113.19
23	b	718	BCR	C15-C14-C13	-2.13	124.27	127.31
22	c	502	CLA	CED-O2D-CGD	-2.13	111.11	115.94
22	B	715	CLA	CHC-C1C-NC	2.13	127.44	124.20
22	C	502	CLA	C1B-CHB-C4A	-2.13	125.89	130.12
26	a	413	SQD	O47-C7-C8	2.13	116.09	111.50
22	b	713	CLA	C2A-C1A-CHA	2.13	127.58	123.86
22	A	404	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
23	C	515	BCR	C11-C10-C9	-2.13	124.27	127.31
22	C	507	CLA	CAA-C2A-C1A	-2.13	105.00	111.97
22	d	401	CLA	O1D-CGD-CBD	2.13	128.84	124.48
28	t	702	STE	C3-C2-C1	-2.13	109.11	114.47
33	M	101	LMG	O6-C1-O1	-2.13	104.94	109.97
22	c	507	CLA	CHD-C1D-ND	-2.13	122.50	124.45
22	B	711	CLA	C9-C8-C10	-2.13	103.59	111.29
27	L	101	LHG	O10-C23-C24	-2.13	115.44	123.73
26	A	409	SQD	O49-C7-C8	-2.13	115.44	123.73
22	B	716	CLA	C2D-C1D-ND	-2.13	108.54	110.10
27	a	414	LHG	C11-C10-C9	-2.12	103.64	114.42
22	b	714	CLA	O2D-CGD-CBD	2.12	115.04	111.27
22	B	709	CLA	C2C-C1C-NC	2.12	111.96	109.97
22	B	704	CLA	C6-C7-C8	-2.12	109.06	115.92
22	b	711	CLA	CHD-C1D-C2D	2.12	129.93	125.48
33	C	520	LMG	C1-O6-C5	-2.12	109.53	113.69
22	B	707	CLA	CHD-C1D-ND	-2.12	122.50	124.45
29	A	413	DGD	C5B-C4B-C3B	-2.12	103.67	114.42
22	C	506	CLA	CAC-C3C-C2C	2.12	131.15	127.53
22	D	403	CLA	CMD-C2D-C3D	2.12	132.49	127.61
29	c	519	DGD	O3E-C3E-C2E	-2.12	105.45	110.35
28	X	101	STE	C15-C14-C13	-2.12	103.68	114.42
34	d	405	PHO	CMB-C2B-C3B	2.12	128.64	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	b	723	LMG	C40-C39-C38	-2.12	103.68	114.42
22	C	509	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
29	c	519	DGD	O2D-C2D-C3D	-2.11	105.47	110.35
29	h	702	DGD	CAB-C9B-C8B	-2.11	103.71	114.42
22	B	712	CLA	CAC-C3C-C2C	2.11	131.14	127.53
22	c	503	CLA	CHD-C1D-C2D	2.11	129.91	125.48
33	C	520	LMG	C31-C30-C29	-2.11	105.62	113.19
29	c	519	DGD	C1D-C2D-C3D	-2.10	105.61	110.00
34	a	405	PHO	C1B-NB-C4B	2.10	111.41	107.09
22	b	704	CLA	C4-C3-C5	2.10	118.81	115.27
22	c	513	CLA	CHD-C1D-C2D	2.10	129.89	125.48
22	b	715	CLA	CHA-C1A-NA	-2.10	121.58	126.40
23	B	719	BCR	C1-C6-C5	-2.10	119.66	122.61
23	c	515	BCR	C37-C22-C21	-2.10	119.98	122.92
22	a	403	CLA	C9-C8-C10	-2.10	103.69	111.29
23	a	407	BCR	C37-C22-C21	-2.10	119.98	122.92
33	c	522	LMG	O8-C28-O10	-2.10	118.30	123.59
22	b	711	CLA	C6-C5-C3	2.10	118.96	113.45
27	D	411	LHG	C27-C26-C25	-2.10	103.77	114.42
33	D	408	LMG	O8-C28-O10	-2.10	118.30	123.59
29	h	702	DGD	O6D-C1D-C2D	-2.09	105.92	110.35
22	C	504	CLA	O1D-CGD-CBD	2.09	128.77	124.48
22	B	706	CLA	O1A-CGA-CBA	2.09	131.90	123.73
22	c	508	CLA	CMC-C2C-C3C	2.09	131.80	126.12
22	A	402	CLA	CAA-CBA-CGA	-2.09	107.14	113.25
23	a	407	BCR	C27-C26-C25	2.09	125.77	122.73
22	A	403	CLA	CHA-C1A-NA	-2.09	121.61	126.40
22	a	401	CLA	C11-C10-C8	-2.09	109.16	115.92
23	a	407	BCR	C21-C20-C19	-2.09	116.69	123.22
22	c	502	CLA	O1D-CGD-CBD	2.09	128.76	124.48
29	h	702	DGD	O3E-C3E-C4E	2.09	115.18	110.35
22	b	706	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
22	B	708	CLA	C1B-CHB-C4A	-2.09	125.98	130.12
27	D	410	LHG	C15-C14-C13	-2.09	103.81	114.42
28	B	720	STE	C4-C3-C2	-2.09	105.68	113.19
29	C	519	DGD	O3G-C1D-C2D	-2.09	105.04	108.30
22	B	704	CLA	C2A-C3A-C4A	2.09	105.24	101.87
22	B	706	CLA	CHD-C4C-C3C	-2.09	121.77	124.84
22	a	403	CLA	C17-C16-C15	-2.09	103.65	113.24
23	a	407	BCR	C37-C22-C23	2.09	121.36	118.08
23	K	101	BCR	C8-C9-C10	2.09	122.14	118.94
22	a	404	CLA	CHC-C1C-NC	2.08	127.36	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	c	518	DGD	C7A-C6A-C5A	-2.08	103.85	114.42
22	B	715	CLA	CAC-C3C-C4C	2.08	127.51	124.81
22	c	506	CLA	CHB-C4A-NA	2.08	127.39	124.51
22	C	512	CLA	C4-C3-C5	2.08	118.77	115.27
22	A	403	CLA	C2A-C1A-CHA	2.08	127.50	123.86
22	C	513	CLA	CBA-CAA-C2A	-2.08	107.72	113.86
29	A	413	DGD	C2G-O2G-C1B	2.08	122.91	117.79
22	b	704	CLA	O1D-CGD-CBD	2.08	128.74	124.48
23	t	701	BCR	C34-C9-C10	-2.08	120.01	122.92
22	B	716	CLA	CHA-C1A-NA	-2.08	121.64	126.40
22	c	511	CLA	O2D-CGD-CBD	2.08	114.96	111.27
27	D	411	LHG	O3-P-O5	-2.08	100.95	109.07
22	d	402	CLA	C3D-C4D-ND	2.08	113.60	110.24
22	C	504	CLA	C2A-C1A-CHA	2.08	127.49	123.86
29	c	517	DGD	O3E-C3E-C2E	-2.08	105.55	110.35
22	b	710	CLA	CHD-C1D-ND	-2.08	122.55	124.45
22	B	711	CLA	C11-C12-C13	-2.07	109.21	115.92
26	b	720	SQD	O47-C45-C46	2.07	115.91	108.40
23	B	719	BCR	C40-C30-C29	-2.07	100.61	108.91
22	D	403	CLA	C1-C2-C3	-2.07	122.46	126.04
23	a	407	BCR	C15-C16-C17	-2.07	119.23	123.47
23	T	701	BCR	C1-C6-C5	-2.07	119.69	122.61
33	c	522	LMG	O3-C3-C2	-2.07	105.56	110.35
27	l	101	LHG	O8-C23-C24	2.07	118.41	111.91
33	D	412	LMG	C38-C37-C36	-2.07	103.91	114.42
22	c	509	CLA	C1B-CHB-C4A	-2.07	126.02	130.12
22	b	710	CLA	CMB-C2B-C3B	2.07	128.54	124.68
28	c	521	STE	C15-C14-C13	-2.07	103.93	114.42
22	c	506	CLA	CAA-CBA-CGA	-2.07	107.21	113.25
26	A	409	SQD	O9-S-C6	2.07	109.39	106.94
33	B	721	LMG	O7-C10-O9	-2.07	118.15	123.30
27	D	410	LHG	C20-C19-C18	-2.07	103.94	114.42
29	c	519	DGD	C3D-C4D-C5D	-2.06	106.56	110.24
22	B	709	CLA	CMD-C2D-C3D	2.06	132.36	127.61
22	b	706	CLA	C1C-C2C-C3C	-2.06	104.79	106.96
22	a	404	CLA	O2D-CGD-O1D	-2.06	119.81	123.84
22	B	715	CLA	C2A-C1A-CHA	2.06	127.46	123.86
25	A	408	PL9	O2-C1-C6	2.06	124.16	120.59
23	A	405	BCR	C8-C7-C6	-2.06	121.42	127.20
22	B	716	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
22	A	404	CLA	CHC-C1C-C2C	-2.06	121.02	126.72
22	b	715	CLA	CHC-C1C-C2C	-2.06	121.02	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	C	519	DGD	CDA-CCA-CBA	-2.06	103.97	114.42
22	C	508	CLA	CHD-C1D-ND	-2.06	122.56	124.45
22	b	704	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
23	H	101	BCR	C29-C30-C25	2.06	113.65	110.48
35	v	201	HEC	CAD-CBD-CGD	-2.06	107.99	113.76
23	b	718	BCR	C2-C1-C6	2.06	113.65	110.48
26	A	409	SQD	C9-C8-C7	-2.06	106.15	113.62
34	D	406	PHO	O2A-CGA-O1A	-2.06	118.41	123.59
25	A	408	PL9	C22-C23-C24	-2.05	122.71	127.66
23	A	405	BCR	C7-C8-C9	-2.05	123.13	126.23
22	B	705	CLA	C4D-C3D-CAD	-2.05	105.67	108.10
27	A	410	LHG	C18-C17-C16	-2.05	104.01	114.42
22	c	514	CLA	C11-C12-C13	-2.05	109.29	115.92
29	C	517	DGD	C7B-C6B-C5B	-2.05	104.01	114.42
27	B	722	LHG	C18-C17-C16	-2.05	104.02	114.42
23	k	102	BCR	C7-C8-C9	-2.05	123.14	126.23
23	K	101	BCR	C7-C8-C9	-2.05	123.14	126.23
29	h	702	DGD	O2E-C2E-C3E	-2.05	105.62	110.35
29	C	518	DGD	C3E-C4E-C5E	-2.05	106.59	110.24
25	d	404	PL9	O1-C4-C3	-2.04	118.47	120.72
29	C	519	DGD	C3G-C2G-C1G	-2.04	106.96	111.79
22	b	704	CLA	C1B-CHB-C4A	-2.04	126.07	130.12
22	c	511	CLA	O2A-CGA-O1A	-2.04	118.44	123.59
27	L	101	LHG	C17-C16-C15	-2.04	104.06	114.42
22	B	712	CLA	C11-C10-C8	-2.04	109.33	115.92
22	B	715	CLA	CHA-C4D-ND	2.04	136.77	132.50
22	B	705	CLA	CHD-C1D-C2D	2.04	129.76	125.48
22	B	708	CLA	C1-O2A-CGA	2.04	121.79	116.44
33	c	520	LMG	C1-O6-C5	-2.04	109.69	113.69
26	A	409	SQD	O5-C5-C4	2.04	113.39	109.69
23	d	403	BCR	C30-C25-C26	-2.04	119.75	122.61
22	b	715	CLA	CHB-C4A-NA	2.04	127.33	124.51
27	l	101	LHG	C11-C10-C9	-2.04	104.09	114.42
22	H	102	CLA	C4D-CHA-C1A	2.04	123.73	121.25
23	k	101	BCR	C33-C5-C6	-2.03	122.24	124.53
22	C	506	CLA	C6-C5-C3	2.03	118.79	113.45
22	c	508	CLA	C1C-C2C-C3C	-2.03	104.82	106.96
22	C	503	CLA	C4D-CHA-C1A	2.03	123.72	121.25
22	B	706	CLA	CHD-C4C-NC	2.03	127.40	124.20
22	H	102	CLA	CHA-C1A-NA	-2.03	121.75	126.40
29	c	518	DGD	C7B-C6B-C5B	-2.03	104.12	114.42
22	B	704	CLA	CMC-C2C-C3C	2.03	131.62	126.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	B	712	CLA	CBC-CAC-C3C	2.03	118.02	112.43
27	D	410	LHG	C10-C9-C8	-2.03	105.90	113.19
29	C	518	DGD	C1D-C2D-C3D	-2.03	105.78	110.00
28	c	501	STE	C3-C2-C1	-2.03	109.37	114.47
29	C	517	DGD	O3E-C3E-C2E	-2.03	105.67	110.35
29	c	518	DGD	C3D-C4D-C5D	-2.03	106.63	110.24
28	X	101	STE	C3-C2-C1	-2.03	109.37	114.47
23	c	515	BCR	C11-C10-C9	-2.02	124.42	127.31
33	b	723	LMG	O6-C1-O1	-2.02	105.18	109.97
23	c	516	BCR	C7-C8-C9	-2.02	123.18	126.23
29	C	518	DGD	C7B-C6B-C5B	-2.02	104.15	114.42
25	a	411	PL9	C7-C8-C9	-2.02	123.43	126.79
22	B	705	CLA	C1B-CHB-C4A	-2.02	126.11	130.12
22	b	710	CLA	O2D-CGD-O1D	-2.02	119.89	123.84
22	b	712	CLA	CHD-C1D-ND	-2.02	122.60	124.45
22	C	507	CLA	CHB-C4A-NA	2.02	127.30	124.51
34	D	406	PHO	C1B-NB-C4B	2.02	111.24	107.09
25	A	408	PL9	C40-C39-C38	-2.02	118.50	123.68
22	b	708	CLA	C2A-C1A-CHA	2.02	127.39	123.86
35	E	103	HEC	O2D-CGD-CBD	2.02	120.51	114.03
29	c	518	DGD	CDB-CCB-CBB	-2.02	104.18	114.42
22	b	710	CLA	CHC-C1C-C2C	-2.02	121.14	126.72
29	C	518	DGD	C5B-C4B-C3B	-2.02	104.19	114.42
23	C	501	BCR	C36-C18-C17	-2.02	120.10	122.92
22	B	716	CLA	O2D-CGD-CBD	2.02	114.85	111.27
23	a	407	BCR	C7-C8-C9	-2.01	123.19	126.23
22	b	701	CLA	C1B-CHB-C4A	-2.01	126.13	130.12
25	A	408	PL9	C11-C9-C8	-2.01	117.04	121.12
29	C	519	DGD	C4D-C3D-C2D	-2.01	107.31	110.82
22	H	102	CLA	CHC-C1C-NC	2.01	127.26	124.20
22	B	704	CLA	C1B-CHB-C4A	-2.01	126.13	130.12
22	B	716	CLA	CHD-C1D-ND	-2.01	122.61	124.45
33	c	523	LMG	C20-C19-C18	-2.01	104.23	114.42
23	h	701	BCR	C38-C26-C25	-2.01	122.27	124.53
22	C	508	CLA	C1-O2A-CGA	2.01	121.71	116.44
22	D	402	CLA	O2D-CGD-O1D	-2.01	119.91	123.84
22	c	507	CLA	C5-C3-C2	2.01	125.18	121.12
22	b	712	CLA	C2C-C1C-NC	2.01	111.85	109.97
22	C	503	CLA	C4D-C3D-CAD	-2.01	105.73	108.10
26	f	101	SQD	O48-C23-C24	2.01	118.20	111.91
22	b	703	CLA	OBD-CAD-C3D	2.01	133.35	128.52
23	a	407	BCR	C30-C25-C26	-2.01	119.79	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	c	504	CLA	C5-C3-C2	-2.00	117.06	121.12
22	B	714	CLA	C3B-C4B-NB	-2.00	106.62	109.21
22	b	702	CLA	O2A-CGA-O1A	-2.00	118.53	123.59
22	c	507	CLA	CGD-CBD-CAD	-2.00	104.24	110.73
22	C	512	CLA	C2A-C1A-CHA	2.00	127.36	123.86
22	D	403	CLA	C6-C7-C8	-2.00	109.44	115.92
22	b	703	CLA	O2A-CGA-O1A	-2.00	118.54	123.59
26	A	412	SQD	O48-C23-O10	-2.00	118.54	123.59
22	D	401	CLA	CMC-C2C-C1C	2.00	128.09	125.04
23	a	407	BCR	C8-C7-C6	-2.00	121.58	127.20
22	c	513	CLA	O2A-CGA-O1A	-2.00	118.54	123.59
22	c	511	CLA	C6-C5-C3	-2.00	108.21	113.45

All (58) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
22	A	402	CLA	ND
22	A	404	CLA	ND
22	B	702	CLA	ND
22	B	703	CLA	ND
22	B	704	CLA	ND
22	B	705	CLA	ND
22	B	706	CLA	ND
22	B	707	CLA	ND
22	B	708	CLA	ND
22	B	710	CLA	ND
22	B	712	CLA	ND
22	B	713	CLA	ND
22	B	714	CLA	ND
22	B	715	CLA	ND
22	B	716	CLA	ND
22	C	502	CLA	ND
22	C	504	CLA	ND
22	C	505	CLA	ND
22	C	506	CLA	ND
22	C	507	CLA	ND
22	C	508	CLA	ND
22	C	510	CLA	ND
22	C	511	CLA	ND
22	C	512	CLA	ND
22	C	513	CLA	ND
22	C	514	CLA	ND

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Mol	Chain	Res	Type	Atom
22	D	401	CLA	ND
22	D	402	CLA	ND
22	H	102	CLA	ND
22	a	401	CLA	ND
22	a	406	CLA	ND
22	b	701	CLA	ND
22	b	703	CLA	ND
22	b	704	CLA	ND
22	b	705	CLA	ND
22	b	706	CLA	ND
22	b	707	CLA	ND
22	b	708	CLA	ND
22	b	709	CLA	ND
22	b	710	CLA	ND
22	b	711	CLA	ND
22	b	712	CLA	ND
22	b	713	CLA	ND
22	b	714	CLA	ND
22	b	715	CLA	ND
22	b	716	CLA	ND
22	c	502	CLA	ND
22	c	503	CLA	ND
22	c	504	CLA	ND
22	c	505	CLA	ND
22	c	506	CLA	ND
22	c	507	CLA	ND
22	c	508	CLA	ND
22	c	510	CLA	ND
22	c	511	CLA	ND
22	c	512	CLA	ND
22	c	513	CLA	ND
22	c	514	CLA	ND

All (1844) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	B	705	CLA	C11-C12-C13-C14
22	B	706	CLA	CHA-CBD-CGD-O1D
22	B	714	CLA	CHA-CBD-CGD-O1D
22	B	714	CLA	CHA-CBD-CGD-O2D
22	B	714	CLA	CAD-CBD-CGD-O1D
22	B	714	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
22	B	714	CLA	C2-C3-C5-C6
22	B	714	CLA	C4-C3-C5-C6
22	C	509	CLA	CHA-CBD-CGD-O1D
22	C	509	CLA	CHA-CBD-CGD-O2D
22	C	510	CLA	C6-C7-C8-C9
22	C	513	CLA	O2A-C1-C2-C3
22	C	514	CLA	C4-C3-C5-C6
22	D	402	CLA	CHA-CBD-CGD-O1D
22	D	402	CLA	CHA-CBD-CGD-O2D
22	D	403	CLA	CBD-CGD-O2D-CED
22	H	102	CLA	CAD-CBD-CGD-O1D
22	H	102	CLA	CAD-CBD-CGD-O2D
22	b	705	CLA	C2-C3-C5-C6
22	b	705	CLA	C4-C3-C5-C6
22	b	714	CLA	CHA-CBD-CGD-O1D
22	b	714	CLA	CHA-CBD-CGD-O2D
22	b	714	CLA	CAD-CBD-CGD-O1D
22	b	716	CLA	CBD-CGD-O2D-CED
22	c	509	CLA	CHA-CBD-CGD-O1D
22	c	509	CLA	CHA-CBD-CGD-O2D
22	c	509	CLA	CBD-CGD-O2D-CED
22	c	514	CLA	CBD-CGD-O2D-CED
23	A	405	BCR	C20-C21-C22-C37
23	B	718	BCR	C16-C17-C18-C36
23	B	718	BCR	C37-C22-C23-C24
23	B	718	BCR	C23-C24-C25-C30
23	C	501	BCR	C11-C12-C13-C35
23	C	501	BCR	C17-C18-C19-C20
23	C	501	BCR	C36-C18-C19-C20
23	C	501	BCR	C37-C22-C23-C24
23	C	501	BCR	C23-C24-C25-C30
23	C	515	BCR	C11-C10-C9-C34
23	C	515	BCR	C20-C21-C22-C37
23	D	404	BCR	C20-C21-C22-C23
23	D	404	BCR	C20-C21-C22-C37
23	D	404	BCR	C21-C22-C23-C24
23	D	404	BCR	C23-C24-C25-C26
23	D	404	BCR	C23-C24-C25-C30
23	H	101	BCR	C7-C8-C9-C10
23	H	101	BCR	C11-C12-C13-C35
23	K	101	BCR	C14-C15-C16-C17
23	K	101	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
23	T	701	BCR	C7-C8-C9-C34
23	Y	101	BCR	C1-C6-C7-C8
23	Y	101	BCR	C5-C6-C7-C8
23	Y	101	BCR	C20-C21-C22-C37
23	Y	101	BCR	C37-C22-C23-C24
23	b	717	BCR	C7-C8-C9-C34
23	b	717	BCR	C35-C13-C14-C15
23	b	717	BCR	C20-C21-C22-C37
23	b	719	BCR	C37-C22-C23-C24
23	c	515	BCR	C16-C17-C18-C19
23	c	515	BCR	C36-C18-C19-C20
23	c	515	BCR	C18-C19-C20-C21
23	c	515	BCR	C23-C24-C25-C30
23	c	516	BCR	C37-C22-C23-C24
23	d	403	BCR	C10-C11-C12-C13
23	h	701	BCR	C11-C12-C13-C35
23	k	101	BCR	C7-C8-C9-C10
23	k	101	BCR	C7-C8-C9-C34
23	k	101	BCR	C17-C18-C19-C20
23	k	101	BCR	C37-C22-C23-C24
23	t	701	BCR	C11-C10-C9-C34
23	t	701	BCR	C11-C12-C13-C14
23	t	701	BCR	C11-C12-C13-C35
25	A	408	PL9	C12-C13-C14-C15
25	A	408	PL9	C12-C13-C14-C16
25	A	408	PL9	C22-C23-C24-C25
25	A	408	PL9	C22-C23-C24-C26
25	A	408	PL9	C25-C24-C26-C27
25	A	408	PL9	C32-C33-C34-C36
25	A	408	PL9	C37-C38-C39-C40
25	A	408	PL9	C37-C38-C39-C41
25	A	408	PL9	C40-C39-C41-C42
25	D	405	PL9	C32-C33-C34-C36
25	D	405	PL9	C37-C38-C39-C40
25	a	411	PL9	C12-C13-C14-C16
25	a	411	PL9	C19-C21-C22-C23
25	a	411	PL9	C22-C23-C24-C25
25	a	411	PL9	C22-C23-C24-C26
25	a	411	PL9	C32-C33-C34-C36
25	a	411	PL9	C33-C34-C36-C37
25	a	411	PL9	C42-C43-C44-C45
25	d	404	PL9	C32-C33-C34-C36

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Mol	Chain	Res	Type	Atoms
25	d	404	PL9	C47-C48-C49-C51
26	A	409	SQD	O6-C44-C45-O47
26	B	723	SQD	O5-C1-O6-C44
26	B	723	SQD	O6-C44-C45-O47
26	B	723	SQD	C8-C7-O47-C45
26	a	413	SQD	O47-C45-C46-O48
26	a	415	SQD	C8-C7-O47-C45
26	b	720	SQD	C8-C7-O47-C45
26	b	720	SQD	O10-C23-O48-C46
26	b	720	SQD	C24-C23-O48-C46
26	f	101	SQD	O5-C1-O6-C44
26	f	101	SQD	O49-C7-O47-C45
26	f	101	SQD	C8-C7-O47-C45
27	A	410	LHG	O1-C1-C2-C3
27	A	410	LHG	C3-O3-P-O5
27	B	722	LHG	O1-C1-C2-O2
27	B	722	LHG	O1-C1-C2-C3
27	B	722	LHG	C1-C2-C3-O3
27	B	722	LHG	C3-O3-P-O4
27	B	722	LHG	C3-O3-P-O5
27	D	410	LHG	O1-C1-C2-C3
27	D	410	LHG	C3-O3-P-O4
27	D	410	LHG	C3-O3-P-O5
27	D	410	LHG	C3-O3-P-O6
27	D	410	LHG	C4-O6-P-O4
27	D	411	LHG	C3-O3-P-O5
27	L	101	LHG	C3-O3-P-O4
27	L	101	LHG	C4-O6-P-O4
27	a	412	LHG	O1-C1-C2-C3
27	a	412	LHG	C4-O6-P-O5
27	a	414	LHG	C3-O3-P-O5
27	d	406	LHG	C3-O3-P-O4
27	d	406	LHG	C4-O6-P-O4
27	l	101	LHG	C3-O3-P-O4
27	l	101	LHG	C4-O6-P-O4
27	l	101	LHG	C4-O6-P-O5
33	C	516	LMG	O9-C10-O7-C8
33	c	522	LMG	C11-C10-O7-C8
33	c	523	LMG	O6-C1-O1-C7
33	c	523	LMG	C29-C28-O8-C9
22	C	506	CLA	C4C-C3C-CAC-CBC
22	C	506	CLA	C2C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
22	b	714	CLA	O1D-CGD-O2D-CED
22	C	510	CLA	CBD-CGD-O2D-CED
22	b	714	CLA	CBD-CGD-O2D-CED
34	d	405	PHO	CBD-CGD-O2D-CED
33	c	523	LMG	O10-C28-O8-C9
22	D	403	CLA	O1D-CGD-O2D-CED
22	b	716	CLA	O1D-CGD-O2D-CED
22	c	509	CLA	O1D-CGD-O2D-CED
25	d	404	PL9	C47-C48-C49-C50
22	c	513	CLA	CBD-CGD-O2D-CED
34	D	407	PHO	CBD-CGD-O2D-CED
26	f	101	SQD	O10-C23-O48-C46
27	a	414	LHG	O10-C23-O8-C6
22	c	514	CLA	O1D-CGD-O2D-CED
22	c	511	CLA	CBD-CGD-O2D-CED
26	B	723	SQD	O49-C7-O47-C45
26	a	415	SQD	O49-C7-O47-C45
26	b	720	SQD	O49-C7-O47-C45
29	A	413	DGD	O1B-C1B-O2G-C2G
33	D	412	LMG	O9-C10-O7-C8
33	b	723	LMG	O9-C10-O7-C8
33	c	522	LMG	O10-C28-O8-C9
22	C	510	CLA	C3-C5-C6-C7
22	b	714	CLA	C3-C5-C6-C7
26	f	101	SQD	C24-C23-O48-C46
29	A	413	DGD	C2B-C1B-O2G-C2G
33	C	516	LMG	C11-C10-O7-C8
22	b	704	CLA	C4-C3-C5-C6
22	b	716	CLA	C4-C3-C5-C6
25	A	408	PL9	C23-C24-C26-C27
22	B	706	CLA	C2A-CAA-CBA-CGA
26	a	415	SQD	O10-C23-O48-C46
33	M	101	LMG	O10-C28-O8-C9
22	C	514	CLA	C3-C5-C6-C7
22	b	701	CLA	C3-C5-C6-C7
26	B	723	SQD	C24-C23-O48-C46
26	D	409	SQD	C24-C23-O48-C46
27	A	410	LHG	C24-C23-O8-C6
27	a	414	LHG	C24-C23-O8-C6
33	C	516	LMG	O6-C5-C6-O5
25	a	411	PL9	C47-C48-C49-C51
25	A	408	PL9	C32-C33-C34-C35

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Mol	Chain	Res	Type	Atoms
25	a	411	PL9	C12-C13-C14-C15
25	d	404	PL9	C42-C43-C44-C45
22	C	510	CLA	O1D-CGD-O2D-CED
33	c	522	LMG	O9-C10-O7-C8
29	h	702	DGD	O6E-C5E-C6E-O5E
33	c	522	LMG	C4-C5-C6-O5
22	C	509	CLA	CBD-CGD-O2D-CED
27	B	722	LHG	O2-C2-C3-O3
27	D	410	LHG	O2-C2-C3-O3
27	D	411	LHG	O2-C2-C3-O3
22	b	702	CLA	C3-C5-C6-C7
33	c	522	LMG	C29-C28-O8-C9
33	C	520	LMG	C11-C10-O7-C8
33	D	412	LMG	C11-C10-O7-C8
27	B	722	LHG	C28-C29-C30-C31
33	c	520	LMG	O6-C5-C6-O5
33	C	516	LMG	C4-C5-C6-O5
27	l	101	LHG	C7-C8-C9-C10
22	a	406	CLA	CBA-CGA-O2A-C1
33	a	419	LMG	C29-C28-O8-C9
26	a	413	SQD	C12-C13-C14-C15
33	c	520	LMG	O9-C10-O7-C8
25	A	408	PL9	C47-C48-C49-C50
22	A	404	CLA	C4-C3-C5-C6
22	b	703	CLA	C4-C3-C5-C6
22	b	707	CLA	C4-C3-C5-C6
25	d	404	PL9	C40-C39-C41-C42
22	A	404	CLA	C2-C3-C5-C6
22	C	514	CLA	C2-C3-C5-C6
22	b	703	CLA	C2-C3-C5-C6
22	b	707	CLA	C2-C3-C5-C6
25	A	408	PL9	C18-C19-C21-C22
25	d	404	PL9	C38-C39-C41-C42
22	b	709	CLA	CBD-CGD-O2D-CED
22	b	706	CLA	C2A-CAA-CBA-CGA
22	a	406	CLA	O1A-CGA-O2A-C1
27	A	410	LHG	O10-C23-O8-C6
25	A	408	PL9	C34-C36-C37-C38
25	A	408	PL9	C44-C46-C47-C48
25	D	405	PL9	C34-C36-C37-C38
25	a	411	PL9	C24-C26-C27-C28
25	d	404	PL9	C34-C36-C37-C38

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Mol	Chain	Res	Type	Atoms
34	d	405	PHO	O1D-CGD-O2D-CED
33	c	523	LMG	C4-C5-C6-O5
27	d	407	LHG	C33-C34-C35-C36
25	D	405	PL9	C12-C13-C14-C15
25	a	411	PL9	C32-C33-C34-C35
22	c	513	CLA	O1D-CGD-O2D-CED
33	b	723	LMG	O10-C28-O8-C9
26	a	415	SQD	C24-C23-O48-C46
33	M	101	LMG	C29-C28-O8-C9
22	b	715	CLA	C15-C16-C17-C18
33	c	520	LMG	C4-C5-C6-O5
33	c	520	LMG	C11-C10-O7-C8
22	C	509	CLA	C15-C16-C17-C18
22	a	406	CLA	C5-C6-C7-C8
26	B	723	SQD	C2-C1-O6-C44
26	f	101	SQD	C2-C1-O6-C44
33	c	523	LMG	C2-C1-O1-C7
33	c	522	LMG	O6-C5-C6-O5
22	b	716	CLA	C2-C3-C5-C6
25	D	405	PL9	C38-C39-C41-C42
25	d	404	PL9	C33-C34-C36-C37
22	A	403	CLA	C14-C13-C15-C16
22	B	703	CLA	C11-C12-C13-C14
22	B	707	CLA	C14-C13-C15-C16
22	B	713	CLA	C11-C12-C13-C14
22	B	714	CLA	C6-C7-C8-C9
22	C	504	CLA	C11-C10-C8-C9
22	C	513	CLA	C11-C10-C8-C9
22	C	514	CLA	C6-C7-C8-C9
22	C	514	CLA	C11-C12-C13-C14
22	D	401	CLA	C11-C10-C8-C9
22	b	705	CLA	C11-C10-C8-C9
22	b	707	CLA	C11-C10-C8-C9
22	b	711	CLA	C14-C13-C15-C16
22	c	510	CLA	C6-C7-C8-C9
22	c	510	CLA	C11-C12-C13-C14
22	c	512	CLA	C11-C10-C8-C9
22	c	512	CLA	C14-C13-C15-C16
22	c	513	CLA	C6-C7-C8-C9
22	C	506	CLA	C10-C11-C12-C13
22	C	514	CLA	C15-C16-C17-C18
23	D	404	BCR	C36-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
23	T	701	BCR	C11-C12-C13-C35
23	d	403	BCR	C37-C22-C23-C24
23	d	403	BCR	C21-C22-C23-C24
26	A	412	SQD	C23-C24-C25-C26
27	a	412	LHG	C23-C24-C25-C26
27	l	101	LHG	C23-C24-C25-C26
28	c	521	STE	C1-C2-C3-C4
29	H	103	DGD	C1A-C2A-C3A-C4A
22	C	510	CLA	C8-C10-C11-C12
22	D	401	CLA	C15-C16-C17-C18
22	b	701	CLA	C13-C15-C16-C17
22	b	715	CLA	C8-C10-C11-C12
26	A	412	SQD	C17-C18-C19-C20
22	B	712	CLA	C13-C15-C16-C17
22	B	713	CLA	C8-C10-C11-C12
22	C	507	CLA	C15-C16-C17-C18
22	C	510	CLA	C5-C6-C7-C8
22	C	513	CLA	C13-C15-C16-C17
22	H	102	CLA	C15-C16-C17-C18
22	b	711	CLA	C13-C15-C16-C17
22	b	711	CLA	C15-C16-C17-C18
22	c	510	CLA	C10-C11-C12-C13
33	D	412	LMG	C10-C11-C12-C13
23	d	403	BCR	C14-C15-C16-C17
22	B	714	CLA	C13-C15-C16-C17
22	D	402	CLA	C15-C16-C17-C18
22	b	703	CLA	C13-C15-C16-C17
25	a	411	PL9	C47-C48-C49-C50
27	a	414	LHG	C23-C24-C25-C26
28	b	725	STE	C1-C2-C3-C4
29	c	518	DGD	C1B-C2B-C3B-C4B
33	b	723	LMG	C28-C29-C30-C31
33	c	522	LMG	C10-C11-C12-C13
22	B	714	CLA	CBD-CGD-O2D-CED
22	C	502	CLA	CBD-CGD-O2D-CED
22	b	713	CLA	C13-C15-C16-C17
22	d	402	CLA	C5-C6-C7-C8
22	C	503	CLA	C3-C5-C6-C7
22	C	510	CLA	C2-C1-O2A-CGA
22	c	507	CLA	C2-C1-O2A-CGA
22	C	504	CLA	C5-C6-C7-C8
22	D	403	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
22	d	402	CLA	C10-C11-C12-C13
28	b	724	STE	C1-C2-C3-C4
33	M	101	LMG	C28-C29-C30-C31
33	d	408	LMG	C28-C29-C30-C31
22	B	716	CLA	C5-C6-C7-C8
22	c	511	CLA	O1D-CGD-O2D-CED
22	B	704	CLA	C11-C10-C8-C7
22	B	711	CLA	C12-C13-C15-C16
22	B	715	CLA	C11-C12-C13-C15
22	C	503	CLA	C6-C7-C8-C10
22	b	705	CLA	C11-C12-C13-C15
22	b	706	CLA	C11-C10-C8-C7
22	H	102	CLA	C3-C5-C6-C7
34	D	407	PHO	O1D-CGD-O2D-CED
22	c	506	CLA	C5-C6-C7-C8
29	C	518	DGD	O6E-C1E-O5D-C6D
22	b	701	CLA	C8-C10-C11-C12
29	c	518	DGD	C1A-C2A-C3A-C4A
23	B	717	BCR	C18-C19-C20-C21
23	C	501	BCR	C18-C19-C20-C21
23	C	515	BCR	C18-C19-C20-C21
23	T	701	BCR	C18-C19-C20-C21
23	t	701	BCR	C10-C11-C12-C13
27	A	410	LHG	O2-C2-C3-O3
27	a	412	LHG	O2-C2-C3-O3
22	D	402	CLA	C13-C15-C16-C17
26	D	409	SQD	O10-C23-O48-C46
33	a	419	LMG	O10-C28-O8-C9
22	B	705	CLA	C8-C10-C11-C12
22	B	707	CLA	C13-C15-C16-C17
22	C	507	CLA	C8-C10-C11-C12
22	b	714	CLA	C8-C10-C11-C12
22	c	512	CLA	C13-C15-C16-C17
33	c	523	LMG	O6-C5-C6-O5
29	h	702	DGD	C4E-C5E-C6E-O5E
22	B	715	CLA	C5-C6-C7-C8
22	c	509	CLA	C10-C11-C12-C13
27	B	722	LHG	C3-O3-P-O6
27	D	411	LHG	C3-O3-P-O6
27	L	101	LHG	C4-O6-P-O3
27	a	412	LHG	C3-O3-P-O6
27	a	414	LHG	C3-O3-P-O6

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Mol	Chain	Res	Type	Atoms
27	d	406	LHG	C3-O3-P-O6
27	d	406	LHG	C4-O6-P-O3
27	l	101	LHG	C4-O6-P-O3
22	H	102	CLA	CBA-CGA-O2A-C1
33	C	520	LMG	C29-C28-O8-C9
28	B	701	STE	C5-C6-C7-C8
27	A	410	LHG	C1-C2-C3-O3
27	D	410	LHG	C1-C2-C3-O3
27	a	412	LHG	C1-C2-C3-O3
22	C	503	CLA	C16-C17-C18-C20
22	B	716	CLA	C3-C5-C6-C7
22	c	507	CLA	CBA-CGA-O2A-C1
26	a	413	SQD	C24-C23-O48-C46
22	b	707	CLA	C10-C11-C12-C13
26	B	723	SQD	C11-C10-C9-C8
27	A	410	LHG	C11-C10-C9-C8
27	L	101	LHG	C17-C18-C19-C20
33	a	419	LMG	C21-C22-C23-C24
33	b	723	LMG	C11-C10-O7-C8
23	A	405	BCR	C35-C13-C14-C15
23	B	717	BCR	C11-C10-C9-C34
23	B	717	BCR	C35-C13-C14-C15
23	B	717	BCR	C16-C17-C18-C36
23	B	717	BCR	C20-C21-C22-C37
23	B	718	BCR	C35-C13-C14-C15
23	B	718	BCR	C20-C21-C22-C37
23	B	719	BCR	C16-C17-C18-C36
23	C	501	BCR	C11-C10-C9-C34
23	C	501	BCR	C16-C17-C18-C36
23	D	404	BCR	C11-C10-C9-C34
23	Y	101	BCR	C11-C10-C9-C34
23	a	407	BCR	C11-C10-C9-C34
23	b	717	BCR	C11-C10-C9-C34
23	b	719	BCR	C35-C13-C14-C15
23	b	719	BCR	C16-C17-C18-C36
23	b	719	BCR	C20-C21-C22-C37
23	c	515	BCR	C11-C10-C9-C34
23	c	515	BCR	C16-C17-C18-C36
23	d	403	BCR	C16-C17-C18-C36
23	h	701	BCR	C35-C13-C14-C15
23	h	701	BCR	C16-C17-C18-C36
23	k	101	BCR	C35-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
23	k	101	BCR	C16-C17-C18-C36
23	k	101	BCR	C20-C21-C22-C37
26	A	409	SQD	C26-C27-C28-C29
26	a	415	SQD	C16-C17-C18-C19
26	b	720	SQD	C24-C25-C26-C27
26	b	720	SQD	C26-C27-C28-C29
27	A	410	LHG	C17-C18-C19-C20
27	d	406	LHG	C29-C30-C31-C32
28	B	724	STE	C2-C3-C4-C5
28	C	521	STE	C5-C6-C7-C8
28	H	104	STE	C9-C10-C11-C12
28	T	702	STE	C9-C10-C11-C12
28	X	101	STE	C4-C5-C6-C7
28	Z	101	STE	C11-C12-C13-C14
28	b	725	STE	C12-C13-C14-C15
28	b	727	STE	C14-C15-C16-C17
28	c	521	STE	C11-C12-C13-C14
29	C	518	DGD	C5A-C6A-C7A-C8A
29	C	519	DGD	CBA-CCA-CDA-CEA
29	c	517	DGD	C4A-C5A-C6A-C7A
29	c	519	DGD	C3A-C4A-C5A-C6A
29	c	519	DGD	CBA-CCA-CDA-CEA
33	C	520	LMG	C31-C32-C33-C34
33	b	723	LMG	C13-C14-C15-C16
33	c	522	LMG	C13-C14-C15-C16
22	b	707	CLA	C16-C17-C18-C20
22	b	716	CLA	C11-C12-C13-C14
22	c	512	CLA	C16-C17-C18-C20
26	a	413	SQD	C29-C30-C31-C32
26	a	415	SQD	C11-C10-C9-C8
27	l	101	LHG	C12-C13-C14-C15
33	M	101	LMG	C12-C13-C14-C15
33	c	520	LMG	C36-C37-C38-C39
26	b	720	SQD	C46-C45-O47-C7
26	B	723	SQD	C11-C12-C13-C14
27	A	410	LHG	C34-C35-C36-C37
28	I	101	STE	C10-C11-C12-C13
28	x	101	STE	C7-C8-C9-C10
33	B	721	LMG	C32-C33-C34-C35
33	B	721	LMG	C33-C34-C35-C36
33	C	520	LMG	C18-C19-C20-C21
33	c	523	LMG	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
26	B	723	SQD	C13-C14-C15-C16
27	D	411	LHG	C33-C34-C35-C36
27	l	101	LHG	C14-C15-C16-C17
28	B	725	STE	C9-C10-C11-C12
29	A	413	DGD	C2B-C3B-C4B-C5B
29	C	518	DGD	C6A-C7A-C8A-C9A
33	b	723	LMG	C23-C24-C25-C26
22	C	509	CLA	O1D-CGD-O2D-CED
26	A	412	SQD	C14-C15-C16-C17
26	B	723	SQD	C18-C19-C20-C21
27	L	101	LHG	C14-C15-C16-C17
27	L	101	LHG	C31-C32-C33-C34
27	d	406	LHG	C32-C33-C34-C35
28	I	101	STE	C2-C3-C4-C5
28	h	703	STE	C10-C11-C12-C13
28	t	702	STE	C11-C10-C9-C8
29	c	519	DGD	C8B-C9B-CAB-CBB
29	h	702	DGD	C2B-C3B-C4B-C5B
33	C	520	LMG	C38-C39-C40-C41
33	D	408	LMG	C31-C32-C33-C34
33	b	721	LMG	C17-C18-C19-C20
33	c	522	LMG	C15-C16-C17-C18
27	A	410	LHG	C23-C24-C25-C26
33	c	523	LMG	C28-C29-C30-C31
23	B	717	BCR	C12-C13-C14-C15
23	B	717	BCR	C20-C21-C22-C23
23	C	515	BCR	C20-C21-C22-C23
23	K	101	BCR	C11-C10-C9-C8
23	K	101	BCR	C20-C21-C22-C23
23	T	701	BCR	C12-C13-C14-C15
23	b	717	BCR	C12-C13-C14-C15
23	b	718	BCR	C16-C17-C18-C19
23	c	515	BCR	C20-C21-C22-C23
23	d	403	BCR	C16-C17-C18-C19
23	d	403	BCR	C20-C21-C22-C23
23	h	701	BCR	C11-C10-C9-C8
23	h	701	BCR	C16-C17-C18-C19
23	t	701	BCR	C11-C10-C9-C8
23	t	701	BCR	C12-C13-C14-C15
29	C	518	DGD	C2E-C1E-O5D-C6D
29	c	518	DGD	C2E-C1E-O5D-C6D
33	D	412	LMG	C29-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
26	A	412	SQD	C12-C13-C14-C15
26	A	412	SQD	C32-C33-C34-C35
26	f	101	SQD	C27-C28-C29-C30
27	l	101	LHG	C9-C10-C11-C12
28	X	101	STE	C7-C8-C9-C10
28	b	724	STE	C6-C7-C8-C9
33	a	419	LMG	C41-C42-C43-C44
33	c	522	LMG	C11-C12-C13-C14
22	C	506	CLA	C5-C6-C7-C8
22	a	404	CLA	C13-C15-C16-C17
22	c	507	CLA	C15-C16-C17-C18
33	D	412	LMG	O10-C28-O8-C9
22	a	401	CLA	C16-C17-C18-C19
22	b	702	CLA	C16-C17-C18-C20
22	c	507	CLA	C16-C17-C18-C20
22	C	506	CLA	C4-C3-C5-C6
25	D	405	PL9	C27-C28-C29-C30
25	d	404	PL9	C7-C8-C9-C10
26	A	409	SQD	C12-C13-C14-C15
27	L	101	LHG	C18-C19-C20-C21
28	B	701	STE	C2-C3-C4-C5
28	B	725	STE	C11-C12-C13-C14
28	M	103	STE	C4-C5-C6-C7
28	T	702	STE	C13-C14-C15-C16
28	c	521	STE	C10-C11-C12-C13
33	c	522	LMG	C30-C31-C32-C33
22	C	506	CLA	C2-C3-C5-C6
22	B	704	CLA	C11-C10-C8-C9
22	B	711	CLA	C14-C13-C15-C16
22	B	715	CLA	C11-C12-C13-C14
22	C	512	CLA	C6-C7-C8-C9
22	b	701	CLA	C14-C13-C15-C16
22	b	705	CLA	C11-C12-C13-C14
26	b	720	SQD	C23-C24-C25-C26
26	f	101	SQD	C23-C24-C25-C26
27	D	411	LHG	C7-C8-C9-C10
26	a	413	SQD	C15-C16-C17-C18
26	a	415	SQD	C10-C11-C12-C13
26	b	720	SQD	C27-C28-C29-C30
27	A	410	LHG	C29-C30-C31-C32
27	L	101	LHG	C29-C30-C31-C32
28	X	101	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
28	b	724	STE	C3-C4-C5-C6
28	l	102	STE	C4-C5-C6-C7
28	x	101	STE	C2-C3-C4-C5
29	C	517	DGD	C5B-C6B-C7B-C8B
29	H	103	DGD	C6A-C7A-C8A-C9A
33	B	721	LMG	C14-C15-C16-C17
33	M	101	LMG	C35-C36-C37-C38
33	a	419	LMG	C13-C14-C15-C16
33	b	721	LMG	C20-C21-C22-C23
33	b	723	LMG	C18-C19-C20-C21
22	c	507	CLA	O1A-CGA-O2A-C1
29	C	519	DGD	O1A-C1A-O1G-C1G
26	A	409	SQD	C16-C17-C18-C19
27	D	411	LHG	C10-C11-C12-C13
27	a	412	LHG	C11-C10-C9-C8
28	a	416	STE	C6-C7-C8-C9
29	A	413	DGD	C9A-CAA-CBA-CCA
29	A	413	DGD	C8B-C9B-CAB-CBB
29	C	518	DGD	C8B-C9B-CAB-CBB
29	c	517	DGD	C7A-C8A-C9A-CAA
33	D	408	LMG	C38-C39-C40-C41
33	b	723	LMG	C30-C31-C32-C33
27	d	407	LHG	O1-C1-C2-C3
27	A	410	LHG	C30-C31-C32-C33
27	a	414	LHG	C17-C18-C19-C20
27	d	407	LHG	C31-C32-C33-C34
28	E	101	STE	C3-C4-C5-C6
29	H	103	DGD	C6B-C7B-C8B-C9B
33	D	412	LMG	C14-C15-C16-C17
33	b	721	LMG	C39-C40-C41-C42
27	a	412	LHG	C7-C8-C9-C10
26	A	409	SQD	C14-C15-C16-C17
26	B	723	SQD	C27-C28-C29-C30
26	a	413	SQD	C10-C11-C12-C13
27	A	410	LHG	C24-C25-C26-C27
27	D	411	LHG	C29-C30-C31-C32
27	a	412	LHG	C16-C17-C18-C19
27	a	414	LHG	C27-C28-C29-C30
28	A	411	STE	C4-C5-C6-C7
28	B	726	STE	C11-C12-C13-C14
28	M	102	STE	C9-C10-C11-C12
28	M	103	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
28	T	702	STE	C5-C6-C7-C8
28	T	702	STE	C12-C13-C14-C15
28	b	722	STE	C7-C8-C9-C10
28	b	727	STE	C6-C7-C8-C9
28	d	409	STE	C5-C6-C7-C8
28	x	101	STE	C3-C4-C5-C6
29	A	413	DGD	CBB-CCB-CDB-CEB
29	H	103	DGD	C8B-C9B-CAB-CBB
29	c	518	DGD	C2A-C3A-C4A-C5A
29	c	518	DGD	C7A-C8A-C9A-CAA
33	C	520	LMG	C37-C38-C39-C40
33	a	419	LMG	C33-C34-C35-C36
33	a	419	LMG	C36-C37-C38-C39
26	B	723	SQD	O10-C23-O48-C46
22	B	706	CLA	C16-C17-C18-C20
22	B	710	CLA	C16-C17-C18-C20
22	D	402	CLA	C16-C17-C18-C20
22	b	715	CLA	C16-C17-C18-C19
22	b	716	CLA	C11-C12-C13-C15
22	c	511	CLA	C16-C17-C18-C20
22	c	512	CLA	C16-C17-C18-C19
29	A	413	DGD	O6D-C1D-O3G-C3G
29	c	518	DGD	O6E-C1E-O5D-C6D
22	B	706	CLA	C5-C6-C7-C8
22	b	707	CLA	C8-C10-C11-C12
22	c	513	CLA	C5-C6-C7-C8
26	A	409	SQD	C32-C33-C34-C35
27	D	411	LHG	C30-C31-C32-C33
33	B	721	LMG	C31-C32-C33-C34
33	C	520	LMG	C30-C31-C32-C33
26	a	415	SQD	C14-C15-C16-C17
27	d	407	LHG	C27-C28-C29-C30
28	b	725	STE	C14-C15-C16-C17
28	b	727	STE	C9-C10-C11-C12
29	C	519	DGD	C4B-C5B-C6B-C7B
29	c	518	DGD	CAB-CBB-CCB-CDB
33	D	408	LMG	C17-C18-C19-C20
33	D	408	LMG	C36-C37-C38-C39
27	B	722	LHG	C26-C27-C28-C29
28	B	701	STE	C3-C4-C5-C6
28	h	703	STE	C7-C8-C9-C10
29	c	517	DGD	C9B-CAB-CBB-CCB

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Mol	Chain	Res	Type	Atoms
29	c	519	DGD	C9B-CAB-CBB-CCB
33	c	522	LMG	C39-C40-C41-C42
33	b	721	LMG	C29-C28-O8-C9
27	D	411	LHG	C11-C10-C9-C8
27	D	411	LHG	C15-C16-C17-C18
27	a	412	LHG	C17-C18-C19-C20
28	d	409	STE	C10-C11-C12-C13
29	c	517	DGD	C4B-C5B-C6B-C7B
33	C	520	LMG	C17-C18-C19-C20
33	M	101	LMG	C14-C15-C16-C17
33	b	723	LMG	C11-C12-C13-C14
33	c	523	LMG	C34-C35-C36-C37
22	b	708	CLA	C5-C6-C7-C8
22	b	715	CLA	C5-C6-C7-C8
27	A	410	LHG	C33-C34-C35-C36
27	L	101	LHG	C12-C13-C14-C15
28	X	101	STE	C13-C14-C15-C16
28	j	101	STE	C4-C5-C6-C7
28	t	702	STE	C6-C7-C8-C9
33	b	721	LMG	C37-C38-C39-C40
33	c	522	LMG	C29-C30-C31-C32
28	B	720	STE	C1-C2-C3-C4
22	B	706	CLA	C16-C17-C18-C19
22	a	401	CLA	C16-C17-C18-C20
22	b	707	CLA	C16-C17-C18-C19
22	c	511	CLA	C16-C17-C18-C19
26	B	723	SQD	C33-C34-C35-C36
26	b	720	SQD	C29-C30-C31-C32
26	f	101	SQD	C25-C26-C27-C28
28	J	101	STE	C3-C4-C5-C6
29	c	519	DGD	C7A-C8A-C9A-CAA
29	h	702	DGD	C6B-C7B-C8B-C9B
33	C	516	LMG	C35-C36-C37-C38
22	b	709	CLA	O1D-CGD-O2D-CED
26	a	415	SQD	C11-C12-C13-C14
29	c	519	DGD	CCA-CDA-CEA-CFA
23	D	404	BCR	C14-C15-C16-C17
33	a	419	LMG	C18-C19-C20-C21
25	a	411	PL9	C35-C34-C36-C37
25	d	404	PL9	C13-C14-C16-C17
34	D	406	PHO	C2-C3-C5-C6
34	a	405	PHO	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
26	B	723	SQD	C9-C10-C11-C12
27	l	101	LHG	C24-C25-C26-C27
33	b	723	LMG	C32-C33-C34-C35
22	c	513	CLA	C2A-CAA-CBA-CGA
27	D	410	LHG	O1-C1-C2-O2
27	a	412	LHG	O1-C1-C2-O2
27	d	407	LHG	O1-C1-C2-O2
22	A	402	CLA	C15-C16-C17-C18
27	D	411	LHG	C12-C13-C14-C15
27	D	411	LHG	C25-C26-C27-C28
27	l	101	LHG	C17-C18-C19-C20
28	c	521	STE	C9-C10-C11-C12
29	A	413	DGD	C2A-C3A-C4A-C5A
28	E	101	STE	C1-C2-C3-C4
22	B	712	CLA	C16-C17-C18-C20
22	C	514	CLA	C16-C17-C18-C19
26	A	409	SQD	C10-C11-C12-C13
28	C	523	STE	C7-C8-C9-C10
22	C	511	CLA	C8-C10-C11-C12
33	C	516	LMG	C16-C17-C18-C19
33	M	101	LMG	C37-C38-C39-C40
22	c	513	CLA	CBA-CGA-O2A-C1
26	a	413	SQD	C16-C17-C18-C19
27	a	412	LHG	C30-C31-C32-C33
26	D	409	SQD	C26-C27-C28-C29
27	d	406	LHG	C12-C13-C14-C15
28	B	726	STE	C11-C10-C9-C8
28	a	417	STE	C4-C5-C6-C7
29	c	519	DGD	C6B-C7B-C8B-C9B
33	c	523	LMG	C18-C19-C20-C21
22	H	102	CLA	C2-C1-O2A-CGA
27	A	410	LHG	C10-C11-C12-C13
28	B	725	STE	C5-C6-C7-C8
22	C	511	CLA	C13-C15-C16-C17
22	H	102	CLA	O1A-CGA-O2A-C1
29	c	519	DGD	O1A-C1A-O1G-C1G
26	A	412	SQD	C10-C11-C12-C13
26	a	413	SQD	C26-C27-C28-C29
26	a	413	SQD	C30-C31-C32-C33
28	A	411	STE	C6-C7-C8-C9
29	C	519	DGD	C3A-C4A-C5A-C6A
29	c	519	DGD	C9A-CAA-CBA-CCA

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Mol	Chain	Res	Type	Atoms
29	h	702	DGD	C9B-CAB-CBB-CCB
33	c	522	LMG	C34-C35-C36-C37
23	B	718	BCR	C23-C24-C25-C26
23	C	501	BCR	C1-C6-C7-C8
23	C	501	BCR	C5-C6-C7-C8
23	C	501	BCR	C23-C24-C25-C26
23	H	101	BCR	C23-C24-C25-C26
23	H	101	BCR	C23-C24-C25-C30
23	b	717	BCR	C1-C6-C7-C8
23	b	717	BCR	C5-C6-C7-C8
23	c	515	BCR	C23-C24-C25-C26
23	d	403	BCR	C23-C24-C25-C26
23	d	403	BCR	C23-C24-C25-C30
23	k	101	BCR	C1-C6-C7-C8
23	k	101	BCR	C5-C6-C7-C8
27	l	101	LHG	C26-C27-C28-C29
29	C	517	DGD	C7B-C8B-C9B-CAB
29	H	103	DGD	C5A-C6A-C7A-C8A
33	d	408	LMG	C30-C31-C32-C33
22	D	403	CLA	C13-C15-C16-C17
22	H	102	CLA	C10-C11-C12-C13
22	b	704	CLA	C15-C16-C17-C18
22	b	713	CLA	C10-C11-C12-C13
27	L	101	LHG	C32-C33-C34-C35
28	H	105	STE	C7-C8-C9-C10
33	c	522	LMG	C38-C39-C40-C41
22	c	513	CLA	O1A-CGA-O2A-C1
28	b	722	STE	C1-C2-C3-C4
28	b	724	STE	C5-C6-C7-C8
28	b	724	STE	C11-C10-C9-C8
33	C	516	LMG	C38-C39-C40-C41
33	b	723	LMG	C12-C13-C14-C15
33	c	523	LMG	C29-C30-C31-C32
22	c	513	CLA	C15-C16-C17-C18
29	C	518	DGD	CCB-CDB-CEB-CFB
25	d	404	PL9	C15-C14-C16-C17
22	A	403	CLA	C6-C7-C8-C10
22	B	702	CLA	C11-C12-C13-C15
22	C	504	CLA	C11-C10-C8-C7
22	C	505	CLA	C2-C3-C5-C6
22	C	512	CLA	C6-C7-C8-C10
22	C	514	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
22	C	514	CLA	C11-C12-C13-C15
22	a	403	CLA	C12-C13-C15-C16
22	a	406	CLA	C12-C13-C15-C16
22	b	701	CLA	C11-C12-C13-C15
22	b	701	CLA	C12-C13-C15-C16
22	b	707	CLA	C11-C10-C8-C7
22	c	504	CLA	C11-C10-C8-C7
22	c	507	CLA	C6-C7-C8-C10
22	c	507	CLA	C12-C13-C15-C16
22	c	510	CLA	C6-C7-C8-C10
22	c	513	CLA	C11-C12-C13-C15
22	d	401	CLA	C6-C7-C8-C10
22	d	402	CLA	C12-C13-C15-C16
25	d	404	PL9	C28-C29-C31-C32
26	a	413	SQD	C24-C25-C26-C27
28	c	521	STE	C7-C8-C9-C10
23	k	101	BCR	C19-C20-C21-C22
27	D	411	LHG	O9-C7-O7-C5
29	C	517	DGD	O1B-C1B-O2G-C2G
33	C	516	LMG	C10-C11-C12-C13
22	C	506	CLA	CBA-CGA-O2A-C1
22	C	514	CLA	CBA-CGA-O2A-C1
33	b	723	LMG	C29-C28-O8-C9
27	a	412	LHG	C32-C33-C34-C35
22	B	710	CLA	C8-C10-C11-C12
22	b	705	CLA	C5-C6-C7-C8
22	c	508	CLA	C8-C10-C11-C12
22	a	406	CLA	C2C-C3C-CAC-CBC
26	A	409	SQD	C30-C31-C32-C33
28	T	702	STE	C11-C12-C13-C14
33	D	408	LMG	C14-C15-C16-C17
33	c	522	LMG	C33-C34-C35-C36
22	b	714	CLA	C15-C16-C17-C18
26	A	409	SQD	C11-C10-C9-C8
26	B	723	SQD	C16-C17-C18-C19
26	a	415	SQD	C24-C25-C26-C27
27	A	410	LHG	C32-C33-C34-C35
29	c	519	DGD	C4B-C5B-C6B-C7B
26	A	412	SQD	C18-C19-C20-C21
28	a	416	STE	C3-C4-C5-C6
33	M	101	LMG	C38-C39-C40-C41
33	c	523	LMG	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
22	c	507	CLA	C16-C17-C18-C19
29	c	517	DGD	O6E-C1E-O5D-C6D
22	B	705	CLA	C10-C11-C12-C13
22	B	711	CLA	C13-C15-C16-C17
27	a	414	LHG	C16-C17-C18-C19
28	B	726	STE	C4-C5-C6-C7
28	I	101	STE	C11-C10-C9-C8
28	Z	101	STE	C13-C14-C15-C16
28	l	102	STE	C10-C11-C12-C13
26	A	409	SQD	C8-C7-O47-C45
28	H	104	STE	C5-C6-C7-C8
28	X	101	STE	C6-C7-C8-C9
29	C	519	DGD	C7B-C8B-C9B-CAB
33	C	520	LMG	C39-C40-C41-C42
23	k	101	BCR	C14-C15-C16-C17
27	D	410	LHG	C11-C10-C9-C8
29	c	517	DGD	CBA-CCA-CDA-CEA
33	M	101	LMG	C13-C14-C15-C16
22	B	704	CLA	C2C-C3C-CAC-CBC
29	C	519	DGD	C6A-C7A-C8A-C9A
33	D	408	LMG	C16-C17-C18-C19
33	c	523	LMG	C38-C39-C40-C41
22	b	715	CLA	C16-C17-C18-C20
26	a	413	SQD	C34-C35-C36-C37
27	B	722	LHG	C9-C10-C11-C12
27	a	414	LHG	C11-C12-C13-C14
28	l	102	STE	C7-C8-C9-C10
29	C	517	DGD	O6E-C5E-C6E-O5E
33	d	408	LMG	O6-C5-C6-O5
25	d	404	PL9	C30-C29-C31-C32
34	D	406	PHO	C4-C3-C5-C6
27	d	407	LHG	C23-C24-C25-C26
22	B	703	CLA	C2-C3-C5-C6
22	b	704	CLA	C2-C3-C5-C6
26	D	409	SQD	C44-C45-C46-O48
28	B	720	STE	C11-C12-C13-C14
28	b	724	STE	C7-C8-C9-C10
28	b	727	STE	C11-C12-C13-C14
33	b	723	LMG	C16-C17-C18-C19
22	A	403	CLA	C6-C7-C8-C9
22	B	702	CLA	C11-C12-C13-C14
22	C	503	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
22	C	511	CLA	C6-C7-C8-C9
22	C	514	CLA	C11-C10-C8-C9
22	a	403	CLA	C14-C13-C15-C16
22	a	406	CLA	C14-C13-C15-C16
22	b	703	CLA	C6-C7-C8-C9
22	c	504	CLA	C11-C10-C8-C9
22	c	506	CLA	C11-C10-C8-C9
22	c	507	CLA	C6-C7-C8-C9
22	c	513	CLA	C11-C12-C13-C14
22	d	401	CLA	C6-C7-C8-C9
29	A	413	DGD	C4B-C5B-C6B-C7B
27	B	722	LHG	C12-C13-C14-C15
33	c	522	LMG	C40-C41-C42-C43
33	D	408	LMG	O6-C5-C6-O5
23	k	101	BCR	C36-C18-C19-C20
22	B	703	CLA	C8-C10-C11-C12
27	L	101	LHG	C11-C12-C13-C14
29	C	517	DGD	C8B-C9B-CAB-CBB
29	c	518	DGD	CAA-CBA-CCA-CDA
33	c	520	LMG	C35-C36-C37-C38
23	B	717	BCR	C17-C18-C19-C20
22	C	506	CLA	O1A-CGA-O2A-C1
22	B	704	CLA	C1A-C2A-CAA-CBA
22	c	513	CLA	C1A-C2A-CAA-CBA
22	c	514	CLA	C1A-C2A-CAA-CBA
22	C	503	CLA	C16-C17-C18-C19
27	L	101	LHG	C13-C14-C15-C16
28	d	409	STE	C11-C12-C13-C14
23	h	701	BCR	C15-C16-C17-C18
27	D	410	LHG	C4-O6-P-O3
27	L	101	LHG	C3-O3-P-O6
28	c	521	STE	C4-C5-C6-C7
29	c	519	DGD	C7B-C8B-C9B-CAB
29	c	517	DGD	O6D-C5D-C6D-O5D
28	a	416	STE	C2-C3-C4-C5
22	c	513	CLA	C13-C15-C16-C17
27	l	101	LHG	C10-C11-C12-C13
29	A	413	DGD	C5B-C6B-C7B-C8B
33	D	412	LMG	C33-C34-C35-C36
27	D	411	LHG	C27-C28-C29-C30
29	C	519	DGD	C2B-C3B-C4B-C5B
22	b	716	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
26	B	723	SQD	C45-C46-O48-C23
22	B	703	CLA	C16-C17-C18-C19
33	C	516	LMG	C32-C33-C34-C35
22	B	714	CLA	O1D-CGD-O2D-CED
28	x	101	STE	C9-C10-C11-C12
29	A	413	DGD	CCB-CDB-CEB-CFB
22	c	504	CLA	C15-C16-C17-C18
22	c	512	CLA	C15-C16-C17-C18
27	a	412	LHG	C15-C16-C17-C18
28	E	101	STE	C4-C5-C6-C7
27	D	411	LHG	C1-C2-C3-O3
22	B	703	CLA	C4-C3-C5-C6
22	C	505	CLA	C4-C3-C5-C6
27	l	101	LHG	C33-C34-C35-C36
29	h	702	DGD	C3B-C4B-C5B-C6B
33	a	419	LMG	C23-C24-C25-C26
29	H	103	DGD	C9A-CAA-CBA-CCA
28	b	722	STE	C12-C13-C14-C15
22	B	711	CLA	C8-C10-C11-C12
22	B	716	CLA	C11-C12-C13-C14
22	a	403	CLA	C16-C17-C18-C20
26	B	723	SQD	O6-C44-C45-C46
26	a	413	SQD	C44-C45-C46-O48
26	a	415	SQD	C44-C45-C46-O48
27	D	410	LHG	C10-C11-C12-C13
27	D	410	LHG	C17-C18-C19-C20
28	b	726	STE	C3-C4-C5-C6
29	c	517	DGD	C7B-C8B-C9B-CAB
33	c	523	LMG	C32-C33-C34-C35
22	A	404	CLA	C6-C7-C8-C9
28	B	720	STE	C12-C13-C14-C15
29	C	519	DGD	CDB-CEB-CFB-CGB
29	c	519	DGD	CDA-CEA-CFA-CGA
33	c	520	LMG	C40-C41-C42-C43
22	C	514	CLA	O1A-CGA-O2A-C1
29	C	518	DGD	C2G-C3G-O3G-C1D
29	c	518	DGD	C2G-C3G-O3G-C1D
29	c	518	DGD	C5D-C6D-O5D-C1E
33	a	419	LMG	C8-C7-O1-C1
27	a	412	LHG	C18-C19-C20-C21
27	a	412	LHG	C28-C29-C30-C31
28	h	703	STE	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
29	C	518	DGD	C6B-C7B-C8B-C9B
29	c	518	DGD	C7B-C8B-C9B-CAB
33	a	419	LMG	O8-C28-C29-C30
22	A	402	CLA	C2C-C3C-CAC-CBC
28	a	417	STE	C7-C8-C9-C10
28	x	101	STE	C5-C6-C7-C8
22	C	514	CLA	C16-C17-C18-C20
25	d	404	PL9	C44-C46-C47-C48
26	A	409	SQD	C17-C18-C19-C20
28	M	102	STE	C11-C10-C9-C8
29	H	103	DGD	C4A-C5A-C6A-C7A
33	D	412	LMG	C35-C36-C37-C38
27	A	410	LHG	O1-C1-C2-O2
28	B	725	STE	C12-C13-C14-C15
28	H	104	STE	C6-C7-C8-C9
28	b	722	STE	C14-C15-C16-C17
29	C	517	DGD	CDA-CEA-CFA-CGA
22	B	715	CLA	C13-C15-C16-C17
28	c	521	STE	C11-C10-C9-C8
29	h	702	DGD	CAA-CBA-CCA-CDA
22	c	504	CLA	C5-C6-C7-C8
23	C	515	BCR	C16-C17-C18-C36
23	t	701	BCR	C20-C21-C22-C37
29	c	517	DGD	O6E-C5E-C6E-O5E
22	C	511	CLA	C4-C3-C5-C6
22	c	506	CLA	C4-C3-C5-C6
27	d	406	LHG	C11-C12-C13-C14
28	A	414	STE	C11-C10-C9-C8
28	b	725	STE	C3-C4-C5-C6
22	b	702	CLA	C16-C17-C18-C19
29	A	413	DGD	C2A-C1A-O1G-C1G
26	b	720	SQD	C19-C20-C21-C22
29	C	518	DGD	C3A-C4A-C5A-C6A
26	A	412	SQD	C27-C28-C29-C30
28	M	103	STE	C7-C8-C9-C10
33	c	522	LMG	C31-C32-C33-C34
26	B	723	SQD	C46-C45-O47-C7
22	d	402	CLA	C15-C16-C17-C18
22	d	401	CLA	C2-C1-O2A-CGA
33	b	723	LMG	O6-C5-C6-O5
27	a	412	LHG	C29-C30-C31-C32
28	B	720	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
28	T	702	STE	C10-C11-C12-C13
28	a	418	STE	C10-C11-C12-C13
28	b	726	STE	C4-C5-C6-C7
28	x	101	STE	C11-C10-C9-C8
33	M	101	LMG	C15-C16-C17-C18
22	B	716	CLA	C11-C12-C13-C15
22	a	403	CLA	C16-C17-C18-C19
26	A	412	SQD	C7-C8-C9-C10
28	H	105	STE	C6-C7-C8-C9
29	A	413	DGD	CBA-CCA-CDA-CEA
33	c	523	LMG	C20-C21-C22-C23
29	C	517	DGD	C6B-C7B-C8B-C9B
33	a	419	LMG	C32-C33-C34-C35
22	A	403	CLA	C13-C15-C16-C17
22	B	712	CLA	C10-C11-C12-C13
22	b	706	CLA	C8-C10-C11-C12
22	b	707	CLA	C13-C15-C16-C17
33	M	101	LMG	C17-C18-C19-C20
26	A	409	SQD	O47-C45-C46-O48
26	a	413	SQD	O6-C44-C45-O47
26	b	720	SQD	O47-C45-C46-O48
33	C	520	LMG	O1-C7-C8-O7
27	A	410	LHG	C26-C27-C28-C29
28	b	727	STE	C5-C6-C7-C8
29	A	413	DGD	CDA-CEA-CFA-CGA
29	H	103	DGD	C7A-C8A-C9A-CAA
33	C	520	LMG	O9-C10-O7-C8
22	B	702	CLA	C16-C17-C18-C20
22	C	508	CLA	C16-C17-C18-C20
28	H	104	STE	C11-C10-C9-C8
28	X	101	STE	C11-C10-C9-C8
33	M	101	LMG	C33-C34-C35-C36
29	c	517	DGD	CAB-CBB-CCB-CDB
22	A	403	CLA	C11-C10-C8-C7
22	B	704	CLA	C12-C13-C15-C16
22	C	506	CLA	C12-C13-C15-C16
22	C	508	CLA	C11-C10-C8-C7
22	C	510	CLA	C6-C7-C8-C10
22	C	510	CLA	C12-C13-C15-C16
22	C	511	CLA	C2-C3-C5-C6
22	C	511	CLA	C6-C7-C8-C10
22	C	513	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
22	C	514	CLA	C6-C7-C8-C10
22	b	703	CLA	C6-C7-C8-C10
22	b	711	CLA	C11-C12-C13-C15
22	b	711	CLA	C12-C13-C15-C16
22	b	715	CLA	C12-C13-C15-C16
22	c	506	CLA	C2-C3-C5-C6
22	c	506	CLA	C11-C10-C8-C7
22	c	512	CLA	C12-C13-C15-C16
22	d	402	CLA	C11-C12-C13-C15
25	a	411	PL9	C13-C14-C16-C17
27	D	410	LHG	C25-C26-C27-C28
33	c	520	LMG	C34-C35-C36-C37
22	B	704	CLA	C14-C13-C15-C16
22	C	506	CLA	C14-C13-C15-C16
22	C	508	CLA	C11-C10-C8-C9
22	C	513	CLA	C11-C12-C13-C14
22	H	102	CLA	C14-C13-C15-C16
22	b	701	CLA	C11-C12-C13-C14
22	b	708	CLA	C11-C12-C13-C14
22	b	709	CLA	C14-C13-C15-C16
22	b	715	CLA	C14-C13-C15-C16
22	c	505	CLA	C11-C10-C8-C9
22	d	402	CLA	C11-C12-C13-C14
22	d	402	CLA	C14-C13-C15-C16
22	b	702	CLA	CBD-CGD-O2D-CED
28	H	105	STE	C5-C6-C7-C8
33	C	516	LMG	C36-C37-C38-C39
22	D	401	CLA	C10-C11-C12-C13
22	A	404	CLA	C5-C6-C7-C8
33	M	101	LMG	C40-C41-C42-C43
29	c	517	DGD	C4D-C5D-C6D-O5D
22	b	704	CLA	C16-C17-C18-C19
28	h	703	STE	C15-C16-C17-C18
22	C	513	CLA	C3-C5-C6-C7
22	B	703	CLA	C15-C16-C17-C18
22	B	710	CLA	C15-C16-C17-C18
33	b	721	LMG	C11-C10-O7-C8
27	L	101	LHG	C30-C31-C32-C33
29	C	519	DGD	C9B-CAB-CBB-CCB
22	B	716	CLA	O1A-CGA-O2A-C1
27	L	101	LHG	C19-C20-C21-C22
28	m	101	STE	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
26	A	409	SQD	C28-C29-C30-C31
28	C	523	STE	C6-C7-C8-C9
29	C	518	DGD	C4A-C5A-C6A-C7A
27	A	410	LHG	O6-C4-C5-C6
28	C	522	STE	C6-C7-C8-C9
28	b	726	STE	C7-C8-C9-C10
22	B	716	CLA	CBA-CGA-O2A-C1
22	C	507	CLA	C13-C15-C16-C17
22	c	514	CLA	C13-C15-C16-C17
26	a	413	SQD	C28-C29-C30-C31
22	c	513	CLA	C4-C3-C5-C6
25	A	408	PL9	C43-C44-C46-C47
29	c	517	DGD	C1B-C2B-C3B-C4B
26	a	413	SQD	C17-C18-C19-C20
22	C	513	CLA	C10-C11-C12-C13
26	a	413	SQD	C11-C10-C9-C8
28	E	101	STE	C5-C6-C7-C8
29	C	518	DGD	C4B-C5B-C6B-C7B
29	c	517	DGD	C3B-C4B-C5B-C6B
29	c	519	DGD	C6A-C7A-C8A-C9A
22	C	508	CLA	C16-C17-C18-C19
34	D	406	PHO	C16-C17-C18-C20
27	A	410	LHG	C35-C36-C37-C38
28	B	725	STE	C2-C3-C4-C5
28	C	521	STE	C3-C4-C5-C6
28	l	102	STE	C1-C2-C3-C4
33	c	523	LMG	C30-C31-C32-C33
28	B	725	STE	C1-C2-C3-C4
27	d	407	LHG	C35-C36-C37-C38
26	A	409	SQD	C31-C32-C33-C34
28	x	101	STE	C4-C5-C6-C7
33	C	520	LMG	C40-C41-C42-C43
26	B	723	SQD	C19-C20-C21-C22
26	a	413	SQD	C18-C19-C20-C21
27	l	101	LHG	C16-C17-C18-C19
28	T	702	STE	C6-C7-C8-C9
33	b	723	LMG	C19-C20-C21-C22
22	a	403	CLA	C2C-C3C-CAC-CBC
27	A	410	LHG	C27-C28-C29-C30
27	d	407	LHG	C30-C31-C32-C33
22	b	708	CLA	C13-C15-C16-C17
22	c	512	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
26	A	409	SQD	C44-C45-C46-O48
26	a	413	SQD	O6-C44-C45-C46
27	A	410	LHG	C4-C5-C6-O8
29	A	413	DGD	C1G-C2G-C3G-O3G
33	C	520	LMG	O1-C7-C8-C9
33	M	101	LMG	C7-C8-C9-O8
33	a	419	LMG	O1-C7-C8-C9
33	c	522	LMG	O1-C7-C8-C9
33	c	522	LMG	C7-C8-C9-O8
26	D	409	SQD	C30-C31-C32-C33
27	d	406	LHG	C17-C18-C19-C20
29	c	519	DGD	O6D-C5D-C6D-O5D
29	c	518	DGD	C8B-C9B-CAB-CBB
29	H	103	DGD	CDA-CEA-CFA-CGA
22	B	712	CLA	C16-C17-C18-C19
22	c	504	CLA	C16-C17-C18-C19
22	c	513	CLA	C2-C3-C5-C6
27	B	722	LHG	C27-C28-C29-C30
27	A	410	LHG	C12-C13-C14-C15
29	c	518	DGD	CDA-CEA-CFA-CGA
28	A	411	STE	C12-C13-C14-C15
28	A	411	STE	C15-C16-C17-C18
28	B	724	STE	C3-C4-C5-C6
28	b	725	STE	C7-C8-C9-C10
28	A	411	STE	C3-C4-C5-C6
28	b	722	STE	C5-C6-C7-C8
33	a	419	LMG	C30-C31-C32-C33
25	d	404	PL9	C37-C38-C39-C40
22	b	704	CLA	C16-C17-C18-C20
33	b	721	LMG	C33-C34-C35-C36
26	B	723	SQD	C28-C29-C30-C31
27	l	101	LHG	C32-C33-C34-C35
29	h	702	DGD	CBA-CCA-CDA-CEA
33	D	408	LMG	C39-C40-C41-C42
29	H	103	DGD	C8A-C9A-CAA-CBA
29	H	103	DGD	CDB-CEB-CFB-CGB
29	A	413	DGD	O2G-C2G-C3G-O3G
33	c	522	LMG	O1-C7-C8-O7
26	f	101	SQD	C24-C25-C26-C27
33	d	408	LMG	C40-C41-C42-C43
33	D	412	LMG	O1-C7-C8-C9
28	b	724	STE	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
29	c	519	DGD	CCB-CDB-CEB-CFB
29	c	517	DGD	O1B-C1B-O2G-C2G
34	a	405	PHO	O1D-CGD-O2D-CED
28	E	102	STE	C4-C5-C6-C7
22	B	704	CLA	C11-C12-C13-C14
22	C	504	CLA	C14-C13-C15-C16
22	C	507	CLA	C14-C13-C15-C16
22	H	102	CLA	C6-C7-C8-C9
22	b	702	CLA	C6-C7-C8-C9
22	b	714	CLA	C6-C7-C8-C9
22	c	507	CLA	C11-C10-C8-C9
29	C	518	DGD	C2B-C3B-C4B-C5B
33	D	408	LMG	C30-C31-C32-C33
33	M	101	LMG	C32-C33-C34-C35
22	c	512	CLA	CBD-CGD-O2D-CED
26	A	412	SQD	C11-C12-C13-C14
27	a	414	LHG	C15-C16-C17-C18
33	c	523	LMG	C37-C38-C39-C40
22	B	710	CLA	C16-C17-C18-C19
23	A	405	BCR	C1-C6-C7-C8
23	A	405	BCR	C5-C6-C7-C8
23	k	102	BCR	C23-C24-C25-C26
22	b	714	CLA	C5-C6-C7-C8
27	B	722	LHG	C18-C19-C20-C21
28	B	720	STE	C9-C10-C11-C12
33	D	412	LMG	C16-C17-C18-C19
29	H	103	DGD	O2G-C1B-C2B-C3B
23	b	719	BCR	C11-C12-C13-C35
28	b	727	STE	C4-C5-C6-C7
23	c	516	BCR	C21-C22-C23-C24
33	c	520	LMG	C38-C39-C40-C41
33	d	408	LMG	C37-C38-C39-C40
23	A	405	BCR	C14-C15-C16-C17
26	b	720	SQD	C30-C31-C32-C33
26	f	101	SQD	C28-C29-C30-C31
22	B	703	CLA	C16-C17-C18-C20
28	b	727	STE	C3-C4-C5-C6
22	B	703	CLA	C10-C11-C12-C13
26	b	720	SQD	C11-C12-C13-C14
26	A	409	SQD	C27-C28-C29-C30
29	C	517	DGD	C2B-C3B-C4B-C5B
22	A	403	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
22	B	702	CLA	C12-C13-C15-C16
22	B	704	CLA	C11-C12-C13-C15
22	B	705	CLA	C11-C12-C13-C15
22	B	707	CLA	C12-C13-C15-C16
22	B	713	CLA	C11-C12-C13-C15
22	B	714	CLA	C6-C7-C8-C10
22	C	507	CLA	C12-C13-C15-C16
22	C	508	CLA	C11-C12-C13-C15
22	C	509	CLA	C11-C10-C8-C7
22	C	513	CLA	C11-C10-C8-C7
22	b	702	CLA	C6-C7-C8-C10
22	b	705	CLA	C12-C13-C15-C16
22	b	707	CLA	C6-C7-C8-C10
22	b	708	CLA	C11-C12-C13-C15
22	b	709	CLA	C12-C13-C15-C16
22	b	715	CLA	C11-C10-C8-C7
22	c	505	CLA	C11-C10-C8-C7
22	c	507	CLA	C11-C10-C8-C7
22	c	509	CLA	C11-C10-C8-C7
22	c	510	CLA	C11-C12-C13-C15
22	d	401	CLA	C11-C12-C13-C15
27	L	101	LHG	O10-C23-O8-C6
22	B	702	CLA	C16-C17-C18-C19
22	D	402	CLA	C16-C17-C18-C19
28	b	722	STE	C4-C5-C6-C7
28	a	417	STE	C2-C3-C4-C5
33	M	101	LMG	C19-C20-C21-C22
23	H	101	BCR	C20-C21-C22-C37
23	K	101	BCR	C35-C13-C14-C15
23	Y	101	BCR	C16-C17-C18-C36
23	c	515	BCR	C35-C13-C14-C15
23	t	701	BCR	C35-C13-C14-C15
27	d	406	LHG	C31-C32-C33-C34
22	B	705	CLA	C3-C5-C6-C7
29	c	518	DGD	CBB-CCB-CDB-CEB
33	D	408	LMG	O10-C28-O8-C9
22	B	703	CLA	C13-C15-C16-C17
22	b	712	CLA	C13-C15-C16-C17
27	B	722	LHG	C29-C30-C31-C32
33	c	520	LMG	C29-C30-C31-C32
22	A	402	CLA	C4C-C3C-CAC-CBC
28	E	101	STE	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
28	b	727	STE	C2-C3-C4-C5
33	D	412	LMG	C15-C16-C17-C18
22	B	711	CLA	C15-C16-C17-C18
26	a	415	SQD	C30-C31-C32-C33
27	a	412	LHG	C14-C15-C16-C17
22	B	703	CLA	CAD-CBD-CGD-O2D
22	C	506	CLA	CAD-CBD-CGD-O2D
22	C	513	CLA	CAD-CBD-CGD-O2D
22	C	514	CLA	CAD-CBD-CGD-O2D
22	c	510	CLA	CAD-CBD-CGD-O2D
33	D	412	LMG	C9-C8-O7-C10
33	c	523	LMG	C9-C8-O7-C10
34	D	406	PHO	CAD-CBD-CGD-O2D
27	d	407	LHG	C26-C27-C28-C29
29	C	518	DGD	CAA-CBA-CCA-CDA
29	C	519	DGD	C8A-C9A-CAA-CBA
22	c	510	CLA	C8-C10-C11-C12
22	d	401	CLA	C16-C17-C18-C20
28	J	101	STE	C5-C6-C7-C8
29	C	519	DGD	C6B-C7B-C8B-C9B
33	b	723	LMG	C34-C35-C36-C37
26	b	720	SQD	O5-C1-O6-C44
29	c	518	DGD	O6D-C1D-O3G-C3G
33	C	516	LMG	O6-C1-O1-C7
33	C	520	LMG	O6-C1-O1-C7
28	C	523	STE	C2-C3-C4-C5
33	b	723	LMG	C14-C15-C16-C17
26	A	409	SQD	O6-C44-C45-C46
27	a	414	LHG	C4-C5-C6-O8
29	C	517	DGD	O1G-C1G-C2G-C3G
27	a	414	LHG	O6-C4-C5-O7
22	c	506	CLA	C15-C16-C17-C18
29	c	517	DGD	C5B-C6B-C7B-C8B
22	C	511	CLA	C15-C16-C17-C18
27	D	411	LHG	C17-C18-C19-C20
33	b	723	LMG	C40-C41-C42-C43
22	B	706	CLA	CHA-CBD-CGD-O2D
22	C	503	CLA	CHA-CBD-CGD-O1D
22	C	503	CLA	CHA-CBD-CGD-O2D
22	C	505	CLA	CHA-CBD-CGD-O1D
22	b	707	CLA	CHA-CBD-CGD-O1D
22	b	707	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
22	b	716	CLA	CHA-CBD-CGD-O1D
22	b	716	CLA	CHA-CBD-CGD-O2D
22	c	503	CLA	CHA-CBD-CGD-O1D
22	c	505	CLA	CHA-CBD-CGD-O1D
22	c	505	CLA	CHA-CBD-CGD-O2D
28	T	702	STE	C15-C16-C17-C18
23	c	515	BCR	C12-C13-C14-C15
29	c	517	DGD	C2E-C1E-O5D-C6D
27	A	410	LHG	O7-C5-C6-O8
27	a	414	LHG	O7-C5-C6-O8
29	C	517	DGD	O1G-C1G-C2G-O2G
29	c	517	DGD	O1G-C1G-C2G-O2G
33	b	723	LMG	O7-C8-C9-O8
28	B	726	STE	C14-C15-C16-C17
22	B	713	CLA	CBD-CGD-O2D-CED
22	d	401	CLA	C16-C17-C18-C19
26	B	723	SQD	C10-C11-C12-C13
27	D	411	LHG	C9-C10-C11-C12
28	B	720	STE	C10-C11-C12-C13
29	H	103	DGD	CCB-CDB-CEB-CFB
25	a	411	PL9	C15-C14-C16-C17
26	a	413	SQD	C31-C32-C33-C34
33	b	721	LMG	C15-C16-C17-C18
22	a	406	CLA	C11-C12-C13-C14
22	b	706	CLA	C14-C13-C15-C16
22	b	711	CLA	C11-C12-C13-C14
22	b	715	CLA	C11-C10-C8-C9
28	a	418	STE	C11-C10-C9-C8
25	D	405	PL9	C47-C48-C49-C51
28	h	703	STE	C5-C6-C7-C8
23	D	404	BCR	C37-C22-C23-C24
29	A	413	DGD	O6D-C5D-C6D-O5D
27	a	412	LHG	C33-C34-C35-C36
33	D	412	LMG	C34-C35-C36-C37
28	b	724	STE	C2-C3-C4-C5
33	c	520	LMG	C31-C32-C33-C34
33	d	408	LMG	C32-C33-C34-C35
23	D	404	BCR	C17-C18-C19-C20
26	A	412	SQD	C34-C35-C36-C37
22	C	514	CLA	C1A-C2A-CAA-CBA
22	a	401	CLA	C1A-C2A-CAA-CBA
22	b	714	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
25	a	411	PL9	C42-C43-C44-C46
33	C	520	LMG	C19-C20-C21-C22
22	B	711	CLA	O1D-CGD-O2D-CED
28	H	104	STE	C7-C8-C9-C10
27	L	101	LHG	C4-O6-P-O5
27	a	412	LHG	C3-O3-P-O5
27	a	414	LHG	C3-O3-P-O4
27	d	406	LHG	C4-O6-P-O5
22	A	403	CLA	C16-C17-C18-C19
22	B	705	CLA	C16-C17-C18-C20
22	C	513	CLA	C16-C17-C18-C20
22	c	504	CLA	C16-C17-C18-C20
28	a	417	STE	C1-C2-C3-C4
33	c	520	LMG	C29-C28-O8-C9
28	X	101	STE	C12-C13-C14-C15
28	m	101	STE	C2-C3-C4-C5
29	A	413	DGD	CFA-CGA-CHA-CIA
29	h	702	DGD	C7B-C8B-C9B-CAB
27	a	412	LHG	C25-C26-C27-C28
29	C	517	DGD	C8A-C9A-CAA-CBA
22	b	706	CLA	C16-C17-C18-C20
22	c	505	CLA	C11-C12-C13-C15
26	A	409	SQD	C11-C12-C13-C14
28	B	726	STE	C6-C7-C8-C9
22	C	503	CLA	CAD-CBD-CGD-O1D
22	C	505	CLA	CAD-CBD-CGD-O1D
22	b	707	CLA	CAD-CBD-CGD-O1D
22	c	503	CLA	CAD-CBD-CGD-O1D
22	c	505	CLA	CAD-CBD-CGD-O1D
22	c	507	CLA	CAD-CBD-CGD-O1D
26	f	101	SQD	C5-C6-S-O7
33	D	408	LMG	C12-C13-C14-C15
29	c	518	DGD	C5A-C6A-C7A-C8A
29	C	519	DGD	CBB-CCB-CDB-CEB
33	C	520	LMG	C32-C33-C34-C35
33	d	408	LMG	C36-C37-C38-C39
22	A	402	CLA	C16-C17-C18-C19
22	A	402	CLA	C16-C17-C18-C20
22	B	709	CLA	C4-C3-C5-C6
34	a	405	PHO	C4-C3-C5-C6
22	B	713	CLA	C6-C7-C8-C10
22	B	713	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	B	716	CLA	C6-C7-C8-C10
22	C	506	CLA	C6-C7-C8-C10
22	C	511	CLA	C11-C10-C8-C7
22	C	513	CLA	C12-C13-C15-C16
22	b	703	CLA	C11-C12-C13-C15
22	b	707	CLA	C11-C12-C13-C15
22	c	502	CLA	C11-C12-C13-C15
22	c	504	CLA	C11-C12-C13-C15
22	c	506	CLA	C6-C7-C8-C10
22	c	513	CLA	C12-C13-C15-C16
22	c	514	CLA	C12-C13-C15-C16
27	A	410	LHG	O6-C4-C5-O7
29	H	103	DGD	CAB-CBB-CCB-CDB
33	C	520	LMG	O10-C28-O8-C9
29	C	517	DGD	C4D-C5D-C6D-O5D
29	C	517	DGD	O6D-C5D-C6D-O5D
28	d	409	STE	C2-C3-C4-C5
29	C	519	DGD	C1A-C2A-C3A-C4A
26	a	413	SQD	C8-C7-O47-C45
27	B	722	LHG	C17-C18-C19-C20
26	a	415	SQD	O47-C45-C46-O48
33	M	101	LMG	O7-C8-C9-O8
33	a	419	LMG	O1-C7-C8-O7
33	c	522	LMG	O7-C8-C9-O8
29	A	413	DGD	CEB-CFB-CGB-CHB
33	C	516	LMG	C15-C16-C17-C18
28	b	727	STE	C11-C10-C9-C8
26	a	415	SQD	C29-C30-C31-C32
22	B	716	CLA	C10-C11-C12-C13
26	a	415	SQD	C31-C32-C33-C34
29	C	519	DGD	C2A-C1A-O1G-C1G
33	B	721	LMG	C29-C30-C31-C32
25	A	408	PL9	C28-C29-C31-C32
25	a	411	PL9	C38-C39-C41-C42
29	h	702	DGD	O2G-C1B-C2B-C3B
33	d	408	LMG	C15-C16-C17-C18
22	c	505	CLA	C8-C10-C11-C12
22	A	403	CLA	C11-C10-C8-C9
22	A	403	CLA	C11-C12-C13-C14
22	B	702	CLA	C14-C13-C15-C16
22	C	508	CLA	C11-C12-C13-C14
22	C	509	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
22	C	510	CLA	C14-C13-C15-C16
22	C	511	CLA	C11-C10-C8-C9
22	b	702	CLA	C11-C10-C8-C9
22	b	705	CLA	C14-C13-C15-C16
22	b	716	CLA	C11-C10-C8-C9
22	c	509	CLA	C11-C10-C8-C9
33	B	721	LMG	C28-C29-C30-C31
33	d	408	LMG	C35-C36-C37-C38
22	b	704	CLA	C3-C5-C6-C7
22	b	706	CLA	C16-C17-C18-C19
34	D	406	PHO	C16-C17-C18-C19
22	c	506	CLA	C13-C15-C16-C17
29	C	517	DGD	C3A-C4A-C5A-C6A
22	c	507	CLA	C8-C10-C11-C12
33	a	419	LMG	C17-C18-C19-C20
25	d	404	PL9	C32-C33-C34-C35
22	b	703	CLA	C8-C10-C11-C12
22	B	715	CLA	C16-C17-C18-C19
28	b	722	STE	C13-C14-C15-C16
29	H	103	DGD	C4B-C5B-C6B-C7B
29	c	518	DGD	C5B-C6B-C7B-C8B
33	b	721	LMG	C19-C20-C21-C22
22	b	709	CLA	C16-C17-C18-C20
26	B	723	SQD	C32-C33-C34-C35
22	C	502	CLA	O1D-CGD-O2D-CED
28	c	501	STE	C7-C8-C9-C10
33	a	419	LMG	C9-C8-O7-C10
27	a	414	LHG	O6-C4-C5-C6
29	A	413	DGD	C6B-C7B-C8B-C9B
29	c	518	DGD	C9B-CAB-CBB-CCB
33	b	721	LMG	C22-C23-C24-C25
27	d	406	LHG	C7-C8-C9-C10
26	a	415	SQD	C17-C18-C19-C20
28	b	722	STE	C2-C3-C4-C5
29	h	702	DGD	CBB-CCB-CDB-CEB
27	D	411	LHG	C2-C3-O3-P
27	d	407	LHG	C2-C3-O3-P
28	t	702	STE	C3-C4-C5-C6
29	C	517	DGD	CBB-CCB-CDB-CEB
29	C	518	DGD	O1A-C1A-O1G-C1G
26	B	723	SQD	C14-C15-C16-C17
22	b	701	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
27	D	410	LHG	C11-C12-C13-C14
29	H	103	DGD	C3B-C4B-C5B-C6B
23	k	102	BCR	C23-C24-C25-C30
29	c	519	DGD	C5A-C6A-C7A-C8A
22	c	512	CLA	CBA-CGA-O2A-C1
28	H	104	STE	C11-C12-C13-C14
22	a	403	CLA	C4C-C3C-CAC-CBC
28	M	103	STE	C2-C3-C4-C5
33	a	419	LMG	C31-C32-C33-C34
22	D	403	CLA	C16-C17-C18-C19
29	A	413	DGD	C4D-C5D-C6D-O5D
29	C	517	DGD	O6E-C1E-O5D-C6D
23	c	516	BCR	C12-C13-C14-C15
33	a	419	LMG	O7-C8-C9-O8
28	j	101	STE	C7-C8-C9-C10
29	h	702	DGD	C5B-C6B-C7B-C8B
27	a	414	LHG	C14-C15-C16-C17
33	b	723	LMG	C7-C8-C9-O8
33	C	516	LMG	C12-C13-C14-C15
22	C	504	CLA	C12-C13-C15-C16
22	b	714	CLA	C2-C3-C5-C6
33	d	408	LMG	C10-C11-C12-C13
22	B	713	CLA	C6-C7-C8-C9
22	B	713	CLA	C14-C13-C15-C16
22	b	703	CLA	C11-C12-C13-C14
22	b	707	CLA	C6-C7-C8-C9
22	b	707	CLA	C11-C12-C13-C14
22	c	506	CLA	C6-C7-C8-C9
22	c	507	CLA	C14-C13-C15-C16
22	c	513	CLA	C14-C13-C15-C16
27	A	410	LHG	C8-C7-O7-C5
22	B	705	CLA	C16-C17-C18-C19
22	B	713	CLA	C16-C17-C18-C19
22	c	505	CLA	C11-C12-C13-C14
33	D	408	LMG	C32-C33-C34-C35
22	B	707	CLA	C15-C16-C17-C18
29	A	413	DGD	CCA-CDA-CEA-CFA
23	a	407	BCR	C11-C12-C13-C35
23	t	701	BCR	C7-C8-C9-C34
22	C	513	CLA	C16-C17-C18-C19
27	l	101	LHG	C18-C19-C20-C21
22	C	512	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
23	C	501	BCR	C11-C12-C13-C14
27	a	414	LHG	C28-C29-C30-C31
33	a	419	LMG	C22-C23-C24-C25
29	H	103	DGD	C5B-C6B-C7B-C8B
25	D	405	PL9	C42-C43-C44-C46
25	D	405	PL9	C28-C29-C31-C32
34	a	405	PHO	C2-C3-C5-C6
33	C	516	LMG	C29-C28-O8-C9
28	C	523	STE	C4-C5-C6-C7
28	a	418	STE	C1-C2-C3-C4
22	c	506	CLA	C16-C17-C18-C20
33	B	721	LMG	O7-C10-C11-C12
23	B	718	BCR	C19-C20-C21-C22
22	B	708	CLA	O1A-CGA-O2A-C1
22	c	512	CLA	O1A-CGA-O2A-C1
27	D	411	LHG	C13-C14-C15-C16
22	c	510	CLA	C13-C15-C16-C17
28	a	418	STE	C5-C6-C7-C8
33	M	101	LMG	C36-C37-C38-C39
28	c	501	STE	C2-C3-C4-C5
22	C	506	CLA	CBD-CGD-O2D-CED
33	M	101	LMG	C30-C31-C32-C33
22	b	714	CLA	C4-C3-C5-C6
28	B	724	STE	O2-C1-C2-C3
28	b	724	STE	O1-C1-C2-C3
22	B	709	CLA	C2-C3-C5-C6
29	c	518	DGD	C4A-C5A-C6A-C7A
22	b	706	CLA	C10-C11-C12-C13
26	A	409	SQD	C13-C14-C15-C16
26	a	415	SQD	C15-C16-C17-C18
29	c	517	DGD	C2A-C3A-C4A-C5A
35	V	201	HEC	CAD-CBD-CGD-O2D
22	D	401	CLA	C2-C1-O2A-CGA
22	c	511	CLA	C2-C1-O2A-CGA
33	C	520	LMG	C2-C1-O1-C7
28	b	722	STE	O1-C1-C2-C3
22	b	710	CLA	C2A-CAA-CBA-CGA
33	C	516	LMG	O1-C7-C8-O7
28	h	703	STE	C11-C10-C9-C8
26	A	409	SQD	C33-C34-C35-C36
28	A	411	STE	C7-C8-C9-C10
22	H	102	CLA	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
22	c	513	CLA	C3A-C2A-CAA-CBA
28	b	725	STE	O1-C1-C2-C3
29	c	519	DGD	C3B-C4B-C5B-C6B
22	b	708	CLA	C4C-C3C-CAC-CBC
26	b	720	SQD	C10-C11-C12-C13
27	B	722	LHG	C24-C25-C26-C27
27	a	412	LHG	C27-C28-C29-C30
27	D	410	LHG	C34-C35-C36-C37
27	l	101	LHG	C11-C12-C13-C14
33	C	520	LMG	C13-C14-C15-C16
28	M	102	STE	O1-C1-C2-C3
25	D	405	PL9	C30-C29-C31-C32
28	l	102	STE	C9-C10-C11-C12
29	c	518	DGD	CCB-CDB-CEB-CFB
22	a	406	CLA	C15-C16-C17-C18
25	A	408	PL9	C4-C3-C7-C8
28	M	102	STE	C4-C5-C6-C7
22	B	710	CLA	C14-C13-C15-C16
22	C	502	CLA	C14-C13-C15-C16
22	C	508	CLA	C14-C13-C15-C16
22	b	706	CLA	C11-C10-C8-C9
22	c	502	CLA	C11-C12-C13-C14
22	A	403	CLA	C16-C17-C18-C20
22	B	713	CLA	C16-C17-C18-C20
33	B	721	LMG	O9-C10-C11-C12
22	B	704	CLA	C4C-C3C-CAC-CBC
27	l	101	LHG	C29-C30-C31-C32
22	B	712	CLA	O1A-CGA-O2A-C1
22	C	504	CLA	C10-C11-C12-C13
29	c	517	DGD	O1G-C1G-C2G-C3G
22	c	510	CLA	CAA-CBA-CGA-O2A
33	C	516	LMG	C14-C15-C16-C17
33	d	408	LMG	O10-C28-O8-C9
22	D	403	CLA	C16-C17-C18-C20
33	M	101	LMG	O6-C1-O1-C7
28	I	101	STE	C12-C13-C14-C15
23	b	718	BCR	C36-C18-C19-C20
33	c	522	LMG	C36-C37-C38-C39
33	c	522	LMG	C42-C43-C44-C45
29	A	413	DGD	C4E-C5E-C6E-O5E
33	b	721	LMG	C32-C33-C34-C35
33	C	516	LMG	C9-C8-O7-C10

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Mol	Chain	Res	Type	Atoms
33	M	101	LMG	C9-C8-O7-C10
22	B	702	CLA	C1A-C2A-CAA-CBA
22	B	703	CLA	C11-C12-C13-C15
22	D	401	CLA	C11-C10-C8-C7
22	D	402	CLA	C11-C12-C13-C15
22	b	705	CLA	C11-C10-C8-C7
22	b	709	CLA	C11-C12-C13-C15
22	b	714	CLA	C6-C7-C8-C10
22	c	513	CLA	C6-C7-C8-C10
33	a	419	LMG	C12-C13-C14-C15
22	B	704	CLA	C10-C11-C12-C13
28	x	101	STE	C1-C2-C3-C4
28	b	725	STE	C4-C5-C6-C7
26	f	101	SQD	O47-C7-C8-C9
33	B	721	LMG	C34-C35-C36-C37
27	l	101	LHG	C28-C29-C30-C31
28	X	101	STE	C5-C6-C7-C8
22	c	502	CLA	C2A-CAA-CBA-CGA
28	C	523	STE	O2-C1-C2-C3
28	b	724	STE	O2-C1-C2-C3
28	b	724	STE	C10-C11-C12-C13
22	A	402	CLA	C13-C15-C16-C17
35	v	201	HEC	CAD-CBD-CGD-O2D
26	D	409	SQD	C27-C28-C29-C30
29	c	518	DGD	C3B-C4B-C5B-C6B
33	b	723	LMG	C29-C30-C31-C32
25	A	408	PL9	C12-C11-C9-C10
28	M	102	STE	O2-C1-C2-C3
27	D	410	LHG	C13-C14-C15-C16
22	B	710	CLA	CBD-CGD-O2D-CED
22	C	512	CLA	CBD-CGD-O2D-CED
22	a	403	CLA	CBD-CGD-O2D-CED
23	k	101	BCR	C15-C16-C17-C18
23	k	102	BCR	C13-C14-C15-C16
29	C	517	DGD	C5A-C6A-C7A-C8A
22	C	510	CLA	C10-C11-C12-C13
27	B	722	LHG	C16-C17-C18-C19
25	A	408	PL9	C29-C31-C32-C33
28	B	724	STE	O1-C1-C2-C3
28	b	722	STE	O2-C1-C2-C3
25	A	408	PL9	C15-C14-C16-C17
26	b	720	SQD	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
22	C	507	CLA	C2-C1-O2A-CGA
22	c	514	CLA	C2-C1-O2A-CGA
28	c	501	STE	O2-C1-C2-C3
35	v	201	HEC	CAD-CBD-CGD-O1D
22	D	402	CLA	C11-C12-C13-C14
22	b	713	CLA	C11-C12-C13-C14
22	c	514	CLA	C14-C13-C15-C16
35	V	201	HEC	CAD-CBD-CGD-O1D
22	b	705	CLA	C15-C16-C17-C18
29	C	517	DGD	O1G-C1A-C2A-C3A
28	x	101	STE	C10-C11-C12-C13
33	b	721	LMG	C14-C15-C16-C17
22	b	705	CLA	C10-C11-C12-C13
22	B	703	CLA	C2A-CAA-CBA-CGA
22	c	506	CLA	C16-C17-C18-C19
29	h	702	DGD	O1B-C1B-C2B-C3B
23	C	515	BCR	C23-C24-C25-C30
23	b	718	BCR	C23-C24-C25-C30
23	h	701	BCR	C23-C24-C25-C26
23	h	701	BCR	C23-C24-C25-C30
23	k	101	BCR	C23-C24-C25-C30
28	b	726	STE	C1-C2-C3-C4
26	b	720	SQD	C44-C45-C46-O48
33	M	101	LMG	O1-C7-C8-C9
29	C	517	DGD	O1A-C1A-O1G-C1G
23	K	101	BCR	C13-C14-C15-C16
22	C	507	CLA	C4-C3-C5-C6
22	b	701	CLA	C4-C3-C5-C6
23	b	717	BCR	C21-C22-C23-C24
22	c	511	CLA	C15-C16-C17-C18
33	B	721	LMG	O10-C28-C29-C30
29	c	518	DGD	C9A-CAA-CBA-CCA
33	B	721	LMG	C30-C31-C32-C33
22	B	712	CLA	C8-C10-C11-C12
29	C	518	DGD	C5D-C6D-O5D-C1E
27	a	412	LHG	C10-C11-C12-C13
29	c	519	DGD	C8A-C9A-CAA-CBA
27	a	412	LHG	C34-C35-C36-C37
27	D	411	LHG	C14-C15-C16-C17
27	L	101	LHG	C27-C28-C29-C30
33	C	516	LMG	C30-C31-C32-C33
28	C	523	STE	O1-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
28	J	101	STE	C2-C3-C4-C5
28	t	702	STE	C2-C3-C4-C5
22	a	406	CLA	C4-C3-C5-C6
26	A	412	SQD	C33-C34-C35-C36
22	C	507	CLA	C2-C3-C5-C6
22	H	102	CLA	C6-C7-C8-C10
22	b	706	CLA	C12-C13-C15-C16
22	b	716	CLA	C11-C10-C8-C7
22	c	512	CLA	C6-C7-C8-C10
28	C	522	STE	C11-C12-C13-C14
28	x	101	STE	C11-C12-C13-C14
26	a	415	SQD	O6-C44-C45-O47
33	D	412	LMG	O1-C7-C8-O7
22	b	715	CLA	C13-C15-C16-C17
28	X	101	STE	C15-C16-C17-C18
33	B	721	LMG	C16-C17-C18-C19
27	L	101	LHG	O9-C7-O7-C5
22	B	712	CLA	CBA-CGA-O2A-C1
26	b	720	SQD	C14-C15-C16-C17
29	c	518	DGD	CBA-CCA-CDA-CEA
34	a	405	PHO	C5-C6-C7-C8
28	Z	101	STE	C10-C11-C12-C13
22	B	713	CLA	O1D-CGD-O2D-CED
26	A	412	SQD	C8-C7-O47-C45
28	b	725	STE	O2-C1-C2-C3
23	a	407	BCR	C20-C21-C22-C37
34	d	405	PHO	C4C-C3C-CAC-CBC
26	a	415	SQD	O48-C23-C24-C25
27	A	410	LHG	C31-C32-C33-C34
22	H	102	CLA	C4-C3-C5-C6
25	d	404	PL9	C45-C44-C46-C47
22	b	716	CLA	C8-C10-C11-C12
22	c	511	CLA	CAA-CBA-CGA-O2A
29	C	517	DGD	CCA-CDA-CEA-CFA
22	B	716	CLA	C6-C7-C8-C9
22	C	506	CLA	C6-C7-C8-C9
22	C	513	CLA	C14-C13-C15-C16
22	D	403	CLA	C11-C12-C13-C14
22	b	710	CLA	C14-C13-C15-C16
22	c	504	CLA	C11-C12-C13-C14
22	b	712	CLA	C3A-C2A-CAA-CBA
34	d	405	PHO	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
22	B	713	CLA	C13-C15-C16-C17
22	C	513	CLA	O1A-CGA-O2A-C1
27	L	101	LHG	O7-C7-C8-C9
22	B	704	CLA	CAD-CBD-CGD-O2D
22	B	705	CLA	CAD-CBD-CGD-O2D
22	B	716	CLA	CAD-CBD-CGD-O2D
22	C	504	CLA	CAD-CBD-CGD-O2D
22	C	507	CLA	CAD-CBD-CGD-O2D
22	a	403	CLA	CAD-CBD-CGD-O2D
22	b	704	CLA	CAD-CBD-CGD-O2D
22	b	710	CLA	CAD-CBD-CGD-O2D
22	c	504	CLA	CAD-CBD-CGD-O2D
22	c	506	CLA	CAD-CBD-CGD-O2D
22	c	511	CLA	CAD-CBD-CGD-O2D
34	a	405	PHO	CAD-CBD-CGD-O2D
22	c	503	CLA	C16-C17-C18-C19
33	c	522	LMG	C16-C17-C18-C19
22	b	709	CLA	C15-C16-C17-C18
25	A	408	PL9	C7-C8-C9-C11
28	B	720	STE	O2-C1-C2-C3
35	e	101	HEC	CAD-CBD-CGD-O1D
27	D	411	LHG	C16-C17-C18-C19
27	l	101	LHG	O7-C7-C8-C9
33	d	408	LMG	O7-C10-C11-C12
29	c	518	DGD	C8A-C9A-CAA-CBA
22	H	102	CLA	C2-C3-C5-C6
22	b	712	CLA	CAA-CBA-CGA-O2A
33	a	419	LMG	O7-C10-C11-C12
23	d	403	BCR	C17-C18-C19-C20
34	d	405	PHO	C2C-C3C-CAC-CBC
27	d	406	LHG	C33-C34-C35-C36
29	c	518	DGD	C6A-C7A-C8A-C9A
26	B	723	SQD	O47-C7-C8-C9
26	a	413	SQD	O47-C7-C8-C9
33	b	721	LMG	O8-C28-C29-C30
26	b	720	SQD	C16-C17-C18-C19
35	E	103	HEC	CAD-CBD-CGD-O1D
28	B	701	STE	C7-C8-C9-C10
22	B	704	CLA	O2A-C1-C2-C3
22	B	716	CLA	O2A-C1-C2-C3
22	D	403	CLA	O2A-C1-C2-C3
34	a	405	PHO	O2A-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
22	b	714	CLA	C2A-CAA-CBA-CGA
27	a	414	LHG	O7-C7-C8-C9
22	B	707	CLA	CHA-CBD-CGD-O1D
22	C	505	CLA	CHA-CBD-CGD-O2D
22	C	506	CLA	CHA-CBD-CGD-O2D
22	C	508	CLA	CHA-CBD-CGD-O1D
22	C	508	CLA	CHA-CBD-CGD-O2D
22	C	510	CLA	CHA-CBD-CGD-O1D
22	C	510	CLA	CHA-CBD-CGD-O2D
22	H	102	CLA	CHA-CBD-CGD-O1D
22	H	102	CLA	CHA-CBD-CGD-O2D
22	a	401	CLA	CHA-CBD-CGD-O1D
22	a	401	CLA	CHA-CBD-CGD-O2D
22	a	404	CLA	CHA-CBD-CGD-O2D
22	b	706	CLA	CHA-CBD-CGD-O1D
22	b	706	CLA	CHA-CBD-CGD-O2D
22	b	711	CLA	CHA-CBD-CGD-O1D
22	b	711	CLA	CHA-CBD-CGD-O2D
22	c	503	CLA	CHA-CBD-CGD-O2D
22	c	507	CLA	CHA-CBD-CGD-O1D
35	e	101	HEC	CAD-CBD-CGD-O2D
33	c	523	LMG	O8-C28-C29-C30
33	b	721	LMG	C35-C36-C37-C38
28	c	501	STE	O1-C1-C2-C3
29	A	413	DGD	C7A-C8A-C9A-CAA
29	H	103	DGD	CCA-CDA-CEA-CFA
26	B	723	SQD	C23-C24-C25-C26
28	B	720	STE	O1-C1-C2-C3
27	a	414	LHG	C11-C10-C9-C8
29	c	517	DGD	O1G-C1A-C2A-C3A
34	D	406	PHO	CHA-CBD-CGD-O1D
22	b	712	CLA	C10-C11-C12-C13
22	c	510	CLA	C15-C16-C17-C18
22	d	401	CLA	C2C-C3C-CAC-CBC
22	B	708	CLA	CBA-CGA-O2A-C1
29	h	702	DGD	CAB-CBB-CCB-CDB
22	B	713	CLA	CAA-CBA-CGA-O2A
25	a	411	PL9	C16-C17-C18-C19
35	E	103	HEC	CAD-CBD-CGD-O2D
22	c	511	CLA	C4-C3-C5-C6
22	B	716	CLA	O1D-CGD-O2D-CED
27	a	412	LHG	C26-C27-C28-C29

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Mol	Chain	Res	Type	Atoms
22	D	402	CLA	C6-C7-C8-C10
22	b	708	CLA	C11-C10-C8-C7
25	a	411	PL9	C4-C3-C7-C8
22	b	713	CLA	CAA-CBA-CGA-O2A
28	J	101	STE	C6-C7-C8-C9
22	A	402	CLA	C11-C10-C8-C9
22	B	711	CLA	C6-C7-C8-C9
22	C	506	CLA	C11-C10-C8-C9
22	C	507	CLA	C6-C7-C8-C9
22	a	406	CLA	C6-C7-C8-C9
22	b	704	CLA	C14-C13-C15-C16
22	b	708	CLA	C11-C10-C8-C9
22	b	709	CLA	C11-C12-C13-C14
22	d	401	CLA	C11-C12-C13-C14
25	a	411	PL9	C14-C16-C17-C18
23	h	701	BCR	C13-C14-C15-C16
22	b	708	CLA	C2C-C3C-CAC-CBC
22	B	714	CLA	C2A-CAA-CBA-CGA
25	D	405	PL9	C41-C42-C43-C44
33	D	408	LMG	C21-C22-C23-C24
22	b	711	CLA	C10-C11-C12-C13
27	A	410	LHG	C18-C19-C20-C21
26	A	409	SQD	O10-C23-C24-C25
22	C	504	CLA	C1A-C2A-CAA-CBA
22	b	712	CLA	C1A-C2A-CAA-CBA
28	x	101	STE	C12-C13-C14-C15
22	C	513	CLA	CBA-CGA-O2A-C1
22	b	712	CLA	CAA-CBA-CGA-O1A
27	a	414	LHG	O9-C7-C8-C9
28	B	720	STE	C7-C8-C9-C10
29	C	519	DGD	C7A-C8A-C9A-CAA
22	c	511	CLA	CAA-CBA-CGA-O1A
29	A	413	DGD	O1B-C1B-C2B-C3B
27	l	101	LHG	C5-C6-O8-C23
26	f	101	SQD	C30-C31-C32-C33
22	C	503	CLA	C4-C3-C5-C6
26	A	412	SQD	O10-C23-C24-C25
27	l	101	LHG	O9-C7-C8-C9
29	C	517	DGD	O1B-C1B-C2B-C3B
29	c	518	DGD	O1B-C1B-C2B-C3B
25	D	405	PL9	C33-C34-C36-C37
22	b	710	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
27	D	410	LHG	C4-O6-P-O5
22	b	708	CLA	C16-C17-C18-C19
27	d	407	LHG	C24-C25-C26-C27
22	B	708	CLA	O1D-CGD-O2D-CED
22	C	512	CLA	O1D-CGD-O2D-CED
28	d	409	STE	C6-C7-C8-C9
22	B	707	CLA	C8-C10-C11-C12
22	b	710	CLA	C13-C15-C16-C17
22	c	513	CLA	C8-C10-C11-C12
22	c	514	CLA	O1A-CGA-O2A-C1
22	B	712	CLA	CAA-CBA-CGA-O2A
22	b	702	CLA	C2A-CAA-CBA-CGA
22	b	713	CLA	CAA-CBA-CGA-O1A
29	c	517	DGD	O1B-C1B-C2B-C3B
26	B	723	SQD	O48-C23-C24-C25
29	c	517	DGD	CAA-CBA-CCA-CDA
25	D	405	PL9	C21-C22-C23-C24
28	C	522	STE	C15-C16-C17-C18
22	B	707	CLA	CAD-CBD-CGD-O1D
22	B	709	CLA	CAD-CBD-CGD-O1D
22	a	404	CLA	CAD-CBD-CGD-O1D
22	b	706	CLA	CAD-CBD-CGD-O1D
22	b	709	CLA	CAD-CBD-CGD-O1D
22	b	709	CLA	O1A-CGA-O2A-C1
26	B	723	SQD	C24-C25-C26-C27
22	B	709	CLA	C13-C15-C16-C17
22	B	713	CLA	C10-C11-C12-C13
22	B	711	CLA	C11-C12-C13-C14
22	C	507	CLA	C11-C12-C13-C14
22	a	404	CLA	C14-C13-C15-C16
22	c	510	CLA	C11-C10-C8-C9
27	d	406	LHG	O1-C1-C2-O2
22	b	709	CLA	CBA-CGA-O2A-C1
22	c	502	CLA	CAA-CBA-CGA-O2A
29	A	413	DGD	O2G-C1B-C2B-C3B
22	C	502	CLA	C2A-CAA-CBA-CGA
25	d	404	PL9	C21-C22-C23-C24
26	a	413	SQD	C14-C15-C16-C17
33	C	520	LMG	C33-C34-C35-C36
33	c	523	LMG	O10-C28-C29-C30
26	b	720	SQD	C25-C26-C27-C28
25	D	405	PL9	C15-C14-C16-C17

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Mol	Chain	Res	Type	Atoms
22	C	512	CLA	C8-C10-C11-C12
34	d	405	PHO	C5-C6-C7-C8
22	B	702	CLA	C3A-C2A-CAA-CBA
22	C	503	CLA	C11-C12-C13-C15
22	C	506	CLA	C11-C10-C8-C7
22	C	507	CLA	C11-C12-C13-C15
22	a	401	CLA	C12-C13-C15-C16
22	b	704	CLA	C11-C12-C13-C15
22	b	704	CLA	C12-C13-C15-C16
22	b	710	CLA	C12-C13-C15-C16
26	B	723	SQD	O49-C7-C8-C9
29	c	518	DGD	O1A-C1A-C2A-C3A
28	A	411	STE	C10-C11-C12-C13
28	b	724	STE	C11-C12-C13-C14
28	a	416	STE	C1-C2-C3-C4
27	D	410	LHG	C28-C29-C30-C31
23	K	101	BCR	C21-C22-C23-C24
23	k	102	BCR	C7-C8-C9-C10
23	K	101	BCR	C15-C16-C17-C18
23	c	515	BCR	C15-C16-C17-C18
33	a	419	LMG	C35-C36-C37-C38
22	B	704	CLA	O1D-CGD-O2D-CED
22	c	503	CLA	C13-C15-C16-C17
22	B	713	CLA	CAA-CBA-CGA-O1A
26	a	413	SQD	O10-C23-C24-C25
22	c	514	CLA	CBA-CGA-O2A-C1
28	d	409	STE	O2-C1-C2-C3
29	A	413	DGD	O6E-C5E-C6E-O5E
33	B	721	LMG	C15-C16-C17-C18
22	b	709	CLA	C13-C15-C16-C17
22	C	506	CLA	CAA-CBA-CGA-O2A
26	A	409	SQD	O47-C7-C8-C9

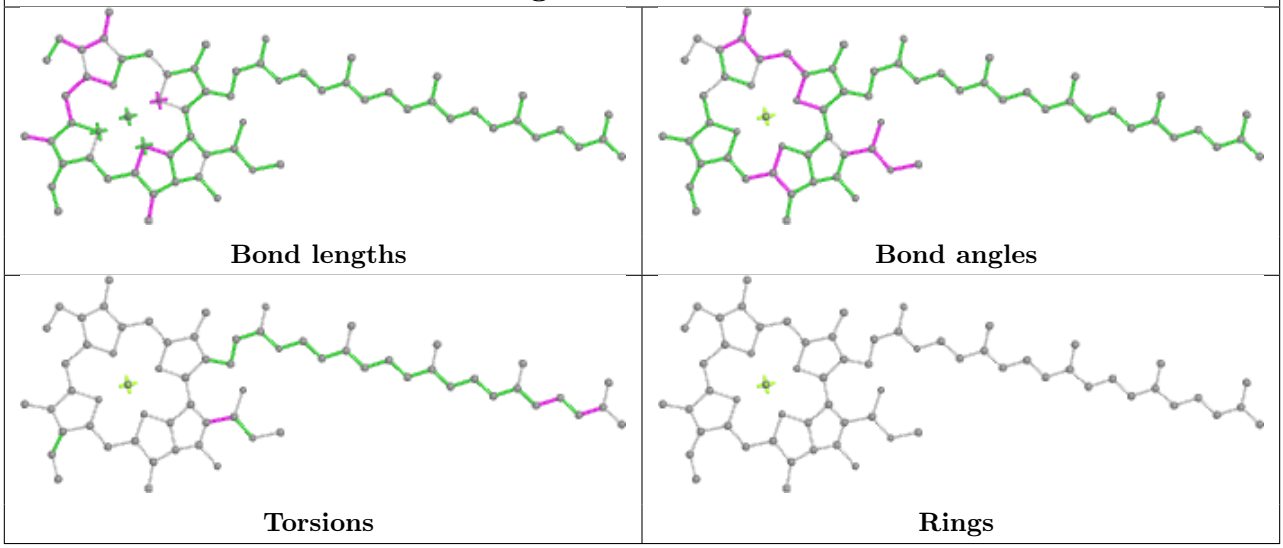
There are no ring outliers.

No monomer is involved in short contacts.

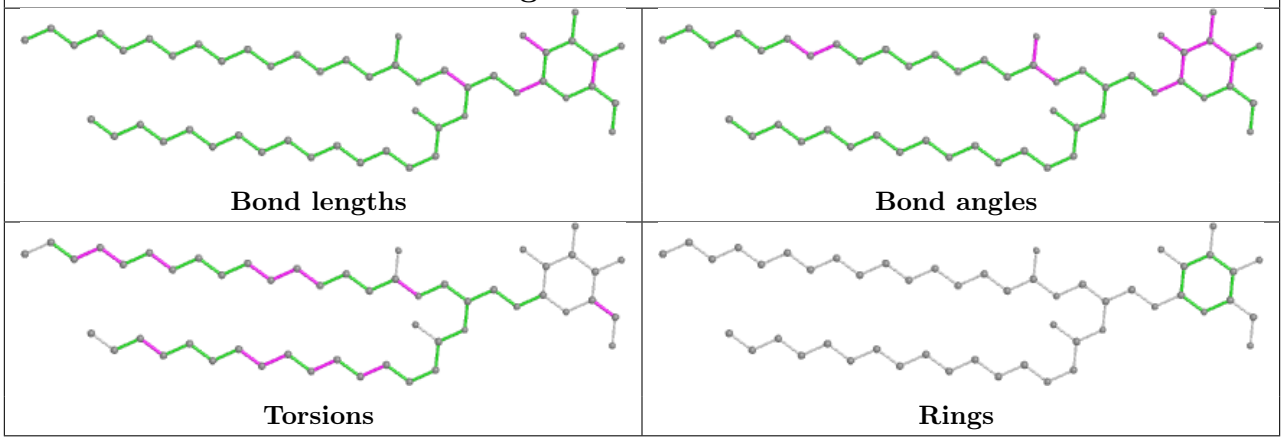
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

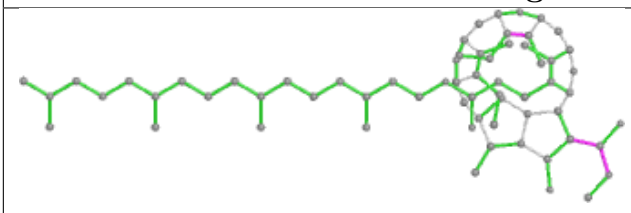
Ligand CLA c 503



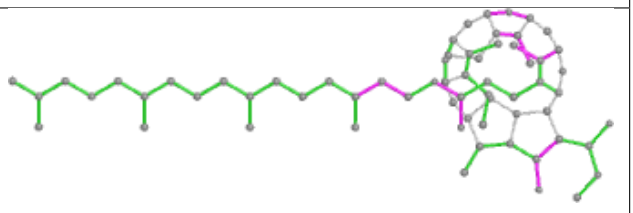
Ligand LMG D 408



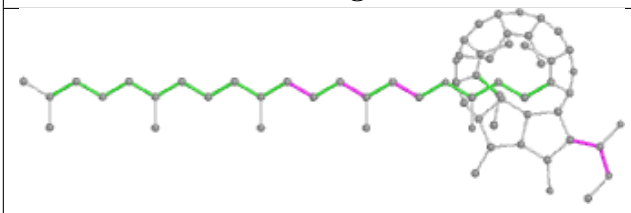
Ligand PHO a 405



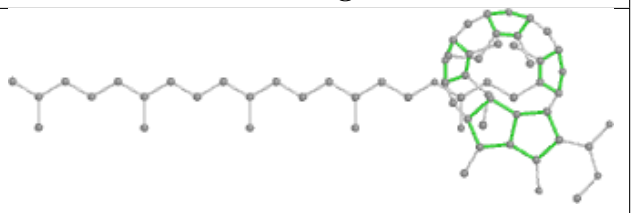
Bond lengths



Bond angles

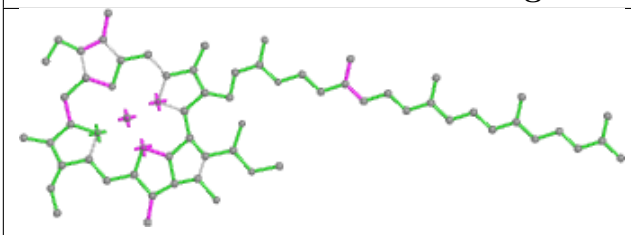


Torsions

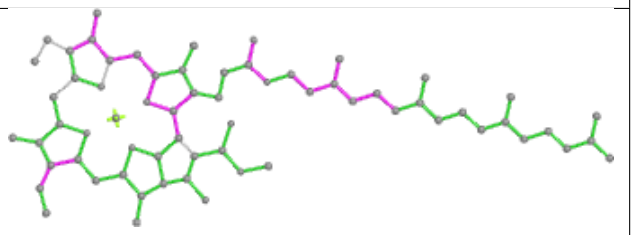


Rings

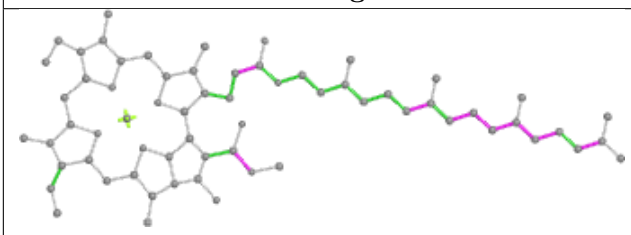
Ligand CLA B 713



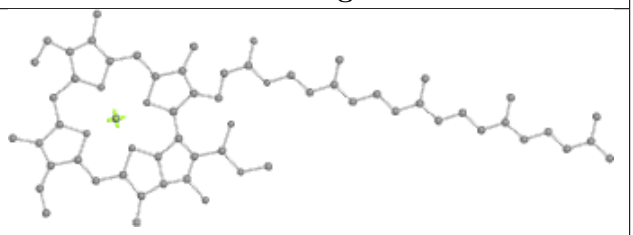
Bond lengths



Bond angles

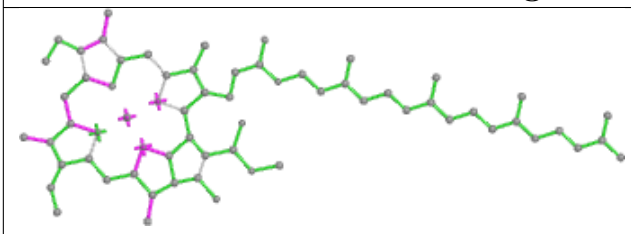


Torsions

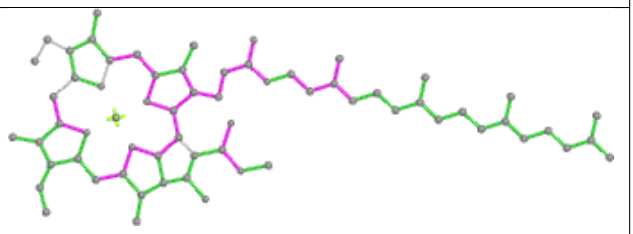


Rings

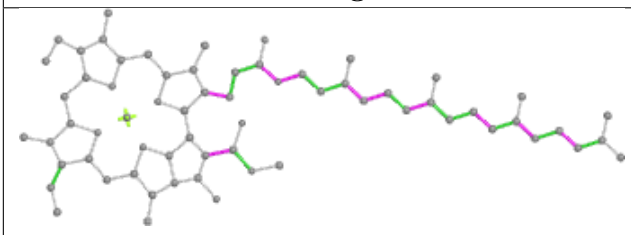
Ligand CLA H 102



Bond lengths



Bond angles



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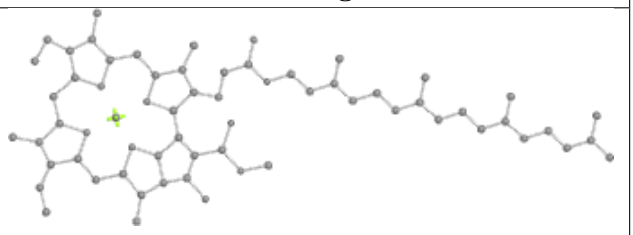
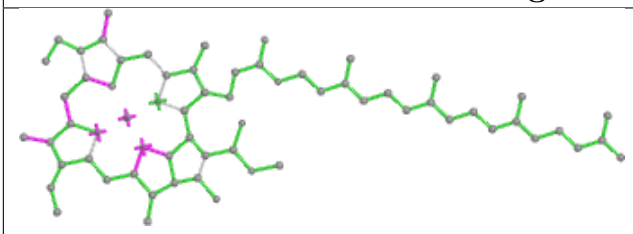


Rings

Ligand CLA a 403



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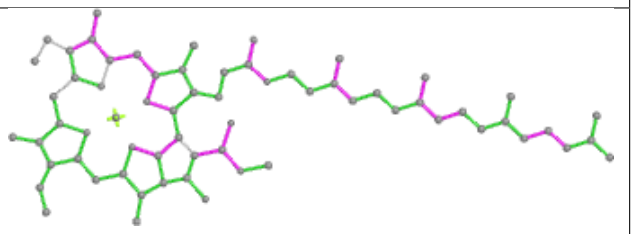
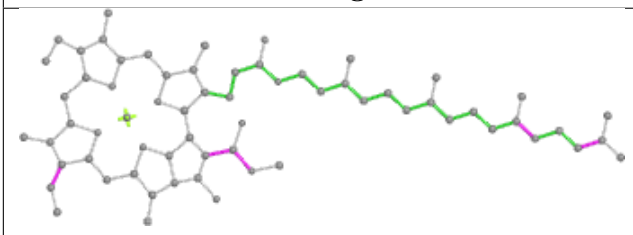
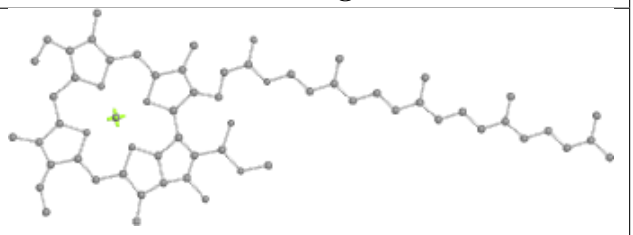


Bond angles

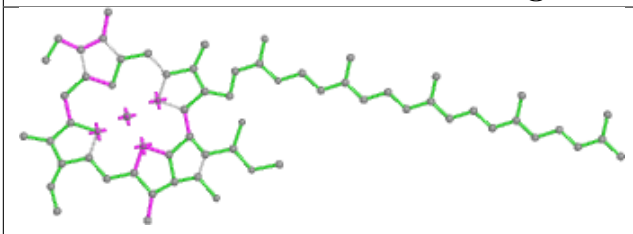


Torsions

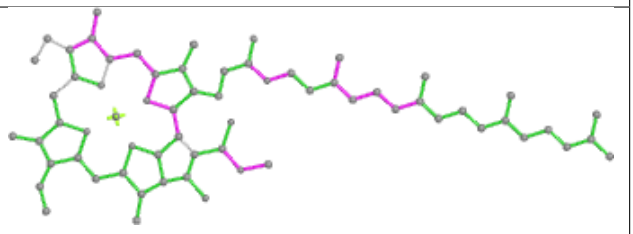


Rings

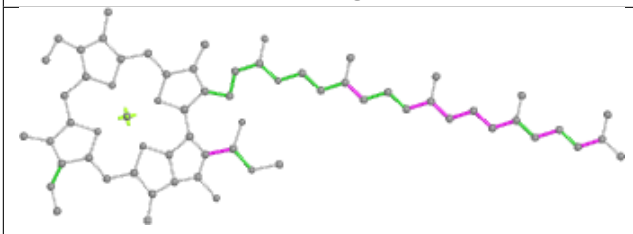
Ligand CLA b 707



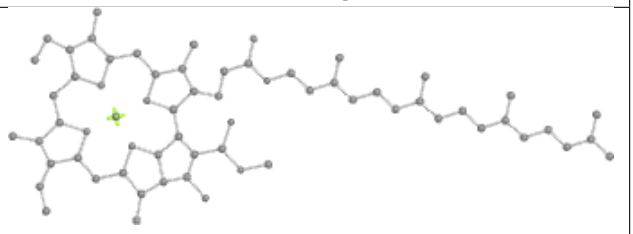
Bond lengths



Bond angles

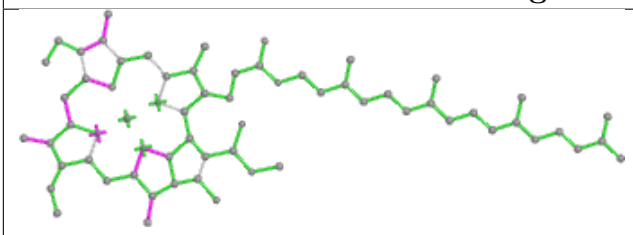


Torsions

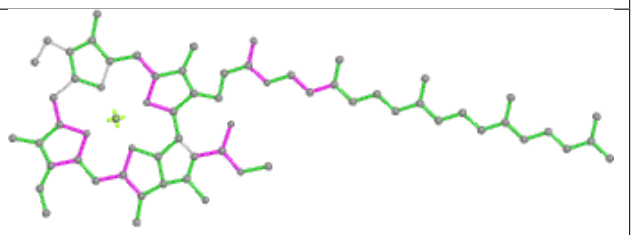


Rings

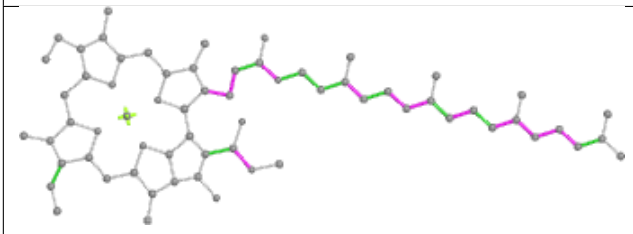
Ligand CLA c 513



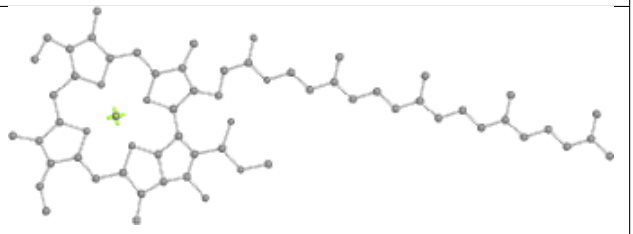
Bond lengths



Bond angles

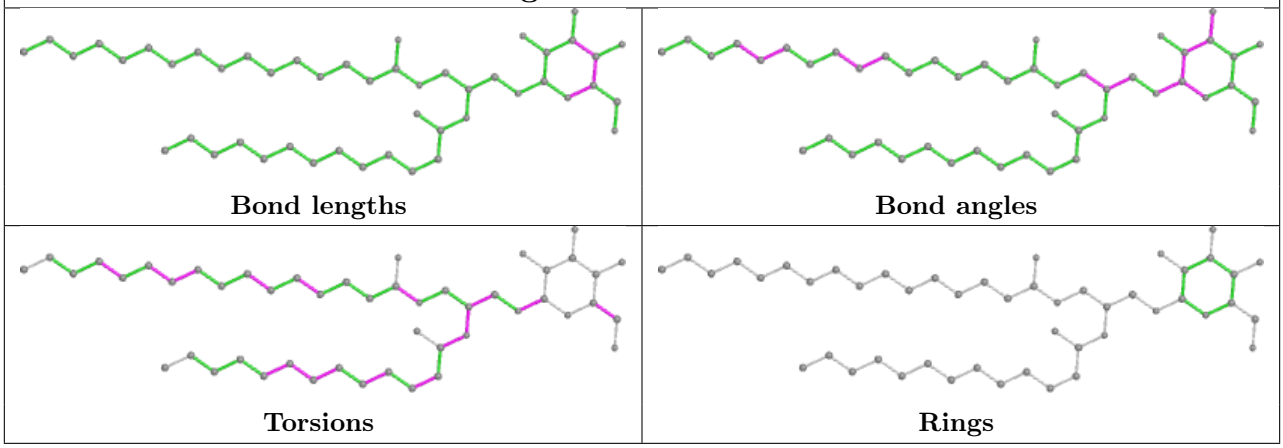


Torsions

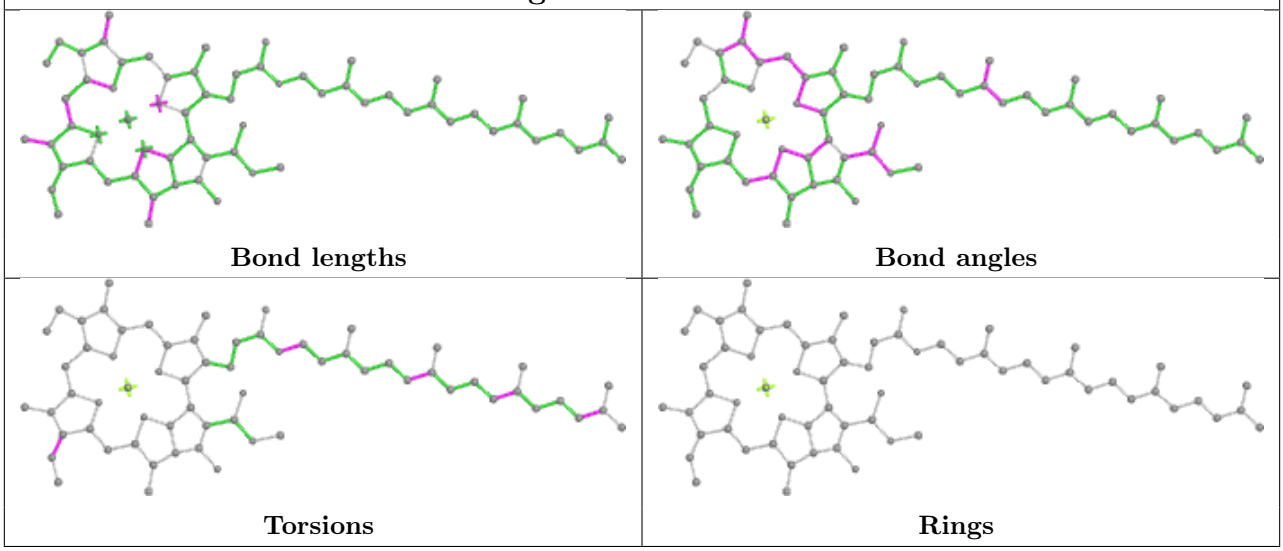


Rings

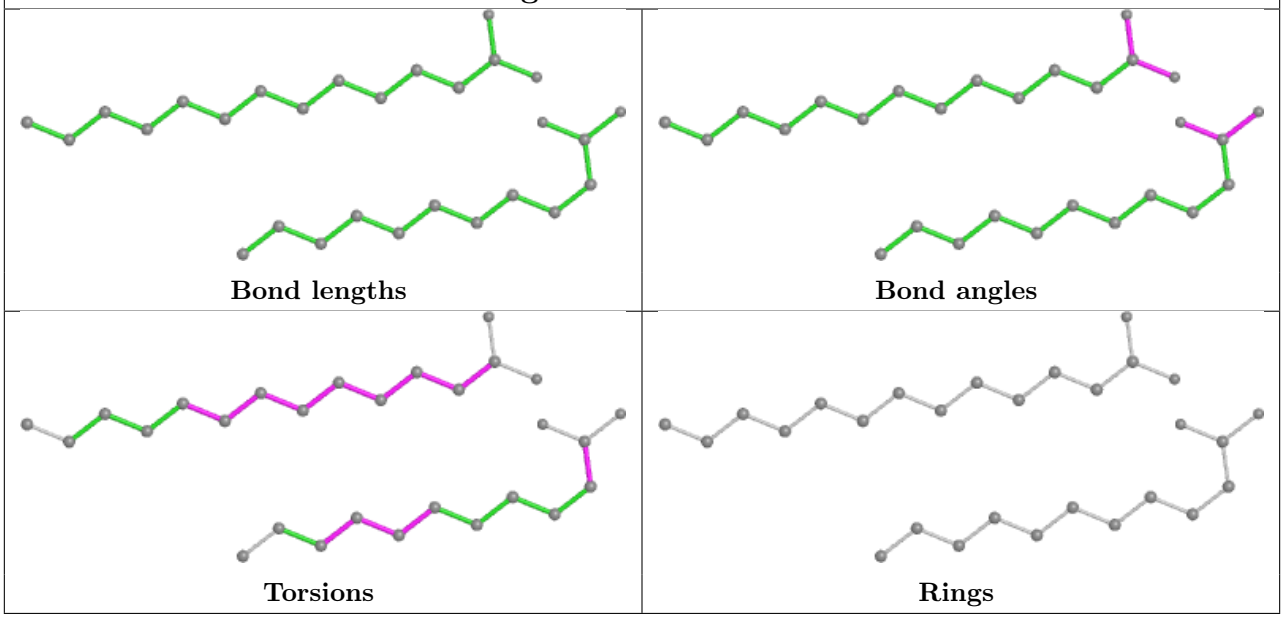
Ligand LMG C 516



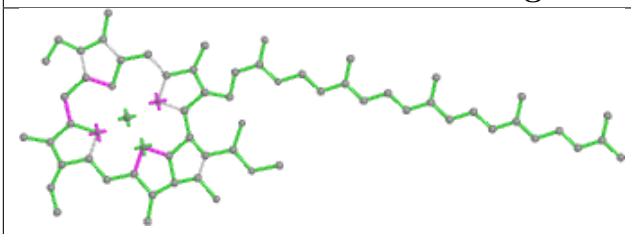
Ligand CLA d 401



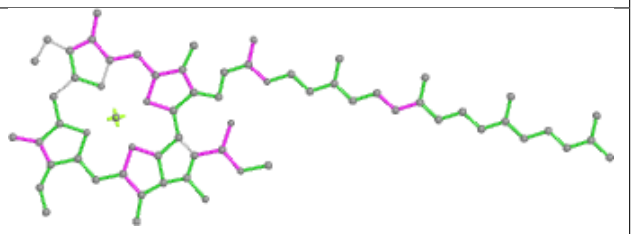
Ligand LMG B 721



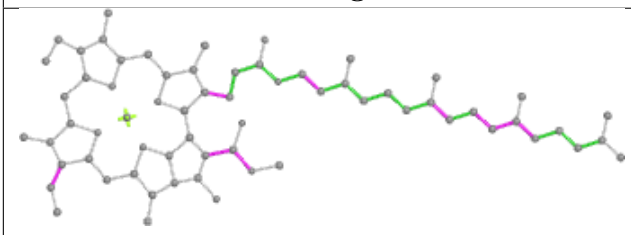
Ligand CLA B 704



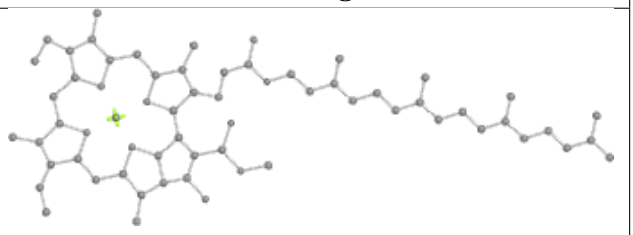
Bond lengths



Bond angles



Torsions

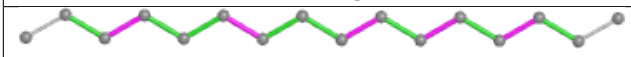


Rings

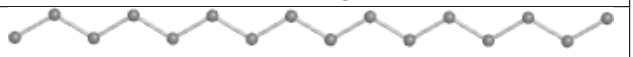
Ligand STE B 726

Bond lengths

Bond angles

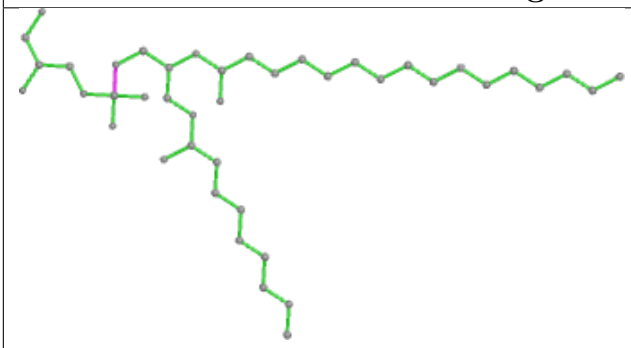


Torsions

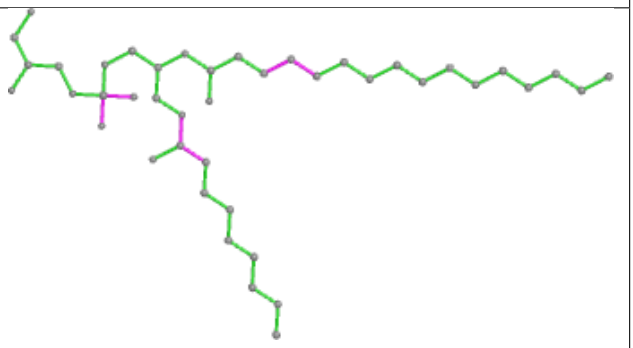


Rings

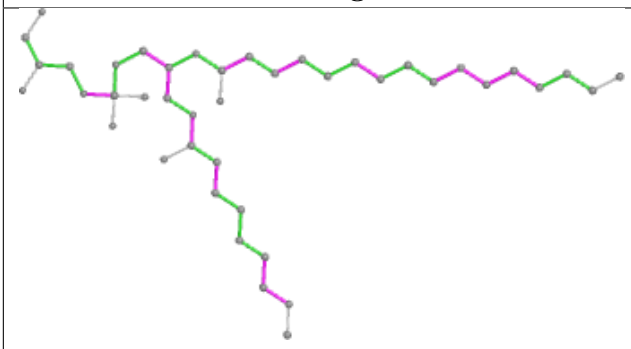
Ligand LHG a 414



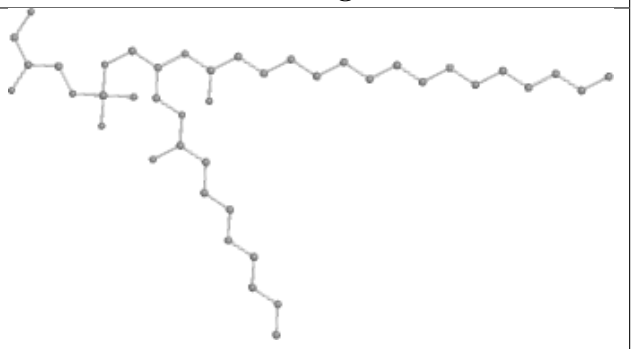
Bond lengths



Bond angles

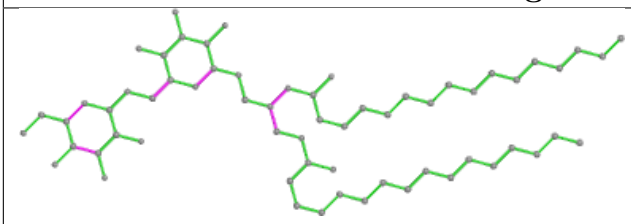


Torsions

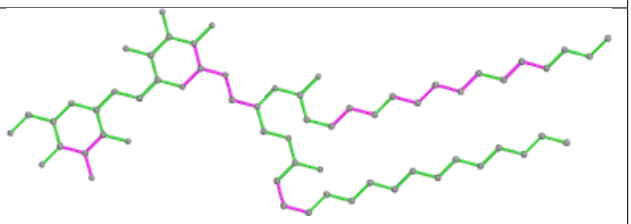


Rings

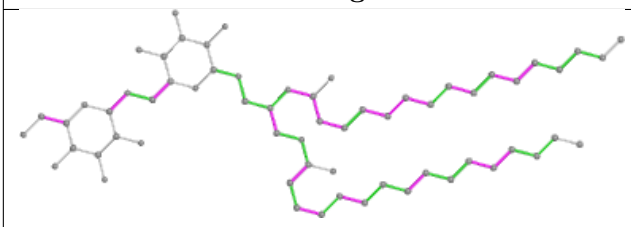
Ligand DGD c 517



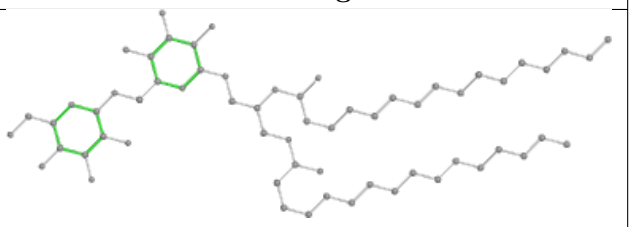
Bond lengths



Bond angles

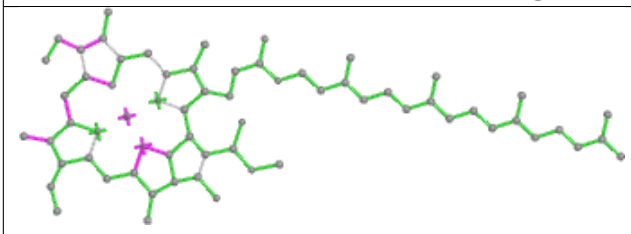


Torsions

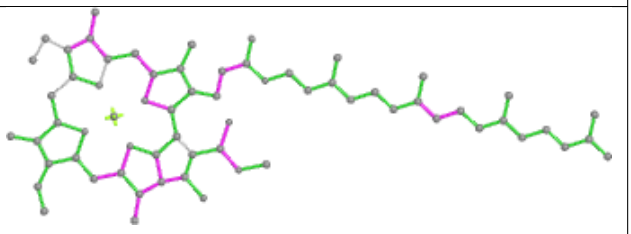


Rings

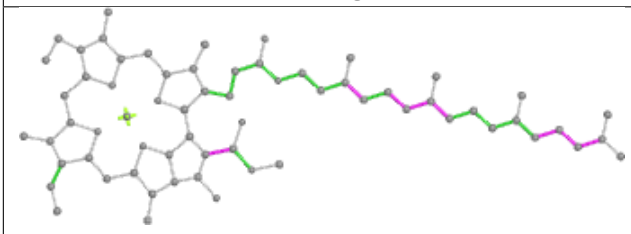
Ligand CLA c 506



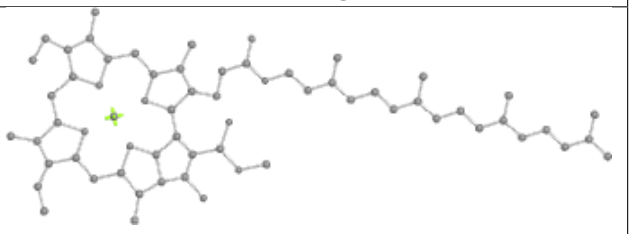
Bond lengths



Bond angles

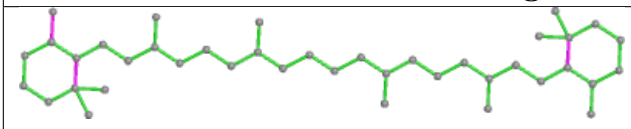


Torsions

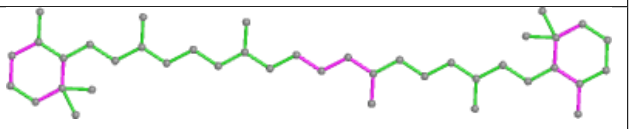


Rings

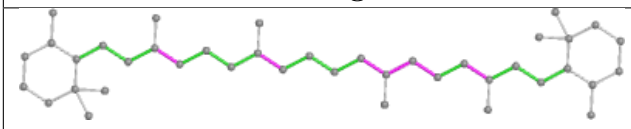
Ligand BCR B 717



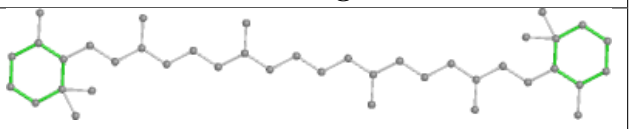
Bond lengths



Bond angles

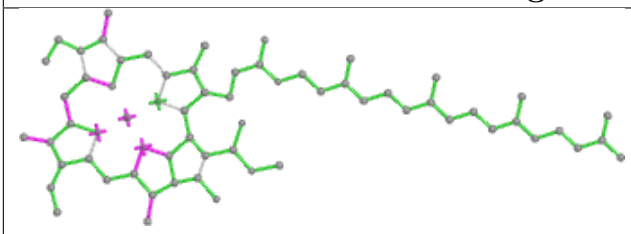


Torsions

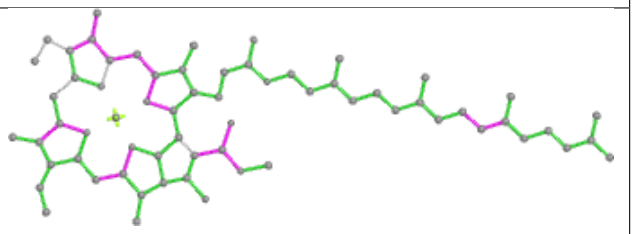


Rings

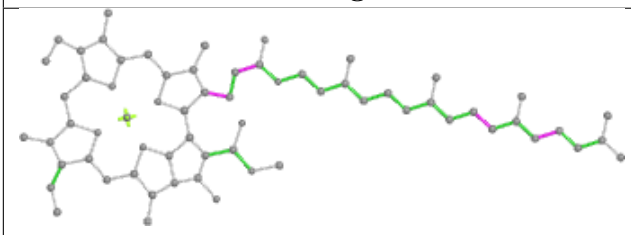
Ligand CLA b 712



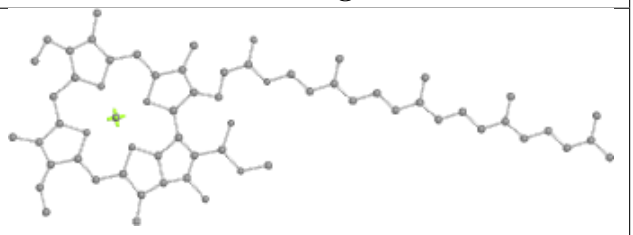
Bond lengths



Bond angles

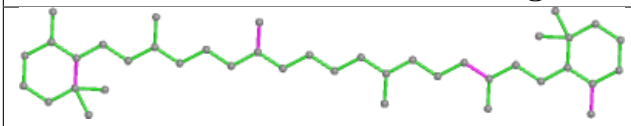


Torsions

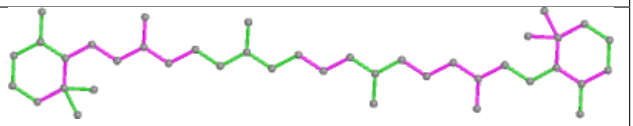


Rings

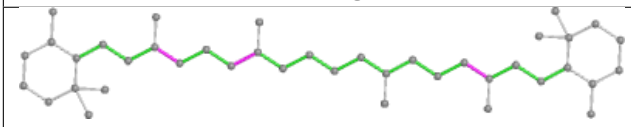
Ligand BCR a 407



Bond lengths



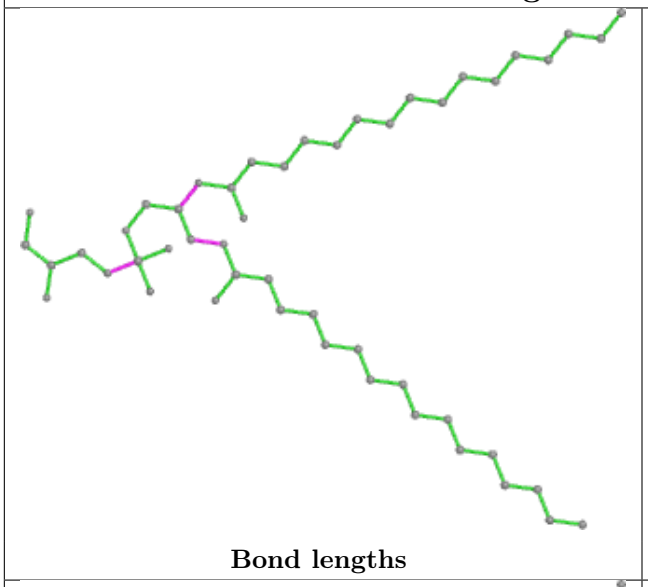
Bond angles



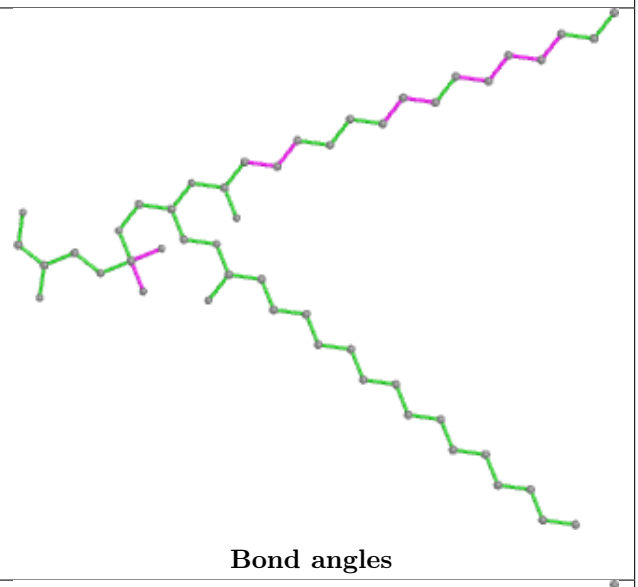
Torsions

Rings

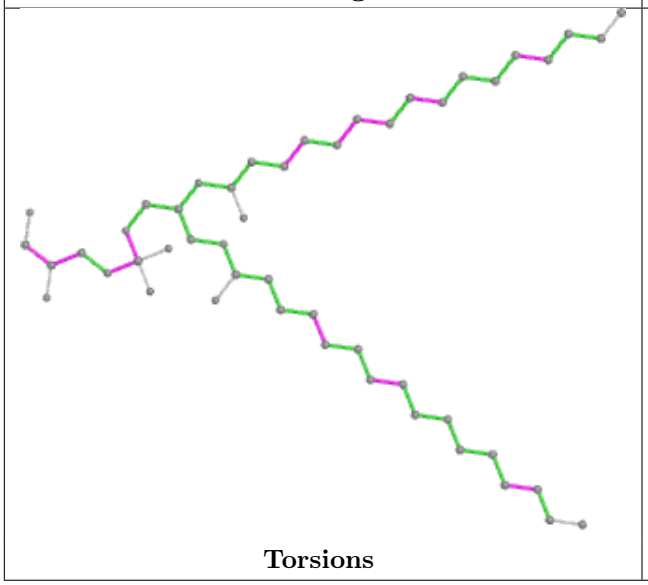
Ligand LHG D 410



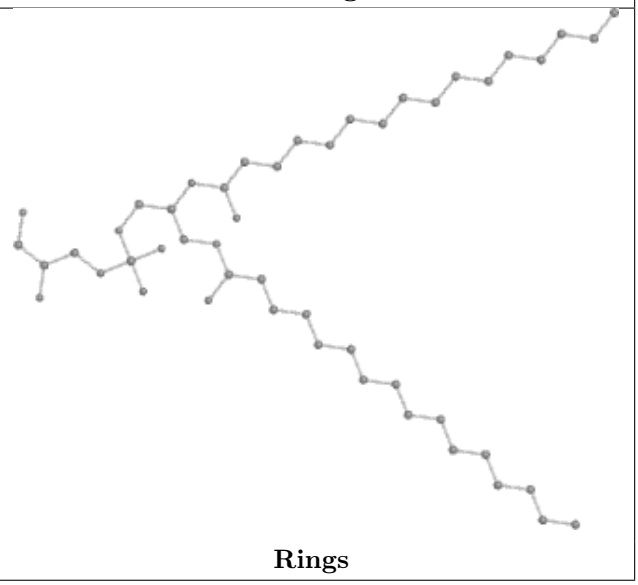
Bond lengths



Bond angles

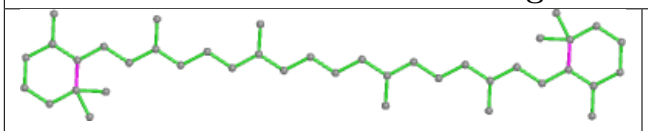


Torsions

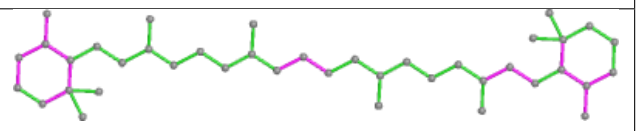


Rings

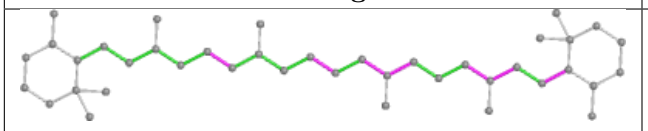
Ligand BCR d 403



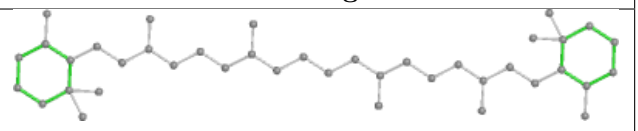
Bond lengths



Bond angles

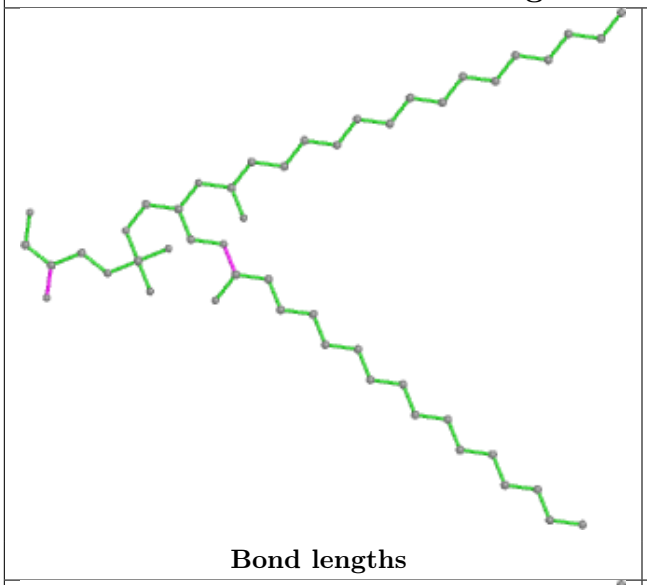


Torsions

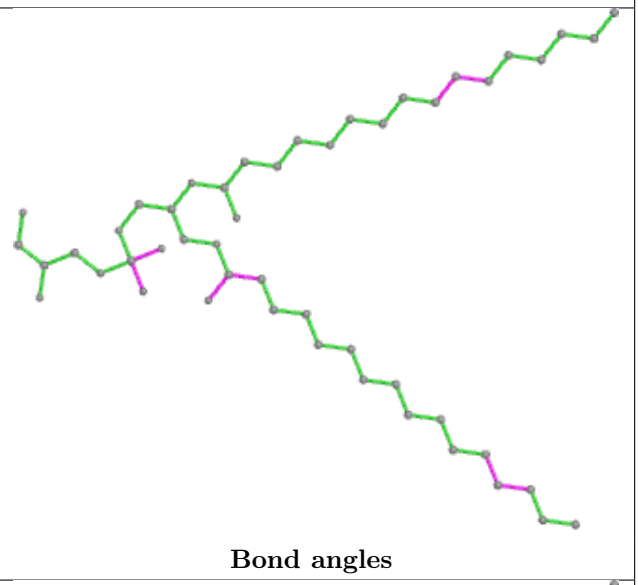


Rings

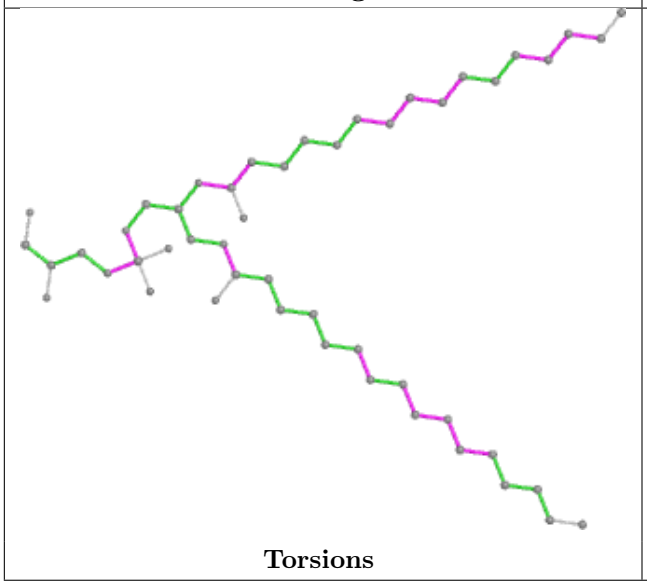
Ligand LHG L 101



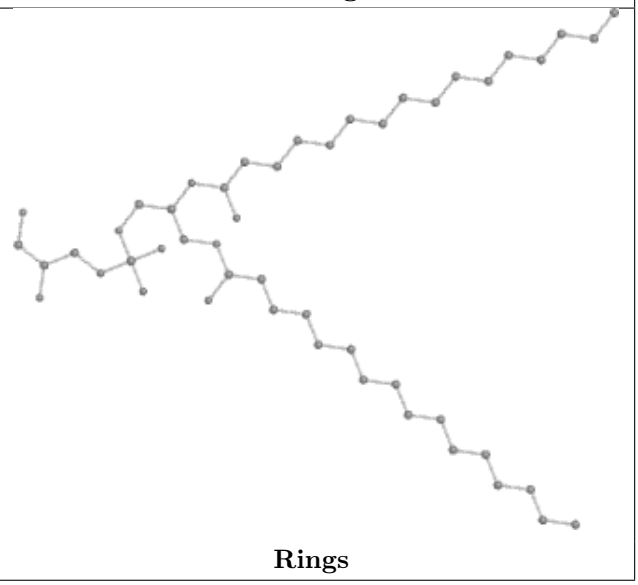
Bond lengths



Bond angles

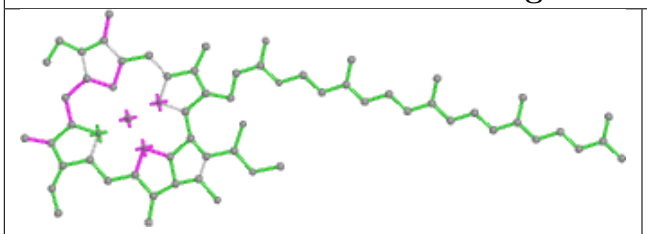


Torsions

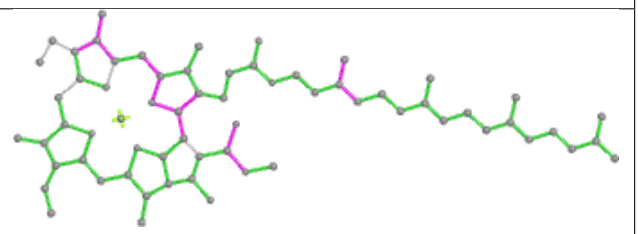


Rings

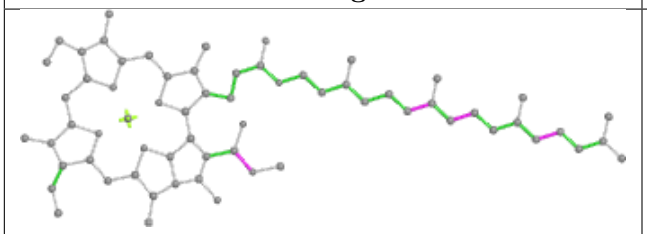
Ligand CLA C 512



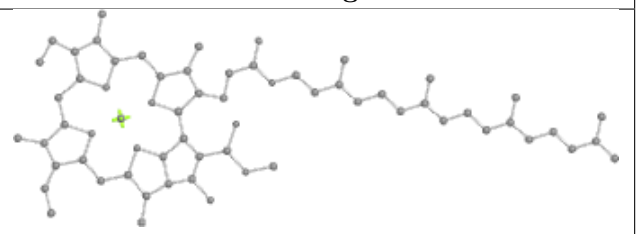
Bond lengths



Bond angles

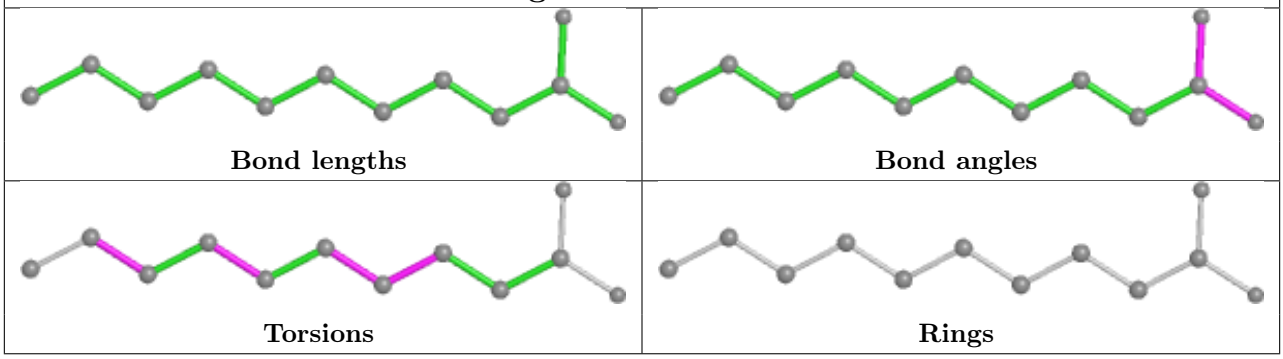


Torsions

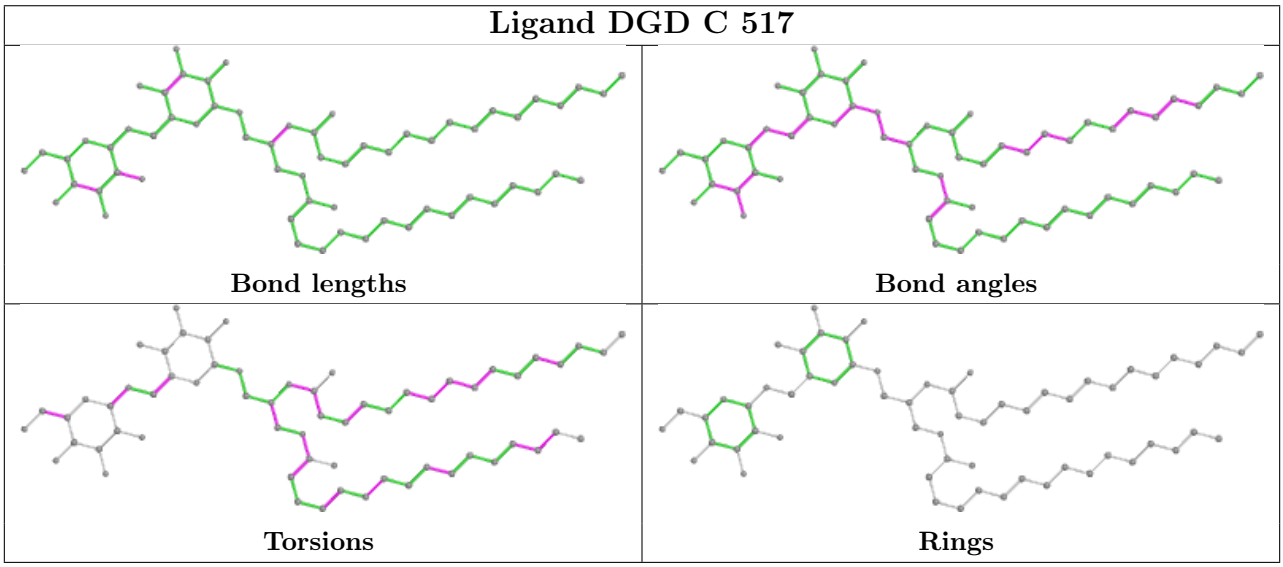


Rings

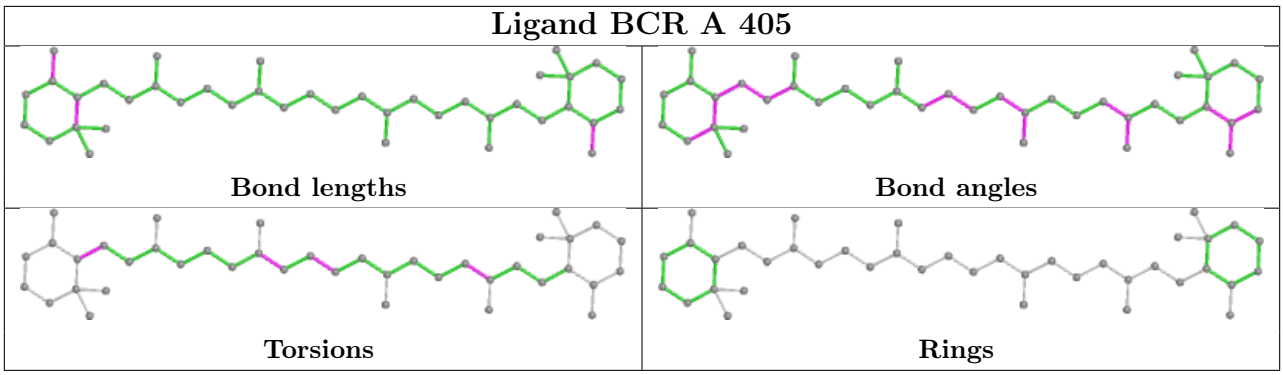
Ligand STE B 701



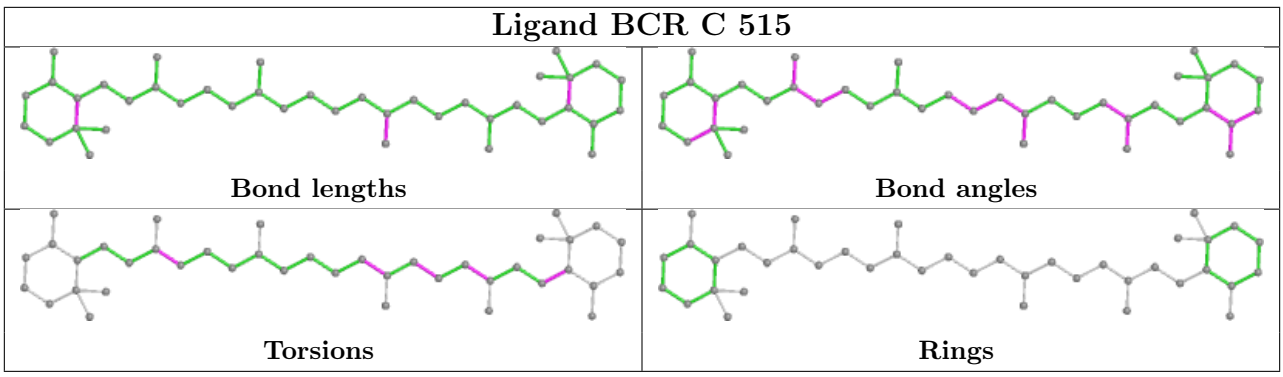
Ligand DGD C 517



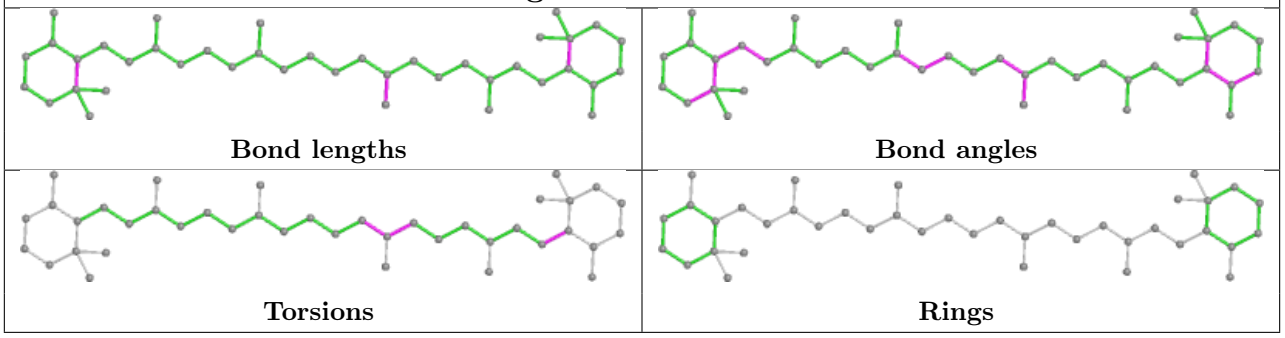
Ligand BCR A 405



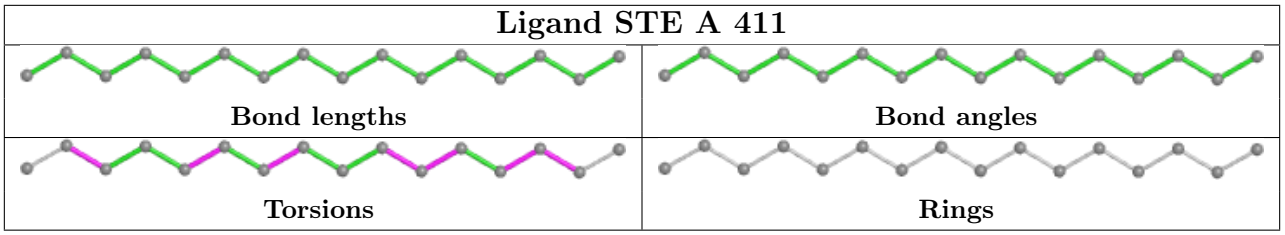
Ligand BCR C 515



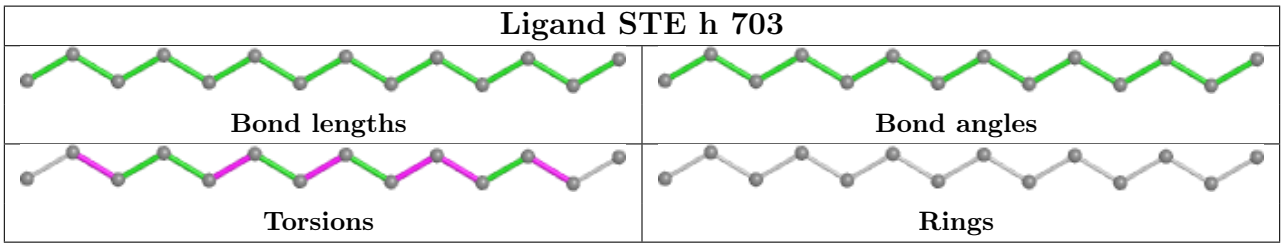
Ligand BCR b 718



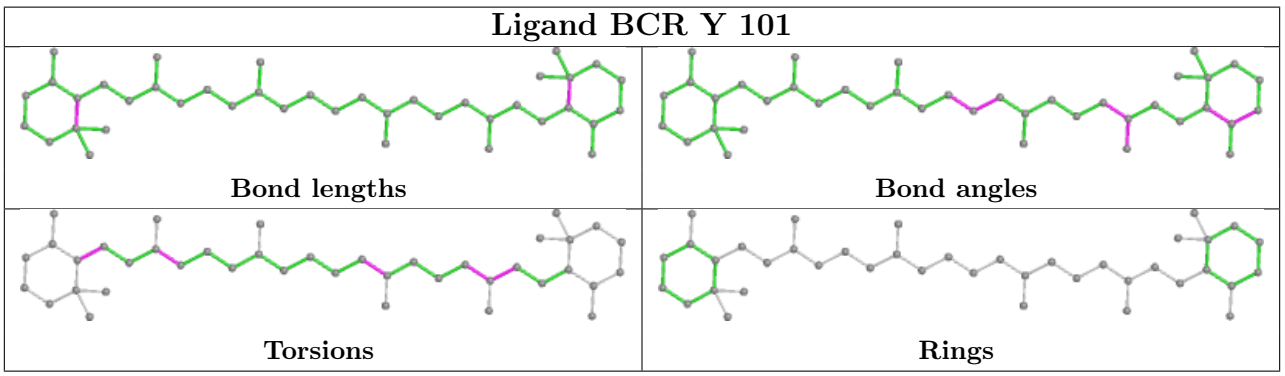
Ligand STE A 411



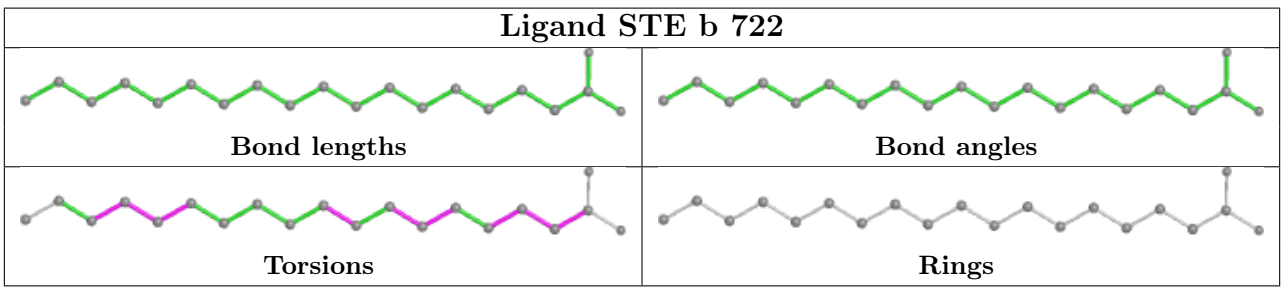
Ligand STE h 703



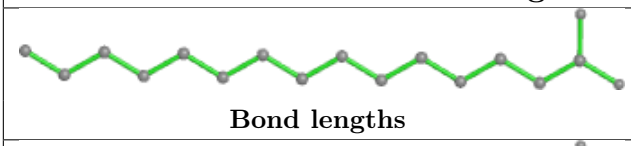
Ligand BCR Y 101



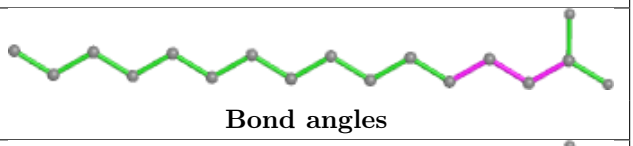
Ligand STE b 722



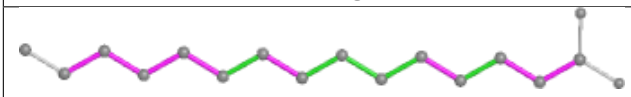
Ligand STE B 720



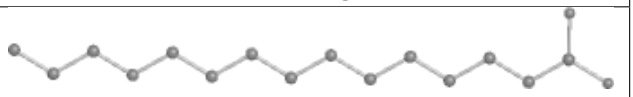
Bond lengths



Bond angles

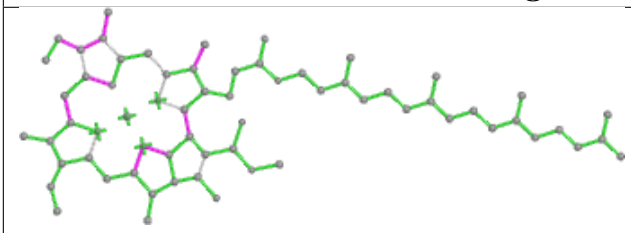


Torsions

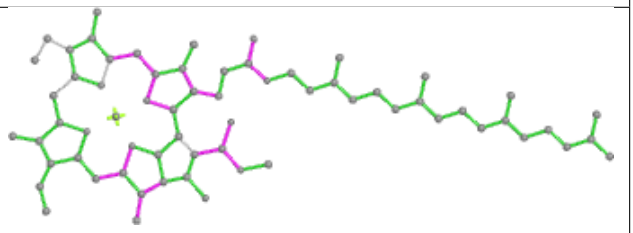


Rings

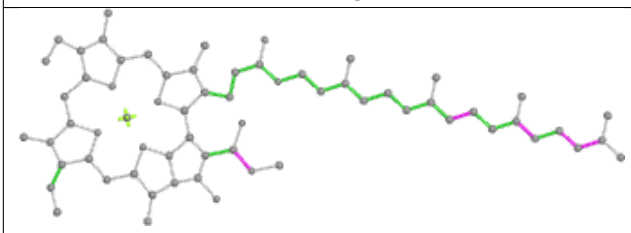
Ligand CLA B 710



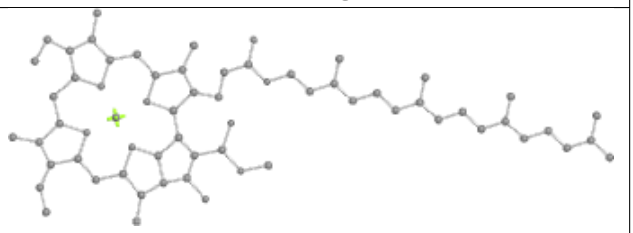
Bond lengths



Bond angles



Torsions

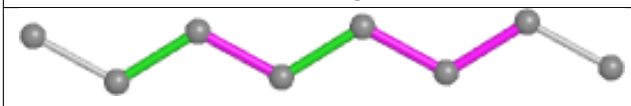


Rings

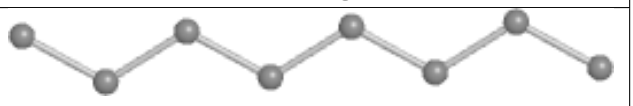
Ligand STE Z 101

Bond lengths

Bond angles

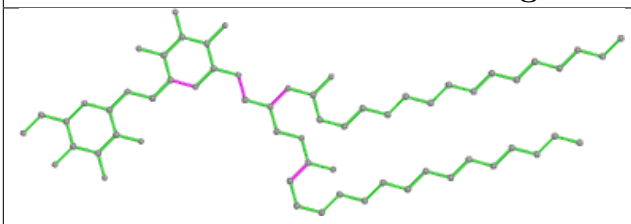


Torsions

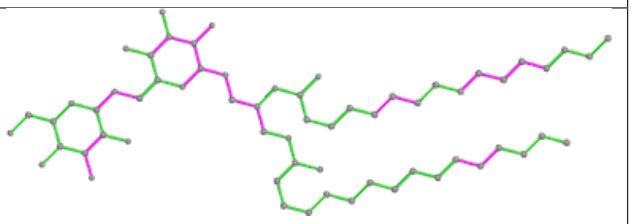


Rings

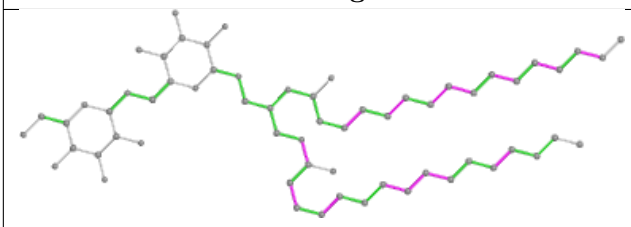
Ligand DGD C 519



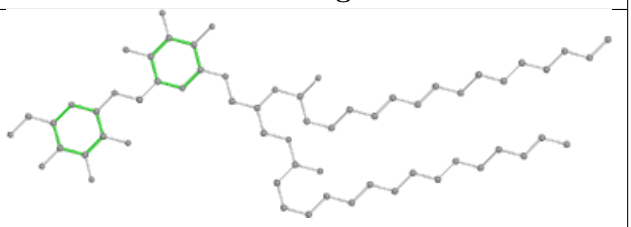
Bond lengths



Bond angles

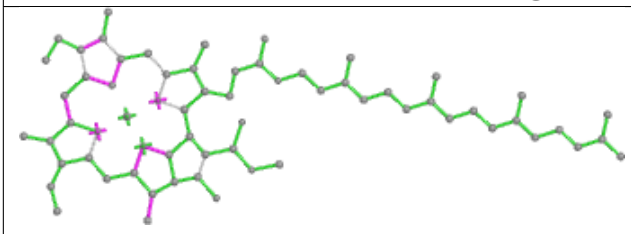


Torsions

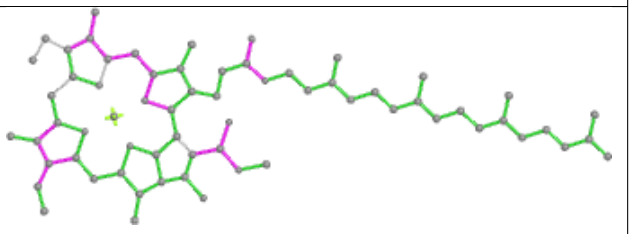


Rings

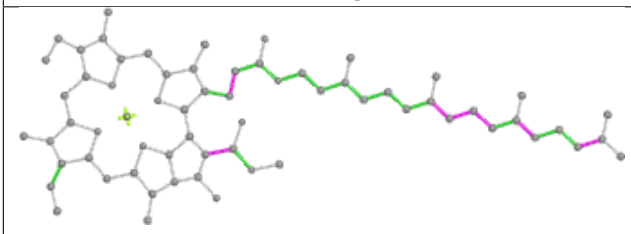
Ligand CLA b 706



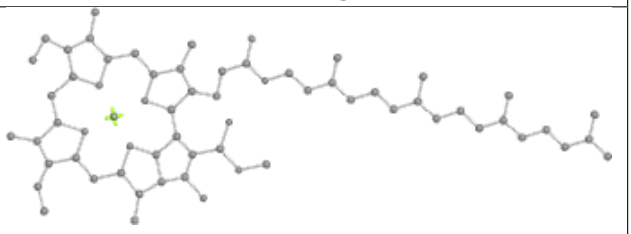
Bond lengths



Bond angles

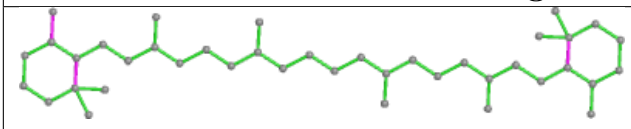


Torsions

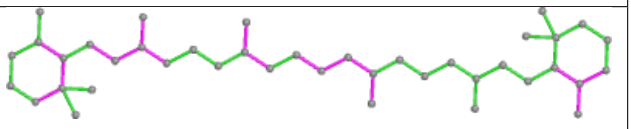


Rings

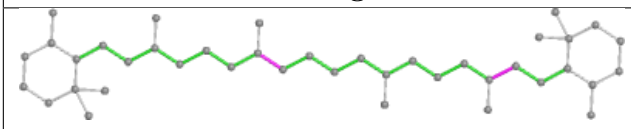
Ligand BCR c 516



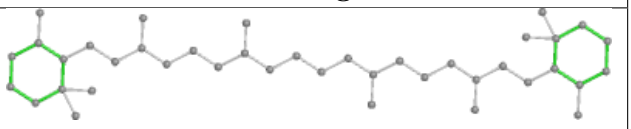
Bond lengths



Bond angles

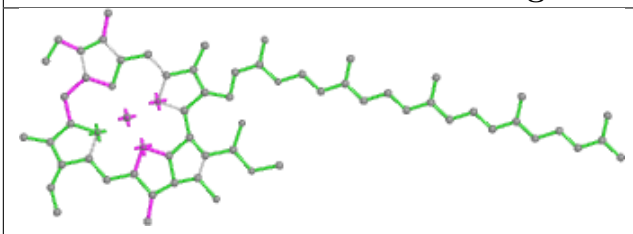


Torsions

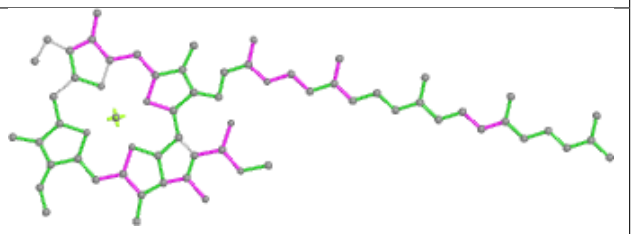


Rings

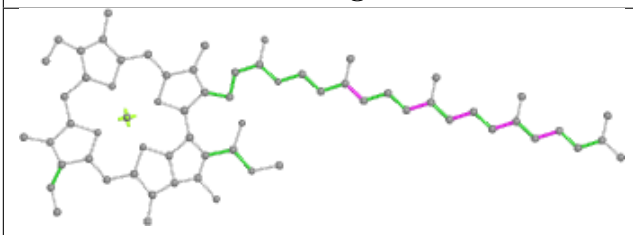
Ligand CLA b 703



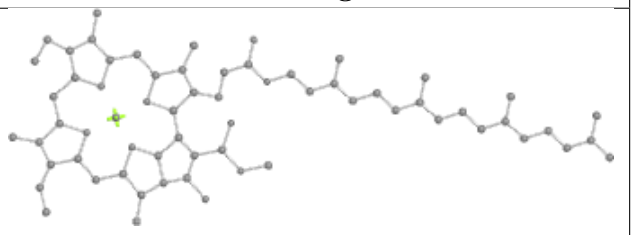
Bond lengths



Bond angles

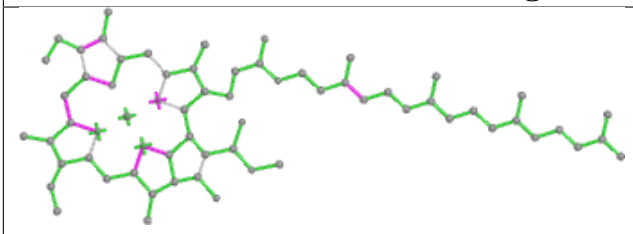


Torsions

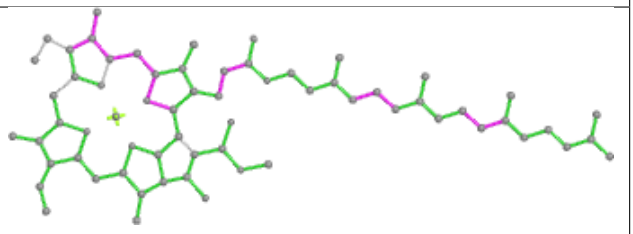


Rings

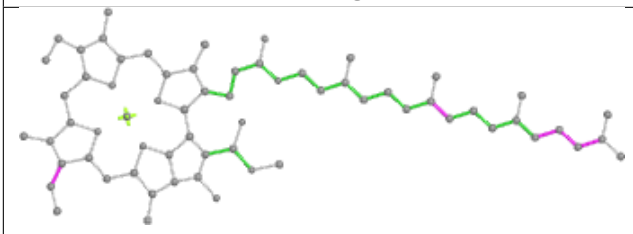
Ligand CLA A 402



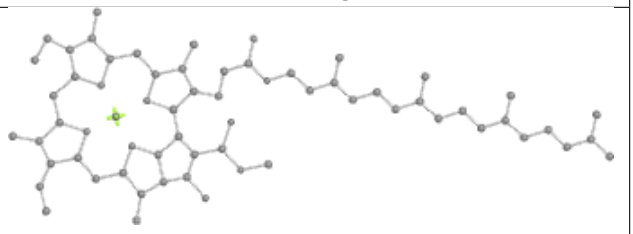
Bond lengths



Bond angles

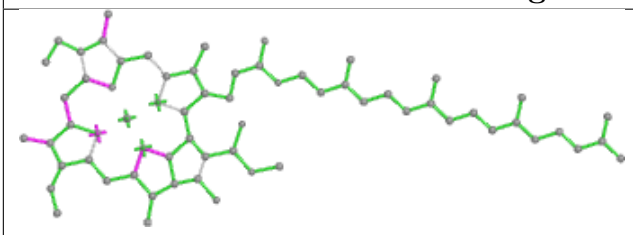


Torsions

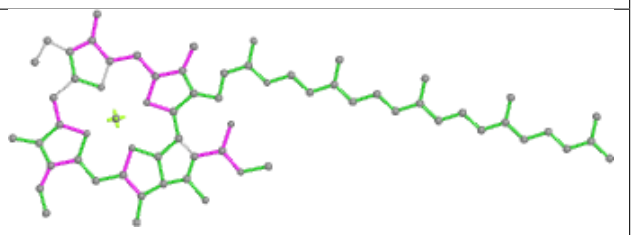


Rings

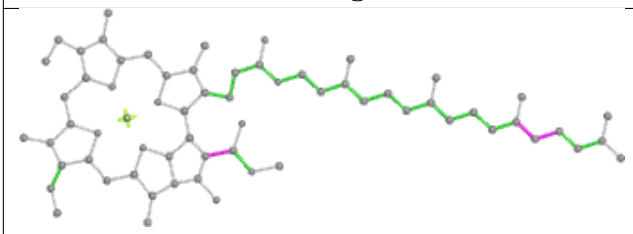
Ligand CLA a 404



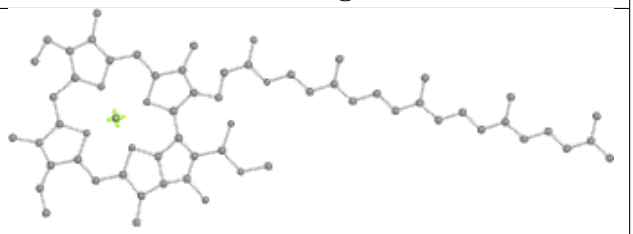
Bond lengths



Bond angles

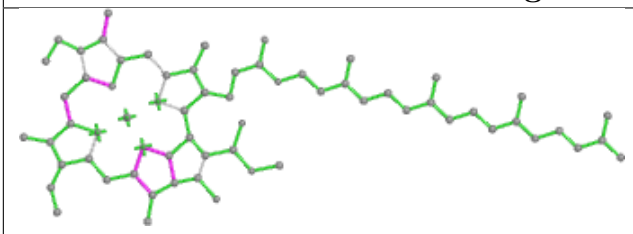


Torsions

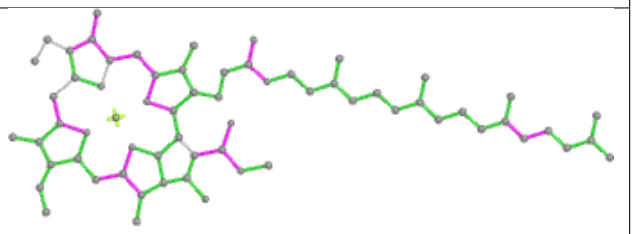


Rings

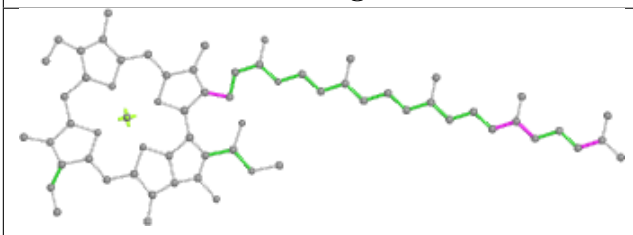
Ligand CLA B 702



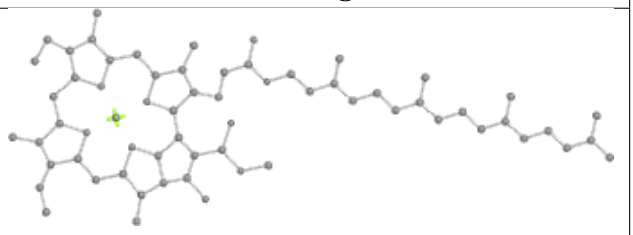
Bond lengths



Bond angles

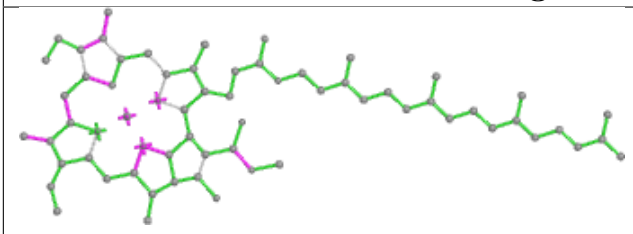


Torsions

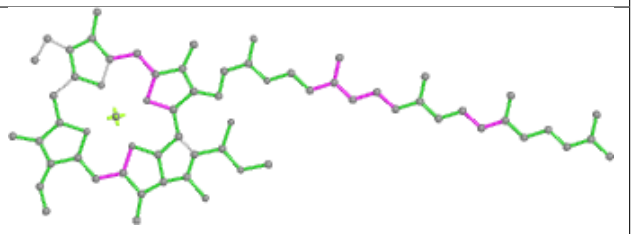


Rings

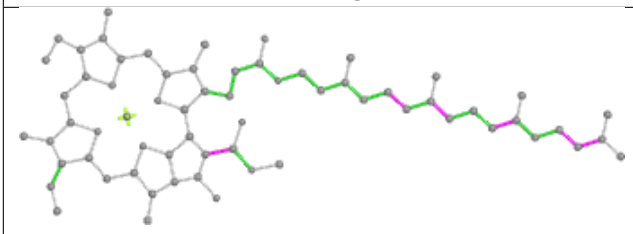
Ligand CLA c 504



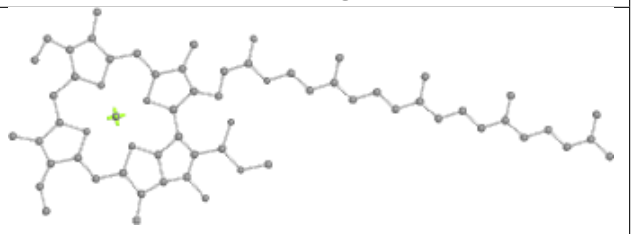
Bond lengths



Bond angles

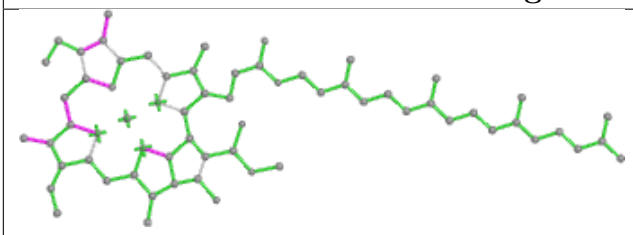


Torsions

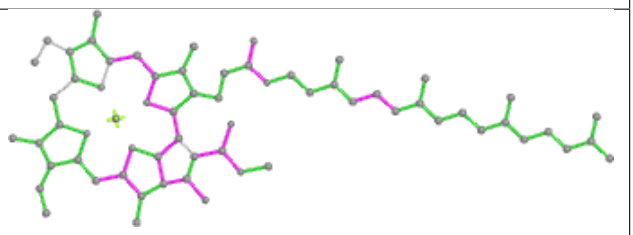


Rings

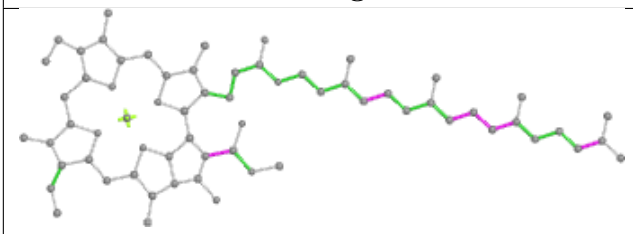
Ligand CLA B 705



Bond lengths



Bond angles



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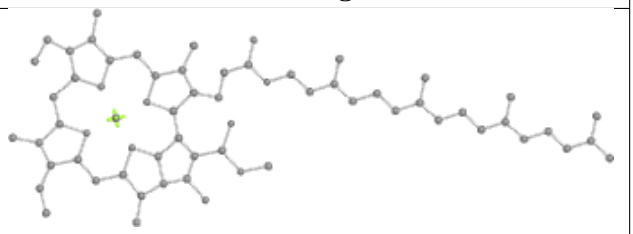
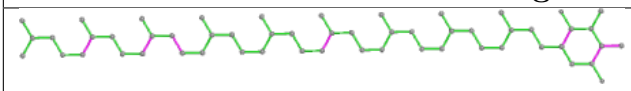


Rings

Ligand PL9 d 404



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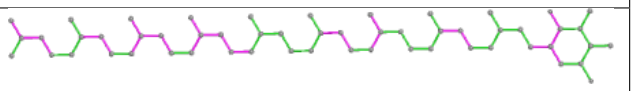
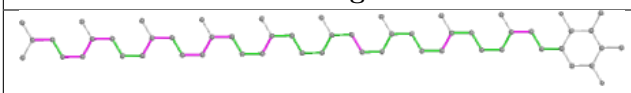


Bond angles



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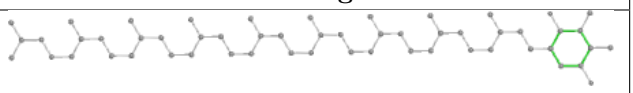
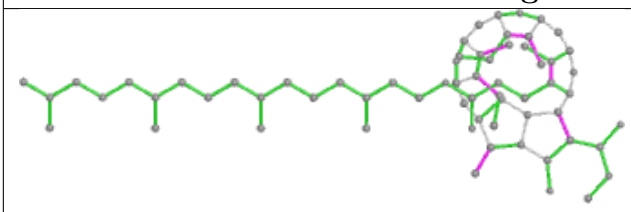


Rings

Ligand PHO D 407



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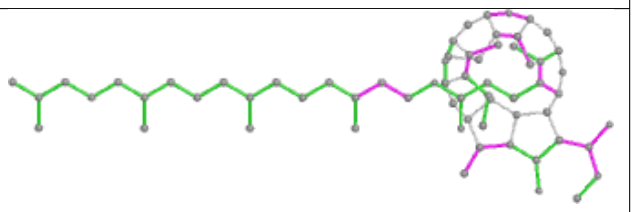

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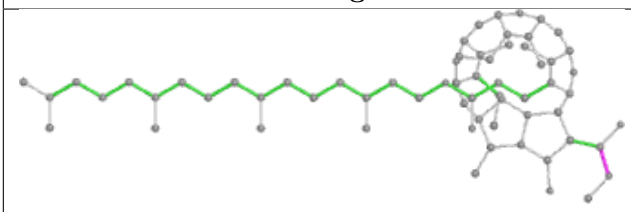

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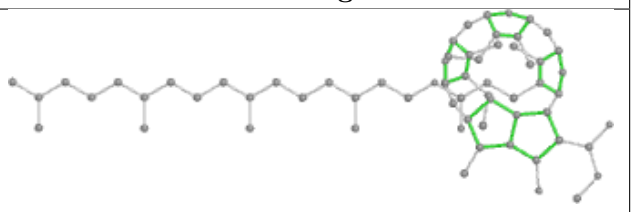
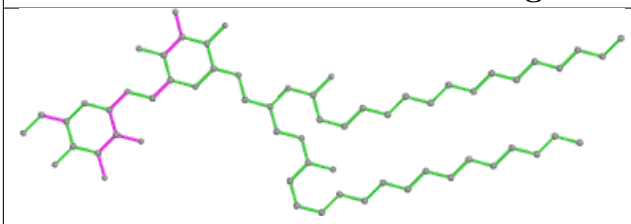


Rings

Ligand DGD c 518



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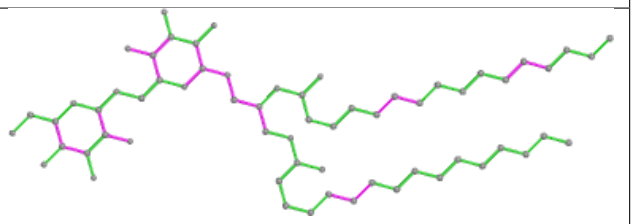
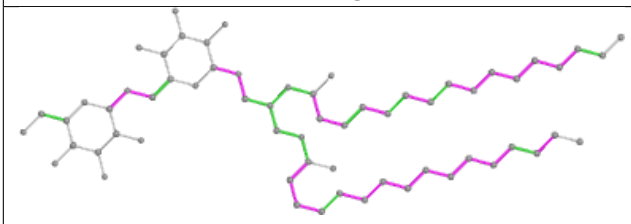


Bond angles



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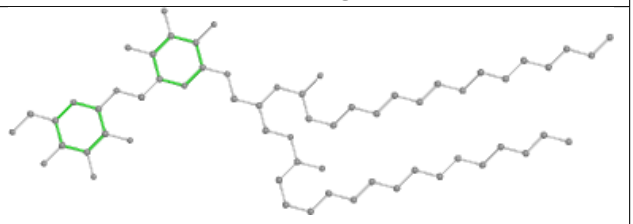
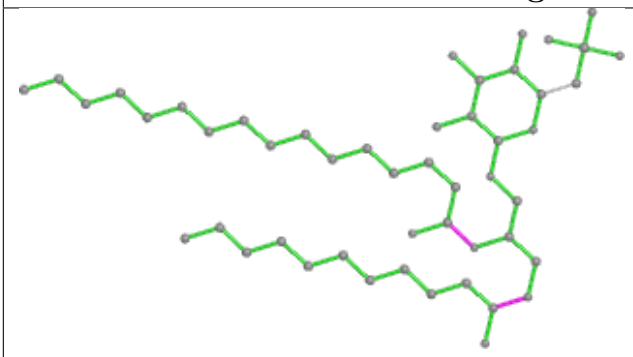


Rings

Ligand SQD b 720



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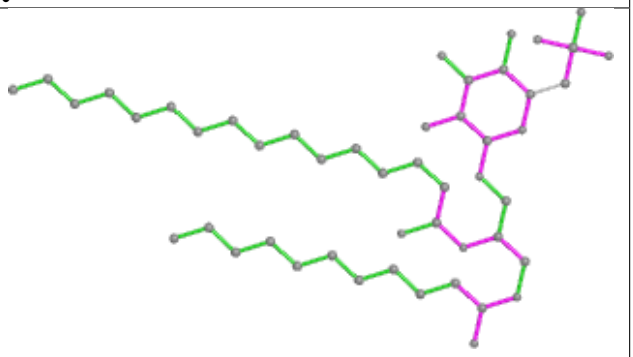
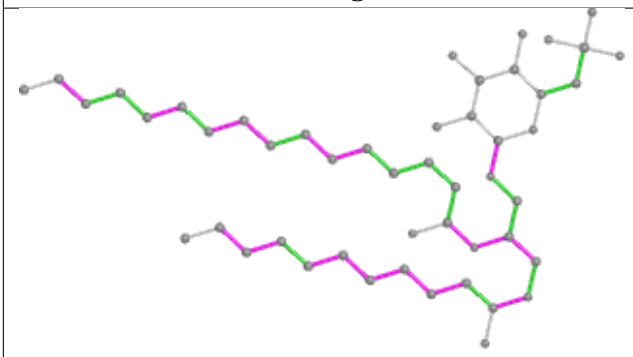


Bond angles



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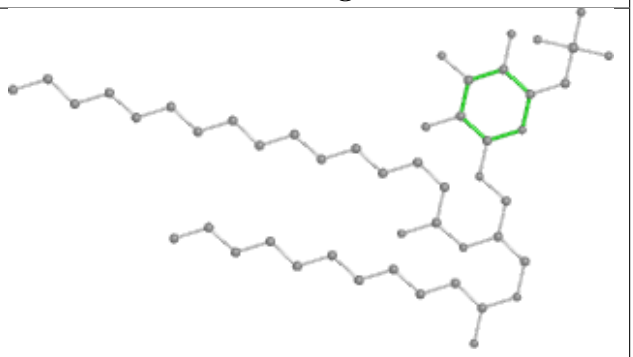
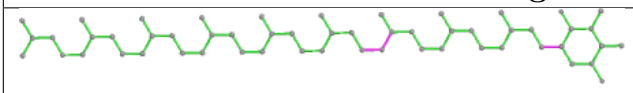


Rings

Ligand PL9 A 408



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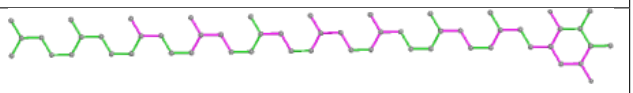
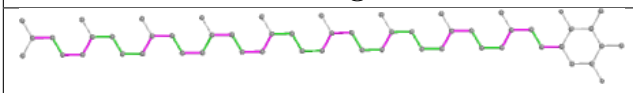


Bond angles



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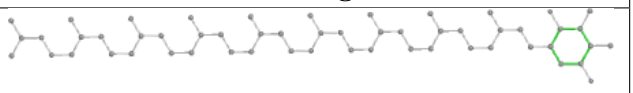
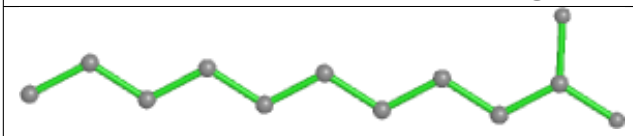


Rings

Ligand STE E 101



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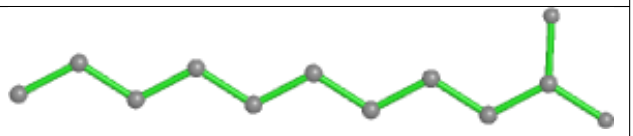
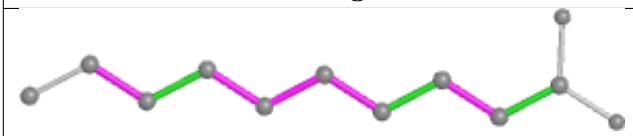


Bond angles



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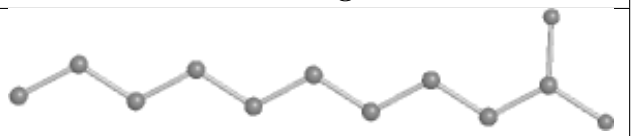
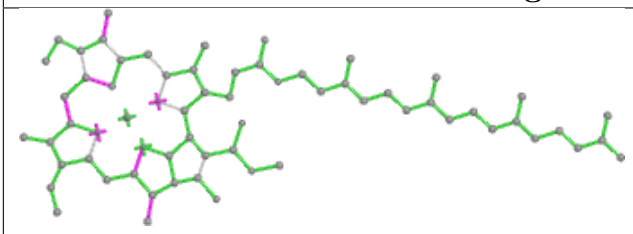


Rings

Ligand CLA C 508



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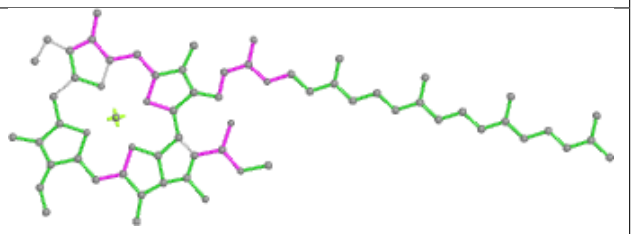
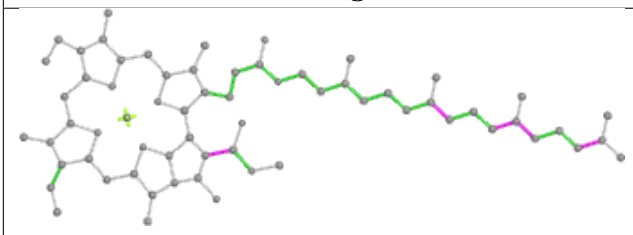


Bond angles



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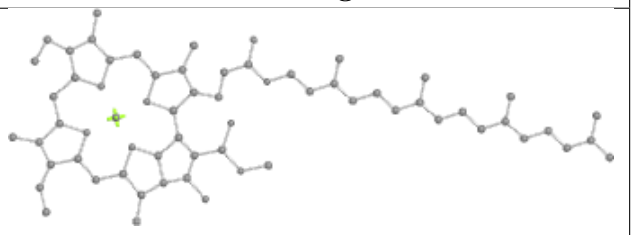
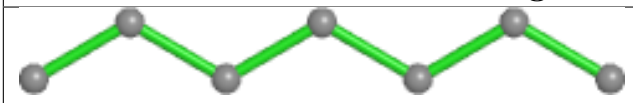


Rings

Ligand STE E 102



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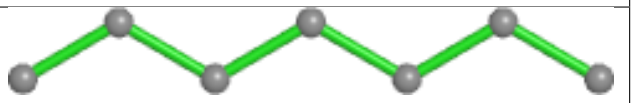
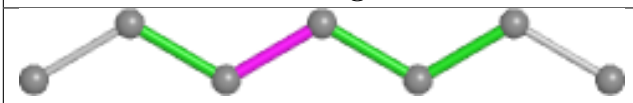


Bond angles



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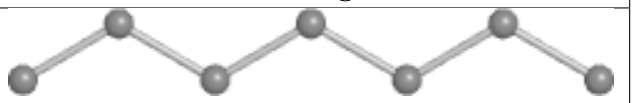


Rings

Ligand STE I 101

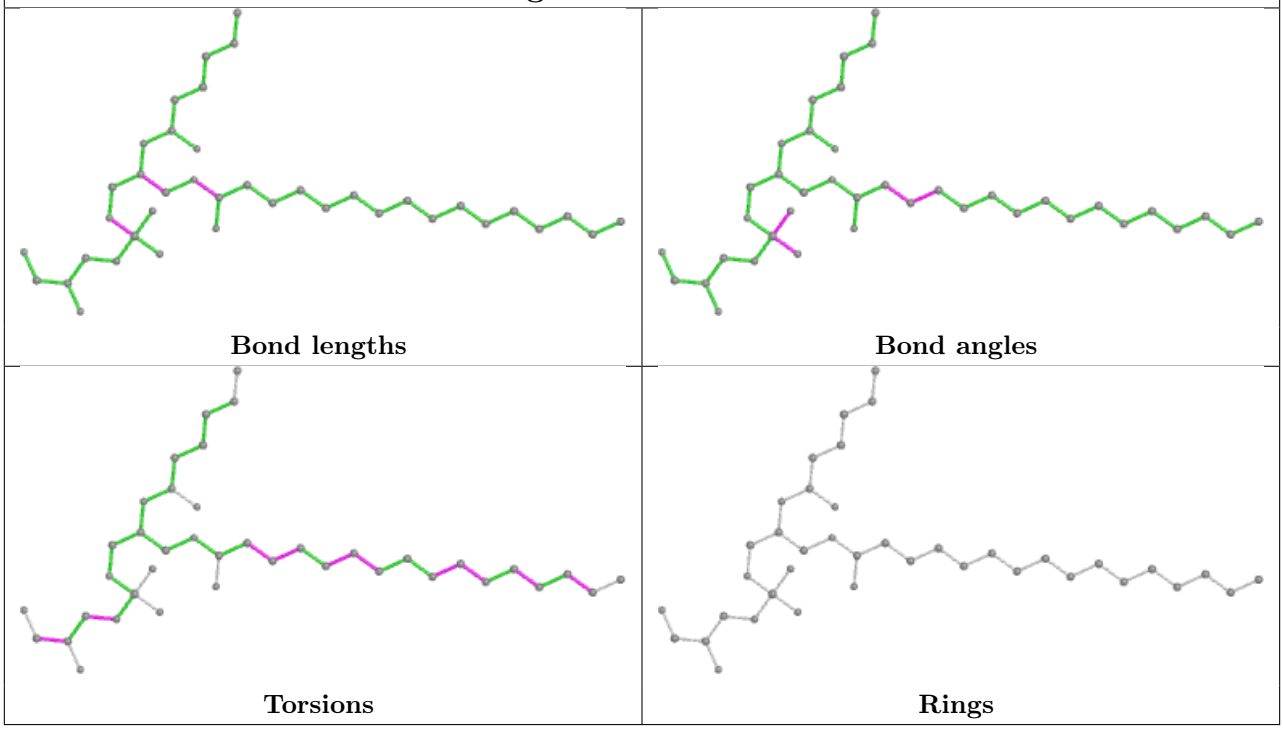
Bond lengths

Bond angles

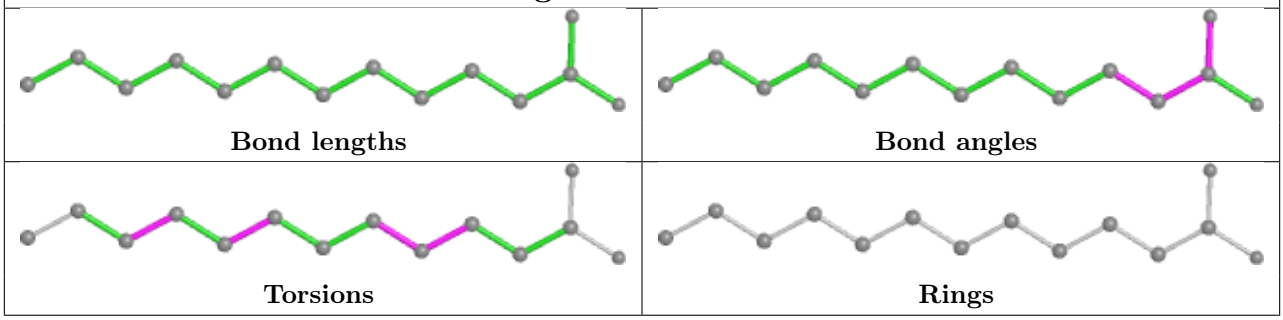
Torsions

Rings

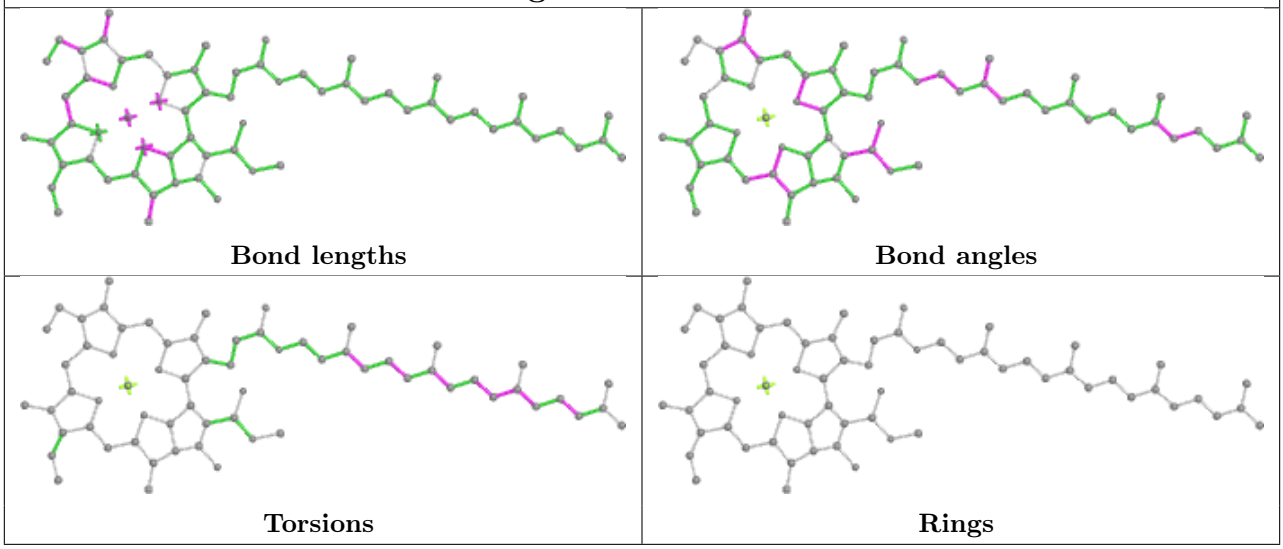
Ligand LHG d 407



Ligand STE t 702



Ligand CLA b 705



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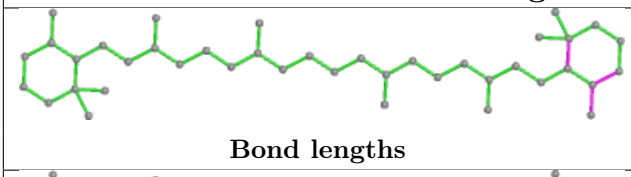
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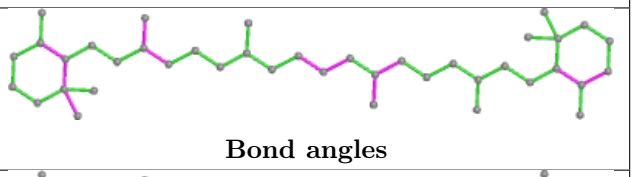
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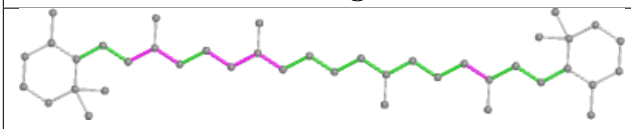
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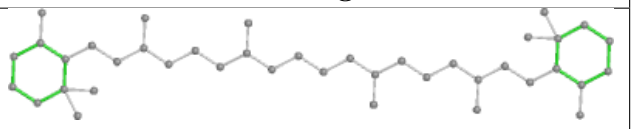
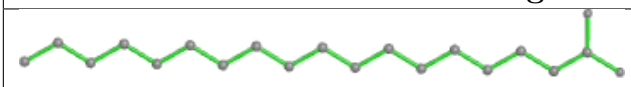

Rings

Ligand STE X 101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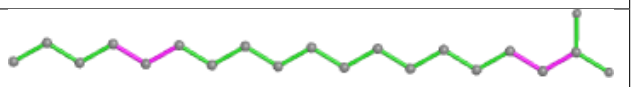
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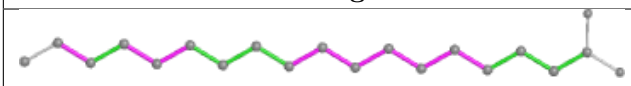
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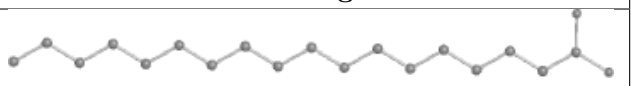
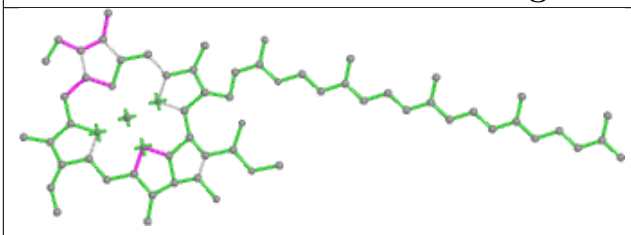

Rings

Ligand CLA c 508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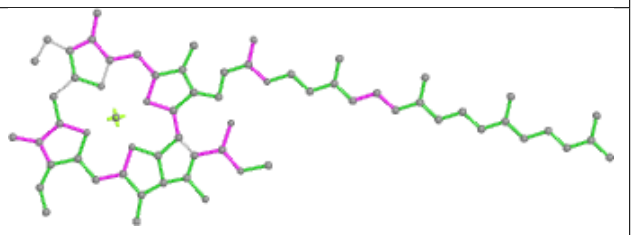
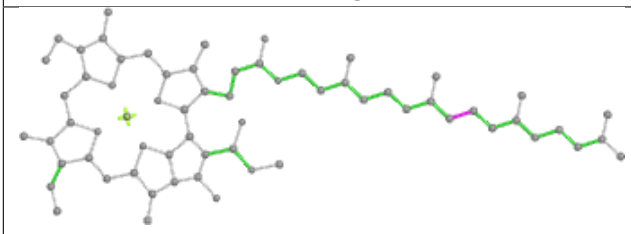

Bond angles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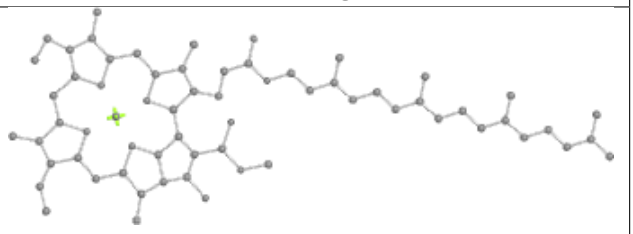
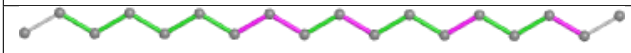

Rings

Ligand STE l 102


Bond lengths


Bond angles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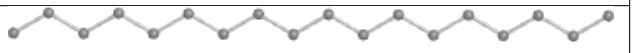
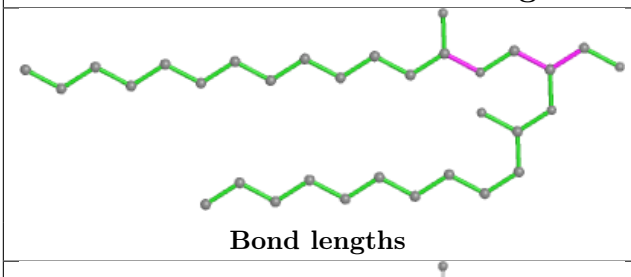
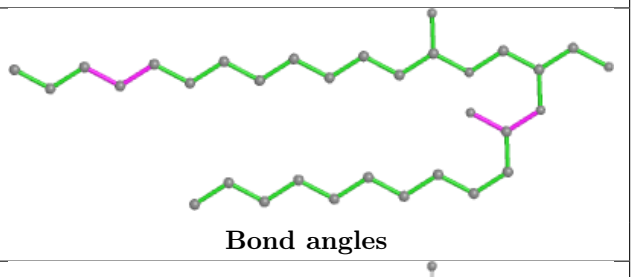
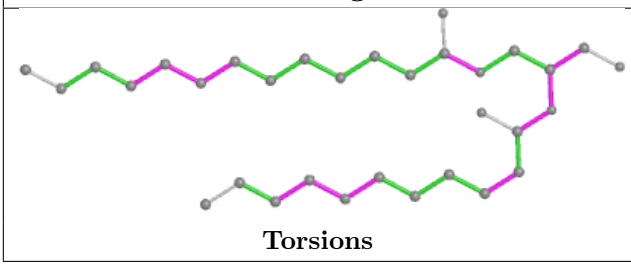
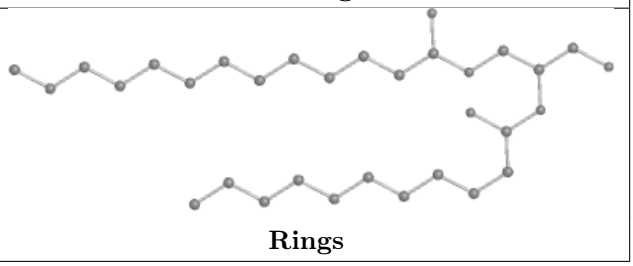

Rings

Ligand LMG D 412

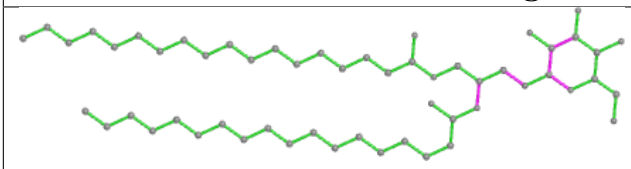

Bond lengths

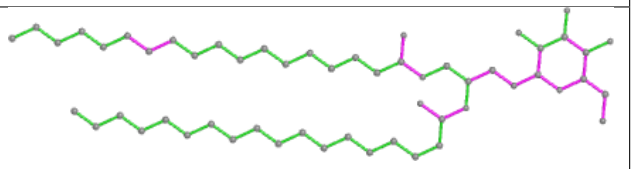

Bond angles

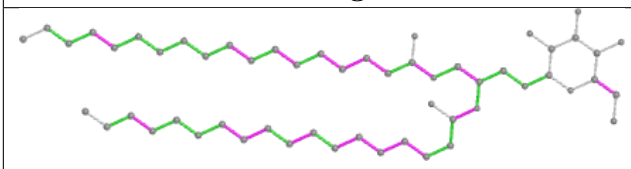

Torsions

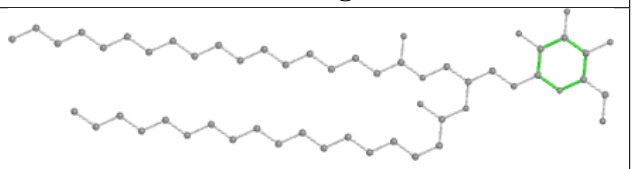

Rings

Ligand LMG b 723

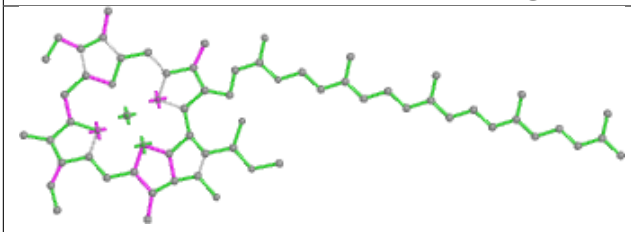

Bond lengths

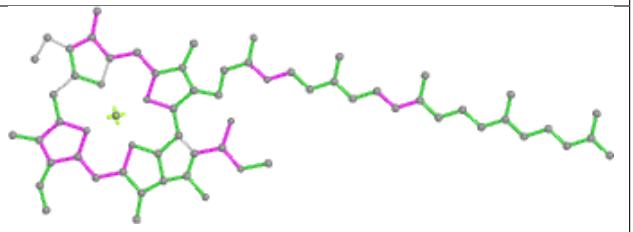

Bond angles

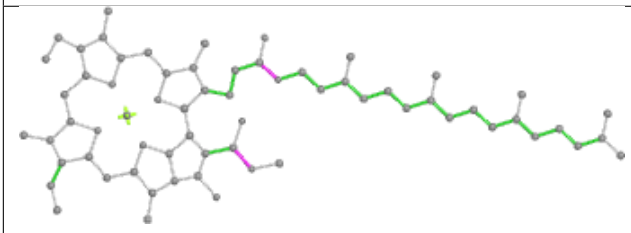

Torsions

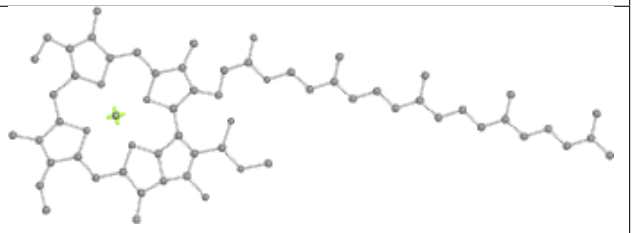

Rings

Ligand CLA B 708

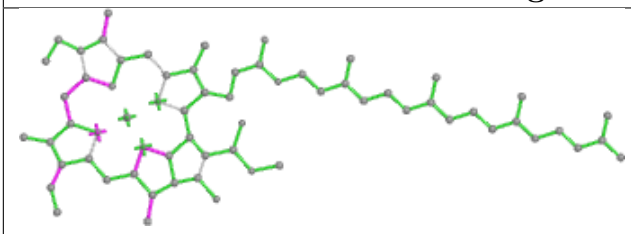

Bond lengths


Bond angles

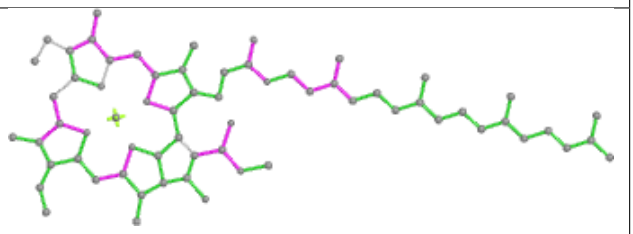

Torsions


Rings

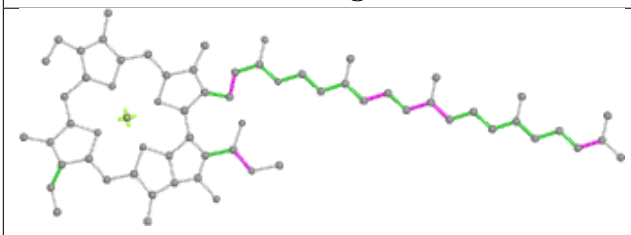
Ligand CLA b 702



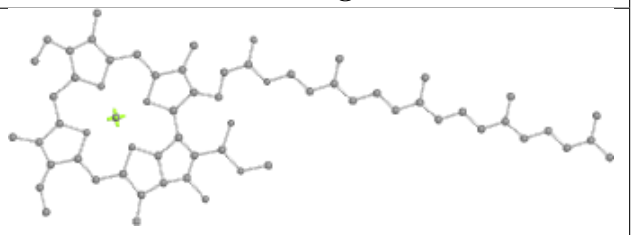
Bond lengths



Bond angles

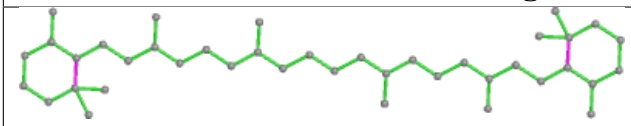


Torsions



Rings

Ligand BCR D 404



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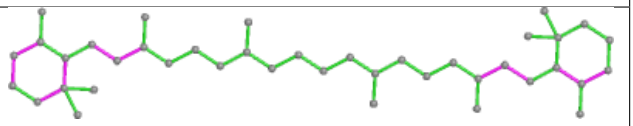
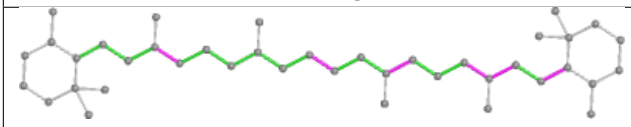


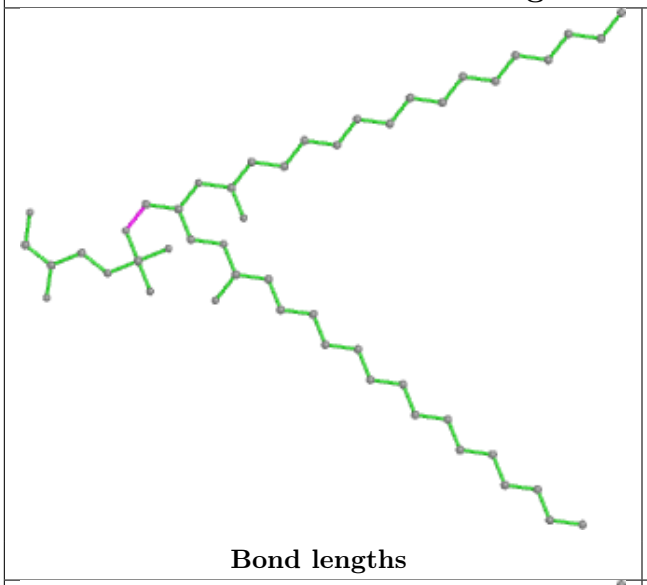
Bond angles



Torsions

Rings

Ligand LHG d 406



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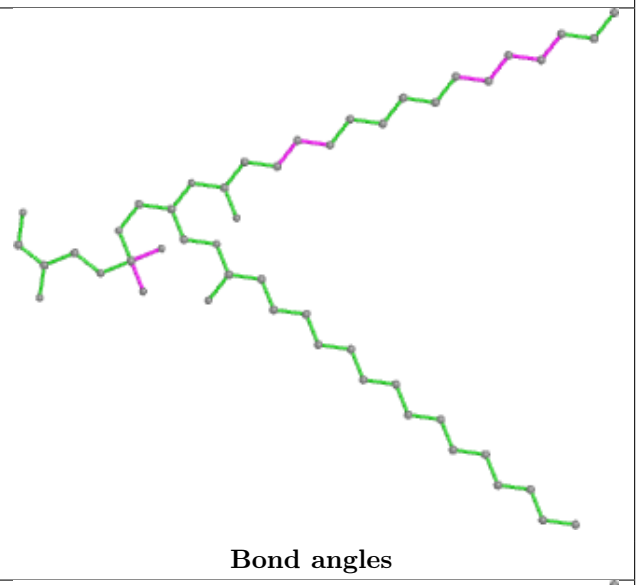
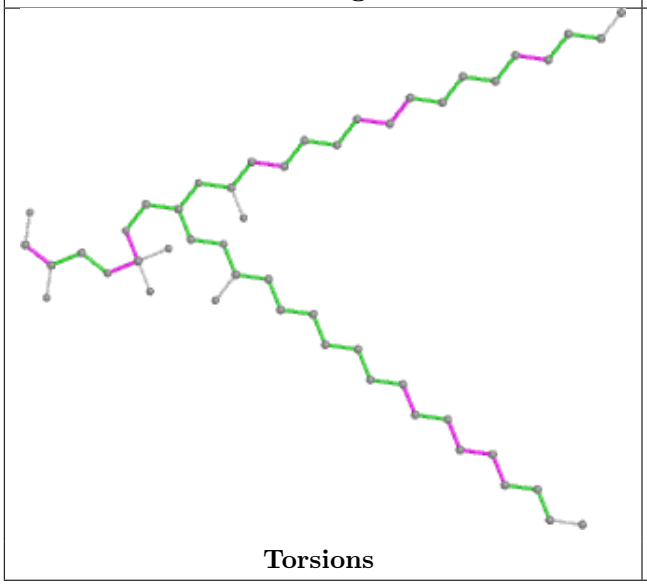
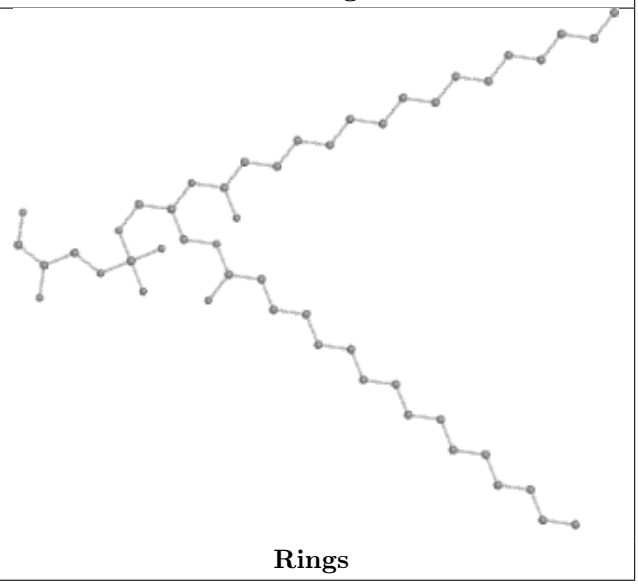


Bond angles

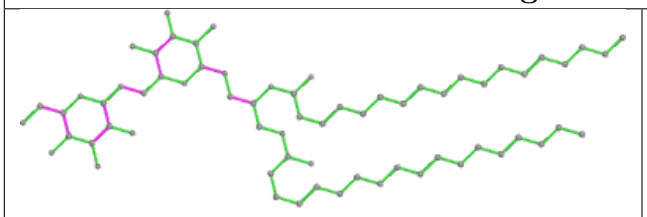


Torsions



Rings

Ligand DGD A 413



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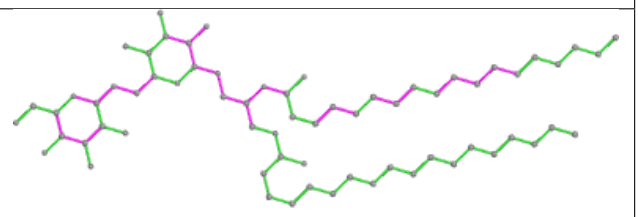
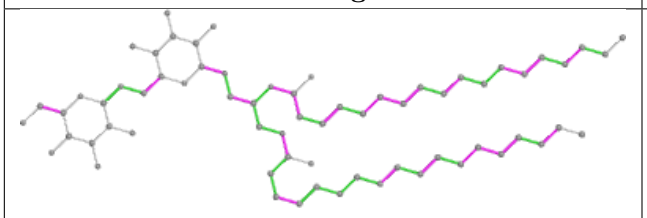
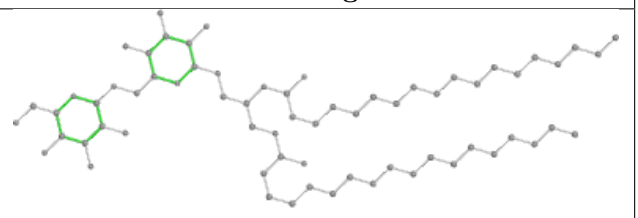


Bond angles

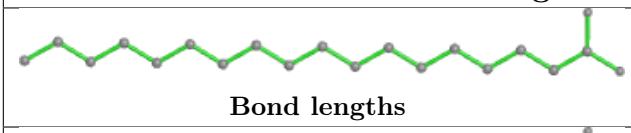


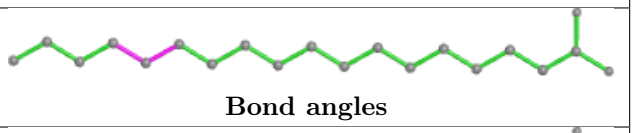
Torsions

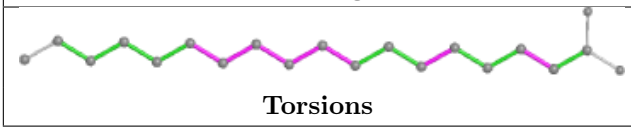


Rings

Ligand STE c 521

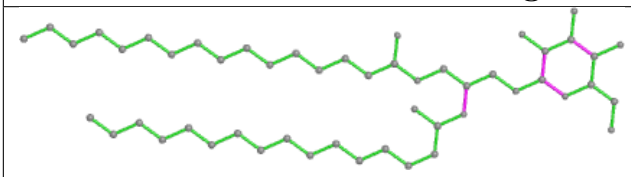

Bond lengths


Bond angles


Torsions


Rings

Ligand LMG b 721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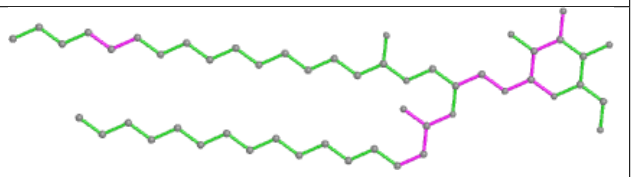
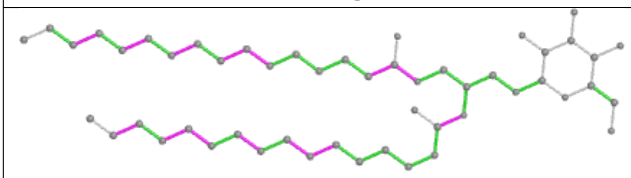
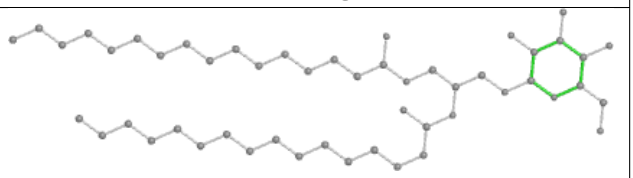
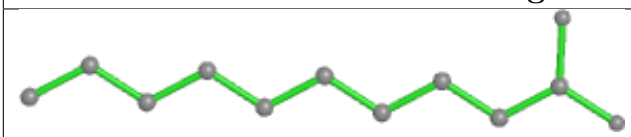

Bond angles


Torsions


Rings

Ligand STE C 523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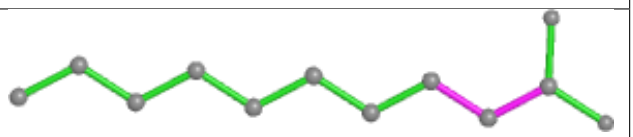
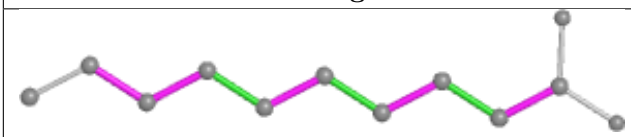
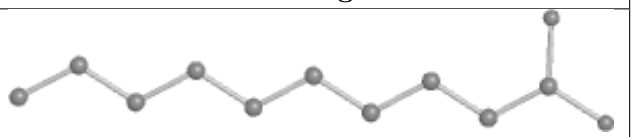
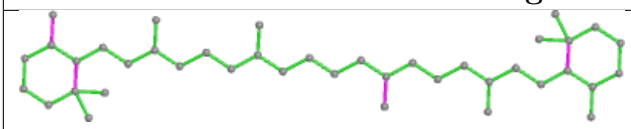

Bond angles


Torsions


Rings

Ligand BCR b 717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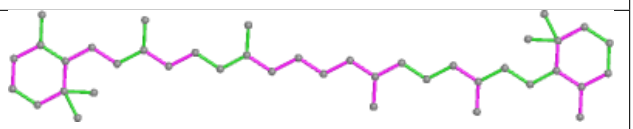
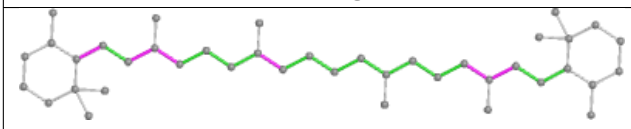

Bond angles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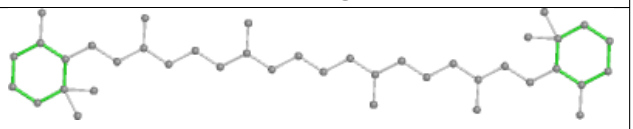
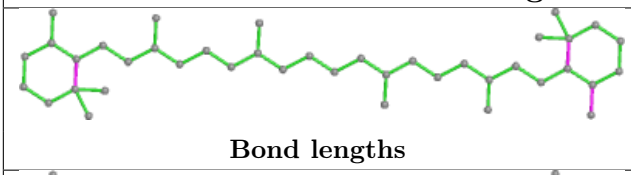
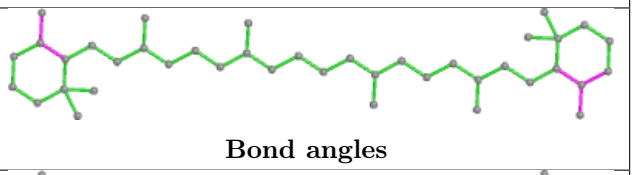

Rings

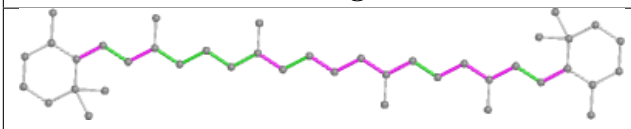
Ligand BCR k 101



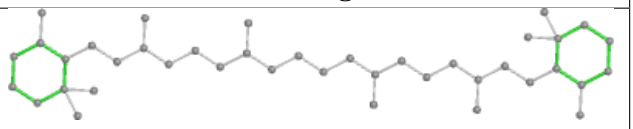
Bond lengths



Bond angles

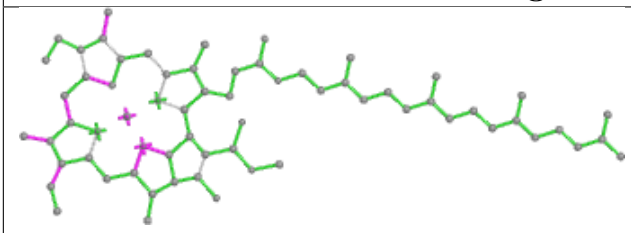


Torsions



Rings

Ligand CLA b 714



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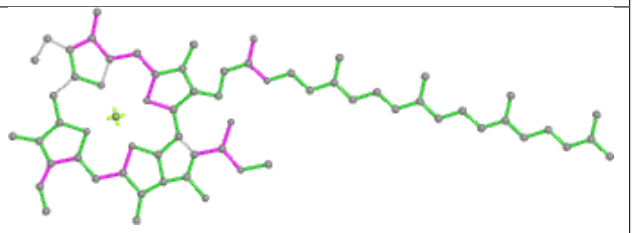
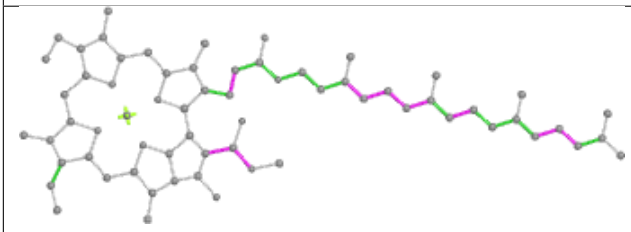
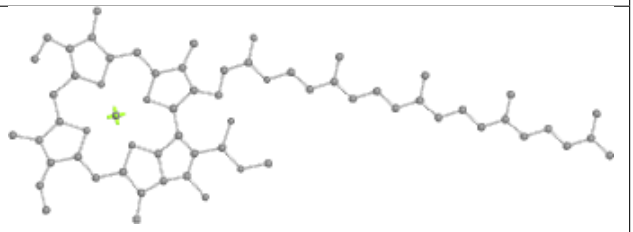


Bond angles

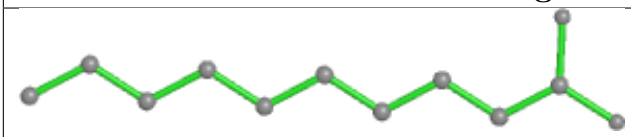


Torsions

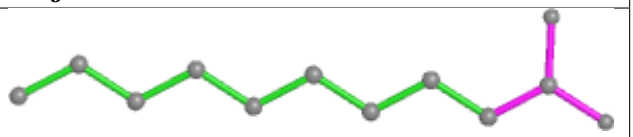


Rings

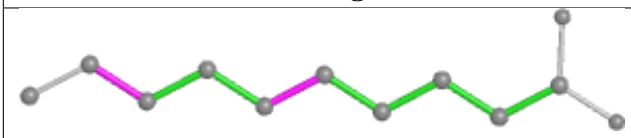
Ligand STE j 101



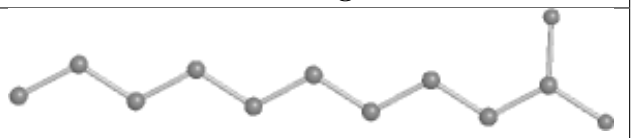
Bond lengths



Bond angles

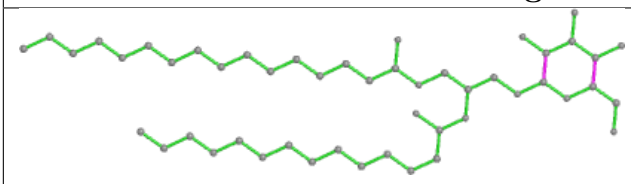


Torsions

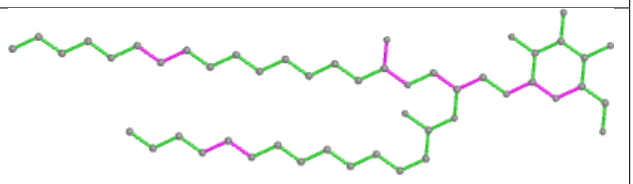


Rings

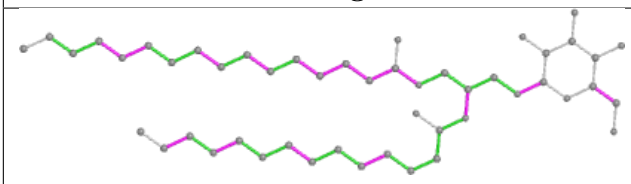
Ligand LMG c 523



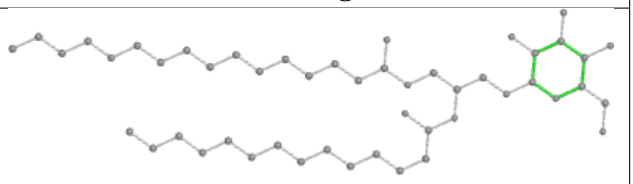
Bond lengths



Bond angles

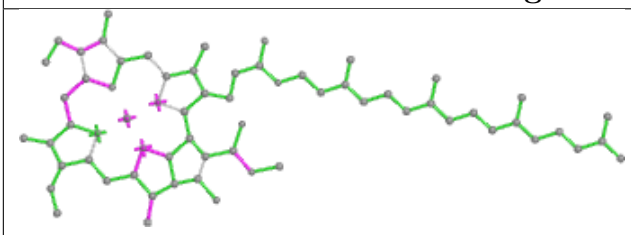


Torsions

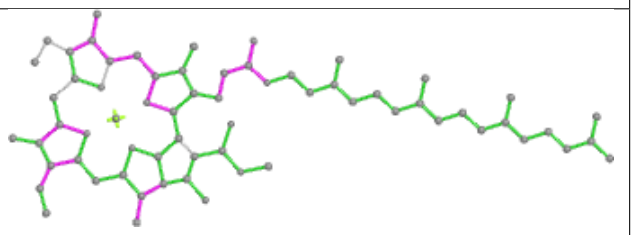


Rings

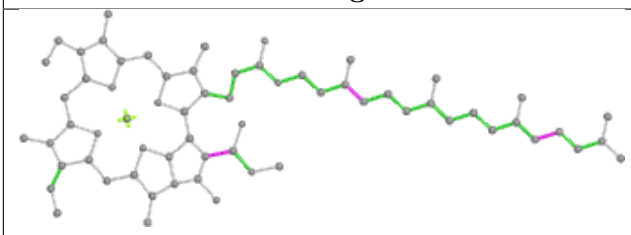
Ligand CLA B 709



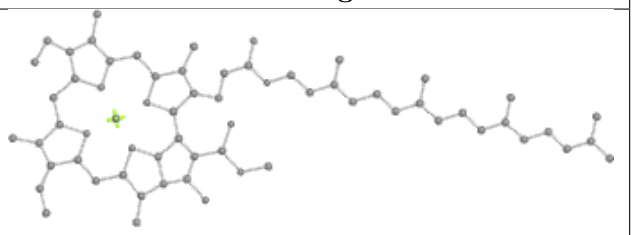
Bond lengths



Bond angles

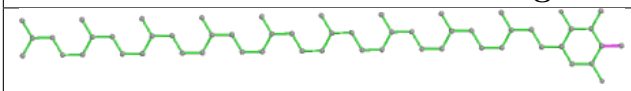


Torsions

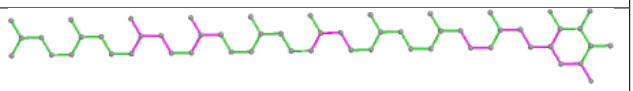


Rings

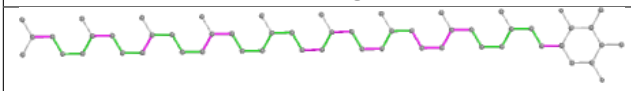
Ligand PL9 a 411



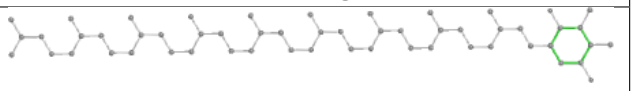
Bond lengths



Bond angles

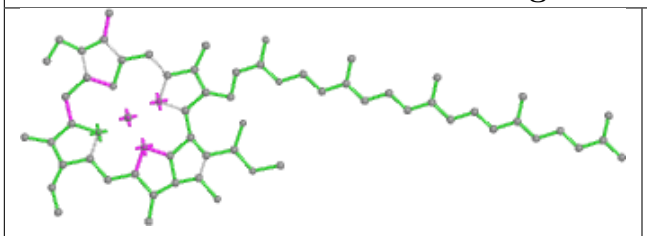


Torsions

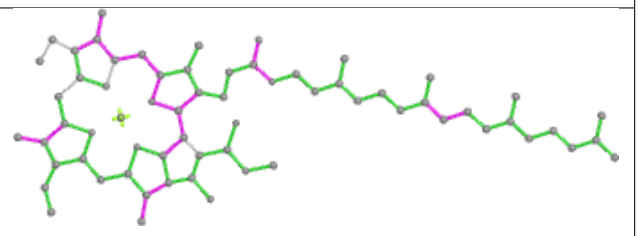


Rings

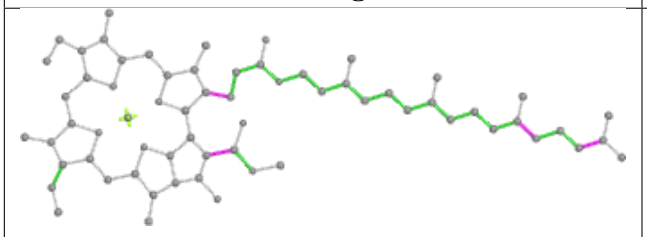
Ligand CLA a 401



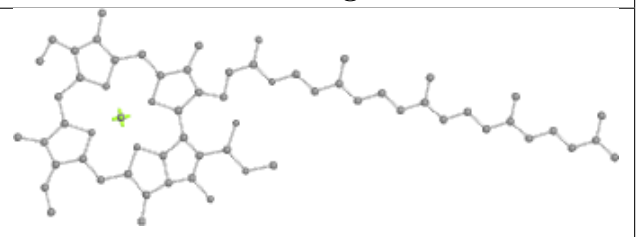
Bond lengths



Bond angles

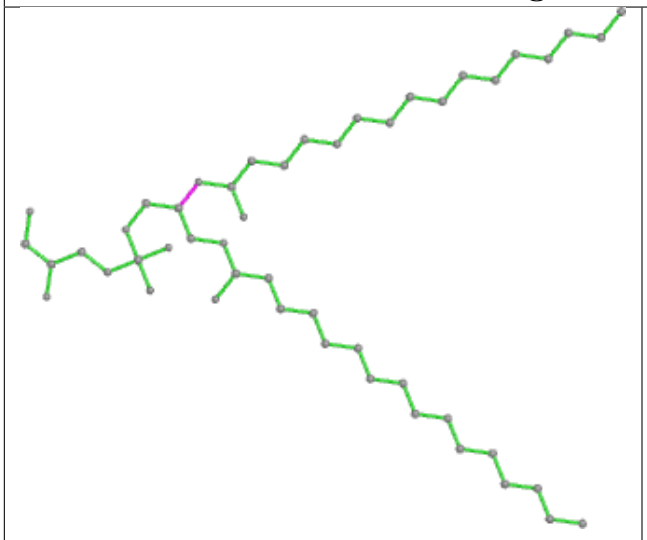


Torsions



Rings

Ligand LHG a 412



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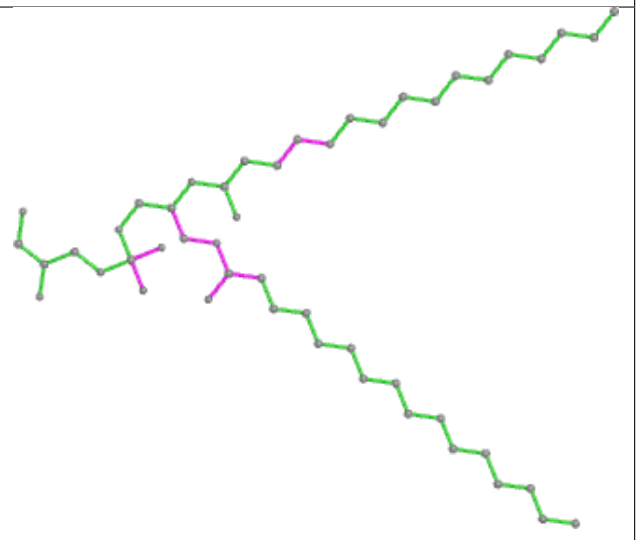
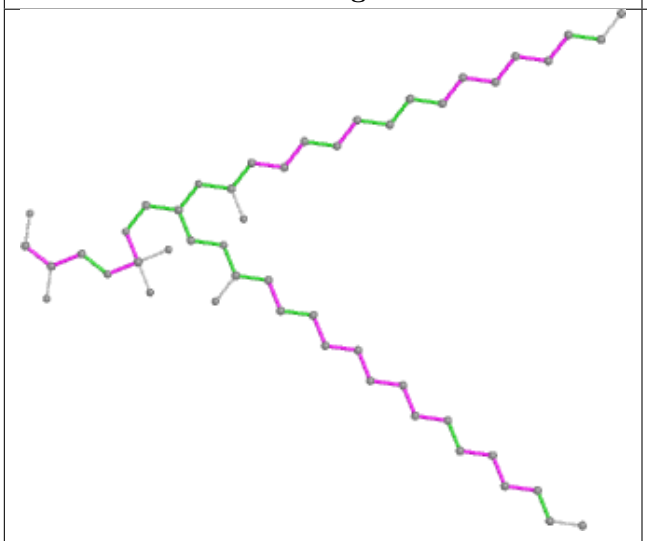
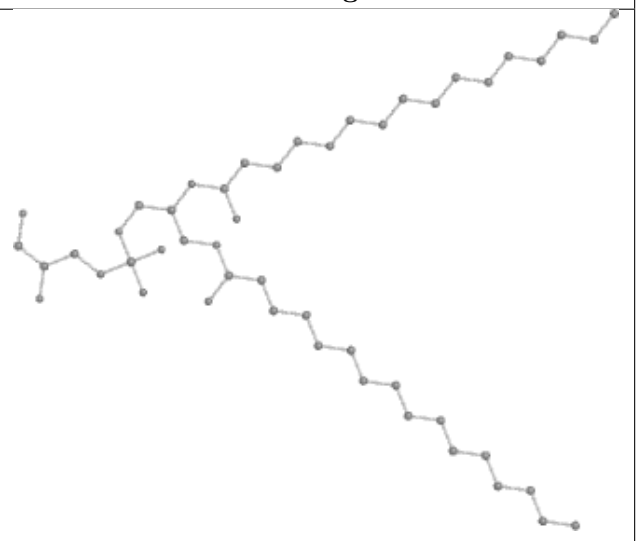


Bond angles

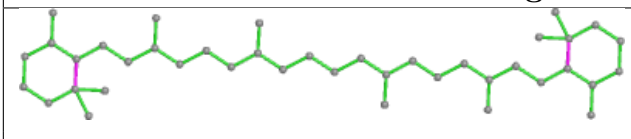


Torsions

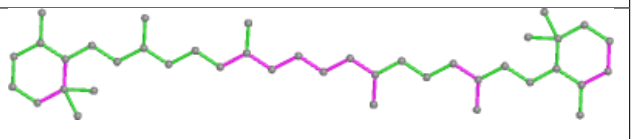


Rings

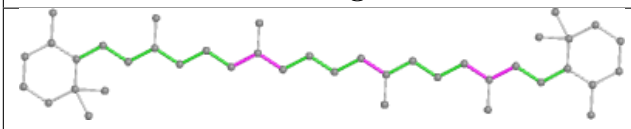
Ligand BCR b 719



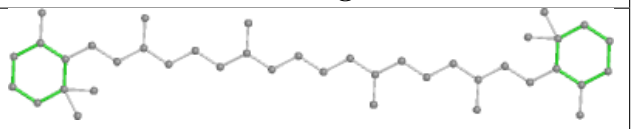
Bond lengths



Bond angles

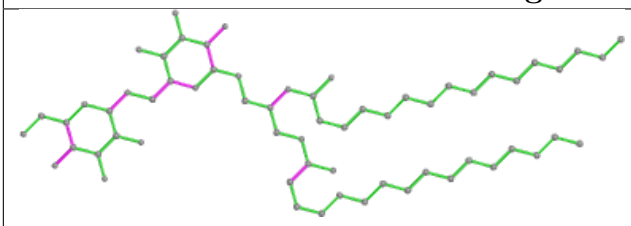


Torsions

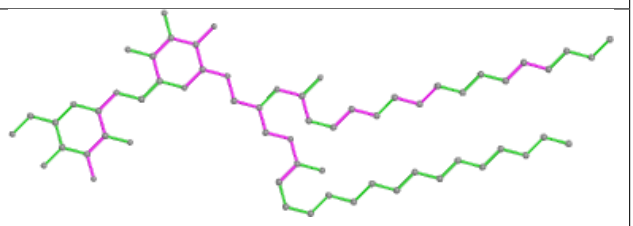


Rings

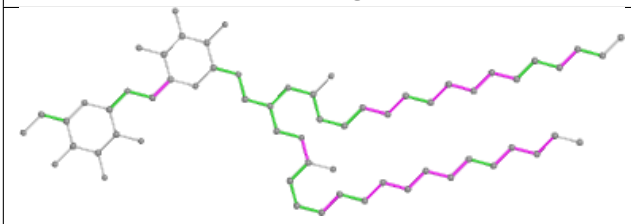
Ligand DGD c 519



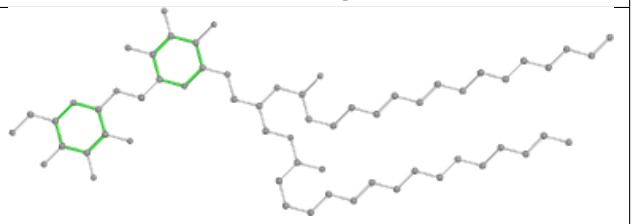
Bond lengths



Bond angles

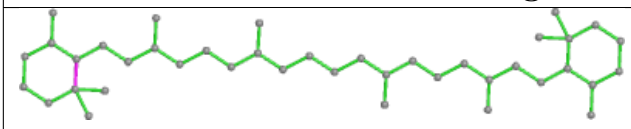


Torsions

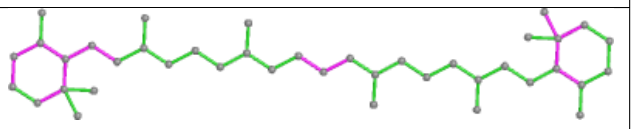


Rings

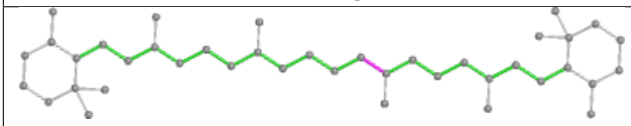
Ligand BCR B 719



Bond lengths



Bond angles



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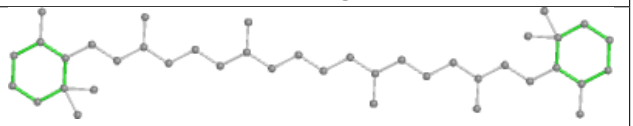
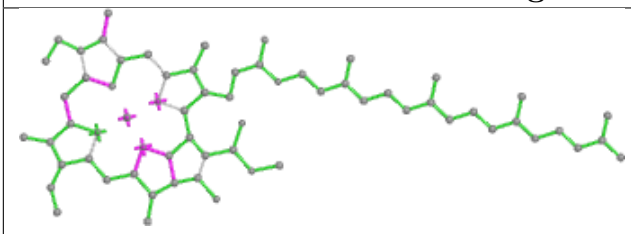
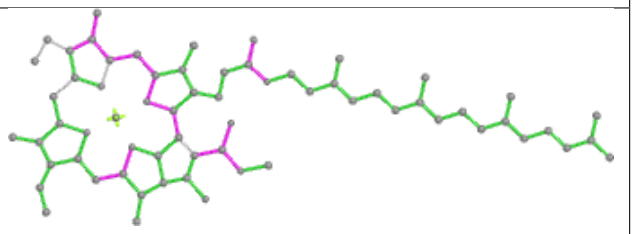


Rings

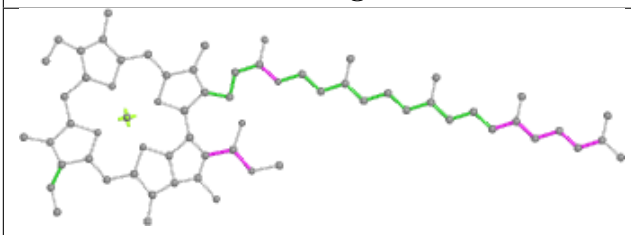
Ligand CLA b 709



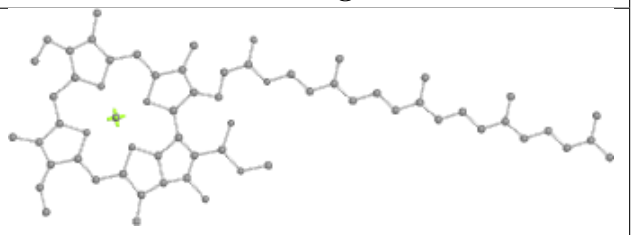
Bond lengths



Bond angles

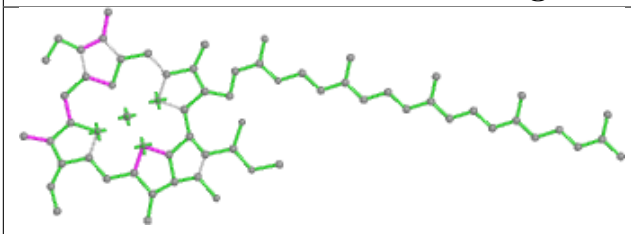


Torsions

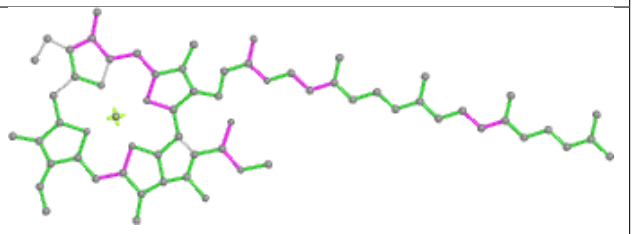


Rings

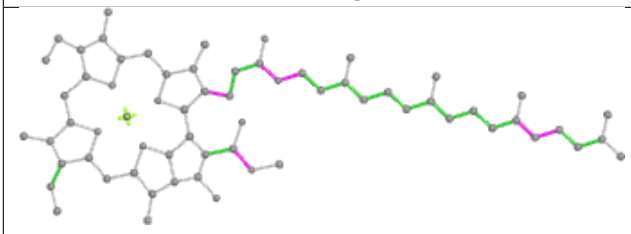
Ligand CLA c 514



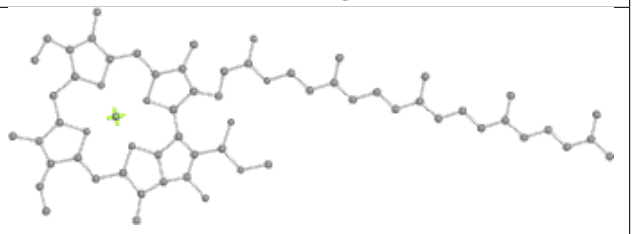
Bond lengths



Bond angles

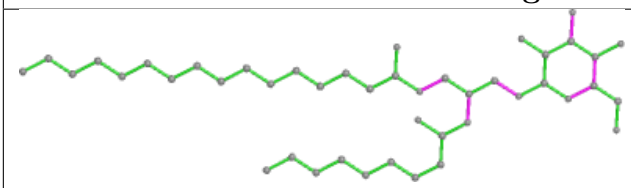


Torsions

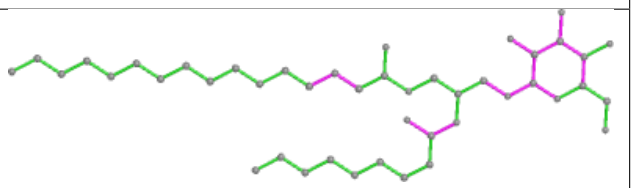


Rings

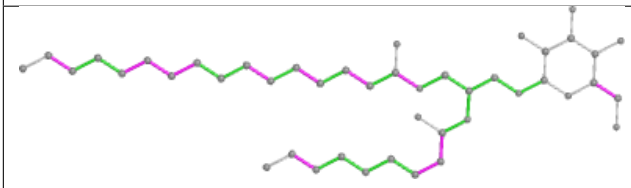
Ligand LMG d 408



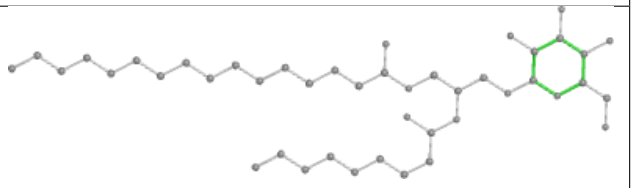
Bond lengths



Bond angles

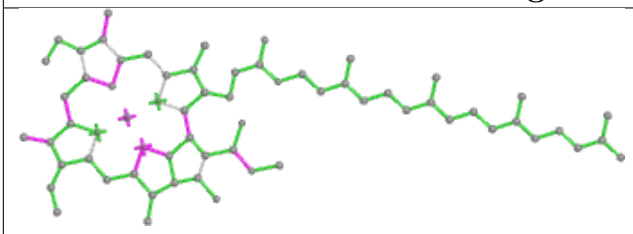


Torsions



Rings

Ligand CLA d 402



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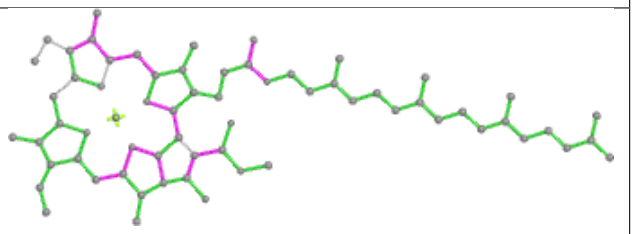
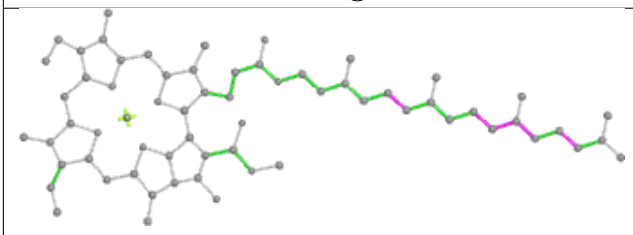
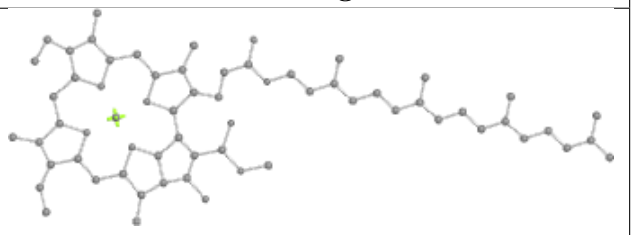


Bond angles

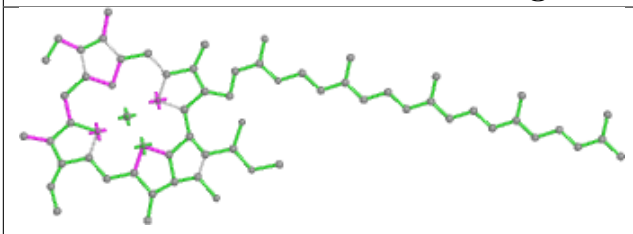


Torsions

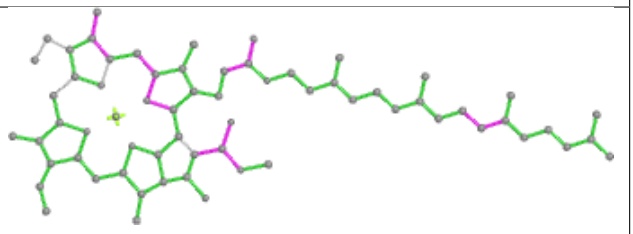


Rings

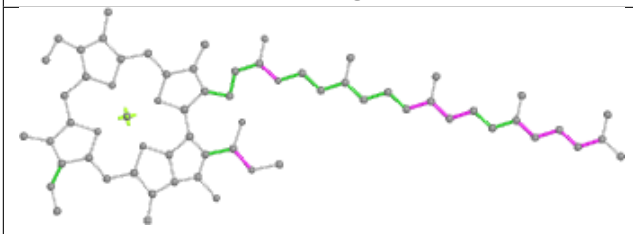
Ligand CLA c 512



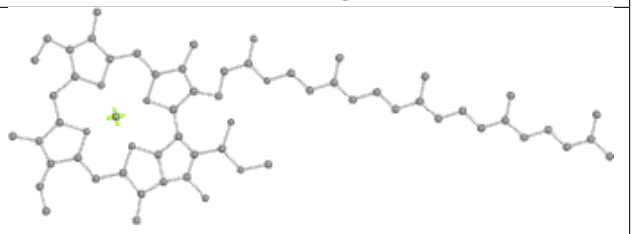
Bond lengths



Bond angles

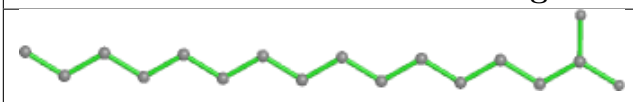


Torsions

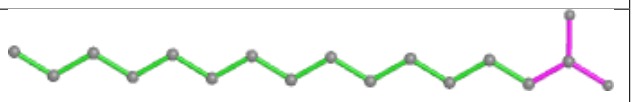


Rings

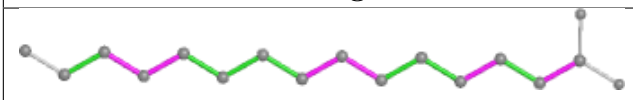
Ligand STE d 409



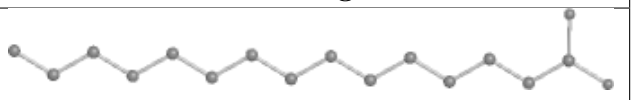
Bond lengths



Bond angles

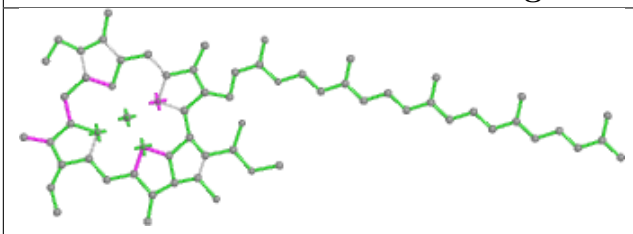


Torsions

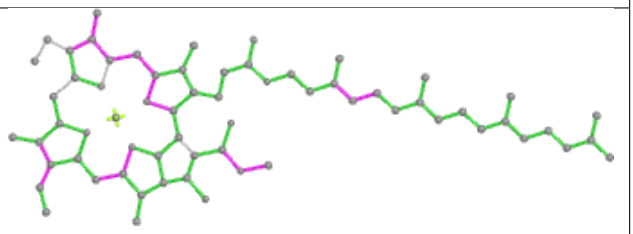


Rings

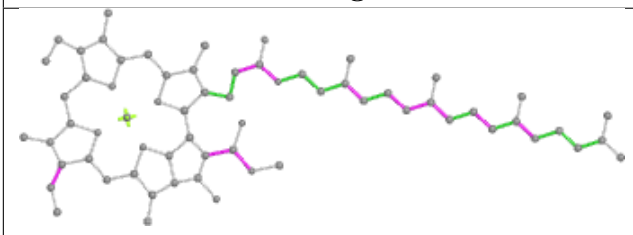
Ligand CLA C 506



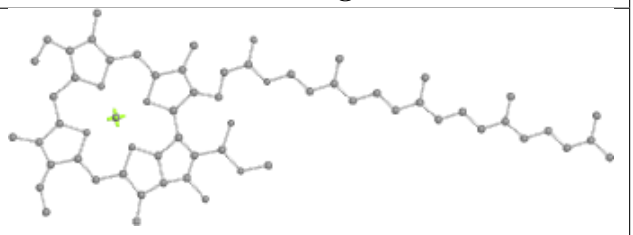
Bond lengths



Bond angles

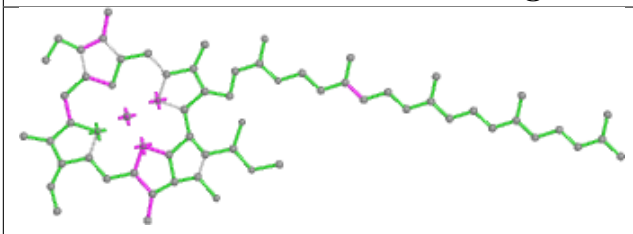


Torsions

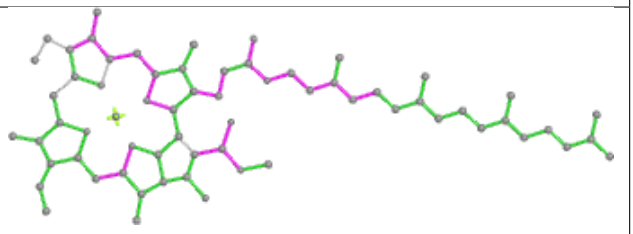


Rings

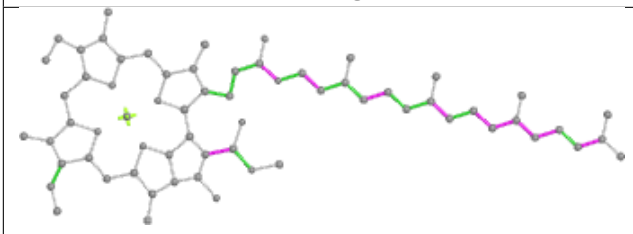
Ligand CLA C 513



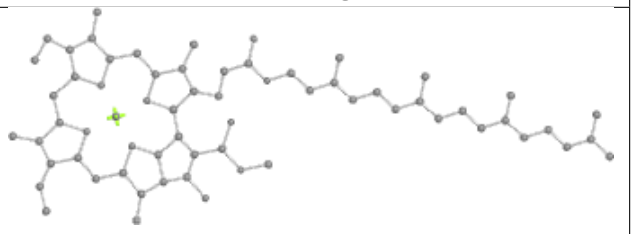
Bond lengths



Bond angles

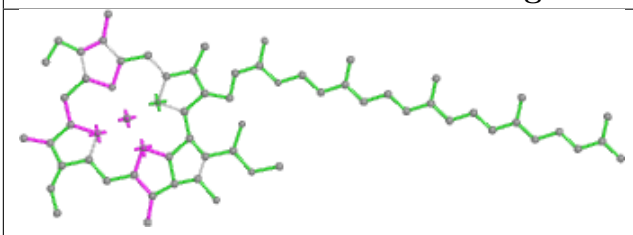


Torsions

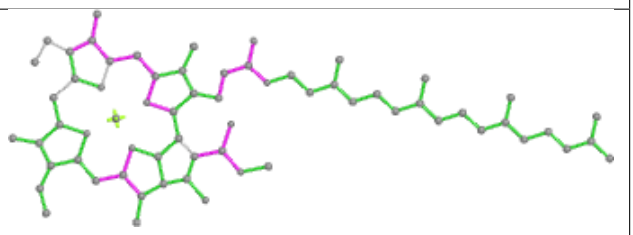


Rings

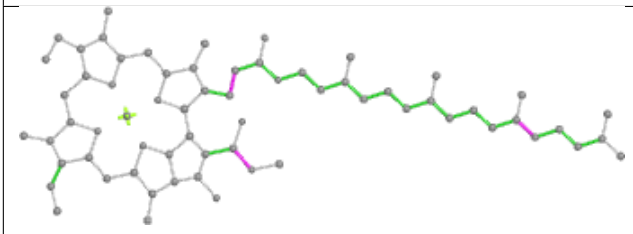
Ligand CLA C 502



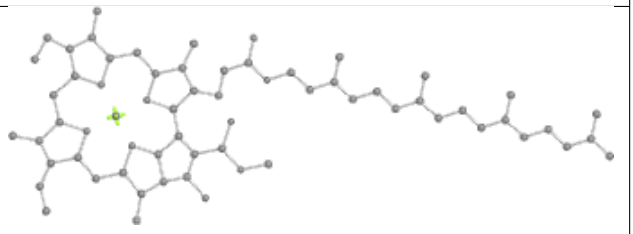
Bond lengths



Bond angles

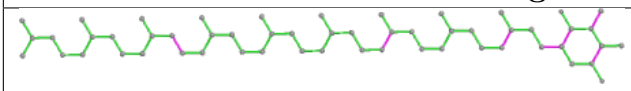


Torsions



Rings

Ligand PL9 D 405



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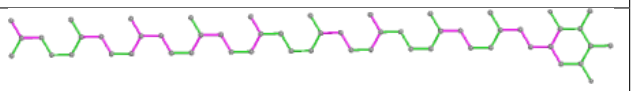

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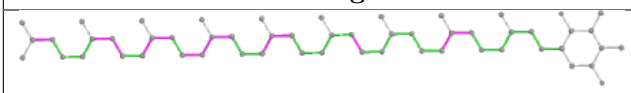
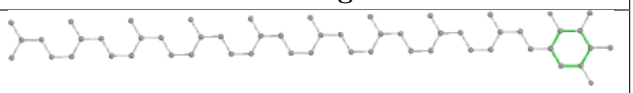
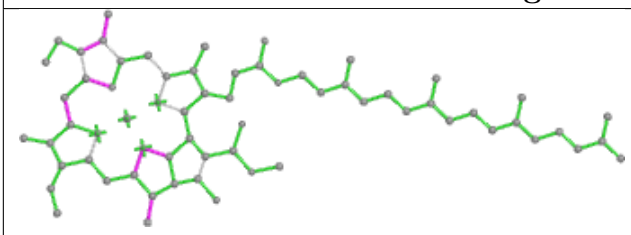


Torsions



Rings

Ligand CLA A 403



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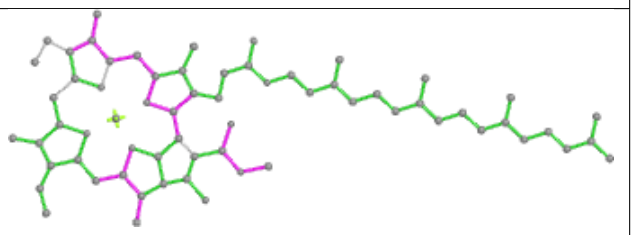

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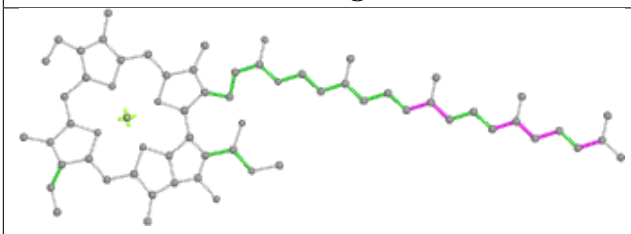

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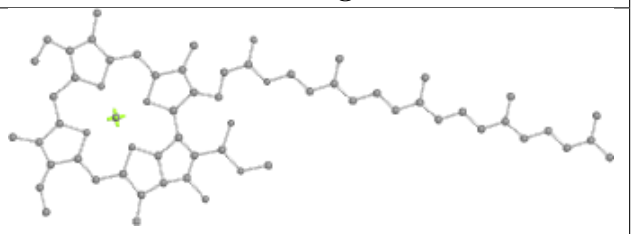
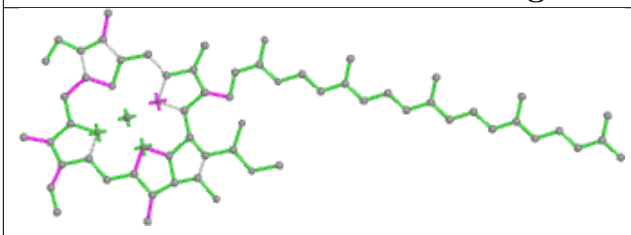


Rings

Ligand CLA b 713



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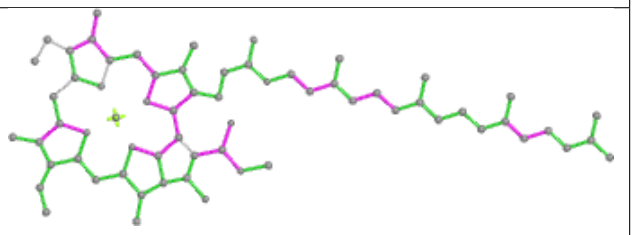
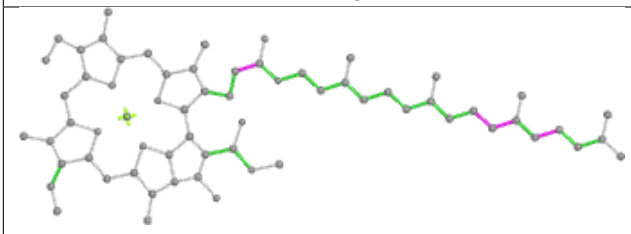


Bond angles



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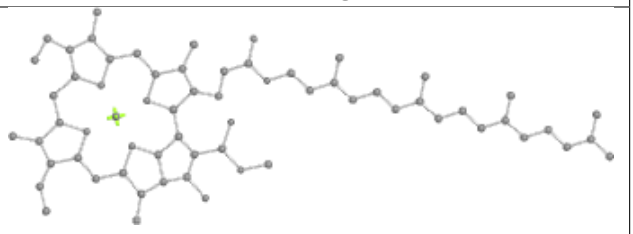
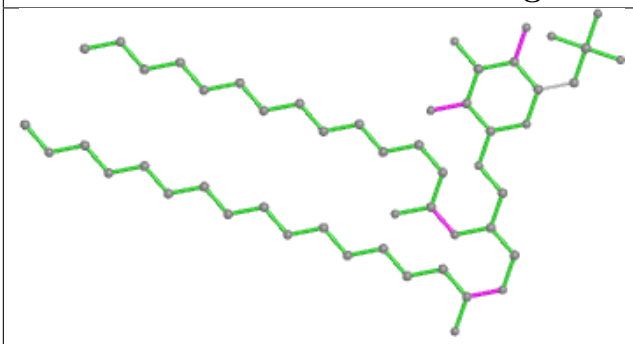


Rings

Ligand SQD A 409



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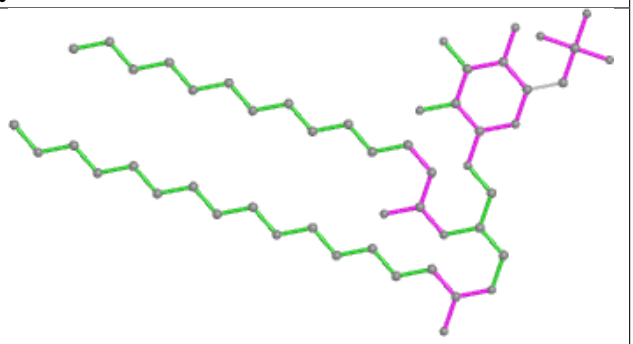
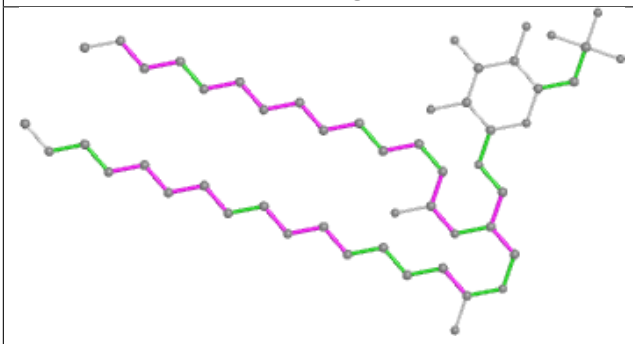


Bond angles



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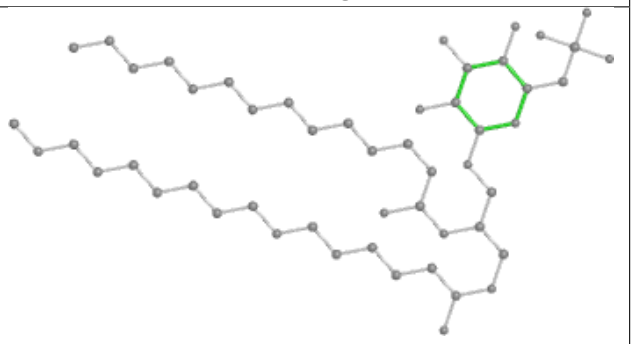
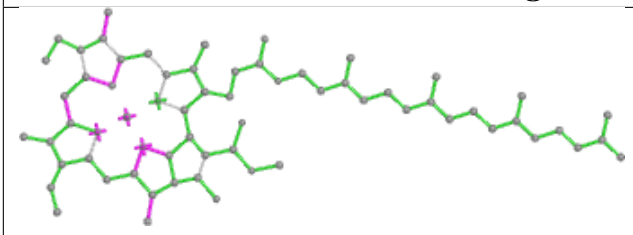


Rings

Ligand CLA B 711



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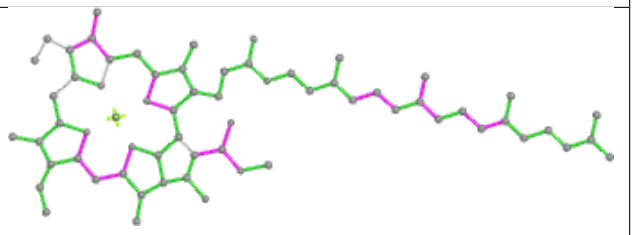
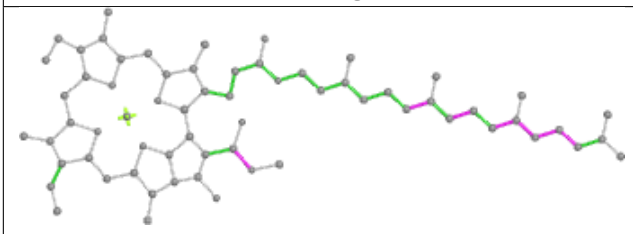


Bond angles



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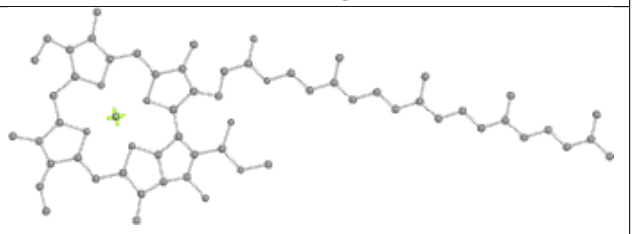
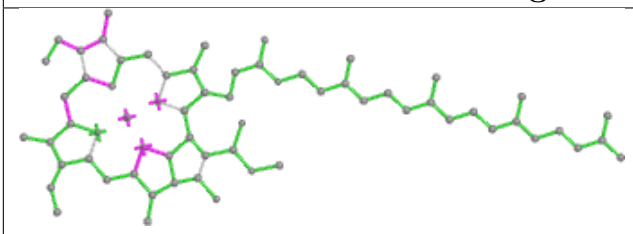


Rings

Ligand CLA c 510



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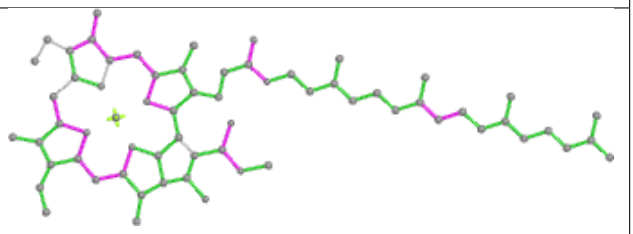
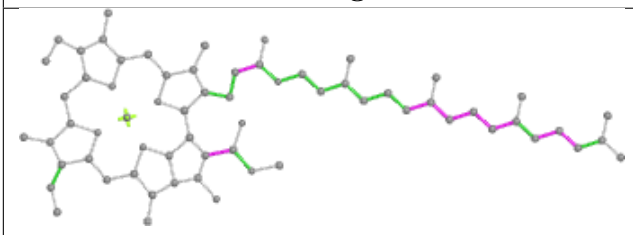


Bond angles



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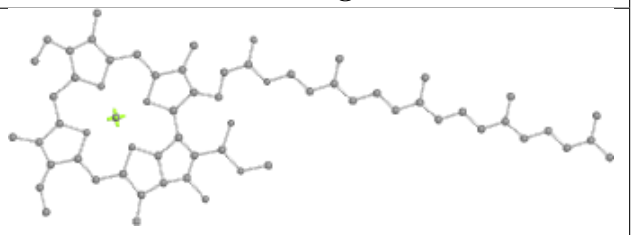
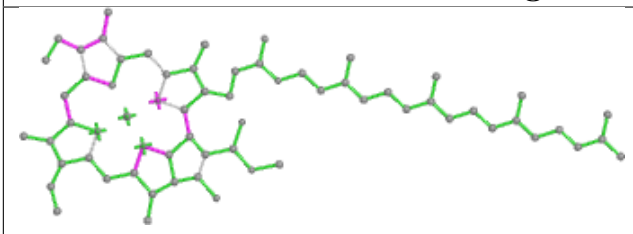


Rings

Ligand CLA B 714



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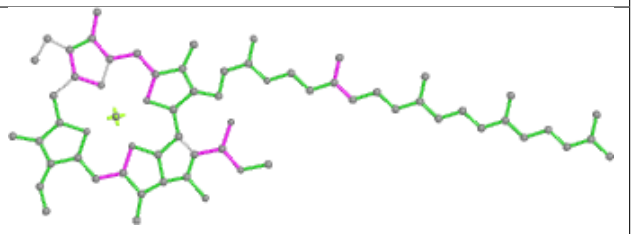
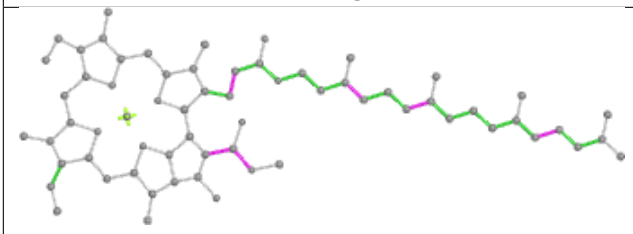


Bond angles



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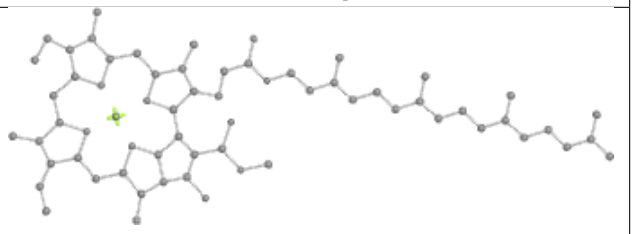


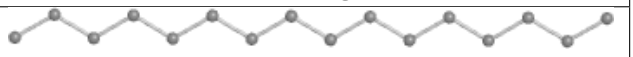
Rings

Ligand STE C 522

Bond lengths

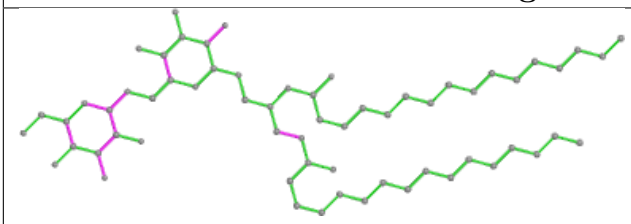
Bond angles

Torsions

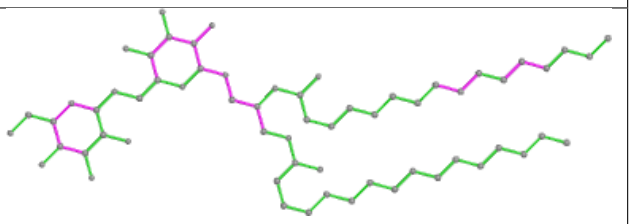


Rings

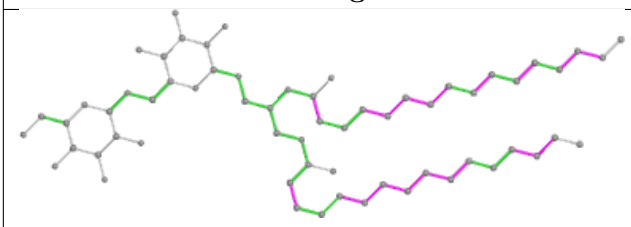
Ligand DGD H 103



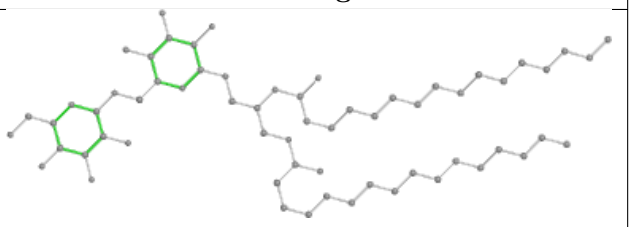
Bond lengths



Bond angles

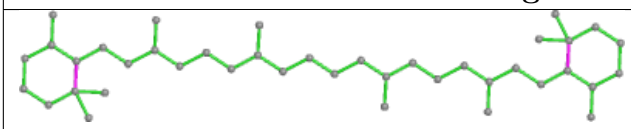


Torsions



Rings

Ligand BCR C 501



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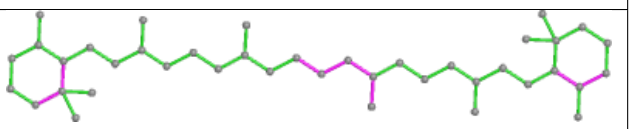
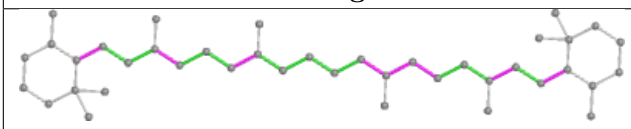


Bond angles



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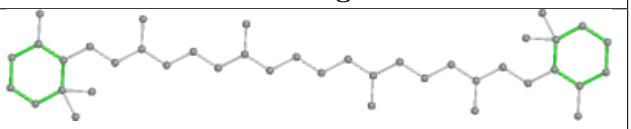
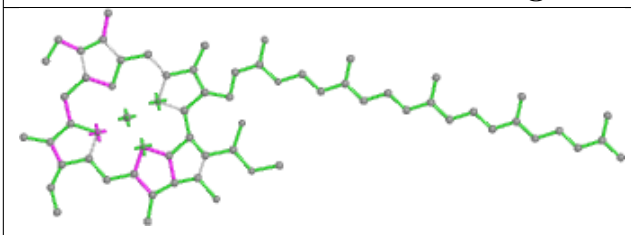


Rings

Ligand CLA b 708



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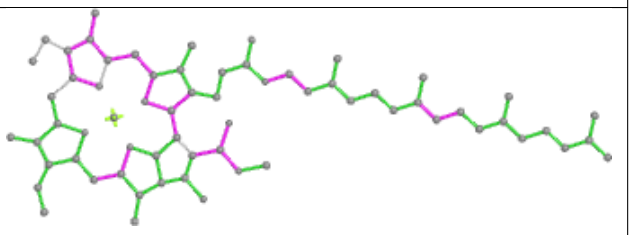
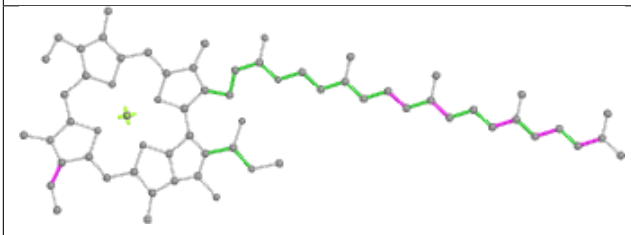


Bond angles



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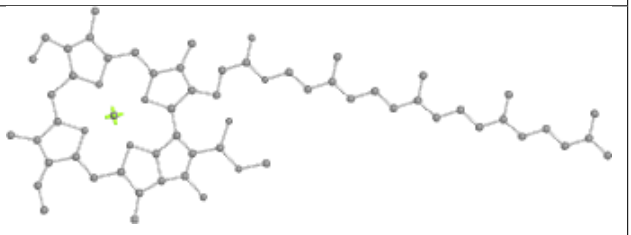
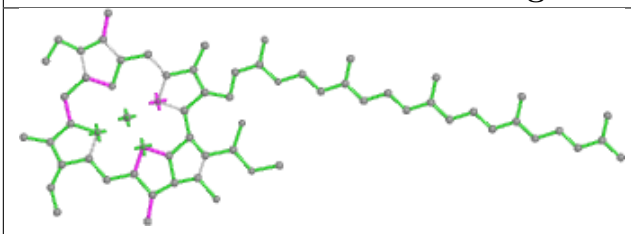


Rings

Ligand CLA b 704



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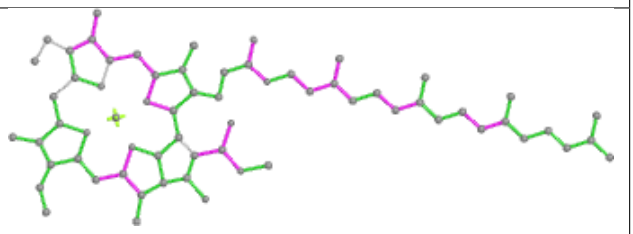
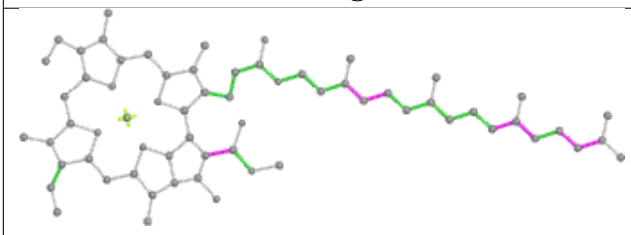
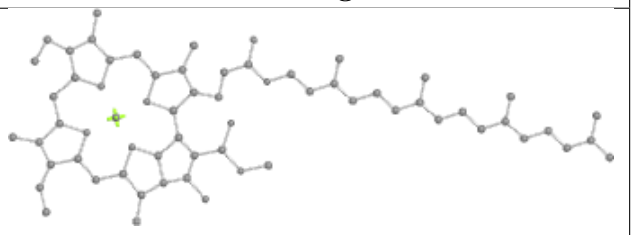


Bond angles

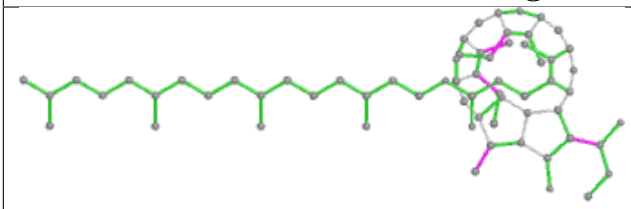


Torsions

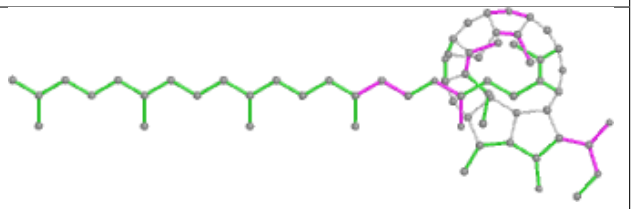


Rings

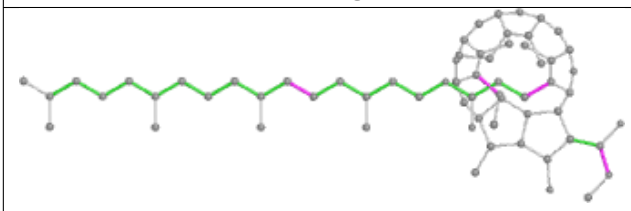
Ligand PHO d 405



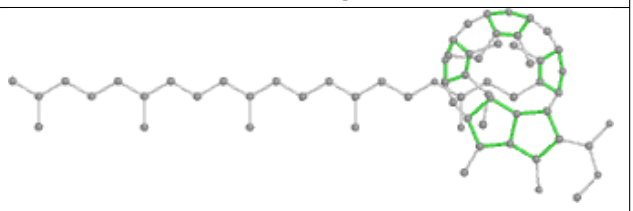
Bond lengths



Bond angles

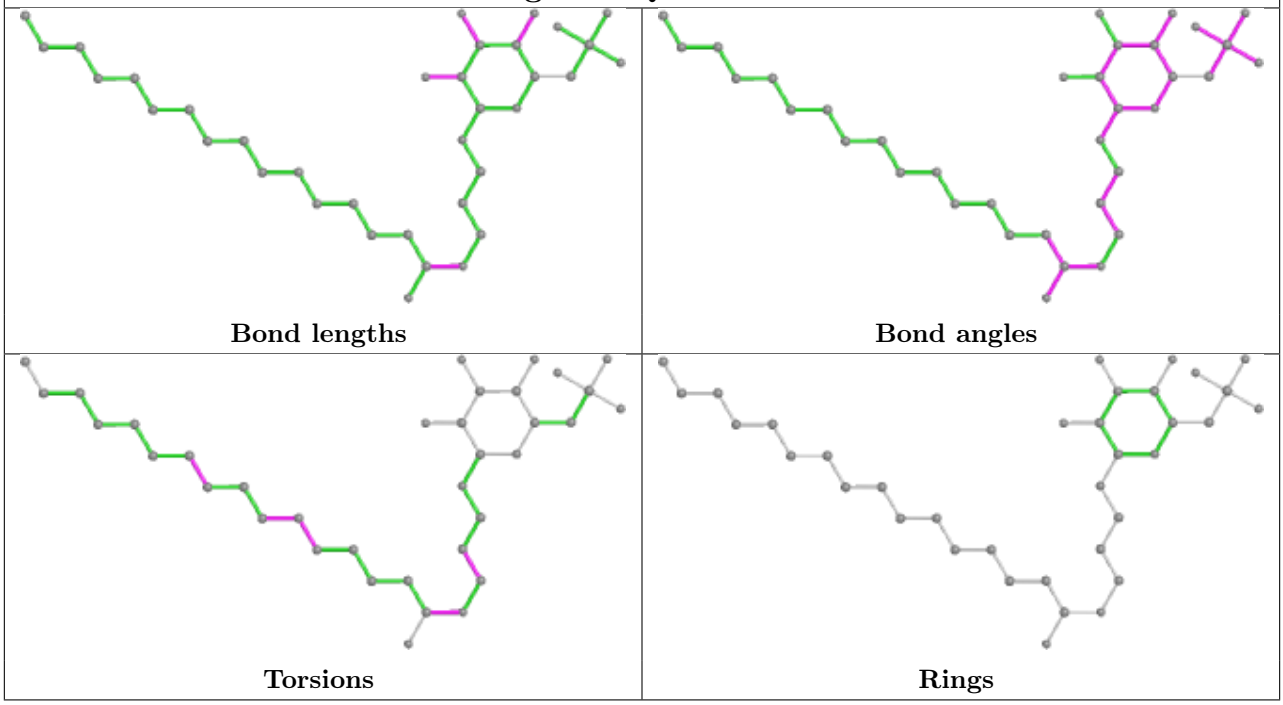


Torsions

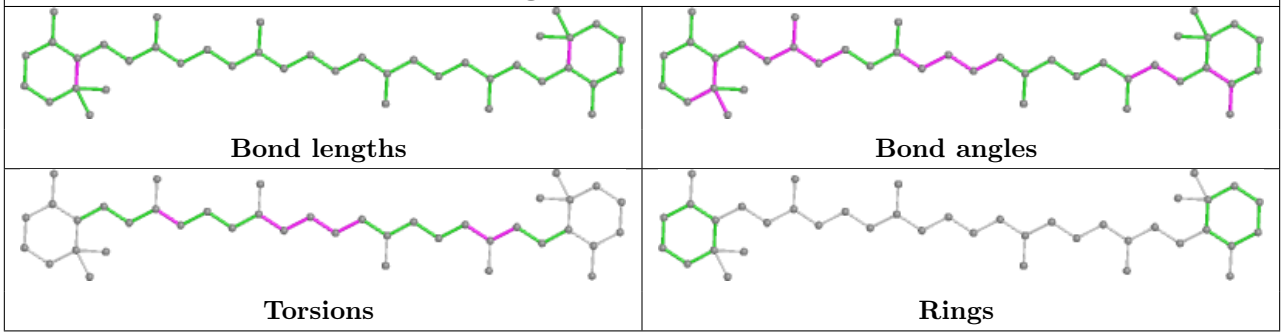


Rings

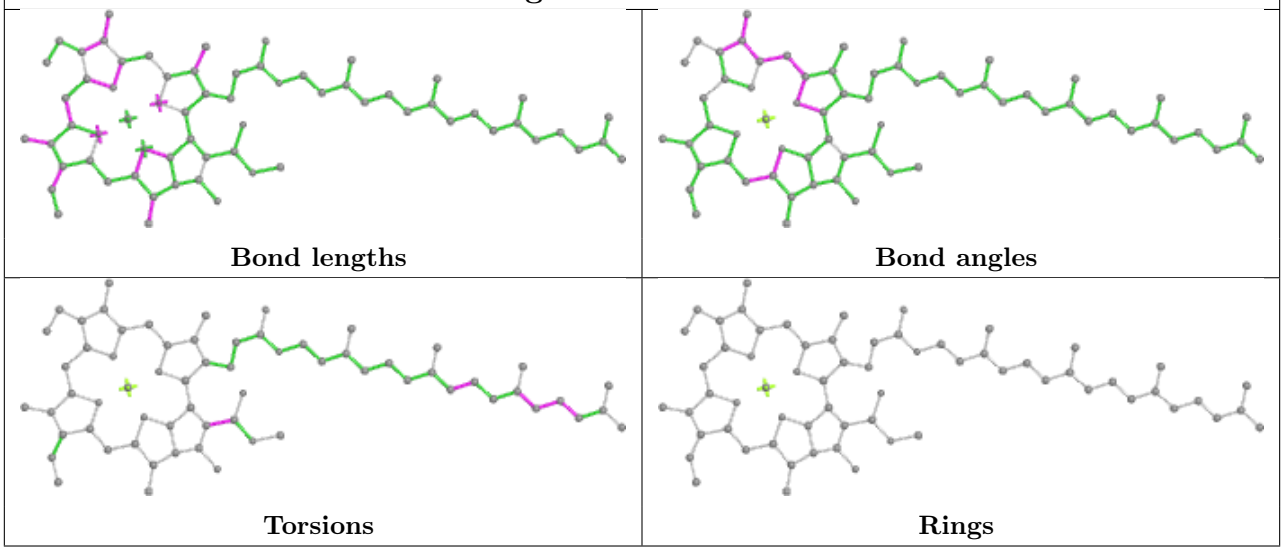
Ligand SQD D 409



Ligand BCR K 101



Ligand CLA B 707



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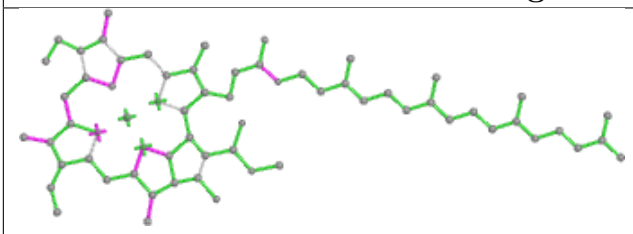
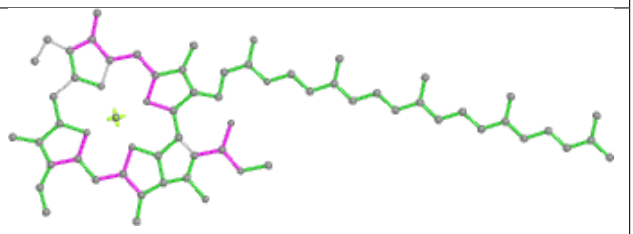
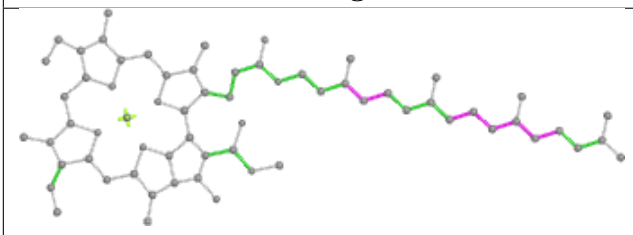


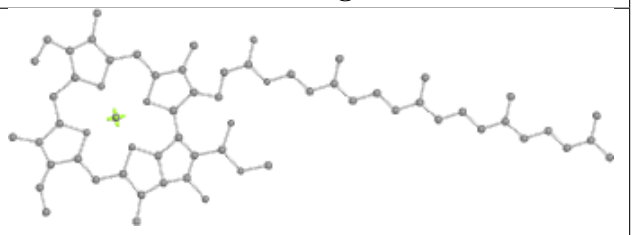
Bond lengths



Bond angles

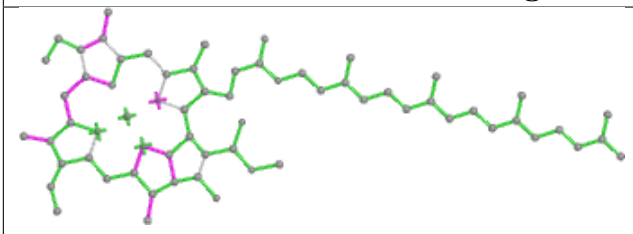


Torsions

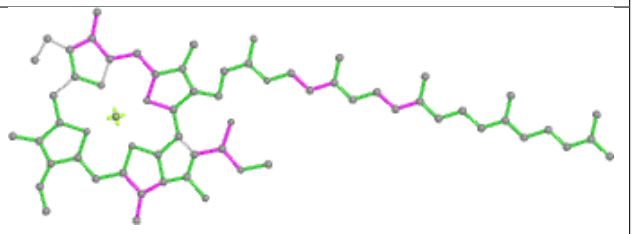


Rings

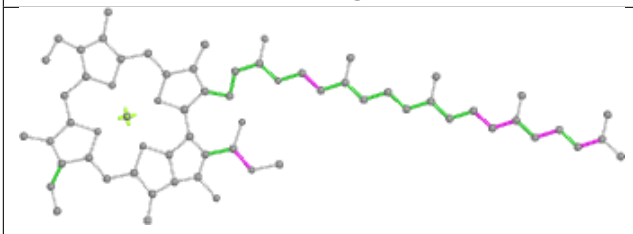
Ligand CLA D 403



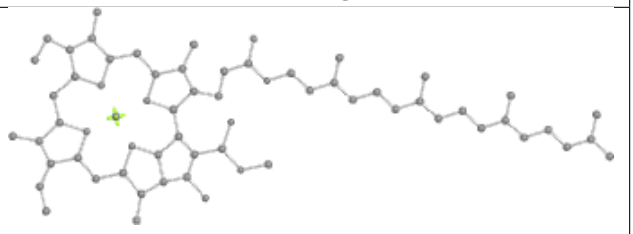
Bond lengths



Bond angles

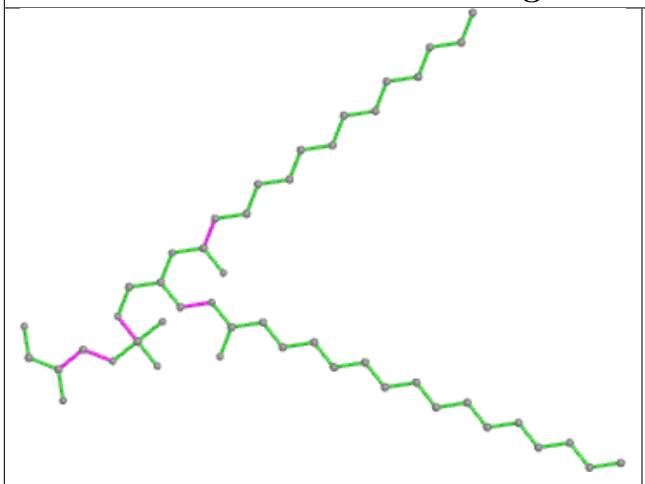


Torsions



Rings

Ligand LHG D 411



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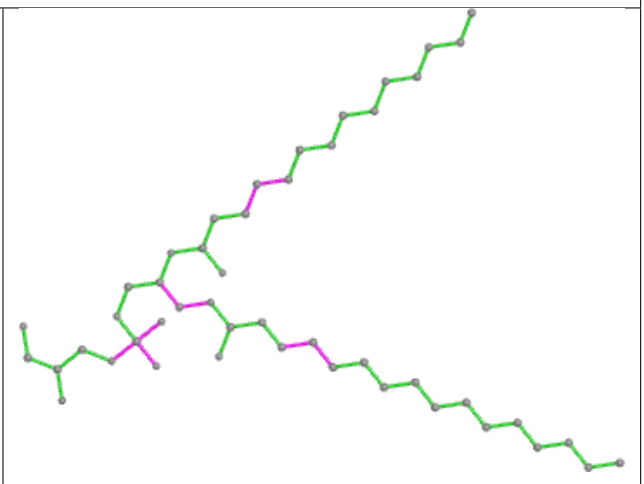
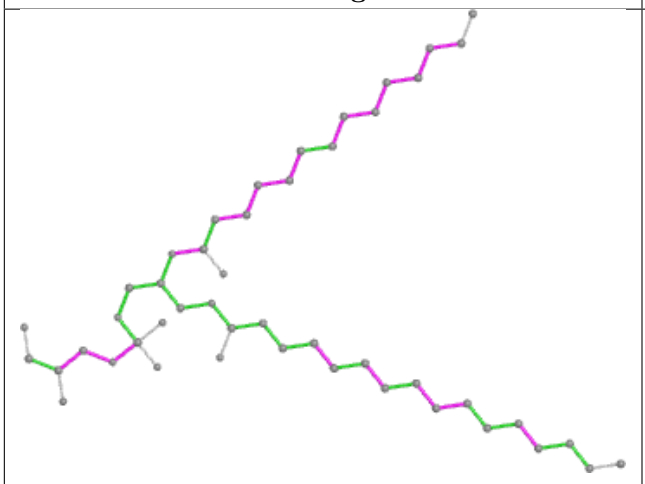


Bond angles



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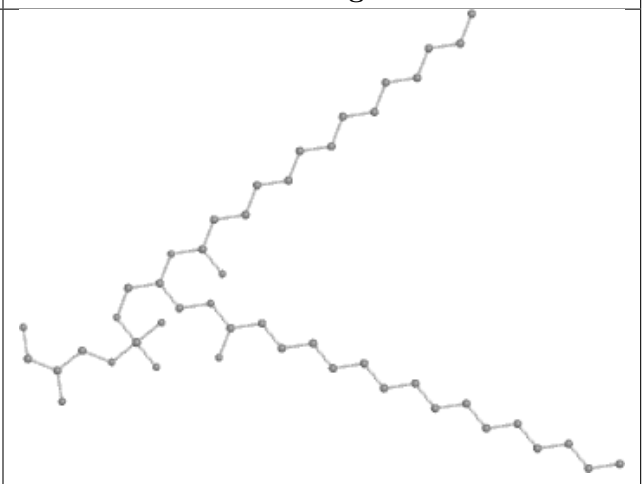
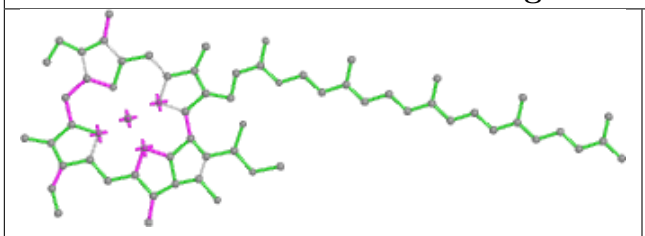
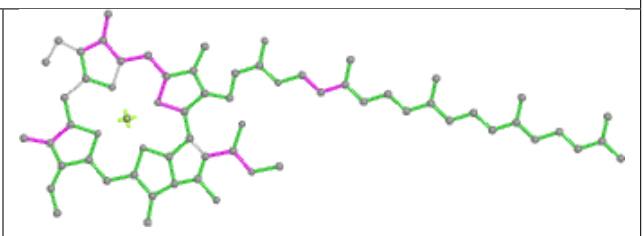


Rings

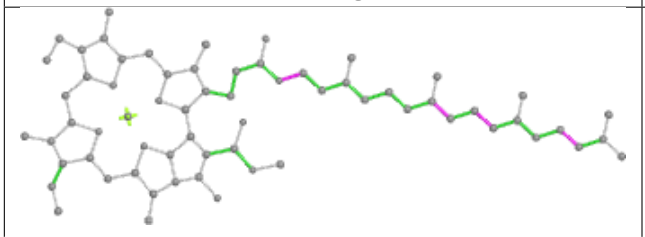
Ligand CLA D 401



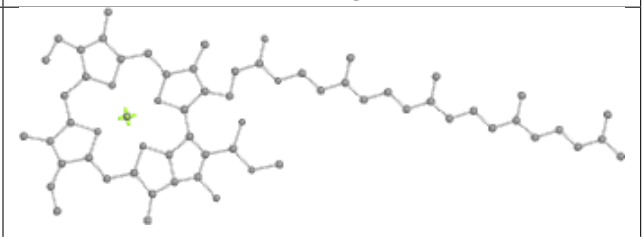
Bond lengths



Bond angles

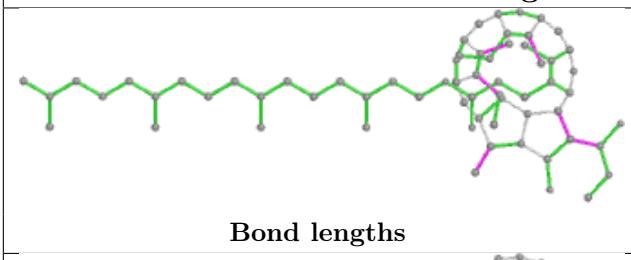


Torsions

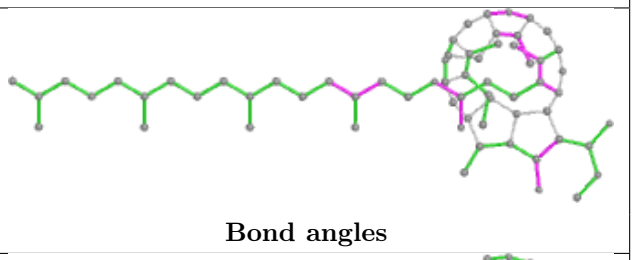


Rings

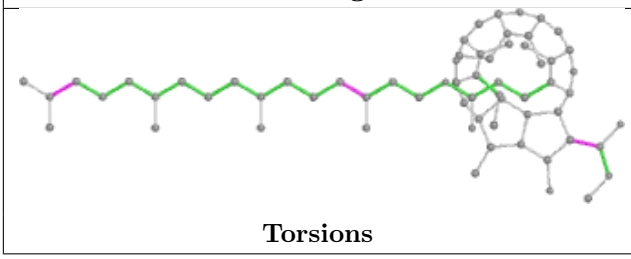
Ligand PHO D 406



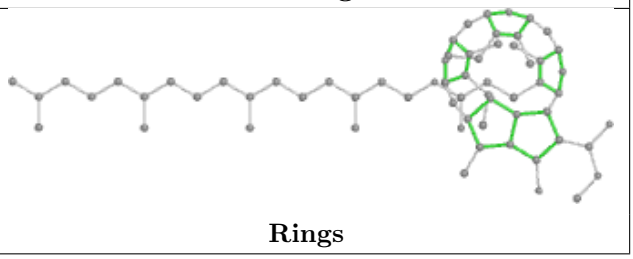
Bond lengths



Bond angles

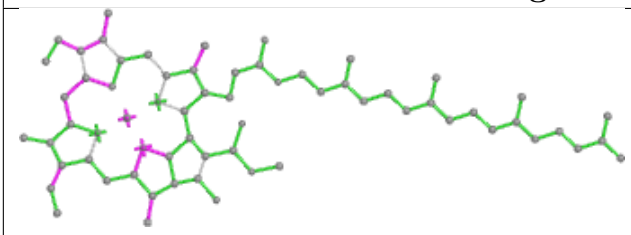


Torsions

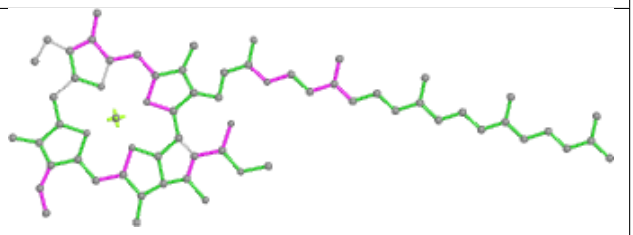


Rings

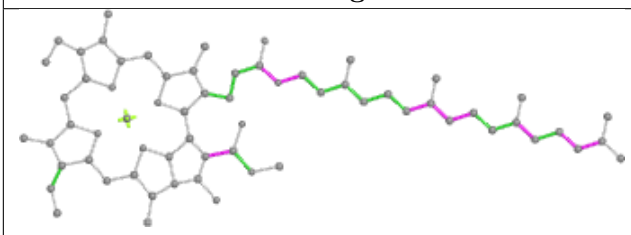
Ligand CLA c 507



Bond lengths



Bond angles



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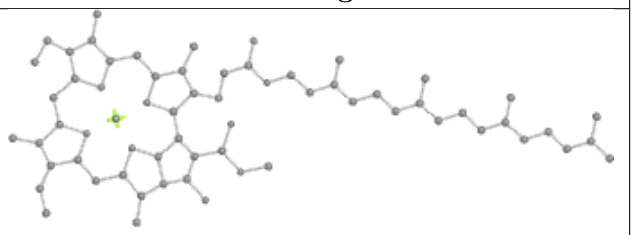
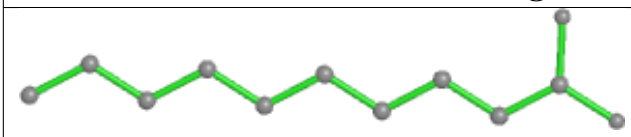
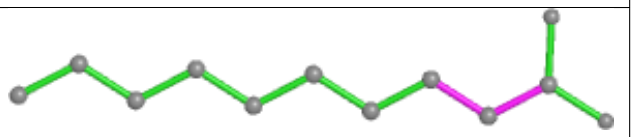


Rings

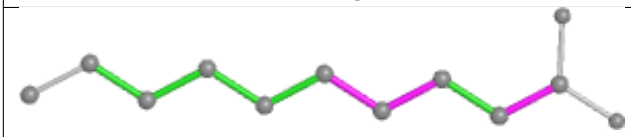
Ligand STE B 724



Bond lengths



Bond angles



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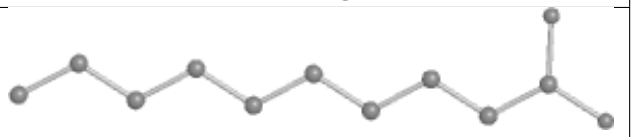
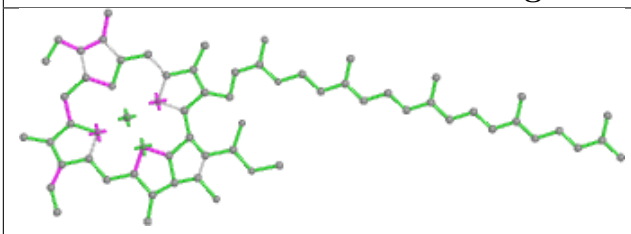
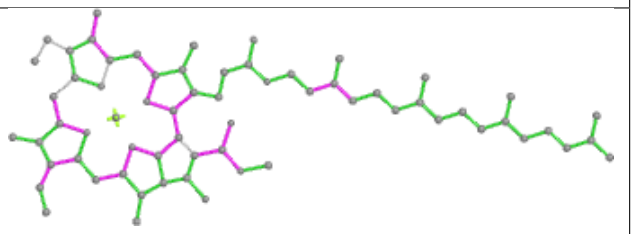


Rings

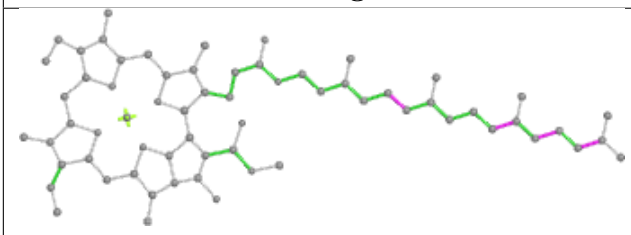
Ligand CLA B 715



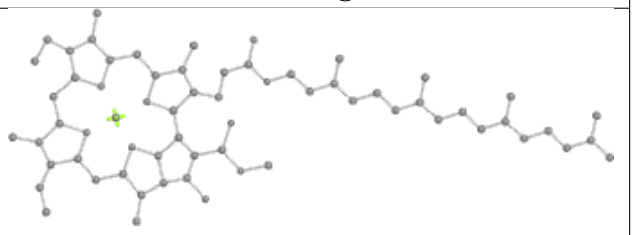
Bond lengths



Bond angles

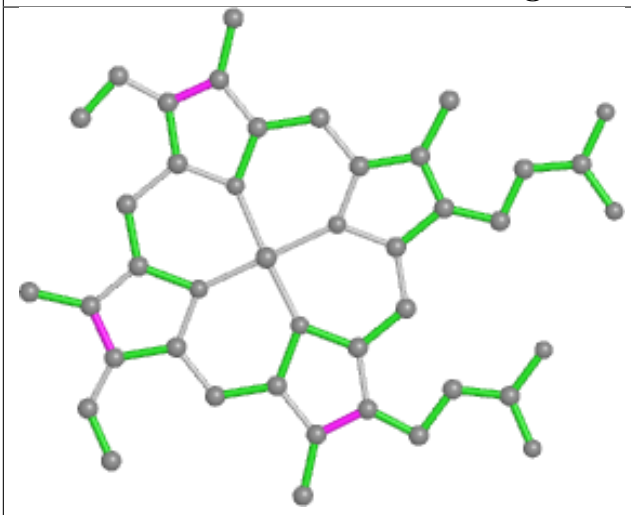


Torsions

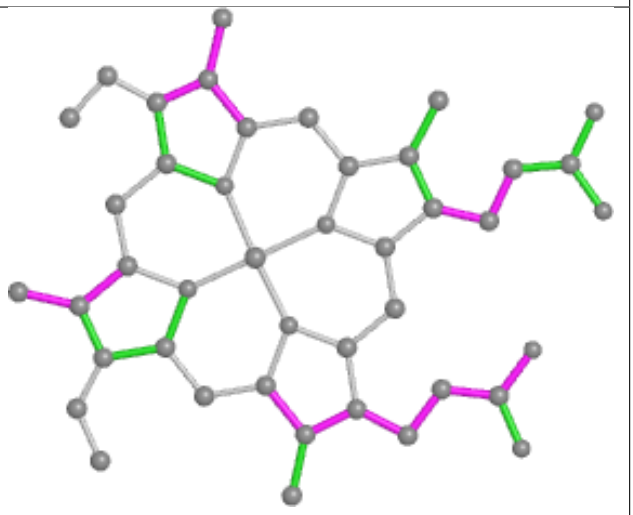


Rings

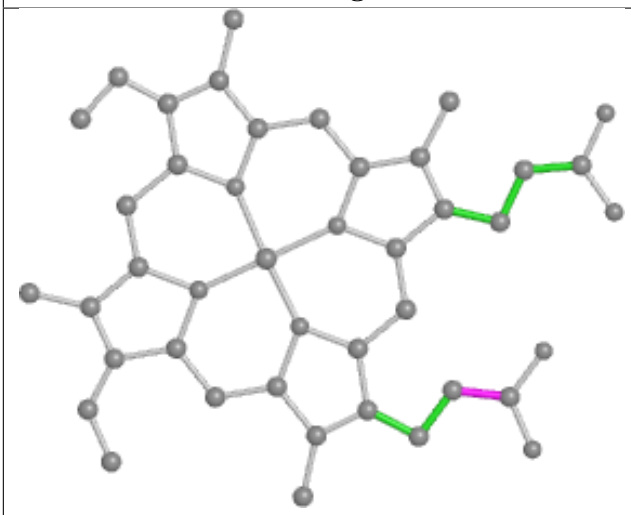
Ligand HEC E 103



Bond lengths



Bond angles



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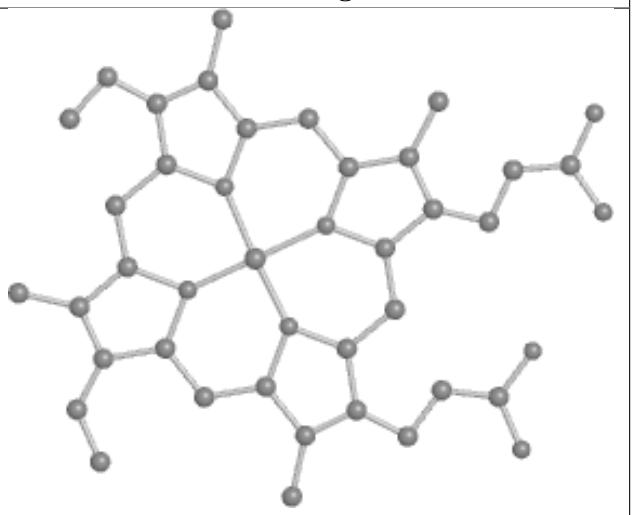
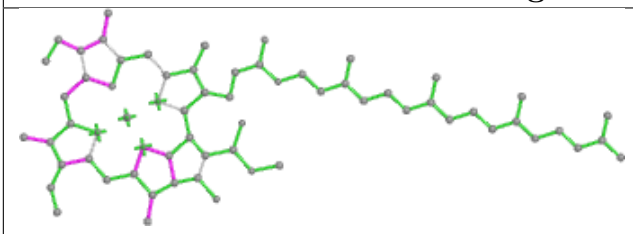
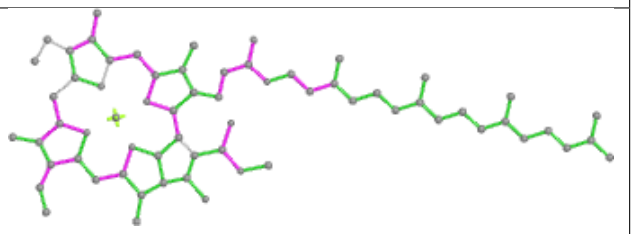


Rings

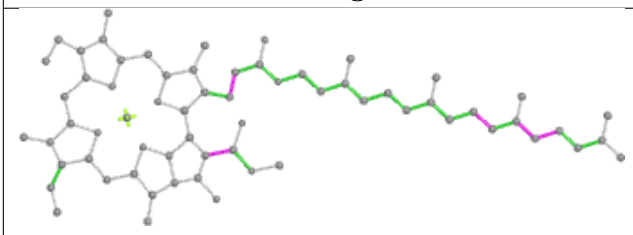
Ligand CLA b 710



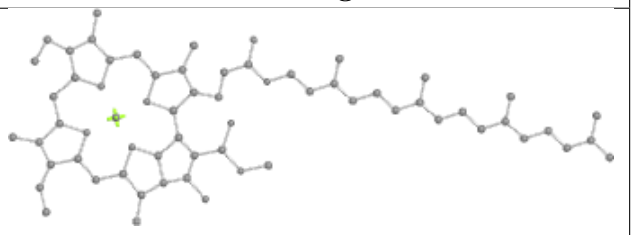
Bond lengths



Bond angles

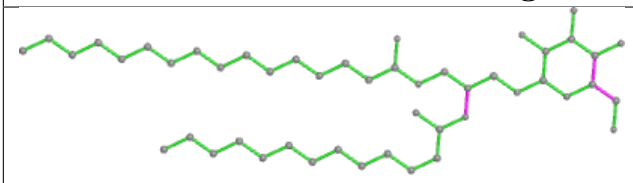


Torsions

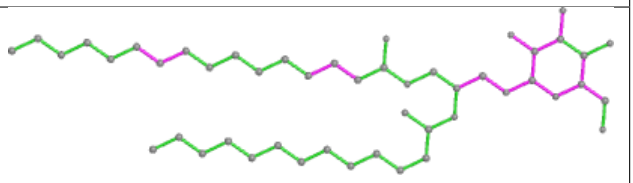


Rings

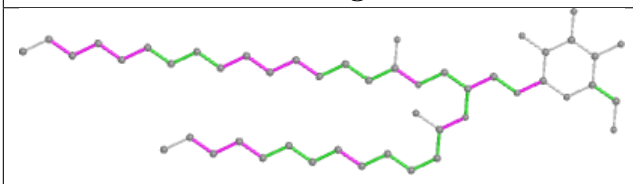
Ligand LMG C 520



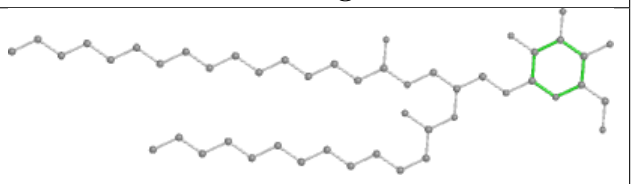
Bond lengths



Bond angles

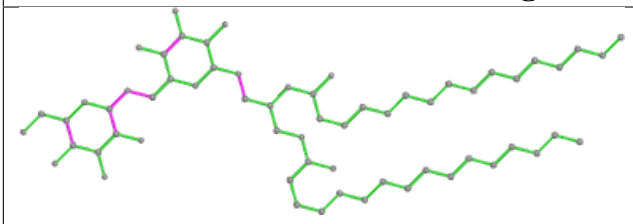


Torsions

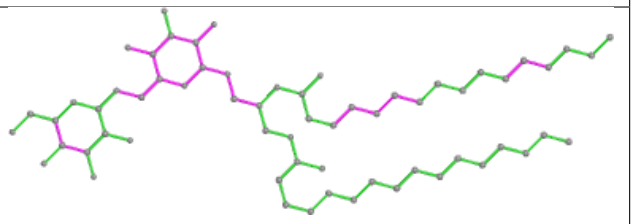


Rings

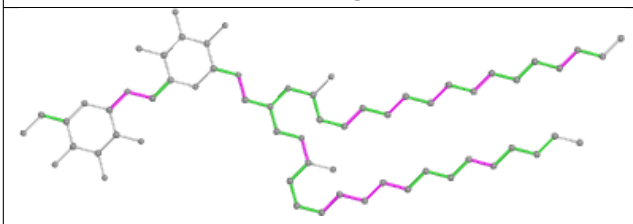
Ligand DGD C 518



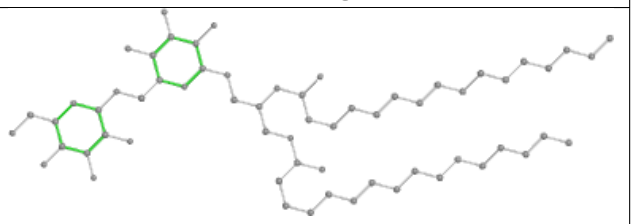
Bond lengths



Bond angles

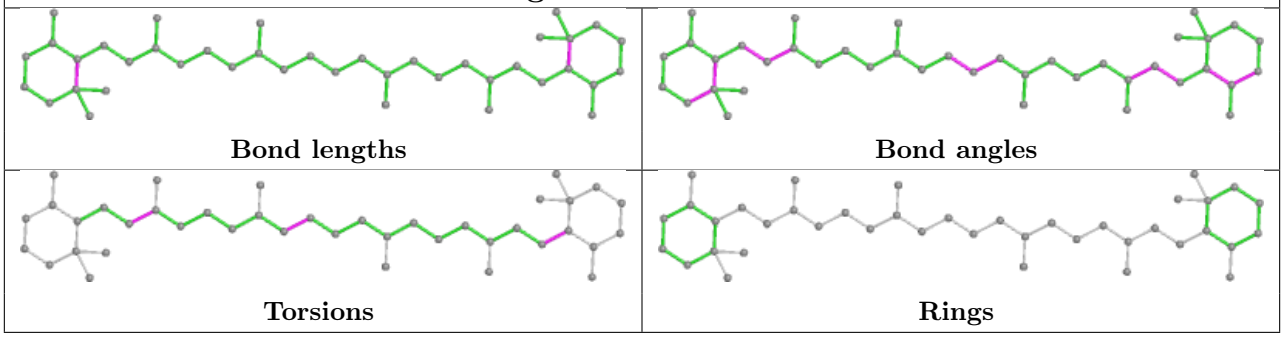


Torsions

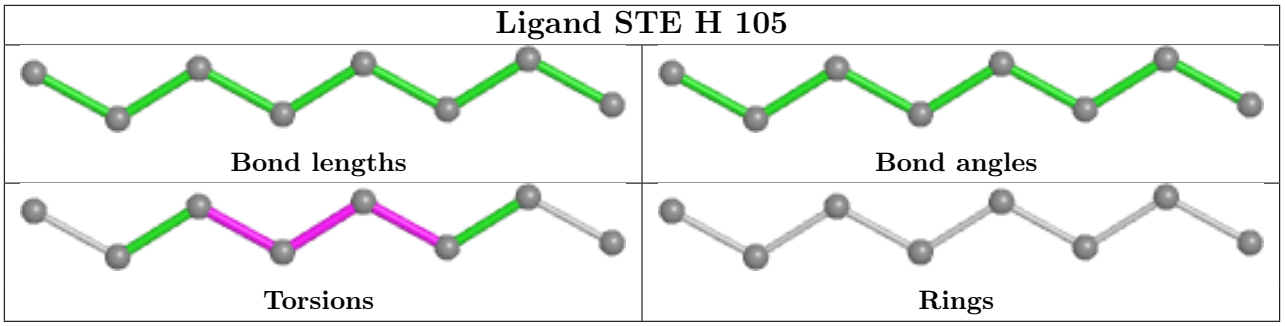


Rings

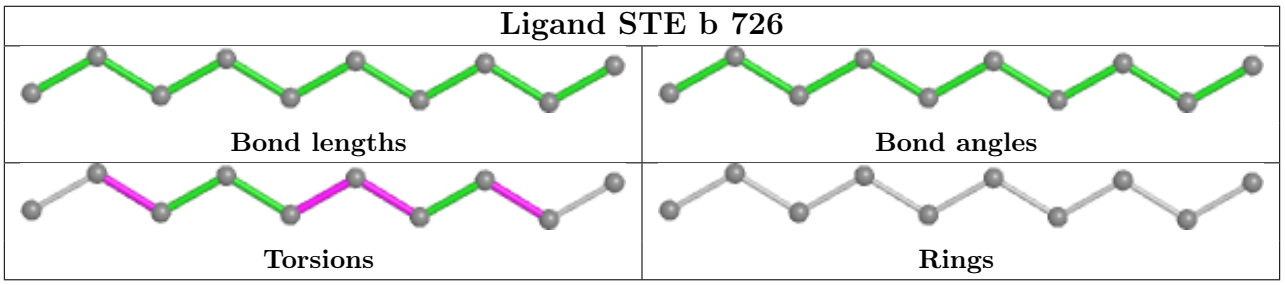
Ligand BCR k 102



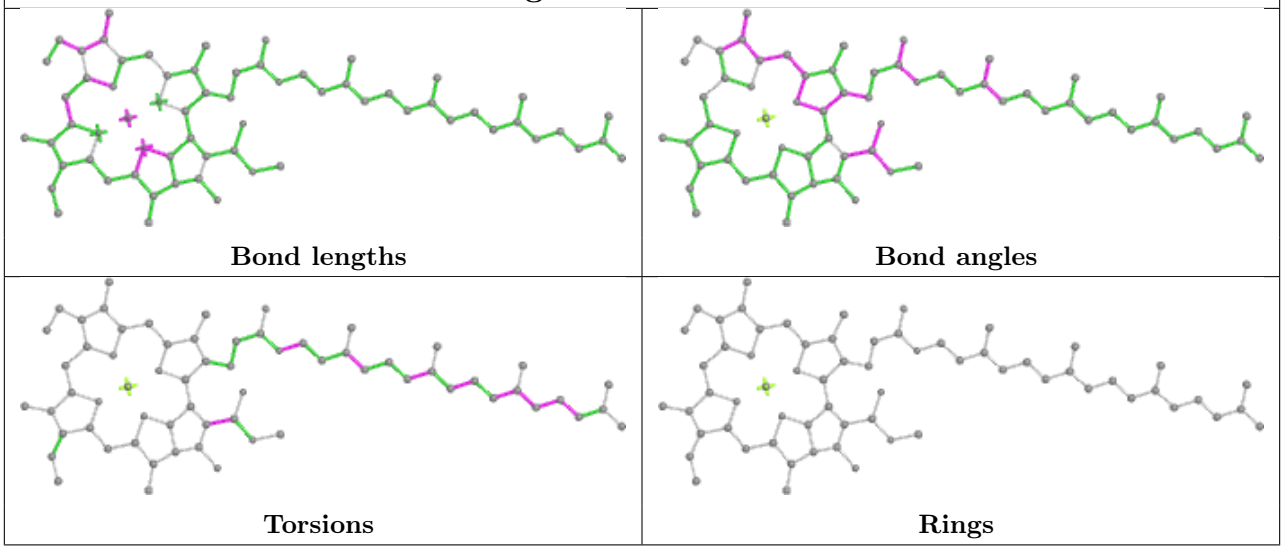
Ligand STE H 105



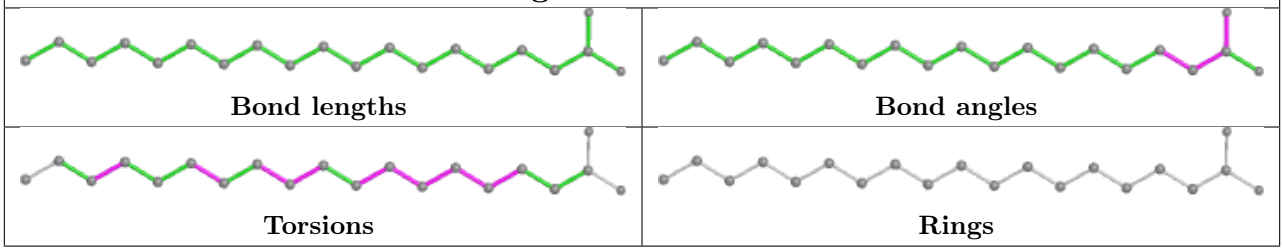
Ligand STE b 726



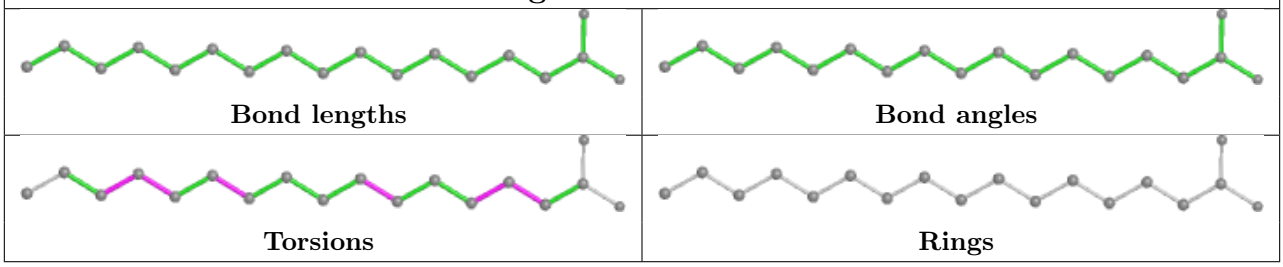
Ligand CLA C 507



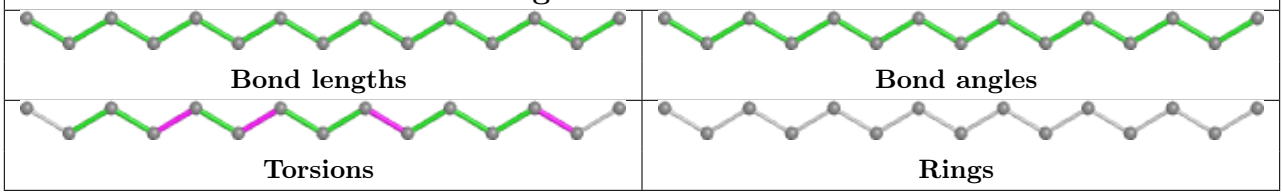
Ligand STE b 727



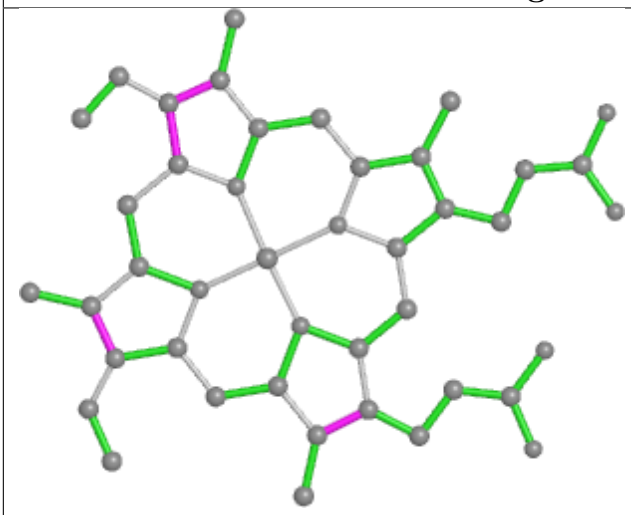
Ligand STE B 725



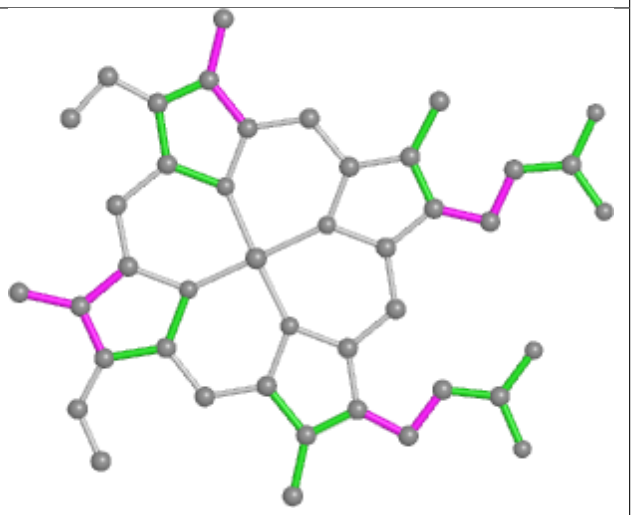
Ligand STE a 418



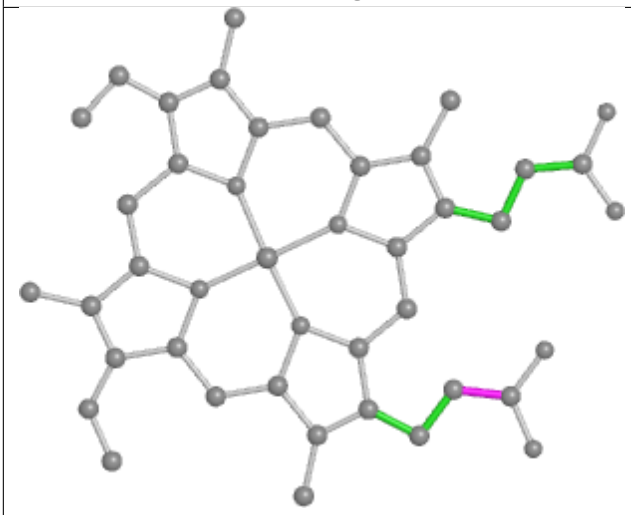
Ligand HEC e 101



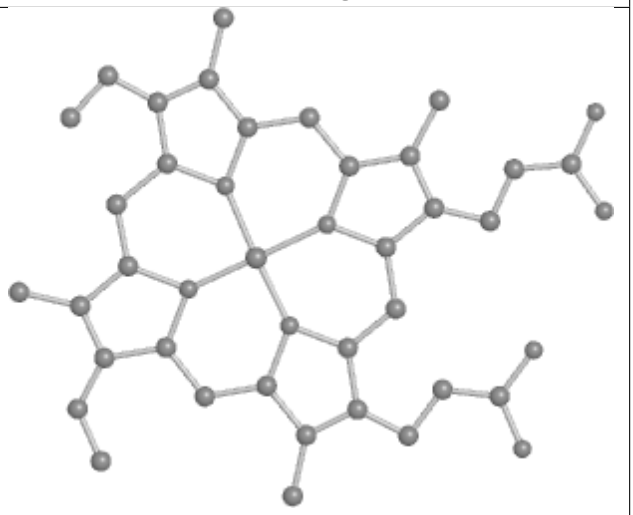
Bond lengths



Bond angles

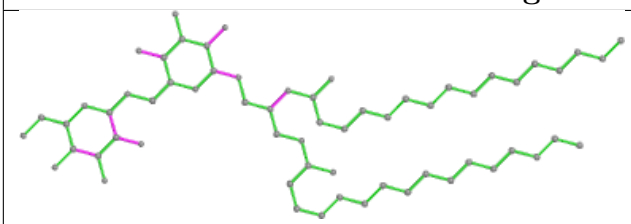


Torsions

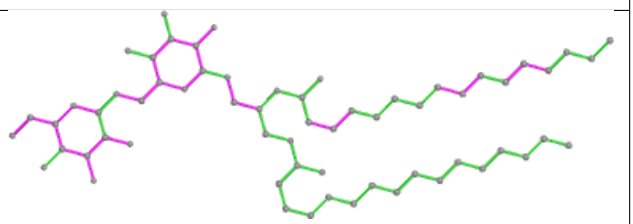


Rings

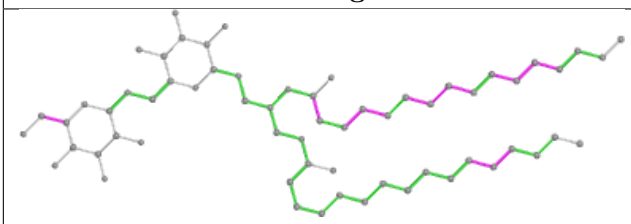
Ligand DGD h 702



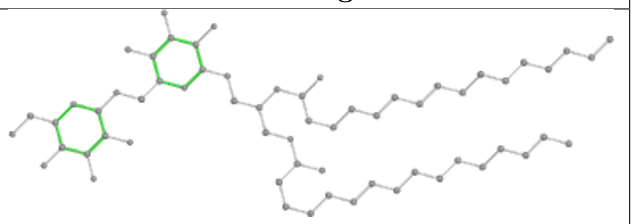
Bond lengths



Bond angles

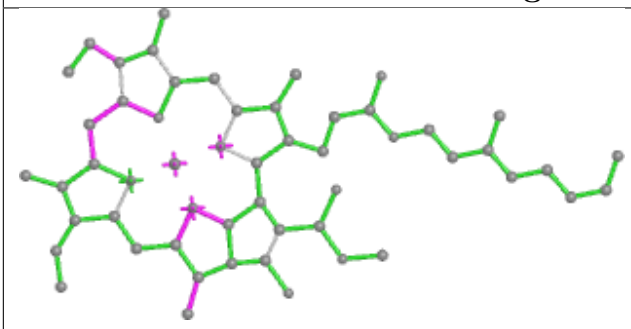


Torsions

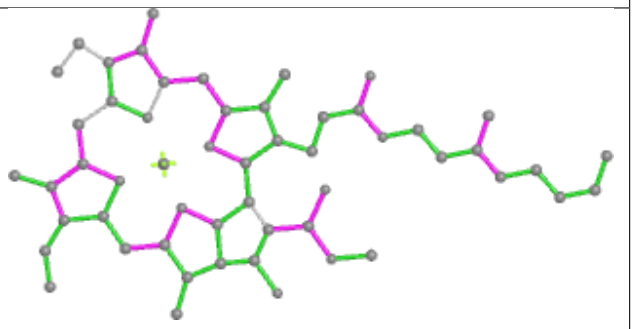


Rings

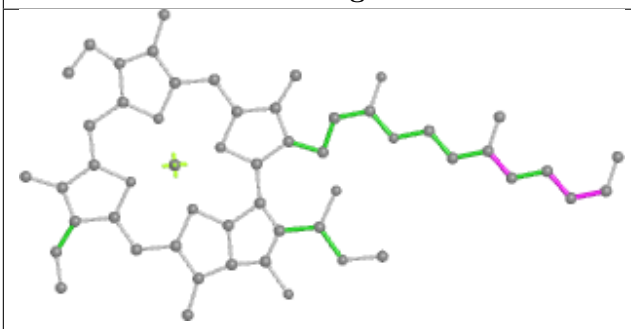
Ligand CLA A 404



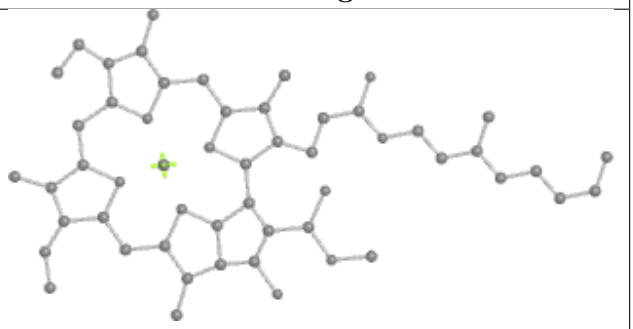
Bond lengths



Bond angles

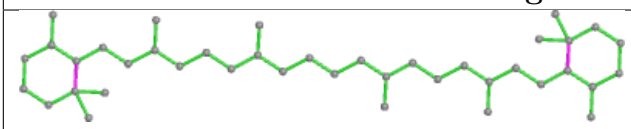


Torsions

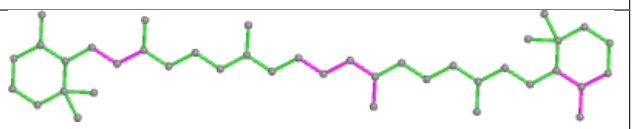


Rings

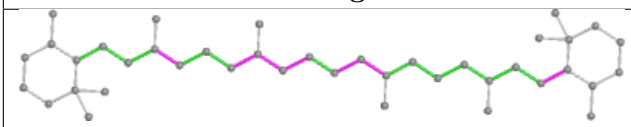
Ligand BCR h 701



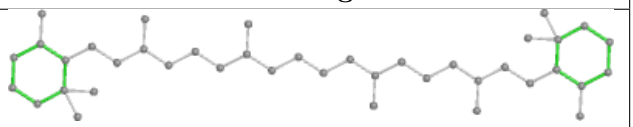
Bond lengths



Bond angles

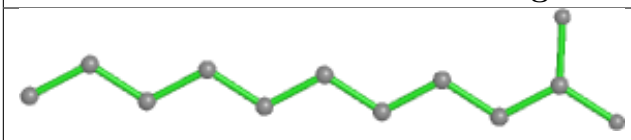


Torsions



Rings

Ligand STE J 101



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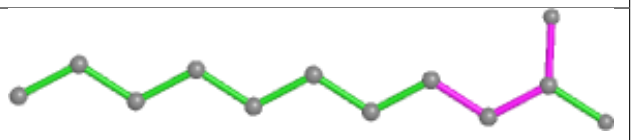
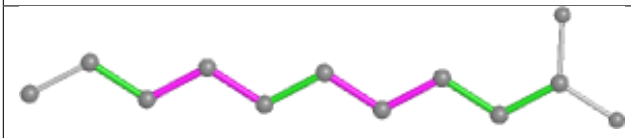
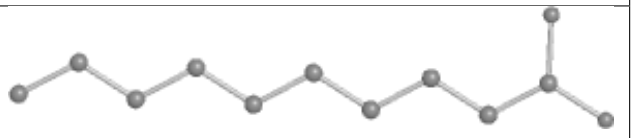


Bond angles



Torsions



Rings

Ligand STE H 104

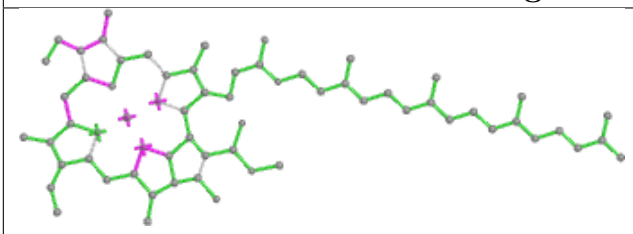
Bond lengths

Bond angles

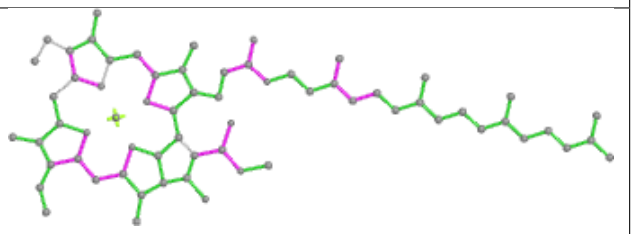
Torsions

Rings

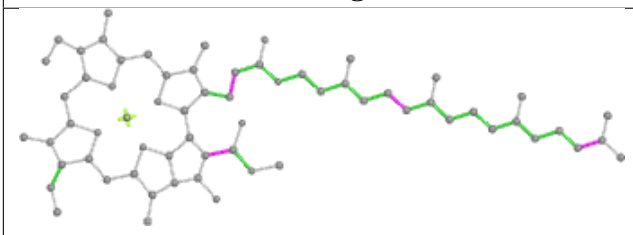
Ligand CLA B 706



Bond lengths



Bond angles



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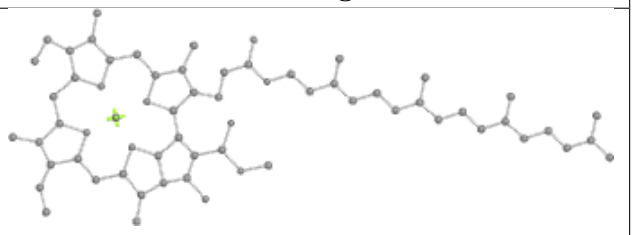
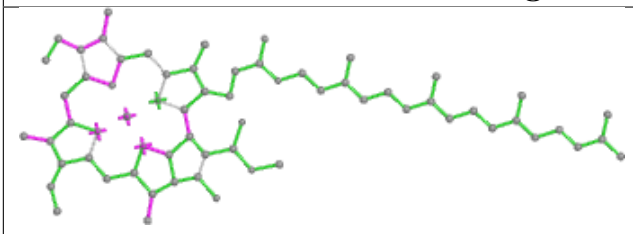


Rings

Ligand CLA B 703



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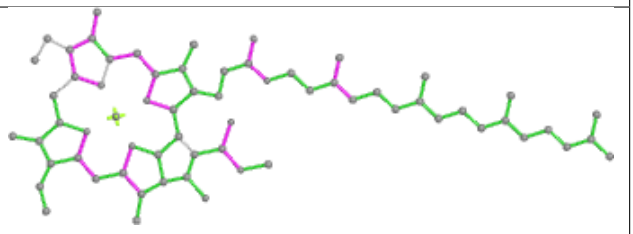
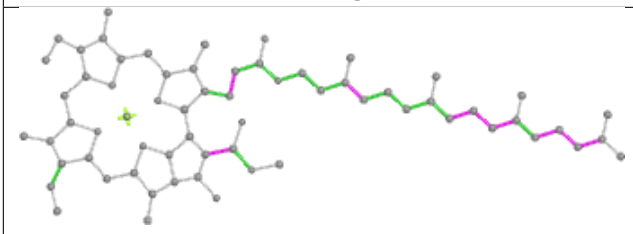


Bond angles



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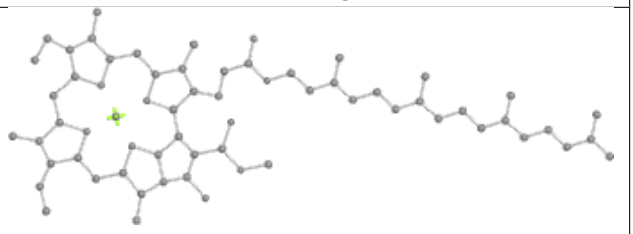
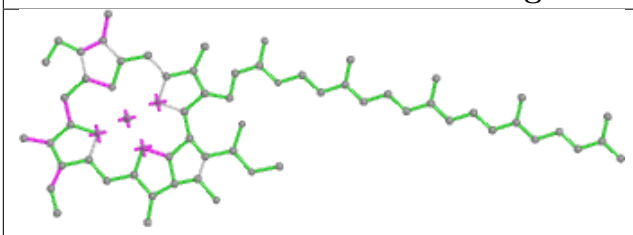


Rings

Ligand CLA C 503



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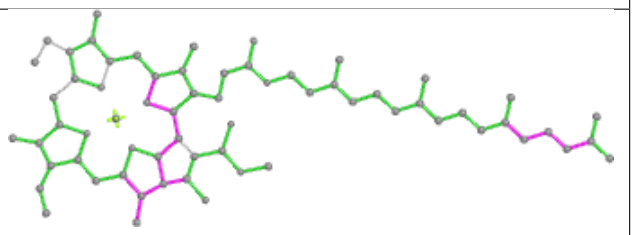
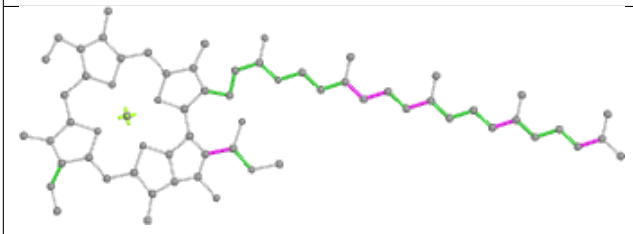


Bond angles



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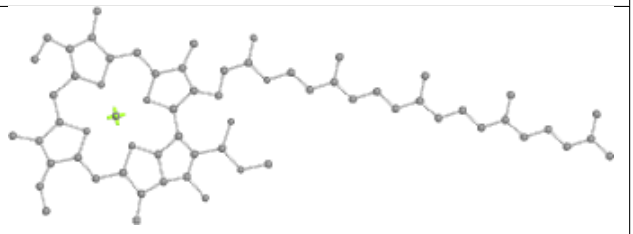
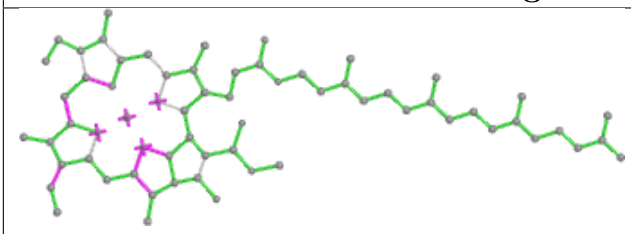
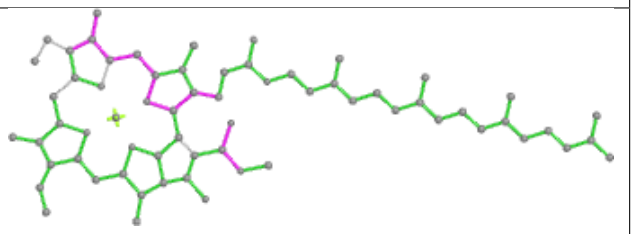


Rings

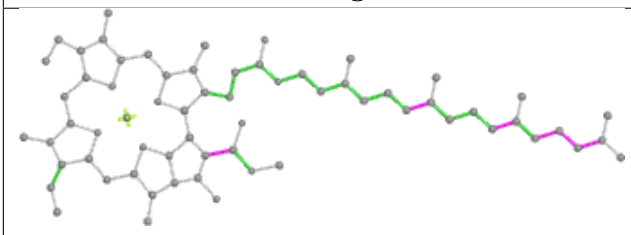
Ligand CLA D 402



Bond lengths



Bond angles



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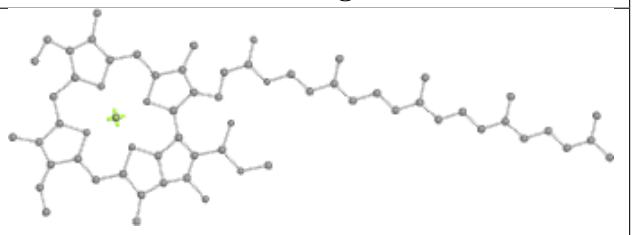
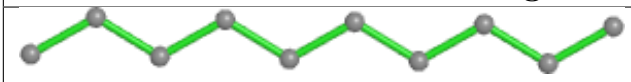


Rings

Ligand STE M 103



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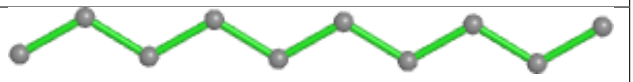
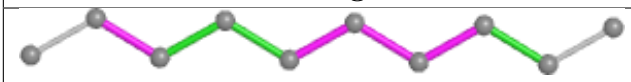
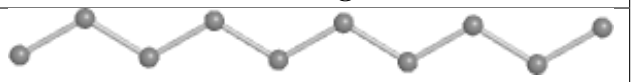


Bond angles

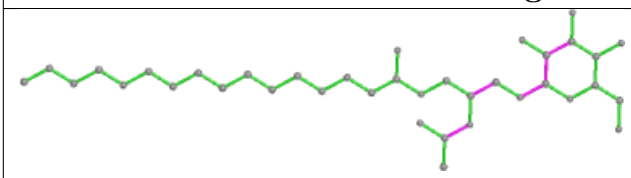


Torsions



Rings

Ligand LMG c 520



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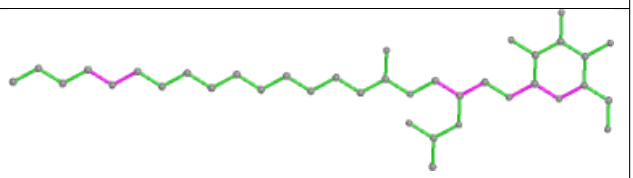
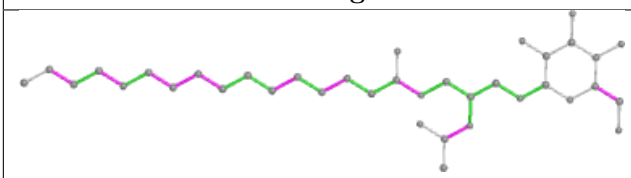


Bond angles



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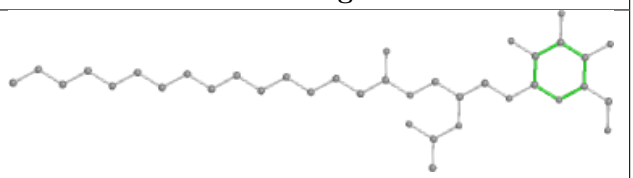
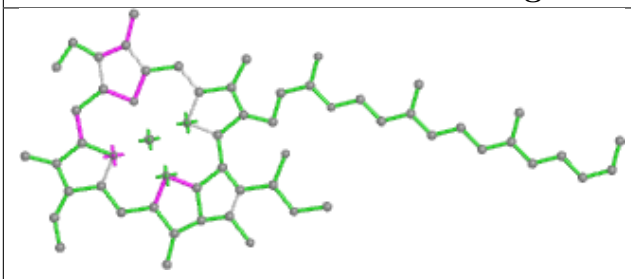


Rings

Ligand CLA C 505



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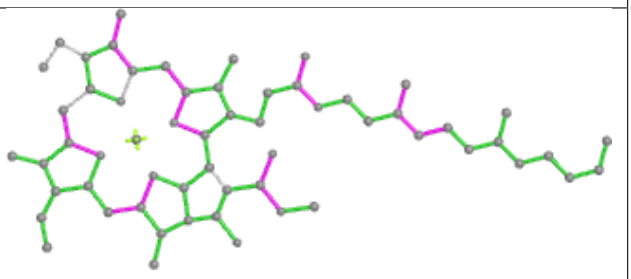
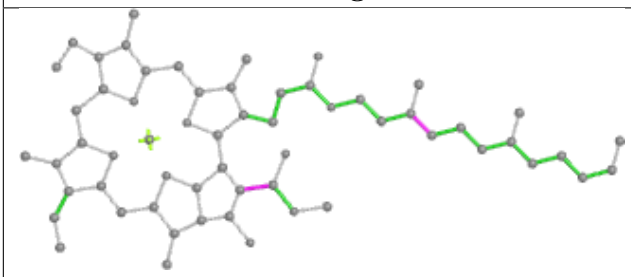


Bond angles



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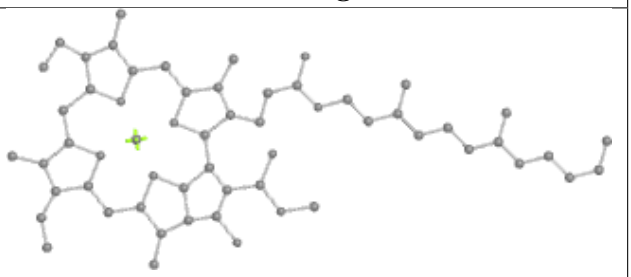
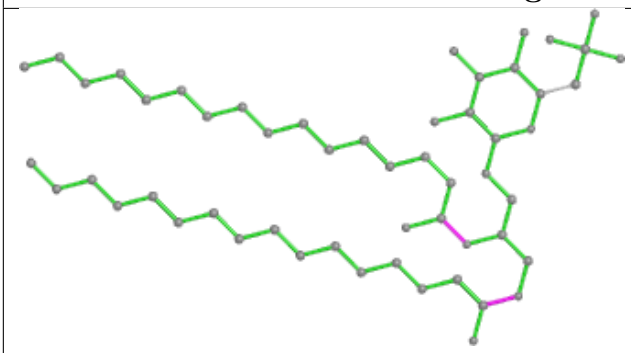


Rings

Ligand SQD B 723



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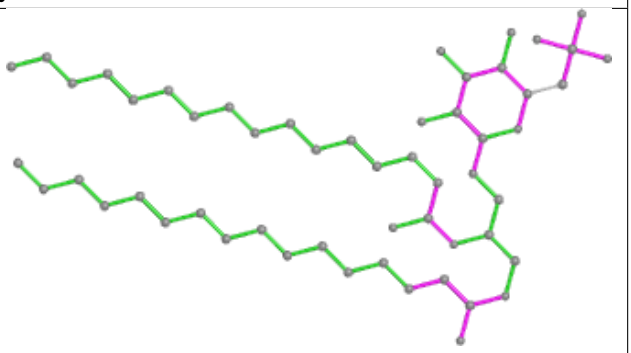
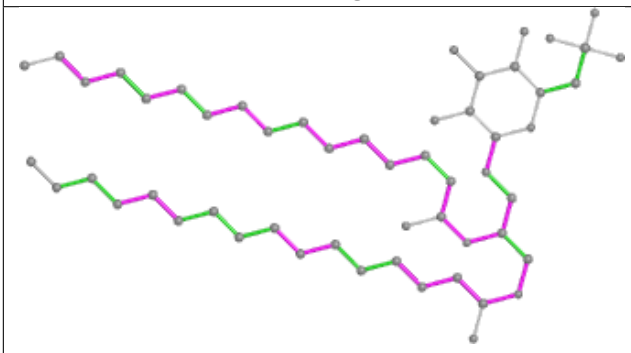


Bond angles



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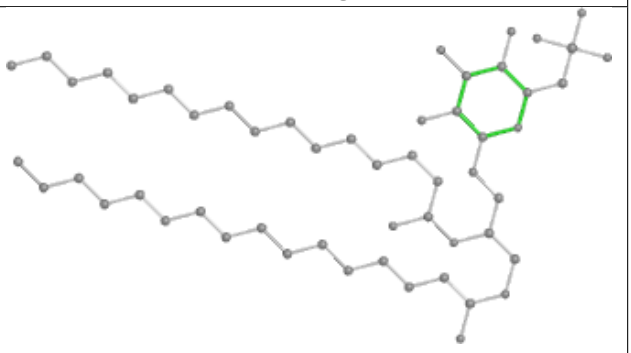
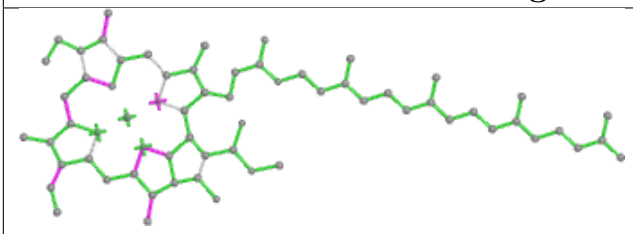
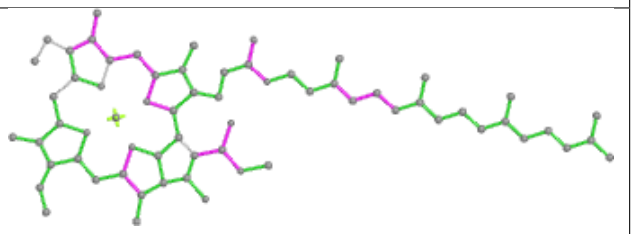
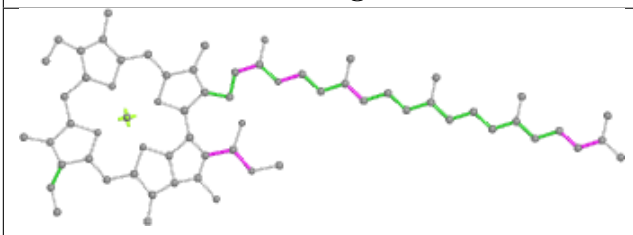


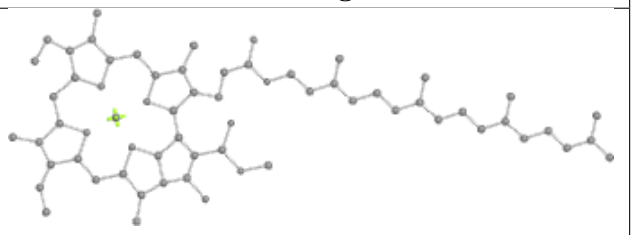
Rings

Ligand CLA c 511

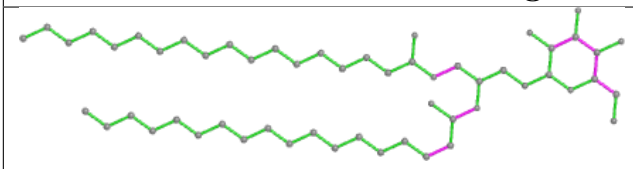

Bond lengths

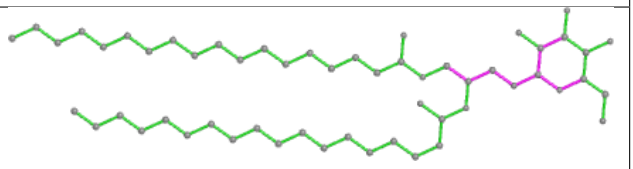

Bond angles

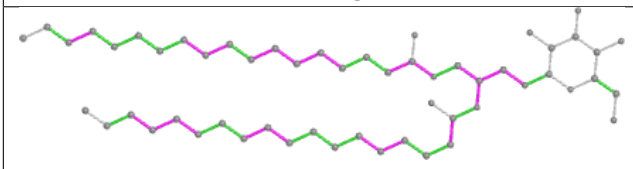

Torsions

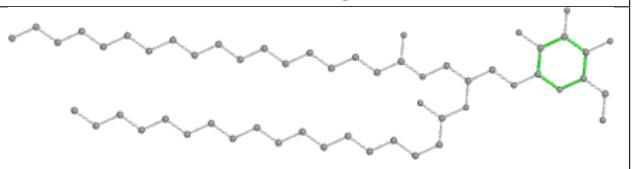

Rings

Ligand LMG a 419

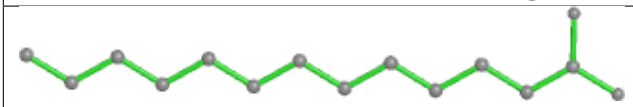

Bond lengths

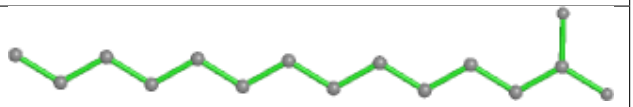

Bond angles

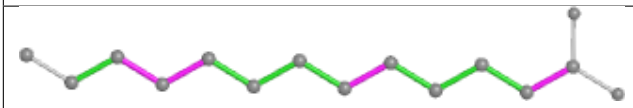

Torsions

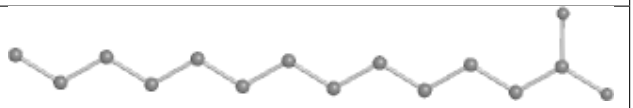

Rings

Ligand STE M 102

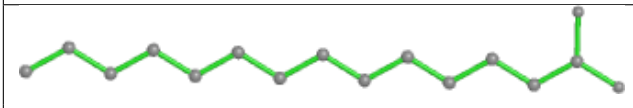

Bond lengths

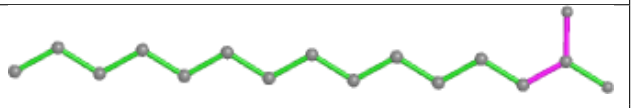

Bond angles

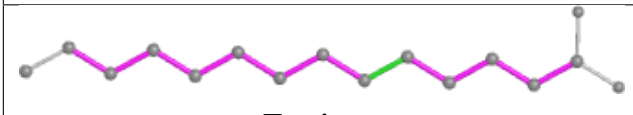

Torsions

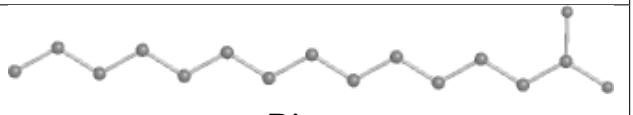

Rings

Ligand STE b 724

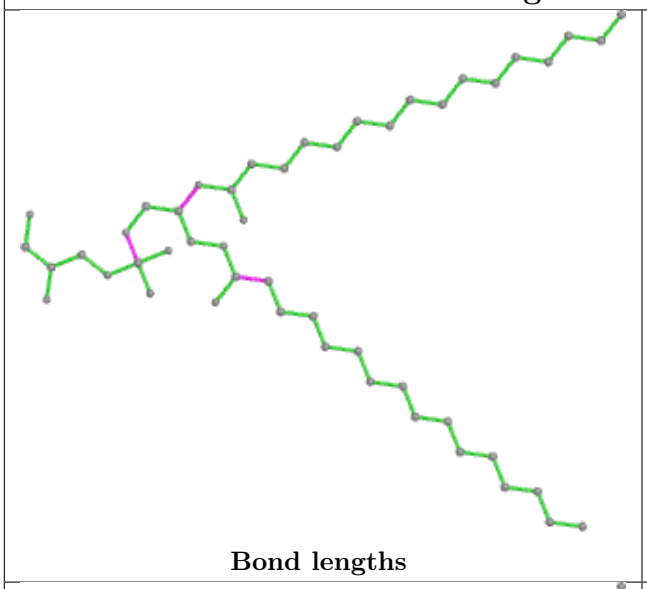

Bond lengths


Bond angles

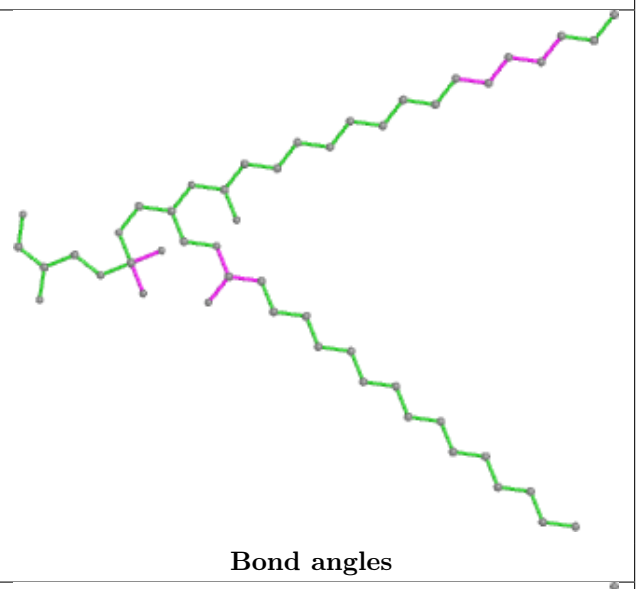

Torsions


Rings

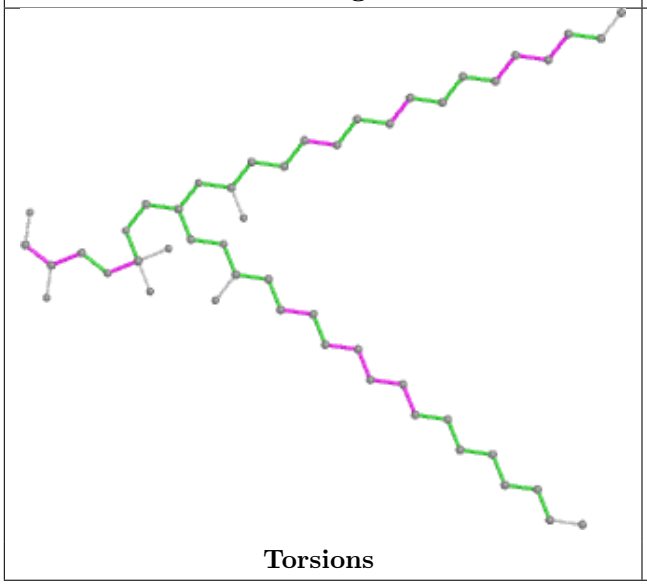
Ligand LHG B 722



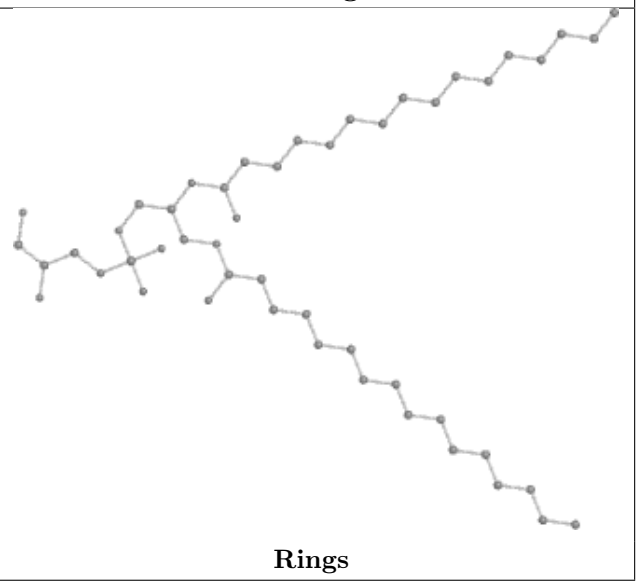
Bond lengths



Bond angles

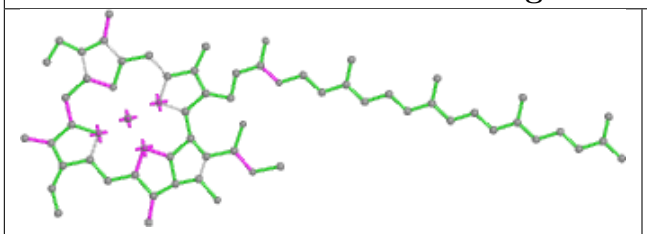


Torsions

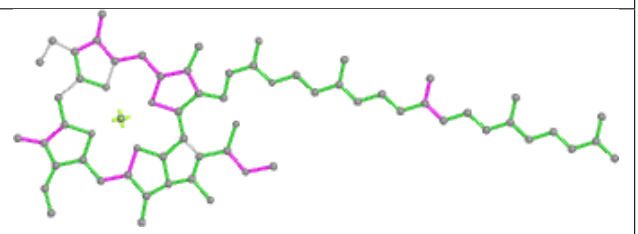


Rings

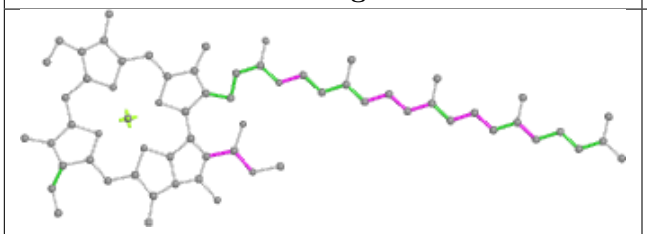
Ligand CLA C 510



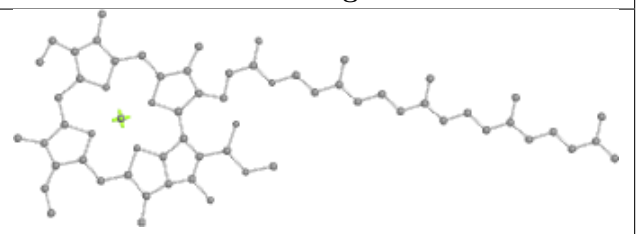
Bond lengths



Bond angles

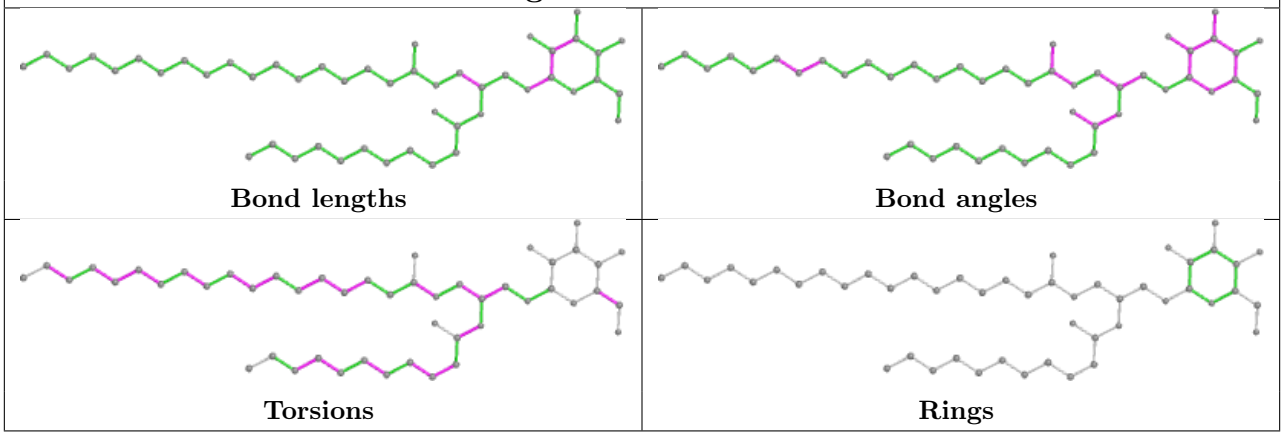


Torsions

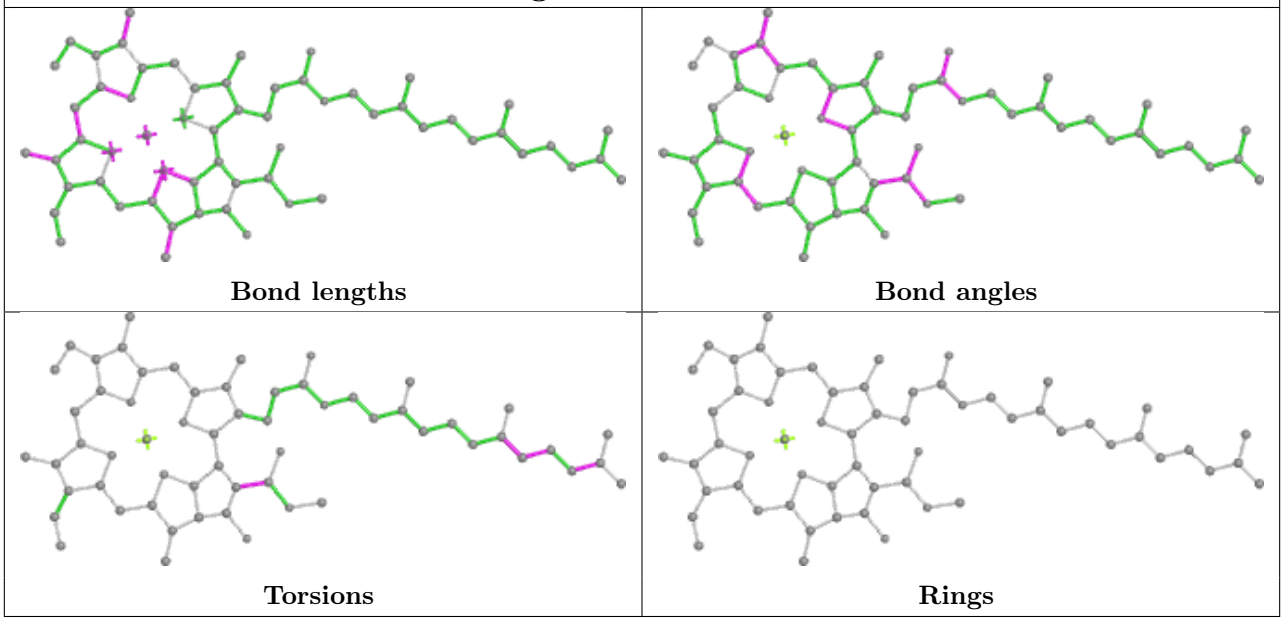


Rings

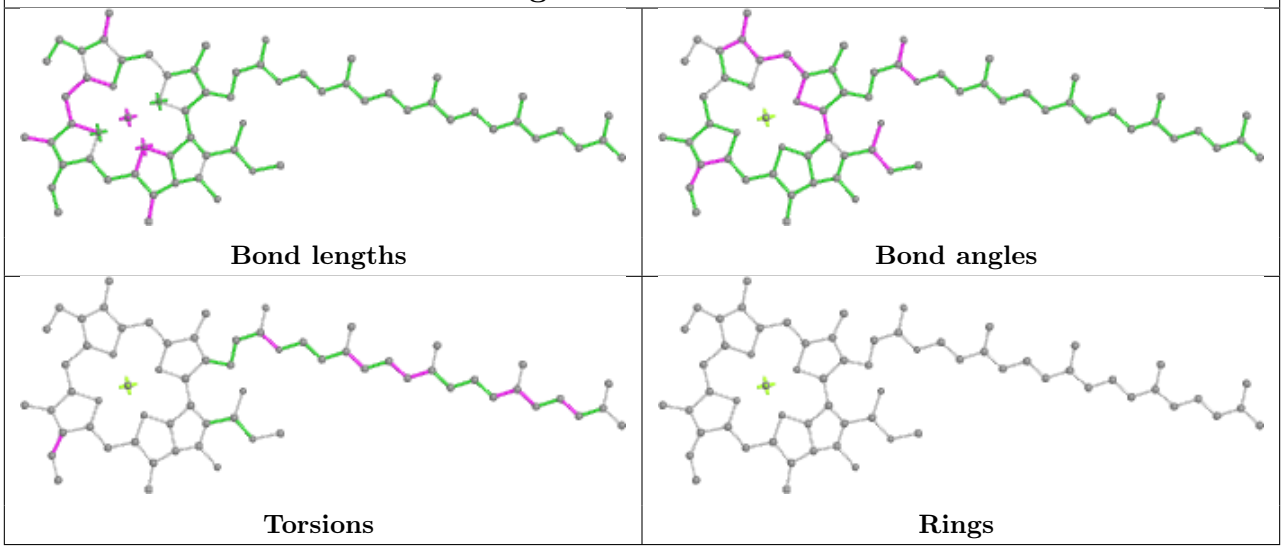
Ligand LMG c 522



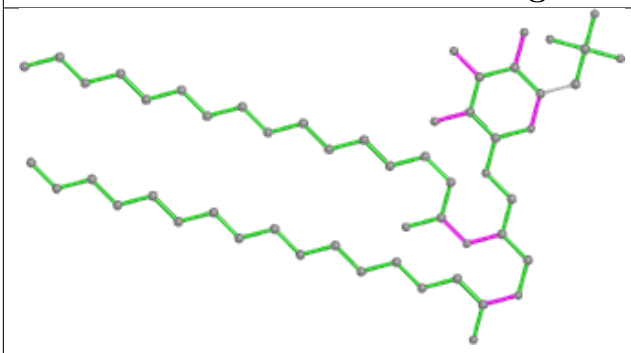
Ligand CLA c 505



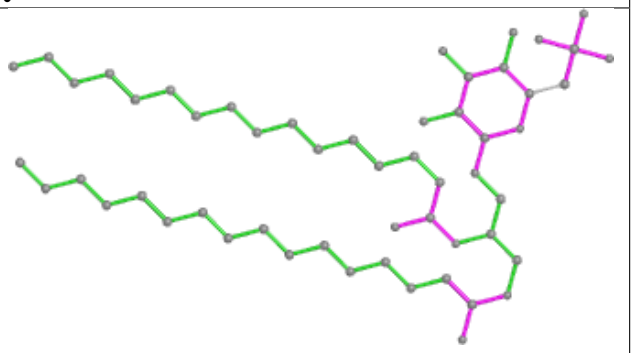
Ligand CLA a 406



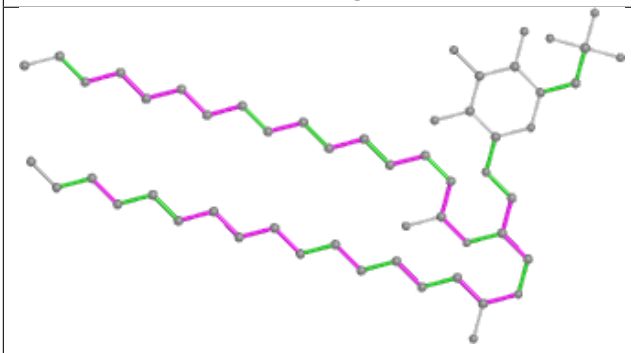
Ligand SQD a 413



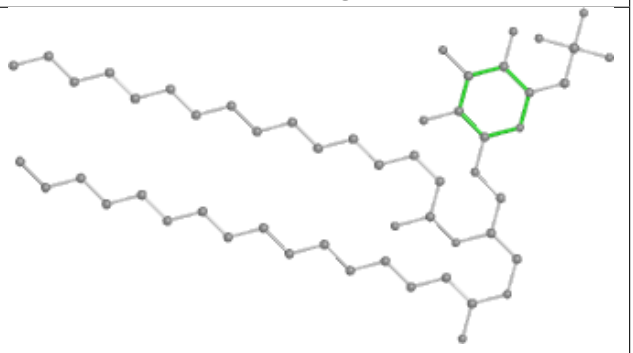
Bond lengths



Bond angles

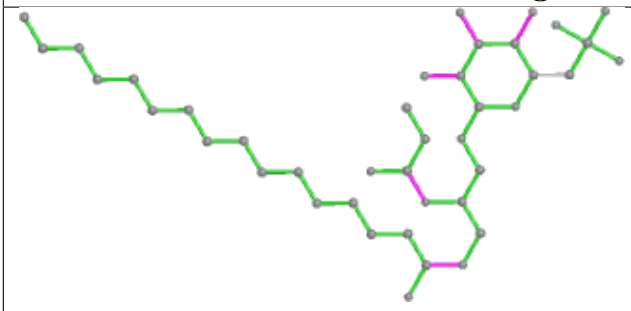


Torsions



Rings

Ligand SQD f 101



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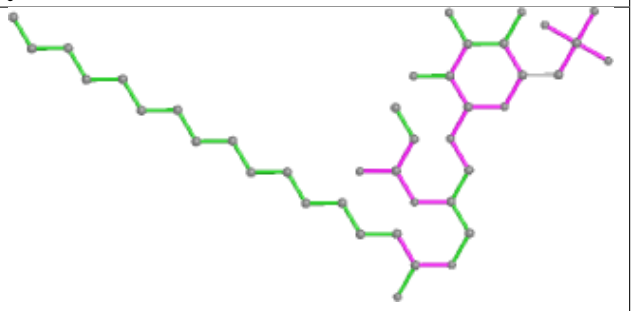
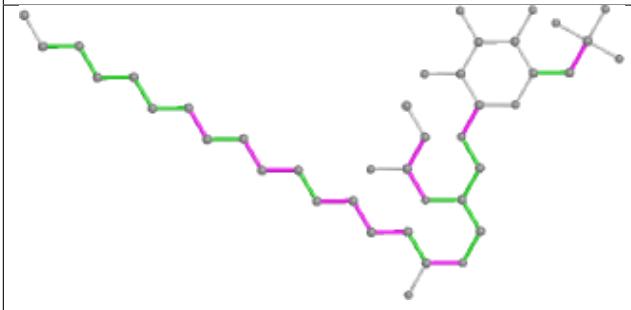


Bond angles



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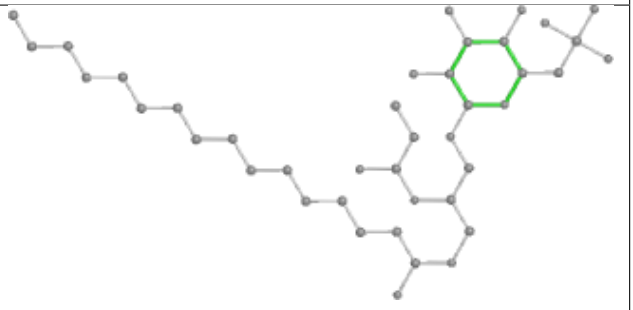
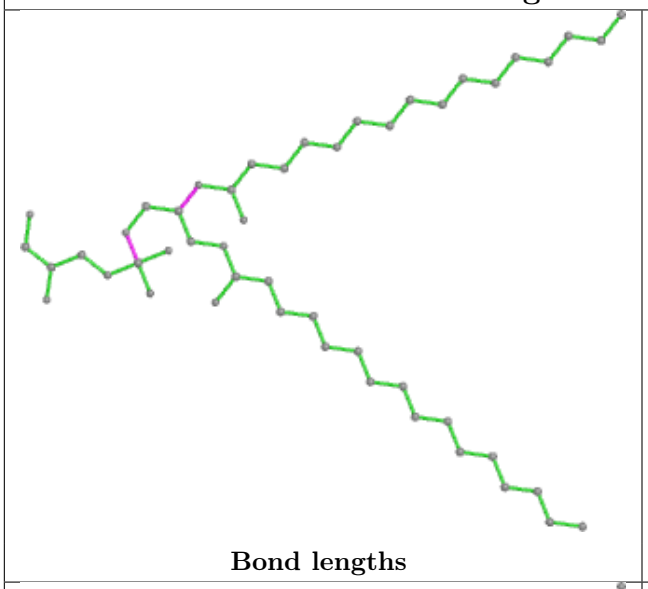
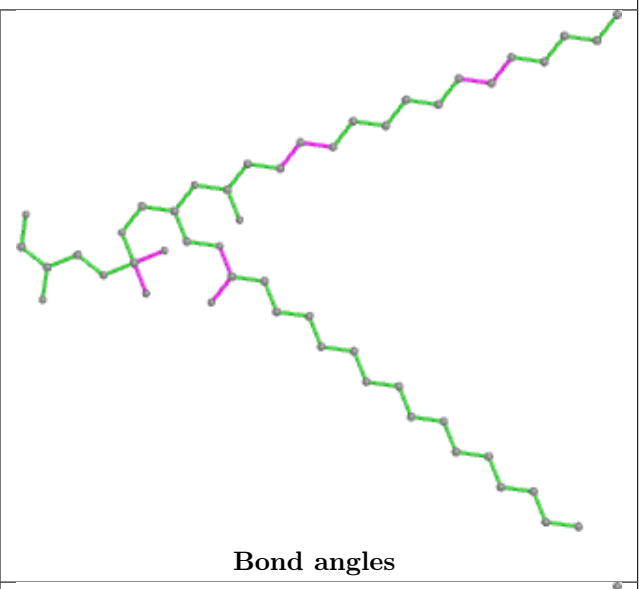


Rings

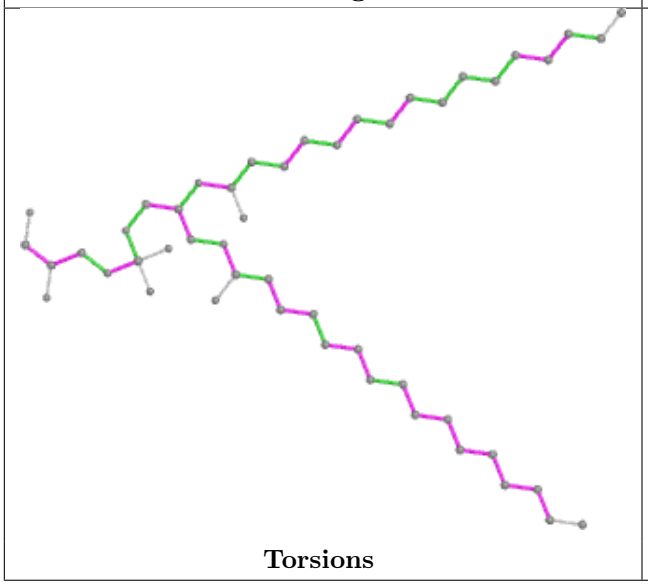
Ligand LHG A 410



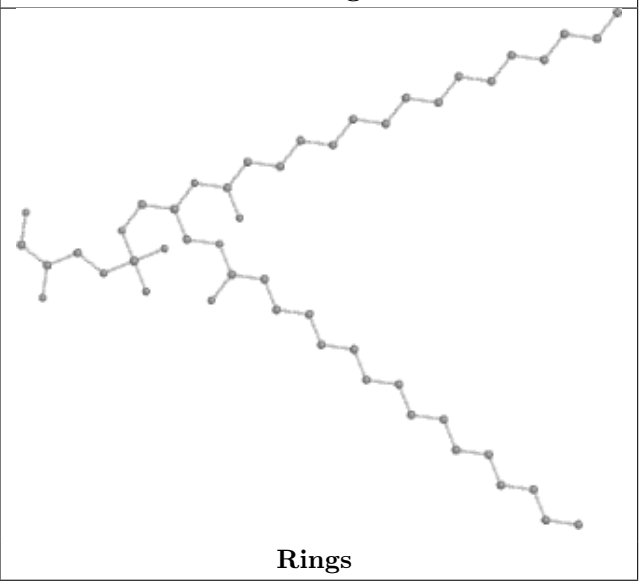
Bond lengths



Bond angles

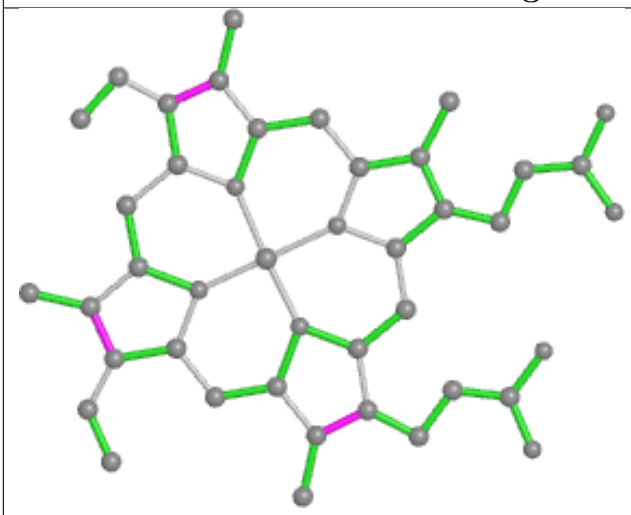


Torsions

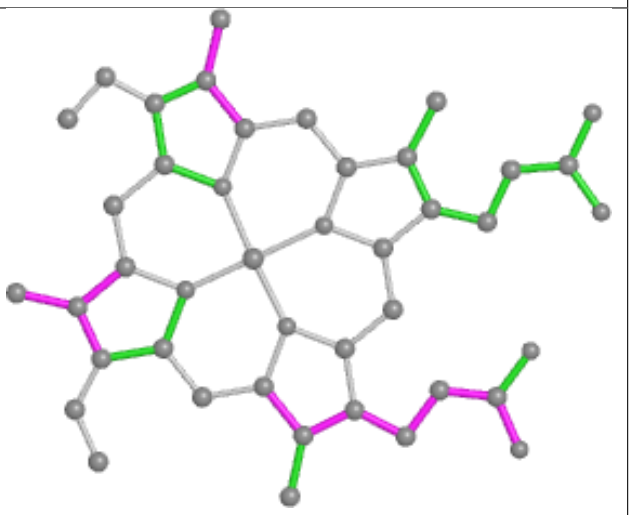


Rings

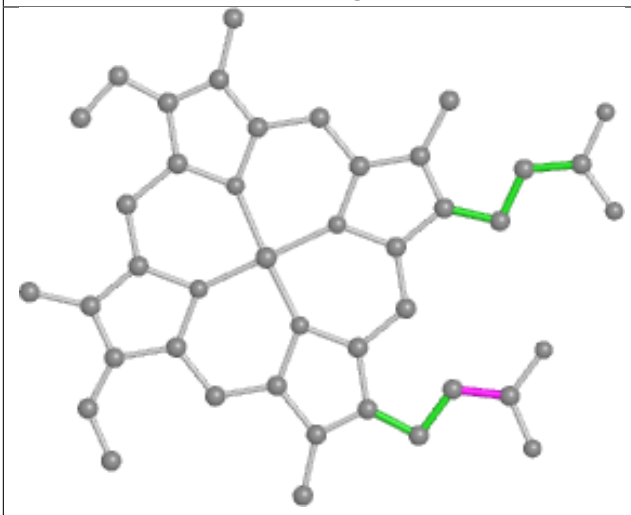
Ligand HEC V 201



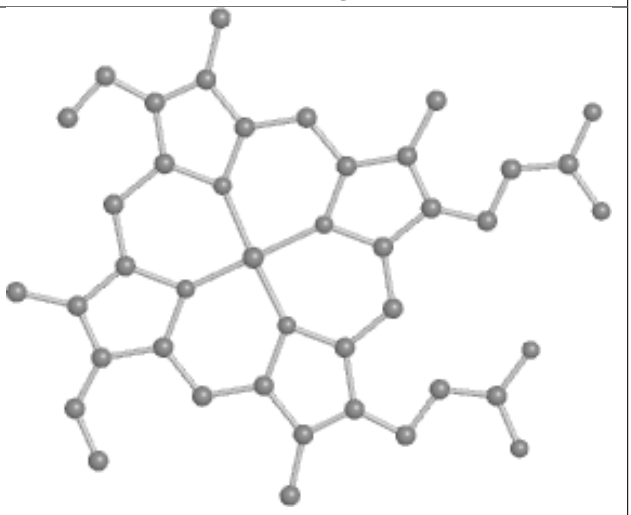
Bond lengths



Bond angles

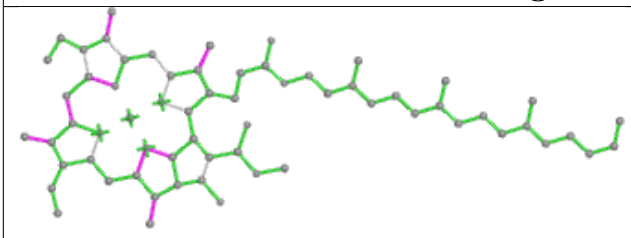


Torsions



Rings

Ligand CLA c 509



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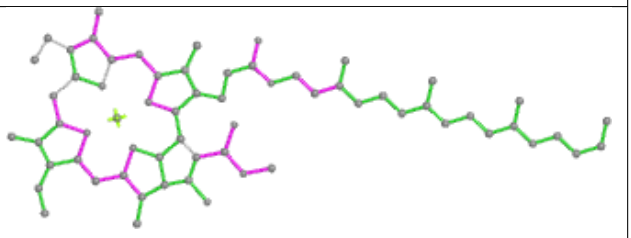
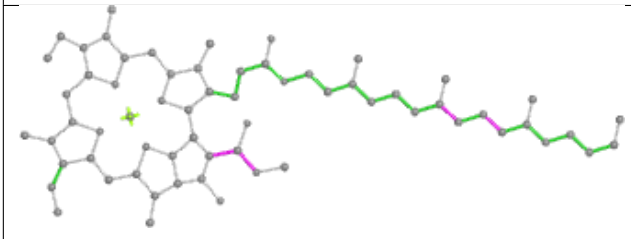
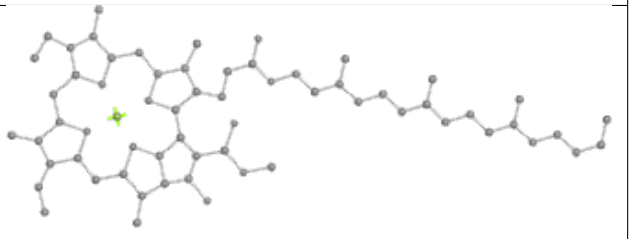


Bond angles

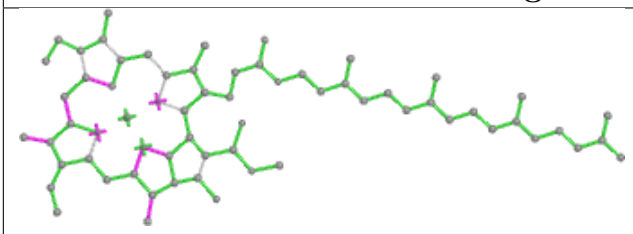


Torsions

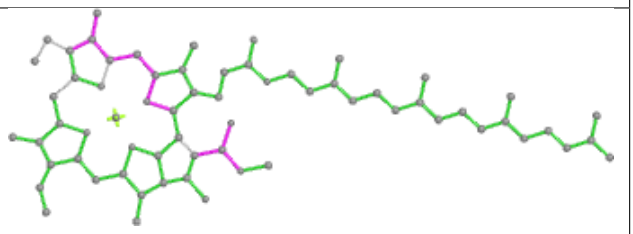


Rings

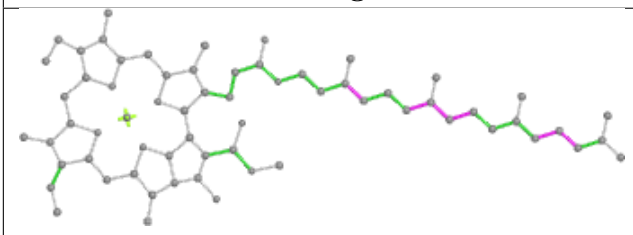
Ligand CLA C 511



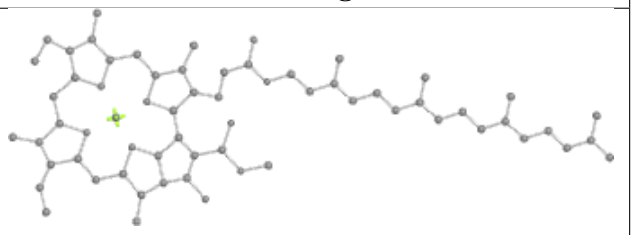
Bond lengths



Bond angles

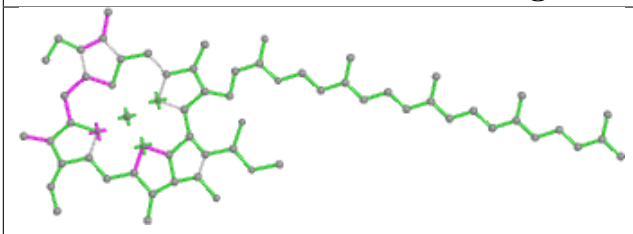


Torsions

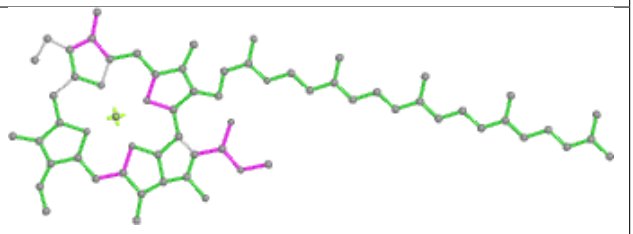


Rings

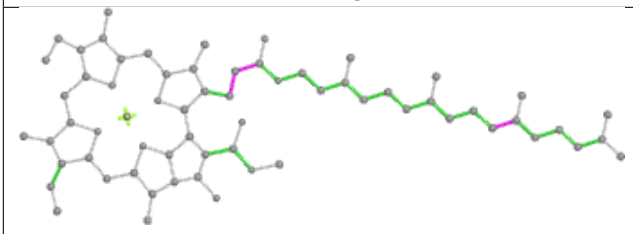
Ligand CLA c 502



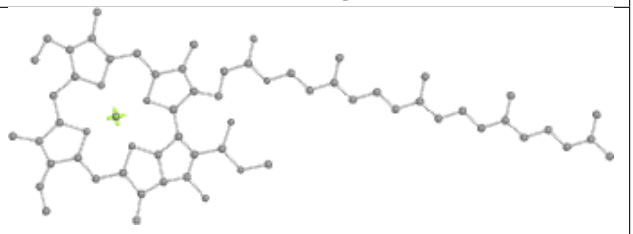
Bond lengths



Bond angles

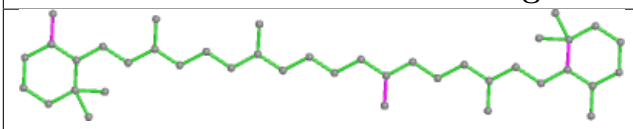


Torsions



Rings

Ligand BCR B 718



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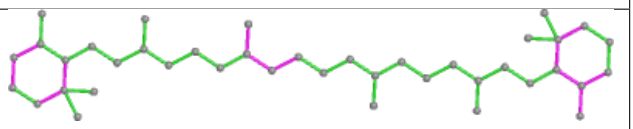
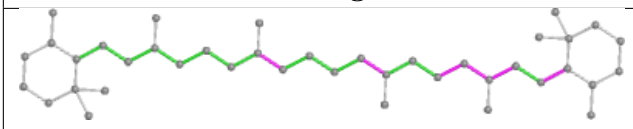


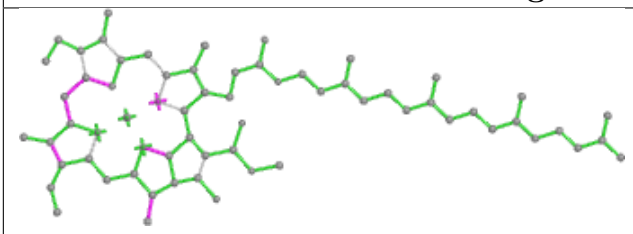
Bond angles



Torsions

Rings

Ligand CLA b 711



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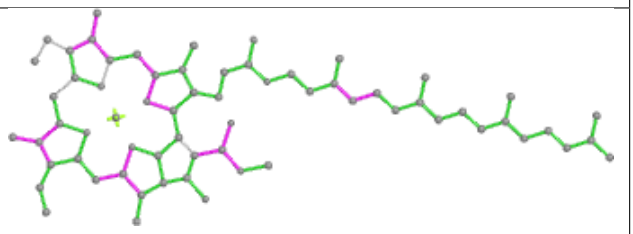
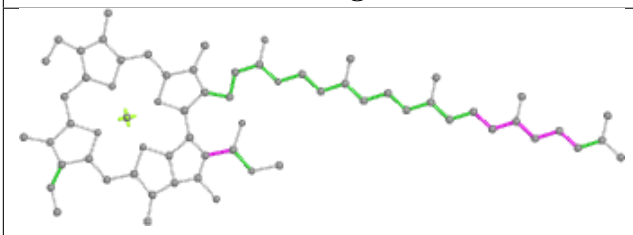
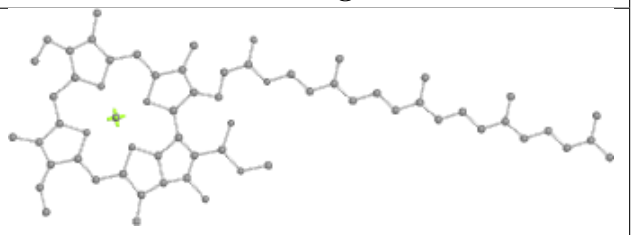


Bond angles

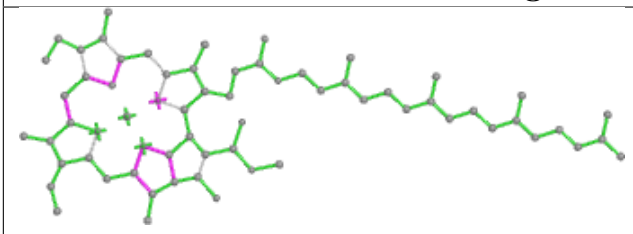


Torsions

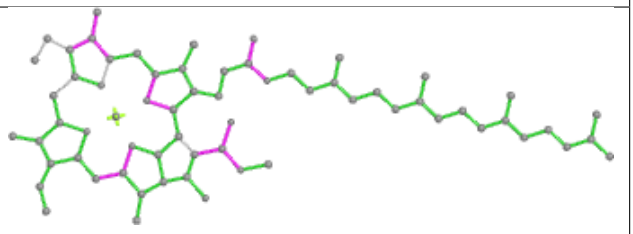


Rings

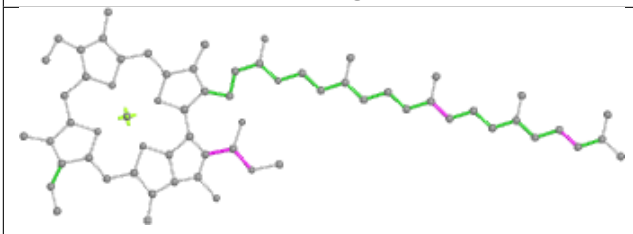
Ligand CLA C 509



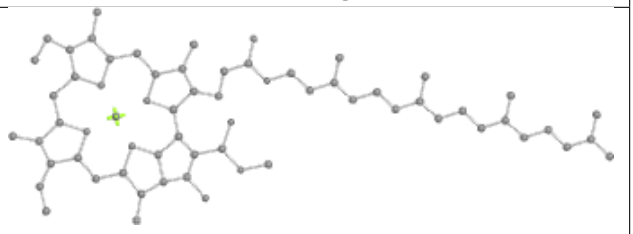
Bond lengths



Bond angles

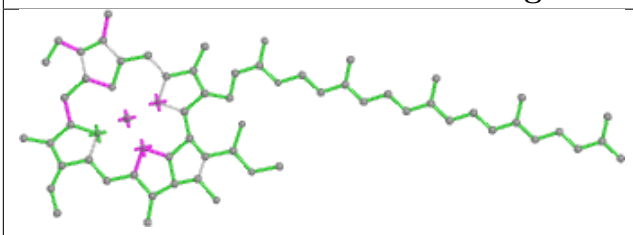


Torsions

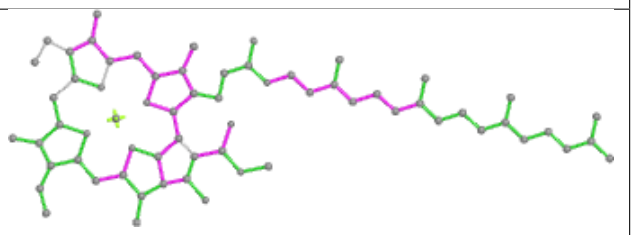


Rings

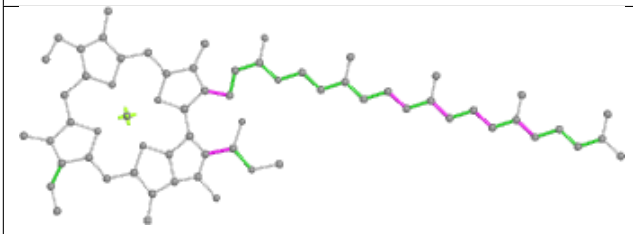
Ligand CLA C 504



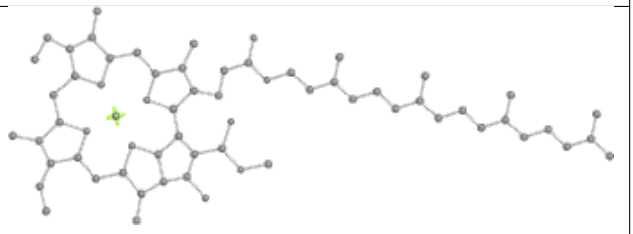
Bond lengths



Bond angles

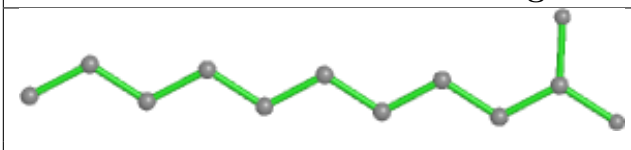


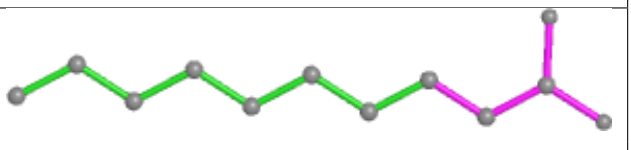
Torsions

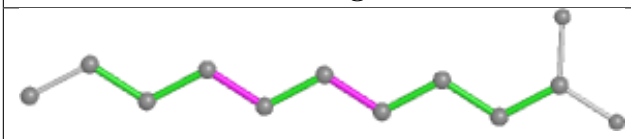


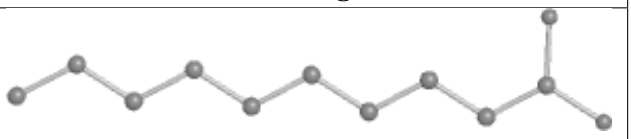
Rings

Ligand STE C 521

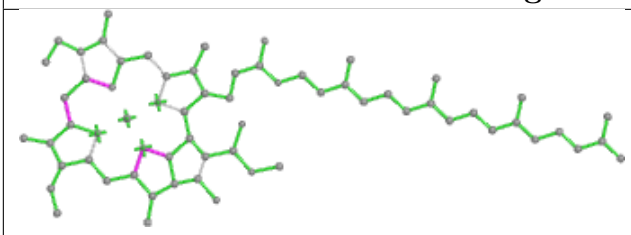

Bond lengths


Bond angles


Torsions


Rings

Ligand CLA B 712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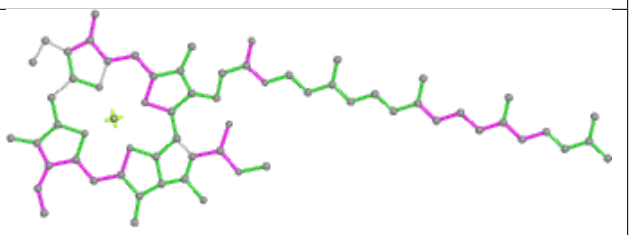
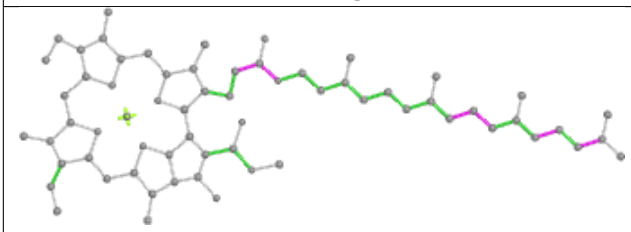

Bond angles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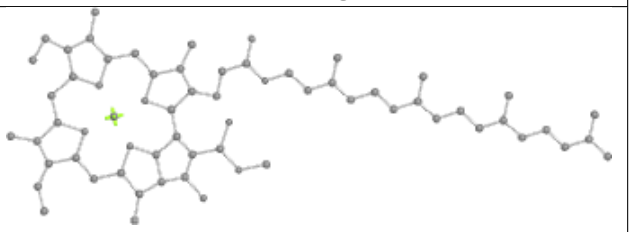
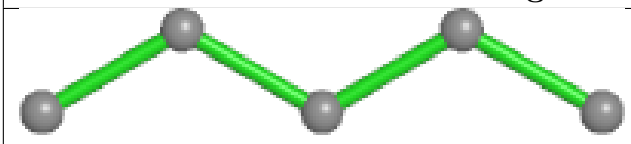

Rings

Ligand STE A 414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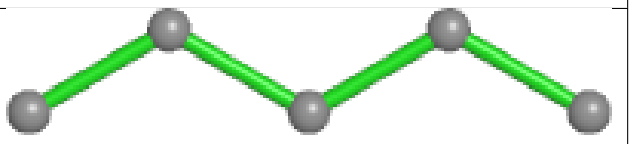
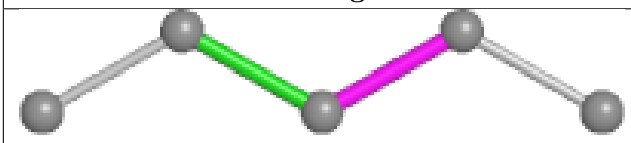

Bond angles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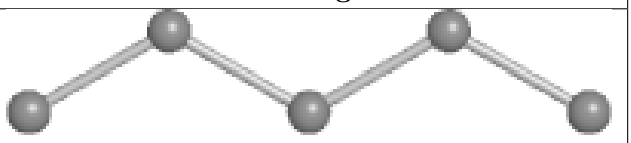
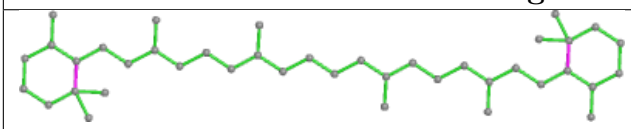

Rings

Ligand BCR c 515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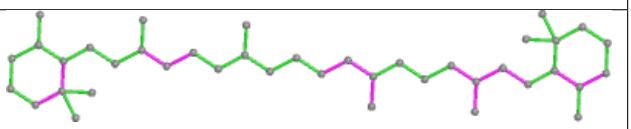
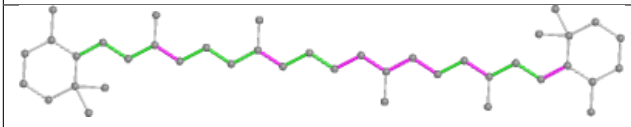
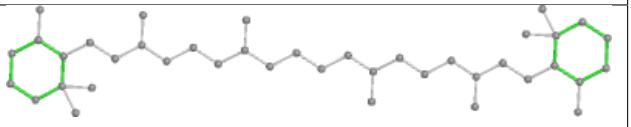
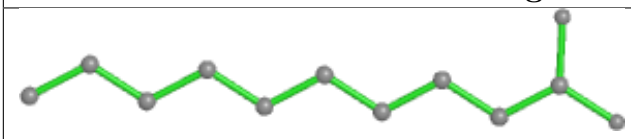

Bond angles

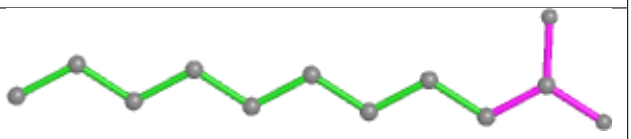

Torsions


Rings

Ligand STE m 101



Bond lengths



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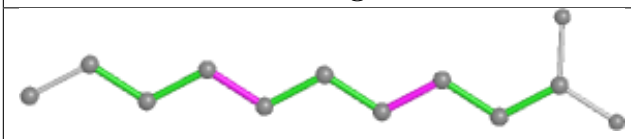

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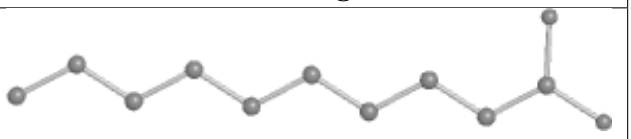
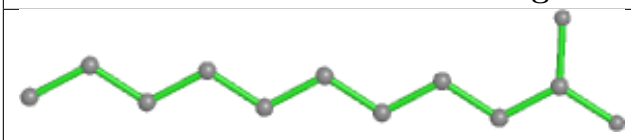


Rings

Ligand STE a 417



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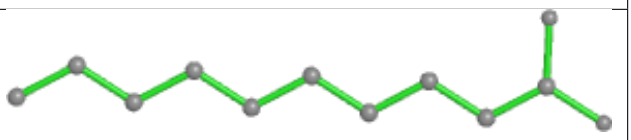
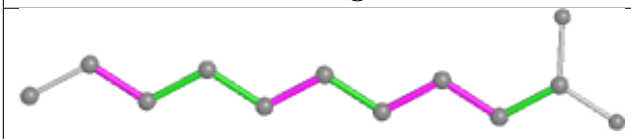


Bond angles



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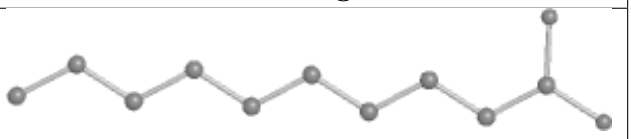
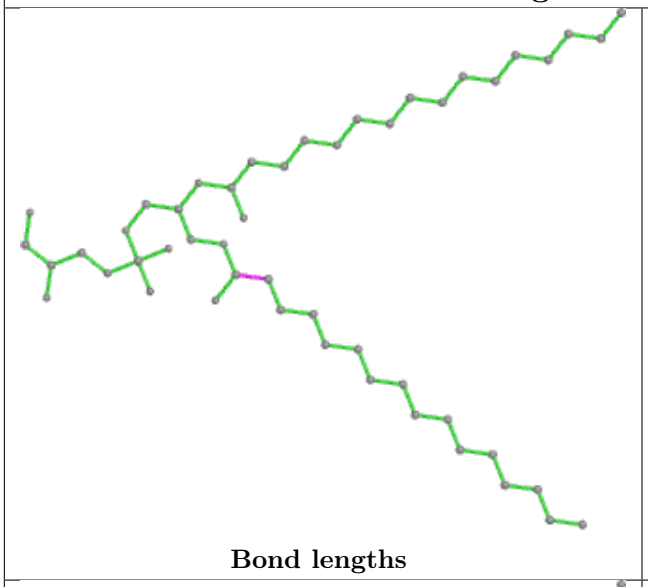


Rings

Ligand LHG l 101



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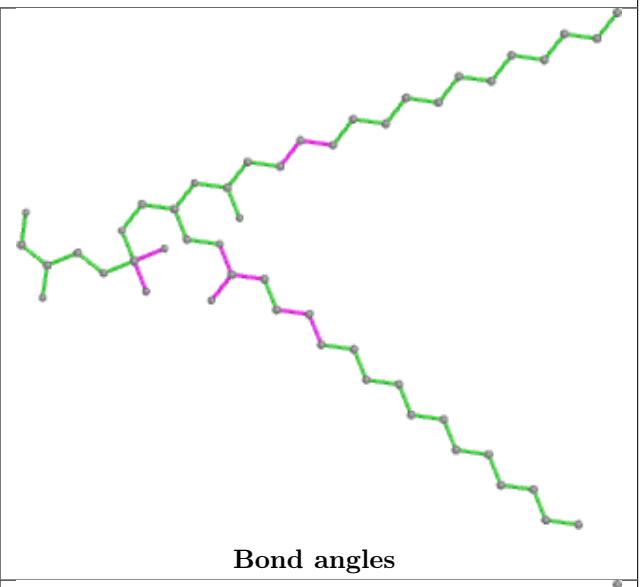
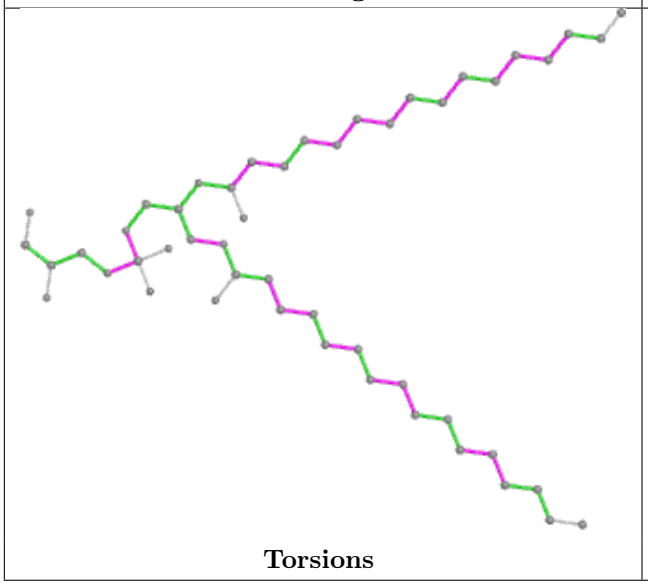


Bond angles



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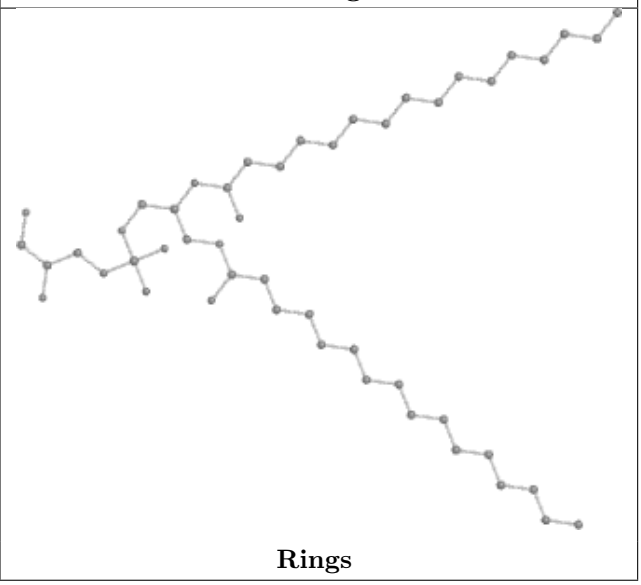
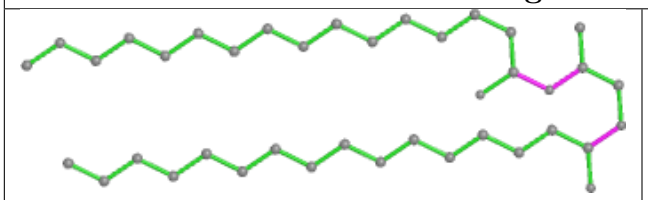


Rings

Ligand SQD A 412



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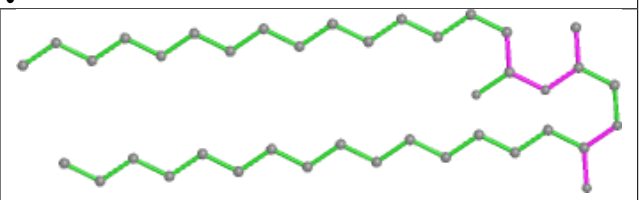
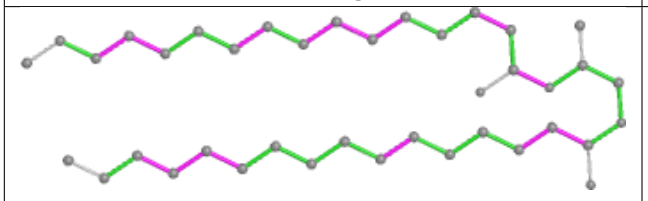


Bond angles



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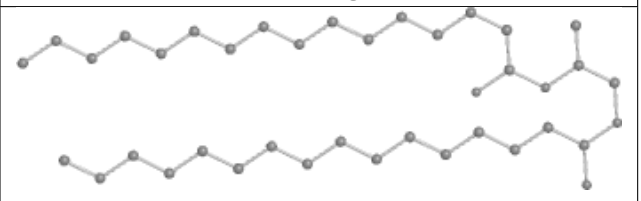
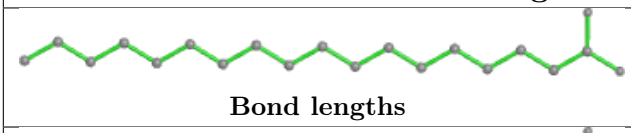


Rings

Ligand STE x 101



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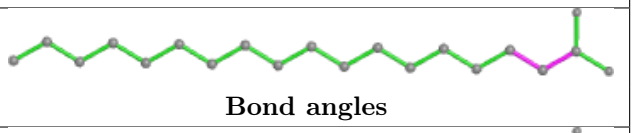
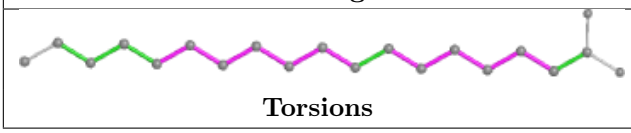
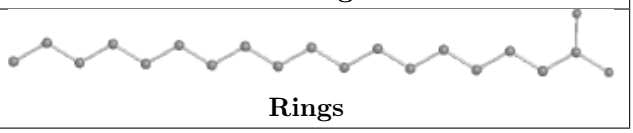


Bond angles

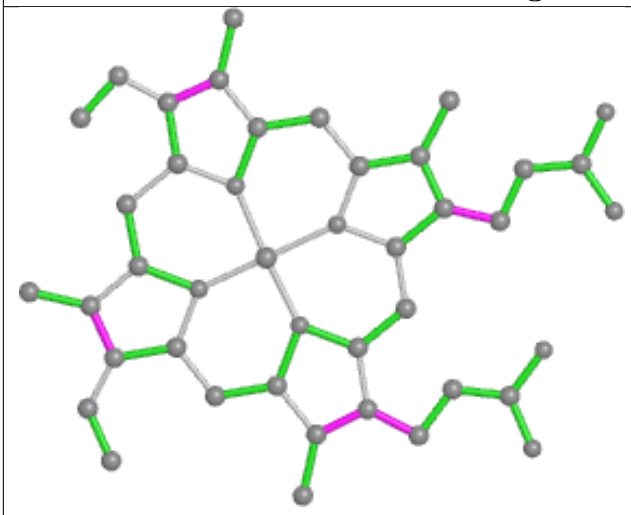


Torsions



Rings

Ligand HEC v 201



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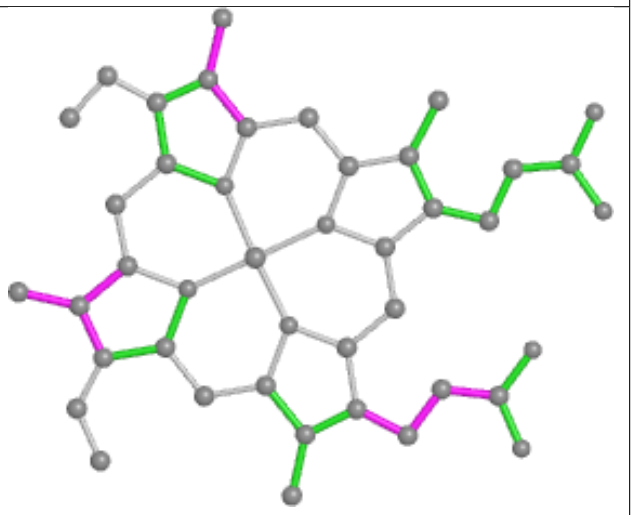
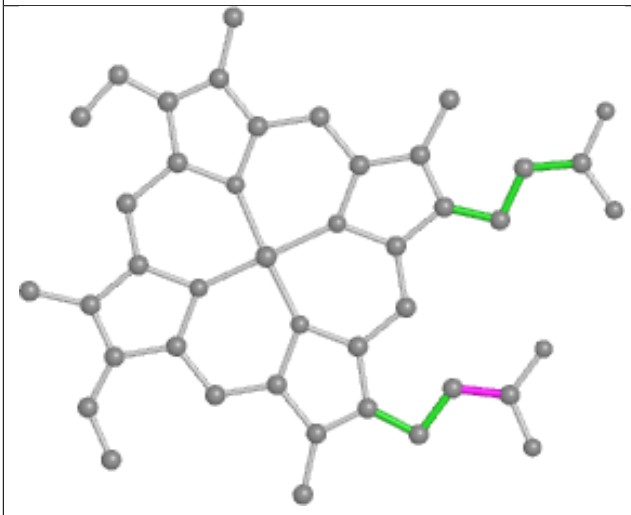


Bond angles



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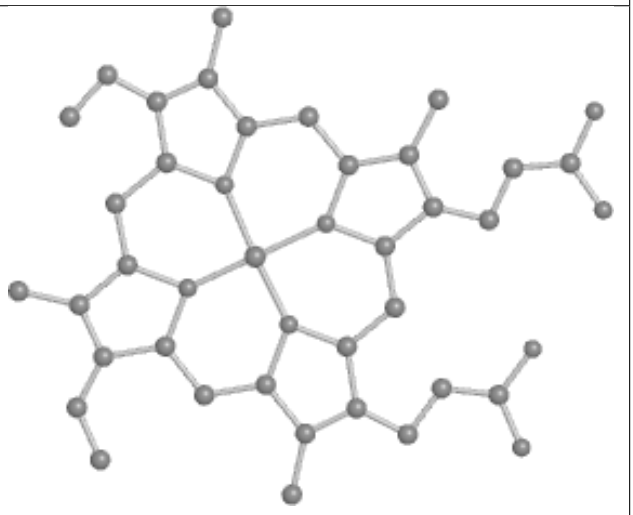
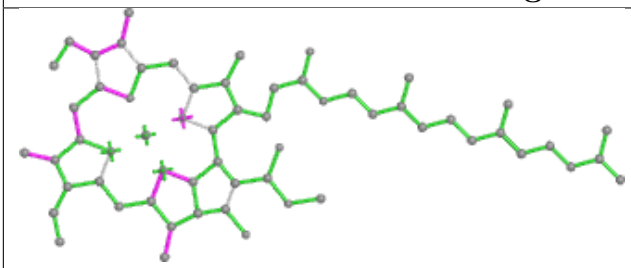


Rings

Ligand CLA B 716



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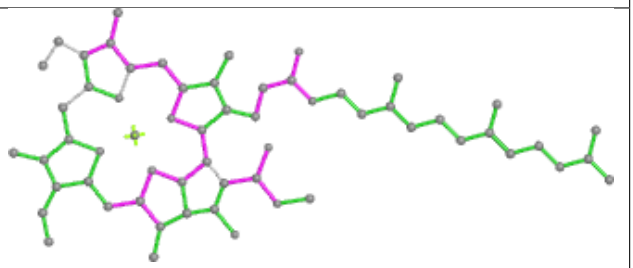
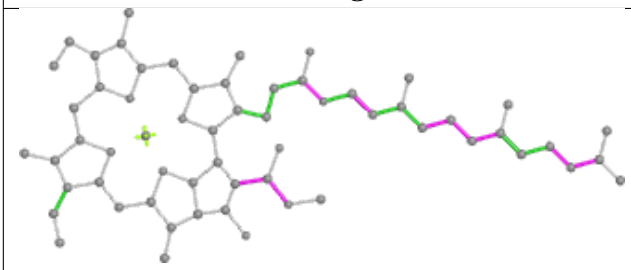
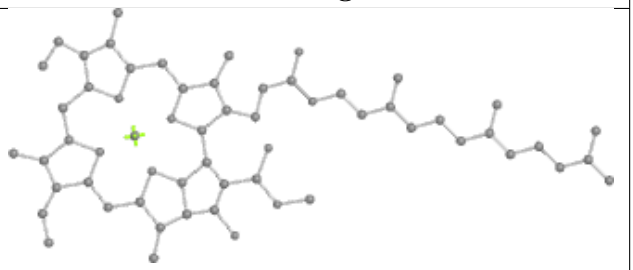


Bond angles

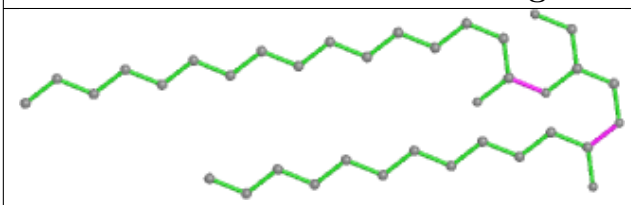


Torsions



Rings

Ligand SQD a 415



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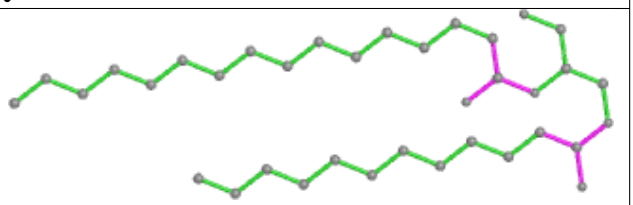
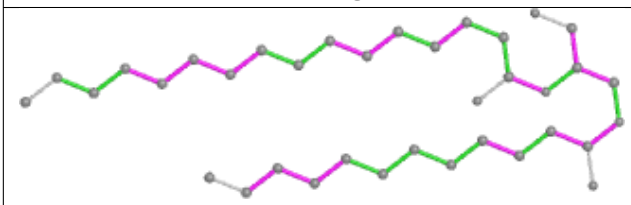
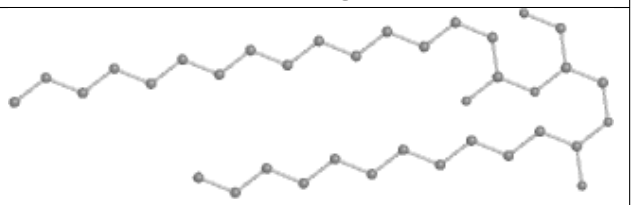


Bond angles



Torsions



Rings

Ligand STE T 702

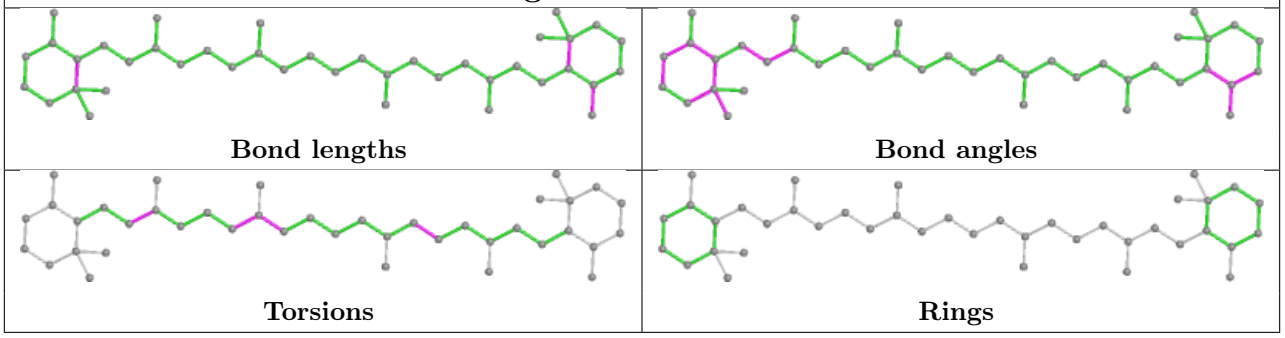
Bond lengths

Bond angles

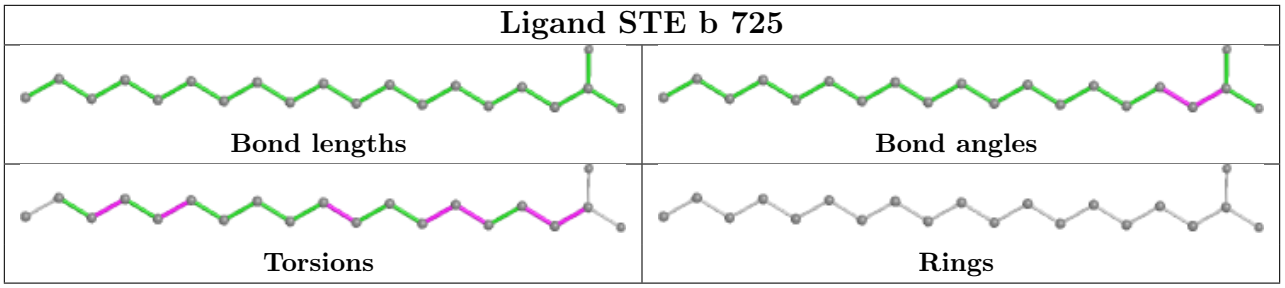
Torsions

Rings

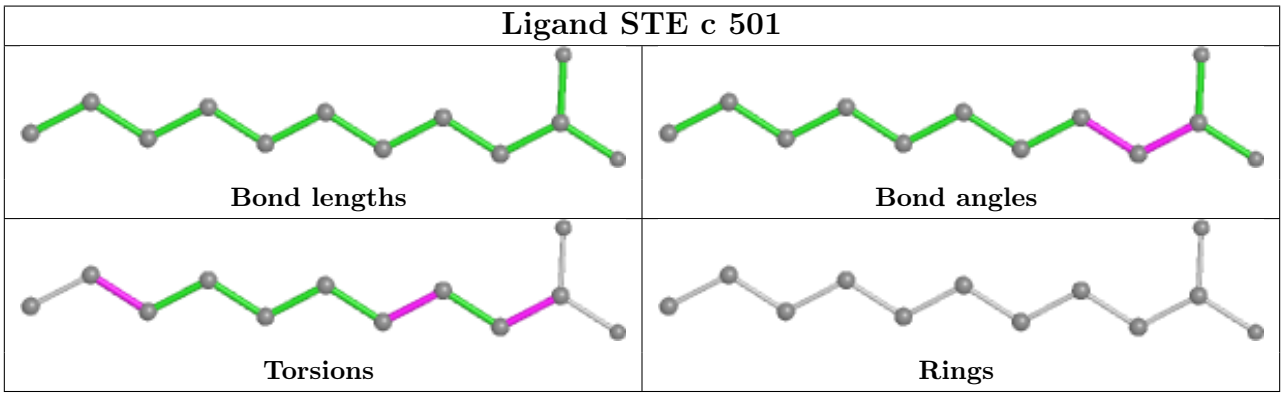
Ligand BCR T 701



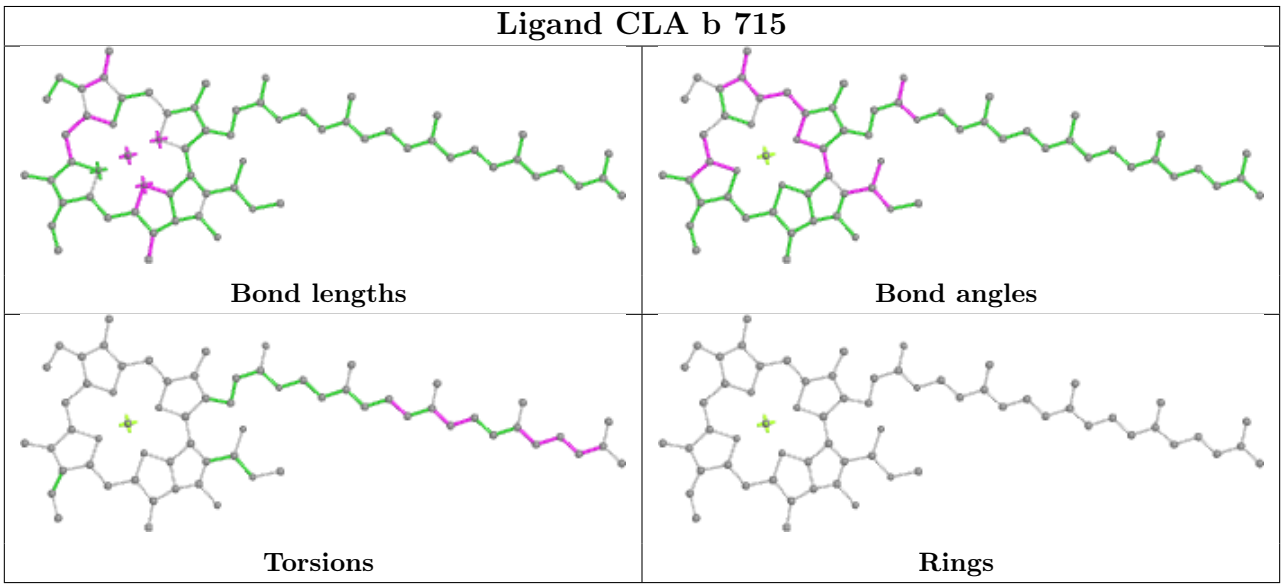
Ligand STE b 725



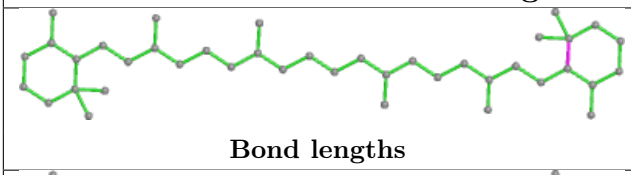
Ligand STE c 501



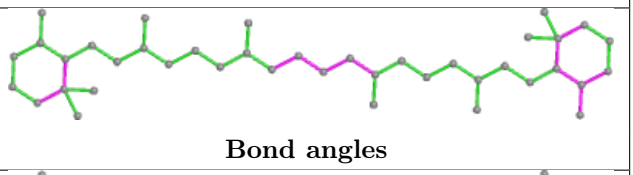
Ligand CLA b 715



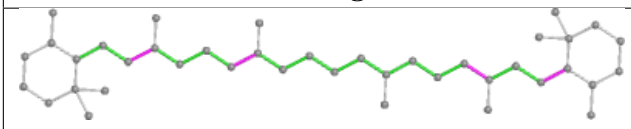
Ligand BCR H 101



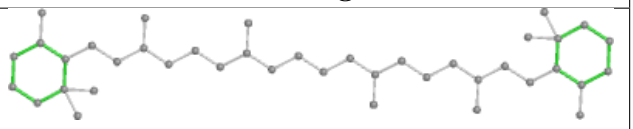
Bond lengths



Bond angles

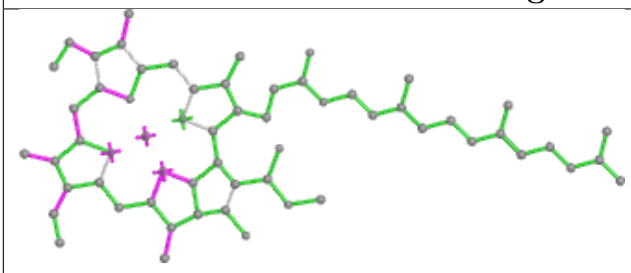


Torsions

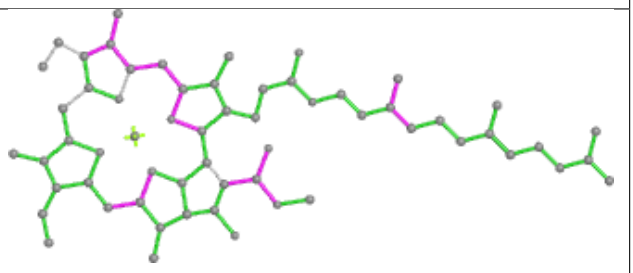


Rings

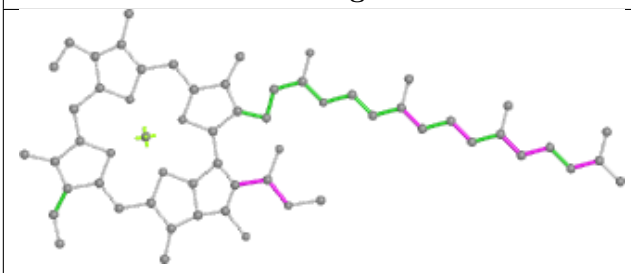
Ligand CLA b 716



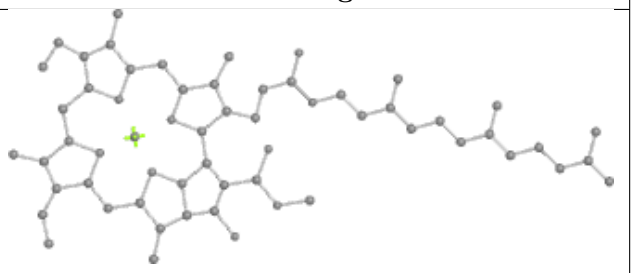
Bond lengths



Bond angles

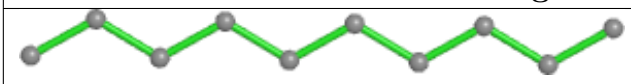


Torsions

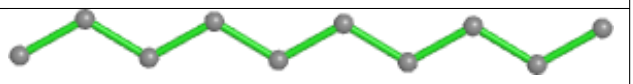


Rings

Ligand STE a 416

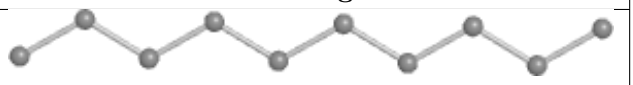


Bond lengths



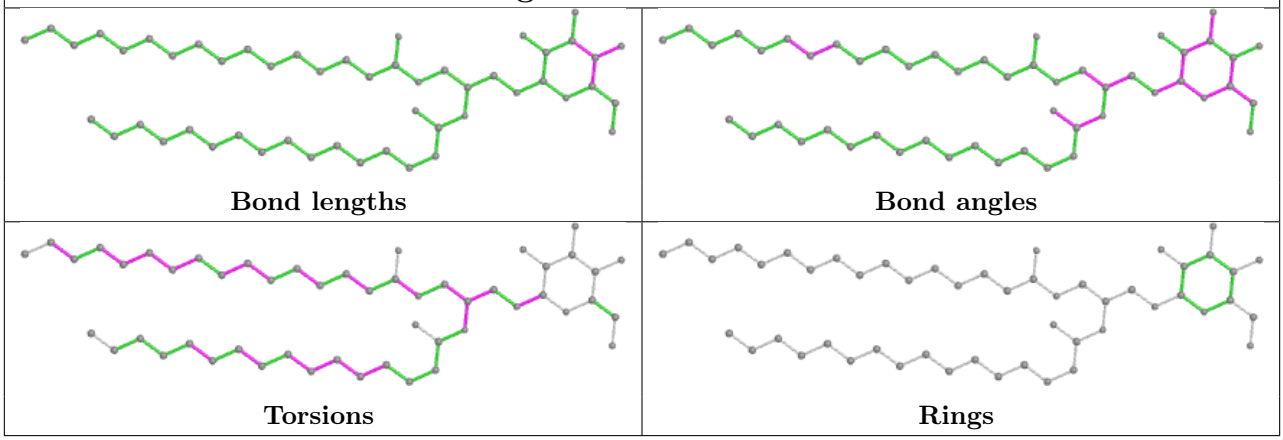
Bond angles

Torsions

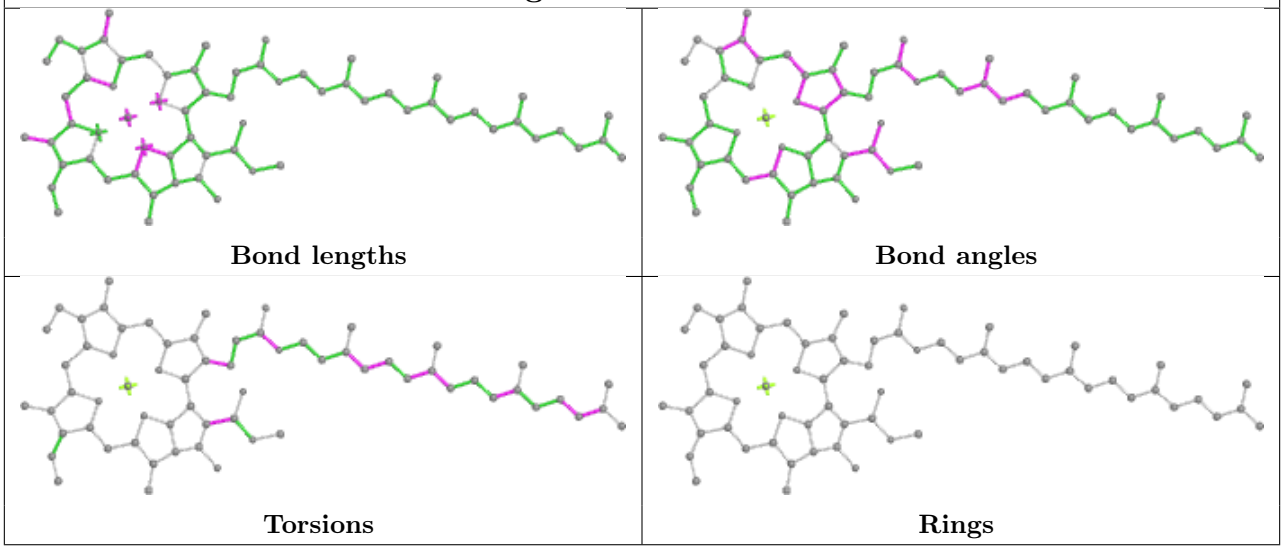


Rings

Ligand LMG M 101



Ligand CLA C 514



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%)	-0.36	2 (0%) 89 91	22, 29, 50, 81	0
1	a	334/344 (97%)	-0.36	1 (0%) 94 94	22, 30, 58, 83	0
2	B	505/510 (99%)	-0.34	10 (1%) 65 69	23, 33, 60, 90	0
2	b	505/510 (99%)	-0.15	17 (3%) 45 51	23, 36, 72, 105	0
3	C	442/461 (95%)	-0.26	5 (1%) 80 84	24, 37, 54, 79	0
3	c	451/461 (97%)	-0.18	7 (1%) 72 75	25, 39, 62, 96	0
4	D	341/352 (96%)	-0.30	0 100 100	23, 30, 49, 78	0
4	d	341/352 (96%)	-0.28	1 (0%) 94 94	24, 34, 60, 74	0
5	E	82/84 (97%)	0.09	2 (2%) 59 64	35, 52, 68, 81	0
5	e	82/84 (97%)	0.20	6 (7%) 15 19	37, 57, 76, 81	0
6	F	34/45 (75%)	-0.31	2 (5%) 22 27	39, 44, 65, 85	0
6	f	34/45 (75%)	-0.14	2 (5%) 22 27	40, 48, 78, 91	0
7	H	65/66 (98%)	-0.04	2 (3%) 49 55	34, 41, 58, 67	0
7	h	63/66 (95%)	0.26	5 (7%) 12 16	40, 50, 61, 71	0
8	I	35/38 (92%)	-0.16	2 (5%) 23 29	31, 37, 72, 80	0
8	i	35/38 (92%)	-0.18	2 (5%) 23 29	32, 40, 70, 78	0
9	J	36/40 (90%)	-0.01	4 (11%) 5 7	31, 49, 78, 89	0
9	j	36/40 (90%)	0.17	4 (11%) 5 7	41, 50, 83, 93	0
10	K	37/46 (80%)	0.14	1 (2%) 54 60	42, 52, 69, 83	0
10	k	37/46 (80%)	0.13	1 (2%) 54 60	48, 55, 68, 81	0
11	L	37/37 (100%)	-0.36	1 (2%) 54 60	26, 31, 63, 71	0
11	l	36/37 (97%)	-0.27	2 (5%) 24 29	23, 29, 71, 86	0
12	M	32/36 (88%)	-0.05	0 100 100	27, 34, 60, 68	0
12	m	31/36 (86%)	-0.17	0 100 100	24, 34, 50, 69	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	O	244/272 (89%)	-0.03	12 (4%) 29 35	25, 41, 79, 130	0
13	o	244/272 (89%)	-0.08	16 (6%) 18 23	25, 40, 77, 119	0
14	R	34/41 (82%)	2.52	23 (67%) 0 0	65, 78, 91, 104	0
14	r	31/41 (75%)	4.49	27 (87%) 0 0	81, 100, 114, 126	0
15	T	29/32 (90%)	-0.42	2 (6%) 16 21	26, 30, 61, 74	0
15	t	29/32 (90%)	-0.24	2 (6%) 16 21	28, 32, 78, 86	0
16	U	97/134 (72%)	-0.24	4 (4%) 37 43	31, 44, 69, 87	0
16	u	97/134 (72%)	-0.40	0 100 100	31, 39, 58, 77	0
17	V	137/163 (84%)	-0.48	0 100 100	30, 39, 55, 82	0
17	v	137/163 (84%)	-0.17	5 (3%) 42 49	30, 46, 68, 84	0
18	X	38/41 (92%)	-0.03	3 (7%) 12 16	41, 51, 73, 82	0
18	x	39/41 (95%)	0.39	3 (7%) 13 17	48, 58, 89, 103	0
19	Y	27/46 (58%)	1.44	10 (37%) 0 0	53, 74, 91, 93	0
19	y	30/46 (65%)	0.64	5 (16%) 1 2	60, 72, 85, 93	0
20	Z	62/62 (100%)	0.95	16 (25%) 0 0	54, 66, 108, 119	0
20	z	62/62 (100%)	0.95	14 (22%) 0 0	54, 71, 107, 114	0
All	All	5302/5700 (93%)	-0.13	221 (4%) 36 42	22, 38, 73, 130	0

All (221) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
14	r	28	VAL	8.0
14	r	25	PRO	7.4
13	o	58	ASN	7.2
20	Z	33	TRP	7.2
13	O	56	PRO	7.1
14	r	29	LYS	7.1
14	r	10	LEU	7.0
2	b	495	PHE	6.9
14	r	9	LEU	6.9
14	r	26	TYR	6.7
14	r	3	TRP	6.7
14	r	14	LEU	6.4
14	r	6	LEU	6.0
13	O	60	ARG	6.0
1	A	13	LEU	5.9

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Mol	Chain	Res	Type	RSRZ
9	j	6	GLY	5.8
14	r	31	VAL	5.8
2	b	487	SER	5.7
14	R	3	TRP	5.6
14	r	27	ALA	5.4
14	R	6	LEU	5.4
19	Y	41	VAL	5.4
13	O	59	LYS	5.4
14	r	13	LEU	5.4
13	O	3	GLN	5.3
14	R	20	VAL	5.3
20	z	33	TRP	5.3
14	r	23	ILE	5.2
5	e	79	PHE	5.1
13	O	4	THR	5.1
13	o	3	GLN	5.1
14	r	24	LEU	5.1
18	X	2	THR	5.0
14	R	32	GLN	4.8
7	H	66	GLY	4.6
18	x	2	THR	4.6
3	c	24	THR	4.6
20	Z	34	ASP	4.5
9	J	5	GLY	4.4
3	c	23	ALA	4.4
13	o	61	GLN	4.3
2	b	505	ARG	4.3
2	b	503	THR	4.3
20	Z	7	LEU	4.2
14	r	15	ALA	4.2
13	o	62	GLU	4.2
14	R	26	TYR	4.2
13	o	56	PRO	4.1
14	r	7	VAL	4.1
20	Z	61	VAL	4.1
13	o	4	THR	4.1
14	r	19	ALA	4.1
14	R	25	PRO	4.1
14	r	5	VAL	4.1
13	o	60	ARG	4.1
2	b	486	LEU	4.0
13	O	5	LEU	4.0

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Mol	Chain	Res	Type	RSRZ
20	z	35	ARG	4.0
20	Z	32	ASP	4.0
14	r	2	ASP	4.0
19	Y	25	ILE	3.9
14	r	18	TRP	3.9
9	j	5	GLY	3.9
8	i	36	ASP	3.9
19	Y	37	PHE	3.8
9	J	6	GLY	3.8
13	o	57	LYS	3.8
7	h	21	VAL	3.7
13	O	62	GLU	3.7
14	R	21	ARG	3.6
1	A	11	ALA	3.5
20	z	3	ILE	3.5
6	F	12	SER	3.5
14	r	8	VAL	3.5
2	b	127	ARG	3.5
14	R	27	ALA	3.5
3	c	143	TYR	3.5
13	o	5	LEU	3.5
14	R	10	LEU	3.5
20	Z	4	LEU	3.4
20	Z	62	VAL	3.4
13	O	61	GLN	3.4
14	R	18	TRP	3.4
14	r	4	ARG	3.4
15	t	30	THR	3.3
19	Y	21	GLN	3.3
2	b	506	ARG	3.3
1	a	11	ALA	3.3
18	x	40	SER	3.3
2	B	485	GLU	3.3
16	U	8	GLU	3.3
14	R	9	LEU	3.3
9	j	7	ARG	3.3
20	Z	35	ARG	3.3
20	z	62	VAL	3.3
8	I	34	ARG	3.2
19	Y	42	ARG	3.2
11	l	3	PRO	3.2
15	T	30	THR	3.2

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Mol	Chain	Res	Type	RSRZ
20	z	41	PHE	3.2
18	x	38	GLN	3.2
5	e	61	ARG	3.2
14	r	21	ARG	3.2
20	z	7	LEU	3.2
9	j	8	ILE	3.2
3	c	146	PHE	3.1
18	X	3	ILE	3.1
20	z	1	MET	3.1
7	h	10	ILE	3.1
9	J	8	ILE	3.1
2	b	295	GLY	3.1
14	r	11	PRO	3.1
10	K	17	ILE	3.1
2	b	289	GLN	3.1
14	R	28	VAL	3.1
2	B	506	ARG	3.1
19	y	19	ILE	3.1
5	E	84	LYS	3.0
19	Y	20	ALA	3.0
19	Y	43	ARG	3.0
7	H	65	LEU	3.0
20	Z	3	ILE	3.0
2	B	293	ALA	3.0
20	Z	41	PHE	2.9
14	R	24	LEU	2.9
14	r	22	ASN	2.9
15	t	29	ILE	2.9
13	o	59	LYS	2.9
2	B	502	VAL	2.9
20	z	30	PRO	2.8
19	y	37	PHE	2.8
14	r	12	VAL	2.8
19	Y	40	ALA	2.8
17	v	21	LEU	2.8
5	E	79	PHE	2.8
14	R	13	LEU	2.7
20	z	60	PHE	2.7
14	R	29	LYS	2.7
2	B	505	ARG	2.7
3	c	147	PHE	2.7
8	I	36	ASP	2.7

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Mol	Chain	Res	Type	RSRZ
6	F	13	TYR	2.7
14	R	5	VAL	2.7
3	C	146	PHE	2.7
20	Z	38	GLN	2.7
2	B	295	GLY	2.6
13	o	207	ARG	2.6
13	o	55	GLU	2.6
14	r	30	GLN	2.6
2	b	502	VAL	2.6
3	C	60	ILE	2.6
5	e	82	GLN	2.6
20	Z	42	LEU	2.6
20	Z	31	GLN	2.6
3	C	57	ALA	2.6
20	z	36	SER	2.5
7	h	6	TRP	2.5
6	f	12	SER	2.5
10	k	13	GLU	2.5
5	e	74	GLN	2.5
9	J	7	ARG	2.5
14	R	14	LEU	2.5
11	L	3	PRO	2.5
2	B	127	ARG	2.4
20	Z	1	MET	2.4
19	y	41	VAL	2.4
19	Y	22	LEU	2.4
7	h	56	ASP	2.4
15	T	29	ILE	2.4
20	z	59	PHE	2.4
11	l	7	ARG	2.4
13	o	65	PHE	2.4
20	Z	60	PHE	2.4
2	b	374	ASN	2.4
17	v	113	VAL	2.4
14	R	30	GLN	2.4
14	R	2	ASP	2.4
5	e	76	VAL	2.3
13	O	63	ALA	2.3
2	b	496	TYR	2.3
2	b	161	LEU	2.3
6	f	16	PHE	2.3
3	C	61	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
16	U	65	PRO	2.2
17	v	15	GLU	2.2
13	O	87	VAL	2.2
2	b	292	LEU	2.2
2	b	288	VAL	2.2
13	O	55	GLU	2.2
2	b	499	VAL	2.2
14	R	31	VAL	2.2
2	b	490	GLN	2.2
19	y	17	GLU	2.2
2	B	487	SER	2.2
19	y	18	VAL	2.2
3	c	57	ALA	2.2
13	o	34	SER	2.2
5	e	60	GLN	2.1
20	z	4	LEU	2.1
17	v	7	VAL	2.1
3	C	58	GLY	2.1
16	U	68	THR	2.1
3	c	262	ARG	2.1
16	U	9	LEU	2.1
13	O	35	SER	2.1
2	B	373	LYS	2.1
14	R	17	GLY	2.1
18	X	34	ILE	2.1
19	Y	38	LEU	2.1
20	z	42	LEU	2.1
2	B	490	GLN	2.1
13	o	64	GLU	2.0
8	i	34	ARG	2.0
4	d	55	VAL	2.0
13	o	246	ALA	2.0
17	v	24	LYS	2.0
20	Z	37	LYS	2.0
7	h	41	PHE	2.0
20	z	29	SER	2.0
14	R	19	ALA	2.0
14	R	8	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
8	FME	I	1	10/11	0.93	0.14	39,52,68,71	0
15	FME	t	1	10/11	0.93	0.10	29,46,71,71	0
12	FME	M	1	10/11	0.95	0.10	41,50,66,80	0
15	FME	T	1	10/11	0.96	0.10	27,47,63,64	0
12	FME	m	1	10/11	0.96	0.10	34,48,69,82	0
8	FME	i	1	10/11	0.97	0.18	38,48,60,62	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
28	STE	H	104	18/20	0.73	0.28	43,76,86,92	0
28	STE	B	726	16/20	0.76	0.36	43,64,79,86	0
28	STE	E	101	12/20	0.77	0.30	56,79,85,90	0
28	STE	C	522	16/20	0.78	0.17	38,53,66,67	0
28	STE	a	418	15/20	0.78	0.15	36,61,76,79	0
28	STE	b	725	20/20	0.78	0.18	45,63,80,83	0
33	LMG	c	522	48/55	0.78	0.24	35,77,108,113	0
28	STE	x	101	20/20	0.80	0.26	45,62,75,81	0
23	BCR	H	101	40/40	0.81	0.16	34,48,61,78	0
25	PL9	A	408	55/55	0.81	0.26	44,70,86,96	0
28	STE	c	501	12/20	0.81	0.21	55,68,85,93	0
28	STE	H	105	8/20	0.81	0.12	47,58,69,69	0
28	STE	I	101	15/20	0.81	0.17	40,55,81,86	0
28	STE	B	720	17/20	0.82	0.20	30,50,62,73	0
29	DGD	A	413	66/66	0.82	0.16	42,64,79,94	0
33	LMG	D	412	32/55	0.82	0.15	37,57,80,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
26	SQD	a	415	36/54	0.82	0.17	25,59,84,92	0
22	CLA	b	701	65/65	0.83	0.16	48,68,91,96	0
28	STE	b	726	10/20	0.83	0.28	43,56,67,75	0
25	PL9	a	411	55/55	0.83	0.22	42,69,93,98	0
22	CLA	C	513	65/65	0.83	0.18	35,56,93,98	0
28	STE	a	416	10/20	0.83	0.19	30,64,69,73	0
28	STE	a	417	12/20	0.83	0.26	51,64,76,77	0
27	LHG	A	410	49/49	0.83	0.23	45,80,104,115	0
28	STE	l	102	18/20	0.84	0.15	37,50,81,85	0
27	LHG	a	414	42/49	0.84	0.25	45,87,109,127	0
23	BCR	h	701	40/40	0.84	0.15	37,56,75,86	0
28	STE	c	521	20/20	0.84	0.18	39,57,79,84	0
28	STE	h	703	14/20	0.84	0.21	43,66,89,90	0
28	STE	b	724	16/20	0.85	0.16	52,66,82,85	0
26	SQD	A	412	39/54	0.85	0.16	38,64,94,99	0
22	CLA	c	513	65/65	0.85	0.15	40,59,95,110	0
33	LMG	a	419	55/55	0.85	0.15	35,62,103,143	0
28	STE	b	727	20/20	0.85	0.15	43,67,93,95	0
22	CLA	c	514	65/65	0.86	0.18	43,71,109,112	0
23	BCR	k	101	40/40	0.86	0.13	36,63,79,87	0
28	STE	A	411	16/20	0.86	0.20	34,47,74,75	0
22	CLA	C	514	65/65	0.86	0.18	40,65,98,108	0
28	STE	b	722	20/20	0.86	0.22	35,54,74,77	0
28	STE	B	725	18/20	0.86	0.14	37,54,75,81	0
28	STE	X	101	20/20	0.87	0.18	33,49,69,79	0
33	LMG	b	723	55/55	0.87	0.26	45,73,94,109	0
28	STE	j	101	12/20	0.87	0.11	41,57,67,69	0
26	SQD	B	723	54/54	0.88	0.15	37,60,94,106	0
22	CLA	H	102	65/65	0.88	0.14	30,60,95,107	0
26	SQD	f	101	41/54	0.88	0.20	55,88,106,108	0
28	STE	B	701	12/20	0.88	0.35	46,61,86,87	0
28	STE	d	409	17/20	0.88	0.15	42,55,64,68	0
28	STE	M	102	15/20	0.88	0.14	34,51,65,75	0
28	STE	C	523	12/20	0.88	0.11	33,46,58,69	0
23	BCR	k	102	40/40	0.89	0.17	40,54,68,71	0
28	STE	T	702	15/20	0.89	0.16	39,54,81,81	0
33	LMG	C	516	48/55	0.89	0.15	38,59,78,100	0
33	LMG	C	520	48/55	0.89	0.14	43,70,88,94	0
23	BCR	d	403	40/40	0.89	0.13	36,54,93,108	0
28	STE	Z	101	8/20	0.89	0.15	39,57,68,68	0
23	BCR	D	404	40/40	0.89	0.13	26,42,91,98	0
33	LMG	c	520	37/55	0.89	0.15	44,70,84,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
23	BCR	Y	101	40/40	0.89	0.12	40,54,75,77	0
33	LMG	c	523	49/55	0.89	0.12	34,57,82,100	0
22	CLA	C	503	65/65	0.90	0.14	30,44,57,62	0
28	STE	E	102	7/20	0.90	0.20	49,62,76,76	0
22	CLA	b	715	65/65	0.90	0.14	27,42,60,65	0
22	CLA	d	402	65/65	0.90	0.15	28,49,81,95	0
28	STE	C	521	12/20	0.90	0.11	34,52,63,66	0
28	STE	J	101	12/20	0.90	0.10	48,67,71,71	0
22	CLA	c	503	65/65	0.90	0.15	27,45,68,75	0
22	CLA	c	509	64/65	0.90	0.14	31,47,87,108	0
28	STE	m	101	12/20	0.90	0.14	42,57,70,79	0
28	STE	t	702	14/20	0.90	0.11	34,53,65,67	0
26	SQD	b	720	49/54	0.91	0.12	37,59,91,109	0
33	LMG	D	408	51/55	0.91	0.17	34,55,84,90	0
22	CLA	b	716	60/65	0.91	0.14	29,46,92,95	0
33	LMG	M	101	51/55	0.91	0.12	30,48,73,79	0
22	CLA	c	511	65/65	0.91	0.16	34,49,63,75	0
23	BCR	c	515	40/40	0.91	0.17	45,61,76,80	0
22	CLA	D	403	65/65	0.91	0.13	24,42,107,122	0
33	LMG	B	721	28/55	0.91	0.13	33,50,62,68	0
28	STE	A	414	5/20	0.91	0.14	41,57,71,71	0
23	BCR	K	101	40/40	0.92	0.13	42,57,71,79	0
22	CLA	a	406	65/65	0.92	0.12	18,38,76,81	0
22	CLA	C	507	65/65	0.92	0.13	26,44,83,94	0
22	CLA	b	702	65/65	0.92	0.15	28,42,63,66	0
33	LMG	b	721	51/55	0.92	0.11	34,52,76,93	0
29	DGD	C	518	62/66	0.92	0.12	35,52,99,119	0
23	BCR	B	719	40/40	0.92	0.10	22,42,58,64	0
22	CLA	C	508	65/65	0.92	0.13	25,42,57,63	0
22	CLA	c	512	65/65	0.92	0.13	38,55,71,74	0
23	BCR	C	515	40/40	0.93	0.10	25,39,51,59	0
22	CLA	a	404	65/65	0.93	0.15	27,42,102,112	0
22	CLA	c	504	65/65	0.93	0.15	23,44,56,64	0
22	CLA	c	506	65/65	0.93	0.16	25,41,69,76	0
22	CLA	c	507	65/65	0.93	0.12	30,48,97,104	0
23	BCR	b	719	40/40	0.93	0.10	33,48,65,76	0
29	DGD	C	519	62/66	0.93	0.11	32,49,69,84	0
29	DGD	c	518	62/66	0.93	0.12	32,53,87,94	0
29	DGD	h	702	62/66	0.93	0.10	32,48,61,73	0
22	CLA	c	508	65/65	0.93	0.13	26,43,60,64	0
22	CLA	C	512	65/65	0.93	0.12	30,52,67,74	0
22	CLA	C	504	65/65	0.93	0.13	30,45,56,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
22	CLA	C	506	65/65	0.93	0.16	23,41,69,80	0
22	CLA	b	704	65/65	0.93	0.13	21,37,84,97	0
22	CLA	b	709	65/65	0.93	0.13	27,47,68,80	0
22	CLA	B	716	60/65	0.93	0.14	23,39,87,103	0
23	BCR	B	718	40/40	0.93	0.09	22,39,53,54	0
22	CLA	B	715	65/65	0.93	0.10	24,36,67,75	0
26	SQD	D	409	36/54	0.93	0.16	48,76,93,99	0
26	SQD	a	413	54/54	0.93	0.14	41,64,90,97	0
23	BCR	C	501	40/40	0.93	0.17	38,56,70,74	0
28	STE	M	103	10/20	0.94	0.10	34,47,51,58	0
23	BCR	c	516	40/40	0.94	0.12	30,43,58,70	0
22	CLA	b	714	65/65	0.94	0.13	22,40,73,86	0
22	CLA	B	702	65/65	0.94	0.14	25,36,56,64	0
22	CLA	B	706	65/65	0.94	0.10	24,37,81,90	0
29	DGD	H	103	62/66	0.94	0.10	28,46,60,64	0
23	BCR	B	717	40/40	0.94	0.12	24,41,58,62	0
28	STE	B	724	12/20	0.94	0.07	40,51,66,66	0
22	CLA	C	509	65/65	0.94	0.12	27,44,105,117	0
25	PL9	D	405	55/55	0.94	0.10	23,33,48,54	0
22	CLA	C	510	65/65	0.94	0.17	27,45,63,74	0
26	SQD	A	409	52/54	0.94	0.15	27,61,89,95	0
22	CLA	c	505	60/65	0.94	0.11	34,47,77,84	0
22	CLA	C	511	65/65	0.94	0.13	32,48,65,80	0
22	CLA	B	712	65/65	0.94	0.14	20,31,45,54	0
22	CLA	C	505	59/65	0.94	0.12	28,43,75,85	0
22	CLA	b	706	65/65	0.94	0.11	23,39,75,80	0
22	CLA	c	510	65/65	0.94	0.17	33,48,63,69	0
22	CLA	b	708	65/65	0.94	0.14	28,44,64,66	0
22	CLA	A	403	65/65	0.94	0.14	21,35,88,102	0
33	LMG	d	408	44/55	0.94	0.11	34,53,82,87	0
34	PHO	a	405	64/64	0.94	0.13	18,32,41,46	0
22	CLA	D	402	65/65	0.95	0.09	15,27,51,56	0
23	BCR	T	701	40/40	0.95	0.09	28,41,57,60	0
22	CLA	B	713	65/65	0.95	0.13	19,32,72,74	0
29	DGD	C	517	62/66	0.95	0.12	23,42,75,85	0
23	BCR	a	407	40/40	0.95	0.08	23,34,50,54	0
23	BCR	b	717	40/40	0.95	0.10	27,41,52,56	0
23	BCR	b	718	40/40	0.95	0.09	27,39,52,55	0
27	LHG	B	722	49/49	0.95	0.13	29,46,70,77	0
29	DGD	c	519	62/66	0.95	0.13	28,55,83,95	0
22	CLA	b	710	65/65	0.95	0.18	24,38,49,61	0
22	CLA	b	712	65/65	0.95	0.16	23,36,47,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
22	CLA	b	713	65/65	0.95	0.14	18,36,67,82	0
22	CLA	B	714	65/65	0.95	0.16	19,37,78,96	0
22	CLA	A	404	54/65	0.95	0.10	17,31,61,68	0
23	BCR	A	405	40/40	0.95	0.09	24,36,47,53	0
22	CLA	B	707	65/65	0.95	0.10	17,35,65,75	0
23	BCR	t	701	40/40	0.95	0.10	22,38,54,56	0
22	CLA	B	709	65/65	0.95	0.12	23,38,52,56	0
22	CLA	B	710	65/65	0.95	0.13	17,33,45,48	0
22	CLA	B	711	65/65	0.95	0.14	18,30,50,56	0
25	PL9	d	404	55/55	0.95	0.10	21,34,43,47	0
22	CLA	b	705	65/65	0.95	0.12	19,35,49,61	0
22	CLA	B	704	65/65	0.95	0.11	20,32,76,78	0
34	PHO	D	406	64/64	0.95	0.10	16,28,37,42	0
22	CLA	b	707	65/65	0.95	0.13	19,36,68,75	0
29	DGD	c	517	62/66	0.96	0.10	24,42,78,87	0
22	CLA	c	502	65/65	0.96	0.12	27,41,52,56	0
22	CLA	a	403	65/65	0.96	0.10	19,31,42,58	0
22	CLA	d	401	65/65	0.96	0.11	20,36,54,62	0
32	BCT	a	410	4/4	0.96	0.18	30,32,44,53	0
22	CLA	B	705	65/65	0.96	0.13	15,31,45,52	0
27	LHG	D	411	47/49	0.96	0.11	24,49,85,96	0
27	LHG	L	101	49/49	0.96	0.10	31,41,55,65	0
27	LHG	a	412	49/49	0.96	0.13	30,48,76,83	0
22	CLA	B	703	65/65	0.96	0.14	20,33,57,65	0
27	LHG	d	406	49/49	0.96	0.10	26,45,56,62	0
27	LHG	d	407	39/49	0.96	0.10	33,49,68,71	0
27	LHG	l	101	49/49	0.96	0.11	31,44,53,61	0
22	CLA	D	401	65/65	0.96	0.11	14,29,57,68	0
22	CLA	b	711	65/65	0.96	0.13	22,34,59,64	0
22	CLA	A	402	65/65	0.96	0.09	15,29,44,57	0
22	CLA	b	703	65/65	0.96	0.13	24,37,68,78	0
22	CLA	B	708	65/65	0.96	0.11	19,36,54,59	0
22	CLA	C	502	65/65	0.96	0.11	22,36,50,61	0
34	PHO	D	407	64/64	0.96	0.13	23,32,44,51	0
22	CLA	a	401	65/65	0.96	0.11	21,32,41,47	0
34	PHO	d	405	64/64	0.96	0.10	28,39,48,63	0
35	HEC	E	103	43/43	0.96	0.12	34,51,70,74	0
35	HEC	e	101	43/43	0.96	0.12	42,59,80,88	0
35	HEC	V	201	43/43	0.97	0.12	17,33,43,50	0
27	LHG	D	410	49/49	0.97	0.09	21,40,54,65	0
35	HEC	v	201	43/43	0.97	0.12	26,37,51,52	0
24	CL	A	406	1/1	0.98	0.06	29,29,29,29	0

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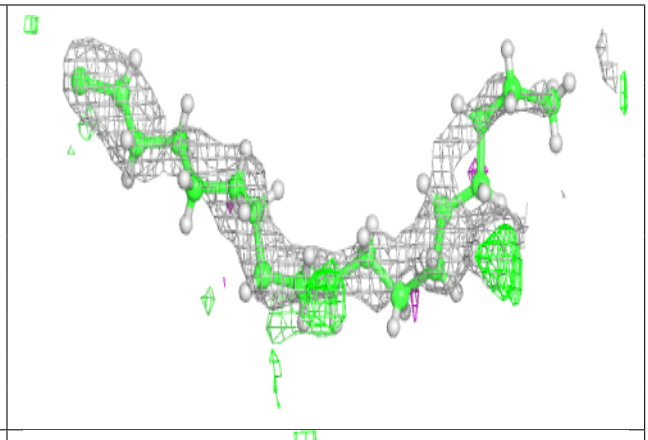
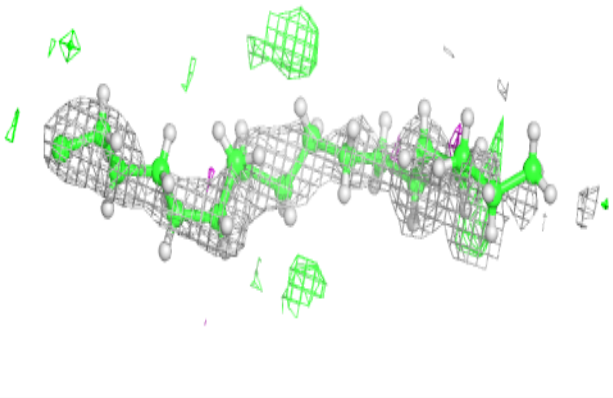
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	BCT	A	417	4/4	0.98	0.17	25,31,36,43	0
31	OEY	a	421[B]	11/11	0.99	0.10	19,25,29,33	11
24	CL	A	407	1/1	0.99	0.02	27,27,27,27	0
24	CL	a	408	1/1	0.99	0.03	28,28,28,28	0
24	CL	a	409	1/1	0.99	0.03	28,28,28,28	0
21	FE2	a	402	1/1	0.99	0.06	33,33,33,33	0
30	OEX	A	415[A]	10/10	0.99	0.12	32,35,38,40	10
30	OEX	a	420[A]	10/10	0.99	0.10	29,35,39,39	10
31	OEY	A	416[B]	11/11	0.99	0.11	14,24,29,31	11
21	FE2	A	401	1/1	1.00	0.09	29,29,29,29	0

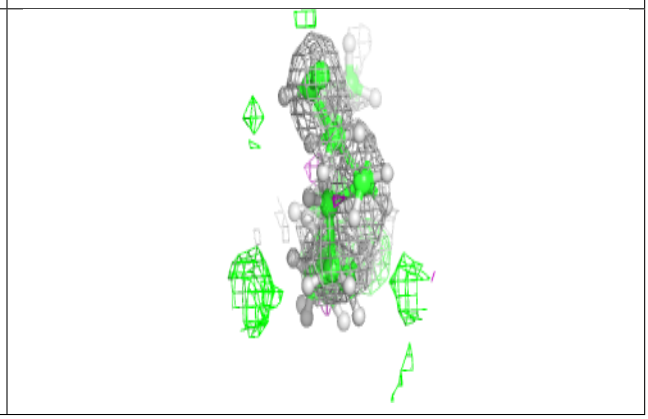
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around STE H 104:

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

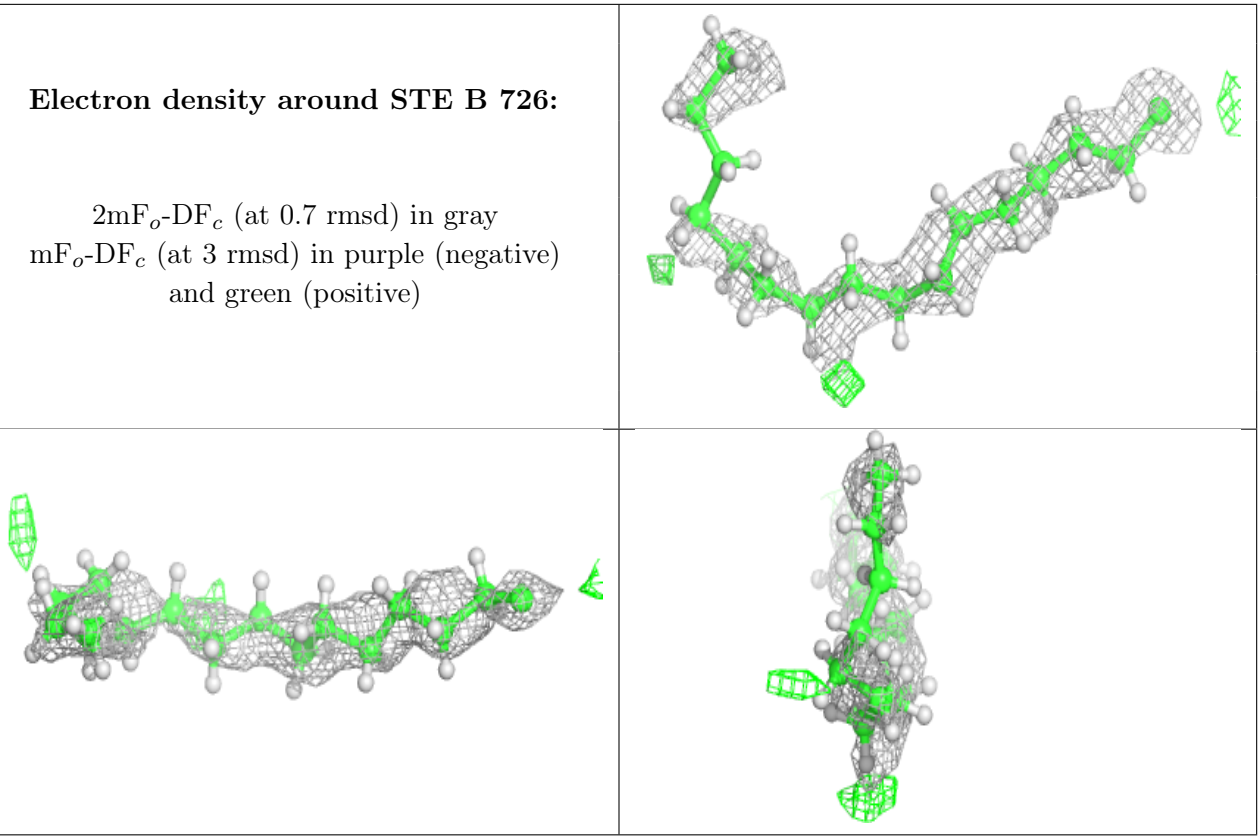






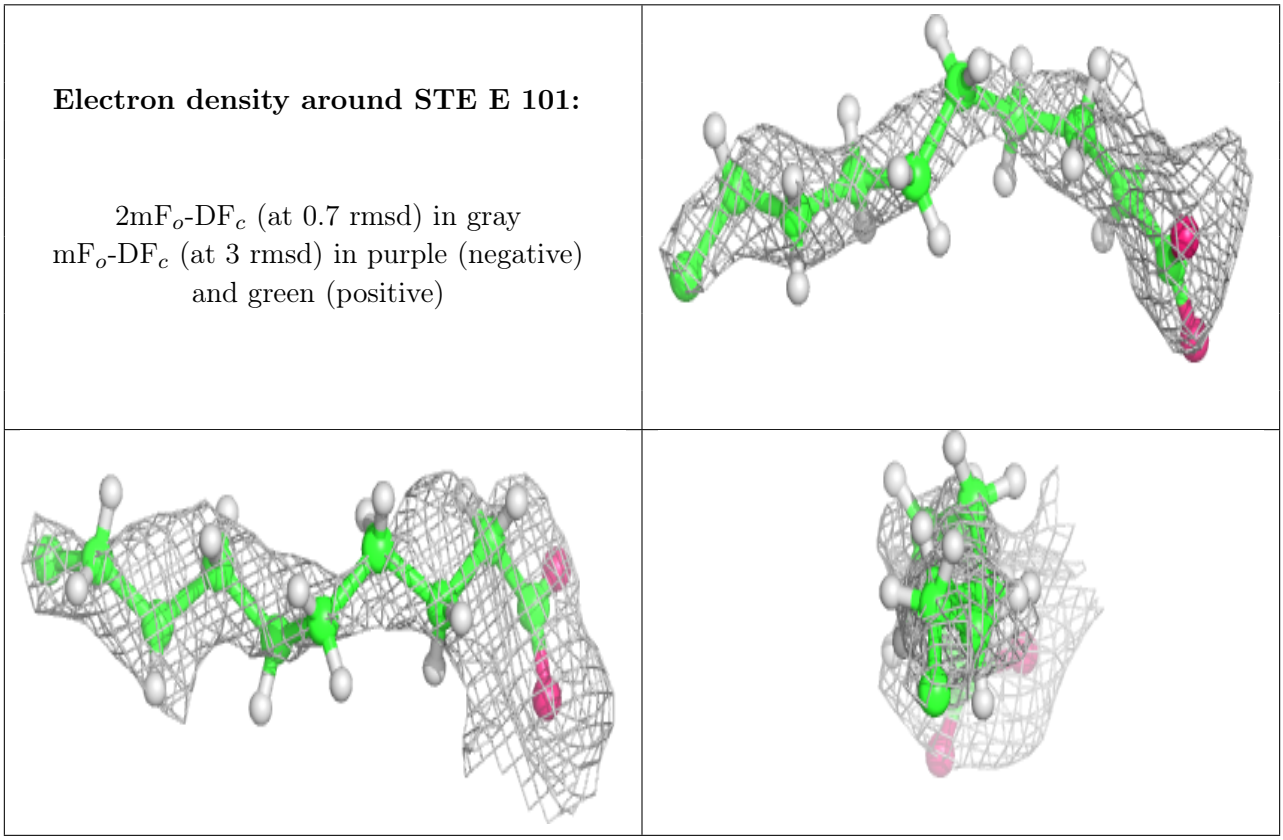
Electron density around STE B 726:

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



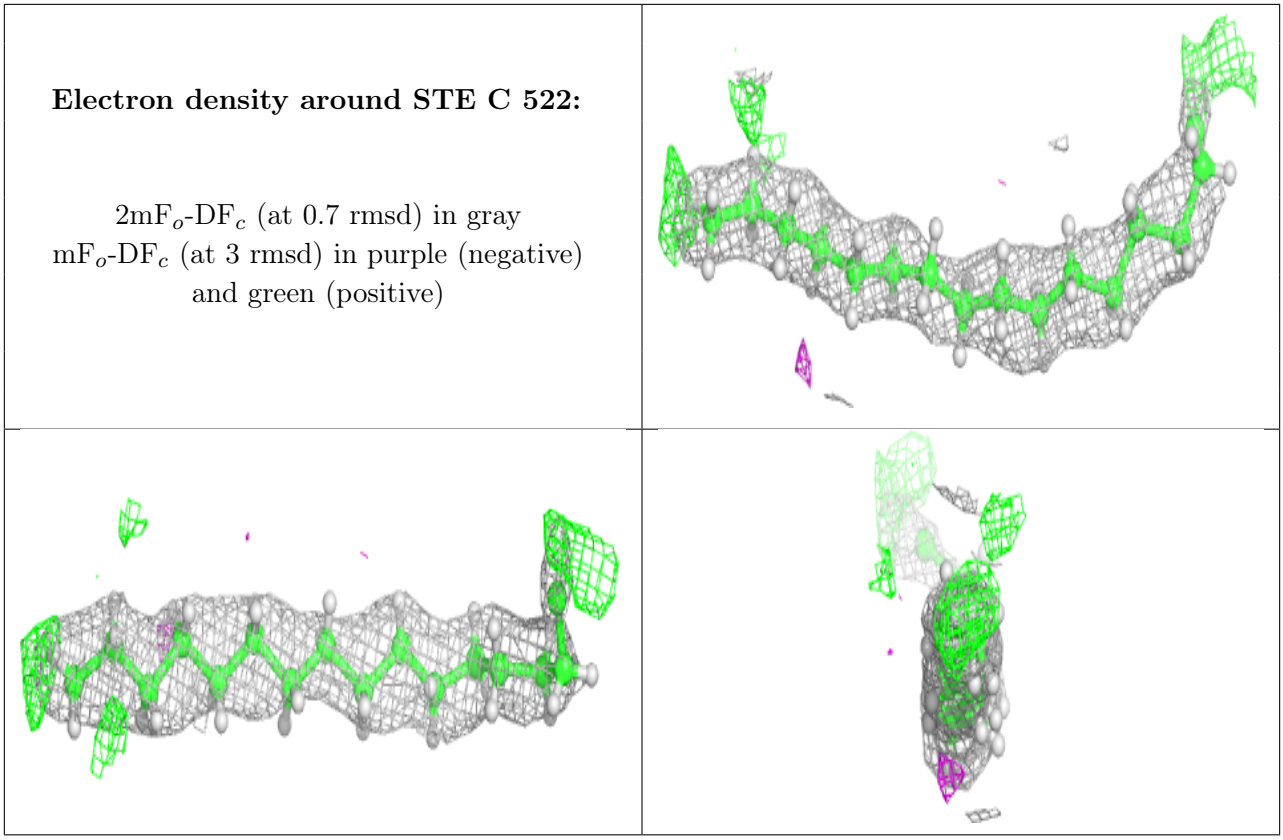
Electron density around STE E 101:

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



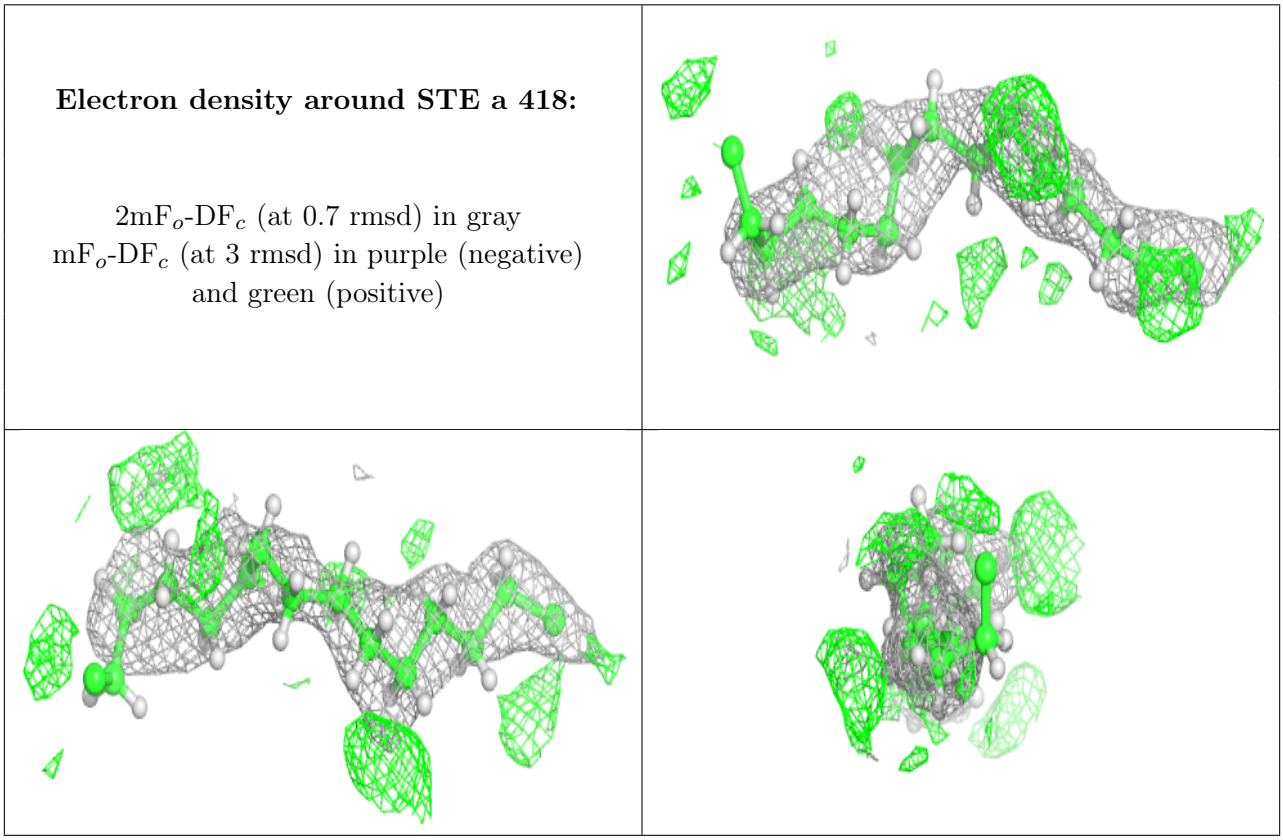
Electron density around STE C 522:

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



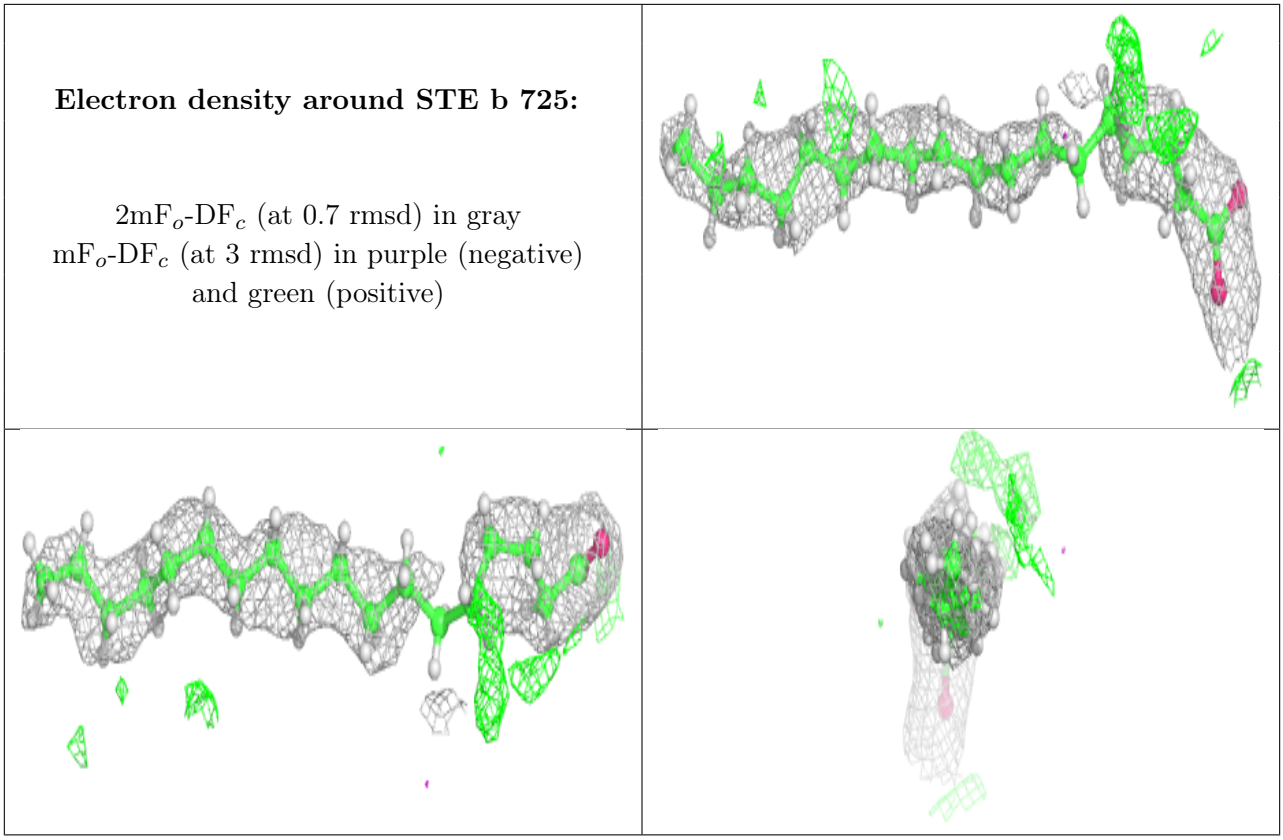
Electron density around STE a 418:

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



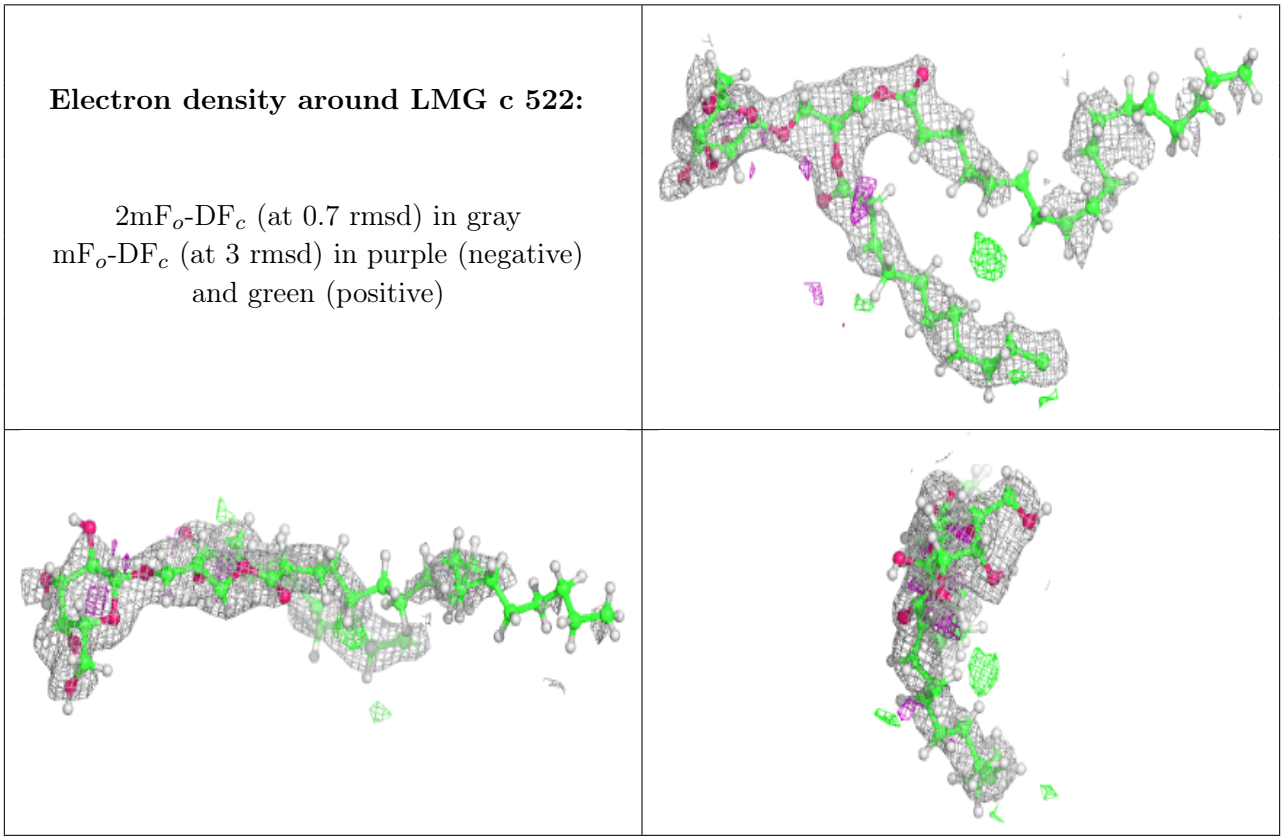
Electron density around STE b 725:

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



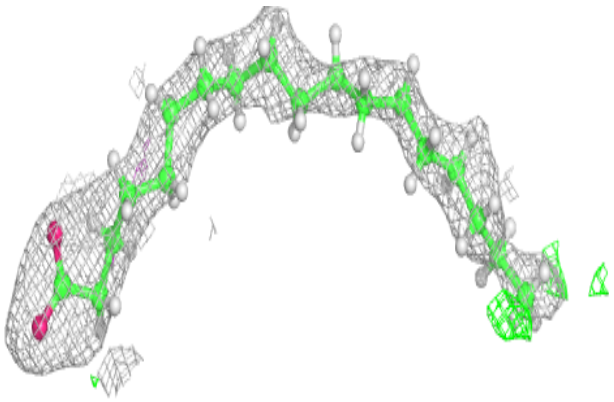
Electron density around LMG c 522:

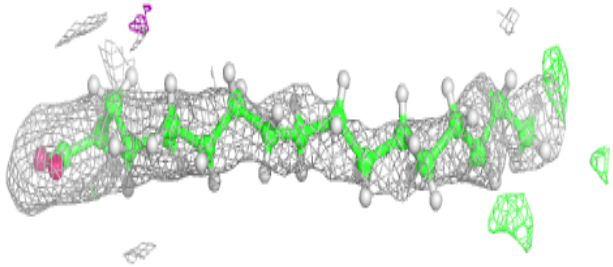
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

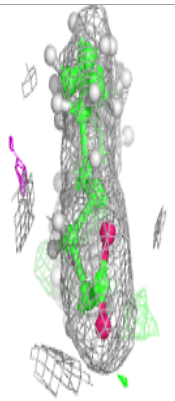


Electron density around STE x 101:

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

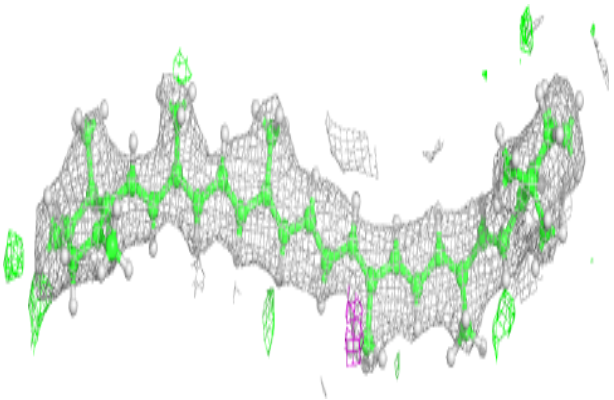


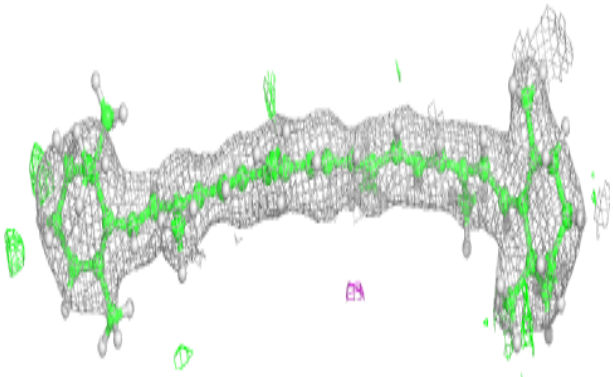


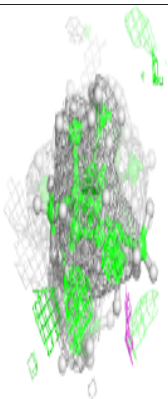


Electron density around BCR H 101:

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

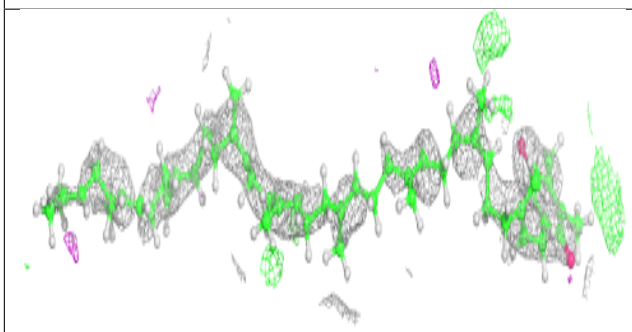


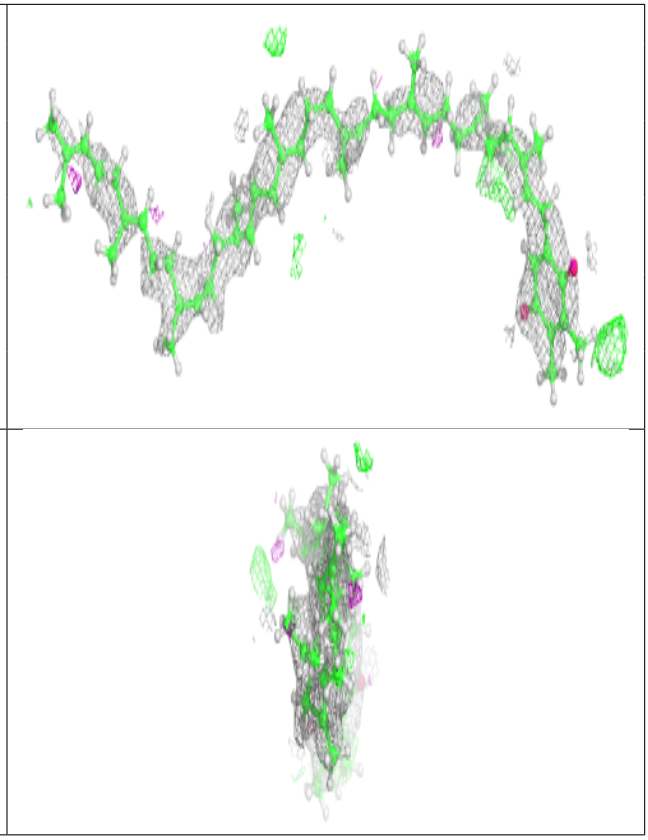




Electron density around PL9 A 408:

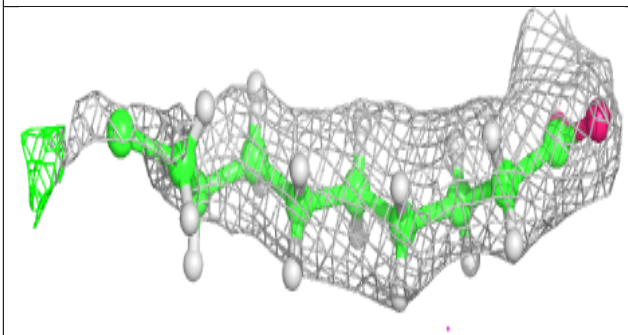
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

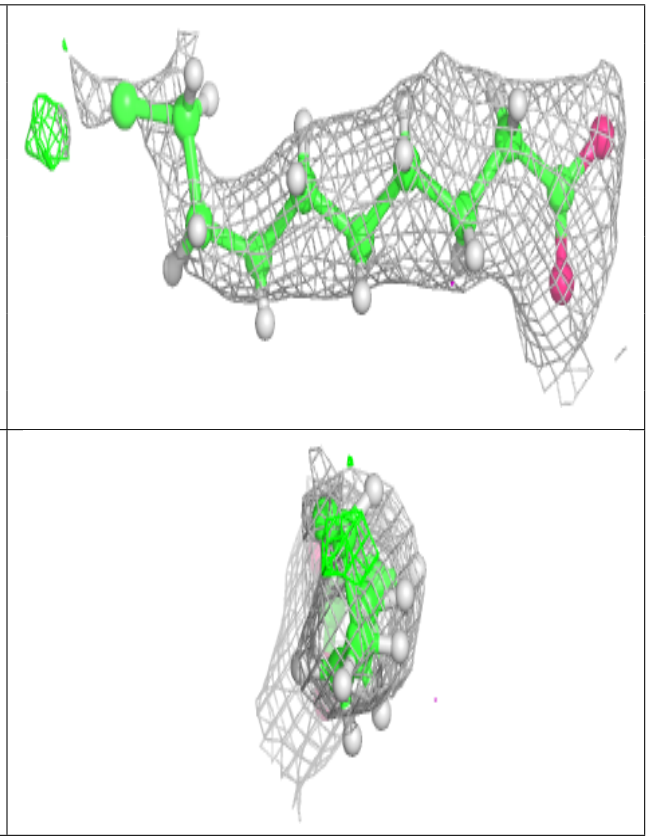




Electron density around STE c 501:

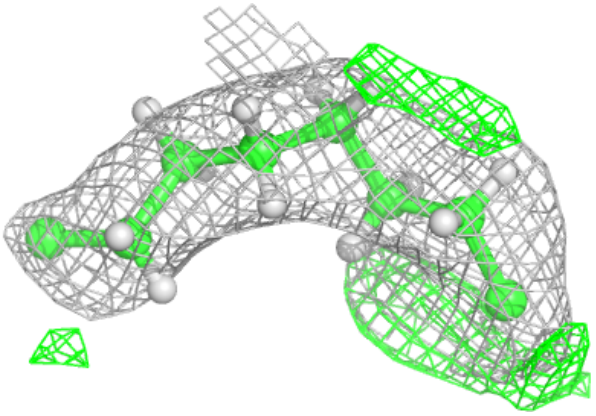
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

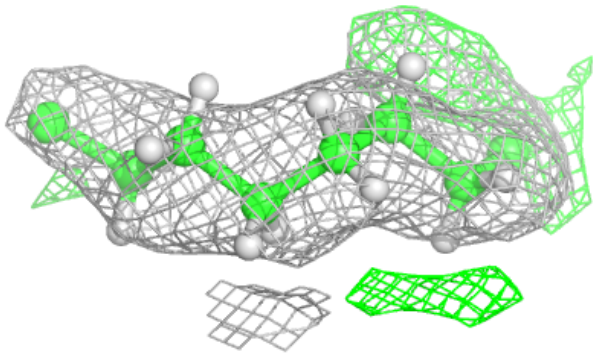


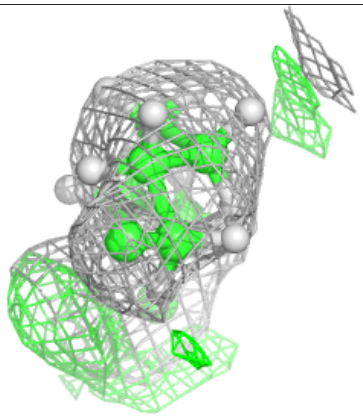


Electron density around STE H 105:

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

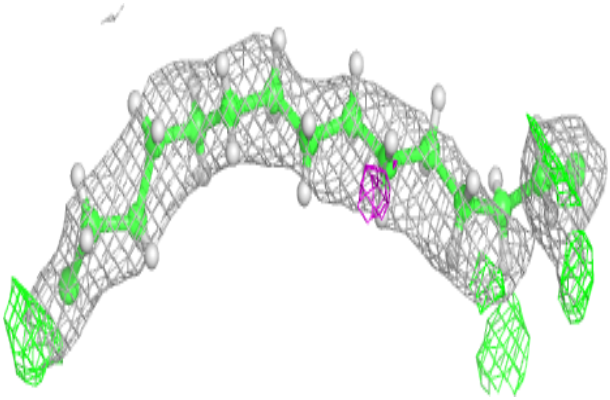


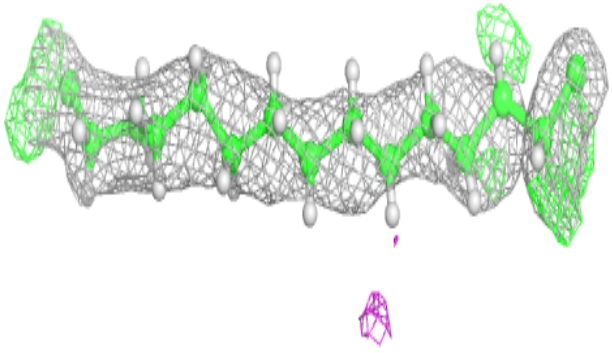


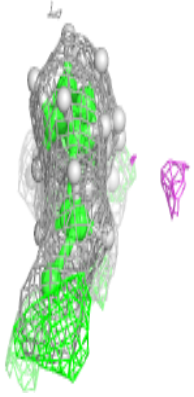


Electron density around STE I 101:

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

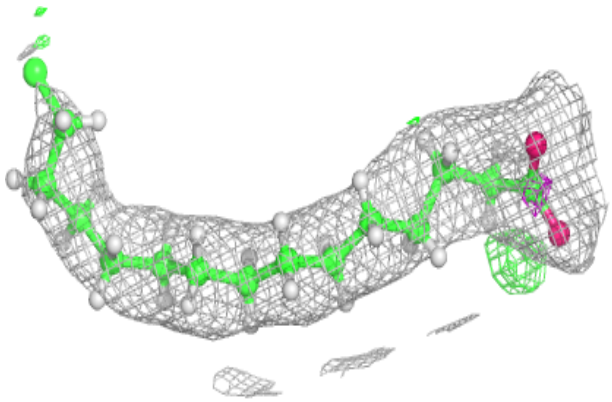


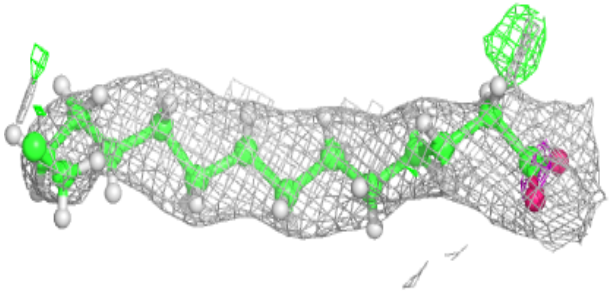


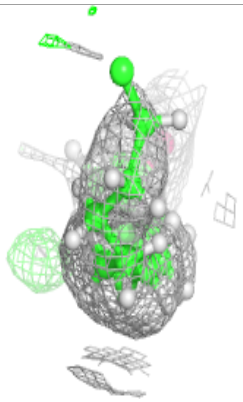


Electron density around STE B 720:

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

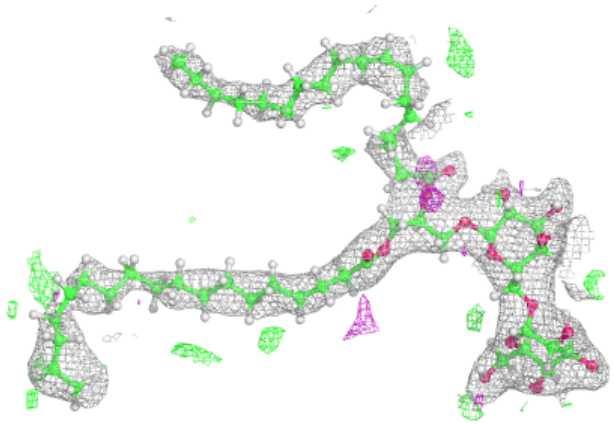


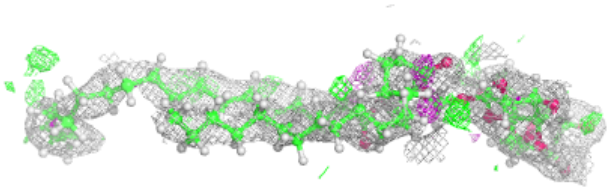


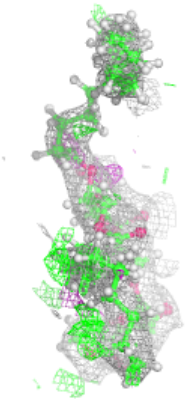


Electron density around DGD A 413:

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

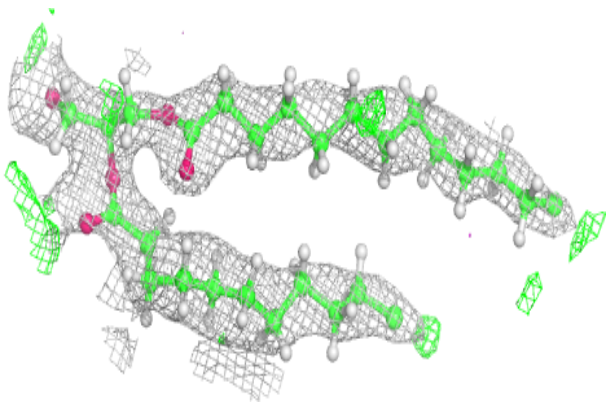


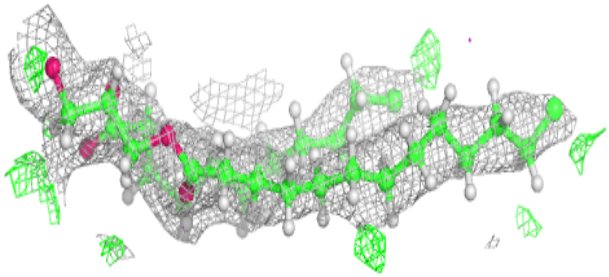


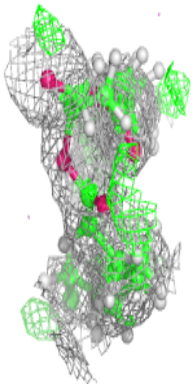


Electron density around LMG D 412:

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

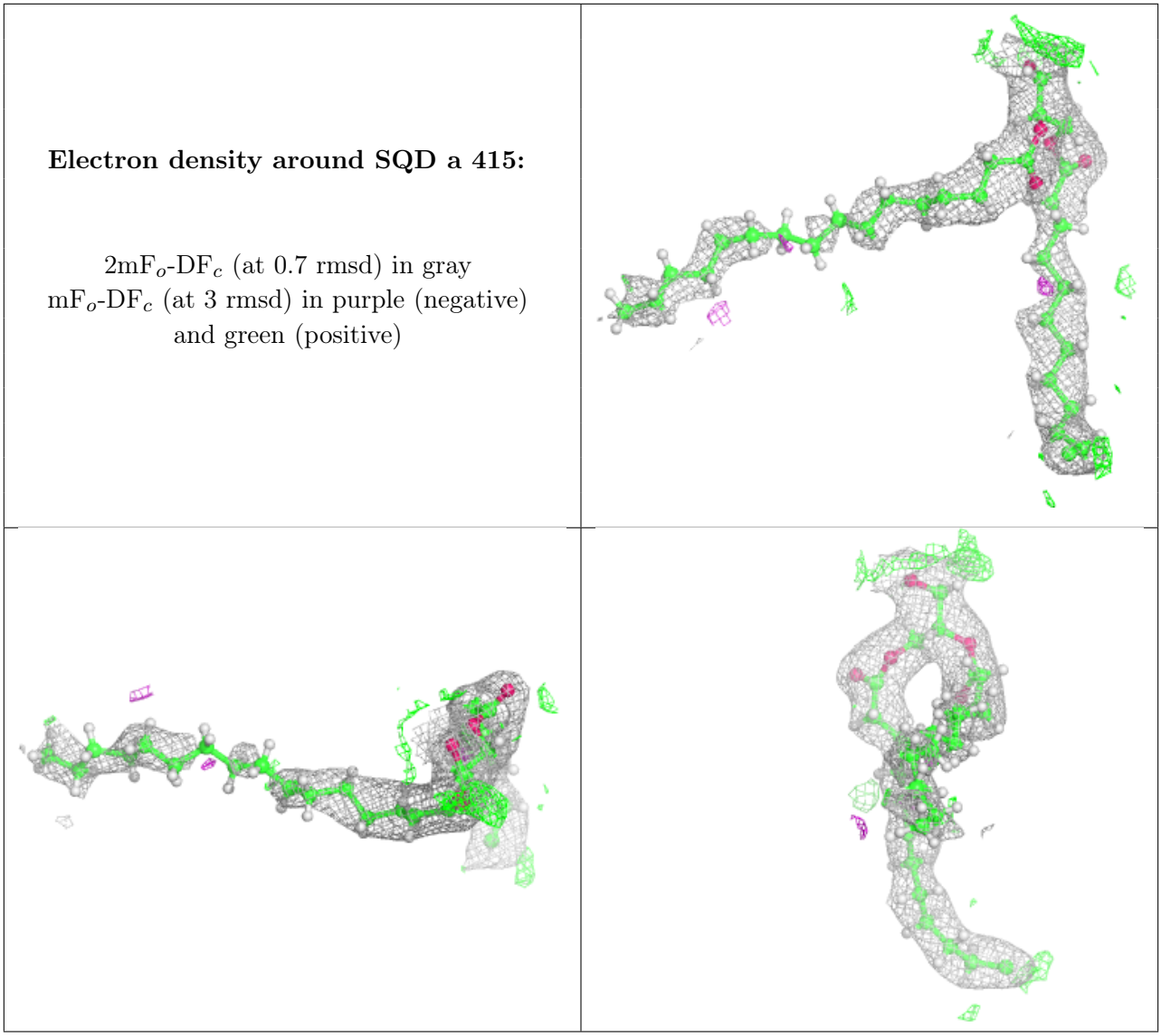






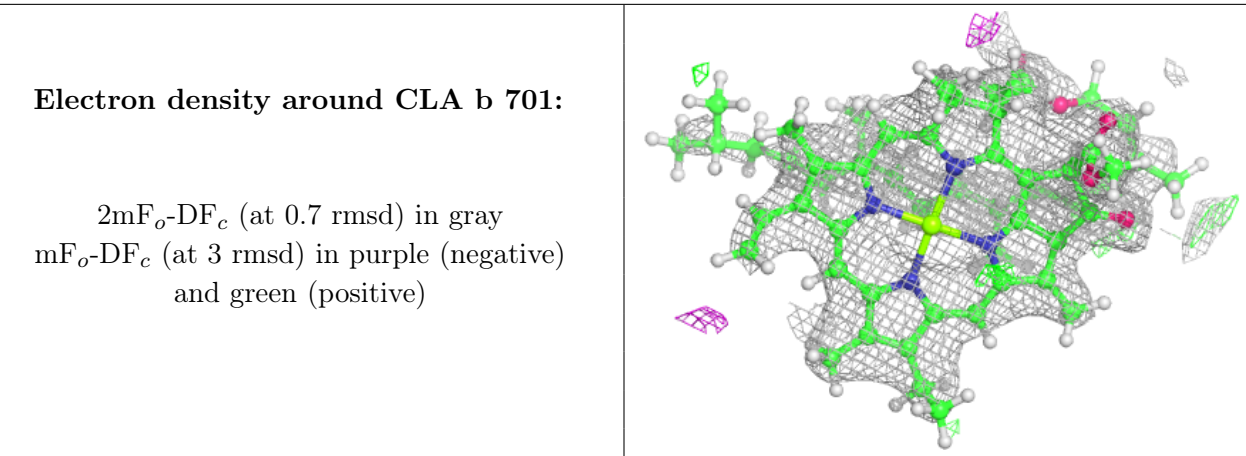
Electron density around SQD a 415:

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



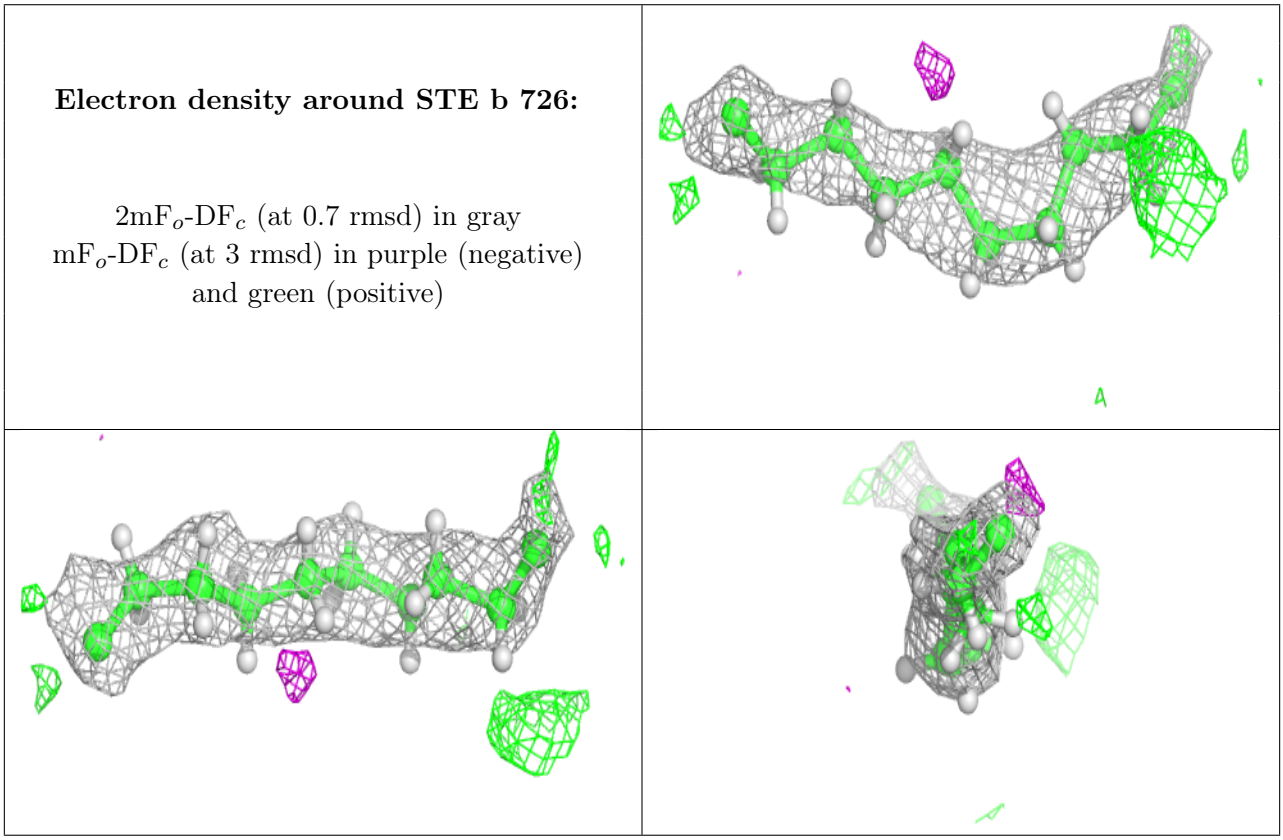
Electron density around CLA b 701:

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



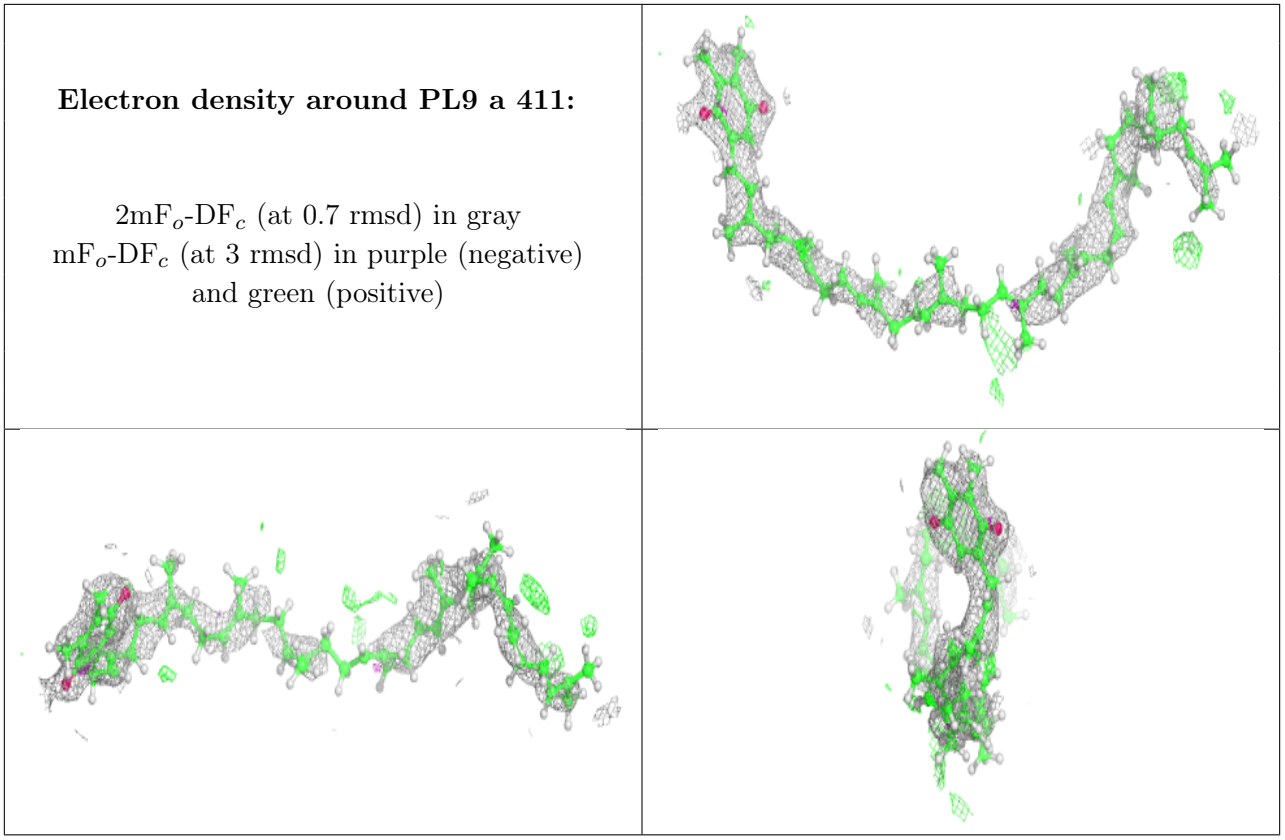
Electron density around STE b 726:

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



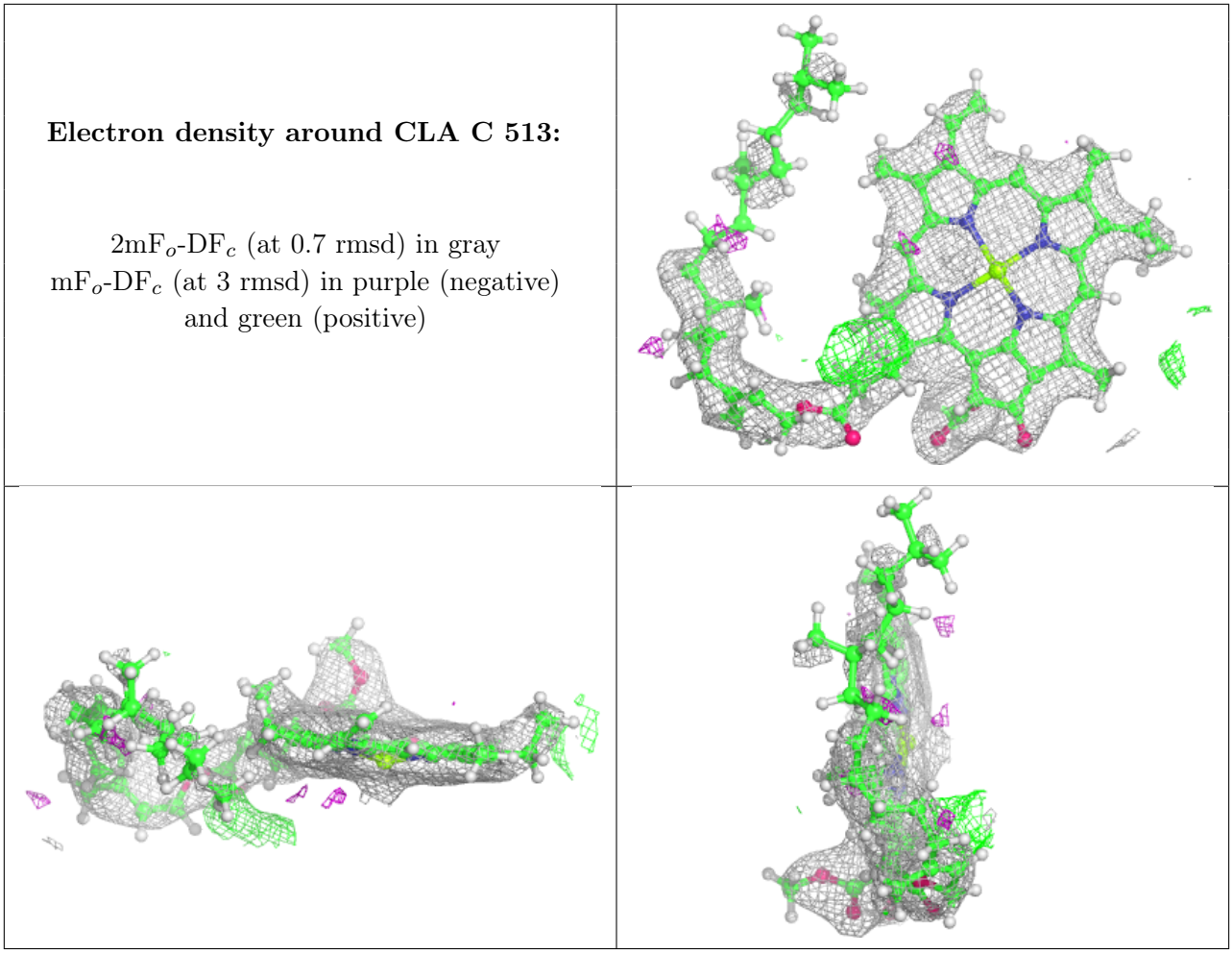
Electron density around PL9 a 411:

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



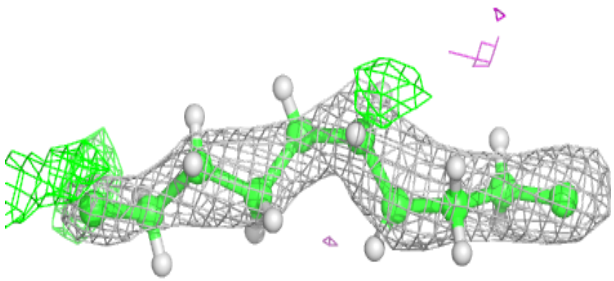
Electron density around CLA C 513:

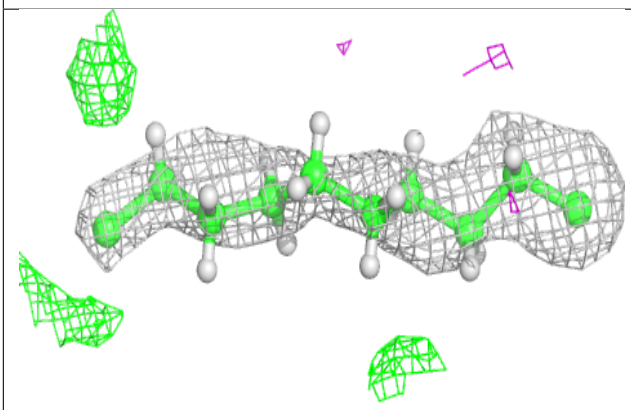
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

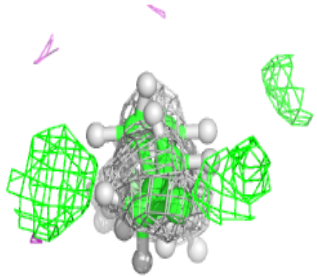


Electron density around STE a 416:

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

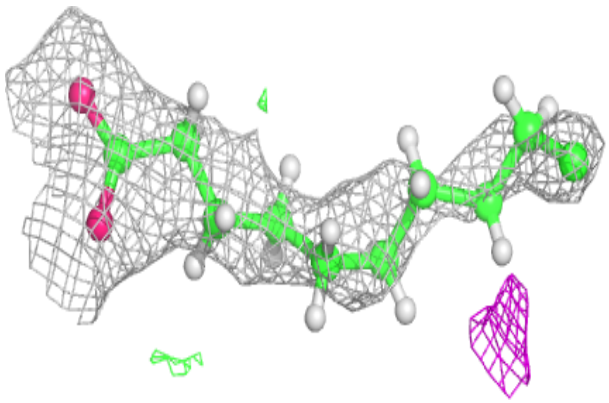


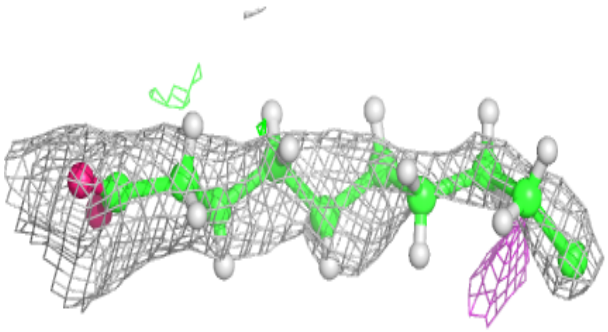


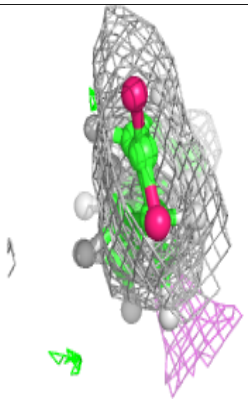


Electron density around STE a 417:

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

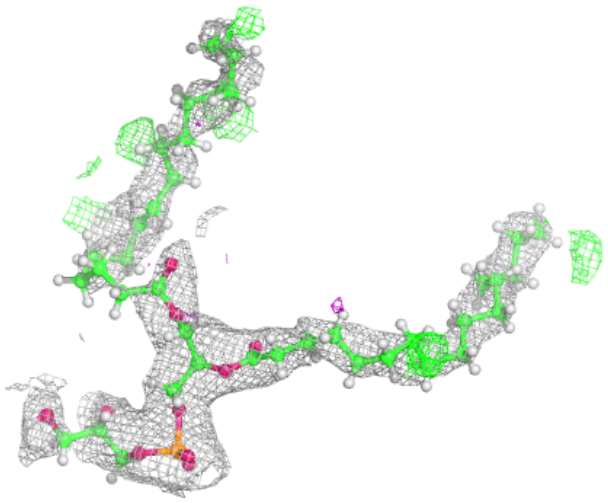


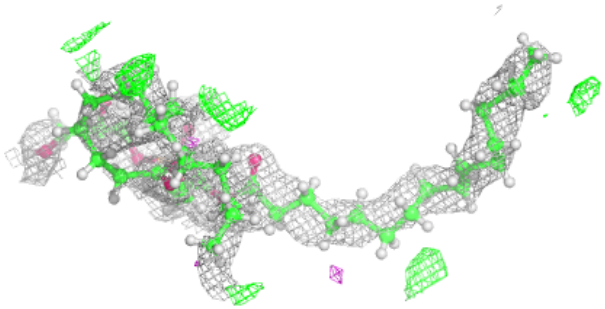


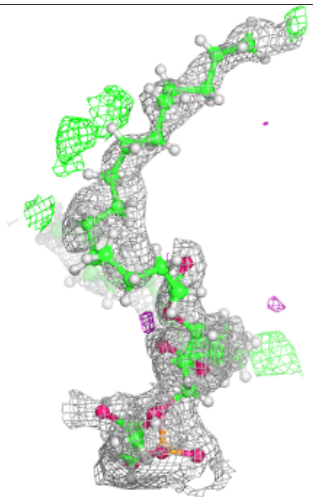


Electron density around LHG A 410:

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

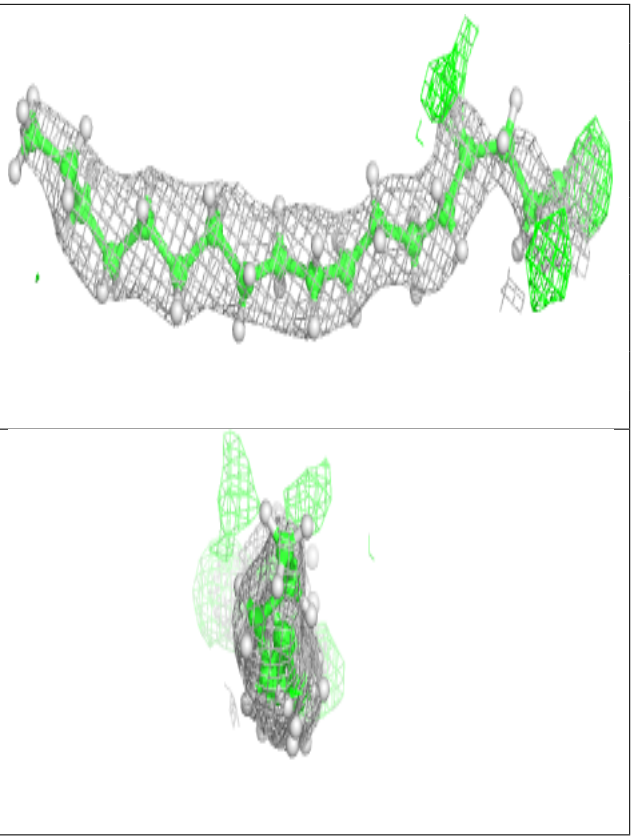






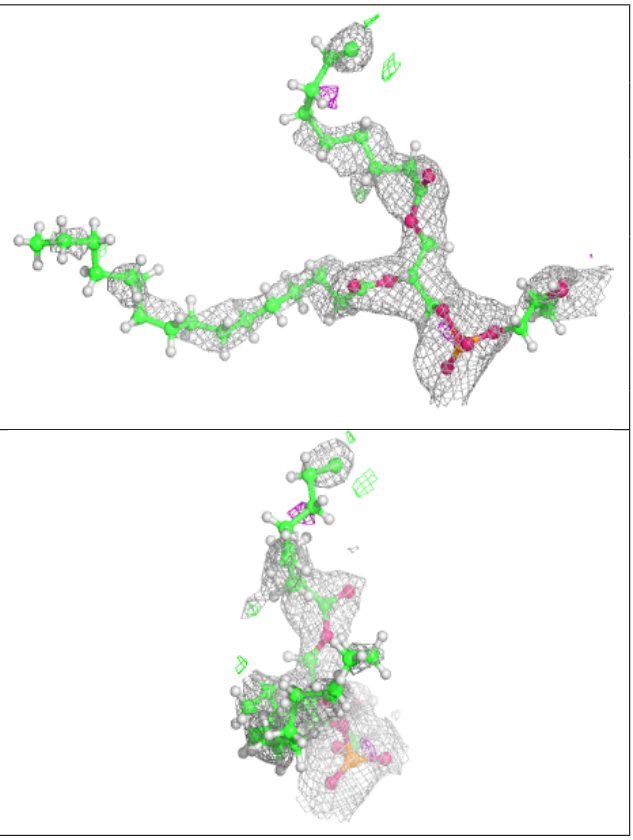
Electron density around STE l 102:

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



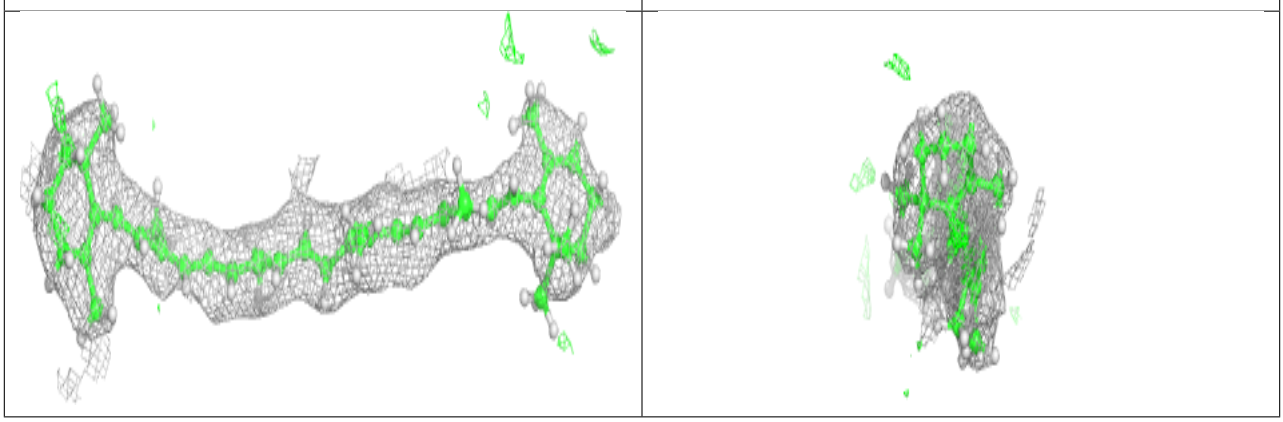
Electron density around LHG a 414:

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



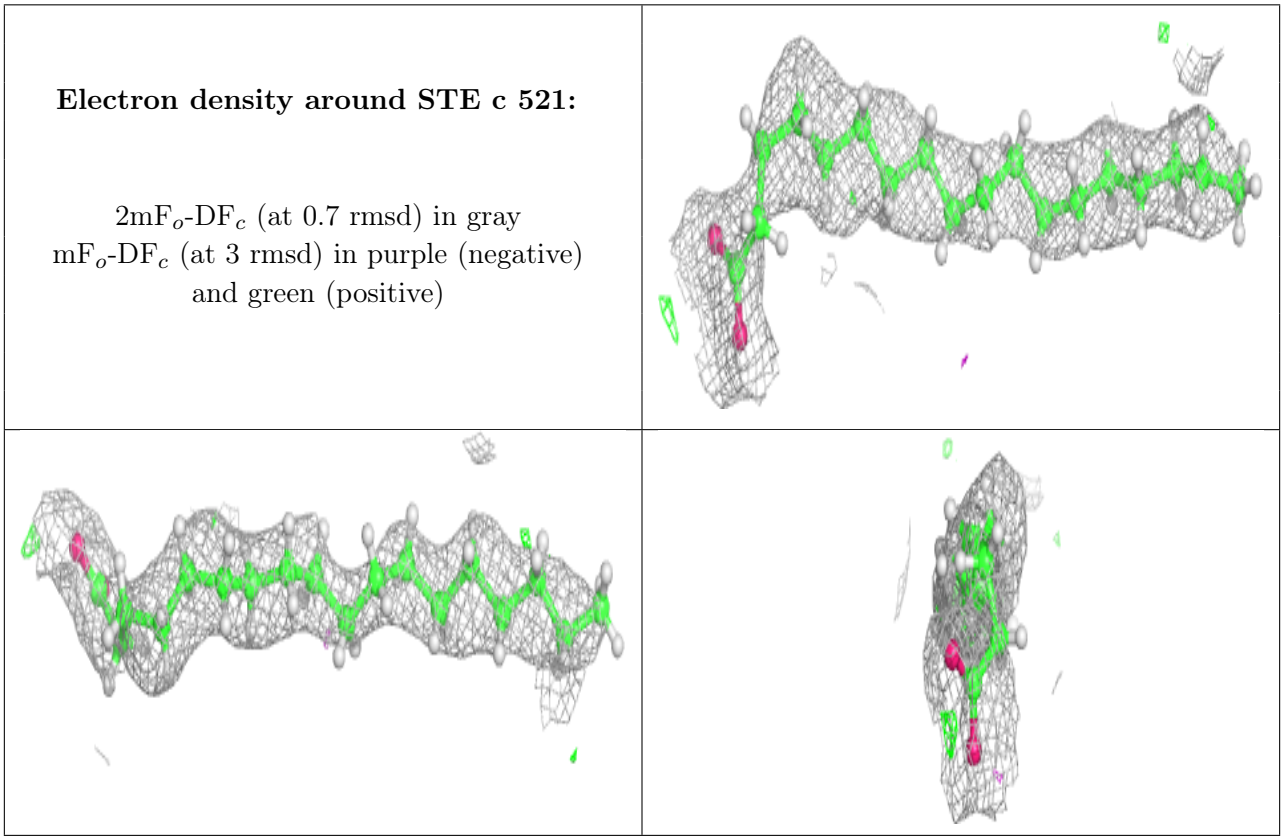
Electron density around BCR h 701:

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



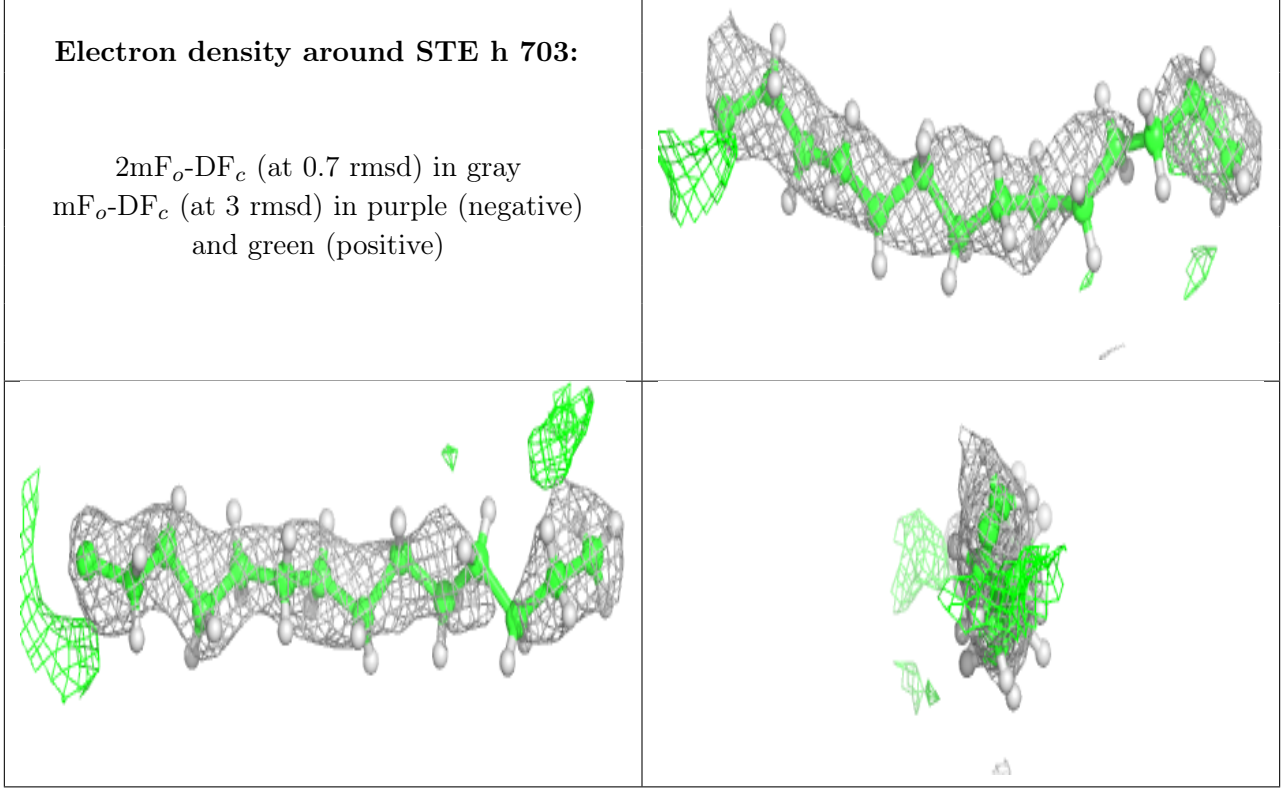
Electron density around STE c 521:

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



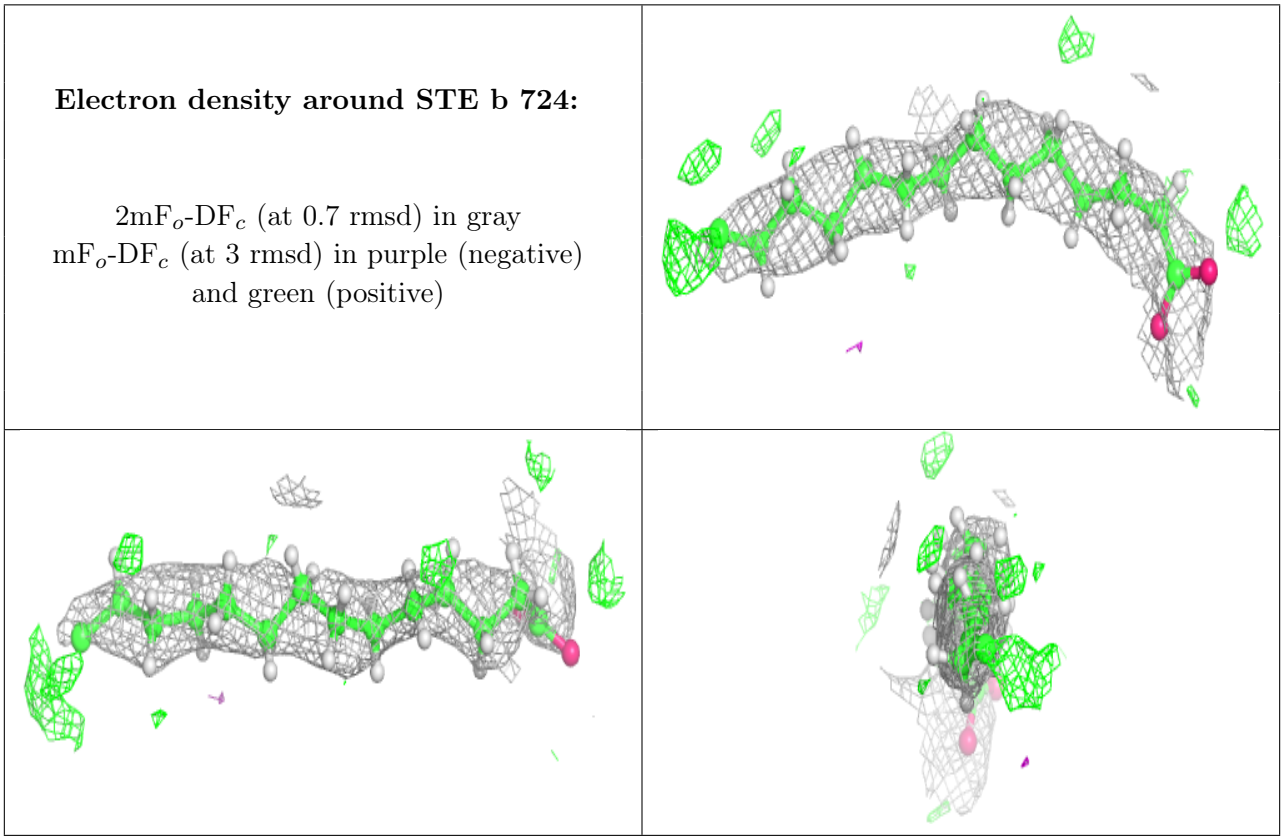
Electron density around STE h 703:

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



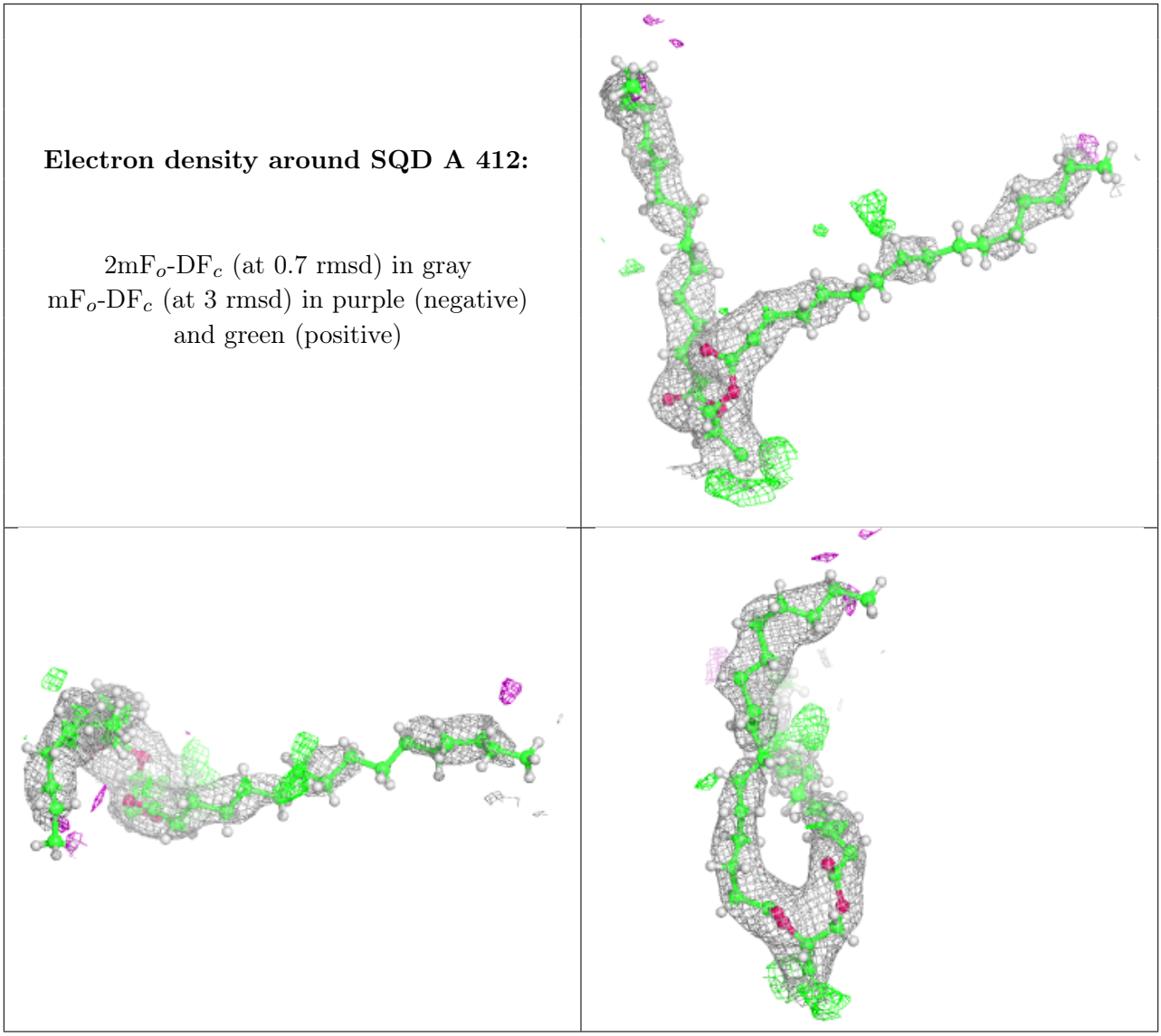
Electron density around STE b 724:

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



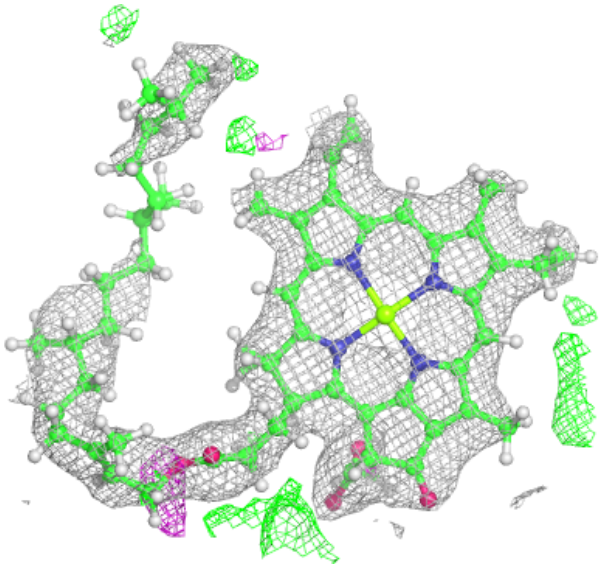
Electron density around SQD A 412:

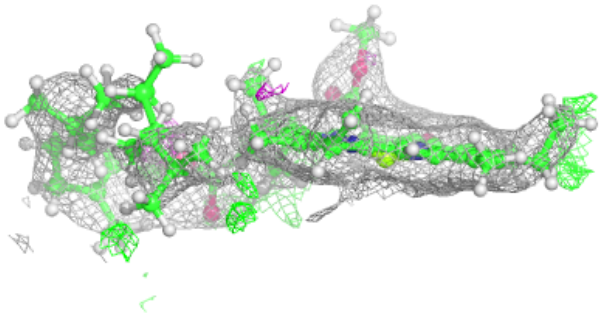
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

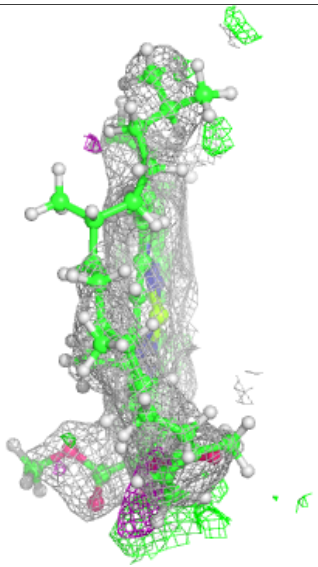


Electron density around CLA c 513:

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

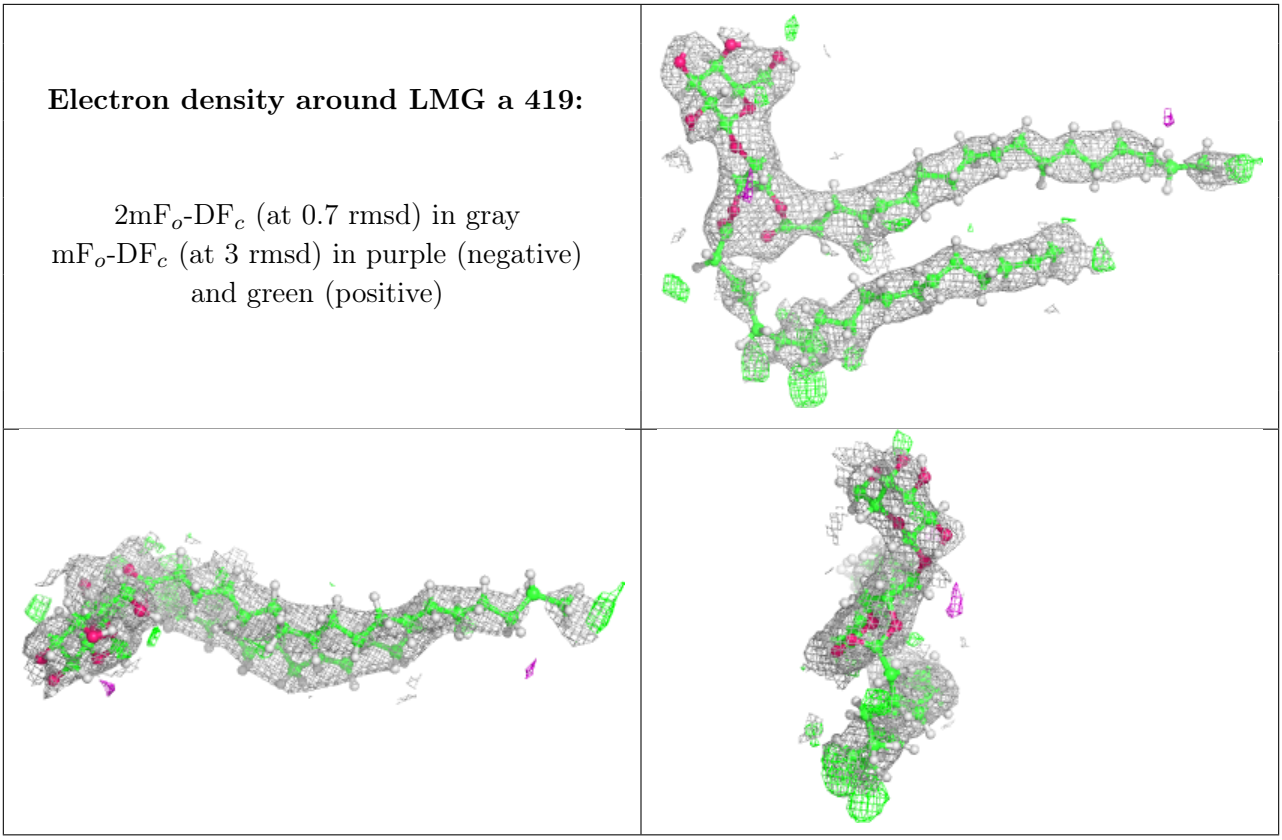






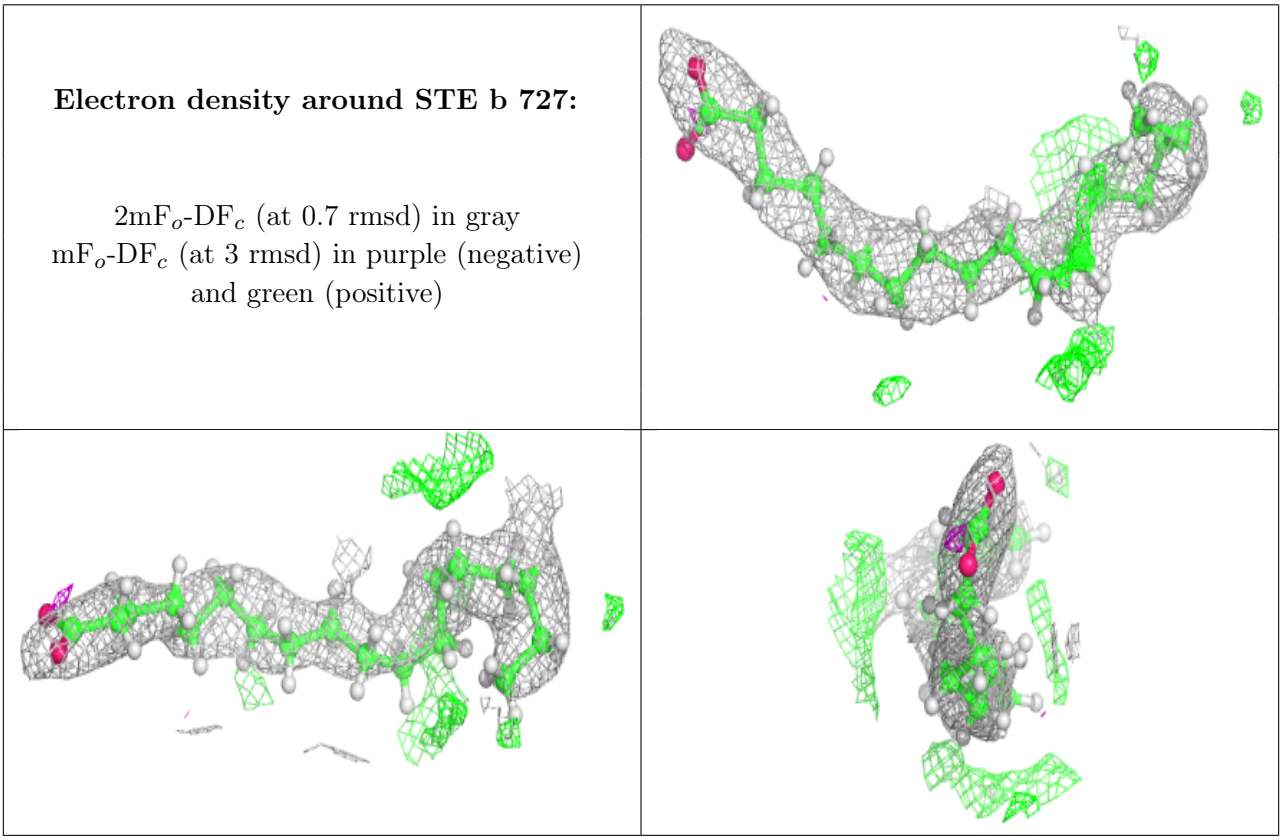
Electron density around LMG a 419:

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



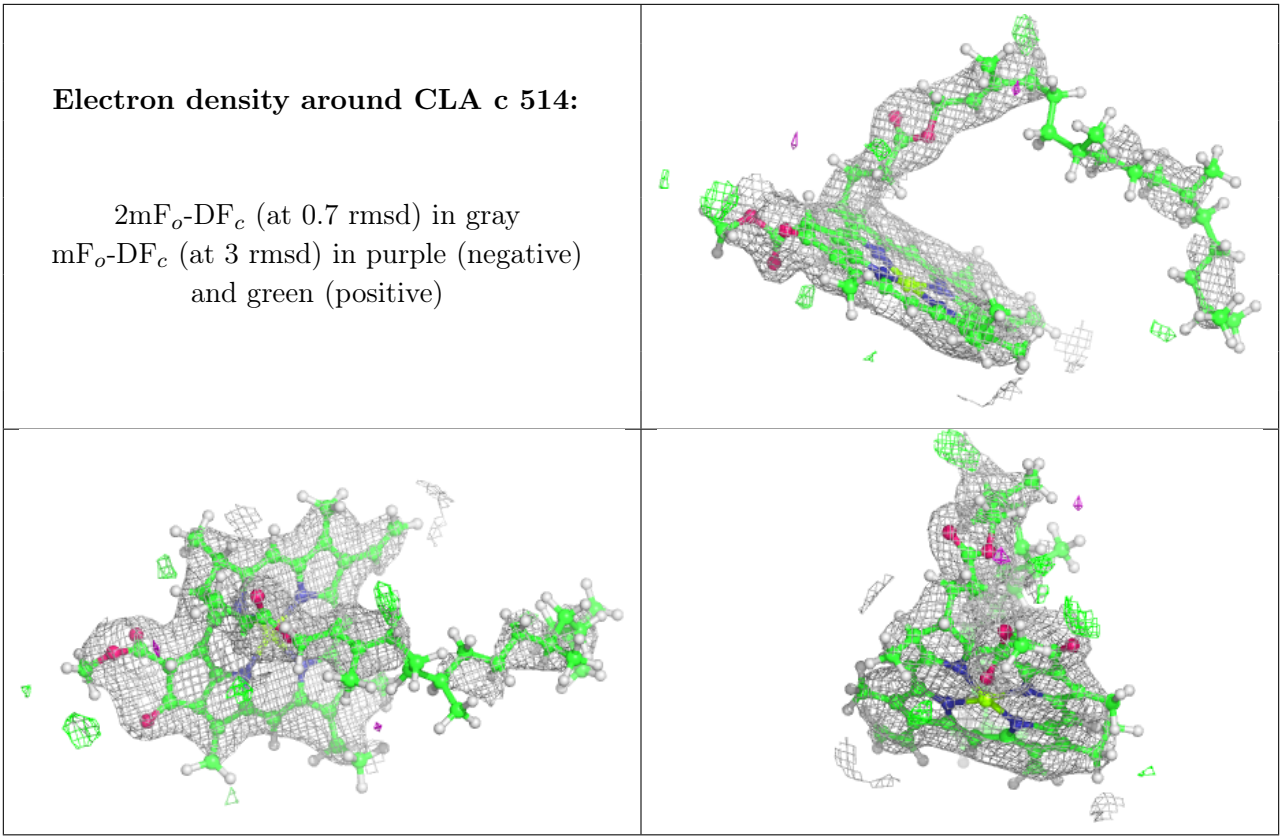
Electron density around STE b 727:

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



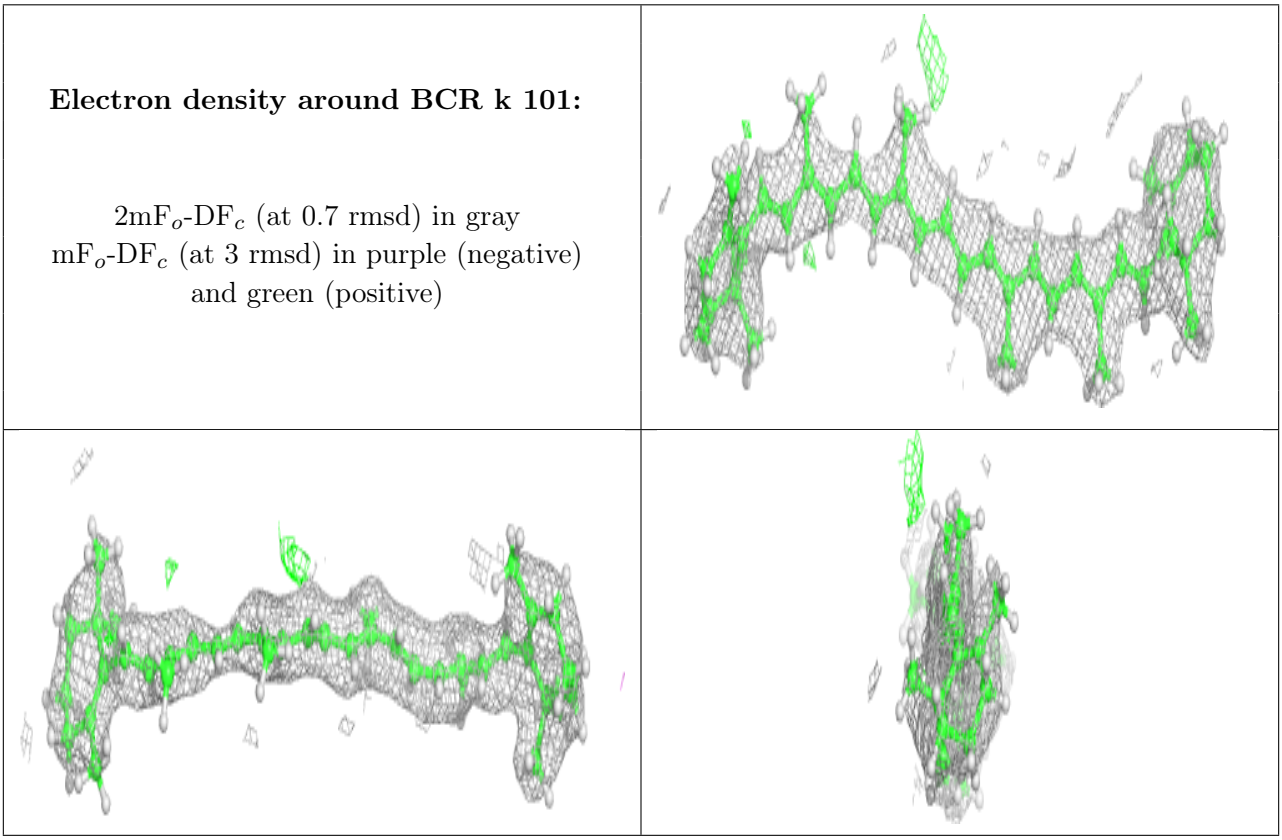
Electron density around CLA c 514:

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



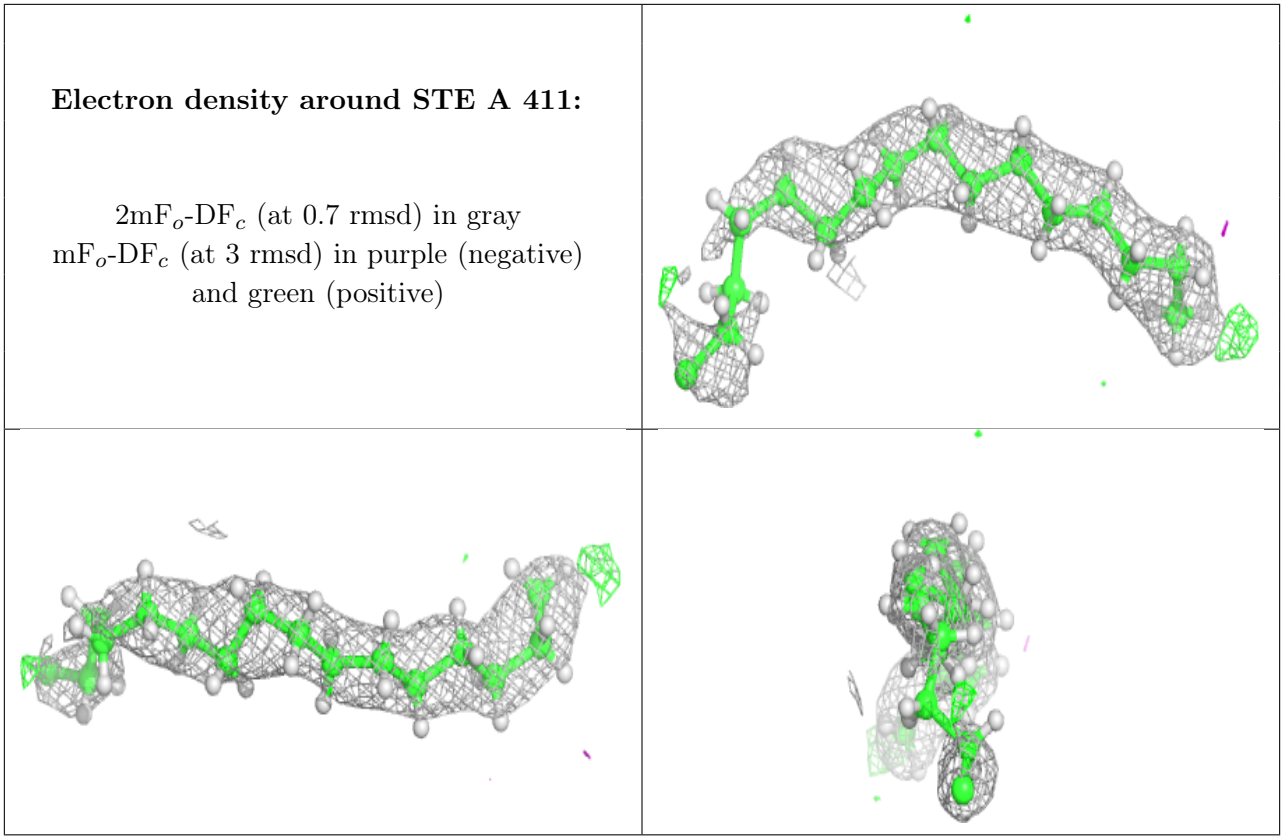
Electron density around BCR k 101:

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



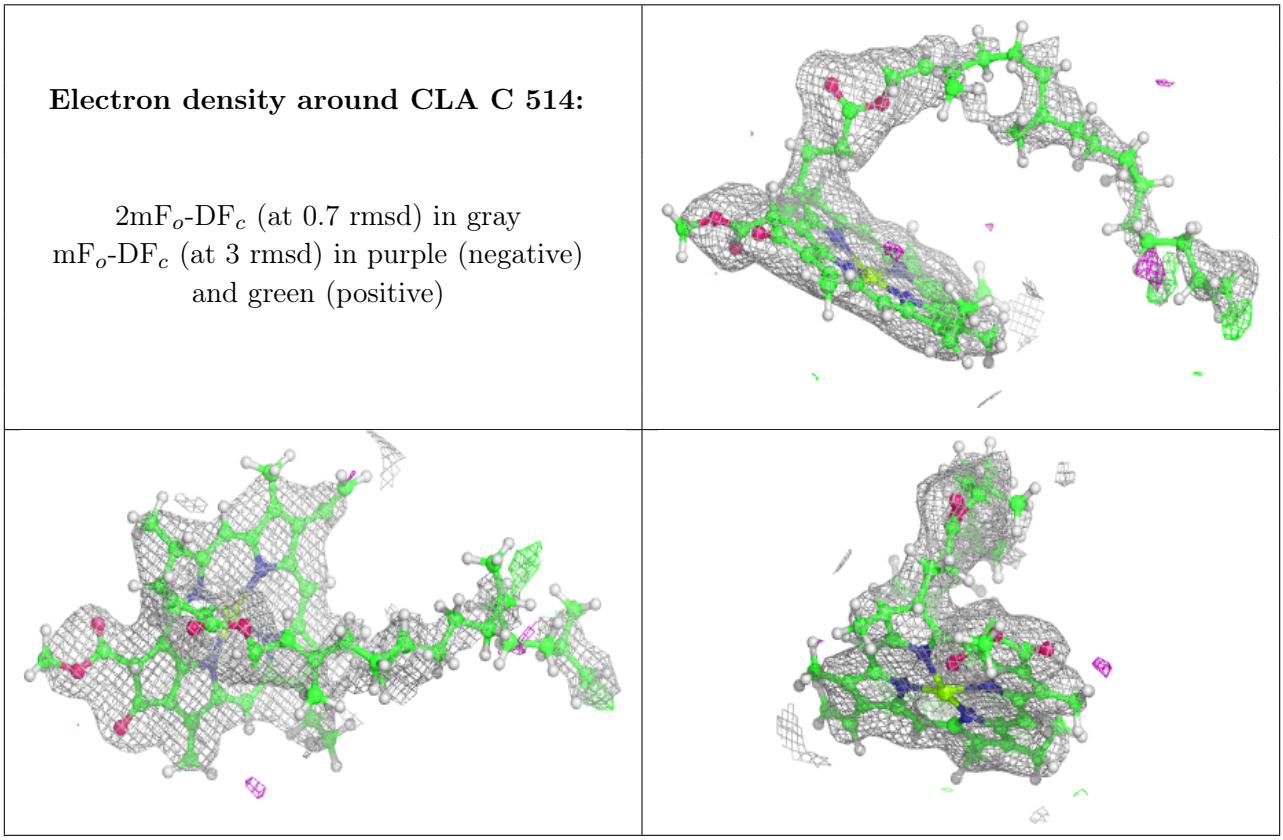
Electron density around STE A 411:

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



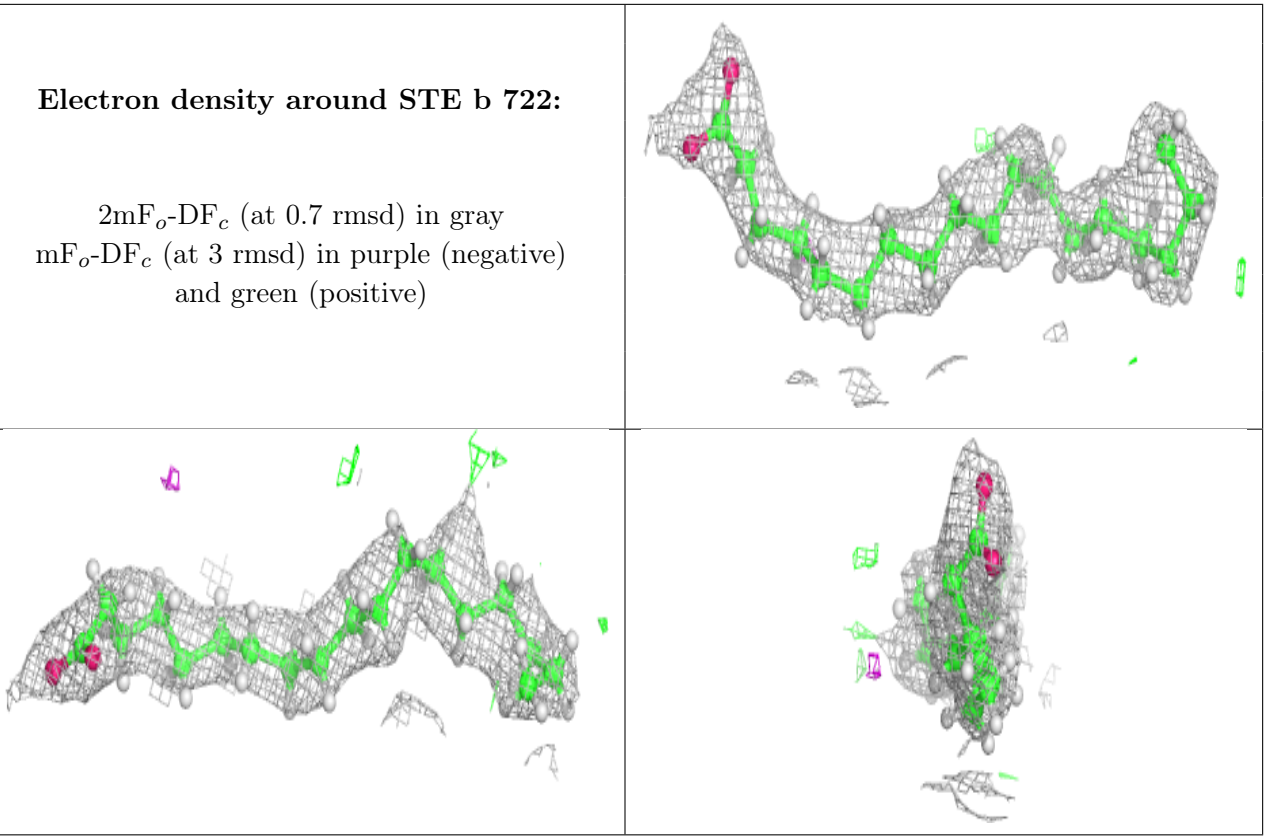
Electron density around CLA C 514:

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



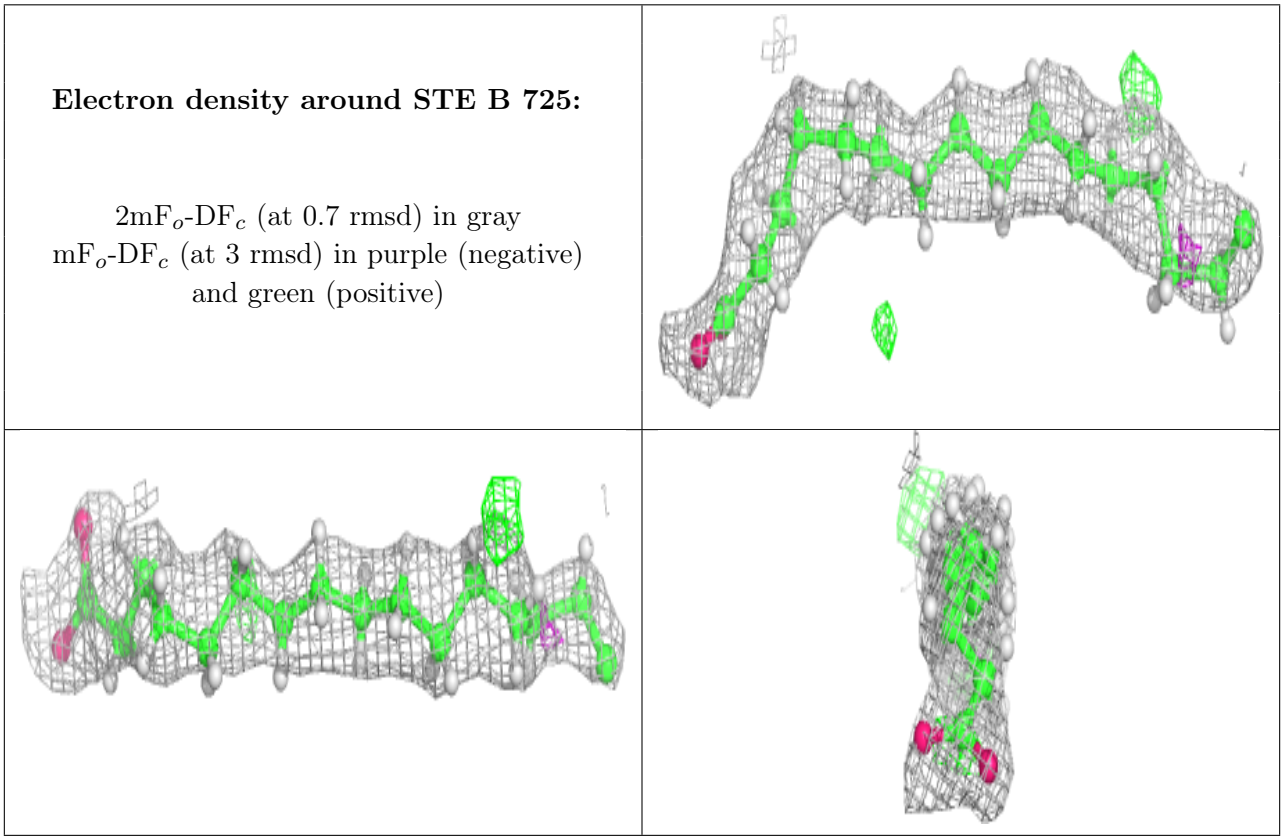
Electron density around STE b 722:

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



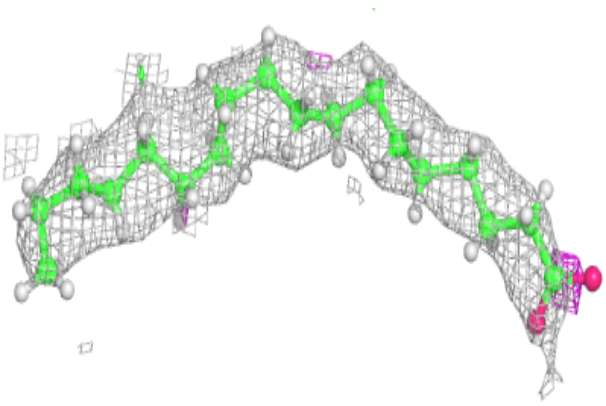
Electron density around STE B 725:

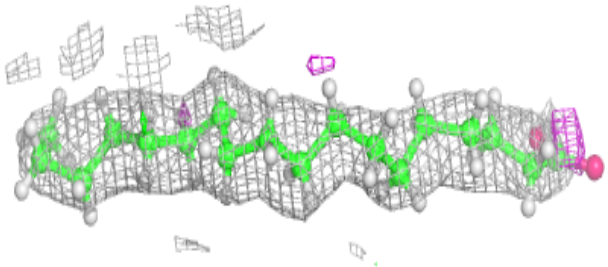
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

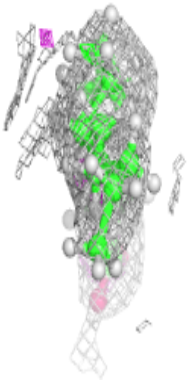


Electron density around STE X 101:

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

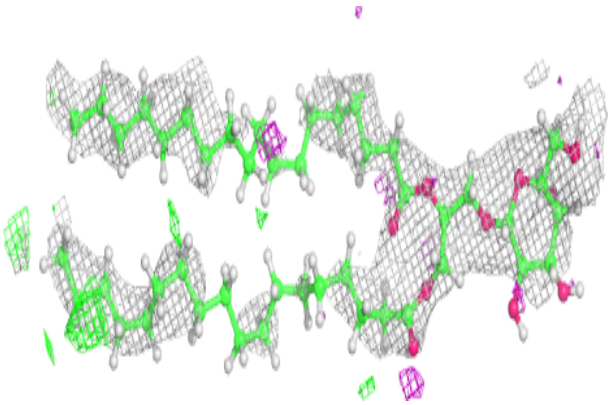


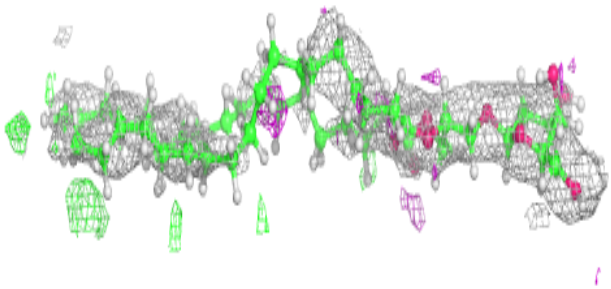


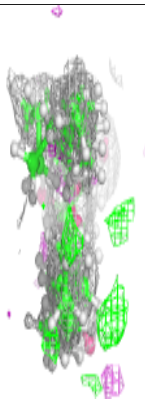


Electron density around LMG b 723:

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

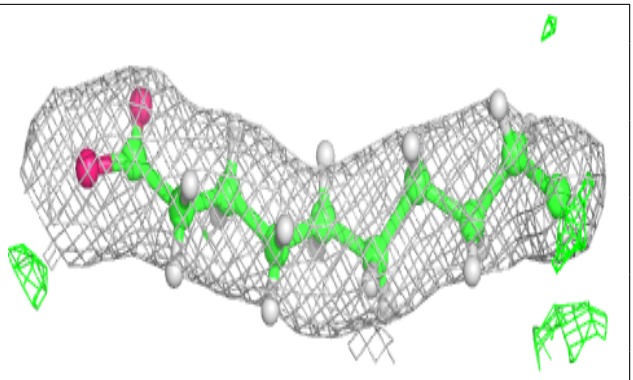


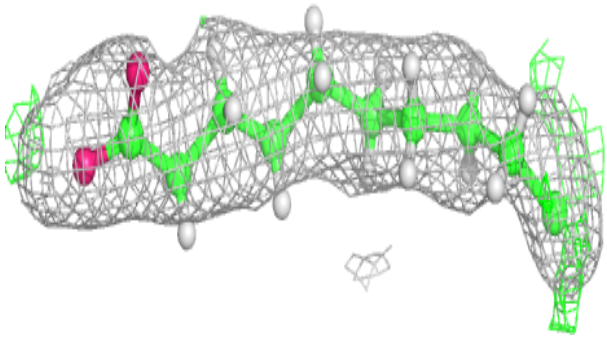


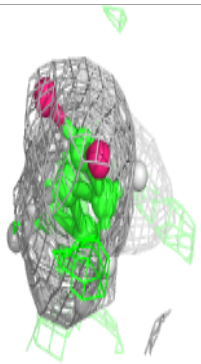


Electron density around STE j 101:

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

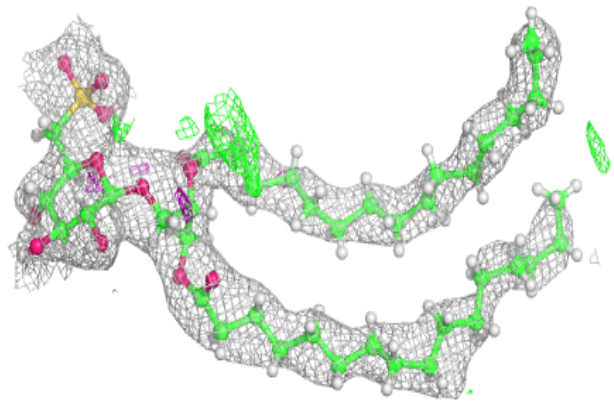


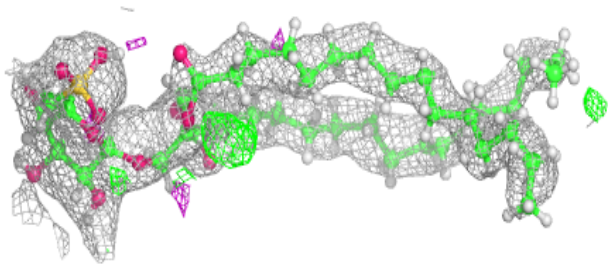


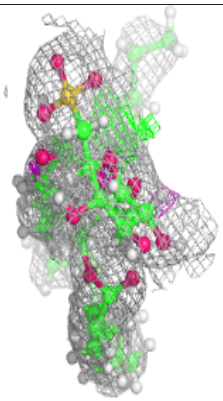


Electron density around SQD B 723:

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

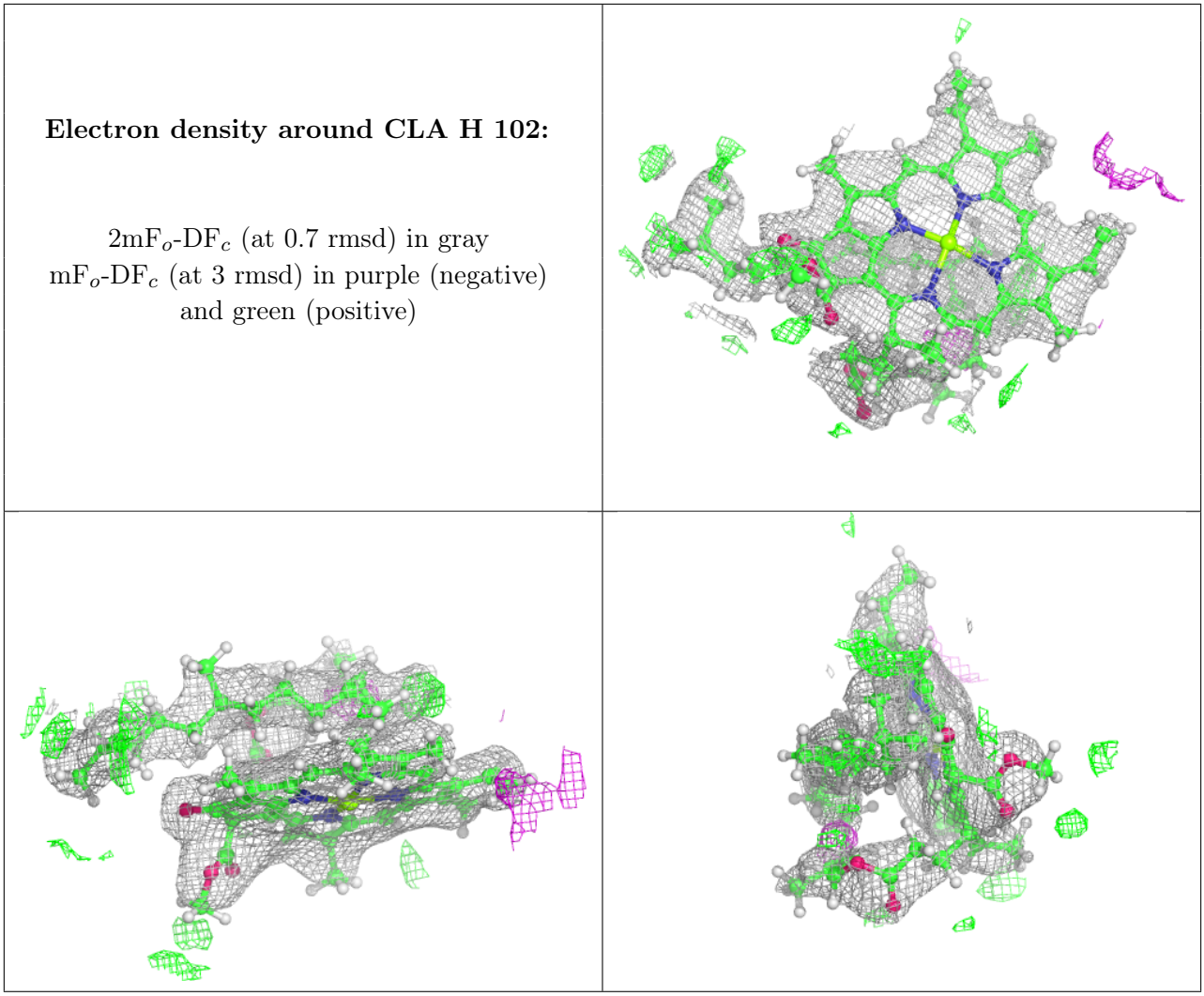






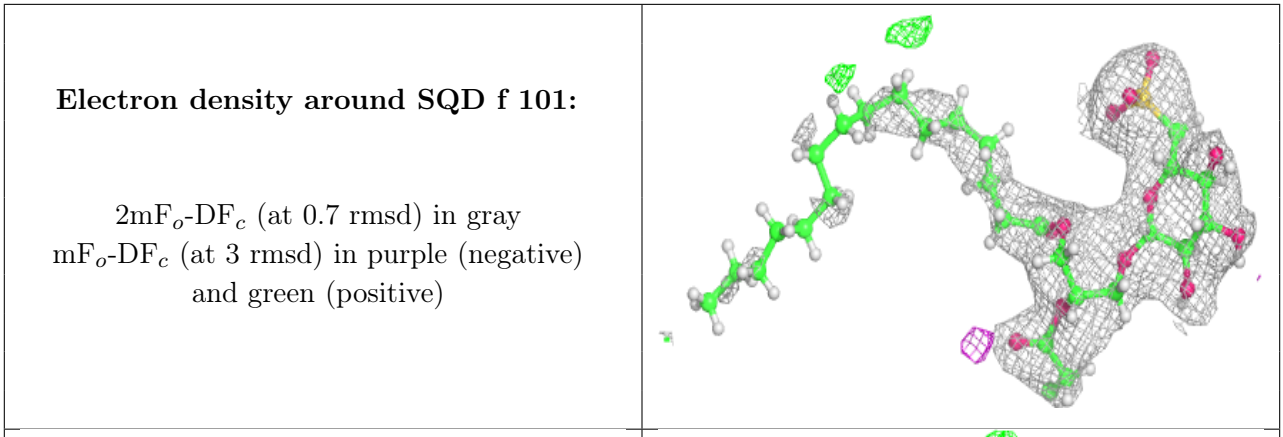
Electron density around CLA H 102:

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



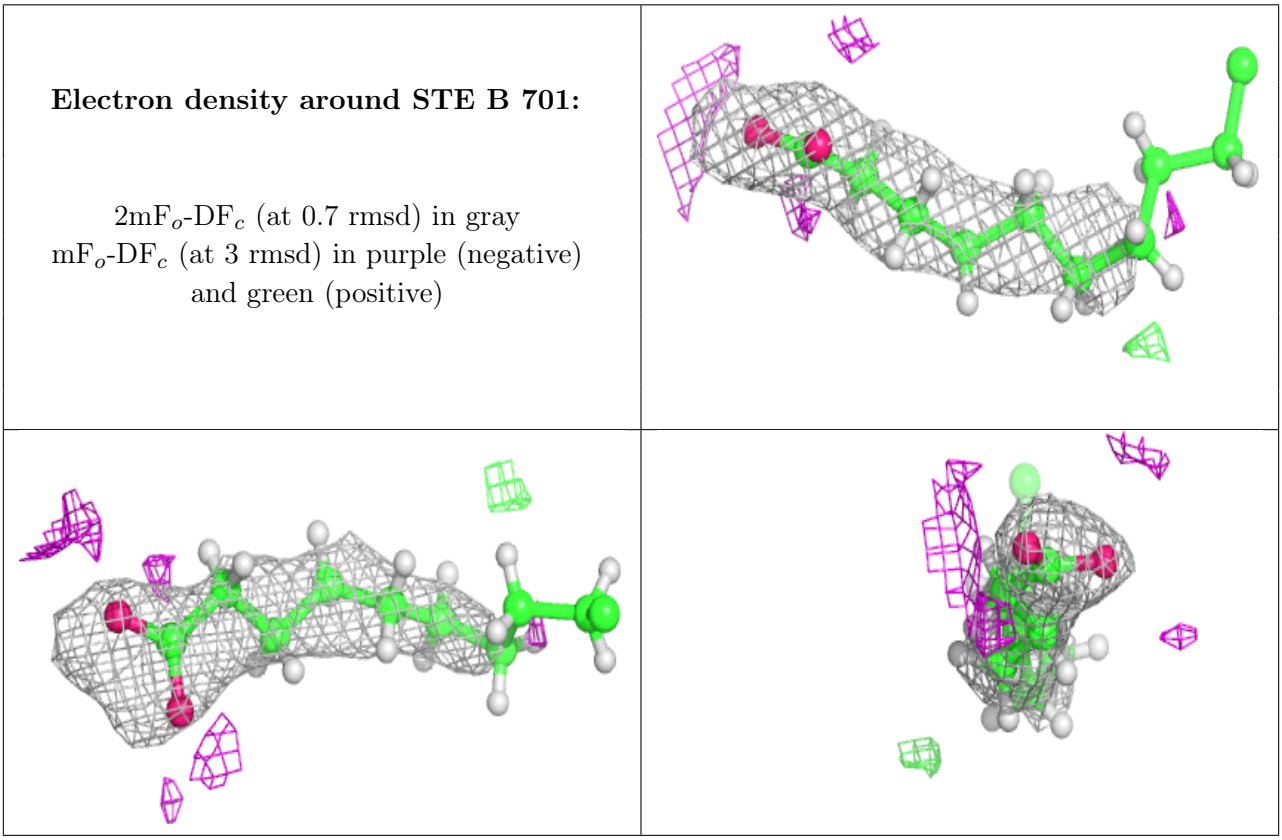
Electron density around SQD f 101:

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



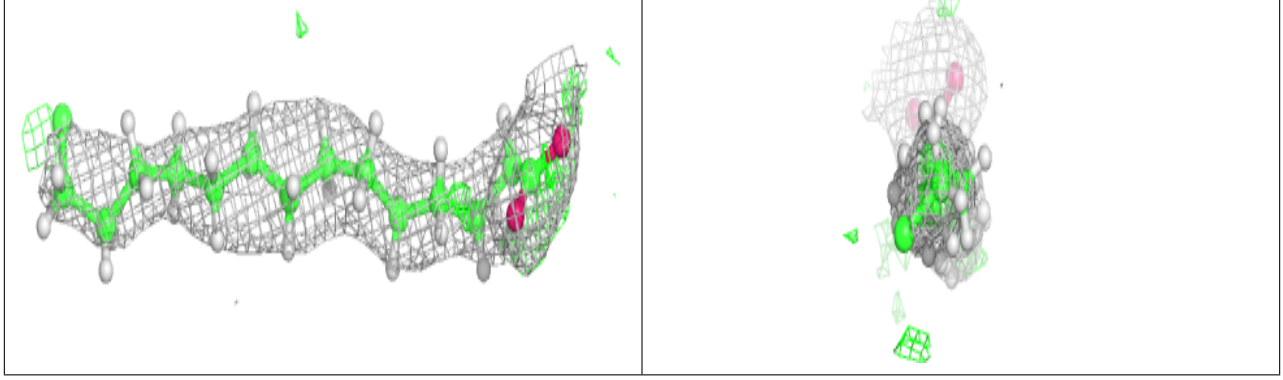
Electron density around STE B 701:

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



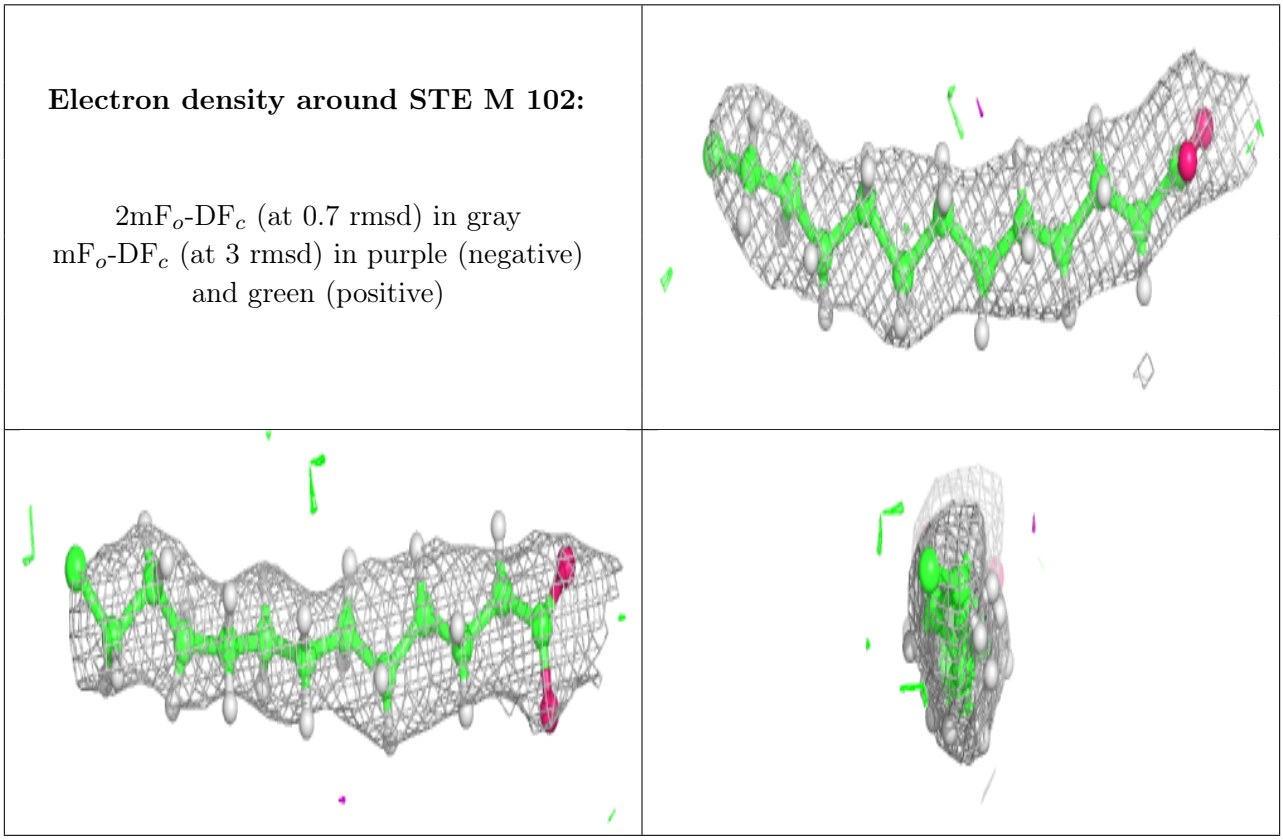
Electron density around STE d 409:

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



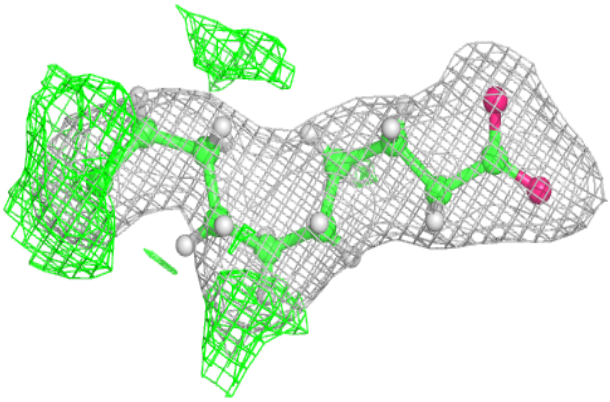
Electron density around STE M 102:

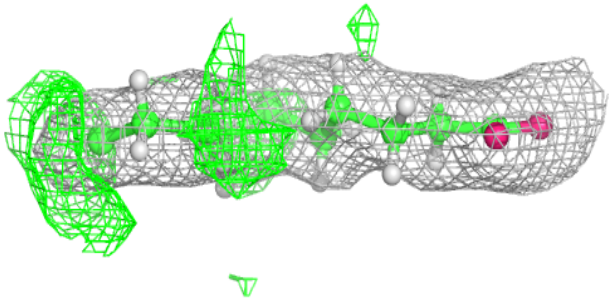
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

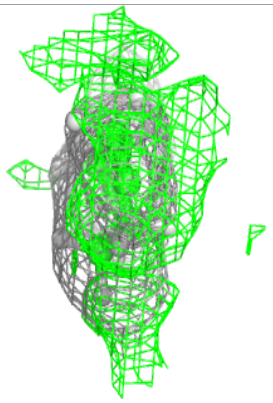


Electron density around STE C 523:

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

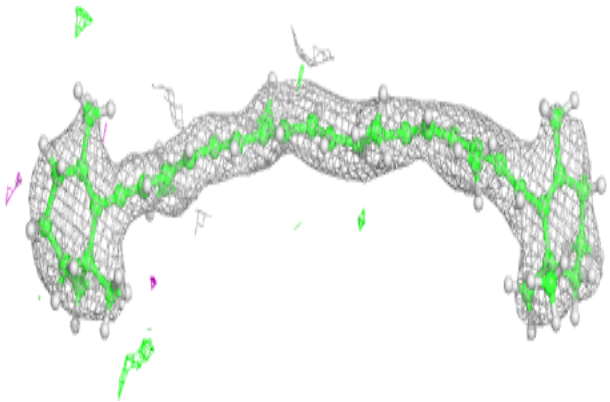


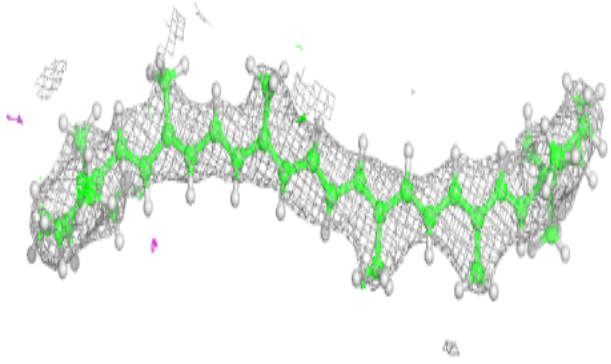


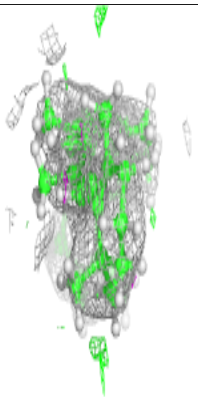


Electron density around BCR k 102:

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

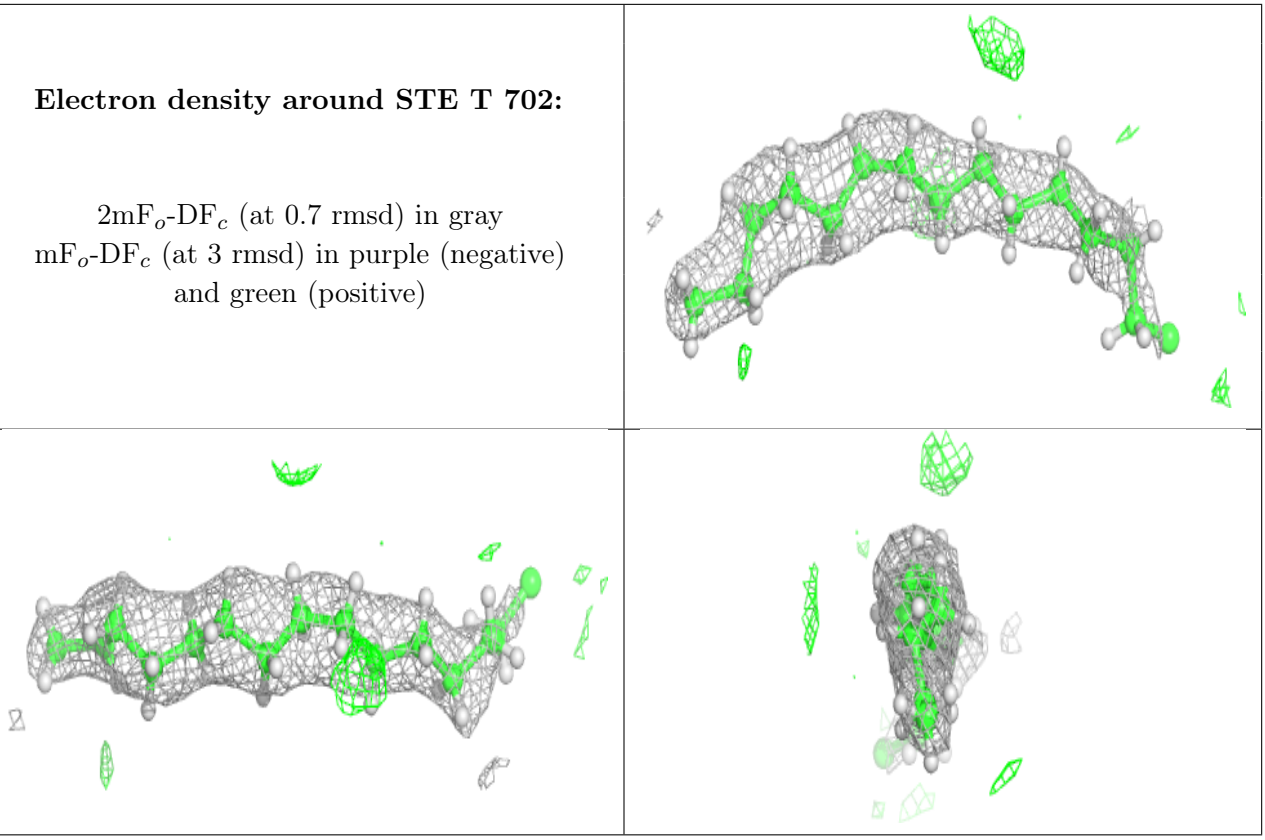






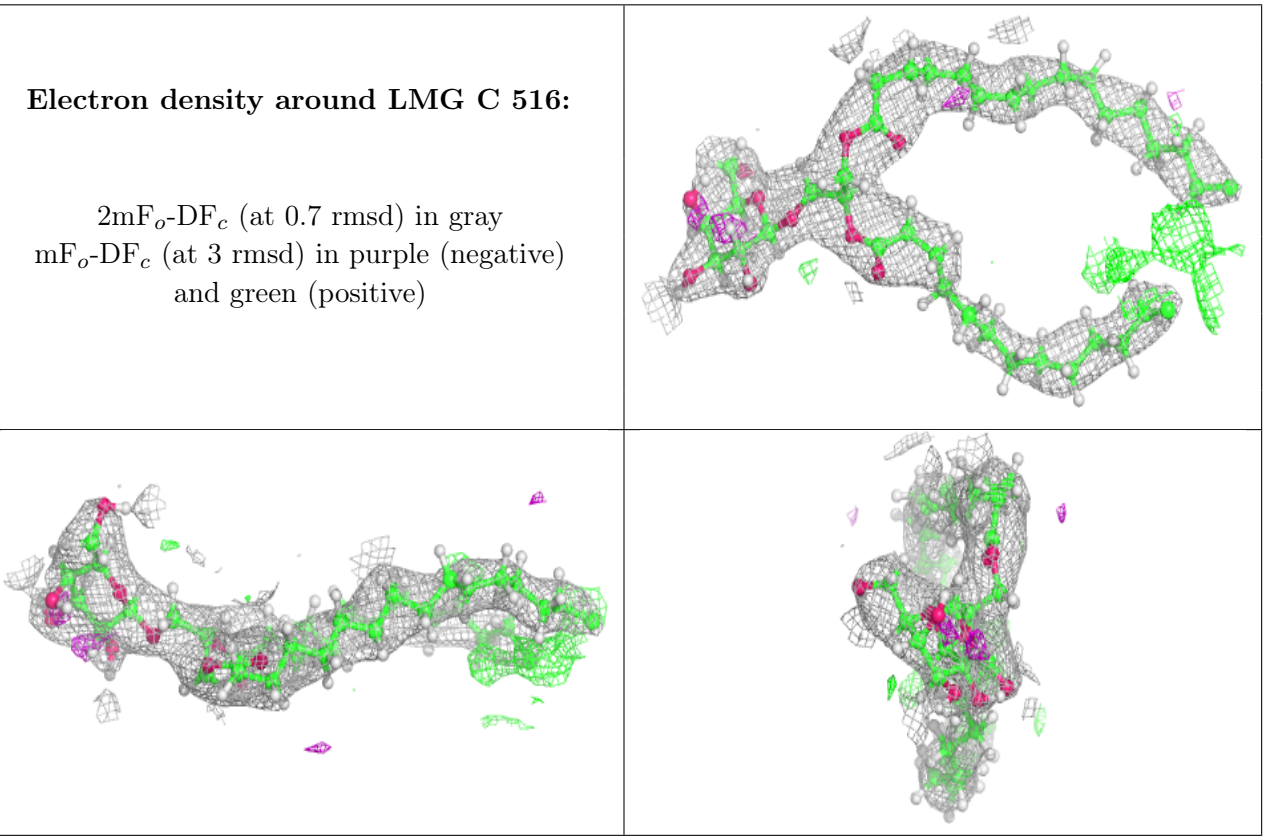
Electron density around STE T 702:

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



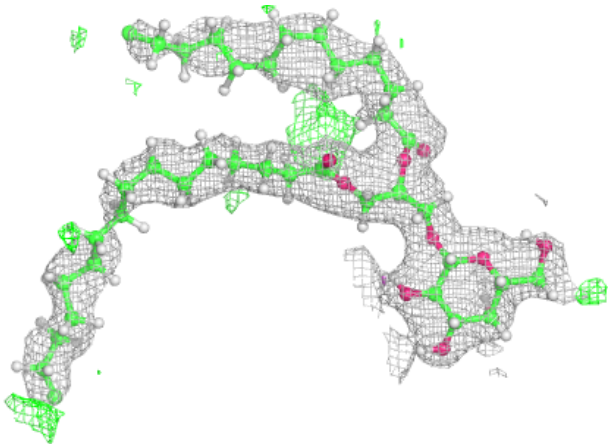
Electron density around LMG C 516:

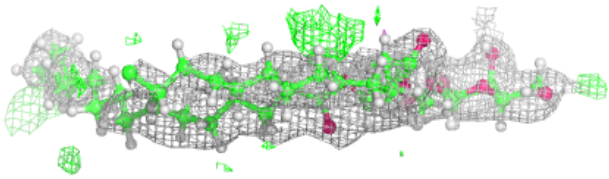
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

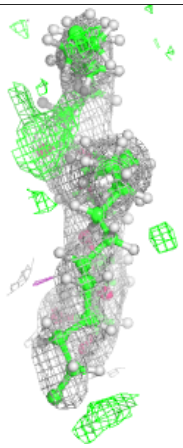


Electron density around LMG C 520:

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

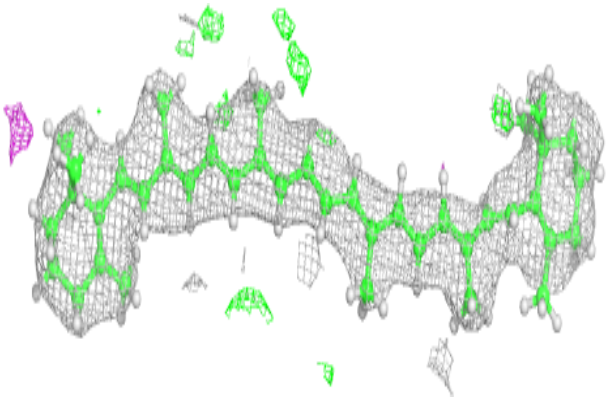


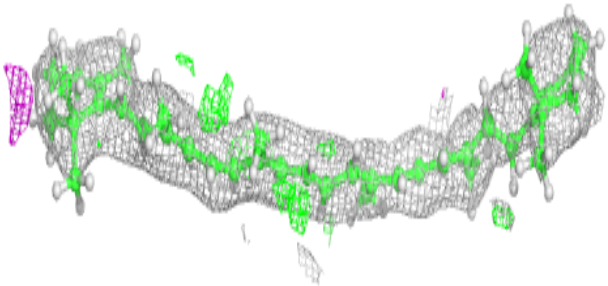


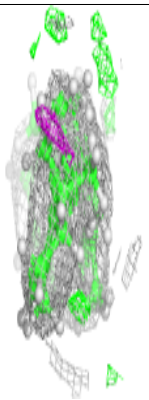


Electron density around BCR d 403:

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

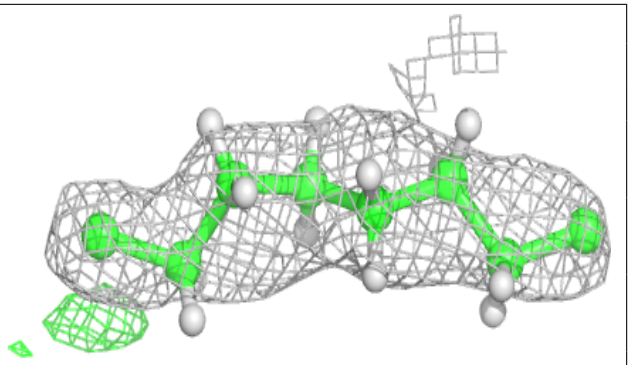


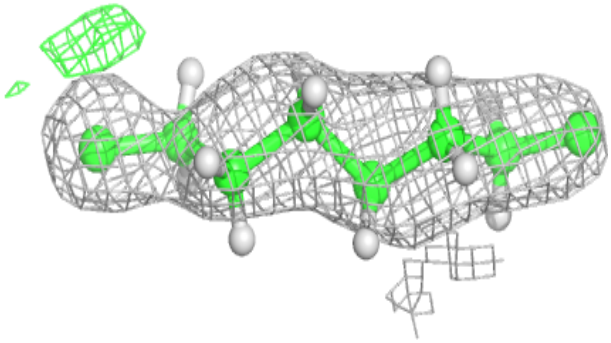


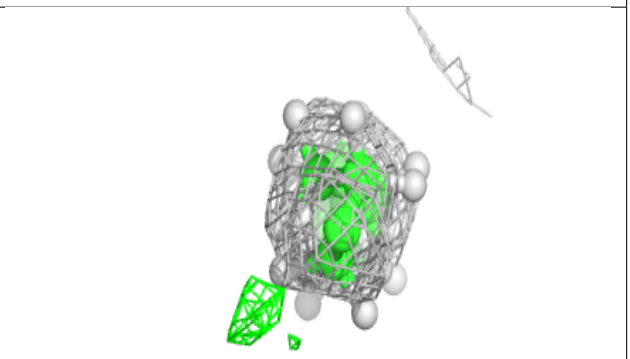


Electron density around STE Z 101:

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

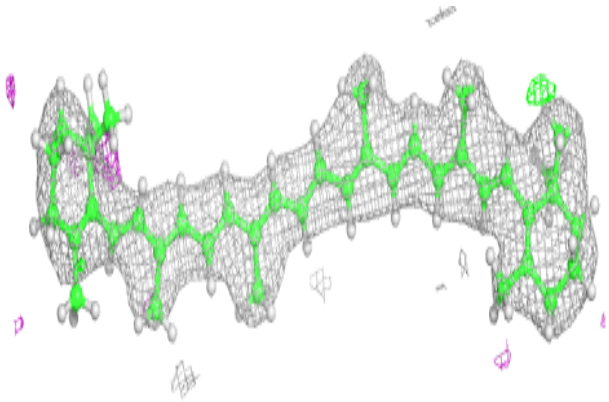


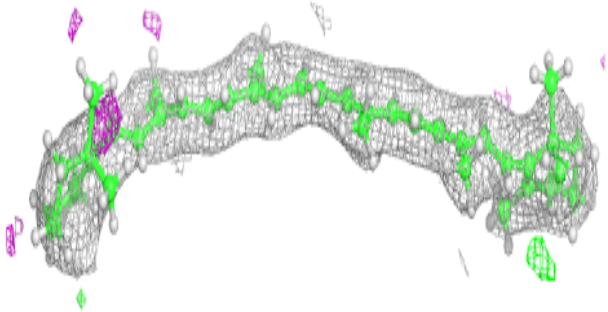


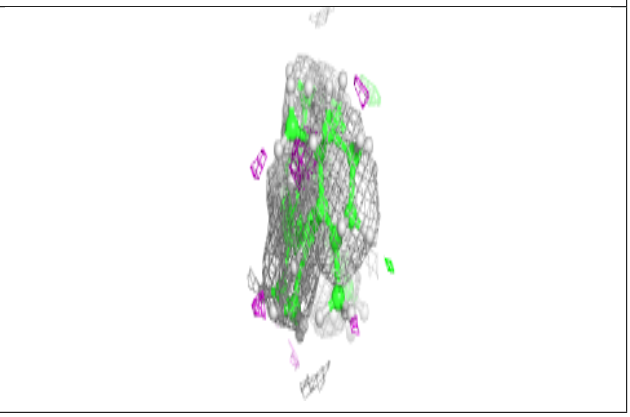


Electron density around BCR D 404:

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

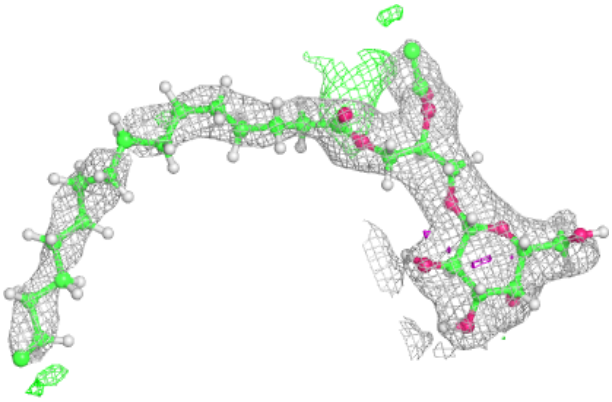


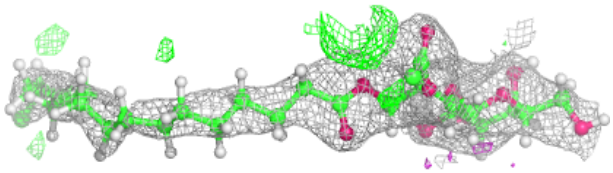


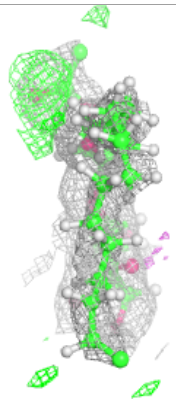


Electron density around LMG c 520:

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

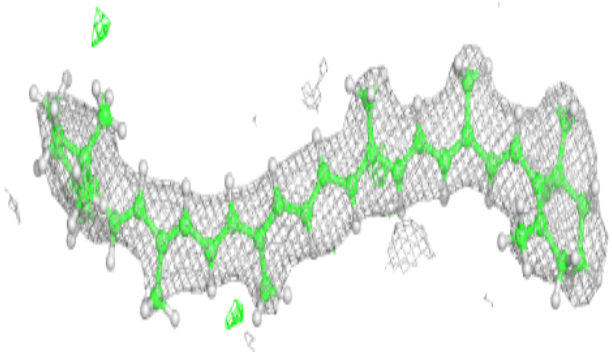


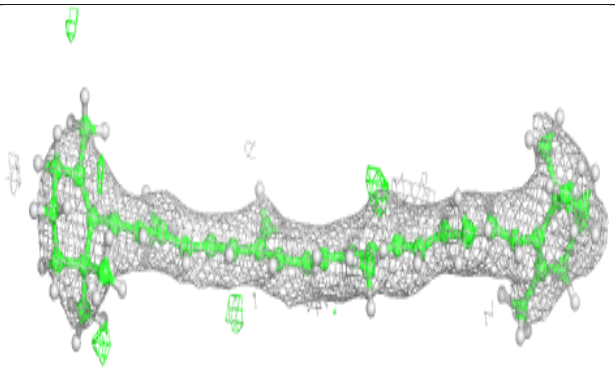


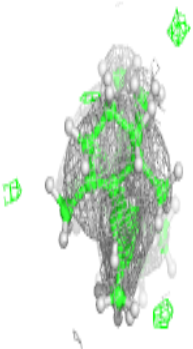


Electron density around BCR Y 101:

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

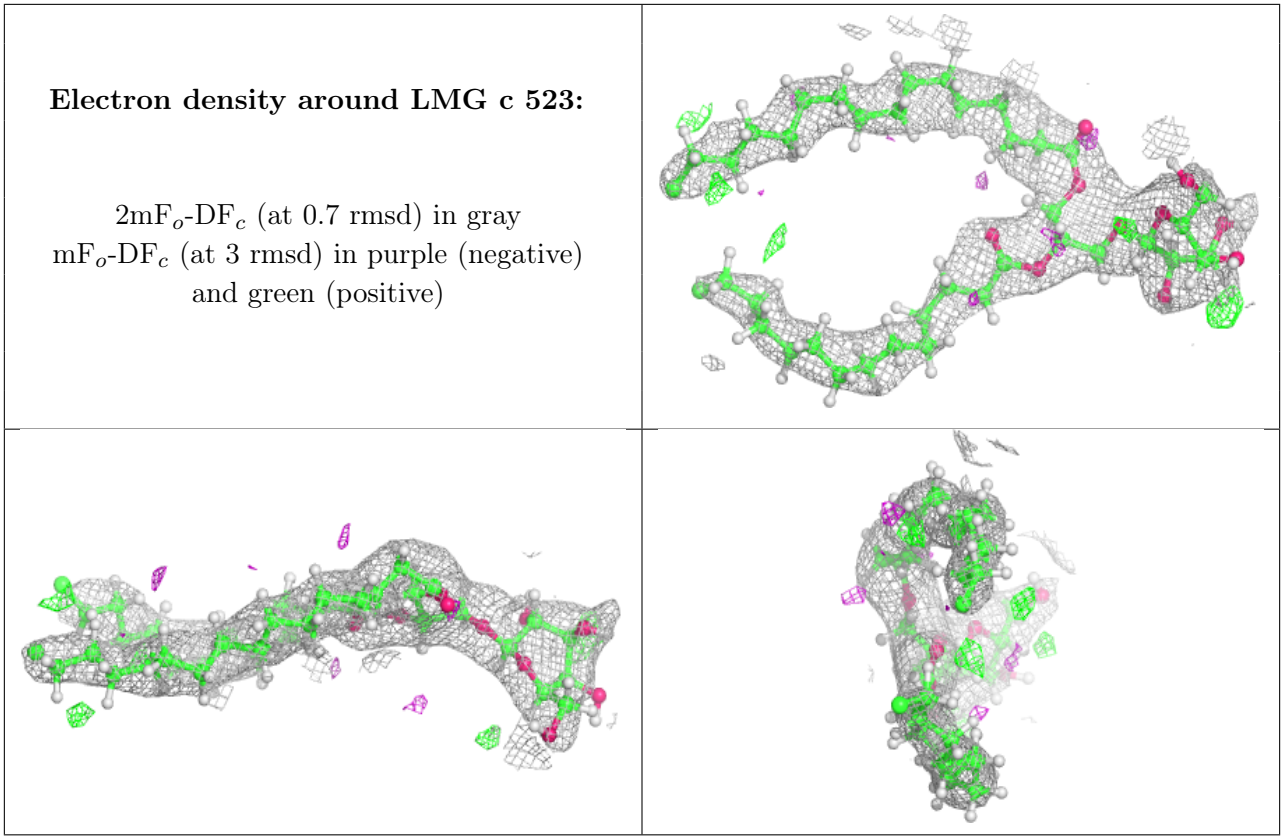






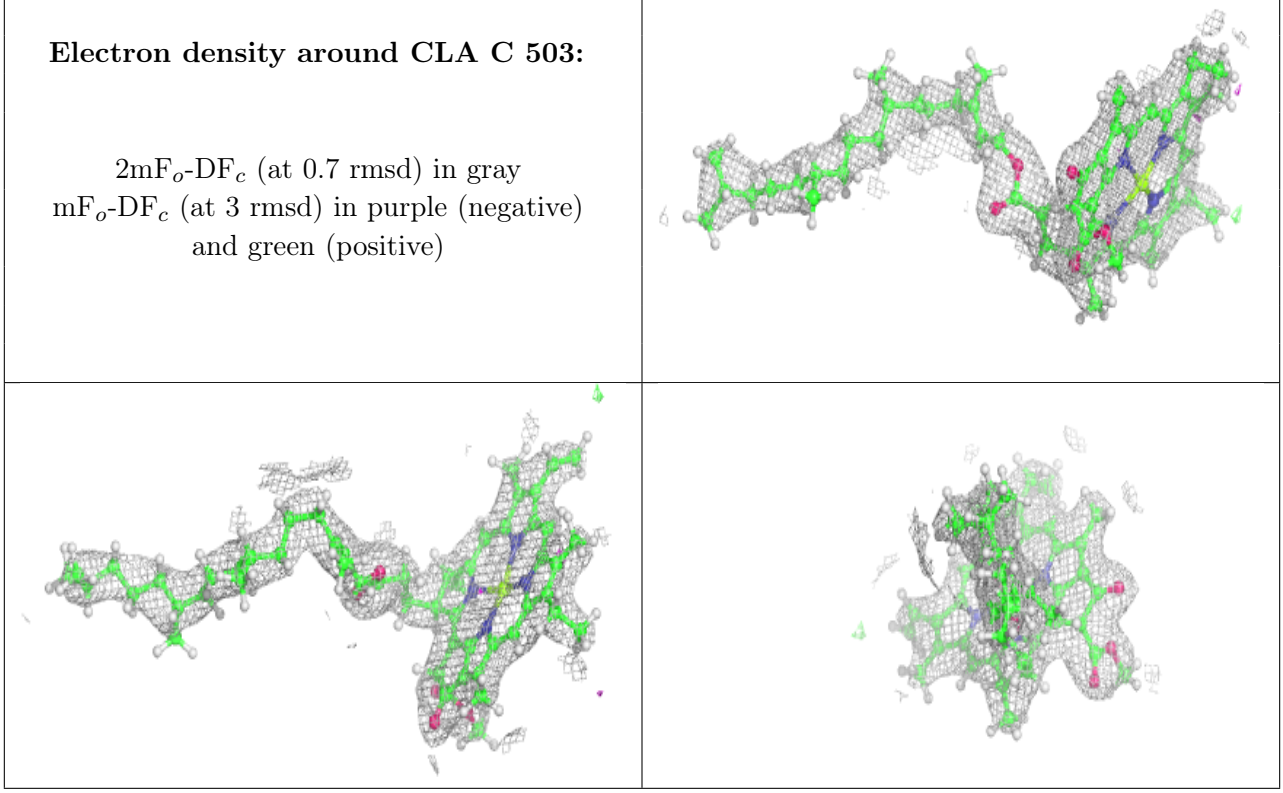
Electron density around LMG c 523:

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



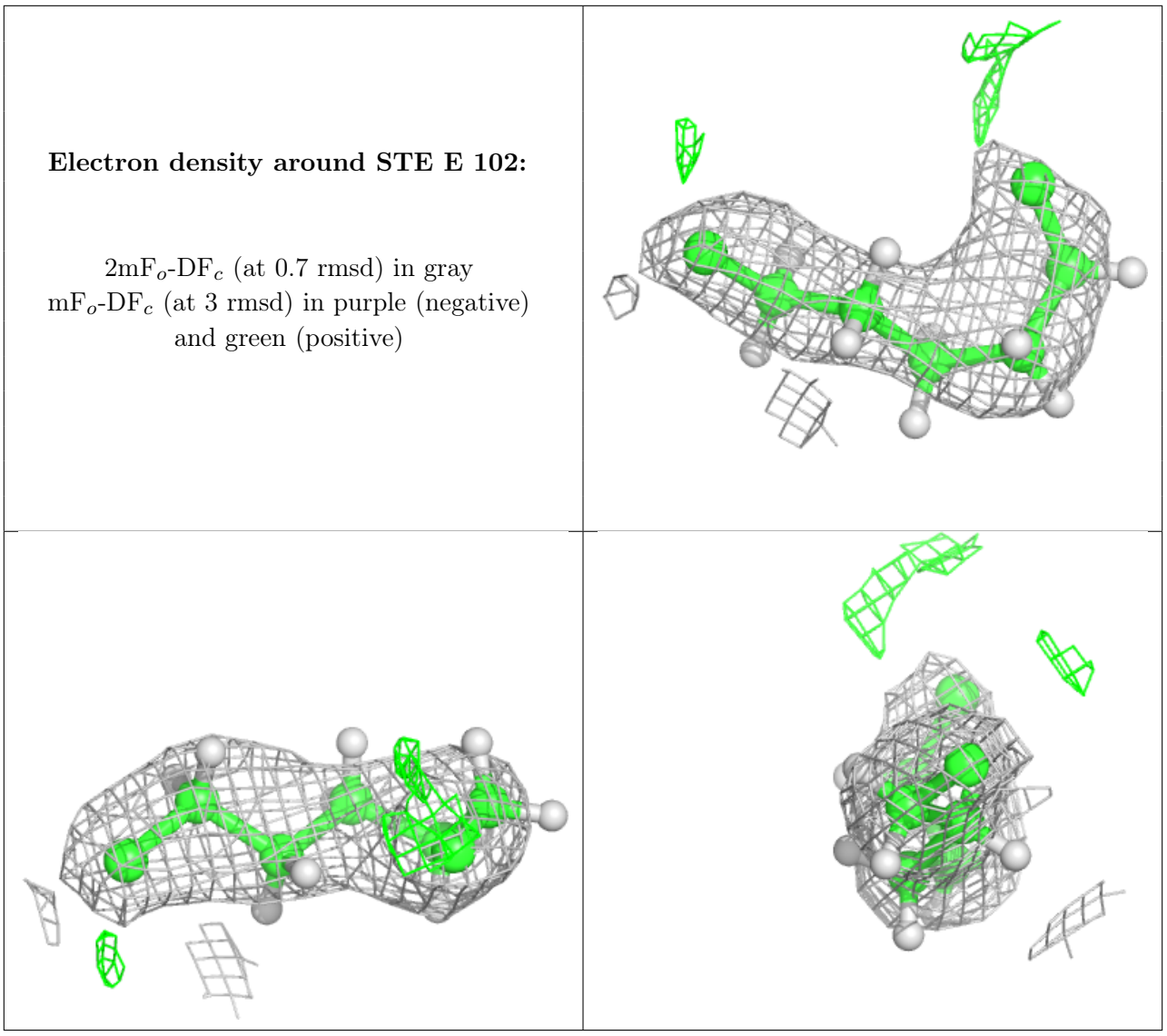
Electron density around CLA C 503:

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



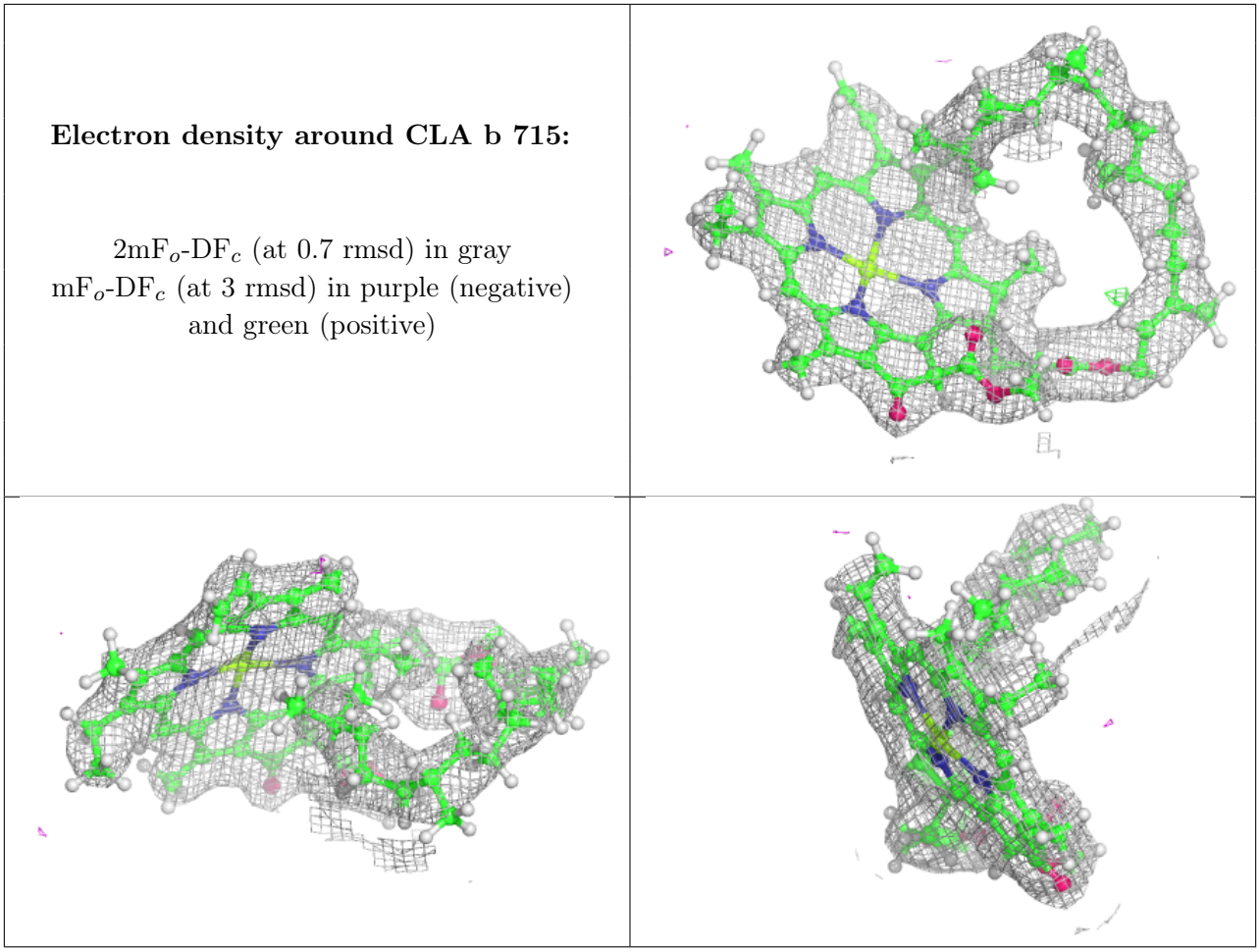
Electron density around STE E 102:

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



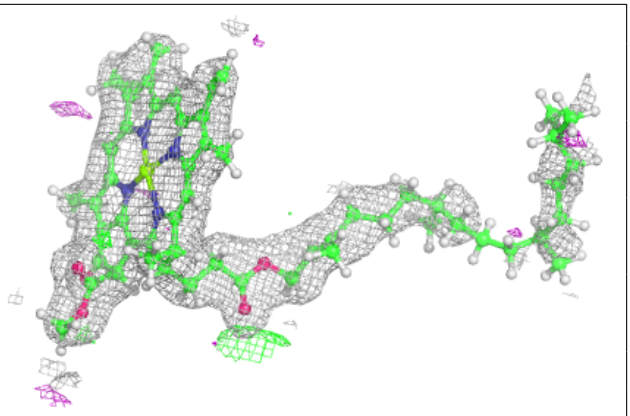
Electron density around CLA b 715:

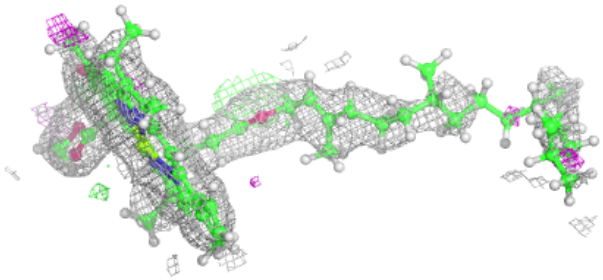
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

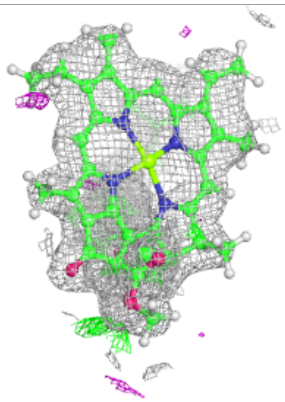


Electron density around CLA d 402:

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

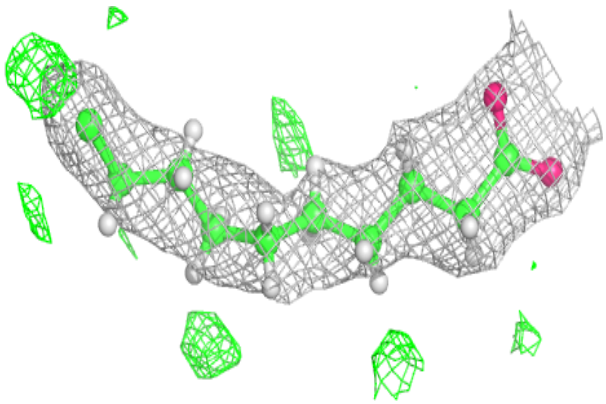


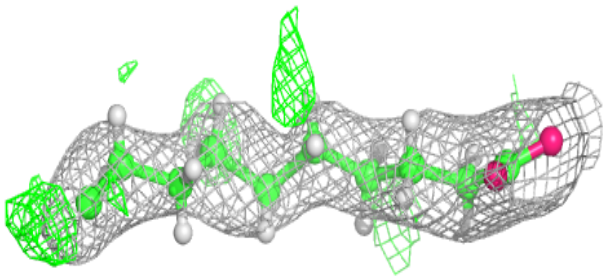


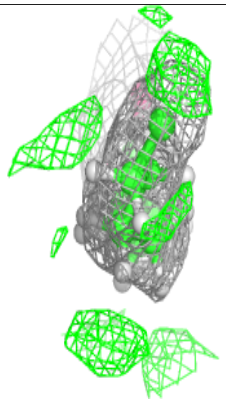


Electron density around STE C 521:

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

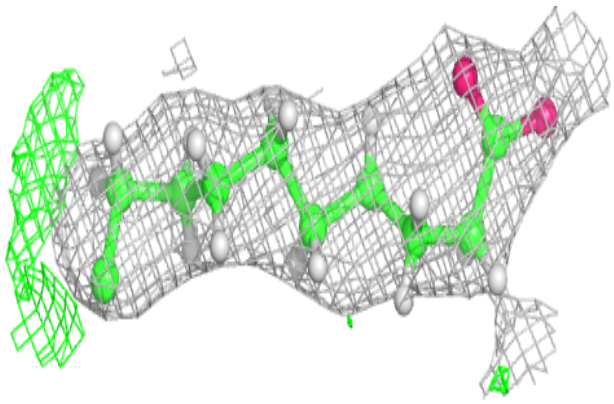


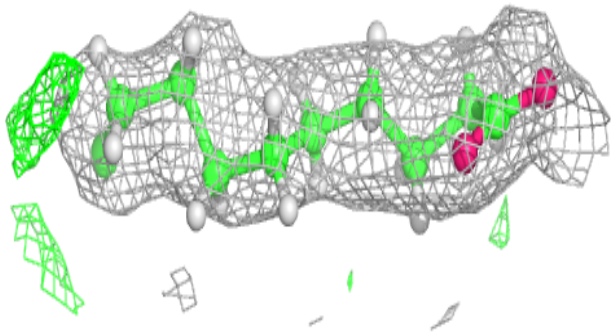


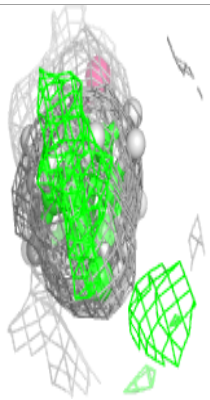


Electron density around STE J 101:

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

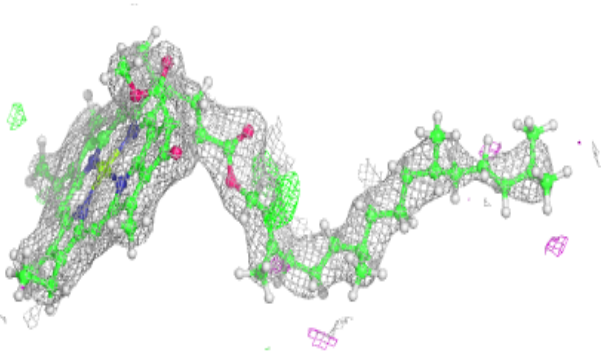


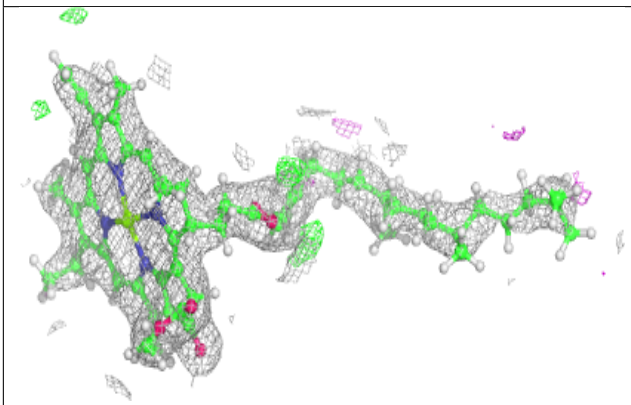


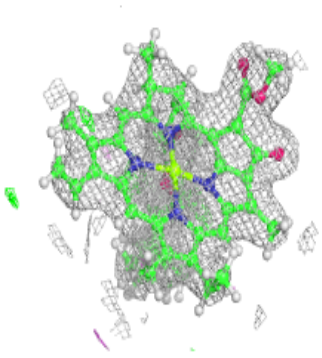


Electron density around CLA c 503:

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

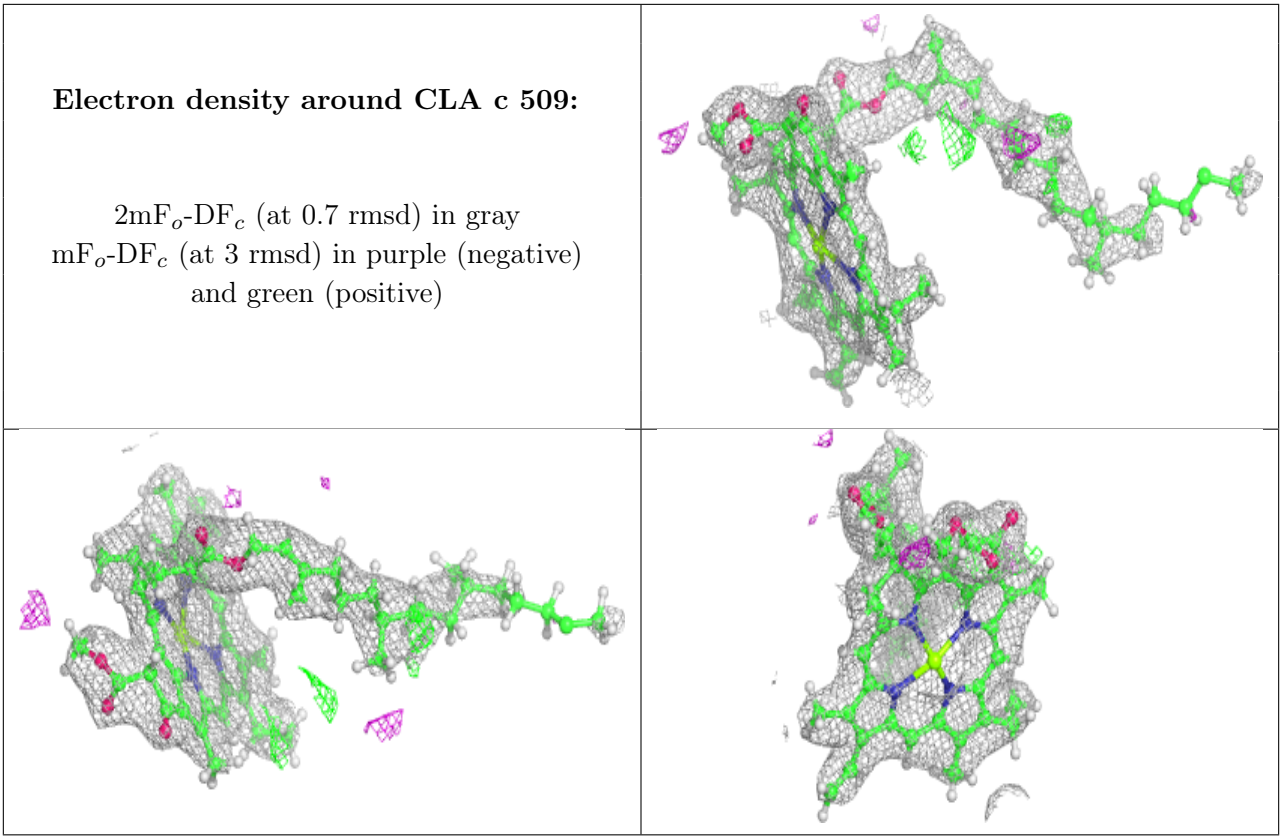






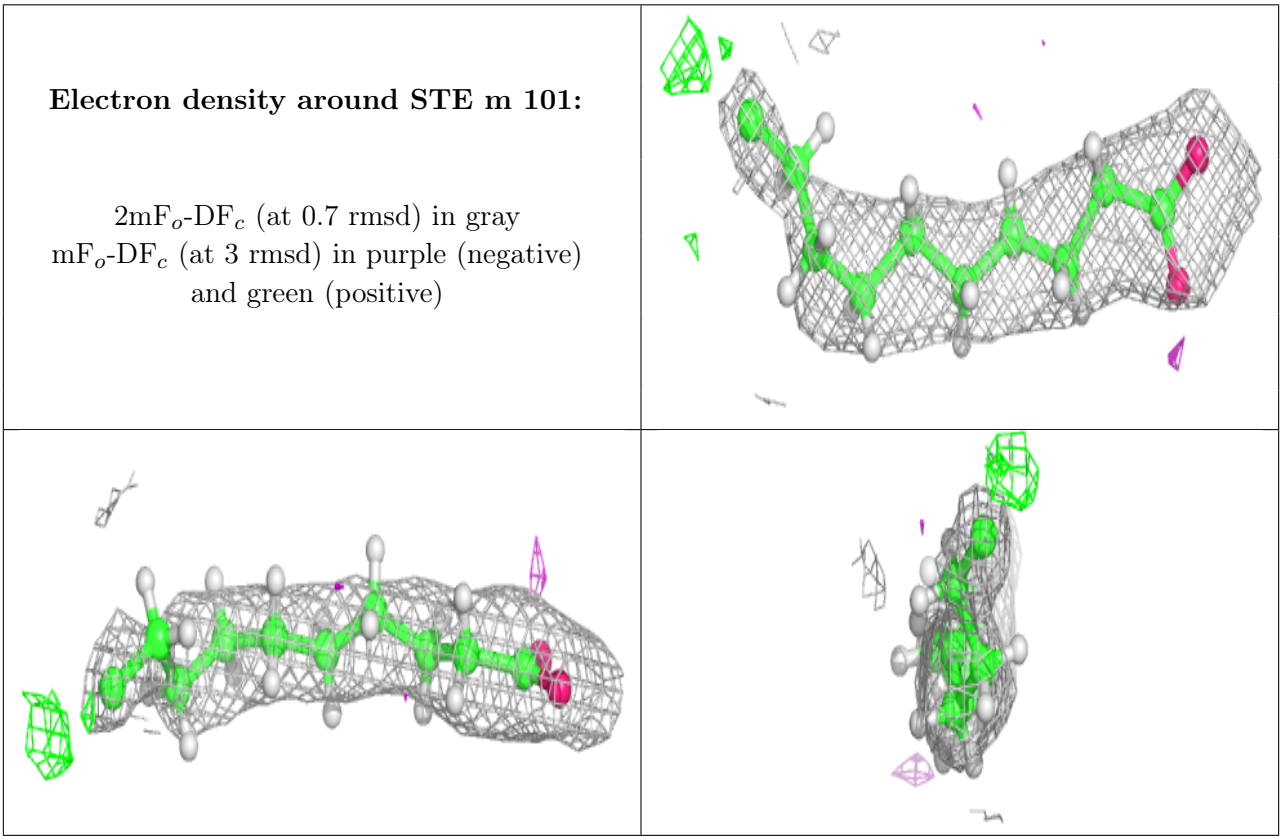
Electron density around CLA c 509:

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



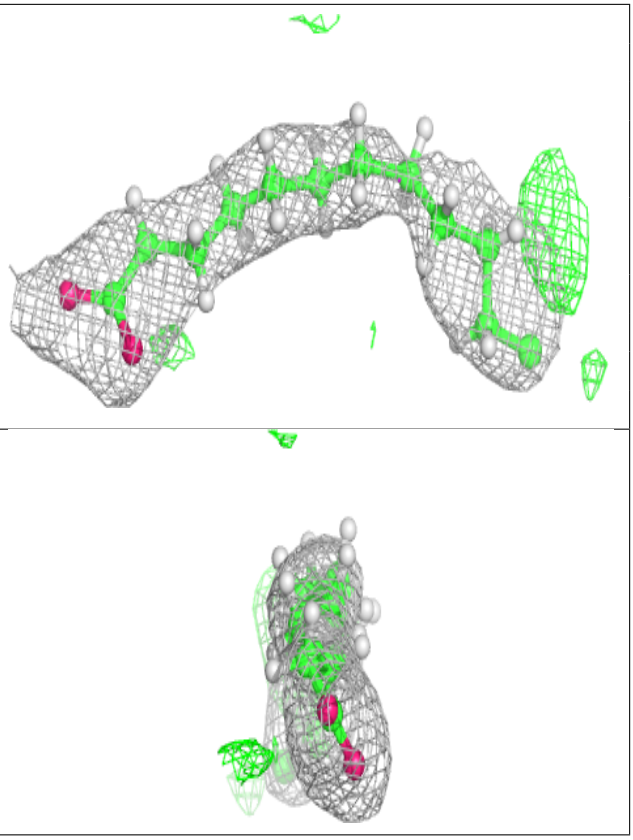
Electron density around STE m 101:

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



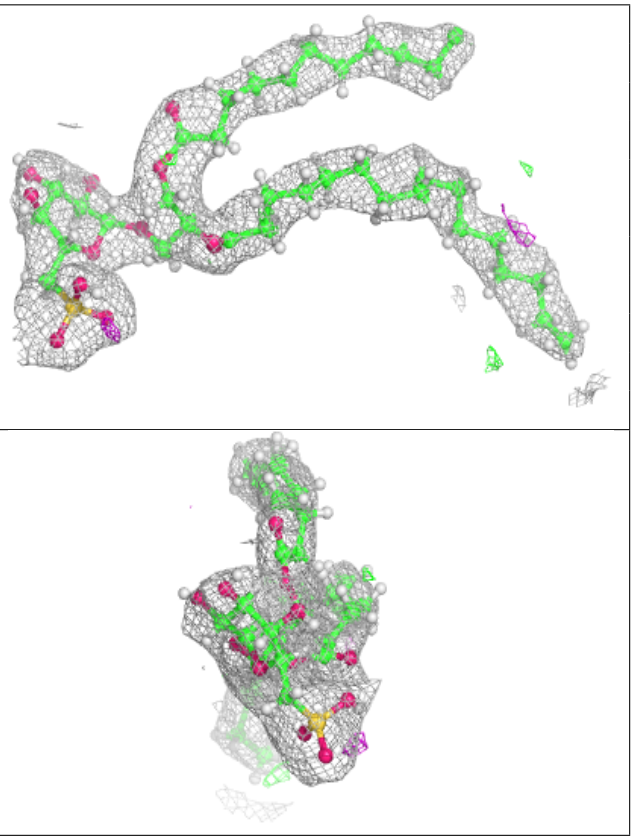
Electron density around STE t 702:

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



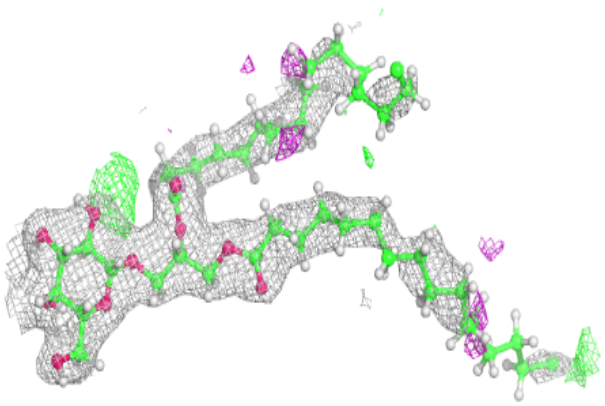
Electron density around SQD b 720:

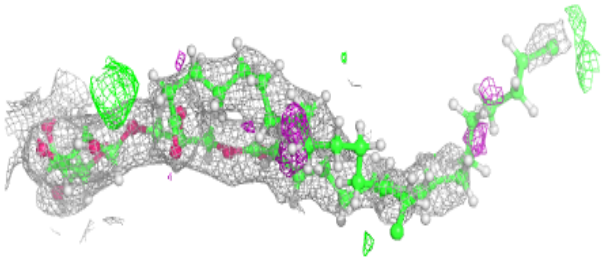
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around LMG D 408:

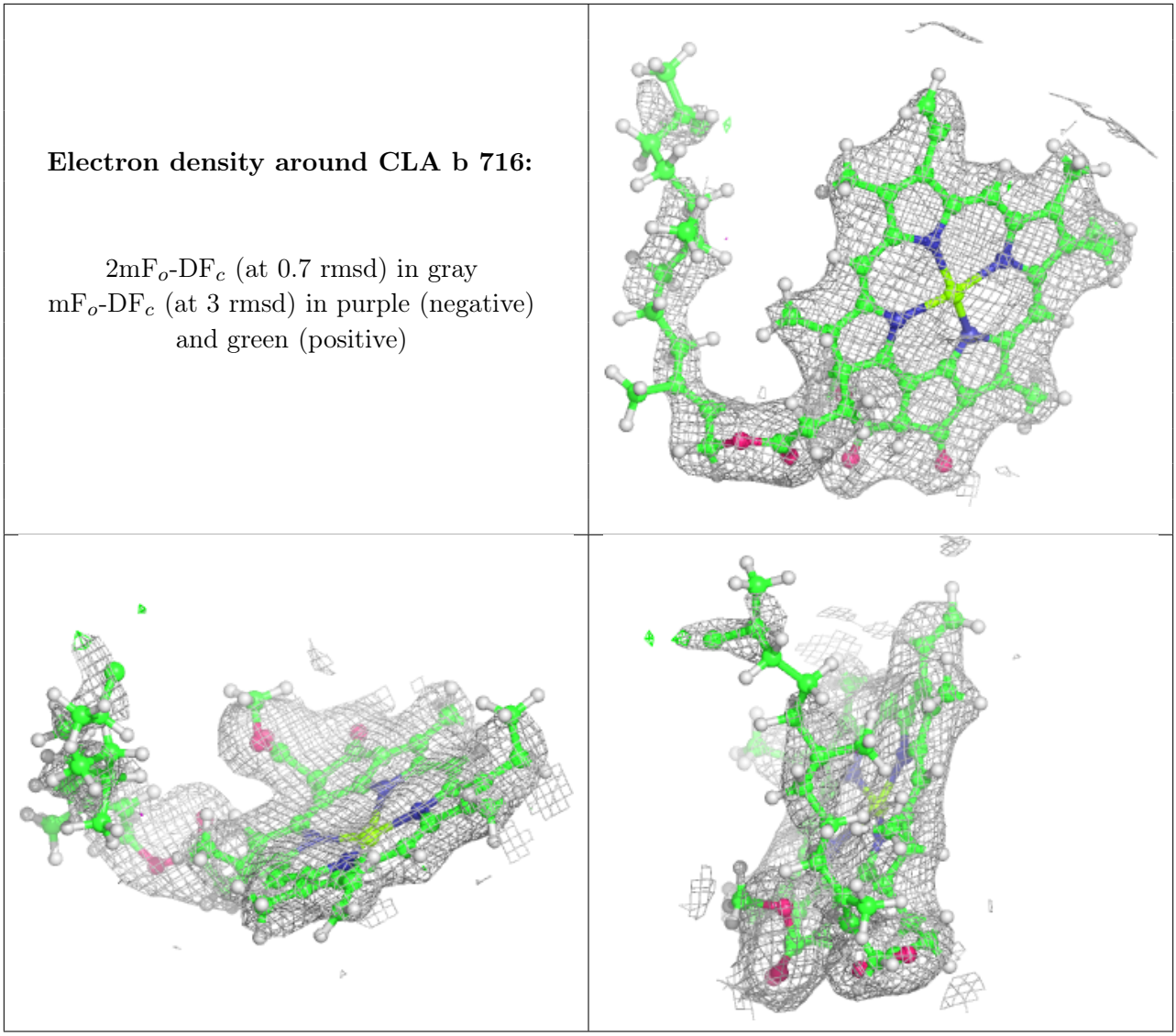
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





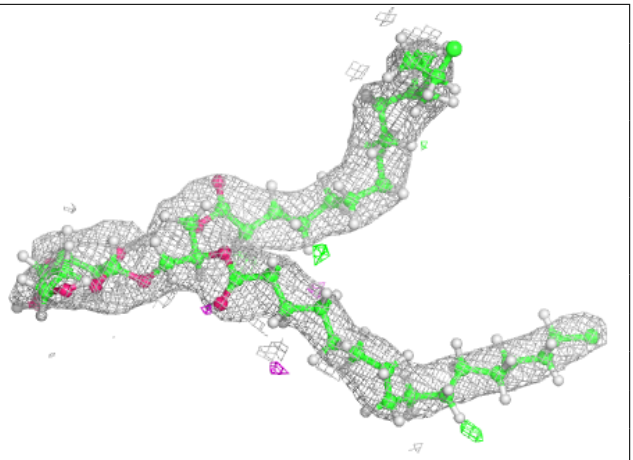
Electron density around CLA b 716:

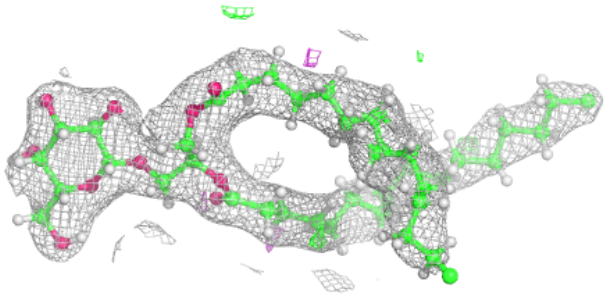
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

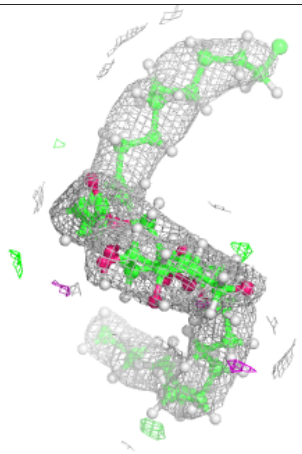


Electron density around LMG M 101:

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

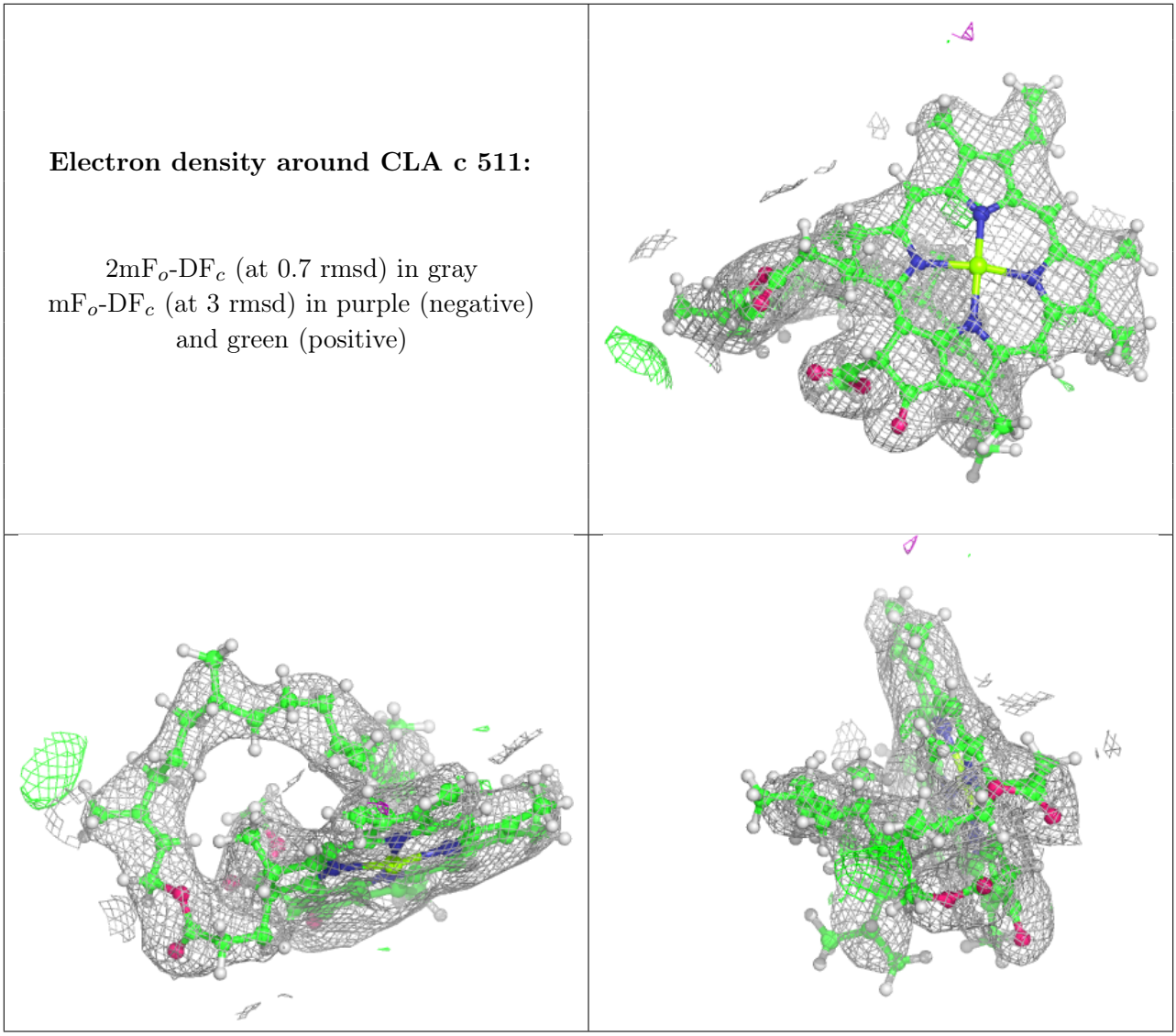






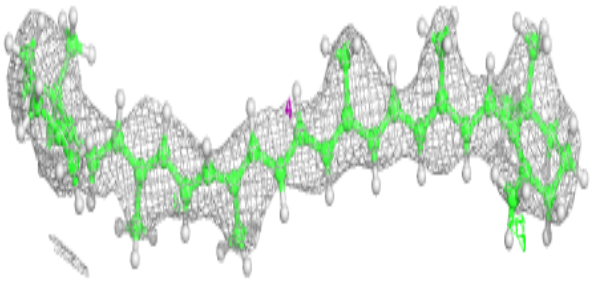
Electron density around CLA c 511:

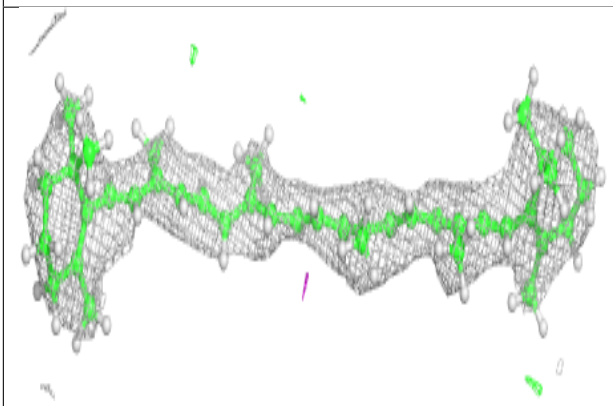
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

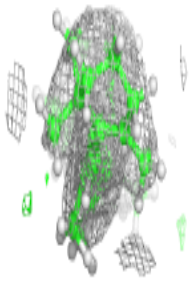


Electron density around BCR c 515:

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

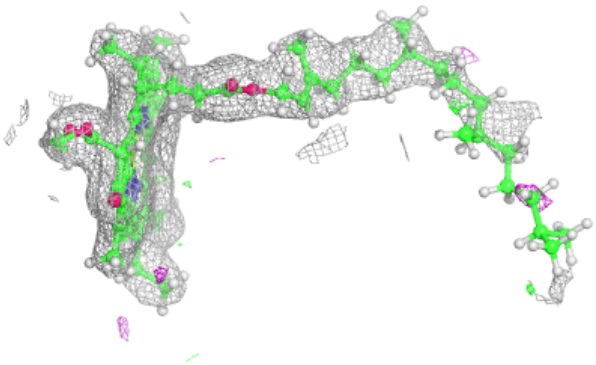


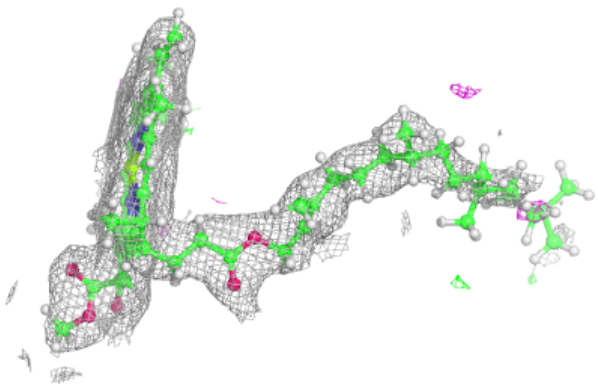


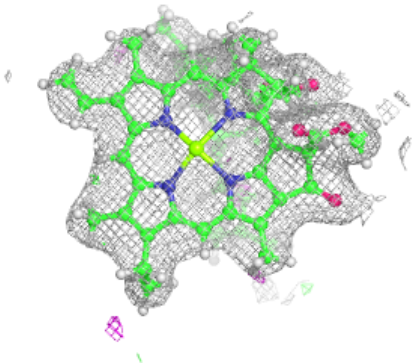


Electron density around CLA D 403:

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

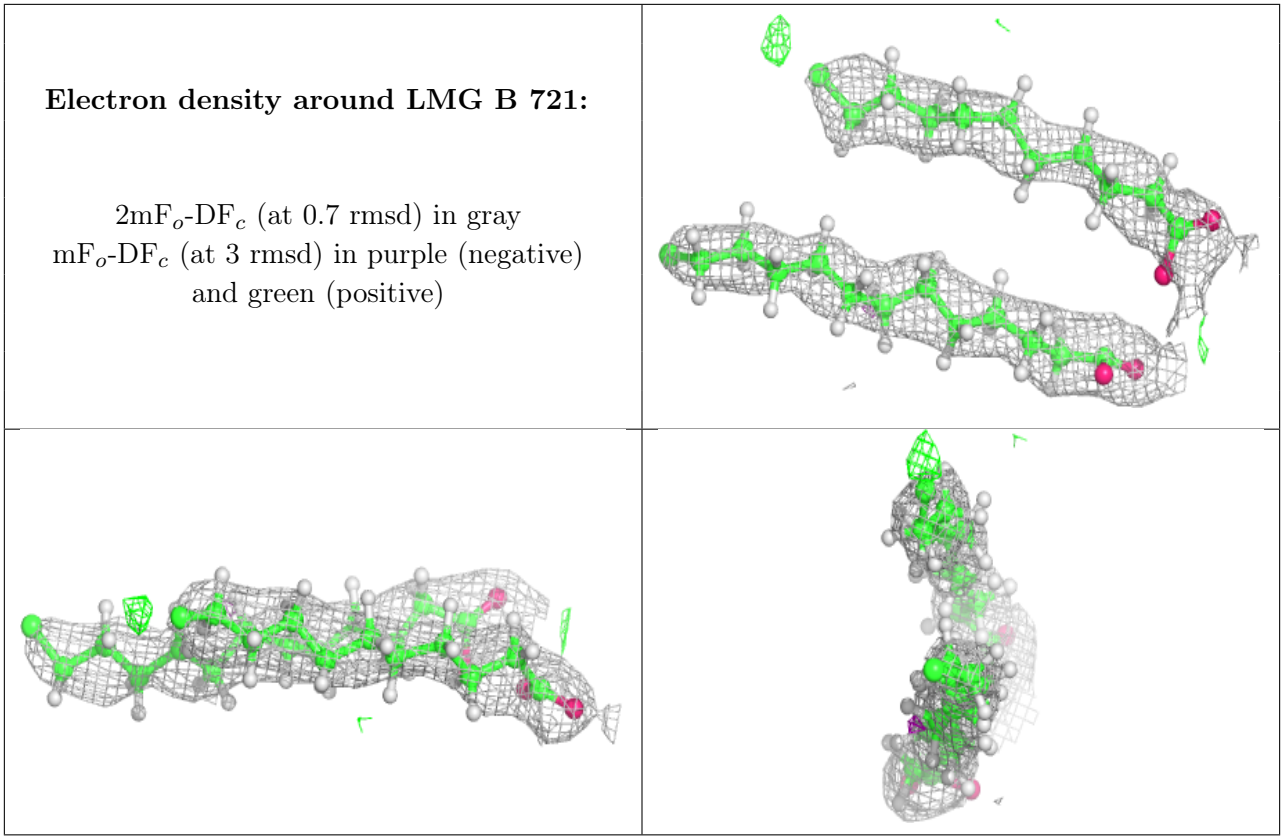






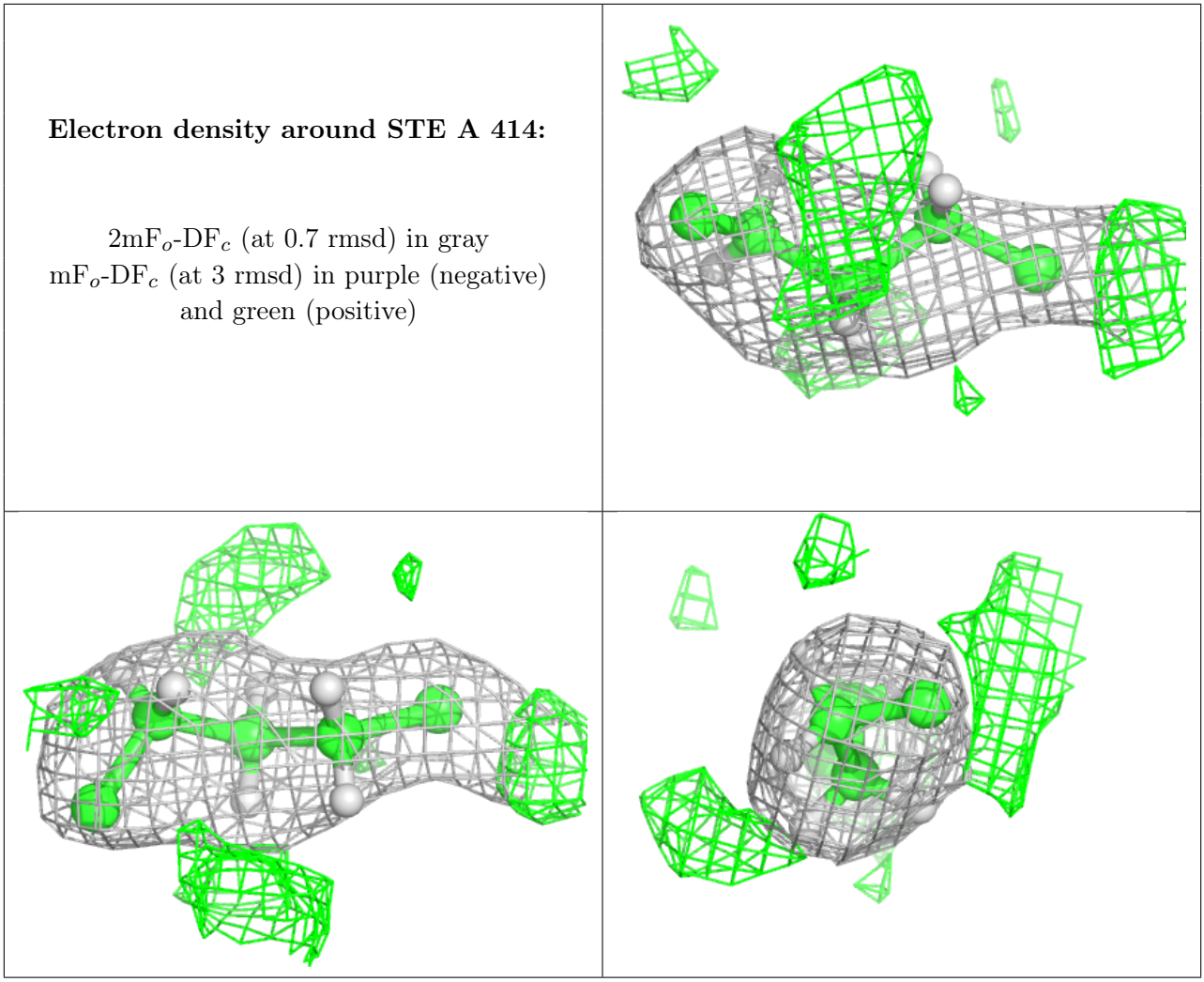
Electron density around LMG B 721:

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



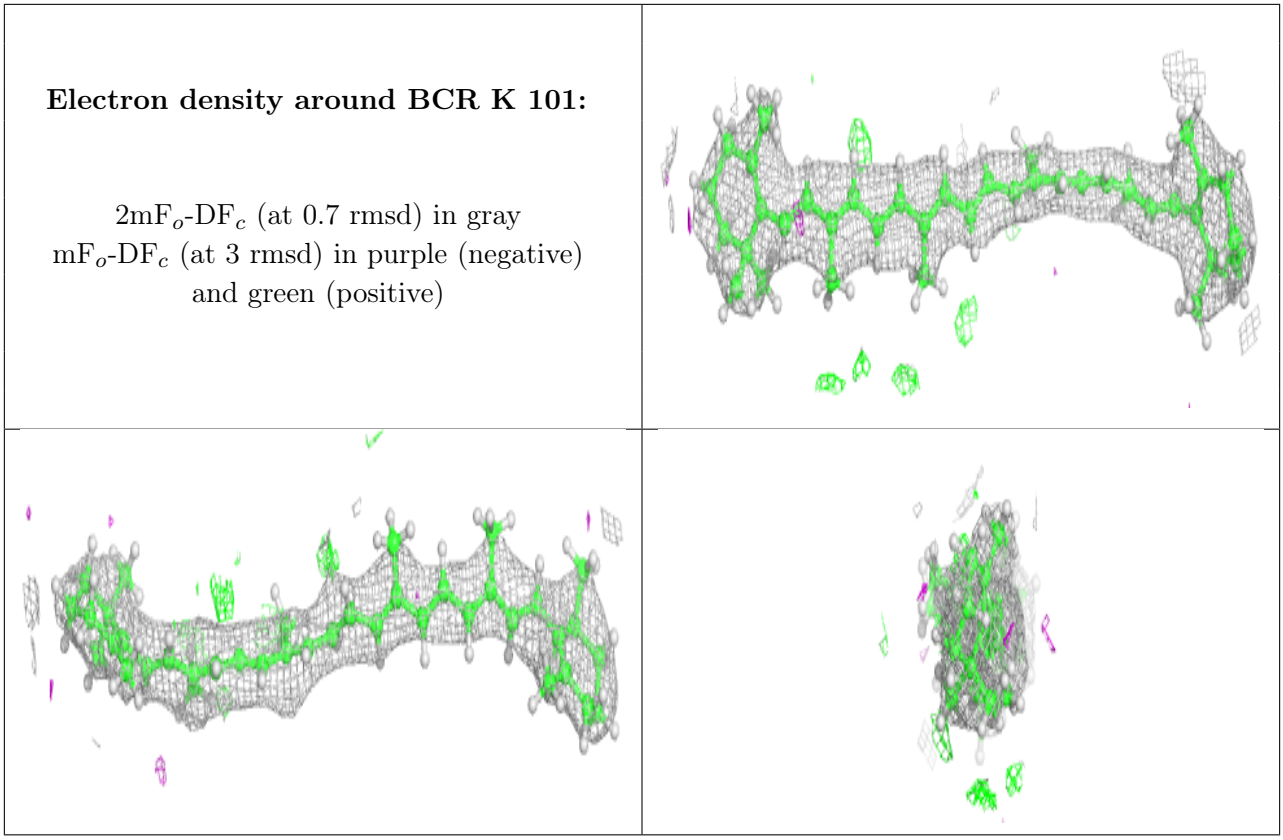
Electron density around STE A 414:

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



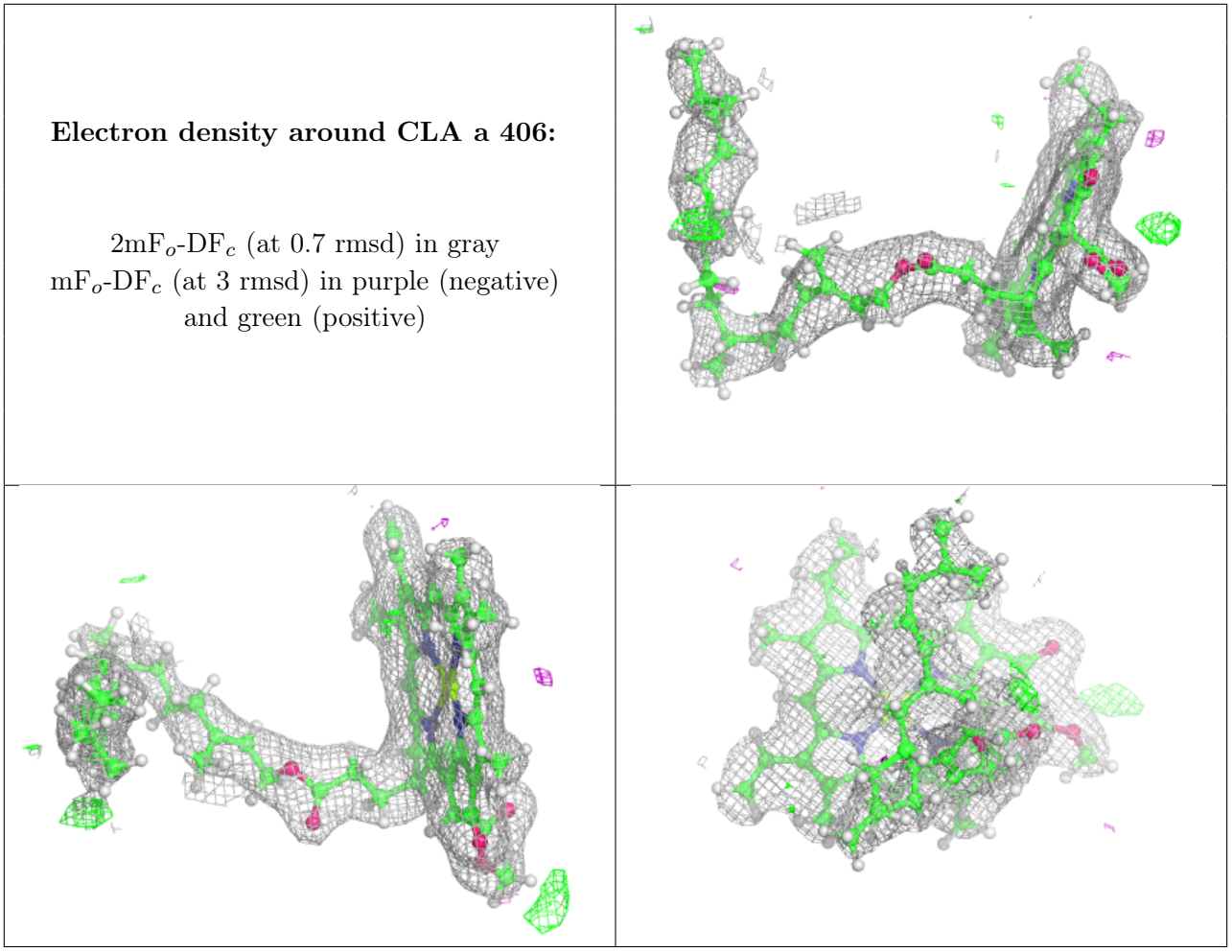
Electron density around BCR K 101:

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



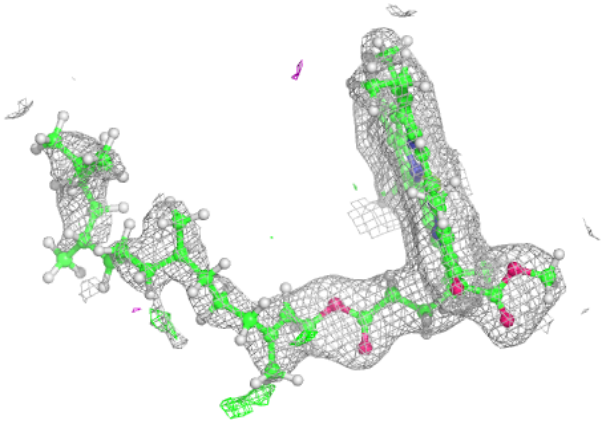
Electron density around CLA a 406:

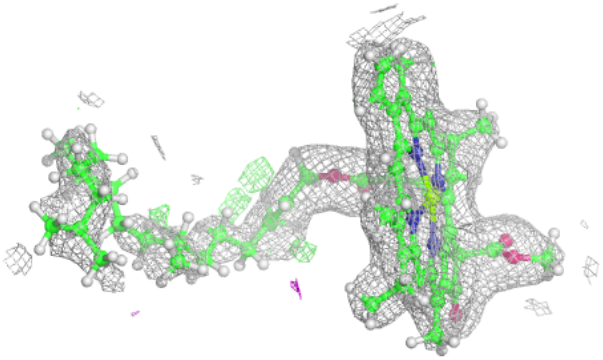
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

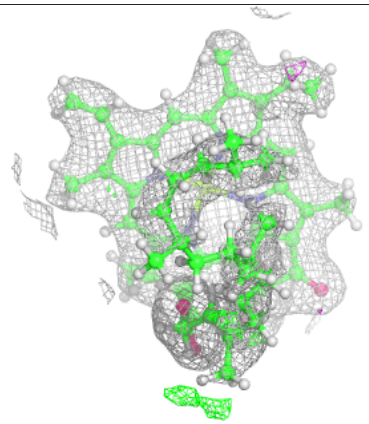


Electron density around CLA C 507:

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

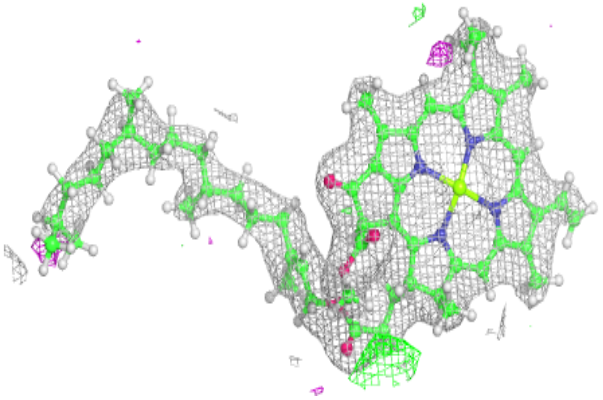


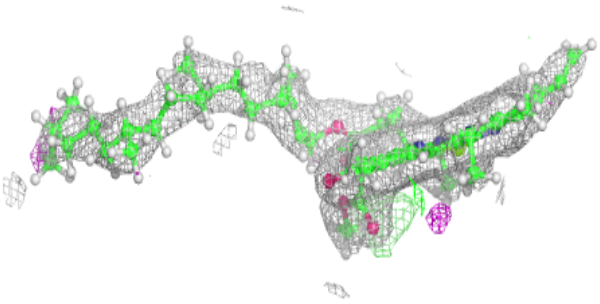


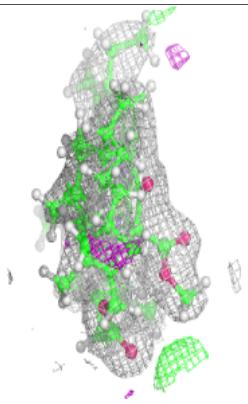


Electron density around CLA b 702:

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

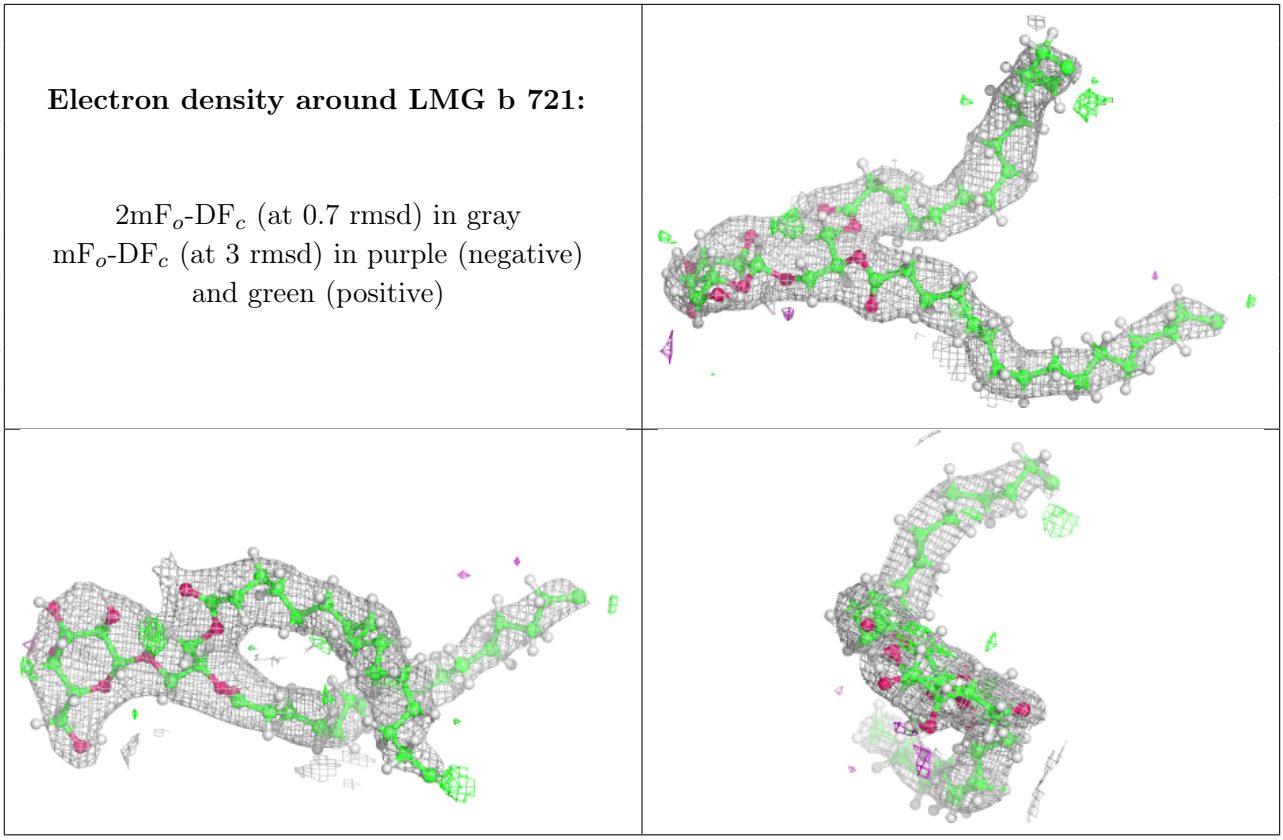






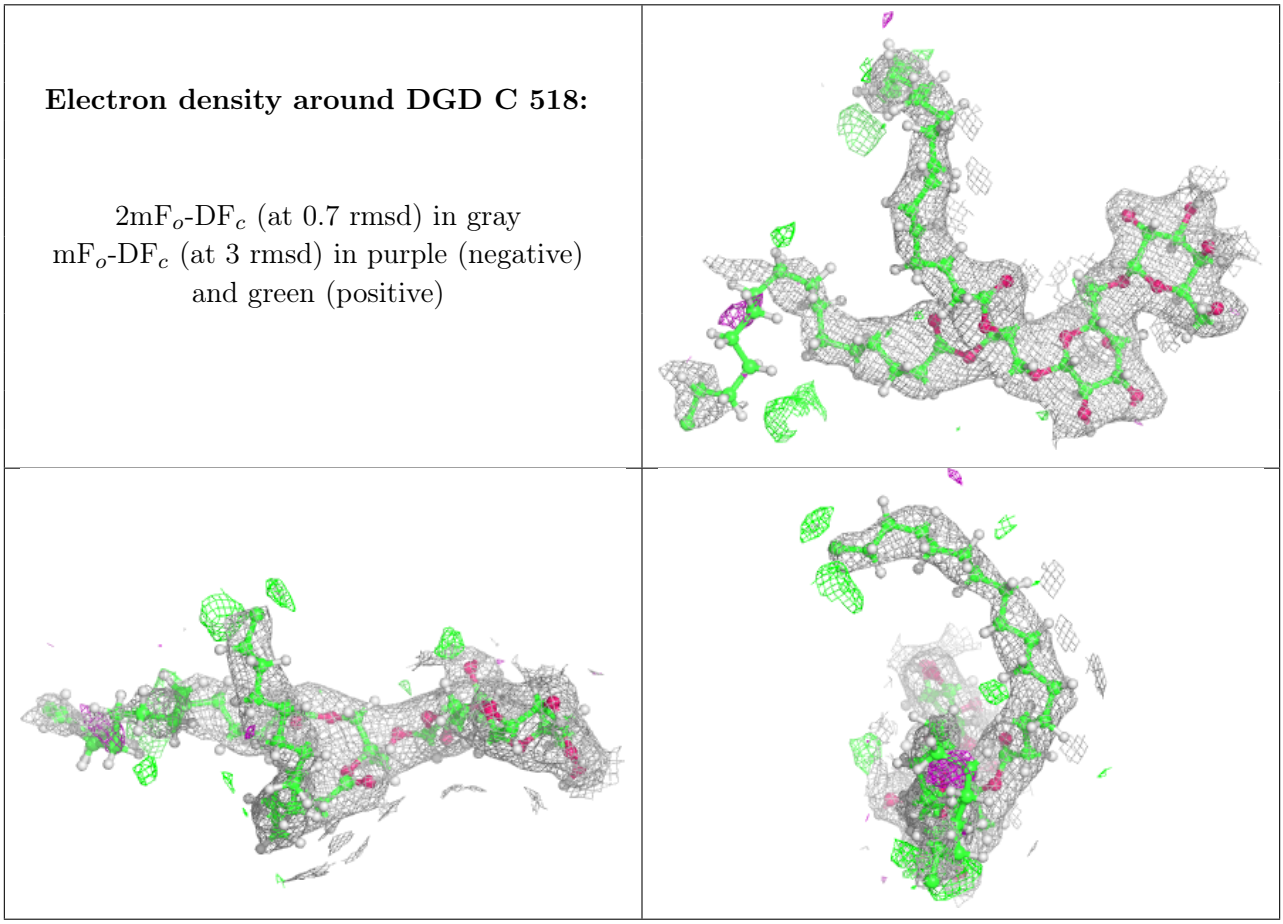
Electron density around LMG b 721:

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



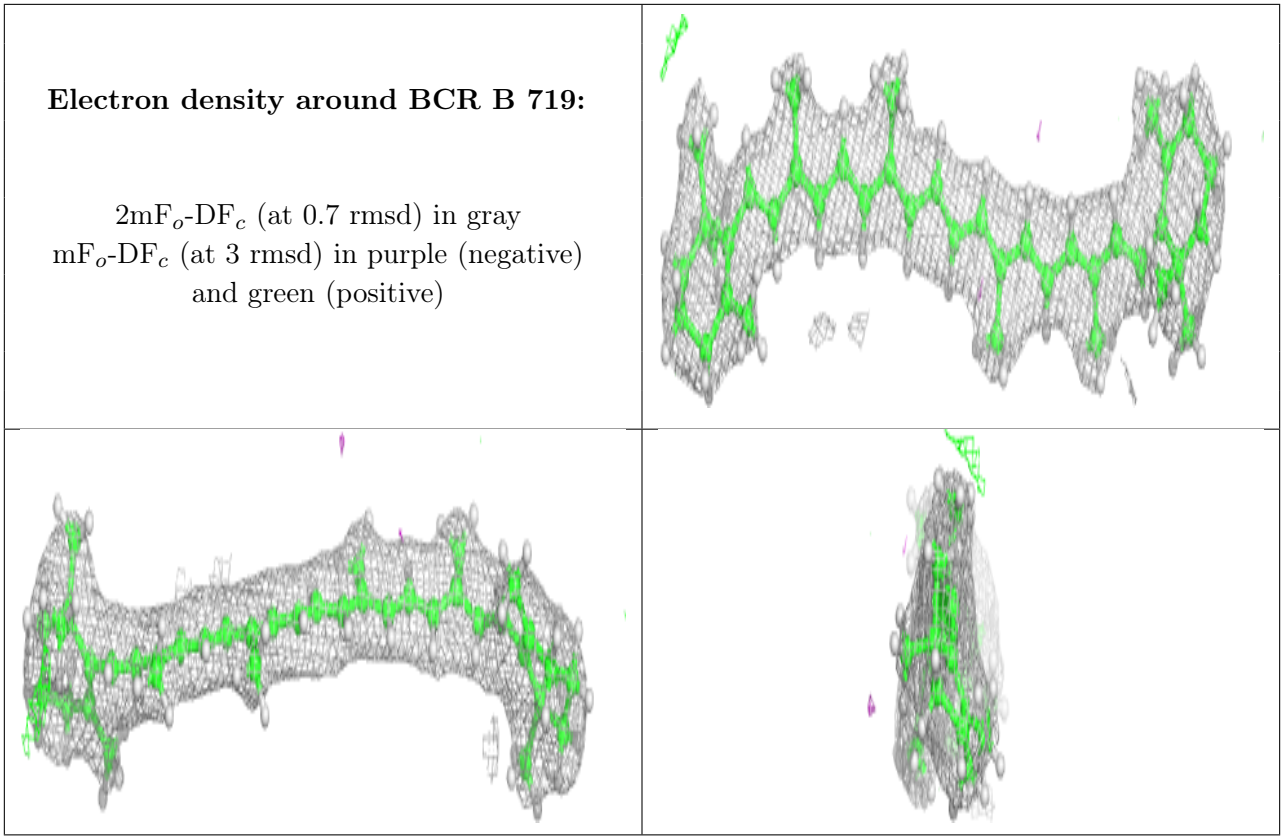
Electron density around DGD C 518:

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



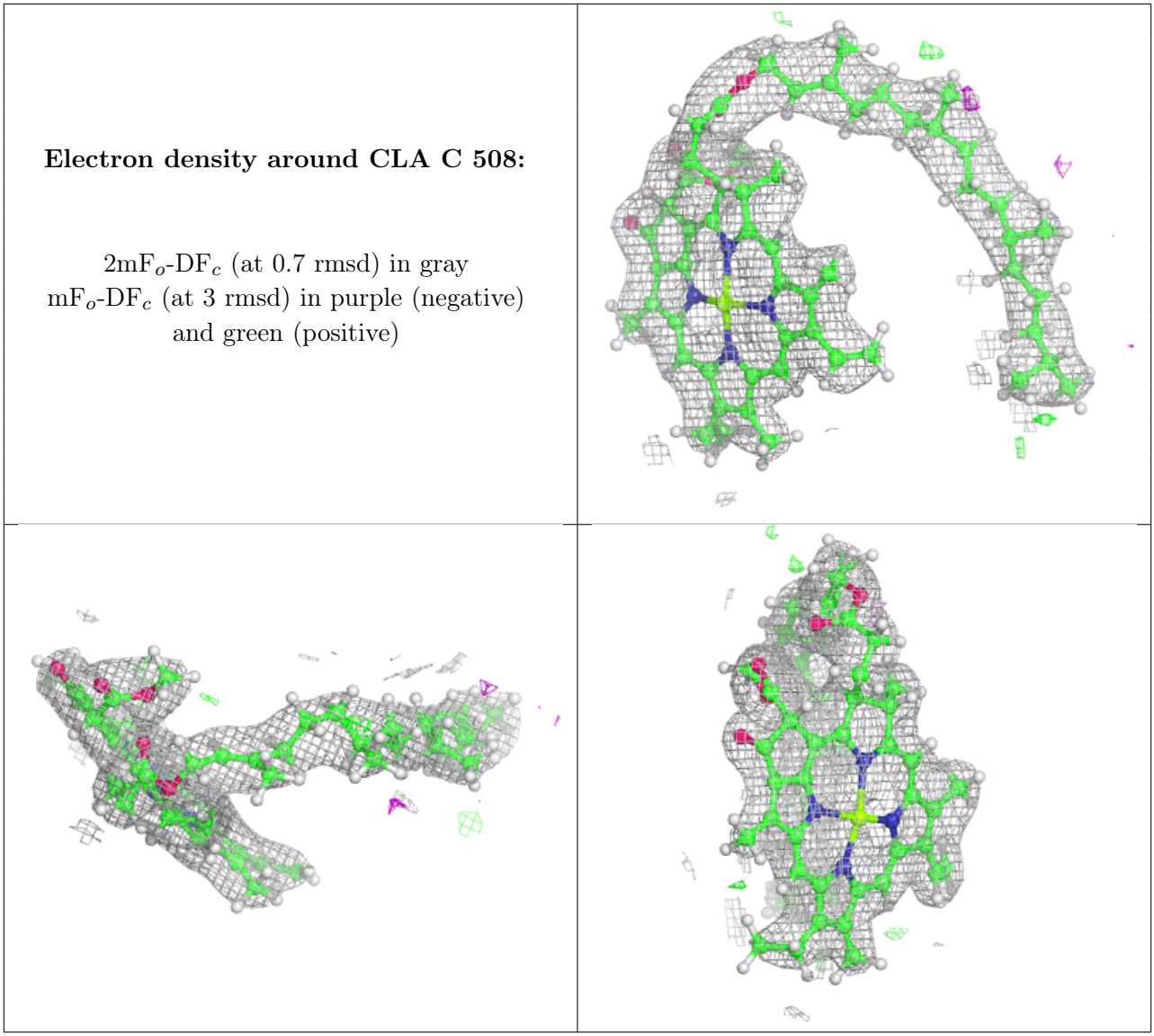
Electron density around BCR B 719:

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



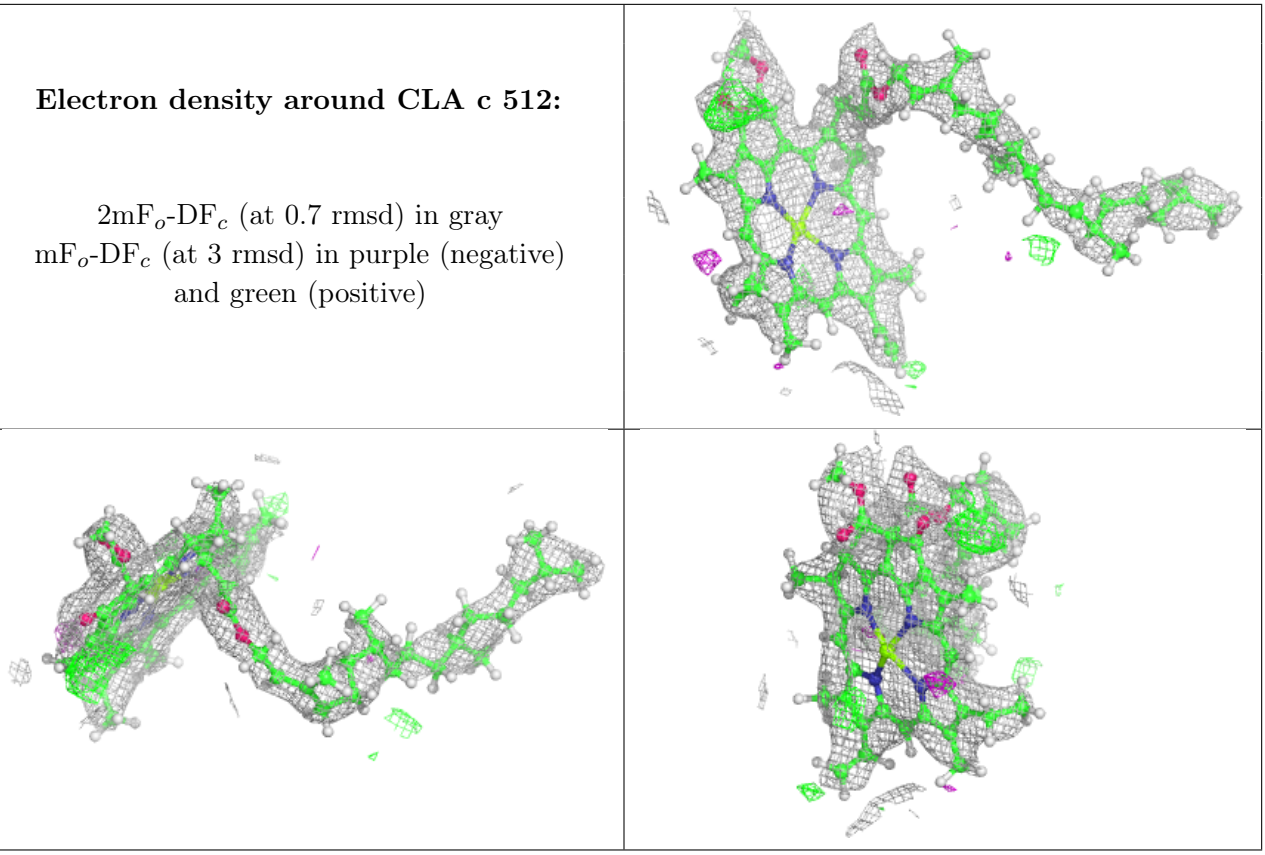
Electron density around CLA C 508:

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



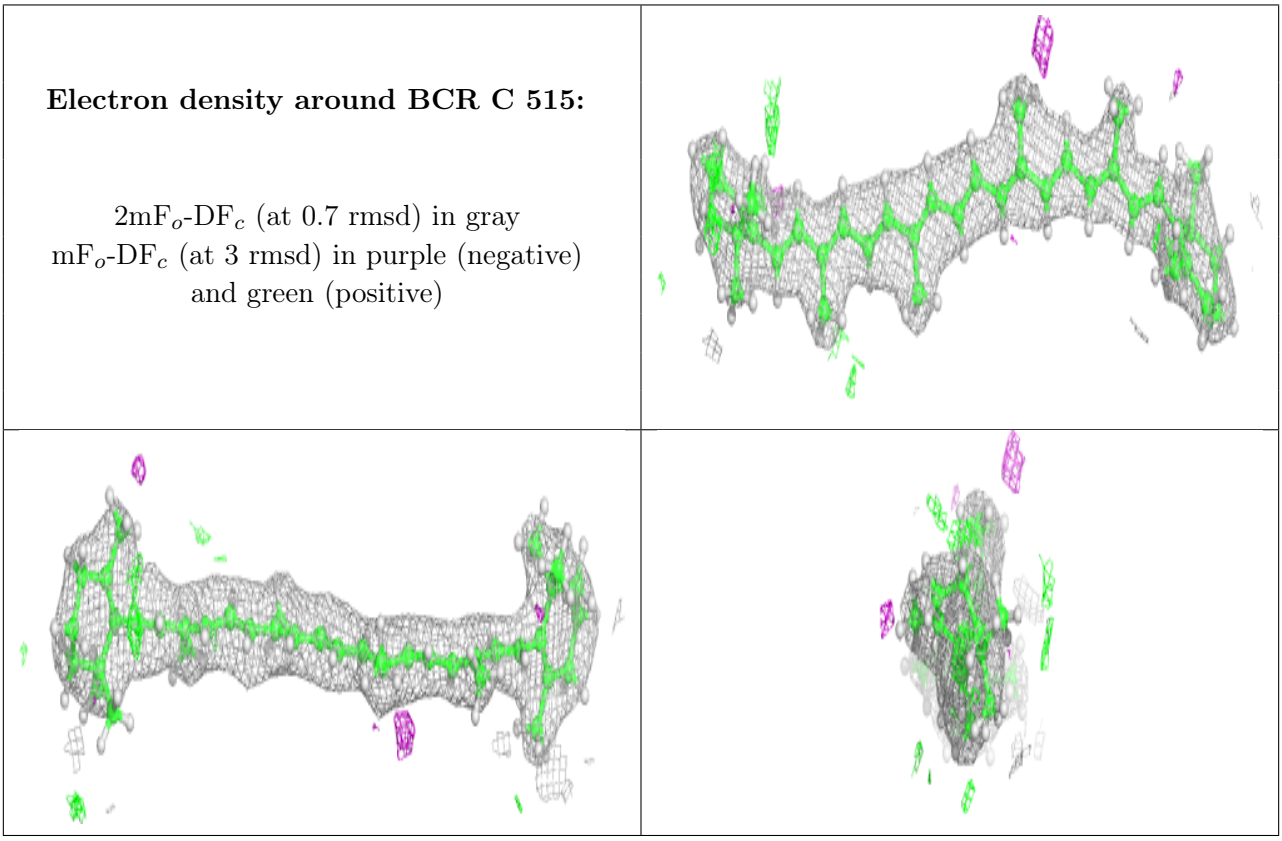
Electron density around CLA c 512:

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



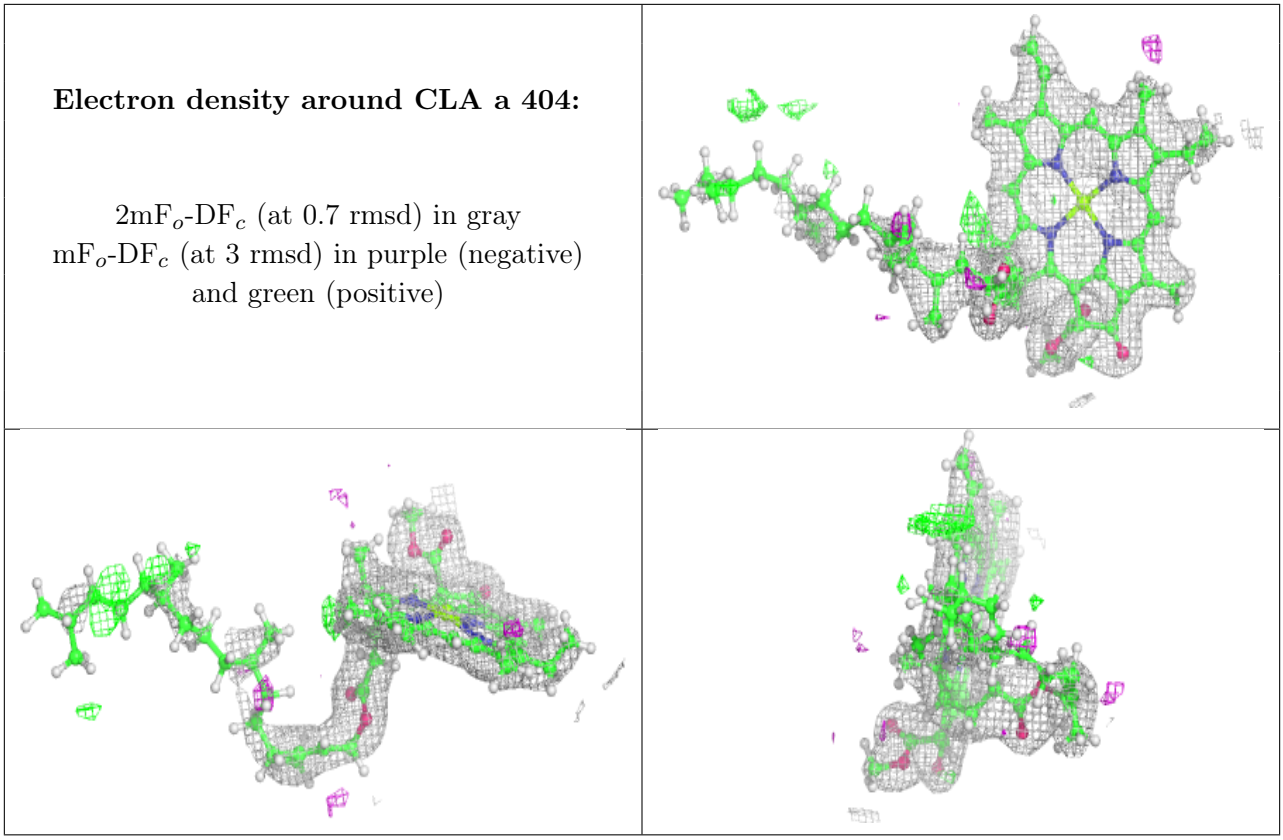
Electron density around BCR C 515:

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



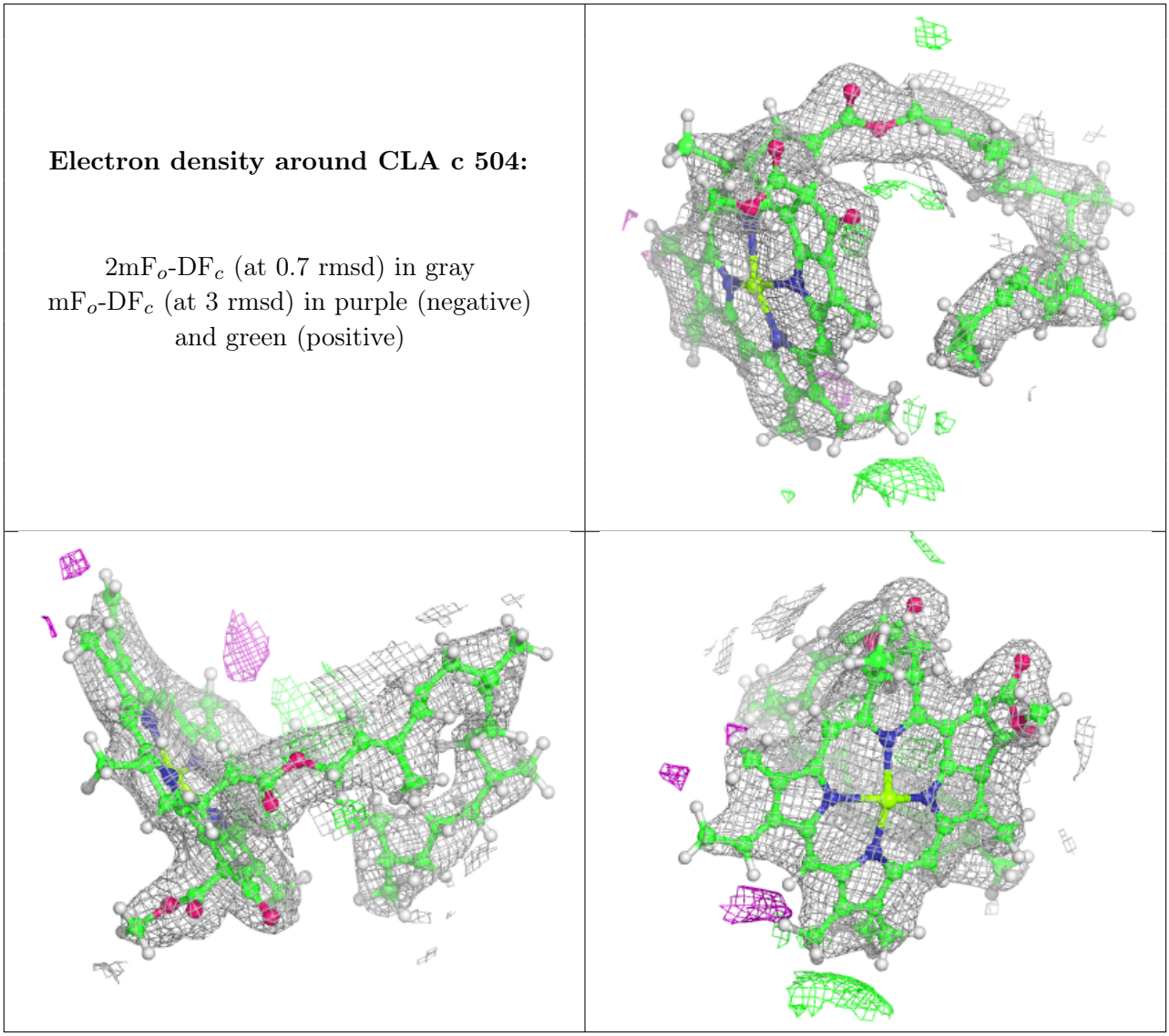
Electron density around CLA a 404:

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



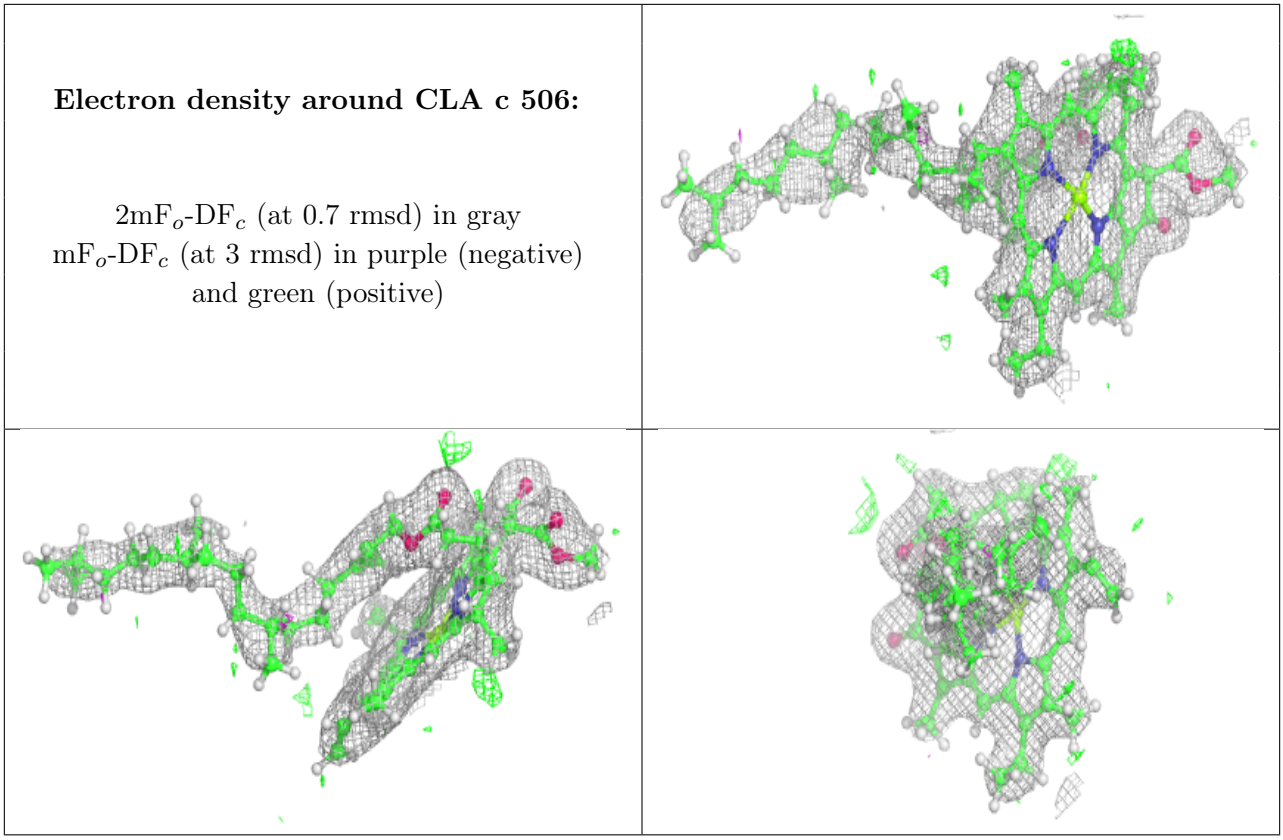
Electron density around CLA c 504:

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



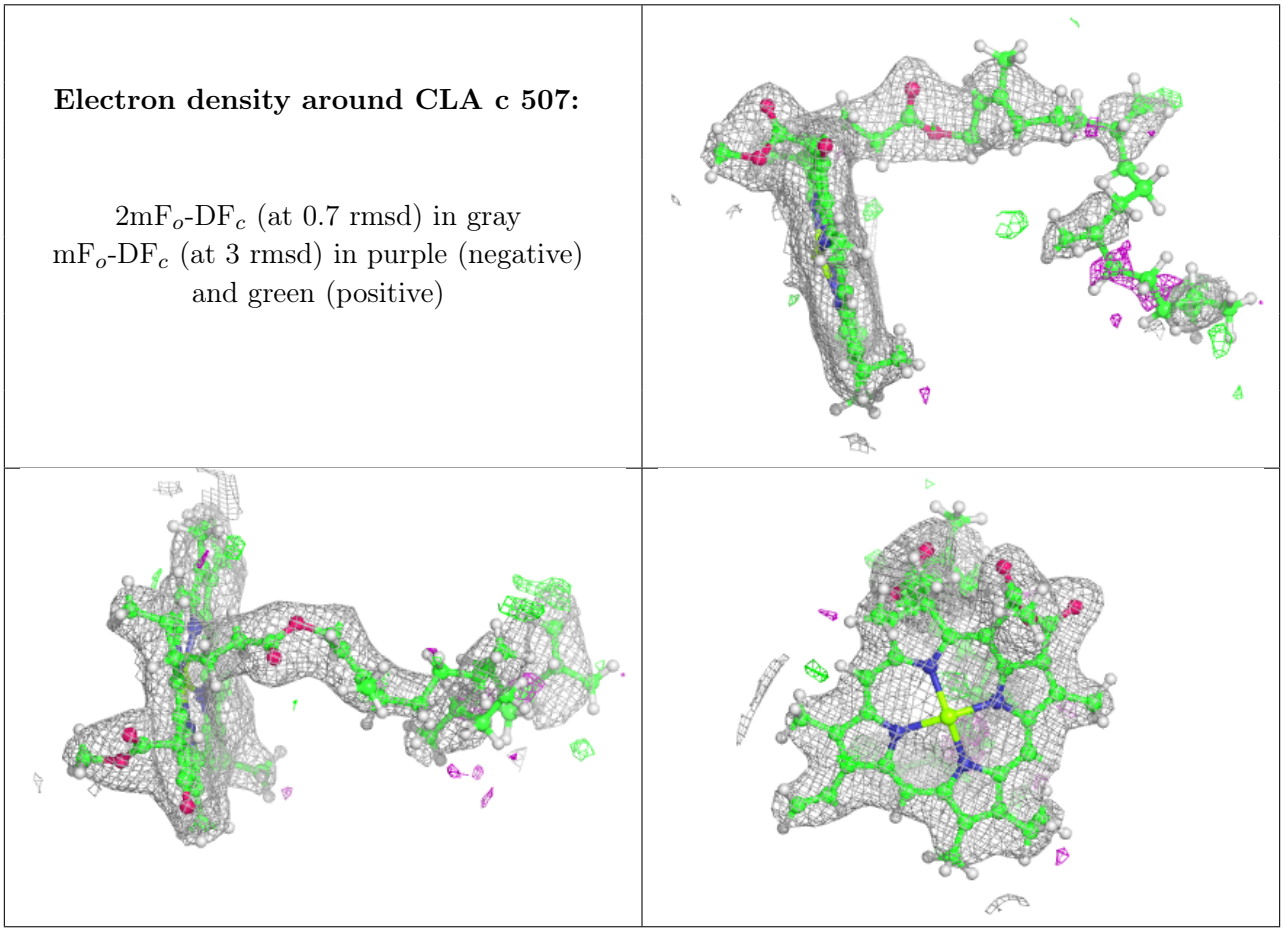
Electron density around CLA c 506:

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



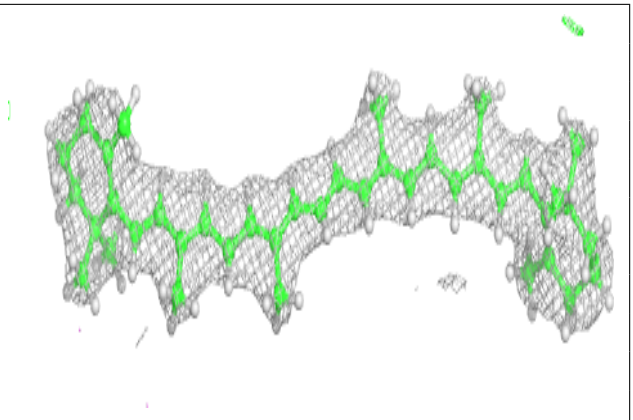
Electron density around CLA c 507:

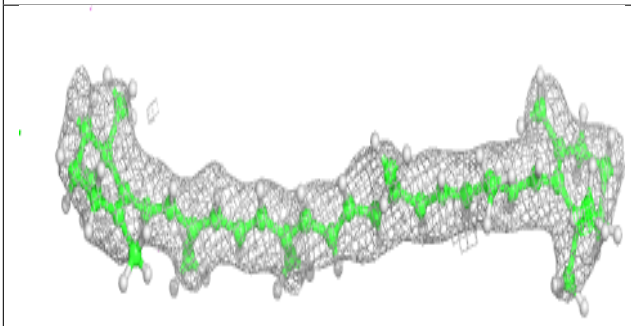
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

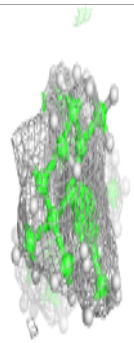


Electron density around BCR b 719:

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

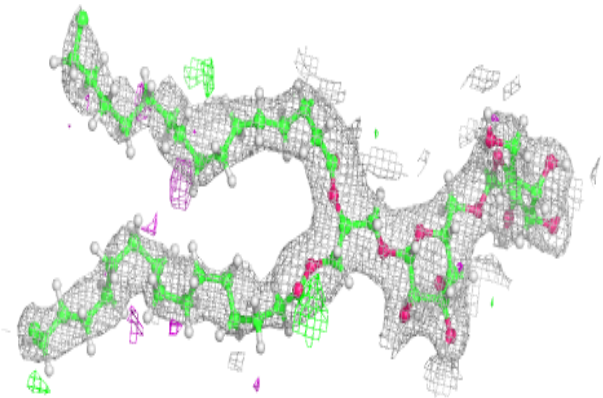


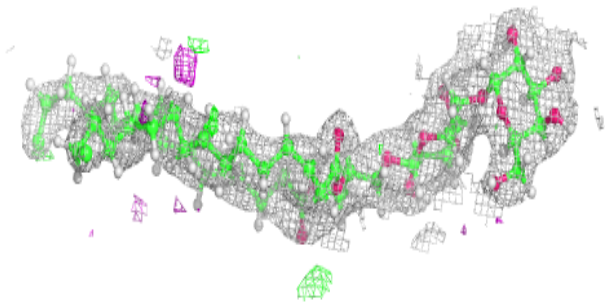


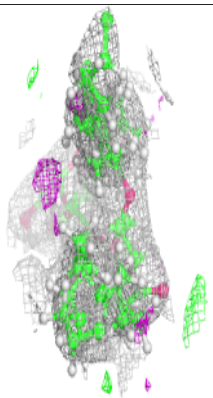


Electron density around DGD C 519:

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

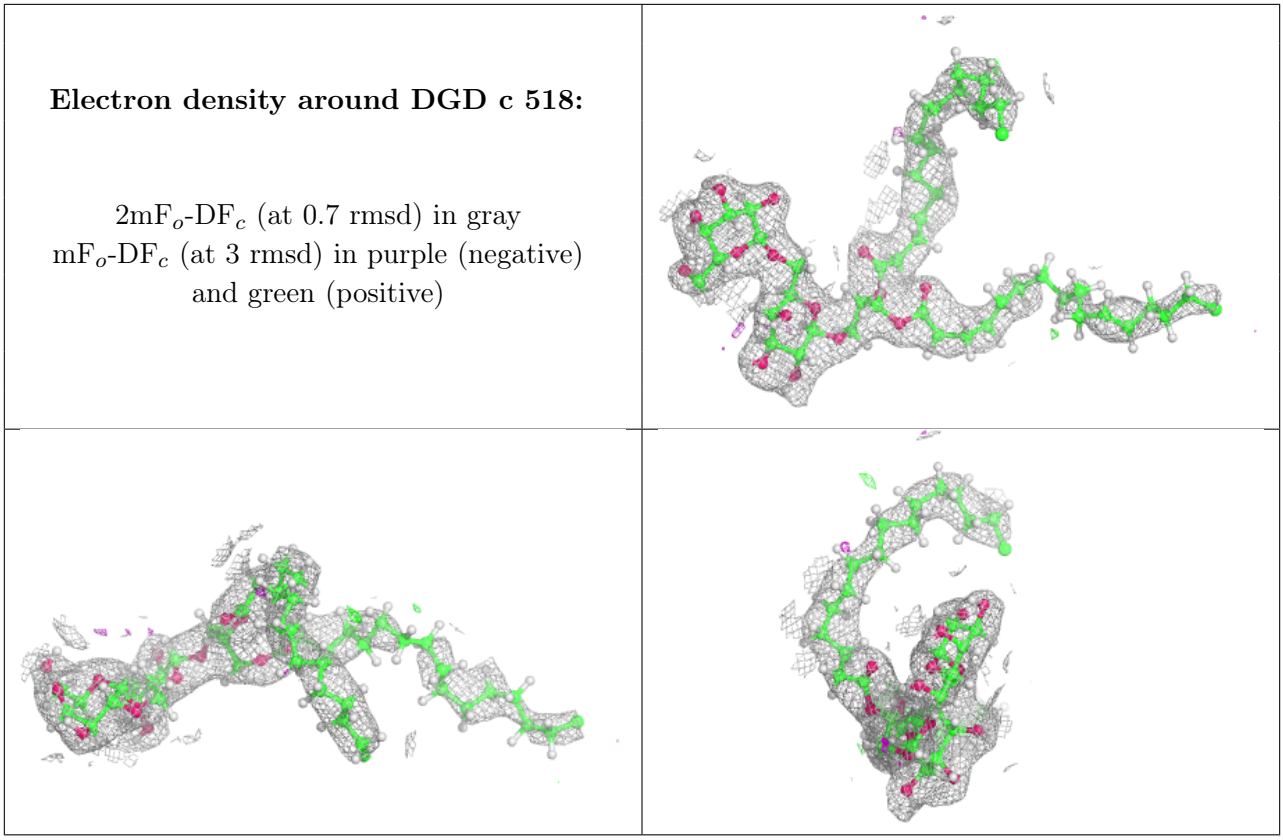






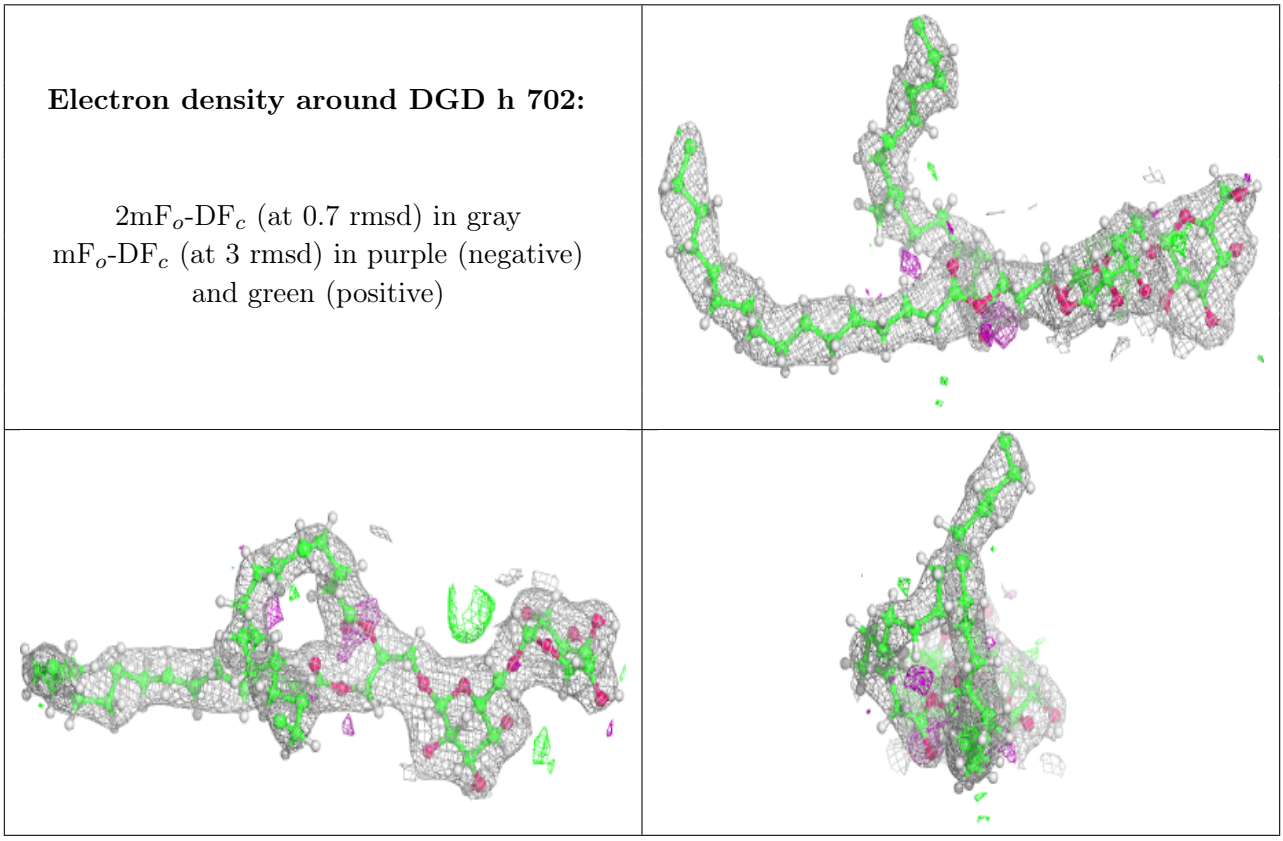
Electron density around DGD c 518:

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



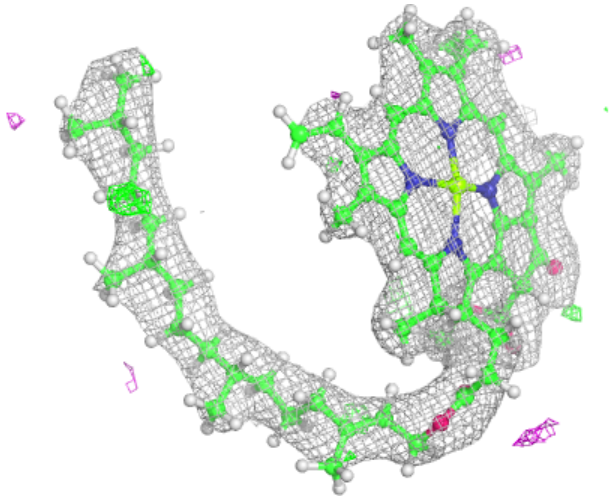
Electron density around DGD h 702:

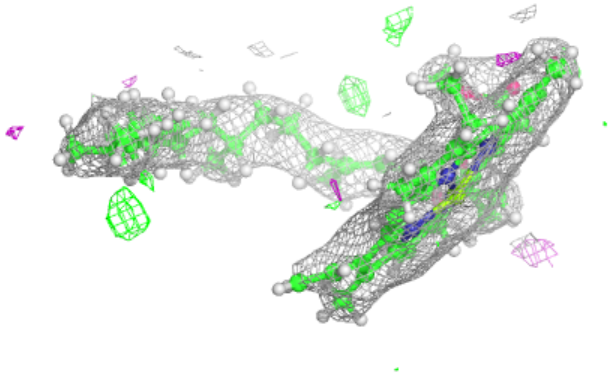
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

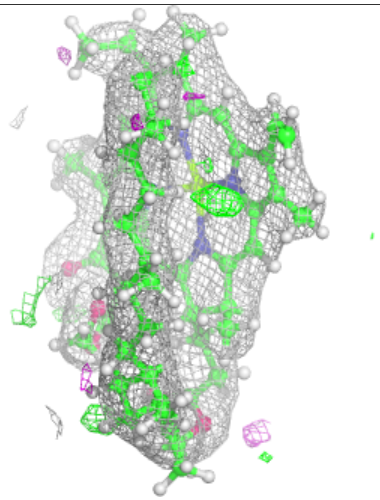


Electron density around CLA c 508:

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

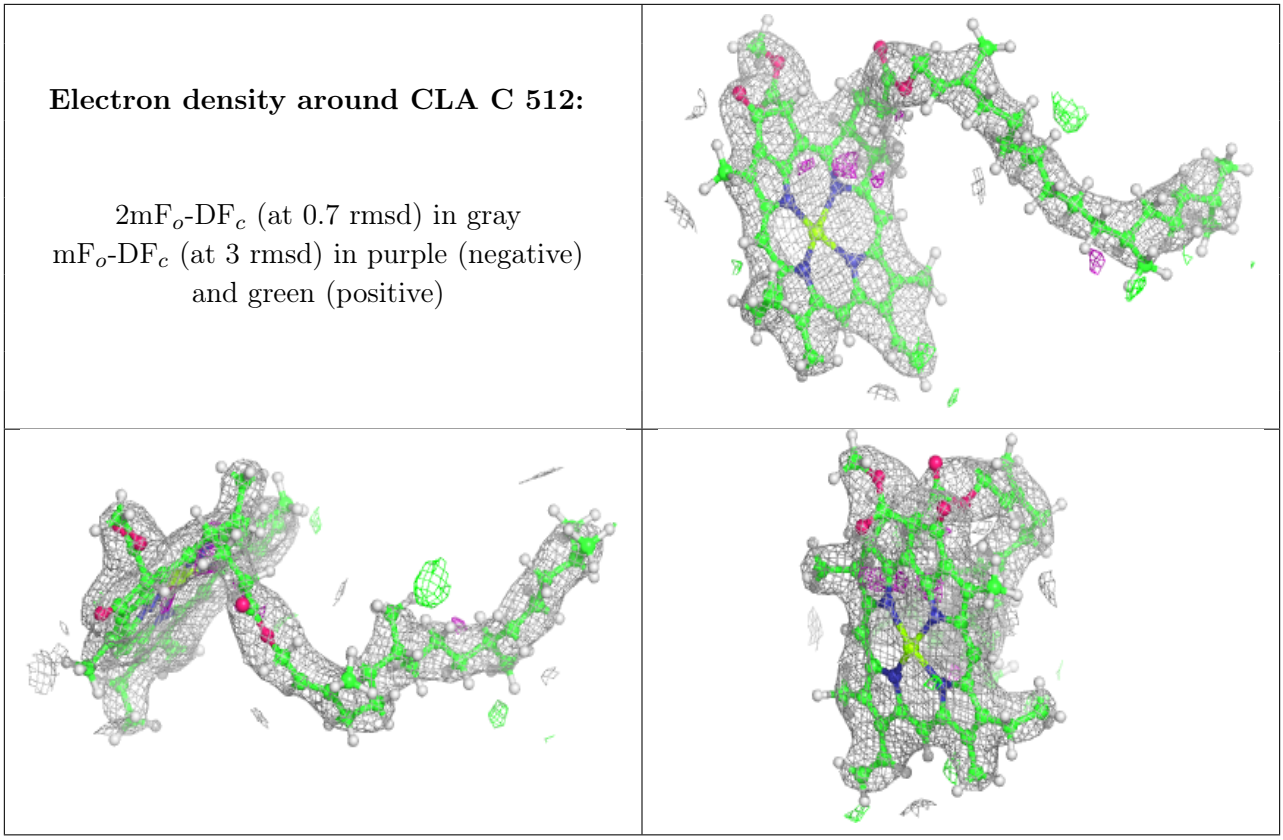






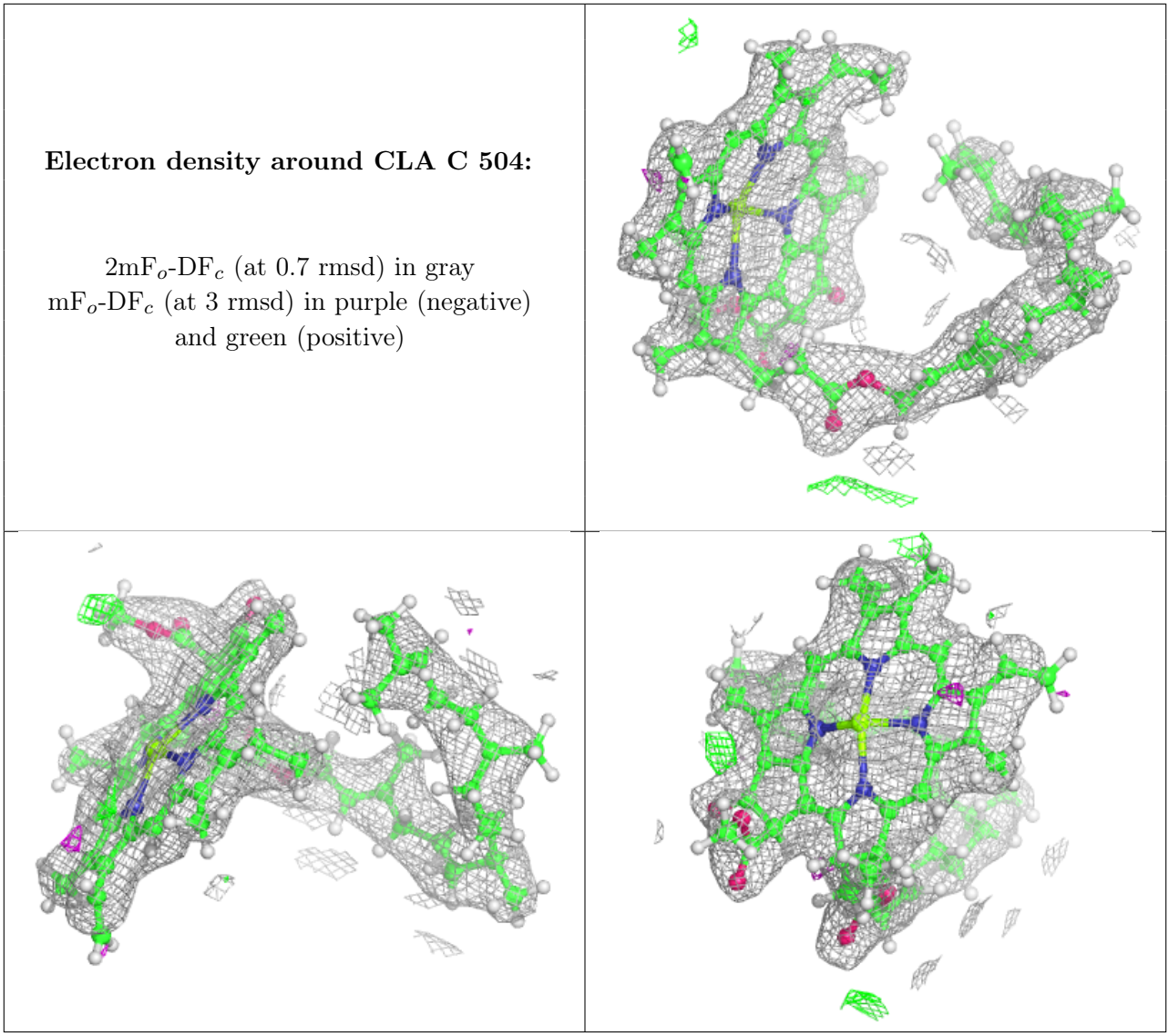
Electron density around CLA C 512:

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



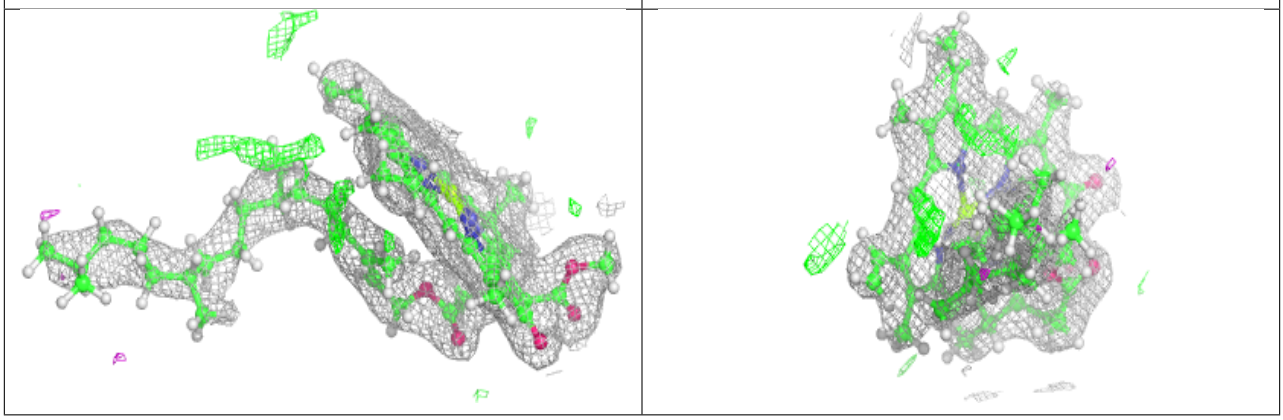
Electron density around CLA C 504:

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



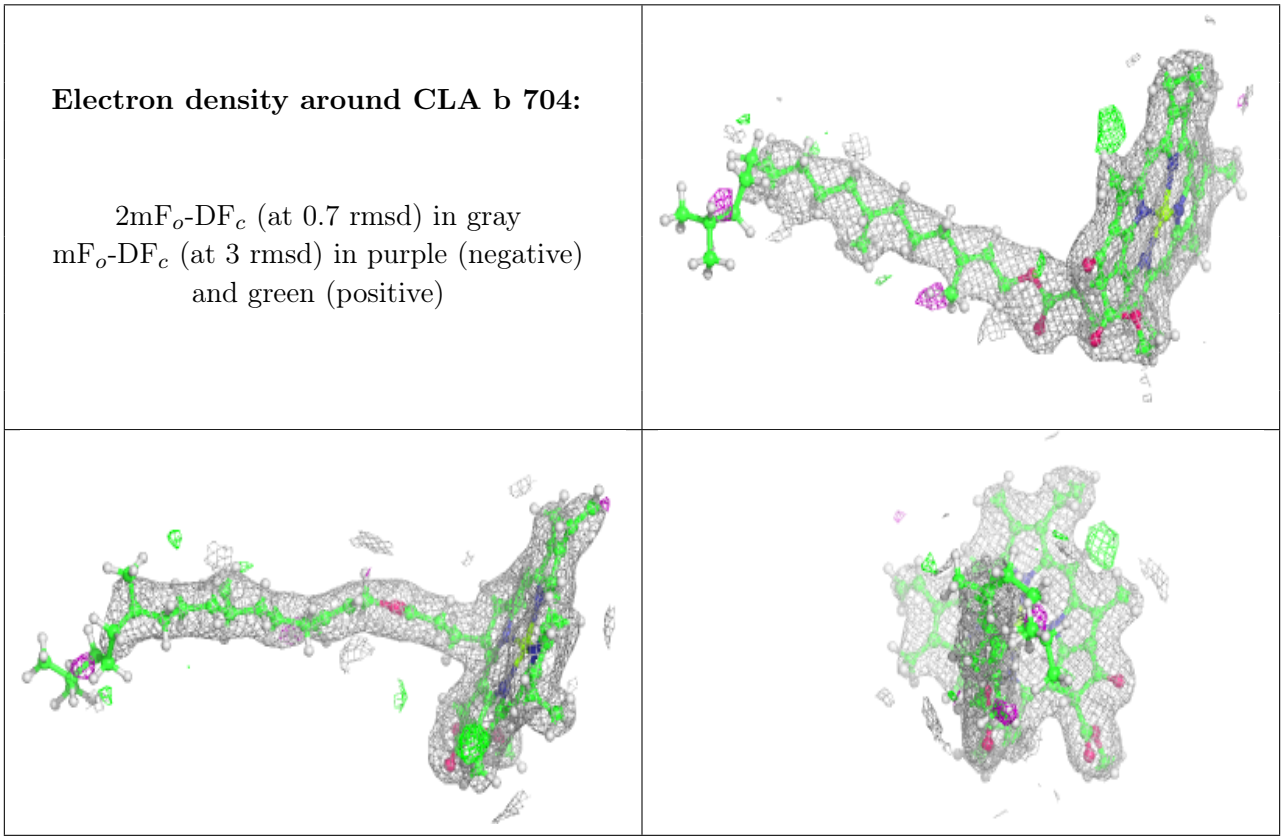
Electron density around CLA C 506:

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



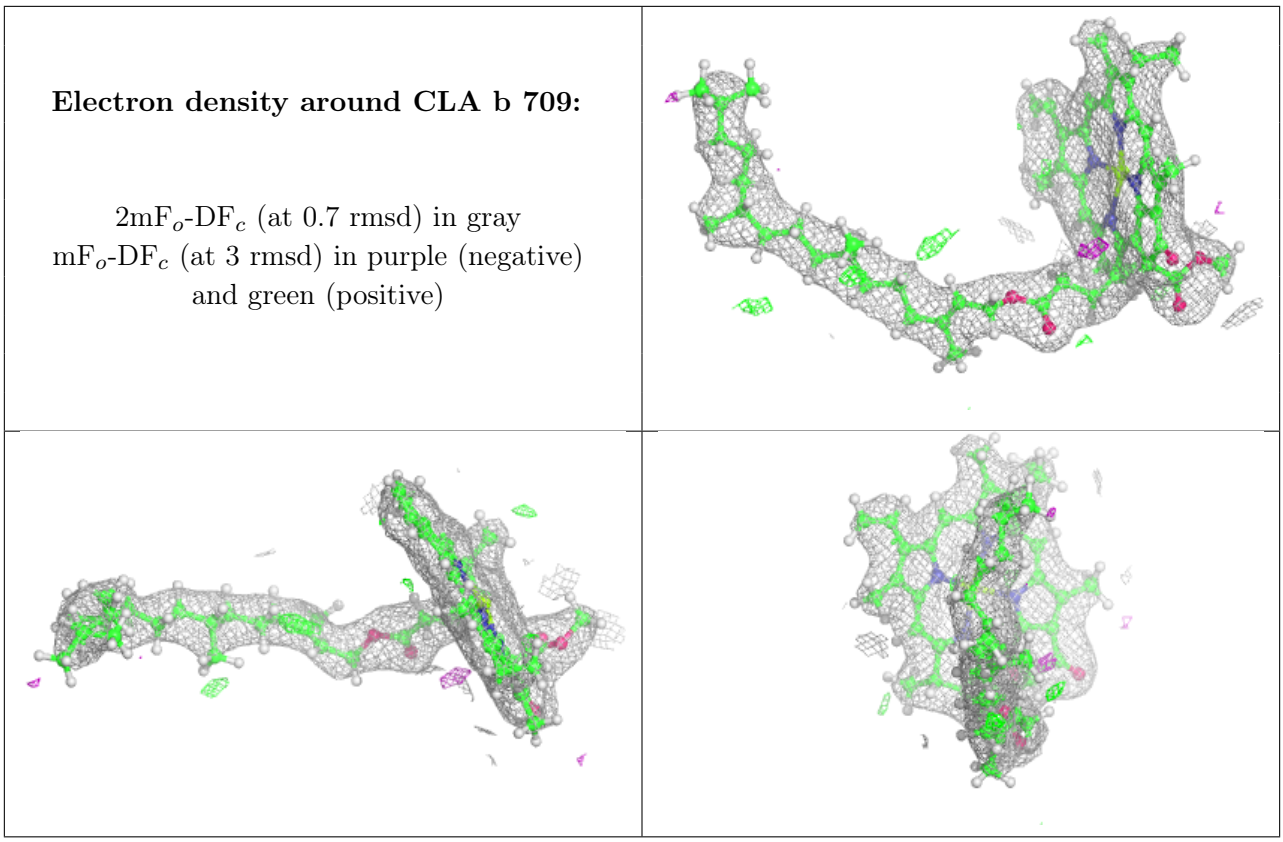
Electron density around CLA b 704:

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



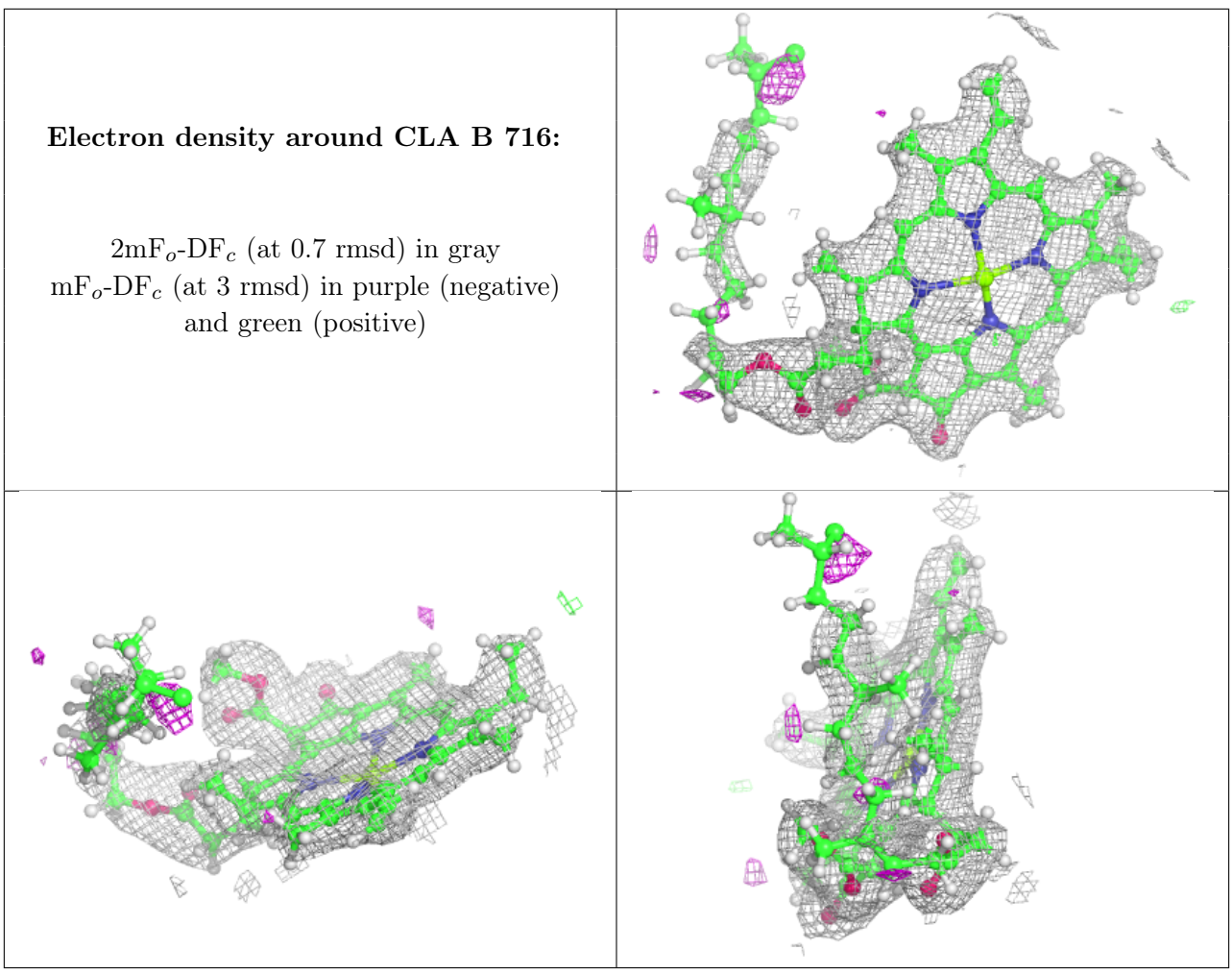
Electron density around CLA b 709:

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



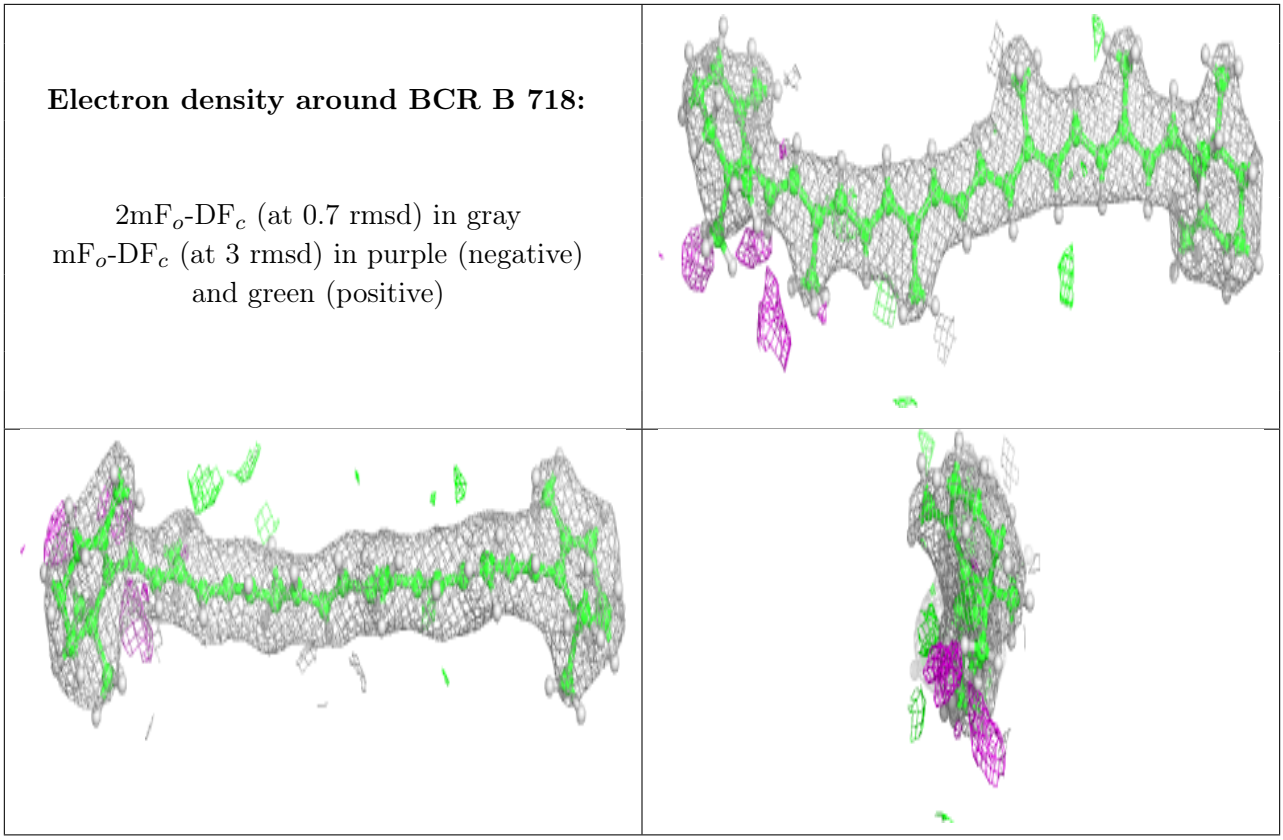
Electron density around CLA B 716:

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



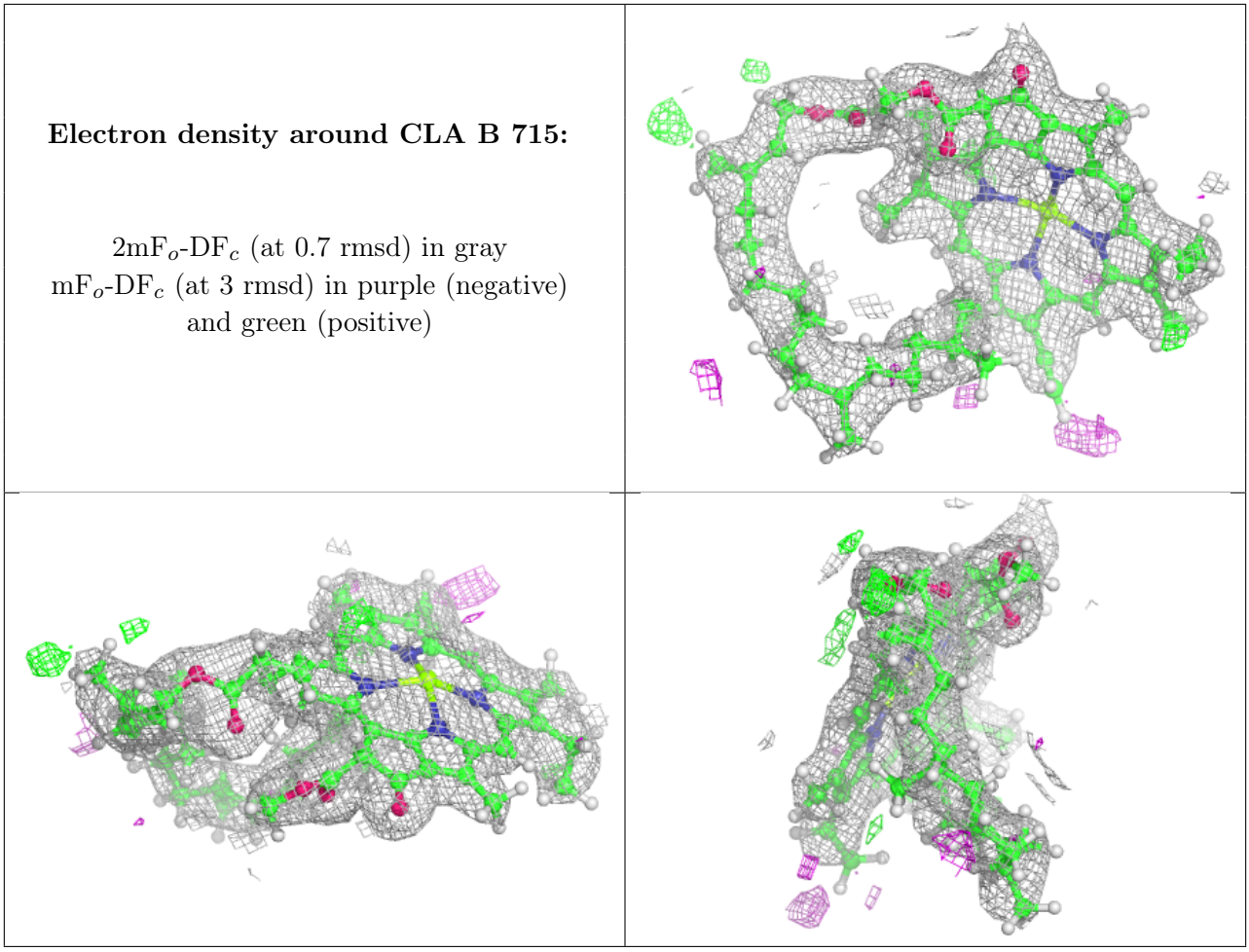
Electron density around BCR B 718:

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



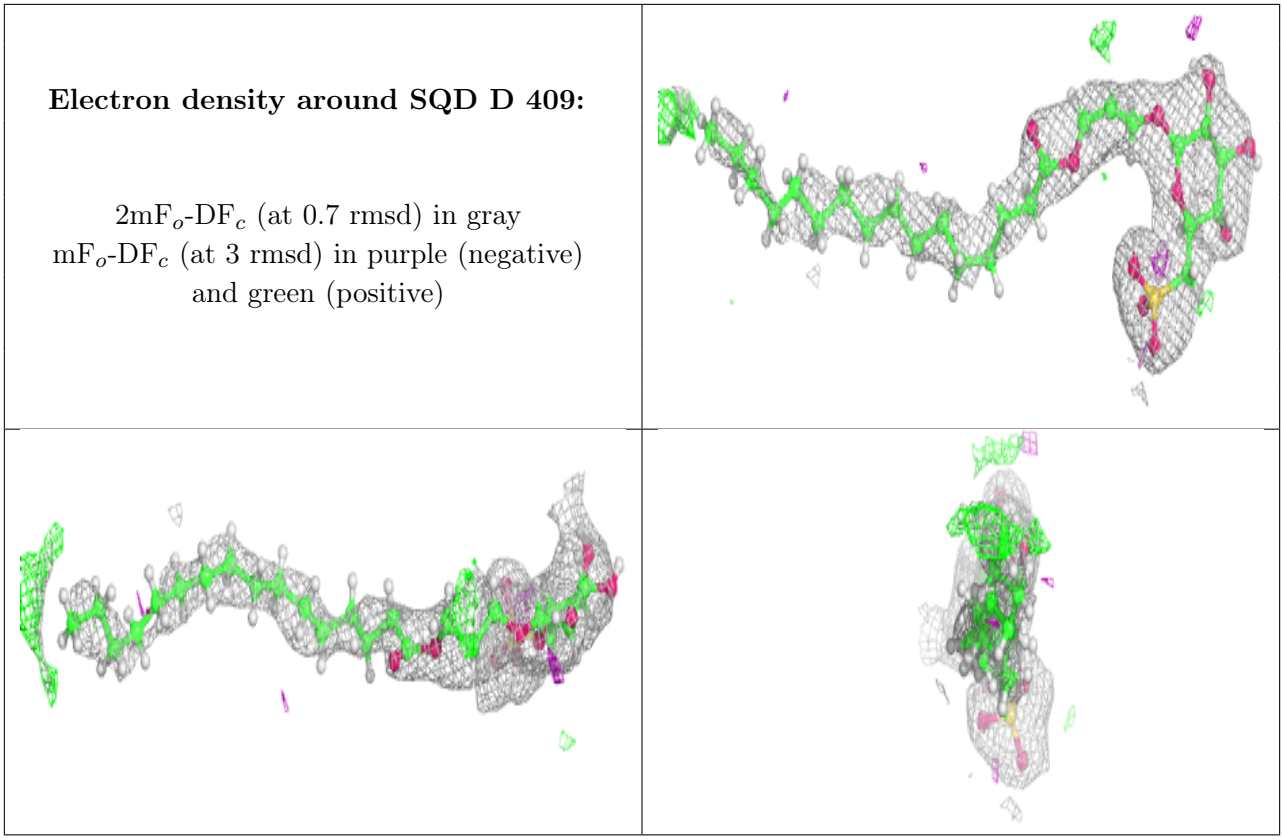
Electron density around CLA B 715:

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



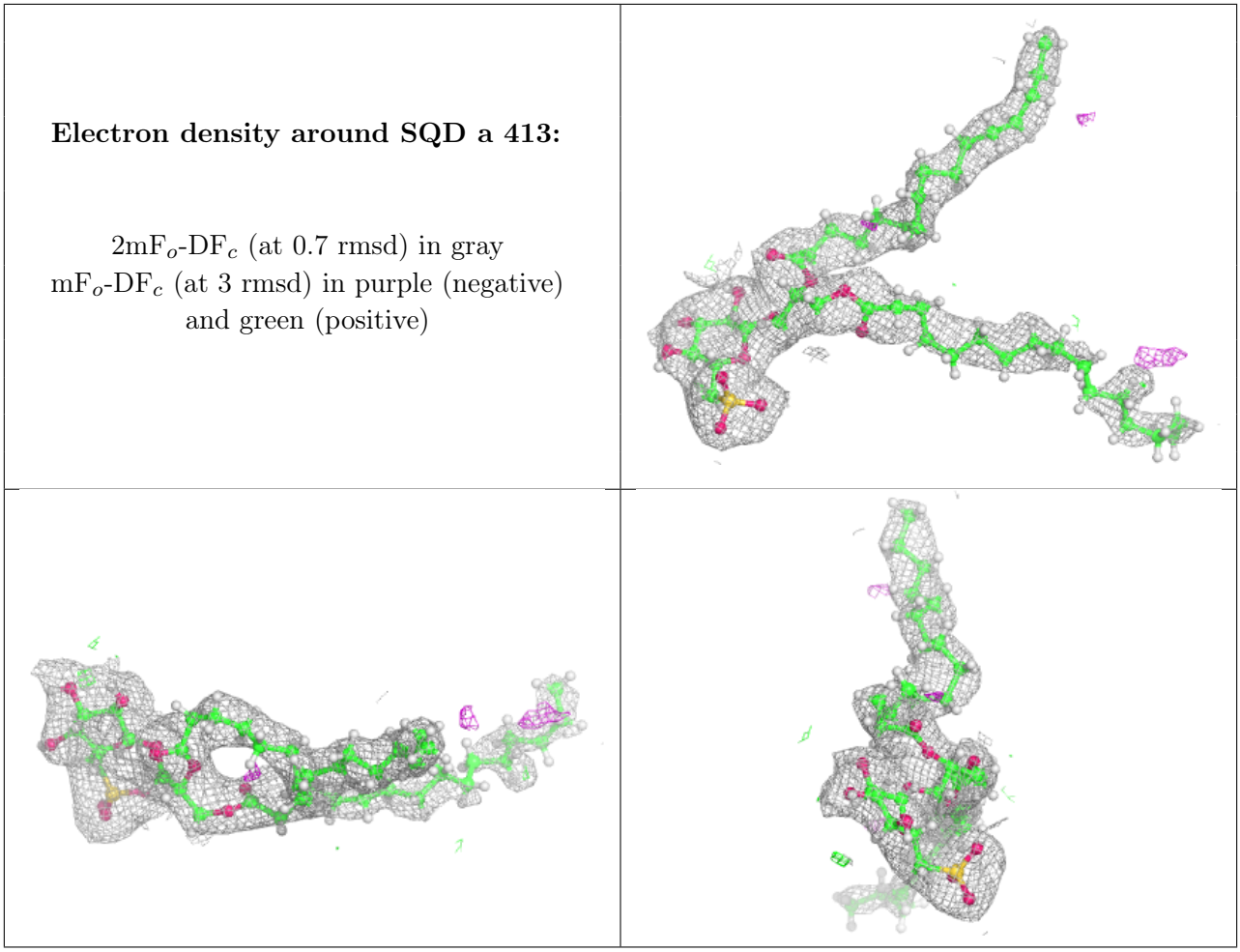
Electron density around SQD D 409:

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



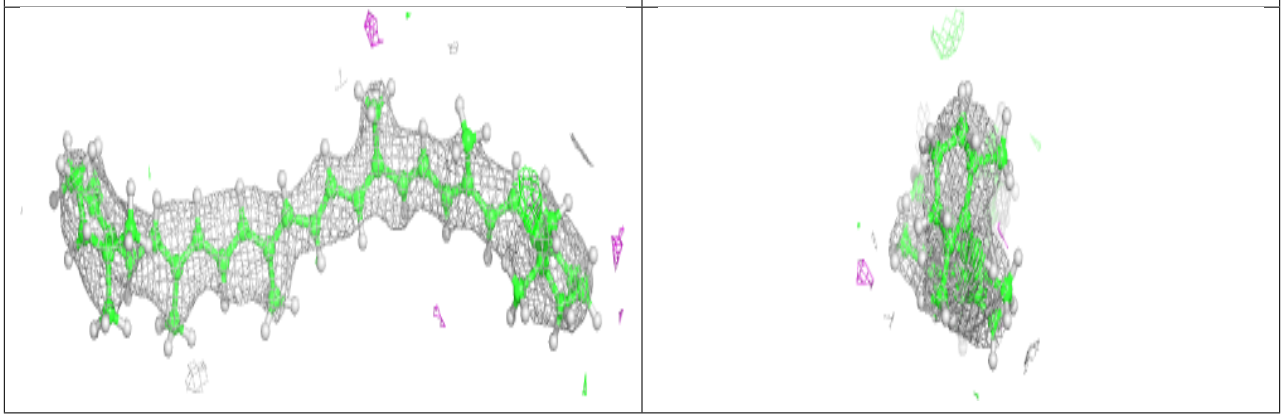
Electron density around SQD a 413:

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



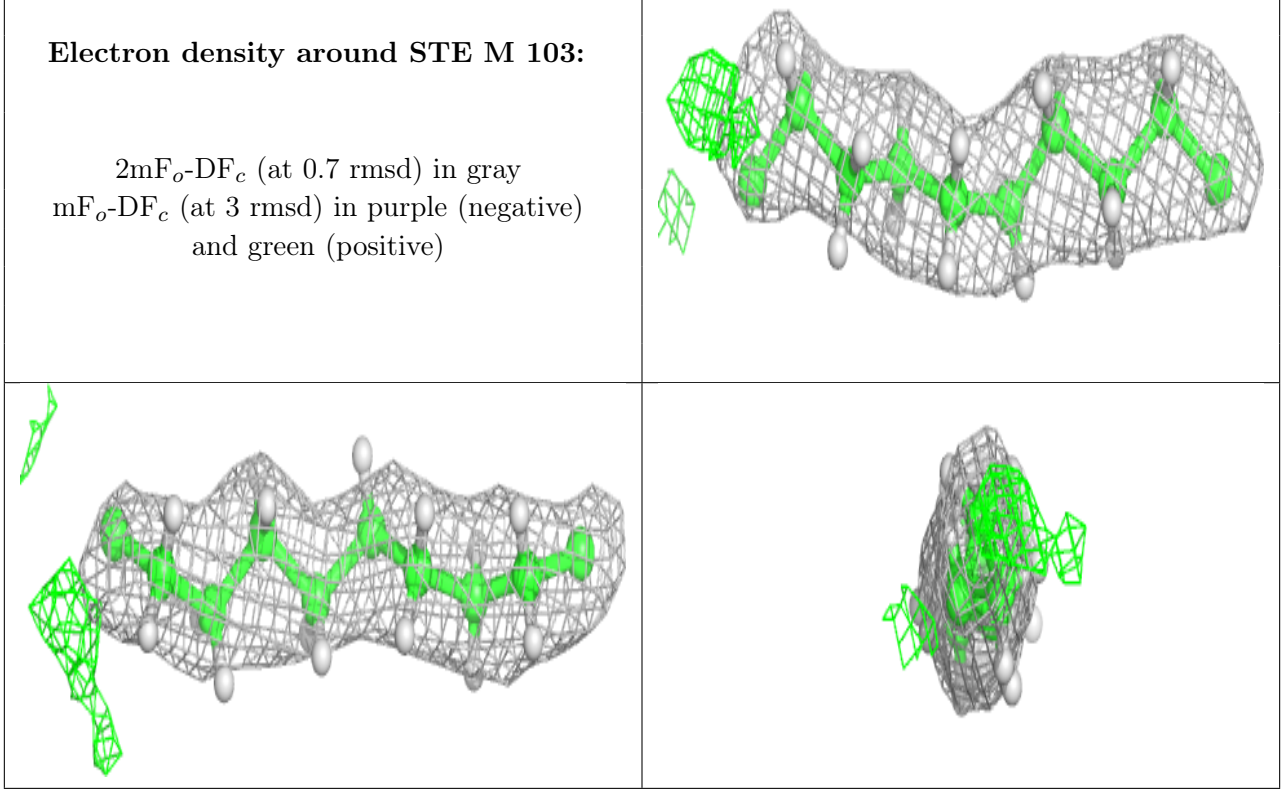
Electron density around BCR C 501:

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



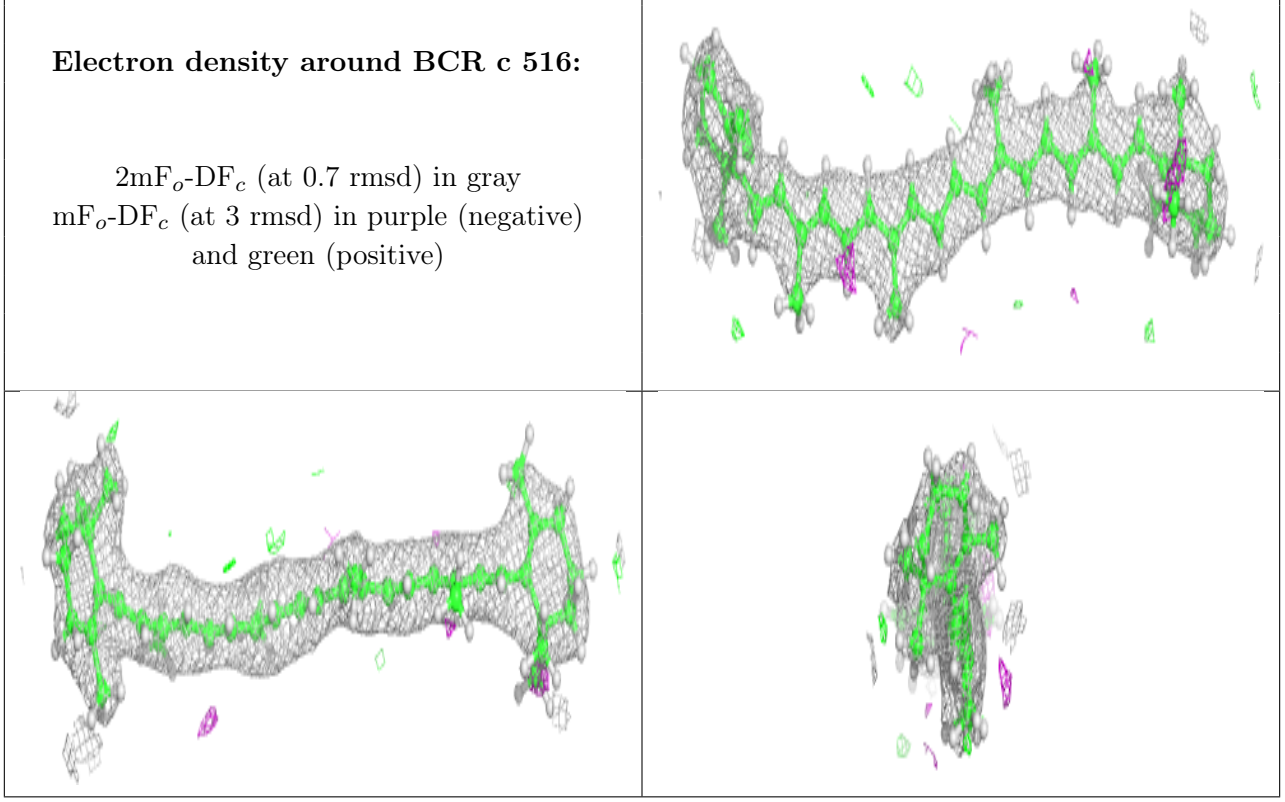
Electron density around STE M 103:

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



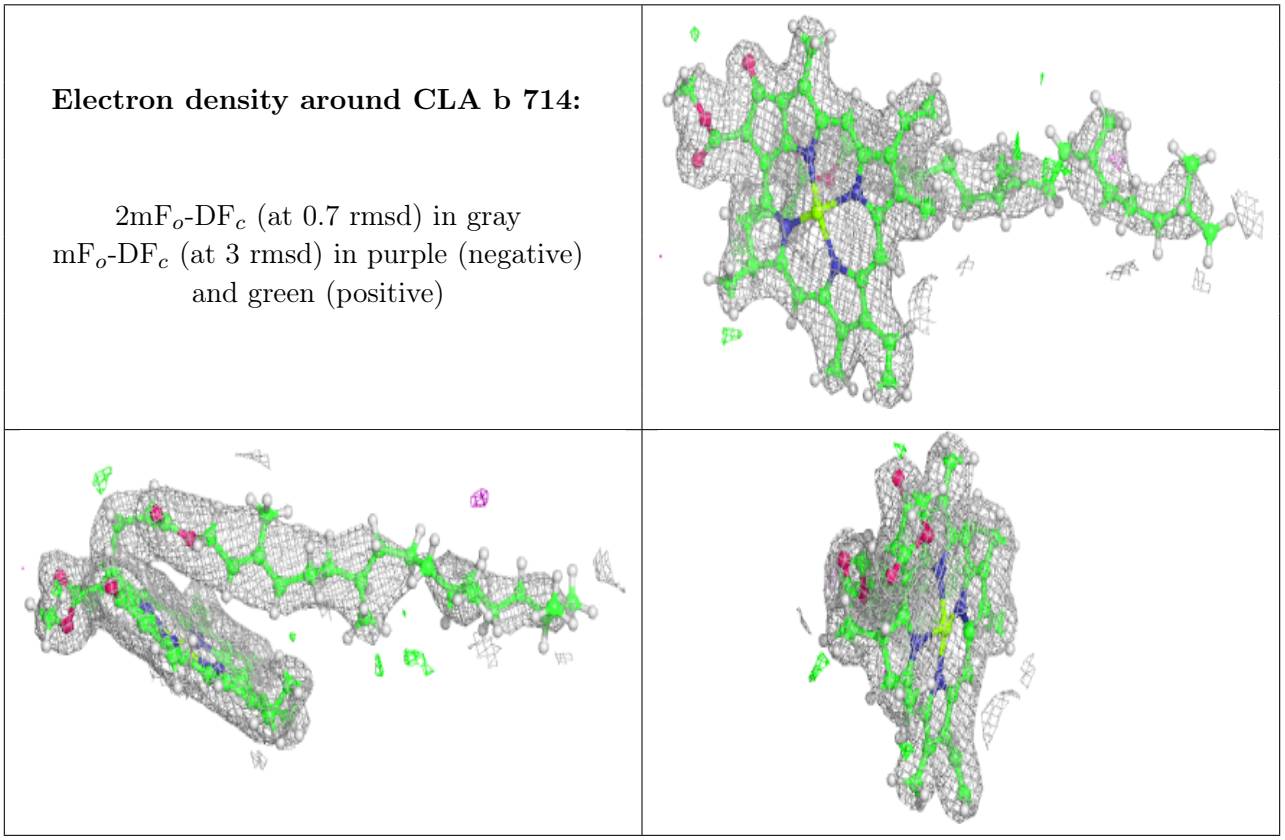
Electron density around BCR c 516:

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



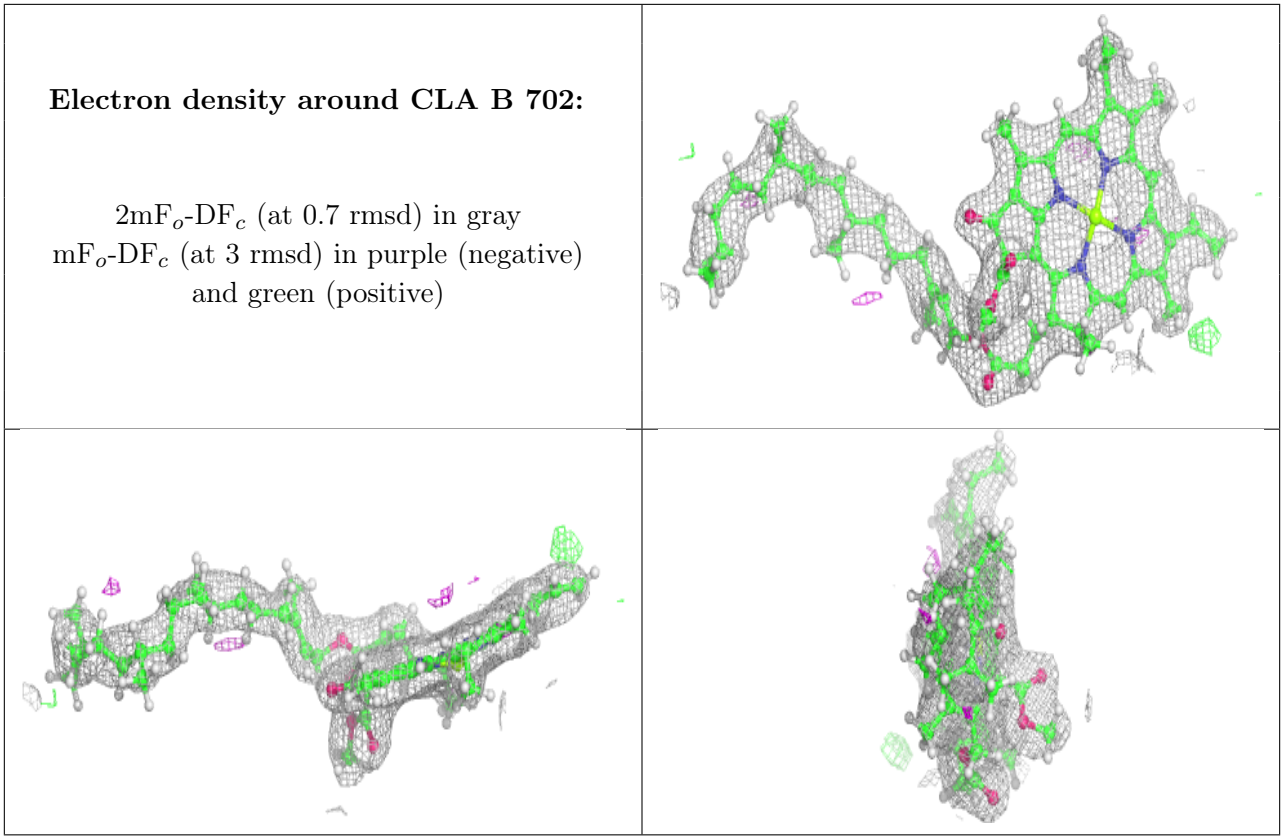
Electron density around CLA b 714:

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



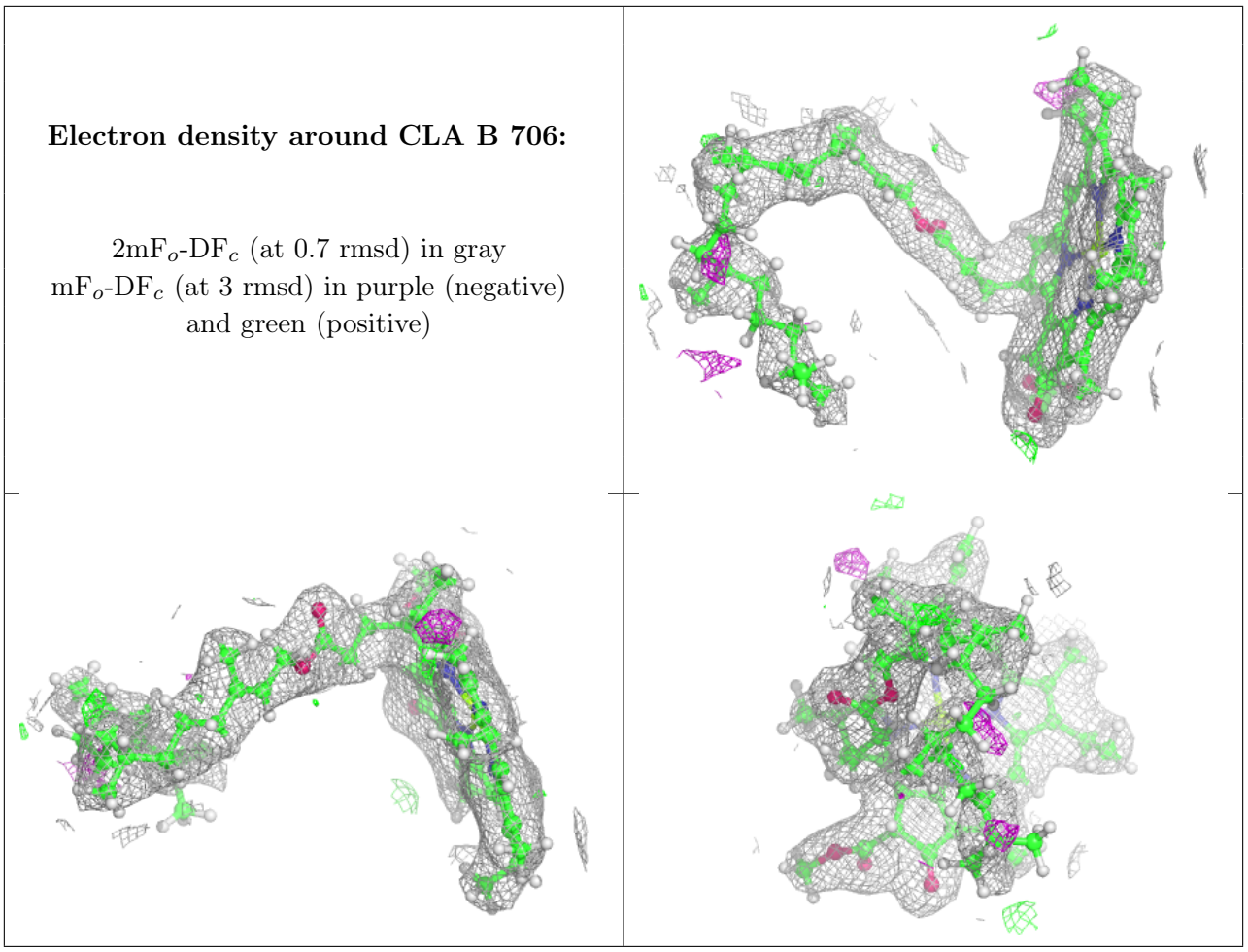
Electron density around CLA B 702:

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



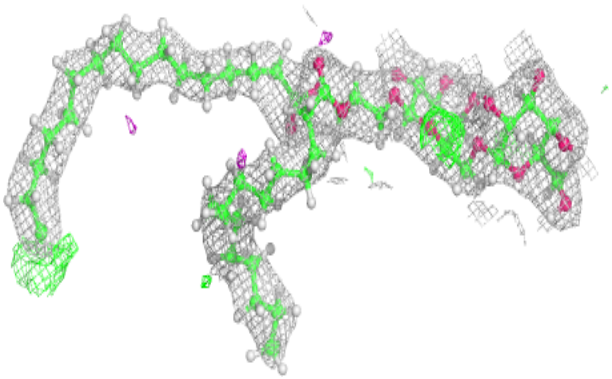
Electron density around CLA B 706:

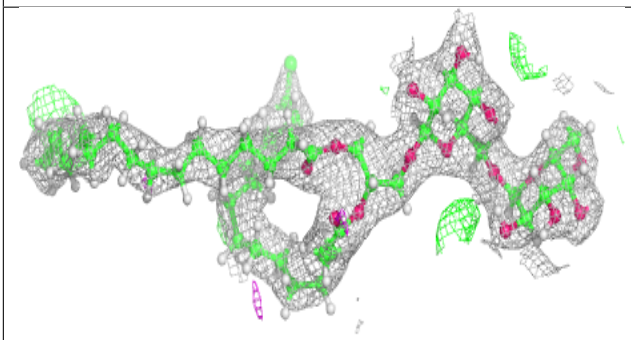
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

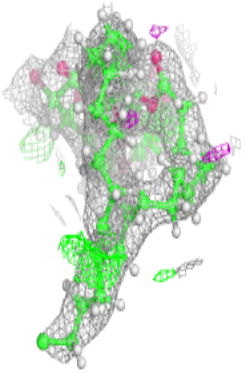


Electron density around DGD H 103:

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

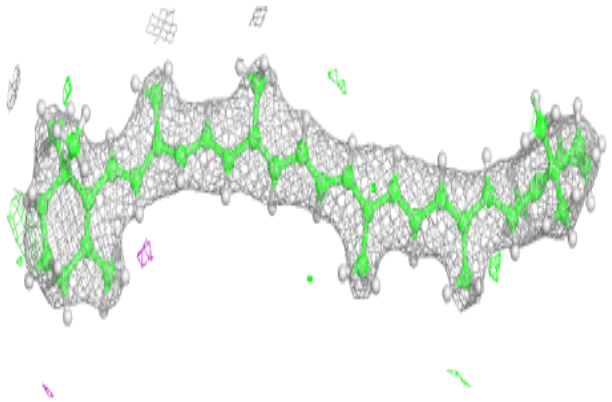


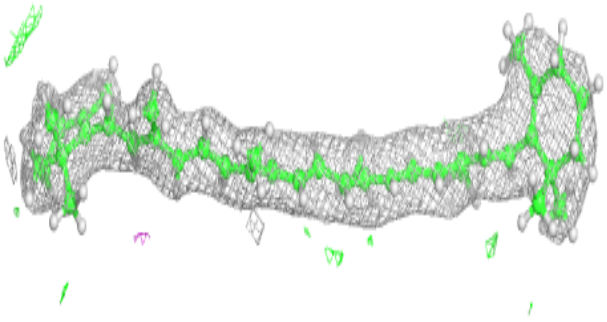


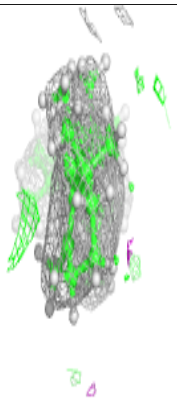


Electron density around BCR B 717:

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

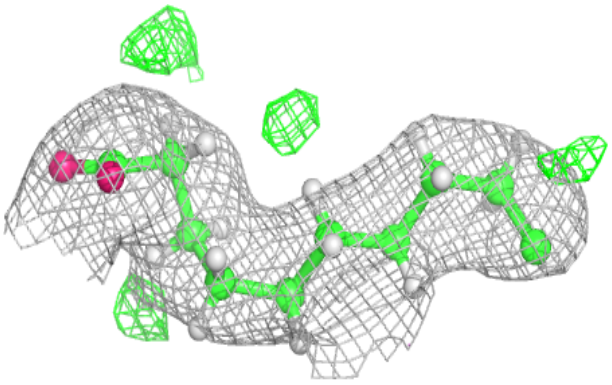


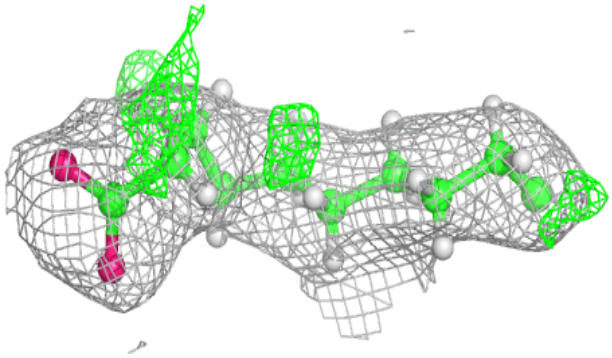


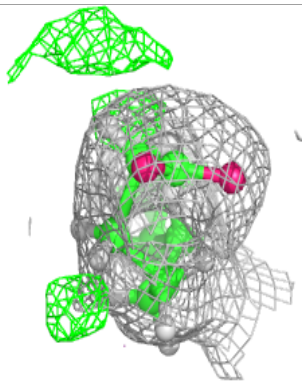


Electron density around STE B 724:

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

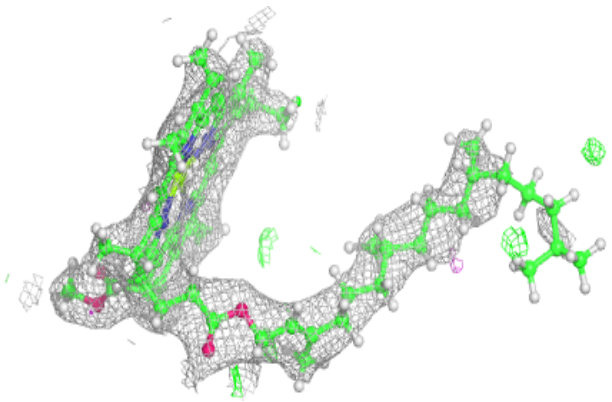


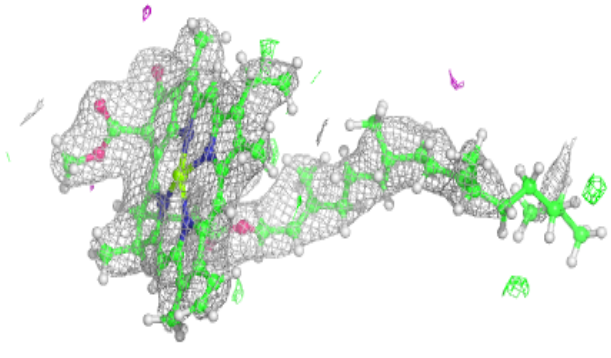


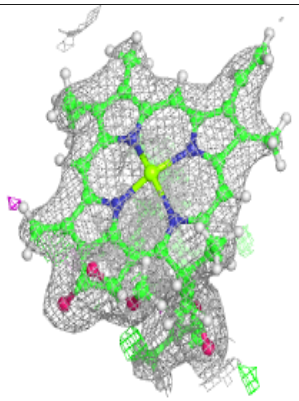


Electron density around CLA C 509:

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

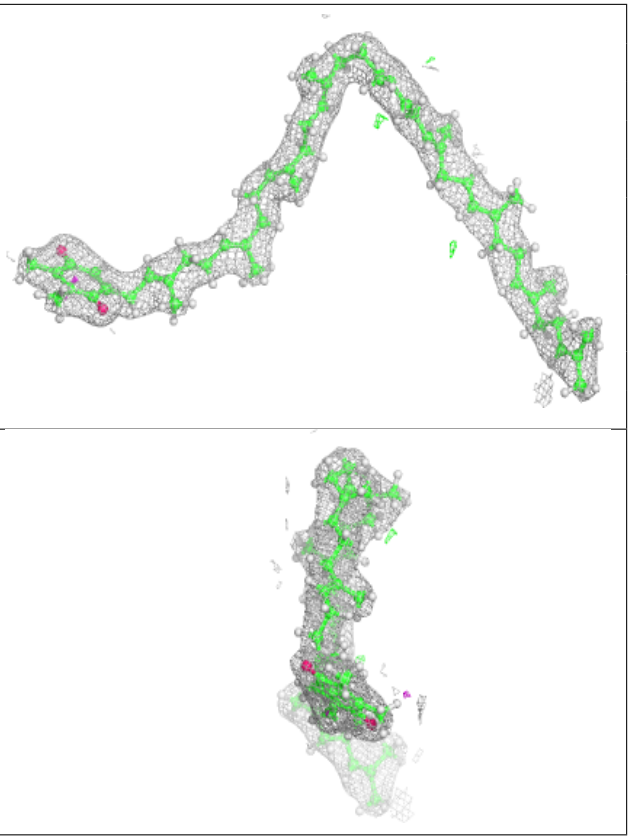


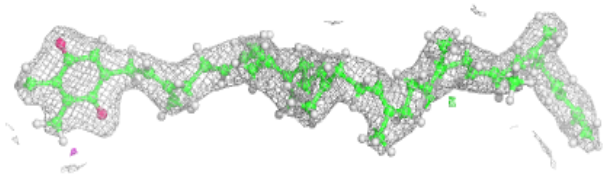




Electron density around PL9 D 405:

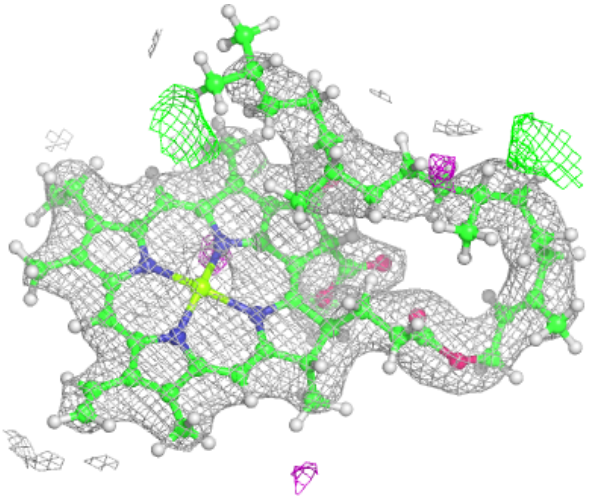
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

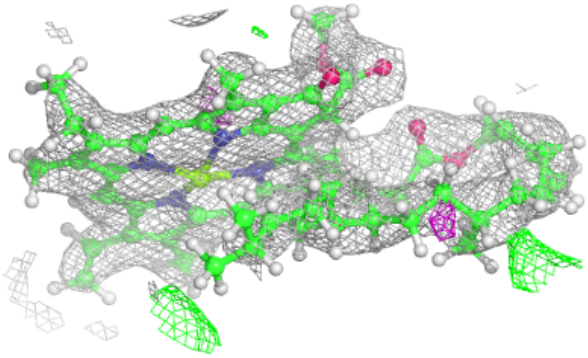


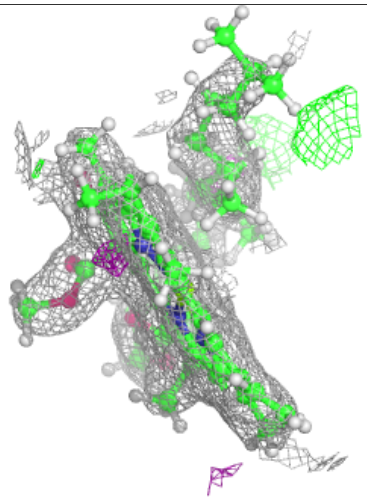


Electron density around CLA C 510:

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

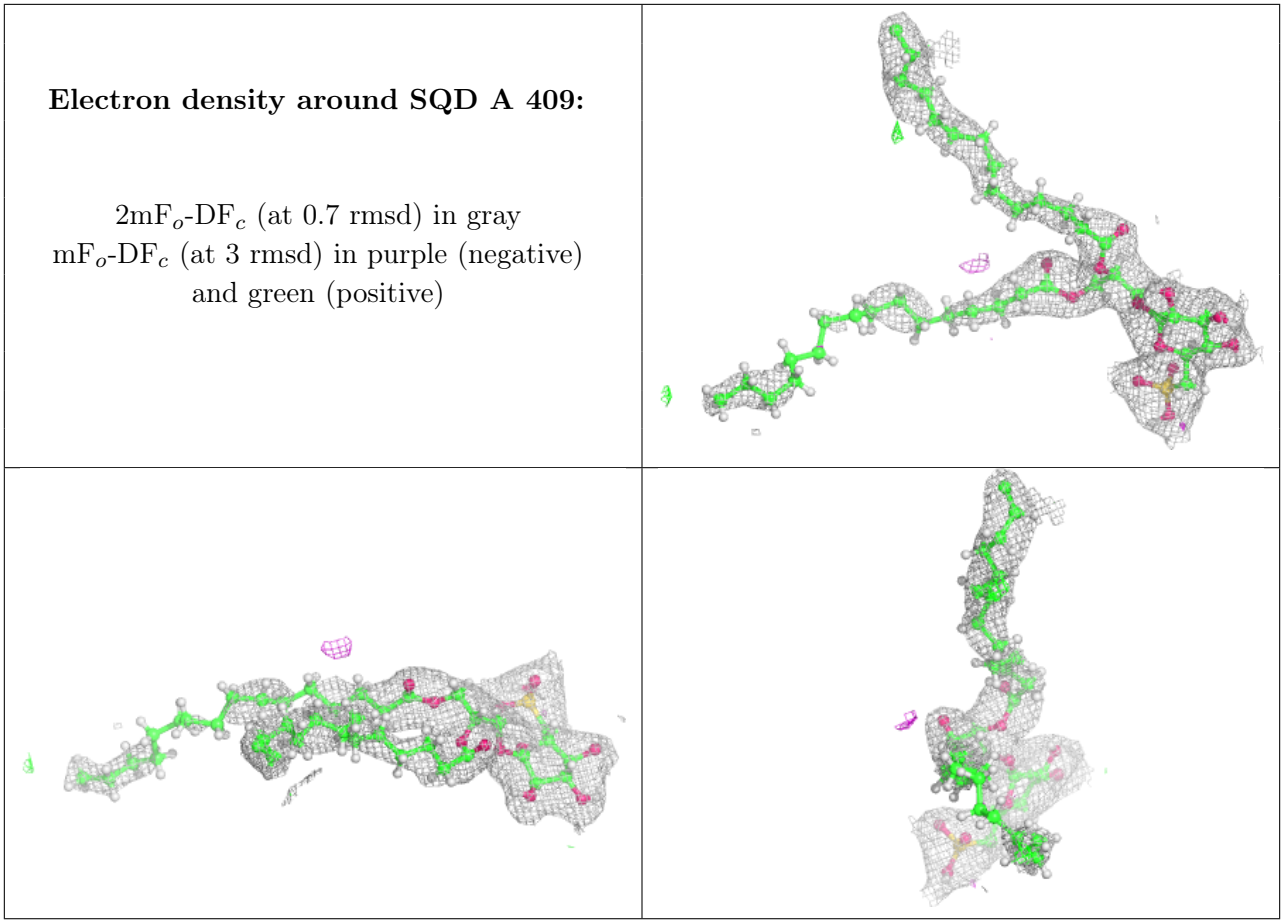






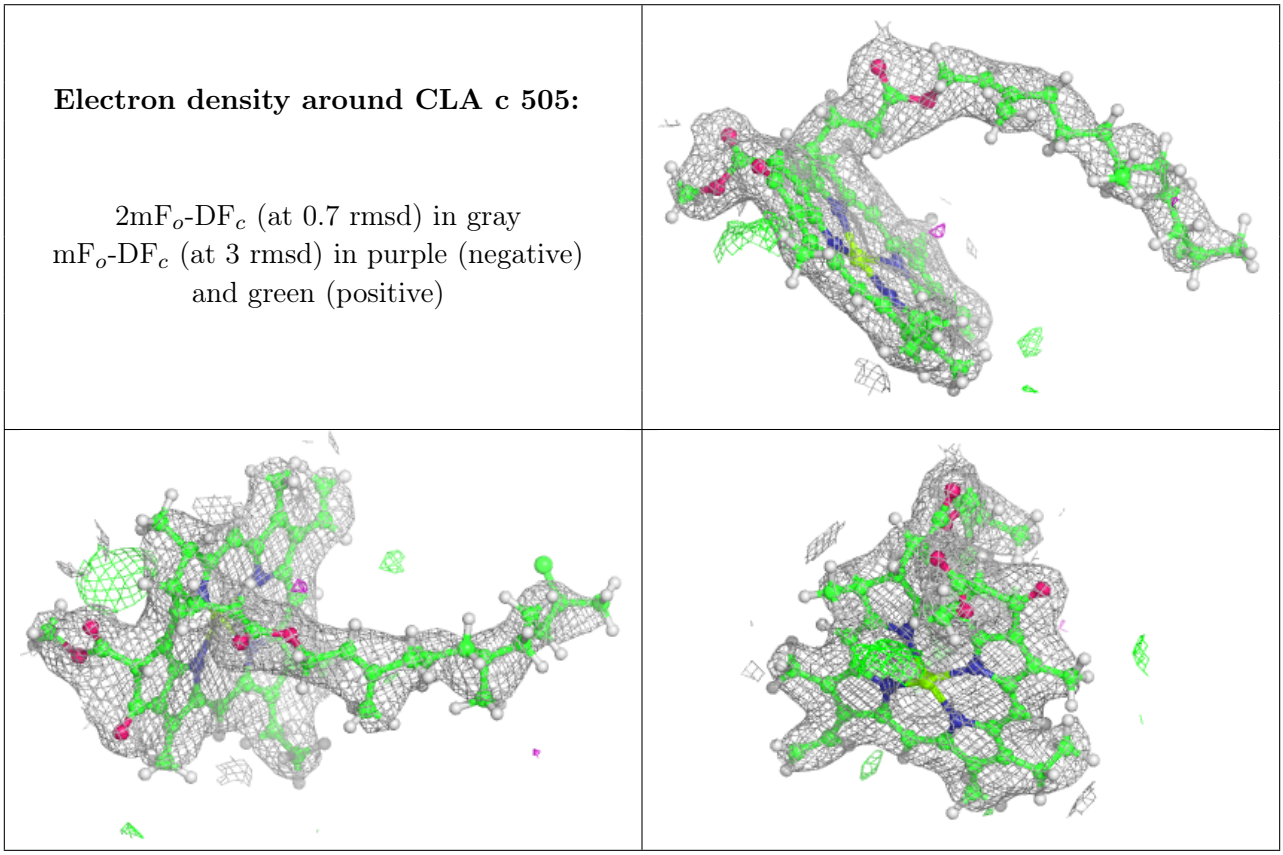
Electron density around SQD A 409:

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



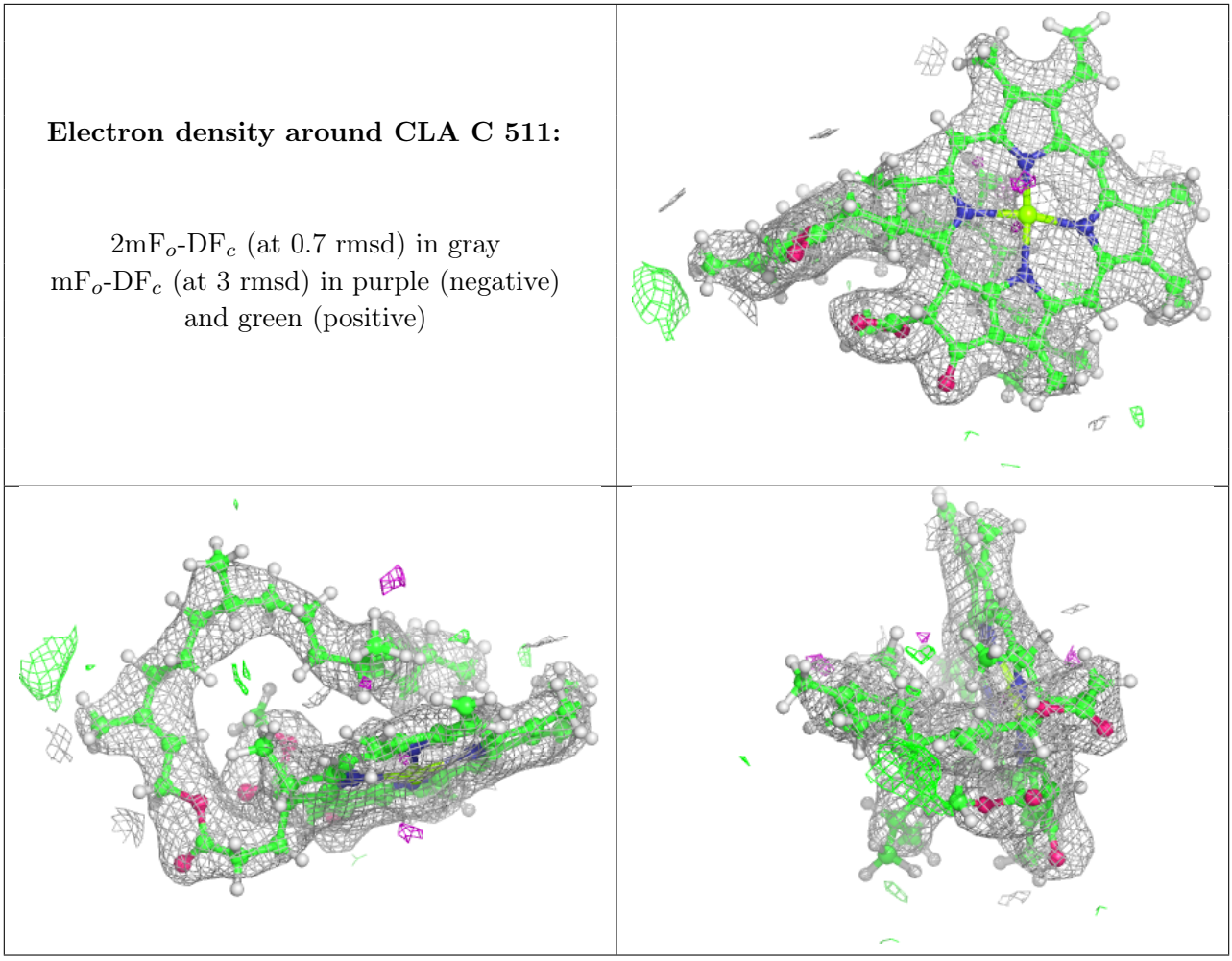
Electron density around CLA c 505:

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



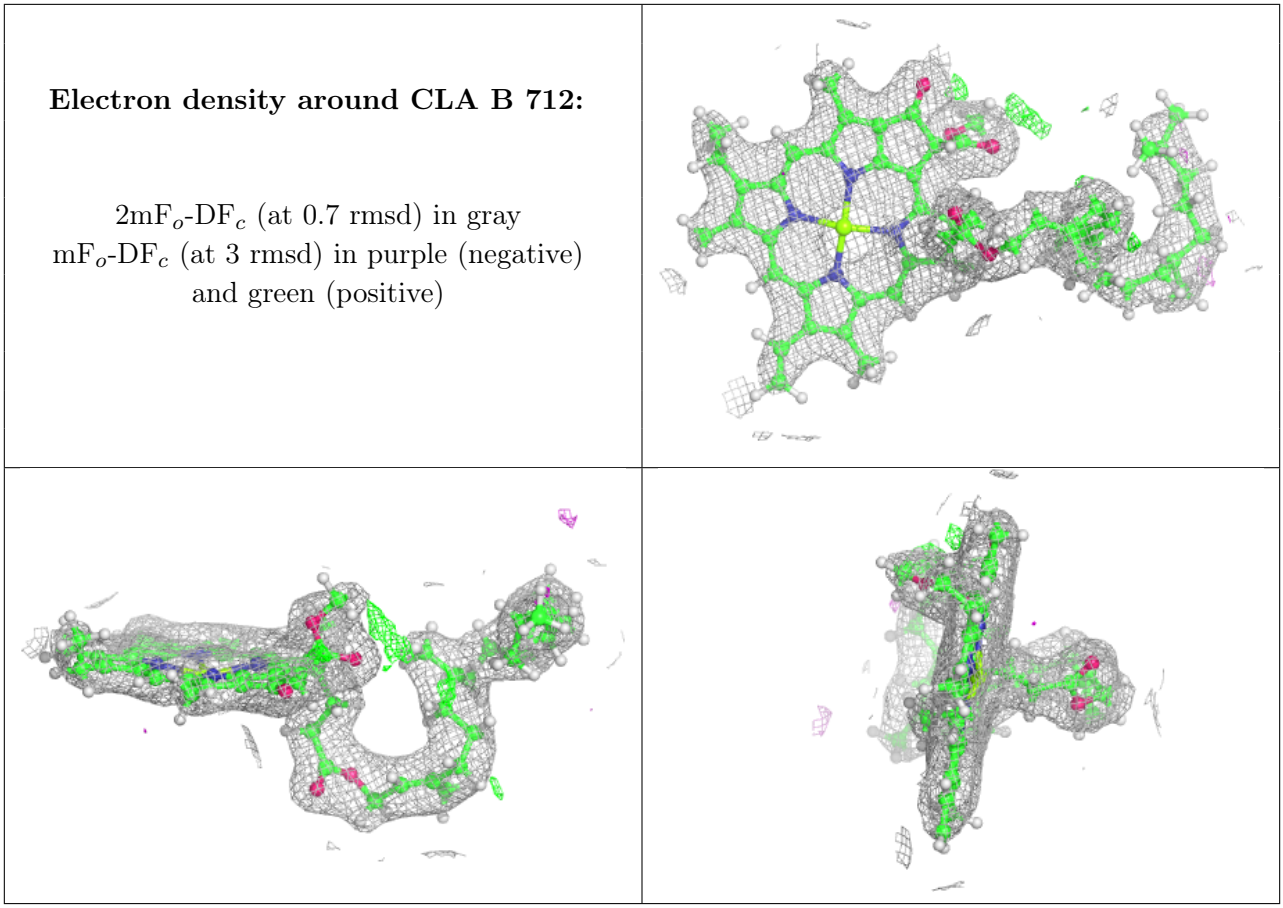
Electron density around CLA C 511:

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



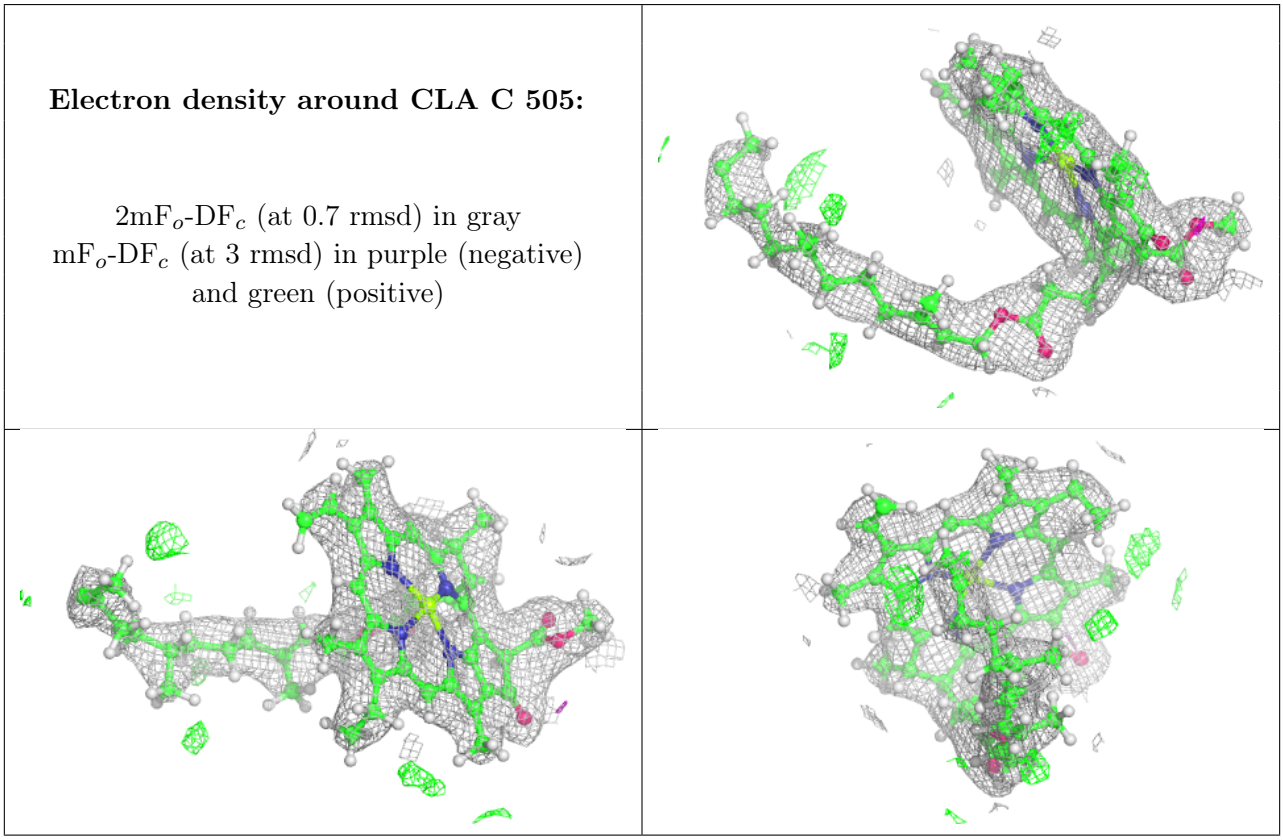
Electron density around CLA B 712:

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



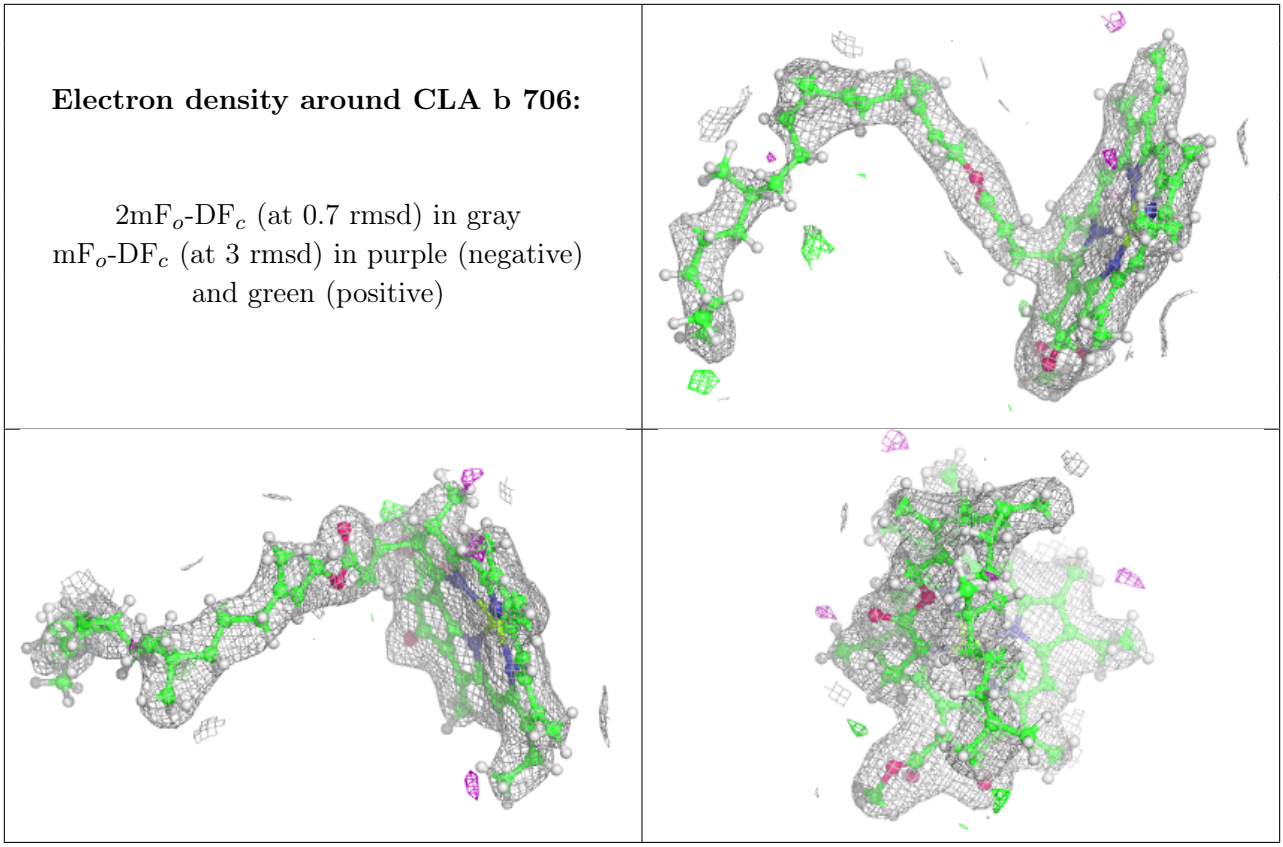
Electron density around CLA C 505:

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



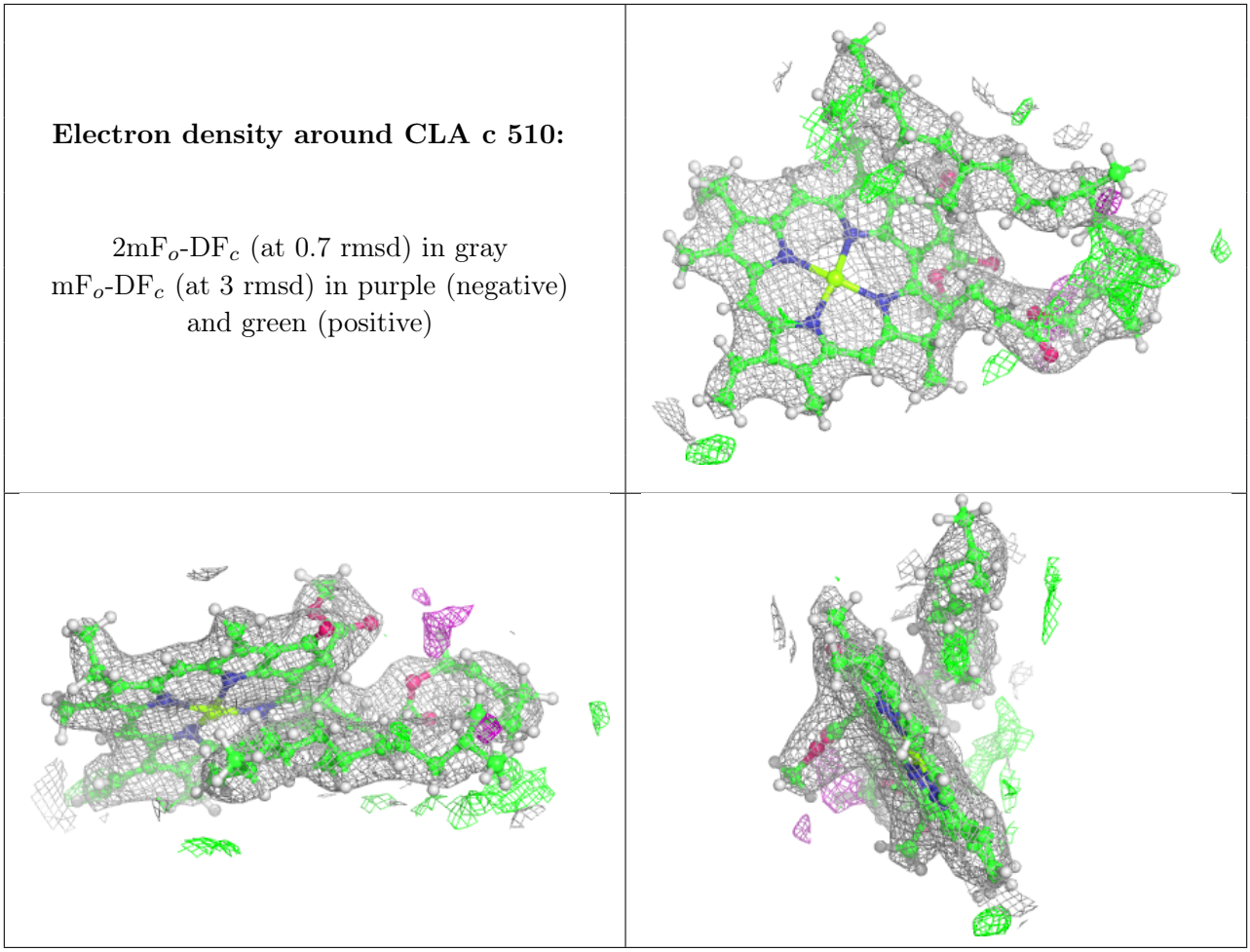
Electron density around CLA b 706:

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



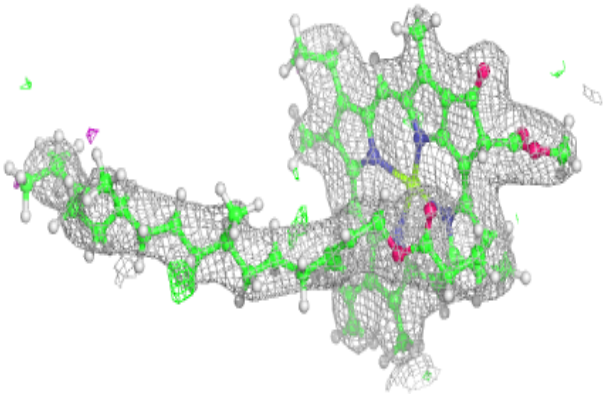
Electron density around CLA c 510:

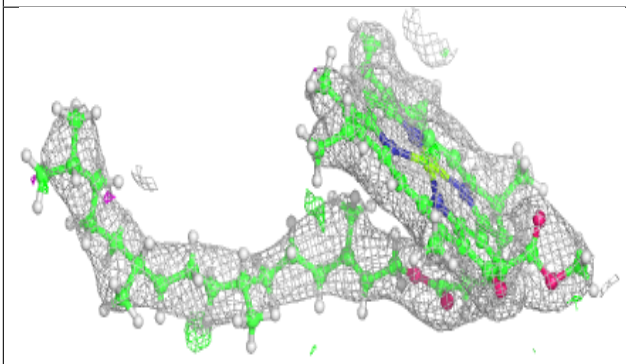
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

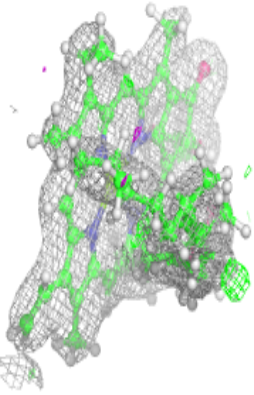


Electron density around CLA b 708:

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

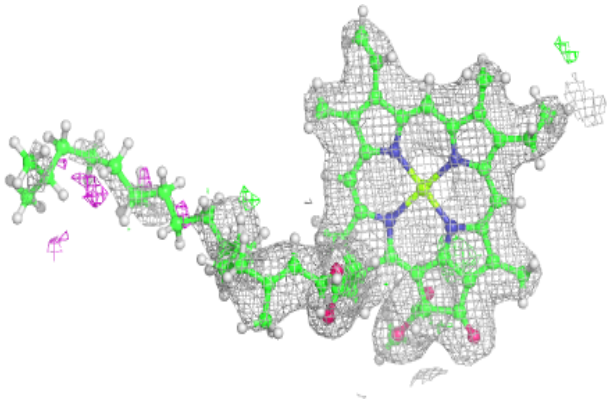


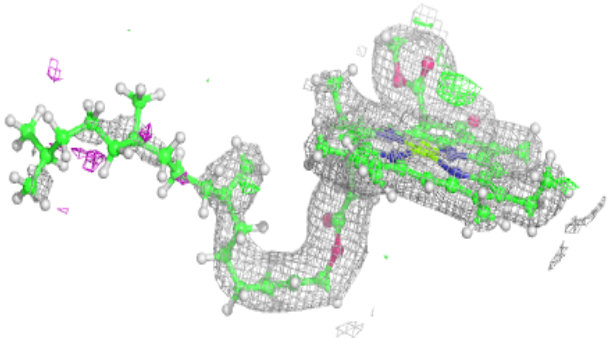


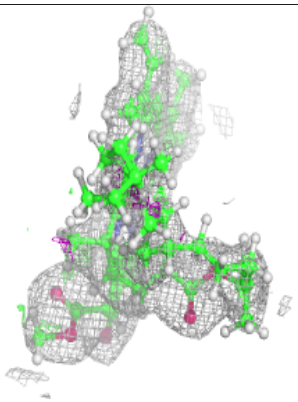


Electron density around CLA A 403:

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

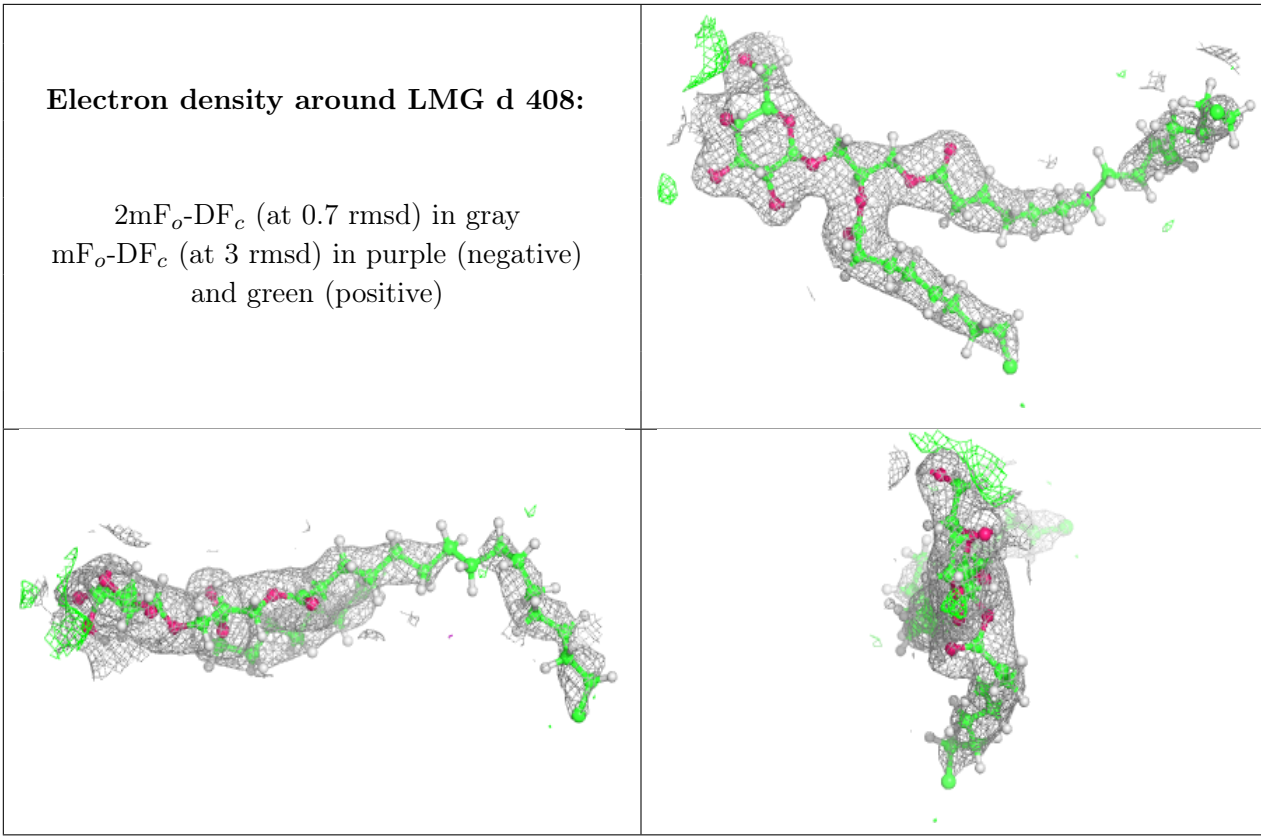






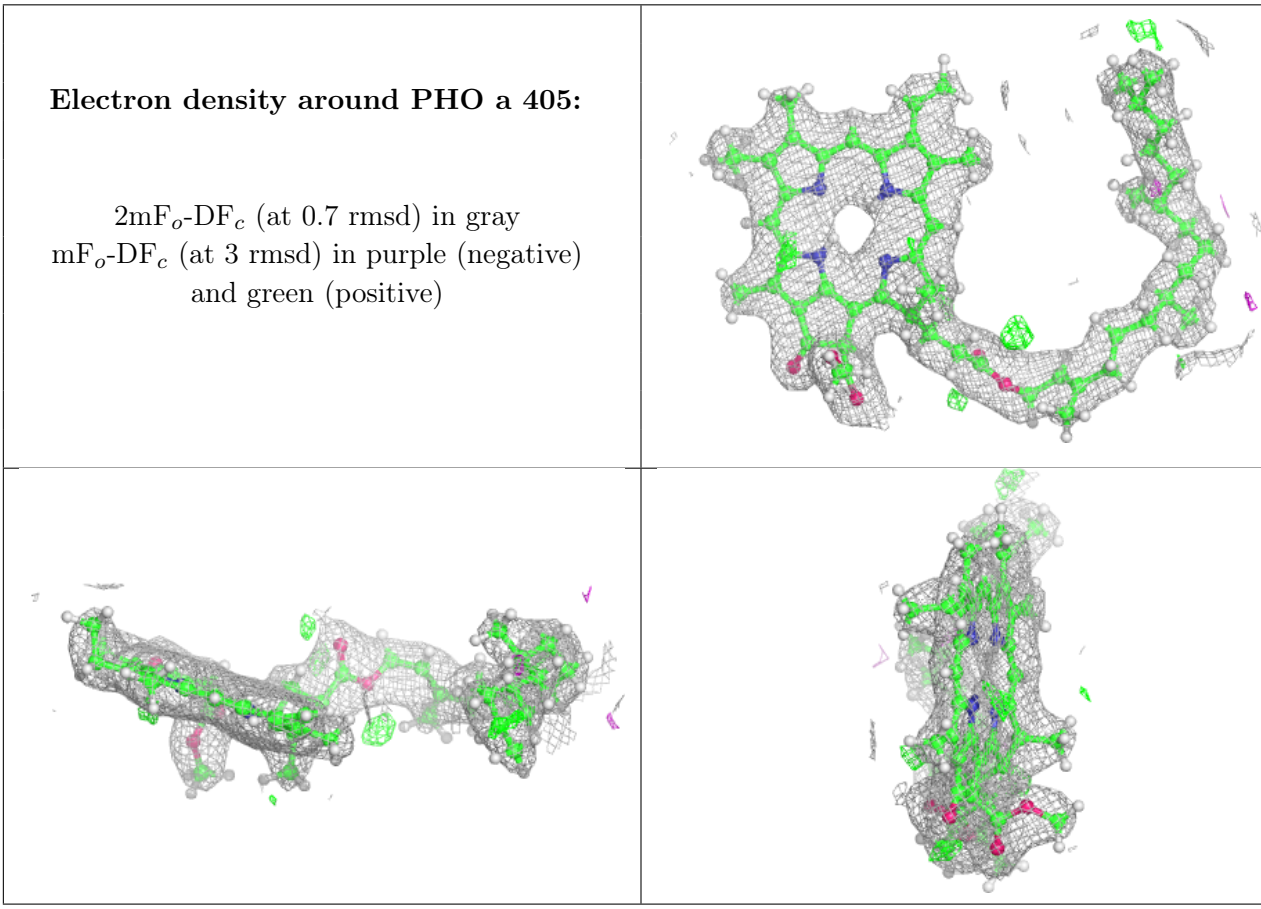
Electron density around LMG d 408:

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



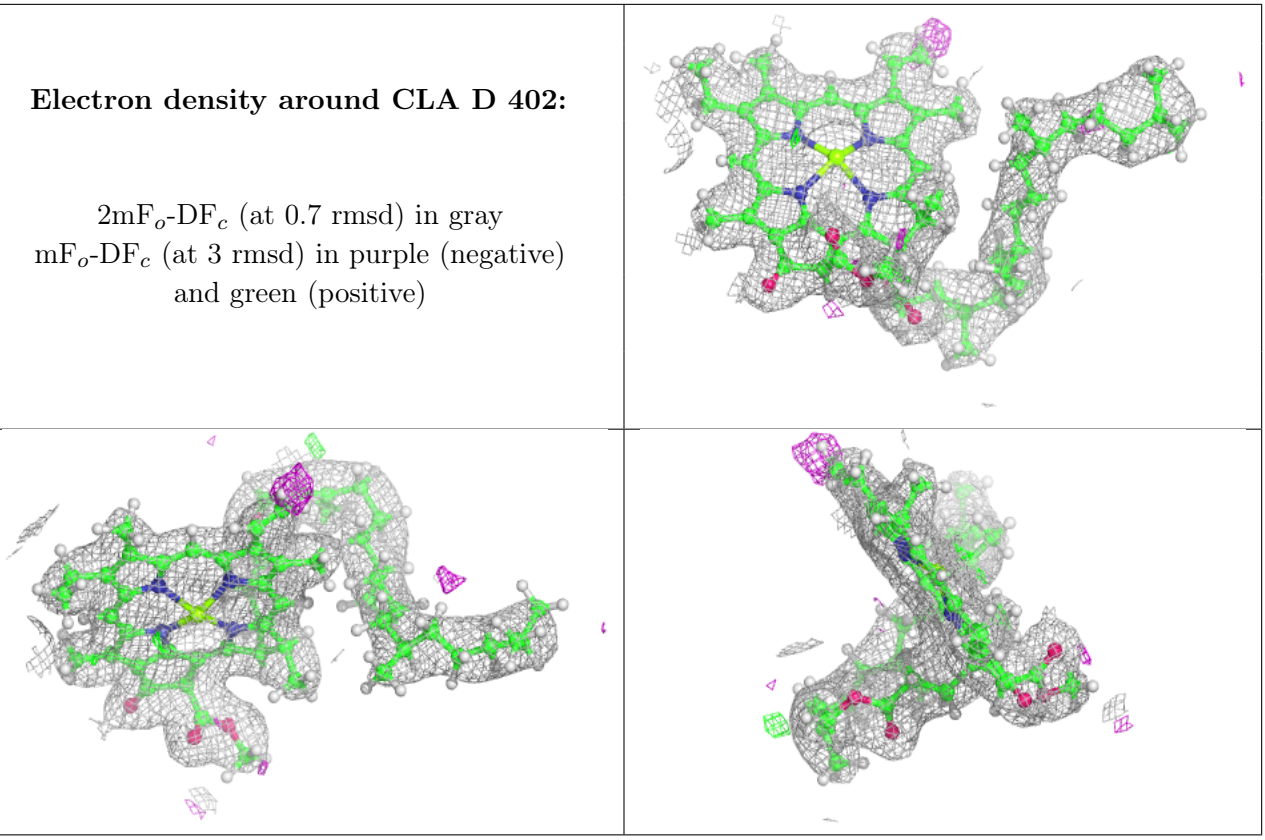
Electron density around PHO a 405:

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



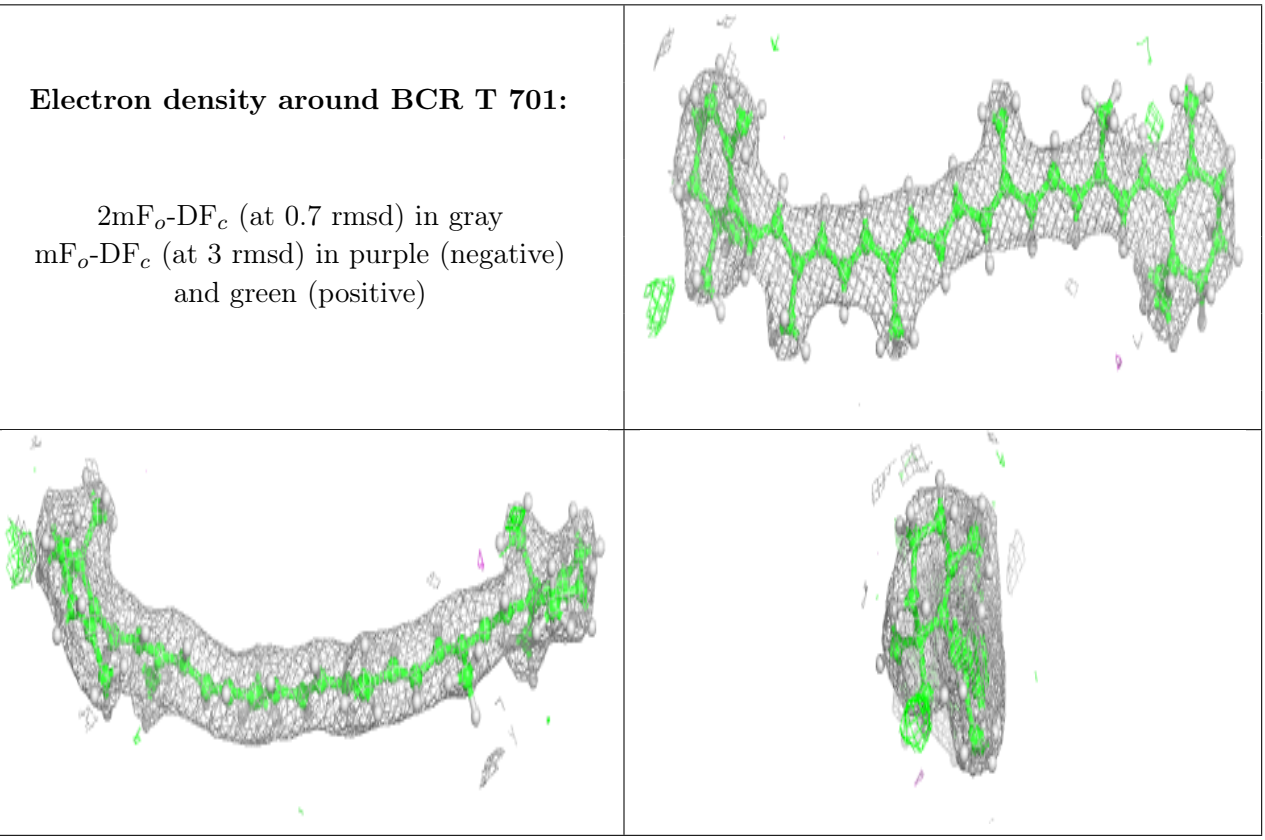
Electron density around CLA D 402:

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



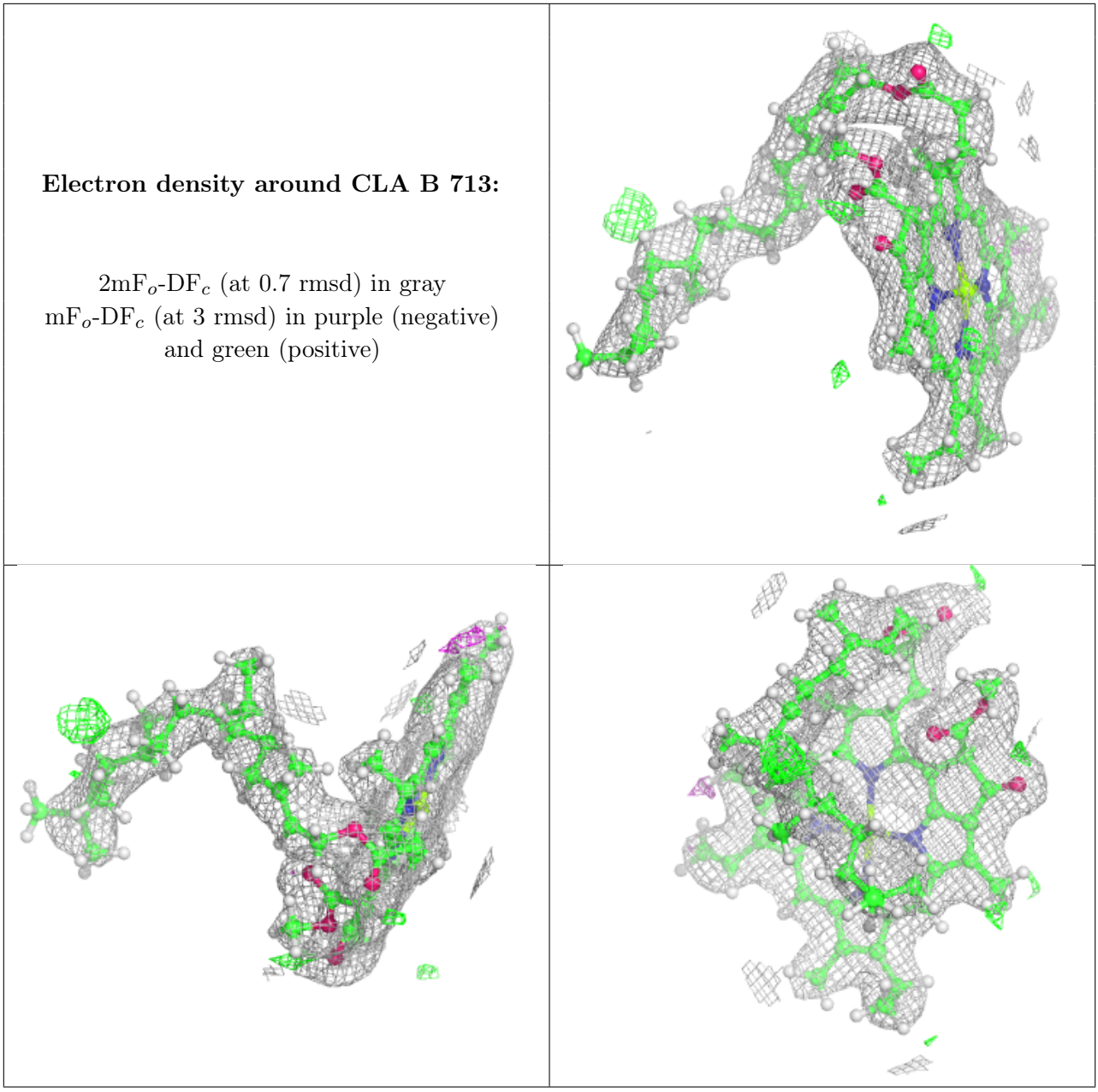
Electron density around BCR T 701:

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



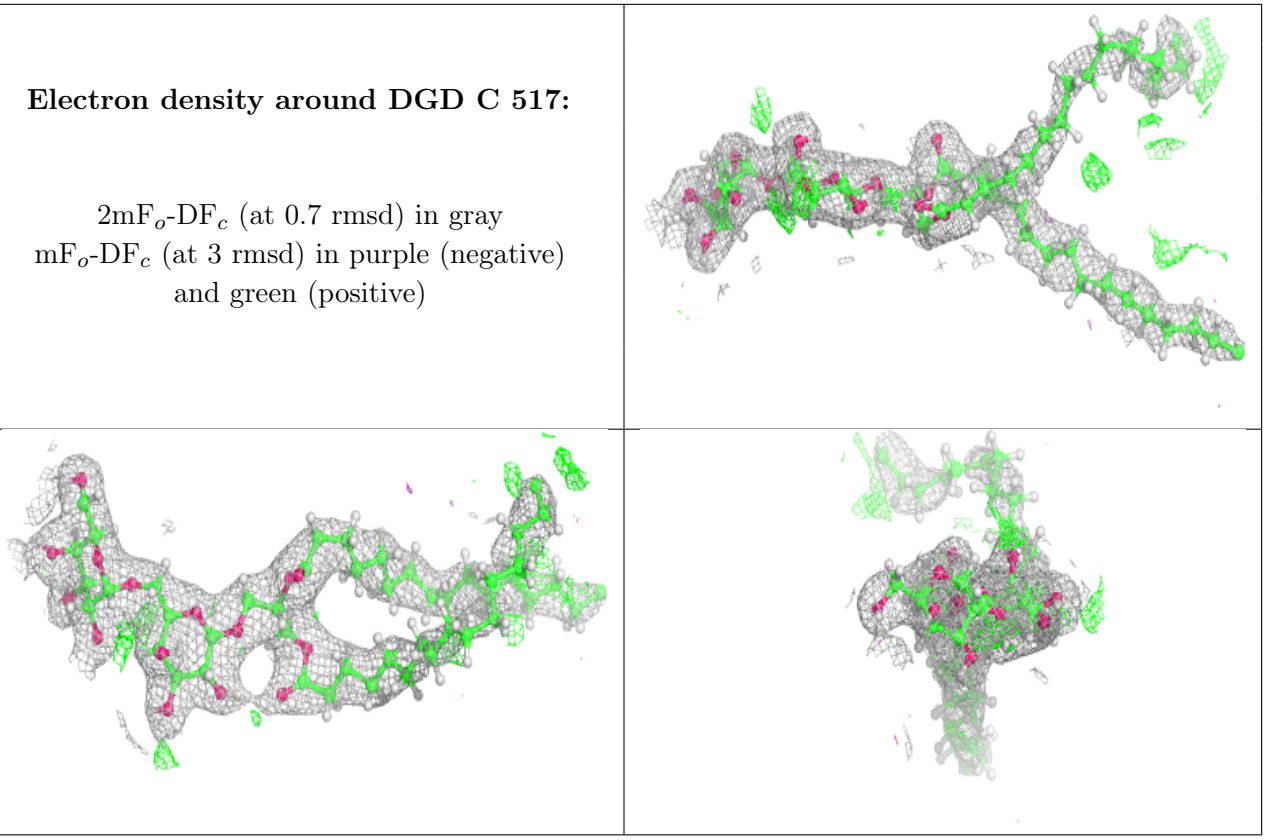
Electron density around CLA B 713:

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



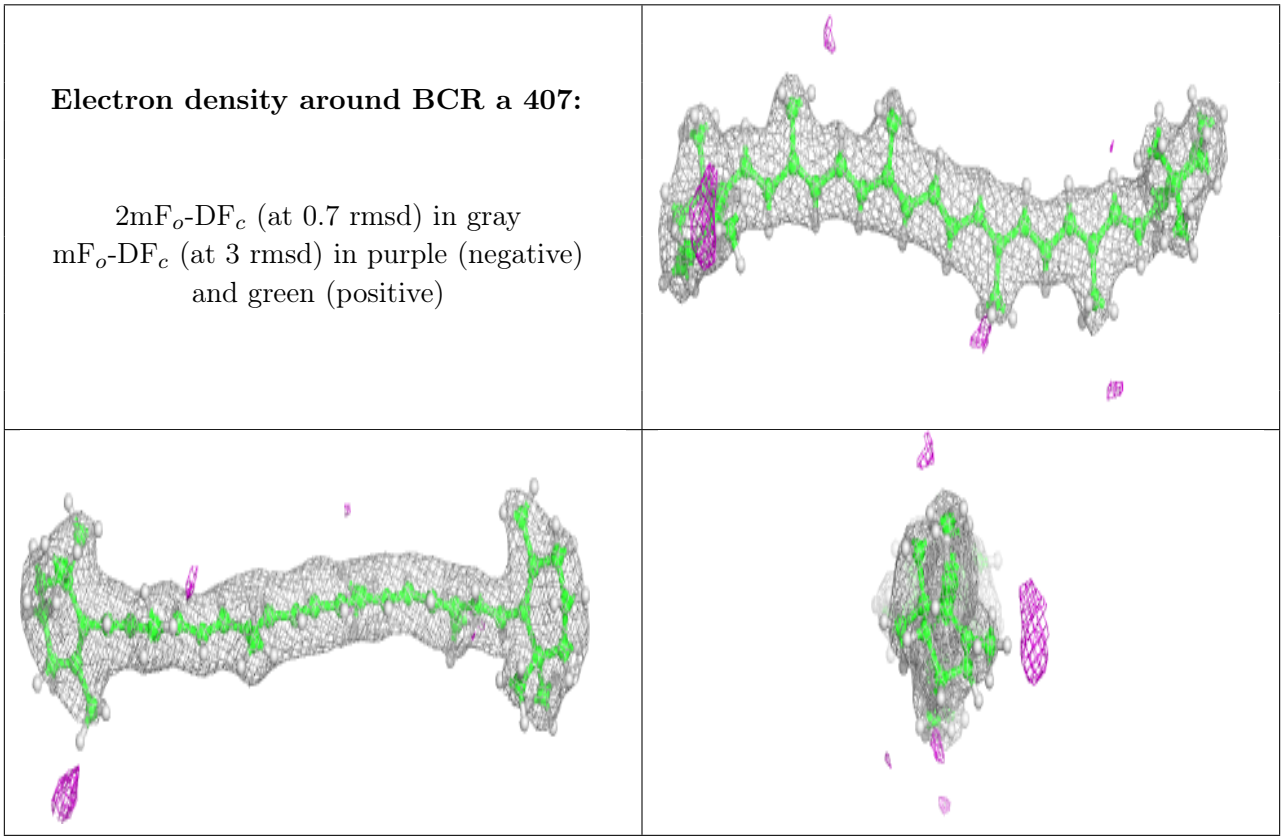
Electron density around DGD C 517:

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



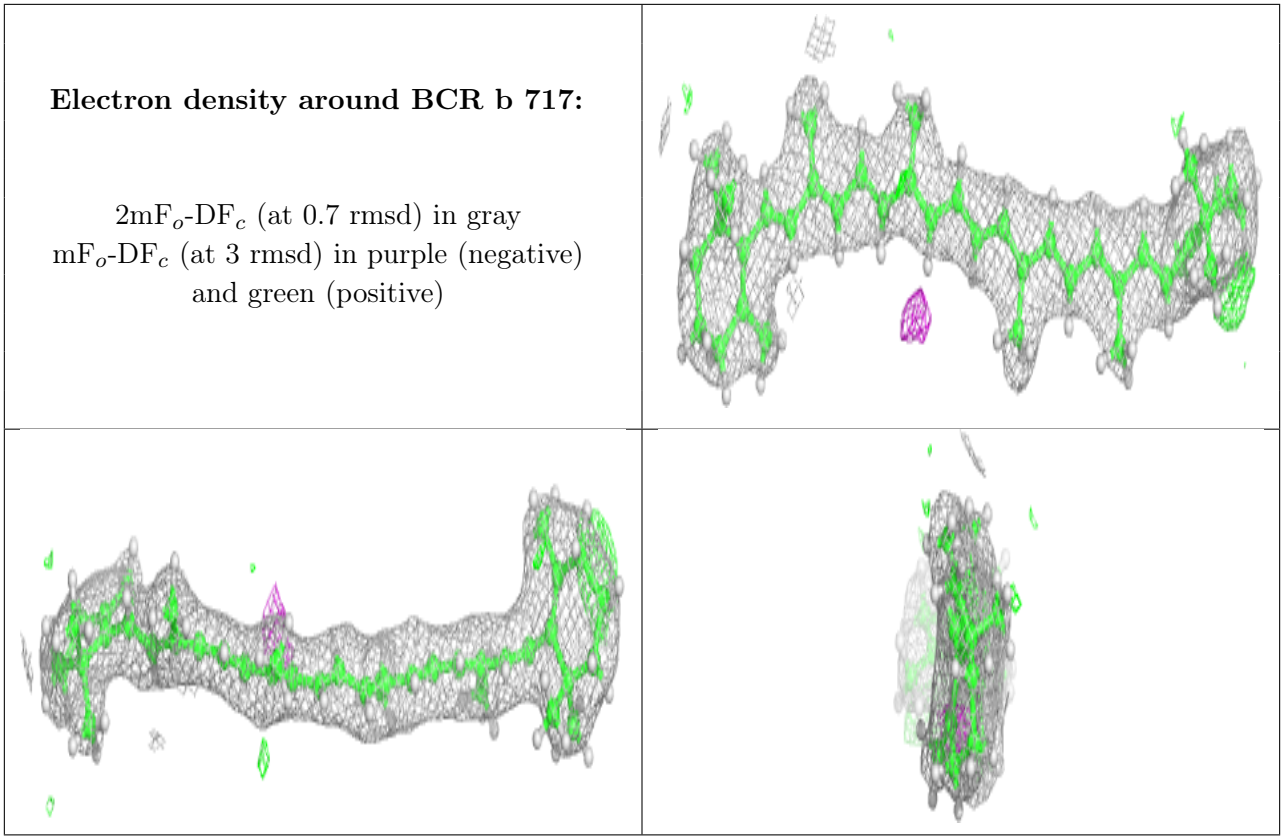
Electron density around BCR a 407:

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



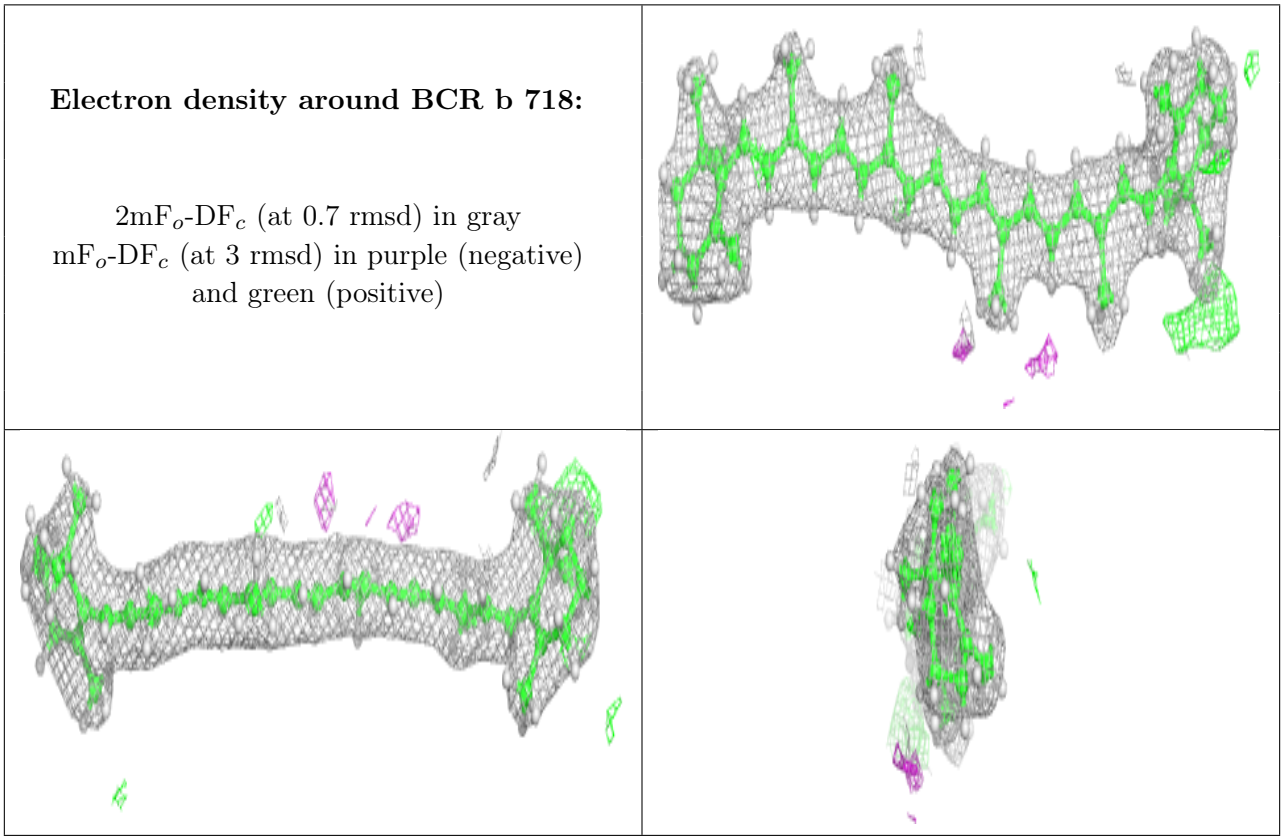
Electron density around BCR b 717:

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



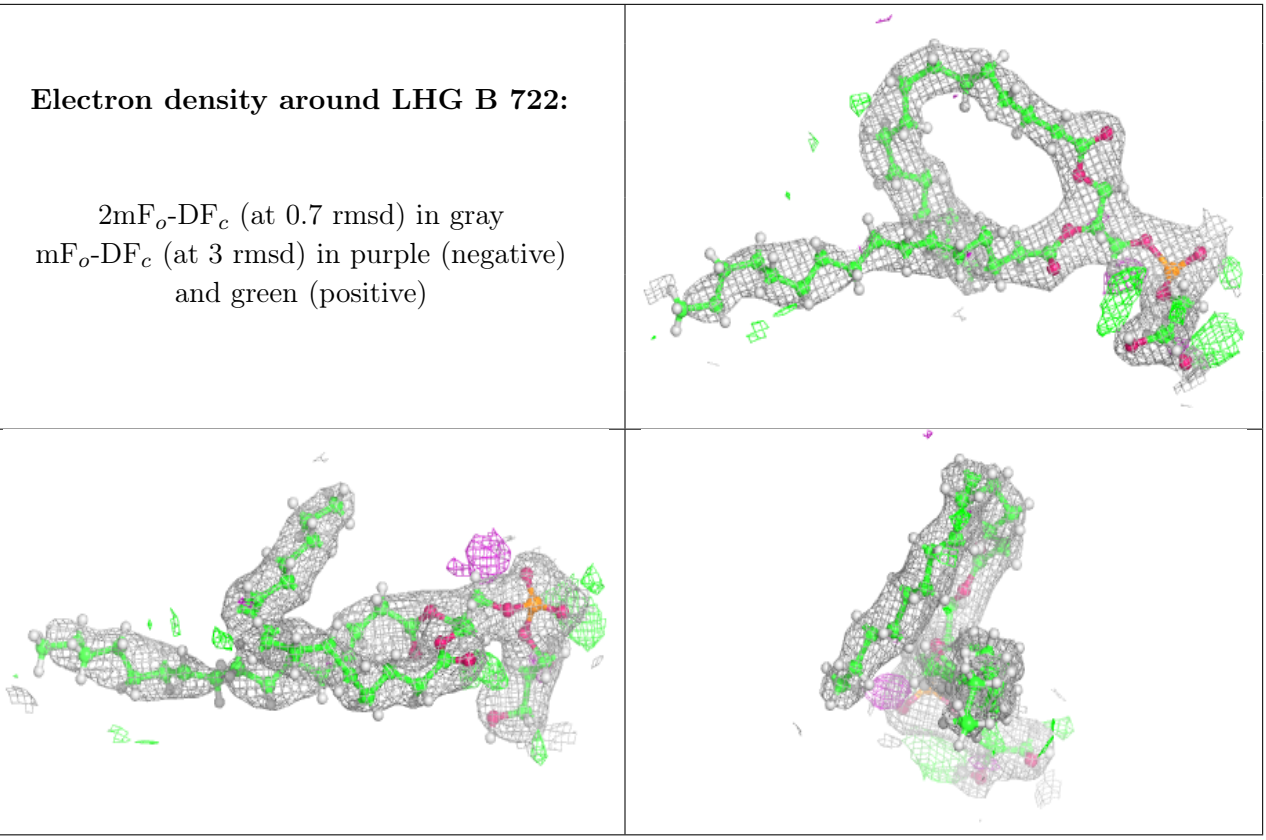
Electron density around BCR b 718:

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



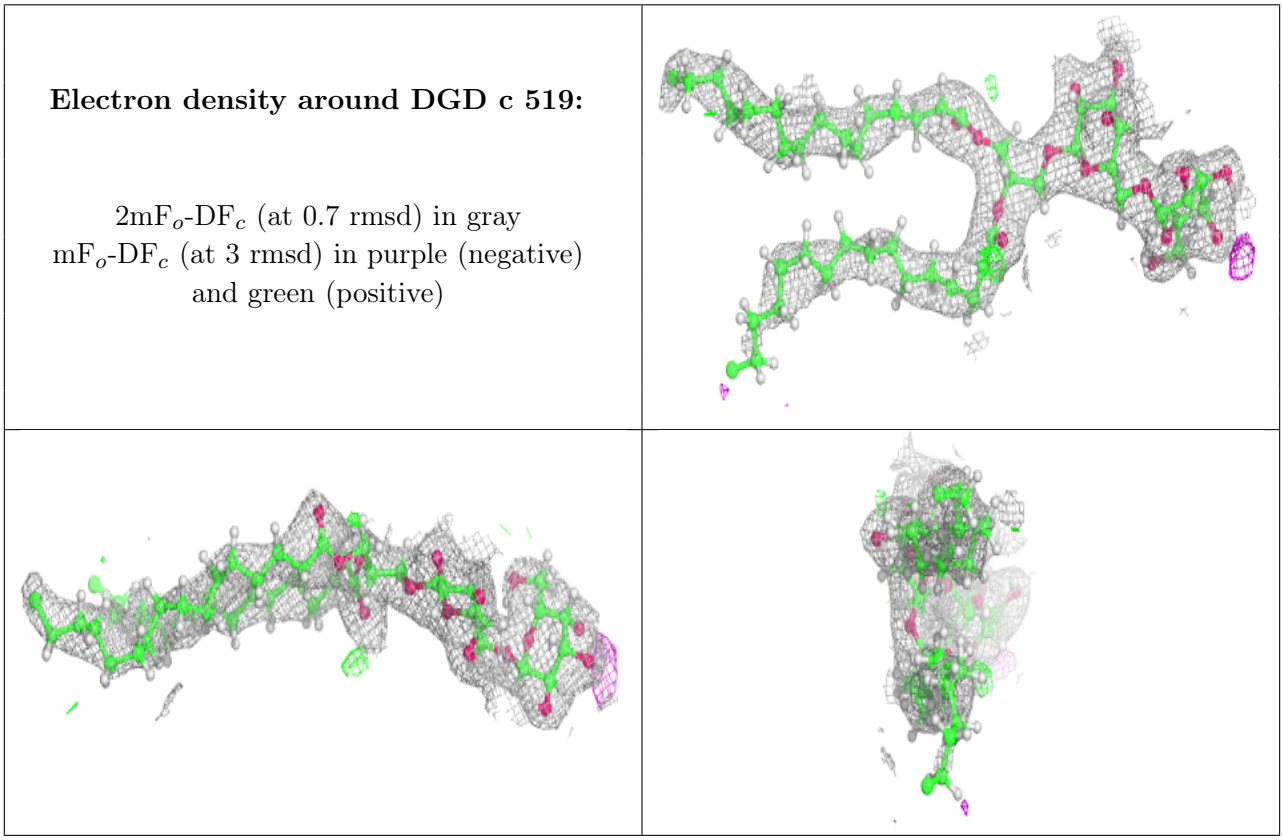
Electron density around LHG B 722:

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



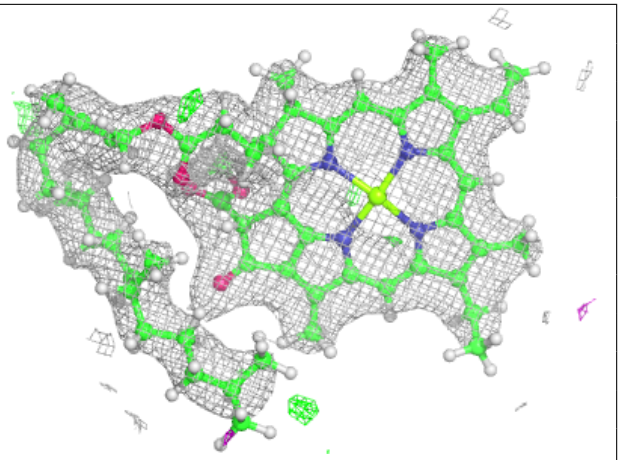
Electron density around DGD c 519:

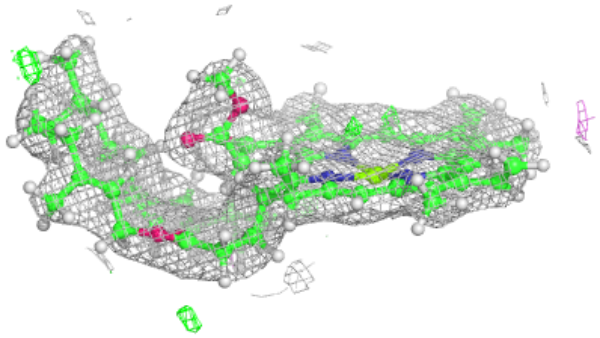
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

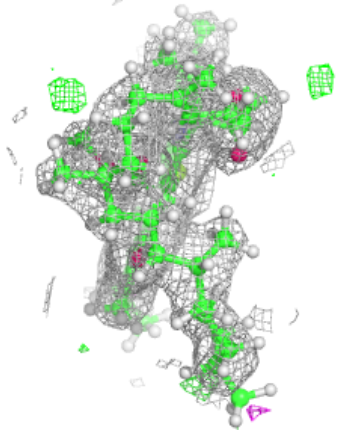


Electron density around CLA b 710:

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

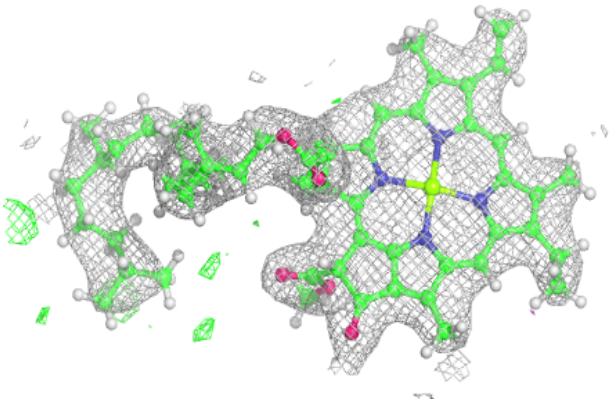


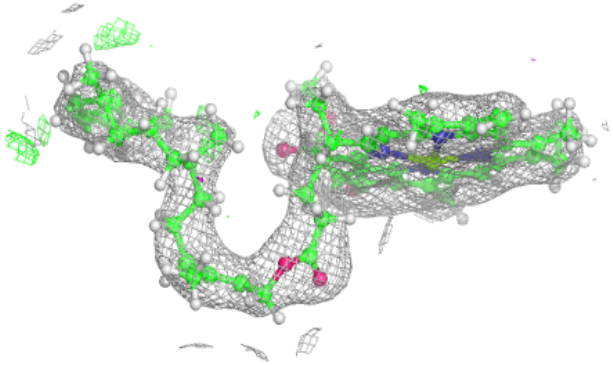


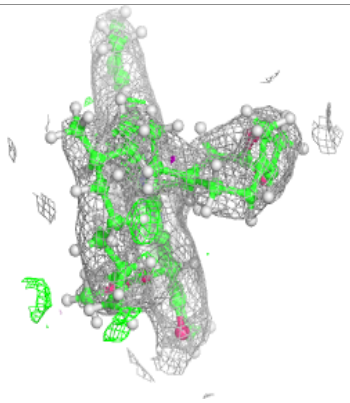


Electron density around CLA b 712:

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

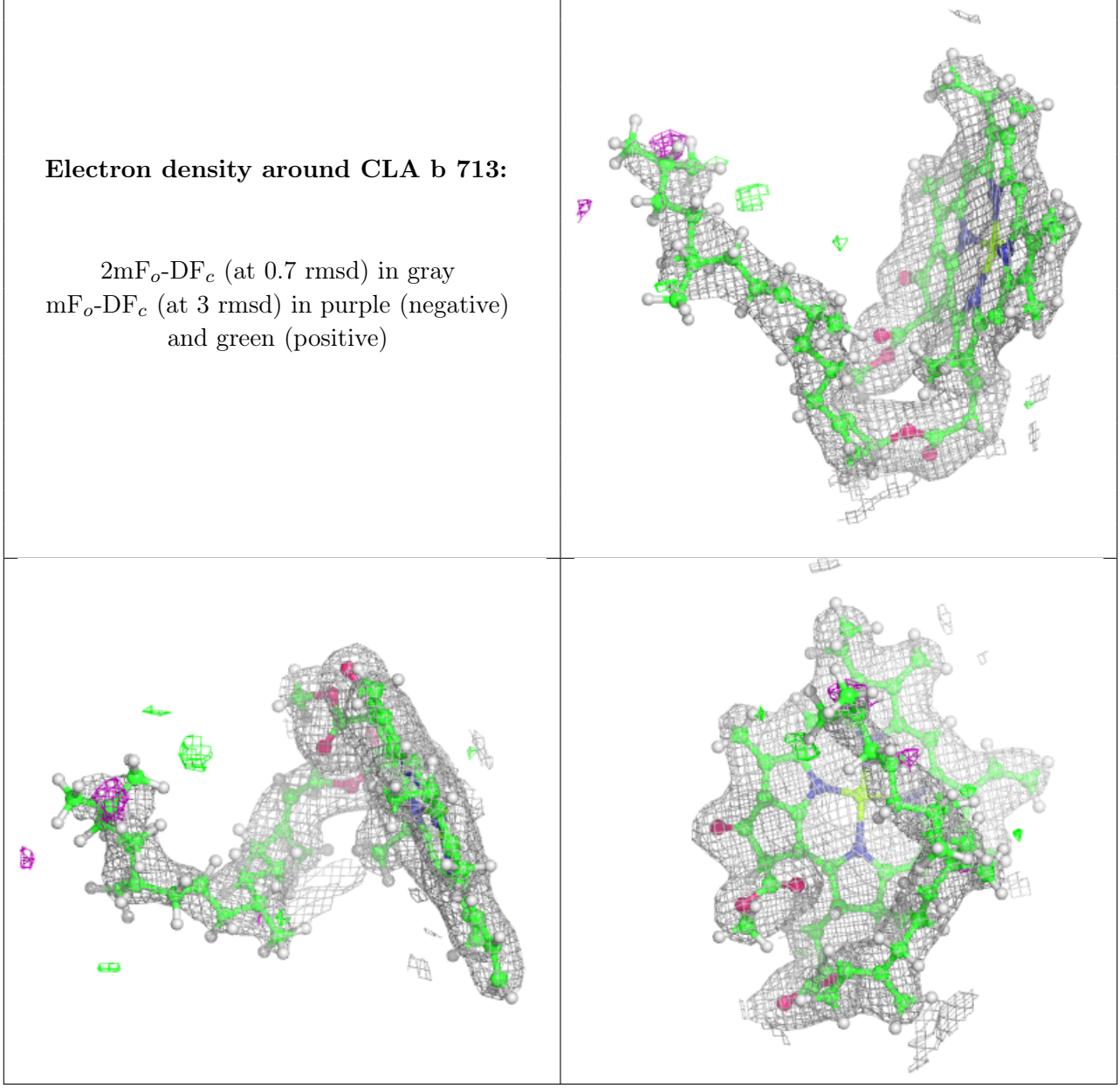






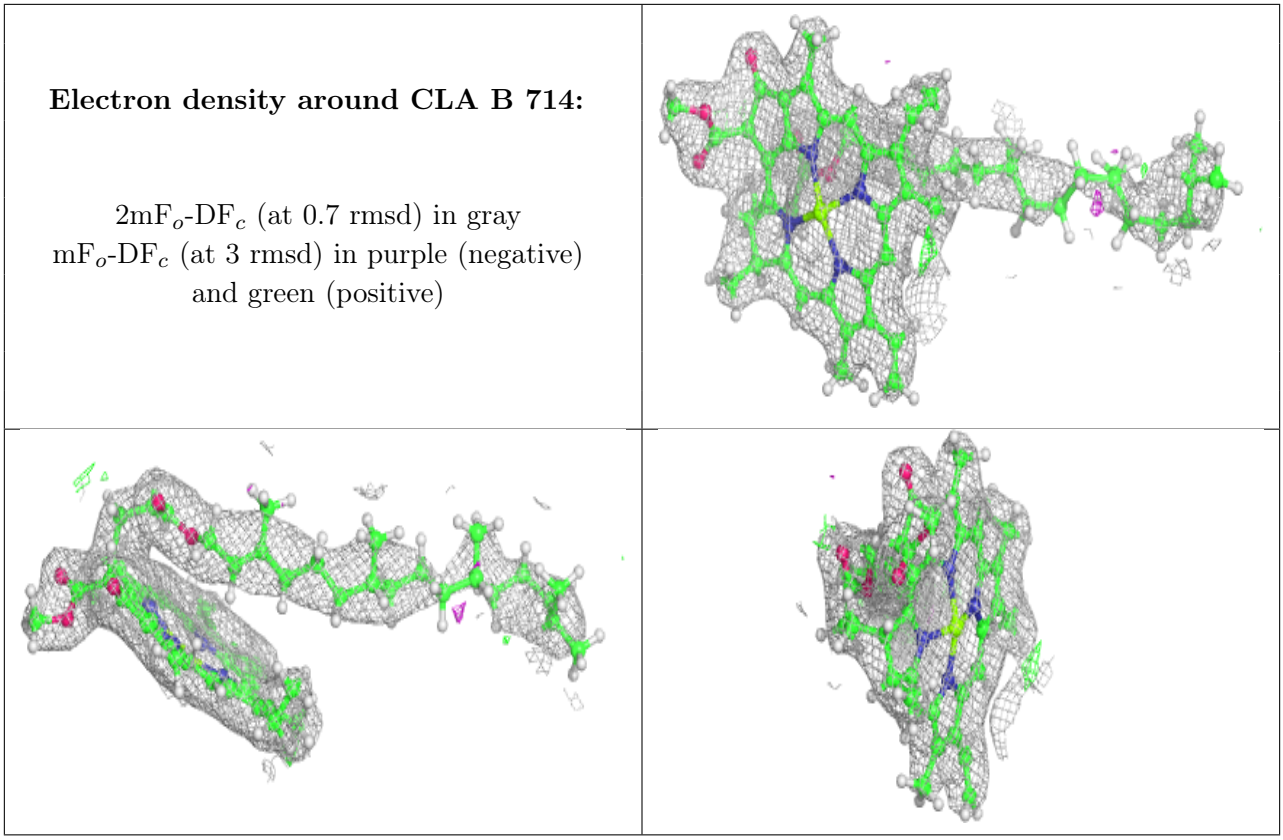
Electron density around CLA b 713:

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



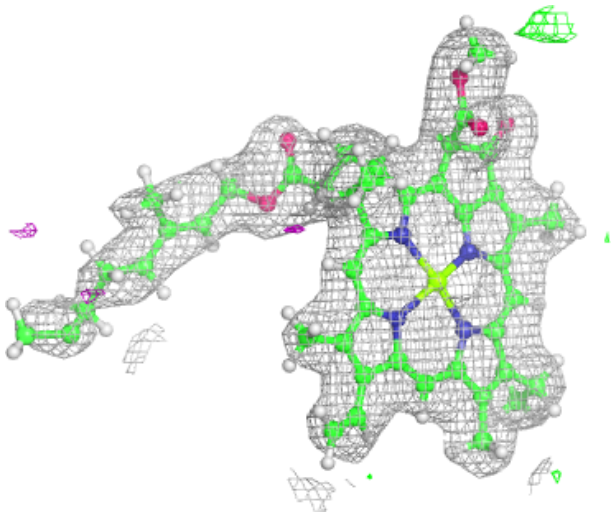
Electron density around CLA B 714:

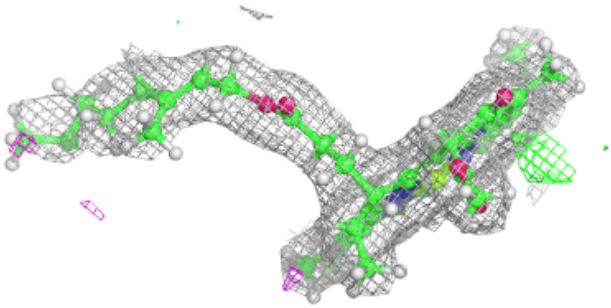
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

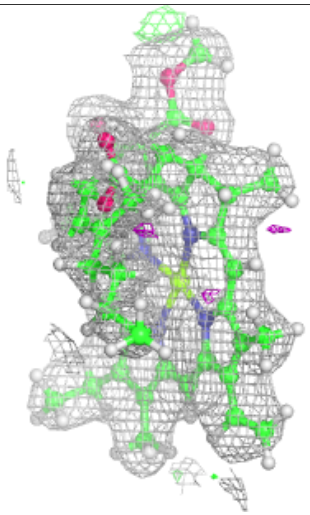


Electron density around CLA A 404:

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

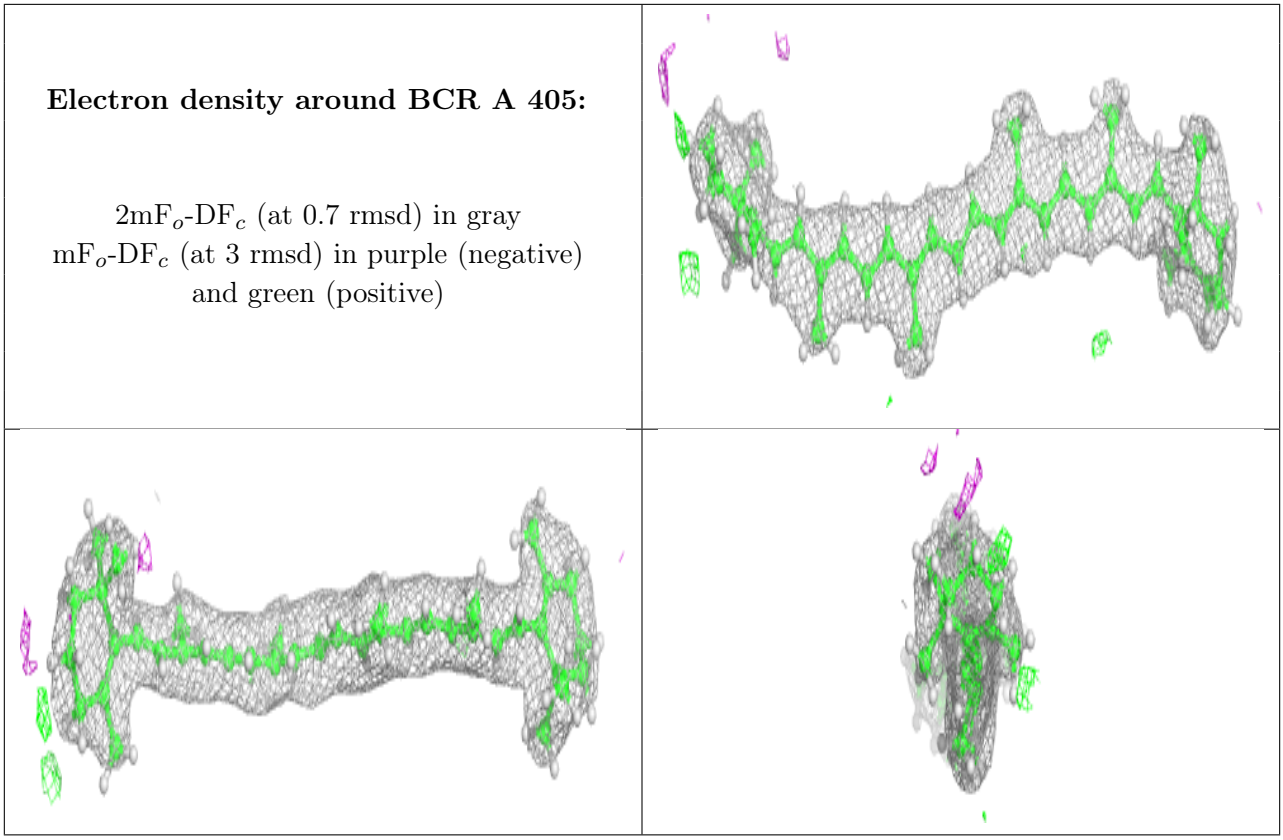






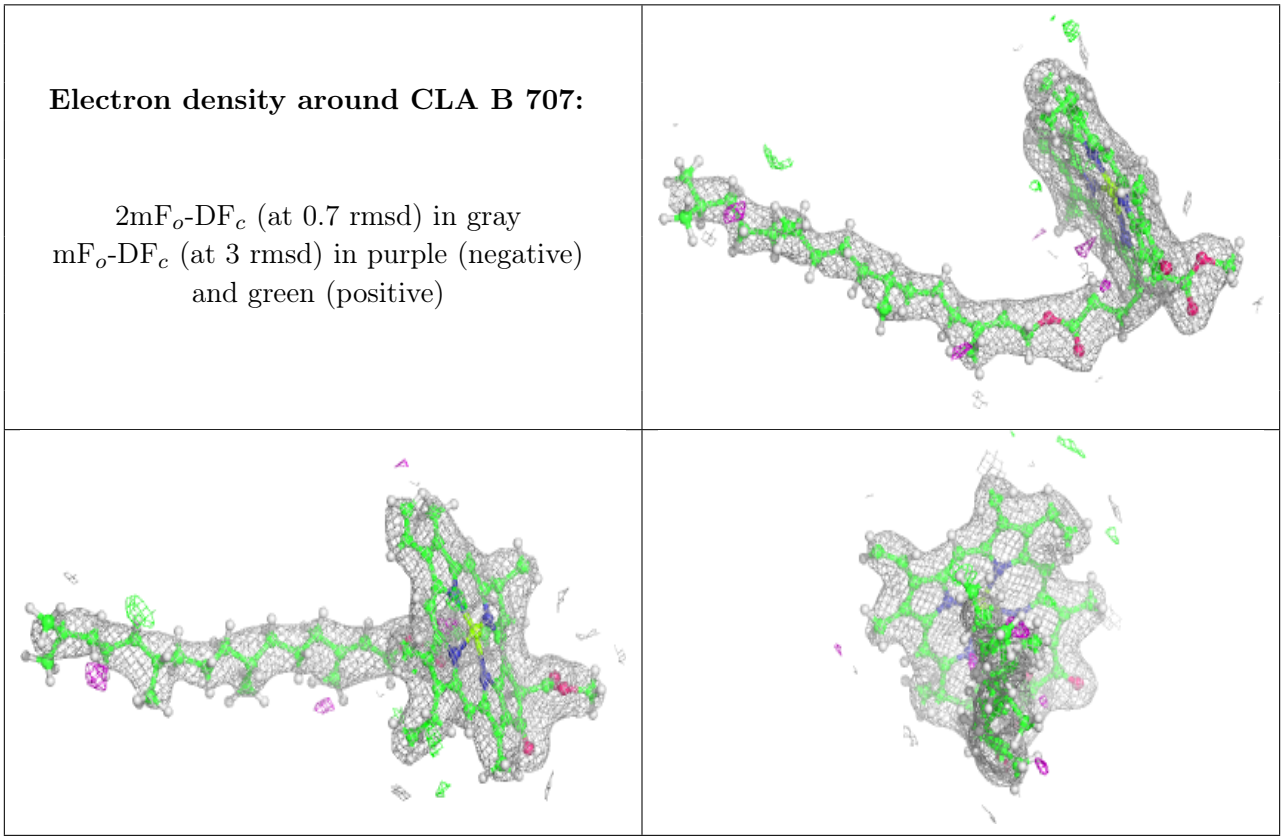
Electron density around BCR A 405:

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



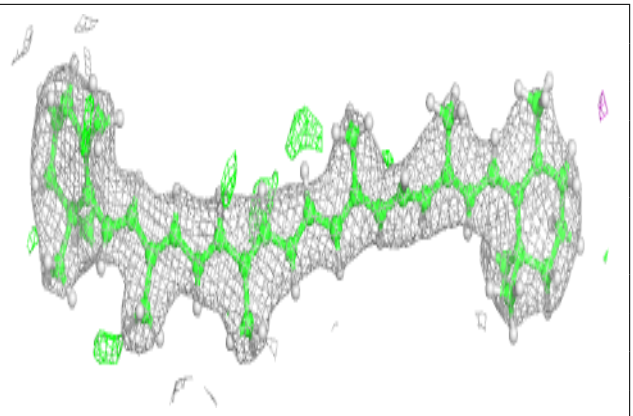
Electron density around CLA B 707:

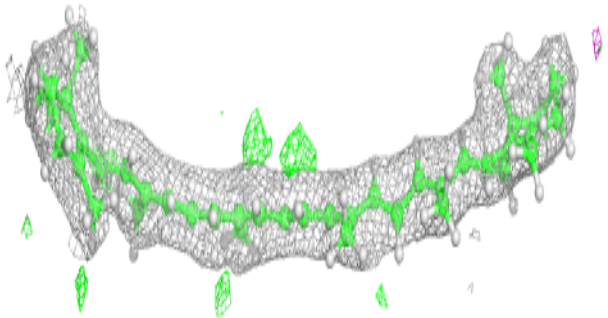
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

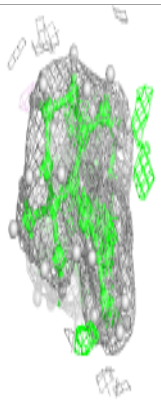


Electron density around BCR t 701:

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

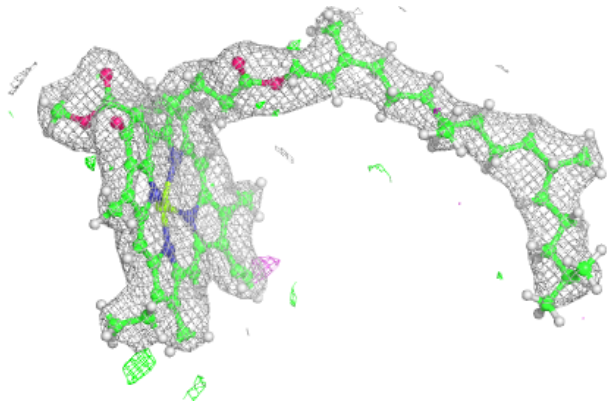


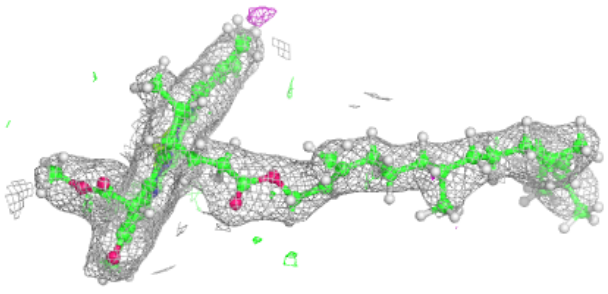


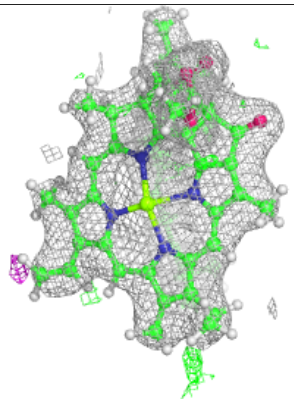


Electron density around CLA B 709:

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

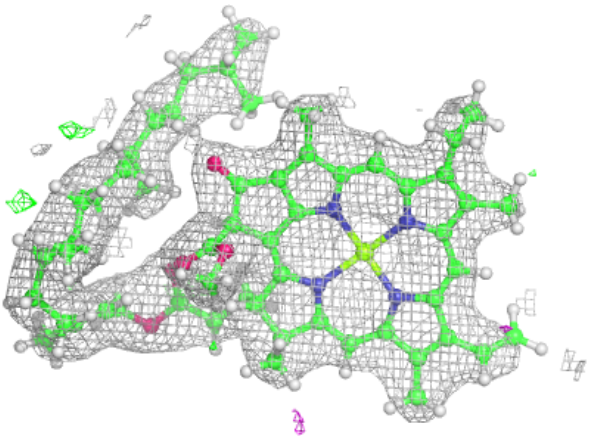


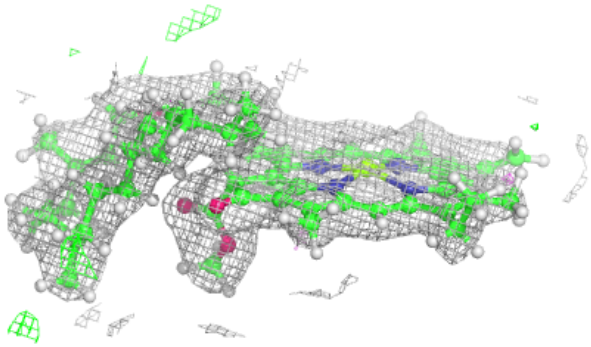


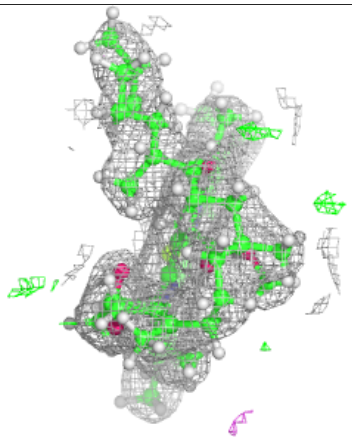


Electron density around CLA B 710:

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

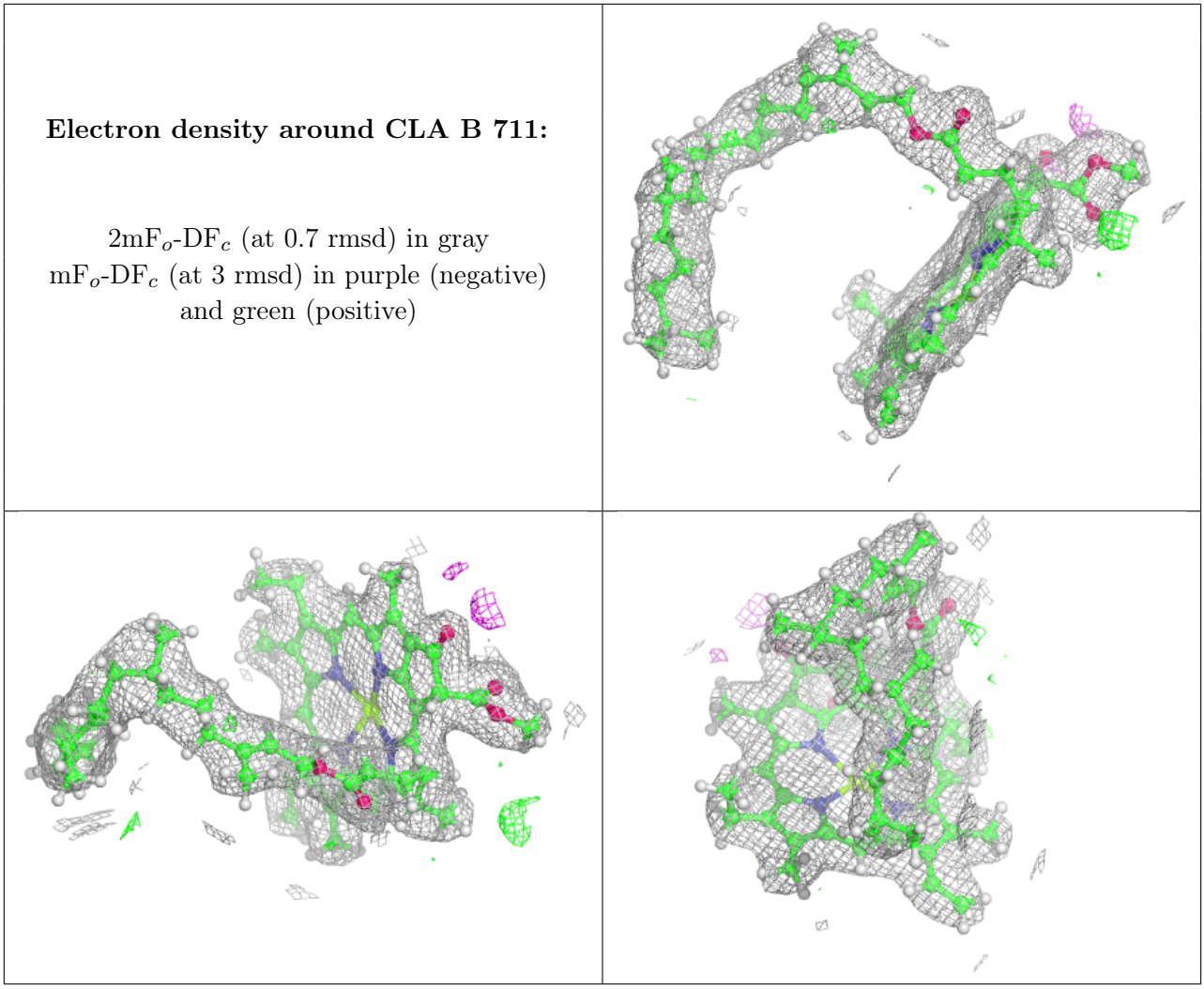






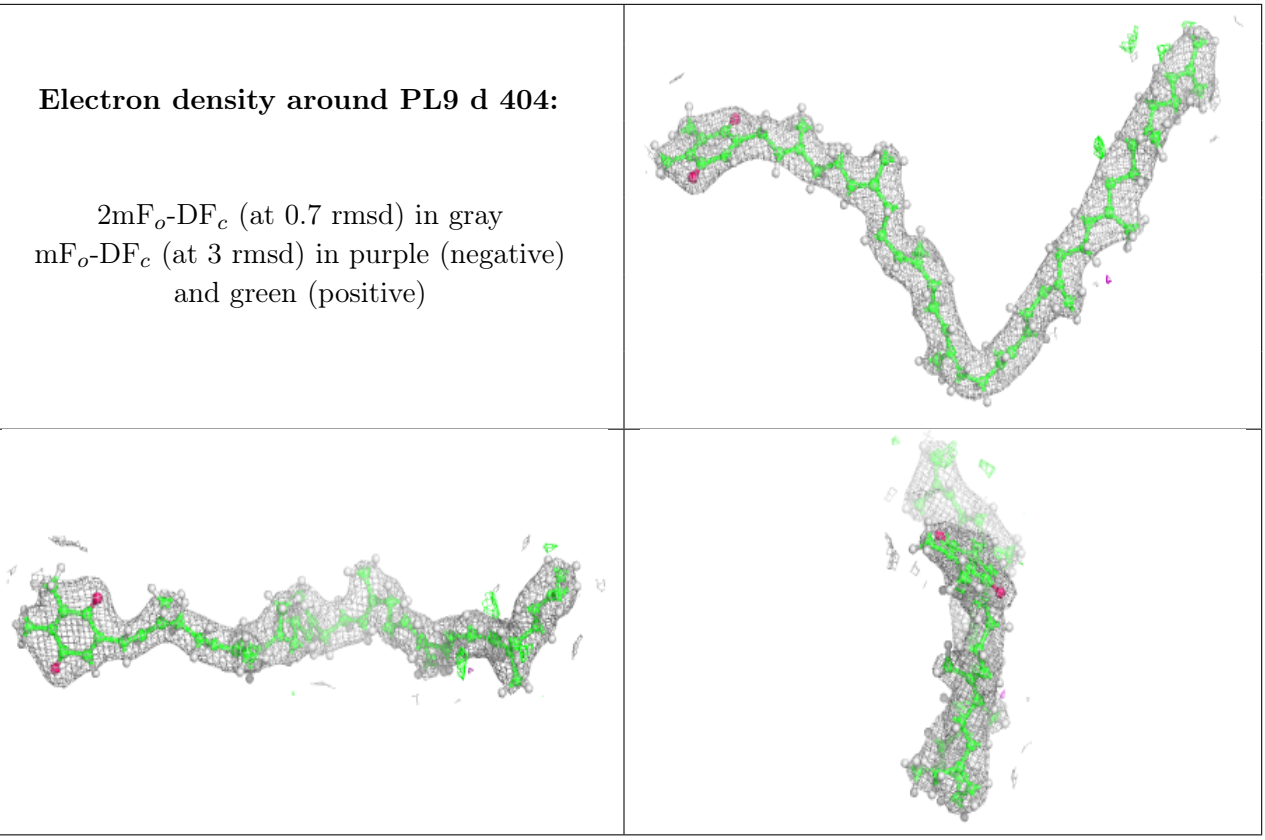
Electron density around CLA B 711:

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



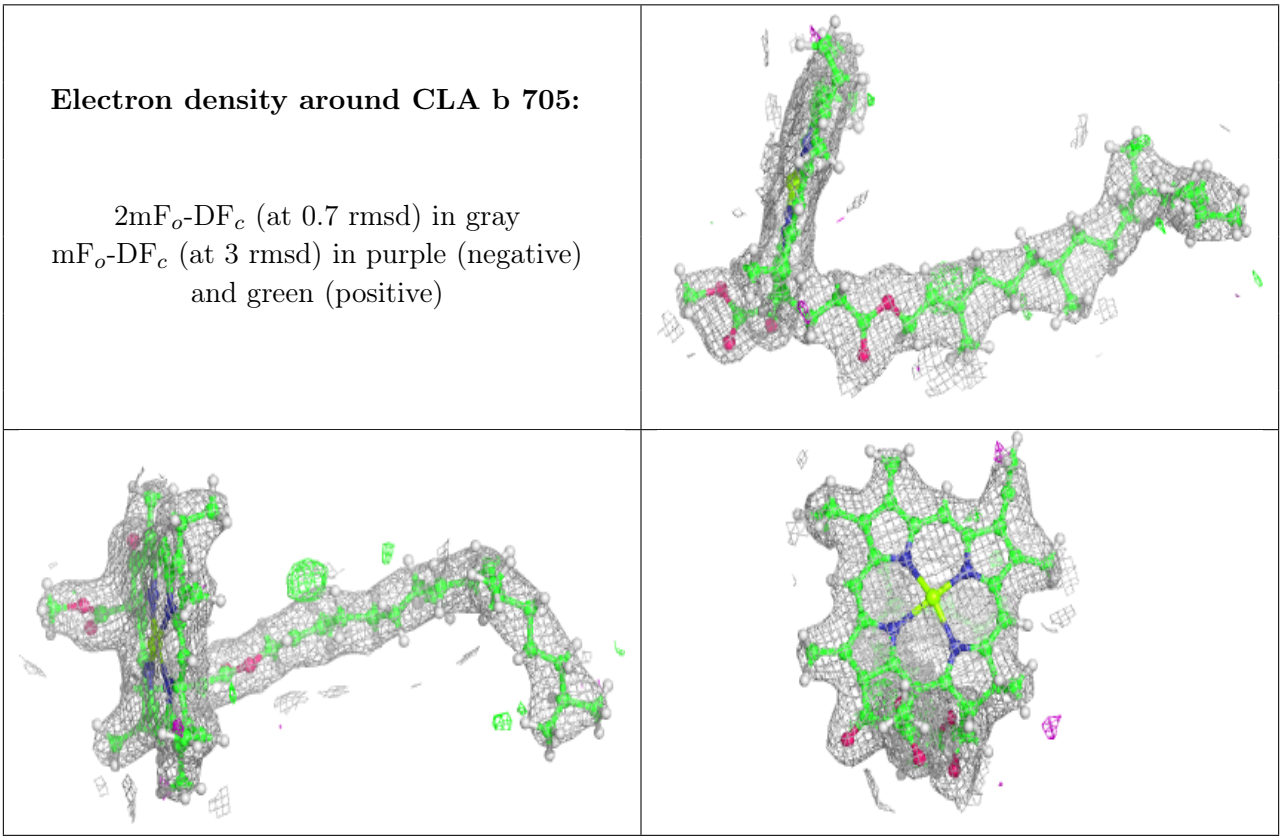
Electron density around PL9 d 404:

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



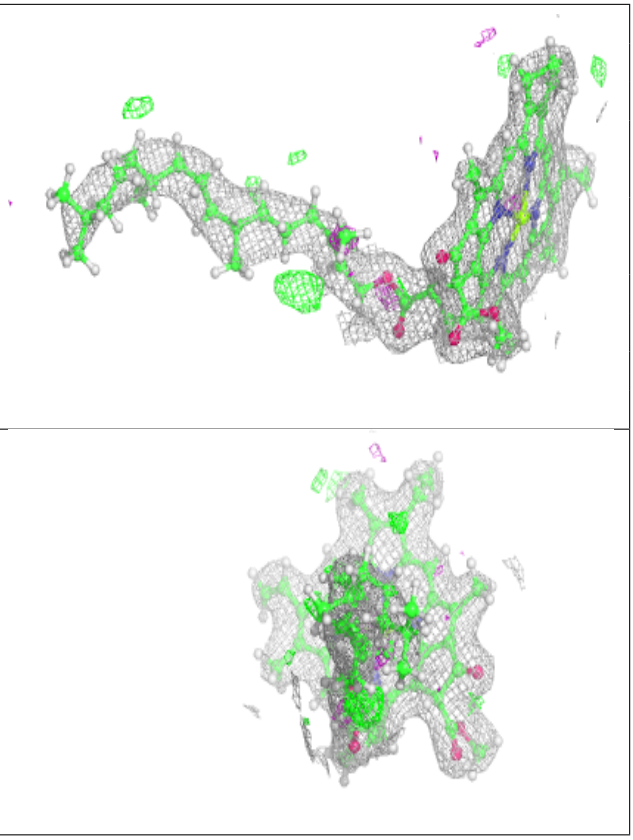
Electron density around CLA b 705:

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



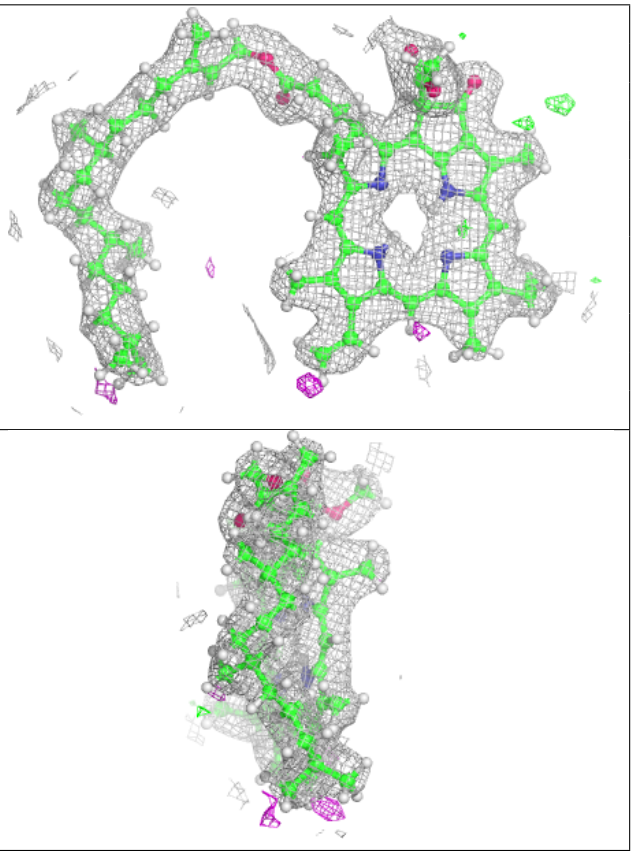
Electron density around CLA B 704:

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



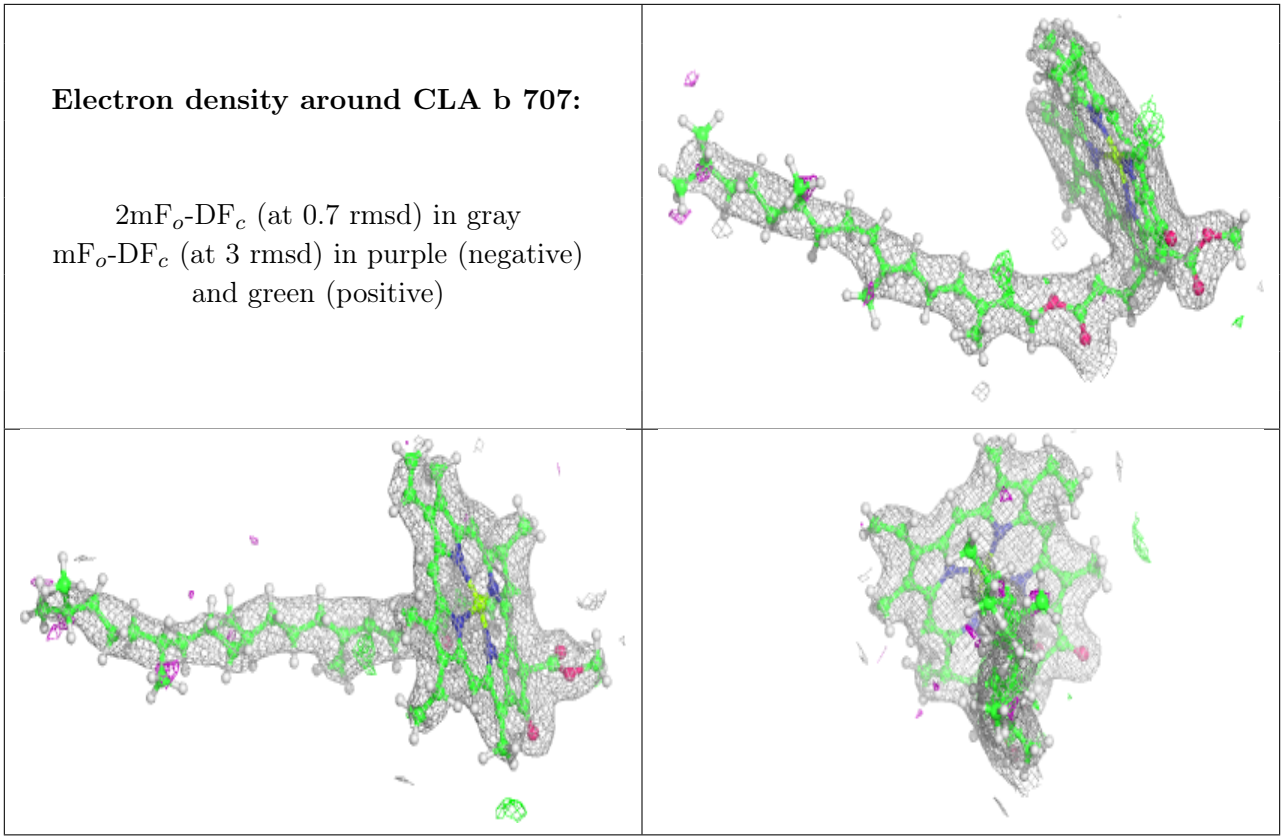
Electron density around PHO D 406:

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



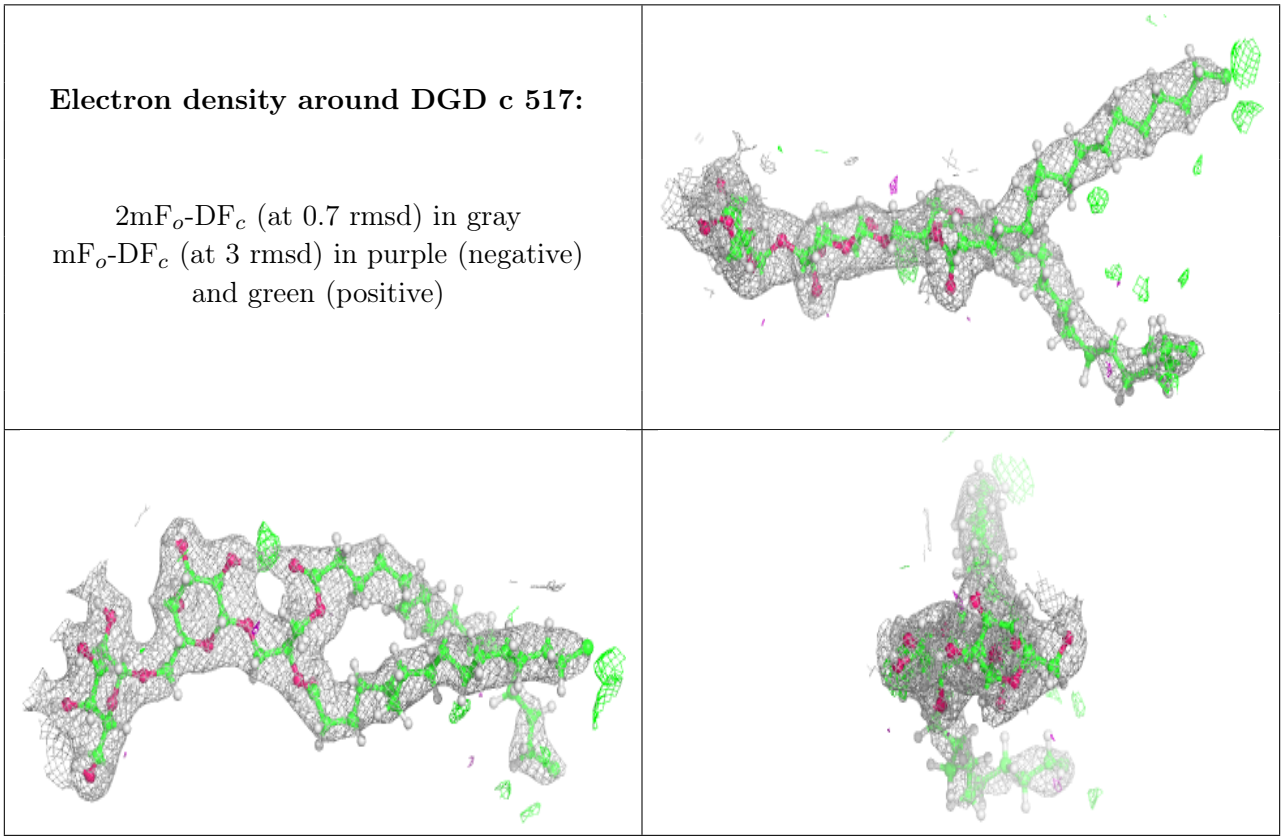
Electron density around CLA b 707:

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



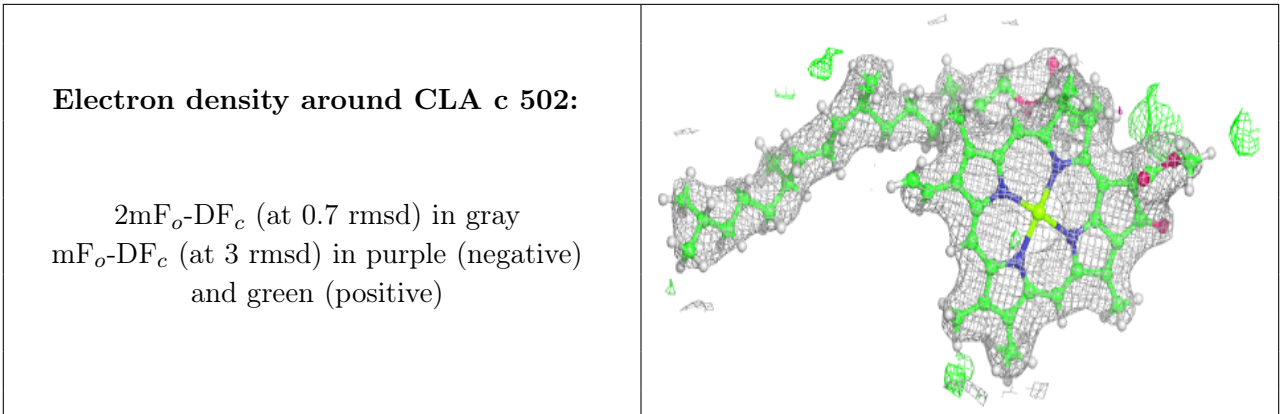
Electron density around DGD c 517:

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



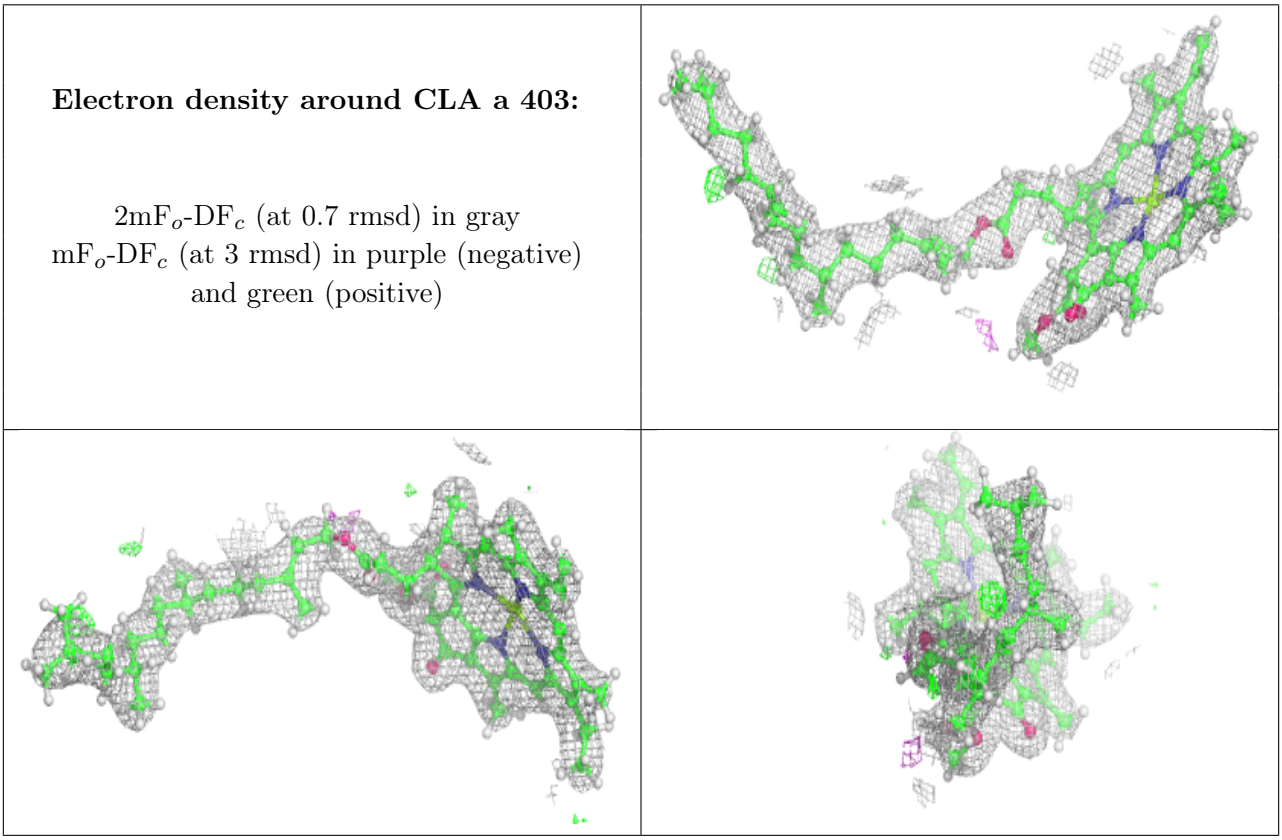
Electron density around CLA c 502:

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



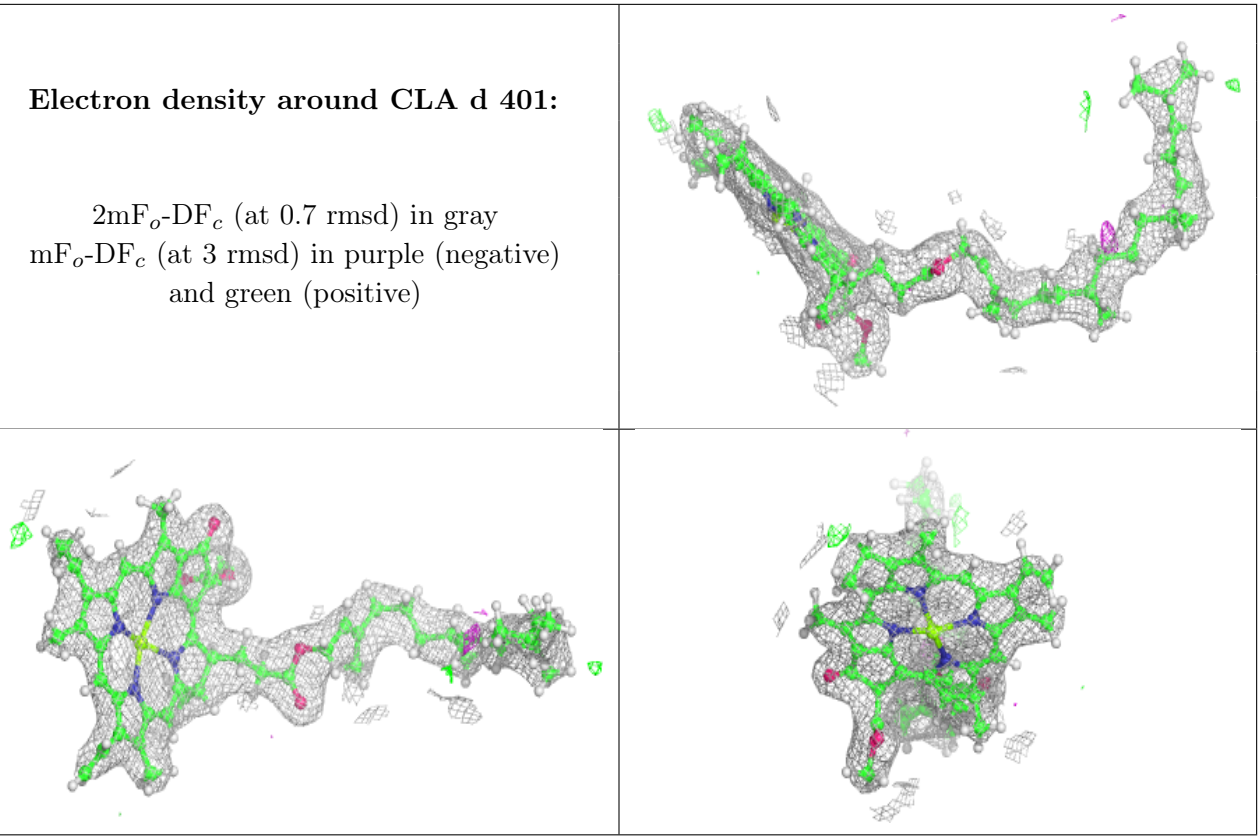
Electron density around CLA a 403:

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



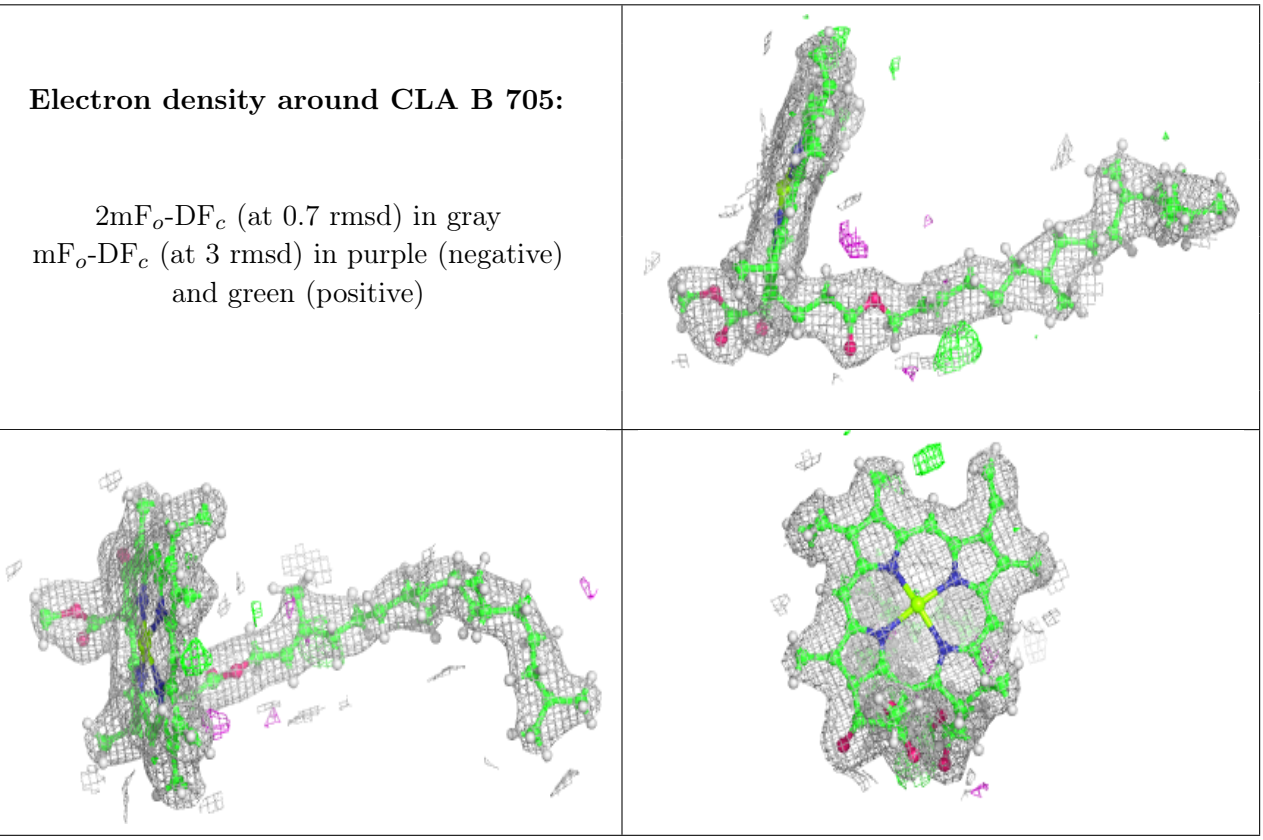
Electron density around CLA d 401:

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



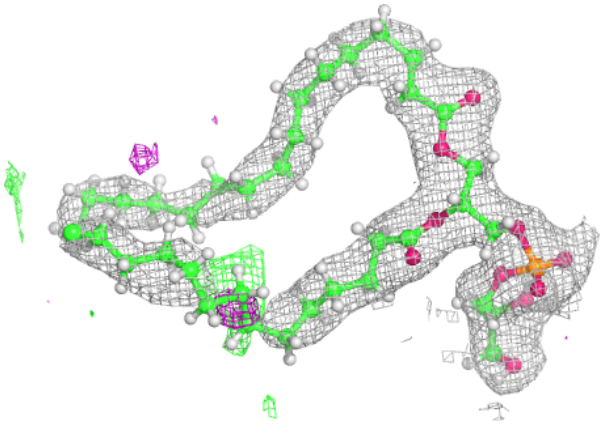
Electron density around CLA B 705:

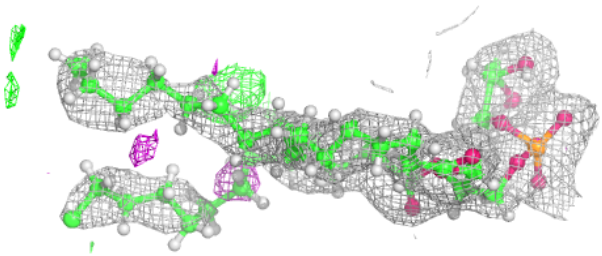
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

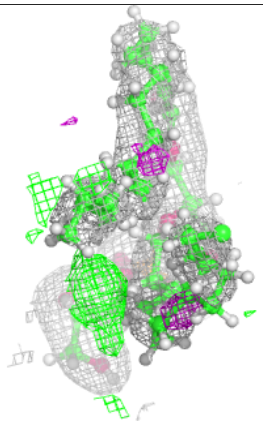


Electron density around LHG D 411:

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

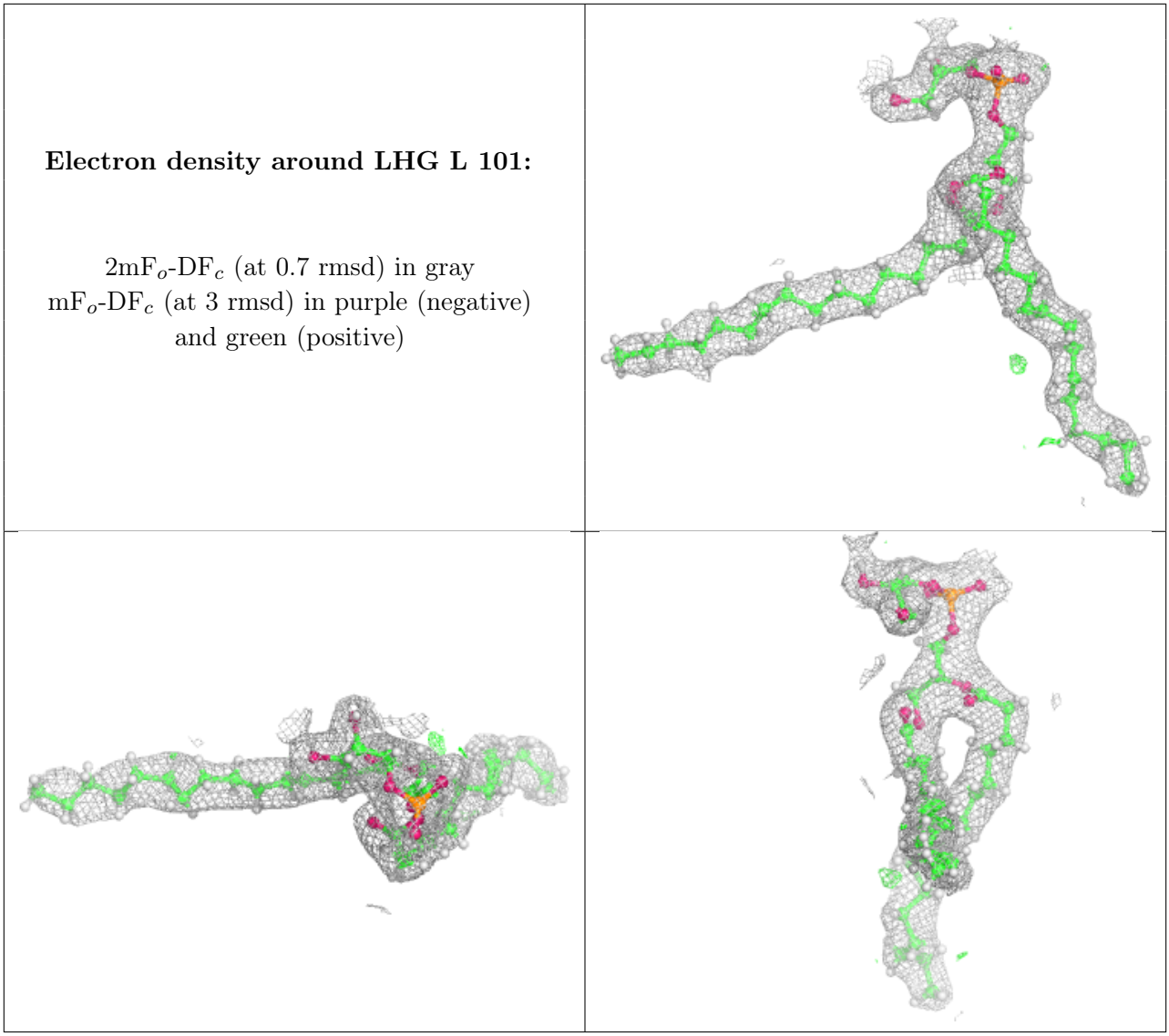






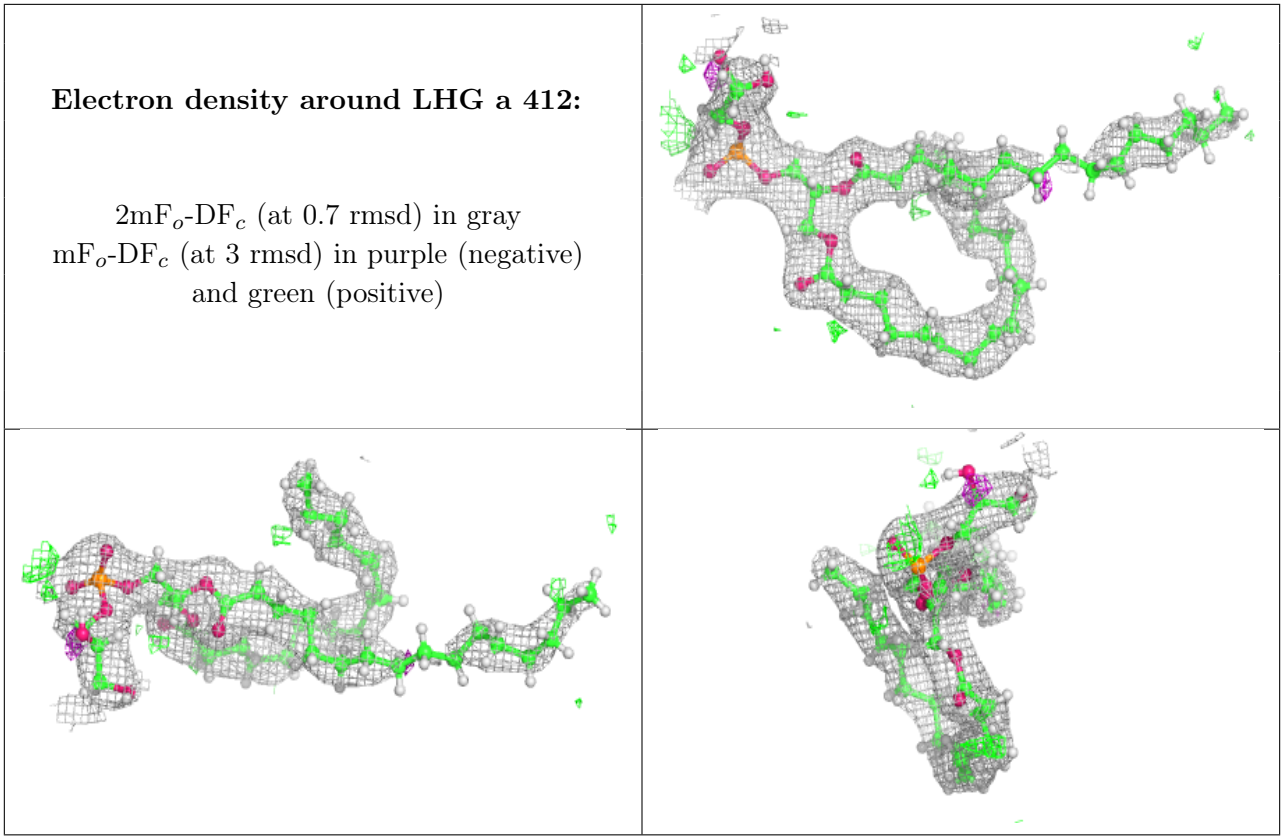
Electron density around LHG L 101:

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



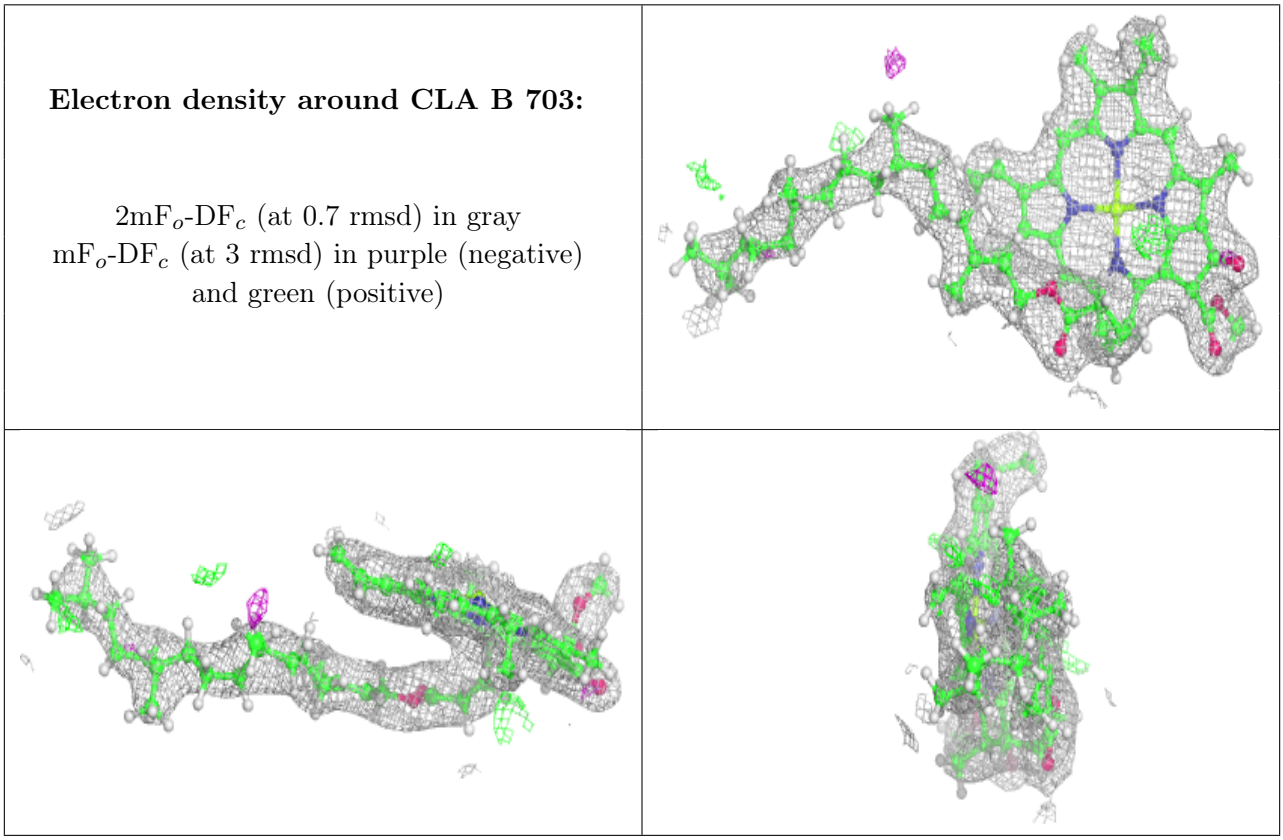
Electron density around LHG a 412:

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



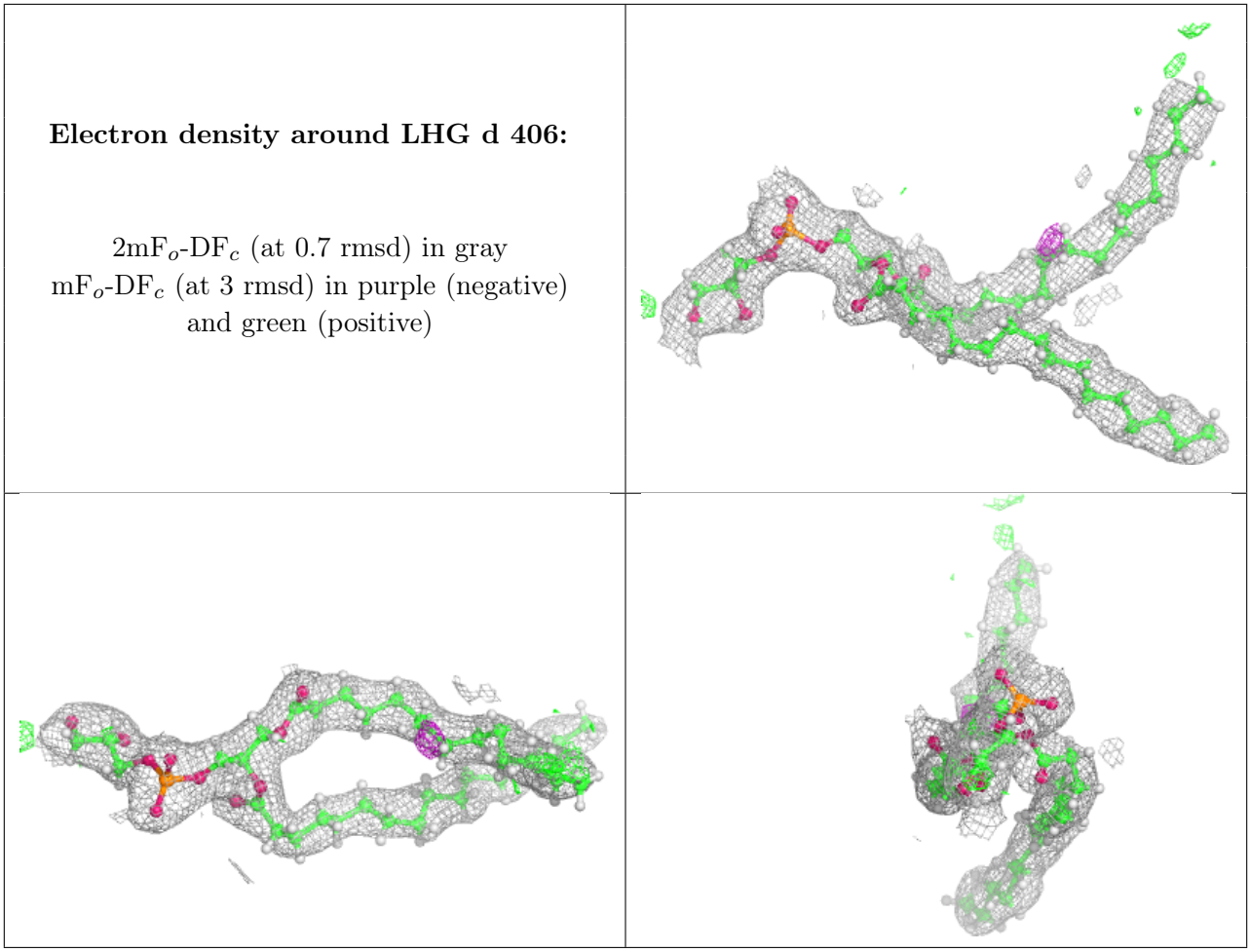
Electron density around CLA B 703:

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



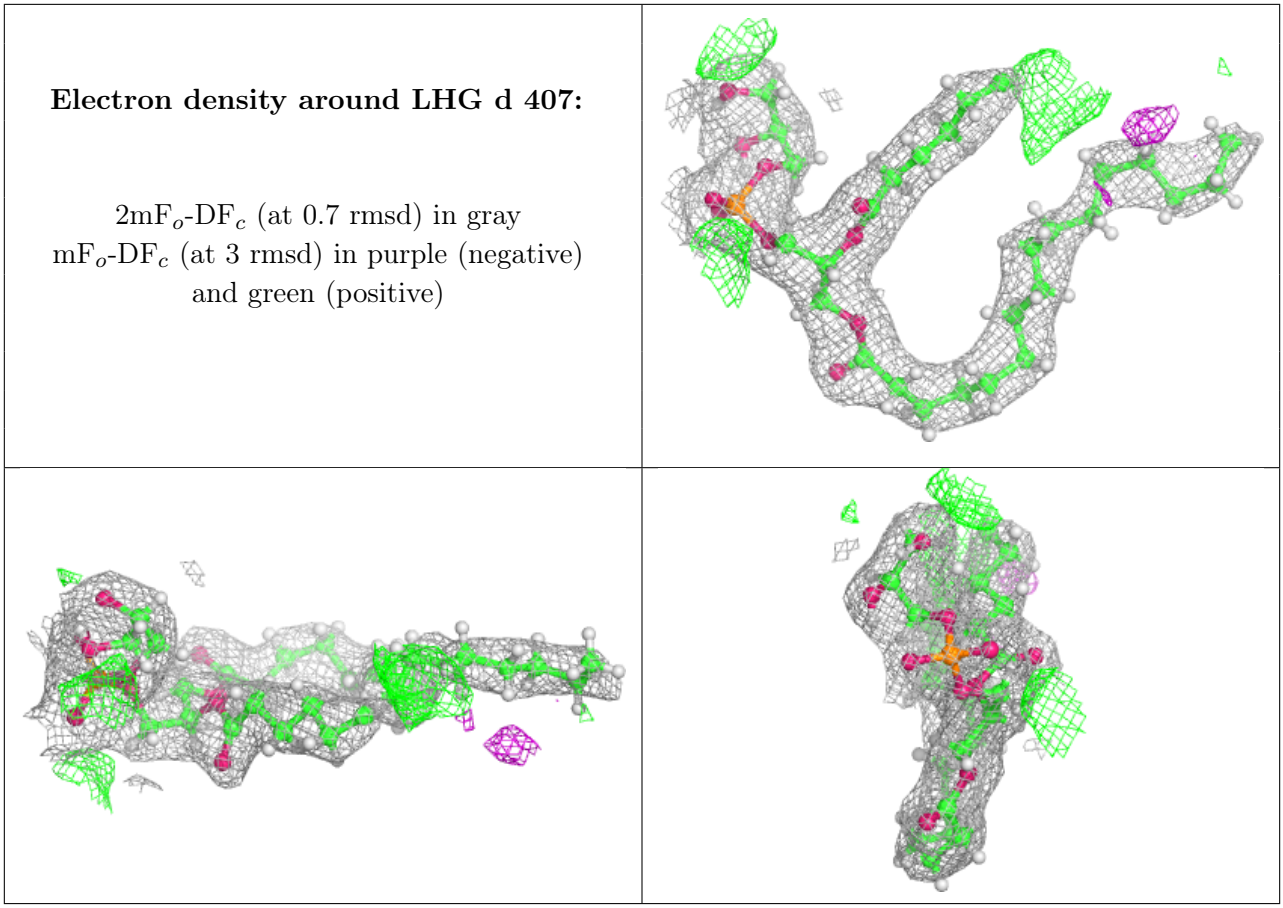
Electron density around LHG d 406:

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



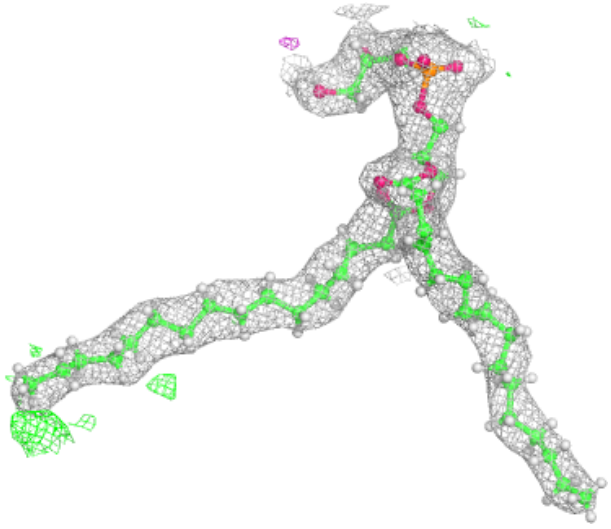
Electron density around LHG d 407:

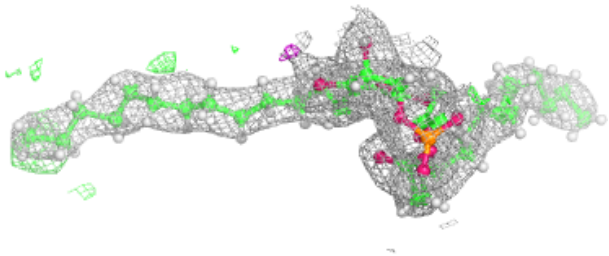
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

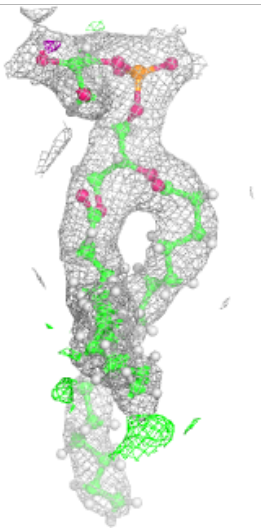


Electron density around LHG l 101:

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

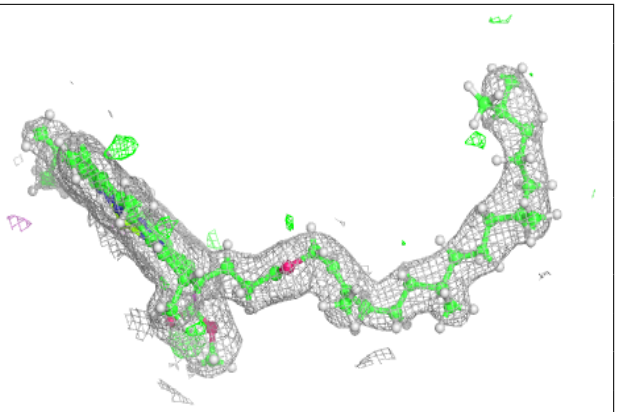


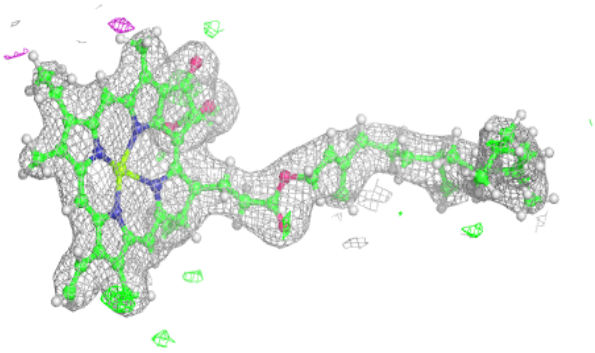


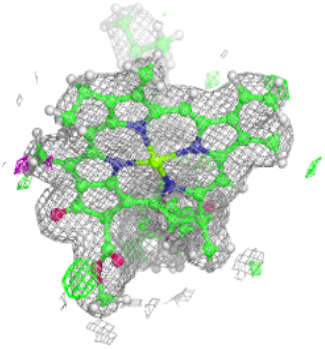


Electron density around CLA D 401:

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

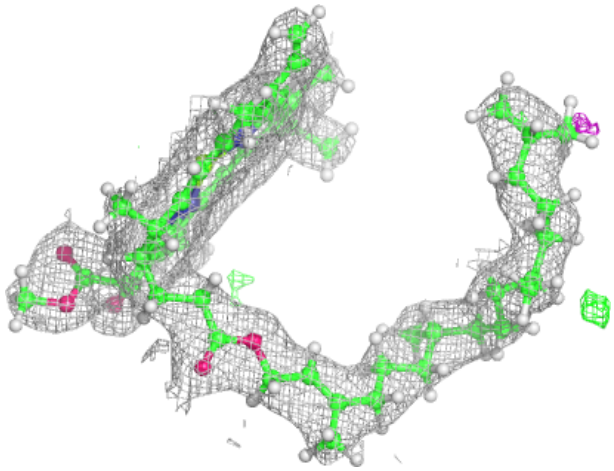


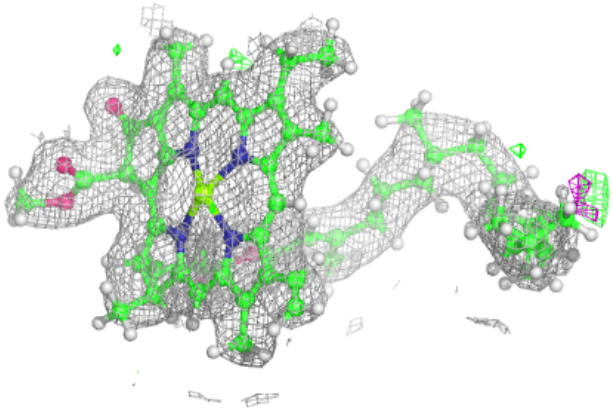


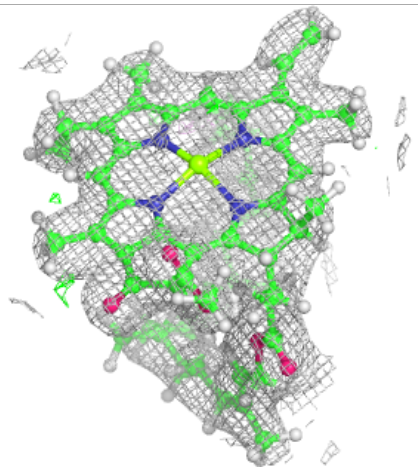


Electron density around CLA b 711:

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

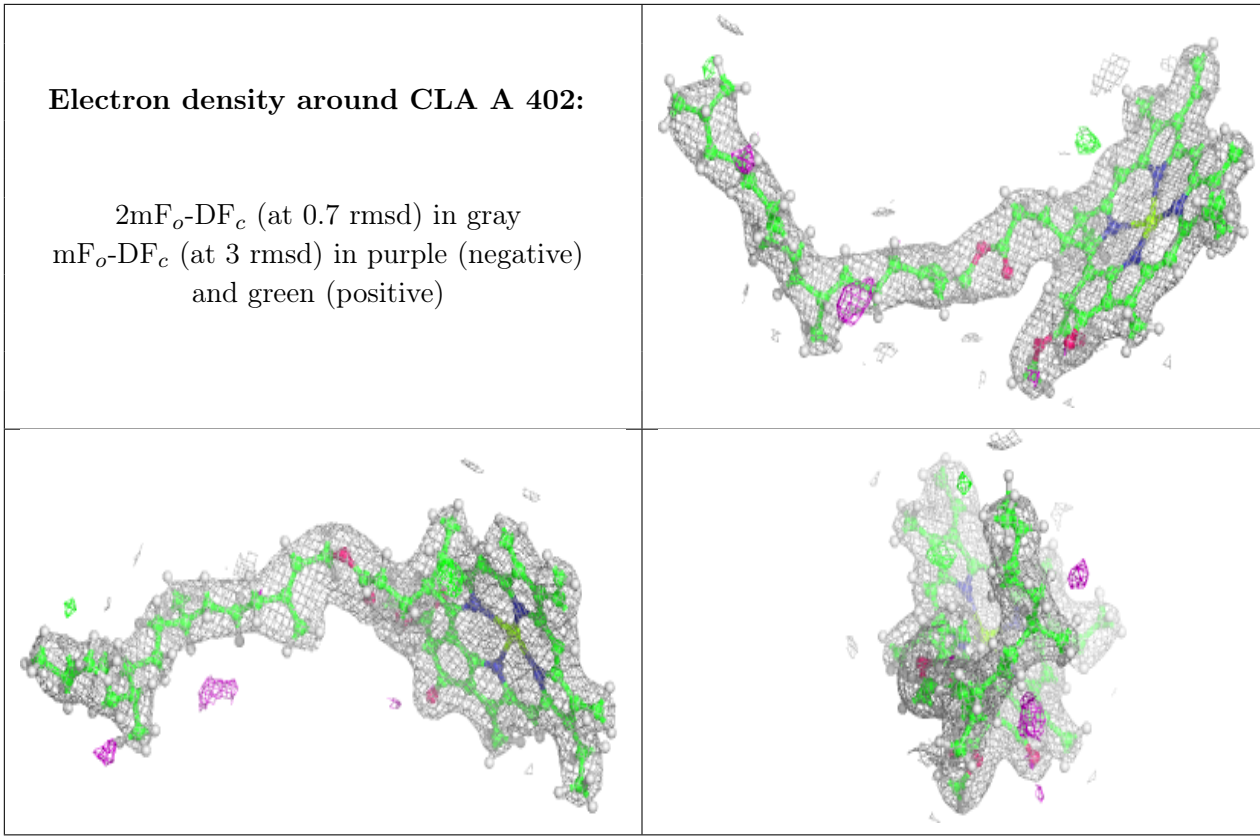






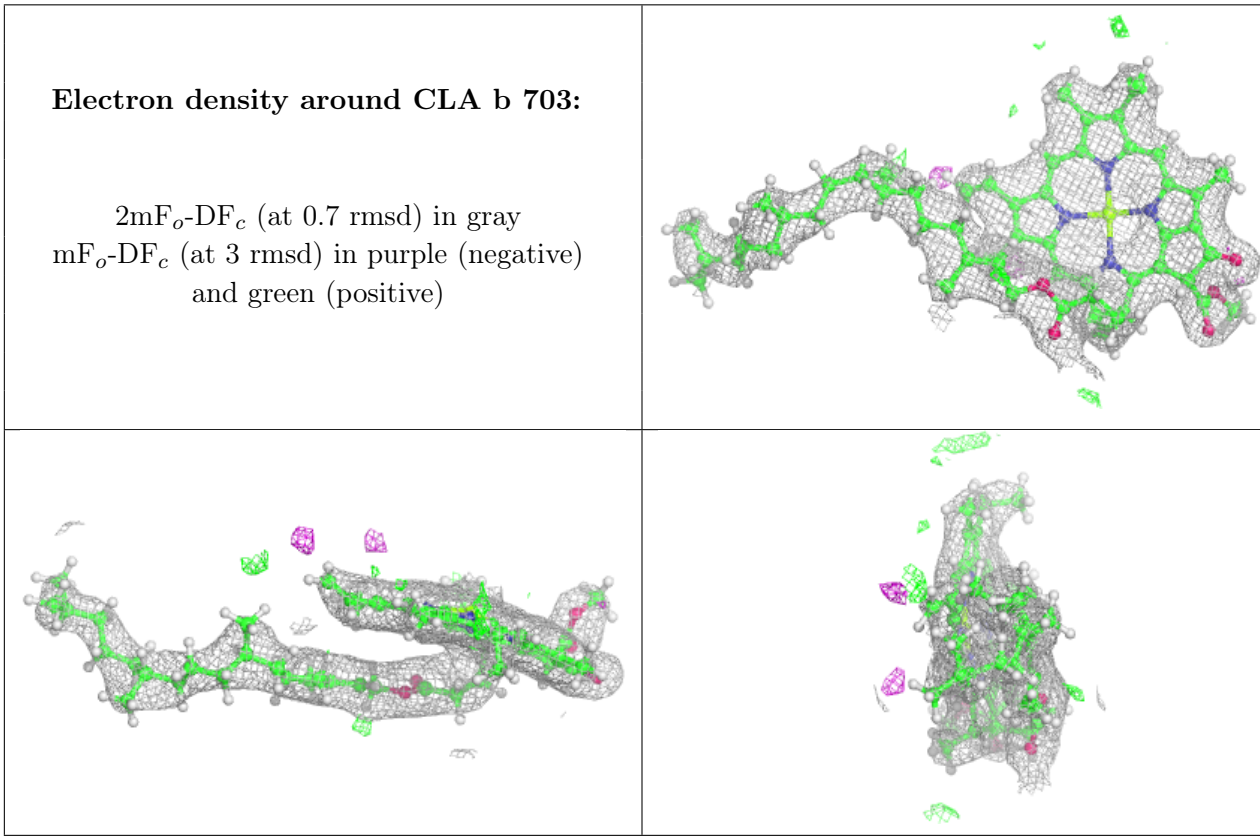
Electron density around CLA A 402:

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



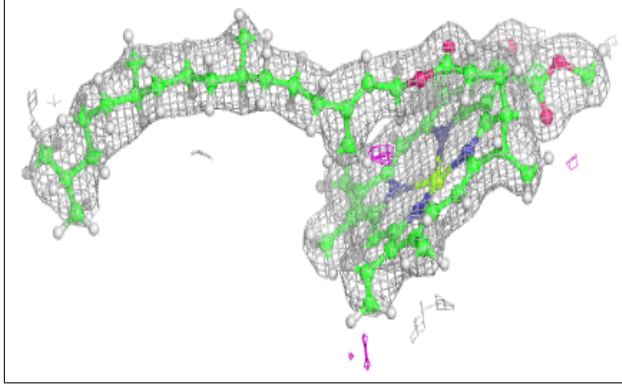
Electron density around CLA b 703:

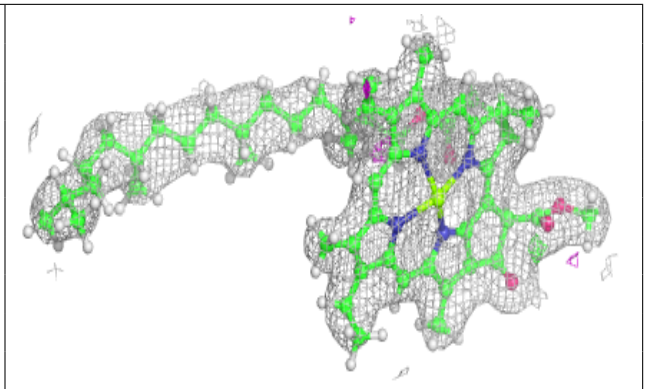
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

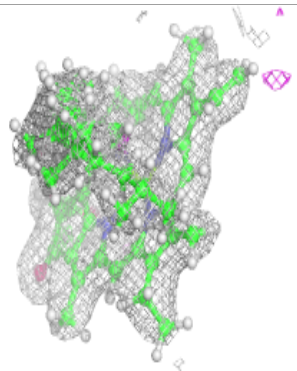


Electron density around CLA B 708:

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

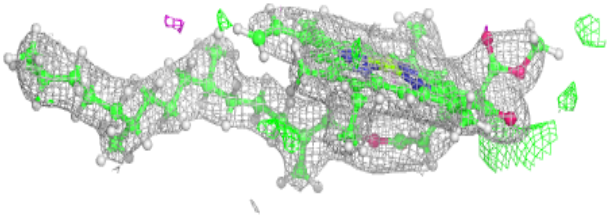


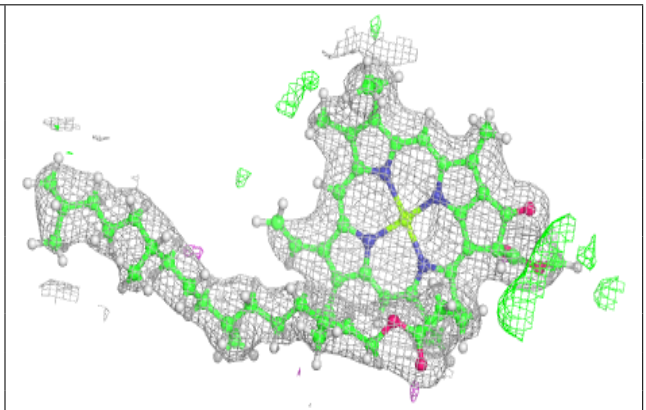


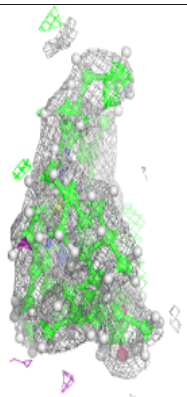


Electron density around CLA C 502:

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

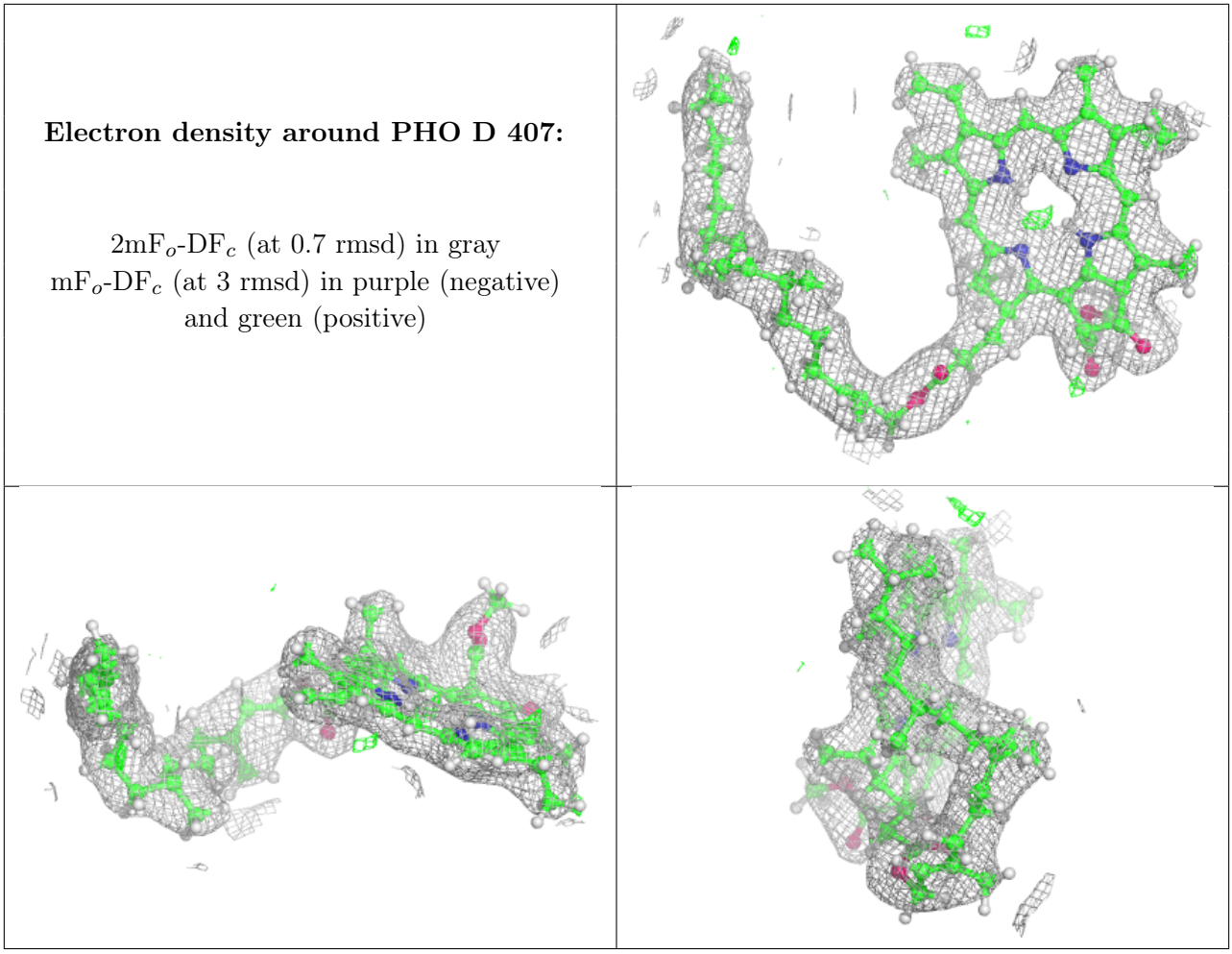






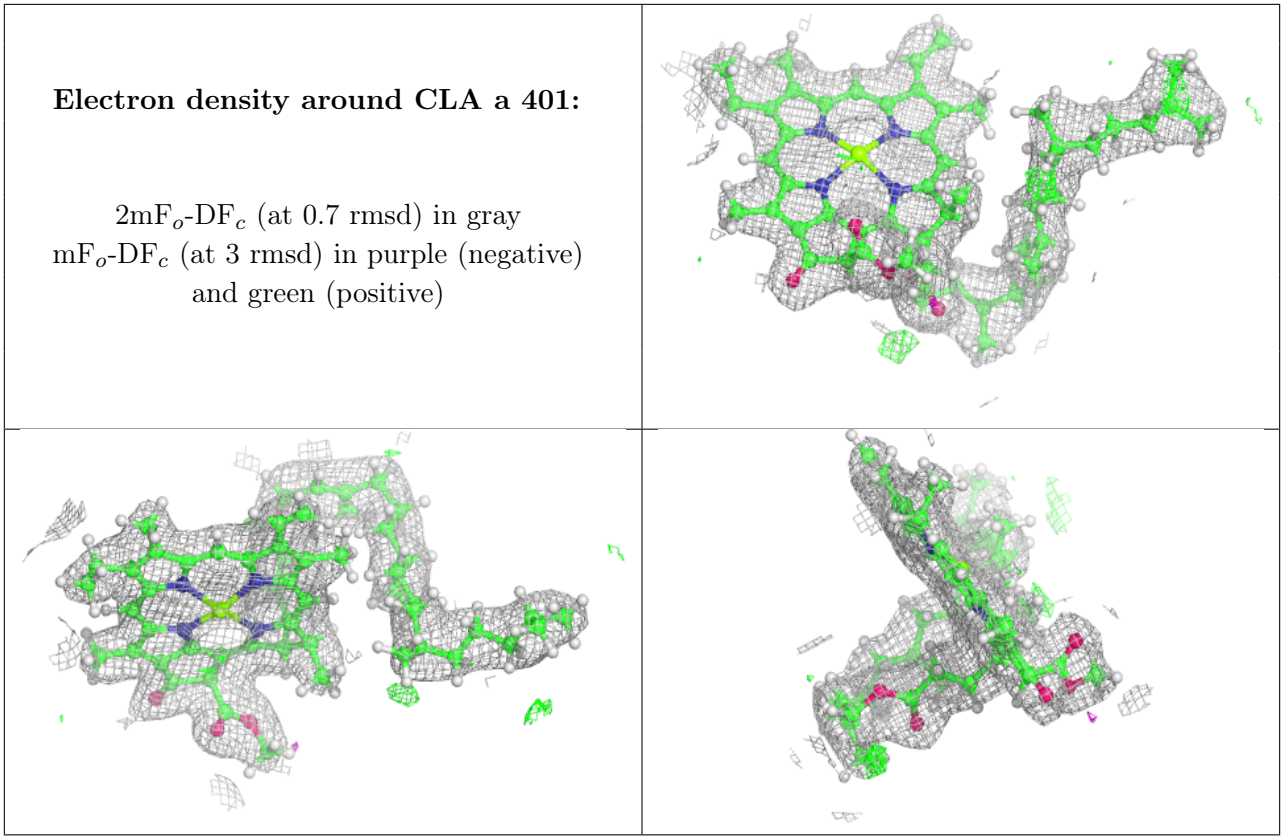
Electron density around PHO D 407:

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



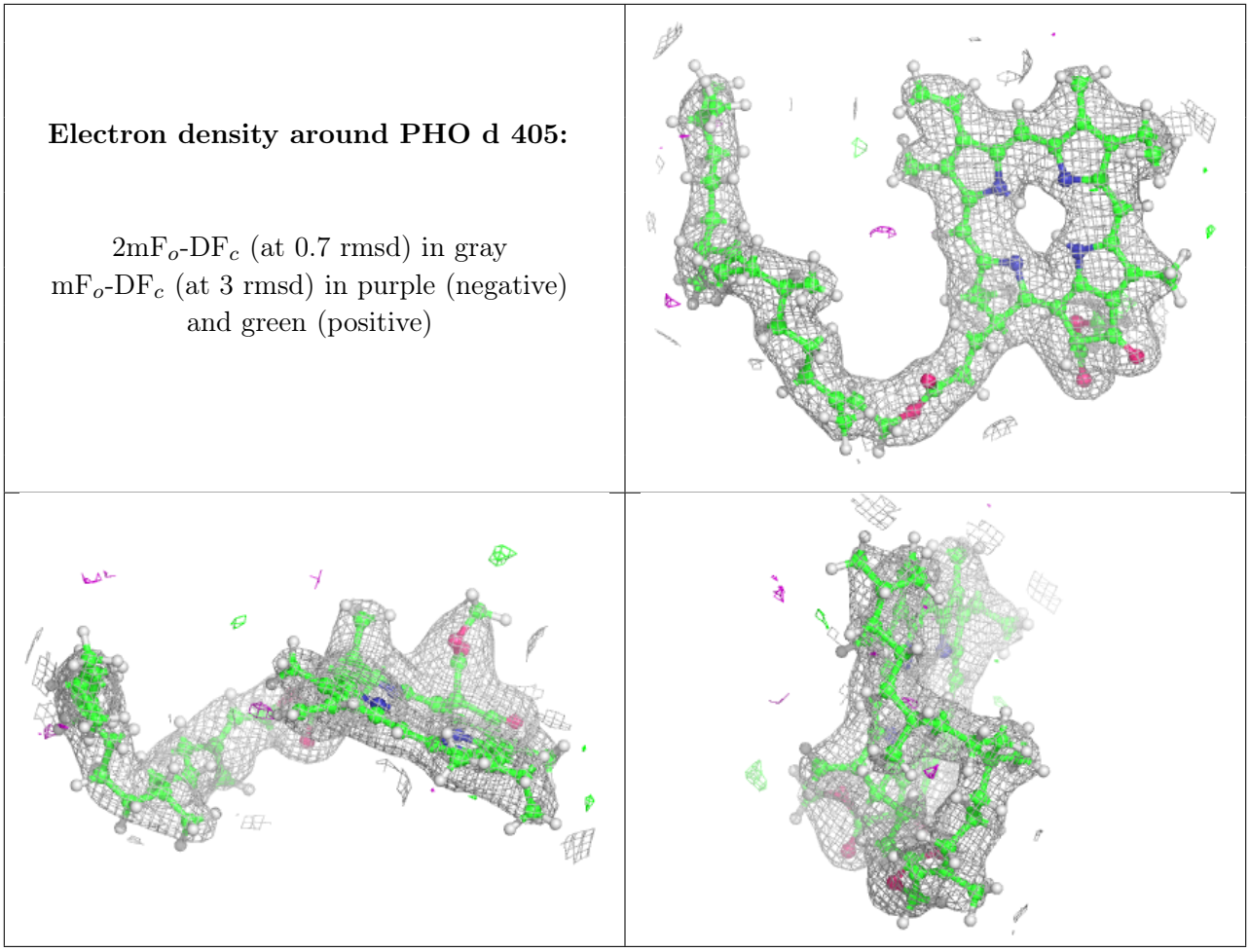
Electron density around CLA a 401:

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



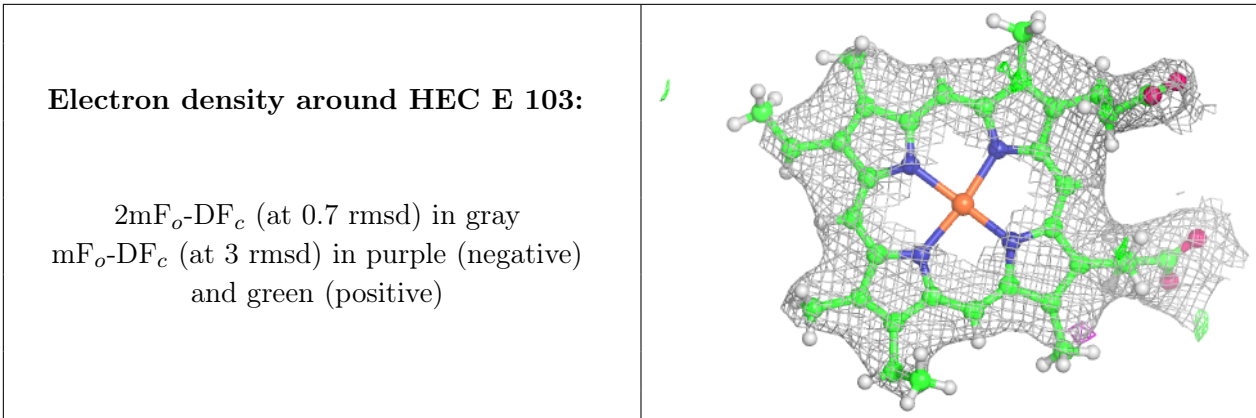
Electron density around PHO d 405:

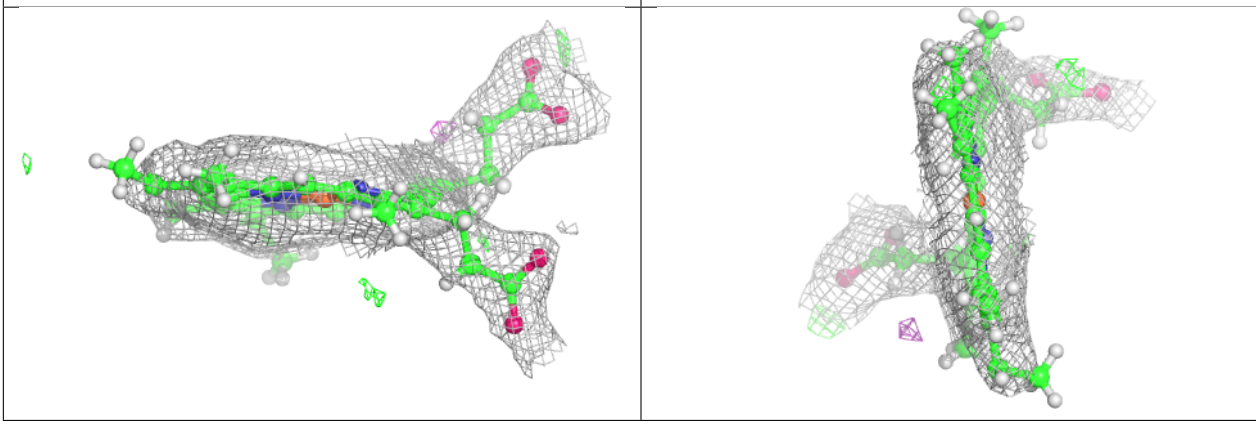
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around HEC E 103:

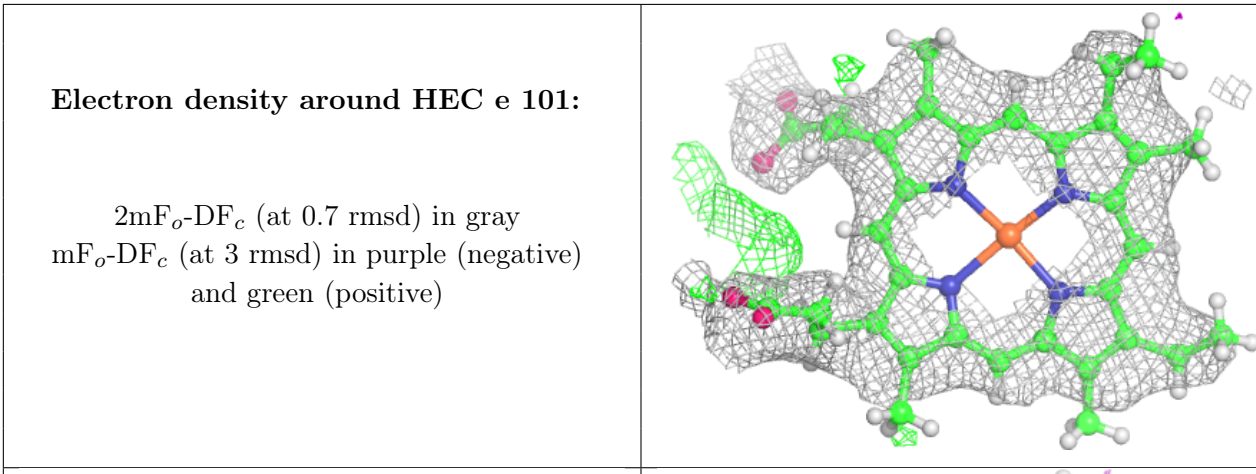
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

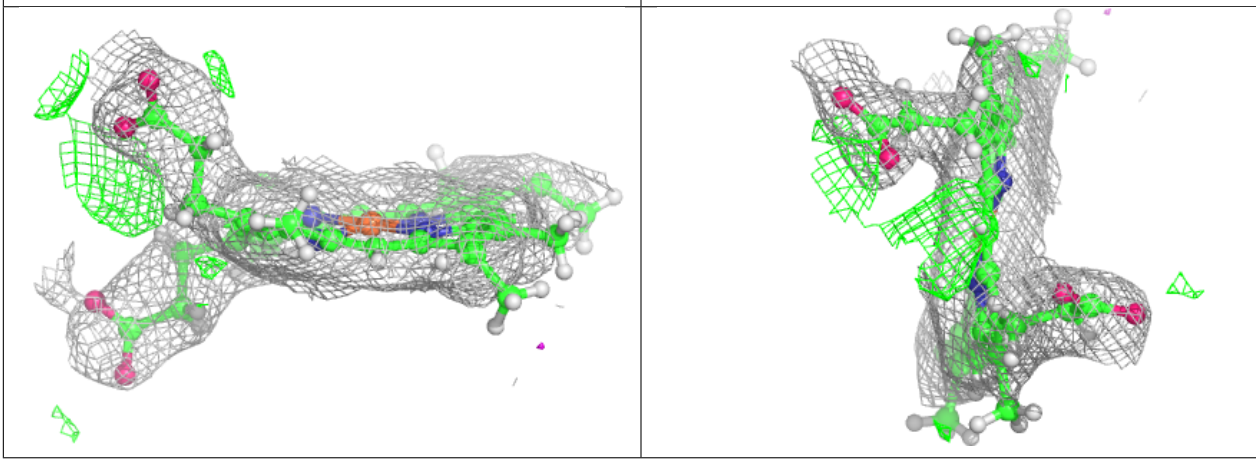




Electron density around HEC e 101:

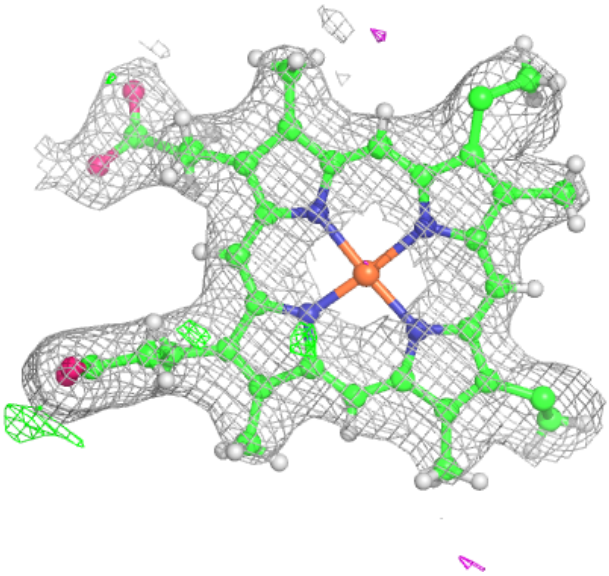
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

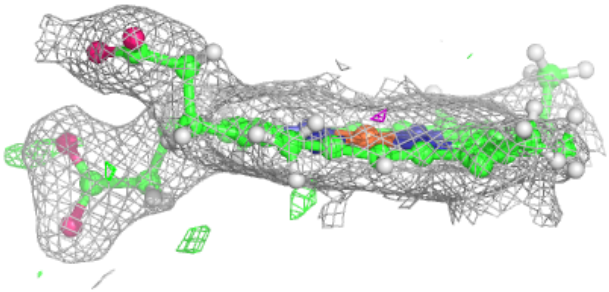


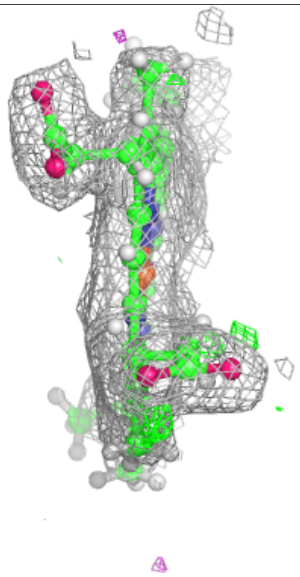


Electron density around HEC V 201:

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

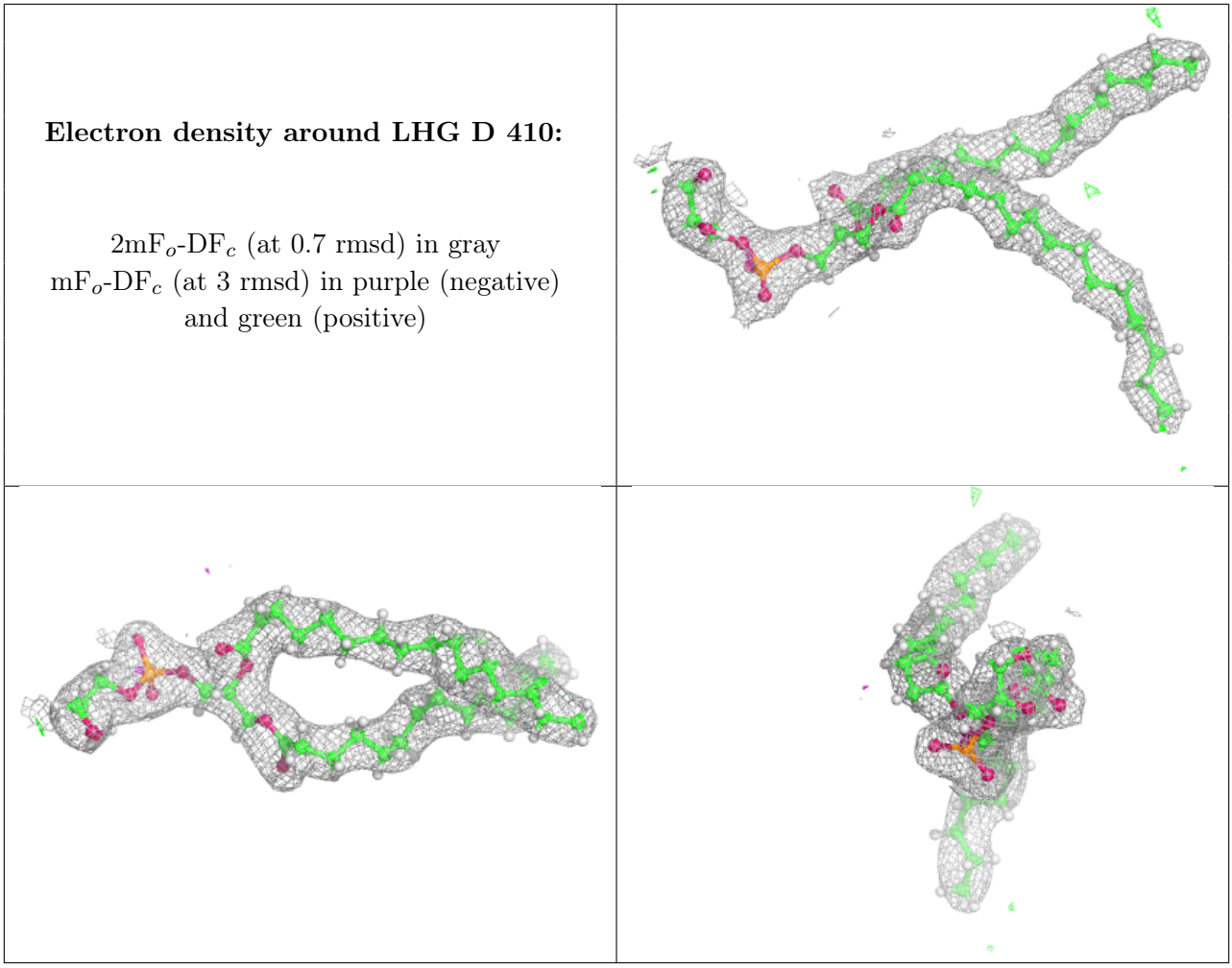






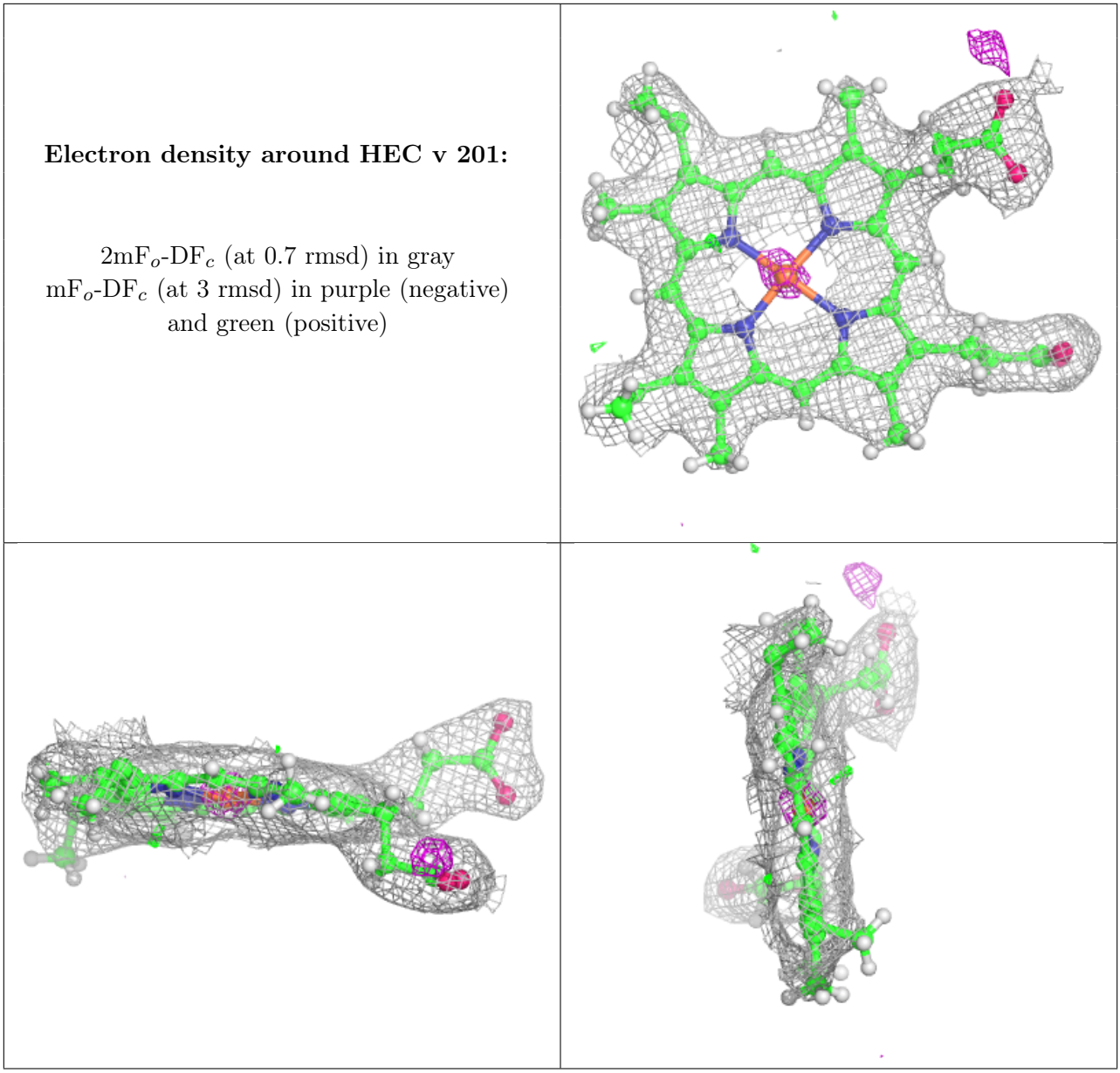
Electron density around LHG D 410:

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



Electron density around HEC v 201:

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



6.5 Other polymers

There are no such residues in this entry.