



# Full wwPDB X-ray Structure Validation Report ⓘ

Oct 31, 2023 – 09:19 PM JST

PDB ID : 5H2F  
Title : Crystal structure of the PsbM-deletion mutant of photosystem II  
Authors : Uto, S.; Kawakami, K.; Umena, Y.; Iwai, M.; Ikeuchi, M.; Shen, J.R.; Kamiya, N.  
Deposited on : 2016-10-15  
Resolution : 2.20 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtrriage (Phenix) : 1.13  
EDS : 2.36  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.36

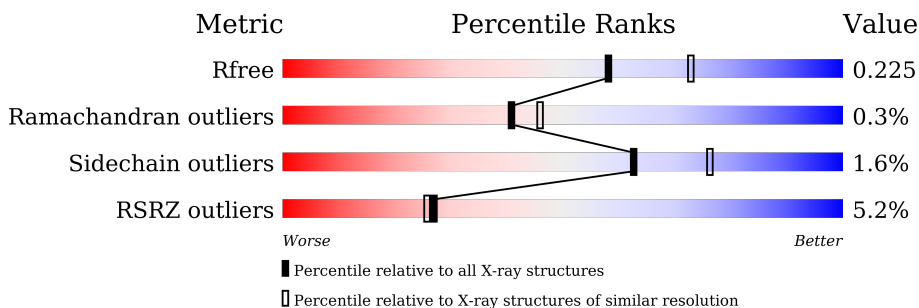
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.20 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	4898 (2.20-2.20)
Ramachandran outliers	138981	5503 (2.20-2.20)
Sidechain outliers	138945	5504 (2.20-2.20)
RSRZ outliers	127900	4800 (2.20-2.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	334	 4% 98%
1	a	334	 10% 98%
2	B	505	 7% 96%
2	b	505	 4% 94%
3	C	455	 3% 96%
3	c	455	 96%
4	D	342	 % 98%

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Mol	Chain	Length	Quality of chain
4	d	342	4% 97% .
5	E	80	12% 96% ..
5	e	80	15% 94% 5% .
6	F	33	12% 97% .
6	f	33	3% 88% 6% 6%
7	H	63	2% 94% 6%
7	h	63	13% 94% 5% .
8	I	36	3% 92% 6% .
8	i	36	97% .
9	J	40	5% 85% 5% 10%
9	j	40	15% 98% .
10	K	37	92% 8%
10	k	37	3% 95% 5%
11	L	35	20% 97% .
11	l	35	11% 97% .
12	O	243	3% 97% .
12	o	243	6% 98% .
13	T	30	93% 7%
13	t	30	7% 90% 10%
14	U	97	100%
14	u	97	99% .
15	V	137	98% .
15	v	137	2% 97% ..
16	Y	29	14% 90% 10%
16	y	29	14% 100%

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Mol	Chain	Length	Quality of chain
17	X	37	
17	x	37	
18	Z	62	
18	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	405	X	-	-	-
22	CLA	A	408	X	-	-	-
22	CLA	B	602	X	-	-	-
22	CLA	B	603	X	-	-	-
22	CLA	B	604	X	-	-	-
22	CLA	B	605	X	-	-	-
22	CLA	B	607	X	-	-	-
22	CLA	B	608	X	-	-	-
22	CLA	B	610	X	-	-	-
22	CLA	B	611	X	-	-	-
22	CLA	B	612	X	-	-	-
22	CLA	B	613	X	-	-	-
22	CLA	B	614	X	-	-	-
22	CLA	B	615	X	-	-	-
22	CLA	B	616	X	-	-	-
22	CLA	B	617	X	-	-	-
22	CLA	C	502	X	-	-	-
22	CLA	C	503	X	-	-	-
22	CLA	C	506	X	-	-	-
22	CLA	C	507	X	-	-	-
22	CLA	C	508	X	-	-	-
22	CLA	C	509	X	-	-	-
22	CLA	C	510	X	-	-	-
22	CLA	C	511	X	-	-	-
22	CLA	C	513	X	-	-	-
22	CLA	D	403	X	-	-	-
22	CLA	D	404	X	-	-	-
22	CLA	a	407	X	-	-	-
22	CLA	a	408	X	-	-	-
22	CLA	b	602	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	b	603	X	-	-	-
22	CLA	b	604	X	-	-	-
22	CLA	b	605	X	-	-	-
22	CLA	b	606	X	-	-	-
22	CLA	b	607	X	-	-	-
22	CLA	b	608	X	-	-	-
22	CLA	b	611	X	-	-	-
22	CLA	b	613	X	-	-	-
22	CLA	b	614	X	-	-	-
22	CLA	b	615	X	-	-	-
22	CLA	b	616	X	-	-	-
22	CLA	b	617	X	-	-	-
22	CLA	c	902	X	-	-	-
22	CLA	c	903	X	-	-	-
22	CLA	c	906	X	-	-	-
22	CLA	c	907	X	-	-	-
22	CLA	c	908	X	-	-	-
22	CLA	c	910	X	-	-	-
22	CLA	c	911	X	-	-	-
22	CLA	c	913	X	-	-	-
22	CLA	d	402	X	-	-	-
29	LMT	f	102	-	-	-	X
30	UNL	a	417	-	-	-	X
31	DMS	B	639	-	-	-	X

## 2 Entry composition

There are 40 unique types of molecules in this entry. The entry contains 51892 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Photosystem II protein D1 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	334	Total 2598	C 1706	N 428	O 449	S 15	0	1	0
1	a	334	Total 2555	C 1675	N 427	O 438	S 15	0	1	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	505	Total 3950	C 2596	N 661	O 680	S 13	0	3	0
2	b	483	Total 3780	C 2484	N 631	O 652	S 13	0	1	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	451	Total 3470	C 2274	N 580	O 603	S 13	0	0	0
3	c	455	Total 3521	C 2305	N 589	O 614	S 13	0	1	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	342	Total 2732	C 1814	N 442	O 464	S 12	0	3	0
4	d	341	Total 2717	C 1805	N 441	O 459	S 12	0	2	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	79	Total	C	N	O	0	0	0
			635	417	101	117			
5	e	79	Total	C	N	O	0	0	0
			636	418	101	117			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	33	Total	C	N	O	S	0	0	0
			269	184	44	40	1			
6	f	31	Total	C	N	O	S	0	0	0
			250	170	42	37	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	63	Total	C	N	O	S	0	3	0
			522	347	87	86	2			
7	h	62	Total	C	N	O	S	0	1	0
			501	335	82	82	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	35	Total	C	N	O	S	0	0	0
			288	196	45	46	1			
8	i	36	Total	C	N	O	S	0	0	0
			293	199	46	47	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	36	Total	C	N	O	S	0	0	0
			251	171	37	42	1			
9	j	40	Total	C	N	O	S	0	0	0
			277	186	41	49	1			

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

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

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
10	k	37	286	198	42	46	0	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
11	L	35	287	192	46	49	0	0	0
11	l	35	287	192	46	49	0	0	0

- Molecule 12 is a protein called Photosystem II manganese-stabilizing polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	O	243	1853	1160	311	378	4	0	1	0
12	o	243	1833	1149	305	375	4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	T	30	253	177	36	38	2	0	0	0
13	t	30	253	177	36	38	2	0	0	0

- Molecule 14 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
14	U	97	782	496	132	154	0	1	0
14	u	97	766	487	129	150	0	0	0

- Molecule 15 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	V	137	1066	677	177	208	4	0	1	0
15	v	137	1058	671	175	208	4	0	1	0

- Molecule 16 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	Y	29	Total 215	C 142	N 37	O 33	S 3	0	0	0
16	y	29	Total 207	C 134	N 37	O 33	S 3	0	0	0

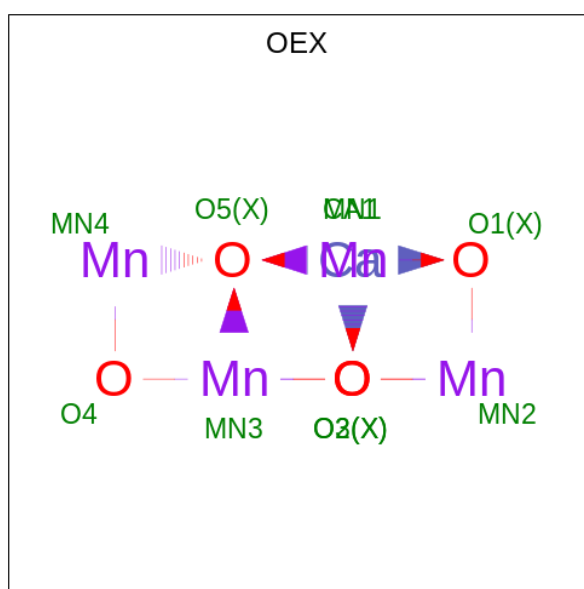
- Molecule 17 is a protein called Photosystem II reaction center X protein.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
17	X	37	Total 269	C 183	N 40	O 46	0	1	0
17	x	36	Total 253	C 172	N 37	O 44	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
18	Z	62	Total 453	C 311	N 68	O 72	S 2	0	0	0
18	z	61	Total 436	C 299	N 67	O 69	S 1	0	0	0

- Molecule 19 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula:  $\text{CaMn}_4\text{O}_5$ ).



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

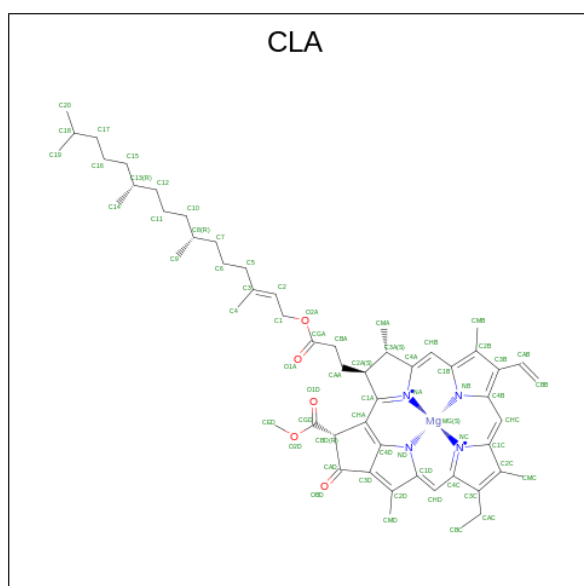
- Molecule 20 is FE (II) ION (three-letter code: FE2) (formula: Fe).

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

- Molecule 21 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

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

- Molecule 22 is CHLOROPHYLL A (three-letter code: CLA) (formula: C<sub>55</sub>H<sub>72</sub>MgN<sub>4</sub>O<sub>5</sub>).



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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
22	A	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
22	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			53	43	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	B	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			56	46	1	4	5		
22	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	a	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
22	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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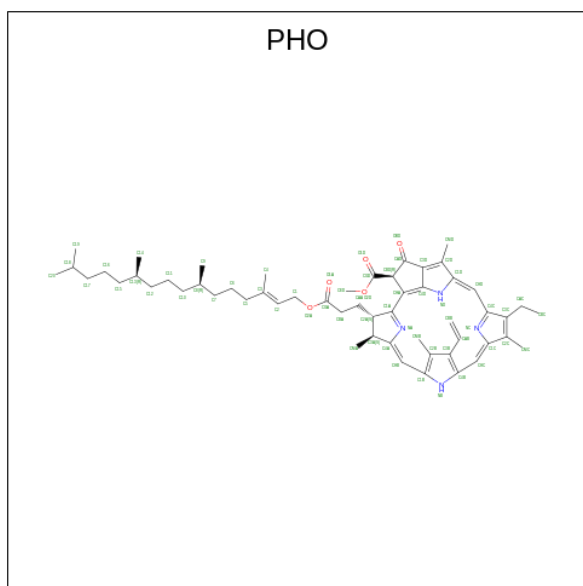
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			52	42	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	b	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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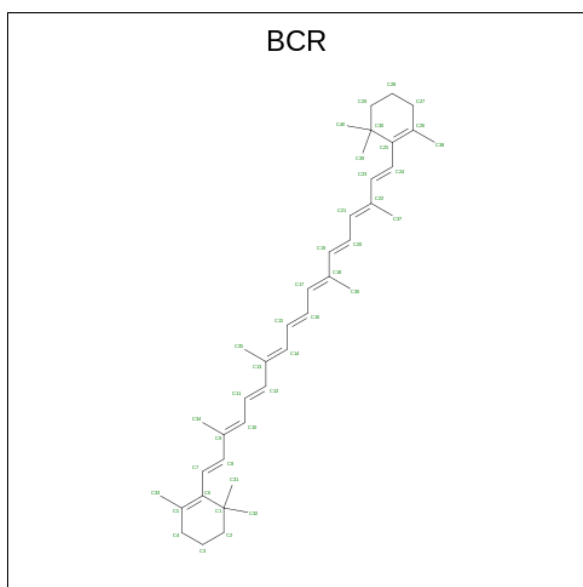
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
22	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 23 is PHEOPHYTIN A (three-letter code: PHO) (formula:  $C_{55}H_{74}N_4O_5$ ).



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

- Molecule 24 is BETA-CAROTENE (three-letter code: BCR) (formula:  $C_{40}H_{56}$ ).



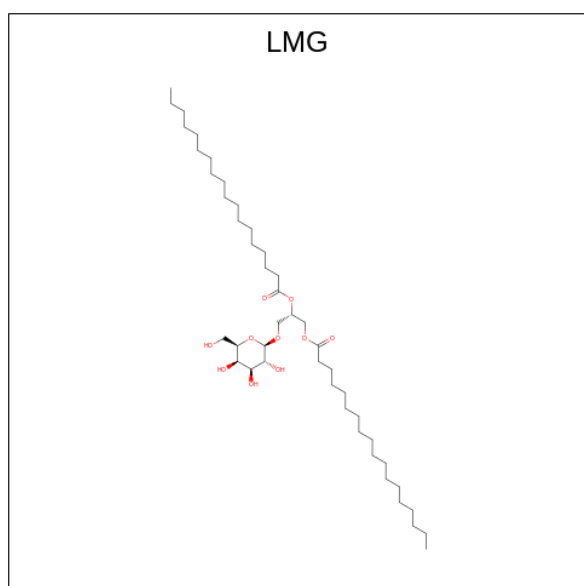
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	A	1	Total C 40 40	0	0
24	B	1	Total C 19 19	0	0
24	B	1	Total C 30 30	0	0
24	B	1	Total C 40 40	0	0
24	C	1	Total C 40 40	0	0
24	C	1	Total C 40 40	0	0
24	D	1	Total C 40 40	0	0
24	K	1	Total C 40 40	0	0
24	Y	1	Total C 39 39	0	0
24	a	1	Total C 40 40	0	0
24	b	1	Total C 20 20	0	0
24	b	1	Total C 31 31	0	0
24	b	1	Total C 40 40	0	0
24	c	1	Total C 40 40	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	c	1	Total C 40 40	0	0
24	d	1	Total C 40 40	0	0
24	k	1	Total C 40 40	0	0
24	y	1	Total C 40 40	0	0

- Molecule 25 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: C<sub>45</sub>H<sub>86</sub>O<sub>10</sub>).



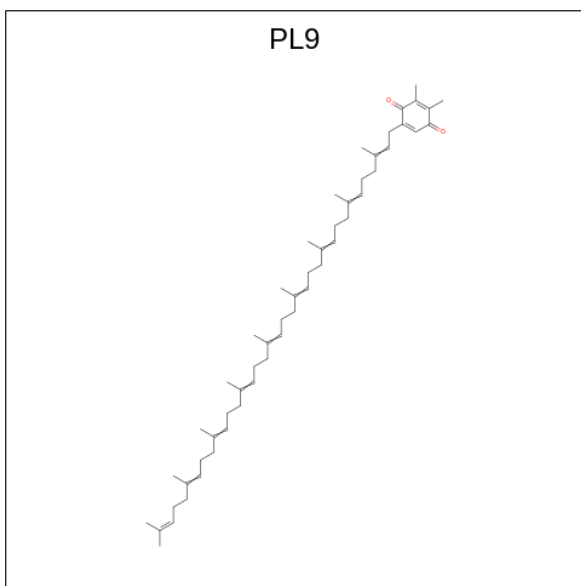
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	A	1	Total C O 51 41 10	0	0
25	B	1	Total C O 40 30 10	0	0
25	C	1	Total C O 51 41 10	0	0
25	C	1	Total C O 40 30 10	0	0
25	D	1	Total C O 46 36 10	0	0
25	J	1	Total C O 45 35 10	0	0
25	b	1	Total C O 43 33 10	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
25	c	1	Total	C	O	0	0
			51	41	10		
25	c	1	Total	C	O	0	0
			49	39	10		
25	d	1	Total	C	O	0	0
			47	37	10		
25	i	1	Total	C	O	0	0
			51	41	10		
25	j	1	Total	C	O	0	0
			47	37	10		

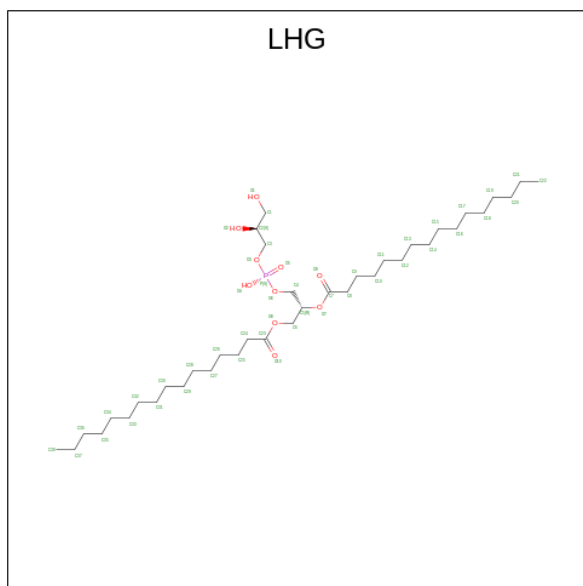
- Molecule 26 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (three-letter code: PL9) (formula:  $C_{53}H_{80}O_2$ ).



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

- Molecule 27 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code:

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

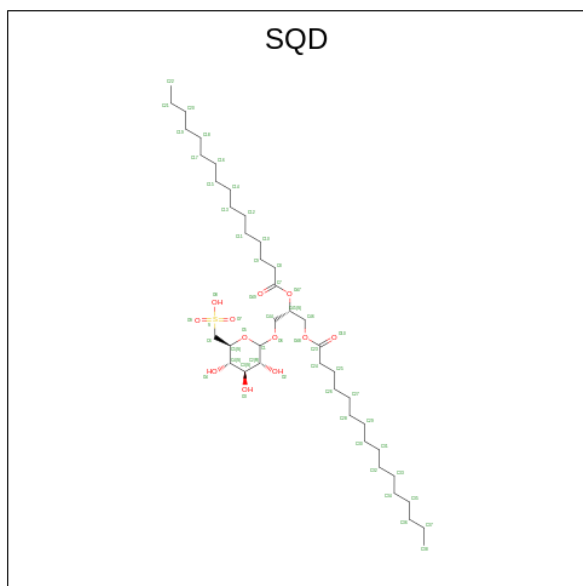


Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
			Total	C	O			P
27	A	1	31	22	8	1	0	0
27	C	1	30	21	8	1	0	0
27	D	1	49	38	10	1	0	0
27	D	1	49	38	10	1	0	0
27	D	1	45	34	10	1	0	0
27	L	1	40	29	10	1	0	0
27	a	1	49	38	10	1	0	0
27	a	1	45	34	10	1	0	0
27	d	1	33	24	8	1	0	0
27	d	1	49	38	10	1	0	0
27	d	1	46	35	10	1	0	0
27	l	1	49	38	10	1	0	0

- Molecule 28 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSY

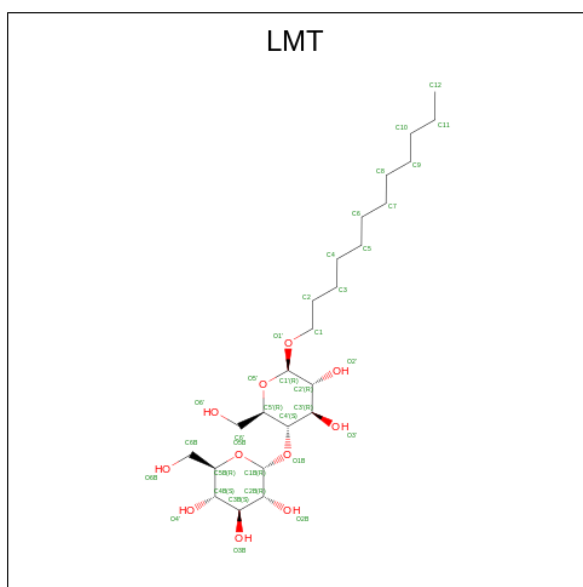


L]-SN-GLYCEROL (three-letter code: SQD) (formula:  $C_{41}H_{78}O_{12}S$ ).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
28	A	1	Total 49	C 36	O 12	S 1	0	0
28	C	1	Total 54	C 41	O 12	S 1	0	0
28	D	1	Total 20	C 9	O 10	S 1	0	0
28	a	1	Total 54	C 41	O 12	S 1	0	0
28	a	1	Total 51	C 38	O 12	S 1	0	0
28	b	1	Total 38	C 26	O 11	S 1	0	0
28	f	1	Total 14	C 6	O 7	S 1	0	0
28	l	1	Total 54	C 41	O 12	S 1	0	0

- Molecule 29 is DODECYL-BETA-D-MALTOSE (three-letter code: LMT) (formula:  $C_{24}H_{46}O_{11}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A	1	Total	C	O	0	0
			35	24	11		
29	B	1	Total	C	O	0	0
			24	18	6		
29	E	1	Total	C	O	0	0
			24	18	6		
29	I	1	Total	C	O	0	0
			35	24	11		
29	T	1	Total	C	O	0	0
			24	18	6		
29	Z	1	Total	C	O	0	0
			35	24	11		
29	a	1	Total	C	O	0	0
			35	24	11		
29	c	1	Total	C	O	0	0
			35	24	11		
29	c	1	Total	C	O	0	0
			24	18	6		
29	f	1	Total	C	O	0	0
			25	19	6		
29	t	1	Total	C	O	0	0
			24	18	6		

- Molecule 30 is UNKNOWN LIGAND (three-letter code: UNL) (formula: ).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
30	A	1	Total	C	0	0
			5	5		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	B	2	Total C 23 23	0	0
30	D	1	Total C 16 16	0	0
30	I	3	Total C 45 45	0	0
30	J	1	Total C 16 16	0	0
30	O	1	Total C 16 16	0	0
30	T	1	Total C 13 13	0	0
30	U	1	Total C 14 14	0	0
30	X	1	Total C 16 16	0	0
30	Z	1	Total C 9 9	0	0
30	a	2	Total C 16 16	0	0
30	b	2	Total C 27 27	0	0
30	c	1	Total C 10 10	0	0
30	d	1	Total C 16 16	0	0
30	i	4	Total C 58 58	0	0
30	j	1	Total C 16 16	0	0
30	t	1	Total C 16 16	0	0
30	u	1	Total C 11 11	0	0
30	x	1	Total C 15 15	0	0

- Molecule 31 is DIMETHYL SULFOXIDE (three-letter code: DMS) (formula: C<sub>2</sub>H<sub>6</sub>OS).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	A	1	Total	C	O	S	0	0
			4	2	1	1		
31	A	1	Total	C	O	S	0	0
			4	2	1	1		
31	A	1	Total	C	O	S	0	0
			4	2	1	1		
31	A	1	Total	C	O	S	0	0
			4	2	1	1		
31	A	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		
31	B	1	Total	C	O	S	0	0
			4	2	1	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	D	1	Total 4	C 2	O 1	S 1	0	0
31	D	1	Total 4	C 2	O 1	S 1	0	0
31	D	1	Total 4	C 2	O 1	S 1	0	0
31	F	1	Total 4	C 2	O 1	S 1	0	0
31	H	1	Total 4	C 2	O 1	S 1	0	0
31	I	1	Total 4	C 2	O 1	S 1	0	0
31	I	1	Total 4	C 2	O 1	S 1	0	0
31	L	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	U	1	Total 4	C 2	O 1	S 1	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	U	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	V	1	Total 4	C 2	O 1	S 1	0	0
31	a	1	Total 4	C 2	O 1	S 1	0	0
31	a	1	Total 4	C 2	O 1	S 1	0	0
31	a	1	Total 4	C 2	O 1	S 1	0	0
31	a	1	Total 4	C 2	O 1	S 1	0	0
31	a	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0

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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>				<b>ZeroOcc</b>	<b>AltConf</b>
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	b	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0
31	c	1	Total 4	C 2	O 1	S 1	0	0

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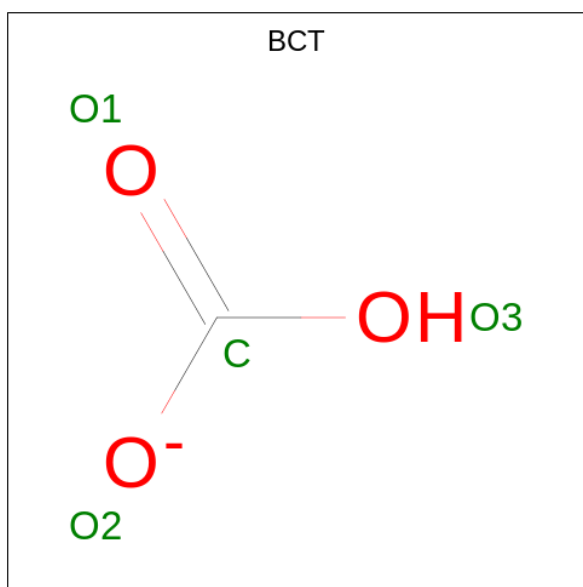
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		
31	f	1	Total	C	O	S	0	0
			4	2	1	1		
31	i	1	Total	C	O	S	0	0
			4	2	1	1		
31	l	1	Total	C	O	S	0	0
			4	2	1	1		
31	l	1	Total	C	O	S	0	0
			4	2	1	1		
31	l	1	Total	C	O	S	0	0
			4	2	1	1		
31	o	1	Total	C	O	S	0	0
			4	2	1	1		
31	o	1	Total	C	O	S	0	0
			4	2	1	1		
31	o	1	Total	C	O	S	0	0
			4	2	1	1		
31	o	1	Total	C	O	S	0	0
			4	2	1	1		
31	o	1	Total	C	O	S	0	0
			4	2	1	1		
31	o	1	Total	C	O	S	0	0
			4	2	1	1		
31	t	1	Total	C	O	S	0	0
			4	2	1	1		
31	t	1	Total	C	O	S	0	0
			4	2	1	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	t	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0

- Molecule 32 is BICARBONATE ION (three-letter code: BCT) (formula:  $\text{CHO}_3$ ).

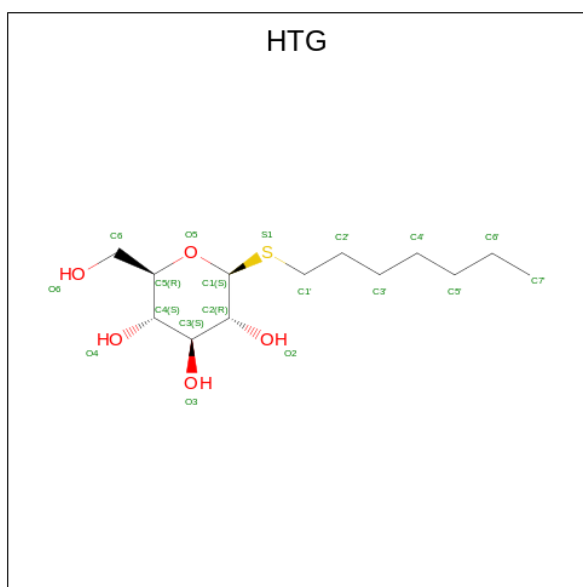


Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	1
			8	2	6		
32	a	1	Total	C	O	0	0
			4	1	3		

- Molecule 33 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
33	B	1	Total	Ca	0	0
			1	1		
33	O	1	Total	Ca	0	0
			1	1		
33	b	1	Total	Ca	0	0
			1	1		
33	c	1	Total	Ca	0	0
			1	1		
33	o	1	Total	Ca	0	0
			1	1		

- Molecule 34 is heptyl 1-thio-beta-D-glucopyranoside (three-letter code: HTG) (formula: C<sub>13</sub>H<sub>26</sub>O<sub>5</sub>S).



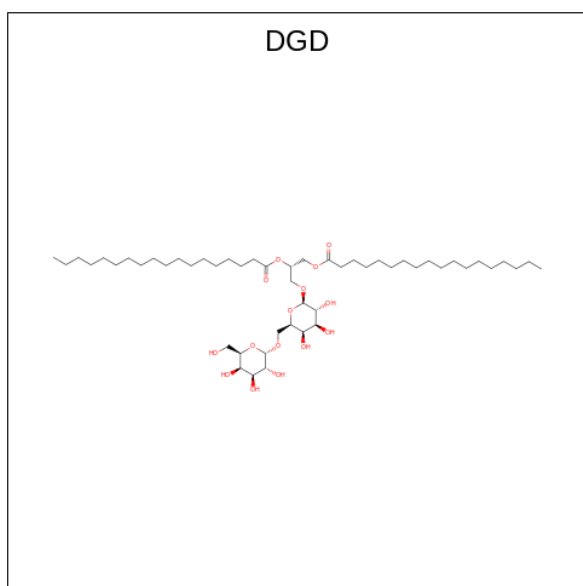
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	C	1	Total	C	O	S	0	0
			19	13	5	1		
34	C	1	Total	C	S		0	0
			9	8	1			
34	C	1	Total	C	O	S	0	0
			19	13	5	1		
34	D	1	Total	C	O	S	0	0
			19	13	5	1		
34	D	1	Total	C	O	S	0	0
			19	13	5	1		
34	V	1	Total	C	O	S	0	0
			14	8	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	c	1	Total	C	O	S	0	0
			19	13	5	1		
34	l	1	Total	C	O	S	0	0
			19	13	5	1		
34	v	1	Total	C	O	S	0	0
			16	10	5	1		

- Molecule 35 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula:  $C_{51}H_{96}O_{15}$ ).



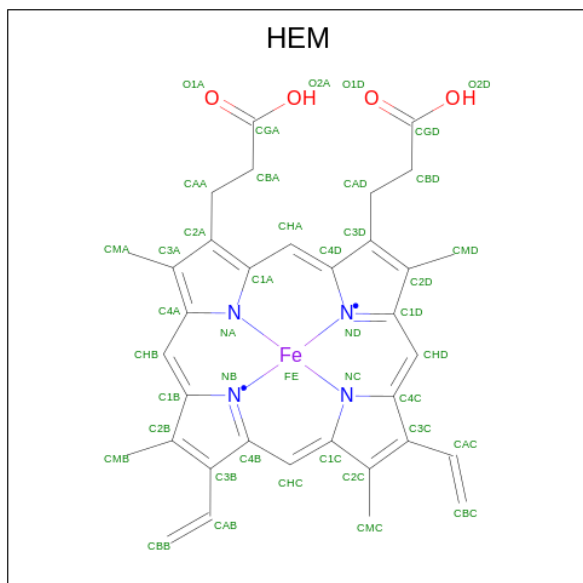
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
35	C	1	Total	C	O	0	0
			62	47	15		
35	C	1	Total	C	O	0	0
			62	47	15		
35	C	1	Total	C	O	0	0
			62	47	15		
35	D	1	Total	C	O	0	0
			50	41	9		
35	H	1	Total	C	O	0	0
			62	47	15		
35	c	1	Total	C	O	0	0
			62	47	15		
35	c	1	Total	C	O	0	0
			62	47	15		
35	c	1	Total	C	O	0	0
			62	47	15		

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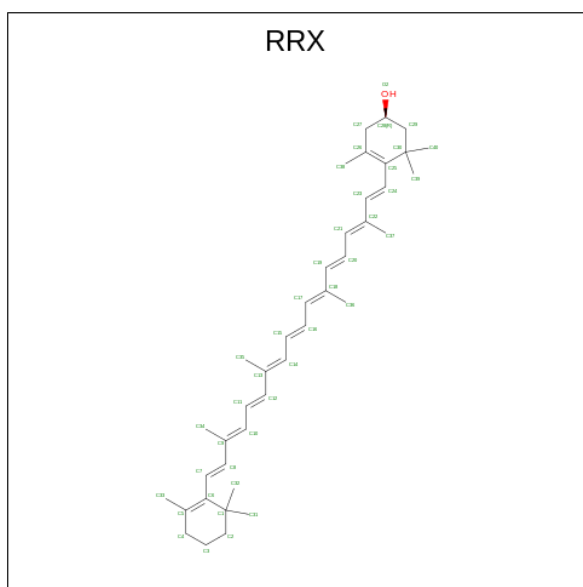
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
35	d	1	Total	C	O	0	0
			43	37	6		
35	h	1	Total	C	O	0	0
			62	47	15		

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



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

- Molecule 37 is (3R)-beta,beta-caroten-3-ol (three-letter code: RRX) (formula:  $C_{40}H_{56}O$ ).

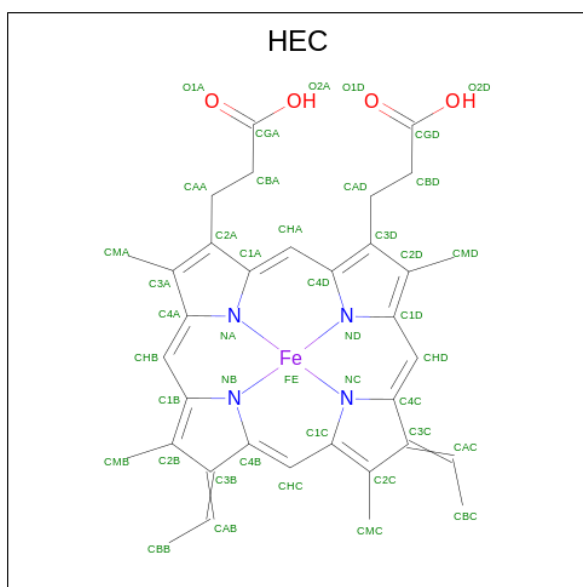


Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	H	1	Total	C O	0	0
			41	40 1		
37	h	1	Total	C O	0	0
			41	40 1		

- Molecule 38 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
38	J	1	Total	Mg	0	0
			1	1		
38	K	1	Total	Mg	0	0
			1	1		
38	j	1	Total	Mg	0	0
			1	1		
38	k	1	Total	Mg	0	0
			1	1		

- Molecule 39 is HEME C (three-letter code: HEC) (formula: C<sub>34</sub>H<sub>34</sub>FeN<sub>4</sub>O<sub>4</sub>).



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

- Molecule 40 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
40	A	132	Total	O	0	0
			132	132		
40	B	256	Total	O	0	6
			262	262		
40	C	174	Total	O	0	4
			178	178		
40	D	130	Total	O	0	1
			131	131		
40	E	33	Total	O	0	2
			35	35		
40	F	4	Total	O	0	0
			4	4		
40	H	39	Total	O	0	0
			39	39		
40	I	5	Total	O	0	0
			5	5		
40	J	15	Total	O	0	1
			16	16		
40	K	7	Total	O	0	0
			7	7		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	L	18	Total O 19 19	0	1
40	O	161	Total O 166 166	0	5
40	T	12	Total O 12 12	0	0
40	U	72	Total O 74 74	0	2
40	V	110	Total O 113 113	0	3
40	Y	7	Total O 8 8	0	1
40	X	15	Total O 16 16	0	1
40	Z	5	Total O 5 5	0	0
40	a	122	Total O 123 123	0	1
40	b	251	Total O 261 261	0	10
40	c	216	Total O 220 220	0	4
40	d	115	Total O 115 115	0	0
40	e	16	Total O 17 17	0	1
40	f	4	Total O 4 4	0	0
40	h	31	Total O 31 31	0	0
40	i	5	Total O 5 5	0	0
40	j	10	Total O 10 10	0	0
40	k	9	Total O 10 10	0	1
40	l	14	Total O 15 15	0	1
40	o	153	Total O 156 156	0	3
40	t	10	Total O 10 10	0	0

*Continued on next page...*

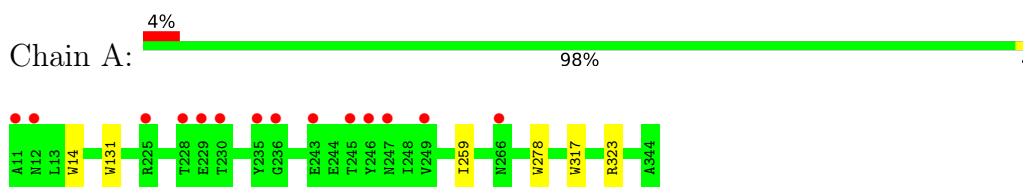
*Continued from previous page...*

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	u	75	Total O 75 75	0	0
40	v	77	Total O 82 82	0	5
40	y	1	Total O 1 1	0	0
40	x	5	Total O 5 5	0	0
40	z	8	Total O 8 8	0	0

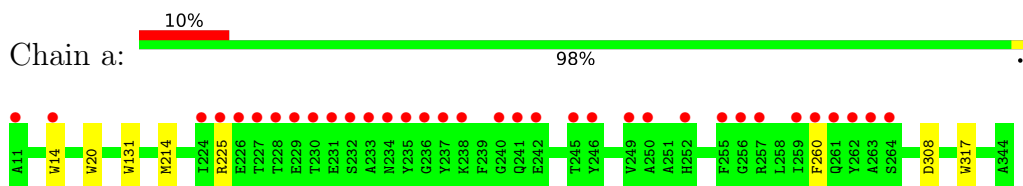
### 3 Residue-property plots [i](#)

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.

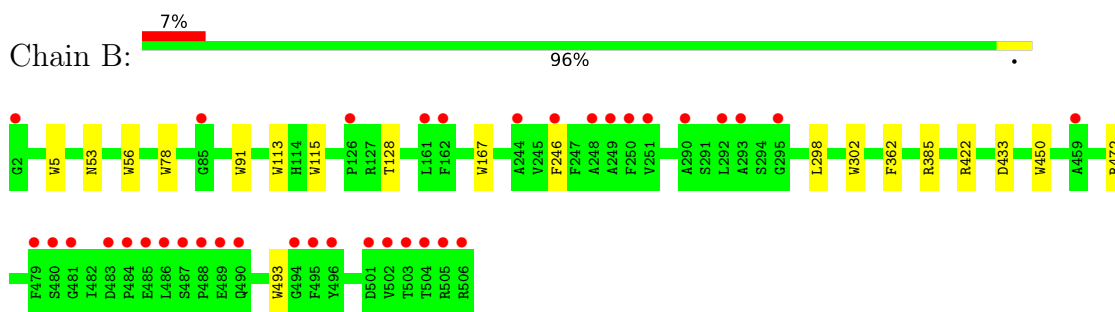
- Molecule 1: Photosystem II protein D1 1



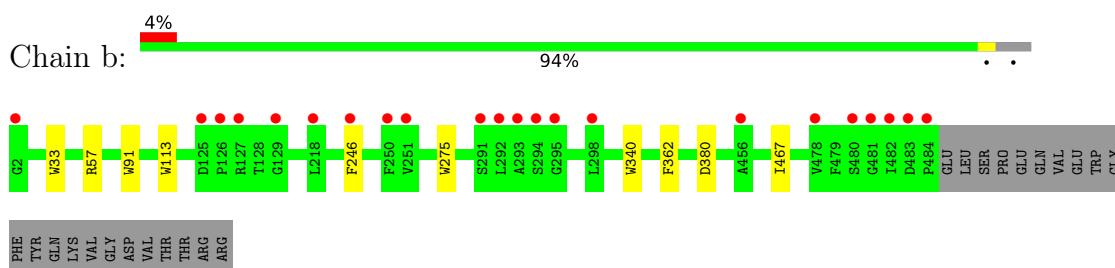
- Molecule 1: Photosystem II protein D1 1



- Molecule 2: Photosystem II CP47 reaction center protein



- Molecule 2: Photosystem II CP47 reaction center protein



- Molecule 3: Photosystem II CP43 reaction center protein





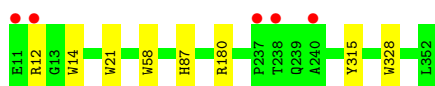
- Molecule 3: Photosystem II CP43 reaction center protein

Chain c: 96%



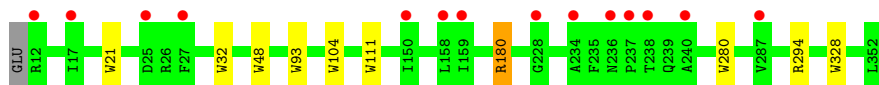
- Molecule 4: Photosystem II D2 protein

Chain D: 98%



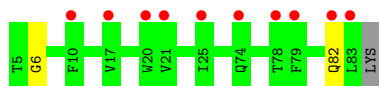
- Molecule 4: Photosystem II D2 protein

Chain d: 97% 4%



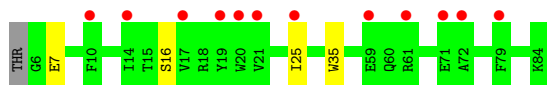
- Molecule 5: Cytochrome b559 subunit alpha

Chain E: 96% 12%



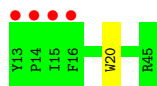
- Molecule 5: Cytochrome b559 subunit alpha

Chain e: 94% 15% 5%

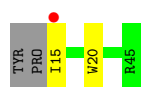
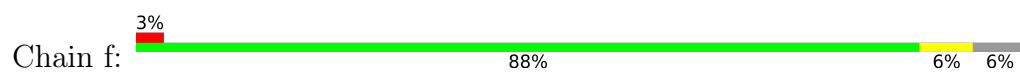


- Molecule 6: Cytochrome b559 subunit beta

Chain F: 97% 12%



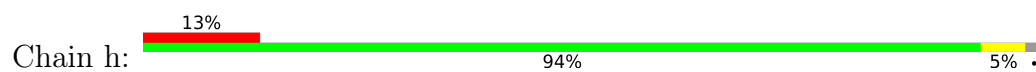
- Molecule 6: Cytochrome b559 subunit beta



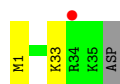
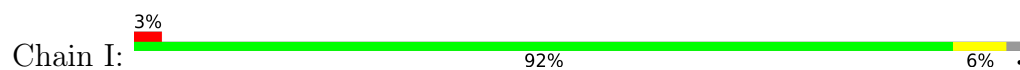
- Molecule 7: Photosystem II reaction center protein H



- Molecule 7: Photosystem II reaction center protein H



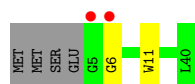
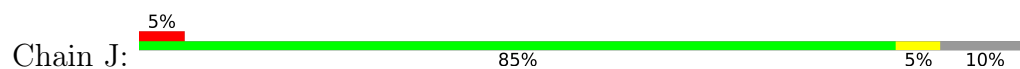
- Molecule 8: Photosystem II reaction center protein I



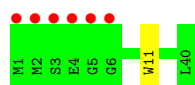
- Molecule 8: Photosystem II reaction center protein I



- Molecule 9: Photosystem II reaction center protein J



- Molecule 9: Photosystem II reaction center protein J



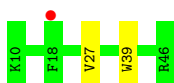
- Molecule 10: Photosystem II reaction center protein K

Chain K:  92% 8%



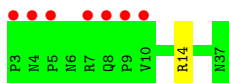
- Molecule 10: Photosystem II reaction center protein K

Chain k:  3% 95% 5%



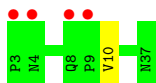
- Molecule 11: Photosystem II reaction center protein L

Chain L:  20% 97%



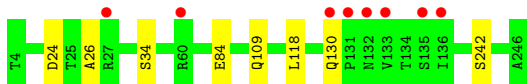
- Molecule 11: Photosystem II reaction center protein L

Chain l:  11% 97%



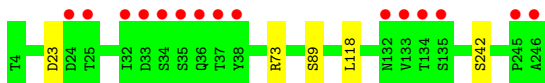
- Molecule 12: Photosystem II manganese-stabilizing polypeptide

Chain O:  3% 97%



- Molecule 12: Photosystem II manganese-stabilizing polypeptide

Chain o:  6% 98%

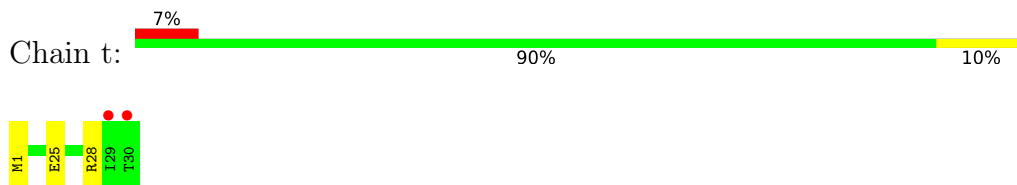


- Molecule 13: Photosystem II reaction center protein T

Chain T:  93% 7%



- Molecule 13: Photosystem II reaction center protein T

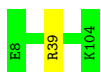


- Molecule 14: Photosystem II 12 kDa extrinsic protein



There are no outlier residues recorded for this chain.

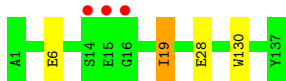
- Molecule 14: Photosystem II 12 kDa extrinsic protein



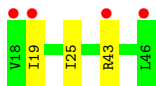
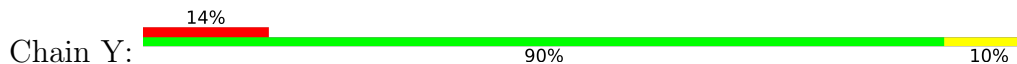
- Molecule 15: Cytochrome c-550



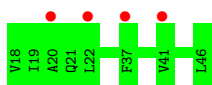
- Molecule 15: Cytochrome c-550



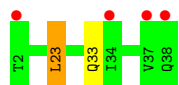
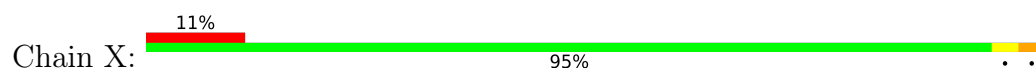
- Molecule 16: Photosystem II reaction center protein Ycf12



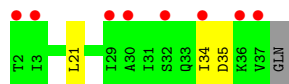
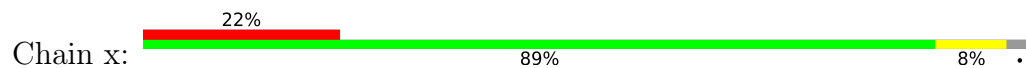
- Molecule 16: Photosystem II reaction center protein Ycf12



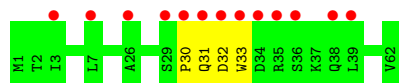
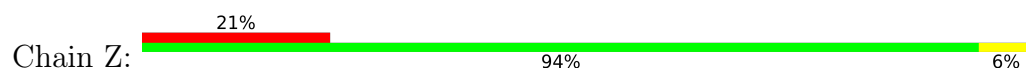
- Molecule 17: Photosystem II reaction center X protein



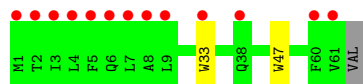
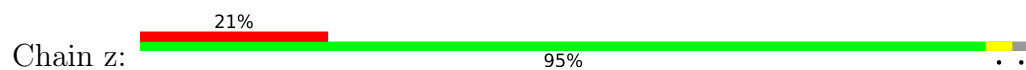
- Molecule 17: Photosystem II reaction center X protein



- Molecule 18: Photosystem II reaction center protein Z



- Molecule 18: Photosystem II reaction center protein Z





## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	121.95Å 226.99Å 285.89Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 2.20 46.79 – 2.20	Depositor EDS
% Data completeness (in resolution range)	96.2 (50.00-2.20) 96.3 (46.79-2.20)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	0.08	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	2.24 (at 2.20Å)	Xtrriage
Refinement program	REFMAC 5.6.0117	Depositor
R, $R_{free}$	0.174 , 0.226 0.174 , 0.225	Depositor DCC
$R_{free}$ test set	19307 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	35.7	Xtrriage
Anisotropy	0.519	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.34 , 60.9	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.50$ , $\langle L^2 \rangle = 0.34$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.96	EDS
Total number of atoms	51892	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	42.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.17% of the height of the origin peak. No significant pseudotranslation is detected.*

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

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

## 5 Model quality

### 5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: UNL, PHO, HTG, BCR, LMG, HEM, CA, FME, LMT, CL, OEX, FE2, DMS, RRX, SQD, CLA, LHG, DGD, MG, BCT, HEC, PL9

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	0.86	3/2686 (0.1%)	0.76	2/3666 (0.1%)
1	a	0.87	4/2640 (0.2%)	0.77	1/3604 (0.0%)
2	B	0.87	10/4099 (0.2%)	0.77	5/5591 (0.1%)
2	b	0.85	5/3917 (0.1%)	0.78	3/5342 (0.1%)
3	C	0.85	6/3583 (0.2%)	0.76	1/4880 (0.0%)
3	c	0.83	9/3638 (0.2%)	0.76	1/4953 (0.0%)
4	D	0.91	5/2836 (0.2%)	0.77	0/3866
4	d	0.88	8/2818 (0.3%)	0.75	2/3842 (0.1%)
5	E	0.73	0/654	0.73	0/895
5	e	0.71	1/655 (0.2%)	0.72	0/896
6	F	0.83	1/278 (0.4%)	0.62	0/379
6	f	0.78	1/257 (0.4%)	0.66	0/349
7	H	0.83	3/541 (0.6%)	0.74	0/737
7	h	0.80	2/517 (0.4%)	0.68	0/704
8	I	0.67	0/285	0.67	0/385
8	i	0.63	0/290	0.64	0/392
9	J	0.80	1/257 (0.4%)	0.72	0/349
9	j	0.79	1/283 (0.4%)	0.67	0/384
10	K	0.71	0/303	0.73	0/416
10	k	0.74	1/296 (0.3%)	0.70	0/408
11	L	0.74	0/294	0.73	0/399
11	l	0.72	0/294	0.71	0/399
12	O	0.69	0/1887	0.80	0/2561
12	o	0.63	0/1864	0.78	1/2535 (0.0%)
13	T	0.79	0/252	0.72	0/342
13	t	0.74	0/252	0.69	0/342
14	U	0.76	0/796	0.82	0/1078
14	u	0.71	0/777	0.79	0/1054
15	V	0.78	0/1090	0.78	0/1480
15	v	0.69	1/1082 (0.1%)	0.75	0/1472
16	Y	0.54	0/216	0.72	0/289

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
16	y	0.48	0/208	0.67	0/278
17	X	0.55	0/275	0.68	1/373 (0.3%)
17	x	0.56	0/256	0.65	0/349
18	Z	0.69	1/463 (0.2%)	0.67	0/636
18	z	0.65	2/447 (0.4%)	0.62	0/614
All	All	0.81	65/41286 (0.2%)	0.76	17/56239 (0.0%)

All (65) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	387	TRP	CD2-CE2	7.25	1.50	1.41
2	B	78	TRP	CD2-CE2	6.94	1.49	1.41
1	A	317	TRP	CD2-CE2	6.86	1.49	1.41
3	c	365	TRP	CD2-CE2	6.65	1.49	1.41
1	A	278	TRP	CD2-CE2	6.57	1.49	1.41
2	b	33	TRP	CD2-CE2	6.42	1.49	1.41
2	b	275	TRP	CD2-CE2	6.39	1.49	1.41
2	B	56	TRP	CD2-CE2	6.37	1.49	1.41
4	d	48	TRP	CD2-CE2	6.21	1.48	1.41
4	D	58	TRP	CD2-CE2	6.12	1.48	1.41
4	d	93	TRP	CD2-CE2	6.10	1.48	1.41
2	B	5	TRP	CD2-CE2	6.04	1.48	1.41
2	B	167	TRP	CD2-CE2	6.00	1.48	1.41
3	c	250	TRP	CD2-CE2	5.98	1.48	1.41
3	c	387	TRP	CD2-CE2	5.95	1.48	1.41
15	v	130	TRP	CD2-CE2	5.90	1.48	1.41
3	c	443	TRP	CD2-CE2	5.86	1.48	1.41
2	B	450	TRP	CD2-CE2	5.84	1.48	1.41
4	d	104	TRP	CD2-CE2	5.80	1.48	1.41
7	H	62	TRP	CD2-CE2	5.74	1.48	1.41
3	C	266	TRP	CD2-CE2	5.69	1.48	1.41
1	A	14	TRP	CD2-CE2	5.68	1.48	1.41
2	B	302	TRP	CD2-CE2	5.62	1.48	1.41
10	k	39	TRP	CD2-CE2	5.62	1.48	1.41
3	C	425	TRP	CD2-CE2	5.58	1.48	1.41
7	H	25	TRP	CD2-CE2	5.57	1.48	1.41
4	d	21	TRP	CD2-CE2	5.56	1.48	1.41
6	f	20	TRP	CD2-CE2	5.56	1.48	1.41
18	z	33	TRP	CD2-CE2	5.55	1.48	1.41
2	B	115	TRP	CD2-CE2	5.52	1.48	1.41
1	a	131	TRP	CD2-CE2	5.46	1.48	1.41
3	C	250	TRP	CD2-CE2	5.46	1.48	1.41

*Continued on next page...*

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	J	11	TRP	CD2-CE2	5.44	1.47	1.41
4	d	32	TRP	CD2-CE2	5.39	1.47	1.41
1	a	14	TRP	CD2-CE2	5.38	1.47	1.41
3	c	359	TRP	CD2-CE2	5.37	1.47	1.41
2	b	91	TRP	CD2-CE2	5.37	1.47	1.41
2	B	91	TRP	CD2-CE2	5.37	1.47	1.41
6	F	20	TRP	CD2-CE2	5.35	1.47	1.41
3	C	359	TRP	CD2-CE2	5.34	1.47	1.41
3	c	35	TRP	CD2-CE2	5.32	1.47	1.41
2	b	340	TRP	CD2-CE2	5.32	1.47	1.41
2	B	493	TRP	CD2-CE2	5.29	1.47	1.41
1	a	20	TRP	CD2-CE2	5.27	1.47	1.41
4	D	21	TRP	CD2-CE2	5.25	1.47	1.41
1	a	317	TRP	CD2-CE2	5.25	1.47	1.41
4	D	87	HIS	CG-CD2	5.25	1.44	1.35
4	d	328	TRP	CD2-CE2	5.23	1.47	1.41
2	b	113	TRP	CD2-CE2	5.22	1.47	1.41
4	D	14	TRP	CD2-CE2	5.19	1.47	1.41
3	c	259	TRP	CD2-CE2	5.19	1.47	1.41
18	z	47	TRP	CD2-CE2	5.18	1.47	1.41
18	Z	33	TRP	CD2-CE2	5.16	1.47	1.41
7	h	6	TRP	CD2-CE2	5.16	1.47	1.41
2	B	113	TRP	CD2-CE2	5.13	1.47	1.41
4	d	280	TRP	CD2-CE2	5.12	1.47	1.41
4	D	328	TRP	CD2-CE2	5.08	1.47	1.41
3	c	36	TRP	CD2-CE2	5.05	1.47	1.41
9	j	11	TRP	CD2-CE2	5.04	1.47	1.41
3	C	97	TRP	CD2-CE2	5.04	1.47	1.41
4	d	111	TRP	CD2-CE2	5.04	1.47	1.41
3	c	97	TRP	CD2-CE2	5.04	1.47	1.41
5	e	35	TRP	CD2-CE2	5.04	1.47	1.41
7	H	6	TRP	CD2-CE2	5.03	1.47	1.41
7	h	62	TRP	CD2-CE2	5.02	1.47	1.41

All (17) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	57	ARG	NE-CZ-NH2	-7.02	116.79	120.30
2	b	57	ARG	NE-CZ-NH1	6.84	123.72	120.30
3	C	473	ASP	CB-CG-OD1	6.78	124.40	118.30
4	d	180	ARG	NE-CZ-NH1	-5.99	117.31	120.30
2	B	433	ASP	CB-CG-OD1	5.78	123.50	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	385	ARG	NE-CZ-NH2	-5.71	117.44	120.30
12	o	73	ARG	NE-CZ-NH1	-5.58	117.51	120.30
4	d	294	ARG	NE-CZ-NH2	-5.45	117.58	120.30
2	B	298	LEU	CA-CB-CG	5.32	127.54	115.30
2	B	422	ARG	NE-CZ-NH2	-5.28	117.66	120.30
17	X	23	LEU	CA-CB-CG	5.28	127.43	115.30
1	A	131	TRP	CA-CB-CG	-5.24	103.75	113.70
2	b	380	ASP	CB-CG-OD2	-5.18	113.63	118.30
2	B	433	ASP	CB-CG-OD2	-5.15	113.66	118.30
1	A	323	ARG	NE-CZ-NH1	5.10	122.85	120.30
3	c	357	ARG	NE-CZ-NH1	-5.09	117.76	120.30
1	a	308	ASP	CB-CG-OD1	5.01	122.81	118.30

There are no chirality outliers.

There are no planarity outliers.

## 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	333/334 (100%)	326 (98%)	6 (2%)	1 (0%)	41	46
1	a	333/334 (100%)	321 (96%)	11 (3%)	1 (0%)	41	46
2	B	506/505 (100%)	495 (98%)	11 (2%)	0	100	100
2	b	482/505 (95%)	465 (96%)	17 (4%)	0	100	100
3	C	449/455 (99%)	434 (97%)	13 (3%)	2 (0%)	34	37
3	c	454/455 (100%)	435 (96%)	18 (4%)	1 (0%)	47	55

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	D	343/342 (100%)	336 (98%)	6 (2%)	1 (0%)	41	46
4	d	341/342 (100%)	333 (98%)	8 (2%)	0	100	100
5	E	77/80 (96%)	75 (97%)	1 (1%)	1 (1%)	12	9
5	e	77/80 (96%)	75 (97%)	2 (3%)	0	100	100
6	F	31/33 (94%)	31 (100%)	0	0	100	100
6	f	29/33 (88%)	29 (100%)	0	0	100	100
7	H	64/63 (102%)	60 (94%)	4 (6%)	0	100	100
7	h	61/63 (97%)	58 (95%)	3 (5%)	0	100	100
8	I	33/36 (92%)	31 (94%)	2 (6%)	0	100	100
8	i	34/36 (94%)	30 (88%)	4 (12%)	0	100	100
9	J	34/40 (85%)	33 (97%)	0	1 (3%)	4	2
9	j	38/40 (95%)	37 (97%)	1 (3%)	0	100	100
10	K	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
10	k	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
11	L	33/35 (94%)	33 (100%)	0	0	100	100
11	l	33/35 (94%)	33 (100%)	0	0	100	100
12	O	242/243 (100%)	228 (94%)	12 (5%)	2 (1%)	19	19
12	o	241/243 (99%)	231 (96%)	10 (4%)	0	100	100
13	T	28/30 (93%)	28 (100%)	0	0	100	100
13	t	28/30 (93%)	27 (96%)	1 (4%)	0	100	100
14	U	96/97 (99%)	92 (96%)	4 (4%)	0	100	100
14	u	95/97 (98%)	91 (96%)	4 (4%)	0	100	100
15	V	136/137 (99%)	131 (96%)	5 (4%)	0	100	100
15	v	136/137 (99%)	126 (93%)	9 (7%)	1 (1%)	22	22
16	Y	27/29 (93%)	26 (96%)	1 (4%)	0	100	100
16	y	27/29 (93%)	26 (96%)	1 (4%)	0	100	100
17	X	36/37 (97%)	35 (97%)	1 (3%)	0	100	100
17	x	34/37 (92%)	31 (91%)	1 (3%)	2 (6%)	1	0
18	Z	60/62 (97%)	56 (93%)	1 (2%)	3 (5%)	2	0
18	z	59/62 (95%)	55 (93%)	4 (7%)	0	100	100
All	All	5100/5190 (98%)	4921 (96%)	163 (3%)	16 (0%)	41	46

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	D	12	ARG
3	C	24	THR
3	C	416	SER
5	E	6	GLY
18	Z	31	GLN
18	Z	32	ASP
3	c	416	SER
15	v	19	ILE
17	x	35	ASP
9	J	6	GLY
12	O	34	SER
18	Z	30	PRO
1	a	225	ARG
12	O	26	ALA
1	A	259	ILE
17	x	34	ILE

### 5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	263/270 (97%)	263 (100%)	0	100	100
1	a	252/270 (93%)	250 (99%)	2 (1%)	81	90
2	B	391/403 (97%)	386 (99%)	5 (1%)	69	81
2	b	378/403 (94%)	375 (99%)	3 (1%)	81	90
3	C	347/356 (98%)	341 (98%)	6 (2%)	60	74
3	c	356/356 (100%)	350 (98%)	6 (2%)	60	74
4	D	278/277 (100%)	276 (99%)	2 (1%)	84	91
4	d	276/277 (100%)	275 (100%)	1 (0%)	91	96
5	E	68/71 (96%)	67 (98%)	1 (2%)	65	78
5	e	67/71 (94%)	64 (96%)	3 (4%)	27	34
6	F	27/27 (100%)	27 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	f	25/27 (93%)	24 (96%)	1 (4%)	31	40
7	H	56/53 (106%)	55 (98%)	1 (2%)	59	72
7	h	54/53 (102%)	53 (98%)	1 (2%)	57	71
8	I	31/32 (97%)	30 (97%)	1 (3%)	39	50
8	i	31/32 (97%)	31 (100%)	0	100	100
9	J	23/28 (82%)	23 (100%)	0	100	100
9	j	25/28 (89%)	25 (100%)	0	100	100
10	K	30/30 (100%)	27 (90%)	3 (10%)	7	7
10	k	28/30 (93%)	27 (96%)	1 (4%)	35	45
11	L	33/33 (100%)	32 (97%)	1 (3%)	41	53
11	l	33/33 (100%)	32 (97%)	1 (3%)	41	53
12	O	203/206 (98%)	197 (97%)	6 (3%)	41	53
12	o	199/206 (97%)	195 (98%)	4 (2%)	55	69
13	T	24/26 (92%)	23 (96%)	1 (4%)	30	38
13	t	24/26 (92%)	22 (92%)	2 (8%)	11	11
14	U	85/84 (101%)	85 (100%)	0	100	100
14	u	82/84 (98%)	81 (99%)	1 (1%)	71	83
15	V	117/117 (100%)	113 (97%)	4 (3%)	37	47
15	v	115/117 (98%)	112 (97%)	3 (3%)	46	58
16	Y	22/22 (100%)	19 (86%)	3 (14%)	3	3
16	y	19/22 (86%)	19 (100%)	0	100	100
17	X	29/30 (97%)	27 (93%)	2 (7%)	15	16
17	x	27/30 (90%)	26 (96%)	1 (4%)	34	43
18	Z	45/52 (86%)	45 (100%)	0	100	100
18	z	40/52 (77%)	40 (100%)	0	100	100
All	All	4103/4234 (97%)	4037 (98%)	66 (2%)	62	76

All (66) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	B	53	ASN
2	B	128	THR
2	B	246	PHE

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	B	362	PHE
2	B	472	ARG
3	C	27	ASP
3	C	255	THR
3	C	289	PHE
3	C	315	MET
3	C	418	ASN
3	C	471	SER
4	D	180	ARG
4	D	315	TYR
5	E	82	GLN
7	H	49	TYR
8	I	33	LYS
10	K	10	LYS
10	K	17	ILE
10	K	27	VAL
11	L	14	ARG
12	O	24	ASP
12	O	84	GLU
12	O	109	GLN
12	O	118	LEU
12	O	130	GLN
12	O	242	SER
13	T	25	GLU
15	V	30	LYS
15	V	110	LYS
15	V	129[A]	LYS
15	V	129[B]	LYS
16	Y	19	ILE
16	Y	25	ILE
16	Y	43	ARG
17	X	23	LEU
17	X	33	GLN
1	a	214	MET
1	a	260	PHE
2	b	246	PHE
2	b	362	PHE
2	b	467	ILE
3	c	78	GLU
3	c	156	LYS
3	c	289	PHE
3	c	334	PRO

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
3	c	381	LYS
3	c	418	ASN
4	d	180	ARG
5	e	7	GLU
5	e	16	SER
5	e	25	ILE
6	f	15	ILE
7	h	49	TYR
10	k	27	VAL
11	l	10	VAL
12	o	23	ASP
12	o	89	SER
12	o	118	LEU
12	o	242	SER
13	t	25	GLU
13	t	28	ARG
14	u	39	ARG
15	v	6	GLU
15	v	19	ILE
15	v	28	GLU
17	x	21	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (23) such sidechains are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	304	HIS
2	B	53	ASN
2	B	331	ASN
6	F	44	GLN
12	O	58	ASN
12	O	104	GLN
12	O	130	GLN
14	U	37	GLN
15	V	34	GLN
1	a	266	ASN
1	a	315	ASN
2	b	53	ASN
2	b	179	GLN
2	b	281	GLN
2	b	331	ASN
3	c	201	ASN
12	o	58	ASN

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Mol	Chain	Res	Type
12	o	82	GLN
12	o	104	GLN
12	o	231	HIS
14	u	73	GLN
15	v	34	GLN
15	v	118	HIS

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

4 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	$\# Z  > 2$
13	FME	T	1	13	8,9,10	0.63	0	7,9,11	1.38	2 (28%)
8	FME	i	1	8	8,9,10	0.53	0	7,9,11	1.35	1 (14%)
8	FME	I	1	8	8,9,10	0.99	0	7,9,11	1.42	1 (14%)
13	FME	t	1	13	8,9,10	0.61	0	7,9,11	1.72	1 (14%)

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. '2' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
13	FME	T	1	13	-	2/7/9/11	-
8	FME	i	1	8	-	2/7/9/11	-
8	FME	I	1	8	-	1/7/9/11	-
13	FME	t	1	13	-	2/7/9/11	-

There are no bond length outliers.

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	t	1	FME	CE-SD-CG	3.92	113.85	100.40
8	i	1	FME	O-C-CA	-2.32	118.69	124.78
8	I	1	FME	CE-SD-CG	2.26	108.15	100.40
13	T	1	FME	CE-SD-CG	2.24	108.08	100.40
13	T	1	FME	C-CA-N	2.05	113.42	109.73

There are no chirality outliers.

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	I	1	FME	O1-CN-N-CA
13	T	1	FME	O1-CN-N-CA
13	T	1	FME	CA-CB-CG-SD
13	t	1	FME	O1-CN-N-CA
13	t	1	FME	CA-CB-CG-SD
8	i	1	FME	O1-CN-N-CA
8	i	1	FME	CB-CA-N-CN

There are no ring outliers.

No monomer is involved in short contacts.

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 352 ligands modelled in this entry, 15 are monoatomic and 27 are unknown - leaving 310 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	509	-	65,73,73	2.43	18 (27%)	76,113,113	2.11	19 (25%)
25	LMG	J	101	38	45,45,55	0.99	2 (4%)	53,53,63	1.04	6 (11%)
34	HTG	c	922	-	19,19,19	0.84	1 (5%)	23,24,24	1.70	2 (8%)
31	DMS	C	534	-	3,3,3	2.69	1 (33%)	3,3,3	0.55	0
27	LHG	d	401	-	32,32,48	1.24	2 (6%)	36,37,54	1.18	4 (11%)
39	HEC	v	202	15	32,50,50	2.29	8 (25%)	24,82,82	1.90	5 (20%)
22	CLA	b	607	-	65,73,73	2.20	19 (29%)	76,113,113	2.54	25 (32%)
22	CLA	c	907	-	65,73,73	2.23	17 (26%)	76,113,113	2.15	22 (28%)
26	PL9	d	405	-	55,55,55	1.03	5 (9%)	68,69,69	1.48	9 (13%)
22	CLA	B	604	-	65,73,73	2.26	17 (26%)	76,113,113	2.26	29 (38%)
24	BCR	D	405	-	41,41,41	1.00	1 (2%)	56,56,56	1.97	15 (26%)
31	DMS	o	307	-	3,3,3	2.60	1 (33%)	3,3,3	0.58	0
31	DMS	H	103	-	3,3,3	2.91	1 (33%)	3,3,3	1.19	0
35	DGD	C	518	-	63,63,67	0.96	3 (4%)	77,77,81	1.28	10 (12%)
31	DMS	B	628	-	3,3,3	2.80	1 (33%)	3,3,3	0.77	0
22	CLA	B	606	-	65,73,73	2.74	17 (26%)	76,113,113	2.38	26 (34%)
34	HTG	b	623	-	19,19,19	1.10	1 (5%)	23,24,24	1.32	4 (17%)
35	DGD	c	918	-	63,63,67	0.94	4 (6%)	77,77,81	1.03	4 (5%)
31	DMS	C	539	-	3,3,3	2.69	1 (33%)	3,3,3	0.61	0
27	LHG	A	412	-	30,30,48	1.38	2 (6%)	33,35,54	1.44	4 (12%)
22	CLA	c	904	-	65,73,73	2.62	19 (29%)	76,113,113	2.36	27 (35%)
31	DMS	u	203	-	3,3,3	2.72	1 (33%)	3,3,3	0.76	0
25	LMG	j	101	38	47,47,55	1.01	2 (4%)	55,55,63	1.18	9 (16%)
31	DMS	I	101	-	3,3,3	2.71	1 (33%)	3,3,3	0.69	0
31	DMS	C	535	-	3,3,3	2.73	1 (33%)	3,3,3	0.78	0
22	CLA	b	615	-	52,60,73	2.83	21 (40%)	60,97,113	2.45	27 (45%)
22	CLA	b	613	-	65,73,73	2.57	18 (27%)	76,113,113	2.26	25 (32%)
19	OEX	A	401	3,40,1	0,15,15	-	-	-	-	-
29	LMT	c	931	-	24,24,36	0.79	1 (4%)	29,29,47	0.86	2 (6%)
31	DMS	B	630	-	3,3,3	2.81	1 (33%)	3,3,3	0.91	0
31	DMS	c	925	-	3,3,3	2.65	1 (33%)	3,3,3	1.11	0
36	HEM	e	101	5,6	41,50,50	1.96	9 (21%)	45,82,82	1.70	9 (20%)
31	DMS	c	934	-	3,3,3	2.66	1 (33%)	3,3,3	0.67	0
37	RRX	H	101	-	42,42,42	0.82	0	57,58,58	1.47	8 (14%)
22	CLA	C	514	-	65,73,73	2.66	18 (27%)	76,113,113	2.23	23 (30%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	DMS	O	310	-	3,3,3	2.62	1 (33%)	3,3,3	0.86	0
29	LMT	B	622	-	24,24,36	0.63	1 (4%)	29,29,47	0.84	1 (3%)
31	DMS	O	309	-	3,3,3	2.54	1 (33%)	3,3,3	0.59	0
22	CLA	B	616	-	65,73,73	2.43	18 (27%)	76,113,113	2.25	21 (27%)
31	DMS	t	104	-	3,3,3	2.71	1 (33%)	3,3,3	0.59	0
22	CLA	b	617	-	60,68,73	2.96	18 (30%)	70,107,113	2.54	26 (37%)
39	HEC	V	202	15	32,50,50	2.08	8 (25%)	24,82,82	1.86	6 (25%)
22	CLA	B	611	40	65,73,73	2.56	16 (24%)	76,113,113	2.42	22 (28%)
27	LHG	D	409	-	48,48,48	1.02	2 (4%)	51,54,54	1.37	5 (9%)
25	LMG	A	410	-	51,51,55	0.95	2 (3%)	59,59,63	1.09	5 (8%)
23	PHO	A	407	-	51,69,69	1.63	8 (15%)	47,99,99	1.66	10 (21%)
22	CLA	B	609	-	65,73,73	2.59	19 (29%)	76,113,113	2.36	25 (32%)
23	PHO	D	402	-	51,69,69	1.76	6 (11%)	47,99,99	1.67	9 (19%)
22	CLA	c	905	40	65,73,73	2.64	19 (29%)	76,113,113	2.22	21 (27%)
31	DMS	A	418	-	3,3,3	2.41	1 (33%)	3,3,3	1.25	0
31	DMS	b	630	-	3,3,3	2.66	1 (33%)	3,3,3	0.29	0
31	DMS	A	416	-	3,3,3	2.66	1 (33%)	3,3,3	1.06	0
31	DMS	C	537	-	3,3,3	2.75	1 (33%)	3,3,3	0.70	0
27	LHG	d	407	-	48,48,48	0.75	2 (4%)	51,54,54	1.06	3 (5%)
22	CLA	B	612	-	65,73,73	2.14	13 (20%)	76,113,113	2.23	25 (32%)
31	DMS	O	311	-	3,3,3	2.97	1 (33%)	3,3,3	0.91	0
22	CLA	c	912	3	65,73,73	2.94	18 (27%)	76,113,113	2.07	23 (30%)
31	DMS	f	103	-	3,3,3	2.70	1 (33%)	3,3,3	0.91	0
31	DMS	C	524	-	3,3,3	2.48	1 (33%)	3,3,3	0.86	0
31	DMS	V	206	-	3,3,3	2.70	1 (33%)	3,3,3	0.55	0
28	SQD	f	101	-	12,13,54	2.23	1 (8%)	15,16,65	1.26	2 (13%)
37	RRX	h	101	-	42,42,42	0.97	0	57,58,58	1.19	5 (8%)
31	DMS	O	305	-	3,3,3	2.90	1 (33%)	3,3,3	0.84	0
22	CLA	C	511	-	65,73,73	2.39	19 (29%)	76,113,113	2.06	25 (32%)
22	CLA	b	603	-	65,73,73	2.78	17 (26%)	76,113,113	2.37	29 (38%)
35	DGD	D	407	-	50,50,67	1.18	3 (6%)	58,58,81	1.31	6 (10%)
31	DMS	A	417	-	3,3,3	2.67	1 (33%)	3,3,3	0.48	0
24	BCR	b	620	-	41,41,41	0.85	0	56,56,56	1.34	8 (14%)
27	LHG	a	423	-	44,44,48	1.02	2 (4%)	47,50,54	1.08	4 (8%)
24	BCR	b	619	-	31,31,41	1.10	2 (6%)	40,40,56	1.34	8 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	DMS	U	202	-	3,3,3	2.77	1 (33%)	3,3,3	1.29	0
31	DMS	c	942	-	3,3,3	2.73	1 (33%)	3,3,3	0.72	0
22	CLA	b	608	40	65,73,73	2.41	18 (27%)	76,113,113	2.19	21 (27%)
31	DMS	b	634	-	3,3,3	2.71	1 (33%)	3,3,3	0.59	0
31	DMS	a	421	-	3,3,3	2.66	1 (33%)	3,3,3	0.60	0
34	HTG	l	106	-	19,19,19	1.01	2 (10%)	23,24,24	2.09	3 (13%)
31	DMS	c	923	-	3,3,3	2.50	1 (33%)	3,3,3	0.40	0
31	DMS	c	937	-	3,3,3	2.88	1 (33%)	3,3,3	0.82	0
31	DMS	V	208	-	3,3,3	2.60	1 (33%)	3,3,3	0.40	0
22	CLA	a	412	-	65,73,73	2.24	17 (26%)	76,113,113	2.19	26 (34%)
26	PL9	a	415	-	55,55,55	0.96	3 (5%)	68,69,69	1.49	12 (17%)
34	HTG	B	623	-	19,19,19	1.16	1 (5%)	23,24,24	1.78	3 (13%)
22	CLA	c	910	-	65,73,73	2.22	16 (24%)	76,113,113	2.18	28 (36%)
31	DMS	V	211	-	3,3,3	2.81	1 (33%)	3,3,3	0.77	0
31	DMS	O	306	-	3,3,3	2.70	1 (33%)	3,3,3	0.75	0
29	LMT	A	414	-	36,36,36	0.80	0	47,47,47	1.14	4 (8%)
26	PL9	A	411	-	55,55,55	0.97	3 (5%)	68,69,69	1.72	14 (20%)
31	DMS	B	639	-	3,3,3	2.76	1 (33%)	3,3,3	0.71	0
31	DMS	C	526	-	3,3,3	2.59	1 (33%)	3,3,3	0.56	0
31	DMS	o	302	-	3,3,3	2.68	1 (33%)	3,3,3	0.95	0
31	DMS	v	208	-	3,3,3	2.63	1 (33%)	3,3,3	0.53	0
31	DMS	l	104	-	3,3,3	2.77	1 (33%)	3,3,3	0.57	0
31	DMS	u	202	-	3,3,3	2.62	1 (33%)	3,3,3	1.05	0
22	CLA	A	408	-	65,73,73	2.10	15 (23%)	76,113,113	2.25	25 (32%)
31	DMS	c	935	-	3,3,3	2.66	1 (33%)	3,3,3	0.89	0
34	HTG	b	632	-	19,19,19	1.08	2 (10%)	23,24,24	2.54	7 (30%)
22	CLA	c	914	-	65,73,73	2.38	18 (27%)	76,113,113	2.25	25 (32%)
29	LMT	a	419	-	36,36,36	0.78	0	47,47,47	1.36	5 (10%)
31	DMS	B	634	-	3,3,3	2.80	1 (33%)	3,3,3	0.65	0
31	DMS	c	943	-	3,3,3	2.69	1 (33%)	3,3,3	0.81	0
22	CLA	C	513	-	56,64,73	2.67	19 (33%)	65,102,113	2.41	21 (32%)
35	DGD	c	919	-	63,63,67	0.98	4 (6%)	77,77,81	1.15	6 (7%)
32	BCT	A	421[A]	20	2,3,3	0.79	0	2,3,3	0.11	0
26	PL9	D	406	-	55,55,55	0.94	3 (5%)	68,69,69	1.56	14 (20%)
31	DMS	B	629	-	3,3,3	2.54	1 (33%)	3,3,3	1.19	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
28	SQD	l	101	-	53,54,54	1.12	4 (7%)	62,65,65	1.47	8 (12%)
31	DMS	u	204	-	3,3,3	2.80	1 (33%)	3,3,3	0.81	0
31	DMS	D	418	-	3,3,3	2.40	1 (33%)	3,3,3	0.67	0
31	DMS	C	538	-	3,3,3	2.67	1 (33%)	3,3,3	0.58	0
23	PHO	a	410	-	51,69,69	1.58	7 (13%)	47,99,99	1.60	5 (10%)
31	DMS	t	105	-	3,3,3	2.71	1 (33%)	3,3,3	0.61	0
31	DMS	B	638	-	3,3,3	2.64	1 (33%)	3,3,3	0.40	0
22	CLA	c	913	-	65,73,73	2.42	19 (29%)	76,113,113	2.13	23 (30%)
31	DMS	a	425	-	3,3,3	3.01	1 (33%)	3,3,3	0.88	0
31	DMS	B	642	-	3,3,3	2.66	1 (33%)	3,3,3	1.04	0
31	DMS	I	106	-	3,3,3	2.68	1 (33%)	3,3,3	0.75	0
31	DMS	v	205	-	3,3,3	2.65	1 (33%)	3,3,3	0.83	0
31	DMS	U	203	-	3,3,3	2.78	1 (33%)	3,3,3	1.24	0
36	HEM	E	102	5,6	41,50,50	1.91	7 (17%)	45,82,82	1.97	13 (28%)
28	SQD	D	408	-	19,20,54	0.97	2 (10%)	26,29,65	1.93	7 (26%)
32	BCT	A	421[B]	20	2,3,3	0.95	0	2,3,3	0.41	0
22	CLA	c	902	-	65,73,73	2.43	18 (27%)	76,113,113	2.47	20 (26%)
35	DGD	d	406	-	42,42,67	1.24	3 (7%)	44,45,81	1.09	3 (6%)
27	LHG	C	522	-	29,29,48	1.31	2 (6%)	33,34,54	1.38	4 (12%)
22	CLA	d	402	-	65,73,73	2.07	17 (26%)	76,113,113	2.30	23 (30%)
22	CLA	C	508	40	65,73,73	2.34	18 (27%)	76,113,113	2.34	23 (30%)
22	CLA	D	401	40	65,73,73	1.81	13 (20%)	76,113,113	2.26	26 (34%)
22	CLA	c	908	40	65,73,73	2.79	18 (27%)	76,113,113	2.48	20 (26%)
31	DMS	b	638	-	3,3,3	2.98	1 (33%)	3,3,3	0.69	0
22	CLA	B	602	40	65,73,73	2.80	19 (29%)	76,113,113	2.38	22 (28%)
31	DMS	v	210	-	3,3,3	2.84	1 (33%)	3,3,3	0.78	0
22	CLA	C	512	3	65,73,73	2.49	19 (29%)	76,113,113	2.21	23 (30%)
31	DMS	V	204	-	3,3,3	2.73	1 (33%)	3,3,3	0.82	0
31	DMS	O	304	-	3,3,3	2.57	1 (33%)	3,3,3	0.42	0
31	DMS	C	536	-	3,3,3	2.68	1 (33%)	3,3,3	0.45	0
29	LMT	t	101	-	24,24,36	0.45	0	29,29,47	1.34	4 (13%)
25	LMG	C	531	-	40,40,55	1.19	3 (7%)	48,48,63	1.13	3 (6%)
27	LHG	L	101	-	39,39,48	1.05	2 (5%)	42,45,54	1.19	4 (9%)
22	CLA	b	609	-	65,73,73	2.23	19 (29%)	76,113,113	2.03	25 (32%)
31	DMS	O	313	-	3,3,3	2.63	1 (33%)	3,3,3	0.48	0



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	DMS	V	205	-	3,3,3	2.62	1 (33%)	3,3,3	0.64	0
27	LHG	D	410	-	48,48,48	0.79	2 (4%)	51,54,54	1.08	4 (7%)
31	DMS	V	210	-	3,3,3	2.77	1 (33%)	3,3,3	0.89	0
31	DMS	C	530	-	3,3,3	2.68	1 (33%)	3,3,3	0.85	0
22	CLA	a	408	40	65,73,73	2.34	19 (29%)	76,113,113	2.41	27 (35%)
34	HTG	C	532	-	19,19,19	1.15	2 (10%)	23,24,24	1.90	1 (4%)
31	DMS	o	303	-	3,3,3	2.70	1 (33%)	3,3,3	0.81	0
29	LMT	f	102	-	25,25,36	1.01	1 (4%)	30,30,47	1.22	5 (16%)
22	CLA	B	608	40	65,73,73	2.16	15 (23%)	76,113,113	2.17	27 (35%)
25	LMG	c	930	-	49,49,55	1.10	3 (6%)	57,57,63	1.06	4 (7%)
34	HTG	D	414	-	19,19,19	0.86	1 (5%)	23,24,24	1.84	1 (4%)
24	BCR	C	515	-	41,41,41	0.81	1 (2%)	56,56,56	1.48	9 (16%)
24	BCR	d	404	-	41,41,41	1.05	3 (7%)	56,56,56	1.77	13 (23%)
22	CLA	c	909	-	65,73,73	2.86	20 (30%)	76,113,113	2.21	23 (30%)
31	DMS	B	637	-	3,3,3	2.78	1 (33%)	3,3,3	0.71	0
22	CLA	A	405	-	65,73,73	2.43	17 (26%)	76,113,113	2.05	24 (31%)
24	BCR	C	516	-	41,41,41	0.91	0	56,56,56	1.36	7 (12%)
31	DMS	b	633	-	3,3,3	2.67	1 (33%)	3,3,3	0.55	0
25	LMG	c	920	-	51,51,55	0.99	2 (3%)	59,59,63	1.09	5 (8%)
31	DMS	a	401	-	3,3,3	2.74	1 (33%)	3,3,3	0.81	0
31	DMS	O	303	-	3,3,3	2.74	1 (33%)	3,3,3	0.77	0
34	HTG	b	627	-	19,19,19	1.03	2 (10%)	23,24,24	1.84	3 (13%)
31	DMS	c	940	-	3,3,3	2.72	1 (33%)	3,3,3	0.57	0
29	LMT	c	921	-	36,36,36	0.67	1 (2%)	47,47,47	1.03	4 (8%)
23	PHO	a	411	-	51,69,69	1.66	7 (13%)	47,99,99	2.23	9 (19%)
29	LMT	E	101	-	24,24,36	0.64	0	29,29,47	0.99	1 (3%)
28	SQD	a	418	-	50,51,54	1.16	3 (6%)	59,62,65	1.47	8 (13%)
22	CLA	B	603	-	65,73,73	2.59	21 (32%)	76,113,113	2.32	32 (42%)
34	HTG	D	415	-	19,19,19	1.16	1 (5%)	23,24,24	2.71	7 (30%)
25	LMG	B	621	-	40,40,55	1.26	3 (7%)	48,48,63	1.39	8 (16%)
31	DMS	C	529	-	3,3,3	2.68	1 (33%)	3,3,3	0.54	0
31	DMS	d	415	-	3,3,3	2.62	1 (33%)	3,3,3	0.61	0
22	CLA	b	612	-	65,73,73	2.10	16 (24%)	76,113,113	2.29	23 (30%)
31	DMS	t	103	-	3,3,3	2.70	1 (33%)	3,3,3	0.64	0
22	CLA	b	616	-	65,73,73	2.43	17 (26%)	76,113,113	2.15	24 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	DMS	B	641	-	3,3,3	2.75	1 (33%)	3,3,3	0.84	0
31	DMS	v	204	-	3,3,3	2.66	1 (33%)	3,3,3	0.69	0
31	DMS	C	528	-	3,3,3	2.63	1 (33%)	3,3,3	0.58	0
31	DMS	C	525	-	3,3,3	2.45	1 (33%)	3,3,3	0.62	0
31	DMS	V	212	-	3,3,3	2.78	1 (33%)	3,3,3	1.18	0
22	CLA	b	606	-	65,73,73	2.03	15 (23%)	76,113,113	2.38	22 (28%)
31	DMS	o	305	-	3,3,3	2.60	1 (33%)	3,3,3	0.66	0
31	DMS	C	527	-	3,3,3	2.66	1 (33%)	3,3,3	0.56	0
31	DMS	d	414	-	3,3,3	2.69	1 (33%)	3,3,3	0.58	0
31	DMS	B	631	-	3,3,3	2.56	1 (33%)	3,3,3	0.62	0
31	DMS	c	936	-	3,3,3	2.69	1 (33%)	3,3,3	0.58	0
22	CLA	C	507	-	65,73,73	2.25	18 (27%)	76,113,113	2.18	20 (26%)
31	DMS	V	209	-	3,3,3	2.65	1 (33%)	3,3,3	0.49	0
31	DMS	a	402	-	3,3,3	2.38	1 (33%)	3,3,3	0.73	0
22	CLA	b	604	-	65,73,73	2.60	17 (26%)	76,113,113	2.30	25 (32%)
19	OEX	a	403	3,40,1	0,15,15	-	-	-	-	-
24	BCR	y	101	-	41,41,41	0.89	0	56,56,56	1.59	14 (25%)
25	LMG	D	412	-	46,46,55	1.14	3 (6%)	54,54,63	1.12	2 (3%)
31	DMS	v	201	-	3,3,3	2.59	1 (33%)	3,3,3	0.85	0
27	LHG	d	408	-	45,45,48	1.04	2 (4%)	48,51,54	0.73	0
31	DMS	o	308	-	3,3,3	2.78	1 (33%)	3,3,3	0.83	0
31	DMS	o	306	-	3,3,3	2.65	1 (33%)	3,3,3	0.60	0
34	HTG	V	203	-	14,14,19	0.69	0	18,19,24	3.11	7 (38%)
25	LMG	i	101	-	51,51,55	0.99	2 (3%)	59,59,63	1.18	7 (11%)
31	DMS	u	205	-	3,3,3	3.07	1 (33%)	3,3,3	1.19	0
28	SQD	a	414	-	53,54,54	1.09	3 (5%)	62,65,65	2.00	12 (19%)
31	DMS	L	102	-	3,3,3	2.75	1 (33%)	3,3,3	0.95	0
31	DMS	l	103	-	3,3,3	2.71	1 (33%)	3,3,3	0.66	0
31	DMS	B	632	-	3,3,3	2.65	1 (33%)	3,3,3	0.60	0
35	DGD	h	102	-	63,63,67	0.97	3 (4%)	77,77,81	1.14	5 (6%)
32	BCT	a	422	20	2,3,3	0.87	0	2,3,3	1.11	0
31	DMS	V	201	-	3,3,3	2.64	1 (33%)	3,3,3	0.90	0
31	DMS	b	629	-	3,3,3	2.28	1 (33%)	3,3,3	1.10	0
22	CLA	c	903	-	65,73,73	2.03	17 (26%)	76,113,113	2.29	25 (32%)
31	DMS	b	636	-	3,3,3	2.67	1 (33%)	3,3,3	0.70	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
35	DGD	C	519	-	63,63,67	0.82	2 (3%)	77,77,81	1.20	9 (11%)
25	LMG	b	622	-	43,43,55	1.35	4 (9%)	51,51,63	1.90	12 (23%)
22	CLA	B	615	-	53,61,73	2.69	19 (35%)	61,98,113	2.95	26 (42%)
29	LMT	Z	101	-	36,36,36	0.67	1 (2%)	47,47,47	1.15	3 (6%)
31	DMS	c	938	-	3,3,3	2.76	1 (33%)	3,3,3	0.83	0
31	DMS	O	307	-	3,3,3	2.79	1 (33%)	3,3,3	0.91	0
22	CLA	D	403	-	65,73,73	1.99	19 (29%)	76,113,113	2.48	25 (32%)
22	CLA	a	409	40	61,69,73	2.04	16 (26%)	71,108,113	2.63	29 (40%)
31	DMS	c	944	-	3,3,3	2.72	1 (33%)	3,3,3	0.78	0
34	HTG	v	203	-	16,16,19	1.05	1 (6%)	20,21,24	3.06	7 (35%)
31	DMS	c	928	-	3,3,3	2.70	1 (33%)	3,3,3	0.77	0
31	DMS	d	411	-	3,3,3	2.71	1 (33%)	3,3,3	0.94	0
35	DGD	H	102	-	63,63,67	1.02	3 (4%)	77,77,81	1.16	6 (7%)
34	HTG	B	627	-	19,19,19	1.01	1 (5%)	23,24,24	2.02	4 (17%)
22	CLA	B	617	-	55,63,73	2.24	15 (27%)	64,101,113	2.68	27 (42%)
31	DMS	B	633	-	3,3,3	2.66	1 (33%)	3,3,3	0.46	0
34	HTG	b	626	-	19,19,19	0.84	1 (5%)	23,24,24	1.61	5 (21%)
31	DMS	B	635	-	3,3,3	2.78	1 (33%)	3,3,3	0.69	0
22	CLA	B	607	-	65,73,73	2.44	19 (29%)	76,113,113	2.34	28 (36%)
31	DMS	v	211	-	3,3,3	2.76	1 (33%)	3,3,3	0.76	0
31	DMS	v	206	-	3,3,3	2.68	1 (33%)	3,3,3	0.73	0
27	LHG	D	411	-	44,44,48	0.98	2 (4%)	47,50,54	1.03	3 (6%)
22	CLA	B	614	-	61,69,73	2.36	16 (26%)	71,108,113	2.03	24 (33%)
27	LHG	a	416	-	48,48,48	1.13	2 (4%)	51,54,54	1.18	4 (7%)
29	LMT	T	102	-	24,24,36	0.73	1 (4%)	29,29,47	1.27	3 (10%)
28	SQD	b	621	-	37,38,54	1.04	2 (5%)	45,48,65	1.50	8 (17%)
31	DMS	D	416	-	3,3,3	2.50	1 (33%)	3,3,3	0.63	0
31	DMS	A	419	-	3,3,3	2.66	1 (33%)	3,3,3	0.82	0
31	DMS	i	106	-	3,3,3	2.62	1 (33%)	3,3,3	0.55	0
34	HTG	C	523	-	8,8,19	0.38	0	7,7,24	1.42	1 (14%)
22	CLA	C	510	-	65,73,73	2.14	15 (23%)	76,113,113	2.23	24 (31%)
31	DMS	v	207	-	3,3,3	2.72	1 (33%)	3,3,3	0.65	0
22	CLA	d	403	-	65,73,73	2.83	20 (30%)	76,113,113	2.05	21 (27%)
24	BCR	B	619	-	30,30,41	0.92	0	39,39,56	1.32	7 (17%)
24	BCR	c	915	-	41,41,41	0.84	1 (2%)	56,56,56	1.39	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	DMS	D	417	-	3,3,3	2.75	1 (33%)	3,3,3	0.60	0
31	DMS	c	929	-	3,3,3	2.80	1 (33%)	3,3,3	0.84	0
31	DMS	c	927	-	3,3,3	2.64	1 (33%)	3,3,3	0.42	0
28	SQD	C	501	-	53,54,54	1.04	3 (5%)	62,65,65	1.95	14 (22%)
31	DMS	b	635	-	3,3,3	2.76	1 (33%)	3,3,3	0.55	0
34	HTG	B	626	-	19,19,19	0.73	0	23,24,24	1.83	5 (21%)
31	DMS	b	637	-	3,3,3	2.72	1 (33%)	3,3,3	0.61	0
24	BCR	a	413	-	41,41,41	1.14	2 (4%)	56,56,56	1.16	8 (14%)
22	CLA	b	614	-	59,67,73	2.39	19 (32%)	68,105,113	2.41	21 (30%)
31	DMS	c	924	-	3,3,3	2.82	1 (33%)	3,3,3	1.32	1 (33%)
31	DMS	c	941	-	3,3,3	2.60	1 (33%)	3,3,3	0.52	0
22	CLA	b	602	40	65,73,73	3.39	17 (26%)	76,113,113	2.43	21 (27%)
22	CLA	b	610	-	65,73,73	2.60	19 (29%)	76,113,113	2.06	22 (28%)
31	DMS	d	412	-	3,3,3	2.56	1 (33%)	3,3,3	0.83	0
22	CLA	C	504	-	65,73,73	2.71	20 (30%)	76,113,113	2.28	27 (35%)
24	BCR	B	620	-	41,41,41	0.97	2 (4%)	56,56,56	1.48	11 (19%)
27	LHG	l	102	-	48,48,48	0.93	2 (4%)	51,54,54	1.08	2 (3%)
22	CLA	C	502	-	65,73,73	2.04	17 (26%)	76,113,113	2.35	22 (28%)
22	CLA	C	505	40	65,73,73	3.03	18 (27%)	76,113,113	2.16	20 (26%)
22	CLA	B	613	-	65,73,73	2.53	19 (29%)	76,113,113	2.08	28 (36%)
22	CLA	C	506	-	65,73,73	2.58	16 (24%)	76,113,113	2.13	21 (27%)
24	BCR	K	101	-	41,41,41	0.86	0	56,56,56	1.19	4 (7%)
31	DMS	O	312	-	3,3,3	2.63	1 (33%)	3,3,3	0.96	0
31	DMS	A	420	-	3,3,3	2.74	1 (33%)	3,3,3	1.35	0
35	DGD	c	917	-	63,63,67	0.97	3 (4%)	77,77,81	1.00	3 (3%)
31	DMS	V	207	-	3,3,3	2.75	1 (33%)	3,3,3	0.89	0
22	CLA	D	404	-	65,73,73	2.43	16 (24%)	76,113,113	1.98	21 (27%)
31	DMS	l	105	-	3,3,3	2.74	1 (33%)	3,3,3	0.72	0
31	DMS	c	939	-	3,3,3	2.76	1 (33%)	3,3,3	0.65	0
22	CLA	B	605	-	65,73,73	2.05	16 (24%)	76,113,113	2.41	28 (36%)
22	CLA	c	911	-	65,73,73	2.19	17 (26%)	76,113,113	2.11	23 (30%)
31	DMS	o	304	-	3,3,3	2.81	1 (33%)	3,3,3	1.15	0
22	CLA	B	610	-	65,73,73	2.12	18 (27%)	76,113,113	2.20	20 (26%)
24	BCR	A	409	-	41,41,41	1.08	2 (4%)	56,56,56	1.27	5 (8%)
31	DMS	O	314	-	3,3,3	2.73	1 (33%)	3,3,3	0.76	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
31	DMS	C	533	-	3,3,3	2.73	1 (33%)	3,3,3	0.75	0
34	HTG	b	624	-	19,19,19	1.06	1 (5%)	23,24,24	2.19	6 (26%)
31	DMS	B	636	-	3,3,3	2.60	1 (33%)	3,3,3	0.63	0
31	DMS	C	540	-	3,3,3	2.78	1 (33%)	3,3,3	0.89	0
31	DMS	v	209	-	3,3,3	2.63	1 (33%)	3,3,3	0.63	0
24	BCR	B	618	-	19,19,41	0.91	1 (5%)	26,26,56	1.42	5 (19%)
31	DMS	B	640	-	3,3,3	2.63	1 (33%)	3,3,3	0.61	0
25	LMG	C	520	-	51,51,55	1.08	2 (3%)	59,59,63	1.23	5 (8%)
31	DMS	O	308	-	3,3,3	2.79	1 (33%)	3,3,3	0.62	0
22	CLA	b	611	40	65,73,73	2.42	18 (27%)	76,113,113	2.30	24 (31%)
31	DMS	d	413	-	3,3,3	2.54	1 (33%)	3,3,3	0.39	0
28	SQD	A	413	-	48,49,54	1.08	3 (6%)	57,60,65	1.74	9 (15%)
22	CLA	a	407	-	65,73,73	2.32	19 (29%)	76,113,113	2.17	27 (35%)
24	BCR	c	916	-	41,41,41	0.86	0	56,56,56	1.55	10 (17%)
24	BCR	k	101	-	41,41,41	0.91	0	56,56,56	1.23	6 (10%)
34	HTG	C	521	-	19,19,19	0.94	2 (10%)	23,24,24	1.64	2 (8%)
22	CLA	C	503	-	65,73,73	2.40	19 (29%)	76,113,113	2.09	19 (25%)
29	LMT	I	102	-	36,36,36	0.68	1 (2%)	47,47,47	1.36	4 (8%)
31	DMS	F	101	-	3,3,3	2.66	1 (33%)	3,3,3	0.60	0
31	DMS	b	631	-	3,3,3	2.68	1 (33%)	3,3,3	0.54	0
31	DMS	c	926	-	3,3,3	2.60	1 (33%)	3,3,3	0.78	0
22	CLA	A	406	40	55,63,73	2.20	17 (30%)	64,101,113	2.56	29 (45%)
31	DMS	c	933	-	3,3,3	2.84	1 (33%)	3,3,3	0.92	0
22	CLA	b	605	-	65,73,73	2.34	19 (29%)	76,113,113	2.21	19 (25%)
22	CLA	c	906	-	65,73,73	2.36	17 (26%)	76,113,113	2.05	20 (26%)
24	BCR	Y	101	-	40,40,41	0.93	2 (5%)	52,54,56	1.70	15 (28%)
31	DMS	a	424	-	3,3,3	2.71	1 (33%)	3,3,3	1.02	0
35	DGD	C	517	-	63,63,67	0.85	3 (4%)	77,77,81	1.33	12 (15%)
24	BCR	b	618	-	20,20,41	0.89	1 (5%)	27,27,56	1.73	5 (18%)
25	LMG	d	409	-	47,47,55	1.09	3 (6%)	55,55,63	1.46	8 (14%)

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	509	-	1/1/15/20	11/37/115/115	-
29	LMT	T	102	-	-	10/15/35/61	0/1/1/2
22	CLA	B	603	-	1/1/15/20	8/37/115/115	-
28	SQD	b	621	-	-	16/32/52/69	0/1/1/1
34	HTG	D	415	-	-	8/10/30/30	0/1/1/1
25	LMG	J	101	38	-	9/40/60/70	0/1/1/1
25	LMG	B	621	-	-	23/35/55/70	0/1/1/1
34	HTG	c	922	-	-	6/10/30/30	0/1/1/1
22	CLA	b	612	-	-	10/37/115/115	-
22	CLA	b	616	-	1/1/15/20	9/37/115/115	-
34	HTG	C	523	-	-	1/6/6/30	-
27	LHG	d	401	-	-	15/34/34/53	-
22	CLA	A	408	-	1/1/15/20	13/37/115/115	-
22	CLA	C	510	-	1/1/15/20	13/37/115/115	-
22	CLA	d	403	-	-	10/37/115/115	-
34	HTG	b	632	-	-	6/10/30/30	0/1/1/1
22	CLA	c	914	-	-	16/37/115/115	-
29	LMT	a	419	-	-	14/21/61/61	0/2/2/2
39	HEC	v	202	15	-	2/10/54/54	-
22	CLA	b	607	-	1/1/15/20	7/37/115/115	-
22	CLA	c	907	-	1/1/15/20	11/37/115/115	-
26	PL9	d	405	-	-	6/53/73/73	0/1/1/1
22	CLA	b	606	-	1/1/15/20	3/37/115/115	-
22	CLA	C	513	-	1/1/13/20	9/27/105/115	-
24	BCR	B	619	-	-	1/24/41/63	0/1/1/2
24	BCR	c	915	-	-	3/29/63/63	0/2/2/2
22	CLA	B	604	-	1/1/15/20	7/37/115/115	-
35	DGD	c	919	-	-	20/51/91/95	0/2/2/2
24	BCR	D	405	-	-	4/29/63/63	0/2/2/2
35	DGD	C	518	-	-	23/51/91/95	0/2/2/2
28	SQD	C	501	-	-	27/49/69/69	0/1/1/1
26	PL9	D	406	-	-	8/53/73/73	0/1/1/1
22	CLA	B	606	-	-	9/37/115/115	-
34	HTG	B	626	-	-	2/10/30/30	0/1/1/1
34	HTG	b	623	-	-	6/10/30/30	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	DGD	c	918	-	-	22/51/91/95	0/2/2/2
27	LHG	A	412	-	-	14/33/33/53	-
22	CLA	C	507	-	1/1/15/20	11/37/115/115	-
24	BCR	a	413	-	-	2/29/63/63	0/2/2/2
22	CLA	c	904	-	-	7/37/115/115	-
28	SQD	l	101	-	-	32/49/69/69	0/1/1/1
22	CLA	b	614	-	1/1/13/20	6/30/108/115	-
22	CLA	b	604	-	1/1/15/20	10/37/115/115	-
22	CLA	b	602	40	1/1/15/20	21/37/115/115	-
22	CLA	b	610	-	-	1/37/115/115	-
25	LMG	j	101	38	-	13/42/62/70	0/1/1/1
22	CLA	b	615	-	1/1/12/20	6/22/100/115	-
22	CLA	b	613	-	1/1/15/20	6/37/115/115	-
24	BCR	y	101	-	-	5/29/63/63	0/2/2/2
25	LMG	D	412	-	-	14/41/61/70	0/1/1/1
22	CLA	C	504	-	-	3/37/115/115	-
23	PHO	a	410	-	-	1/37/103/103	0/5/6/6
29	LMT	c	931	-	-	11/15/35/61	0/1/1/2
22	CLA	c	913	-	1/1/15/20	19/37/115/115	-
24	BCR	B	620	-	-	0/29/63/63	0/2/2/2
27	LHG	l	102	-	-	26/53/53/53	-
22	CLA	C	502	-	1/1/15/20	5/37/115/115	-
22	CLA	C	505	40	-	6/37/115/115	-
27	LHG	d	408	-	-	17/50/50/53	-
36	HEM	e	101	5,6	-	4/12/54/54	-
34	HTG	V	203	-	-	0/5/25/30	0/1/1/1
37	RRX	H	101	-	-	1/29/65/65	0/2/2/2
22	CLA	C	514	-	-	18/37/115/115	-
22	CLA	B	613	-	1/1/15/20	4/37/115/115	-
22	CLA	C	506	-	1/1/15/20	5/37/115/115	-
25	LMG	i	101	-	-	26/46/66/70	0/1/1/1
29	LMT	B	622	-	-	8/15/35/61	0/1/1/2
36	HEM	E	102	5,6	-	1/12/54/54	-
22	CLA	B	616	-	1/1/15/20	12/37/115/115	-
24	BCR	K	101	-	-	3/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	SQD	a	414	-	-	27/49/69/69	0/1/1/1
35	DGD	c	917	-	-	21/51/91/95	0/2/2/2
28	SQD	D	408	-	-	3/12/32/69	0/1/1/1
22	CLA	c	902	-	1/1/15/20	3/37/115/115	-
22	CLA	b	617	-	1/1/14/20	7/31/109/115	-
35	DGD	d	406	-	-	30/44/44/95	-
39	HEC	V	202	15	-	2/10/54/54	-
22	CLA	D	404	-	1/1/15/20	13/37/115/115	-
22	CLA	B	611	40	1/1/15/20	9/37/115/115	-
27	LHG	D	409	-	-	15/53/53/53	-
27	LHG	C	522	-	-	15/31/31/53	-
22	CLA	d	402	-	1/1/15/20	8/37/115/115	-
25	LMG	A	410	-	-	28/46/66/70	0/1/1/1
22	CLA	C	508	40	1/1/15/20	11/37/115/115	-
23	PHO	A	407	-	-	2/37/103/103	0/5/6/6
22	CLA	B	609	-	-	2/37/115/115	-
22	CLA	B	605	-	1/1/15/20	9/37/115/115	-
23	PHO	D	402	-	-	6/37/103/103	0/5/6/6
22	CLA	D	401	40	-	6/37/115/115	-
22	CLA	c	911	-	1/1/15/20	7/37/115/115	-
22	CLA	c	905	40	-	15/37/115/115	-
22	CLA	c	908	40	1/1/15/20	11/37/115/115	-
35	DGD	h	102	-	-	18/51/91/95	0/2/2/2
22	CLA	B	610	-	1/1/15/20	2/37/115/115	-
24	BCR	A	409	-	-	2/29/63/63	0/2/2/2
34	HTG	b	624	-	-	4/10/30/30	0/1/1/1
27	LHG	d	407	-	-	20/53/53/53	-
22	CLA	B	602	40	1/1/15/20	23/37/115/115	-
22	CLA	B	612	-	1/1/15/20	11/37/115/115	-
22	CLA	c	912	3	-	4/37/115/115	-
22	CLA	c	903	-	1/1/15/20	10/37/115/115	-
22	CLA	C	512	3	-	1/37/115/115	-
35	DGD	C	519	-	-	29/51/91/95	0/2/2/2
28	SQD	f	101	-	-	4/12/12/69	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	BCR	B	618	-	-	0/11/28/63	0/1/1/2
25	LMG	b	622	-	-	20/38/58/70	0/1/1/1
25	LMG	C	520	-	-	19/46/66/70	0/1/1/1
37	RRX	h	101	-	-	8/29/65/65	0/2/2/2
22	CLA	b	611	40	1/1/15/20	6/37/115/115	-
22	CLA	C	511	-	1/1/15/20	14/37/115/115	-
29	LMT	t	101	-	-	10/15/35/61	0/1/1/2
22	CLA	b	603	-	1/1/15/20	3/37/115/115	-
35	DGD	D	407	-	-	29/44/64/95	0/1/1/2
25	LMG	C	531	-	-	14/35/55/70	0/1/1/1
22	CLA	B	615	-	1/1/12/20	11/23/101/115	-
27	LHG	L	101	-	-	20/44/44/53	-
22	CLA	b	609	-	-	7/37/115/115	-
29	LMT	Z	101	-	-	8/21/61/61	0/2/2/2
28	SQD	A	413	-	-	26/44/64/69	0/1/1/1
27	LHG	D	410	-	-	12/53/53/53	-
22	CLA	D	403	-	1/1/15/20	0/37/115/115	-
24	BCR	b	620	-	-	0/29/63/63	0/2/2/2
27	LHG	a	423	-	-	22/49/49/53	-
22	CLA	a	407	-	1/1/15/20	7/37/115/115	-
24	BCR	b	619	-	-	4/26/43/63	0/1/1/2
22	CLA	a	409	40	-	10/33/111/115	-
24	BCR	c	916	-	-	4/29/63/63	0/2/2/2
22	CLA	a	408	40	1/1/15/20	6/37/115/115	-
24	BCR	k	101	-	-	4/29/63/63	0/2/2/2
34	HTG	C	521	-	-	4/10/30/30	0/1/1/1
22	CLA	b	608	40	1/1/15/20	15/37/115/115	-
34	HTG	C	532	-	-	7/10/30/30	0/1/1/1
34	HTG	l	106	-	-	6/10/30/30	0/1/1/1
22	CLA	C	503	-	1/1/15/20	7/37/115/115	-
34	HTG	v	203	-	-	5/7/27/30	0/1/1/1
29	LMT	f	102	-	-	10/17/37/61	0/1/1/2
22	CLA	B	608	40	1/1/15/20	7/37/115/115	-
35	DGD	H	102	-	-	17/51/91/95	0/2/2/2
29	LMT	I	102	-	-	11/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	HTG	B	627	-	-	7/10/30/30	0/1/1/1
25	LMG	c	930	-	-	12/44/64/70	0/1/1/1
34	HTG	D	414	-	-	3/10/30/30	0/1/1/1
22	CLA	A	406	40	-	5/25/103/115	-
24	BCR	C	515	-	-	4/29/63/63	0/2/2/2
24	BCR	d	404	-	-	4/29/63/63	0/2/2/2
22	CLA	B	617	-	1/1/13/20	5/25/103/115	-
22	CLA	c	909	-	-	12/37/115/115	-
22	CLA	A	405	-	1/1/15/20	7/37/115/115	-
22	CLA	b	605	-	1/1/15/20	11/37/115/115	-
22	CLA	c	906	-	1/1/15/20	10/37/115/115	-
24	BCR	C	516	-	-	0/29/63/63	0/2/2/2
24	BCR	Y	101	-	-	6/29/60/63	0/2/2/2
34	HTG	b	626	-	-	6/10/30/30	0/1/1/1
22	CLA	a	412	-	-	12/37/115/115	-
26	PL9	a	415	-	-	15/53/73/73	0/1/1/1
25	LMG	c	920	-	-	21/46/66/70	0/1/1/1
22	CLA	B	607	-	1/1/15/20	14/37/115/115	-
34	HTG	B	623	-	-	3/10/30/30	0/1/1/1
22	CLA	c	910	-	1/1/15/20	15/37/115/115	-
34	HTG	b	627	-	-	3/10/30/30	0/1/1/1
29	LMT	c	921	-	-	11/21/61/61	0/2/2/2
27	LHG	D	411	-	-	12/49/49/53	-
22	CLA	B	614	-	1/1/14/20	6/33/111/115	-
29	LMT	A	414	-	-	14/21/61/61	0/2/2/2
27	LHG	a	416	-	-	28/53/53/53	-
35	DGD	C	517	-	-	19/51/91/95	0/2/2/2
23	PHO	a	411	-	-	6/37/103/103	0/5/6/6
26	PL9	A	411	-	-	12/53/73/73	0/1/1/1
29	LMT	E	101	-	-	9/15/35/61	0/1/1/2
24	BCR	b	618	-	-	7/13/30/63	0/1/1/2
28	SQD	a	418	-	-	24/46/66/69	0/1/1/1
25	LMG	d	409	-	-	28/42/62/70	0/1/1/1

All (1594) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	602	CLA	MG-NA	19.40	2.52	2.06
22	B	606	CLA	MG-NA	15.87	2.44	2.06
22	b	617	CLA	MG-NA	15.18	2.42	2.06
22	c	912	CLA	MG-NA	14.71	2.41	2.06
22	B	602	CLA	MG-NA	14.39	2.40	2.06
22	b	603	CLA	MG-NA	14.14	2.39	2.06
22	C	505	CLA	MG-NA	13.78	2.39	2.06
22	b	604	CLA	MG-NA	13.69	2.38	2.06
22	c	908	CLA	MG-NA	13.08	2.37	2.06
22	c	905	CLA	MG-NA	12.88	2.36	2.06
22	c	904	CLA	MG-NA	12.83	2.36	2.06
22	B	613	CLA	MG-NA	12.32	2.35	2.06
22	b	613	CLA	MG-NA	12.17	2.35	2.06
22	A	405	CLA	MG-NC	11.62	2.33	2.06
22	C	506	CLA	MG-NA	11.61	2.33	2.06
22	c	909	CLA	MG-NA	11.40	2.33	2.06
22	C	512	CLA	MG-NA	11.28	2.33	2.06
22	B	611	CLA	MG-NC	11.25	2.33	2.06
22	C	514	CLA	MG-NA	10.98	2.32	2.06
22	D	404	CLA	MG-NC	10.68	2.31	2.06
22	b	615	CLA	MG-NA	10.66	2.31	2.06
22	B	616	CLA	MG-NA	10.56	2.31	2.06
22	B	609	CLA	MG-ND	10.48	2.26	2.05
22	C	503	CLA	MG-NA	10.17	2.30	2.06
22	c	902	CLA	MG-NA	9.92	2.29	2.06
22	C	505	CLA	MG-ND	9.80	2.25	2.05
22	C	504	CLA	MG-NC	9.77	2.29	2.06
22	b	610	CLA	MG-NA	9.74	2.29	2.06
22	C	513	CLA	MG-NA	9.70	2.29	2.06
22	b	614	CLA	MG-NA	9.53	2.28	2.06
22	a	408	CLA	MG-ND	-9.49	1.87	2.05
22	b	608	CLA	MG-NA	9.39	2.28	2.06
22	B	615	CLA	MG-NC	9.39	2.28	2.06
22	b	616	CLA	MG-NA	9.38	2.28	2.06
22	B	603	CLA	MG-ND	-9.34	1.87	2.05
22	b	605	CLA	MG-NA	9.04	2.27	2.06
22	d	403	CLA	MG-NC	9.04	2.27	2.06
22	C	509	CLA	MG-NA	8.92	2.27	2.06
22	B	614	CLA	MG-NA	8.89	2.27	2.06
22	b	612	CLA	MG-NA	8.87	2.27	2.06
22	b	610	CLA	MG-ND	8.55	2.22	2.05
22	B	608	CLA	MG-NA	8.51	2.26	2.06
22	c	914	CLA	MG-NC	8.49	2.26	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	d	403	CLA	MG-NA	8.48	2.26	2.06
22	b	607	CLA	MG-NA	8.43	2.26	2.06
22	B	604	CLA	MG-NA	8.37	2.26	2.06
22	b	611	CLA	MG-NC	8.35	2.26	2.06
22	c	909	CLA	MG-ND	-8.26	1.89	2.05
22	c	906	CLA	MG-NA	8.26	2.25	2.06
22	C	504	CLA	MG-NA	8.13	2.25	2.06
22	B	612	CLA	MG-NA	8.10	2.25	2.06
22	C	508	CLA	MG-NA	8.09	2.25	2.06
22	c	912	CLA	MG-NC	8.05	2.25	2.06
22	B	607	CLA	MG-NA	8.00	2.25	2.06
36	e	101	HEM	C3D-C2D	7.97	1.53	1.36
36	E	102	HEM	C3D-C2D	7.96	1.53	1.36
22	d	403	CLA	MG-ND	-7.95	1.90	2.05
22	B	607	CLA	MG-NC	7.92	2.25	2.06
22	C	511	CLA	MG-NA	7.83	2.24	2.06
22	a	407	CLA	MG-NA	7.78	2.24	2.06
22	B	609	CLA	MG-NC	7.71	2.24	2.06
22	C	507	CLA	MG-NA	7.71	2.24	2.06
22	c	907	CLA	MG-NA	7.68	2.24	2.06
22	c	913	CLA	MG-NC	7.66	2.24	2.06
22	D	403	CLA	MG-NA	7.55	2.24	2.06
22	c	909	CLA	MG-NC	7.45	2.24	2.06
22	B	611	CLA	MG-ND	-7.40	1.91	2.05
22	C	509	CLA	MG-NC	7.29	2.23	2.06
28	f	101	SQD	C6-S	-7.16	1.67	1.77
22	C	514	CLA	MG-NC	7.15	2.23	2.06
22	b	609	CLA	MG-NA	7.07	2.23	2.06
22	A	406	CLA	MG-NA	7.05	2.23	2.06
22	b	611	CLA	MG-ND	-7.03	1.91	2.05
22	c	908	CLA	MG-ND	7.02	2.19	2.05
22	C	505	CLA	MG-NC	6.94	2.22	2.06
22	c	911	CLA	MG-NA	6.94	2.22	2.06
22	c	902	CLA	MG-ND	-6.94	1.92	2.05
22	c	905	CLA	MG-NC	6.93	2.22	2.06
22	B	605	CLA	MG-NA	6.88	2.22	2.06
22	c	908	CLA	C3B-C2B	6.74	1.49	1.40
22	B	603	CLA	MG-NA	6.71	2.22	2.06
22	b	602	CLA	MG-ND	6.69	2.19	2.05
22	B	617	CLA	MG-NA	6.58	2.21	2.06
22	C	510	CLA	MG-NA	6.53	2.21	2.06
22	c	913	CLA	MG-NA	6.53	2.21	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	605	CLA	MG-ND	-6.49	1.92	2.05
22	B	603	CLA	MG-NC	6.45	2.21	2.06
22	C	503	CLA	MG-ND	-6.44	1.93	2.05
22	C	511	CLA	MG-ND	-6.35	1.93	2.05
22	a	412	CLA	MG-ND	6.34	2.18	2.05
23	D	402	PHO	C3B-C2B	6.34	1.49	1.40
22	b	617	CLA	C3B-C2B	6.32	1.49	1.40
22	b	616	CLA	C3B-C2B	6.30	1.49	1.40
39	V	202	HEC	C2B-C3B	-6.28	1.34	1.40
22	C	508	CLA	MG-NC	6.27	2.21	2.06
22	C	513	CLA	MG-NC	6.22	2.21	2.06
22	C	514	CLA	C3B-C2B	6.15	1.48	1.40
22	C	508	CLA	C3B-C2B	6.14	1.48	1.40
22	B	607	CLA	C3B-C2B	6.12	1.48	1.40
22	a	412	CLA	C3C-C2C	6.09	1.49	1.36
22	c	910	CLA	MG-NA	6.08	2.20	2.06
22	b	602	CLA	C3B-C2B	6.05	1.48	1.40
39	v	202	HEC	C2B-C3B	-6.04	1.34	1.40
22	c	909	CLA	C3C-C2C	6.02	1.49	1.36
22	B	610	CLA	CHC-C1C	5.99	1.50	1.35
22	C	504	CLA	MG-ND	5.99	2.17	2.05
22	C	504	CLA	CHC-C1C	5.98	1.50	1.35
22	B	614	CLA	CHC-C1C	5.98	1.50	1.35
22	B	616	CLA	O2D-CGD	5.97	1.47	1.33
22	c	913	CLA	C3B-C2B	5.95	1.48	1.40
22	b	603	CLA	C3C-C2C	5.95	1.49	1.36
22	c	908	CLA	CHC-C1C	5.90	1.50	1.35
22	b	602	CLA	C3C-C2C	5.88	1.49	1.36
22	a	409	CLA	MG-NA	5.88	2.20	2.06
22	c	912	CLA	CHD-C1D	5.87	1.49	1.38
22	d	402	CLA	MG-NA	5.86	2.20	2.06
22	c	908	CLA	C3C-C2C	5.86	1.49	1.36
22	B	611	CLA	C3C-C2C	5.84	1.49	1.36
22	C	506	CLA	CHC-C1C	5.83	1.49	1.35
22	c	913	CLA	C3C-C2C	5.80	1.49	1.36
22	b	608	CLA	MG-NC	5.78	2.20	2.06
22	C	513	CLA	C3C-C2C	5.77	1.49	1.36
22	b	602	CLA	CHC-C1C	5.75	1.49	1.35
22	B	615	CLA	CHC-C1C	5.74	1.49	1.35
22	C	503	CLA	C3C-C2C	5.73	1.48	1.36
22	B	603	CLA	C3C-C2C	5.73	1.48	1.36
22	c	904	CLA	C3C-C2C	5.73	1.48	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	504	CLA	C3B-C2B	5.72	1.48	1.40
22	b	608	CLA	C3C-C2C	5.71	1.48	1.36
22	c	912	CLA	CHC-C1C	5.68	1.49	1.35
22	B	608	CLA	CHD-C1D	5.67	1.49	1.38
22	c	902	CLA	CHC-C1C	5.65	1.49	1.35
22	b	606	CLA	MG-NA	5.65	2.19	2.06
22	A	408	CLA	C3C-C2C	5.65	1.48	1.36
22	b	609	CLA	C3C-C2C	5.65	1.48	1.36
22	c	906	CLA	CHC-C1C	5.64	1.49	1.35
22	B	602	CLA	C3B-C2B	5.64	1.48	1.40
23	D	402	PHO	O2D-CGD	5.63	1.46	1.33
22	B	611	CLA	CHC-C1C	5.63	1.49	1.35
22	b	602	CLA	O2D-CGD	5.61	1.46	1.33
22	c	905	CLA	O2D-CGD	5.61	1.46	1.33
22	a	408	CLA	C3B-C2B	5.61	1.48	1.40
22	b	611	CLA	CHC-C1C	5.61	1.49	1.35
22	b	616	CLA	C3C-C2C	5.60	1.48	1.36
22	B	610	CLA	MG-NA	5.60	2.19	2.06
22	C	514	CLA	C3C-C2C	5.60	1.48	1.36
22	b	617	CLA	C3C-C2C	5.58	1.48	1.36
22	b	617	CLA	CHC-C1C	5.56	1.49	1.35
22	b	603	CLA	MG-ND	5.55	2.16	2.05
22	B	609	CLA	C3C-C2C	5.54	1.48	1.36
22	C	505	CLA	C3B-C2B	5.54	1.48	1.40
22	b	606	CLA	CHC-C1C	5.54	1.49	1.35
22	c	909	CLA	O2D-CGD	5.54	1.46	1.33
22	A	408	CLA	MG-NA	5.53	2.19	2.06
22	b	604	CLA	C3C-C2C	5.53	1.48	1.36
22	C	514	CLA	CHC-C1C	5.53	1.49	1.35
22	B	615	CLA	O2A-CGA	5.52	1.49	1.33
22	c	906	CLA	C3B-C2B	5.52	1.48	1.40
22	b	615	CLA	C3C-C2C	5.51	1.48	1.36
22	b	603	CLA	CHC-C1C	5.50	1.49	1.35
22	c	905	CLA	C3C-C2C	5.49	1.48	1.36
22	b	608	CLA	CHD-C1D	5.49	1.49	1.38
22	b	602	CLA	O2A-CGA	5.48	1.49	1.33
22	c	910	CLA	CHD-C1D	5.48	1.49	1.38
22	D	404	CLA	CHC-C1C	5.47	1.49	1.35
22	c	914	CLA	O2D-CGD	5.47	1.46	1.33
23	a	411	PHO	C3B-C2B	5.46	1.47	1.40
22	C	511	CLA	OBD-CAD	5.46	1.31	1.22
22	C	513	CLA	CHC-C1C	5.46	1.49	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	602	CLA	CHC-C1C	5.46	1.49	1.35
22	b	610	CLA	CHC-C1C	5.46	1.49	1.35
22	C	509	CLA	C3C-C2C	5.45	1.48	1.36
22	C	505	CLA	CHD-C1D	5.45	1.49	1.38
22	C	505	CLA	C3C-C2C	5.45	1.48	1.36
22	d	403	CLA	CHC-C1C	5.44	1.48	1.35
22	B	612	CLA	C3C-C2C	5.44	1.48	1.36
22	B	616	CLA	CHC-C1C	5.43	1.48	1.35
22	b	613	CLA	CHC-C1C	5.43	1.48	1.35
22	c	909	CLA	CHC-C1C	5.43	1.48	1.35
22	d	402	CLA	C3B-C2B	5.42	1.47	1.40
22	c	903	CLA	MG-NC	5.41	2.19	2.06
23	A	407	PHO	C3B-C2B	5.41	1.47	1.40
22	c	912	CLA	O2D-CGD	5.41	1.46	1.33
22	b	603	CLA	O2D-CGD	5.41	1.46	1.33
22	b	606	CLA	MG-ND	-5.40	1.95	2.05
22	a	407	CLA	MG-ND	5.39	2.16	2.05
22	c	914	CLA	MG-NA	5.38	2.19	2.06
22	C	513	CLA	O2D-CGD	5.38	1.46	1.33
22	C	512	CLA	C3C-C2C	5.38	1.48	1.36
22	a	412	CLA	CHC-C1C	5.37	1.48	1.35
22	b	614	CLA	CHC-C1C	5.37	1.48	1.35
22	a	412	CLA	O2D-CGD	5.37	1.46	1.33
22	C	503	CLA	CHC-C1C	5.36	1.48	1.35
39	v	202	HEC	C3D-C2D	5.35	1.53	1.37
22	B	603	CLA	C3B-C2B	5.35	1.47	1.40
22	b	609	CLA	CHC-C1C	5.35	1.48	1.35
22	C	508	CLA	CHC-C1C	5.34	1.48	1.35
22	B	617	CLA	C3C-C2C	5.34	1.48	1.36
22	b	602	CLA	CHD-C1D	5.33	1.48	1.38
22	a	412	CLA	CHD-C1D	5.33	1.48	1.38
22	C	506	CLA	C3C-C2C	5.33	1.48	1.36
22	c	912	CLA	C3B-C2B	5.33	1.47	1.40
22	D	404	CLA	C3C-C2C	5.32	1.48	1.36
22	d	402	CLA	CHC-C1C	5.31	1.48	1.35
22	a	407	CLA	O2D-CGD	5.31	1.46	1.33
22	a	407	CLA	CHC-C1C	5.31	1.48	1.35
22	B	602	CLA	O2D-CGD	5.31	1.46	1.33
22	c	907	CLA	C3B-C2B	5.30	1.47	1.40
22	C	507	CLA	CHC-C1C	5.30	1.48	1.35
22	C	504	CLA	C3C-C2C	5.30	1.48	1.36
22	C	502	CLA	CHC-C1C	5.30	1.48	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	910	CLA	C3B-C2B	5.29	1.47	1.40
22	B	610	CLA	MG-NC	5.27	2.18	2.06
22	C	508	CLA	C3C-C2C	5.27	1.47	1.36
22	C	505	CLA	CHC-C1C	5.27	1.48	1.35
22	C	510	CLA	O2D-CGD	5.26	1.46	1.33
22	a	408	CLA	CHC-C1C	5.26	1.48	1.35
22	A	405	CLA	C3C-C2C	5.26	1.47	1.36
22	b	604	CLA	O2D-CGD	5.26	1.46	1.33
22	c	914	CLA	CHC-C1C	5.26	1.48	1.35
22	D	401	CLA	C3C-C2C	5.25	1.47	1.36
27	A	412	LHG	O7-C7	5.25	1.47	1.35
22	b	608	CLA	O2D-CGD	5.24	1.46	1.33
22	c	904	CLA	CHC-C1C	5.24	1.48	1.35
22	B	607	CLA	CHC-C1C	5.23	1.48	1.35
22	d	403	CLA	O2A-CGA	5.23	1.48	1.33
22	c	907	CLA	O2D-CGD	5.23	1.46	1.33
22	D	404	CLA	CHD-C1D	5.23	1.48	1.38
22	C	510	CLA	C3C-C2C	5.22	1.47	1.36
22	c	904	CLA	CHD-C1D	5.22	1.48	1.38
22	C	513	CLA	C3B-C2B	5.22	1.47	1.40
22	b	613	CLA	MG-ND	5.21	2.16	2.05
22	b	611	CLA	C3C-C2C	5.21	1.47	1.36
22	B	606	CLA	CHC-C1C	5.21	1.48	1.35
22	c	911	CLA	CHC-C1C	5.20	1.48	1.35
22	B	615	CLA	C3C-C2C	5.20	1.47	1.36
22	b	615	CLA	O2D-CGD	5.20	1.45	1.33
22	d	403	CLA	OBD-CAD	5.19	1.31	1.22
22	C	509	CLA	CHC-C1C	5.19	1.48	1.35
22	c	910	CLA	O2D-CGD	5.19	1.45	1.33
22	C	511	CLA	C3B-C2B	5.18	1.47	1.40
22	B	609	CLA	CHC-C1C	5.18	1.48	1.35
22	b	606	CLA	C3C-C2C	5.18	1.47	1.36
22	d	403	CLA	C3B-C2B	5.17	1.47	1.40
22	C	514	CLA	CHD-C1D	5.16	1.48	1.38
22	B	604	CLA	CHD-C1D	5.16	1.48	1.38
22	a	412	CLA	MG-NC	5.15	2.18	2.06
22	b	604	CLA	CHD-C1D	5.15	1.48	1.38
31	u	205	DMS	O-S	5.15	1.85	1.50
22	B	607	CLA	C3C-C2C	5.15	1.47	1.36
22	c	913	CLA	CHC-C1C	5.15	1.48	1.35
22	B	603	CLA	CHC-C1C	5.15	1.48	1.35
22	B	617	CLA	C3B-C2B	5.14	1.47	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	609	CLA	CHD-C1D	5.14	1.48	1.38
22	b	609	CLA	CHD-C1D	5.14	1.48	1.38
22	C	512	CLA	O2D-CGD	5.14	1.45	1.33
22	C	502	CLA	MG-NA	5.14	2.18	2.06
22	B	604	CLA	C3C-C2C	5.13	1.47	1.36
22	c	903	CLA	CHC-C1C	5.13	1.48	1.35
22	c	906	CLA	C3C-C2C	5.12	1.47	1.36
22	c	902	CLA	C3C-C2C	5.12	1.47	1.36
22	B	612	CLA	O2D-CGD	5.12	1.45	1.33
22	B	605	CLA	CHD-C1D	5.11	1.48	1.38
22	c	907	CLA	C3C-C2C	5.11	1.47	1.36
22	d	403	CLA	C3C-C2C	5.09	1.47	1.36
22	C	507	CLA	O2D-CGD	5.09	1.45	1.33
22	c	905	CLA	CHC-C1C	5.08	1.48	1.35
22	C	502	CLA	C3C-C2C	5.08	1.47	1.36
22	b	607	CLA	CHC-C1C	5.08	1.48	1.35
22	c	909	CLA	C3B-C2B	5.08	1.47	1.40
31	a	425	DMS	O-S	5.07	1.84	1.50
22	c	914	CLA	C3B-C2B	5.07	1.47	1.40
22	A	406	CLA	O2D-CGD	5.07	1.45	1.33
22	b	613	CLA	C3B-C2B	5.07	1.47	1.40
22	B	602	CLA	CHD-C1D	5.06	1.48	1.38
22	C	506	CLA	CHD-C1D	5.06	1.48	1.38
31	O	311	DMS	O-S	5.06	1.84	1.50
31	b	638	DMS	O-S	5.06	1.84	1.50
22	c	906	CLA	CHD-C1D	5.05	1.48	1.38
22	C	510	CLA	CHC-C1C	5.04	1.47	1.35
22	b	613	CLA	O2D-CGD	5.04	1.45	1.33
22	B	604	CLA	O2D-CGD	5.03	1.45	1.33
22	c	903	CLA	C3B-C2B	5.03	1.47	1.40
22	b	614	CLA	C3C-C2C	5.02	1.47	1.36
22	b	607	CLA	C3C-C2C	5.02	1.47	1.36
35	D	407	DGD	O2G-C1B	5.02	1.48	1.34
27	a	416	LHG	O8-C23	5.02	1.48	1.33
22	b	603	CLA	CHD-C4C	5.01	1.50	1.39
22	B	602	CLA	C3C-C2C	5.01	1.47	1.36
22	c	912	CLA	C3C-C2C	5.00	1.47	1.36
22	C	512	CLA	C3B-C2B	5.00	1.47	1.40
22	B	609	CLA	C3B-C2B	5.00	1.47	1.40
22	c	902	CLA	C3B-C2B	4.99	1.47	1.40
22	C	507	CLA	CHD-C1D	4.99	1.48	1.38
22	B	615	CLA	O2D-CGD	4.99	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	611	CLA	O2D-CGD	4.98	1.45	1.33
39	v	202	HEC	C3C-C2C	-4.98	1.35	1.40
22	b	615	CLA	CHD-C1D	4.98	1.48	1.38
22	B	613	CLA	CHC-C1C	4.97	1.47	1.35
22	b	614	CLA	O2D-CGD	4.97	1.45	1.33
25	b	622	LMG	O8-C28	4.97	1.47	1.33
22	b	603	CLA	C3B-C2B	4.97	1.47	1.40
22	b	611	CLA	C3B-C2B	4.96	1.47	1.40
22	b	616	CLA	CHC-C1C	4.96	1.47	1.35
22	B	612	CLA	C3B-C2B	4.96	1.47	1.40
22	b	616	CLA	O2D-CGD	4.95	1.45	1.33
22	c	914	CLA	C3C-C2C	4.95	1.47	1.36
22	C	505	CLA	CHD-C4C	4.94	1.50	1.39
22	B	616	CLA	C3C-C2C	4.94	1.47	1.36
22	A	408	CLA	O2D-CGD	4.94	1.45	1.33
22	c	910	CLA	OBD-CAD	4.94	1.31	1.22
22	A	405	CLA	CHC-C1C	4.94	1.47	1.35
22	C	514	CLA	O2D-CGD	4.93	1.45	1.33
22	c	907	CLA	CHD-C1D	4.92	1.47	1.38
22	d	403	CLA	CHD-C1D	4.91	1.47	1.38
22	B	602	CLA	O2A-CGA	4.91	1.47	1.33
22	b	610	CLA	O2D-CGD	4.91	1.45	1.33
22	B	614	CLA	C3B-C2B	4.91	1.47	1.40
22	B	613	CLA	O2D-CGD	4.91	1.45	1.33
22	B	612	CLA	CHC-C1C	4.91	1.47	1.35
22	C	511	CLA	O2D-CGD	4.91	1.45	1.33
22	a	408	CLA	C3C-C2C	4.90	1.47	1.36
25	D	412	LMG	O8-C28	4.89	1.47	1.33
22	B	616	CLA	C3B-C2B	4.89	1.47	1.40
35	d	406	DGD	O2G-C1B	4.88	1.48	1.34
22	C	511	CLA	MG-NC	4.87	2.17	2.06
22	b	615	CLA	C3B-C2B	4.86	1.47	1.40
22	b	605	CLA	C3C-C2C	4.85	1.47	1.36
22	C	512	CLA	CHC-C1C	4.85	1.47	1.35
22	a	409	CLA	MG-ND	-4.85	1.96	2.05
22	B	613	CLA	C3B-C2B	4.84	1.47	1.40
31	H	103	DMS	O-S	4.84	1.82	1.50
35	d	406	DGD	O1G-C1A	4.83	1.47	1.33
22	B	613	CLA	C3C-C2C	4.83	1.47	1.36
22	a	409	CLA	C3B-C2B	4.83	1.47	1.40
22	A	408	CLA	CHD-C1D	4.82	1.47	1.38
31	O	305	DMS	O-S	4.82	1.82	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	c	937	DMS	O-S	4.82	1.82	1.50
22	b	614	CLA	CHD-C1D	4.81	1.47	1.38
31	B	628	DMS	O-S	4.81	1.82	1.50
22	d	402	CLA	C3C-C2C	4.80	1.46	1.36
25	B	621	LMG	O8-C28	4.80	1.47	1.33
22	C	507	CLA	C3B-C2B	4.80	1.47	1.40
22	b	617	CLA	O2D-CGD	4.80	1.44	1.33
23	a	411	PHO	OBD-CAD	4.79	1.29	1.22
22	A	408	CLA	CHC-C1C	4.79	1.47	1.35
22	B	604	CLA	CHC-C1C	4.79	1.47	1.35
22	B	604	CLA	C3B-C2B	4.79	1.47	1.40
22	c	903	CLA	C3C-C2C	4.79	1.46	1.36
25	D	412	LMG	O7-C10	4.78	1.47	1.34
31	c	933	DMS	O-S	4.78	1.82	1.50
31	v	210	DMS	O-S	4.78	1.82	1.50
22	b	610	CLA	C1D-ND	-4.78	1.31	1.37
31	c	924	DMS	O-S	4.77	1.82	1.50
22	B	604	CLA	MG-NC	4.77	2.17	2.06
22	b	610	CLA	C3C-C2C	4.77	1.46	1.36
22	c	906	CLA	CHD-C4C	4.77	1.50	1.39
22	A	406	CLA	CHC-C1C	4.77	1.47	1.35
22	b	615	CLA	CHC-C1C	4.77	1.47	1.35
31	B	630	DMS	O-S	4.76	1.82	1.50
25	C	531	LMG	O7-C10	4.75	1.47	1.34
22	B	608	CLA	CHC-C1C	4.75	1.47	1.35
22	C	512	CLA	O2A-CGA	4.75	1.47	1.33
22	D	401	CLA	OBD-CAD	4.75	1.30	1.22
25	c	930	LMG	O7-C10	4.75	1.47	1.34
31	o	304	DMS	O-S	4.75	1.82	1.50
22	b	612	CLA	O2D-CGD	4.74	1.44	1.33
22	B	613	CLA	CHD-C1D	4.73	1.47	1.38
22	b	608	CLA	CHC-C1C	4.73	1.47	1.35
22	c	911	CLA	CHD-C1D	4.73	1.47	1.38
25	C	520	LMG	O8-C28	4.72	1.47	1.33
22	C	510	CLA	O2A-CGA	4.72	1.47	1.33
22	A	408	CLA	MG-NC	4.72	2.17	2.06
22	a	409	CLA	CHC-C1C	4.72	1.47	1.35
22	B	614	CLA	MG-ND	-4.72	1.96	2.05
22	C	502	CLA	MG-NC	4.72	2.17	2.06
35	D	407	DGD	O1G-C1A	4.72	1.47	1.33
27	a	416	LHG	O7-C7	4.71	1.47	1.34
22	C	508	CLA	CHD-C1D	4.71	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	603	CLA	CHD-C1D	4.71	1.47	1.38
22	B	605	CLA	CHC-C1C	4.71	1.47	1.35
22	c	914	CLA	CHD-C1D	4.70	1.47	1.38
22	c	907	CLA	CHC-C1C	4.70	1.47	1.35
22	B	612	CLA	CHD-C1D	4.70	1.47	1.38
31	B	634	DMS	O-S	4.70	1.82	1.50
31	V	211	DMS	O-S	4.70	1.82	1.50
31	c	929	DMS	O-S	4.69	1.82	1.50
22	C	507	CLA	C3C-C2C	4.69	1.46	1.36
22	B	607	CLA	O2D-CGD	4.69	1.44	1.33
22	B	615	CLA	C3B-C2B	4.68	1.46	1.40
25	i	101	LMG	O8-C28	4.68	1.47	1.33
31	B	635	DMS	O-S	4.68	1.81	1.50
22	a	407	CLA	C3B-C2B	4.68	1.46	1.40
27	C	522	LHG	O7-C7	4.68	1.47	1.34
22	b	607	CLA	O2D-CGD	4.68	1.44	1.33
22	B	608	CLA	O2D-CGD	4.67	1.44	1.33
22	D	404	CLA	C3B-C2B	4.67	1.46	1.40
22	b	612	CLA	CHC-C1C	4.67	1.46	1.35
25	c	920	LMG	O8-C28	4.67	1.47	1.33
31	o	308	DMS	O-S	4.66	1.81	1.50
31	B	637	DMS	O-S	4.66	1.81	1.50
22	C	503	CLA	CHD-C1D	4.66	1.47	1.38
22	b	604	CLA	CHC-C1C	4.66	1.46	1.35
22	B	617	CLA	CHC-C1C	4.65	1.46	1.35
22	D	404	CLA	O2D-CGD	4.65	1.44	1.33
22	C	509	CLA	CHD-C1D	4.65	1.47	1.38
22	c	913	CLA	O2D-CGD	4.65	1.44	1.33
22	a	407	CLA	CHD-C1D	4.65	1.47	1.38
31	O	308	DMS	O-S	4.64	1.81	1.50
22	B	614	CLA	C3C-C2C	4.64	1.46	1.36
22	C	510	CLA	CHD-C1D	4.64	1.47	1.38
31	O	307	DMS	O-S	4.64	1.81	1.50
31	B	641	DMS	O-S	4.64	1.81	1.50
31	c	939	DMS	O-S	4.64	1.81	1.50
27	d	401	LHG	O8-C23	4.64	1.46	1.33
31	V	212	DMS	O-S	4.64	1.81	1.50
31	V	210	DMS	O-S	4.64	1.81	1.50
22	b	607	CLA	CHD-C1D	4.63	1.47	1.38
31	b	635	DMS	O-S	4.63	1.81	1.50
31	C	540	DMS	O-S	4.63	1.81	1.50
31	u	204	DMS	O-S	4.63	1.81	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	v	211	DMS	O-S	4.63	1.81	1.50
28	a	414	SQD	O48-C23	4.63	1.46	1.33
22	b	607	CLA	C3B-C2B	4.63	1.46	1.40
22	C	509	CLA	C3B-C2B	4.62	1.46	1.40
31	l	104	DMS	O-S	4.62	1.81	1.50
22	b	615	CLA	O2A-CGA	4.62	1.46	1.33
22	B	610	CLA	C3C-C2C	4.62	1.46	1.36
31	c	938	DMS	O-S	4.61	1.81	1.50
22	c	903	CLA	CHD-C1D	4.61	1.47	1.38
22	B	607	CLA	MG-ND	-4.61	1.96	2.05
22	C	506	CLA	C3B-C2B	4.61	1.46	1.40
31	O	303	DMS	O-S	4.61	1.81	1.50
22	b	609	CLA	C3B-C2B	4.60	1.46	1.40
25	B	621	LMG	O7-C10	4.60	1.47	1.34
22	b	605	CLA	CHC-C1C	4.60	1.46	1.35
31	U	203	DMS	O-S	4.60	1.81	1.50
22	b	613	CLA	C3C-C2C	4.60	1.46	1.36
31	D	417	DMS	O-S	4.60	1.81	1.50
31	V	206	DMS	O-S	4.59	1.81	1.50
22	C	505	CLA	O2D-CGD	4.59	1.44	1.33
22	c	913	CLA	CHD-C1D	4.59	1.47	1.38
22	a	407	CLA	MG-NC	4.58	2.17	2.06
22	B	614	CLA	CHD-C1D	4.58	1.47	1.38
31	C	537	DMS	O-S	4.58	1.81	1.50
31	V	207	DMS	O-S	4.58	1.81	1.50
31	I	101	DMS	O-S	4.57	1.81	1.50
22	C	511	CLA	CHC-C1C	4.57	1.46	1.35
31	B	639	DMS	O-S	4.57	1.81	1.50
22	b	616	CLA	MG-NC	4.57	2.17	2.06
23	a	410	PHO	C3D-C2D	4.57	1.47	1.39
22	c	910	CLA	O2A-CGA	4.57	1.46	1.33
31	C	533	DMS	O-S	4.57	1.81	1.50
22	c	911	CLA	C3C-C2C	4.56	1.46	1.36
22	B	608	CLA	CHD-C4C	4.56	1.49	1.39
22	c	904	CLA	C3B-C2B	4.56	1.46	1.40
22	d	402	CLA	O2A-CGA	4.56	1.46	1.33
31	a	401	DMS	O-S	4.56	1.81	1.50
31	C	535	DMS	O-S	4.56	1.81	1.50
22	b	610	CLA	CHD-C1D	4.56	1.47	1.38
22	B	609	CLA	O2D-CGD	4.56	1.44	1.33
31	l	105	DMS	O-S	4.56	1.81	1.50
31	O	314	DMS	O-S	4.55	1.81	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	c	942	DMS	O-S	4.55	1.81	1.50
22	b	605	CLA	O2D-CGD	4.55	1.44	1.33
22	B	605	CLA	C3C-C2C	4.55	1.46	1.36
22	c	910	CLA	MG-NC	4.55	2.17	2.06
31	L	102	DMS	O-S	4.55	1.81	1.50
22	a	407	CLA	C3C-C2C	4.55	1.46	1.36
31	a	424	DMS	O-S	4.55	1.81	1.50
31	b	637	DMS	O-S	4.55	1.81	1.50
27	A	412	LHG	O8-C23	4.55	1.46	1.33
31	c	940	DMS	O-S	4.54	1.80	1.50
25	C	520	LMG	O7-C10	4.54	1.47	1.34
31	b	634	DMS	O-S	4.54	1.80	1.50
28	a	418	SQD	O48-C23	4.54	1.46	1.33
31	u	203	DMS	O-S	4.54	1.80	1.50
31	U	202	DMS	O-S	4.54	1.80	1.50
31	V	204	DMS	O-S	4.53	1.80	1.50
31	d	411	DMS	O-S	4.53	1.80	1.50
31	O	306	DMS	O-S	4.53	1.80	1.50
22	c	914	CLA	O2A-CGA	4.53	1.46	1.33
31	C	536	DMS	O-S	4.53	1.80	1.50
31	f	103	DMS	O-S	4.53	1.80	1.50
31	b	630	DMS	O-S	4.53	1.80	1.50
31	t	104	DMS	O-S	4.53	1.80	1.50
23	D	402	PHO	OBD-CAD	4.53	1.28	1.22
31	A	419	DMS	O-S	4.52	1.80	1.50
31	c	928	DMS	O-S	4.52	1.80	1.50
31	c	944	DMS	O-S	4.52	1.80	1.50
31	t	103	DMS	O-S	4.52	1.80	1.50
22	C	506	CLA	O2D-CGD	4.52	1.44	1.33
22	d	403	CLA	CHD-C4C	4.52	1.49	1.39
22	b	609	CLA	MG-ND	-4.52	1.96	2.05
31	B	633	DMS	O-S	4.52	1.80	1.50
22	B	616	CLA	CHD-C1D	4.52	1.47	1.38
31	t	105	DMS	O-S	4.52	1.80	1.50
31	l	103	DMS	O-S	4.52	1.80	1.50
31	o	302	DMS	O-S	4.51	1.80	1.50
22	b	606	CLA	O2D-CGD	4.51	1.44	1.33
31	c	943	DMS	O-S	4.51	1.80	1.50
31	v	207	DMS	O-S	4.51	1.80	1.50
22	d	403	CLA	O2D-CGD	4.51	1.44	1.33
22	B	615	CLA	MG-NA	4.51	2.17	2.06
31	A	420	DMS	O-S	4.50	1.80	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	V	202	HEC	C3D-C2D	4.50	1.51	1.37
31	o	303	DMS	O-S	4.50	1.80	1.50
31	C	534	DMS	O-S	4.50	1.80	1.50
23	A	407	PHO	O2D-CGD	4.50	1.44	1.33
22	C	504	CLA	O2D-CGD	4.50	1.44	1.33
31	b	631	DMS	O-S	4.49	1.80	1.50
31	d	414	DMS	O-S	4.49	1.80	1.50
22	c	906	CLA	O2D-CGD	4.49	1.44	1.33
31	c	936	DMS	O-S	4.49	1.80	1.50
22	b	611	CLA	CHD-C1D	4.49	1.47	1.38
22	a	408	CLA	CHD-C4C	4.49	1.49	1.39
22	c	903	CLA	O2D-CGD	4.49	1.44	1.33
31	c	925	DMS	O-S	4.49	1.80	1.50
31	C	539	DMS	O-S	4.49	1.80	1.50
31	v	206	DMS	O-S	4.49	1.80	1.50
22	b	608	CLA	C3B-C2B	4.48	1.46	1.40
31	C	527	DMS	O-S	4.48	1.80	1.50
22	C	504	CLA	O2A-CGA	4.48	1.46	1.33
31	C	530	DMS	O-S	4.48	1.80	1.50
28	l	101	SQD	O47-C7	4.48	1.46	1.34
28	l	101	SQD	O48-C23	4.48	1.46	1.33
31	I	106	DMS	O-S	4.48	1.80	1.50
35	H	102	DGD	O1G-C1A	4.48	1.46	1.33
28	a	418	SQD	O47-C7	4.48	1.46	1.34
28	b	621	SQD	O48-C23	4.48	1.46	1.33
23	a	411	PHO	O2D-CGD	4.47	1.44	1.33
35	c	919	DGD	O1G-C1A	4.47	1.46	1.33
22	C	506	CLA	C1D-ND	-4.47	1.32	1.37
31	A	417	DMS	O-S	4.47	1.80	1.50
22	B	610	CLA	O2D-CGD	4.47	1.44	1.33
27	D	409	LHG	O8-C23	4.46	1.46	1.33
31	b	633	DMS	O-S	4.46	1.80	1.50
31	B	642	DMS	O-S	4.46	1.80	1.50
22	C	503	CLA	O2D-CGD	4.46	1.44	1.33
22	c	912	CLA	CHD-C4C	4.46	1.49	1.39
22	B	613	CLA	MG-ND	-4.46	1.97	2.05
31	C	529	DMS	O-S	4.46	1.80	1.50
22	C	504	CLA	CHD-C1D	4.45	1.47	1.38
31	A	416	DMS	O-S	4.45	1.80	1.50
31	b	636	DMS	O-S	4.45	1.80	1.50
31	V	209	DMS	O-S	4.45	1.80	1.50
31	v	204	DMS	O-S	4.44	1.80	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	611	CLA	O2D-CGD	4.44	1.44	1.33
31	c	927	DMS	O-S	4.44	1.80	1.50
31	C	538	DMS	O-S	4.44	1.80	1.50
31	F	101	DMS	O-S	4.44	1.80	1.50
31	c	934	DMS	O-S	4.44	1.80	1.50
25	j	101	LMG	O8-C28	4.44	1.46	1.33
22	C	506	CLA	MG-NC	4.44	2.16	2.06
31	B	638	DMS	O-S	4.44	1.80	1.50
31	c	935	DMS	O-S	4.43	1.80	1.50
22	b	613	CLA	CHD-C1D	4.43	1.47	1.38
22	b	615	CLA	MG-ND	-4.43	1.97	2.05
22	c	904	CLA	O2D-CGD	4.42	1.44	1.33
31	a	421	DMS	O-S	4.42	1.80	1.50
22	D	401	CLA	O2D-CGD	4.42	1.44	1.33
31	O	310	DMS	O-S	4.42	1.80	1.50
28	C	501	SQD	O47-C7	4.42	1.46	1.34
23	a	410	PHO	C3B-C2B	4.42	1.46	1.40
22	B	605	CLA	OBD-CAD	4.42	1.30	1.22
25	b	622	LMG	O7-C10	4.42	1.46	1.34
22	c	911	CLA	O2D-CGD	4.42	1.44	1.33
22	A	408	CLA	C3B-C2B	4.41	1.46	1.40
22	c	913	CLA	O2A-CGA	4.41	1.46	1.33
31	B	632	DMS	O-S	4.41	1.80	1.50
22	C	510	CLA	C3B-C2B	4.41	1.46	1.40
22	C	506	CLA	CHD-C4C	4.41	1.49	1.39
22	A	405	CLA	O2D-CGD	4.41	1.44	1.33
39	V	202	HEC	C3C-C2C	-4.41	1.36	1.40
25	d	409	LMG	O8-C28	4.41	1.46	1.33
22	c	908	CLA	O2D-CGD	4.41	1.44	1.33
25	C	531	LMG	O8-C28	4.40	1.46	1.33
31	o	306	DMS	O-S	4.40	1.80	1.50
31	i	106	DMS	O-S	4.40	1.80	1.50
31	v	209	DMS	O-S	4.40	1.80	1.50
31	O	312	DMS	O-S	4.40	1.80	1.50
27	a	423	LHG	O8-C23	4.40	1.46	1.33
31	C	526	DMS	O-S	4.40	1.79	1.50
31	C	528	DMS	O-S	4.40	1.79	1.50
22	A	405	CLA	MG-ND	-4.39	1.97	2.05
31	v	205	DMS	O-S	4.39	1.79	1.50
31	O	313	DMS	O-S	4.39	1.79	1.50
31	c	926	DMS	O-S	4.39	1.79	1.50
23	a	410	PHO	O2D-CGD	4.39	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	514	CLA	O2A-CGA	4.39	1.46	1.33
25	A	410	LMG	O8-C28	4.39	1.46	1.33
22	c	909	CLA	CHD-C1D	4.39	1.46	1.38
31	v	208	DMS	O-S	4.38	1.79	1.50
22	b	617	CLA	MG-ND	4.38	2.14	2.05
22	B	606	CLA	C3C-C2C	4.38	1.46	1.36
22	D	403	CLA	C3C-C2C	4.38	1.46	1.36
22	B	606	CLA	CHD-C1D	4.38	1.46	1.38
22	B	606	CLA	C3B-C2B	4.38	1.46	1.40
31	V	205	DMS	O-S	4.38	1.79	1.50
31	o	307	DMS	O-S	4.38	1.79	1.50
22	b	605	CLA	MG-NC	4.37	2.16	2.06
22	a	409	CLA	O2D-CGD	4.37	1.43	1.33
25	c	930	LMG	O8-C28	4.36	1.46	1.33
34	B	623	HTG	C1'-S1	-4.36	1.75	1.81
31	o	305	DMS	O-S	4.36	1.79	1.50
22	C	513	CLA	CHD-C1D	4.36	1.46	1.38
22	C	511	CLA	CHD-C1D	4.35	1.46	1.38
27	C	522	LHG	O8-C23	4.35	1.46	1.33
31	B	640	DMS	O-S	4.35	1.79	1.50
22	A	405	CLA	CHD-C1D	4.34	1.46	1.38
31	V	201	DMS	O-S	4.34	1.79	1.50
31	V	208	DMS	O-S	4.34	1.79	1.50
22	B	611	CLA	CHD-C1D	4.33	1.46	1.38
31	d	415	DMS	O-S	4.33	1.79	1.50
35	C	518	DGD	O1G-C1A	4.33	1.46	1.33
31	c	941	DMS	O-S	4.33	1.79	1.50
22	C	502	CLA	CHD-C1D	4.33	1.46	1.38
22	c	908	CLA	O2A-CGA	4.33	1.46	1.33
31	u	202	DMS	O-S	4.32	1.79	1.50
22	c	911	CLA	MG-NC	4.32	2.16	2.06
22	c	902	CLA	CHD-C1D	4.32	1.46	1.38
22	b	613	CLA	O2A-CGA	4.32	1.46	1.33
35	h	102	DGD	O1G-C1A	4.32	1.46	1.33
22	c	910	CLA	C3C-C2C	4.31	1.45	1.36
31	O	304	DMS	O-S	4.31	1.79	1.50
22	b	603	CLA	O2A-CGA	4.31	1.45	1.33
22	b	602	CLA	CHD-C4C	4.31	1.49	1.39
22	C	507	CLA	MG-NC	4.31	2.16	2.06
22	C	508	CLA	O2D-CGD	4.31	1.43	1.33
22	B	607	CLA	O2A-CGA	4.31	1.45	1.33
31	B	636	DMS	O-S	4.30	1.79	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	B	629	DMS	O-S	4.29	1.79	1.50
22	D	403	CLA	CHD-C1D	4.29	1.46	1.38
22	a	409	CLA	CHD-C1D	4.29	1.46	1.38
22	D	404	CLA	OBD-CAD	4.29	1.29	1.22
22	b	616	CLA	CHD-C1D	4.29	1.46	1.38
22	b	610	CLA	O2A-CGA	4.29	1.45	1.33
23	D	402	PHO	O2A-CGA	4.29	1.45	1.33
22	C	509	CLA	O2D-CGD	4.28	1.43	1.33
22	B	611	CLA	C3B-C2B	4.28	1.46	1.40
22	b	610	CLA	C3B-C2B	4.28	1.46	1.40
22	c	904	CLA	O2A-CGA	4.28	1.45	1.33
22	c	906	CLA	MG-NC	4.28	2.16	2.06
22	C	507	CLA	O2A-CGA	4.27	1.45	1.33
31	v	201	DMS	O-S	4.27	1.79	1.50
31	d	413	DMS	O-S	4.27	1.79	1.50
22	C	511	CLA	C3C-C2C	4.27	1.45	1.36
22	b	612	CLA	C3C-C2C	4.27	1.45	1.36
22	c	904	CLA	OBD-CAD	4.27	1.29	1.22
22	A	405	CLA	OBD-CAD	4.27	1.29	1.22
22	c	911	CLA	C3B-C2B	4.27	1.46	1.40
22	B	610	CLA	CHD-C1D	4.26	1.46	1.38
27	d	401	LHG	O7-C7	4.26	1.46	1.34
25	i	101	LMG	O7-C10	4.25	1.46	1.34
31	B	631	DMS	O-S	4.25	1.78	1.50
22	B	614	CLA	MG-NC	4.24	2.16	2.06
31	d	412	DMS	O-S	4.24	1.78	1.50
22	B	609	CLA	O2A-CGA	4.24	1.45	1.33
22	d	402	CLA	CHD-C4C	4.24	1.48	1.39
35	h	102	DGD	O2G-C1B	4.23	1.46	1.34
22	A	406	CLA	MG-ND	4.23	2.14	2.05
22	B	608	CLA	C3B-C2B	4.23	1.46	1.40
22	B	617	CLA	O2D-CGD	4.22	1.43	1.33
28	a	414	SQD	O47-C7	4.22	1.46	1.34
22	D	404	CLA	C4C-C3C	4.22	1.52	1.45
31	O	309	DMS	O-S	4.22	1.78	1.50
31	c	923	DMS	O-S	4.21	1.78	1.50
22	B	617	CLA	O2A-CGA	4.21	1.45	1.33
31	D	416	DMS	O-S	4.21	1.78	1.50
22	a	412	CLA	C3B-C2B	4.19	1.46	1.40
22	d	402	CLA	O2D-CGD	4.19	1.43	1.33
22	c	907	CLA	CHD-C4C	4.19	1.48	1.39
22	B	602	CLA	CHD-C4C	4.18	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	l	102	LHG	O7-C7	4.18	1.46	1.34
22	B	604	CLA	O2A-CGA	4.18	1.45	1.33
22	D	401	CLA	MG-NA	4.17	2.16	2.06
22	d	402	CLA	CHD-C1D	4.16	1.46	1.38
22	c	907	CLA	O2A-CGA	4.16	1.45	1.33
25	c	920	LMG	O7-C10	4.16	1.46	1.34
22	B	603	CLA	CHD-C4C	4.16	1.48	1.39
22	b	617	CLA	O2A-CGA	4.16	1.45	1.33
22	C	504	CLA	CHD-C4C	4.15	1.48	1.39
22	c	910	CLA	CHC-C1C	4.15	1.45	1.35
27	d	408	LHG	O8-C23	4.14	1.45	1.33
22	b	611	CLA	C1D-ND	-4.14	1.32	1.37
22	C	507	CLA	CHD-C4C	4.14	1.48	1.39
22	c	902	CLA	O2D-CGD	4.14	1.43	1.33
22	c	909	CLA	CHD-C4C	4.14	1.48	1.39
22	b	605	CLA	CHD-C1D	4.13	1.46	1.38
22	c	906	CLA	O2A-CGA	4.13	1.45	1.33
22	B	606	CLA	MG-ND	-4.12	1.97	2.05
22	b	614	CLA	C3B-C2B	4.12	1.46	1.40
23	A	407	PHO	O2A-CGA	4.12	1.45	1.33
31	C	524	DMS	O-S	4.12	1.78	1.50
22	C	502	CLA	O2D-CGD	4.12	1.43	1.33
25	d	409	LMG	O7-C10	4.11	1.45	1.34
22	B	610	CLA	C3B-C2B	4.11	1.46	1.40
22	D	403	CLA	O2A-CGA	4.11	1.45	1.33
22	C	502	CLA	CHD-C4C	4.11	1.48	1.39
22	a	408	CLA	O2D-CGD	4.11	1.43	1.33
22	b	614	CLA	CHD-C4C	4.11	1.48	1.39
22	b	617	CLA	CHD-C1D	4.11	1.46	1.38
22	b	609	CLA	O2A-CGA	4.10	1.45	1.33
22	b	616	CLA	OBD-CAD	4.10	1.29	1.22
28	A	413	SQD	O48-C23	4.10	1.45	1.33
22	b	612	CLA	O2A-CGA	4.09	1.45	1.33
22	B	605	CLA	O2D-CGD	4.09	1.43	1.33
22	b	608	CLA	CHD-C4C	4.09	1.48	1.39
22	A	406	CLA	OBD-CAD	4.09	1.29	1.22
22	b	616	CLA	CHD-C4C	4.08	1.48	1.39
22	B	610	CLA	O2A-CGA	4.08	1.45	1.33
22	B	608	CLA	C3C-C2C	4.08	1.45	1.36
25	A	410	LMG	O7-C10	4.07	1.45	1.34
22	B	615	CLA	OBD-CAD	4.07	1.29	1.22
22	C	510	CLA	OBD-CAD	4.06	1.29	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	E	102	HEM	C3C-CAC	4.06	1.56	1.47
22	c	911	CLA	CHD-C4C	4.04	1.48	1.39
22	C	506	CLA	O2A-CGA	4.04	1.45	1.33
22	b	606	CLA	O2A-CGA	4.03	1.45	1.33
35	C	519	DGD	O1G-C1A	4.03	1.45	1.33
22	C	512	CLA	CHD-C1D	4.03	1.46	1.38
22	b	605	CLA	C4B-NB	-4.02	1.31	1.35
22	b	616	CLA	O2A-CGA	4.02	1.45	1.33
22	b	603	CLA	CHD-C1D	4.02	1.46	1.38
31	a	402	DMS	O-S	4.00	1.77	1.50
22	b	610	CLA	OBD-CAD	4.00	1.29	1.22
22	a	407	CLA	CHD-C4C	4.00	1.48	1.39
35	H	102	DGD	O2G-C1B	4.00	1.45	1.34
22	a	412	CLA	O2A-CGA	3.99	1.45	1.33
31	A	418	DMS	O-S	3.99	1.77	1.50
25	J	101	LMG	O7-C10	3.99	1.45	1.34
22	b	613	CLA	OBD-CAD	3.98	1.29	1.22
22	c	909	CLA	OBD-CAD	3.97	1.29	1.22
31	C	525	DMS	O-S	3.97	1.77	1.50
22	C	513	CLA	O2A-CGA	3.97	1.44	1.33
22	B	616	CLA	CHD-C4C	3.97	1.48	1.39
31	D	418	DMS	O-S	3.97	1.77	1.50
22	B	612	CLA	OBD-CAD	3.97	1.29	1.22
22	c	911	CLA	OBD-CAD	3.95	1.29	1.22
22	a	412	CLA	CHD-C4C	3.95	1.48	1.39
22	B	604	CLA	CHD-C4C	3.95	1.48	1.39
23	D	402	PHO	C3D-C2D	3.94	1.46	1.39
22	B	614	CLA	OBD-CAD	3.94	1.29	1.22
22	b	610	CLA	MG-NC	3.94	2.15	2.06
22	B	608	CLA	OBD-CAD	3.94	1.29	1.22
22	B	603	CLA	O2D-CGD	3.94	1.42	1.33
25	J	101	LMG	O8-C28	3.93	1.44	1.33
23	a	411	PHO	C3D-C2D	3.93	1.46	1.39
22	C	502	CLA	O2A-CGA	3.93	1.44	1.33
28	A	413	SQD	O47-C7	3.92	1.45	1.34
22	B	614	CLA	O2A-CGA	3.92	1.44	1.33
22	C	503	CLA	C3B-C2B	3.92	1.45	1.40
22	b	604	CLA	C1D-ND	-3.91	1.33	1.37
27	L	101	LHG	O8-C23	3.91	1.44	1.33
22	B	614	CLA	O2D-CGD	3.91	1.42	1.33
22	C	502	CLA	C3B-C2B	3.91	1.45	1.40
22	C	509	CLA	CHD-C4C	3.91	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	c	918	DGD	O1G-C1A	3.91	1.44	1.33
22	c	903	CLA	MG-NA	3.90	2.15	2.06
27	l	102	LHG	O8-C23	3.90	1.44	1.33
22	B	605	CLA	CHD-C4C	3.90	1.48	1.39
22	a	408	CLA	O2A-CGA	3.89	1.44	1.33
22	A	405	CLA	C3B-C2B	3.89	1.45	1.40
22	a	409	CLA	O2A-CGA	3.88	1.44	1.33
27	D	411	LHG	O7-C7	3.88	1.45	1.34
22	c	907	CLA	C1D-ND	-3.88	1.33	1.37
22	c	908	CLA	OBD-CAD	3.88	1.29	1.22
35	c	917	DGD	O2G-C1B	3.88	1.45	1.34
22	b	615	CLA	CHD-C4C	3.88	1.48	1.39
27	a	423	LHG	O7-C7	3.87	1.45	1.34
22	D	404	CLA	O2A-CGA	3.87	1.44	1.33
22	D	404	CLA	CHD-C4C	3.86	1.48	1.39
28	C	501	SQD	O48-C23	3.85	1.44	1.33
22	b	612	CLA	CHD-C1D	3.85	1.45	1.38
22	c	911	CLA	C3D-C2D	3.85	1.49	1.39
22	B	611	CLA	CHD-C4C	3.85	1.48	1.39
27	L	101	LHG	O7-C7	3.85	1.45	1.34
22	C	512	CLA	CHD-C4C	3.84	1.48	1.39
22	c	914	CLA	MG-ND	3.84	2.13	2.05
22	B	603	CLA	O2A-CGA	3.84	1.44	1.33
22	C	511	CLA	CHD-C4C	3.84	1.48	1.39
22	b	617	CLA	C1D-ND	-3.83	1.33	1.37
27	D	409	LHG	O7-C7	3.83	1.45	1.34
22	B	606	CLA	O2D-CGD	3.83	1.42	1.33
22	c	914	CLA	CHD-C4C	3.83	1.48	1.39
22	a	408	CLA	OBD-CAD	3.82	1.29	1.22
22	b	609	CLA	OBD-CAD	3.82	1.29	1.22
22	B	602	CLA	C4C-C3C	3.82	1.51	1.45
22	B	616	CLA	O2A-CGA	3.80	1.44	1.33
22	D	403	CLA	C1D-ND	-3.80	1.33	1.37
22	c	909	CLA	O2A-CGA	3.80	1.44	1.33
22	b	609	CLA	O2D-CGD	3.80	1.42	1.33
22	A	408	CLA	CHD-C4C	3.80	1.47	1.39
22	C	512	CLA	OBD-CAD	3.80	1.29	1.22
22	C	509	CLA	O2A-CGA	3.79	1.44	1.33
22	c	913	CLA	MG-ND	-3.79	1.98	2.05
22	b	606	CLA	CHD-C1D	3.79	1.45	1.38
22	C	503	CLA	O2A-CGA	3.79	1.44	1.33
34	C	532	HTG	C1'-S1	-3.78	1.76	1.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	513	CLA	CHD-C4C	3.78	1.47	1.39
22	b	608	CLA	C3D-C2D	3.77	1.49	1.39
22	c	910	CLA	CHD-C4C	3.77	1.47	1.39
22	a	412	CLA	C1D-ND	-3.77	1.33	1.37
22	D	401	CLA	CHC-C1C	3.77	1.44	1.35
22	d	403	CLA	C3D-C2D	3.76	1.49	1.39
31	b	629	DMS	O-S	3.76	1.75	1.50
25	j	101	LMG	O7-C10	3.76	1.44	1.34
22	c	908	CLA	CHD-C1D	3.75	1.45	1.38
22	C	504	CLA	OBD-CAD	3.75	1.28	1.22
22	B	609	CLA	C1D-ND	-3.75	1.33	1.37
22	C	506	CLA	OBD-CAD	3.75	1.28	1.22
22	B	612	CLA	O2A-CGA	3.74	1.44	1.33
22	D	401	CLA	CHD-C4C	3.74	1.47	1.39
22	b	602	CLA	OBD-CAD	3.73	1.28	1.22
22	b	602	CLA	C3D-C2D	3.72	1.49	1.39
22	C	514	CLA	CHD-C4C	3.72	1.47	1.39
35	c	919	DGD	O2G-C1B	3.72	1.44	1.34
22	C	510	CLA	C3D-C2D	3.71	1.49	1.39
22	b	604	CLA	MG-ND	3.71	2.13	2.05
22	a	408	CLA	CHD-C1D	3.71	1.45	1.38
22	C	506	CLA	C4C-C3C	3.71	1.51	1.45
34	b	623	HTG	C1'-S1	-3.71	1.76	1.81
22	B	612	CLA	CHD-C4C	3.70	1.47	1.39
22	C	509	CLA	C3D-C2D	3.70	1.49	1.39
22	B	617	CLA	CHD-C1D	3.70	1.45	1.38
22	b	603	CLA	C4D-ND	3.70	1.42	1.37
22	a	409	CLA	CHD-C4C	3.70	1.47	1.39
23	a	411	PHO	C3C-C2C	3.69	1.48	1.37
22	c	903	CLA	CHD-C4C	3.69	1.47	1.39
22	b	614	CLA	O2A-CGA	3.68	1.44	1.33
22	a	408	CLA	C1D-ND	-3.68	1.33	1.37
35	c	917	DGD	O1G-C1A	3.68	1.44	1.33
22	D	403	CLA	O2D-CGD	3.67	1.42	1.33
22	c	904	CLA	CHD-C4C	3.67	1.47	1.39
39	v	202	HEC	CBC-CAC	-3.67	1.35	1.49
22	B	607	CLA	CHD-C1D	3.67	1.45	1.38
22	c	908	CLA	CHD-C4C	3.66	1.47	1.39
27	D	411	LHG	O8-C23	3.66	1.44	1.33
22	B	607	CLA	C4B-CHC	3.66	1.51	1.41
22	A	406	CLA	CHD-C4C	3.65	1.47	1.39
22	C	508	CLA	CHD-C4C	3.65	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	606	CLA	C1D-ND	-3.65	1.33	1.37
22	b	606	CLA	CHD-C4C	3.65	1.47	1.39
22	a	409	CLA	C3C-C2C	3.65	1.44	1.36
23	a	411	PHO	O2A-CGA	3.64	1.44	1.33
22	c	913	CLA	CHD-C4C	3.64	1.47	1.39
22	d	403	CLA	C4C-C3C	3.64	1.51	1.45
22	B	613	CLA	O2A-CGA	3.64	1.44	1.33
22	A	408	CLA	OBD-CAD	3.64	1.28	1.22
22	c	911	CLA	O2A-CGA	3.63	1.43	1.33
22	B	617	CLA	MG-ND	3.63	2.13	2.05
22	b	611	CLA	O2A-CGA	3.63	1.43	1.33
22	b	611	CLA	CHD-C4C	3.62	1.47	1.39
22	C	511	CLA	O2A-CGA	3.62	1.43	1.33
22	c	905	CLA	C3B-C2B	3.62	1.45	1.40
22	B	605	CLA	C3B-C2B	3.62	1.45	1.40
22	b	615	CLA	C3D-C2D	3.61	1.49	1.39
22	c	902	CLA	O2A-CGA	3.60	1.43	1.33
22	B	617	CLA	CHD-C4C	3.60	1.47	1.39
22	B	615	CLA	CHD-C4C	3.60	1.47	1.39
22	b	604	CLA	CHD-C4C	3.60	1.47	1.39
22	b	607	CLA	C1D-ND	-3.60	1.33	1.37
22	a	407	CLA	O2A-CGA	3.59	1.43	1.33
22	c	907	CLA	OBD-CAD	3.59	1.28	1.22
23	a	410	PHO	O2A-CGA	3.58	1.43	1.33
22	d	402	CLA	MG-NC	3.58	2.14	2.06
22	B	617	CLA	C3D-C2D	3.58	1.48	1.39
35	c	918	DGD	O2G-C1B	3.58	1.44	1.34
22	C	514	CLA	C4B-CHC	3.58	1.50	1.41
22	A	408	CLA	O2A-CGA	3.57	1.43	1.33
22	B	605	CLA	MG-ND	3.56	2.12	2.05
22	b	605	CLA	C3B-C2B	3.56	1.45	1.40
22	c	902	CLA	OBD-CAD	3.55	1.28	1.22
22	c	913	CLA	OBD-CAD	3.55	1.28	1.22
22	c	905	CLA	CHD-C1D	3.55	1.45	1.38
22	B	611	CLA	C3D-C2D	3.54	1.48	1.39
22	c	905	CLA	C3D-C2D	3.54	1.48	1.39
22	B	613	CLA	CHD-C4C	3.53	1.47	1.39
22	A	406	CLA	C1D-ND	-3.53	1.33	1.37
22	b	605	CLA	O2A-CGA	3.53	1.43	1.33
22	a	408	CLA	MG-NA	3.53	2.14	2.06
27	d	408	LHG	O7-C7	3.53	1.44	1.34
22	A	406	CLA	C3B-C2B	3.53	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	610	CLA	C1D-ND	-3.53	1.33	1.37
22	A	406	CLA	O2A-CGA	3.53	1.43	1.33
22	c	903	CLA	O2A-CGA	3.53	1.43	1.33
22	b	607	CLA	O2A-CGA	3.52	1.43	1.33
22	B	609	CLA	CHD-C4C	3.52	1.47	1.39
22	C	504	CLA	C3D-C2D	3.51	1.48	1.39
22	B	611	CLA	O2A-CGA	3.50	1.43	1.33
22	B	605	CLA	O2A-CGA	3.50	1.43	1.33
36	e	101	HEM	C3C-CAC	3.50	1.55	1.47
22	c	905	CLA	O2A-CGA	3.49	1.43	1.33
22	A	405	CLA	C1D-ND	-3.49	1.33	1.37
22	b	617	CLA	C4D-CHA	3.48	1.50	1.38
22	B	606	CLA	O2A-CGA	3.48	1.43	1.33
34	v	203	HTG	C1'-S1	-3.48	1.77	1.81
25	b	622	LMG	O1-C1	3.47	1.46	1.40
22	c	910	CLA	C4C-C3C	3.44	1.51	1.45
22	b	609	CLA	MG-NC	3.44	2.14	2.06
22	D	403	CLA	CHD-C4C	3.44	1.47	1.39
22	C	513	CLA	OBD-CAD	3.43	1.28	1.22
23	A	407	PHO	C3A-C2A	-3.42	1.51	1.54
26	A	411	PL9	C7-C3	3.42	1.54	1.51
22	b	612	CLA	C3B-C2B	3.42	1.45	1.40
22	B	603	CLA	OBD-CAD	3.42	1.28	1.22
22	b	602	CLA	C1B-CHB	3.42	1.50	1.41
22	b	605	CLA	C4D-CHA	3.42	1.50	1.38
22	b	617	CLA	OBD-CAD	3.41	1.28	1.22
22	c	903	CLA	C3D-C2D	3.41	1.48	1.39
22	C	503	CLA	C3D-C2D	3.41	1.48	1.39
22	c	912	CLA	OBD-CAD	3.41	1.28	1.22
22	C	508	CLA	O2A-CGA	3.41	1.43	1.33
35	C	517	DGD	O1G-C1A	3.41	1.43	1.33
22	c	910	CLA	C3D-C2D	3.41	1.48	1.39
22	b	602	CLA	C4D-CHA	3.40	1.50	1.38
22	C	503	CLA	OBD-CAD	3.40	1.28	1.22
22	b	611	CLA	C4C-C3C	3.40	1.50	1.45
22	b	615	CLA	C4C-C3C	3.40	1.50	1.45
22	c	905	CLA	MG-ND	-3.40	1.99	2.05
22	B	602	CLA	OBD-CAD	3.39	1.28	1.22
22	c	912	CLA	O2A-CGA	3.39	1.43	1.33
22	b	613	CLA	C3D-C2D	3.39	1.48	1.39
22	B	609	CLA	C3D-C2D	3.39	1.48	1.39
22	b	604	CLA	C3B-C2B	3.38	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	610	CLA	CHD-C4C	3.38	1.47	1.39
22	c	908	CLA	C3D-C2D	3.37	1.48	1.39
34	l	106	HTG	C1'-S1	-3.37	1.77	1.81
22	b	608	CLA	O2A-CGA	3.37	1.43	1.33
22	D	401	CLA	CHD-C1D	3.36	1.44	1.38
39	V	202	HEC	CBB-CAB	-3.36	1.36	1.49
22	b	612	CLA	C1B-CHB	3.36	1.50	1.41
22	b	617	CLA	C1C-NC	-3.35	1.32	1.37
22	C	504	CLA	C4D-CHA	3.35	1.50	1.38
22	D	404	CLA	C1D-ND	-3.35	1.33	1.37
22	D	403	CLA	C4C-C3C	3.35	1.50	1.45
22	C	502	CLA	C3D-C2D	3.34	1.48	1.39
22	c	902	CLA	CHD-C4C	3.34	1.46	1.39
22	C	510	CLA	CHD-C4C	3.34	1.46	1.39
22	B	613	CLA	C1D-ND	-3.34	1.33	1.37
39	v	202	HEC	CBB-CAB	-3.33	1.37	1.49
22	B	610	CLA	C3D-C2D	3.33	1.48	1.39
22	C	504	CLA	C4B-CHC	3.33	1.50	1.41
22	B	616	CLA	C1B-NB	-3.33	1.32	1.35
22	B	610	CLA	C4D-CHA	3.32	1.50	1.38
22	B	611	CLA	C4C-C3C	3.31	1.50	1.45
22	c	913	CLA	C3D-C2D	3.31	1.48	1.39
27	D	410	LHG	O7-C7	3.30	1.43	1.34
22	B	602	CLA	C1D-ND	-3.30	1.33	1.37
22	C	509	CLA	C1C-NC	-3.30	1.32	1.37
22	c	908	CLA	C4D-CHA	3.30	1.50	1.38
22	C	514	CLA	C4D-CHA	3.30	1.50	1.38
22	C	505	CLA	O2A-CGA	3.29	1.43	1.33
36	E	102	HEM	C3C-C2C	-3.29	1.35	1.40
22	C	505	CLA	C4D-CHA	3.29	1.50	1.38
22	c	905	CLA	CHD-C4C	3.28	1.46	1.39
22	c	909	CLA	C4C-C3C	3.28	1.50	1.45
22	C	508	CLA	OBD-CAD	3.28	1.28	1.22
22	C	512	CLA	C4D-CHA	3.28	1.50	1.38
22	b	606	CLA	C1D-ND	-3.28	1.33	1.37
39	V	202	HEC	CBC-CAC	-3.27	1.37	1.49
22	b	610	CLA	C3D-C2D	3.27	1.48	1.39
22	b	613	CLA	CHD-C4C	3.27	1.46	1.39
22	D	403	CLA	CHC-C1C	3.27	1.43	1.35
22	c	908	CLA	C1B-CHB	3.26	1.50	1.41
27	D	410	LHG	O8-C23	3.26	1.42	1.33
22	c	906	CLA	C3D-C2D	3.26	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	616	CLA	C1D-ND	-3.25	1.33	1.37
22	C	511	CLA	C4C-C3C	3.25	1.50	1.45
22	B	615	CLA	C1B-CHB	3.24	1.50	1.41
22	C	512	CLA	C1D-ND	-3.24	1.33	1.37
22	c	913	CLA	C1D-ND	-3.24	1.33	1.37
22	c	914	CLA	OBD-CAD	3.24	1.28	1.22
22	B	610	CLA	CHD-C4C	3.24	1.46	1.39
22	b	616	CLA	C1B-CHB	3.23	1.50	1.41
22	c	914	CLA	C1B-CHB	3.23	1.50	1.41
22	A	406	CLA	CHD-C1D	3.22	1.44	1.38
22	b	604	CLA	C3D-C2D	3.22	1.47	1.39
22	b	617	CLA	C3D-C2D	3.22	1.47	1.39
22	C	512	CLA	C4C-C3C	3.22	1.50	1.45
22	B	606	CLA	C1C-C2C	3.22	1.50	1.44
22	c	912	CLA	C4D-CHA	3.22	1.49	1.38
34	D	415	HTG	C1'-S1	-3.21	1.77	1.81
22	b	605	CLA	C3D-C2D	3.21	1.47	1.39
22	D	401	CLA	C3D-C2D	3.21	1.47	1.39
36	e	101	HEM	C3C-C2C	-3.20	1.35	1.40
22	c	908	CLA	C4B-CHC	3.20	1.49	1.41
23	A	407	PHO	C3D-C2D	3.19	1.45	1.39
34	b	624	HTG	C1'-S1	-3.19	1.77	1.81
22	C	514	CLA	C1B-CHB	3.19	1.49	1.41
22	B	616	CLA	C1C-NC	-3.19	1.33	1.37
22	b	607	CLA	CHD-C4C	3.19	1.46	1.39
22	c	914	CLA	C3D-C2D	3.19	1.47	1.39
22	A	405	CLA	CHD-C4C	3.18	1.46	1.39
22	B	616	CLA	C4D-CHA	3.18	1.49	1.38
22	c	905	CLA	C4C-C3C	3.18	1.50	1.45
22	b	616	CLA	C4C-C3C	3.18	1.50	1.45
22	C	512	CLA	C3D-C2D	3.17	1.47	1.39
22	A	405	CLA	C3D-C2D	3.17	1.47	1.39
22	B	616	CLA	C3D-C2D	3.17	1.47	1.39
22	C	514	CLA	C3D-C2D	3.17	1.47	1.39
23	A	407	PHO	OBD-CAD	3.16	1.26	1.22
22	D	404	CLA	C3D-C2D	3.16	1.47	1.39
22	d	402	CLA	C4C-C3C	3.15	1.50	1.45
22	b	615	CLA	MG-NC	3.15	2.13	2.06
22	C	503	CLA	C4D-CHA	3.15	1.49	1.38
22	B	614	CLA	C3D-C2D	3.15	1.47	1.39
22	D	403	CLA	MG-NC	3.15	2.13	2.06
28	A	413	SQD	C6-S	-3.14	1.65	1.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	602	CLA	C4D-CHA	3.14	1.49	1.38
22	b	608	CLA	OBD-CAD	3.14	1.27	1.22
22	c	911	CLA	C4B-CHC	3.13	1.49	1.41
22	a	407	CLA	OBD-CAD	3.13	1.27	1.22
22	a	407	CLA	C3D-C2D	3.13	1.47	1.39
22	b	604	CLA	C4D-CHA	3.13	1.49	1.38
22	b	612	CLA	C3D-C2D	3.13	1.47	1.39
22	C	507	CLA	C1D-ND	-3.13	1.33	1.37
22	b	611	CLA	C4D-CHA	3.13	1.49	1.38
22	A	405	CLA	O2A-CGA	3.12	1.42	1.33
22	b	610	CLA	C1B-CHB	3.12	1.49	1.41
22	B	602	CLA	C3D-C2D	3.12	1.47	1.39
22	B	603	CLA	C4B-NB	3.12	1.38	1.35
22	B	607	CLA	C4D-CHA	3.11	1.49	1.38
22	B	605	CLA	C4C-C3C	3.11	1.50	1.45
23	a	410	PHO	OBD-CAD	3.11	1.26	1.22
22	B	613	CLA	C4B-CHC	3.10	1.49	1.41
22	C	514	CLA	C1C-C2C	3.10	1.50	1.44
22	B	606	CLA	CHD-C4C	3.10	1.46	1.39
22	c	903	CLA	C4D-CHA	3.09	1.49	1.38
23	A	407	PHO	C3C-C2C	3.09	1.46	1.37
22	B	615	CLA	CHD-C1D	3.08	1.44	1.38
22	C	511	CLA	C3D-C2D	3.08	1.47	1.39
22	d	402	CLA	OBD-CAD	3.08	1.27	1.22
36	E	102	HEM	CAB-C3B	3.08	1.55	1.47
22	B	615	CLA	C3D-C2D	3.08	1.47	1.39
22	B	609	CLA	C4D-CHA	3.08	1.49	1.38
22	B	611	CLA	OBD-CAD	3.07	1.27	1.22
22	B	613	CLA	OBD-CAD	3.07	1.27	1.22
22	d	403	CLA	C4D-ND	3.07	1.41	1.37
22	B	602	CLA	C1C-NC	-3.07	1.33	1.37
22	b	608	CLA	C4D-CHA	3.06	1.49	1.38
22	b	607	CLA	MG-NC	3.06	2.13	2.06
22	a	412	CLA	OBD-CAD	3.06	1.27	1.22
22	C	510	CLA	C4C-C3C	3.06	1.50	1.45
22	C	505	CLA	C1B-CHB	3.06	1.49	1.41
22	b	612	CLA	CHD-C4C	3.06	1.46	1.39
22	a	408	CLA	C3D-C2D	3.05	1.47	1.39
36	e	101	HEM	CAB-C3B	3.05	1.55	1.47
22	c	904	CLA	C4D-CHA	3.05	1.49	1.38
22	C	513	CLA	C1B-CHB	3.05	1.49	1.41
22	C	507	CLA	OBD-CAD	3.05	1.27	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	506	CLA	C3D-C2D	3.05	1.47	1.39
27	d	407	LHG	O7-C7	3.05	1.42	1.34
22	B	616	CLA	MG-NC	3.04	2.13	2.06
22	b	611	CLA	C3D-C2D	3.04	1.47	1.39
22	B	604	CLA	C1B-CHB	3.04	1.49	1.41
22	C	505	CLA	C1C-NC	-3.04	1.33	1.37
22	C	507	CLA	C3D-C2D	3.04	1.47	1.39
22	c	906	CLA	C4D-CHA	3.03	1.49	1.38
22	C	504	CLA	C1C-C2C	3.03	1.50	1.44
22	c	907	CLA	C4C-C3C	3.03	1.50	1.45
22	a	408	CLA	MG-NC	3.03	2.13	2.06
35	C	517	DGD	O2G-C1B	3.02	1.42	1.34
22	B	603	CLA	C1C-NC	-3.02	1.33	1.37
22	C	506	CLA	C4D-CHA	3.02	1.49	1.38
35	C	518	DGD	O3G-C1D	3.02	1.45	1.40
22	c	902	CLA	C1C-C2C	3.01	1.50	1.44
22	A	405	CLA	C4C-C3C	3.01	1.50	1.45
22	B	608	CLA	O2A-CGA	3.01	1.42	1.33
22	b	616	CLA	MG-ND	3.01	2.11	2.05
22	c	909	CLA	C4B-CHC	3.01	1.49	1.41
22	b	615	CLA	C1B-CHB	3.01	1.49	1.41
22	A	408	CLA	C4C-C3C	3.01	1.50	1.45
23	a	410	PHO	C3C-C2C	3.01	1.46	1.37
22	B	614	CLA	CHD-C4C	3.01	1.46	1.39
22	c	911	CLA	C1C-NC	-3.01	1.33	1.37
22	c	907	CLA	C4D-CHA	3.01	1.49	1.38
22	b	602	CLA	C4B-CHC	3.00	1.49	1.41
22	B	615	CLA	C4D-CHA	3.00	1.49	1.38
22	C	512	CLA	C1B-CHB	3.00	1.49	1.41
22	b	613	CLA	C4D-CHA	2.99	1.49	1.38
22	C	505	CLA	C3D-C2D	2.99	1.47	1.39
22	B	613	CLA	MG-NC	-2.99	1.99	2.06
22	c	912	CLA	C4B-CHC	2.99	1.49	1.41
22	c	906	CLA	C4B-CHC	2.99	1.49	1.41
29	f	102	LMT	O1'-C1'	2.99	1.45	1.40
22	b	616	CLA	C1D-ND	-2.99	1.34	1.37
22	C	504	CLA	C1D-ND	-2.98	1.34	1.37
22	C	513	CLA	C4D-CHA	2.98	1.49	1.38
22	b	615	CLA	C4D-CHA	2.98	1.49	1.38
22	D	401	CLA	C3B-C2B	2.98	1.44	1.40
22	C	513	CLA	C3D-C2D	2.98	1.47	1.39
22	C	508	CLA	C4D-CHA	2.98	1.49	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	611	CLA	C1B-CHB	2.98	1.49	1.41
22	c	906	CLA	C1C-NC	-2.98	1.33	1.37
22	b	609	CLA	C4D-CHA	2.98	1.49	1.38
22	b	614	CLA	OBD-CAD	2.97	1.27	1.22
22	b	616	CLA	C3D-C2D	2.97	1.47	1.39
22	b	607	CLA	C1C-C2C	2.97	1.50	1.44
22	a	407	CLA	C1B-CHB	2.97	1.49	1.41
22	B	606	CLA	C1B-NB	-2.97	1.32	1.35
22	C	509	CLA	OBD-CAD	2.96	1.27	1.22
22	B	615	CLA	MG-ND	-2.96	1.99	2.05
22	B	613	CLA	C3D-C2D	2.96	1.47	1.39
22	B	615	CLA	C1D-ND	-2.96	1.34	1.37
22	C	507	CLA	C4D-CHA	2.96	1.48	1.38
22	B	605	CLA	C4D-CHA	2.96	1.48	1.38
22	c	904	CLA	C1B-NB	-2.96	1.32	1.35
34	C	521	HTG	C1'-S1	-2.95	1.77	1.81
22	B	605	CLA	MG-NC	2.95	2.13	2.06
22	d	403	CLA	C1C-NC	-2.95	1.33	1.37
22	b	606	CLA	C3B-C2B	2.95	1.44	1.40
22	B	615	CLA	C1C-C2C	2.95	1.50	1.44
22	B	606	CLA	C4B-CHC	2.95	1.49	1.41
22	B	612	CLA	C3D-C2D	2.95	1.47	1.39
22	c	902	CLA	C4C-C3C	2.95	1.50	1.45
22	B	611	CLA	C1C-C2C	2.95	1.50	1.44
22	b	615	CLA	C1C-NC	-2.94	1.33	1.37
22	C	502	CLA	C4D-CHA	2.94	1.48	1.38
22	c	912	CLA	C3D-C2D	2.93	1.47	1.39
22	A	408	CLA	C4D-CHA	2.93	1.48	1.38
22	a	412	CLA	C4D-CHA	2.93	1.48	1.38
22	C	502	CLA	OBD-CAD	2.93	1.27	1.22
22	C	508	CLA	C4B-CHC	2.93	1.49	1.41
22	C	508	CLA	C3D-C2D	2.92	1.47	1.39
22	c	912	CLA	C1B-CHB	2.92	1.49	1.41
22	a	409	CLA	OBD-CAD	2.92	1.27	1.22
22	a	407	CLA	C4D-CHA	2.92	1.48	1.38
35	H	102	DGD	O5D-C1E	2.92	1.45	1.40
22	b	603	CLA	C1B-CHB	2.92	1.49	1.41
22	b	606	CLA	C4D-CHA	2.92	1.48	1.38
22	b	609	CLA	C3D-C2D	2.92	1.47	1.39
28	a	414	SQD	C6-S	-2.92	1.66	1.77
22	b	602	CLA	C1C-C2C	2.92	1.50	1.44
22	C	512	CLA	C4D-ND	2.91	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	514	CLA	OBD-CAD	2.91	1.27	1.22
22	D	401	CLA	O2A-CGA	2.91	1.41	1.33
22	c	911	CLA	C4D-CHA	2.91	1.48	1.38
34	b	627	HTG	C1'-S1	-2.90	1.77	1.81
22	b	613	CLA	C1D-ND	-2.90	1.34	1.37
22	c	909	CLA	C4D-CHA	2.90	1.48	1.38
22	c	909	CLA	C3D-C2D	2.90	1.47	1.39
22	B	608	CLA	C3D-C2D	2.90	1.47	1.39
23	D	402	PHO	C3C-C2C	2.89	1.46	1.37
22	b	616	CLA	C4D-CHA	2.89	1.48	1.38
22	C	505	CLA	C1D-ND	-2.89	1.34	1.37
22	b	614	CLA	C4D-CHA	2.89	1.48	1.38
34	B	627	HTG	C1'-S1	-2.89	1.77	1.81
22	B	602	CLA	C1B-CHB	2.89	1.49	1.41
22	D	404	CLA	C1B-CHB	2.89	1.49	1.41
22	b	606	CLA	C3D-C2D	2.89	1.47	1.39
22	B	616	CLA	C1B-CHB	2.88	1.49	1.41
22	c	906	CLA	OBD-CAD	2.88	1.27	1.22
22	b	611	CLA	C1B-CHB	2.88	1.49	1.41
22	C	511	CLA	C1B-CHB	2.87	1.49	1.41
22	c	914	CLA	C1C-C2C	2.87	1.50	1.44
22	B	617	CLA	C4D-CHA	2.87	1.48	1.38
35	C	519	DGD	O2G-C1B	2.87	1.42	1.34
22	d	403	CLA	C4B-CHC	2.87	1.49	1.41
22	b	603	CLA	C3D-C2D	2.86	1.46	1.39
28	a	418	SQD	C6-S	-2.86	1.66	1.77
34	b	632	HTG	O5-C1	2.86	1.46	1.42
27	d	407	LHG	O8-C23	2.86	1.41	1.33
22	c	909	CLA	C1B-CHB	2.86	1.48	1.41
22	b	612	CLA	OBD-CAD	2.86	1.27	1.22
22	B	609	CLA	C4D-ND	2.86	1.41	1.37
22	C	512	CLA	C1C-C2C	2.86	1.50	1.44
22	B	611	CLA	C4B-CHC	2.86	1.48	1.41
22	B	606	CLA	C1B-CHB	2.85	1.48	1.41
22	b	614	CLA	C4C-C3C	2.85	1.50	1.45
26	a	415	PL9	C6-C5	2.85	1.50	1.35
22	b	602	CLA	C4D-ND	2.84	1.41	1.37
26	A	411	PL9	C2-C3	2.84	1.42	1.34
22	b	613	CLA	C4B-CHC	2.84	1.48	1.41
22	c	904	CLA	C1D-ND	-2.83	1.34	1.37
23	a	411	PHO	C3A-C2A	-2.83	1.52	1.54
22	C	511	CLA	C4D-CHA	2.83	1.48	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	406	CLA	C3C-C2C	2.83	1.42	1.36
22	D	401	CLA	C4B-CHC	2.83	1.48	1.41
22	B	608	CLA	C1B-CHB	2.83	1.48	1.41
22	D	401	CLA	C1D-ND	-2.82	1.34	1.37
22	B	615	CLA	C1C-NC	-2.82	1.33	1.37
22	b	614	CLA	MG-NC	2.82	2.13	2.06
22	C	506	CLA	C4B-CHC	2.82	1.48	1.41
22	a	407	CLA	C1D-ND	-2.82	1.34	1.37
22	C	509	CLA	C4D-CHA	2.82	1.48	1.38
22	c	905	CLA	C1B-CHB	2.81	1.48	1.41
22	c	913	CLA	C4D-CHA	2.81	1.48	1.38
22	b	604	CLA	C1C-C2C	2.81	1.50	1.44
22	b	615	CLA	C1C-C2C	2.80	1.50	1.44
22	b	609	CLA	CHD-C4C	2.80	1.45	1.39
22	b	611	CLA	OBD-CAD	2.80	1.27	1.22
24	A	409	BCR	C19-C18	2.80	1.52	1.45
22	b	608	CLA	C1D-ND	-2.80	1.34	1.37
22	c	904	CLA	C1C-NC	-2.80	1.33	1.37
22	B	615	CLA	C4C-C3C	2.79	1.49	1.45
22	A	405	CLA	C4D-CHA	2.79	1.48	1.38
22	b	605	CLA	CHD-C4C	2.79	1.45	1.39
22	C	513	CLA	MG-ND	-2.79	2.00	2.05
22	c	902	CLA	C4D-CHA	2.79	1.48	1.38
22	b	614	CLA	C1B-CHB	2.79	1.48	1.41
22	C	507	CLA	C1B-CHB	2.79	1.48	1.41
22	c	913	CLA	C4C-C3C	2.79	1.49	1.45
22	a	409	CLA	C3D-C2D	2.78	1.46	1.39
22	b	604	CLA	C4C-C3C	2.78	1.49	1.45
22	d	403	CLA	C4D-CHA	2.77	1.48	1.38
22	b	612	CLA	MG-NC	2.77	2.12	2.06
22	a	409	CLA	C4D-CHA	2.77	1.48	1.38
22	c	904	CLA	C3D-C2D	2.77	1.46	1.39
22	C	508	CLA	C1B-CHB	2.77	1.48	1.41
22	b	603	CLA	C4D-CHA	2.77	1.48	1.38
22	C	510	CLA	C4D-CHA	2.77	1.48	1.38
22	B	608	CLA	C4C-C3C	2.77	1.49	1.45
22	b	614	CLA	C3D-C2D	2.77	1.46	1.39
22	c	905	CLA	C4D-CHA	2.76	1.48	1.38
22	B	613	CLA	C4C-C3C	2.76	1.49	1.45
22	B	608	CLA	C4D-CHA	2.76	1.48	1.38
26	D	406	PL9	C7-C3	2.75	1.54	1.51
22	b	615	CLA	OBD-CAD	2.75	1.27	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	b	617	CLA	C1B-CHB	2.75	1.48	1.41
22	B	607	CLA	C3D-C2D	2.74	1.46	1.39
22	B	610	CLA	C1B-CHB	2.74	1.48	1.41
22	B	605	CLA	C1B-CHB	2.74	1.48	1.41
22	d	403	CLA	C1B-CHB	2.73	1.48	1.41
22	c	902	CLA	C4B-NB	2.73	1.37	1.35
22	B	604	CLA	C3D-C2D	2.71	1.46	1.39
22	a	412	CLA	MG-NA	2.71	2.12	2.06
22	B	617	CLA	C1D-ND	-2.71	1.34	1.37
22	a	412	CLA	C3D-C2D	2.71	1.46	1.39
22	b	609	CLA	C1D-ND	-2.71	1.34	1.37
22	b	608	CLA	C1B-CHB	2.71	1.48	1.41
22	B	614	CLA	C4D-CHA	2.71	1.48	1.38
22	b	610	CLA	C4D-CHA	2.71	1.48	1.38
22	C	513	CLA	C4B-CHC	2.70	1.48	1.41
22	A	406	CLA	C4D-CHA	2.70	1.48	1.38
22	b	610	CLA	C4B-CHC	2.70	1.48	1.41
22	D	403	CLA	C4D-CHA	2.70	1.48	1.38
22	c	904	CLA	MG-NC	2.69	2.12	2.06
22	c	913	CLA	C1B-CHB	2.69	1.48	1.41
29	I	102	LMT	O1'-C1'	2.69	1.44	1.40
22	c	905	CLA	C4B-CHC	2.69	1.48	1.41
22	c	906	CLA	C1B-CHB	2.68	1.48	1.41
22	c	907	CLA	C3D-C2D	2.68	1.46	1.39
35	C	517	DGD	O5D-C1E	2.68	1.44	1.40
22	D	404	CLA	C4D-CHA	2.68	1.47	1.38
24	d	404	BCR	C12-C13	2.68	1.51	1.45
22	b	617	CLA	C1C-C2C	2.68	1.49	1.44
22	B	604	CLA	C4D-CHA	2.68	1.47	1.38
34	b	626	HTG	C1'-S1	-2.68	1.78	1.81
28	C	501	SQD	C6-S	-2.68	1.67	1.77
22	B	607	CLA	C1D-ND	-2.67	1.34	1.37
22	b	609	CLA	C1C-NC	-2.67	1.33	1.37
24	D	405	BCR	C8-C9	2.67	1.51	1.45
22	B	603	CLA	C1D-ND	-2.67	1.34	1.37
22	D	401	CLA	C4D-CHA	2.67	1.47	1.38
22	d	403	CLA	C1C-C2C	2.66	1.49	1.44
26	a	415	PL9	C7-C3	2.66	1.54	1.51
22	B	614	CLA	C1B-CHB	2.66	1.48	1.41
22	a	412	CLA	C1B-CHB	2.66	1.48	1.41
22	c	908	CLA	MG-NC	2.66	2.12	2.06
22	C	507	CLA	C4C-C3C	2.66	1.49	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	909	CLA	C1C-C2C	2.65	1.49	1.44
22	B	604	CLA	OBD-CAD	2.65	1.27	1.22
22	c	904	CLA	C4C-C3C	2.65	1.49	1.45
22	C	502	CLA	C1B-CHB	2.65	1.48	1.41
22	b	606	CLA	C4B-CHC	2.65	1.48	1.41
26	d	405	PL9	C6-C5	2.65	1.49	1.35
22	b	605	CLA	C4B-CHC	2.65	1.48	1.41
22	C	509	CLA	C4B-CHC	2.64	1.48	1.41
22	D	403	CLA	MG-ND	-2.64	2.00	2.05
22	c	909	CLA	C1D-ND	-2.64	1.34	1.37
22	B	616	CLA	OBD-CAD	2.64	1.27	1.22
22	b	603	CLA	OBD-CAD	2.64	1.27	1.22
22	C	507	CLA	C4B-CHC	2.64	1.48	1.41
22	C	503	CLA	C4B-CHC	2.64	1.48	1.41
22	b	614	CLA	C4B-CHC	2.63	1.48	1.41
22	a	408	CLA	C4D-CHA	2.63	1.47	1.38
29	c	921	LMT	O1'-C1'	2.63	1.44	1.40
26	a	415	PL9	C2-C3	2.63	1.41	1.34
22	B	603	CLA	C1B-CHB	2.63	1.48	1.41
25	d	409	LMG	O1-C1	2.63	1.44	1.40
22	B	611	CLA	C4D-CHA	2.63	1.47	1.38
29	c	931	LMT	O1'-C1'	2.62	1.44	1.40
22	b	612	CLA	C1D-ND	-2.62	1.34	1.37
22	B	607	CLA	C1C-C2C	2.62	1.49	1.44
22	D	403	CLA	C1B-CHB	2.62	1.48	1.41
22	b	609	CLA	C4D-ND	2.62	1.41	1.37
35	c	917	DGD	O5D-C1E	2.62	1.44	1.40
22	b	603	CLA	MG-NC	2.61	2.12	2.06
22	b	612	CLA	C4D-CHA	2.61	1.47	1.38
22	b	602	CLA	C4C-C3C	2.61	1.49	1.45
26	A	411	PL9	C6-C5	2.61	1.48	1.35
22	A	406	CLA	C4D-ND	2.61	1.41	1.37
36	e	101	HEM	CAA-C2A	2.61	1.55	1.52
34	D	414	HTG	C1'-S1	-2.61	1.78	1.81
22	B	602	CLA	C4B-CHC	2.60	1.48	1.41
22	c	910	CLA	MG-ND	-2.60	2.00	2.05
22	c	912	CLA	C1C-NC	-2.59	1.33	1.37
22	b	604	CLA	OBD-CAD	2.59	1.26	1.22
35	C	518	DGD	O2G-C1B	2.59	1.41	1.34
22	b	607	CLA	C4D-CHA	2.59	1.47	1.38
22	c	914	CLA	C4D-CHA	2.59	1.47	1.38
22	c	911	CLA	C1D-ND	-2.59	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	c	922	HTG	C1'-S1	-2.59	1.78	1.81
22	a	409	CLA	C3D-C4D	-2.58	1.38	1.44
22	c	904	CLA	C1B-CHB	2.58	1.48	1.41
22	B	605	CLA	C3D-C2D	2.58	1.46	1.39
26	d	405	PL9	C18-C19	2.58	1.39	1.33
22	C	510	CLA	C4B-NB	-2.58	1.32	1.35
36	e	101	HEM	FE-ND	2.58	2.09	1.96
22	B	610	CLA	C4B-CHC	2.58	1.48	1.41
22	B	615	CLA	C4B-CHC	2.57	1.48	1.41
22	b	614	CLA	C1C-NC	-2.57	1.34	1.37
22	c	910	CLA	C4D-CHA	2.57	1.47	1.38
22	b	604	CLA	C1B-NB	-2.57	1.32	1.35
22	D	403	CLA	C3B-C2B	2.57	1.43	1.40
22	C	502	CLA	C4B-CHC	2.57	1.48	1.41
36	e	101	HEM	CMD-C2D	2.56	1.56	1.50
22	c	903	CLA	C1B-CHB	2.56	1.48	1.41
22	c	911	CLA	C4D-ND	2.56	1.41	1.37
22	b	604	CLA	O2A-CGA	2.55	1.40	1.33
22	a	409	CLA	C1D-ND	-2.55	1.34	1.37
22	c	902	CLA	C4B-CHC	2.55	1.48	1.41
22	B	607	CLA	C3D-C4D	-2.55	1.38	1.44
22	B	605	CLA	C1D-ND	-2.54	1.34	1.37
22	A	406	CLA	C4B-CHC	2.54	1.48	1.41
24	a	413	BCR	C5-C6	2.54	1.38	1.34
22	B	603	CLA	C3D-C4D	-2.54	1.38	1.44
22	C	509	CLA	C4C-C3C	2.54	1.49	1.45
22	b	607	CLA	C3D-C2D	2.54	1.46	1.39
22	c	912	CLA	C4C-C3C	2.54	1.49	1.45
22	b	613	CLA	C1A-CHA	2.54	1.53	1.43
22	b	611	CLA	C4B-CHC	2.53	1.48	1.41
22	c	909	CLA	C1C-NC	-2.53	1.34	1.37
22	C	509	CLA	C1B-CHB	2.53	1.48	1.41
22	c	906	CLA	C1D-ND	-2.53	1.34	1.37
29	Z	101	LMT	O1'-C1'	2.53	1.44	1.40
24	b	618	BCR	C14-C13	2.53	1.35	1.33
22	C	507	CLA	C1C-C2C	2.52	1.49	1.44
22	b	607	CLA	C4B-CHC	2.52	1.48	1.41
36	E	102	HEM	FE-ND	2.52	2.09	1.96
22	b	608	CLA	C4B-CHC	2.52	1.48	1.41
22	c	903	CLA	OBD-CAD	2.51	1.26	1.22
22	C	504	CLA	C1B-CHB	2.51	1.48	1.41
22	A	406	CLA	C3D-C2D	2.51	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	C	505	CLA	C4B-CHC	2.51	1.48	1.41
22	c	914	CLA	C4B-CHC	2.50	1.47	1.41
36	e	101	HEM	CMB-C2B	2.50	1.56	1.50
22	A	408	CLA	C3D-C2D	2.49	1.45	1.39
22	C	508	CLA	C1D-ND	-2.49	1.34	1.37
22	C	514	CLA	C1D-ND	-2.49	1.34	1.37
22	B	612	CLA	C4D-CHA	2.49	1.47	1.38
28	b	621	SQD	C6-S	-2.49	1.68	1.77
22	C	508	CLA	C4D-ND	2.49	1.41	1.37
22	C	510	CLA	MG-NC	2.48	2.12	2.06
22	B	602	CLA	C1C-C2C	2.48	1.49	1.44
22	C	509	CLA	C4D-ND	2.48	1.41	1.37
22	d	402	CLA	C4D-CHA	2.48	1.47	1.38
22	b	613	CLA	C1B-CHB	2.48	1.47	1.41
23	a	410	PHO	CBD-CGD	-2.48	1.49	1.52
22	b	605	CLA	C1C-NC	-2.48	1.34	1.37
22	B	603	CLA	C3D-C2D	2.48	1.45	1.39
22	C	502	CLA	C1D-ND	-2.47	1.34	1.37
22	b	607	CLA	MG-ND	2.47	2.10	2.05
22	B	606	CLA	C1C-NC	-2.47	1.34	1.37
24	A	409	BCR	C12-C13	2.47	1.51	1.45
22	b	606	CLA	MG-NC	2.47	2.12	2.06
22	C	502	CLA	C4C-C3C	2.46	1.49	1.45
22	A	405	CLA	C4B-CHC	2.46	1.47	1.41
22	c	912	CLA	C4D-ND	2.46	1.41	1.37
22	b	613	CLA	C1C-NC	-2.46	1.34	1.37
22	D	404	CLA	C4B-CHC	2.46	1.47	1.41
22	b	609	CLA	C4B-CHC	2.46	1.47	1.41
22	b	611	CLA	C1C-C2C	2.45	1.49	1.44
22	B	603	CLA	C4D-CHA	2.45	1.47	1.38
22	b	603	CLA	C1D-ND	-2.45	1.34	1.37
22	b	614	CLA	C1C-C2C	2.45	1.49	1.44
35	c	919	DGD	O5D-C1E	2.44	1.44	1.40
22	C	513	CLA	C1D-ND	-2.44	1.34	1.37
22	B	617	CLA	C4B-CHC	2.44	1.47	1.41
22	B	603	CLA	C1C-C2C	2.44	1.49	1.44
22	C	509	CLA	MG-ND	-2.44	2.01	2.05
22	b	605	CLA	C4C-C3C	2.43	1.49	1.45
22	C	513	CLA	C1C-C2C	2.43	1.49	1.44
22	a	407	CLA	C4B-NB	-2.43	1.33	1.35
22	b	609	CLA	C1B-CHB	2.43	1.47	1.41
22	B	613	CLA	C1B-NB	-2.43	1.33	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	l	101	SQD	C6-S	-2.43	1.68	1.77
22	d	402	CLA	C3D-C2D	2.42	1.45	1.39
22	C	503	CLA	CHD-C4C	2.42	1.44	1.39
24	d	404	BCR	C23-C22	2.42	1.51	1.45
22	b	607	CLA	C4C-C3C	2.41	1.49	1.45
22	b	608	CLA	C4D-ND	2.41	1.41	1.37
34	C	532	HTG	C1-S1	-2.40	1.77	1.80
22	B	612	CLA	C4B-CHC	2.40	1.47	1.41
22	b	607	CLA	C1B-CHB	2.40	1.47	1.41
22	B	617	CLA	C1B-CHB	2.39	1.47	1.41
22	b	605	CLA	C1B-CHB	2.39	1.47	1.41
22	C	507	CLA	C1C-NC	-2.39	1.34	1.37
22	C	508	CLA	C1C-C2C	2.38	1.49	1.44
22	B	609	CLA	C1C-C2C	2.38	1.49	1.44
22	B	609	CLA	C4C-C3C	2.38	1.49	1.45
22	A	406	CLA	MG-NC	-2.37	2.00	2.06
22	b	609	CLA	C4B-NB	-2.37	1.33	1.35
23	A	407	PHO	CBD-CGD	-2.37	1.49	1.52
22	B	613	CLA	C1B-CHB	2.37	1.47	1.41
22	a	409	CLA	C1B-CHB	2.36	1.47	1.41
22	c	902	CLA	C1B-CHB	2.36	1.47	1.41
22	b	605	CLA	C1D-ND	-2.36	1.34	1.37
22	c	905	CLA	C1C-NC	-2.35	1.34	1.37
22	c	914	CLA	C1D-ND	-2.35	1.34	1.37
22	B	607	CLA	C4C-C3C	2.35	1.49	1.45
22	B	614	CLA	C4C-C3C	2.35	1.49	1.45
22	C	512	CLA	C4B-CHC	2.35	1.47	1.41
22	c	911	CLA	C1B-CHB	2.35	1.47	1.41
22	b	604	CLA	C4B-CHC	2.35	1.47	1.41
22	b	603	CLA	C4B-CHC	2.35	1.47	1.41
35	D	407	DGD	O3G-C1D	2.35	1.44	1.40
22	c	910	CLA	C1B-CHB	2.35	1.47	1.41
22	c	913	CLA	C4B-CHC	2.34	1.47	1.41
39	v	202	HEC	CMD-C2D	2.34	1.56	1.51
22	b	615	CLA	C4B-CHC	2.34	1.47	1.41
22	c	908	CLA	C4C-C3C	2.34	1.49	1.45
35	d	406	DGD	O3G-C1D	2.34	1.44	1.40
22	B	606	CLA	OBD-CAD	2.34	1.26	1.22
22	C	503	CLA	C1B-CHB	2.34	1.47	1.41
26	D	406	PL9	C6-C5	2.33	1.47	1.35
28	D	408	SQD	O6-C1	2.33	1.44	1.40
22	a	412	CLA	C4B-NB	-2.33	1.33	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	903	CLA	C4B-CHC	2.33	1.47	1.41
22	D	403	CLA	C1B-NB	2.33	1.37	1.35
34	l	106	HTG	C1-S1	-2.32	1.77	1.80
22	d	402	CLA	MG-ND	-2.32	2.01	2.05
22	C	504	CLA	C1C-NC	-2.32	1.34	1.37
22	B	607	CLA	CHD-C4C	2.32	1.44	1.39
22	b	616	CLA	C4B-CHC	2.32	1.47	1.41
24	b	619	BCR	C8-C9	2.32	1.50	1.46
22	C	510	CLA	C4D-ND	2.32	1.40	1.37
24	b	619	BCR	C12-C13	2.32	1.50	1.45
22	C	505	CLA	C3D-C4D	-2.32	1.38	1.44
22	d	402	CLA	C4D-ND	2.31	1.40	1.37
22	a	408	CLA	C4D-ND	2.31	1.40	1.37
22	c	902	CLA	C1D-ND	-2.31	1.34	1.37
25	B	621	LMG	O1-C1	2.31	1.44	1.40
39	V	202	HEC	C4B-C3B	2.30	1.47	1.43
22	b	614	CLA	MG-ND	2.30	2.10	2.05
29	B	622	LMT	O1'-C1'	2.30	1.44	1.40
28	l	101	SQD	O6-C1	2.30	1.44	1.40
22	c	903	CLA	C1D-ND	-2.29	1.35	1.37
22	B	604	CLA	C1C-NC	-2.29	1.34	1.37
22	D	403	CLA	OBD-CAD	2.29	1.26	1.22
22	a	409	CLA	C4C-C3C	2.29	1.49	1.45
22	a	407	CLA	C4B-CHC	2.29	1.47	1.41
22	b	610	CLA	C1C-NC	-2.29	1.34	1.37
22	B	607	CLA	OBD-CAD	2.28	1.26	1.22
22	C	511	CLA	C3D-C4D	-2.28	1.39	1.44
36	e	101	HEM	C2C-C1C	2.28	1.47	1.42
22	b	608	CLA	C4C-C3C	2.28	1.49	1.45
28	D	408	SQD	C6-S	-2.27	1.69	1.77
24	d	404	BCR	C30-C25	-2.27	1.50	1.53
22	a	408	CLA	C1D-C2D	2.27	1.49	1.45
22	c	908	CLA	C4D-ND	2.27	1.40	1.37
22	C	514	CLA	C4D-ND	2.26	1.40	1.37
22	C	511	CLA	C4B-CHC	2.26	1.47	1.41
22	B	603	CLA	C4B-CHC	2.26	1.47	1.41
22	A	408	CLA	C4B-CHC	2.26	1.47	1.41
22	c	903	CLA	C4C-C3C	2.26	1.48	1.45
25	C	531	LMG	O1-C1	2.25	1.44	1.40
22	b	614	CLA	C1B-NB	2.25	1.37	1.35
22	d	402	CLA	C1B-CHB	2.25	1.47	1.41
22	B	609	CLA	OBD-CAD	2.25	1.26	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	E	102	HEM	CMA-C3A	2.25	1.56	1.51
22	B	610	CLA	C1C-C2C	2.25	1.48	1.44
22	c	907	CLA	C3D-C4D	-2.25	1.39	1.44
24	a	413	BCR	C12-C13	2.24	1.50	1.45
22	C	503	CLA	C4C-C3C	2.24	1.48	1.45
22	b	611	CLA	C3D-C4D	-2.24	1.39	1.44
22	c	905	CLA	C1D-ND	-2.24	1.35	1.37
24	C	515	BCR	C19-C18	2.24	1.50	1.45
22	B	606	CLA	C4D-CHA	2.24	1.46	1.38
22	b	610	CLA	C1C-C2C	2.23	1.48	1.44
22	B	613	CLA	C3D-C4D	-2.23	1.39	1.44
22	B	609	CLA	C4B-CHC	2.23	1.47	1.41
22	b	606	CLA	C1C-NC	-2.23	1.34	1.37
22	b	607	CLA	O2A-C1	-2.22	1.39	1.46
34	C	521	HTG	C1-S1	-2.22	1.77	1.80
22	B	609	CLA	C3D-C4D	-2.22	1.39	1.44
22	A	405	CLA	C3A-C2A	-2.22	1.48	1.54
22	C	511	CLA	C1C-C2C	2.22	1.48	1.44
24	Y	101	BCR	C5-C6	2.22	1.36	1.33
22	c	914	CLA	C4C-C3C	2.22	1.48	1.45
22	b	612	CLA	C4B-CHC	2.21	1.47	1.41
22	b	617	CLA	C4B-CHC	2.21	1.47	1.41
22	C	503	CLA	C1C-C2C	2.21	1.48	1.44
26	D	406	PL9	C2-C3	2.21	1.40	1.34
34	b	632	HTG	C1'-S1	-2.21	1.78	1.81
26	d	405	PL9	C7-C3	2.21	1.53	1.51
22	B	604	CLA	C4D-ND	2.20	1.40	1.37
22	a	407	CLA	C1C-NC	-2.20	1.34	1.37
22	C	503	CLA	C1D-ND	-2.20	1.35	1.37
22	c	907	CLA	C4B-CHC	2.19	1.47	1.41
22	B	609	CLA	C1B-CHB	2.19	1.47	1.41
22	D	404	CLA	C1C-C2C	2.19	1.48	1.44
22	A	408	CLA	C3D-C4D	-2.19	1.39	1.44
22	a	408	CLA	C4B-CHC	2.19	1.47	1.41
22	D	403	CLA	C3D-C2D	2.18	1.45	1.39
22	A	406	CLA	C3D-C4D	-2.18	1.39	1.44
22	b	617	CLA	CHD-C4C	2.17	1.44	1.39
22	B	608	CLA	C1C-NC	-2.17	1.34	1.37
39	v	202	HEC	C1D-ND	2.17	1.40	1.36
22	c	906	CLA	C4C-C3C	2.17	1.48	1.45
22	c	909	CLA	C3D-C4D	-2.16	1.39	1.44
22	c	907	CLA	C1B-CHB	2.16	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	c	905	CLA	C4D-ND	2.16	1.40	1.37
22	c	902	CLA	C3D-C2D	2.16	1.45	1.39
24	c	915	BCR	C23-C22	2.15	1.50	1.45
22	C	513	CLA	C4C-C3C	2.15	1.48	1.45
39	V	202	HEC	CMC-C2C	2.15	1.56	1.51
22	b	605	CLA	OBD-CAD	2.15	1.26	1.22
22	c	905	CLA	C4B-NB	2.15	1.37	1.35
26	d	405	PL9	C23-C24	2.15	1.38	1.33
22	C	502	CLA	C1C-C2C	2.14	1.48	1.44
22	c	913	CLA	C1C-C2C	2.14	1.48	1.44
24	Y	101	BCR	C7-C6	2.14	1.48	1.46
22	C	514	CLA	C4C-C3C	2.13	1.48	1.45
22	B	616	CLA	C4B-CHC	2.13	1.46	1.41
22	C	505	CLA	C4D-ND	2.13	1.40	1.37
22	A	405	CLA	C1B-CHB	2.13	1.46	1.41
22	B	612	CLA	C1D-ND	-2.12	1.35	1.37
24	B	620	BCR	C26-C25	2.12	1.38	1.34
22	c	904	CLA	C3D-C4D	-2.12	1.39	1.44
22	C	511	CLA	C4D-ND	2.12	1.40	1.37
22	B	602	CLA	C4D-ND	2.12	1.40	1.37
22	a	412	CLA	C3D-C4D	-2.11	1.39	1.44
22	c	907	CLA	MG-ND	-2.11	2.01	2.05
22	C	508	CLA	C4C-C3C	2.11	1.48	1.45
22	c	903	CLA	C4D-ND	2.11	1.40	1.37
29	T	102	LMT	O1'-C1'	2.11	1.43	1.40
22	b	615	CLA	C4D-ND	2.10	1.40	1.37
22	b	608	CLA	C3D-C4D	-2.10	1.39	1.44
22	c	910	CLA	C4D-ND	2.10	1.40	1.37
22	b	617	CLA	C4D-ND	2.10	1.40	1.37
22	b	615	CLA	C3D-C4D	-2.09	1.39	1.44
34	b	627	HTG	O5-C1	2.09	1.45	1.42
35	c	918	DGD	O3G-C1D	2.09	1.43	1.40
22	D	403	CLA	C1C-C2C	2.09	1.48	1.44
22	C	504	CLA	C4D-ND	2.08	1.40	1.37
22	b	613	CLA	C4C-C3C	2.08	1.48	1.45
22	B	614	CLA	C1C-C2C	2.08	1.48	1.44
22	B	610	CLA	C4C-C3C	2.08	1.48	1.45
35	c	918	DGD	O5D-C1E	2.07	1.43	1.40
22	C	503	CLA	C1C-NC	-2.07	1.34	1.37
22	a	408	CLA	C1B-CHB	2.07	1.46	1.41
22	b	612	CLA	C3D-C4D	-2.06	1.39	1.44
22	d	402	CLA	C3D-C4D	-2.06	1.39	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	613	CLA	C4D-CHA	2.06	1.45	1.38
24	B	620	BCR	C19-C18	2.06	1.50	1.45
22	C	512	CLA	MG-NC	2.06	2.11	2.06
25	D	412	LMG	O1-C1	2.06	1.43	1.40
25	b	622	LMG	C4-C5	2.06	1.57	1.53
25	c	930	LMG	O1-C1	2.06	1.43	1.40
35	c	919	DGD	O2G-C2G	-2.05	1.41	1.46
22	C	513	CLA	C4D-ND	2.05	1.40	1.37
22	C	503	CLA	C1B-NB	2.05	1.37	1.35
22	C	504	CLA	C4C-C3C	2.05	1.48	1.45
22	B	607	CLA	C1B-CHB	2.05	1.46	1.41
22	a	408	CLA	C4C-C3C	2.05	1.48	1.45
22	B	617	CLA	C1C-C2C	2.04	1.48	1.44
22	c	913	CLA	C3D-C4D	-2.04	1.39	1.44
22	a	407	CLA	C4C-C3C	2.04	1.48	1.45
22	B	604	CLA	C4C-C3C	2.04	1.48	1.45
22	d	403	CLA	C1D-C2D	2.03	1.49	1.45
22	b	607	CLA	OBD-CAD	2.03	1.26	1.22
22	c	908	CLA	C1D-ND	-2.03	1.35	1.37
22	C	512	CLA	C1C-NC	-2.02	1.34	1.37
22	B	608	CLA	C3D-C4D	-2.02	1.39	1.44
36	E	102	HEM	CMD-C2D	2.02	1.55	1.50
39	v	202	HEC	C4D-ND	2.02	1.40	1.36
22	B	602	CLA	C3D-C4D	-2.02	1.39	1.44
22	b	610	CLA	C4C-C3C	2.02	1.48	1.45
22	C	506	CLA	C1A-CHA	2.01	1.51	1.43
26	d	405	PL9	C28-C29	2.01	1.37	1.33
22	B	610	CLA	OBD-CAD	2.01	1.25	1.22
22	c	912	CLA	C1D-ND	-2.01	1.35	1.37
24	B	618	BCR	C5-C6	2.01	1.37	1.34
39	V	202	HEC	CMA-C3A	2.01	1.56	1.51
22	D	403	CLA	C4B-CHC	2.01	1.46	1.41
22	B	616	CLA	C4C-C3C	2.01	1.48	1.45
22	B	610	CLA	C4D-ND	2.01	1.40	1.37
35	h	102	DGD	O5D-C1E	2.01	1.43	1.40
22	c	904	CLA	C4B-CHC	2.01	1.46	1.41
22	b	615	CLA	C1B-NB	2.00	1.37	1.35
22	B	603	CLA	C4C-C3C	2.00	1.48	1.45
22	B	604	CLA	C4B-CHC	2.00	1.46	1.41

All (2317) bond angle outliers are listed below:



Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	602	CLA	C4A-NA-C1A	11.72	111.97	106.71
22	C	506	CLA	C4A-NA-C1A	11.20	111.74	106.71
22	B	602	CLA	C4A-NA-C1A	10.95	111.63	106.71
22	c	912	CLA	C4A-NA-C1A	10.35	111.36	106.71
22	c	909	CLA	C4A-NA-C1A	9.96	111.19	106.71
22	c	904	CLA	C4A-NA-C1A	9.82	111.12	106.71
22	b	608	CLA	C4A-NA-C1A	9.79	111.11	106.71
22	c	908	CLA	C4A-NA-C1A	9.69	111.06	106.71
22	C	514	CLA	C4A-NA-C1A	9.68	111.06	106.71
22	B	615	CLA	C2D-C1D-ND	9.54	117.14	110.10
22	c	905	CLA	C4A-NA-C1A	9.23	110.85	106.71
34	V	203	HTG	O5-C1-C2	-9.01	98.98	110.31
22	B	606	CLA	C4A-NA-C1A	8.85	110.68	106.71
22	C	507	CLA	C4A-NA-C1A	8.72	110.63	106.71
22	B	615	CLA	C4A-NA-C1A	8.71	110.62	106.71
34	l	106	HTG	C1'-S1-C1	8.58	116.14	100.09
22	b	617	CLA	C4A-NA-C1A	8.54	110.54	106.71
22	B	616	CLA	C4A-NA-C1A	8.53	110.54	106.71
28	a	414	SQD	O6-C1-C2	8.49	121.56	108.30
22	C	505	CLA	C4A-NA-C1A	8.46	110.51	106.71
22	C	504	CLA	C4A-NA-C1A	8.43	110.50	106.71
34	C	532	HTG	C1'-S1-C1	8.39	115.79	100.09
22	C	513	CLA	C4A-NA-C1A	8.39	110.48	106.71
34	D	414	HTG	C1'-S1-C1	8.16	115.35	100.09
23	a	411	PHO	O2D-CGD-CBD	8.14	121.31	111.00
22	C	512	CLA	C4A-NA-C1A	8.08	110.34	106.71
22	b	614	CLA	C4A-NA-C1A	7.98	110.29	106.71
34	b	632	HTG	C1'-S1-C1	7.96	114.97	100.09
22	B	611	CLA	O2D-CGD-CBD	7.92	125.33	111.27
22	C	508	CLA	C4A-NA-C1A	7.91	110.26	106.71
22	D	403	CLA	C4A-NA-C1A	7.88	110.25	106.71
22	D	403	CLA	C2C-C1C-NC	7.75	117.24	109.97
34	v	203	HTG	O5-C1-C2	-7.74	100.58	110.31
34	b	624	HTG	C1'-S1-C1	7.69	114.47	100.09
22	b	605	CLA	C4A-NA-C1A	7.62	110.13	106.71
22	a	409	CLA	C2C-C1C-NC	7.61	117.10	109.97
34	D	415	HTG	C1'-S1-C1	7.58	114.27	100.09
22	d	403	CLA	C4A-NA-C1A	7.56	110.11	106.71
22	b	606	CLA	CHD-C4C-C3C	-7.54	113.75	124.84
22	c	902	CLA	CHD-C1D-ND	-7.52	117.55	124.45
22	b	615	CLA	C4A-NA-C1A	7.49	110.07	106.71
22	B	605	CLA	C4A-NA-C1A	7.48	110.07	106.71
22	c	902	CLA	C2D-C1D-ND	7.44	115.59	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	v	203	HTG	C1'-S1-C1	7.39	113.91	100.09
22	b	616	CLA	C4A-NA-C1A	7.33	110.00	106.71
22	b	617	CLA	C2D-C1D-ND	7.31	115.49	110.10
22	B	604	CLA	O2D-CGD-CBD	7.29	124.23	111.27
23	a	411	PHO	C1-C2-C3	-7.29	113.43	126.04
22	B	612	CLA	C4A-NA-C1A	7.24	109.96	106.71
22	b	603	CLA	O2D-CGD-CBD	7.22	124.10	111.27
22	C	509	CLA	C4A-NA-C1A	7.17	109.93	106.71
34	B	627	HTG	C1'-S1-C1	7.17	113.50	100.09
22	b	611	CLA	C2D-C1D-ND	7.12	115.35	110.10
34	b	627	HTG	C1'-S1-C1	7.09	113.35	100.09
22	c	908	CLA	CHD-C1D-ND	-7.07	117.95	124.45
22	b	612	CLA	C4A-NA-C1A	7.01	109.86	106.71
22	C	502	CLA	O2D-CGD-O1D	-6.96	110.22	123.84
22	B	611	CLA	C4A-NA-C1A	6.96	109.84	106.71
22	B	610	CLA	C4A-NA-C1A	6.93	109.82	106.71
22	a	408	CLA	CHD-C1D-ND	-6.89	118.12	124.45
28	a	414	SQD	O9-S-C6	6.88	115.12	106.94
22	d	402	CLA	C2D-C1D-ND	6.86	115.16	110.10
22	b	603	CLA	CHD-C1D-ND	-6.85	118.16	124.45
22	c	907	CLA	CHD-C1D-ND	-6.82	118.18	124.45
22	c	902	CLA	C4A-NA-C1A	6.81	109.77	106.71
22	A	405	CLA	C2D-C1D-ND	6.80	115.12	110.10
28	C	501	SQD	O6-C1-C2	6.79	118.90	108.30
22	C	510	CLA	C2C-C1C-NC	6.73	116.28	109.97
22	b	602	CLA	O2D-CGD-CBD	6.73	123.22	111.27
22	A	406	CLA	C2C-C1C-NC	6.72	116.27	109.97
34	D	415	HTG	O5-C1-C2	-6.70	101.88	110.31
22	D	401	CLA	C2C-C1C-NC	6.69	116.24	109.97
34	B	623	HTG	C1'-S1-C1	6.69	112.61	100.09
23	a	410	PHO	O2D-CGD-CBD	6.68	119.45	111.00
22	B	609	CLA	CHD-C1D-ND	-6.66	118.33	124.45
22	b	606	CLA	CHD-C1D-ND	-6.66	118.33	124.45
22	C	503	CLA	C2D-C1D-ND	6.66	115.01	110.10
22	D	403	CLA	C1C-C2C-C3C	-6.64	99.97	106.96
22	b	607	CLA	CHD-C1D-ND	-6.64	118.35	124.45
22	c	913	CLA	C4A-NA-C1A	6.60	109.67	106.71
22	a	409	CLA	C2D-C1D-ND	6.59	114.96	110.10
22	b	612	CLA	C2D-C1D-ND	6.58	114.96	110.10
22	C	508	CLA	O2D-CGD-CBD	6.57	122.94	111.27
22	B	608	CLA	C4D-CHA-C1A	-6.54	113.28	121.25
23	A	407	PHO	O2D-CGD-CBD	6.53	119.27	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	502	CLA	C4A-NA-C1A	6.51	109.63	106.71
34	c	922	HTG	C1'-S1-C1	6.50	112.25	100.09
34	C	521	HTG	C1'-S1-C1	6.49	112.23	100.09
22	C	502	CLA	O2D-CGD-CBD	6.49	122.79	111.27
22	A	408	CLA	C2D-C1D-ND	6.46	114.87	110.10
22	a	409	CLA	C1C-C2C-C3C	-6.43	100.19	106.96
22	C	505	CLA	CHD-C1D-ND	-6.42	118.55	124.45
22	B	614	CLA	C4A-NA-C1A	6.41	109.59	106.71
22	B	605	CLA	C2D-C1D-ND	6.39	114.81	110.10
22	D	401	CLA	C1C-C2C-C3C	-6.38	100.25	106.96
22	b	614	CLA	CHD-C1D-ND	-6.35	118.61	124.45
22	b	613	CLA	CHD-C4C-C3C	-6.35	115.50	124.84
22	a	409	CLA	CHD-C1D-ND	-6.32	118.64	124.45
22	b	616	CLA	C2D-C1D-ND	6.31	114.76	110.10
22	B	615	CLA	CHD-C4C-C3C	-6.31	115.56	124.84
22	b	604	CLA	C2C-C1C-NC	6.27	115.84	109.97
22	B	610	CLA	CHD-C4C-C3C	-6.25	115.65	124.84
22	b	605	CLA	C2D-C1D-ND	6.25	114.71	110.10
22	b	607	CLA	CHD-C4C-C3C	-6.25	115.66	124.84
22	A	406	CLA	C1C-C2C-C3C	-6.24	100.39	106.96
22	B	605	CLA	C2C-C1C-NC	6.23	115.81	109.97
22	B	609	CLA	C2D-C1D-ND	6.22	114.69	110.10
34	B	626	HTG	C1'-S1-C1	6.22	111.73	100.09
22	B	609	CLA	O2D-CGD-CBD	6.22	122.32	111.27
22	b	606	CLA	C2D-C1D-ND	6.17	114.65	110.10
22	a	408	CLA	CHD-C4C-C3C	-6.15	115.81	124.84
22	c	914	CLA	C4A-NA-C1A	6.14	109.47	106.71
24	D	405	BCR	C24-C23-C22	-6.14	116.96	126.23
22	b	610	CLA	CHD-C1D-ND	-6.14	118.81	124.45
22	c	908	CLA	C2D-C1D-ND	6.14	114.63	110.10
22	B	617	CLA	O2D-CGD-CBD	6.13	122.17	111.27
22	B	617	CLA	CHD-C4C-C3C	-6.11	115.86	124.84
22	B	611	CLA	C2D-C1D-ND	6.10	114.60	110.10
22	b	607	CLA	O2D-CGD-CBD	6.07	122.06	111.27
22	c	910	CLA	C2C-C1C-NC	6.06	115.65	109.97
22	B	611	CLA	CHD-C1D-ND	-6.05	118.89	124.45
22	a	407	CLA	C2D-C1D-ND	6.04	114.56	110.10
22	B	607	CLA	O2D-CGD-O1D	-6.04	112.03	123.84
22	a	412	CLA	O2D-CGD-CBD	6.03	121.99	111.27
22	B	614	CLA	C2D-C1D-ND	6.02	114.54	110.10
22	a	408	CLA	C2D-C1D-ND	6.02	114.54	110.10
28	C	501	SQD	O9-S-C6	6.02	114.09	106.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	607	CLA	C4A-NA-C1A	6.01	109.41	106.71
22	C	502	CLA	C2D-C1D-ND	6.00	114.53	110.10
25	b	622	LMG	O1-C1-C2	5.99	117.66	108.30
22	c	914	CLA	C4D-CHA-C1A	-5.99	113.96	121.25
22	B	617	CLA	CHD-C1D-ND	-5.99	118.95	124.45
22	B	612	CLA	C2D-C1D-ND	5.97	114.50	110.10
22	b	607	CLA	C2D-C1D-ND	5.93	114.47	110.10
22	c	907	CLA	C2C-C1C-NC	5.93	115.53	109.97
22	B	606	CLA	C2D-C1D-ND	5.93	114.47	110.10
22	C	509	CLA	C2D-C1D-ND	5.92	114.46	110.10
22	b	612	CLA	CHD-C4C-C3C	-5.91	116.15	124.84
22	b	617	CLA	O2D-CGD-CBD	5.90	121.75	111.27
22	B	602	CLA	O2D-CGD-CBD	5.89	121.74	111.27
22	b	605	CLA	C4D-CHA-C1A	-5.88	114.10	121.25
27	A	412	LHG	O7-C7-C8	5.87	121.88	111.09
22	C	504	CLA	C2D-C1D-ND	5.84	114.41	110.10
22	B	616	CLA	CHD-C1D-ND	-5.83	119.09	124.45
22	C	513	CLA	C2D-C1D-ND	5.83	114.40	110.10
22	C	511	CLA	C2C-C1C-NC	5.82	115.43	109.97
22	B	607	CLA	O2D-CGD-CBD	5.79	121.55	111.27
22	B	617	CLA	C2D-C1D-ND	5.79	114.37	110.10
22	b	613	CLA	C4A-NA-C1A	5.76	109.29	106.71
22	B	616	CLA	C2D-C1D-ND	5.74	114.33	110.10
22	b	604	CLA	CHD-C4C-C3C	-5.73	116.41	124.84
22	b	611	CLA	C2C-C1C-NC	5.73	115.34	109.97
22	D	401	CLA	CHD-C4C-C3C	-5.73	116.41	124.84
22	c	910	CLA	C4A-NA-C1A	5.73	109.28	106.71
22	D	404	CLA	CHD-C1D-ND	-5.73	119.19	124.45
22	D	403	CLA	C2D-C1D-ND	5.72	114.32	110.10
22	B	607	CLA	CHD-C4C-C3C	-5.72	116.44	124.84
27	D	409	LHG	O7-C7-C8	5.71	123.81	111.50
22	b	611	CLA	O2D-CGD-CBD	5.69	121.38	111.27
22	d	402	CLA	C4D-CHA-C1A	-5.68	114.34	121.25
22	A	405	CLA	C2C-C1C-NC	5.68	115.29	109.97
22	b	607	CLA	O2D-CGD-O1D	-5.68	112.74	123.84
22	C	507	CLA	CHD-C1D-ND	-5.66	119.25	124.45
22	a	408	CLA	C4D-CHA-C1A	-5.66	114.36	121.25
22	C	508	CLA	C2D-C1D-ND	5.65	114.27	110.10
22	B	604	CLA	C2D-C1D-ND	5.64	114.26	110.10
22	c	903	CLA	C2D-C1D-ND	5.63	114.25	110.10
22	b	608	CLA	C4D-CHA-C1A	-5.63	114.40	121.25
22	C	507	CLA	C2D-C1D-ND	5.62	114.25	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	D	401	CLA	C2D-C1D-ND	5.62	114.25	110.10
22	A	408	CLA	C2C-C1C-NC	5.61	115.22	109.97
22	B	608	CLA	C2C-C1C-NC	5.60	115.22	109.97
22	c	904	CLA	C4D-CHA-C1A	-5.60	114.44	121.25
22	c	914	CLA	C2D-C1D-ND	5.59	114.22	110.10
22	B	617	CLA	C2C-C1C-NC	5.58	115.20	109.97
25	d	409	LMG	O1-C1-C2	5.58	117.01	108.30
36	E	102	HEM	C4D-ND-C1D	5.56	110.81	105.07
22	B	607	CLA	C2C-C1C-NC	5.55	115.17	109.97
22	b	617	CLA	CHD-C4C-C3C	-5.55	116.69	124.84
22	C	502	CLA	CHD-C1D-ND	-5.55	119.36	124.45
22	c	905	CLA	C2D-C1D-ND	5.52	114.17	110.10
22	b	610	CLA	C1C-C2C-C3C	-5.52	101.16	106.96
34	V	203	HTG	C1'-S1-C1	5.51	110.71	100.16
25	b	622	LMG	O7-C10-C11	5.51	123.37	111.50
22	B	604	CLA	C2C-C1C-NC	5.50	115.12	109.97
22	B	609	CLA	CHD-C4C-C3C	-5.50	116.76	124.84
27	a	416	LHG	O7-C7-C8	5.49	123.33	111.50
34	b	626	HTG	C1'-S1-C1	5.49	110.35	100.09
22	A	406	CLA	CHD-C1D-ND	-5.48	119.42	124.45
39	V	202	HEC	CBD-CAD-C3D	-5.47	103.28	112.62
22	a	412	CLA	C1C-C2C-C3C	-5.46	101.22	106.96
22	B	615	CLA	C3D-C2D-C1D	-5.45	98.39	105.83
22	c	908	CLA	O2D-CGD-CBD	5.44	120.93	111.27
22	B	606	CLA	CHD-C4C-C3C	-5.43	116.86	124.84
22	d	402	CLA	O2D-CGD-CBD	5.42	120.91	111.27
22	a	412	CLA	C4D-CHA-C1A	-5.41	114.66	121.25
22	B	609	CLA	C2C-C1C-NC	5.41	115.04	109.97
22	C	512	CLA	C2D-C1D-ND	5.41	114.09	110.10
22	c	914	CLA	CHD-C4C-C3C	-5.41	116.89	124.84
22	C	510	CLA	C4D-CHA-C1A	-5.40	114.67	121.25
22	a	408	CLA	C2C-C1C-NC	5.40	115.03	109.97
22	A	406	CLA	C2D-C1D-ND	5.40	114.08	110.10
22	B	613	CLA	C4A-NA-C1A	5.40	109.13	106.71
22	B	603	CLA	C2C-C1C-NC	5.39	115.02	109.97
22	c	903	CLA	C4A-NA-C1A	5.36	109.12	106.71
22	c	903	CLA	C1-C2-C3	-5.36	116.77	126.04
22	c	911	CLA	CHD-C1D-ND	-5.36	119.53	124.45
22	b	611	CLA	C4A-NA-C1A	5.35	109.11	106.71
22	b	613	CLA	C2D-C1D-ND	5.35	114.04	110.10
22	A	408	CLA	CHD-C1D-ND	-5.35	119.54	124.45
22	c	902	CLA	CMD-C2D-C1D	5.31	134.08	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	405	BCR	C7-C8-C9	-5.31	118.21	126.23
22	a	408	CLA	CHD-C4C-NC	5.31	132.56	124.20
28	A	413	SQD	O9-S-C6	5.30	113.24	106.94
22	b	610	CLA	C2C-C1C-NC	5.30	114.94	109.97
36	E	102	HEM	CBD-CAD-C3D	-5.30	97.91	112.63
22	a	412	CLA	C2C-C1C-NC	5.27	114.91	109.97
23	D	402	PHO	O2D-CGD-CBD	5.27	117.67	111.00
22	a	408	CLA	C1C-C2C-C3C	-5.26	101.42	106.96
22	c	903	CLA	CHD-C4C-C3C	-5.26	117.11	124.84
22	D	403	CLA	C1-C2-C3	-5.26	116.95	126.04
36	e	101	HEM	C4D-ND-C1D	5.25	110.50	105.07
22	c	906	CLA	C4A-NA-C1A	5.25	109.06	106.71
22	B	615	CLA	CHD-C1D-ND	-5.25	119.63	124.45
22	b	611	CLA	CHD-C4C-C3C	-5.24	117.13	124.84
22	B	603	CLA	C2D-C1D-ND	5.24	113.96	110.10
22	B	613	CLA	CHD-C1D-ND	-5.24	119.64	124.45
22	C	510	CLA	C1C-C2C-C3C	-5.22	101.47	106.96
22	B	616	CLA	CHD-C4C-C3C	-5.22	117.16	124.84
22	D	404	CLA	C4A-NA-C1A	5.22	109.05	106.71
23	D	402	PHO	C1-C2-C3	-5.22	117.02	126.04
22	C	510	CLA	C4A-NA-C1A	5.21	109.05	106.71
22	b	614	CLA	C2D-C1D-ND	5.21	113.94	110.10
22	B	605	CLA	C1C-C2C-C3C	-5.21	101.48	106.96
34	b	632	HTG	O5-C5-C4	5.21	119.15	109.69
22	C	508	CLA	CHD-C1D-ND	-5.20	119.67	124.45
28	l	101	SQD	O6-C1-C2	5.19	116.40	108.30
22	b	605	CLA	C2C-C1C-NC	5.17	114.82	109.97
22	d	402	CLA	C2C-C1C-NC	5.17	114.82	109.97
22	c	913	CLA	C1-C2-C3	-5.17	117.10	126.04
22	B	610	CLA	C2D-C1D-ND	5.16	113.91	110.10
35	d	406	DGD	O2G-C1B-C2B	5.16	122.63	111.50
22	c	902	CLA	CHD-C4C-C3C	-5.16	117.26	124.84
22	c	902	CLA	C1C-C2C-C3C	-5.16	101.53	106.96
22	a	407	CLA	C4A-NA-C1A	5.16	109.02	106.71
22	b	615	CLA	C4D-CHA-C1A	-5.14	114.99	121.25
24	d	404	BCR	C7-C8-C9	-5.14	118.47	126.23
22	b	603	CLA	C2D-C1D-ND	5.14	113.89	110.10
28	a	414	SQD	O47-C7-C8	5.13	122.56	111.50
22	C	505	CLA	C2C-C1C-NC	5.13	114.78	109.97
22	B	602	CLA	CHD-C1D-ND	-5.13	119.74	124.45
22	C	507	CLA	C2C-C1C-NC	5.10	114.75	109.97
22	C	514	CLA	CHD-C4C-C3C	-5.10	117.34	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	906	CLA	C2D-C1D-ND	5.09	113.86	110.10
22	c	913	CLA	O2D-CGD-CBD	5.08	120.30	111.27
22	c	910	CLA	C4D-CHA-C1A	-5.07	115.07	121.25
22	b	604	CLA	O2D-CGD-CBD	5.07	120.28	111.27
22	a	407	CLA	CHD-C1D-ND	-5.07	119.80	124.45
22	c	913	CLA	C2D-C1D-ND	5.06	113.83	110.10
22	c	911	CLA	C4A-NA-C1A	5.05	108.98	106.71
22	b	608	CLA	C2C-C1C-NC	5.05	114.70	109.97
22	b	613	CLA	CAC-C3C-C4C	5.04	131.35	124.81
22	C	504	CLA	CHD-C4C-C3C	-5.04	117.44	124.84
22	B	617	CLA	O2D-CGD-O1D	-5.03	114.00	123.84
22	c	911	CLA	CHD-C4C-C3C	-5.03	117.45	124.84
22	B	610	CLA	CHD-C1D-ND	-5.02	119.84	124.45
22	c	911	CLA	C2D-C1D-ND	5.02	113.80	110.10
22	c	903	CLA	O2D-CGD-O1D	-5.01	114.04	123.84
22	C	502	CLA	C2C-C1C-NC	5.00	114.66	109.97
22	c	906	CLA	O2D-CGD-CBD	5.00	120.16	111.27
22	b	604	CLA	C2D-C1D-ND	5.00	113.79	110.10
22	a	409	CLA	C4D-CHA-C1A	-5.00	115.16	121.25
22	B	609	CLA	C4D-CHA-C1A	-5.00	115.16	121.25
22	c	908	CLA	CHD-C4C-C3C	-4.99	117.51	124.84
22	b	606	CLA	CHD-C4C-NC	4.98	132.05	124.20
22	b	615	CLA	C2D-C1D-ND	4.98	113.77	110.10
22	B	603	CLA	CHD-C4C-C3C	-4.97	117.54	124.84
22	C	503	CLA	O2D-CGD-CBD	4.96	120.08	111.27
22	c	907	CLA	O2D-CGD-CBD	4.95	120.06	111.27
24	b	618	BCR	C3-C4-C5	-4.94	105.25	114.08
22	b	607	CLA	C1-C2-C3	-4.94	117.50	126.04
22	B	607	CLA	C2D-C1D-ND	4.94	113.74	110.10
22	c	904	CLA	C2C-C1C-NC	4.93	114.59	109.97
22	B	611	CLA	CHD-C4C-C3C	-4.93	117.60	124.84
22	A	405	CLA	C1C-C2C-C3C	-4.93	101.78	106.96
22	b	612	CLA	C2C-C1C-NC	4.92	114.58	109.97
22	A	406	CLA	CHD-C4C-C3C	-4.91	117.62	124.84
22	b	604	CLA	C4-C3-C5	4.91	123.53	115.27
28	a	418	SQD	C1-O5-C5	-4.91	104.05	113.69
22	C	503	CLA	O2D-CGD-O1D	-4.91	114.24	123.84
22	C	503	CLA	C4A-NA-C1A	4.91	108.91	106.71
22	b	613	CLA	C4D-CHA-C1A	-4.90	115.28	121.25
22	b	609	CLA	CHD-C4C-C3C	-4.90	117.63	124.84
22	C	513	CLA	CHD-C4C-C3C	-4.90	117.64	124.84
22	b	612	CLA	CHD-C1D-ND	-4.89	119.96	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	522	LHG	O7-C7-C8	4.89	122.04	111.50
22	B	605	CLA	CHD-C1D-ND	-4.87	119.97	124.45
22	b	604	CLA	C1C-C2C-C3C	-4.87	101.83	106.96
23	a	411	PHO	O2D-CGD-O1D	-4.87	114.32	123.84
22	b	602	CLA	C2D-C1D-ND	4.86	113.69	110.10
28	D	408	SQD	O6-C1-C2	4.86	115.89	108.30
22	c	910	CLA	C2D-C1D-ND	4.85	113.68	110.10
22	b	604	CLA	CHD-C1D-ND	-4.84	120.00	124.45
22	B	604	CLA	CHD-C1D-ND	-4.84	120.00	124.45
22	b	606	CLA	O2D-CGD-CBD	4.84	119.87	111.27
22	B	611	CLA	O2D-CGD-O1D	-4.84	114.38	123.84
22	b	612	CLA	C4D-CHA-C1A	-4.84	115.36	121.25
22	B	603	CLA	C4D-CHA-C1A	-4.83	115.37	121.25
22	C	503	CLA	C4D-CHA-C1A	-4.82	115.38	121.25
34	v	203	HTG	C1-C2-C3	-4.81	101.08	110.59
22	C	512	CLA	CHD-C1D-ND	-4.80	120.05	124.45
22	c	903	CLA	C2C-C1C-NC	4.79	114.46	109.97
26	A	411	PL9	C7-C3-C4	4.79	120.77	116.88
22	B	612	CLA	CHD-C1D-ND	-4.79	120.05	124.45
22	B	613	CLA	C2D-C1D-ND	4.78	113.63	110.10
29	I	102	LMT	O1B-C4'-C3'	4.78	119.99	107.28
28	l	101	SQD	O47-C7-C8	4.78	121.80	111.50
22	b	614	CLA	C2C-C1C-NC	4.77	114.44	109.97
24	C	515	BCR	C33-C5-C6	-4.77	119.17	124.53
22	C	507	CLA	CHD-C4C-C3C	-4.77	117.83	124.84
22	b	606	CLA	C4D-CHA-C1A	-4.76	115.45	121.25
22	B	612	CLA	C4D-CHA-C1A	-4.76	115.45	121.25
22	b	603	CLA	CHA-C4D-ND	4.76	142.46	132.50
22	C	508	CLA	CHD-C4C-C3C	-4.75	117.85	124.84
22	C	510	CLA	O2D-CGD-CBD	4.75	119.71	111.27
35	c	919	DGD	O2G-C1B-C2B	4.75	121.74	111.50
22	d	402	CLA	C1D-ND-C4D	-4.75	102.96	106.33
22	d	403	CLA	C2C-C1C-NC	4.75	114.42	109.97
22	c	902	CLA	C2C-C1C-NC	4.75	114.42	109.97
22	c	907	CLA	C4A-NA-C1A	4.74	108.84	106.71
22	c	908	CLA	O2D-CGD-O1D	-4.74	114.57	123.84
22	a	412	CLA	C4-C3-C5	4.72	123.21	115.27
28	A	413	SQD	O48-C23-C24	4.72	126.72	111.91
22	a	409	CLA	O2D-CGD-CBD	4.71	119.64	111.27
22	B	607	CLA	C1C-C2C-C3C	-4.70	102.01	106.96
22	C	505	CLA	C1C-C2C-C3C	-4.70	102.02	106.96
22	A	408	CLA	C1C-C2C-C3C	-4.68	102.03	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	606	CLA	C2C-C1C-NC	4.68	114.36	109.97
22	B	613	CLA	C4D-CHA-C1A	-4.68	115.56	121.25
22	b	607	CLA	C2C-C1C-NC	4.66	114.34	109.97
22	c	904	CLA	C2D-C1D-ND	4.66	113.54	110.10
39	v	202	HEC	CBD-CAD-C3D	-4.66	104.67	112.62
22	a	407	CLA	O2D-CGD-CBD	4.65	119.54	111.27
22	B	604	CLA	C1C-C2C-C3C	-4.65	102.07	106.96
22	b	610	CLA	CHD-C4C-C3C	-4.65	118.00	124.84
22	A	406	CLA	C4-C3-C5	4.65	123.09	115.27
22	C	504	CLA	CHA-C4D-ND	4.65	142.23	132.50
22	B	603	CLA	C4A-NA-C1A	4.65	108.80	106.71
22	C	511	CLA	C1C-C2C-C3C	-4.64	102.08	106.96
22	b	607	CLA	C4D-CHA-C1A	-4.64	115.60	121.25
22	B	611	CLA	C3D-C2D-C1D	-4.63	99.51	105.83
22	b	616	CLA	CHD-C1D-ND	-4.63	120.19	124.45
22	C	512	CLA	CHD-C4C-C3C	-4.63	118.03	124.84
22	C	513	CLA	O2D-CGD-CBD	4.63	119.49	111.27
22	C	509	CLA	O2D-CGD-CBD	4.62	119.48	111.27
22	B	607	CLA	C4D-CHA-C1A	-4.62	115.63	121.25
22	B	612	CLA	CHD-C4C-C3C	-4.62	118.06	124.84
22	a	409	CLA	CHD-C4C-C3C	-4.61	118.06	124.84
22	C	505	CLA	O2D-CGD-CBD	4.60	119.44	111.27
28	C	501	SQD	O8-S-C6	4.60	113.06	105.74
22	B	615	CLA	O2D-CGD-CBD	4.59	119.43	111.27
22	d	403	CLA	C1C-C2C-C3C	-4.59	102.13	106.96
28	a	418	SQD	O6-C1-C2	4.59	115.47	108.30
22	d	402	CLA	C1C-C2C-C3C	-4.58	102.14	106.96
22	b	609	CLA	C2C-C1C-NC	4.58	114.26	109.97
22	B	613	CLA	C2C-C1C-NC	4.58	114.26	109.97
28	l	101	SQD	O7-S-C6	4.58	112.38	106.94
24	Y	101	BCR	C38-C26-C25	-4.58	119.39	124.53
22	C	512	CLA	C2C-C1C-NC	4.58	114.26	109.97
24	y	101	BCR	C33-C5-C6	-4.57	119.39	124.53
22	B	611	CLA	C2C-C1C-NC	4.57	114.25	109.97
22	D	401	CLA	CHD-C4C-NC	4.57	131.40	124.20
22	b	615	CLA	C2C-C1C-NC	4.57	114.25	109.97
22	A	405	CLA	CHD-C1D-ND	-4.56	120.26	124.45
29	I	102	LMT	C1'-O5'-C5'	4.56	122.64	113.69
24	d	404	BCR	C38-C26-C25	-4.56	119.41	124.53
22	B	605	CLA	O2D-CGD-CBD	4.55	119.36	111.27
22	C	510	CLA	C2D-C1D-ND	4.54	113.45	110.10
22	A	408	CLA	C4A-NA-C1A	4.54	108.75	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	609	CLA	C4A-NA-C1A	4.53	108.74	106.71
22	c	909	CLA	C2D-C1D-ND	4.52	113.43	110.10
22	c	905	CLA	C2C-C1C-NC	4.52	114.20	109.97
22	C	502	CLA	CHD-C4C-C3C	-4.51	118.22	124.84
22	c	909	CLA	C1C-C2C-C3C	-4.50	102.23	106.96
22	c	914	CLA	C1C-C2C-C3C	-4.49	102.23	106.96
36	E	102	HEM	CBA-CAA-C2A	-4.49	104.95	112.62
34	V	203	HTG	O2-C2-C1	4.49	118.51	110.27
22	b	614	CLA	CHD-C4C-C3C	-4.49	118.24	124.84
22	B	608	CLA	C1C-C2C-C3C	-4.49	102.24	106.96
22	b	614	CLA	CAC-C3C-C4C	4.49	130.63	124.81
22	B	610	CLA	C2C-C1C-NC	4.48	114.17	109.97
22	C	503	CLA	CHD-C4C-C3C	-4.45	118.30	124.84
28	A	413	SQD	O6-C1-C2	4.45	115.25	108.30
23	D	402	PHO	C4-C3-C5	4.45	122.76	115.27
22	a	407	CLA	CAC-C3C-C4C	4.44	130.57	124.81
22	C	512	CLA	C1-O2A-CGA	4.43	128.08	116.44
22	c	910	CLA	CAC-C3C-C4C	4.43	130.56	124.81
22	B	606	CLA	C4D-CHA-C1A	-4.43	115.86	121.25
22	B	603	CLA	C1C-C2C-C3C	-4.43	102.30	106.96
22	c	907	CLA	C1C-C2C-C3C	-4.43	102.30	106.96
22	B	612	CLA	C2C-C1C-NC	4.42	114.12	109.97
28	C	501	SQD	C1-O5-C5	-4.42	105.01	113.69
22	c	902	CLA	C3D-C2D-C1D	-4.42	99.80	105.83
22	c	909	CLA	O2D-CGD-CBD	4.42	119.11	111.27
22	c	913	CLA	CHD-C1D-ND	-4.41	120.40	124.45
22	c	910	CLA	C1C-C2C-C3C	-4.41	102.32	106.96
22	b	603	CLA	C4A-NA-C1A	4.41	108.69	106.71
22	D	404	CLA	O2D-CGD-CBD	4.41	119.10	111.27
28	C	501	SQD	C1-C2-C3	-4.40	100.83	110.00
22	c	908	CLA	C1C-C2C-C3C	-4.40	102.33	106.96
22	C	511	CLA	C2D-C1D-ND	4.40	113.35	110.10
22	B	617	CLA	C1C-C2C-C3C	-4.39	102.34	106.96
24	c	916	BCR	C15-C14-C13	-4.39	121.04	127.31
22	B	617	CLA	C4D-CHA-C1A	-4.39	115.91	121.25
22	d	403	CLA	C1-O2A-CGA	4.39	127.95	116.44
22	B	614	CLA	C4D-CHA-C1A	-4.38	115.92	121.25
22	B	609	CLA	C1C-C2C-C3C	-4.37	102.37	106.96
35	D	407	DGD	C4D-C3D-C2D	4.37	118.44	110.82
22	B	615	CLA	C2C-C1C-NC	4.36	114.06	109.97
22	C	511	CLA	CHD-C4C-C3C	-4.36	118.44	124.84
35	H	102	DGD	O1G-C1A-O1A	-4.35	112.61	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	902	CLA	O2D-CGD-CBD	4.35	119.00	111.27
22	B	610	CLA	CHD-C4C-NC	4.35	131.05	124.20
22	b	614	CLA	CMD-C2D-C1D	4.35	132.37	124.71
22	B	611	CLA	C1C-C2C-C3C	-4.34	102.39	106.96
22	b	613	CLA	O2D-CGD-CBD	4.33	118.97	111.27
22	B	605	CLA	CHD-C4C-C3C	-4.33	118.47	124.84
22	B	602	CLA	O2D-CGD-O1D	-4.33	115.37	123.84
22	b	617	CLA	CBC-CAC-C3C	-4.33	100.49	112.43
35	D	407	DGD	O2G-C1B-C2B	4.33	120.82	111.50
22	b	615	CLA	O2D-CGD-CBD	4.32	118.94	111.27
22	c	908	CLA	CHD-C4C-NC	4.32	131.00	124.20
22	b	603	CLA	CMD-C2D-C1D	4.31	132.32	124.71
22	A	408	CLA	C4-C3-C5	4.31	122.52	115.27
27	l	102	LHG	O7-C7-C8	4.31	120.78	111.50
22	b	605	CLA	O2D-CGD-CBD	4.31	118.92	111.27
25	D	412	LMG	O7-C10-C11	4.30	120.76	111.50
22	b	602	CLA	C1C-C2C-C3C	-4.30	102.44	106.96
25	d	409	LMG	O7-C10-C11	4.29	120.75	111.50
22	c	914	CLA	C2C-C1C-NC	4.29	113.99	109.97
22	c	911	CLA	CHD-C4C-NC	4.28	130.95	124.20
25	C	520	LMG	O8-C28-C29	4.28	125.33	111.91
22	c	905	CLA	CHD-C1D-ND	-4.28	120.52	124.45
28	a	414	SQD	C1-C2-C3	-4.27	101.10	110.00
36	e	101	HEM	CBD-CAD-C3D	-4.27	100.77	112.63
24	c	915	BCR	C33-C5-C6	-4.27	119.74	124.53
22	B	606	CLA	CMC-C2C-C1C	4.26	131.53	125.04
22	b	602	CLA	C1-O2A-CGA	4.26	127.61	116.44
22	c	905	CLA	C1C-C2C-C3C	-4.25	102.49	106.96
22	B	610	CLA	C1C-C2C-C3C	-4.25	102.49	106.96
22	B	617	CLA	C1-O2A-CGA	4.25	127.59	116.44
22	C	504	CLA	O2D-CGD-O1D	-4.25	115.53	123.84
25	B	621	LMG	O7-C10-C11	4.25	120.65	111.50
22	B	617	CLA	CHD-C4C-NC	4.24	130.89	124.20
22	c	913	CLA	C1C-C2C-C3C	-4.24	102.50	106.96
34	D	415	HTG	O5-C5-C4	4.24	117.40	109.69
22	b	609	CLA	O2D-CGD-CBD	4.24	118.80	111.27
22	C	508	CLA	C1C-C2C-C3C	-4.24	102.50	106.96
22	b	602	CLA	C4D-CHA-C1A	-4.23	116.10	121.25
22	C	506	CLA	C2C-C1C-NC	4.23	113.94	109.97
22	b	617	CLA	CHD-C1D-ND	-4.23	120.57	124.45
22	b	612	CLA	C1C-C2C-C3C	-4.23	102.51	106.96
35	C	517	DGD	O3G-C3G-C2G	-4.22	100.71	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	C	501	SQD	O47-C7-C8	4.22	120.60	111.50
37	H	101	RRX	C24-C23-C22	-4.22	119.86	126.23
22	B	603	CLA	O2D-CGD-CBD	4.22	118.76	111.27
22	b	611	CLA	CHD-C1D-ND	-4.21	120.58	124.45
22	b	617	CLA	C3D-C2D-C1D	-4.21	100.08	105.83
26	A	411	PL9	C53-C6-C1	4.21	123.60	114.99
22	B	617	CLA	O2A-CGA-CBA	4.21	125.11	111.91
22	c	911	CLA	CMC-C2C-C1C	4.21	131.44	125.04
28	A	413	SQD	O47-C7-C8	4.21	120.57	111.50
22	a	407	CLA	C2C-C1C-NC	4.20	113.91	109.97
22	b	611	CLA	C1C-C2C-C3C	-4.20	102.54	106.96
22	C	511	CLA	O2D-CGD-O1D	-4.20	115.63	123.84
22	b	608	CLA	CHA-C4D-ND	4.20	141.29	132.50
22	b	611	CLA	C4D-CHA-C1A	-4.20	116.14	121.25
22	b	617	CLA	C2C-C1C-NC	4.20	113.90	109.97
22	c	913	CLA	C2C-C1C-NC	4.20	113.90	109.97
22	a	407	CLA	C1C-C2C-C3C	-4.20	102.55	106.96
22	C	506	CLA	CAC-C3C-C4C	4.19	130.25	124.81
22	c	907	CLA	CHD-C4C-C3C	-4.19	118.68	124.84
22	C	514	CLA	C2D-C1D-ND	4.19	113.19	110.10
22	b	608	CLA	C1C-C2C-C3C	-4.18	102.56	106.96
22	C	507	CLA	C1C-C2C-C3C	-4.18	102.56	106.96
22	c	906	CLA	CHD-C4C-C3C	-4.18	118.69	124.84
22	a	408	CLA	O2D-CGD-CBD	4.18	118.70	111.27
22	B	606	CLA	CHC-C1C-NC	-4.18	117.86	124.20
22	b	602	CLA	CHD-C4C-C3C	-4.18	118.70	124.84
22	c	904	CLA	C1C-C2C-C3C	-4.17	102.57	106.96
22	c	902	CLA	C1D-ND-C4D	-4.17	103.37	106.33
22	B	602	CLA	CAC-C3C-C4C	4.17	130.22	124.81
35	c	917	DGD	O2G-C1B-C2B	4.17	120.49	111.50
22	c	903	CLA	CHA-C4D-ND	4.17	141.22	132.50
22	B	608	CLA	C2D-C1D-ND	4.17	113.17	110.10
22	C	513	CLA	C1-O2A-CGA	4.16	127.36	116.44
22	C	514	CLA	O2D-CGD-O1D	-4.16	115.70	123.84
22	C	508	CLA	C2C-C1C-NC	4.16	113.87	109.97
22	d	403	CLA	CHD-C1D-ND	-4.15	120.64	124.45
22	B	613	CLA	CHD-C4C-C3C	-4.15	118.73	124.84
22	b	606	CLA	O2D-CGD-O1D	-4.15	115.73	123.84
22	a	409	CLA	C3D-C2D-C1D	-4.15	100.17	105.83
22	b	603	CLA	CMB-C2B-C3B	4.15	132.44	124.68
26	D	406	PL9	C40-C39-C41	4.14	122.24	115.27
22	C	502	CLA	C1C-C2C-C3C	-4.13	102.61	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	520	LMG	O7-C10-C11	4.13	120.41	111.50
26	d	405	PL9	C35-C34-C36	4.13	122.22	115.27
22	b	607	CLA	C1C-C2C-C3C	-4.13	102.62	106.96
22	C	513	CLA	CHD-C1D-ND	-4.13	120.66	124.45
23	a	410	PHO	O2D-CGD-O1D	-4.12	115.78	123.84
22	a	412	CLA	O2D-CGD-O1D	-4.12	115.78	123.84
34	b	632	HTG	C1-O5-C5	4.12	120.17	112.58
22	D	403	CLA	C4D-CHA-C1A	-4.11	116.24	121.25
22	b	610	CLA	C2D-C1D-ND	4.11	113.14	110.10
22	a	409	CLA	C4A-NA-C1A	4.11	108.56	106.71
22	D	404	CLA	CAC-C3C-C4C	4.11	130.14	124.81
27	d	407	LHG	O8-C23-O10	-4.11	113.22	123.59
22	c	905	CLA	CHD-C4C-C3C	-4.10	118.81	124.84
22	B	609	CLA	O2D-CGD-O1D	-4.10	115.81	123.84
22	D	404	CLA	C2D-C1D-ND	4.10	113.13	110.10
22	b	613	CLA	C2C-C1C-NC	4.10	113.81	109.97
22	C	514	CLA	CHA-C4D-ND	4.09	141.06	132.50
22	D	404	CLA	C2C-C1C-NC	4.09	113.81	109.97
22	b	616	CLA	CHD-C4C-C3C	-4.09	118.83	124.84
24	b	618	BCR	C33-C5-C6	-4.09	119.94	124.53
23	a	411	PHO	C4-C3-C5	4.09	122.15	115.27
22	B	606	CLA	O2D-CGD-O1D	-4.09	115.85	123.84
22	c	912	CLA	CHA-C4D-ND	4.08	141.04	132.50
22	A	408	CLA	C1D-ND-C4D	-4.07	103.44	106.33
22	B	616	CLA	C2C-C1C-NC	4.07	113.78	109.97
22	B	615	CLA	CHD-C4C-NC	4.06	130.60	124.20
22	B	615	CLA	C1C-C2C-C3C	-4.06	102.69	106.96
22	c	906	CLA	CHD-C1D-ND	-4.05	120.73	124.45
22	c	909	CLA	CHD-C1D-ND	-4.05	120.73	124.45
22	B	613	CLA	CAC-C3C-C4C	4.05	130.07	124.81
22	B	604	CLA	O2D-CGD-O1D	-4.05	115.92	123.84
22	B	610	CLA	C4D-CHA-C1A	-4.05	116.32	121.25
22	B	616	CLA	CHD-C4C-NC	4.05	130.58	124.20
22	B	607	CLA	C4-C3-C5	4.04	122.08	115.27
22	d	403	CLA	O2D-CGD-CBD	4.04	118.45	111.27
22	c	906	CLA	C2C-C1C-NC	4.04	113.76	109.97
22	B	605	CLA	C4D-CHA-C1A	-4.04	116.33	121.25
22	b	615	CLA	CHD-C4C-C3C	-4.04	118.90	124.84
27	D	409	LHG	O7-C7-O9	-4.04	113.94	123.70
22	B	604	CLA	CHD-C4C-C3C	-4.04	118.91	124.84
22	B	602	CLA	O1D-CGD-CBD	-4.03	116.23	124.48
22	B	609	CLA	CHA-C4D-ND	4.03	140.94	132.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	914	CLA	CHD-C1D-ND	-4.02	120.76	124.45
22	b	605	CLA	C1C-C2C-C3C	-4.02	102.73	106.96
22	c	913	CLA	CHD-C4C-C3C	-4.02	118.93	124.84
28	b	621	SQD	O7-S-C6	4.02	111.72	106.94
22	c	903	CLA	C1D-CHD-C4C	-4.02	117.39	126.06
22	c	911	CLA	O2D-CGD-CBD	4.02	118.41	111.27
22	C	506	CLA	C1C-C2C-C3C	-4.02	102.73	106.96
22	C	511	CLA	C4A-NA-C1A	4.02	108.51	106.71
22	c	913	CLA	O2D-CGD-O1D	-4.02	115.99	123.84
22	c	903	CLA	O2D-CGD-CBD	4.01	118.39	111.27
22	d	402	CLA	O2D-CGD-O1D	-4.01	116.00	123.84
22	c	914	CLA	CMC-C2C-C1C	4.00	131.14	125.04
22	c	907	CLA	C2D-C1D-ND	3.99	113.05	110.10
22	b	609	CLA	CHA-C4D-ND	3.99	140.85	132.50
22	A	406	CLA	C4D-CHA-C1A	-3.99	116.39	121.25
22	C	503	CLA	C1C-C2C-C3C	-3.99	102.76	106.96
25	b	622	LMG	C7-O1-C1	3.99	121.53	113.74
22	B	616	CLA	O2D-CGD-CBD	3.98	118.33	111.27
22	a	409	CLA	C3B-C4B-NB	3.98	114.35	109.21
25	C	531	LMG	O7-C10-C11	3.98	120.07	111.50
22	b	610	CLA	CMC-C2C-C1C	3.97	131.09	125.04
28	A	413	SQD	O48-C23-O10	-3.97	113.57	123.59
22	D	401	CLA	C1D-CHD-C4C	-3.97	117.49	126.06
22	B	602	CLA	C2C-C1C-NC	3.97	113.69	109.97
22	b	612	CLA	CHD-C4C-NC	3.97	130.46	124.20
22	b	603	CLA	C1C-C2C-C3C	-3.97	102.78	106.96
22	A	406	CLA	C1D-CHD-C4C	-3.97	117.50	126.06
22	a	412	CLA	CHD-C4C-C3C	-3.96	119.01	124.84
22	b	617	CLA	C3C-C4C-NC	3.96	115.02	110.57
22	B	612	CLA	C1C-C2C-C3C	-3.96	102.79	106.96
22	b	605	CLA	CHD-C4C-C3C	-3.96	119.02	124.84
22	b	616	CLA	C2C-C1C-NC	3.96	113.68	109.97
26	d	405	PL9	O1-C4-C3	-3.96	116.36	120.72
22	a	409	CLA	C4-C3-C5	3.95	121.91	115.27
34	V	203	HTG	C1-C2-C3	-3.94	102.81	110.59
34	B	627	HTG	C1-O5-C5	3.94	119.84	112.58
22	c	904	CLA	CMD-C2D-C1D	3.93	131.65	124.71
22	c	909	CLA	C2C-C1C-NC	3.93	113.66	109.97
37	H	101	RRX	C31-C1-C6	-3.93	103.93	110.30
34	b	624	HTG	O5-C1-C2	3.93	115.25	110.31
22	D	403	CLA	CHD-C1D-ND	-3.92	120.85	124.45
22	C	514	CLA	O2D-CGD-CBD	3.92	118.23	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	903	CLA	CHD-C1D-ND	-3.92	120.85	124.45
22	C	504	CLA	CHD-C1D-ND	-3.92	120.86	124.45
22	C	513	CLA	C1C-C2C-C3C	-3.90	102.85	106.96
35	C	517	DGD	C3G-C2G-C1G	-3.90	102.56	111.79
22	b	603	CLA	O2D-CGD-O1D	-3.90	116.21	123.84
26	a	415	PL9	C53-C6-C1	3.90	122.96	114.99
22	d	402	CLA	O2A-CGA-CBA	3.90	124.14	111.91
22	B	603	CLA	O2D-CGD-O1D	-3.90	116.22	123.84
22	A	408	CLA	O2D-CGD-CBD	3.90	118.19	111.27
25	c	930	LMG	O7-C10-C11	3.90	119.90	111.50
29	a	419	LMT	C4B-C3B-C2B	-3.90	104.02	110.82
22	b	608	CLA	CGD-CBD-CAD	-3.89	98.13	110.73
22	B	605	CLA	CMC-C2C-C1C	3.89	130.97	125.04
22	b	612	CLA	C3D-C2D-C1D	-3.89	100.52	105.83
34	B	627	HTG	O5-C1-C2	3.89	115.21	110.31
22	c	904	CLA	CHA-C4D-ND	3.89	140.64	132.50
27	a	423	LHG	O7-C7-C8	3.89	119.88	111.50
22	c	914	CLA	O2D-CGD-O1D	-3.89	116.24	123.84
22	b	607	CLA	CMD-C2D-C1D	3.89	131.56	124.71
22	c	903	CLA	C1C-C2C-C3C	-3.88	102.87	106.96
22	b	611	CLA	C3D-C2D-C1D	-3.88	100.53	105.83
22	C	511	CLA	CHA-C4D-ND	3.88	140.62	132.50
22	B	607	CLA	CHA-C4D-ND	3.88	140.62	132.50
22	C	514	CLA	C4D-CHA-C1A	-3.88	116.53	121.25
22	C	508	CLA	O2D-CGD-O1D	-3.88	116.25	123.84
22	c	912	CLA	C1C-C2C-C3C	-3.88	102.88	106.96
24	Y	101	BCR	C16-C15-C14	-3.87	115.54	123.47
29	T	102	LMT	C1'-C2'-C3'	3.87	118.06	110.00
22	a	408	CLA	CED-O2D-CGD	3.87	124.69	115.94
22	b	611	CLA	O2D-CGD-O1D	-3.87	116.28	123.84
22	C	509	CLA	C4D-CHA-C1A	-3.87	116.54	121.25
22	c	909	CLA	C4D-CHA-C1A	-3.87	116.54	121.25
22	b	616	CLA	C1C-C2C-C3C	-3.86	102.89	106.96
22	a	408	CLA	C4A-NA-C1A	3.86	108.44	106.71
36	e	101	HEM	C4B-CHC-C1C	3.86	127.65	122.56
22	b	610	CLA	C4A-NA-C1A	3.86	108.44	106.71
22	c	910	CLA	O2D-CGD-CBD	3.85	118.11	111.27
22	b	607	CLA	C1-O2A-CGA	3.85	126.55	116.44
22	a	407	CLA	C4-C3-C5	3.85	121.75	115.27
22	B	608	CLA	CGD-CBD-CAD	-3.85	98.27	110.73
22	A	406	CLA	CMC-C2C-C1C	3.85	130.90	125.04
22	C	512	CLA	C1C-C2C-C3C	-3.85	102.91	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	514	CLA	C1C-C2C-C3C	-3.84	102.92	106.96
22	B	608	CLA	O2D-CGD-CBD	3.84	118.09	111.27
22	c	909	CLA	CHD-C4C-C3C	-3.84	119.20	124.84
22	b	614	CLA	C3D-C2D-C1D	-3.83	100.61	105.83
24	B	620	BCR	C2-C1-C6	3.83	116.37	110.48
22	c	906	CLA	C1C-C2C-C3C	-3.83	102.93	106.96
22	B	612	CLA	O2D-CGD-O1D	-3.82	116.36	123.84
22	C	511	CLA	O2D-CGD-CBD	3.82	118.05	111.27
22	B	602	CLA	CHA-C4D-ND	3.81	140.48	132.50
22	b	607	CLA	C3D-C2D-C1D	-3.81	100.63	105.83
22	b	613	CLA	CHD-C4C-NC	3.81	130.20	124.20
22	B	606	CLA	CAC-C3C-C4C	3.81	129.75	124.81
22	C	509	CLA	CHD-C4C-C3C	-3.80	119.25	124.84
22	B	610	CLA	O2D-CGD-CBD	3.80	118.03	111.27
35	h	102	DGD	O1G-C1A-C2A	3.80	123.84	111.91
25	b	622	LMG	C3-C4-C5	3.80	117.02	110.24
26	D	406	PL9	C7-C8-C9	-3.80	120.47	126.79
22	C	514	CLA	CHD-C1D-ND	-3.80	120.97	124.45
22	B	604	CLA	C4A-NA-C1A	3.79	108.41	106.71
22	B	609	CLA	CAC-C3C-C4C	3.79	129.73	124.81
39	v	202	HEC	CMC-C2C-C1C	-3.79	122.64	128.46
22	c	906	CLA	C4D-CHA-C1A	-3.79	116.64	121.25
22	a	412	CLA	C2D-C1D-ND	3.79	112.90	110.10
24	d	404	BCR	C30-C25-C26	-3.79	117.28	122.61
22	A	408	CLA	C3D-C2D-C1D	-3.78	100.67	105.83
22	B	612	CLA	C3D-C2D-C1D	-3.78	100.67	105.83
22	b	604	CLA	CMC-C2C-C1C	3.78	130.80	125.04
22	c	904	CLA	C1-C2-C3	-3.78	119.50	126.04
35	H	102	DGD	O1G-C1A-C2A	3.78	123.76	111.91
24	c	915	BCR	C15-C14-C13	-3.78	121.92	127.31
22	B	616	CLA	C3D-C2D-C1D	-3.78	100.68	105.83
22	C	507	CLA	C3D-C2D-C1D	-3.78	100.68	105.83
22	C	510	CLA	CHA-C4D-ND	3.77	140.40	132.50
22	c	903	CLA	C4D-CHA-C1A	-3.77	116.66	121.25
22	B	611	CLA	CMD-C2D-C1D	3.77	131.36	124.71
22	B	608	CLA	CBC-CAC-C3C	-3.77	102.04	112.43
22	b	607	CLA	CHD-C4C-NC	3.77	130.14	124.20
22	C	504	CLA	O2D-CGD-CBD	3.77	117.96	111.27
22	c	905	CLA	C3D-C2D-C1D	-3.77	100.69	105.83
25	c	920	LMG	O8-C28-C29	3.76	123.72	111.91
22	b	613	CLA	CHD-C1D-ND	-3.76	121.00	124.45
22	b	614	CLA	O2D-CGD-CBD	3.76	117.94	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	905	CLA	C3B-C4B-NB	3.75	114.06	109.21
22	b	605	CLA	CHA-C4D-ND	3.75	140.34	132.50
26	a	415	PL9	C7-C3-C4	3.74	119.92	116.88
22	C	509	CLA	O2D-CGD-O1D	-3.74	116.53	123.84
22	B	608	CLA	CHD-C1D-ND	-3.74	121.02	124.45
22	B	609	CLA	C3D-C2D-C1D	-3.73	100.74	105.83
22	D	404	CLA	C1C-C2C-C3C	-3.73	103.03	106.96
22	c	914	CLA	CHD-C4C-NC	3.73	130.08	124.20
22	D	401	CLA	CBC-CAC-C3C	-3.73	102.16	112.43
22	A	408	CLA	CHD-C4C-C3C	-3.73	119.36	124.84
22	c	911	CLA	O2D-CGD-O1D	-3.73	116.55	123.84
22	c	902	CLA	O2D-CGD-O1D	-3.73	116.55	123.84
22	C	505	CLA	CHD-C4C-C3C	-3.72	119.37	124.84
22	C	513	CLA	C3D-C2D-C1D	-3.72	100.75	105.83
22	C	504	CLA	C3D-C2D-C1D	-3.72	100.76	105.83
22	c	908	CLA	C2C-C1C-NC	3.72	113.45	109.97
22	B	617	CLA	C3D-C2D-C1D	-3.72	100.76	105.83
22	b	606	CLA	C3D-C2D-C1D	-3.72	100.76	105.83
22	B	603	CLA	C3D-C2D-C1D	-3.71	100.76	105.83
22	B	611	CLA	O2A-CGA-CBA	3.71	123.56	111.91
22	B	615	CLA	C1-O2A-CGA	3.71	126.19	116.44
22	c	904	CLA	CHD-C1D-ND	-3.71	121.04	124.45
22	B	614	CLA	C2C-C1C-NC	3.71	113.45	109.97
22	B	608	CLA	C4-C3-C5	3.71	121.51	115.27
22	b	602	CLA	C2C-C1C-NC	3.71	113.45	109.97
22	b	615	CLA	CHA-C4D-ND	3.71	140.26	132.50
24	d	404	BCR	C16-C15-C14	-3.71	115.88	123.47
24	A	409	BCR	C15-C16-C17	-3.70	115.90	123.47
22	B	605	CLA	C3D-C2D-C1D	-3.70	100.78	105.83
22	b	616	CLA	C3D-C2D-C1D	-3.70	100.78	105.83
24	B	618	BCR	C3-C4-C5	-3.69	107.48	114.08
22	c	911	CLA	C1C-C2C-C3C	-3.69	103.08	106.96
22	b	604	CLA	C4A-NA-C1A	3.69	108.36	106.71
22	C	503	CLA	C2C-C1C-NC	3.69	113.43	109.97
22	b	615	CLA	C3D-C2D-C1D	-3.69	100.80	105.83
22	C	503	CLA	C3D-C2D-C1D	-3.68	100.80	105.83
22	B	612	CLA	CMD-C2D-C1D	3.68	131.20	124.71
22	C	513	CLA	CHA-C4D-ND	3.68	140.20	132.50
22	b	612	CLA	CHA-C4D-ND	3.68	140.20	132.50
22	c	906	CLA	C3D-C2D-C1D	-3.67	100.82	105.83
22	B	614	CLA	C1C-C2C-C3C	-3.67	103.09	106.96
22	B	614	CLA	CHD-C4C-C3C	-3.67	119.44	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	606	CLA	C4-C3-C5	3.67	121.45	115.27
22	C	509	CLA	C2C-C1C-NC	3.67	113.41	109.97
22	b	614	CLA	CMB-C2B-C1B	3.67	134.11	128.46
22	D	401	CLA	C4D-CHA-C1A	-3.67	116.78	121.25
22	B	605	CLA	CAC-C3C-C4C	3.67	129.57	124.81
22	A	408	CLA	C4D-CHA-C1A	-3.67	116.78	121.25
22	c	902	CLA	CHD-C4C-NC	3.67	129.98	124.20
22	b	602	CLA	O2D-CGD-O1D	-3.66	116.67	123.84
22	a	407	CLA	C3D-C2D-C1D	-3.66	100.83	105.83
22	B	608	CLA	C4A-NA-C1A	3.66	108.35	106.71
22	a	409	CLA	CMB-C2B-C3B	3.66	131.53	124.68
24	k	101	BCR	C24-C23-C22	-3.66	120.70	126.23
22	C	508	CLA	CMD-C2D-C1D	3.66	131.16	124.71
28	a	418	SQD	O47-C7-C8	3.66	119.39	111.50
22	b	617	CLA	O2D-CGD-O1D	-3.66	116.69	123.84
22	b	617	CLA	CHA-C4D-ND	3.65	140.14	132.50
22	C	509	CLA	C1C-C2C-C3C	-3.65	103.12	106.96
22	b	604	CLA	CHD-C4C-NC	3.65	129.96	124.20
22	c	909	CLA	CHA-C4D-ND	3.65	140.13	132.50
22	d	402	CLA	C4-C3-C5	3.64	121.40	115.27
22	b	604	CLA	C3D-C2D-C1D	-3.64	100.86	105.83
22	B	615	CLA	C4-C3-C5	3.64	121.40	115.27
22	D	403	CLA	C3B-C4B-NB	3.64	113.92	109.21
22	B	607	CLA	C4A-NA-C1A	3.64	108.34	106.71
22	d	403	CLA	CMD-C2D-C1D	3.64	131.13	124.71
22	B	613	CLA	C1C-C2C-C3C	-3.64	103.13	106.96
22	b	606	CLA	C4A-NA-C1A	3.64	108.34	106.71
22	b	613	CLA	C3D-C2D-C1D	-3.64	100.87	105.83
27	D	411	LHG	O8-C23-O10	-3.63	114.42	123.59
24	C	515	BCR	C38-C26-C25	-3.63	120.45	124.53
24	b	620	BCR	C7-C8-C9	-3.63	120.74	126.23
22	B	616	CLA	CHA-C4D-ND	3.63	140.09	132.50
22	C	509	CLA	CHD-C1D-ND	-3.63	121.12	124.45
22	B	606	CLA	C2C-C1C-NC	3.62	113.37	109.97
22	b	613	CLA	C4-C3-C5	3.62	121.36	115.27
22	B	608	CLA	CHA-C4D-ND	3.62	140.06	132.50
22	c	906	CLA	C1-O2A-CGA	3.61	125.92	116.44
22	B	603	CLA	C7-C6-C5	-3.61	103.55	113.36
35	C	518	DGD	O5D-C6D-C5D	3.61	115.73	109.05
34	b	624	HTG	C1-C2-C3	3.61	117.72	110.59
22	b	608	CLA	O2D-CGD-O1D	-3.61	116.78	123.84
22	b	612	CLA	CMD-C2D-C1D	3.61	131.08	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	616	CLA	C1C-C2C-C3C	-3.61	103.16	106.96
22	c	904	CLA	O2A-CGA-CBA	3.60	123.22	111.91
22	b	614	CLA	C1C-C2C-C3C	-3.60	103.17	106.96
22	B	604	CLA	C3D-C2D-C1D	-3.60	100.92	105.83
22	c	908	CLA	C4-C3-C5	3.60	121.33	115.27
22	A	406	CLA	CHD-C4C-NC	3.60	129.87	124.20
22	D	403	CLA	C2A-C1A-CHA	-3.60	117.57	123.86
24	D	405	BCR	C28-C27-C26	-3.60	107.65	114.08
22	B	614	CLA	O2D-CGD-O1D	-3.60	116.81	123.84
22	A	406	CLA	CHA-C4D-ND	3.60	140.02	132.50
39	v	202	HEC	C1D-C2D-C3D	-3.60	104.49	107.00
22	B	602	CLA	CMD-C2D-C1D	3.60	131.05	124.71
22	B	617	CLA	C4A-NA-C1A	3.59	108.32	106.71
22	c	914	CLA	C3D-C2D-C1D	-3.59	100.94	105.83
22	b	616	CLA	O2D-CGD-CBD	3.59	117.64	111.27
26	d	405	PL9	C7-C8-C9	-3.59	120.82	126.79
22	C	505	CLA	CMD-C2D-C1D	3.58	131.03	124.71
35	c	918	DGD	O2G-C1B-C2B	3.58	119.22	111.50
22	c	906	CLA	CMB-C2B-C3B	3.57	131.37	124.68
22	d	402	CLA	CHD-C4C-C3C	-3.57	119.59	124.84
27	d	401	LHG	O7-C7-C8	3.57	119.19	111.50
22	C	514	CLA	CHD-C4C-NC	3.56	129.82	124.20
25	b	622	LMG	O6-C1-O1	3.56	118.41	109.97
22	c	903	CLA	CHD-C4C-NC	3.56	129.81	124.20
22	c	910	CLA	CHA-C4D-ND	3.56	139.94	132.50
22	C	507	CLA	O2D-CGD-CBD	3.56	117.59	111.27
35	h	102	DGD	O2G-C1B-C2B	3.55	119.16	111.50
22	C	504	CLA	C1D-CHD-C4C	-3.55	118.40	126.06
22	b	605	CLA	O2D-CGD-O1D	-3.55	116.90	123.84
22	C	510	CLA	CHD-C4C-C3C	-3.55	119.63	124.84
22	a	409	CLA	C1-C2-C3	-3.55	119.91	126.04
22	c	905	CLA	CHA-C4D-ND	3.54	139.91	132.50
27	L	101	LHG	O7-C7-C8	3.54	119.14	111.50
22	b	605	CLA	C3D-C2D-C1D	-3.54	101.00	105.83
35	h	102	DGD	O1G-C1A-O1A	-3.54	114.66	123.59
35	C	519	DGD	O6D-C1D-O3G	-3.54	101.59	109.97
22	D	401	CLA	O2D-CGD-CBD	3.54	117.55	111.27
22	C	512	CLA	CHA-C4D-ND	3.53	139.89	132.50
22	b	609	CLA	O2D-CGD-O1D	-3.53	116.94	123.84
34	C	523	HTG	C1-S1-C1'	3.52	112.50	100.40
22	C	505	CLA	CHA-C4D-ND	3.52	139.86	132.50
22	C	507	CLA	CAC-C3C-C4C	3.52	129.37	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	608	CLA	O2D-CGD-CBD	3.52	117.52	111.27
22	b	603	CLA	C2C-C1C-NC	3.52	113.27	109.97
22	b	604	CLA	CHA-C4D-ND	3.51	139.85	132.50
22	B	606	CLA	CHA-C4D-ND	3.51	139.85	132.50
22	b	602	CLA	CHA-C4D-ND	3.51	139.84	132.50
22	D	403	CLA	CHD-C4C-C3C	-3.51	119.68	124.84
22	B	611	CLA	CHA-C4D-ND	3.51	139.84	132.50
28	a	414	SQD	C1-O5-C5	-3.51	106.80	113.69
22	c	903	CLA	C3D-C2D-C1D	-3.50	101.05	105.83
22	c	908	CLA	CMB-C2B-C3B	3.50	131.24	124.68
22	b	615	CLA	C1C-C2C-C3C	-3.50	103.27	106.96
22	C	508	CLA	C3D-C2D-C1D	-3.50	101.05	105.83
22	c	904	CLA	C3D-C2D-C1D	-3.50	101.05	105.83
22	B	607	CLA	CMD-C2D-C1D	3.50	130.89	124.71
22	c	912	CLA	C2D-C1D-ND	3.50	112.69	110.10
22	c	904	CLA	CHD-C4C-C3C	-3.50	119.69	124.84
29	a	419	LMT	C2'-C3'-C4'	3.50	117.68	109.68
22	b	608	CLA	CHD-C4C-C3C	-3.50	119.70	124.84
22	C	514	CLA	O2A-CGA-CBA	3.50	122.88	111.91
24	c	916	BCR	C33-C5-C6	-3.50	120.60	124.53
22	B	602	CLA	C1-O2A-CGA	3.49	125.61	116.44
22	C	506	CLA	CHD-C1D-ND	-3.49	121.24	124.45
22	c	910	CLA	C2A-C1A-CHA	-3.49	117.75	123.86
22	B	611	CLA	O2A-CGA-O1A	-3.49	114.78	123.59
26	D	406	PL9	C53-C6-C1	3.49	122.13	114.99
22	C	514	CLA	CMC-C2C-C1C	3.49	130.36	125.04
24	K	101	BCR	C24-C23-C22	-3.49	120.96	126.23
22	b	607	CLA	CHA-C4D-ND	3.48	139.78	132.50
34	v	203	HTG	O4-C4-C3	-3.48	102.30	110.35
22	a	409	CLA	CMC-C2C-C1C	3.48	130.34	125.04
22	b	617	CLA	C1C-C2C-C3C	-3.48	103.30	106.96
26	D	406	PL9	C20-C19-C21	3.48	121.12	115.27
22	c	905	CLA	C4D-CHA-C1A	-3.47	117.02	121.25
25	b	622	LMG	C4-C3-C2	3.47	116.88	110.82
22	C	508	CLA	CHA-C4D-ND	3.47	139.76	132.50
22	C	505	CLA	CHD-C4C-NC	3.46	129.66	124.20
22	b	610	CLA	CHD-C4C-NC	3.46	129.65	124.20
22	B	607	CLA	C3D-C2D-C1D	-3.45	101.12	105.83
22	C	504	CLA	C1C-C2C-C3C	-3.45	103.33	106.96
22	B	602	CLA	C2D-C1D-ND	3.45	112.64	110.10
25	A	410	LMG	O7-C10-C11	3.45	118.93	111.50
22	B	604	CLA	CHA-C4D-ND	3.45	139.71	132.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	513	CLA	O1D-CGD-CBD	-3.44	117.44	124.48
22	a	407	CLA	CHA-C4D-ND	3.44	139.69	132.50
29	E	101	LMT	O5'-C5'-C6'	3.44	114.98	106.44
22	B	613	CLA	C2A-C1A-CHA	-3.44	117.85	123.86
22	D	403	CLA	O2D-CGD-CBD	3.44	117.38	111.27
22	B	614	CLA	CHA-C4D-ND	3.43	139.68	132.50
22	b	604	CLA	C1D-CHD-C4C	-3.43	118.65	126.06
27	D	411	LHG	O8-C23-C24	3.43	122.67	111.91
22	d	403	CLA	CHA-C4D-ND	3.43	139.67	132.50
22	C	513	CLA	O2D-CGD-O1D	-3.43	117.14	123.84
22	B	607	CLA	C1-C2-C3	-3.43	120.11	126.04
22	b	602	CLA	O2A-CGA-CBA	3.43	122.66	111.91
22	b	614	CLA	C4-C3-C5	3.42	121.03	115.27
22	B	606	CLA	C3C-C4C-NC	3.42	114.41	110.57
34	D	415	HTG	O5-C1-S1	3.42	118.01	109.82
35	C	518	DGD	O2G-C1B-C2B	3.42	118.87	111.50
22	C	513	CLA	C2C-C1C-NC	3.42	113.17	109.97
22	b	615	CLA	CAC-C3C-C4C	3.41	129.24	124.81
22	c	912	CLA	O2D-CGD-CBD	3.41	117.32	111.27
27	D	409	LHG	O8-C23-C24	3.41	122.60	111.91
22	b	606	CLA	CHA-C4D-ND	3.40	139.62	132.50
22	C	502	CLA	CAC-C3C-C4C	3.40	129.22	124.81
22	b	616	CLA	CHD-C4C-NC	3.39	129.55	124.20
22	d	402	CLA	CHD-C1D-ND	-3.39	121.33	124.45
22	d	402	CLA	C3D-C2D-C1D	-3.39	101.21	105.83
22	c	908	CLA	CBC-CAC-C3C	-3.39	103.09	112.43
22	b	605	CLA	C3C-C4C-NC	3.38	114.36	110.57
22	A	406	CLA	C4A-NA-C1A	3.38	108.22	106.71
22	c	912	CLA	O2A-CGA-O1A	-3.37	115.08	123.59
25	b	622	LMG	O6-C5-C6	3.37	114.82	106.44
22	B	605	CLA	CHA-C4D-ND	3.37	139.55	132.50
22	b	609	CLA	C1D-CHD-C4C	-3.37	118.79	126.06
22	B	615	CLA	CED-O2D-CGD	3.37	123.56	115.94
22	b	613	CLA	C4C-C3C-C2C	-3.37	101.99	106.90
22	C	504	CLA	C2C-C1C-NC	3.37	113.12	109.97
35	C	519	DGD	O1G-C1A-C2A	3.37	122.47	111.91
35	C	519	DGD	O2G-C1B-C2B	3.36	118.75	111.50
22	B	608	CLA	CAC-C3C-C4C	3.36	129.17	124.81
22	A	408	CLA	CMD-C2D-C1D	3.36	130.64	124.71
22	a	412	CLA	C1D-CHD-C4C	-3.36	118.81	126.06
29	f	102	LMT	O1'-C1'-C2'	3.36	113.55	108.30
22	b	602	CLA	CHD-C1D-ND	-3.36	121.37	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	d	403	CLA	C2D-C1D-ND	3.36	112.58	110.10
22	b	609	CLA	C1C-C2C-C3C	-3.36	103.43	106.96
22	c	907	CLA	C3B-C4B-NB	3.36	113.55	109.21
22	C	507	CLA	CHA-C4D-ND	3.36	139.52	132.50
24	D	405	BCR	C29-C30-C25	3.36	115.65	110.48
22	b	604	CLA	O2A-CGA-O1A	-3.36	115.12	123.59
22	a	409	CLA	CHD-C4C-NC	3.36	129.49	124.20
29	Z	101	LMT	C3B-C4B-C5B	3.35	116.22	110.24
28	a	418	SQD	O48-C23-C24	3.35	122.43	111.91
22	b	614	CLA	CAA-CBA-CGA	-3.35	103.45	113.25
22	C	508	CLA	C4D-CHA-C1A	-3.35	117.17	121.25
22	b	609	CLA	C3C-C4C-NC	3.35	114.33	110.57
22	B	603	CLA	CHA-C4D-ND	3.35	139.50	132.50
22	B	607	CLA	CHC-C1C-NC	-3.35	119.13	124.20
22	d	403	CLA	C4D-CHA-C1A	-3.34	117.18	121.25
22	b	617	CLA	O1D-CGD-CBD	-3.34	117.65	124.48
22	B	603	CLA	CHC-C1C-NC	-3.34	119.14	124.20
22	D	401	CLA	CMC-C2C-C1C	3.34	130.12	125.04
22	D	401	CLA	C3D-C2D-C1D	-3.34	101.28	105.83
22	B	605	CLA	CMD-C2D-C1D	3.34	130.59	124.71
34	V	203	HTG	O5-C1-S1	3.34	117.80	109.82
22	c	907	CLA	CMD-C2D-C1D	3.34	130.59	124.71
22	b	617	CLA	C4C-C3C-C2C	-3.33	102.04	106.90
22	B	613	CLA	CMD-C2D-C1D	3.33	130.59	124.71
22	a	408	CLA	CBC-CAC-C3C	-3.33	103.25	112.43
22	B	606	CLA	C1C-C2C-C3C	-3.33	103.46	106.96
22	C	511	CLA	C4D-CHA-C1A	-3.33	117.20	121.25
22	C	506	CLA	O2D-CGD-CBD	3.32	117.17	111.27
22	c	914	CLA	CHA-C4D-ND	3.32	139.45	132.50
22	d	402	CLA	O2A-CGA-O1A	-3.32	115.20	123.59
37	H	101	RRX	C7-C8-C9	-3.32	121.21	126.23
22	d	402	CLA	CHA-C4D-ND	3.32	139.44	132.50
22	c	911	CLA	C4D-CHA-C1A	-3.32	117.21	121.25
22	c	912	CLA	C2C-C1C-NC	3.32	113.08	109.97
24	y	101	BCR	C24-C23-C22	-3.31	121.23	126.23
22	C	504	CLA	CMB-C2B-C3B	3.31	130.87	124.68
22	b	603	CLA	CHD-C4C-C3C	-3.31	119.98	124.84
22	B	616	CLA	C4D-CHA-C1A	-3.31	117.22	121.25
22	B	615	CLA	C1D-ND-C4D	-3.31	103.99	106.33
22	C	510	CLA	CHB-C4A-NA	3.30	129.08	124.51
22	c	902	CLA	C4-C3-C5	3.30	120.82	115.27
22	B	606	CLA	O2D-CGD-CBD	3.30	117.13	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	616	CLA	CED-O2D-CGD	3.30	123.40	115.94
22	a	408	CLA	C3D-C2D-C1D	-3.30	101.33	105.83
22	C	513	CLA	CHD-C4C-NC	3.30	129.40	124.20
22	C	508	CLA	CHD-C4C-NC	3.29	129.39	124.20
22	C	511	CLA	C1D-CHD-C4C	-3.29	118.96	126.06
22	B	607	CLA	C3C-C4C-NC	3.29	114.26	110.57
28	D	408	SQD	O7-S-C6	3.29	110.85	106.94
22	b	603	CLA	C4-C3-C5	3.29	120.80	115.27
22	b	609	CLA	C2D-C1D-ND	3.29	112.53	110.10
24	y	101	BCR	C21-C20-C19	-3.29	112.96	123.22
22	b	613	CLA	C3C-C4C-NC	3.28	114.25	110.57
22	b	611	CLA	CHA-C4D-ND	3.28	139.37	132.50
22	b	609	CLA	C4D-CHA-C1A	-3.28	117.26	121.25
35	D	407	DGD	C3D-C4D-C5D	3.28	114.88	109.77
22	A	405	CLA	C3D-C2D-C1D	-3.28	101.36	105.83
22	C	507	CLA	CMC-C2C-C1C	3.28	130.03	125.04
22	B	612	CLA	C2A-C1A-CHA	-3.28	118.13	123.86
22	c	908	CLA	C3D-C2D-C1D	-3.27	101.36	105.83
22	A	408	CLA	O2D-CGD-O1D	-3.27	117.44	123.84
22	B	615	CLA	CMD-C2D-C1D	3.27	130.48	124.71
22	B	605	CLA	CHD-C4C-NC	3.27	129.36	124.20
22	B	615	CLA	O2A-CGA-CBA	3.27	122.18	111.91
22	B	603	CLA	C3B-C4B-NB	3.27	113.44	109.21
22	b	611	CLA	C3C-C4C-NC	3.27	114.24	110.57
22	d	403	CLA	O2D-CGD-O1D	-3.27	117.45	123.84
22	B	614	CLA	C3D-C2D-C1D	-3.27	101.37	105.83
22	b	606	CLA	C1-C2-C3	-3.27	120.39	126.04
22	C	506	CLA	C2D-C1D-ND	3.26	112.51	110.10
22	b	612	CLA	C7-C6-C5	-3.26	104.51	113.36
22	C	509	CLA	O2A-CGA-O1A	-3.26	115.37	123.59
22	B	610	CLA	CHA-C4D-ND	3.26	139.31	132.50
22	C	514	CLA	CHC-C1C-NC	-3.26	119.26	124.20
22	b	603	CLA	C3D-C2D-C1D	-3.25	101.39	105.83
22	c	912	CLA	C4-C3-C5	3.25	120.75	115.27
22	c	914	CLA	O2D-CGD-CBD	3.25	117.05	111.27
22	c	905	CLA	O2D-CGD-CBD	3.25	117.04	111.27
22	B	617	CLA	CHA-C4D-ND	3.24	139.28	132.50
26	a	415	PL9	C35-C34-C36	3.24	120.73	115.27
22	c	907	CLA	CHD-C4C-NC	3.24	129.31	124.20
22	c	910	CLA	C1-O2A-CGA	3.24	124.94	116.44
22	c	912	CLA	CHD-C1D-ND	-3.24	121.48	124.45
22	c	902	CLA	C4D-CHA-C1A	-3.24	117.31	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	619	BCR	C29-C30-C25	3.24	115.46	110.48
28	D	408	SQD	O6-C44-C45	3.24	114.96	108.76
22	A	406	CLA	O2D-CGD-CBD	3.24	117.02	111.27
22	a	407	CLA	O2D-CGD-O1D	-3.24	117.51	123.84
28	D	408	SQD	O8-S-C6	3.23	110.89	105.74
22	d	402	CLA	C3B-C4B-NB	3.23	113.39	109.21
22	a	408	CLA	CMB-C2B-C3B	3.23	130.72	124.68
22	C	512	CLA	C1D-CHD-C4C	-3.23	119.09	126.06
22	a	408	CLA	CHA-C4D-ND	3.23	139.25	132.50
22	b	606	CLA	C1C-C2C-C3C	-3.23	103.56	106.96
22	A	408	CLA	CHA-C4D-ND	3.23	139.25	132.50
22	b	609	CLA	CMB-C2B-C3B	3.22	130.71	124.68
22	c	907	CLA	C3D-C2D-C1D	-3.22	101.44	105.83
22	a	407	CLA	C4D-CHA-C1A	-3.22	117.33	121.25
28	f	101	SQD	O8-S-C6	3.22	110.97	105.77
22	B	602	CLA	CHD-C4C-C3C	-3.22	120.11	124.84
22	d	403	CLA	CHD-C4C-C3C	-3.22	120.11	124.84
27	a	423	LHG	O8-C23-C24	3.21	122.00	111.91
22	D	403	CLA	CMC-C2C-C1C	3.21	129.93	125.04
24	y	101	BCR	C38-C26-C25	-3.21	120.92	124.53
34	v	203	HTG	O5-C1-S1	3.21	117.50	109.82
22	B	617	CLA	C3B-C4B-NB	3.21	113.36	109.21
22	C	512	CLA	O2D-CGD-O1D	-3.21	117.57	123.84
22	B	604	CLA	C4D-CHA-C1A	-3.20	117.35	121.25
22	a	412	CLA	CHA-C4D-ND	3.20	139.19	132.50
22	b	607	CLA	C3C-C4C-NC	3.20	114.16	110.57
22	B	617	CLA	CMB-C2B-C3B	3.20	130.66	124.68
22	D	404	CLA	CHA-C4D-ND	3.20	139.19	132.50
22	c	911	CLA	CMB-C2B-C3B	3.20	130.66	124.68
22	C	504	CLA	C3C-C4C-NC	3.20	114.16	110.57
22	C	504	CLA	C4-C3-C5	3.20	120.65	115.27
22	b	610	CLA	CBC-CAC-C3C	-3.19	103.62	112.43
22	C	503	CLA	CAC-C3C-C4C	3.19	128.95	124.81
22	D	403	CLA	C3D-C2D-C1D	-3.19	101.48	105.83
22	b	616	CLA	CHA-C4D-ND	3.19	139.17	132.50
22	c	907	CLA	C4D-CHA-C1A	-3.19	117.37	121.25
22	B	615	CLA	CHA-C4D-ND	3.19	139.16	132.50
22	D	404	CLA	CMD-C2D-C1D	3.18	130.32	124.71
22	b	606	CLA	C3C-C4C-NC	3.18	114.14	110.57
22	b	616	CLA	O2D-CGD-O1D	-3.18	117.61	123.84
35	c	919	DGD	O1G-C1A-C2A	3.18	121.90	111.91
28	b	621	SQD	O5-C1-C2	-3.18	103.61	110.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	905	CLA	C5-C3-C2	-3.18	114.68	121.12
22	b	605	CLA	CAC-C3C-C4C	3.18	128.93	124.81
22	B	607	CLA	CHD-C4C-NC	3.18	129.21	124.20
22	c	910	CLA	O2A-CGA-CBA	3.18	121.88	111.91
22	B	606	CLA	CHD-C1D-ND	-3.17	121.54	124.45
22	b	604	CLA	CMB-C2B-C3B	3.17	130.61	124.68
37	h	101	RRX	C7-C8-C9	-3.17	121.44	126.23
22	b	603	CLA	C1-C2-C3	-3.17	120.56	126.04
22	C	509	CLA	C3D-C2D-C1D	-3.17	101.51	105.83
22	B	611	CLA	CHD-C4C-NC	3.17	129.19	124.20
22	c	905	CLA	C4-C3-C5	3.17	120.60	115.27
22	B	603	CLA	CHD-C1D-ND	-3.17	121.54	124.45
22	B	609	CLA	CHD-C4C-NC	3.16	129.19	124.20
22	B	608	CLA	C3B-C4B-NB	3.16	113.30	109.21
22	B	615	CLA	O1D-CGD-CBD	-3.16	118.02	124.48
25	C	520	LMG	O8-C28-O10	-3.16	115.62	123.59
34	v	203	HTG	O3-C3-C2	3.15	117.64	110.35
25	c	920	LMG	O7-C10-C11	3.15	118.29	111.50
22	c	902	CLA	CHA-C4D-ND	3.15	139.08	132.50
22	B	603	CLA	O2A-CGA-CBA	3.15	121.78	111.91
35	c	919	DGD	O2G-C1B-O1B	-3.14	116.10	123.70
22	c	905	CLA	CHD-C4C-NC	3.14	129.15	124.20
22	a	412	CLA	C1-C2-C3	-3.14	120.61	126.04
27	d	407	LHG	O8-C23-C24	3.14	121.76	111.91
22	b	602	CLA	C3D-C2D-C1D	-3.14	101.55	105.83
22	C	509	CLA	C4-C3-C5	3.13	120.54	115.27
23	a	411	PHO	CMC-C2C-C3C	3.13	130.84	124.94
22	a	409	CLA	O2D-CGD-O1D	-3.13	117.72	123.84
22	C	512	CLA	C3D-C2D-C1D	-3.13	101.56	105.83
29	t	101	LMT	C1'-C2'-C3'	-3.13	103.48	110.00
28	b	621	SQD	O6-C1-C2	3.13	113.19	108.30
22	B	606	CLA	C3D-C2D-C1D	-3.13	101.56	105.83
22	b	612	CLA	CAC-C3C-C4C	3.12	128.86	124.81
22	b	609	CLA	C4-C3-C5	3.12	120.52	115.27
34	b	632	HTG	O5-C1-S1	3.12	117.29	109.82
22	D	403	CLA	CHC-C1C-NC	-3.12	119.47	124.20
22	B	603	CLA	C1-C2-C3	-3.12	120.65	126.04
22	B	617	CLA	O2A-CGA-O1A	-3.12	115.72	123.59
22	B	612	CLA	O2D-CGD-CBD	3.12	116.81	111.27
22	C	513	CLA	C4-C3-C5	3.11	120.51	115.27
22	b	615	CLA	C4-C3-C5	3.11	120.51	115.27
22	c	910	CLA	CMC-C2C-C1C	3.11	129.78	125.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	618	BCR	C2-C3-C4	-3.11	104.43	111.38
22	c	909	CLA	C3D-C2D-C1D	-3.11	101.59	105.83
22	B	609	CLA	C3C-C4C-NC	3.11	114.06	110.57
22	C	511	CLA	O2A-CGA-O1A	-3.11	115.75	123.59
22	c	904	CLA	CAC-C3C-C4C	3.11	128.84	124.81
22	c	913	CLA	CHA-C4D-ND	3.11	139.00	132.50
22	b	604	CLA	C2A-C3A-C4A	-3.10	96.86	101.87
22	C	506	CLA	CHA-C4D-ND	3.10	138.99	132.50
22	c	908	CLA	CHA-C4D-ND	3.10	138.99	132.50
24	d	404	BCR	C37-C22-C21	-3.10	118.58	122.92
22	b	613	CLA	O2A-CGA-CBA	3.09	121.62	111.91
24	B	620	BCR	C38-C26-C25	-3.09	121.06	124.53
23	A	407	PHO	CMC-C2C-C3C	3.09	130.77	124.94
22	b	613	CLA	C11-C12-C13	-3.09	105.92	115.92
22	B	602	CLA	C1C-C2C-C3C	-3.09	103.71	106.96
22	C	510	CLA	O2A-CGA-CBA	3.09	121.61	111.91
22	A	405	CLA	CHD-C4C-C3C	-3.09	120.30	124.84
29	t	101	LMT	O5'-C5'-C4'	3.09	115.30	109.69
37	h	101	RRX	C11-C10-C9	-3.09	122.91	127.31
25	B	621	LMG	O8-C28-C29	3.09	121.59	111.91
22	b	604	CLA	O2D-CGD-O1D	-3.08	117.81	123.84
22	C	513	CLA	C4D-CHA-C1A	-3.08	117.50	121.25
22	c	904	CLA	C7-C6-C5	-3.08	105.00	113.36
26	A	411	PL9	C22-C23-C24	-3.08	120.25	127.66
22	b	602	CLA	CHD-C4C-NC	3.08	129.05	124.20
22	A	405	CLA	O2A-CGA-O1A	-3.08	115.83	123.59
22	a	412	CLA	CHD-C1D-ND	-3.07	121.63	124.45
26	A	411	PL9	C32-C33-C34	-3.07	120.27	127.66
22	a	409	CLA	C2A-C1A-CHA	-3.07	118.49	123.86
22	D	403	CLA	O2D-CGD-O1D	-3.07	117.84	123.84
22	C	506	CLA	C1-O2A-CGA	3.07	124.49	116.44
22	D	401	CLA	C3B-C4B-NB	3.07	113.17	109.21
26	A	411	PL9	C45-C44-C46	3.06	120.42	115.27
22	C	505	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
24	C	516	BCR	C7-C8-C9	-3.06	121.61	126.23
22	a	408	CLA	CHB-C4A-NA	3.06	128.74	124.51
24	y	101	BCR	C16-C15-C14	-3.06	117.21	123.47
22	B	605	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
22	c	910	CLA	C3B-C4B-NB	3.05	113.16	109.21
22	c	911	CLA	CAC-C3C-C4C	3.05	128.77	124.81
22	b	608	CLA	C4-C3-C5	3.05	120.41	115.27
22	b	609	CLA	C4C-C3C-C2C	-3.05	102.45	106.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	908	CLA	CMD-C2D-C1D	3.04	130.08	124.71
22	c	914	CLA	C1-O2A-CGA	3.04	124.43	116.44
22	C	506	CLA	C4D-CHA-C1A	-3.04	117.54	121.25
22	c	910	CLA	C1D-CHD-C4C	-3.04	119.49	126.06
22	c	911	CLA	CHA-C4D-ND	3.04	138.86	132.50
22	C	505	CLA	C3D-C2D-C1D	-3.04	101.68	105.83
22	C	502	CLA	C3D-C2D-C1D	-3.03	101.69	105.83
22	A	405	CLA	CMB-C2B-C3B	3.03	130.35	124.68
22	C	511	CLA	CAC-C3C-C4C	3.03	128.75	124.81
22	a	409	CLA	CMD-C2D-C1D	3.03	130.06	124.71
22	C	502	CLA	CHA-C4D-ND	3.03	138.84	132.50
22	B	610	CLA	CMC-C2C-C1C	3.03	129.65	125.04
22	B	603	CLA	CMD-C2D-C1D	3.03	130.05	124.71
22	b	610	CLA	CHC-C1C-NC	-3.03	119.61	124.20
35	C	518	DGD	O6E-C1E-C2E	3.02	116.75	110.35
22	D	404	CLA	C1-O2A-CGA	3.02	124.38	116.44
24	B	620	BCR	C7-C8-C9	-3.02	121.67	126.23
22	A	405	CLA	C7-C6-C5	-3.02	105.15	113.36
24	C	515	BCR	C7-C8-C9	-3.02	121.67	126.23
28	l	101	SQD	O48-C23-C24	3.02	121.39	111.91
22	D	404	CLA	O2D-CGD-O1D	-3.02	117.94	123.84
22	c	911	CLA	C2C-C1C-NC	3.02	112.80	109.97
22	B	608	CLA	C3D-C2D-C1D	-3.02	101.72	105.83
22	B	610	CLA	CBC-CAC-C3C	-3.01	104.12	112.43
37	H	101	RRX	C16-C17-C18	-3.01	123.01	127.31
22	a	412	CLA	C3B-C4B-NB	3.01	113.10	109.21
28	b	621	SQD	O48-C23-C24	3.01	121.36	111.91
24	B	620	BCR	C32-C1-C6	-3.01	105.42	110.30
22	c	909	CLA	CHD-C4C-NC	3.01	128.95	124.20
34	c	922	HTG	C1-O5-C5	3.01	118.13	112.58
22	B	610	CLA	C3D-C2D-C1D	-3.01	101.73	105.83
35	H	102	DGD	O2G-C1B-C2B	3.01	117.98	111.50
24	D	405	BCR	C33-C5-C6	-3.00	121.16	124.53
22	a	407	CLA	CMB-C2B-C3B	3.00	130.29	124.68
27	a	416	LHG	O8-C23-C24	3.00	121.32	111.91
24	Y	101	BCR	C37-C22-C23	3.00	122.80	118.08
34	b	632	HTG	C3-C4-C5	3.00	115.59	110.24
22	b	610	CLA	C1-C2-C3	-3.00	120.86	126.04
22	C	509	CLA	CHB-C4A-NA	3.00	128.66	124.51
22	b	612	CLA	C3B-C4B-NB	3.00	113.08	109.21
22	b	615	CLA	C1-O2A-CGA	3.00	124.30	116.44
24	C	516	BCR	C11-C10-C9	-2.99	123.04	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	913	CLA	C3D-C2D-C1D	-2.99	101.75	105.83
22	A	405	CLA	C4-C3-C5	2.99	120.30	115.27
22	B	607	CLA	CMB-C2B-C3B	2.99	130.27	124.68
22	c	909	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
26	D	406	PL9	C10-C9-C11	2.99	120.29	115.27
24	d	404	BCR	C21-C20-C19	-2.99	113.90	123.22
22	a	409	CLA	C1-O2A-CGA	2.98	124.27	116.44
22	C	505	CLA	C2D-C1D-ND	2.98	112.30	110.10
22	b	607	CLA	C3B-C4B-NB	2.98	113.06	109.21
22	c	905	CLA	CMD-C2D-C1D	2.98	129.96	124.71
24	D	405	BCR	C38-C26-C25	-2.98	121.19	124.53
28	C	501	SQD	O48-C23-O10	-2.97	116.08	123.59
22	c	907	CLA	CHA-C4D-ND	2.97	138.72	132.50
28	A	413	SQD	O3-C3-C2	2.97	117.22	110.35
22	b	614	CLA	CHA-C4D-ND	2.97	138.71	132.50
28	A	413	SQD	C1-O5-C5	-2.97	107.86	113.69
28	a	414	SQD	O48-C23-C24	2.97	121.23	111.91
22	a	409	CLA	C1D-ND-C4D	-2.97	104.23	106.33
22	B	612	CLA	C1D-ND-C4D	-2.97	104.23	106.33
24	B	619	BCR	C28-C27-C26	-2.97	108.78	114.08
22	B	602	CLA	C3D-C2D-C1D	-2.97	101.78	105.83
22	c	906	CLA	CHA-C4D-ND	2.96	138.70	132.50
22	C	505	CLA	C4D-CHA-C1A	-2.96	117.64	121.25
22	B	606	CLA	C4-C3-C5	2.96	120.25	115.27
22	B	604	CLA	C1D-CHD-C4C	-2.96	119.67	126.06
22	b	606	CLA	CMC-C2C-C1C	2.96	129.55	125.04
25	C	531	LMG	O8-C28-C29	2.96	121.19	111.91
22	C	514	CLA	C3D-C2D-C1D	-2.96	101.79	105.83
22	B	617	CLA	CBC-CAC-C3C	-2.96	104.28	112.43
22	b	610	CLA	C3D-C2D-C1D	-2.96	101.80	105.83
22	C	510	CLA	C1-C2-C3	-2.96	120.93	126.04
24	c	915	BCR	C7-C8-C9	-2.96	121.77	126.23
25	j	101	LMG	C7-O1-C1	-2.96	107.96	113.74
22	C	510	CLA	C3B-C4B-NB	2.96	113.03	109.21
27	D	409	LHG	C5-O7-C7	-2.95	110.52	117.79
22	C	511	CLA	CHD-C4C-NC	2.95	128.86	124.20
34	b	623	HTG	C2'-C1'-S1	-2.95	102.86	112.40
22	C	503	CLA	CHA-C4D-ND	2.95	138.67	132.50
24	c	916	BCR	C11-C10-C9	-2.95	123.10	127.31
23	a	411	PHO	CMB-C2B-C3B	2.95	130.19	124.68
25	A	410	LMG	O8-C28-C29	2.95	121.15	111.91
22	B	610	CLA	C1-C2-C3	-2.94	120.95	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	510	CLA	O2D-CGD-O1D	-2.94	118.09	123.84
22	c	913	CLA	CMB-C2B-C3B	2.94	130.18	124.68
22	B	615	CLA	C4D-CHA-C1A	-2.94	117.67	121.25
22	c	905	CLA	CAC-C3C-C4C	2.93	128.62	124.81
22	C	509	CLA	CHD-C4C-NC	2.93	128.82	124.20
22	a	412	CLA	CBC-CAC-C3C	-2.93	104.35	112.43
25	J	101	LMG	O8-C28-O10	-2.93	116.20	123.59
22	a	407	CLA	CMD-C2D-C1D	2.93	129.87	124.71
22	b	613	CLA	CED-O2D-CGD	2.93	122.56	115.94
24	c	916	BCR	C38-C26-C25	-2.93	121.24	124.53
22	C	512	CLA	C3B-C4B-NB	2.92	112.99	109.21
22	c	914	CLA	CHC-C1C-NC	-2.92	119.77	124.20
22	D	401	CLA	O2D-CGD-O1D	-2.92	118.12	123.84
22	D	403	CLA	C4-C3-C5	2.92	120.19	115.27
22	a	412	CLA	CHD-C4C-NC	2.92	128.81	124.20
26	A	411	PL9	C20-C19-C21	2.92	120.19	115.27
22	b	617	CLA	CAC-C3C-C4C	2.92	128.60	124.81
22	b	609	CLA	O2A-CGA-O1A	-2.92	116.22	123.59
22	b	609	CLA	CHD-C1D-ND	-2.92	121.77	124.45
29	A	414	LMT	C1'-C2'-C3'	-2.92	103.92	110.00
22	C	502	CLA	C1D-CHD-C4C	-2.91	119.78	126.06
37	h	101	RRX	C16-C17-C18	-2.91	123.15	127.31
22	B	615	CLA	C3C-C4C-NC	2.91	113.84	110.57
22	C	508	CLA	CMB-C2B-C3B	2.91	130.12	124.68
24	d	404	BCR	C37-C22-C23	2.90	122.65	118.08
22	b	603	CLA	C4D-CHA-C1A	-2.90	117.72	121.25
29	t	101	LMT	O1'-C1'-C2'	2.90	112.83	108.30
35	C	518	DGD	O3G-C1D-C2D	2.90	112.83	108.30
22	A	408	CLA	O2A-CGA-O1A	-2.90	116.27	123.59
22	b	608	CLA	C3D-C2D-C1D	-2.90	101.87	105.83
22	A	405	CLA	C1B-CHB-C4A	-2.90	124.38	130.12
27	A	412	LHG	O8-C23-C24	2.90	121.00	111.91
24	d	404	BCR	C35-C13-C14	-2.90	118.87	122.92
22	b	615	CLA	C4C-C3C-C2C	-2.89	102.68	106.90
22	A	406	CLA	CAC-C3C-C4C	2.89	128.56	124.81
22	b	610	CLA	CHA-C4D-ND	2.89	138.54	132.50
25	J	101	LMG	C7-O1-C1	-2.89	108.10	113.74
22	b	609	CLA	CAC-C3C-C4C	2.89	128.56	124.81
22	B	613	CLA	C3D-C2D-C1D	-2.88	101.89	105.83
27	D	410	LHG	O8-C6-C5	-2.88	100.04	108.43
37	H	101	RRX	C10-C11-C12	-2.88	114.22	123.22
22	B	603	CLA	CHD-C4C-NC	2.88	128.74	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	d	402	CLA	C2A-C1A-CHA	-2.88	118.82	123.86
22	B	614	CLA	O2D-CGD-CBD	2.88	116.39	111.27
24	K	101	BCR	C33-C5-C6	-2.88	121.30	124.53
22	c	908	CLA	CED-O2D-CGD	-2.88	109.43	115.94
22	b	605	CLA	C4C-C3C-C2C	-2.88	102.70	106.90
22	b	603	CLA	O2A-CGA-CBA	2.87	120.93	111.91
22	B	605	CLA	C6-C5-C3	-2.87	105.92	113.45
22	C	503	CLA	CHD-C4C-NC	2.87	128.73	124.20
26	a	415	PL9	C20-C19-C21	2.87	120.10	115.27
22	B	606	CLA	C1D-ND-C4D	-2.87	104.30	106.33
22	B	606	CLA	CHD-C4C-NC	2.87	128.72	124.20
22	C	509	CLA	CHA-C4D-ND	2.87	138.50	132.50
22	c	903	CLA	CMB-C2B-C3B	2.86	130.04	124.68
26	d	405	PL9	C53-C6-C1	2.86	120.85	114.99
22	C	514	CLA	C2C-C1C-NC	2.86	112.65	109.97
22	B	617	CLA	CAC-C3C-C4C	2.86	128.52	124.81
26	A	411	PL9	C37-C36-C34	-2.86	103.56	112.98
22	C	511	CLA	CMD-C2D-C1D	2.86	129.75	124.71
26	a	415	PL9	C42-C43-C44	-2.86	120.78	127.66
22	c	913	CLA	CHD-C4C-NC	2.86	128.71	124.20
22	B	609	CLA	CHB-C4A-NA	2.86	128.46	124.51
22	C	507	CLA	C3C-C4C-NC	2.86	113.77	110.57
22	c	906	CLA	CHD-C4C-NC	2.85	128.70	124.20
22	c	911	CLA	O2A-CGA-O1A	-2.85	116.39	123.59
25	b	622	LMG	O8-C28-C29	2.85	120.86	111.91
22	C	509	CLA	C5-C3-C2	-2.85	115.35	121.12
22	B	602	CLA	CMC-C2C-C1C	2.85	129.38	125.04
22	b	615	CLA	CED-O2D-CGD	2.85	122.38	115.94
24	B	620	BCR	C23-C24-C25	-2.85	119.20	127.20
22	C	511	CLA	C4D-C3D-CAD	2.85	111.45	108.10
24	Y	101	BCR	C24-C23-C22	-2.85	121.93	126.23
24	k	101	BCR	C32-C1-C6	-2.84	105.69	110.30
34	C	521	HTG	C1-O5-C5	2.84	117.82	112.58
26	A	411	PL9	C25-C24-C26	2.84	120.05	115.27
22	b	616	CLA	CMB-C2B-C3B	2.84	129.99	124.68
39	V	202	HEC	CMB-C2B-C1B	-2.84	124.10	128.46
34	B	626	HTG	O5-C1-C2	-2.84	106.75	110.31
35	D	407	DGD	O1G-C1A-C2A	2.84	120.81	111.91
22	B	613	CLA	C1-O2A-CGA	2.84	123.89	116.44
24	b	618	BCR	C11-C10-C9	-2.83	123.26	127.31
22	C	510	CLA	CAC-C3C-C4C	2.83	128.49	124.81
22	B	604	CLA	CMB-C2B-C3B	2.83	129.97	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	a	407	CLA	CHD-C4C-C3C	-2.83	120.68	124.84
24	D	405	BCR	C16-C17-C18	-2.83	123.27	127.31
36	E	102	HEM	C4C-CHD-C1D	2.83	126.29	122.56
22	D	403	CLA	CMB-C2B-C3B	2.83	129.97	124.68
22	B	608	CLA	CED-O2D-CGD	2.83	122.33	115.94
24	A	409	BCR	C38-C26-C25	-2.82	121.36	124.53
22	B	612	CLA	C7-C6-C5	-2.82	105.69	113.36
22	c	910	CLA	C3D-C2D-C1D	-2.82	101.98	105.83
22	C	502	CLA	C2A-C1A-CHA	-2.82	118.93	123.86
22	B	605	CLA	CGD-CBD-CAD	-2.82	101.60	110.73
23	A	407	PHO	CMB-C2B-C3B	2.82	129.95	124.68
36	E	102	HEM	CMC-C2C-C3C	2.82	129.95	124.68
22	B	609	CLA	C1D-CHD-C4C	-2.82	119.98	126.06
34	D	415	HTG	C3-C4-C5	2.81	115.25	110.24
29	Z	101	LMT	O5B-C5B-C4B	2.81	114.80	109.69
22	B	608	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
23	a	410	PHO	C7-C6-C5	-2.81	105.73	113.36
22	c	909	CLA	C1-O2A-CGA	2.81	123.81	116.44
25	B	621	LMG	C3-C4-C5	2.81	115.24	110.24
22	B	616	CLA	O2A-CGA-O1A	-2.80	116.52	123.59
27	d	401	LHG	O8-C23-C24	2.80	120.70	111.91
22	b	611	CLA	CHD-C4C-NC	2.80	128.62	124.20
22	B	617	CLA	O2A-C1-C2	2.80	115.99	108.64
25	i	101	LMG	O8-C28-C29	2.80	120.69	111.91
22	C	512	CLA	CMD-C2D-C1D	2.80	129.64	124.71
22	C	510	CLA	C3D-C2D-C1D	-2.80	102.01	105.83
28	b	621	SQD	O48-C23-O10	-2.80	116.54	123.59
22	c	912	CLA	C4D-CHA-C1A	-2.79	117.85	121.25
22	B	603	CLA	C3C-C4C-NC	2.79	113.70	110.57
24	c	916	BCR	C35-C13-C14	-2.79	119.01	122.92
22	b	612	CLA	CMC-C2C-C1C	2.79	129.29	125.04
22	a	409	CLA	CAC-C3C-C4C	2.79	128.43	124.81
22	A	408	CLA	C3B-C4B-NB	2.79	112.81	109.21
22	B	610	CLA	C1-O2A-CGA	2.79	123.75	116.44
22	C	510	CLA	C1D-CHD-C4C	-2.79	120.05	126.06
22	c	902	CLA	C1-O2A-CGA	2.78	123.75	116.44
22	B	604	CLA	C2A-C3A-C4A	-2.78	97.37	101.87
22	B	612	CLA	CHD-C4C-NC	2.78	128.59	124.20
22	b	617	CLA	CMB-C2B-C3B	2.78	129.88	124.68
28	C	501	SQD	O5-C1-C2	-2.78	104.46	110.35
22	D	401	CLA	C1-C2-C3	-2.78	121.24	126.04
22	b	603	CLA	C3D-C4D-CHA	-2.77	106.38	112.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	914	CLA	CMD-C2D-C1D	2.77	129.60	124.71
22	b	617	CLA	C1D-CHD-C4C	-2.77	120.08	126.06
22	c	913	CLA	C2A-C1A-CHA	-2.77	119.01	123.86
22	C	511	CLA	CHD-C1D-ND	-2.77	121.91	124.45
25	i	101	LMG	O6-C1-C2	-2.77	104.49	110.35
22	a	412	CLA	C2A-C1A-CHA	-2.77	119.02	123.86
24	b	620	BCR	C24-C23-C22	-2.77	122.05	126.23
22	C	508	CLA	C4-C3-C5	2.77	119.92	115.27
22	a	407	CLA	O2A-CGA-O1A	-2.76	116.61	123.59
27	L	101	LHG	C6-C5-C4	-2.76	105.25	111.79
22	b	607	CLA	C14-C13-C12	-2.76	101.29	111.29
22	c	910	CLA	CHD-C4C-C3C	-2.76	120.78	124.84
22	C	514	CLA	O2A-CGA-O1A	-2.76	116.62	123.59
22	C	505	CLA	C7-C6-C5	-2.76	105.86	113.36
22	A	405	CLA	C4D-CHA-C1A	-2.76	117.89	121.25
22	b	616	CLA	O2A-CGA-O1A	-2.76	116.63	123.59
22	b	606	CLA	CAC-C3C-C4C	2.76	128.39	124.81
34	b	627	HTG	C3-C4-C5	2.76	115.16	110.24
27	D	411	LHG	O7-C7-C8	2.76	117.44	111.50
22	c	906	CLA	O2D-CGD-O1D	-2.76	118.45	123.84
22	c	907	CLA	O2D-CGD-O1D	-2.76	118.45	123.84
22	A	406	CLA	O2A-CGA-O1A	-2.75	116.64	123.59
22	b	615	CLA	C6-C5-C3	2.75	119.12	114.62
34	B	626	HTG	C3-C4-C5	2.75	115.15	110.24
22	C	504	CLA	C4C-C3C-C2C	-2.75	102.88	106.90
22	b	611	CLA	O2A-CGA-CBA	2.75	120.55	111.91
22	b	606	CLA	C4C-C3C-C2C	-2.75	102.89	106.90
22	B	607	CLA	CBC-CAC-C3C	-2.75	104.85	112.43
22	c	912	CLA	O2A-CGA-CBA	2.75	120.53	111.91
24	C	516	BCR	C37-C22-C23	2.75	122.40	118.08
22	B	608	CLA	CHD-C4C-C3C	-2.75	120.80	124.84
22	C	502	CLA	CHD-C4C-NC	2.75	128.53	124.20
22	b	609	CLA	CMD-C2D-C1D	2.74	129.55	124.71
29	c	931	LMT	O5'-C5'-C6'	2.74	113.26	106.44
22	c	912	CLA	CHD-C4C-C3C	-2.74	120.81	124.84
22	b	608	CLA	C1D-ND-C4D	2.74	108.28	106.33
22	c	909	CLA	C1-C2-C3	-2.74	121.30	126.04
22	B	607	CLA	CHD-C1D-ND	-2.74	121.94	124.45
22	c	911	CLA	CBC-CAC-C3C	-2.74	104.88	112.43
25	i	101	LMG	O7-C10-C11	2.74	117.40	111.50
22	A	406	CLA	C4D-C3D-CAD	2.74	111.32	108.10
22	c	903	CLA	C2A-C1A-CHA	-2.73	119.08	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	405	BCR	C29-C28-C27	-2.73	105.27	111.38
23	D	402	PHO	C1A-C2A-C3A	-2.73	100.24	102.84
24	Y	101	BCR	C1-C6-C7	2.73	123.51	115.78
22	c	911	CLA	C3D-C2D-C1D	-2.73	102.10	105.83
22	b	602	CLA	CED-O2D-CGD	2.73	122.12	115.94
22	b	604	CLA	C3C-C4C-NC	2.73	113.63	110.57
24	d	404	BCR	C30-C25-C24	2.73	123.50	115.78
22	b	616	CLA	CMC-C2C-C1C	2.73	129.20	125.04
34	D	415	HTG	C1-C2-C3	-2.73	105.20	110.59
28	l	101	SQD	O5-C1-C2	-2.73	104.58	110.35
22	B	615	CLA	CHC-C1C-NC	-2.73	120.07	124.20
25	d	409	LMG	C8-O7-C10	-2.73	111.08	117.79
22	B	604	CLA	CHC-C1C-NC	-2.72	120.07	124.20
22	C	507	CLA	C4-C3-C5	2.72	119.85	115.27
26	D	406	PL9	C50-C49-C48	-2.72	114.78	122.65
22	B	604	CLA	O2A-CGA-CBA	2.72	120.44	111.91
39	V	202	HEC	C1D-C2D-C3D	-2.72	105.11	107.00
36	E	102	HEM	C3B-C2B-C1B	2.72	108.50	106.49
35	C	517	DGD	O2G-C1B-O1B	-2.72	117.14	123.70
22	A	405	CLA	CHC-C1C-NC	-2.71	120.08	124.20
22	B	612	CLA	CHA-C4D-ND	2.71	138.17	132.50
22	C	513	CLA	C1-C2-C3	-2.71	121.35	126.04
22	B	616	CLA	O1D-CGD-CBD	-2.71	118.94	124.48
28	a	414	SQD	O9-S-O7	-2.71	104.57	113.95
22	c	908	CLA	O2A-CGA-CBA	2.71	120.41	111.91
22	A	406	CLA	O1D-CGD-CBD	-2.71	118.95	124.48
29	c	921	LMT	O2'-C2'-C3'	-2.70	104.10	110.35
22	C	502	CLA	C1-O2A-CGA	2.70	123.53	116.44
24	b	620	BCR	C3-C4-C5	-2.70	109.26	114.08
22	B	613	CLA	CMC-C2C-C1C	2.70	129.15	125.04
22	B	602	CLA	O2A-CGA-CBA	2.70	120.38	111.91
22	B	604	CLA	CMD-C2D-C1D	2.70	129.47	124.71
24	D	405	BCR	C10-C11-C12	-2.70	114.80	123.22
28	b	621	SQD	O9-S-C6	2.70	110.14	106.94
22	b	610	CLA	C7-C6-C5	-2.70	106.04	113.36
22	b	616	CLA	O1D-CGD-CBD	-2.70	118.97	124.48
22	c	907	CLA	O2A-CGA-CBA	2.69	120.36	111.91
22	B	609	CLA	C11-C12-C13	-2.69	107.21	115.92
24	C	515	BCR	C29-C30-C25	2.69	114.63	110.48
27	a	423	LHG	O8-C23-O10	-2.69	116.79	123.59
22	D	404	CLA	C4-C3-C5	2.69	119.80	115.27
29	c	921	LMT	O1'-C1'-C2'	2.69	112.51	108.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	613	CLA	C2A-C1A-CHA	-2.69	119.15	123.86
22	B	606	CLA	C7-C6-C5	-2.69	106.05	113.36
28	a	414	SQD	C44-O6-C1	-2.69	108.48	113.74
35	C	517	DGD	O5D-C6D-C5D	-2.69	104.07	109.05
22	b	605	CLA	CMB-C2B-C3B	2.69	129.71	124.68
35	c	918	DGD	O1G-C1A-C2A	2.69	120.34	111.91
22	a	408	CLA	C2A-C1A-CHA	-2.69	119.16	123.86
26	d	405	PL9	C22-C23-C24	-2.69	121.19	127.66
22	C	512	CLA	CHD-C4C-NC	2.69	128.44	124.20
22	c	903	CLA	C6-C5-C3	-2.69	106.41	113.45
22	b	613	CLA	CHB-C4A-NA	2.69	128.23	124.51
22	c	903	CLA	O2A-CGA-O1A	-2.69	116.81	123.59
22	A	408	CLA	C5-C3-C2	-2.68	115.69	121.12
22	b	616	CLA	C1D-CHD-C4C	-2.68	120.27	126.06
22	B	615	CLA	C4C-C3C-C2C	-2.68	102.99	106.90
22	C	511	CLA	C3D-C4D-CHA	-2.68	106.59	112.72
24	k	101	BCR	C2-C1-C6	2.68	114.61	110.48
27	D	409	LHG	O8-C23-O10	-2.68	116.83	123.59
22	d	402	CLA	CMA-C3A-C2A	-2.68	103.02	113.83
22	b	613	CLA	O2D-CGD-O1D	-2.68	118.60	123.84
22	C	504	CLA	O2A-CGA-CBA	2.68	120.31	111.91
22	D	401	CLA	CHA-C4D-ND	2.67	138.09	132.50
22	b	616	CLA	O2A-CGA-CBA	2.67	120.30	111.91
22	A	408	CLA	CHD-C4C-NC	2.67	128.41	124.20
22	C	513	CLA	C1D-CHD-C4C	-2.67	120.30	126.06
35	C	518	DGD	O1G-C1A-O1A	-2.67	116.85	123.59
34	B	623	HTG	O4-C4-C3	-2.67	104.17	110.35
22	D	404	CLA	CMB-C2B-C3B	2.67	129.67	124.68
28	a	414	SQD	O2-C2-C1	2.67	116.53	110.05
34	b	626	HTG	C3-C4-C5	2.67	115.00	110.24
23	A	407	PHO	CMA-C3A-C4A	-2.67	108.53	114.38
22	D	404	CLA	C2A-C1A-CHA	-2.67	119.19	123.86
39	v	202	HEC	CMC-C2C-C3C	2.67	128.95	125.82
22	B	616	CLA	C6-C7-C8	-2.67	107.30	115.92
22	C	504	CLA	CHD-C4C-NC	2.67	128.40	124.20
23	a	410	PHO	C4C-NC-C1C	-2.66	101.63	107.09
22	B	613	CLA	O2D-CGD-CBD	2.66	116.00	111.27
22	c	909	CLA	CMD-C2D-C1D	2.66	129.40	124.71
22	b	602	CLA	C4-C3-C5	2.66	119.75	115.27
22	C	511	CLA	O1D-CGD-CBD	-2.66	119.04	124.48
22	b	611	CLA	C4C-C3C-C2C	-2.66	103.02	106.90
24	C	516	BCR	C33-C5-C6	-2.66	121.54	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	602	CLA	C4C-C3C-C2C	-2.66	103.03	106.90
22	C	508	CLA	O2A-CGA-CBA	2.66	120.24	111.91
22	b	603	CLA	C1-O2A-CGA	2.66	123.41	116.44
25	b	622	LMG	O7-C10-O9	-2.66	117.28	123.70
24	d	404	BCR	C24-C23-C22	-2.66	122.22	126.23
22	C	507	CLA	CHD-C4C-NC	2.65	128.39	124.20
22	C	512	CLA	C4D-CHA-C1A	-2.65	118.02	121.25
26	a	415	PL9	C10-C9-C11	2.65	119.74	115.27
35	C	517	DGD	O6E-C1E-C2E	-2.65	104.73	110.35
24	a	413	BCR	C28-C27-C26	-2.65	109.34	114.08
22	B	607	CLA	O1D-CGD-CBD	-2.65	119.06	124.48
23	A	407	PHO	CED-O2D-CGD	2.65	121.94	115.94
35	c	919	DGD	O1G-C1A-O1A	-2.65	116.90	123.59
22	c	908	CLA	C1-C2-C3	-2.65	121.46	126.04
26	D	406	PL9	C37-C38-C39	-2.65	121.28	127.66
24	y	101	BCR	C1-C6-C7	2.65	123.28	115.78
22	c	906	CLA	O2A-CGA-CBA	2.64	120.21	111.91
22	b	609	CLA	C11-C12-C13	-2.64	107.37	115.92
22	C	510	CLA	C1-O2A-CGA	2.64	123.38	116.44
25	j	101	LMG	C9-C8-C7	-2.64	105.54	111.79
39	V	202	HEC	CMC-C2C-C1C	-2.64	124.41	128.46
22	c	911	CLA	O2A-CGA-CBA	2.64	120.19	111.91
22	c	902	CLA	CMC-C2C-C1C	2.64	129.06	125.04
22	c	907	CLA	C4-C3-C5	2.64	119.71	115.27
22	A	406	CLA	C1-C2-C3	-2.64	121.48	126.04
22	b	606	CLA	C3B-C4B-NB	2.64	112.62	109.21
26	D	406	PL9	C25-C24-C26	2.64	119.70	115.27
22	C	512	CLA	C3C-C4C-NC	2.63	113.53	110.57
22	b	615	CLA	CHD-C1D-ND	-2.63	122.03	124.45
22	c	914	CLA	O1D-CGD-CBD	-2.63	119.09	124.48
22	b	614	CLA	CED-O2D-CGD	2.63	121.89	115.94
22	B	602	CLA	C4D-CHA-C1A	-2.63	118.05	121.25
26	D	406	PL9	C12-C13-C14	-2.63	121.32	127.66
22	b	614	CLA	CHD-C4C-NC	2.63	128.35	124.20
22	A	405	CLA	C1D-ND-C4D	-2.63	104.47	106.33
22	B	614	CLA	O2A-CGA-CBA	2.63	120.16	111.91
22	A	406	CLA	CMB-C2B-C3B	2.63	129.59	124.68
22	d	403	CLA	CHD-C4C-NC	2.63	128.34	124.20
22	b	604	CLA	O1D-CGD-CBD	-2.63	119.11	124.48
22	C	514	CLA	C1D-CHD-C4C	-2.63	120.39	126.06
22	B	608	CLA	C1-O2A-CGA	2.63	123.33	116.44
22	A	405	CLA	CHA-C4D-ND	2.62	137.99	132.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	613	CLA	O2A-CGA-CBA	2.62	120.14	111.91
22	a	407	CLA	C2A-C1A-CHA	-2.62	119.27	123.86
22	b	615	CLA	CMD-C2D-C1D	2.62	129.34	124.71
22	C	510	CLA	CHD-C1D-ND	-2.62	122.04	124.45
22	C	506	CLA	C4-C3-C5	2.62	119.68	115.27
25	d	409	LMG	O2-C2-C1	2.62	116.41	110.05
26	a	415	PL9	C40-C39-C41	2.62	119.68	115.27
22	b	609	CLA	C1-C2-C3	-2.62	121.52	126.04
24	D	405	BCR	C38-C26-C27	2.62	118.64	113.62
22	b	613	CLA	C1-C2-C3	-2.62	121.52	126.04
35	C	519	DGD	O3G-C3G-C2G	-2.62	104.59	110.90
25	j	101	LMG	O7-C10-C11	2.61	117.14	111.50
22	C	502	CLA	CMC-C2C-C1C	2.61	129.02	125.04
22	C	511	CLA	C3D-C2D-C1D	-2.61	102.27	105.83
22	C	508	CLA	CBC-CAC-C3C	-2.61	105.23	112.43
25	j	101	LMG	O8-C28-C29	2.61	120.10	111.91
28	D	408	SQD	C3-C4-C5	2.61	114.89	110.24
22	b	615	CLA	C3B-C4B-NB	2.61	112.58	109.21
22	B	606	CLA	CMD-C2D-C1D	2.61	129.31	124.71
22	b	608	CLA	CHD-C4C-NC	2.61	128.31	124.20
22	c	906	CLA	CAC-C3C-C4C	2.61	128.19	124.81
22	B	613	CLA	CHD-C4C-NC	2.61	128.31	124.20
22	A	406	CLA	C3D-C2D-C1D	-2.61	102.27	105.83
22	C	504	CLA	CMC-C2C-C1C	2.60	129.00	125.04
24	b	618	BCR	C7-C8-C9	-2.60	122.30	126.23
24	C	515	BCR	C8-C7-C6	-2.60	119.90	127.20
22	d	402	CLA	CMD-C2D-C1D	2.60	129.29	124.71
22	b	605	CLA	C1D-CHD-C4C	-2.60	120.45	126.06
22	A	408	CLA	C1D-CHD-C4C	-2.60	120.45	126.06
22	c	903	CLA	CMC-C2C-C1C	2.60	128.99	125.04
22	d	403	CLA	C4D-C3D-CAD	2.60	111.16	108.10
22	C	509	CLA	O2A-CGA-CBA	2.59	120.05	111.91
39	v	202	HEC	CMB-C2B-C1B	-2.59	124.48	128.46
22	b	608	CLA	CHD-C1D-ND	-2.59	122.07	124.45
22	c	910	CLA	CHD-C1D-ND	-2.59	122.07	124.45
22	b	617	CLA	CHD-C4C-NC	2.59	128.29	124.20
22	a	412	CLA	CMC-C2C-C1C	2.59	128.99	125.04
26	A	411	PL9	C3-C4-C5	2.59	121.97	118.60
28	f	101	SQD	O7-S-C6	2.59	110.03	106.92
22	D	401	CLA	CHB-C4A-NA	2.59	128.09	124.51
22	b	610	CLA	O2D-CGD-CBD	2.59	115.86	111.27
35	C	518	DGD	O2G-C1B-O1B	-2.59	117.45	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	a	412	CLA	O2A-CGA-CBA	2.59	120.02	111.91
22	b	614	CLA	C4C-C3C-C2C	-2.59	103.13	106.90
24	K	101	BCR	C20-C21-C22	-2.58	123.62	127.31
29	a	419	LMT	O5B-C5B-C6B	2.58	112.86	106.44
24	D	405	BCR	C36-C18-C19	2.58	122.14	118.08
25	d	409	LMG	O7-C10-O9	-2.58	117.46	123.70
22	b	607	CLA	CMB-C2B-C3B	2.58	129.51	124.68
22	B	610	CLA	O2D-CGD-O1D	-2.58	118.79	123.84
26	A	411	PL9	C30-C29-C31	2.58	119.61	115.27
22	A	406	CLA	CMD-C2D-C1D	2.58	129.26	124.71
24	D	405	BCR	C15-C14-C13	-2.58	123.63	127.31
22	B	605	CLA	C3B-C4B-NB	2.58	112.54	109.21
22	B	612	CLA	CHB-C4A-NA	2.58	128.07	124.51
22	B	613	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
22	b	611	CLA	O2A-CGA-O1A	-2.57	117.09	123.59
22	c	914	CLA	CED-O2D-CGD	2.57	121.76	115.94
22	d	403	CLA	CED-O2D-CGD	2.57	121.75	115.94
22	c	912	CLA	O2A-C1-C2	-2.57	101.88	108.64
26	a	415	PL9	C32-C33-C34	-2.57	121.47	127.66
29	f	102	LMT	C3'-C4'-C5'	-2.57	105.03	110.93
28	C	501	SQD	O48-C23-C24	2.57	119.97	111.91
22	B	606	CLA	C4C-C3C-C2C	-2.57	103.16	106.90
22	B	616	CLA	C3B-C4B-NB	2.57	112.53	109.21
34	D	415	HTG	O2-C2-C3	2.57	116.28	110.35
22	b	617	CLA	C1-O2A-CGA	2.57	123.18	116.44
22	C	513	CLA	CMD-C2D-C1D	2.57	129.23	124.71
24	A	409	BCR	C36-C18-C17	-2.56	119.33	122.92
22	C	502	CLA	O2A-CGA-CBA	2.56	119.96	111.91
22	D	403	CLA	O2A-CGA-CBA	2.56	119.96	111.91
26	D	406	PL9	C51-C49-C50	2.56	120.27	114.60
22	b	610	CLA	CAC-C3C-C4C	2.56	128.13	124.81
22	B	603	CLA	C5-C3-C2	-2.56	115.93	121.12
26	A	411	PL9	C37-C38-C39	-2.56	121.49	127.66
22	A	408	CLA	CMC-C2C-C1C	2.56	128.94	125.04
22	B	609	CLA	CMB-C2B-C3B	2.56	129.47	124.68
23	A	407	PHO	O1D-CGD-CBD	-2.56	120.48	124.74
28	a	414	SQD	O47-C7-O49	-2.56	117.52	123.70
22	a	412	CLA	CED-O2D-CGD	2.56	121.72	115.94
22	B	609	CLA	C6-C5-C3	-2.56	106.75	113.45
22	c	914	CLA	O2A-CGA-CBA	2.56	119.93	111.91
22	B	613	CLA	CHA-C4D-ND	2.55	137.84	132.50
22	b	602	CLA	CHC-C1C-NC	-2.55	120.33	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	C	510	CLA	C3C-C4C-NC	2.55	113.44	110.57
22	D	401	CLA	CMB-C2B-C1B	2.55	132.39	128.46
25	d	409	LMG	C3-C4-C5	2.55	114.79	110.24
22	b	603	CLA	CAA-CBA-CGA	-2.55	105.80	113.25
22	c	904	CLA	C4C-C3C-C2C	-2.55	103.18	106.90
22	c	903	CLA	C3D-C4D-CHA	-2.55	106.89	112.72
22	b	610	CLA	C2A-C1A-CHA	-2.55	119.40	123.86
22	D	403	CLA	CHA-C4D-ND	2.55	137.83	132.50
22	A	405	CLA	CAA-CBA-CGA	-2.55	105.81	113.25
22	C	512	CLA	C4C-C3C-C2C	-2.54	103.19	106.90
28	l	101	SQD	O9-S-C6	2.54	109.96	106.94
22	c	914	CLA	CHB-C4A-NA	2.54	128.02	124.51
25	i	101	LMG	C31-C30-C29	-2.54	104.06	113.19
22	c	904	CLA	C4D-C3D-CAD	2.54	111.09	108.10
22	C	504	CLA	C4D-CHA-C1A	-2.54	118.16	121.25
25	D	412	LMG	O8-C28-C29	2.54	119.87	111.91
22	B	616	CLA	O2A-CGA-CBA	2.54	119.87	111.91
22	c	913	CLA	C4D-CHA-C1A	-2.54	118.16	121.25
22	D	404	CLA	C3D-C2D-C1D	-2.54	102.37	105.83
27	D	410	LHG	C14-C13-C12	-2.54	101.55	114.42
22	b	604	CLA	CHC-C1C-NC	-2.54	120.36	124.20
25	i	101	LMG	C1-O6-C5	-2.53	108.71	113.69
22	b	612	CLA	CBC-CAC-C3C	-2.53	105.44	112.43
36	e	101	HEM	C4C-CHD-C1D	2.53	125.90	122.56
22	D	401	CLA	CHD-C1D-ND	-2.53	122.13	124.45
22	B	614	CLA	C1-C2-C3	-2.53	121.66	126.04
22	B	612	CLA	C3B-C4B-NB	2.53	112.48	109.21
24	c	916	BCR	C16-C17-C18	-2.53	123.70	127.31
22	b	614	CLA	C3C-C4C-NC	2.53	113.41	110.57
22	B	604	CLA	O1D-CGD-CBD	-2.53	119.31	124.48
22	D	401	CLA	C4-C3-C5	2.53	119.53	115.27
28	l	101	SQD	O47-C7-O49	-2.53	117.59	123.70
24	Y	101	BCR	C8-C9-C10	-2.53	115.06	118.94
22	C	509	CLA	C4C-C3C-C2C	-2.53	103.21	106.90
22	c	912	CLA	CMC-C2C-C1C	2.53	128.89	125.04
22	B	603	CLA	C1-O2A-CGA	2.53	123.07	116.44
35	D	407	DGD	O1G-C1G-C2G	2.53	115.78	108.43
28	D	408	SQD	C4-C3-C2	2.52	115.23	110.82
22	c	903	CLA	O2A-CGA-CBA	2.52	119.82	111.91
24	B	619	BCR	C15-C16-C17	-2.52	118.31	123.47
24	K	101	BCR	C16-C17-C18	-2.52	123.71	127.31
35	C	518	DGD	C3B-C2B-C1B	-2.52	104.45	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	423	LHG	O7-C7-O9	-2.52	117.61	123.70
22	B	616	CLA	O2D-CGD-O1D	-2.52	118.91	123.84
22	d	402	CLA	CAC-C3C-C4C	2.52	128.08	124.81
22	B	617	CLA	C4-C3-C5	2.52	119.51	115.27
22	B	610	CLA	CAC-C3C-C4C	2.52	128.08	124.81
27	L	101	LHG	O7-C7-O9	-2.52	117.61	123.70
22	b	616	CLA	C4D-CHA-C1A	-2.52	118.18	121.25
22	C	502	CLA	O1D-CGD-CBD	-2.52	119.33	124.48
29	f	102	LMT	O5'-C5'-C6'	2.52	112.69	106.44
22	b	611	CLA	C1D-CHD-C4C	-2.51	120.63	126.06
22	b	607	CLA	C2A-C1A-CHA	-2.51	119.46	123.86
22	B	607	CLA	OBD-CAD-C3D	-2.51	122.47	128.52
22	B	604	CLA	O2A-CGA-O1A	-2.51	117.25	123.59
22	B	605	CLA	C1D-CHD-C4C	-2.51	120.64	126.06
35	h	102	DGD	C3D-C4D-C5D	-2.51	105.76	110.24
22	B	603	CLA	CMB-C2B-C3B	2.51	129.37	124.68
22	a	408	CLA	C3B-C4B-NB	2.51	112.45	109.21
22	c	907	CLA	CHB-C4A-NA	2.51	127.98	124.51
22	a	407	CLA	O2A-CGA-CBA	2.51	119.78	111.91
22	C	503	CLA	CMC-C2C-C1C	2.51	128.86	125.04
22	b	612	CLA	C1D-CHD-C4C	-2.51	120.65	126.06
22	A	405	CLA	C1D-CHD-C4C	-2.51	120.65	126.06
22	D	404	CLA	C4D-CHA-C1A	-2.50	118.20	121.25
22	B	603	CLA	OBD-CAD-C3D	-2.50	122.50	128.52
24	k	101	BCR	C11-C10-C9	-2.50	123.74	127.31
22	b	612	CLA	C3C-C4C-NC	2.50	113.37	110.57
25	j	101	LMG	O2-C2-C1	-2.50	103.98	110.05
22	b	611	CLA	CMB-C2B-C3B	2.50	129.35	124.68
35	C	518	DGD	C6D-C5D-C4D	2.50	117.31	112.09
22	A	405	CLA	O2D-CGD-O1D	-2.50	118.96	123.84
24	Y	101	BCR	C7-C8-C9	-2.50	122.46	126.23
22	B	616	CLA	CHB-C4A-NA	2.49	127.96	124.51
22	a	407	CLA	CMC-C2C-C1C	2.49	128.84	125.04
22	c	906	CLA	CBC-CAC-C3C	-2.49	105.56	112.43
22	a	409	CLA	O2A-CGA-O1A	-2.49	117.30	123.59
22	C	508	CLA	O1D-CGD-CBD	-2.49	119.39	124.48
25	c	930	LMG	O8-C28-C29	2.49	119.73	111.91
22	B	605	CLA	C4-C3-C5	2.49	119.46	115.27
22	D	403	CLA	C4-C3-C2	-2.49	117.29	123.68
22	B	611	CLA	O1D-CGD-CBD	-2.49	119.40	124.48
24	Y	101	BCR	C34-C9-C8	2.49	121.99	118.08
22	c	902	CLA	C3B-C4B-NB	2.49	112.42	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	904	CLA	CAA-CBA-CGA	-2.48	105.99	113.25
22	b	613	CLA	O2A-CGA-O1A	-2.48	117.33	123.59
22	B	611	CLA	CMB-C2B-C3B	2.48	129.32	124.68
22	c	911	CLA	C1D-CHD-C4C	-2.48	120.71	126.06
22	a	408	CLA	O2D-CGD-O1D	-2.48	118.99	123.84
22	C	502	CLA	C4D-CHA-C1A	-2.48	118.23	121.25
24	C	516	BCR	C38-C26-C25	-2.48	121.75	124.53
35	c	919	DGD	C2G-O2G-C1B	-2.48	111.70	117.79
22	b	615	CLA	O2D-CGD-O1D	-2.48	119.00	123.84
22	A	408	CLA	CAC-C3C-C4C	2.47	128.02	124.81
28	C	501	SQD	O9-S-O7	-2.47	105.39	113.95
22	C	508	CLA	O2A-CGA-O1A	-2.47	117.35	123.59
22	B	613	CLA	CMB-C2B-C3B	2.47	129.30	124.68
28	C	501	SQD	O2-C2-C1	2.47	116.05	110.05
24	y	101	BCR	C7-C6-C5	-2.47	115.48	121.46
22	B	610	CLA	C1D-CHD-C4C	-2.47	120.73	126.06
22	B	603	CLA	C4C-C3C-C2C	-2.47	103.30	106.90
23	a	410	PHO	O2A-CGA-CBA	2.47	119.65	111.91
22	C	510	CLA	C4-C3-C5	2.47	119.42	115.27
39	V	202	HEC	CBA-CAA-C2A	-2.47	108.45	112.60
26	A	411	PL9	C26-C27-C28	2.47	119.98	111.88
22	c	914	CLA	CAC-C3C-C4C	2.47	128.01	124.81
22	b	602	CLA	CMB-C2B-C3B	2.47	129.29	124.68
22	d	402	CLA	C1D-CHD-C4C	-2.46	120.74	126.06
22	B	614	CLA	C3B-C4B-NB	2.46	112.40	109.21
35	D	407	DGD	C1D-C2D-C3D	2.46	115.13	110.00
27	d	401	LHG	O4-P-O5	2.46	120.33	110.68
36	E	102	HEM	C4B-CHC-C1C	2.46	125.81	122.56
22	b	617	CLA	C4-C3-C5	2.46	119.41	115.27
22	b	612	CLA	C1D-ND-C4D	-2.46	104.59	106.33
22	b	611	CLA	CHC-C1C-NC	-2.46	120.47	124.20
22	B	609	CLA	O2A-CGA-CBA	2.46	119.62	111.91
22	C	510	CLA	C11-C10-C8	-2.46	107.98	115.92
22	D	404	CLA	CBC-CAC-C3C	-2.46	105.66	112.43
22	B	604	CLA	C1D-ND-C4D	-2.45	104.59	106.33
22	C	514	CLA	CMD-C2D-C1D	2.45	129.03	124.71
22	B	605	CLA	CHB-C4A-NA	2.45	127.90	124.51
22	B	604	CLA	CMC-C2C-C1C	2.45	128.77	125.04
22	A	405	CLA	C3C-C4C-NC	2.45	113.31	110.57
22	B	612	CLA	C3C-C4C-NC	2.45	113.31	110.57
28	b	621	SQD	C3-C4-C5	2.44	114.60	110.24
22	C	504	CLA	CHC-C1C-NC	-2.44	120.50	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	c	917	DGD	O2G-C1B-O1B	-2.44	117.80	123.70
34	l	106	HTG	O5-C1-C2	-2.44	107.24	110.31
24	D	405	BCR	C32-C1-C6	2.44	114.26	110.30
22	B	615	CLA	O2D-CGD-O1D	-2.44	119.07	123.84
22	B	617	CLA	CHB-C4A-NA	2.44	127.88	124.51
25	A	410	LMG	C8-O7-C10	-2.44	111.79	117.79
22	C	504	CLA	C5-C3-C2	-2.44	116.19	121.12
22	c	911	CLA	C2A-C1A-CHA	-2.44	119.60	123.86
22	b	617	CLA	O2A-CGA-CBA	2.43	119.55	111.91
25	B	621	LMG	O7-C10-O9	-2.43	117.82	123.70
37	H	101	RRX	C38-C26-C25	-2.43	121.80	124.53
22	B	610	CLA	C3C-C4C-NC	2.43	113.30	110.57
22	b	609	CLA	CHD-C4C-NC	2.43	128.03	124.20
22	a	412	CLA	CMB-C2B-C3B	2.43	129.23	124.68
22	B	606	CLA	C2A-C1A-CHA	-2.43	119.61	123.86
22	C	504	CLA	CMD-C2D-C1D	2.43	128.99	124.71
22	b	604	CLA	C4D-CHA-C1A	-2.43	118.30	121.25
22	a	408	CLA	C1D-ND-C4D	-2.43	104.61	106.33
27	d	401	LHG	O8-C23-O10	-2.42	117.47	123.59
22	C	505	CLA	C3B-C4B-NB	2.42	112.34	109.21
22	c	904	CLA	OBD-CAD-C3D	-2.42	122.69	128.52
22	B	612	CLA	CAC-C3C-C4C	2.42	127.95	124.81
26	D	406	PL9	C40-C39-C38	-2.42	117.47	123.68
35	c	918	DGD	O1G-C1A-O1A	-2.42	117.49	123.59
22	C	512	CLA	O2D-CGD-CBD	2.42	115.57	111.27
22	b	615	CLA	C3C-C4C-NC	2.42	113.28	110.57
22	b	612	CLA	O2D-CGD-O1D	-2.42	119.11	123.84
22	C	505	CLA	C1-O2A-CGA	2.42	122.79	116.44
22	a	407	CLA	O1D-CGD-CBD	-2.42	119.54	124.48
34	v	203	HTG	O2-C2-C1	2.42	114.71	110.27
28	C	501	SQD	C45-O47-C7	-2.42	111.84	117.79
24	B	620	BCR	C10-C11-C12	-2.42	115.68	123.22
22	B	613	CLA	C3B-C4B-NB	2.41	112.33	109.21
22	a	412	CLA	OBD-CAD-C3D	-2.41	122.71	128.52
24	B	620	BCR	C33-C5-C6	-2.41	121.82	124.53
22	c	912	CLA	CAC-C3C-C4C	2.41	127.94	124.81
22	C	506	CLA	C3D-C2D-C1D	-2.41	102.54	105.83
22	a	408	CLA	O2A-CGA-CBA	2.41	119.48	111.91
22	C	505	CLA	O1D-CGD-CBD	-2.41	119.55	124.48
22	c	912	CLA	CMD-C2D-C1D	2.41	128.96	124.71
22	B	604	CLA	C3C-C4C-NC	2.41	113.27	110.57
22	c	912	CLA	CHC-C1C-NC	-2.41	120.55	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	913	CLA	C1-O2A-CGA	2.41	122.75	116.44
35	C	519	DGD	O2G-C1B-O1B	-2.41	117.89	123.70
24	D	405	BCR	C30-C25-C24	2.41	122.58	115.78
22	B	615	CLA	C3B-C4B-NB	2.40	112.32	109.21
35	c	919	DGD	O2E-C2E-C3E	-2.40	104.79	110.35
34	b	623	HTG	C1-O5-C5	2.40	117.01	112.58
22	b	610	CLA	C16-C15-C13	-2.40	108.16	115.92
35	C	517	DGD	O2G-C1B-C2B	2.40	116.67	111.50
24	a	413	BCR	C40-C30-C25	-2.40	106.41	110.30
25	d	409	LMG	O8-C28-C29	2.40	119.43	111.91
24	c	915	BCR	C38-C26-C25	-2.40	121.84	124.53
22	b	607	CLA	O2A-CGA-O1A	-2.40	117.55	123.59
24	Y	101	BCR	C15-C14-C13	-2.40	123.89	127.31
25	c	930	LMG	O7-C10-O9	-2.39	117.92	123.70
22	C	507	CLA	C1D-CHD-C4C	-2.39	120.90	126.06
36	E	102	HEM	CHB-C1B-NB	2.39	127.33	124.38
35	d	406	DGD	O2G-C1B-O1B	-2.39	117.93	123.70
24	A	409	BCR	C33-C5-C6	-2.39	121.85	124.53
22	b	616	CLA	CAC-C3C-C4C	2.39	127.91	124.81
22	B	617	CLA	C3C-C4C-NC	2.39	113.25	110.57
25	J	101	LMG	O3-C3-C2	-2.39	104.83	110.35
22	C	502	CLA	C3C-C4C-NC	2.39	113.25	110.57
22	B	604	CLA	CBC-CAC-C3C	-2.38	105.86	112.43
22	B	609	CLA	CMC-C2C-C1C	2.38	128.67	125.04
29	c	931	LMT	O1'-C1'-C2'	2.38	112.02	108.30
22	b	615	CLA	C2A-C1A-CHA	-2.38	119.69	123.86
22	b	610	CLA	CMD-C2D-C1D	2.38	128.91	124.71
22	B	605	CLA	O2A-CGA-O1A	-2.38	117.58	123.59
22	b	614	CLA	C4D-CHA-C1A	-2.38	118.35	121.25
36	E	102	HEM	CAD-CBD-CGD	2.38	118.73	113.60
24	d	404	BCR	C15-C14-C13	-2.38	123.91	127.31
22	b	616	CLA	C2A-C1A-CHA	-2.38	119.70	123.86
22	c	904	CLA	C3B-C4B-NB	2.38	112.29	109.21
22	a	412	CLA	CMD-C2D-C3D	2.38	133.09	127.61
34	l	106	HTG	C1-C2-C3	-2.38	105.89	110.59
22	B	602	CLA	CED-O2D-CGD	2.38	121.31	115.94
22	C	507	CLA	C1-O2A-CGA	2.38	122.68	116.44
22	A	405	CLA	C2A-C1A-CHA	-2.38	119.70	123.86
22	C	507	CLA	CMB-C2B-C3B	2.38	129.12	124.68
22	b	611	CLA	CMC-C2C-C1C	2.38	128.66	125.04
22	B	602	CLA	CHC-C1C-NC	-2.37	120.60	124.20
22	b	615	CLA	O2A-CGA-CBA	2.37	119.36	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	908	CLA	C4D-CHA-C1A	-2.37	118.36	121.25
22	c	905	CLA	CED-O2D-CGD	2.37	121.30	115.94
22	c	910	CLA	CMB-C2B-C3B	2.37	129.12	124.68
22	C	506	CLA	O2D-CGD-O1D	-2.37	119.20	123.84
22	b	603	CLA	O1D-CGD-CBD	-2.37	119.63	124.48
22	B	609	CLA	C3D-C4D-CHA	-2.37	107.30	112.72
24	a	413	BCR	C23-C24-C25	-2.37	120.56	127.20
29	c	921	LMT	C1B-O1B-C4'	-2.37	112.11	117.96
22	c	910	CLA	C3D-C4D-CHA	-2.36	107.31	112.72
22	B	608	CLA	C1-C2-C3	-2.36	121.95	126.04
22	C	510	CLA	CMD-C2D-C1D	2.36	128.88	124.71
22	D	404	CLA	O2A-CGA-O1A	-2.36	117.63	123.59
22	b	617	CLA	C4-C3-C2	-2.36	117.62	123.68
36	E	102	HEM	CMA-C3A-C4A	-2.36	124.84	128.46
25	C	531	LMG	O6-C5-C6	2.36	112.30	106.44
22	b	605	CLA	CGD-CBD-CAD	-2.36	103.10	110.73
22	c	904	CLA	O2D-CGD-O1D	-2.36	119.23	123.84
22	a	407	CLA	C5-C3-C2	-2.35	116.35	121.12
22	C	506	CLA	CMB-C2B-C3B	2.35	129.08	124.68
24	a	413	BCR	C8-C7-C6	-2.35	120.60	127.20
22	d	402	CLA	CMC-C2C-C1C	2.35	128.62	125.04
22	d	403	CLA	C3D-C2D-C1D	-2.35	102.62	105.83
22	C	514	CLA	C1-O2A-CGA	2.35	122.61	116.44
25	J	101	LMG	O8-C28-C29	2.35	119.28	111.91
22	A	408	CLA	O2A-CGA-CBA	2.35	119.28	111.91
28	a	418	SQD	C44-O6-C1	-2.35	109.15	113.74
29	T	102	LMT	O5'-C1'-C2'	2.35	115.32	110.35
22	b	617	CLA	C3B-C4B-NB	2.35	112.24	109.21
36	e	101	HEM	C1B-NB-C4B	2.34	107.50	105.07
22	c	906	CLA	C4C-C3C-C2C	-2.34	103.48	106.90
22	b	613	CLA	CMC-C2C-C1C	2.34	128.60	125.04
27	a	416	LHG	O7-C7-O9	-2.34	118.05	123.70
22	B	611	CLA	C3C-C4C-NC	2.34	113.19	110.57
22	b	604	CLA	C3B-C4B-NB	2.34	112.23	109.21
25	c	930	LMG	C1-O6-C5	2.34	118.28	113.69
28	D	408	SQD	C1-O5-C5	-2.34	109.10	113.69
22	a	407	CLA	C7-C6-C5	-2.34	107.01	113.36
22	a	407	CLA	C1D-CHD-C4C	-2.34	121.02	126.06
24	B	619	BCR	C24-C23-C22	-2.33	122.71	126.23
22	C	512	CLA	C3A-C2A-C1A	2.33	104.83	101.34
22	B	613	CLA	C3D-C4D-ND	2.33	114.01	110.24
24	c	916	BCR	C36-C18-C19	2.33	121.75	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	V	203	HTG	C1-O5-C5	-2.33	108.28	112.58
22	c	910	CLA	O2D-CGD-O1D	-2.33	119.28	123.84
22	B	617	CLA	C1D-CHD-C4C	-2.33	121.03	126.06
22	b	604	CLA	C5-C3-C2	-2.33	116.40	121.12
22	C	507	CLA	C4C-C3C-C2C	-2.33	103.50	106.90
22	C	507	CLA	O2D-CGD-O1D	-2.33	119.29	123.84
22	b	612	CLA	O2A-CGA-CBA	2.33	119.21	111.91
22	c	910	CLA	C3C-C4C-NC	2.33	113.18	110.57
22	b	615	CLA	CHC-C1C-NC	-2.33	120.67	124.20
22	a	412	CLA	C5-C3-C2	-2.33	116.41	121.12
22	D	403	CLA	C1D-ND-C4D	-2.33	104.68	106.33
22	B	608	CLA	C4-C3-C2	-2.33	117.71	123.68
22	d	402	CLA	C3D-C4D-CHA	-2.32	107.41	112.72
26	A	411	PL9	C10-C9-C11	2.32	119.18	115.27
22	A	406	CLA	C5-C3-C2	-2.32	116.42	121.12
22	c	909	CLA	CMC-C2C-C3C	2.32	132.42	126.12
22	B	603	CLA	C1D-CHD-C4C	-2.32	121.05	126.06
22	A	406	CLA	CED-O2D-CGD	2.32	121.19	115.94
22	B	605	CLA	CAA-C2A-C3A	-2.32	106.42	112.78
22	c	907	CLA	CAC-C3C-C4C	2.32	127.82	124.81
26	d	405	PL9	C42-C43-C44	-2.32	122.08	127.66
22	B	605	CLA	O2A-CGA-CBA	2.32	119.18	111.91
22	C	506	CLA	CHB-C4A-NA	2.32	127.72	124.51
24	Y	101	BCR	C24-C25-C26	-2.31	115.86	121.46
25	B	621	LMG	O6-C5-C4	2.31	113.90	109.69
27	a	416	LHG	C6-O8-C23	2.31	125.69	117.12
25	B	621	LMG	C4-C3-C2	2.31	114.86	110.82
22	D	401	CLA	CAC-C3C-C4C	2.31	127.81	124.81
22	c	912	CLA	C3D-C2D-C1D	-2.31	102.68	105.83
22	B	608	CLA	O1D-CGD-CBD	-2.31	119.75	124.48
22	B	614	CLA	CMB-C2B-C3B	2.31	129.00	124.68
24	B	620	BCR	C15-C14-C13	-2.31	124.01	127.31
22	b	617	CLA	C4D-CHA-C1A	-2.31	118.44	121.25
34	b	623	HTG	O5-C1-C2	2.31	113.22	110.31
22	D	403	CLA	CAC-C3C-C4C	2.31	127.81	124.81
22	d	403	CLA	C3B-C4B-NB	2.31	112.20	109.21
22	a	408	CLA	CMD-C2D-C1D	2.31	128.78	124.71
22	A	405	CLA	O2A-CGA-CBA	2.31	119.15	111.91
22	b	615	CLA	CMB-C2B-C3B	2.31	129.00	124.68
22	C	503	CLA	C4C-C3C-C2C	-2.31	103.53	106.90
24	y	101	BCR	C15-C14-C13	-2.31	124.02	127.31
25	i	101	LMG	O1-C1-C2	2.31	111.90	108.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	620	BCR	C40-C30-C25	-2.30	106.56	110.30
24	B	619	BCR	C23-C24-C25	-2.30	120.73	127.20
22	c	904	CLA	C4-C3-C5	2.30	119.15	115.27
22	D	401	CLA	O2A-CGA-O1A	-2.30	117.78	123.59
22	B	607	CLA	CMC-C2C-C1C	2.30	128.55	125.04
22	b	609	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
22	B	613	CLA	C1D-ND-C4D	-2.30	104.70	106.33
26	a	415	PL9	C51-C49-C50	2.30	119.69	114.60
22	b	605	CLA	C3B-C4B-NB	2.30	112.19	109.21
22	a	409	CLA	CHA-C4D-ND	2.30	137.31	132.50
22	D	403	CLA	C3C-C4C-NC	2.30	113.15	110.57
22	B	614	CLA	C1D-CHD-C4C	-2.30	121.10	126.06
22	b	614	CLA	O2A-CGA-CBA	2.30	119.12	111.91
22	B	609	CLA	C1-O2A-CGA	2.30	122.47	116.44
22	c	909	CLA	CAC-C3C-C2C	2.30	131.46	127.53
24	B	619	BCR	C20-C21-C22	-2.30	124.03	127.31
24	B	620	BCR	C15-C16-C17	-2.30	118.77	123.47
22	b	617	CLA	CMD-C2D-C1D	2.29	128.76	124.71
22	c	907	CLA	O2A-CGA-O1A	-2.29	117.80	123.59
22	b	603	CLA	C4D-C3D-CAD	2.29	110.80	108.10
22	C	508	CLA	CHC-C1C-NC	-2.29	120.72	124.20
24	b	620	BCR	C33-C5-C6	-2.29	121.95	124.53
22	b	608	CLA	C2D-C1D-ND	2.29	111.79	110.10
22	c	905	CLA	C7-C6-C5	-2.29	107.14	113.36
22	a	407	CLA	C3C-C4C-NC	2.29	113.14	110.57
22	c	904	CLA	C3D-C4D-CHA	-2.29	107.48	112.72
28	C	501	SQD	O7-S-C6	-2.29	104.22	106.94
22	c	912	CLA	O2D-CGD-O1D	-2.29	119.36	123.84
22	B	608	CLA	CMC-C2C-C1C	2.29	128.53	125.04
28	a	414	SQD	O5-C1-C2	-2.29	105.50	110.35
22	b	613	CLA	CMD-C2D-C3D	2.29	132.88	127.61
22	b	614	CLA	C3B-C4B-NB	2.29	112.17	109.21
22	C	505	CLA	CMB-C2B-C3B	2.29	128.96	124.68
23	a	411	PHO	C11-C12-C13	-2.29	108.52	115.92
22	C	502	CLA	O2A-CGA-O1A	-2.29	117.82	123.59
22	B	604	CLA	CHD-C4C-NC	2.29	127.81	124.20
22	B	606	CLA	C3D-C4D-CHA	-2.29	107.49	112.72
22	C	511	CLA	O2A-CGA-CBA	2.29	119.08	111.91
22	B	612	CLA	CBC-CAC-C3C	-2.29	106.13	112.43
22	C	511	CLA	C3B-C4B-NB	2.28	112.16	109.21
22	C	503	CLA	C6-C5-C3	-2.28	107.47	113.45
35	C	517	DGD	O3D-C3D-C2D	-2.28	105.07	110.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	H	102	DGD	C3B-C2B-C1B	-2.28	105.32	113.62
22	B	603	CLA	C6-C7-C8	-2.28	108.54	115.92
22	a	412	CLA	CHC-C1C-C2C	-2.28	120.41	126.72
22	B	602	CLA	C2A-C1A-CHA	-2.28	119.87	123.86
22	C	510	CLA	O2A-CGA-O1A	-2.28	117.84	123.59
22	B	613	CLA	CHC-C1C-NC	-2.28	120.75	124.20
22	B	611	CLA	C1D-CHD-C4C	-2.28	121.14	126.06
22	c	907	CLA	C2A-C1A-CHA	-2.28	119.88	123.86
22	B	608	CLA	CHB-C4A-NA	2.28	127.66	124.51
22	b	607	CLA	C4C-C3C-C2C	-2.28	103.58	106.90
22	C	503	CLA	CMB-C2B-C1B	2.27	131.96	128.46
22	C	511	CLA	CBC-CAC-C3C	-2.27	106.16	112.43
22	b	617	CLA	CHC-C1C-NC	-2.27	120.76	124.20
22	b	612	CLA	C1-C2-C3	-2.27	122.11	126.04
22	B	613	CLA	C4C-C3C-C2C	-2.27	103.59	106.90
22	b	611	CLA	C3B-C4B-NB	2.27	112.14	109.21
22	C	508	CLA	C1D-CHD-C4C	-2.27	121.16	126.06
31	c	924	DMS	O-S-C2	2.27	118.11	106.54
22	d	402	CLA	CHD-C4C-NC	2.27	127.78	124.20
34	b	627	HTG	C1-O5-C5	2.27	116.76	112.58
22	B	604	CLA	C2A-C1A-CHA	-2.27	119.90	123.86
29	I	102	LMT	C2'-C3'-C4'	-2.27	104.51	109.68
22	c	907	CLA	C1D-CHD-C4C	-2.26	121.17	126.06
22	b	612	CLA	C3D-C4D-CHA	-2.26	107.54	112.72
22	c	913	CLA	CMD-C2D-C1D	2.26	128.70	124.71
22	b	615	CLA	CHD-C4C-NC	2.26	127.77	124.20
22	b	605	CLA	O2A-CGA-CBA	2.26	119.01	111.91
22	b	604	CLA	CAC-C3C-C4C	2.26	127.75	124.81
36	E	102	HEM	CMD-C2D-C1D	2.26	128.48	125.04
27	C	522	LHG	O8-C23-C24	2.26	119.00	111.91
25	B	621	LMG	O1-C1-C2	2.26	111.83	108.30
22	b	603	CLA	OBD-CAD-C3D	-2.26	123.08	128.52
22	B	607	CLA	O2A-CGA-O1A	-2.26	117.89	123.59
22	c	912	CLA	C3D-C4D-CHA	-2.26	107.56	112.72
27	D	410	LHG	O8-C23-O10	-2.26	117.89	123.59
22	b	609	CLA	C3D-C2D-C1D	-2.26	102.75	105.83
22	a	408	CLA	C4-C3-C5	2.26	119.07	115.27
22	B	603	CLA	O2A-CGA-O1A	-2.26	117.90	123.59
22	c	913	CLA	C6-C5-C3	-2.26	107.54	113.45
34	b	624	HTG	C1-O5-C5	2.25	116.74	112.58
22	d	403	CLA	CAC-C3C-C4C	2.25	127.73	124.81
24	a	413	BCR	C24-C23-C22	-2.25	122.83	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	C	519	DGD	O4D-C4D-C3D	-2.25	105.14	110.35
22	a	408	CLA	C3D-C4D-CHA	-2.25	107.57	112.72
22	C	506	CLA	CHD-C4C-C3C	-2.25	121.53	124.84
22	C	512	CLA	C6-C7-C8	-2.25	108.65	115.92
22	C	506	CLA	CMC-C2C-C1C	2.25	128.46	125.04
23	a	411	PHO	CMA-C3A-C4A	-2.25	109.45	114.38
23	D	402	PHO	O2D-CGD-O1D	-2.25	119.44	123.84
22	a	412	CLA	C3D-C2D-C1D	-2.25	102.77	105.83
22	B	602	CLA	CHD-C4C-NC	2.25	127.74	124.20
23	A	407	PHO	C1A-C2A-C3A	-2.24	100.70	102.84
22	B	609	CLA	C3B-C4B-NB	2.24	112.11	109.21
22	B	603	CLA	C1D-ND-C4D	-2.24	104.74	106.33
22	b	609	CLA	C4D-C3D-CAD	2.24	110.74	108.10
22	c	910	CLA	C4D-C3D-CAD	2.24	110.74	108.10
22	c	913	CLA	CBC-CAC-C3C	-2.24	106.26	112.43
22	B	605	CLA	C4D-C3D-CAD	2.24	110.73	108.10
22	B	606	CLA	O2A-CGA-O1A	-2.24	117.94	123.59
22	b	610	CLA	O2A-CGA-O1A	-2.24	117.94	123.59
34	b	632	HTG	C4-C3-C2	-2.24	106.92	110.82
22	b	606	CLA	CHC-C1C-NC	-2.24	120.81	124.20
22	C	512	CLA	CED-O2D-CGD	2.24	121.00	115.94
22	B	615	CLA	CMC-C2C-C1C	2.24	128.44	125.04
22	B	616	CLA	C4C-C3C-C2C	-2.24	103.64	106.90
22	A	406	CLA	C3B-C4B-NB	2.23	112.10	109.21
22	C	506	CLA	C3A-C2A-C1A	2.23	104.68	101.34
22	B	607	CLA	C4C-C3C-C2C	-2.23	103.64	106.90
22	b	616	CLA	CHB-C4A-NA	2.23	127.60	124.51
22	B	616	CLA	CMD-C2D-C1D	2.23	128.65	124.71
22	b	611	CLA	C1D-ND-C4D	-2.23	104.75	106.33
22	c	910	CLA	CED-O2D-CGD	2.23	120.98	115.94
22	b	604	CLA	O2A-CGA-CBA	2.23	118.90	111.91
22	a	409	CLA	CHC-C1C-C2C	-2.23	120.56	126.72
22	C	504	CLA	OBD-CAD-C3D	-2.23	123.16	128.52
24	c	916	BCR	C7-C8-C9	-2.23	122.87	126.23
22	D	401	CLA	CMD-C2D-C3D	2.23	132.74	127.61
22	A	408	CLA	C3D-C4D-CHA	-2.23	107.63	112.72
22	C	508	CLA	CMC-C2C-C1C	2.23	128.43	125.04
22	a	409	CLA	CHB-C4A-NA	2.23	127.59	124.51
22	B	609	CLA	CMD-C2D-C1D	2.22	128.63	124.71
22	a	408	CLA	C6-C5-C3	-2.22	107.63	113.45
22	a	407	CLA	C11-C10-C8	-2.22	108.74	115.92
22	b	606	CLA	OBD-CAD-C3D	-2.22	123.17	128.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	617	CLA	C2A-C1A-CHA	-2.22	119.98	123.86
22	C	513	CLA	CED-O2D-CGD	2.22	120.96	115.94
22	B	614	CLA	C7-C6-C5	-2.22	107.33	113.36
24	b	618	BCR	C1-C6-C7	2.22	122.06	115.78
24	B	618	BCR	C35-C13-C12	2.22	120.65	118.51
22	C	504	CLA	CED-O2D-CGD	2.22	120.95	115.94
22	b	616	CLA	C6-C7-C8	-2.22	108.76	115.92
22	c	911	CLA	C16-C15-C13	-2.22	108.76	115.92
26	d	405	PL9	C10-C9-C11	2.21	119.00	115.27
37	h	101	RRX	C10-C11-C12	-2.21	116.31	123.22
35	H	102	DGD	C2G-O2G-C1B	-2.21	112.34	117.79
22	D	401	CLA	C6-C5-C3	-2.21	107.65	113.45
35	C	519	DGD	O1G-C1A-O1A	-2.21	118.01	123.59
22	c	913	CLA	O2A-CGA-CBA	2.21	118.85	111.91
22	C	511	CLA	CMC-C2C-C1C	2.21	128.41	125.04
37	h	101	RRX	C2-C1-C6	2.21	113.89	110.48
22	b	611	CLA	C9-C8-C10	-2.21	103.28	111.29
34	b	632	HTG	O2-C2-C3	2.21	115.46	110.35
22	B	615	CLA	CAA-CBA-CGA	-2.21	106.79	113.25
24	B	619	BCR	C11-C12-C13	-2.21	120.21	126.42
22	c	906	CLA	O2A-CGA-O1A	-2.21	118.01	123.59
24	C	516	BCR	C37-C22-C21	-2.21	119.83	122.92
22	B	614	CLA	CHD-C4C-NC	2.21	127.69	124.20
25	C	520	LMG	O8-C9-C8	2.21	114.86	108.43
22	c	903	CLA	C3C-C4C-NC	2.21	113.05	110.57
22	C	506	CLA	C3B-C4B-NB	2.21	112.06	109.21
25	d	409	LMG	O6-C5-C6	2.21	111.92	106.44
24	d	404	BCR	C10-C11-C12	-2.21	116.33	123.22
34	b	626	HTG	C2'-C1'-S1	-2.21	105.27	112.40
24	Y	101	BCR	C36-C18-C19	2.21	121.55	118.08
24	k	101	BCR	C38-C26-C25	-2.20	122.05	124.53
35	C	517	DGD	C4E-C3E-C2E	-2.20	106.97	110.82
26	D	406	PL9	C22-C23-C24	-2.20	122.35	127.66
22	B	605	CLA	C5-C3-C2	-2.20	116.66	121.12
25	B	621	LMG	O6-C1-O1	2.20	115.19	109.97
22	C	509	CLA	C1D-ND-C4D	-2.20	104.77	106.33
22	c	903	CLA	CMD-C2D-C1D	2.20	128.59	124.71
22	B	607	CLA	C1-O2A-CGA	2.20	122.22	116.44
22	B	613	CLA	CBA-CAA-C2A	-2.20	107.37	113.86
29	f	102	LMT	C1-O1'-C1'	2.20	117.49	113.84
22	a	409	CLA	O2A-CGA-CBA	2.20	118.81	111.91
22	b	609	CLA	C3D-C4D-CHA	-2.20	107.70	112.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	a	412	CLA	CAC-C3C-C4C	2.20	127.66	124.81
22	B	615	CLA	CMB-C2B-C3B	2.20	128.79	124.68
22	c	906	CLA	C2A-C1A-CHA	-2.20	120.02	123.86
25	c	920	LMG	O8-C9-C8	2.19	114.82	108.43
22	D	404	CLA	C1B-CHB-C4A	-2.19	125.77	130.12
22	c	910	CLA	CMD-C2D-C1D	2.19	128.58	124.71
25	j	101	LMG	O4-C4-C5	-2.19	103.85	109.30
24	c	915	BCR	C8-C7-C6	-2.19	121.04	127.20
22	a	408	CLA	CMC-C2C-C3C	2.19	132.07	126.12
22	c	914	CLA	C3C-C4C-NC	2.19	113.03	110.57
22	C	508	CLA	C3B-C4B-NB	2.19	112.04	109.21
24	b	620	BCR	C16-C17-C18	-2.19	124.19	127.31
34	b	624	HTG	O5-C5-C6	2.19	111.87	106.44
22	B	617	CLA	C1-C2-C3	-2.18	122.27	126.04
23	D	402	PHO	C4C-NC-C1C	-2.18	102.61	107.09
22	A	406	CLA	CHC-C1C-C2C	-2.18	120.68	126.72
22	d	403	CLA	C3D-C4D-CHA	-2.18	107.73	112.72
28	a	418	SQD	O5-C1-O6	2.18	115.14	109.97
35	C	519	DGD	O6E-C5E-C6E	2.18	111.85	106.44
25	j	101	LMG	O8-C28-O10	-2.18	118.09	123.59
22	B	607	CLA	C1D-CHD-C4C	-2.18	121.36	126.06
22	b	607	CLA	C3D-C4D-CHA	-2.18	107.74	112.72
22	B	609	CLA	O2A-CGA-O1A	-2.18	118.10	123.59
23	D	402	PHO	CMB-C2B-C3B	2.17	128.74	124.68
23	A	407	PHO	C7-C6-C5	-2.17	107.46	113.36
34	b	623	HTG	C4'-C3'-C2'	-2.17	103.41	114.42
22	b	615	CLA	C1D-CHD-C4C	-2.17	121.38	126.06
22	c	912	CLA	CHD-C4C-NC	2.17	127.62	124.20
22	B	610	CLA	C3B-C4B-NB	2.17	112.01	109.21
24	y	101	BCR	C8-C9-C10	-2.17	115.61	118.94
22	B	608	CLA	CHD-C4C-NC	2.17	127.62	124.20
22	b	608	CLA	C3B-C4B-NB	2.17	112.01	109.21
22	c	908	CLA	C1D-CHD-C4C	-2.17	121.39	126.06
24	y	101	BCR	C34-C9-C8	2.16	121.49	118.08
22	b	608	CLA	CBC-CAC-C3C	-2.16	106.46	112.43
22	A	408	CLA	CHC-C1C-NC	-2.16	120.92	124.20
22	b	608	CLA	CMD-C2D-C1D	2.16	128.52	124.71
22	b	603	CLA	CAC-C3C-C4C	2.16	127.61	124.81
26	D	406	PL9	C42-C43-C44	-2.16	122.46	127.66
22	b	605	CLA	C1-O2A-CGA	2.16	122.11	116.44
22	b	606	CLA	CMD-C2D-C1D	2.16	128.52	124.71
22	c	911	CLA	CHB-C4A-NA	2.16	127.50	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	i	101	LMG	C6-C5-C4	2.16	118.06	113.00
22	D	403	CLA	CED-O2D-CGD	2.16	120.82	115.94
22	c	904	CLA	C3C-C4C-NC	2.16	112.99	110.57
35	d	406	DGD	O1G-C1A-C2A	2.16	118.68	111.91
22	c	913	CLA	C1D-CHD-C4C	-2.16	121.40	126.06
22	c	903	CLA	C16-C15-C13	-2.16	108.95	115.92
24	C	515	BCR	C24-C23-C22	-2.16	122.98	126.23
24	C	515	BCR	C36-C18-C19	2.15	121.47	118.08
25	c	920	LMG	O3-C3-C4	-2.15	105.37	110.35
22	A	408	CLA	C2A-C1A-CHA	-2.15	120.10	123.86
24	b	620	BCR	C15-C14-C13	-2.15	124.24	127.31
34	B	626	HTG	O5-C5-C4	2.15	113.60	109.69
22	b	603	CLA	C4C-C3C-C2C	-2.15	103.76	106.90
26	D	406	PL9	C36-C37-C38	-2.15	104.82	111.88
23	D	402	PHO	CED-O2D-CGD	2.15	120.80	115.94
22	b	602	CLA	CMC-C2C-C1C	2.15	128.31	125.04
22	D	401	CLA	O2A-CGA-CBA	2.15	118.65	111.91
28	a	418	SQD	O48-C23-O10	-2.15	118.17	123.59
22	C	514	CLA	C2A-C1A-CHA	-2.15	120.11	123.86
22	B	605	CLA	C1D-ND-C4D	-2.15	104.81	106.33
24	Y	101	BCR	C21-C20-C19	-2.14	116.53	123.22
22	c	910	CLA	C4C-C3C-C2C	-2.14	103.77	106.90
22	b	603	CLA	C3B-C4B-NB	2.14	111.98	109.21
22	b	602	CLA	O1D-CGD-CBD	-2.14	120.10	124.48
22	B	614	CLA	CMD-C2D-C1D	2.14	128.49	124.71
22	C	504	CLA	O2A-CGA-O1A	-2.14	118.19	123.59
22	C	512	CLA	C4D-C3D-CAD	2.14	110.62	108.10
28	A	413	SQD	C45-O47-C7	-2.14	112.52	117.79
24	b	620	BCR	C32-C1-C6	-2.14	106.83	110.30
24	y	101	BCR	C10-C11-C12	-2.14	116.54	123.22
34	B	626	HTG	O5-C5-C6	2.14	111.75	106.44
22	C	513	CLA	C4C-C3C-C2C	-2.14	103.78	106.90
24	y	101	BCR	C35-C13-C14	-2.14	119.93	122.92
25	b	622	LMG	C9-O8-C28	2.14	125.04	117.12
24	Y	101	BCR	C10-C11-C12	-2.14	116.55	123.22
24	b	619	BCR	C35-C13-C14	-2.14	119.93	122.92
29	A	414	LMT	O3B-C3B-C2B	2.14	115.29	110.35
22	C	503	CLA	C3C-C4C-NC	2.13	112.97	110.57
22	b	608	CLA	C1-O2A-CGA	2.13	122.04	116.44
22	B	608	CLA	O2A-CGA-O1A	-2.13	118.21	123.59
22	A	406	CLA	C2A-C1A-CHA	-2.13	120.13	123.86
35	C	517	DGD	O6D-C1D-O3G	-2.13	104.92	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	616	CLA	CMB-C2B-C3B	2.13	128.67	124.68
22	a	408	CLA	C1D-CHD-C4C	-2.13	121.46	126.06
24	c	916	BCR	C21-C20-C19	-2.13	116.57	123.22
25	A	410	LMG	O8-C28-O10	-2.13	118.22	123.59
35	h	102	DGD	C3G-O3G-C1D	-2.13	109.58	113.74
26	d	405	PL9	C22-C21-C19	2.13	119.97	112.98
22	D	403	CLA	C1B-CHB-C4A	-2.13	125.91	130.12
22	C	504	CLA	C3D-C4D-CHA	-2.13	107.86	112.72
22	C	510	CLA	C3D-C4D-CHA	-2.13	107.86	112.72
22	B	612	CLA	O1D-CGD-CBD	-2.13	120.14	124.48
24	b	619	BCR	C30-C25-C24	2.13	121.79	115.78
22	c	909	CLA	CHC-C1C-NC	-2.13	120.98	124.20
27	A	412	LHG	C6-O8-C23	2.12	124.99	117.12
22	B	614	CLA	C2A-C1A-CHA	-2.12	120.14	123.86
29	A	414	LMT	O1'-C1'-C2'	2.12	111.62	108.30
22	b	603	CLA	C1D-CHD-C4C	-2.12	121.48	126.06
22	D	404	CLA	CMC-C2C-C1C	2.12	128.27	125.04
22	b	608	CLA	OBD-CAD-C3D	-2.12	123.41	128.52
22	b	615	CLA	C3D-C4D-CHA	-2.12	107.87	112.72
22	B	613	CLA	C3C-C4C-NC	2.12	112.95	110.57
24	y	101	BCR	C23-C24-C25	-2.12	121.25	127.20
27	D	410	LHG	C34-C33-C32	-2.12	103.67	114.42
22	c	904	CLA	C6-C5-C3	-2.12	107.90	113.45
27	d	407	LHG	O7-C7-C8	2.12	116.06	111.50
22	B	614	CLA	CHD-C1D-ND	-2.12	122.51	124.45
22	C	513	CLA	C3C-C4C-NC	2.12	112.94	110.57
24	k	101	BCR	C15-C16-C17	-2.11	119.14	123.47
22	a	407	CLA	CAA-C2A-C3A	-2.11	106.99	112.78
24	a	413	BCR	C32-C1-C31	-2.11	102.04	108.53
22	b	611	CLA	C2A-C1A-CHA	-2.11	120.16	123.86
22	c	909	CLA	O2A-CGA-CBA	2.11	118.53	111.91
22	d	403	CLA	O2A-CGA-CBA	2.11	118.53	111.91
36	e	101	HEM	CHA-C4D-ND	2.11	126.99	124.38
24	Y	101	BCR	C11-C12-C13	-2.11	120.49	126.42
22	a	408	CLA	CBA-CAA-C2A	-2.11	107.64	113.86
22	c	910	CLA	C1D-ND-C4D	-2.11	104.84	106.33
22	B	607	CLA	C3D-C4D-CHA	-2.11	107.90	112.72
37	H	101	RRX	C20-C21-C22	-2.11	124.30	127.31
22	b	602	CLA	C5-C3-C2	-2.11	116.85	121.12
34	V	203	HTG	O5-C5-C6	2.11	111.67	106.44
22	b	607	CLA	C1D-ND-C4D	-2.11	104.84	106.33
24	C	515	BCR	C11-C12-C13	-2.10	120.50	126.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	605	CLA	C6-C7-C8	-2.10	109.12	115.92
24	d	404	BCR	C12-C13-C14	2.10	122.17	118.94
27	C	522	LHG	P-O6-C4	2.10	124.08	118.30
22	B	612	CLA	C3D-C4D-ND	2.10	113.64	110.24
29	Z	101	LMT	O3B-C3B-C2B	-2.10	105.49	110.35
28	A	413	SQD	C1-C2-C3	-2.10	105.62	110.00
27	l	102	LHG	C6-O8-C23	2.10	124.90	117.12
22	C	512	CLA	CHB-C4A-NA	2.10	127.42	124.51
22	c	912	CLA	C4D-C3D-CAD	2.10	110.57	108.10
24	b	619	BCR	C24-C25-C26	-2.10	116.38	121.46
22	b	613	CLA	C3B-C4B-NB	2.10	111.92	109.21
25	A	410	LMG	O6-C1-C2	-2.09	105.92	110.35
22	a	409	CLA	C1D-CHD-C4C	-2.09	121.54	126.06
24	A	409	BCR	C35-C13-C12	2.09	121.38	118.08
22	c	909	CLA	OBD-CAD-C3D	-2.09	123.48	128.52
22	C	507	CLA	CMD-C2D-C1D	2.09	128.40	124.71
22	C	504	CLA	C2A-C1A-CHA	-2.09	120.20	123.86
25	c	920	LMG	O4-C4-C3	-2.09	105.51	110.35
34	B	627	HTG	O5-C1-S1	-2.09	104.83	109.82
22	a	407	CLA	C4C-C3C-C2C	-2.09	103.85	106.90
22	B	612	CLA	C1-C2-C3	-2.09	122.43	126.04
22	B	611	CLA	CMC-C2C-C1C	2.09	128.22	125.04
27	C	522	LHG	O4-P-O5	2.09	118.86	110.68
28	b	621	SQD	C1-C2-C3	-2.09	105.65	110.00
24	a	413	BCR	C16-C15-C14	-2.09	119.20	123.47
29	a	419	LMT	O4'-C4B-C5B	2.09	114.48	109.30
29	T	102	LMT	O1'-C1-C2	2.08	116.87	109.56
22	c	904	CLA	O2A-C1-C2	2.08	114.11	108.64
22	B	606	CLA	C16-C15-C13	-2.08	109.19	115.92
22	b	603	CLA	CED-O2D-CGD	2.08	120.65	115.94
22	c	913	CLA	O1D-CGD-CBD	-2.08	120.22	124.48
24	D	405	BCR	C2-C1-C6	2.08	113.69	110.48
35	C	518	DGD	O1G-C1A-C2A	2.08	118.44	111.91
34	b	626	HTG	C4'-C3'-C2'	-2.08	103.86	114.42
22	c	914	CLA	CMB-C2B-C3B	2.08	128.57	124.68
22	c	903	CLA	C3B-C4B-NB	2.08	111.90	109.21
22	d	403	CLA	CHC-C1C-NC	-2.08	121.05	124.20
22	c	902	CLA	C3D-C4D-CHA	-2.08	107.97	112.72
29	c	921	LMT	C1B-O5B-C5B	2.08	117.77	113.69
24	a	413	BCR	C15-C16-C17	-2.08	119.22	123.47
22	A	405	CLA	C4C-C3C-C2C	-2.08	103.87	106.90
22	c	911	CLA	C1-O2A-CGA	2.08	121.89	116.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	907	CLA	CHC-C1C-C2C	-2.08	120.98	126.72
22	B	611	CLA	C2A-C1A-CHA	-2.08	120.23	123.86
24	c	915	BCR	C15-C16-C17	-2.08	119.22	123.47
28	C	501	SQD	C44-O6-C1	-2.08	109.69	113.74
22	B	611	CLA	CAA-CBA-CGA	-2.07	107.19	113.25
24	B	620	BCR	C33-C5-C4	2.07	117.60	113.62
24	b	619	BCR	C23-C24-C25	-2.07	121.38	127.20
24	b	619	BCR	C37-C22-C21	-2.07	120.02	122.92
24	c	915	BCR	C35-C13-C14	-2.07	120.02	122.92
22	A	406	CLA	CBC-CAC-C3C	-2.07	106.72	112.43
23	D	402	PHO	C4-C3-C2	-2.07	118.37	123.68
22	a	409	CLA	CED-O2D-CGD	2.07	120.62	115.94
24	c	916	BCR	C37-C22-C21	-2.07	120.02	122.92
22	B	613	CLA	C4-C3-C5	2.07	118.75	115.27
22	c	910	CLA	C4-C3-C5	2.07	118.75	115.27
22	B	614	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
22	B	604	CLA	CAC-C3C-C4C	2.07	127.49	124.81
22	B	608	CLA	C3D-C4D-CHA	-2.07	108.00	112.72
34	b	624	HTG	C4-C3-C2	2.07	114.43	110.82
22	A	405	CLA	CHB-C4A-NA	2.07	127.37	124.51
35	c	917	DGD	O4D-C4D-C5D	-2.06	104.17	109.30
24	Y	101	BCR	C30-C25-C24	2.06	121.62	115.78
26	A	411	PL9	C35-C34-C36	2.06	118.74	115.27
27	A	412	LHG	O7-C7-O9	-2.06	118.87	122.96
29	B	622	LMT	O5'-C5'-C4'	2.06	113.44	109.69
26	d	405	PL9	C31-C32-C33	-2.06	105.11	111.88
28	a	414	SQD	O48-C23-O10	-2.06	118.39	123.59
22	B	604	CLA	CED-O2D-CGD	2.06	120.59	115.94
24	B	618	BCR	C32-C1-C6	-2.06	106.96	110.30
22	c	913	CLA	C4C-C3C-C2C	-2.06	103.90	106.90
22	b	610	CLA	C4D-CHA-C1A	-2.06	118.75	121.25
22	C	505	CLA	CMC-C2C-C3C	2.06	131.70	126.12
23	A	407	PHO	C4C-NC-C1C	-2.05	102.88	107.09
37	H	101	RRX	C33-C5-C6	-2.05	122.22	124.53
22	b	613	CLA	CMB-C2B-C3B	2.05	128.52	124.68
24	B	618	BCR	C1-C6-C5	-2.05	119.72	122.61
35	c	918	DGD	C3A-C2A-C1A	-2.05	106.16	113.62
22	C	503	CLA	C16-C15-C13	-2.05	109.29	115.92
35	C	517	DGD	O1G-C1A-O1A	-2.05	118.42	123.59
22	B	606	CLA	CMB-C2B-C3B	2.05	128.51	124.68
24	b	619	BCR	C20-C21-C22	-2.05	124.38	127.31
35	C	517	DGD	O6E-C5E-C6E	2.05	111.53	106.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	b	603	CLA	O2A-CGA-O1A	-2.05	118.42	123.59
22	b	608	CLA	CMC-C2C-C3C	2.05	131.68	126.12
29	I	102	LMT	C3'-C4'-C5'	-2.05	106.23	110.93
26	a	415	PL9	C46-C47-C48	-2.05	105.15	111.88
35	H	102	DGD	C1D-O6D-C5D	-2.05	109.67	113.69
35	C	517	DGD	C6D-C5D-C4D	2.04	116.36	112.09
24	B	619	BCR	C15-C14-C13	-2.04	124.39	127.31
22	B	614	CLA	C4C-C3C-C2C	-2.04	103.92	106.90
22	A	405	CLA	C3B-C4B-NB	2.04	111.85	109.21
25	C	520	LMG	O6-C5-C6	2.04	111.52	106.44
22	B	604	CLA	C6-C5-C3	2.04	118.81	113.45
25	b	622	LMG	O8-C9-C8	2.04	114.38	108.43
22	b	616	CLA	CMD-C2D-C3D	2.04	132.31	127.61
23	A	407	PHO	O2A-CGA-CBA	2.04	118.31	111.91
22	B	614	CLA	C3C-C4C-NC	2.04	112.86	110.57
22	c	902	CLA	O2A-CGA-O1A	-2.04	118.44	123.59
34	B	623	HTG	C2'-C1'-S1	-2.04	105.81	112.40
22	b	603	CLA	CMB-C2B-C1B	-2.04	125.33	128.46
25	j	101	LMG	O3-C3-C4	2.04	115.06	110.35
29	f	102	LMT	O1B-C4'-C5'	2.04	116.04	108.87
22	B	603	CLA	CAC-C3C-C2C	2.04	131.01	127.53
35	C	518	DGD	O3D-C3D-C2D	-2.04	105.64	110.35
24	y	101	BCR	C35-C13-C12	2.04	121.29	118.08
29	A	414	LMT	O2B-C2B-C3B	2.04	115.05	110.35
22	c	905	CLA	C1D-CHD-C4C	-2.03	121.67	126.06
28	a	418	SQD	C4-C3-C2	2.03	114.38	110.82
22	c	910	CLA	C1B-CHB-C4A	-2.03	126.09	130.12
22	c	909	CLA	C4C-C3C-C2C	-2.03	103.93	106.90
22	B	614	CLA	CAC-C3C-C4C	2.03	127.45	124.81
22	B	607	CLA	O2A-CGA-CBA	2.03	118.29	111.91
29	t	101	LMT	C1-O1'-C1'	-2.03	110.47	113.84
34	b	626	HTG	O5-C1-C2	-2.03	107.76	110.31
22	C	506	CLA	C7-C6-C5	-2.03	107.84	113.36
22	B	613	CLA	C3D-C4D-CHA	-2.03	108.07	112.72
22	c	914	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
22	c	905	CLA	C4C-C3C-C2C	-2.03	103.94	106.90
22	C	514	CLA	C3D-C4D-CHA	-2.03	108.08	112.72
36	E	102	HEM	C1B-NB-C4B	2.03	107.17	105.07
28	l	101	SQD	O48-C23-O10	-2.03	118.47	123.59
22	D	404	CLA	C3B-C4B-NB	2.03	111.83	109.21
22	B	604	CLA	C1B-CHB-C4A	-2.03	126.10	130.12
27	L	101	LHG	O8-C23-O10	-2.03	118.47	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	a	409	CLA	C1B-CHB-C4A	-2.03	126.10	130.12
22	c	904	CLA	CAA-C2A-C3A	-2.03	107.23	112.78
22	C	502	CLA	C3B-C4B-NB	2.03	111.83	109.21
25	b	622	LMG	O6-C5-C4	2.03	113.38	109.69
22	c	912	CLA	C1-O2A-CGA	2.03	121.76	116.44
35	C	519	DGD	C6D-C5D-C4D	2.03	116.32	112.09
22	B	603	CLA	CAA-CBA-CGA	-2.03	107.33	113.25
22	C	514	CLA	C4C-C3C-C2C	-2.03	103.94	106.90
36	e	101	HEM	CAD-CBD-CGD	2.03	117.96	113.60
22	c	914	CLA	C3D-C4D-CHA	-2.02	108.09	112.72
22	D	401	CLA	C16-C15-C13	-2.02	109.38	115.92
22	b	607	CLA	C1D-CHD-C4C	-2.02	121.69	126.06
22	B	612	CLA	C4C-C3C-C2C	-2.02	103.95	106.90
36	e	101	HEM	C1D-C2D-C3D	-2.02	104.83	106.96
39	V	202	HEC	O2D-CGD-CBD	2.02	120.53	114.03
22	B	603	CLA	C2A-C1A-CHA	-2.02	120.33	123.86
22	B	608	CLA	C2A-C1A-CHA	-2.02	120.33	123.86
22	C	503	CLA	C3B-C4B-NB	2.02	111.82	109.21
22	A	406	CLA	CHB-C4A-NA	2.02	127.30	124.51
36	E	102	HEM	O1D-CGD-CBD	-2.02	116.60	123.08
22	A	406	CLA	C1B-CHB-C4A	-2.02	126.12	130.12
25	J	101	LMG	C9-C8-C7	-2.02	107.02	111.79
29	a	419	LMT	O3B-C3B-C2B	2.02	115.01	110.35
22	D	401	CLA	C4A-NA-C1A	2.02	107.61	106.71
22	C	514	CLA	C3C-C4C-NC	2.02	112.83	110.57
36	e	101	HEM	CMD-C2D-C1D	2.01	128.11	125.04
22	c	905	CLA	CMC-C2C-C1C	2.01	128.11	125.04
22	C	511	CLA	CMB-C2B-C3B	2.01	128.45	124.68
22	C	506	CLA	O2A-CGA-O1A	-2.01	118.51	123.59
24	C	515	BCR	C36-C18-C17	-2.01	120.10	122.92
22	c	909	CLA	C4-C3-C5	2.01	118.65	115.27
22	c	904	CLA	C1D-CHD-C4C	-2.01	121.72	126.06
22	B	611	CLA	C4-C3-C5	2.01	118.65	115.27
25	j	101	LMG	C31-C30-C29	-2.01	105.97	113.19
24	c	915	BCR	C24-C23-C22	-2.01	123.20	126.23
25	J	101	LMG	O7-C10-C11	2.01	115.83	111.50
24	b	619	BCR	C38-C26-C25	-2.01	122.28	124.53
22	C	511	CLA	C4-C3-C5	2.01	118.65	115.27
22	C	505	CLA	C6-C5-C3	2.00	118.71	113.45
24	C	516	BCR	C8-C7-C6	-2.00	121.57	127.20
26	a	415	PL9	C30-C29-C31	2.00	118.64	115.27
22	B	617	CLA	CMC-C2C-C1C	2.00	128.09	125.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	c	909	CLA	C3B-C4B-NB	2.00	111.80	109.21
26	a	415	PL9	C7-C8-C9	-2.00	123.46	126.79
23	a	411	PHO	C16-C15-C13	-2.00	109.45	115.92
22	b	610	CLA	O2A-CGA-CBA	2.00	118.19	111.91
24	b	620	BCR	C23-C24-C25	-2.00	121.58	127.20
22	B	603	CLA	C3D-C4D-CHA	-2.00	108.15	112.72

All (51) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
22	A	405	CLA	ND
22	A	408	CLA	ND
22	B	602	CLA	ND
22	B	603	CLA	ND
22	B	604	CLA	ND
22	B	605	CLA	ND
22	B	607	CLA	ND
22	B	608	CLA	ND
22	B	610	CLA	ND
22	B	611	CLA	ND
22	B	612	CLA	ND
22	B	613	CLA	ND
22	B	614	CLA	ND
22	B	615	CLA	ND
22	B	616	CLA	ND
22	B	617	CLA	ND
22	C	502	CLA	ND
22	C	503	CLA	ND
22	C	506	CLA	ND
22	C	507	CLA	ND
22	C	508	CLA	ND
22	C	509	CLA	ND
22	C	510	CLA	ND
22	C	511	CLA	ND
22	C	513	CLA	ND
22	D	403	CLA	ND
22	D	404	CLA	ND
22	a	407	CLA	ND
22	a	408	CLA	ND
22	b	602	CLA	ND
22	b	603	CLA	ND
22	b	604	CLA	ND

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Mol	Chain	Res	Type	Atom
22	b	605	CLA	ND
22	b	606	CLA	ND
22	b	607	CLA	ND
22	b	608	CLA	ND
22	b	611	CLA	ND
22	b	613	CLA	ND
22	b	614	CLA	ND
22	b	615	CLA	ND
22	b	616	CLA	ND
22	b	617	CLA	ND
22	c	902	CLA	ND
22	c	903	CLA	ND
22	c	906	CLA	ND
22	c	907	CLA	ND
22	c	908	CLA	ND
22	c	910	CLA	ND
22	c	911	CLA	ND
22	c	913	CLA	ND
22	d	402	CLA	ND

All (1768) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	A	408	CLA	C4-C3-C5-C6
22	B	602	CLA	CAD-CBD-CGD-O2D
22	B	602	CLA	O2A-C1-C2-C3
22	B	602	CLA	C11-C10-C8-C9
22	B	606	CLA	C2-C3-C5-C6
22	B	606	CLA	C4-C3-C5-C6
22	B	612	CLA	CHA-CBD-CGD-O1D
22	B	615	CLA	C2-C1-O2A-CGA
22	B	615	CLA	CHA-CBD-CGD-O2D
22	B	615	CLA	CAD-CBD-CGD-O2D
22	C	503	CLA	CHA-CBD-CGD-O1D
22	C	503	CLA	CAD-CBD-CGD-O1D
22	C	508	CLA	CHA-CBD-CGD-O1D
22	C	509	CLA	CHA-CBD-CGD-O1D
22	C	509	CLA	CHA-CBD-CGD-O2D
22	D	401	CLA	CHA-CBD-CGD-O1D
22	a	408	CLA	CHA-CBD-CGD-O2D
22	a	409	CLA	CHA-CBD-CGD-O1D
22	b	602	CLA	C2-C1-O2A-CGA

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Mol	Chain	Res	Type	Atoms
22	b	602	CLA	CHA-CBD-CGD-O1D
22	b	602	CLA	CHA-CBD-CGD-O2D
22	b	606	CLA	C4-C3-C5-C6
22	b	607	CLA	CHA-CBD-CGD-O1D
22	b	615	CLA	CHA-CBD-CGD-O1D
22	b	615	CLA	CHA-CBD-CGD-O2D
22	c	903	CLA	CHA-CBD-CGD-O1D
22	c	903	CLA	CAD-CBD-CGD-O1D
22	c	904	CLA	C1A-C2A-CAA-CBA
22	c	909	CLA	CHA-CBD-CGD-O1D
22	c	909	CLA	CHA-CBD-CGD-O2D
22	c	914	CLA	C11-C12-C13-C15
24	D	405	BCR	C21-C22-C23-C24
24	D	405	BCR	C37-C22-C23-C24
24	D	405	BCR	C23-C24-C25-C30
24	Y	101	BCR	C5-C6-C7-C8
24	Y	101	BCR	C21-C22-C23-C24
24	Y	101	BCR	C37-C22-C23-C24
24	b	618	BCR	C7-C8-C9-C10
24	b	618	BCR	C7-C8-C9-C34
24	b	619	BCR	C7-C8-C9-C10
24	b	619	BCR	C7-C8-C9-C34
24	d	404	BCR	C21-C22-C23-C24
24	d	404	BCR	C37-C22-C23-C24
24	d	404	BCR	C23-C24-C25-C26
24	k	101	BCR	C11-C12-C13-C35
24	y	101	BCR	C7-C8-C9-C10
24	y	101	BCR	C7-C8-C9-C34
24	y	101	BCR	C37-C22-C23-C24
25	B	621	LMG	C2-C1-O1-C7
25	C	531	LMG	C8-C7-O1-C1
25	D	412	LMG	C11-C10-O7-C8
25	d	409	LMG	C2-C1-O1-C7
25	d	409	LMG	O6-C1-O1-C7
26	A	411	PL9	C9-C11-C12-C13
26	A	411	PL9	C25-C24-C26-C27
26	A	411	PL9	C26-C27-C28-C29
26	a	415	PL9	C14-C16-C17-C18
26	a	415	PL9	C35-C34-C36-C37
27	A	412	LHG	C4-O6-P-O3
27	A	412	LHG	C4-O6-P-O4
27	A	412	LHG	C4-O6-P-O5

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Mol	Chain	Res	Type	Atoms
27	a	416	LHG	C3-O3-P-O5
27	a	416	LHG	C3-O3-P-O6
27	a	416	LHG	C4-O6-P-O5
27	a	423	LHG	O1-C1-C2-C3
27	a	423	LHG	C4-O6-P-O5
27	d	401	LHG	C4-O6-P-O3
27	d	401	LHG	C4-O6-P-O4
27	d	401	LHG	C5-C4-O6-P
27	d	401	LHG	O10-C23-O8-C6
27	d	401	LHG	C24-C23-O8-C6
27	d	407	LHG	C3-O3-P-O5
27	d	407	LHG	C3-O3-P-O6
27	d	407	LHG	C4-O6-P-O4
27	l	102	LHG	O1-C1-C2-C3
27	l	102	LHG	C3-O3-P-O4
28	A	413	SQD	C2-C1-O6-C44
28	A	413	SQD	C5-C6-S-O7
28	A	413	SQD	C5-C6-S-O8
28	A	413	SQD	C5-C6-S-O9
28	C	501	SQD	C5-C6-S-O8
28	D	408	SQD	O6-C44-C45-C46
28	D	408	SQD	O6-C44-C45-O47
28	a	414	SQD	C5-C6-S-O7
28	a	414	SQD	C5-C6-S-O8
28	a	414	SQD	C5-C6-S-O9
28	a	418	SQD	C2-C1-O6-C44
28	a	418	SQD	O6-C44-C45-O47
28	l	101	SQD	O5-C5-C6-S
29	B	622	LMT	C2'-C1'-O1'-C1'
29	E	101	LMT	C2'-C1'-O1'-C1
29	I	102	LMT	O5'-C1'-O1'-C1
29	a	419	LMT	O5'-C1'-O1'-C1
29	c	931	LMT	C2'-C1'-O1'-C1
29	c	931	LMT	O5'-C1'-O1'-C1
29	f	102	LMT	C2'-C1'-O1'-C1
29	f	102	LMT	O5'-C1'-O1'-C1
29	t	101	LMT	C2'-C1'-O1'-C1'
34	B	627	HTG	C2-C1-S1-C1'
34	B	627	HTG	O5-C1-S1-C1'
34	C	521	HTG	O5-C1-S1-C1'
34	C	532	HTG	O5-C1-S1-C1'
34	D	415	HTG	C2-C1-S1-C1'

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Mol	Chain	Res	Type	Atoms
34	D	415	HTG	O5-C1-S1-C1'
34	D	415	HTG	C2'-C1'-S1-C1
34	b	632	HTG	O5-C1-S1-C1'
34	c	922	HTG	C2-C1-S1-C1'
34	c	922	HTG	O5-C1-S1-C1'
34	l	106	HTG	C2-C1-S1-C1'
34	l	106	HTG	O5-C1-S1-C1'
34	v	203	HTG	C2'-C1'-S1-C1
35	D	407	DGD	O1G-C1G-C2G-O2G
35	D	407	DGD	C2D-C1D-O3G-C3G
35	D	407	DGD	O6D-C1D-O3G-C3G
35	d	406	DGD	C2B-C1B-O2G-C2G
36	e	101	HEM	C1A-C2A-CAA-CBA
36	e	101	HEM	C3A-C2A-CAA-CBA
37	h	101	RRX	C7-C8-C9-C10
37	h	101	RRX	C7-C8-C9-C34
27	A	412	LHG	C8-C7-O7-C5
29	I	102	LMT	C3'-C4'-O1B-C1B
27	A	412	LHG	O9-C7-O7-C5
23	a	411	PHO	O1D-CGD-O2D-CED
22	C	514	CLA	O1D-CGD-O2D-CED
22	C	514	CLA	CBD-CGD-O2D-CED
22	c	912	CLA	CBD-CGD-O2D-CED
22	c	913	CLA	CBD-CGD-O2D-CED
23	a	411	PHO	CBD-CGD-O2D-CED
22	B	617	CLA	O1A-CGA-O2A-C1
22	b	602	CLA	O1A-CGA-O2A-C1
25	A	410	LMG	O10-C28-O8-C9
25	B	621	LMG	O10-C28-O8-C9
28	l	101	SQD	O10-C23-O48-C46
22	b	608	CLA	C5-C6-C7-C8
22	b	617	CLA	O1D-CGD-O2D-CED
22	c	914	CLA	O1D-CGD-O2D-CED
25	D	412	LMG	O9-C10-O7-C8
22	C	510	CLA	C3-C5-C6-C7
22	C	513	CLA	C3-C5-C6-C7
22	b	617	CLA	C3-C5-C6-C7
22	c	913	CLA	C3-C5-C6-C7
22	b	602	CLA	CBA-CGA-O2A-C1
28	l	101	SQD	C24-C23-O48-C46
35	d	406	DGD	C2A-C1A-O1G-C1G
29	c	921	LMT	C4'-C5'-C6'-O6'

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Mol	Chain	Res	Type	Atoms
22	c	910	CLA	CBD-CGD-O2D-CED
34	c	922	HTG	O5-C5-C6-O6
22	B	615	CLA	C4-C3-C5-C6
22	A	408	CLA	C2-C3-C5-C6
22	B	615	CLA	C2-C3-C5-C6
22	b	606	CLA	C2-C3-C5-C6
26	A	411	PL9	C23-C24-C26-C27
26	a	415	PL9	C33-C34-C36-C37
22	A	408	CLA	C3-C5-C6-C7
22	B	602	CLA	C3-C5-C6-C7
22	b	605	CLA	C3-C5-C6-C7
22	B	617	CLA	CBA-CGA-O2A-C1
25	A	410	LMG	C29-C28-O8-C9
25	B	621	LMG	C29-C28-O8-C9
28	b	621	SQD	C24-C23-O48-C46
29	A	414	LMT	O5B-C5B-C6B-O6B
29	c	921	LMT	O5'-C5'-C6'-O6'
34	b	624	HTG	S1-C1'-C2'-C3'
25	b	622	LMG	O9-C10-O7-C8
35	d	406	DGD	O1B-C1B-O2G-C2G
29	a	419	LMT	C4'-C5'-C6'-O6'
29	c	931	LMT	C4'-C5'-C6'-O6'
34	b	626	HTG	C4-C5-C6-O6
22	B	615	CLA	O1A-CGA-O2A-C1
25	D	412	LMG	O10-C28-O8-C9
28	b	621	SQD	O10-C23-O48-C46
25	d	409	LMG	C8-C9-O8-C28
25	D	412	LMG	O6-C5-C6-O5
29	t	101	LMT	O5'-C5'-C6'-O6'
34	b	627	HTG	O5-C5-C6-O6
22	a	407	CLA	C2C-C3C-CAC-CBC
22	b	617	CLA	CBD-CGD-O2D-CED
22	a	412	CLA	C3-C5-C6-C7
35	d	406	DGD	O1A-C1A-O1G-C1G
29	a	419	LMT	O5'-C5'-C6'-O6'
29	c	931	LMT	O5'-C5'-C6'-O6'
25	b	622	LMG	C11-C10-O7-C8
25	d	409	LMG	C11-C10-O7-C8
27	C	522	LHG	C8-C7-O7-C5
22	C	513	CLA	O1D-CGD-O2D-CED
22	c	902	CLA	CBD-CGD-O2D-CED
34	D	415	HTG	O5-C5-C6-O6

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Mol	Chain	Res	Type	Atoms
29	f	102	LMT	C4'-C5'-C6'-O6'
27	d	408	LHG	C11-C12-C13-C14
35	c	918	DGD	C8B-C9B-CAB-CBB
28	C	501	SQD	C13-C14-C15-C16
28	a	414	SQD	C17-C18-C19-C20
35	D	407	DGD	CCB-CDB-CEB-CFB
25	D	412	LMG	C4-C5-C6-O5
22	B	615	CLA	CBA-CGA-O2A-C1
25	D	412	LMG	C29-C28-O8-C9
34	C	532	HTG	S1-C1'-C2'-C3'
34	l	106	HTG	S1-C1'-C2'-C3'
29	I	102	LMT	O5B-C5B-C6B-O6B
34	b	626	HTG	O5-C5-C6-O6
34	b	627	HTG	C4-C5-C6-O6
34	c	922	HTG	C4-C5-C6-O6
29	T	102	LMT	C4'-C5'-C6'-O6'
34	l	106	HTG	C4-C5-C6-O6
28	A	413	SQD	O5-C1-O6-C44
28	b	621	SQD	O5-C1-O6-C44
26	D	406	PL9	C39-C41-C42-C43
26	a	415	PL9	C9-C11-C12-C13
26	a	415	PL9	C34-C36-C37-C38
29	A	414	LMT	C4B-C5B-C6B-O6B
29	t	101	LMT	C4'-C5'-C6'-O6'
22	b	616	CLA	O1D-CGD-O2D-CED
27	a	423	LHG	C1-C2-C3-O3
34	C	532	HTG	C4-C5-C6-O6
22	B	602	CLA	CBA-CGA-O2A-C1
22	c	913	CLA	CBA-CGA-O2A-C1
25	C	531	LMG	C29-C28-O8-C9
25	b	622	LMG	C29-C28-O8-C9
25	i	101	LMG	C29-C28-O8-C9
35	D	407	DGD	C2A-C1A-O1G-C1G
34	v	203	HTG	C1'-C2'-C3'-C4'
35	c	917	DGD	C1B-C2B-C3B-C4B
22	c	907	CLA	C5-C6-C7-C8
22	c	911	CLA	O1D-CGD-O2D-CED
22	b	612	CLA	C13-C15-C16-C17
28	l	101	SQD	C23-C24-C25-C26
25	D	412	LMG	C2-C1-O1-C7
35	H	102	DGD	C6B-C7B-C8B-C9B
22	c	913	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
29	T	102	LMT	O5'-C5'-C6'-O6'
29	f	102	LMT	O5'-C5'-C6'-O6'
22	c	905	CLA	C4-C3-C5-C6
22	B	602	CLA	C14-C13-C15-C16
22	B	616	CLA	C11-C10-C8-C9
22	C	510	CLA	C14-C13-C15-C16
22	b	602	CLA	C11-C10-C8-C9
22	b	608	CLA	C6-C7-C8-C9
22	c	905	CLA	C14-C13-C15-C16
22	c	910	CLA	C11-C10-C8-C9
22	c	912	CLA	C11-C10-C8-C9
22	c	913	CLA	C6-C7-C8-C9
22	B	607	CLA	O1D-CGD-O2D-CED
24	A	409	BCR	C36-C18-C19-C20
24	K	101	BCR	C11-C12-C13-C35
24	Y	101	BCR	C36-C18-C19-C20
24	c	916	BCR	C37-C22-C23-C24
37	h	101	RRX	C37-C22-C23-C24
24	b	618	BCR	C11-C12-C13-C14
29	A	414	LMT	C4'-C5'-C6'-O6'
27	a	416	LHG	C7-C8-C9-C10
28	C	501	SQD	C7-C8-C9-C10
25	C	531	LMG	O10-C28-O8-C9
22	C	502	CLA	C13-C15-C16-C17
22	b	617	CLA	C5-C6-C7-C8
22	B	616	CLA	O1D-CGD-O2D-CED
22	b	612	CLA	O1D-CGD-O2D-CED
27	D	411	LHG	C12-C13-C14-C15
22	D	401	CLA	C2C-C3C-CAC-CBC
27	a	423	LHG	C24-C23-O8-C6
22	A	408	CLA	C13-C15-C16-C17
22	B	606	CLA	C13-C15-C16-C17
22	B	607	CLA	C13-C15-C16-C17
22	C	505	CLA	C8-C10-C11-C12
22	C	510	CLA	C10-C11-C12-C13
22	b	604	CLA	C5-C6-C7-C8
22	c	910	CLA	C13-C15-C16-C17
25	A	410	LMG	C28-C29-C30-C31
25	c	920	LMG	C28-C29-C30-C31
35	C	518	DGD	C1A-C2A-C3A-C4A
35	c	918	DGD	C1A-C2A-C3A-C4A
35	c	918	DGD	C1B-C2B-C3B-C4B

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Mol	Chain	Res	Type	Atoms
34	b	624	HTG	C1'-C2'-C3'-C4'
34	l	106	HTG	C1'-C2'-C3'-C4'
35	C	517	DGD	O6E-C5E-C6E-O5E
22	A	405	CLA	C15-C16-C17-C18
22	B	605	CLA	C13-C15-C16-C17
22	B	607	CLA	C15-C16-C17-C18
22	B	616	CLA	C8-C10-C11-C12
22	C	507	CLA	C10-C11-C12-C13
22	C	510	CLA	C15-C16-C17-C18
22	D	404	CLA	C15-C16-C17-C18
22	b	609	CLA	C13-C15-C16-C17
27	a	423	LHG	O1-C1-C2-O2
28	f	101	SQD	O6-C1-O5-C5
25	b	622	LMG	O10-C28-O8-C9
25	C	520	LMG	C10-C11-C12-C13
25	d	409	LMG	C10-C11-C12-C13
27	a	423	LHG	C23-C24-C25-C26
28	A	413	SQD	C23-C24-C25-C26
28	b	621	SQD	C23-C24-C25-C26
35	C	518	DGD	C1B-C2B-C3B-C4B
35	d	406	DGD	C1B-C2B-C3B-C4B
25	c	930	LMG	O6-C5-C6-O5
34	l	106	HTG	O5-C5-C6-O6
22	B	616	CLA	C5-C6-C7-C8
22	b	602	CLA	C10-C11-C12-C13
22	b	612	CLA	C10-C11-C12-C13
22	d	403	CLA	C8-C10-C11-C12
29	t	101	LMT	O1'-C1-C2-C3
35	H	102	DGD	C2B-C3B-C4B-C5B
22	C	504	CLA	O1D-CGD-O2D-CED
25	j	101	LMG	O6-C5-C6-O5
25	d	409	LMG	O9-C10-O7-C8
27	C	522	LHG	O9-C7-O7-C5
22	c	910	CLA	C2-C1-O2A-CGA
25	c	930	LMG	C10-C11-C12-C13
27	A	412	LHG	C23-C24-C25-C26
27	C	522	LHG	C7-C8-C9-C10
22	B	602	CLA	C13-C15-C16-C17
22	B	614	CLA	C11-C10-C8-C7
22	c	909	CLA	C11-C10-C8-C7
25	i	101	LMG	O10-C28-O8-C9
24	k	101	BCR	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
22	C	503	CLA	O1D-CGD-O2D-CED
22	C	512	CLA	O1D-CGD-O2D-CED
22	A	408	CLA	C10-C11-C12-C13
25	b	622	LMG	C4-C5-C6-O5
25	B	621	LMG	O6-C1-O1-C7
28	a	418	SQD	O5-C1-O6-C44
29	E	101	LMT	O5'-C1'-O1'-C1
22	B	609	CLA	C13-C15-C16-C17
22	b	608	CLA	C10-C11-C12-C13
22	b	616	CLA	C5-C6-C7-C8
26	a	415	PL9	C19-C21-C22-C23
26	a	415	PL9	C24-C26-C27-C28
26	a	415	PL9	C39-C41-C42-C43
26	a	415	PL9	C44-C46-C47-C48
29	f	102	LMT	O1'-C1-C2-C3
25	B	621	LMG	C28-C29-C30-C31
34	b	623	HTG	S1-C1'-C2'-C3'
28	a	418	SQD	C32-C33-C34-C35
22	B	612	CLA	C15-C16-C17-C18
22	C	514	CLA	C15-C16-C17-C18
22	c	910	CLA	C15-C16-C17-C18
22	B	602	CLA	O1A-CGA-O2A-C1
35	D	407	DGD	O1A-C1A-O1G-C1G
35	C	519	DGD	O6E-C5E-C6E-O5E
22	c	912	CLA	O1D-CGD-O2D-CED
22	B	604	CLA	C5-C6-C7-C8
22	b	608	CLA	C15-C16-C17-C18
22	c	908	CLA	C5-C6-C7-C8
22	c	903	CLA	O1D-CGD-O2D-CED
22	c	909	CLA	CBD-CGD-O2D-CED
27	d	401	LHG	C8-C7-O7-C5
22	A	408	CLA	C8-C10-C11-C12
22	B	611	CLA	C15-C16-C17-C18
22	C	509	CLA	C13-C15-C16-C17
22	b	605	CLA	C13-C15-C16-C17
22	b	616	CLA	C10-C11-C12-C13
22	d	403	CLA	C15-C16-C17-C18
27	L	101	LHG	C4-O6-P-O3
27	l	102	LHG	C3-O3-P-O6
25	C	531	LMG	C28-C29-C30-C31
34	B	623	HTG	C4-C5-C6-O6
27	d	408	LHG	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
34	B	627	HTG	S1-C1'-C2'-C3'
27	D	409	LHG	C23-C24-C25-C26
27	d	401	LHG	O9-C7-O7-C5
22	B	608	CLA	C8-C10-C11-C12
22	c	905	CLA	C10-C11-C12-C13
22	c	909	CLA	C10-C11-C12-C13
22	B	607	CLA	C2A-CAA-CBA-CGA
24	b	618	BCR	C9-C10-C11-C12
25	b	622	LMG	C10-C11-C12-C13
25	c	920	LMG	C15-C16-C17-C18
25	c	930	LMG	C35-C36-C37-C38
25	d	409	LMG	C20-C21-C22-C23
27	a	423	LHG	C26-C27-C28-C29
35	c	918	DGD	C3A-C4A-C5A-C6A
35	D	407	DGD	C2B-C1B-O2G-C2G
34	C	532	HTG	O5-C5-C6-O6
34	C	521	HTG	C1'-C2'-C3'-C4'
25	C	531	LMG	C13-C14-C15-C16
25	J	101	LMG	C30-C31-C32-C33
25	b	622	LMG	C19-C20-C21-C22
25	j	101	LMG	C30-C31-C32-C33
27	d	407	LHG	C14-C15-C16-C17
27	l	102	LHG	C26-C27-C28-C29
28	l	101	SQD	C17-C18-C19-C20
29	B	622	LMT	C6-C7-C8-C9
35	C	517	DGD	C2B-C3B-C4B-C5B
35	C	517	DGD	C5B-C6B-C7B-C8B
35	C	519	DGD	C5B-C6B-C7B-C8B
35	d	406	DGD	CAA-CBA-CCA-CDA
22	C	507	CLA	C16-C17-C18-C20
22	C	508	CLA	C16-C17-C18-C20
22	a	407	CLA	C16-C17-C18-C19
22	c	906	CLA	C16-C17-C18-C19
22	c	907	CLA	C16-C17-C18-C19
22	c	913	CLA	C16-C17-C18-C19
22	c	914	CLA	C16-C17-C18-C19
25	d	409	LMG	C19-C20-C21-C22
25	i	101	LMG	C11-C12-C13-C14
28	C	501	SQD	C17-C18-C19-C20
28	a	418	SQD	C13-C14-C15-C16
28	l	101	SQD	C34-C35-C36-C37
35	C	519	DGD	CAB-CBB-CCB-CDB

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Mol	Chain	Res	Type	Atoms
35	D	407	DGD	C8B-C9B-CAB-CBB
35	d	406	DGD	CBB-CCB-CDB-CEB
35	h	102	DGD	C8A-C9A-CAA-CBA
35	D	407	DGD	O1B-C1B-O2G-C2G
27	l	102	LHG	C7-C8-C9-C10
22	C	509	CLA	CBD-CGD-O2D-CED
27	l	102	LHG	C10-C11-C12-C13
28	A	413	SQD	C9-C10-C11-C12
28	l	101	SQD	C24-C25-C26-C27
22	B	608	CLA	O1D-CGD-O2D-CED
27	a	423	LHG	O10-C23-O8-C6
25	A	410	LMG	C16-C17-C18-C19
25	A	410	LMG	C29-C30-C31-C32
25	B	621	LMG	C14-C15-C16-C17
27	d	408	LHG	C10-C11-C12-C13
28	a	418	SQD	C12-C13-C14-C15
28	a	418	SQD	C15-C16-C17-C18
34	b	632	HTG	C2'-C3'-C4'-C5'
35	C	519	DGD	C7B-C8B-C9B-CAB
35	H	102	DGD	CCB-CDB-CEB-CFB
35	c	917	DGD	C7B-C8B-C9B-CAB
35	d	406	DGD	C5B-C6B-C7B-C8B
35	h	102	DGD	C5B-C6B-C7B-C8B
27	d	407	LHG	O2-C2-C3-O3
25	c	930	LMG	C37-C38-C39-C40
25	d	409	LMG	C29-C30-C31-C32
27	l	102	LHG	C32-C33-C34-C35
28	a	414	SQD	C15-C16-C17-C18
28	a	418	SQD	C24-C25-C26-C27
28	a	418	SQD	C27-C28-C29-C30
29	I	102	LMT	C5-C6-C7-C8
35	C	518	DGD	CBB-CCB-CDB-CEB
35	c	918	DGD	C3B-C4B-C5B-C6B
35	d	406	DGD	C6A-C7A-C8A-C9A
25	d	409	LMG	C29-C28-O8-C9
25	C	520	LMG	C31-C32-C33-C34
25	d	409	LMG	C12-C13-C14-C15
27	a	416	LHG	C15-C16-C17-C18
27	d	401	LHG	C27-C28-C29-C30
28	C	501	SQD	C15-C16-C17-C18
28	b	621	SQD	C31-C32-C33-C34
28	l	101	SQD	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
29	T	102	LMT	O1'-C1-C2-C3
22	C	503	CLA	C16-C17-C18-C19
22	b	616	CLA	C16-C17-C18-C20
22	c	914	CLA	C4-C3-C5-C6
25	A	410	LMG	C38-C39-C40-C41
25	A	410	LMG	C39-C40-C41-C42
25	b	622	LMG	C31-C32-C33-C34
25	c	920	LMG	C35-C36-C37-C38
25	c	930	LMG	C32-C33-C34-C35
25	j	101	LMG	C37-C38-C39-C40
27	a	416	LHG	C34-C35-C36-C37
28	A	413	SQD	C26-C27-C28-C29
29	B	622	LMT	O1'-C1-C2-C3
34	C	523	HTG	C2'-C3'-C4'-C5'
22	A	405	CLA	C14-C13-C15-C16
22	B	611	CLA	C14-C13-C15-C16
22	B	614	CLA	C11-C10-C8-C9
22	b	603	CLA	C11-C12-C13-C14
22	b	604	CLA	C6-C7-C8-C9
22	c	907	CLA	C14-C13-C15-C16
22	c	908	CLA	C11-C10-C8-C9
35	C	519	DGD	C1A-C2A-C3A-C4A
25	C	520	LMG	C34-C35-C36-C37
25	j	101	LMG	C36-C37-C38-C39
27	C	522	LHG	C24-C25-C26-C27
27	a	416	LHG	C11-C12-C13-C14
27	d	407	LHG	C30-C31-C32-C33
28	a	414	SQD	C29-C30-C31-C32
28	l	101	SQD	C12-C13-C14-C15
34	b	624	HTG	C3'-C4'-C5'-C6'
35	C	519	DGD	C5A-C6A-C7A-C8A
35	C	519	DGD	CBB-CCB-CDB-CEB
35	D	407	DGD	C4A-C5A-C6A-C7A
35	c	919	DGD	C4A-C5A-C6A-C7A
22	c	905	CLA	C15-C16-C17-C18
24	b	618	BCR	C11-C12-C13-C35
25	b	622	LMG	C21-C22-C23-C24
25	c	920	LMG	C20-C21-C22-C23
25	d	409	LMG	C34-C35-C36-C37
27	D	411	LHG	C13-C14-C15-C16
27	D	411	LHG	C18-C19-C20-C21
28	C	501	SQD	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
29	Z	101	LMT	C4-C5-C6-C7
35	C	517	DGD	C4A-C5A-C6A-C7A
27	D	409	LHG	O1-C1-C2-C3
27	D	410	LHG	O1-C1-C2-C3
27	d	407	LHG	O1-C1-C2-C3
34	b	626	HTG	S1-C1'-C2'-C3'
25	B	621	LMG	C11-C10-O7-C8
25	b	622	LMG	C17-C18-C19-C20
27	D	411	LHG	C29-C30-C31-C32
27	d	408	LHG	C15-C16-C17-C18
27	l	102	LHG	C27-C28-C29-C30
28	a	418	SQD	C28-C29-C30-C31
29	a	419	LMT	C11-C10-C9-C8
29	c	921	LMT	C2-C3-C4-C5
35	c	917	DGD	C7A-C8A-C9A-CAA
35	d	406	DGD	C3B-C4B-C5B-C6B
35	d	406	DGD	C8B-C9B-CAB-CBB
35	h	102	DGD	C2B-C3B-C4B-C5B
35	h	102	DGD	CBB-CCB-CDB-CEB
27	a	423	LHG	C7-C8-C9-C10
28	a	418	SQD	C7-C8-C9-C10
25	C	520	LMG	C20-C21-C22-C23
25	J	101	LMG	C12-C13-C14-C15
25	d	409	LMG	C32-C33-C34-C35
25	i	101	LMG	C14-C15-C16-C17
27	l	102	LHG	C13-C14-C15-C16
28	C	501	SQD	C14-C15-C16-C17
28	a	414	SQD	C16-C17-C18-C19
29	A	414	LMT	C6-C7-C8-C9
29	I	102	LMT	C6-C7-C8-C9
29	f	102	LMT	C2-C3-C4-C5
35	C	518	DGD	C2A-C3A-C4A-C5A
35	C	519	DGD	C2A-C3A-C4A-C5A
35	H	102	DGD	C7A-C8A-C9A-CAA
35	d	406	DGD	C4B-C5B-C6B-C7B
35	h	102	DGD	C3B-C4B-C5B-C6B
22	A	408	CLA	C16-C17-C18-C20
22	B	611	CLA	C16-C17-C18-C20
22	C	508	CLA	C16-C17-C18-C19
22	C	514	CLA	C16-C17-C18-C19
22	b	608	CLA	C16-C17-C18-C19
22	b	608	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
22	b	616	CLA	C16-C17-C18-C19
22	c	906	CLA	C16-C17-C18-C20
22	c	908	CLA	C16-C17-C18-C20
22	c	914	CLA	C16-C17-C18-C20
25	A	410	LMG	C20-C21-C22-C23
25	A	410	LMG	C21-C22-C23-C24
25	b	622	LMG	C14-C15-C16-C17
25	d	409	LMG	C11-C12-C13-C14
27	a	416	LHG	C25-C26-C27-C28
28	a	418	SQD	C29-C30-C31-C32
29	a	419	LMT	C2-C3-C4-C5
35	c	919	DGD	C9A-CAA-CBA-CCA
27	d	401	LHG	C11-C12-C13-C14
27	d	407	LHG	C26-C27-C28-C29
28	A	413	SQD	C28-C29-C30-C31
28	a	414	SQD	C13-C14-C15-C16
28	a	414	SQD	C32-C33-C34-C35
29	I	102	LMT	C7-C8-C9-C10
29	c	931	LMT	C7-C8-C9-C10
29	t	101	LMT	C7-C8-C9-C10
35	C	518	DGD	C7A-C8A-C9A-CAA
35	D	407	DGD	CAA-CBA-CCA-CDA
35	c	918	DGD	CAB-CBB-CCB-CDB
35	c	919	DGD	C6A-C7A-C8A-C9A
35	c	919	DGD	CCB-CDB-CEB-CFB
22	A	405	CLA	C13-C15-C16-C17
25	C	520	LMG	C15-C16-C17-C18
27	C	522	LHG	C26-C27-C28-C29
27	d	401	LHG	C26-C27-C28-C29
28	C	501	SQD	C18-C19-C20-C21
28	a	414	SQD	C18-C19-C20-C21
28	a	418	SQD	C18-C19-C20-C21
29	Z	101	LMT	C3-C4-C5-C6
35	C	518	DGD	CCA-CDA-CEA-CFA
35	d	406	DGD	CCA-CDA-CEA-CFA
25	A	410	LMG	C17-C18-C19-C20
25	C	520	LMG	C18-C19-C20-C21
27	l	102	LHG	C16-C17-C18-C19
28	a	414	SQD	C31-C32-C33-C34
22	c	910	CLA	O1D-CGD-O2D-CED
22	b	617	CLA	C10-C11-C12-C13
22	c	907	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
29	I	102	LMT	C1-C2-C3-C4
29	t	101	LMT	C1-C2-C3-C4
29	A	414	LMT	C2-C1-O1'-C1'
29	c	931	LMT	C2-C1-O1'-C1'
29	f	102	LMT	C2-C1-O1'-C1'
25	B	621	LMG	C15-C16-C17-C18
27	l	102	LHG	C28-C29-C30-C31
28	C	501	SQD	C30-C31-C32-C33
28	a	414	SQD	C27-C28-C29-C30
28	a	418	SQD	C17-C18-C19-C20
29	c	931	LMT	C2-C3-C4-C5
35	C	518	DGD	C6A-C7A-C8A-C9A
35	D	407	DGD	C2B-C3B-C4B-C5B
22	A	408	CLA	C16-C17-C18-C19
22	B	606	CLA	C16-C17-C18-C20
22	a	407	CLA	C16-C17-C18-C20
22	c	909	CLA	C16-C17-C18-C19
25	C	520	LMG	C16-C17-C18-C19
25	c	920	LMG	C30-C31-C32-C33
27	A	412	LHG	C26-C27-C28-C29
27	a	416	LHG	C12-C13-C14-C15
27	a	416	LHG	C32-C33-C34-C35
35	D	407	DGD	C3B-C4B-C5B-C6B
35	c	919	DGD	C4B-C5B-C6B-C7B
28	C	501	SQD	O6-C44-C45-C46
34	D	415	HTG	C1'-C2'-C3'-C4'
25	J	101	LMG	C34-C35-C36-C37
27	l	102	LHG	C29-C30-C31-C32
35	c	918	DGD	CAA-CBA-CCA-CDA
23	a	410	PHO	O2A-C1-C2-C3
22	B	605	CLA	C3-C5-C6-C7
22	b	602	CLA	C3-C5-C6-C7
29	B	622	LMT	C1-C2-C3-C4
22	B	605	CLA	C10-C11-C12-C13
22	B	612	CLA	C4-C3-C5-C6
26	d	405	PL9	C40-C39-C41-C42
26	a	415	PL9	C13-C14-C16-C17
28	l	101	SQD	C8-C7-O47-C45
25	i	101	LMG	C12-C13-C14-C15
27	C	522	LHG	C9-C10-C11-C12
28	a	414	SQD	C24-C25-C26-C27
35	c	919	DGD	C2A-C3A-C4A-C5A

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Mol	Chain	Res	Type	Atoms
27	D	410	LHG	O1-C1-C2-O2
28	f	101	SQD	O5-C1-O6-C44
25	b	622	LMG	C18-C19-C20-C21
27	a	416	LHG	C9-C10-C11-C12
27	d	408	LHG	C13-C14-C15-C16
35	H	102	DGD	CAB-CBB-CCB-CDB
22	B	614	CLA	O1D-CGD-O2D-CED
22	A	406	CLA	C6-C7-C8-C9
22	C	507	CLA	C16-C17-C18-C19
22	a	407	CLA	C4C-C3C-CAC-CBC
25	c	920	LMG	C18-C19-C20-C21
28	l	101	SQD	C27-C28-C29-C30
28	b	621	SQD	C28-C29-C30-C31
28	l	101	SQD	C28-C29-C30-C31
35	c	918	DGD	CBA-CCA-CDA-CEA
35	d	406	DGD	C9A-CAA-CBA-CCA
28	A	413	SQD	C11-C12-C13-C14
28	A	413	SQD	C27-C28-C29-C30
29	f	102	LMT	C11-C10-C9-C8
35	D	407	DGD	C2A-C3A-C4A-C5A
25	d	409	LMG	C28-C29-C30-C31
22	a	408	CLA	C15-C16-C17-C18
22	c	913	CLA	C15-C16-C17-C18
25	J	101	LMG	O6-C5-C6-O5
27	d	407	LHG	C1-C2-C3-O3
34	b	632	HTG	O5-C5-C6-O6
25	c	930	LMG	C34-C35-C36-C37
28	C	501	SQD	C12-C13-C14-C15
28	a	418	SQD	C31-C32-C33-C34
28	l	101	SQD	C26-C27-C28-C29
35	C	517	DGD	C4B-C5B-C6B-C7B
35	D	407	DGD	C5A-C6A-C7A-C8A
25	B	621	LMG	O9-C10-O7-C8
28	l	101	SQD	O49-C7-O47-C45
29	Z	101	LMT	C1-C2-C3-C4
22	C	510	CLA	C2-C1-O2A-CGA
25	j	101	LMG	C31-C32-C33-C34
27	D	410	LHG	C14-C15-C16-C17
27	a	416	LHG	C29-C30-C31-C32
35	C	518	DGD	C5A-C6A-C7A-C8A
24	Y	101	BCR	C1-C6-C7-C8
25	d	409	LMG	O10-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
25	B	621	LMG	C12-C13-C14-C15
27	D	409	LHG	C10-C11-C12-C13
27	L	101	LHG	C13-C14-C15-C16
28	b	621	SQD	C29-C30-C31-C32
22	C	514	CLA	C16-C17-C18-C20
25	C	520	LMG	C28-C29-C30-C31
25	i	101	LMG	C10-C11-C12-C13
22	B	603	CLA	C3-C5-C6-C7
22	b	610	CLA	C3-C5-C6-C7
24	D	405	BCR	C23-C24-C25-C26
24	b	618	BCR	C1-C6-C7-C8
24	b	618	BCR	C5-C6-C7-C8
24	d	404	BCR	C23-C24-C25-C30
37	h	101	RRX	C1-C6-C7-C8
37	h	101	RRX	C5-C6-C7-C8
25	i	101	LMG	C34-C35-C36-C37
35	c	917	DGD	C8A-C9A-CAA-CBA
22	c	904	CLA	CBA-CGA-O2A-C1
25	c	920	LMG	C19-C20-C21-C22
27	D	409	LHG	C31-C32-C33-C34
27	a	416	LHG	C10-C11-C12-C13
35	C	518	DGD	CAA-CBA-CCA-CDA
35	D	407	DGD	C7B-C8B-C9B-CAB
27	a	423	LHG	C29-C30-C31-C32
28	a	418	SQD	C16-C17-C18-C19
22	B	608	CLA	C15-C16-C17-C18
27	l	102	LHG	C34-C35-C36-C37
35	C	518	DGD	C3B-C4B-C5B-C6B
22	A	408	CLA	C11-C12-C13-C15
22	B	611	CLA	C12-C13-C15-C16
22	B	612	CLA	C2-C3-C5-C6
22	C	506	CLA	C11-C12-C13-C15
22	C	509	CLA	C12-C13-C15-C16
22	D	404	CLA	C6-C7-C8-C10
22	a	409	CLA	C6-C7-C8-C10
22	a	412	CLA	C6-C7-C8-C10
22	b	603	CLA	C11-C12-C13-C15
22	b	604	CLA	C6-C7-C8-C10
22	b	607	CLA	C6-C7-C8-C10
22	b	608	CLA	C12-C13-C15-C16
22	b	612	CLA	C12-C13-C15-C16
22	c	905	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
22	c	907	CLA	C12-C13-C15-C16
22	c	908	CLA	C11-C10-C8-C7
22	c	913	CLA	C12-C13-C15-C16
22	c	914	CLA	C2-C3-C5-C6
22	d	403	CLA	C6-C7-C8-C10
26	d	405	PL9	C38-C39-C41-C42
28	A	413	SQD	C17-C18-C19-C20
28	A	413	SQD	C25-C26-C27-C28
22	C	502	CLA	C15-C16-C17-C18
22	B	606	CLA	C16-C17-C18-C19
22	B	602	CLA	O1D-CGD-O2D-CED
22	a	412	CLA	O1D-CGD-O2D-CED
29	Z	101	LMT	O5B-C5B-C6B-O6B
25	c	920	LMG	C11-C12-C13-C14
27	D	409	LHG	C15-C16-C17-C18
27	d	408	LHG	C28-C29-C30-C31
28	A	413	SQD	C18-C19-C20-C21
29	a	419	LMT	C6-C7-C8-C9
22	b	607	CLA	C2A-CAA-CBA-CGA
22	a	409	CLA	C8-C10-C11-C12
22	c	904	CLA	C8-C10-C11-C12
27	D	409	LHG	C29-C30-C31-C32
28	A	413	SQD	C15-C16-C17-C18
25	A	410	LMG	C18-C19-C20-C21
25	C	520	LMG	C39-C40-C41-C42
35	C	517	DGD	C6A-C7A-C8A-C9A
22	c	906	CLA	C13-C15-C16-C17
22	c	908	CLA	C13-C15-C16-C17
25	i	101	LMG	C30-C31-C32-C33
28	b	621	SQD	C24-C25-C26-C27
28	l	101	SQD	C33-C34-C35-C36
34	b	626	HTG	C3'-C4'-C5'-C6'
29	a	419	LMT	C1-C2-C3-C4
29	c	921	LMT	C6-C7-C8-C9
22	c	904	CLA	O1A-CGA-O2A-C1
22	B	607	CLA	C10-C11-C12-C13
22	A	406	CLA	O1D-CGD-O2D-CED
25	i	101	LMG	C35-C36-C37-C38
27	D	409	LHG	C28-C29-C30-C31
27	D	410	LHG	C32-C33-C34-C35
27	L	101	LHG	C24-C25-C26-C27
28	a	414	SQD	C30-C31-C32-C33

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Mol	Chain	Res	Type	Atoms
25	A	410	LMG	C11-C10-O7-C8
25	i	101	LMG	C11-C10-O7-C8
27	a	416	LHG	C8-C7-O7-C5
27	a	423	LHG	O6-C4-C5-O7
25	J	101	LMG	C16-C17-C18-C19
27	C	522	LHG	C12-C13-C14-C15
29	E	101	LMT	C11-C10-C9-C8
29	c	921	LMT	C4-C5-C6-C7
35	d	406	DGD	C2A-C3A-C4A-C5A
22	c	910	CLA	C8-C10-C11-C12
29	I	102	LMT	C4-C5-C6-C7
35	D	407	DGD	C3A-C4A-C5A-C6A
27	a	416	LHG	O9-C7-O7-C5
35	D	407	DGD	C6B-C7B-C8B-C9B
22	B	612	CLA	C13-C15-C16-C17
22	a	412	CLA	C15-C16-C17-C18
28	A	413	SQD	O6-C44-C45-O47
28	C	501	SQD	O6-C44-C45-O47
28	a	414	SQD	O6-C44-C45-O47
35	d	406	DGD	O2G-C2G-C3G-O3G
25	C	520	LMG	C12-C13-C14-C15
35	c	919	DGD	C8A-C9A-CAA-CBA
22	B	611	CLA	C16-C17-C18-C19
25	C	531	LMG	C12-C13-C14-C15
25	c	920	LMG	C17-C18-C19-C20
28	l	101	SQD	C9-C10-C11-C12
28	l	101	SQD	C11-C12-C13-C14
35	c	917	DGD	O6E-C5E-C6E-O5E
22	D	404	CLA	C8-C10-C11-C12
26	a	415	PL9	C15-C14-C16-C17
28	a	414	SQD	C7-C8-C9-C10
26	A	411	PL9	C4-C3-C7-C8
25	i	101	LMG	C16-C17-C18-C19
28	A	413	SQD	C16-C17-C18-C19
29	c	921	LMT	C1-C2-C3-C4
22	A	408	CLA	C11-C12-C13-C14
22	B	607	CLA	C11-C12-C13-C14
22	B	616	CLA	C11-C12-C13-C14
22	C	506	CLA	C11-C12-C13-C14
22	C	509	CLA	C14-C13-C15-C16
22	D	404	CLA	C6-C7-C8-C9
22	a	409	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
22	a	412	CLA	C6-C7-C8-C9
22	b	608	CLA	C14-C13-C15-C16
22	b	612	CLA	C14-C13-C15-C16
22	b	614	CLA	C11-C10-C8-C9
22	c	909	CLA	C11-C10-C8-C9
22	c	913	CLA	C14-C13-C15-C16
22	d	403	CLA	C6-C7-C8-C9
35	d	406	DGD	CAB-CBB-CCB-CDB
25	A	410	LMG	C33-C34-C35-C36
25	B	621	LMG	C13-C14-C15-C16
28	C	501	SQD	C28-C29-C30-C31
28	C	501	SQD	C34-C35-C36-C37
34	D	414	HTG	C2'-C3'-C4'-C5'
35	D	407	DGD	CCA-CDA-CEA-CFA
22	B	602	CLA	C10-C11-C12-C13
22	c	910	CLA	C10-C11-C12-C13
22	d	403	CLA	CBD-CGD-O2D-CED
27	A	412	LHG	C27-C28-C29-C30
27	D	409	LHG	C16-C17-C18-C19
22	C	507	CLA	C1A-C2A-CAA-CBA
22	c	909	CLA	C1A-C2A-CAA-CBA
22	c	907	CLA	C16-C17-C18-C20
22	c	908	CLA	C16-C17-C18-C19
22	c	913	CLA	C16-C17-C18-C20
25	i	101	LMG	O9-C10-O7-C8
25	i	101	LMG	C33-C34-C35-C36
29	T	102	LMT	C11-C10-C9-C8
35	C	519	DGD	C9A-CAA-CBA-CCA
35	C	519	DGD	C2B-C3B-C4B-C5B
35	c	917	DGD	C9A-CAA-CBA-CCA
22	b	602	CLA	C13-C15-C16-C17
22	b	608	CLA	C8-C10-C11-C12
27	a	416	LHG	C4-O6-P-O3
27	L	101	LHG	C16-C17-C18-C19
29	c	921	LMT	O1'-C1-C2-C3
29	t	101	LMT	C11-C10-C9-C8
35	c	919	DGD	C3B-C4B-C5B-C6B
35	c	919	DGD	C5B-C6B-C7B-C8B
29	a	419	LMT	O5B-C5B-C6B-O6B
35	C	519	DGD	O6D-C5D-C6D-O5D
25	A	410	LMG	C31-C32-C33-C34
27	d	408	LHG	C25-C26-C27-C28

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Mol	Chain	Res	Type	Atoms
22	C	507	CLA	C5-C6-C7-C8
29	a	419	LMT	C2B-C1B-O1B-C4'
27	d	408	LHG	C16-C17-C18-C19
22	D	401	CLA	O1D-CGD-O2D-CED
25	c	920	LMG	C32-C33-C34-C35
25	d	409	LMG	C21-C22-C23-C24
35	C	517	DGD	CAA-CBA-CCA-CDA
35	C	519	DGD	C4A-C5A-C6A-C7A
29	a	419	LMT	O5B-C1B-O1B-C4'
22	A	406	CLA	C6-C7-C8-C10
28	l	101	SQD	C31-C32-C33-C34
35	C	519	DGD	C9B-CAB-CBB-CCB
35	c	918	DGD	C8A-C9A-CAA-CBA
27	d	407	LHG	C12-C13-C14-C15
25	A	410	LMG	O9-C10-O7-C8
25	J	101	LMG	C17-C18-C19-C20
22	B	612	CLA	C10-C11-C12-C13
34	B	623	HTG	O5-C5-C6-O6
25	c	920	LMG	C12-C13-C14-C15
27	l	102	LHG	C30-C31-C32-C33
28	a	414	SQD	C14-C15-C16-C17
34	b	623	HTG	C2'-C3'-C4'-C5'
27	C	522	LHG	C23-C24-C25-C26
25	C	520	LMG	C17-C18-C19-C20
27	L	101	LHG	C14-C15-C16-C17
35	c	917	DGD	C2A-C3A-C4A-C5A
22	b	605	CLA	C16-C17-C18-C19
25	A	410	LMG	C35-C36-C37-C38
25	B	621	LMG	C7-C8-C9-O8
25	C	520	LMG	C33-C34-C35-C36
25	D	412	LMG	O1-C7-C8-C9
25	d	409	LMG	C7-C8-C9-O8
27	d	408	LHG	C4-C5-C6-O8
28	A	413	SQD	O6-C44-C45-C46
28	C	501	SQD	C33-C34-C35-C36
28	a	414	SQD	O6-C44-C45-C46
35	D	407	DGD	C1G-C2G-C3G-O3G
35	c	919	DGD	C6B-C7B-C8B-C9B
29	E	101	LMT	O5'-C5'-C6'-O6'
25	A	410	LMG	C22-C23-C24-C25
25	b	622	LMG	C15-C16-C17-C18
35	C	518	DGD	O6D-C5D-C6D-O5D

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Mol	Chain	Res	Type	Atoms
35	C	518	DGD	C2G-C3G-O3G-C1D
35	c	918	DGD	C2G-C3G-O3G-C1D
35	c	918	DGD	C5D-C6D-O5D-C1E
25	i	101	LMG	C18-C19-C20-C21
27	a	423	LHG	C14-C15-C16-C17
29	I	102	LMT	C9-C10-C11-C12
35	H	102	DGD	CDB-CEB-CFB-CGB
22	c	911	CLA	C8-C10-C11-C12
25	C	520	LMG	C22-C23-C24-C25
28	A	413	SQD	C19-C20-C21-C22
29	Z	101	LMT	C9-C10-C11-C12
34	B	626	HTG	C2'-C3'-C4'-C5'
35	c	917	DGD	C8B-C9B-CAB-CBB
25	C	531	LMG	C14-C15-C16-C17
27	L	101	LHG	C10-C11-C12-C13
28	l	101	SQD	C19-C20-C21-C22
29	I	102	LMT	C11-C10-C9-C8
28	l	101	SQD	C25-C26-C27-C28
35	h	102	DGD	CDB-CEB-CFB-CGB
25	b	622	LMG	C13-C14-C15-C16
23	D	402	PHO	C8-C10-C11-C12
25	A	410	LMG	C11-C12-C13-C14
25	b	622	LMG	C12-C13-C14-C15
29	Z	101	LMT	C11-C10-C9-C8
35	C	517	DGD	C3B-C4B-C5B-C6B
28	C	501	SQD	C8-C7-O47-C45
25	B	621	LMG	C17-C18-C19-C20
27	d	408	LHG	C19-C20-C21-C22
34	B	626	HTG	C3'-C4'-C5'-C6'
34	D	415	HTG	C4'-C5'-C6'-C7'
22	b	614	CLA	C8-C10-C11-C12
26	A	411	PL9	C30-C29-C31-C32
27	A	412	LHG	C25-C26-C27-C28
27	l	102	LHG	C9-C10-C11-C12
28	l	101	SQD	C10-C11-C12-C13
22	C	503	CLA	C16-C17-C18-C20
22	C	509	CLA	C16-C17-C18-C19
22	b	602	CLA	C16-C17-C18-C19
28	a	414	SQD	C35-C36-C37-C38
27	l	102	LHG	C35-C36-C37-C38
28	A	413	SQD	C30-C31-C32-C33
29	A	414	LMT	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
22	B	612	CLA	C8-C10-C11-C12
22	B	614	CLA	C10-C11-C12-C13
28	b	621	SQD	C35-C36-C37-C38
35	C	517	DGD	C6B-C7B-C8B-C9B
25	C	531	LMG	O6-C5-C6-O5
29	c	921	LMT	O5B-C5B-C6B-O6B
35	h	102	DGD	C6B-C7B-C8B-C9B
22	B	615	CLA	O1D-CGD-O2D-CED
22	c	909	CLA	C13-C15-C16-C17
27	A	412	LHG	C32-C33-C34-C35
28	l	101	SQD	C13-C14-C15-C16
29	a	419	LMT	O1'-C1-C2-C3
35	c	918	DGD	C2B-C3B-C4B-C5B
22	C	513	CLA	CBA-CGA-O2A-C1
27	L	101	LHG	O6-C4-C5-O7
35	H	102	DGD	O2G-C1B-C2B-C3B
22	c	909	CLA	C16-C17-C18-C20
25	c	920	LMG	C39-C40-C41-C42
35	C	518	DGD	C3A-C4A-C5A-C6A
35	c	919	DGD	C8B-C9B-CAB-CBB
27	d	408	LHG	C12-C13-C14-C15
29	T	102	LMT	C1-C2-C3-C4
22	c	908	CLA	O1D-CGD-O2D-CED
27	L	101	LHG	C19-C20-C21-C22
29	A	414	LMT	C11-C10-C9-C8
34	D	414	HTG	C1'-C2'-C3'-C4'
22	C	504	CLA	C8-C10-C11-C12
25	b	622	LMG	C2-C1-O1-C7
25	i	101	LMG	C15-C16-C17-C18
27	d	407	LHG	C29-C30-C31-C32
27	a	423	LHG	O7-C5-C6-O8
27	A	412	LHG	C3-O3-P-O5
35	C	518	DGD	CDB-CEB-CFB-CGB
22	b	603	CLA	C13-C15-C16-C17
22	b	613	CLA	C8-C10-C11-C12
23	a	411	PHO	CHA-CBD-CGD-O2D
25	c	930	LMG	C38-C39-C40-C41
25	i	101	LMG	C13-C14-C15-C16
27	d	407	LHG	C35-C36-C37-C38
34	D	414	HTG	C4'-C5'-C6'-C7'
35	c	919	DGD	CBB-CCB-CDB-CEB
35	d	406	DGD	C7B-C8B-C9B-CAB

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Mol	Chain	Res	Type	Atoms
27	D	410	LHG	C26-C27-C28-C29
29	A	414	LMT	C4-C5-C6-C7
35	d	406	DGD	C2B-C3B-C4B-C5B
22	A	405	CLA	C12-C13-C15-C16
22	B	602	CLA	C11-C10-C8-C7
22	B	602	CLA	C12-C13-C15-C16
22	B	605	CLA	C11-C12-C13-C15
22	B	607	CLA	C11-C10-C8-C7
22	B	607	CLA	C11-C12-C13-C15
22	B	607	CLA	C12-C13-C15-C16
22	B	612	CLA	C12-C13-C15-C16
22	B	616	CLA	C11-C12-C13-C15
22	B	616	CLA	C12-C13-C15-C16
22	a	407	CLA	C12-C13-C15-C16
22	a	409	CLA	C11-C10-C8-C7
22	a	412	CLA	C11-C12-C13-C15
22	b	604	CLA	C2-C3-C5-C6
22	b	605	CLA	C6-C7-C8-C10
22	b	614	CLA	C11-C10-C8-C7
22	c	903	CLA	C11-C12-C13-C15
22	c	905	CLA	C11-C10-C8-C7
22	c	905	CLA	C11-C12-C13-C15
22	c	908	CLA	C11-C12-C13-C15
22	c	910	CLA	C11-C10-C8-C7
22	d	402	CLA	C11-C12-C13-C15
26	A	411	PL9	C28-C29-C31-C32
25	j	101	LMG	C16-C17-C18-C19
34	C	521	HTG	C2'-C3'-C4'-C5'
34	D	415	HTG	C3'-C4'-C5'-C6'
22	A	408	CLA	C11-C10-C8-C9
22	B	607	CLA	C14-C13-C15-C16
22	B	612	CLA	C14-C13-C15-C16
22	C	514	CLA	C11-C10-C8-C9
22	D	404	CLA	C14-C13-C15-C16
22	a	407	CLA	C14-C13-C15-C16
22	a	409	CLA	C11-C10-C8-C9
22	a	412	CLA	C11-C12-C13-C14
22	b	605	CLA	C6-C7-C8-C9
22	c	903	CLA	C11-C12-C13-C14
25	B	621	LMG	C29-C30-C31-C32
28	C	501	SQD	C11-C12-C13-C14
27	a	416	LHG	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
29	T	102	LMT	C9-C10-C11-C12
34	b	627	HTG	C3'-C4'-C5'-C6'
35	h	102	DGD	CDA-CEA-CFA-CGA
22	B	605	CLA	O1D-CGD-O2D-CED
35	C	519	DGD	C4D-C5D-C6D-O5D
25	c	920	LMG	C33-C34-C35-C36
29	A	414	LMT	C3-C4-C5-C6
29	c	931	LMT	C4-C5-C6-C7
25	c	930	LMG	C11-C12-C13-C14
25	d	409	LMG	C22-C23-C24-C25
29	A	414	LMT	C5-C6-C7-C8
34	b	624	HTG	C2'-C3'-C4'-C5'
22	c	914	CLA	CBA-CGA-O2A-C1
25	i	101	LMG	C40-C41-C42-C43
27	a	416	LHG	C13-C14-C15-C16
29	A	414	LMT	C2-C3-C4-C5
22	a	409	CLA	C10-C11-C12-C13
22	d	403	CLA	C13-C15-C16-C17
35	C	517	DGD	CAB-CBB-CCB-CDB
22	b	611	CLA	CBD-CGD-O2D-CED
25	b	622	LMG	C16-C17-C18-C19
27	l	102	LHG	C11-C10-C9-C8
22	c	904	CLA	C5-C6-C7-C8
27	L	101	LHG	O6-C4-C5-C6
25	A	410	LMG	C19-C20-C21-C22
25	c	920	LMG	C31-C32-C33-C34
25	B	621	LMG	C10-C11-C12-C13
28	a	418	SQD	C24-C23-O48-C46
22	a	408	CLA	C2C-C3C-CAC-CBC
29	E	101	LMT	C3-C4-C5-C6
22	a	409	CLA	C14-C13-C15-C16
22	C	513	CLA	O1A-CGA-O2A-C1
25	b	622	LMG	C32-C33-C34-C35
35	c	918	DGD	CDA-CEA-CFA-CGA
22	B	609	CLA	O1D-CGD-O2D-CED
22	b	605	CLA	O1D-CGD-O2D-CED
22	c	914	CLA	C5-C6-C7-C8
22	c	914	CLA	C13-C15-C16-C17
25	i	101	LMG	O8-C28-C29-C30
35	c	917	DGD	O6D-C5D-C6D-O5D
27	a	416	LHG	C31-C32-C33-C34
35	c	918	DGD	C5B-C6B-C7B-C8B

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Mol	Chain	Res	Type	Atoms
27	d	408	LHG	C2-C3-O3-P
35	C	519	DGD	CCB-CDB-CEB-CFB
24	k	101	BCR	C19-C20-C21-C22
35	c	917	DGD	C4D-C5D-C6D-O5D
29	T	102	LMT	C2-C1-O1'-C1'
25	C	520	LMG	C38-C39-C40-C41
25	i	101	LMG	C22-C23-C24-C25
25	j	101	LMG	C13-C14-C15-C16
29	I	102	LMT	C4B-C5B-C6B-O6B
35	c	919	DGD	CDB-CEB-CFB-CGB
27	L	101	LHG	C15-C16-C17-C18
28	A	413	SQD	C11-C10-C9-C8
22	c	903	CLA	C15-C16-C17-C18
25	B	621	LMG	O1-C7-C8-C9
25	i	101	LMG	C7-C8-C9-O8
27	a	423	LHG	C4-C5-C6-O8
28	a	418	SQD	O6-C44-C45-C46
28	l	101	SQD	C44-C45-C46-O48
35	H	102	DGD	O1G-C1G-C2G-C3G
35	d	406	DGD	O1G-C1G-C2G-C3G
35	d	406	DGD	C1G-C2G-C3G-O3G
25	i	101	LMG	C29-C30-C31-C32
29	t	101	LMT	C9-C10-C11-C12
34	b	626	HTG	C2'-C3'-C4'-C5'
25	A	410	LMG	C36-C37-C38-C39
25	J	101	LMG	C35-C36-C37-C38
35	C	517	DGD	C5A-C6A-C7A-C8A
35	C	519	DGD	CDB-CEB-CFB-CGB
35	c	917	DGD	CDA-CEA-CFA-CGA
22	C	514	CLA	O2A-C1-C2-C3
23	A	407	PHO	O2A-C1-C2-C3
25	i	101	LMG	C31-C32-C33-C34
28	C	501	SQD	C27-C28-C29-C30
34	C	532	HTG	C2'-C3'-C4'-C5'
22	D	404	CLA	C3-C5-C6-C7
25	c	920	LMG	C21-C22-C23-C24
35	C	519	DGD	CBA-CCA-CDA-CEA
22	b	615	CLA	C4-C3-C5-C6
22	D	404	CLA	C16-C17-C18-C19
25	d	409	LMG	C36-C37-C38-C39
28	a	418	SQD	C9-C10-C11-C12
22	c	914	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
25	D	412	LMG	C12-C13-C14-C15
28	C	501	SQD	C35-C36-C37-C38
35	c	917	DGD	C3B-C4B-C5B-C6B
35	d	406	DGD	CDB-CEB-CFB-CGB
22	C	502	CLA	O1D-CGD-O2D-CED
27	d	407	LHG	O1-C1-C2-O2
22	c	905	CLA	C8-C10-C11-C12
25	B	621	LMG	C18-C19-C20-C21
27	A	412	LHG	C33-C34-C35-C36
27	D	411	LHG	C16-C17-C18-C19
35	d	406	DGD	C4A-C5A-C6A-C7A
35	C	519	DGD	C2A-C1A-O1G-C1G
27	A	412	LHG	C24-C25-C26-C27
22	b	602	CLA	C16-C17-C18-C20
22	b	612	CLA	C16-C17-C18-C20
22	c	911	CLA	C16-C17-C18-C20
27	a	423	LHG	C28-C29-C30-C31
29	f	102	LMT	C1-C2-C3-C4
27	L	101	LHG	O2-C2-C3-O3
29	f	102	LMT	C9-C10-C11-C12
27	L	101	LHG	C11-C10-C9-C8
35	C	518	DGD	CDA-CEA-CFA-CGA
35	c	918	DGD	C6A-C7A-C8A-C9A
35	D	407	DGD	C5B-C6B-C7B-C8B
25	B	621	LMG	O7-C8-C9-O8
28	l	101	SQD	O47-C45-C46-O48
35	D	407	DGD	O2G-C2G-C3G-O3G
35	d	406	DGD	O1G-C1G-C2G-O2G
22	D	401	CLA	C4C-C3C-CAC-CBC
29	t	101	LMT	C3-C4-C5-C6
25	C	520	LMG	C37-C38-C39-C40
27	d	408	LHG	C32-C33-C34-C35
29	t	101	LMT	C2-C3-C4-C5
26	a	415	PL9	C45-C44-C46-C47
22	C	507	CLA	C2-C1-O2A-CGA
22	B	603	CLA	C11-C12-C13-C14
22	B	611	CLA	C11-C12-C13-C14
22	B	612	CLA	C11-C12-C13-C14
22	B	614	CLA	C11-C12-C13-C14
22	C	507	CLA	C11-C12-C13-C14
22	b	608	CLA	C11-C12-C13-C14
22	c	908	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	c	914	CLA	C11-C12-C13-C14
27	L	101	LHG	C25-C26-C27-C28
28	C	501	SQD	C10-C11-C12-C13
35	C	518	DGD	C9A-CAA-CBA-CCA
22	C	508	CLA	C5-C6-C7-C8
27	D	411	LHG	C2-C3-O3-P
27	a	416	LHG	C14-C15-C16-C17
35	C	518	DGD	CBA-CCA-CDA-CEA
35	c	917	DGD	C3A-C4A-C5A-C6A
22	B	615	CLA	C2A-CAA-CBA-CGA
22	B	602	CLA	C16-C17-C18-C19
22	b	605	CLA	C16-C17-C18-C20
22	b	612	CLA	C16-C17-C18-C19
24	C	515	BCR	C23-C24-C25-C26
24	C	515	BCR	C23-C24-C25-C30
24	b	619	BCR	C23-C24-C25-C26
24	b	619	BCR	C23-C24-C25-C30
24	c	916	BCR	C5-C6-C7-C8
22	C	511	CLA	C8-C10-C11-C12
22	C	514	CLA	CBA-CGA-O2A-C1
24	y	101	BCR	C21-C22-C23-C24
37	h	101	RRX	C21-C22-C23-C24
22	d	403	CLA	C10-C11-C12-C13
28	C	501	SQD	O49-C7-O47-C45
28	C	501	SQD	C31-C32-C33-C34
34	b	632	HTG	C3'-C4'-C5'-C6'
28	C	501	SQD	C24-C25-C26-C27
35	c	918	DGD	C4A-C5A-C6A-C7A
35	H	102	DGD	C9B-CAB-CBB-CCB
22	b	613	CLA	O1D-CGD-O2D-CED
27	d	401	LHG	C31-C32-C33-C34
29	Z	101	LMT	C5-C6-C7-C8
27	a	423	LHG	O2-C2-C3-O3
22	A	408	CLA	C11-C10-C8-C7
22	B	602	CLA	C11-C12-C13-C15
22	B	603	CLA	C11-C12-C13-C15
22	B	605	CLA	C11-C10-C8-C7
22	B	614	CLA	C11-C12-C13-C15
22	C	507	CLA	C11-C12-C13-C15
22	C	509	CLA	C11-C10-C8-C7
22	C	514	CLA	C11-C10-C8-C7
22	D	404	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	b	602	CLA	C11-C12-C13-C15
22	b	604	CLA	C11-C10-C8-C7
22	c	907	CLA	C6-C7-C8-C10
22	c	913	CLA	C6-C7-C8-C10
22	c	913	CLA	C11-C12-C13-C15
22	c	914	CLA	C12-C13-C15-C16
22	d	403	CLA	C11-C10-C8-C7
23	D	402	PHO	C11-C12-C13-C15
24	c	915	BCR	C9-C10-C11-C12
25	j	101	LMG	C35-C36-C37-C38
28	A	413	SQD	C13-C14-C15-C16
35	C	519	DGD	CAA-CBA-CCA-CDA
29	T	102	LMT	C5-C6-C7-C8
22	B	603	CLA	C13-C15-C16-C17
22	C	507	CLA	C13-C15-C16-C17
22	c	913	CLA	C8-C10-C11-C12
25	D	412	LMG	C35-C36-C37-C38
35	d	406	DGD	C9B-CAB-CBB-CCB
23	a	411	PHO	C4C-C3C-CAC-CBC
25	d	409	LMG	C13-C14-C15-C16
27	a	416	LHG	C30-C31-C32-C33
34	B	627	HTG	C2'-C1'-S1-C1
34	b	623	HTG	C2'-C1'-S1-C1
34	c	922	HTG	C2'-C1'-S1-C1
22	C	509	CLA	C16-C17-C18-C20
22	a	409	CLA	C12-C13-C15-C16
35	C	518	DGD	C4D-C5D-C6D-O5D
35	c	919	DGD	CAA-CBA-CCA-CDA
25	c	930	LMG	C14-C15-C16-C17
22	B	617	CLA	CAD-CBD-CGD-O2D
22	C	513	CLA	CAD-CBD-CGD-O2D
22	b	605	CLA	CAD-CBD-CGD-O2D
22	b	615	CLA	CAD-CBD-CGD-O2D
22	c	904	CLA	CAD-CBD-CGD-O2D
22	c	913	CLA	CAD-CBD-CGD-O2D
22	d	403	CLA	CAD-CBD-CGD-O2D
23	D	402	PHO	CAD-CBD-CGD-O2D
22	B	612	CLA	O1D-CGD-O2D-CED
29	A	414	LMT	O5'-C5'-C6'-O6'
29	T	102	LMT	C2-C3-C4-C5
25	C	520	LMG	C21-C22-C23-C24
35	c	917	DGD	O6E-C1E-O5D-C6D

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Mol	Chain	Res	Type	Atoms
35	c	918	DGD	O6E-C1E-O5D-C6D
26	a	415	PL9	C43-C44-C46-C47
29	A	414	LMT	C1-C2-C3-C4
34	b	623	HTG	C4'-C5'-C6'-C7'
35	d	406	DGD	C3A-C4A-C5A-C6A
27	C	522	LHG	C4-C5-C6-O8
35	D	407	DGD	O1G-C1G-C2G-C3G
22	c	914	CLA	O1A-CGA-O2A-C1
22	C	508	CLA	C10-C11-C12-C13
22	B	617	CLA	O1D-CGD-O2D-CED
25	c	920	LMG	C34-C35-C36-C37
25	c	930	LMG	C33-C34-C35-C36
27	a	416	LHG	C27-C28-C29-C30
25	d	409	LMG	C15-C16-C17-C18
35	C	518	DGD	C4B-C5B-C6B-C7B
27	l	102	LHG	C14-C15-C16-C17
35	D	407	DGD	C8A-C9A-CAA-CBA
27	L	101	LHG	C1-C2-C3-O3
22	B	602	CLA	CHA-CBD-CGD-O1D
22	B	602	CLA	CHA-CBD-CGD-O2D
22	B	606	CLA	CHA-CBD-CGD-O1D
22	B	607	CLA	CHA-CBD-CGD-O1D
22	B	608	CLA	CHA-CBD-CGD-O1D
22	B	615	CLA	CHA-CBD-CGD-O1D
22	C	505	CLA	CHA-CBD-CGD-O1D
22	C	507	CLA	CHA-CBD-CGD-O1D
22	C	508	CLA	CHA-CBD-CGD-O2D
22	C	513	CLA	CHA-CBD-CGD-O1D
22	b	608	CLA	CHA-CBD-CGD-O1D
22	c	905	CLA	CHA-CBD-CGD-O1D
22	c	908	CLA	CHA-CBD-CGD-O1D
28	a	418	SQD	O10-C23-O48-C46
25	i	101	LMG	C36-C37-C38-C39
35	C	517	DGD	C8B-C9B-CAB-CBB
35	H	102	DGD	C7B-C8B-C9B-CAB
29	B	622	LMT	C4-C5-C6-C7
25	B	621	LMG	O1-C7-C8-O7
25	d	409	LMG	O7-C8-C9-O8
25	i	101	LMG	O7-C8-C9-O8
27	C	522	LHG	O7-C5-C6-O8
28	b	621	SQD	O47-C45-C46-O48
35	H	102	DGD	O1G-C1G-C2G-O2G

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Mol	Chain	Res	Type	Atoms
34	b	626	HTG	C4'-C5'-C6'-C7'
22	C	514	CLA	O1A-CGA-O2A-C1
34	B	623	HTG	C1'-C2'-C3'-C4'
27	D	409	LHG	O1-C1-C2-O2
34	c	922	HTG	S1-C1'-C2'-C3'
25	C	520	LMG	C14-C15-C16-C17
26	a	415	PL9	C4-C3-C7-C8
28	a	414	SQD	C11-C10-C9-C8
29	c	921	LMT	C9-C10-C11-C12
22	B	605	CLA	C11-C10-C8-C9
22	C	505	CLA	C14-C13-C15-C16
22	C	509	CLA	C11-C10-C8-C9
22	c	906	CLA	C14-C13-C15-C16
22	c	913	CLA	C11-C12-C13-C14
23	D	402	PHO	C11-C12-C13-C14
27	D	410	LHG	C13-C14-C15-C16
22	b	617	CLA	C8-C10-C11-C12
27	A	412	LHG	C28-C29-C30-C31
28	a	414	SQD	C12-C13-C14-C15
24	A	409	BCR	C17-C18-C19-C20
24	c	916	BCR	C21-C22-C23-C24
24	k	101	BCR	C11-C12-C13-C14
25	j	101	LMG	C34-C35-C36-C37
22	c	903	CLA	C16-C17-C18-C19
22	c	906	CLA	C8-C10-C11-C12
22	B	617	CLA	C2-C1-O2A-CGA
25	C	531	LMG	C29-C30-C31-C32
29	E	101	LMT	C5-C6-C7-C8
27	D	410	LHG	C3-O3-P-O6
25	b	622	LMG	C29-C30-C31-C32
25	d	409	LMG	C30-C31-C32-C33
27	d	401	LHG	C9-C10-C11-C12
28	a	414	SQD	C25-C26-C27-C28
22	b	604	CLA	C4-C3-C5-C6
27	L	101	LHG	C4-O6-P-O5
27	a	416	LHG	C4-O6-P-O4
27	l	102	LHG	C3-O3-P-O5
28	f	101	SQD	O5-C5-C6-S
22	b	609	CLA	C16-C17-C18-C20
25	c	930	LMG	C28-C29-C30-C31
29	c	921	LMT	C3-C4-C5-C6
35	C	519	DGD	O6D-C1D-O3G-C3G

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Mol	Chain	Res	Type	Atoms
22	b	612	CLA	C8-C10-C11-C12
27	a	416	LHG	O6-C4-C5-C6
27	a	423	LHG	O6-C4-C5-C6
35	D	407	DGD	CDA-CEA-CFA-CGA
35	h	102	DGD	O2G-C1B-C2B-C3B
27	d	407	LHG	C34-C35-C36-C37
27	D	410	LHG	C30-C31-C32-C33
22	B	602	CLA	C16-C17-C18-C20
22	c	911	CLA	C16-C17-C18-C19
27	d	407	LHG	C16-C17-C18-C19
22	B	602	CLA	CAD-CBD-CGD-O1D
22	B	606	CLA	CAD-CBD-CGD-O1D
22	B	608	CLA	CAD-CBD-CGD-O1D
22	B	615	CLA	CAD-CBD-CGD-O1D
22	C	505	CLA	CAD-CBD-CGD-O1D
22	C	507	CLA	CAD-CBD-CGD-O1D
22	C	513	CLA	CAD-CBD-CGD-O1D
22	b	602	CLA	CAD-CBD-CGD-O1D
22	b	608	CLA	CAD-CBD-CGD-O1D
22	b	615	CLA	CAD-CBD-CGD-O1D
22	c	905	CLA	CAD-CBD-CGD-O1D
28	b	621	SQD	O5-C5-C6-S
35	C	519	DGD	O1A-C1A-O1G-C1G
22	b	611	CLA	C8-C10-C11-C12
27	L	101	LHG	C26-C27-C28-C29
35	h	102	DGD	CCB-CDB-CEB-CFB
35	c	919	DGD	C2A-C1A-O1G-C1G
25	j	101	LMG	C39-C40-C41-C42
34	b	623	HTG	C3'-C4'-C5'-C6'
22	B	602	CLA	C6-C7-C8-C10
22	B	603	CLA	C6-C7-C8-C10
22	B	604	CLA	C6-C7-C8-C10
22	B	604	CLA	C11-C10-C8-C7
22	B	616	CLA	C11-C10-C8-C7
22	C	505	CLA	C12-C13-C15-C16
22	C	510	CLA	C12-C13-C15-C16
22	C	514	CLA	C6-C7-C8-C10
22	C	514	CLA	C11-C12-C13-C15
22	b	602	CLA	C11-C10-C8-C7
22	b	608	CLA	C6-C7-C8-C10
22	b	608	CLA	C11-C10-C8-C7
22	b	609	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
22	b	609	CLA	C11-C12-C13-C15
22	c	905	CLA	C12-C13-C15-C16
22	c	906	CLA	C12-C13-C15-C16
22	c	907	CLA	C11-C12-C13-C15
22	c	909	CLA	C11-C12-C13-C15
22	c	910	CLA	C6-C7-C8-C10
22	c	912	CLA	C11-C10-C8-C7
25	d	409	LMG	C14-C15-C16-C17
27	a	416	LHG	C16-C17-C18-C19
29	B	622	LMT	C11-C10-C9-C8
28	a	414	SQD	C33-C34-C35-C36
35	C	517	DGD	CBB-CCB-CDB-CEB
35	C	519	DGD	C4E-C5E-C6E-O5E
29	B	622	LMT	C9-C10-C11-C12
25	J	101	LMG	C18-C19-C20-C21
25	A	410	LMG	O1-C7-C8-C9
25	A	410	LMG	C12-C13-C14-C15
25	A	410	LMG	O1-C7-C8-O7
25	A	410	LMG	O7-C8-C9-O8
25	D	412	LMG	O1-C7-C8-O7
25	c	930	LMG	O1-C7-C8-O7
28	b	621	SQD	O6-C44-C45-O47
28	l	101	SQD	O6-C44-C45-O47
35	H	102	DGD	C5B-C6B-C7B-C8B
27	D	411	LHG	C15-C16-C17-C18
35	C	518	DGD	C5D-C6D-O5D-C1E
25	c	920	LMG	C37-C38-C39-C40
27	d	401	LHG	C11-C10-C9-C8
22	c	906	CLA	C2-C3-C5-C6
28	l	101	SQD	C15-C16-C17-C18
22	B	602	CLA	C11-C12-C13-C14
22	B	607	CLA	C11-C10-C8-C9
22	B	616	CLA	C14-C13-C15-C16
22	C	514	CLA	C6-C7-C8-C9
22	b	604	CLA	C11-C10-C8-C9
22	c	905	CLA	C11-C10-C8-C9
22	d	403	CLA	C11-C10-C8-C9
22	C	514	CLA	C3-C5-C6-C7
22	c	905	CLA	C3-C5-C6-C7
22	D	404	CLA	C16-C17-C18-C20
26	A	411	PL9	C39-C41-C42-C43
27	l	102	LHG	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
35	c	917	DGD	C5B-C6B-C7B-C8B
29	A	414	LMT	C7-C8-C9-C10
22	c	914	CLA	CBD-CGD-O2D-CED
25	J	101	LMG	C14-C15-C16-C17
25	c	920	LMG	C36-C37-C38-C39
35	h	102	DGD	C7A-C8A-C9A-CAA
34	b	632	HTG	C4'-C5'-C6'-C7'
35	c	918	DGD	CCA-CDA-CEA-CFA
27	C	522	LHG	O7-C7-C8-C9
27	d	401	LHG	C4-C5-O7-C7
22	C	508	CLA	C2A-CAA-CBA-CGA
22	c	910	CLA	C2A-CAA-CBA-CGA
35	h	102	DGD	C9A-CAA-CBA-CCA
22	B	613	CLA	O1A-CGA-O2A-C1
22	d	402	CLA	C2-C1-O2A-CGA
27	d	408	LHG	C29-C30-C31-C32
34	C	532	HTG	C1'-C2'-C3'-C4'
25	j	101	LMG	C18-C19-C20-C21
27	C	522	LHG	C13-C14-C15-C16
35	D	407	DGD	C4B-C5B-C6B-C7B
27	L	101	LHG	C5-C6-O8-C23
25	b	622	LMG	C20-C21-C22-C23
25	d	409	LMG	C18-C19-C20-C21
22	C	510	CLA	O1D-CGD-O2D-CED
24	a	413	BCR	C1-C6-C7-C8
24	c	916	BCR	C1-C6-C7-C8
22	b	615	CLA	C2-C3-C5-C6
22	b	605	CLA	C2C-C3C-CAC-CBC
35	d	406	DGD	C7A-C8A-C9A-CAA
34	B	627	HTG	C1'-C2'-C3'-C4'
22	C	506	CLA	O1D-CGD-O2D-CED
35	c	917	DGD	C2E-C1E-O5D-C6D
35	c	918	DGD	C2E-C1E-O5D-C6D
35	c	918	DGD	C4B-C5B-C6B-C7B
27	d	408	LHG	O7-C5-C6-O8
35	h	102	DGD	O1G-C1G-C2G-O2G
27	a	423	LHG	C4-O6-P-O3
27	d	407	LHG	C4-O6-P-O3
28	l	101	SQD	C7-C8-C9-C10
25	C	531	LMG	C21-C22-C23-C24
35	C	517	DGD	O6D-C5D-C6D-O5D
25	A	410	LMG	C7-C8-C9-O8

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Mol	Chain	Res	Type	Atoms
25	C	531	LMG	O1-C7-C8-C9
28	b	621	SQD	C44-C45-C46-O48
22	b	602	CLA	C4-C3-C5-C6
27	a	423	LHG	C10-C11-C12-C13
22	C	511	CLA	C2-C3-C5-C6
22	C	511	CLA	C6-C7-C8-C10
22	b	602	CLA	C6-C7-C8-C10
29	a	419	LMT	C7-C8-C9-C10
35	C	517	DGD	CDA-CEA-CFA-CGA
22	C	510	CLA	C11-C12-C13-C14
22	b	602	CLA	C11-C12-C13-C14
22	c	905	CLA	C11-C12-C13-C14
22	c	907	CLA	C6-C7-C8-C9
22	c	908	CLA	C11-C12-C13-C14
22	c	914	CLA	C14-C13-C15-C16
22	d	402	CLA	C11-C12-C13-C14
24	C	515	BCR	C13-C14-C15-C16
22	a	408	CLA	C4C-C3C-CAC-CBC
27	D	409	LHG	C25-C26-C27-C28
27	a	416	LHG	C17-C18-C19-C20
35	h	102	DGD	CAA-CBA-CCA-CDA
27	l	102	LHG	C31-C32-C33-C34
29	B	622	LMT	C3-C4-C5-C6
35	c	918	DGD	C9A-CAA-CBA-CCA
29	E	101	LMT	C1-C2-C3-C4
22	b	616	CLA	C4-C3-C5-C6
27	a	416	LHG	C35-C36-C37-C38
22	B	606	CLA	C8-C10-C11-C12
25	C	531	LMG	C10-C11-C12-C13
35	C	517	DGD	C4D-C5D-C6D-O5D
34	b	623	HTG	C4-C5-C6-O6
37	H	101	RRX	C9-C10-C11-C12
37	h	101	RRX	C9-C10-C11-C12
29	c	921	LMT	C5-C6-C7-C8
27	D	410	LHG	C29-C30-C31-C32
28	a	414	SQD	C28-C29-C30-C31
22	b	611	CLA	C16-C17-C18-C20
22	b	606	CLA	O1D-CGD-O2D-CED
27	d	407	LHG	C31-C32-C33-C34
36	e	101	HEM	CAA-CBA-CGA-O1A
25	B	621	LMG	C4-C5-C6-O5
27	a	416	LHG	O2-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
22	B	616	CLA	C13-C15-C16-C17
35	C	518	DGD	C2E-C1E-O5D-C6D
22	c	902	CLA	C2A-CAA-CBA-CGA
25	C	520	LMG	O1-C7-C8-O7
28	A	413	SQD	O47-C45-C46-O48
27	D	409	LHG	C11-C10-C9-C8
22	B	613	CLA	C8-C10-C11-C12
28	A	413	SQD	C24-C23-O48-C46
22	c	906	CLA	C4-C3-C5-C6
27	d	401	LHG	C25-C26-C27-C28
26	A	411	PL9	C13-C14-C16-C17
26	D	406	PL9	C43-C44-C46-C47
22	b	611	CLA	C11-C12-C13-C14
23	D	402	PHO	C6-C7-C8-C9
25	j	101	LMG	C32-C33-C34-C35
27	l	102	LHG	C1-C2-C3-O3
35	h	102	DGD	O1G-C1G-C2G-C3G
27	d	407	LHG	C28-C29-C30-C31
25	D	412	LMG	C21-C22-C23-C24
35	C	519	DGD	CDA-CEA-CFA-CGA
22	B	605	CLA	O2A-C1-C2-C3
25	C	531	LMG	C17-C18-C19-C20
36	e	101	HEM	CAA-CBA-CGA-O2A
34	v	203	HTG	S1-C1'-C2'-C3'
22	B	616	CLA	C4-C3-C5-C6
22	A	408	CLA	C12-C13-C15-C16
22	C	506	CLA	C12-C13-C15-C16
22	C	508	CLA	C11-C10-C8-C7
22	C	508	CLA	C11-C12-C13-C15
22	C	510	CLA	C11-C10-C8-C7
22	C	510	CLA	C11-C12-C13-C15
22	c	903	CLA	C12-C13-C15-C16
22	c	904	CLA	C6-C7-C8-C10
34	B	627	HTG	C4'-C5'-C6'-C7'
28	a	418	SQD	C10-C11-C12-C13
29	E	101	LMT	O1'-C1-C2-C3
35	H	102	DGD	C5A-C6A-C7A-C8A
24	K	101	BCR	C9-C10-C11-C12
27	l	102	LHG	C23-C24-C25-C26
22	d	402	CLA	C15-C16-C17-C18
35	c	917	DGD	CAA-CBA-CCA-CDA
27	l	102	LHG	C17-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
26	a	415	PL9	C3-C7-C8-C9
35	C	517	DGD	C8A-C9A-CAA-CBA
26	d	405	PL9	C35-C34-C36-C37
28	l	101	SQD	C11-C10-C9-C8
22	b	602	CLA	C2-C3-C5-C6
22	c	911	CLA	O1A-CGA-O2A-C1
22	a	412	CLA	C10-C11-C12-C13
37	h	101	RRX	C19-C20-C21-C22
34	v	203	HTG	C4-C5-C6-O6
27	d	407	LHG	C11-C12-C13-C14
28	b	621	SQD	C34-C35-C36-C37
29	a	419	LMT	C4-C5-C6-C7
35	C	519	DGD	C4B-C5B-C6B-C7B
35	C	519	DGD	C6B-C7B-C8B-C9B
26	D	406	PL9	C34-C36-C37-C38
35	c	917	DGD	C6A-C7A-C8A-C9A
26	A	411	PL9	C15-C14-C16-C17
35	H	102	DGD	CCA-CDA-CEA-CFA
35	c	919	DGD	O1A-C1A-O1G-C1G
35	D	407	DGD	C6A-C7A-C8A-C9A
22	B	613	CLA	C10-C11-C12-C13
25	c	920	LMG	C22-C23-C24-C25
22	C	510	CLA	C2A-CAA-CBA-CGA
34	C	521	HTG	O5-C5-C6-O6
35	H	102	DGD	O1B-C1B-C2B-C3B
24	a	413	BCR	C5-C6-C7-C8
24	y	101	BCR	C23-C24-C25-C30
22	b	616	CLA	C8-C10-C11-C12
27	D	411	LHG	C26-C27-C28-C29
35	C	519	DGD	C8A-C9A-CAA-CBA
28	a	414	SQD	C10-C11-C12-C13
22	C	511	CLA	C4-C3-C5-C6
28	f	101	SQD	C45-C44-O6-C1
22	B	610	CLA	C2-C3-C5-C6
35	c	917	DGD	C5D-C6D-O5D-C1E
27	D	409	LHG	C19-C20-C21-C22
35	D	407	DGD	C9B-CAB-CBB-CCB
25	A	410	LMG	C15-C16-C17-C18
35	C	518	DGD	C8A-C9A-CAA-CBA
39	V	202	HEC	CAD-CBD-CGD-O2D
28	b	621	SQD	C44-C45-O47-C7
28	A	413	SQD	O10-C23-O48-C46

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Mol	Chain	Res	Type	Atoms
22	C	511	CLA	C12-C13-C15-C16
22	b	607	CLA	C11-C12-C13-C15
25	i	101	LMG	O10-C28-C29-C30
28	D	408	SQD	C2-C1-O6-C44
29	c	931	LMT	O1'-C1-C2-C3
27	D	410	LHG	C35-C36-C37-C38
22	b	607	CLA	C16-C17-C18-C20
22	b	609	CLA	C16-C17-C18-C19
22	d	402	CLA	C16-C17-C18-C19
26	A	411	PL9	C2-C3-C7-C8
34	C	532	HTG	C2'-C1'-S1-C1
34	b	632	HTG	C2'-C1'-S1-C1
22	c	913	CLA	CAA-CBA-CGA-O2A
35	c	917	DGD	O2G-C1B-C2B-C3B
22	B	604	CLA	C4-C3-C5-C6
22	a	412	CLA	C4-C3-C5-C6
39	v	202	HEC	CAD-CBD-CGD-O2D
22	b	616	CLA	C2-C3-C5-C6
26	d	405	PL9	C33-C34-C36-C37
22	B	604	CLA	C11-C10-C8-C9
22	C	506	CLA	C14-C13-C15-C16
22	C	508	CLA	C11-C10-C8-C9
22	C	510	CLA	C11-C10-C8-C9
22	C	511	CLA	C11-C10-C8-C9
22	C	514	CLA	C11-C12-C13-C14
22	b	605	CLA	C11-C10-C8-C9
22	b	605	CLA	C11-C12-C13-C14
22	b	609	CLA	C11-C12-C13-C14
22	c	907	CLA	C11-C12-C13-C14
22	c	909	CLA	C11-C12-C13-C14
22	c	910	CLA	C11-C12-C13-C14
29	c	931	LMT	C9-C10-C11-C12
22	b	616	CLA	C3A-C2A-CAA-CBA
27	d	408	LHG	C27-C28-C29-C30
22	C	511	CLA	O1A-CGA-O2A-C1
25	j	101	LMG	C40-C41-C42-C43
22	A	405	CLA	CAD-CBD-CGD-O2D
22	B	604	CLA	CAD-CBD-CGD-O2D
22	B	605	CLA	CAD-CBD-CGD-O2D
22	B	608	CLA	CAD-CBD-CGD-O2D
22	B	611	CLA	CAD-CBD-CGD-O2D
22	C	504	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
22	C	505	CLA	CAD-CBD-CGD-O2D
22	C	511	CLA	CAD-CBD-CGD-O2D
22	D	404	CLA	CAD-CBD-CGD-O2D
22	a	407	CLA	CAD-CBD-CGD-O2D
22	b	611	CLA	CAD-CBD-CGD-O2D
22	b	613	CLA	CAD-CBD-CGD-O2D
22	c	906	CLA	CAD-CBD-CGD-O2D
22	c	914	CLA	CAD-CBD-CGD-O2D
22	c	911	CLA	CBA-CGA-O2A-C1
22	c	903	CLA	C16-C17-C18-C20
27	D	411	LHG	C31-C32-C33-C34
22	C	514	CLA	C10-C11-C12-C13
22	c	913	CLA	C10-C11-C12-C13
35	D	407	DGD	CBB-CCB-CDB-CEB
22	B	602	CLA	CAA-CBA-CGA-O2A
25	d	409	LMG	O8-C28-C29-C30
28	a	414	SQD	O47-C7-C8-C9
29	T	102	LMT	C7-C8-C9-C10
25	D	412	LMG	C34-C35-C36-C37
22	a	408	CLA	C16-C17-C18-C20
39	V	202	HEC	CAD-CBD-CGD-O1D
39	v	202	HEC	CAD-CBD-CGD-O1D
22	C	509	CLA	C5-C6-C7-C8
22	B	616	CLA	C2-C3-C5-C6
24	Y	101	BCR	C17-C18-C19-C20
27	d	408	LHG	C17-C18-C19-C20
23	D	402	PHO	C2C-C3C-CAC-CBC
23	a	411	PHO	C2C-C3C-CAC-CBC
25	C	520	LMG	O1-C7-C8-C9
28	A	413	SQD	C44-C45-C46-O48
28	l	101	SQD	O6-C44-C45-C46
35	c	919	DGD	O6D-C5D-C6D-O5D
27	C	522	LHG	O6-C4-C5-O7
27	l	102	LHG	O6-C4-C5-O7
28	l	101	SQD	O47-C7-C8-C9
34	D	415	HTG	C4-C5-C6-O6
25	A	410	LMG	C40-C41-C42-C43
23	a	411	PHO	C5-C6-C7-C8
22	D	404	CLA	O2A-C1-C2-C3
22	d	402	CLA	O2A-C1-C2-C3
35	C	518	DGD	C2B-C3B-C4B-C5B
22	C	513	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
35	d	406	DGD	C2D-C1D-O3G-C3G
25	B	621	LMG	C20-C21-C22-C23
22	b	604	CLA	CBD-CGD-O2D-CED
27	D	409	LHG	C30-C31-C32-C33
22	A	406	CLA	CHA-CBD-CGD-O2D
22	B	603	CLA	CHA-CBD-CGD-O1D
22	B	603	CLA	CHA-CBD-CGD-O2D
22	B	607	CLA	CHA-CBD-CGD-O2D
22	C	503	CLA	CHA-CBD-CGD-O2D
22	C	510	CLA	CHA-CBD-CGD-O2D
22	C	511	CLA	CHA-CBD-CGD-O1D
22	D	401	CLA	CHA-CBD-CGD-O2D
22	a	408	CLA	CHA-CBD-CGD-O1D
22	a	409	CLA	CHA-CBD-CGD-O2D
22	b	607	CLA	CHA-CBD-CGD-O2D
22	b	612	CLA	CHA-CBD-CGD-O2D
22	b	617	CLA	CHA-CBD-CGD-O2D
22	c	913	CLA	CHA-CBD-CGD-O1D
26	d	405	PL9	C36-C37-C38-C39
35	d	406	DGD	C8A-C9A-CAA-CBA
25	B	621	LMG	C16-C17-C18-C19
25	D	412	LMG	O7-C8-C9-O8
35	h	102	DGD	C7B-C8B-C9B-CAB
22	c	902	CLA	C13-C15-C16-C17
27	a	423	LHG	C12-C13-C14-C15
22	A	405	CLA	C2C-C3C-CAC-CBC
28	C	501	SQD	O47-C7-C8-C9
22	d	402	CLA	C16-C17-C18-C20
23	A	407	PHO	CHA-CBD-CGD-O1D
22	b	613	CLA	CBA-CGA-O2A-C1
34	B	627	HTG	C4-C5-C6-O6
35	C	519	DGD	C6A-C7A-C8A-C9A
22	c	910	CLA	C11-C12-C13-C15
26	D	406	PL9	C28-C29-C31-C32
22	b	611	CLA	C16-C17-C18-C19
26	d	405	PL9	C4-C3-C7-C8
35	H	102	DGD	C8A-C9A-CAA-CBA
22	B	602	CLA	C6-C7-C8-C9
22	B	603	CLA	C6-C7-C8-C9
22	B	604	CLA	C6-C7-C8-C9
22	C	511	CLA	C6-C7-C8-C9
22	a	412	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	b	602	CLA	C6-C7-C8-C9
22	b	608	CLA	C11-C10-C8-C9
22	b	609	CLA	C11-C10-C8-C9
22	c	903	CLA	C14-C13-C15-C16
22	c	910	CLA	C6-C7-C8-C9
22	D	401	CLA	C15-C16-C17-C18
25	c	920	LMG	C40-C41-C42-C43
29	E	101	LMT	C4-C5-C6-C7
22	C	511	CLA	CAA-CBA-CGA-O2A
22	b	604	CLA	C2A-CAA-CBA-CGA
26	D	406	PL9	C11-C12-C13-C14
22	b	614	CLA	CAA-CBA-CGA-O2A
22	a	412	CLA	C8-C10-C11-C12
35	h	102	DGD	CAB-CBB-CCB-CDB
22	C	513	CLA	CAA-CBA-CGA-O1A
35	c	917	DGD	O1B-C1B-C2B-C3B
22	C	514	CLA	C4-C3-C5-C6
25	c	920	LMG	C13-C14-C15-C16
22	C	503	CLA	C15-C16-C17-C18
29	a	419	LMT	C5-C6-C7-C8
22	c	913	CLA	CAA-CBA-CGA-O1A
24	K	101	BCR	C11-C12-C13-C14
22	B	613	CLA	CBA-CGA-O2A-C1
22	C	511	CLA	CBA-CGA-O2A-C1
22	b	602	CLA	C1A-C2A-CAA-CBA
22	A	405	CLA	C4C-C3C-CAC-CBC
27	D	410	LHG	C25-C26-C27-C28
22	b	614	CLA	C2-C1-O2A-CGA
28	l	101	SQD	C16-C17-C18-C19
25	d	409	LMG	O10-C28-C29-C30
28	b	621	SQD	O6-C44-C45-C46
35	h	102	DGD	C1G-C2G-C3G-O3G
27	D	411	LHG	C30-C31-C32-C33
29	Z	101	LMT	C7-C8-C9-C10
26	D	406	PL9	C45-C44-C46-C47
22	C	502	CLA	CAA-CBA-CGA-O2A
29	c	931	LMT	C5-C6-C7-C8
35	d	406	DGD	CDA-CEA-CFA-CGA
27	D	410	LHG	C4-O6-P-O5
27	L	101	LHG	C4-O6-P-O4
27	d	407	LHG	C4-O6-P-O5
28	a	414	SQD	C19-C20-C21-C22

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Mol	Chain	Res	Type	Atoms
22	B	602	CLA	CAA-CBA-CGA-O1A
24	c	915	BCR	C23-C24-C25-C30
27	C	522	LHG	C27-C28-C29-C30
22	b	604	CLA	C10-C11-C12-C13
22	b	614	CLA	CAA-CBA-CGA-O1A
22	B	611	CLA	C4C-C3C-CAC-CBC
22	c	911	CLA	CAA-CBA-CGA-O2A
22	B	607	CLA	C16-C17-C18-C19
25	B	621	LMG	O8-C28-C29-C30
28	l	101	SQD	O49-C7-C8-C9
26	A	411	PL9	C20-C19-C21-C22
26	D	406	PL9	C35-C34-C36-C37
22	A	406	CLA	CAD-CBD-CGD-O1D
22	b	613	CLA	CAD-CBD-CGD-O1D
22	c	907	CLA	CAD-CBD-CGD-O1D
28	C	501	SQD	C5-C6-S-O7
28	a	418	SQD	C5-C6-S-O9
22	C	511	CLA	CAA-CBA-CGA-O1A
22	C	514	CLA	C8-C10-C11-C12
22	C	508	CLA	C11-C12-C13-C14
22	D	404	CLA	C11-C10-C8-C9
22	c	905	CLA	C6-C7-C8-C9
22	c	910	CLA	C14-C13-C15-C16
28	C	501	SQD	C32-C33-C34-C35
25	C	531	LMG	O8-C28-C29-C30
27	D	411	LHG	O8-C23-C24-C25
35	C	519	DGD	O1G-C1A-C2A-C3A
27	a	423	LHG	C30-C31-C32-C33
27	l	102	LHG	C11-C12-C13-C14
22	B	608	CLA	C13-C15-C16-C17
35	c	919	DGD	CCA-CDA-CEA-CFA
22	b	602	CLA	CAA-CBA-CGA-O2A
27	D	409	LHG	O7-C7-C8-C9
27	L	101	LHG	O7-C7-C8-C9
28	a	418	SQD	O48-C23-C24-C25
22	B	606	CLA	C10-C11-C12-C13
28	C	501	SQD	O49-C7-C8-C9
27	D	411	LHG	C11-C12-C13-C14
22	B	610	CLA	C4-C3-C5-C6
26	D	406	PL9	C30-C29-C31-C32
22	C	511	CLA	C11-C10-C8-C7
22	D	404	CLA	C11-C10-C8-C7

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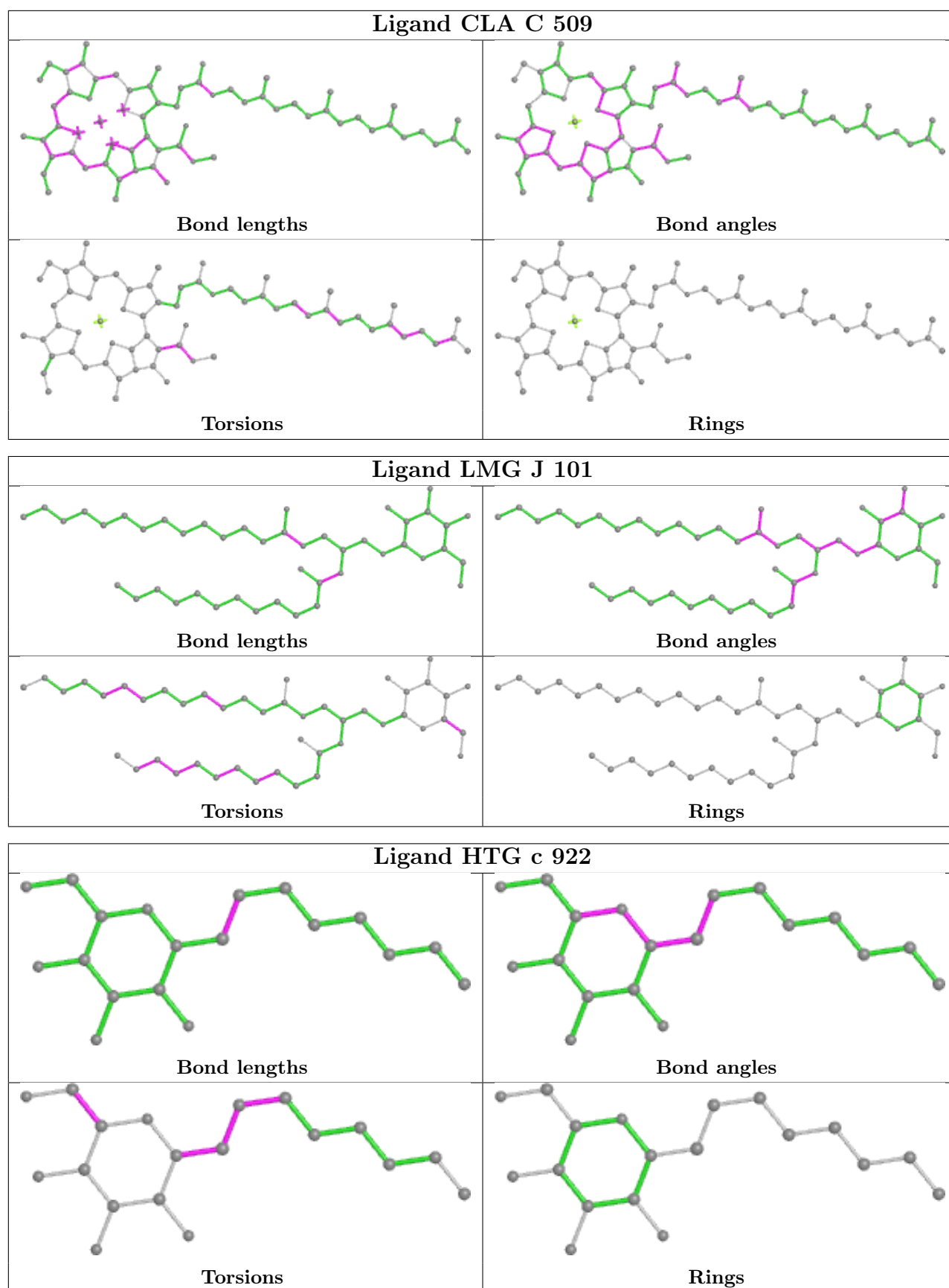
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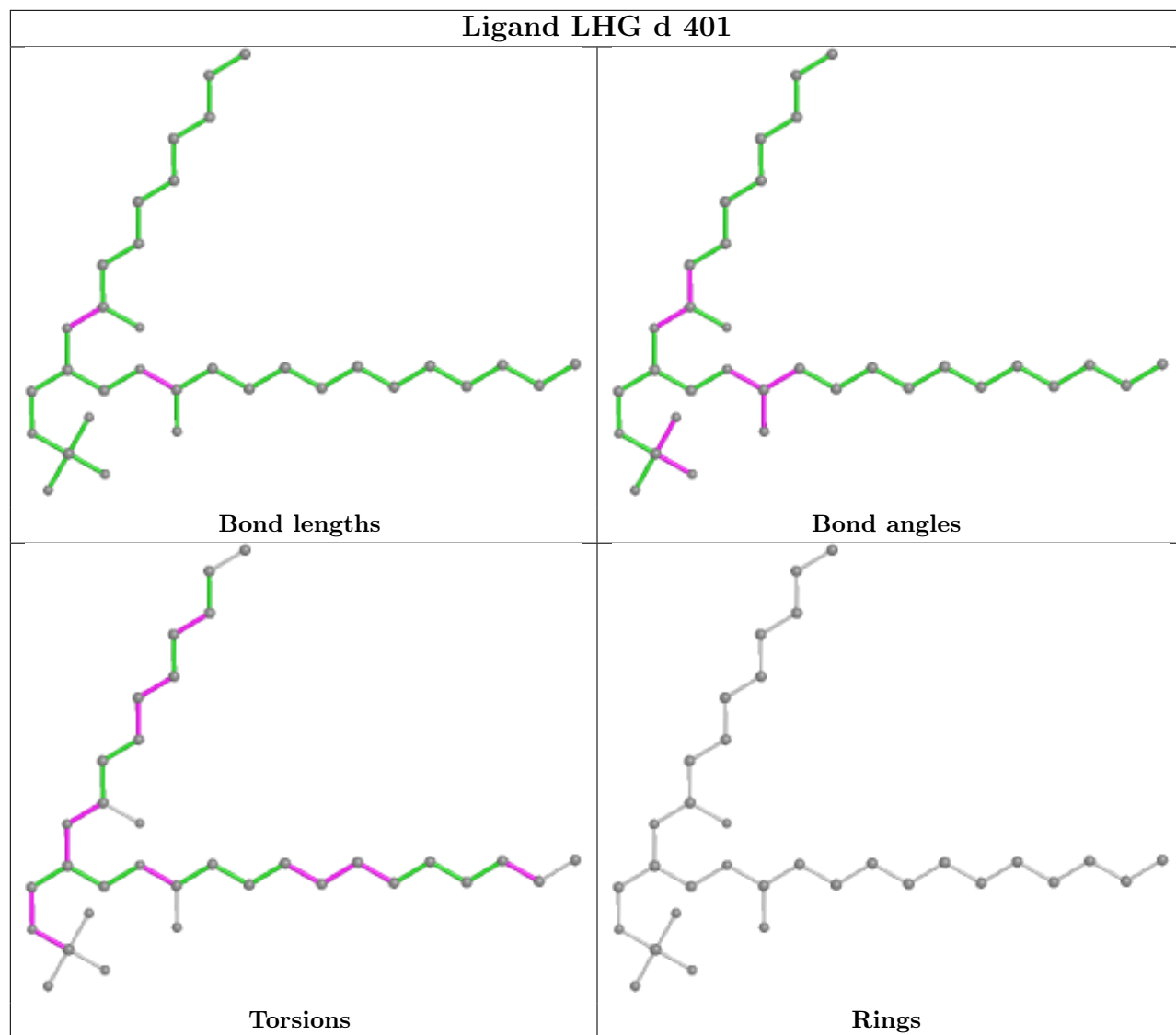
Mol	Chain	Res	Type	Atoms
22	a	412	CLA	C12-C13-C15-C16
22	b	612	CLA	C6-C7-C8-C10
34	v	203	HTG	C2-C1-S1-C1'
35	C	519	DGD	O1A-C1A-C2A-C3A
22	d	402	CLA	CAA-CBA-CGA-O2A
27	C	522	LHG	O8-C23-C24-C25
27	a	423	LHG	O8-C23-C24-C25
35	c	918	DGD	O2G-C1B-C2B-C3B
35	c	919	DGD	O1G-C1A-C2A-C3A
24	B	619	BCR	C11-C12-C13-C14
24	C	515	BCR	C21-C22-C23-C24
24	c	915	BCR	C11-C12-C13-C14
22	C	502	CLA	CAA-CBA-CGA-O1A
27	L	101	LHG	O9-C7-C8-C9
28	a	418	SQD	O10-C23-C24-C25
36	E	102	HEM	CAD-CBD-CGD-O1D
22	c	906	CLA	CAA-CBA-CGA-O2A
25	A	410	LMG	O6-C1-O1-C7
35	C	517	DGD	O6E-C1E-O5D-C6D
22	b	613	CLA	O1A-CGA-O2A-C1
25	i	101	LMG	C21-C22-C23-C24
35	C	517	DGD	O2G-C1B-C2B-C3B
22	B	611	CLA	C5-C6-C7-C8
27	D	409	LHG	O9-C7-C8-C9
35	c	919	DGD	O1A-C1A-C2A-C3A
22	b	607	CLA	C16-C17-C18-C19
35	H	102	DGD	C3B-C4B-C5B-C6B

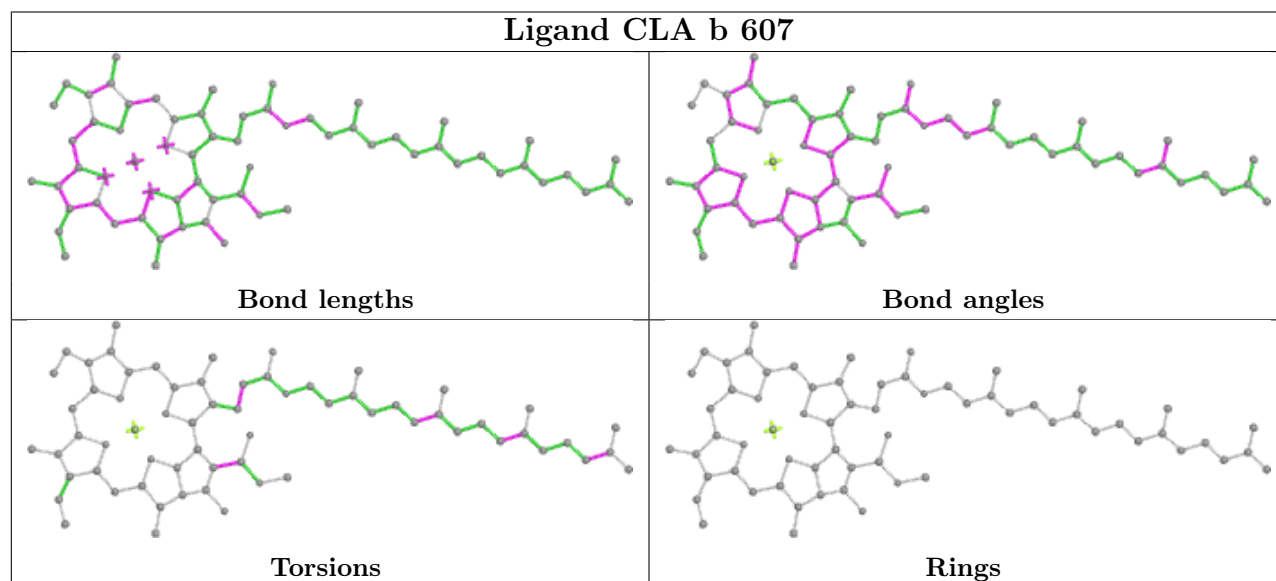
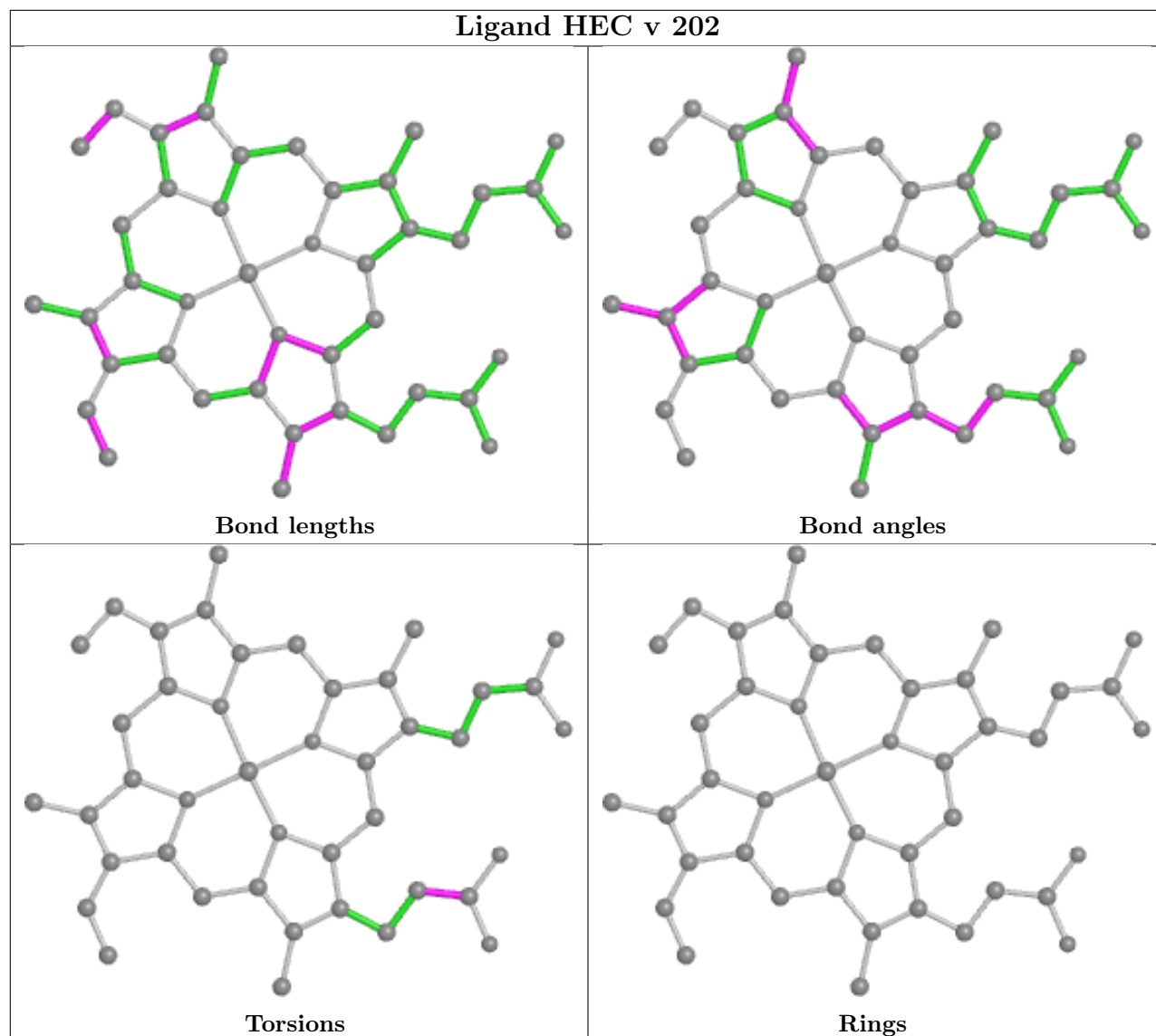
There are no ring outliers.

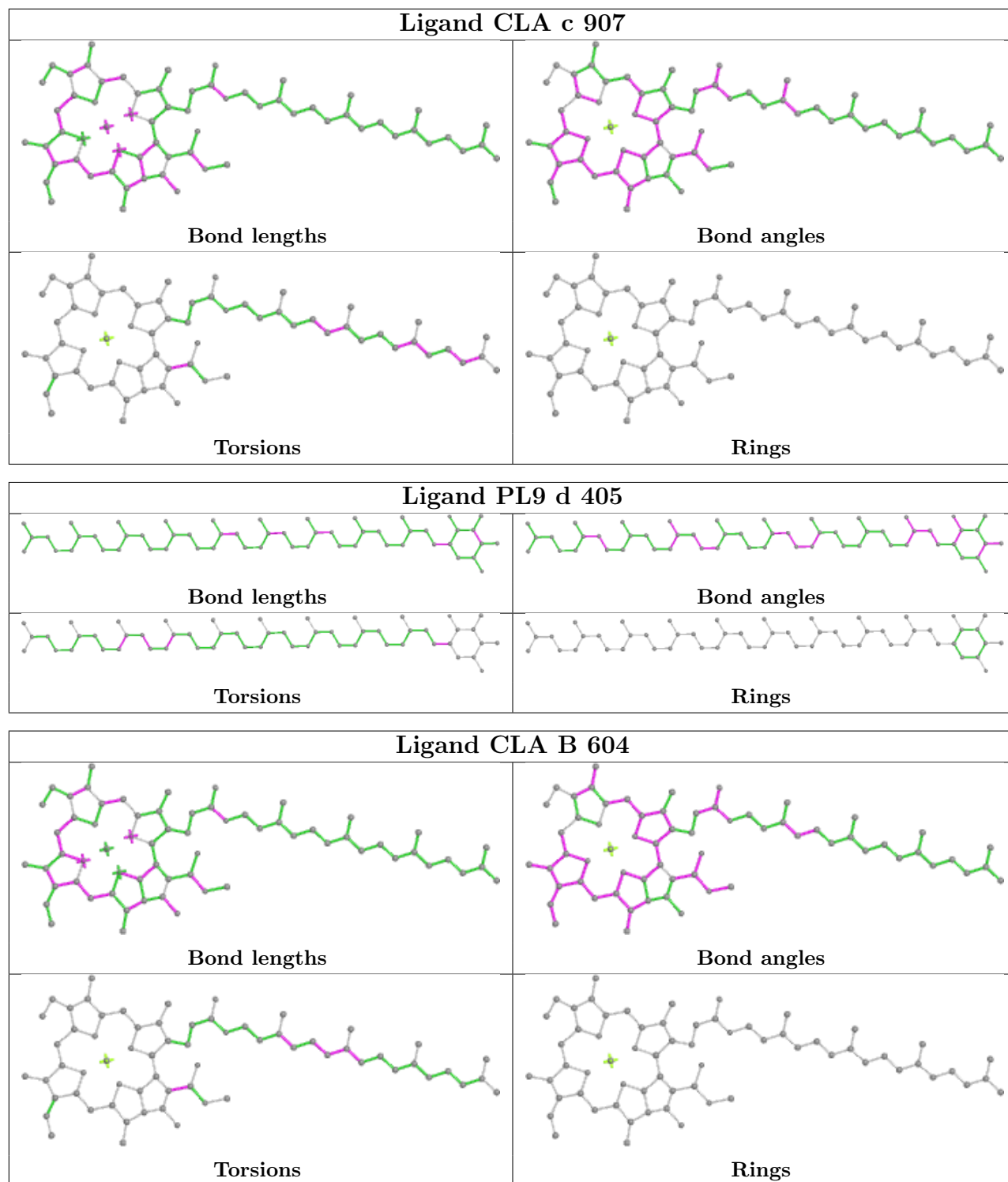
No monomer is involved in short contacts.

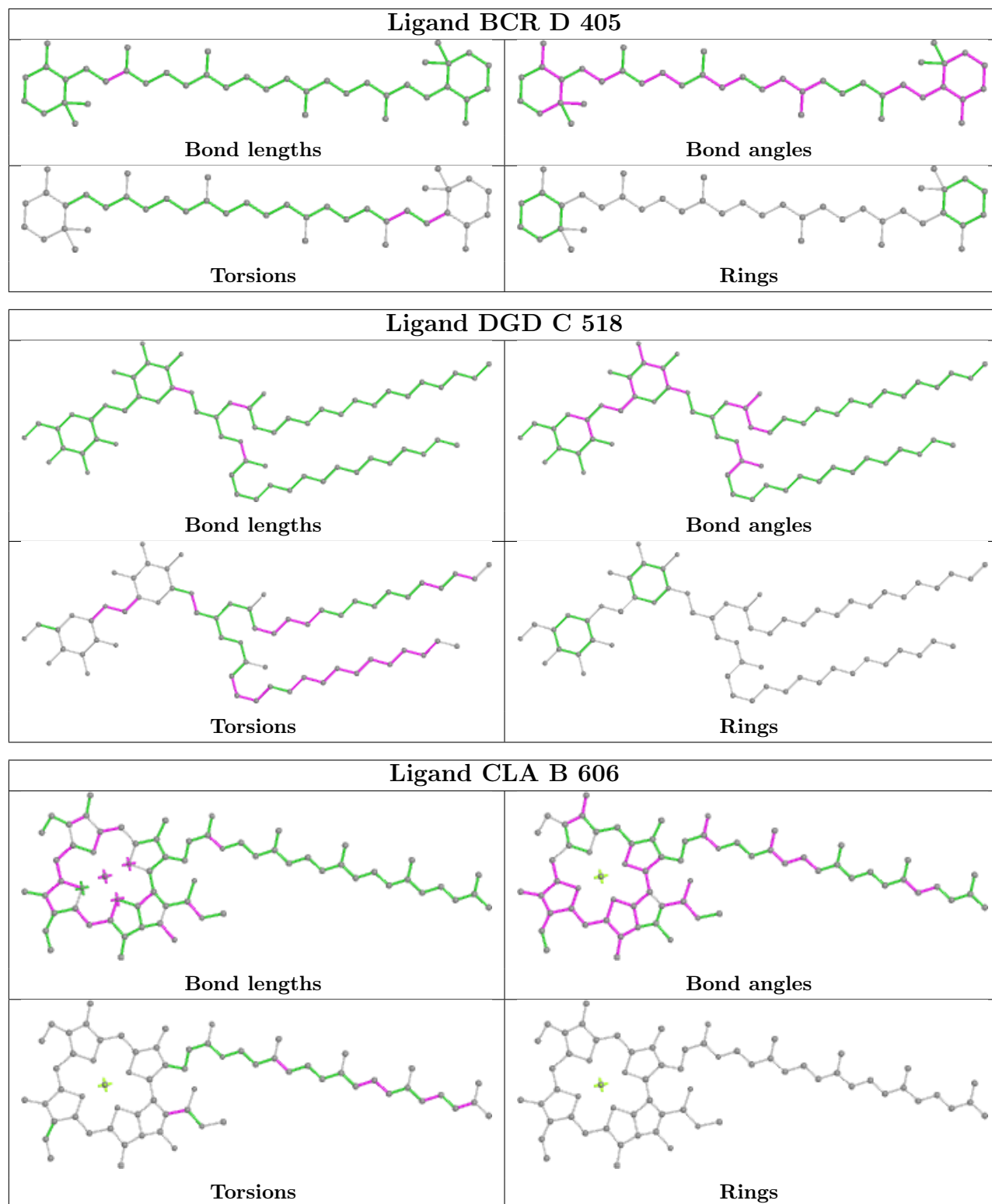
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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



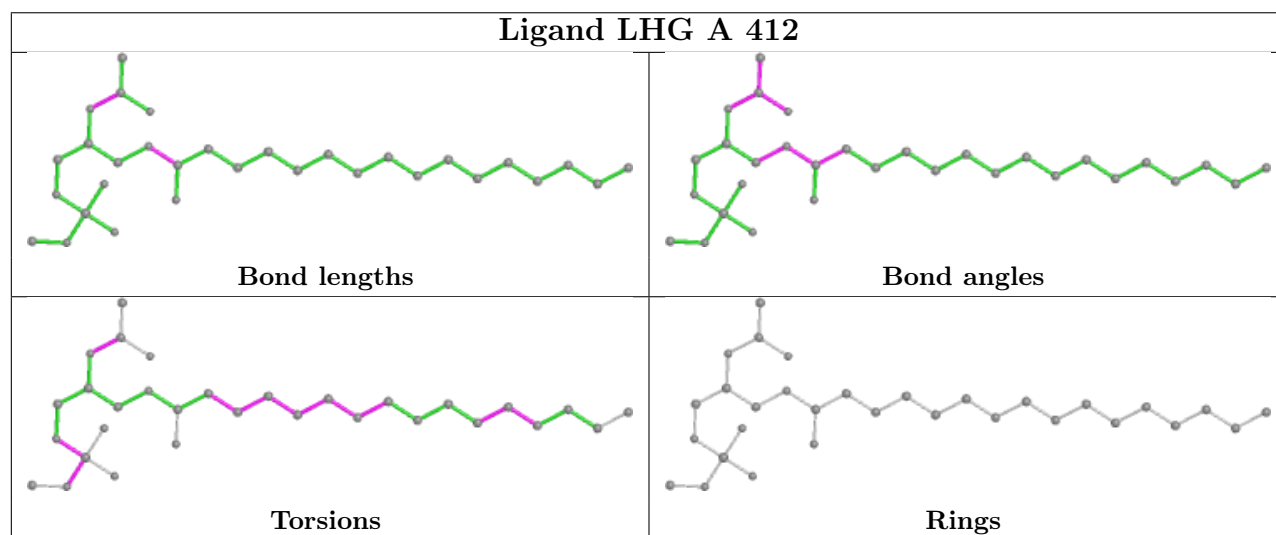
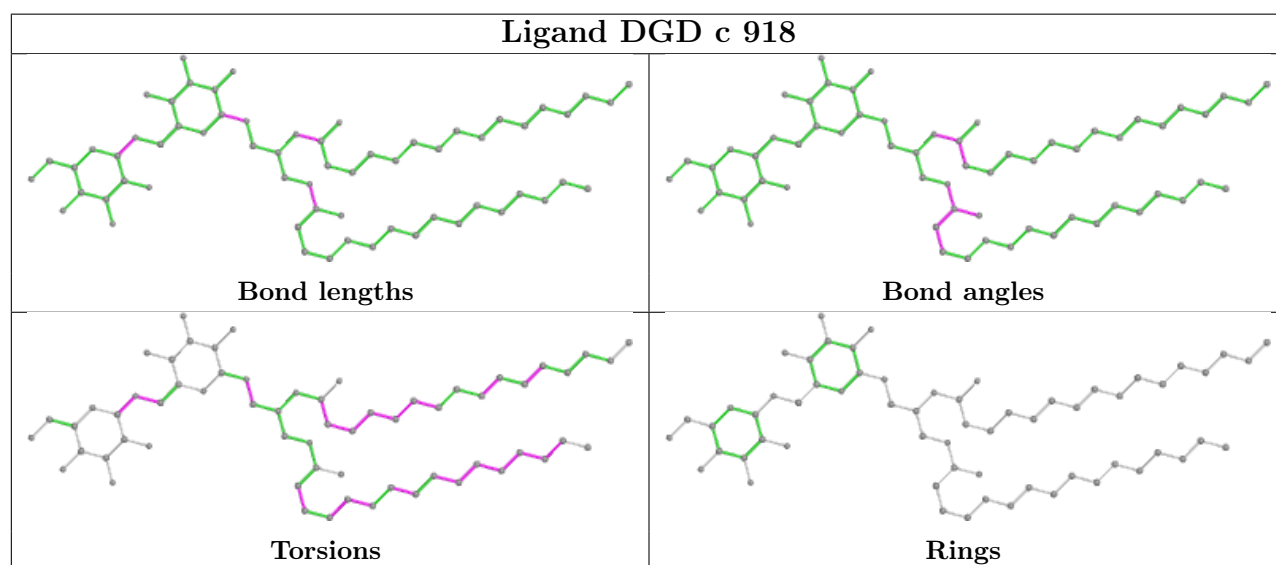
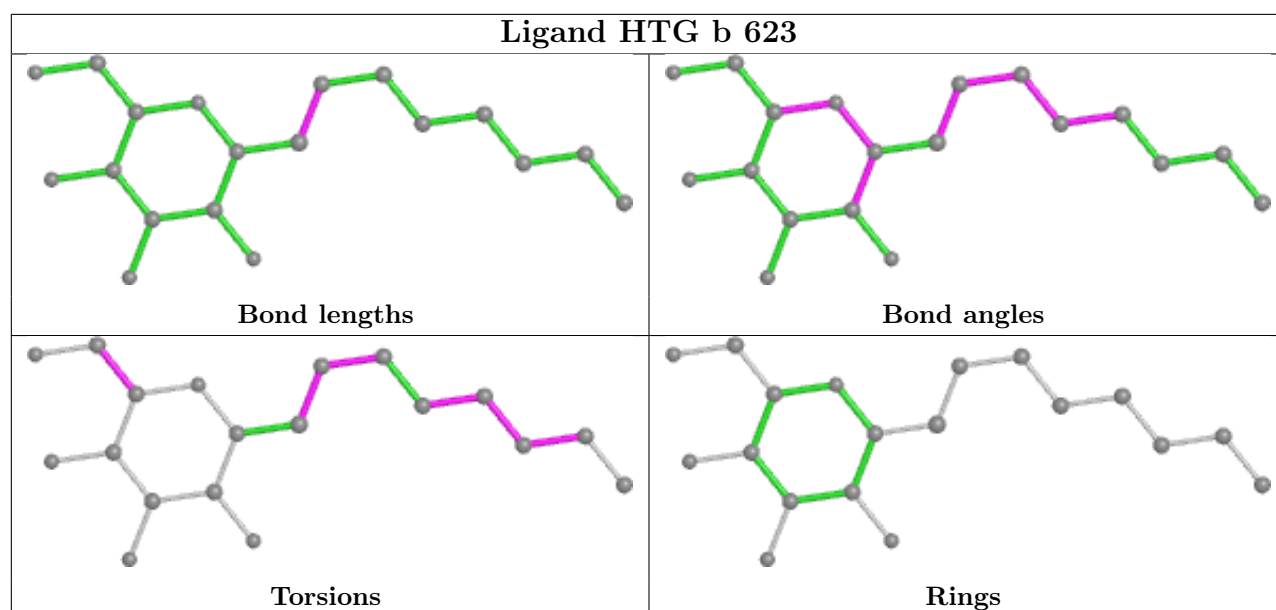


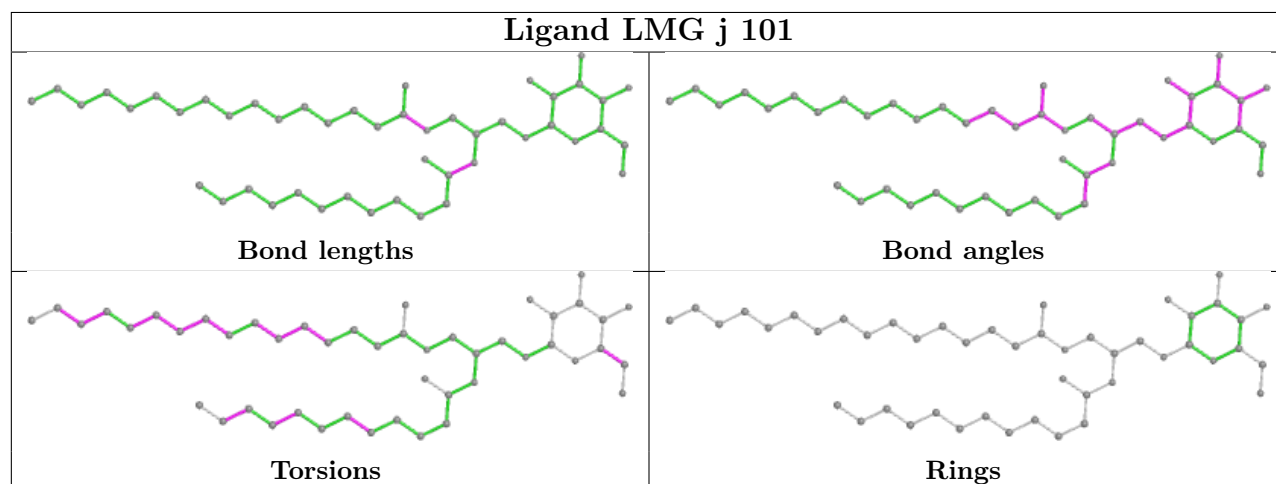
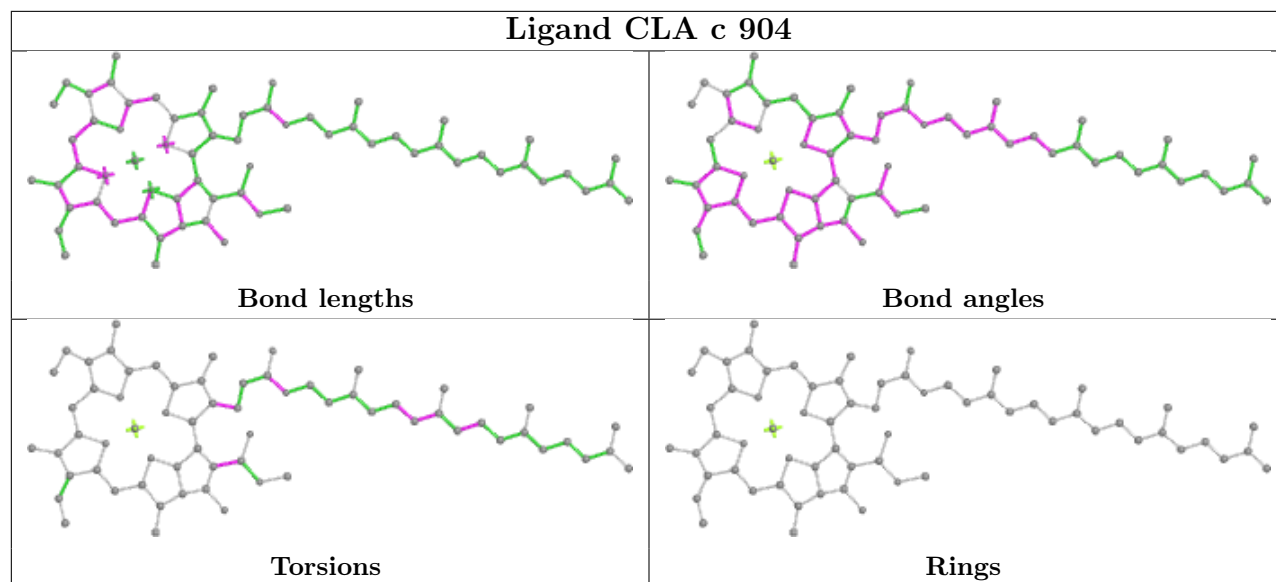


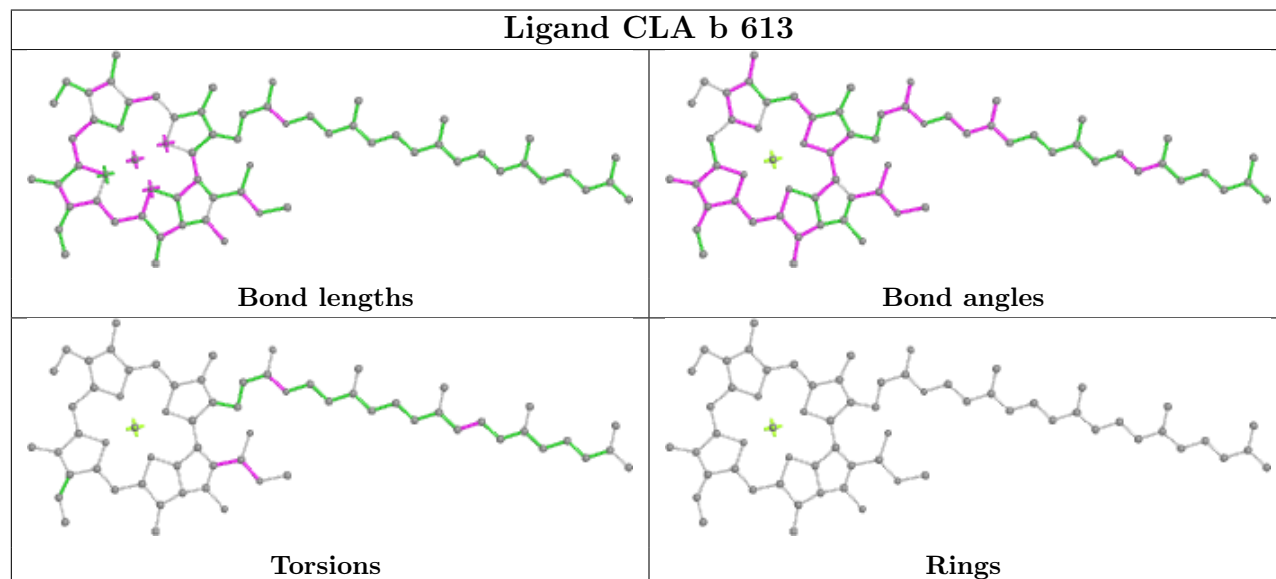
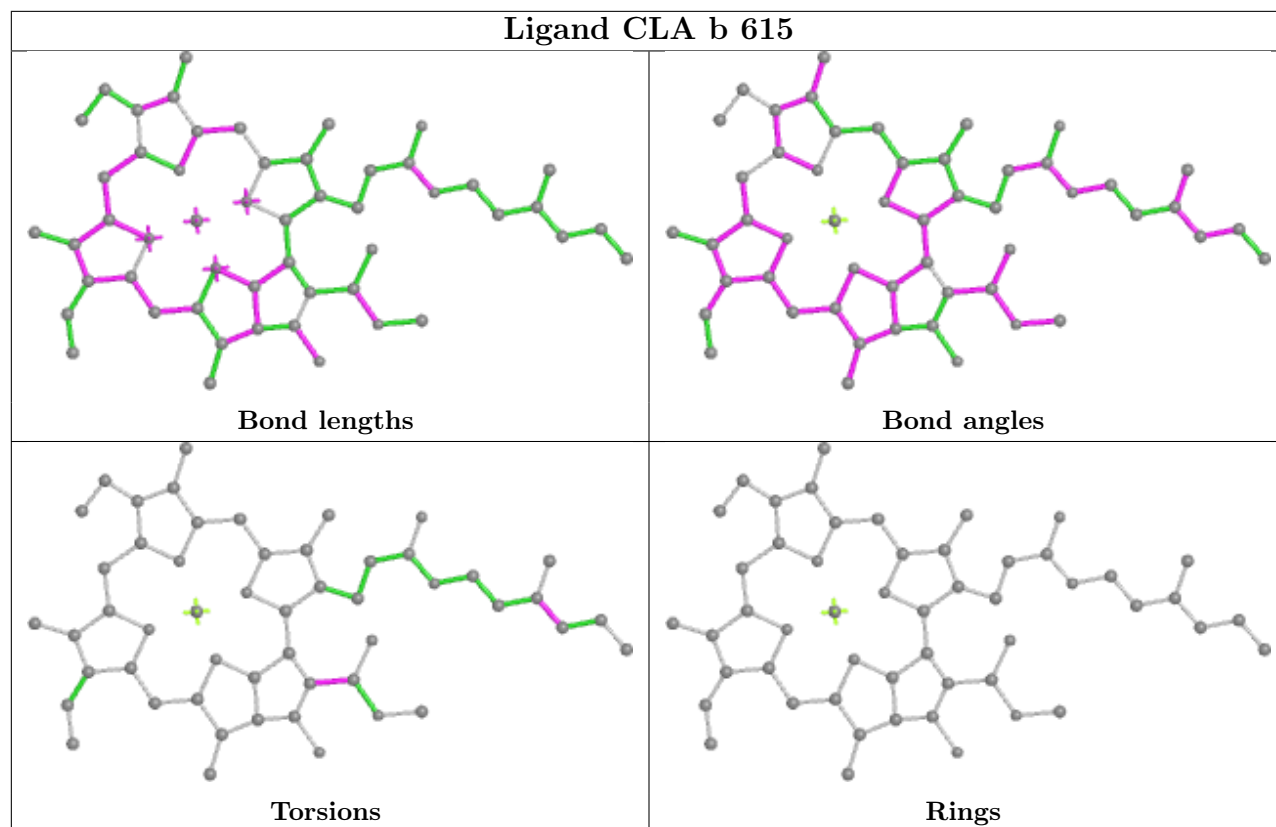


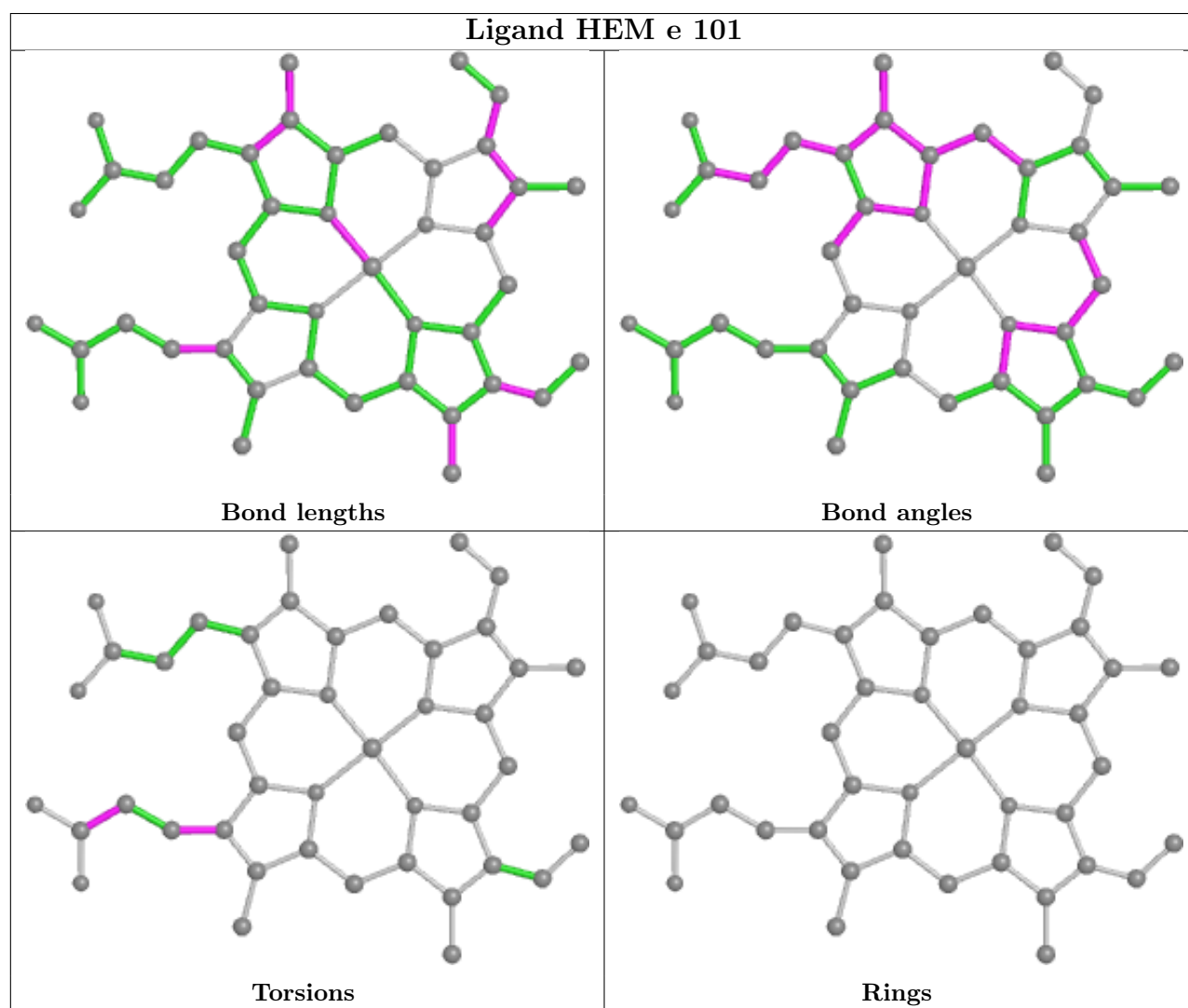
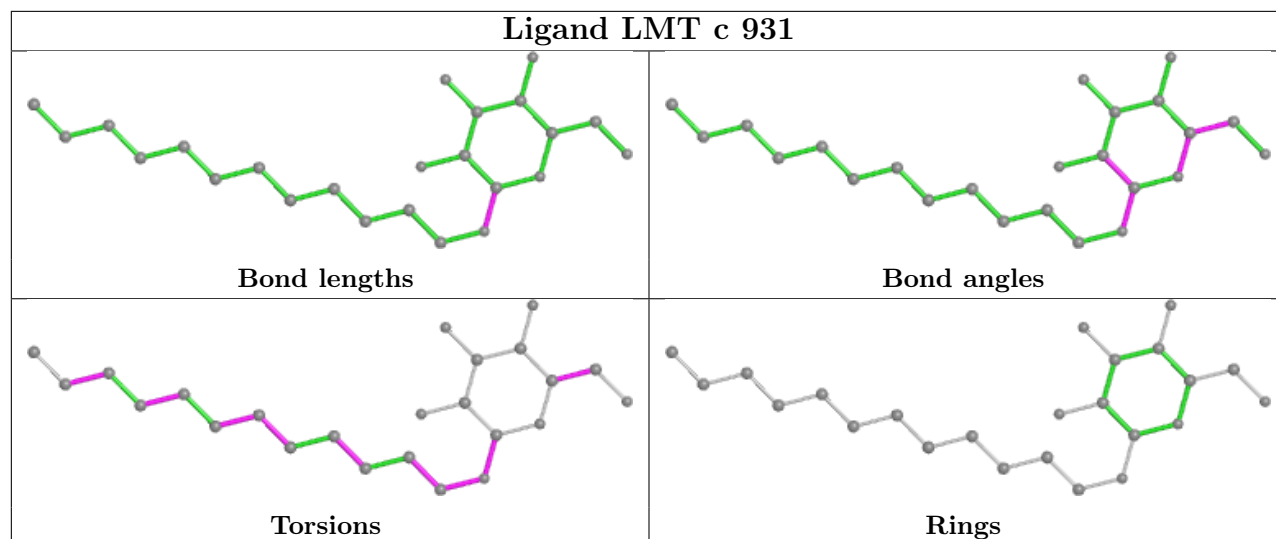


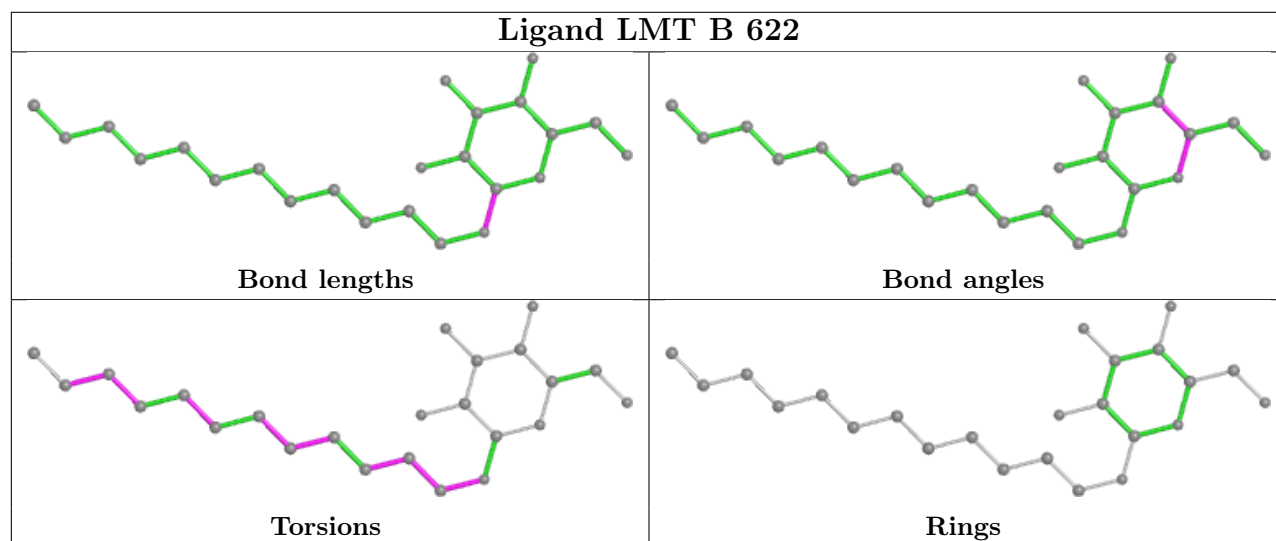
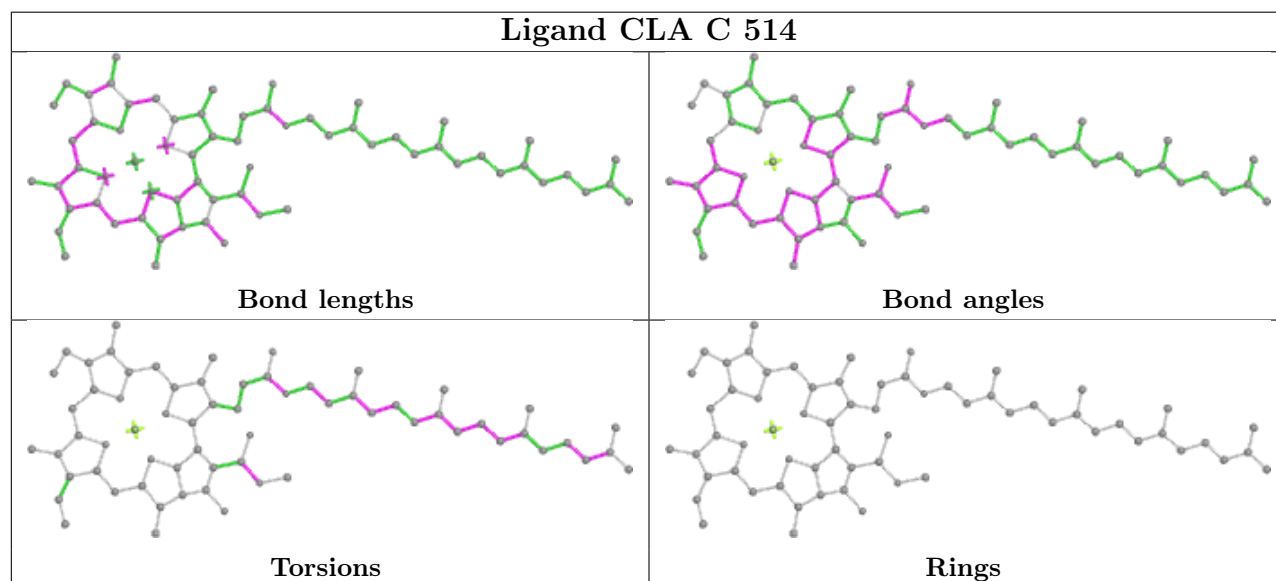
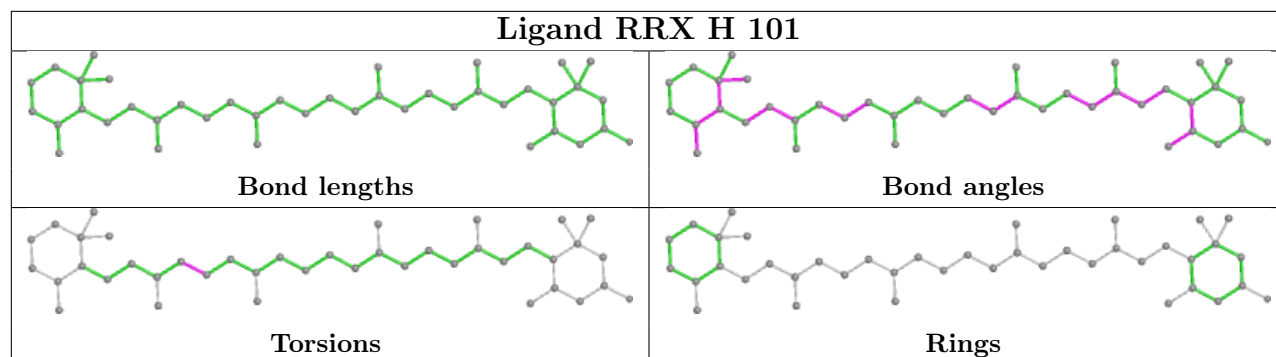


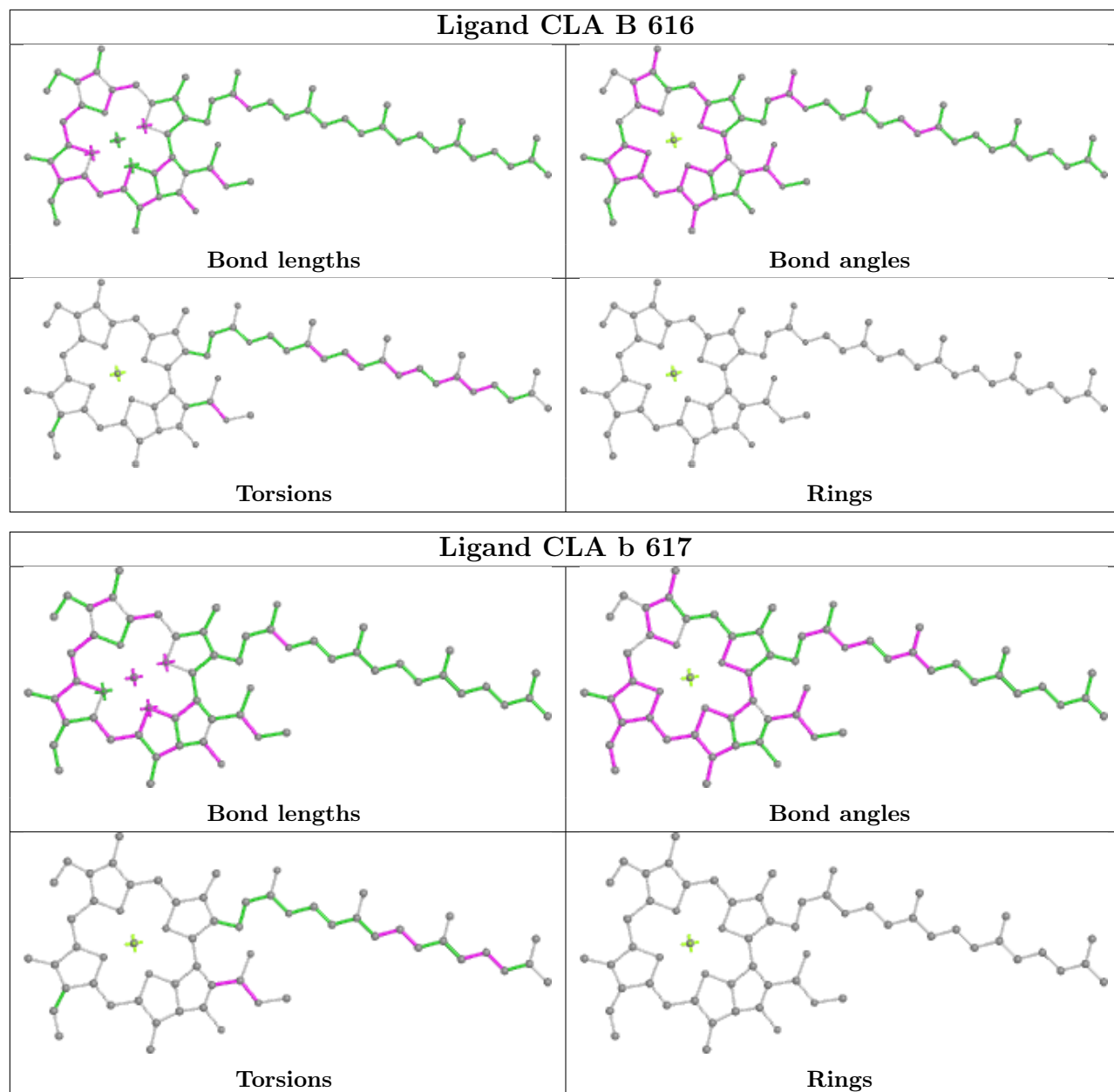


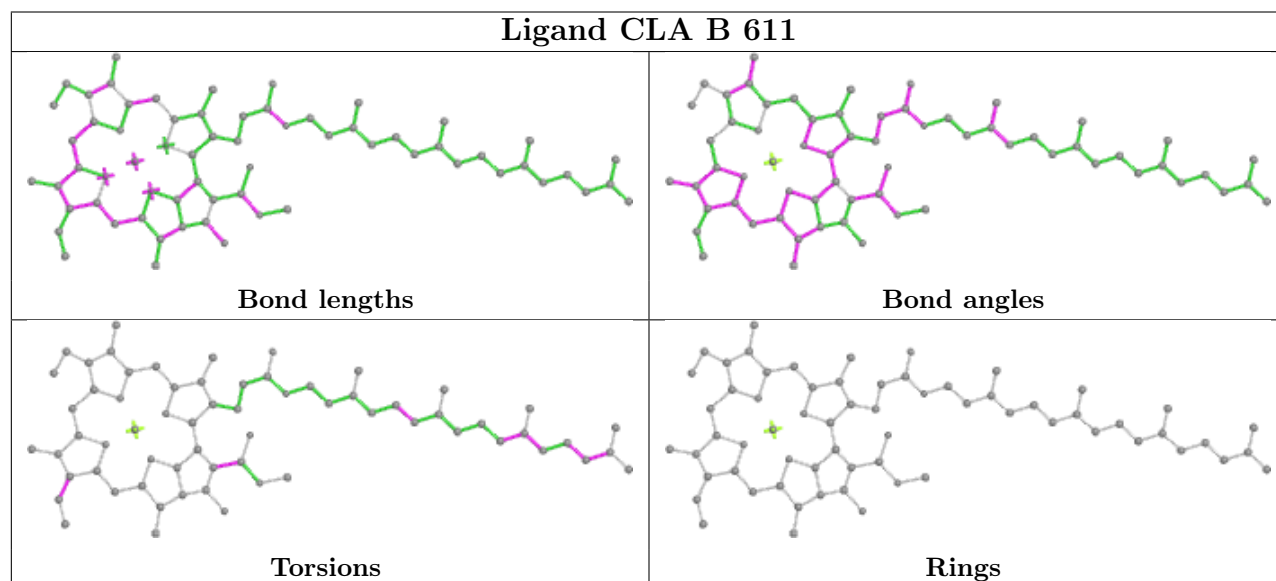
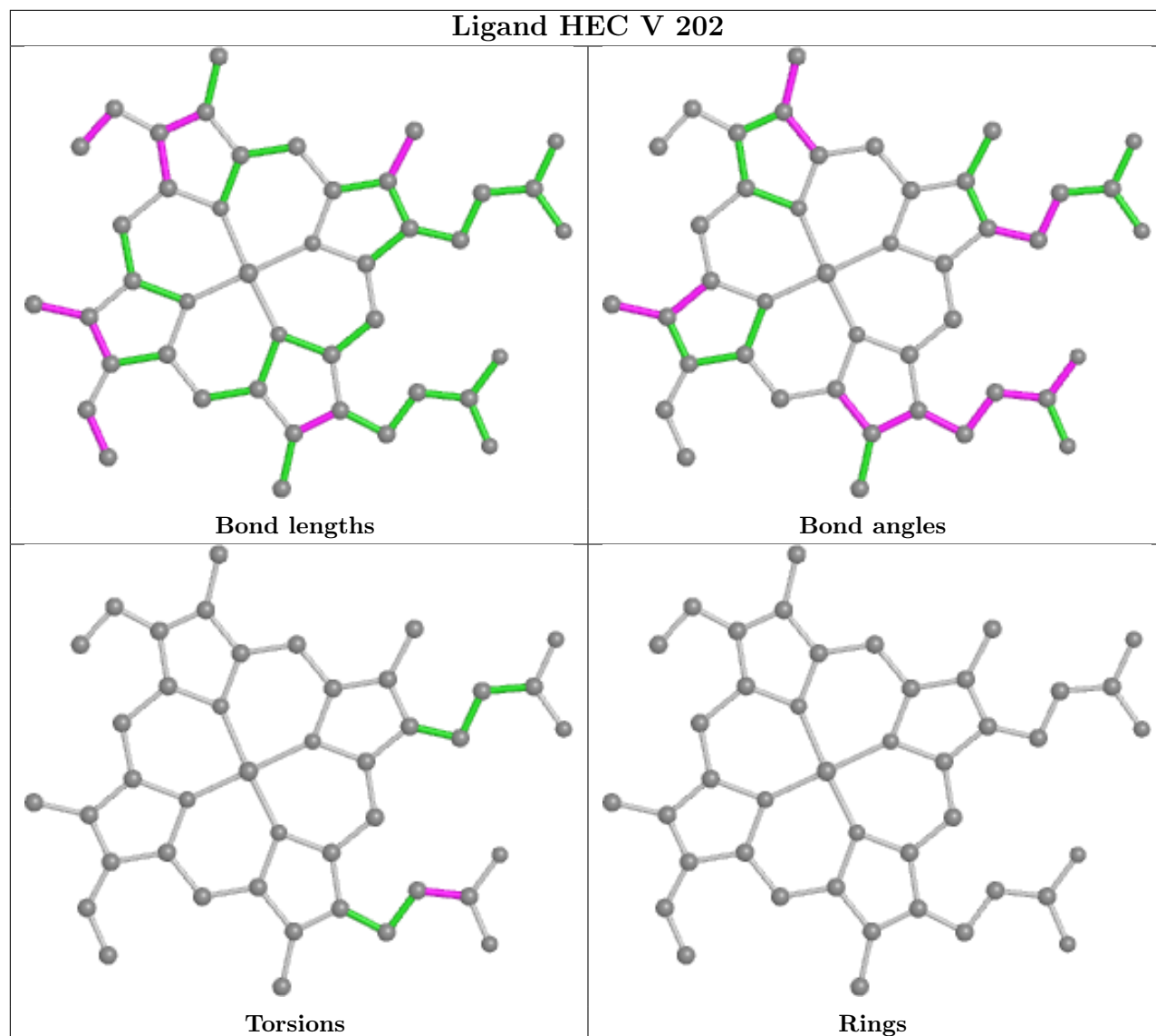


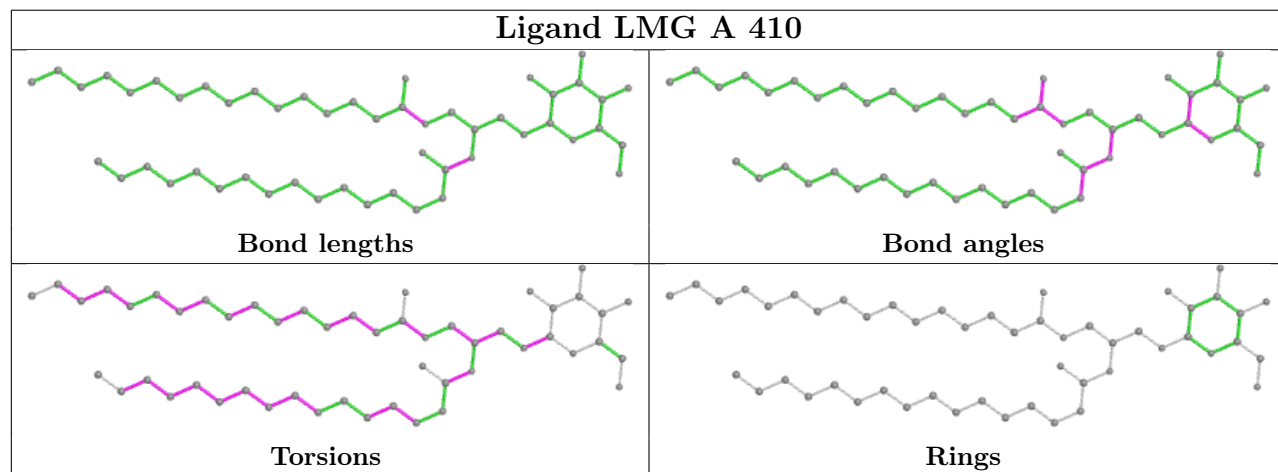
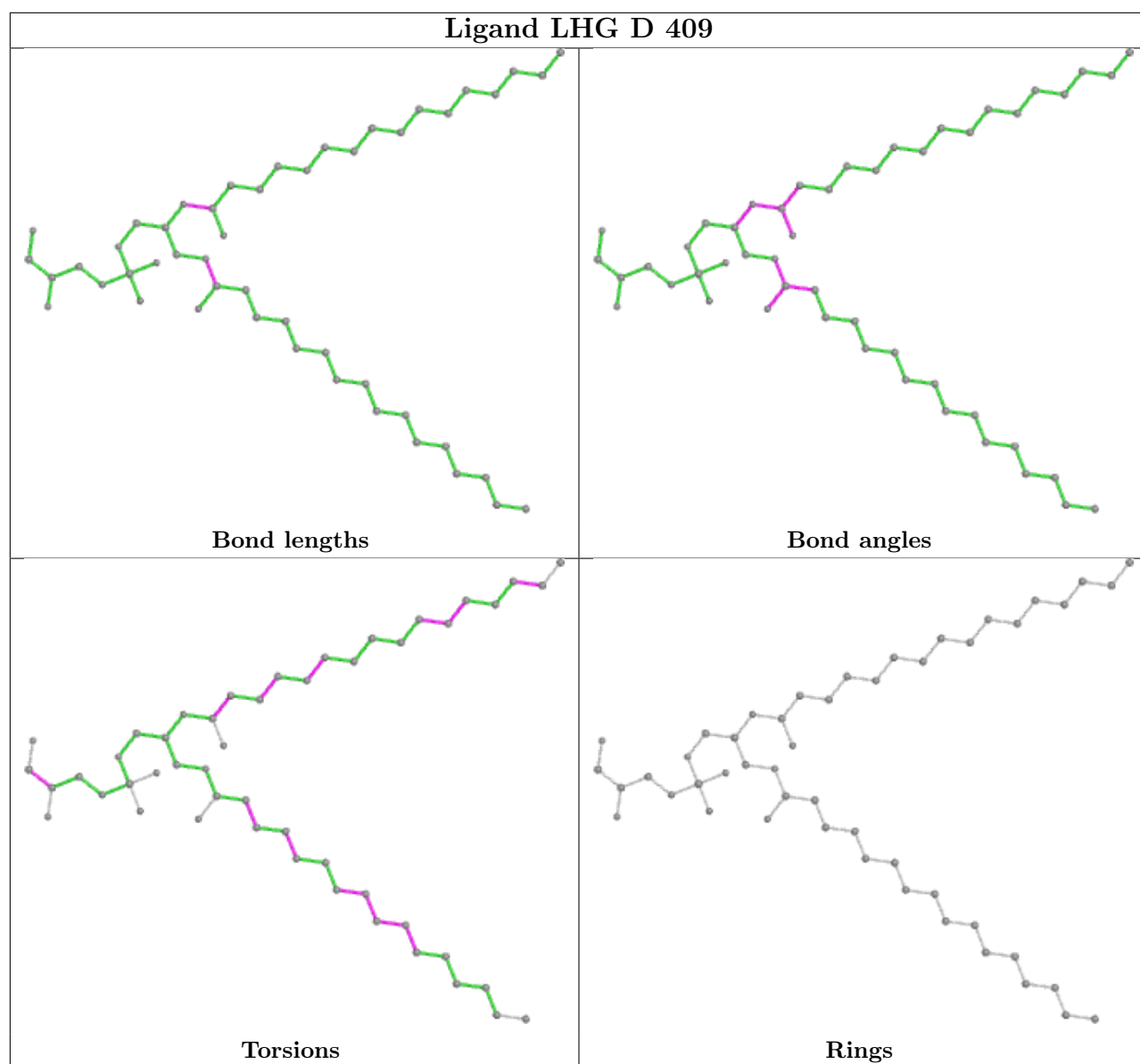




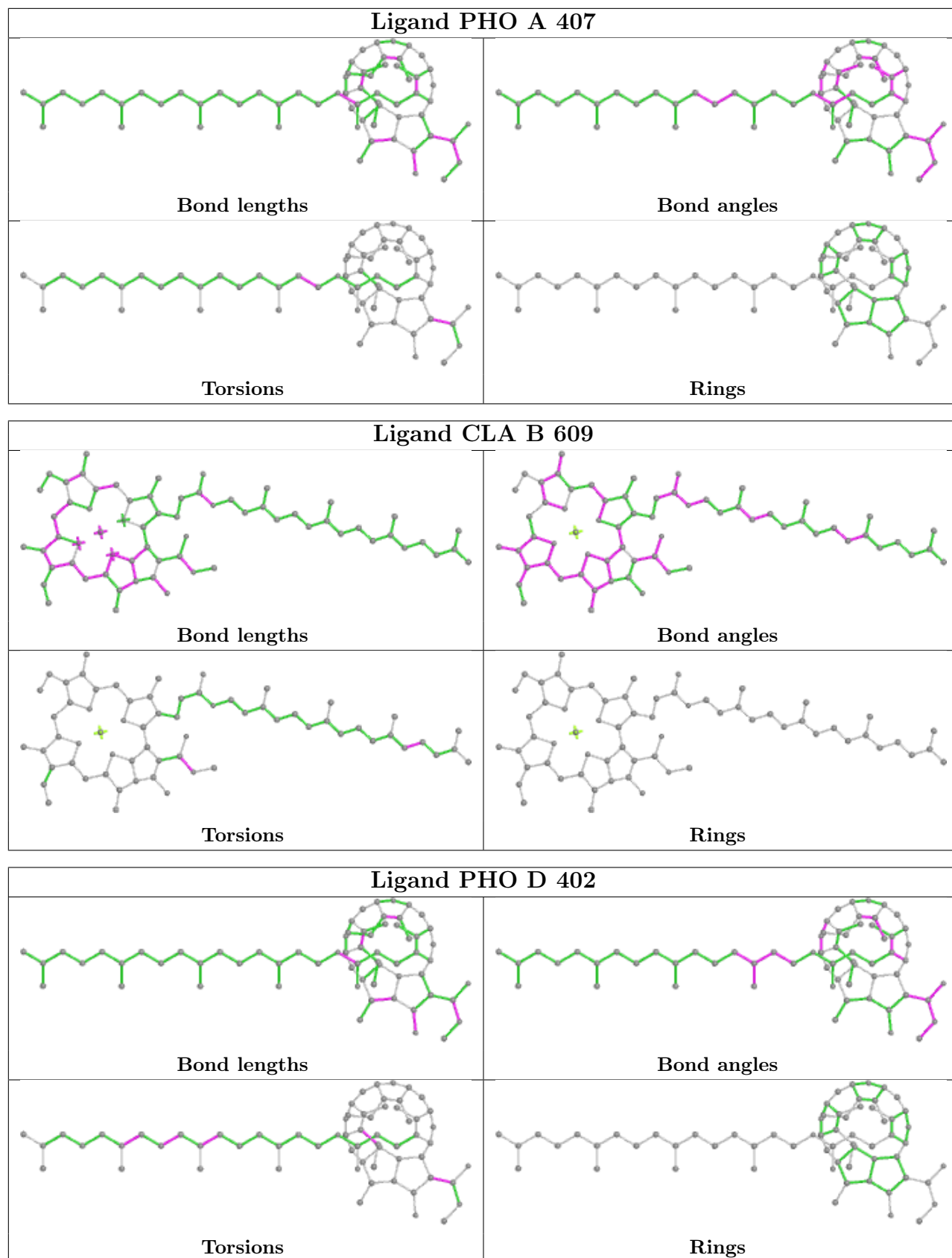


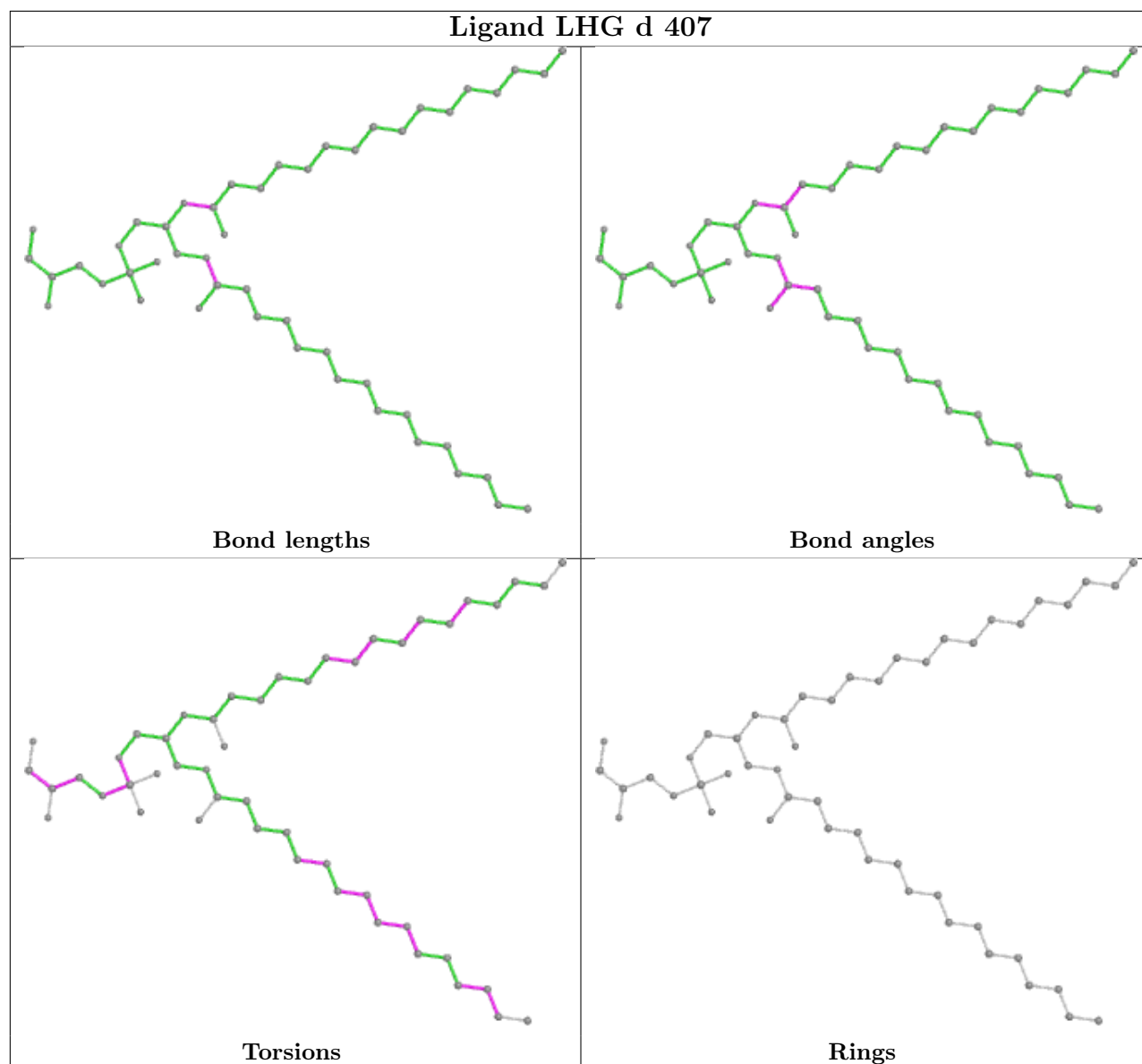
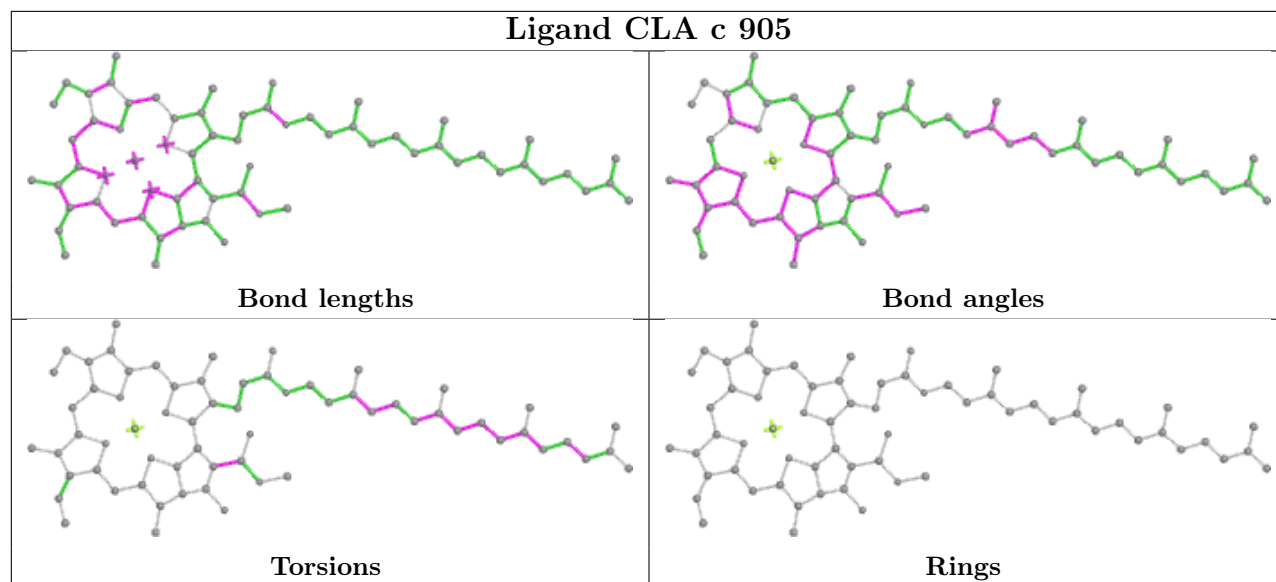


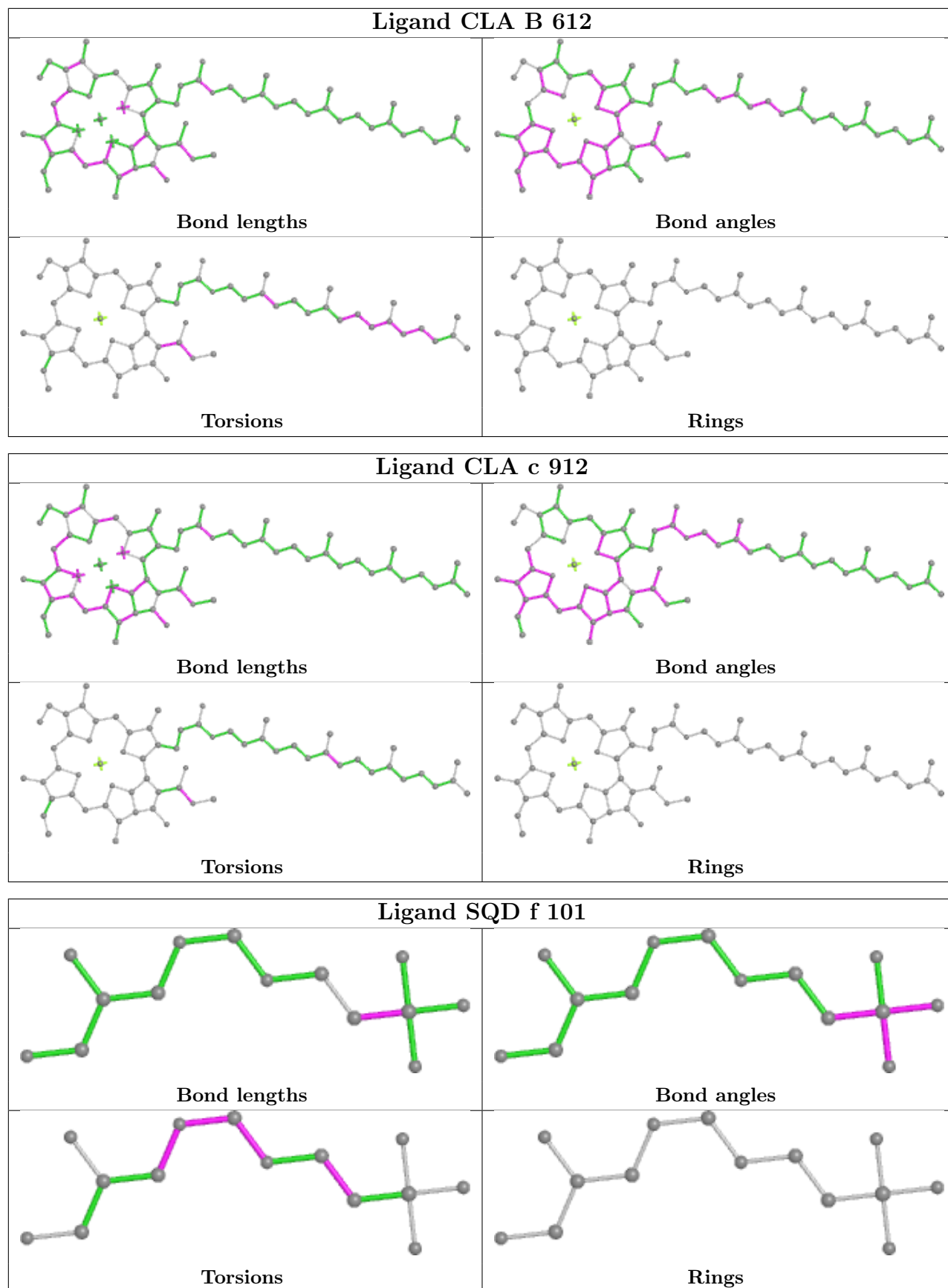


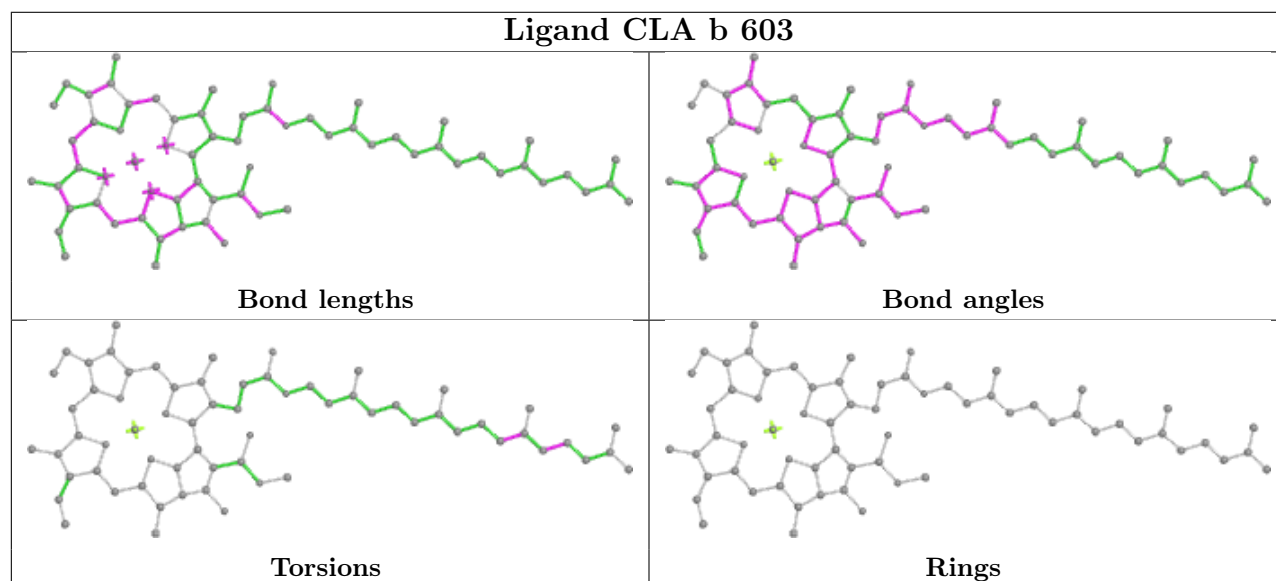
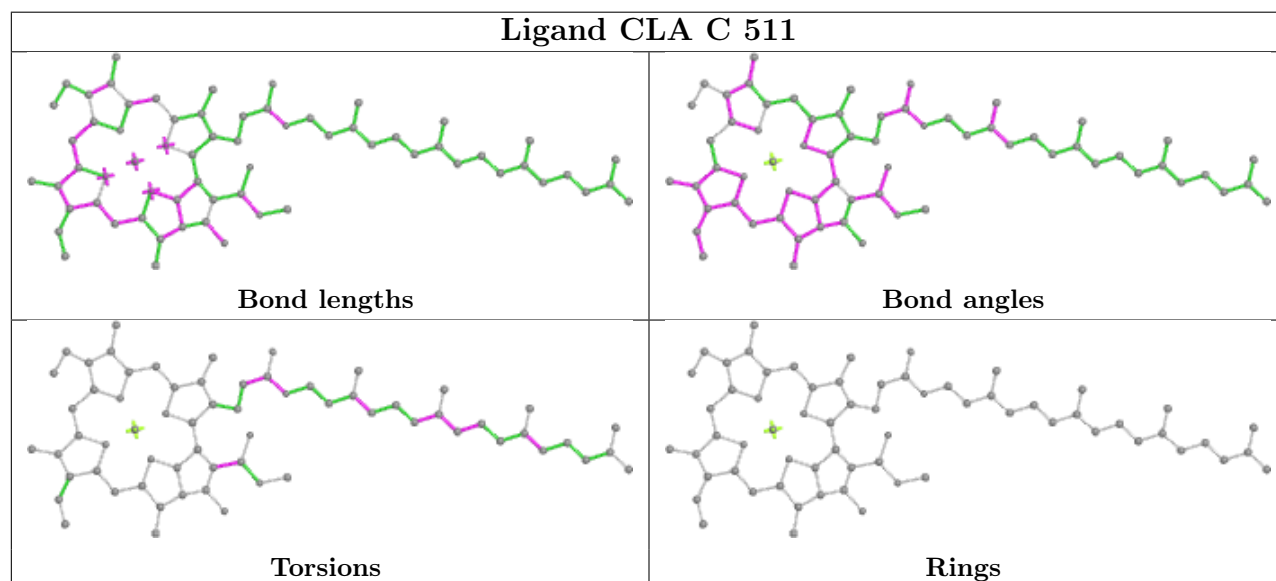
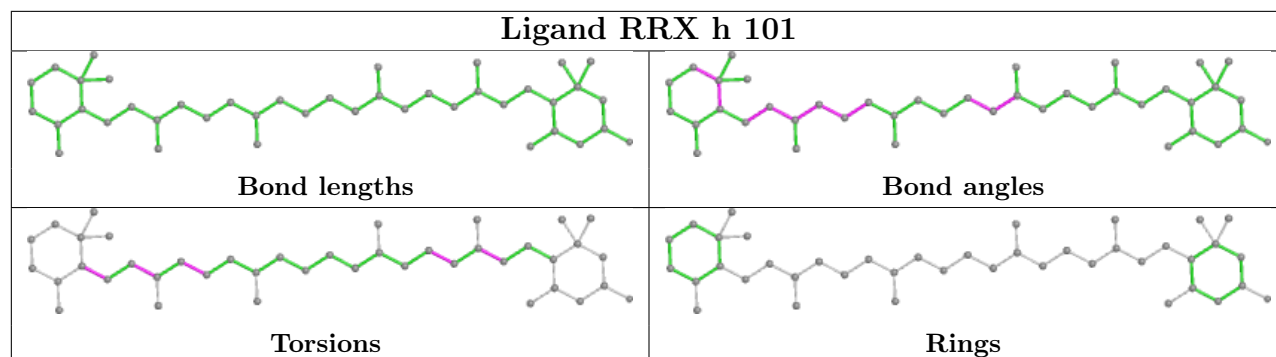


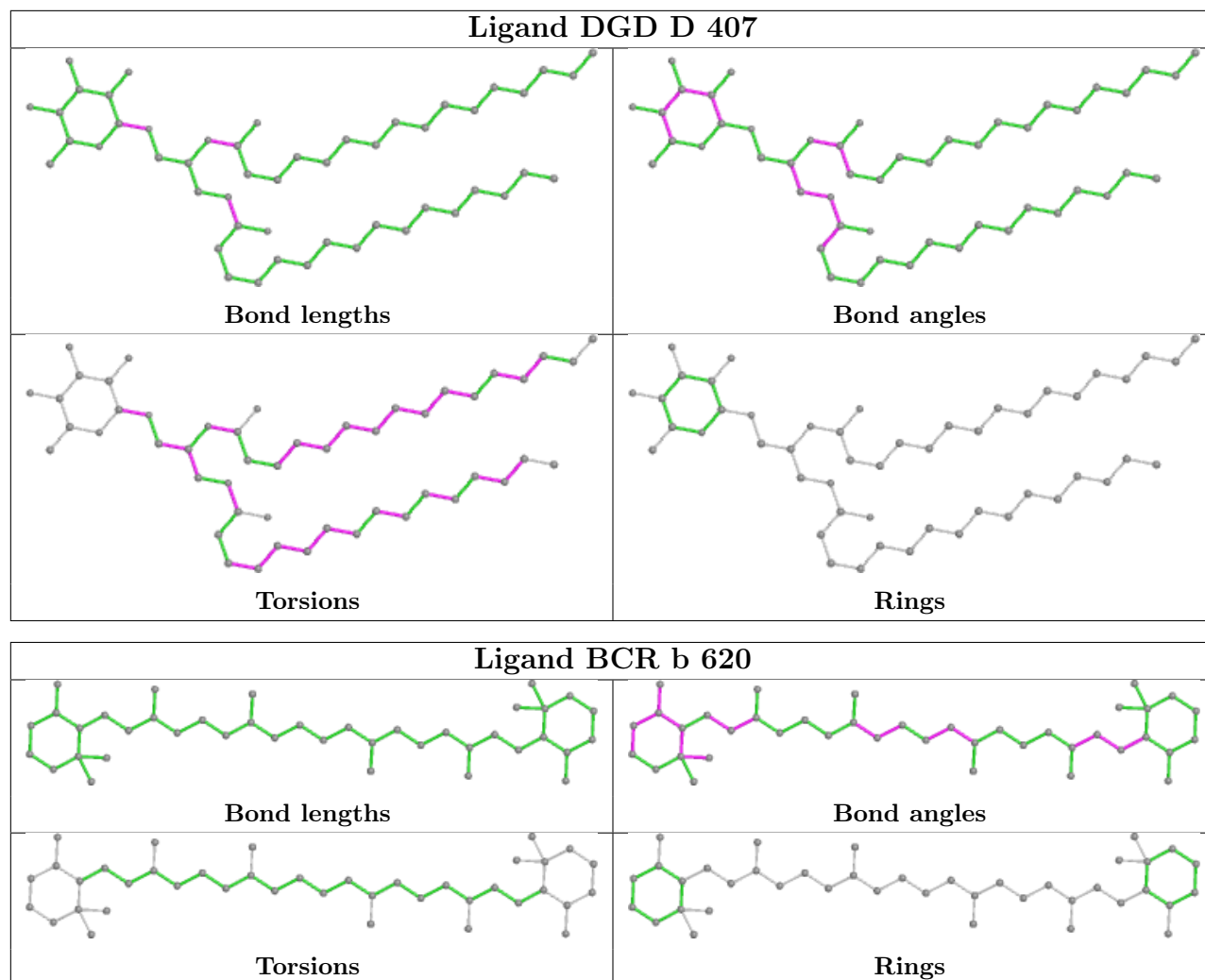


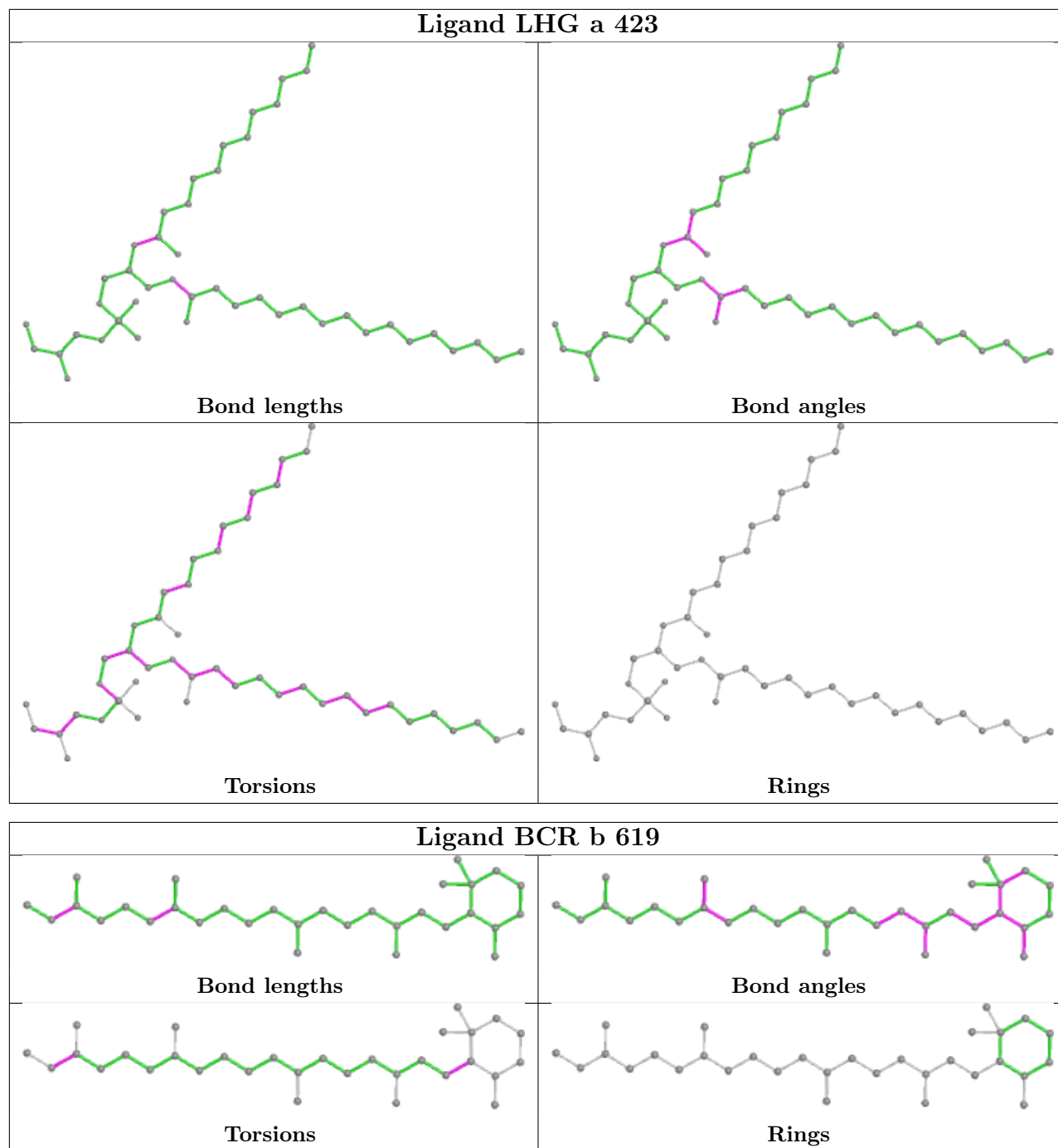


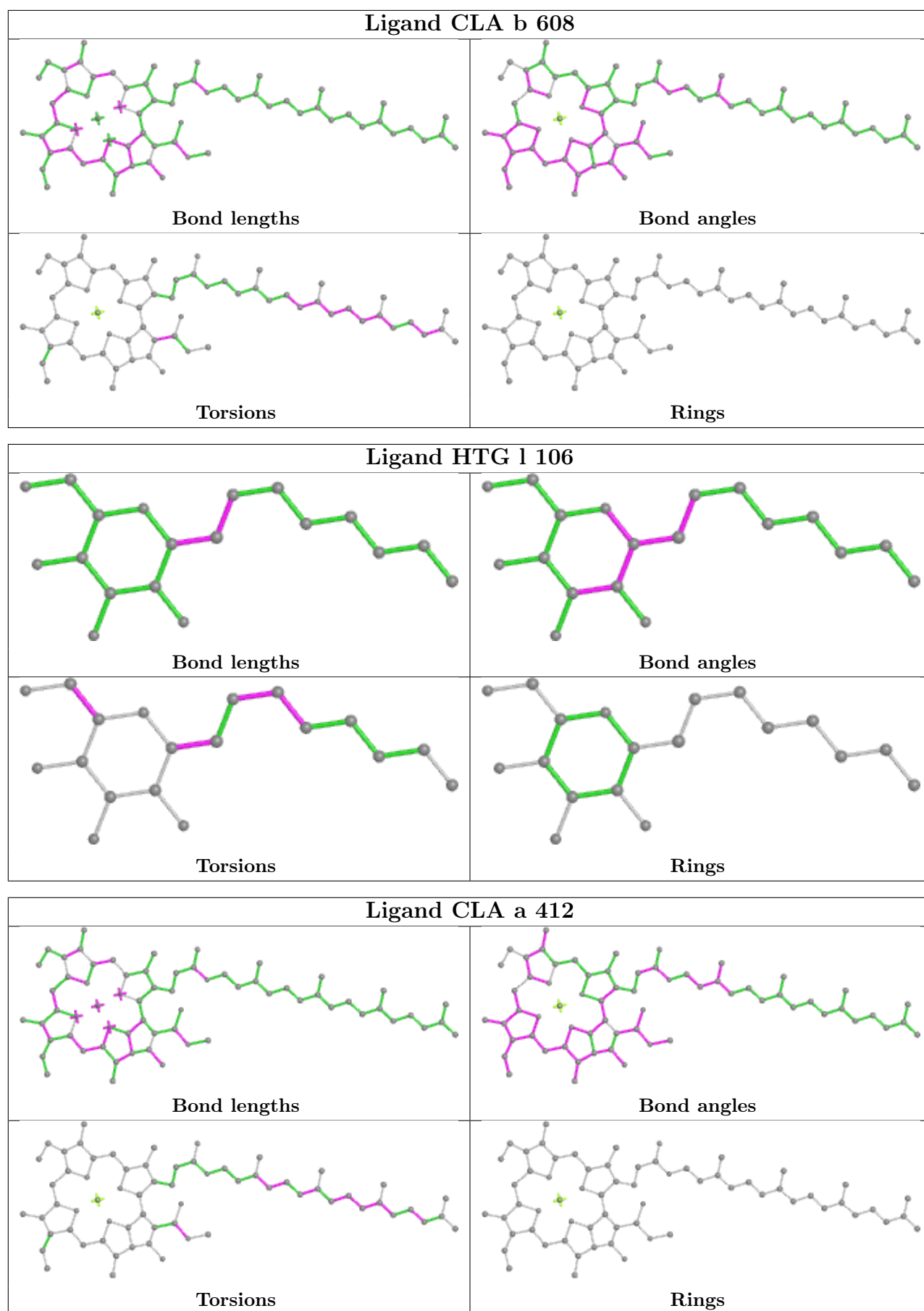


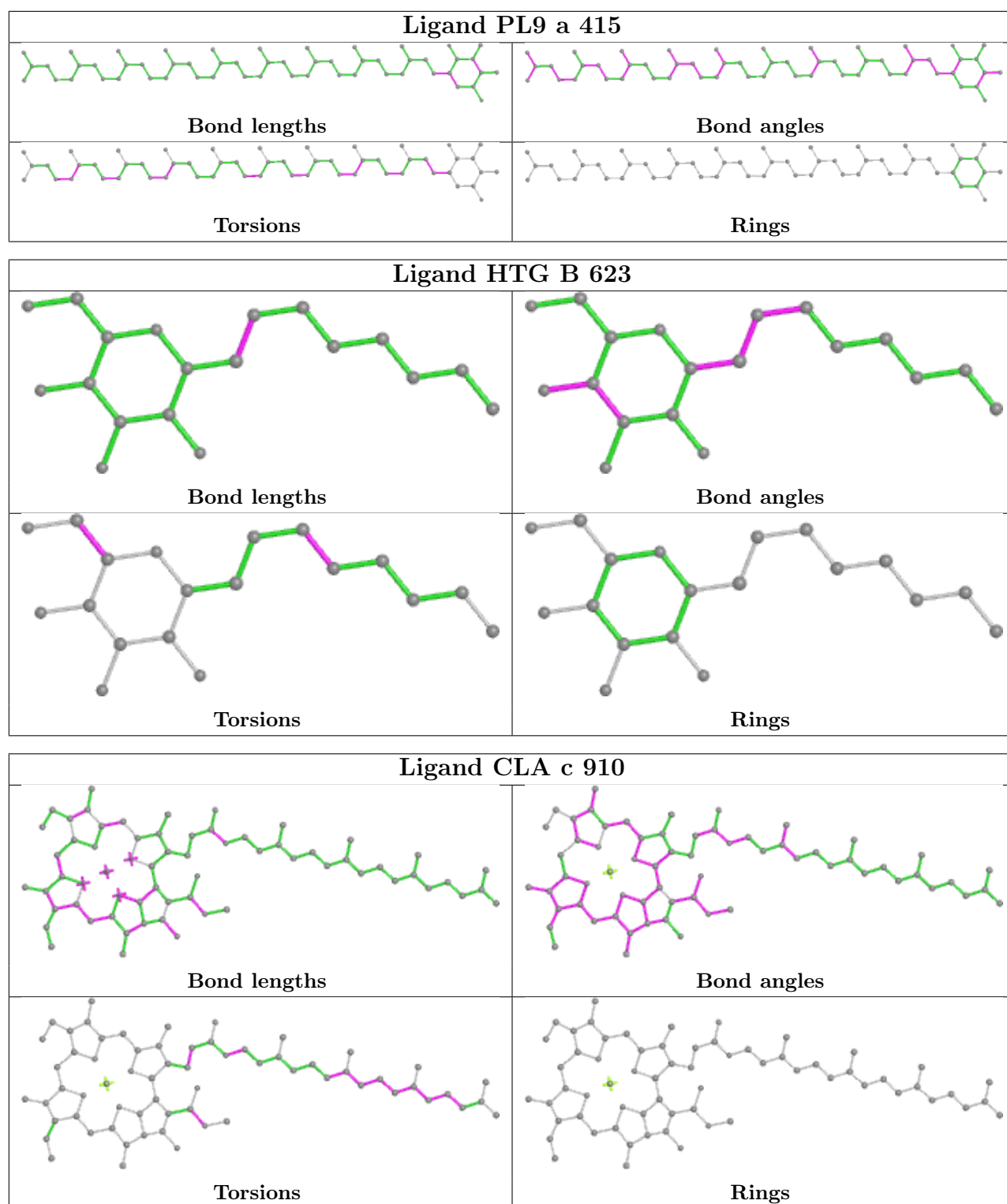




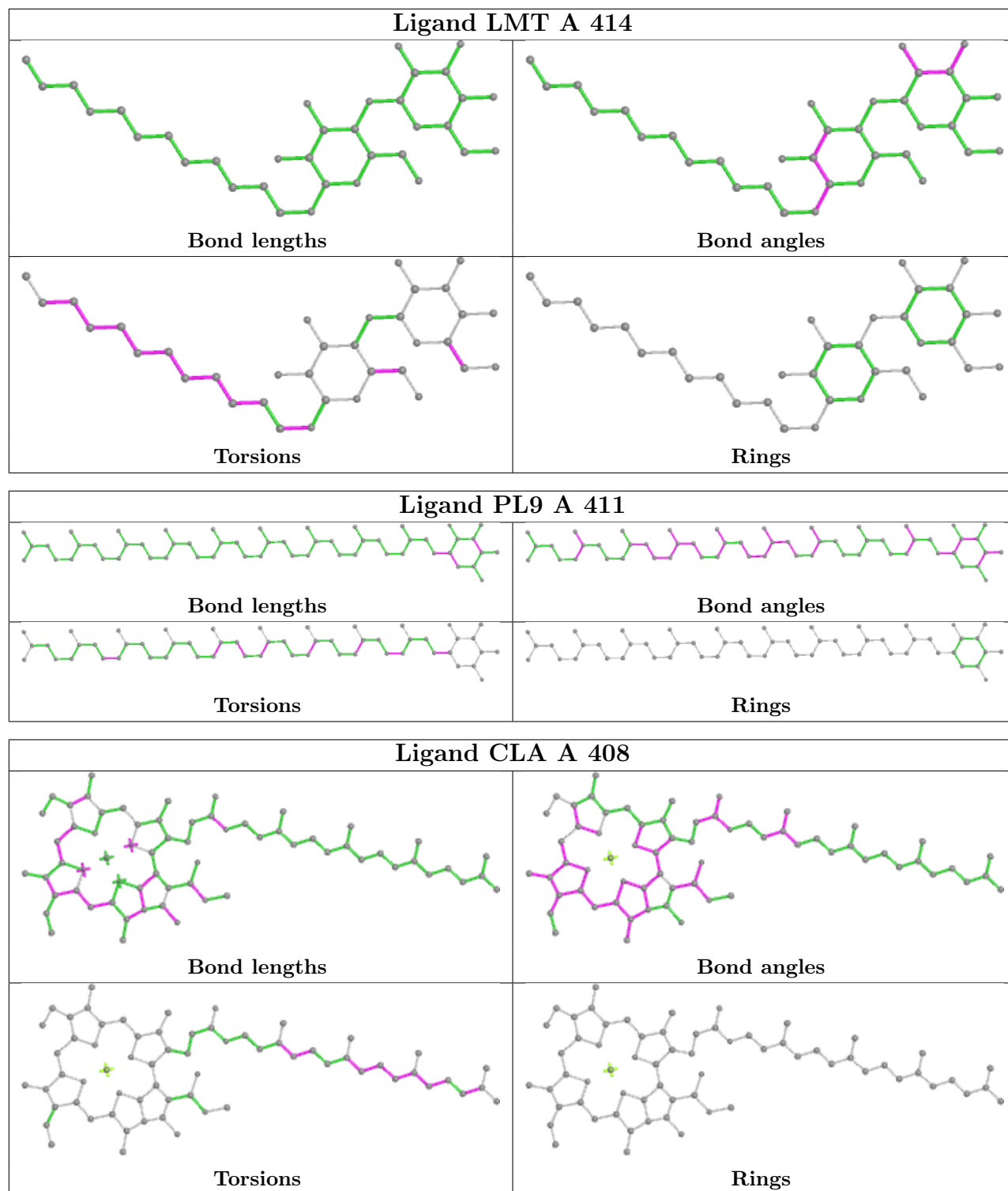


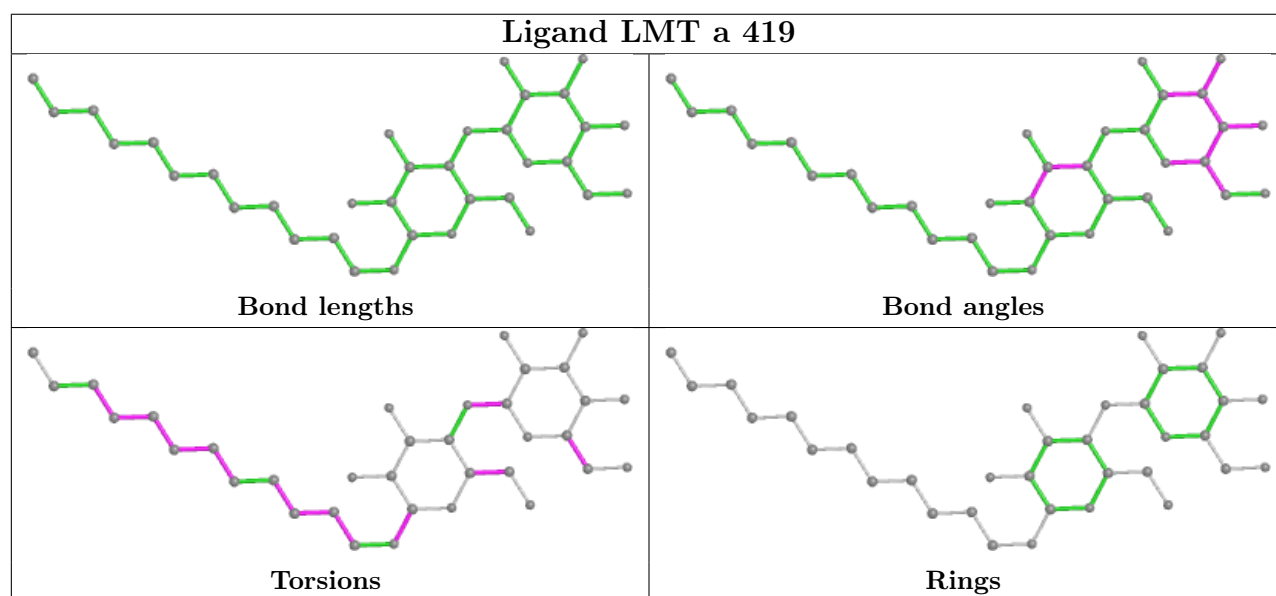
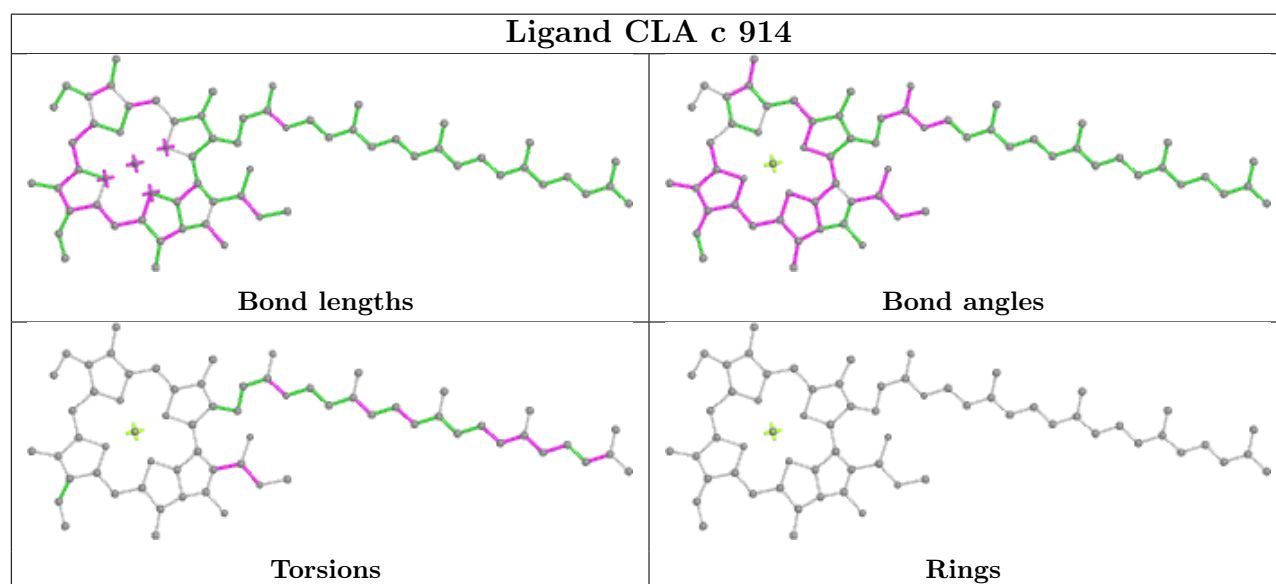
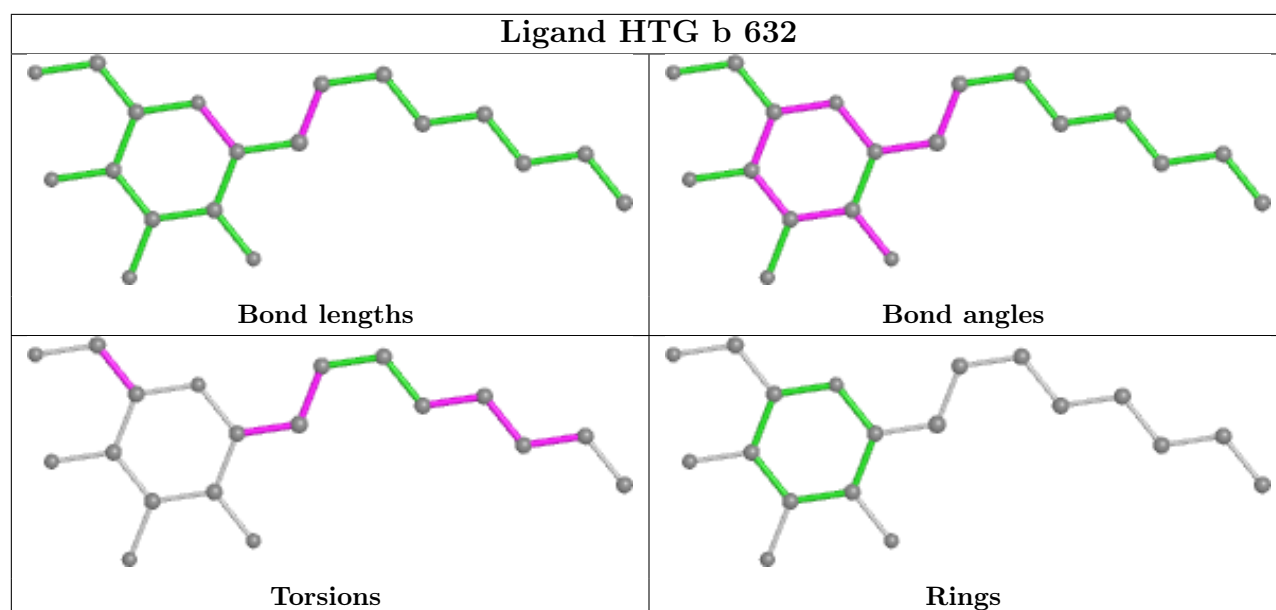


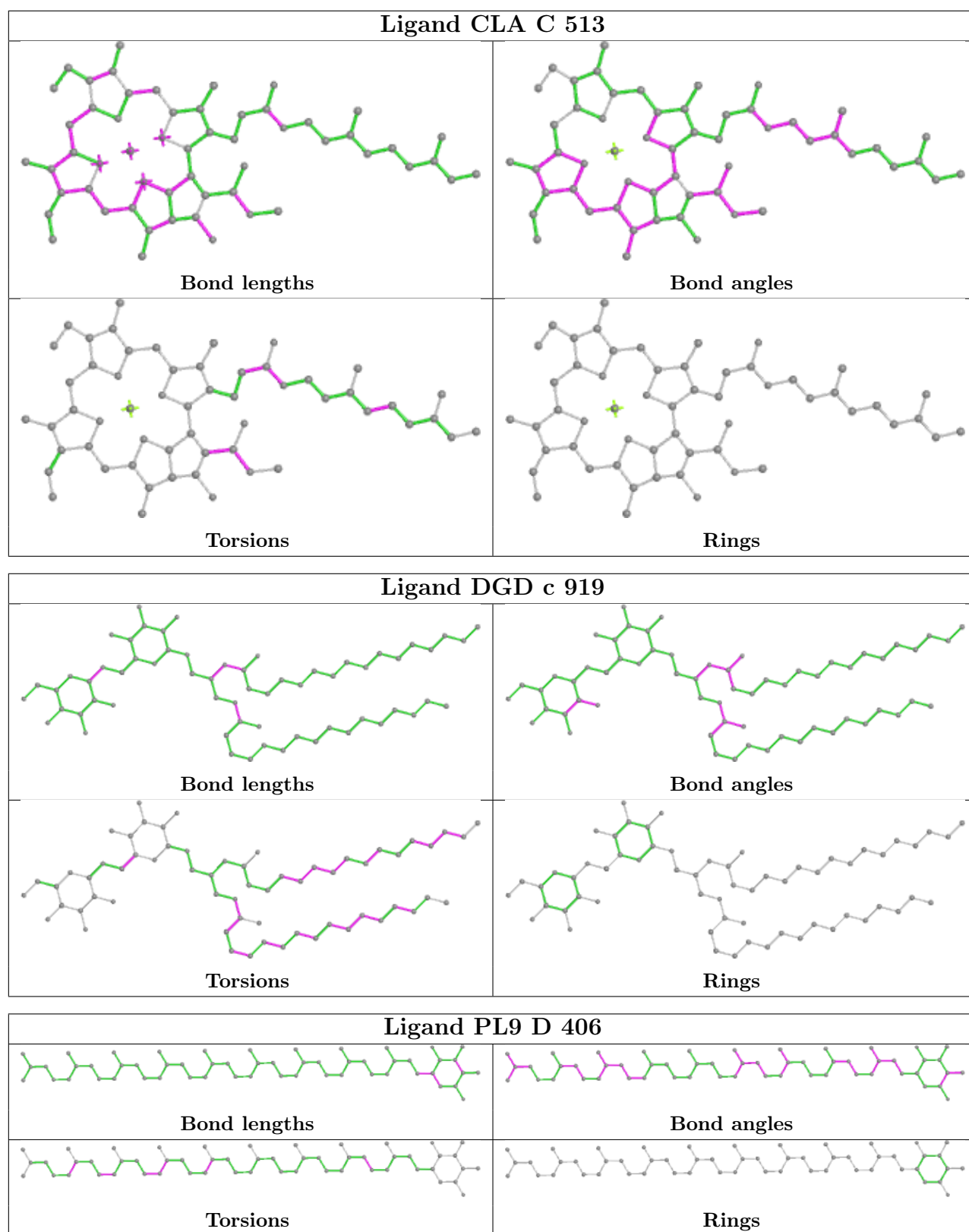


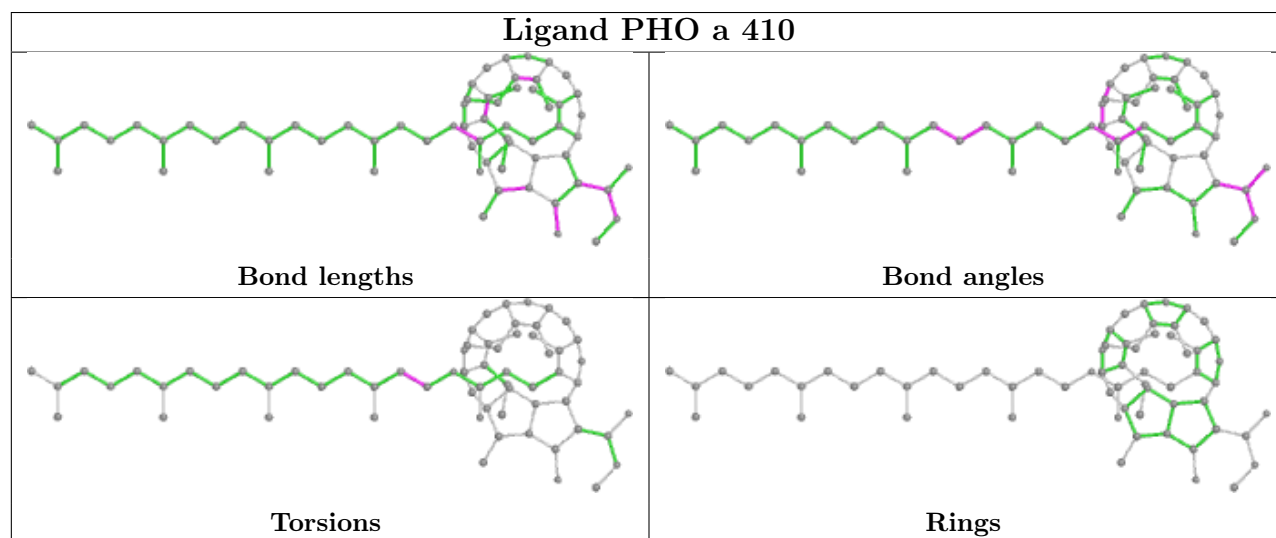
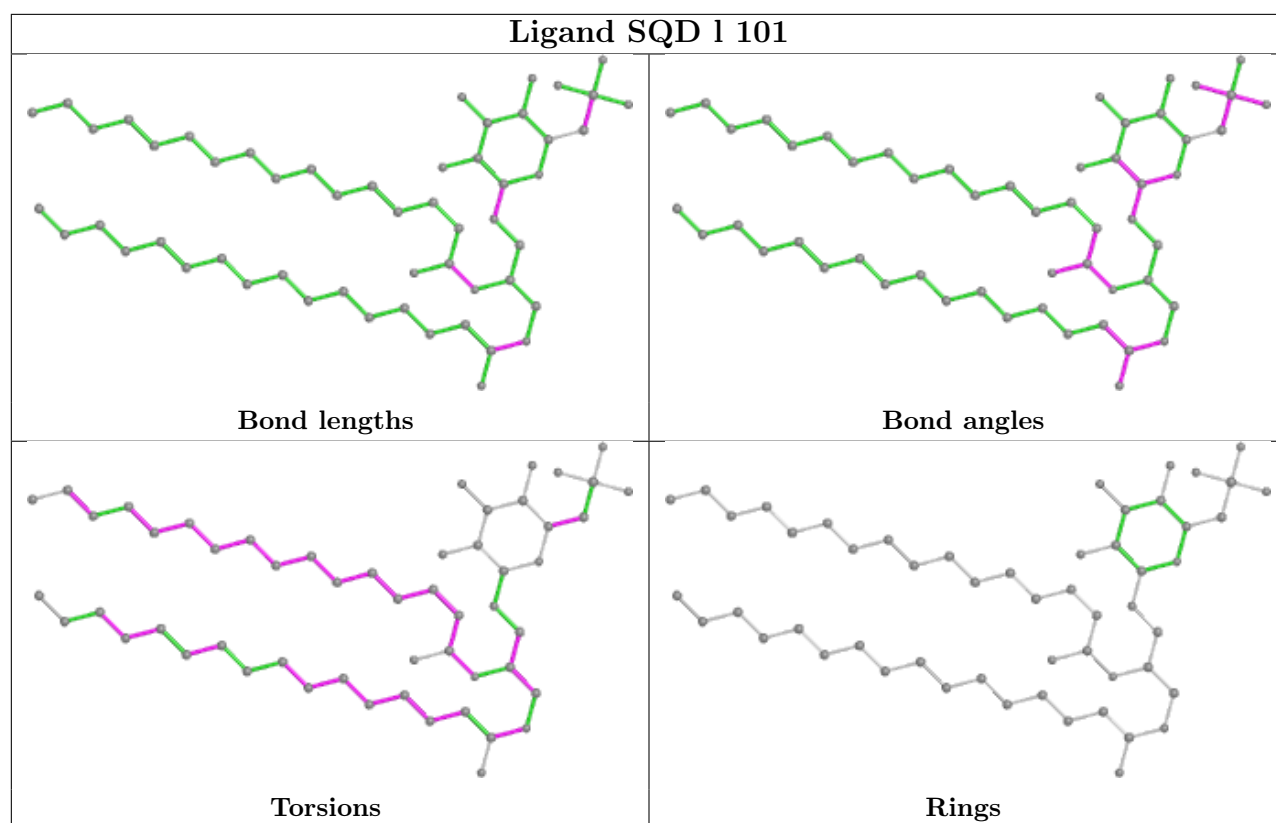


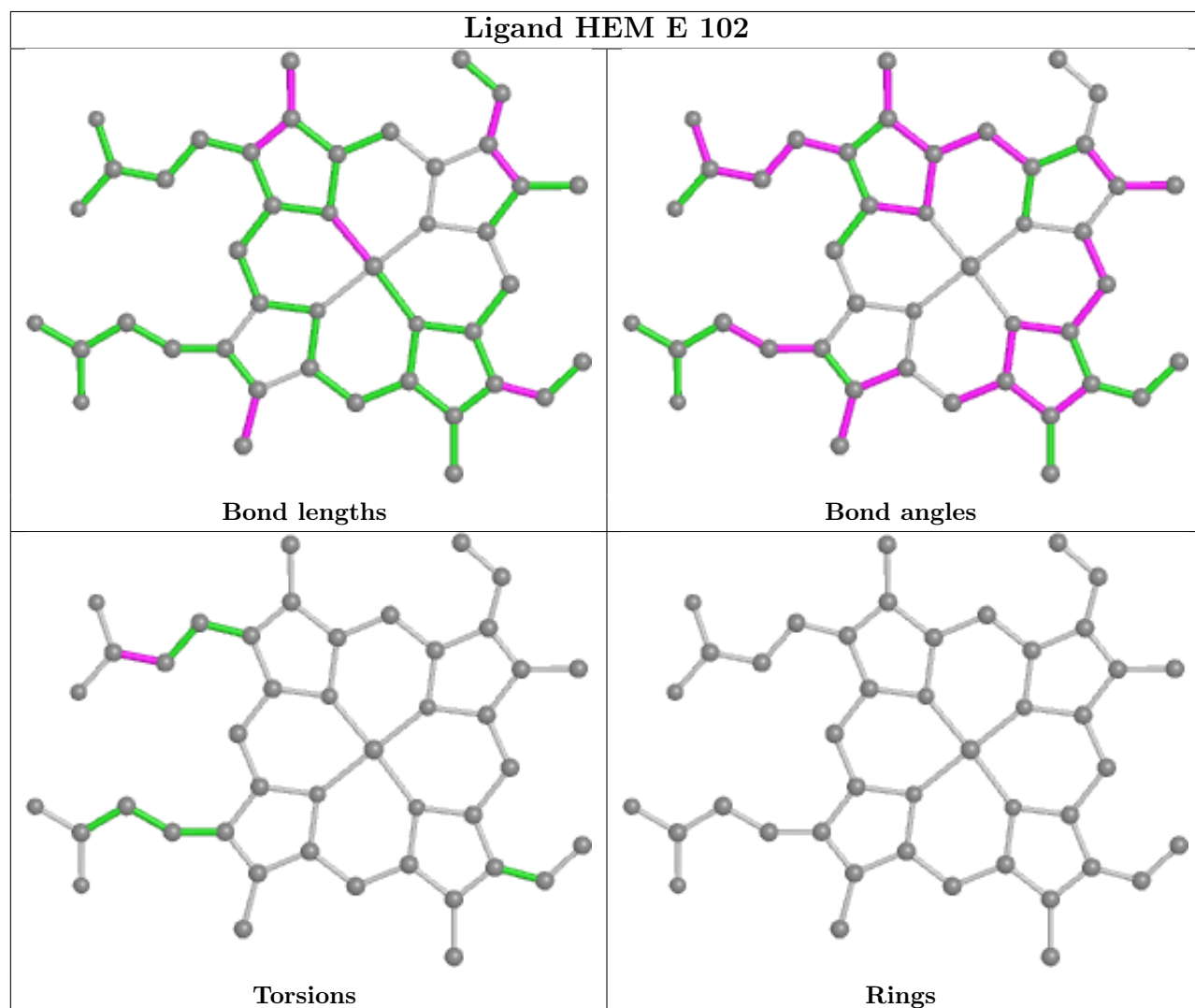
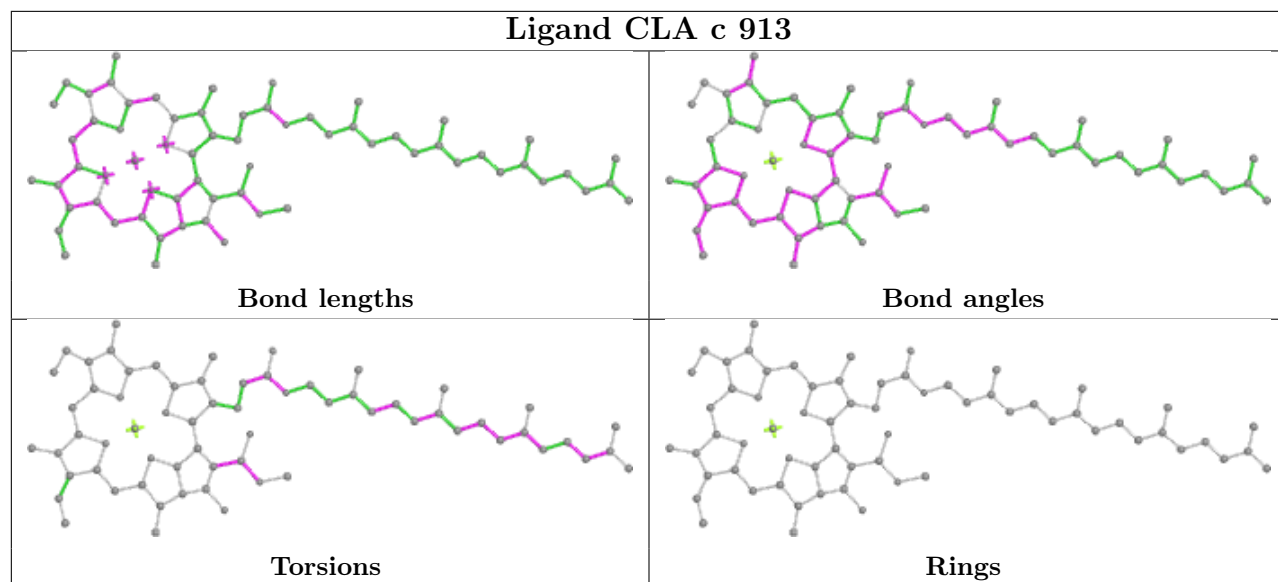


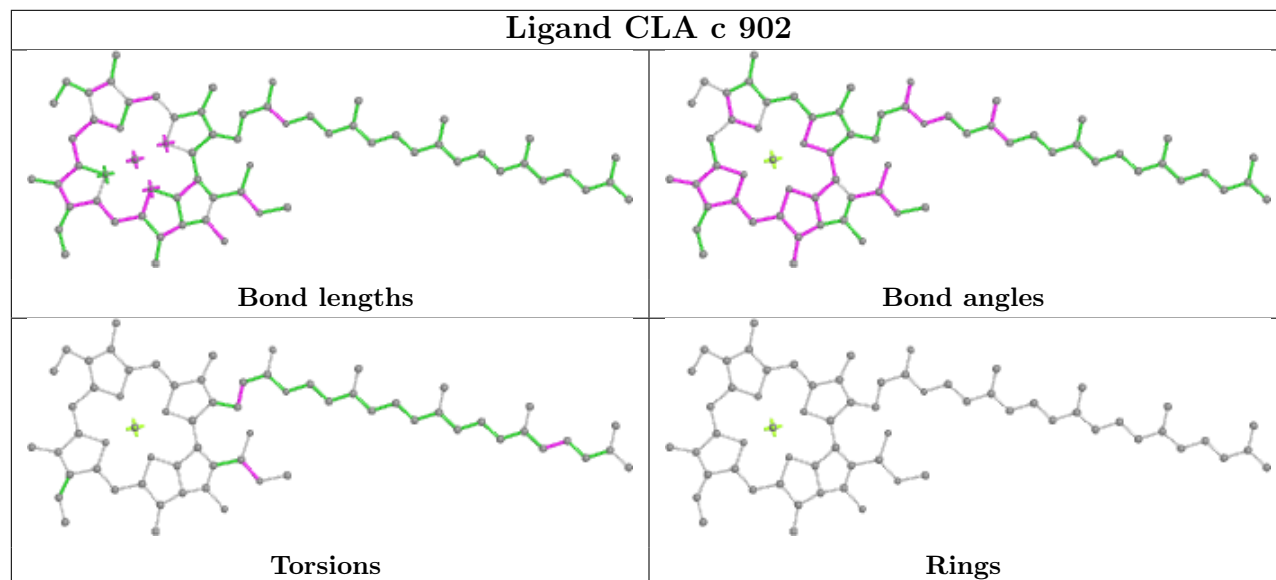
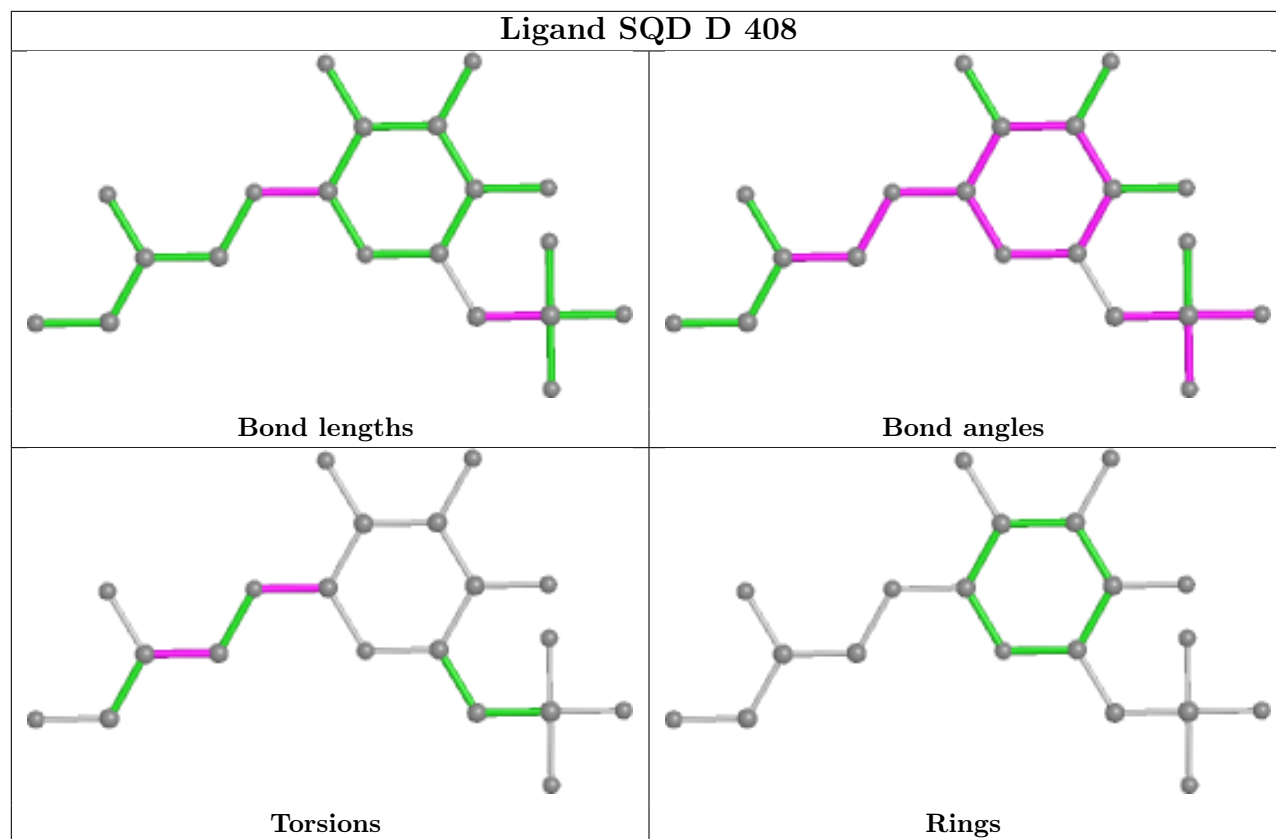


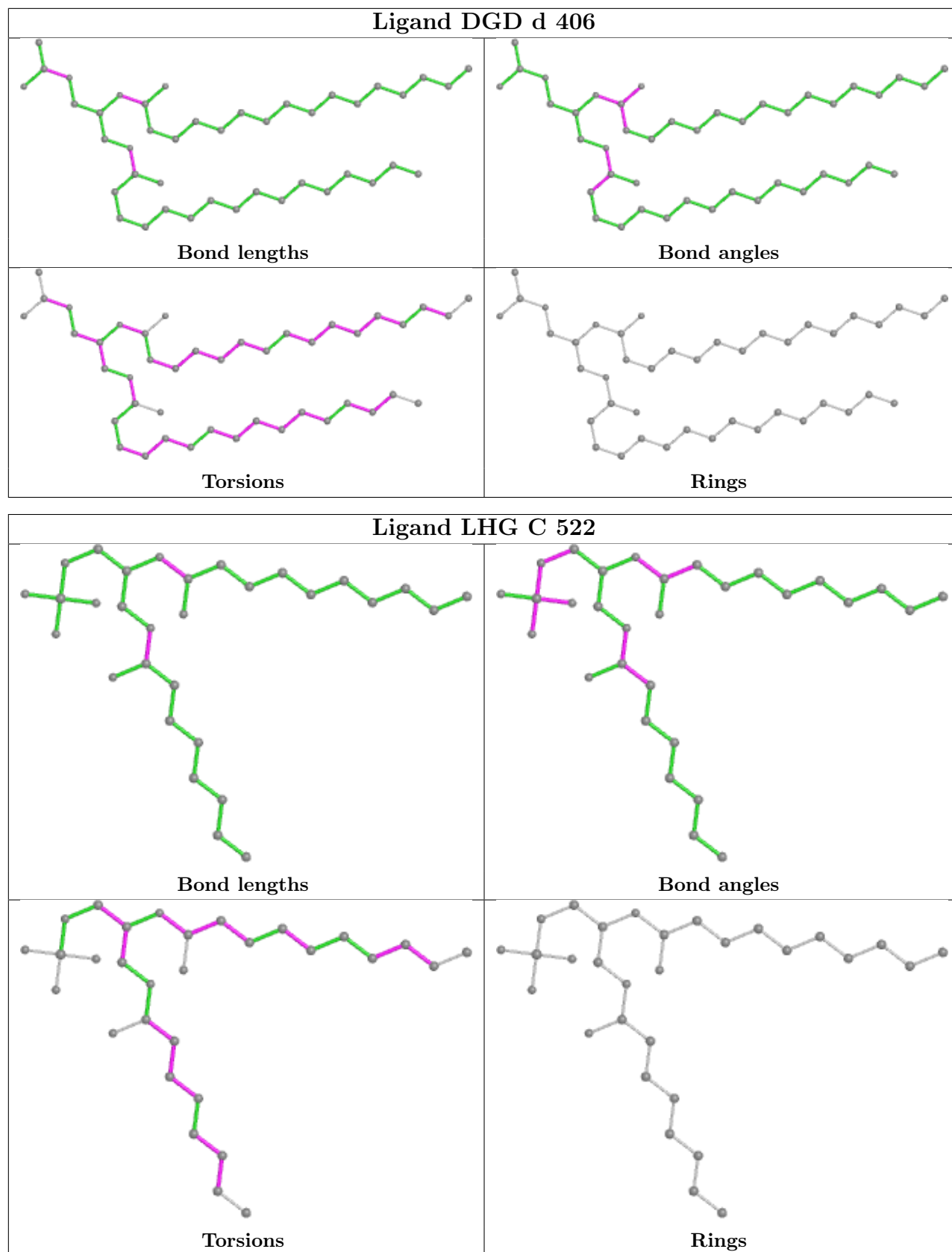


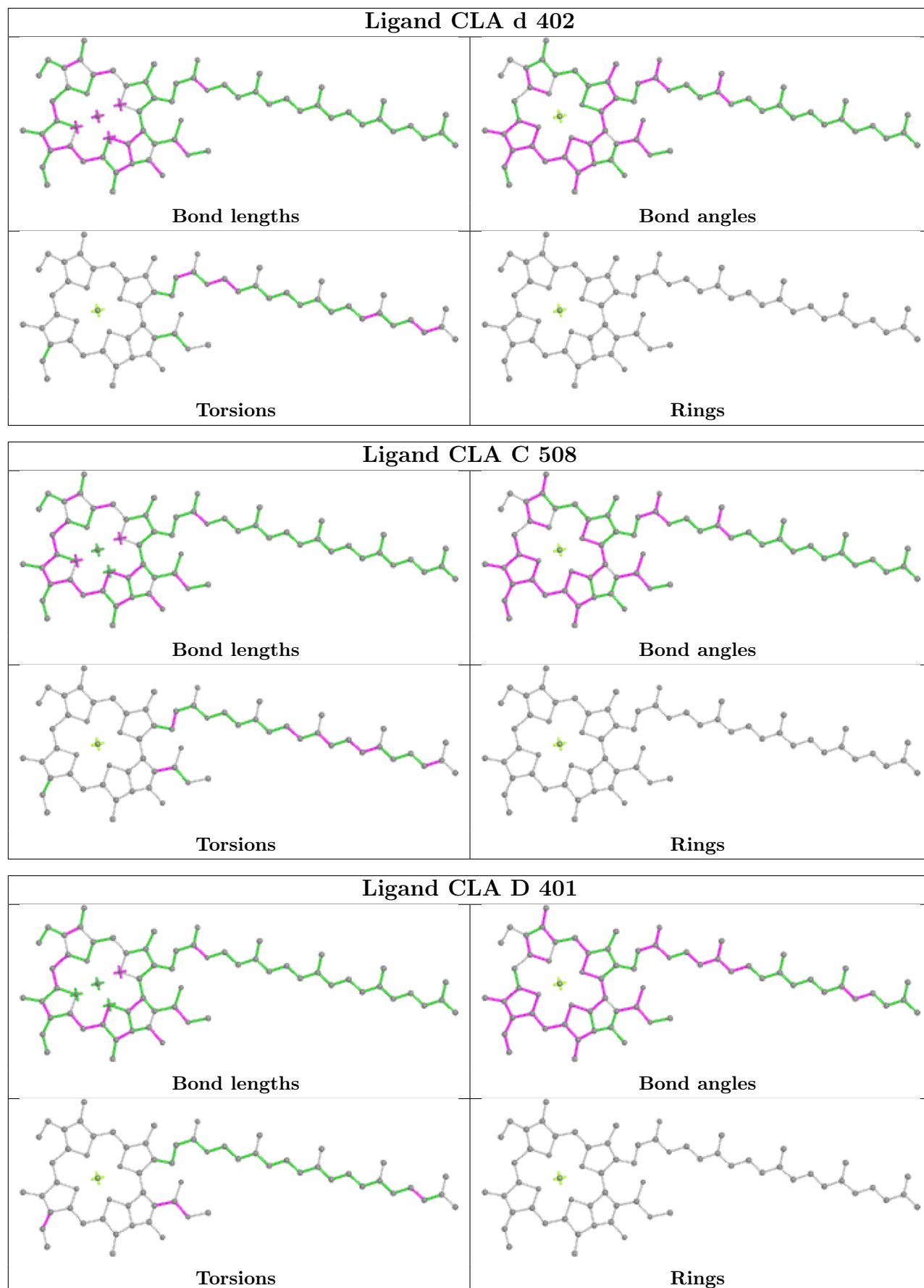




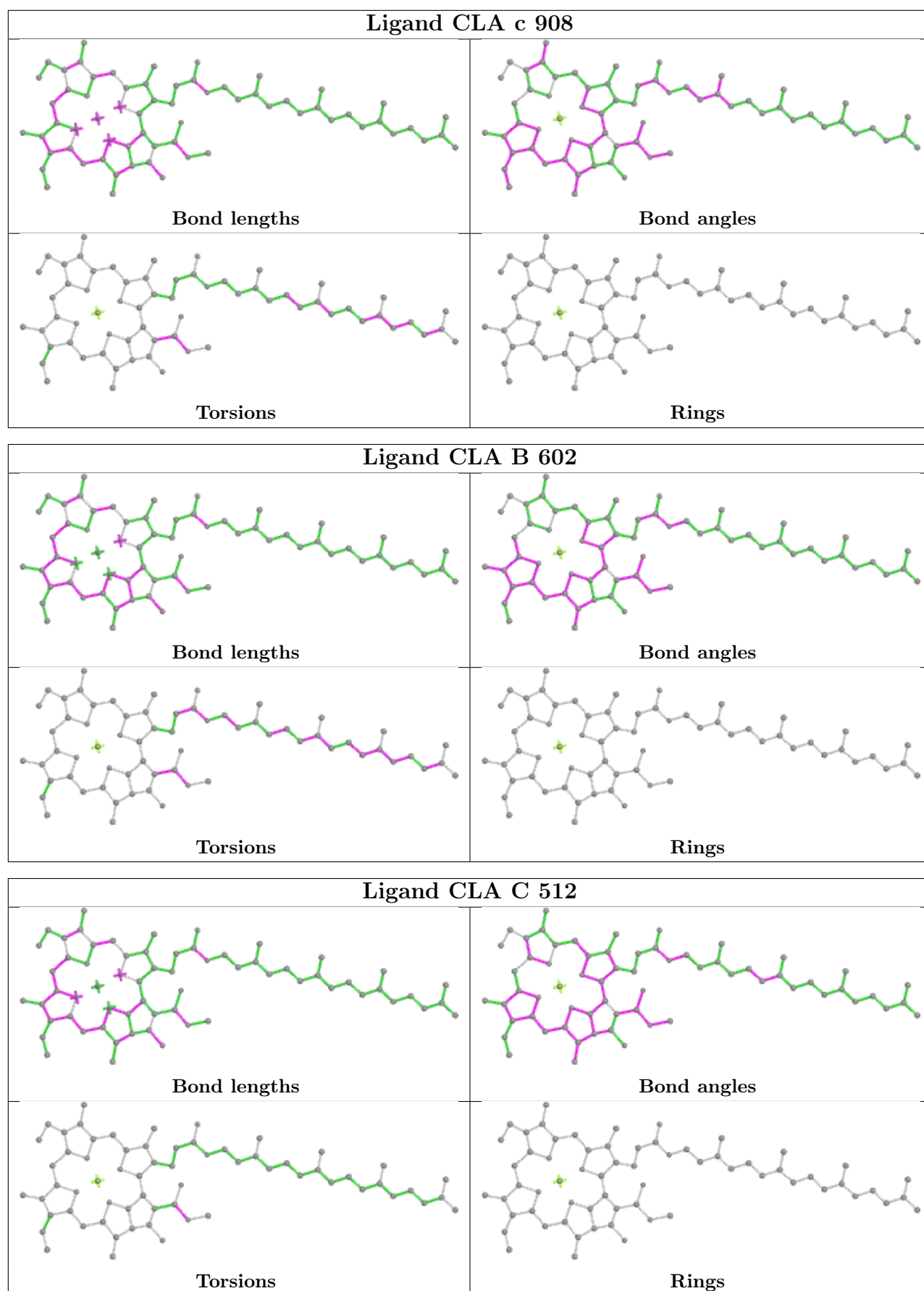


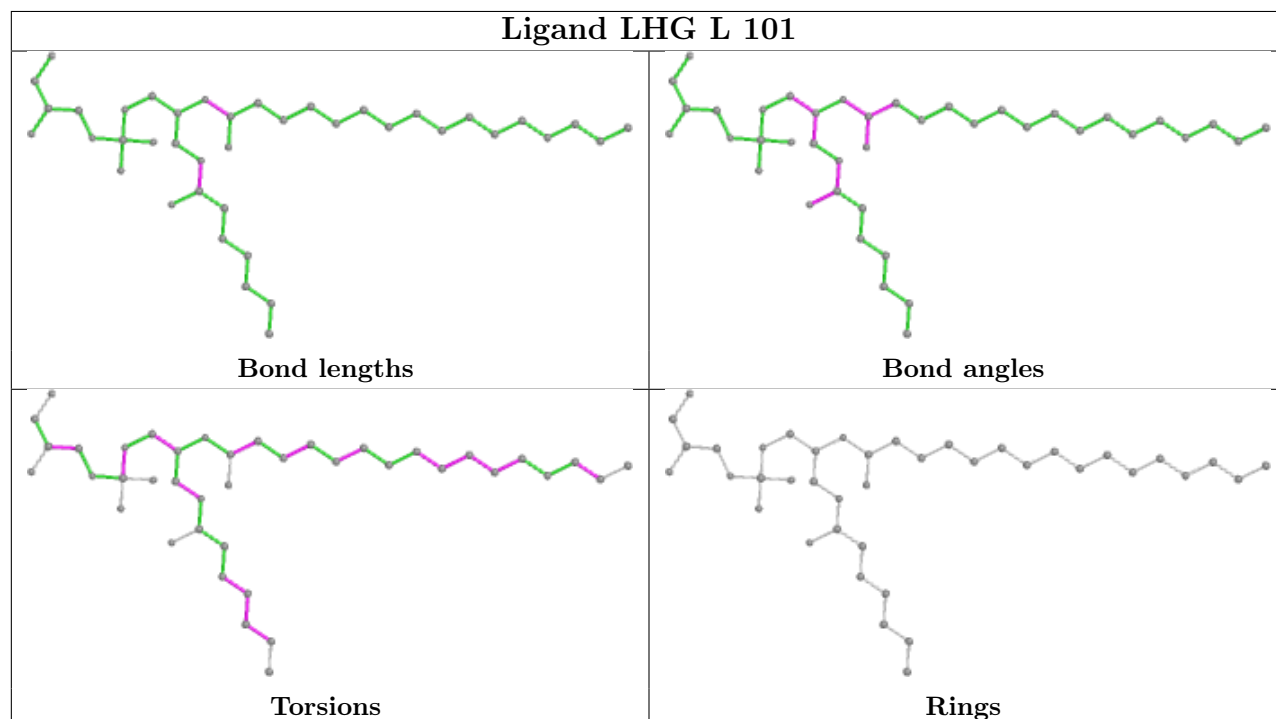
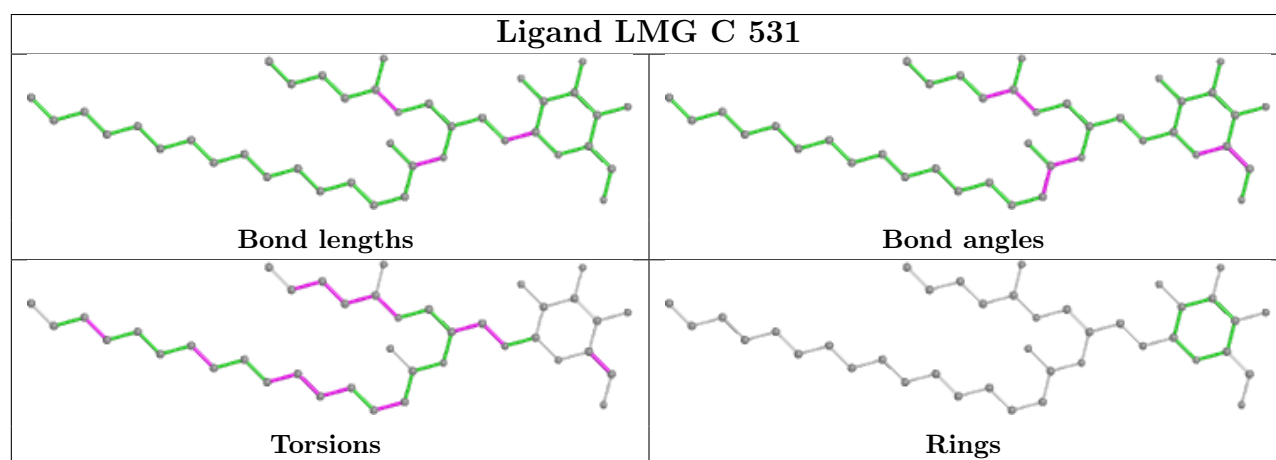
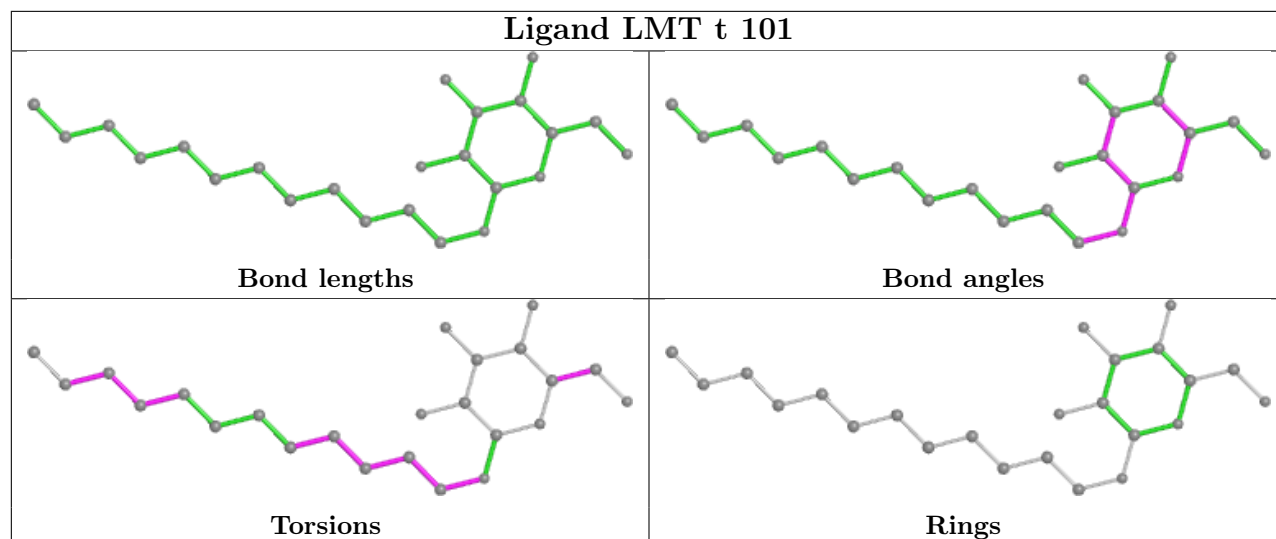


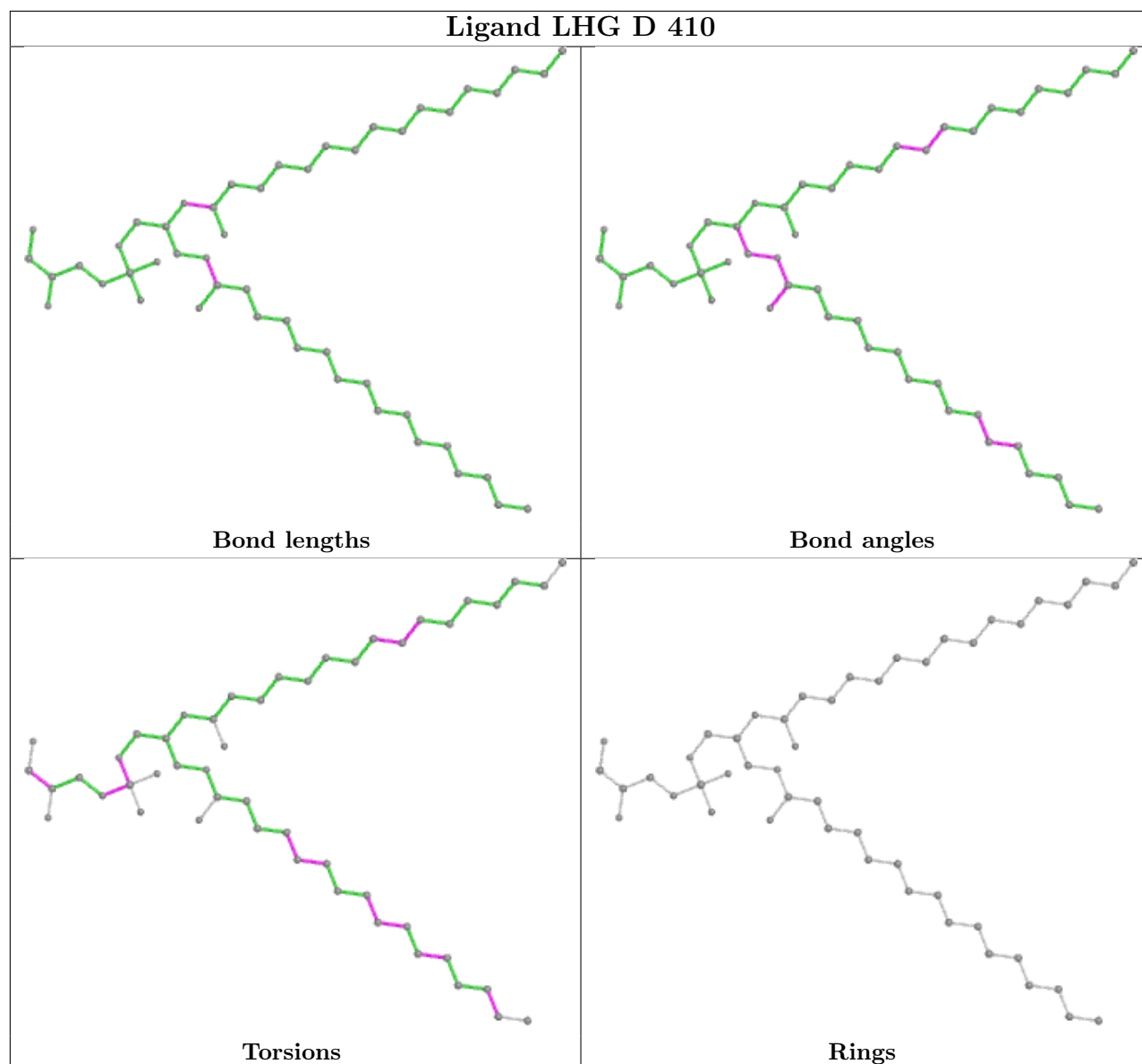
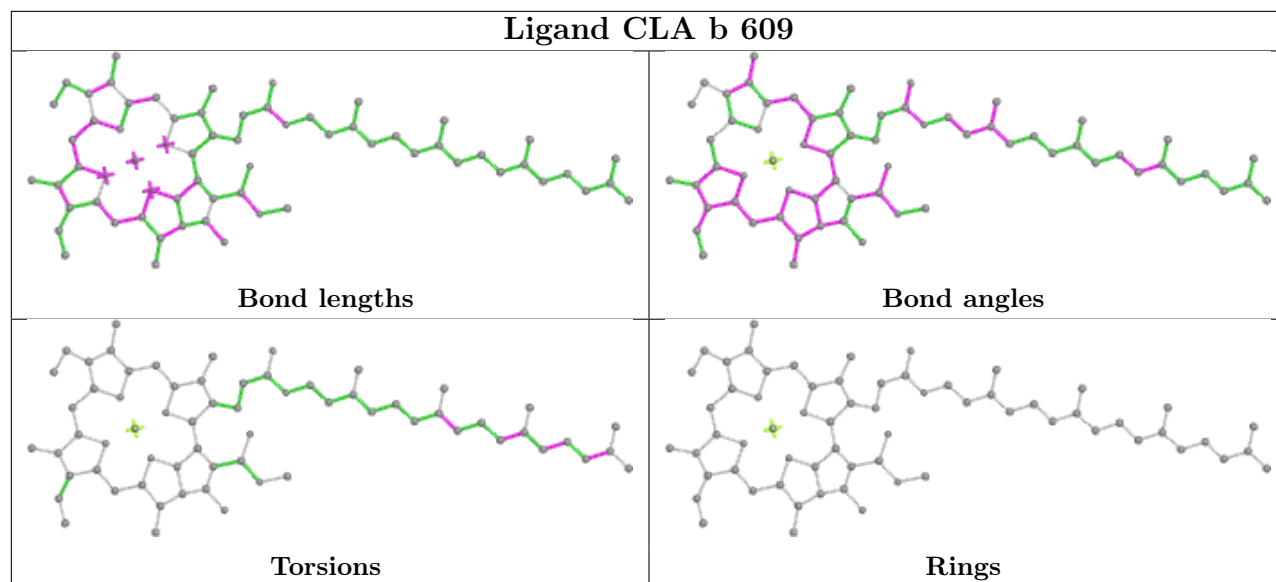


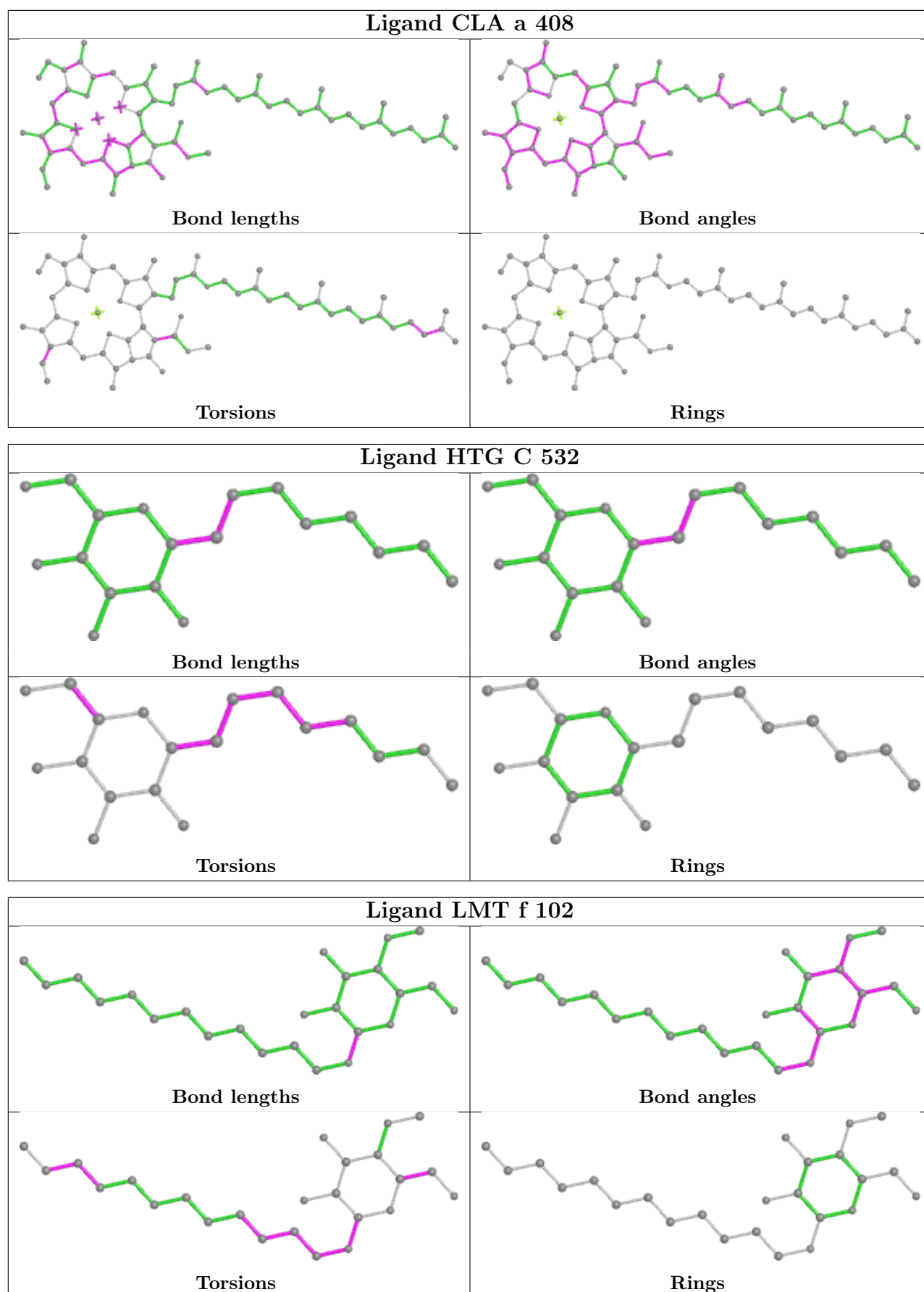


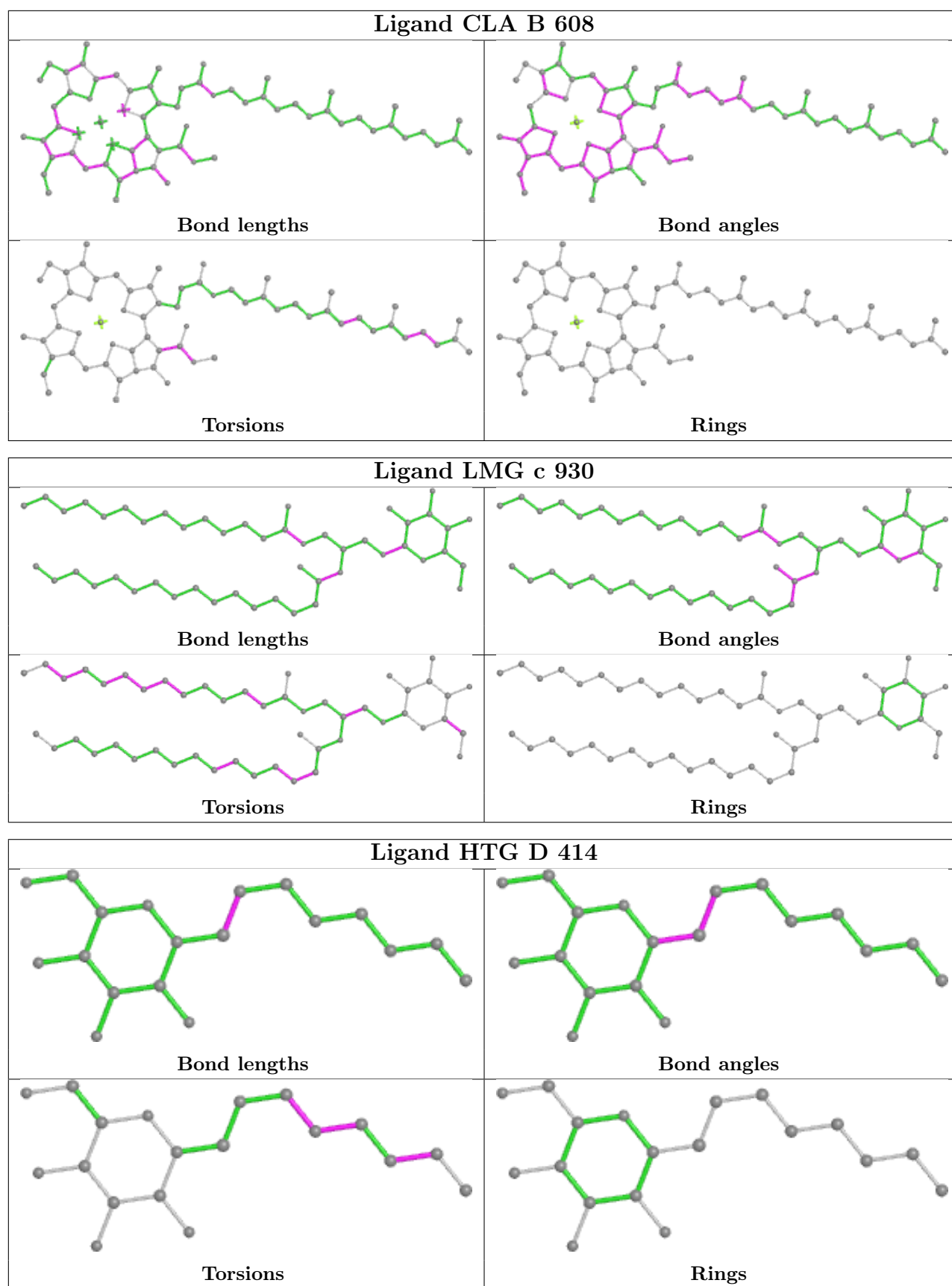


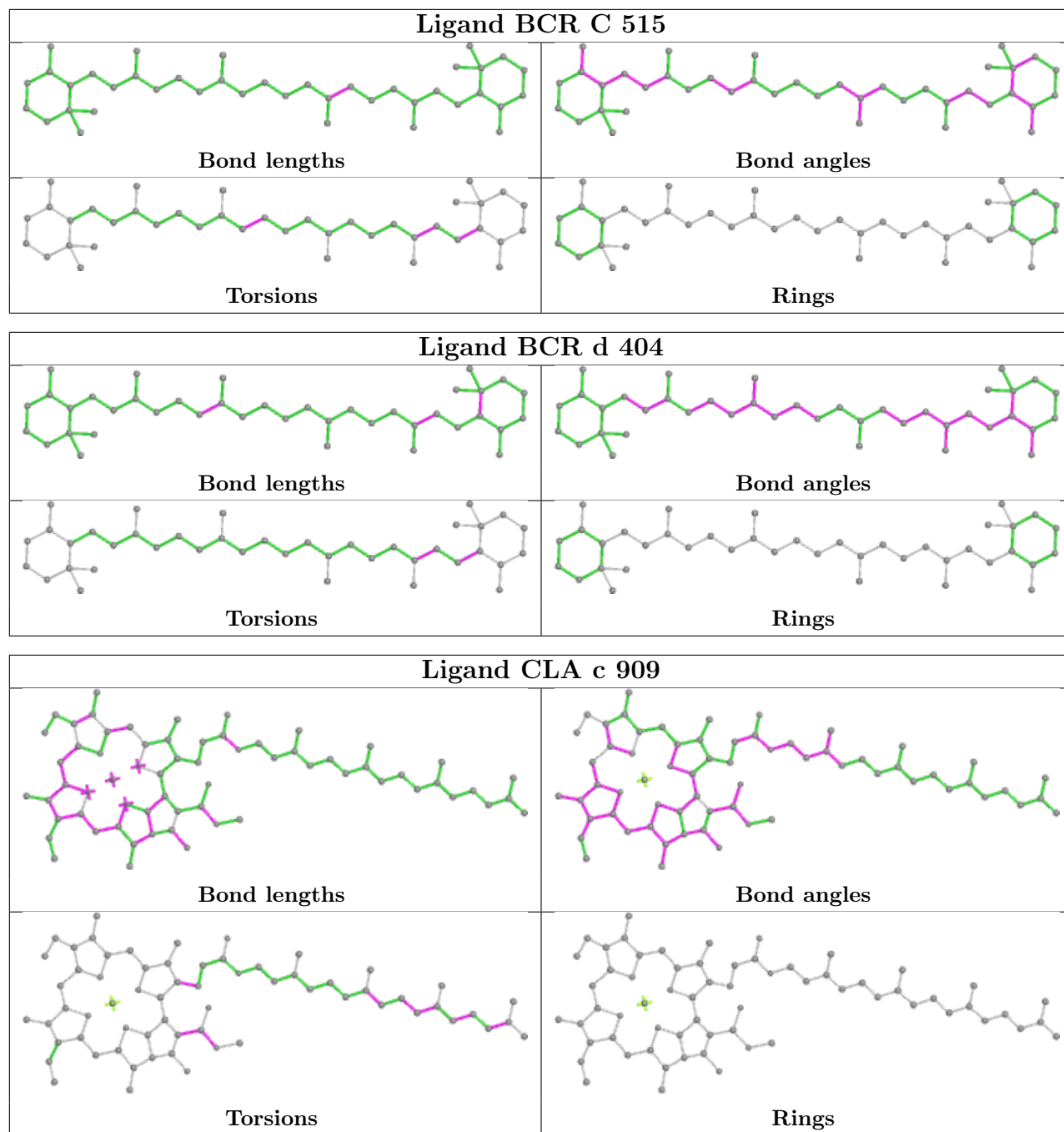


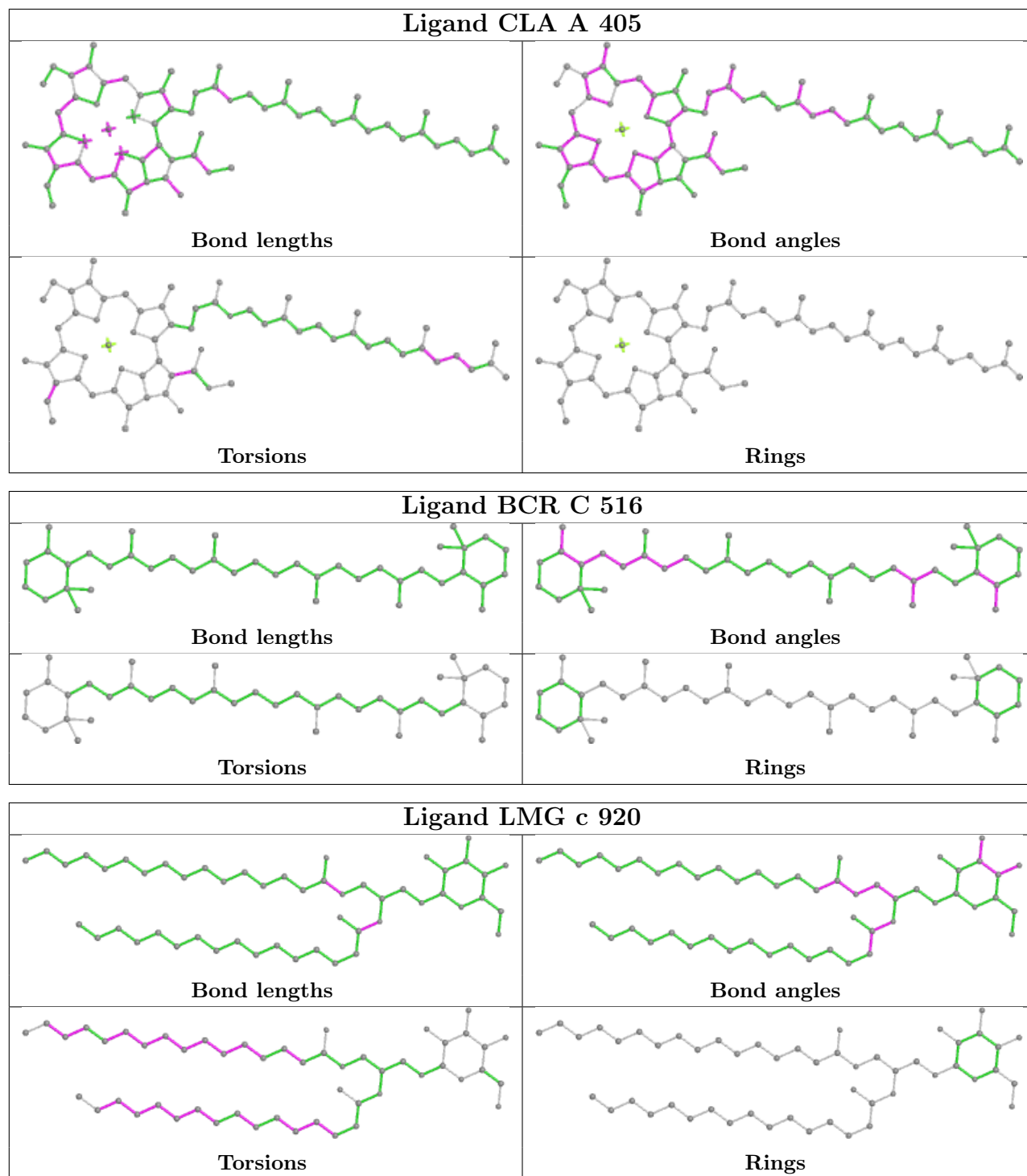


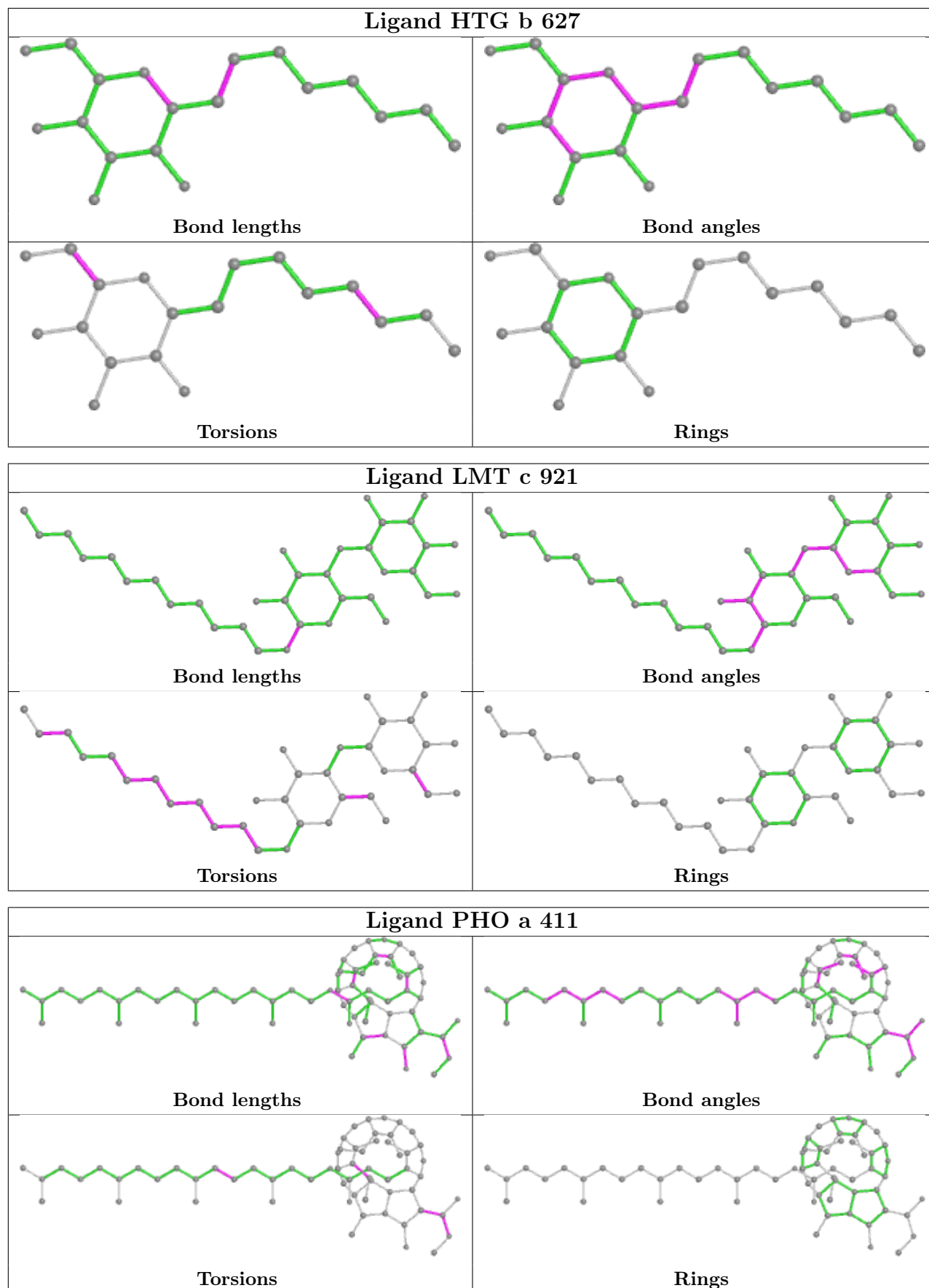




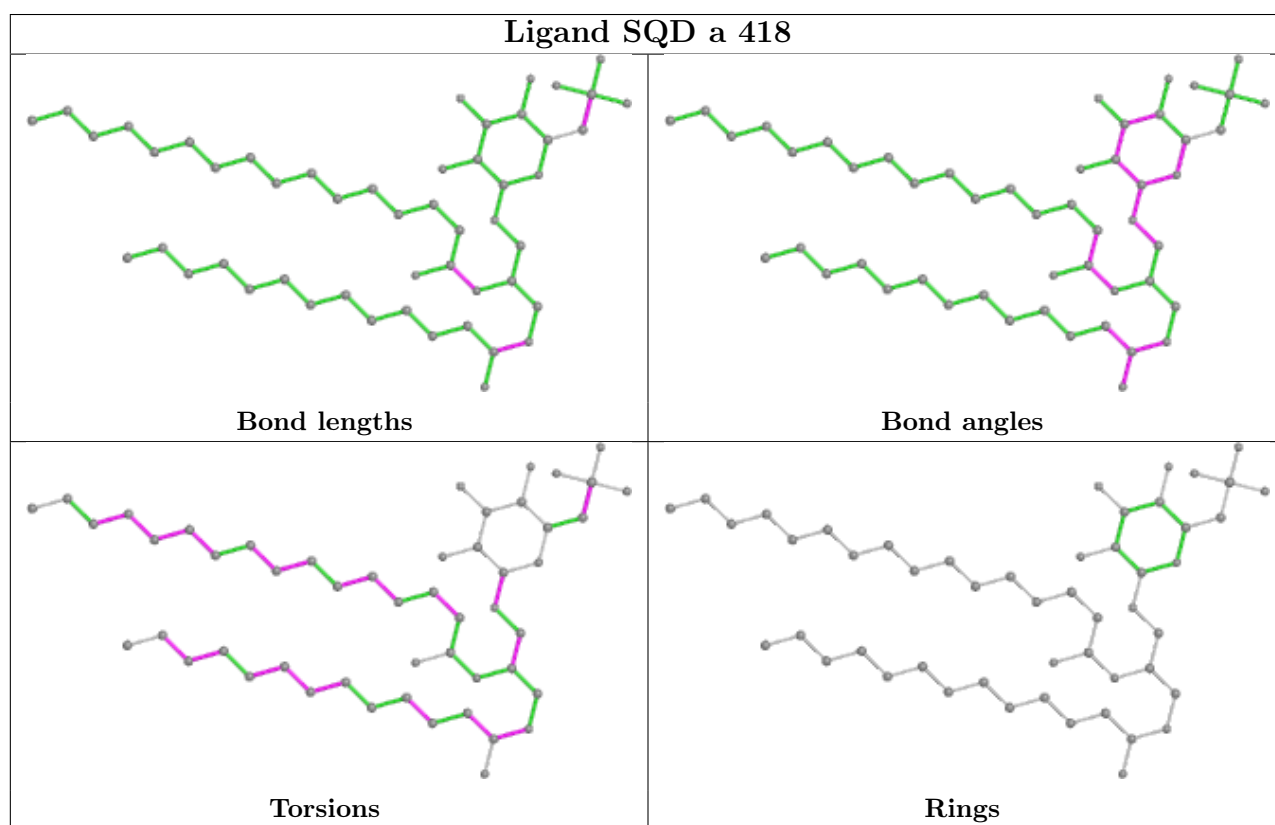
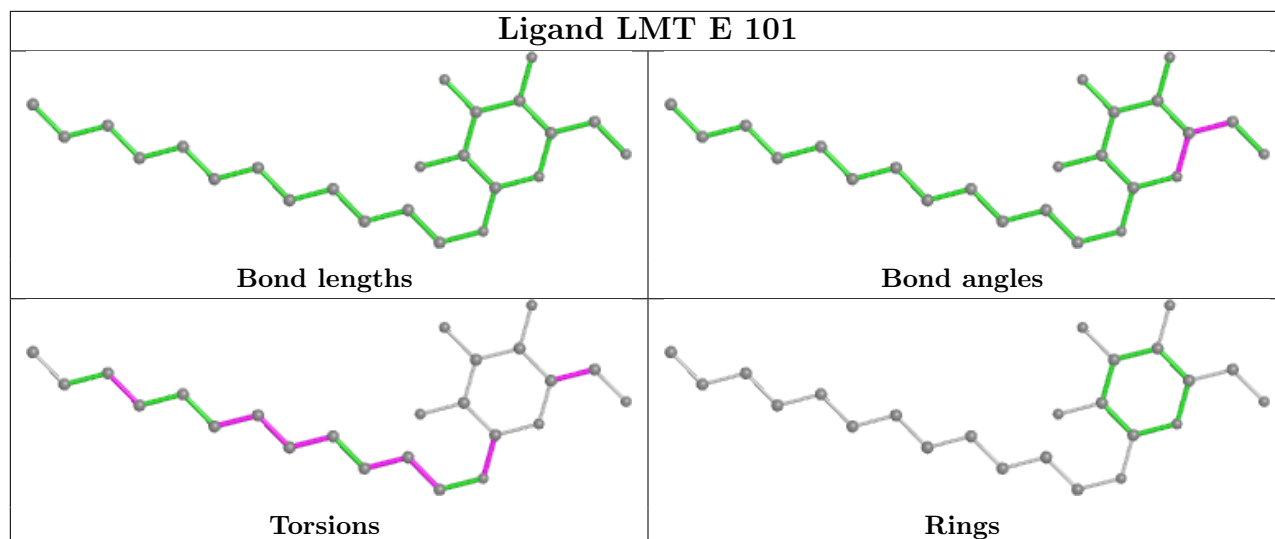


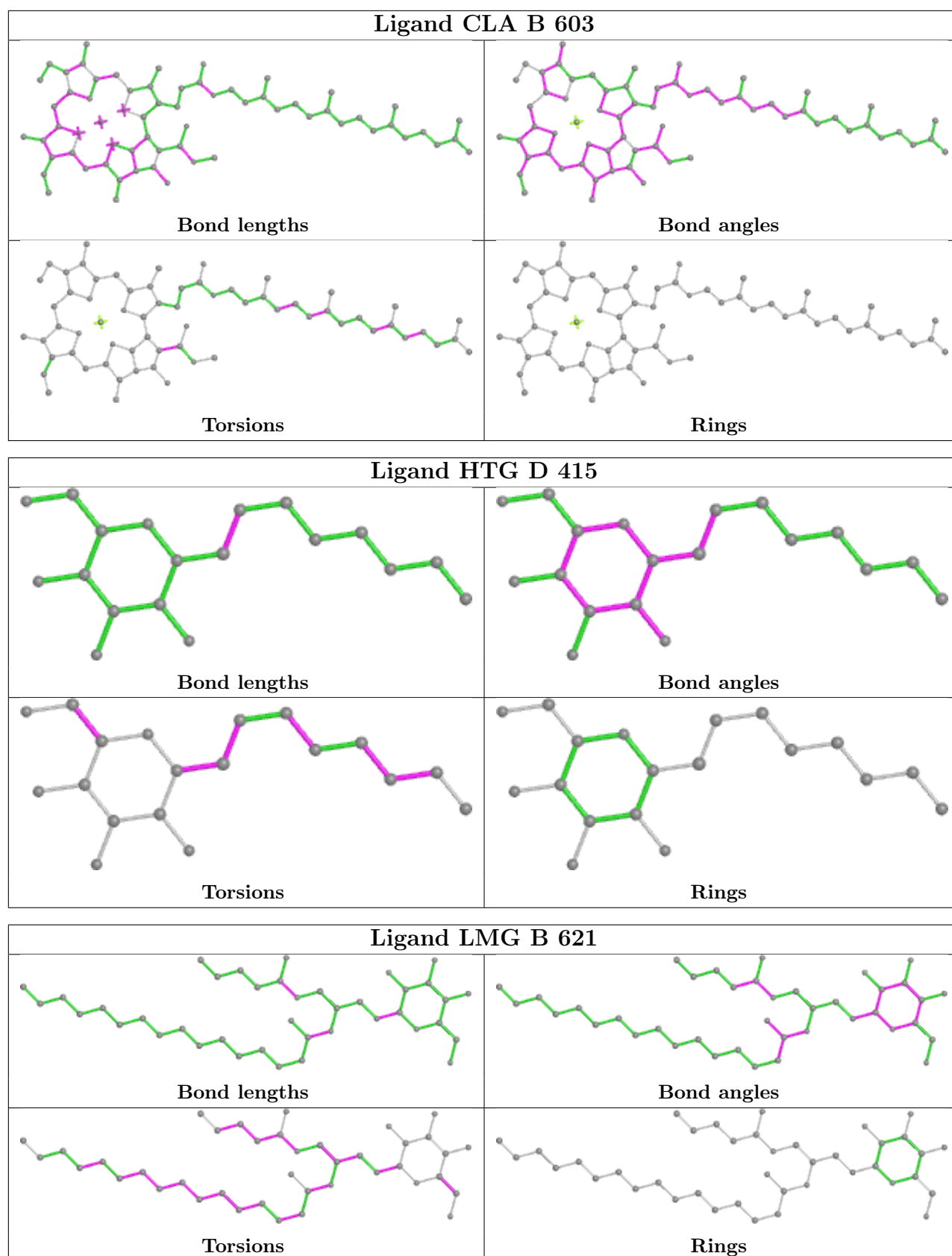


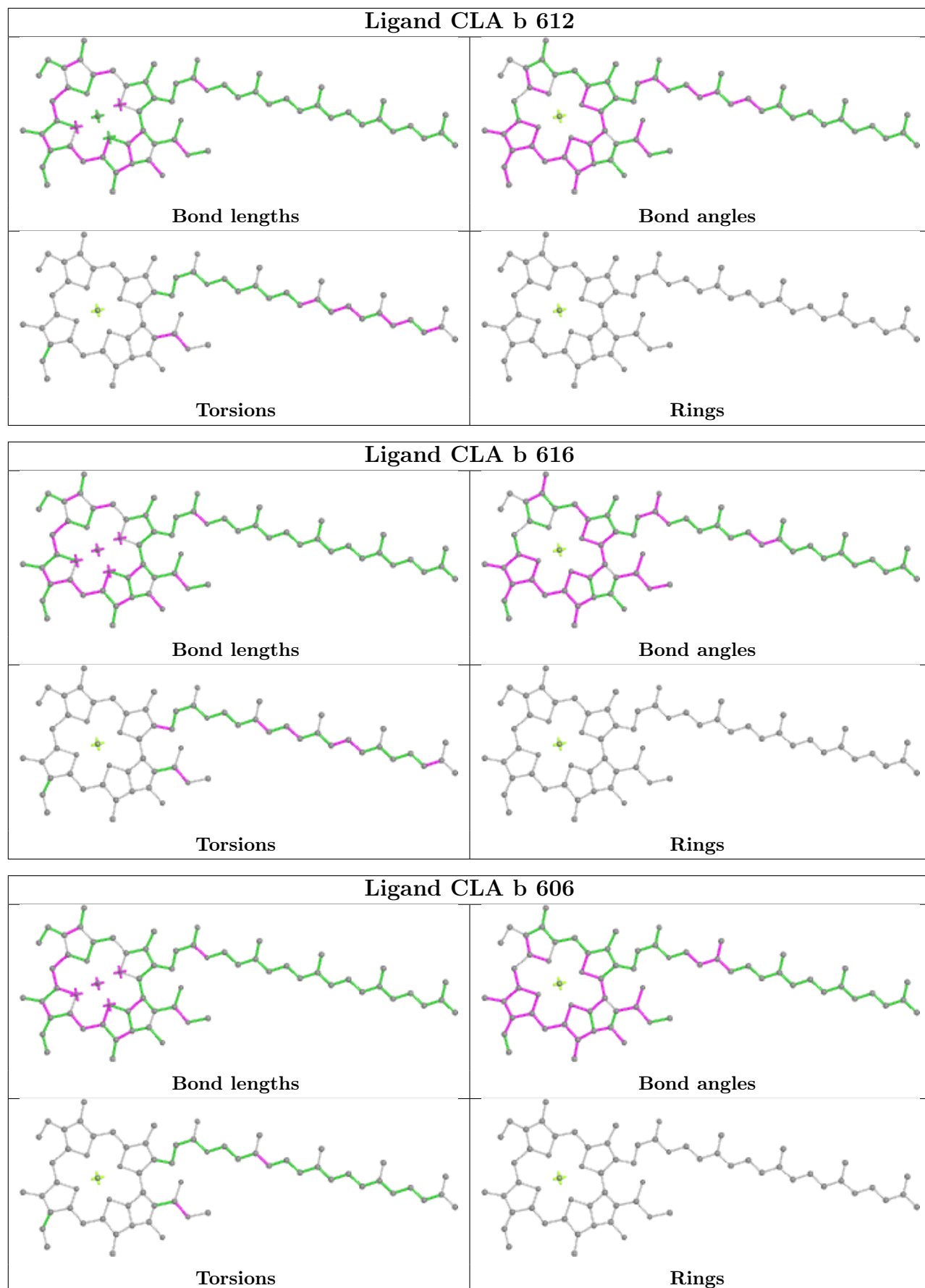


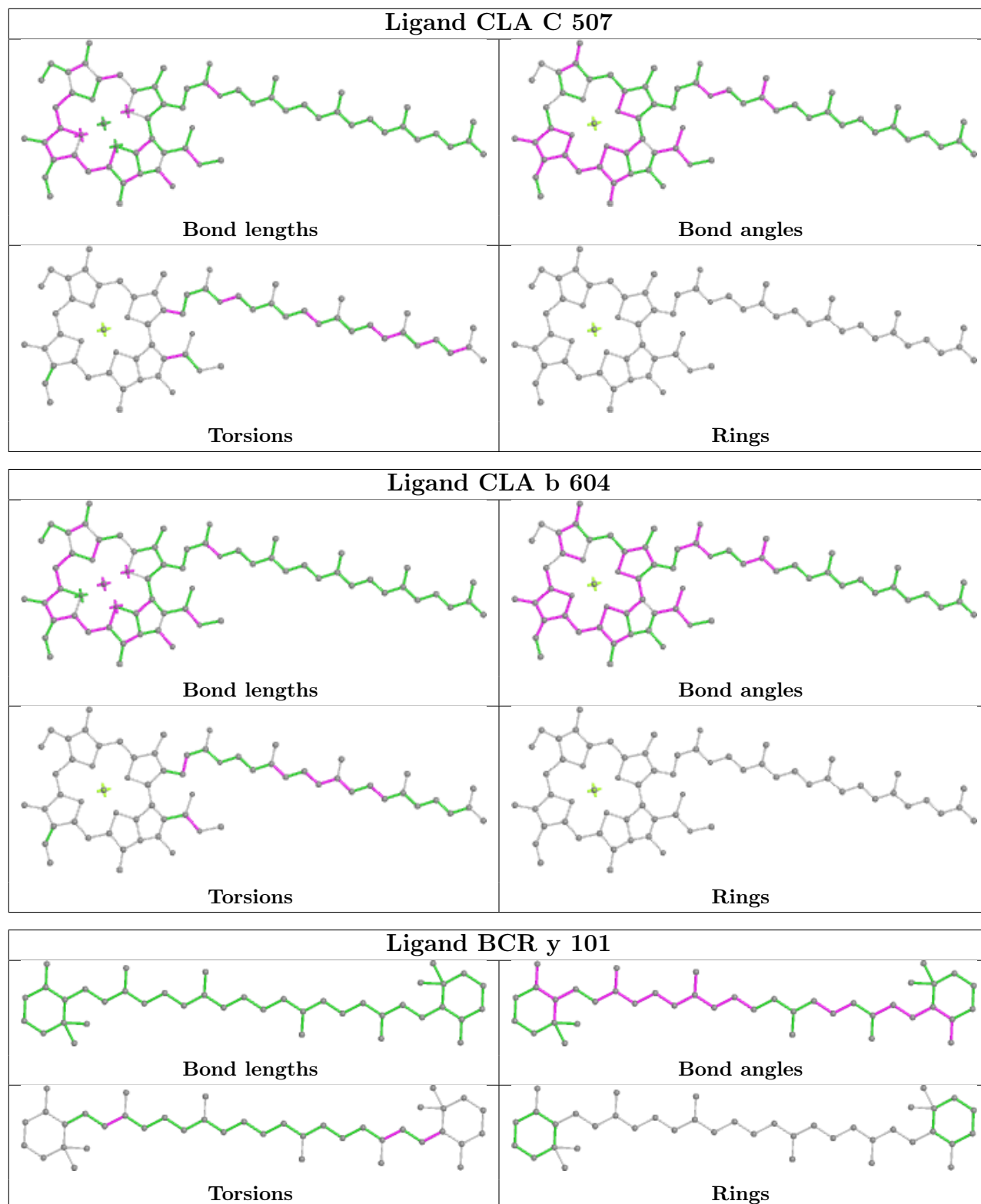


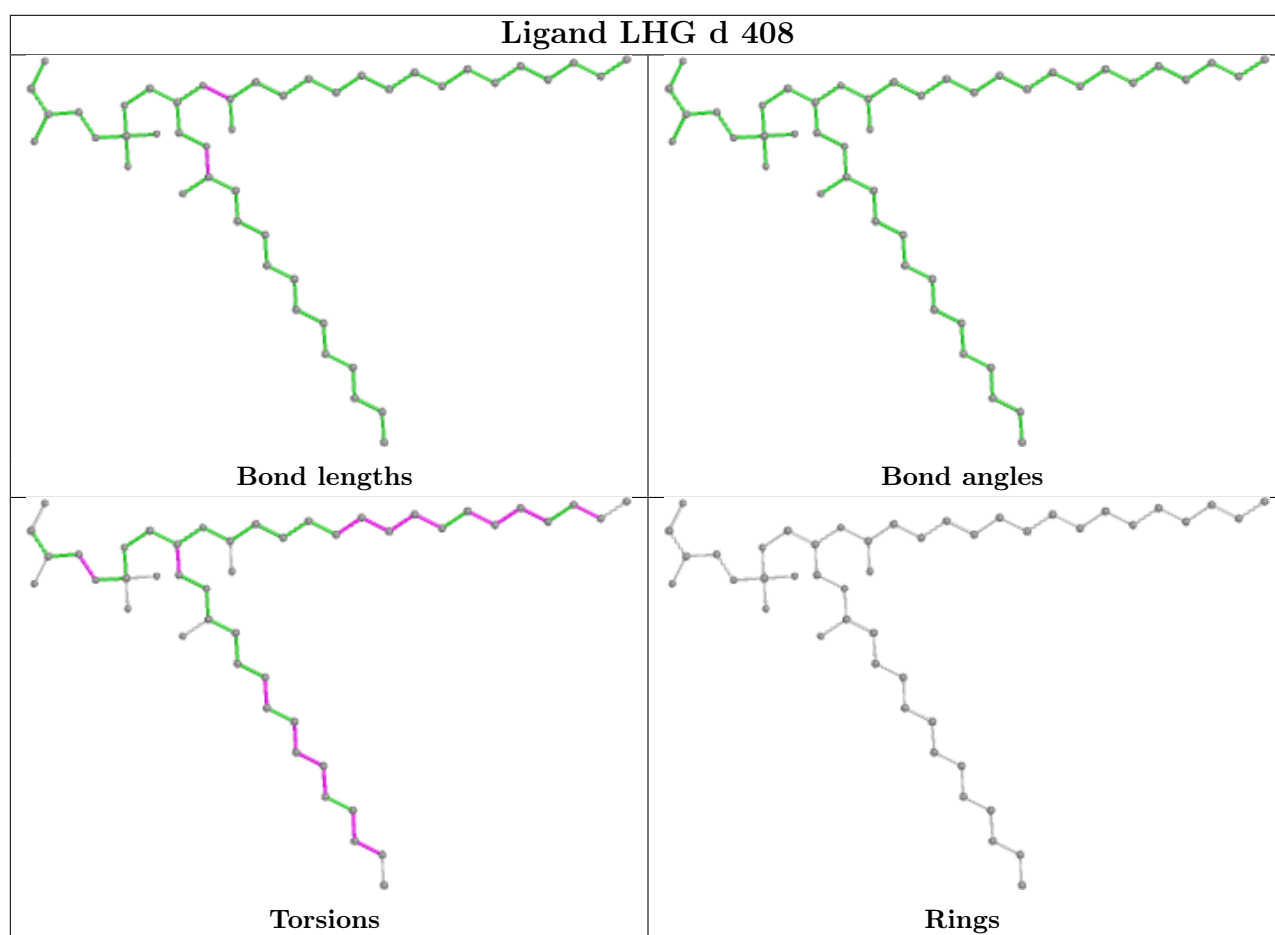
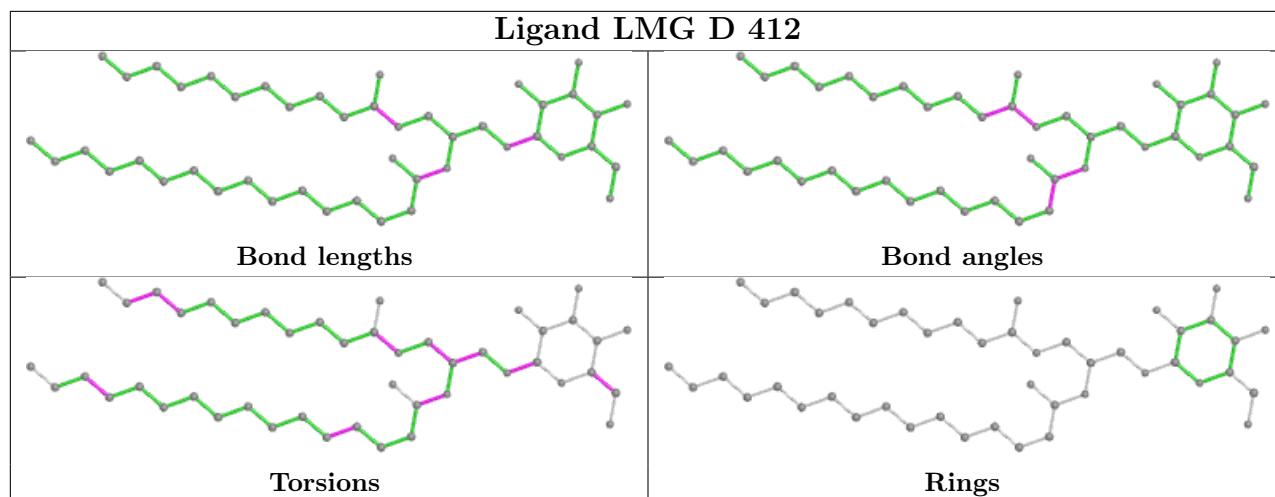


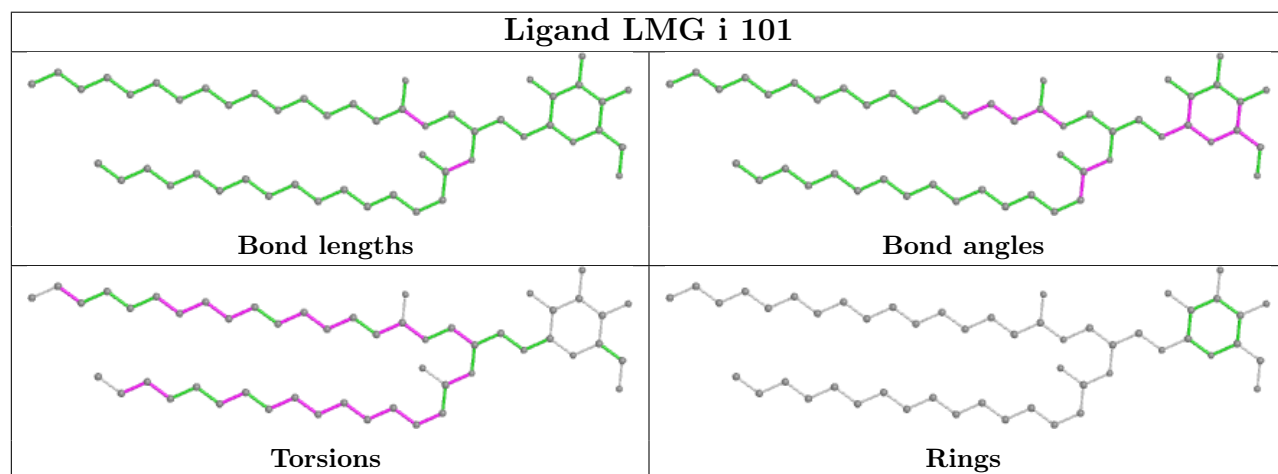
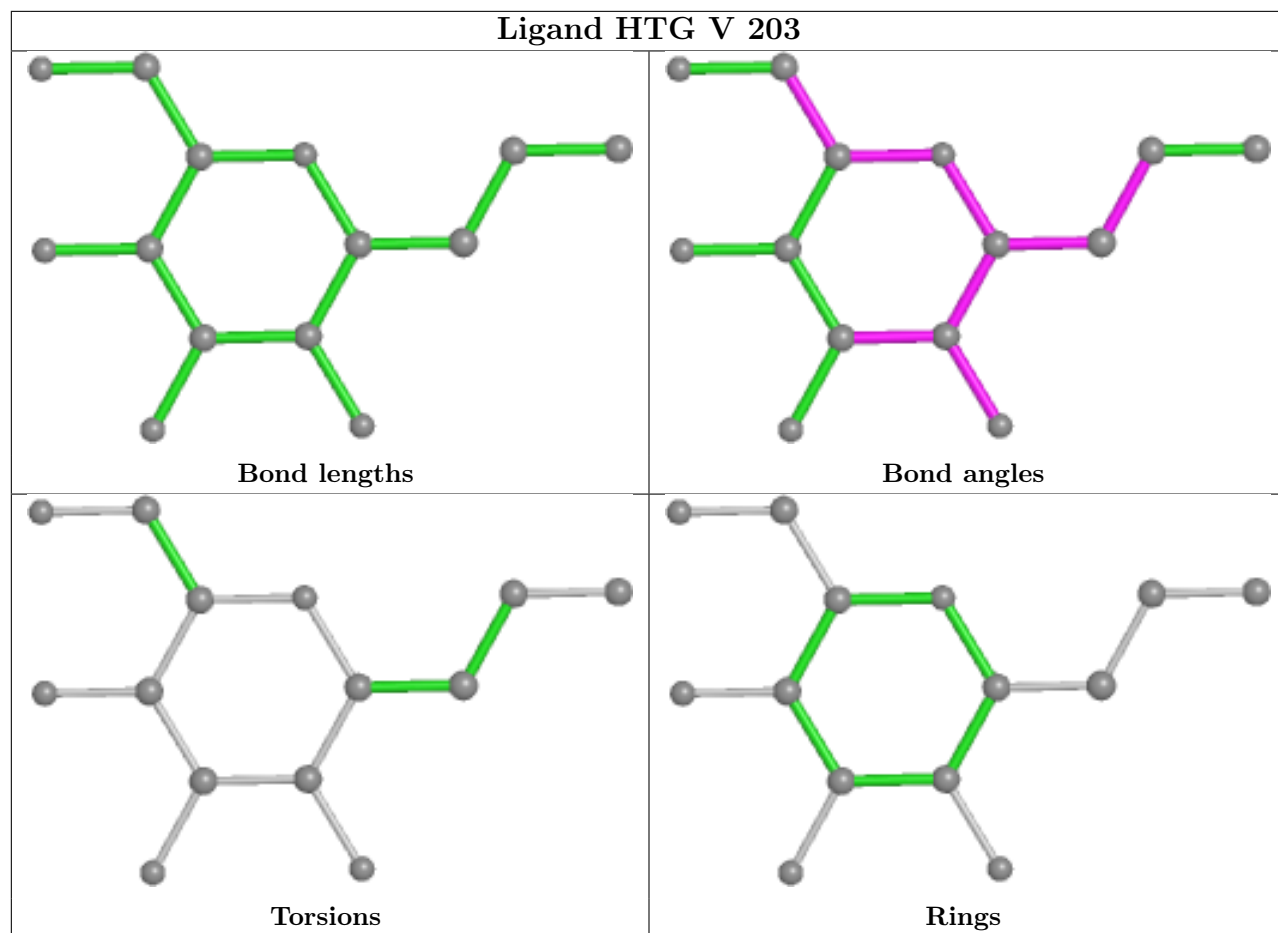


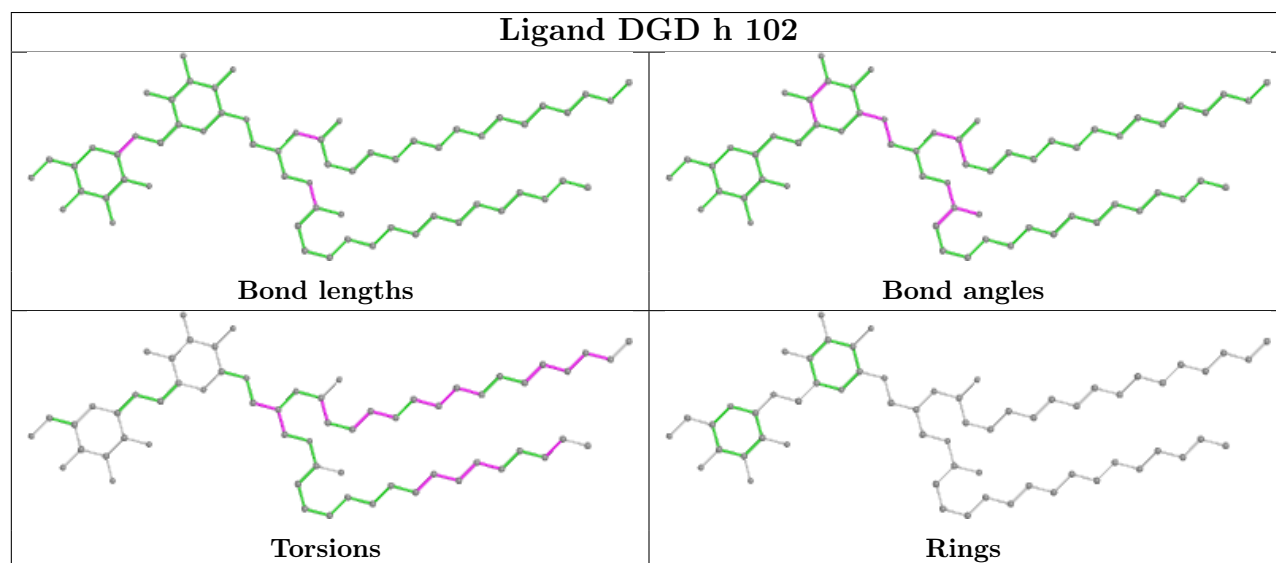
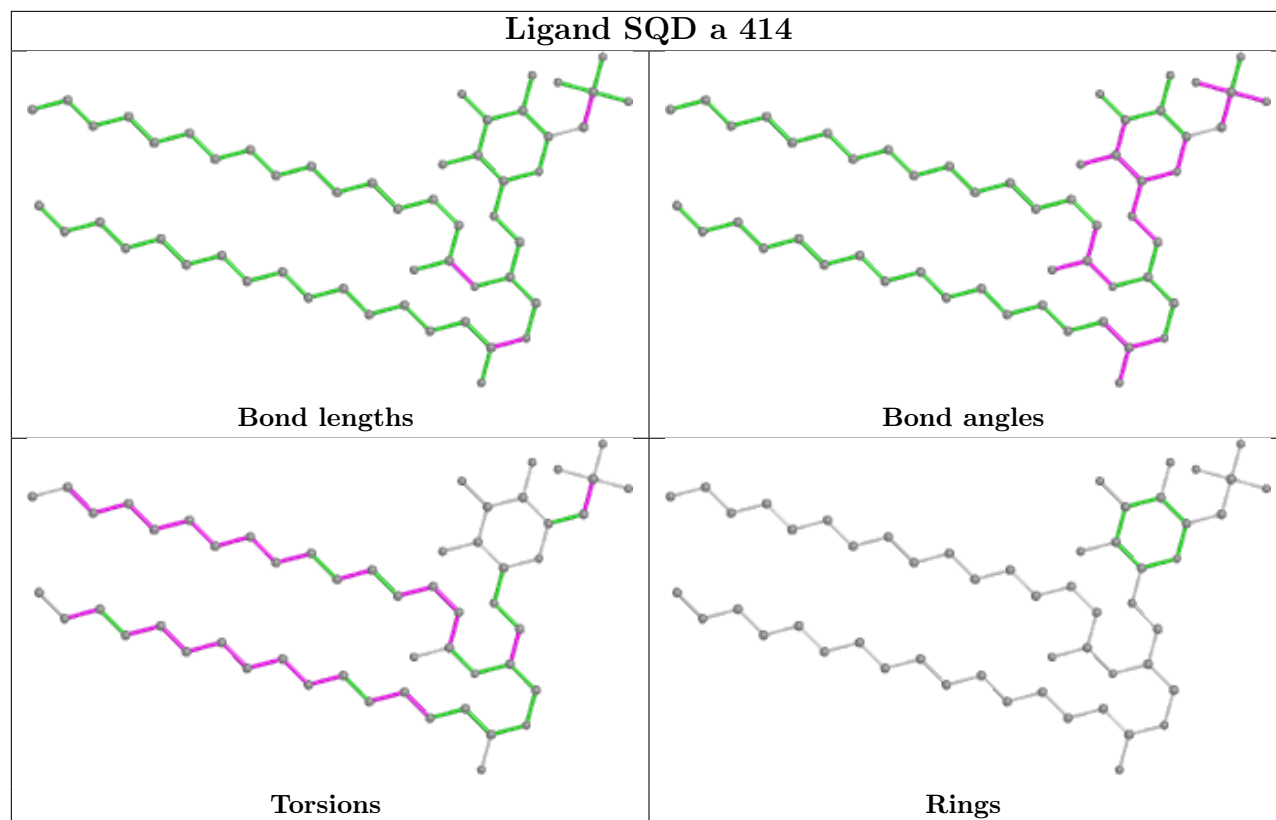


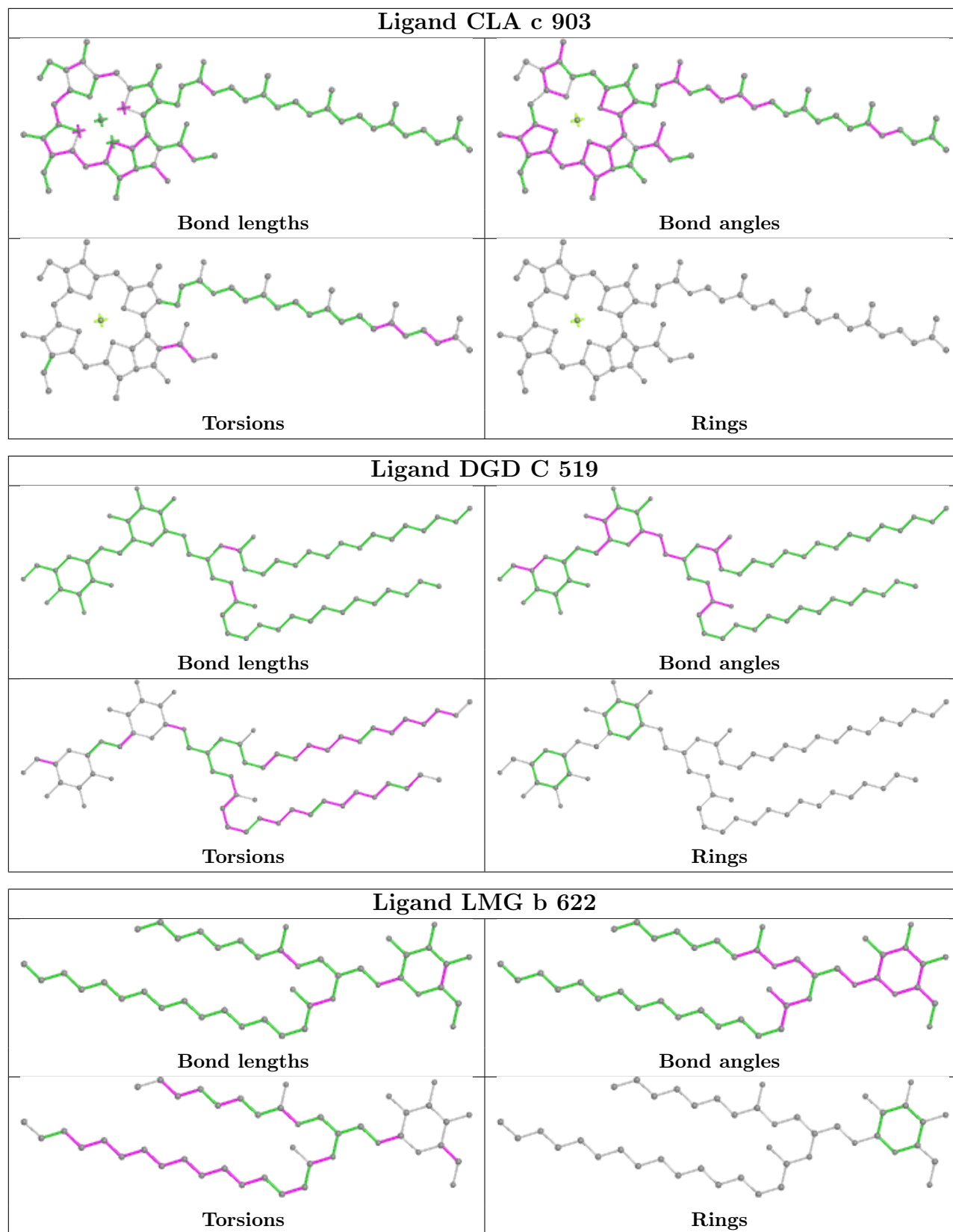




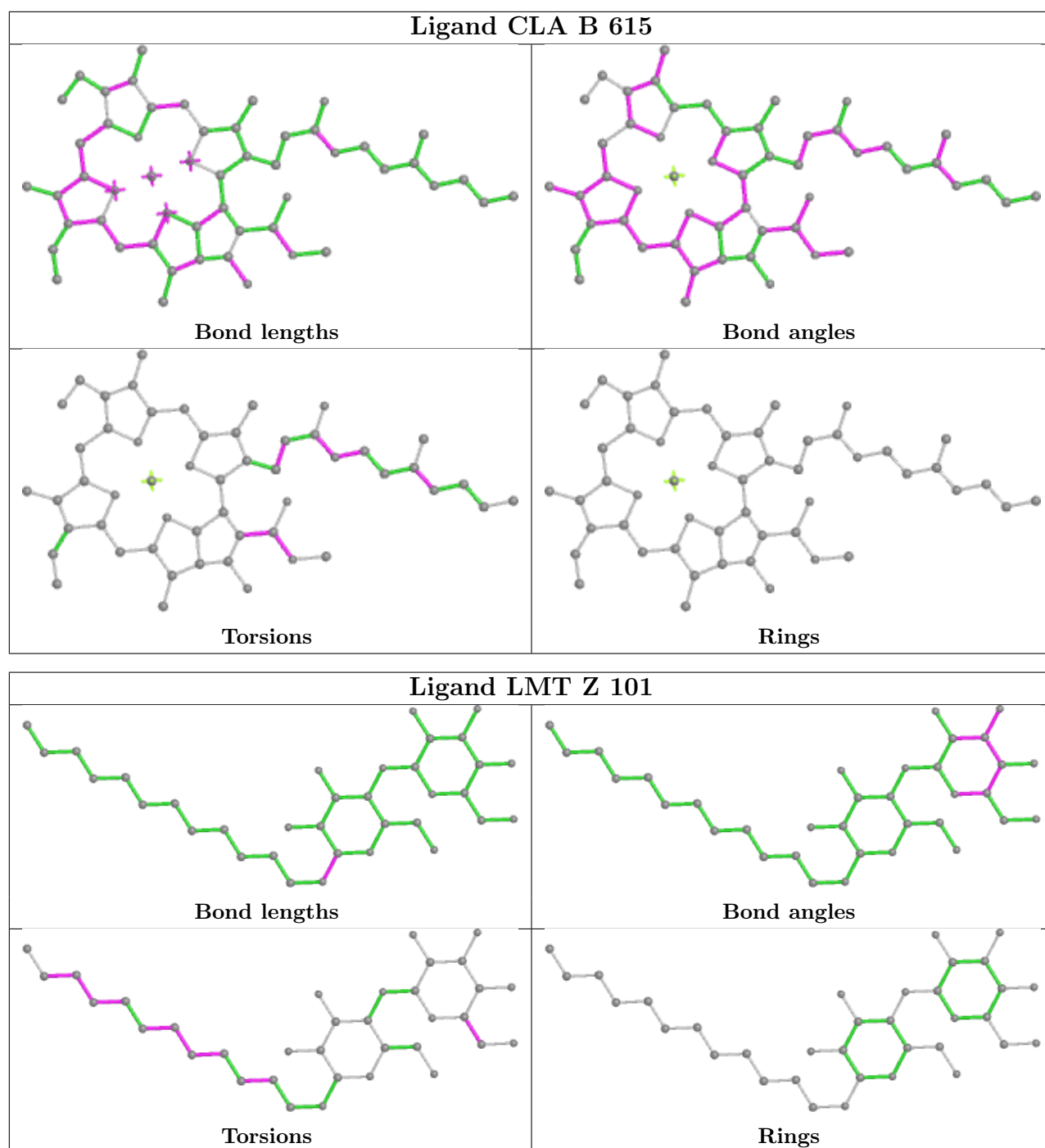


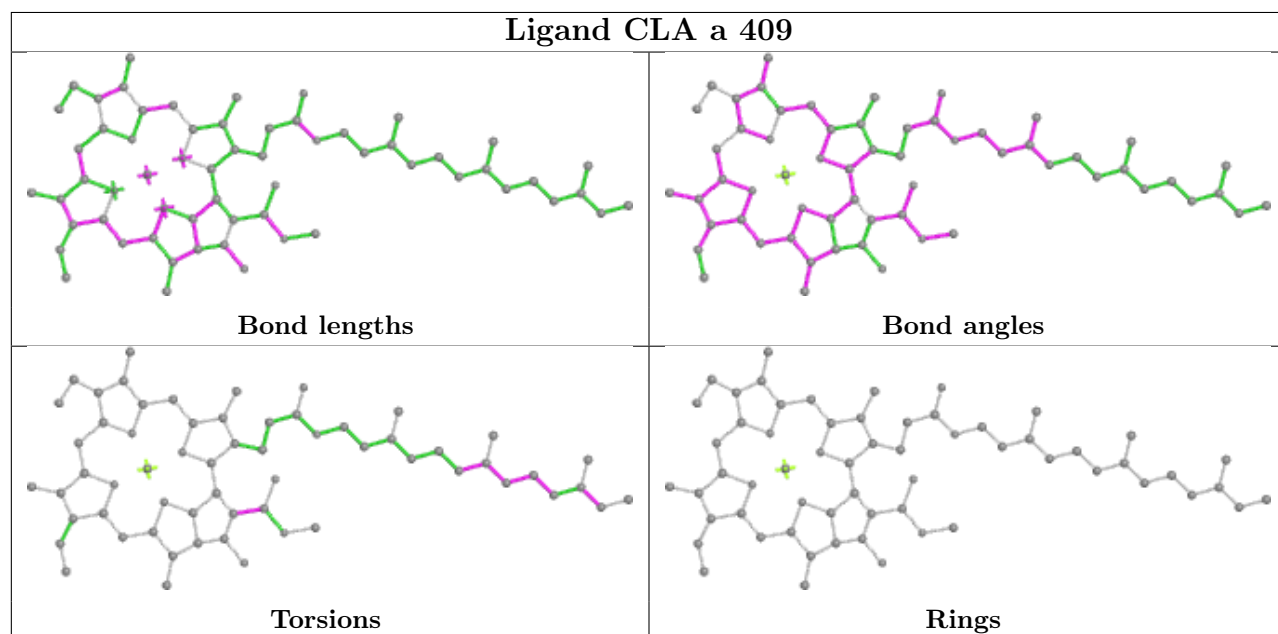
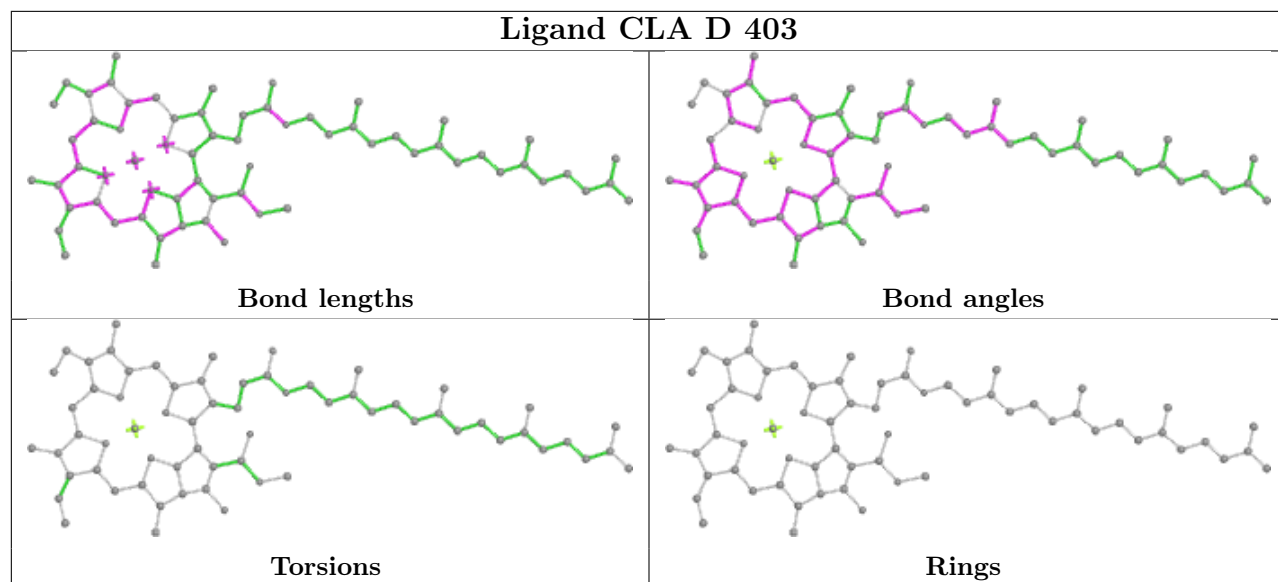


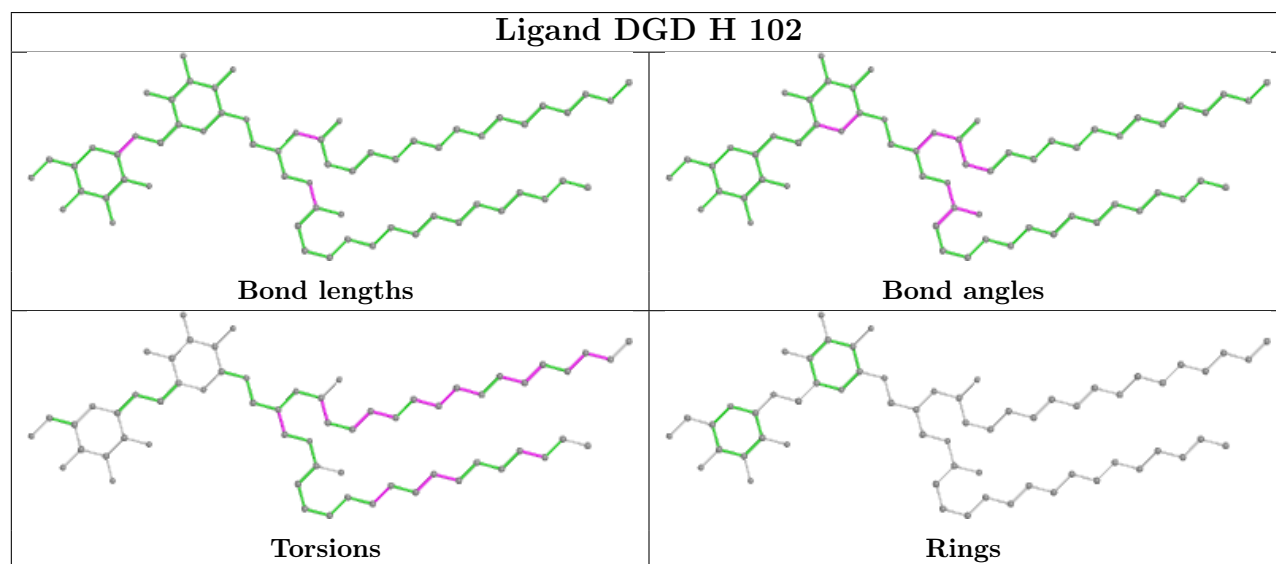
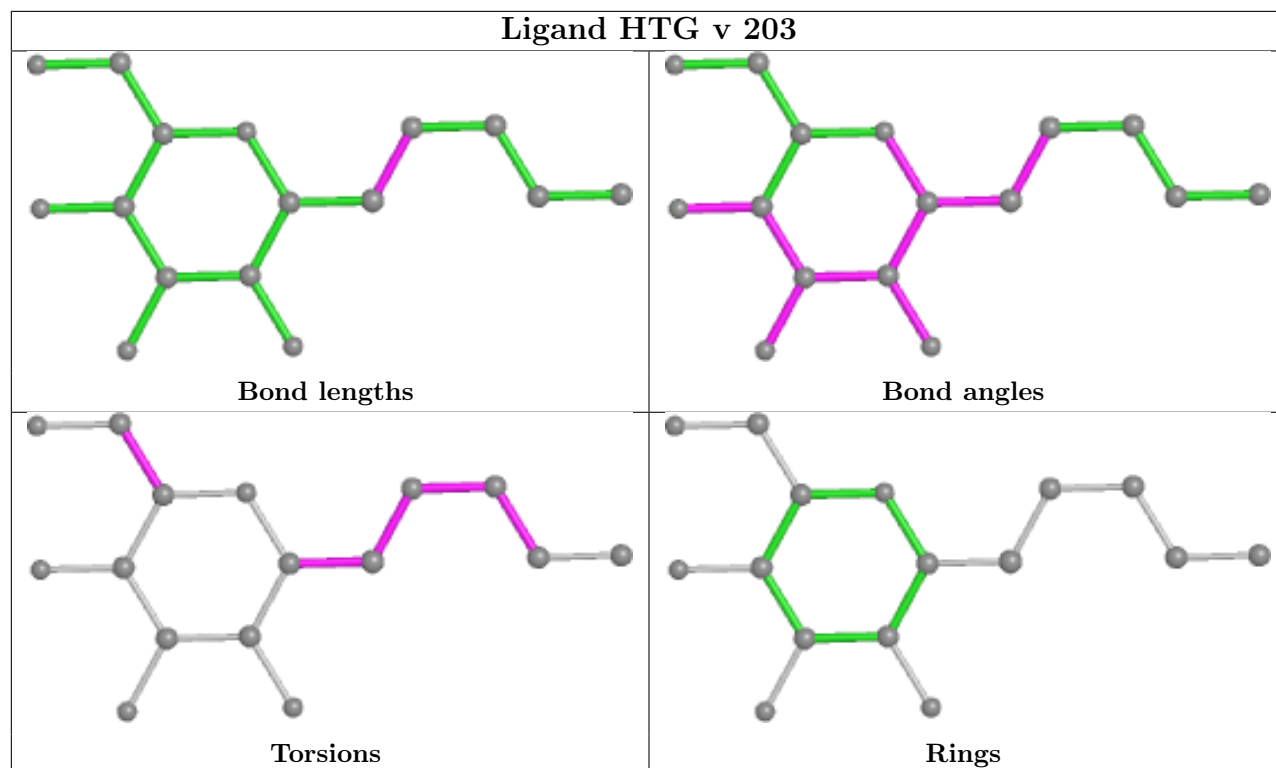


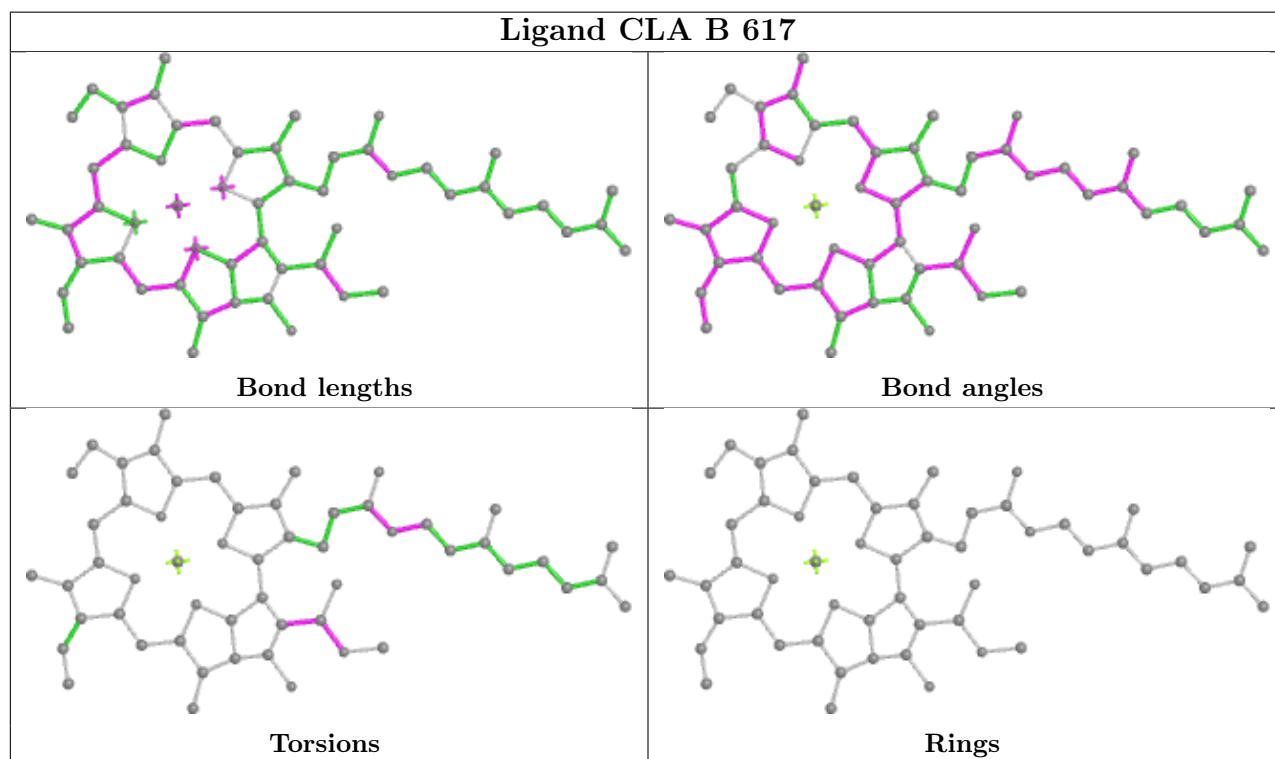
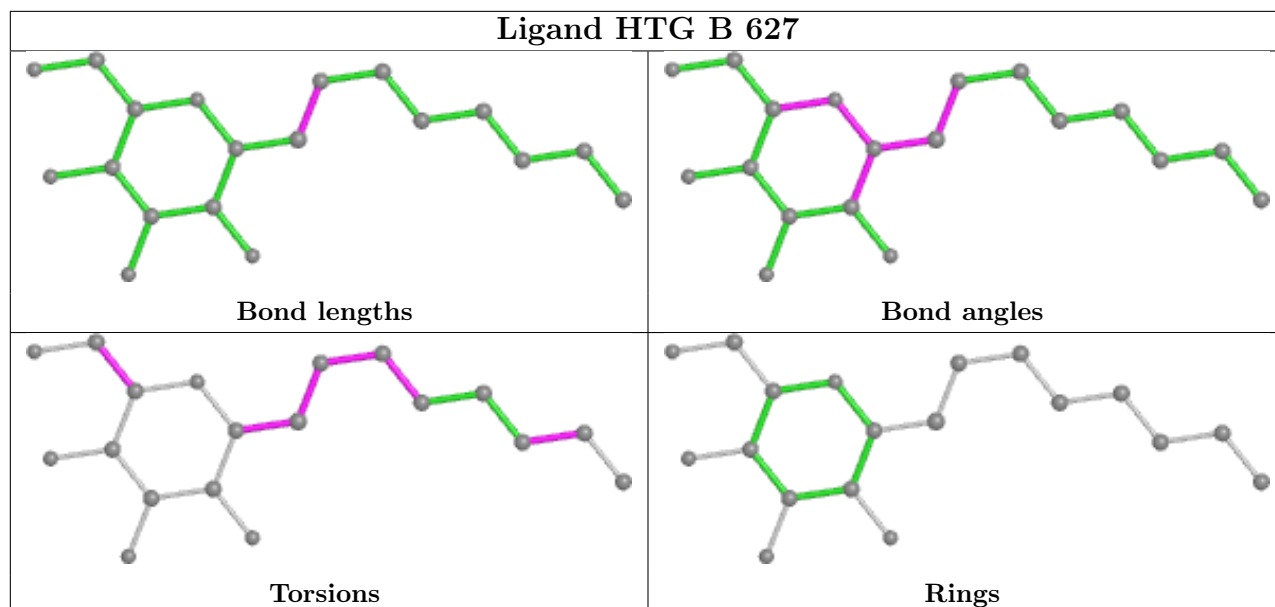


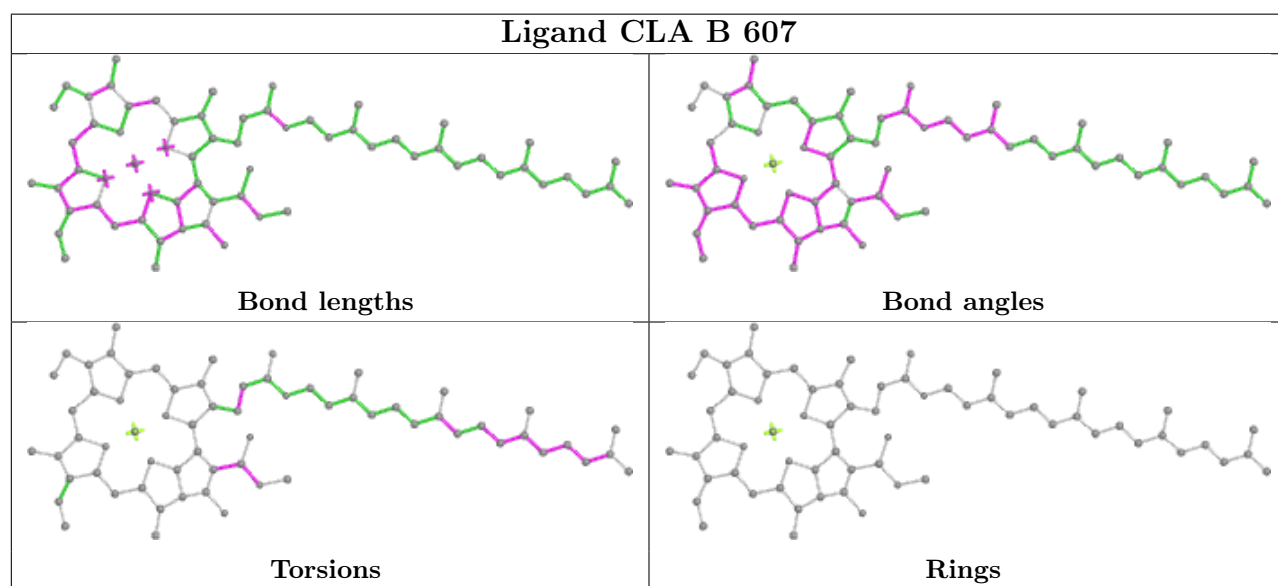
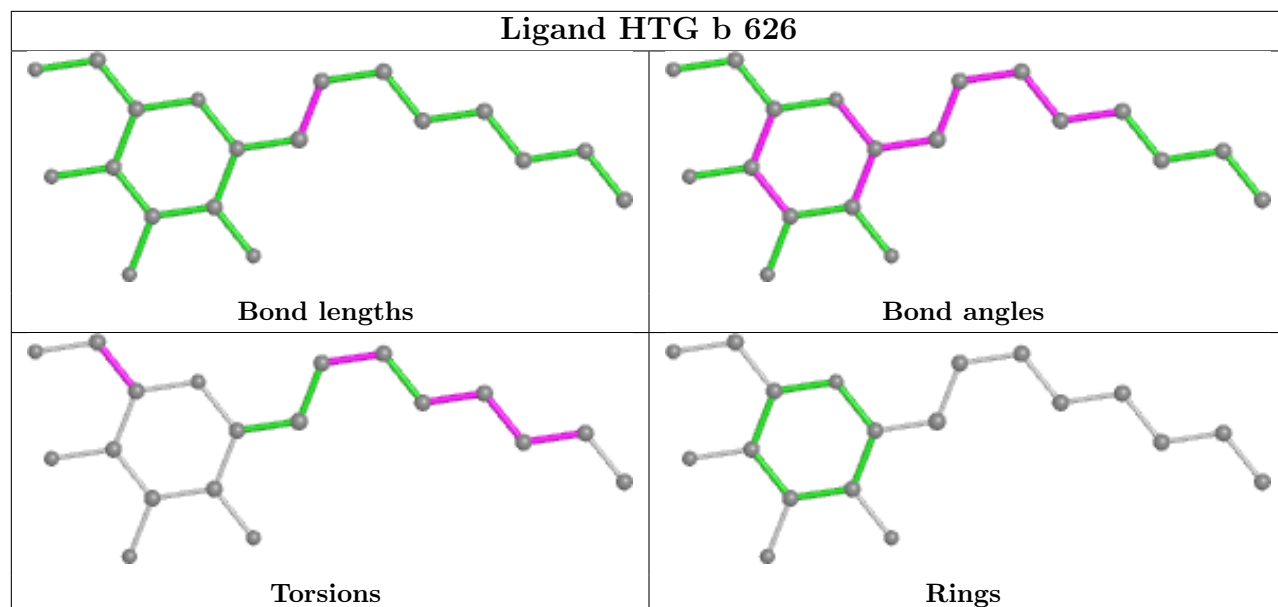


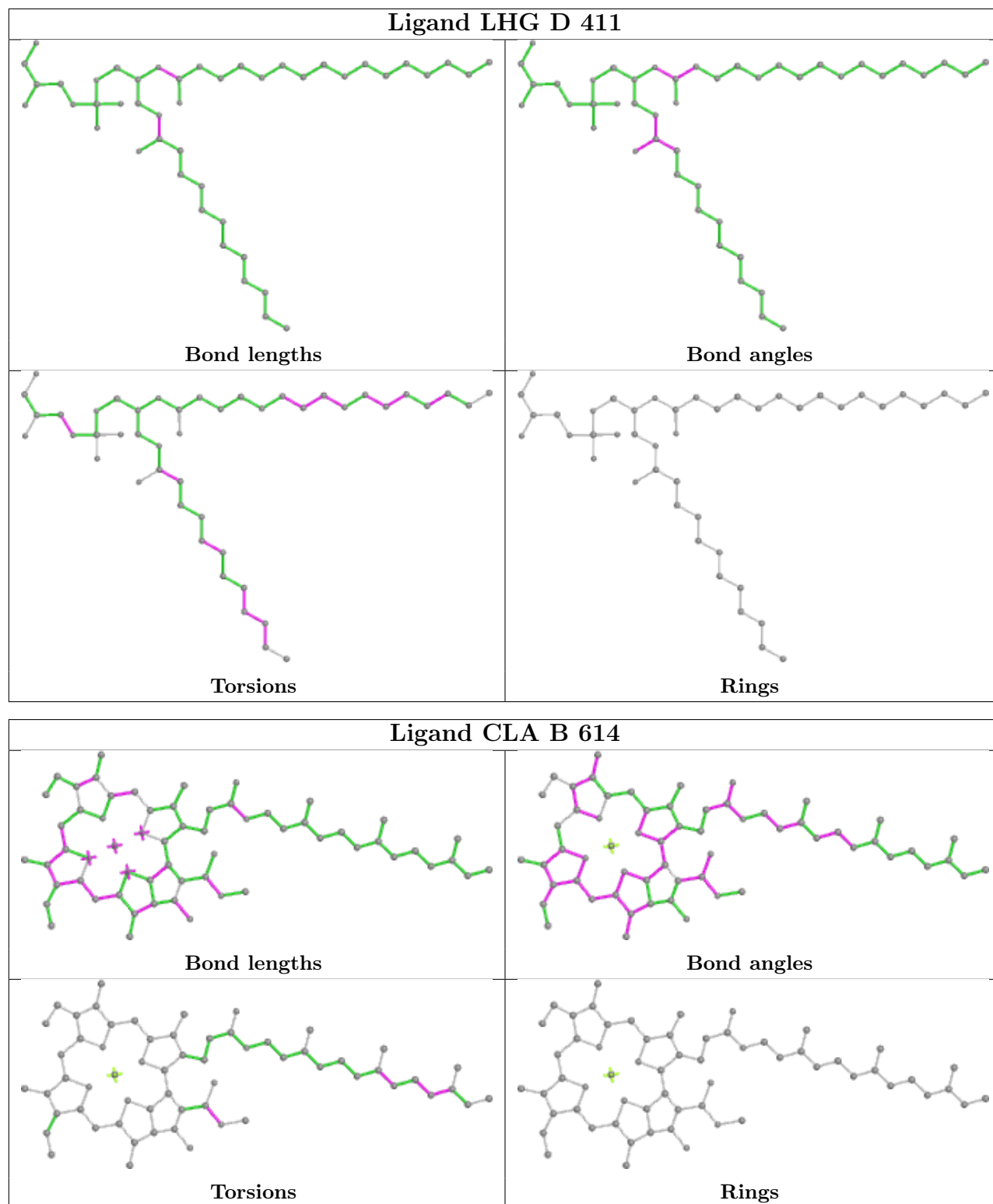


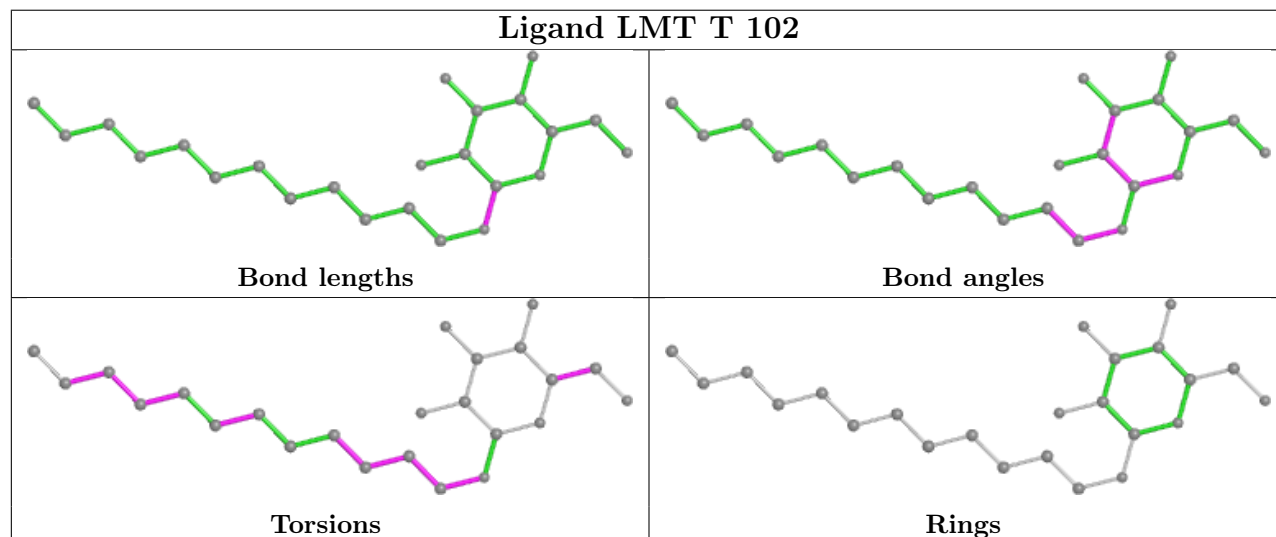
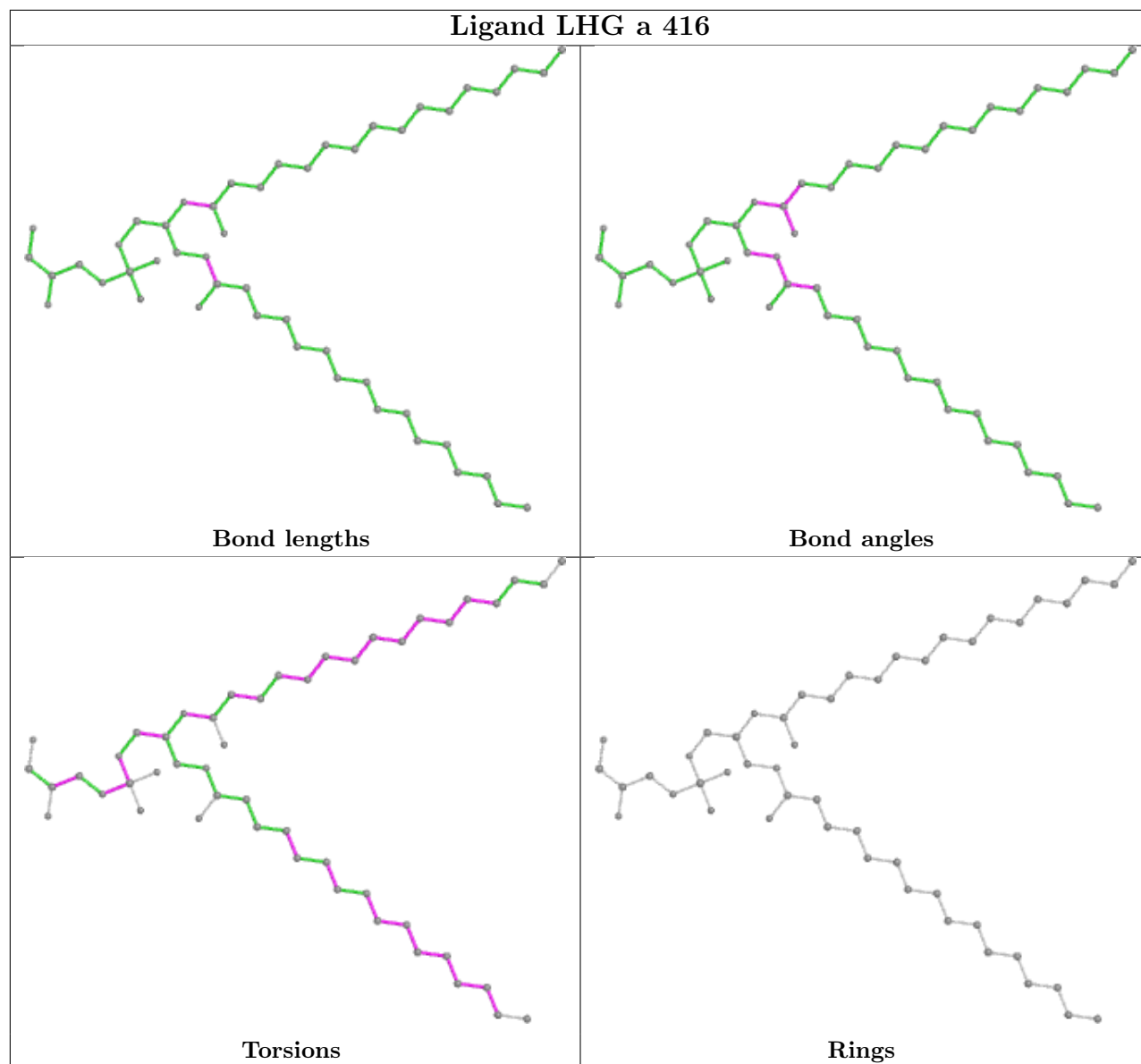


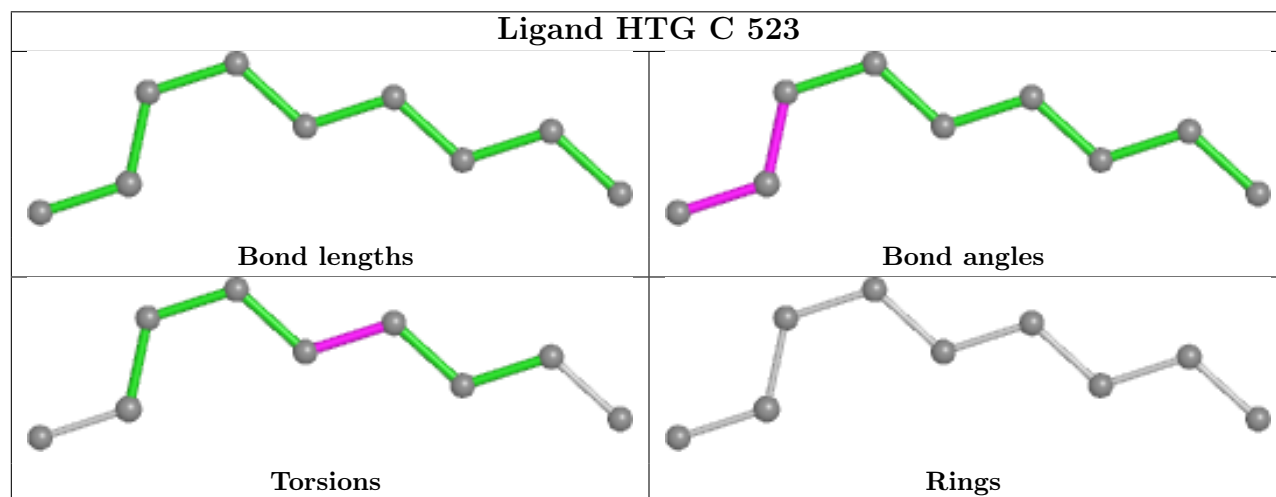
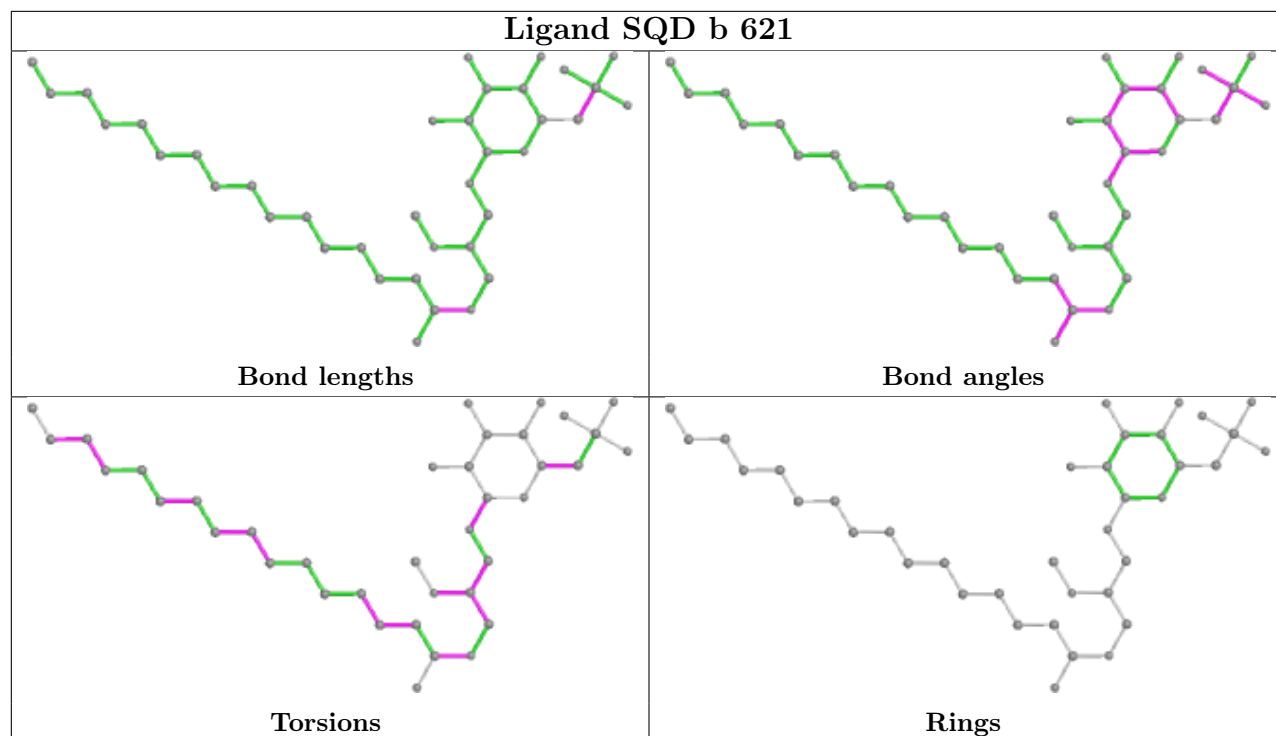




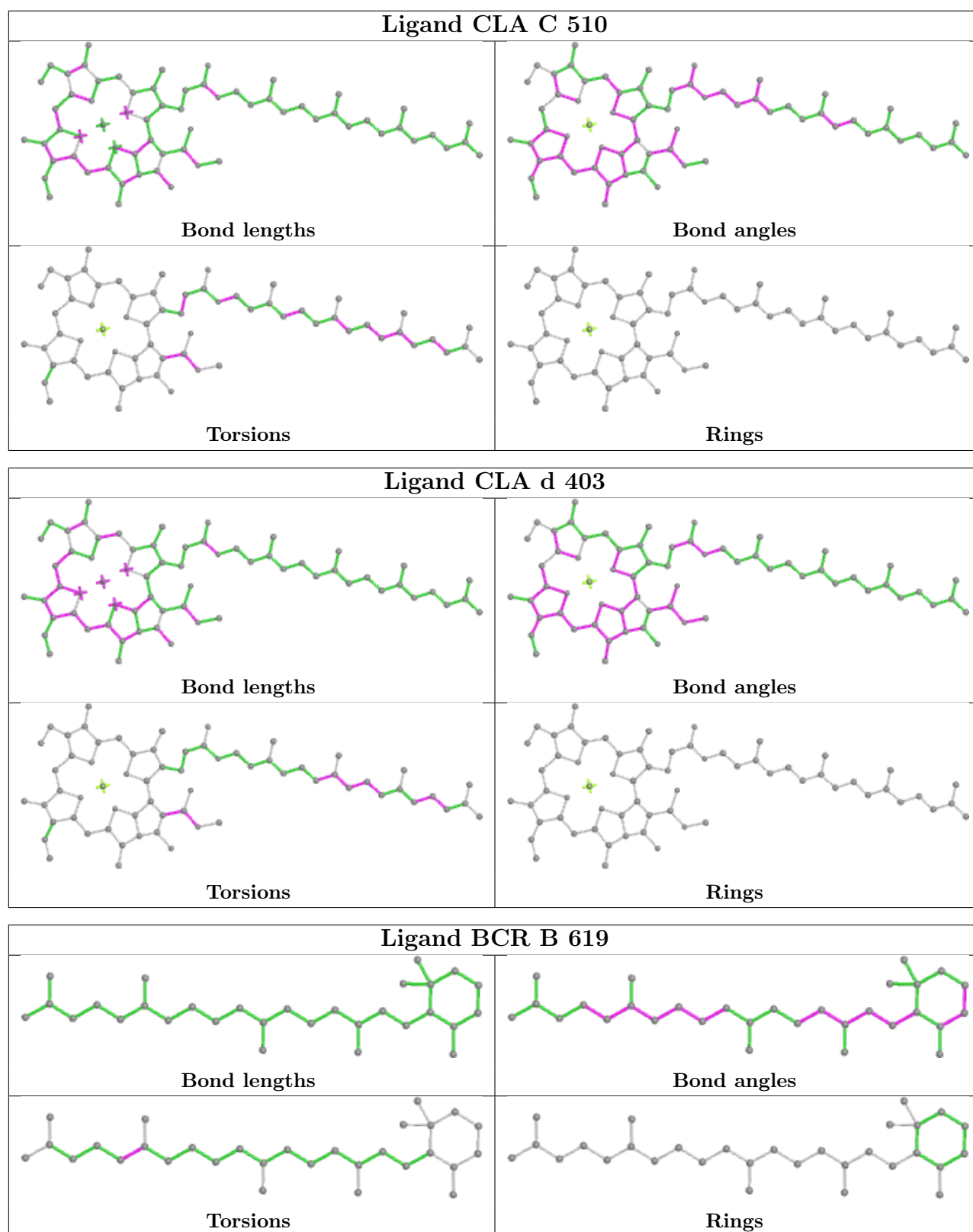


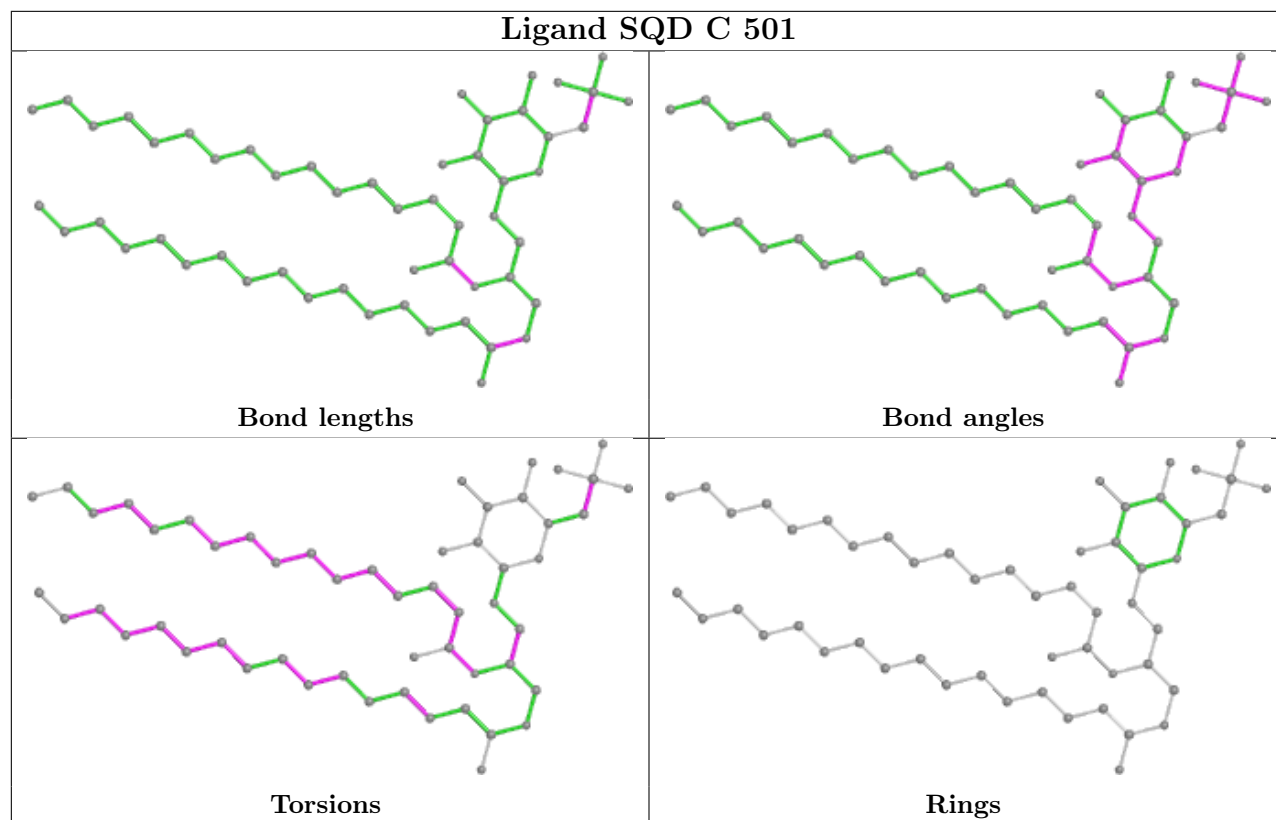
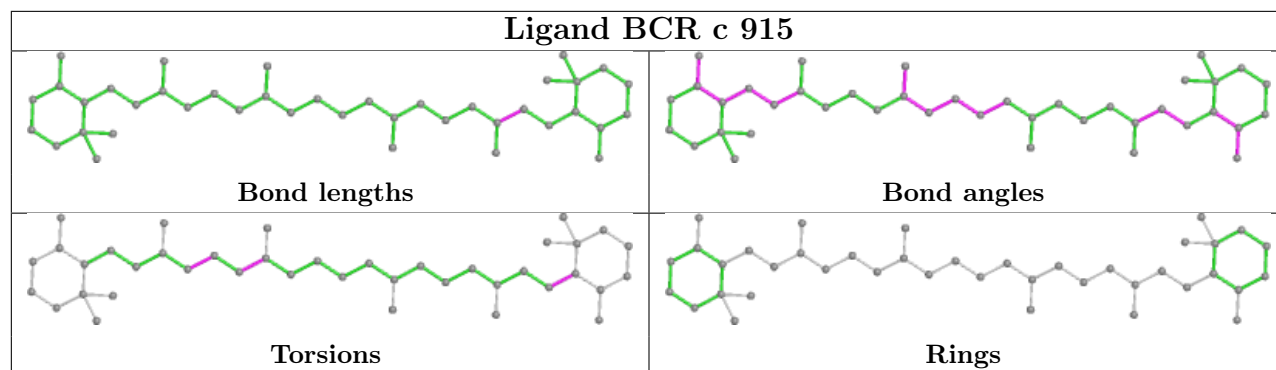


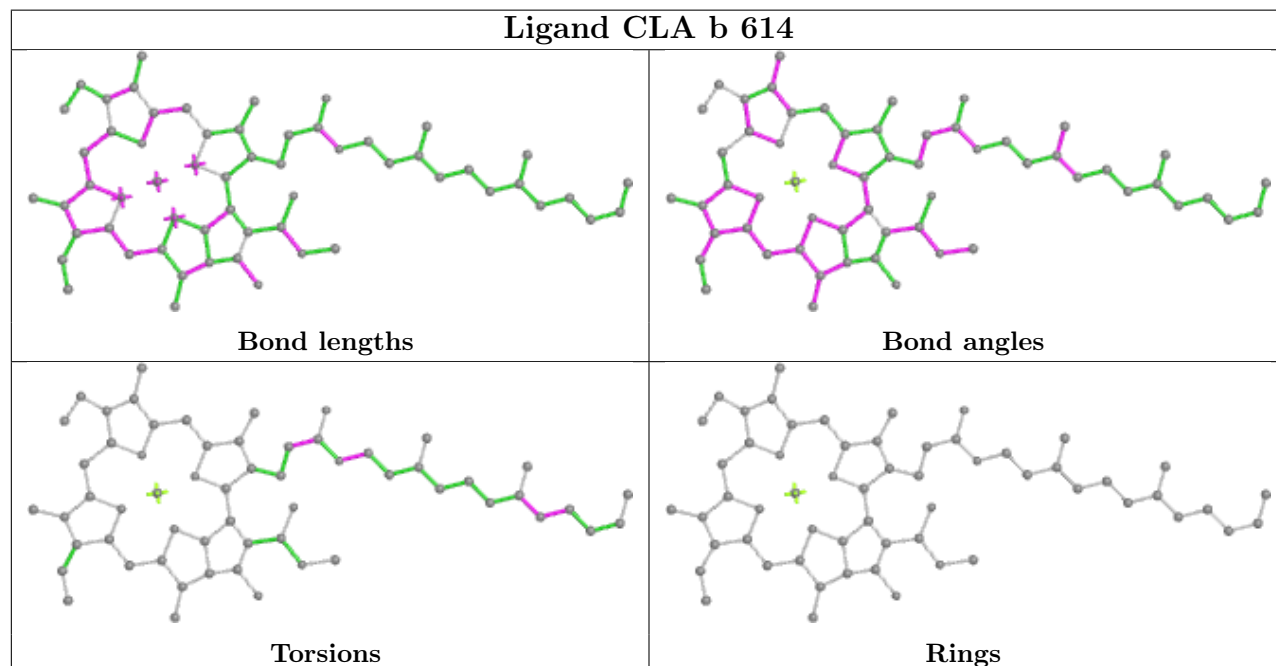
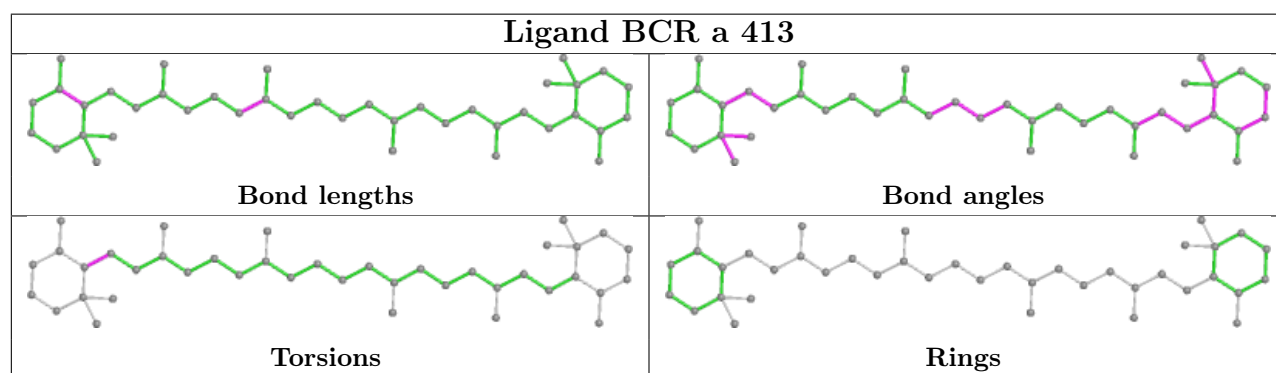
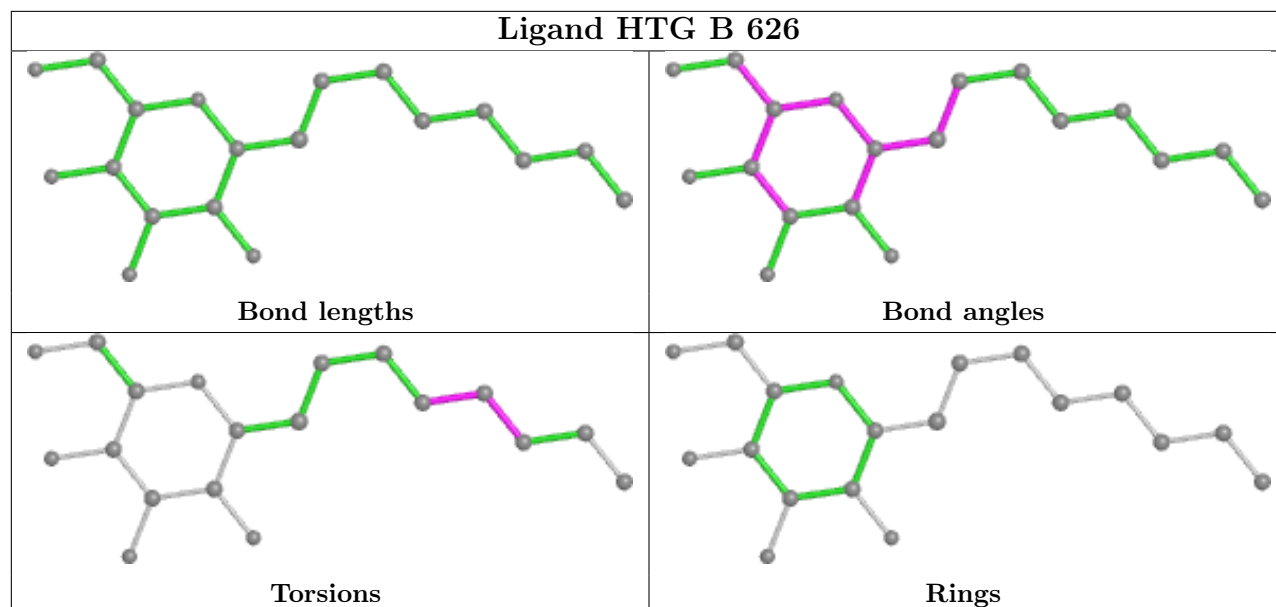


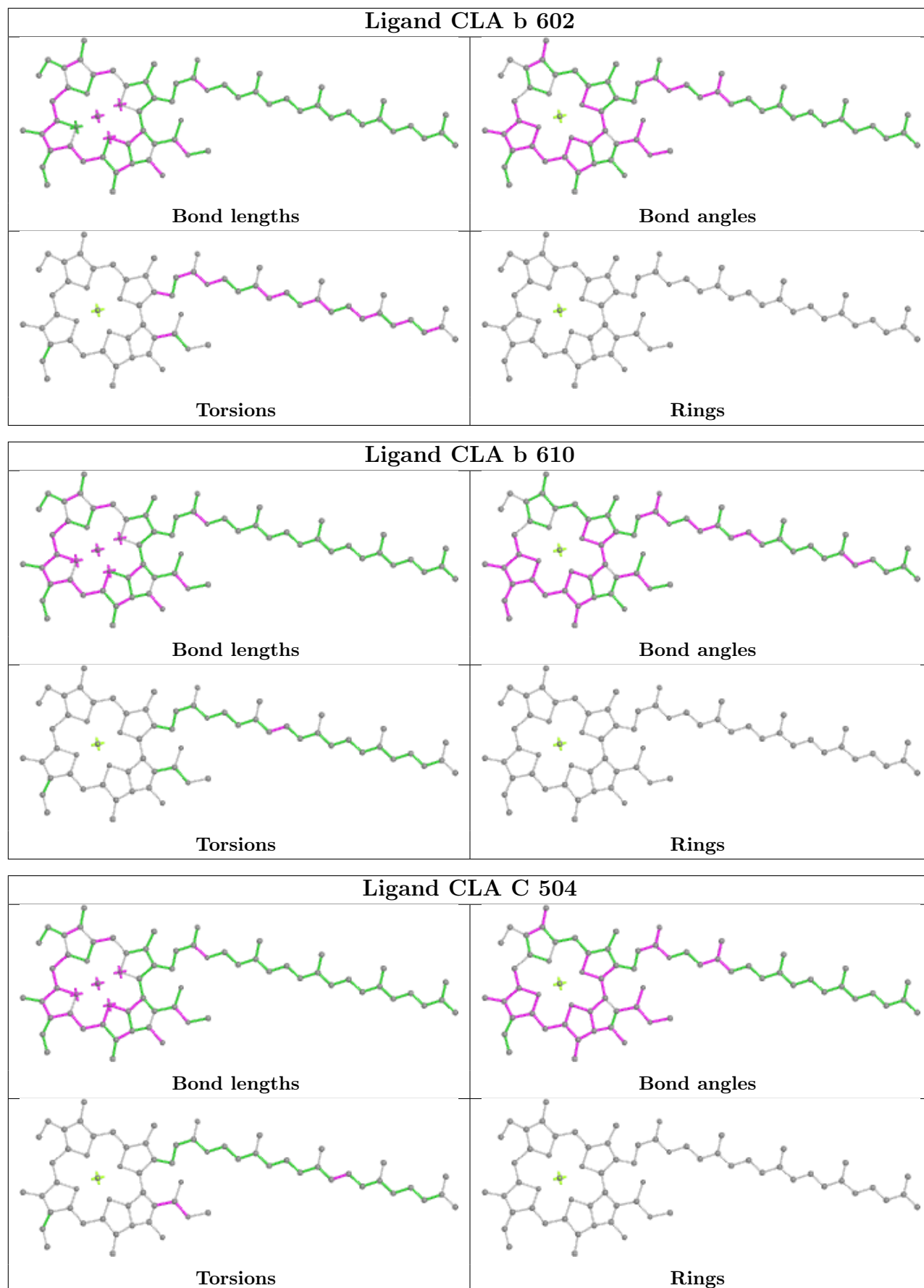


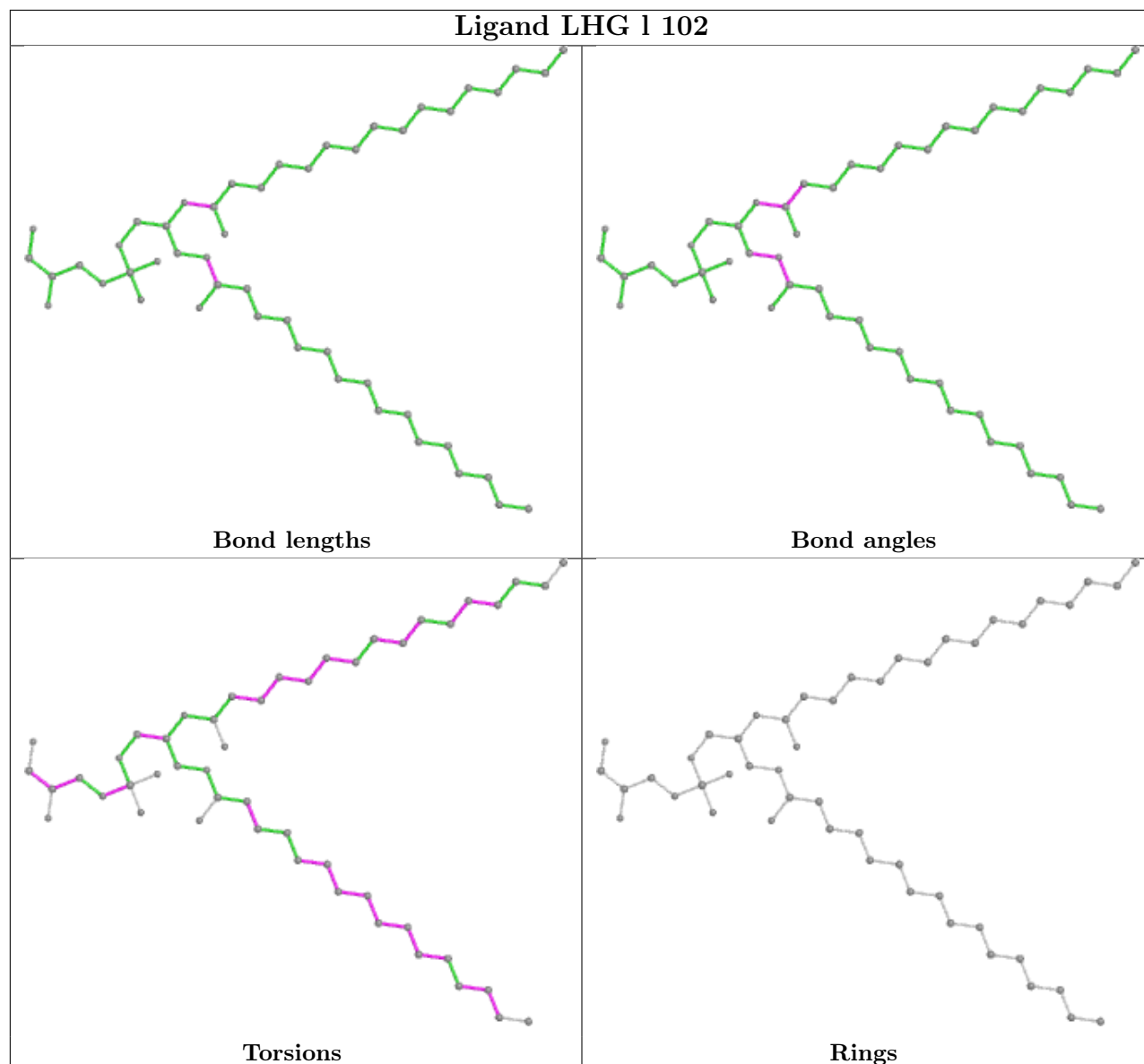
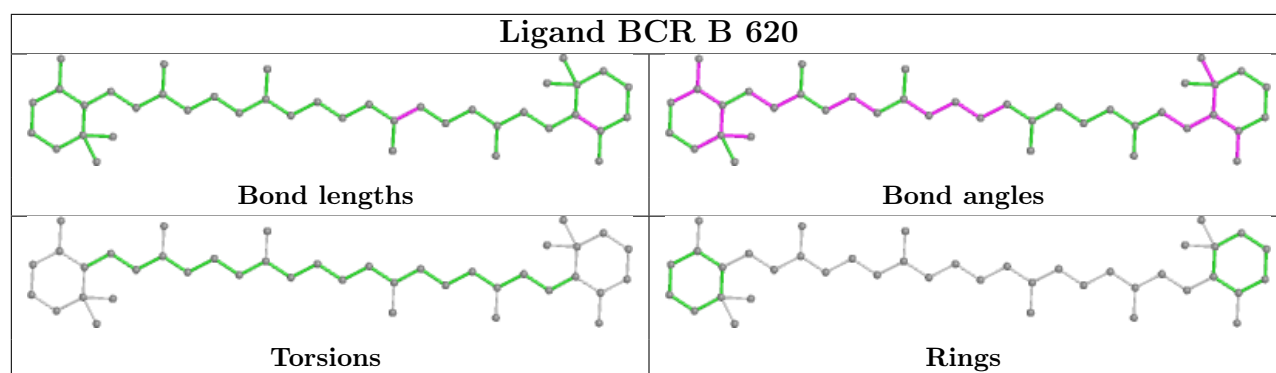


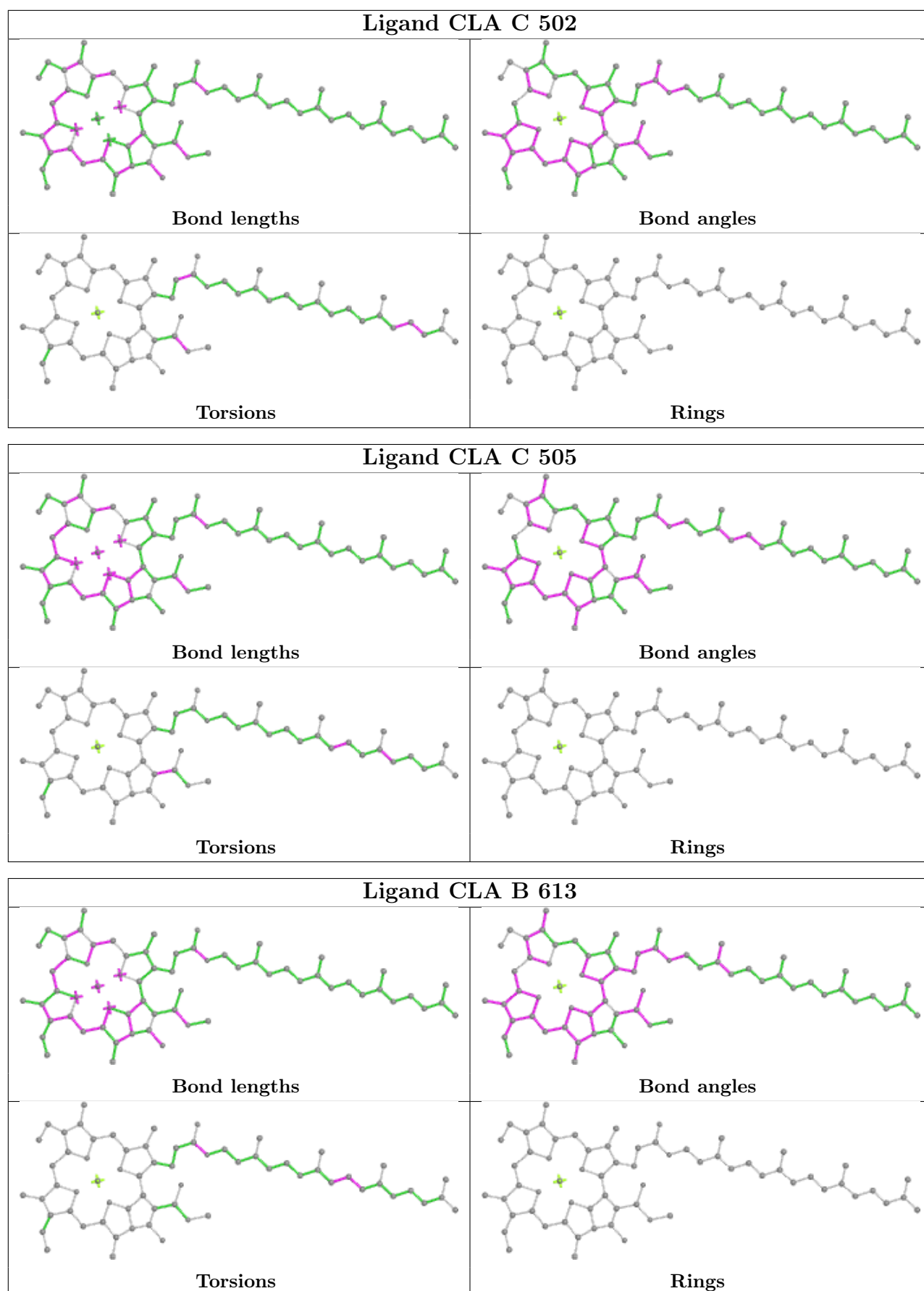


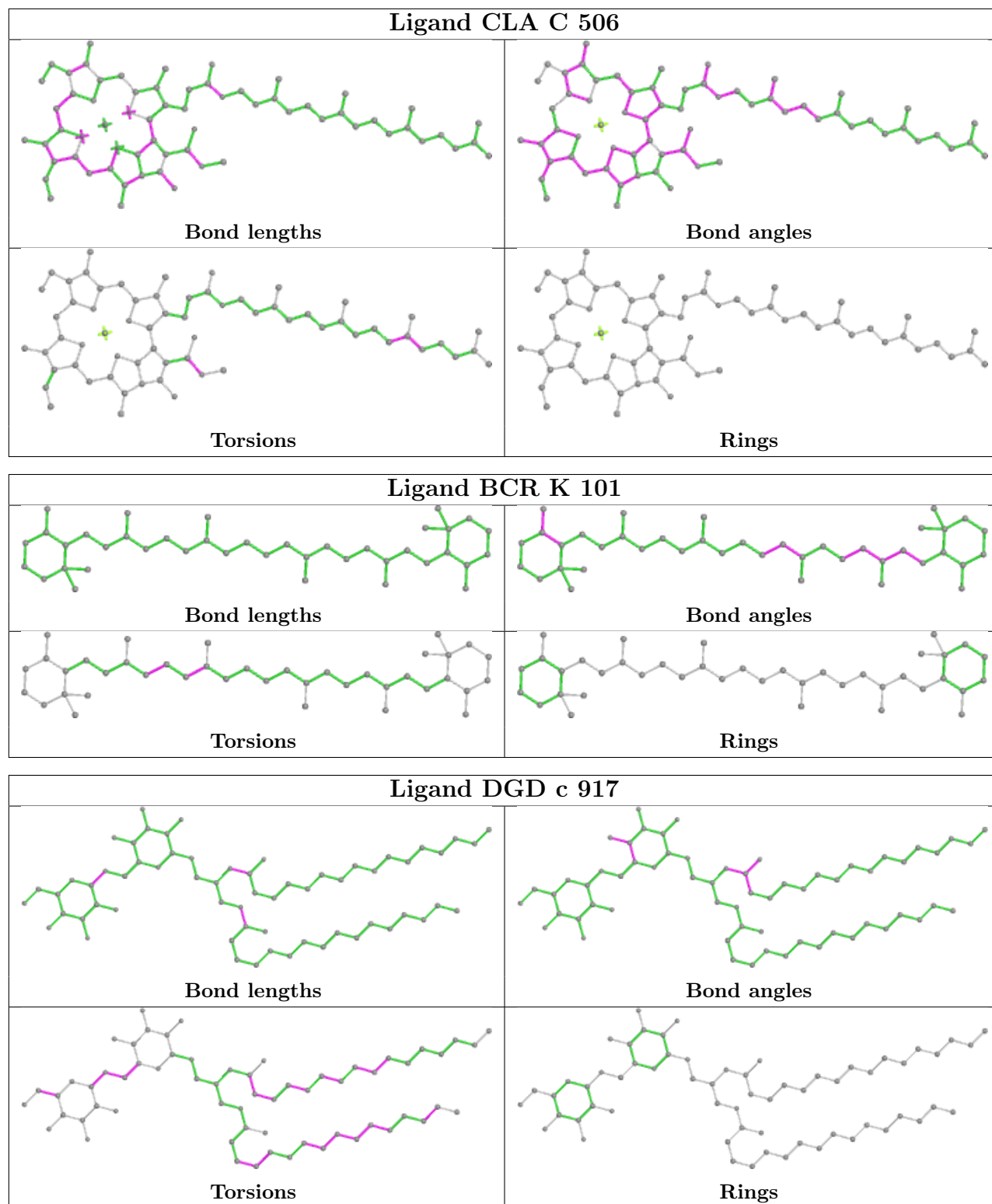


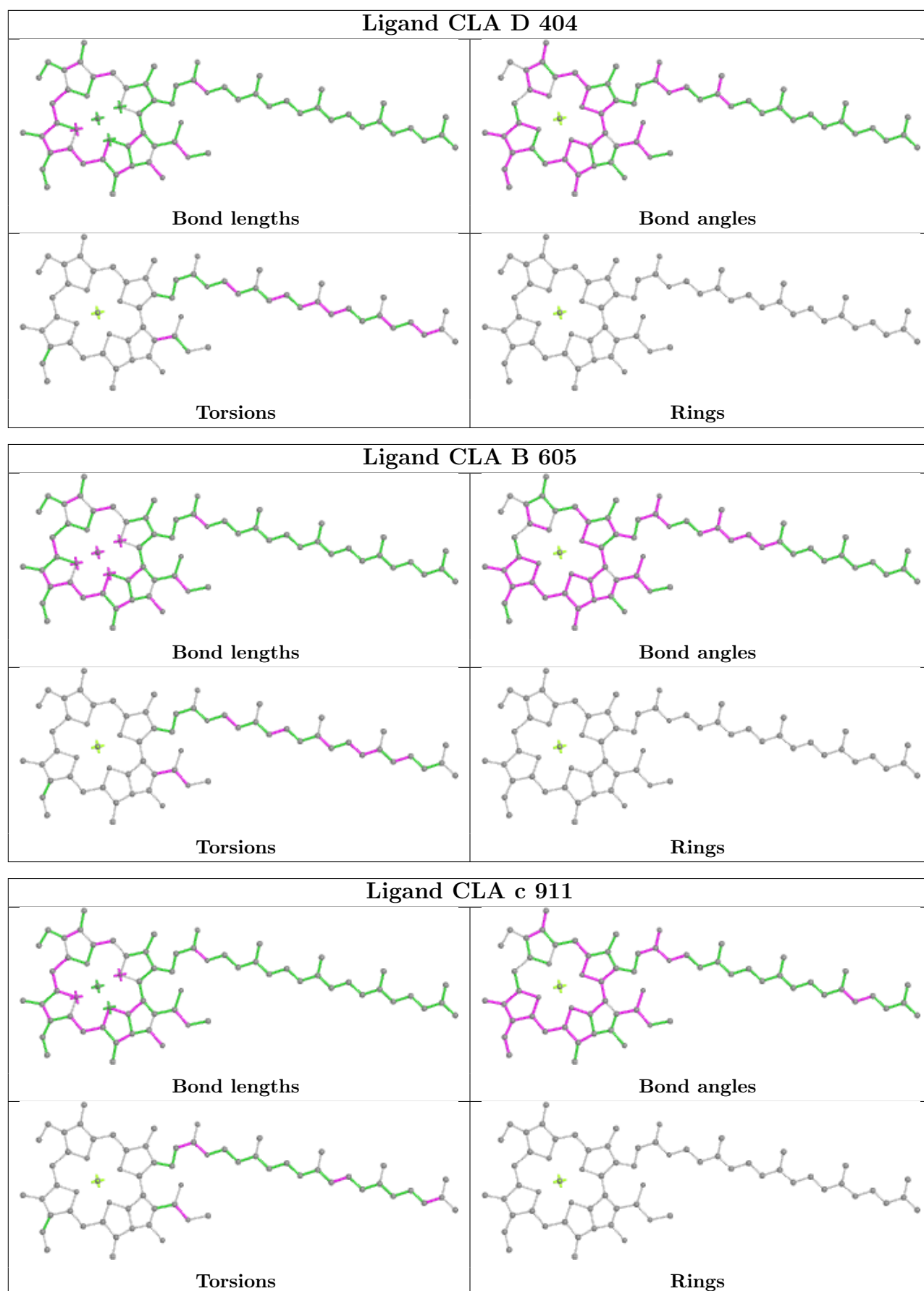




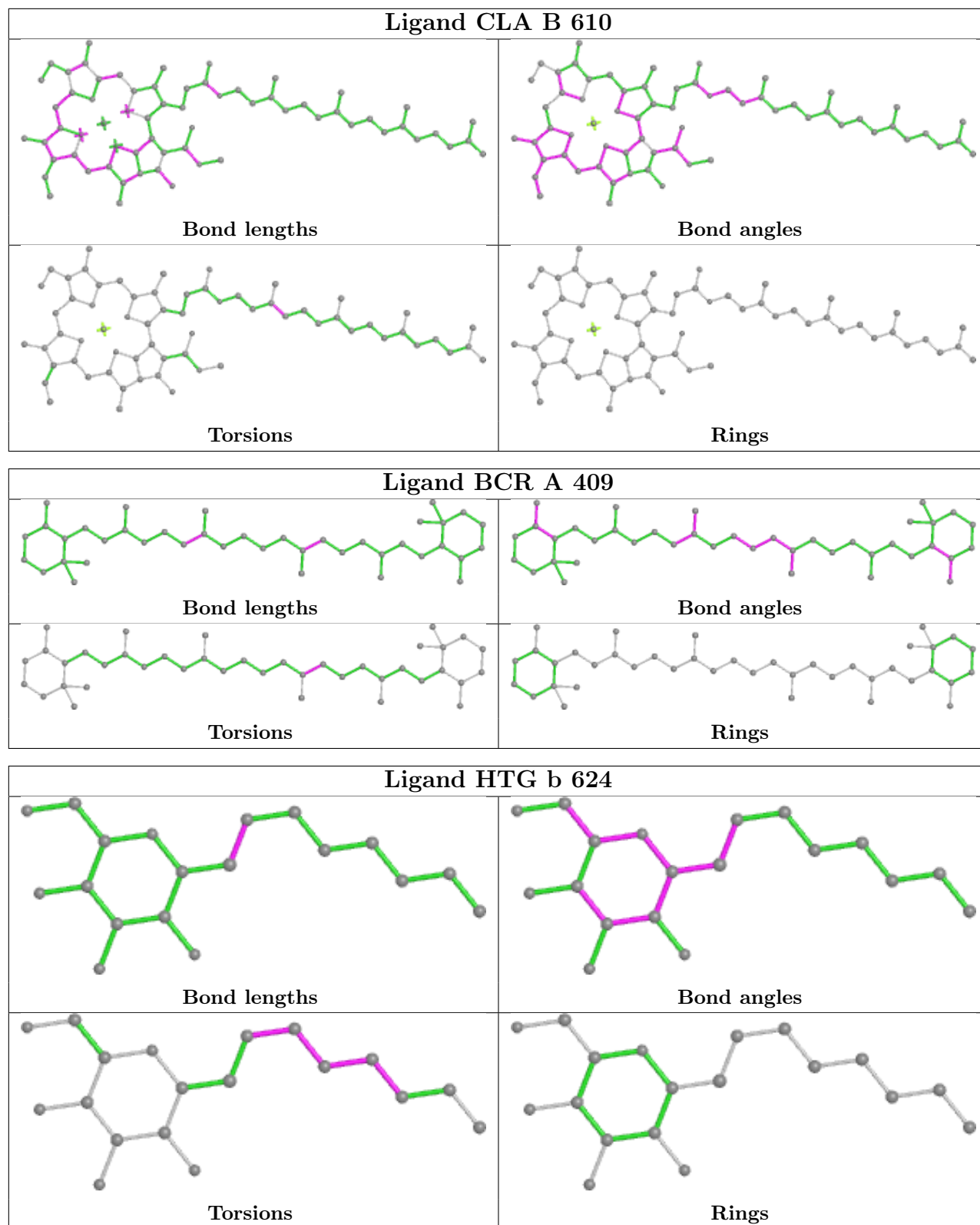


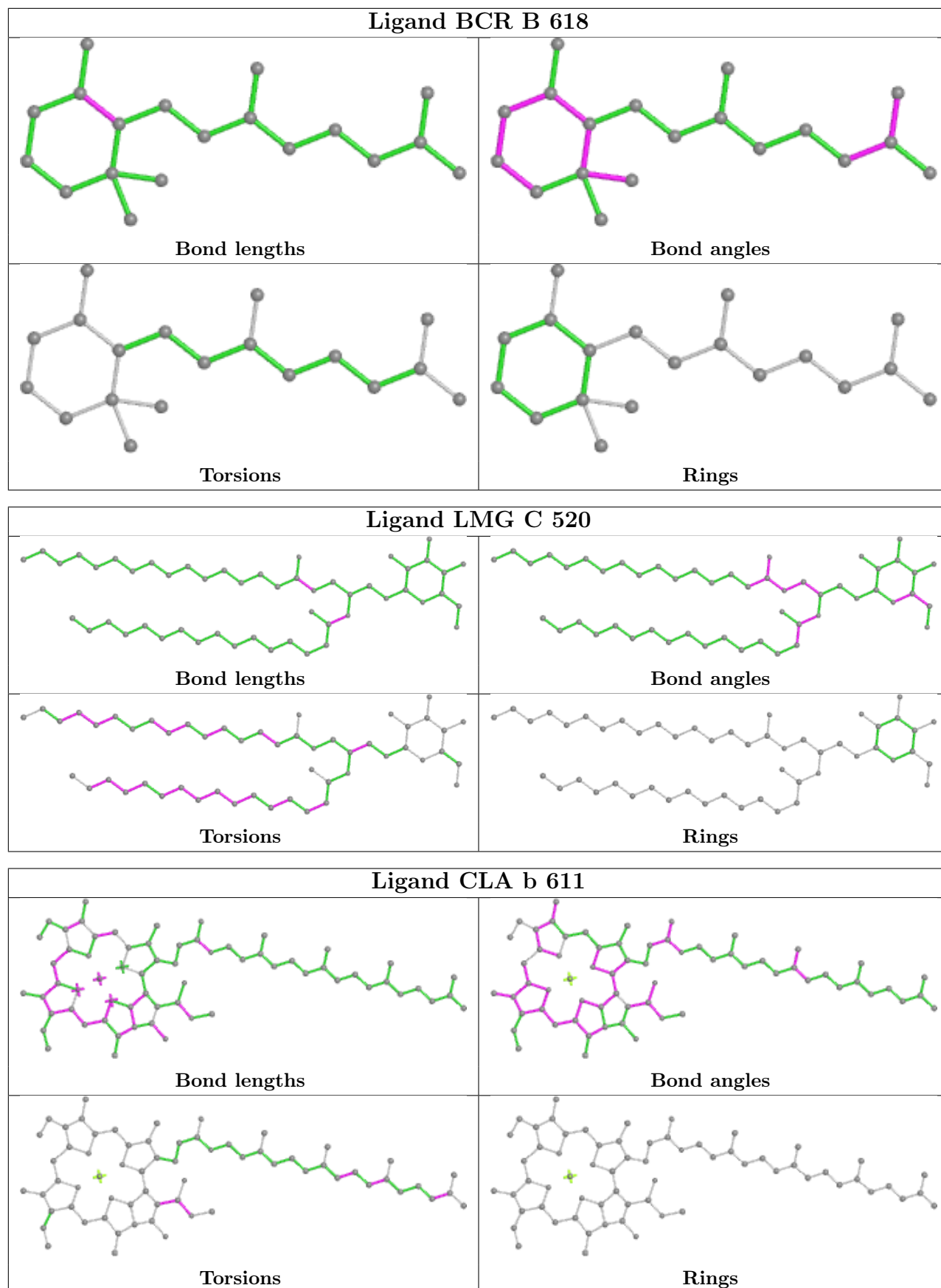


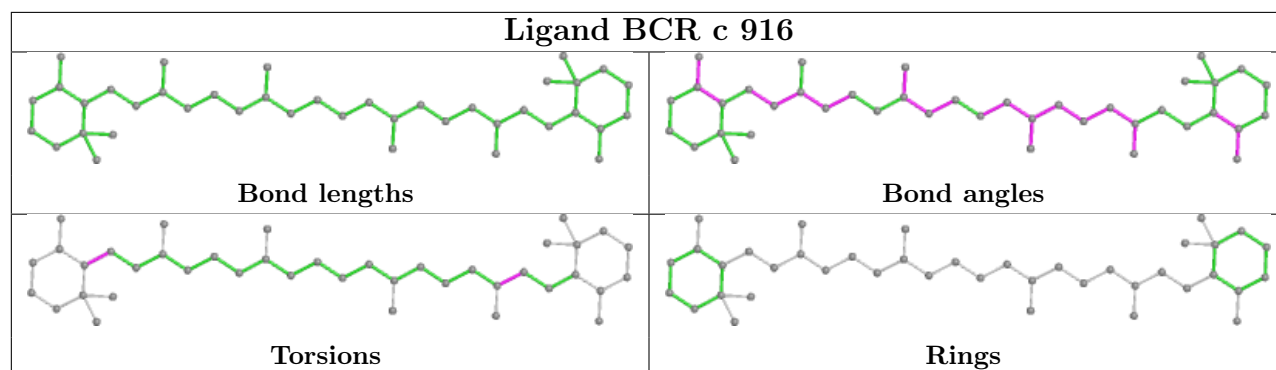
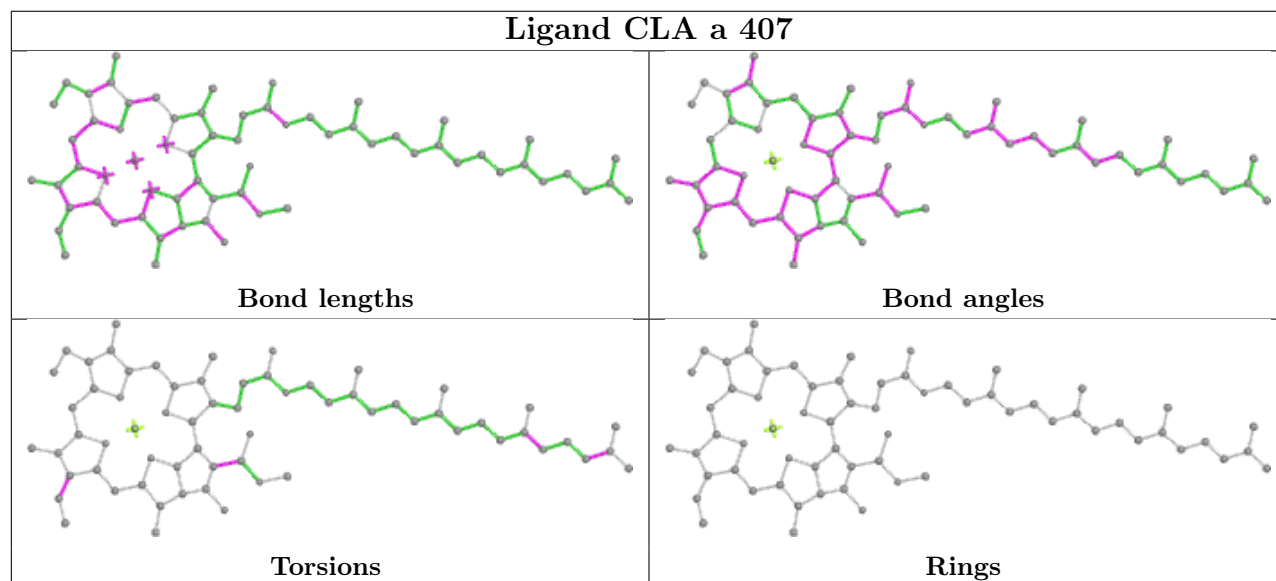
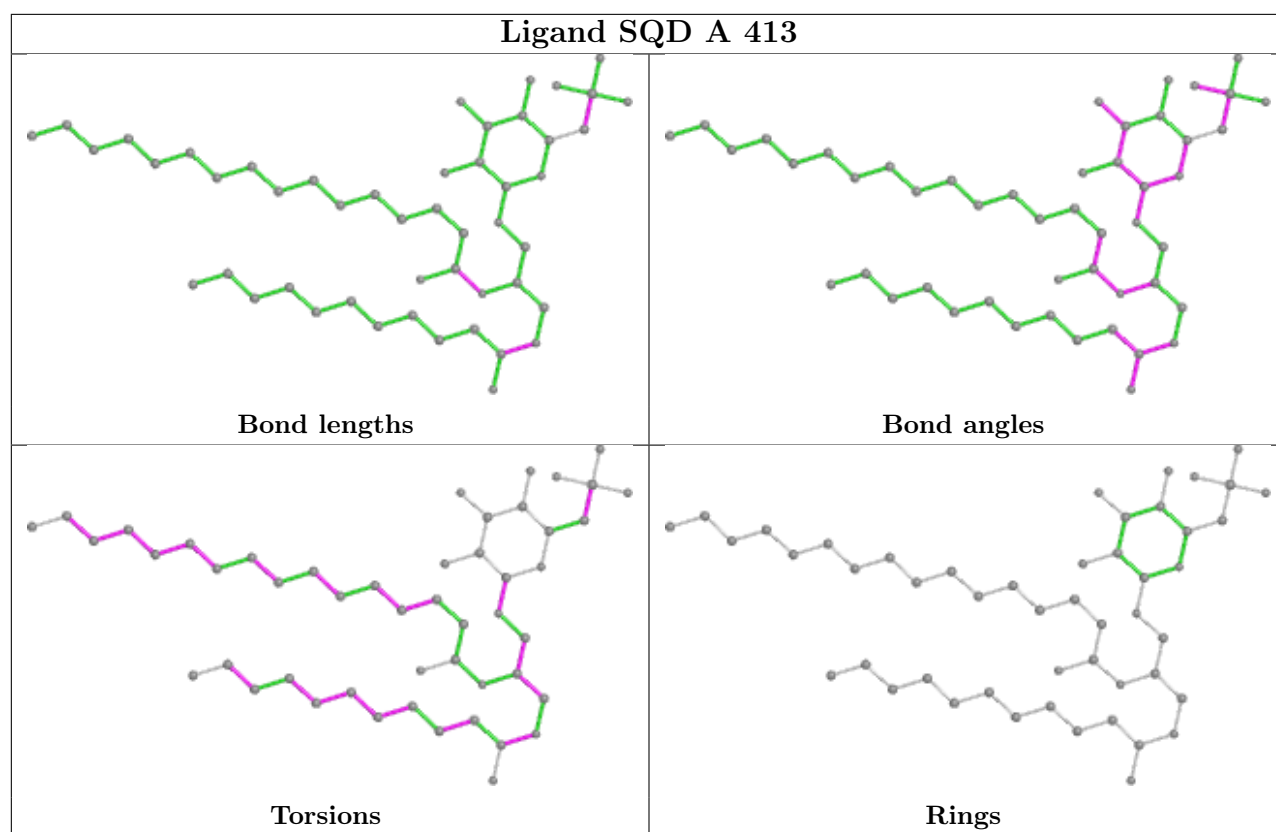


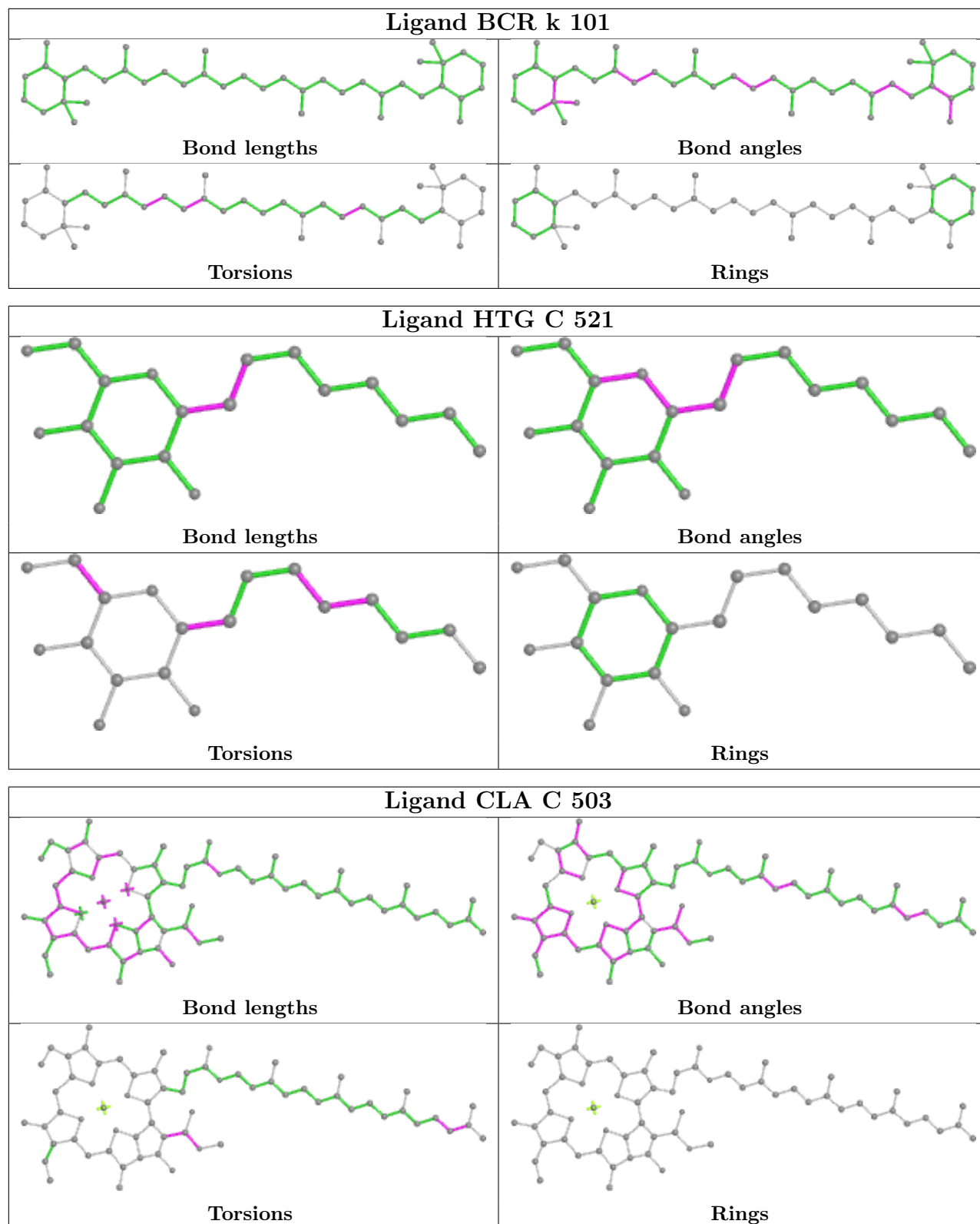


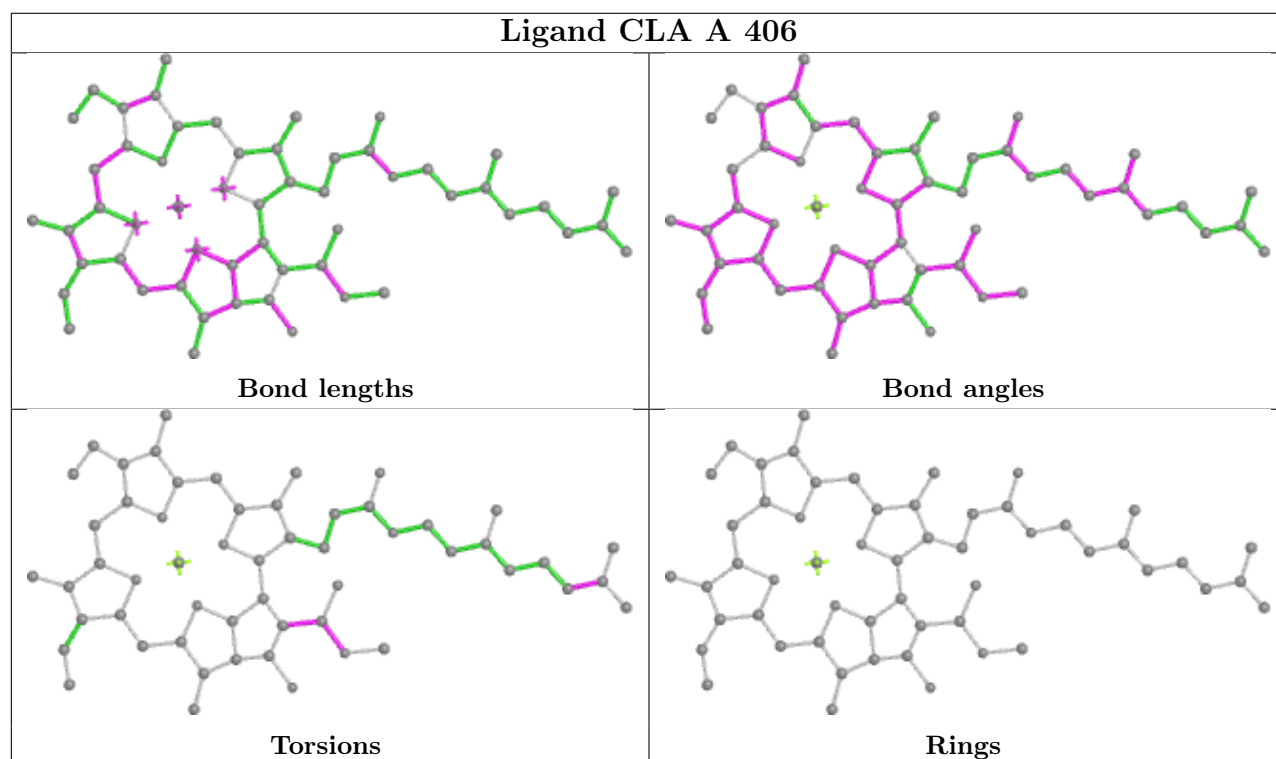
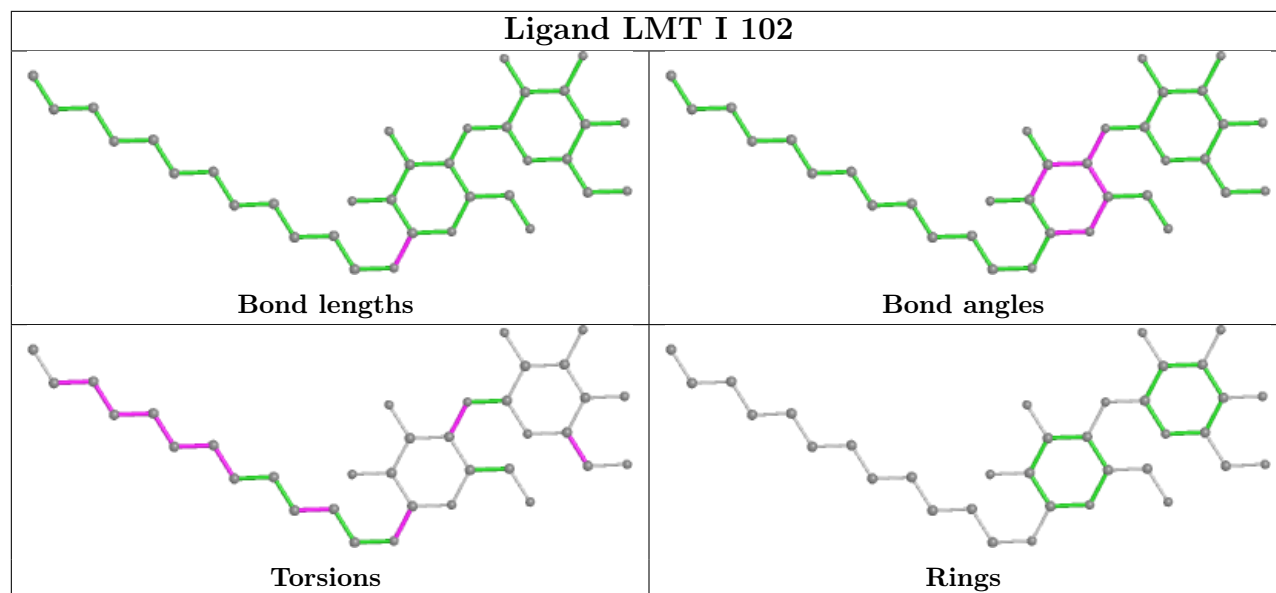


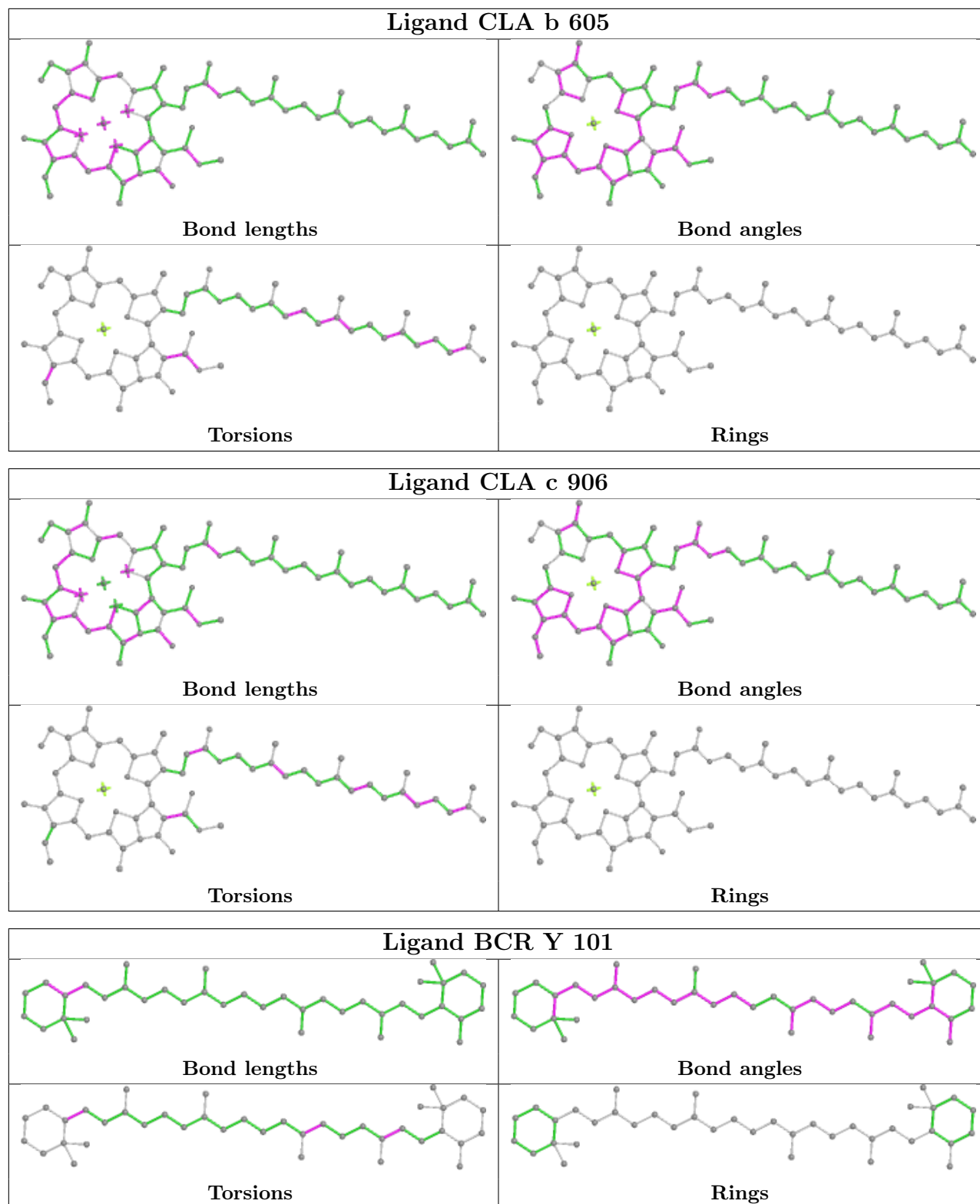


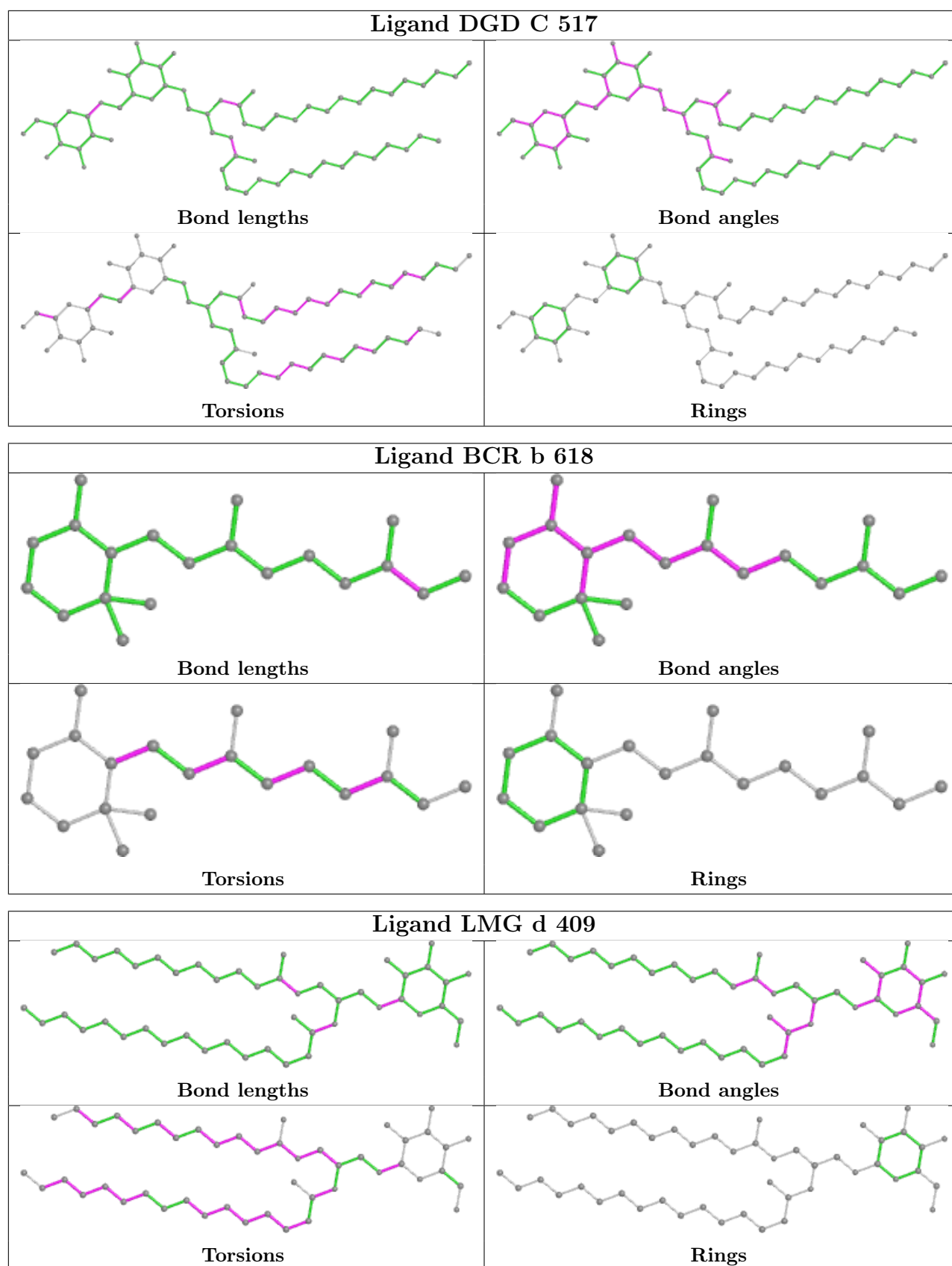












## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.



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

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

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	334/334 (100%)	-0.34	14 (4%) 36 34	21, 28, 66, 87	0
1	a	334/334 (100%)	-0.01	34 (10%) 6 6	22, 30, 96, 135	0
2	B	505/505 (100%)	-0.21	36 (7%) 16 14	22, 33, 67, 109	0
2	b	483/505 (95%)	-0.35	22 (4%) 32 31	24, 35, 57, 124	0
3	C	451/455 (99%)	-0.32	12 (2%) 54 52	24, 37, 55, 106	0
3	c	455/455 (100%)	-0.34	2 (0%) 92 91	27, 41, 57, 89	0
4	D	342/342 (100%)	-0.52	5 (1%) 73 72	21, 29, 51, 86	0
4	d	341/342 (99%)	-0.25	14 (4%) 37 35	22, 32, 59, 85	0
5	E	79/80 (98%)	0.53	10 (12%) 3 3	30, 53, 77, 89	0
5	e	79/80 (98%)	0.80	12 (15%) 2 2	35, 54, 91, 96	0
6	F	33/33 (100%)	-0.39	4 (12%) 4 3	32, 38, 68, 87	0
6	f	31/33 (93%)	-0.18	1 (3%) 47 45	34, 42, 62, 95	0
7	H	63/63 (100%)	-0.33	1 (1%) 72 70	32, 42, 52, 104	0
7	h	62/63 (98%)	0.27	8 (12%) 3 3	34, 48, 62, 74	0
8	I	34/36 (94%)	-0.50	1 (2%) 51 49	33, 42, 60, 78	0
8	i	35/36 (97%)	-0.64	0 100 100	34, 43, 71, 95	0
9	J	36/40 (90%)	-0.52	2 (5%) 24 23	29, 46, 73, 82	0
9	j	40/40 (100%)	0.08	6 (15%) 2 2	34, 47, 81, 92	0
10	K	37/37 (100%)	-0.43	0 100 100	36, 44, 55, 70	0
10	k	37/37 (100%)	-0.19	1 (2%) 54 52	39, 47, 68, 81	0
11	L	35/35 (100%)	-0.14	7 (20%) 1 1	23, 32, 66, 78	0
11	l	35/35 (100%)	-0.15	4 (11%) 5 4	25, 35, 75, 92	0
12	O	243/243 (100%)	-0.27	8 (3%) 46 44	23, 39, 69, 104	0
12	o	243/243 (100%)	-0.29	15 (6%) 20 19	24, 42, 71, 102	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	T	29/30 (96%)	-0.60	0 100 100	26, 32, 59, 89	0
13	t	29/30 (96%)	-0.51	2 (6%) 16 15	27, 34, 66, 98	0
14	U	97/97 (100%)	-0.19	0 100 100	26, 36, 58, 89	0
14	u	97/97 (100%)	-0.66	0 100 100	28, 37, 51, 76	0
15	V	137/137 (100%)	-0.63	0 100 100	25, 34, 50, 70	0
15	v	137/137 (100%)	-0.22	3 (2%) 62 59	29, 44, 61, 84	0
16	Y	29/29 (100%)	0.45	4 (13%) 2 2	40, 54, 69, 81	0
16	y	29/29 (100%)	0.52	4 (13%) 2 2	51, 62, 70, 74	0
17	X	37/37 (100%)	0.21	4 (10%) 5 5	41, 50, 72, 83	0
17	x	36/37 (97%)	0.94	8 (22%) 0 0	41, 54, 88, 89	0
18	Z	62/62 (100%)	0.41	13 (20%) 1 1	42, 54, 88, 106	0
18	z	61/62 (98%)	0.90	13 (21%) 0 0	49, 64, 98, 102	0
All	All	5147/5190 (99%)	-0.23	270 (5%) 27 26	21, 37, 70, 135	0

All (270) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
18	z	3	ILE	7.2
2	B	486	LEU	6.5
1	a	235	TYR	6.4
1	a	228	THR	6.3
2	B	488	PRO	6.2
17	x	2	THR	6.2
1	a	229	GLU	6.1
1	A	230	THR	5.9
18	z	4	LEU	5.8
3	C	24	THR	5.8
1	A	246	TYR	5.7
1	a	230	THR	5.7
2	b	484	PRO	5.6
18	z	2	THR	5.5
1	a	260	PHE	5.4
2	b	483	ASP	5.4
2	B	2	GLY	5.3
7	H	64	ALA	5.2
2	B	485	GLU	5.1
1	a	227	THR	5.0
1	a	225	ARG	5.0

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Mol	Chain	Res	Type	RSRZ
1	a	11	ALA	5.0
18	Z	33	TRP	5.0
2	B	484	PRO	4.9
2	B	496	TYR	4.9
2	B	479	PHE	4.8
1	A	245	THR	4.8
18	Z	32	ASP	4.7
18	z	60	PHE	4.6
12	o	36	GLN	4.6
2	B	495	PHE	4.5
2	b	480	SER	4.5
12	o	132	ASN	4.5
18	z	1	MET	4.5
1	A	11	ALA	4.4
18	z	5	PHE	4.4
2	B	503	THR	4.3
2	b	482	ILE	4.3
1	a	245	THR	4.3
1	a	256	GLY	4.3
2	B	483	ASP	4.2
18	z	61	VAL	4.2
12	o	134	THR	4.1
12	o	246	ALA	4.1
6	F	15	ILE	4.1
1	a	224	ILE	4.1
2	B	487	SER	4.1
2	b	293	ALA	4.0
4	d	27	PHE	4.0
12	o	38	TYR	4.0
9	j	1	MET	3.9
1	a	242	GLU	3.9
15	v	16	GLY	3.9
1	a	246	TYR	3.9
3	c	143	TYR	3.9
1	a	259	ILE	3.8
2	B	506	ARG	3.8
18	z	6	GLN	3.8
18	Z	3	ILE	3.8
2	b	481	GLY	3.7
6	F	16	PHE	3.7
1	a	237	TYR	3.7
5	E	21	VAL	3.7

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Mol	Chain	Res	Type	RSRZ
11	L	5	PRO	3.7
2	B	501	ASP	3.7
13	t	29	ILE	3.6
5	E	83	LEU	3.6
1	a	262	TYR	3.6
9	j	4	GLU	3.6
17	x	37	VAL	3.6
1	a	226	GLU	3.6
7	h	22	ALA	3.6
12	o	133	VAL	3.6
2	B	293	ALA	3.5
16	y	22	LEU	3.5
1	a	263	ALA	3.5
9	J	5	GLY	3.4
1	a	231	GLU	3.4
18	Z	36	SER	3.4
13	t	30	THR	3.4
1	a	236	GLY	3.3
2	b	126	PRO	3.3
11	L	9	PRO	3.3
18	Z	30	PRO	3.3
2	b	295	GLY	3.3
5	e	72	ALA	3.3
3	C	257	PHE	3.3
1	A	228	THR	3.3
6	F	13	TYR	3.3
17	x	34	ILE	3.3
1	A	249	VAL	3.3
12	o	35	SER	3.3
1	a	261	GLN	3.2
1	a	250	ALA	3.2
11	l	9	PRO	3.2
10	k	18	PHE	3.2
6	F	14	PRO	3.2
11	L	7	ARG	3.2
2	B	489	GLU	3.2
2	B	161[A]	LEU	3.2
5	E	25	ILE	3.1
5	e	10	PHE	3.1
1	a	232	SER	3.1
1	A	229	GLU	3.1
2	B	504	THR	3.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
17	x	3	ILE	3.1
5	e	21	VAL	3.1
1	a	240	GLY	3.1
4	D	240	ALA	3.1
5	e	20	TRP	3.1
2	B	295	GLY	3.1
4	D	12	ARG	3.0
4	d	238	THR	3.0
5	E	79	PHE	3.0
2	B	480	SER	3.0
2	B	494	GLY	3.0
2	b	129	GLY	3.0
4	d	237	PRO	3.0
2	b	218	LEU	3.0
4	d	240	ALA	3.0
18	Z	34	ASP	3.0
3	C	145	SER	3.0
3	C	434	ALA	3.0
11	L	8	GLN	2.9
1	A	225	ARG	2.9
1	a	233	ALA	2.9
12	o	32	ILE	2.9
1	A	12	ASN	2.9
5	e	79	PHE	2.9
2	B	502	VAL	2.9
18	Z	31	GLN	2.9
2	b	294	SER	2.9
5	E	17	VAL	2.9
18	Z	29	SER	2.9
4	d	12	ARG	2.9
17	x	29	ILE	2.8
5	E	10	PHE	2.8
17	X	38	GLN	2.8
4	d	236	ASN	2.8
9	j	3	SER	2.8
7	h	23	PRO	2.8
4	D	238	THR	2.8
1	a	252	HIS	2.8
3	C	25	ASN	2.8
1	a	255	PHE	2.7
12	O	133	VAL	2.7
18	Z	38	GLN	2.7

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
2	b	127	ARG	2.7
5	E	20	TRP	2.7
9	j	2	MET	2.7
12	O	135	SER	2.7
1	A	235	TYR	2.7
4	d	25	ASP	2.7
2	B	505	ARG	2.7
5	e	19	TYR	2.7
3	C	433	LEU	2.7
4	d	287	VAL	2.7
9	j	5	GLY	2.7
2	B	85	GLY	2.6
2	B	162	PHE	2.6
4	d	158	LEU	2.6
18	Z	7	LEU	2.6
17	x	36	LYS	2.6
1	a	264	SER	2.6
16	Y	46	LEU	2.6
17	x	32	SER	2.6
7	h	2	ALA	2.6
3	C	255	THR	2.6
11	L	3	PRO	2.6
17	x	30	ALA	2.6
12	O	130	GLN	2.6
7	h	58	VAL	2.6
4	d	17	ILE	2.6
12	o	25	THR	2.5
16	y	20	ALA	2.5
18	Z	35	ARG	2.5
5	e	25	ILE	2.5
11	l	3	PRO	2.5
12	O	60	ARG	2.5
5	E	74	GLN	2.5
1	a	257	ARG	2.5
18	Z	39	LEU	2.5
4	d	159	ILE	2.5
12	O	27	ARG	2.5
17	X	37	VAL	2.4
2	B	490	GLN	2.4
5	e	71	GLU	2.4
1	a	241	GLN	2.4
17	X	34	ILE	2.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
18	z	7	LEU	2.4
11	l	4	ASN	2.4
12	o	33	ASP	2.4
2	B	481	GLY	2.4
7	h	57	GLY	2.4
16	Y	18	VAL	2.4
17	X	2	THR	2.4
12	o	37	THR	2.4
2	b	291	SER	2.4
18	z	8	ALA	2.3
3	c	200	THR	2.3
2	b	251	VAL	2.3
1	A	236	GLY	2.3
3	C	261	ARG	2.3
5	E	78	THR	2.3
2	B	250	PHE	2.3
11	L	10	VAL	2.3
2	B	246	PHE	2.3
5	E	82	GLN	2.3
4	D	237	PRO	2.3
16	Y	19	ILE	2.3
16	y	37	PHE	2.3
3	C	23	ALA	2.3
3	C	256	PRO	2.2
1	A	243	GLU	2.2
3	C	144	SER	2.2
4	d	234	ALA	2.2
2	b	250	PHE	2.2
18	z	33	TRP	2.2
2	B	290	ALA	2.2
2	b	2	GLY	2.2
7	h	24	GLY	2.2
1	a	14	TRP	2.2
4	d	150	ILE	2.2
12	O	132	ASN	2.2
2	b	298	LEU	2.2
1	a	238	LYS	2.2
12	O	131	PRO	2.2
12	o	245	PRO	2.2
12	o	135	SER	2.2
1	a	234	ASN	2.2
2	b	456	ALA	2.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
12	o	34	SER	2.2
15	v	15	GLU	2.2
2	B	248	ALA	2.1
18	Z	26	ALA	2.1
6	f	15	ILE	2.1
7	h	63	LYS	2.1
7	h	56	ASP	2.1
18	z	9	LEU	2.1
2	B	244	ALA	2.1
2	B	251	VAL	2.1
1	A	247	ASN	2.1
12	O	136	ILE	2.1
2	b	125	ASP	2.1
12	o	24	ASP	2.1
1	a	249	VAL	2.1
2	B	249	ALA	2.1
2	B	459	ALA	2.1
5	e	17	VAL	2.1
5	e	59	GLU	2.1
11	L	4	ASN	2.1
9	J	6	GLY	2.1
16	y	41	VAL	2.1
9	j	6	GLY	2.1
2	B	126	PRO	2.1
5	e	61	ARG	2.1
16	Y	43	ARG	2.1
1	A	266	ASN	2.1
3	C	201	ASN	2.1
4	d	228	GLY	2.1
15	v	14	SER	2.1
4	D	11	GLU	2.0
2	b	292	LEU	2.0
2	b	246	PHE	2.0
2	B	292	LEU	2.0
5	e	14	ILE	2.0
11	l	8	GLN	2.0
2	b	478	VAL	2.0
18	z	38	GLN	2.0
8	I	34	ARG	2.0



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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
8	FME	I	1	10/11	0.95	0.14	33,37,40,41	0
13	FME	T	1	10/11	0.95	0.19	38,42,72,75	0
8	FME	i	1	10/11	0.97	0.11	36,41,45,48	0
13	FME	t	1	10/11	0.97	0.09	33,38,80,91	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<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q<0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
31	DMS	O	305	4/4	0.54	0.23	68,70,79,99	0
31	DMS	c	942	4/4	0.55	0.23	101,103,111,117	0
30	UNL	I	105	16/-	0.56	0.36	70,82,88,90	0
29	LMT	f	102	25/35	0.57	0.45	61,93,105,108	0
30	UNL	i	105	10/-	0.58	0.33	67,78,86,87	0
34	HTG	B	627	19/19	0.59	0.32	51,104,113,116	0
34	HTG	b	627	19/19	0.60	0.25	50,92,108,109	0
34	HTG	b	632	19/19	0.61	0.27	56,74,91,92	0
25	LMG	b	622	43/55	0.63	0.28	48,78,88,98	0
31	DMS	d	414	4/4	0.64	0.37	102,112,113,120	0
30	UNL	u	201	11/-	0.65	0.27	47,53,69,69	0
34	HTG	D	414	19/19	0.66	0.31	63,103,114,115	0
31	DMS	a	401	4/4	0.66	0.29	75,84,85,104	0
30	UNL	a	417	10/-	0.66	0.41	75,80,84,87	0
35	DGD	d	406	43/66	0.66	0.32	58,85,139,146	0
25	LMG	B	621	40/55	0.67	0.24	47,82,108,112	0
30	UNL	t	102	16/-	0.68	0.32	59,71,78,80	0
31	DMS	C	537	4/4	0.68	0.37	88,103,104,113	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
34	HTG	D	415	19/19	0.68	0.28	39,69,80,87	0
25	LMG	D	412	46/55	0.69	0.25	41,68,138,142	0
30	UNL	i	104	16/-	0.69	0.34	67,76,87,89	0
34	HTG	C	532	19/19	0.69	0.27	69,98,111,112	0
29	LMT	c	931	24/35	0.69	0.26	50,84,95,98	0
29	LMT	T	102	24/35	0.70	0.23	42,80,98,101	0
28	SQD	l	101	54/54	0.70	0.25	53,82,119,123	0
31	DMS	c	936	4/4	0.70	0.26	106,116,116,124	0
29	LMT	A	414	35/35	0.71	0.35	59,86,109,114	0
27	LHG	a	416	49/49	0.71	0.28	60,84,100,108	0
35	DGD	D	407	50/66	0.71	0.29	60,87,120,123	0
29	LMT	Z	101	35/35	0.71	0.36	40,105,123,128	0
25	LMG	C	531	40/55	0.72	0.24	37,81,103,107	0
31	DMS	c	937	4/4	0.72	0.17	80,90,91,100	0
30	UNL	a	420	6/-	0.73	0.35	56,59,60,60	0
30	UNL	I	103	13/-	0.73	0.23	53,57,77,82	0
25	LMG	c	930	49/55	0.73	0.20	44,78,96,106	0
29	LMT	a	419	35/35	0.73	0.27	46,69,93,100	0
31	DMS	B	639	4/4	0.74	0.41	72,87,90,102	0
27	LHG	A	412	31/49	0.74	0.27	66,83,107,117	0
30	UNL	T	101	13/-	0.74	0.34	63,71,77,79	0
31	DMS	B	634	4/4	0.74	0.25	57,68,73,95	0
30	UNL	Z	102	9/-	0.75	0.30	57,71,79,81	0
26	PL9	a	415	55/55	0.76	0.28	64,84,106,111	0
34	HTG	c	922	19/19	0.76	0.29	70,93,109,112	0
29	LMT	t	101	24/35	0.76	0.19	50,71,109,119	0
31	DMS	C	534	4/4	0.76	0.33	105,111,112,121	0
34	HTG	b	624	19/19	0.78	0.28	69,97,109,110	0
26	PL9	A	411	55/55	0.78	0.23	61,73,87,92	0
37	RRX	h	101	41/41	0.78	0.21	40,49,75,82	0
31	DMS	b	636	4/4	0.79	0.25	88,95,109,113	0
30	UNL	c	932	10/-	0.79	0.23	56,74,80,83	0
31	DMS	l	105	4/4	0.80	0.19	100,103,110,115	0
29	LMT	E	101	24/35	0.80	0.27	61,82,97,113	0
31	DMS	b	637	4/4	0.80	0.18	90,97,101,112	0
31	DMS	L	102	4/4	0.80	0.22	79,80,91,100	0
30	UNL	j	103	16/-	0.81	0.17	59,67,71,74	0
27	LHG	d	401	33/49	0.81	0.16	62,94,138,142	0
22	CLA	b	602	65/65	0.81	0.31	49,67,89,98	0
29	LMT	I	102	35/35	0.81	0.30	76,88,100,102	0
24	BCR	B	618	19/40	0.82	0.18	50,59,74,77	0
30	UNL	U	201	14/-	0.82	0.25	44,57,65,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
27	LHG	C	522	30/49	0.82	0.16	55,79,127,134	0
31	DMS	v	207	4/4	0.83	0.17	84,93,97,117	0
31	DMS	C	536	4/4	0.83	0.22	77,80,94,95	0
31	DMS	V	211	4/4	0.83	0.23	77,84,85,85	0
34	HTG	l	106	19/19	0.83	0.18	63,97,108,109	0
25	LMG	A	410	51/55	0.83	0.19	47,62,83,91	0
31	DMS	H	103	4/4	0.83	0.25	63,67,69,74	0
30	UNL	i	103	16/-	0.83	0.20	53,64,79,82	0
28	SQD	b	621	38/54	0.84	0.17	58,90,110,112	0
29	LMT	c	921	35/35	0.84	0.36	74,90,99,103	0
29	LMT	B	622	24/35	0.84	0.16	57,67,73,78	0
34	HTG	v	203	16/19	0.84	0.16	52,69,81,97	0
28	SQD	A	413	49/54	0.84	0.20	46,65,91,95	0
30	UNL	b	628	11/-	0.84	0.32	58,63,78,79	0
34	HTG	B	626	19/19	0.84	0.20	42,69,81,87	0
25	LMG	c	920	51/55	0.85	0.18	37,61,87,91	0
25	LMG	d	409	47/55	0.85	0.18	49,76,113,114	0
37	RRX	H	101	41/41	0.85	0.16	32,42,58,62	0
31	DMS	C	540	4/4	0.85	0.33	82,83,91,97	0
30	UNL	I	104	16/-	0.86	0.27	60,71,84,86	0
31	DMS	t	105	4/4	0.86	0.18	89,93,101,108	0
31	DMS	O	307	4/4	0.86	0.26	84,97,98,104	0
30	UNL	B	624	7/-	0.86	0.17	30,45,51,56	0
35	DGD	h	102	62/66	0.86	0.20	28,42,53,58	0
24	BCR	b	618	20/40	0.86	0.25	57,65,70,71	0
31	DMS	B	632	4/4	0.86	0.20	49,57,67,69	0
31	DMS	U	203	4/4	0.87	0.24	62,73,74,76	0
31	DMS	t	104	4/4	0.87	0.15	101,101,104,111	0
31	DMS	c	938	4/4	0.87	0.31	86,91,98,103	0
28	SQD	a	418	51/54	0.87	0.15	47,70,91,97	0
31	DMS	v	210	4/4	0.87	0.24	63,71,80,91	0
25	LMG	C	520	51/55	0.87	0.19	34,60,90,92	0
31	DMS	l	103	4/4	0.87	0.20	91,95,97,99	0
30	UNL	D	413	16/-	0.88	0.23	38,46,52,58	0
31	DMS	b	638	4/4	0.88	0.24	49,52,54,70	0
30	UNL	b	625	16/-	0.88	0.13	43,52,64,67	0
31	DMS	u	204	4/4	0.88	0.33	50,68,69,75	0
31	DMS	u	205	4/4	0.88	0.33	64,67,73,83	0
31	DMS	V	204	4/4	0.88	0.24	66,73,76,76	0
28	SQD	f	101	14/54	0.88	0.22	77,89,96,96	0
30	UNL	A	415	5/-	0.88	0.35	68,72,73,75	0
31	DMS	a	425	4/4	0.88	0.15	39,47,51,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
34	HTG	C	521	19/19	0.88	0.22	55,80,93,96	0
31	DMS	f	103	4/4	0.88	0.28	87,89,90,100	0
25	LMG	i	101	51/55	0.88	0.16	45,57,80,81	0
31	DMS	u	203	4/4	0.89	0.17	56,68,72,84	0
27	LHG	l	102	49/49	0.89	0.18	38,61,91,95	0
31	DMS	C	529	4/4	0.89	0.32	72,78,78,86	0
30	UNL	X	101	16/-	0.89	0.13	35,53,62,64	0
30	UNL	x	101	15/-	0.89	0.13	43,50,56,58	0
31	DMS	O	314	4/4	0.89	0.26	78,80,86,91	0
30	UNL	J	103	16/-	0.89	0.20	44,57,77,77	0
31	DMS	l	104	4/4	0.89	0.16	79,80,86,87	0
31	DMS	c	927	4/4	0.89	0.23	87,89,91,97	0
31	DMS	c	929	4/4	0.89	0.32	69,73,76,78	0
28	SQD	D	408	20/54	0.89	0.30	65,97,105,108	0
31	DMS	D	417	4/4	0.90	0.19	72,72,77,86	0
34	HTG	b	626	19/19	0.90	0.13	47,69,86,90	0
27	LHG	a	423	45/49	0.90	0.15	39,58,72,74	0
31	DMS	v	205	4/4	0.90	0.26	70,72,78,80	0
31	DMS	V	210	4/4	0.90	0.13	70,73,78,88	0
31	DMS	O	308	4/4	0.90	0.19	64,72,73,80	0
31	DMS	O	313	4/4	0.90	0.25	89,100,100,107	0
31	DMS	c	935	4/4	0.90	0.33	71,78,81,84	0
31	DMS	o	303	4/4	0.90	0.21	60,77,80,83	0
31	DMS	a	421	4/4	0.90	0.26	85,87,87,94	0
31	DMS	B	631	4/4	0.90	0.27	78,80,84,87	0
31	DMS	b	635	4/4	0.90	0.17	62,69,76,86	0
31	DMS	V	207	4/4	0.91	0.15	64,71,71,76	0
27	LHG	D	409	49/49	0.91	0.19	38,56,85,97	0
31	DMS	C	535	4/4	0.91	0.38	70,79,83,86	0
31	DMS	V	212	4/4	0.91	0.18	51,54,55,72	0
31	DMS	c	943	4/4	0.91	0.16	77,82,87,92	0
34	HTG	C	523	9/19	0.91	0.22	63,69,81,86	0
28	SQD	a	414	54/54	0.91	0.14	36,69,81,87	0
35	DGD	H	102	62/66	0.91	0.19	28,37,46,50	0
31	DMS	d	415	4/4	0.91	0.15	60,63,67,79	0
24	BCR	y	101	40/40	0.91	0.12	32,41,51,53	0
34	HTG	V	203	14/19	0.91	0.23	48,52,79,84	0
31	DMS	C	533	4/4	0.91	0.22	79,84,85,89	0
31	DMS	v	211	4/4	0.92	0.18	65,77,82,90	0
31	DMS	o	305	4/4	0.92	0.36	78,82,86,87	0
31	DMS	o	308	4/4	0.92	0.26	76,77,82,91	0
31	DMS	c	944	4/4	0.92	0.20	79,82,89,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
24	BCR	b	619	31/40	0.92	0.15	47,54,63,67	0
35	DGD	C	518	62/66	0.92	0.17	29,40,89,109	0
31	DMS	A	420	4/4	0.92	0.15	37,39,39,57	0
22	CLA	c	913	65/65	0.92	0.14	42,54,96,98	0
22	CLA	C	514	65/65	0.92	0.15	44,55,83,86	0
24	BCR	B	619	30/40	0.92	0.14	44,51,61,63	0
22	CLA	B	602	65/65	0.92	0.17	39,56,101,107	0
30	UNL	i	102	16/-	0.92	0.13	41,51,80,81	0
24	BCR	c	915	40/40	0.93	0.12	43,59,68,69	0
24	BCR	k	101	40/40	0.93	0.11	36,45,51,52	0
31	DMS	F	101	4/4	0.93	0.20	69,70,74,77	0
31	DMS	B	637	4/4	0.93	0.30	69,76,80,88	0
31	DMS	c	940	4/4	0.93	0.30	74,74,75,80	0
31	DMS	I	101	4/4	0.93	0.23	64,69,74,76	0
22	CLA	B	615	53/65	0.93	0.11	31,36,71,84	0
31	DMS	O	303	4/4	0.93	0.17	68,71,78,79	0
22	CLA	c	914	65/65	0.93	0.16	47,60,95,108	0
31	DMS	b	634	4/4	0.93	0.25	68,76,79,86	0
22	CLA	B	603	65/65	0.93	0.14	27,36,43,47	0
22	CLA	B	610	65/65	0.93	0.12	30,37,42,46	0
22	CLA	b	607	65/65	0.93	0.11	29,37,58,65	0
30	UNL	O	301	16/-	0.93	0.13	39,47,73,74	0
31	DMS	U	202	4/4	0.93	0.15	42,49,58,67	0
22	CLA	c	912	65/65	0.93	0.10	35,45,50,53	0
31	DMS	v	204	4/4	0.94	0.13	87,88,90,91	0
31	DMS	c	928	4/4	0.94	0.17	73,74,74,80	0
31	DMS	O	304	4/4	0.94	0.38	74,80,84,88	0
31	DMS	v	208	4/4	0.94	0.13	88,90,91,94	0
24	BCR	C	515	40/40	0.94	0.10	37,50,58,59	0
31	DMS	B	636	4/4	0.94	0.23	60,62,67,69	0
22	CLA	b	617	60/65	0.94	0.11	32,41,75,80	0
31	DMS	B	638	4/4	0.94	0.16	81,82,86,93	0
22	CLA	c	903	65/65	0.94	0.21	27,34,54,65	0
31	DMS	B	642	4/4	0.94	0.20	65,66,75,82	0
30	UNL	d	410	16/-	0.94	0.16	40,49,57,60	0
27	LHG	L	101	40/49	0.94	0.12	37,53,63,66	0
31	DMS	d	412	4/4	0.94	0.18	58,59,66,66	0
22	CLA	c	904	65/65	0.94	0.21	32,44,50,54	0
22	CLA	C	507	65/65	0.94	0.12	37,45,85,88	0
22	CLA	b	603	65/65	0.94	0.14	29,36,46,49	0
27	LHG	d	408	46/49	0.94	0.15	29,41,93,97	0
31	DMS	C	538	4/4	0.94	0.36	79,86,86,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
31	DMS	C	539	4/4	0.94	0.24	88,90,93,95	0
22	CLA	B	607	65/65	0.94	0.10	28,34,56,65	0
31	DMS	o	304	4/4	0.94	0.17	70,70,70,74	0
31	DMS	b	631	4/4	0.94	0.17	68,72,79,80	0
25	LMG	j	101	47/55	0.94	0.11	33,43,69,74	0
28	SQD	C	501	54/54	0.94	0.13	32,64,83,89	0
22	CLA	b	610	65/65	0.94	0.10	32,41,45,54	0
31	DMS	B	630	4/4	0.94	0.15	63,67,68,75	0
26	PL9	D	406	55/55	0.94	0.12	21,30,37,51	0
22	CLA	b	616	65/65	0.94	0.10	30,37,53,57	0
31	DMS	t	103	4/4	0.95	0.13	89,102,103,103	0
22	CLA	C	512	65/65	0.95	0.09	31,39,48,51	0
30	UNL	B	625	16/-	0.95	0.09	40,47,59,59	0
22	CLA	b	615	52/65	0.95	0.10	36,42,71,76	0
24	BCR	B	620	40/40	0.95	0.10	30,37,49,50	0
22	CLA	C	513	56/65	0.95	0.10	37,48,62,65	0
24	BCR	C	516	40/40	0.95	0.10	32,39,47,54	0
31	DMS	A	416	4/4	0.95	0.12	60,67,69,72	0
24	BCR	D	405	40/40	0.95	0.12	26,35,62,66	0
22	CLA	B	608	65/65	0.95	0.12	24,29,64,79	0
31	DMS	I	106	4/4	0.95	0.29	64,74,78,80	0
22	CLA	D	404	65/65	0.95	0.11	30,37,94,104	0
33	CA	B	601	1/1	0.95	0.04	64,64,64,64	0
34	HTG	B	623	19/19	0.95	0.10	41,47,64,66	0
24	BCR	b	620	40/40	0.95	0.12	33,39,48,49	0
22	CLA	C	502	65/65	0.95	0.13	33,39,52,62	0
31	DMS	B	635	4/4	0.95	0.18	61,63,66,73	0
24	BCR	d	404	40/40	0.95	0.10	27,38,63,66	0
31	DMS	c	939	4/4	0.95	0.31	88,92,95,102	0
22	CLA	c	906	65/65	0.95	0.10	30,40,50,54	0
31	DMS	O	309	4/4	0.95	0.25	61,70,70,74	0
31	DMS	O	311	4/4	0.95	0.13	48,56,59,61	0
34	HTG	b	623	19/19	0.95	0.10	42,46,54,63	0
22	CLA	c	907	65/65	0.95	0.12	39,47,102,108	0
22	CLA	c	908	65/65	0.95	0.10	34,39,53,61	0
31	DMS	B	641	4/4	0.95	0.10	46,49,61,66	0
22	CLA	B	604	65/65	0.95	0.15	26,30,40,47	0
31	DMS	C	528	4/4	0.95	0.28	88,89,90,90	0
31	DMS	i	106	4/4	0.95	0.22	72,76,79,89	0
31	DMS	V	205	4/4	0.95	0.16	64,66,67,71	0
35	DGD	C	517	62/66	0.95	0.13	24,35,80,88	0
22	CLA	C	510	65/65	0.95	0.16	31,36,59,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
35	DGD	C	519	62/66	0.95	0.15	23,36,76,85	0
31	DMS	V	209	4/4	0.95	0.32	76,87,89,93	0
31	DMS	o	302	4/4	0.95	0.17	59,64,71,75	0
35	DGD	c	918	62/66	0.95	0.15	34,42,98,113	0
31	DMS	C	530	4/4	0.95	0.32	71,79,82,83	0
22	CLA	b	608	65/65	0.95	0.10	27,31,73,74	0
22	CLA	d	403	65/65	0.95	0.11	35,40,85,90	0
25	LMG	J	101	45/55	0.95	0.13	28,36,71,79	0
22	CLA	B	617	55/65	0.96	0.08	28,35,72,76	0
31	DMS	u	202	4/4	0.96	0.15	47,53,55,68	0
31	DMS	b	630	4/4	0.96	0.15	56,63,63,64	0
22	CLA	B	612	65/65	0.96	0.13	23,29,55,60	0
24	BCR	K	101	40/40	0.96	0.10	31,39,43,43	0
24	BCR	Y	101	39/40	0.96	0.09	34,40,48,50	0
26	PL9	d	405	55/55	0.96	0.11	23,32,39,43	0
24	BCR	a	413	40/40	0.96	0.09	26,31,38,39	0
22	CLA	c	902	65/65	0.96	0.11	34,39,50,51	0
22	CLA	C	503	65/65	0.96	0.17	28,32,47,56	0
27	LHG	D	411	45/49	0.96	0.13	31,39,90,94	0
32	BCT	a	422	4/4	0.96	0.07	51,52,56,57	0
31	DMS	A	417	4/4	0.96	0.15	76,82,83,85	0
33	CA	O	302	1/1	0.96	0.04	59,59,59,59	0
31	DMS	c	933	4/4	0.96	0.10	57,64,66,70	0
22	CLA	C	504	65/65	0.96	0.13	29,37,42,51	0
31	DMS	B	629	4/4	0.96	0.16	48,52,58,65	0
22	CLA	c	905	65/65	0.96	0.18	30,35,62,66	0
24	BCR	c	916	40/40	0.96	0.10	33,42,48,49	0
22	CLA	a	412	65/65	0.96	0.11	27,32,102,116	0
27	LHG	d	407	49/49	0.96	0.11	28,36,56,63	0
31	DMS	c	941	4/4	0.96	0.24	73,79,87,88	0
22	CLA	C	505	65/65	0.96	0.17	28,34,58,60	0
22	CLA	C	506	65/65	0.96	0.14	30,37,50,54	0
22	CLA	c	909	65/65	0.96	0.14	31,37,80,97	0
22	CLA	c	910	65/65	0.96	0.15	28,38,58,64	0
22	CLA	B	613	65/65	0.96	0.15	24,30,37,40	0
31	DMS	B	640	4/4	0.96	0.30	47,53,57,63	0
31	DMS	V	201	4/4	0.96	0.19	46,48,54,58	0
22	CLA	C	508	65/65	0.96	0.10	32,42,55,59	0
22	CLA	b	609	65/65	0.96	0.14	27,34,42,45	0
31	DMS	V	206	4/4	0.96	0.09	45,48,51,62	0
31	DMS	C	527	4/4	0.96	0.17	74,80,80,81	0
22	CLA	C	509	65/65	0.96	0.14	29,35,81,102	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
23	PHO	a	411	64/64	0.96	0.14	26,33,40,48	0
22	CLA	b	611	65/65	0.96	0.11	28,35,40,43	0
35	DGD	c	917	62/66	0.96	0.14	26,42,81,94	0
22	CLA	b	612	65/65	0.96	0.12	27,31,72,83	0
35	DGD	c	919	62/66	0.96	0.12	29,40,73,79	0
31	DMS	o	306	4/4	0.96	0.21	66,71,74,83	0
22	CLA	b	613	65/65	0.96	0.14	26,32,37,40	0
36	HEM	E	102	43/43	0.96	0.15	48,56,62,65	0
22	CLA	B	611	65/65	0.96	0.17	26,33,41,46	0
31	DMS	a	424	4/4	0.96	0.15	38,47,50,65	0
22	CLA	B	609	65/65	0.97	0.17	25,30,38,39	0
22	CLA	D	403	65/65	0.97	0.12	18,24,45,52	0
31	DMS	b	629	4/4	0.97	0.14	29,31,36,45	0
22	CLA	B	616	65/65	0.97	0.11	30,36,50,57	0
22	CLA	c	911	65/65	0.97	0.20	29,38,46,52	0
31	DMS	b	633	4/4	0.97	0.09	68,68,70,78	0
22	CLA	a	409	61/65	0.97	0.15	25,29,80,87	0
31	DMS	O	310	4/4	0.97	0.14	66,68,68,73	0
22	CLA	b	614	59/65	0.97	0.14	26,32,76,82	0
31	DMS	O	312	4/4	0.97	0.18	37,51,56,59	0
22	CLA	B	605	65/65	0.97	0.18	24,28,60,66	0
31	DMS	c	925	4/4	0.97	0.13	51,58,60,61	0
31	DMS	c	926	4/4	0.97	0.17	63,64,67,68	0
22	CLA	B	606	65/65	0.97	0.14	24,30,42,46	0
31	DMS	A	419	4/4	0.97	0.21	58,60,70,72	0
23	PHO	A	407	64/64	0.97	0.13	20,25,30,32	0
23	PHO	D	402	64/64	0.97	0.14	25,29,35,39	0
23	PHO	a	410	64/64	0.97	0.13	21,28,32,36	0
27	LHG	D	410	49/49	0.97	0.12	29,36,51,61	0
22	CLA	A	408	65/65	0.97	0.11	19,29,99,110	0
31	DMS	v	201	4/4	0.97	0.13	42,48,50,51	0
24	BCR	A	409	40/40	0.97	0.12	25,30,37,38	0
31	DMS	V	208	4/4	0.97	0.10	73,74,77,78	0
31	DMS	v	206	4/4	0.97	0.21	69,72,72,77	0
22	CLA	b	604	65/65	0.97	0.16	26,32,45,50	0
22	CLA	b	605	65/65	0.97	0.17	23,29,63,65	0
31	DMS	v	209	4/4	0.97	0.25	72,74,76,81	0
22	CLA	b	606	65/65	0.97	0.14	24,28,40,40	0
22	CLA	C	511	65/65	0.97	0.20	31,36,41,46	0
22	CLA	A	405	65/65	0.97	0.11	18,23,36,54	0
22	CLA	B	614	61/65	0.97	0.14	25,31,70,83	0
38	MG	K	102	1/1	0.97	0.06	51,51,51,51	0

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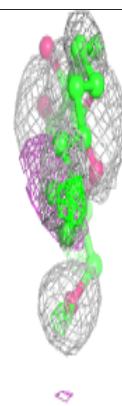
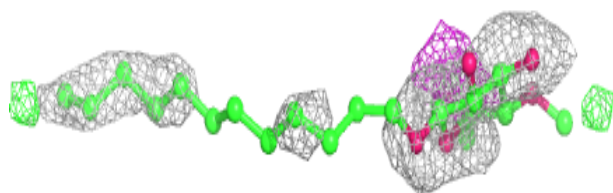
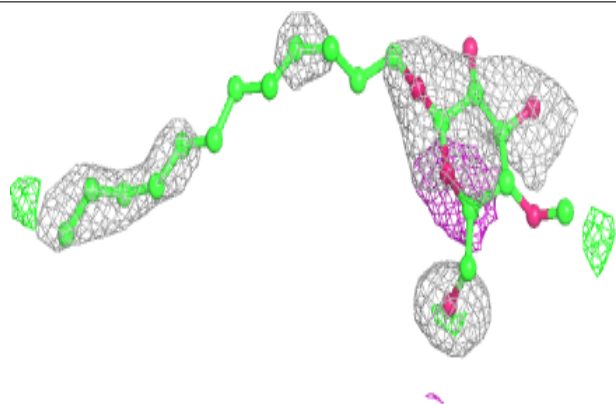
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
38	MG	k	102	1/1	0.97	0.05	48,48,48,48	0
31	DMS	B	633	4/4	0.98	0.16	65,71,71,73	0
31	DMS	c	924	4/4	0.98	0.14	37,42,47,49	0
22	CLA	a	408	65/65	0.98	0.10	20,26,35,41	0
22	CLA	A	406	55/65	0.98	0.12	21,27,49,60	0
22	CLA	D	401	65/65	0.98	0.09	19,23,31,36	0
32	BCT	A	421[A]	4/4	0.98	0.08	34,36,39,39	4
32	BCT	A	421[B]	4/4	0.98	0.08	27,29,30,34	4
31	DMS	D	416	4/4	0.98	0.18	55,59,60,69	0
22	CLA	a	407	65/65	0.98	0.13	23,26,45,61	0
22	CLA	d	402	65/65	0.98	0.13	21,27,42,50	0
36	HEM	e	101	43/43	0.98	0.17	43,55,85,93	0
31	DMS	c	934	4/4	0.98	0.24	64,73,74,77	0
31	DMS	d	411	4/4	0.98	0.13	60,62,64,64	0
31	DMS	O	306	4/4	0.98	0.19	69,69,70,81	0
31	DMS	d	413	4/4	0.98	0.19	67,69,73,80	0
39	HEC	V	202	43/43	0.98	0.09	23,29,36,40	0
39	HEC	v	202	43/43	0.98	0.08	33,37,42,46	0
33	CA	o	301	1/1	0.99	0.02	55,55,55,55	0
31	DMS	C	524	4/4	0.99	0.07	38,42,43,43	0
31	DMS	c	923	4/4	0.99	0.15	37,40,42,43	0
31	DMS	a	402	4/4	0.99	0.10	30,32,34,34	0
31	DMS	C	525	4/4	0.99	0.06	34,35,38,40	0
31	DMS	C	526	4/4	0.99	0.08	48,48,50,51	0
20	FE2	a	404	1/1	0.99	0.07	42,42,42,42	0
31	DMS	B	628	4/4	0.99	0.14	27,29,32,38	0
31	DMS	o	307	4/4	0.99	0.30	48,56,62,64	0
21	CL	A	403	1/1	0.99	0.09	29,29,29,29	0
31	DMS	D	418	4/4	0.99	0.11	35,39,42,43	0
21	CL	A	404	1/1	0.99	0.12	28,28,28,28	0
21	CL	a	405	1/1	0.99	0.07	31,31,31,31	0
21	CL	a	406	1/1	0.99	0.13	32,32,32,32	0
38	MG	J	102	1/1	0.99	0.07	30,30,30,30	0
31	DMS	A	418	4/4	0.99	0.10	29,30,31,31	0
38	MG	j	102	1/1	0.99	0.11	40,40,40,40	0
19	OEX	A	401	10/10	0.99	0.12	25,27,31,32	0
33	CA	b	601	1/1	0.99	0.03	59,59,59,59	0
33	CA	c	901	1/1	0.99	0.03	48,48,48,48	0
20	FE2	A	402	1/1	1.00	0.07	39,39,39,39	0
19	OEX	a	403	10/10	1.00	0.09	29,31,32,33	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.

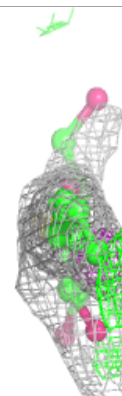
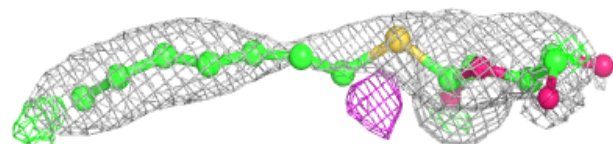
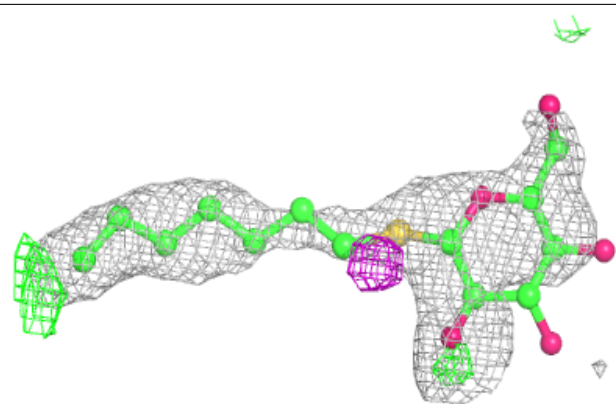
**Electron density around LMT f 102:**

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



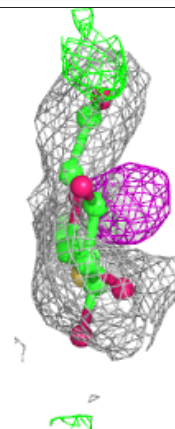
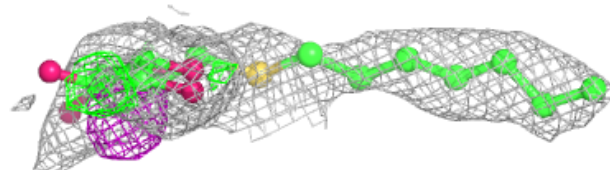
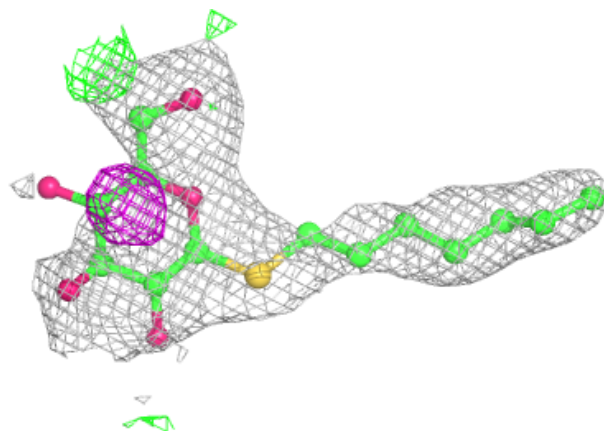
**Electron density around HTG B 627:**

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

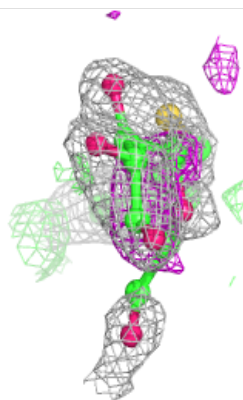
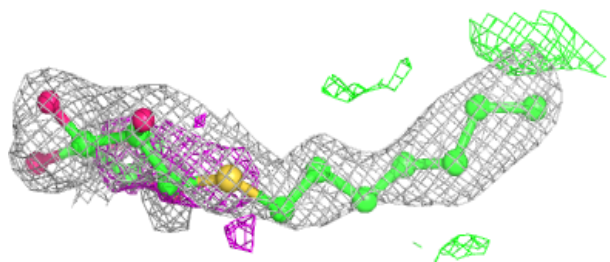
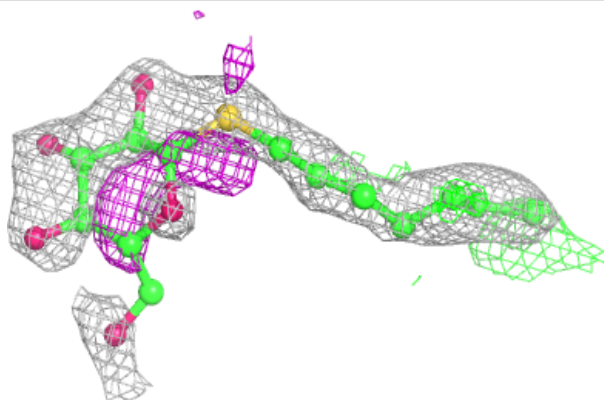


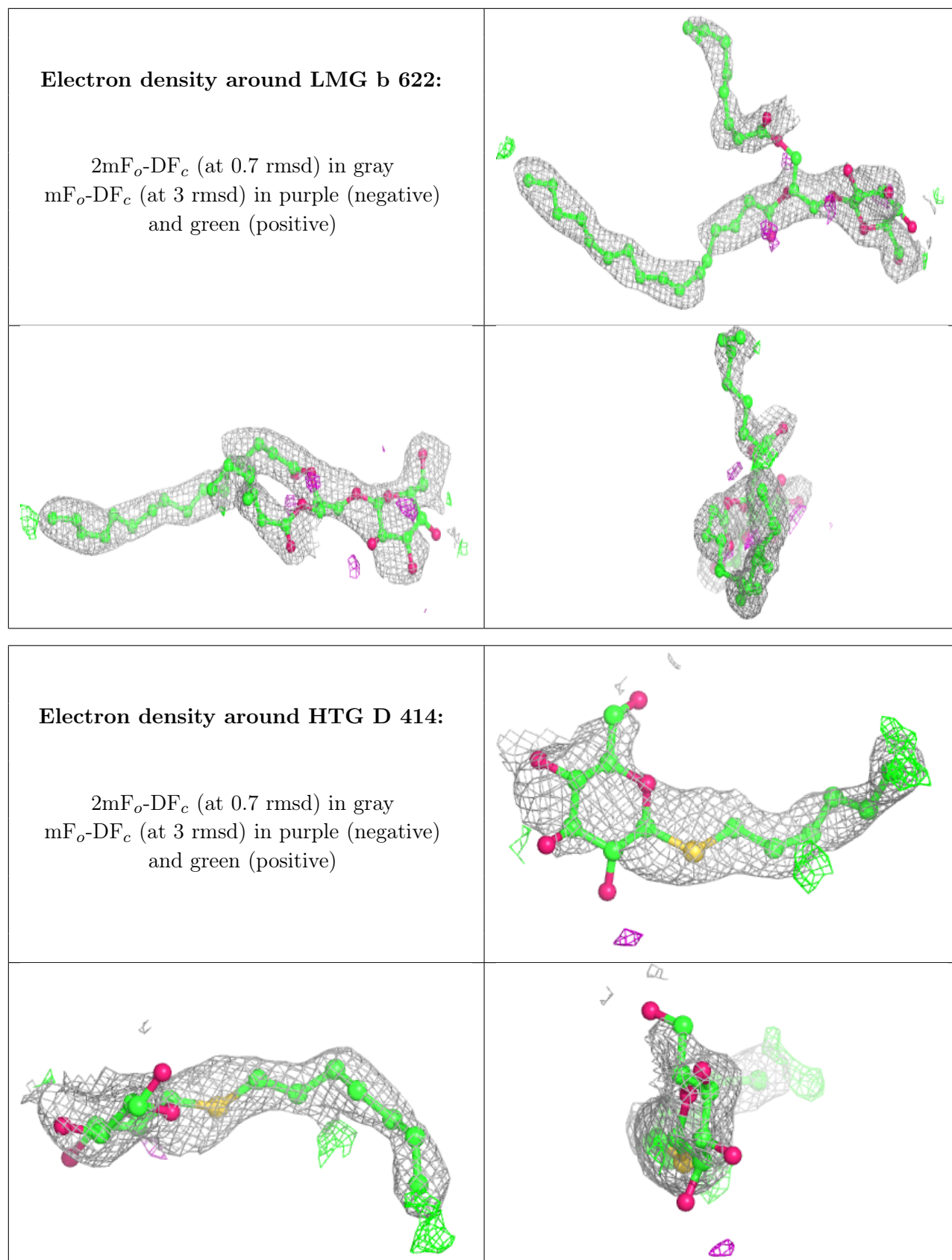
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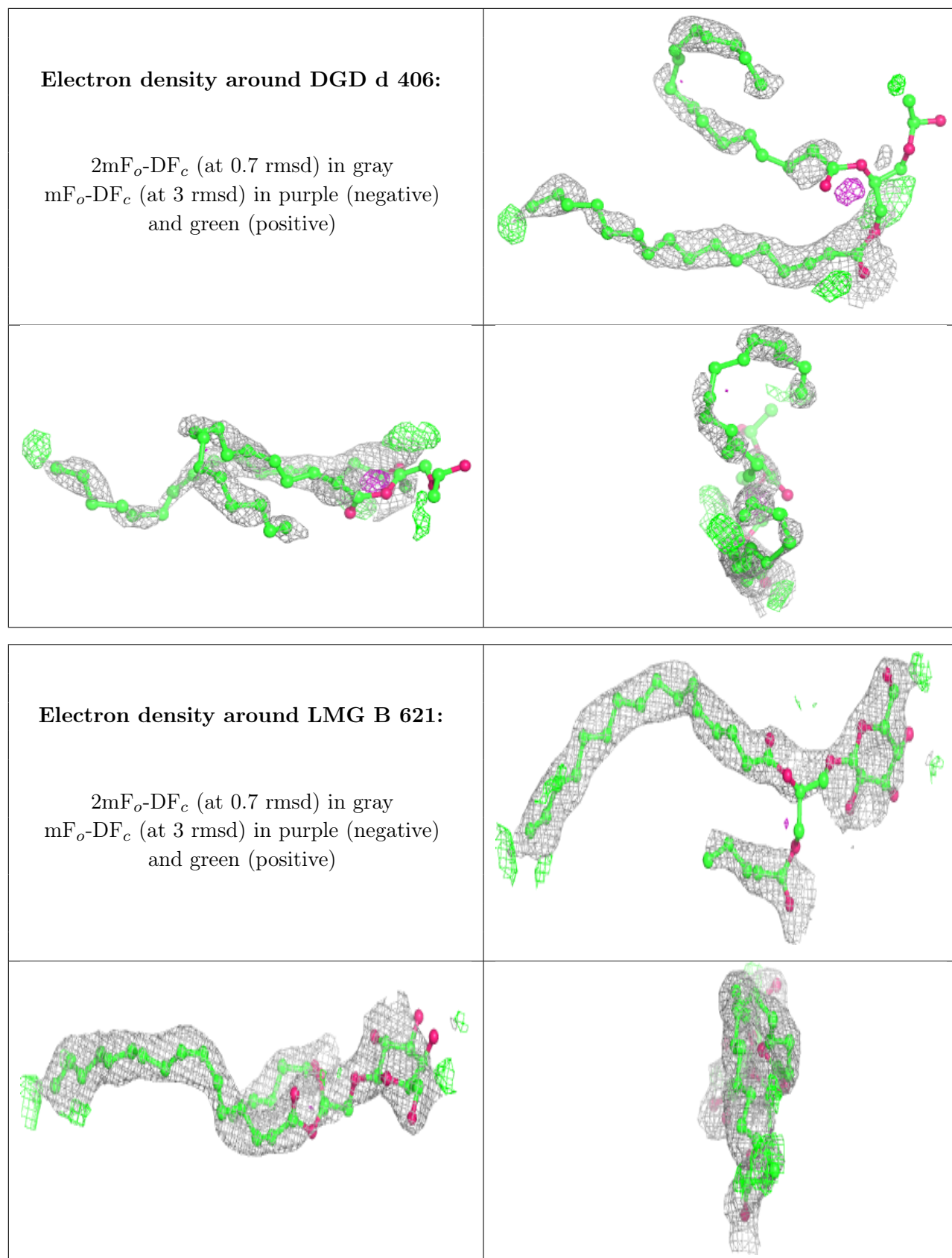
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around HTG b 632:**

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



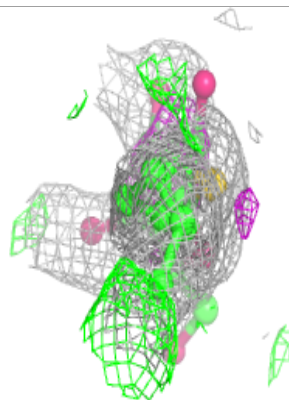
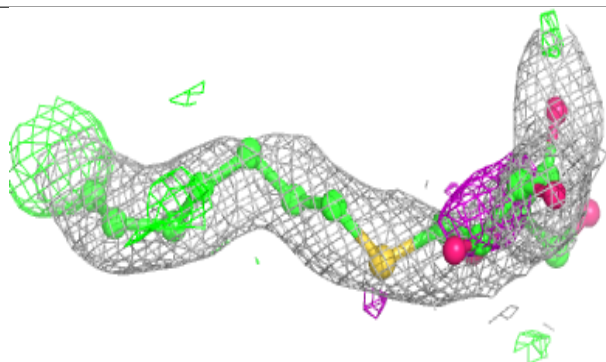
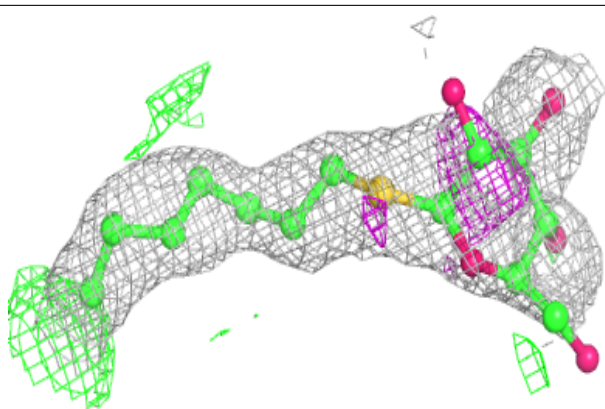




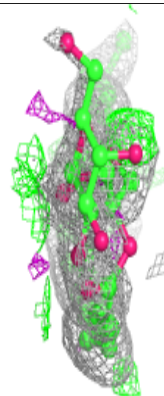
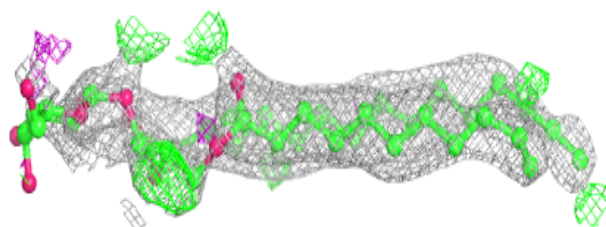
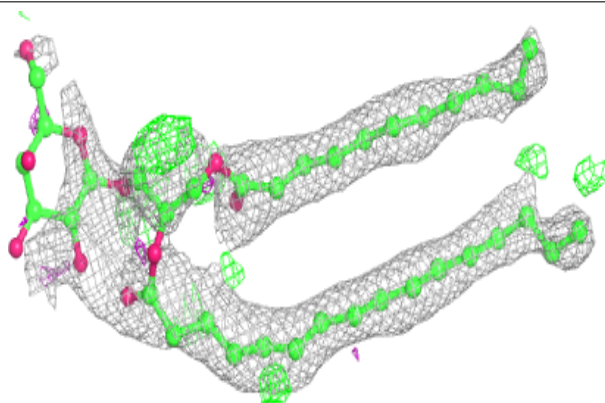


**Electron density around HTG D 415:**

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

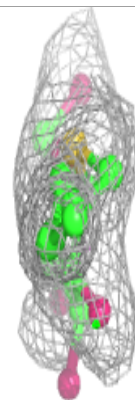
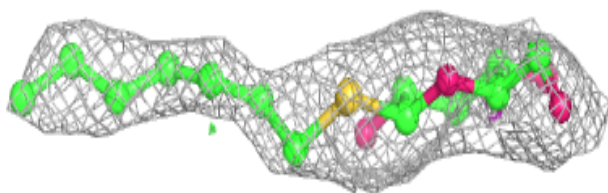
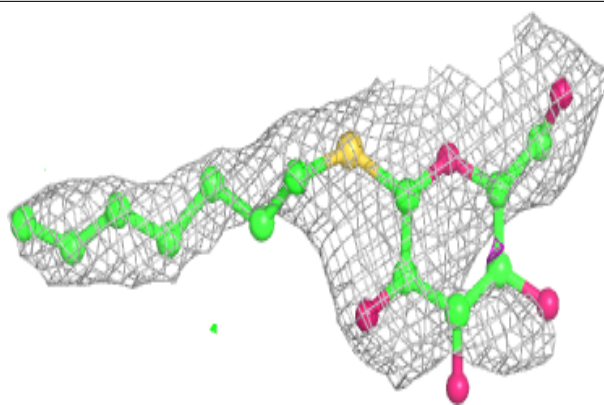
**Electron density around LMG D 412:**

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

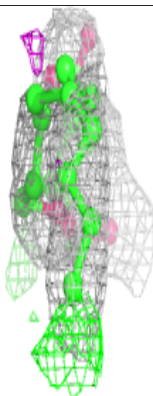
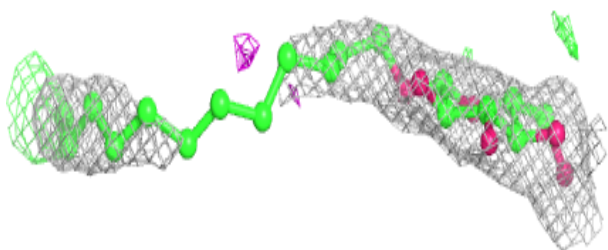
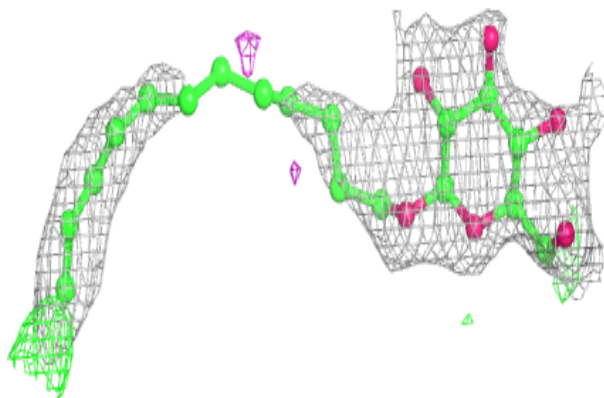


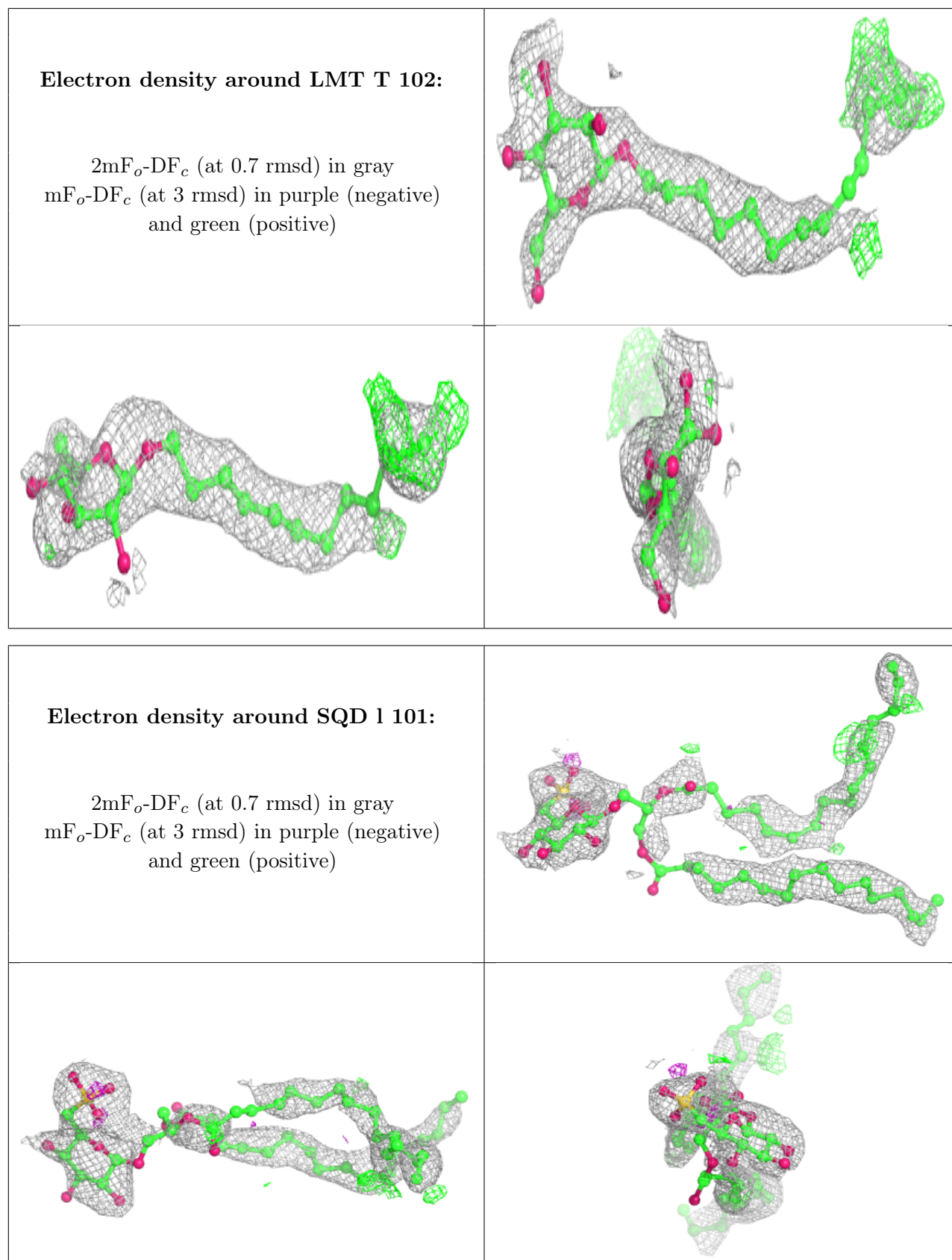
**Electron density around HTG C 532:**

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

**Electron density around LMT c 931:**

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

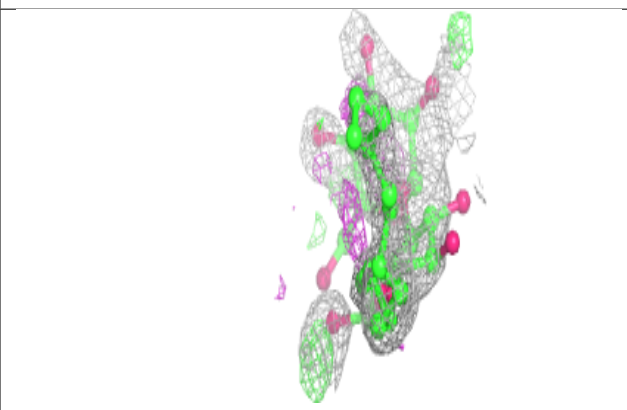
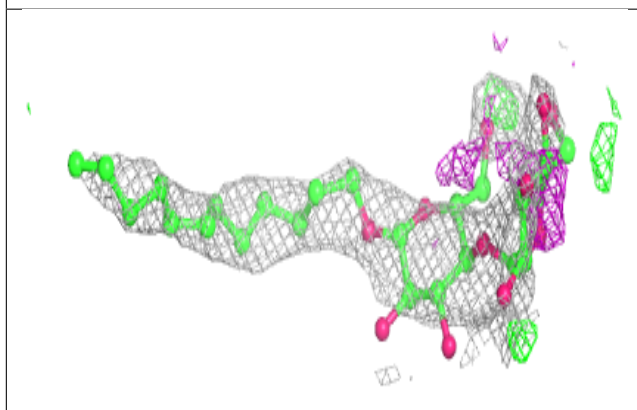
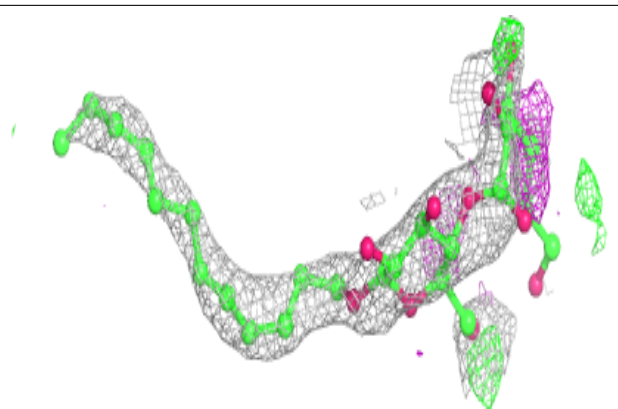




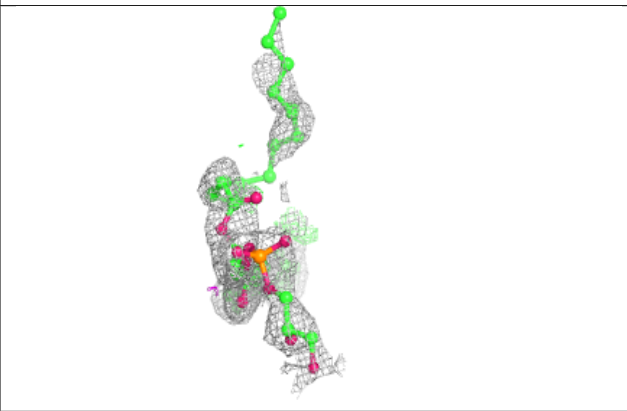
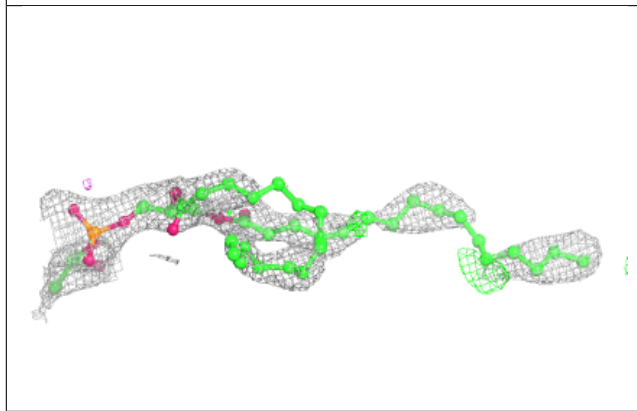
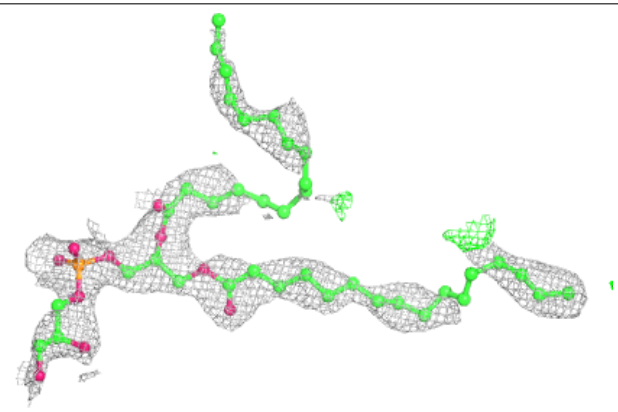


**Electron density around LMT A 414:**

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

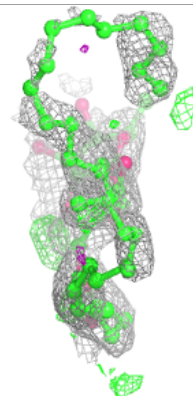
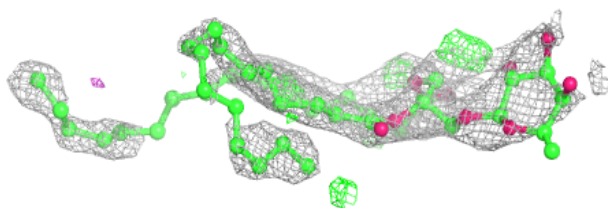
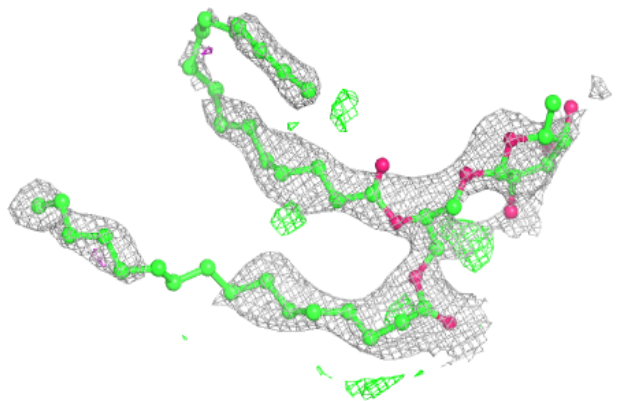
**Electron density around LHG a 416:**

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

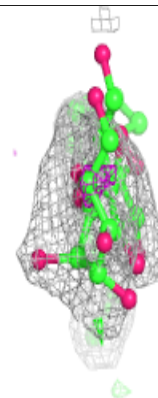
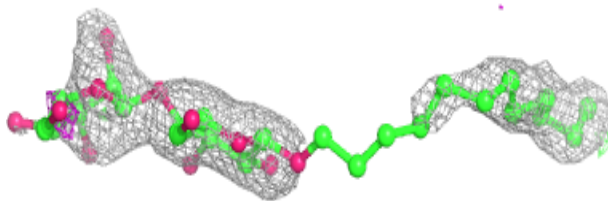
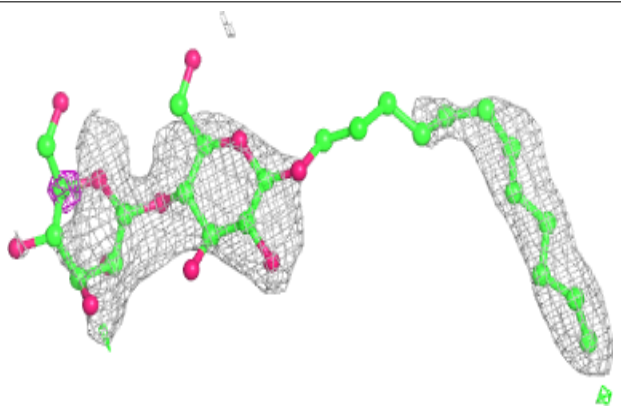


**Electron density around DGD D 407:**

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and green (positive)

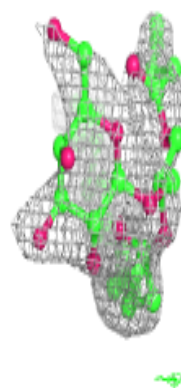
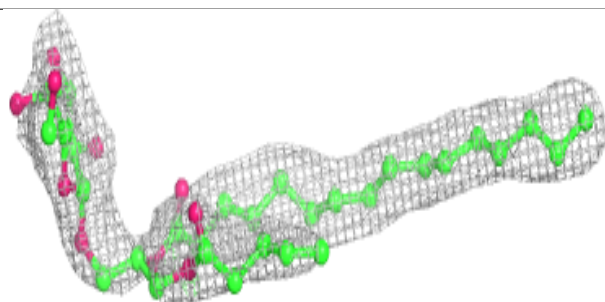
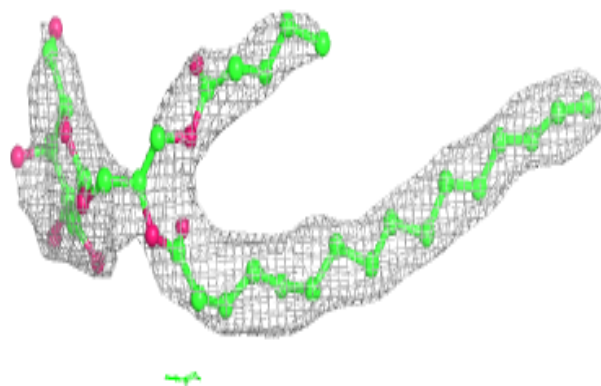
**Electron density around LMT Z 101:**

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

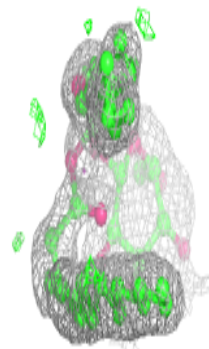
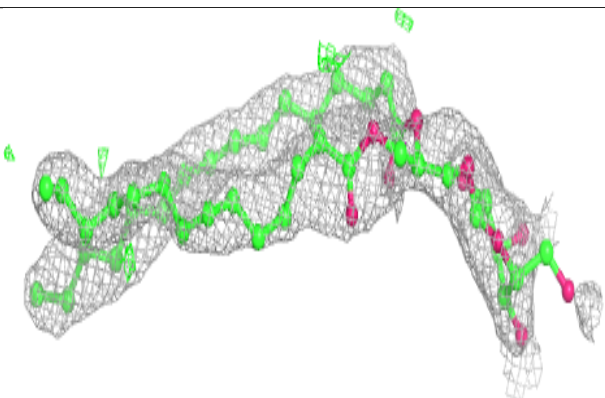
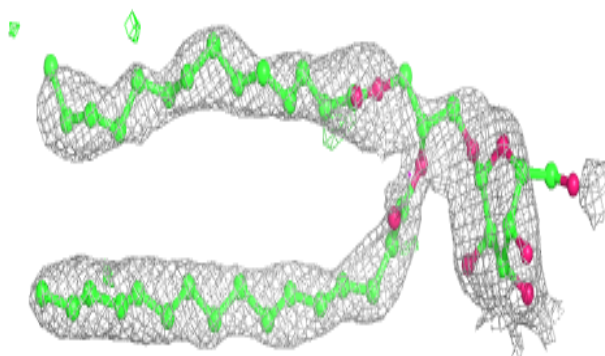


**Electron density around LMG C 531:**

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

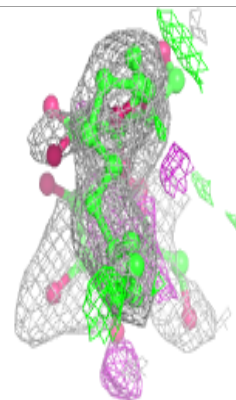
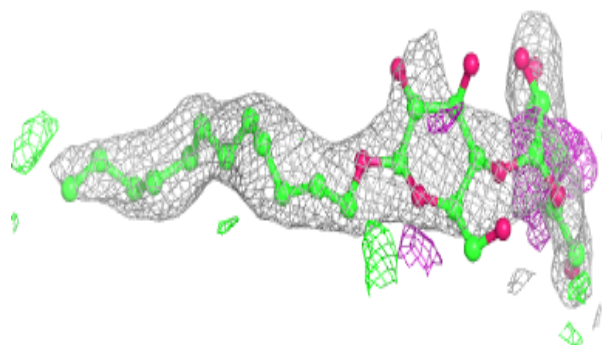
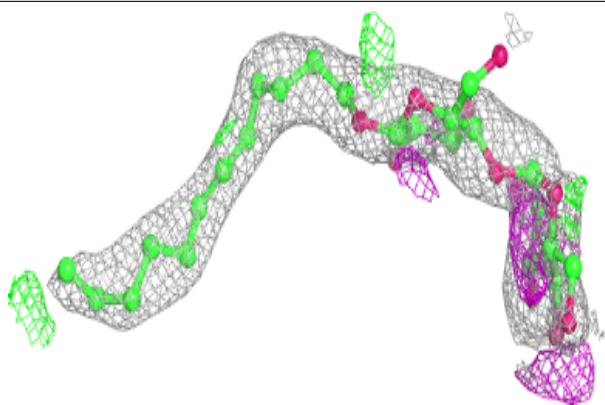
**Electron density around LMG c 930:**

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

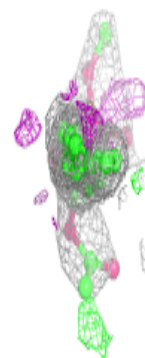
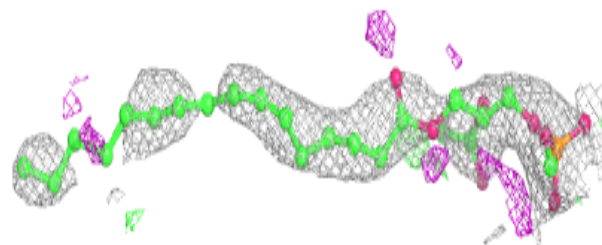
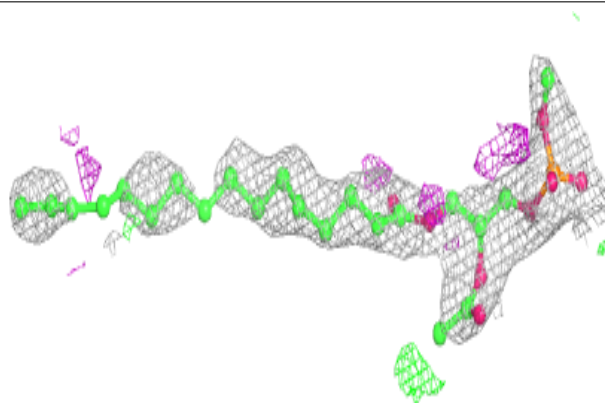


**Electron density around LMT a 419:**

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

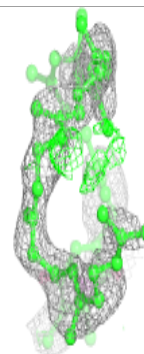
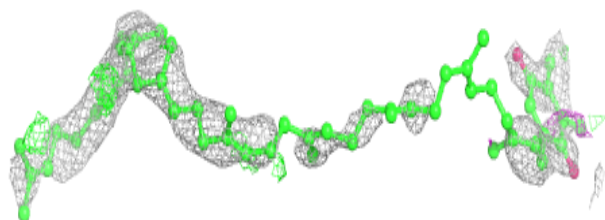
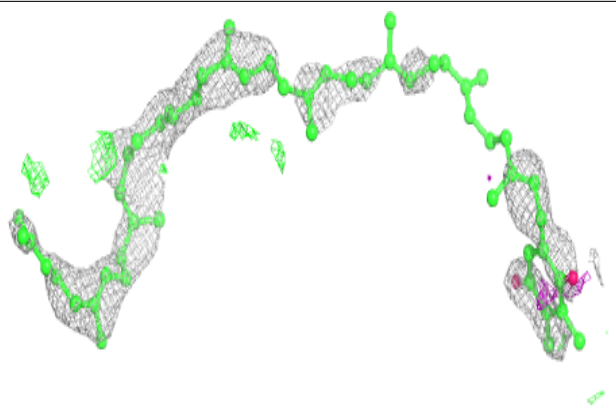
**Electron density around LHG A 412:**

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

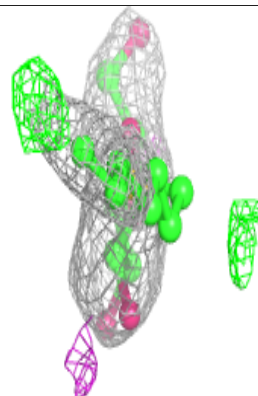
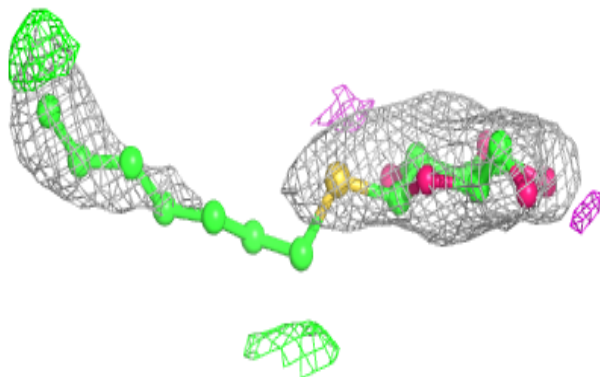
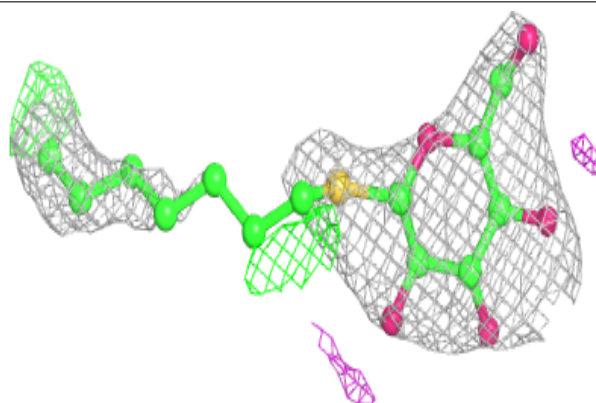


**Electron density around PL9 a 415:**

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

**Electron density around HTG c 922:**

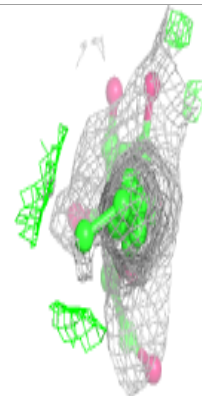
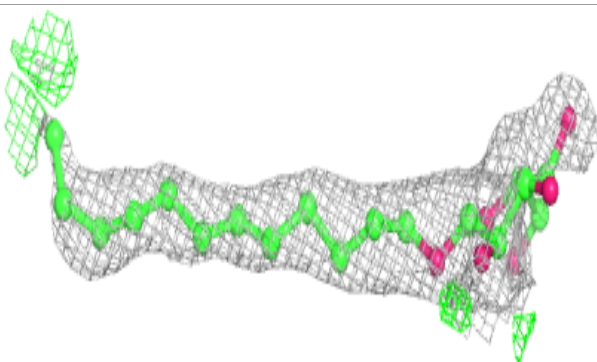
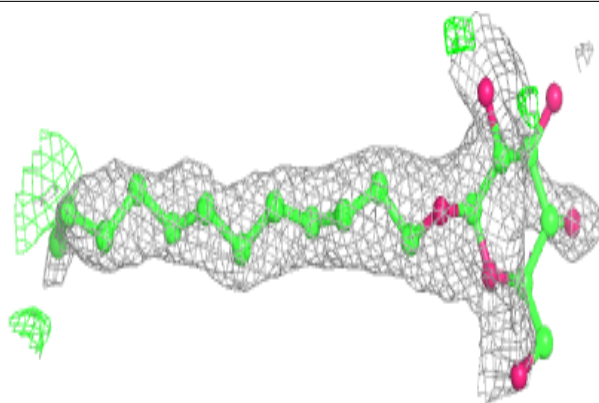
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



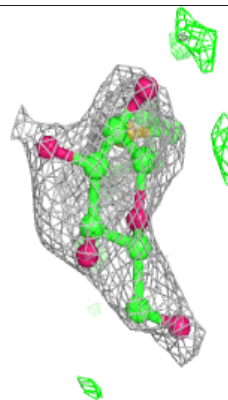
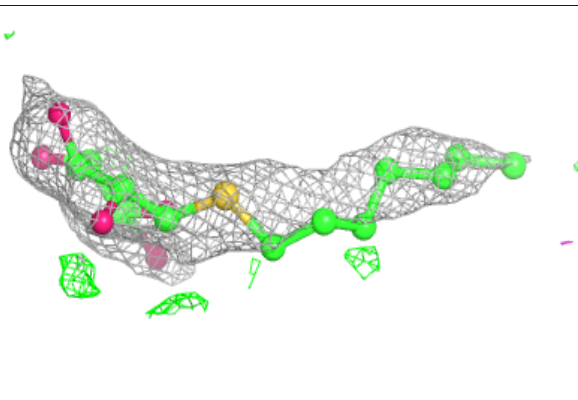
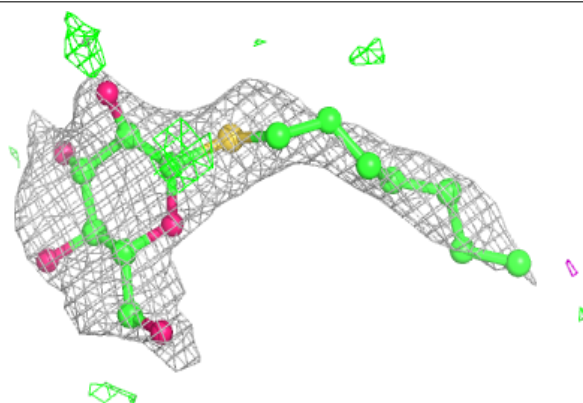


**Electron density around LMT t 101:**

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

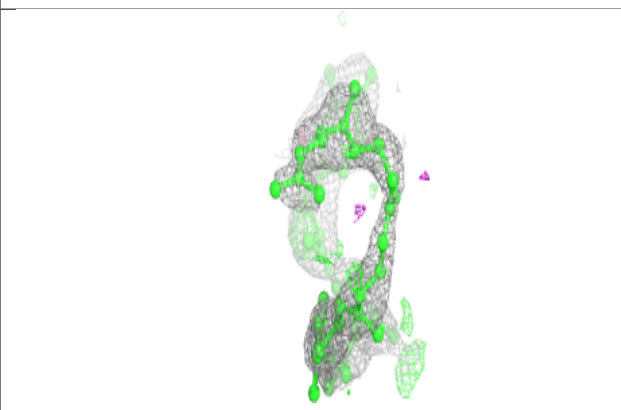
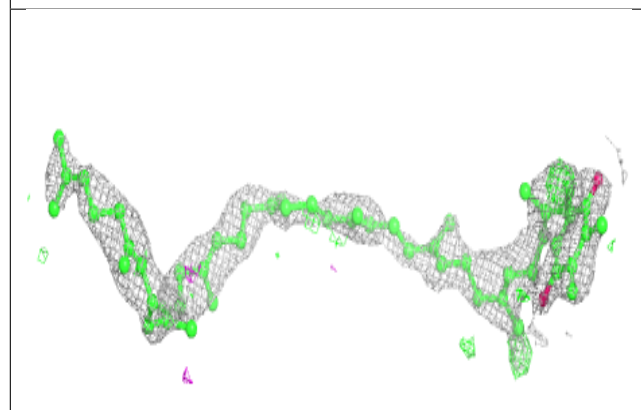
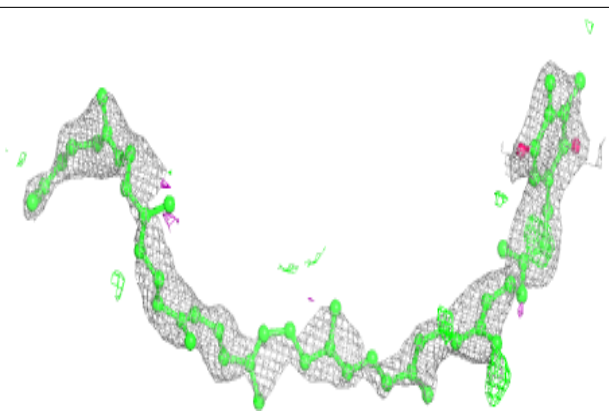
**Electron density around HTG b 624:**

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

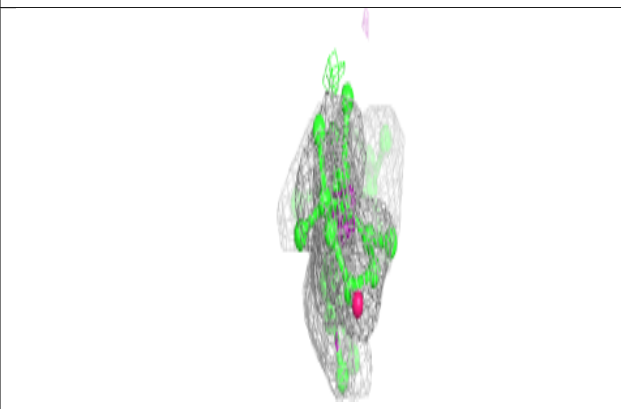
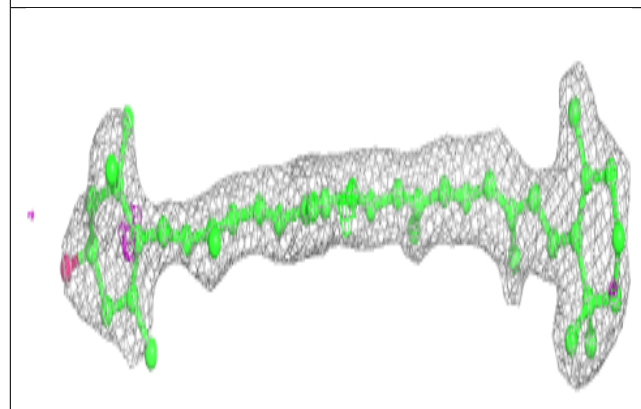
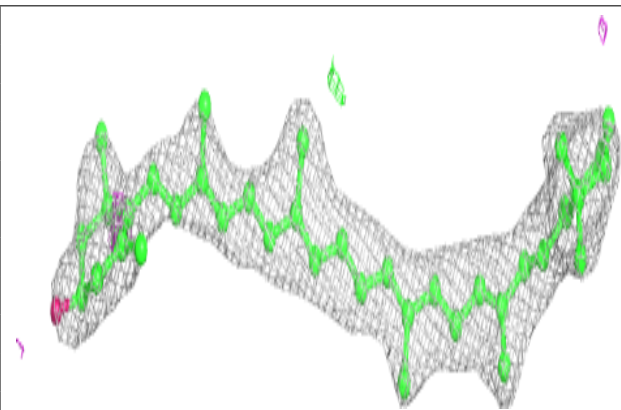


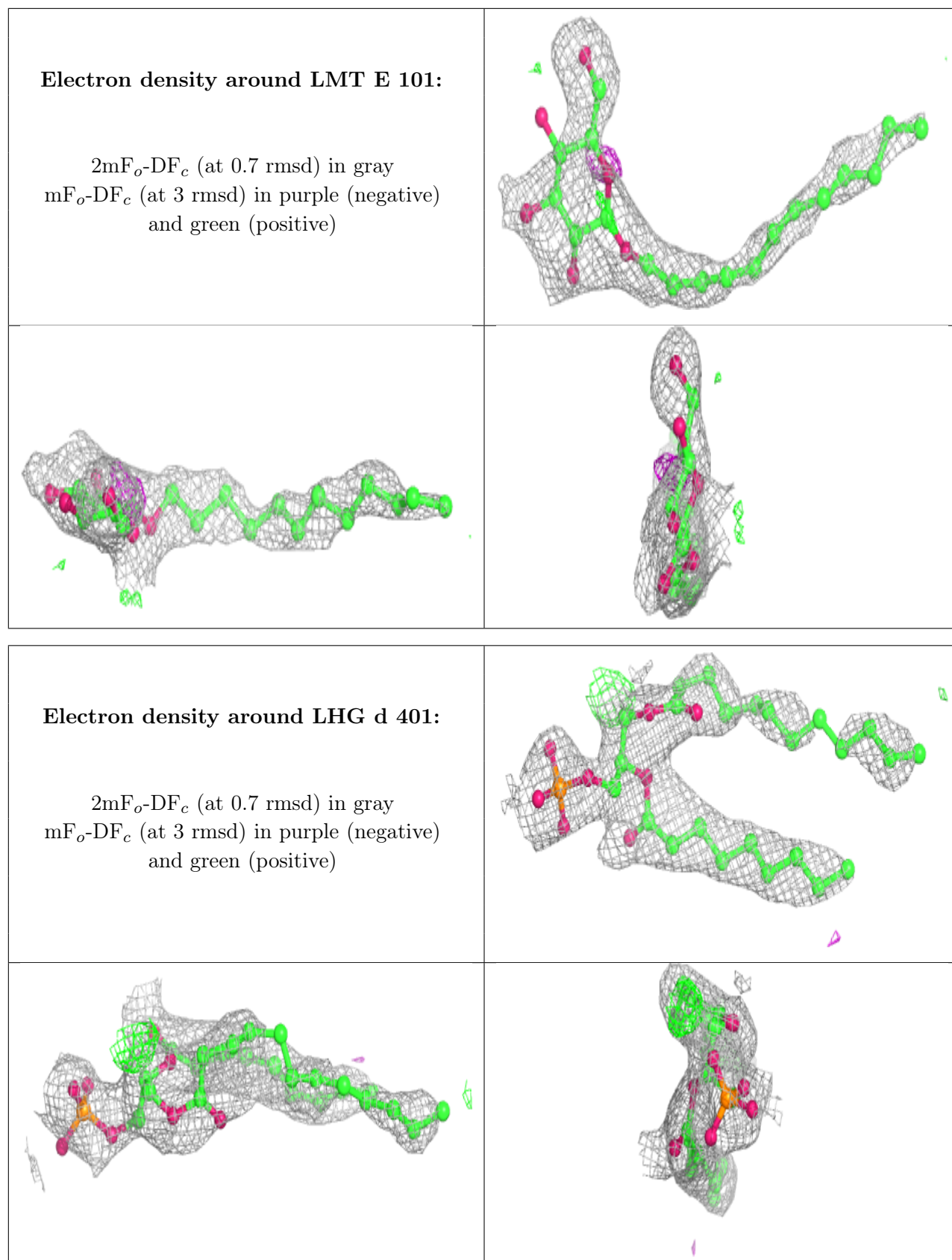
**Electron density around PL9 A 411:**

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

**Electron density around RRX 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)

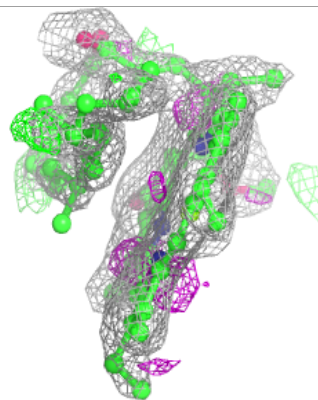
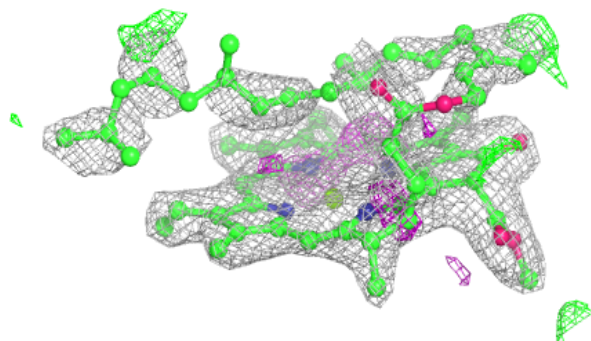
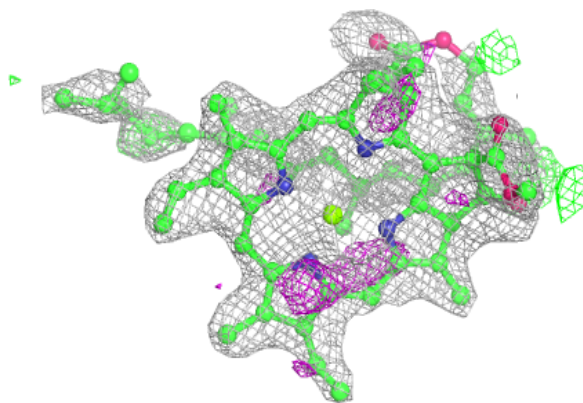




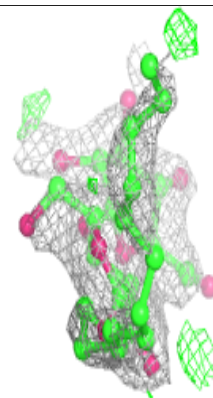
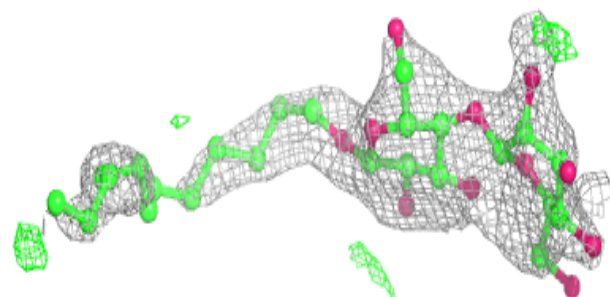
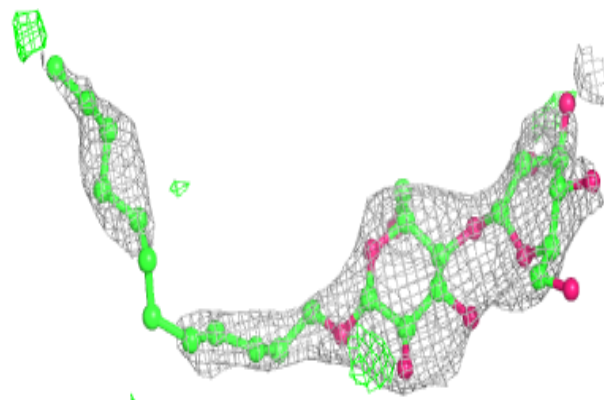


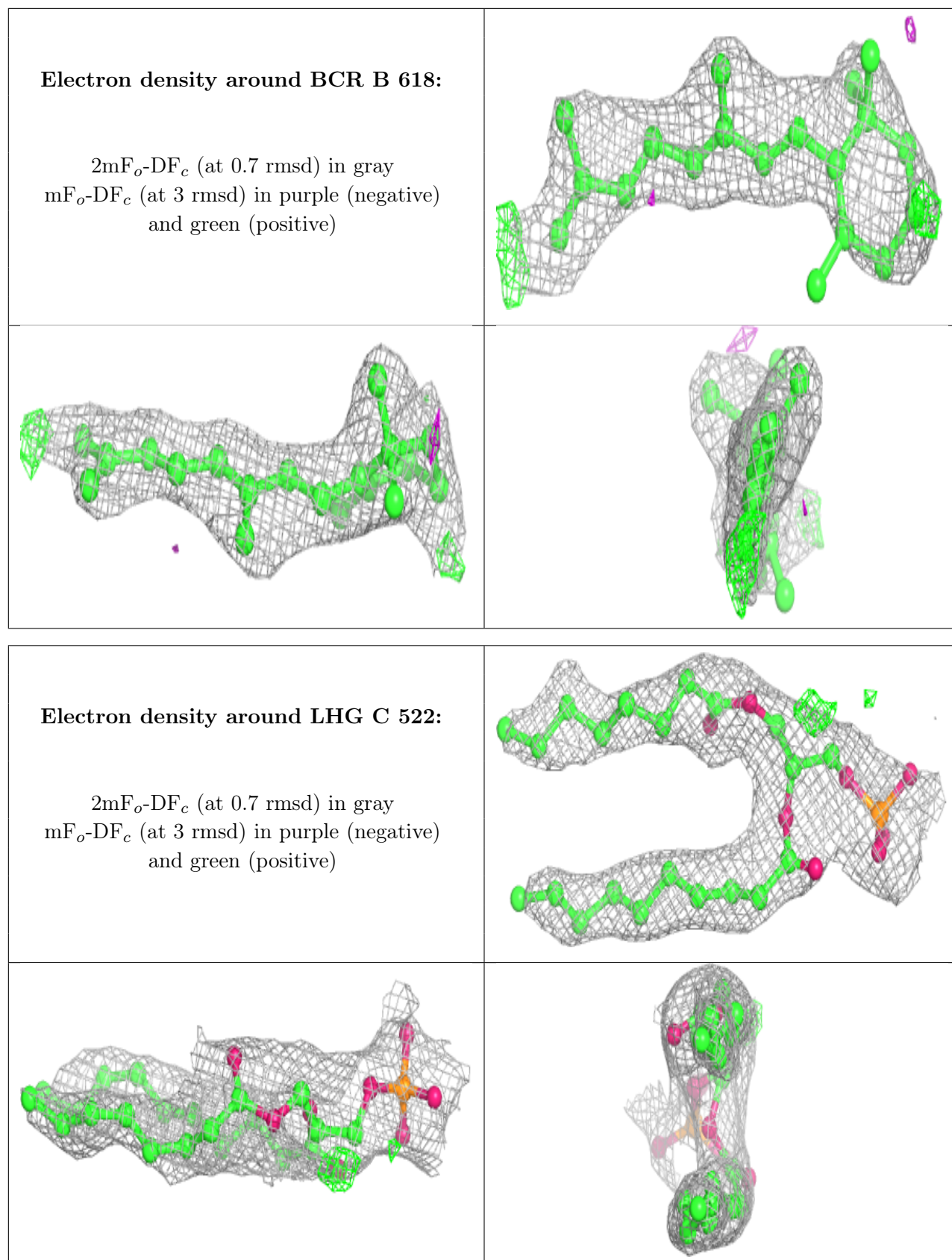
**Electron density around CLA b 602:**

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

**Electron density around LMT I 102:**

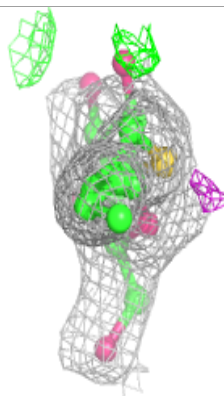
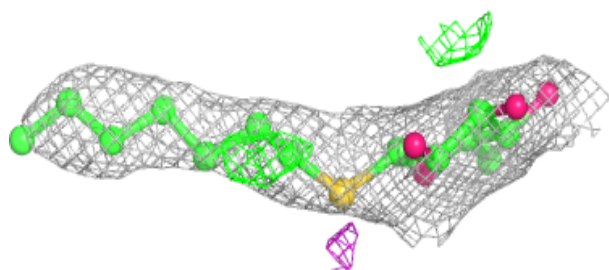
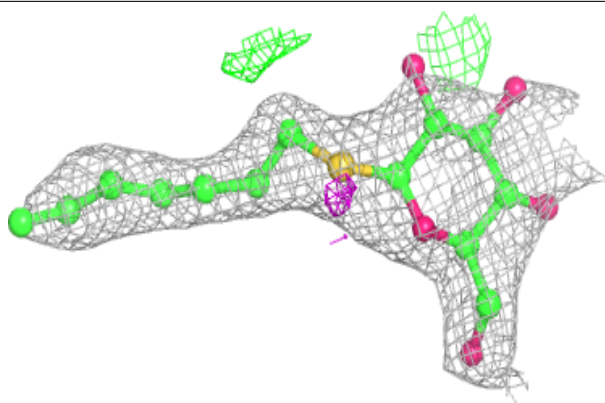
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



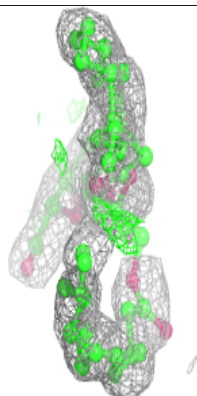
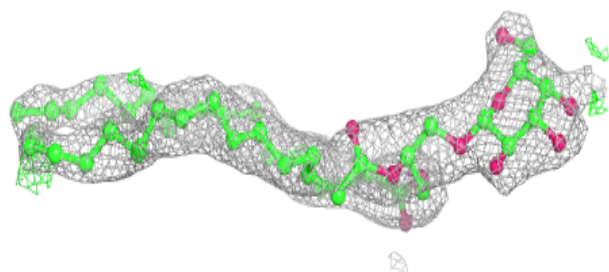
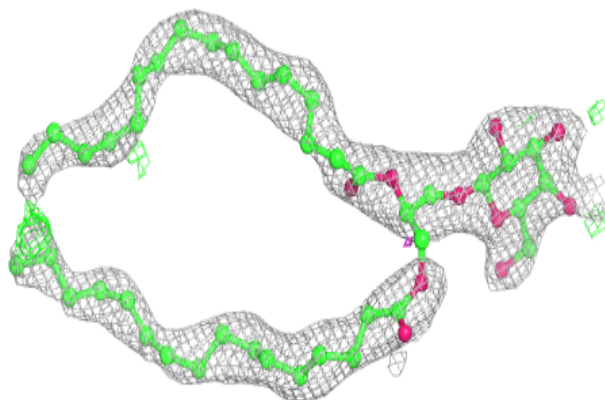


**Electron density around HTG 1 106:**

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

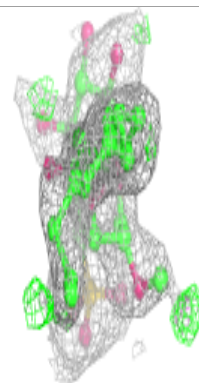
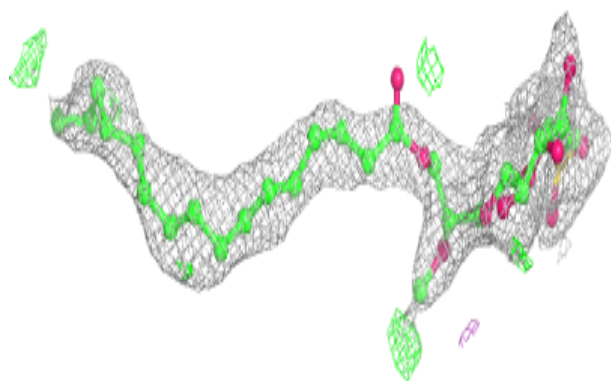
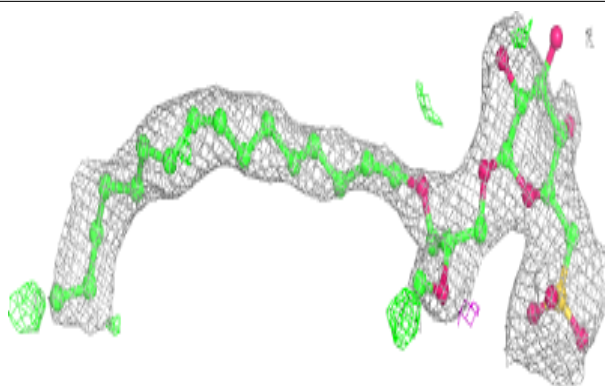
**Electron density around LMG A 410:**

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

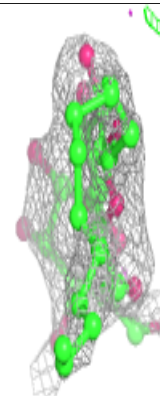
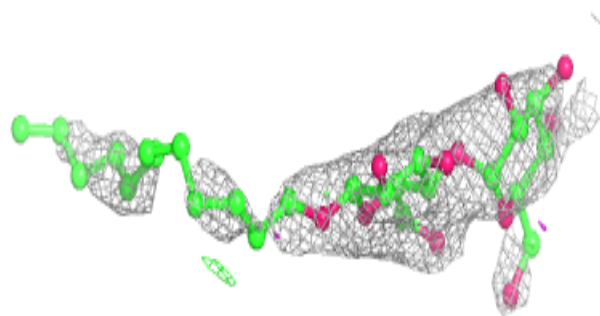
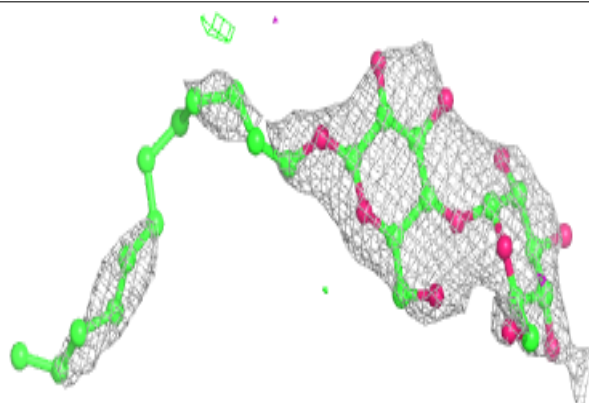


**Electron density around SQD b 621:**

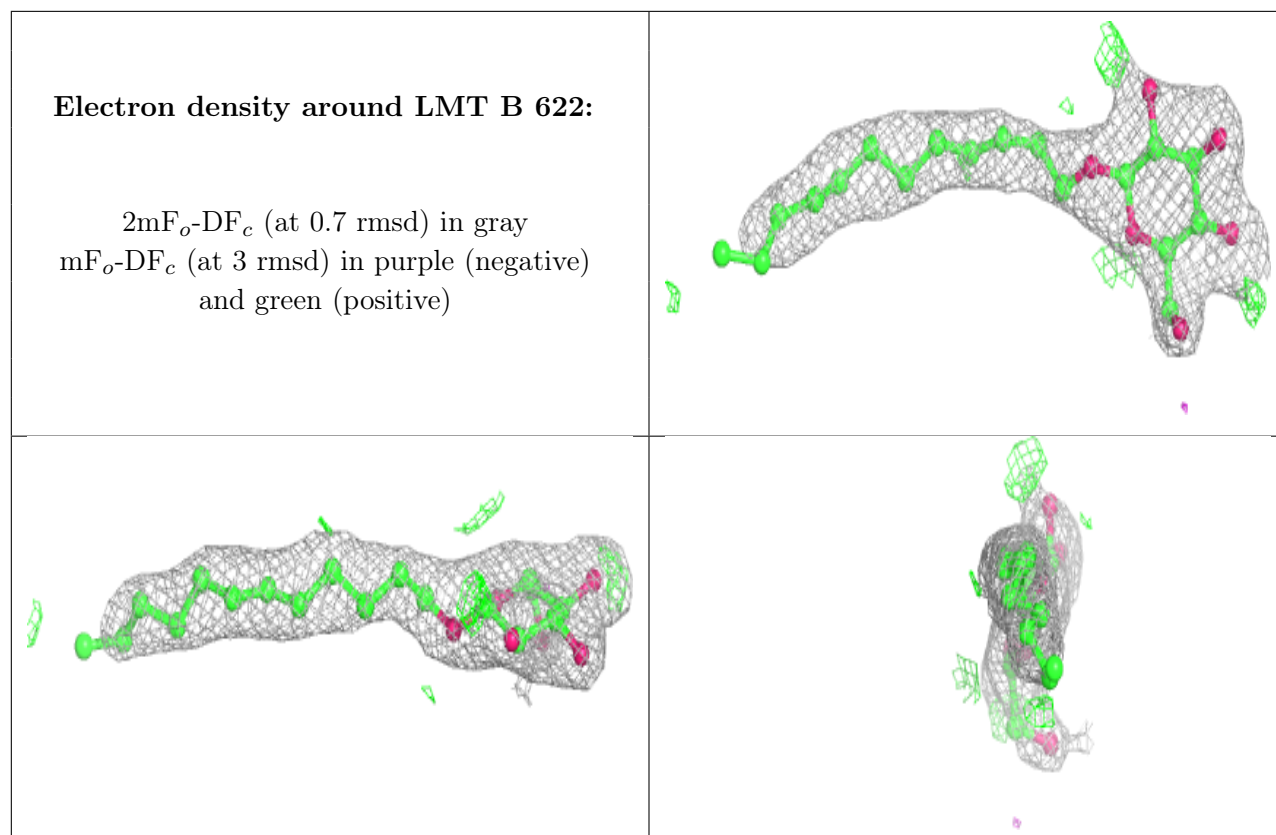
$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)

**Electron density around LMT c 921:**

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

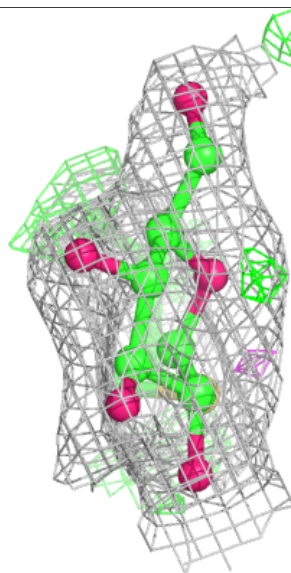
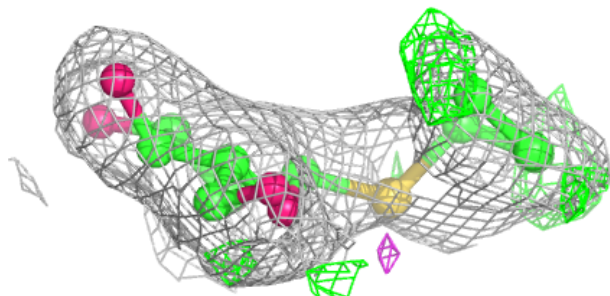
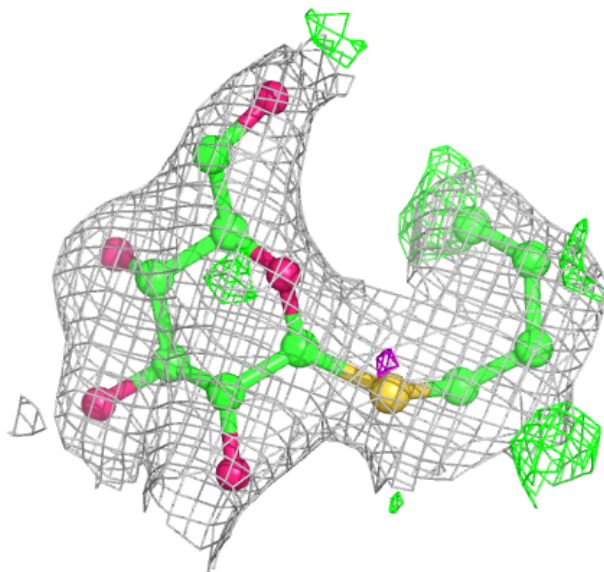






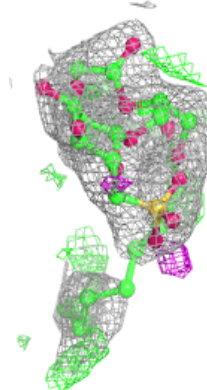
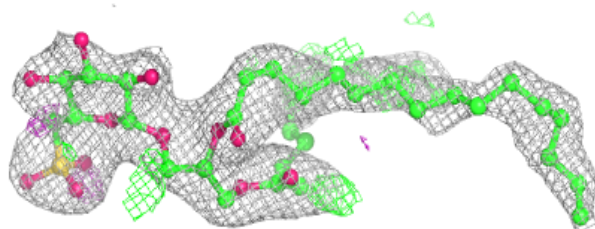
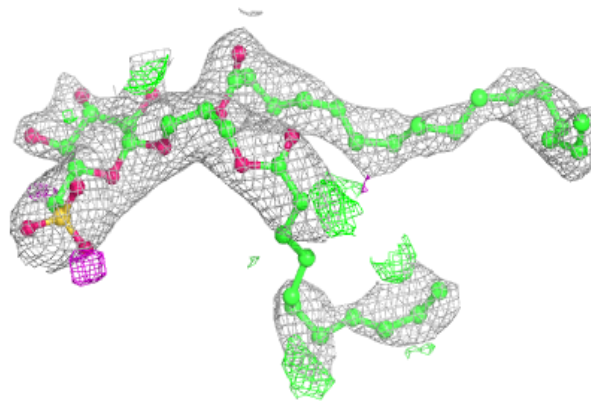
**Electron density around HTG v 203:**

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

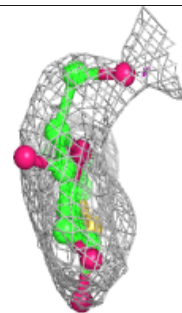
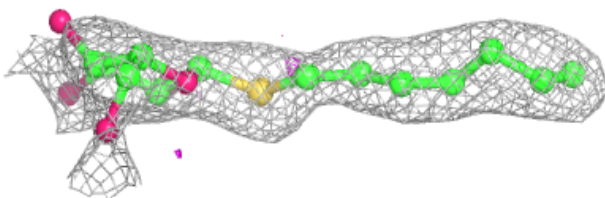
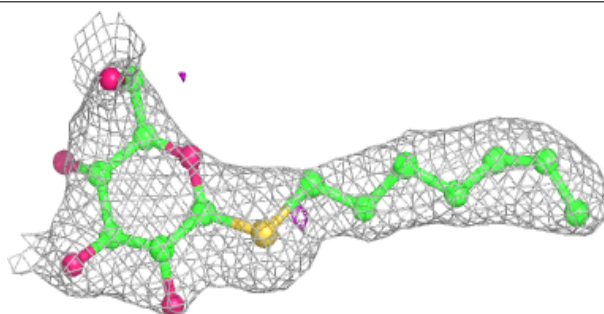


**Electron density around SQD A 413:**

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

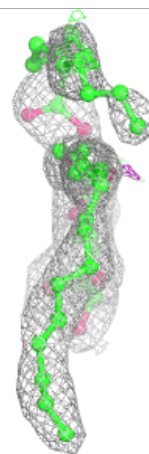
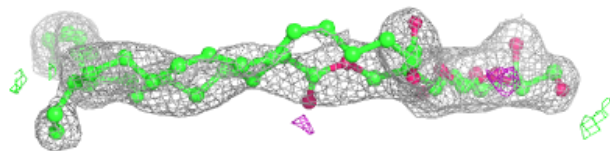
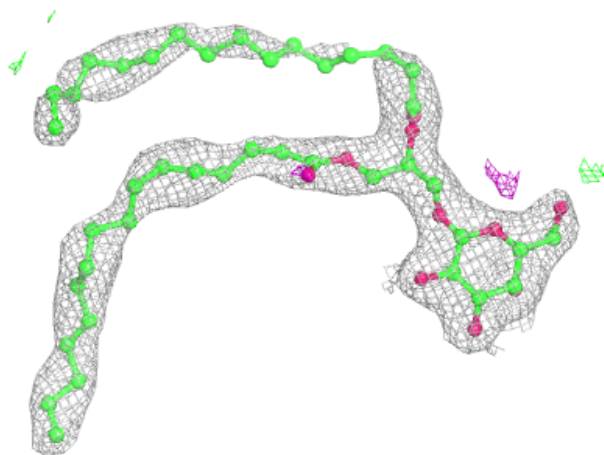
**Electron density around HTG B 626:**

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

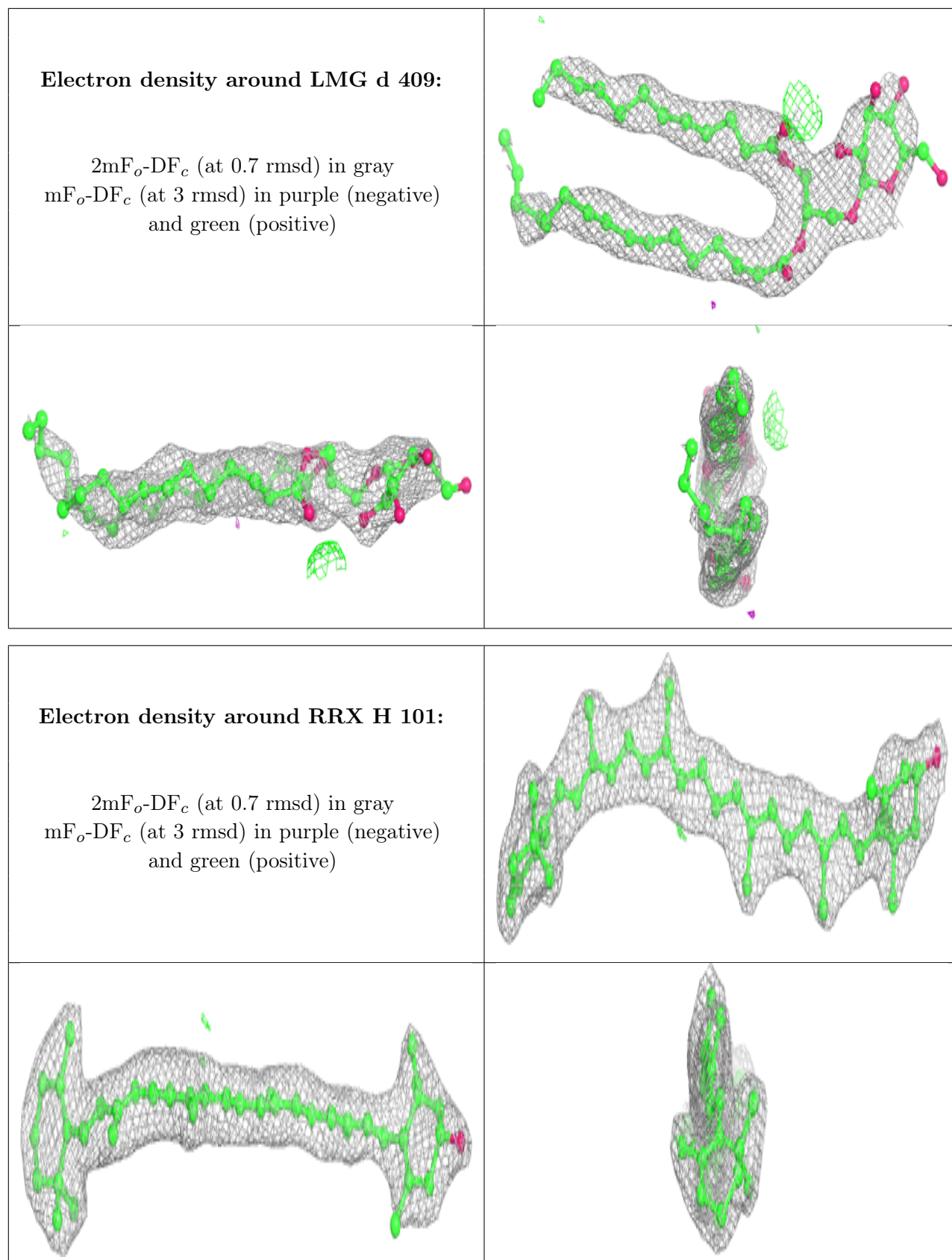


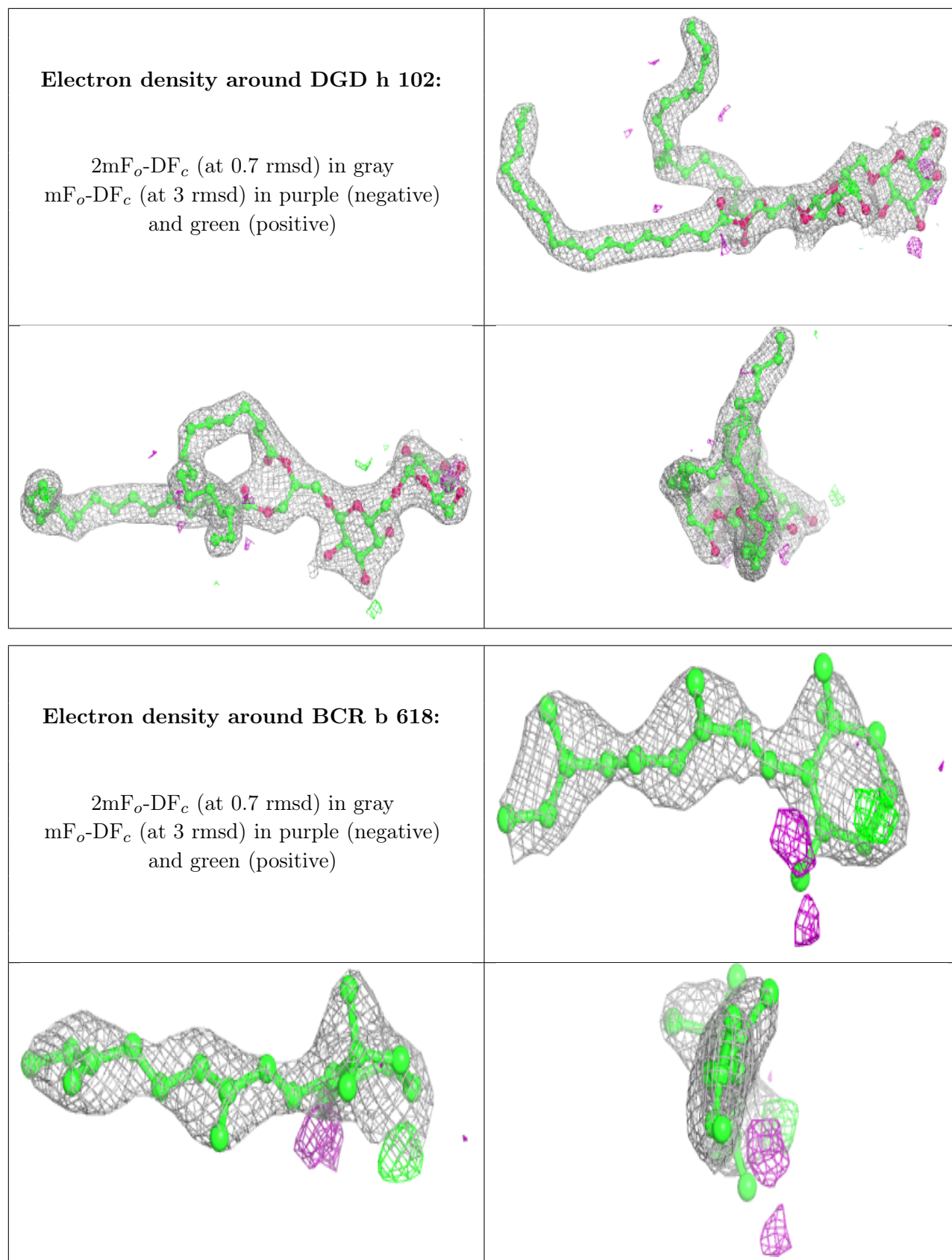
**Electron density around LMG c 920:**

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



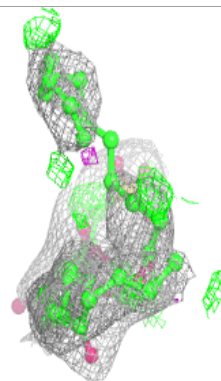
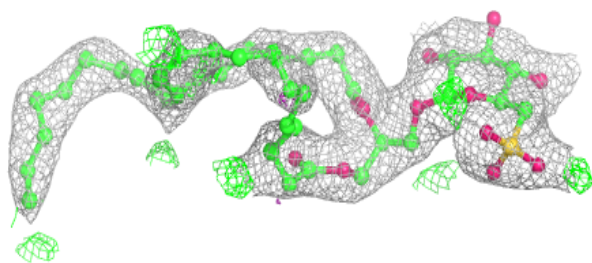
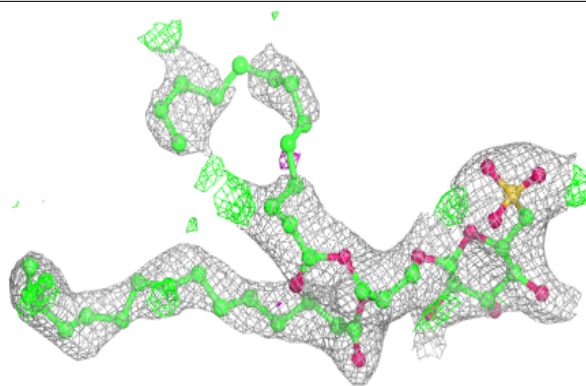






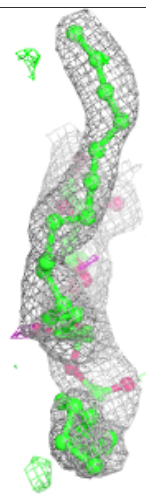
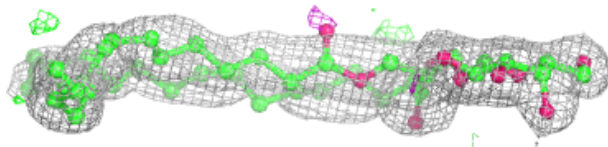
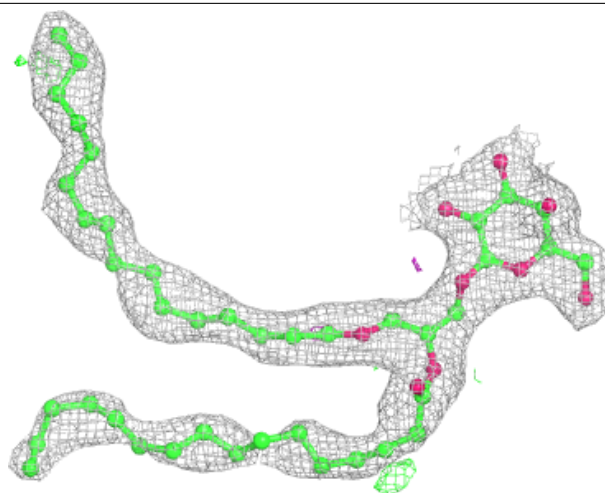
**Electron density around SQD a 418:**

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



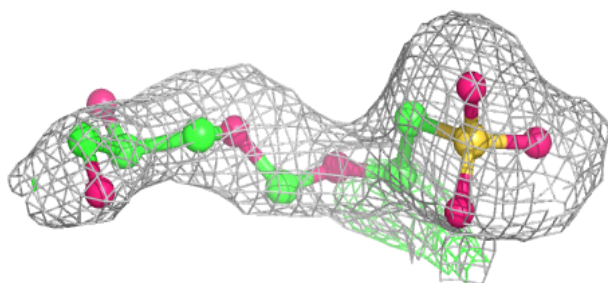
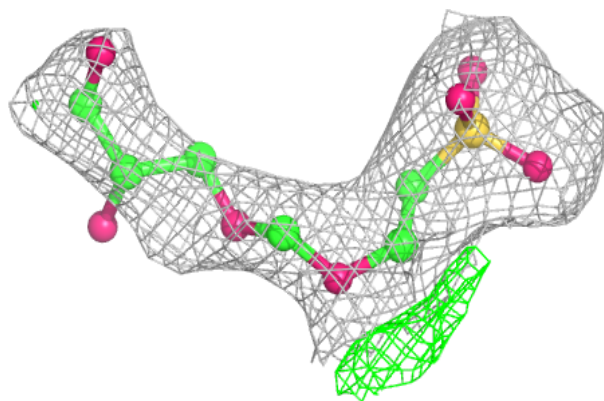
**Electron density around LMG C 520:**

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

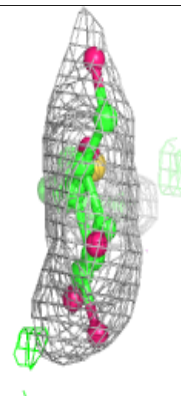
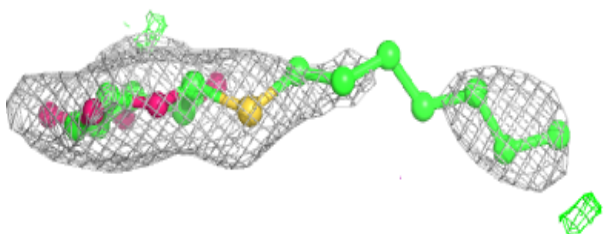
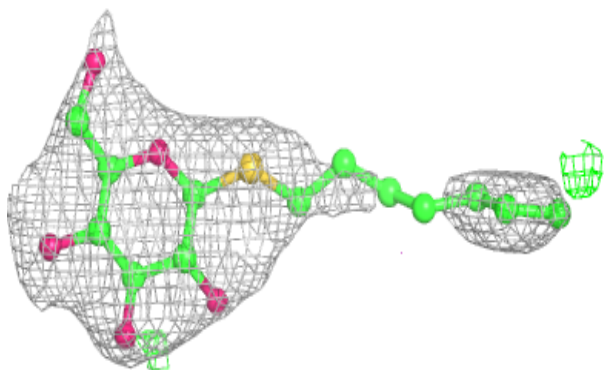


**Electron density around SQD f 101:**

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

**Electron density around HTG C 521:**

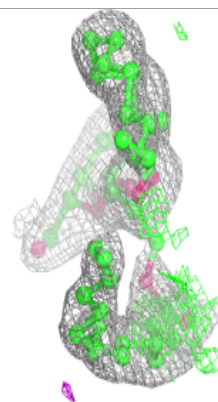
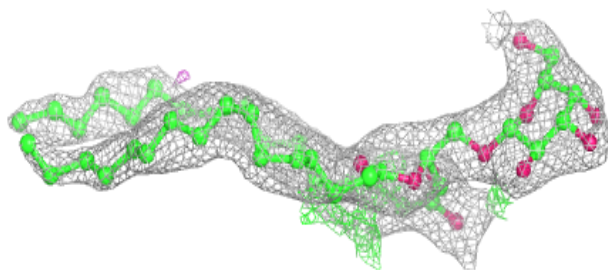
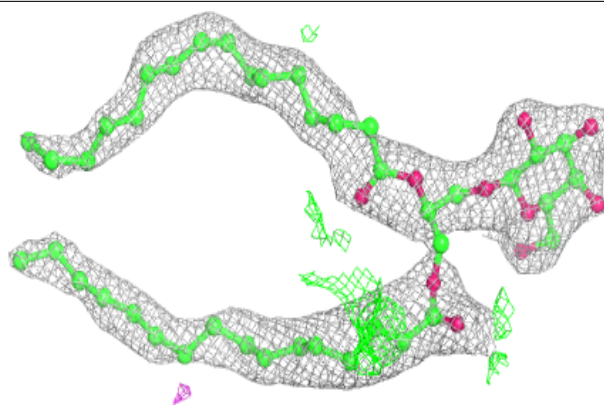
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





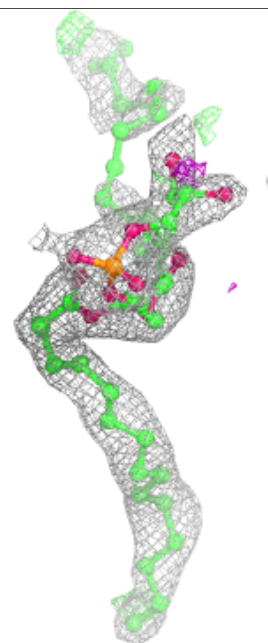
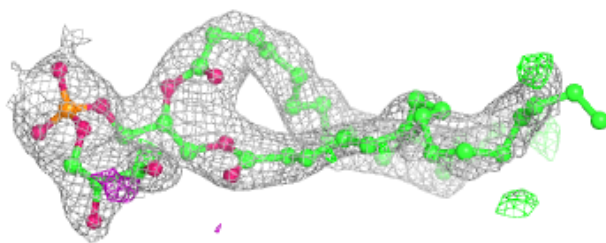
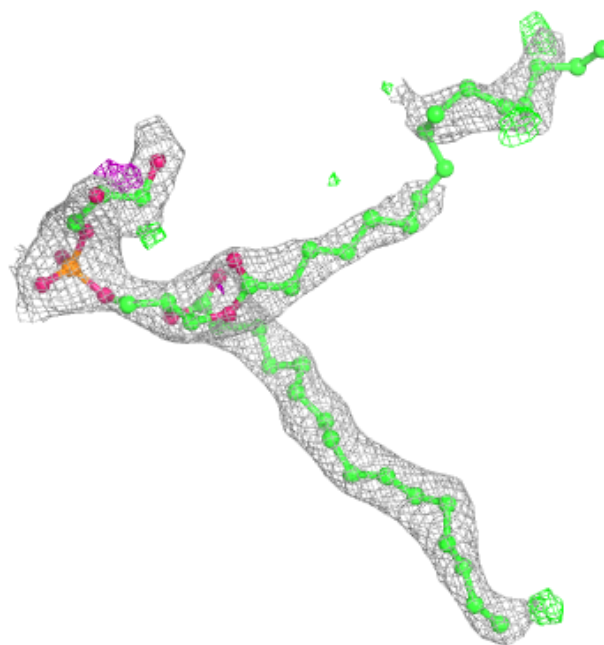
**Electron density around LMG i 101:**

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



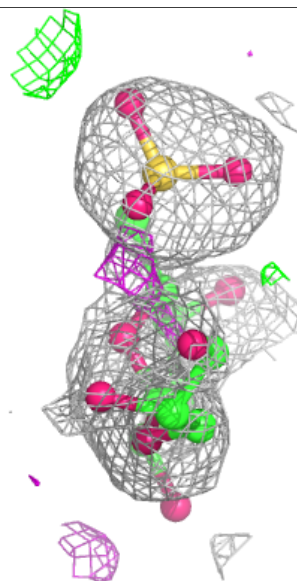
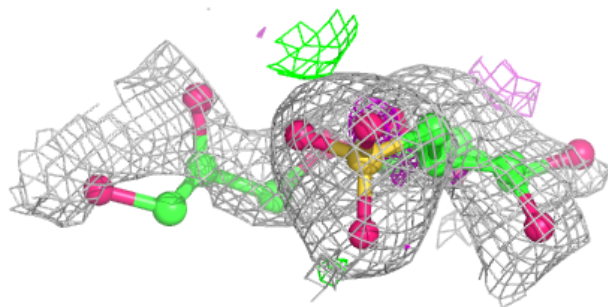
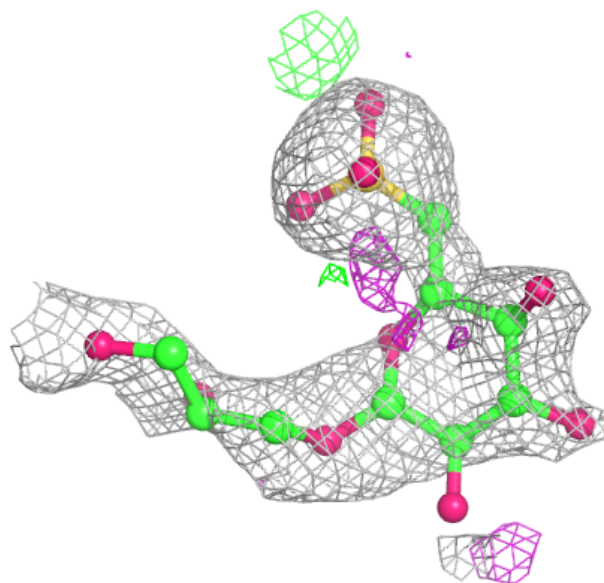
**Electron density around LHG 1 102:**

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



**Electron density around SQD D 408:**

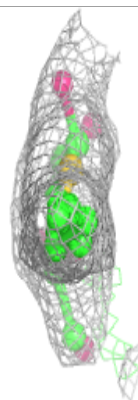
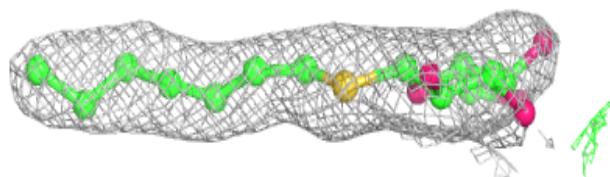
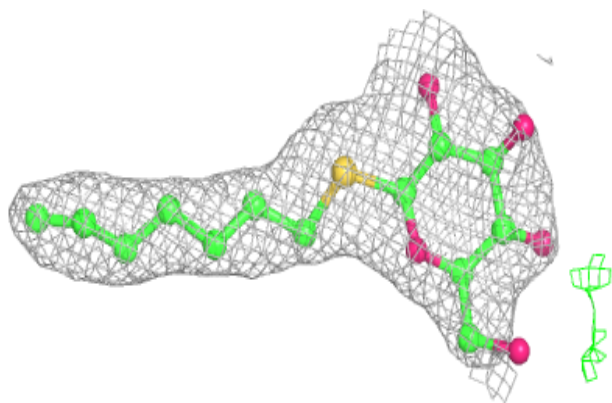
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



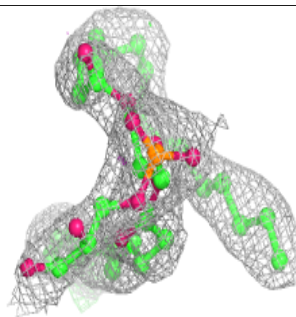
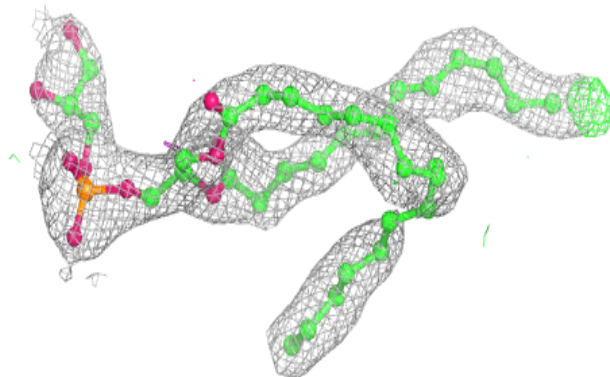
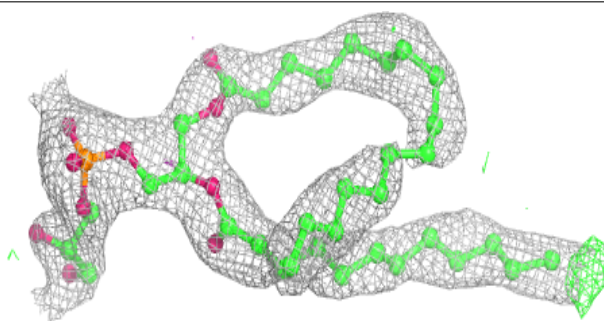


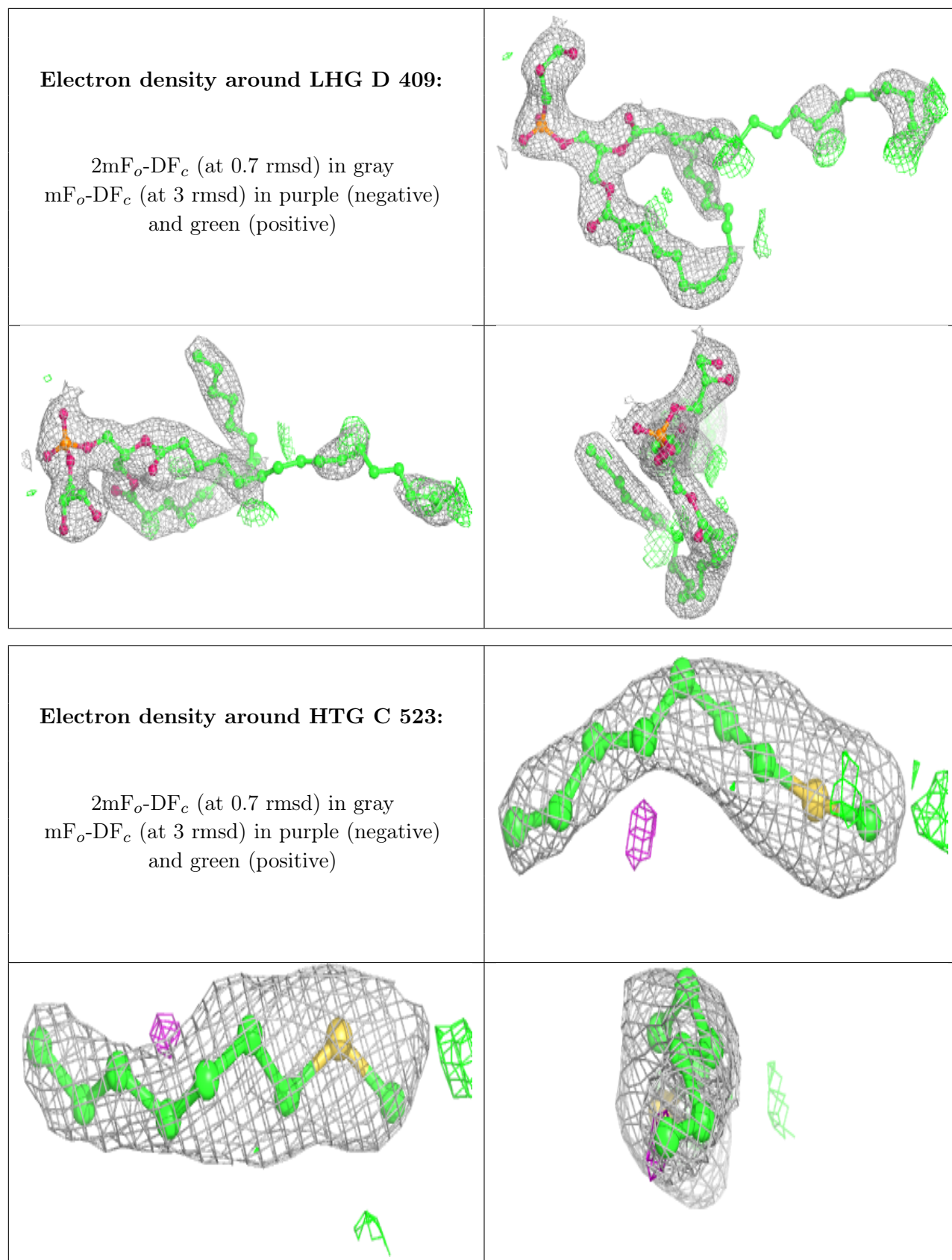
**Electron density around HTG b 626:**

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

**Electron density around LHG a 423:**

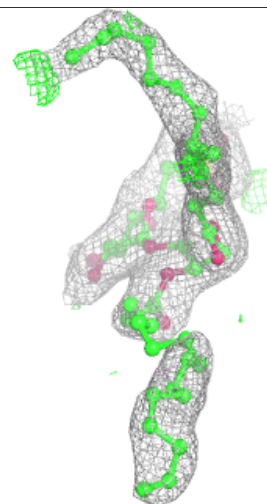
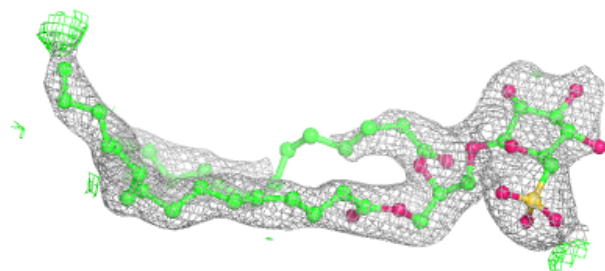
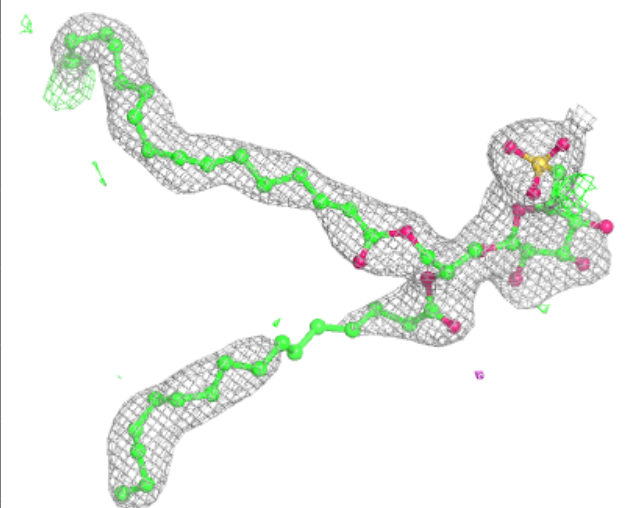
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





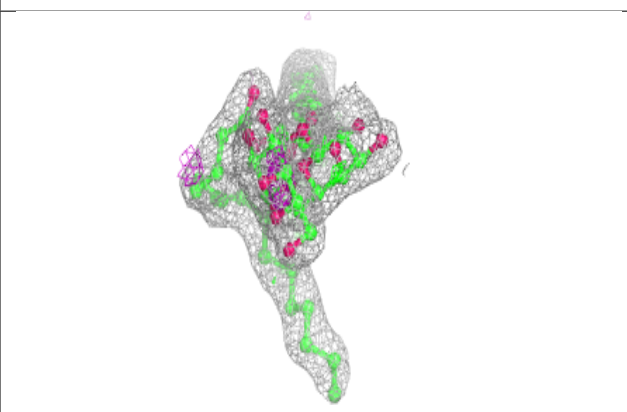
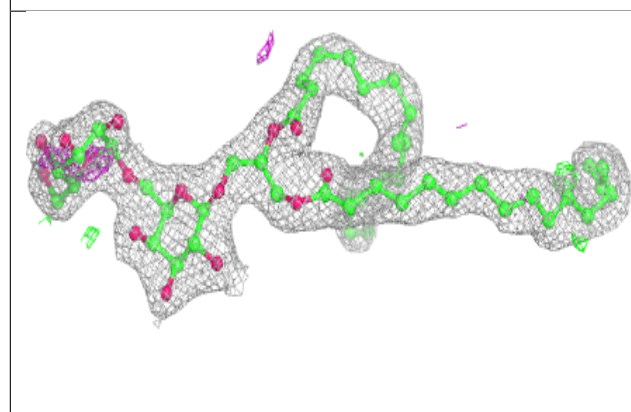
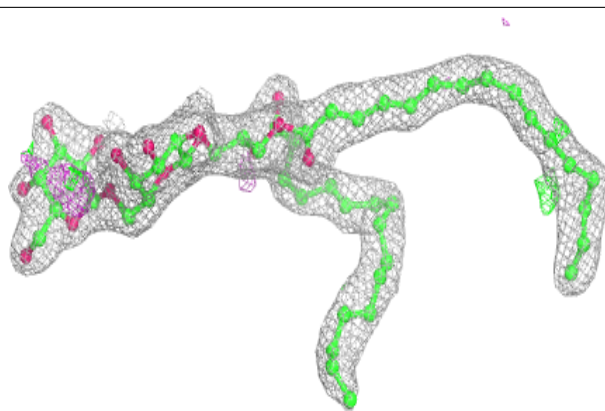
**Electron density around SQD a 414:**

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

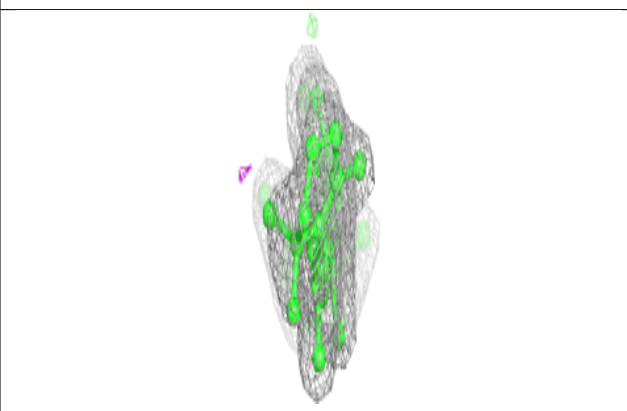
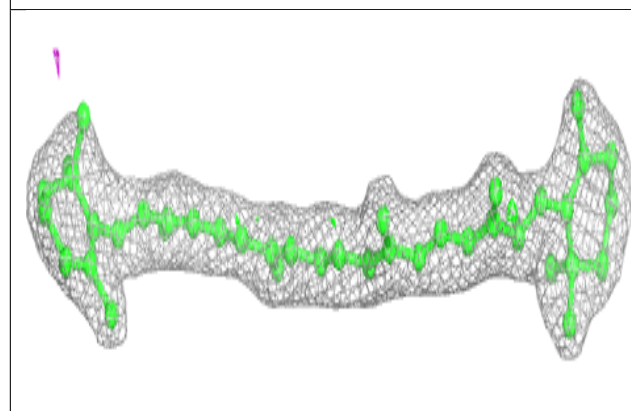
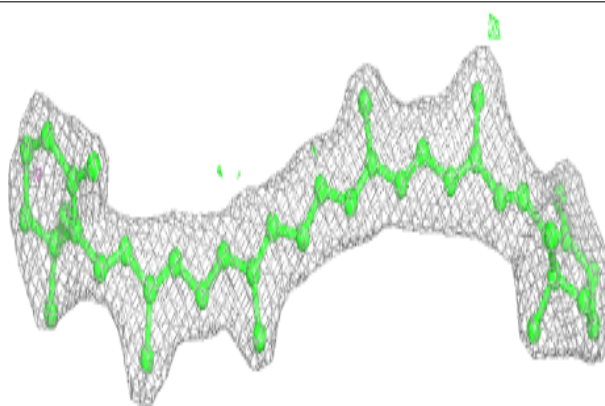


**Electron density around DGD H 102:**

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

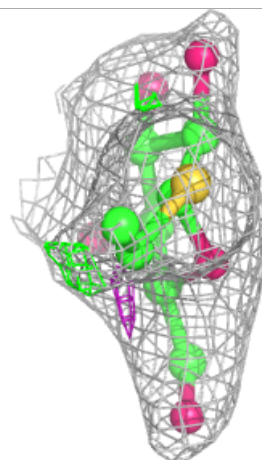
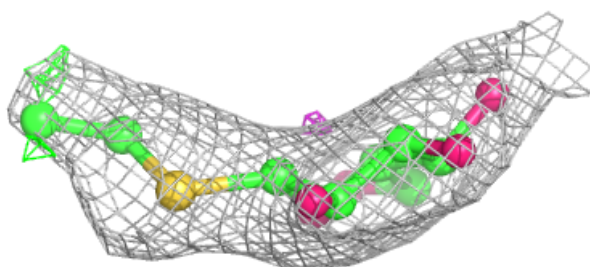
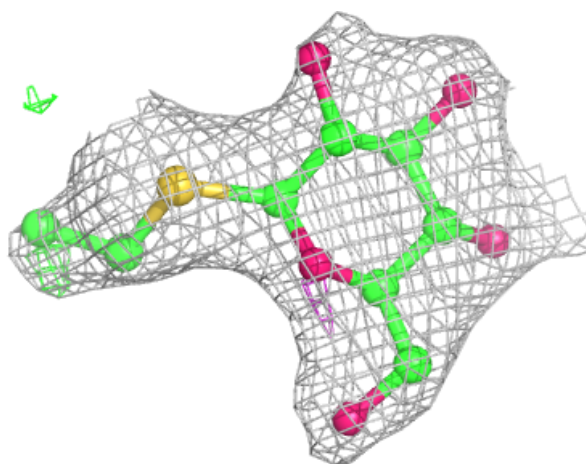
**Electron density around BCR y 101:**

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



**Electron density around HTG V 203:**

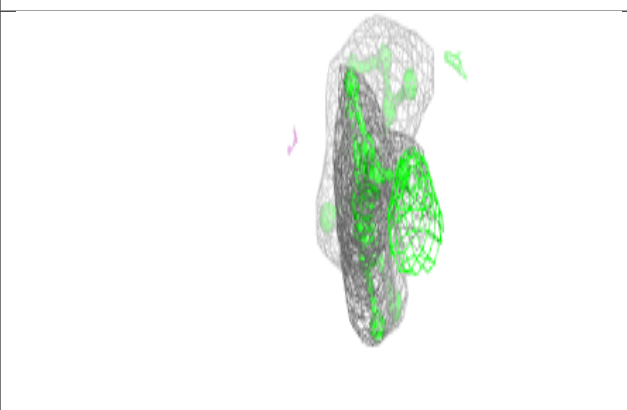
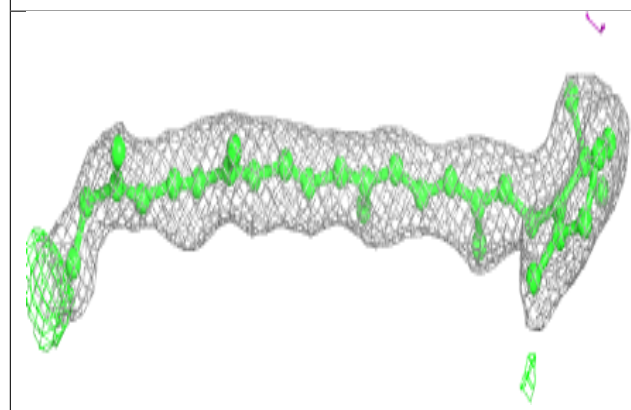
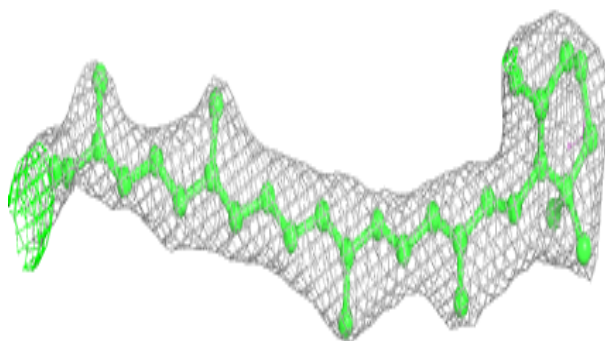
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



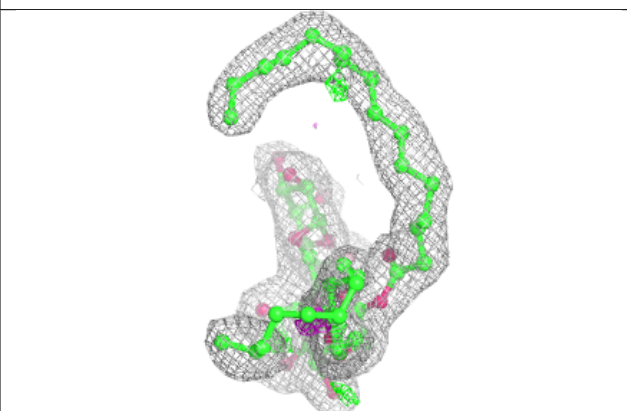
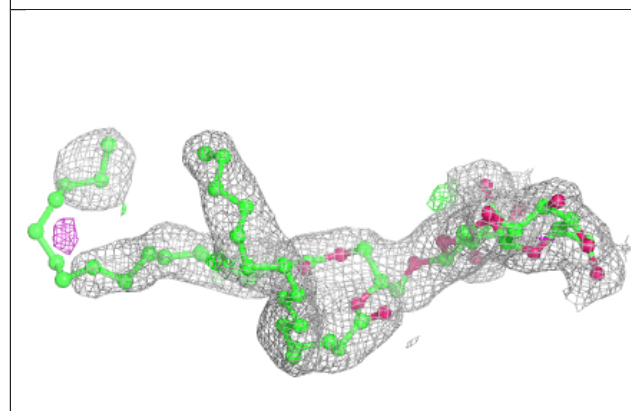
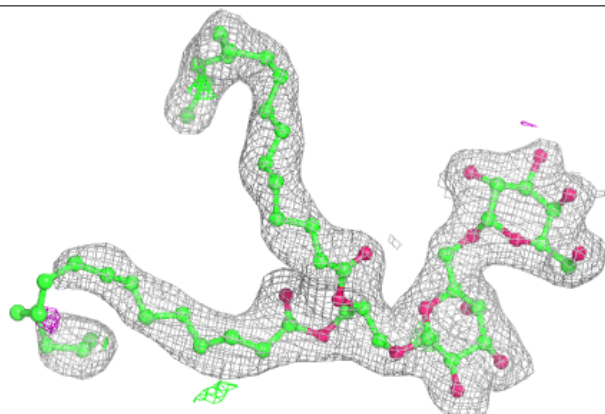


**Electron density around BCR b 619:**

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

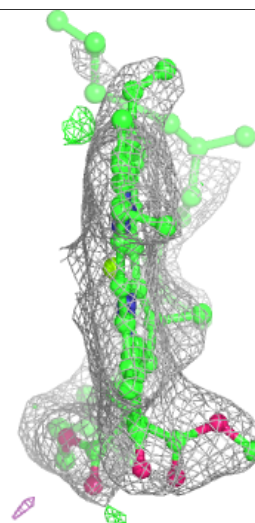
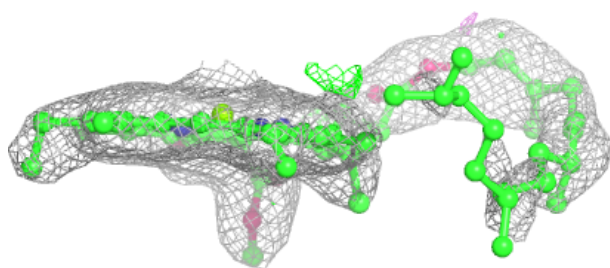
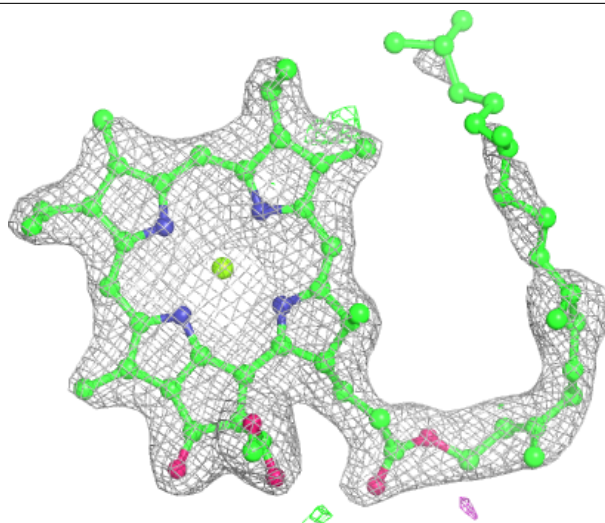
**Electron density around DGD C 518:**

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



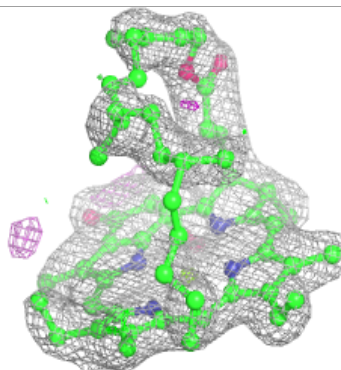
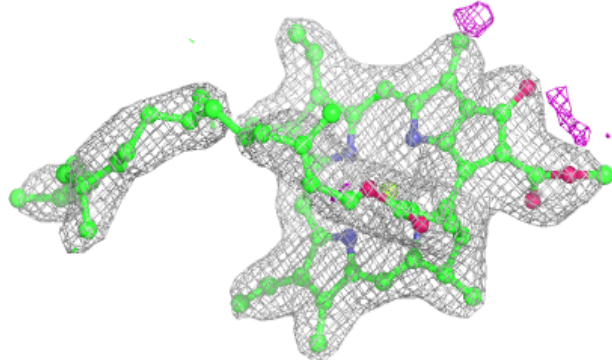
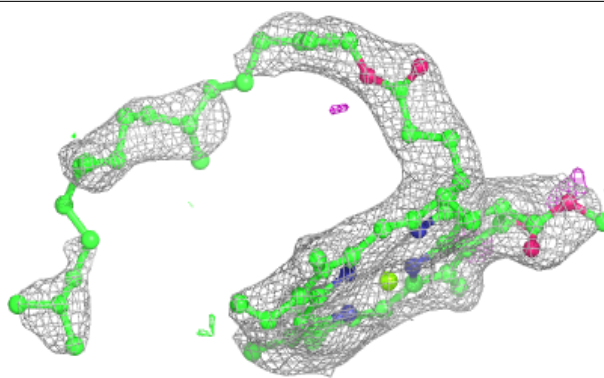
**Electron density around CLA c 913:**

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

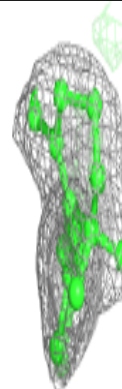
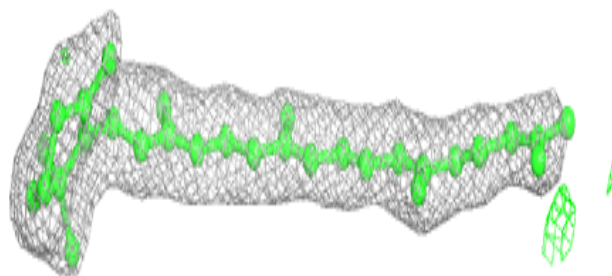
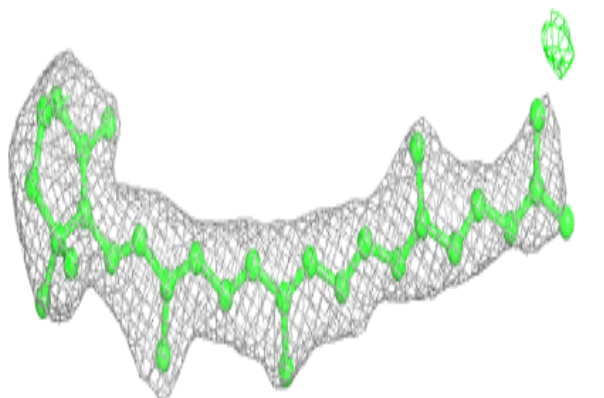


**Electron density around CLA C 514:**

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

**Electron density around BCR B 619:**

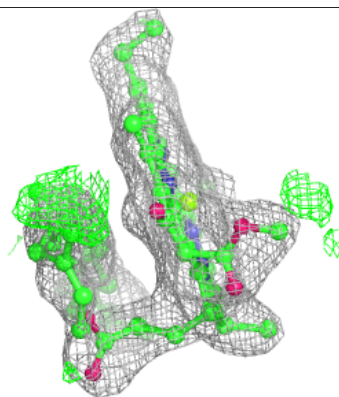
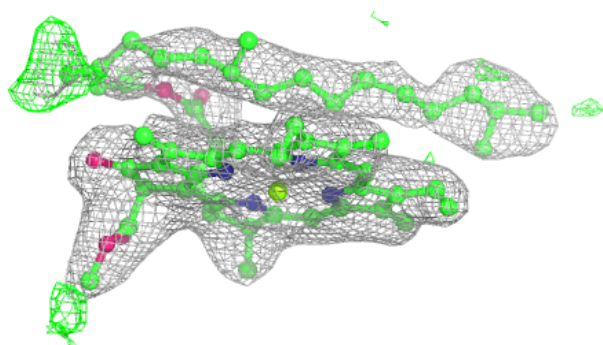
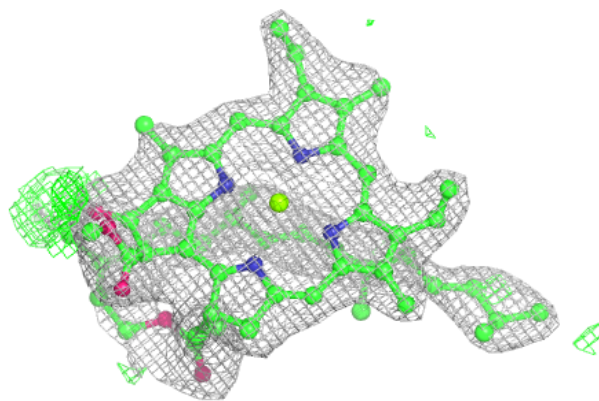
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



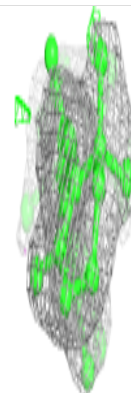
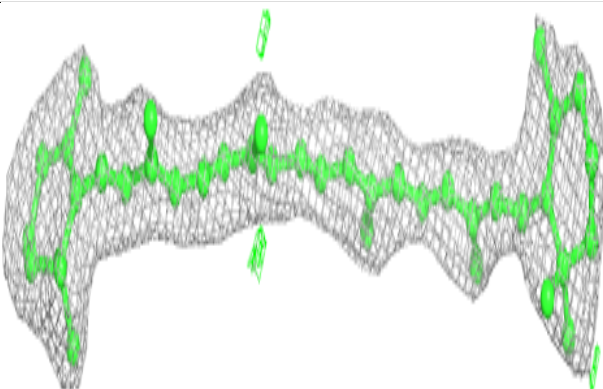
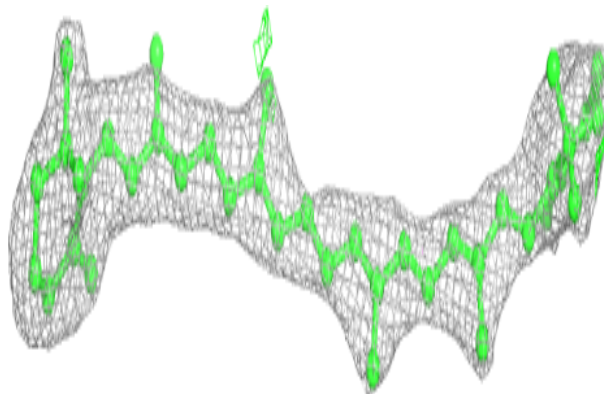


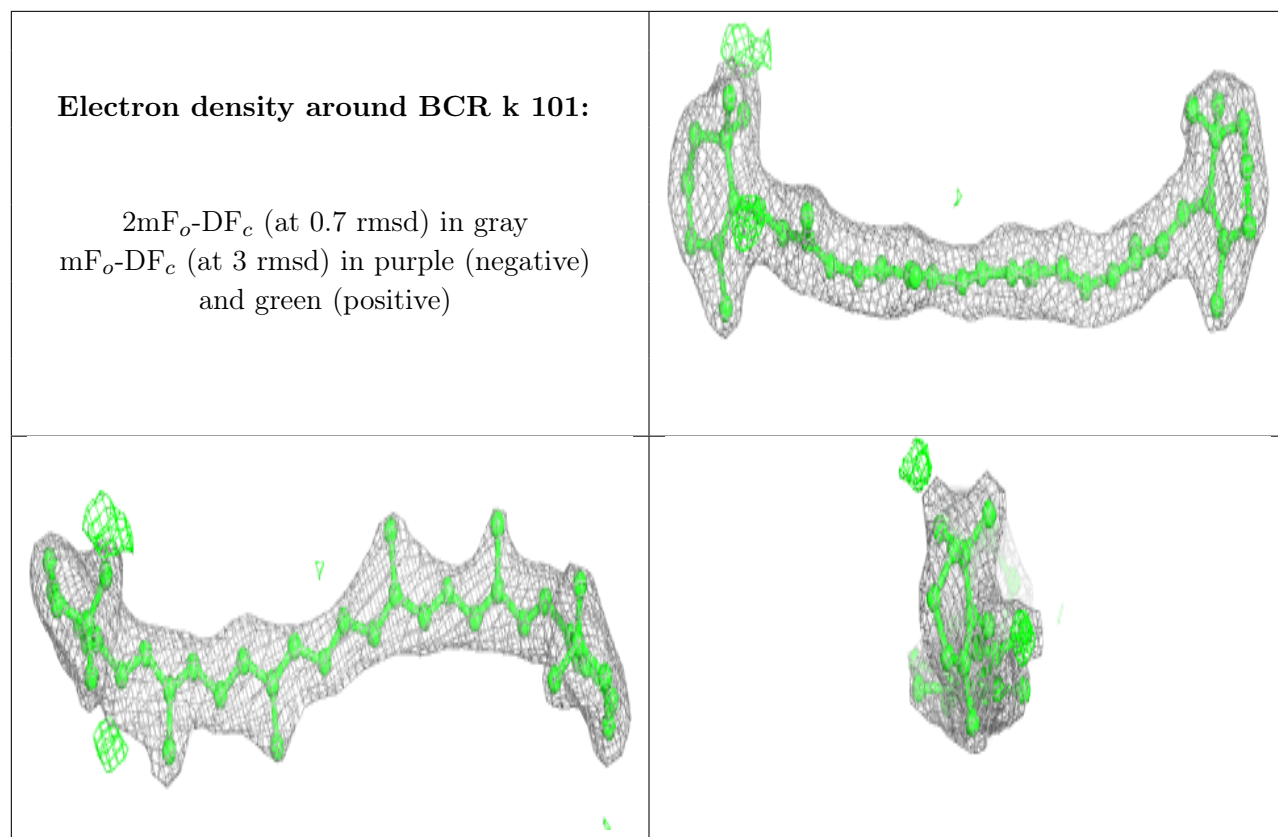
**Electron density around CLA B 602:**

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

**Electron density around BCR c 915:**

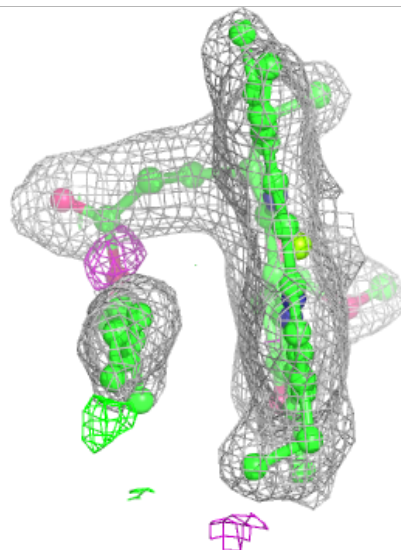
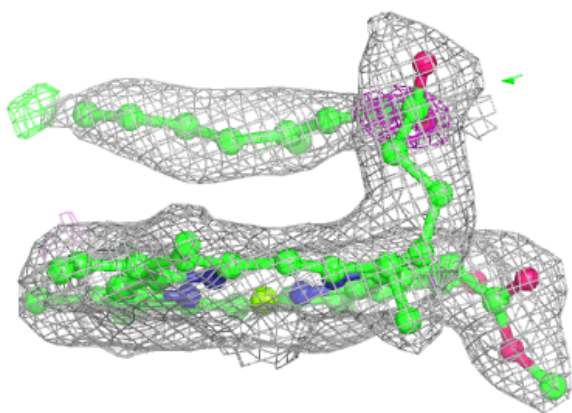
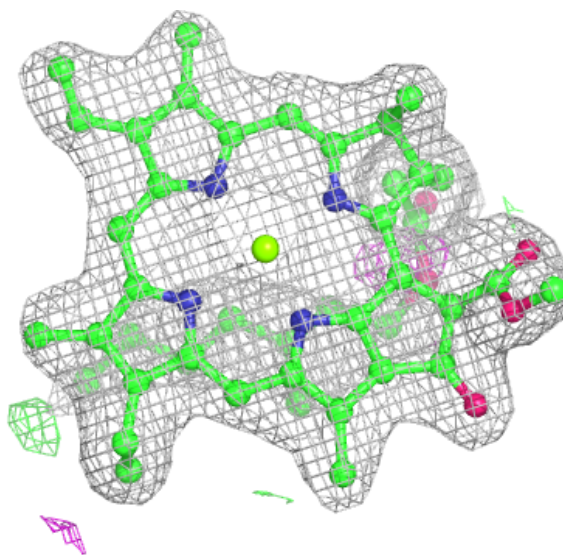
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





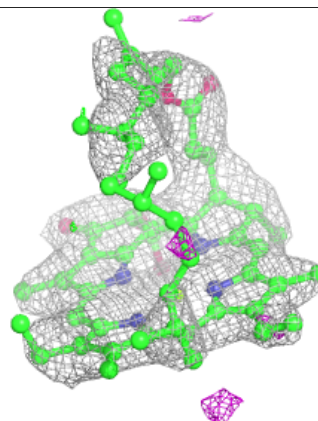
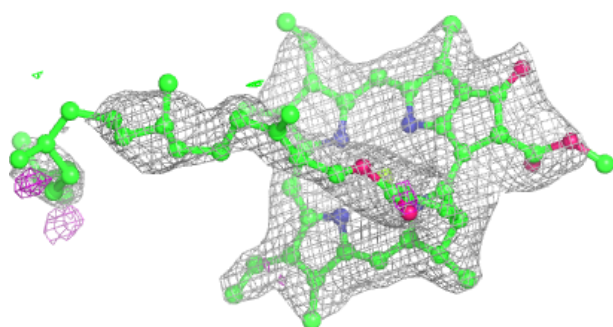
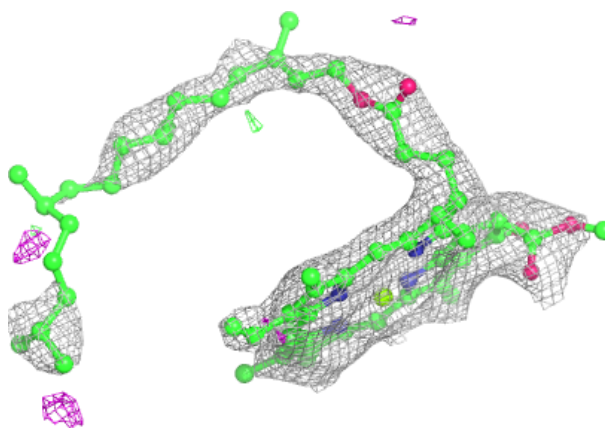
**Electron density around CLA B 615:**

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

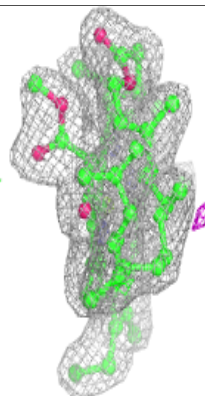
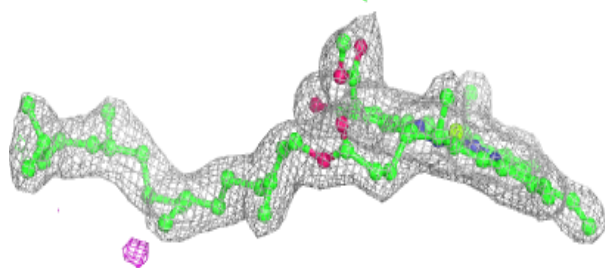
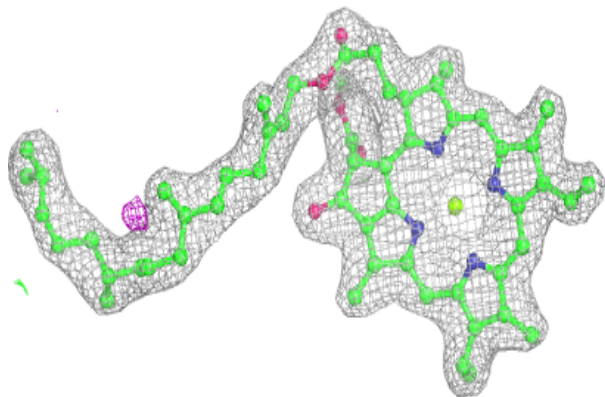


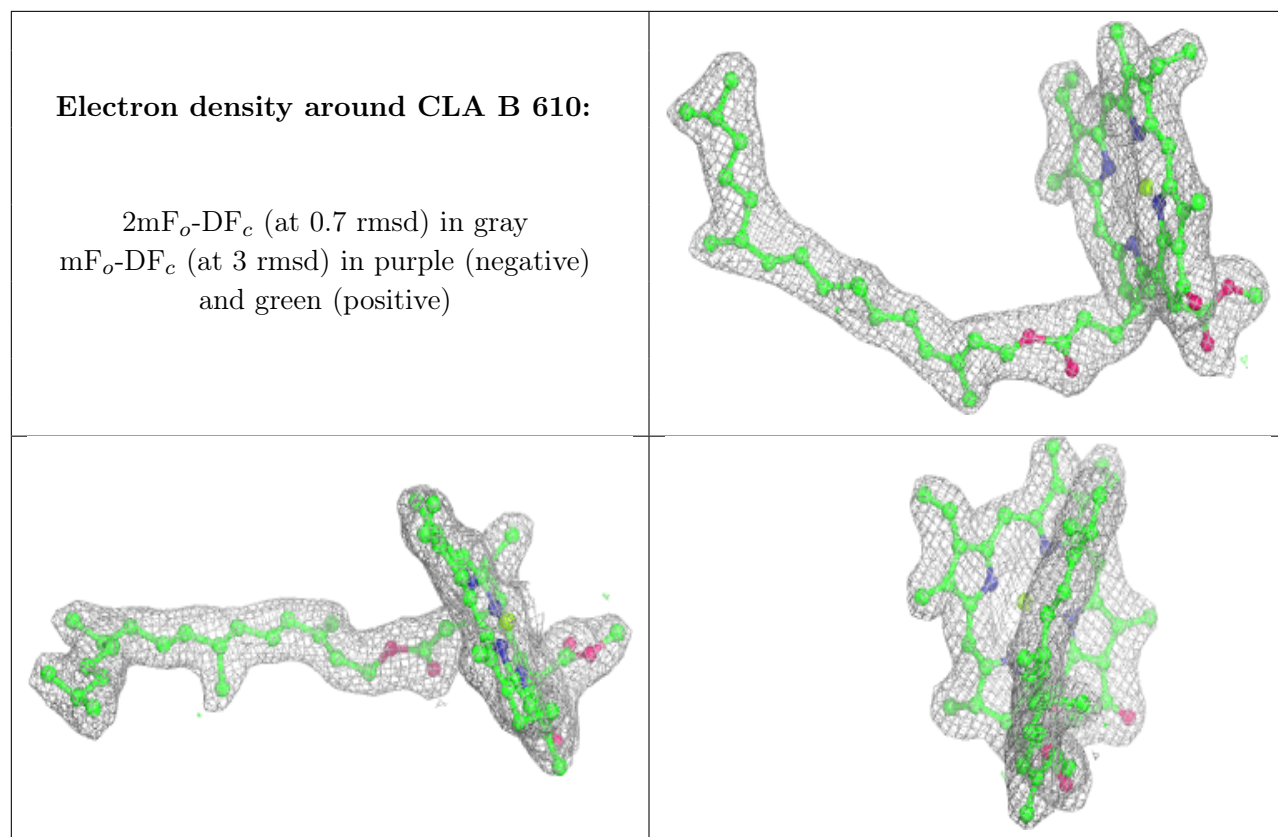
**Electron density around CLA c 914:**

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

**Electron density around CLA B 603:**

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

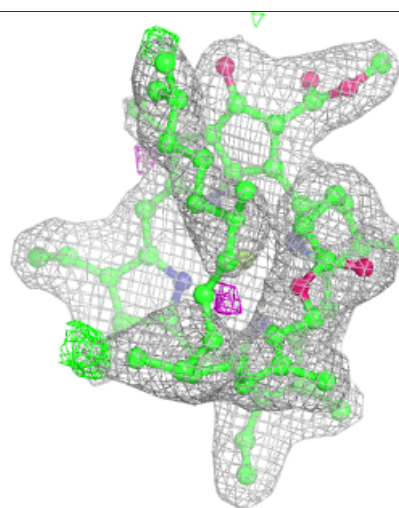
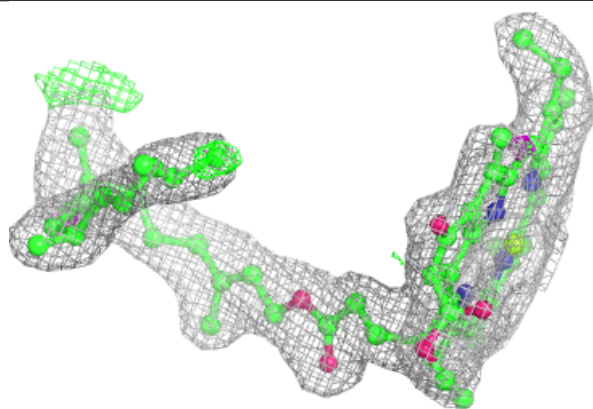
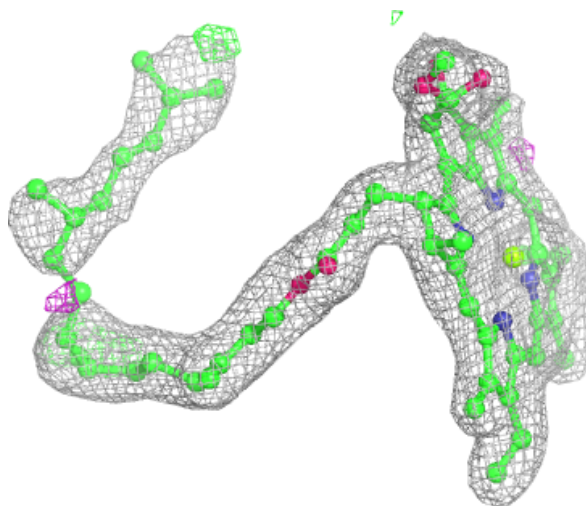






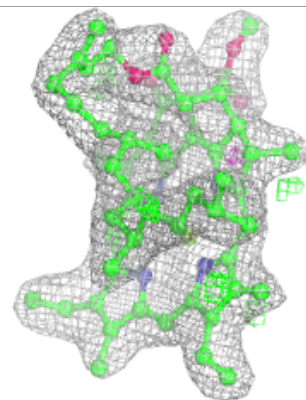
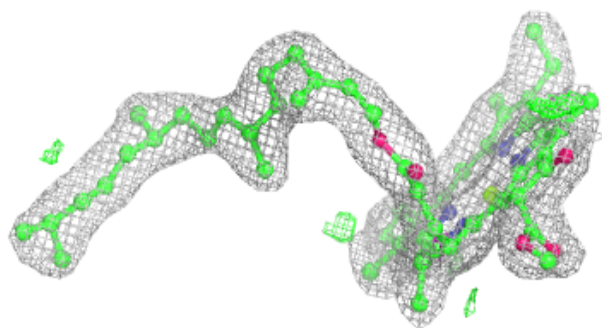
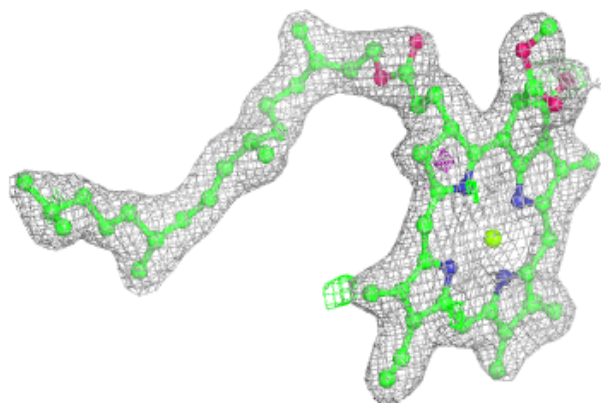
**Electron density around CLA b 607:**

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

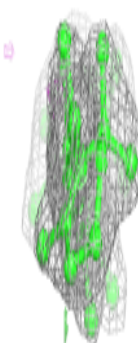
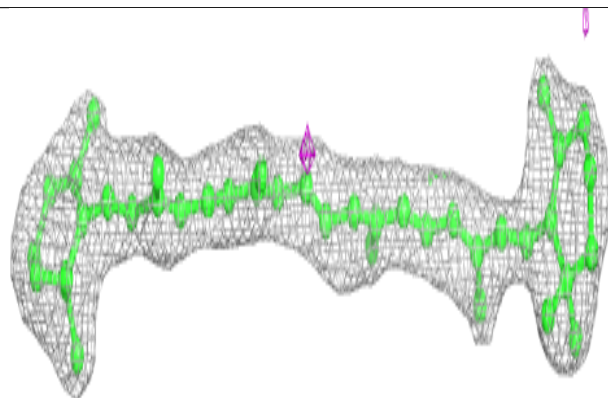
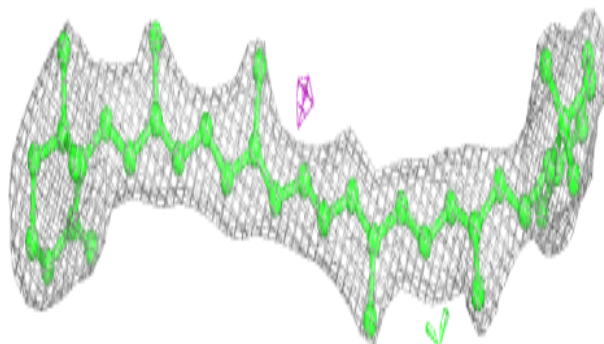


**Electron density around CLA c 912:**

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

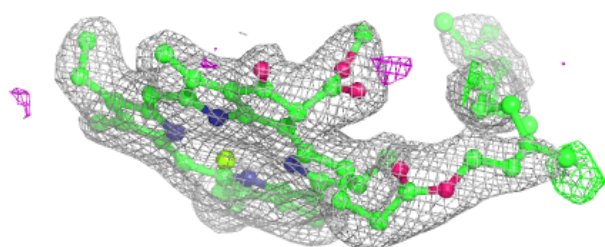
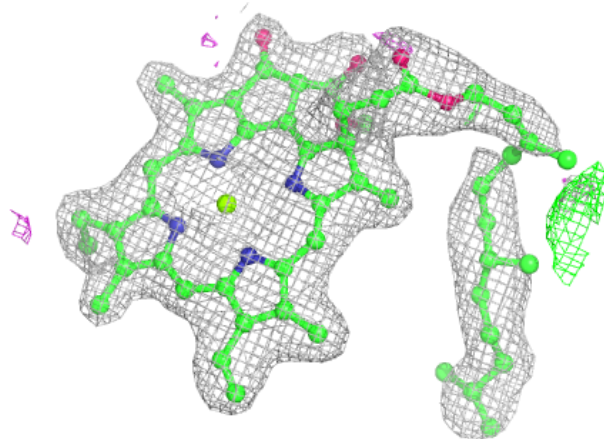
**Electron density around BCR C 515:**

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

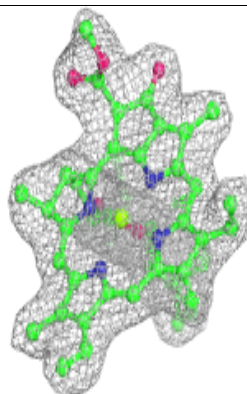
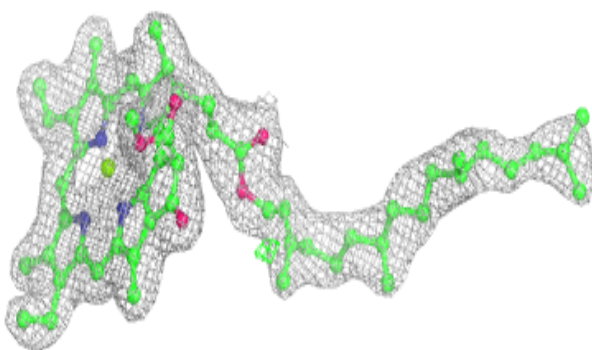
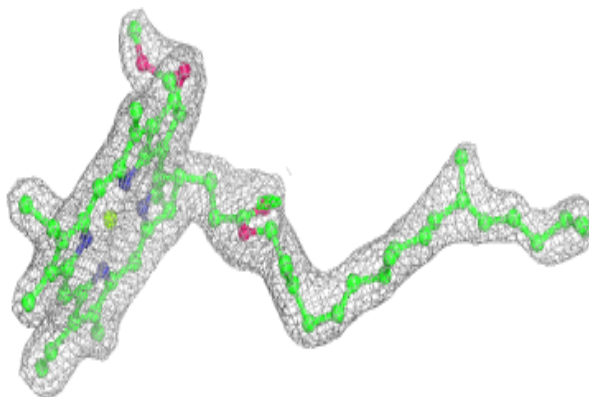


**Electron density around CLA b 617:**

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

**Electron density around CLA c 903:**

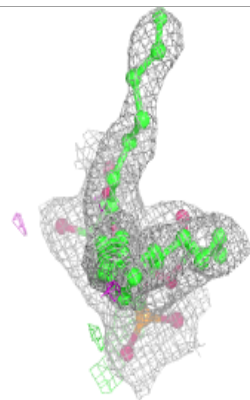
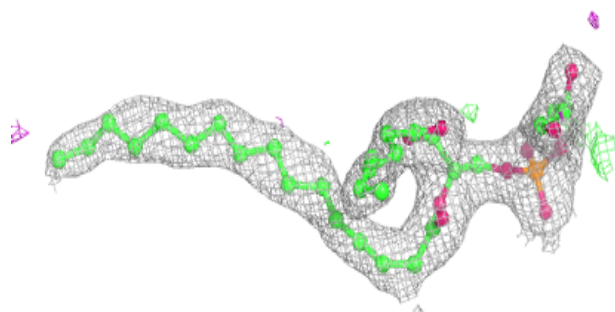
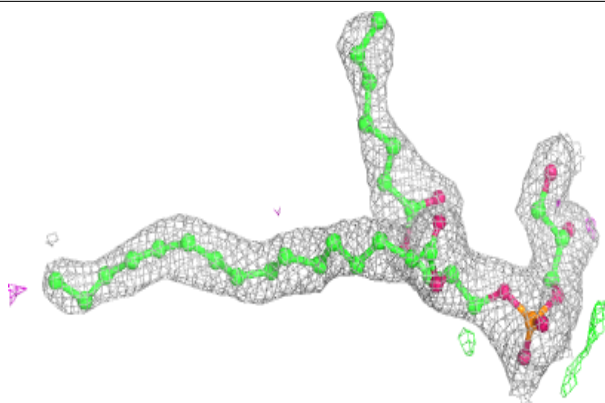
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





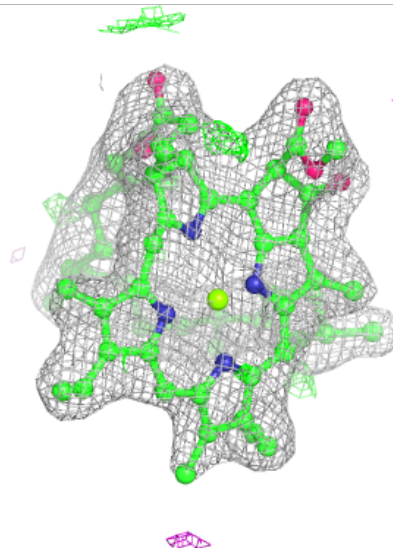
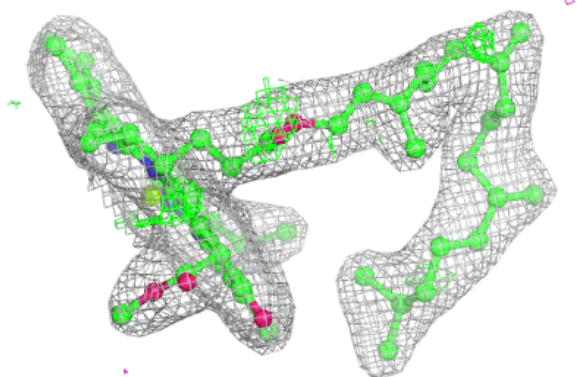
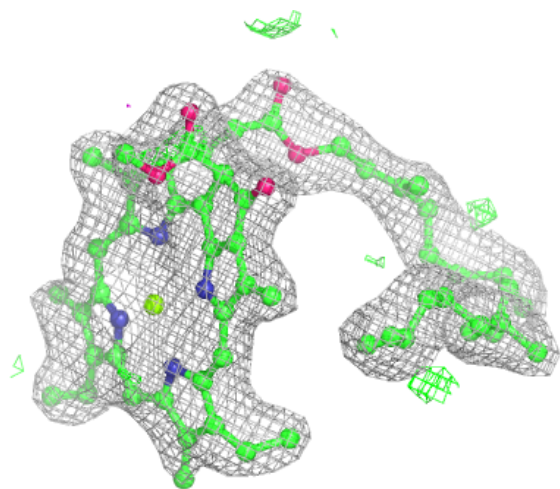
**Electron density around LHG L 101:**

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



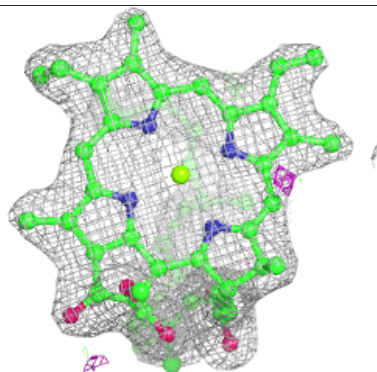
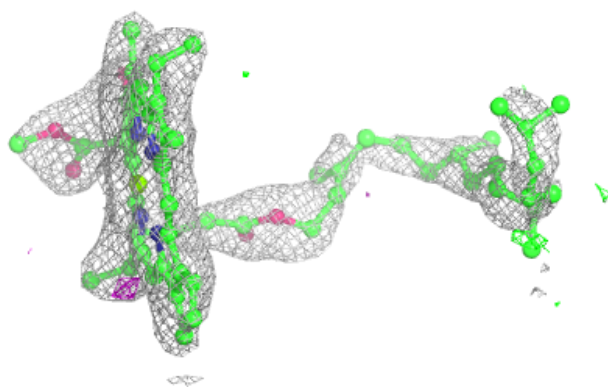
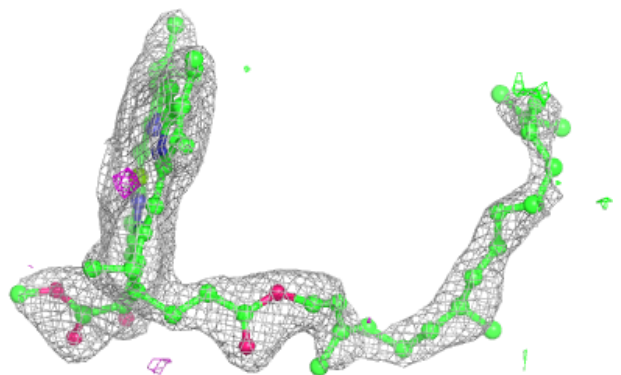
**Electron density around CLA c 904:**

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

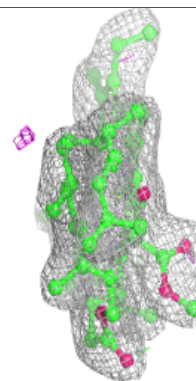
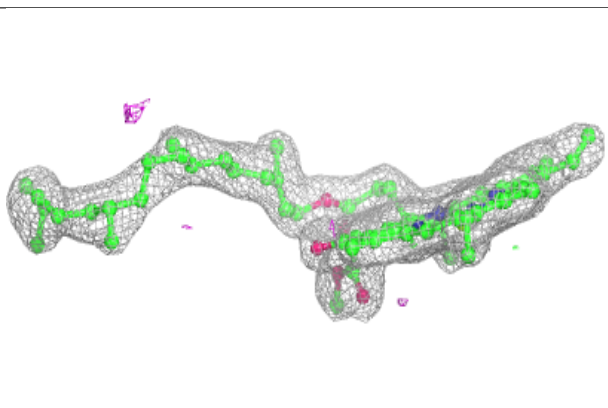
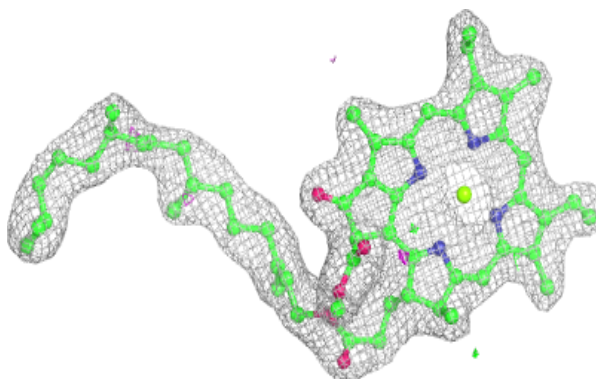


**Electron density around CLA C 507:**

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

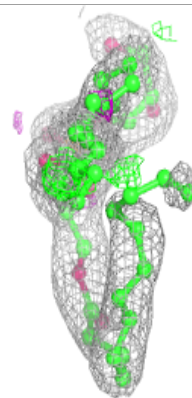
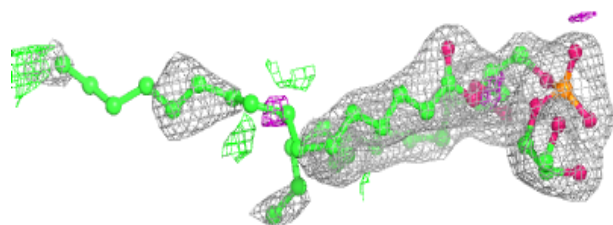
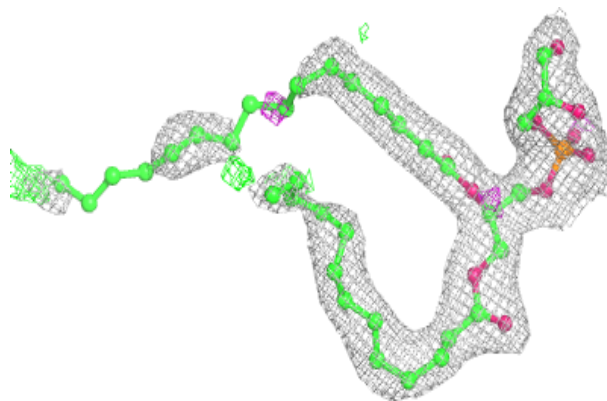
**Electron density around CLA b 603:**

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



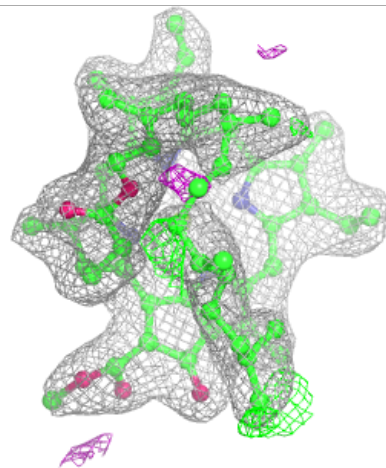
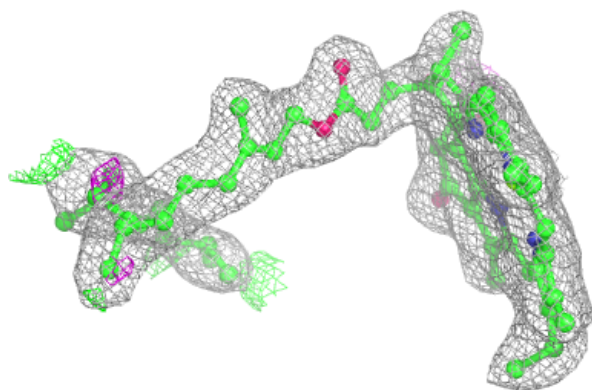
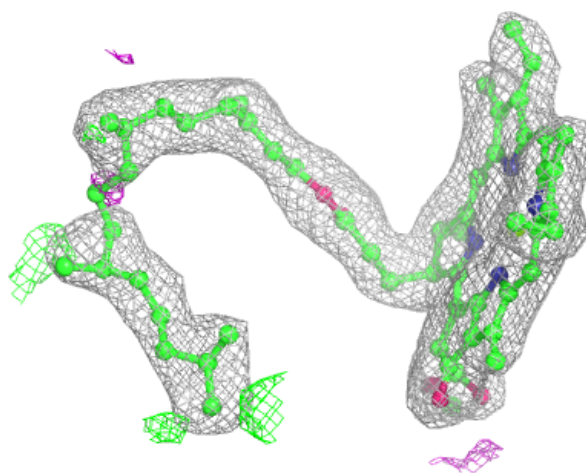
**Electron density around LHG d 408:**

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



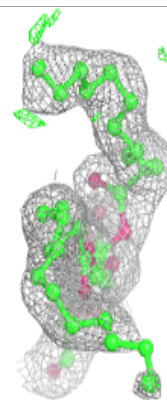
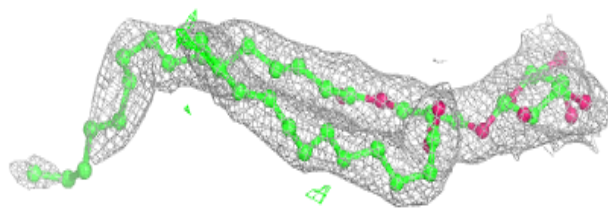
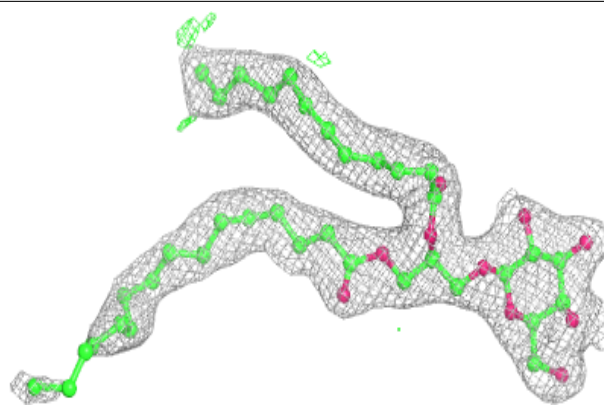
**Electron density around CLA B 607:**

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



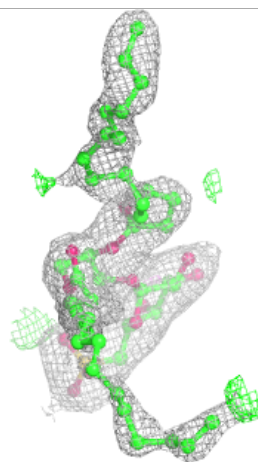
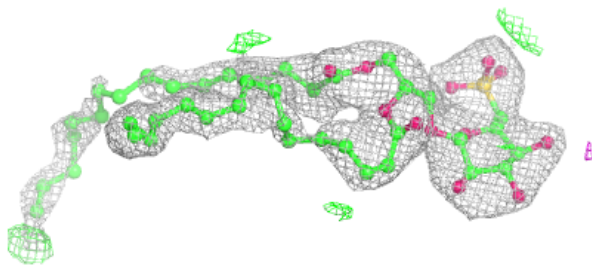
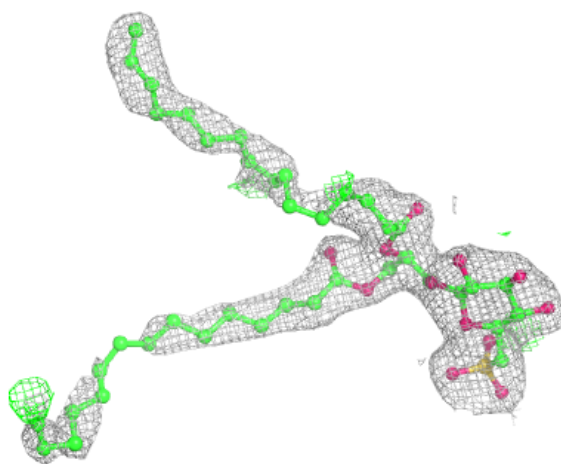
**Electron density around LMG j 101:**

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



**Electron density around SQD C 501:**

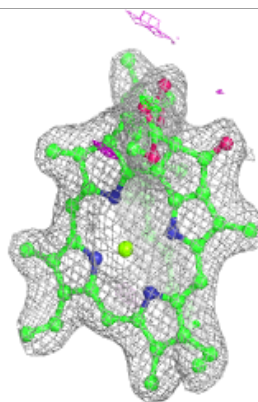
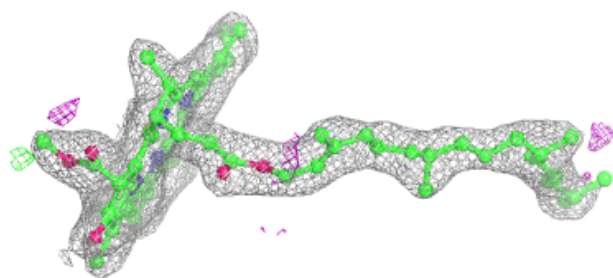
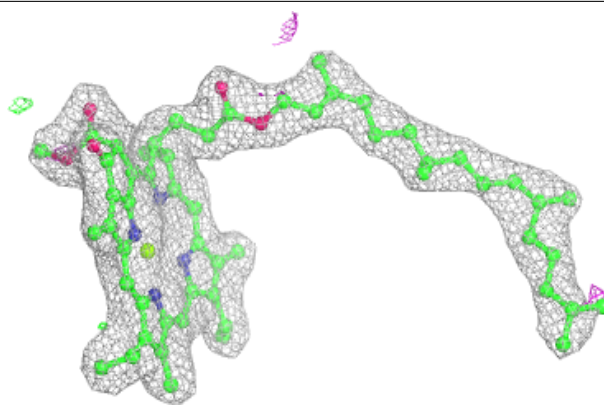
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



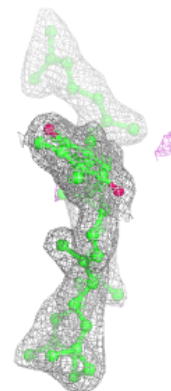
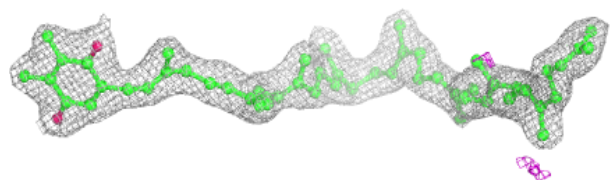
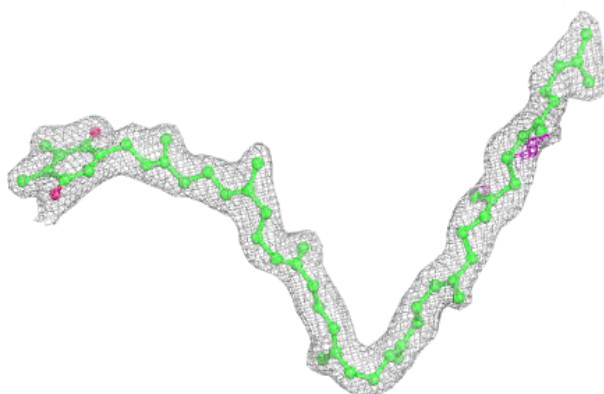


**Electron density around CLA b 610:**

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

**Electron density around PL9 D 406:**

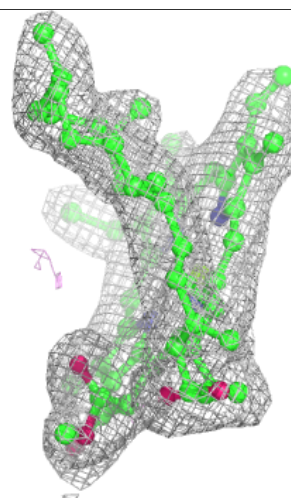
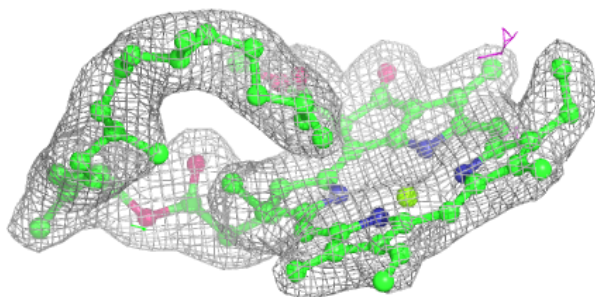
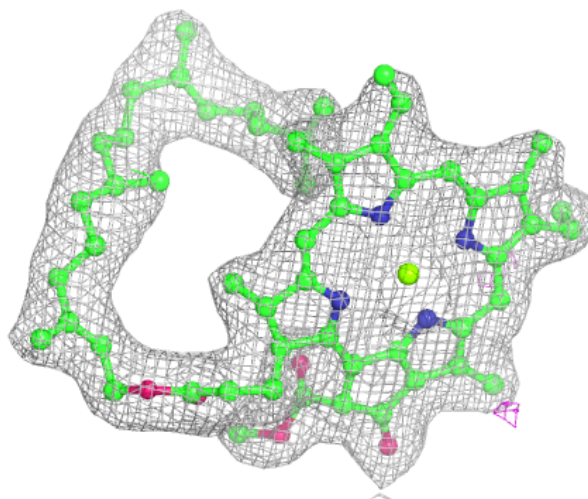
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





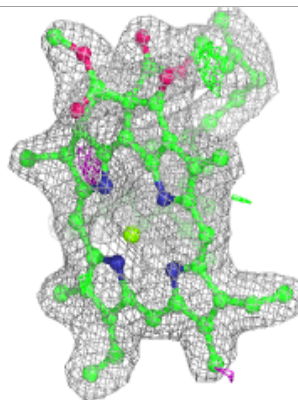
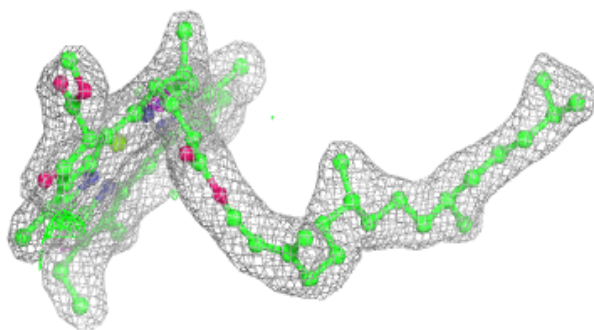
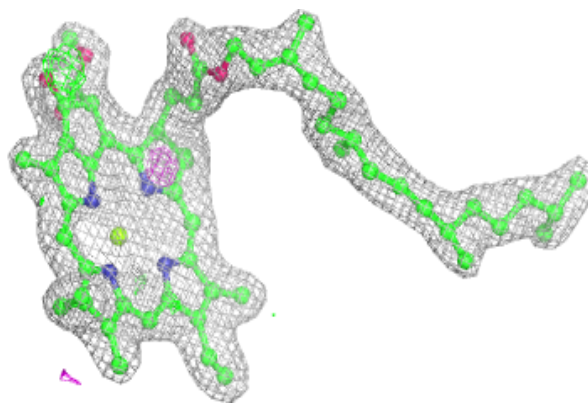
**Electron density around CLA b 616:**

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

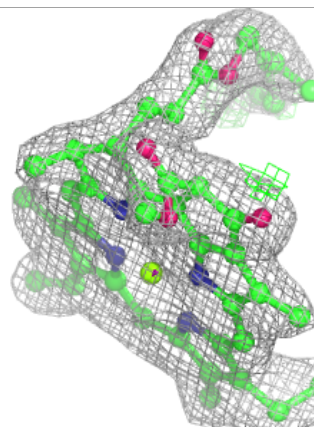
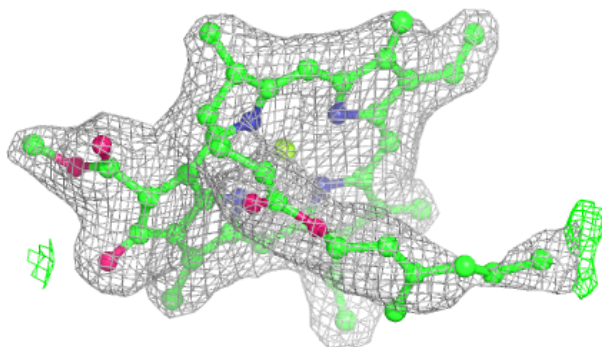
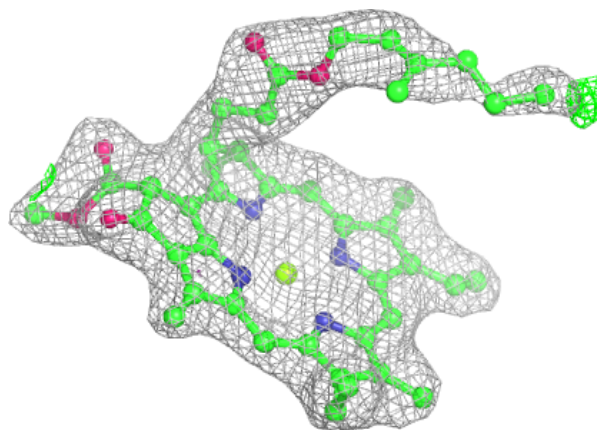


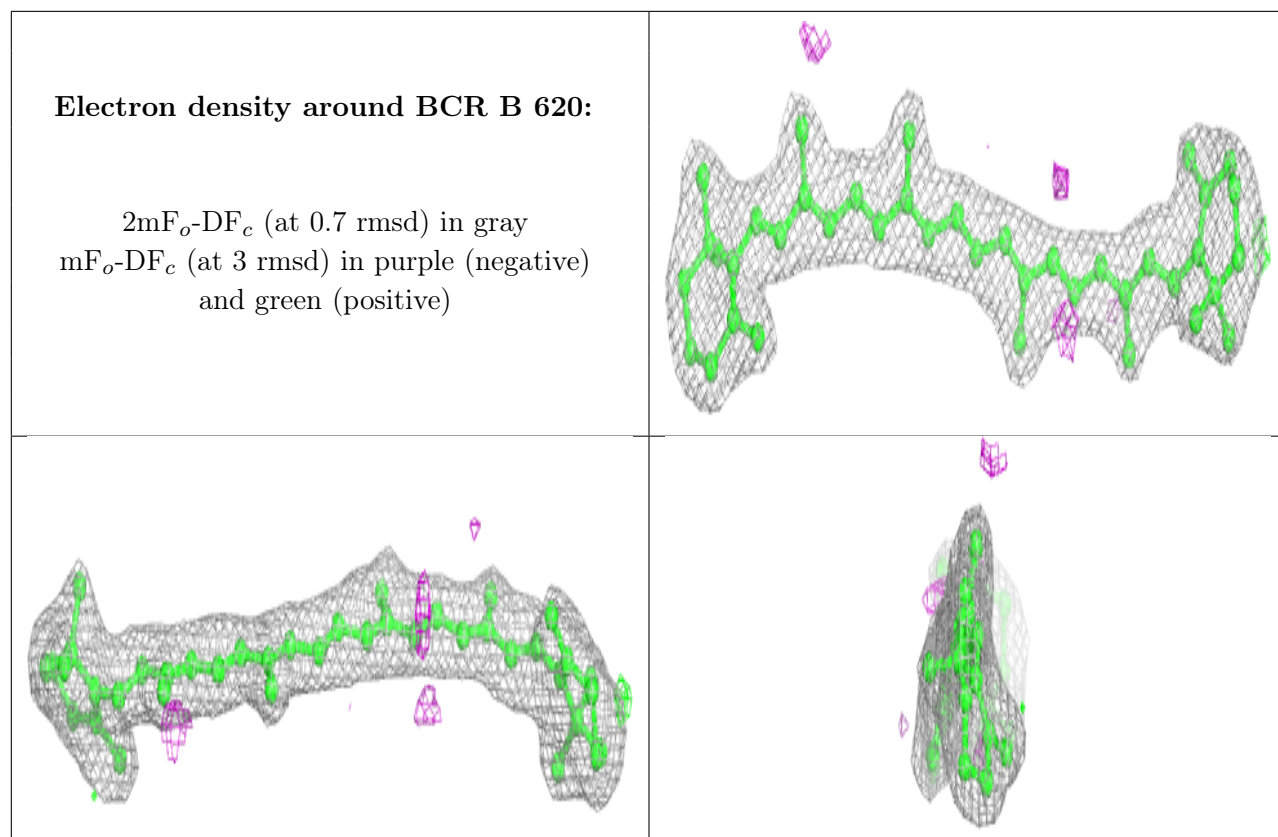
**Electron density around CLA C 512:**

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

**Electron density around CLA b 615:**

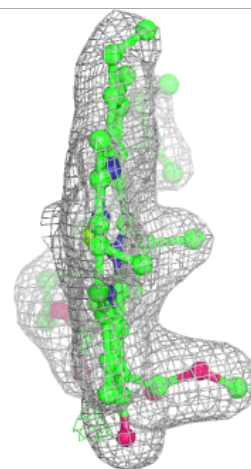
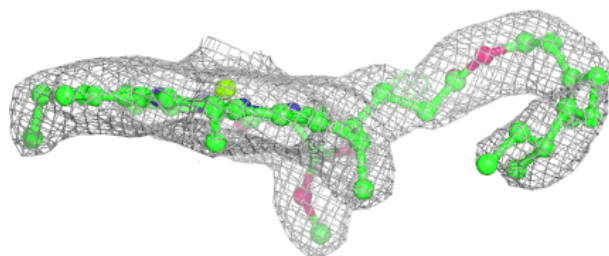
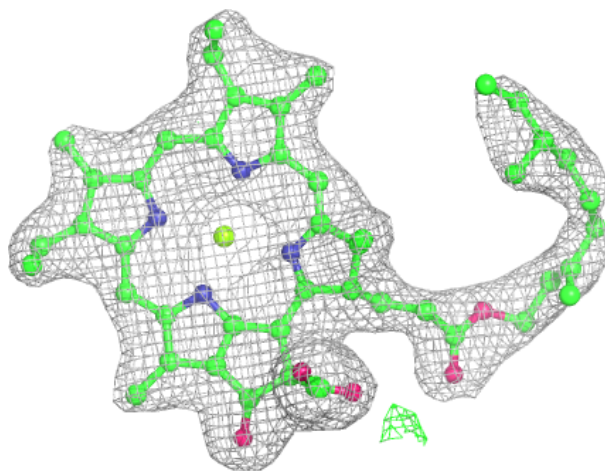
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

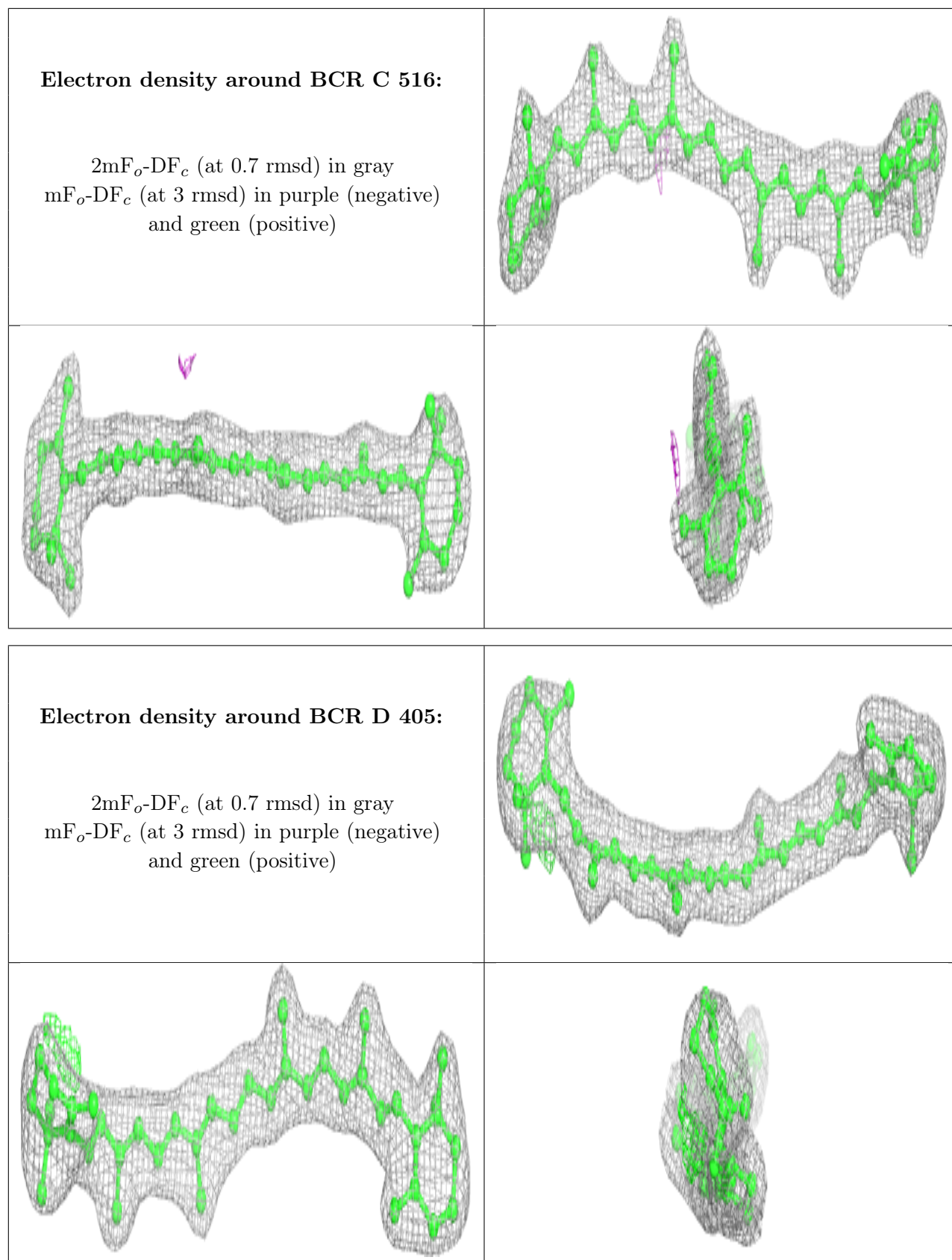




**Electron density around CLA C 513:**

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

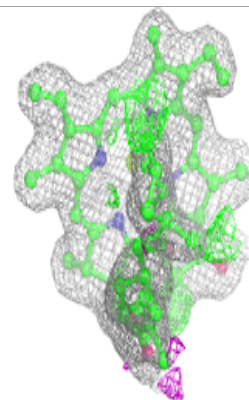
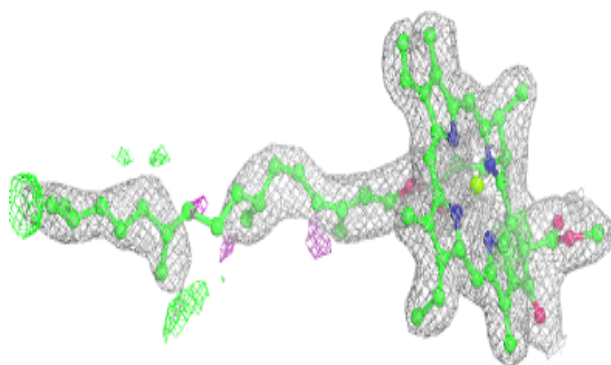
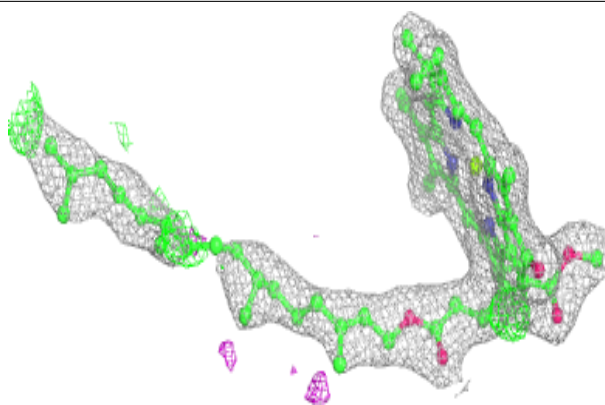




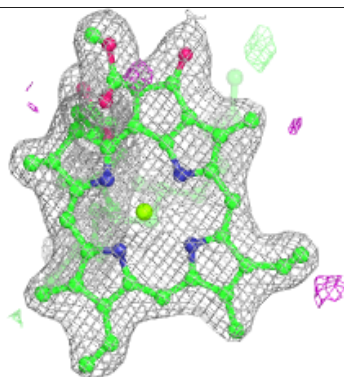
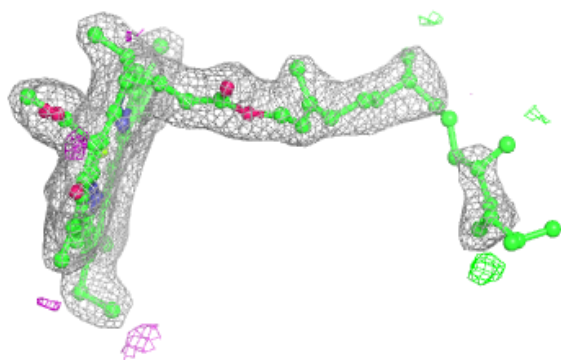
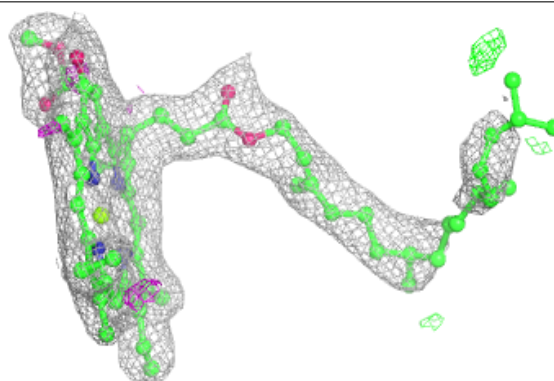


**Electron density around CLA B 608:**

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

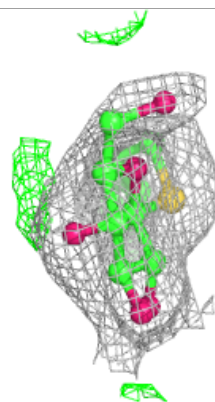
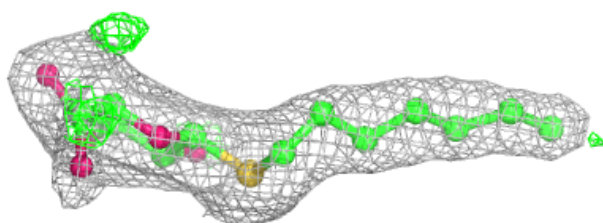
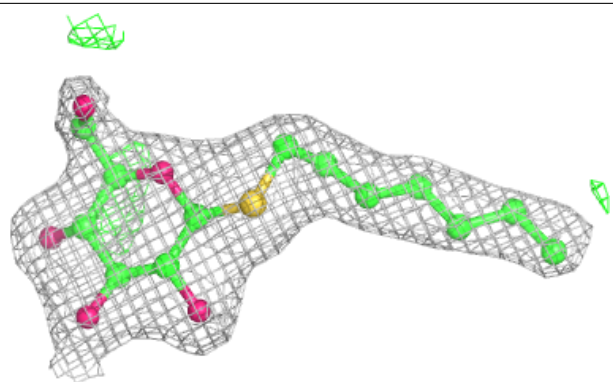
**Electron density around CLA D 404:**

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

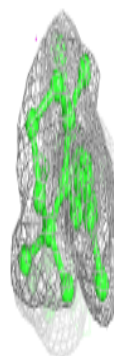
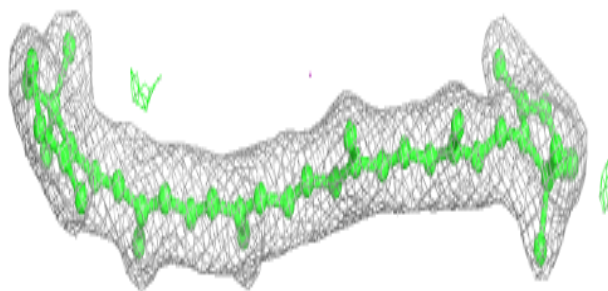
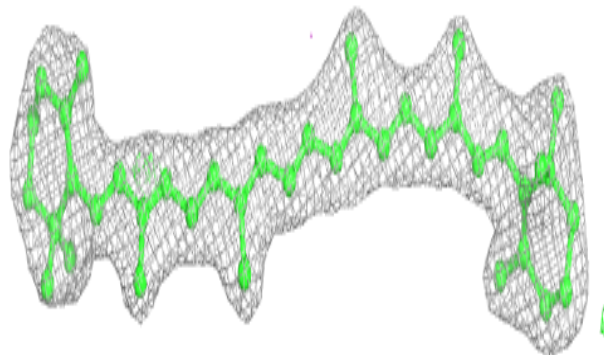


**Electron density around HTG B 623:**

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

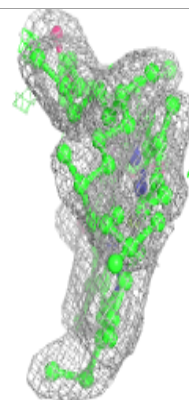
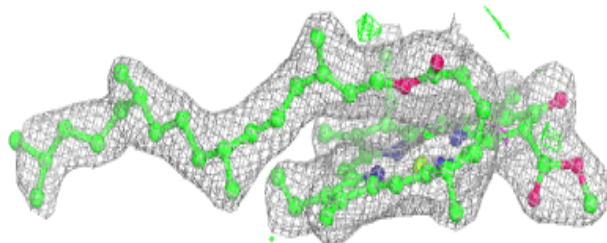
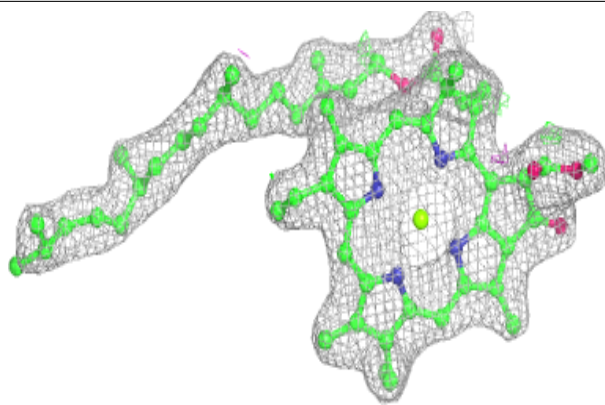
**Electron density around BCR b 620:**

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

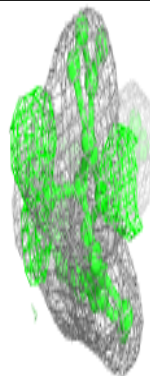
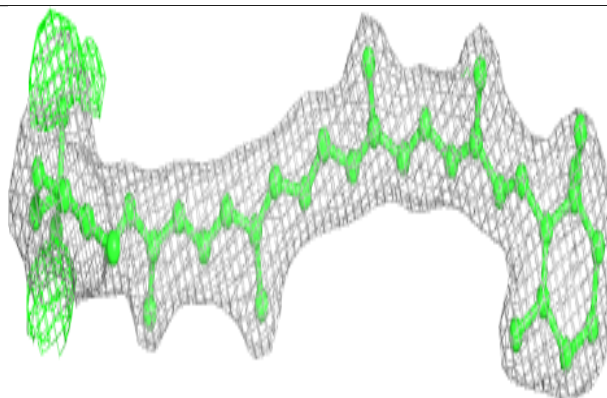
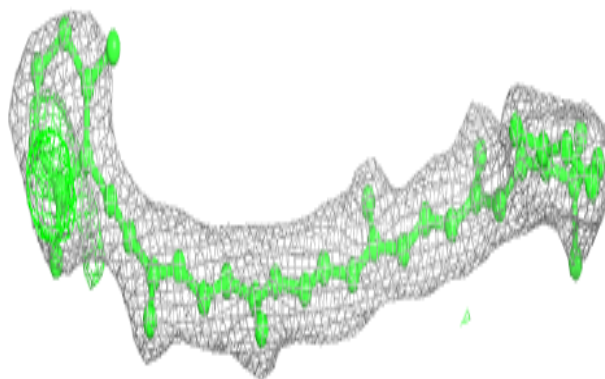


**Electron density around CLA C 502:**

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

**Electron density around BCR d 404:**

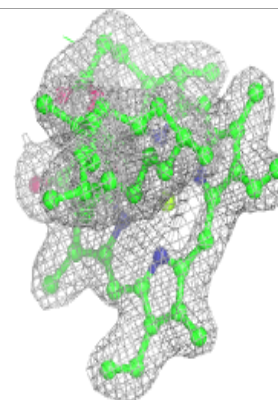
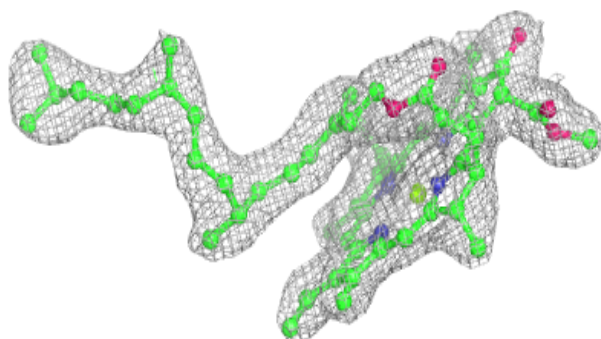
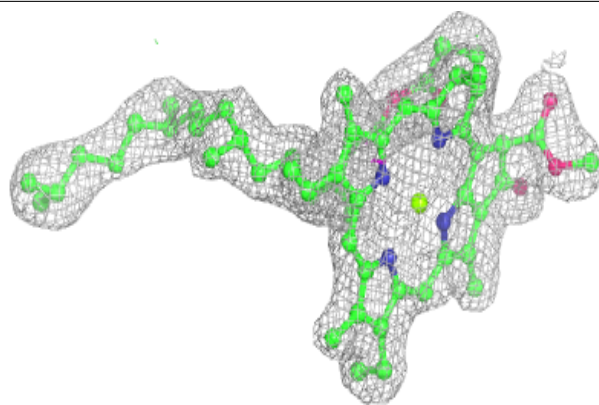
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



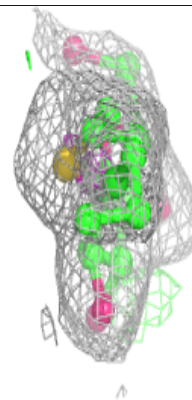
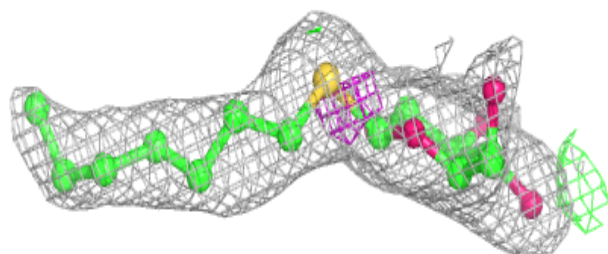
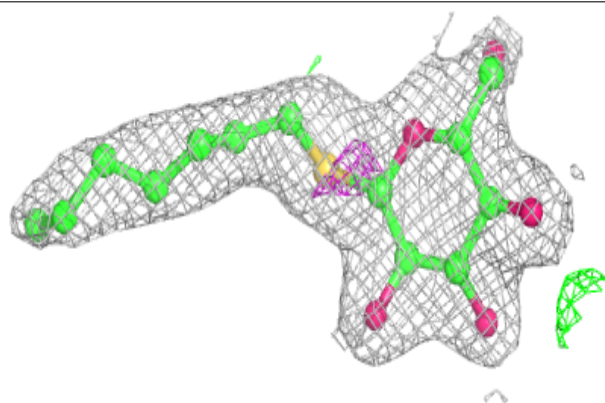


**Electron density around CLA c 906:**

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

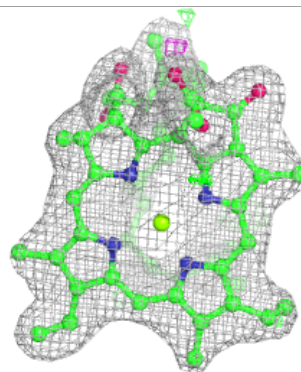
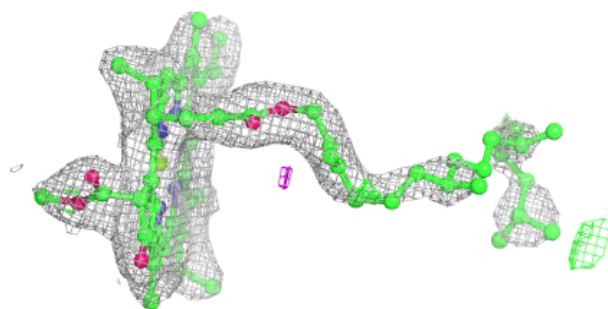
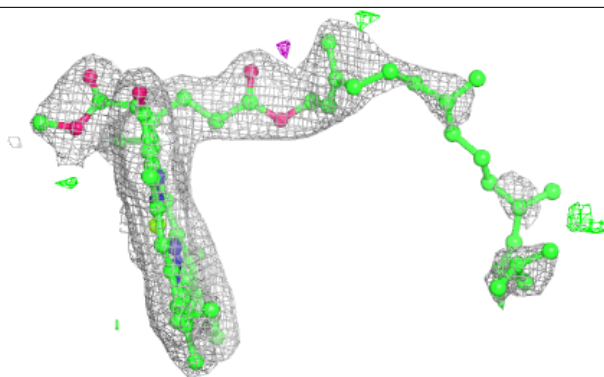
**Electron density around HTG b 623:**

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



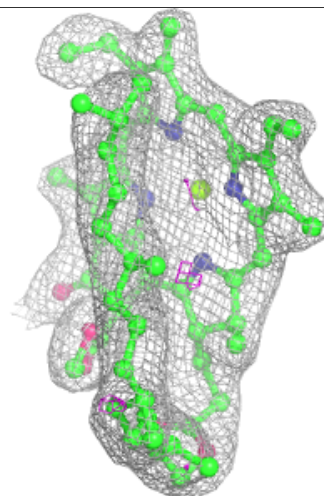
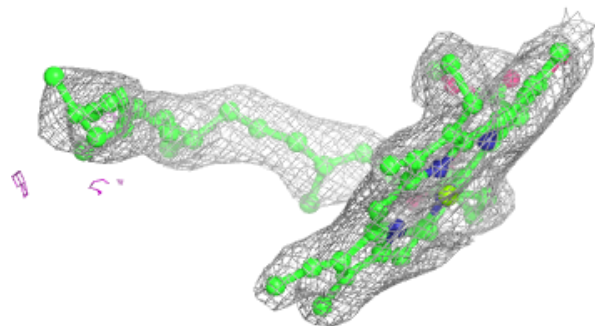
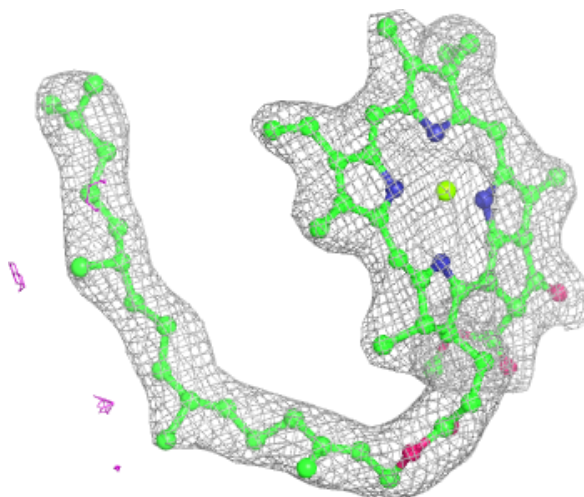
**Electron density around CLA c 907:**

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



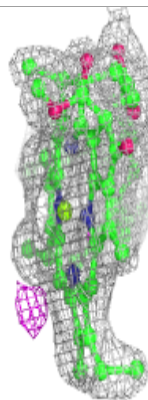
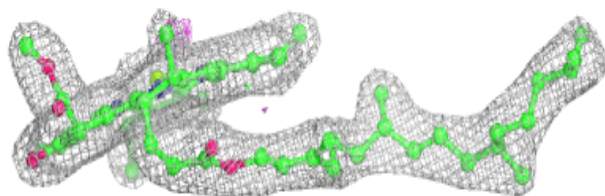
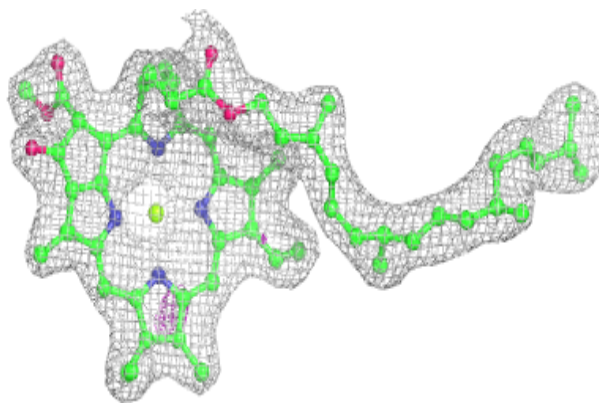
**Electron density around CLA c 908:**

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

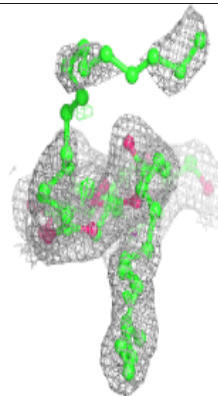
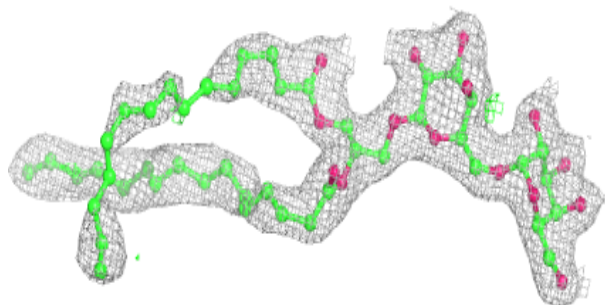
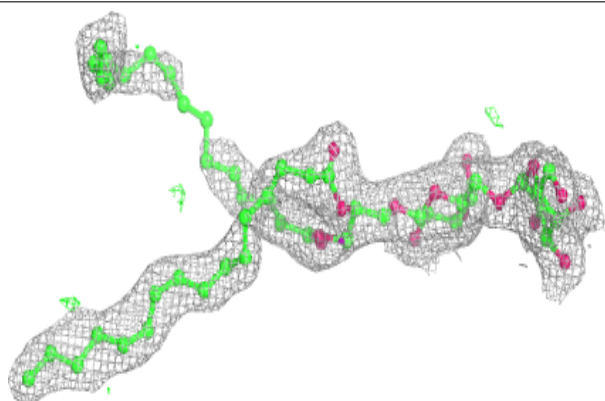


**Electron density around CLA B 604:**

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

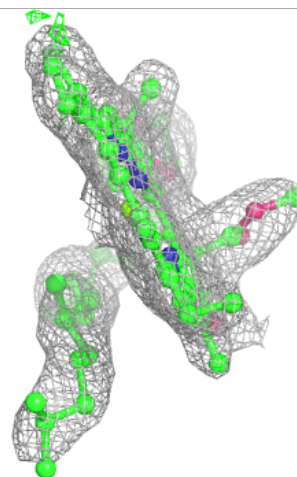
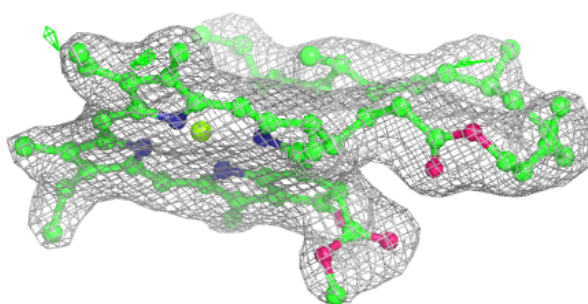
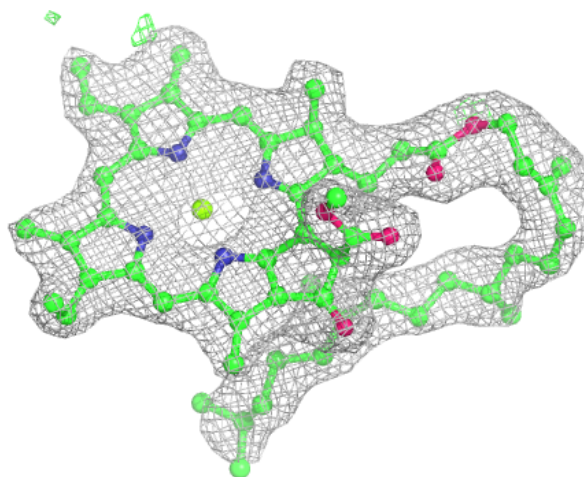
**Electron density around DGD C 517:**

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



**Electron density around CLA C 510:**

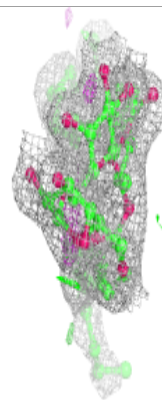
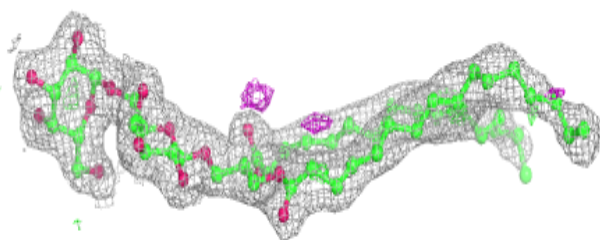
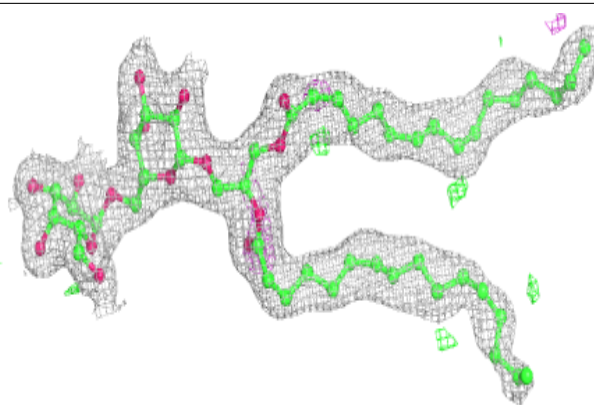
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



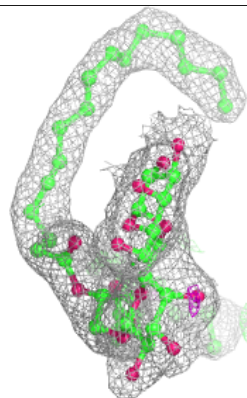
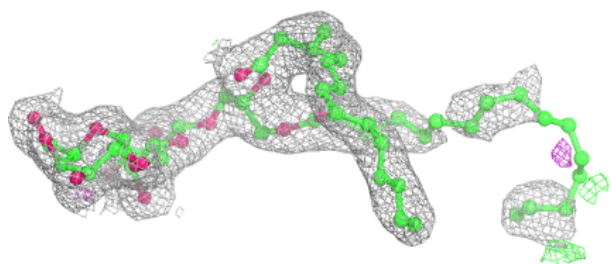
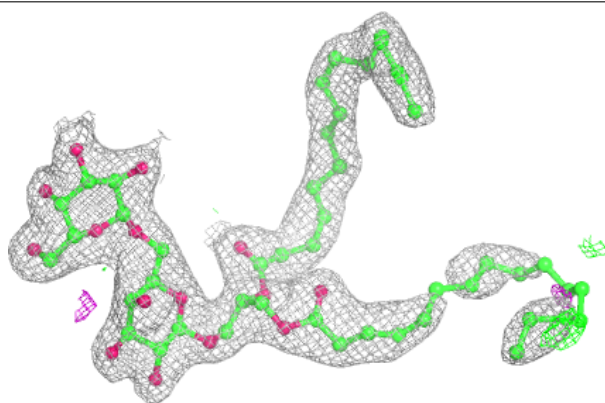


**Electron density around DGD C 519:**

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

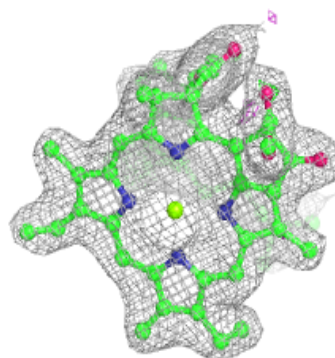
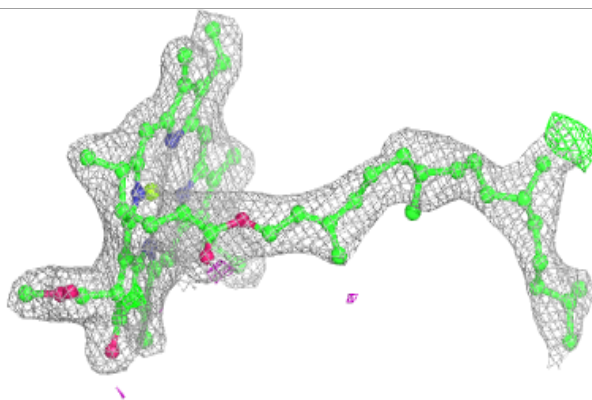
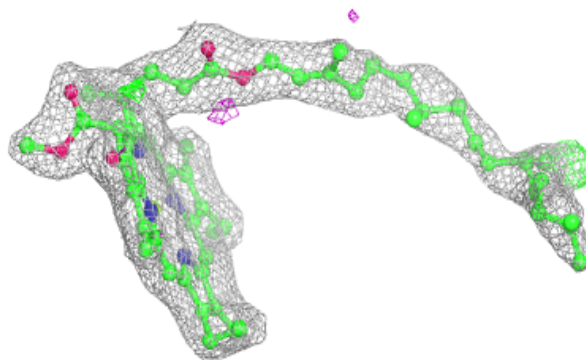
**Electron density around DGD c 918:**

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

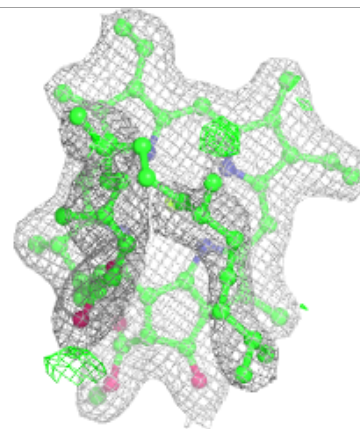
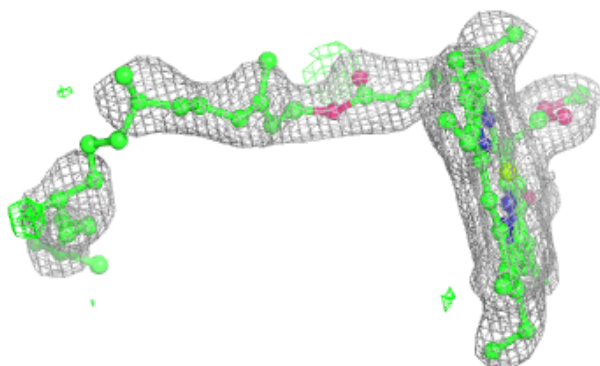
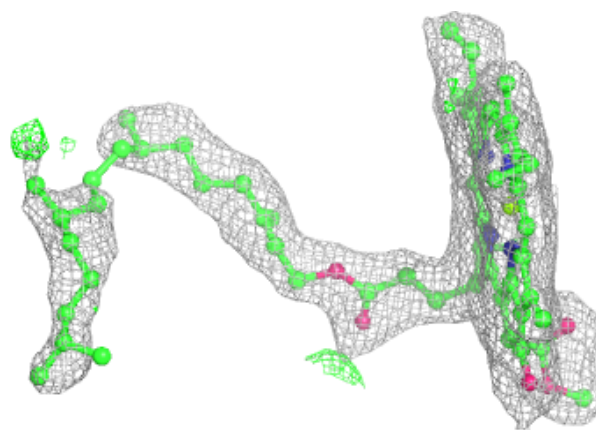


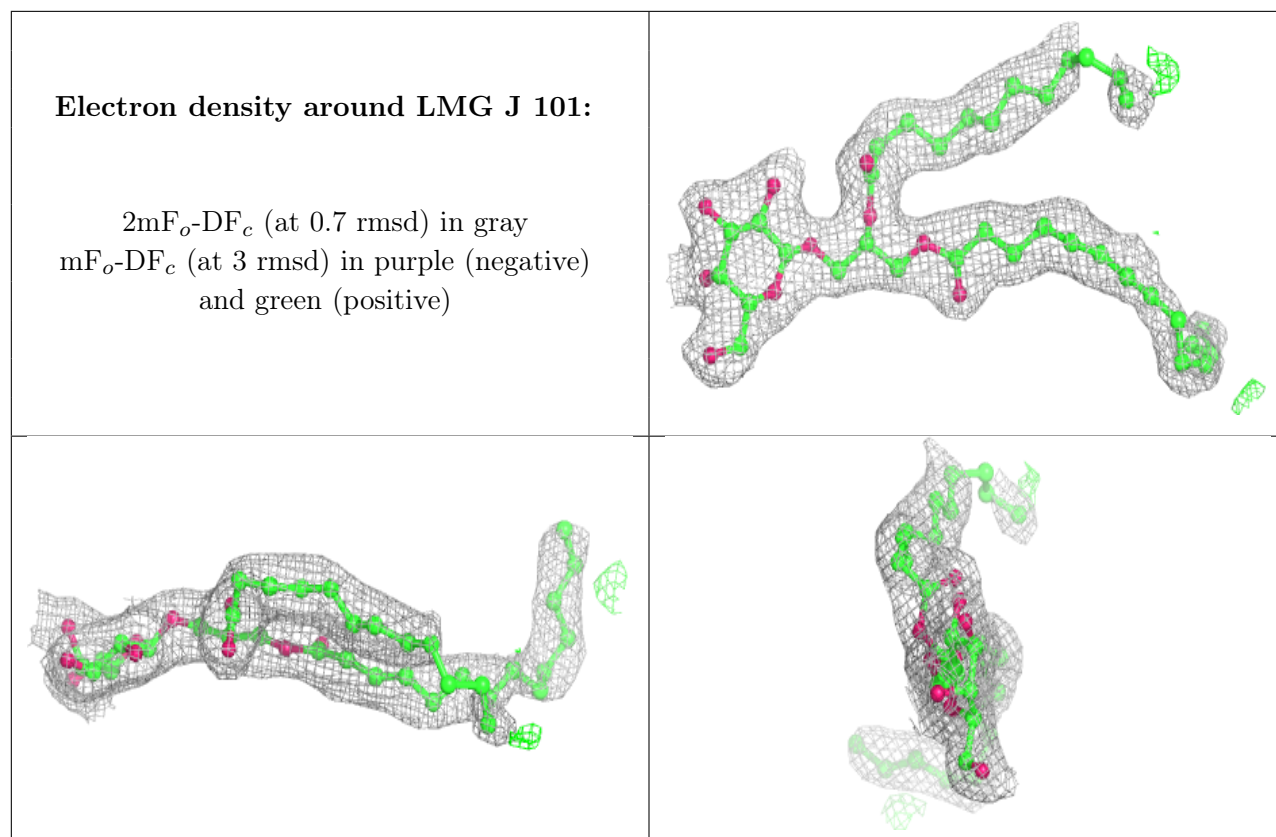
**Electron density around CLA b 608:**

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

**Electron density around CLA d 403:**

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

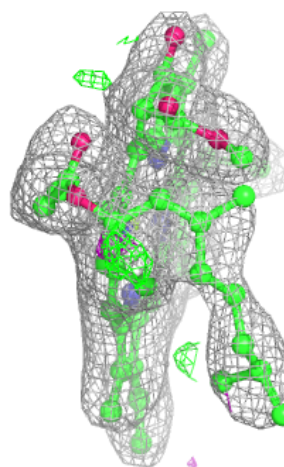
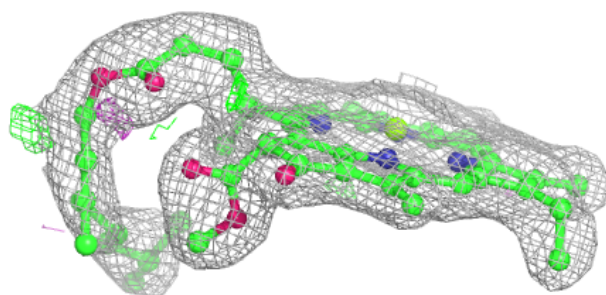
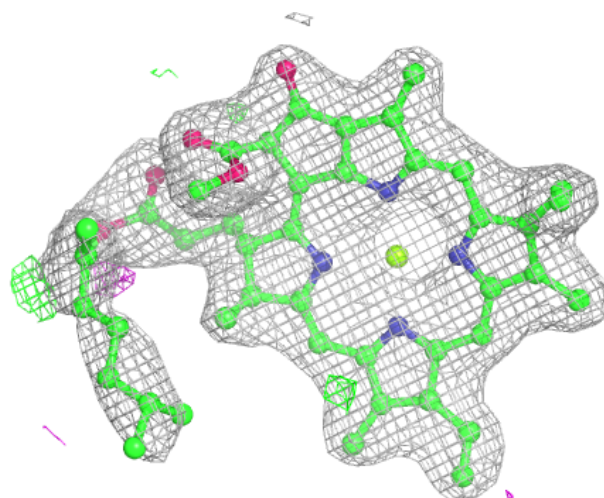






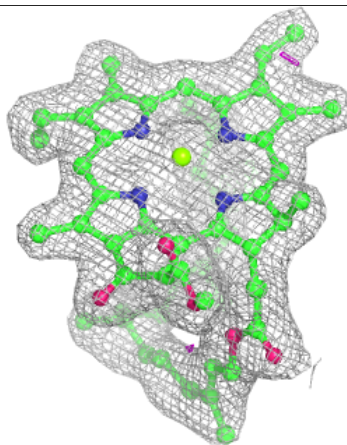
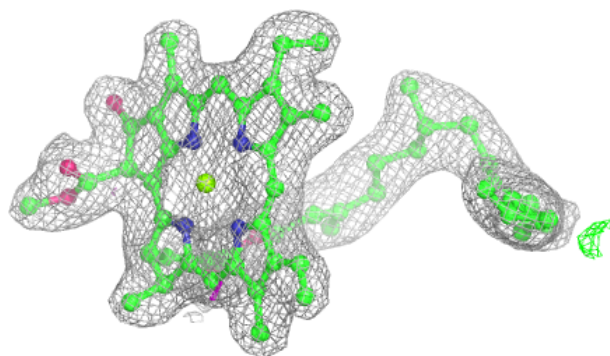
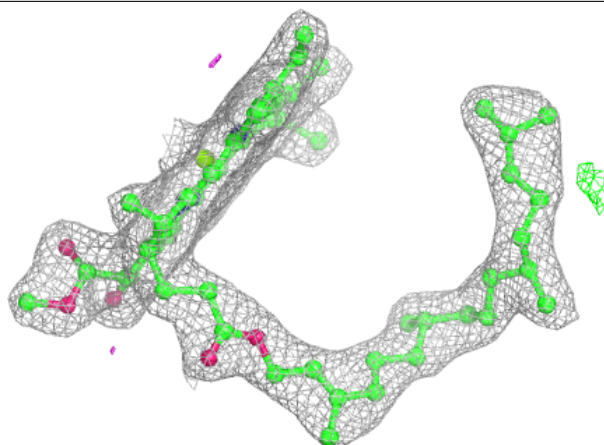
**Electron density around CLA B 617:**

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

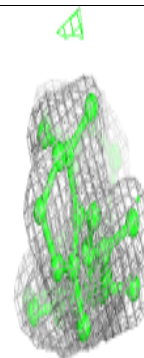
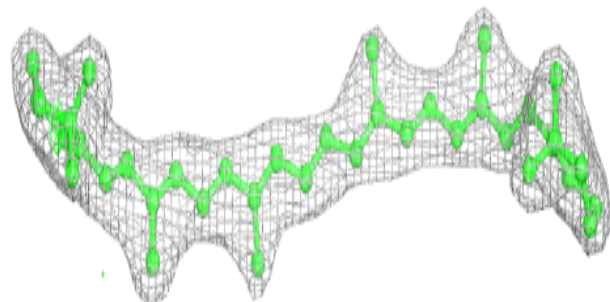
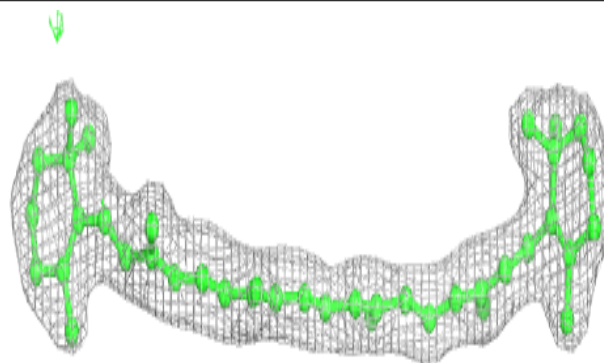


**Electron density around CLA B 612:**

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

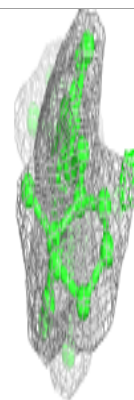
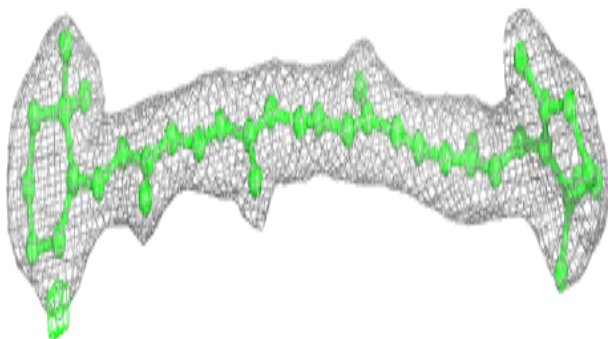
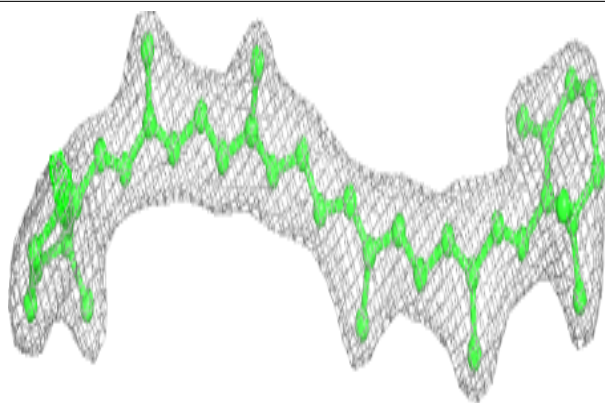
**Electron density around BCR K 101:**

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

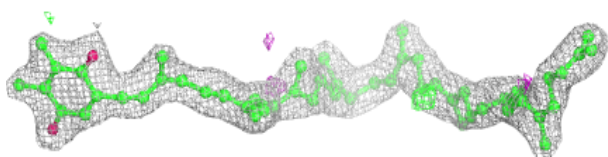
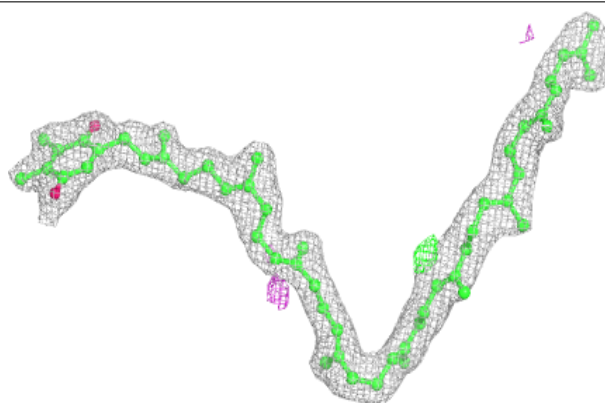


**Electron density around BCR Y 101:**

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

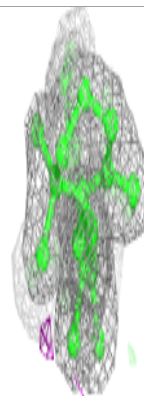
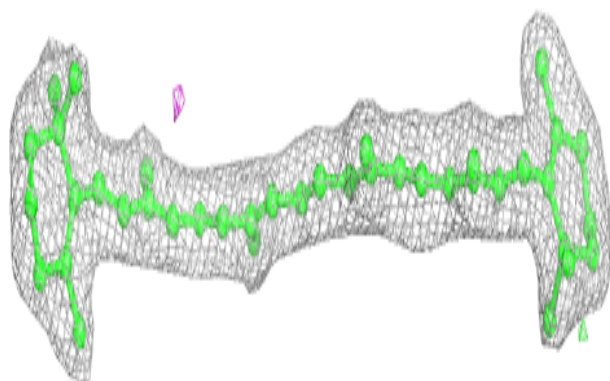
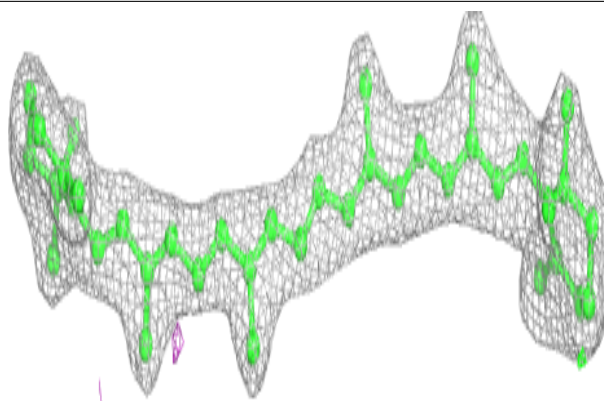
**Electron density around PL9 d 405:**

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

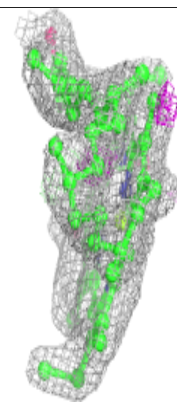
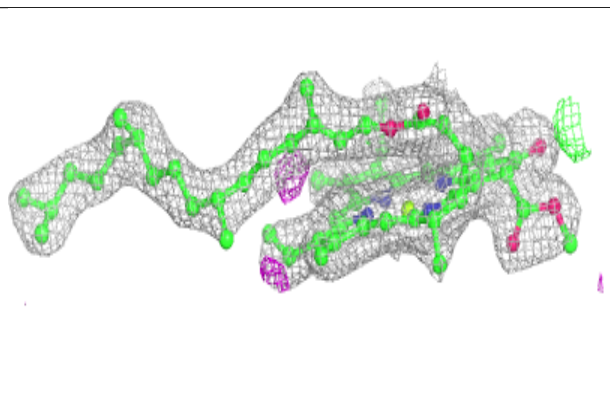
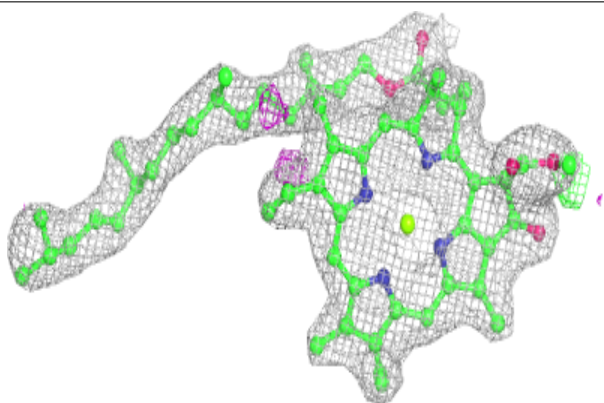


**Electron density around BCR a 413:**

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

**Electron density around CLA c 902:**

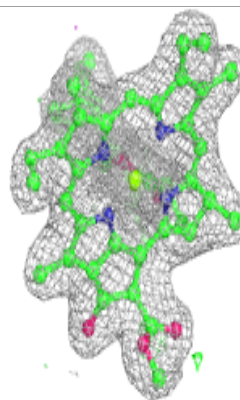
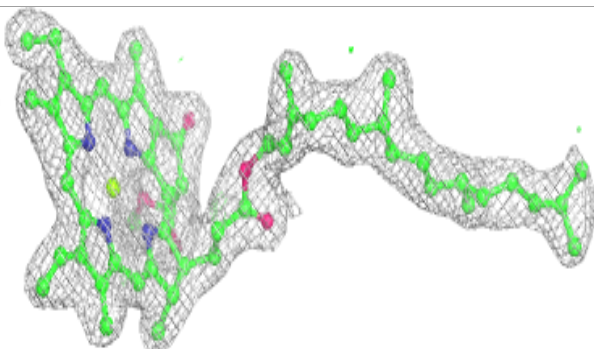
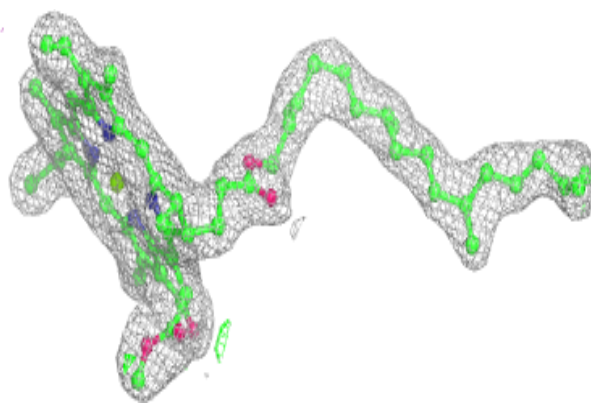
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



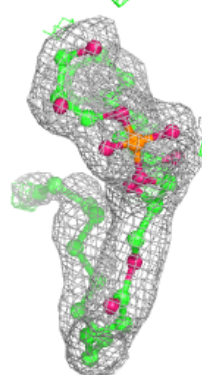
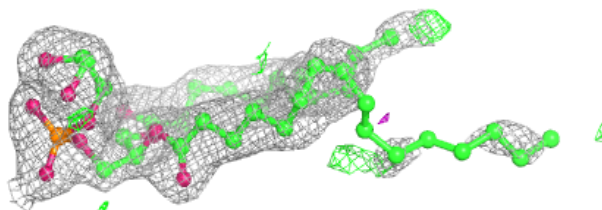
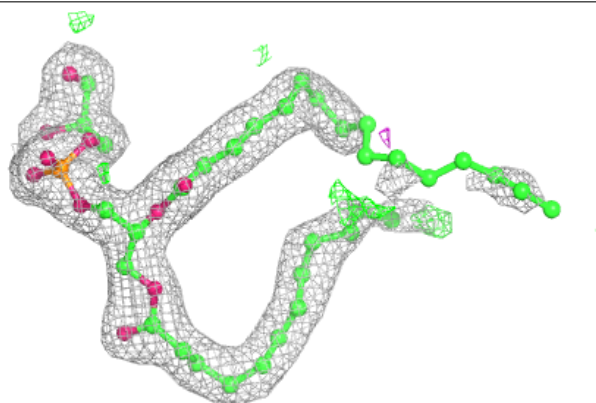


**Electron density around CLA C 503:**

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

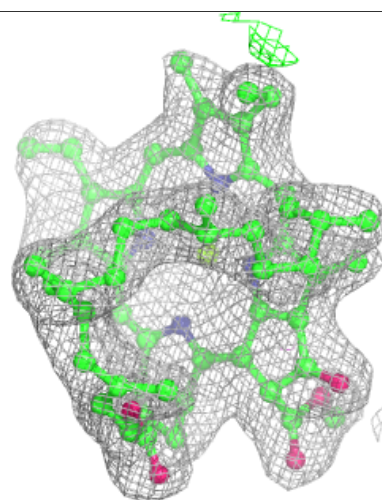
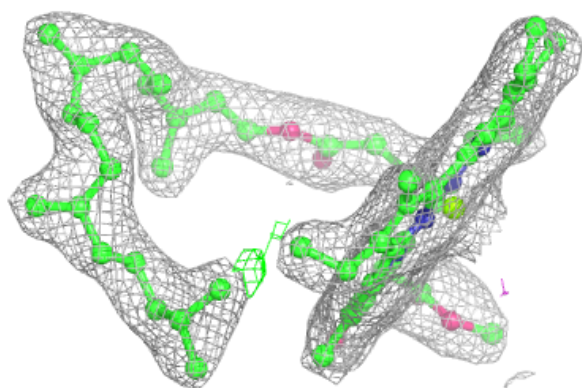
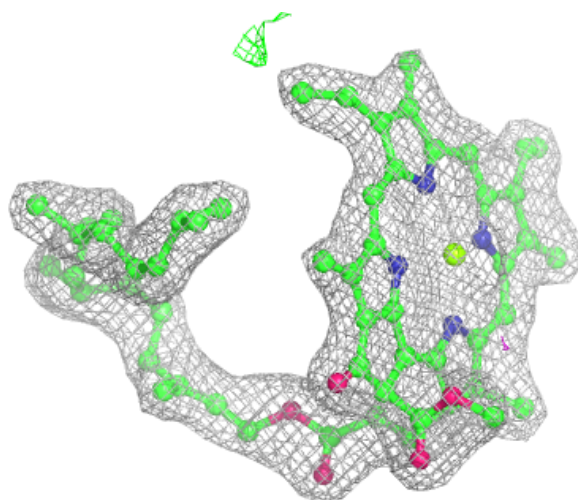
**Electron density around LHG D 411:**

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



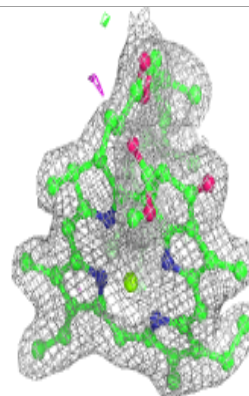
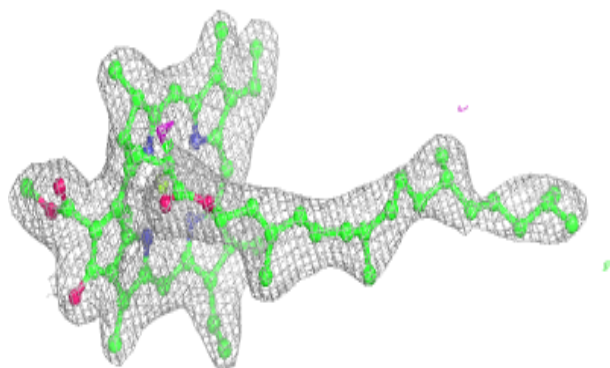
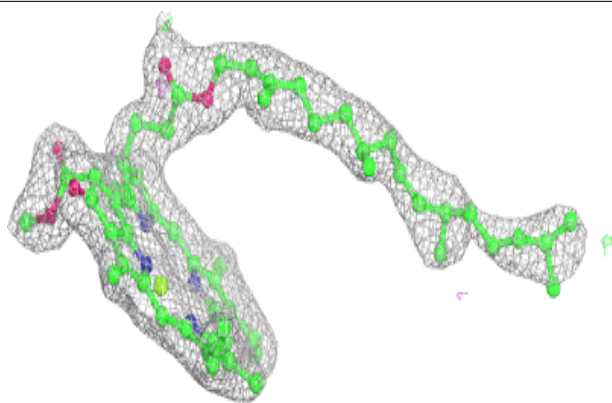
**Electron density around CLA C 504:**

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

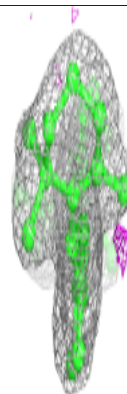
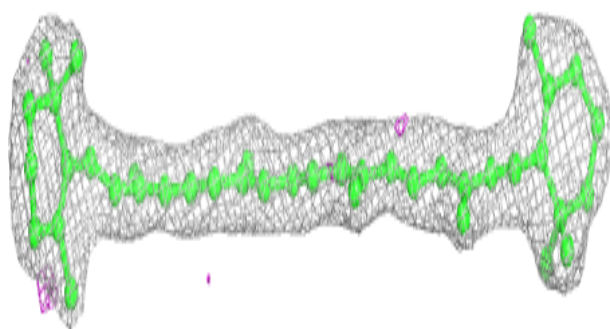
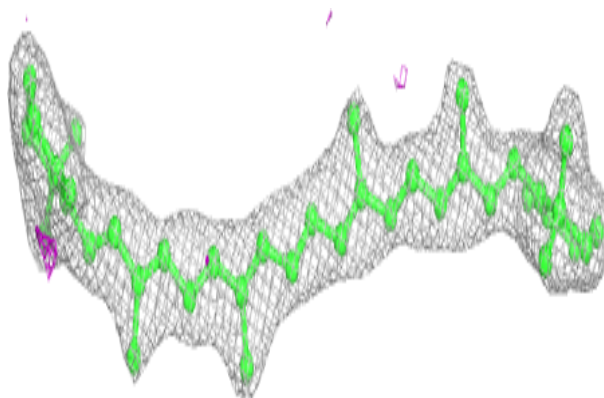


**Electron density around CLA c 905:**

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

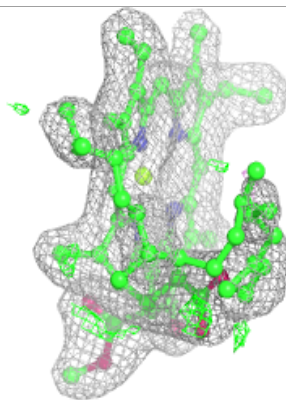
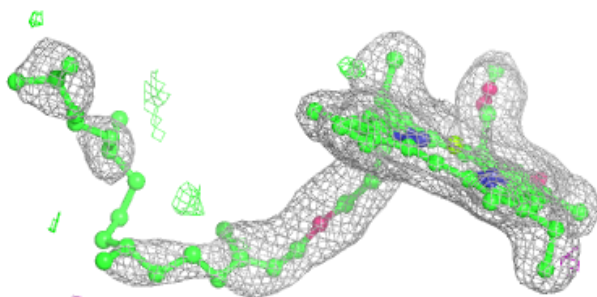
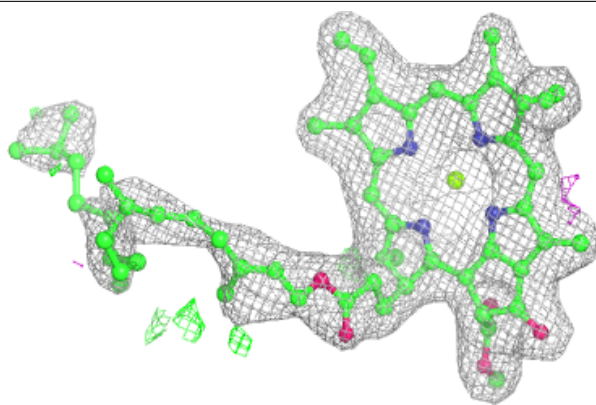
**Electron density around BCR c 916:**

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



**Electron density around CLA a 412:**

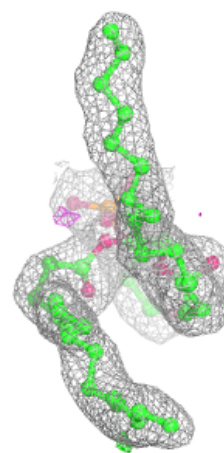
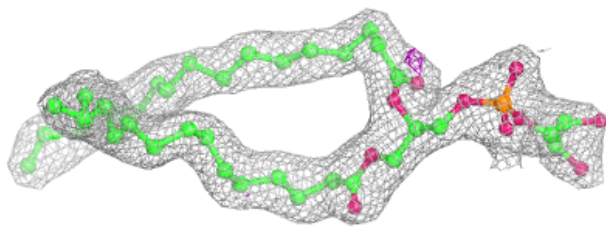
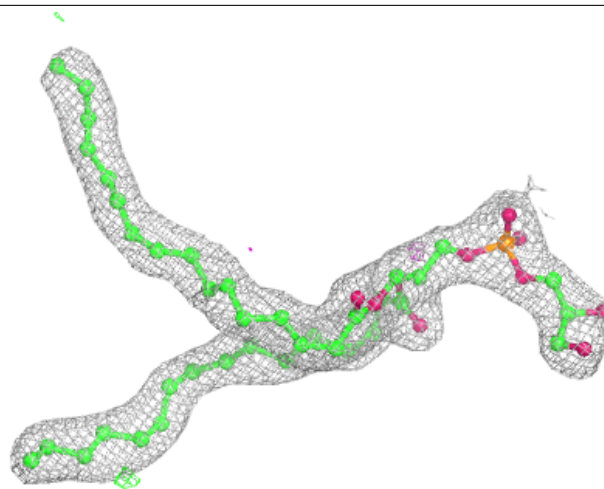
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





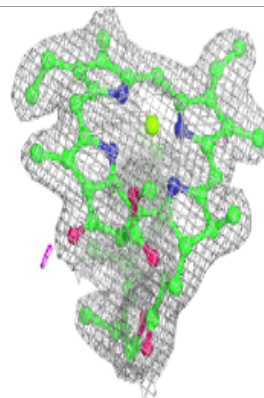
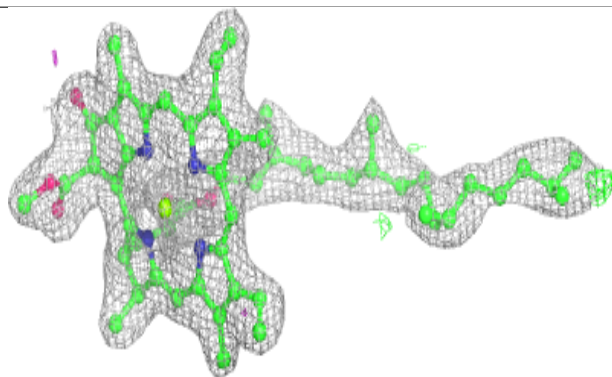
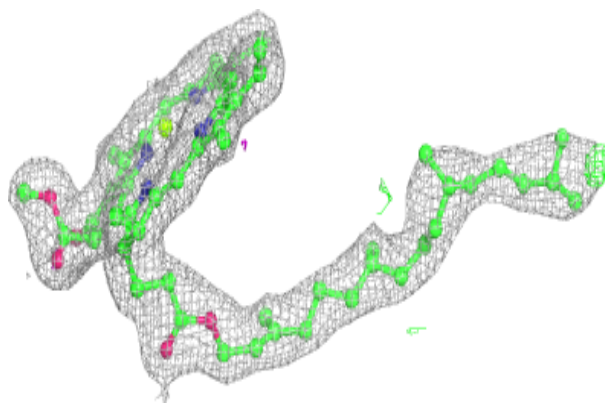
**Electron density around LHG d 407:**

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

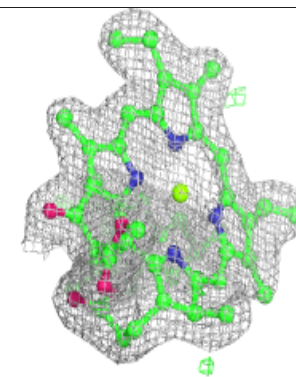
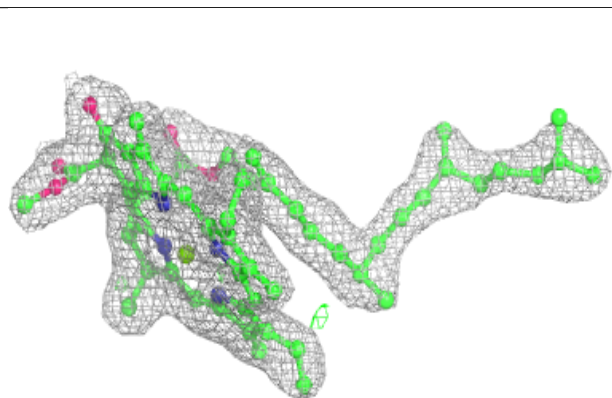
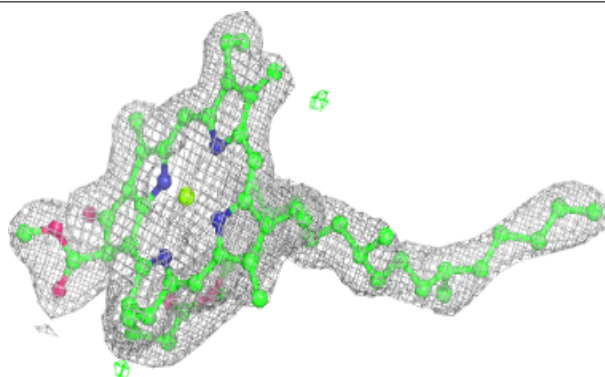


**Electron density around CLA C 505:**

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

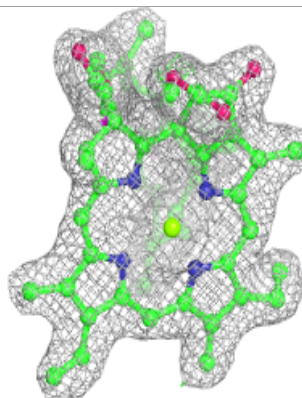
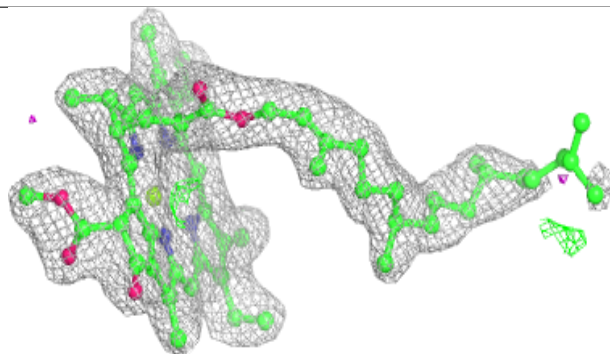
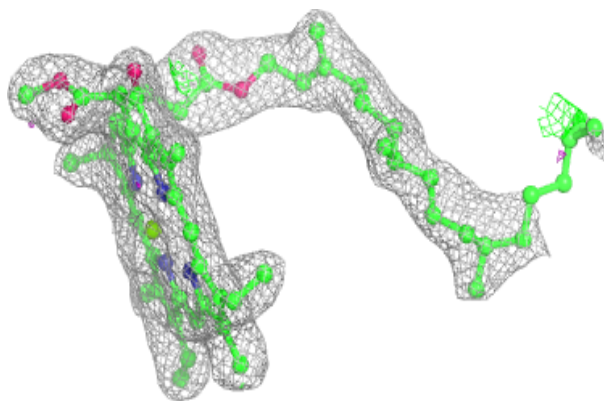
**Electron density around CLA C 506:**

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



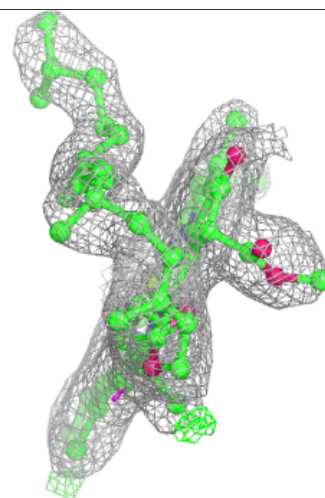
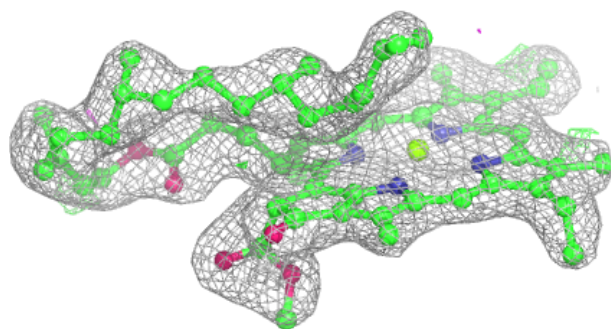
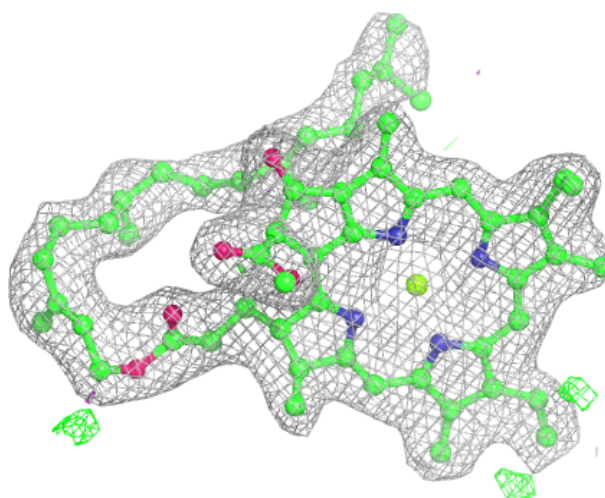
**Electron density around CLA c 909:**

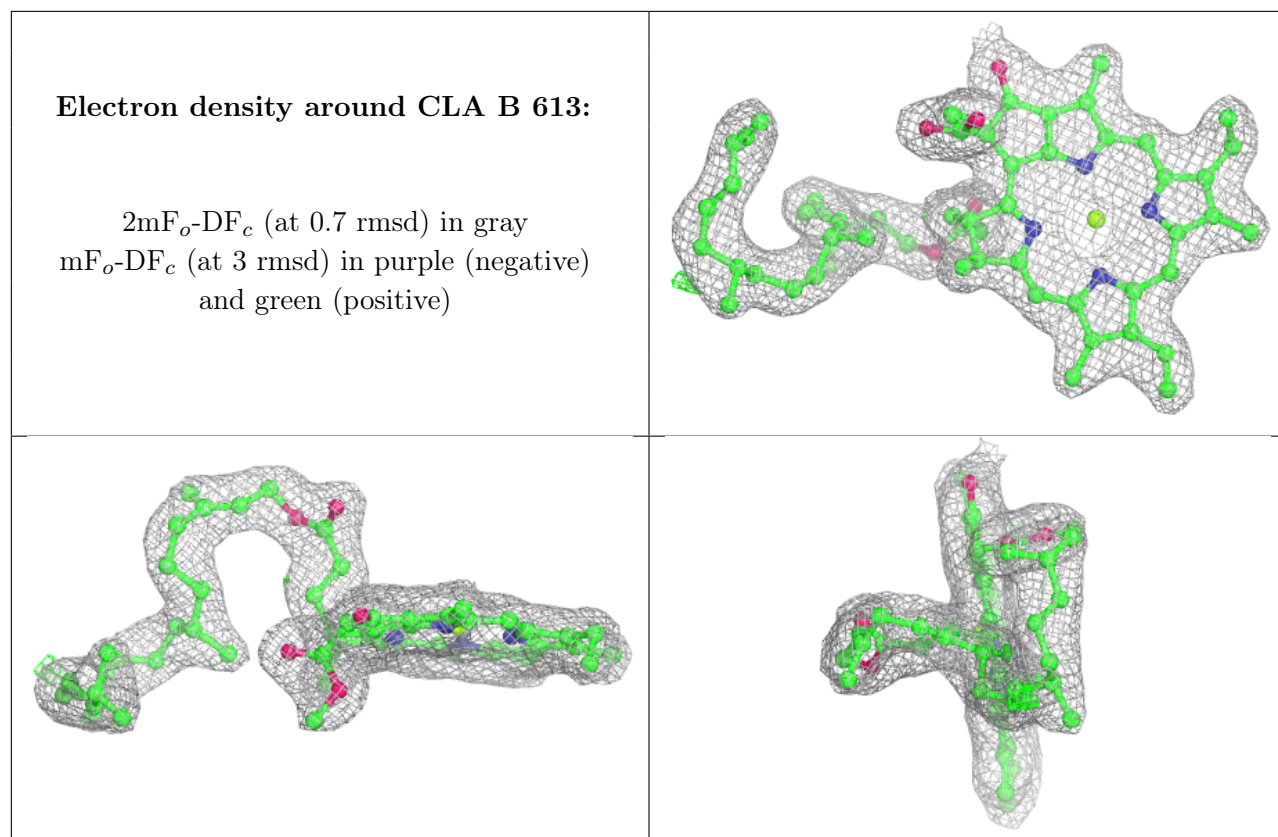
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA c 910:**

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

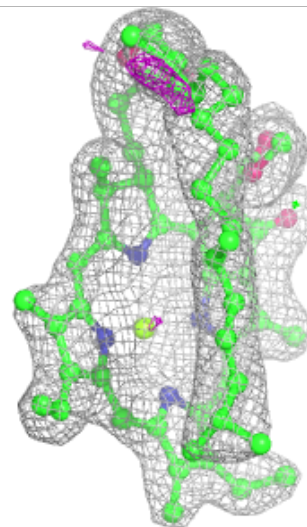
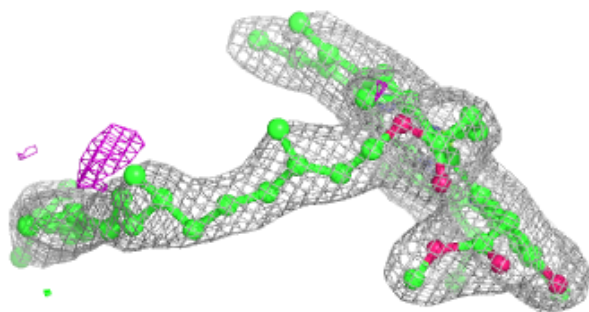
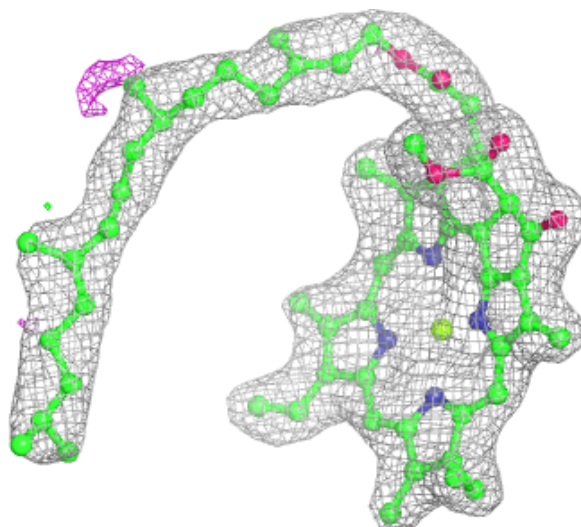






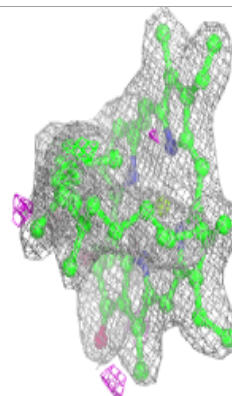
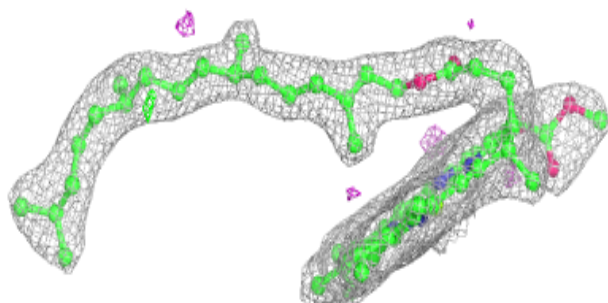
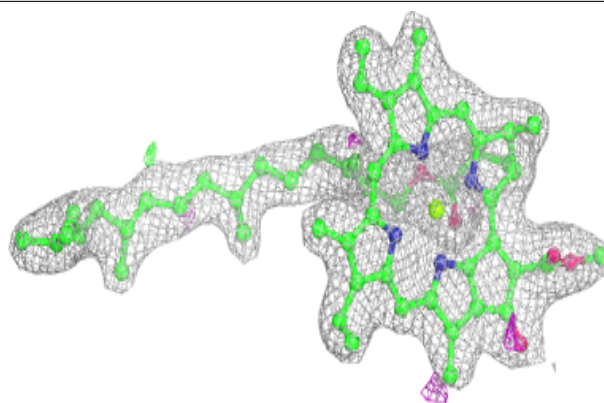
**Electron density around CLA C 508:**

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

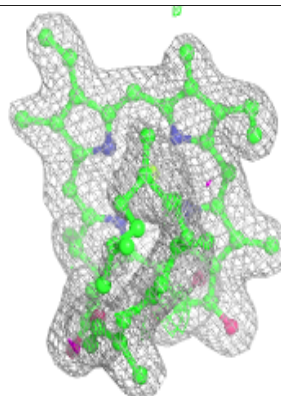
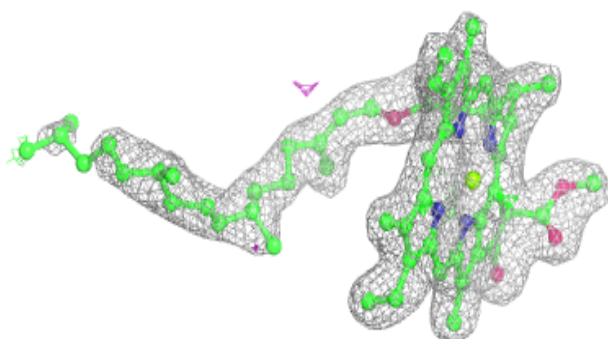
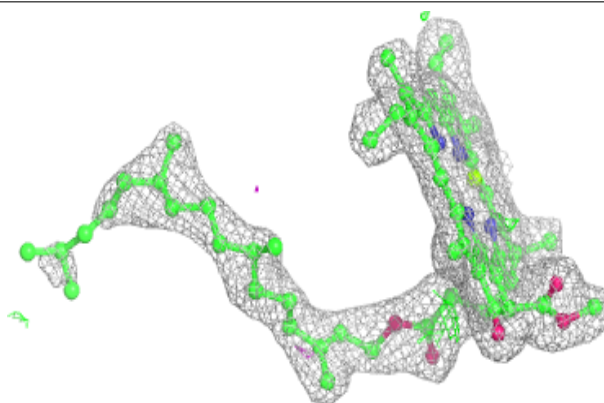


**Electron density around CLA b 609:**

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

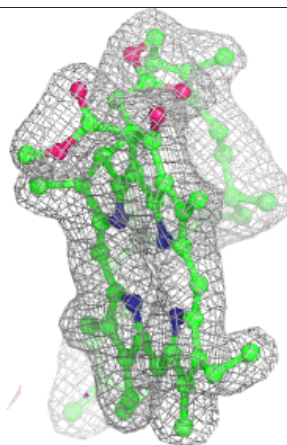
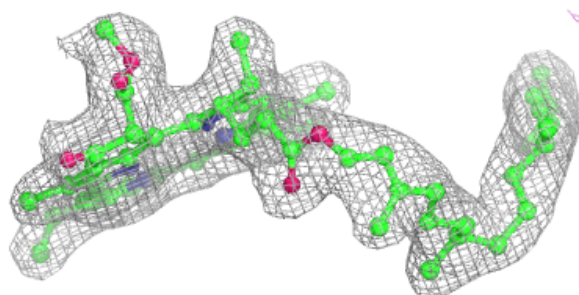
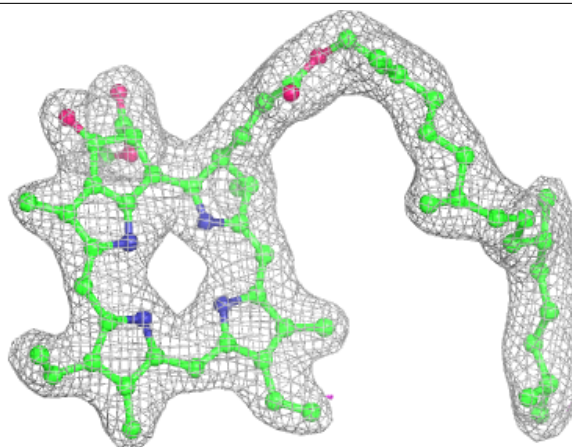
**Electron density around CLA C 509:**

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



**Electron density around PHO a 411:**

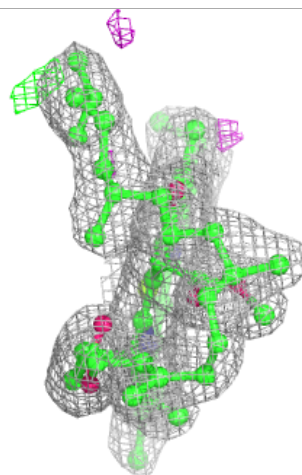
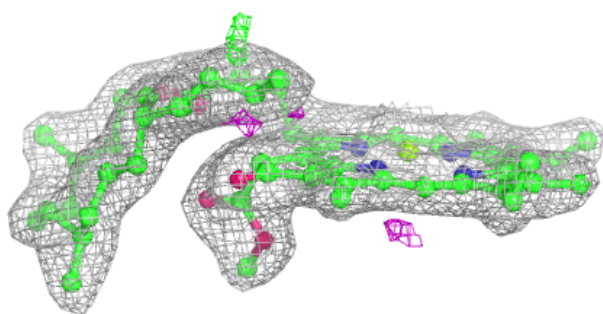
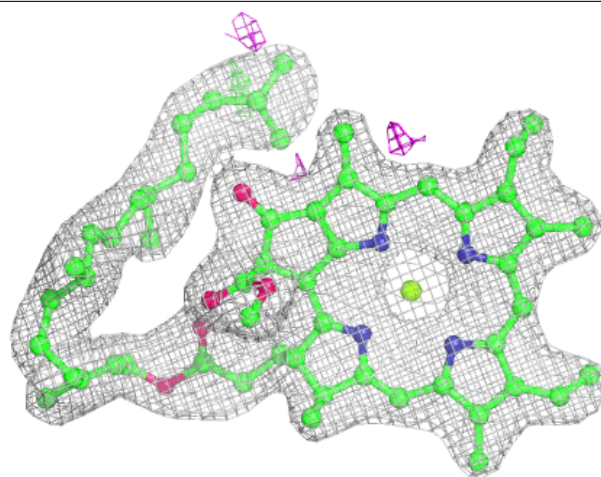
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

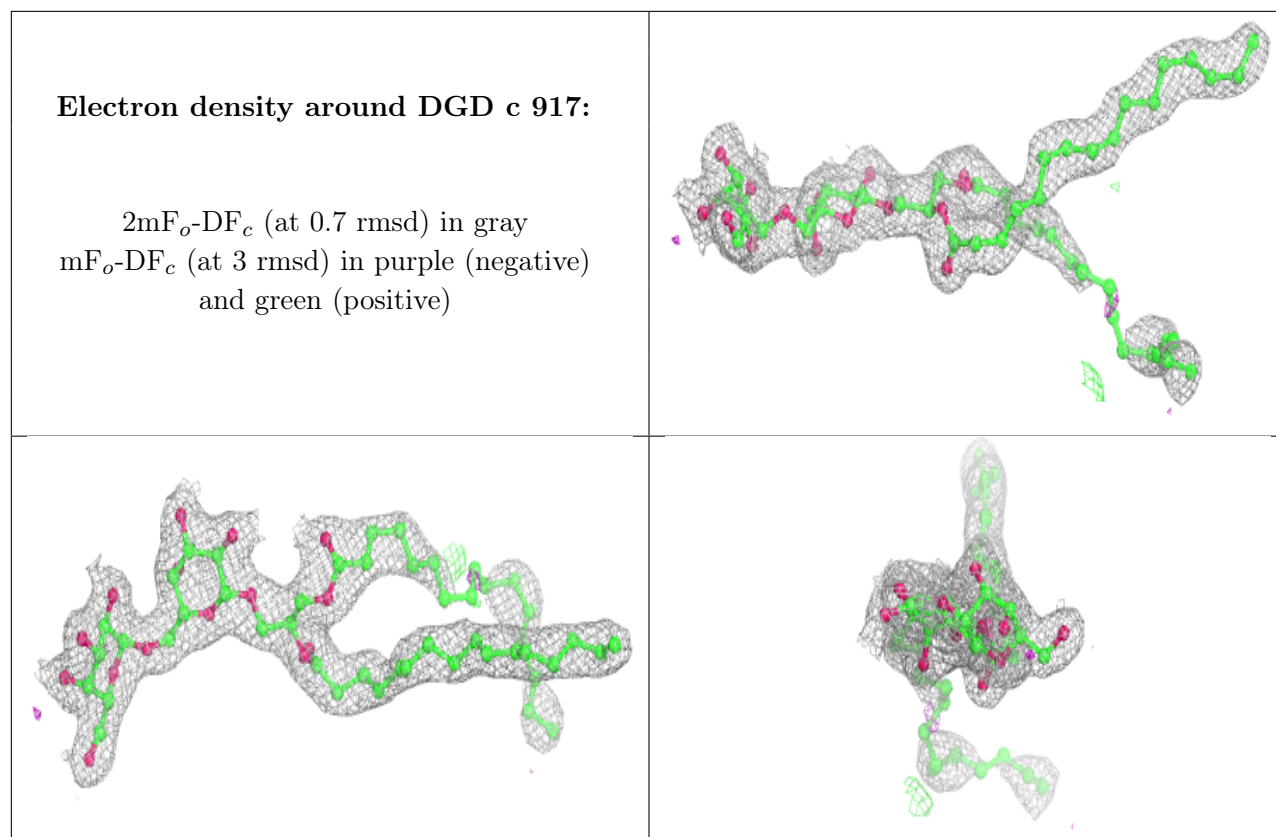




**Electron density around CLA b 611:**

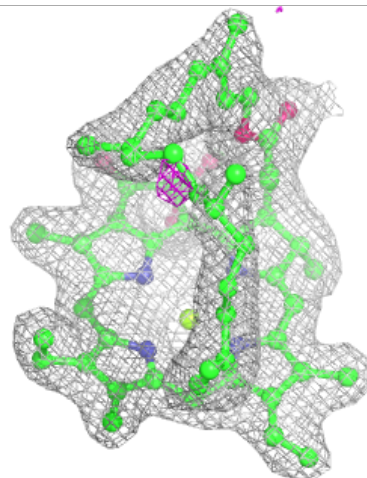
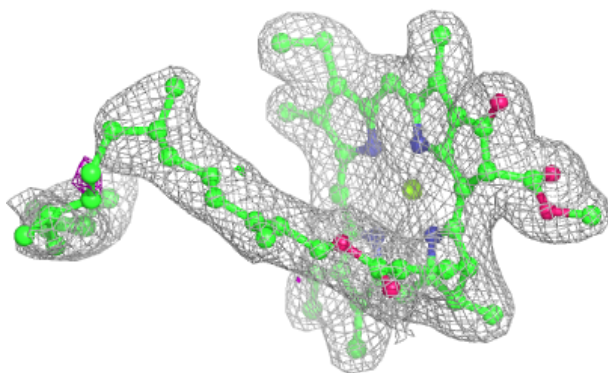
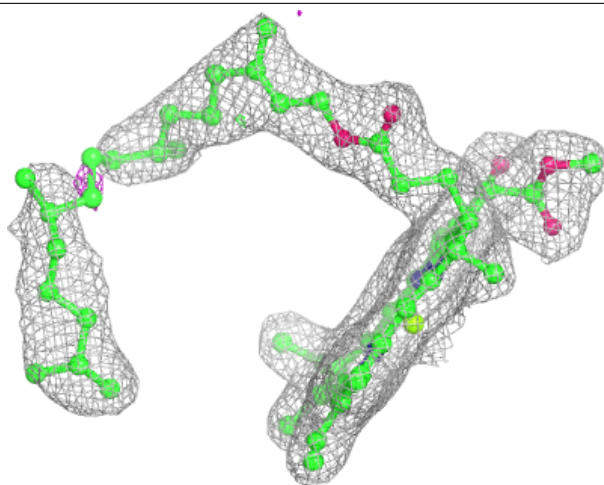
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





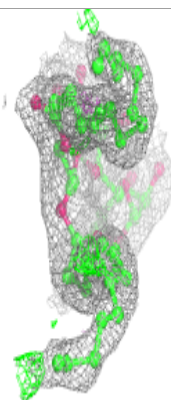
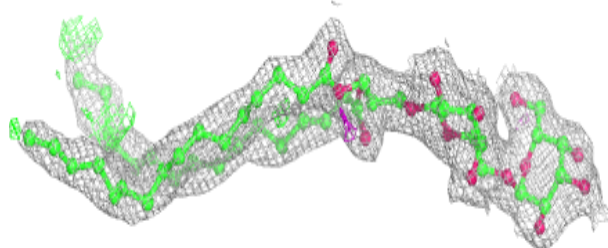
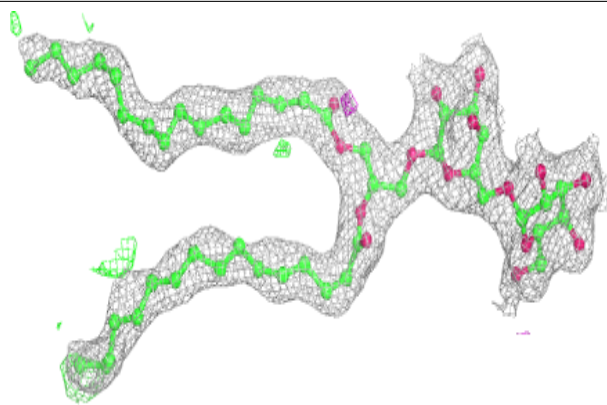
**Electron density around CLA b 612:**

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

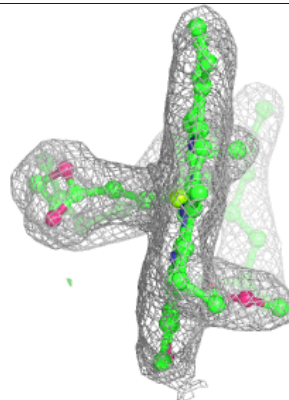
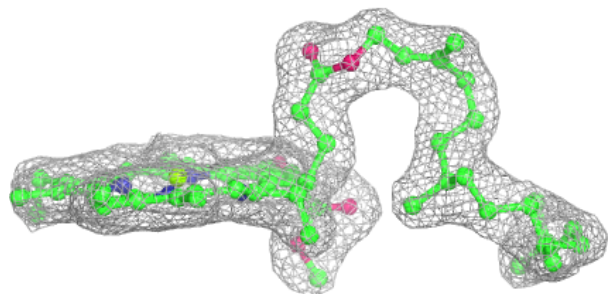
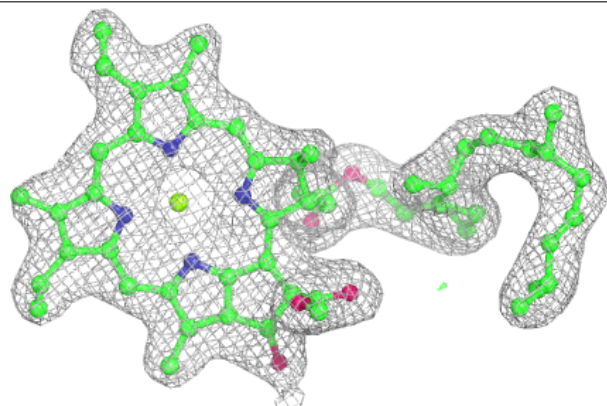


**Electron density around DGD c 919:**

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

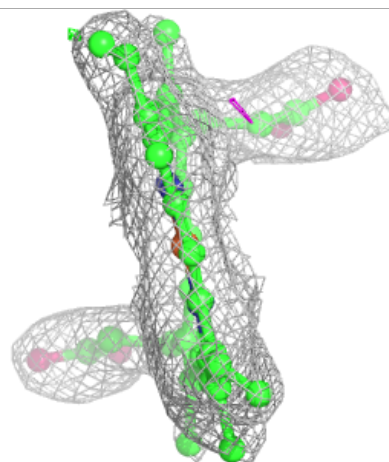
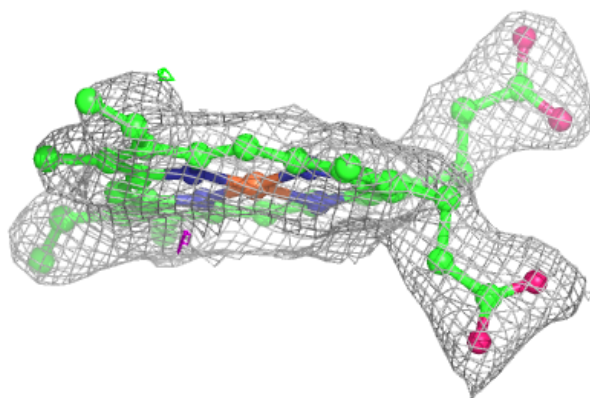
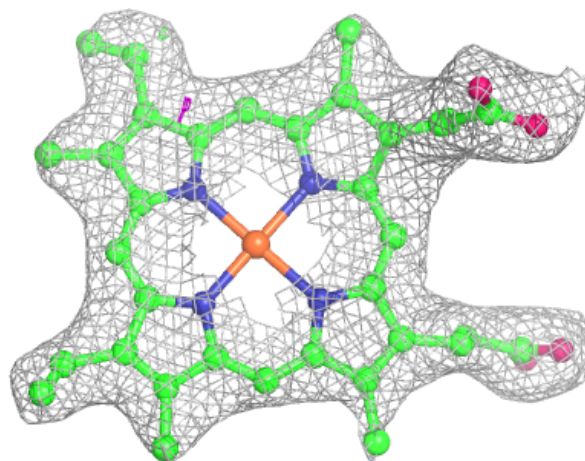
**Electron density around CLA b 613:**

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



**Electron density around HEM E 102:**

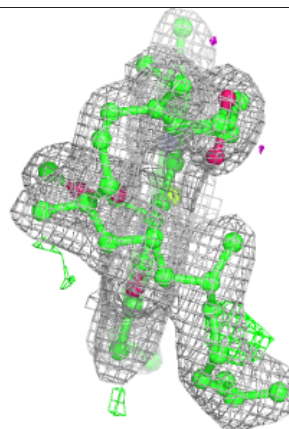
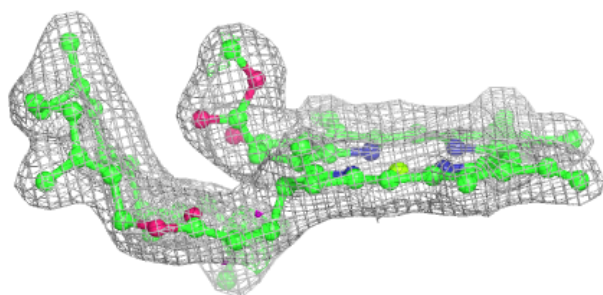
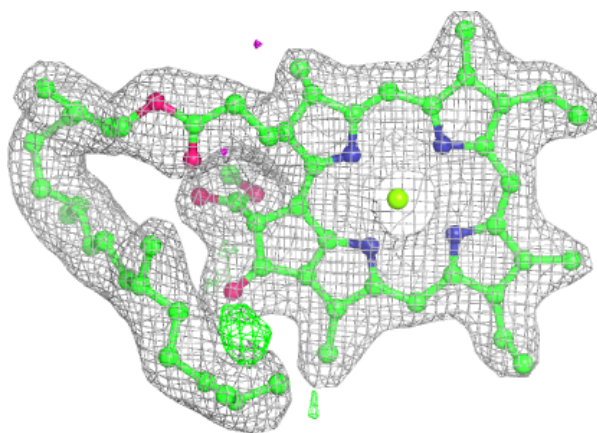
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



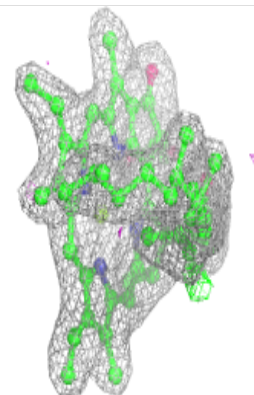
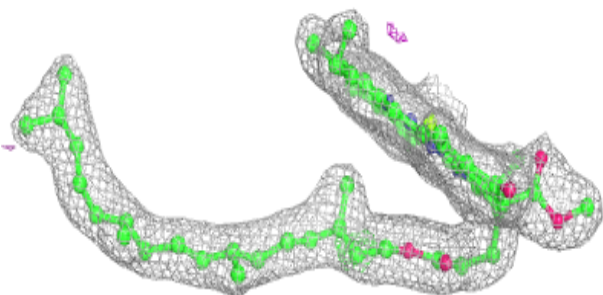
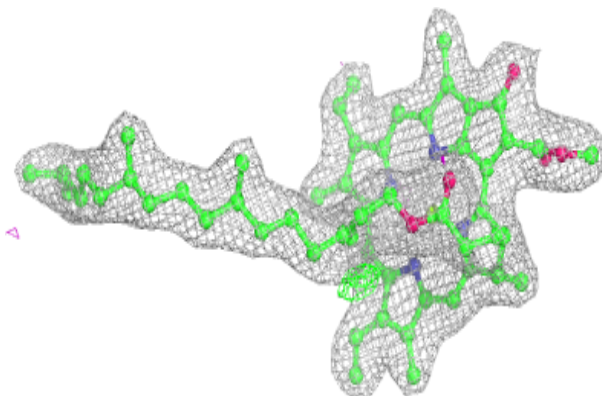


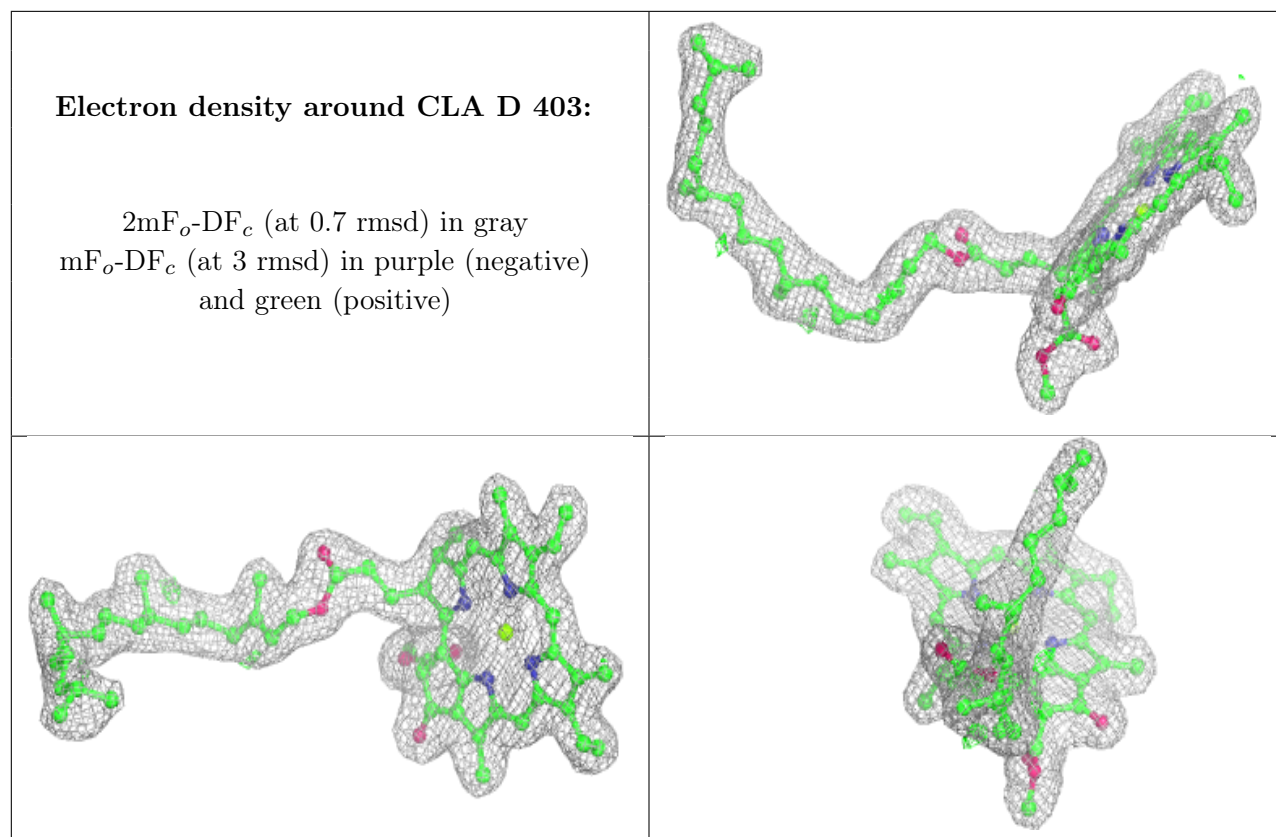
**Electron density around CLA B 611:**

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

**Electron density around CLA B 609:**

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

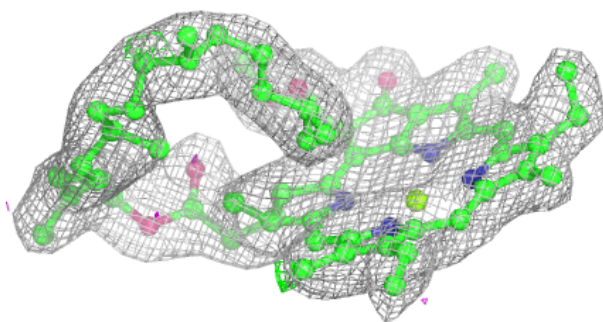
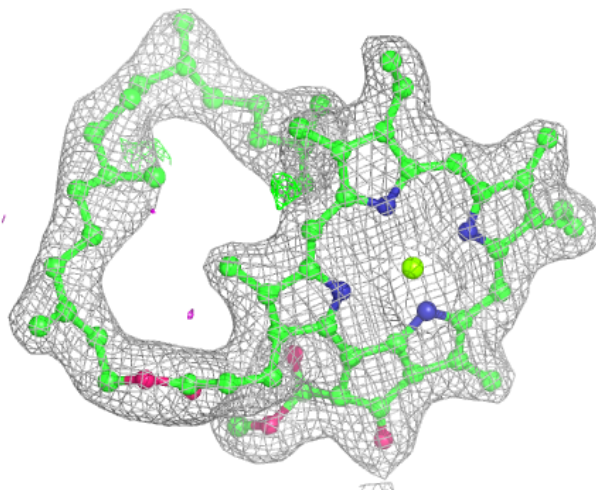






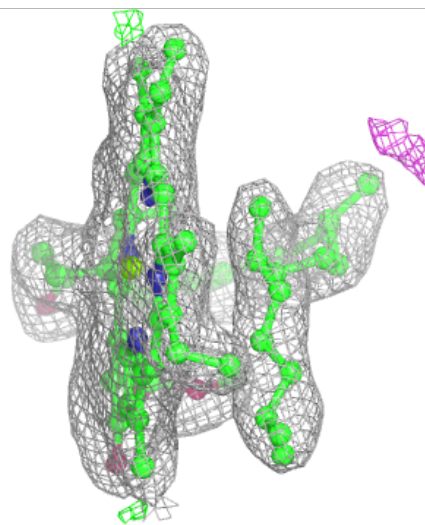
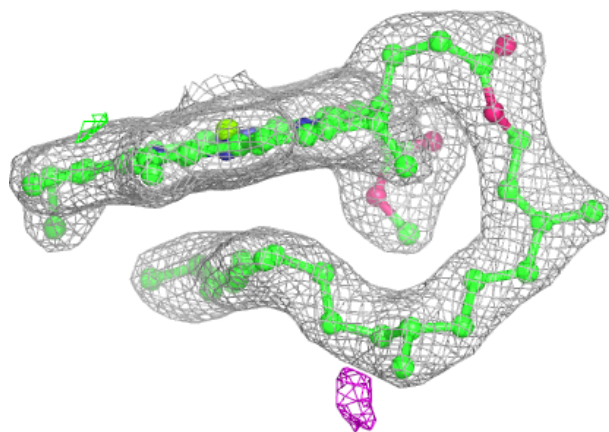
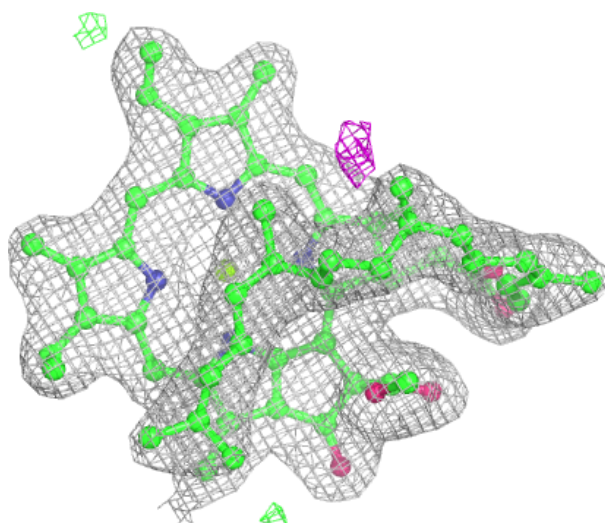
**Electron density around CLA B 616:**

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



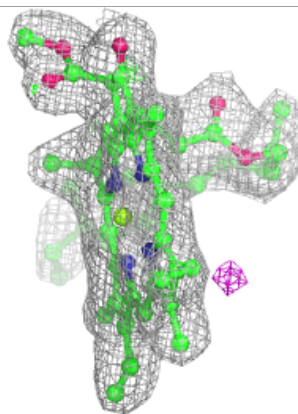
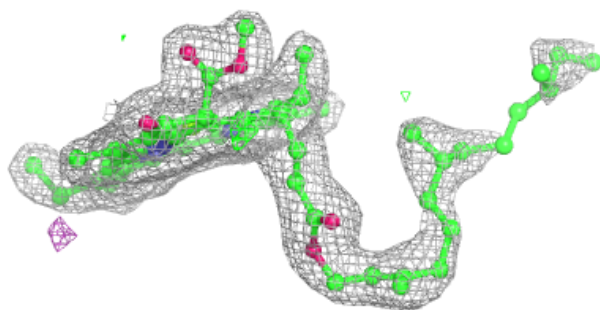
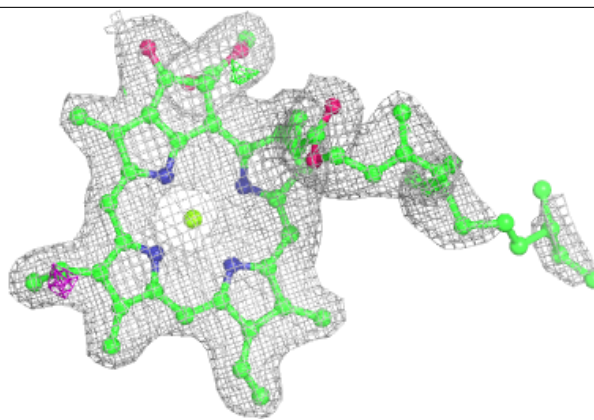
**Electron density around CLA c 911:**

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



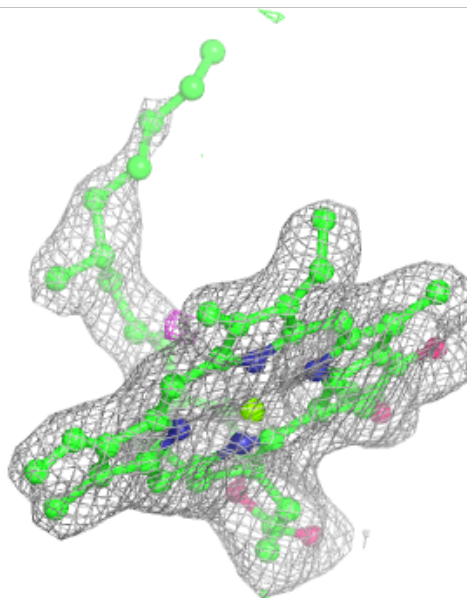
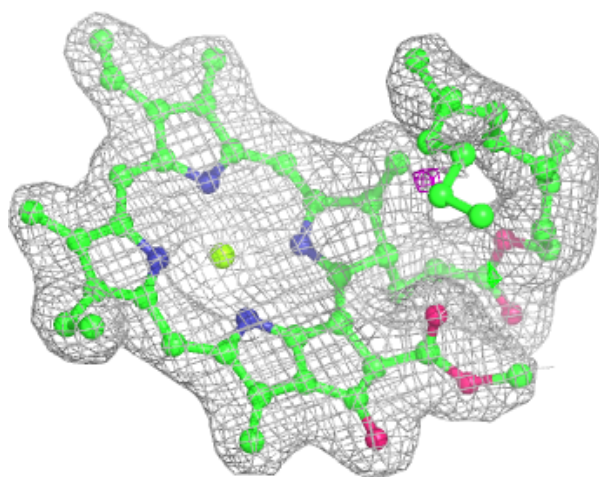
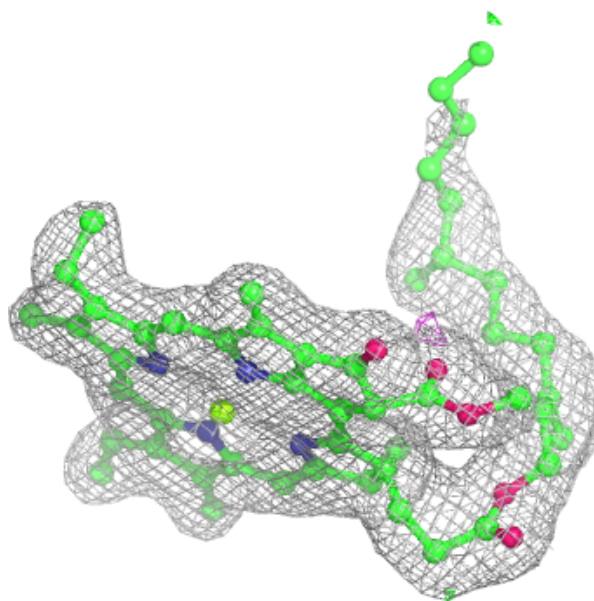
**Electron density around CLA a 409:**

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



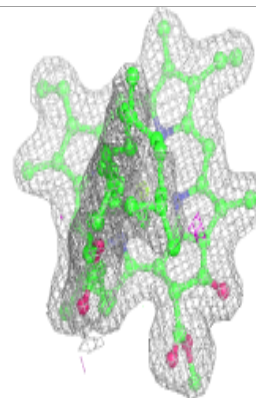
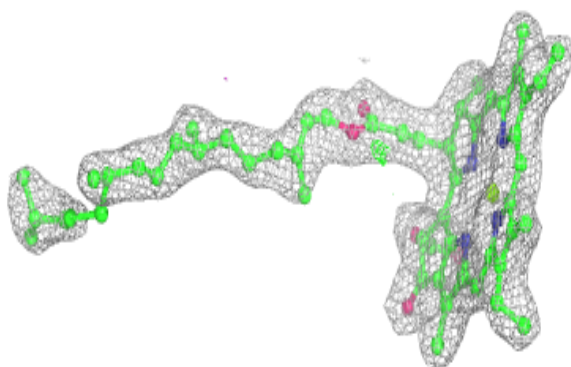
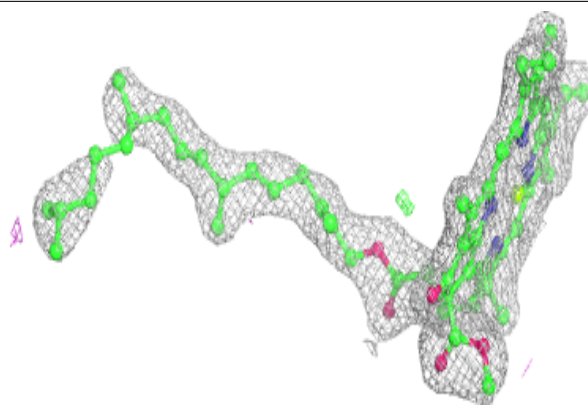
**Electron density around CLA b 614:**

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

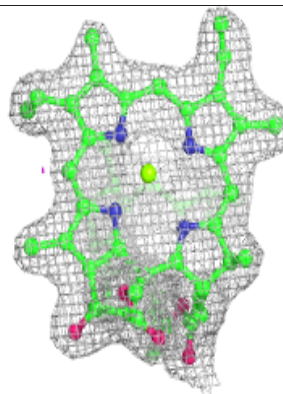
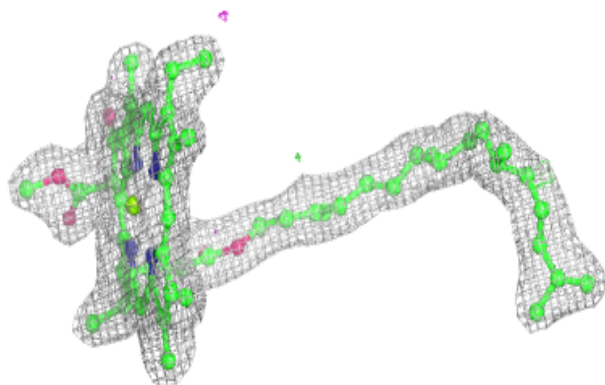
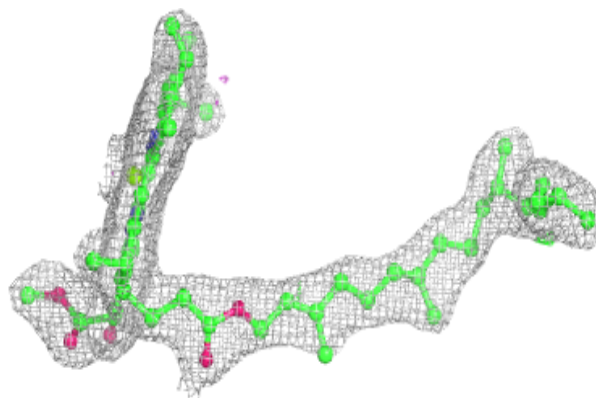


**Electron density around CLA B 605:**

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

**Electron density around CLA B 606:**

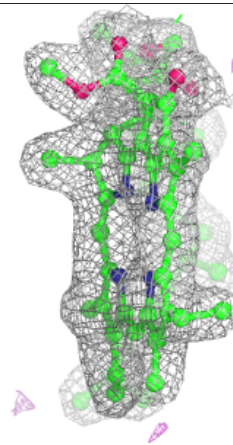
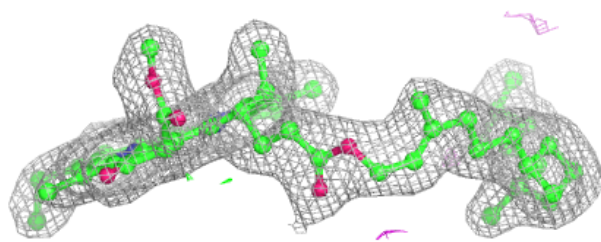
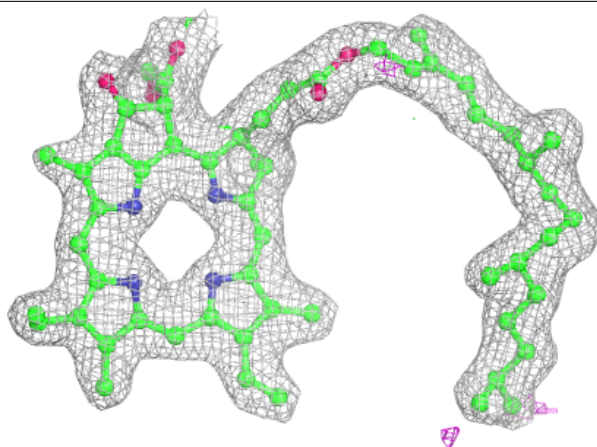
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





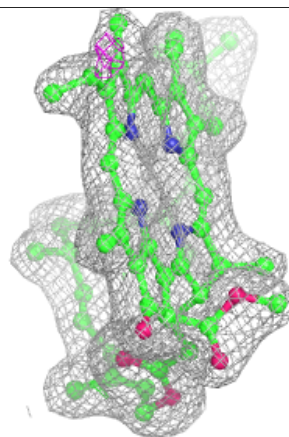
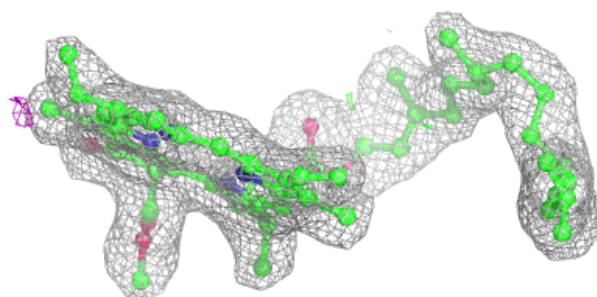
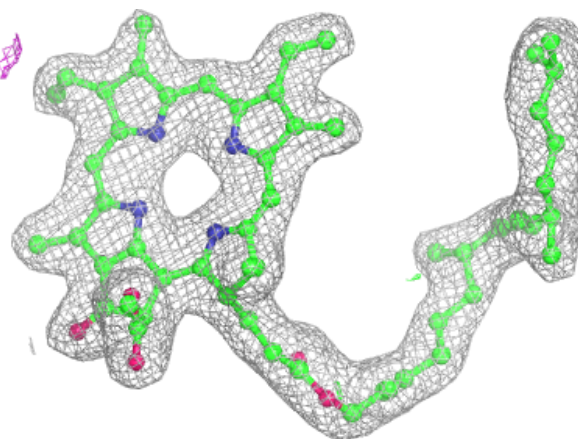
**Electron density around PHO A 407:**

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



**Electron density around PHO D 402:**

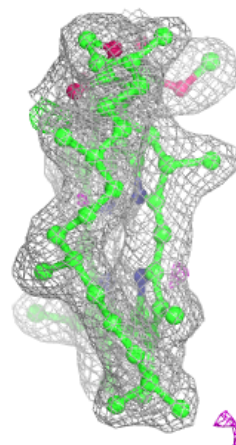
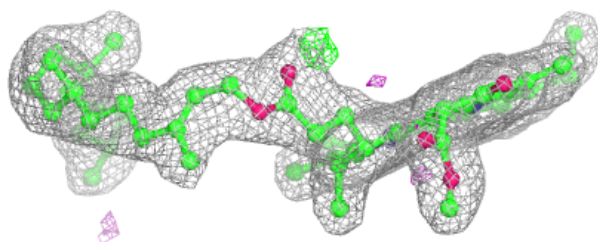
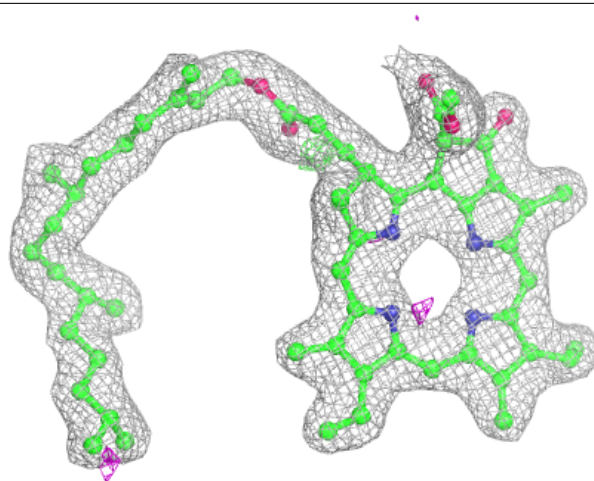
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





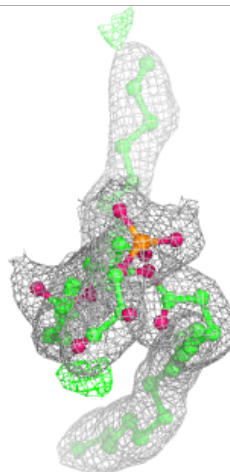
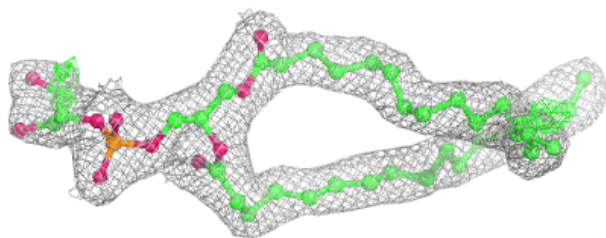
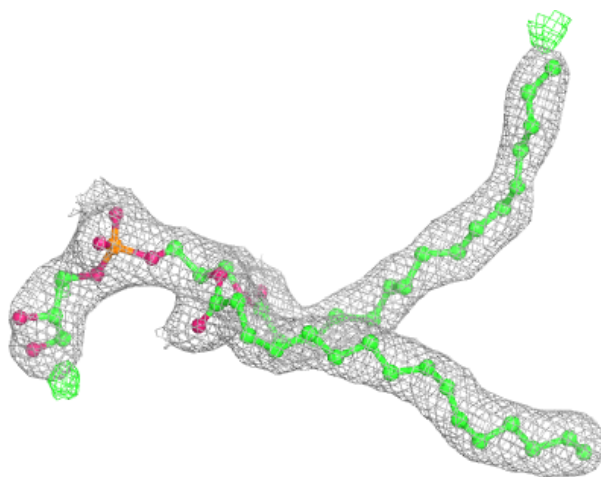
**Electron density around PHO a 410:**

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



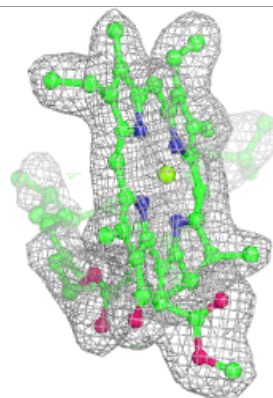
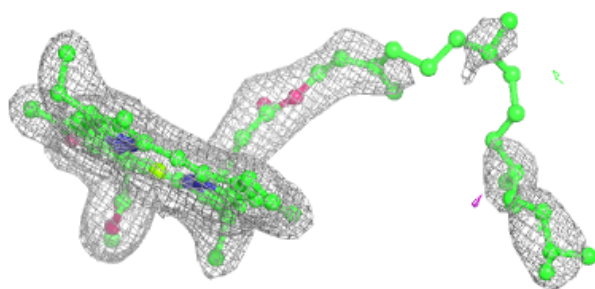
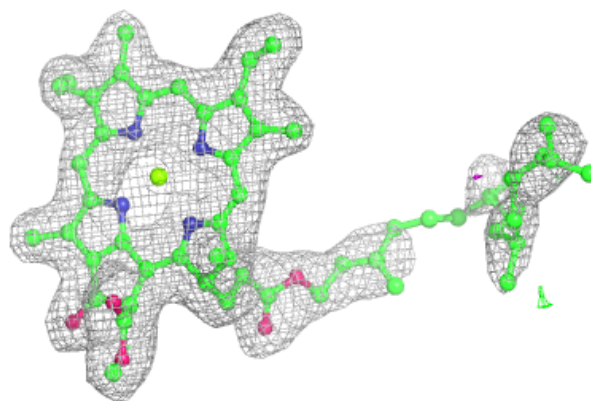
**Electron density around LHG D 410:**

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

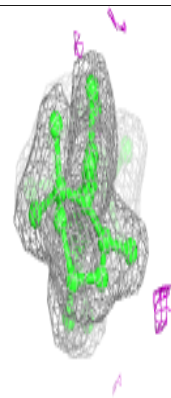
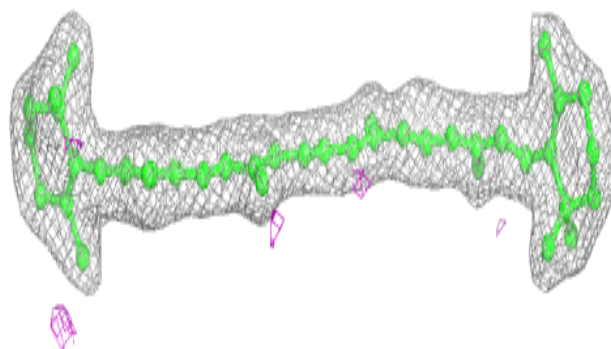
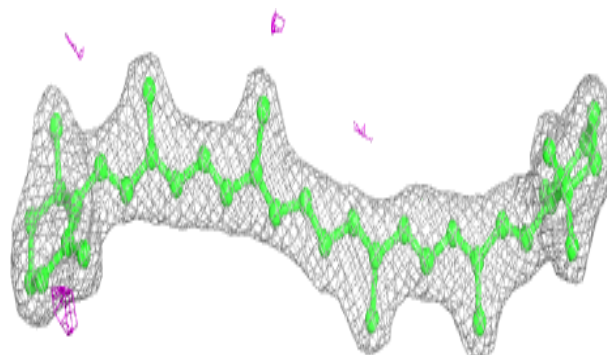


**Electron density around CLA A 408:**

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

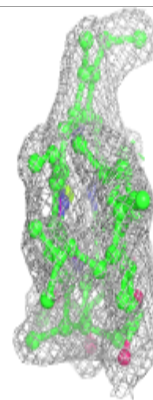
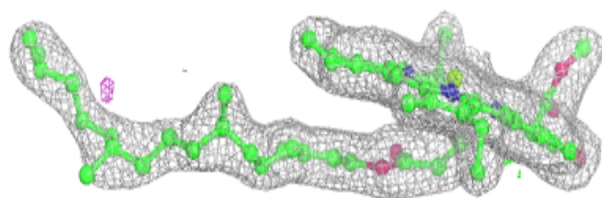
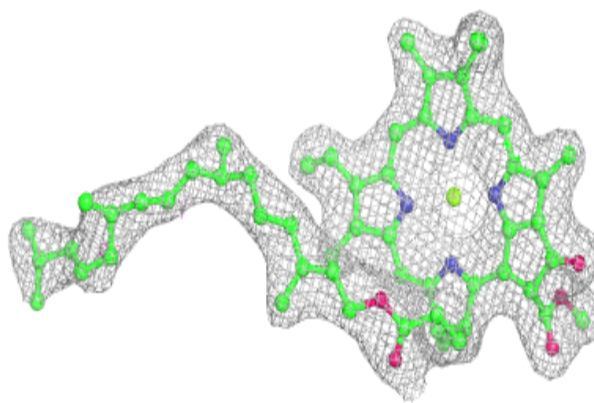
**Electron density around BCR A 409:**

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

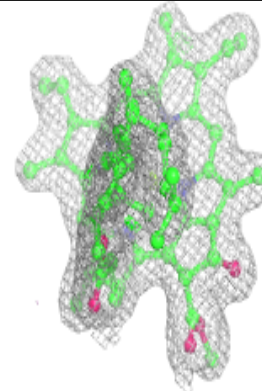
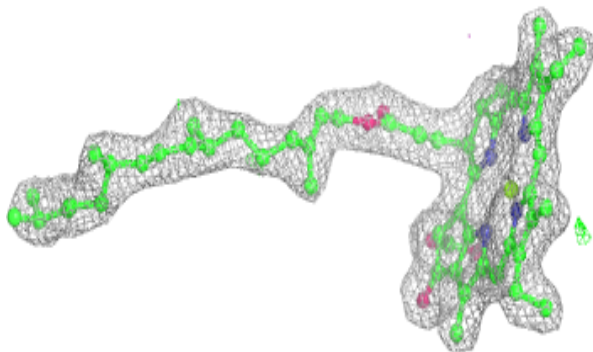
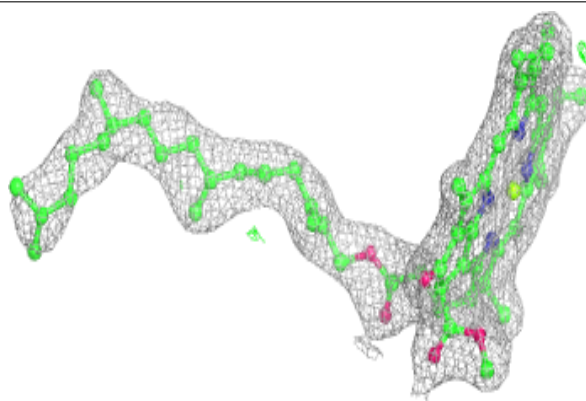


**Electron density around CLA b 604:**

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

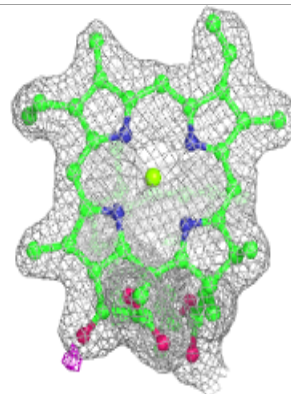
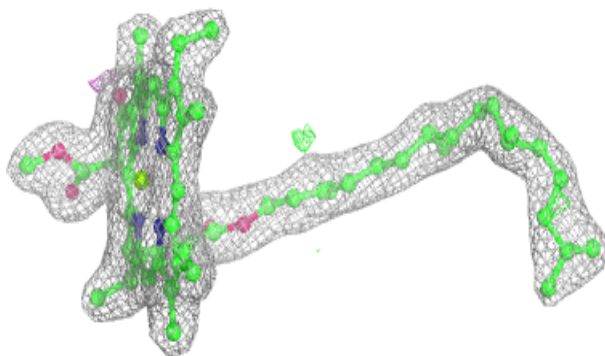
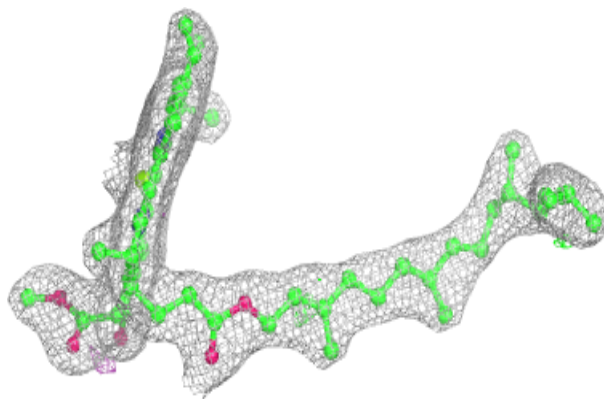
**Electron density around CLA b 605:**

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



**Electron density around CLA b 606:**

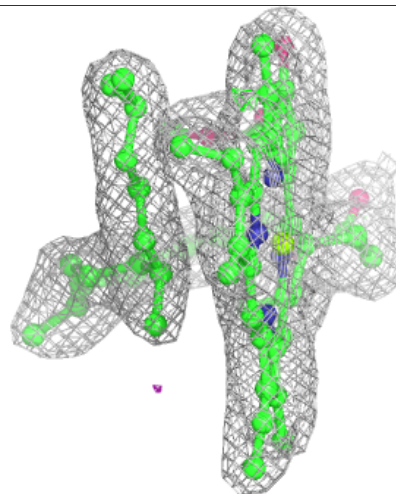
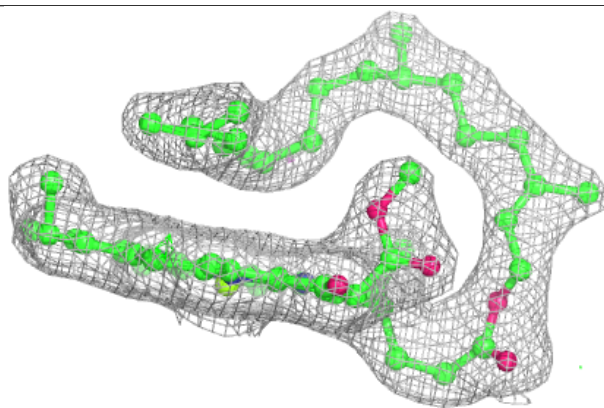
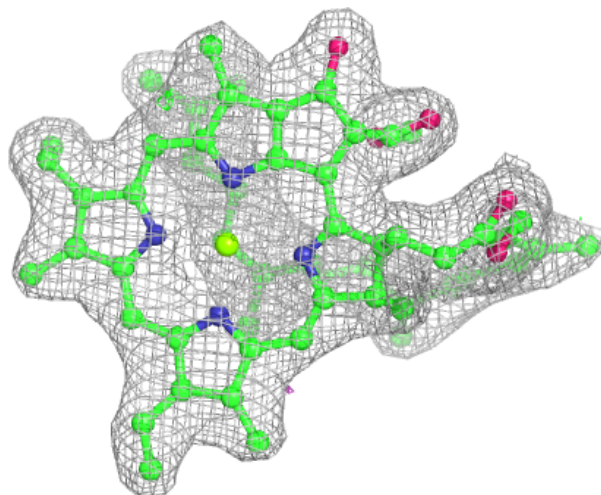
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

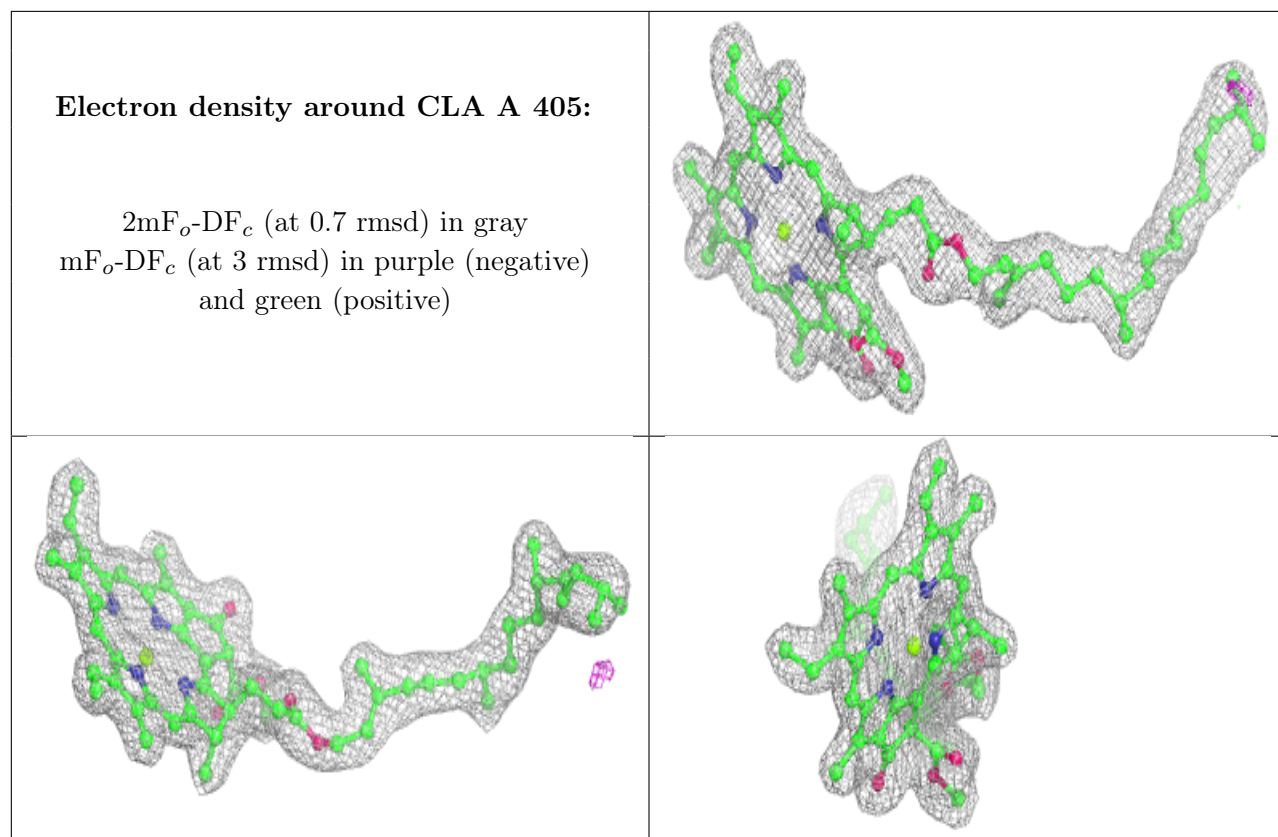




**Electron density around CLA C 511:**

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

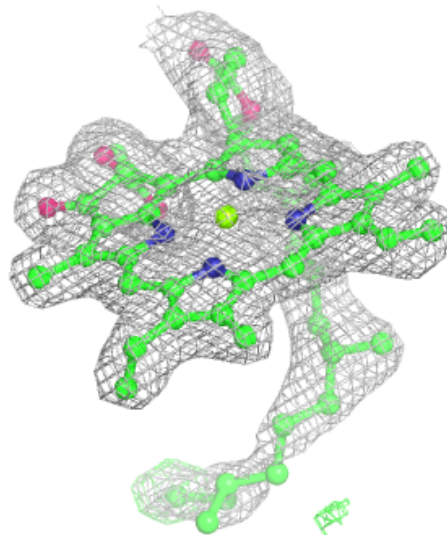
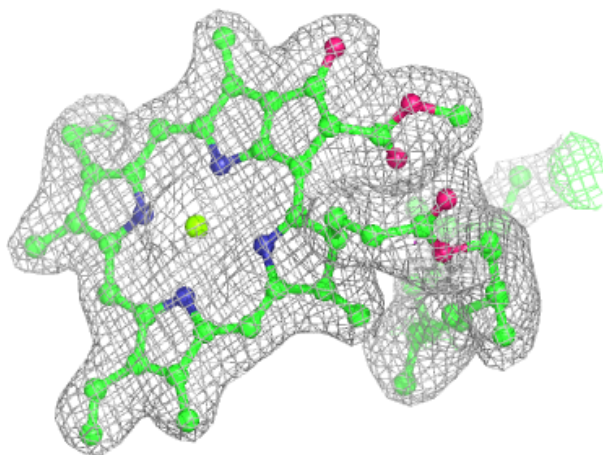
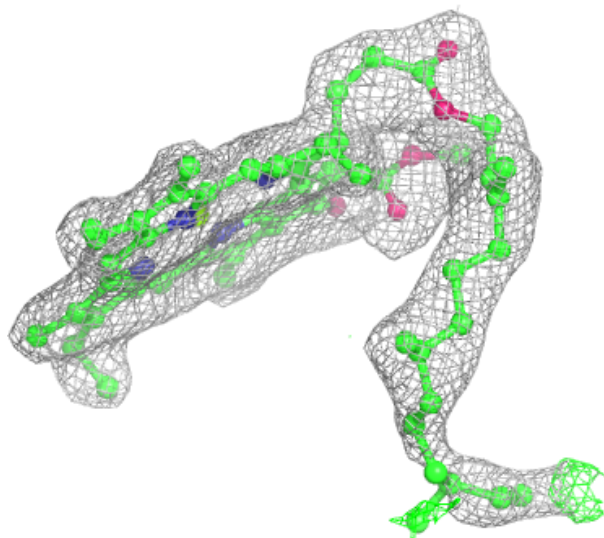






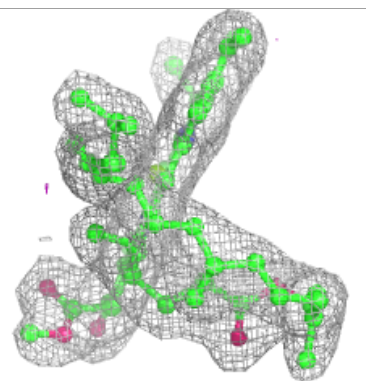
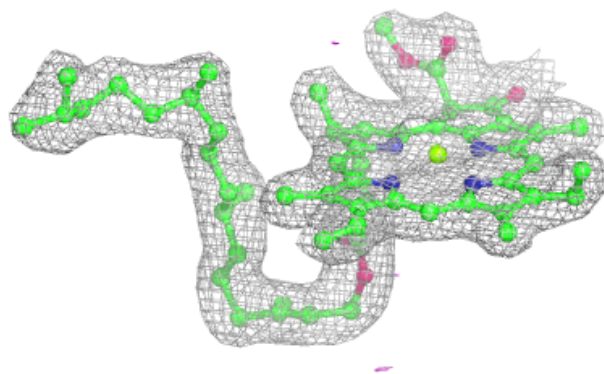
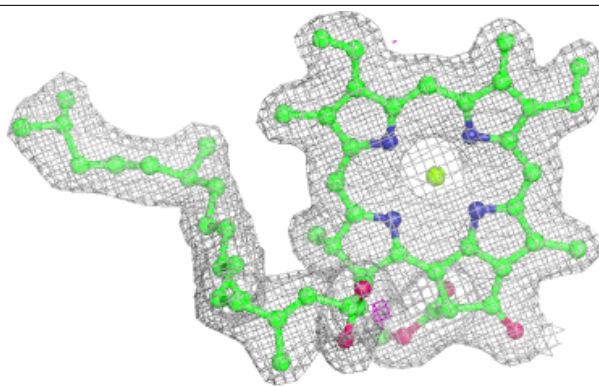
**Electron density around CLA B 614:**

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



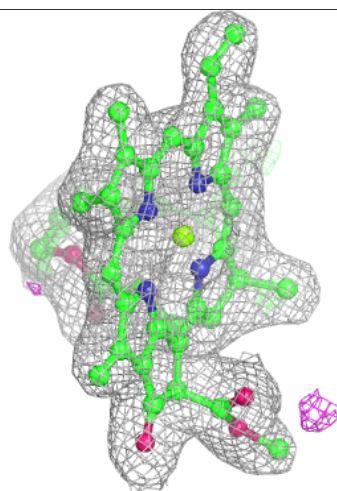
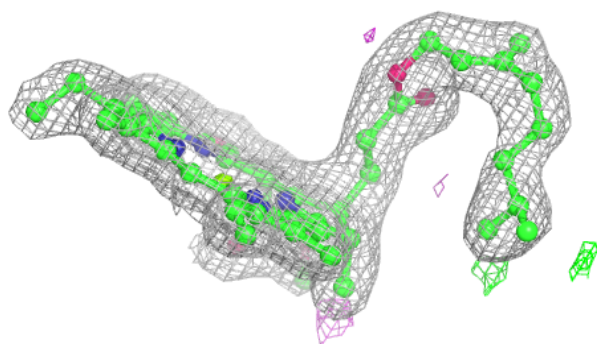
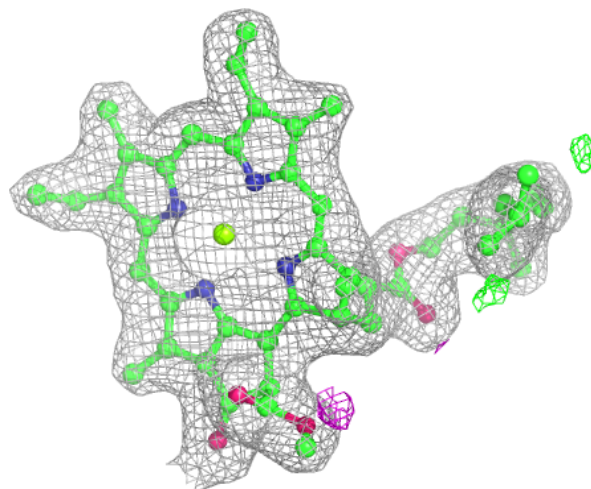
**Electron density around CLA a 408:**

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



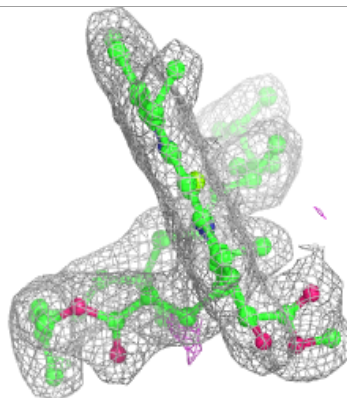
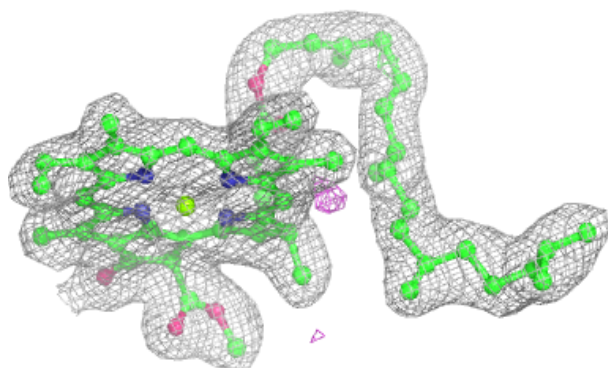
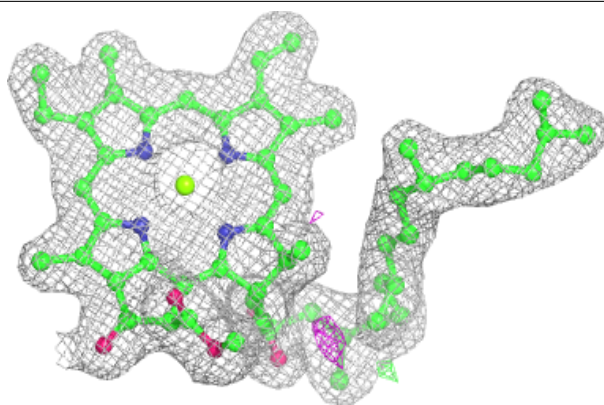
**Electron density around CLA A 406:**

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

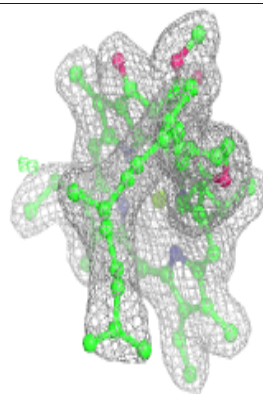
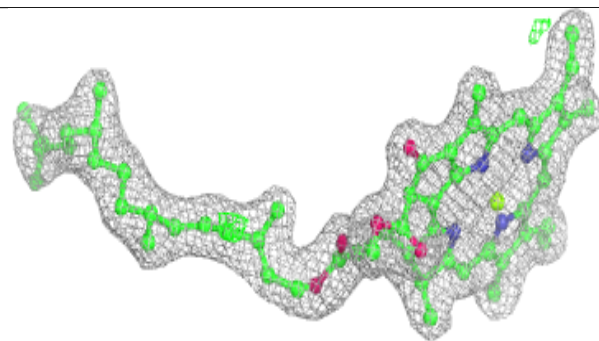
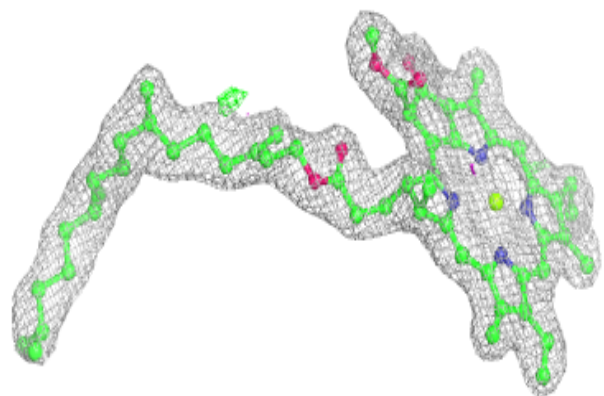


**Electron density around CLA D 401:**

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

**Electron density around CLA a 407:**

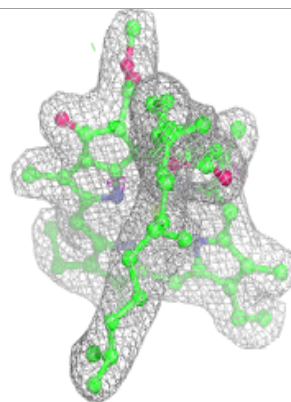
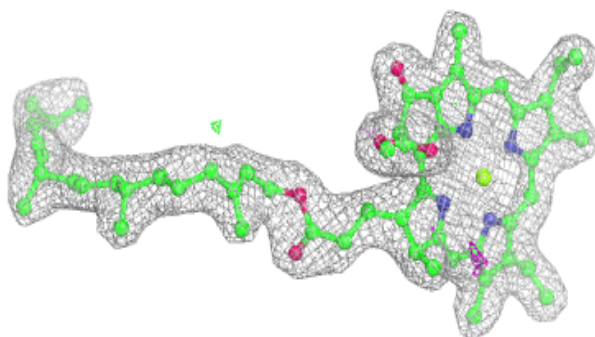
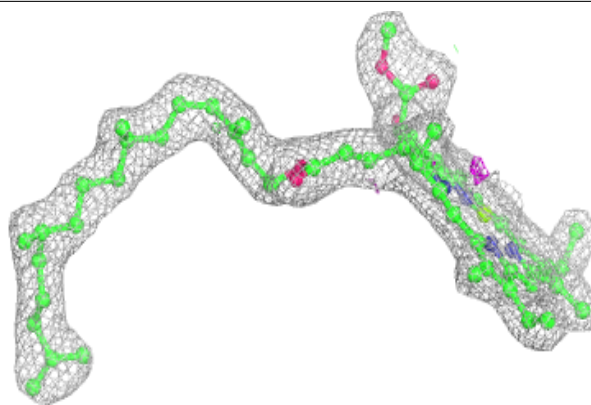
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



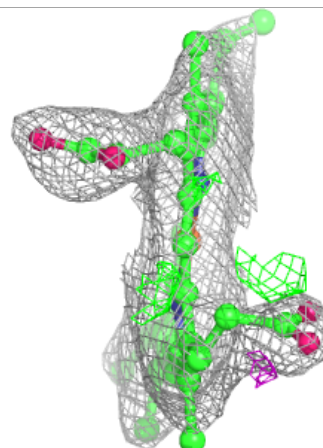
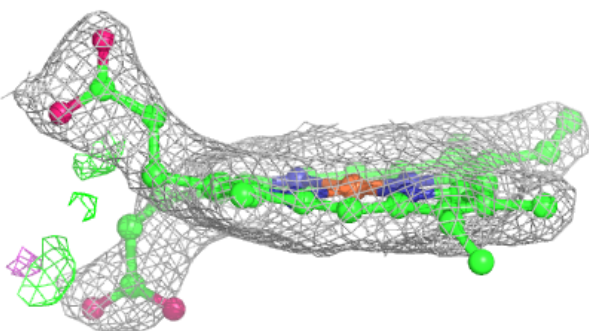
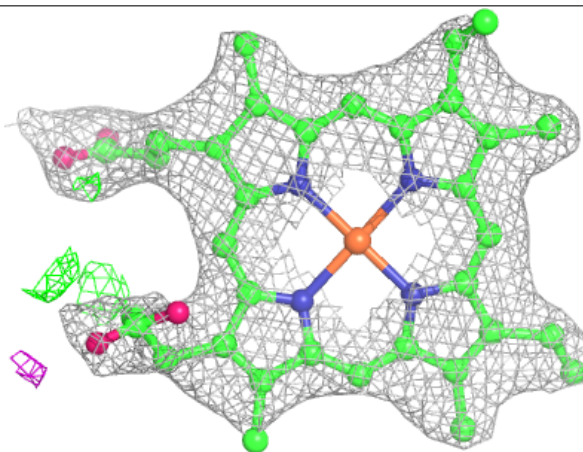


**Electron density around CLA d 402:**

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

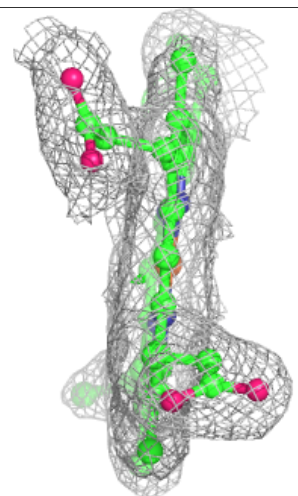
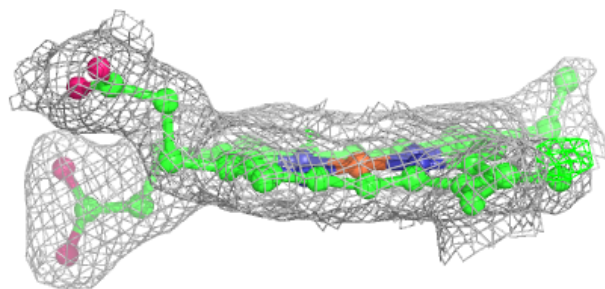
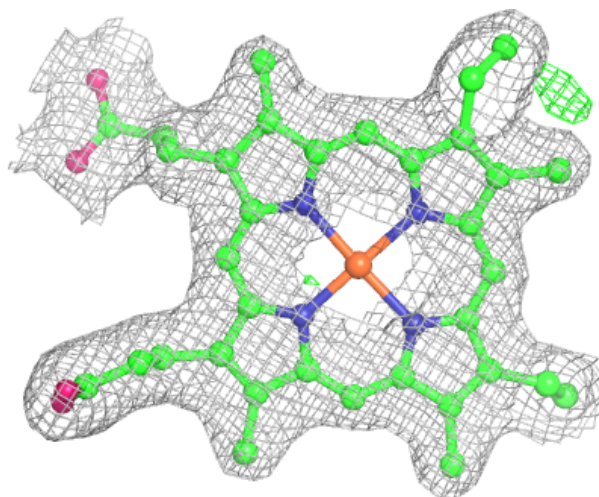
**Electron density around HEM e 101:**

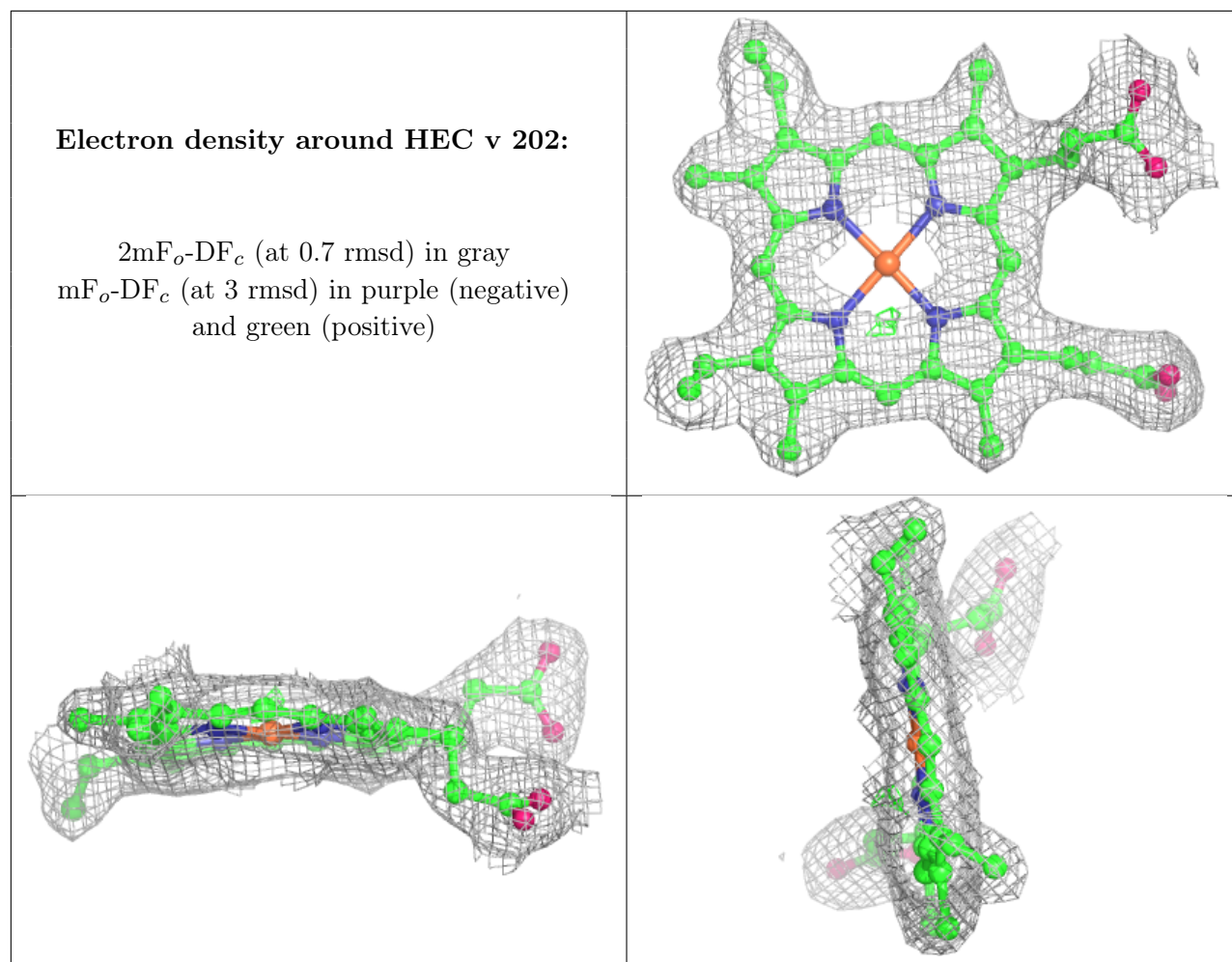
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around HEC V 202:**

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





## 6.5 Other polymers [i](#)

There are no such residues in this entry.