



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 12, 2024 – 03:11 PM JST

PDB ID : 8IR7
Title : XFEL structure of cyanobacterial photosystem II following one flash (1F) with a 200-nanosecond delay
Authors : Li, H.; Suga, M.; Shen, J.R.
Deposited on : 2023-03-17
Resolution : 2.25 Å (reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.36
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

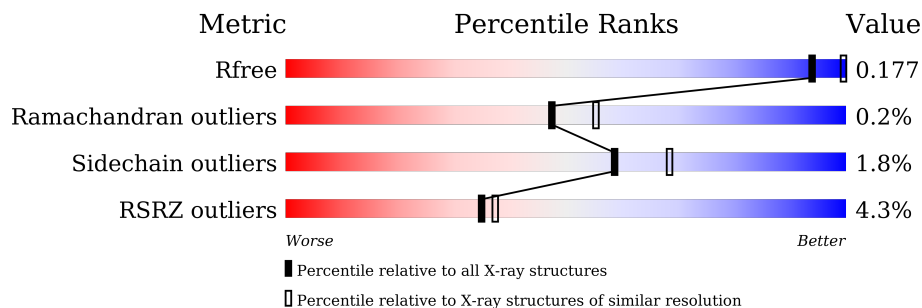
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.25 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.



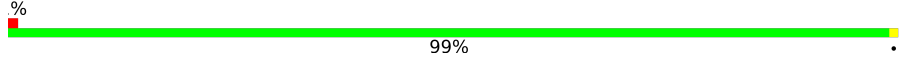
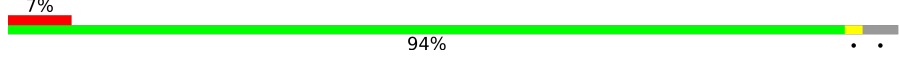
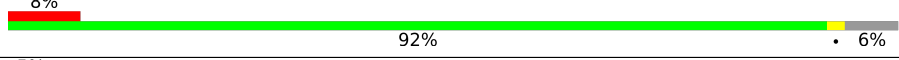


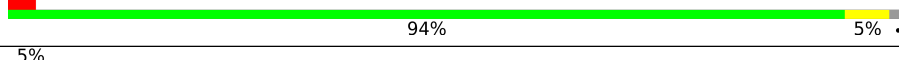
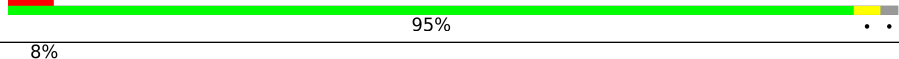
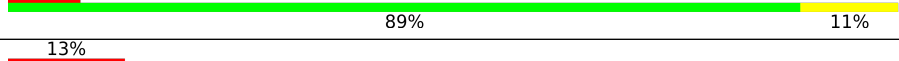
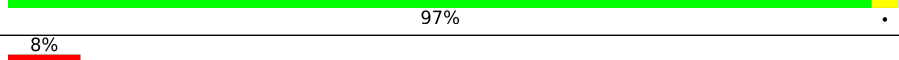
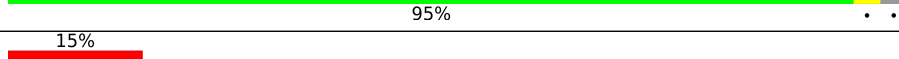
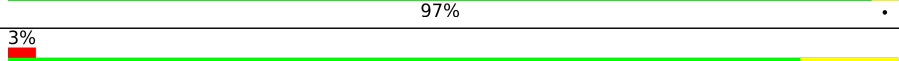
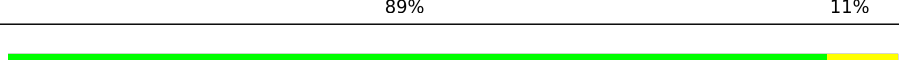
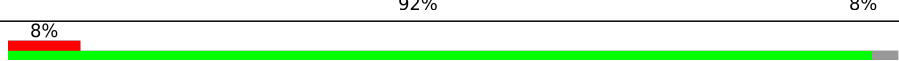
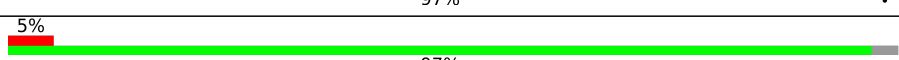
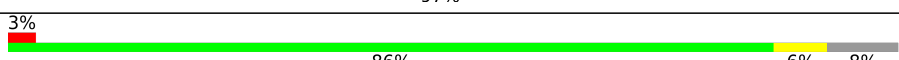
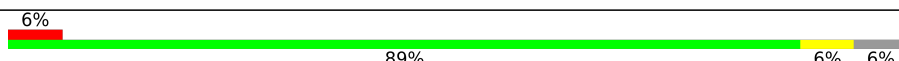
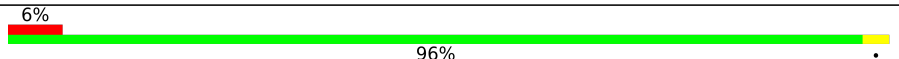
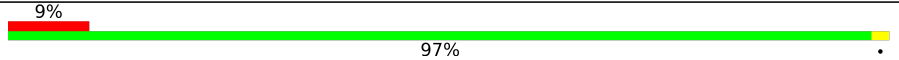

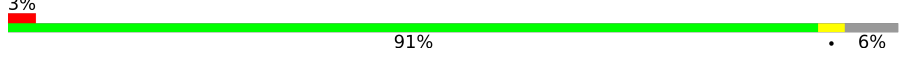
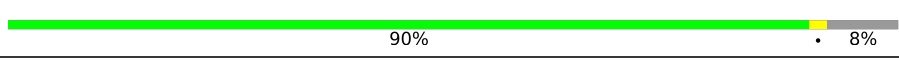
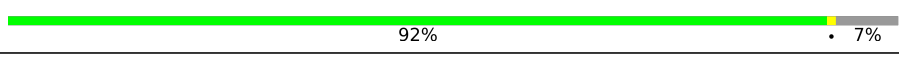
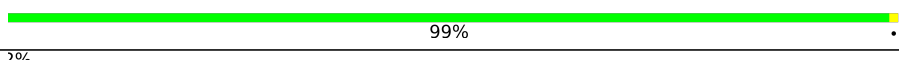
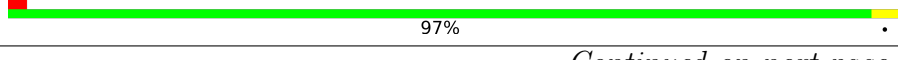

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1377 (2.26-2.26)
Ramachandran outliers	138981	1449 (2.26-2.26)
Sidechain outliers	138945	1450 (2.26-2.26)
RSRZ outliers	127900	1356 (2.26-2.26)

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

Mol	Chain	Length	Quality of chain
1	A	344	 97%
1	a	344	 97%
2	B	505	 99%
2	b	505	 99%
3	C	455	 98%
3	c	455	 99%
4	D	342	 99%

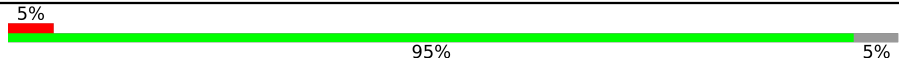
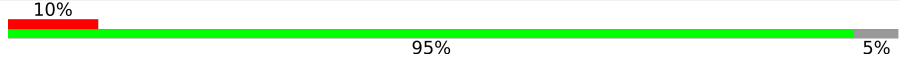
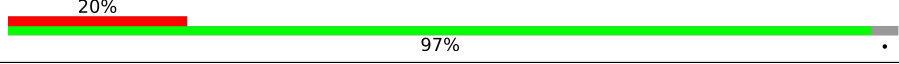
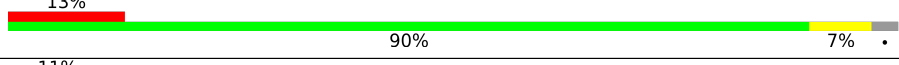
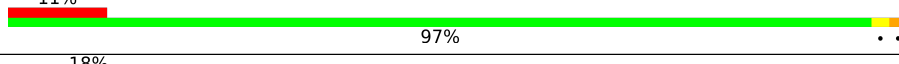
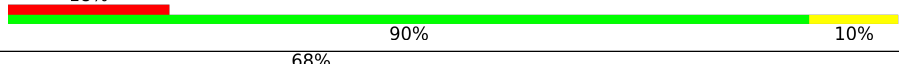
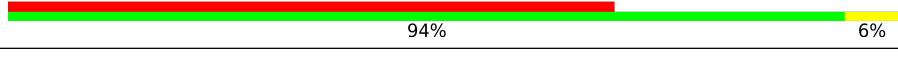
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Mol	Chain	Length	Quality of chain
4	d	342	 99%
5	E	84	 94%
5	e	84	 92% 6%
6	F	44	 77% 23%
6	f	44	 70% 30%
7	H	65	 94% 5%
7	h	65	 95%
8	I	38	 89% 11%
8	i	38	 97%
9	J	39	 95%
9	j	39	 97%
10	K	37	 89% 11%
10	k	37	 92% 8%
11	L	37	 97%
11	l	37	 97%
12	M	36	 86% 6% 8%
12	m	36	 89% 6% 6%
13	O	244	 96%
13	o	244	 97%
14	T	32	 88% 6% 6%
14	t	32	 91% 6%
15	U	104	 90% 8%
15	u	104	 92% 7%
16	V	137	 99%
16	v	137	 97%

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Mol	Chain	Length	Quality of chain
17	X	40	
17	x	40	
18	Y	30	
18	y	30	
19	Z	62	
19	z	62	
20	R	34	

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
23	CLA	A	404[A]	X	-	-	-
23	CLA	A	404[B]	X	-	-	-
23	CLA	A	405[B]	X	-	-	-
23	CLA	A	408	X	-	-	-
23	CLA	B	601	X	-	-	-
23	CLA	B	602	X	-	-	-
23	CLA	B	603	X	-	-	-
23	CLA	B	604	X	-	-	-
23	CLA	B	605	X	-	-	-
23	CLA	B	606	X	-	-	-
23	CLA	B	607	X	-	-	-
23	CLA	B	609	X	-	-	-
23	CLA	B	610	X	-	-	-
23	CLA	B	611	X	-	-	-
23	CLA	B	612	X	-	-	-
23	CLA	B	613	X	-	-	-
23	CLA	B	614	X	-	-	-
23	CLA	B	615	X	-	-	-
23	CLA	B	616	X	-	-	-
23	CLA	C	501	X	-	-	-
23	CLA	C	502	X	-	-	-
23	CLA	C	503	X	-	-	-
23	CLA	C	504	X	-	-	-
23	CLA	C	505	X	-	-	-
23	CLA	C	506	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CLA	C	507	X	-	-	-
23	CLA	C	509	X	-	-	-
23	CLA	C	510	X	-	-	-
23	CLA	C	511	X	-	-	-
23	CLA	C	512	X	-	-	-
23	CLA	C	513	X	-	-	-
23	CLA	D	403[A]	X	-	-	-
23	CLA	D	403[B]	X	-	-	-
23	CLA	D	404	X	-	-	-
23	CLA	a	404[A]	X	-	-	-
23	CLA	a	404[B]	X	-	-	-
23	CLA	a	407	X	-	-	-
23	CLA	b	601	X	-	-	-
23	CLA	b	602	X	-	-	-
23	CLA	b	603	X	-	-	-
23	CLA	b	604	X	-	-	-
23	CLA	b	605	X	-	-	-
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23	CLA	b	616	X	-	-	-
23	CLA	c	502	X	-	-	-
23	CLA	c	503	X	-	-	-
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23	CLA	c	505	X	-	-	-
23	CLA	c	506	X	-	-	-
23	CLA	c	507	X	-	-	-
23	CLA	c	508	X	-	-	-
23	CLA	c	509	X	-	-	-
23	CLA	c	510	X	-	-	-
23	CLA	c	511	X	-	-	-
23	CLA	c	512	X	-	-	-
23	CLA	c	513	X	-	-	-
23	CLA	c	514	X	-	-	-
23	CLA	d	402[A]	X	-	-	-
23	CLA	d	402[B]	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CLA	d	403[A]	X	-	-	-
23	CLA	d	403[B]	X	-	-	-
23	CLA	d	404	X	-	-	-
27	GOL	D	413	-	X	-	-
27	GOL	a	416	-	-	-	X
31	LMT	F	101	-	-	-	X
31	LMT	e	101	-	-	-	X
34	HTG	b	623	-	-	-	X

2 Entry composition [i](#)

There are 41 unique types of molecules in this entry. The entry contains 62674 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.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	334	4338	2836	717	760	25	0	222	0
1	a	334	4318	2821	715	757	25	0	220	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	279	PRO	ARG	conflict	UNP P51765
a	279	PRO	ARG	conflict	UNP P51765

- 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	504	4166	2735	694	724	13	0	22	0
2	b	504	4134	2718	687	716	13	0	19	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	4272	2796	715	743	18	0	99	0
3	c	455	4316	2827	720	751	18	0	101	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	19	ASN	-	expression tag	UNP D0VWR7
C	20	SER	-	expression tag	UNP D0VWR7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	21	ILE	-	expression tag	UNP D0VWR7
C	22	PHE	-	expression tag	UNP D0VWR7
c	19	ASN	-	expression tag	UNP D0VWR7
c	20	SER	-	expression tag	UNP D0VWR7
c	21	ILE	-	expression tag	UNP D0VWR7
c	22	PHE	-	expression tag	UNP D0VWR7

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	342	Total	C	N	O	S	0	115	0
			3625	2390	597	623	15			
4	d	341	Total	C	N	O	S	0	119	0
			3658	2412	605	626	15			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	0	0	0
			662	432	107	123			
5	e	79	Total	C	N	O	0	2	0
			670	439	110	121			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			
6	f	31	Total	C	N	O	S	0	1	0
			261	179	43	38	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	64	Total	C	N	O	S	0	0	0
			506	339	81	84	2			
7	h	64	Total	C	N	O	S	0	1	0
			517	345	85	85	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			
8	i	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	38	Total	C	N	O	S	0	0	0
			272	182	42	47	1			
9	j	39	Total	C	N	O	S	0	0	0
			277	185	43	48	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			
10	k	37	Total	C	N	O	0	0	0
			293	204	43	46			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	33	LEU	PHE	conflict	UNP P19054
K	39	TRP	VAL	conflict	UNP P19054
k	33	LEU	PHE	conflict	UNP P19054
k	39	TRP	VAL	conflict	UNP P19054

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	L	36	Total	C	N	O	0	2	0
			311	207	49	55			
11	l	36	Total	C	N	O	0	2	0
			311	207	49	55			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	33	Total	C	N	O	S	0	1	0
			268	179	39	49	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	m	34	286	190	43	52	1	0	2	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	8	LEU	PHE	conflict	UNP P12312
m	8	LEU	PHE	conflict	UNP P12312

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	O	243	1958	1221	335	398	4	0	10	0
13	o	243	1933	1207	330	392	4	0	8	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	T	30	311	213	48	48	2	0	6	0
14	t	30	302	208	47	45	2	0	5	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
15	U	96	800	508	133	159	0	4	0
15	u	97	815	519	135	161	0	5	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	V	137	1120	711	185	220	4	0	6	0
16	v	137	1117	712	185	216	4	0	6	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
17	X	38	Total	C	N	O	0	1	0
			289	194	46	49			
17	x	38	Total	C	N	O	0	0	0
			281	188	45	48			

- Molecule 18 is a protein called Photosystem II reaction center protein Ycf12.

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	34	Total	C	N	O	0	0	0
			273	186	47	40			

- Molecule 21 is FE (II) ION (three-letter code: FE2) (formula: Fe) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
21	A	1	Total	Fe	0	1
			2	2		
21	a	1	Total	Fe	0	1
			2	2		

- Molecule 22 is CHLORIDE ION (three-letter code: CL) (formula: Cl) (labeled as "Ligand of Interest" by depositor).

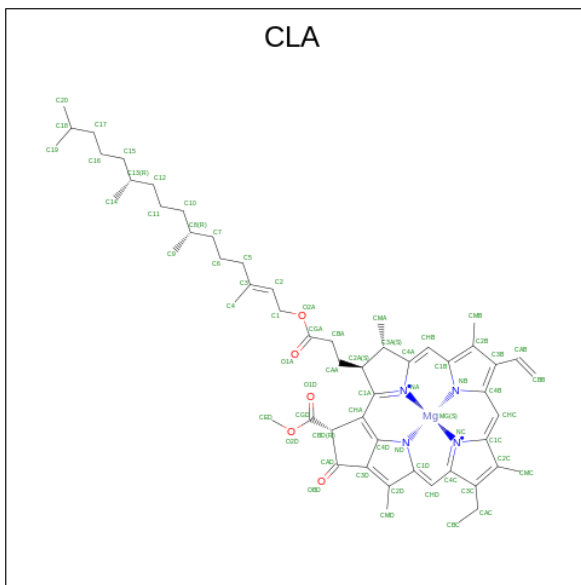
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	2	Total	Cl	0	2
			4	4		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	a	2	Total Cl 4 4	0	2

- Molecule 23 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



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

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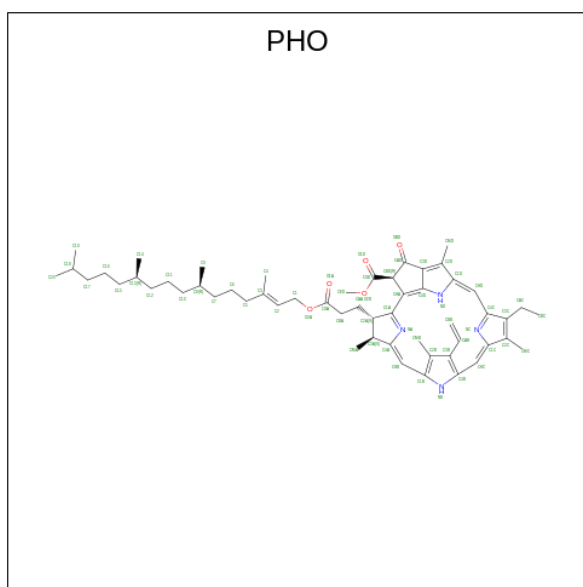
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	1
			130	110	2	8	10		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	a	1	Total	C	Mg	N	O	0	1
			130	110	2	8	10		
23	a	1	Total	C	Mg	N	O	0	1
			130	110	2	8	10		
23	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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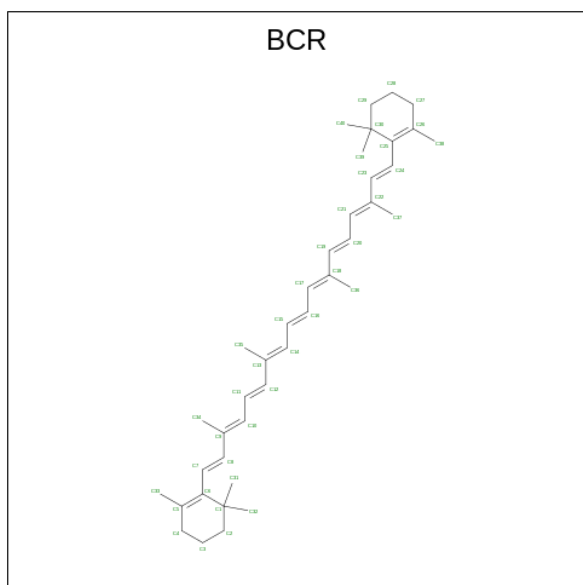
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	d	1	Total	C	Mg	N	O	0	1
			130	110	2	8	10		
23	d	1	Total	C	Mg	N	O	0	1
			130	110	2	8	10		
23	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 24 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



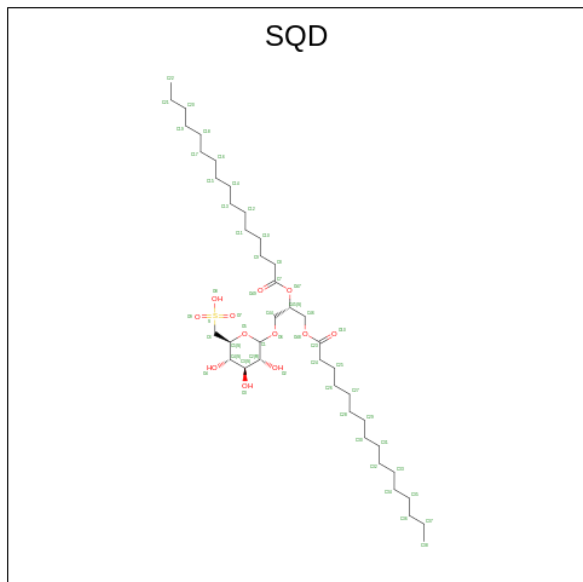
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
24	A	1	Total	C	N	O	0	1
			128	110	8	10		
24	A	1	Total	C	N	O	0	1
			128	110	8	10		
24	a	1	Total	C	N	O	0	1
			128	110	8	10		
24	a	1	Total	C	N	O	0	1
			128	110	8	10		

- Molecule 25 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



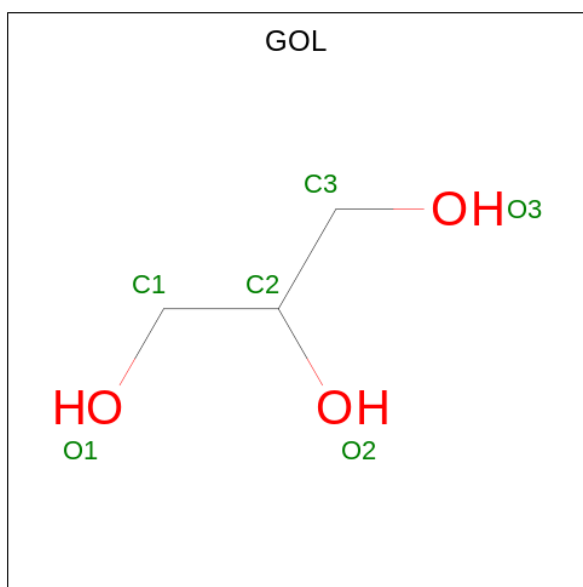
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	A	1	Total C 40 40	0	0
25	B	1	Total C 40 40	0	0
25	B	1	Total C 40 40	0	0
25	B	1	Total C 40 40	0	0
25	C	1	Total C 40 40	0	0
25	C	1	Total C 40 40	0	0
25	D	1	Total C 40 40	0	0
25	H	1	Total C 40 40	0	0
25	K	1	Total C 40 40	0	0
25	T	1	Total C 40 40	0	0
25	Y	1	Total C 40 40	0	0
25	a	1	Total C 40 40	0	0
25	b	1	Total C 40 40	0	0
25	b	1	Total C 40 40	0	0
25	b	1	Total C 40 40	0	0
25	c	1	Total C 40 40	0	0
25	c	1	Total C 40 40	0	0
25	d	1	Total C 40 40	0	0
25	h	1	Total C 40 40	0	0
25	k	1	Total C 40 40	0	0
25	t	1	Total C 40 40	0	0
25	y	1	Total C 40 40	0	0

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



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
26	A	1	Total 108	C 82	O 24	S 2	0	1
26	A	1	Total 54	C 41	O 12	S 1	0	0
26	B	1	Total 54	C 41	O 12	S 1	0	0
26	F	1	Total 43	C 30	O 12	S 1	0	0
26	a	1	Total 108	C 82	O 24	S 2	0	1
26	a	1	Total 54	C 41	O 12	S 1	0	0
26	b	1	Total 54	C 41	O 12	S 1	0	0
26	f	1	Total 43	C 30	O 12	S 1	0	0

- Molecule 27 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



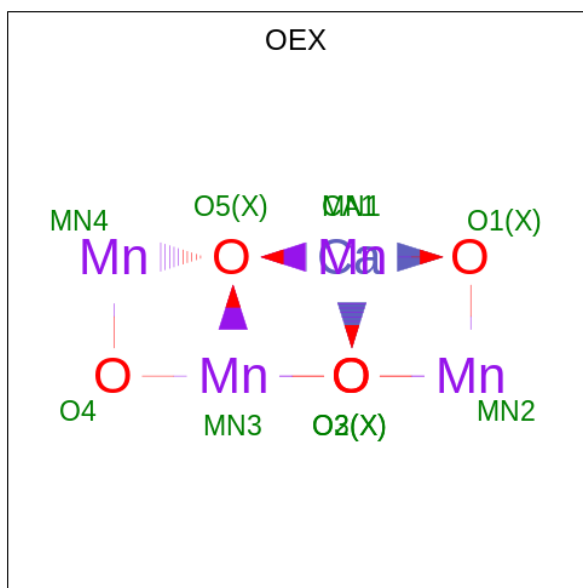
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C O 6 3 3	0	0
27	B	1	Total C O 6 3 3	0	0
27	B	1	Total C O 6 3 3	0	0
27	B	1	Total C O 6 3 3	0	0
27	C	1	Total C O 12 6 6	0	1
27	D	1	Total C O 6 3 3	0	0
27	D	1	Total C O 6 3 3	0	0
27	O	1	Total C O 6 3 3	0	0
27	O	1	Total C O 6 3 3	0	0
27	V	1	Total C O 12 6 6	0	1
27	a	1	Total C O 6 3 3	0	0
27	a	1	Total C O 6 3 3	0	0
27	b	1	Total C O 6 3 3	0	0
27	b	1	Total C O 6 3 3	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
27	c	1	Total	C	O	0	1
			12	6	6		
27	c	1	Total	C	O	0	0
			6	3	3		
27	d	1	Total	C	O	0	0
			6	3	3		
27	l	1	Total	C	O	0	1
			12	6	6		
27	o	1	Total	C	O	0	0
			6	3	3		
27	o	1	Total	C	O	0	0
			6	3	3		
27	v	1	Total	C	O	0	1
			12	6	6		

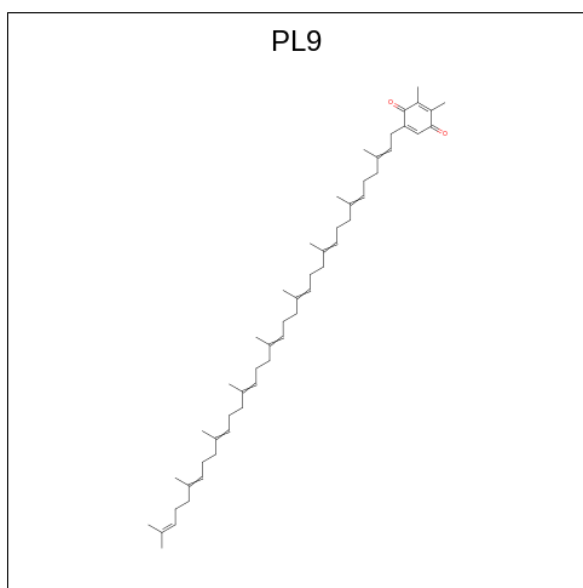
- Molecule 28 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn_4O_5) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
28	A	1	Total	Ca	Mn	O	0	1
			20	2	8	10		
28	a	1	Total	Ca	Mn	O	0	1
			20	2	8	10		

- Molecule 29 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (three-letter code: PL9) (formula:

C₅₃H₈₀O₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A	1	Total	C	O	0	1
			110	106	4		
29	D	1	Total	C	O	0	1
			110	106	4		
29	a	1	Total	C	O	0	1
			110	106	4		
29	d	1	Total	C	O	0	1
			110	106	4		

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

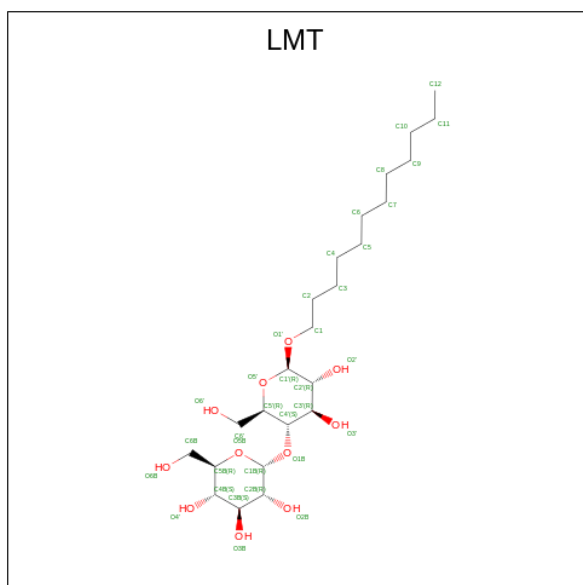
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
30	A	1	Total	C	O	0	0
			28	23	5		
30	B	1	Total	C	O	0	0
			33	28	5		
30	D	2	Total	C	O	0	0
			57	51	6		
30	I	1	Total	C	O	0	0
			40	35	5		
30	J	1	Total	C		0	0
			10	10			
30	K	1	Total	C	O	0	1
			68	58	10		
30	X	1	Total	C	O	0	0
			18	16	2		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
30	a	1	Total	C	O	0	0
			30	25	5		
30	b	1	Total	C	O	0	0
			33	28	5		
30	c	1	Total	C	O	0	1
			64	54	10		
30	d	2	Total	C	O	0	0
			53	47	6		
30	i	1	Total	C	O	0	0
			40	35	5		
30	j	1	Total	C		0	0
			10	10			
30	l	1	Total	C		0	0
			10	10			
30	m	1	Total	C		0	0
			10	10			
30	x	1	Total	C	O	0	0
			18	16	2		

- Molecule 31 is DODECYL-BETA-D-MALTOSE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



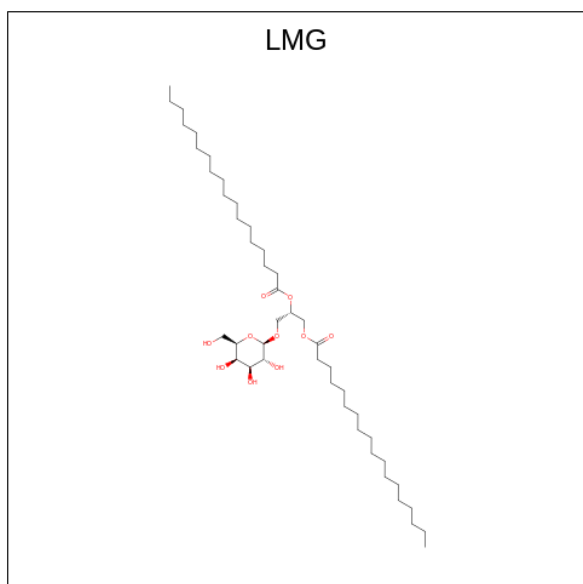
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	A	1	Total	C	O	0	0
			35	24	11		
31	A	1	Total	C	O	0	0
			35	24	11		

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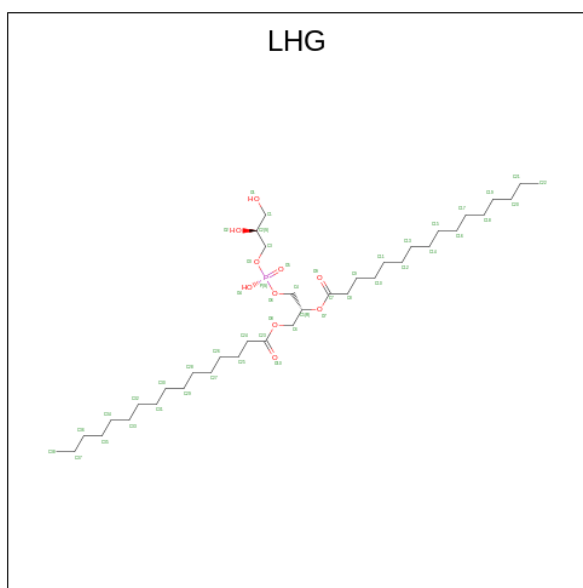
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	B	1	Total	C	O	0	0
			35	24	11		
31	B	1	Total	C	O	0	0
			35	24	11		
31	B	1	Total	C	O	0	0
			25	19	6		
31	F	1	Total	C	O	0	0
			35	24	11		
31	M	1	Total	C	O	0	0
			35	24	11		
31	M	1	Total	C	O	0	0
			35	24	11		
31	a	1	Total	C	O	0	0
			35	24	11		
31	b	1	Total	C	O	0	0
			25	19	6		
31	b	1	Total	C	O	0	0
			25	19	6		
31	e	1	Total	C	O	0	0
			35	24	11		
31	m	1	Total	C	O	0	0
			35	24	11		
31	t	1	Total	C	O	0	0
			26	19	7		

- Molecule 32 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



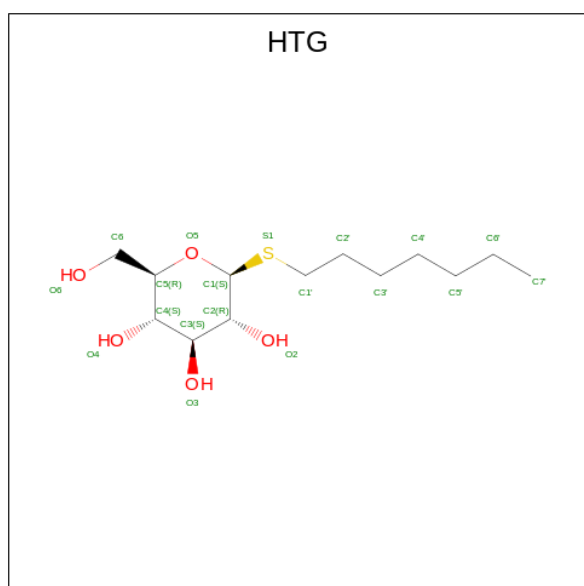
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	0
			51	41	10		
32	B	1	Total	C	O	0	0
			51	41	10		
32	C	1	Total	C	O	0	0
			51	41	10		
32	C	1	Total	C	O	0	0
			51	41	10		
32	D	1	Total	C	O	0	0
			51	41	10		
32	c	1	Total	C	O	0	0
			51	41	10		
32	c	1	Total	C	O	0	0
			51	41	10		
32	c	1	Total	C	O	0	0
			51	41	10		
32	d	1	Total	C	O	0	0
			51	41	10		
32	m	1	Total	C	O	0	0
			51	41	10		
32	Z	1	Total	C	O	0	0
			37	27	10		
32	z	1	Total	C	O	0	0
			39	29	10		

- Molecule 33 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	A	1	Total	C	O	P	0	1
			98	76	20	2		
33	D	1	Total	C	O	P	0	1
			98	76	20	2		
33	D	1	Total	C	O	P	0	1
			98	76	20	2		
33	E	1	Total	C	O	P	0	1
			84	62	20	2		
33	L	1	Total	C	O	P	0	1
			98	76	20	2		
33	a	1	Total	C	O	P	0	1
			84	62	20	2		
33	b	1	Total	C	O	P	0	1
			98	76	20	2		
33	d	1	Total	C	O	P	0	1
			98	76	20	2		
33	d	1	Total	C	O	P	0	1
			98	76	20	2		
33	d	1	Total	C	O	P	0	1
			98	76	20	2		

- Molecule 34 is heptyl 1-thio-beta-D-glucopyranoside (three-letter code: HTG) (formula: $C_{13}H_{26}O_5S$).



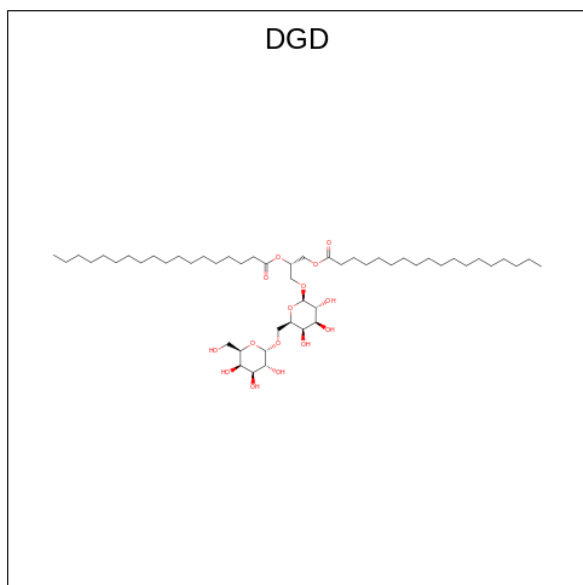
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	B	1	Total	C	O	S	0	0
			19	13	5	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
34	B	1	Total 19	C 13	O 5	S 1	0	0
34	B	1	Total 19	C 13	O 5	S 1	0	0
34	C	1	Total 19	C 13	O 5	S 1	0	0
34	D	1	Total 16	C 10	O 5	S 1	0	0
34	V	1	Total 11	C 6	O 5		0	0
34	b	1	Total 19	C 13	O 5	S 1	0	0
34	b	1	Total 19	C 13	O 5	S 1	0	0
34	b	1	Total 19	C 13	O 5	S 1	0	0
34	c	1	Total 19	C 13	O 5	S 1	0	0
34	d	1	Total 16	C 10	O 5	S 1	0	0

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



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
35	C	1	Total 124	C 94	O 30	0	1

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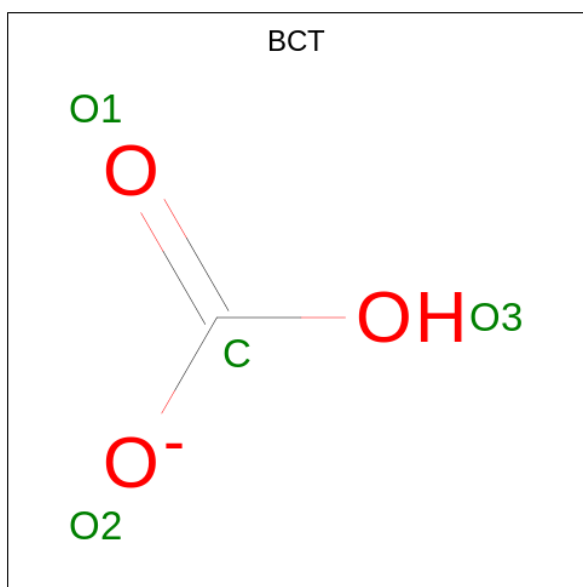
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
35	C	1	Total	C	O	0	1
			124	94	30		
35	C	1	Total	C	O	0	0
			62	47	15		
35	H	1	Total	C	O	0	0
			62	47	15		
35	c	1	Total	C	O	0	1
			124	94	30		
35	c	1	Total	C	O	0	1
			124	94	30		
35	c	1	Total	C	O	0	0
			62	47	15		
35	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 36 is CALCIUM ION (three-letter code: CA) (formula: Ca).

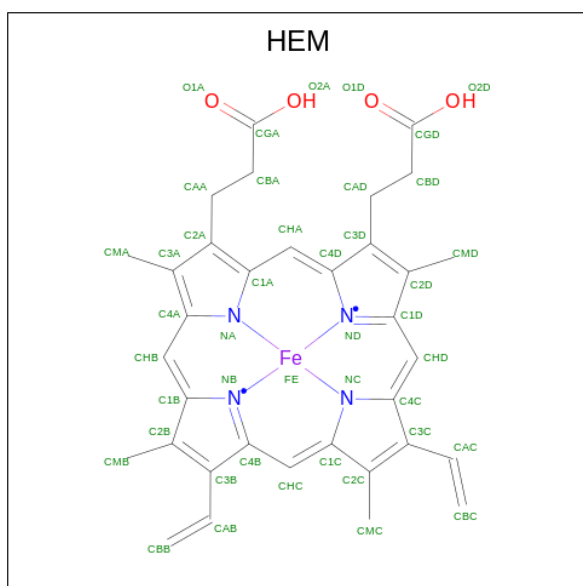
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
36	C	1	Total	Ca	0	0
			1	1		
36	F	1	Total	Ca	0	0
			1	1		
36	O	1	Total	Ca	0	0
			1	1		
36	c	2	Total	Ca	0	0
			2	2		
36	f	1	Total	Ca	0	0
			1	1		
36	o	1	Total	Ca	0	0
			1	1		

- Molecule 37 is BICARBONATE ION (three-letter code: BCT) (formula: CHO₃) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
37	D	1	Total	C	O	0	1
			8	2	6		
37	d	1	Total	C	O	0	1
			8	2	6		

- Molecule 38 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



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

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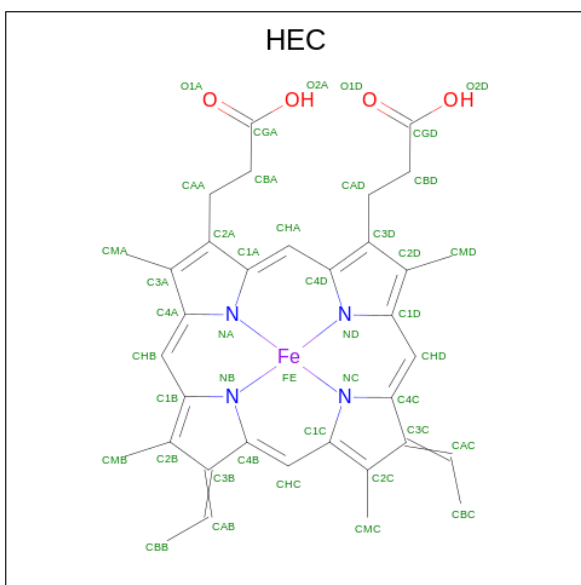
Continued from previous page...

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

- Molecule 39 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
39	J	1	Total	Mg	0	0
			1	1		
39	j	1	Total	Mg	0	0
			1	1		

- Molecule 40 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



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

- Molecule 41 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
41	A	136	Total	O	0	86
			221	221		
41	B	189	Total	O	0	2
			191	191		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
41	C	169	Total O 206 206	0	38
41	D	123	Total O 157 157	0	34
41	E	15	Total O 15 15	0	0
41	F	6	Total O 6 6	0	0
41	H	23	Total O 23 23	0	0
41	I	4	Total O 4 4	0	0
41	J	7	Total O 7 7	0	0
41	K	6	Total O 6 6	0	0
41	L	9	Total O 10 10	0	1
41	M	5	Total O 5 5	0	0
41	O	106	Total O 111 111	0	5
41	T	11	Total O 14 14	0	3
41	U	42	Total O 44 44	0	2
41	V	80	Total O 81 81	0	1
41	X	7	Total O 7 7	0	0
41	a	129	Total O 209 209	0	81
41	b	199	Total O 202 202	0	3
41	c	158	Total O 191 191	0	34
41	d	121	Total O 153 153	0	32
41	e	9	Total O 9 9	0	0
41	f	3	Total O 3 3	0	0

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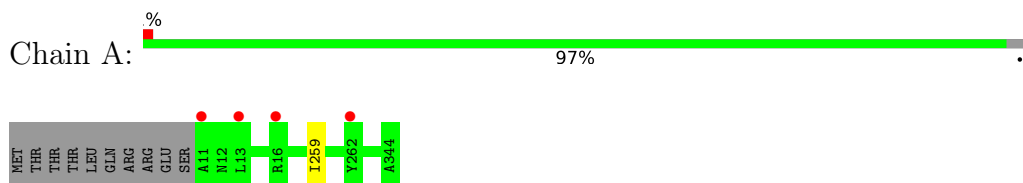
Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
41	h	16	Total O 16 16	0	0
41	i	2	Total O 2 2	0	0
41	j	2	Total O 2 2	0	0
41	k	3	Total O 3 3	0	0
41	l	8	Total O 10 10	0	2
41	m	13	Total O 13 13	0	0
41	o	100	Total O 104 104	0	4
41	t	7	Total O 10 10	0	3
41	u	49	Total O 50 50	0	1
41	v	59	Total O 61 61	0	2
41	x	7	Total O 7 7	0	0
41	y	2	Total O 2 2	0	0

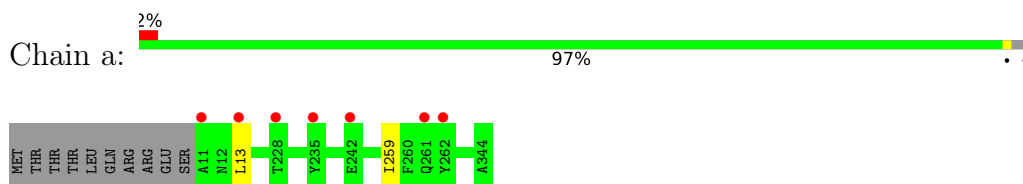
3 Residue-property plots [i](#)

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.

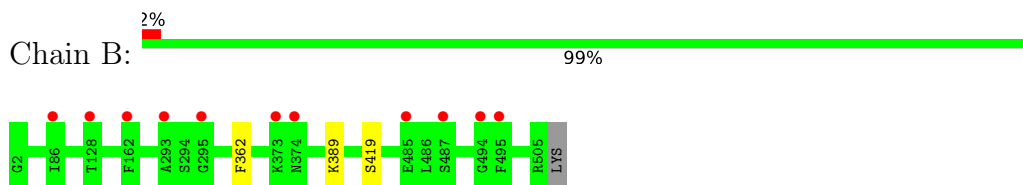
- Molecule 1: Photosystem II protein D1



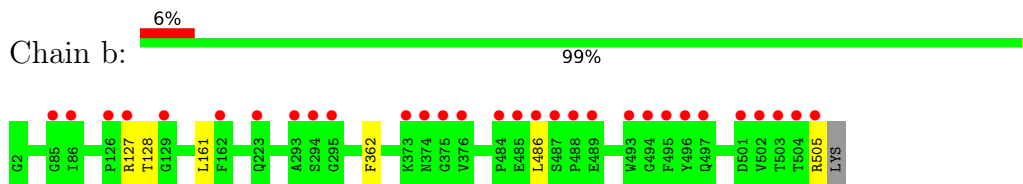
- Molecule 1: Photosystem II protein D1



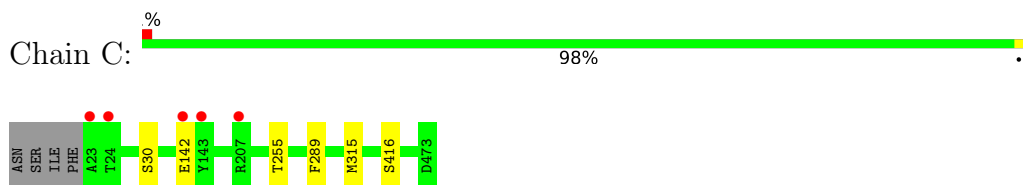
- Molecule 2: Photosystem II CP47 reaction center protein



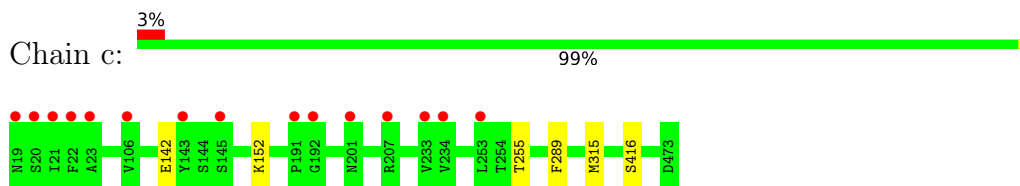
- Molecule 2: Photosystem II CP47 reaction center protein



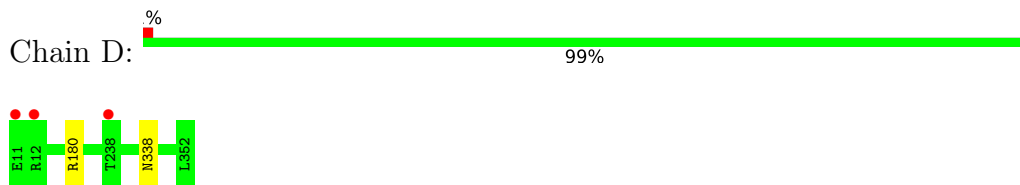
- Molecule 3: Photosystem II CP43 reaction center protein



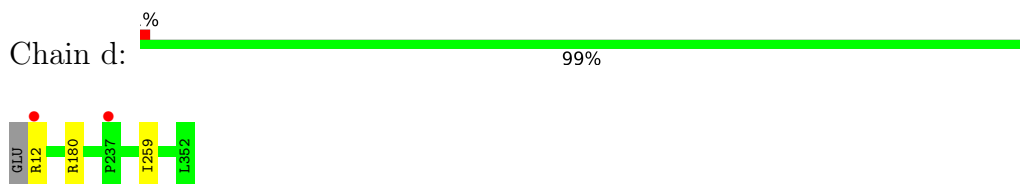
- Molecule 3: Photosystem II CP43 reaction center protein



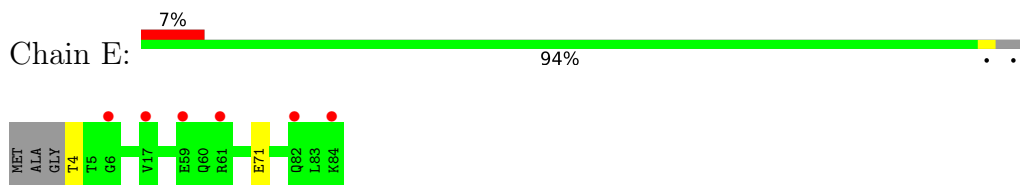
- Molecule 4: Photosystem II D2 protein



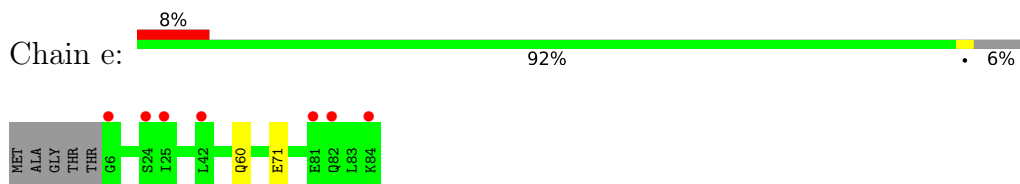
- Molecule 4: Photosystem II D2 protein



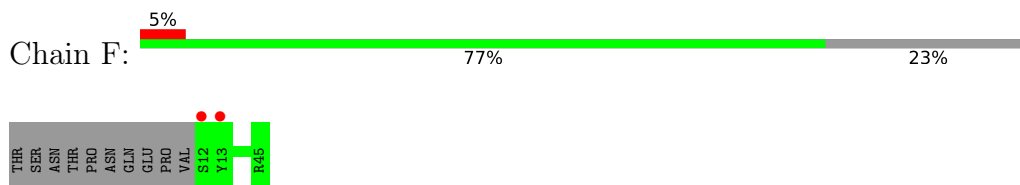
- Molecule 5: Cytochrome b559 subunit alpha



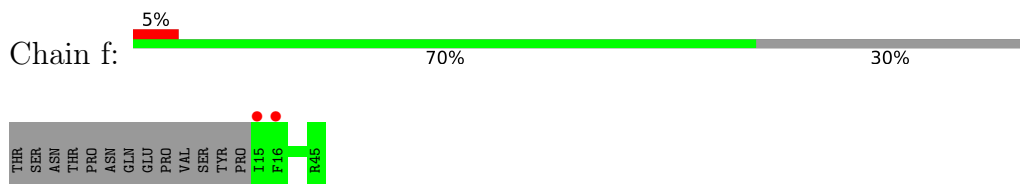
- Molecule 5: Cytochrome b559 subunit alpha



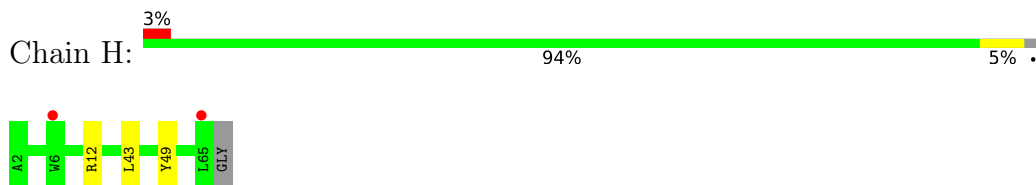
- Molecule 6: Cytochrome b559 subunit beta



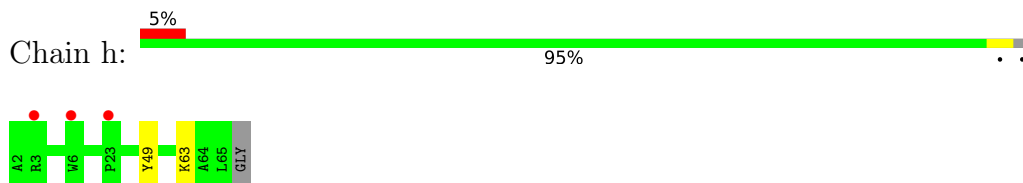
- Molecule 6: Cytochrome b559 subunit beta



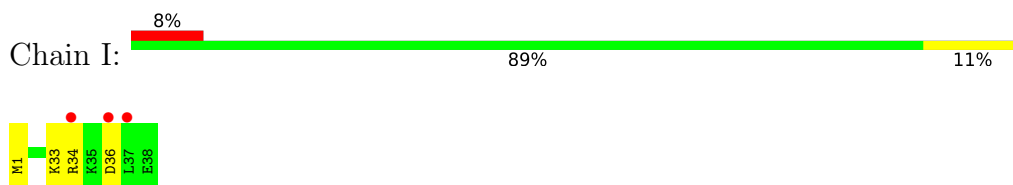
- Molecule 7: Photosystem II reaction center protein H



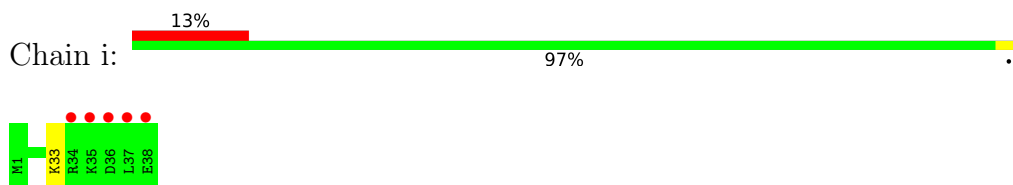
- Molecule 7: Photosystem II reaction center protein H



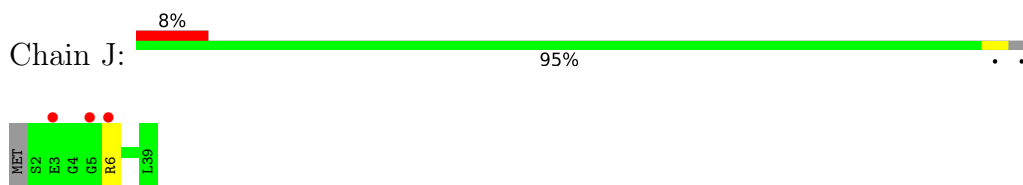
- Molecule 8: Photosystem II reaction center protein I



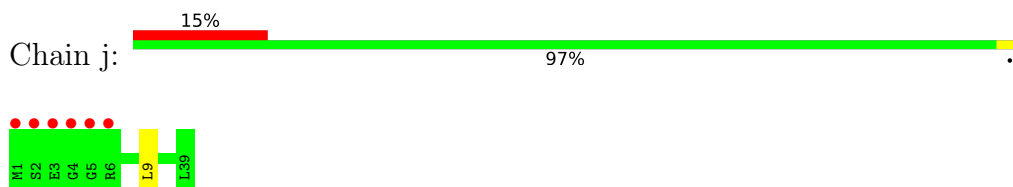
- Molecule 8: Photosystem II reaction center protein I



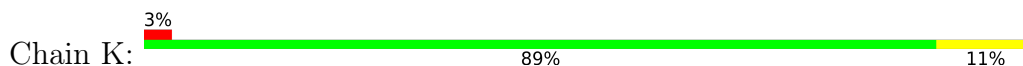
- Molecule 9: Photosystem II reaction center protein J

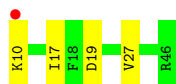


- Molecule 9: Photosystem II reaction center protein J



- Molecule 10: Photosystem II reaction center protein K

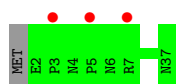




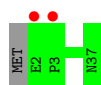
- Molecule 10: Photosystem II reaction center protein K



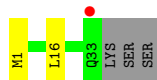
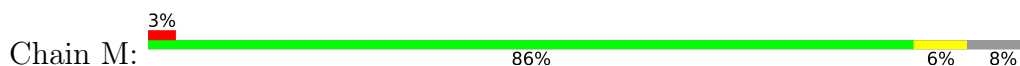
- Molecule 11: Photosystem II reaction center protein L



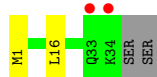
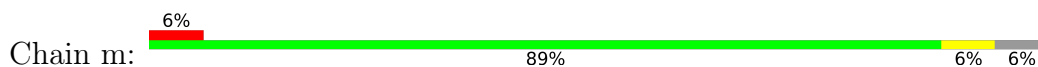
- Molecule 11: Photosystem II reaction center protein L



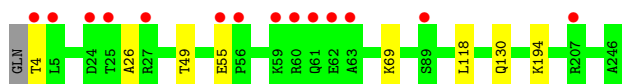
- Molecule 12: Photosystem II reaction center protein M



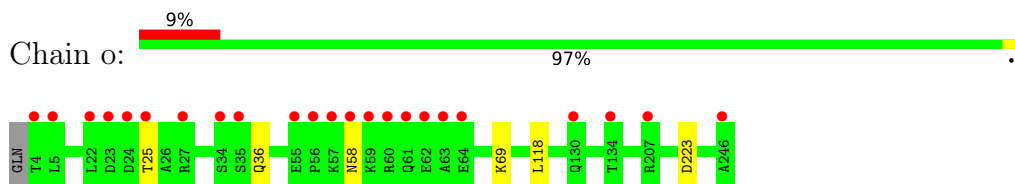
- Molecule 12: Photosystem II reaction center protein M



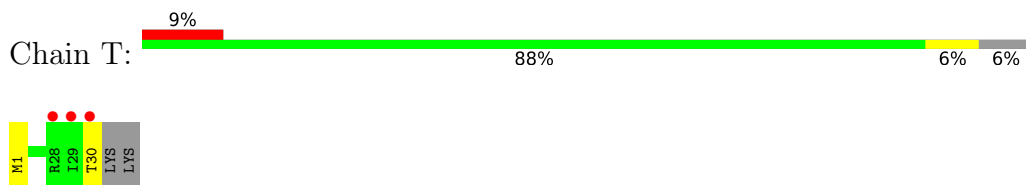
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



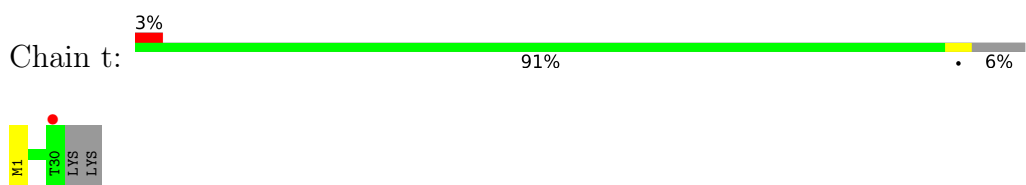
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



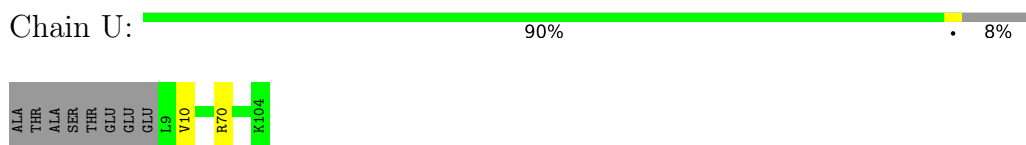
- Molecule 14: Photosystem II reaction center protein T



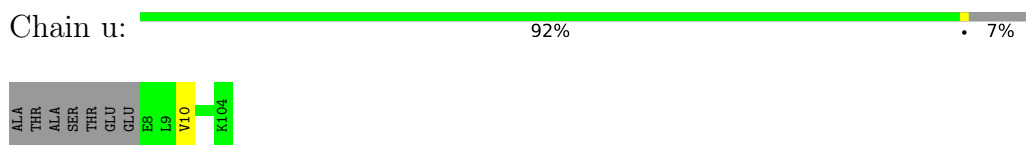
- Molecule 14: Photosystem II reaction center protein T



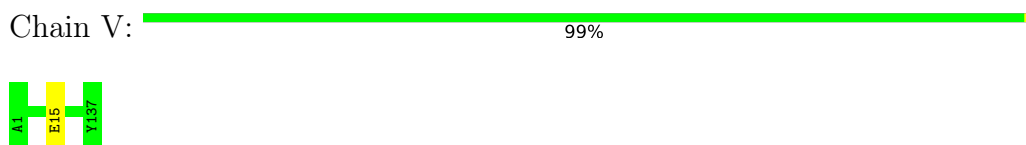
- Molecule 15: Photosystem II 12 kDa extrinsic protein



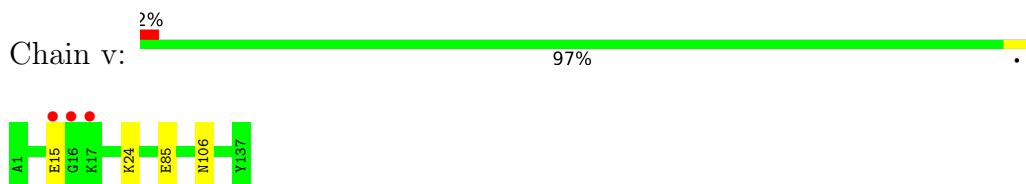
- Molecule 15: Photosystem II 12 kDa extrinsic protein



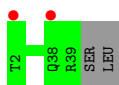
- Molecule 16: Cytochrome c-550



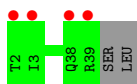
- Molecule 16: Cytochrome c-550



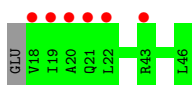
- Molecule 17: Photosystem II reaction center protein X



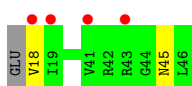
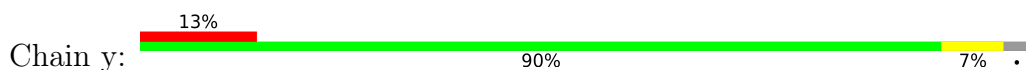
- Molecule 17: Photosystem II reaction center protein X



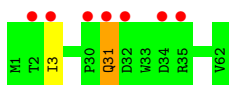
- Molecule 18: Photosystem II reaction center protein Ycf12



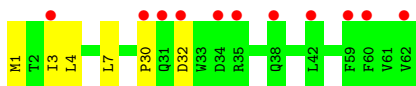
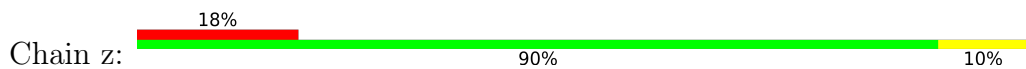
- Molecule 18: Photosystem II reaction center protein Ycf12



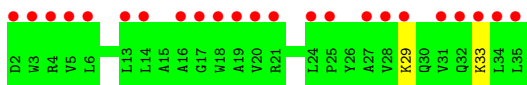
- Molecule 19: Photosystem II reaction center protein Z



- Molecule 19: Photosystem II reaction center protein Z



- Molecule 20: Photosystem II protein Y



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	125.75Å 231.60Å 288.28Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.98 – 2.25 19.98 – 2.25	Depositor EDS
% Data completeness (in resolution range)	99.9 (19.98-2.25) 99.9 (19.98-2.25)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.69 (at 2.26Å)	Xtrriage
Refinement program	PHENIX (1.19.2_4158: ???)	Depositor
R, R_{free}	0.140 , 0.177 0.140 , 0.177	Depositor DCC
R_{free} test set	19819 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å ²)	50.3	Xtrriage
Anisotropy	0.516	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.35 , 86.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.50$, $\langle L^2 \rangle = 0.34$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.98	EDS
Total number of atoms	62674	wwPDB-VP
Average B, all atoms (Å ²)	65.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.71% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

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

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.42	0/4478	0.58	0/6098
1	a	0.42	0/4457	0.56	0/6069
2	B	0.43	0/4314	0.58	0/5879
2	b	0.41	0/4285	0.57	0/5841
3	C	0.40	0/4416	0.56	0/6013
3	c	0.40	0/4467	0.54	0/6082
4	D	0.45	0/3746	0.60	0/5102
4	d	0.44	0/3780	0.57	0/5147
5	E	0.40	0/681	0.57	0/928
5	e	0.38	0/690	0.54	0/939
6	F	0.38	0/284	0.55	0/387
6	f	0.37	0/269	0.50	0/365
7	H	0.38	0/519	0.60	0/708
7	h	0.36	0/530	0.57	0/722
8	I	0.35	0/311	0.53	0/419
8	i	0.40	0/311	0.55	0/419
9	J	0.38	0/278	0.53	0/376
9	j	0.36	0/283	0.55	0/383
10	K	0.39	0/303	0.52	0/416
10	k	0.39	0/303	0.51	0/416
11	L	0.41	0/318	0.56	0/433
11	l	0.43	0/318	0.55	0/433
12	M	0.45	0/261	0.51	0/357
12	m	0.39	0/279	0.51	0/380
13	O	0.42	0/1991	0.64	0/2698
13	o	0.39	0/1966	0.63	1/2665 (0.0%)
14	T	0.45	0/310	0.62	0/419
14	t	0.43	0/301	0.58	0/406
15	U	0.43	0/811	0.62	0/1095
15	u	0.44	0/826	0.62	0/1116
16	V	0.40	0/1142	0.58	0/1545

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.37	0/1139	0.55	0/1542
17	X	0.32	0/292	0.47	0/395
17	x	0.32	0/284	0.48	0/384
18	Y	0.33	0/216	0.52	0/289
18	y	0.30	0/216	0.50	0/289
19	Z	0.31	0/490	0.44	0/669
19	z	0.31	0/490	0.43	0/669
20	R	0.33	0/279	0.52	0/383
All	All	0.41	0/50634	0.57	1/68876 (0.0%)

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	o	223	ASP	CB-CG-OD1	5.21	122.99	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	553/344 (161%)	544 (98%)	7 (1%)	2 (0%)	34	37
1	a	551/344 (160%)	539 (98%)	10 (2%)	2 (0%)	34	37
2	B	524/505 (104%)	516 (98%)	8 (2%)	0	100	100
2	b	521/505 (103%)	510 (98%)	11 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	C	548/455 (120%)	537 (98%)	10 (2%)	1 (0%)	47	55
3	c	554/455 (122%)	543 (98%)	10 (2%)	1 (0%)	47	55
4	D	454/342 (133%)	440 (97%)	14 (3%)	0	100	100
4	d	457/342 (134%)	444 (97%)	13 (3%)	0	100	100
5	E	79/84 (94%)	78 (99%)	1 (1%)	0	100	100
5	e	79/84 (94%)	79 (100%)	0	0	100	100
6	F	32/44 (73%)	32 (100%)	0	0	100	100
6	f	30/44 (68%)	30 (100%)	0	0	100	100
7	H	62/65 (95%)	62 (100%)	0	0	100	100
7	h	63/65 (97%)	59 (94%)	3 (5%)	1 (2%)	9	5
8	I	36/38 (95%)	33 (92%)	2 (6%)	1 (3%)	5	2
8	i	36/38 (95%)	32 (89%)	4 (11%)	0	100	100
9	J	36/39 (92%)	35 (97%)	1 (3%)	0	100	100
9	j	37/39 (95%)	37 (100%)	0	0	100	100
10	K	35/37 (95%)	35 (100%)	0	0	100	100
10	k	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
11	L	36/37 (97%)	36 (100%)	0	0	100	100
11	l	36/37 (97%)	36 (100%)	0	0	100	100
12	M	32/36 (89%)	32 (100%)	0	0	100	100
12	m	34/36 (94%)	34 (100%)	0	0	100	100
13	O	251/244 (103%)	242 (96%)	8 (3%)	1 (0%)	34	37
13	o	249/244 (102%)	243 (98%)	6 (2%)	0	100	100
14	T	33/32 (103%)	33 (100%)	0	0	100	100
14	t	32/32 (100%)	32 (100%)	0	0	100	100
15	U	97/104 (93%)	93 (96%)	4 (4%)	0	100	100
15	u	99/104 (95%)	95 (96%)	4 (4%)	0	100	100
16	V	140/137 (102%)	137 (98%)	3 (2%)	0	100	100
16	v	140/137 (102%)	134 (96%)	6 (4%)	0	100	100
17	X	37/40 (92%)	36 (97%)	1 (3%)	0	100	100
17	x	36/40 (90%)	36 (100%)	0	0	100	100
18	Y	27/30 (90%)	24 (89%)	3 (11%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	y	27/30 (90%)	26 (96%)	1 (4%)	0	100	100
19	Z	60/62 (97%)	58 (97%)	1 (2%)	1 (2%)	9	4
19	z	60/62 (97%)	59 (98%)	0	1 (2%)	9	4
20	R	32/34 (94%)	31 (97%)	1 (3%)	0	100	100
All	All	6180/5384 (115%)	6036 (98%)	133 (2%)	11 (0%)	47	55

All (11) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
8	I	36	ASP
3	c	416	SER
19	Z	31	GLN
13	O	26	ALA
19	z	30	PRO
7	h	63	LYS
1	A	259[A]	ILE
1	A	259[B]	ILE
1	a	259[A]	ILE
1	a	259[B]	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	444/279 (159%)	444 (100%)	0	100	100
1	a	442/279 (158%)	441 (100%)	1 (0%)	93	96
2	B	423/403 (105%)	420 (99%)	3 (1%)	84	90
2	b	420/403 (104%)	413 (98%)	7 (2%)	60	71
3	C	431/356 (121%)	425 (99%)	6 (1%)	67	76
3	c	437/356 (123%)	431 (99%)	6 (1%)	67	76
4	D	368/277 (133%)	366 (100%)	2 (0%)	88	92

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	d	372/277 (134%)	368 (99%)	4 (1%)	73	82
5	E	72/73 (99%)	70 (97%)	2 (3%)	43	52
5	e	72/73 (99%)	70 (97%)	2 (3%)	43	52
6	F	28/38 (74%)	28 (100%)	0	100	100
6	f	26/38 (68%)	26 (100%)	0	100	100
7	H	54/54 (100%)	51 (94%)	3 (6%)	21	21
7	h	55/54 (102%)	54 (98%)	1 (2%)	59	68
8	I	34/34 (100%)	32 (94%)	2 (6%)	19	19
8	i	34/34 (100%)	33 (97%)	1 (3%)	42	51
9	J	26/27 (96%)	25 (96%)	1 (4%)	33	39
9	j	26/27 (96%)	25 (96%)	1 (4%)	33	39
10	K	30/30 (100%)	26 (87%)	4 (13%)	4	2
10	k	30/30 (100%)	27 (90%)	3 (10%)	7	5
11	L	36/35 (103%)	36 (100%)	0	100	100
11	l	36/35 (103%)	36 (100%)	0	100	100
12	M	30/32 (94%)	28 (93%)	2 (7%)	16	15
12	m	32/32 (100%)	30 (94%)	2 (6%)	18	17
13	O	216/207 (104%)	209 (97%)	7 (3%)	39	47
13	o	213/207 (103%)	208 (98%)	5 (2%)	50	59
14	T	32/28 (114%)	30 (94%)	2 (6%)	18	17
14	t	31/28 (111%)	31 (100%)	0	100	100
15	U	86/89 (97%)	84 (98%)	2 (2%)	50	59
15	u	88/89 (99%)	86 (98%)	2 (2%)	50	59
16	V	123/117 (105%)	122 (99%)	1 (1%)	81	88
16	v	123/117 (105%)	119 (97%)	4 (3%)	38	46
17	X	32/33 (97%)	32 (100%)	0	100	100
17	x	31/33 (94%)	31 (100%)	0	100	100
18	Y	22/23 (96%)	22 (100%)	0	100	100
18	y	22/23 (96%)	20 (91%)	2 (9%)	9	7
19	Z	52/52 (100%)	50 (96%)	2 (4%)	33	39
19	z	52/52 (100%)	47 (90%)	5 (10%)	8	6

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
20	R	29/29 (100%)	27 (93%)	2 (7%)	15	14
All	All	5110/4403 (116%)	5023 (98%)	87 (2%)	59	71

All (87) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	B	362	PHE
2	B	389	LYS
2	B	419	SER
3	C	30	SER
3	C	142	GLU
3	C	255	THR
3	C	289	PHE
3	C	315[A]	MET
3	C	315[B]	MET
4	D	180	ARG
4	D	338	ASN
5	E	4	THR
5	E	71	GLU
7	H	12	ARG
7	H	43	LEU
7	H	49	TYR
8	I	33	LYS
8	I	34	ARG
9	J	6	ARG
10	K	10	LYS
10	K	17	ILE
10	K	19	ASP
10	K	27	VAL
12	M	16[A]	LEU
12	M	16[B]	LEU
13	O	4	THR
13	O	49	THR
13	O	55	GLU
13	O	69	LYS
13	O	118	LEU
13	O	130	GLN
13	O	194	LYS
14	T	30[A]	THR
14	T	30[B]	THR
15	U	10	VAL
15	U	70	ARG

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Mol	Chain	Res	Type
16	V	15	GLU
1	a	13	LEU
2	b	127	ARG
2	b	128	THR
2	b	161	LEU
2	b	362	PHE
2	b	486[A]	LEU
2	b	486[B]	LEU
2	b	505	ARG
3	c	142	GLU
3	c	152	LYS
3	c	255	THR
3	c	289	PHE
3	c	315[A]	MET
3	c	315[B]	MET
4	d	12	ARG
4	d	180	ARG
4	d	259[A]	ILE
4	d	259[B]	ILE
5	e	60	GLN
5	e	71	GLU
7	h	49	TYR
8	i	33	LYS
9	j	9	LEU
10	k	10	LYS
10	k	17	ILE
10	k	24	VAL
12	m	16[A]	LEU
12	m	16[B]	LEU
13	o	25	THR
13	o	36	GLN
13	o	58	ASN
13	o	69	LYS
13	o	118	LEU
15	u	10[A]	VAL
15	u	10[B]	VAL
16	v	15	GLU
16	v	24	LYS
16	v	85	GLU
16	v	106	ASN
18	y	18	VAL
18	y	45	ASN

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Mol	Chain	Res	Type
19	Z	3	ILE
19	Z	31	GLN
20	R	29	LYS
20	R	33	LYS
19	z	1	MET
19	z	3	ILE
19	z	4	LEU
19	z	7	LEU
19	z	32	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (3) such sidechains are listed below:

Mol	Chain	Res	Type
5	E	60	GLN
13	o	58	ASN
16	v	86	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
12	FME	m	1	12	8,9,10	0.53	0	7,9,11	1.44	2 (28%)
14	FME	T	1	14	8,9,10	0.72	0	7,9,11	1.64	1 (14%)
14	FME	t	1	14	8,9,10	0.73	0	7,9,11	1.39	1 (14%)
12	FME	M	1	12	8,9,10	0.61	0	7,9,11	1.13	1 (14%)
8	FME	i	1	8	8,9,10	0.65	0	7,9,11	1.24	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
8	FME	I	1	8	8,9,10	0.59	0	7,9,11	1.32	2 (28%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
12	FME	m	1	12	-	2/7/9/11	-
14	FME	T	1	14	-	2/7/9/11	-
14	FME	t	1	14	-	0/7/9/11	-
12	FME	M	1	12	-	0/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-
8	FME	I	1	8	-	1/7/9/11	-

There are no bond length outliers.

All (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	t	1	FME	O-C-CA	-2.74	117.60	124.78
14	T	1	FME	CG-CB-CA	2.53	119.98	112.95
12	m	1	FME	O1-CN-N	-2.45	118.81	125.27
8	I	1	FME	O-C-CA	-2.28	118.80	124.78
12	M	1	FME	O-C-CA	-2.19	119.05	124.78
12	m	1	FME	O-C-CA	-2.10	119.28	124.78
8	I	1	FME	CA-N-CN	-2.04	119.69	122.82

There are no chirality outliers.

All (6) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	i	1	FME	O-C-CA-CB
12	m	1	FME	O1-CN-N-CA
12	m	1	FME	O-C-CA-CB
14	T	1	FME	C-CA-CB-CG
8	I	1	FME	O1-CN-N-CA
14	T	1	FME	N-CA-CB-CG

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 274 ligands modelled in this entry, 21 are monoatomic and 20 are unknown - leaving 233 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	BCR	B	617	-	41,41,41	1.08	1 (2%)	56,56,56	1.28	7 (12%)
33	LHG	D	408[A]	-	48,48,48	0.92	2 (4%)	51,54,54	0.99	4 (7%)
26	SQD	B	620	-	53,54,54	1.07	4 (7%)	62,65,65	1.74	12 (19%)
23	CLA	B	604	-	65,73,73	2.02	17 (26%)	76,113,113	2.65	26 (34%)
27	GOL	c	526[B]	-	5,5,5	0.84	0	5,5,5	0.97	0
35	DGD	C	517[A]	-	63,63,67	0.89	3 (4%)	77,77,81	1.02	5 (6%)
31	LMT	m	103	-	36,36,36	1.08	3 (8%)	47,47,47	1.08	3 (6%)
23	CLA	a	405[A]	41	65,73,73	1.94	16 (24%)	76,113,113	2.81	27 (35%)
26	SQD	b	620	-	53,54,54	1.05	3 (5%)	62,65,65	1.69	12 (19%)
28	OEX	A	413[B]	3,41,1	0,15,15	-	-	-	-	-
33	LHG	D	407[A]	-	48,48,48	0.86	2 (4%)	51,54,54	0.99	3 (5%)
23	CLA	A	406[B]	41	65,73,73	2.06	16 (24%)	76,113,113	2.78	28 (36%)
35	DGD	C	518	-	63,63,67	0.88	3 (4%)	77,77,81	0.99	4 (5%)
31	LMT	M	102	-	36,36,36	1.09	3 (8%)	47,47,47	1.07	2 (4%)
28	OEX	a	411[A]	3,41,1	0,15,15	-	-	-	-	-
28	OEX	a	411[B]	3,41,1	0,15,15	-	-	-	-	-
25	BCR	B	618	-	41,41,41	0.98	1 (2%)	56,56,56	1.40	7 (12%)
33	LHG	A	419[B]	-	48,48,48	0.86	2 (4%)	51,54,54	1.22	6 (11%)
33	LHG	d	408[A]	-	48,48,48	0.92	2 (4%)	51,54,54	0.99	3 (5%)
33	LHG	d	408[B]	-	48,48,48	0.92	2 (4%)	51,54,54	1.01	2 (3%)
34	HTG	b	625	-	19,19,19	0.97	2 (10%)	23,24,24	1.50	3 (13%)
29	PL9	a	412[A]	-	55,55,55	0.65	2 (3%)	68,69,69	2.00	22 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	GOL	D	413	-	5,5,5	1.45	2 (40%)	5,5,5	0.81	0
25	BCR	T	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.64	15 (26%)
25	BCR	a	408	-	41,41,41	1.05	1 (2%)	56,56,56	1.40	6 (10%)
29	PL9	d	406[B]	-	55,55,55	0.68	1 (1%)	68,69,69	1.60	19 (27%)
23	CLA	B	606	-	65,73,73	1.96	15 (23%)	76,113,113	3.00	26 (34%)
32	LMG	C	520	-	51,51,55	1.06	3 (5%)	59,59,63	1.34	6 (10%)
23	CLA	c	514	-	65,73,73	2.12	17 (26%)	76,113,113	2.77	28 (36%)
25	BCR	k	101	-	41,41,41	1.05	1 (2%)	56,56,56	1.46	12 (21%)
29	PL9	A	414[A]	-	55,55,55	0.68	2 (3%)	68,69,69	2.08	25 (36%)
29	PL9	A	414[B]	-	55,55,55	0.65	2 (3%)	68,69,69	1.98	24 (35%)
23	CLA	b	606	-	65,73,73	1.99	15 (23%)	76,113,113	2.82	28 (36%)
33	LHG	E	101[B]	-	41,41,48	1.06	2 (4%)	44,47,54	1.10	4 (9%)
37	BCT	d	401[A]	21	2,3,3	0.57	0	2,3,3	1.58	1 (50%)
23	CLA	a	404[A]	-	65,73,73	1.99	15 (23%)	76,113,113	2.87	32 (42%)
23	CLA	a	404[B]	-	65,73,73	2.05	16 (24%)	76,113,113	2.85	32 (42%)
37	BCT	d	401[B]	21	2,3,3	0.64	0	2,3,3	1.22	0
23	CLA	B	605	-	65,73,73	1.99	16 (24%)	76,113,113	2.88	27 (35%)
37	BCT	D	401[B]	21	2,3,3	0.65	0	2,3,3	1.24	0
33	LHG	a	418[A]	-	41,41,48	1.04	2 (4%)	44,47,54	0.92	2 (4%)
23	CLA	b	604	-	65,73,73	1.98	16 (24%)	76,113,113	2.81	27 (35%)
26	SQD	F	103	-	42,43,54	1.22	4 (9%)	51,54,65	2.18	14 (27%)
23	CLA	A	405[A]	41	65,73,73	1.90	16 (24%)	76,113,113	2.85	30 (39%)
23	CLA	d	402[A]	41	65,73,73	2.00	14 (21%)	76,113,113	2.75	26 (34%)
35	DGD	h	102	-	63,63,67	0.87	3 (4%)	77,77,81	1.08	5 (6%)
27	GOL	a	417	-	5,5,5	1.08	0	5,5,5	0.95	0
32	LMG	A	418	-	51,51,55	0.91	2 (3%)	59,59,63	1.49	8 (13%)
23	CLA	b	613	-	65,73,73	1.98	16 (24%)	76,113,113	2.76	28 (36%)
23	CLA	C	504	41	65,73,73	1.99	16 (24%)	76,113,113	2.76	25 (32%)
25	BCR	b	619	-	41,41,41	1.07	1 (2%)	56,56,56	1.42	8 (14%)
27	GOL	d	413	-	5,5,5	1.07	0	5,5,5	0.92	0
35	DGD	C	516[B]	-	63,63,67	0.84	2 (3%)	77,77,81	1.10	7 (9%)
23	CLA	D	403[A]	-	65,73,73	1.99	16 (24%)	76,113,113	2.87	29 (38%)
27	GOL	b	624	-	5,5,5	1.20	1 (20%)	5,5,5	0.79	0
27	GOL	b	628	-	5,5,5	0.50	0	5,5,5	1.34	1 (20%)
23	CLA	C	512	-	65,73,73	2.04	15 (23%)	76,113,113	2.78	31 (40%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	PHO	A	407[B]	-	51,69,69	1.80	8 (15%)	47,99,99	1.70	11 (23%)
23	CLA	d	404	-	65,73,73	2.04	16 (24%)	76,113,113	2.85	28 (36%)
24	PHO	a	406[B]	-	51,69,69	1.83	8 (15%)	47,99,99	1.83	11 (23%)
23	CLA	c	511	-	65,73,73	2.01	16 (24%)	76,113,113	2.79	31 (40%)
27	GOL	c	526[A]	-	5,5,5	0.94	0	5,5,5	0.95	0
31	LMT	A	420	-	36,36,36	1.06	2 (5%)	47,47,47	1.15	4 (8%)
23	CLA	C	511	3	65,73,73	2.07	17 (26%)	76,113,113	2.71	26 (34%)
25	BCR	C	514	-	41,41,41	1.04	1 (2%)	56,56,56	1.46	6 (10%)
28	OEX	A	413[A]	3,41,1	0,15,15	-	-	-	-	-
23	CLA	A	406[A]	41	65,73,73	1.96	16 (24%)	76,113,113	2.81	29 (38%)
23	CLA	c	504	-	65,73,73	2.01	16 (24%)	76,113,113	2.78	27 (35%)
34	HTG	C	521	-	19,19,19	0.86	1 (5%)	23,24,24	1.37	2 (8%)
31	LMT	e	101	-	36,36,36	1.02	4 (11%)	47,47,47	1.02	1 (2%)
25	BCR	D	405	-	41,41,41	1.10	1 (2%)	56,56,56	1.84	16 (28%)
27	GOL	V	203[B]	-	5,5,5	1.06	0	5,5,5	0.85	0
33	LHG	A	419[A]	-	48,48,48	0.84	2 (4%)	51,54,54	1.31	6 (11%)
35	DGD	H	102	-	63,63,67	0.88	3 (4%)	77,77,81	1.07	6 (7%)
31	LMT	B	628	-	36,36,36	1.17	4 (11%)	47,47,47	1.37	6 (12%)
23	CLA	c	512	3	65,73,73	2.08	17 (26%)	76,113,113	2.80	29 (38%)
29	PL9	d	406[A]	-	55,55,55	0.65	1 (1%)	68,69,69	1.63	17 (25%)
31	LMT	M	101	-	36,36,36	1.13	4 (11%)	47,47,47	1.22	4 (8%)
25	BCR	B	619	-	41,41,41	1.11	2 (4%)	56,56,56	1.37	12 (21%)
23	CLA	C	506	-	65,73,73	2.03	18 (27%)	76,113,113	2.80	29 (38%)
23	CLA	b	603	-	65,73,73	2.03	16 (24%)	76,113,113	2.83	31 (40%)
33	LHG	E	101[A]	-	41,41,48	1.06	2 (4%)	44,47,54	1.11	3 (6%)
31	LMT	a	415	-	36,36,36	1.01	1 (2%)	47,47,47	1.04	2 (4%)
23	CLA	b	610	41	65,73,73	2.05	16 (24%)	76,113,113	2.89	29 (38%)
23	CLA	C	503	-	65,73,73	1.99	16 (24%)	76,113,113	2.80	27 (35%)
37	BCT	D	401[A]	21	2,3,3	0.54	0	2,3,3	1.81	1 (50%)
23	CLA	B	610	41	65,73,73	2.05	16 (24%)	76,113,113	2.86	30 (39%)
25	BCR	b	617	-	41,41,41	1.08	1 (2%)	56,56,56	1.34	6 (10%)
33	LHG	d	407[A]	-	48,48,48	0.86	2 (4%)	51,54,54	1.08	4 (7%)
33	LHG	d	407[B]	-	48,48,48	0.88	2 (4%)	51,54,54	1.05	4 (7%)
33	LHG	b	629[B]	-	48,48,48	0.87	2 (4%)	51,54,54	1.03	4 (7%)
25	BCR	C	515	-	41,41,41	1.05	1 (2%)	56,56,56	1.39	9 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	BCR	Y	101	-	41,41,41	0.99	1 (2%)	56,56,56	1.66	10 (17%)
33	LHG	L	101[B]	-	48,48,48	0.92	2 (4%)	51,54,54	1.04	2 (3%)
35	DGD	C	516[A]	-	63,63,67	0.81	2 (3%)	77,77,81	1.21	8 (10%)
40	HEC	v	201	16	32,50,50	2.04	3 (9%)	24,82,82	1.97	6 (25%)
25	BCR	c	516	-	41,41,41	1.04	1 (2%)	56,56,56	1.44	12 (21%)
27	GOL	o	302	-	5,5,5	0.95	0	5,5,5	0.99	0
23	CLA	B	607	41	65,73,73	1.95	16 (24%)	76,113,113	2.89	27 (35%)
23	CLA	b	608	-	65,73,73	2.02	17 (26%)	76,113,113	2.78	30 (39%)
26	SQD	a	409[B]	-	53,54,54	0.97	3 (5%)	62,65,65	1.64	11 (17%)
26	SQD	a	410	-	53,54,54	1.07	4 (7%)	62,65,65	1.25	8 (12%)
27	GOL	B	624	-	5,5,5	0.95	0	5,5,5	1.17	1 (20%)
23	CLA	C	513	-	65,73,73	2.07	15 (23%)	76,113,113	2.77	28 (36%)
31	LMT	b	621	-	25,25,36	0.96	2 (8%)	30,30,47	1.19	3 (10%)
24	PHO	A	416[B]	-	51,69,69	1.87	8 (15%)	47,99,99	1.90	10 (21%)
35	DGD	c	517[B]	-	63,63,67	0.86	2 (3%)	77,77,81	1.10	5 (6%)
31	LMT	b	627	-	25,25,36	0.88	1 (4%)	30,30,47	1.13	1 (3%)
32	LMG	Z	101	-	37,37,55	1.00	2 (5%)	45,45,63	1.46	8 (17%)
24	PHO	A	407[A]	-	51,69,69	1.78	8 (15%)	47,99,99	1.77	11 (23%)
27	GOL	A	411	-	5,5,5	1.09	0	5,5,5	0.77	0
32	LMG	D	412	39	51,51,55	0.84	2 (3%)	59,59,63	1.11	4 (6%)
24	PHO	a	406[A]	-	51,69,69	1.83	8 (15%)	47,99,99	1.71	10 (21%)
23	CLA	c	503	-	65,73,73	2.05	13 (20%)	76,113,113	2.64	26 (34%)
23	CLA	d	403[A]	-	65,73,73	1.94	17 (26%)	76,113,113	2.79	29 (38%)
23	CLA	d	403[B]	-	65,73,73	1.96	16 (24%)	76,113,113	2.80	29 (38%)
27	GOL	o	303	-	5,5,5	1.00	0	5,5,5	1.07	0
34	HTG	c	522	-	19,19,19	0.98	1 (5%)	23,24,24	1.54	1 (4%)
35	DGD	c	519	-	63,63,67	0.89	4 (6%)	77,77,81	1.06	4 (5%)
23	CLA	B	611	-	65,73,73	2.56	16 (24%)	76,113,113	3.24	29 (38%)
33	LHG	d	414[B]	-	48,48,48	0.90	2 (4%)	51,54,54	1.06	4 (7%)
25	BCR	H	101	-	41,41,41	1.03	1 (2%)	56,56,56	1.49	9 (16%)
23	CLA	B	601	41	65,73,73	2.12	17 (26%)	76,113,113	2.82	28 (36%)
23	CLA	c	509	-	65,73,73	2.12	16 (24%)	76,113,113	2.74	23 (30%)
23	CLA	C	505	-	65,73,73	1.96	16 (24%)	76,113,113	2.74	28 (36%)
23	CLA	C	502	-	65,73,73	2.04	16 (24%)	76,113,113	2.63	26 (34%)
27	GOL	B	627	-	5,5,5	0.89	0	5,5,5	1.04	1 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	GOL	V	203[A]	-	5,5,5	1.22	0	5,5,5	0.91	0
23	CLA	C	507	41	65,73,73	1.99	16 (24%)	76,113,113	2.74	24 (31%)
23	CLA	C	509	-	65,73,73	2.11	17 (26%)	76,113,113	2.82	29 (38%)
25	BCR	y	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.60	11 (19%)
23	CLA	B	616	-	65,73,73	2.02	17 (26%)	76,113,113	2.92	26 (34%)
27	GOL	O	302	-	5,5,5	0.96	0	5,5,5	0.89	0
25	BCR	d	405	-	41,41,41	1.11	2 (4%)	56,56,56	2.03	17 (30%)
23	CLA	c	513	-	65,73,73	2.06	16 (24%)	76,113,113	2.74	28 (36%)
25	BCR	K	102	-	41,41,41	1.04	1 (2%)	56,56,56	1.40	10 (17%)
23	CLA	B	615	-	65,73,73	2.03	15 (23%)	76,113,113	2.84	28 (36%)
34	HTG	b	622	-	19,19,19	1.22	2 (10%)	23,24,24	1.98	7 (30%)
31	LMT	A	417	-	36,36,36	0.93	2 (5%)	47,47,47	1.01	1 (2%)
23	CLA	c	506	-	65,73,73	2.00	16 (24%)	76,113,113	2.74	25 (32%)
32	LMG	B	621	-	51,51,55	0.93	2 (3%)	59,59,63	1.31	4 (6%)
31	LMT	F	101	-	36,36,36	1.07	1 (2%)	47,47,47	1.05	2 (4%)
34	HTG	B	625	-	19,19,19	1.06	2 (10%)	23,24,24	1.21	3 (13%)
23	CLA	b	615	-	65,73,73	1.99	17 (26%)	76,113,113	2.76	30 (39%)
31	LMT	B	631	-	25,25,36	0.88	1 (4%)	30,30,47	1.19	3 (10%)
32	LMG	c	501	-	51,51,55	0.92	2 (3%)	59,59,63	1.17	4 (6%)
31	LMT	B	630	-	36,36,36	1.04	3 (8%)	47,47,47	1.14	4 (8%)
23	CLA	B	613	-	65,73,73	2.03	17 (26%)	76,113,113	2.70	30 (39%)
34	HTG	V	202	-	11,11,19	0.26	0	15,15,24	1.20	1 (6%)
23	CLA	B	608	-	65,73,73	1.93	17 (26%)	76,113,113	2.87	31 (40%)
23	CLA	B	614	-	65,73,73	2.04	17 (26%)	76,113,113	2.97	29 (38%)
26	SQD	A	412	-	53,54,54	1.01	3 (5%)	62,65,65	1.21	7 (11%)
23	CLA	b	607	41	65,73,73	1.95	17 (26%)	76,113,113	2.77	26 (34%)
26	SQD	A	410[B]	-	53,54,54	0.94	3 (5%)	62,65,65	1.76	11 (17%)
23	CLA	b	609	-	65,73,73	2.01	15 (23%)	76,113,113	2.83	29 (38%)
34	HTG	D	411	-	16,16,19	1.04	1 (6%)	20,21,24	1.54	1 (5%)
33	LHG	b	629[A]	-	48,48,48	0.85	3 (6%)	51,54,54	1.03	4 (7%)
33	LHG	L	101[A]	-	48,48,48	0.89	2 (4%)	51,54,54	1.15	3 (5%)
27	GOL	l	102[B]	-	5,5,5	0.84	0	5,5,5	1.02	0
23	CLA	C	510	-	65,73,73	2.04	16 (24%)	76,113,113	2.92	30 (39%)
23	CLA	b	602	-	65,73,73	2.05	17 (26%)	76,113,113	2.91	34 (44%)
23	CLA	B	612	-	65,73,73	2.03	17 (26%)	76,113,113	2.94	27 (35%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
34	HTG	b	623	-	19,19,19	1.07	1 (5%)	23,24,24	1.87	2 (8%)
24	PHO	a	414[B]	-	51,69,69	1.91	8 (15%)	47,99,99	1.97	11 (23%)
32	LMG	m	101	-	51,51,55	0.89	2 (3%)	59,59,63	1.23	4 (6%)
26	SQD	a	409[A]	-	53,54,54	0.95	3 (5%)	62,65,65	1.77	13 (20%)
27	GOL	c	527	-	5,5,5	1.12	0	5,5,5	0.97	0
23	CLA	b	612	-	65,73,73	2.04	16 (24%)	76,113,113	2.70	27 (35%)
35	DGD	c	518[B]	-	63,63,67	0.86	2 (3%)	77,77,81	0.95	5 (6%)
23	CLA	D	404	-	65,73,73	2.09	17 (26%)	76,113,113	2.66	27 (35%)
38	HEM	F	102	6,5	41,50,50	1.30	4 (9%)	45,82,82	2.11	12 (26%)
33	LHG	D	408[B]	-	48,48,48	0.91	2 (4%)	51,54,54	0.98	3 (5%)
38	HEM	f	101	6,5	41,50,50	1.29	5 (12%)	45,82,82	1.81	11 (24%)
24	PHO	A	416[A]	-	51,69,69	1.87	8 (15%)	47,99,99	1.93	12 (25%)
35	DGD	c	517[A]	-	63,63,67	0.85	2 (3%)	77,77,81	1.12	6 (7%)
35	DGD	C	517[B]	-	63,63,67	0.86	2 (3%)	77,77,81	0.96	5 (6%)
25	BCR	t	102	-	41,41,41	1.06	1 (2%)	56,56,56	1.59	10 (17%)
27	GOL	v	202[A]	-	5,5,5	1.27	0	5,5,5	0.72	0
27	GOL	v	202[B]	-	5,5,5	1.05	0	5,5,5	0.88	0
23	CLA	a	405[B]	41	65,73,73	2.00	16 (24%)	76,113,113	2.84	28 (36%)
25	BCR	A	409	-	41,41,41	1.04	1 (2%)	56,56,56	1.29	7 (12%)
33	LHG	D	407[B]	-	48,48,48	0.89	2 (4%)	51,54,54	0.98	3 (5%)
23	CLA	a	407	-	65,73,73	1.95	17 (26%)	76,113,113	2.85	29 (38%)
32	LMG	c	521	-	51,51,55	1.01	2 (3%)	59,59,63	1.36	7 (11%)
32	LMG	c	520	-	51,51,55	0.90	2 (3%)	59,59,63	1.12	6 (10%)
34	HTG	d	411	-	16,16,19	0.96	1 (6%)	20,21,24	1.64	1 (5%)
23	CLA	b	614	-	65,73,73	2.00	16 (24%)	76,113,113	2.84	28 (36%)
23	CLA	c	508	41	65,73,73	2.02	16 (24%)	76,113,113	2.83	26 (34%)
23	CLA	A	408	-	65,73,73	1.97	14 (21%)	76,113,113	2.96	34 (44%)
31	LMT	t	101	-	26,26,36	0.94	2 (7%)	31,31,47	1.30	2 (6%)
34	HTG	B	622	-	19,19,19	1.05	2 (10%)	23,24,24	1.56	5 (21%)
29	PL9	a	412[B]	-	55,55,55	0.64	2 (3%)	68,69,69	1.97	22 (32%)
23	CLA	c	505	41	65,73,73	2.10	17 (26%)	76,113,113	2.71	27 (35%)
33	LHG	d	414[A]	-	48,48,48	0.89	2 (4%)	51,54,54	1.12	4 (7%)
23	CLA	c	507	-	65,73,73	2.04	16 (24%)	76,113,113	2.79	29 (38%)
23	CLA	c	502	-	65,73,73	2.03	17 (26%)	76,113,113	2.84	26 (34%)
23	CLA	c	510	-	65,73,73	2.06	16 (24%)	76,113,113	2.80	29 (38%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
26	SQD	f	102	-	42,43,54	1.19	3 (7%)	51,54,65	1.52	11 (21%)
27	GOL	B	629	-	5,5,5	0.99	0	5,5,5	0.96	0
23	CLA	A	404[A]	-	65,73,73	2.02	16 (24%)	76,113,113	2.77	32 (42%)
23	CLA	A	404[B]	-	65,73,73	2.08	16 (24%)	76,113,113	2.80	29 (38%)
25	BCR	c	515	-	41,41,41	0.99	1 (2%)	56,56,56	1.71	15 (26%)
27	GOL	O	303	-	5,5,5	0.82	0	5,5,5	1.14	1 (20%)
29	PL9	D	406[A]	-	55,55,55	0.62	2 (3%)	68,69,69	1.64	18 (26%)
29	PL9	D	406[B]	-	55,55,55	0.61	1 (1%)	68,69,69	1.68	15 (22%)
33	LHG	a	418[B]	-	41,41,48	1.04	2 (4%)	44,47,54	0.93	2 (4%)
23	CLA	C	501	-	65,73,73	1.95	16 (24%)	76,113,113	2.85	30 (39%)
23	CLA	B	602	-	65,73,73	2.02	16 (24%)	76,113,113	2.78	26 (34%)
23	CLA	d	402[B]	41	65,73,73	2.04	16 (24%)	76,113,113	2.87	28 (36%)
23	CLA	A	405[B]	41	65,73,73	2.02	16 (24%)	76,113,113	2.84	29 (38%)
32	LMG	z	101	-	39,39,55	1.09	2 (5%)	47,47,63	1.06	3 (6%)
23	CLA	B	609	-	65,73,73	1.99	15 (23%)	76,113,113	2.74	26 (34%)
27	GOL	D	402	-	5,5,5	1.64	2 (40%)	5,5,5	1.01	1 (20%)
27	GOL	a	416	-	5,5,5	1.03	0	5,5,5	1.02	0
26	SQD	A	410[A]	-	53,54,54	0.93	3 (5%)	62,65,65	1.81	10 (16%)
27	GOL	C	522[A]	-	5,5,5	1.18	0	5,5,5	0.83	0
27	GOL	C	522[B]	-	5,5,5	1.08	0	5,5,5	0.86	0
23	CLA	B	603	-	65,73,73	2.05	16 (24%)	76,113,113	2.92	29 (38%)
32	LMG	C	519	-	51,51,55	0.94	2 (3%)	59,59,63	1.11	4 (6%)
23	CLA	C	508	-	65,73,73	2.13	17 (26%)	76,113,113	2.79	25 (32%)
23	CLA	b	605	-	65,73,73	1.94	15 (23%)	76,113,113	2.94	28 (36%)
23	CLA	b	611	-	65,73,73	1.95	17 (26%)	76,113,113	2.92	27 (35%)
25	BCR	b	618	-	41,41,41	0.98	1 (2%)	56,56,56	1.27	7 (12%)
34	HTG	B	623	-	19,19,19	0.83	2 (10%)	23,24,24	1.46	1 (4%)
23	CLA	D	403[B]	-	65,73,73	2.04	16 (24%)	76,113,113	2.80	29 (38%)
25	BCR	h	101	-	41,41,41	1.03	1 (2%)	56,56,56	1.46	10 (17%)
23	CLA	b	601	41	65,73,73	2.12	15 (23%)	76,113,113	2.76	27 (35%)
27	GOL	l	102[A]	-	5,5,5	0.96	0	5,5,5	0.97	0
40	HEC	V	201	16	32,50,50	1.99	4 (12%)	24,82,82	2.11	7 (29%)
24	PHO	a	414[A]	-	51,69,69	1.86	9 (17%)	47,99,99	1.99	13 (27%)
32	LMG	d	412	39	51,51,55	0.89	2 (3%)	59,59,63	1.11	4 (6%)
23	CLA	b	616	-	65,73,73	2.00	15 (23%)	76,113,113	2.89	29 (38%)
35	DGD	c	518[A]	-	63,63,67	0.84	2 (3%)	77,77,81	0.97	5 (6%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	BCR	B	617	-	-	2/29/63/63	0/2/2/2
33	LHG	D	408[A]	-	-	14/53/53/53	-
26	SQD	B	620	-	-	14/49/69/69	0/1/1/1
23	CLA	B	604	-	1/1/15/20	1/37/115/115	-
27	GOL	c	526[B]	-	-	0/4/4/4	-
35	DGD	C	517[A]	-	-	15/51/91/95	0/2/2/2
31	LMT	m	103	-	-	5/21/61/61	0/2/2/2
23	CLA	a	405[A]	41	-	5/37/115/115	-
26	SQD	b	620	-	-	16/49/69/69	0/1/1/1
33	LHG	D	407[A]	-	-	16/53/53/53	-
35	DGD	C	518	-	-	19/51/91/95	0/2/2/2
23	CLA	A	406[B]	41	-	4/37/115/115	-
31	LMT	M	102	-	-	6/21/61/61	0/2/2/2
25	BCR	B	618	-	-	0/29/63/63	0/2/2/2
33	LHG	A	419[B]	-	-	14/53/53/53	-
33	LHG	d	408[A]	-	-	11/53/53/53	-
33	LHG	d	408[B]	-	-	14/53/53/53	-
34	HTG	b	625	-	-	3/10/30/30	0/1/1/1
29	PL9	a	412[A]	-	-	14/53/73/73	0/1/1/1
27	GOL	D	413	-	-	4/4/4/4	-
25	BCR	T	101	-	-	1/29/63/63	0/2/2/2
25	BCR	a	408	-	-	2/29/63/63	0/2/2/2
29	PL9	d	406[B]	-	-	6/53/73/73	0/1/1/1
23	CLA	B	606	-	1/1/15/20	9/37/115/115	-
32	LMG	C	520	-	-	13/46/66/70	0/1/1/1
23	CLA	c	514	-	1/1/15/20	10/37/115/115	-
25	BCR	k	101	-	-	0/29/63/63	0/2/2/2
29	PL9	A	414[A]	-	-	15/53/73/73	0/1/1/1
29	PL9	A	414[B]	-	-	15/53/73/73	0/1/1/1
23	CLA	b	606	-	1/1/15/20	11/37/115/115	-
33	LHG	E	101[B]	-	-	22/46/46/53	-
23	CLA	a	404[A]	-	1/1/15/20	3/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	a	404[B]	-	1/1/15/20	5/37/115/115	-
23	CLA	B	605	-	1/1/15/20	5/37/115/115	-
33	LHG	a	418[A]	-	-	16/46/46/53	-
23	CLA	b	604	-	1/1/15/20	8/37/115/115	-
26	SQD	F	103	-	-	14/38/58/69	0/1/1/1
23	CLA	d	402[A]	41	1/1/15/20	8/37/115/115	-
23	CLA	A	405[A]	41	-	4/37/115/115	-
35	DGD	h	102	-	-	15/51/91/95	0/2/2/2
27	GOL	a	417	-	-	0/4/4/4	-
32	LMG	A	418	-	-	14/46/66/70	0/1/1/1
23	CLA	b	613	-	1/1/15/20	3/37/115/115	-
23	CLA	C	504	41	1/1/15/20	6/37/115/115	-
25	BCR	b	619	-	-	2/29/63/63	0/2/2/2
27	GOL	d	413	-	-	4/4/4/4	-
35	DGD	C	516[B]	-	-	14/51/91/95	0/2/2/2
23	CLA	D	403[A]	-	1/1/15/20	0/37/115/115	-
27	GOL	b	624	-	-	2/4/4/4	-
27	GOL	b	628	-	-	0/4/4/4	-
23	CLA	C	512	-	1/1/15/20	9/37/115/115	-
24	PHO	A	407[B]	-	-	2/37/103/103	0/5/6/6
23	CLA	d	404	-	1/1/15/20	8/37/115/115	-
24	PHO	a	406[B]	-	-	5/37/103/103	0/5/6/6
23	CLA	c	511	-	1/1/15/20	10/37/115/115	-
27	GOL	c	526[A]	-	-	0/4/4/4	-
31	LMT	A	420	-	-	16/21/61/61	0/2/2/2
23	CLA	C	511	3	1/1/15/20	4/37/115/115	-
25	BCR	C	514	-	-	1/29/63/63	0/2/2/2
23	CLA	c	504	-	1/1/15/20	1/37/115/115	-
23	CLA	A	406[A]	41	-	5/37/115/115	-
34	HTG	C	521	-	-	0/10/30/30	0/1/1/1
31	LMT	e	101	-	-	15/21/61/61	0/2/2/2
25	BCR	D	405	-	-	4/29/63/63	0/2/2/2
27	GOL	V	203[B]	-	-	2/4/4/4	-
33	LHG	A	419[A]	-	-	10/53/53/53	-
35	DGD	H	102	-	-	9/51/91/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	LMT	B	628	-	-	12/21/61/61	0/2/2/2
23	CLA	c	512	3	1/1/15/20	6/37/115/115	-
29	PL9	d	406[A]	-	-	6/53/73/73	0/1/1/1
31	LMT	M	101	-	-	4/21/61/61	0/2/2/2
25	BCR	B	619	-	-	0/29/63/63	0/2/2/2
23	CLA	C	506	-	1/1/15/20	12/37/115/115	-
23	CLA	b	603	-	1/1/15/20	6/37/115/115	-
33	LHG	E	101[A]	-	-	22/46/46/53	-
31	LMT	a	415	-	-	10/21/61/61	0/2/2/2
23	CLA	b	610	41	1/1/15/20	5/37/115/115	-
23	CLA	C	503	-	1/1/15/20	2/37/115/115	-
23	CLA	B	610	41	1/1/15/20	8/37/115/115	-
25	BCR	b	617	-	-	2/29/63/63	0/2/2/2
33	LHG	d	407[A]	-	-	13/53/53/53	-
33	LHG	d	407[B]	-	-	15/53/53/53	-
33	LHG	b	629[B]	-	-	19/53/53/53	-
25	BCR	C	515	-	-	0/29/63/63	0/2/2/2
25	BCR	Y	101	-	-	2/29/63/63	0/2/2/2
33	LHG	L	101[B]	-	-	17/53/53/53	-
35	DGD	C	516[A]	-	-	11/51/91/95	0/2/2/2
40	HEC	v	201	16	-	2/10/54/54	-
25	BCR	c	516	-	-	0/29/63/63	0/2/2/2
27	GOL	o	302	-	-	2/4/4/4	-
23	CLA	B	607	41	1/1/15/20	3/37/115/115	-
23	CLA	b	608	-	-	5/37/115/115	-
26	SQD	a	409[B]	-	-	10/49/69/69	0/1/1/1
26	SQD	a	410	-	-	13/49/69/69	0/1/1/1
27	GOL	B	624	-	-	3/4/4/4	-
23	CLA	C	513	-	1/1/15/20	7/37/115/115	-
31	LMT	b	621	-	-	8/17/37/61	0/1/1/2
24	PHO	A	416[B]	-	-	2/37/103/103	0/5/6/6
35	DGD	c	517[B]	-	-	19/51/91/95	0/2/2/2
31	LMT	b	627	-	-	11/17/37/61	0/1/1/2
32	LMG	Z	101	-	-	10/31/51/70	0/1/1/1
24	PHO	A	407[A]	-	-	4/37/103/103	0/5/6/6

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	GOL	A	411	-	-	2/4/4/4	-
32	LMG	D	412	39	-	8/46/66/70	0/1/1/1
24	PHO	a	406[A]	-	-	6/37/103/103	0/5/6/6
23	CLA	c	503	-	1/1/15/20	5/37/115/115	-
23	CLA	d	403[A]	-	1/1/15/20	2/37/115/115	-
23	CLA	d	403[B]	-	1/1/15/20	4/37/115/115	-
27	GOL	o	303	-	-	3/4/4/4	-
34	HTG	c	522	-	-	2/10/30/30	0/1/1/1
35	DGD	c	519	-	-	12/51/91/95	0/2/2/2
23	CLA	B	611	-	1/1/15/20	1/37/115/115	-
33	LHG	d	414[B]	-	-	12/53/53/53	-
25	BCR	H	101	-	-	3/29/63/63	0/2/2/2
23	CLA	B	601	41	1/1/15/20	11/37/115/115	-
23	CLA	c	509	-	1/1/15/20	5/37/115/115	-
23	CLA	C	505	-	1/1/15/20	6/37/115/115	-
23	CLA	C	502	-	1/1/15/20	9/37/115/115	-
27	GOL	B	627	-	-	0/4/4/4	-
27	GOL	V	203[A]	-	-	2/4/4/4	-
23	CLA	C	507	41	1/1/15/20	5/37/115/115	-
23	CLA	C	509	-	1/1/15/20	9/37/115/115	-
25	BCR	y	101	-	-	4/29/63/63	0/2/2/2
23	CLA	B	616	-	1/1/15/20	5/37/115/115	-
27	GOL	O	302	-	-	2/4/4/4	-
25	BCR	d	405	-	-	5/29/63/63	0/2/2/2
23	CLA	c	513	-	1/1/15/20	14/37/115/115	-
25	BCR	K	102	-	-	2/29/63/63	0/2/2/2
23	CLA	B	615	-	1/1/15/20	8/37/115/115	-
34	HTG	b	622	-	-	5/10/30/30	0/1/1/1
31	LMT	A	417	-	-	7/21/61/61	0/2/2/2
23	CLA	c	506	-	1/1/15/20	7/37/115/115	-
32	LMG	B	621	-	-	18/46/66/70	0/1/1/1
31	LMT	F	101	-	-	8/21/61/61	0/2/2/2
34	HTG	B	625	-	-	4/10/30/30	0/1/1/1
23	CLA	b	615	-	1/1/15/20	7/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	LMT	B	631	-	-	11/17/37/61	0/1/1/2
32	LMG	c	501	-	-	13/46/66/70	0/1/1/1
31	LMT	B	630	-	-	10/21/61/61	0/2/2/2
23	CLA	B	613	-	1/1/15/20	9/37/115/115	-
34	HTG	V	202	-	-	0/2/19/30	0/1/1/1
23	CLA	B	608	-	-	3/37/115/115	-
23	CLA	B	614	-	1/1/15/20	14/37/115/115	-
26	SQD	A	412	-	-	16/49/69/69	0/1/1/1
23	CLA	b	607	41	1/1/15/20	4/37/115/115	-
26	SQD	A	410[B]	-	-	12/49/69/69	0/1/1/1
23	CLA	b	609	-	1/1/15/20	1/37/115/115	-
34	HTG	D	411	-	-	3/7/27/30	0/1/1/1
33	LHG	b	629[A]	-	-	20/53/53/53	-
33	LHG	L	101[A]	-	-	19/53/53/53	-
27	GOL	l	102[B]	-	-	1/4/4/4	-
23	CLA	C	510	-	1/1/15/20	13/37/115/115	-
23	CLA	b	602	-	1/1/15/20	5/37/115/115	-
23	CLA	B	612	-	1/1/15/20	4/37/115/115	-
34	HTG	b	623	-	-	4/10/30/30	0/1/1/1
24	PHO	a	414[B]	-	-	0/37/103/103	0/5/6/6
32	LMG	m	101	-	-	11/46/66/70	0/1/1/1
26	SQD	a	409[A]	-	-	10/49/69/69	0/1/1/1
27	GOL	c	527	-	-	3/4/4/4	-
23	CLA	b	612	-	1/1/15/20	3/37/115/115	-
35	DGD	c	518[B]	-	-	17/51/91/95	0/2/2/2
23	CLA	D	404	-	1/1/15/20	12/37/115/115	-
38	HEM	F	102	6,5	-	4/12/54/54	-
33	LHG	D	408[B]	-	-	13/53/53/53	-
38	HEM	f	101	6,5	-	6/12/54/54	-
24	PHO	A	416[A]	-	-	1/37/103/103	0/5/6/6
35	DGD	c	517[A]	-	-	20/51/91/95	0/2/2/2
35	DGD	C	517[B]	-	-	14/51/91/95	0/2/2/2
25	BCR	t	102	-	-	5/29/63/63	0/2/2/2
27	GOL	v	202[A]	-	-	1/4/4/4	-
27	GOL	v	202[B]	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	a	405[B]	41	-	5/37/115/115	-
25	BCR	A	409	-	-	0/29/63/63	0/2/2/2
33	LHG	D	407[B]	-	-	16/53/53/53	-
23	CLA	a	407	-	1/1/15/20	9/37/115/115	-
32	LMG	c	521	-	-	12/46/66/70	0/1/1/1
32	LMG	c	520	-	-	12/46/66/70	0/1/1/1
34	HTG	d	411	-	-	1/7/27/30	0/1/1/1
23	CLA	b	614	-	1/1/15/20	15/37/115/115	-
23	CLA	c	508	41	1/1/15/20	7/37/115/115	-
23	CLA	A	408	-	1/1/15/20	8/37/115/115	-
31	LMT	t	101	-	-	10/17/38/61	0/1/1/2
34	HTG	B	622	-	-	3/10/30/30	0/1/1/1
29	PL9	a	412[B]	-	-	15/53/73/73	0/1/1/1
23	CLA	c	505	41	1/1/15/20	6/37/115/115	-
33	LHG	d	414[A]	-	-	13/53/53/53	-
23	CLA	c	507	-	1/1/15/20	6/37/115/115	-
23	CLA	c	502	-	1/1/15/20	2/37/115/115	-
23	CLA	c	510	-	1/1/15/20	15/37/115/115	-
26	SQD	f	102	-	-	13/38/58/69	0/1/1/1
27	GOL	B	629	-	-	4/4/4/4	-
23	CLA	A	404[A]	-	1/1/15/20	5/37/115/115	-
23	CLA	A	404[B]	-	1/1/15/20	7/37/115/115	-
25	BCR	c	515	-	-	0/29/63/63	0/2/2/2
27	GOL	O	303	-	-	2/4/4/4	-
29	PL9	D	406[A]	-	-	8/53/73/73	0/1/1/1
29	PL9	D	406[B]	-	-	9/53/73/73	0/1/1/1
33	LHG	a	418[B]	-	-	16/46/46/53	-
23	CLA	C	501	-	1/1/15/20	5/37/115/115	-
23	CLA	B	602	-	1/1/15/20	7/37/115/115	-
23	CLA	A	405[B]	41	1/1/15/20	3/37/115/115	-
23	CLA	d	402[B]	41	1/1/15/20	3/37/115/115	-
32	LMG	z	101	-	-	9/34/54/70	0/1/1/1
23	CLA	B	609	-	1/1/15/20	1/37/115/115	-
27	GOL	D	402	-	-	2/4/4/4	-
27	GOL	a	416	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	SQD	A	410[A]	-	-	12/49/69/69	0/1/1/1
27	GOL	C	522[A]	-	-	0/4/4/4	-
27	GOL	C	522[B]	-	-	0/4/4/4	-
23	CLA	B	603	-	1/1/15/20	6/37/115/115	-
32	LMG	C	519	-	-	10/46/66/70	0/1/1/1
23	CLA	b	605	-	1/1/15/20	7/37/115/115	-
23	CLA	C	508	-	-	3/37/115/115	-
23	CLA	b	611	-	1/1/15/20	3/37/115/115	-
25	BCR	b	618	-	-	0/29/63/63	0/2/2/2
34	HTG	B	623	-	-	2/10/30/30	0/1/1/1
23	CLA	D	403[B]	-	1/1/15/20	2/37/115/115	-
25	BCR	h	101	-	-	1/29/63/63	0/2/2/2
23	CLA	b	601	41	1/1/15/20	18/37/115/115	-
27	GOL	l	102[A]	-	-	2/4/4/4	-
40	HEC	V	201	16	-	2/10/54/54	-
24	PHO	a	414[A]	-	-	2/37/103/103	0/5/6/6
32	LMG	d	412	39	-	10/46/66/70	0/1/1/1
23	CLA	b	616	-	1/1/15/20	9/37/115/115	-
35	DGD	c	518[A]	-	-	17/51/91/95	0/2/2/2

All (1554) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	611	CLA	C3B-C2B	10.49	1.54	1.40
23	B	612	CLA	C3B-C2B	7.21	1.50	1.40
23	C	508	CLA	C3B-C2B	6.98	1.50	1.40
23	C	511	CLA	C3B-C2B	6.66	1.49	1.40
23	C	509	CLA	C3B-C2B	6.63	1.49	1.40
23	B	616	CLA	C3B-C2B	6.58	1.49	1.40
23	b	612	CLA	C3B-C2B	6.47	1.49	1.40
23	A	404[B]	CLA	C3B-C2B	6.46	1.49	1.40
23	B	611	CLA	C1D-ND	6.40	1.45	1.37
23	c	503	CLA	C3B-C2B	6.40	1.49	1.40
23	b	603	CLA	C3B-C2B	6.37	1.49	1.40
24	a	406[A]	PHO	C3B-C2B	6.36	1.49	1.40
23	B	611	CLA	CMB-C2B	6.36	1.64	1.51
24	a	414[B]	PHO	C3B-C2B	6.35	1.49	1.40
23	c	512	CLA	C3B-C2B	6.35	1.49	1.40
23	C	513	CLA	C3B-C2B	6.34	1.49	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	408	CLA	C3B-C2B	6.29	1.49	1.40
23	a	404[A]	CLA	C3B-C2B	6.26	1.49	1.40
23	A	404[A]	CLA	C3B-C2B	6.26	1.49	1.40
23	B	603	CLA	C3B-C2B	6.24	1.49	1.40
23	B	602	CLA	C3B-C2B	6.23	1.49	1.40
23	b	613	CLA	C3B-C2B	6.21	1.49	1.40
23	b	608	CLA	C3B-C2B	6.20	1.49	1.40
24	A	407[A]	PHO	C3B-C2B	6.19	1.49	1.40
23	b	601	CLA	C3B-C2B	6.16	1.48	1.40
23	c	509	CLA	C3B-C2B	6.15	1.48	1.40
24	A	416[B]	PHO	C3B-C2B	6.15	1.48	1.40
24	A	416[A]	PHO	C3B-C2B	6.12	1.48	1.40
23	a	404[B]	CLA	C3B-C2B	6.10	1.48	1.40
23	b	614	CLA	C3B-C2B	6.09	1.48	1.40
23	C	504	CLA	C3B-C2B	6.08	1.48	1.40
23	c	511	CLA	C3B-C2B	6.08	1.48	1.40
23	c	510	CLA	C3B-C2B	6.07	1.48	1.40
23	c	505	CLA	C3B-C2B	6.06	1.48	1.40
23	c	507	CLA	C3B-C2B	6.05	1.48	1.40
40	v	201	HEC	C2B-C3B	-6.04	1.34	1.40
24	A	407[B]	PHO	C3B-C2B	6.03	1.48	1.40
23	b	610	CLA	C3B-C2B	6.01	1.48	1.40
24	a	406[B]	PHO	C3B-C2B	6.00	1.48	1.40
23	B	608	CLA	C3B-C2B	6.00	1.48	1.40
23	B	601	CLA	C3B-C2B	5.97	1.48	1.40
23	D	403[A]	CLA	C3B-C2B	5.94	1.48	1.40
23	D	403[B]	CLA	C3B-C2B	5.93	1.48	1.40
23	B	606	CLA	C3B-C2B	5.91	1.48	1.40
24	a	414[A]	PHO	C3B-C2B	5.90	1.48	1.40
23	A	405[B]	CLA	C3B-C2B	5.90	1.48	1.40
23	B	613	CLA	C3B-C2B	5.90	1.48	1.40
23	C	502	CLA	C3B-C2B	5.88	1.48	1.40
23	d	403[B]	CLA	C3B-C2B	5.87	1.48	1.40
23	b	607	CLA	C3B-C2B	5.85	1.48	1.40
23	a	407	CLA	C3B-C2B	5.84	1.48	1.40
23	B	604	CLA	C3B-C2B	5.79	1.48	1.40
23	b	604	CLA	C3B-C2B	5.79	1.48	1.40
23	c	514	CLA	C3B-C2B	5.79	1.48	1.40
23	c	514	CLA	C1D-ND	5.77	1.44	1.37
23	b	611	CLA	C3B-C2B	5.77	1.48	1.40
23	b	606	CLA	C3B-C2B	5.75	1.48	1.40
23	d	404	CLA	C3B-C2B	5.75	1.48	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	406[B]	PHO	C3D-C2D	5.73	1.49	1.39
23	C	512	CLA	C3B-C2B	5.73	1.48	1.40
23	c	509	CLA	C3C-C2C	5.71	1.48	1.36
23	C	510	CLA	C3B-C2B	5.66	1.48	1.40
23	d	403[A]	CLA	C3B-C2B	5.65	1.48	1.40
23	c	502	CLA	C3B-C2B	5.62	1.48	1.40
23	C	506	CLA	C3B-C2B	5.60	1.48	1.40
23	B	614	CLA	C3B-C2B	5.60	1.48	1.40
23	C	510	CLA	C1D-ND	5.59	1.44	1.37
23	B	611	CLA	CHC-C1C	5.59	1.49	1.35
23	D	404	CLA	C3C-C2C	5.58	1.48	1.36
23	B	610	CLA	C3C-C2C	5.58	1.48	1.36
23	C	501	CLA	C3B-C2B	5.57	1.48	1.40
23	C	512	CLA	C3C-C2C	5.55	1.48	1.36
23	B	611	CLA	C3C-C2C	5.55	1.48	1.36
23	A	406[B]	CLA	C3C-C2C	5.52	1.48	1.36
23	C	503	CLA	C3C-C2C	5.52	1.48	1.36
23	a	404[B]	CLA	C3C-C2C	5.52	1.48	1.36
23	d	402[B]	CLA	C3C-C2C	5.52	1.48	1.36
23	b	616	CLA	C3B-C2B	5.51	1.48	1.40
23	B	607	CLA	C3B-C2B	5.51	1.48	1.40
23	C	507	CLA	C3B-C2B	5.50	1.48	1.40
23	b	605	CLA	C3C-C2C	5.49	1.48	1.36
23	C	507	CLA	C3C-C2C	5.49	1.48	1.36
23	c	513	CLA	C3C-C2C	5.49	1.48	1.36
24	a	414[B]	PHO	C3D-C2D	5.45	1.49	1.39
23	A	404[A]	CLA	C3C-C2C	5.45	1.48	1.36
23	C	508	CLA	C3C-C2C	5.44	1.48	1.36
23	C	512	CLA	CHC-C1C	5.44	1.48	1.35
40	v	201	HEC	C3D-C2D	5.44	1.53	1.37
23	B	601	CLA	C3C-C2C	5.44	1.48	1.36
40	V	201	HEC	C2B-C3B	-5.44	1.35	1.40
23	A	406[B]	CLA	C3B-C2B	5.43	1.47	1.40
23	B	613	CLA	CHC-C1C	5.43	1.48	1.35
23	B	605	CLA	C3C-C2C	5.43	1.48	1.36
23	b	606	CLA	C3C-C2C	5.42	1.48	1.36
23	c	505	CLA	O2D-CGD	5.42	1.46	1.33
23	C	502	CLA	C1D-ND	5.41	1.44	1.37
24	a	406[A]	PHO	C3D-C2D	5.41	1.49	1.39
23	a	405[B]	CLA	C3B-C2B	5.41	1.47	1.40
23	d	404	CLA	C3C-C2C	5.41	1.48	1.36
23	B	601	CLA	C1D-ND	5.40	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	603	CLA	C3C-C2C	5.39	1.48	1.36
23	c	506	CLA	C3C-C2C	5.39	1.48	1.36
23	B	614	CLA	C3C-C2C	5.38	1.48	1.36
23	B	610	CLA	C3B-C2B	5.38	1.47	1.40
23	B	612	CLA	CHC-C1C	5.38	1.48	1.35
23	C	509	CLA	C3C-C2C	5.38	1.48	1.36
23	b	609	CLA	C3B-C2B	5.37	1.47	1.40
23	d	402[B]	CLA	C1D-ND	5.36	1.44	1.37
23	b	601	CLA	C3C-C2C	5.36	1.48	1.36
23	A	404[B]	CLA	C3C-C2C	5.35	1.48	1.36
23	d	402[A]	CLA	C3C-C2C	5.35	1.48	1.36
23	a	405[B]	CLA	CHC-C1C	5.35	1.48	1.35
23	b	601	CLA	C1D-ND	5.35	1.44	1.37
23	a	405[A]	CLA	C3C-C2C	5.34	1.48	1.36
23	c	503	CLA	C3C-C2C	5.33	1.48	1.36
23	B	603	CLA	C1D-ND	5.33	1.44	1.37
23	d	404	CLA	C1D-ND	5.33	1.44	1.37
23	c	504	CLA	C3C-C2C	5.32	1.48	1.36
23	c	510	CLA	O2D-CGD	5.32	1.46	1.33
23	b	603	CLA	C3C-C2C	5.32	1.48	1.36
23	b	605	CLA	C3B-C2B	5.32	1.47	1.40
23	c	513	CLA	C3B-C2B	5.31	1.47	1.40
23	c	513	CLA	CHC-C1C	5.31	1.48	1.35
23	b	616	CLA	CHC-C1C	5.30	1.48	1.35
23	b	614	CLA	C3C-C2C	5.30	1.48	1.36
23	b	602	CLA	C3C-C2C	5.29	1.48	1.36
23	c	512	CLA	C1D-ND	5.29	1.44	1.37
23	C	503	CLA	C3B-C2B	5.29	1.47	1.40
23	D	403[B]	CLA	C3C-C2C	5.28	1.48	1.36
23	b	615	CLA	C3C-C2C	5.28	1.48	1.36
24	a	414[A]	PHO	C3D-C2D	5.28	1.48	1.39
23	b	610	CLA	C3C-C2C	5.28	1.48	1.36
23	a	407	CLA	CHC-C1C	5.28	1.48	1.35
23	c	502	CLA	CHC-C1C	5.28	1.48	1.35
23	b	602	CLA	CHC-C1C	5.28	1.48	1.35
23	b	602	CLA	O2D-CGD	5.27	1.46	1.33
23	B	601	CLA	CHC-C1C	5.26	1.48	1.35
23	b	607	CLA	C3C-C2C	5.26	1.47	1.36
23	C	501	CLA	CHC-C1C	5.26	1.48	1.35
23	C	508	CLA	C1D-ND	5.26	1.44	1.37
23	c	506	CLA	CHC-C1C	5.26	1.48	1.35
23	C	510	CLA	C3C-C2C	5.25	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	416[A]	PHO	C3D-C2D	5.25	1.48	1.39
23	A	408	CLA	C3C-C2C	5.25	1.47	1.36
23	B	613	CLA	C1D-ND	5.25	1.44	1.37
23	b	601	CLA	CHC-C1C	5.24	1.48	1.35
23	C	505	CLA	CHC-C1C	5.24	1.48	1.35
23	B	605	CLA	C1D-ND	5.24	1.44	1.37
23	c	504	CLA	C1D-ND	5.23	1.44	1.37
23	d	403[A]	CLA	C3C-C2C	5.23	1.47	1.36
23	d	404	CLA	CHC-C1C	5.23	1.48	1.35
23	a	405[B]	CLA	C3C-C2C	5.23	1.47	1.36
23	B	604	CLA	C3C-C2C	5.23	1.47	1.36
23	a	405[A]	CLA	C3B-C2B	5.22	1.47	1.40
23	d	402[B]	CLA	O2D-CGD	5.22	1.45	1.33
23	c	509	CLA	CHC-C1C	5.22	1.48	1.35
23	D	403[A]	CLA	C3C-C2C	5.22	1.47	1.36
23	a	404[A]	CLA	C3C-C2C	5.22	1.47	1.36
23	b	610	CLA	CHC-C1C	5.21	1.48	1.35
23	B	614	CLA	C1D-ND	5.21	1.44	1.37
23	b	603	CLA	O2D-CGD	5.21	1.45	1.33
23	D	404	CLA	CHC-C1C	5.20	1.48	1.35
23	b	616	CLA	C3C-C2C	5.20	1.47	1.36
23	c	510	CLA	C3C-C2C	5.20	1.47	1.36
23	b	609	CLA	O2D-CGD	5.20	1.45	1.33
23	c	508	CLA	C3B-C2B	5.20	1.47	1.40
23	B	606	CLA	CHC-C1C	5.20	1.48	1.35
23	c	503	CLA	C1D-ND	5.20	1.44	1.37
23	c	514	CLA	C3C-C2C	5.20	1.47	1.36
23	c	509	CLA	O2D-CGD	5.20	1.45	1.33
23	C	505	CLA	C3B-C2B	5.19	1.47	1.40
23	b	613	CLA	CHC-C1C	5.19	1.48	1.35
23	B	609	CLA	CHC-C1C	5.19	1.48	1.35
23	B	615	CLA	CHC-C1C	5.19	1.48	1.35
23	c	513	CLA	C1D-ND	5.19	1.44	1.37
23	b	612	CLA	C3C-C2C	5.19	1.47	1.36
23	A	405[A]	CLA	C3B-C2B	5.18	1.47	1.40
23	D	404	CLA	C1D-ND	5.17	1.44	1.37
24	A	416[B]	PHO	O2D-CGD	5.17	1.45	1.33
23	c	504	CLA	CHC-C1C	5.16	1.48	1.35
23	d	402[A]	CLA	C1D-ND	5.16	1.44	1.37
23	b	609	CLA	CHC-C1C	5.15	1.48	1.35
23	b	615	CLA	C3B-C2B	5.15	1.47	1.40
23	B	606	CLA	C3C-C2C	5.15	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	609	CLA	C3B-C2B	5.15	1.47	1.40
23	C	502	CLA	C3C-C2C	5.15	1.47	1.36
23	b	614	CLA	CHC-C1C	5.15	1.48	1.35
23	C	503	CLA	CHC-C1C	5.14	1.48	1.35
24	a	414[B]	PHO	OBD-CAD	5.14	1.29	1.22
23	C	513	CLA	C3C-C2C	5.13	1.47	1.36
23	B	610	CLA	CHC-C1C	5.13	1.48	1.35
23	c	505	CLA	C1D-ND	5.13	1.44	1.37
23	A	404[B]	CLA	C1D-ND	5.12	1.44	1.37
23	A	406[A]	CLA	CHC-C1C	5.12	1.48	1.35
23	c	509	CLA	C1D-ND	5.12	1.44	1.37
24	a	414[B]	PHO	O2D-CGD	5.11	1.45	1.33
23	C	506	CLA	O2D-CGD	5.11	1.45	1.33
23	b	611	CLA	CHC-C1C	5.11	1.48	1.35
23	c	505	CLA	C3C-C2C	5.11	1.47	1.36
23	A	405[B]	CLA	O2D-CGD	5.11	1.45	1.33
23	c	511	CLA	C3C-C2C	5.11	1.47	1.36
24	A	416[B]	PHO	C3D-C2D	5.11	1.48	1.39
23	C	509	CLA	O2D-CGD	5.11	1.45	1.33
23	B	615	CLA	O2D-CGD	5.10	1.45	1.33
23	C	510	CLA	CHC-C1C	5.10	1.48	1.35
23	d	403[B]	CLA	C3C-C2C	5.10	1.47	1.36
23	c	510	CLA	C1D-ND	5.10	1.44	1.37
23	A	406[B]	CLA	CHC-C1C	5.09	1.48	1.35
23	C	509	CLA	C1D-ND	5.09	1.44	1.37
23	c	514	CLA	CHC-C1C	5.09	1.48	1.35
23	D	404	CLA	C3B-C2B	5.09	1.47	1.40
23	C	508	CLA	O2D-CGD	5.08	1.45	1.33
23	c	502	CLA	C3C-C2C	5.08	1.47	1.36
23	B	601	CLA	O2D-CGD	5.08	1.45	1.33
23	d	402[B]	CLA	CHC-C1C	5.08	1.48	1.35
25	k	101	BCR	C23-C22	-5.07	1.35	1.45
23	B	616	CLA	C3C-C2C	5.07	1.47	1.36
23	B	609	CLA	C3C-C2C	5.07	1.47	1.36
23	a	407	CLA	C3C-C2C	5.07	1.47	1.36
23	c	511	CLA	O2D-CGD	5.06	1.45	1.33
23	c	506	CLA	C3B-C2B	5.06	1.47	1.40
23	c	507	CLA	C1D-ND	5.06	1.44	1.37
23	B	615	CLA	C1D-ND	5.06	1.44	1.37
23	C	511	CLA	CHC-C1C	5.06	1.47	1.35
23	C	513	CLA	C1D-ND	5.06	1.44	1.37
23	A	406[A]	CLA	C3C-C2C	5.05	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	515	BCR	C23-C22	-5.05	1.35	1.45
23	c	502	CLA	C1D-ND	5.05	1.44	1.37
40	V	201	HEC	C3D-C2D	5.05	1.52	1.37
23	B	605	CLA	O2D-CGD	5.05	1.45	1.33
23	b	615	CLA	CHC-C1C	5.05	1.47	1.35
23	B	616	CLA	CHC-C1C	5.05	1.47	1.35
23	b	604	CLA	CHC-C1C	5.04	1.47	1.35
23	B	610	CLA	C1D-ND	5.04	1.44	1.37
23	C	504	CLA	C3C-C2C	5.04	1.47	1.36
23	B	615	CLA	C3B-C2B	5.04	1.47	1.40
25	d	405	BCR	C23-C22	-5.03	1.35	1.45
24	a	406[A]	PHO	O2D-CGD	5.03	1.45	1.33
23	A	404[B]	CLA	CHC-C1C	5.03	1.47	1.35
23	A	405[B]	CLA	CHC-C1C	5.03	1.47	1.35
23	b	603	CLA	CHC-C1C	5.03	1.47	1.35
23	b	610	CLA	O2D-CGD	5.02	1.45	1.33
23	b	606	CLA	CHC-C1C	5.02	1.47	1.35
23	C	501	CLA	C3C-C2C	5.02	1.47	1.36
23	d	402[B]	CLA	C3B-C2B	5.02	1.47	1.40
23	B	602	CLA	CHC-C1C	5.02	1.47	1.35
23	B	601	CLA	O2A-CGA	5.02	1.48	1.33
23	c	514	CLA	O2D-CGD	5.02	1.45	1.33
23	C	507	CLA	CHC-C1C	5.02	1.47	1.35
23	a	405[A]	CLA	CHC-C1C	5.01	1.47	1.35
23	b	607	CLA	CHC-C1C	5.01	1.47	1.35
23	d	402[A]	CLA	C3B-C2B	5.01	1.47	1.40
23	B	605	CLA	CHC-C1C	5.01	1.47	1.35
23	b	611	CLA	C3C-C2C	5.01	1.47	1.36
24	a	406[B]	PHO	O2D-CGD	5.01	1.45	1.33
25	T	101	BCR	C23-C22	-5.00	1.35	1.45
23	c	512	CLA	C3C-C2C	5.00	1.47	1.36
23	b	608	CLA	C3C-C2C	4.99	1.47	1.36
23	c	507	CLA	C3C-C2C	4.99	1.47	1.36
23	A	405[A]	CLA	CHC-C1C	4.99	1.47	1.35
40	V	201	HEC	C3C-C2C	-4.98	1.35	1.40
25	C	514	BCR	C23-C22	-4.98	1.35	1.45
23	d	402[A]	CLA	O2D-CGD	4.98	1.45	1.33
23	c	512	CLA	CHC-C1C	4.98	1.47	1.35
23	D	403[B]	CLA	O2D-CGD	4.98	1.45	1.33
23	b	613	CLA	C3C-C2C	4.97	1.47	1.36
23	C	511	CLA	O2D-CGD	4.97	1.45	1.33
23	A	405[B]	CLA	C3C-C2C	4.96	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A	409	BCR	C23-C22	-4.96	1.35	1.45
23	a	404[B]	CLA	C1D-ND	4.96	1.43	1.37
23	B	609	CLA	O2D-CGD	4.95	1.45	1.33
24	a	414[A]	PHO	O2D-CGD	4.95	1.45	1.33
23	B	612	CLA	C3C-C2C	4.95	1.47	1.36
23	c	504	CLA	C3B-C2B	4.95	1.47	1.40
23	b	616	CLA	O2D-CGD	4.95	1.45	1.33
23	A	406[B]	CLA	O2D-CGD	4.94	1.45	1.33
23	B	607	CLA	C3C-C2C	4.94	1.47	1.36
23	B	614	CLA	CHC-C1C	4.94	1.47	1.35
24	A	407[B]	PHO	C3D-C2D	4.94	1.48	1.39
23	B	602	CLA	C3C-C2C	4.94	1.47	1.36
24	A	407[B]	PHO	O2D-CGD	4.94	1.45	1.33
23	C	506	CLA	C3C-C2C	4.93	1.47	1.36
23	B	607	CLA	CHC-C1C	4.93	1.47	1.35
23	A	406[A]	CLA	C3B-C2B	4.93	1.47	1.40
23	B	613	CLA	O2D-CGD	4.92	1.45	1.33
23	C	513	CLA	O2D-CGD	4.92	1.45	1.33
23	A	406[B]	CLA	C1D-ND	4.92	1.43	1.37
23	C	504	CLA	O2D-CGD	4.91	1.45	1.33
23	b	602	CLA	C3B-C2B	4.91	1.47	1.40
23	c	508	CLA	CHC-C1C	4.91	1.47	1.35
23	b	606	CLA	C1D-ND	4.91	1.43	1.37
24	A	416[A]	PHO	O2D-CGD	4.91	1.45	1.33
23	C	504	CLA	CHC-C1C	4.90	1.47	1.35
23	B	615	CLA	C3C-C2C	4.90	1.47	1.36
24	A	407[A]	PHO	O2D-CGD	4.90	1.45	1.33
23	A	406[A]	CLA	O2D-CGD	4.90	1.45	1.33
23	c	508	CLA	C1D-ND	4.90	1.43	1.37
23	b	613	CLA	O2D-CGD	4.89	1.45	1.33
23	c	511	CLA	C1D-ND	4.89	1.43	1.37
23	A	404[B]	CLA	O2D-CGD	4.89	1.45	1.33
23	C	513	CLA	CHC-C1C	4.89	1.47	1.35
23	B	604	CLA	CHC-C1C	4.89	1.47	1.35
23	b	608	CLA	CHC-C1C	4.88	1.47	1.35
23	b	609	CLA	C3C-C2C	4.88	1.47	1.36
24	A	407[A]	PHO	C3D-C2D	4.88	1.48	1.39
23	c	508	CLA	O2D-CGD	4.88	1.45	1.33
23	c	508	CLA	C3C-C2C	4.88	1.47	1.36
23	d	402[A]	CLA	CHC-C1C	4.87	1.47	1.35
23	B	602	CLA	C1D-ND	4.87	1.43	1.37
23	A	405[A]	CLA	C3C-C2C	4.87	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	614	CLA	O2D-CGD	4.86	1.45	1.33
23	C	505	CLA	O2D-CGD	4.86	1.45	1.33
23	a	407	CLA	O2D-CGD	4.86	1.45	1.33
23	c	507	CLA	O2D-CGD	4.86	1.45	1.33
23	b	605	CLA	O2D-CGD	4.85	1.45	1.33
23	C	511	CLA	C3C-C2C	4.85	1.47	1.36
23	B	613	CLA	C3C-C2C	4.85	1.47	1.36
26	F	103	SQD	O47-C7	4.84	1.48	1.34
23	b	601	CLA	O2D-CGD	4.84	1.45	1.33
24	a	414[A]	PHO	OBD-CAD	4.84	1.29	1.22
23	a	404[A]	CLA	CHC-C1C	4.84	1.47	1.35
23	c	503	CLA	O2D-CGD	4.84	1.45	1.33
25	B	619	BCR	C23-C22	-4.83	1.35	1.45
23	c	503	CLA	CHC-C1C	4.83	1.47	1.35
23	C	502	CLA	CHC-C1C	4.83	1.47	1.35
23	b	615	CLA	O2D-CGD	4.83	1.45	1.33
24	A	416[B]	PHO	OBD-CAD	4.83	1.29	1.22
23	b	601	CLA	O2A-CGA	4.83	1.47	1.33
23	B	608	CLA	C3C-C2C	4.82	1.47	1.36
23	C	512	CLA	C1D-ND	4.82	1.43	1.37
23	c	505	CLA	CHC-C1C	4.81	1.47	1.35
23	c	513	CLA	O2D-CGD	4.81	1.44	1.33
23	D	403[B]	CLA	CHC-C1C	4.81	1.47	1.35
23	B	606	CLA	C1D-ND	4.81	1.43	1.37
23	C	508	CLA	CHC-C1C	4.80	1.47	1.35
23	D	403[A]	CLA	O2D-CGD	4.80	1.44	1.33
23	A	404[A]	CLA	CHC-C1C	4.80	1.47	1.35
23	a	405[B]	CLA	O2D-CGD	4.80	1.44	1.33
25	K	102	BCR	C23-C22	-4.80	1.35	1.45
23	d	403[B]	CLA	CHC-C1C	4.80	1.47	1.35
23	c	511	CLA	CHC-C1C	4.80	1.47	1.35
23	b	605	CLA	CHC-C1C	4.79	1.47	1.35
23	b	612	CLA	CHC-C1C	4.79	1.47	1.35
23	C	512	CLA	O2D-CGD	4.78	1.44	1.33
23	A	408	CLA	CHC-C1C	4.78	1.47	1.35
25	b	617	BCR	C23-C22	-4.77	1.35	1.45
23	B	605	CLA	C3B-C2B	4.76	1.47	1.40
24	A	407[B]	PHO	OBD-CAD	4.76	1.29	1.22
23	B	603	CLA	O2D-CGD	4.76	1.44	1.33
23	C	510	CLA	O2D-CGD	4.76	1.44	1.33
23	C	505	CLA	C3C-C2C	4.75	1.46	1.36
23	C	502	CLA	O2D-CGD	4.75	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	604	CLA	C3C-C2C	4.75	1.46	1.36
23	D	403[A]	CLA	CHC-C1C	4.75	1.47	1.35
23	a	404[B]	CLA	CHC-C1C	4.75	1.47	1.35
23	b	604	CLA	C1D-ND	4.74	1.43	1.37
23	A	405[B]	CLA	C1D-ND	4.74	1.43	1.37
23	b	613	CLA	C1D-ND	4.73	1.43	1.37
23	d	403[B]	CLA	O2D-CGD	4.73	1.44	1.33
23	A	404[A]	CLA	O2D-CGD	4.73	1.44	1.33
23	c	507	CLA	CHC-C1C	4.73	1.47	1.35
25	D	405	BCR	C23-C22	-4.73	1.35	1.45
23	b	609	CLA	C1D-ND	4.72	1.43	1.37
23	C	501	CLA	C1D-ND	4.72	1.43	1.37
23	C	507	CLA	O2D-CGD	4.71	1.44	1.33
23	b	616	CLA	C1D-ND	4.71	1.43	1.37
23	B	603	CLA	CHC-C1C	4.70	1.47	1.35
23	D	404	CLA	O2D-CGD	4.70	1.44	1.33
25	c	516	BCR	C23-C22	-4.69	1.35	1.45
23	C	509	CLA	CHC-C1C	4.69	1.47	1.35
25	b	619	BCR	C23-C22	-4.69	1.35	1.45
23	a	405[B]	CLA	C1D-ND	4.68	1.43	1.37
23	b	612	CLA	C1D-ND	4.68	1.43	1.37
23	A	408	CLA	O2D-CGD	4.67	1.44	1.33
23	d	403[A]	CLA	O2D-CGD	4.66	1.44	1.33
32	c	521	LMG	O7-C10	4.66	1.47	1.34
23	d	403[A]	CLA	CHC-C1C	4.66	1.46	1.35
23	c	510	CLA	CHC-C1C	4.65	1.46	1.35
23	B	614	CLA	O2D-CGD	4.65	1.44	1.33
23	b	608	CLA	O2D-CGD	4.64	1.44	1.33
32	C	520	LMG	O7-C10	4.62	1.47	1.34
25	B	617	BCR	C23-C22	-4.62	1.36	1.45
23	b	606	CLA	O2D-CGD	4.62	1.44	1.33
23	B	611	CLA	O2D-CGD	4.62	1.44	1.33
23	c	512	CLA	O2D-CGD	4.62	1.44	1.33
23	a	404[A]	CLA	C1D-ND	4.62	1.43	1.37
23	B	616	CLA	O2D-CGD	4.62	1.44	1.33
23	C	506	CLA	CHD-C1D	4.61	1.47	1.38
25	t	102	BCR	C23-C22	-4.60	1.36	1.45
23	b	605	CLA	C1D-ND	4.60	1.43	1.37
23	C	506	CLA	CHC-C1C	4.59	1.46	1.35
23	c	506	CLA	O2D-CGD	4.59	1.44	1.33
25	y	101	BCR	C23-C22	-4.59	1.36	1.45
23	c	504	CLA	CHD-C1D	4.58	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	602	CLA	CHD-C1D	4.58	1.47	1.38
23	C	505	CLA	C1D-ND	4.58	1.43	1.37
23	B	610	CLA	OBD-CAD	4.58	1.30	1.22
23	b	612	CLA	O2D-CGD	4.57	1.44	1.33
23	c	514	CLA	O2A-CGA	4.56	1.46	1.33
23	b	602	CLA	C1D-ND	4.56	1.43	1.37
23	C	503	CLA	O2D-CGD	4.55	1.44	1.33
23	b	603	CLA	C1D-ND	4.55	1.43	1.37
23	b	610	CLA	C1D-ND	4.55	1.43	1.37
23	B	604	CLA	O2D-CGD	4.55	1.44	1.33
25	c	515	BCR	C23-C22	-4.55	1.36	1.45
26	f	102	SQD	O47-C7	4.54	1.47	1.34
23	a	404[A]	CLA	O2D-CGD	4.54	1.44	1.33
40	v	201	HEC	C3C-C2C	-4.53	1.36	1.40
23	B	615	CLA	CHD-C1D	4.52	1.47	1.38
23	a	404[B]	CLA	O2D-CGD	4.52	1.44	1.33
23	b	615	CLA	C1D-ND	4.51	1.43	1.37
23	B	608	CLA	C1D-ND	4.51	1.43	1.37
26	a	410	SQD	O48-C23	4.51	1.46	1.33
23	B	604	CLA	CHD-C1D	4.51	1.47	1.38
23	C	504	CLA	C1D-ND	4.51	1.43	1.37
26	B	620	SQD	O47-C7	4.50	1.47	1.34
23	a	405[A]	CLA	O2D-CGD	4.50	1.44	1.33
32	C	520	LMG	O8-C28	4.49	1.46	1.33
25	a	408	BCR	C23-C22	-4.48	1.36	1.45
33	E	101[A]	LHG	O8-C23	4.48	1.46	1.33
23	c	514	CLA	CHD-C1D	4.47	1.47	1.38
23	D	403[B]	CLA	C1D-ND	4.46	1.43	1.37
23	D	404	CLA	CHD-C1D	4.46	1.47	1.38
23	C	503	CLA	C1D-ND	4.46	1.43	1.37
32	z	101	LMG	O8-C28	4.46	1.46	1.33
32	B	621	LMG	O8-C28	4.45	1.46	1.33
33	E	101[B]	LHG	O8-C23	4.45	1.46	1.33
25	Y	101	BCR	C23-C22	-4.43	1.36	1.45
24	a	406[B]	PHO	OBD-CAD	4.43	1.28	1.22
23	B	609	CLA	C1D-ND	4.42	1.43	1.37
26	A	412	SQD	O48-C23	4.42	1.46	1.33
23	B	608	CLA	CHC-C1C	4.42	1.46	1.35
23	B	609	CLA	CHD-C1D	4.41	1.47	1.38
23	B	602	CLA	O2D-CGD	4.41	1.44	1.33
23	b	611	CLA	O2D-CGD	4.40	1.43	1.33
25	H	101	BCR	C23-C22	-4.40	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	h	101	BCR	C23-C22	-4.40	1.36	1.45
33	a	418[A]	LHG	O8-C23	4.39	1.46	1.33
23	B	606	CLA	O2D-CGD	4.39	1.43	1.33
23	B	610	CLA	O2D-CGD	4.39	1.43	1.33
23	c	513	CLA	O2A-CGA	4.39	1.46	1.33
23	B	612	CLA	O2D-CGD	4.39	1.43	1.33
23	C	509	CLA	CHD-C1D	4.38	1.46	1.38
35	c	519	DGD	O1G-C1A	4.38	1.46	1.33
23	d	402[A]	CLA	C3D-C2D	4.38	1.51	1.39
23	c	513	CLA	CHD-C1D	4.37	1.46	1.38
33	a	418[B]	LHG	O8-C23	4.37	1.46	1.33
23	b	614	CLA	C1D-ND	4.37	1.43	1.37
23	D	403[B]	CLA	O2A-CGA	4.37	1.46	1.33
23	c	512	CLA	CHD-C1D	4.36	1.46	1.38
26	b	620	SQD	O48-C23	4.36	1.46	1.33
23	B	602	CLA	CHD-C1D	4.36	1.46	1.38
24	a	406[A]	PHO	OBD-CAD	4.36	1.28	1.22
23	C	510	CLA	CHD-C4C	4.35	1.49	1.39
26	b	620	SQD	O47-C7	4.35	1.46	1.34
23	A	405[A]	CLA	O2D-CGD	4.35	1.43	1.33
23	C	511	CLA	C1D-ND	4.34	1.43	1.37
23	C	506	CLA	C1D-ND	4.34	1.43	1.37
23	c	508	CLA	CHD-C1D	4.34	1.46	1.38
33	d	408[B]	LHG	O8-C23	4.33	1.46	1.33
23	c	503	CLA	O2A-CGA	4.33	1.46	1.33
23	b	601	CLA	CHD-C1D	4.33	1.46	1.38
23	b	607	CLA	CHD-C1D	4.33	1.46	1.38
23	C	502	CLA	C3D-C2D	4.33	1.50	1.39
23	c	506	CLA	C1D-ND	4.32	1.43	1.37
25	b	618	BCR	C23-C22	-4.32	1.36	1.45
23	b	604	CLA	O2D-CGD	4.32	1.43	1.33
24	A	416[A]	PHO	OBD-CAD	4.31	1.28	1.22
23	a	404[B]	CLA	CHD-C1D	4.31	1.46	1.38
23	c	502	CLA	CHD-C1D	4.31	1.46	1.38
23	b	608	CLA	CHD-C1D	4.31	1.46	1.38
33	d	408[A]	LHG	O8-C23	4.31	1.45	1.33
32	m	101	LMG	O8-C28	4.30	1.45	1.33
23	C	508	CLA	O2A-CGA	4.30	1.45	1.33
23	b	611	CLA	O2A-CGA	4.30	1.45	1.33
23	A	408	CLA	O2A-CGA	4.28	1.45	1.33
23	d	404	CLA	O2A-CGA	4.28	1.45	1.33
23	D	403[A]	CLA	C1D-ND	4.27	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	512	CLA	O2A-CGA	4.27	1.45	1.33
23	A	406[B]	CLA	CHD-C1D	4.26	1.46	1.38
23	B	604	CLA	C1D-ND	4.26	1.43	1.37
23	C	502	CLA	CHD-C1D	4.26	1.46	1.38
23	C	501	CLA	CHD-C1D	4.25	1.46	1.38
23	a	407	CLA	O2A-CGA	4.25	1.45	1.33
32	c	521	LMG	O8-C28	4.25	1.45	1.33
23	c	508	CLA	O2A-CGA	4.24	1.45	1.33
23	C	513	CLA	CHD-C1D	4.24	1.46	1.38
23	c	509	CLA	CHD-C1D	4.24	1.46	1.38
23	c	505	CLA	C3D-C2D	4.24	1.50	1.39
23	d	404	CLA	O2D-CGD	4.23	1.43	1.33
23	B	609	CLA	O2A-CGA	4.23	1.45	1.33
23	C	513	CLA	O2A-CGA	4.23	1.45	1.33
23	b	601	CLA	C3D-C2D	4.22	1.50	1.39
23	A	404[A]	CLA	C1D-ND	4.22	1.43	1.37
23	b	616	CLA	O2A-CGA	4.22	1.45	1.33
23	D	403[A]	CLA	O2A-CGA	4.22	1.45	1.33
32	C	519	LMG	O8-C28	4.22	1.45	1.33
23	C	511	CLA	CHD-C1D	4.21	1.46	1.38
23	A	408	CLA	C1D-ND	4.21	1.43	1.37
23	C	508	CLA	C3D-C2D	4.21	1.50	1.39
26	f	102	SQD	O48-C23	4.20	1.45	1.33
35	C	518	DGD	O1G-C1A	4.20	1.45	1.33
23	D	403[B]	CLA	CHD-C1D	4.20	1.46	1.38
23	b	607	CLA	O2D-CGD	4.20	1.43	1.33
23	d	404	CLA	CHD-C1D	4.20	1.46	1.38
23	B	614	CLA	CHD-C4C	4.20	1.48	1.39
23	d	402[B]	CLA	O2A-CGA	4.19	1.45	1.33
23	b	611	CLA	C1D-ND	4.19	1.42	1.37
23	B	601	CLA	CHD-C1D	4.19	1.46	1.38
33	E	101[A]	LHG	O7-C7	4.19	1.46	1.34
23	C	507	CLA	O2A-CGA	4.19	1.45	1.33
26	B	620	SQD	O48-C23	4.18	1.45	1.33
35	C	516[B]	DGD	O2G-C1B	4.18	1.46	1.34
23	B	608	CLA	CHD-C1D	4.18	1.46	1.38
23	A	406[A]	CLA	CHD-C1D	4.18	1.46	1.38
23	c	504	CLA	CHD-C4C	4.18	1.48	1.39
33	E	101[B]	LHG	O7-C7	4.18	1.46	1.34
23	D	404	CLA	C3D-C2D	4.17	1.50	1.39
23	C	512	CLA	O2A-CGA	4.17	1.45	1.33
23	b	602	CLA	CHD-C4C	4.16	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	616	CLA	C1D-ND	4.16	1.42	1.37
23	c	507	CLA	CHD-C1D	4.16	1.46	1.38
32	Z	101	LMG	O7-C10	4.16	1.46	1.34
23	a	404[B]	CLA	CHD-C4C	4.16	1.48	1.39
23	B	611	CLA	O2A-CGA	4.16	1.45	1.33
33	a	418[B]	LHG	O7-C7	4.16	1.46	1.34
23	B	608	CLA	O2D-CGD	4.15	1.43	1.33
23	a	405[A]	CLA	C1D-ND	4.15	1.42	1.37
33	L	101[B]	LHG	O8-C23	4.15	1.45	1.33
23	b	609	CLA	CHD-C1D	4.14	1.46	1.38
24	A	407[A]	PHO	OBD-CAD	4.14	1.28	1.22
23	b	601	CLA	CHD-C4C	4.14	1.48	1.39
23	d	402[B]	CLA	C3D-C2D	4.14	1.50	1.39
23	b	612	CLA	CHD-C1D	4.13	1.46	1.38
33	a	418[A]	LHG	O7-C7	4.13	1.46	1.34
23	A	406[B]	CLA	CHD-C4C	4.13	1.48	1.39
26	a	409[B]	SQD	O47-C7	4.13	1.46	1.34
23	C	501	CLA	O2A-CGA	4.13	1.45	1.33
23	b	603	CLA	CHD-C1D	4.13	1.46	1.38
26	a	410	SQD	O47-C7	4.13	1.45	1.34
23	c	514	CLA	CHD-C4C	4.12	1.48	1.39
32	C	519	LMG	O7-C10	4.12	1.45	1.34
23	A	404[B]	CLA	CHD-C1D	4.12	1.46	1.38
23	a	405[A]	CLA	O2A-CGA	4.12	1.45	1.33
23	c	503	CLA	C3D-C2D	4.12	1.50	1.39
23	b	604	CLA	CHD-C1D	4.12	1.46	1.38
23	C	512	CLA	CHD-C1D	4.11	1.46	1.38
23	A	405[B]	CLA	O2A-CGA	4.11	1.45	1.33
35	c	517[B]	DGD	O2G-C1B	4.11	1.45	1.34
23	C	507	CLA	C1D-ND	4.11	1.42	1.37
23	A	405[B]	CLA	CHD-C1D	4.11	1.46	1.38
23	C	507	CLA	CHD-C1D	4.10	1.46	1.38
32	c	501	LMG	O7-C10	4.10	1.45	1.34
23	b	615	CLA	CHD-C1D	4.10	1.46	1.38
23	c	506	CLA	CHD-C1D	4.10	1.46	1.38
35	c	518[B]	DGD	O1G-C1A	4.10	1.45	1.33
32	z	101	LMG	O7-C10	4.09	1.45	1.34
23	C	508	CLA	OBD-CAD	4.09	1.29	1.22
23	c	509	CLA	C3D-C2D	4.09	1.50	1.39
23	A	406[B]	CLA	C3D-C2D	4.09	1.50	1.39
35	c	517[A]	DGD	O2G-C1B	4.09	1.45	1.34
23	d	403[B]	CLA	O2A-CGA	4.09	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	510	CLA	CHD-C1D	4.09	1.46	1.38
23	c	508	CLA	CHD-C4C	4.08	1.48	1.39
23	d	402[A]	CLA	O2A-CGA	4.08	1.45	1.33
23	C	511	CLA	O2A-CGA	4.08	1.45	1.33
23	b	610	CLA	OBD-CAD	4.08	1.29	1.22
23	B	611	CLA	C1C-C2C	4.07	1.52	1.44
23	b	610	CLA	CHD-C1D	4.07	1.46	1.38
26	a	409[A]	SQD	O47-C7	4.07	1.45	1.34
23	C	502	CLA	O2A-CGA	4.07	1.45	1.33
23	c	507	CLA	O2A-CGA	4.06	1.45	1.33
26	F	103	SQD	O48-C23	4.06	1.45	1.33
35	h	102	DGD	O2G-C1B	4.06	1.45	1.34
23	C	504	CLA	C3D-C2D	4.06	1.50	1.39
32	c	520	LMG	O7-C10	4.06	1.45	1.34
35	C	516[A]	DGD	O2G-C1B	4.06	1.45	1.34
23	B	607	CLA	O2D-CGD	4.06	1.43	1.33
23	C	513	CLA	CHD-C4C	4.05	1.48	1.39
23	A	405[A]	CLA	C3D-C2D	4.05	1.50	1.39
23	d	403[A]	CLA	O2A-CGA	4.05	1.45	1.33
23	D	403[B]	CLA	CHD-C4C	4.05	1.48	1.39
32	c	520	LMG	O8-C28	4.05	1.45	1.33
32	c	501	LMG	O8-C28	4.04	1.45	1.33
23	c	505	CLA	CHD-C1D	4.04	1.46	1.38
35	H	102	DGD	O1G-C1A	4.04	1.45	1.33
23	A	404[B]	CLA	CHD-C4C	4.04	1.48	1.39
24	A	416[A]	PHO	C3C-C2C	4.04	1.49	1.37
23	c	509	CLA	O2A-CGA	4.04	1.45	1.33
23	A	404[A]	CLA	CHD-C1D	4.03	1.46	1.38
23	c	502	CLA	O2D-CGD	4.03	1.43	1.33
23	A	408	CLA	CHD-C1D	4.02	1.46	1.38
23	B	610	CLA	CHD-C1D	4.02	1.46	1.38
23	A	406[B]	CLA	O2A-CGA	4.02	1.45	1.33
23	A	406[A]	CLA	C1D-ND	4.02	1.42	1.37
32	A	418	LMG	O8-C28	4.02	1.45	1.33
23	b	612	CLA	C3D-C2D	4.02	1.50	1.39
26	a	409[B]	SQD	O48-C23	4.01	1.45	1.33
23	c	504	CLA	O2A-CGA	4.01	1.45	1.33
23	C	503	CLA	CHD-C1D	4.01	1.46	1.38
23	b	615	CLA	O2A-CGA	4.01	1.45	1.33
23	B	602	CLA	CHD-C4C	4.01	1.48	1.39
23	a	405[B]	CLA	O2A-CGA	4.00	1.45	1.33
23	b	614	CLA	C3D-C2D	4.00	1.50	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	615	CLA	C3D-C2D	4.00	1.50	1.39
32	B	621	LMG	O7-C10	4.00	1.45	1.34
23	c	505	CLA	O2A-CGA	4.00	1.45	1.33
34	b	622	HTG	C1'-S1	-4.00	1.76	1.81
23	c	502	CLA	CHD-C4C	3.99	1.48	1.39
23	C	506	CLA	O2A-CGA	3.99	1.45	1.33
23	b	608	CLA	C1D-ND	3.99	1.42	1.37
26	A	410[B]	SQD	O48-C23	3.99	1.45	1.33
23	a	404[A]	CLA	CHD-C1D	3.99	1.46	1.38
23	c	511	CLA	O2A-CGA	3.99	1.45	1.33
33	D	408[B]	LHG	O8-C23	3.99	1.45	1.33
23	B	616	CLA	O2A-CGA	3.99	1.45	1.33
23	b	616	CLA	C3D-C2D	3.98	1.50	1.39
23	C	505	CLA	CHD-C1D	3.98	1.46	1.38
33	D	408[A]	LHG	O7-C7	3.98	1.45	1.34
24	A	416[B]	PHO	O2A-CGA	3.98	1.45	1.33
26	a	409[A]	SQD	O48-C23	3.98	1.45	1.33
26	A	412	SQD	O47-C7	3.98	1.45	1.34
23	B	610	CLA	CHD-C4C	3.98	1.48	1.39
23	c	508	CLA	C3D-C2D	3.98	1.50	1.39
23	B	607	CLA	OBD-CAD	3.98	1.29	1.22
23	d	402[B]	CLA	CHD-C1D	3.98	1.46	1.38
24	a	414[A]	PHO	C3C-C2C	3.97	1.49	1.37
23	c	502	CLA	O2A-CGA	3.97	1.44	1.33
23	B	616	CLA	C3D-C2D	3.97	1.50	1.39
23	c	513	CLA	CHD-C4C	3.97	1.48	1.39
23	C	509	CLA	CHD-C4C	3.97	1.48	1.39
23	c	510	CLA	O2A-CGA	3.96	1.44	1.33
23	B	608	CLA	C3D-C2D	3.96	1.49	1.39
23	B	610	CLA	C3D-C2D	3.96	1.49	1.39
23	B	615	CLA	OBD-CAD	3.96	1.29	1.22
23	a	404[A]	CLA	CHD-C4C	3.96	1.48	1.39
25	B	618	BCR	C23-C22	-3.94	1.37	1.45
23	C	509	CLA	C3D-C2D	3.94	1.49	1.39
23	B	614	CLA	O2A-CGA	3.94	1.44	1.33
23	B	613	CLA	C3D-C2D	3.94	1.49	1.39
35	C	517[B]	DGD	O1G-C1A	3.94	1.44	1.33
23	c	507	CLA	CHD-C4C	3.94	1.48	1.39
23	d	403[B]	CLA	C1D-ND	3.94	1.42	1.37
32	d	412	LMG	O8-C28	3.94	1.44	1.33
23	D	404	CLA	OBD-CAD	3.93	1.29	1.22
23	b	608	CLA	C3D-C2D	3.93	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	607	CLA	CHD-C1D	3.92	1.46	1.38
23	B	609	CLA	C3D-C2D	3.92	1.49	1.39
23	c	509	CLA	CHD-C4C	3.92	1.48	1.39
23	b	609	CLA	O2A-CGA	3.92	1.44	1.33
23	c	504	CLA	O2D-CGD	3.92	1.42	1.33
23	D	403[A]	CLA	CHD-C1D	3.92	1.46	1.38
23	C	506	CLA	CHD-C4C	3.92	1.48	1.39
23	B	605	CLA	O2A-CGA	3.92	1.44	1.33
23	B	611	CLA	OBD-CAD	3.92	1.29	1.22
23	C	513	CLA	C3D-C2D	3.91	1.49	1.39
23	C	511	CLA	C3D-C2D	3.91	1.49	1.39
23	B	613	CLA	CHD-C1D	3.91	1.46	1.38
23	C	503	CLA	CHD-C4C	3.91	1.48	1.39
23	B	601	CLA	CHD-C4C	3.91	1.48	1.39
23	b	608	CLA	OBD-CAD	3.91	1.29	1.22
33	d	407[B]	LHG	O7-C7	3.91	1.45	1.34
23	b	610	CLA	CHD-C4C	3.91	1.48	1.39
33	D	408[A]	LHG	O8-C23	3.90	1.44	1.33
32	A	418	LMG	O7-C10	3.90	1.45	1.34
23	C	508	CLA	CHD-C1D	3.90	1.46	1.38
23	b	616	CLA	CHD-C1D	3.90	1.46	1.38
23	c	506	CLA	CHD-C4C	3.90	1.48	1.39
23	b	613	CLA	C3D-C2D	3.90	1.49	1.39
23	a	405[A]	CLA	C3D-C2D	3.90	1.49	1.39
23	B	612	CLA	CHD-C1D	3.90	1.46	1.38
24	a	414[B]	PHO	O2A-CGA	3.90	1.44	1.33
23	D	403[A]	CLA	CHD-C4C	3.89	1.48	1.39
23	C	510	CLA	CHD-C1D	3.89	1.45	1.38
23	b	606	CLA	CHD-C1D	3.89	1.45	1.38
23	c	502	CLA	C3D-C2D	3.89	1.49	1.39
35	h	102	DGD	O1G-C1A	3.89	1.44	1.33
23	A	405[A]	CLA	C1D-ND	3.89	1.42	1.37
23	C	505	CLA	CHD-C4C	3.89	1.48	1.39
23	A	406[B]	CLA	OBD-CAD	3.89	1.29	1.22
23	B	615	CLA	O2A-CGA	3.89	1.44	1.33
23	c	512	CLA	CHD-C4C	3.87	1.48	1.39
23	B	604	CLA	CHD-C4C	3.87	1.48	1.39
33	b	629[B]	LHG	O7-C7	3.87	1.45	1.34
23	C	512	CLA	C3D-C2D	3.87	1.49	1.39
33	L	101[B]	LHG	O7-C7	3.87	1.45	1.34
23	c	503	CLA	CHD-C1D	3.86	1.45	1.38
23	B	609	CLA	CHD-C4C	3.86	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	405[B]	CLA	C3D-C2D	3.86	1.49	1.39
33	D	407[B]	LHG	O8-C23	3.86	1.44	1.33
23	d	404	CLA	C3D-C2D	3.86	1.49	1.39
24	A	416[A]	PHO	O2A-CGA	3.86	1.44	1.33
32	d	412	LMG	O7-C10	3.86	1.45	1.34
23	C	509	CLA	O2A-CGA	3.85	1.44	1.33
35	C	517[A]	DGD	O2G-C1B	3.85	1.45	1.34
26	A	410[A]	SQD	O48-C23	3.85	1.44	1.33
23	b	614	CLA	O2A-CGA	3.84	1.44	1.33
23	D	404	CLA	CHD-C4C	3.84	1.48	1.39
33	L	101[A]	LHG	O8-C23	3.84	1.44	1.33
23	c	511	CLA	CHD-C4C	3.84	1.48	1.39
33	D	408[B]	LHG	O7-C7	3.84	1.45	1.34
23	b	614	CLA	CHD-C1D	3.84	1.45	1.38
23	A	406[A]	CLA	C3D-C2D	3.84	1.49	1.39
23	b	605	CLA	CHD-C4C	3.84	1.48	1.39
23	b	611	CLA	CHD-C4C	3.84	1.48	1.39
23	d	403[B]	CLA	CHD-C1D	3.84	1.45	1.38
35	c	518[A]	DGD	O1G-C1A	3.83	1.44	1.33
23	a	404[B]	CLA	C3D-C2D	3.83	1.49	1.39
23	A	405[A]	CLA	O2A-CGA	3.83	1.44	1.33
23	C	510	CLA	O2A-CGA	3.83	1.44	1.33
23	C	512	CLA	CHD-C4C	3.83	1.48	1.39
23	c	510	CLA	C3D-C2D	3.83	1.49	1.39
24	a	414[A]	PHO	O2A-CGA	3.83	1.44	1.33
24	a	414[B]	PHO	C3C-C2C	3.82	1.49	1.37
23	b	616	CLA	CHD-C4C	3.82	1.48	1.39
23	b	608	CLA	O2A-CGA	3.82	1.44	1.33
23	a	404[B]	CLA	O2A-CGA	3.82	1.44	1.33
23	c	514	CLA	C3D-C2D	3.82	1.49	1.39
23	A	408	CLA	CHD-C4C	3.82	1.48	1.39
23	c	511	CLA	C3D-C2D	3.82	1.49	1.39
33	L	101[A]	LHG	O7-C7	3.82	1.45	1.34
24	A	407[B]	PHO	O2A-CGA	3.82	1.44	1.33
23	B	604	CLA	OBD-CAD	3.81	1.29	1.22
23	b	608	CLA	CHD-C4C	3.81	1.47	1.39
23	C	501	CLA	O2D-CGD	3.81	1.42	1.33
23	B	603	CLA	CHD-C1D	3.81	1.45	1.38
23	B	602	CLA	C3D-C2D	3.81	1.49	1.39
24	A	416[B]	PHO	C3C-C2C	3.81	1.49	1.37
34	b	623	HTG	C1'-S1	-3.81	1.76	1.81
23	b	611	CLA	CHD-C1D	3.81	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	403[A]	CLA	CHD-C1D	3.81	1.45	1.38
23	B	605	CLA	CHD-C1D	3.81	1.45	1.38
23	b	605	CLA	CHD-C1D	3.81	1.45	1.38
23	c	509	CLA	OBD-CAD	3.81	1.29	1.22
23	b	602	CLA	O2A-CGA	3.80	1.44	1.33
35	C	516[B]	DGD	O1G-C1A	3.80	1.44	1.33
33	b	629[B]	LHG	O8-C23	3.80	1.44	1.33
23	A	406[A]	CLA	O2A-CGA	3.80	1.44	1.33
33	d	414[B]	LHG	O8-C23	3.80	1.44	1.33
23	b	604	CLA	OBD-CAD	3.80	1.29	1.22
35	c	517[B]	DGD	O1G-C1A	3.80	1.44	1.33
23	d	402[A]	CLA	CHD-C1D	3.80	1.45	1.38
35	c	518[B]	DGD	O2G-C1B	3.79	1.45	1.34
23	c	506	CLA	O2A-CGA	3.79	1.44	1.33
24	A	416[A]	PHO	CHA-CBD	-3.79	1.47	1.52
23	c	503	CLA	CHD-C4C	3.79	1.47	1.39
23	B	603	CLA	O2A-CGA	3.78	1.44	1.33
23	b	607	CLA	C3D-C2D	3.78	1.49	1.39
23	C	505	CLA	O2A-CGA	3.78	1.44	1.33
23	B	605	CLA	CHD-C4C	3.78	1.47	1.39
23	c	507	CLA	C3D-C2D	3.78	1.49	1.39
23	c	513	CLA	C3D-C2D	3.78	1.49	1.39
35	C	517[B]	DGD	O2G-C1B	3.77	1.44	1.34
23	b	615	CLA	CHD-C4C	3.77	1.47	1.39
23	c	512	CLA	OBD-CAD	3.77	1.29	1.22
23	d	402[A]	CLA	OBD-CAD	3.77	1.29	1.22
23	a	405[B]	CLA	CHD-C1D	3.77	1.45	1.38
33	D	407[B]	LHG	O7-C7	3.77	1.44	1.34
23	b	615	CLA	C3D-C2D	3.77	1.49	1.39
23	C	511	CLA	CHD-C4C	3.77	1.47	1.39
23	B	603	CLA	C3D-C2D	3.77	1.49	1.39
23	b	603	CLA	C3D-C2D	3.76	1.49	1.39
23	a	405[B]	CLA	CHD-C4C	3.76	1.47	1.39
23	B	605	CLA	C3D-C2D	3.76	1.49	1.39
23	C	513	CLA	OBD-CAD	3.76	1.29	1.22
23	b	603	CLA	CHD-C4C	3.76	1.47	1.39
23	C	506	CLA	C3D-C2D	3.76	1.49	1.39
23	c	511	CLA	CHD-C1D	3.75	1.45	1.38
23	c	508	CLA	OBD-CAD	3.75	1.28	1.22
23	c	510	CLA	CHD-C4C	3.75	1.47	1.39
33	d	414[A]	LHG	O8-C23	3.75	1.44	1.33
23	b	609	CLA	OBD-CAD	3.74	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	A	419[B]	LHG	O8-C23	3.74	1.44	1.33
23	A	406[A]	CLA	OBD-CAD	3.74	1.28	1.22
23	a	405[B]	CLA	C3D-C2D	3.73	1.49	1.39
23	A	404[A]	CLA	CHD-C4C	3.73	1.47	1.39
23	c	513	CLA	OBD-CAD	3.73	1.28	1.22
23	b	606	CLA	O2A-CGA	3.73	1.44	1.33
23	B	611	CLA	CHD-C1D	3.73	1.45	1.38
23	a	404[B]	CLA	OBD-CAD	3.73	1.28	1.22
33	d	407[A]	LHG	O7-C7	3.72	1.44	1.34
23	A	405[A]	CLA	CHD-C1D	3.72	1.45	1.38
23	A	405[B]	CLA	CHD-C4C	3.72	1.47	1.39
23	c	506	CLA	OBD-CAD	3.72	1.28	1.22
32	m	101	LMG	O7-C10	3.72	1.44	1.34
33	d	408[B]	LHG	O7-C7	3.71	1.44	1.34
23	B	601	CLA	C3D-C2D	3.71	1.49	1.39
23	C	510	CLA	OBD-CAD	3.71	1.28	1.22
35	C	517[A]	DGD	O1G-C1A	3.71	1.44	1.33
23	b	602	CLA	C3D-C2D	3.71	1.49	1.39
33	d	414[B]	LHG	O7-C7	3.71	1.44	1.34
23	b	614	CLA	CHD-C4C	3.71	1.47	1.39
23	C	510	CLA	C3D-C2D	3.71	1.49	1.39
23	d	404	CLA	CHD-C4C	3.70	1.47	1.39
23	d	402[B]	CLA	CHD-C4C	3.70	1.47	1.39
23	c	503	CLA	OBD-CAD	3.70	1.28	1.22
23	c	506	CLA	C3D-C2D	3.70	1.49	1.39
23	c	512	CLA	C3D-C2D	3.69	1.49	1.39
23	a	405[B]	CLA	OBD-CAD	3.69	1.28	1.22
23	C	503	CLA	O2A-CGA	3.69	1.44	1.33
23	B	613	CLA	CHD-C4C	3.69	1.47	1.39
24	A	407[A]	PHO	C3C-C2C	3.68	1.48	1.37
26	A	410[A]	SQD	O47-C7	3.68	1.44	1.34
23	B	607	CLA	CHD-C4C	3.68	1.47	1.39
23	a	405[A]	CLA	OBD-CAD	3.68	1.28	1.22
23	a	407	CLA	C1D-ND	3.68	1.42	1.37
35	C	518	DGD	O2G-C1B	3.68	1.44	1.34
24	A	407[B]	PHO	C3C-C2C	3.68	1.48	1.37
23	B	602	CLA	O2A-CGA	3.67	1.44	1.33
23	A	406[A]	CLA	CHD-C4C	3.67	1.47	1.39
23	A	404[B]	CLA	C3D-C2D	3.66	1.49	1.39
23	d	403[B]	CLA	CHD-C4C	3.66	1.47	1.39
23	a	404[A]	CLA	C3D-C2D	3.66	1.49	1.39
33	d	408[A]	LHG	O7-C7	3.66	1.44	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	a	407	CLA	CHD-C1D	3.66	1.45	1.38
23	B	615	CLA	CHD-C4C	3.65	1.47	1.39
23	b	604	CLA	CHD-C4C	3.65	1.47	1.39
23	D	403[B]	CLA	C3D-C2D	3.65	1.49	1.39
23	C	503	CLA	OBD-CAD	3.65	1.28	1.22
23	b	604	CLA	C3D-C2D	3.65	1.49	1.39
26	A	410[B]	SQD	O47-C7	3.64	1.44	1.34
24	A	407[A]	PHO	O2A-CGA	3.64	1.44	1.33
23	C	502	CLA	CHD-C4C	3.64	1.47	1.39
23	B	606	CLA	CHD-C4C	3.64	1.47	1.39
24	a	406[B]	PHO	C3C-C2C	3.64	1.48	1.37
23	C	503	CLA	C3D-C2D	3.63	1.49	1.39
23	C	504	CLA	CHD-C1D	3.63	1.45	1.38
23	A	404[A]	CLA	C3D-C2D	3.63	1.49	1.39
23	b	606	CLA	CHD-C4C	3.63	1.47	1.39
24	a	406[A]	PHO	C3C-C2C	3.62	1.48	1.37
23	D	404	CLA	O2A-CGA	3.62	1.43	1.33
35	c	517[A]	DGD	O1G-C1A	3.62	1.43	1.33
23	d	402[A]	CLA	CHD-C4C	3.62	1.47	1.39
33	b	629[A]	LHG	O7-C7	3.62	1.44	1.34
23	a	404[A]	CLA	OBD-CAD	3.61	1.28	1.22
23	b	609	CLA	CHD-C4C	3.61	1.47	1.39
23	B	606	CLA	CHD-C1D	3.61	1.45	1.38
23	C	507	CLA	C3D-C2D	3.61	1.49	1.39
23	C	509	CLA	OBD-CAD	3.61	1.28	1.22
23	C	501	CLA	C3D-C2D	3.61	1.49	1.39
23	C	506	CLA	OBD-CAD	3.61	1.28	1.22
23	B	613	CLA	OBD-CAD	3.60	1.28	1.22
23	B	603	CLA	OBD-CAD	3.60	1.28	1.22
33	D	407[A]	LHG	O7-C7	3.60	1.44	1.34
23	B	614	CLA	C3D-C2D	3.60	1.48	1.39
23	b	613	CLA	O2A-CGA	3.60	1.43	1.33
34	B	625	HTG	C1'-S1	-3.59	1.76	1.81
23	B	610	CLA	O2A-CGA	3.59	1.43	1.33
24	a	406[B]	PHO	O2A-CGA	3.59	1.43	1.33
23	b	601	CLA	OBD-CAD	3.58	1.28	1.22
23	a	405[A]	CLA	CHD-C4C	3.58	1.47	1.39
23	b	609	CLA	C3D-C2D	3.58	1.48	1.39
38	f	101	HEM	C4D-ND	-3.58	1.34	1.40
23	B	603	CLA	CHD-C4C	3.58	1.47	1.39
23	C	502	CLA	OBD-CAD	3.57	1.28	1.22
23	b	612	CLA	OBD-CAD	3.57	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	403[A]	CLA	CHD-C4C	3.57	1.47	1.39
23	A	408	CLA	C3D-C2D	3.57	1.48	1.39
35	c	519	DGD	O2G-C1B	3.56	1.44	1.34
23	C	504	CLA	O2A-CGA	3.56	1.43	1.33
33	A	419[B]	LHG	O7-C7	3.56	1.44	1.34
23	B	607	CLA	O2A-CGA	3.56	1.43	1.33
23	b	603	CLA	O2A-CGA	3.56	1.43	1.33
23	A	405[A]	CLA	CHD-C4C	3.56	1.47	1.39
23	c	507	CLA	OBD-CAD	3.56	1.28	1.22
23	b	606	CLA	C3D-C2D	3.56	1.48	1.39
35	C	516[A]	DGD	O1G-C1A	3.55	1.43	1.33
23	d	403[A]	CLA	C3D-C2D	3.55	1.48	1.39
23	B	601	CLA	OBD-CAD	3.54	1.28	1.22
34	B	622	HTG	C1'-S1	-3.54	1.76	1.81
23	a	405[A]	CLA	CHD-C1D	3.54	1.45	1.38
23	b	605	CLA	OBD-CAD	3.54	1.28	1.22
23	b	602	CLA	OBD-CAD	3.54	1.28	1.22
35	c	518[A]	DGD	O2G-C1B	3.53	1.44	1.34
23	B	611	CLA	CHD-C4C	3.53	1.47	1.39
33	d	407[A]	LHG	O8-C23	3.53	1.43	1.33
33	D	407[A]	LHG	O8-C23	3.53	1.43	1.33
23	c	505	CLA	CHD-C4C	3.52	1.47	1.39
23	B	612	CLA	O2A-CGA	3.52	1.43	1.33
33	A	419[A]	LHG	O8-C23	3.52	1.43	1.33
23	A	405[B]	CLA	OBD-CAD	3.52	1.28	1.22
33	d	407[B]	LHG	O8-C23	3.52	1.43	1.33
23	b	612	CLA	O2A-CGA	3.52	1.43	1.33
23	d	404	CLA	OBD-CAD	3.52	1.28	1.22
23	b	610	CLA	C3D-C2D	3.51	1.48	1.39
23	d	402[B]	CLA	OBD-CAD	3.51	1.28	1.22
23	B	606	CLA	C3D-C2D	3.51	1.48	1.39
35	H	102	DGD	O2G-C1B	3.51	1.44	1.34
23	b	605	CLA	C3D-C2D	3.51	1.48	1.39
23	C	504	CLA	CHD-C4C	3.51	1.47	1.39
23	b	606	CLA	OBD-CAD	3.50	1.28	1.22
33	d	414[A]	LHG	O7-C7	3.50	1.44	1.34
23	B	607	CLA	C1D-ND	3.50	1.42	1.37
23	b	613	CLA	CHD-C1D	3.50	1.45	1.38
23	B	616	CLA	CHD-C1D	3.50	1.45	1.38
33	A	419[A]	LHG	O7-C7	3.49	1.44	1.34
33	b	629[A]	LHG	O8-C23	3.49	1.43	1.33
23	C	501	CLA	CHD-C4C	3.49	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	606	CLA	O2A-CGA	3.48	1.43	1.33
32	D	412	LMG	O7-C10	3.48	1.44	1.34
23	A	404[B]	CLA	O2A-CGA	3.48	1.43	1.33
23	D	403[B]	CLA	OBD-CAD	3.47	1.28	1.22
23	C	512	CLA	OBD-CAD	3.47	1.28	1.22
23	B	612	CLA	C1D-ND	3.46	1.42	1.37
23	c	505	CLA	OBD-CAD	3.45	1.28	1.22
23	d	403[B]	CLA	C3D-C2D	3.45	1.48	1.39
23	b	616	CLA	OBD-CAD	3.45	1.28	1.22
23	c	511	CLA	OBD-CAD	3.45	1.28	1.22
38	F	102	HEM	C4D-ND	-3.44	1.34	1.40
23	d	403[B]	CLA	OBD-CAD	3.44	1.28	1.22
23	c	514	CLA	OBD-CAD	3.43	1.28	1.22
23	D	403[A]	CLA	C3D-C2D	3.43	1.48	1.39
32	D	412	LMG	O8-C28	3.43	1.43	1.33
23	B	608	CLA	CHD-C4C	3.42	1.47	1.39
23	b	607	CLA	C1D-ND	3.42	1.42	1.37
23	b	603	CLA	OBD-CAD	3.42	1.28	1.22
23	B	612	CLA	CHD-C4C	3.42	1.47	1.39
23	B	611	CLA	C3D-C2D	3.41	1.48	1.39
23	d	403[A]	CLA	OBD-CAD	3.41	1.28	1.22
23	B	604	CLA	O2A-CGA	3.41	1.43	1.33
23	C	507	CLA	CHD-C4C	3.40	1.47	1.39
23	C	508	CLA	CHD-C4C	3.40	1.47	1.39
23	b	605	CLA	O2A-CGA	3.40	1.43	1.33
24	a	406[A]	PHO	O2A-CGA	3.39	1.43	1.33
23	b	615	CLA	OBD-CAD	3.38	1.28	1.22
38	F	102	HEM	C1B-NB	-3.38	1.34	1.40
23	c	510	CLA	OBD-CAD	3.37	1.28	1.22
23	b	612	CLA	CHD-C4C	3.36	1.46	1.39
23	B	614	CLA	CHD-C1D	3.35	1.44	1.38
23	A	404[B]	CLA	OBD-CAD	3.35	1.28	1.22
34	c	522	HTG	C1'-S1	-3.35	1.77	1.81
23	C	505	CLA	C3D-C2D	3.35	1.48	1.39
23	c	504	CLA	C3D-C2D	3.34	1.48	1.39
23	B	607	CLA	C3D-C2D	3.34	1.48	1.39
23	A	404[A]	CLA	OBD-CAD	3.34	1.28	1.22
23	B	612	CLA	C3D-C2D	3.33	1.48	1.39
23	b	614	CLA	OBD-CAD	3.32	1.28	1.22
24	A	416[B]	PHO	CHA-CBD	-3.32	1.48	1.52
23	C	505	CLA	OBD-CAD	3.31	1.28	1.22
23	b	607	CLA	CHD-C4C	3.30	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	607	CLA	C1B-NB	-3.30	1.32	1.35
23	B	608	CLA	O2A-CGA	3.29	1.43	1.33
23	c	502	CLA	OBD-CAD	3.28	1.28	1.22
23	B	604	CLA	C3D-C2D	3.28	1.48	1.39
23	d	403[A]	CLA	C1D-ND	3.27	1.41	1.37
34	D	411	HTG	C1'-S1	-3.27	1.77	1.81
23	B	602	CLA	OBD-CAD	3.27	1.28	1.22
23	B	613	CLA	O2A-CGA	3.27	1.42	1.33
23	D	403[A]	CLA	OBD-CAD	3.26	1.28	1.22
23	b	610	CLA	O2A-CGA	3.26	1.42	1.33
23	C	507	CLA	OBD-CAD	3.25	1.28	1.22
23	b	604	CLA	O2A-CGA	3.25	1.42	1.33
23	a	407	CLA	C3D-C2D	3.24	1.48	1.39
23	B	615	CLA	C1C-C2C	3.23	1.50	1.44
23	B	612	CLA	OBD-CAD	3.23	1.28	1.22
23	a	407	CLA	CHD-C4C	3.23	1.46	1.39
23	b	611	CLA	C3D-C2D	3.21	1.47	1.39
23	B	611	CLA	C4B-CHC	3.21	1.49	1.41
23	B	616	CLA	CHD-C4C	3.21	1.46	1.39
23	B	611	CLA	C4B-NB	-3.21	1.32	1.35
38	f	101	HEM	C1B-NB	-3.21	1.34	1.40
23	A	404[A]	CLA	O2A-CGA	3.19	1.42	1.33
23	D	404	CLA	C1C-C2C	3.19	1.50	1.44
23	b	613	CLA	CHD-C4C	3.19	1.46	1.39
23	C	511	CLA	OBD-CAD	3.17	1.27	1.22
23	B	609	CLA	OBD-CAD	3.17	1.27	1.22
23	b	602	CLA	C1C-C2C	3.13	1.50	1.44
23	A	405[A]	CLA	OBD-CAD	3.12	1.27	1.22
34	d	411	HTG	C1'-S1	-3.10	1.77	1.81
23	C	504	CLA	OBD-CAD	3.08	1.27	1.22
23	a	404[A]	CLA	O2A-CGA	3.07	1.42	1.33
23	b	607	CLA	O2A-CGA	3.07	1.42	1.33
34	b	625	HTG	C1'-S1	-3.07	1.77	1.81
23	a	407	CLA	OBD-CAD	3.04	1.27	1.22
23	B	616	CLA	C1C-C2C	3.03	1.50	1.44
23	B	614	CLA	OBD-CAD	3.03	1.27	1.22
23	c	504	CLA	OBD-CAD	3.01	1.27	1.22
23	a	407	CLA	C1C-C2C	2.99	1.50	1.44
23	B	607	CLA	C1B-NB	-2.98	1.32	1.35
23	B	607	CLA	C4D-CHA	2.98	1.49	1.38
23	B	606	CLA	C1C-C2C	2.98	1.50	1.44
23	B	612	CLA	C1B-CHB	2.97	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	602	CLA	C4B-CHC	2.97	1.49	1.41
23	B	606	CLA	OBD-CAD	2.96	1.27	1.22
23	C	511	CLA	C4D-CHA	2.96	1.48	1.38
23	A	404[A]	CLA	C4C-C3C	2.96	1.50	1.45
23	C	504	CLA	C4D-CHA	2.94	1.48	1.38
23	B	605	CLA	C4B-CHC	2.92	1.49	1.41
23	C	511	CLA	C1C-C2C	2.91	1.50	1.44
34	C	521	HTG	C1'-S1	-2.91	1.77	1.81
23	D	404	CLA	C4C-C3C	2.90	1.50	1.45
23	a	404[B]	CLA	C4C-C3C	2.89	1.50	1.45
23	c	506	CLA	C4C-C3C	2.89	1.50	1.45
23	c	510	CLA	C1B-NB	-2.88	1.32	1.35
23	B	604	CLA	C4D-CHA	2.87	1.48	1.38
23	A	404[B]	CLA	C4C-C3C	2.86	1.50	1.45
23	B	614	CLA	C4D-CHA	2.86	1.48	1.38
24	a	414[B]	PHO	C3A-C2A	-2.85	1.52	1.54
23	c	504	CLA	C1C-C2C	2.84	1.50	1.44
23	B	611	CLA	C1B-CHB	2.83	1.48	1.41
24	A	407[A]	PHO	CBD-CGD	-2.83	1.48	1.52
23	b	612	CLA	C1C-C2C	2.83	1.50	1.44
23	b	611	CLA	OBD-CAD	2.82	1.27	1.22
23	B	602	CLA	C1C-C2C	2.82	1.50	1.44
23	B	604	CLA	C1C-C2C	2.82	1.50	1.44
23	c	510	CLA	C4D-CHA	2.82	1.48	1.38
23	b	610	CLA	C1B-CHB	2.82	1.48	1.41
23	B	616	CLA	C4D-CHA	2.81	1.48	1.38
23	B	608	CLA	OBD-CAD	2.81	1.27	1.22
23	b	604	CLA	C4B-CHC	2.81	1.48	1.41
23	B	614	CLA	C1B-CHB	2.80	1.48	1.41
23	b	609	CLA	C1B-CHB	2.80	1.48	1.41
27	D	402	GOL	O2-C2	-2.80	1.35	1.43
23	b	611	CLA	C1B-CHB	2.80	1.48	1.41
26	a	409[B]	SQD	C6-S	-2.80	1.67	1.77
23	B	616	CLA	OBD-CAD	2.80	1.27	1.22
31	t	101	LMT	O3'-C3'	-2.79	1.36	1.43
23	d	403[B]	CLA	C1B-CHB	2.78	1.48	1.41
23	c	512	CLA	C1B-CHB	2.78	1.48	1.41
23	b	607	CLA	C1C-C2C	2.78	1.50	1.44
23	C	512	CLA	C1C-C2C	2.78	1.49	1.44
23	A	408	CLA	OBD-CAD	2.78	1.27	1.22
31	M	101	LMT	O2'-C2'	-2.77	1.36	1.43
29	A	414[A]	PL9	C6-C5	2.76	1.49	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	615	CLA	C4D-CHA	2.76	1.48	1.38
23	B	614	CLA	C4B-NB	-2.76	1.32	1.35
29	a	412[A]	PL9	C6-C5	2.75	1.49	1.35
23	B	610	CLA	C1B-CHB	2.75	1.48	1.41
23	d	403[A]	CLA	C1B-CHB	2.75	1.48	1.41
23	B	612	CLA	C1C-C2C	2.75	1.49	1.44
23	C	507	CLA	C4D-CHA	2.75	1.48	1.38
23	b	609	CLA	C1C-C2C	2.74	1.49	1.44
23	C	501	CLA	C4D-CHA	2.74	1.48	1.38
23	c	509	CLA	C4D-CHA	2.74	1.48	1.38
23	C	506	CLA	C4C-C3C	2.74	1.49	1.45
23	C	503	CLA	C4B-CHC	2.73	1.48	1.41
26	a	409[A]	SQD	C6-S	-2.73	1.67	1.77
23	B	610	CLA	C4D-CHA	2.73	1.48	1.38
23	B	613	CLA	C4D-CHA	2.73	1.48	1.38
23	B	616	CLA	C1B-CHB	2.73	1.48	1.41
26	A	410[A]	SQD	C6-S	-2.73	1.67	1.77
38	f	101	HEM	FE-NB	2.73	2.10	1.96
23	B	604	CLA	C4C-C3C	2.73	1.49	1.45
23	A	406[A]	CLA	C4D-CHA	2.72	1.48	1.38
23	a	405[A]	CLA	C1C-C2C	2.72	1.49	1.44
26	A	410[B]	SQD	C6-S	-2.72	1.67	1.77
23	B	605	CLA	OBD-CAD	2.72	1.27	1.22
23	D	403[A]	CLA	C4D-CHA	2.71	1.48	1.38
23	B	601	CLA	C4B-CHC	2.71	1.48	1.41
23	B	612	CLA	C4D-CHA	2.71	1.48	1.38
23	C	501	CLA	C1C-C2C	2.71	1.49	1.44
23	c	514	CLA	C1C-C2C	2.71	1.49	1.44
23	c	502	CLA	C1B-CHB	2.71	1.48	1.41
23	D	404	CLA	C1B-CHB	2.71	1.48	1.41
23	D	403[A]	CLA	C1B-CHB	2.70	1.48	1.41
23	a	405[B]	CLA	C1C-C2C	2.70	1.49	1.44
32	Z	101	LMG	O8-C28	2.70	1.46	1.33
23	c	502	CLA	C1C-C2C	2.70	1.49	1.44
23	c	512	CLA	C4D-CHA	2.70	1.48	1.38
23	c	511	CLA	C1B-CHB	2.69	1.48	1.41
23	b	609	CLA	C4D-CHA	2.69	1.48	1.38
29	a	412[B]	PL9	C6-C5	2.69	1.49	1.35
23	b	607	CLA	OBD-CAD	2.69	1.27	1.22
23	c	505	CLA	C4C-C3C	2.69	1.49	1.45
26	f	102	SQD	C6-S	-2.69	1.67	1.77
23	b	616	CLA	C1C-C2C	2.69	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	512	CLA	C4B-CHC	2.69	1.48	1.41
29	A	414[B]	PL9	C6-C5	2.68	1.49	1.35
23	A	405[A]	CLA	C4D-CHA	2.68	1.47	1.38
23	B	606	CLA	C1B-CHB	2.68	1.48	1.41
23	c	504	CLA	C4B-CHC	2.68	1.48	1.41
34	b	622	HTG	O5-C1	2.68	1.46	1.42
23	b	604	CLA	C4D-CHA	2.68	1.47	1.38
23	B	612	CLA	C1B-NB	-2.67	1.32	1.35
26	A	412	SQD	C6-S	-2.67	1.67	1.77
23	C	505	CLA	C4B-CHC	2.67	1.48	1.41
23	B	603	CLA	C1B-CHB	2.67	1.48	1.41
23	b	613	CLA	OBD-CAD	2.67	1.27	1.22
23	C	504	CLA	C1C-C2C	2.67	1.49	1.44
23	C	501	CLA	OBD-CAD	2.66	1.27	1.22
23	c	505	CLA	C1C-C2C	2.66	1.49	1.44
23	C	502	CLA	C1C-C2C	2.66	1.49	1.44
35	H	102	DGD	O5D-C1E	2.66	1.44	1.40
23	C	505	CLA	C1C-C2C	2.66	1.49	1.44
23	b	613	CLA	C1C-C2C	2.66	1.49	1.44
31	B	630	LMT	O2'-C2'	-2.65	1.36	1.43
23	c	504	CLA	C1B-CHB	2.65	1.48	1.41
23	b	612	CLA	C4D-CHA	2.65	1.47	1.38
23	c	506	CLA	C4D-CHA	2.65	1.47	1.38
23	B	608	CLA	C4D-CHA	2.65	1.47	1.38
23	c	508	CLA	C4D-CHA	2.65	1.47	1.38
23	b	604	CLA	C1B-CHB	2.65	1.48	1.41
23	c	506	CLA	C4B-CHC	2.65	1.48	1.41
23	A	408	CLA	C4D-CHA	2.65	1.47	1.38
23	C	509	CLA	C4D-CHA	2.64	1.47	1.38
23	c	504	CLA	C3D-C4D	-2.64	1.38	1.44
23	B	604	CLA	C1B-CHB	2.63	1.48	1.41
23	A	404[B]	CLA	C4D-CHA	2.63	1.47	1.38
23	b	613	CLA	C4D-CHA	2.63	1.47	1.38
23	B	601	CLA	C1C-C2C	2.63	1.49	1.44
23	B	609	CLA	C4D-CHA	2.63	1.47	1.38
23	C	506	CLA	C4D-CHA	2.63	1.47	1.38
23	b	612	CLA	C1B-CHB	2.62	1.48	1.41
23	c	505	CLA	C4D-CHA	2.62	1.47	1.38
23	B	615	CLA	C4D-CHA	2.62	1.47	1.38
23	a	405[A]	CLA	C4D-CHA	2.62	1.47	1.38
23	b	610	CLA	C1C-C2C	2.62	1.49	1.44
23	B	614	CLA	C4B-CHC	2.62	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	506	CLA	C1C-C2C	2.62	1.49	1.44
23	C	511	CLA	C1B-CHB	2.61	1.48	1.41
23	c	508	CLA	C1C-C2C	2.61	1.49	1.44
23	c	509	CLA	C4C-C3C	2.61	1.49	1.45
23	B	605	CLA	C1B-CHB	2.61	1.48	1.41
23	c	511	CLA	C1C-C2C	2.61	1.49	1.44
34	b	625	HTG	C1-S1	-2.61	1.76	1.80
23	B	605	CLA	C1C-C2C	2.61	1.49	1.44
23	d	404	CLA	C1B-CHB	2.61	1.48	1.41
23	b	607	CLA	C1B-CHB	2.60	1.48	1.41
38	F	102	HEM	FE-NB	2.60	2.09	1.96
23	A	405[B]	CLA	C4D-CHA	2.60	1.47	1.38
23	B	613	CLA	C1B-CHB	2.60	1.48	1.41
23	c	511	CLA	C4D-CHA	2.60	1.47	1.38
23	D	404	CLA	C4B-CHC	2.59	1.48	1.41
23	b	601	CLA	C1C-C2C	2.59	1.49	1.44
23	C	505	CLA	C4D-CHA	2.59	1.47	1.38
23	C	501	CLA	C4B-CHC	2.59	1.48	1.41
23	C	508	CLA	C4D-CHA	2.59	1.47	1.38
23	c	512	CLA	C1C-C2C	2.59	1.49	1.44
23	b	610	CLA	C4B-CHC	2.58	1.48	1.41
23	C	501	CLA	C3D-C4D	-2.58	1.38	1.44
35	c	519	DGD	O2G-C2G	-2.58	1.40	1.46
26	a	410	SQD	C6-S	-2.58	1.67	1.77
23	c	510	CLA	C1B-CHB	2.58	1.48	1.41
23	c	513	CLA	C1B-CHB	2.58	1.48	1.41
23	C	513	CLA	C4D-CHA	2.58	1.47	1.38
23	B	602	CLA	C3D-C4D	-2.58	1.38	1.44
23	b	611	CLA	C1C-C2C	2.57	1.49	1.44
23	C	512	CLA	C4D-CHA	2.57	1.47	1.38
23	c	502	CLA	C4D-CHA	2.57	1.47	1.38
23	B	609	CLA	C4B-CHC	2.57	1.48	1.41
23	A	404[A]	CLA	C4D-CHA	2.57	1.47	1.38
23	B	607	CLA	C1B-CHB	2.57	1.48	1.41
23	C	504	CLA	C1B-CHB	2.57	1.48	1.41
23	c	513	CLA	C4D-CHA	2.57	1.47	1.38
34	B	625	HTG	C1-S1	-2.57	1.76	1.80
23	c	513	CLA	C4B-CHC	2.57	1.48	1.41
23	b	616	CLA	C3D-C4D	-2.57	1.38	1.44
23	c	506	CLA	C1B-CHB	2.57	1.48	1.41
23	c	504	CLA	C4D-CHA	2.56	1.47	1.38
40	V	201	HEC	C3C-C4C	2.56	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	a	405[B]	CLA	C4B-CHC	2.56	1.48	1.41
23	C	510	CLA	C1C-C2C	2.56	1.49	1.44
23	b	607	CLA	C3D-C4D	-2.56	1.38	1.44
23	B	608	CLA	C4C-C3C	2.56	1.49	1.45
23	d	404	CLA	C4D-CHA	2.56	1.47	1.38
23	d	403[A]	CLA	C4C-C3C	2.56	1.49	1.45
23	b	614	CLA	C4D-CHA	2.55	1.47	1.38
23	C	508	CLA	C1B-CHB	2.55	1.48	1.41
23	b	615	CLA	C4B-CHC	2.55	1.48	1.41
23	B	607	CLA	C1C-C2C	2.55	1.49	1.44
24	a	414[A]	PHO	C3A-C2A	-2.55	1.52	1.54
23	b	616	CLA	C4D-CHA	2.54	1.47	1.38
26	b	620	SQD	C6-S	-2.54	1.68	1.77
23	b	601	CLA	C4D-CHA	2.54	1.47	1.38
23	c	503	CLA	C1B-CHB	2.54	1.48	1.41
23	C	508	CLA	C4C-C3C	2.54	1.49	1.45
24	a	414[B]	PHO	CHA-CBD	-2.54	1.49	1.52
23	c	510	CLA	C4C-C3C	2.53	1.49	1.45
23	C	505	CLA	C1B-CHB	2.53	1.48	1.41
23	b	607	CLA	C4D-CHA	2.53	1.47	1.38
23	b	608	CLA	C4D-CHA	2.53	1.47	1.38
23	C	509	CLA	C1C-C2C	2.53	1.49	1.44
23	b	606	CLA	C1B-CHB	2.53	1.48	1.41
23	b	611	CLA	C4B-CHC	2.53	1.48	1.41
23	C	507	CLA	C4B-CHC	2.53	1.48	1.41
23	b	615	CLA	C1B-CHB	2.51	1.48	1.41
23	d	403[B]	CLA	C4C-C3C	2.51	1.49	1.45
23	C	503	CLA	C1C-C2C	2.51	1.49	1.44
24	a	406[A]	PHO	CHA-CBD	-2.51	1.49	1.52
31	B	628	LMT	C3'-C2'	2.51	1.58	1.52
29	d	406[B]	PL9	C6-C5	2.51	1.48	1.35
31	e	101	LMT	O3'-C3'	-2.51	1.37	1.43
23	C	513	CLA	C1B-CHB	2.51	1.48	1.41
29	D	406[B]	PL9	C6-C5	2.51	1.48	1.35
23	c	503	CLA	C4D-CHA	2.51	1.47	1.38
26	F	103	SQD	O6-C1	2.51	1.44	1.40
23	B	603	CLA	C4D-CHA	2.51	1.47	1.38
23	b	603	CLA	C4B-CHC	2.51	1.48	1.41
23	B	610	CLA	C1C-C2C	2.51	1.49	1.44
23	b	605	CLA	C1B-CHB	2.51	1.48	1.41
23	B	605	CLA	C4D-CHA	2.50	1.47	1.38
31	B	631	LMT	O3'-C3'	-2.50	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	615	CLA	C3D-C4D	-2.50	1.38	1.44
23	A	404[A]	CLA	C1C-C2C	2.49	1.49	1.44
23	A	405[B]	CLA	C1C-C2C	2.49	1.49	1.44
23	b	613	CLA	C1B-NB	-2.49	1.33	1.35
31	A	420	LMT	O3'-C3'	-2.49	1.37	1.43
23	a	404[A]	CLA	C4C-C3C	2.49	1.49	1.45
23	A	406[A]	CLA	C4B-CHC	2.49	1.47	1.41
23	A	406[B]	CLA	C4B-CHC	2.49	1.47	1.41
23	b	602	CLA	C4C-C3C	2.49	1.49	1.45
23	a	404[B]	CLA	C4D-CHA	2.49	1.47	1.38
23	b	613	CLA	C4B-CHC	2.49	1.47	1.41
23	a	405[B]	CLA	C4D-CHA	2.49	1.47	1.38
23	b	609	CLA	C4B-CHC	2.49	1.47	1.41
23	b	603	CLA	C4D-CHA	2.48	1.47	1.38
23	A	405[A]	CLA	C1B-CHB	2.48	1.47	1.41
23	B	607	CLA	C3D-C4D	-2.48	1.38	1.44
23	C	507	CLA	C1C-C2C	2.48	1.49	1.44
23	c	507	CLA	C1B-CHB	2.48	1.47	1.41
23	A	404[B]	CLA	C1B-CHB	2.48	1.47	1.41
23	d	404	CLA	C1C-C2C	2.48	1.49	1.44
23	C	507	CLA	C4C-C3C	2.48	1.49	1.45
23	c	508	CLA	C4B-CHC	2.48	1.47	1.41
23	a	404[A]	CLA	C4D-CHA	2.48	1.47	1.38
23	b	606	CLA	C1C-C2C	2.48	1.49	1.44
23	d	402[A]	CLA	C4D-CHA	2.48	1.47	1.38
23	d	404	CLA	C4B-CHC	2.48	1.47	1.41
23	D	403[B]	CLA	C4D-CHA	2.47	1.47	1.38
26	F	103	SQD	C6-S	-2.47	1.68	1.77
23	A	406[B]	CLA	C1C-C2C	2.47	1.49	1.44
23	B	615	CLA	C1B-CHB	2.47	1.47	1.41
23	c	514	CLA	C4D-CHA	2.47	1.47	1.38
23	d	403[B]	CLA	C4D-CHA	2.46	1.47	1.38
23	C	501	CLA	C1B-CHB	2.46	1.47	1.41
23	b	606	CLA	C4D-CHA	2.46	1.47	1.38
23	b	610	CLA	C4D-CHA	2.46	1.47	1.38
23	a	407	CLA	C1B-CHB	2.46	1.47	1.41
23	C	505	CLA	C4C-C3C	2.46	1.49	1.45
23	a	405[A]	CLA	C1B-CHB	2.46	1.47	1.41
23	c	502	CLA	C4B-CHC	2.46	1.47	1.41
23	B	612	CLA	C4B-NB	-2.46	1.33	1.35
23	C	509	CLA	C4B-NB	-2.46	1.33	1.35
23	c	509	CLA	C1C-C2C	2.46	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	402[B]	CLA	C4D-CHA	2.46	1.47	1.38
23	b	614	CLA	C1C-C2C	2.46	1.49	1.44
23	c	505	CLA	C1C-NC	-2.46	1.34	1.37
23	B	614	CLA	C3D-C4D	-2.45	1.38	1.44
23	b	608	CLA	C1B-CHB	2.45	1.47	1.41
31	b	621	LMT	C3'-C2'	2.45	1.58	1.52
23	B	607	CLA	C4B-CHC	2.45	1.47	1.41
23	b	610	CLA	C3D-C4D	-2.45	1.38	1.44
23	C	513	CLA	C1C-C2C	2.45	1.49	1.44
23	A	405[B]	CLA	C4B-CHC	2.45	1.47	1.41
23	d	403[A]	CLA	C1B-NB	-2.44	1.33	1.35
23	d	402[B]	CLA	C4B-CHC	2.44	1.47	1.41
31	M	102	LMT	O2'-C2'	-2.44	1.37	1.43
23	a	405[A]	CLA	C3D-C4D	-2.44	1.38	1.44
23	b	602	CLA	C4D-CHA	2.44	1.47	1.38
23	B	606	CLA	C4D-CHA	2.44	1.47	1.38
23	B	602	CLA	C4D-CHA	2.44	1.47	1.38
23	C	507	CLA	C1B-CHB	2.44	1.47	1.41
23	b	611	CLA	C4C-C3C	2.44	1.49	1.45
26	B	620	SQD	C6-S	-2.44	1.68	1.77
23	C	509	CLA	C4C-C3C	2.43	1.49	1.45
23	B	616	CLA	C1C-NC	-2.43	1.34	1.37
23	b	616	CLA	C4B-CHC	2.43	1.47	1.41
23	C	503	CLA	C4D-CHA	2.43	1.47	1.38
23	B	614	CLA	C1C-C2C	2.43	1.49	1.44
23	d	402[B]	CLA	C1B-NB	-2.43	1.33	1.35
23	c	509	CLA	C1B-CHB	2.43	1.47	1.41
23	C	503	CLA	C3D-C4D	-2.43	1.38	1.44
23	B	606	CLA	C3D-C4D	-2.43	1.38	1.44
23	B	604	CLA	C4B-CHC	2.43	1.47	1.41
23	b	606	CLA	C3D-C4D	-2.43	1.38	1.44
23	B	601	CLA	C4D-CHA	2.43	1.47	1.38
23	c	508	CLA	C1B-CHB	2.42	1.47	1.41
23	b	614	CLA	C4B-CHC	2.42	1.47	1.41
23	B	605	CLA	C3D-C4D	-2.42	1.38	1.44
23	C	511	CLA	C4C-C3C	2.42	1.49	1.45
23	C	510	CLA	C4D-CHA	2.42	1.47	1.38
23	B	606	CLA	C4B-CHC	2.42	1.47	1.41
24	A	407[A]	PHO	CHA-CBD	-2.42	1.49	1.52
23	b	614	CLA	C1B-CHB	2.42	1.47	1.41
23	b	615	CLA	C4C-C3C	2.42	1.49	1.45
31	F	101	LMT	O3'-C3'	-2.41	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	506	CLA	C1C-C2C	2.41	1.49	1.44
23	A	405[A]	CLA	C1C-C2C	2.41	1.49	1.44
23	A	406[A]	CLA	C1C-C2C	2.41	1.49	1.44
23	a	404[A]	CLA	C1B-CHB	2.41	1.47	1.41
23	A	408	CLA	C3D-C4D	-2.41	1.38	1.44
23	c	507	CLA	C4D-CHA	2.41	1.47	1.38
23	b	603	CLA	C3D-C4D	-2.41	1.38	1.44
23	C	506	CLA	C1B-CHB	2.41	1.47	1.41
23	B	608	CLA	C1C-NC	-2.40	1.34	1.37
31	M	101	LMT	O2B-C2B	-2.40	1.37	1.43
23	b	611	CLA	C4D-CHA	2.40	1.46	1.38
23	B	613	CLA	C4C-C3C	2.40	1.49	1.45
23	A	406[B]	CLA	C4D-CHA	2.40	1.46	1.38
23	A	405[B]	CLA	C1B-CHB	2.40	1.47	1.41
23	a	407	CLA	C4B-CHC	2.40	1.47	1.41
23	b	601	CLA	C4B-CHC	2.40	1.47	1.41
23	D	403[A]	CLA	C3D-C4D	-2.39	1.38	1.44
23	C	506	CLA	C3D-C4D	-2.39	1.38	1.44
23	C	510	CLA	C1B-CHB	2.39	1.47	1.41
23	B	610	CLA	C3D-C4D	-2.39	1.38	1.44
23	B	614	CLA	C4C-C3C	2.39	1.49	1.45
23	c	507	CLA	C4C-C3C	2.39	1.49	1.45
23	D	403[B]	CLA	C3D-C4D	-2.39	1.38	1.44
23	A	404[B]	CLA	C1C-C2C	2.38	1.49	1.44
23	C	510	CLA	C4C-C3C	2.38	1.49	1.45
23	B	603	CLA	C4B-CHC	2.38	1.47	1.41
24	A	416[B]	PHO	C3A-C2A	-2.38	1.52	1.54
23	d	403[A]	CLA	C4D-CHA	2.38	1.46	1.38
31	A	420	LMT	O2'-C2'	-2.38	1.37	1.43
23	b	612	CLA	C4B-CHC	2.38	1.47	1.41
23	c	509	CLA	C4B-CHC	2.37	1.47	1.41
35	C	518	DGD	O2G-C2G	-2.37	1.40	1.46
34	B	623	HTG	C1'-S1	-2.37	1.78	1.81
23	b	604	CLA	C1C-C2C	2.37	1.49	1.44
23	D	403[B]	CLA	C1B-CHB	2.37	1.47	1.41
23	c	502	CLA	C4C-C3C	2.37	1.49	1.45
23	c	511	CLA	C4B-CHC	2.37	1.47	1.41
23	B	602	CLA	C4C-C3C	2.37	1.49	1.45
25	B	619	BCR	C30-C25	-2.37	1.50	1.53
23	b	605	CLA	C4D-CHA	2.37	1.46	1.38
23	C	506	CLA	C4B-NB	-2.37	1.33	1.35
23	C	502	CLA	C4D-CHA	2.37	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	609	CLA	C3D-C4D	-2.37	1.38	1.44
31	a	415	LMT	O3'-C3'	-2.37	1.37	1.43
23	B	616	CLA	C4B-CHC	2.36	1.47	1.41
24	a	406[B]	PHO	CHA-CBD	-2.36	1.49	1.52
23	b	612	CLA	C3D-C4D	-2.36	1.38	1.44
23	B	603	CLA	C1C-C2C	2.36	1.49	1.44
23	b	608	CLA	C1C-C2C	2.36	1.49	1.44
23	C	502	CLA	C4B-CHC	2.36	1.47	1.41
23	c	504	CLA	C4C-C3C	2.36	1.49	1.45
23	B	602	CLA	C1B-CHB	2.36	1.47	1.41
23	C	509	CLA	C1B-CHB	2.36	1.47	1.41
23	C	511	CLA	C4B-CHC	2.36	1.47	1.41
23	B	610	CLA	C4C-C3C	2.36	1.49	1.45
23	B	603	CLA	C1B-NB	-2.35	1.33	1.35
23	B	610	CLA	C4B-CHC	2.35	1.47	1.41
23	C	502	CLA	C4C-C3C	2.35	1.49	1.45
29	d	406[A]	PL9	C6-C5	2.35	1.47	1.35
23	c	513	CLA	C4C-C3C	2.35	1.49	1.45
31	B	628	LMT	O3'-C3'	-2.35	1.37	1.43
24	a	414[A]	PHO	CHA-CBD	-2.35	1.49	1.52
23	d	403[B]	CLA	C3D-C4D	-2.35	1.38	1.44
31	B	630	LMT	O2B-C2B	-2.35	1.37	1.43
23	c	507	CLA	C3D-C4D	-2.35	1.38	1.44
23	a	404[B]	CLA	C1C-C2C	2.35	1.49	1.44
23	C	507	CLA	C3D-C4D	-2.34	1.38	1.44
24	A	416[A]	PHO	C3A-C2A	-2.34	1.52	1.54
23	A	405[A]	CLA	C3D-C4D	-2.34	1.38	1.44
23	c	502	CLA	C3D-C4D	-2.34	1.38	1.44
32	C	520	LMG	O1-C1	2.34	1.44	1.40
23	A	406[B]	CLA	C3D-C4D	-2.34	1.38	1.44
23	B	613	CLA	C1C-C2C	2.34	1.49	1.44
23	c	513	CLA	C1C-C2C	2.34	1.49	1.44
23	c	514	CLA	C3D-C4D	-2.34	1.38	1.44
29	D	406[A]	PL9	C6-C5	2.34	1.47	1.35
23	b	611	CLA	C3D-C4D	-2.33	1.38	1.44
23	b	614	CLA	C3D-C4D	-2.33	1.38	1.44
24	a	406[A]	PHO	CBD-CGD	-2.33	1.49	1.52
23	C	510	CLA	C3D-C4D	-2.33	1.38	1.44
23	C	513	CLA	C3D-C4D	-2.33	1.38	1.44
23	b	603	CLA	C1C-C2C	2.33	1.49	1.44
23	C	502	CLA	C1B-CHB	2.33	1.47	1.41
31	M	102	LMT	O3'-C3'	-2.33	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	406[B]	CLA	C1B-CHB	2.32	1.47	1.41
23	b	602	CLA	C3D-C4D	-2.32	1.38	1.44
23	D	403[B]	CLA	C1C-C2C	2.32	1.49	1.44
23	B	602	CLA	C4B-CHC	2.32	1.47	1.41
31	M	101	LMT	O3'-C3'	-2.32	1.37	1.43
31	m	103	LMT	O2B-C2B	-2.32	1.37	1.43
23	a	405[B]	CLA	C1B-CHB	2.32	1.47	1.41
23	C	512	CLA	C3D-C4D	-2.32	1.38	1.44
23	b	615	CLA	C1B-NB	-2.32	1.33	1.35
23	b	615	CLA	C1C-C2C	2.32	1.49	1.44
38	f	101	HEM	C1D-ND	-2.32	1.34	1.38
23	B	601	CLA	C1B-CHB	2.32	1.47	1.41
23	B	609	CLA	C1C-C2C	2.31	1.49	1.44
23	C	511	CLA	C3D-C4D	-2.31	1.39	1.44
23	D	403[B]	CLA	C4C-C3C	2.31	1.49	1.45
23	c	514	CLA	C4C-C3C	2.31	1.49	1.45
23	B	608	CLA	C1B-CHB	2.31	1.47	1.41
23	b	606	CLA	C4B-CHC	2.31	1.47	1.41
24	A	407[B]	PHO	CBD-CGD	-2.31	1.49	1.52
23	b	610	CLA	C4C-C3C	2.31	1.49	1.45
24	A	407[B]	PHO	CHA-CBD	-2.31	1.49	1.52
23	d	403[A]	CLA	C1C-C2C	2.30	1.49	1.44
23	d	403[A]	CLA	C3D-C4D	-2.30	1.39	1.44
35	c	519	DGD	O5D-C1E	2.30	1.44	1.40
23	A	405[A]	CLA	C4B-CHC	2.30	1.47	1.41
23	A	404[A]	CLA	C1B-CHB	2.30	1.47	1.41
23	D	404	CLA	C4D-CHA	2.30	1.46	1.38
23	c	508	CLA	C4C-C3C	2.30	1.49	1.45
23	B	616	CLA	C3D-C4D	-2.29	1.39	1.44
23	a	407	CLA	C1B-NB	-2.29	1.33	1.35
23	c	513	CLA	C3D-C4D	-2.29	1.39	1.44
23	d	402[B]	CLA	C1C-C2C	2.29	1.49	1.44
23	b	602	CLA	C1B-NB	-2.29	1.33	1.35
23	a	404[B]	CLA	C1B-CHB	2.28	1.47	1.41
23	c	509	CLA	C3D-C4D	-2.28	1.39	1.44
31	m	103	LMT	C3'-C2'	2.27	1.58	1.52
23	C	503	CLA	C1B-CHB	2.27	1.47	1.41
23	C	504	CLA	C1B-NB	-2.27	1.33	1.35
23	c	505	CLA	C1B-NB	-2.27	1.33	1.35
23	D	403[B]	CLA	C4B-CHC	2.27	1.47	1.41
23	b	608	CLA	C4B-CHC	2.27	1.47	1.41
23	d	402[B]	CLA	C1B-CHB	2.26	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	502	CLA	C1C-NC	-2.26	1.34	1.37
23	b	601	CLA	C1B-CHB	2.26	1.47	1.41
23	B	611	CLA	C4D-CHA	2.25	1.46	1.38
23	c	512	CLA	C4C-C3C	2.25	1.48	1.45
23	a	404[A]	CLA	C1C-C2C	2.25	1.48	1.44
23	B	609	CLA	C1B-CHB	2.25	1.47	1.41
23	a	407	CLA	C4D-CHA	2.25	1.46	1.38
23	C	509	CLA	C4B-CHC	2.25	1.47	1.41
23	A	406[A]	CLA	C3D-C4D	-2.24	1.39	1.44
23	c	507	CLA	C4B-CHC	2.24	1.47	1.41
23	c	514	CLA	C1B-CHB	2.24	1.47	1.41
23	D	403[A]	CLA	C1B-NB	-2.24	1.33	1.35
31	t	101	LMT	O2'-C2'	-2.24	1.37	1.43
23	d	402[A]	CLA	C1B-CHB	2.24	1.47	1.41
27	b	624	GOL	C3-C2	2.24	1.60	1.51
23	d	402[A]	CLA	C4B-CHC	2.23	1.47	1.41
23	c	514	CLA	C4B-CHC	2.23	1.47	1.41
23	B	609	CLA	C3D-C4D	-2.23	1.39	1.44
27	D	402	GOL	C3-C2	2.23	1.60	1.51
23	C	502	CLA	C3D-C4D	-2.23	1.39	1.44
23	a	405[B]	CLA	C3D-C4D	-2.22	1.39	1.44
23	B	604	CLA	C3D-C4D	-2.22	1.39	1.44
23	d	403[B]	CLA	C1C-C2C	2.22	1.48	1.44
23	d	404	CLA	C3D-C4D	-2.21	1.39	1.44
23	c	512	CLA	C4B-CHC	2.21	1.47	1.41
23	A	406[B]	CLA	C4C-C3C	2.21	1.48	1.45
35	C	517[A]	DGD	O5D-C1E	2.21	1.44	1.40
23	B	604	CLA	C1A-CHA	2.21	1.52	1.43
23	D	403[A]	CLA	C4C-C3C	2.21	1.48	1.45
23	C	504	CLA	C4B-CHC	2.21	1.47	1.41
23	b	613	CLA	C1B-CHB	2.21	1.47	1.41
35	h	102	DGD	O5D-C1E	2.21	1.44	1.40
31	A	417	LMT	O3'-C3'	-2.21	1.37	1.43
23	B	601	CLA	C4C-C3C	2.20	1.48	1.45
23	A	406[A]	CLA	C1B-CHB	2.20	1.47	1.41
23	C	501	CLA	C4C-C3C	2.20	1.48	1.45
23	b	605	CLA	C4B-CHC	2.19	1.47	1.41
23	b	612	CLA	C4C-C3C	2.19	1.48	1.45
29	a	412[A]	PL9	C2-C3	2.19	1.40	1.34
23	d	403[A]	CLA	C4B-CHC	2.19	1.47	1.41
23	d	404	CLA	C4C-C3C	2.19	1.48	1.45
23	b	605	CLA	C3D-C4D	-2.19	1.39	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	406[B]	PHO	C3A-C2A	-2.18	1.52	1.54
23	A	404[B]	CLA	C3D-C4D	-2.18	1.39	1.44
23	A	404[B]	CLA	C4B-CHC	2.18	1.47	1.41
31	m	103	LMT	O3'-C3'	-2.18	1.37	1.43
23	B	601	CLA	C3D-C4D	-2.18	1.39	1.44
23	A	404[A]	CLA	C4B-NB	-2.18	1.33	1.35
23	C	505	CLA	C3D-C4D	-2.18	1.39	1.44
23	c	510	CLA	C1C-C2C	2.18	1.48	1.44
23	c	511	CLA	C3D-C4D	-2.18	1.39	1.44
23	C	506	CLA	C1D-C2D	2.17	1.49	1.45
23	C	510	CLA	C4B-CHC	2.17	1.47	1.41
23	B	613	CLA	C4B-CHC	2.17	1.47	1.41
34	B	622	HTG	O5-C1	2.17	1.45	1.42
23	a	405[B]	CLA	C4C-C3C	2.17	1.48	1.45
23	c	508	CLA	C3D-C4D	-2.17	1.39	1.44
23	B	608	CLA	C3D-C4D	-2.17	1.39	1.44
23	A	406[A]	CLA	C1B-NB	-2.17	1.33	1.35
23	a	407	CLA	C4C-C3C	2.17	1.48	1.45
31	B	630	LMT	O3'-C3'	-2.16	1.37	1.43
23	b	605	CLA	C1D-C2D	2.16	1.49	1.45
23	b	607	CLA	C4C-C3C	2.16	1.48	1.45
23	c	505	CLA	C1B-CHB	2.16	1.47	1.41
25	d	405	BCR	C30-C25	-2.16	1.50	1.53
23	b	614	CLA	C4C-C3C	2.16	1.48	1.45
31	M	102	LMT	O3B-C3B	-2.16	1.37	1.43
23	B	608	CLA	C1C-C2C	2.16	1.48	1.44
23	B	601	CLA	C1C-NC	-2.16	1.34	1.37
23	c	511	CLA	C4C-C3C	2.16	1.48	1.45
23	C	506	CLA	C4B-CHC	2.16	1.47	1.41
23	C	504	CLA	C3D-C4D	-2.15	1.39	1.44
23	A	405[A]	CLA	C1B-NB	-2.15	1.33	1.35
23	b	603	CLA	C1B-CHB	2.15	1.47	1.41
23	B	615	CLA	C4B-CHC	2.15	1.47	1.41
23	a	404[A]	CLA	C4B-CHC	2.14	1.46	1.41
23	A	405[B]	CLA	C3D-C4D	-2.14	1.39	1.44
23	d	403[B]	CLA	C4B-CHC	2.14	1.46	1.41
23	A	405[B]	CLA	C4C-C3C	2.13	1.48	1.45
23	a	404[B]	CLA	C3D-C4D	-2.13	1.39	1.44
29	A	414[A]	PL9	C2-C1	-2.12	1.39	1.44
23	D	403[A]	CLA	C4B-CHC	2.12	1.46	1.41
23	c	506	CLA	C3D-C4D	-2.12	1.39	1.44
31	A	417	LMT	O2'-C2'	-2.12	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	B	615	CLA	MG-NA	2.12	2.11	2.06
23	C	512	CLA	C1B-CHB	2.12	1.46	1.41
23	d	402[A]	CLA	C1C-C2C	2.12	1.48	1.44
23	B	612	CLA	C4C-C3C	2.12	1.48	1.45
23	a	404[B]	CLA	C4B-CHC	2.11	1.46	1.41
23	C	508	CLA	C3D-C4D	-2.11	1.39	1.44
23	D	404	CLA	C3D-C4D	-2.11	1.39	1.44
23	C	503	CLA	C4C-C3C	2.11	1.48	1.45
23	b	608	CLA	C3D-C4D	-2.10	1.39	1.44
23	C	513	CLA	C4B-CHC	2.10	1.46	1.41
23	B	612	CLA	C4B-CHC	2.10	1.46	1.41
29	a	412[B]	PL9	C2-C3	2.10	1.40	1.34
23	c	505	CLA	C4B-CHC	2.08	1.46	1.41
23	a	405[A]	CLA	C4C-C3C	2.08	1.48	1.45
31	b	627	LMT	O3'-C3'	-2.08	1.38	1.43
23	c	510	CLA	C3D-C4D	-2.08	1.39	1.44
23	b	602	CLA	C1B-CHB	2.08	1.46	1.41
23	B	616	CLA	C1B-NB	-2.08	1.33	1.35
23	c	512	CLA	MG-NA	2.07	2.11	2.06
23	b	613	CLA	C3D-C4D	-2.07	1.39	1.44
23	B	613	CLA	C3D-C4D	-2.06	1.39	1.44
29	A	414[B]	PL9	C2-C3	2.06	1.40	1.34
38	f	101	HEM	CHB-C1B	2.06	1.40	1.35
26	B	620	SQD	O6-C1	2.06	1.43	1.40
23	b	608	CLA	C4C-C3C	2.06	1.48	1.45
31	M	101	LMT	O1'-C1'	-2.06	1.36	1.40
23	c	514	CLA	C1D-C2D	2.05	1.49	1.45
23	b	604	CLA	C4C-C3C	2.05	1.48	1.45
23	c	503	CLA	C3D-C4D	-2.05	1.39	1.44
31	e	101	LMT	O2'-C2'	-2.05	1.38	1.43
23	B	613	CLA	C1B-NB	-2.05	1.33	1.35
23	b	611	CLA	C1D-C2D	2.05	1.49	1.45
27	D	413	GOL	O2-C2	-2.05	1.37	1.43
23	C	508	CLA	C4B-CHC	2.05	1.46	1.41
26	a	410	SQD	O6-C1	2.05	1.43	1.40
23	d	402[B]	CLA	C3D-C4D	-2.05	1.39	1.44
23	a	405[A]	CLA	C4B-CHC	2.04	1.46	1.41
23	C	511	CLA	C4B-NB	-2.04	1.33	1.35
23	b	604	CLA	C1A-CHA	2.04	1.51	1.43
23	b	603	CLA	C4C-C3C	2.04	1.48	1.45
29	D	406[A]	PL9	C2-C3	2.04	1.40	1.34
23	B	605	CLA	C4C-C3C	2.04	1.48	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	B	628	LMT	O5'-C5'	-2.04	1.39	1.44
23	a	407	CLA	C3D-C4D	-2.04	1.39	1.44
23	b	616	CLA	C1B-CHB	2.04	1.46	1.41
23	C	509	CLA	C3D-C4D	-2.03	1.39	1.44
23	D	404	CLA	C1B-NB	-2.03	1.33	1.35
31	b	621	LMT	O3'-C3'	-2.03	1.38	1.43
31	B	628	LMT	O4'-C4B	-2.03	1.38	1.43
23	A	408	CLA	C1C-C2C	2.03	1.48	1.44
31	e	101	LMT	O2B-C2B	-2.03	1.38	1.43
33	b	629[A]	LHG	O7-C5	-2.02	1.41	1.46
23	A	408	CLA	C4B-CHC	2.02	1.46	1.41
23	b	608	CLA	C4B-NB	-2.02	1.33	1.35
23	c	507	CLA	C1C-C2C	2.02	1.48	1.44
23	A	404[A]	CLA	C3D-C4D	-2.02	1.39	1.44
23	C	508	CLA	C1C-NC	-2.01	1.34	1.37
23	C	508	CLA	C1A-CHA	2.01	1.51	1.43
27	D	413	GOL	C3-C2	2.01	1.60	1.51
34	B	623	HTG	C1-S1	-2.01	1.77	1.80
23	B	608	CLA	C4B-CHC	2.01	1.46	1.41
31	e	101	LMT	O3B-C3B	-2.01	1.38	1.43
23	c	512	CLA	C1D-C2D	2.01	1.49	1.45
23	B	603	CLA	C4C-C3C	2.01	1.48	1.45
23	b	607	CLA	C4B-CHC	2.01	1.46	1.41
23	b	601	CLA	C1D-C2D	2.00	1.49	1.45
24	a	414[A]	PHO	CBD-CGD	-2.00	1.49	1.52
38	F	102	HEM	C1D-ND	-2.00	1.34	1.38

All (3086) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	611	CLA	C1D-ND-C4D	-12.14	97.71	106.33
23	B	612	CLA	C1D-ND-C4D	-10.81	98.65	106.33
23	b	605	CLA	C1D-ND-C4D	-10.51	98.87	106.33
23	B	611	CLA	C2D-C1D-ND	10.51	117.85	110.10
23	a	405[B]	CLA	C1D-ND-C4D	-10.23	99.07	106.33
23	b	611	CLA	C1D-ND-C4D	-10.06	99.19	106.33
23	A	408	CLA	C1D-ND-C4D	-10.01	99.22	106.33
23	B	601	CLA	C1D-ND-C4D	-10.00	99.23	106.33
23	a	407	CLA	C1D-ND-C4D	-10.00	99.23	106.33
23	c	502	CLA	C1D-ND-C4D	-9.94	99.27	106.33
23	B	607	CLA	C1D-ND-C4D	-9.94	99.28	106.33
23	C	503	CLA	C1D-ND-C4D	-9.93	99.28	106.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	612	CLA	C2D-C1D-ND	9.80	117.32	110.10
23	d	402[B]	CLA	C1D-ND-C4D	-9.73	99.42	106.33
23	B	606	CLA	C1D-ND-C4D	-9.72	99.43	106.33
23	B	614	CLA	C1D-ND-C4D	-9.70	99.45	106.33
23	a	405[A]	CLA	C1D-ND-C4D	-9.69	99.45	106.33
23	c	512	CLA	C1D-ND-C4D	-9.65	99.48	106.33
23	d	404	CLA	C1D-ND-C4D	-9.65	99.48	106.33
23	B	615	CLA	C1D-ND-C4D	-9.64	99.49	106.33
23	C	510	CLA	C1D-ND-C4D	-9.59	99.53	106.33
23	d	403[B]	CLA	C1D-ND-C4D	-9.57	99.54	106.33
23	b	610	CLA	C1D-ND-C4D	-9.57	99.54	106.33
23	B	616	CLA	C2D-C1D-ND	9.52	117.12	110.10
23	A	406[B]	CLA	C1D-ND-C4D	-9.48	99.60	106.33
23	A	405[B]	CLA	C1D-ND-C4D	-9.47	99.61	106.33
23	c	506	CLA	C1D-ND-C4D	-9.46	99.62	106.33
23	B	603	CLA	C1D-ND-C4D	-9.44	99.63	106.33
23	A	406[A]	CLA	C1D-ND-C4D	-9.41	99.65	106.33
23	B	605	CLA	C1D-ND-C4D	-9.39	99.67	106.33
23	C	501	CLA	C1D-ND-C4D	-9.38	99.67	106.33
23	b	609	CLA	C1D-ND-C4D	-9.37	99.68	106.33
23	C	513	CLA	C1D-ND-C4D	-9.36	99.69	106.33
23	b	614	CLA	C2D-C1D-ND	9.34	116.99	110.10
23	A	408	CLA	C2D-C1D-ND	9.32	116.97	110.10
23	b	608	CLA	C1D-ND-C4D	-9.31	99.72	106.33
23	C	505	CLA	C1D-ND-C4D	-9.30	99.73	106.33
23	b	614	CLA	C1D-ND-C4D	-9.27	99.75	106.33
23	B	608	CLA	C1D-ND-C4D	-9.25	99.76	106.33
23	B	616	CLA	C1D-ND-C4D	-9.22	99.78	106.33
23	c	504	CLA	C1D-ND-C4D	-9.21	99.79	106.33
23	B	607	CLA	C2D-C1D-ND	9.21	116.89	110.10
23	b	615	CLA	C1D-ND-C4D	-9.20	99.80	106.33
23	b	606	CLA	C1D-ND-C4D	-9.18	99.81	106.33
23	b	602	CLA	C1D-ND-C4D	-9.18	99.81	106.33
23	B	615	CLA	C2D-C1D-ND	9.15	116.85	110.10
23	B	608	CLA	C2D-C1D-ND	9.15	116.85	110.10
23	a	404[B]	CLA	C1D-ND-C4D	-9.15	99.84	106.33
23	c	514	CLA	C1D-ND-C4D	-9.14	99.84	106.33
23	D	403[A]	CLA	C1D-ND-C4D	-9.14	99.84	106.33
23	b	601	CLA	C1D-ND-C4D	-9.12	99.86	106.33
23	B	606	CLA	C2D-C1D-ND	9.10	116.81	110.10
23	c	507	CLA	C1D-ND-C4D	-9.08	99.88	106.33
23	A	405[A]	CLA	C2D-C1D-ND	9.08	116.79	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	407	CLA	C2D-C1D-ND	9.06	116.78	110.10
23	A	405[A]	CLA	C1D-ND-C4D	-9.06	99.90	106.33
23	B	614	CLA	C2D-C1D-ND	9.05	116.77	110.10
23	B	610	CLA	C1D-ND-C4D	-9.04	99.92	106.33
23	d	403[A]	CLA	C1D-ND-C4D	-9.03	99.92	106.33
23	b	611	CLA	C2D-C1D-ND	8.97	116.72	110.10
23	c	510	CLA	C1D-ND-C4D	-8.97	99.96	106.33
23	a	404[A]	CLA	C1D-ND-C4D	-8.97	99.96	106.33
23	b	603	CLA	C1D-ND-C4D	-8.90	100.02	106.33
23	b	616	CLA	C1D-ND-C4D	-8.89	100.02	106.33
23	c	503	CLA	C1D-ND-C4D	-8.89	100.02	106.33
23	B	609	CLA	C1D-ND-C4D	-8.89	100.02	106.33
23	a	405[B]	CLA	C2D-C1D-ND	8.87	116.64	110.10
23	b	605	CLA	C2D-C1D-ND	8.86	116.64	110.10
23	c	511	CLA	C1D-ND-C4D	-8.86	100.04	106.33
23	b	613	CLA	C2D-C1D-ND	8.84	116.62	110.10
23	d	404	CLA	C2D-C1D-ND	8.84	116.62	110.10
23	d	402[B]	CLA	C2D-C1D-ND	8.84	116.62	110.10
23	C	504	CLA	C2D-C1D-ND	8.84	116.62	110.10
23	c	513	CLA	C1D-ND-C4D	-8.84	100.06	106.33
23	C	509	CLA	C1D-ND-C4D	-8.83	100.06	106.33
23	a	405[A]	CLA	C2D-C1D-ND	8.81	116.60	110.10
23	D	403[B]	CLA	C1D-ND-C4D	-8.80	100.09	106.33
23	B	603	CLA	C2D-C1D-ND	8.79	116.58	110.10
23	b	607	CLA	C1D-ND-C4D	-8.77	100.11	106.33
23	A	405[B]	CLA	C2D-C1D-ND	8.73	116.54	110.10
23	C	506	CLA	C1D-ND-C4D	-8.73	100.13	106.33
23	B	602	CLA	C1D-ND-C4D	-8.71	100.15	106.33
23	C	512	CLA	C1D-ND-C4D	-8.71	100.15	106.33
23	d	402[A]	CLA	C1D-ND-C4D	-8.67	100.18	106.33
23	C	507	CLA	C1D-ND-C4D	-8.66	100.18	106.33
23	A	404[B]	CLA	C1D-ND-C4D	-8.64	100.19	106.33
23	C	504	CLA	C1D-ND-C4D	-8.63	100.20	106.33
23	C	508	CLA	C1D-ND-C4D	-8.62	100.21	106.33
23	A	406[A]	CLA	C2D-C1D-ND	8.61	116.45	110.10
23	b	604	CLA	C1D-ND-C4D	-8.61	100.22	106.33
23	C	503	CLA	C2D-C1D-ND	8.57	116.42	110.10
23	D	404	CLA	C1D-ND-C4D	-8.56	100.25	106.33
23	b	616	CLA	C2D-C1D-ND	8.53	116.39	110.10
23	c	502	CLA	C2D-C1D-ND	8.53	116.39	110.10
23	d	402[A]	CLA	C2D-C1D-ND	8.52	116.39	110.10
23	c	512	CLA	C2D-C1D-ND	8.52	116.39	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	511	CLA	C1D-ND-C4D	-8.49	100.30	106.33
23	D	403[A]	CLA	C2D-C1D-ND	8.48	116.35	110.10
23	c	505	CLA	C1D-ND-C4D	-8.47	100.32	106.33
23	b	607	CLA	C2D-C1D-ND	8.44	116.32	110.10
23	C	508	CLA	C2D-C1D-ND	8.42	116.31	110.10
23	c	509	CLA	C2D-C1D-ND	8.38	116.28	110.10
23	b	610	CLA	C2D-C1D-ND	8.38	116.28	110.10
23	b	609	CLA	C2D-C1D-ND	8.37	116.28	110.10
23	B	601	CLA	C2D-C1D-ND	8.37	116.27	110.10
23	B	610	CLA	C2D-C1D-ND	8.35	116.26	110.10
23	b	613	CLA	C1D-ND-C4D	-8.34	100.41	106.33
23	B	613	CLA	C1D-ND-C4D	-8.30	100.44	106.33
23	b	615	CLA	C2D-C1D-ND	8.29	116.21	110.10
23	c	503	CLA	C2D-C1D-ND	8.25	116.18	110.10
23	C	501	CLA	C2D-C1D-ND	8.24	116.18	110.10
23	B	605	CLA	C2D-C1D-ND	8.20	116.15	110.10
23	C	511	CLA	C2D-C1D-ND	8.14	116.10	110.10
23	c	509	CLA	C1D-ND-C4D	-8.14	100.56	106.33
24	a	406[B]	PHO	O2D-CGD-CBD	8.14	121.31	111.00
23	b	608	CLA	C2D-C1D-ND	8.12	116.09	110.10
23	c	508	CLA	C1D-ND-C4D	-8.10	100.58	106.33
23	b	604	CLA	C2D-C1D-ND	8.09	116.06	110.10
23	C	513	CLA	C2D-C1D-ND	8.08	116.06	110.10
23	A	406[B]	CLA	C2D-C1D-ND	8.06	116.04	110.10
23	C	509	CLA	C2D-C1D-ND	8.05	116.04	110.10
23	a	404[A]	CLA	C2D-C1D-ND	8.03	116.02	110.10
23	C	507	CLA	C2D-C1D-ND	8.03	116.02	110.10
23	c	506	CLA	C2D-C1D-ND	8.01	116.01	110.10
23	b	612	CLA	C1D-ND-C4D	-8.00	100.65	106.33
23	c	510	CLA	C2D-C1D-ND	8.00	116.00	110.10
23	B	609	CLA	C2D-C1D-ND	7.98	115.99	110.10
23	c	511	CLA	C2D-C1D-ND	7.97	115.98	110.10
23	b	601	CLA	C2D-C1D-ND	7.97	115.98	110.10
23	c	505	CLA	C2D-C1D-ND	7.97	115.98	110.10
23	B	604	CLA	C1D-ND-C4D	-7.95	100.68	106.33
23	d	403[A]	CLA	C2D-C1D-ND	7.92	115.94	110.10
23	c	507	CLA	C2D-C1D-ND	7.91	115.93	110.10
23	C	505	CLA	C2D-C1D-ND	7.88	115.91	110.10
23	d	403[B]	CLA	C2D-C1D-ND	7.85	115.89	110.10
23	C	502	CLA	C1D-ND-C4D	-7.83	100.77	106.33
23	B	613	CLA	C2D-C1D-ND	7.78	115.83	110.10
23	b	606	CLA	C2D-C1D-ND	7.73	115.80	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	602	CLA	C4A-NA-C1A	-7.72	103.23	106.71
23	a	404[B]	CLA	C2D-C1D-ND	7.70	115.78	110.10
23	A	404[A]	CLA	C1D-ND-C4D	-7.69	100.87	106.33
23	C	512	CLA	C2D-C1D-ND	7.69	115.77	110.10
23	c	508	CLA	C2D-C1D-ND	7.69	115.77	110.10
23	c	513	CLA	C2D-C1D-ND	7.67	115.76	110.10
23	b	603	CLA	C2D-C1D-ND	7.65	115.74	110.10
23	D	404	CLA	C2D-C1D-ND	7.63	115.72	110.10
23	B	602	CLA	C2D-C1D-ND	7.59	115.70	110.10
23	C	506	CLA	C2D-C1D-ND	7.59	115.70	110.10
23	C	510	CLA	C2D-C1D-ND	7.58	115.69	110.10
23	C	510	CLA	CMD-C2D-C1D	7.55	138.02	124.71
23	A	404[A]	CLA	C2D-C1D-ND	7.53	115.66	110.10
23	D	403[B]	CLA	C2D-C1D-ND	7.51	115.64	110.10
23	c	508	CLA	O2D-CGD-CBD	7.50	124.59	111.27
23	c	504	CLA	C2D-C1D-ND	7.49	115.62	110.10
24	a	414[B]	PHO	O2D-CGD-CBD	7.47	120.46	111.00
23	b	602	CLA	C2D-C1D-ND	7.46	115.60	110.10
23	c	514	CLA	C2D-C1D-ND	7.45	115.59	110.10
23	c	504	CLA	C4A-NA-C1A	-7.45	103.36	106.71
23	B	611	CLA	CHD-C4C-C3C	-7.44	113.91	124.84
26	F	103	SQD	O6-C1-C2	7.44	119.91	108.30
23	B	606	CLA	C4A-NA-C1A	-7.40	103.38	106.71
24	A	416[A]	PHO	O2D-CGD-CBD	7.38	120.34	111.00
34	b	623	HTG	C1'-S1-C1	7.36	113.86	100.09
23	A	404[B]	CLA	C2D-C1D-ND	7.33	115.51	110.10
23	C	502	CLA	C2D-C1D-ND	7.30	115.48	110.10
23	B	606	CLA	CMD-C2D-C1D	7.25	137.50	124.71
23	B	616	CLA	O2D-CGD-CBD	7.25	124.16	111.27
24	A	416[B]	PHO	O2D-CGD-CBD	7.22	120.14	111.00
23	b	611	CLA	CMD-C2D-C1D	7.21	137.42	124.71
24	a	414[A]	PHO	O2D-CGD-CBD	7.21	120.13	111.00
23	C	503	CLA	C4A-NA-C1A	-7.17	103.48	106.71
24	a	406[A]	PHO	O2D-CGD-CBD	7.16	120.07	111.00
23	B	605	CLA	CHD-C4C-C3C	-7.05	114.47	124.84
23	b	616	CLA	C4A-NA-C1A	-7.04	103.54	106.71
23	B	616	CLA	CHD-C4C-C3C	-7.03	114.50	124.84
23	B	611	CLA	CMD-C2D-C1D	7.01	137.07	124.71
24	A	407[B]	PHO	O2D-CGD-CBD	6.96	119.81	111.00
23	c	502	CLA	CHD-C1D-ND	-6.92	118.10	124.45
24	A	407[A]	PHO	O2D-CGD-CBD	6.91	119.75	111.00
23	C	508	CLA	C2C-C1C-NC	6.90	116.44	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	610	CLA	CMD-C2D-C1D	6.89	136.85	124.71
23	a	405[B]	CLA	CHD-C1D-ND	-6.88	118.13	124.45
23	c	504	CLA	CMD-C2D-C1D	6.88	136.84	124.71
23	B	604	CLA	C2D-C1D-ND	6.86	115.16	110.10
23	C	512	CLA	C4A-NA-C1A	-6.86	103.62	106.71
23	b	612	CLA	C2D-C1D-ND	6.85	115.15	110.10
23	B	606	CLA	CHD-C1D-ND	-6.85	118.16	124.45
23	D	403[B]	CLA	C4A-NA-C1A	-6.83	103.64	106.71
23	A	408	CLA	CHD-C1D-ND	-6.81	118.20	124.45
23	b	609	CLA	CHD-C4C-C3C	-6.80	114.85	124.84
23	B	609	CLA	C4A-NA-C1A	-6.79	103.65	106.71
23	B	603	CLA	O2D-CGD-CBD	6.78	123.32	111.27
23	c	514	CLA	CMD-C2D-C1D	6.78	136.67	124.71
23	b	616	CLA	O2D-CGD-CBD	6.77	123.30	111.27
23	B	615	CLA	C4A-NA-C1A	-6.74	103.68	106.71
23	c	508	CLA	CMD-C2D-C1D	6.73	136.58	124.71
23	A	404[B]	CLA	CMD-C2D-C1D	6.71	136.55	124.71
23	b	606	CLA	CMD-C2D-C1D	6.70	136.52	124.71
23	b	603	CLA	C4A-NA-C1A	-6.70	103.69	106.71
23	b	601	CLA	O2D-CGD-CBD	6.70	123.17	111.27
23	b	616	CLA	CHD-C4C-C3C	-6.69	115.01	124.84
23	a	407	CLA	CHD-C4C-C3C	-6.66	115.06	124.84
23	B	606	CLA	CHD-C4C-C3C	-6.65	115.07	124.84
23	A	408	CLA	CMD-C2D-C1D	6.65	136.43	124.71
23	d	402[B]	CLA	CHD-C4C-C3C	-6.64	115.08	124.84
23	C	510	CLA	CHD-C1D-ND	-6.64	118.35	124.45
23	B	615	CLA	CHD-C4C-C3C	-6.64	115.08	124.84
23	B	614	CLA	CMD-C2D-C1D	6.63	136.40	124.71
23	b	606	CLA	CHD-C4C-C3C	-6.63	115.09	124.84
23	A	404[A]	CLA	CMD-C2D-C1D	6.62	136.38	124.71
23	B	604	CLA	C2C-C1C-NC	6.61	116.17	109.97
23	b	605	CLA	CHD-C4C-C3C	-6.61	115.12	124.84
23	d	403[B]	CLA	C2C-C1C-NC	6.59	116.14	109.97
23	b	611	CLA	CHD-C1D-ND	-6.58	118.41	124.45
23	c	502	CLA	CMD-C2D-C1D	6.57	136.29	124.71
23	d	404	CLA	CMD-C2D-C1D	6.56	136.28	124.71
23	C	512	CLA	CHD-C4C-C3C	-6.55	115.22	124.84
23	C	501	CLA	C4A-NA-C1A	-6.54	103.77	106.71
23	c	505	CLA	CHD-C1D-ND	-6.54	118.45	124.45
23	a	404[B]	CLA	C2C-C1C-NC	6.53	116.09	109.97
23	b	610	CLA	CHD-C4C-C3C	-6.53	115.24	124.84
23	C	506	CLA	C2C-C1C-NC	6.53	116.09	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	D	403[A]	CLA	C4A-NA-C1A	-6.52	103.77	106.71
23	D	403[B]	CLA	CHD-C1D-ND	-6.52	118.47	124.45
23	d	403[A]	CLA	C2C-C1C-NC	6.51	116.07	109.97
23	b	615	CLA	C4A-NA-C1A	-6.50	103.78	106.71
23	C	507	CLA	CMD-C2D-C1D	6.50	136.16	124.71
23	c	508	CLA	CHD-C1D-ND	-6.50	118.48	124.45
23	b	605	CLA	CMD-C2D-C1D	6.50	136.16	124.71
23	C	506	CLA	CMD-C2D-C1D	6.48	136.14	124.71
23	C	503	CLA	CHD-C4C-C3C	-6.48	115.31	124.84
34	c	522	HTG	C1'-S1-C1	6.48	112.21	100.09
23	C	506	CLA	CHD-C1D-ND	-6.46	118.51	124.45
23	D	403[A]	CLA	CMD-C2D-C1D	6.46	136.10	124.71
23	b	602	CLA	O2D-CGD-CBD	6.44	122.72	111.27
23	B	601	CLA	CMD-C2D-C1D	6.43	136.04	124.71
23	B	611	CLA	O2D-CGD-CBD	6.42	122.69	111.27
23	C	501	CLA	CHD-C4C-C3C	-6.42	115.41	124.84
23	B	605	CLA	CMD-C2D-C1D	6.42	136.02	124.71
23	B	611	CLA	CHD-C1D-ND	-6.41	118.57	124.45
23	A	406[B]	CLA	CHD-C1D-ND	-6.40	118.57	124.45
23	D	404	CLA	C4A-NA-C1A	-6.39	103.83	106.71
23	C	511	CLA	CHD-C4C-C3C	-6.38	115.46	124.84
23	b	613	CLA	CHD-C4C-C3C	-6.37	115.47	124.84
23	b	605	CLA	CHD-C1D-ND	-6.37	118.60	124.45
23	c	507	CLA	CMD-C2D-C1D	6.37	135.94	124.71
23	c	511	CLA	CHD-C4C-C3C	-6.37	115.48	124.84
23	b	606	CLA	C4A-NA-C1A	-6.36	103.85	106.71
34	D	411	HTG	C1'-S1-C1	6.35	111.97	100.09
23	b	604	CLA	O2D-CGD-CBD	6.35	122.55	111.27
23	B	610	CLA	O2D-CGD-CBD	6.34	122.54	111.27
23	d	404	CLA	CHD-C1D-ND	-6.34	118.63	124.45
23	a	405[A]	CLA	CHD-C4C-C3C	-6.34	115.52	124.84
23	B	603	CLA	CHD-C4C-C3C	-6.34	115.53	124.84
23	D	403[B]	CLA	CMD-C2D-C1D	6.33	135.87	124.71
23	a	405[B]	CLA	CMD-C2D-C1D	6.33	135.87	124.71
23	C	504	CLA	C2C-C1C-NC	6.31	115.89	109.97
23	b	614	CLA	CHD-C4C-C3C	-6.31	115.57	124.84
23	a	405[A]	CLA	CHD-C1D-ND	-6.31	118.66	124.45
23	B	612	CLA	CHD-C4C-C3C	-6.30	115.58	124.84
23	b	612	CLA	CHD-C4C-C3C	-6.30	115.58	124.84
23	c	509	CLA	C2C-C1C-NC	6.29	115.87	109.97
23	B	607	CLA	CHD-C4C-C3C	-6.29	115.59	124.84
23	c	513	CLA	CMD-C2D-C1D	6.28	135.79	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	503	CLA	CMD-C2D-C1D	6.28	135.79	124.71
23	b	611	CLA	CHD-C4C-C3C	-6.28	115.61	124.84
23	B	601	CLA	CHD-C4C-C3C	-6.28	115.61	124.84
23	B	616	CLA	C3C-C4C-NC	6.27	117.60	110.57
23	D	403[A]	CLA	C2C-C1C-NC	6.26	115.84	109.97
23	d	402[B]	CLA	CHD-C1D-ND	-6.26	118.70	124.45
23	a	404[A]	CLA	C2C-C1C-NC	6.26	115.83	109.97
23	A	405[B]	CLA	CHD-C1D-ND	-6.25	118.71	124.45
25	D	405	BCR	C7-C8-C9	-6.23	116.82	126.23
23	d	402[A]	CLA	CHD-C4C-C3C	-6.22	115.70	124.84
23	A	408	CLA	CHD-C4C-C3C	-6.21	115.72	124.84
23	b	602	CLA	CHD-C1D-ND	-6.20	118.76	124.45
23	a	404[A]	CLA	C4A-NA-C1A	-6.19	103.92	106.71
23	b	601	CLA	C4A-NA-C1A	-6.19	103.92	106.71
23	c	514	CLA	CHD-C1D-ND	-6.19	118.77	124.45
23	c	512	CLA	CHD-C4C-C3C	-6.18	115.75	124.84
23	A	406[B]	CLA	CMD-C2D-C1D	6.18	135.60	124.71
23	a	404[B]	CLA	CMD-C2D-C1D	6.18	135.60	124.71
23	B	602	CLA	CMD-C2D-C1D	6.16	135.58	124.71
23	D	403[A]	CLA	CHD-C1D-ND	-6.16	118.79	124.45
23	C	508	CLA	CHD-C4C-C3C	-6.16	115.79	124.84
23	a	405[B]	CLA	CHD-C4C-C3C	-6.16	115.79	124.84
23	A	404[B]	CLA	C2C-C1C-NC	6.16	115.74	109.97
23	c	503	CLA	C2C-C1C-NC	6.14	115.72	109.97
26	F	103	SQD	O47-C7-C8	6.12	124.70	111.50
23	C	509	CLA	CMD-C2D-C1D	6.12	135.50	124.71
23	b	607	CLA	CMD-C2D-C1D	6.10	135.47	124.71
23	b	606	CLA	CHD-C1D-ND	-6.10	118.85	124.45
23	b	607	CLA	C2C-C1C-NC	6.09	115.68	109.97
23	C	501	CLA	CMD-C2D-C1D	6.09	135.45	124.71
23	B	609	CLA	CHD-C4C-C3C	-6.09	115.89	124.84
23	b	601	CLA	CHD-C4C-C3C	-6.08	115.90	124.84
23	A	404[A]	CLA	C2C-C1C-NC	6.08	115.67	109.97
23	d	403[B]	CLA	CMD-C2D-C1D	6.08	135.43	124.71
23	c	508	CLA	C2C-C1C-NC	6.08	115.67	109.97
23	b	616	CLA	CMD-C2D-C1D	6.07	135.40	124.71
23	B	608	CLA	CHD-C1D-ND	-6.06	118.88	124.45
23	B	614	CLA	CHD-C4C-C3C	-6.06	115.93	124.84
23	B	608	CLA	CHD-C4C-C3C	-6.06	115.93	124.84
23	B	608	CLA	C2C-C1C-NC	6.04	115.63	109.97
23	C	505	CLA	CHD-C4C-C3C	-6.04	115.96	124.84
23	A	404[B]	CLA	CHD-C1D-ND	-6.04	118.91	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	601	CLA	CHD-C1D-ND	-6.04	118.91	124.45
26	A	410[A]	SQD	O6-C1-C2	6.03	117.72	108.30
23	b	604	CLA	C2C-C1C-NC	6.03	115.62	109.97
23	c	507	CLA	CHD-C1D-ND	-6.03	118.91	124.45
23	d	403[A]	CLA	C4A-NA-C1A	-6.03	104.00	106.71
23	B	605	CLA	C4A-NA-C1A	-6.02	104.00	106.71
23	C	509	CLA	C2C-C1C-NC	6.01	115.60	109.97
23	c	507	CLA	C2C-C1C-NC	6.01	115.60	109.97
23	b	609	CLA	CMD-C2D-C1D	6.01	135.30	124.71
23	d	404	CLA	CHD-C4C-C3C	-6.01	116.01	124.84
23	B	612	CLA	O2D-CGD-CBD	6.00	121.92	111.27
23	b	603	CLA	CHD-C4C-C3C	-6.00	116.03	124.84
23	B	601	CLA	O2D-CGD-CBD	5.99	121.91	111.27
23	C	507	CLA	CHD-C4C-C3C	-5.99	116.04	124.84
23	C	502	CLA	C2C-C1C-NC	5.99	115.58	109.97
23	A	406[A]	CLA	CHD-C4C-C3C	-5.98	116.05	124.84
23	d	402[B]	CLA	CMD-C2D-C1D	5.98	135.24	124.71
23	a	404[B]	CLA	CHD-C1D-ND	-5.98	118.96	124.45
23	A	406[B]	CLA	CHD-C4C-C3C	-5.97	116.06	124.84
23	b	615	CLA	CHD-C4C-C3C	-5.96	116.08	124.84
23	D	403[B]	CLA	C2C-C1C-NC	5.96	115.55	109.97
23	C	502	CLA	CHD-C4C-C3C	-5.96	116.09	124.84
23	B	614	CLA	CHD-C1D-ND	-5.95	118.99	124.45
23	C	509	CLA	CHD-C1D-ND	-5.94	118.99	124.45
23	b	602	CLA	CMD-C2D-C1D	5.94	135.19	124.71
23	C	510	CLA	O2D-CGD-CBD	5.94	121.82	111.27
23	b	615	CLA	CMD-C2D-C1D	5.94	135.18	124.71
23	c	511	CLA	CMD-C2D-C1D	5.94	135.17	124.71
23	c	509	CLA	CHD-C4C-C3C	-5.93	116.12	124.84
23	C	505	CLA	CMD-C2D-C1D	5.93	135.16	124.71
23	C	503	CLA	CHD-C1D-ND	-5.91	119.02	124.45
23	a	404[B]	CLA	C4A-NA-C1A	-5.91	104.05	106.71
34	d	411	HTG	C1'-S1-C1	5.91	111.14	100.09
23	C	513	CLA	CHD-C1D-ND	-5.90	119.03	124.45
23	C	507	CLA	O2D-CGD-CBD	5.90	121.75	111.27
23	b	601	CLA	CHD-C1D-ND	-5.89	119.04	124.45
23	A	405[A]	CLA	CHD-C4C-C3C	-5.89	116.18	124.84
29	A	414[A]	PL9	C7-C8-C9	-5.89	116.99	126.79
23	B	606	CLA	O2D-CGD-CBD	5.89	121.73	111.27
23	B	614	CLA	O2D-CGD-CBD	5.89	121.73	111.27
23	A	404[A]	CLA	C4A-NA-C1A	-5.89	104.06	106.71
23	A	406[A]	CLA	CHD-C1D-ND	-5.88	119.05	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	614	CLA	C2C-C1C-NC	5.88	115.48	109.97
23	B	610	CLA	CMD-C2D-C1D	5.87	135.05	124.71
23	B	609	CLA	CHD-C1D-ND	-5.86	119.06	124.45
23	c	504	CLA	CHD-C4C-C3C	-5.86	116.23	124.84
23	b	604	CLA	CHD-C4C-C3C	-5.84	116.25	124.84
23	c	506	CLA	CHD-C4C-C3C	-5.84	116.25	124.84
23	c	502	CLA	CHD-C4C-C3C	-5.84	116.26	124.84
40	V	201	HEC	CBD-CAD-C3D	-5.84	102.66	112.62
23	c	508	CLA	CHD-C4C-C3C	-5.84	116.26	124.84
23	B	602	CLA	CHD-C4C-C3C	-5.83	116.27	124.84
23	b	601	CLA	CMD-C2D-C1D	5.83	134.99	124.71
23	b	614	CLA	O2D-CGD-CBD	5.83	121.63	111.27
23	C	509	CLA	CHD-C4C-C3C	-5.83	116.27	124.84
23	B	612	CLA	CHD-C1D-ND	-5.83	119.10	124.45
23	c	514	CLA	C4A-NA-C1A	-5.82	104.09	106.71
23	C	509	CLA	C4A-NA-C1A	-5.82	104.09	106.71
23	b	607	CLA	CHD-C1D-ND	-5.82	119.11	124.45
23	c	503	CLA	CHD-C4C-C3C	-5.81	116.30	124.84
23	A	404[A]	CLA	CHD-C1D-ND	-5.81	119.11	124.45
23	b	608	CLA	CHD-C1D-ND	-5.81	119.11	124.45
23	b	607	CLA	CHD-C4C-C3C	-5.81	116.31	124.84
25	t	102	BCR	C33-C5-C6	-5.80	118.01	124.53
34	B	623	HTG	C1'-S1-C1	5.80	110.94	100.09
23	b	602	CLA	CHD-C4C-C3C	-5.79	116.32	124.84
23	B	609	CLA	CMD-C2D-C1D	5.79	134.92	124.71
26	A	410[B]	SQD	O6-C1-C2	5.79	117.34	108.30
23	A	405[B]	CLA	CHD-C4C-C3C	-5.78	116.35	124.84
23	c	504	CLA	CHD-C1D-ND	-5.77	119.15	124.45
23	B	613	CLA	CMD-C2D-C1D	5.77	134.87	124.71
23	c	510	CLA	C1-C2-C3	-5.76	116.08	126.04
23	c	510	CLA	CHD-C4C-C3C	-5.75	116.38	124.84
23	a	404[A]	CLA	CMD-C2D-C1D	5.75	134.84	124.71
23	d	402[A]	CLA	C4A-NA-C1A	-5.75	104.12	106.71
23	B	610	CLA	CHD-C4C-C3C	-5.75	116.39	124.84
23	c	506	CLA	O2D-CGD-CBD	5.75	121.48	111.27
23	C	504	CLA	CHD-C4C-C3C	-5.74	116.41	124.84
23	B	603	CLA	CMD-C2D-C1D	5.73	134.82	124.71
23	b	613	CLA	C2C-C1C-NC	5.73	115.34	109.97
23	C	507	CLA	CHD-C1D-ND	-5.73	119.19	124.45
23	A	406[A]	CLA	C4A-NA-C1A	-5.72	104.13	106.71
23	C	510	CLA	CHD-C4C-C3C	-5.72	116.43	124.84
23	c	512	CLA	CMD-C2D-C1D	5.72	134.79	124.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	506	CLA	CMD-C2D-C1D	5.72	134.79	124.71
23	c	514	CLA	CHD-C4C-C3C	-5.72	116.44	124.84
23	C	513	CLA	CHD-C4C-C3C	-5.71	116.44	124.84
23	c	512	CLA	CHD-C1D-ND	-5.71	119.21	124.45
23	B	607	CLA	CHD-C1D-ND	-5.70	119.21	124.45
23	C	513	CLA	CMD-C2D-C1D	5.70	134.76	124.71
23	c	513	CLA	C4A-NA-C1A	-5.70	104.14	106.71
23	C	501	CLA	O2D-CGD-CBD	5.70	121.40	111.27
23	b	612	CLA	C2C-C1C-NC	5.70	115.31	109.97
23	d	403[B]	CLA	CHD-C4C-C3C	-5.70	116.47	124.84
23	B	611	CLA	C3D-C2D-C1D	-5.69	98.06	105.83
23	B	611	CLA	CMB-C2B-C1B	5.69	137.21	128.46
23	b	611	CLA	O2D-CGD-CBD	5.68	121.36	111.27
23	c	513	CLA	O2D-CGD-CBD	5.68	121.36	111.27
23	D	404	CLA	CHD-C4C-C3C	-5.67	116.50	124.84
23	B	604	CLA	CMD-C2D-C1D	5.67	134.71	124.71
23	d	404	CLA	O2D-CGD-CBD	5.67	121.34	111.27
23	B	603	CLA	CHD-C1D-ND	-5.66	119.25	124.45
23	B	615	CLA	CHD-C1D-ND	-5.66	119.25	124.45
23	b	608	CLA	C2C-C1C-NC	5.66	115.27	109.97
23	C	505	CLA	O2D-CGD-CBD	5.65	121.31	111.27
23	c	505	CLA	CMD-C2D-C1D	5.65	134.68	124.71
24	a	414[B]	PHO	C1-C2-C3	-5.65	116.27	126.04
23	C	507	CLA	C2C-C1C-NC	5.65	115.27	109.97
23	d	403[A]	CLA	CMD-C2D-C1D	5.64	134.65	124.71
23	B	602	CLA	C4A-NA-C1A	-5.64	104.17	106.71
23	c	507	CLA	CHD-C4C-C3C	-5.63	116.56	124.84
23	A	405[B]	CLA	C2C-C1C-NC	5.63	115.25	109.97
23	A	408	CLA	C2C-C1C-NC	5.63	115.24	109.97
23	b	603	CLA	O2D-CGD-CBD	5.62	121.26	111.27
23	b	603	CLA	CMD-C2D-C1D	5.62	134.61	124.71
23	B	602	CLA	O2D-CGD-CBD	5.61	121.24	111.27
23	d	402[A]	CLA	C2C-C1C-NC	5.61	115.22	109.97
23	b	604	CLA	C1-C2-C3	-5.61	116.35	126.04
23	c	502	CLA	O2D-CGD-CBD	5.60	121.22	111.27
23	A	405[B]	CLA	CMD-C2D-C1D	5.60	134.58	124.71
23	b	609	CLA	C4A-NA-C1A	-5.59	104.19	106.71
23	b	605	CLA	C2C-C1C-NC	5.59	115.20	109.97
23	d	403[B]	CLA	CHD-C1D-ND	-5.58	119.32	124.45
26	a	409[A]	SQD	O6-C1-C2	5.58	117.02	108.30
23	A	405[A]	CLA	C2C-C1C-NC	5.58	115.19	109.97
23	B	604	CLA	CHD-C4C-C3C	-5.57	116.65	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	510	CLA	C2C-C1C-NC	5.57	115.19	109.97
23	c	513	CLA	CHD-C4C-C3C	-5.57	116.65	124.84
26	A	410[A]	SQD	C1-O5-C5	-5.56	102.77	113.69
23	c	510	CLA	CMD-C2D-C1D	5.56	134.52	124.71
23	B	613	CLA	C2C-C1C-NC	5.56	115.18	109.97
23	B	616	CLA	C4A-NA-C1A	-5.56	104.21	106.71
23	d	403[A]	CLA	CHD-C1D-ND	-5.56	119.35	124.45
23	a	405[A]	CLA	C4A-NA-C1A	-5.55	104.21	106.71
25	d	405	BCR	C7-C8-C9	-5.55	117.84	126.23
23	d	403[A]	CLA	CHD-C4C-C3C	-5.55	116.69	124.84
26	B	620	SQD	O6-C1-C2	5.55	116.96	108.30
23	c	505	CLA	C4A-NA-C1A	-5.55	104.21	106.71
23	B	611	CLA	CMC-C2C-C1C	5.54	133.48	125.04
23	b	611	CLA	C2C-C1C-NC	5.54	115.17	109.97
23	C	502	CLA	CMD-C2D-C1D	5.54	134.48	124.71
23	c	513	CLA	CHD-C1D-ND	-5.54	119.36	124.45
23	B	613	CLA	C1-C2-C3	-5.54	116.47	126.04
23	C	512	CLA	CMD-C2D-C1D	5.53	134.47	124.71
23	D	403[A]	CLA	CHD-C4C-C3C	-5.53	116.71	124.84
23	A	405[A]	CLA	CHD-C1D-ND	-5.53	119.37	124.45
23	B	609	CLA	C2C-C1C-NC	5.53	115.15	109.97
23	b	608	CLA	CHD-C4C-C3C	-5.53	116.72	124.84
23	B	604	CLA	C3C-C4C-NC	5.52	116.77	110.57
23	C	505	CLA	C2C-C1C-NC	5.52	115.15	109.97
26	B	620	SQD	O47-C7-C8	5.51	123.37	111.50
23	b	613	CLA	CMD-C2D-C1D	5.50	134.41	124.71
23	A	404[B]	CLA	C4A-NA-C1A	-5.50	104.23	106.71
23	A	406[B]	CLA	C4A-NA-C1A	-5.50	104.23	106.71
23	c	506	CLA	C2C-C1C-NC	5.50	115.12	109.97
23	B	603	CLA	C2C-C1C-NC	5.49	115.12	109.97
23	b	608	CLA	C4A-NA-C1A	-5.49	104.24	106.71
23	a	405[B]	CLA	C4A-NA-C1A	-5.49	104.24	106.71
23	c	511	CLA	CHD-C1D-ND	-5.48	119.42	124.45
26	b	620	SQD	O6-C1-C2	5.47	116.85	108.30
23	B	615	CLA	CMD-C2D-C1D	5.47	134.35	124.71
23	b	610	CLA	CHD-C1D-ND	-5.47	119.43	124.45
23	c	508	CLA	C4A-NA-C1A	-5.47	104.25	106.71
23	B	613	CLA	CHD-C4C-C3C	-5.46	116.81	124.84
23	c	511	CLA	C2C-C1C-NC	5.45	115.08	109.97
23	b	610	CLA	O2D-CGD-CBD	5.45	120.95	111.27
23	c	509	CLA	C4A-NA-C1A	-5.45	104.26	106.71
23	C	510	CLA	C2C-C1C-NC	5.44	115.07	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	614	CLA	C3D-C2D-C1D	-5.44	98.40	105.83
23	C	511	CLA	C2C-C1C-NC	5.44	115.07	109.97
23	B	607	CLA	C2C-C1C-NC	5.44	115.07	109.97
23	d	402[A]	CLA	CHD-C1D-ND	-5.44	119.46	124.45
23	c	506	CLA	CHD-C1D-ND	-5.43	119.46	124.45
23	B	610	CLA	C4A-NA-C1A	-5.43	104.26	106.71
23	B	606	CLA	C3D-C2D-C1D	-5.43	98.42	105.83
23	C	513	CLA	C2C-C1C-NC	5.43	115.06	109.97
23	C	504	CLA	CHD-C1D-ND	-5.42	119.47	124.45
23	C	511	CLA	CMD-C2D-C1D	5.42	134.26	124.71
23	b	614	CLA	CHD-C1D-ND	-5.42	119.47	124.45
23	b	616	CLA	CHD-C1D-ND	-5.41	119.48	124.45
23	B	616	CLA	C3D-C2D-C1D	-5.40	98.46	105.83
38	F	102	HEM	CBA-CAA-C2A	-5.40	103.41	112.62
23	b	609	CLA	CHD-C1D-ND	-5.39	119.50	124.45
23	a	404[A]	CLA	CHD-C4C-C3C	-5.39	116.92	124.84
23	C	502	CLA	CHD-C1D-ND	-5.38	119.51	124.45
23	A	408	CLA	C3D-C2D-C1D	-5.38	98.49	105.83
23	A	404[B]	CLA	CHD-C4C-C3C	-5.37	116.94	124.84
23	B	610	CLA	CHD-C1D-ND	-5.37	119.52	124.45
23	B	602	CLA	C2C-C1C-NC	5.37	115.00	109.97
24	a	414[A]	PHO	C1-C2-C3	-5.37	116.76	126.04
23	C	511	CLA	O2D-CGD-CBD	5.36	120.80	111.27
23	d	402[B]	CLA	C2C-C1C-NC	5.36	115.00	109.97
23	B	605	CLA	CHD-C1D-ND	-5.36	119.53	124.45
23	c	507	CLA	C4A-NA-C1A	-5.36	104.30	106.71
23	A	405[A]	CLA	O2D-CGD-CBD	5.35	120.78	111.27
23	c	505	CLA	CHD-C4C-C3C	-5.35	116.98	124.84
23	c	509	CLA	C3D-C2D-C1D	-5.34	98.54	105.83
23	a	405[A]	CLA	CMD-C2D-C1D	5.34	134.12	124.71
23	c	509	CLA	CMD-C2D-C1D	5.33	134.11	124.71
23	A	406[A]	CLA	C2C-C1C-NC	5.33	114.97	109.97
23	b	603	CLA	C2C-C1C-NC	5.32	114.96	109.97
23	B	605	CLA	C2C-C1C-NC	5.32	114.96	109.97
23	c	506	CLA	C4A-NA-C1A	-5.32	104.31	106.71
23	B	602	CLA	CHD-C1D-ND	-5.32	119.56	124.45
23	B	607	CLA	O2D-CGD-CBD	5.32	120.72	111.27
23	b	611	CLA	C3D-C2D-C1D	-5.32	98.58	105.83
23	a	404[B]	CLA	CHD-C4C-C3C	-5.31	117.03	124.84
23	C	512	CLA	CHD-C1D-ND	-5.31	119.58	124.45
23	b	615	CLA	C2C-C1C-NC	5.30	114.94	109.97
23	C	501	CLA	CHD-C1D-ND	-5.30	119.58	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	404[A]	CLA	CHD-C1D-ND	-5.29	119.59	124.45
23	B	608	CLA	C3D-C2D-C1D	-5.29	98.62	105.83
23	C	502	CLA	C4A-NA-C1A	-5.28	104.33	106.71
23	C	506	CLA	C4A-NA-C1A	-5.28	104.33	106.71
23	c	512	CLA	C2C-C1C-NC	5.28	114.92	109.97
23	b	615	CLA	CHD-C1D-ND	-5.28	119.61	124.45
23	C	504	CLA	CMD-C2D-C1D	5.28	134.01	124.71
23	b	613	CLA	C3D-C2D-C1D	-5.26	98.65	105.83
23	C	508	CLA	O2D-CGD-CBD	5.25	120.60	111.27
23	c	505	CLA	C2C-C1C-NC	5.25	114.89	109.97
23	b	614	CLA	C3D-C2D-C1D	-5.25	98.67	105.83
26	A	410[A]	SQD	C1-C2-C3	-5.25	99.07	110.00
23	D	403[B]	CLA	CHD-C4C-C3C	-5.25	117.13	124.84
23	B	612	CLA	CMD-C2D-C1D	5.25	133.96	124.71
23	c	511	CLA	C4A-NA-C1A	-5.23	104.35	106.71
23	c	509	CLA	O2D-CGD-CBD	5.23	120.56	111.27
23	C	504	CLA	C3D-C2D-C1D	-5.23	98.70	105.83
34	C	521	HTG	C1'-S1-C1	5.22	109.86	100.09
23	b	616	CLA	C3D-C2D-C1D	-5.22	98.71	105.83
26	a	409[A]	SQD	O47-C7-C8	5.21	122.73	111.50
23	C	504	CLA	O2D-CGD-CBD	5.21	120.52	111.27
23	C	507	CLA	C4A-NA-C1A	-5.20	104.37	106.71
23	C	508	CLA	CMD-C2D-C1D	5.20	133.87	124.71
23	A	405[A]	CLA	C3D-C2D-C1D	-5.19	98.75	105.83
23	d	402[A]	CLA	CMD-C2D-C1D	5.19	133.85	124.71
23	a	407	CLA	O2D-CGD-CBD	5.17	120.46	111.27
23	b	614	CLA	C2C-C1C-NC	5.17	114.82	109.97
23	b	613	CLA	C3C-C4C-NC	5.17	116.37	110.57
23	d	404	CLA	C3D-C2D-C1D	-5.17	98.77	105.83
23	C	513	CLA	O2D-CGD-CBD	5.17	120.45	111.27
38	F	102	HEM	CAD-CBD-CGD	5.17	124.73	113.60
25	d	405	BCR	C15-C14-C13	-5.17	119.93	127.31
23	C	508	CLA	C3C-C4C-NC	5.16	116.36	110.57
23	b	613	CLA	CHD-C1D-ND	-5.16	119.71	124.45
23	b	607	CLA	C3C-C4C-NC	5.15	116.35	110.57
23	B	608	CLA	CMD-C2D-C1D	5.15	133.79	124.71
23	B	610	CLA	C2C-C1C-NC	5.15	114.80	109.97
23	D	404	CLA	O2D-CGD-CBD	5.15	120.41	111.27
23	c	504	CLA	C2C-C1C-NC	5.14	114.79	109.97
23	B	615	CLA	C3D-C2D-C1D	-5.14	98.81	105.83
32	A	418	LMG	C7-O1-C1	-5.14	103.71	113.74
23	C	512	CLA	O2D-CGD-CBD	5.13	120.39	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	512	CLA	O2D-CGD-CBD	5.12	120.37	111.27
23	D	403[A]	CLA	C3D-C2D-C1D	-5.12	98.84	105.83
23	A	406[A]	CLA	CMD-C2D-C1D	5.12	133.74	124.71
23	c	502	CLA	O2D-CGD-O1D	-5.11	113.84	123.84
23	C	506	CLA	CHD-C4C-C3C	-5.11	117.33	124.84
23	B	614	CLA	C4A-NA-C1A	-5.11	104.41	106.71
23	b	606	CLA	O2D-CGD-CBD	5.11	120.35	111.27
23	B	604	CLA	C1-C2-C3	-5.11	117.21	126.04
23	c	514	CLA	C2C-C1C-NC	5.10	114.75	109.97
23	c	510	CLA	O2D-CGD-CBD	5.10	120.33	111.27
23	c	510	CLA	C4A-NA-C1A	-5.10	104.41	106.71
23	B	616	CLA	C2C-C1C-NC	5.10	114.75	109.97
23	a	407	CLA	CHD-C1D-ND	-5.09	119.77	124.45
26	b	620	SQD	O47-C7-C8	5.09	122.47	111.50
23	A	406[B]	CLA	C2C-C1C-NC	5.09	114.74	109.97
23	a	407	CLA	C3C-C4C-NC	5.09	116.28	110.57
23	B	612	CLA	C3C-C4C-NC	5.08	116.27	110.57
32	B	621	LMG	O7-C10-C11	5.08	122.44	111.50
23	b	612	CLA	C4A-NA-C1A	-5.07	104.42	106.71
23	C	505	CLA	CHD-C1D-ND	-5.07	119.80	124.45
23	b	607	CLA	C3D-C2D-C1D	-5.06	98.92	105.83
23	A	405[B]	CLA	C3D-C2D-C1D	-5.06	98.93	105.83
23	B	605	CLA	C3D-C2D-C1D	-5.05	98.94	105.83
23	B	608	CLA	O2D-CGD-CBD	5.05	120.24	111.27
23	d	404	CLA	C2C-C1C-NC	5.05	114.70	109.97
23	c	502	CLA	C2C-C1C-NC	5.04	114.69	109.97
23	b	604	CLA	CMD-C2D-C1D	5.04	133.59	124.71
23	b	614	CLA	CMD-C2D-C1D	5.04	133.59	124.71
23	d	402[B]	CLA	C3D-C2D-C1D	-5.04	98.95	105.83
23	C	510	CLA	C4A-NA-C1A	-5.04	104.44	106.71
23	a	407	CLA	C2C-C1C-NC	5.03	114.68	109.97
38	F	102	HEM	CHC-C4B-NB	5.02	129.88	124.43
23	b	612	CLA	C3C-C4C-NC	5.02	116.20	110.57
23	b	603	CLA	CHD-C1D-ND	-5.02	119.84	124.45
23	C	505	CLA	C3C-C4C-NC	5.01	116.19	110.57
23	C	510	CLA	C1-C2-C3	-5.01	117.38	126.04
23	d	404	CLA	C4A-NA-C1A	-5.01	104.45	106.71
23	B	607	CLA	CMD-C2D-C1D	5.01	133.54	124.71
23	b	605	CLA	C4A-NA-C1A	-5.00	104.46	106.71
23	c	506	CLA	C3C-C4C-NC	5.00	116.18	110.57
23	c	503	CLA	O2D-CGD-CBD	5.00	120.14	111.27
23	B	604	CLA	O2D-CGD-CBD	4.99	120.14	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	606	CLA	C2C-C1C-NC	4.99	114.65	109.97
23	D	404	CLA	CHD-C1D-ND	-4.99	119.87	124.45
23	B	603	CLA	C4A-NA-C1A	-4.99	104.46	106.71
23	B	606	CLA	C3C-C4C-NC	4.98	116.16	110.57
23	b	605	CLA	O2D-CGD-CBD	4.98	120.11	111.27
23	b	610	CLA	C2C-C1C-NC	4.97	114.63	109.97
23	D	404	CLA	CMD-C2D-C1D	4.96	133.46	124.71
26	a	409[B]	SQD	O47-C7-C8	4.96	122.19	111.50
23	B	607	CLA	C3D-C2D-C1D	-4.96	99.07	105.83
23	b	606	CLA	C2C-C1C-NC	4.95	114.61	109.97
23	b	609	CLA	C3D-C2D-C1D	-4.95	99.08	105.83
23	b	605	CLA	C3D-C2D-C1D	-4.94	99.08	105.83
23	d	402[B]	CLA	O2D-CGD-CBD	4.94	120.05	111.27
25	Y	101	BCR	C33-C5-C6	-4.94	118.98	124.53
23	B	603	CLA	C3D-C2D-C1D	-4.94	99.09	105.83
23	a	405[A]	CLA	C2C-C1C-NC	4.94	114.60	109.97
23	B	610	CLA	C3D-C2D-C1D	-4.92	99.11	105.83
26	A	410[B]	SQD	C1-O5-C5	-4.92	104.03	113.69
23	b	613	CLA	C4A-NA-C1A	-4.92	104.49	106.71
23	B	605	CLA	C3C-C4C-NC	4.92	116.09	110.57
23	b	605	CLA	C3D-C4D-ND	4.92	118.19	110.24
23	a	405[A]	CLA	C3D-C2D-C1D	-4.91	99.12	105.83
23	B	608	CLA	C3C-C4C-NC	4.91	116.08	110.57
23	b	604	CLA	CHD-C1D-ND	-4.90	119.95	124.45
23	C	508	CLA	C3D-C2D-C1D	-4.90	99.14	105.83
23	d	402[A]	CLA	C3D-C2D-C1D	-4.89	99.16	105.83
23	C	501	CLA	C2C-C1C-NC	4.88	114.55	109.97
23	B	615	CLA	C2C-C1C-NC	4.88	114.54	109.97
23	b	609	CLA	C3C-C4C-NC	4.88	116.04	110.57
23	b	615	CLA	C3D-C2D-C1D	-4.87	99.19	105.83
23	C	509	CLA	O2D-CGD-CBD	4.87	119.92	111.27
23	a	405[B]	CLA	C3D-C2D-C1D	-4.87	99.19	105.83
23	d	403[B]	CLA	C4A-NA-C1A	-4.85	104.52	106.71
23	A	405[A]	CLA	C4A-NA-C1A	-4.85	104.53	106.71
23	B	612	CLA	C2C-C1C-NC	4.85	114.51	109.97
23	d	403[B]	CLA	O2D-CGD-CBD	4.84	119.87	111.27
26	a	409[B]	SQD	O6-C1-C2	4.84	115.86	108.30
23	B	613	CLA	CHD-C1D-ND	-4.84	120.01	124.45
23	A	404[A]	CLA	CHD-C4C-C3C	-4.84	117.73	124.84
23	c	505	CLA	O2D-CGD-CBD	4.84	119.86	111.27
23	b	612	CLA	CMD-C2D-C1D	4.83	133.22	124.71
23	A	405[B]	CLA	C4A-NA-C1A	-4.82	104.54	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	604	CLA	C3C-C4C-NC	4.82	115.98	110.57
23	b	609	CLA	C2C-C1C-NC	4.82	114.49	109.97
23	B	605	CLA	O2D-CGD-CBD	4.82	119.83	111.27
23	b	610	CLA	C3D-C2D-C1D	-4.82	99.25	105.83
23	B	608	CLA	C4A-NA-C1A	-4.81	104.54	106.71
23	c	502	CLA	C3D-C2D-C1D	-4.81	99.27	105.83
26	f	102	SQD	O47-C7-C8	4.80	121.85	111.50
23	C	501	CLA	C3D-C2D-C1D	-4.80	99.28	105.83
23	C	504	CLA	C1C-C2C-C3C	-4.80	101.91	106.96
23	c	510	CLA	CHD-C1D-ND	-4.80	120.04	124.45
23	c	504	CLA	C3D-C2D-C1D	-4.79	99.29	105.83
23	C	502	CLA	O2D-CGD-CBD	4.79	119.78	111.27
23	C	505	CLA	C4A-NA-C1A	-4.78	104.56	106.71
23	c	502	CLA	C4A-NA-C1A	-4.78	104.56	106.71
23	c	507	CLA	C3D-C2D-C1D	-4.78	99.31	105.83
29	a	412[B]	PL9	C7-C3-C4	4.78	120.76	116.88
23	b	610	CLA	C1-C2-C3	-4.77	117.79	126.04
23	c	505	CLA	C3D-C2D-C1D	-4.76	99.33	105.83
23	c	508	CLA	C3D-C2D-C1D	-4.76	99.34	105.83
38	f	101	HEM	CHC-C4B-NB	4.76	129.60	124.43
23	a	405[B]	CLA	C3D-C4D-ND	4.76	117.93	110.24
23	C	511	CLA	CHD-C1D-ND	-4.75	120.09	124.45
23	C	503	CLA	C3D-C2D-C1D	-4.75	99.35	105.83
23	c	503	CLA	C1C-C2C-C3C	-4.74	101.97	106.96
23	c	504	CLA	O2D-CGD-CBD	4.74	119.70	111.27
23	b	608	CLA	CMD-C2D-C1D	4.74	133.07	124.71
23	A	406[A]	CLA	O2D-CGD-CBD	4.74	119.69	111.27
23	A	406[B]	CLA	C3D-C4D-ND	4.74	117.90	110.24
23	b	610	CLA	C3C-C4C-NC	4.73	115.88	110.57
23	a	407	CLA	CMD-C2D-C1D	4.73	133.05	124.71
23	D	404	CLA	C2C-C1C-NC	4.72	114.39	109.97
23	C	506	CLA	C1C-C2C-C3C	-4.72	101.99	106.96
23	B	601	CLA	C3D-C2D-C1D	-4.72	99.39	105.83
23	C	511	CLA	C3C-C4C-NC	4.72	115.86	110.57
23	B	611	CLA	C3D-C4D-ND	4.71	117.86	110.24
23	A	405[A]	CLA	C1C-C2C-C3C	-4.71	102.00	106.96
23	A	404[A]	CLA	C3D-C2D-C1D	-4.71	99.41	105.83
26	F	103	SQD	C1-O5-C5	-4.70	104.46	113.69
23	C	507	CLA	C3D-C2D-C1D	-4.70	99.42	105.83
23	B	616	CLA	CMD-C2D-C1D	4.70	133.00	124.71
23	C	509	CLA	C3D-C2D-C1D	-4.69	99.43	105.83
23	B	601	CLA	C4A-NA-C1A	-4.69	104.60	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	407	CLA	C3D-C2D-C1D	-4.69	99.43	105.83
23	C	506	CLA	C3D-C2D-C1D	-4.69	99.43	105.83
23	C	504	CLA	C3C-C4C-NC	4.68	115.83	110.57
23	c	509	CLA	CHD-C1D-ND	-4.68	120.15	124.45
23	a	405[A]	CLA	C3D-C4D-ND	4.68	117.81	110.24
23	b	604	CLA	C4A-NA-C1A	-4.68	104.60	106.71
23	A	405[B]	CLA	C1C-C2C-C3C	-4.68	102.04	106.96
23	c	512	CLA	C3D-C2D-C1D	-4.68	99.45	105.83
23	B	611	CLA	C3C-C4C-NC	4.68	115.81	110.57
23	B	601	CLA	C2C-C1C-NC	4.67	114.35	109.97
23	B	613	CLA	C3D-C2D-C1D	-4.67	99.46	105.83
23	B	609	CLA	C3D-C2D-C1D	-4.67	99.46	105.83
23	C	507	CLA	C3C-C4C-NC	4.67	115.81	110.57
23	d	403[A]	CLA	C3C-C4C-NC	4.67	115.80	110.57
23	c	513	CLA	C3D-C2D-C1D	-4.66	99.47	105.83
23	c	508	CLA	C1C-C2C-C3C	-4.66	102.06	106.96
23	C	508	CLA	C4A-NA-C1A	-4.66	104.61	106.71
29	A	414[B]	PL9	C7-C8-C9	-4.66	119.04	126.79
26	F	103	SQD	O8-S-C6	4.65	113.15	105.74
23	d	403[B]	CLA	C3D-C4D-ND	4.65	117.76	110.24
23	c	503	CLA	C3D-C2D-C1D	-4.64	99.50	105.83
23	C	511	CLA	C3D-C2D-C1D	-4.63	99.51	105.83
23	b	611	CLA	C3C-C4C-NC	4.63	115.77	110.57
34	b	622	HTG	C1-O5-C5	4.63	121.11	112.58
23	A	406[A]	CLA	C3D-C2D-C1D	-4.62	99.52	105.83
25	H	101	BCR	C38-C26-C25	-4.62	119.34	124.53
23	b	602	CLA	C3D-C4D-ND	4.62	117.70	110.24
24	A	416[B]	PHO	C1-C2-C3	-4.61	118.06	126.04
23	d	403[B]	CLA	C1C-C2C-C3C	-4.61	102.11	106.96
23	c	502	CLA	C3D-C4D-ND	4.61	117.70	110.24
23	b	608	CLA	C3D-C4D-ND	4.61	117.69	110.24
23	B	603	CLA	C3C-C4C-NC	4.61	115.74	110.57
29	a	412[A]	PL9	C7-C8-C9	-4.60	119.13	126.79
23	c	514	CLA	C3D-C2D-C1D	-4.60	99.55	105.83
23	b	608	CLA	C1C-C2C-C3C	-4.59	102.13	106.96
23	B	609	CLA	C3C-C4C-NC	4.59	115.72	110.57
23	A	406[B]	CLA	C3D-C2D-C1D	-4.59	99.57	105.83
23	B	602	CLA	C3D-C2D-C1D	-4.58	99.58	105.83
26	b	620	SQD	C1-O5-C5	-4.58	104.70	113.69
23	a	404[A]	CLA	C3D-C2D-C1D	-4.58	99.58	105.83
23	B	615	CLA	C3C-C4C-NC	4.58	115.71	110.57
23	c	511	CLA	C1-C2-C3	-4.58	118.12	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	504	CLA	C4A-NA-C1A	-4.58	104.65	106.71
23	a	405[A]	CLA	O2D-CGD-CBD	4.58	119.40	111.27
23	C	513	CLA	C3D-C2D-C1D	-4.57	99.59	105.83
23	C	510	CLA	C3D-C4D-ND	4.57	117.64	110.24
23	c	506	CLA	C3D-C4D-ND	4.57	117.64	110.24
23	b	601	CLA	C3D-C2D-C1D	-4.57	99.59	105.83
23	b	606	CLA	C3D-C2D-C1D	-4.57	99.60	105.83
23	c	513	CLA	C2C-C1C-NC	4.56	114.25	109.97
23	b	603	CLA	C1D-CHD-C4C	-4.56	116.22	126.06
23	D	403[A]	CLA	O2D-CGD-CBD	4.55	119.36	111.27
23	A	406[A]	CLA	C3D-C4D-ND	4.55	117.61	110.24
23	B	601	CLA	C3D-C4D-ND	4.55	117.60	110.24
23	d	402[B]	CLA	C4A-NA-C1A	-4.55	104.66	106.71
23	C	503	CLA	C3D-C4D-ND	4.55	117.59	110.24
23	A	405[A]	CLA	CMD-C2D-C1D	4.55	132.73	124.71
23	C	502	CLA	C3D-C2D-C1D	-4.55	99.63	105.83
23	b	602	CLA	C2C-C1C-NC	4.54	114.23	109.97
23	b	607	CLA	C1C-C2C-C3C	-4.54	102.19	106.96
38	F	102	HEM	C1B-NB-C4B	4.53	109.75	105.07
23	B	610	CLA	O2A-CGA-CBA	4.53	126.13	111.91
23	C	503	CLA	O2D-CGD-CBD	4.53	119.31	111.27
24	A	416[A]	PHO	C1-C2-C3	-4.53	118.22	126.04
23	B	616	CLA	CHD-C1D-ND	-4.52	120.30	124.45
23	B	612	CLA	C3D-C2D-C1D	-4.51	99.68	105.83
23	b	601	CLA	C3D-C4D-ND	4.51	117.53	110.24
23	A	408	CLA	C4A-NA-C1A	-4.50	104.68	106.71
23	B	612	CLA	C3D-C4D-ND	4.50	117.52	110.24
23	C	513	CLA	C4A-NA-C1A	-4.50	104.68	106.71
23	D	404	CLA	C3D-C2D-C1D	-4.50	99.69	105.83
23	A	405[B]	CLA	O2D-CGD-CBD	4.50	119.26	111.27
23	d	402[B]	CLA	C3D-C4D-ND	4.50	117.51	110.24
23	d	402[A]	CLA	C1C-C2C-C3C	-4.49	102.24	106.96
23	B	612	CLA	O2D-CGD-O1D	-4.49	115.06	123.84
23	c	514	CLA	O2D-CGD-CBD	4.49	119.24	111.27
23	B	613	CLA	C3C-C4C-NC	4.48	115.60	110.57
23	a	405[B]	CLA	O2D-CGD-CBD	4.48	119.23	111.27
23	b	608	CLA	O2D-CGD-CBD	4.48	119.23	111.27
23	c	509	CLA	C3C-C4C-NC	4.48	115.59	110.57
23	C	512	CLA	C3D-C2D-C1D	-4.47	99.73	105.83
23	c	511	CLA	C3D-C2D-C1D	-4.47	99.73	105.83
23	C	503	CLA	C2C-C1C-NC	4.47	114.16	109.97
23	C	511	CLA	C4A-NA-C1A	-4.46	104.70	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	510	CLA	C3D-C2D-C1D	-4.46	99.75	105.83
23	C	506	CLA	O2D-CGD-CBD	4.46	119.19	111.27
23	C	508	CLA	CHD-C1D-ND	-4.45	120.36	124.45
23	c	503	CLA	CHD-C1D-ND	-4.45	120.36	124.45
23	C	510	CLA	C3D-C2D-C1D	-4.45	99.76	105.83
23	b	611	CLA	C3D-C4D-ND	4.45	117.43	110.24
23	d	403[A]	CLA	C1C-C2C-C3C	-4.45	102.28	106.96
23	b	611	CLA	C4A-NA-C1A	-4.44	104.71	106.71
23	A	404[B]	CLA	C3D-C2D-C1D	-4.44	99.77	105.83
23	A	406[B]	CLA	O2D-CGD-CBD	4.44	119.16	111.27
23	b	604	CLA	C3D-C2D-C1D	-4.44	99.77	105.83
23	d	403[A]	CLA	C3D-C4D-ND	4.44	117.42	110.24
23	a	404[B]	CLA	C3D-C4D-ND	4.43	117.41	110.24
23	B	616	CLA	O2D-CGD-O1D	-4.43	115.17	123.84
23	b	612	CLA	O2D-CGD-CBD	4.43	119.14	111.27
23	c	511	CLA	C3C-C4C-NC	4.42	115.53	110.57
32	d	412	LMG	O7-C10-C11	4.42	121.03	111.50
23	b	603	CLA	C3D-C2D-C1D	-4.42	99.80	105.83
23	b	605	CLA	C3C-C4C-NC	4.42	115.52	110.57
23	D	403[B]	CLA	C3D-C2D-C1D	-4.41	99.81	105.83
23	C	502	CLA	C1C-C2C-C3C	-4.41	102.32	106.96
23	c	503	CLA	C4A-NA-C1A	-4.41	104.72	106.71
23	D	404	CLA	C3C-C4C-NC	4.40	115.50	110.57
23	d	402[A]	CLA	O2D-CGD-CBD	4.39	119.07	111.27
23	b	612	CLA	CMC-C2C-C1C	4.39	131.72	125.04
23	a	407	CLA	C4A-NA-C1A	-4.39	104.73	106.71
23	B	607	CLA	C3C-C4C-NC	4.39	115.49	110.57
23	b	609	CLA	O2D-CGD-CBD	4.38	119.06	111.27
23	a	404[B]	CLA	C1C-C2C-C3C	-4.38	102.35	106.96
23	A	408	CLA	C3D-C4D-ND	4.38	117.33	110.24
23	B	607	CLA	C3D-C4D-ND	4.38	117.33	110.24
29	a	412[A]	PL9	C7-C3-C4	4.38	120.44	116.88
23	B	613	CLA	C4A-NA-C1A	-4.38	104.74	106.71
23	b	607	CLA	O2D-CGD-CBD	4.38	119.05	111.27
23	a	407	CLA	C3D-C4D-ND	4.37	117.31	110.24
23	C	501	CLA	C1D-CHD-C4C	-4.37	116.63	126.06
23	B	609	CLA	C3D-C4D-ND	4.37	117.31	110.24
23	C	513	CLA	C3D-C4D-ND	4.36	117.30	110.24
29	A	414[B]	PL9	C7-C3-C4	4.36	120.42	116.88
32	c	521	LMG	O6-C5-C4	4.36	117.61	109.69
23	b	615	CLA	C3C-C4C-NC	4.35	115.45	110.57
23	A	405[B]	CLA	C3D-C4D-ND	4.35	117.28	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	614	CLA	C3C-C4C-NC	4.35	115.45	110.57
23	c	514	CLA	C1D-CHD-C4C	-4.35	116.67	126.06
23	b	603	CLA	C3D-C4D-ND	4.35	117.28	110.24
23	b	612	CLA	CAC-C3C-C4C	4.35	130.45	124.81
23	a	404[B]	CLA	C3D-C2D-C1D	-4.35	99.90	105.83
23	b	601	CLA	C2C-C1C-NC	4.35	114.05	109.97
23	C	506	CLA	C3D-C4D-ND	4.35	117.27	110.24
26	A	410[B]	SQD	C1-C2-C3	-4.34	100.97	110.00
23	C	503	CLA	C3C-C4C-NC	4.33	115.43	110.57
23	b	616	CLA	C3C-C4C-NC	4.33	115.43	110.57
23	C	512	CLA	C3C-C4C-NC	4.33	115.42	110.57
33	E	101[A]	LHG	O7-C7-C8	4.32	120.82	111.50
23	B	605	CLA	C3D-C4D-ND	4.32	117.23	110.24
23	A	404[A]	CLA	C1C-C2C-C3C	-4.32	102.41	106.96
23	b	616	CLA	C1D-CHD-C4C	-4.32	116.73	126.06
23	B	607	CLA	C4A-NA-C1A	-4.32	104.76	106.71
23	D	403[A]	CLA	C3C-C4C-NC	4.31	115.41	110.57
23	C	512	CLA	C2C-C1C-NC	4.31	114.01	109.97
23	a	404[B]	CLA	O2D-CGD-CBD	4.31	118.93	111.27
25	d	405	BCR	C40-C30-C25	-4.31	103.30	110.30
23	B	616	CLA	C4C-C3C-C2C	-4.31	100.61	106.90
23	b	602	CLA	O2D-CGD-O1D	-4.31	115.41	123.84
23	C	510	CLA	C1C-C2C-C3C	-4.31	102.43	106.96
23	b	610	CLA	C3D-C4D-ND	4.31	117.21	110.24
23	c	509	CLA	C1C-C2C-C3C	-4.31	102.43	106.96
23	d	402[B]	CLA	C1C-C2C-C3C	-4.30	102.43	106.96
23	B	610	CLA	C3C-C4C-NC	4.30	115.39	110.57
23	c	507	CLA	C3D-C4D-ND	4.30	117.19	110.24
23	B	607	CLA	C1C-C2C-C3C	-4.30	102.44	106.96
29	A	414[B]	PL9	C32-C33-C34	-4.30	117.31	127.66
29	A	414[A]	PL9	C32-C33-C34	-4.30	117.31	127.66
23	b	603	CLA	C3C-C4C-NC	4.29	115.38	110.57
23	B	613	CLA	O2D-CGD-CBD	4.29	118.89	111.27
23	D	404	CLA	C3D-C4D-ND	4.29	117.17	110.24
23	a	404[A]	CLA	C1C-C2C-C3C	-4.29	102.45	106.96
25	y	101	BCR	C33-C5-C6	-4.29	119.72	124.53
23	c	514	CLA	C3D-C4D-ND	4.28	117.17	110.24
23	b	615	CLA	C3D-C4D-ND	4.28	117.17	110.24
23	C	501	CLA	C3C-C4C-NC	4.28	115.37	110.57
23	b	607	CLA	C3D-C4D-ND	4.28	117.16	110.24
23	a	405[B]	CLA	C2C-C1C-NC	4.28	113.98	109.97
23	B	615	CLA	C3D-C4D-ND	4.28	117.16	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	505	CLA	C3D-C2D-C1D	-4.28	99.99	105.83
23	c	513	CLA	C1-C2-C3	-4.28	118.64	126.04
25	C	515	BCR	C7-C8-C9	-4.28	119.77	126.23
23	b	606	CLA	C3C-C4C-NC	4.27	115.36	110.57
26	A	410[B]	SQD	C44-O6-C1	-4.27	105.40	113.74
31	t	101	LMT	C3'-C4'-C5'	-4.27	101.14	110.93
23	A	404[B]	CLA	O2D-CGD-CBD	4.27	118.85	111.27
23	c	507	CLA	O2D-CGD-CBD	4.27	118.85	111.27
23	B	601	CLA	C3C-C4C-NC	4.26	115.35	110.57
25	b	617	BCR	C33-C5-C6	-4.26	119.75	124.53
23	b	612	CLA	CHD-C1D-ND	-4.25	120.54	124.45
23	a	405[A]	CLA	C3C-C4C-NC	4.25	115.34	110.57
26	f	102	SQD	C1-O5-C5	4.25	122.03	113.69
23	c	503	CLA	C3D-C4D-ND	4.25	117.12	110.24
23	C	501	CLA	O2D-CGD-O1D	-4.25	115.53	123.84
23	D	403[B]	CLA	C3C-C4C-NC	4.25	115.33	110.57
23	b	612	CLA	C1-C2-C3	-4.24	118.70	126.04
33	E	101[B]	LHG	O7-C7-C8	4.24	120.65	111.50
23	b	608	CLA	C3D-C2D-C1D	-4.24	100.04	105.83
23	c	504	CLA	C1D-CHD-C4C	-4.24	116.91	126.06
23	c	504	CLA	C3C-C4C-NC	4.24	115.32	110.57
23	C	511	CLA	C1D-CHD-C4C	-4.24	116.92	126.06
23	A	408	CLA	C3C-C4C-NC	4.24	115.32	110.57
23	A	404[B]	CLA	C1D-CHD-C4C	-4.23	116.93	126.06
23	c	506	CLA	C3D-C2D-C1D	-4.23	100.06	105.83
23	B	610	CLA	C3D-C4D-ND	4.23	117.08	110.24
25	c	515	BCR	C11-C10-C9	-4.22	121.28	127.31
23	d	404	CLA	C3D-C4D-ND	4.22	117.07	110.24
23	b	606	CLA	C1D-CHD-C4C	-4.22	116.95	126.06
23	C	505	CLA	C3D-C4D-ND	4.22	117.06	110.24
23	a	404[A]	CLA	C3D-C4D-ND	4.22	117.06	110.24
29	a	412[B]	PL9	C7-C8-C9	-4.21	119.78	126.79
23	a	404[A]	CLA	C1D-CHD-C4C	-4.21	116.98	126.06
23	D	403[B]	CLA	O2D-CGD-CBD	4.20	118.73	111.27
23	c	507	CLA	C1-C2-C3	-4.20	118.78	126.04
23	D	403[B]	CLA	C3D-C4D-ND	4.20	117.03	110.24
23	c	503	CLA	CMD-C2D-C1D	4.20	132.11	124.71
23	C	501	CLA	C3D-C4D-ND	4.19	117.02	110.24
26	F	103	SQD	C44-O6-C1	-4.19	105.55	113.74
23	b	602	CLA	C3D-C2D-C1D	-4.19	100.11	105.83
26	a	409[A]	SQD	C1-C2-C3	-4.19	101.27	110.00
23	c	508	CLA	CMC-C2C-C1C	4.19	131.42	125.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	615	CLA	CMC-C2C-C1C	4.19	131.42	125.04
32	A	418	LMG	O7-C10-C11	4.19	120.52	111.50
23	A	404[B]	CLA	CAA-C2A-C3A	-4.18	101.32	112.78
23	d	403[B]	CLA	C3C-C4C-NC	4.18	115.26	110.57
23	b	609	CLA	C3D-C4D-ND	4.18	117.00	110.24
23	B	603	CLA	C3D-C4D-ND	4.18	116.99	110.24
23	C	509	CLA	C3C-C4C-NC	4.18	115.25	110.57
23	a	404[A]	CLA	CAA-C2A-C3A	-4.18	101.34	112.78
23	b	606	CLA	C3D-C4D-ND	4.17	116.99	110.24
23	C	512	CLA	C3D-C4D-ND	4.17	116.99	110.24
23	C	509	CLA	C1C-C2C-C3C	-4.17	102.57	106.96
23	c	505	CLA	C3D-C4D-ND	4.17	116.98	110.24
23	c	512	CLA	C3D-C4D-ND	4.17	116.98	110.24
23	A	406[A]	CLA	C1C-C2C-C3C	-4.16	102.59	106.96
23	c	502	CLA	C3C-C4C-NC	4.15	115.22	110.57
23	b	613	CLA	C1C-C2C-C3C	-4.14	102.60	106.96
40	v	201	HEC	CMB-C2B-C1B	-4.14	122.10	128.46
23	A	404[B]	CLA	C1C-C2C-C3C	-4.14	102.60	106.96
23	c	505	CLA	C1-O2A-CGA	4.14	127.31	116.44
23	D	403[A]	CLA	C1C-C2C-C3C	-4.14	102.60	106.96
23	B	605	CLA	C1D-CHD-C4C	-4.14	117.13	126.06
23	c	504	CLA	C3D-C4D-ND	4.14	116.94	110.24
23	B	602	CLA	C3D-C4D-ND	4.14	116.93	110.24
23	d	402[B]	CLA	C3C-C4C-NC	4.14	115.21	110.57
23	d	403[B]	CLA	C3D-C2D-C1D	-4.13	100.19	105.83
23	b	602	CLA	C3C-C4C-NC	4.13	115.20	110.57
23	C	509	CLA	C3D-C4D-ND	4.13	116.91	110.24
32	A	418	LMG	O1-C1-C2	4.13	114.75	108.30
23	C	502	CLA	C3C-C4C-NC	4.12	115.20	110.57
23	d	402[A]	CLA	C3D-C4D-ND	4.12	116.90	110.24
32	C	520	LMG	O7-C10-C11	4.12	120.38	111.50
23	B	608	CLA	C3D-C4D-ND	4.12	116.90	110.24
29	A	414[A]	PL9	C7-C3-C2	-4.12	117.89	123.30
23	b	604	CLA	CAC-C3C-C4C	4.11	130.15	124.81
23	d	403[A]	CLA	O2D-CGD-CBD	4.11	118.58	111.27
23	d	403[A]	CLA	C3D-C2D-C1D	-4.11	100.22	105.83
32	c	501	LMG	O7-C10-C11	4.11	120.36	111.50
23	b	609	CLA	C1-C2-C3	-4.11	118.94	126.04
23	c	512	CLA	O2D-CGD-O1D	-4.11	115.81	123.84
23	C	512	CLA	C1D-CHD-C4C	-4.11	117.20	126.06
23	c	510	CLA	C3D-C4D-ND	4.11	116.88	110.24
23	A	404[A]	CLA	C3B-C4B-NB	4.11	114.52	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	614	CLA	C3C-C4C-NC	4.10	115.17	110.57
23	C	513	CLA	C3C-C4C-NC	4.10	115.17	110.57
23	D	403[B]	CLA	C1-C2-C3	-4.10	118.95	126.04
23	A	405[A]	CLA	C3D-C4D-ND	4.10	116.87	110.24
32	Z	101	LMG	O7-C10-C11	4.10	120.33	111.50
23	c	510	CLA	C1D-CHD-C4C	-4.10	117.22	126.06
23	b	614	CLA	O2D-CGD-O1D	-4.10	115.83	123.84
23	B	613	CLA	C3B-C4B-NB	4.10	114.50	109.21
23	A	408	CLA	C1C-C2C-C3C	-4.09	102.65	106.96
23	B	615	CLA	C1D-CHD-C4C	-4.09	117.23	126.06
23	A	404[B]	CLA	C3D-C4D-ND	4.09	116.85	110.24
23	c	513	CLA	C3D-C4D-ND	4.09	116.85	110.24
23	C	508	CLA	C1-C2-C3	-4.09	118.97	126.04
23	b	616	CLA	C2C-C1C-NC	4.08	113.80	109.97
23	b	614	CLA	C3D-C4D-ND	4.08	116.84	110.24
23	B	616	CLA	C3B-C4B-NB	4.08	114.48	109.21
23	A	404[A]	CLA	CAA-C2A-C3A	-4.08	101.61	112.78
23	A	405[A]	CLA	CAA-C2A-C3A	-4.08	101.61	112.78
35	C	516[A]	DGD	O2G-C1B-C2B	4.08	120.29	111.50
23	c	512	CLA	C4A-NA-C1A	-4.07	104.87	106.71
23	c	505	CLA	C3C-C4C-NC	4.07	115.14	110.57
26	a	409[A]	SQD	C1-O5-C5	-4.07	105.69	113.69
25	h	101	BCR	C7-C8-C9	-4.07	120.09	126.23
23	D	403[A]	CLA	C3D-C4D-ND	4.07	116.82	110.24
23	b	616	CLA	C3D-C4D-ND	4.06	116.81	110.24
23	A	406[A]	CLA	C3C-C4C-NC	4.06	115.13	110.57
26	B	620	SQD	C3-C4-C5	4.06	117.48	110.24
23	c	512	CLA	C3C-C4C-NC	4.06	115.12	110.57
23	d	402[A]	CLA	C3C-C4C-NC	4.06	115.12	110.57
23	c	514	CLA	C3C-C4C-NC	4.05	115.11	110.57
23	C	508	CLA	C3B-C4B-NB	4.05	114.44	109.21
23	A	404[B]	CLA	C3C-C4C-NC	4.05	115.11	110.57
32	c	521	LMG	O7-C10-C11	4.05	120.22	111.50
23	B	604	CLA	C1D-CHD-C4C	-4.04	117.34	126.06
23	C	503	CLA	C1D-CHD-C4C	-4.04	117.34	126.06
23	b	604	CLA	C1C-C2C-C3C	-4.04	102.71	106.96
23	B	604	CLA	C3B-C4B-NB	4.03	114.42	109.21
23	a	404[B]	CLA	C1D-CHD-C4C	-4.03	117.36	126.06
29	a	412[B]	PL9	C32-C33-C34	-4.03	117.95	127.66
23	B	614	CLA	C1C-C2C-C3C	-4.03	102.72	106.96
23	c	508	CLA	C3C-C4C-NC	4.03	115.09	110.57
23	b	610	CLA	C4A-NA-C1A	-4.03	104.89	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	C	519	LMG	O7-C10-C11	4.03	120.18	111.50
23	b	614	CLA	C4A-NA-C1A	-4.02	104.90	106.71
23	d	404	CLA	C3C-C4C-NC	4.02	115.08	110.57
23	a	407	CLA	CMC-C2C-C1C	4.01	131.15	125.04
23	c	510	CLA	C3C-C4C-NC	4.01	115.07	110.57
23	d	402[A]	CLA	C1D-CHD-C4C	-4.01	117.41	126.06
32	C	520	LMG	O6-C5-C4	4.01	116.97	109.69
23	b	604	CLA	CMC-C2C-C1C	4.01	131.14	125.04
23	b	601	CLA	C3C-C4C-NC	4.01	115.06	110.57
23	B	601	CLA	C1D-CHD-C4C	-4.01	117.42	126.06
23	c	511	CLA	C3D-C4D-ND	4.00	116.72	110.24
25	c	515	BCR	C15-C14-C13	-4.00	121.60	127.31
23	B	616	CLA	C3D-C4D-ND	4.00	116.71	110.24
23	B	602	CLA	C1D-CHD-C4C	-4.00	117.43	126.06
23	C	508	CLA	C1C-C2C-C3C	-4.00	102.75	106.96
23	b	613	CLA	C1-C2-C3	-4.00	119.13	126.04
23	A	408	CLA	C3B-C4B-NB	3.99	114.37	109.21
23	c	508	CLA	O2D-CGD-O1D	-3.99	116.04	123.84
23	A	408	CLA	O2D-CGD-CBD	3.98	118.35	111.27
25	Y	101	BCR	C15-C14-C13	-3.98	121.63	127.31
23	B	606	CLA	C3D-C4D-ND	3.98	116.67	110.24
23	b	616	CLA	O2A-CGA-CBA	3.98	124.38	111.91
23	c	511	CLA	O2D-CGD-CBD	3.97	118.33	111.27
23	b	615	CLA	C1D-CHD-C4C	-3.97	117.49	126.06
29	A	414[B]	PL9	C7-C3-C2	-3.97	118.08	123.30
23	B	602	CLA	C3C-C4C-NC	3.97	115.02	110.57
23	c	512	CLA	C1D-CHD-C4C	-3.97	117.50	126.06
23	b	607	CLA	C4A-NA-C1A	-3.97	104.92	106.71
23	c	507	CLA	C1C-C2C-C3C	-3.96	102.79	106.96
23	b	612	CLA	C3D-C4D-ND	3.96	116.64	110.24
23	D	403[B]	CLA	C1C-C2C-C3C	-3.96	102.80	106.96
26	B	620	SQD	O7-S-C6	3.96	111.64	106.94
23	b	606	CLA	C4-C3-C5	3.96	121.93	115.27
23	B	614	CLA	C3D-C4D-ND	3.96	116.64	110.24
23	c	503	CLA	C1D-CHD-C4C	-3.95	117.53	126.06
23	a	404[A]	CLA	C3C-C4C-NC	3.95	115.00	110.57
23	C	504	CLA	C3D-C4D-ND	3.95	116.63	110.24
29	D	406[B]	PL9	C42-C43-C44	-3.95	118.15	127.66
29	a	412[B]	PL9	C7-C3-C2	-3.95	118.11	123.30
23	b	603	CLA	O2D-CGD-O1D	-3.95	116.11	123.84
23	a	404[A]	CLA	C3B-C4B-NB	3.95	114.31	109.21
23	A	404[A]	CLA	C3C-C4C-NC	3.95	115.00	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	610	CLA	O2A-CGA-CBA	3.95	124.29	111.91
26	A	412	SQD	O47-C7-C8	3.95	120.00	111.50
23	B	611	CLA	O2D-CGD-O1D	-3.94	116.13	123.84
23	C	502	CLA	C3D-C4D-ND	3.94	116.61	110.24
29	d	406[A]	PL9	C42-C43-C44	-3.93	118.19	127.66
23	a	404[B]	CLA	C3C-C4C-NC	3.93	114.98	110.57
23	c	511	CLA	C1C-C2C-C3C	-3.93	102.82	106.96
23	B	603	CLA	O2D-CGD-O1D	-3.93	116.15	123.84
23	D	403[A]	CLA	C1-C2-C3	-3.93	119.25	126.04
23	a	405[A]	CLA	C1C-C2C-C3C	-3.93	102.83	106.96
23	B	607	CLA	C3B-C4B-NB	3.92	114.28	109.21
25	T	101	BCR	C15-C16-C17	-3.92	115.44	123.47
23	b	607	CLA	C3B-C4B-NB	3.92	114.28	109.21
23	d	404	CLA	O2D-CGD-O1D	-3.92	116.17	123.84
23	B	615	CLA	C1C-C2C-C3C	-3.91	102.84	106.96
26	a	409[A]	SQD	C44-O6-C1	-3.91	106.09	113.74
23	C	511	CLA	C3D-C4D-ND	3.91	116.56	110.24
23	A	404[B]	CLA	C3B-C4B-NB	3.91	114.27	109.21
29	A	414[A]	PL9	C7-C3-C4	3.91	120.05	116.88
23	b	614	CLA	C1D-CHD-C4C	-3.91	117.63	126.06
23	B	605	CLA	C4-C3-C5	3.90	121.83	115.27
23	A	406[B]	CLA	C3C-C4C-NC	3.90	114.95	110.57
23	c	509	CLA	C1D-CHD-C4C	-3.90	117.64	126.06
29	a	412[A]	PL9	C32-C33-C34	-3.89	118.28	127.66
32	c	521	LMG	C3-C4-C5	3.89	117.18	110.24
23	C	508	CLA	C3D-C4D-ND	3.89	116.54	110.24
23	B	603	CLA	C1D-CHD-C4C	-3.89	117.66	126.06
34	b	625	HTG	C1-O5-C5	3.89	119.76	112.58
23	B	610	CLA	C1C-C2C-C3C	-3.89	102.87	106.96
23	B	608	CLA	O2D-CGD-O1D	-3.89	116.24	123.84
23	B	614	CLA	C1D-CHD-C4C	-3.89	117.67	126.06
23	d	402[B]	CLA	C1D-CHD-C4C	-3.89	117.67	126.06
34	b	622	HTG	C1'-S1-C1	3.89	107.36	100.09
23	B	602	CLA	O2D-CGD-O1D	-3.89	116.24	123.84
23	c	505	CLA	C3B-C4B-NB	3.89	114.23	109.21
33	A	419[A]	LHG	O8-C23-O10	-3.88	113.79	123.59
35	c	517[A]	DGD	O2G-C1B-C2B	3.88	119.87	111.50
23	B	606	CLA	C1D-CHD-C4C	-3.88	117.68	126.06
23	A	405[A]	CLA	CMC-C2C-C1C	3.88	130.95	125.04
23	B	607	CLA	O2D-CGD-O1D	-3.88	116.26	123.84
23	b	608	CLA	CMC-C2C-C1C	3.88	130.94	125.04
23	C	513	CLA	C1C-C2C-C3C	-3.88	102.88	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	405[B]	CLA	C3C-C4C-NC	3.87	114.91	110.57
23	d	402[A]	CLA	CAA-C2A-C3A	-3.87	102.19	112.78
23	b	601	CLA	C1D-CHD-C4C	-3.87	117.72	126.06
24	A	407[A]	PHO	C1A-C2A-C3A	-3.87	99.16	102.84
23	b	609	CLA	C1D-CHD-C4C	-3.87	117.72	126.06
23	b	612	CLA	C3B-C4B-NB	3.87	114.21	109.21
25	a	408	BCR	C38-C26-C25	-3.86	120.19	124.53
23	c	507	CLA	C3C-C4C-NC	3.86	114.91	110.57
23	C	507	CLA	C3D-C4D-ND	3.86	116.49	110.24
23	a	404[B]	CLA	C3B-C4B-NB	3.86	114.20	109.21
23	C	509	CLA	C1-C2-C3	-3.86	119.37	126.04
40	v	201	HEC	CBD-CAD-C3D	-3.86	106.03	112.62
23	B	611	CLA	CHD-C4C-NC	3.86	130.28	124.20
23	B	604	CLA	C3D-C2D-C1D	-3.86	100.57	105.83
23	A	405[A]	CLA	C3C-C4C-NC	3.85	114.89	110.57
23	A	406[B]	CLA	C1C-C2C-C3C	-3.85	102.91	106.96
32	Z	101	LMG	C1-C2-C3	3.85	118.00	110.00
23	b	604	CLA	C3D-C4D-ND	3.84	116.45	110.24
25	C	514	BCR	C15-C14-C13	-3.84	121.83	127.31
23	b	612	CLA	C1D-CHD-C4C	-3.84	117.77	126.06
23	c	512	CLA	C3B-C4B-NB	3.84	114.18	109.21
23	B	602	CLA	C1C-C2C-C3C	-3.84	102.92	106.96
29	a	412[A]	PL9	C7-C3-C2	-3.84	118.25	123.30
23	B	613	CLA	C4-C3-C5	3.84	121.72	115.27
23	B	610	CLA	CAA-C2A-C3A	-3.83	102.28	112.78
29	A	414[B]	PL9	C37-C38-C39	-3.83	118.44	127.66
23	b	602	CLA	CAA-C2A-C3A	-3.83	102.30	112.78
23	A	408	CLA	C1-C2-C3	-3.83	119.43	126.04
23	B	606	CLA	O2D-CGD-O1D	-3.82	116.36	123.84
40	V	201	HEC	CBA-CAA-C2A	-3.82	106.17	112.60
23	b	612	CLA	C3D-C2D-C1D	-3.82	100.62	105.83
25	B	618	BCR	C29-C30-C25	3.82	116.36	110.48
23	B	606	CLA	C1C-C2C-C3C	-3.81	102.95	106.96
23	B	604	CLA	C1C-C2C-C3C	-3.81	102.95	106.96
23	b	603	CLA	CAA-C2A-C3A	-3.81	102.34	112.78
23	C	504	CLA	C3B-C4B-NB	3.81	114.14	109.21
23	B	611	CLA	CMB-C2B-C3B	3.81	131.80	124.68
23	d	402[B]	CLA	CAA-C2A-C3A	-3.81	102.35	112.78
23	C	512	CLA	C1-C2-C3	-3.81	119.46	126.04
25	d	405	BCR	C38-C26-C25	-3.81	120.25	124.53
23	A	405[B]	CLA	CAA-C2A-C3A	-3.80	102.36	112.78
31	B	628	LMT	C1'-O5'-C5'	-3.80	106.22	113.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	d	405	BCR	C29-C30-C25	3.80	116.34	110.48
33	A	419[A]	LHG	O7-C7-C8	3.80	119.69	111.50
24	A	416[A]	PHO	C1A-C2A-C3A	-3.80	99.22	102.84
23	b	605	CLA	C1D-CHD-C4C	-3.80	117.86	126.06
40	v	201	HEC	CMC-C2C-C1C	-3.80	122.62	128.46
38	f	101	HEM	CAD-CBD-CGD	3.80	121.78	113.60
23	c	508	CLA	C3D-C4D-ND	3.80	116.38	110.24
23	b	608	CLA	CMB-C2B-C3B	3.80	131.78	124.68
38	F	102	HEM	CBD-CAD-C3D	-3.79	102.08	112.63
33	b	629[B]	LHG	O7-C7-C8	3.79	119.67	111.50
23	c	507	CLA	C3B-C4B-NB	3.79	114.11	109.21
25	A	409	BCR	C24-C23-C22	-3.79	120.51	126.23
23	d	404	CLA	C1C-C2C-C3C	-3.79	102.97	106.96
23	B	607	CLA	C4-C3-C5	3.79	121.64	115.27
23	B	614	CLA	O2D-CGD-O1D	-3.78	116.44	123.84
26	A	410[A]	SQD	C44-O6-C1	-3.78	106.36	113.74
26	A	410[B]	SQD	O47-C7-C8	3.78	119.64	111.50
23	b	616	CLA	O2D-CGD-O1D	-3.78	116.45	123.84
32	m	101	LMG	O7-C10-C11	3.78	119.64	111.50
23	a	404[B]	CLA	CAA-C2A-C3A	-3.77	102.45	112.78
23	B	604	CLA	C4A-NA-C1A	-3.77	105.01	106.71
23	b	611	CLA	O2D-CGD-O1D	-3.77	116.46	123.84
23	c	513	CLA	C1D-CHD-C4C	-3.77	117.92	126.06
23	A	405[A]	CLA	CBC-CAC-C3C	-3.77	102.04	112.43
34	V	202	HTG	C1-O5-C5	3.77	117.30	112.19
23	c	503	CLA	C3C-C4C-NC	3.77	114.80	110.57
23	c	513	CLA	C3C-C4C-NC	3.77	114.80	110.57
23	C	513	CLA	C3B-C4B-NB	3.77	114.08	109.21
24	a	414[A]	PHO	C4-C3-C5	3.76	121.59	115.27
23	B	613	CLA	C3D-C4D-ND	3.76	116.31	110.24
23	C	506	CLA	C1-C2-C3	-3.75	119.56	126.04
23	C	510	CLA	C4-C3-C5	3.75	121.58	115.27
23	B	614	CLA	O2A-CGA-O1A	-3.75	114.13	123.59
23	b	608	CLA	C3B-C4B-NB	3.75	114.06	109.21
23	d	403[B]	CLA	C3B-C4B-NB	3.75	114.06	109.21
23	b	610	CLA	C1D-CHD-C4C	-3.74	117.98	126.06
23	C	510	CLA	C1D-CHD-C4C	-3.74	117.98	126.06
35	c	518[B]	DGD	O2G-C1B-C2B	3.74	119.56	111.50
26	A	410[A]	SQD	O47-C7-C8	3.74	119.56	111.50
23	C	513	CLA	C1D-CHD-C4C	-3.74	117.99	126.06
29	a	412[A]	PL9	C15-C14-C16	3.74	121.56	115.27
23	A	406[B]	CLA	C1D-CHD-C4C	-3.74	118.00	126.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	B	625	HTG	C1'-S1-C1	3.73	107.07	100.09
23	B	611	CLA	C1D-CHD-C4C	-3.73	118.00	126.06
23	c	506	CLA	CAC-C3C-C4C	3.73	129.65	124.81
23	A	406[A]	CLA	C1D-CHD-C4C	-3.73	118.01	126.06
23	c	514	CLA	C3B-C4B-NB	3.73	114.03	109.21
23	b	604	CLA	C3B-C4B-NB	3.73	114.03	109.21
25	b	619	BCR	C11-C10-C9	-3.72	122.00	127.31
23	A	404[A]	CLA	C3D-C4D-ND	3.72	116.25	110.24
35	C	517[B]	DGD	O2G-C1B-C2B	3.72	119.51	111.50
23	C	505	CLA	C1-C2-C3	-3.72	119.62	126.04
23	c	511	CLA	C1D-CHD-C4C	-3.71	118.05	126.06
23	C	511	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
23	b	608	CLA	C3C-C4C-NC	3.71	114.73	110.57
23	b	605	CLA	O2D-CGD-O1D	-3.71	116.59	123.84
23	d	403[B]	CLA	C1D-CHD-C4C	-3.70	118.07	126.06
23	A	405[B]	CLA	CMC-C2C-C1C	3.70	130.68	125.04
23	B	603	CLA	C3B-C4B-NB	3.70	114.00	109.21
23	B	609	CLA	C1C-C2C-C3C	-3.70	103.06	106.96
23	b	606	CLA	C1C-C2C-C3C	-3.70	103.06	106.96
23	C	505	CLA	C1D-CHD-C4C	-3.70	118.08	126.06
23	c	510	CLA	C3B-C4B-NB	3.70	113.99	109.21
23	b	601	CLA	O2D-CGD-O1D	-3.70	116.61	123.84
35	C	517[A]	DGD	O2G-C1B-C2B	3.69	119.46	111.50
23	B	607	CLA	CMC-C2C-C1C	3.69	130.66	125.04
23	b	611	CLA	C1-C2-C3	-3.69	119.66	126.04
23	c	503	CLA	O2D-CGD-O1D	-3.69	116.63	123.84
23	B	604	CLA	C3D-C4D-ND	3.69	116.20	110.24
23	B	614	CLA	C1-C2-C3	-3.68	119.67	126.04
23	c	509	CLA	C3D-C4D-ND	3.68	116.19	110.24
23	C	507	CLA	C1C-C2C-C3C	-3.68	103.09	106.96
33	L	101[A]	LHG	O7-C7-C8	3.68	119.43	111.50
23	c	504	CLA	O2D-CGD-O1D	-3.68	116.65	123.84
23	B	608	CLA	C4C-C3C-C2C	-3.68	101.54	106.90
23	b	611	CLA	C3B-C4B-NB	3.67	113.96	109.21
23	b	613	CLA	C3B-C4B-NB	3.67	113.96	109.21
23	C	508	CLA	C1D-CHD-C4C	-3.67	118.13	126.06
29	A	414[A]	PL9	C37-C38-C39	-3.67	118.82	127.66
23	B	613	CLA	C1C-C2C-C3C	-3.67	103.10	106.96
23	b	603	CLA	C1C-C2C-C3C	-3.67	103.10	106.96
23	a	404[A]	CLA	O2A-CGA-O1A	-3.67	114.34	123.59
35	c	517[B]	DGD	O2G-C1B-C2B	3.66	119.39	111.50
23	C	506	CLA	C3C-C4C-NC	3.66	114.68	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	604	CLA	C1D-CHD-C4C	-3.66	118.17	126.06
23	C	507	CLA	C1D-CHD-C4C	-3.65	118.17	126.06
29	a	412[B]	PL9	C15-C14-C16	3.65	121.42	115.27
23	A	405[B]	CLA	CBC-CAC-C3C	-3.65	102.36	112.43
23	a	404[A]	CLA	CMB-C2B-C3B	3.65	131.51	124.68
26	a	409[B]	SQD	C44-O6-C1	-3.65	106.61	113.74
25	K	102	BCR	C7-C8-C9	-3.65	120.72	126.23
23	B	608	CLA	C3B-C4B-NB	3.64	113.92	109.21
23	C	511	CLA	C4-C3-C5	3.64	121.39	115.27
23	a	407	CLA	C1C-C2C-C3C	-3.64	103.13	106.96
25	T	101	BCR	C11-C10-C9	-3.64	122.12	127.31
25	Y	101	BCR	C16-C17-C18	-3.64	122.12	127.31
23	D	404	CLA	O2D-CGD-O1D	-3.64	116.73	123.84
23	c	505	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
23	b	605	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
23	b	614	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
23	b	614	CLA	C1-C2-C3	-3.63	119.76	126.04
26	a	409[A]	SQD	O9-S-C6	3.63	111.25	106.94
23	b	611	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
23	b	602	CLA	CMC-C2C-C1C	3.63	130.56	125.04
23	B	612	CLA	CMB-C2B-C3B	3.62	131.46	124.68
25	b	617	BCR	C7-C8-C9	-3.62	120.76	126.23
23	D	403[A]	CLA	C3B-C4B-NB	3.62	113.89	109.21
23	A	405[A]	CLA	C1D-CHD-C4C	-3.62	118.25	126.06
23	c	502	CLA	C1C-C2C-C3C	-3.62	103.15	106.96
23	B	608	CLA	CAC-C3C-C4C	3.62	129.50	124.81
23	b	615	CLA	O2D-CGD-CBD	3.62	117.69	111.27
33	d	408[B]	LHG	O7-C7-C8	3.61	119.29	111.50
23	C	506	CLA	C3B-C4B-NB	3.61	113.88	109.21
23	c	506	CLA	C4C-C3C-C2C	-3.61	101.63	106.90
29	D	406[B]	PL9	C10-C9-C11	3.61	121.35	115.27
23	a	407	CLA	C1D-CHD-C4C	-3.61	118.27	126.06
23	B	615	CLA	O2D-CGD-CBD	3.61	117.67	111.27
25	D	405	BCR	C28-C27-C26	-3.61	107.64	114.08
23	B	612	CLA	CMC-C2C-C1C	3.60	130.53	125.04
23	d	404	CLA	C1D-CHD-C4C	-3.60	118.29	126.06
23	a	404[B]	CLA	CMB-C2B-C3B	3.60	131.42	124.68
26	a	410	SQD	O47-C7-C8	3.60	119.26	111.50
25	H	101	BCR	C16-C17-C18	-3.60	122.17	127.31
23	c	512	CLA	C1C-C2C-C3C	-3.60	103.17	106.96
23	B	602	CLA	CMC-C2C-C1C	3.60	130.52	125.04
23	B	611	CLA	CHB-C4A-NA	3.60	129.49	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	508	CLA	C4C-C3C-C2C	-3.59	101.67	106.90
23	c	506	CLA	O2D-CGD-O1D	-3.59	116.83	123.84
23	A	405[A]	CLA	O2D-CGD-O1D	-3.58	116.83	123.84
34	B	622	HTG	O5-C1-C2	3.58	114.82	110.31
23	D	404	CLA	C1D-CHD-C4C	-3.58	118.33	126.06
23	d	403[A]	CLA	C3B-C4B-NB	3.58	113.84	109.21
23	B	611	CLA	C4C-C3C-C2C	-3.58	101.69	106.90
23	C	510	CLA	C3B-C4B-NB	3.57	113.83	109.21
23	c	511	CLA	C3B-C4B-NB	3.57	113.82	109.21
32	c	501	LMG	C7-O1-C1	-3.56	106.78	113.74
23	b	603	CLA	C3B-C4B-NB	3.56	113.82	109.21
29	A	414[B]	PL9	C15-C14-C16	3.56	121.26	115.27
25	h	101	BCR	C38-C26-C25	-3.56	120.53	124.53
23	b	614	CLA	C3B-C4B-NB	3.56	113.81	109.21
23	d	403[A]	CLA	C1-C2-C3	-3.56	119.89	126.04
23	c	507	CLA	C1D-CHD-C4C	-3.56	118.39	126.06
23	b	607	CLA	O2D-CGD-O1D	-3.55	116.89	123.84
23	A	405[B]	CLA	C1D-CHD-C4C	-3.55	118.40	126.06
23	B	603	CLA	C1C-C2C-C3C	-3.55	103.22	106.96
23	B	612	CLA	C4C-C3C-C2C	-3.55	101.73	106.90
29	d	406[A]	PL9	C40-C39-C41	3.55	121.23	115.27
38	f	101	HEM	C1B-NB-C4B	3.54	108.73	105.07
25	k	101	BCR	C7-C8-C9	-3.54	120.88	126.23
29	a	412[A]	PL9	C27-C28-C29	-3.54	119.13	127.66
23	c	510	CLA	C1C-C2C-C3C	-3.54	103.23	106.96
32	c	520	LMG	O7-C10-C11	3.54	119.12	111.50
24	a	414[B]	PHO	C4-C3-C5	3.54	121.22	115.27
23	A	405[B]	CLA	C3C-C4C-NC	3.53	114.53	110.57
23	A	404[A]	CLA	O2D-CGD-CBD	3.53	117.54	111.27
23	A	408	CLA	C1D-CHD-C4C	-3.53	118.44	126.06
23	B	604	CLA	CHD-C1D-ND	-3.53	121.21	124.45
23	b	612	CLA	C1C-C2C-C3C	-3.53	103.25	106.96
32	C	520	LMG	C3-C4-C5	3.52	116.52	110.24
23	C	509	CLA	C1D-CHD-C4C	-3.52	118.46	126.06
23	C	505	CLA	CAC-C3C-C4C	3.52	129.38	124.81
23	B	611	CLA	C2A-C1A-CHA	-3.52	117.71	123.86
23	b	602	CLA	C1D-CHD-C4C	-3.52	118.47	126.06
24	A	407[B]	PHO	C1A-C2A-C3A	-3.52	99.49	102.84
29	A	414[A]	PL9	C22-C23-C24	-3.52	119.19	127.66
25	D	405	BCR	C38-C26-C25	-3.51	120.58	124.53
29	A	414[A]	PL9	C15-C14-C16	3.51	121.18	115.27
23	C	509	CLA	C3B-C4B-NB	3.51	113.75	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	404[A]	CLA	C1D-CHD-C4C	-3.51	118.49	126.06
23	C	502	CLA	O2D-CGD-O1D	-3.50	116.99	123.84
23	B	616	CLA	C1D-CHD-C4C	-3.50	118.50	126.06
29	D	406[A]	PL9	C53-C6-C1	3.50	122.15	114.99
23	D	403[B]	CLA	C3B-C4B-NB	3.50	113.73	109.21
33	A	419[B]	LHG	O7-C7-C8	3.50	119.04	111.50
23	C	502	CLA	C1D-CHD-C4C	-3.50	118.52	126.06
23	d	402[B]	CLA	CHD-C4C-NC	3.49	129.71	124.20
25	D	405	BCR	C10-C11-C12	-3.49	112.32	123.22
23	a	405[A]	CLA	C1D-CHD-C4C	-3.49	118.53	126.06
23	a	405[B]	CLA	C1D-CHD-C4C	-3.49	118.53	126.06
29	A	414[B]	PL9	C22-C23-C24	-3.49	119.26	127.66
23	c	514	CLA	C1C-C2C-C3C	-3.49	103.29	106.96
23	c	504	CLA	C1C-C2C-C3C	-3.49	103.29	106.96
29	a	412[A]	PL9	C30-C29-C31	3.48	121.13	115.27
23	A	404[A]	CLA	O2A-CGA-CBA	3.48	122.83	111.91
23	c	511	CLA	C4-C3-C5	3.48	121.12	115.27
23	b	613	CLA	C3D-C4D-ND	3.47	115.86	110.24
29	D	406[A]	PL9	C42-C43-C44	-3.47	119.29	127.66
23	C	511	CLA	C1C-C2C-C3C	-3.47	103.31	106.96
25	d	405	BCR	C10-C11-C12	-3.47	112.38	123.22
23	B	602	CLA	C3B-C4B-NB	3.47	113.70	109.21
25	k	101	BCR	C29-C30-C25	3.47	115.82	110.48
23	b	604	CLA	O2D-CGD-O1D	-3.47	117.05	123.84
23	a	404[A]	CLA	O2D-CGD-CBD	3.47	117.43	111.27
34	B	622	HTG	C1'-S1-C1	3.46	106.57	100.09
26	b	620	SQD	O8-S-C6	3.46	111.26	105.74
23	b	609	CLA	CMC-C2C-C1C	3.46	130.31	125.04
23	B	605	CLA	C1C-C2C-C3C	-3.46	103.32	106.96
23	A	406[A]	CLA	O2A-CGA-O1A	-3.46	114.85	123.59
23	d	403[A]	CLA	O2A-CGA-CBA	3.46	122.77	111.91
29	a	412[B]	PL9	C30-C29-C31	3.46	121.09	115.27
23	b	612	CLA	C4-C3-C5	3.45	121.08	115.27
33	L	101[B]	LHG	O7-C7-C8	3.45	118.95	111.50
23	C	511	CLA	C3B-C4B-NB	3.45	113.68	109.21
23	C	509	CLA	CMC-C2C-C1C	3.45	130.30	125.04
23	B	604	CLA	C4C-C3C-C2C	-3.45	101.87	106.90
23	A	408	CLA	CAA-C2A-C3A	-3.45	103.34	112.78
23	c	509	CLA	C1-C2-C3	-3.45	120.08	126.04
26	F	103	SQD	O7-S-C6	3.44	111.03	106.94
32	C	519	LMG	O8-C28-C29	3.43	122.69	111.91
23	b	613	CLA	O2A-CGA-O1A	-3.43	114.93	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	405[B]	CLA	C1C-C2C-C3C	-3.43	103.35	106.96
40	V	201	HEC	CMB-C2B-C1B	-3.42	123.20	128.46
23	b	605	CLA	O2A-CGA-O1A	-3.42	114.95	123.59
23	b	616	CLA	O2A-CGA-O1A	-3.42	114.95	123.59
25	C	514	BCR	C7-C8-C9	-3.42	121.07	126.23
23	d	403[B]	CLA	C1-C2-C3	-3.42	120.13	126.04
23	C	504	CLA	C1D-CHD-C4C	-3.42	118.69	126.06
23	b	613	CLA	C1D-CHD-C4C	-3.42	118.69	126.06
23	B	614	CLA	CMC-C2C-C1C	3.41	130.24	125.04
25	B	617	BCR	C33-C5-C6	-3.41	120.69	124.53
23	a	404[A]	CLA	O2A-CGA-CBA	3.41	122.61	111.91
23	A	404[B]	CLA	CMB-C2B-C3B	3.41	131.06	124.68
29	a	412[A]	PL9	C35-C34-C36	3.41	121.01	115.27
23	B	610	CLA	C1D-CHD-C4C	-3.41	118.70	126.06
23	b	606	CLA	O2D-CGD-O1D	-3.41	117.18	123.84
23	B	609	CLA	C1D-CHD-C4C	-3.40	118.72	126.06
23	b	616	CLA	CHD-C4C-NC	3.40	129.56	124.20
23	C	506	CLA	CBC-CAC-C3C	-3.40	103.06	112.43
23	D	404	CLA	C1C-C2C-C3C	-3.40	103.38	106.96
29	d	406[B]	PL9	C37-C38-C39	-3.40	119.48	127.66
23	c	510	CLA	CAC-C3C-C4C	3.40	129.22	124.81
23	B	609	CLA	O2D-CGD-CBD	3.40	117.30	111.27
23	b	610	CLA	C4C-C3C-C2C	-3.39	101.95	106.90
23	B	607	CLA	C1D-CHD-C4C	-3.39	118.74	126.06
23	B	602	CLA	CAA-C2A-C3A	-3.39	103.49	112.78
23	d	402[B]	CLA	C3B-C4B-NB	3.39	113.59	109.21
23	D	404	CLA	CAC-C3C-C4C	3.39	129.21	124.81
23	B	614	CLA	CAC-C3C-C4C	3.39	129.21	124.81
23	A	406[A]	CLA	C3B-C4B-NB	3.39	113.59	109.21
23	b	606	CLA	CHD-C4C-NC	3.39	129.54	124.20
29	D	406[A]	PL9	C25-C24-C26	3.39	120.97	115.27
24	A	416[B]	PHO	C4-C3-C5	3.38	120.96	115.27
25	c	515	BCR	C16-C17-C18	-3.38	122.49	127.31
23	B	603	CLA	CAA-C2A-C3A	-3.38	103.52	112.78
23	B	601	CLA	C4C-C3C-C2C	-3.38	101.97	106.90
23	C	505	CLA	C1C-C2C-C3C	-3.38	103.40	106.96
38	f	101	HEM	CHA-C4D-ND	3.38	128.56	124.38
23	B	610	CLA	O2D-CGD-O1D	-3.38	117.23	123.84
23	b	602	CLA	C1C-C2C-C3C	-3.38	103.41	106.96
23	c	507	CLA	CAC-C3C-C4C	3.37	129.19	124.81
33	d	414[B]	LHG	O7-C7-C8	3.37	118.77	111.50
35	c	518[A]	DGD	O2G-C1B-C2B	3.37	118.77	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	612	CLA	C1D-CHD-C4C	-3.37	118.79	126.06
23	b	615	CLA	C1C-C2C-C3C	-3.37	103.42	106.96
32	B	621	LMG	O8-C28-C29	3.37	122.47	111.91
23	b	612	CLA	C4C-C3C-C2C	-3.36	101.99	106.90
26	F	103	SQD	C1-C2-C3	-3.36	102.99	110.00
34	b	622	HTG	O2-C2-C1	3.36	116.44	110.27
38	F	102	HEM	CHB-C1B-NB	3.36	128.53	124.38
23	B	603	CLA	CMB-C2B-C3B	3.36	130.96	124.68
23	B	610	CLA	CAA-CBA-CGA	-3.35	103.46	113.25
24	A	416[B]	PHO	C1A-C2A-C3A	-3.35	99.65	102.84
24	A	416[A]	PHO	CMC-C2C-C3C	3.35	131.26	124.94
23	C	508	CLA	CHC-C1C-C2C	-3.35	117.46	126.72
23	C	501	CLA	C1C-C2C-C3C	-3.35	103.44	106.96
23	B	613	CLA	C1D-CHD-C4C	-3.34	118.85	126.06
23	C	510	CLA	O2D-CGD-O1D	-3.34	117.31	123.84
29	d	406[B]	PL9	C10-C9-C11	3.34	120.88	115.27
23	C	501	CLA	CMC-C2C-C1C	3.33	130.12	125.04
26	A	412	SQD	O8-S-C6	3.33	111.05	105.74
32	Z	101	LMG	O6-C1-C2	3.33	117.40	110.35
23	d	403[A]	CLA	C1D-CHD-C4C	-3.33	118.87	126.06
26	a	409[B]	SQD	O9-S-C6	3.33	110.89	106.94
23	C	507	CLA	O2D-CGD-O1D	-3.33	117.33	123.84
23	A	405[A]	CLA	C3B-C4B-NB	3.33	113.51	109.21
23	B	605	CLA	CHD-C4C-NC	3.32	129.44	124.20
23	C	512	CLA	C4-C3-C5	3.32	120.86	115.27
23	B	606	CLA	O2A-CGA-O1A	-3.32	115.22	123.59
24	A	407[A]	PHO	CMA-C3A-C4A	-3.32	107.11	114.38
26	a	410	SQD	O7-S-C6	3.32	110.88	106.94
23	C	513	CLA	C1-C2-C3	-3.31	120.31	126.04
34	b	625	HTG	O5-C5-C4	3.31	115.71	109.69
23	C	508	CLA	O2D-CGD-O1D	-3.31	117.36	123.84
23	a	404[B]	CLA	CHC-C1C-C2C	-3.31	117.57	126.72
23	C	504	CLA	O2D-CGD-O1D	-3.31	117.37	123.84
33	A	419[B]	LHG	O8-C23-O10	-3.31	115.25	123.59
23	C	506	CLA	C1D-CHD-C4C	-3.30	118.93	126.06
23	b	613	CLA	O2D-CGD-CBD	3.30	117.13	111.27
23	B	614	CLA	O2A-CGA-CBA	3.30	122.26	111.91
29	d	406[B]	PL9	C40-C39-C41	3.30	120.82	115.27
33	d	414[A]	LHG	O8-C23-O10	-3.30	115.27	123.59
23	B	613	CLA	CAC-C3C-C4C	3.30	129.09	124.81
23	B	614	CLA	C3B-C4B-NB	3.30	113.47	109.21
23	c	512	CLA	C4-C3-C5	3.30	120.81	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	C	516[B]	DGD	O2G-C1B-C2B	3.29	118.60	111.50
23	b	608	CLA	C1D-CHD-C4C	-3.29	118.95	126.06
33	d	408[A]	LHG	O7-C7-C8	3.29	118.59	111.50
23	C	505	CLA	C4C-C3C-C2C	-3.29	102.10	106.90
23	C	506	CLA	O2D-CGD-O1D	-3.29	117.41	123.84
23	C	507	CLA	C4C-C3C-C2C	-3.29	102.11	106.90
23	B	610	CLA	O2A-CGA-O1A	-3.29	115.29	123.59
23	b	610	CLA	O2A-CGA-O1A	-3.29	115.29	123.59
32	z	101	LMG	O7-C10-C11	3.28	118.58	111.50
23	C	502	CLA	C3B-C4B-NB	3.28	113.45	109.21
25	D	405	BCR	C29-C30-C25	3.28	115.53	110.48
29	a	412[B]	PL9	C27-C28-C29	-3.28	119.76	127.66
23	B	608	CLA	C1C-C2C-C3C	-3.28	103.51	106.96
23	B	610	CLA	C3B-C4B-NB	3.27	113.44	109.21
23	C	512	CLA	CHD-C4C-NC	3.27	129.36	124.20
23	C	503	CLA	C4C-C3C-C2C	-3.27	102.13	106.90
23	C	511	CLA	CMC-C2C-C1C	3.27	130.02	125.04
23	c	511	CLA	CMC-C2C-C1C	3.27	130.02	125.04
23	b	605	CLA	CHD-C4C-NC	3.27	129.35	124.20
23	b	608	CLA	O2D-CGD-O1D	-3.27	117.45	123.84
23	c	509	CLA	C3B-C4B-NB	3.27	113.43	109.21
23	A	405[B]	CLA	C3B-C4B-NB	3.26	113.43	109.21
23	C	510	CLA	C3C-C4C-NC	3.26	114.23	110.57
23	b	609	CLA	C4C-C3C-C2C	-3.26	102.15	106.90
25	b	618	BCR	C15-C14-C13	-3.26	122.66	127.31
23	C	510	CLA	CHD-C4C-NC	3.26	129.34	124.20
23	b	610	CLA	C1C-C2C-C3C	-3.26	103.53	106.96
23	c	503	CLA	C3B-C4B-NB	3.26	113.42	109.21
23	d	402[A]	CLA	C3B-C4B-NB	3.25	113.42	109.21
33	D	407[B]	LHG	O7-C7-C8	3.25	118.51	111.50
23	B	603	CLA	C4C-C3C-C2C	-3.25	102.16	106.90
25	K	102	BCR	C38-C26-C25	-3.25	120.88	124.53
23	a	407	CLA	C3B-C4B-NB	3.25	113.41	109.21
23	c	513	CLA	O2A-CGA-CBA	3.25	122.11	111.91
23	A	404[A]	CLA	CMB-C2B-C3B	3.25	130.75	124.68
33	d	414[A]	LHG	O7-C7-C8	3.25	118.50	111.50
33	A	419[B]	LHG	C5-O7-C7	-3.25	109.80	117.79
35	h	102	DGD	O2G-C1B-C2B	3.25	118.50	111.50
31	B	628	LMT	C4B-C3B-C2B	3.25	116.49	110.82
26	a	409[B]	SQD	C1-C2-C3	-3.24	103.24	110.00
31	b	627	LMT	C3'-C4'-C5'	-3.24	103.49	110.93
23	B	605	CLA	C4C-C3C-C2C	-3.24	102.17	106.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	a	412[B]	PL9	C25-C24-C26	3.24	120.73	115.27
40	v	201	HEC	CBA-CAA-C2A	-3.24	107.14	112.60
23	b	609	CLA	C1C-C2C-C3C	-3.24	103.55	106.96
23	b	609	CLA	C3B-C4B-NB	3.24	113.40	109.21
23	c	506	CLA	C1C-C2C-C3C	-3.24	103.55	106.96
23	B	604	CLA	CAC-C3C-C4C	3.24	129.01	124.81
23	C	509	CLA	O2A-CGA-CBA	3.24	122.06	111.91
23	a	405[B]	CLA	CHD-C4C-NC	3.23	129.30	124.20
26	a	410	SQD	O48-C23-C24	3.23	122.06	111.91
23	C	511	CLA	C4C-C3C-C2C	-3.23	102.18	106.90
29	d	406[B]	PL9	C42-C43-C44	-3.23	119.88	127.66
23	B	608	CLA	C1D-CHD-C4C	-3.23	119.09	126.06
23	B	612	CLA	CAC-C3C-C4C	3.23	129.00	124.81
26	a	409[B]	SQD	C1-O5-C5	-3.22	107.36	113.69
23	c	505	CLA	C4C-C3C-C2C	-3.22	102.20	106.90
24	a	414[A]	PHO	C4A-C3A-C2A	-3.22	99.77	102.84
23	c	502	CLA	C1D-CHD-C4C	-3.22	119.11	126.06
23	b	616	CLA	C4C-C3C-C2C	-3.22	102.20	106.90
23	c	508	CLA	C1D-CHD-C4C	-3.22	119.11	126.06
23	C	513	CLA	O2D-CGD-O1D	-3.22	117.55	123.84
33	d	414[A]	LHG	O8-C23-C24	3.22	122.00	111.91
25	C	514	BCR	C33-C5-C6	-3.22	120.92	124.53
23	B	616	CLA	C1-O2A-CGA	3.22	124.88	116.44
29	D	406[B]	PL9	C27-C28-C29	-3.22	119.92	127.66
38	F	102	HEM	CHD-C1D-ND	3.22	127.92	124.43
23	B	607	CLA	CAA-C2A-C3A	-3.22	103.97	112.78
23	C	503	CLA	CHD-C4C-NC	3.21	129.26	124.20
23	a	404[A]	CLA	CHC-C1C-C2C	-3.20	117.86	126.72
23	B	612	CLA	C1C-C2C-C3C	-3.20	103.59	106.96
23	B	602	CLA	CAC-C3C-C4C	3.20	128.96	124.81
23	c	513	CLA	O2D-CGD-O1D	-3.20	117.58	123.84
23	a	405[A]	CLA	C3B-C4B-NB	3.20	113.34	109.21
23	C	512	CLA	C1C-C2C-C3C	-3.19	103.60	106.96
23	b	616	CLA	CBC-CAC-C3C	-3.19	103.63	112.43
23	a	404[A]	CLA	CAA-C2A-C1A	-3.19	101.52	111.97
23	b	613	CLA	O2A-CGA-CBA	3.19	121.92	111.91
25	B	619	BCR	C24-C23-C22	-3.19	121.42	126.23
29	a	412[A]	PL9	C17-C18-C19	-3.19	119.99	127.66
25	a	408	BCR	C29-C30-C25	3.18	115.38	110.48
23	A	408	CLA	CMB-C2B-C3B	3.18	130.64	124.68
23	C	501	CLA	CHD-C4C-NC	3.18	129.22	124.20
23	C	506	CLA	CHC-C1C-C2C	-3.18	117.92	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	404	CLA	CAA-C2A-C3A	-3.18	104.06	112.78
25	t	102	BCR	C28-C27-C26	-3.18	108.40	114.08
23	C	503	CLA	C4-C3-C5	3.18	120.62	115.27
32	C	520	LMG	O8-C28-C29	3.18	121.89	111.91
23	A	406[A]	CLA	O2D-CGD-O1D	-3.18	117.62	123.84
29	A	414[A]	PL9	C27-C28-C29	-3.18	120.01	127.66
23	B	615	CLA	CHD-C4C-NC	3.18	129.21	124.20
23	C	505	CLA	CMC-C2C-C1C	3.18	129.88	125.04
23	c	507	CLA	CHC-C1C-C2C	-3.17	117.94	126.72
23	b	615	CLA	C4C-C3C-C2C	-3.17	102.27	106.90
31	A	417	LMT	O5B-C5B-C4B	3.17	115.45	109.69
29	a	412[A]	PL9	C25-C24-C26	3.17	120.61	115.27
23	b	605	CLA	C4C-C3C-C2C	-3.17	102.28	106.90
23	A	404[A]	CLA	O2A-CGA-O1A	-3.17	115.59	123.59
23	D	403[B]	CLA	CAC-C3C-C4C	3.17	128.92	124.81
23	D	403[A]	CLA	C1D-CHD-C4C	-3.17	119.22	126.06
23	c	513	CLA	C1C-C2C-C3C	-3.17	103.62	106.96
23	b	608	CLA	C1-C2-C3	-3.17	120.56	126.04
23	C	506	CLA	CAC-C3C-C4C	3.17	128.92	124.81
23	a	407	CLA	C4C-C3C-C2C	-3.16	102.29	106.90
23	b	615	CLA	C3B-C4B-NB	3.16	113.30	109.21
23	b	607	CLA	C1D-CHD-C4C	-3.16	119.24	126.06
25	y	101	BCR	C38-C26-C25	-3.16	120.98	124.53
23	A	404[B]	CLA	O2A-CGA-CBA	3.16	121.81	111.91
24	A	416[A]	PHO	C4-C3-C5	3.15	120.58	115.27
23	b	609	CLA	CAC-C3C-C4C	3.15	128.90	124.81
32	Z	101	LMG	C4-C3-C2	3.15	116.33	110.82
26	B	620	SQD	O9-S-C6	3.15	110.69	106.94
23	d	402[A]	CLA	CHD-C4C-NC	3.15	129.17	124.20
40	V	201	HEC	C1D-C2D-C3D	-3.15	104.80	107.00
23	B	611	CLA	C1-C2-C3	-3.15	120.59	126.04
33	A	419[A]	LHG	C5-O7-C7	-3.15	110.03	117.79
23	B	601	CLA	C1C-C2C-C3C	-3.15	103.64	106.96
26	B	620	SQD	O48-C23-C24	3.15	121.79	111.91
33	A	419[A]	LHG	O8-C23-C24	3.15	121.79	111.91
29	D	406[A]	PL9	C17-C18-C19	-3.15	120.08	127.66
23	D	404	CLA	C4C-C3C-C2C	-3.15	102.31	106.90
32	c	521	LMG	C9-C8-C7	-3.15	104.35	111.79
33	d	414[B]	LHG	O8-C23-O10	-3.15	115.65	123.59
23	A	404[B]	CLA	CHC-C1C-C2C	-3.15	118.02	126.72
23	c	509	CLA	O2D-CGD-O1D	-3.14	117.69	123.84
23	C	511	CLA	C1-C2-C3	-3.14	120.61	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	510	CLA	CHC-C1C-C2C	-3.14	118.03	126.72
23	b	612	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
23	b	614	CLA	CBC-CAC-C3C	-3.14	103.77	112.43
23	b	606	CLA	C3B-C4B-NB	3.14	113.27	109.21
23	c	505	CLA	C1D-CHD-C4C	-3.14	119.29	126.06
23	C	512	CLA	C4C-C3C-C2C	-3.14	102.33	106.90
23	B	612	CLA	C11-C12-C13	-3.14	105.78	115.92
23	C	504	CLA	CMC-C2C-C1C	3.14	129.81	125.04
23	C	511	CLA	CAC-C3C-C4C	3.14	128.88	124.81
23	a	405[B]	CLA	C4-C3-C5	3.13	120.54	115.27
23	B	613	CLA	O2A-CGA-O1A	-3.13	115.68	123.59
23	B	609	CLA	CBC-CAC-C3C	-3.13	103.79	112.43
25	d	405	BCR	C16-C17-C18	-3.13	122.84	127.31
23	B	604	CLA	O2A-CGA-O1A	-3.13	115.69	123.59
23	b	613	CLA	C4C-C3C-C2C	-3.13	102.34	106.90
23	a	405[A]	CLA	CHD-C4C-NC	3.13	129.13	124.20
23	b	601	CLA	C1C-C2C-C3C	-3.13	103.67	106.96
23	a	405[A]	CLA	C1-C2-C3	-3.13	120.64	126.04
23	d	403[A]	CLA	O2D-CGD-O1D	-3.13	117.73	123.84
33	d	414[B]	LHG	O8-C23-C24	3.13	121.72	111.91
35	C	518	DGD	O1G-C1A-C2A	3.13	121.72	111.91
23	b	611	CLA	C1D-CHD-C4C	-3.13	119.31	126.06
23	c	512	CLA	CHD-C4C-NC	3.12	129.12	124.20
23	b	601	CLA	C4-C3-C5	3.12	120.52	115.27
23	A	406[B]	CLA	CAA-C2A-C3A	-3.12	104.23	112.78
25	b	618	BCR	C37-C22-C21	-3.12	118.55	122.92
23	b	602	CLA	CAC-C3C-C4C	3.12	128.86	124.81
24	a	406[B]	PHO	CMA-C3A-C4A	-3.12	107.55	114.38
23	c	510	CLA	C4C-C3C-C2C	-3.12	102.35	106.90
23	c	502	CLA	C4C-C3C-C2C	-3.12	102.35	106.90
23	A	405[B]	CLA	CHD-C4C-NC	3.12	129.12	124.20
25	y	101	BCR	C24-C23-C22	-3.12	121.53	126.23
29	D	406[A]	PL9	C51-C49-C50	3.12	121.49	114.60
23	C	509	CLA	CAC-C3C-C4C	3.12	128.85	124.81
23	C	504	CLA	CBC-CAC-C3C	-3.11	103.85	112.43
26	A	412	SQD	O48-C23-C24	3.11	121.68	111.91
26	a	409[B]	SQD	O8-S-C6	3.11	110.70	105.74
23	c	512	CLA	CMC-C2C-C1C	3.11	129.78	125.04
23	c	508	CLA	C4-C3-C5	3.11	120.51	115.27
23	c	507	CLA	O2D-CGD-O1D	-3.11	117.76	123.84
23	c	513	CLA	CAC-C3C-C4C	3.11	128.84	124.81
23	B	601	CLA	O2D-CGD-O1D	-3.11	117.76	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	607	CLA	C4-C3-C5	3.11	120.50	115.27
29	D	406[A]	PL9	C10-C9-C11	3.11	120.50	115.27
23	a	407	CLA	O2A-CGA-CBA	3.11	121.66	111.91
23	B	611	CLA	C4A-NA-C1A	-3.10	105.31	106.71
29	D	406[B]	PL9	C53-C6-C1	3.10	121.33	114.99
23	b	609	CLA	CHD-C4C-NC	3.10	129.09	124.20
23	b	609	CLA	O2D-CGD-O1D	-3.10	117.78	123.84
25	k	101	BCR	C20-C21-C22	-3.10	122.89	127.31
29	A	414[A]	PL9	C10-C9-C11	3.10	120.48	115.27
23	c	506	CLA	C1D-CHD-C4C	-3.10	119.38	126.06
23	a	407	CLA	C4-C3-C5	3.09	120.48	115.27
23	b	609	CLA	CBC-CAC-C3C	-3.09	103.90	112.43
33	D	408[B]	LHG	O7-C7-C8	3.09	118.17	111.50
23	b	601	CLA	C4C-C3C-C2C	-3.09	102.39	106.90
33	b	629[A]	LHG	O7-C7-C8	3.09	118.16	111.50
23	A	405[B]	CLA	C4-C3-C5	3.09	120.47	115.27
23	c	513	CLA	C4-C3-C5	3.09	120.47	115.27
23	b	611	CLA	C4C-C3C-C2C	-3.09	102.39	106.90
23	B	609	CLA	C3B-C4B-NB	3.09	113.20	109.21
23	d	403[B]	CLA	O2A-CGA-CBA	3.08	121.59	111.91
23	d	403[B]	CLA	C2A-C1A-CHA	-3.08	118.47	123.86
29	D	406[B]	PL9	C25-C24-C26	3.08	120.46	115.27
24	a	414[A]	PHO	CMB-C2B-C3B	3.08	130.44	124.68
29	a	412[A]	PL9	C10-C9-C11	3.08	120.45	115.27
23	b	614	CLA	CHC-C1C-C2C	-3.08	118.20	126.72
23	c	510	CLA	CHC-C1C-C2C	-3.08	118.20	126.72
23	b	610	CLA	CAA-C2A-C3A	-3.08	104.35	112.78
24	a	406[B]	PHO	C1A-C2A-C3A	-3.08	99.91	102.84
31	M	101	LMT	C1'-O5'-C5'	-3.07	107.65	113.69
23	B	612	CLA	O2A-CGA-CBA	3.07	121.55	111.91
23	a	404[A]	CLA	C1-C2-C3	-3.07	120.73	126.04
40	v	201	HEC	CMB-C2B-C3B	3.07	129.43	125.82
23	c	510	CLA	O2A-CGA-CBA	3.07	121.55	111.91
23	c	503	CLA	CMC-C2C-C1C	3.07	129.72	125.04
23	c	506	CLA	C3B-C4B-NB	3.07	113.18	109.21
29	a	412[B]	PL9	C37-C38-C39	-3.07	120.27	127.66
29	A	414[B]	PL9	C27-C28-C29	-3.07	120.27	127.66
23	B	601	CLA	CHD-C4C-NC	3.07	129.04	124.20
23	b	601	CLA	CHD-C4C-NC	3.07	129.04	124.20
23	a	407	CLA	CAA-C2A-C3A	-3.07	104.38	112.78
26	a	409[B]	SQD	C45-O47-C7	-3.06	110.25	117.79
23	B	611	CLA	C3B-C4B-NB	3.06	113.17	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	403[B]	CLA	C4-C3-C5	3.06	120.42	115.27
23	b	612	CLA	O2A-CGA-O1A	-3.06	115.87	123.59
34	b	622	HTG	O5-C5-C4	3.06	115.25	109.69
23	c	505	CLA	CAC-C3C-C4C	3.06	128.78	124.81
29	a	412[B]	PL9	C17-C18-C19	-3.06	120.30	127.66
23	B	607	CLA	CBC-CAC-C3C	-3.05	104.01	112.43
23	B	604	CLA	CHC-C1C-C2C	-3.05	118.27	126.72
29	d	406[A]	PL9	C10-C9-C11	3.05	120.41	115.27
23	B	613	CLA	C4C-C3C-C2C	-3.05	102.45	106.90
23	b	615	CLA	C4-C3-C5	3.05	120.41	115.27
40	v	201	HEC	C1D-C2D-C3D	-3.05	104.87	107.00
23	c	509	CLA	C4C-C3C-C2C	-3.05	102.45	106.90
23	a	404[A]	CLA	C4-C3-C5	3.05	120.41	115.27
23	a	405[B]	CLA	CMC-C2C-C1C	3.05	129.69	125.04
23	D	403[A]	CLA	O2A-CGA-CBA	3.05	121.48	111.91
23	a	405[A]	CLA	CMC-C2C-C1C	3.05	129.68	125.04
23	d	403[A]	CLA	C2A-C1A-CHA	-3.05	118.53	123.86
26	b	620	SQD	C3-C4-C5	3.05	115.67	110.24
23	B	609	CLA	C4C-C3C-C2C	-3.05	102.46	106.90
23	B	603	CLA	CHC-C1C-C2C	-3.05	118.30	126.72
23	B	605	CLA	O2A-CGA-O1A	-3.04	115.91	123.59
23	b	614	CLA	C4C-C3C-C2C	-3.04	102.46	106.90
23	c	510	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
23	d	403[A]	CLA	C4C-C3C-C2C	-3.04	102.46	106.90
23	D	403[B]	CLA	O2A-CGA-CBA	3.04	121.46	111.91
23	b	616	CLA	C3B-C4B-NB	3.04	113.14	109.21
23	C	504	CLA	C1-O2A-CGA	3.04	124.42	116.44
23	A	406[B]	CLA	CHD-C4C-NC	3.04	128.99	124.20
29	A	414[A]	PL9	C20-C19-C21	3.04	120.38	115.27
23	b	603	CLA	C2A-C1A-CHA	-3.04	118.55	123.86
26	A	410[B]	SQD	O9-S-C6	3.04	110.55	106.94
23	A	406[B]	CLA	C3B-C4B-NB	3.04	113.14	109.21
23	c	511	CLA	CHD-C4C-NC	3.03	128.98	124.20
23	d	403[A]	CLA	O2A-CGA-O1A	-3.03	115.94	123.59
23	B	603	CLA	CAC-C3C-C4C	3.03	128.74	124.81
23	A	406[A]	CLA	O2A-CGA-CBA	3.03	121.42	111.91
23	b	614	CLA	CHD-C4C-NC	3.03	128.97	124.20
23	A	404[A]	CLA	C1-C2-C3	-3.03	120.81	126.04
23	c	509	CLA	CHC-C1C-C2C	-3.02	118.36	126.72
23	d	403[A]	CLA	C4-C3-C5	3.02	120.36	115.27
23	b	607	CLA	C4C-C3C-C2C	-3.02	102.49	106.90
29	d	406[A]	PL9	C37-C38-C39	-3.02	120.38	127.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	A	420	LMT	O5B-C5B-C4B	3.02	115.18	109.69
23	c	514	CLA	C4C-C3C-C2C	-3.02	102.50	106.90
23	b	603	CLA	C4C-C3C-C2C	-3.02	102.50	106.90
23	A	408	CLA	CHD-C4C-NC	3.02	128.96	124.20
23	c	502	CLA	C3B-C4B-NB	3.02	113.11	109.21
23	b	605	CLA	CHC-C1C-C2C	-3.02	118.38	126.72
23	c	504	CLA	CMC-C2C-C1C	3.02	129.63	125.04
23	B	615	CLA	C3B-C4B-NB	3.02	113.11	109.21
23	A	404[A]	CLA	CAA-C2A-C1A	-3.01	102.09	111.97
23	B	605	CLA	C1-C2-C3	-3.01	120.83	126.04
29	a	412[A]	PL9	C42-C43-C44	-3.01	120.41	127.66
25	T	101	BCR	C12-C13-C14	-3.01	114.32	118.94
33	d	407[A]	LHG	O7-C7-C8	3.01	117.99	111.50
32	c	520	LMG	O1-C7-C8	-3.01	103.64	110.90
23	D	403[A]	CLA	CAC-C3C-C4C	3.01	128.71	124.81
23	B	608	CLA	CHC-C1C-C2C	-3.01	118.40	126.72
23	C	510	CLA	O2A-CGA-O1A	-3.01	116.00	123.59
25	C	514	BCR	C16-C17-C18	-3.01	123.02	127.31
23	B	610	CLA	C4C-C3C-C2C	-3.01	102.52	106.90
23	C	509	CLA	CMB-C2B-C3B	3.00	130.30	124.68
25	B	618	BCR	C37-C22-C21	-3.00	118.71	122.92
29	a	412[B]	PL9	C35-C34-C36	3.00	120.32	115.27
23	B	613	CLA	CMB-C2B-C3B	3.00	130.29	124.68
23	a	407	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
26	A	410[B]	SQD	O48-C23-C24	3.00	121.32	111.91
23	A	404[A]	CLA	CHC-C1C-C2C	-3.00	118.43	126.72
23	a	405[B]	CLA	C1-C2-C3	-3.00	120.86	126.04
23	B	606	CLA	C4C-C3C-C2C	-3.00	102.53	106.90
23	b	603	CLA	O2A-CGA-CBA	3.00	121.31	111.91
23	b	611	CLA	CHC-C1C-C2C	-3.00	118.43	126.72
23	A	405[A]	CLA	CHD-C4C-NC	3.00	128.93	124.20
23	B	616	CLA	CMB-C2B-C3B	3.00	130.28	124.68
26	a	409[A]	SQD	C45-O47-C7	-3.00	110.42	117.79
23	c	504	CLA	C3B-C4B-NB	2.99	113.08	109.21
23	D	404	CLA	C4-C3-C5	2.99	120.30	115.27
40	V	201	HEC	CMC-C2C-C1C	-2.99	123.87	128.46
23	b	615	CLA	C11-C10-C8	-2.99	106.25	115.92
23	B	607	CLA	CHD-C4C-NC	2.99	128.91	124.20
23	B	614	CLA	CHC-C1C-C2C	-2.99	118.45	126.72
23	a	404[B]	CLA	O2A-CGA-CBA	2.99	121.29	111.91
23	C	506	CLA	CMC-C2C-C1C	2.99	129.59	125.04
23	c	503	CLA	CHD-C4C-NC	2.99	128.91	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	404	CLA	CHD-C4C-NC	2.99	128.91	124.20
33	a	418[B]	LHG	O7-C7-C8	2.99	117.93	111.50
23	C	502	CLA	CHC-C1C-C2C	-2.98	118.47	126.72
33	D	408[A]	LHG	O8-C23-C24	2.98	121.27	111.91
23	c	504	CLA	C4C-C3C-C2C	-2.98	102.55	106.90
24	A	416[B]	PHO	CED-O2D-CGD	2.98	122.68	115.94
25	c	515	BCR	C20-C21-C22	-2.98	123.05	127.31
35	H	102	DGD	O1G-C1A-C2A	2.98	121.25	111.91
23	d	403[B]	CLA	O2D-CGD-O1D	-2.98	118.02	123.84
32	D	412	LMG	O7-C10-C11	2.98	117.91	111.50
23	c	512	CLA	CAC-C3C-C4C	2.97	128.67	124.81
23	B	612	CLA	C4A-NA-C1A	-2.97	105.37	106.71
23	c	504	CLA	CAC-C3C-C4C	2.97	128.67	124.81
23	B	616	CLA	CAC-C3C-C4C	2.97	128.67	124.81
33	E	101[A]	LHG	O8-C23-C24	2.97	121.23	111.91
23	C	502	CLA	CBC-CAC-C3C	-2.97	104.24	112.43
23	C	509	CLA	O2A-CGA-O1A	-2.97	116.10	123.59
23	c	503	CLA	CHC-C1C-C2C	-2.97	118.51	126.72
25	c	515	BCR	C37-C22-C21	-2.97	118.76	122.92
31	m	103	LMT	C3'-C4'-C5'	-2.97	104.13	110.93
23	b	610	CLA	CHD-C4C-NC	2.97	128.88	124.20
23	D	403[B]	CLA	C1D-CHD-C4C	-2.97	119.66	126.06
23	C	513	CLA	CMC-C2C-C1C	2.96	129.55	125.04
29	d	406[B]	PL9	C7-C8-C9	-2.96	121.86	126.79
29	a	412[B]	PL9	C22-C23-C24	-2.96	120.52	127.66
23	c	513	CLA	C4C-C3C-C2C	-2.96	102.58	106.90
23	B	611	CLA	CAC-C3C-C4C	2.96	128.65	124.81
23	c	508	CLA	C3B-C4B-NB	2.96	113.04	109.21
23	b	602	CLA	C4C-C3C-C2C	-2.96	102.58	106.90
23	b	601	CLA	CMB-C2B-C3B	2.96	130.22	124.68
23	d	402[A]	CLA	CHC-C1C-C2C	-2.96	118.53	126.72
23	B	614	CLA	CHD-C4C-NC	2.96	128.87	124.20
23	B	603	CLA	O2A-CGA-O1A	-2.96	116.12	123.59
23	B	607	CLA	O2A-CGA-O1A	-2.96	116.12	123.59
23	b	605	CLA	C3B-C4B-NB	2.96	113.03	109.21
24	A	407[A]	PHO	O1D-CGD-CBD	-2.96	119.81	124.74
23	b	610	CLA	C4-C3-C5	2.96	120.24	115.27
24	a	414[B]	PHO	CMB-C2B-C3B	2.95	130.21	124.68
23	C	501	CLA	CAC-C3C-C4C	2.95	128.64	124.81
26	A	410[A]	SQD	O9-S-C6	2.95	110.44	106.94
23	b	608	CLA	CAC-C3C-C4C	2.95	128.63	124.81
23	C	501	CLA	C3B-C4B-NB	2.94	113.02	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	403[B]	CLA	CHC-C1C-C2C	-2.94	118.58	126.72
25	y	101	BCR	C15-C14-C13	-2.94	123.11	127.31
23	C	501	CLA	C4C-C3C-C2C	-2.94	102.61	106.90
25	T	101	BCR	C15-C14-C13	2.94	131.51	127.31
23	c	514	CLA	CAC-C3C-C4C	2.94	128.63	124.81
29	A	414[A]	PL9	C30-C29-C31	2.94	120.22	115.27
29	A	414[B]	PL9	C17-C18-C19	-2.94	120.58	127.66
23	B	613	CLA	O2A-CGA-CBA	2.94	121.13	111.91
23	C	503	CLA	O2A-CGA-O1A	-2.94	116.18	123.59
23	D	403[B]	CLA	C4C-C3C-C2C	-2.94	102.62	106.90
23	C	503	CLA	C1C-C2C-C3C	-2.94	103.87	106.96
33	a	418[A]	LHG	O7-C7-C8	2.94	117.83	111.50
23	b	611	CLA	O2A-CGA-O1A	-2.93	116.19	123.59
23	B	614	CLA	CMB-C2B-C3B	2.93	130.17	124.68
23	A	406[A]	CLA	CHD-C4C-NC	2.93	128.83	124.20
29	A	414[A]	PL9	C17-C18-C19	-2.93	120.59	127.66
38	f	101	HEM	CHB-C1B-NB	2.93	128.01	124.38
33	D	407[A]	LHG	O8-C23-O10	-2.93	116.19	123.59
23	c	504	CLA	C4-C3-C5	2.93	120.20	115.27
29	d	406[A]	PL9	C22-C23-C24	-2.93	120.60	127.66
23	B	606	CLA	CMC-C2C-C1C	2.93	129.50	125.04
25	a	408	BCR	C40-C30-C25	-2.93	105.55	110.30
23	A	408	CLA	CHC-C1C-C2C	-2.93	118.61	126.72
23	C	513	CLA	CBC-CAC-C3C	-2.93	104.35	112.43
23	c	510	CLA	C4-C3-C5	2.93	120.20	115.27
23	B	608	CLA	CMA-C3A-C4A	-2.93	103.90	111.77
23	a	405[B]	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
25	c	516	BCR	C32-C1-C6	-2.93	105.55	110.30
29	d	406[A]	PL9	C27-C28-C29	-2.93	120.61	127.66
23	C	502	CLA	CMC-C2C-C1C	2.93	129.50	125.04
23	A	404[A]	CLA	C4C-C3C-C2C	-2.93	102.63	106.90
23	b	613	CLA	CMB-C2B-C3B	2.92	130.15	124.68
23	a	404[B]	CLA	CAA-C2A-C1A	-2.92	102.40	111.97
25	h	101	BCR	C33-C5-C6	-2.92	121.25	124.53
23	d	402[A]	CLA	CBC-CAC-C3C	-2.92	104.38	112.43
23	A	406[A]	CLA	CAA-C2A-C3A	-2.92	104.78	112.78
23	A	408	CLA	C4C-C3C-C2C	-2.92	102.64	106.90
23	D	403[B]	CLA	CHC-C1C-C2C	-2.92	118.65	126.72
29	d	406[A]	PL9	C53-C6-C1	2.92	120.95	114.99
23	b	607	CLA	CHC-C1C-C2C	-2.92	118.66	126.72
23	A	404[B]	CLA	C4C-C3C-C2C	-2.92	102.65	106.90
23	A	405[B]	CLA	CHC-C1C-C2C	-2.92	118.66	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	a	412[A]	PL9	C22-C23-C24	-2.92	120.64	127.66
33	A	419[B]	LHG	O8-C23-C24	2.91	121.06	111.91
23	b	605	CLA	C2A-C1A-CHA	-2.91	118.77	123.86
25	T	101	BCR	C16-C17-C18	-2.91	123.15	127.31
25	b	619	BCR	C24-C23-C22	-2.91	121.83	126.23
38	f	101	HEM	C4D-ND-C1D	2.91	108.08	105.07
23	B	604	CLA	C6-C5-C3	-2.91	105.82	113.45
26	A	410[A]	SQD	O48-C23-C24	2.91	121.04	111.91
23	c	509	CLA	CAA-C2A-C3A	-2.91	104.81	112.78
23	A	408	CLA	CMC-C2C-C1C	2.91	129.47	125.04
23	b	610	CLA	C3B-C4B-NB	2.91	112.97	109.21
33	D	408[A]	LHG	O8-C23-O10	-2.91	116.25	123.59
23	A	405[A]	CLA	C4-C3-C5	2.91	120.16	115.27
23	a	404[A]	CLA	O2D-CGD-O1D	-2.90	118.16	123.84
29	D	406[B]	PL9	C51-C49-C50	2.90	121.02	114.60
23	a	405[A]	CLA	C4C-C3C-C2C	-2.90	102.67	106.90
23	b	616	CLA	C1C-C2C-C3C	-2.90	103.91	106.96
23	C	509	CLA	C4C-C3C-C2C	-2.90	102.67	106.90
29	A	414[B]	PL9	C20-C19-C21	2.90	120.15	115.27
23	C	510	CLA	O2A-CGA-CBA	2.90	121.01	111.91
23	b	611	CLA	C2A-C1A-CHA	-2.90	118.79	123.86
23	C	512	CLA	O2A-CGA-CBA	2.90	121.01	111.91
23	C	507	CLA	C4-C3-C5	2.90	120.15	115.27
23	b	615	CLA	CHC-C1C-C2C	-2.90	118.70	126.72
23	B	606	CLA	CHD-C4C-NC	2.90	128.77	124.20
23	c	514	CLA	O2A-CGA-CBA	2.90	121.00	111.91
23	c	510	CLA	CMB-C2B-C3B	2.90	130.10	124.68
23	d	402[A]	CLA	CMA-C3A-C2A	-2.90	102.14	113.83
25	c	516	BCR	C7-C8-C9	-2.90	121.86	126.23
23	B	605	CLA	O2D-CGD-O1D	-2.90	118.18	123.84
23	b	608	CLA	CBC-CAC-C3C	-2.89	104.45	112.43
23	B	613	CLA	CHC-C1C-C2C	-2.89	118.72	126.72
23	A	405[A]	CLA	CHC-C1C-C2C	-2.89	118.72	126.72
23	D	403[A]	CLA	CHC-C1C-C2C	-2.89	118.72	126.72
25	K	102	BCR	C20-C21-C22	-2.89	123.18	127.31
23	c	512	CLA	C4C-C3C-C2C	-2.89	102.69	106.90
23	D	403[A]	CLA	C4C-C3C-C2C	-2.89	102.69	106.90
26	a	410	SQD	C3-C4-C5	2.88	115.39	110.24
23	B	609	CLA	O2A-CGA-CBA	2.88	120.96	111.91
23	B	601	CLA	C3B-C4B-NB	2.88	112.94	109.21
23	b	603	CLA	C4-C3-C5	2.88	120.12	115.27
23	B	609	CLA	CHC-C1C-C2C	-2.88	118.75	126.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	404[B]	CLA	CMA-C3A-C4A	-2.88	104.03	111.77
23	A	406[B]	CLA	C4C-C3C-C2C	-2.88	102.70	106.90
33	E	101[B]	LHG	O8-C23-C24	2.88	120.94	111.91
25	d	405	BCR	C28-C27-C26	-2.88	108.94	114.08
35	H	102	DGD	O1G-C1A-O1A	-2.88	116.33	123.59
32	m	101	LMG	O8-C28-C29	2.88	120.93	111.91
23	B	603	CLA	CHD-C4C-NC	2.87	128.73	124.20
23	c	506	CLA	CHC-C1C-C2C	-2.87	118.77	126.72
25	B	618	BCR	C15-C14-C13	-2.87	123.21	127.31
35	C	516[B]	DGD	C3G-C2G-C1G	-2.87	104.99	111.79
23	b	608	CLA	CHC-C1C-C2C	-2.87	118.78	126.72
23	b	610	CLA	CMC-C2C-C1C	2.87	129.41	125.04
24	a	406[A]	PHO	O2A-CGA-CBA	2.87	120.92	111.91
23	D	403[A]	CLA	O2A-CGA-O1A	-2.87	116.35	123.59
23	a	405[B]	CLA	C4C-C3C-C2C	-2.87	102.72	106.90
23	A	408	CLA	O2A-CGA-CBA	2.87	120.91	111.91
26	f	102	SQD	O5-C1-C2	2.87	116.42	110.35
23	B	614	CLA	C2A-C1A-CHA	-2.87	118.85	123.86
23	D	404	CLA	C3B-C4B-NB	2.87	112.91	109.21
35	c	519	DGD	O2G-C1B-C2B	2.86	117.67	111.50
29	a	412[A]	PL9	C37-C38-C39	-2.86	120.77	127.66
23	D	404	CLA	CAA-C2A-C3A	-2.86	104.94	112.78
25	b	619	BCR	C34-C9-C10	-2.86	118.91	122.92
23	b	606	CLA	CAA-C2A-C3A	-2.86	104.94	112.78
23	C	505	CLA	C4-C3-C5	2.86	120.08	115.27
23	b	602	CLA	C1-C2-C3	-2.86	121.09	126.04
25	a	408	BCR	C7-C8-C9	-2.86	121.91	126.23
23	C	502	CLA	CHD-C4C-NC	2.86	128.71	124.20
23	A	406[B]	CLA	O2A-CGA-O1A	-2.86	116.38	123.59
23	c	513	CLA	CHC-C1C-C2C	-2.86	118.81	126.72
23	B	602	CLA	CHD-C4C-NC	2.86	128.71	124.20
23	d	404	CLA	CBC-CAC-C3C	-2.86	104.55	112.43
23	b	614	CLA	O2A-CGA-O1A	-2.86	116.38	123.59
23	c	510	CLA	O2A-C1-C2	2.86	116.14	108.64
33	d	407[B]	LHG	O7-C7-C8	2.85	117.65	111.50
23	d	404	CLA	C4C-C3C-C2C	-2.85	102.74	106.90
23	c	512	CLA	CHC-C1C-C2C	-2.85	118.83	126.72
23	D	404	CLA	CMC-C2C-C1C	2.85	129.38	125.04
23	b	612	CLA	CMB-C2B-C3B	2.85	130.02	124.68
23	B	606	CLA	C4-C3-C5	2.85	120.07	115.27
23	C	505	CLA	C3B-C4B-NB	2.85	112.90	109.21
24	a	406[A]	PHO	C1A-C2A-C3A	-2.85	100.13	102.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	615	CLA	C4-C3-C5	2.85	120.06	115.27
33	b	629[A]	LHG	O8-C23-C24	2.85	120.84	111.91
23	c	506	CLA	CMC-C2C-C1C	2.85	129.38	125.04
23	C	502	CLA	O2A-CGA-CBA	2.85	120.84	111.91
23	b	604	CLA	CHC-C1C-C2C	-2.85	118.85	126.72
23	b	602	CLA	C11-C12-C13	-2.85	106.72	115.92
31	b	621	LMT	C1'-O5'-C5'	-2.84	108.10	113.69
23	b	601	CLA	C1-O2A-CGA	2.84	123.91	116.44
32	c	520	LMG	O8-C28-C29	2.84	120.83	111.91
23	b	607	CLA	CBC-CAC-C3C	-2.84	104.59	112.43
23	b	605	CLA	C4-C3-C5	2.84	120.05	115.27
24	a	406[A]	PHO	O1D-CGD-CBD	-2.84	120.01	124.74
23	B	613	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
23	c	507	CLA	CMC-C2C-C1C	2.84	129.37	125.04
23	c	505	CLA	CHC-C1C-C2C	-2.84	118.86	126.72
23	C	503	CLA	C1-C2-C3	-2.84	121.13	126.04
26	a	410	SQD	C1-O5-C5	2.84	119.26	113.69
23	c	511	CLA	CHC-C1C-C2C	-2.84	118.87	126.72
34	b	622	HTG	O2-C2-C3	-2.84	103.79	110.35
23	C	511	CLA	CHD-C4C-NC	2.84	128.67	124.20
23	b	610	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
23	a	405[B]	CLA	CAA-C2A-C3A	-2.83	105.02	112.78
24	a	414[B]	PHO	C4A-C3A-C2A	-2.83	100.14	102.84
23	A	406[B]	CLA	CHC-C1C-C2C	-2.83	118.89	126.72
23	b	603	CLA	CHC-C1C-C2C	-2.83	118.89	126.72
23	a	407	CLA	CHD-C4C-NC	2.83	128.66	124.20
31	B	630	LMT	O1'-C1'-C2'	2.83	112.72	108.30
32	z	101	LMG	O8-C28-C29	2.83	120.78	111.91
23	d	404	CLA	CHC-C1C-C2C	-2.83	118.90	126.72
24	a	414[B]	PHO	O2D-CGD-O1D	-2.83	118.31	123.84
23	c	502	CLA	C1-C2-C3	-2.83	121.16	126.04
23	C	504	CLA	CHC-C1C-C2C	-2.83	118.91	126.72
23	b	613	CLA	CHC-C1C-C2C	-2.82	118.91	126.72
23	b	615	CLA	CAC-C3C-C4C	2.82	128.47	124.81
23	B	614	CLA	C4C-C3C-C2C	-2.82	102.78	106.90
23	A	406[B]	CLA	O2A-CGA-CBA	2.82	120.77	111.91
23	B	605	CLA	C2A-C1A-CHA	-2.82	118.93	123.86
23	C	505	CLA	CHC-C1C-C2C	-2.82	118.92	126.72
23	B	612	CLA	C1-C2-C3	-2.82	121.17	126.04
23	d	404	CLA	C3B-C4B-NB	2.82	112.85	109.21
23	b	607	CLA	CAA-C2A-C3A	-2.82	105.06	112.78
23	C	513	CLA	C2A-C1A-CHA	-2.82	118.93	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	f	101	HEM	CHD-C1D-ND	2.82	127.49	124.43
23	c	508	CLA	CHD-C4C-NC	2.82	128.64	124.20
35	c	517[A]	DGD	O3G-C3G-C2G	-2.82	104.11	110.90
23	b	606	CLA	C4C-C3C-C2C	-2.82	102.79	106.90
23	c	509	CLA	O2A-CGA-CBA	2.81	120.74	111.91
23	C	513	CLA	CAC-C3C-C4C	2.81	128.46	124.81
23	D	403[B]	CLA	C4-C3-C5	2.81	120.00	115.27
23	C	513	CLA	CMB-C2B-C3B	2.81	129.93	124.68
29	D	406[B]	PL9	C40-C39-C41	2.81	119.99	115.27
29	A	414[B]	PL9	C30-C29-C31	2.81	119.99	115.27
23	d	402[B]	CLA	CHC-C1C-C2C	-2.81	118.96	126.72
23	b	613	CLA	C4-C3-C5	2.81	119.99	115.27
24	a	414[A]	PHO	CMC-C2C-C3C	2.81	130.23	124.94
26	f	102	SQD	C4-C3-C2	-2.81	105.93	110.82
23	c	511	CLA	O2A-CGA-CBA	2.80	120.71	111.91
26	B	620	SQD	C1-O5-C5	-2.80	108.18	113.69
23	b	604	CLA	C4C-C3C-C2C	-2.80	102.81	106.90
23	B	601	CLA	O2A-CGA-CBA	2.80	120.71	111.91
23	d	403[A]	CLA	CHC-C1C-C2C	-2.80	118.97	126.72
23	b	611	CLA	CHD-C4C-NC	2.80	128.62	124.20
26	B	620	SQD	C4-C3-C2	2.80	115.72	110.82
23	D	403[B]	CLA	CMC-C2C-C1C	2.80	129.30	125.04
23	C	509	CLA	CHC-C1C-C2C	-2.80	118.98	126.72
23	c	503	CLA	O2A-CGA-CBA	2.80	120.69	111.91
23	b	602	CLA	C2A-C1A-CHA	-2.80	118.97	123.86
23	d	402[B]	CLA	C1-C2-C3	-2.80	121.21	126.04
23	B	610	CLA	CHC-C1C-C2C	-2.80	118.99	126.72
23	A	406[A]	CLA	CHC-C1C-C2C	-2.80	118.99	126.72
23	A	404[B]	CLA	O2A-CGA-O1A	-2.80	116.54	123.59
25	C	515	BCR	C33-C5-C6	-2.80	121.39	124.53
23	c	511	CLA	O2A-CGA-O1A	-2.79	116.54	123.59
35	C	516[A]	DGD	O3G-C3G-C2G	-2.79	104.16	110.90
23	C	507	CLA	C3B-C4B-NB	2.79	112.82	109.21
24	A	407[A]	PHO	CMC-C2C-C3C	2.79	130.21	124.94
23	B	615	CLA	C11-C10-C8	-2.79	106.90	115.92
23	D	403[B]	CLA	O2A-CGA-O1A	-2.79	116.55	123.59
23	D	403[B]	CLA	CAA-C2A-C3A	-2.79	105.14	112.78
23	b	606	CLA	CHC-C1C-C2C	-2.79	119.01	126.72
23	b	612	CLA	O2A-CGA-CBA	2.79	120.66	111.91
25	c	516	BCR	C37-C22-C21	-2.79	119.02	122.92
33	D	408[A]	LHG	O7-C7-C8	2.79	117.50	111.50
24	a	406[B]	PHO	O2D-CGD-O1D	-2.78	118.39	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	D	405	BCR	C37-C22-C23	2.78	122.46	118.08
26	a	409[A]	SQD	O47-C7-O49	-2.78	116.98	123.70
23	b	603	CLA	CHD-C4C-NC	2.78	128.59	124.20
23	A	406[B]	CLA	O2D-CGD-O1D	-2.78	118.40	123.84
23	a	407	CLA	O2A-CGA-O1A	-2.78	116.58	123.59
33	b	629[B]	LHG	O8-C23-C24	2.78	120.62	111.91
23	A	404[A]	CLA	CAA-CBA-CGA	-2.78	105.14	113.25
23	a	404[B]	CLA	C4C-C3C-C2C	-2.78	102.85	106.90
23	c	512	CLA	O2A-CGA-CBA	2.78	120.62	111.91
23	A	406[B]	CLA	CBC-CAC-C3C	-2.77	104.79	112.43
23	B	612	CLA	C3B-C4B-NB	2.77	112.79	109.21
23	C	513	CLA	C4C-C3C-C2C	-2.77	102.86	106.90
32	B	621	LMG	C12-C11-C10	-2.77	103.55	113.62
23	D	404	CLA	O2A-CGA-O1A	-2.77	116.60	123.59
34	b	623	HTG	O5-C1-C2	2.77	113.80	110.31
35	c	519	DGD	O1G-C1A-C2A	2.77	120.60	111.91
23	c	507	CLA	C4C-C3C-C2C	-2.77	102.86	106.90
23	C	501	CLA	CBC-CAC-C3C	-2.77	104.81	112.43
38	f	101	HEM	CBD-CAD-C3D	-2.77	104.94	112.63
25	T	101	BCR	C2-C1-C6	2.77	114.74	110.48
25	Y	101	BCR	C10-C11-C12	-2.76	114.59	123.22
23	A	408	CLA	CBC-CAC-C3C	-2.76	104.82	112.43
29	a	412[A]	PL9	C53-C6-C1	2.76	120.64	114.99
23	A	405[B]	CLA	CAC-C3C-C4C	2.76	128.39	124.81
35	c	517[B]	DGD	C3G-C2G-C1G	-2.76	105.26	111.79
23	b	608	CLA	CHD-C4C-NC	2.76	128.55	124.20
23	C	513	CLA	CHC-C1C-C2C	-2.76	119.09	126.72
23	c	513	CLA	CHD-C4C-NC	2.76	128.55	124.20
23	b	611	CLA	O2A-CGA-CBA	2.76	120.56	111.91
35	C	516[B]	DGD	O6D-C1D-O3G	-2.76	103.44	109.97
23	C	510	CLA	CMC-C2C-C1C	2.76	129.24	125.04
23	c	510	CLA	CHD-C4C-NC	2.75	128.54	124.20
23	c	502	CLA	CHC-C1C-C2C	-2.75	119.11	126.72
23	b	612	CLA	C2A-C1A-CHA	-2.75	119.05	123.86
23	C	506	CLA	CAA-C2A-C3A	-2.75	105.24	112.78
29	A	414[A]	PL9	C40-C39-C41	2.75	119.90	115.27
29	a	412[B]	PL9	C42-C43-C44	-2.75	121.04	127.66
23	B	603	CLA	O2A-CGA-CBA	2.75	120.53	111.91
29	D	406[B]	PL9	C17-C18-C19	-2.75	121.04	127.66
31	M	102	LMT	C1'-O5'-C5'	-2.75	108.30	113.69
32	A	418	LMG	C8-O7-C10	-2.75	111.03	117.79
23	c	507	CLA	CHD-C4C-NC	2.75	128.53	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	610	CLA	CMC-C2C-C1C	2.74	129.22	125.04
23	c	508	CLA	O2A-CGA-CBA	2.74	120.52	111.91
23	B	601	CLA	CAC-C3C-C4C	2.74	128.37	124.81
23	C	509	CLA	C16-C15-C13	-2.74	107.06	115.92
23	b	603	CLA	CMA-C3A-C2A	-2.74	102.78	113.83
40	V	201	HEC	CAD-CBD-CGD	-2.74	106.08	113.76
23	c	511	CLA	C4C-C3C-C2C	-2.74	102.91	106.90
23	c	514	CLA	CAA-C2A-C3A	-2.74	105.28	112.78
29	A	414[A]	PL9	C10-C9-C8	-2.74	116.66	123.68
23	A	404[A]	CLA	CAC-C3C-C4C	2.73	128.36	124.81
23	c	502	CLA	CHD-C4C-NC	2.73	128.51	124.20
23	C	508	CLA	CMB-C2B-C3B	2.73	129.79	124.68
25	B	618	BCR	C2-C1-C6	2.73	114.69	110.48
23	B	605	CLA	CHC-C1C-C2C	-2.73	119.16	126.72
25	B	619	BCR	C21-C20-C19	-2.73	114.69	123.22
23	A	406[A]	CLA	CBC-CAC-C3C	-2.73	104.90	112.43
25	H	101	BCR	C37-C22-C21	-2.73	119.10	122.92
32	A	418	LMG	O6-C1-O1	-2.73	103.51	109.97
35	C	516[A]	DGD	C2G-O2G-C1B	-2.73	111.07	117.79
32	c	501	LMG	C8-O7-C10	-2.73	111.08	117.79
25	b	619	BCR	C38-C26-C25	-2.73	121.47	124.53
33	d	408[A]	LHG	O8-C23-C24	2.73	120.46	111.91
23	C	512	CLA	CMA-C3A-C4A	-2.72	104.45	111.77
33	d	407[B]	LHG	O8-C23-O10	-2.72	116.72	123.59
25	k	101	BCR	C11-C10-C9	-2.72	123.42	127.31
23	A	406[B]	CLA	C2A-C1A-CHA	-2.72	119.10	123.86
23	d	402[A]	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
26	B	620	SQD	O48-C23-O10	-2.72	116.72	123.59
29	D	406[A]	PL9	C42-C41-C39	-2.72	104.03	112.98
23	B	616	CLA	C1C-C2C-C3C	-2.72	104.10	106.96
23	D	403[A]	CLA	CAA-C2A-C3A	-2.72	105.33	112.78
23	C	507	CLA	CHC-C1C-C2C	-2.72	119.20	126.72
23	a	404[B]	CLA	C1-C2-C3	-2.72	121.34	126.04
29	a	412[B]	PL9	C53-C6-C1	2.72	120.55	114.99
33	D	408[B]	LHG	O8-C23-C24	2.72	120.44	111.91
33	A	419[A]	LHG	O7-C7-O9	-2.72	117.13	123.70
32	c	521	LMG	O8-C28-C29	2.72	120.43	111.91
34	b	622	HTG	O5-C1-C2	2.72	113.73	110.31
23	B	616	CLA	O2A-CGA-CBA	2.72	120.43	111.91
29	A	414[B]	PL9	C10-C9-C11	2.71	119.84	115.27
23	b	601	CLA	C3B-C4B-NB	2.71	112.72	109.21
23	c	513	CLA	C3B-C4B-NB	2.71	112.72	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	d	406[A]	PL9	C36-C34-C33	-2.71	115.63	121.12
25	b	617	BCR	C29-C30-C25	2.71	114.66	110.48
23	d	403[B]	CLA	C4C-C3C-C2C	-2.71	102.95	106.90
32	A	418	LMG	C6-C5-C4	2.71	119.35	113.00
23	c	503	CLA	CBC-CAC-C3C	-2.71	104.96	112.43
23	C	501	CLA	C1-O2A-CGA	2.71	123.55	116.44
23	b	602	CLA	CHD-C4C-NC	2.71	128.47	124.20
23	a	405[A]	CLA	O2D-CGD-O1D	-2.71	118.54	123.84
23	B	606	CLA	C3B-C4B-NB	2.71	112.71	109.21
23	B	606	CLA	O2A-CGA-CBA	2.71	120.40	111.91
25	h	101	BCR	C16-C17-C18	-2.71	123.45	127.31
23	C	509	CLA	CHD-C4C-NC	2.71	128.47	124.20
23	a	404[B]	CLA	O2D-CGD-O1D	-2.71	118.55	123.84
24	a	406[A]	PHO	CMA-C3A-C4A	-2.71	108.45	114.38
23	B	608	CLA	CMC-C2C-C1C	2.71	129.16	125.04
23	C	508	CLA	CAC-C3C-C4C	2.71	128.32	124.81
25	h	101	BCR	C10-C11-C12	-2.71	114.77	123.22
25	c	516	BCR	C15-C14-C13	-2.71	123.45	127.31
23	A	406[A]	CLA	C2A-C1A-CHA	-2.71	119.13	123.86
23	A	404[A]	CLA	C2A-C1A-CHA	-2.70	119.13	123.86
23	b	615	CLA	CHD-C4C-NC	2.70	128.46	124.20
23	B	610	CLA	CAC-C3C-C4C	2.70	128.32	124.81
26	b	620	SQD	O7-S-C6	2.70	110.15	106.94
23	C	512	CLA	CMC-C2C-C1C	2.70	129.15	125.04
23	b	603	CLA	CMB-C2B-C3B	2.70	129.73	124.68
23	B	602	CLA	CHC-C1C-C2C	-2.70	119.25	126.72
25	K	102	BCR	C24-C23-C22	-2.70	122.16	126.23
23	c	505	CLA	CMB-C2B-C3B	2.70	129.73	124.68
35	C	517[A]	DGD	O1G-C1A-O1A	-2.70	116.78	123.59
24	a	406[B]	PHO	O2A-CGA-O1A	-2.70	116.79	123.59
23	D	403[A]	CLA	CMC-C2C-C1C	2.70	129.15	125.04
23	A	405[B]	CLA	C2A-C1A-CHA	-2.70	119.15	123.86
23	C	511	CLA	CMB-C2B-C3B	2.69	129.72	124.68
23	c	514	CLA	CHC-C1C-C2C	-2.69	119.27	126.72
23	a	407	CLA	CAC-C3C-C4C	2.69	128.30	124.81
25	T	101	BCR	C33-C5-C6	-2.69	121.51	124.53
23	B	615	CLA	C4C-C3C-C2C	-2.69	102.97	106.90
24	a	406[B]	PHO	O2A-CGA-CBA	2.69	120.34	111.91
23	c	514	CLA	CHD-C4C-NC	2.69	128.44	124.20
23	B	612	CLA	O2A-CGA-O1A	-2.69	116.81	123.59
32	D	412	LMG	O8-C28-C29	2.69	120.34	111.91
29	a	412[B]	PL9	C40-C39-C41	2.69	119.79	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	515	BCR	C36-C18-C17	-2.69	119.16	122.92
23	a	404[A]	CLA	C4C-C3C-C2C	-2.69	102.98	106.90
23	c	502	CLA	CAC-C3C-C4C	2.69	128.30	124.81
23	a	405[A]	CLA	CHC-C1C-C2C	-2.69	119.29	126.72
23	b	603	CLA	CBC-CAC-C3C	-2.69	105.03	112.43
32	D	412	LMG	O8-C28-O10	-2.68	116.82	123.59
23	c	504	CLA	CHD-C4C-NC	2.68	128.43	124.20
23	d	402[B]	CLA	C4C-C3C-C2C	-2.68	102.99	106.90
32	m	101	LMG	C8-O7-C10	-2.68	111.19	117.79
23	A	406[A]	CLA	CMC-C2C-C1C	2.68	129.12	125.04
23	A	405[A]	CLA	CAC-C3C-C4C	2.68	128.29	124.81
23	d	402[B]	CLA	C4-C3-C5	2.68	119.78	115.27
29	a	412[B]	PL9	C10-C9-C11	2.68	119.78	115.27
38	f	101	HEM	CMD-C2D-C1D	2.68	129.12	125.04
23	C	506	CLA	C4-C3-C5	2.68	119.77	115.27
23	B	608	CLA	CHB-C4A-NA	2.68	128.21	124.51
33	a	418[A]	LHG	O8-C23-C24	2.68	120.30	111.91
24	a	414[A]	PHO	CBA-CAA-C2A	-2.68	105.99	113.81
35	c	517[A]	DGD	C3G-C2G-C1G	-2.68	105.46	111.79
29	D	406[A]	PL9	C37-C38-C39	-2.67	121.22	127.66
31	B	628	LMT	C2'-C3'-C4'	2.67	115.79	109.68
23	A	406[A]	CLA	C1-C2-C3	-2.67	121.42	126.04
23	B	602	CLA	CMB-C2B-C3B	2.67	129.68	124.68
26	f	102	SQD	O48-C23-C24	2.67	120.28	111.91
24	a	406[B]	PHO	O1D-CGD-CBD	-2.67	120.30	124.74
23	b	603	CLA	O2A-CGA-O1A	-2.67	116.86	123.59
23	B	605	CLA	C3B-C4B-NB	2.67	112.66	109.21
29	d	406[B]	PL9	C36-C34-C33	-2.67	115.72	121.12
23	A	404[B]	CLA	CAC-C3C-C4C	2.66	128.27	124.81
23	B	615	CLA	O2D-CGD-O1D	-2.66	118.63	123.84
23	a	405[A]	CLA	CAA-C2A-C3A	-2.66	105.50	112.78
23	C	513	CLA	CHD-C4C-NC	2.66	128.39	124.20
32	C	519	LMG	O8-C28-O10	-2.66	116.89	123.59
23	C	512	CLA	CBC-CAC-C3C	-2.66	105.11	112.43
26	A	410[A]	SQD	O48-C23-O10	-2.65	116.89	123.59
23	B	609	CLA	CHD-C4C-NC	2.65	128.38	124.20
23	a	404[A]	CLA	CAC-C3C-C4C	2.65	128.25	124.81
25	B	618	BCR	C37-C22-C23	2.65	122.26	118.08
23	d	402[B]	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
23	B	608	CLA	O2A-CGA-O1A	-2.65	116.91	123.59
23	c	504	CLA	C1-C2-C3	-2.65	121.46	126.04
29	D	406[A]	PL9	C40-C39-C41	2.65	119.72	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	D	404	CLA	CHC-C1C-C2C	-2.65	119.40	126.72
23	c	504	CLA	C2A-C1A-CHA	-2.65	119.23	123.86
26	A	410[B]	SQD	O7-S-C6	2.64	110.08	106.94
23	B	601	CLA	C1-O2A-CGA	2.64	123.38	116.44
29	a	412[B]	PL9	C20-C19-C21	2.64	119.71	115.27
23	C	507	CLA	O2A-CGA-CBA	2.64	120.19	111.91
23	B	615	CLA	C6-C7-C8	-2.64	107.38	115.92
23	c	508	CLA	CHC-C1C-C2C	-2.64	119.42	126.72
23	B	602	CLA	CMA-C3A-C4A	-2.64	104.68	111.77
29	A	414[B]	PL9	C40-C39-C41	2.64	119.71	115.27
23	B	605	CLA	CMC-C2C-C1C	2.64	129.06	125.04
23	C	510	CLA	C2A-C1A-CHA	-2.64	119.25	123.86
23	A	406[A]	CLA	C4C-C3C-C2C	-2.64	103.05	106.90
26	F	103	SQD	O48-C23-C24	2.64	120.18	111.91
23	A	406[A]	CLA	C4-C3-C5	2.63	119.70	115.27
33	d	407[B]	LHG	C6-C5-C4	-2.63	105.56	111.79
24	A	416[A]	PHO	O2D-CGD-O1D	-2.63	118.69	123.84
23	D	403[B]	CLA	C2A-C1A-CHA	-2.63	119.26	123.86
23	b	614	CLA	CMC-C2C-C1C	2.63	129.05	125.04
25	t	102	BCR	C11-C10-C9	-2.63	123.56	127.31
23	C	506	CLA	O2A-CGA-CBA	2.63	120.15	111.91
26	f	102	SQD	O5-C5-C4	2.62	114.46	109.69
23	b	601	CLA	CHC-C1C-C2C	-2.62	119.47	126.72
31	F	101	LMT	C1'-O5'-C5'	-2.62	108.54	113.69
23	D	403[A]	CLA	CMB-C2B-C3B	2.62	129.58	124.68
23	c	514	CLA	CMB-C2B-C3B	2.62	129.58	124.68
23	d	403[A]	CLA	CAA-C2A-C3A	-2.62	105.61	112.78
23	B	612	CLA	C2A-C1A-CHA	-2.62	119.28	123.86
25	D	405	BCR	C3-C4-C5	-2.62	109.40	114.08
23	C	511	CLA	C1-O2A-CGA	2.62	123.31	116.44
31	e	101	LMT	O1'-C1'-C2'	2.62	112.39	108.30
23	b	609	CLA	CHC-C1C-C2C	-2.62	119.48	126.72
23	B	601	CLA	CHC-C1C-C2C	-2.62	119.49	126.72
23	D	403[B]	CLA	CBC-CAC-C3C	-2.61	105.22	112.43
29	A	414[A]	PL9	C53-C6-C1	2.61	120.33	114.99
23	C	506	CLA	CMB-C2B-C3B	2.61	129.57	124.68
26	A	412	SQD	C4-C3-C2	-2.61	106.26	110.82
23	c	514	CLA	CMC-C2C-C1C	2.61	129.02	125.04
23	D	404	CLA	O2A-CGA-CBA	2.61	120.10	111.91
23	d	404	CLA	C4-C3-C5	2.61	119.66	115.27
23	B	609	CLA	CMC-C2C-C1C	2.61	129.01	125.04
33	D	407[A]	LHG	O8-C23-C24	2.61	120.09	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	a	418[B]	LHG	O8-C23-C24	2.61	120.09	111.91
33	D	407[A]	LHG	O7-C7-C8	2.61	117.12	111.50
23	d	402[B]	CLA	CAC-C3C-C2C	2.61	131.99	127.53
23	c	514	CLA	C2A-C1A-CHA	-2.61	119.30	123.86
25	c	516	BCR	C37-C22-C23	2.60	122.18	118.08
23	B	602	CLA	C11-C12-C13	-2.60	107.50	115.92
23	c	507	CLA	O2A-CGA-O1A	-2.60	117.02	123.59
31	M	101	LMT	C3'-C4'-C5'	-2.60	104.96	110.93
23	b	604	CLA	C4-C3-C5	2.60	119.65	115.27
23	C	506	CLA	C2A-C1A-CHA	-2.60	119.31	123.86
33	L	101[A]	LHG	O8-C23-C24	2.60	120.06	111.91
23	b	610	CLA	CAA-CBA-CGA	-2.60	105.66	113.25
23	b	614	CLA	O2A-CGA-CBA	2.60	120.06	111.91
35	H	102	DGD	O2G-C1B-C2B	2.60	117.10	111.50
31	a	415	LMT	C3'-C4'-C5'	-2.60	104.97	110.93
23	B	607	CLA	C4C-C3C-C2C	-2.59	103.12	106.90
23	d	402[A]	CLA	O2A-CGA-CBA	2.59	120.05	111.91
23	A	405[A]	CLA	OBD-CAD-C3D	-2.59	122.28	128.52
33	d	407[B]	LHG	O8-C23-C24	2.59	120.04	111.91
24	a	414[B]	PHO	CBA-CAA-C2A	-2.59	106.24	113.81
23	c	504	CLA	CBC-CAC-C3C	-2.59	105.29	112.43
23	d	402[B]	CLA	CBC-CAC-C3C	-2.59	105.29	112.43
35	h	102	DGD	O1G-C1A-C2A	2.59	120.04	111.91
25	C	514	BCR	C38-C26-C25	-2.59	121.62	124.53
23	C	513	CLA	O2A-CGA-CBA	2.59	120.03	111.91
23	c	509	CLA	CHD-C4C-NC	2.59	128.28	124.20
23	a	404[A]	CLA	C2A-C1A-CHA	-2.59	119.34	123.86
23	C	506	CLA	O2A-CGA-O1A	-2.59	117.06	123.59
23	C	504	CLA	C4C-C3C-C2C	-2.58	103.13	106.90
23	B	604	CLA	C6-C7-C8	-2.58	107.57	115.92
23	C	511	CLA	CHC-C1C-C2C	-2.58	119.58	126.72
23	A	406[B]	CLA	C4-C3-C5	2.58	119.61	115.27
35	h	102	DGD	O1G-C1A-O1A	-2.58	117.08	123.59
23	b	615	CLA	C1-C2-C3	-2.58	121.58	126.04
29	d	406[A]	PL9	C36-C37-C38	-2.58	103.40	111.88
25	D	405	BCR	C24-C23-C22	-2.58	122.34	126.23
23	A	408	CLA	CHB-C4A-NA	2.58	128.08	124.51
23	d	403[B]	CLA	CHD-C4C-NC	2.58	128.27	124.20
23	c	507	CLA	C4-C3-C5	2.58	119.61	115.27
33	d	408[B]	LHG	O8-C23-C24	2.58	119.99	111.91
23	b	615	CLA	O2A-CGA-O1A	-2.58	117.09	123.59
25	y	101	BCR	C10-C11-C12	-2.57	115.18	123.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	509	CLA	O2A-CGA-O1A	-2.57	117.10	123.59
35	c	518[B]	DGD	O1G-C1A-C2A	2.57	119.98	111.91
23	C	501	CLA	CHC-C1C-C2C	-2.57	119.60	126.72
25	C	515	BCR	C11-C10-C9	-2.57	123.64	127.31
31	B	631	LMT	C3'-C4'-C5'	-2.57	105.03	110.93
23	a	404[A]	CLA	CMA-C3A-C4A	-2.57	104.87	111.77
23	c	506	CLA	C1-C2-C3	-2.57	121.60	126.04
23	b	616	CLA	CHC-C1C-C2C	-2.57	119.62	126.72
23	D	403[A]	CLA	O2D-CGD-O1D	-2.56	118.83	123.84
23	B	608	CLA	CMB-C2B-C3B	2.56	129.47	124.68
23	B	612	CLA	C4-C3-C5	2.56	119.58	115.27
23	D	403[A]	CLA	C2A-C1A-CHA	-2.56	119.38	123.86
29	A	414[B]	PL9	C53-C6-C1	2.56	120.23	114.99
23	b	612	CLA	CHC-C1C-C2C	-2.56	119.64	126.72
35	c	517[A]	DGD	O1G-C1A-O1A	-2.56	117.13	123.59
23	b	606	CLA	O2A-CGA-O1A	-2.56	117.13	123.59
25	H	101	BCR	C10-C11-C12	-2.56	115.23	123.22
25	h	101	BCR	C36-C18-C17	-2.56	119.34	122.92
25	T	101	BCR	C7-C8-C9	-2.56	122.37	126.23
24	A	407[B]	PHO	O2A-CGA-CBA	2.56	119.94	111.91
23	b	606	CLA	CMC-C2C-C1C	2.56	128.93	125.04
23	b	610	CLA	CMA-C3A-C4A	-2.56	104.90	111.77
23	d	402[B]	CLA	C2A-C1A-CHA	-2.56	119.39	123.86
24	A	416[B]	PHO	O2D-CGD-O1D	-2.56	118.84	123.84
23	C	502	CLA	O2A-CGA-O1A	-2.56	117.14	123.59
23	a	404[B]	CLA	C4-C3-C5	2.55	119.57	115.27
23	a	405[B]	CLA	C3B-C4B-NB	2.55	112.51	109.21
23	c	512	CLA	CBC-CAC-C3C	-2.55	105.39	112.43
25	c	516	BCR	C21-C20-C19	-2.55	115.25	123.22
23	a	407	CLA	CMB-C2B-C3B	2.55	129.45	124.68
25	D	405	BCR	C16-C17-C18	-2.55	123.67	127.31
23	C	513	CLA	C4-C3-C5	2.55	119.56	115.27
23	C	503	CLA	CHC-C1C-C2C	-2.55	119.67	126.72
23	B	614	CLA	CAA-C2A-C3A	-2.55	105.80	112.78
23	b	612	CLA	CHD-C4C-NC	2.55	128.22	124.20
31	A	420	LMT	O5'-C5'-C6'	2.55	112.77	106.44
23	B	610	CLA	CHD-C4C-NC	2.54	128.21	124.20
23	A	404[B]	CLA	CAA-C2A-C1A	-2.54	103.64	111.97
23	A	405[A]	CLA	CMA-C3A-C2A	-2.54	103.58	113.83
23	A	404[B]	CLA	C2A-C1A-CHA	-2.54	119.42	123.86
31	B	628	LMT	O1'-C1'-C2'	2.54	112.27	108.30
24	a	414[A]	PHO	O1D-CGD-CBD	-2.54	120.51	124.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	604	CLA	C6-C5-C3	-2.54	106.80	113.45
35	C	518	DGD	O2G-C1B-C2B	2.54	116.97	111.50
25	A	409	BCR	C15-C14-C13	-2.54	123.69	127.31
23	B	614	CLA	CBC-CAC-C3C	-2.53	105.44	112.43
23	B	606	CLA	C1-C2-C3	-2.53	121.66	126.04
23	c	510	CLA	C1-O2A-CGA	2.53	123.09	116.44
23	C	510	CLA	CBC-CAC-C3C	-2.53	105.45	112.43
29	A	414[A]	PL9	C35-C34-C36	2.53	119.53	115.27
25	B	619	BCR	C38-C26-C25	-2.53	121.69	124.53
25	T	101	BCR	C3-C4-C5	-2.53	109.56	114.08
23	b	602	CLA	CAA-CBA-CGA	-2.53	105.86	113.25
23	A	405[A]	CLA	C2A-C1A-CHA	-2.53	119.44	123.86
23	A	405[B]	CLA	O2D-CGD-O1D	-2.53	118.89	123.84
23	B	602	CLA	C4C-C3C-C2C	-2.53	103.21	106.90
23	C	501	CLA	C4-C3-C5	2.53	119.52	115.27
25	Y	101	BCR	C15-C16-C17	-2.53	118.30	123.47
25	h	101	BCR	C37-C22-C21	-2.53	119.38	122.92
23	C	502	CLA	C4C-C3C-C2C	-2.53	103.22	106.90
33	A	419[B]	LHG	O7-C7-O9	-2.53	117.60	123.70
23	B	609	CLA	O2A-CGA-O1A	-2.53	117.22	123.59
25	B	617	BCR	C7-C8-C9	-2.53	122.42	126.23
23	B	608	CLA	C1-C2-C3	-2.52	121.68	126.04
23	C	501	CLA	C1-C2-C3	-2.52	121.68	126.04
23	C	512	CLA	C3B-C4B-NB	2.52	112.47	109.21
25	A	409	BCR	C33-C5-C6	-2.52	121.69	124.53
23	a	405[A]	CLA	C2A-C1A-CHA	-2.52	119.45	123.86
23	A	406[A]	CLA	CMA-C3A-C2A	-2.52	103.66	113.83
23	c	505	CLA	CED-O2D-CGD	2.52	121.63	115.94
23	B	607	CLA	O2A-C1-C2	-2.52	102.02	108.64
23	b	609	CLA	C16-C15-C13	-2.52	107.78	115.92
23	d	403[A]	CLA	CMB-C2B-C3B	2.52	129.39	124.68
25	H	101	BCR	C31-C1-C6	-2.52	106.22	110.30
27	b	628	GOL	C3-C2-C1	-2.52	101.92	111.70
38	F	102	HEM	C4D-ND-C1D	2.52	107.67	105.07
24	A	407[B]	PHO	O1D-CGD-CBD	-2.51	120.55	124.74
29	a	412[A]	PL9	C47-C48-C49	-2.51	119.16	127.75
23	c	508	CLA	O1D-CGD-CBD	-2.51	119.34	124.48
29	D	406[B]	PL9	C20-C19-C21	2.51	119.50	115.27
23	d	402[A]	CLA	C2A-C1A-CHA	-2.51	119.47	123.86
26	F	103	SQD	O5-C1-O6	2.51	115.92	109.97
24	A	407[A]	PHO	O2A-CGA-CBA	2.51	119.78	111.91
24	A	407[A]	PHO	CMB-C2B-C3B	2.51	129.37	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	A	414[B]	PL9	C45-C44-C46	2.51	119.49	115.27
23	b	613	CLA	CHD-C4C-NC	2.51	128.16	124.20
23	C	507	CLA	CHD-C4C-NC	2.51	128.16	124.20
25	d	405	BCR	C24-C23-C22	-2.51	122.44	126.23
23	a	405[A]	CLA	O2A-CGA-O1A	-2.51	117.26	123.59
23	b	603	CLA	C1B-CHB-C4A	-2.51	125.15	130.12
23	B	612	CLA	CHD-C4C-NC	2.51	128.15	124.20
35	c	519	DGD	O3G-C1D-C2D	-2.51	104.39	108.30
26	f	102	SQD	O7-S-C6	2.50	109.91	106.94
23	D	403[B]	CLA	O2D-CGD-O1D	-2.50	118.94	123.84
23	C	505	CLA	O2A-CGA-CBA	2.50	119.76	111.91
23	B	603	CLA	C4-C3-C5	2.50	119.48	115.27
23	C	507	CLA	C1-C2-C3	-2.50	121.72	126.04
33	D	407[B]	LHG	O8-C23-O10	-2.50	117.28	123.59
23	B	609	CLA	O2D-CGD-O1D	-2.50	118.95	123.84
23	c	505	CLA	C2A-C1A-CHA	-2.50	119.49	123.86
29	A	414[B]	PL9	C42-C43-C44	-2.50	121.65	127.66
26	F	103	SQD	O47-C7-O49	-2.50	117.67	123.70
23	a	404[A]	CLA	CMC-C2C-C1C	2.50	128.84	125.04
26	f	102	SQD	O47-C7-O49	-2.50	117.67	123.70
23	A	408	CLA	C4-C3-C5	2.50	119.47	115.27
23	C	512	CLA	CHB-C4A-NA	2.50	127.96	124.51
23	B	606	CLA	CHC-C1C-C2C	-2.50	119.82	126.72
23	B	603	CLA	C2A-C1A-CHA	-2.49	119.50	123.86
23	B	615	CLA	CMB-C2B-C1B	2.49	132.30	128.46
25	A	409	BCR	C8-C7-C6	-2.49	120.20	127.20
23	C	504	CLA	C4-C3-C5	2.49	119.46	115.27
25	a	408	BCR	C37-C22-C21	-2.49	119.43	122.92
23	b	610	CLA	CHC-C1C-C2C	-2.49	119.83	126.72
23	b	602	CLA	CMA-C3A-C4A	-2.49	105.08	111.77
23	a	405[B]	CLA	CHC-C1C-C2C	-2.49	119.84	126.72
23	a	405[A]	CLA	O2A-CGA-CBA	2.49	119.72	111.91
23	B	616	CLA	CHC-C1C-C2C	-2.49	119.84	126.72
23	b	612	CLA	C11-C12-C13	-2.49	107.88	115.92
25	t	102	BCR	C1-C6-C7	2.49	122.81	115.78
24	A	407[B]	PHO	CMC-C2C-C3C	2.48	129.63	124.94
24	a	406[A]	PHO	CMB-C2B-C3B	2.48	129.33	124.68
25	c	516	BCR	C2-C1-C6	2.48	114.30	110.48
38	F	102	HEM	CHA-C4D-ND	2.48	127.45	124.38
33	D	408[B]	LHG	O8-C23-O10	-2.48	117.33	123.59
23	a	404[B]	CLA	C2A-C1A-CHA	-2.48	119.52	123.86
35	C	516[A]	DGD	O5D-C6D-C5D	-2.48	104.46	109.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	d	406[A]	PL9	C17-C18-C19	-2.48	121.69	127.66
23	c	511	CLA	C4-C3-C2	-2.48	117.32	123.68
25	c	516	BCR	C20-C21-C22	-2.48	123.77	127.31
25	D	405	BCR	C40-C30-C25	-2.48	106.28	110.30
23	a	405[B]	CLA	O2A-CGA-O1A	-2.48	117.34	123.59
23	C	509	CLA	O2D-CGD-O1D	-2.48	118.99	123.84
23	c	506	CLA	O2A-CGA-CBA	2.48	119.68	111.91
23	C	513	CLA	CAA-C2A-C3A	-2.48	106.00	112.78
24	A	407[A]	PHO	O2A-CGA-O1A	-2.48	117.34	123.59
23	c	504	CLA	CHC-C1C-C2C	-2.48	119.88	126.72
29	d	406[B]	PL9	C27-C28-C29	-2.47	121.70	127.66
23	A	404[A]	CLA	CMA-C3A-C2A	-2.47	103.85	113.83
23	D	404	CLA	C2A-C1A-CHA	-2.47	119.53	123.86
29	D	406[B]	PL9	C22-C23-C24	-2.47	121.71	127.66
23	C	512	CLA	C2A-C1A-CHA	-2.47	119.54	123.86
26	F	103	SQD	C46-C45-C44	-2.47	105.94	111.79
29	D	406[B]	PL9	C37-C38-C39	-2.47	121.72	127.66
26	b	620	SQD	C1-C2-C3	-2.47	104.85	110.00
23	d	403[B]	CLA	O2A-CGA-O1A	-2.47	117.36	123.59
25	K	102	BCR	C29-C30-C25	2.47	114.28	110.48
25	k	101	BCR	C39-C30-C25	-2.47	106.30	110.30
23	b	602	CLA	C11-C10-C8	-2.47	107.95	115.92
23	B	604	CLA	CMC-C2C-C1C	2.47	128.79	125.04
23	B	615	CLA	CED-O2D-CGD	2.47	121.52	115.94
23	A	404[B]	CLA	O2D-CGD-O1D	-2.47	119.02	123.84
23	a	407	CLA	CBC-CAC-C3C	-2.47	105.64	112.43
23	a	404[B]	CLA	O2A-CGA-O1A	-2.46	117.37	123.59
25	Y	101	BCR	C36-C18-C17	-2.46	119.47	122.92
29	d	406[B]	PL9	C7-C3-C4	2.46	118.88	116.88
33	d	407[A]	LHG	O8-C23-O10	-2.46	117.38	123.59
23	b	607	CLA	O2A-CGA-O1A	-2.46	117.38	123.59
23	C	503	CLA	CMC-C2C-C1C	2.46	128.79	125.04
23	d	404	CLA	O2A-CGA-CBA	2.46	119.63	111.91
26	a	409[A]	SQD	O7-S-C6	2.46	109.86	106.94
23	C	502	CLA	CAC-C3C-C4C	2.46	128.00	124.81
26	a	409[B]	SQD	O47-C7-O49	-2.46	117.76	123.70
23	c	514	CLA	C1-C2-C3	-2.46	121.79	126.04
23	a	405[B]	CLA	C2A-C1A-CHA	-2.46	119.56	123.86
23	d	404	CLA	C1-O2A-CGA	2.46	122.89	116.44
23	C	501	CLA	C2A-C1A-CHA	-2.46	119.56	123.86
25	c	515	BCR	C36-C18-C19	2.46	121.95	118.08
23	C	508	CLA	C4-C3-C5	2.46	119.40	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	502	CLA	C2A-C1A-CHA	-2.45	119.57	123.86
23	A	408	CLA	O2D-CGD-O1D	-2.45	119.04	123.84
35	C	516[B]	DGD	O3G-C3G-C2G	-2.45	104.98	110.90
23	C	510	CLA	CAC-C3C-C4C	2.45	127.99	124.81
23	d	402[A]	CLA	C4C-C3C-C2C	-2.45	103.32	106.90
23	A	406[B]	CLA	CMA-C3A-C2A	-2.45	103.94	113.83
23	A	405[A]	CLA	CMA-C3A-C4A	-2.45	105.19	111.77
23	d	404	CLA	C2A-C1A-CHA	-2.45	119.58	123.86
23	d	403[B]	CLA	CMC-C2C-C1C	2.45	128.77	125.04
23	B	608	CLA	C11-C12-C13	-2.45	108.00	115.92
23	b	613	CLA	CED-O2D-CGD	2.45	121.47	115.94
29	a	412[A]	PL9	C40-C39-C41	2.45	119.39	115.27
23	B	607	CLA	CHC-C1C-C2C	-2.45	119.95	126.72
23	B	615	CLA	CAC-C3C-C4C	2.45	127.98	124.81
29	A	414[B]	PL9	C35-C34-C36	2.45	119.39	115.27
24	A	407[B]	PHO	C1-C2-C3	-2.45	121.81	126.04
23	c	508	CLA	O2A-CGA-O1A	-2.45	117.42	123.59
23	a	404[B]	CLA	CAC-C3C-C4C	2.45	127.98	124.81
23	c	502	CLA	CMC-C2C-C1C	2.45	128.76	125.04
29	D	406[A]	PL9	C27-C28-C29	-2.44	121.77	127.66
29	a	412[A]	PL9	C20-C19-C21	2.44	119.38	115.27
26	B	620	SQD	C44-O6-C1	-2.44	108.96	113.74
25	H	101	BCR	C36-C18-C17	-2.44	119.50	122.92
29	D	406[B]	PL9	C7-C8-C9	-2.44	122.72	126.79
23	b	605	CLA	C1-C2-C3	-2.44	121.82	126.04
23	B	606	CLA	C2A-C1A-CHA	-2.44	119.59	123.86
25	C	515	BCR	C3-C4-C5	-2.44	109.72	114.08
23	a	407	CLA	C2A-C1A-CHA	-2.44	119.59	123.86
25	B	619	BCR	C29-C30-C25	2.44	114.24	110.48
31	B	630	LMT	O5'-C5'-C6'	2.44	112.50	106.44
23	A	405[A]	CLA	O2A-CGA-O1A	-2.44	117.44	123.59
23	a	404[A]	CLA	CHD-C4C-NC	2.44	128.05	124.20
23	B	603	CLA	CMC-C2C-C1C	2.44	128.75	125.04
23	b	607	CLA	C2A-C1A-CHA	-2.44	119.60	123.86
23	c	506	CLA	C4-C3-C5	2.44	119.37	115.27
25	C	515	BCR	C24-C23-C22	-2.44	122.55	126.23
23	D	403[B]	CLA	CED-O2D-CGD	2.43	121.44	115.94
23	B	604	CLA	O2A-CGA-CBA	2.43	119.54	111.91
25	b	618	BCR	C29-C30-C25	2.43	114.22	110.48
24	a	406[A]	PHO	O2A-CGA-O1A	-2.43	117.46	123.59
25	d	405	BCR	C37-C22-C23	2.43	121.90	118.08
23	b	608	CLA	C11-C12-C13	-2.43	108.07	115.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	601	CLA	C2A-C1A-CHA	-2.43	119.61	123.86
23	A	408	CLA	CAC-C3C-C4C	2.43	127.96	124.81
23	C	504	CLA	CAC-C3C-C4C	2.43	127.96	124.81
29	d	406[A]	PL9	C47-C48-C49	-2.42	119.47	127.75
23	C	501	CLA	CAA-C2A-C3A	-2.42	106.14	112.78
23	b	615	CLA	O2D-CGD-O1D	-2.42	119.10	123.84
23	B	601	CLA	CMB-C2B-C3B	2.42	129.21	124.68
23	C	505	CLA	O2D-CGD-O1D	-2.42	119.11	123.84
25	A	409	BCR	C16-C17-C18	-2.42	123.86	127.31
25	H	101	BCR	C16-C15-C14	-2.42	118.52	123.47
26	A	412	SQD	O48-C23-O10	-2.42	117.49	123.59
29	D	406[B]	PL9	C45-C44-C46	2.42	119.33	115.27
23	b	602	CLA	C4-C3-C5	2.42	119.33	115.27
23	A	405[B]	CLA	CMA-C3A-C2A	-2.42	104.08	113.83
26	a	409[A]	SQD	O8-S-C6	2.41	109.59	105.74
23	c	507	CLA	C2A-C1A-CHA	-2.41	119.64	123.86
25	D	405	BCR	C15-C14-C13	-2.41	123.86	127.31
29	A	414[A]	PL9	C35-C34-C33	-2.41	117.49	123.68
23	C	512	CLA	CMB-C2B-C3B	2.41	129.19	124.68
25	c	515	BCR	C28-C27-C26	-2.41	109.78	114.08
23	c	509	CLA	C4-C3-C5	2.41	119.32	115.27
23	A	404[A]	CLA	C1B-CHB-C4A	-2.41	125.35	130.12
23	D	404	CLA	CHD-C4C-NC	2.41	128.00	124.20
23	b	601	CLA	C2A-C1A-CHA	-2.41	119.65	123.86
29	A	414[A]	PL9	C42-C43-C44	-2.41	121.87	127.66
25	y	101	BCR	C21-C20-C19	-2.40	115.71	123.22
23	B	610	CLA	C1-C2-C3	-2.40	121.89	126.04
23	C	505	CLA	O2A-CGA-O1A	-2.40	117.53	123.59
23	B	604	CLA	O2D-CGD-O1D	-2.40	119.14	123.84
35	c	519	DGD	O2G-C1B-O1B	-2.40	117.90	123.70
23	B	610	CLA	C2A-C1A-CHA	-2.40	119.66	123.86
26	A	410[B]	SQD	O48-C23-O10	-2.40	117.53	123.59
23	c	513	CLA	CHB-C4A-NA	2.40	127.83	124.51
23	C	506	CLA	CHD-C4C-NC	2.40	127.99	124.20
23	b	604	CLA	O2A-CGA-O1A	-2.40	117.54	123.59
35	H	102	DGD	O6E-C5E-C6E	2.40	112.40	106.44
25	b	618	BCR	C37-C22-C23	2.40	121.86	118.08
29	D	406[B]	PL9	C36-C37-C38	-2.40	104.00	111.88
23	C	505	CLA	O1D-CGD-CBD	-2.40	119.58	124.48
31	B	631	LMT	O5'-C5'-C4'	2.40	114.81	109.75
23	C	510	CLA	CMB-C2B-C3B	2.40	129.16	124.68
23	B	608	CLA	CHD-C4C-NC	2.40	127.98	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	512	CLA	CMA-C3A-C4A	2.39	118.21	111.77
23	b	615	CLA	O2A-CGA-CBA	2.39	119.42	111.91
23	a	407	CLA	CMA-C3A-C2A	-2.39	104.17	113.83
23	a	404[B]	CLA	CHD-C4C-NC	2.39	127.97	124.20
23	c	511	CLA	C11-C10-C8	-2.39	108.19	115.92
25	k	101	BCR	C2-C1-C6	2.39	114.16	110.48
23	c	510	CLA	CMC-C2C-C1C	2.39	128.68	125.04
29	d	406[B]	PL9	C36-C37-C38	-2.39	104.02	111.88
23	C	512	CLA	CHC-C1C-C2C	-2.39	120.11	126.72
31	A	420	LMT	O5'-C5'-C4'	2.39	114.79	109.75
23	A	405[B]	CLA	O2A-CGA-O1A	-2.39	117.56	123.59
25	c	516	BCR	C11-C10-C9	-2.39	123.90	127.31
31	B	631	LMT	O1'-C1'-C2'	2.39	112.03	108.30
23	c	514	CLA	O2D-CGD-O1D	-2.39	119.17	123.84
29	D	406[B]	PL9	C32-C33-C34	-2.39	121.92	127.66
23	c	507	CLA	CMB-C2B-C3B	2.38	129.14	124.68
23	c	513	CLA	CMC-C2C-C1C	2.38	128.67	125.04
24	A	416[B]	PHO	CMC-C2C-C3C	2.38	129.44	124.94
23	B	615	CLA	CHC-C1C-C2C	-2.38	120.14	126.72
23	B	608	CLA	O2A-CGA-CBA	2.38	119.38	111.91
23	B	602	CLA	C2A-C1A-CHA	-2.38	119.70	123.86
23	b	608	CLA	O2A-CGA-O1A	-2.38	117.58	123.59
26	b	620	SQD	O48-C23-C24	2.38	119.38	111.91
33	L	101[A]	LHG	O8-C23-O10	-2.38	117.59	123.59
23	b	614	CLA	C2A-C1A-CHA	-2.38	119.70	123.86
23	A	404[B]	CLA	CHD-C4C-NC	2.38	127.95	124.20
29	a	412[A]	PL9	C10-C9-C8	-2.38	117.58	123.68
29	d	406[A]	PL9	C7-C8-C9	-2.38	122.84	126.79
23	a	405[B]	CLA	O2A-CGA-CBA	2.38	119.36	111.91
23	c	502	CLA	C2A-C1A-CHA	-2.38	119.70	123.86
29	D	406[A]	PL9	C45-C44-C46	2.38	119.27	115.27
23	c	505	CLA	CBC-CAC-C3C	-2.38	105.88	112.43
23	C	505	CLA	CHA-C1A-NA	-2.37	120.96	126.40
23	C	507	CLA	O2A-CGA-O1A	-2.37	117.60	123.59
23	c	512	CLA	O2A-CGA-O1A	-2.37	117.60	123.59
23	b	605	CLA	CMC-C2C-C1C	2.37	128.65	125.04
23	B	613	CLA	C2A-C1A-CHA	-2.37	119.71	123.86
33	D	407[B]	LHG	O8-C23-C24	2.37	119.35	111.91
23	B	601	CLA	CHB-C4A-NA	2.37	127.79	124.51
24	a	406[B]	PHO	CMB-C2B-C3B	2.37	129.11	124.68
23	C	506	CLA	CGD-CBD-CAD	-2.37	103.06	110.73
35	C	518	DGD	O3G-C3G-C2G	-2.37	105.18	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	L	101[B]	LHG	O8-C23-C24	2.37	119.34	111.91
23	C	503	CLA	C3B-C4B-NB	2.37	112.27	109.21
23	d	403[B]	CLA	CMB-C2B-C3B	2.37	129.11	124.68
23	b	614	CLA	CAC-C3C-C4C	2.37	127.88	124.81
25	d	405	BCR	C21-C20-C19	-2.37	115.83	123.22
23	B	613	CLA	CHB-C4A-NA	2.37	127.78	124.51
25	t	102	BCR	C21-C20-C19	-2.36	115.84	123.22
35	H	102	DGD	C1E-O6E-C5E	-2.36	109.05	113.69
23	c	512	CLA	C1-C2-C3	-2.36	121.96	126.04
29	D	406[A]	PL9	C22-C23-C24	-2.36	121.98	127.66
25	Y	101	BCR	C36-C18-C19	2.36	121.79	118.08
23	A	406[B]	CLA	C1-C2-C3	-2.36	121.96	126.04
31	B	628	LMT	C1B-C2B-C3B	2.36	114.91	110.00
23	c	510	CLA	O2A-CGA-O1A	-2.36	117.64	123.59
25	C	515	BCR	C32-C1-C6	-2.36	106.48	110.30
23	c	507	CLA	CAA-C2A-C3A	-2.36	106.33	112.78
23	b	608	CLA	C2A-C1A-CHA	-2.36	119.74	123.86
23	C	512	CLA	CBA-CAA-C2A	-2.36	106.91	113.86
24	A	416[B]	PHO	CMB-C2B-C3B	2.35	129.08	124.68
35	c	517[B]	DGD	O3G-C3G-C2G	-2.35	105.22	110.90
23	c	511	CLA	CMB-C2B-C3B	2.35	129.08	124.68
23	B	609	CLA	C1-C2-C3	-2.35	121.97	126.04
23	c	503	CLA	CMB-C2B-C3B	2.35	129.08	124.68
23	C	505	CLA	CMB-C2B-C1B	2.35	132.08	128.46
24	A	416[A]	PHO	CMA-C3A-C4A	-2.35	109.23	114.38
23	B	611	CLA	C4D-CHA-C1A	-2.35	118.39	121.25
31	m	103	LMT	C3B-C4B-C5B	-2.35	106.05	110.24
29	A	414[A]	PL9	C45-C44-C46	2.35	119.22	115.27
35	C	517[A]	DGD	O6E-C5E-C6E	2.35	112.28	106.44
29	a	412[A]	PL9	C45-C44-C46	2.35	119.22	115.27
23	A	408	CLA	CMA-C3A-C4A	-2.35	105.46	111.77
26	a	410	SQD	O5-C5-C4	2.35	113.96	109.69
23	d	402[A]	CLA	O2A-CGA-O1A	-2.35	117.67	123.59
23	C	510	CLA	CMD-C2D-C3D	-2.34	122.22	127.61
23	b	609	CLA	O2A-CGA-CBA	2.34	119.26	111.91
25	h	101	BCR	C24-C23-C22	-2.34	122.69	126.23
23	b	611	CLA	CMB-C2B-C3B	2.34	129.06	124.68
23	C	506	CLA	C4C-C3C-C2C	-2.34	103.48	106.90
26	F	103	SQD	O8-S-O7	-2.34	105.56	111.27
26	b	620	SQD	C44-O6-C1	-2.34	109.17	113.74
24	a	406[A]	PHO	CMC-C2C-C3C	2.34	129.35	124.94
29	a	412[B]	PL9	C45-C44-C46	2.34	119.20	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	616	CLA	CHD-C4C-NC	2.34	127.89	124.20
29	d	406[B]	PL9	C45-C44-C46	2.34	119.20	115.27
23	d	403[B]	CLA	CAA-C2A-C3A	-2.34	106.38	112.78
23	B	603	CLA	CMA-C3A-C2A	-2.33	104.41	113.83
35	C	517[B]	DGD	C2G-O2G-C1B	-2.33	112.05	117.79
34	B	622	HTG	C1-O5-C5	2.33	116.88	112.58
23	C	501	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
23	a	405[B]	CLA	CMB-C2B-C3B	2.33	129.04	124.68
23	B	613	CLA	C4-C3-C2	-2.33	117.70	123.68
23	C	509	CLA	C2A-C1A-CHA	-2.33	119.78	123.86
23	D	403[A]	CLA	CHD-C4C-NC	2.33	127.88	124.20
23	d	402[A]	CLA	C1-O2A-CGA	2.33	122.56	116.44
23	c	505	CLA	CHD-C4C-NC	2.33	127.88	124.20
23	c	507	CLA	O2A-CGA-CBA	2.33	119.22	111.91
25	K	102	BCR	C37-C22-C21	-2.33	119.66	122.92
29	a	412[A]	PL9	C35-C34-C33	-2.33	117.70	123.68
29	d	406[B]	PL9	C53-C6-C1	2.33	119.75	114.99
35	C	517[A]	DGD	O1G-C1A-C2A	2.33	119.21	111.91
23	d	402[B]	CLA	C1-O2A-CGA	2.33	122.55	116.44
35	c	518[A]	DGD	O1G-C1A-C2A	2.33	119.21	111.91
25	B	617	BCR	C31-C1-C6	-2.33	106.53	110.30
23	c	512	CLA	CMB-C2B-C3B	2.33	129.03	124.68
23	b	616	CLA	CMC-C2C-C1C	2.33	128.58	125.04
33	d	407[A]	LHG	O8-C23-C24	2.33	119.21	111.91
23	c	508	CLA	CBC-CAC-C3C	-2.32	106.02	112.43
29	a	412[B]	PL9	C47-C48-C49	-2.32	119.81	127.75
25	T	101	BCR	C21-C20-C19	-2.32	115.97	123.22
26	a	410	SQD	O48-C23-O10	-2.32	117.73	123.59
23	d	402[B]	CLA	CMA-C3A-C2A	-2.32	104.46	113.83
23	c	505	CLA	O2A-CGA-CBA	2.32	119.20	111.91
35	c	517[A]	DGD	C2G-O2G-C1B	-2.32	112.07	117.79
23	B	615	CLA	C2A-C1A-CHA	-2.32	119.80	123.86
23	B	601	CLA	CMC-C2C-C1C	2.32	128.57	125.04
23	B	605	CLA	CED-O2D-CGD	2.32	121.18	115.94
23	a	405[A]	CLA	C4-C3-C5	2.32	119.17	115.27
26	f	102	SQD	O8-S-C6	2.32	109.44	105.74
23	A	404[A]	CLA	CMA-C3A-C4A	-2.32	105.54	111.77
24	A	416[B]	PHO	O2A-CGA-CBA	2.32	119.18	111.91
23	b	606	CLA	O2A-CGA-CBA	2.32	119.18	111.91
26	a	409[A]	SQD	O48-C23-C24	2.32	119.17	111.91
23	B	609	CLA	CAC-C3C-C4C	2.32	127.81	124.81
23	C	508	CLA	CHD-C4C-NC	2.31	127.85	124.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	408	CLA	CMA-C3A-C2A	-2.31	104.50	113.83
23	C	511	CLA	O2A-CGA-CBA	2.31	119.17	111.91
25	H	101	BCR	C24-C23-C22	-2.31	122.74	126.23
23	c	504	CLA	O2A-CGA-CBA	2.31	119.16	111.91
29	d	406[B]	PL9	C47-C48-C49	-2.31	119.85	127.75
23	a	405[B]	CLA	CAC-C3C-C4C	2.31	127.81	124.81
29	A	414[A]	PL9	C37-C36-C34	-2.31	105.38	112.98
29	A	414[B]	PL9	C37-C36-C34	-2.31	105.38	112.98
26	A	410[B]	SQD	O8-S-C6	2.31	109.42	105.74
23	C	505	CLA	CHD-C4C-NC	2.31	127.84	124.20
23	c	510	CLA	C4-C3-C2	-2.31	117.76	123.68
32	C	520	LMG	C9-C8-C7	-2.31	106.33	111.79
23	a	404[A]	CLA	C1B-CHB-C4A	-2.31	125.55	130.12
32	m	101	LMG	C3-C4-C5	2.30	114.35	110.24
31	A	420	LMT	O1'-C1'-C2'	2.30	111.90	108.30
23	b	603	CLA	C7-C6-C5	-2.30	107.10	113.36
23	d	403[A]	CLA	CMC-C2C-C1C	2.30	128.55	125.04
31	M	102	LMT	C3'-C4'-C5'	-2.30	105.65	110.93
29	A	414[A]	PL9	C2-C3-C4	2.30	121.97	118.80
23	C	502	CLA	C1-C2-C3	-2.30	122.06	126.04
29	d	406[B]	PL9	C22-C23-C24	-2.30	122.12	127.66
23	c	502	CLA	O2A-CGA-CBA	2.30	119.13	111.91
26	a	409[B]	SQD	C3-C4-C5	2.30	114.34	110.24
23	c	502	CLA	O2A-CGA-O1A	-2.30	117.79	123.59
35	c	518[B]	DGD	C2G-O2G-C1B	-2.30	112.13	117.79
23	A	404[A]	CLA	CMC-C2C-C1C	2.30	128.54	125.04
23	d	404	CLA	CMC-C2C-C1C	2.30	128.54	125.04
25	d	405	BCR	C39-C30-C25	-2.30	106.57	110.30
23	b	604	CLA	O2A-CGA-CBA	2.30	119.11	111.91
23	A	408	CLA	O2A-CGA-O1A	-2.29	117.81	123.59
25	B	619	BCR	C7-C8-C9	-2.29	122.77	126.23
23	b	601	CLA	O2A-CGA-CBA	2.29	119.10	111.91
25	B	617	BCR	C16-C17-C18	-2.29	124.04	127.31
29	A	414[A]	PL9	C47-C48-C49	-2.29	119.92	127.75
23	b	608	CLA	C4C-C3C-C2C	-2.29	103.56	106.90
24	a	414[A]	PHO	O2D-CGD-O1D	-2.29	119.36	123.84
24	A	407[B]	PHO	CMB-C2B-C3B	2.29	128.96	124.68
33	d	408[A]	LHG	O8-C23-O10	-2.29	117.82	123.59
23	A	404[B]	CLA	C1-C2-C3	-2.29	122.09	126.04
23	a	405[A]	CLA	CBC-CAC-C3C	-2.29	106.12	112.43
23	C	501	CLA	O2A-CGA-CBA	2.29	119.08	111.91
35	H	102	DGD	C3E-C4E-C5E	-2.29	106.16	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	c	521	LMG	O8-C28-O10	-2.29	117.82	123.59
23	C	503	CLA	O2D-CGD-O1D	-2.28	119.37	123.84
25	K	102	BCR	C2-C1-C6	2.28	114.00	110.48
25	T	101	BCR	C35-C13-C12	2.28	121.67	118.08
25	B	617	BCR	C15-C14-C13	-2.28	124.05	127.31
23	b	606	CLA	C2A-C1A-CHA	-2.28	119.87	123.86
25	Y	101	BCR	C28-C27-C26	-2.28	110.00	114.08
23	c	513	CLA	CBA-CAA-C2A	-2.28	107.13	113.86
23	B	614	CLA	CMA-C3A-C2A	-2.28	104.63	113.83
23	C	503	CLA	C2A-C1A-CHA	-2.28	119.87	123.86
23	A	404[B]	CLA	CAA-CBA-CGA	-2.28	106.59	113.25
23	C	510	CLA	C4-C3-C2	-2.28	117.83	123.68
23	b	616	CLA	C4-C3-C5	2.28	119.10	115.27
38	F	102	HEM	O2A-CGA-CBA	2.28	121.35	114.03
40	V	201	HEC	CMB-C2B-C3B	2.28	128.50	125.82
34	b	622	HTG	C6-C5-C4	-2.28	107.67	113.00
23	b	609	CLA	C7-C6-C5	-2.28	107.18	113.36
23	B	613	CLA	CMC-C2C-C1C	2.27	128.50	125.04
23	c	508	CLA	C4C-C3C-C2C	-2.27	103.58	106.90
23	a	404[A]	CLA	CMA-C3A-C2A	-2.27	104.66	113.83
23	B	610	CLA	CMA-C3A-C2A	-2.27	104.67	113.83
29	d	406[A]	PL9	C31-C32-C33	-2.27	104.42	111.88
31	t	101	LMT	C1-O1'-C1'	2.27	117.60	113.84
23	C	508	CLA	C2A-C1A-CHA	-2.27	119.89	123.86
23	c	503	CLA	C2A-C1A-CHA	-2.27	119.89	123.86
23	A	406[B]	CLA	CMC-C2C-C1C	2.27	128.49	125.04
24	A	416[A]	PHO	O1D-CGD-CBD	-2.27	120.96	124.74
23	b	602	CLA	C1B-CHB-C4A	-2.27	125.63	130.12
23	B	608	CLA	C2A-C1A-CHA	-2.27	119.90	123.86
23	A	408	CLA	C11-C12-C13	-2.27	108.60	115.92
23	c	504	CLA	O2A-CGA-O1A	-2.27	117.88	123.59
26	b	620	SQD	O47-C7-O49	-2.26	118.23	123.70
29	A	414[B]	PL9	C10-C9-C8	-2.26	117.87	123.68
23	B	604	CLA	C11-C12-C13	-2.26	108.60	115.92
23	c	503	CLA	C1-C2-C3	-2.26	122.13	126.04
23	d	404	CLA	CMB-C2B-C3B	2.26	128.91	124.68
33	d	414[A]	LHG	O7-C7-O9	-2.26	118.24	123.70
25	k	101	BCR	C10-C11-C12	-2.26	116.16	123.22
23	b	605	CLA	O2A-CGA-CBA	2.26	119.00	111.91
23	D	403[A]	CLA	C4-C3-C5	2.26	119.07	115.27
23	b	604	CLA	CHD-C4C-NC	2.26	127.77	124.20
38	f	101	HEM	C3C-C4C-NC	-2.26	106.68	110.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	d	407[A]	LHG	C6-C5-C4	-2.26	106.44	111.79
23	c	508	CLA	CAC-C3C-C4C	2.26	127.74	124.81
23	C	504	CLA	CHD-C4C-NC	2.26	127.76	124.20
26	a	409[B]	SQD	O48-C23-C24	2.26	119.00	111.91
23	C	501	CLA	OBD-CAD-C3D	-2.26	123.09	128.52
23	B	607	CLA	C2A-C1A-CHA	-2.26	119.91	123.86
33	b	629[A]	LHG	O8-C23-O10	-2.26	117.90	123.59
24	a	414[A]	PHO	C4-C3-C2	-2.26	117.89	123.68
25	t	102	BCR	C36-C18-C19	2.26	121.63	118.08
29	A	414[B]	PL9	C12-C13-C14	-2.26	122.23	127.66
23	d	403[B]	CLA	CBC-CAC-C3C	-2.25	106.22	112.43
23	B	606	CLA	CMB-C2B-C3B	2.25	128.90	124.68
23	c	511	CLA	CAC-C3C-C4C	2.25	127.73	124.81
25	c	515	BCR	C33-C5-C6	-2.25	122.00	124.53
23	d	403[B]	CLA	CAC-C3C-C4C	2.25	127.73	124.81
23	c	505	CLA	O2A-CGA-O1A	-2.25	117.91	123.59
23	C	510	CLA	C4C-C3C-C2C	-2.25	103.61	106.90
23	C	503	CLA	O2A-CGA-CBA	2.25	118.97	111.91
23	C	508	CLA	O2A-CGA-CBA	2.25	118.97	111.91
23	b	602	CLA	CHC-C1C-C2C	-2.25	120.50	126.72
25	c	515	BCR	C38-C26-C25	-2.25	122.00	124.53
29	D	406[A]	PL9	C20-C19-C21	2.25	119.05	115.27
23	c	511	CLA	C2A-C1A-CHA	-2.25	119.93	123.86
24	A	416[A]	PHO	CMB-C2B-C3B	2.25	128.88	124.68
25	D	405	BCR	C11-C10-C9	-2.25	124.10	127.31
23	c	513	CLA	O2A-CGA-O1A	-2.25	117.92	123.59
23	c	503	CLA	C4C-C3C-C2C	-2.25	103.62	106.90
25	Y	101	BCR	C37-C22-C23	2.24	121.61	118.08
23	A	404[B]	CLA	C1B-CHB-C4A	-2.24	125.67	130.12
25	b	618	BCR	C8-C7-C6	-2.24	120.91	127.20
24	a	414[A]	PHO	CED-O2D-CGD	2.24	121.00	115.94
35	h	102	DGD	O3G-C1D-C2D	2.24	111.80	108.30
25	D	405	BCR	C15-C16-C17	-2.24	118.89	123.47
25	b	619	BCR	C16-C15-C14	-2.24	118.89	123.47
23	b	615	CLA	CMC-C2C-C1C	2.24	128.45	125.04
35	h	102	DGD	C6D-C5D-C4D	2.24	116.77	112.09
23	C	510	CLA	CHB-C4A-NA	2.24	127.61	124.51
23	C	503	CLA	CAC-C3C-C4C	2.24	127.71	124.81
25	d	405	BCR	C40-C30-C39	2.24	115.39	108.53
25	b	619	BCR	C15-C14-C13	-2.24	124.12	127.31
23	B	612	CLA	CHC-C1C-C2C	-2.24	120.54	126.72
24	A	416[B]	PHO	O1D-CGD-CBD	-2.23	121.02	124.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	620	SQD	O9-S-C6	2.23	109.59	106.94
29	d	406[B]	PL9	C17-C18-C19	-2.23	122.28	127.66
23	B	603	CLA	CBC-CAC-C3C	-2.23	106.27	112.43
23	b	606	CLA	CBC-CAC-C3C	-2.23	106.27	112.43
25	y	101	BCR	C1-C6-C7	2.23	122.10	115.78
29	D	406[A]	PL9	C36-C37-C38	-2.23	104.54	111.88
34	B	625	HTG	C3-C4-C5	2.23	114.22	110.24
23	c	512	CLA	C1-O2A-CGA	2.23	122.30	116.44
25	Y	101	BCR	C38-C26-C25	-2.23	122.02	124.53
25	A	409	BCR	C11-C10-C9	-2.23	124.13	127.31
25	d	405	BCR	C11-C10-C9	-2.23	124.13	127.31
25	d	405	BCR	C33-C5-C6	-2.23	122.03	124.53
23	c	502	CLA	CBC-CAC-C3C	-2.23	106.29	112.43
23	c	512	CLA	C2A-C1A-CHA	-2.23	119.97	123.86
38	F	102	HEM	O2D-CGD-CBD	2.22	121.18	114.03
23	a	404[A]	CLA	C7-C6-C5	-2.22	107.32	113.36
23	d	403[A]	CLA	C1B-CHB-C4A	-2.22	125.72	130.12
26	A	410[A]	SQD	O8-S-C6	2.22	109.28	105.74
23	c	502	CLA	C4-C3-C5	2.22	119.01	115.27
23	C	505	CLA	CBC-CAC-C3C	-2.22	106.31	112.43
23	D	404	CLA	CMA-C3A-C4A	-2.22	105.81	111.77
26	f	102	SQD	O48-C23-O10	-2.22	117.99	123.59
23	d	402[B]	CLA	O2A-CGA-CBA	2.22	118.87	111.91
23	A	405[A]	CLA	CHB-C4A-NA	2.22	127.58	124.51
35	C	516[B]	DGD	O5D-C6D-C5D	-2.22	104.94	109.05
23	C	509	CLA	C11-C12-C13	-2.22	108.75	115.92
23	C	509	CLA	C4-C3-C5	2.22	119.00	115.27
35	C	516[A]	DGD	C3G-C2G-C1G	-2.22	106.55	111.79
35	c	518[A]	DGD	O4E-C4E-C3E	-2.22	105.23	110.35
25	t	102	BCR	C35-C13-C12	2.22	121.57	118.08
23	b	609	CLA	CMB-C2B-C3B	2.21	128.82	124.68
25	A	409	BCR	C40-C30-C25	-2.21	106.71	110.30
23	c	514	CLA	C1-O2A-CGA	2.21	122.24	116.44
23	b	607	CLA	CMB-C2B-C3B	2.21	128.81	124.68
23	C	512	CLA	O1D-CGD-CBD	-2.21	119.96	124.48
25	t	102	BCR	C7-C6-C5	-2.21	116.11	121.46
35	C	517[B]	DGD	O1G-C1A-C2A	2.21	118.84	111.91
25	B	618	BCR	C38-C26-C25	-2.21	122.05	124.53
23	b	602	CLA	C7-C6-C5	-2.21	107.37	113.36
23	b	605	CLA	C1-O2A-CGA	2.21	122.23	116.44
34	B	622	HTG	C2'-C1'-S1	-2.21	105.27	112.40
23	d	402[B]	CLA	CHB-C4A-NA	2.20	127.56	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	514	CLA	C4-C3-C5	2.20	118.98	115.27
23	C	512	CLA	O2A-CGA-O1A	-2.20	118.03	123.59
23	b	614	CLA	CAA-C2A-C3A	-2.20	106.75	112.78
24	a	414[B]	PHO	C4-C3-C2	-2.20	118.03	123.68
23	c	505	CLA	CMC-C2C-C1C	2.20	128.39	125.04
23	b	602	CLA	O2A-CGA-CBA	2.20	118.82	111.91
23	b	608	CLA	O2A-CGA-CBA	2.20	118.81	111.91
24	A	407[A]	PHO	C1-C2-C3	-2.20	122.24	126.04
23	a	405[A]	CLA	CAC-C3C-C4C	2.20	127.67	124.81
29	A	414[B]	PL9	C47-C48-C49	-2.20	120.23	127.75
25	b	618	BCR	C35-C13-C14	-2.20	119.84	122.92
25	k	101	BCR	C36-C18-C19	2.20	121.54	118.08
23	b	603	CLA	CMC-C2C-C1C	2.20	128.39	125.04
23	A	406[B]	CLA	CAC-C3C-C4C	2.20	127.66	124.81
29	A	414[A]	PL9	C51-C49-C50	2.20	119.46	114.60
24	A	416[A]	PHO	O2A-CGA-CBA	2.20	118.80	111.91
23	B	614	CLA	OBD-CAD-C3D	-2.20	123.24	128.52
29	d	406[B]	PL9	C35-C34-C36	2.19	118.96	115.27
24	A	407[B]	PHO	O2A-CGA-O1A	-2.19	118.06	123.59
31	m	103	LMT	C1'-O5'-C5'	-2.19	109.39	113.69
25	k	101	BCR	C24-C23-C22	-2.19	122.92	126.23
29	a	412[B]	PL9	C51-C49-C50	2.19	119.44	114.60
23	b	616	CLA	C2A-C1A-CHA	-2.19	120.03	123.86
32	c	520	LMG	O6-C5-C4	2.19	113.67	109.69
24	a	406[B]	PHO	C1-C2-C3	-2.19	122.26	126.04
29	A	414[B]	PL9	C35-C34-C33	-2.19	118.07	123.68
23	d	403[B]	CLA	C1B-CHB-C4A	-2.19	125.79	130.12
23	b	602	CLA	CMB-C2B-C3B	2.19	128.77	124.68
25	B	618	BCR	C16-C17-C18	-2.19	124.19	127.31
23	D	403[A]	CLA	CED-O2D-CGD	2.19	120.88	115.94
23	a	407	CLA	CHC-C1C-C2C	-2.18	120.68	126.72
25	T	101	BCR	C1-C6-C7	2.18	121.96	115.78
23	b	609	CLA	OBD-CAD-C3D	-2.18	123.26	128.52
26	a	409[A]	SQD	O9-S-O7	-2.18	106.39	113.95
23	c	514	CLA	O2A-CGA-O1A	-2.18	118.08	123.59
23	b	605	CLA	CAC-C3C-C4C	2.18	127.64	124.81
23	b	613	CLA	CAC-C3C-C4C	2.18	127.64	124.81
23	a	405[B]	CLA	CBC-CAC-C3C	-2.18	106.41	112.43
23	B	611	CLA	C4-C3-C5	2.18	118.94	115.27
23	c	504	CLA	OBD-CAD-C3D	-2.18	123.27	128.52
24	a	414[B]	PHO	C7-C6-C5	-2.18	107.44	113.36
29	d	406[A]	PL9	C51-C49-C50	2.18	119.42	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	511	CLA	O2A-CGA-O1A	-2.18	118.09	123.59
23	d	403[A]	CLA	CAC-C3C-C4C	2.18	127.64	124.81
23	C	503	CLA	CMB-C2B-C3B	2.18	128.75	124.68
35	c	518[A]	DGD	C2G-O2G-C1B	-2.18	112.43	117.79
31	B	630	LMT	O5'-C5'-C4'	2.18	114.34	109.75
23	b	603	CLA	C5-C3-C2	-2.17	116.72	121.12
25	d	405	BCR	C38-C26-C27	2.17	117.79	113.62
32	d	412	LMG	O8-C28-C29	2.17	118.73	111.91
23	c	503	CLA	O2A-CGA-O1A	-2.17	118.11	123.59
23	B	611	CLA	OBD-CAD-C3D	-2.17	123.29	128.52
23	b	606	CLA	CMB-C2B-C3B	2.17	128.74	124.68
32	d	412	LMG	O8-C28-O10	-2.17	118.11	123.59
25	t	102	BCR	C29-C28-C27	-2.17	106.52	111.38
23	c	505	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
25	d	405	BCR	C3-C4-C5	-2.17	110.20	114.08
26	a	410	SQD	O8-S-C6	2.17	109.20	105.74
24	a	406[A]	PHO	CBA-CAA-C2A	-2.17	107.47	113.81
23	c	511	CLA	CED-O2D-CGD	2.17	120.84	115.94
23	B	610	CLA	CMA-C3A-C4A	-2.17	105.95	111.77
25	D	405	BCR	C30-C25-C24	2.17	121.91	115.78
23	a	404[B]	CLA	C1B-CHB-C4A	-2.17	125.82	130.12
33	A	419[A]	LHG	O4-P-O5	2.17	122.95	112.24
23	c	510	CLA	C2A-C1A-CHA	-2.17	120.07	123.86
23	C	502	CLA	C4-C3-C5	2.17	118.92	115.27
25	K	102	BCR	C32-C1-C6	-2.16	106.79	110.30
25	y	101	BCR	C34-C9-C10	-2.16	119.89	122.92
23	B	610	CLA	CHB-C4A-NA	2.16	127.50	124.51
23	A	405[A]	CLA	C4C-C3C-C2C	-2.16	103.75	106.90
25	b	618	BCR	C33-C5-C6	-2.16	122.10	124.53
23	b	616	CLA	CAC-C3C-C4C	2.16	127.61	124.81
25	C	515	BCR	C39-C30-C25	-2.16	106.80	110.30
23	C	507	CLA	CBC-CAC-C3C	-2.16	106.48	112.43
23	b	606	CLA	C1-O2A-CGA	2.16	122.11	116.44
23	b	611	CLA	OBD-CAD-C3D	-2.16	123.33	128.52
25	h	101	BCR	C16-C15-C14	-2.16	119.05	123.47
25	y	101	BCR	C34-C9-C8	2.16	121.48	118.08
29	A	414[B]	PL9	C51-C49-C50	2.16	119.37	114.60
26	A	410[A]	SQD	O9-S-O7	-2.16	106.48	113.95
23	B	602	CLA	CHB-C4A-NA	2.16	127.50	124.51
23	b	602	CLA	CMA-C3A-C2A	-2.16	105.13	113.83
23	b	601	CLA	CMC-C2C-C1C	2.16	128.32	125.04
23	A	404[B]	CLA	CMA-C3A-C2A	-2.16	105.13	113.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	407[B]	PHO	O2D-CGD-O1D	-2.15	119.63	123.84
25	c	515	BCR	C37-C22-C23	2.15	121.47	118.08
33	E	101[B]	LHG	O7-C7-O9	-2.15	118.50	123.70
23	b	606	CLA	C1-C2-C3	-2.15	122.32	126.04
26	A	412	SQD	C1-C2-C3	-2.15	105.51	110.00
25	C	515	BCR	C15-C16-C17	-2.15	119.07	123.47
29	A	414[B]	PL9	C25-C24-C26	2.15	118.89	115.27
23	A	408	CLA	C2A-C1A-CHA	-2.15	120.10	123.86
35	C	517[A]	DGD	C2G-O2G-C1B	-2.15	112.50	117.79
27	B	624	GOL	C3-C2-C1	-2.15	103.35	111.70
23	B	613	CLA	CHD-C4C-NC	2.15	127.59	124.20
25	c	516	BCR	C28-C27-C26	-2.15	110.24	114.08
35	c	517[A]	DGD	O6D-C1D-O3G	-2.15	104.89	109.97
23	D	404	CLA	CMA-C3A-C2A	-2.15	105.17	113.83
29	d	406[A]	PL9	C35-C34-C36	2.15	118.88	115.27
23	C	512	CLA	O2D-CGD-O1D	-2.14	119.64	123.84
23	A	405[B]	CLA	C4C-C3C-C2C	-2.14	103.77	106.90
23	a	404[B]	CLA	CMA-C3A-C2A	-2.14	105.19	113.83
26	A	412	SQD	O6-C44-C45	-2.14	105.73	110.90
25	D	405	BCR	C37-C22-C21	-2.14	119.92	122.92
24	A	407[B]	PHO	CBA-CAA-C2A	-2.14	107.55	113.81
23	B	608	CLA	CAA-C2A-C3A	-2.14	106.92	112.78
23	c	503	CLA	C1-O2A-CGA	2.14	122.06	116.44
25	k	101	BCR	C3-C4-C5	-2.14	110.25	114.08
29	A	414[A]	PL9	C25-C24-C26	2.14	118.87	115.27
25	T	101	BCR	C36-C18-C19	2.14	121.45	118.08
25	T	101	BCR	C7-C6-C5	-2.14	116.28	121.46
23	c	506	CLA	CHD-C4C-NC	2.14	127.57	124.20
23	C	504	CLA	CAA-C2A-C3A	-2.14	106.93	112.78
24	A	407[A]	PHO	CBA-CAA-C2A	-2.14	107.57	113.81
23	B	613	CLA	C1B-CHB-C4A	-2.13	125.89	130.12
34	B	625	HTG	O5-C5-C4	2.13	113.57	109.69
23	B	605	CLA	CAC-C3C-C4C	2.13	127.58	124.81
23	B	616	CLA	CMC-C2C-C1C	2.13	128.29	125.04
23	B	611	CLA	O2A-CGA-O1A	-2.13	118.21	123.59
23	b	610	CLA	C4-C3-C2	-2.13	118.21	123.68
23	b	603	CLA	CAC-C3C-C4C	2.13	127.58	124.81
35	C	517[B]	DGD	O1G-C1A-O1A	-2.13	118.21	123.59
23	C	503	CLA	CBC-CAC-C3C	-2.13	106.56	112.43
31	b	621	LMT	C2'-C3'-C4'	2.13	114.54	109.68
32	A	418	LMG	C12-C11-C10	-2.13	105.88	113.62
33	b	629[B]	LHG	O8-C23-O10	-2.13	118.22	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	609	CLA	CAA-C2A-C3A	-2.13	106.95	112.78
27	O	303	GOL	C3-C2-C1	-2.13	103.44	111.70
35	C	516[A]	DGD	O1G-C1A-O1A	-2.13	118.22	123.59
23	B	606	CLA	CAA-C2A-C3A	-2.13	106.95	112.78
23	b	613	CLA	O2D-CGD-O1D	-2.13	119.68	123.84
35	c	518[A]	DGD	O1G-C1A-O1A	-2.13	118.23	123.59
25	b	619	BCR	C21-C20-C19	-2.13	116.58	123.22
23	b	609	CLA	O2A-CGA-O1A	-2.12	118.23	123.59
23	B	604	CLA	C4-C3-C5	2.12	118.84	115.27
33	d	414[B]	LHG	O7-C7-O9	-2.12	118.57	123.70
24	a	414[A]	PHO	C1A-C2A-C3A	-2.12	100.82	102.84
32	Z	101	LMG	C1-O6-C5	2.12	117.85	113.69
35	C	516[A]	DGD	O6D-C1D-O3G	-2.12	104.95	109.97
23	A	405[A]	CLA	O2A-CGA-CBA	2.12	118.56	111.91
25	B	617	BCR	C11-C10-C9	-2.12	124.28	127.31
23	b	615	CLA	CHA-C1A-NA	-2.12	121.54	126.40
25	c	515	BCR	C29-C30-C25	2.12	113.74	110.48
25	t	102	BCR	C33-C5-C4	2.12	117.69	113.62
29	A	414[A]	PL9	C12-C13-C14	-2.12	122.56	127.66
26	F	103	SQD	O9-S-C6	-2.12	104.42	106.94
24	a	414[B]	PHO	C1A-C2A-C3A	-2.12	100.82	102.84
32	d	412	LMG	O7-C10-O9	-2.12	118.59	123.70
23	D	403[B]	CLA	CHD-C4C-NC	2.12	127.54	124.20
25	c	515	BCR	C31-C1-C6	-2.11	106.87	110.30
25	K	102	BCR	C3-C4-C5	-2.11	110.30	114.08
23	b	604	CLA	C4-C3-C2	-2.11	118.26	123.68
32	c	520	LMG	C8-O7-C10	-2.11	112.59	117.79
24	a	414[B]	PHO	O1D-CGD-CBD	-2.11	121.22	124.74
23	A	405[B]	CLA	CHB-C4A-NA	2.11	127.43	124.51
25	B	619	BCR	C2-C1-C6	2.11	113.73	110.48
23	B	613	CLA	CMA-C3A-C4A	-2.11	106.10	111.77
32	A	418	LMG	O8-C28-C29	2.11	118.53	111.91
23	B	615	CLA	CBC-CAC-C3C	-2.11	106.61	112.43
23	B	615	CLA	CHA-C1A-NA	-2.11	121.57	126.40
35	c	518[B]	DGD	O1G-C1A-O1A	-2.11	118.27	123.59
25	b	617	BCR	C21-C20-C19	-2.11	116.64	123.22
23	b	615	CLA	C11-C12-C13	-2.11	109.10	115.92
23	b	614	CLA	CED-O2D-CGD	2.11	120.71	115.94
23	d	404	CLA	CAC-C3C-C4C	2.11	127.55	124.81
26	F	103	SQD	O48-C23-O10	-2.11	118.28	123.59
31	b	621	LMT	C1-O1'-C1'	2.11	117.33	113.84
38	F	102	HEM	C3C-C4C-NC	-2.11	106.97	110.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	a	412[B]	PL9	C35-C34-C33	-2.11	118.28	123.68
24	A	416[A]	PHO	C6-C5-C3	-2.11	107.94	113.45
23	C	508	CLA	CAA-C2A-C3A	-2.10	107.02	112.78
23	b	607	CLA	CMC-C2C-C1C	2.10	128.24	125.04
23	A	408	CLA	C1-O2A-CGA	2.10	121.96	116.44
25	k	101	BCR	C15-C14-C13	-2.10	124.31	127.31
29	d	406[A]	PL9	C12-C13-C14	-2.10	122.60	127.66
25	b	617	BCR	C24-C23-C22	-2.10	123.06	126.23
31	B	628	LMT	O1B-C4'-C5'	-2.10	103.69	109.45
23	B	605	CLA	OBD-CAD-C3D	-2.10	123.47	128.52
33	b	629[A]	LHG	O7-C7-O9	-2.10	118.63	123.70
23	b	615	CLA	C2A-C1A-CHA	-2.10	120.19	123.86
23	B	616	CLA	C2A-C1A-CHA	-2.10	120.19	123.86
25	h	101	BCR	C20-C21-C22	-2.10	124.32	127.31
23	b	605	CLA	CED-O2D-CGD	2.10	120.68	115.94
23	b	610	CLA	CAC-C3C-C4C	2.09	127.53	124.81
33	E	101[A]	LHG	O7-C7-O9	-2.09	118.64	123.70
23	B	603	CLA	C7-C6-C5	-2.09	107.67	113.36
25	c	516	BCR	C15-C16-C17	-2.09	119.19	123.47
23	b	615	CLA	C6-C7-C8	-2.09	109.16	115.92
32	c	501	LMG	O6-C5-C4	2.09	113.49	109.69
23	b	607	CLA	CAC-C3C-C4C	2.09	127.52	124.81
32	D	412	LMG	C7-O1-C1	-2.09	109.66	113.74
23	b	601	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
26	B	620	SQD	O47-C7-O49	-2.09	118.65	123.70
25	K	102	BCR	C33-C5-C6	-2.09	122.18	124.53
23	A	404[A]	CLA	C7-C6-C5	-2.09	107.69	113.36
23	c	511	CLA	CMA-C3A-C4A	-2.09	106.17	111.77
23	B	605	CLA	O2A-CGA-CBA	2.08	118.45	111.91
23	d	403[A]	CLA	CHD-C4C-NC	2.08	127.49	124.20
23	A	405[B]	CLA	O2A-CGA-CBA	2.08	118.44	111.91
25	B	617	BCR	C34-C9-C8	2.08	121.36	118.08
31	F	101	LMT	O1'-C1'-C2'	2.08	111.55	108.30
25	T	101	BCR	C39-C30-C25	-2.08	106.93	110.30
23	B	610	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
38	f	101	HEM	CHA-C4D-C3D	-2.08	121.43	125.33
23	c	513	CLA	C2A-C1A-CHA	-2.08	120.23	123.86
23	b	602	CLA	O2A-CGA-O1A	-2.08	118.35	123.59
23	d	404	CLA	C6-C7-C8	-2.08	109.21	115.92
23	B	607	CLA	C11-C10-C8	-2.08	109.21	115.92
32	B	621	LMG	O8-C28-O10	-2.08	118.35	123.59
29	d	406[B]	PL9	C51-C49-C50	2.08	119.19	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	a	406[B]	PHO	CBA-CAA-C2A	-2.08	107.75	113.81
35	C	517[B]	DGD	O2G-C1B-O1B	-2.07	118.69	123.70
27	D	402	GOL	C3-C2-C1	-2.07	103.64	111.70
25	B	619	BCR	C3-C4-C5	-2.07	110.37	114.08
35	c	517[B]	DGD	C2G-O2G-C1B	-2.07	112.68	117.79
25	y	101	BCR	C37-C22-C23	2.07	121.34	118.08
23	B	609	CLA	C2A-C1A-CHA	-2.07	120.23	123.86
26	b	620	SQD	O5-C1-C2	-2.07	105.96	110.35
29	d	406[B]	PL9	C12-C13-C14	-2.07	122.67	127.66
23	b	608	CLA	CAA-C2A-C3A	-2.07	107.10	112.78
23	A	404[A]	CLA	C4-C3-C5	2.07	118.75	115.27
29	D	406[A]	PL9	C12-C13-C14	-2.07	122.68	127.66
23	b	616	CLA	O1D-CGD-CBD	-2.07	120.25	124.48
35	c	517[B]	DGD	O6D-C1D-O3G	-2.07	105.08	109.97
23	B	609	CLA	C16-C15-C13	-2.07	109.24	115.92
29	d	406[B]	PL9	C20-C19-C21	2.07	118.75	115.27
29	D	406[A]	PL9	C30-C29-C31	2.07	118.75	115.27
29	a	412[A]	PL9	C51-C49-C50	2.07	119.17	114.60
23	b	601	CLA	CAC-C3C-C4C	2.07	127.49	124.81
29	D	406[A]	PL9	C25-C24-C23	-2.06	118.38	123.68
23	C	512	CLA	C4-C3-C2	-2.06	118.38	123.68
23	B	607	CLA	O2A-CGA-CBA	2.06	118.38	111.91
23	B	608	CLA	C4-C3-C5	2.06	118.74	115.27
29	a	412[B]	PL9	C10-C9-C8	-2.06	118.39	123.68
25	c	515	BCR	C34-C9-C10	-2.06	120.04	122.92
23	b	607	CLA	C1-O2A-CGA	2.06	121.85	116.44
23	B	608	CLA	CMA-C3A-C2A	-2.06	105.52	113.83
25	a	408	BCR	C8-C7-C6	-2.06	121.42	127.20
23	b	608	CLA	CMA-C3A-C4A	-2.06	106.24	111.77
31	B	630	LMT	O5B-C5B-C6B	2.06	111.56	106.44
34	B	622	HTG	O2-C2-C3	-2.06	105.59	110.35
32	z	101	LMG	C7-O1-C1	-2.06	109.72	113.74
35	C	516[B]	DGD	O1G-C1A-C2A	2.06	118.36	111.91
24	A	407[B]	PHO	CMA-C3A-C4A	-2.06	109.87	114.38
25	c	516	BCR	C16-C17-C18	-2.06	124.38	127.31
23	b	605	CLA	CHB-C4A-NA	2.06	127.35	124.51
23	c	513	CLA	OBD-CAD-C3D	-2.05	123.58	128.52
25	B	619	BCR	C34-C9-C8	2.05	121.31	118.08
25	y	101	BCR	C40-C30-C25	-2.05	106.97	110.30
23	D	403[B]	CLA	CMB-C2B-C3B	2.05	128.52	124.68
23	b	608	CLA	C11-C10-C8	-2.05	109.28	115.92
35	C	516[A]	DGD	C3E-C4E-C5E	2.05	113.90	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	101	LMT	O5B-C5B-C6B	2.05	111.54	106.44
23	a	407	CLA	CHB-C4A-NA	2.05	127.35	124.51
23	A	406[A]	CLA	CMA-C3A-C4A	-2.05	106.26	111.77
34	C	521	HTG	C1-O5-C5	2.05	116.36	112.58
25	c	515	BCR	C35-C13-C14	-2.05	120.05	122.92
23	A	404[A]	CLA	CHB-C4A-NA	2.05	127.34	124.51
32	C	519	LMG	C8-O7-C10	-2.04	112.76	117.79
32	Z	101	LMG	C9-C8-C7	-2.04	106.95	111.79
26	A	410[B]	SQD	O9-S-O7	-2.04	106.88	113.95
33	D	408[A]	LHG	O4-P-O5	2.04	122.34	112.24
23	b	601	CLA	CAA-C2A-C3A	-2.04	107.18	112.78
23	C	513	CLA	O2A-CGA-O1A	-2.04	118.44	123.59
23	b	613	CLA	CHB-C4A-NA	2.04	127.34	124.51
33	A	419[B]	LHG	O4-P-O5	2.04	122.33	112.24
24	A	407[A]	PHO	C4-C3-C5	2.04	118.70	115.27
24	a	406[B]	PHO	C4-C3-C5	2.04	118.70	115.27
25	B	619	BCR	C39-C30-C25	-2.04	106.99	110.30
23	b	614	CLA	CMB-C2B-C3B	2.04	128.50	124.68
25	C	514	BCR	C40-C30-C25	-2.04	106.99	110.30
23	b	613	CLA	C16-C15-C13	-2.04	109.33	115.92
23	c	507	CLA	CAA-CBA-CGA	2.04	119.21	113.25
25	H	101	BCR	C7-C8-C9	-2.04	123.16	126.23
23	b	602	CLA	CHB-C4A-NA	2.04	127.33	124.51
23	b	611	CLA	CMC-C2C-C1C	2.03	128.14	125.04
23	c	506	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
23	B	616	CLA	C4-C3-C2	-2.03	118.46	123.68
23	C	507	CLA	C6-C7-C8	-2.03	109.34	115.92
33	E	101[B]	LHG	C5-O7-C7	-2.03	112.78	117.79
23	B	601	CLA	O1D-CGD-CBD	-2.03	120.32	124.48
23	B	601	CLA	CAA-C2A-C3A	-2.03	107.21	112.78
23	b	616	CLA	C11-C12-C13	-2.03	109.35	115.92
23	A	405[B]	CLA	CED-O2D-CGD	2.03	120.53	115.94
23	C	504	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
25	B	619	BCR	C16-C15-C14	-2.03	119.31	123.47
35	C	518	DGD	O1G-C1A-O1A	-2.03	118.47	123.59
32	C	520	LMG	O1-C1-C2	2.03	111.47	108.30
23	b	615	CLA	CBC-CAC-C3C	-2.03	106.83	112.43
23	b	616	CLA	OBD-CAD-C3D	-2.03	123.63	128.52
23	B	611	CLA	C2C-C1C-NC	2.03	111.87	109.97
23	c	507	CLA	CBC-CAC-C3C	-2.03	106.83	112.43
23	d	402[A]	CLA	CAC-C3C-C2C	2.03	131.00	127.53
26	a	409[A]	SQD	O48-C23-O10	-2.03	118.47	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	b	629[B]	LHG	O7-C7-O9	-2.03	118.80	123.70
25	b	617	BCR	C20-C21-C22	-2.03	124.42	127.31
31	M	101	LMT	C3B-C4B-C5B	-2.03	106.62	110.24
23	b	610	CLA	CHB-C4A-NA	2.03	127.31	124.51
32	c	520	LMG	O8-C28-O10	-2.03	118.48	123.59
29	d	406[A]	PL9	C45-C44-C46	2.03	118.68	115.27
26	B	620	SQD	O5-C1-C2	-2.03	106.06	110.35
23	c	511	CLA	C7-C6-C5	-2.02	107.86	113.36
32	c	521	LMG	C1-C2-C3	-2.02	105.78	110.00
23	B	611	CLA	C1C-C2C-C3C	-2.02	104.83	106.96
23	C	501	CLA	CMB-C2B-C3B	2.02	128.46	124.68
27	B	627	GOL	C3-C2-C1	-2.02	103.84	111.70
24	a	414[A]	PHO	O2A-CGA-CBA	2.02	118.25	111.91
25	B	619	BCR	C15-C14-C13	-2.02	124.43	127.31
25	D	405	BCR	C38-C26-C27	2.02	117.50	113.62
35	c	518[B]	DGD	O2G-C1B-O1B	-2.02	118.82	123.70
23	A	406[A]	CLA	CHB-C4A-NA	2.02	127.30	124.51
23	c	506	CLA	C1-O2A-CGA	2.02	121.74	116.44
23	B	616	CLA	CHA-C1A-NA	-2.02	121.78	126.40
29	d	406[B]	PL9	C40-C39-C38	-2.02	118.50	123.68
25	B	619	BCR	C10-C11-C12	-2.02	116.92	123.22
23	a	404[B]	CLA	CMC-C2C-C1C	2.02	128.11	125.04
23	B	611	CLA	C11-C12-C13	-2.02	109.40	115.92
24	A	416[A]	PHO	CED-O2D-CGD	2.01	120.49	115.94
23	d	403[A]	CLA	CBC-CAC-C3C	-2.01	106.88	112.43
32	Z	101	LMG	C3-C4-C5	2.01	113.83	110.24
23	b	613	CLA	OBD-CAD-C3D	-2.01	123.67	128.52
24	a	406[A]	PHO	O2D-CGD-O1D	-2.01	119.90	123.84
25	b	619	BCR	C7-C8-C9	-2.01	123.19	126.23
37	D	401[A]	BCT	O2-C-O1	2.01	124.76	119.55
35	C	516[B]	DGD	O1G-C1A-O1A	-2.01	118.52	123.59
32	Z	101	LMG	C7-O1-C1	-2.01	109.81	113.74
23	B	601	CLA	CBC-CAC-C3C	-2.01	106.89	112.43
23	D	403[A]	CLA	CBC-CAC-C3C	-2.01	106.89	112.43
37	d	401[A]	BCT	O2-C-O1	2.01	124.76	119.55
34	b	625	HTG	C1-C2-C3	-2.01	106.62	110.59
25	k	101	BCR	C34-C9-C8	2.01	121.24	118.08
29	D	406[A]	PL9	O2-C1-C6	-2.01	117.11	120.59
23	c	511	CLA	CAA-C2A-C3A	-2.01	107.28	112.78
23	a	404[B]	CLA	CHB-C4A-NA	2.01	127.29	124.51
23	b	604	CLA	O1D-CGD-CBD	-2.01	120.38	124.48
23	b	616	CLA	CHA-C1A-NA	-2.01	121.80	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	508	CLA	C1-O2A-CGA	2.01	121.71	116.44
23	b	611	CLA	CBC-CAC-C3C	-2.01	106.90	112.43
23	A	408	CLA	OBD-CAD-C3D	-2.00	123.70	128.52
26	f	102	SQD	C44-O6-C1	-2.00	109.82	113.74
25	C	515	BCR	C2-C1-C6	2.00	113.56	110.48
23	b	611	CLA	CAC-C3C-C4C	2.00	127.41	124.81
31	a	415	LMT	C1'-O5'-C5'	-2.00	109.76	113.69
23	C	509	CLA	C11-C10-C8	-2.00	109.45	115.92

All (70) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	A	404[A]	CLA	ND
23	A	404[B]	CLA	ND
23	A	405[B]	CLA	ND
23	A	408	CLA	ND
23	B	601	CLA	ND
23	B	602	CLA	ND
23	B	603	CLA	ND
23	B	604	CLA	ND
23	B	605	CLA	ND
23	B	606	CLA	ND
23	B	607	CLA	ND
23	B	609	CLA	ND
23	B	610	CLA	ND
23	B	611	CLA	ND
23	B	612	CLA	ND
23	B	613	CLA	ND
23	B	614	CLA	ND
23	B	615	CLA	ND
23	B	616	CLA	ND
23	C	501	CLA	ND
23	C	502	CLA	ND
23	C	503	CLA	ND
23	C	504	CLA	ND
23	C	505	CLA	ND
23	C	506	CLA	ND
23	C	507	CLA	ND
23	C	509	CLA	ND
23	C	510	CLA	ND
23	C	511	CLA	ND
23	C	512	CLA	ND

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Mol	Chain	Res	Type	Atom
23	C	513	CLA	ND
23	D	403[A]	CLA	ND
23	D	403[B]	CLA	ND
23	D	404	CLA	ND
23	a	404[A]	CLA	ND
23	a	404[B]	CLA	ND
23	a	407	CLA	ND
23	b	601	CLA	ND
23	b	602	CLA	ND
23	b	603	CLA	ND
23	b	604	CLA	ND
23	b	605	CLA	ND
23	b	606	CLA	ND
23	b	607	CLA	ND
23	b	609	CLA	ND
23	b	610	CLA	ND
23	b	611	CLA	ND
23	b	612	CLA	ND
23	b	613	CLA	ND
23	b	614	CLA	ND
23	b	615	CLA	ND
23	b	616	CLA	ND
23	c	502	CLA	ND
23	c	503	CLA	ND
23	c	504	CLA	ND
23	c	505	CLA	ND
23	c	506	CLA	ND
23	c	507	CLA	ND
23	c	508	CLA	ND
23	c	509	CLA	ND
23	c	510	CLA	ND
23	c	511	CLA	ND
23	c	512	CLA	ND
23	c	513	CLA	ND
23	c	514	CLA	ND
23	d	402[A]	CLA	ND
23	d	402[B]	CLA	ND
23	d	403[A]	CLA	ND
23	d	403[B]	CLA	ND
23	d	404	CLA	ND

All (1620) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	A	408	CLA	C4-C3-C5-C6
23	B	614	CLA	CHA-CBD-CGD-O1D
23	B	614	CLA	CHA-CBD-CGD-O2D
23	B	614	CLA	CAD-CBD-CGD-O1D
23	B	614	CLA	CAD-CBD-CGD-O2D
23	C	508	CLA	CHA-CBD-CGD-O1D
23	C	508	CLA	CHA-CBD-CGD-O2D
23	b	606	CLA	CHA-CBD-CGD-O1D
23	b	614	CLA	CHA-CBD-CGD-O1D
23	b	614	CLA	CHA-CBD-CGD-O2D
23	b	614	CLA	CAD-CBD-CGD-O1D
23	b	614	CLA	CAD-CBD-CGD-O2D
23	c	509	CLA	CHA-CBD-CGD-O1D
23	c	509	CLA	CHA-CBD-CGD-O2D
23	c	510	CLA	C2-C1-O2A-CGA
23	d	404	CLA	C2-C3-C5-C6
23	d	404	CLA	C4-C3-C5-C6
25	D	405	BCR	C21-C22-C23-C24
25	D	405	BCR	C37-C22-C23-C24
25	D	405	BCR	C23-C24-C25-C30
25	Y	101	BCR	C1-C6-C7-C8
25	Y	101	BCR	C5-C6-C7-C8
25	b	617	BCR	C1-C6-C7-C8
25	d	405	BCR	C21-C22-C23-C24
25	d	405	BCR	C37-C22-C23-C24
25	y	101	BCR	C1-C6-C7-C8
25	y	101	BCR	C5-C6-C7-C8
26	A	410[A]	SQD	O49-C7-O47-C45
26	A	410[B]	SQD	C8-C7-O47-C45
26	A	412	SQD	O6-C44-C45-O47
26	B	620	SQD	O5-C1-O6-C44
26	B	620	SQD	O49-C7-O47-C45
26	F	103	SQD	C2-C1-O6-C44
26	F	103	SQD	O49-C7-O47-C45
26	F	103	SQD	C8-C7-O47-C45
26	a	410	SQD	O6-C44-C45-O47
26	a	410	SQD	C5-C6-S-O7
26	a	410	SQD	C5-C6-S-O8
26	a	410	SQD	C5-C6-S-O9
26	b	620	SQD	O49-C7-O47-C45
26	b	620	SQD	C8-C7-O47-C45
26	f	102	SQD	O6-C44-C45-O47
26	f	102	SQD	O49-C7-O47-C45

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Mol	Chain	Res	Type	Atoms
26	f	102	SQD	C8-C7-O47-C45
27	A	411	GOL	O1-C1-C2-C3
27	B	624	GOL	C1-C2-C3-O3
27	B	629	GOL	O1-C1-C2-C3
27	D	402	GOL	O1-C1-C2-C3
27	D	413	GOL	C1-C2-C3-O3
27	V	203[A]	GOL	C1-C2-C3-O3
27	V	203[B]	GOL	C1-C2-C3-O3
27	b	624	GOL	C1-C2-C3-O3
27	c	527	GOL	C1-C2-C3-O3
27	c	527	GOL	O2-C2-C3-O3
27	o	302	GOL	C1-C2-C3-O3
27	o	303	GOL	C1-C2-C3-O3
29	A	414[A]	PL9	C9-C11-C12-C13
29	A	414[A]	PL9	C15-C14-C16-C17
29	A	414[A]	PL9	C14-C16-C17-C18
29	A	414[B]	PL9	C9-C11-C12-C13
29	A	414[B]	PL9	C15-C14-C16-C17
29	A	414[B]	PL9	C14-C16-C17-C18
29	A	414[B]	PL9	C18-C19-C21-C22
29	A	414[B]	PL9	C20-C19-C21-C22
29	a	412[A]	PL9	C9-C11-C12-C13
29	a	412[A]	PL9	C14-C16-C17-C18
29	a	412[A]	PL9	C25-C24-C26-C27
29	a	412[B]	PL9	C9-C11-C12-C13
29	a	412[B]	PL9	C14-C16-C17-C18
29	a	412[B]	PL9	C25-C24-C26-C27
31	A	417	LMT	C2'-C1'-O1'-C1
31	A	417	LMT	O5'-C1'-O1'-C1
31	A	420	LMT	C2'-C1'-O1'-C1
31	A	420	LMT	O5'-C1'-O1'-C1
31	B	630	LMT	C2'-C1'-O1'-C1
31	B	631	LMT	O5'-C1'-O1'-C1
31	B	631	LMT	C2-C1-O1'-C1'
31	F	101	LMT	C2'-C1'-O1'-C1
31	F	101	LMT	O5'-C1'-O1'-C1
31	M	102	LMT	C2-C1-O1'-C1'
31	b	627	LMT	C2'-C1'-O1'-C1
31	b	627	LMT	O5'-C1'-O1'-C1
31	b	627	LMT	C2-C1-O1'-C1'
31	t	101	LMT	O5'-C1'-O1'-C1
31	t	101	LMT	C2-C1-O1'-C1'

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Mol	Chain	Res	Type	Atoms
32	C	520	LMG	C11-C10-O7-C8
32	c	521	LMG	O9-C10-O7-C8
32	Z	101	LMG	O9-C10-O7-C8
32	Z	101	LMG	C11-C10-O7-C8
32	z	101	LMG	O6-C1-O1-C7
32	z	101	LMG	O9-C10-O7-C8
33	A	419[B]	LHG	O2-C2-C3-O3
33	D	407[A]	LHG	O2-C2-C3-O3
33	D	407[A]	LHG	C3-O3-P-O4
33	D	407[A]	LHG	C3-O3-P-O5
33	D	407[A]	LHG	C3-O3-P-O6
33	D	407[A]	LHG	C4-O6-P-O4
33	D	407[B]	LHG	O2-C2-C3-O3
33	D	407[B]	LHG	C3-O3-P-O4
33	D	407[B]	LHG	C4-O6-P-O4
33	D	407[B]	LHG	C4-O6-P-O5
33	E	101[A]	LHG	C3-O3-P-O4
33	E	101[A]	LHG	C3-O3-P-O5
33	E	101[A]	LHG	O10-C23-O8-C6
33	E	101[A]	LHG	C24-C23-O8-C6
33	E	101[B]	LHG	C3-O3-P-O4
33	E	101[B]	LHG	C3-O3-P-O5
33	E	101[B]	LHG	C3-O3-P-O6
33	E	101[B]	LHG	O10-C23-O8-C6
33	E	101[B]	LHG	C24-C23-O8-C6
33	L	101[A]	LHG	C4-O6-P-O4
33	L	101[A]	LHG	C4-O6-P-O5
33	L	101[B]	LHG	C4-O6-P-O3
33	L	101[B]	LHG	C4-O6-P-O4
33	L	101[B]	LHG	C4-O6-P-O5
33	a	418[A]	LHG	C3-O3-P-O4
33	a	418[A]	LHG	C4-O6-P-O5
33	a	418[A]	LHG	O10-C23-O8-C6
33	a	418[A]	LHG	C24-C23-O8-C6
33	a	418[B]	LHG	C3-O3-P-O4
33	a	418[B]	LHG	C4-O6-P-O5
33	a	418[B]	LHG	O10-C23-O8-C6
33	a	418[B]	LHG	C24-C23-O8-C6
33	b	629[A]	LHG	C4-O6-P-O3
33	b	629[A]	LHG	C4-O6-P-O4
33	b	629[A]	LHG	C4-O6-P-O5
33	b	629[B]	LHG	C4-O6-P-O3

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Mol	Chain	Res	Type	Atoms
33	b	629[B]	LHG	C4-O6-P-O4
33	b	629[B]	LHG	C4-O6-P-O5
33	d	407[A]	LHG	C3-O3-P-O5
33	d	407[A]	LHG	C4-O6-P-O4
33	d	407[B]	LHG	O2-C2-C3-O3
33	d	407[B]	LHG	C3-O3-P-O4
33	d	407[B]	LHG	C3-O3-P-O6
33	d	407[B]	LHG	C4-O6-P-O4
33	d	414[A]	LHG	C3-O3-P-O5
34	B	622	HTG	C2'-C1'-S1-C1
31	A	420	LMT	O5B-C1B-O1B-C4'
31	a	415	LMT	O5B-C5B-C6B-O6B
31	B	630	LMT	C4'-C5'-C6'-O6'
26	A	410[B]	SQD	O49-C7-O47-C45
32	C	520	LMG	O9-C10-O7-C8
23	D	404	CLA	C3-C5-C6-C7
23	c	513	CLA	C3-C5-C6-C7
23	d	404	CLA	C3-C5-C6-C7
31	B	630	LMT	O5B-C5B-C6B-O6B
26	A	410[A]	SQD	C8-C7-O47-C45
26	B	620	SQD	C8-C7-O47-C45
32	c	521	LMG	C11-C10-O7-C8
32	z	101	LMG	C11-C10-O7-C8
31	M	102	LMT	C4B-C5B-C6B-O6B
23	C	504	CLA	C4-C3-C5-C6
23	a	407	CLA	C4-C3-C5-C6
23	A	408	CLA	C2-C3-C5-C6
23	a	407	CLA	C2-C3-C5-C6
29	A	414[A]	PL9	C18-C19-C21-C22
29	a	412[B]	PL9	C23-C24-C26-C27
23	B	606	CLA	C2A-CAA-CBA-CGA
23	b	606	CLA	C2A-CAA-CBA-CGA
23	B	614	CLA	C3-C5-C6-C7
23	b	616	CLA	C3-C5-C6-C7
31	F	101	LMT	O5'-C5'-C6'-O6'
31	M	102	LMT	O5'-C5'-C6'-O6'
31	m	103	LMT	O5B-C5B-C6B-O6B
34	D	411	HTG	O5-C5-C6-O6
31	m	103	LMT	C4B-C5B-C6B-O6B
31	B	628	LMT	C6-C7-C8-C9
34	b	625	HTG	S1-C1'-C2'-C3'
31	B	628	LMT	C4'-C5'-C6'-O6'

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Mol	Chain	Res	Type	Atoms
34	b	625	HTG	O5-C5-C6-O6
23	C	501	CLA	CBD-CGD-O2D-CED
23	C	513	CLA	CBD-CGD-O2D-CED
23	D	404	CLA	CBD-CGD-O2D-CED
23	c	514	CLA	CBD-CGD-O2D-CED
33	E	101[A]	LHG	O2-C2-C3-O3
33	d	407[A]	LHG	O2-C2-C3-O3
23	A	408	CLA	C3-C5-C6-C7
23	B	616	CLA	C3-C5-C6-C7
31	B	628	LMT	O5B-C5B-C6B-O6B
23	C	503	CLA	CBD-CGD-O2D-CED
31	a	415	LMT	C4B-C5B-C6B-O6B
32	C	520	LMG	O6-C5-C6-O5
31	B	630	LMT	C4B-C5B-C6B-O6B
32	c	521	LMG	C4-C5-C6-O5
34	D	411	HTG	C4-C5-C6-O6
34	D	411	HTG	S1-C1'-C2'-C3'
31	A	420	LMT	O5'-C5'-C6'-O6'
31	B	628	LMT	O5'-C5'-C6'-O6'
31	F	101	LMT	C4'-C5'-C6'-O6'
31	A	420	LMT	O5B-C5B-C6B-O6B
31	B	630	LMT	O5'-C5'-C6'-O6'
31	B	631	LMT	O5'-C5'-C6'-O6'
31	b	621	LMT	O5'-C5'-C6'-O6'
23	B	605	CLA	C4-C3-C5-C6
23	C	507	CLA	C4-C3-C5-C6
23	D	404	CLA	C4-C3-C5-C6
23	b	603	CLA	C4-C3-C5-C6
23	b	605	CLA	C4-C3-C5-C6
23	b	614	CLA	C4-C3-C5-C6
23	c	508	CLA	C4-C3-C5-C6
29	A	414[A]	PL9	C20-C19-C21-C22
29	a	412[A]	PL9	C15-C14-C16-C17
29	a	412[A]	PL9	C30-C29-C31-C32
29	a	412[B]	PL9	C15-C14-C16-C17
29	a	412[B]	PL9	C30-C29-C31-C32
23	B	605	CLA	C2-C3-C5-C6
23	C	507	CLA	C2-C3-C5-C6
23	b	603	CLA	C2-C3-C5-C6
23	b	605	CLA	C2-C3-C5-C6
23	b	614	CLA	C2-C3-C5-C6
23	c	508	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
29	A	414[A]	PL9	C13-C14-C16-C17
29	A	414[B]	PL9	C13-C14-C16-C17
29	a	412[A]	PL9	C13-C14-C16-C17
29	a	412[A]	PL9	C28-C29-C31-C32
29	a	412[B]	PL9	C13-C14-C16-C17
29	a	412[B]	PL9	C28-C29-C31-C32
31	M	102	LMT	O5B-C5B-C6B-O6B
34	B	625	HTG	O5-C5-C6-O6
31	M	102	LMT	C4'-C5'-C6'-O6'
31	e	101	LMT	O5'-C1'-O1'-C1
29	A	414[B]	PL9	C44-C46-C47-C48
29	D	406[A]	PL9	C39-C41-C42-C43
29	D	406[B]	PL9	C39-C41-C42-C43
29	d	406[B]	PL9	C39-C41-C42-C43
23	c	510	CLA	C3-C5-C6-C7
31	b	627	LMT	O5'-C5'-C6'-O6'
31	e	101	LMT	C4'-C5'-C6'-O6'
32	c	521	LMG	O6-C5-C6-O5
33	A	419[B]	LHG	C1-C2-C3-O3
33	D	407[B]	LHG	C1-C2-C3-O3
33	d	407[A]	LHG	C1-C2-C3-O3
31	b	627	LMT	C4'-C5'-C6'-O6'
23	a	407	CLA	CBA-CGA-O2A-C1
23	c	510	CLA	CBA-CGA-O2A-C1
35	C	518	DGD	C6B-C7B-C8B-C9B
31	A	420	LMT	C4B-C5B-C6B-O6B
33	D	408[A]	LHG	C33-C34-C35-C36
23	b	606	CLA	C10-C11-C12-C13
26	F	103	SQD	C23-C24-C25-C26
31	B	631	LMT	C2'-C1'-O1'-C1
31	t	101	LMT	C2'-C1'-O1'-C1
31	t	101	LMT	O5'-C5'-C6'-O6'
23	C	504	CLA	C2-C3-C5-C6
29	a	412[A]	PL9	C23-C24-C26-C27
23	B	602	CLA	C6-C7-C8-C9
23	C	502	CLA	C14-C13-C15-C16
23	C	506	CLA	C14-C13-C15-C16
23	b	601	CLA	C11-C10-C8-C9
23	b	604	CLA	C6-C7-C8-C9
23	b	616	CLA	C6-C7-C8-C9
23	c	505	CLA	C11-C12-C13-C14
23	c	510	CLA	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
25	K	102	BCR	C7-C8-C9-C34
25	b	619	BCR	C7-C8-C9-C34
25	t	102	BCR	C37-C22-C23-C24
25	b	619	BCR	C7-C8-C9-C10
26	b	620	SQD	C18-C19-C20-C21
32	B	621	LMG	C39-C40-C41-C42
26	A	410[B]	SQD	C7-C8-C9-C10
23	a	407	CLA	O1A-CGA-O2A-C1
31	e	101	LMT	O5B-C5B-C6B-O6B
31	b	621	LMT	C4'-C5'-C6'-O6'
23	B	601	CLA	C10-C11-C12-C13
23	B	602	CLA	C13-C15-C16-C17
23	B	606	CLA	C10-C11-C12-C13
23	b	601	CLA	C10-C11-C12-C13
23	b	604	CLA	C8-C10-C11-C12
23	b	614	CLA	C8-C10-C11-C12
35	h	102	DGD	C6B-C7B-C8B-C9B
35	C	518	DGD	C2B-C3B-C4B-C5B
23	A	408	CLA	C5-C6-C7-C8
23	B	601	CLA	C5-C6-C7-C8
23	C	508	CLA	C10-C11-C12-C13
23	c	513	CLA	C15-C16-C17-C18
27	V	203[A]	GOL	O2-C2-C3-O3
27	b	624	GOL	O2-C2-C3-O3
35	c	518[B]	DGD	C1B-C2B-C3B-C4B
31	a	415	LMT	O1'-C1-C2-C3
31	B	628	LMT	C5'-C4'-O1B-C1B
33	D	408[B]	LHG	C33-C34-C35-C36
31	A	420	LMT	C4'-C5'-C6'-O6'
31	A	420	LMT	O1'-C1-C2-C3
23	C	507	CLA	C5-C6-C7-C8
32	Z	101	LMG	C10-C11-C12-C13
33	E	101[A]	LHG	C23-C24-C25-C26
35	c	518[A]	DGD	C1B-C2B-C3B-C4B
23	c	513	CLA	CBD-CGD-O2D-CED
31	A	417	LMT	O5B-C5B-C6B-O6B
23	a	404[B]	CLA	C15-C16-C17-C18
23	C	510	CLA	C11-C12-C13-C15
23	D	404	CLA	C11-C10-C8-C7
25	T	101	BCR	C13-C14-C15-C16
23	B	603	CLA	C13-C15-C16-C17
23	B	614	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
23	D	404	CLA	C10-C11-C12-C13
23	b	605	CLA	C8-C10-C11-C12
34	b	623	HTG	C1'-C2'-C3'-C4'
23	c	512	CLA	CBD-CGD-O2D-CED
31	B	630	LMT	O5'-C1'-O1'-C1
31	b	621	LMT	O5'-C1'-O1'-C1
23	b	604	CLA	C5-C6-C7-C8
23	b	604	CLA	C15-C16-C17-C18
29	A	414[A]	PL9	C44-C46-C47-C48
29	d	406[A]	PL9	C39-C41-C42-C43
34	B	625	HTG	S1-C1'-C2'-C3'
23	C	512	CLA	C10-C11-C12-C13
23	b	611	CLA	C15-C16-C17-C18
31	A	420	LMT	C5'-C4'-O1B-C1B
23	c	510	CLA	O1A-CGA-O2A-C1
31	B	628	LMT	C4B-C5B-C6B-O6B
31	B	631	LMT	C4'-C5'-C6'-O6'
23	B	614	CLA	C10-C11-C12-C13
23	b	606	CLA	C13-C15-C16-C17
23	b	611	CLA	C8-C10-C11-C12
23	c	514	CLA	C10-C11-C12-C13
23	a	404[A]	CLA	C15-C16-C17-C18
23	b	606	CLA	C15-C16-C17-C18
33	D	407[B]	LHG	C3-O3-P-O6
33	D	407[B]	LHG	C4-O6-P-O3
33	E	101[A]	LHG	C3-O3-P-O6
33	E	101[A]	LHG	C4-O6-P-O3
33	E	101[B]	LHG	C4-O6-P-O3
33	L	101[A]	LHG	C4-O6-P-O3
33	a	418[A]	LHG	C3-O3-P-O6
33	a	418[A]	LHG	C4-O6-P-O3
33	a	418[B]	LHG	C3-O3-P-O6
33	a	418[B]	LHG	C4-O6-P-O3
33	d	407[A]	LHG	C3-O3-P-O6
26	B	620	SQD	C7-C8-C9-C10
31	A	417	LMT	O1'-C1-C2-C3
34	B	622	HTG	C1'-C2'-C3'-C4'
34	b	625	HTG	C4-C5-C6-O6
35	c	517[B]	DGD	O6D-C5D-C6D-O5D
34	b	622	HTG	S1-C1'-C2'-C3'
34	d	411	HTG	S1-C1'-C2'-C3'
26	A	410[A]	SQD	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
33	D	407[A]	LHG	C1-C2-C3-O3
33	d	407[B]	LHG	C1-C2-C3-O3
32	B	621	LMG	O9-C10-O7-C8
23	B	610	CLA	C2A-CAA-CBA-CGA
23	b	610	CLA	C2A-CAA-CBA-CGA
23	b	615	CLA	C16-C17-C18-C19
23	c	510	CLA	C16-C17-C18-C20
35	C	516[B]	DGD	O6D-C5D-C6D-O5D
26	A	410[A]	SQD	C15-C16-C17-C18
26	A	410[B]	SQD	C15-C16-C17-C18
32	D	412	LMG	C19-C20-C21-C22
33	D	407[B]	LHG	C16-C17-C18-C19
33	L	101[A]	LHG	C12-C13-C14-C15
33	L	101[B]	LHG	C12-C13-C14-C15
33	L	101[B]	LHG	C15-C16-C17-C18
35	c	518[B]	DGD	C9A-CAA-CBA-CCA
32	B	621	LMG	C11-C10-O7-C8
23	C	502	CLA	C15-C16-C17-C18
26	F	103	SQD	C30-C31-C32-C33
26	f	102	SQD	C32-C33-C34-C35
31	b	627	LMT	C7-C8-C9-C10
33	L	101[A]	LHG	C17-C18-C19-C20
33	b	629[B]	LHG	C14-C15-C16-C17
33	d	414[A]	LHG	C16-C17-C18-C19
35	c	518[A]	DGD	CAA-CBA-CCA-CDA
23	B	615	CLA	C16-C17-C18-C19
23	a	407	CLA	C16-C17-C18-C19
23	b	606	CLA	C16-C17-C18-C20
23	b	614	CLA	C16-C17-C18-C20
23	c	509	CLA	C16-C17-C18-C19
23	d	404	CLA	C16-C17-C18-C20
31	t	101	LMT	C4-C5-C6-C7
32	C	520	LMG	C18-C19-C20-C21
32	m	101	LMG	C35-C36-C37-C38
35	c	518[A]	DGD	C9A-CAA-CBA-CCA
35	h	102	DGD	C9A-CAA-CBA-CCA
31	e	101	LMT	O5'-C5'-C6'-O6'
33	d	414[B]	LHG	C16-C17-C18-C19
35	C	517[A]	DGD	CCB-CDB-CEB-CFB
34	B	623	HTG	C3'-C4'-C5'-C6'
35	c	517[A]	DGD	C2B-C3B-C4B-C5B
35	c	517[B]	DGD	C2B-C3B-C4B-C5B

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Mol	Chain	Res	Type	Atoms
35	c	518[B]	DGD	CAA-CBA-CCA-CDA
35	c	518[B]	DGD	CBA-CCA-CDA-CEA
23	c	507	CLA	C15-C16-C17-C18
33	E	101[B]	LHG	O2-C2-C3-O3
31	A	420	LMT	C3-C4-C5-C6
32	D	412	LMG	C35-C36-C37-C38
33	D	408[B]	LHG	C32-C33-C34-C35
35	C	516[A]	DGD	C4B-C5B-C6B-C7B
23	C	511	CLA	C3-C5-C6-C7
32	c	520	LMG	C10-C11-C12-C13
31	b	621	LMT	C2'-C1'-O1'-C1
31	e	101	LMT	C2'-C1'-O1'-C1
35	C	517[A]	DGD	C2E-C1E-O5D-C6D
35	C	517[B]	DGD	C2E-C1E-O5D-C6D
26	F	103	SQD	C24-C25-C26-C27
32	c	501	LMG	C30-C31-C32-C33
33	L	101[B]	LHG	C13-C14-C15-C16
33	a	418[B]	LHG	C26-C27-C28-C29
35	C	516[A]	DGD	C5B-C6B-C7B-C8B
35	C	516[B]	DGD	C5B-C6B-C7B-C8B
35	c	517[A]	DGD	C9A-CAA-CBA-CCA
23	B	603	CLA	C16-C17-C18-C20
23	b	602	CLA	C16-C17-C18-C19
24	a	406[B]	PHO	C4-C3-C5-C6
29	A	414[A]	PL9	C45-C44-C46-C47
33	D	407[A]	LHG	C16-C17-C18-C19
33	a	418[A]	LHG	C26-C27-C28-C29
33	b	629[A]	LHG	C14-C15-C16-C17
35	C	517[B]	DGD	CCB-CDB-CEB-CFB
29	d	406[A]	PL9	C13-C14-C16-C17
23	B	613	CLA	C11-C12-C13-C14
23	a	405[A]	CLA	C11-C12-C13-C14
23	a	405[B]	CLA	C11-C12-C13-C14
23	b	610	CLA	C11-C12-C13-C14
23	c	505	CLA	C14-C13-C15-C16
32	A	418	LMG	C10-C11-C12-C13
33	E	101[B]	LHG	C23-C24-C25-C26
26	A	412	SQD	C17-C18-C19-C20
32	A	418	LMG	C12-C13-C14-C15
32	B	621	LMG	C17-C18-C19-C20
33	D	408[A]	LHG	C32-C33-C34-C35
33	L	101[A]	LHG	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
35	c	517[B]	DGD	C9A-CAA-CBA-CCA
23	c	508	CLA	C2A-CAA-CBA-CGA
31	B	630	LMT	C2-C3-C4-C5
32	c	501	LMG	C34-C35-C36-C37
33	d	407[B]	LHG	C34-C35-C36-C37
33	d	414[A]	LHG	C32-C33-C34-C35
35	c	518[A]	DGD	CBA-CCA-CDA-CEA
27	B	624	GOL	O1-C1-C2-C3
27	B	629	GOL	C1-C2-C3-O3
27	D	413	GOL	O1-C1-C2-C3
27	O	302	GOL	O1-C1-C2-C3
27	O	303	GOL	O1-C1-C2-C3
27	a	416	GOL	O1-C1-C2-C3
27	d	413	GOL	O1-C1-C2-C3
27	v	202[B]	GOL	O1-C1-C2-C3
31	A	420	LMT	C1-C2-C3-C4
32	Z	101	LMG	O6-C5-C6-O5
23	C	502	CLA	C13-C15-C16-C17
32	A	418	LMG	C17-C18-C19-C20
33	L	101[A]	LHG	C25-C26-C27-C28
33	d	408[B]	LHG	C27-C28-C29-C30
32	c	501	LMG	C10-C11-C12-C13
31	B	631	LMT	C3-C4-C5-C6
31	e	101	LMT	C4-C5-C6-C7
32	C	520	LMG	C13-C14-C15-C16
32	C	520	LMG	C17-C18-C19-C20
33	A	419[A]	LHG	C34-C35-C36-C37
33	A	419[B]	LHG	C34-C35-C36-C37
33	L	101[B]	LHG	C17-C18-C19-C20
33	d	407[A]	LHG	C11-C10-C9-C8
35	H	102	DGD	C5B-C6B-C7B-C8B
35	h	102	DGD	C7B-C8B-C9B-CAB
23	B	603	CLA	C16-C17-C18-C19
23	B	615	CLA	C16-C17-C18-C20
23	a	407	CLA	C16-C17-C18-C20
23	c	510	CLA	C16-C17-C18-C19
26	F	103	SQD	O5-C1-O6-C44
26	A	410[A]	SQD	C12-C13-C14-C15
31	e	101	LMT	C5-C6-C7-C8
32	c	520	LMG	C34-C35-C36-C37
33	L	101[A]	LHG	C13-C14-C15-C16
33	L	101[B]	LHG	C25-C26-C27-C28

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Mol	Chain	Res	Type	Atoms
33	d	407[A]	LHG	C34-C35-C36-C37
35	C	516[B]	DGD	C4B-C5B-C6B-C7B
26	B	620	SQD	C11-C10-C9-C8
26	B	620	SQD	C30-C31-C32-C33
32	m	101	LMG	C39-C40-C41-C42
33	d	408[A]	LHG	C27-C28-C29-C30
34	b	622	HTG	C2'-C3'-C4'-C5'
35	c	519	DGD	CBB-CCB-CDB-CEB
26	a	410	SQD	C31-C32-C33-C34
35	H	102	DGD	CCB-CDB-CEB-CFB
23	C	513	CLA	O1D-CGD-O2D-CED
23	A	404[B]	CLA	C13-C15-C16-C17
35	C	516[B]	DGD	C4D-C5D-C6D-O5D
31	A	420	LMT	C2-C1-O1'-C1'
31	B	628	LMT	C2-C1-O1'-C1'
31	F	101	LMT	C2-C1-O1'-C1'
31	m	103	LMT	C2-C1-O1'-C1'
26	F	103	SQD	C29-C30-C31-C32
26	a	410	SQD	C16-C17-C18-C19
26	b	620	SQD	C27-C28-C29-C30
23	b	602	CLA	C16-C17-C18-C20
23	b	614	CLA	C16-C17-C18-C19
23	d	404	CLA	C16-C17-C18-C19
32	c	520	LMG	C33-C34-C35-C36
33	A	419[A]	LHG	C12-C13-C14-C15
33	b	629[A]	LHG	C16-C17-C18-C19
33	A	419[B]	LHG	C12-C13-C14-C15
33	E	101[A]	LHG	C24-C25-C26-C27
35	H	102	DGD	C9B-CAB-CBB-CCB
35	c	517[A]	DGD	O6D-C5D-C6D-O5D
31	B	631	LMT	C4-C5-C6-C7
32	B	621	LMG	C34-C35-C36-C37
23	A	406[B]	CLA	C13-C15-C16-C17
23	b	614	CLA	C10-C11-C12-C13
29	D	406[B]	PL9	C15-C14-C16-C17
29	d	406[A]	PL9	C15-C14-C16-C17
29	d	406[B]	PL9	C15-C14-C16-C17
35	c	517[A]	DGD	C2A-C1A-O1G-C1G
35	c	517[B]	DGD	C2A-C1A-O1G-C1G
23	D	404	CLA	C2-C3-C5-C6
23	c	506	CLA	C2-C3-C5-C6
24	a	406[B]	PHO	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
29	A	414[A]	PL9	C12-C11-C9-C8
29	A	414[A]	PL9	C43-C44-C46-C47
29	D	406[A]	PL9	C13-C14-C16-C17
29	d	406[B]	PL9	C13-C14-C16-C17
23	c	514	CLA	O1D-CGD-O2D-CED
26	B	620	SQD	C34-C35-C36-C37
27	A	411	GOL	O1-C1-C2-O2
27	B	624	GOL	O2-C2-C3-O3
27	B	629	GOL	O1-C1-C2-O2
27	B	629	GOL	O2-C2-C3-O3
27	D	402	GOL	O1-C1-C2-O2
27	O	302	GOL	O1-C1-C2-O2
27	V	203[B]	GOL	O2-C2-C3-O3
27	o	303	GOL	O2-C2-C3-O3
27	v	202[B]	GOL	O1-C1-C2-O2
31	B	630	LMT	C5-C6-C7-C8
32	D	412	LMG	C30-C31-C32-C33
32	c	520	LMG	C31-C32-C33-C34
33	d	414[B]	LHG	C32-C33-C34-C35
35	c	518[A]	DGD	CBB-CCB-CDB-CEB
32	A	418	LMG	C19-C20-C21-C22
32	D	412	LMG	C12-C13-C14-C15
33	D	408[A]	LHG	C15-C16-C17-C18
35	c	517[A]	DGD	C5A-C6A-C7A-C8A
35	c	517[B]	DGD	C4D-C5D-C6D-O5D
35	H	102	DGD	C7A-C8A-C9A-CAA
31	b	627	LMT	C5-C6-C7-C8
32	C	520	LMG	C19-C20-C21-C22
33	D	407[B]	LHG	C12-C13-C14-C15
35	c	517[A]	DGD	CAA-CBA-CCA-CDA
23	B	616	CLA	C2-C1-O2A-CGA
23	b	601	CLA	C2-C1-O2A-CGA
32	C	519	LMG	C16-C17-C18-C19
33	D	408[B]	LHG	C29-C30-C31-C32
33	d	414[A]	LHG	C29-C30-C31-C32
31	a	415	LMT	C1-C2-C3-C4
31	B	628	LMT	C5-C6-C7-C8
35	c	517[A]	DGD	C7A-C8A-C9A-CAA
35	c	518[B]	DGD	C2B-C3B-C4B-C5B
35	c	518[B]	DGD	CBB-CCB-CDB-CEB
25	D	405	BCR	C23-C24-C25-C26
25	b	617	BCR	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
25	t	102	BCR	C23-C24-C25-C26
33	E	101[B]	LHG	C24-C25-C26-C27
33	D	408[B]	LHG	C24-C23-O8-C6
26	A	410[B]	SQD	C12-C13-C14-C15
31	M	102	LMT	C7-C8-C9-C10
35	c	518[A]	DGD	C6A-C7A-C8A-C9A
31	b	621	LMT	C3'-C4'-O1B-C1B
33	b	629[B]	LHG	C16-C17-C18-C19
29	A	414[A]	PL9	C30-C29-C31-C32
29	D	406[A]	PL9	C15-C14-C16-C17
23	C	503	CLA	O1D-CGD-O2D-CED
23	D	404	CLA	O1D-CGD-O2D-CED
23	A	408	CLA	C12-C13-C15-C16
23	B	606	CLA	C11-C10-C8-C7
23	C	510	CLA	C2-C3-C5-C6
23	a	405[A]	CLA	C11-C12-C13-C15
23	a	405[B]	CLA	C11-C12-C13-C15
23	b	606	CLA	C11-C10-C8-C7
23	b	606	CLA	C12-C13-C15-C16
23	c	505	CLA	C12-C13-C15-C16
23	c	511	CLA	C12-C13-C15-C16
29	A	414[B]	PL9	C12-C11-C9-C8
35	c	517[B]	DGD	O1A-C1A-O1G-C1G
31	M	101	LMT	O1'-C1-C2-C3
23	c	509	CLA	C16-C17-C18-C20
23	C	501	CLA	O1D-CGD-O2D-CED
26	b	620	SQD	C24-C23-O48-C46
33	D	408[A]	LHG	C29-C30-C31-C32
35	c	517[B]	DGD	C5A-C6A-C7A-C8A
23	C	510	CLA	C10-C11-C12-C13
33	D	407[A]	LHG	C13-C14-C15-C16
32	A	418	LMG	C36-C37-C38-C39
26	F	103	SQD	C7-C8-C9-C10
23	B	615	CLA	C10-C11-C12-C13
26	a	410	SQD	C25-C26-C27-C28
31	B	631	LMT	O1'-C1-C2-C3
33	D	408[B]	LHG	C15-C16-C17-C18
35	c	517[B]	DGD	CAA-CBA-CCA-CDA
32	A	418	LMG	C29-C30-C31-C32
35	C	516[A]	DGD	C8A-C9A-CAA-CBA
35	h	102	DGD	CAA-CBA-CCA-CDA
33	D	408[B]	LHG	O10-C23-O8-C6

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Mol	Chain	Res	Type	Atoms
35	c	517[A]	DGD	O1A-C1A-O1G-C1G
35	C	517[A]	DGD	O6E-C1E-O5D-C6D
35	C	517[B]	DGD	O6E-C1E-O5D-C6D
23	C	506	CLA	C5-C6-C7-C8
26	a	409[A]	SQD	C9-C10-C11-C12
26	b	620	SQD	C26-C27-C28-C29
32	c	501	LMG	C35-C36-C37-C38
33	b	629[B]	LHG	C27-C28-C29-C30
33	d	414[B]	LHG	C25-C26-C27-C28
32	m	101	LMG	C11-C10-O7-C8
26	A	412	SQD	C26-C27-C28-C29
31	b	621	LMT	C3-C4-C5-C6
32	c	501	LMG	C29-C30-C31-C32
33	d	414[B]	LHG	C29-C30-C31-C32
35	C	516[B]	DGD	C9A-CAA-CBA-CCA
31	B	628	LMT	C1-C2-C3-C4
23	C	509	CLA	CBD-CGD-O2D-CED
32	m	101	LMG	O9-C10-O7-C8
26	f	102	SQD	C25-C26-C27-C28
32	D	412	LMG	C36-C37-C38-C39
26	A	412	SQD	C2-C1-O6-C44
26	A	410[A]	SQD	O6-C44-C45-O47
26	A	410[B]	SQD	O6-C44-C45-O47
26	b	620	SQD	C14-C15-C16-C17
35	C	516[A]	DGD	C9A-CAA-CBA-CCA
35	c	518[A]	DGD	C2B-C3B-C4B-C5B
34	b	623	HTG	O5-C5-C6-O6
23	c	508	CLA	C5-C6-C7-C8
23	C	510	CLA	C4-C3-C5-C6
29	A	414[B]	PL9	C45-C44-C46-C47
23	B	606	CLA	C11-C10-C8-C9
23	C	513	CLA	C6-C7-C8-C9
23	D	404	CLA	C11-C10-C8-C9
23	D	404	CLA	C14-C13-C15-C16
23	c	506	CLA	C11-C12-C13-C14
31	M	101	LMT	O5'-C5'-C6'-O6'
35	C	516[A]	DGD	O6E-C5E-C6E-O5E
31	B	628	LMT	C3'-C4'-O1B-C1B
31	M	101	LMT	C3-C4-C5-C6
32	C	519	LMG	C17-C18-C19-C20
33	b	629[A]	LHG	C13-C14-C15-C16
35	C	517[B]	DGD	C5B-C6B-C7B-C8B

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Mol	Chain	Res	Type	Atoms
32	A	418	LMG	C39-C40-C41-C42
32	C	519	LMG	C37-C38-C39-C40
23	B	614	CLA	C5-C6-C7-C8
25	t	102	BCR	C21-C22-C23-C24
23	A	405[A]	CLA	C1A-C2A-CAA-CBA
31	A	420	LMT	C3'-C4'-O1B-C1B
31	A	420	LMT	C5-C6-C7-C8
31	B	630	LMT	C6-C7-C8-C9
33	D	408[A]	LHG	C17-C18-C19-C20
23	A	406[A]	CLA	C13-C15-C16-C17
23	B	608	CLA	C13-C15-C16-C17
23	b	601	CLA	C8-C10-C11-C12
23	b	610	CLA	C15-C16-C17-C18
33	d	407[B]	LHG	C4-O6-P-O3
34	b	622	HTG	C3'-C4'-C5'-C6'
35	C	516[B]	DGD	C8A-C9A-CAA-CBA
33	D	408[B]	LHG	C17-C18-C19-C20
23	c	513	CLA	C10-C11-C12-C13
23	C	512	CLA	CBA-CGA-O2A-C1
31	t	101	LMT	O1'-C1-C2-C3
32	d	412	LMG	C29-C30-C31-C32
23	A	404[A]	CLA	C13-C15-C16-C17
23	b	615	CLA	C16-C17-C18-C20
23	d	403[A]	CLA	C16-C17-C18-C20
33	d	408[A]	LHG	C25-C26-C27-C28
31	e	101	LMT	C1-C2-C3-C4
31	b	621	LMT	C11-C10-C9-C8
35	c	518[B]	DGD	C6A-C7A-C8A-C9A
32	A	418	LMG	C11-C12-C13-C14
23	c	506	CLA	C4-C3-C5-C6
29	A	414[B]	PL9	C30-C29-C31-C32
31	b	627	LMT	C3-C4-C5-C6
33	d	408[B]	LHG	C9-C10-C11-C12
26	a	409[B]	SQD	C12-C13-C14-C15
26	b	620	SQD	C11-C10-C9-C8
32	A	418	LMG	C13-C14-C15-C16
33	d	414[B]	LHG	C24-C25-C26-C27
35	c	518[A]	DGD	C4A-C5A-C6A-C7A
23	d	403[B]	CLA	C16-C17-C18-C20
32	d	412	LMG	O6-C5-C6-O5
35	C	516[B]	DGD	O6E-C5E-C6E-O5E
26	A	410[A]	SQD	O6-C44-C45-C46

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Mol	Chain	Res	Type	Atoms
26	A	410[B]	SQD	O6-C44-C45-C46
26	A	412	SQD	O6-C44-C45-C46
26	B	620	SQD	C44-C45-C46-O48
26	a	409[A]	SQD	O6-C44-C45-C46
26	b	620	SQD	C44-C45-C46-O48
26	f	102	SQD	O6-C44-C45-C46
26	f	102	SQD	C44-C45-C46-O48
31	B	631	LMT	C11-C10-C9-C8
33	E	101[B]	LHG	C4-C5-C6-O8
33	d	408[B]	LHG	C25-C26-C27-C28
23	B	613	CLA	C13-C15-C16-C17
31	a	415	LMT	C3-C4-C5-C6
33	D	407[B]	LHG	C10-C11-C12-C13
33	E	101[A]	LHG	C25-C26-C27-C28
31	t	101	LMT	C4'-C5'-C6'-O6'
35	C	517[A]	DGD	C2G-C3G-O3G-C1D
35	C	517[A]	DGD	C5D-C6D-O5D-C1E
35	C	517[B]	DGD	C5D-C6D-O5D-C1E
35	c	518[A]	DGD	C2G-C3G-O3G-C1D
35	c	518[A]	DGD	C5D-C6D-O5D-C1E
35	c	518[B]	DGD	C5D-C6D-O5D-C1E
26	F	103	SQD	C34-C35-C36-C37
35	C	517[A]	DGD	CDA-CEA-CFA-CGA
26	b	620	SQD	C13-C14-C15-C16
35	h	102	DGD	C2B-C3B-C4B-C5B
35	c	517[A]	DGD	C4D-C5D-C6D-O5D
31	a	415	LMT	C9-C10-C11-C12
34	B	622	HTG	C2'-C3'-C4'-C5'
35	C	516[A]	DGD	C3B-C4B-C5B-C6B
23	C	506	CLA	C15-C16-C17-C18
27	D	413	GOL	O2-C2-C3-O3
27	O	303	GOL	O1-C1-C2-O2
27	o	302	GOL	O2-C2-C3-O3
32	m	101	LMG	C38-C39-C40-C41
35	C	517[B]	DGD	CDA-CEA-CFA-CGA
26	b	620	SQD	O10-C23-O48-C46
35	c	518[B]	DGD	C4A-C5A-C6A-C7A
23	A	405[A]	CLA	C15-C16-C17-C18
32	D	412	LMG	O6-C5-C6-O5
35	c	517[A]	DGD	O6E-C5E-C6E-O5E
23	C	505	CLA	C4-C3-C5-C6
29	a	412[A]	PL9	C12-C11-C9-C10

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Mol	Chain	Res	Type	Atoms
29	a	412[B]	PL9	C12-C11-C9-C10
33	b	629[B]	LHG	C12-C13-C14-C15
23	B	608	CLA	C16-C17-C18-C20
23	B	610	CLA	C16-C17-C18-C19
23	c	513	CLA	CBA-CGA-O2A-C1
23	d	404	CLA	CBA-CGA-O2A-C1
23	B	615	CLA	C5-C6-C7-C8
23	d	402[A]	CLA	C2C-C3C-CAC-CBC
23	d	402[B]	CLA	C2C-C3C-CAC-CBC
33	d	414[A]	LHG	C33-C34-C35-C36
34	c	522	HTG	C4'-C5'-C6'-C7'
35	h	102	DGD	CDB-CEB-CFB-CGB
26	b	620	SQD	C46-C45-O47-C7
35	c	517[B]	DGD	O6E-C5E-C6E-O5E
23	B	601	CLA	C13-C15-C16-C17
23	A	408	CLA	C2-C1-O2A-CGA
23	b	614	CLA	C2-C1-O2A-CGA
31	A	420	LMT	C4-C5-C6-C7
33	d	408[A]	LHG	C34-C35-C36-C37
26	a	409[A]	SQD	C12-C13-C14-C15
32	C	519	LMG	C31-C32-C33-C34
32	Z	101	LMG	C11-C12-C13-C14
33	D	407[A]	LHG	C12-C13-C14-C15
23	B	612	CLA	C10-C11-C12-C13
32	B	621	LMG	C29-C30-C31-C32
32	d	412	LMG	C16-C17-C18-C19
33	L	101[B]	LHG	C27-C28-C29-C30
33	d	414[B]	LHG	C33-C34-C35-C36
23	b	601	CLA	CBA-CGA-O2A-C1
23	B	610	CLA	C16-C17-C18-C20
33	D	408[B]	LHG	C13-C14-C15-C16
33	d	408[B]	LHG	C28-C29-C30-C31
23	C	512	CLA	O1A-CGA-O2A-C1
23	d	404	CLA	O1A-CGA-O2A-C1
35	c	519	DGD	CBA-CCA-CDA-CEA
32	d	412	LMG	C10-C11-C12-C13
31	t	101	LMT	C7-C8-C9-C10
35	C	516[A]	DGD	O6D-C5D-C6D-O5D
23	d	403[A]	CLA	C16-C17-C18-C19
32	B	621	LMG	C15-C16-C17-C18
33	d	408[A]	LHG	C29-C30-C31-C32
35	C	517[B]	DGD	C8B-C9B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
23	A	406[A]	CLA	C12-C13-C15-C16
23	A	406[B]	CLA	C12-C13-C15-C16
23	B	602	CLA	C11-C12-C13-C15
23	B	614	CLA	C11-C10-C8-C7
23	C	513	CLA	C11-C10-C8-C7
23	D	404	CLA	C12-C13-C15-C16
23	b	601	CLA	C11-C10-C8-C7
23	b	614	CLA	C12-C13-C15-C16
23	b	616	CLA	C6-C7-C8-C10
23	c	505	CLA	C11-C12-C13-C15
23	c	506	CLA	C11-C12-C13-C15
23	c	513	CLA	C12-C13-C15-C16
29	D	406[B]	PL9	C13-C14-C16-C17
23	B	602	CLA	C11-C12-C13-C14
23	C	504	CLA	C14-C13-C15-C16
23	C	505	CLA	C11-C12-C13-C14
23	C	510	CLA	C14-C13-C15-C16
23	C	513	CLA	C11-C10-C8-C9
23	b	601	CLA	C6-C7-C8-C9
23	b	606	CLA	C11-C10-C8-C9
23	c	514	CLA	C6-C7-C8-C9
32	z	101	LMG	C14-C15-C16-C17
33	E	101[B]	LHG	C25-C26-C27-C28
33	d	408[A]	LHG	C28-C29-C30-C31
35	C	516[B]	DGD	C7A-C8A-C9A-CAA
26	F	103	SQD	C24-C23-O48-C46
32	m	101	LMG	C37-C38-C39-C40
35	h	102	DGD	C6A-C7A-C8A-C9A
32	C	520	LMG	C35-C36-C37-C38
33	d	408[B]	LHG	C29-C30-C31-C32
35	h	102	DGD	CDA-CEA-CFA-CGA
31	a	415	LMT	C2-C3-C4-C5
33	b	629[A]	LHG	C27-C28-C29-C30
34	B	625	HTG	C4'-C5'-C6'-C7'
31	e	101	LMT	C9-C10-C11-C12
32	B	621	LMG	O6-C5-C6-O5
35	C	517[A]	DGD	C5B-C6B-C7B-C8B
33	E	101[A]	LHG	O6-C4-C5-C6
33	L	101[B]	LHG	O6-C4-C5-C6
33	b	629[A]	LHG	O6-C4-C5-C6
33	D	407[A]	LHG	C10-C11-C12-C13
33	D	408[A]	LHG	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
33	d	408[A]	LHG	C9-C10-C11-C12
23	b	602	CLA	C10-C11-C12-C13
29	d	406[A]	PL9	C45-C44-C46-C47
23	C	505	CLA	C2-C3-C5-C6
32	d	412	LMG	C28-C29-C30-C31
23	A	405[B]	CLA	C15-C16-C17-C18
26	A	412	SQD	C27-C28-C29-C30
26	a	409[B]	SQD	C9-C10-C11-C12
33	A	419[A]	LHG	C26-C27-C28-C29
33	d	407[A]	LHG	C13-C14-C15-C16
23	d	403[B]	CLA	C16-C17-C18-C19
32	C	519	LMG	C36-C37-C38-C39
35	C	518	DGD	CDB-CEB-CFB-CGB
23	B	601	CLA	CBA-CGA-O2A-C1
35	C	516[A]	DGD	C7A-C8A-C9A-CAA
23	c	513	CLA	O1D-CGD-O2D-CED
35	c	519	DGD	C2B-C3B-C4B-C5B
31	e	101	LMT	C2-C1-O1'-C1'
26	A	412	SQD	C7-C8-C9-C10
23	C	510	CLA	CBA-CGA-O2A-C1
32	c	521	LMG	C29-C28-O8-C9
35	c	518[A]	DGD	CDA-CEA-CFA-CGA
26	a	409[B]	SQD	O6-C44-C45-C46
33	a	418[A]	LHG	C4-C5-C6-O8
33	a	418[B]	LHG	C4-C5-C6-O8
33	L	101[A]	LHG	C24-C25-C26-C27
33	a	418[A]	LHG	C10-C11-C12-C13
33	b	629[A]	LHG	C12-C13-C14-C15
24	a	406[A]	PHO	O2A-C1-C2-C3
23	B	615	CLA	C13-C15-C16-C17
26	a	410	SQD	C18-C19-C20-C21
35	c	518[A]	DGD	C5A-C6A-C7A-C8A
23	c	514	CLA	C4-C3-C5-C6
24	a	406[A]	PHO	C4-C3-C5-C6
23	B	608	CLA	C16-C17-C18-C19
29	D	406[A]	PL9	C43-C44-C46-C47
33	L	101[A]	LHG	C11-C12-C13-C14
31	F	101	LMT	C4-C5-C6-C7
33	a	418[A]	LHG	C7-C8-C9-C10
23	b	601	CLA	O1A-CGA-O2A-C1
31	m	103	LMT	O5'-C5'-C6'-O6'
27	c	527	GOL	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
33	E	101[A]	LHG	O6-C4-C5-O7
33	E	101[B]	LHG	O6-C4-C5-O7
33	d	407[B]	LHG	C24-C23-O8-C6
35	c	517[B]	DGD	C7A-C8A-C9A-CAA
32	C	520	LMG	C10-C11-C12-C13
35	c	518[B]	DGD	C1A-C2A-C3A-C4A
23	A	406[A]	CLA	C16-C17-C18-C20
23	b	606	CLA	C16-C17-C18-C19
32	C	519	LMG	C34-C35-C36-C37
33	b	629[A]	LHG	C31-C32-C33-C34
31	F	101	LMT	C2-C3-C4-C5
26	a	409[A]	SQD	C34-C35-C36-C37
26	a	409[A]	SQD	O6-C44-C45-O47
26	a	409[B]	SQD	O6-C44-C45-O47
26	b	620	SQD	O47-C45-C46-O48
26	f	102	SQD	O47-C45-C46-O48
35	C	517[A]	DGD	C8B-C9B-CAB-CBB
35	C	518	DGD	CAB-CBB-CCB-CDB
33	E	101[A]	LHG	C17-C18-C19-C20
31	a	415	LMT	O5'-C1'-O1'-C1
23	d	402[B]	CLA	C15-C16-C17-C18
29	a	412[A]	PL9	C24-C26-C27-C28
33	D	408[A]	LHG	C10-C11-C12-C13
33	d	407[B]	LHG	C13-C14-C15-C16
23	b	608	CLA	C2-C1-O2A-CGA
23	b	613	CLA	C2-C1-O2A-CGA
23	c	514	CLA	C2-C1-O2A-CGA
26	b	620	SQD	C31-C32-C33-C34
23	B	601	CLA	C15-C16-C17-C18
23	B	610	CLA	C14-C13-C15-C16
23	B	614	CLA	C14-C13-C15-C16
23	c	513	CLA	C6-C7-C8-C9
33	D	408[B]	LHG	C2-C3-O3-P
23	c	513	CLA	O1A-CGA-O2A-C1
33	a	418[B]	LHG	C10-C11-C12-C13
35	C	517[A]	DGD	C8A-C9A-CAA-CBA
23	B	601	CLA	C2A-CAA-CBA-CGA
25	B	617	BCR	C1-C6-C7-C8
25	B	617	BCR	C5-C6-C7-C8
25	H	101	BCR	C23-C24-C25-C26
25	H	101	BCR	C23-C24-C25-C30
25	d	405	BCR	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
25	d	405	BCR	C23-C24-C25-C30
25	t	102	BCR	C23-C24-C25-C30
23	C	510	CLA	C13-C15-C16-C17
23	b	605	CLA	C5-C6-C7-C8
32	A	418	LMG	C20-C21-C22-C23
35	H	102	DGD	CAB-CBB-CCB-CDB
35	h	102	DGD	C9B-CAB-CBB-CCB
33	d	414[A]	LHG	C25-C26-C27-C28
25	K	102	BCR	C7-C8-C9-C10
32	c	501	LMG	C21-C22-C23-C24
33	E	101[B]	LHG	C17-C18-C19-C20
23	B	602	CLA	C15-C16-C17-C18
32	d	412	LMG	C18-C19-C20-C21
23	C	502	CLA	C16-C17-C18-C19
23	c	512	CLA	O1D-CGD-O2D-CED
23	c	510	CLA	C10-C11-C12-C13
34	B	625	HTG	C4-C5-C6-O6
23	B	610	CLA	C12-C13-C15-C16
23	B	614	CLA	C12-C13-C15-C16
23	C	502	CLA	C12-C13-C15-C16
23	C	504	CLA	C12-C13-C15-C16
23	C	505	CLA	C11-C12-C13-C15
23	C	506	CLA	C12-C13-C15-C16
23	a	407	CLA	C11-C10-C8-C7
23	b	601	CLA	C6-C7-C8-C10
23	c	507	CLA	C11-C10-C8-C7
23	c	511	CLA	C11-C10-C8-C7
24	a	406[A]	PHO	C2-C3-C5-C6
23	b	615	CLA	C10-C11-C12-C13
33	L	101[A]	LHG	C11-C10-C9-C8
33	b	629[B]	LHG	C13-C14-C15-C16
33	d	414[A]	LHG	C24-C25-C26-C27
33	b	629[A]	LHG	C34-C35-C36-C37
23	C	511	CLA	C8-C10-C11-C12
26	A	412	SQD	C30-C31-C32-C33
26	a	409[B]	SQD	C34-C35-C36-C37
35	C	516[A]	DGD	CCA-CDA-CEA-CFA
33	b	629[A]	LHG	C9-C10-C11-C12
34	c	522	HTG	C2'-C1'-S1-C1
33	a	418[B]	LHG	C23-C24-C25-C26
23	b	607	CLA	C3-C5-C6-C7
32	c	520	LMG	C29-C30-C31-C32

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Mol	Chain	Res	Type	Atoms
32	m	101	LMG	C14-C15-C16-C17
32	C	519	LMG	C30-C31-C32-C33
26	F	103	SQD	O10-C23-O48-C46
35	c	518[B]	DGD	C5A-C6A-C7A-C8A
23	B	616	CLA	CAD-CBD-CGD-O2D
23	b	610	CLA	CAD-CBD-CGD-O2D
23	b	612	CLA	CAD-CBD-CGD-O2D
23	b	616	CLA	CAD-CBD-CGD-O2D
23	c	511	CLA	CAD-CBD-CGD-O2D
23	c	513	CLA	CAD-CBD-CGD-O2D
24	A	407[A]	PHO	CAD-CBD-CGD-O2D
24	A	407[B]	PHO	CAD-CBD-CGD-O2D
24	a	406[A]	PHO	CAD-CBD-CGD-O2D
26	B	620	SQD	C46-C45-O47-C7
38	f	101	HEM	C2B-C3B-CAB-CBB
31	e	101	LMT	C3-C4-C5-C6
33	E	101[A]	LHG	C13-C14-C15-C16
23	c	513	CLA	C13-C15-C16-C17
26	a	409[A]	SQD	C27-C28-C29-C30
33	d	408[B]	LHG	C24-C23-O8-C6
23	c	511	CLA	C4-C3-C5-C6
33	D	407[A]	LHG	C34-C35-C36-C37
31	e	101	LMT	C4B-C5B-C6B-O6B
32	c	520	LMG	C4-C5-C6-O5
26	A	412	SQD	O5-C1-O6-C44
35	c	517[B]	DGD	O6E-C1E-O5D-C6D
35	c	518[B]	DGD	O6E-C1E-O5D-C6D
29	a	412[B]	PL9	C24-C26-C27-C28
24	a	406[B]	PHO	C2C-C3C-CAC-CBC
26	a	410	SQD	O6-C44-C45-C46
32	c	501	LMG	C7-C8-C9-O8
33	E	101[A]	LHG	C4-C5-C6-O8
33	L	101[B]	LHG	O6-C4-C5-O7
33	b	629[A]	LHG	O6-C4-C5-O7
23	b	601	CLA	C13-C15-C16-C17
34	b	623	HTG	C4'-C5'-C6'-C7'
31	F	101	LMT	C6-C7-C8-C9
35	C	517[A]	DGD	C7A-C8A-C9A-CAA
31	B	630	LMT	C3-C4-C5-C6
33	D	407[B]	LHG	C13-C14-C15-C16
23	B	601	CLA	CHA-CBD-CGD-O1D
23	B	601	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
23	C	502	CLA	CHA-CBD-CGD-O1D
23	C	502	CLA	CHA-CBD-CGD-O2D
23	b	601	CLA	CHA-CBD-CGD-O1D
23	c	503	CLA	CHA-CBD-CGD-O1D
23	B	601	CLA	O1A-CGA-O2A-C1
23	C	510	CLA	O1A-CGA-O2A-C1
32	c	521	LMG	O10-C28-O8-C9
33	d	407[B]	LHG	O10-C23-O8-C6
33	d	407[B]	LHG	C11-C10-C9-C8
32	z	101	LMG	C19-C20-C21-C22
33	L	101[B]	LHG	C11-C10-C9-C8
33	a	418[A]	LHG	O7-C5-C6-O8
33	a	418[B]	LHG	O7-C5-C6-O8
26	F	103	SQD	C32-C33-C34-C35
29	D	406[A]	PL9	C45-C44-C46-C47
35	c	518[A]	DGD	C1A-C2A-C3A-C4A
29	A	414[B]	PL9	C43-C44-C46-C47
23	C	506	CLA	C6-C7-C8-C9
23	a	405[B]	CLA	C6-C7-C8-C9
23	c	511	CLA	C11-C10-C8-C9
35	C	516[A]	DGD	C4D-C5D-C6D-O5D
23	C	511	CLA	O1A-CGA-O2A-C1
33	d	408[B]	LHG	O10-C23-O8-C6
23	b	612	CLA	C8-C10-C11-C12
23	C	506	CLA	C16-C17-C18-C20
23	C	501	CLA	C2A-CAA-CBA-CGA
35	h	102	DGD	CAB-CBB-CCB-CDB
27	d	413	GOL	C1-C2-C3-O3
27	l	102[B]	GOL	O1-C1-C2-C3
23	a	404[A]	CLA	C2C-C3C-CAC-CBC
31	B	628	LMT	C9-C10-C11-C12
35	c	518[B]	DGD	C7B-C8B-C9B-CAB
25	y	101	BCR	C21-C22-C23-C24
33	L	101[B]	LHG	C26-C27-C28-C29
23	A	405[B]	CLA	C1A-C2A-CAA-CBA
23	C	501	CLA	C1A-C2A-CAA-CBA
23	d	402[A]	CLA	C1A-C2A-CAA-CBA
23	A	406[B]	CLA	C16-C17-C18-C20
33	d	408[A]	LHG	C24-C23-O8-C6
33	A	419[A]	LHG	C32-C33-C34-C35
31	b	627	LMT	C1-C2-C3-C4
33	D	407[A]	LHG	C4-O6-P-O3

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Mol	Chain	Res	Type	Atoms
33	d	414[A]	LHG	C3-O3-P-O6
32	A	418	LMG	C18-C19-C20-C21
32	d	412	LMG	C11-C12-C13-C14
33	a	418[A]	LHG	C23-C24-C25-C26
26	a	409[A]	SQD	C35-C36-C37-C38
33	E	101[B]	LHG	C13-C14-C15-C16
33	D	408[A]	LHG	C2-C3-O3-P
33	d	408[A]	LHG	C2-C3-O3-P
33	d	408[B]	LHG	C2-C3-O3-P
29	a	412[B]	PL9	C12-C11-C9-C8
33	D	407[A]	LHG	C4-O6-P-O5
33	E	101[A]	LHG	C4-O6-P-O5
33	E	101[B]	LHG	C4-O6-P-O5
33	a	418[A]	LHG	C4-O6-P-O4
33	a	418[B]	LHG	C4-O6-P-O4
33	d	407[A]	LHG	C3-O3-P-O4
33	d	407[B]	LHG	C3-O3-P-O5
33	d	407[B]	LHG	C4-O6-P-O5
35	c	517[A]	DGD	O6E-C1E-O5D-C6D
23	c	510	CLA	C15-C16-C17-C18
33	D	407[B]	LHG	O6-C4-C5-C6
33	E	101[B]	LHG	O6-C4-C5-C6
33	L	101[A]	LHG	O6-C4-C5-C6
33	b	629[B]	LHG	O6-C4-C5-C6
26	A	410[A]	SQD	C18-C19-C20-C21
31	B	631	LMT	C6-C7-C8-C9
35	C	516[B]	DGD	CDB-CEB-CFB-CGB
32	c	501	LMG	C31-C32-C33-C34
33	D	408[B]	LHG	C10-C11-C12-C13
32	B	621	LMG	C18-C19-C20-C21
33	d	414[A]	LHG	C27-C28-C29-C30
35	c	517[A]	DGD	CCB-CDB-CEB-CFB
23	B	601	CLA	CAD-CBD-CGD-O1D
23	B	605	CLA	CAD-CBD-CGD-O1D
23	B	607	CLA	CAD-CBD-CGD-O1D
23	C	502	CLA	CAD-CBD-CGD-O1D
23	C	504	CLA	CAD-CBD-CGD-O1D
23	c	503	CLA	CAD-CBD-CGD-O1D
23	c	507	CLA	CAD-CBD-CGD-O1D
32	c	520	LMG	C28-C29-C30-C31
35	H	102	DGD	O2G-C1B-C2B-C3B
33	d	408[B]	LHG	C34-C35-C36-C37

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Mol	Chain	Res	Type	Atoms
32	C	520	LMG	C12-C13-C14-C15
35	h	102	DGD	C3B-C4B-C5B-C6B
23	c	507	CLA	C10-C11-C12-C13
26	a	410	SQD	C15-C16-C17-C18
26	A	412	SQD	C24-C23-O48-C46
33	D	408[A]	LHG	C24-C23-O8-C6
33	E	101[A]	LHG	C1-C2-C3-O3
23	c	512	CLA	C8-C10-C11-C12
23	B	616	CLA	C12-C13-C15-C16
23	C	506	CLA	C6-C7-C8-C10
23	C	510	CLA	C12-C13-C15-C16
23	b	604	CLA	C6-C7-C8-C10
23	b	615	CLA	C12-C13-C15-C16
23	c	506	CLA	C12-C13-C15-C16
23	c	510	CLA	C6-C7-C8-C10
23	c	510	CLA	C11-C10-C8-C7
23	d	403[B]	CLA	C11-C12-C13-C15
33	d	408[A]	LHG	O10-C23-O8-C6
35	c	519	DGD	O6D-C5D-C6D-O5D
23	B	601	CLA	CAA-CBA-CGA-O2A
23	b	601	CLA	CAA-CBA-CGA-O2A
31	e	101	LMT	C2-C3-C4-C5
35	C	518	DGD	C7A-C8A-C9A-CAA
23	c	510	CLA	C8-C10-C11-C12
26	f	102	SQD	C23-C24-C25-C26
35	C	517[A]	DGD	C1A-C2A-C3A-C4A
33	D	407[B]	LHG	C11-C10-C9-C8
33	D	408[A]	LHG	O10-C23-O8-C6
31	b	627	LMT	C6-C7-C8-C9
33	A	419[B]	LHG	C26-C27-C28-C29
35	c	517[A]	DGD	C8B-C9B-CAB-CBB
23	C	512	CLA	CBD-CGD-O2D-CED
26	A	410[A]	SQD	C34-C35-C36-C37
35	C	516[B]	DGD	CCA-CDA-CEA-CFA
23	B	607	CLA	C3-C5-C6-C7
26	B	620	SQD	O47-C45-C46-O48
33	E	101[A]	LHG	O7-C5-C6-O8
33	E	101[B]	LHG	O7-C5-C6-O8
35	H	102	DGD	O1G-C1G-C2G-O2G
26	b	620	SQD	C28-C29-C30-C31
32	B	621	LMG	C37-C38-C39-C40
23	C	511	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
33	b	629[B]	LHG	C25-C26-C27-C28
33	d	407[B]	LHG	C9-C10-C11-C12
26	a	409[A]	SQD	C11-C12-C13-C14
35	C	517[B]	DGD	C2G-C3G-O3G-C1D
35	c	518[B]	DGD	C2G-C3G-O3G-C1D
23	C	502	CLA	C16-C17-C18-C20
23	b	612	CLA	C10-C11-C12-C13
31	b	627	LMT	O1'-C1-C2-C3
31	m	103	LMT	C7-C8-C9-C10
35	c	519	DGD	C2A-C1A-O1G-C1G
32	C	519	LMG	C29-C30-C31-C32
33	b	629[B]	LHG	C28-C29-C30-C31
23	A	406[A]	CLA	C14-C13-C15-C16
23	A	406[B]	CLA	C14-C13-C15-C16
23	a	407	CLA	C11-C10-C8-C9
23	b	615	CLA	C14-C13-C15-C16
23	c	507	CLA	C11-C10-C8-C9
23	c	510	CLA	C6-C7-C8-C9
26	A	412	SQD	O10-C23-O48-C46
35	C	518	DGD	O1A-C1A-O1G-C1G
24	a	406[A]	PHO	C8-C10-C11-C12
33	A	419[B]	LHG	C18-C19-C20-C21
35	C	518	DGD	CAA-CBA-CCA-CDA
32	c	501	LMG	C33-C34-C35-C36
35	c	519	DGD	O1A-C1A-O1G-C1G
26	A	410[B]	SQD	C11-C10-C9-C8
26	B	620	SQD	C24-C25-C26-C27
26	a	409[B]	SQD	C27-C28-C29-C30
26	b	620	SQD	C33-C34-C35-C36
31	B	631	LMT	C1-C2-C3-C4
34	b	622	HTG	C1'-C2'-C3'-C4'
23	b	601	CLA	C4-C3-C5-C6
32	B	621	LMG	C32-C33-C34-C35
23	c	511	CLA	C2-C3-C5-C6
29	a	412[A]	PL9	C12-C11-C9-C8
33	d	414[A]	LHG	C34-C35-C36-C37
34	b	623	HTG	S1-C1'-C2'-C3'
33	d	408[A]	LHG	C32-C33-C34-C35
32	m	101	LMG	C11-C12-C13-C14
33	L	101[B]	LHG	C24-C25-C26-C27
35	c	519	DGD	CDA-CEA-CFA-CGA
23	c	512	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
23	B	613	CLA	C2-C1-O2A-CGA
23	C	506	CLA	C2-C1-O2A-CGA
23	C	509	CLA	C2-C1-O2A-CGA
26	A	410[A]	SQD	C16-C17-C18-C19
31	b	621	LMT	C7-C8-C9-C10
35	C	518	DGD	CBA-CCA-CDA-CEA
35	C	518	DGD	C9A-CAA-CBA-CCA
23	c	504	CLA	C8-C10-C11-C12
23	C	509	CLA	O1D-CGD-O2D-CED
33	d	407[A]	LHG	O10-C23-O8-C6
33	L	101[A]	LHG	O6-C4-C5-O7
32	z	101	LMG	C20-C21-C22-C23
29	A	414[A]	PL9	C28-C29-C31-C32
32	B	621	LMG	C14-C15-C16-C17
32	B	621	LMG	C36-C37-C38-C39
33	d	407[A]	LHG	C24-C23-O8-C6
35	C	518	DGD	C2A-C1A-O1G-C1G
23	d	402[A]	CLA	C4C-C3C-CAC-CBC
35	C	518	DGD	C8A-C9A-CAA-CBA
35	h	102	DGD	CBA-CCA-CDA-CEA
35	C	516[B]	DGD	O6E-C1E-O5D-C6D
35	c	518[A]	DGD	O6E-C1E-O5D-C6D
35	C	516[A]	DGD	C6A-C7A-C8A-C9A
31	a	415	LMT	C2'-C1'-O1'-C1
35	C	516[B]	DGD	C2E-C1E-O5D-C6D
35	c	517[A]	DGD	C2E-C1E-O5D-C6D
35	c	517[B]	DGD	C2E-C1E-O5D-C6D
35	c	518[A]	DGD	C2E-C1E-O5D-C6D
35	c	518[B]	DGD	C2E-C1E-O5D-C6D
33	L	101[A]	LHG	C26-C27-C28-C29
35	C	518	DGD	C7B-C8B-C9B-CAB
35	c	517[B]	DGD	C4B-C5B-C6B-C7B
33	d	414[B]	LHG	C3-O3-P-O6
33	A	419[B]	LHG	C23-C24-C25-C26
35	c	517[B]	DGD	C1A-C2A-C3A-C4A
32	z	101	LMG	C13-C14-C15-C16
33	D	407[B]	LHG	C26-C27-C28-C29
33	L	101[A]	LHG	C27-C28-C29-C30
35	C	518	DGD	CDA-CEA-CFA-CGA
35	H	102	DGD	O1G-C1G-C2G-C3G
29	D	406[B]	PL9	C45-C44-C46-C47
23	B	613	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
23	C	509	CLA	C6-C7-C8-C9
23	C	510	CLA	C11-C12-C13-C14
23	a	404[A]	CLA	C4C-C3C-CAC-CBC
26	a	410	SQD	C26-C27-C28-C29
35	c	519	DGD	C7B-C8B-C9B-CAB
23	b	614	CLA	CBD-CGD-O2D-CED
33	D	408[A]	LHG	C27-C28-C29-C30
33	b	629[B]	LHG	C9-C10-C11-C12
23	a	404[B]	CLA	C2C-C3C-CAC-CBC
23	B	606	CLA	C15-C16-C17-C18
26	a	409[B]	SQD	C11-C12-C13-C14
31	A	417	LMT	C7-C8-C9-C10
35	H	102	DGD	CCA-CDA-CEA-CFA
35	c	517[A]	DGD	C4B-C5B-C6B-C7B
33	d	414[A]	LHG	C1-C2-C3-O3
27	d	413	GOL	O1-C1-C2-O2
23	d	402[B]	CLA	C4C-C3C-CAC-CBC
23	c	512	CLA	CBA-CGA-O2A-C1
33	d	408[A]	LHG	C33-C34-C35-C36
38	F	102	HEM	CAD-CBD-CGD-O1D
35	C	517[B]	DGD	C8A-C9A-CAA-CBA
23	B	606	CLA	C8-C10-C11-C12
33	a	418[B]	LHG	C24-C25-C26-C27
33	b	629[B]	LHG	C10-C11-C12-C13
29	D	406[B]	PL9	C28-C29-C31-C32
26	A	410[A]	SQD	C11-C10-C9-C8
23	B	613	CLA	C15-C16-C17-C18
33	b	629[A]	LHG	C25-C26-C27-C28
32	Z	101	LMG	C29-C28-O8-C9
26	B	620	SQD	C29-C30-C31-C32
35	c	518[B]	DGD	C9B-CAB-CBB-CCB
23	B	611	CLA	C8-C10-C11-C12
23	C	506	CLA	C16-C17-C18-C19
31	M	101	LMT	C2-C3-C4-C5
33	D	407[A]	LHG	C11-C10-C9-C8
23	A	404[B]	CLA	C2A-CAA-CBA-CGA
32	c	521	LMG	O1-C7-C8-O7
33	D	408[B]	LHG	C28-C29-C30-C31
33	a	418[A]	LHG	C24-C25-C26-C27
35	C	516[B]	DGD	C6A-C7A-C8A-C9A
35	c	518[B]	DGD	CDA-CEA-CFA-CGA
23	C	506	CLA	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
35	h	102	DGD	O2G-C1B-C2B-C3B
29	A	414[B]	PL9	C12-C11-C9-C10
29	d	406[B]	PL9	C45-C44-C46-C47
34	b	622	HTG	O5-C5-C6-O6
29	A	414[B]	PL9	C4-C3-C7-C8
29	a	412[A]	PL9	C4-C3-C7-C8
29	a	412[B]	PL9	C4-C3-C7-C8
23	B	610	CLA	C11-C12-C13-C14
23	a	405[A]	CLA	C6-C7-C8-C9
23	d	404	CLA	C11-C12-C13-C14
23	A	408	CLA	C16-C17-C18-C19
23	c	507	CLA	C13-C15-C16-C17
32	z	101	LMG	C10-C11-C12-C13
32	Z	101	LMG	C21-C22-C23-C24
33	b	629[B]	LHG	C34-C35-C36-C37
35	c	518[A]	DGD	C7B-C8B-C9B-CAB
33	L	101[A]	LHG	C23-C24-C25-C26
24	A	407[B]	PHO	O2A-C1-C2-C3
32	B	621	LMG	O6-C1-O1-C7
29	A	414[B]	PL9	C39-C41-C42-C43
33	A	419[B]	LHG	C17-C18-C19-C20
23	b	601	CLA	C3-C5-C6-C7
23	b	610	CLA	C13-C15-C16-C17
23	d	402[A]	CLA	C15-C16-C17-C18
33	a	418[B]	LHG	C7-C8-C9-C10
26	A	410[A]	SQD	C13-C14-C15-C16
23	c	509	CLA	C1A-C2A-CAA-CBA
32	d	412	LMG	C13-C14-C15-C16
23	B	613	CLA	C11-C10-C8-C7
23	B	613	CLA	C12-C13-C15-C16
23	C	513	CLA	C11-C12-C13-C15
23	a	405[B]	CLA	C6-C7-C8-C10
23	b	607	CLA	C12-C13-C15-C16
23	b	608	CLA	C12-C13-C15-C16
23	c	514	CLA	C12-C13-C15-C16
29	a	412[B]	PL9	C43-C44-C46-C47
23	A	404[A]	CLA	C2C-C3C-CAC-CBC
23	c	511	CLA	O1A-CGA-O2A-C1
33	A	419[A]	LHG	C18-C19-C20-C21
33	b	629[A]	LHG	C17-C18-C19-C20
38	F	102	HEM	CAD-CBD-CGD-O2D
23	b	608	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
32	B	621	LMG	O8-C28-C29-C30
32	c	501	LMG	O8-C28-C29-C30
38	f	101	HEM	CAD-CBD-CGD-O1D
33	A	419[B]	LHG	C35-C36-C37-C38
33	D	407[A]	LHG	C26-C27-C28-C29
32	d	412	LMG	C35-C36-C37-C38
33	d	407[A]	LHG	C16-C17-C18-C19
29	a	412[B]	PL9	C45-C44-C46-C47
29	d	406[A]	PL9	C43-C44-C46-C47
26	a	409[B]	SQD	C35-C36-C37-C38
33	A	419[B]	LHG	C29-C30-C31-C32
33	A	419[B]	LHG	C32-C33-C34-C35
35	C	517[B]	DGD	C1A-C2A-C3A-C4A
23	a	404[B]	CLA	C4C-C3C-CAC-CBC
32	c	501	LMG	O7-C8-C9-O8
33	b	629[B]	LHG	C31-C32-C33-C34
35	h	102	DGD	C7A-C8A-C9A-CAA
31	B	628	LMT	C4-C5-C6-C7
23	A	406[A]	CLA	C16-C17-C18-C19
32	C	520	LMG	C38-C39-C40-C41
35	C	518	DGD	C6A-C7A-C8A-C9A
29	A	414[A]	PL9	C39-C41-C42-C43
33	d	414[B]	LHG	C1-C2-C3-O3
23	C	512	CLA	O1D-CGD-O2D-CED
29	D	406[B]	PL9	C35-C34-C36-C37
29	a	412[A]	PL9	C45-C44-C46-C47
23	a	404[B]	CLA	C2-C1-O2A-CGA
23	c	513	CLA	C2-C1-O2A-CGA
29	D	406[B]	PL9	C43-C44-C46-C47
23	D	404	CLA	C8-C10-C11-C12
23	b	605	CLA	C13-C15-C16-C17
35	C	517[B]	DGD	C7A-C8A-C9A-CAA
23	D	403[B]	CLA	C16-C17-C18-C20
23	B	603	CLA	C11-C12-C13-C14
23	C	512	CLA	C6-C7-C8-C9
23	b	605	CLA	C6-C7-C8-C9
23	b	614	CLA	C11-C12-C13-C14
23	C	509	CLA	C3-C5-C6-C7
40	V	201	HEC	CAD-CBD-CGD-O1D
32	z	101	LMG	O7-C10-C11-C12
33	A	419[A]	LHG	C29-C30-C31-C32
33	E	101[B]	LHG	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
35	c	517[A]	DGD	CAB-CBB-CCB-CDB
35	c	517[B]	DGD	CBA-CCA-CDA-CEA
25	C	514	BCR	C23-C24-C25-C30
25	a	408	BCR	C1-C6-C7-C8
25	h	101	BCR	C23-C24-C25-C30
25	t	102	BCR	C5-C6-C7-C8
25	y	101	BCR	C23-C24-C25-C30
26	A	410[B]	SQD	C16-C17-C18-C19
32	A	418	LMG	O1-C7-C8-C9
40	V	201	HEC	CAD-CBD-CGD-O2D
27	l	102[A]	GOL	O1-C1-C2-C3
27	v	202[A]	GOL	O1-C1-C2-C3
31	e	101	LMT	C2B-C1B-O1B-C4'
29	D	406[A]	PL9	C35-C34-C36-C37
29	a	412[B]	PL9	C35-C34-C36-C37
25	d	405	BCR	C7-C8-C9-C10
23	b	601	CLA	C2-C3-C5-C6
29	a	412[A]	PL9	C43-C44-C46-C47
23	C	510	CLA	C8-C10-C11-C12
35	c	517[B]	DGD	C5D-C6D-O5D-C1E
31	e	101	LMT	O1'-C1-C2-C3
33	L	101[B]	LHG	C11-C12-C13-C14
23	A	404[A]	CLA	C16-C17-C18-C19
33	A	419[A]	LHG	C35-C36-C37-C38
33	D	407[B]	LHG	C32-C33-C34-C35
33	d	414[B]	LHG	C18-C19-C20-C21
33	b	629[A]	LHG	C10-C11-C12-C13
33	d	414[B]	LHG	C34-C35-C36-C37
32	C	520	LMG	C4-C5-C6-O5
23	C	506	CLA	C4-C3-C5-C6
23	B	603	CLA	C11-C12-C13-C15
23	a	405[A]	CLA	C6-C7-C8-C10
23	b	615	CLA	C11-C12-C13-C15
23	c	503	CLA	C11-C12-C13-C15
38	f	101	HEM	CAA-CBA-CGA-O2A
33	L	101[A]	LHG	C16-C17-C18-C19
35	c	519	DGD	C9B-CAB-CBB-CCB
27	D	413	GOL	O1-C1-C2-O2
27	a	416	GOL	O1-C1-C2-O2
27	d	413	GOL	O2-C2-C3-O3
25	a	408	BCR	C19-C20-C21-C22
32	B	621	LMG	C2-C1-O1-C7

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Mol	Chain	Res	Type	Atoms
32	Z	101	LMG	C2-C1-O1-C7
32	A	418	LMG	O1-C7-C8-O7
23	b	616	CLA	C5-C6-C7-C8
26	a	410	SQD	C24-C25-C26-C27
35	C	518	DGD	C4A-C5A-C6A-C7A
33	A	419[A]	LHG	O8-C23-C24-C25
23	b	616	CLA	C4-C3-C5-C6
23	c	505	CLA	C4-C3-C5-C6
29	D	406[B]	PL9	C20-C19-C21-C22
23	B	610	CLA	C13-C15-C16-C17
23	b	608	CLA	C13-C15-C16-C17
31	A	417	LMT	C9-C10-C11-C12
23	c	514	CLA	C2-C3-C5-C6
29	d	406[B]	PL9	C43-C44-C46-C47
35	c	518[A]	DGD	C9B-CAB-CBB-CCB
32	Z	101	LMG	O7-C10-C11-C12
33	d	414[B]	LHG	C13-C14-C15-C16
23	B	614	CLA	C11-C10-C8-C9
23	B	615	CLA	C14-C13-C15-C16
23	C	505	CLA	C14-C13-C15-C16
23	a	405[A]	CLA	C14-C13-C15-C16
23	b	603	CLA	C11-C10-C8-C9
23	b	607	CLA	C14-C13-C15-C16
23	b	608	CLA	C14-C13-C15-C16
23	c	503	CLA	C11-C12-C13-C14
23	c	506	CLA	C14-C13-C15-C16
23	c	514	CLA	C14-C13-C15-C16
23	d	403[B]	CLA	C11-C12-C13-C14
40	v	201	HEC	CAD-CBD-CGD-O2D
31	t	101	LMT	C2-C3-C4-C5
23	C	510	CLA	CAA-CBA-CGA-O2A
23	C	512	CLA	CAA-CBA-CGA-O2A
23	c	511	CLA	CAA-CBA-CGA-O2A
23	A	404[B]	CLA	CAD-CBD-CGD-O2D
23	B	604	CLA	CAD-CBD-CGD-O2D
23	B	610	CLA	CAD-CBD-CGD-O2D
23	B	612	CLA	CAD-CBD-CGD-O2D
23	C	512	CLA	CAD-CBD-CGD-O2D
23	b	603	CLA	CAD-CBD-CGD-O2D
23	b	604	CLA	CAD-CBD-CGD-O2D
23	b	607	CLA	CAD-CBD-CGD-O2D
23	c	502	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
23	c	506	CLA	CAD-CBD-CGD-O2D
24	a	406[B]	PHO	CAD-CBD-CGD-O2D
24	a	414[A]	PHO	CAD-CBD-CGD-O2D
38	F	102	HEM	C2B-C3B-CAB-CBB
23	D	403[B]	CLA	C16-C17-C18-C19
33	D	408[A]	LHG	C28-C29-C30-C31
23	B	605	CLA	C8-C10-C11-C12
31	t	101	LMT	C11-C10-C9-C8
33	b	629[A]	LHG	C30-C31-C32-C33
33	b	629[B]	LHG	C17-C18-C19-C20
23	B	613	CLA	CAA-CBA-CGA-O2A
33	L	101[A]	LHG	O7-C7-C8-C9
33	a	418[A]	LHG	O8-C23-C24-C25
33	a	418[B]	LHG	O8-C23-C24-C25
26	f	102	SQD	C34-C35-C36-C37
29	A	414[A]	PL9	C25-C24-C26-C27
38	f	101	HEM	CAA-CBA-CGA-O1A
38	f	101	HEM	CAD-CBD-CGD-O2D
26	A	412	SQD	C9-C10-C11-C12
23	b	616	CLA	C2-C3-C5-C6
33	b	629[B]	LHG	O7-C7-C8-C9
24	A	407[A]	PHO	C2C-C3C-CAC-CBC
24	A	416[A]	PHO	C2C-C3C-CAC-CBC
24	a	406[A]	PHO	C2C-C3C-CAC-CBC
24	a	414[A]	PHO	C2C-C3C-CAC-CBC
32	B	621	LMG	O1-C7-C8-C9
33	D	407[B]	LHG	C34-C35-C36-C37
35	C	518	DGD	O6D-C5D-C6D-O5D
33	E	101[B]	LHG	O7-C7-C8-C9
33	L	101[B]	LHG	O7-C7-C8-C9
33	b	629[A]	LHG	O7-C7-C8-C9
33	d	408[B]	LHG	C32-C33-C34-C35
33	d	408[B]	LHG	C33-C34-C35-C36
23	A	404[A]	CLA	C15-C16-C17-C18
23	B	602	CLA	O2A-C1-C2-C3
23	C	509	CLA	O2A-C1-C2-C3
24	A	407[A]	PHO	O2A-C1-C2-C3
24	a	406[B]	PHO	O2A-C1-C2-C3
23	D	404	CLA	O1A-CGA-O2A-C1
23	A	404[A]	CLA	C4C-C3C-CAC-CBC
32	B	621	LMG	C20-C21-C22-C23
38	F	102	HEM	C4B-C3B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
38	f	101	HEM	C4B-C3B-CAB-CBB
32	c	520	LMG	O7-C10-C11-C12
40	v	201	HEC	CAD-CBD-CGD-O1D
26	A	410[B]	SQD	C13-C14-C15-C16
32	c	520	LMG	C35-C36-C37-C38
26	B	620	SQD	C31-C32-C33-C34
23	A	405[A]	CLA	CHA-CBD-CGD-O1D
23	A	405[A]	CLA	CHA-CBD-CGD-O2D
23	A	405[B]	CLA	CHA-CBD-CGD-O2D
23	B	606	CLA	CHA-CBD-CGD-O1D
23	B	606	CLA	CHA-CBD-CGD-O2D
23	B	607	CLA	CHA-CBD-CGD-O1D
23	C	504	CLA	CHA-CBD-CGD-O1D
23	C	507	CLA	CHA-CBD-CGD-O1D
23	C	507	CLA	CHA-CBD-CGD-O2D
23	C	509	CLA	CHA-CBD-CGD-O1D
23	b	606	CLA	CHA-CBD-CGD-O2D
23	c	503	CLA	CHA-CBD-CGD-O2D
23	c	508	CLA	CHA-CBD-CGD-O1D
23	c	508	CLA	CHA-CBD-CGD-O2D
23	c	510	CLA	CHA-CBD-CGD-O1D
23	c	510	CLA	CHA-CBD-CGD-O2D
23	d	402[A]	CLA	CHA-CBD-CGD-O1D
23	d	402[A]	CLA	CHA-CBD-CGD-O2D
26	A	410[B]	SQD	C34-C35-C36-C37
31	A	420	LMT	C7-C8-C9-C10
23	b	613	CLA	CAA-CBA-CGA-O2A
35	C	518	DGD	O1G-C1A-C2A-C3A
33	A	419[A]	LHG	C17-C18-C19-C20
33	d	414[A]	LHG	C13-C14-C15-C16
26	F	103	SQD	O47-C45-C46-O48
35	C	517[A]	DGD	CAB-CBB-CCB-CDB
26	B	620	SQD	C12-C13-C14-C15
23	c	513	CLA	CAA-CBA-CGA-O2A
33	A	419[B]	LHG	O8-C23-C24-C25
33	d	408[B]	LHG	C30-C31-C32-C33
35	c	517[B]	DGD	C7B-C8B-C9B-CAB
23	B	606	CLA	C16-C17-C18-C19
24	A	407[A]	PHO	CHA-CBD-CGD-O1D
24	A	416[B]	PHO	CHA-CBD-CGD-O1D
24	A	416[B]	PHO	CHA-CBD-CGD-O2D
23	b	604	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
23	c	511	CLA	CBA-CGA-O2A-C1
26	A	412	SQD	C31-C32-C33-C34
23	B	602	CLA	C6-C7-C8-C10
23	B	615	CLA	C12-C13-C15-C16
23	b	601	CLA	C11-C12-C13-C15
23	d	402[A]	CLA	C11-C12-C13-C15
29	A	414[B]	PL9	C28-C29-C31-C32
29	A	414[A]	PL9	C4-C3-C7-C8
32	c	521	LMG	C32-C33-C34-C35
33	A	419[B]	LHG	C9-C10-C11-C12
23	A	408	CLA	C14-C13-C15-C16
23	B	614	CLA	C6-C7-C8-C9
23	B	616	CLA	C14-C13-C15-C16
23	b	601	CLA	C11-C12-C13-C14
23	b	614	CLA	C14-C13-C15-C16
29	d	406[B]	PL9	C34-C36-C37-C38
35	C	518	DGD	C2A-C3A-C4A-C5A
23	b	615	CLA	C5-C6-C7-C8
26	a	409[B]	SQD	C10-C11-C12-C13
33	d	414[A]	LHG	C18-C19-C20-C21
29	D	406[B]	PL9	C36-C37-C38-C39
32	Z	101	LMG	O9-C10-C11-C12
33	b	629[A]	LHG	C24-C25-C26-C27
35	C	517[B]	DGD	C3A-C4A-C5A-C6A
23	c	508	CLA	C8-C10-C11-C12
23	C	501	CLA	C16-C17-C18-C20
33	d	407[B]	LHG	C25-C26-C27-C28
27	l	102[A]	GOL	C1-C2-C3-O3
27	o	303	GOL	O1-C1-C2-C3
29	D	406[A]	PL9	C28-C29-C31-C32
33	E	101[B]	LHG	O8-C23-C24-C25
35	c	519	DGD	C6B-C7B-C8B-C9B
33	b	629[B]	LHG	O6-C4-C5-O7
23	b	604	CLA	C13-C15-C16-C17
33	D	408[B]	LHG	C27-C28-C29-C30
35	h	102	DGD	CCB-CDB-CEB-CFB
23	c	512	CLA	C1A-C2A-CAA-CBA
23	c	514	CLA	C1A-C2A-CAA-CBA
26	A	410[B]	SQD	C18-C19-C20-C21
33	A	419[A]	LHG	O10-C23-C24-C25
32	d	412	LMG	C19-C20-C21-C22
33	d	408[B]	LHG	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
23	C	513	CLA	C2-C1-O2A-CGA
23	C	512	CLA	CAA-CBA-CGA-O1A
23	c	511	CLA	CAA-CBA-CGA-O1A
33	L	101[B]	LHG	O9-C7-C8-C9
33	a	418[A]	LHG	O10-C23-C24-C25
33	b	629[A]	LHG	O9-C7-C8-C9
32	C	519	LMG	O1-C7-C8-C9
35	c	517[A]	DGD	O2G-C1B-C2B-C3B
32	C	519	LMG	C12-C13-C14-C15
23	B	614	CLA	C2A-CAA-CBA-CGA
23	a	404[B]	CLA	C2A-CAA-CBA-CGA
23	b	603	CLA	C2A-CAA-CBA-CGA
23	A	404[B]	CLA	C16-C17-C18-C19
23	C	510	CLA	CAA-CBA-CGA-O1A
33	a	418[B]	LHG	O10-C23-C24-C25
23	A	404[B]	CLA	C4C-C3C-CAC-CBC
32	m	101	LMG	C32-C33-C34-C35
33	E	101[A]	LHG	O7-C7-C8-C9
23	A	404[B]	CLA	C15-C16-C17-C18
23	B	612	CLA	O1A-CGA-O2A-C1
23	a	407	CLA	C15-C16-C17-C18
33	d	407[A]	LHG	C4-O6-P-O5
33	d	414[B]	LHG	C3-O3-P-O5
32	m	101	LMG	C30-C31-C32-C33
35	c	519	DGD	CDB-CEB-CFB-CGB
23	A	404[B]	CLA	C2C-C3C-CAC-CBC
26	A	412	SQD	C15-C16-C17-C18
32	c	521	LMG	C28-C29-C30-C31
32	c	520	LMG	O9-C10-C11-C12
33	E	101[B]	LHG	O9-C7-C8-C9
33	L	101[A]	LHG	O9-C7-C8-C9
33	b	629[B]	LHG	O9-C7-C8-C9
23	b	616	CLA	O1A-CGA-O2A-C1
33	D	408[B]	LHG	O8-C23-C24-C25
35	c	517[A]	DGD	C1A-C2A-C3A-C4A
23	B	613	CLA	CAA-CBA-CGA-O1A
35	C	517[B]	DGD	O2G-C1B-C2B-C3B
32	C	520	LMG	C11-C12-C13-C14
35	C	516[B]	DGD	C1B-C2B-C3B-C4B
35	C	518	DGD	O1A-C1A-C2A-C3A
29	d	406[A]	PL9	C11-C12-C13-C14
32	c	501	LMG	C4-C5-C6-O5

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Mol	Chain	Res	Type	Atoms
23	B	609	CLA	CAD-CBD-CGD-O1D
23	C	506	CLA	CAD-CBD-CGD-O1D
23	b	601	CLA	CAD-CBD-CGD-O1D
23	b	605	CLA	CAD-CBD-CGD-O1D
23	b	609	CLA	CAD-CBD-CGD-O1D
23	c	505	CLA	CAD-CBD-CGD-O1D
26	f	102	SQD	C7-C8-C9-C10
26	a	409[A]	SQD	C10-C11-C12-C13
35	c	519	DGD	C6A-C7A-C8A-C9A
23	B	605	CLA	C5-C6-C7-C8
31	A	417	LMT	C2B-C1B-O1B-C4'
23	a	405[B]	CLA	C14-C13-C15-C16
23	d	402[A]	CLA	C11-C12-C13-C14
32	c	501	LMG	C14-C15-C16-C17
23	c	513	CLA	CAA-CBA-CGA-O1A
31	a	415	LMT	C7-C8-C9-C10
23	B	612	CLA	CBA-CGA-O2A-C1
33	D	408[A]	LHG	O8-C23-C24-C25
35	c	517[B]	DGD	O2G-C1B-C2B-C3B
32	c	520	LMG	C30-C31-C32-C33
23	b	611	CLA	C13-C15-C16-C17
32	c	521	LMG	C16-C17-C18-C19
26	f	102	SQD	C28-C29-C30-C31
23	b	602	CLA	C2A-CAA-CBA-CGA
32	D	412	LMG	O7-C10-C11-C12
26	a	409[B]	SQD	C18-C19-C20-C21
26	a	409[A]	SQD	C19-C20-C21-C22
29	D	406[A]	PL9	C40-C39-C41-C42
35	c	517[A]	DGD	CBA-CCA-CDA-CEA
23	B	615	CLA	C11-C12-C13-C15
23	C	505	CLA	C12-C13-C15-C16
23	C	509	CLA	C6-C7-C8-C10
23	b	603	CLA	C11-C10-C8-C7
33	A	419[B]	LHG	O10-C23-C24-C25
35	c	517[B]	DGD	O1B-C1B-C2B-C3B
26	A	412	SQD	O48-C23-C24-C25
33	E	101[A]	LHG	O8-C23-C24-C25
35	C	517[A]	DGD	O2G-C1B-C2B-C3B
26	f	102	SQD	C26-C27-C28-C29
32	D	412	LMG	C16-C17-C18-C19
33	D	407[A]	LHG	C28-C29-C30-C31
33	D	408[A]	LHG	O10-C23-C24-C25

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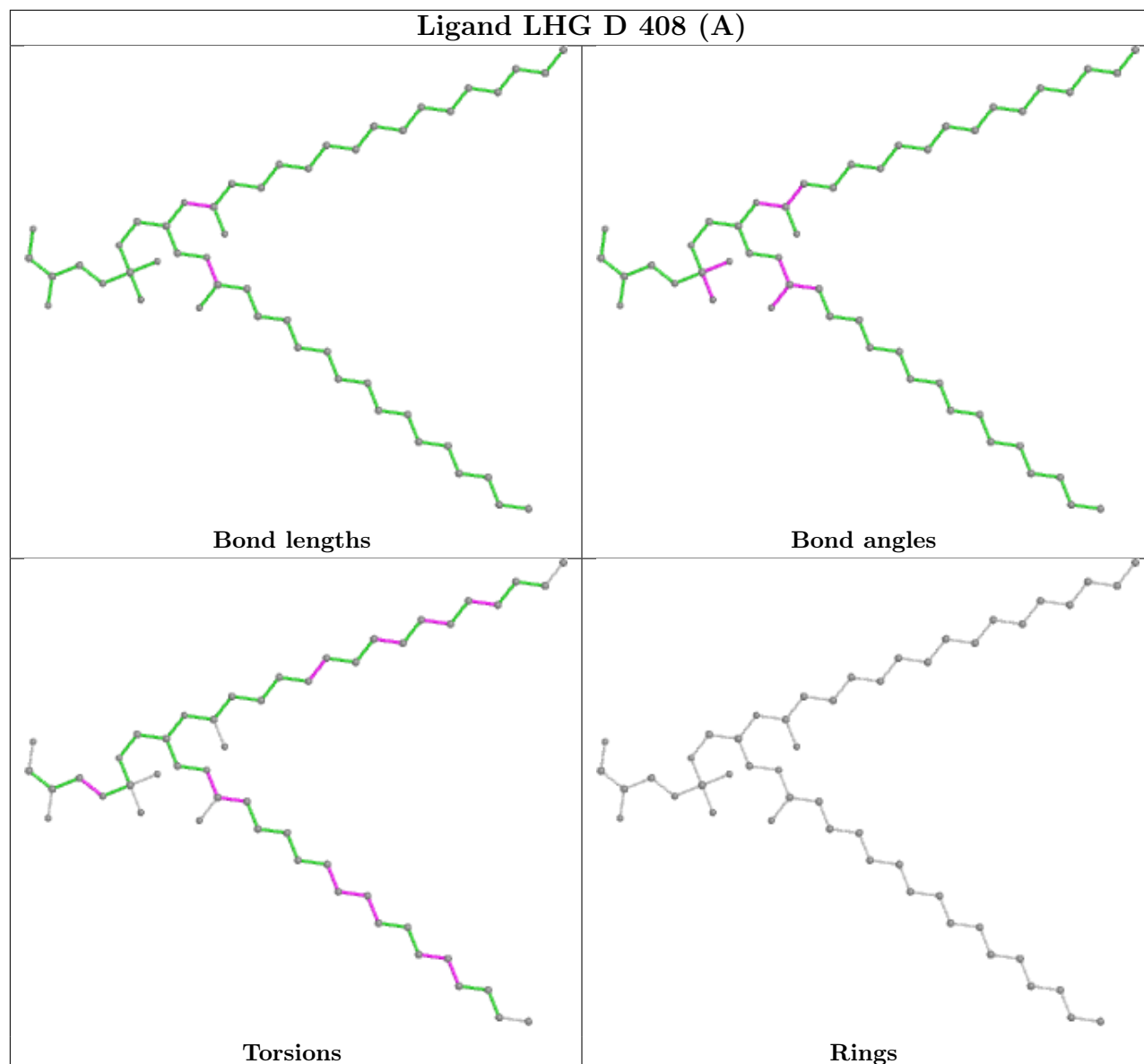
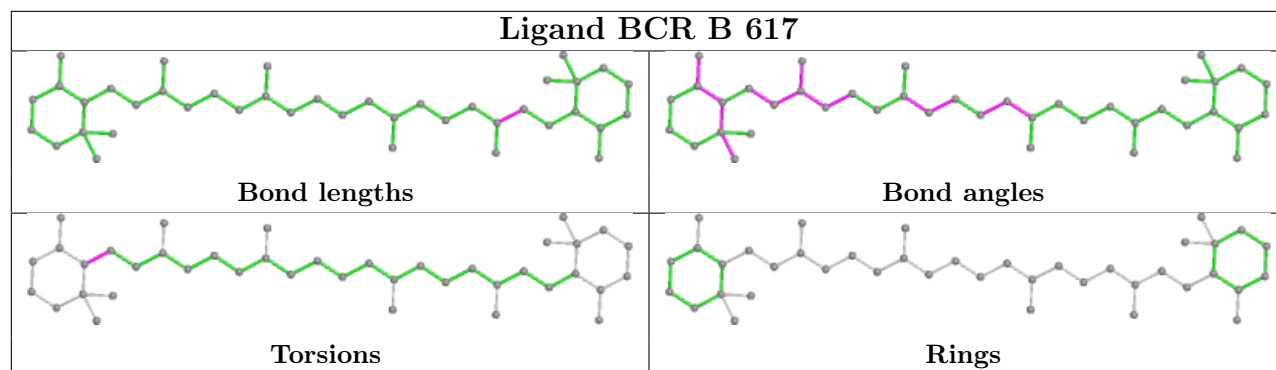
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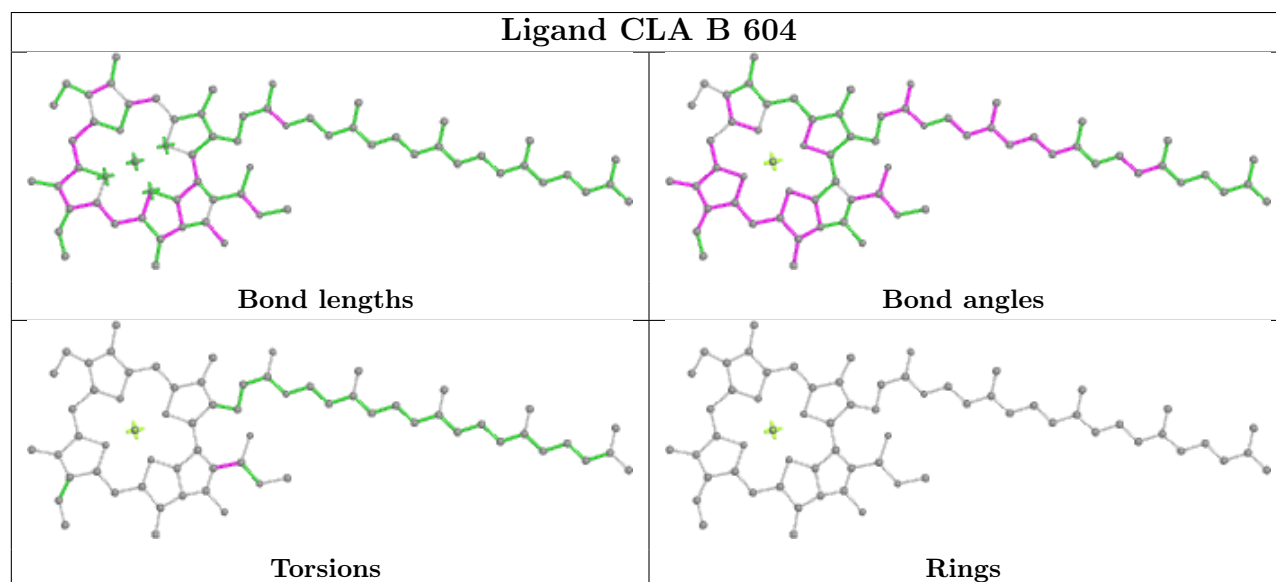
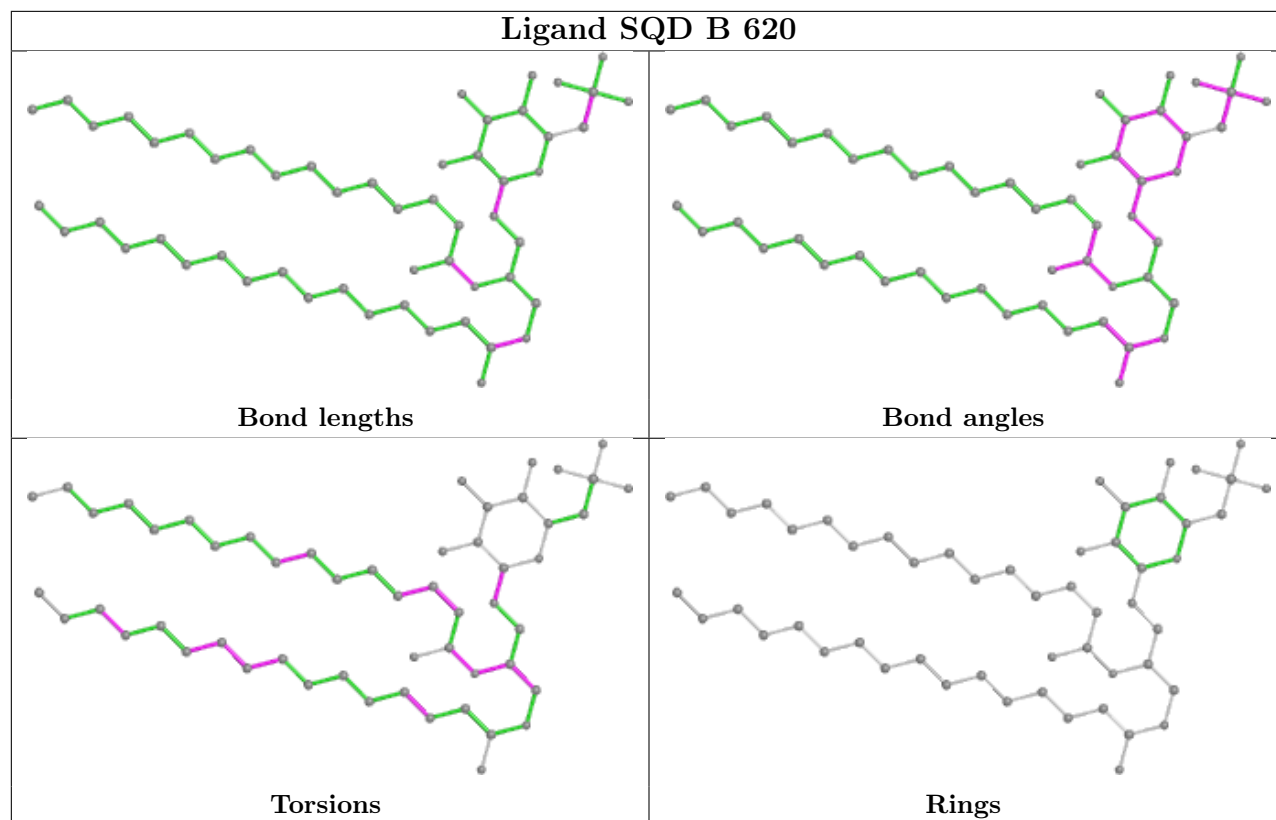
Mol	Chain	Res	Type	Atoms
33	E	101[B]	LHG	O10-C23-C24-C25
35	c	517[A]	DGD	O1B-C1B-C2B-C3B
25	H	101	BCR	C9-C10-C11-C12
32	A	418	LMG	C31-C32-C33-C34
35	C	517[A]	DGD	C3A-C4A-C5A-C6A
23	c	502	CLA	CAA-CBA-CGA-O2A
26	a	410	SQD	O48-C23-C24-C25
32	c	521	LMG	O7-C10-C11-C12
33	d	408[B]	LHG	O8-C23-C24-C25
32	c	520	LMG	C32-C33-C34-C35
23	b	602	CLA	C8-C10-C11-C12
23	b	613	CLA	CAA-CBA-CGA-O1A
34	B	623	HTG	C2'-C3'-C4'-C5'
26	A	412	SQD	O10-C23-C24-C25
33	E	101[A]	LHG	O9-C7-C8-C9
33	E	101[A]	LHG	O10-C23-C24-C25
23	B	603	CLA	C2A-CAA-CBA-CGA
23	C	509	CLA	C8-C10-C11-C12
23	b	616	CLA	CBA-CGA-O2A-C1
32	c	521	LMG	O9-C10-C11-C12
35	C	517[A]	DGD	O1B-C1B-C2B-C3B
35	C	517[B]	DGD	O1B-C1B-C2B-C3B
32	m	101	LMG	C40-C41-C42-C43

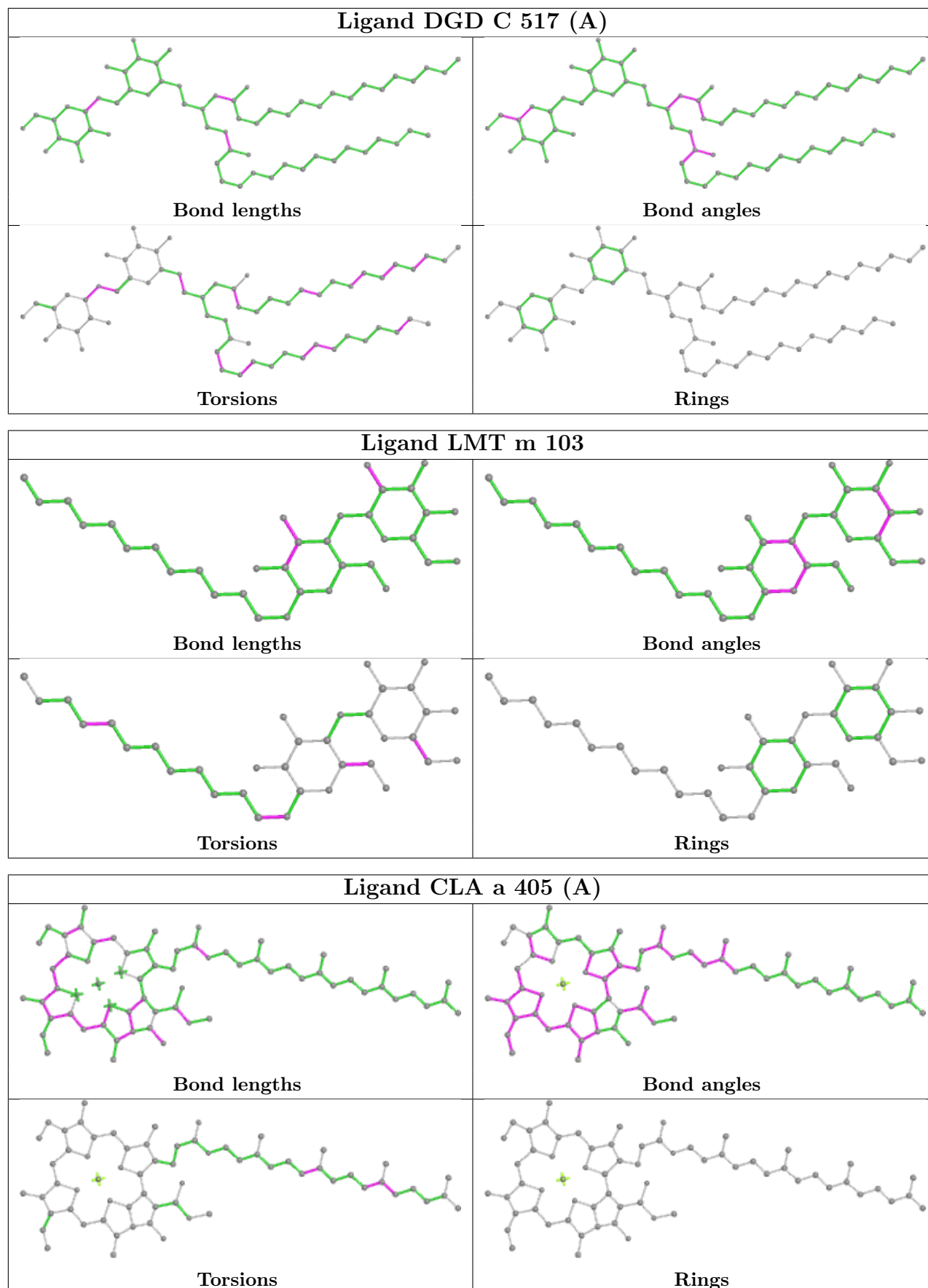
There are no ring outliers.

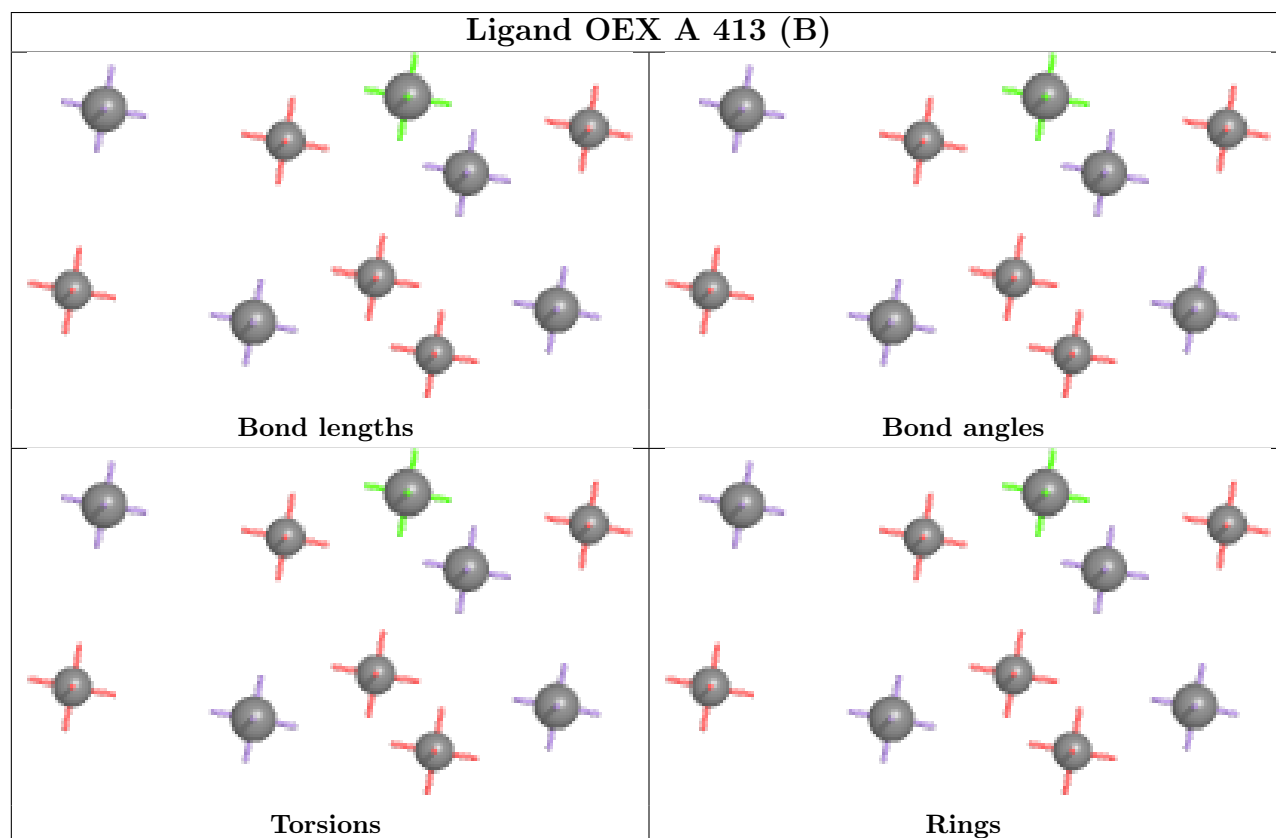
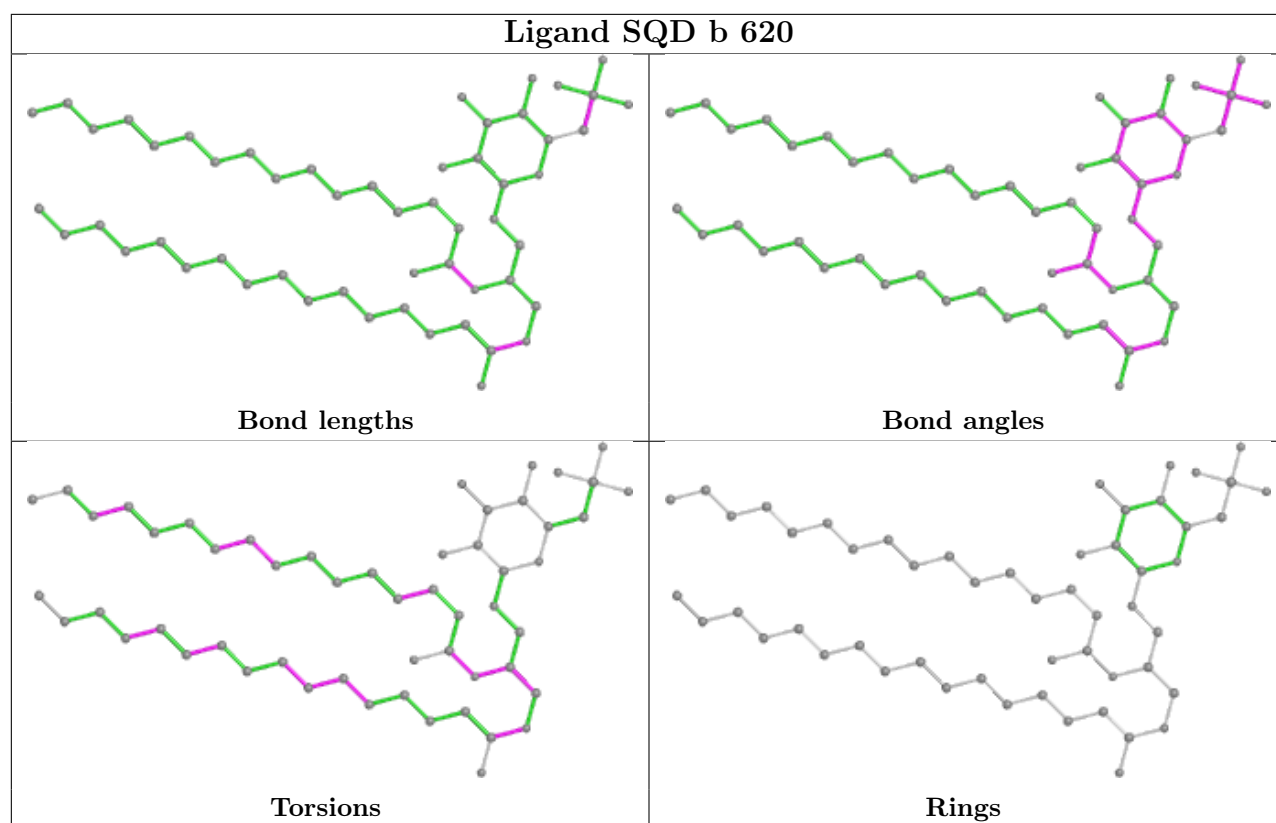
No monomer is involved in short contacts.

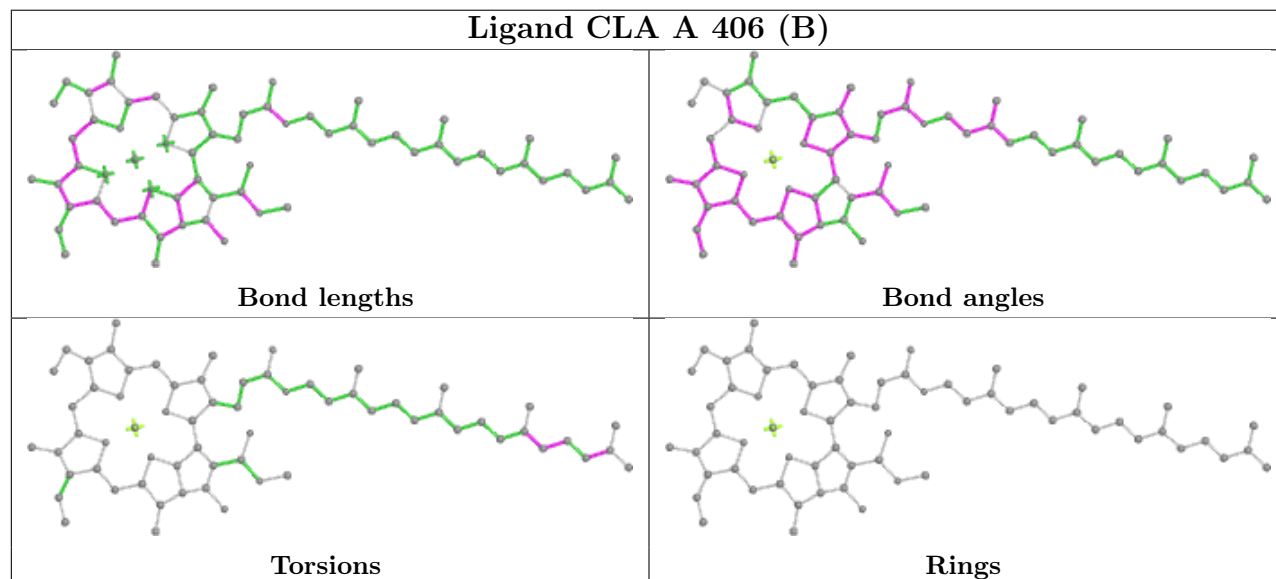
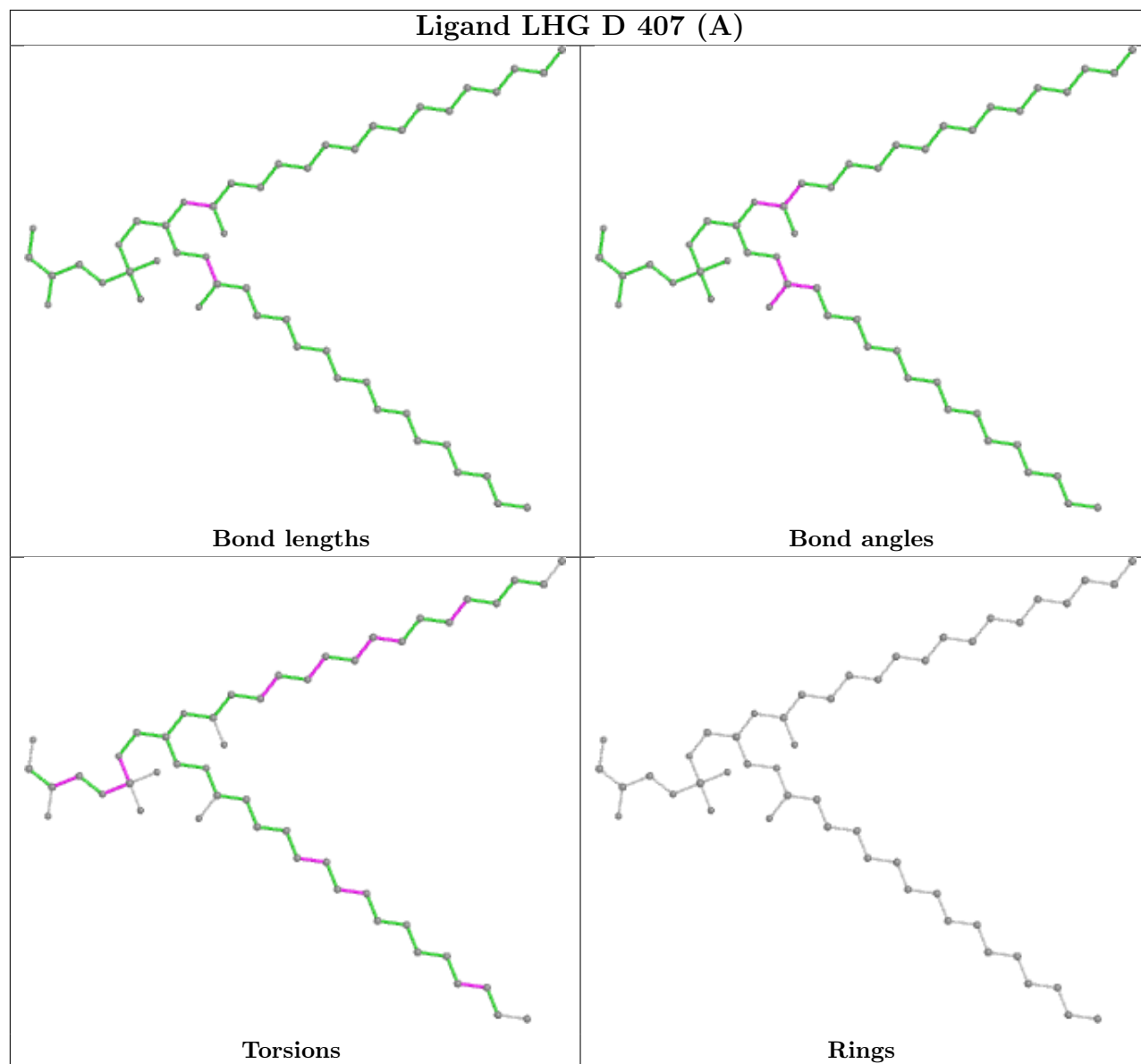
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

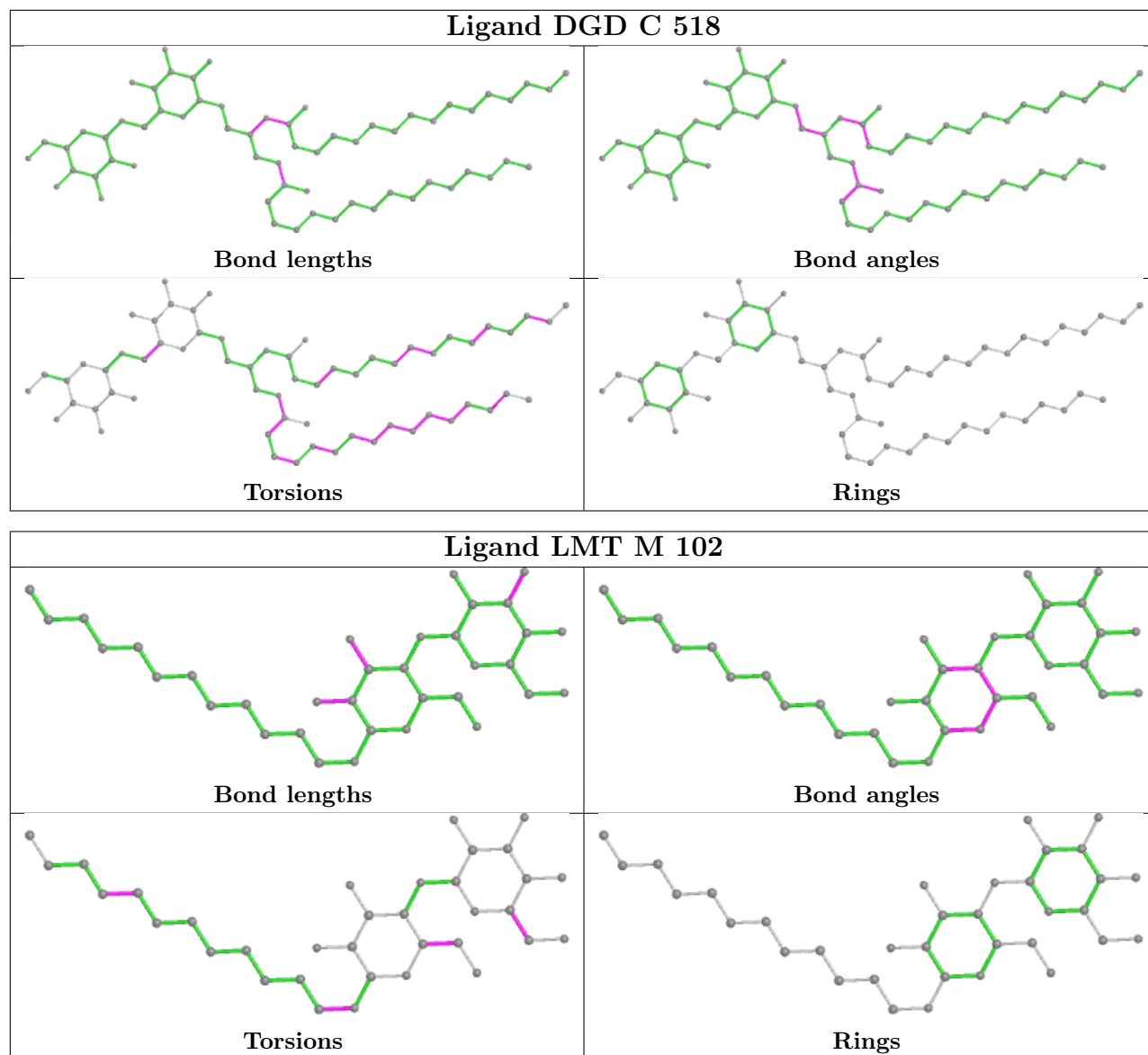


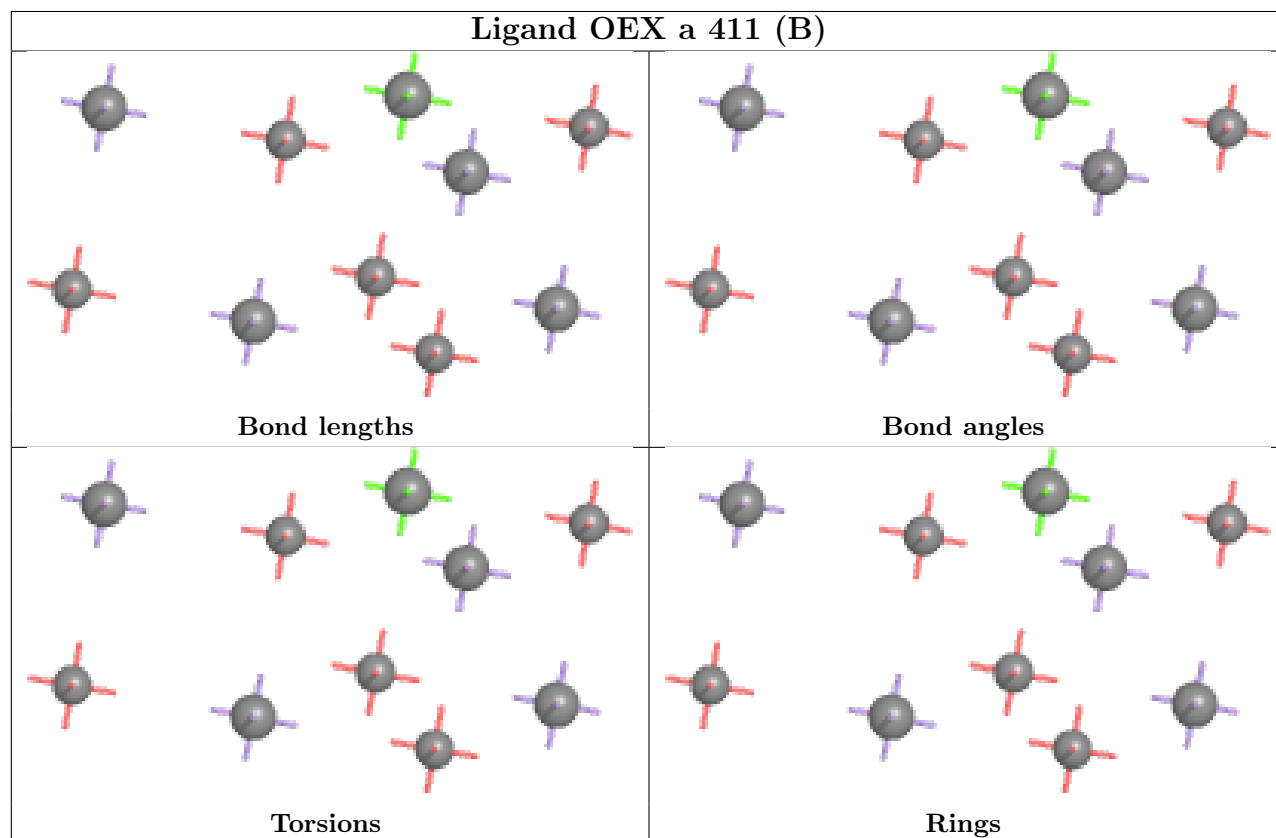
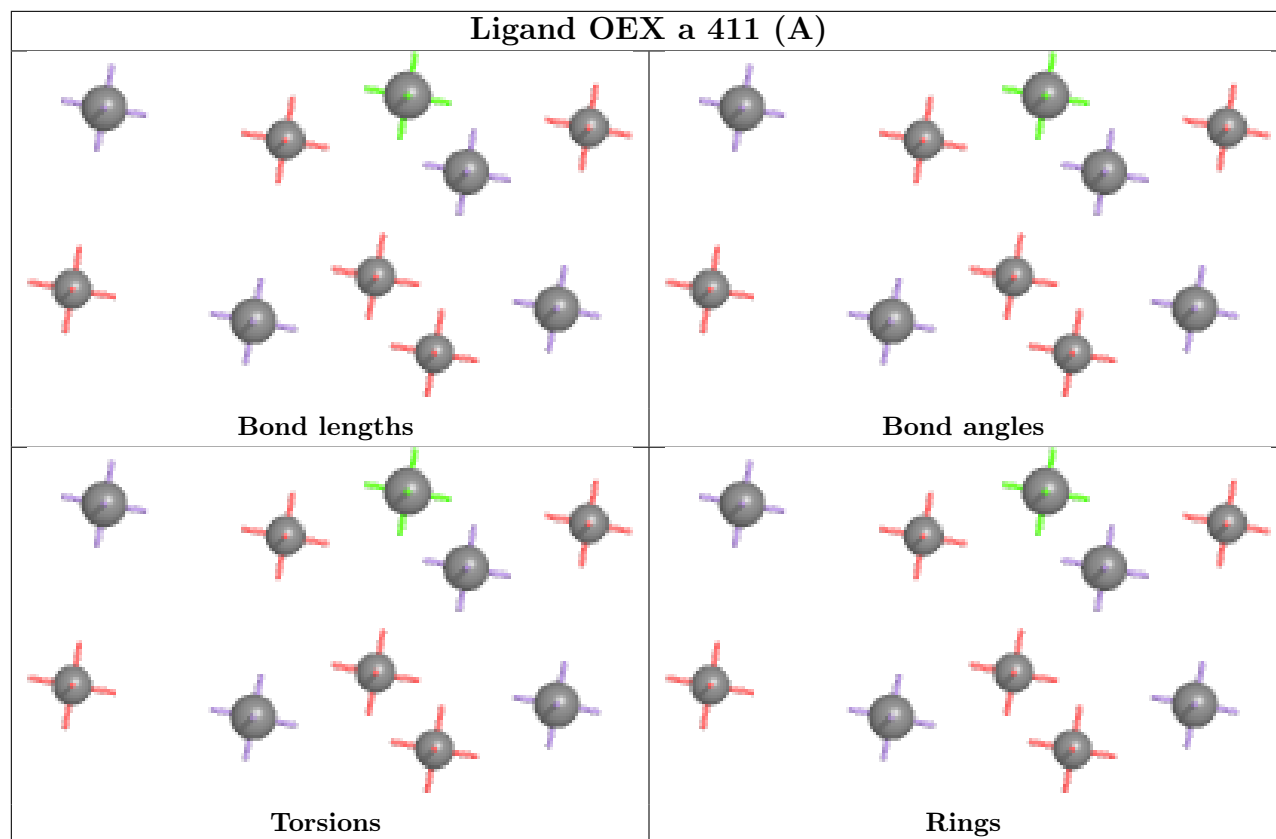


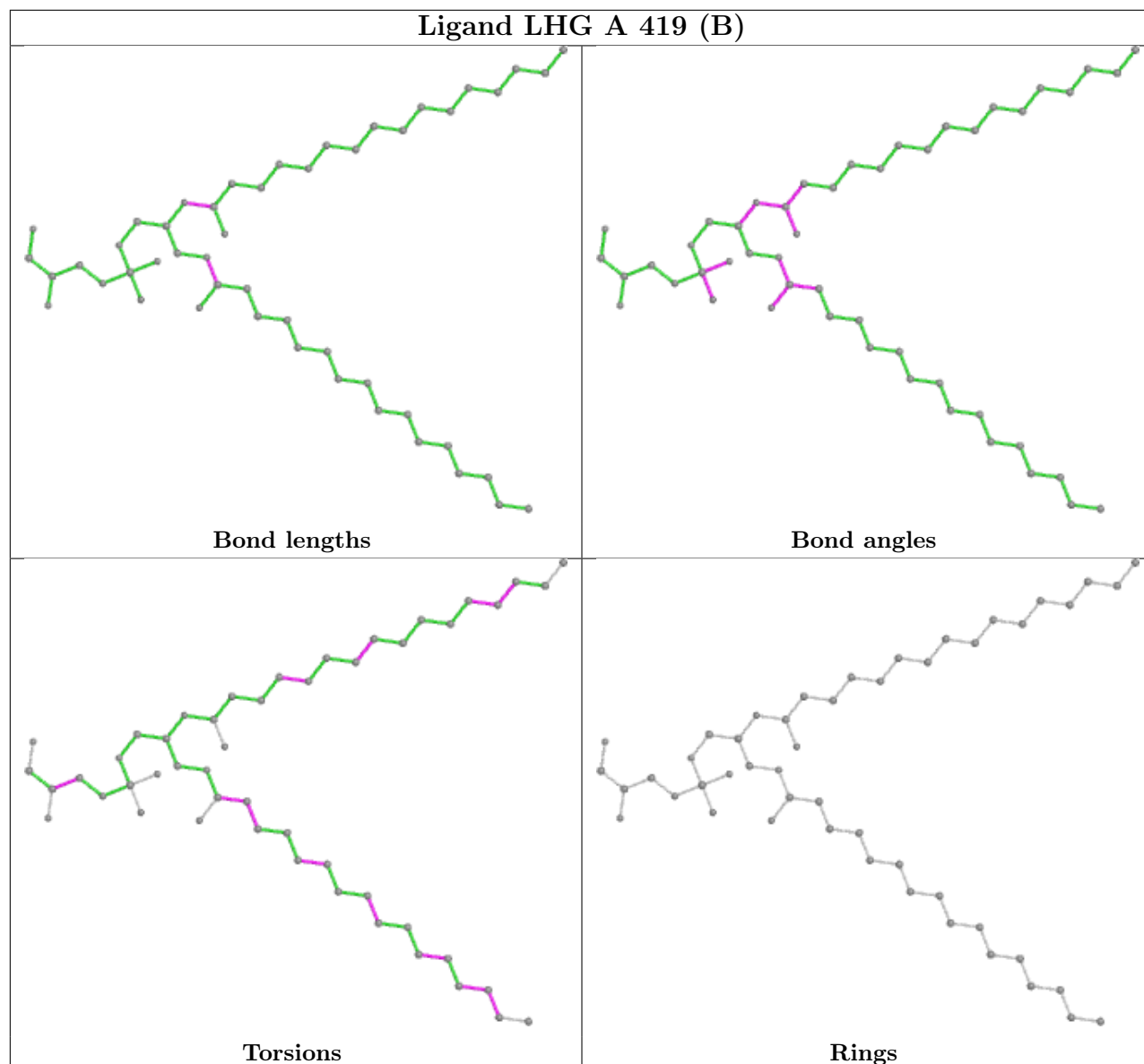
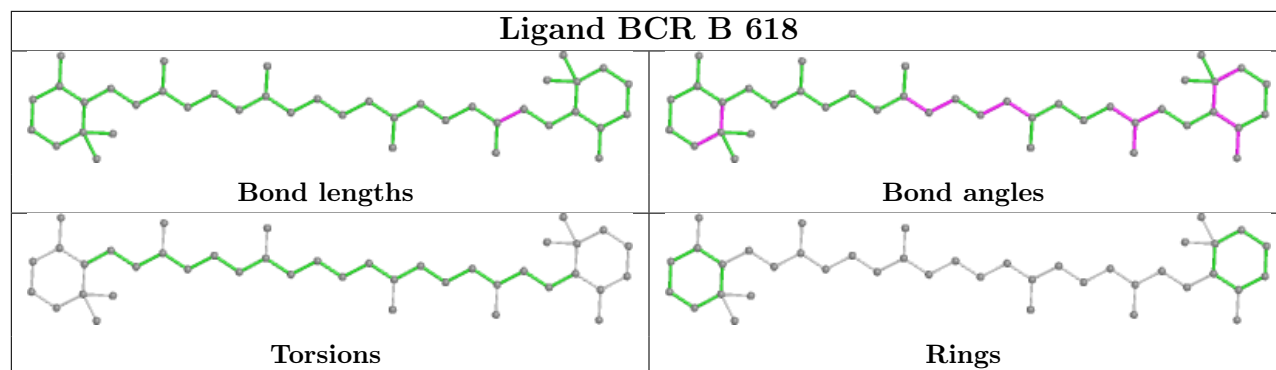


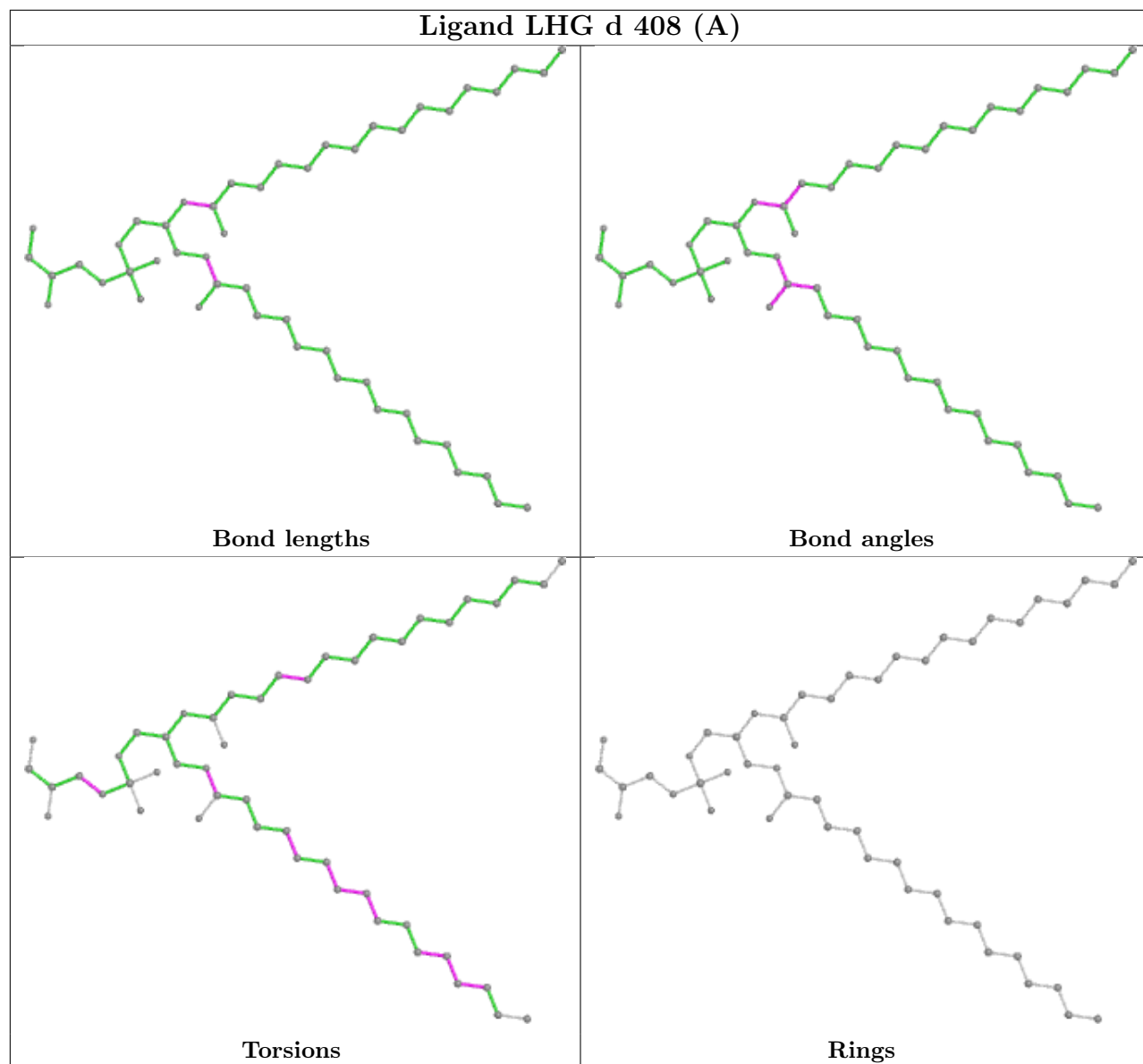


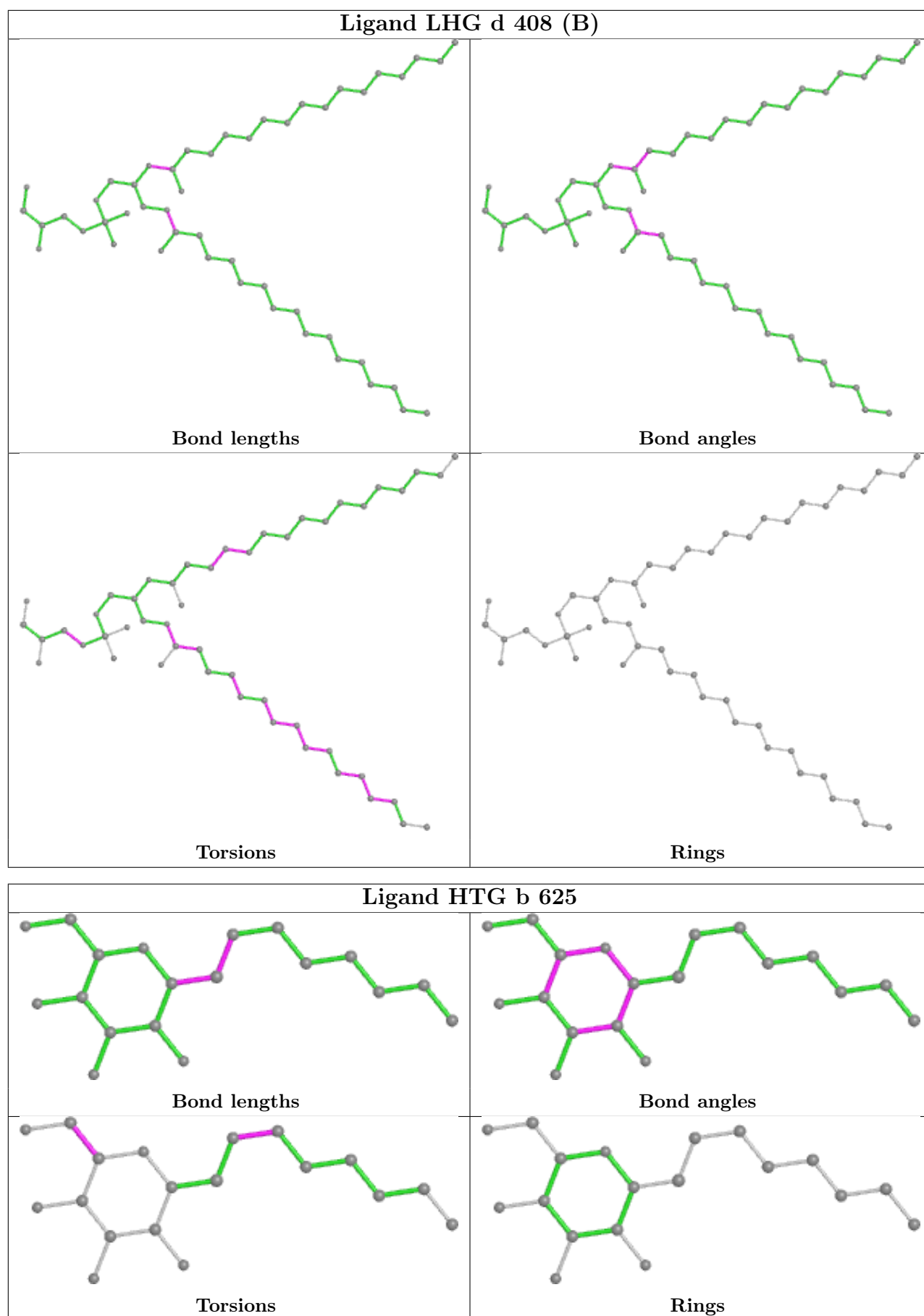


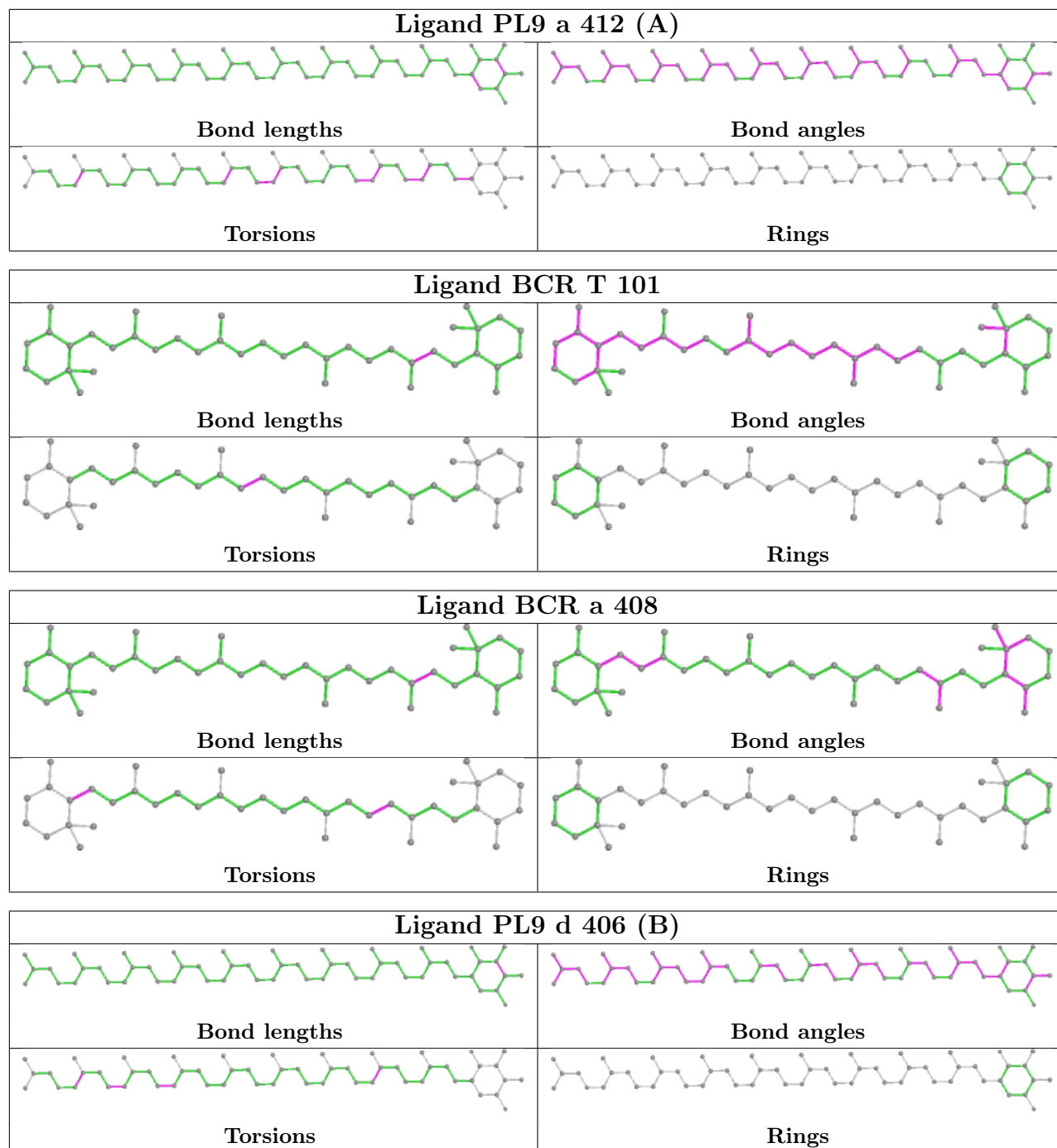


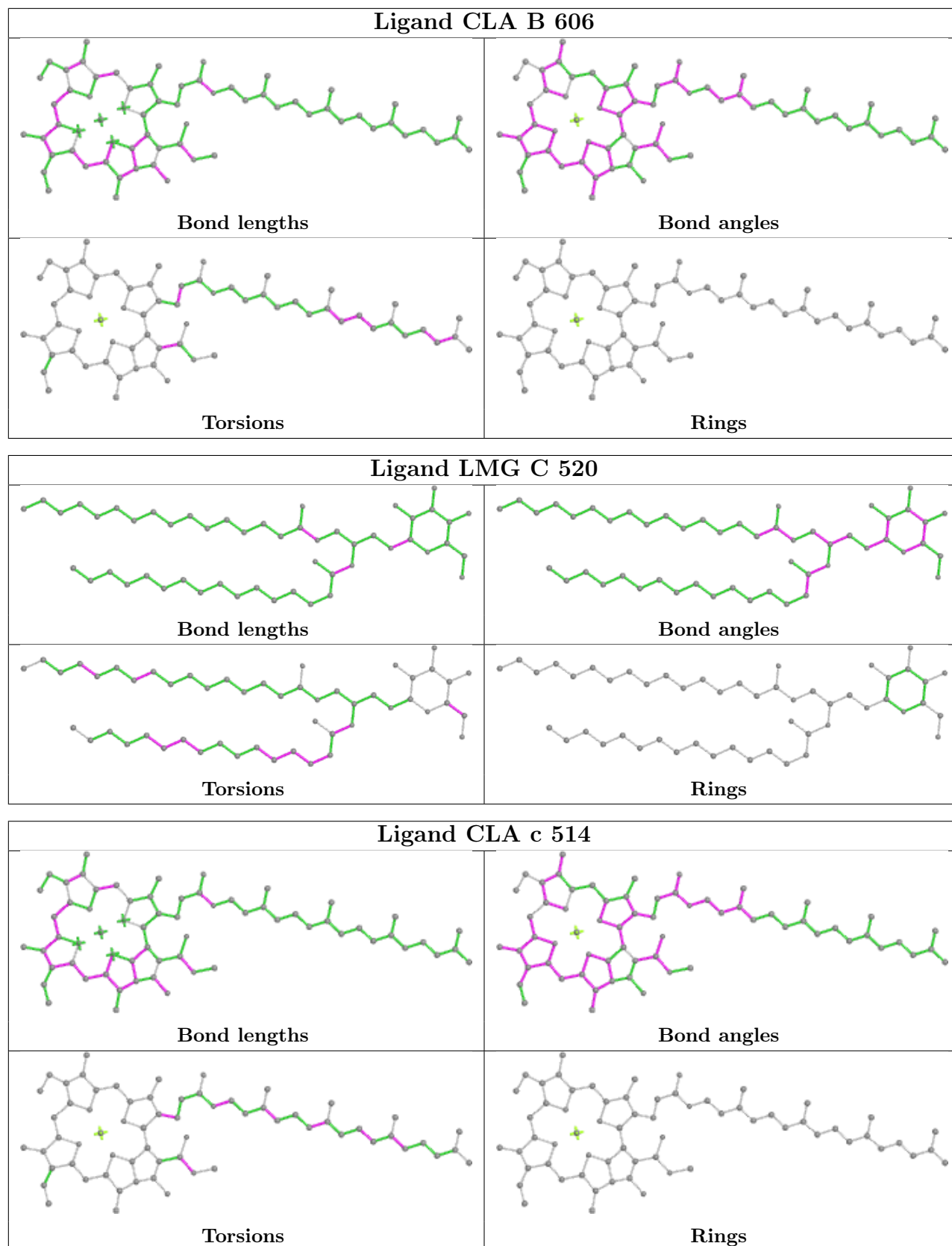


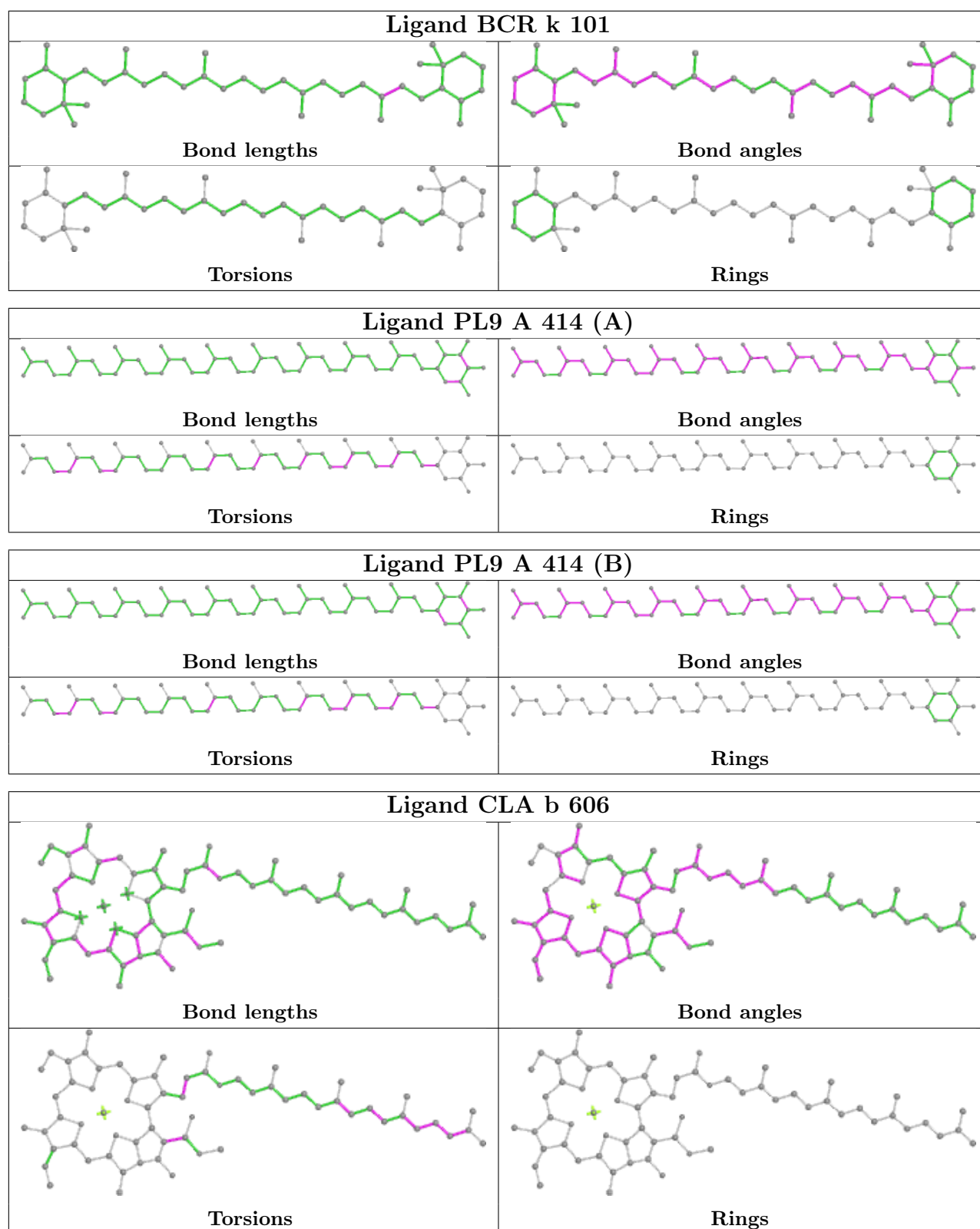


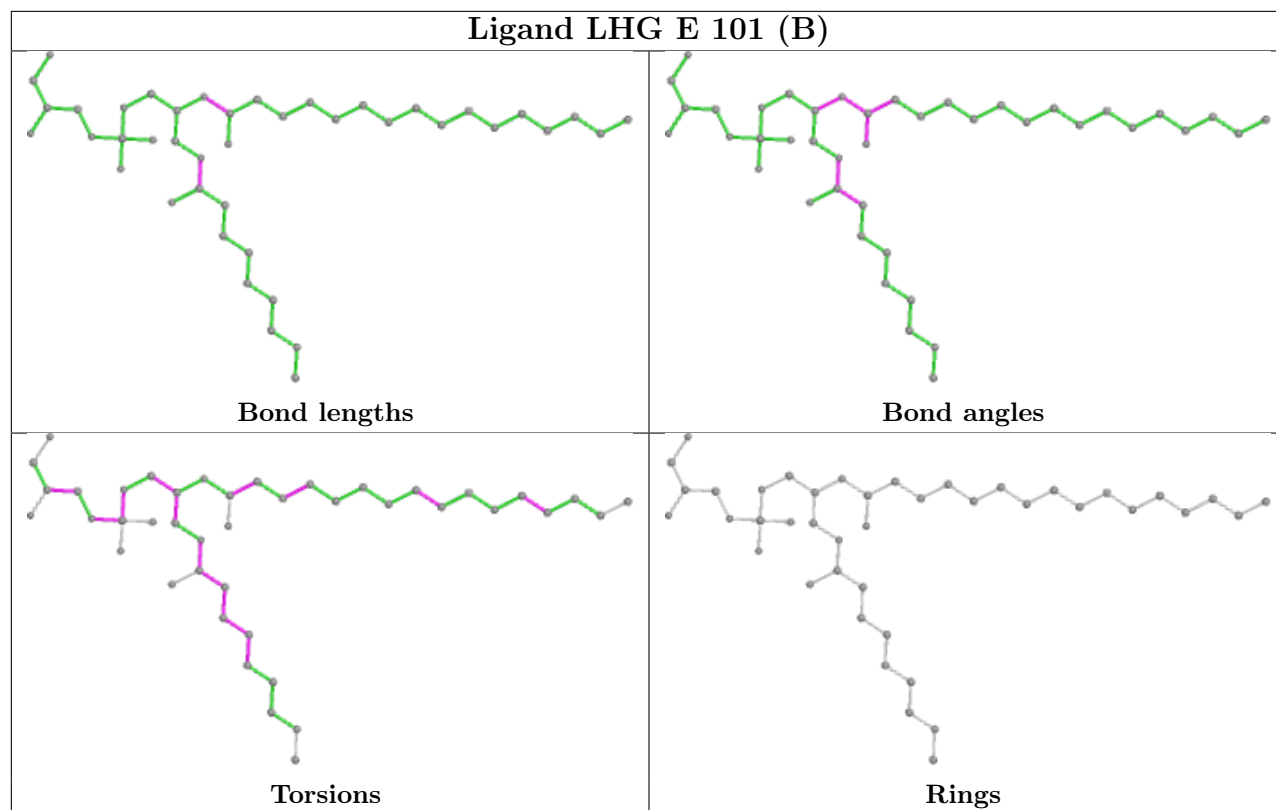


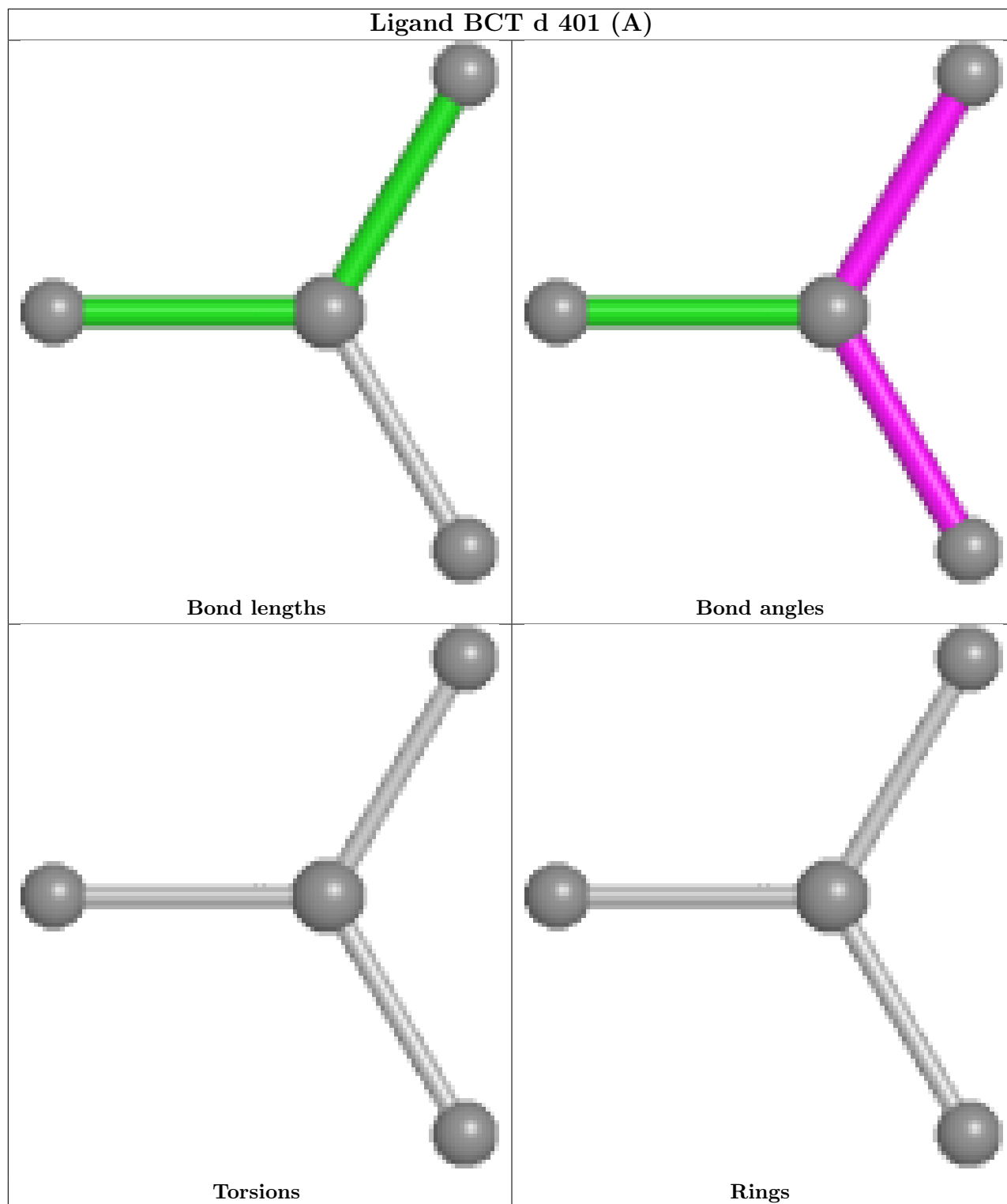


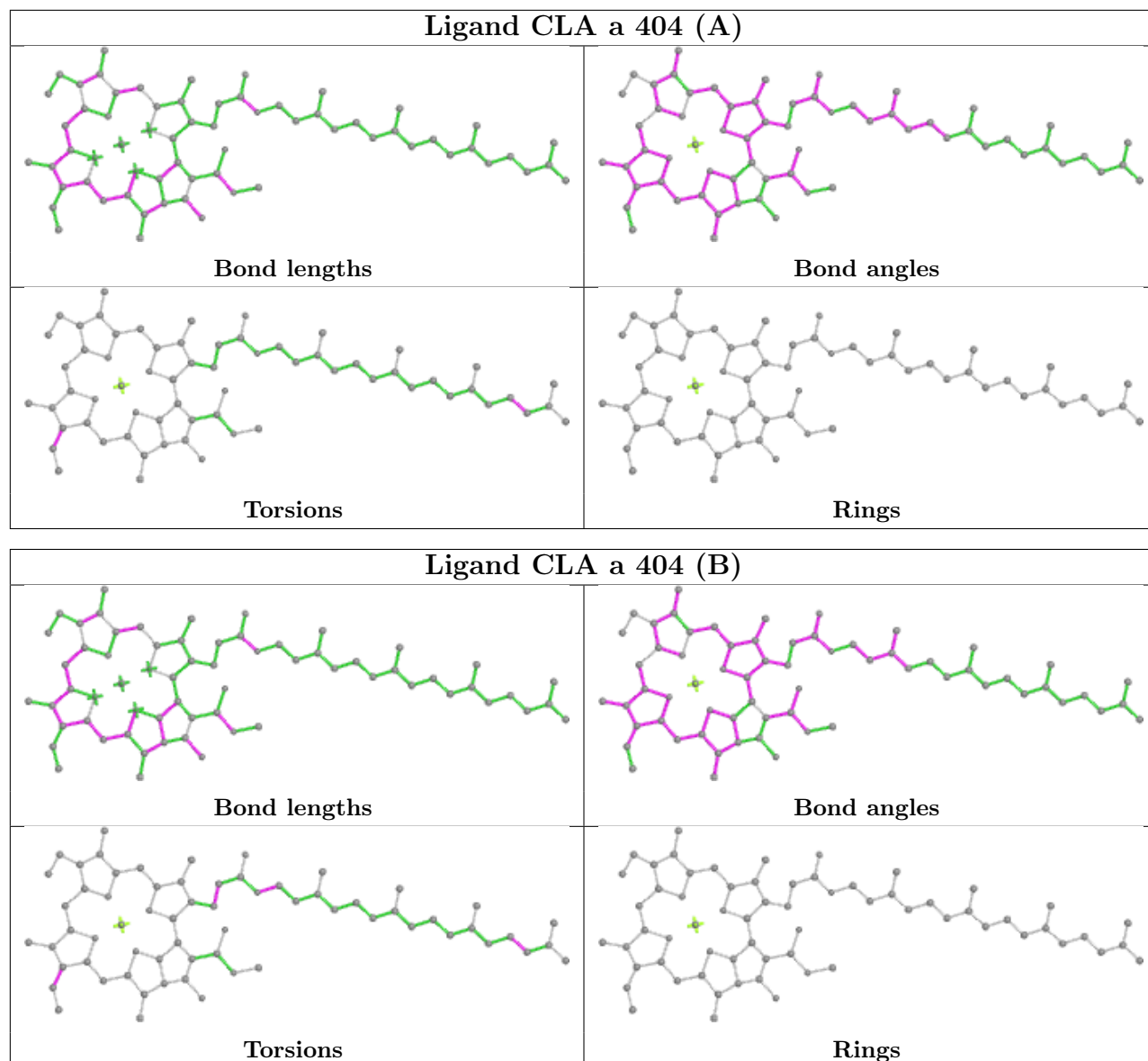


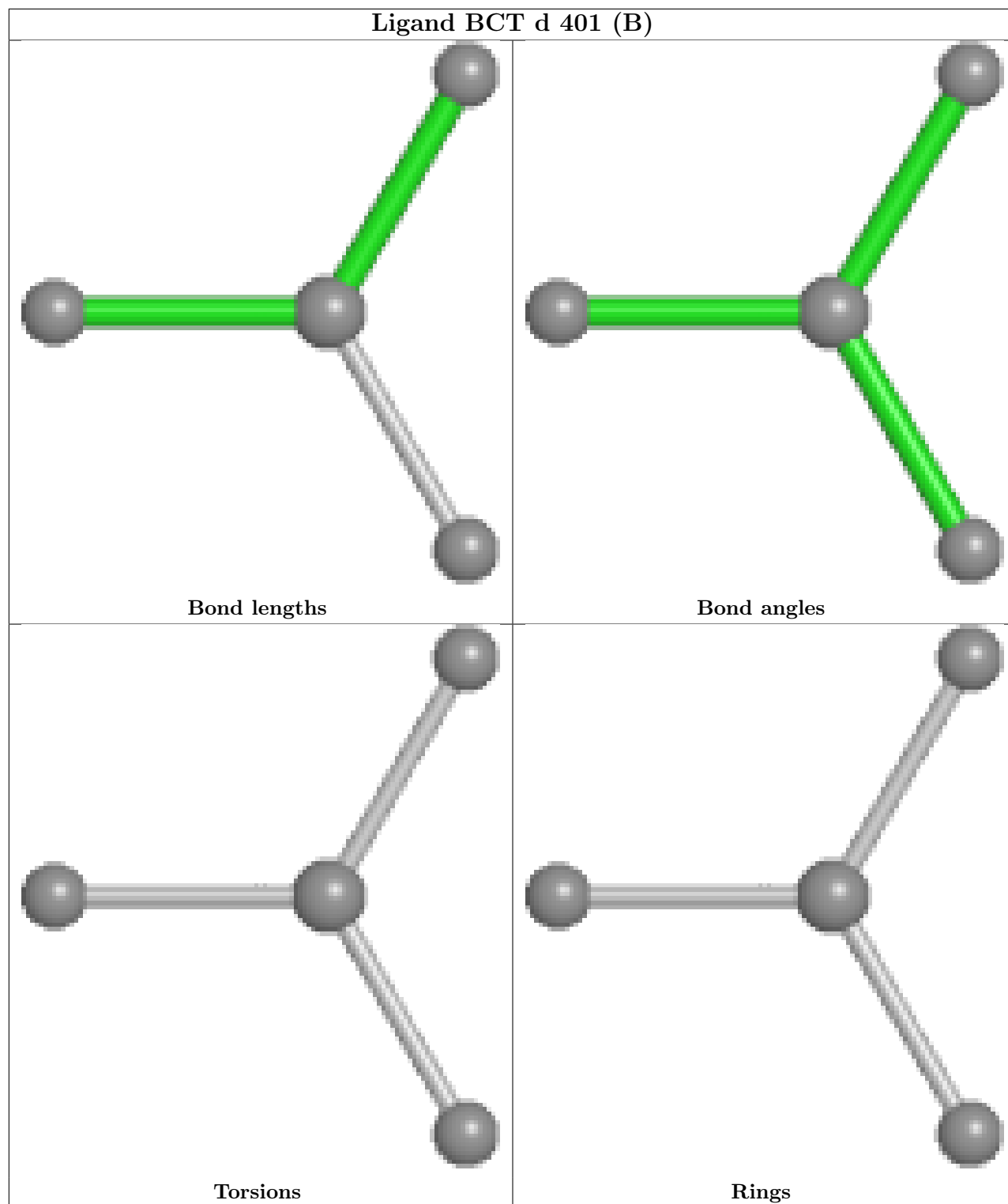


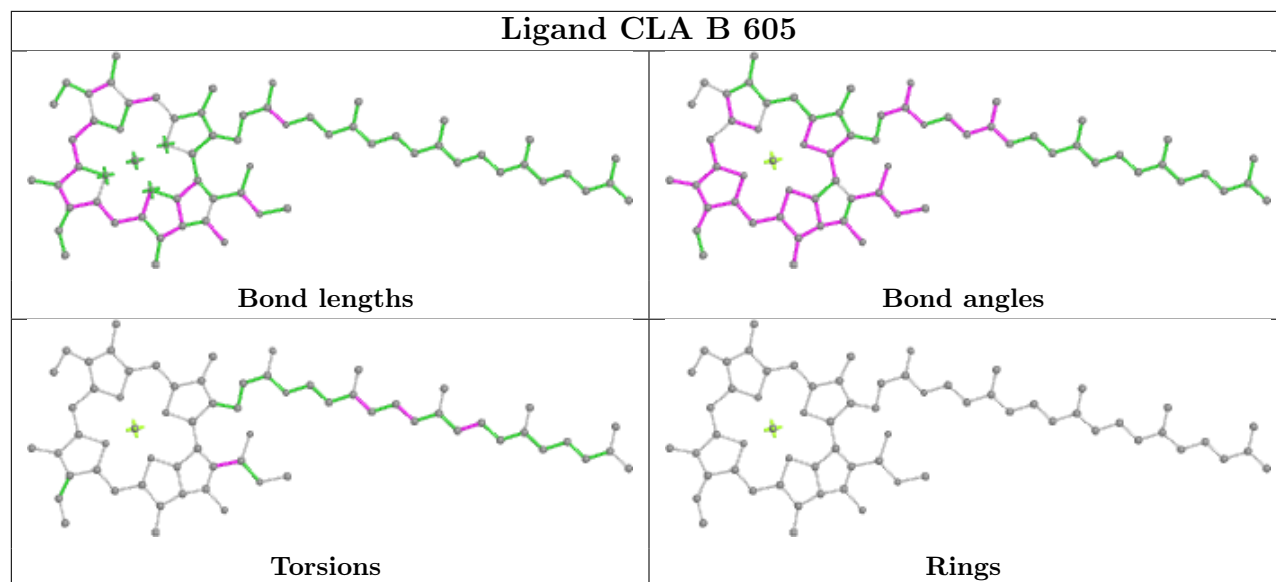


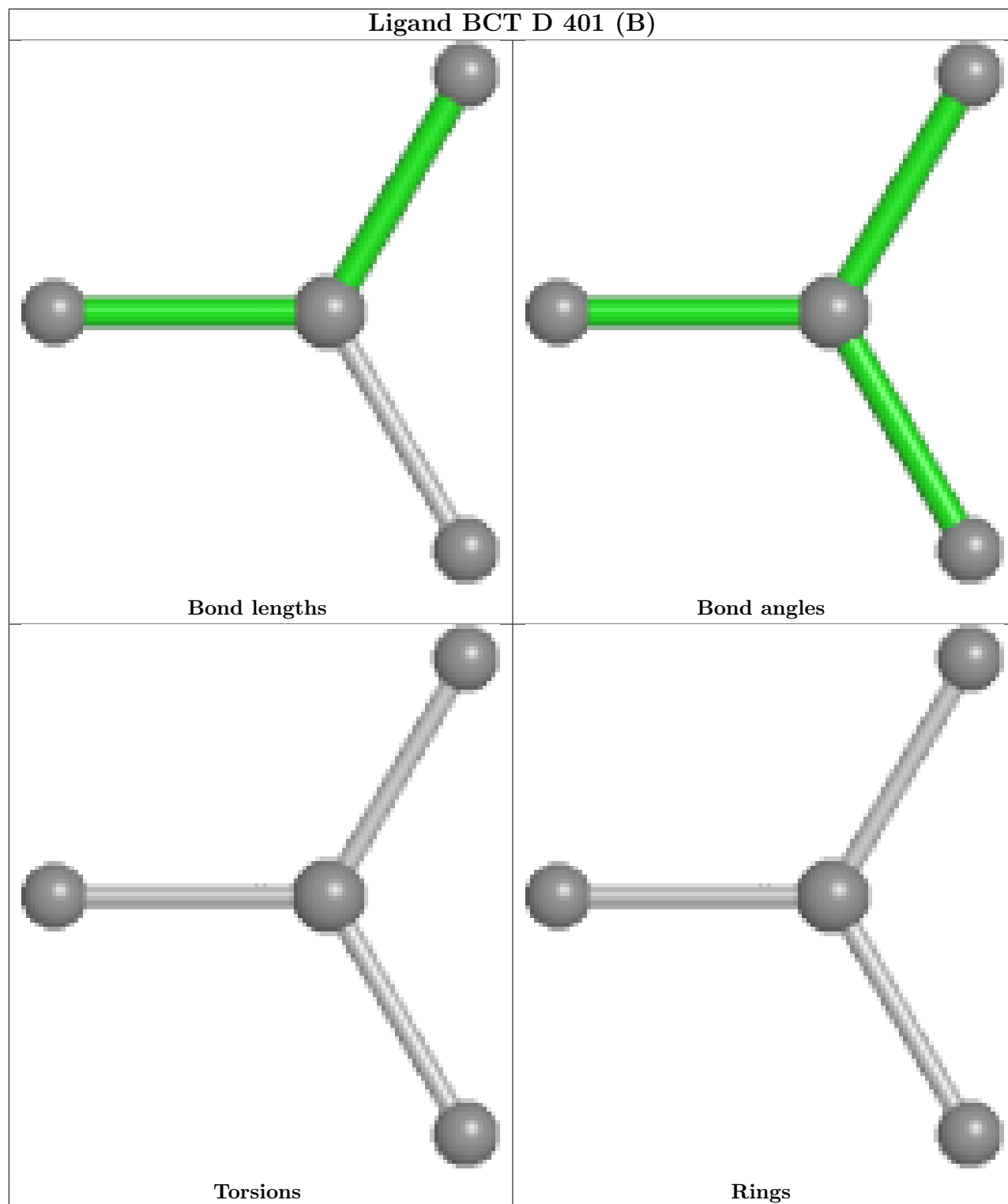


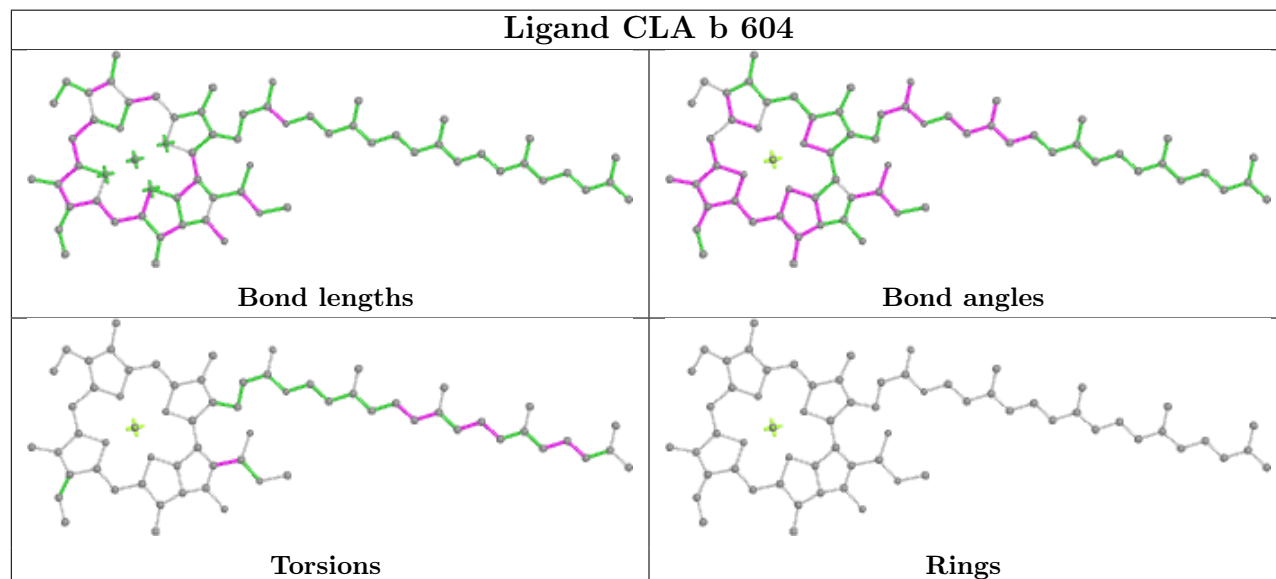
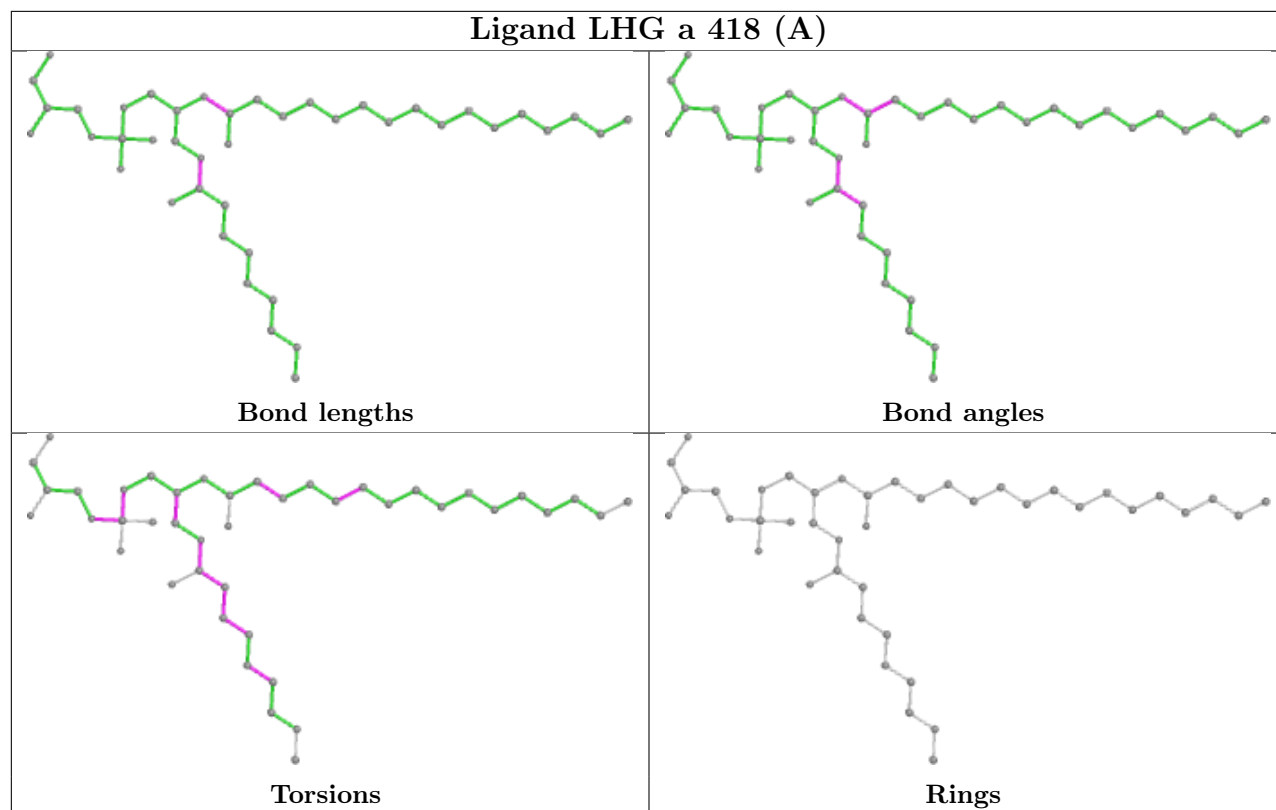


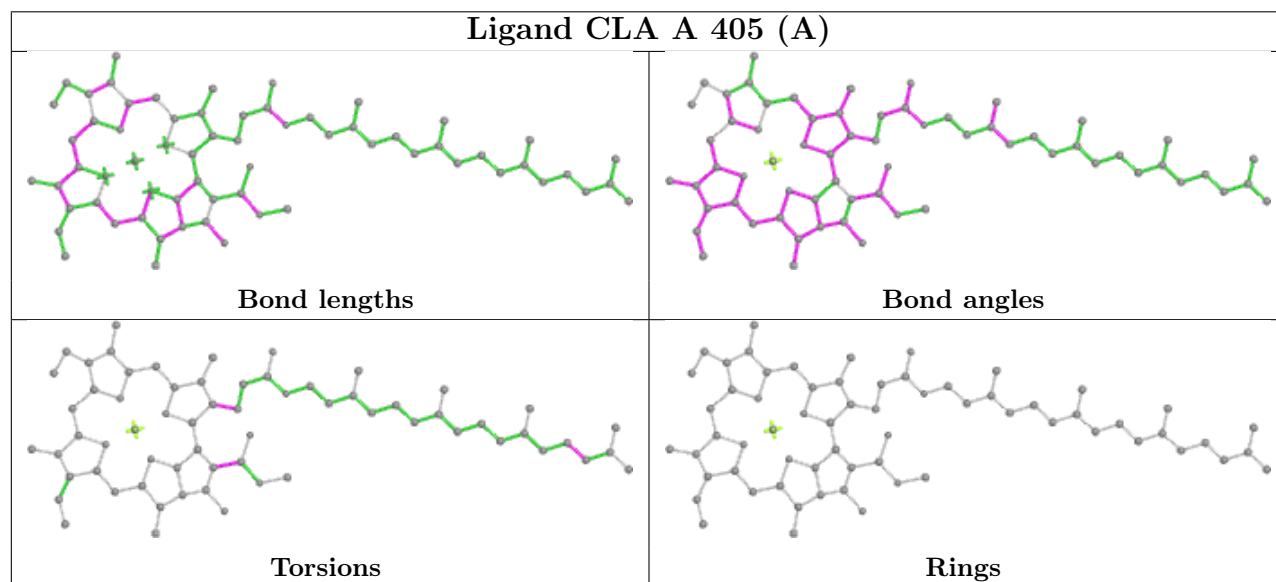
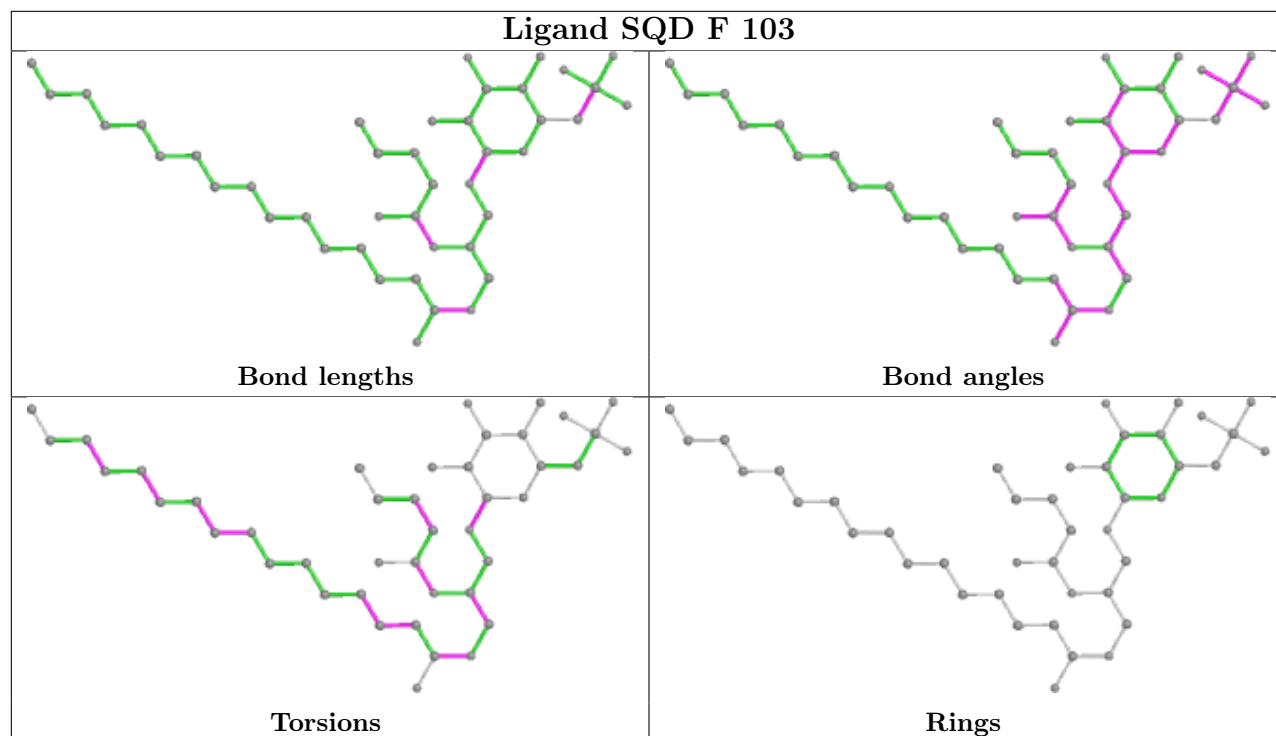


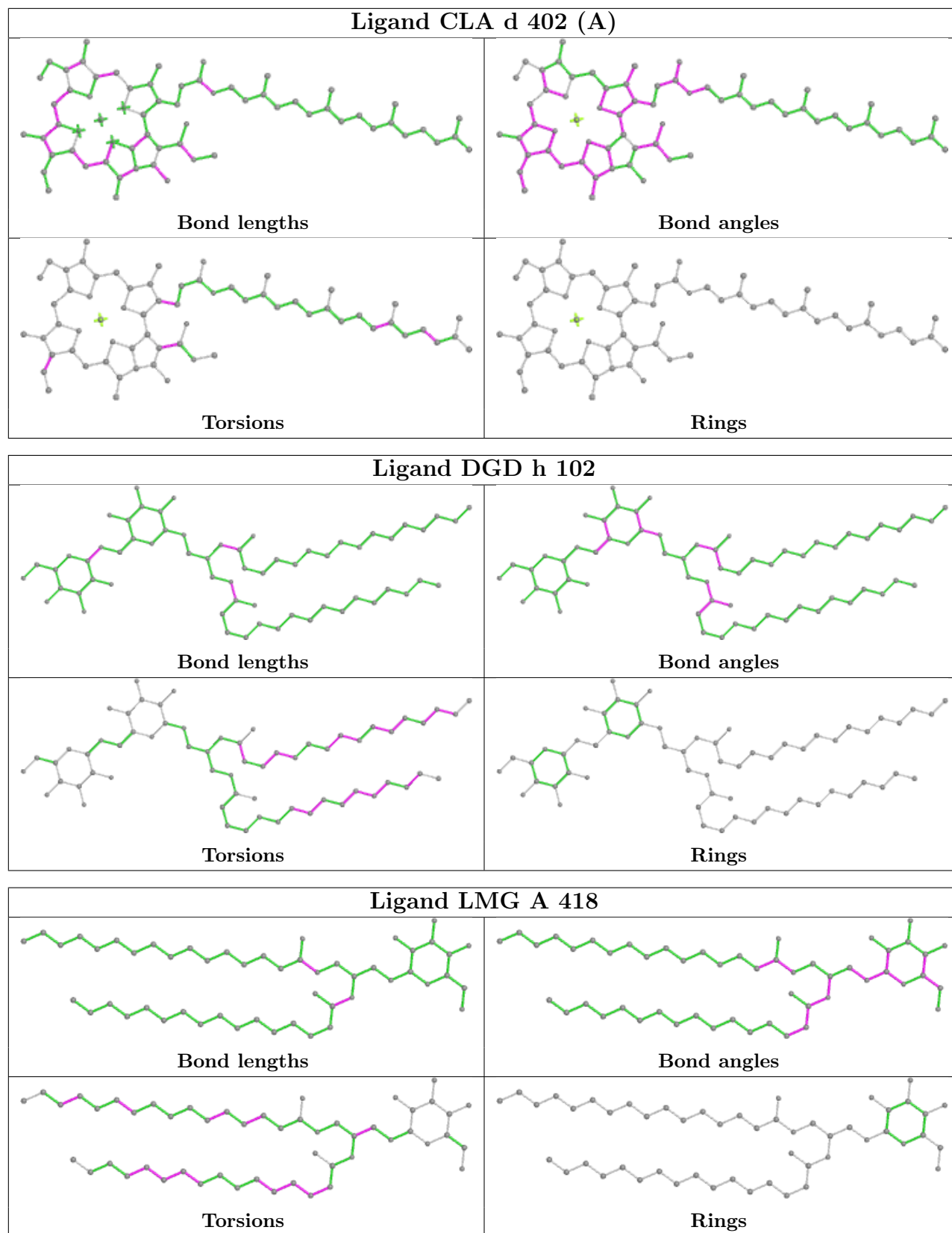


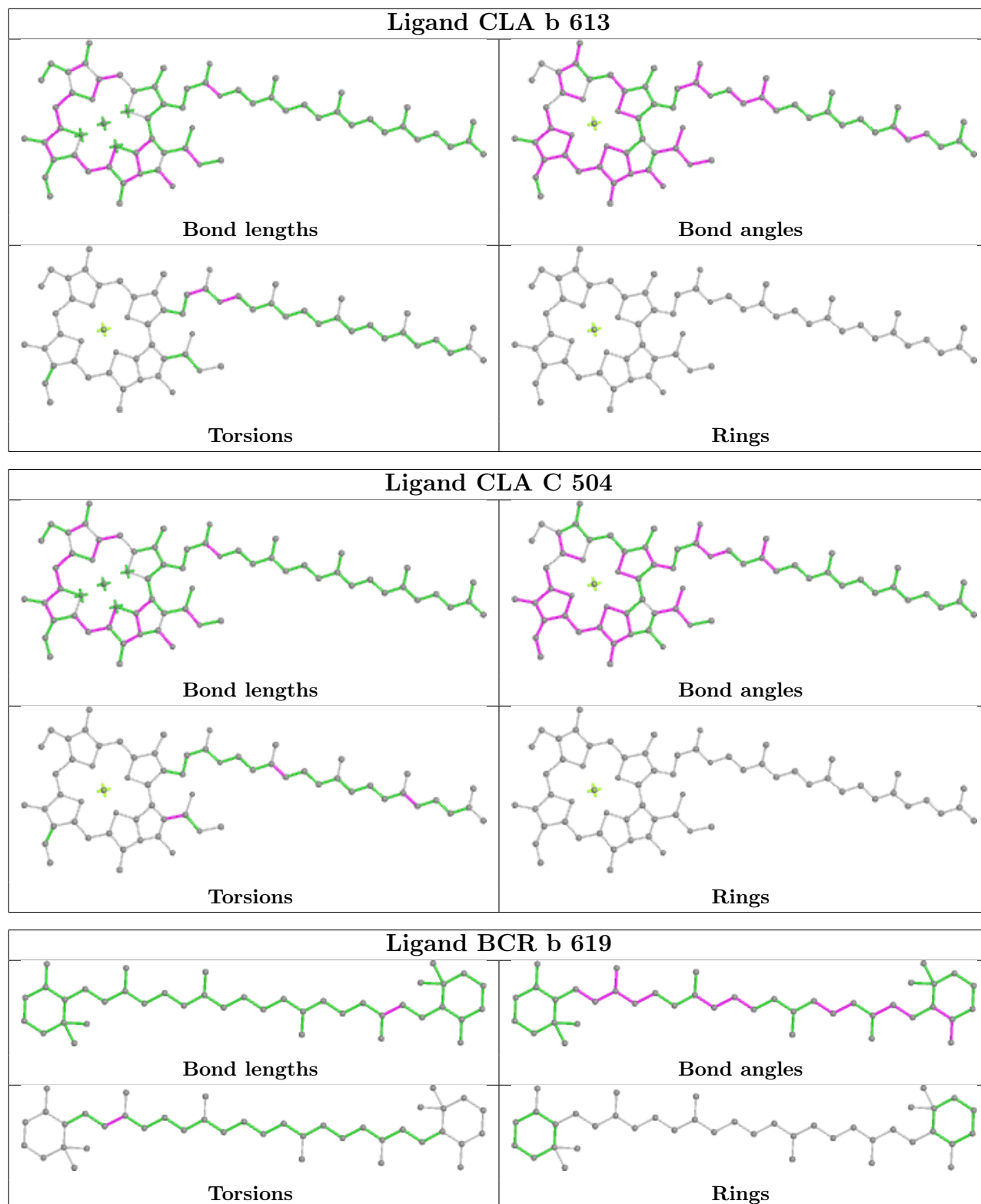


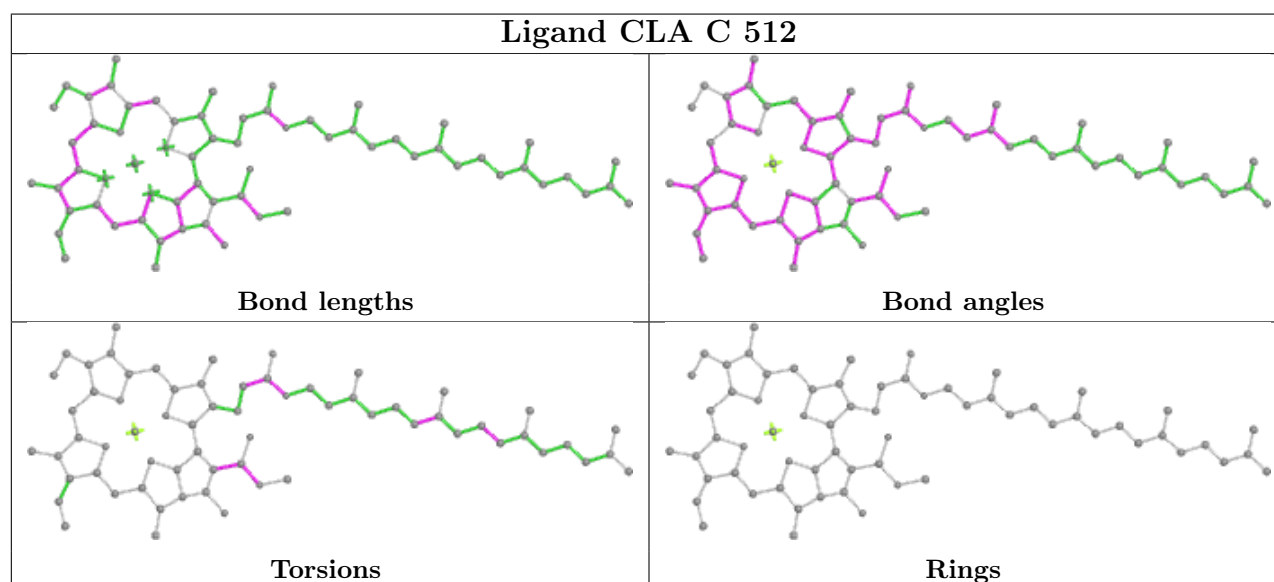
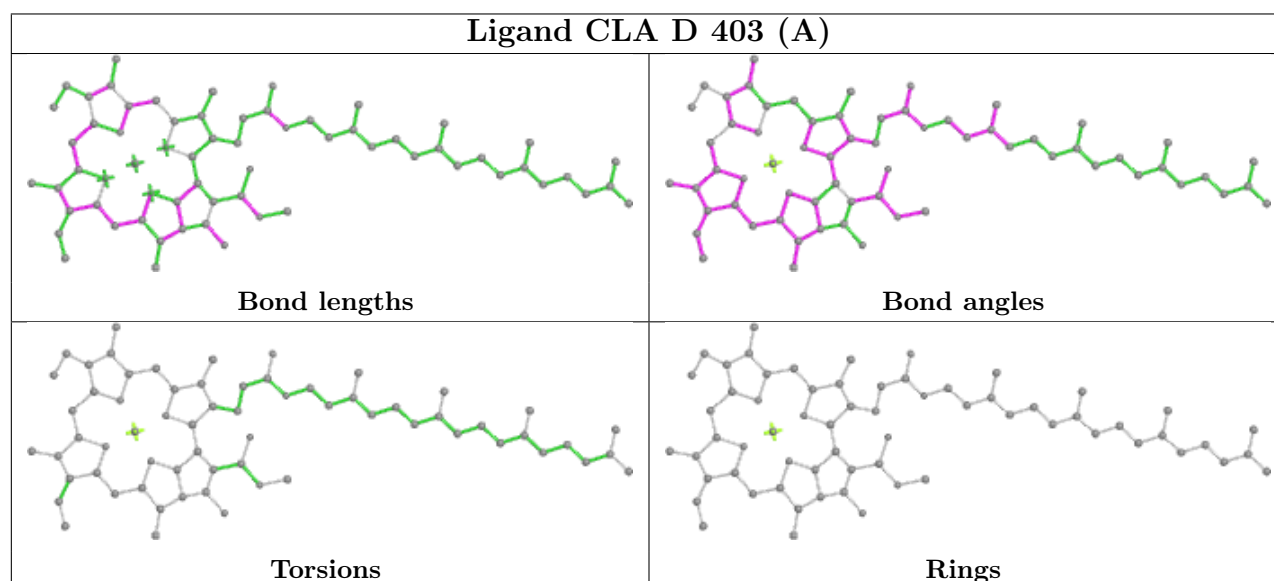
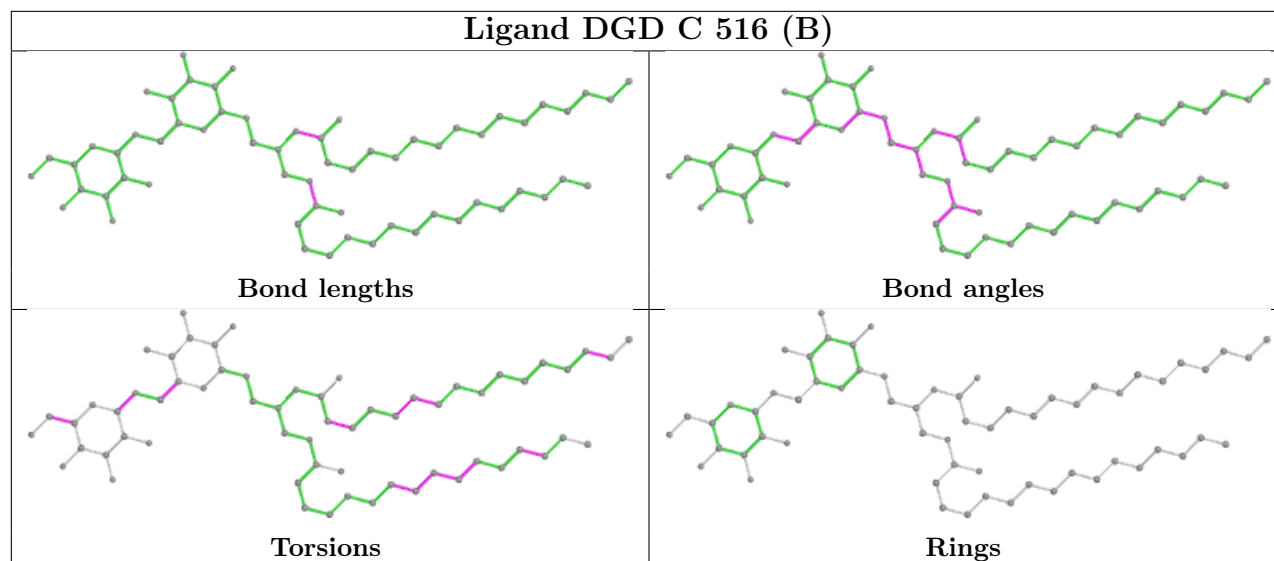


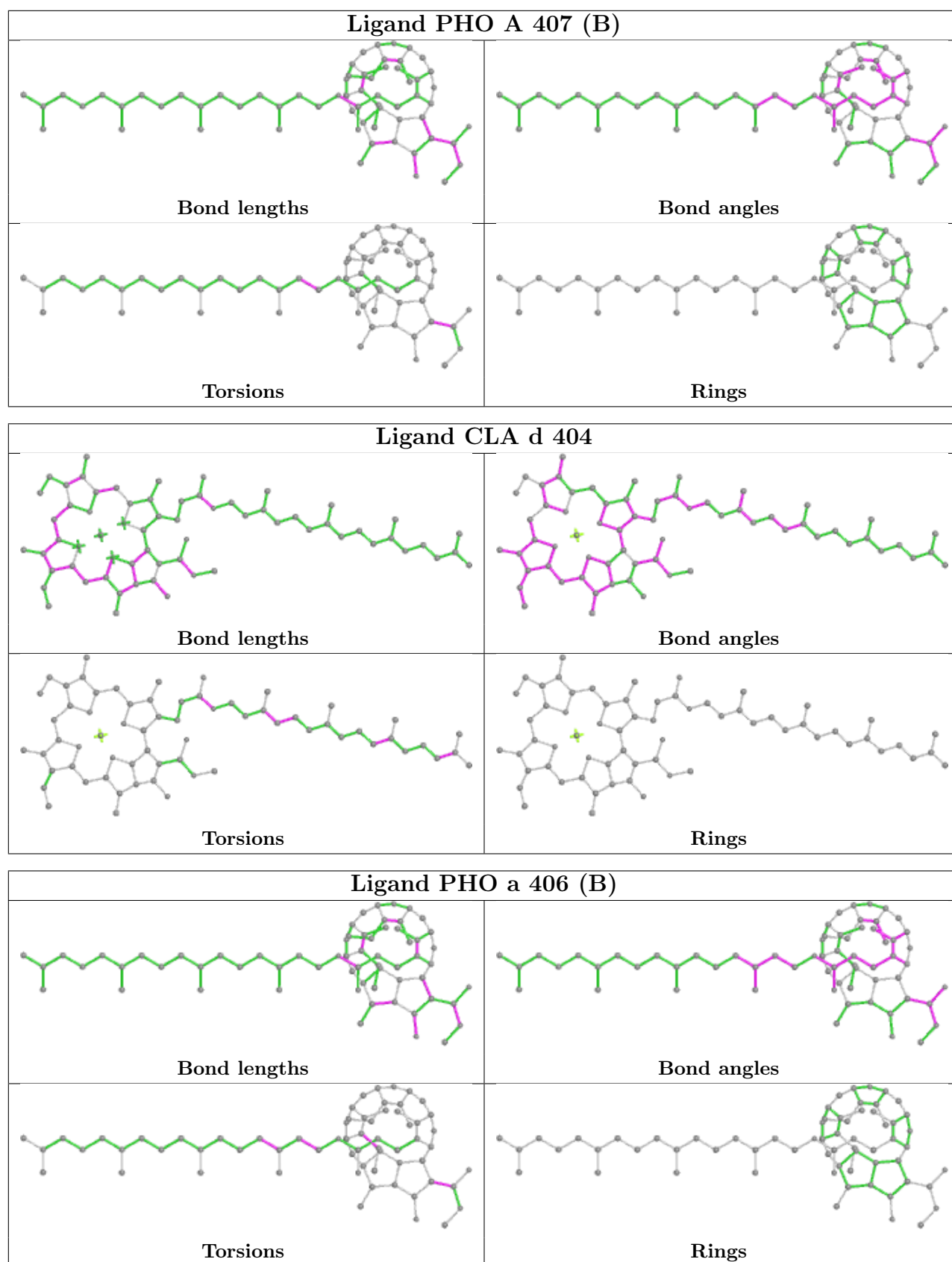


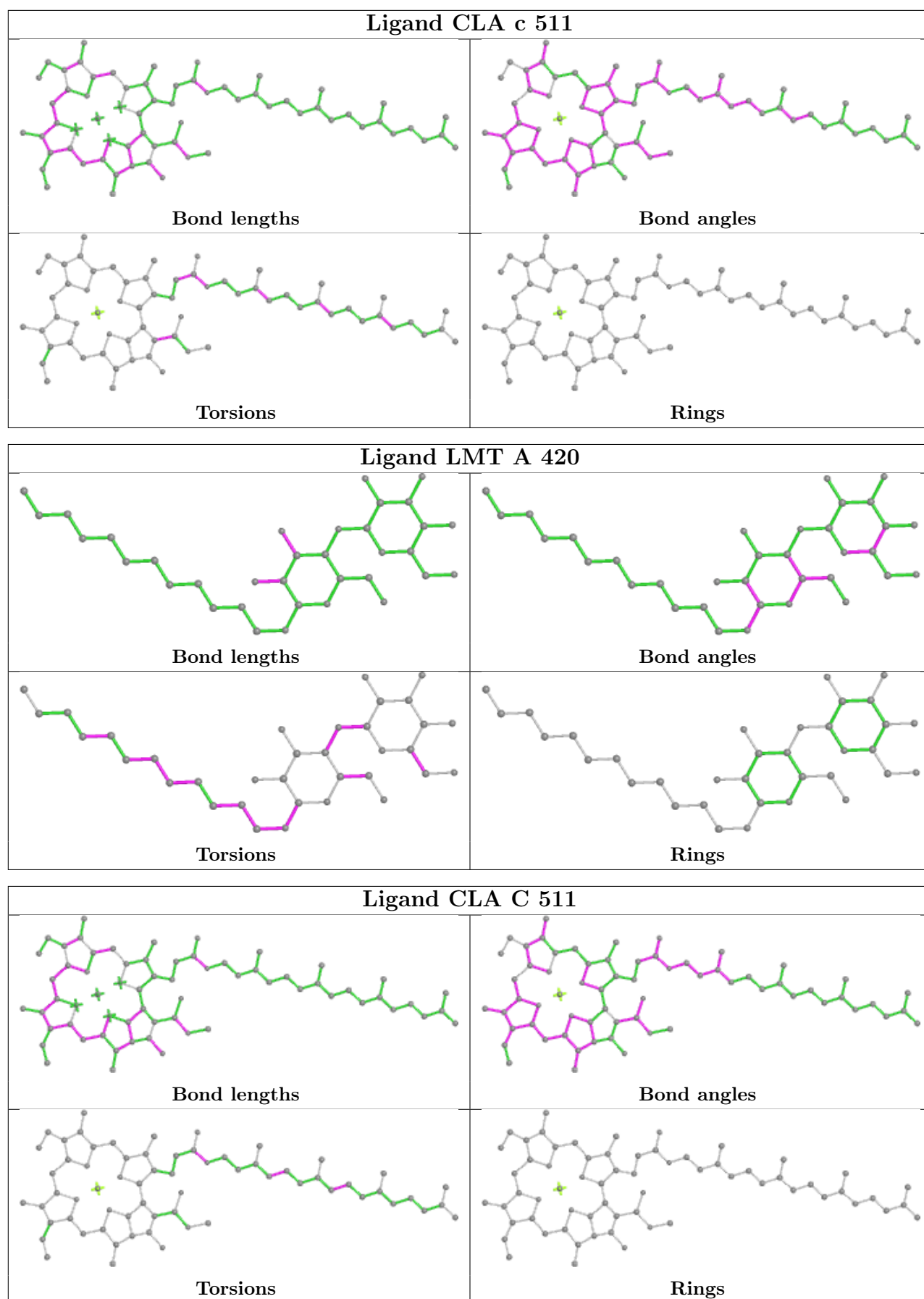


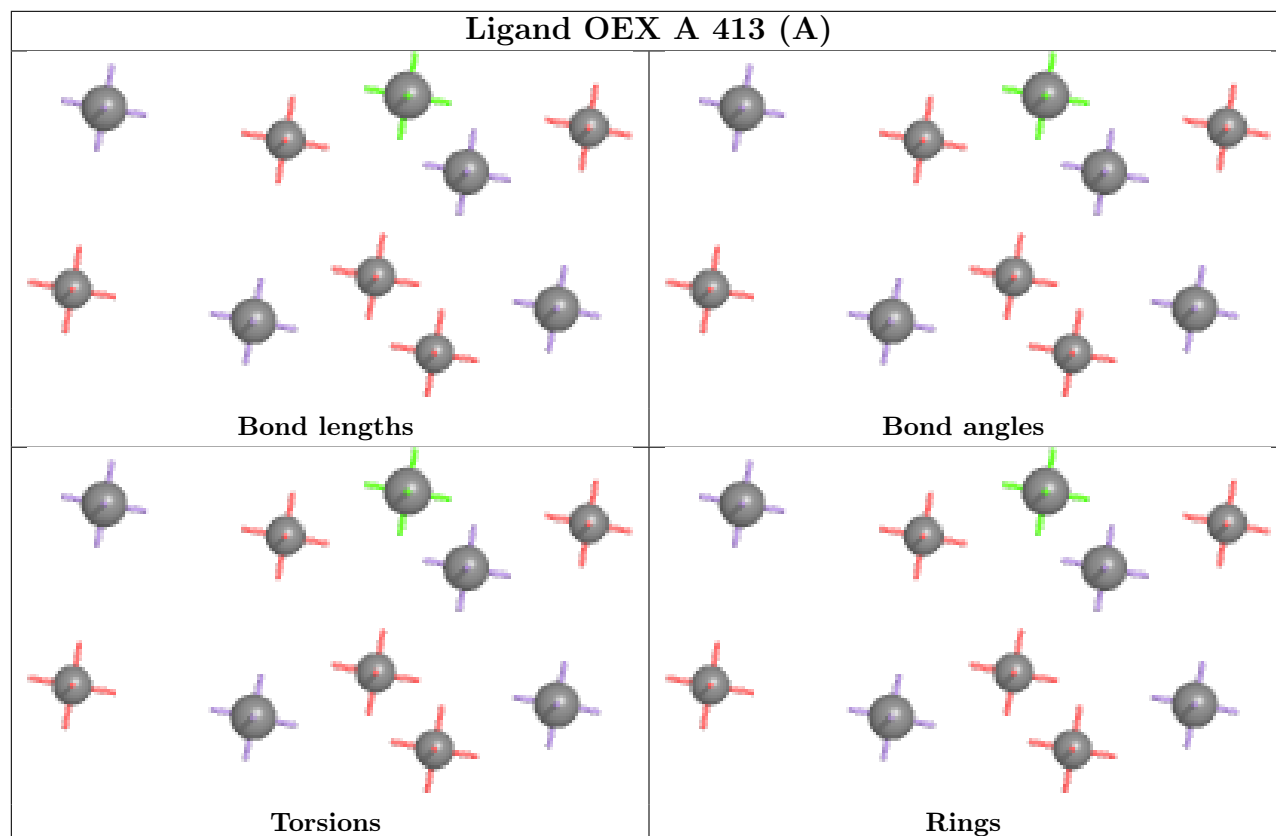
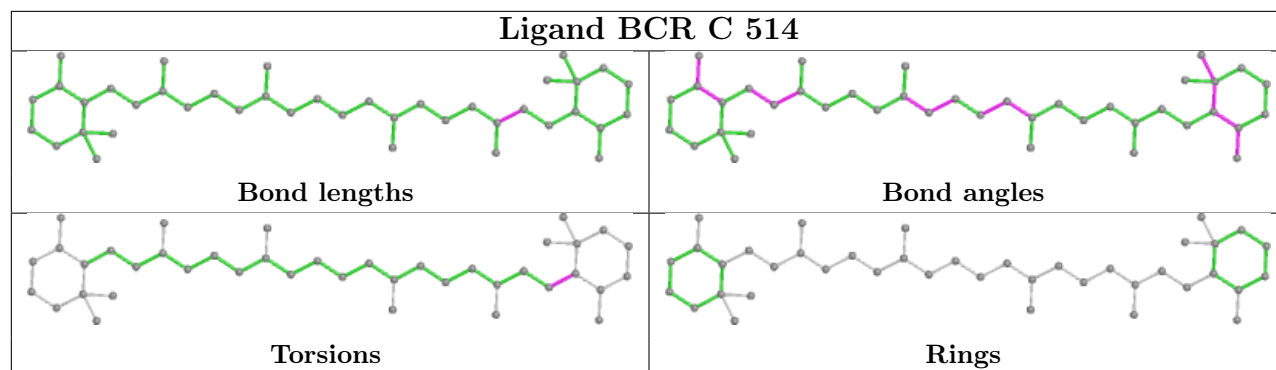


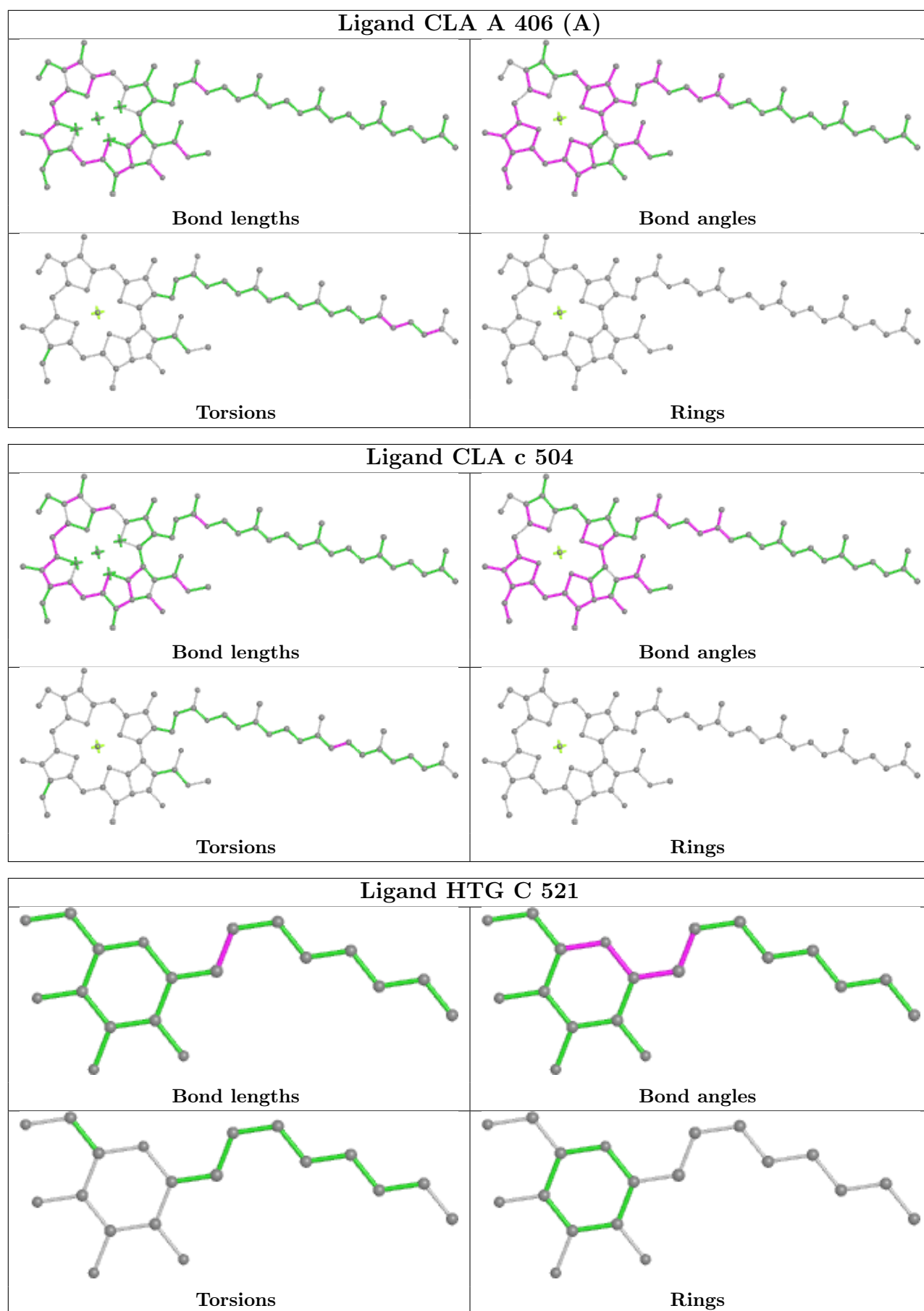


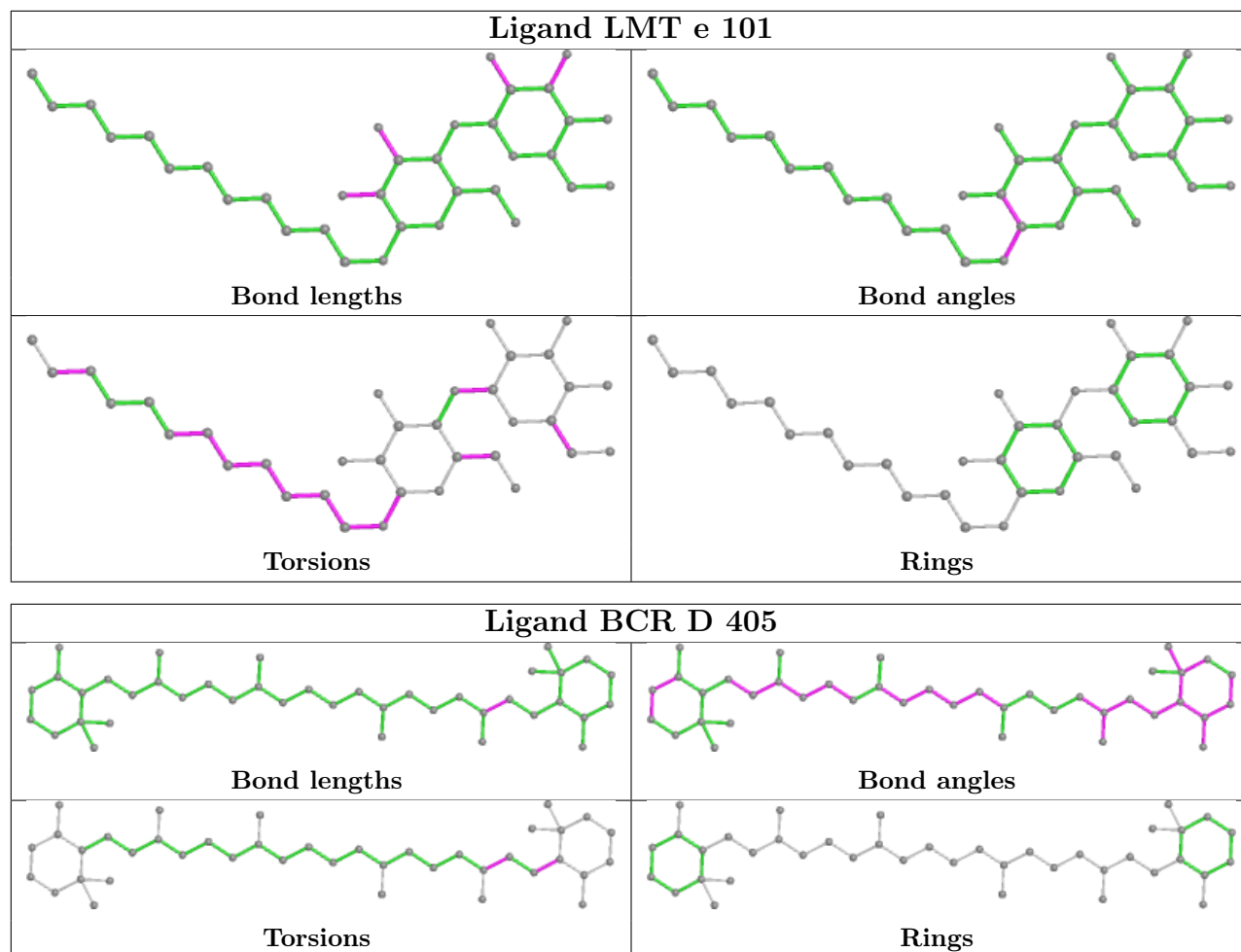


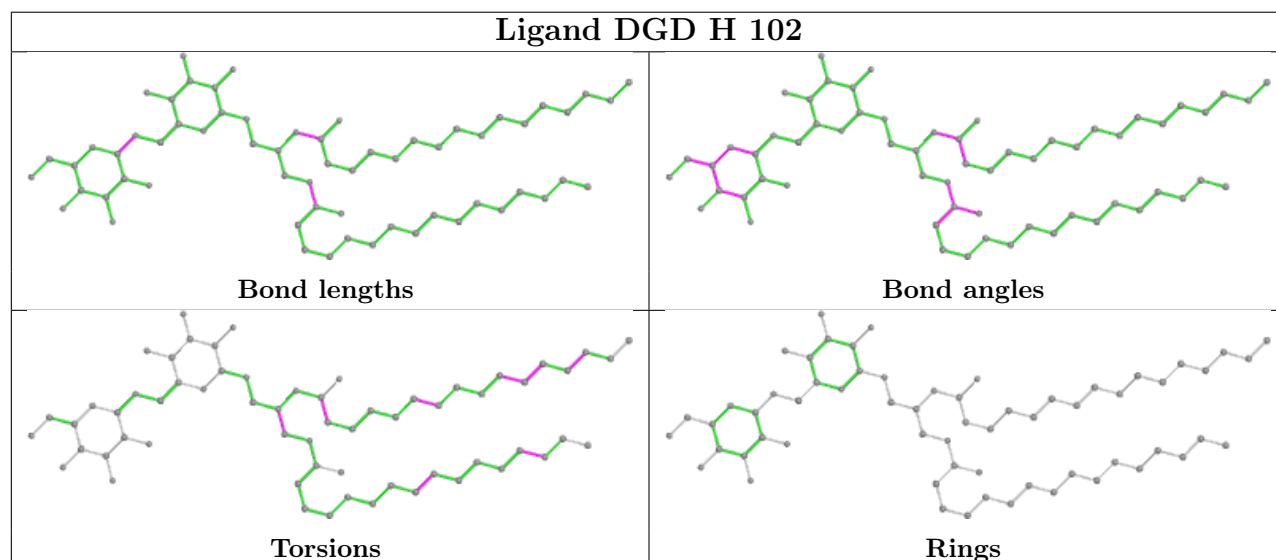
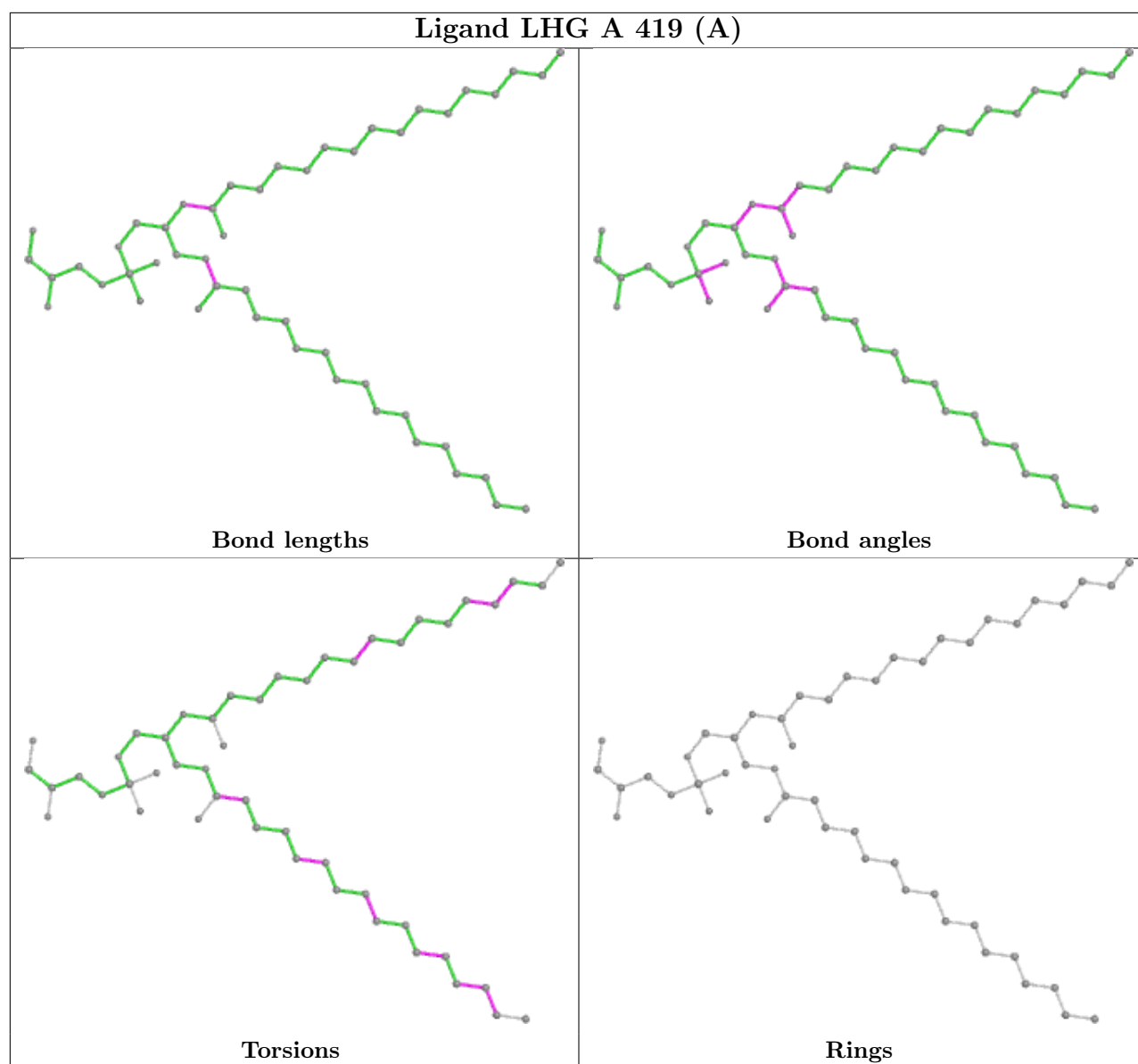


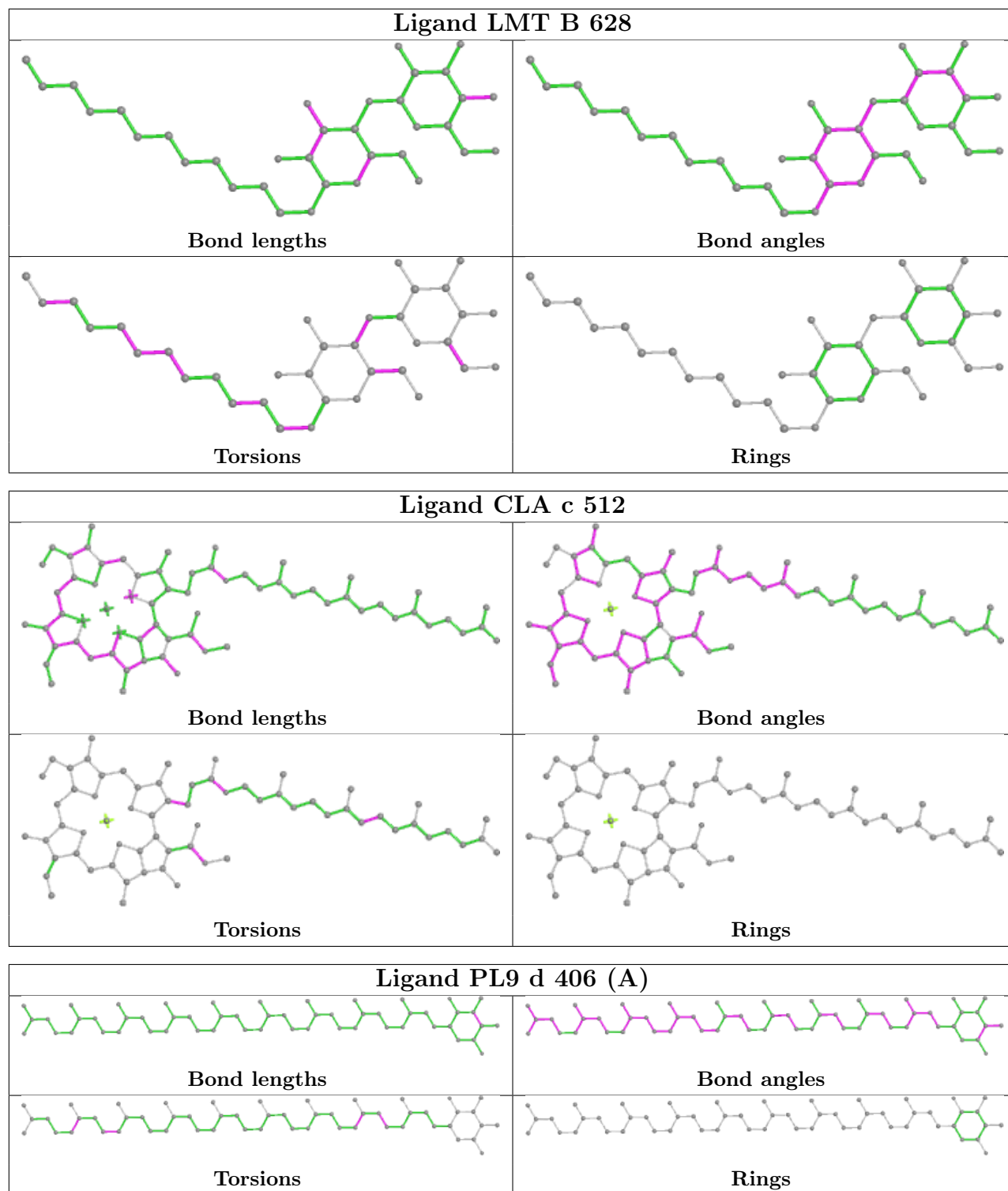


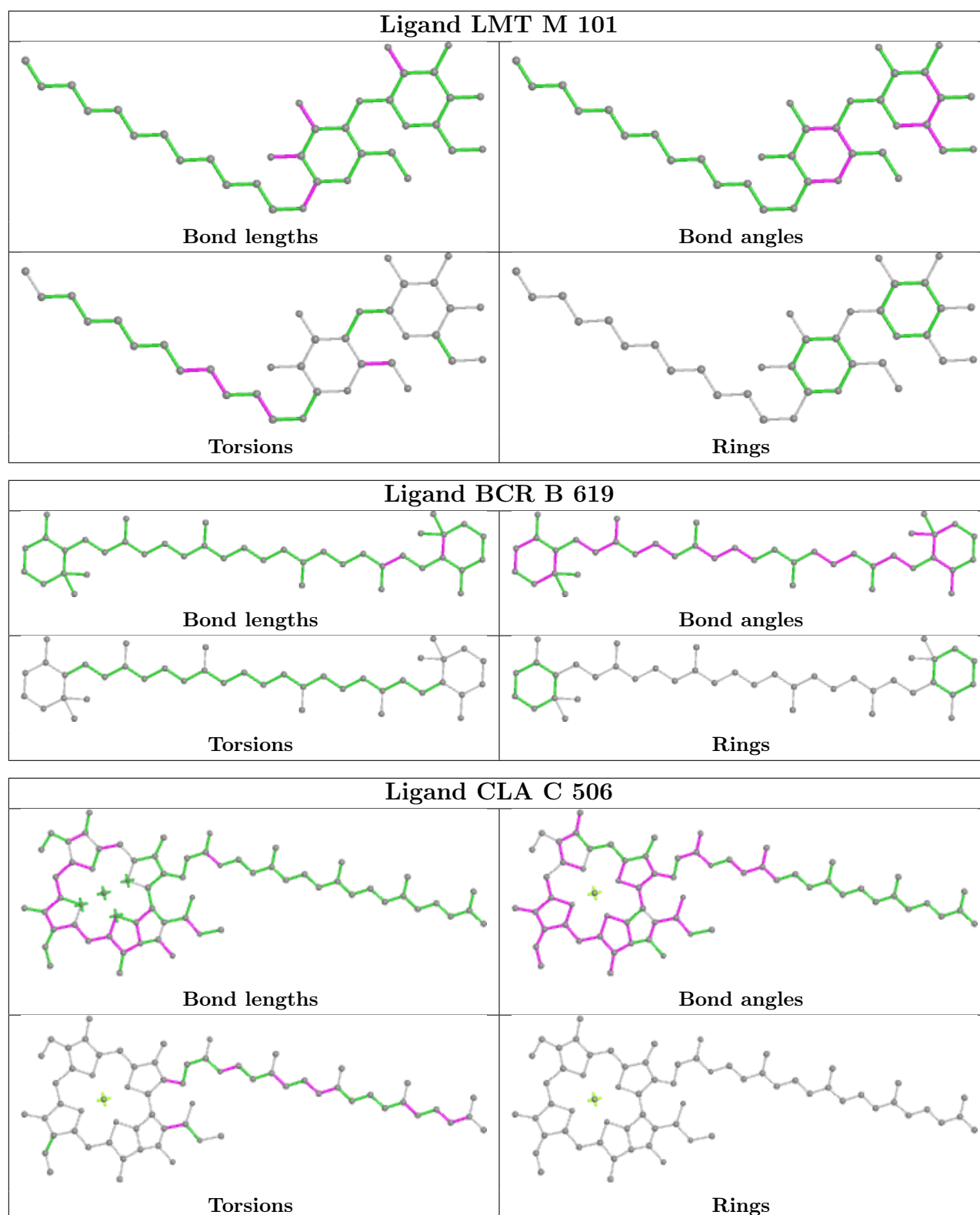


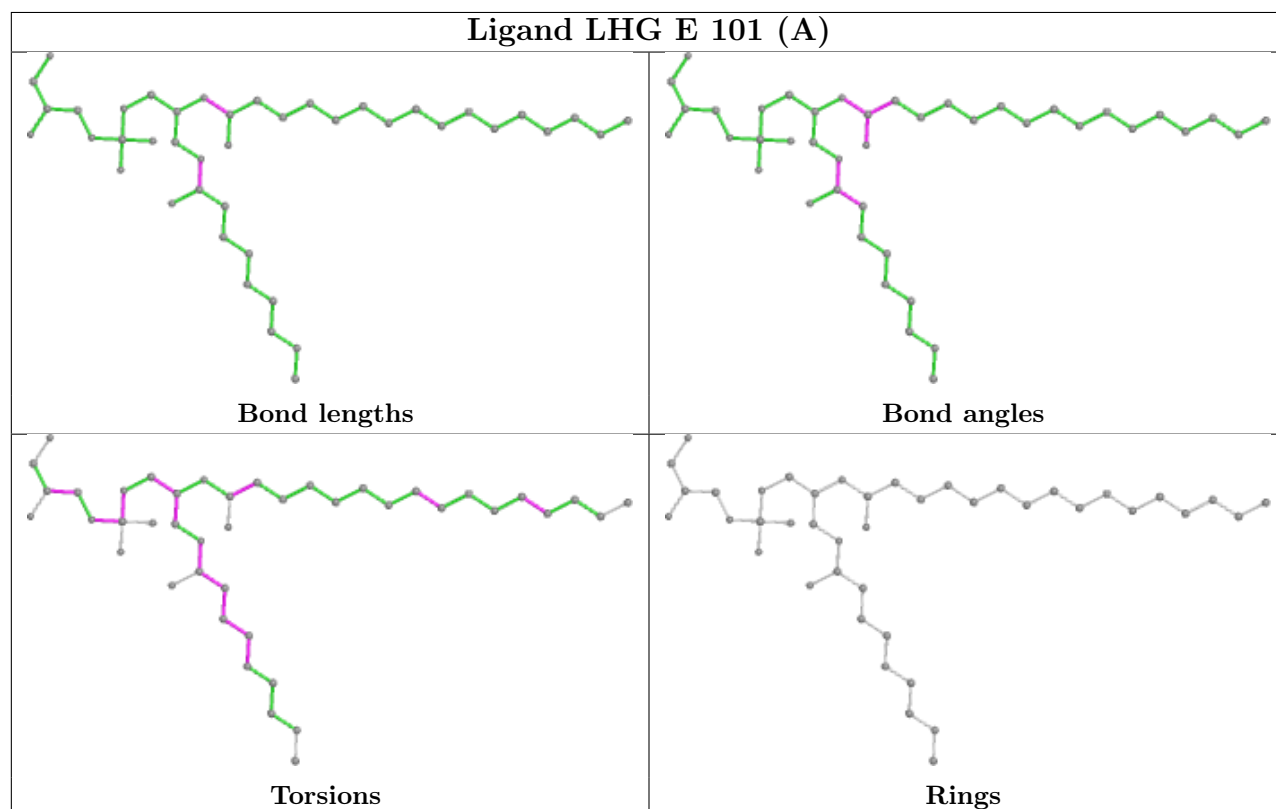
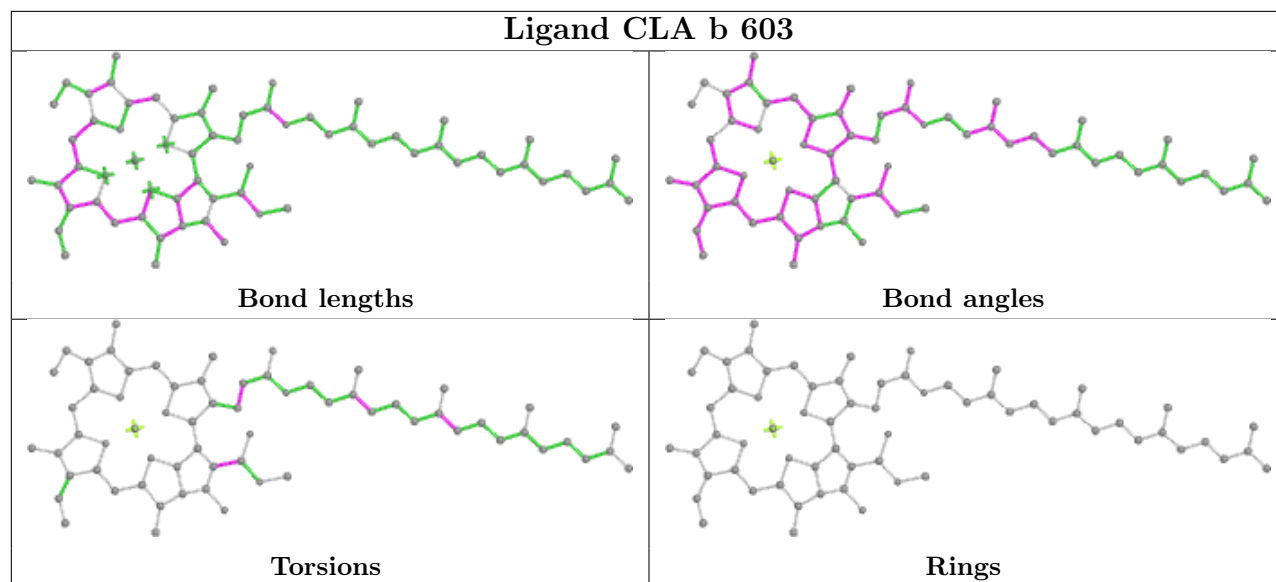


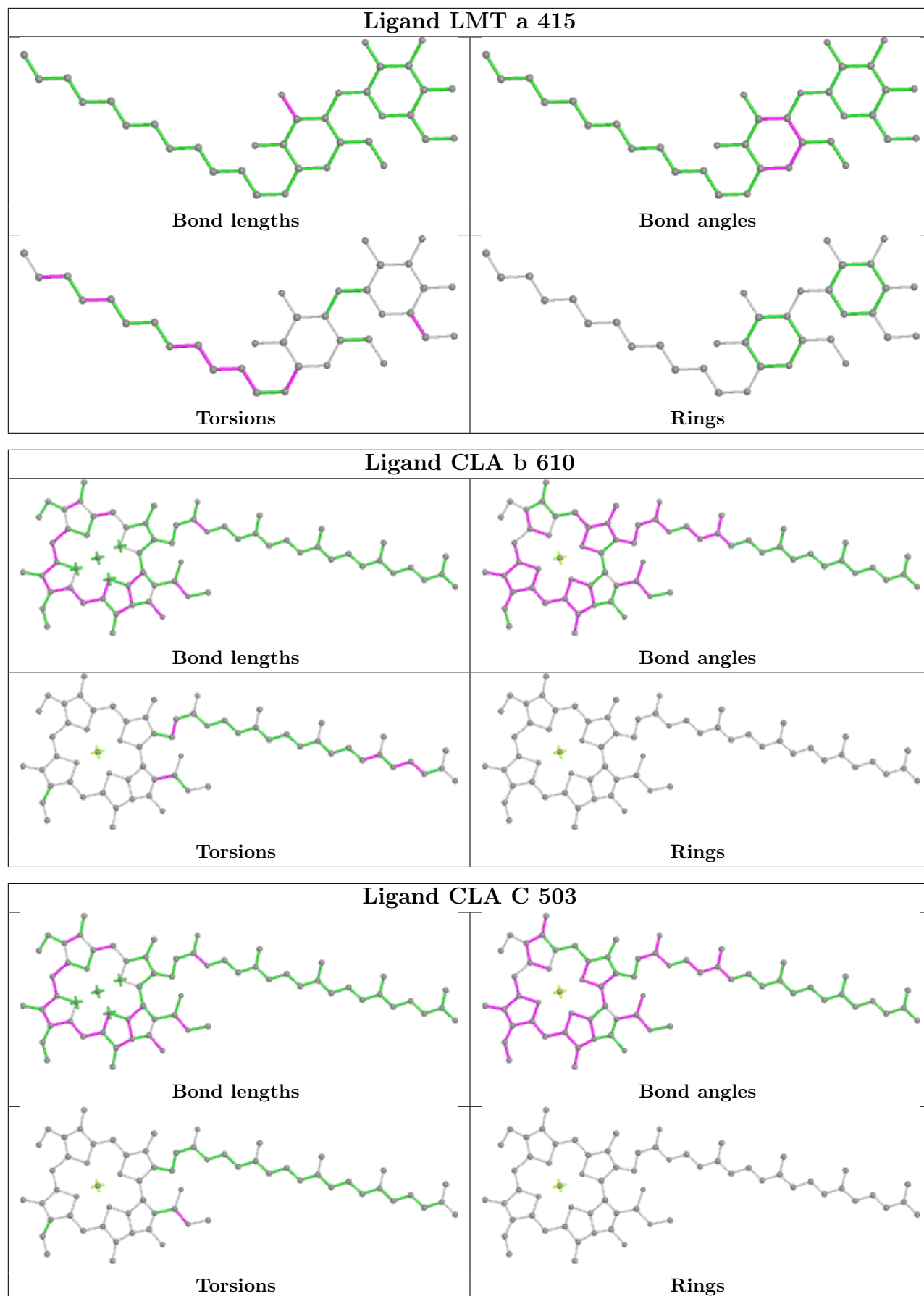


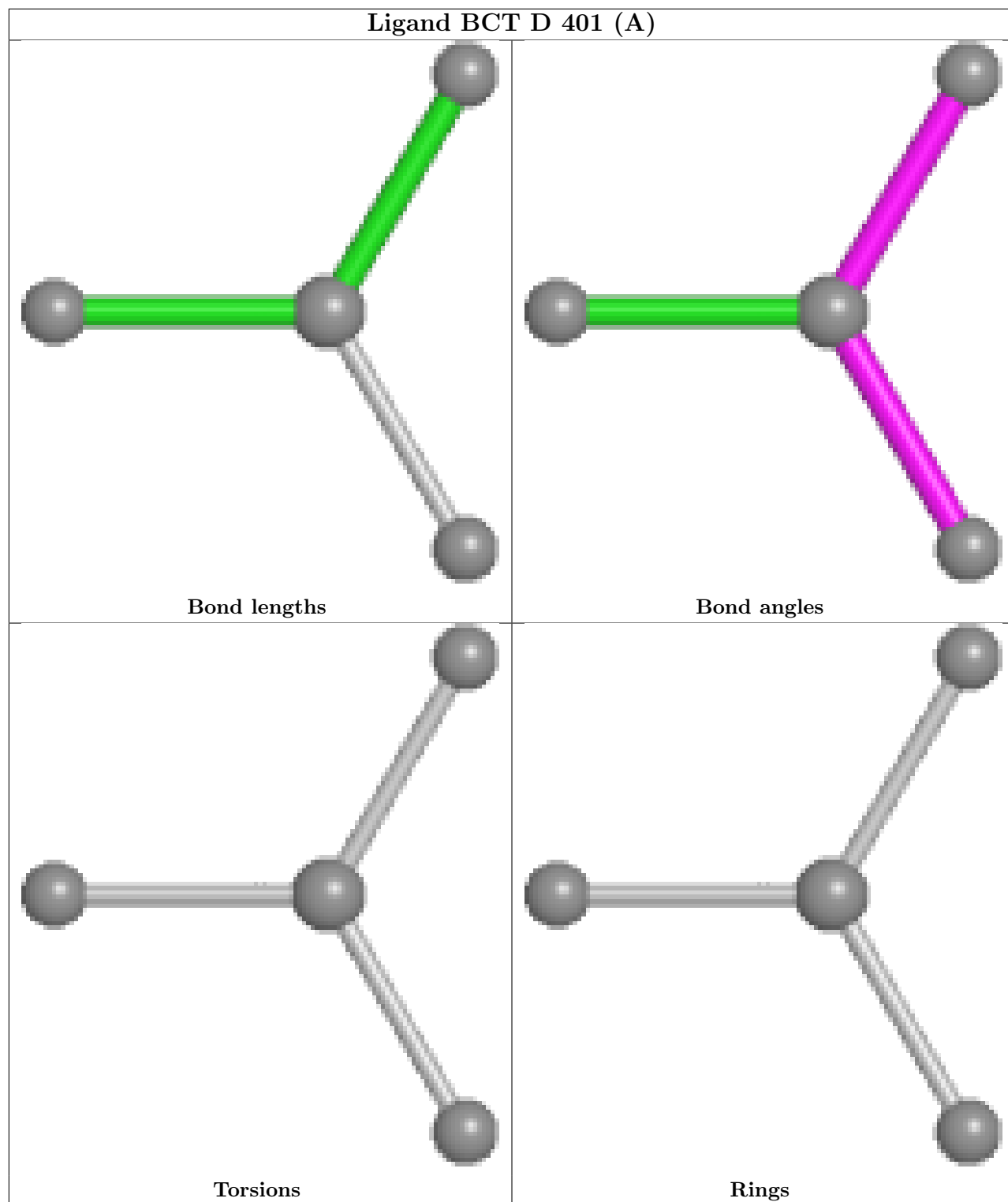


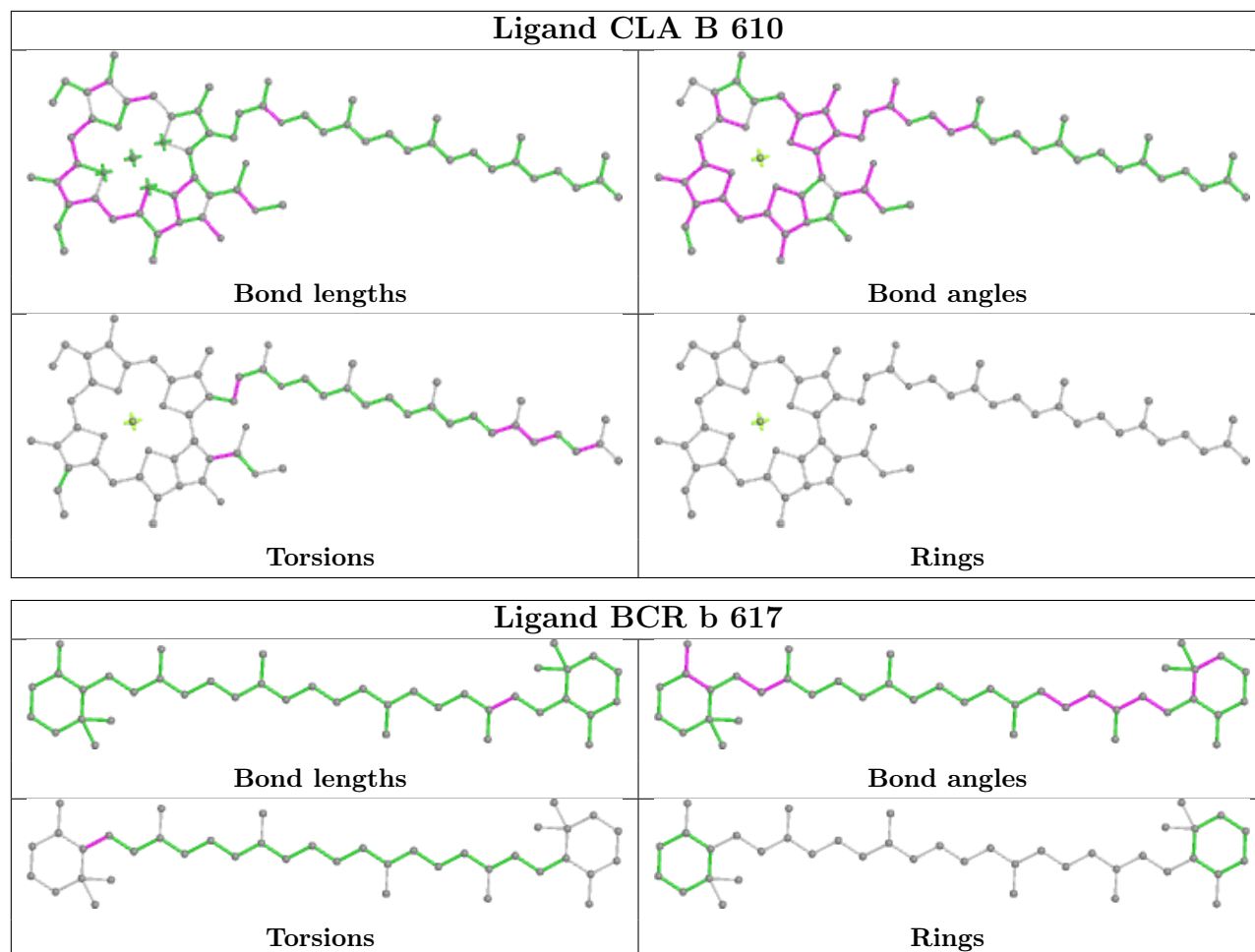


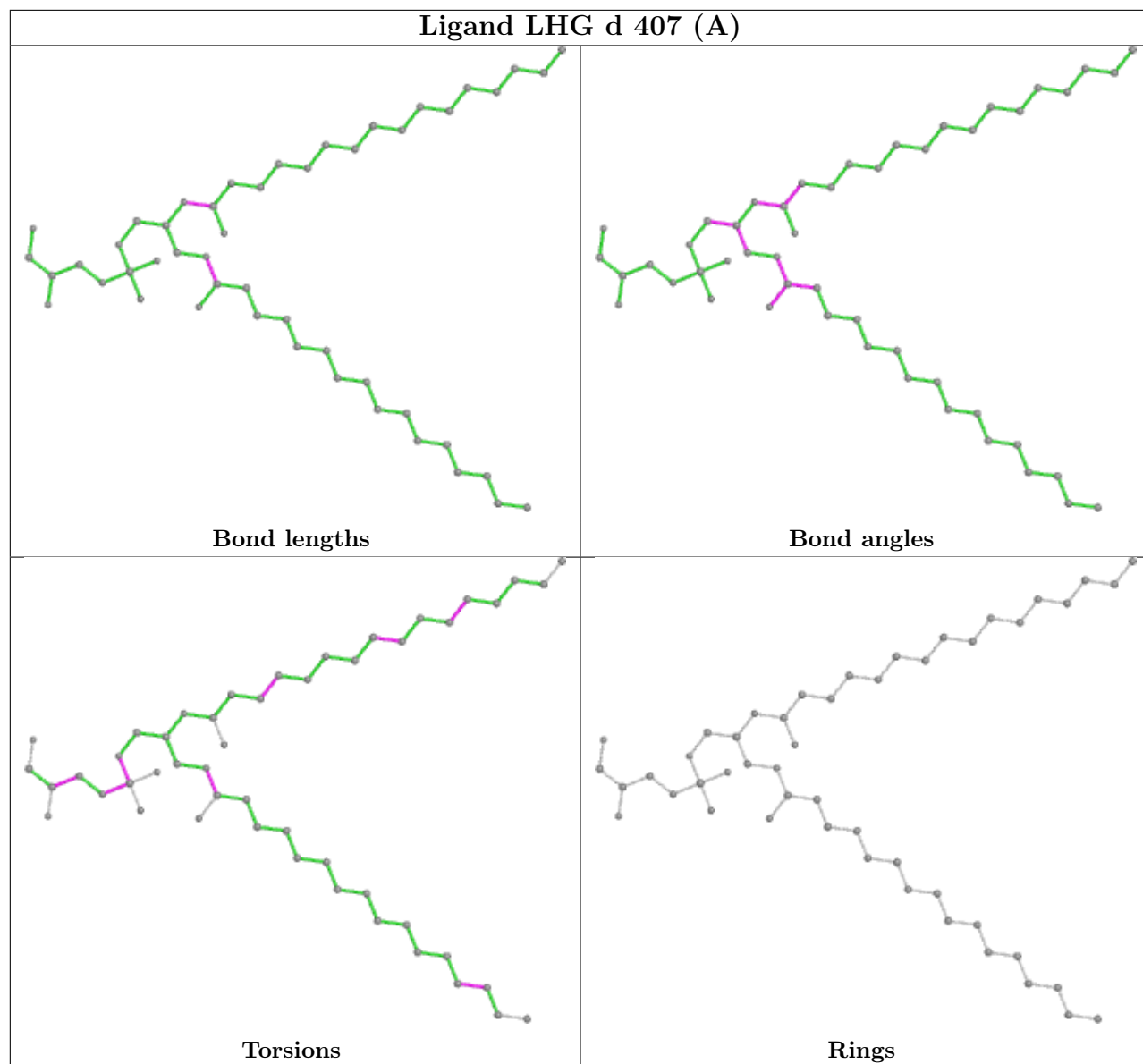


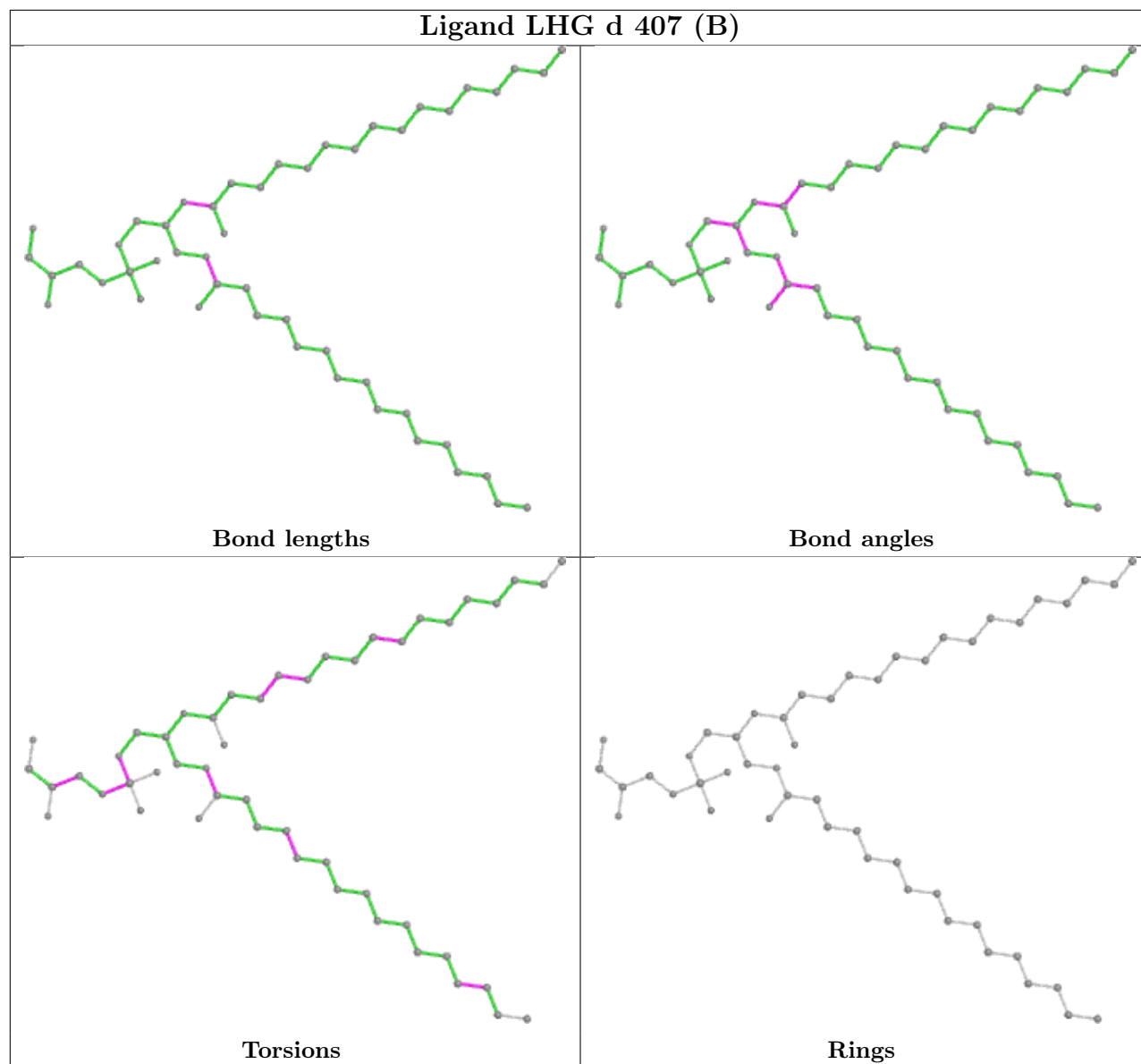


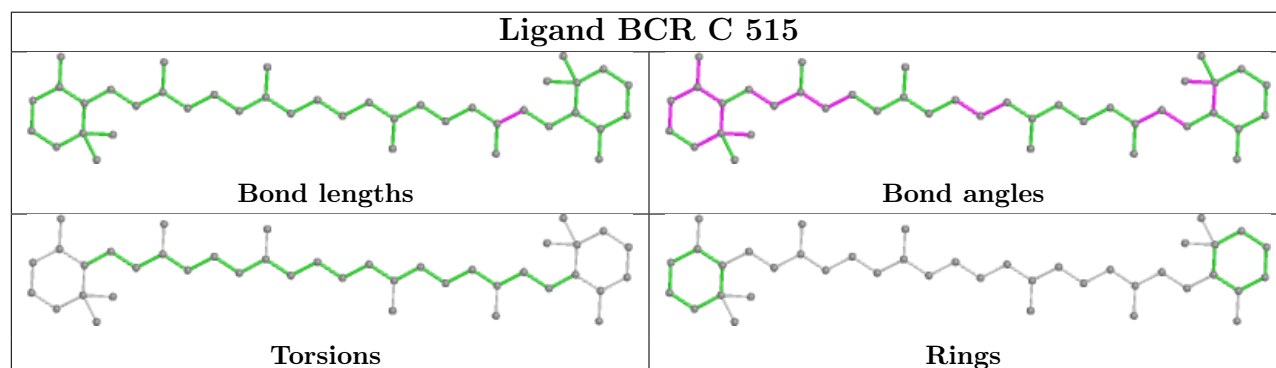
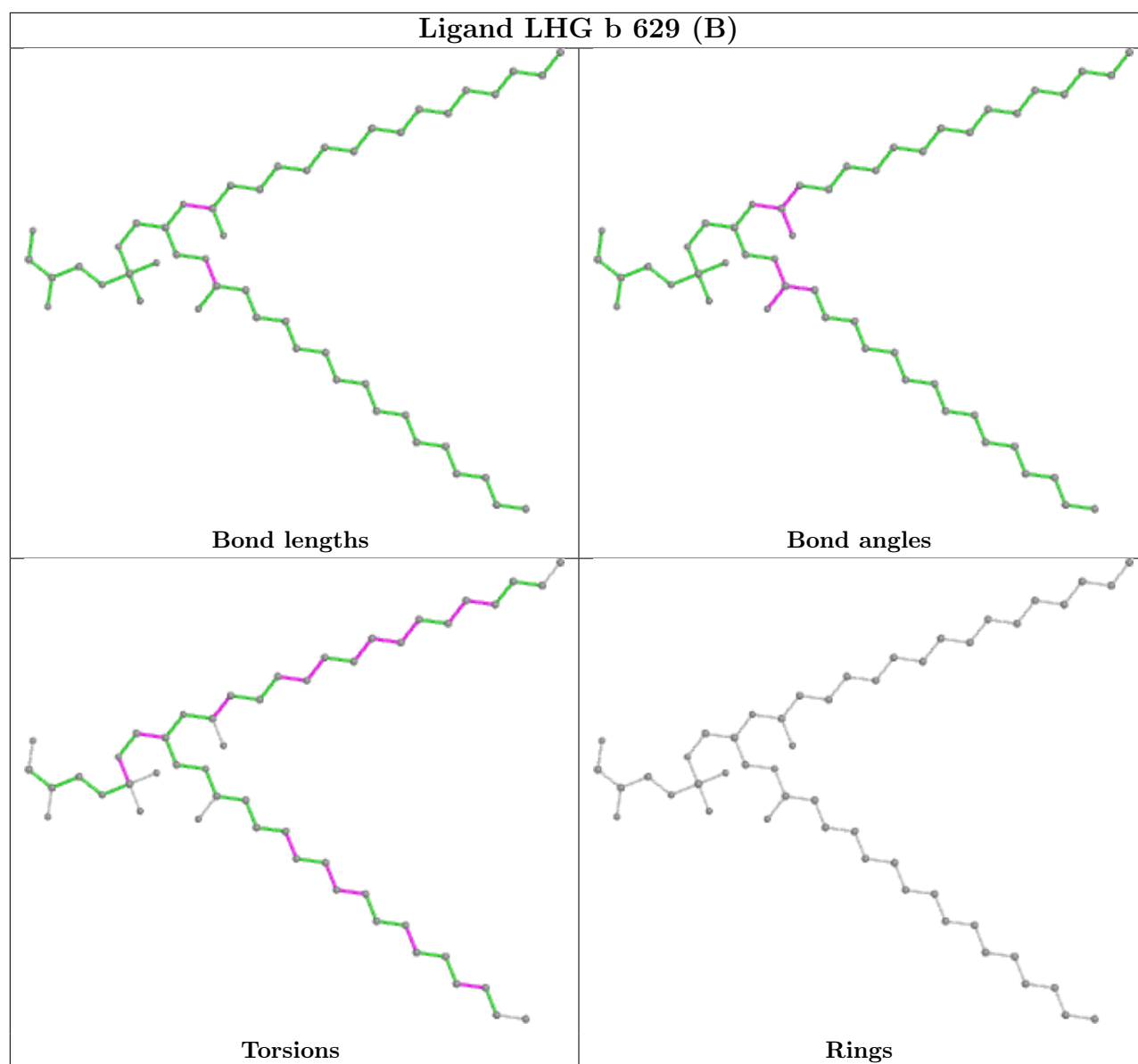


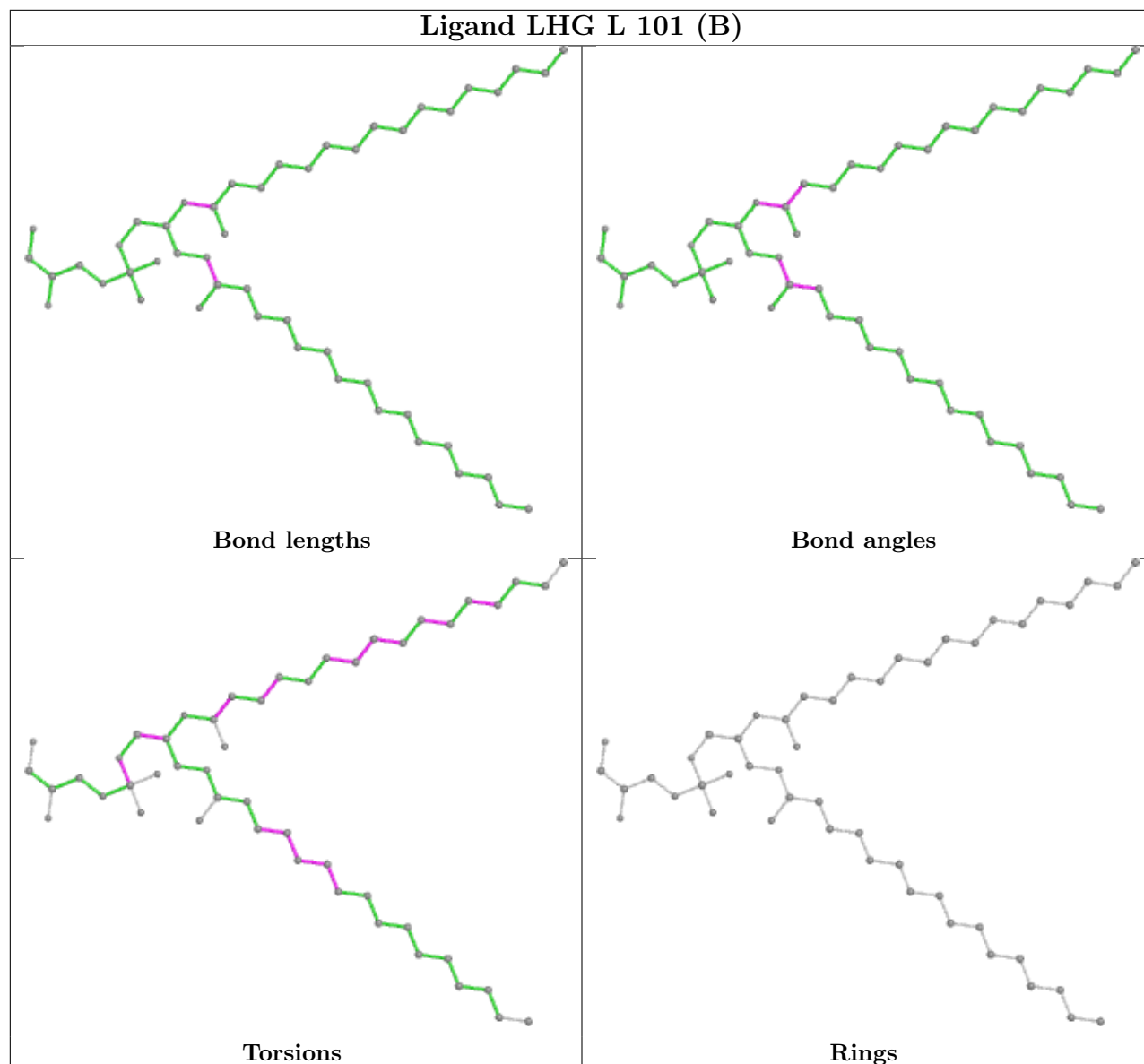
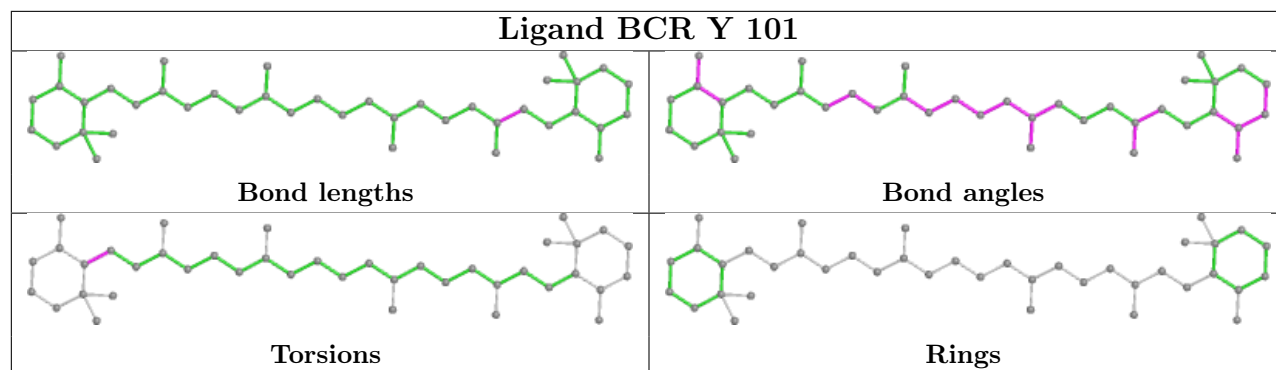


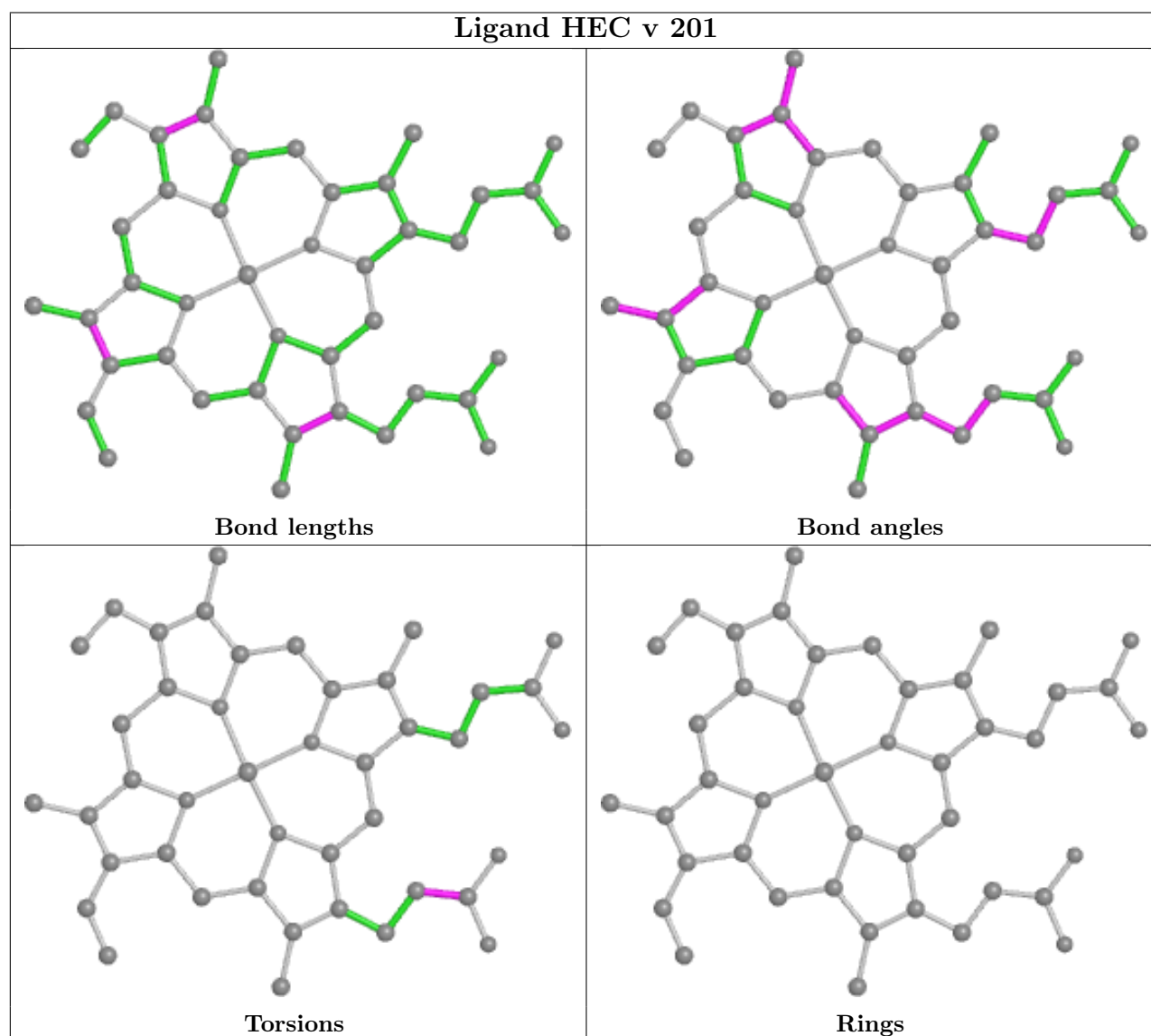
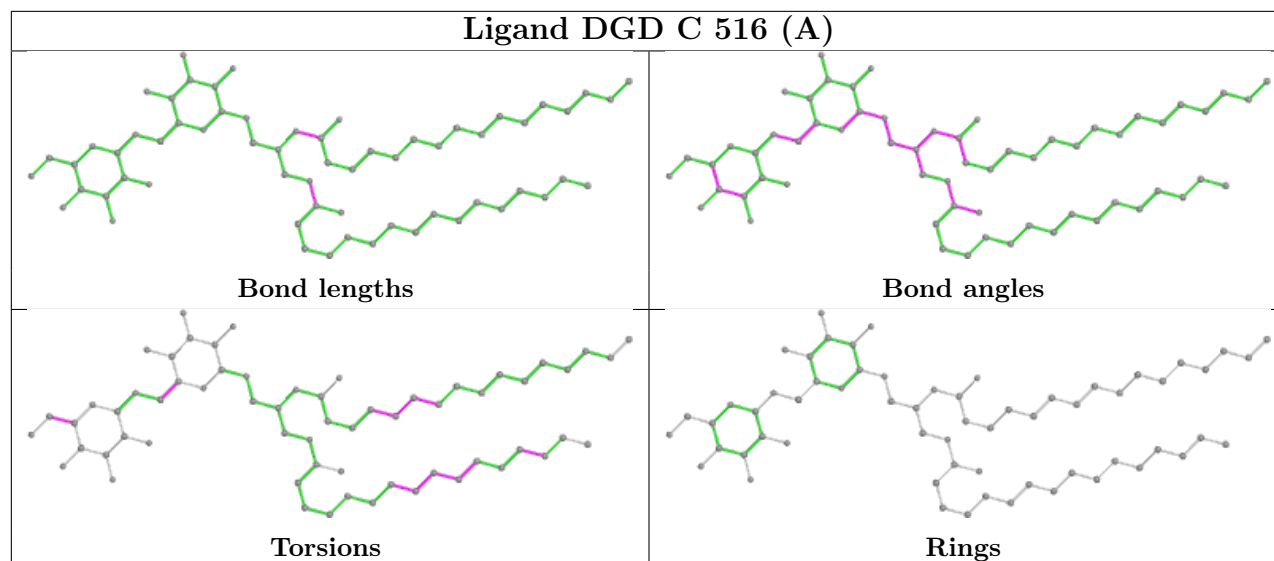


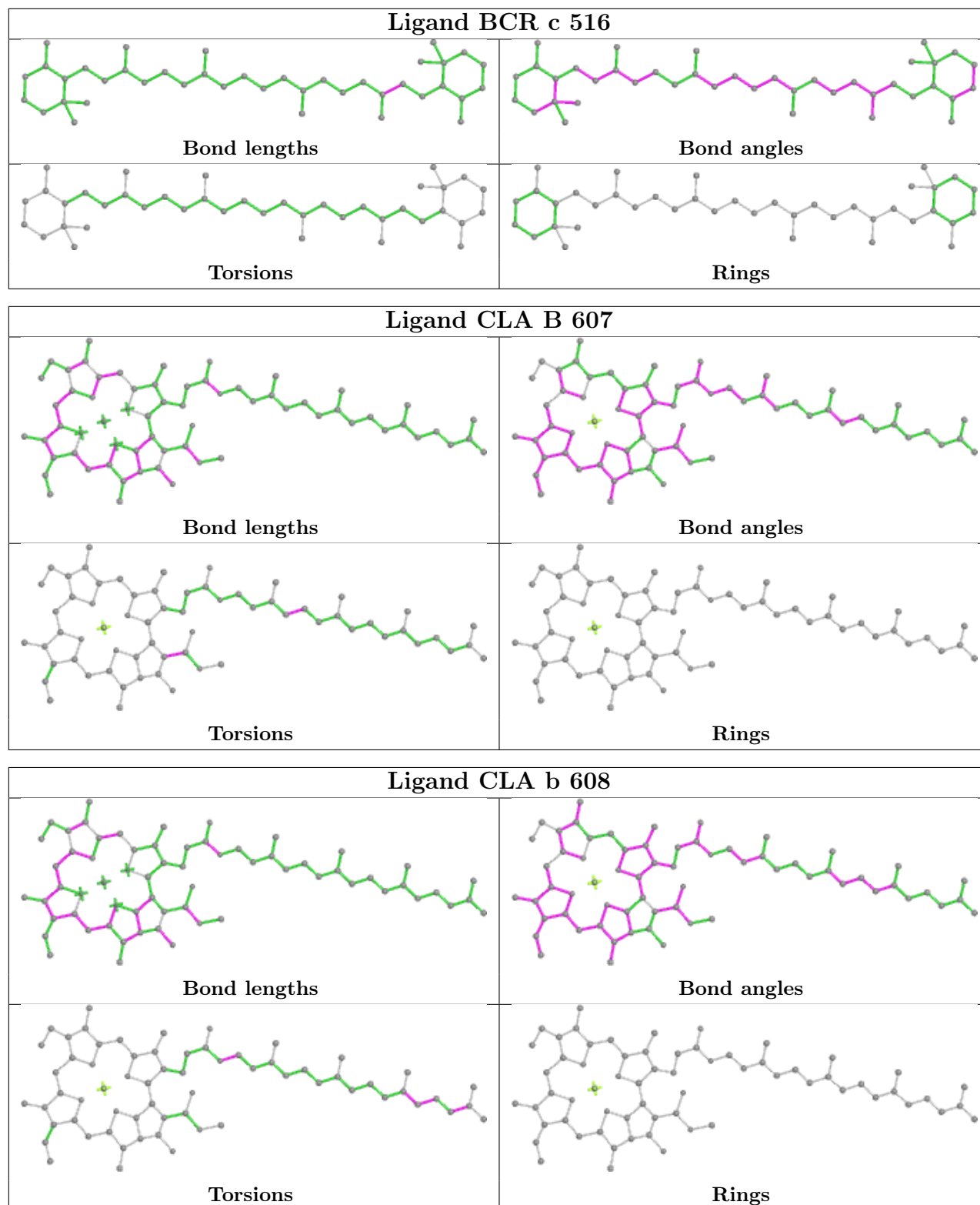


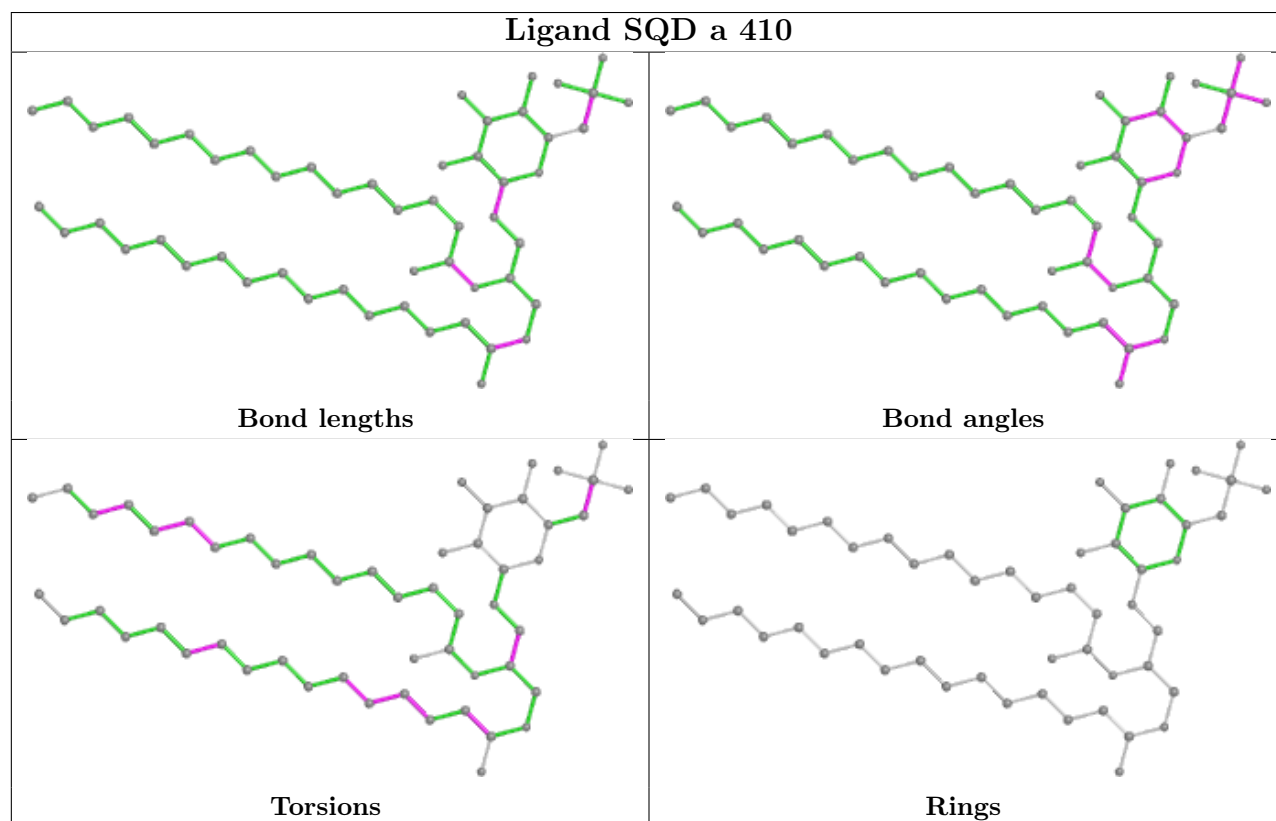
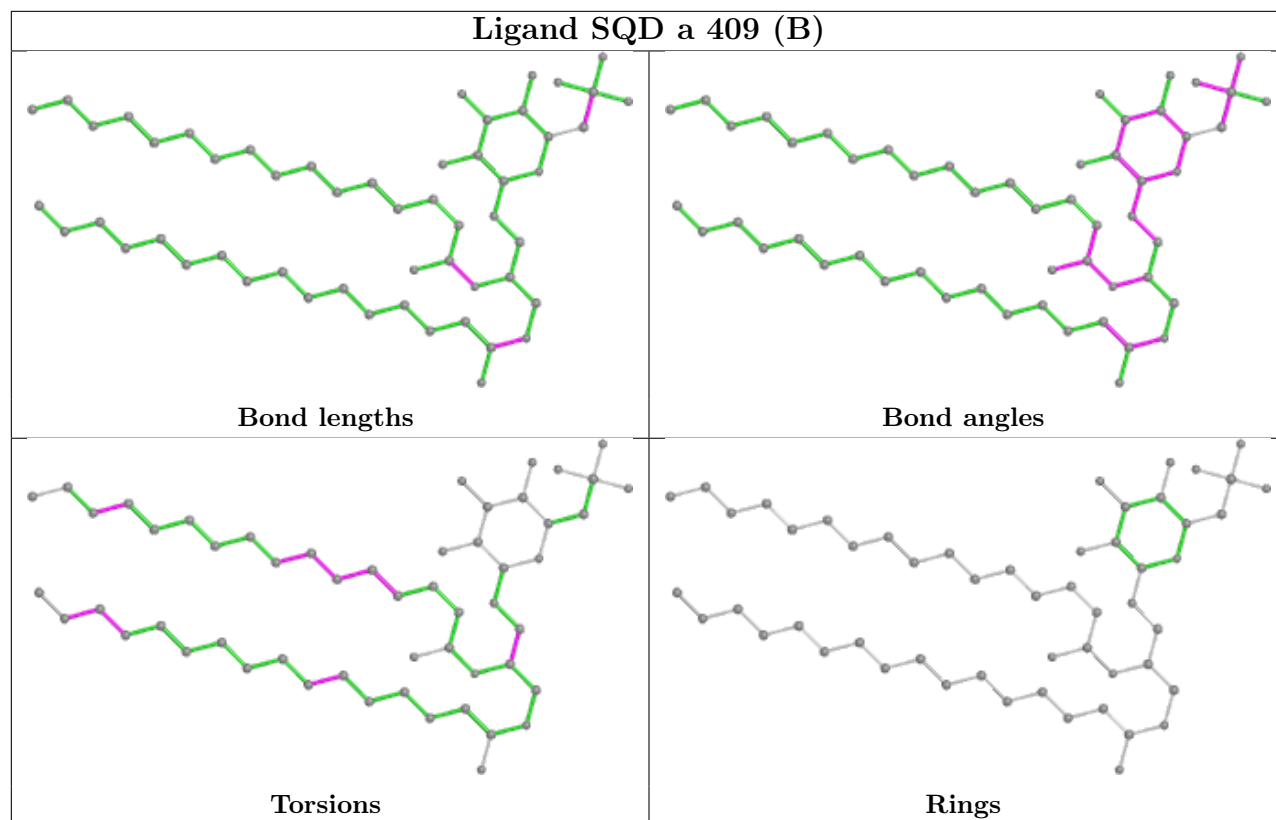


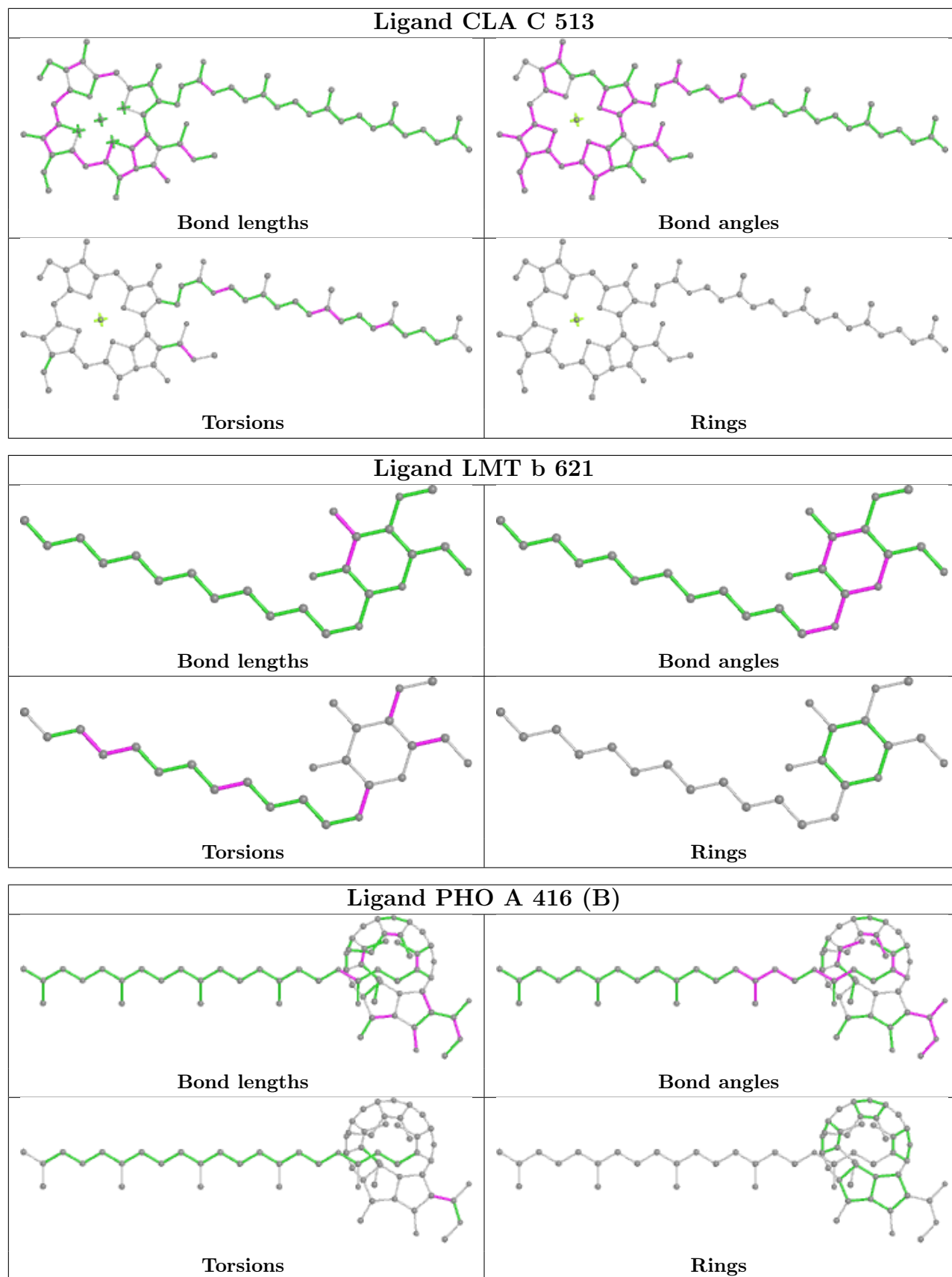


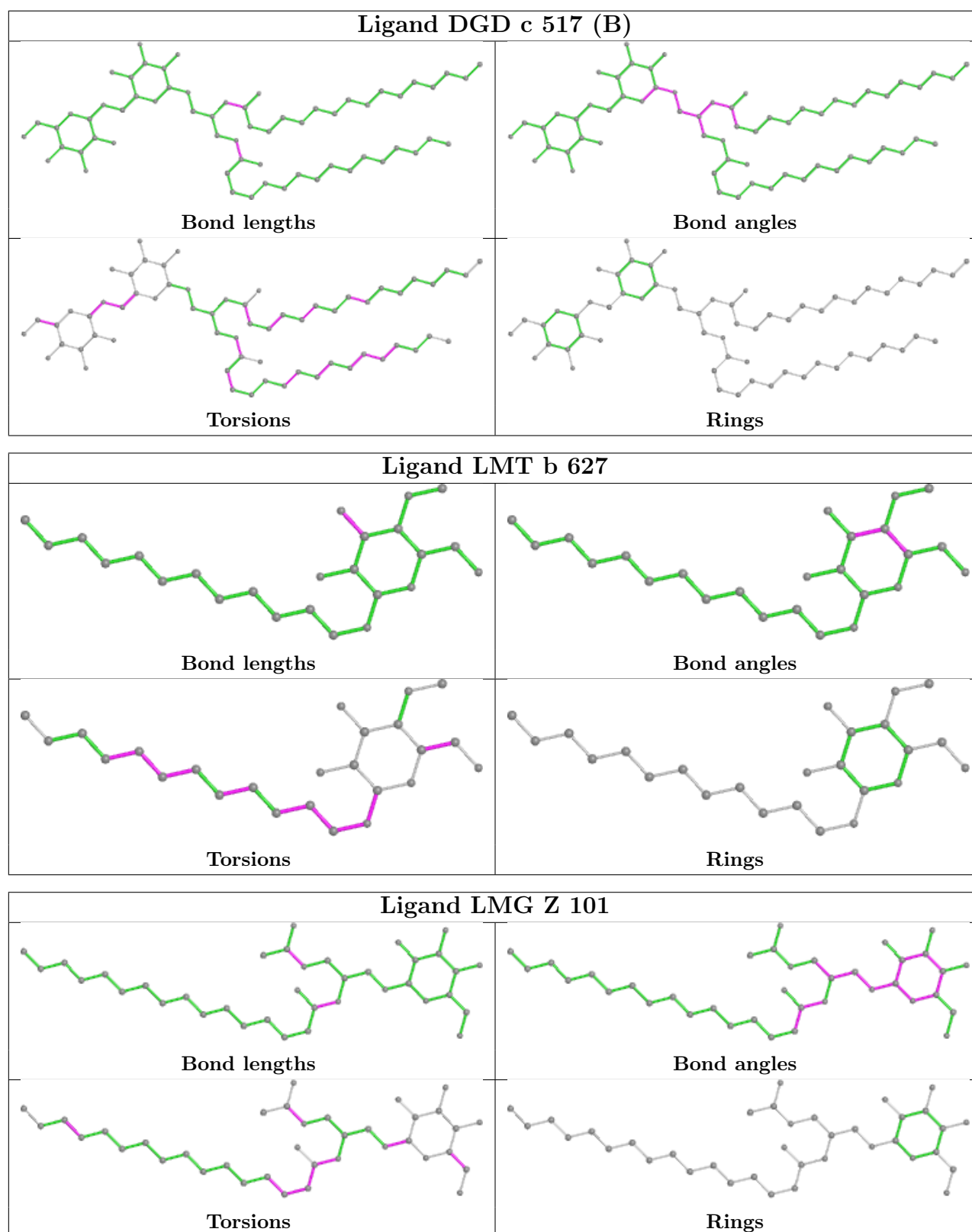


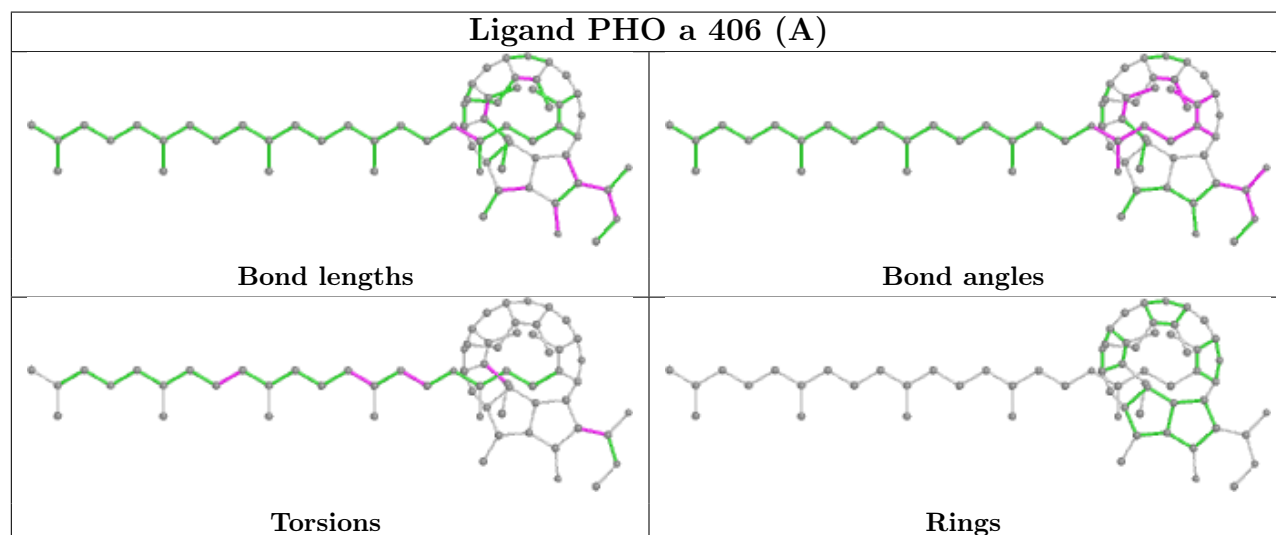
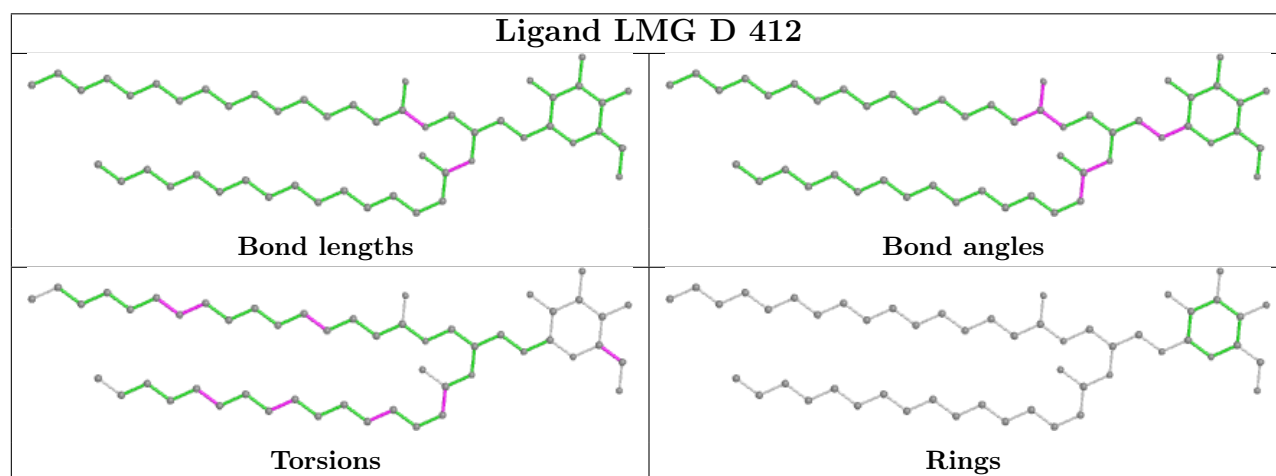
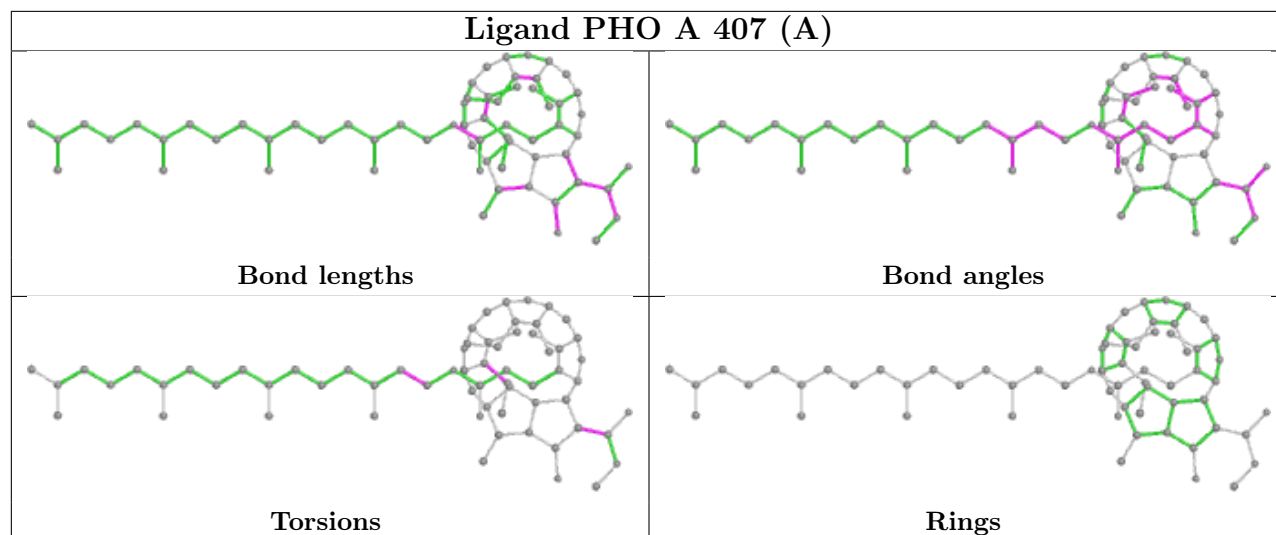


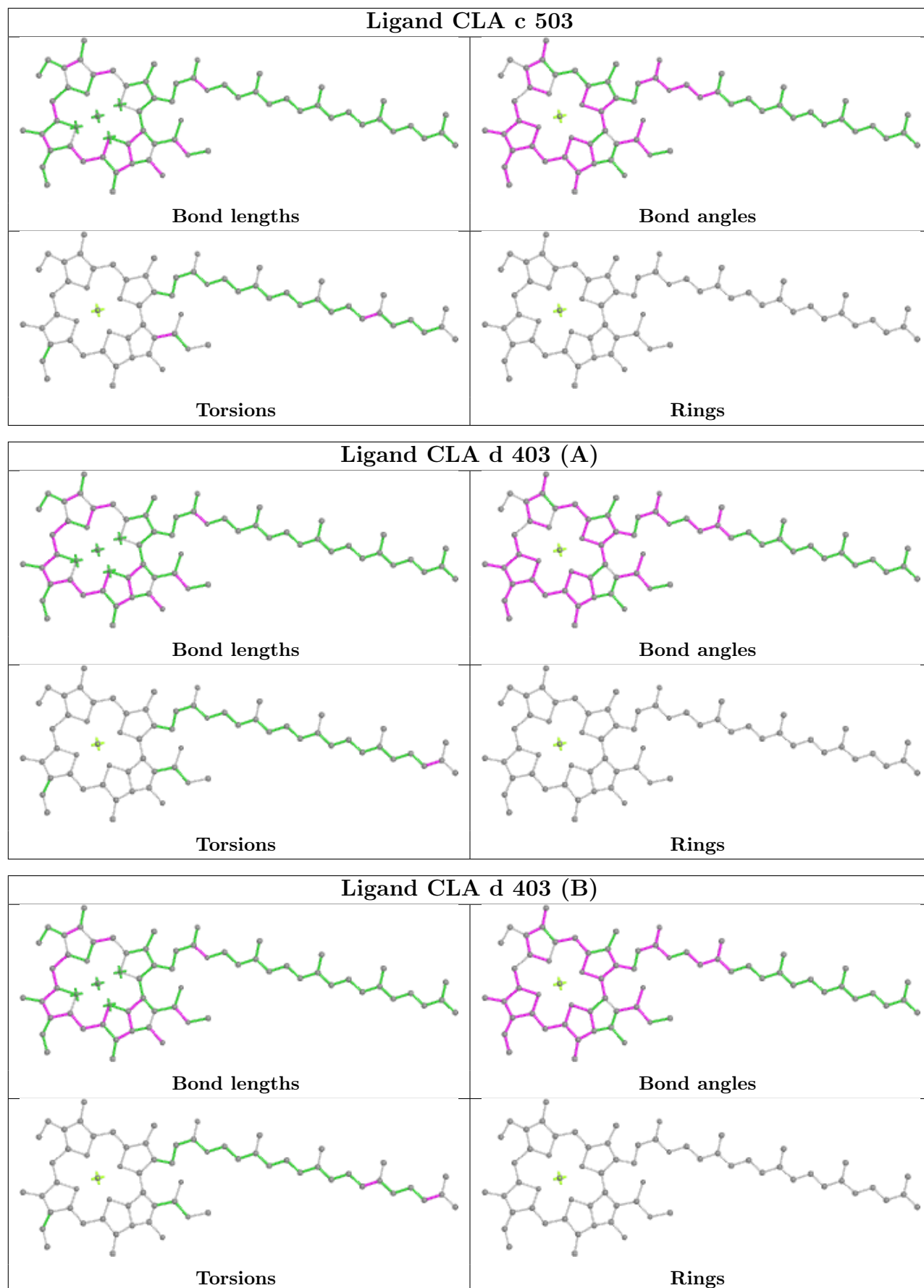


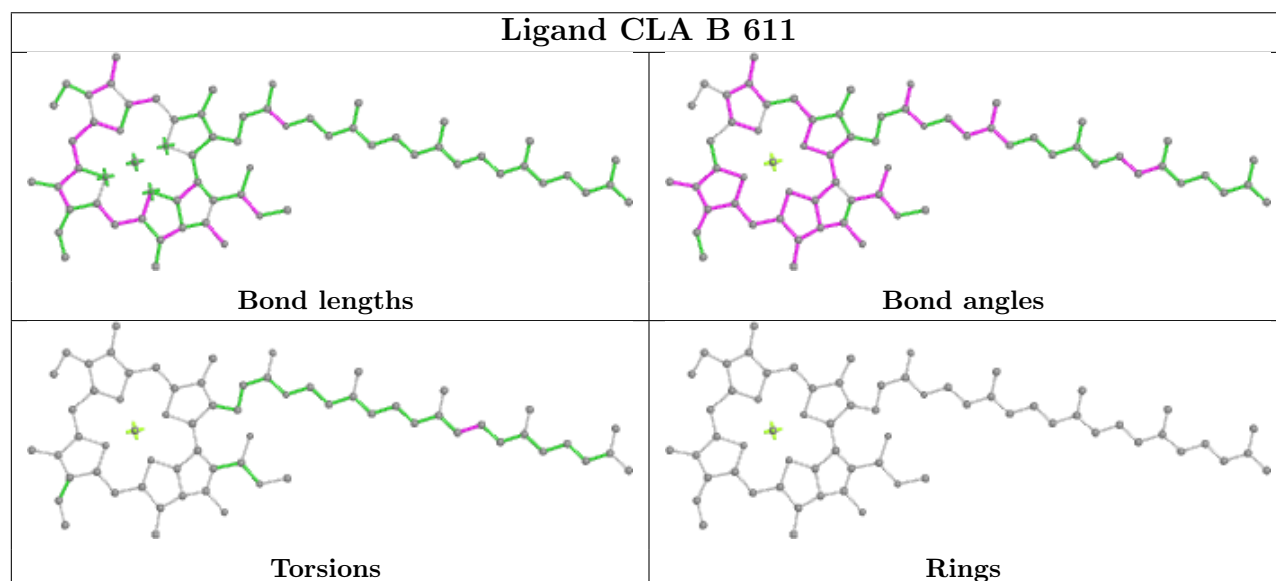
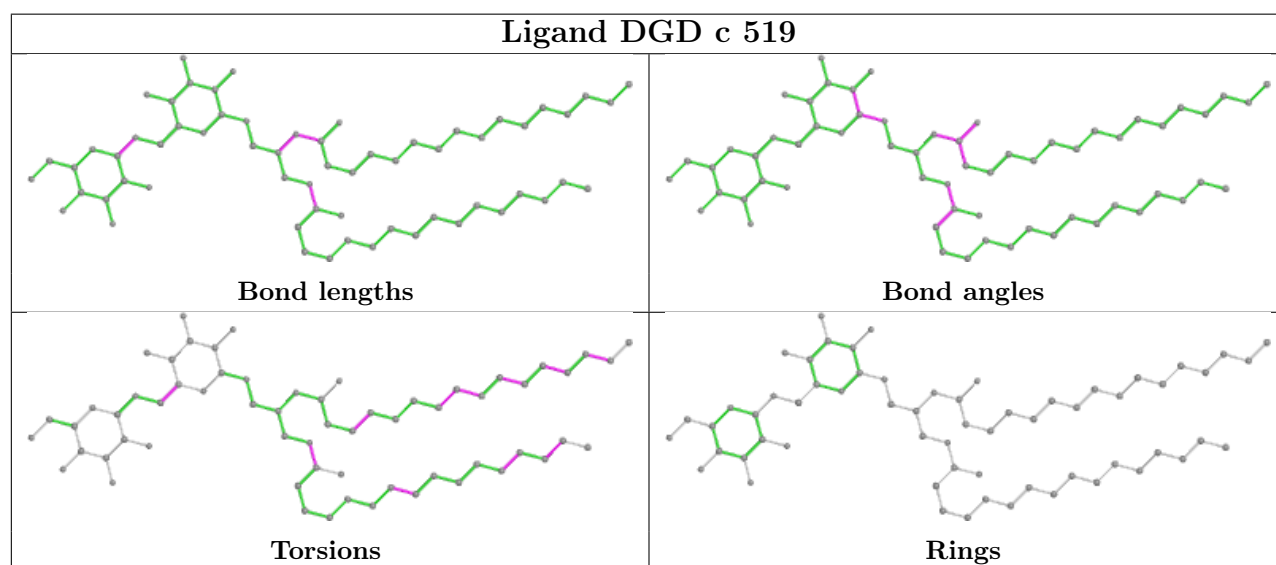
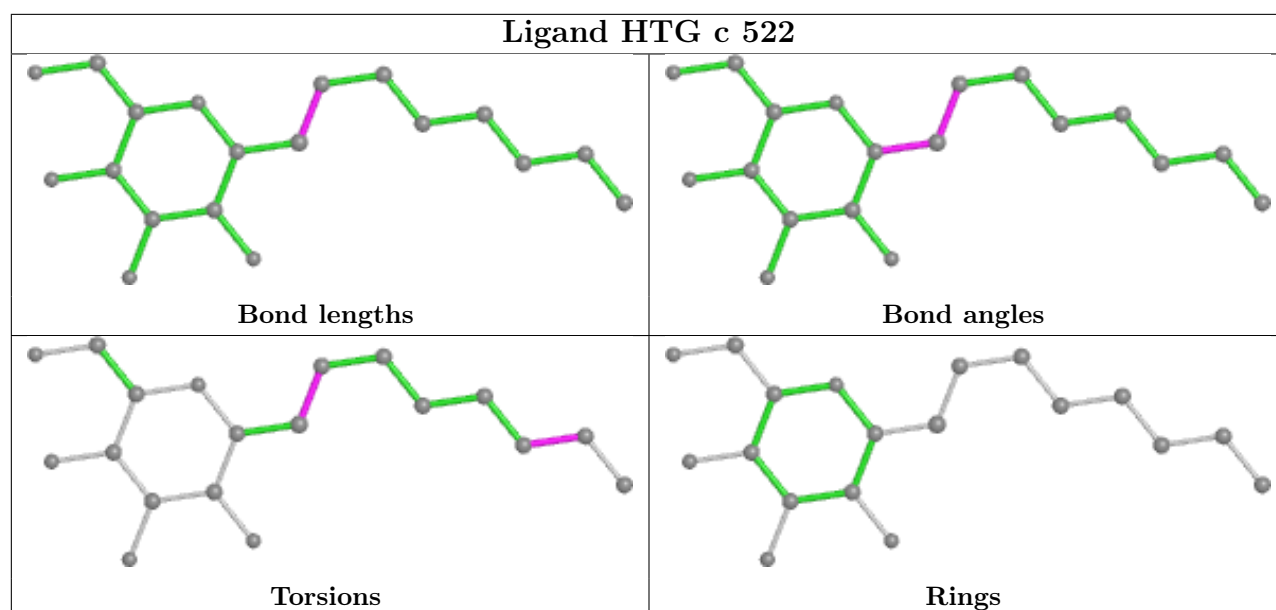


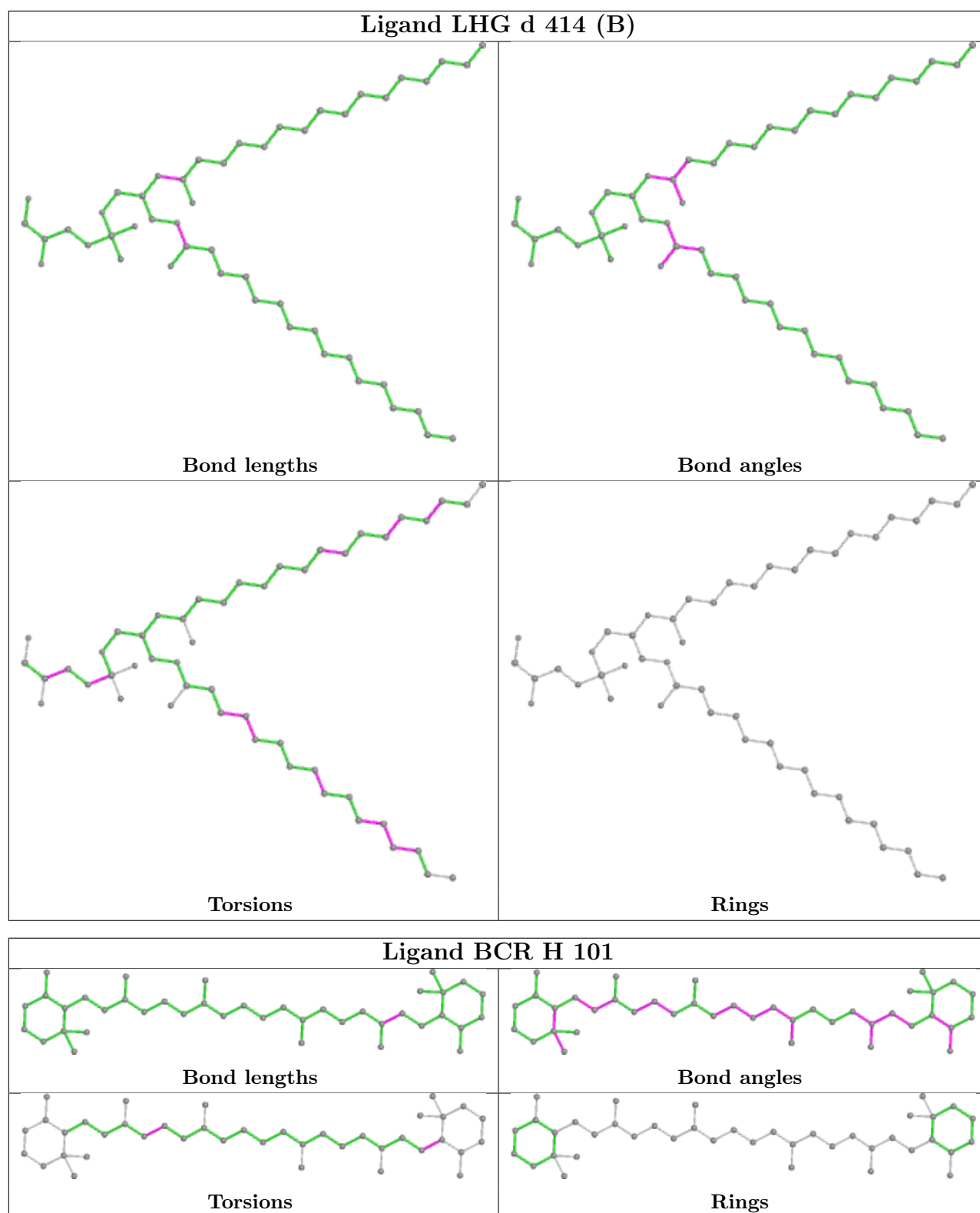


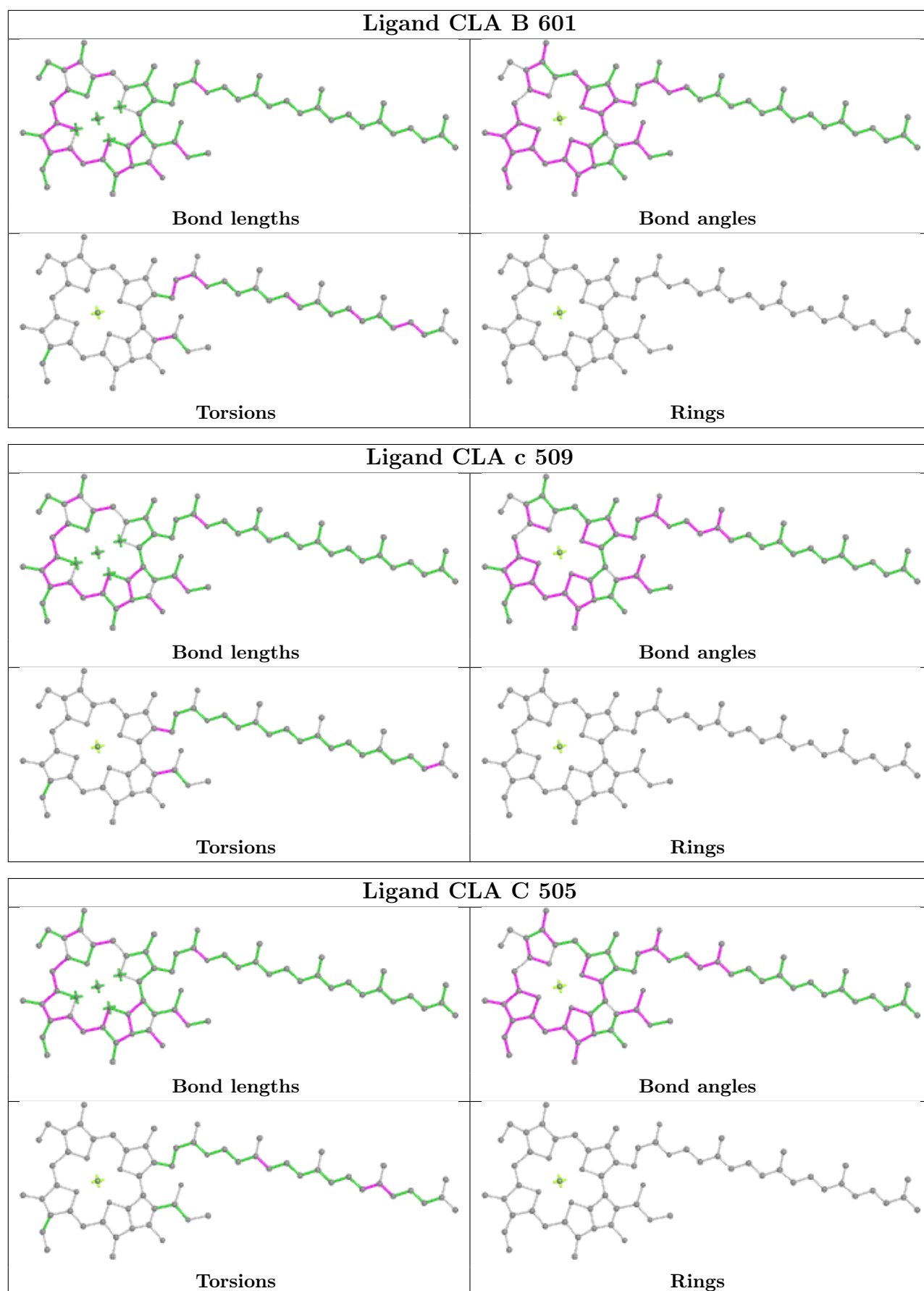


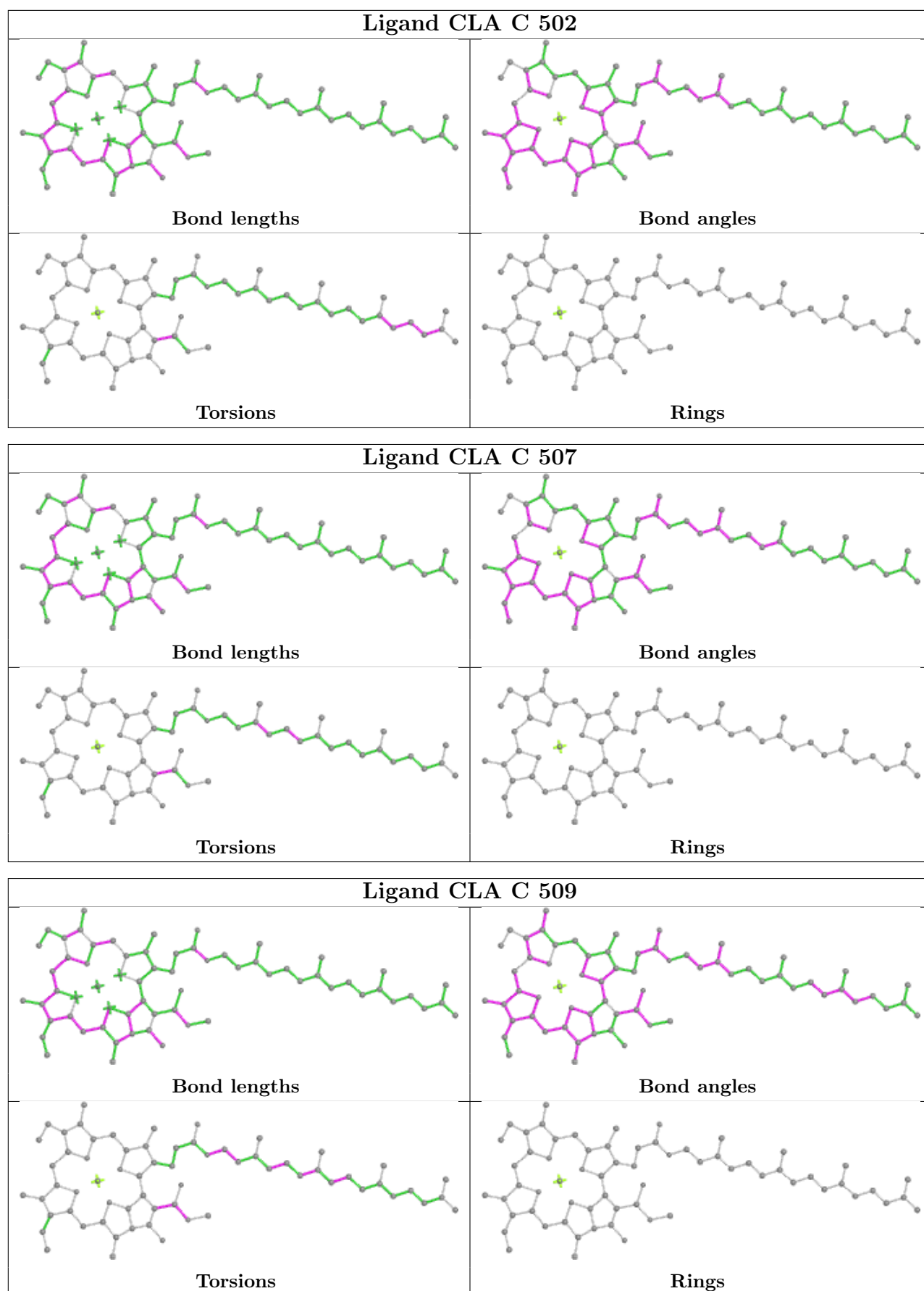


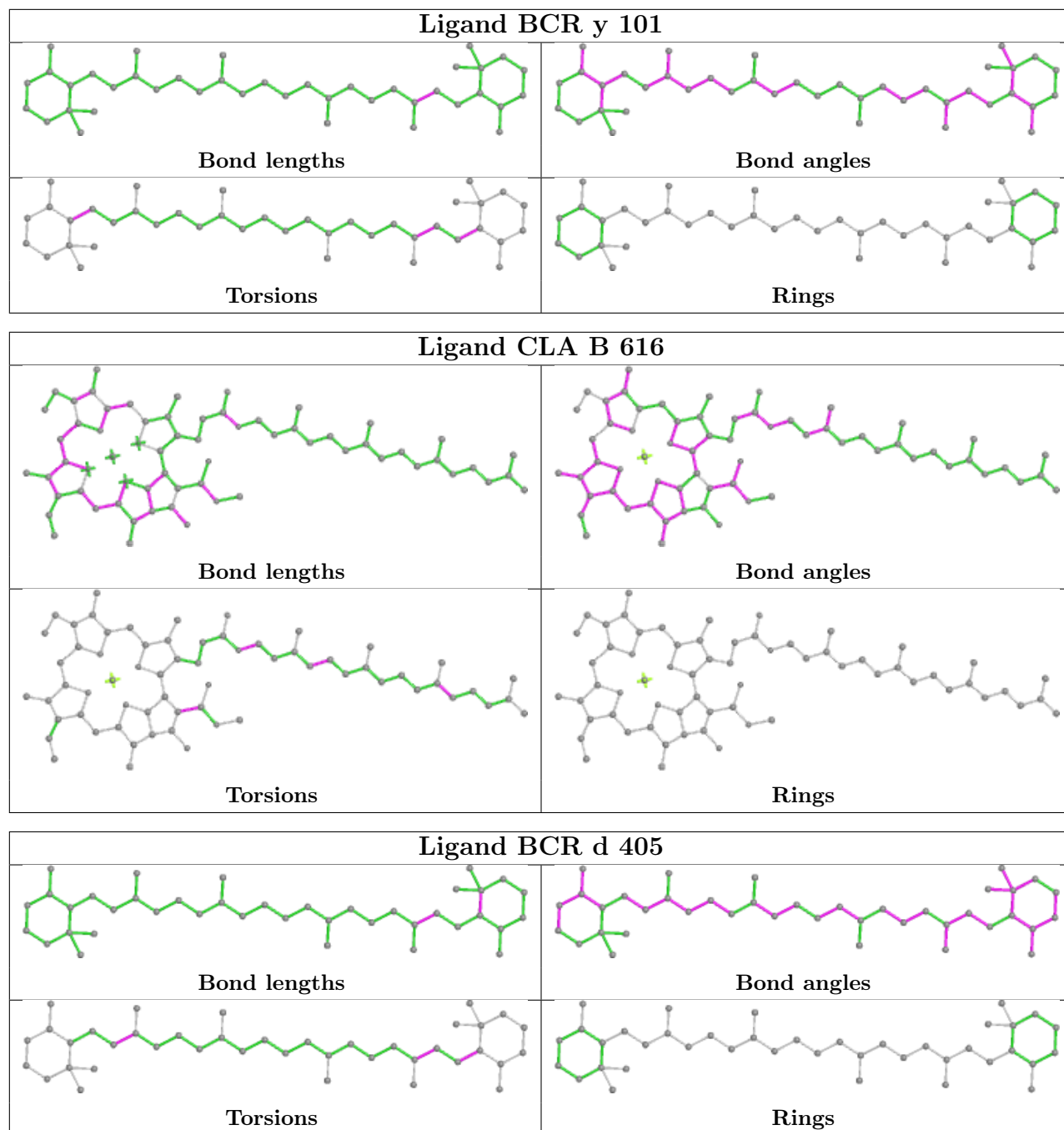


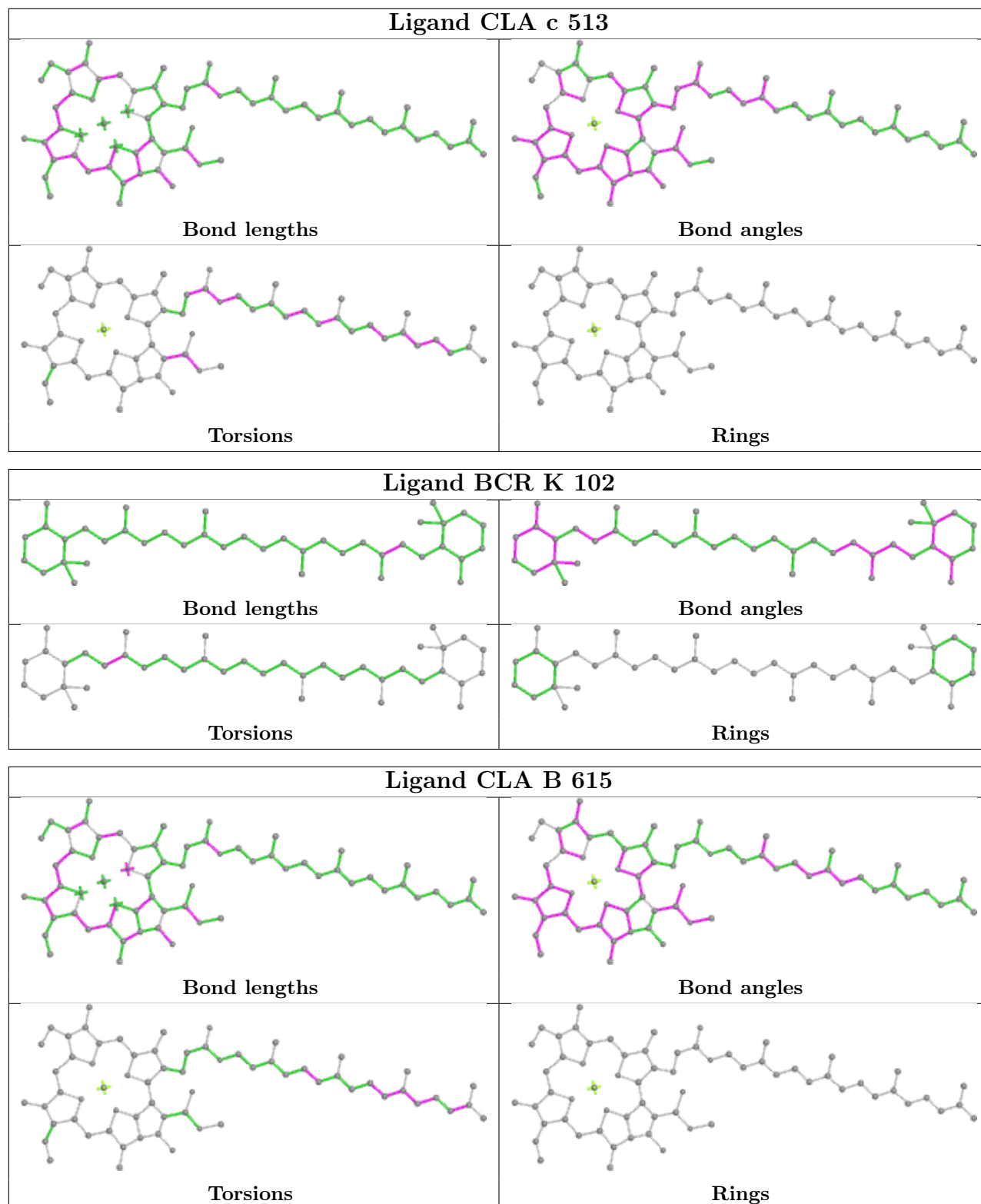


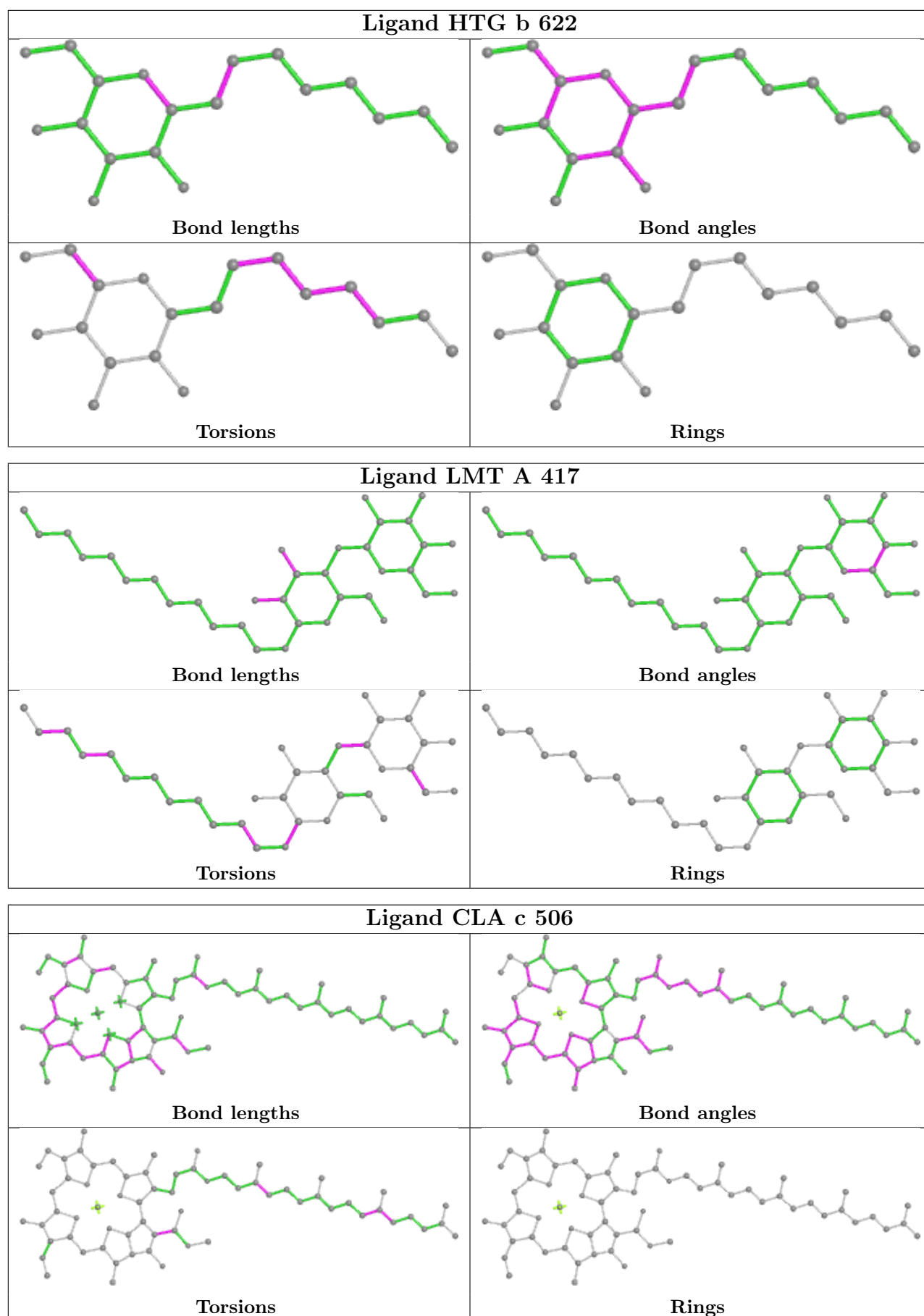


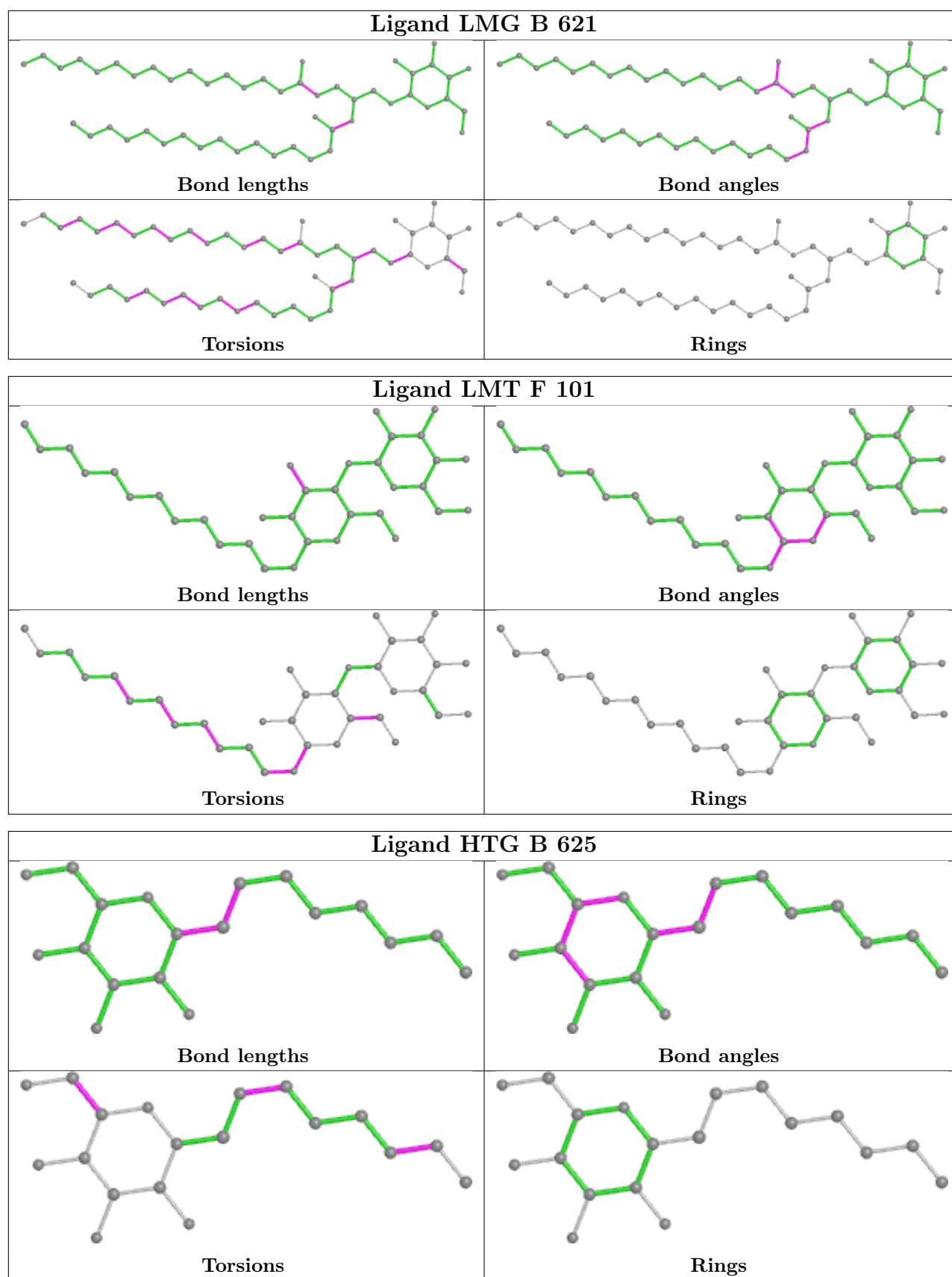


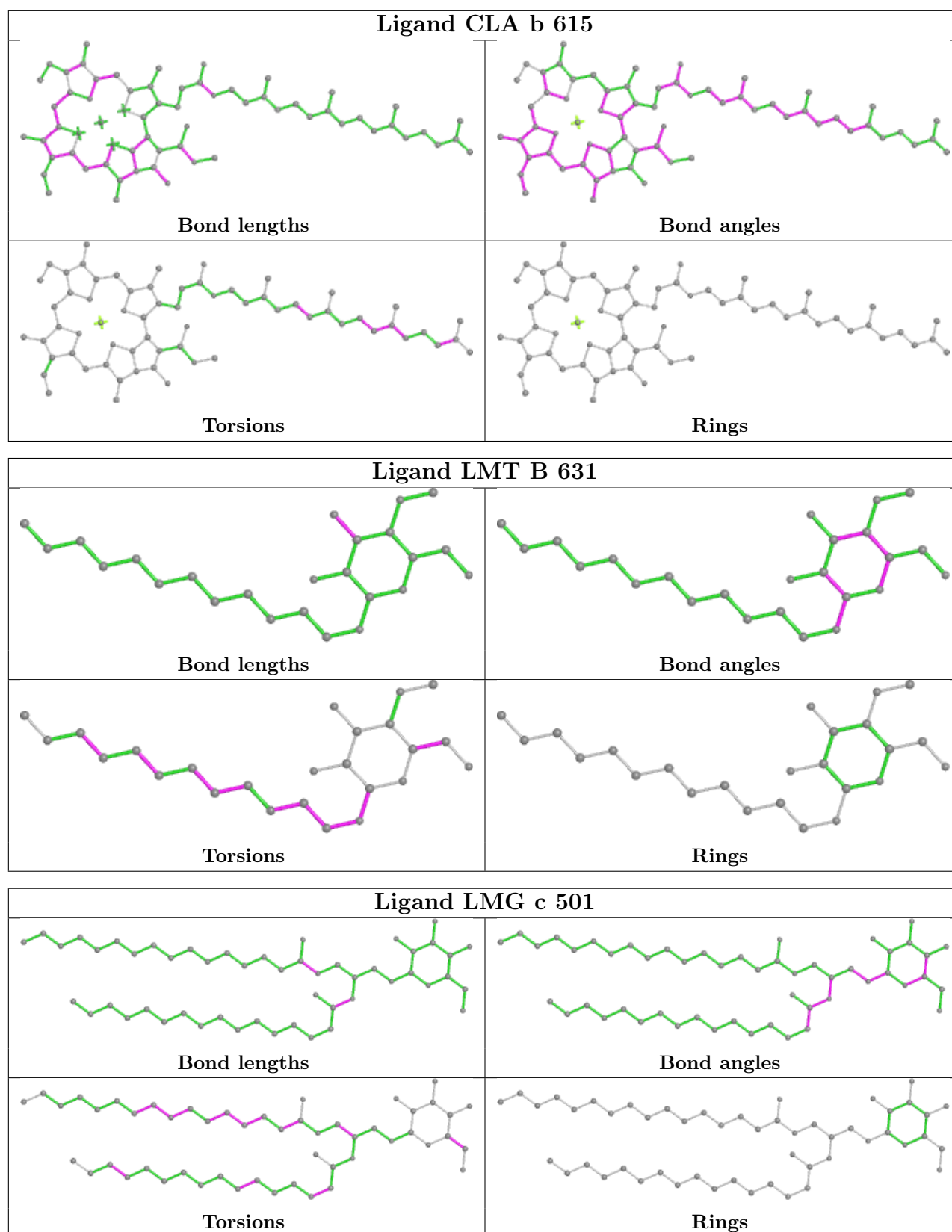


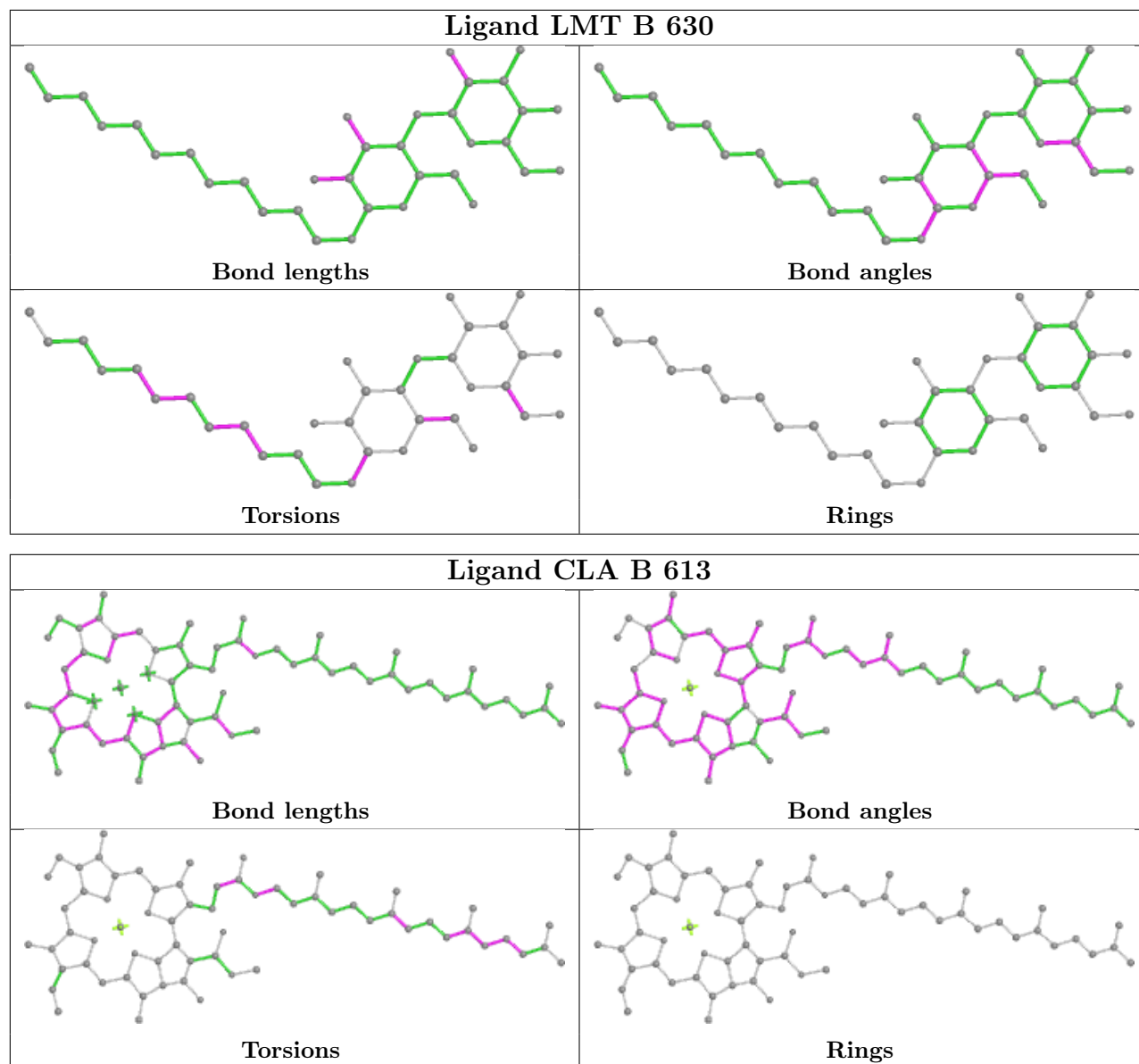


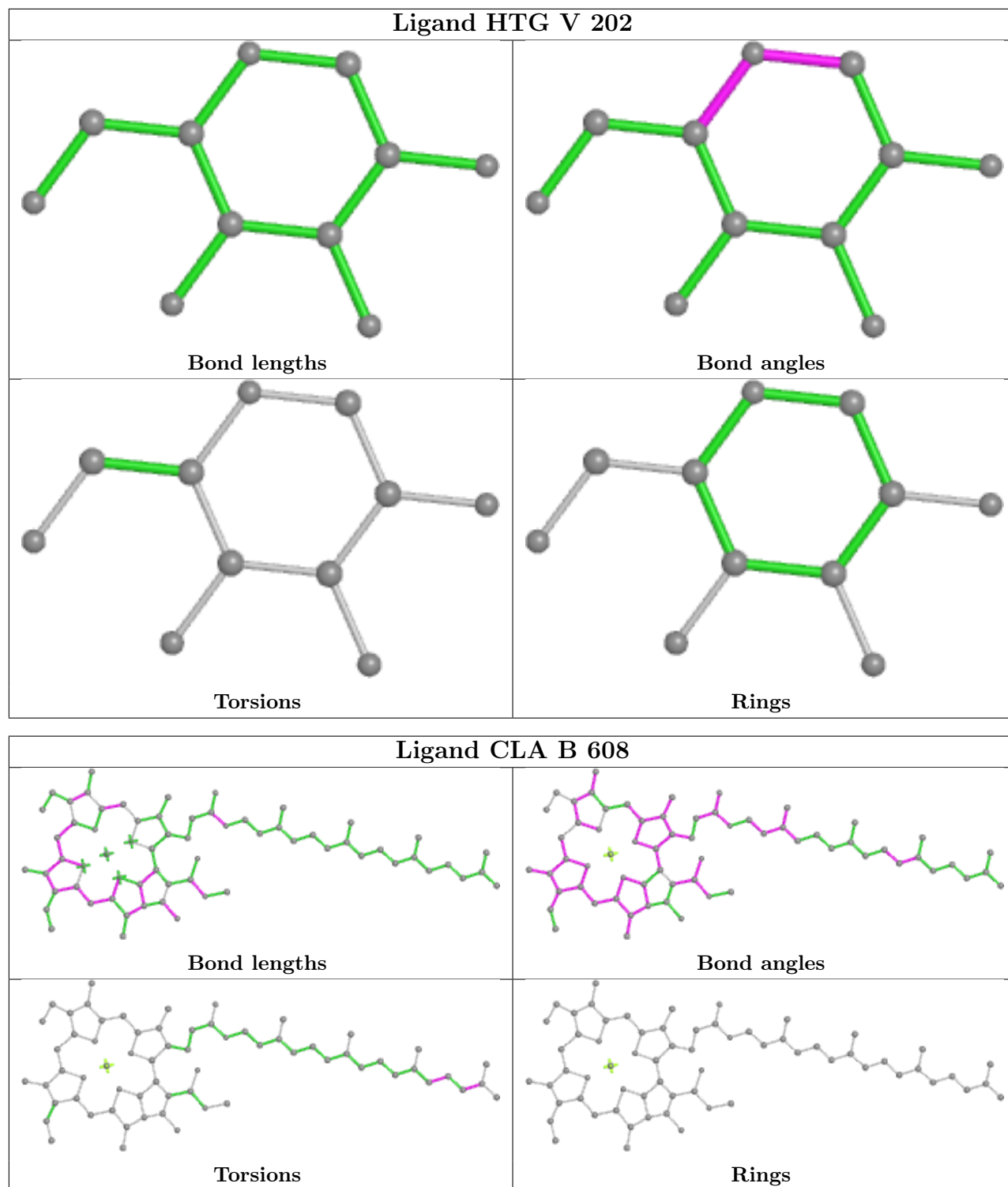


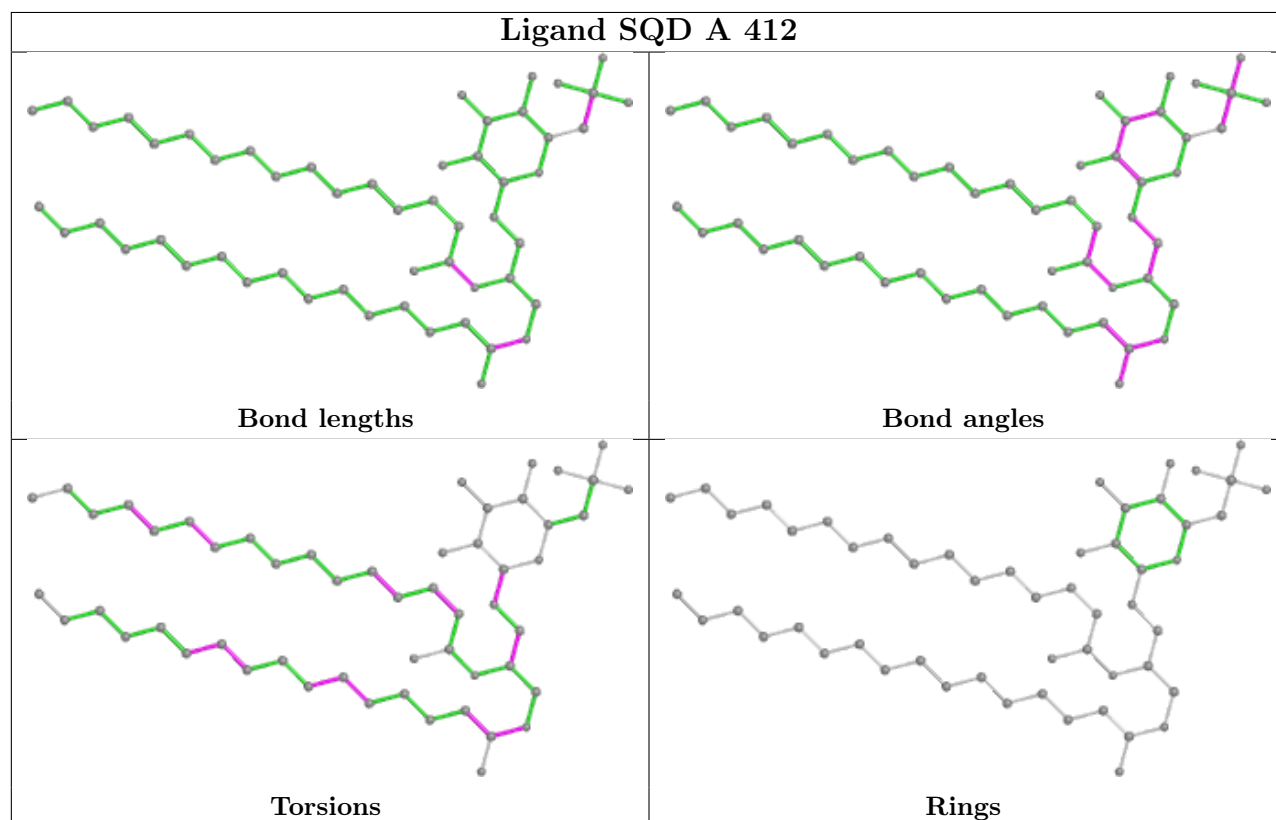
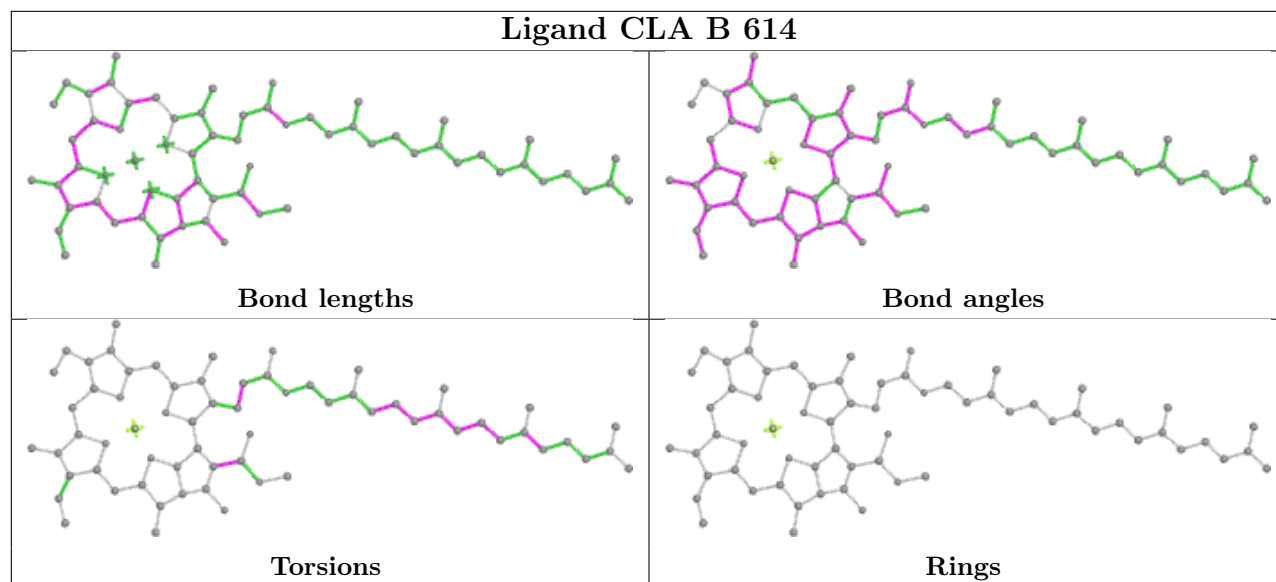


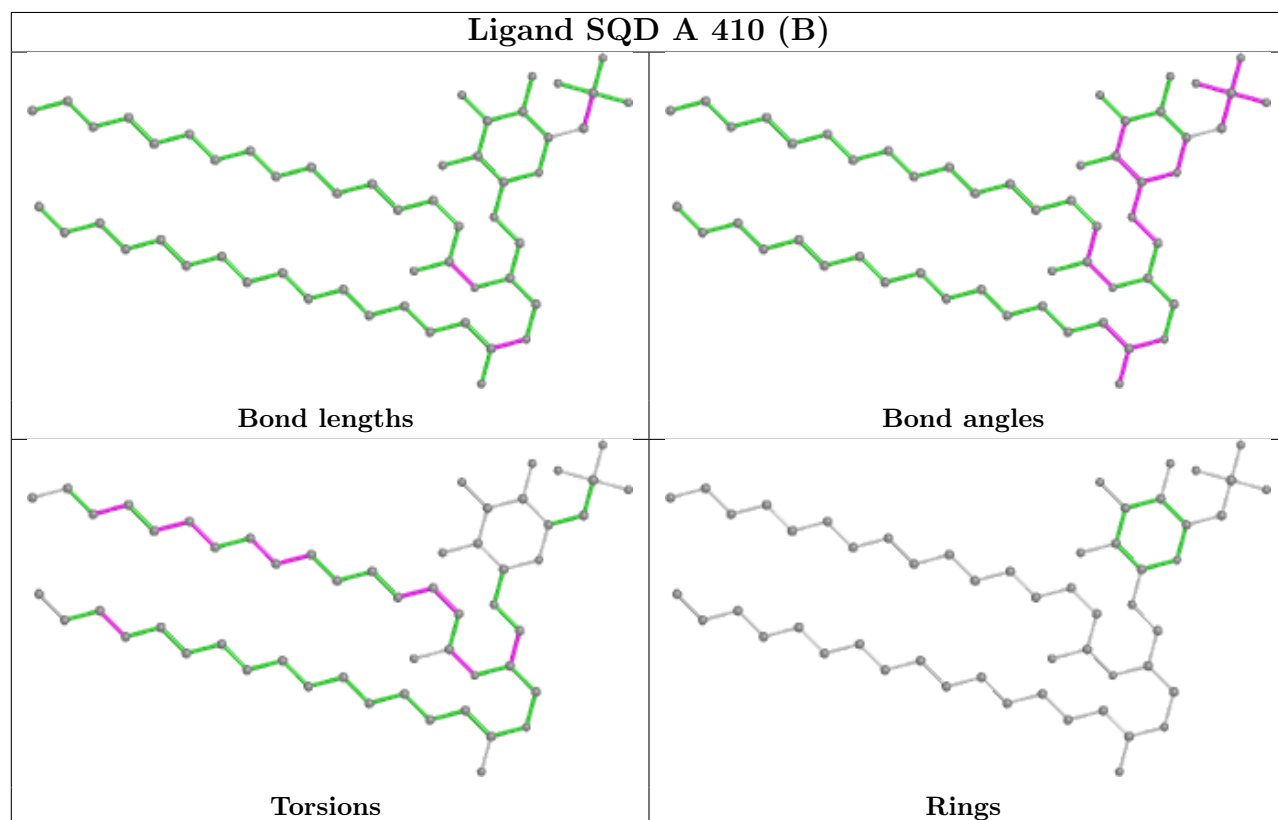
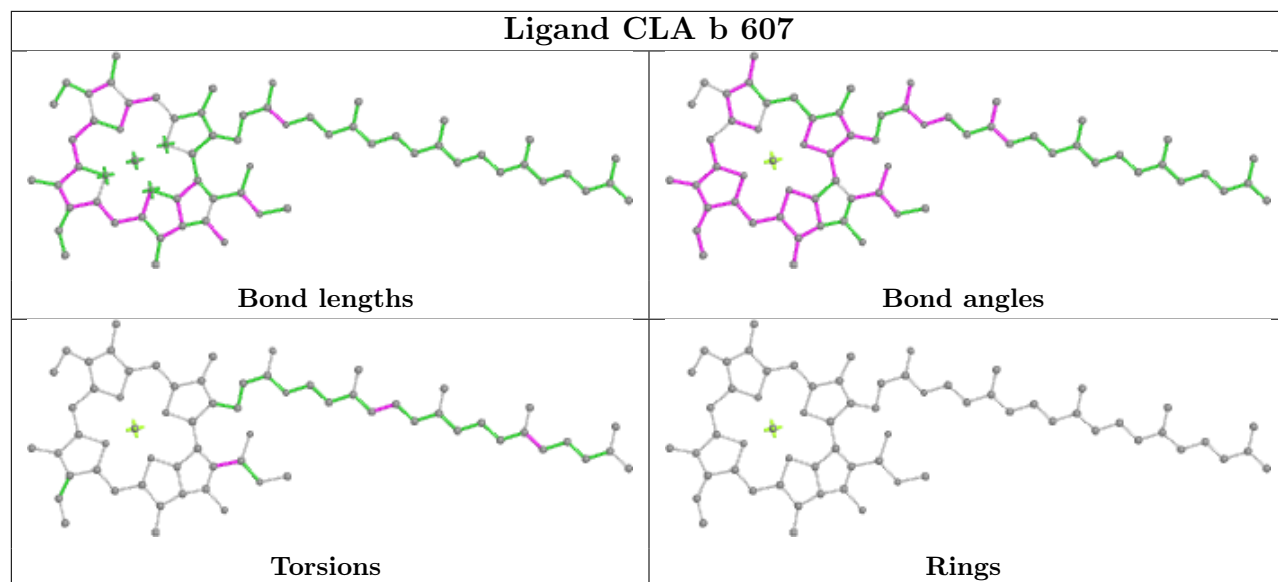


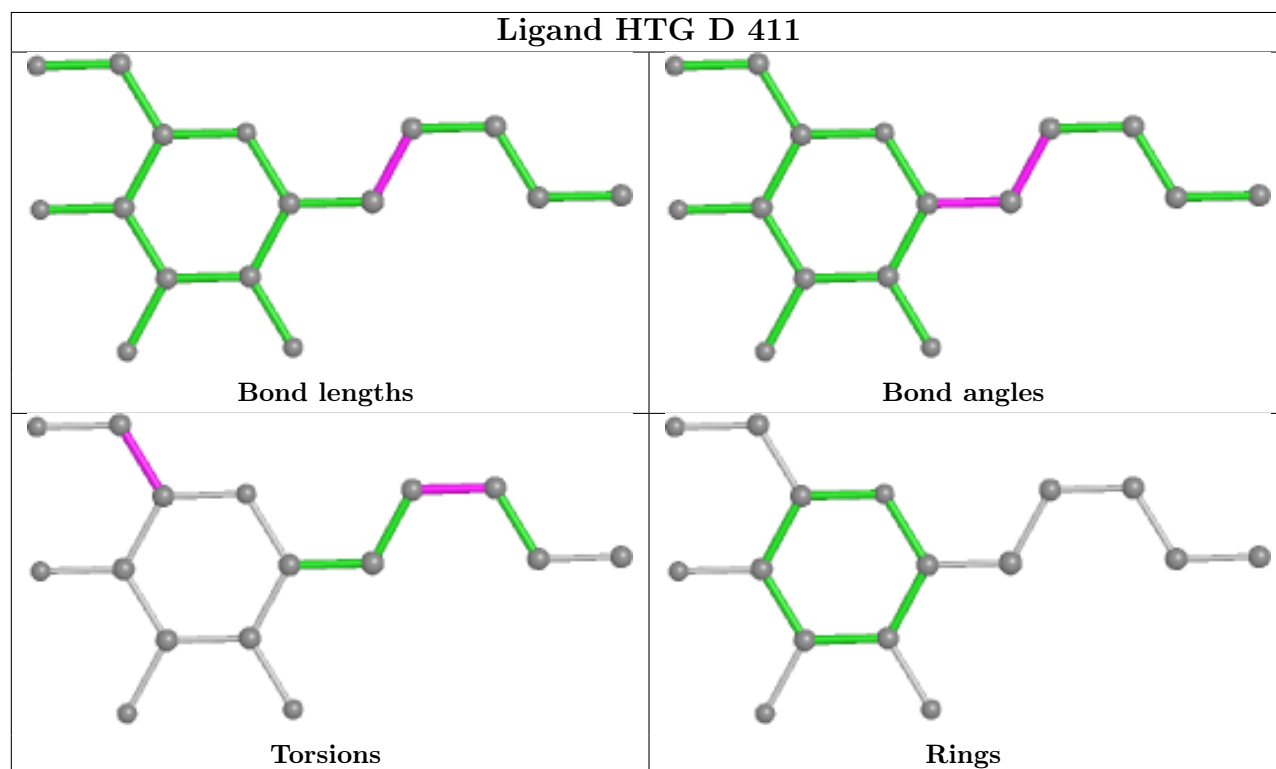
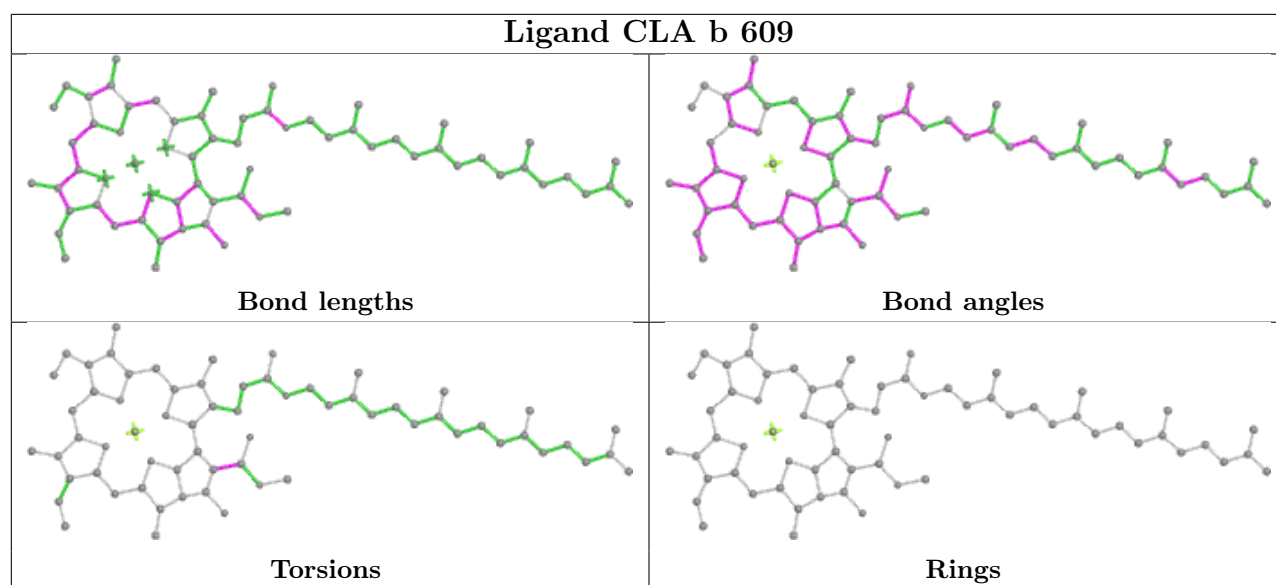


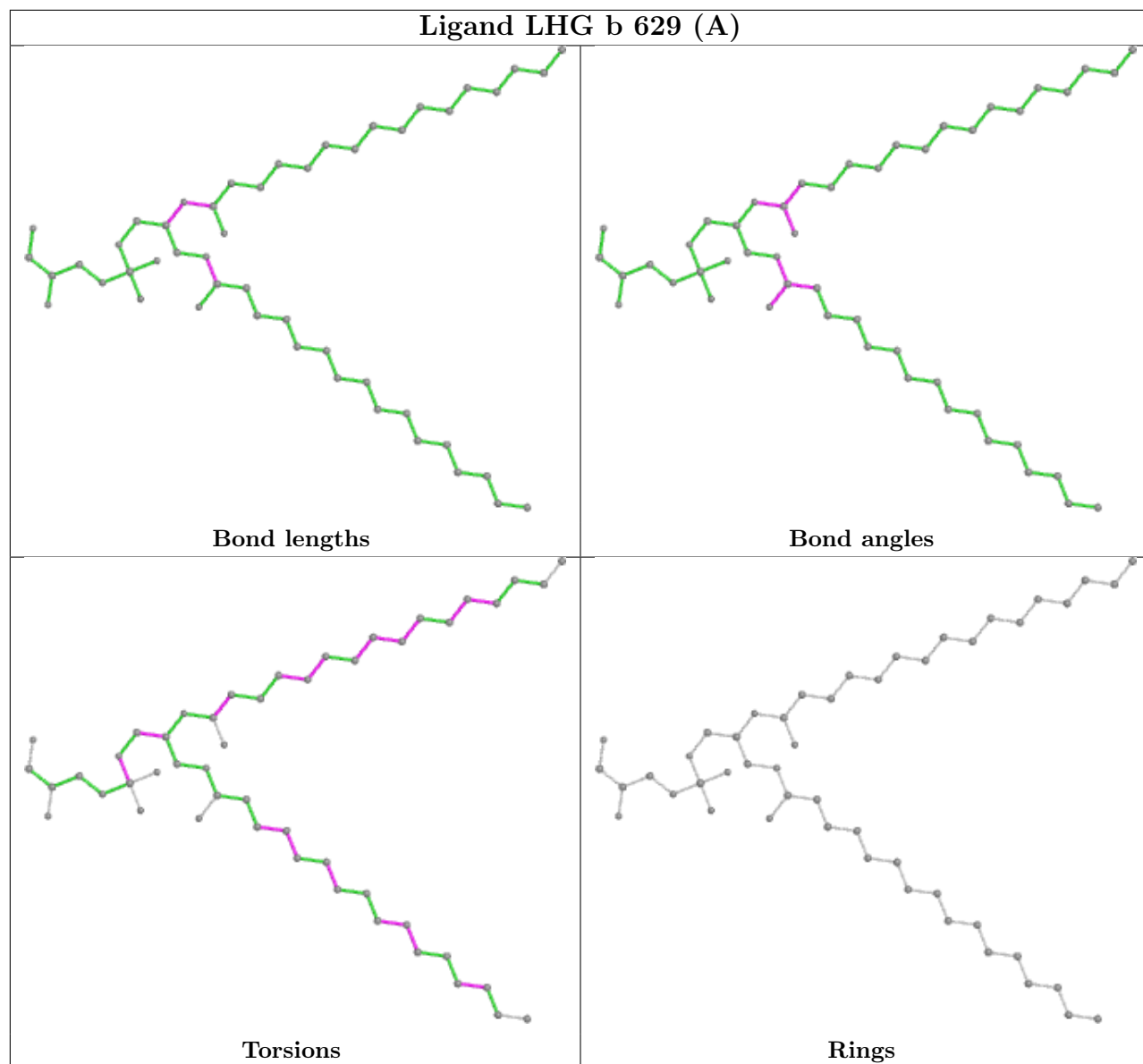


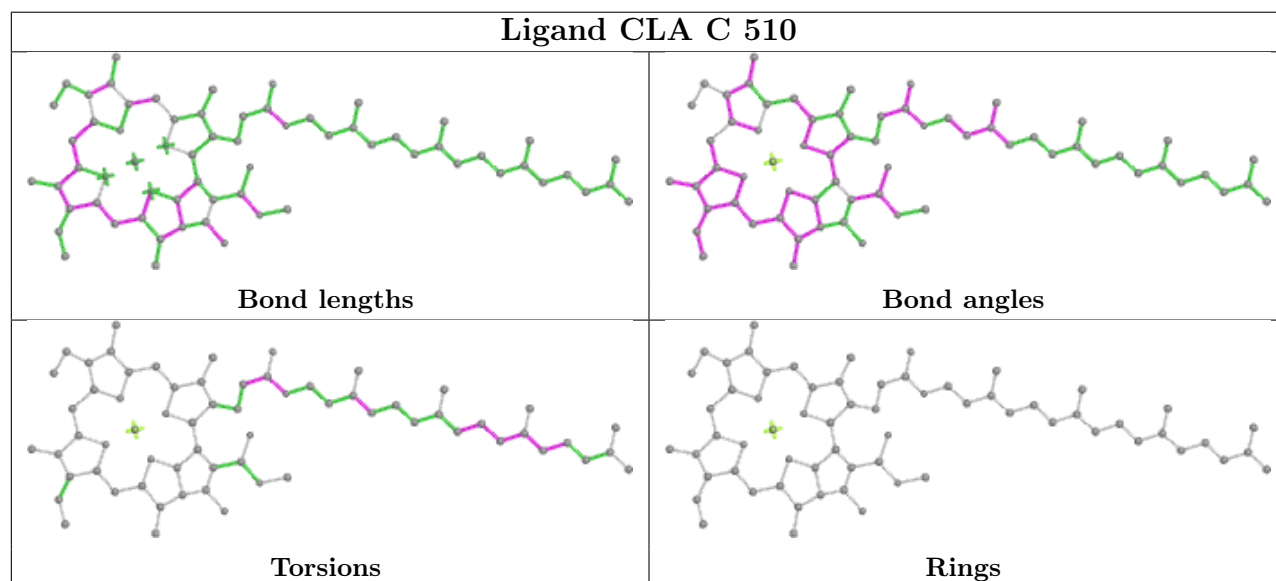
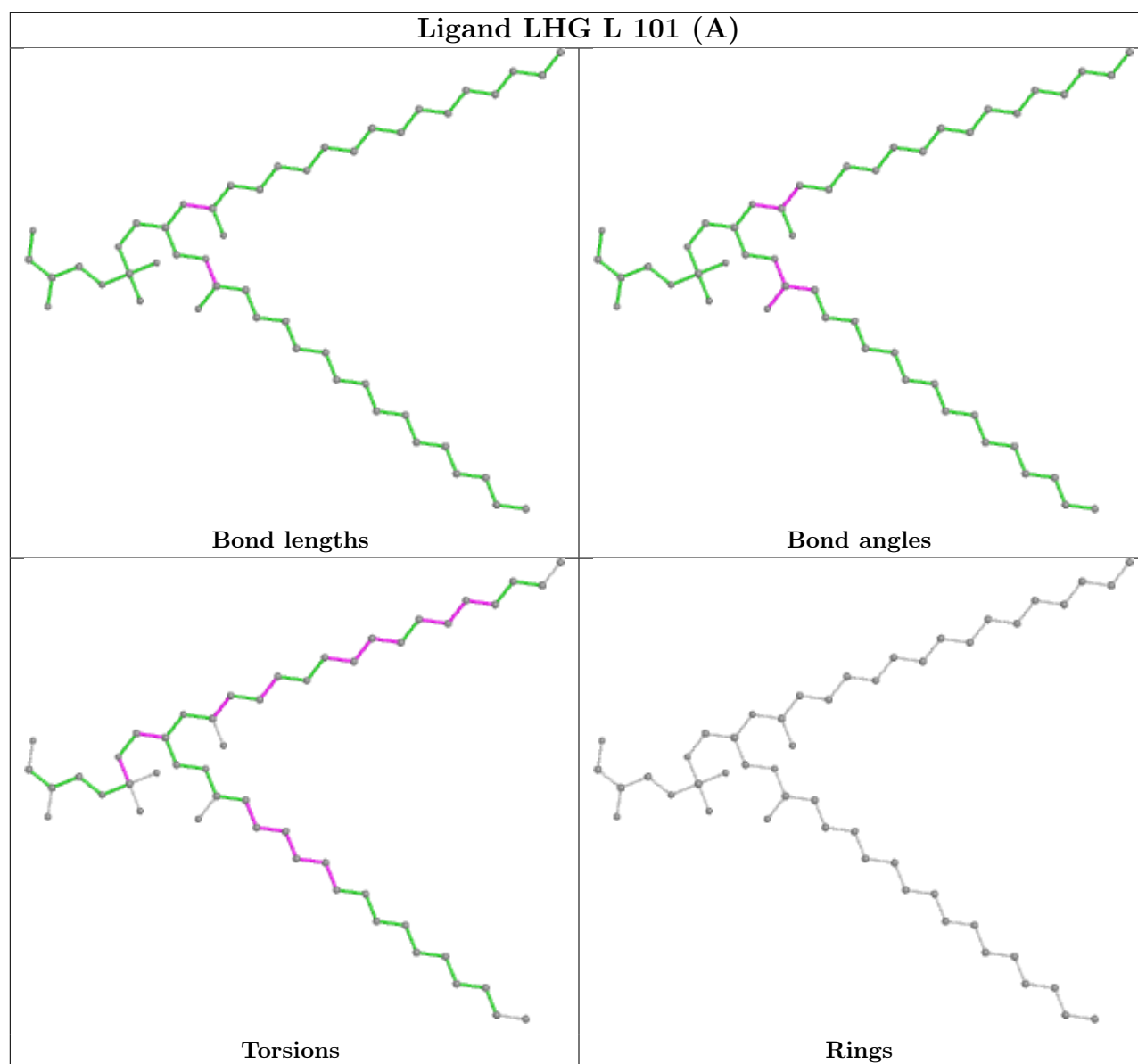


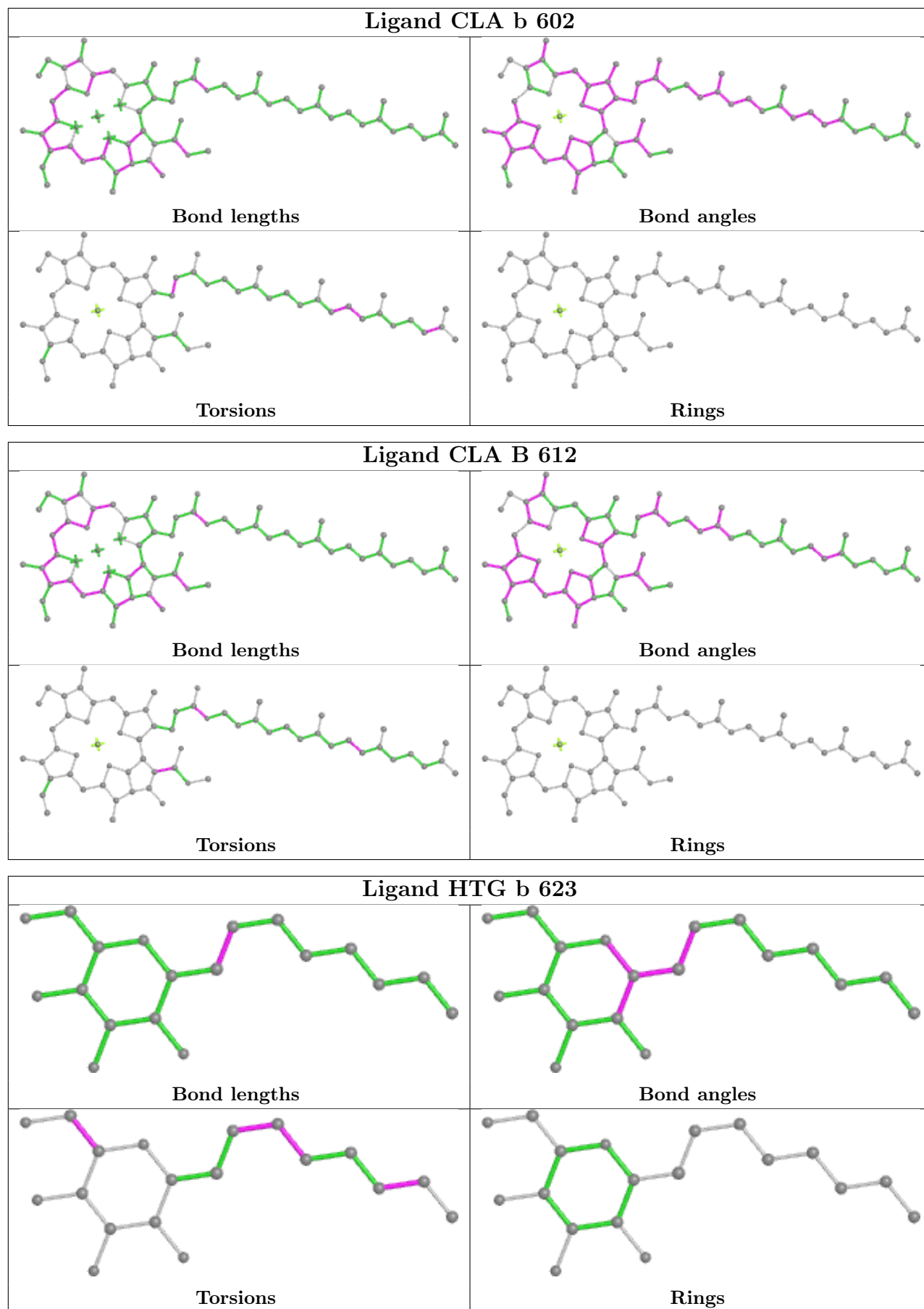


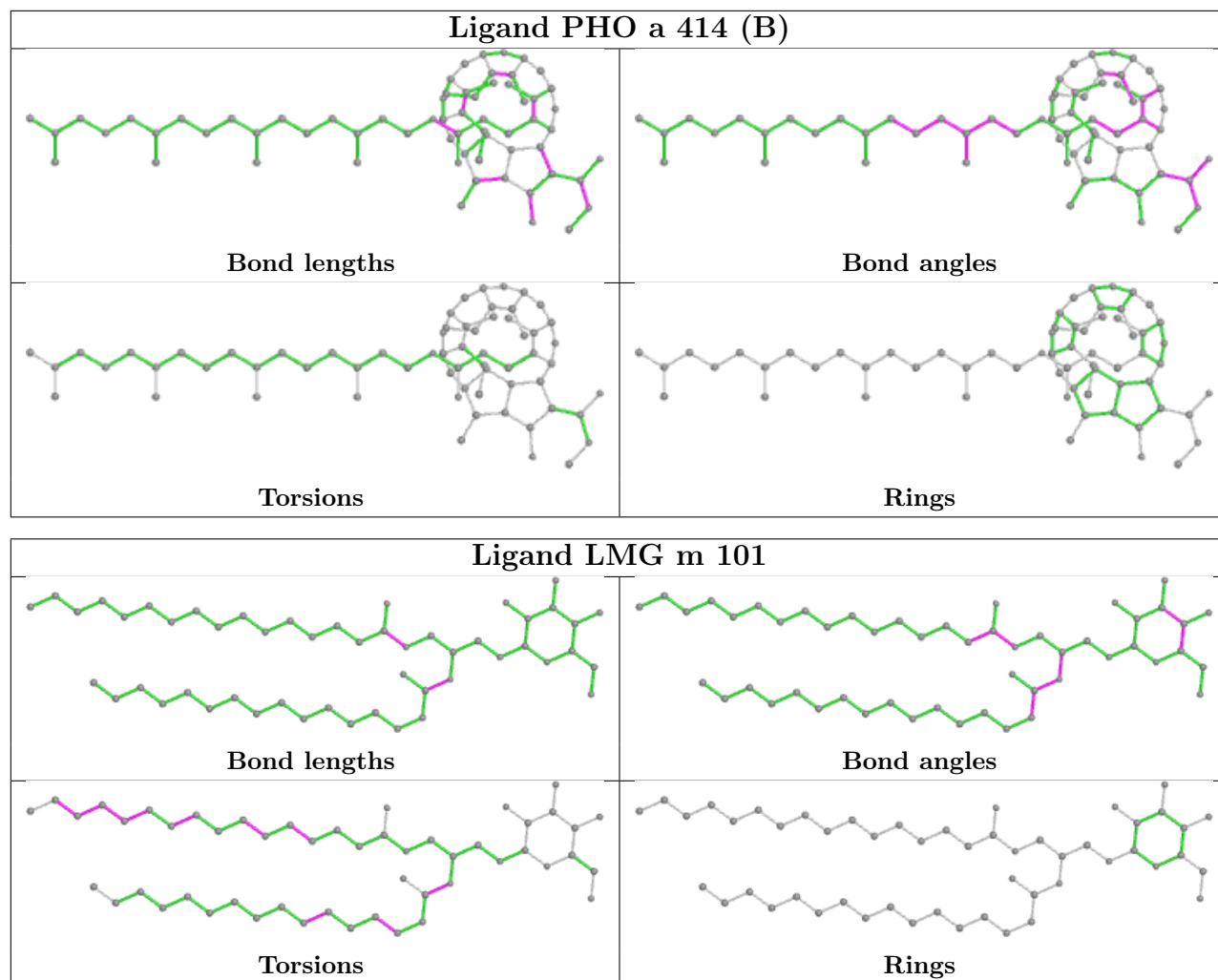


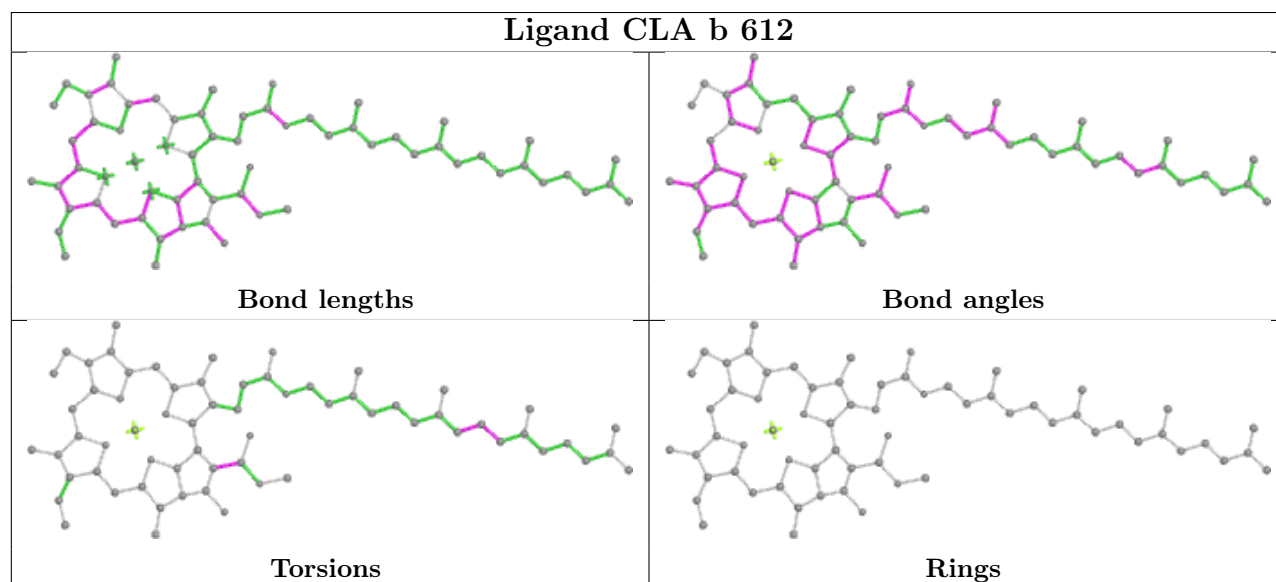
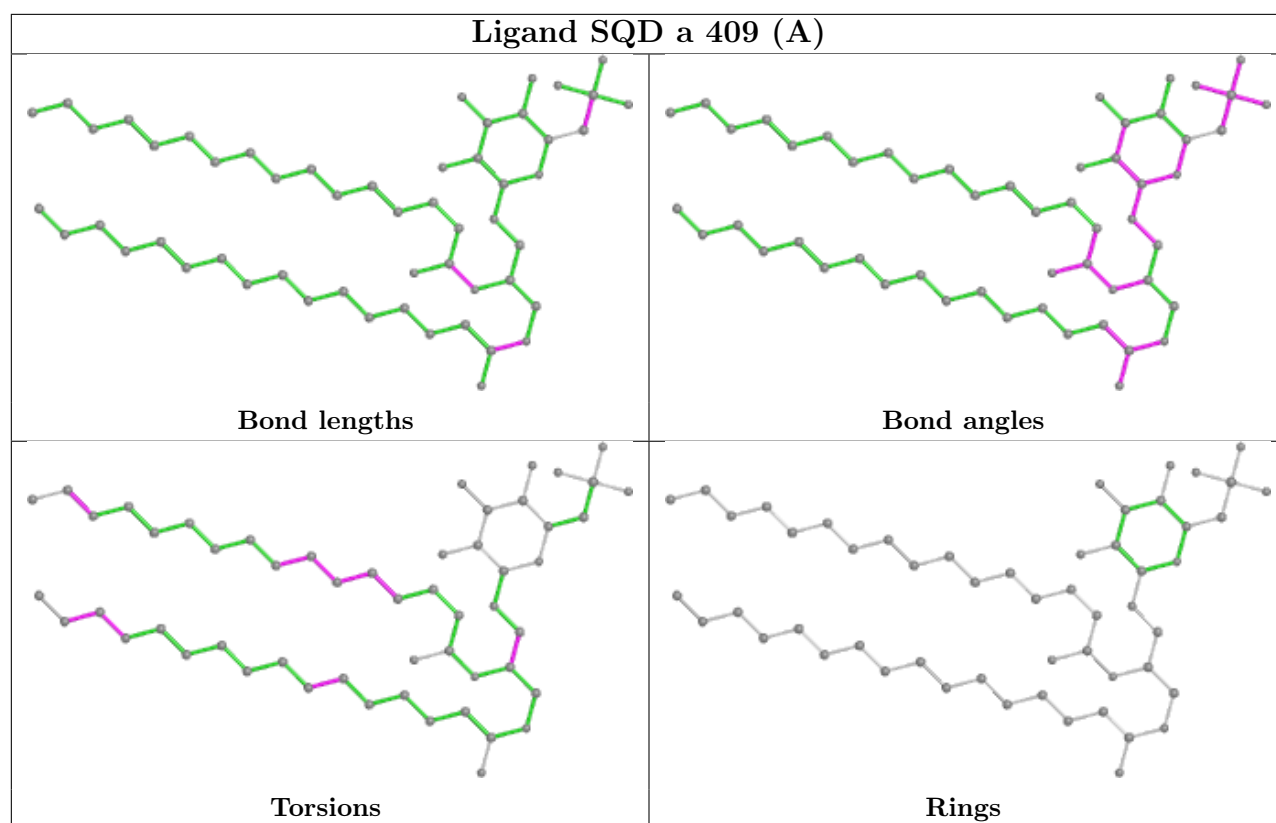


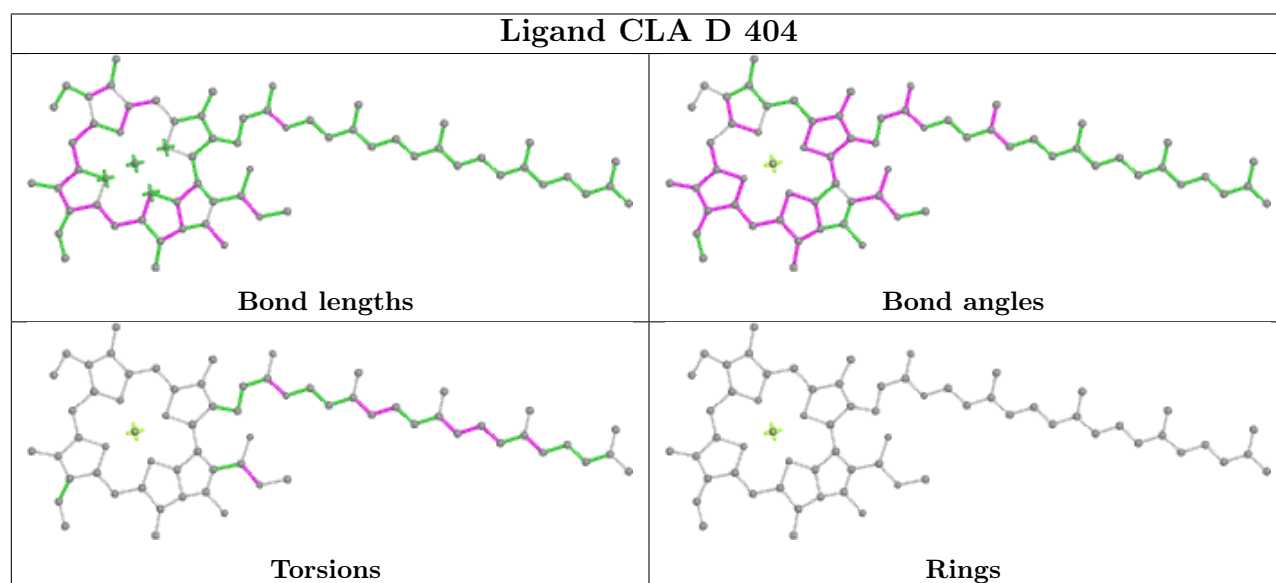
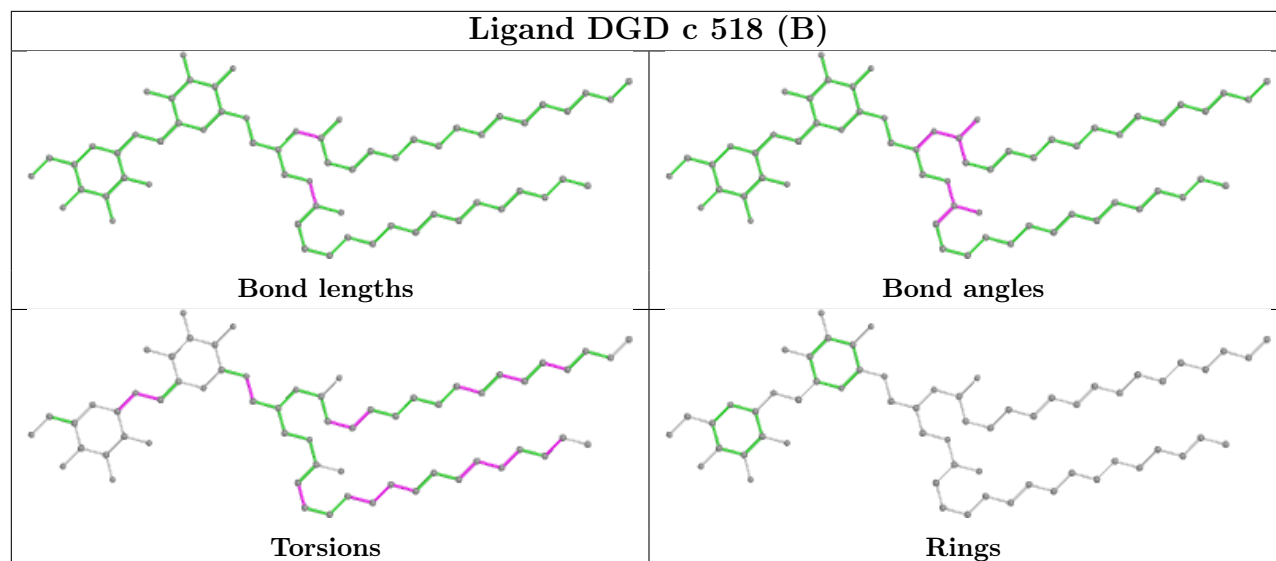


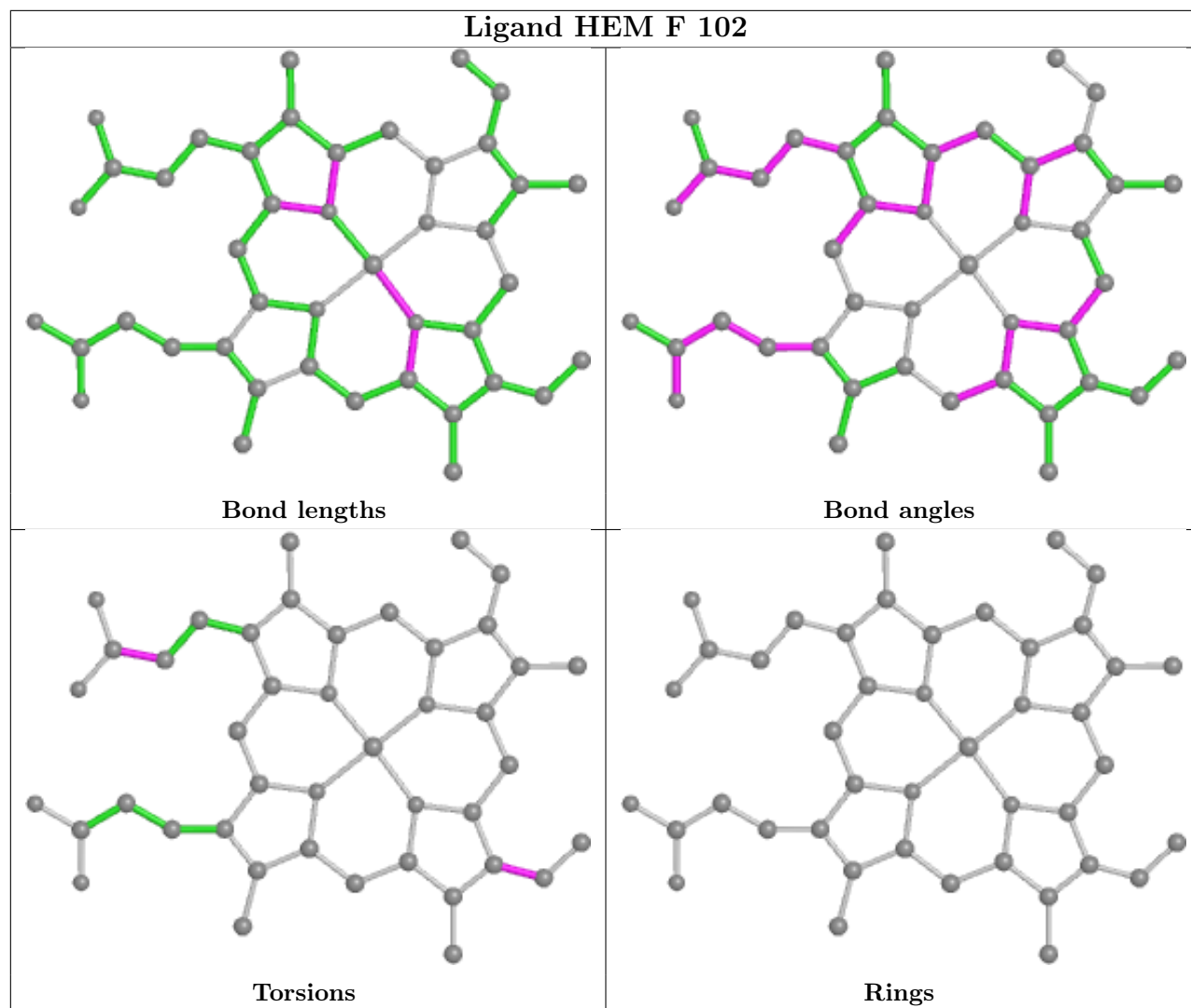


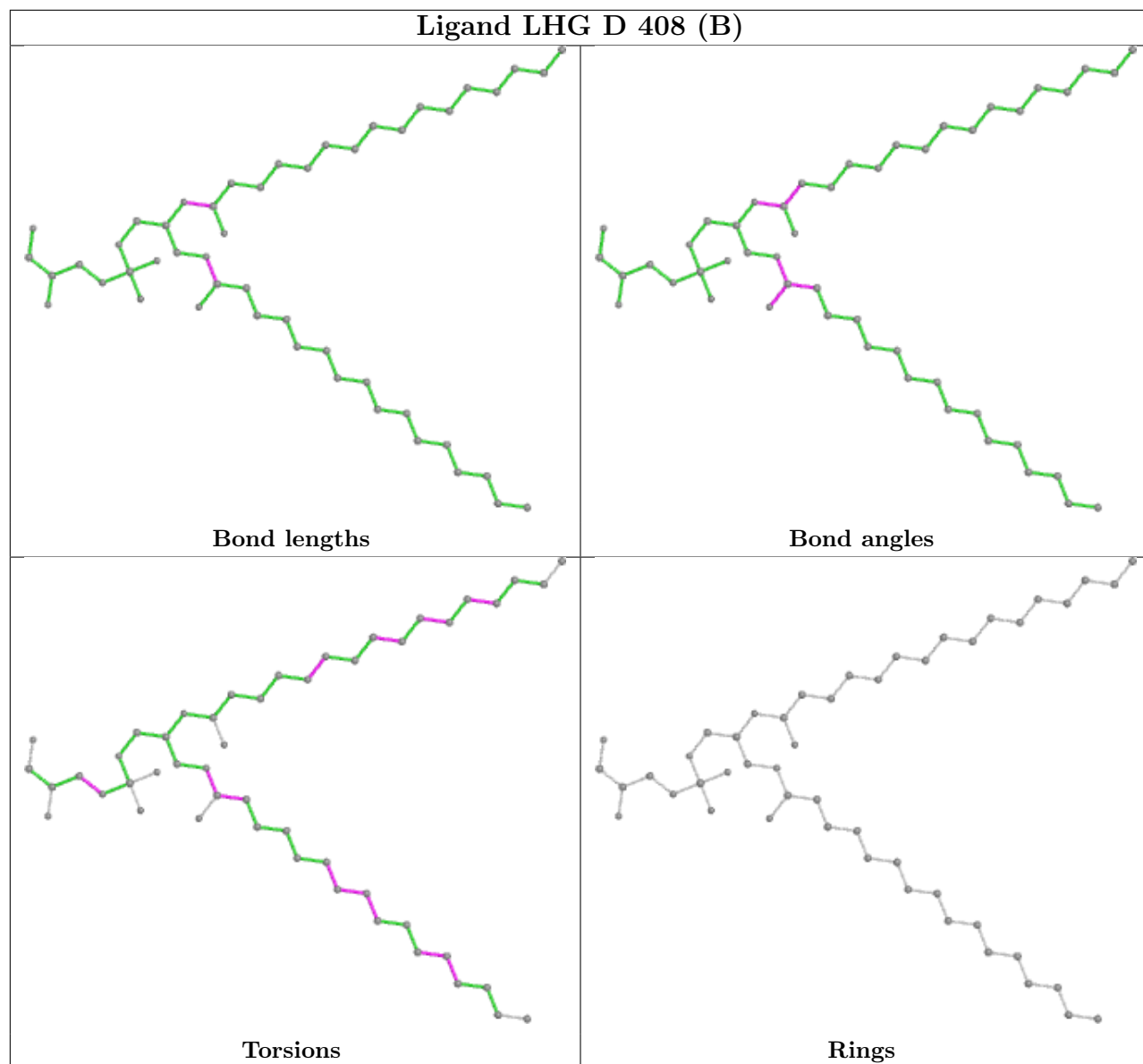


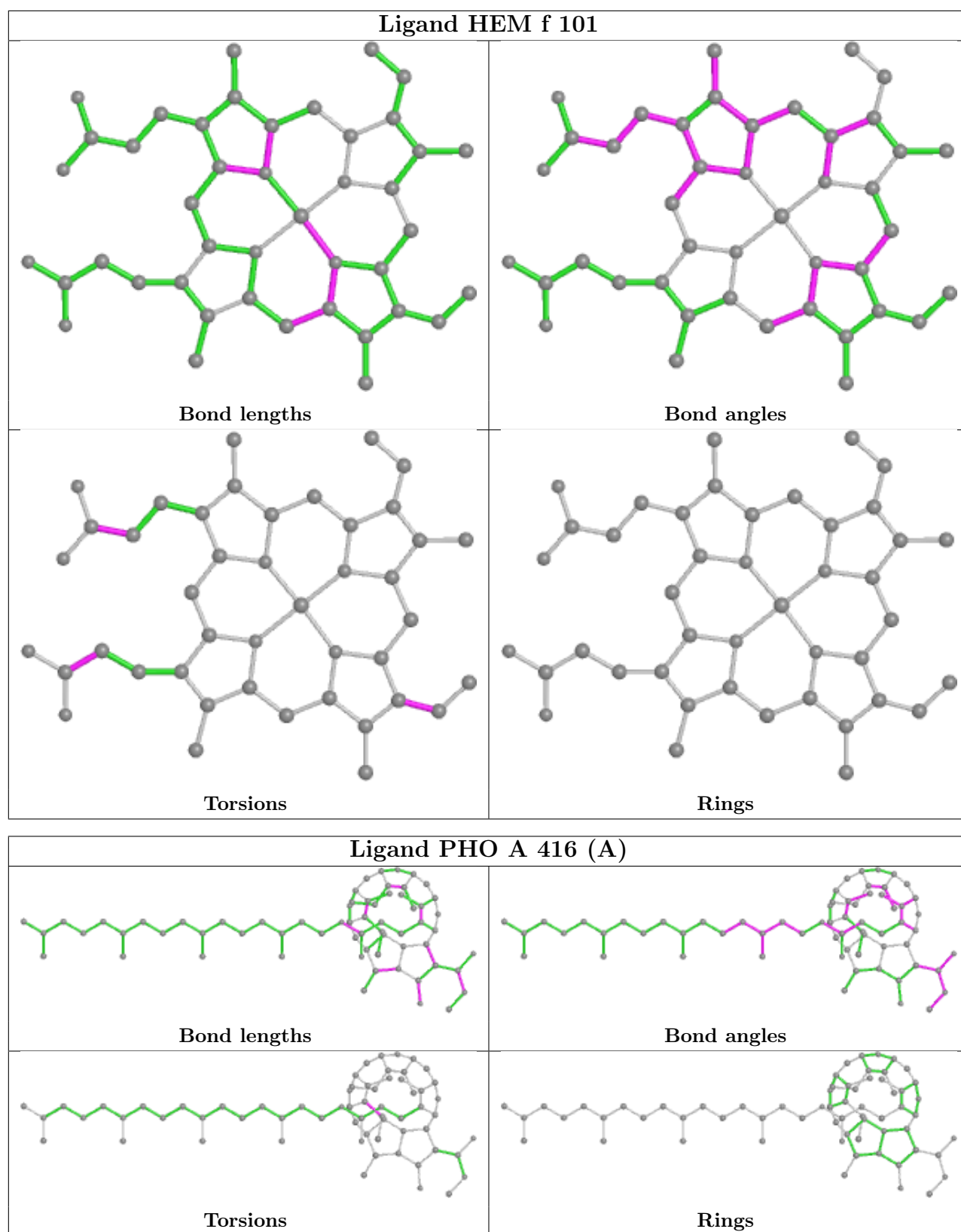


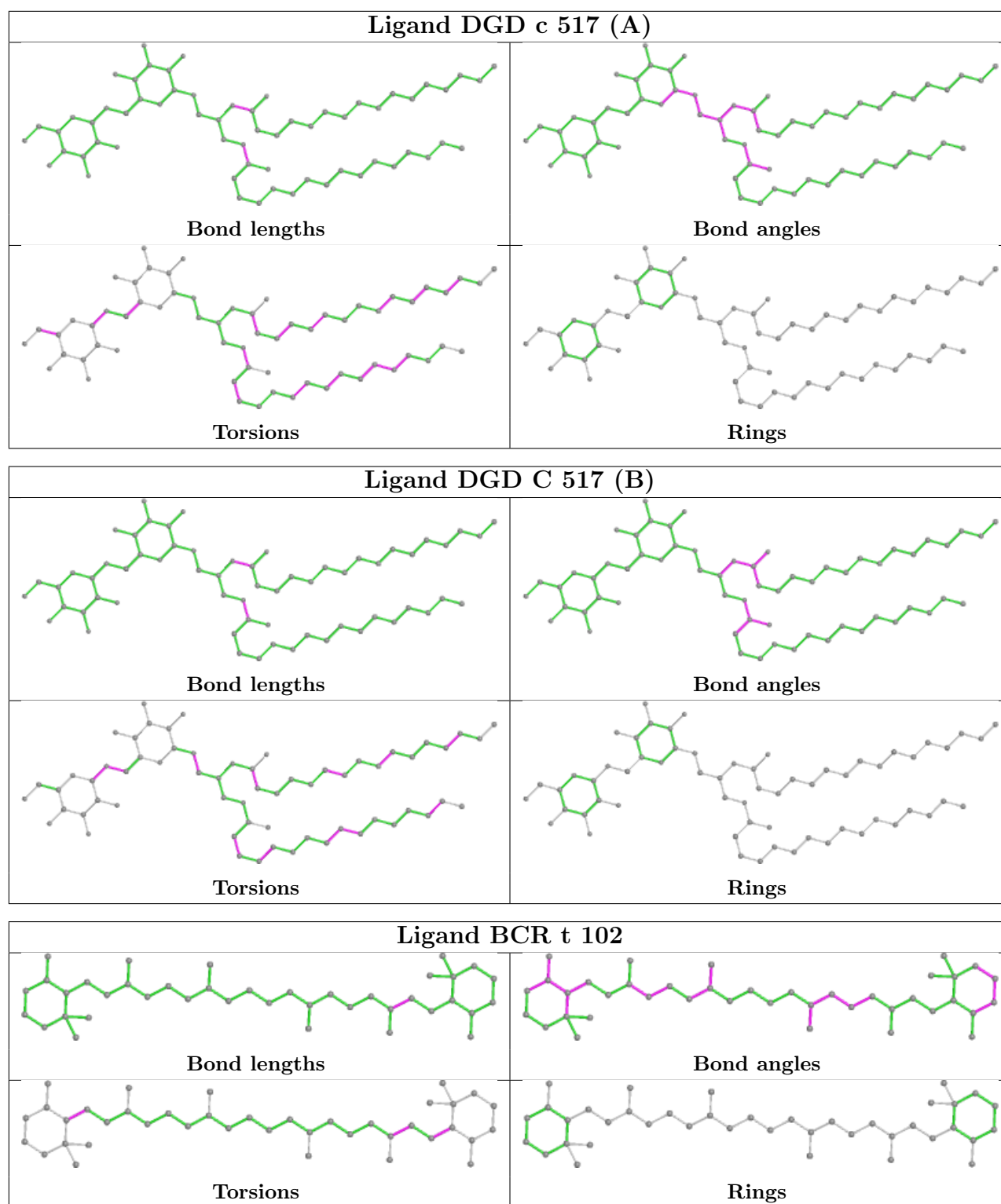


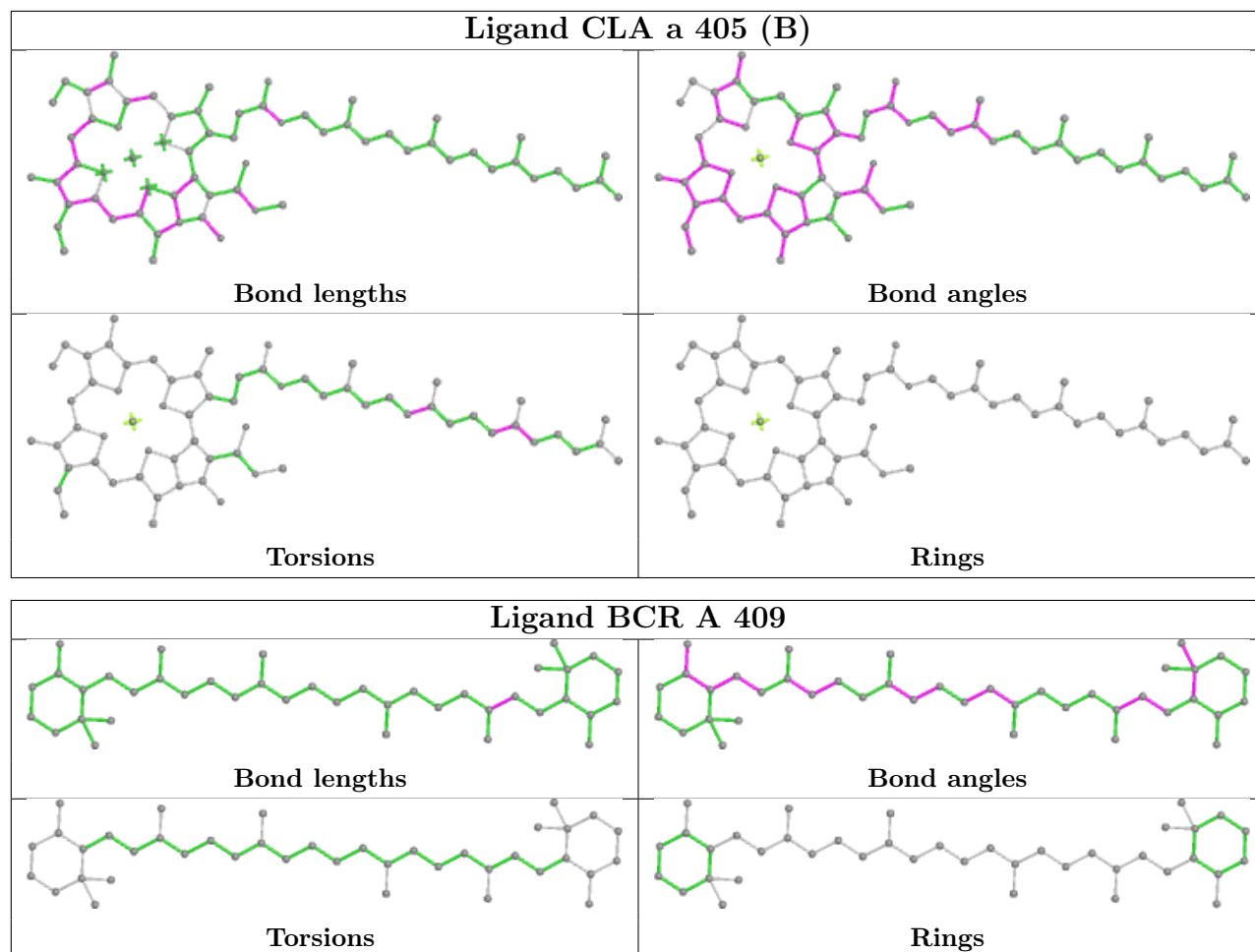


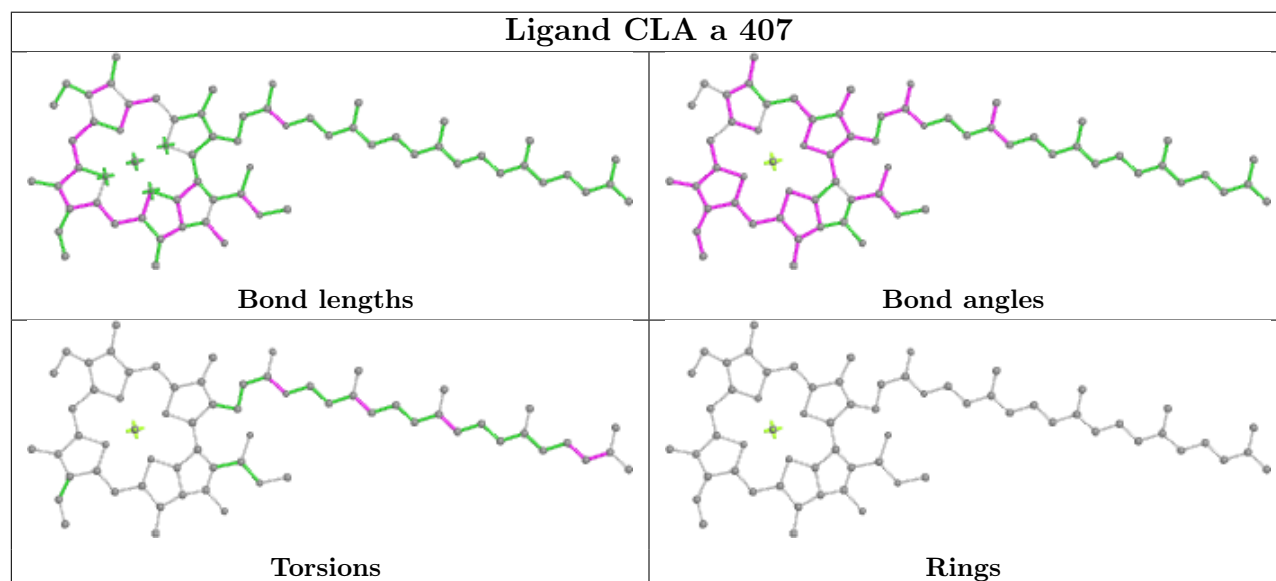
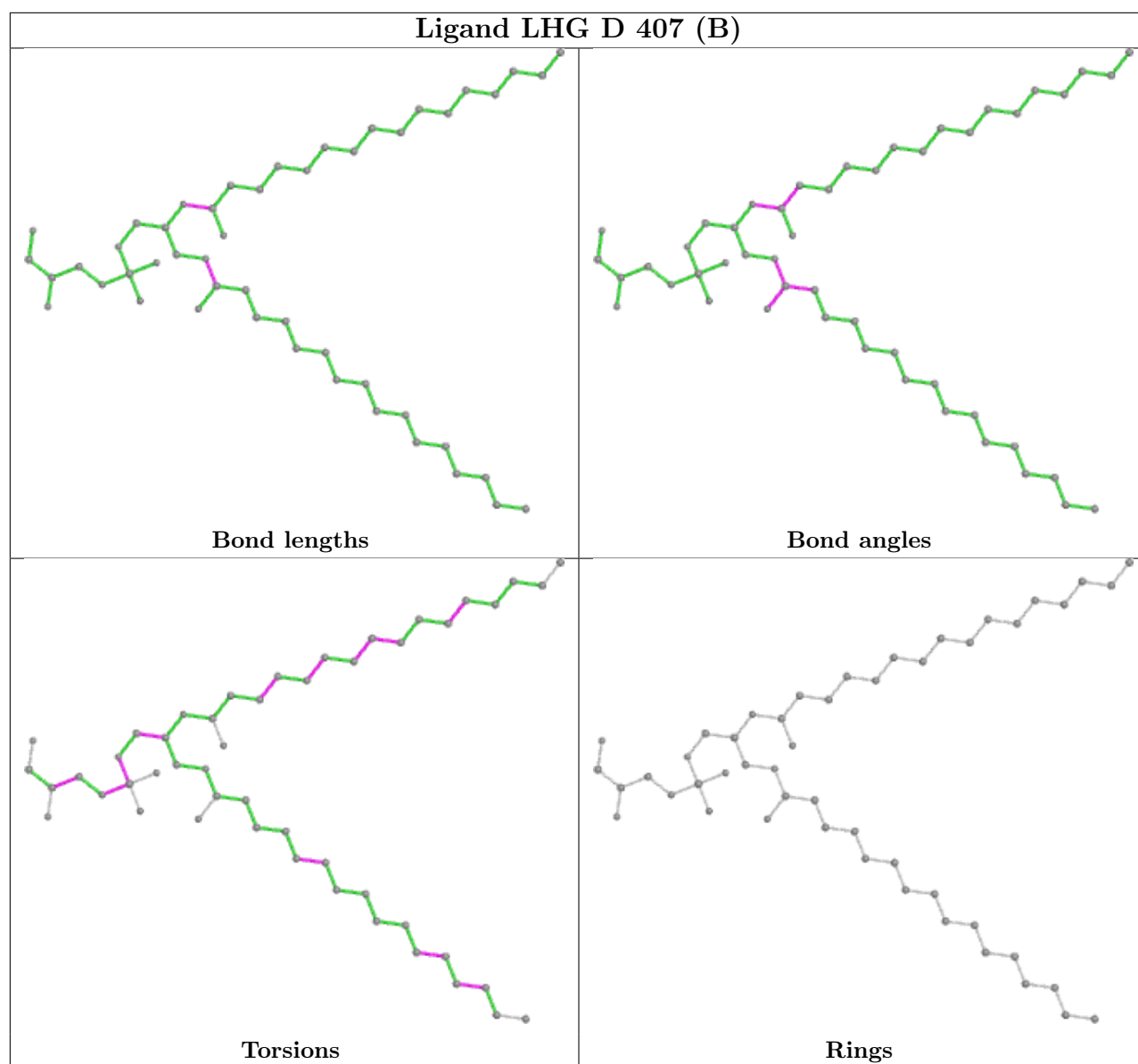


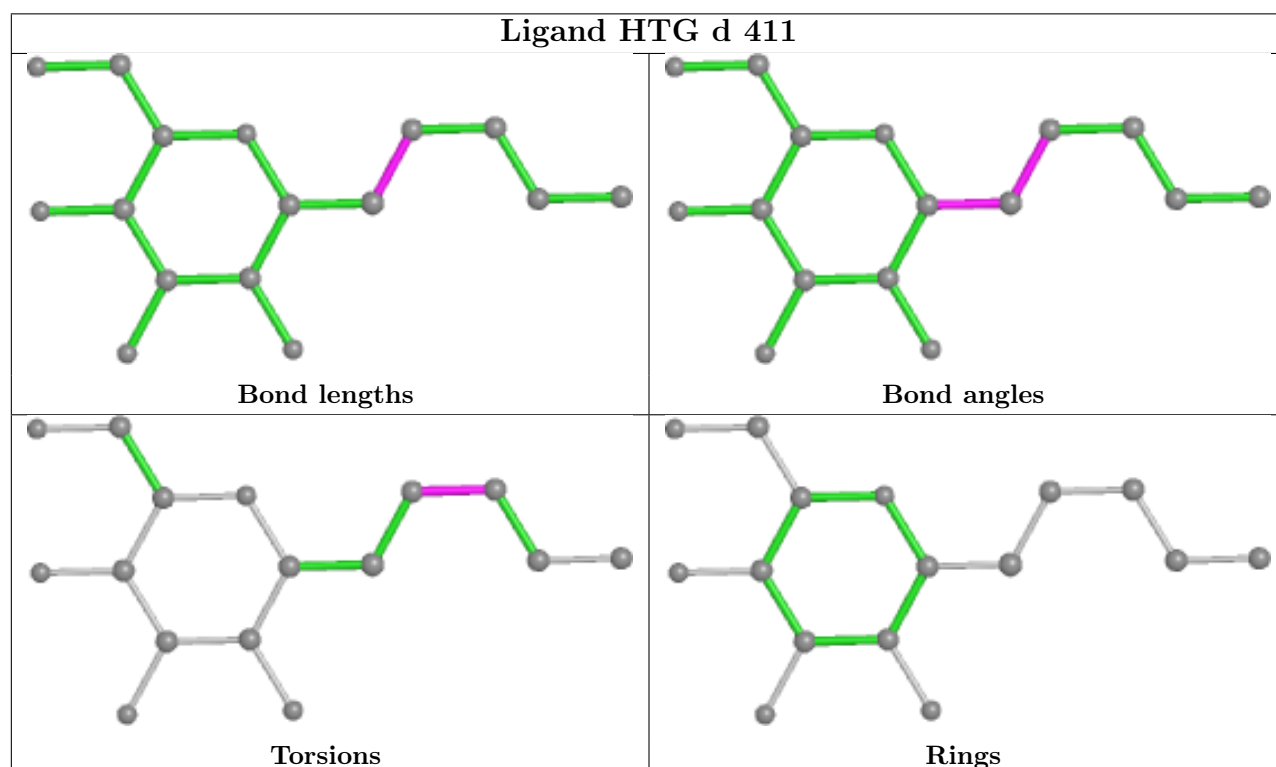
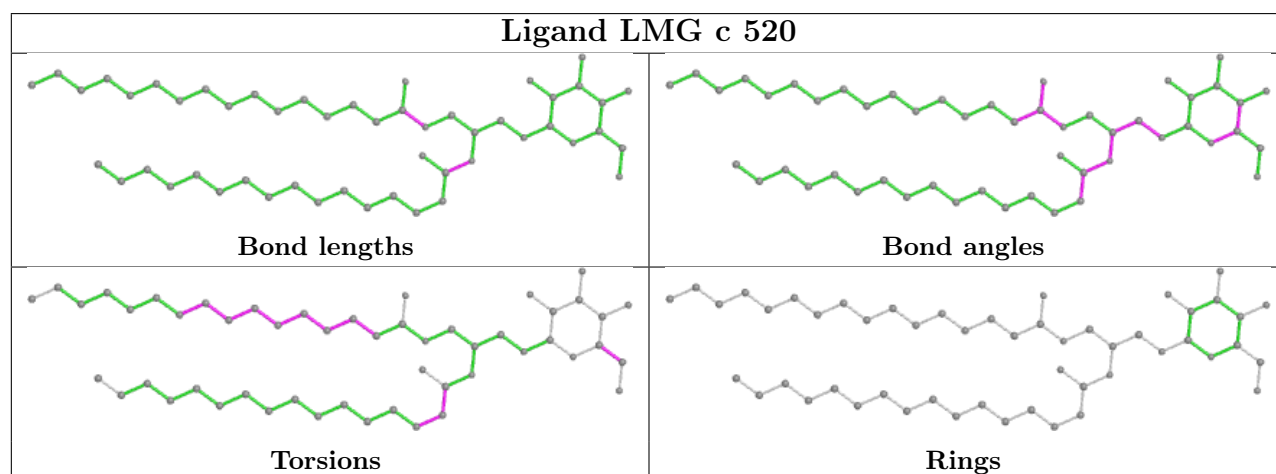
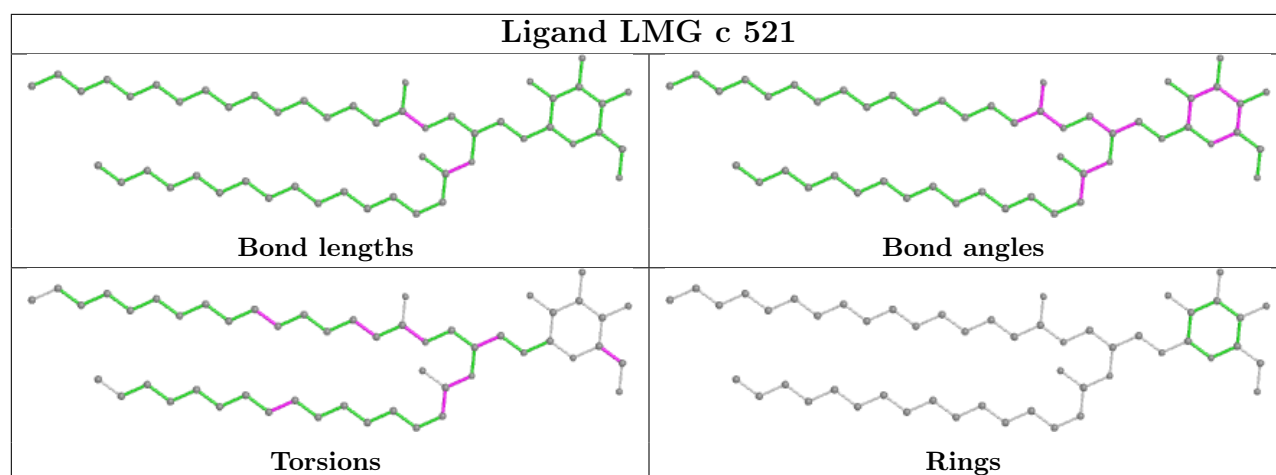


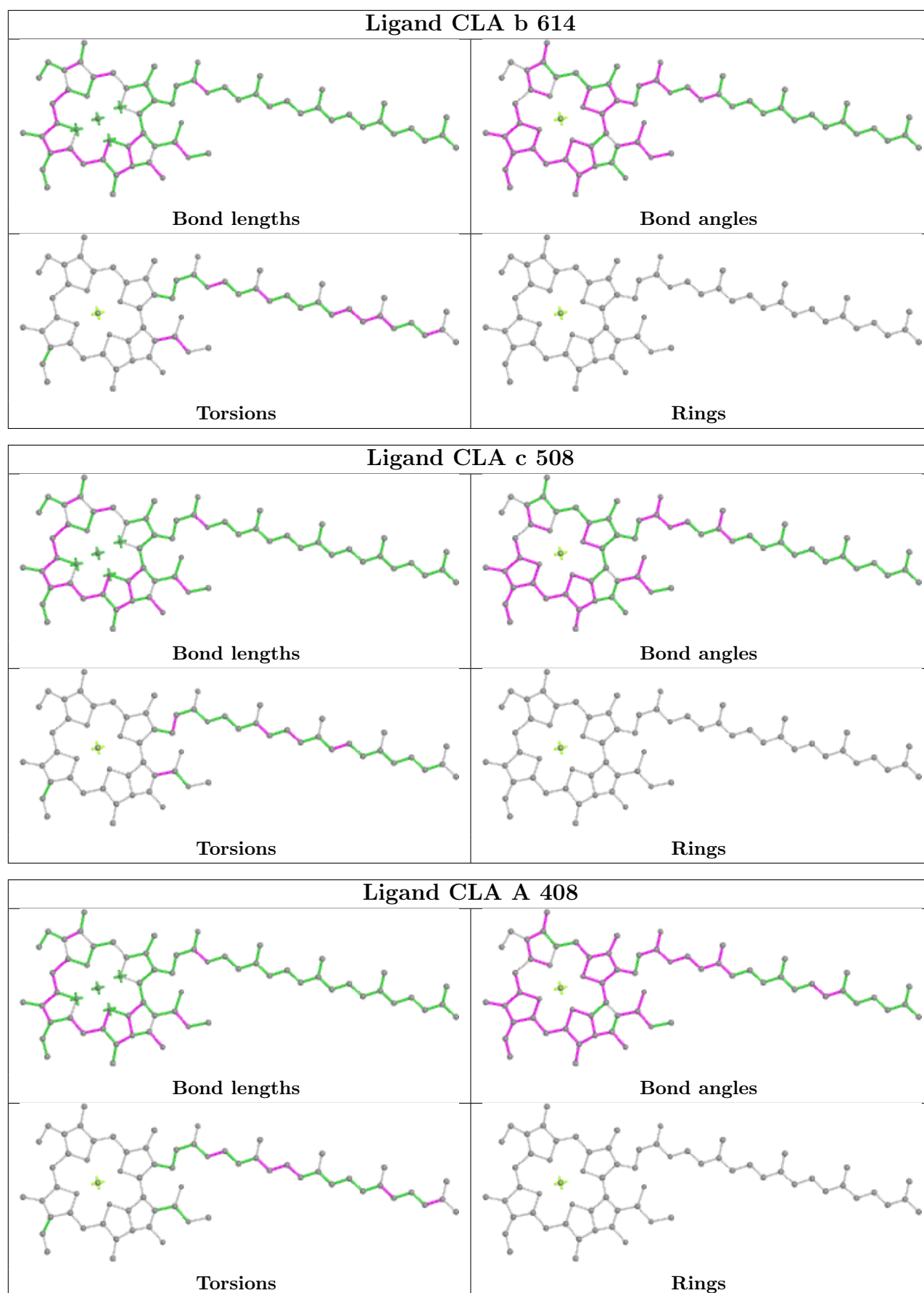


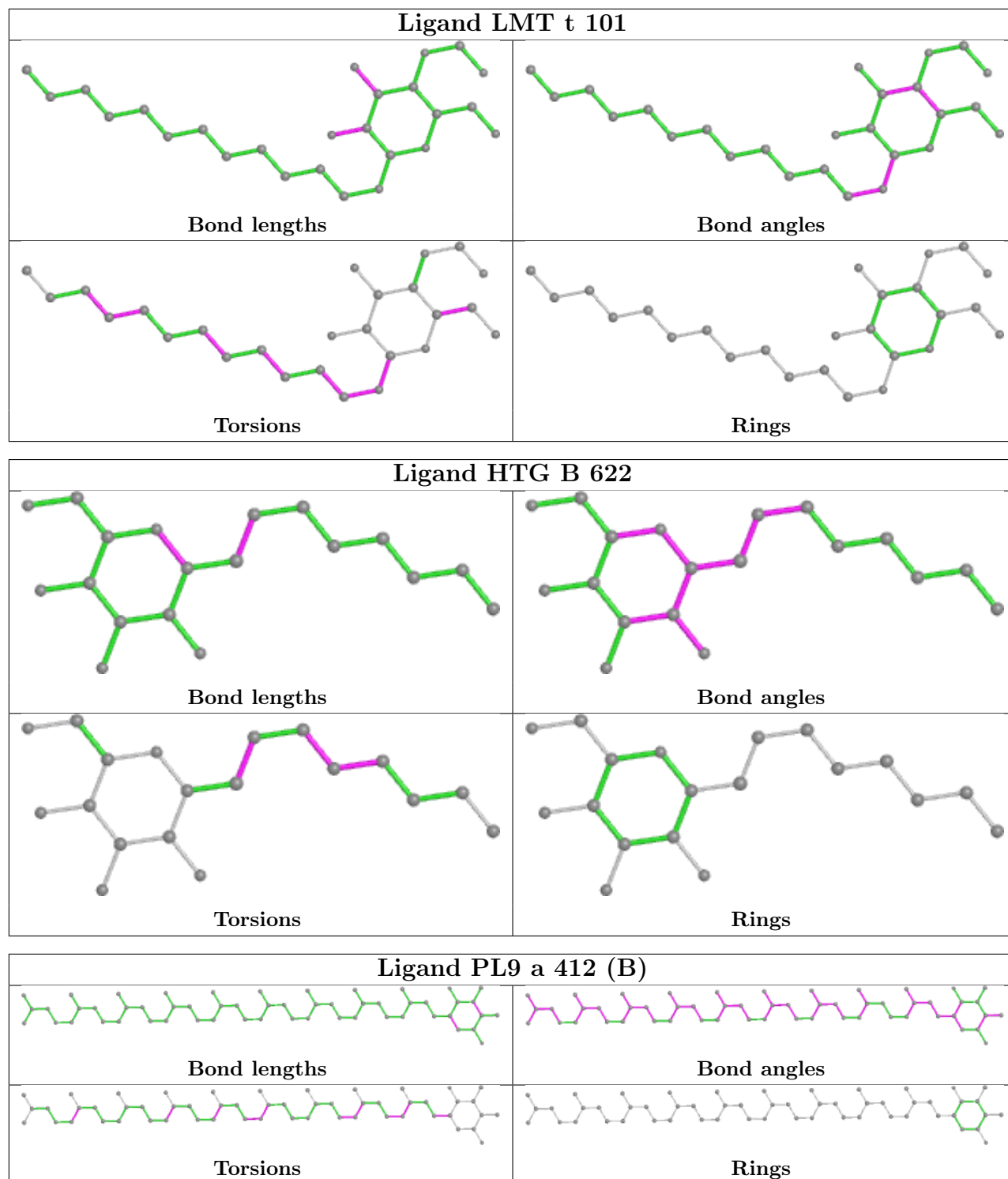


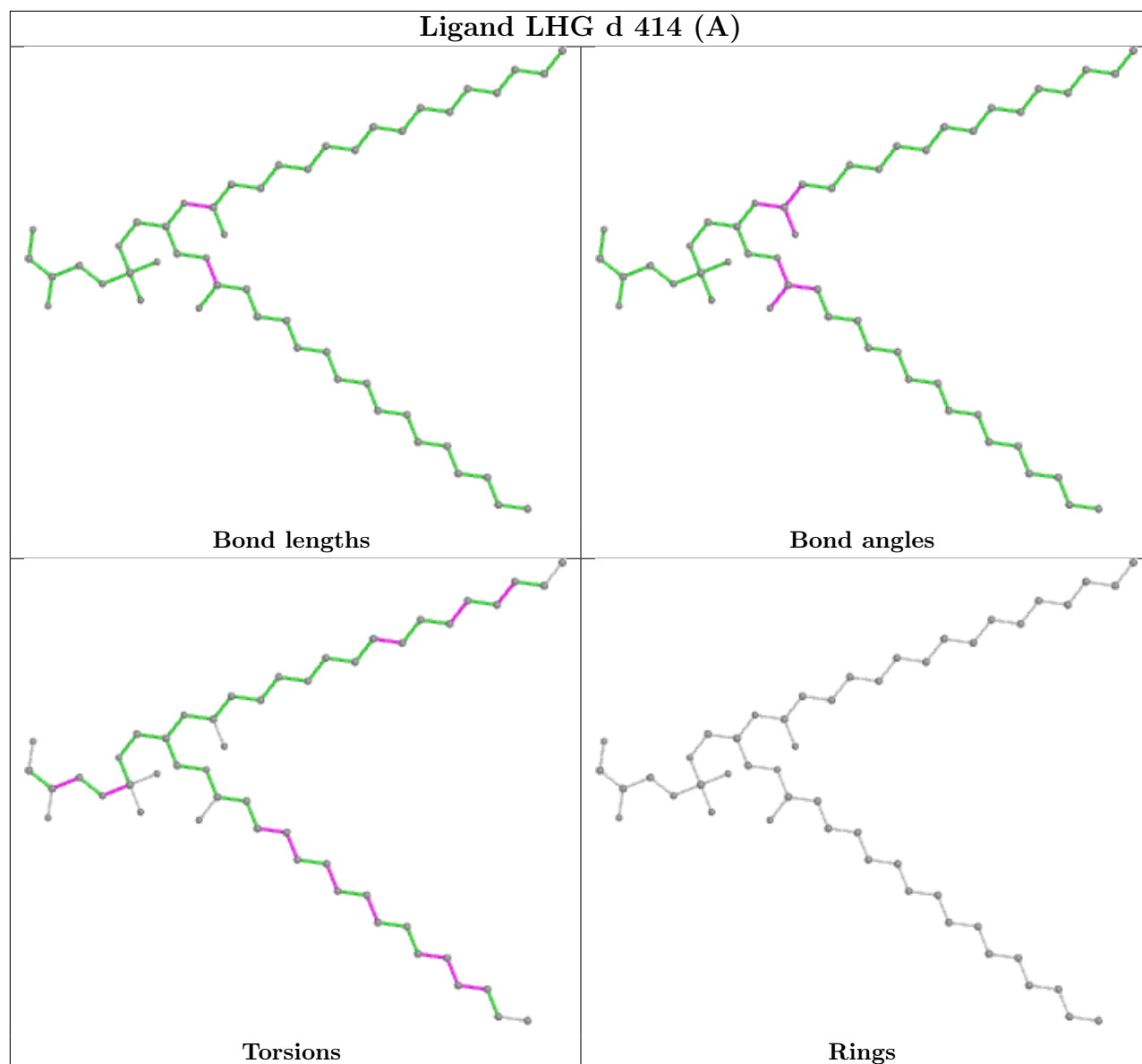
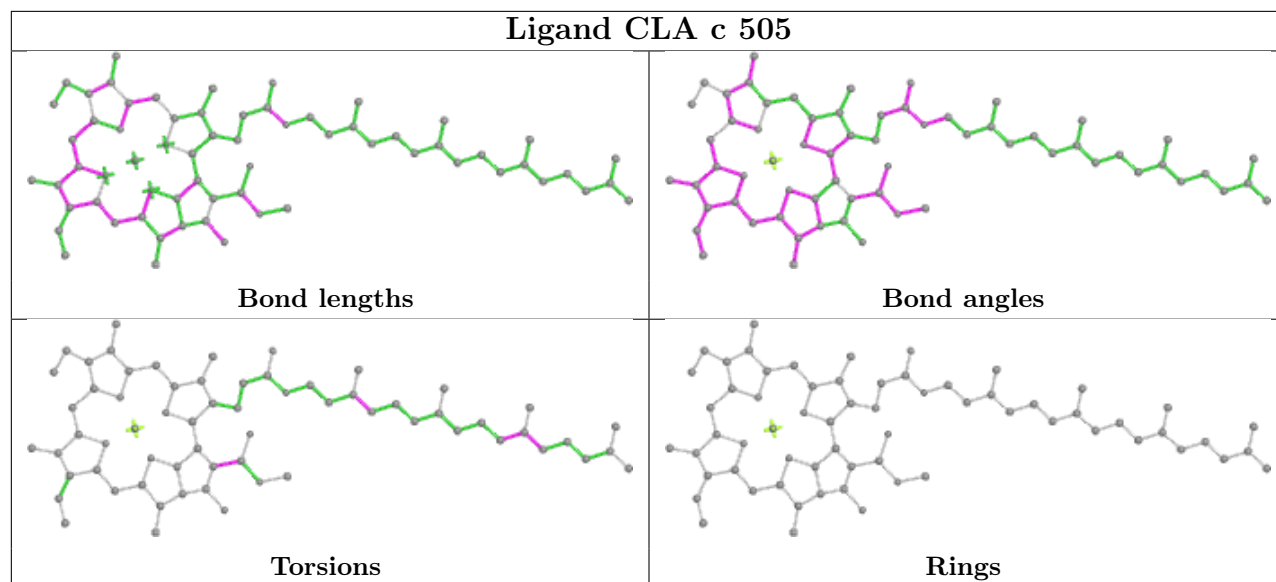


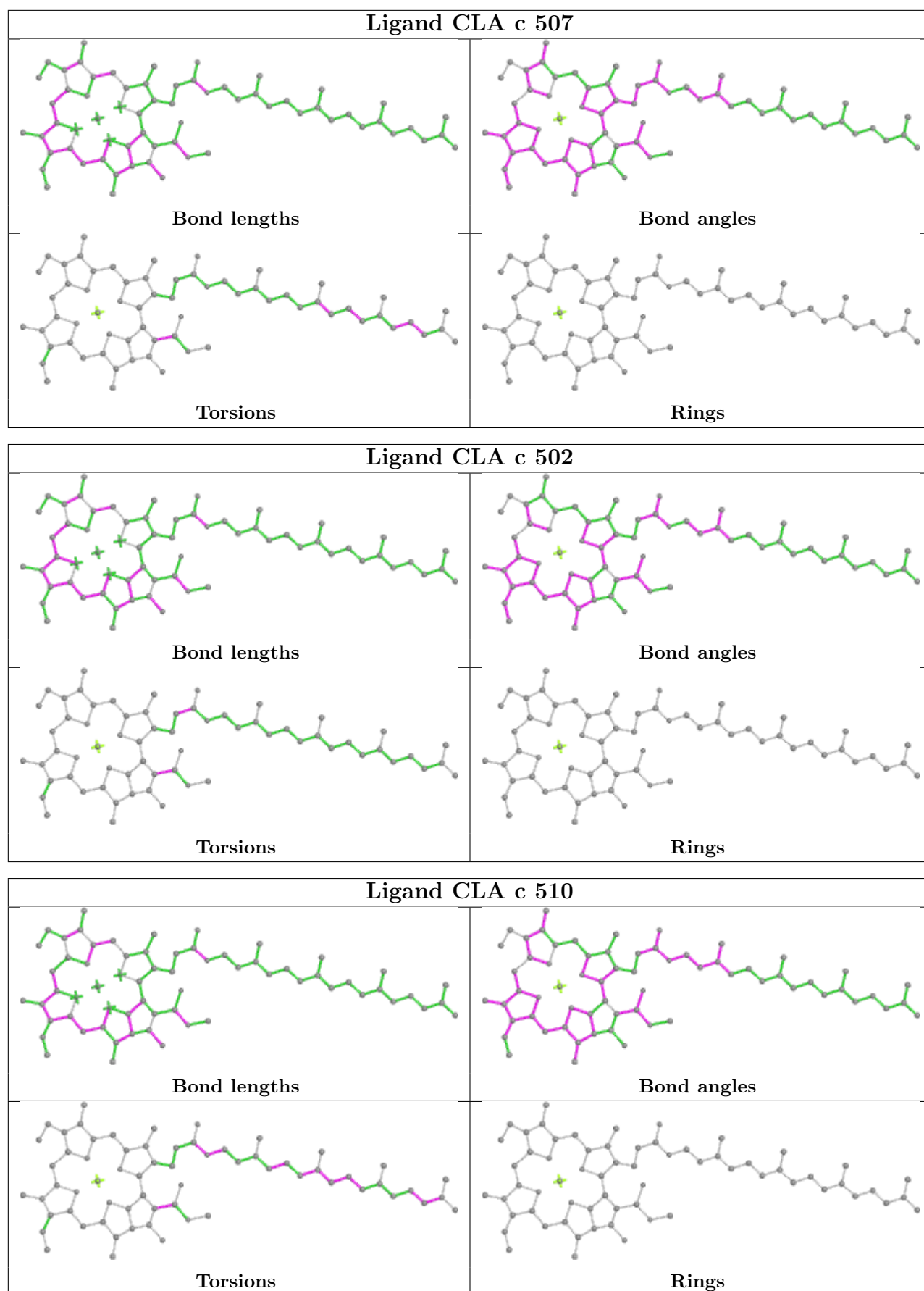


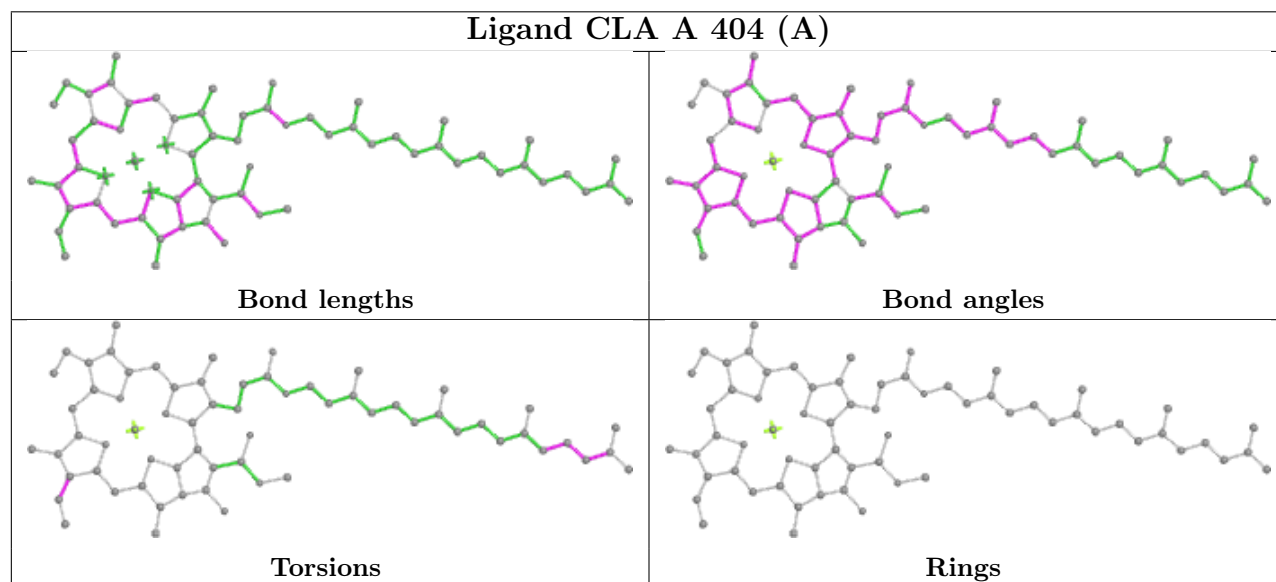
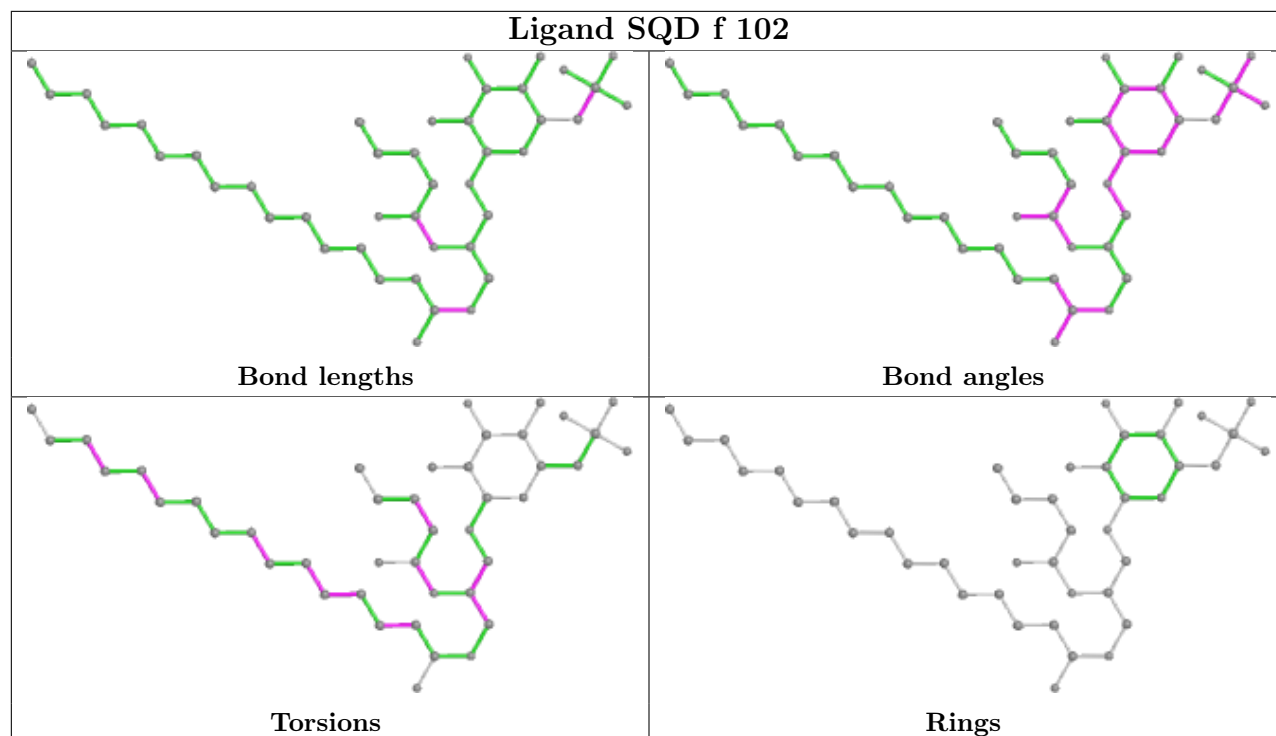


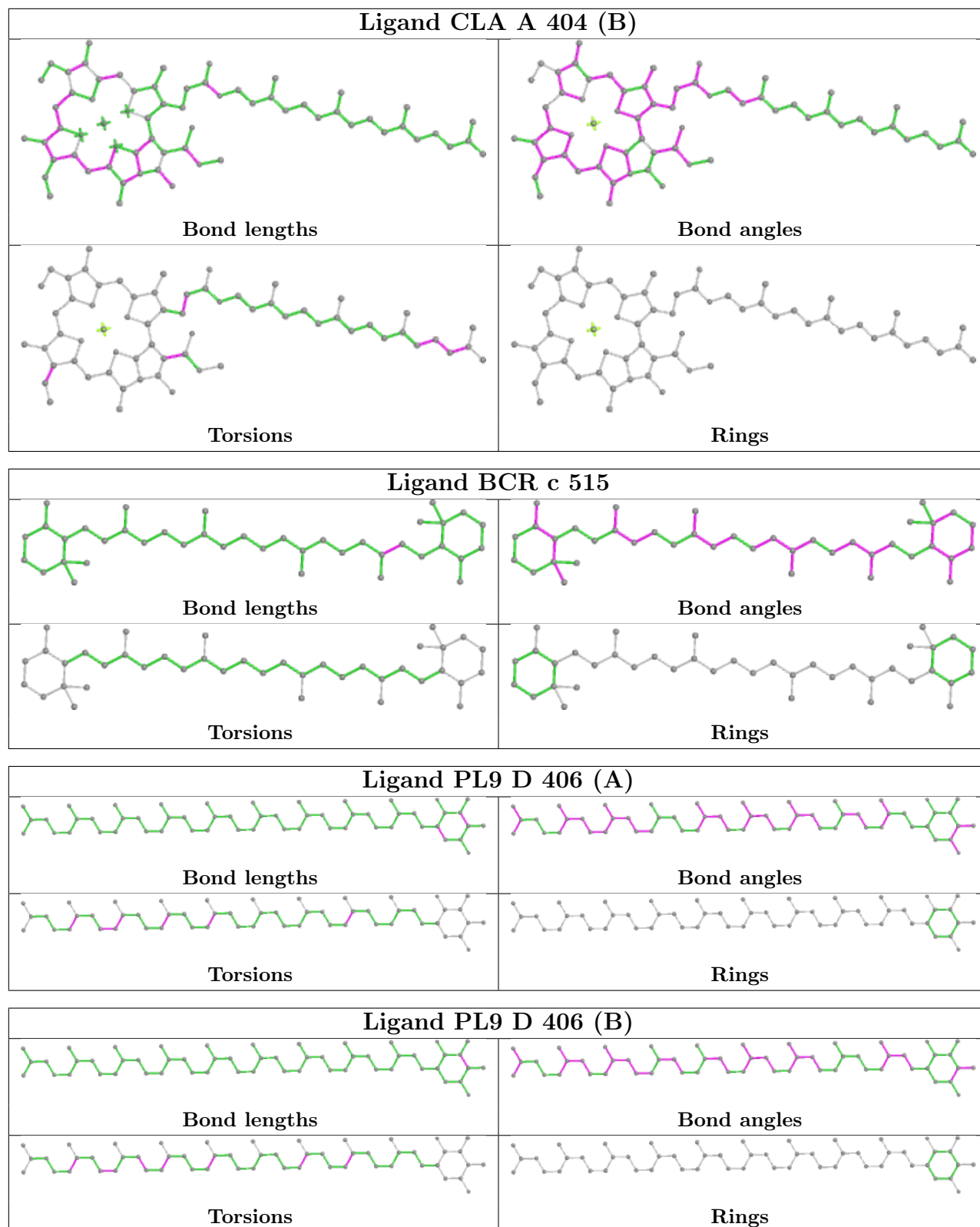


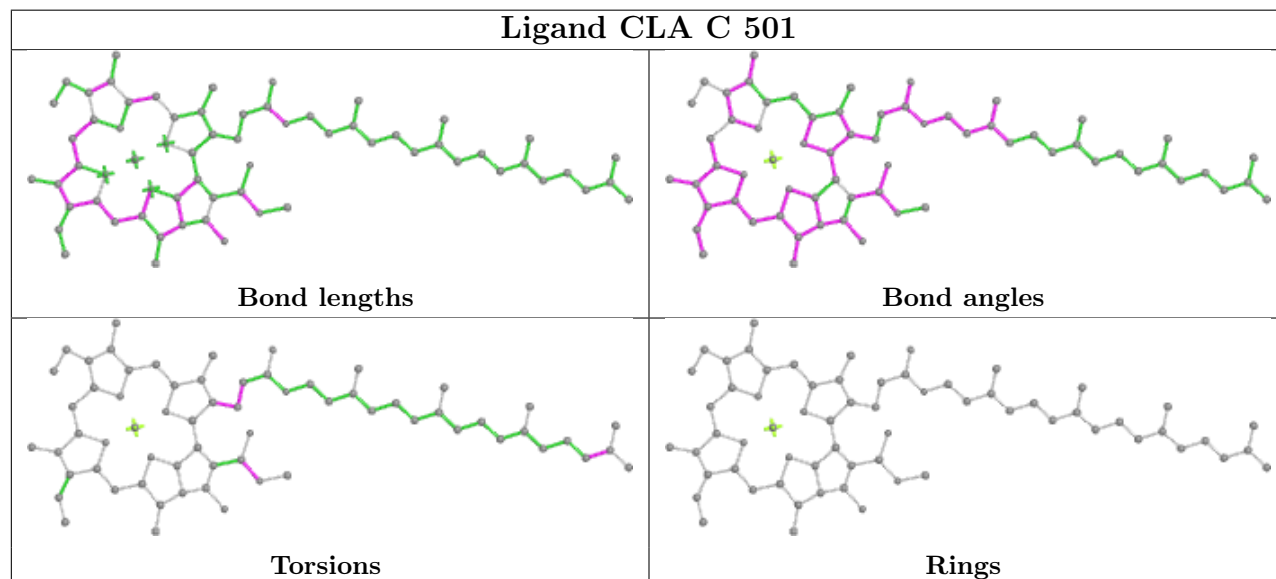
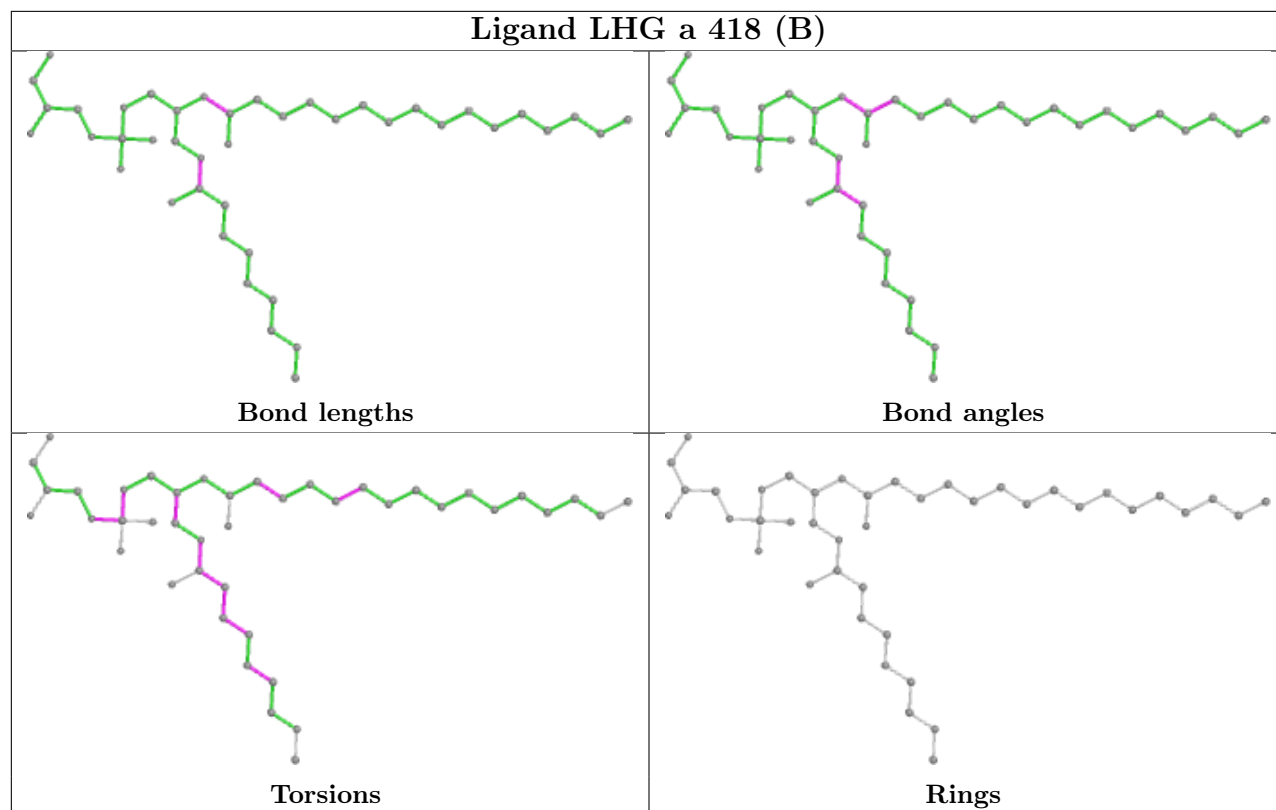


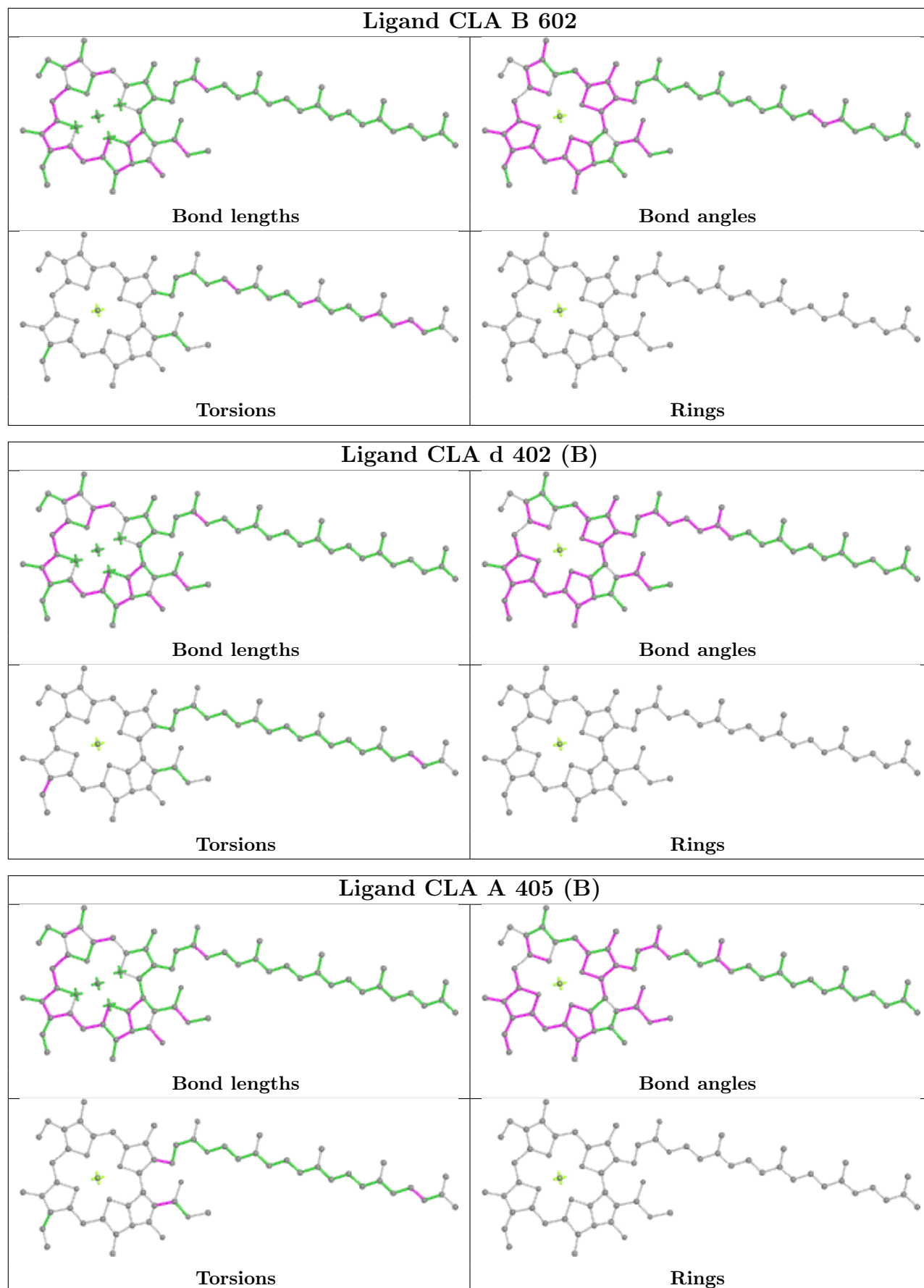


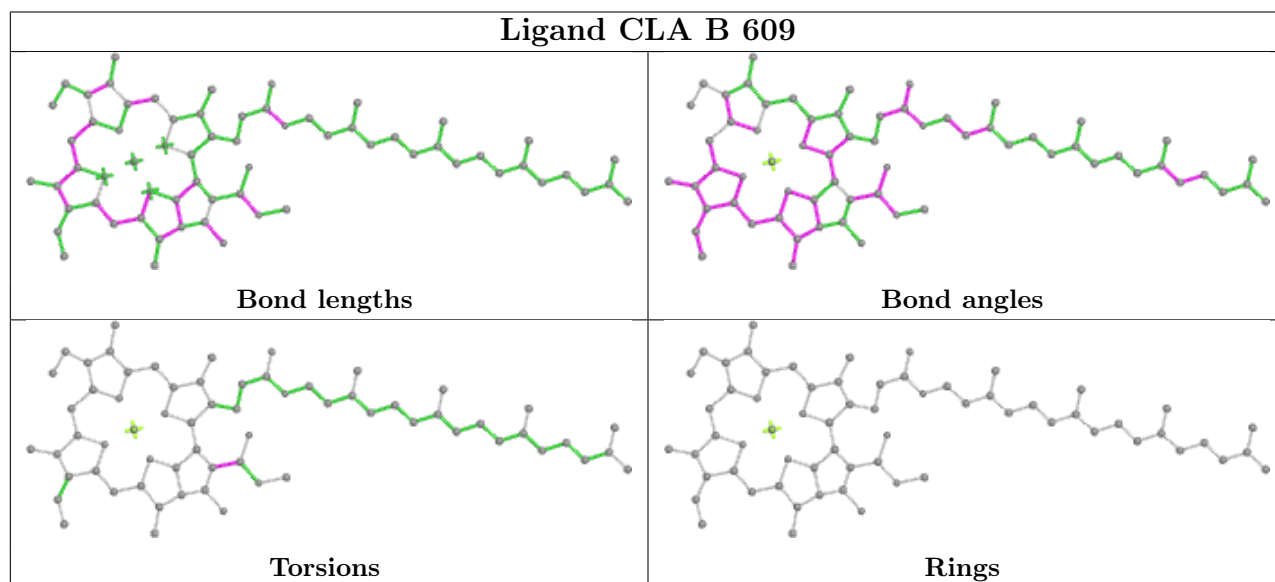
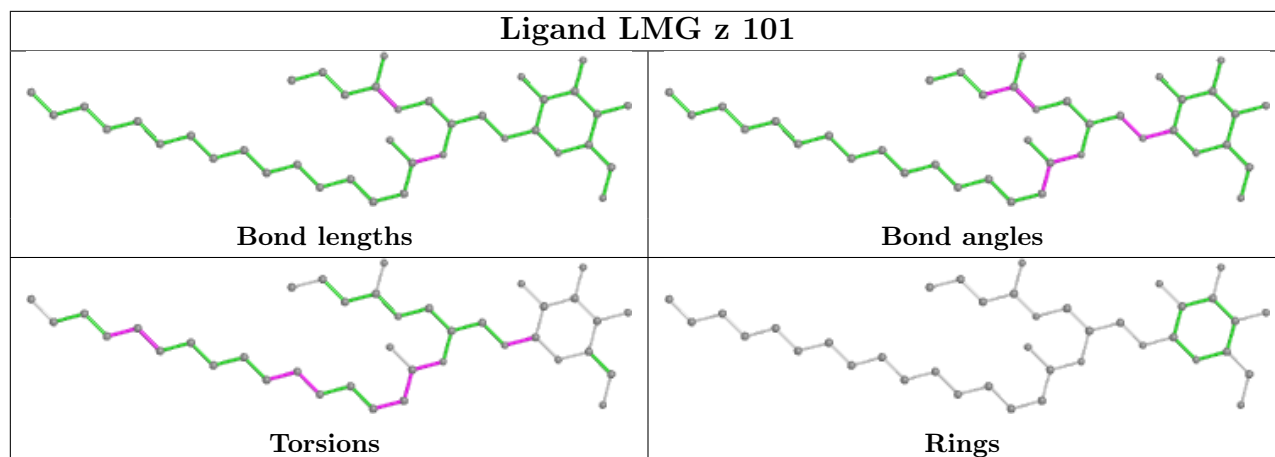


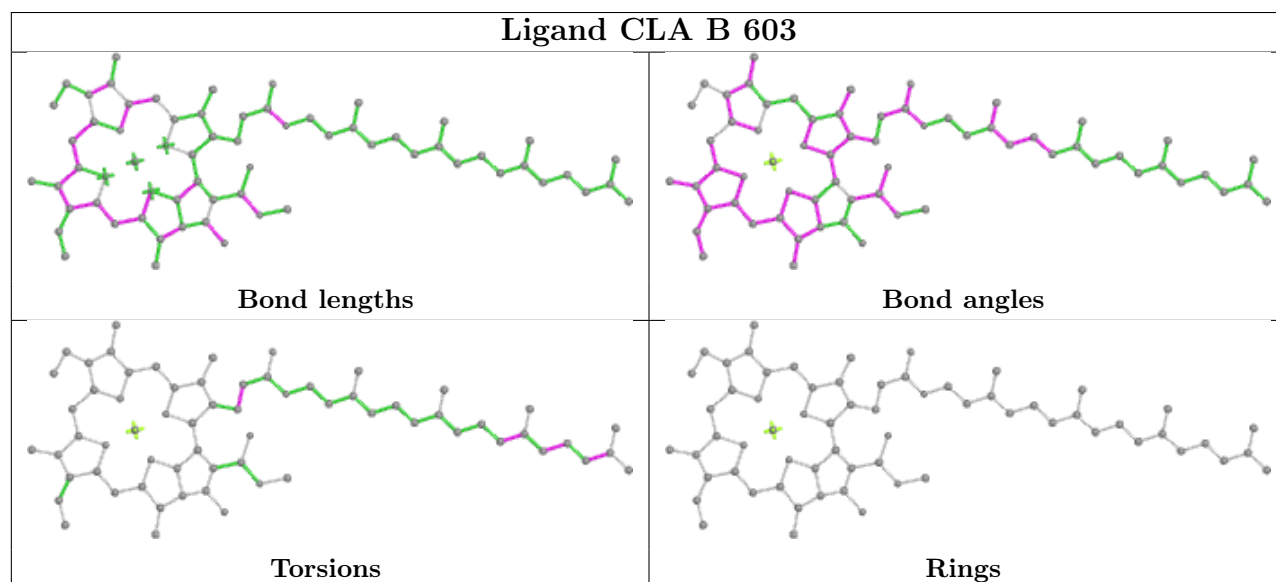
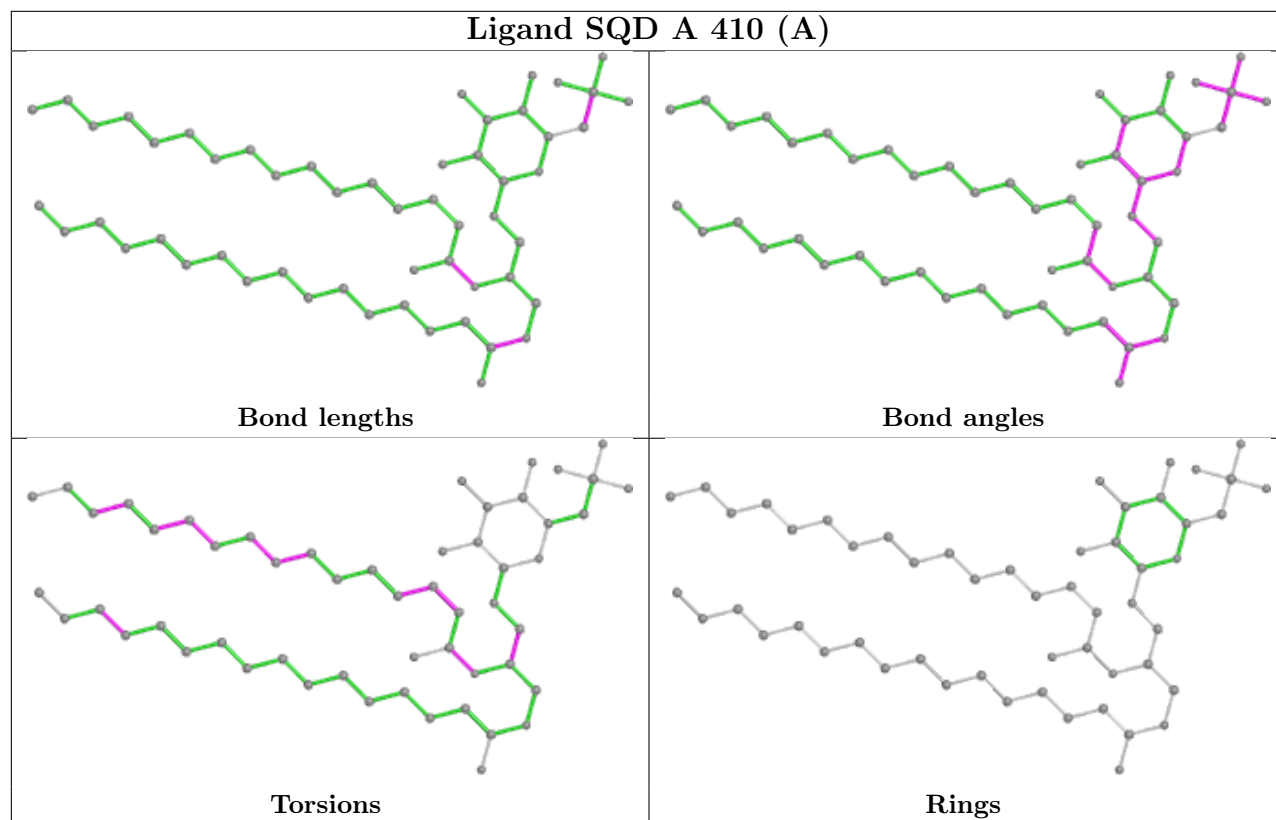


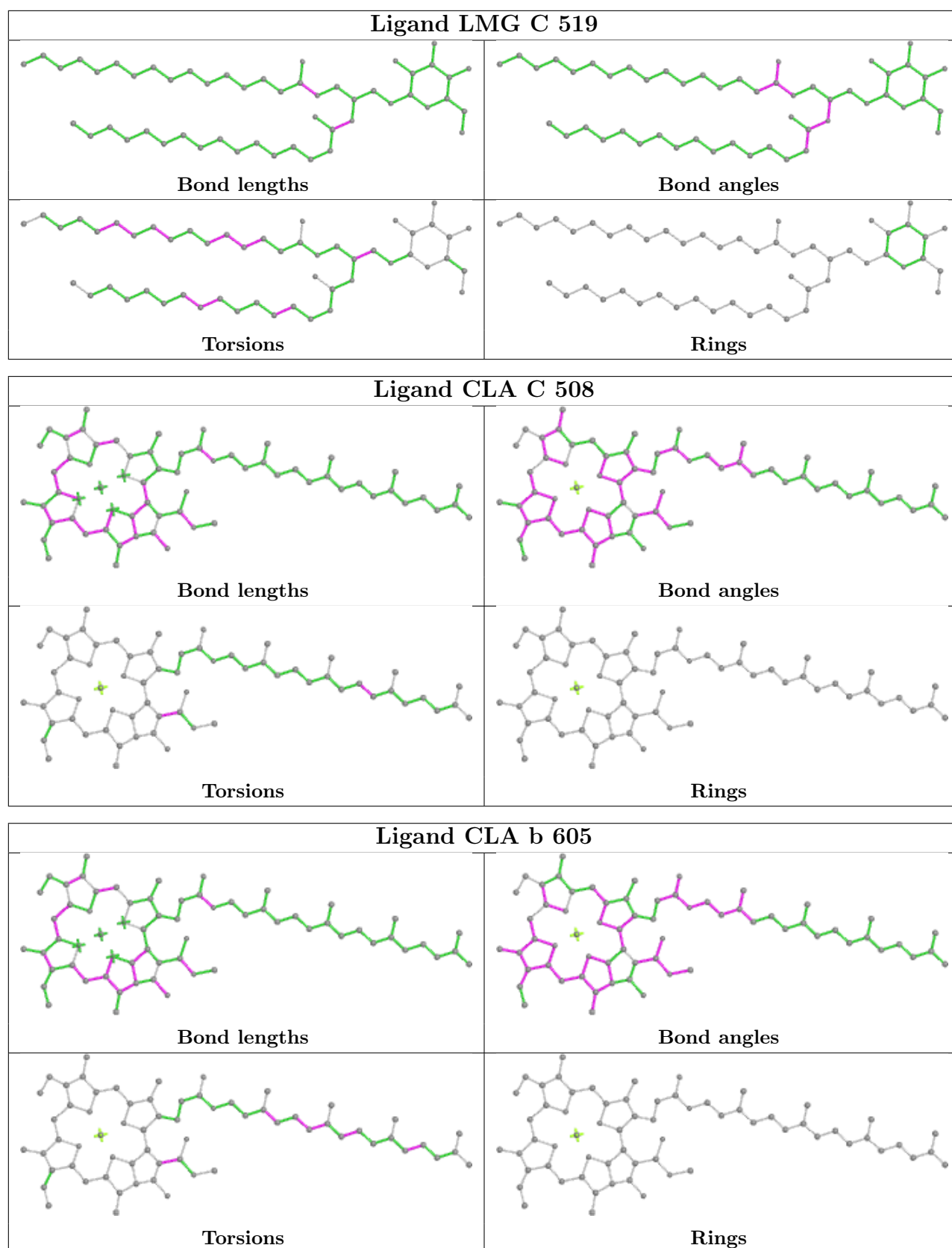


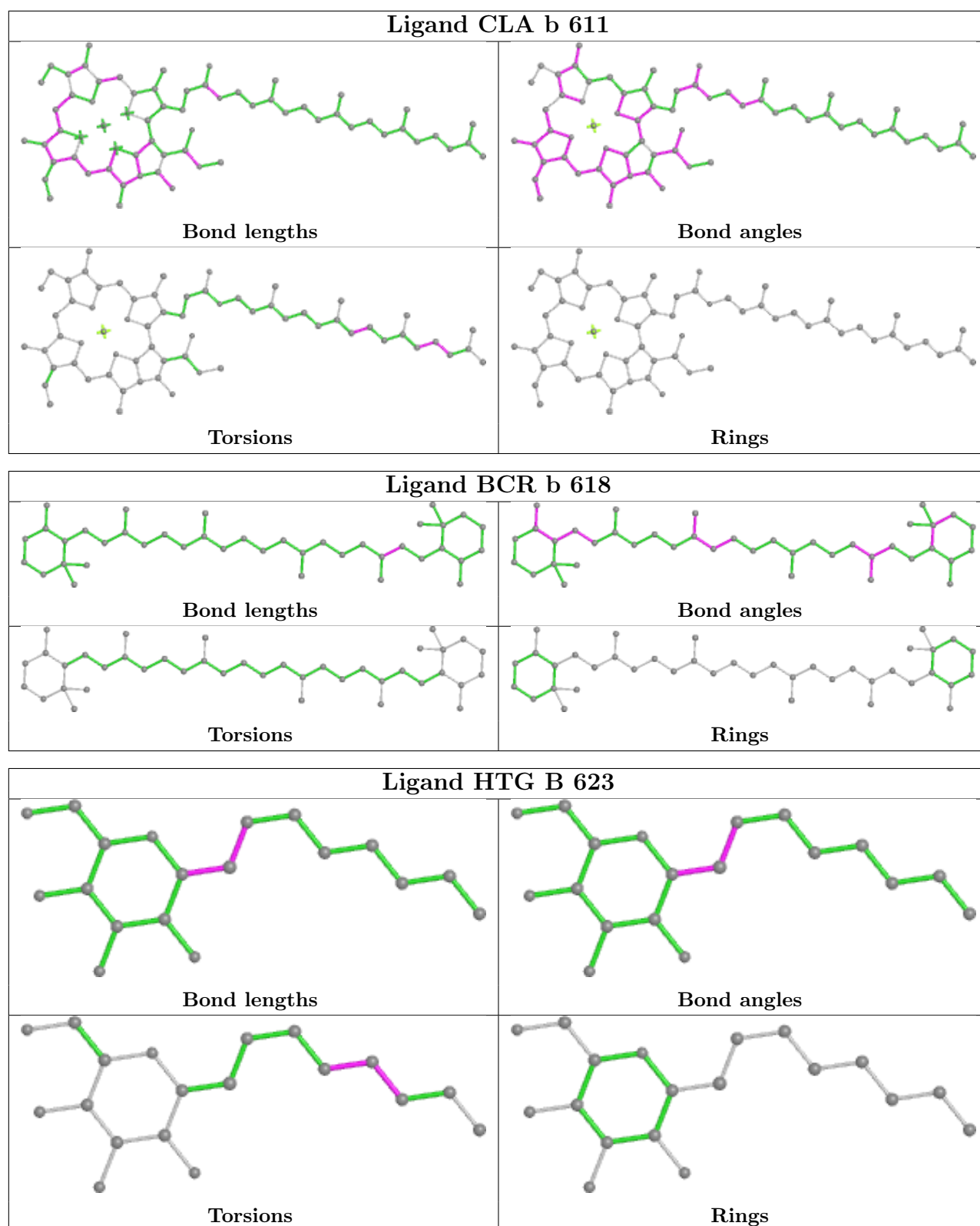


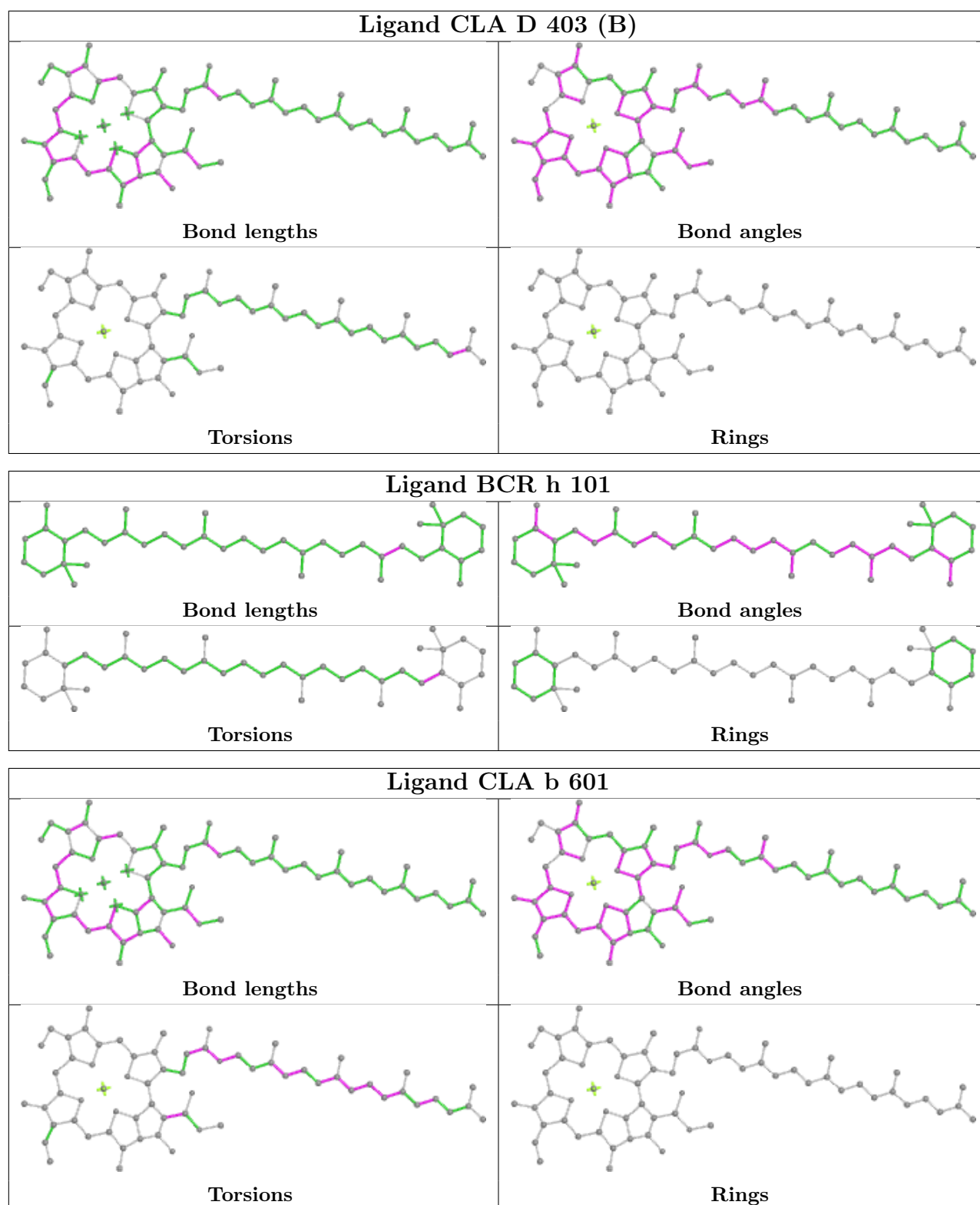


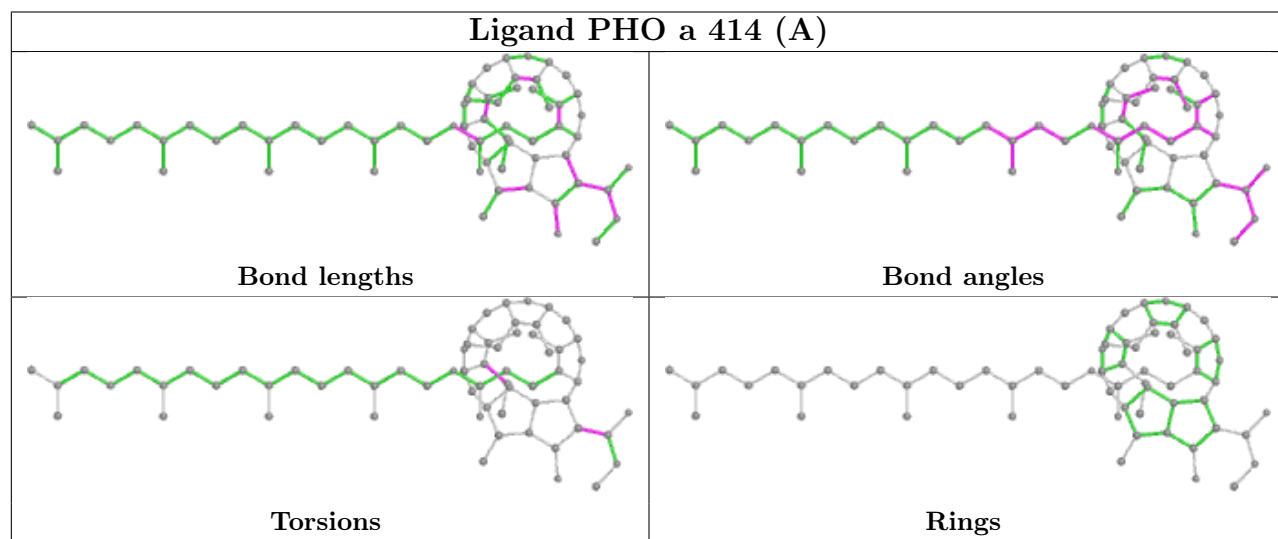
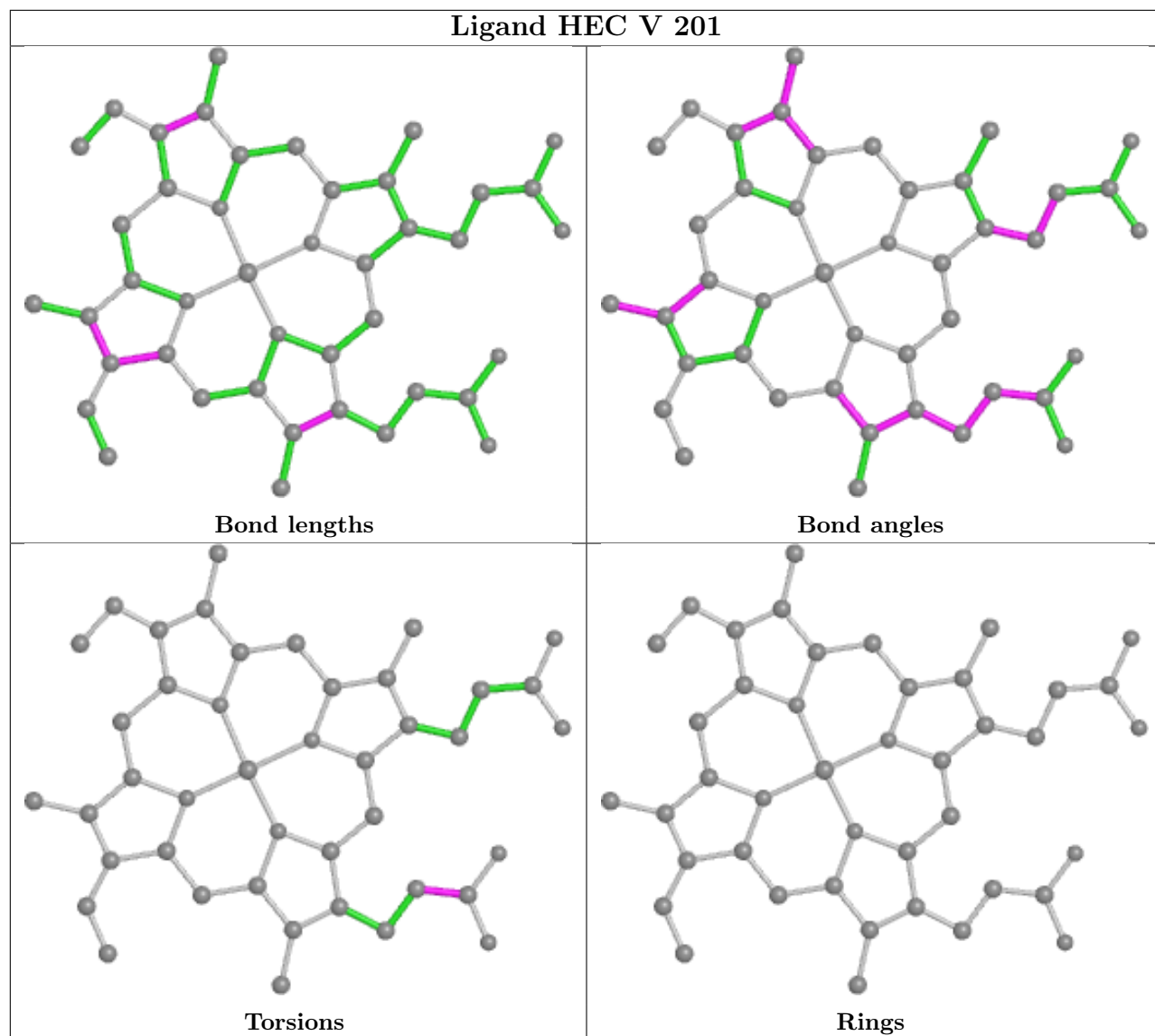


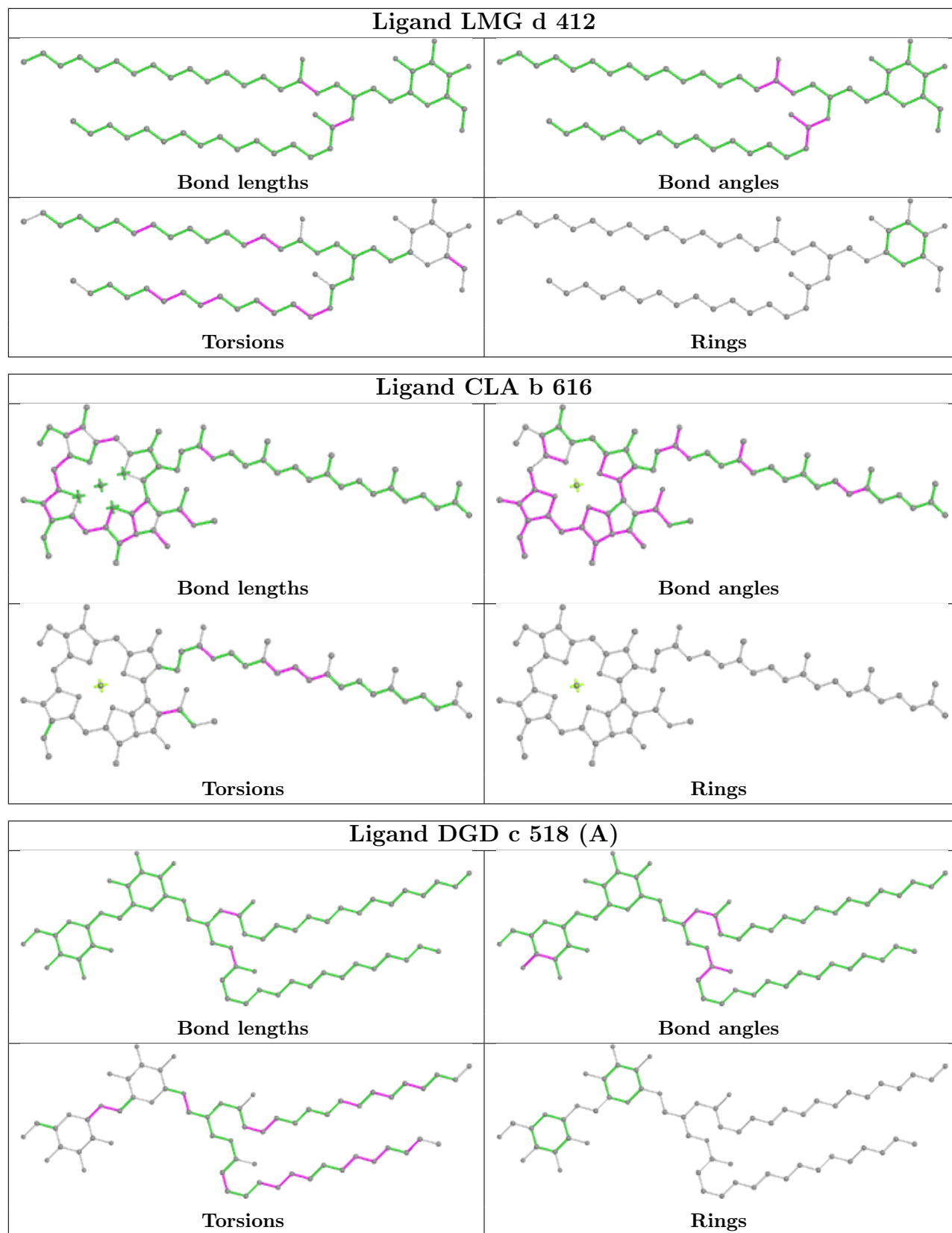












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

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

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

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	334/344 (97%)	-0.77	4 (1%) 79 81	41, 48, 71, 127	0
1	a	334/344 (97%)	-0.68	7 (2%) 63 66	42, 52, 80, 127	0
2	B	504/505 (99%)	-0.53	11 (2%) 62 65	42, 54, 83, 117	0
2	b	504/505 (99%)	-0.36	30 (5%) 21 23	45, 58, 99, 162	1 (0%)
3	C	451/455 (99%)	-0.56	5 (1%) 80 82	45, 60, 81, 158	0
3	c	455/455 (100%)	-0.48	15 (3%) 46 48	48, 66, 87, 124	2 (0%)
4	D	342/342 (100%)	-0.70	3 (0%) 84 85	40, 50, 67, 138	0
4	d	341/342 (99%)	-0.68	2 (0%) 89 89	44, 54, 77, 134	0
5	E	81/84 (96%)	-0.10	6 (7%) 14 15	52, 71, 98, 166	0
5	e	79/84 (94%)	0.19	7 (8%) 9 10	63, 76, 119, 150	0
6	F	34/44 (77%)	-0.48	2 (5%) 22 24	54, 62, 88, 115	0
6	f	31/44 (70%)	-0.30	2 (6%) 18 20	59, 67, 99, 152	0
7	H	64/65 (98%)	-0.31	2 (3%) 49 52	51, 63, 84, 112	0
7	h	64/65 (98%)	-0.34	3 (4%) 31 34	57, 69, 94, 111	0
8	I	37/38 (97%)	-0.12	3 (8%) 12 13	56, 63, 127, 163	0
8	i	37/38 (97%)	-0.07	5 (13%) 3 2	56, 63, 124, 148	0
9	J	38/39 (97%)	-0.25	3 (7%) 12 14	53, 71, 122, 182	0
9	j	39/39 (100%)	0.19	6 (15%) 2 2	60, 75, 131, 175	0
10	K	37/37 (100%)	-0.61	1 (2%) 54 57	59, 69, 88, 110	0
10	k	37/37 (100%)	-0.51	0 100 100	69, 75, 98, 113	0
11	L	36/37 (97%)	-0.36	3 (8%) 11 12	40, 47, 105, 144	0
11	l	36/37 (97%)	-0.35	2 (5%) 24 26	43, 49, 97, 125	0
12	M	32/36 (88%)	-0.67	1 (3%) 49 52	44, 49, 77, 140	0
12	m	33/36 (91%)	-0.46	2 (6%) 21 23	43, 50, 72, 153	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	243/244 (99%)	-0.13	14 (5%) 23 25	44, 65, 119, 185	0
13	o	243/244 (99%)	-0.03	23 (9%) 8 8	45, 67, 128, 169	0
14	T	29/32 (90%)	-0.61	3 (10%) 6 6	44, 49, 78, 116	0
14	t	29/32 (90%)	-0.67	1 (3%) 45 47	45, 51, 75, 128	0
15	U	96/104 (92%)	-0.47	0 100 100	49, 59, 92, 101	0
15	u	97/104 (93%)	-0.41	0 100 100	52, 63, 83, 135	0
16	V	137/137 (100%)	-0.61	0 100 100	48, 58, 82, 105	0
16	v	137/137 (100%)	-0.23	3 (2%) 62 65	54, 71, 104, 138	0
17	X	38/40 (95%)	-0.29	2 (5%) 26 29	62, 72, 94, 115	0
17	x	38/40 (95%)	0.08	4 (10%) 6 6	65, 78, 119, 163	0
18	Y	29/30 (96%)	0.91	6 (20%) 1 1	69, 85, 126, 135	0
18	y	29/30 (96%)	0.24	4 (13%) 2 2	77, 90, 111, 120	0
19	Z	62/62 (100%)	0.02	7 (11%) 5 4	67, 80, 140, 163	0
19	z	62/62 (100%)	0.36	11 (17%) 1 1	80, 95, 144, 189	0
20	R	34/34 (100%)	2.44	23 (67%) 0 0	85, 109, 136, 155	0
All	All	5283/5384 (98%)	-0.41	226 (4%) 35 37	40, 60, 101, 189	3 (0%)

All (226) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
5	E	84	LYS	8.4
1	a	11	ALA	8.1
2	b	495	PHE	7.9
3	C	23	ALA	7.7
3	c	20	SER	7.2
13	O	60	ARG	6.4
2	b	494	GLY	6.2
20	R	35	LEU	6.0
13	o	4	THR	6.0
19	Z	32	ASP	5.9
18	Y	19	ILE	5.6
13	O	62	GLU	5.6
1	A	11	ALA	5.6
13	O	56	PRO	5.5
13	o	56	PRO	5.5
5	e	84	LYS	5.4
6	f	15	ILE	5.3

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Mol	Chain	Res	Type	RSRZ
17	x	2	THR	5.3
12	m	34	LYS	5.3
18	Y	18	VAL	5.3
9	j	3	GLU	5.1
6	F	12	SER	5.0
20	R	32	GLN	5.0
17	x	38	GLN	5.0
19	Z	31	GLN	5.0
19	z	31	GLN	4.9
13	O	4	THR	4.8
2	b	502	VAL	4.8
20	R	3	TRP	4.7
3	c	143	TYR	4.7
13	o	62	GLU	4.7
13	o	60	ARG	4.6
19	z	32	ASP	4.6
11	L	3	PRO	4.6
19	z	60	PHE	4.6
3	C	143	TYR	4.6
12	M	33	GLN	4.5
2	b	503	THR	4.5
13	o	59	LYS	4.5
11	l	3	PRO	4.4
9	j	1	MET	4.4
13	o	57	LYS	4.4
13	O	63	ALA	4.4
14	T	30[A]	THR	4.4
3	c	19	ASN	4.4
13	O	59	LYS	4.4
20	R	20	VAL	4.3
20	R	33	LYS	4.3
8	I	36	ASP	4.3
13	o	58	ASN	4.3
2	b	504	THR	4.3
1	a	262[A]	TYR	4.3
13	o	24	ASP	4.3
13	o	63	ALA	4.2
19	Z	30	PRO	4.2
19	z	38	GLN	4.2
2	b	127	ARG	4.1
18	y	18	VAL	4.1
19	Z	3	ILE	4.0

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Mol	Chain	Res	Type	RSRZ
13	O	5	LEU	4.0
2	b	493[A]	TRP	4.0
19	z	3	ILE	4.0
4	D	11	GLU	4.0
20	R	24	LEU	4.0
9	j	5	GLY	3.9
4	D	12	ARG	3.9
7	h	6	TRP	3.8
2	b	489	GLU	3.8
3	C	207	ARG	3.8
19	z	30	PRO	3.7
20	R	34	LEU	3.7
3	c	21	ILE	3.7
2	b	505	ARG	3.6
13	o	207	ARG	3.6
2	b	293	ALA	3.5
20	R	21	ARG	3.5
12	m	33	GLN	3.5
6	f	16[A]	PHE	3.5
1	A	13	LEU	3.4
13	O	61	GLN	3.4
2	b	485	GLU	3.4
2	B	494	GLY	3.4
13	o	25	THR	3.4
20	R	4	ARG	3.4
19	z	42	LEU	3.4
8	I	34	ARG	3.4
2	b	496	TYR	3.4
9	j	2	SER	3.4
11	l	2	GLU	3.3
16	v	17	LYS	3.3
7	H	6	TRP	3.3
20	R	19	ALA	3.3
18	y	43	ARG	3.3
13	o	61	GLN	3.3
13	O	25	THR	3.3
9	J	3	GLU	3.2
18	Y	20	ALA	3.2
18	Y	21	GLN	3.2
20	R	18	TRP	3.2
16	v	15	GLU	3.2
17	x	39	ARG	3.2

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Mol	Chain	Res	Type	RSRZ
9	j	4	GLY	3.2
5	e	81	GLU	3.2
20	R	31	VAL	3.2
2	B	485	GLU	3.2
2	b	484[A]	PRO	3.2
13	o	64	GLU	3.1
17	X	38	GLN	3.1
6	F	13	TYR	3.1
19	z	35	ARG	3.1
20	R	6	LEU	3.1
18	Y	43	ARG	3.1
20	R	29	LYS	3.0
8	i	38	GLU	3.0
13	o	35	SER	3.0
3	c	207	ARG	3.0
13	o	134	THR	3.0
19	Z	34	ASP	3.0
3	c	23	ALA	2.9
17	X	2	THR	2.9
2	b	295	GLY	2.9
19	Z	35	ARG	2.9
2	b	373	LYS	2.9
2	B	293	ALA	2.9
17	x	3	ILE	2.9
2	b	85	GLY	2.9
13	o	55	GLU	2.9
13	o	246	ALA	2.9
18	Y	22	LEU	2.9
18	y	41	VAL	2.8
11	L	7	ARG	2.8
13	o	27	ARG	2.8
14	T	29[A]	ILE	2.8
19	z	62	VAL	2.8
8	i	34	ARG	2.8
2	b	486[A]	LEU	2.8
5	e	6	GLY	2.7
3	C	24	THR	2.7
13	o	23	ASP	2.7
18	y	19	ILE	2.7
3	c	192	GLY	2.7
5	E	59	GLU	2.7
2	B	295	GLY	2.7

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Mol	Chain	Res	Type	RSRZ
5	E	6	GLY	2.7
2	b	488	PRO	2.7
11	L	5	PRO	2.7
3	C	142	GLU	2.7
8	i	37	LEU	2.7
9	j	6	ARG	2.6
16	v	16	GLY	2.6
13	o	5	LEU	2.6
2	b	294	SER	2.6
4	d	12	ARG	2.6
13	O	89	SER	2.6
13	O	55	GLU	2.6
4	d	237[A]	PRO	2.5
2	B	162	PHE	2.5
20	R	14	LEU	2.5
3	c	201	ASN	2.5
2	b	374	ASN	2.5
3	c	22	PHE	2.5
1	A	262[A]	TYR	2.5
2	b	86	ILE	2.5
3	c	234	VAL	2.5
10	K	10	LYS	2.5
20	R	28	VAL	2.4
2	b	497	GLN	2.4
9	J	5	GLY	2.4
5	E	61	ARG	2.4
20	R	25	PRO	2.4
2	b	501	ASP	2.4
8	i	36	ASP	2.4
7	H	65	LEU	2.4
1	a	228	THR	2.4
20	R	16	ALA	2.4
13	O	207	ARG	2.3
13	o	22	LEU	2.3
1	A	16	ARG	2.3
2	b	375	GLY	2.3
1	a	261[A]	GLN	2.3
7	h	23	PRO	2.3
1	a	235[A]	TYR	2.3
2	b	487	SER	2.3
20	R	2	ASP	2.3
2	B	487	SER	2.3

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Mol	Chain	Res	Type	RSRZ
13	o	34	SER	2.3
9	J	6	ARG	2.3
2	B	86	ILE	2.3
20	R	27	ALA	2.3
2	b	129	GLY	2.2
3	c	233	VAL	2.2
5	e	82	GLN	2.2
13	O	27	ARG	2.2
20	R	5	VAL	2.2
2	b	162	PHE	2.2
19	z	34	ASP	2.2
3	c	145	SER	2.1
14	T	28[A]	ARG	2.1
3	c	106	VAL	2.1
5	e	42	LEU	2.1
13	o	130	GLN	2.1
19	z	59	PHE	2.1
2	B	374	ASN	2.1
5	e	25	ILE	2.1
20	R	17	GLY	2.1
5	E	82	GLN	2.1
4	D	238[A]	THR	2.1
1	a	13	LEU	2.1
8	i	35	LYS	2.1
20	R	13	LEU	2.1
13	O	24	ASP	2.1
19	Z	2	THR	2.1
5	e	24	SER	2.1
3	c	191	PRO	2.1
3	c	253	LEU	2.1
2	B	128	THR	2.1
5	E	17	VAL	2.1
2	b	126	PRO	2.1
1	a	242[A]	GLU	2.0
2	b	376	VAL	2.0
2	B	373	LYS	2.0
8	I	37	LEU	2.0
7	h	3[A]	ARG	2.0
2	B	495	PHE	2.0
2	b	223	GLN	2.0
14	t	30[A]	THR	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
8	FME	i	1	10/11	0.91	0.17	53,71,78,80	0
14	FME	T	1	10/11	0.95	0.10	43,57,72,74	0
14	FME	t	1	10/11	0.96	0.10	46,50,59,77	0
12	FME	M	1	10/11	0.97	0.14	48,60,93,98	0
8	FME	I	1	10/11	0.97	0.08	61,69,76,80	0
12	FME	m	1	10/11	0.99	0.12	50,64,86,115	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
30	UNL	B	626	33/-	0.49	0.36	52,106,144,150	0
30	UNL	b	626	33/-	0.52	0.38	72,98,155,160	0
30	UNL	I	101	40/-	0.53	0.34	72,105,157,164	0
27	GOL	a	416	6/6	0.53	0.53	77,99,109,115	0
31	LMT	M	102	35/35	0.56	0.30	74,127,183,188	0
32	LMG	C	520	51/55	0.58	0.31	63,120,162,184	0
31	LMT	b	621	25/35	0.59	0.28	80,113,162,172	0
30	UNL	K	101[B]	34/-	0.60	0.37	89,111,127,127	34
30	UNL	K	101[A]	34/-	0.60	0.37	89,111,127,127	34
30	UNL	i	101	40/-	0.60	0.31	78,107,158,162	0
31	LMT	F	101	35/35	0.64	0.51	101,134,184,188	0
31	LMT	M	101	35/35	0.65	0.25	60,98,124,133	0
30	UNL	j	101	10/-	0.66	0.28	75,91,107,111	0
31	LMT	B	631	25/35	0.68	0.24	62,89,154,167	0
30	UNL	A	415	28/-	0.69	0.35	89,114,133,157	0
30	UNL	x	101	18/-	0.69	0.25	72,82,136,137	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
31	LMT	B	630	35/35	0.69	0.35	65,119,149,170	0
32	LMG	Z	101	37/55	0.70	0.29	70,121,155,172	0
36	CA	F	104	1/1	0.70	0.23	128,128,128,128	0
27	GOL	b	624	6/6	0.71	0.23	87,102,106,114	0
30	UNL	c	525[A]	32/-	0.71	0.40	97,116,129,140	32
32	LMG	c	521	51/55	0.71	0.29	74,136,164,192	0
30	UNL	c	525[B]	32/-	0.71	0.40	97,116,129,141	32
30	UNL	d	410	36/-	0.71	0.20	72,94,131,144	0
31	LMT	m	103	35/35	0.72	0.26	59,91,108,120	0
31	LMT	b	627	25/35	0.73	0.23	60,99,146,162	0
31	LMT	A	417	35/35	0.75	0.29	67,117,141,143	0
30	UNL	X	101	18/-	0.76	0.22	63,74,107,110	0
30	UNL	a	413	30/-	0.76	0.31	91,122,144,152	0
33	LHG	a	418[A]	42/49	0.76	0.36	99,142,159,169	42
33	LHG	a	418[B]	42/49	0.76	0.36	99,142,160,170	42
34	HTG	D	411	16/19	0.76	0.25	85,109,138,155	0
31	LMT	A	420	35/35	0.76	0.35	98,138,160,173	0
31	LMT	a	415	35/35	0.77	0.40	108,136,150,161	0
27	GOL	B	627	6/6	0.77	0.26	67,92,106,120	0
30	UNL	m	102	10/-	0.77	0.32	72,78,95,98	0
31	LMT	e	101	35/35	0.77	0.52	103,152,193,201	0
31	LMT	B	628	35/35	0.77	0.25	65,105,146,152	0
27	GOL	o	302	6/6	0.77	0.30	89,105,115,125	0
34	HTG	b	623	19/19	0.78	0.47	86,126,163,167	0
34	HTG	d	411	16/19	0.79	0.30	84,123,143,152	0
26	SQD	f	102	43/54	0.80	0.34	98,128,180,194	0
30	UNL	l	101	10/-	0.80	0.28	72,84,95,97	0
32	LMG	z	101	39/55	0.80	0.24	76,128,154,167	0
27	GOL	c	527	6/6	0.81	0.25	106,114,129,130	0
34	HTG	C	521	19/19	0.81	0.34	105,130,146,146	0
27	GOL	A	411	6/6	0.82	0.18	65,81,86,86	0
26	SQD	b	620	54/54	0.82	0.18	66,95,127,132	0
27	GOL	D	402	6/6	0.82	0.41	53,80,82,89	0
27	GOL	O	302	6/6	0.82	0.23	76,91,103,107	0
27	GOL	o	303	6/6	0.82	0.20	84,94,101,105	0
27	GOL	O	303	6/6	0.83	0.23	85,103,105,108	0
27	GOL	l	102[A]	6/6	0.83	0.88	70,103,107,112	6
27	GOL	l	102[B]	6/6	0.83	0.88	69,103,108,112	6
31	LMT	t	101	26/35	0.84	0.17	72,104,148,156	0
27	GOL	v	202[A]	6/6	0.84	0.17	67,80,85,87	6
27	GOL	v	202[B]	6/6	0.84	0.17	67,80,85,87	6
29	PL9	A	414[A]	55/55	0.84	0.23	73,99,113,114	55

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
30	UNL	J	101	10/-	0.84	0.16	74,84,93,99	0
29	PL9	A	414[B]	55/55	0.84	0.23	73,99,113,115	55
26	SQD	A	412	54/54	0.85	0.18	68,93,134,159	0
32	LMG	c	501	51/55	0.85	0.16	65,96,111,119	0
26	SQD	B	620	54/54	0.85	0.15	64,93,135,152	0
27	GOL	a	417	6/6	0.85	0.44	59,81,81,85	0
26	SQD	a	410	54/54	0.85	0.19	63,99,137,154	0
34	HTG	c	522	19/19	0.85	0.25	111,129,143,150	0
33	LHG	E	101[A]	42/49	0.85	0.23	76,106,119,123	42
33	LHG	E	101[B]	42/49	0.85	0.23	76,106,119,124	42
36	CA	f	103	1/1	0.85	0.09	124,124,124,124	0
32	LMG	A	418	51/55	0.86	0.16	67,91,119,134	0
30	UNL	D	410	40/-	0.86	0.16	66,93,138,147	0
34	HTG	B	623	19/19	0.86	0.22	65,97,115,117	0
29	PL9	a	412[A]	55/55	0.86	0.21	89,110,123,125	55
29	PL9	a	412[B]	55/55	0.86	0.21	90,110,123,126	55
34	HTG	b	622	19/19	0.88	0.16	58,88,121,122	0
25	BCR	C	514	40/40	0.88	0.13	55,76,88,94	0
23	CLA	c	514	65/65	0.88	0.17	62,95,121,145	0
23	CLA	b	616	65/65	0.89	0.16	48,64,125,141	0
32	LMG	D	412	51/55	0.89	0.17	51,66,122,146	0
27	GOL	d	413	6/6	0.89	0.35	56,70,85,97	0
23	CLA	d	404	65/65	0.89	0.15	50,67,120,154	0
32	LMG	d	412	51/55	0.89	0.17	55,71,117,152	0
27	GOL	B	629	6/6	0.90	0.26	75,77,89,98	0
25	BCR	K	102	40/40	0.90	0.17	58,67,79,84	0
34	HTG	B	622	19/19	0.90	0.14	60,87,119,127	0
25	BCR	h	101	40/40	0.90	0.14	57,70,91,98	0
32	LMG	c	520	51/55	0.90	0.18	60,90,133,162	0
23	CLA	b	601	65/65	0.90	0.15	59,84,124,161	0
23	CLA	B	601	65/65	0.91	0.13	53,79,109,156	0
26	SQD	F	103	43/54	0.91	0.18	70,104,133,142	0
23	CLA	C	513	65/65	0.91	0.13	60,86,109,119	0
27	GOL	V	203[A]	6/6	0.91	0.15	56,66,76,77	6
27	GOL	V	203[B]	6/6	0.91	0.15	56,66,76,77	6
32	LMG	C	519	51/55	0.91	0.17	59,83,120,134	0
23	CLA	c	513	65/65	0.91	0.17	62,82,129,135	0
25	BCR	d	405	40/40	0.92	0.13	51,65,107,114	0
23	CLA	C	512	65/65	0.92	0.14	57,74,115,133	0
27	GOL	D	413	6/6	0.92	0.20	50,65,76,97	0
30	UNL	d	409	17/-	0.92	0.12	67,83,114,117	0
23	CLA	B	606	65/65	0.92	0.14	44,59,106,130	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
23	CLA	B	616	65/65	0.92	0.17	46,60,132,143	0
25	BCR	Y	101	40/40	0.92	0.12	53,66,81,88	0
30	UNL	D	409	17/-	0.92	0.14	59,77,102,118	0
23	CLA	b	606	65/65	0.93	0.13	45,60,112,121	0
32	LMG	B	621	51/55	0.93	0.12	55,73,94,118	0
35	DGD	c	518[A]	62/66	0.93	0.12	53,68,119,132	62
35	DGD	c	518[B]	62/66	0.93	0.12	53,68,119,133	62
23	CLA	C	506	65/65	0.93	0.13	57,71,122,143	0
32	LMG	m	101	51/55	0.93	0.12	57,77,101,118	0
36	CA	o	301	1/1	0.93	0.04	104,104,104,104	0
25	BCR	c	515	40/40	0.94	0.10	68,80,93,96	0
23	CLA	a	407	65/65	0.94	0.17	45,58,147,168	0
34	HTG	b	625	19/19	0.94	0.09	65,80,96,103	0
23	CLA	c	507	65/65	0.94	0.13	55,72,124,142	0
25	BCR	k	101	40/40	0.94	0.13	56,74,87,91	0
35	DGD	C	517[A]	62/66	0.94	0.12	51,65,110,116	62
35	DGD	C	517[B]	62/66	0.94	0.12	51,65,110,116	62
35	DGD	C	518	62/66	0.94	0.11	46,62,94,114	0
35	DGD	H	102	62/66	0.94	0.11	46,61,80,94	0
25	BCR	D	405	40/40	0.94	0.10	46,62,103,107	0
23	CLA	B	609	65/65	0.94	0.14	43,59,71,80	0
35	DGD	c	519	62/66	0.94	0.12	51,68,101,132	0
35	DGD	h	102	62/66	0.94	0.11	52,66,82,87	0
34	HTG	B	625	19/19	0.94	0.10	68,82,99,100	0
23	CLA	C	508	65/65	0.94	0.10	47,56,111,146	0
25	BCR	b	618	40/40	0.94	0.10	45,58,78,85	0
23	CLA	b	612	65/65	0.95	0.10	42,54,66,75	0
34	HTG	V	202	11/19	0.95	0.41	77,111,125,125	0
25	BCR	t	102	40/40	0.95	0.09	43,60,79,87	0
25	BCR	y	101	40/40	0.95	0.09	59,71,85,102	0
26	SQD	A	410[A]	54/54	0.95	0.13	56,80,112,118	54
26	SQD	A	410[B]	54/54	0.95	0.13	56,80,112,119	54
25	BCR	C	515	40/40	0.95	0.11	50,65,76,85	0
23	CLA	a	405[A]	65/65	0.95	0.11	42,54,121,135	65
25	BCR	H	101	40/40	0.95	0.10	49,66,82,87	0
23	CLA	a	405[B]	65/65	0.95	0.11	42,54,121,135	65
23	CLA	B	611	65/65	0.95	0.10	38,47,67,77	0
23	CLA	A	408	65/65	0.95	0.12	43,53,132,147	0
33	LHG	d	408[A]	49/49	0.95	0.14	52,65,110,124	49
33	LHG	d	408[B]	49/49	0.95	0.14	52,65,110,124	49
23	CLA	D	404	65/65	0.95	0.14	48,60,122,143	0
36	CA	C	523	1/1	0.95	0.07	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
27	GOL	B	624	6/6	0.95	0.22	73,81,88,89	0
25	BCR	A	409	40/40	0.95	0.10	40,52,65,71	0
25	BCR	B	618	40/40	0.95	0.09	44,57,74,83	0
33	LHG	A	419[B]	49/49	0.96	0.12	50,65,85,90	49
33	LHG	D	408[A]	49/49	0.96	0.14	49,62,111,112	49
33	LHG	D	408[B]	49/49	0.96	0.14	49,62,111,113	49
26	SQD	a	409[A]	54/54	0.96	0.13	58,83,118,125	54
26	SQD	a	409[B]	54/54	0.96	0.13	58,83,119,125	54
23	CLA	b	614	65/65	0.96	0.09	42,51,101,119	0
23	CLA	b	615	65/65	0.96	0.11	46,59,79,92	0
33	LHG	b	629[A]	49/49	0.96	0.13	50,59,71,93	49
33	LHG	b	629[B]	49/49	0.96	0.13	50,59,71,94	49
33	LHG	d	407[A]	49/49	0.96	0.15	49,57,71,77	49
33	LHG	d	407[B]	49/49	0.96	0.15	49,57,72,78	49
23	CLA	C	501	65/65	0.96	0.08	49,61,72,80	0
23	CLA	c	502	65/65	0.96	0.10	56,68,81,89	0
33	LHG	d	414[A]	49/49	0.96	0.14	55,68,80,91	49
33	LHG	d	414[B]	49/49	0.96	0.14	55,69,80,91	49
29	PL9	D	406[A]	55/55	0.96	0.11	39,50,60,73	55
29	PL9	D	406[B]	55/55	0.96	0.11	39,50,60,73	55
25	BCR	T	101	40/40	0.96	0.08	45,60,73,80	0
23	CLA	c	505	65/65	0.96	0.10	50,65,107,140	0
23	CLA	c	506	65/65	0.96	0.09	49,65,91,99	0
27	GOL	C	522[A]	6/6	0.96	0.12	58,61,63,72	6
27	GOL	C	522[B]	6/6	0.96	0.12	58,62,63,72	6
25	BCR	b	619	40/40	0.96	0.08	50,66,88,92	0
23	CLA	C	509	65/65	0.96	0.10	46,60,85,93	0
25	BCR	c	516	40/40	0.96	0.11	55,67,77,93	0
23	CLA	c	508	65/65	0.96	0.10	54,69,86,92	0
23	CLA	c	509	65/65	0.96	0.12	47,63,123,148	0
23	CLA	c	512	65/65	0.96	0.10	57,68,88,104	0
23	CLA	C	511	65/65	0.96	0.12	49,65,83,87	0
23	CLA	C	504	65/65	0.96	0.10	39,58,107,136	0
35	DGD	c	517[A]	62/66	0.96	0.11	50,65,99,107	62
35	DGD	c	517[B]	62/66	0.96	0.11	50,65,100,107	62
23	CLA	b	604	65/65	0.96	0.11	39,52,101,120	0
27	GOL	c	526[A]	6/6	0.96	0.25	66,69,73,74	6
27	GOL	c	526[B]	6/6	0.96	0.25	66,69,73,74	6
23	CLA	B	614	65/65	0.96	0.10	41,50,106,118	0
23	CLA	b	609	65/65	0.96	0.13	47,65,78,89	0
25	BCR	B	619	40/40	0.96	0.08	48,60,92,98	0
23	CLA	C	507	65/65	0.96	0.11	49,64,82,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
33	LHG	A	419[A]	49/49	0.96	0.12	50,65,85,89	49
38	HEM	f	101	43/43	0.96	0.14	61,82,118,133	0
23	CLA	b	613	65/65	0.97	0.08	42,50,90,102	0
23	CLA	B	613	65/65	0.97	0.08	40,47,94,117	0
29	PL9	d	406[A]	55/55	0.97	0.10	42,52,62,71	55
29	PL9	d	406[B]	55/55	0.97	0.10	42,53,62,71	55
23	CLA	B	603	65/65	0.97	0.10	45,53,72,83	0
23	CLA	B	605	65/65	0.97	0.11	40,49,66,84	0
25	BCR	a	408	40/40	0.97	0.07	46,55,66,71	0
25	BCR	b	617	40/40	0.97	0.08	46,55,65,68	0
23	CLA	A	406[A]	65/65	0.97	0.09	41,48,114,126	65
23	CLA	c	504	65/65	0.97	0.09	51,71,84,98	0
23	CLA	a	404[A]	65/65	0.97	0.13	39,48,64,75	65
23	CLA	a	404[B]	65/65	0.97	0.13	39,48,65,75	65
23	CLA	C	502	65/65	0.97	0.08	45,56,83,92	0
23	CLA	C	503	65/65	0.97	0.08	51,61,72,78	0
23	CLA	B	607	65/65	0.97	0.09	36,49,73,84	0
27	GOL	b	628	6/6	0.97	0.20	78,86,89,89	0
23	CLA	c	510	65/65	0.97	0.10	47,63,88,100	0
35	DGD	C	516[A]	62/66	0.97	0.10	48,59,99,107	62
35	DGD	C	516[B]	62/66	0.97	0.10	48,59,99,107	62
23	CLA	A	406[B]	65/65	0.97	0.09	41,48,114,126	65
23	CLA	b	602	65/65	0.97	0.12	48,60,80,86	0
23	CLA	B	610	65/65	0.97	0.11	43,56,67,85	0
23	CLA	b	605	65/65	0.97	0.11	39,51,72,81	0
24	PHO	a	414[A]	64/64	0.97	0.11	45,55,62,67	64
24	PHO	a	414[B]	64/64	0.97	0.11	45,55,62,67	64
23	CLA	B	602	65/65	0.97	0.11	45,57,73,89	0
25	BCR	B	617	40/40	0.97	0.09	42,53,64,66	0
23	CLA	b	607	65/65	0.97	0.08	38,49,81,92	0
33	LHG	L	101[A]	49/49	0.97	0.11	50,58,71,92	49
33	LHG	L	101[B]	49/49	0.97	0.11	49,58,71,92	49
23	CLA	B	612	65/65	0.97	0.07	37,50,64,71	0
36	CA	O	301	1/1	0.97	0.06	105,105,105,105	0
23	CLA	b	610	65/65	0.97	0.08	49,58,69,74	0
23	CLA	b	611	65/65	0.97	0.08	39,50,72,82	0
23	CLA	C	510	65/65	0.97	0.07	46,60,82,88	0
40	HEC	V	201	43/43	0.97	0.12	39,50,58,63	0
40	HEC	v	201	43/43	0.97	0.11	52,63,72,74	0
23	CLA	D	403[A]	65/65	0.98	0.11	34,44,71,78	65
24	PHO	A	407[A]	64/64	0.98	0.08	38,47,55,57	64
24	PHO	A	407[B]	64/64	0.98	0.08	38,47,55,57	64

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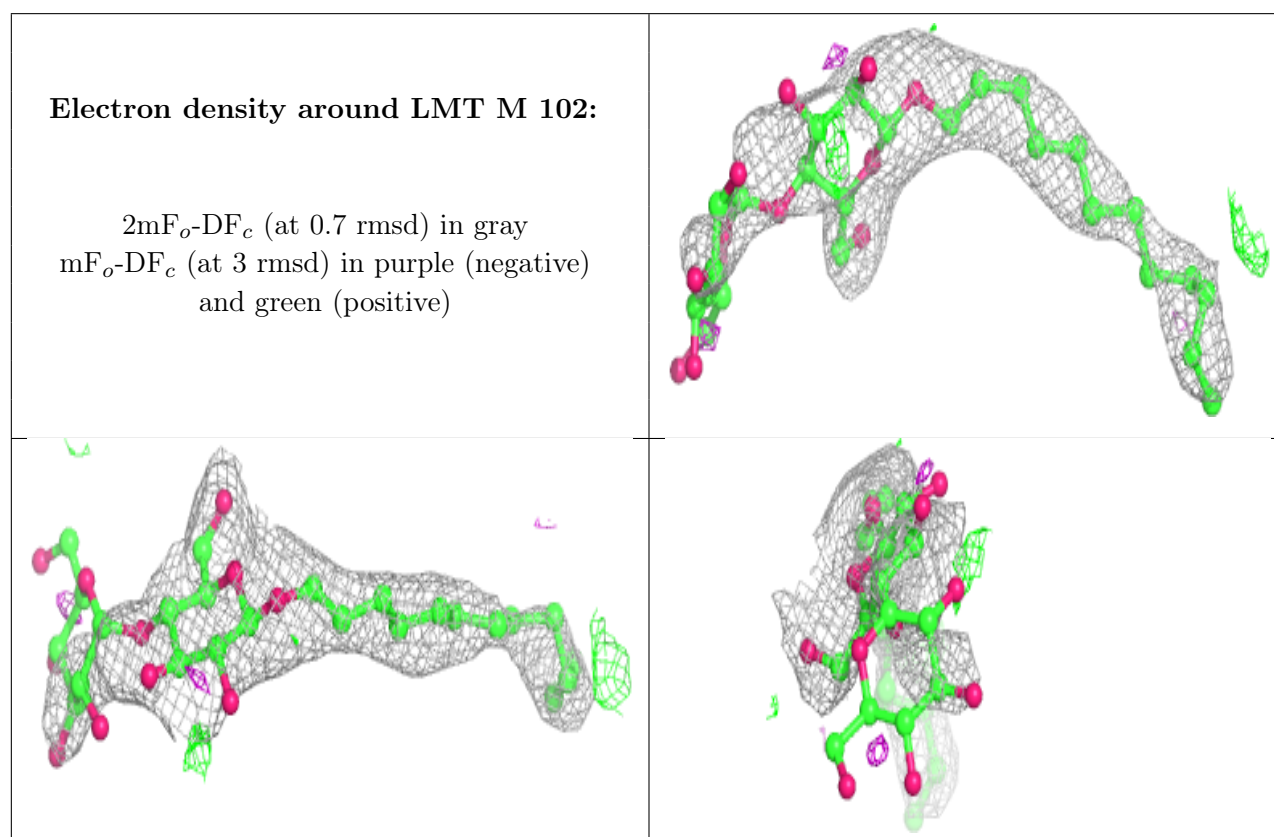
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
33	LHG	D	407[A]	49/49	0.98	0.13	48,56,68,81	49
33	LHG	D	407[B]	49/49	0.98	0.13	47,56,68,81	49
24	PHO	A	416[A]	64/64	0.98	0.09	39,51,57,64	64
24	PHO	A	416[B]	64/64	0.98	0.09	38,51,57,65	64
24	PHO	a	406[A]	64/64	0.98	0.08	44,50,54,57	64
24	PHO	a	406[B]	64/64	0.98	0.08	44,50,54,58	64
23	CLA	D	403[B]	65/65	0.98	0.11	34,44,72,79	65
23	CLA	c	503	65/65	0.98	0.08	44,59,89,106	0
23	CLA	B	608	65/65	0.98	0.07	43,51,71,83	0
23	CLA	B	615	65/65	0.98	0.10	43,54,80,90	0
23	CLA	b	608	65/65	0.98	0.07	43,57,78,91	0
23	CLA	A	404[B]	65/65	0.98	0.12	37,44,63,70	65
23	CLA	B	604	65/65	0.98	0.09	38,48,111,141	0
23	CLA	A	405[A]	65/65	0.98	0.10	38,45,56,70	65
23	CLA	A	405[B]	65/65	0.98	0.10	37,45,56,70	65
23	CLA	c	511	65/65	0.98	0.09	51,65,80,93	0
23	CLA	A	404[A]	65/65	0.98	0.12	37,44,62,70	65
23	CLA	C	505	65/65	0.98	0.08	48,60,89,106	0
36	CA	c	523	1/1	0.98	0.05	75,75,75,75	0
36	CA	c	524	1/1	0.98	0.07	77,77,77,77	0
23	CLA	b	603	65/65	0.98	0.07	45,57,81,98	0
23	CLA	d	402[A]	65/65	0.98	0.08	40,45,63,73	65
37	BCT	d	401[A]	4/4	0.98	0.09	59,63,67,79	4
37	BCT	d	401[B]	4/4	0.98	0.09	59,64,67,80	4
38	HEM	F	102	43/43	0.98	0.09	55,69,84,89	0
23	CLA	d	402[B]	65/65	0.98	0.08	40,45,64,73	65
23	CLA	d	403[A]	65/65	0.98	0.11	39,47,77,91	65
23	CLA	d	403[B]	65/65	0.98	0.11	39,47,77,91	65
28	OEX	a	411[A]	10/10	0.99	0.06	46,49,51,56	10
28	OEX	a	411[B]	10/10	0.99	0.06	46,50,54,56	10
21	FE2	A	401[A]	1/1	0.99	0.04	52,52,52,52	1
21	FE2	A	401[B]	1/1	0.99	0.04	52,52,52,52	1
21	FE2	a	401[A]	1/1	0.99	0.05	55,55,55,55	1
21	FE2	a	401[B]	1/1	0.99	0.05	55,55,55,55	1
22	CL	A	402[A]	1/1	0.99	0.02	44,44,44,44	1
22	CL	A	402[B]	1/1	0.99	0.02	44,44,44,44	1
22	CL	A	403[A]	1/1	0.99	0.04	47,47,47,47	1
22	CL	A	403[B]	1/1	0.99	0.04	47,47,47,47	1
37	BCT	D	401[A]	4/4	0.99	0.13	55,60,61,68	4
37	BCT	D	401[B]	4/4	0.99	0.13	55,57,62,72	4
22	CL	a	402[A]	1/1	0.99	0.04	50,50,50,50	1
22	CL	a	402[B]	1/1	0.99	0.04	50,50,50,50	1

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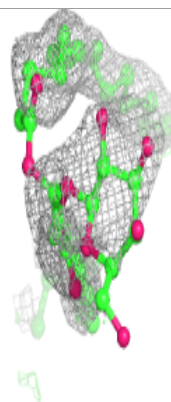
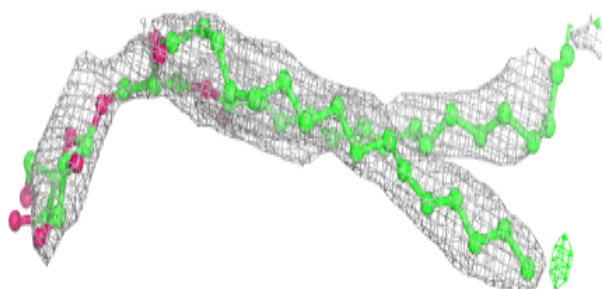
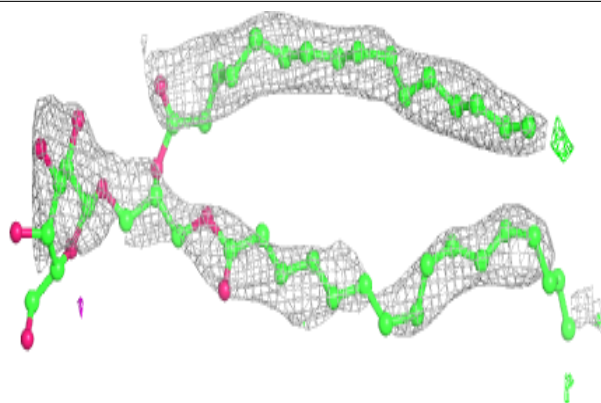
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
22	CL	a	403[A]	1/1	0.99	0.04	52,52,52,52	1
22	CL	a	403[B]	1/1	0.99	0.04	52,52,52,52	1
39	MG	J	102	1/1	0.99	0.02	59,59,59,59	0
39	MG	j	102	1/1	0.99	0.07	63,63,63,63	0
28	OEX	A	413[A]	10/10	0.99	0.06	40,44,50,50	10
28	OEX	A	413[B]	10/10	0.99	0.06	40,44,50,51	10

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.

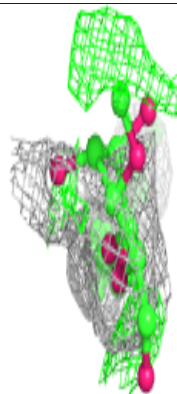
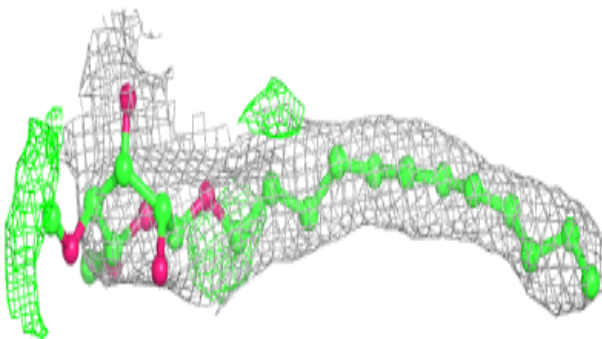
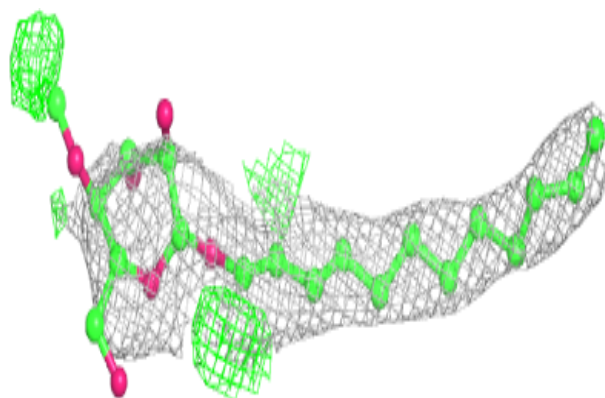


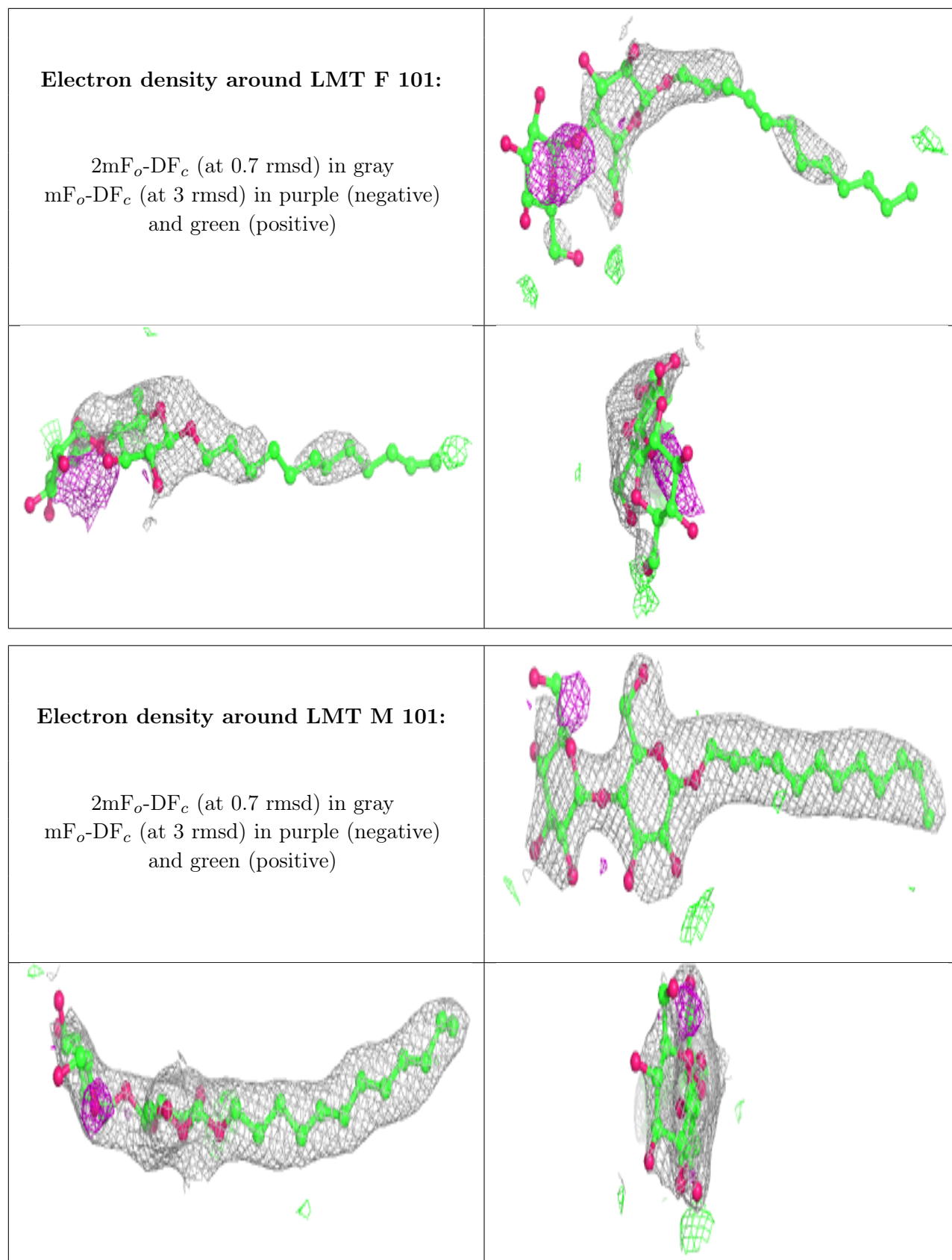
Electron density around LMG C 520:

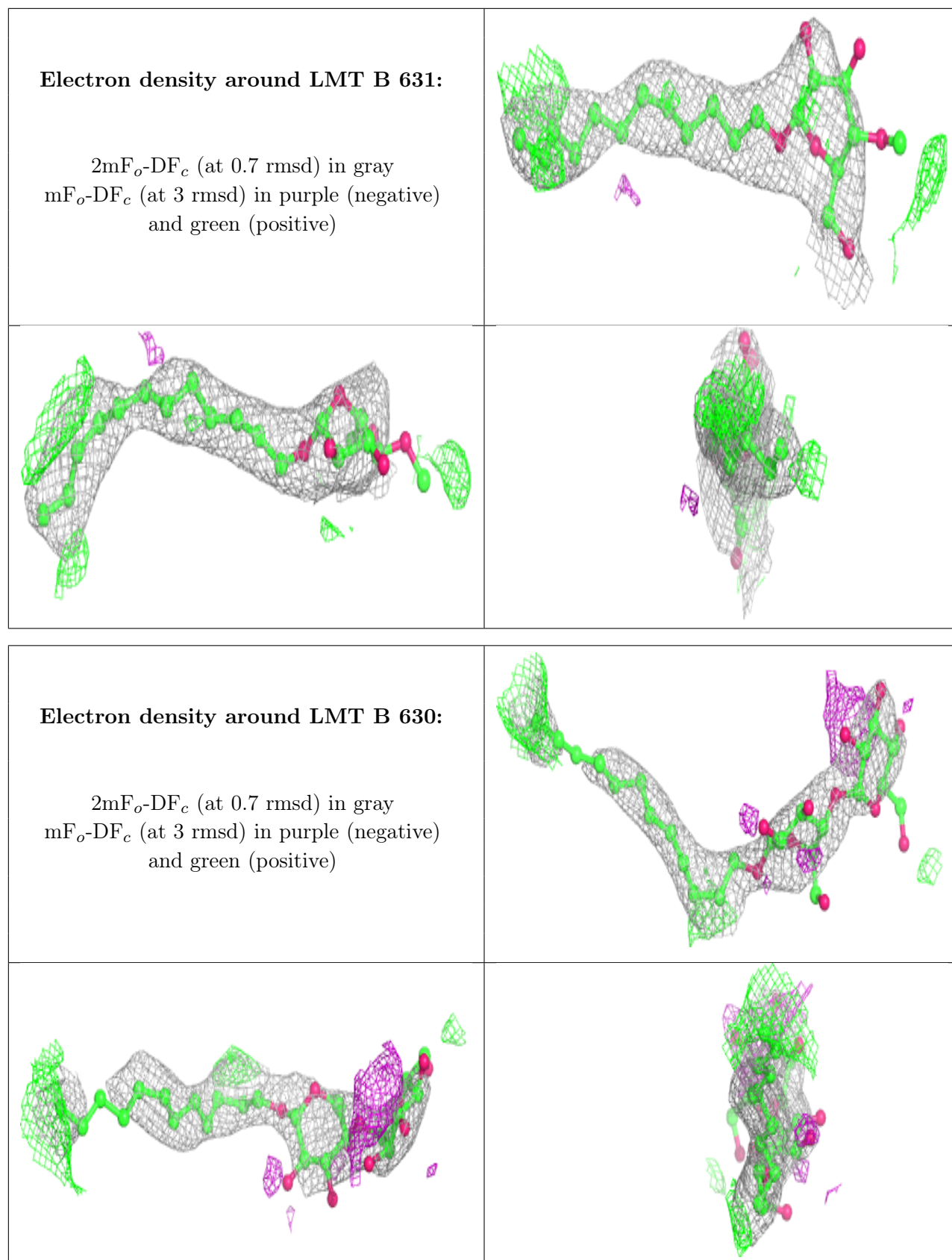
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around LMT b 621:**

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

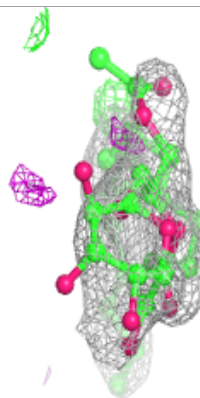
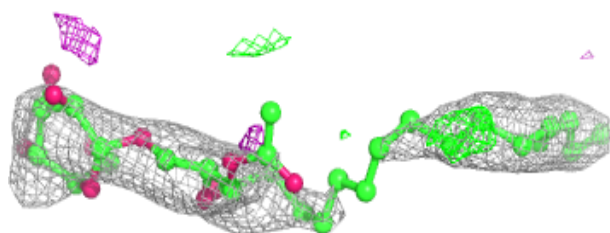
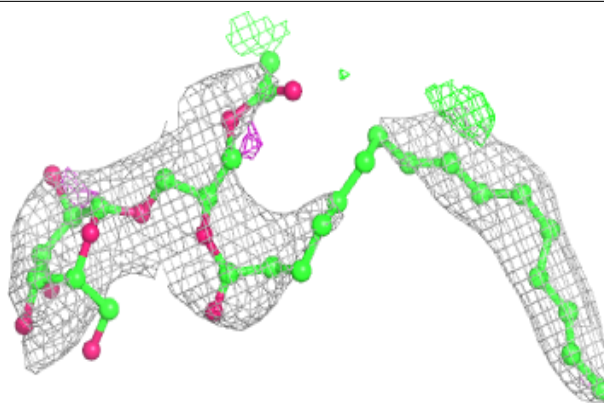




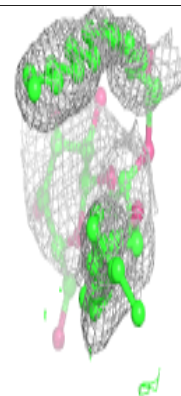
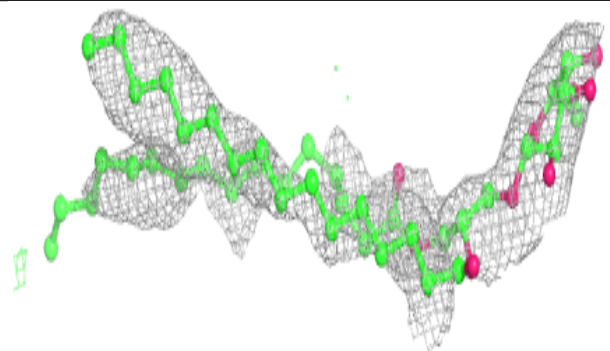
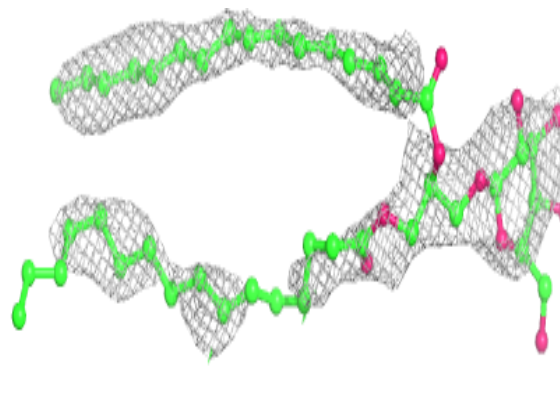


Electron density around LMG Z 101:

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

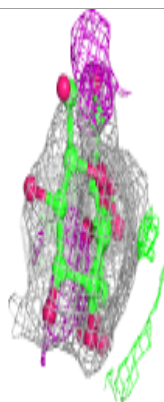
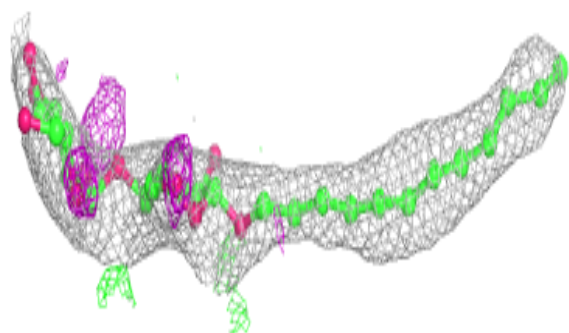
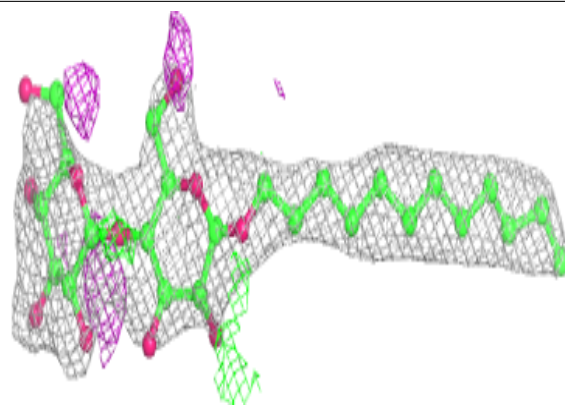
**Electron density around LMG c 521:**

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

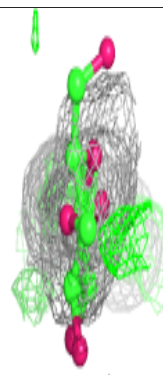
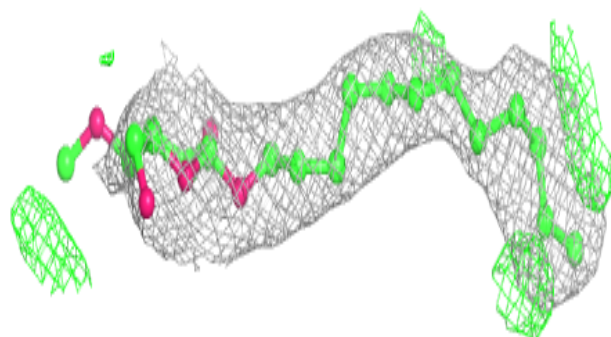
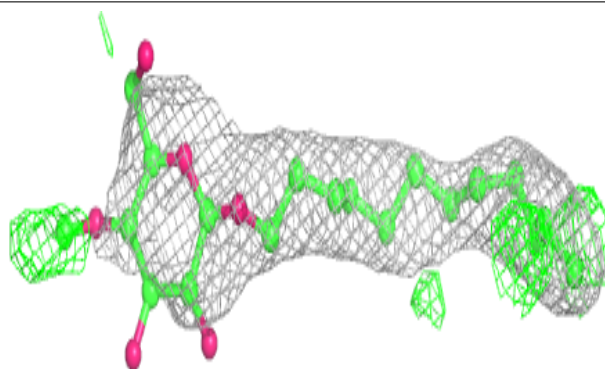


Electron density around LMT m 103:

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

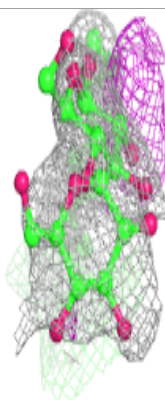
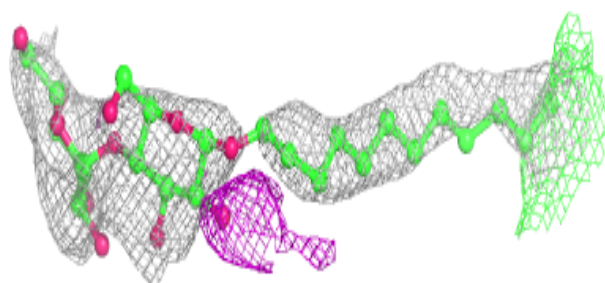
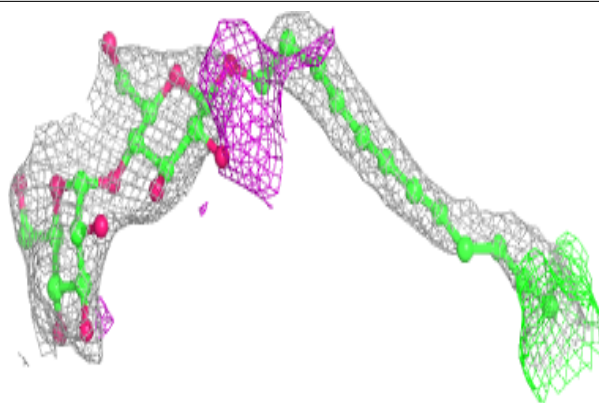
**Electron density around LMT b 627:**

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

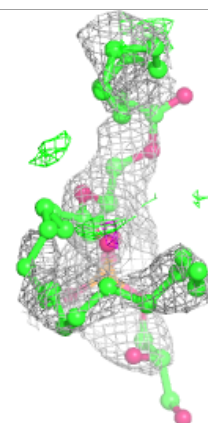
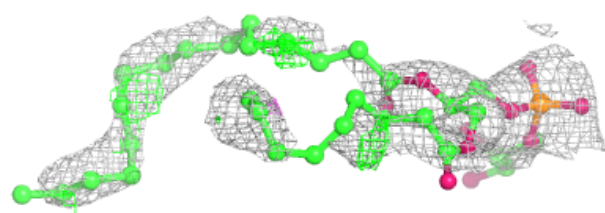
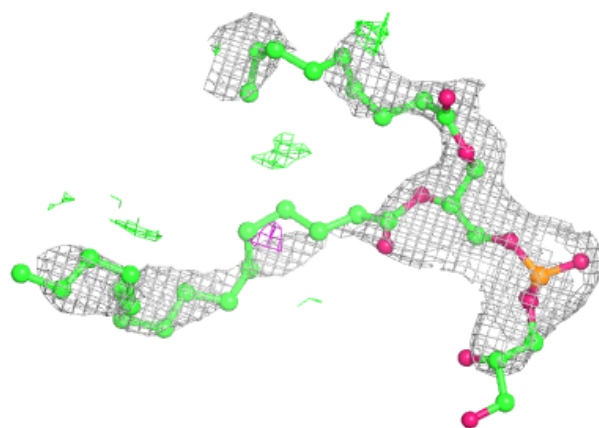


Electron density around LMT A 417:

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

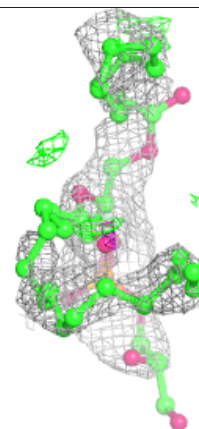
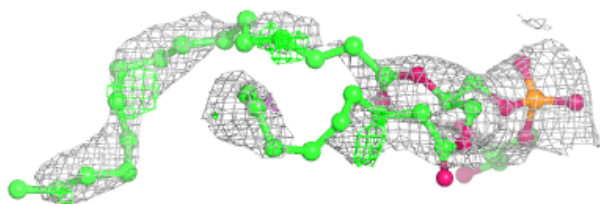
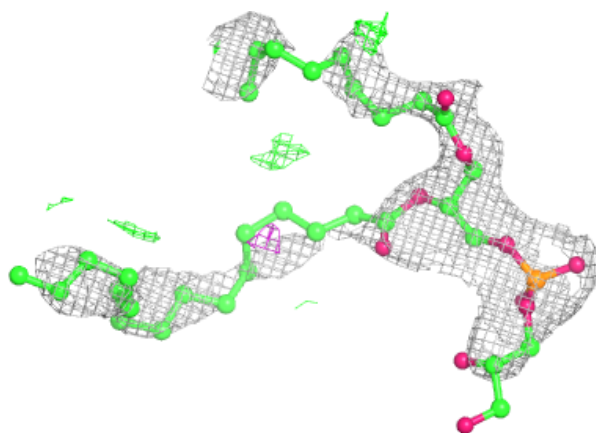
**Electron density around LHG a 418 (A):**

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

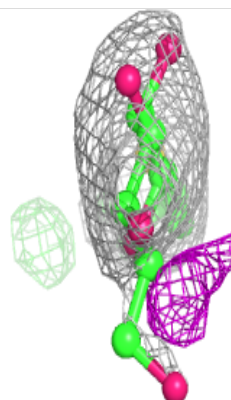
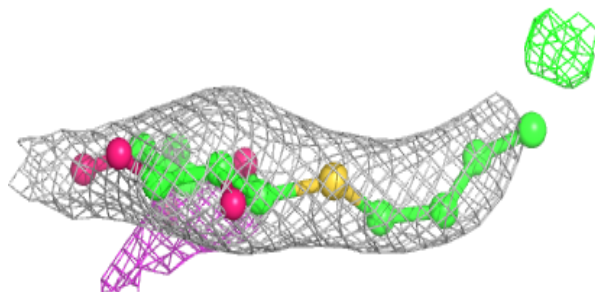
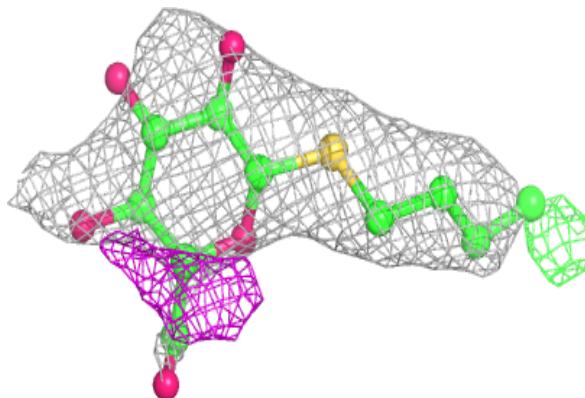


Electron density around LHG a 418 (B):

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

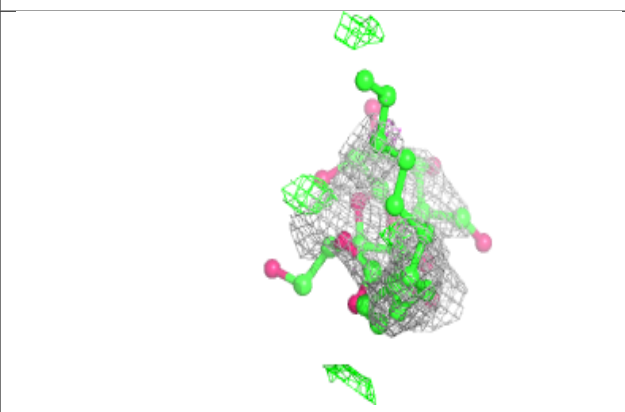
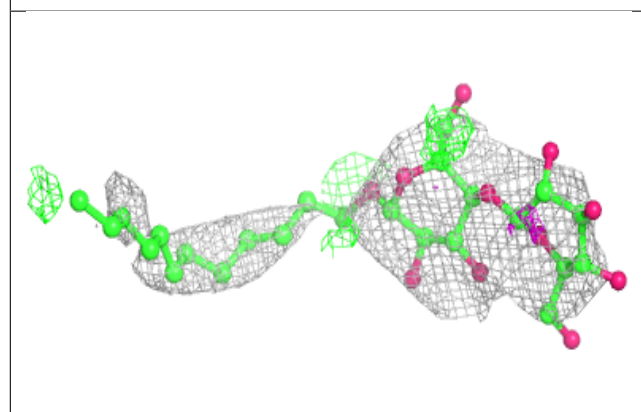
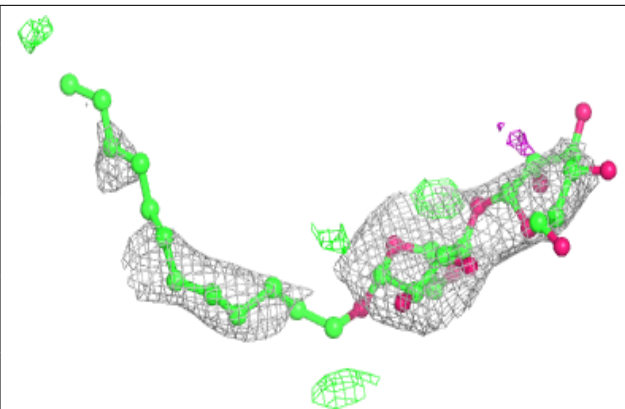
**Electron density around HTG D 411:**

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

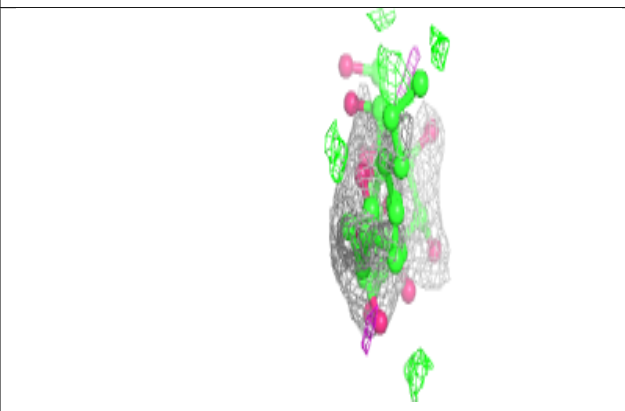
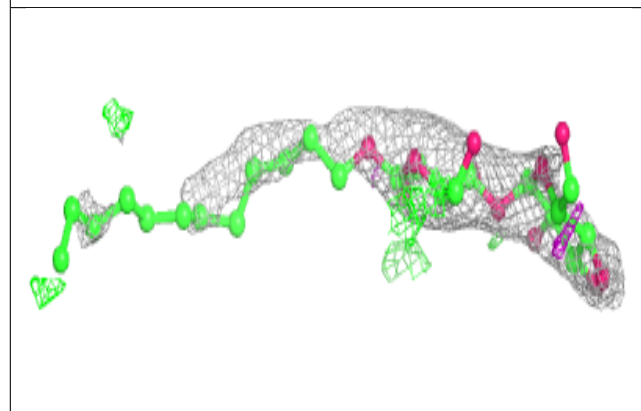
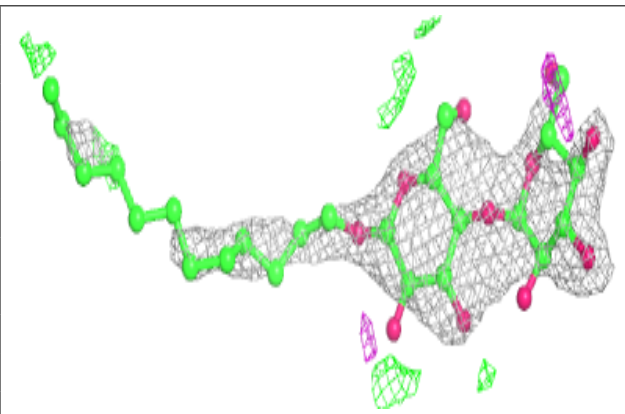


Electron density around LMT A 420:

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

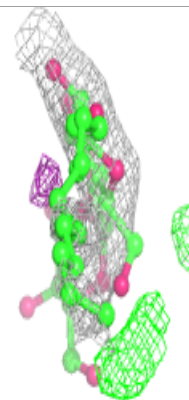
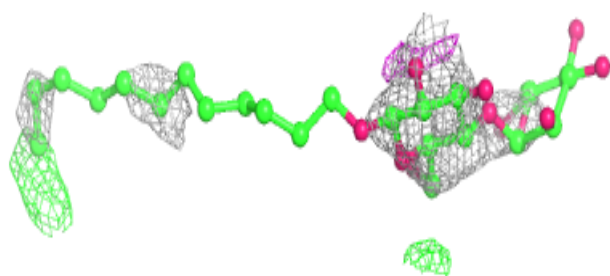
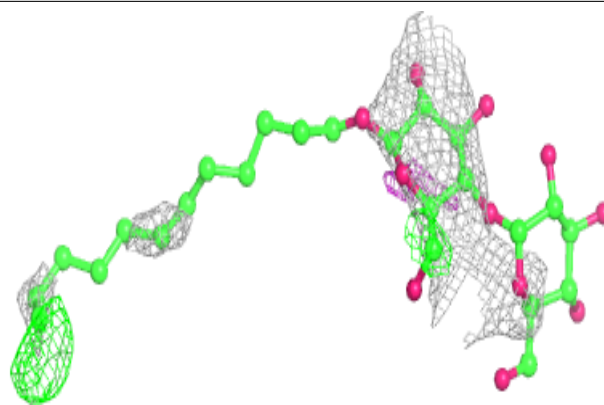
**Electron density around LMT a 415:**

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

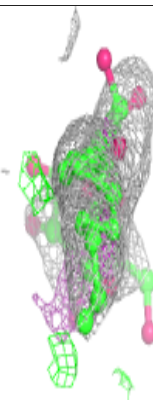
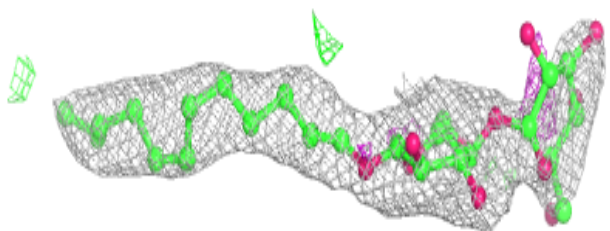
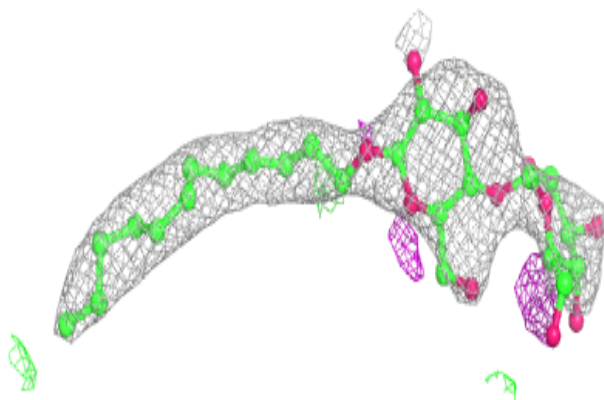


Electron density around LMT e 101:

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

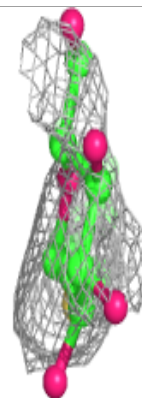
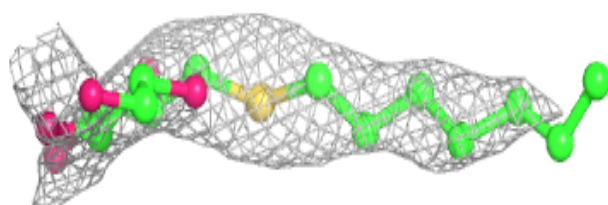
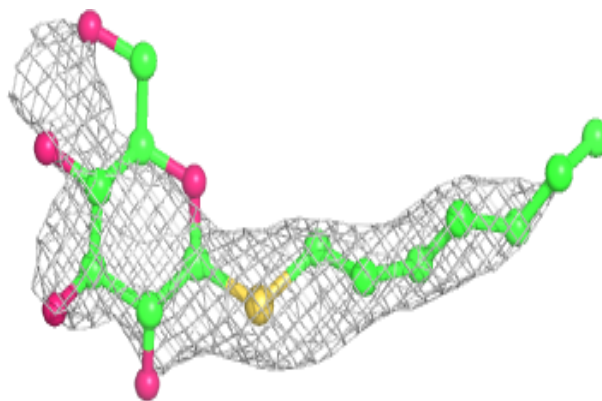
**Electron density around LMT B 628:**

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

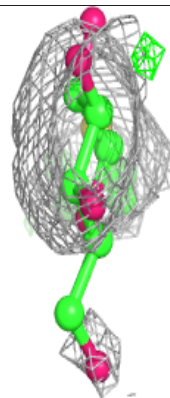
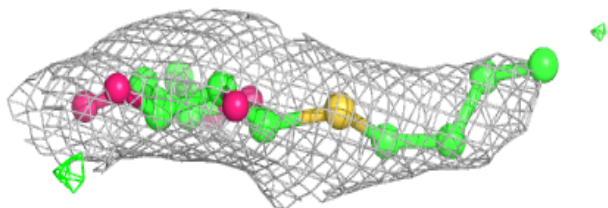
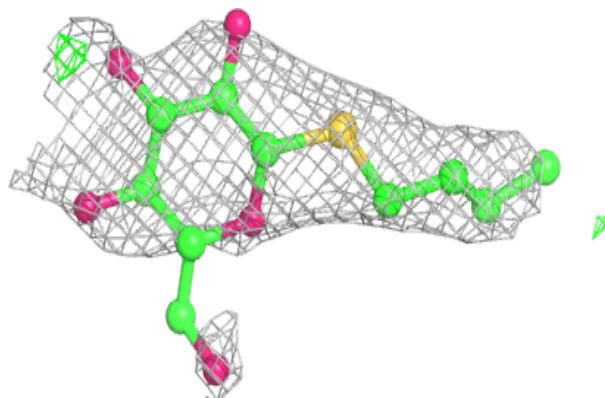


Electron density around HTG b 623:

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

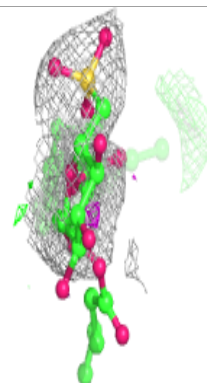
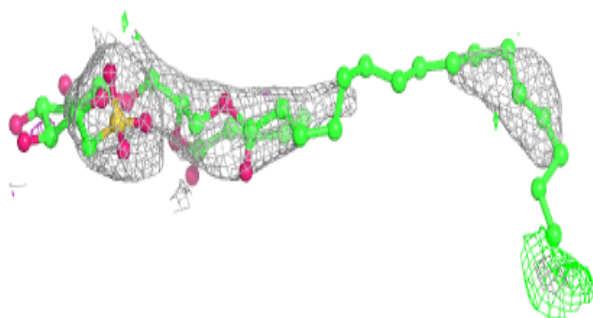
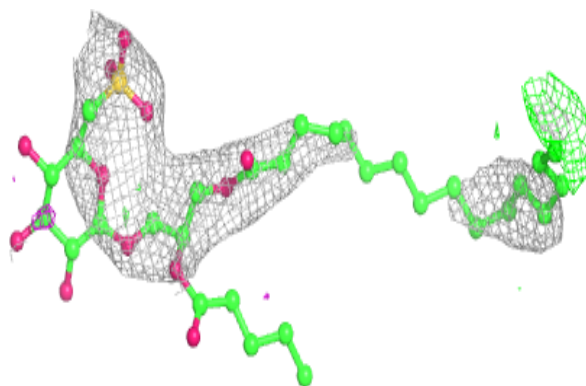
**Electron density around HTG d 411:**

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

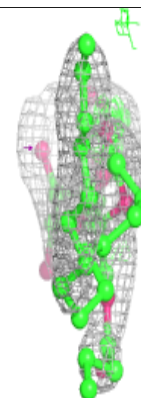
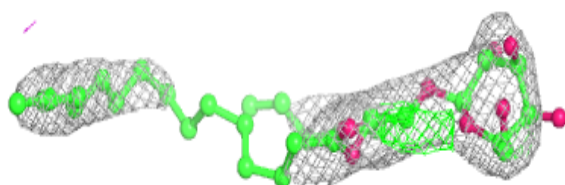
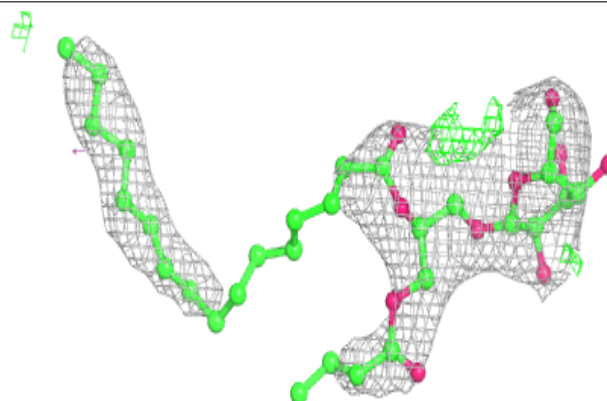


Electron density around SQD f 102:

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

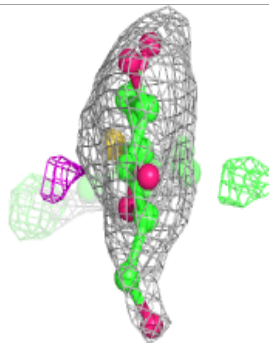
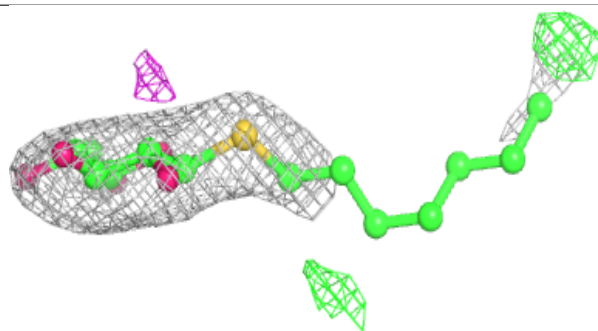
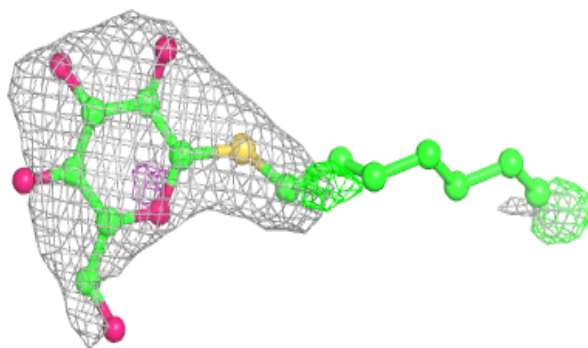
**Electron density around LMG z 101:**

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

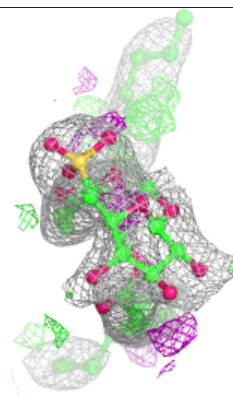
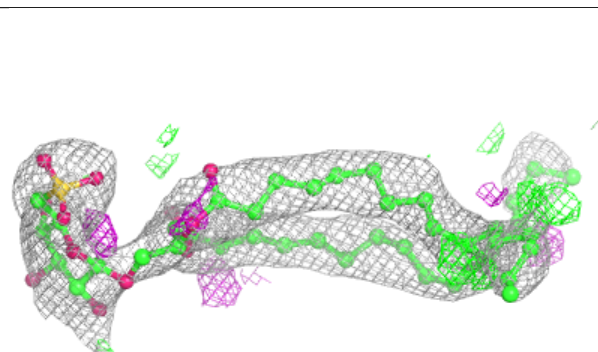
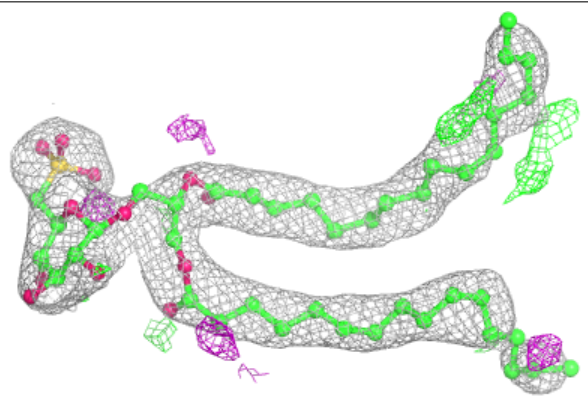


Electron density around HTG C 521:

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

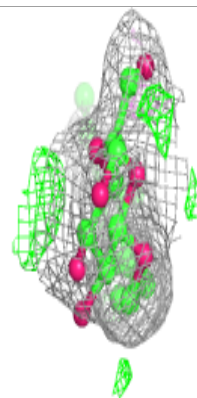
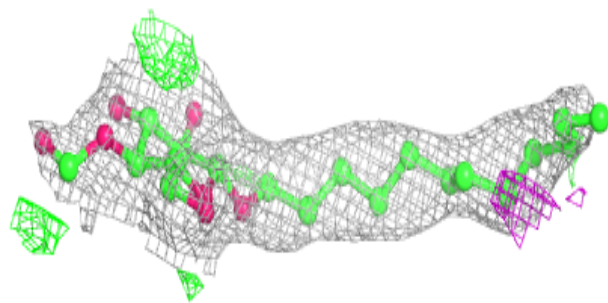
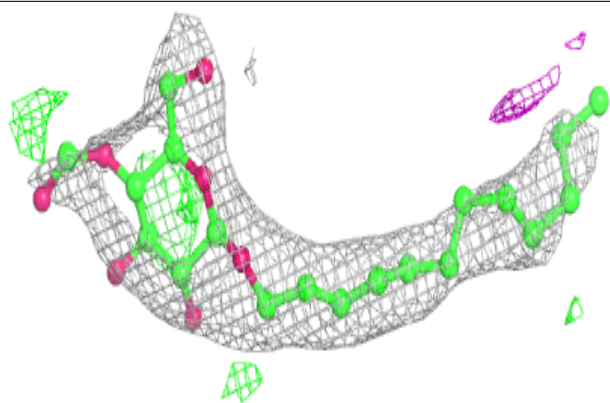
**Electron density around SQD b 620:**

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

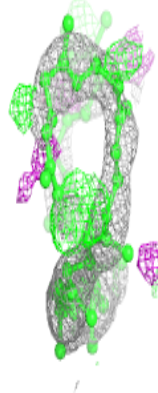
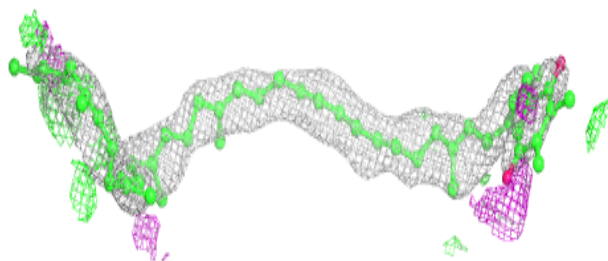
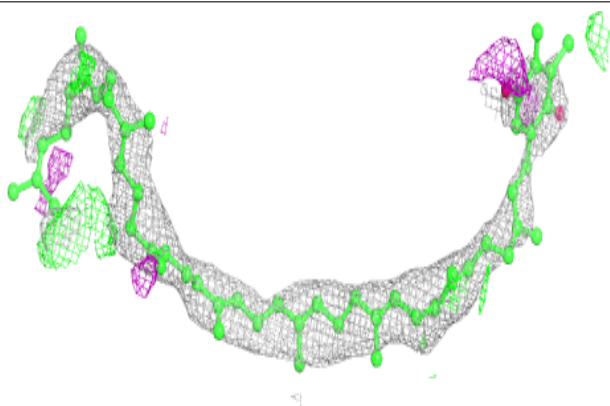


Electron density around LMT t 101:

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

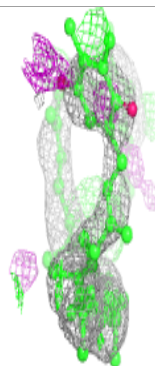
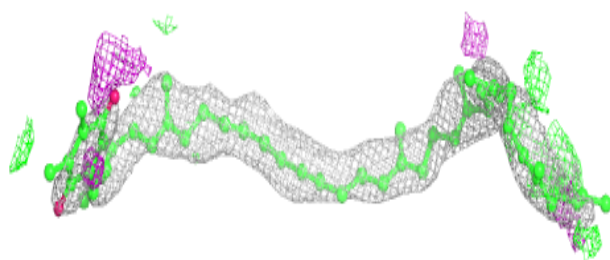
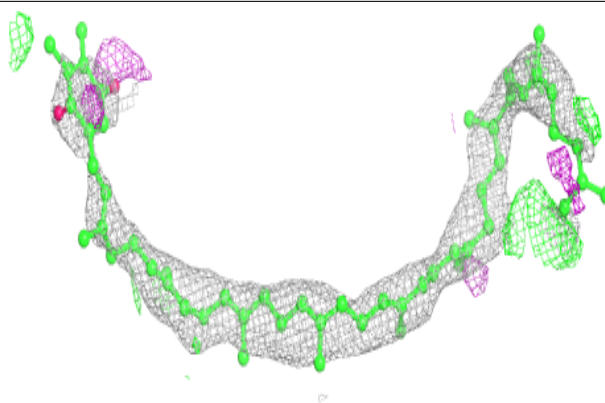
**Electron density around PL9 A 414 (A):**

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

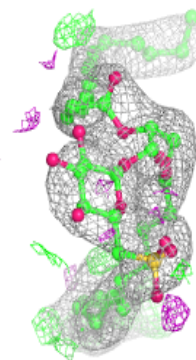
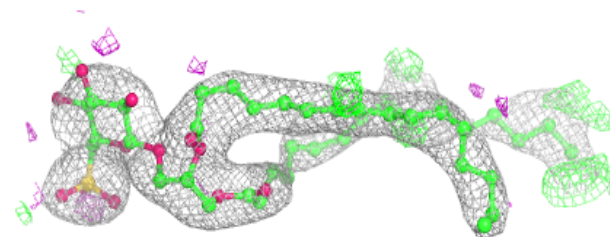
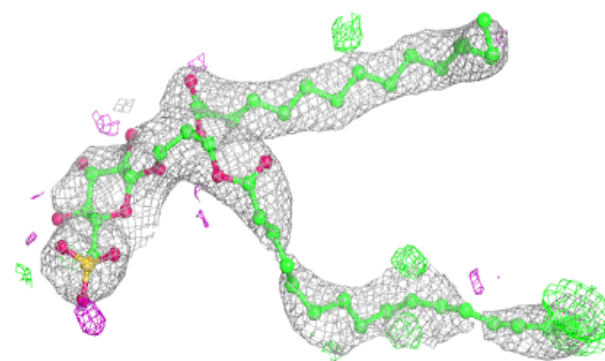


Electron density around PL9 A 414 (B):

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

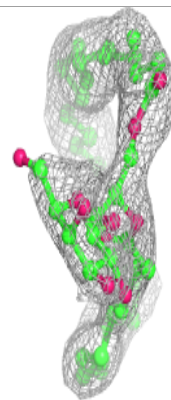
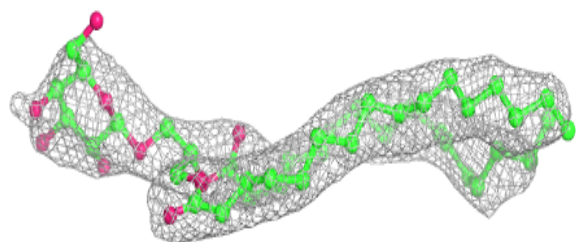
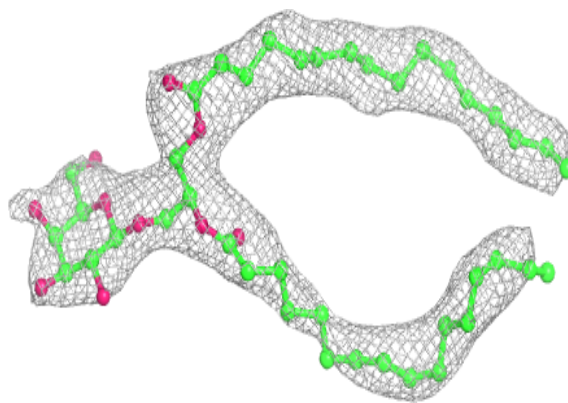
**Electron density around SQD A 412:**

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

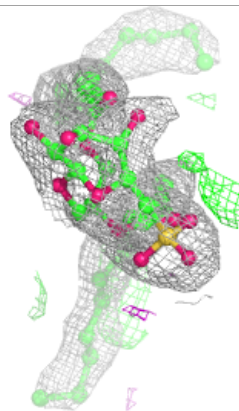
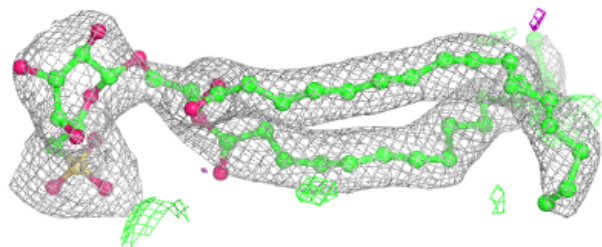
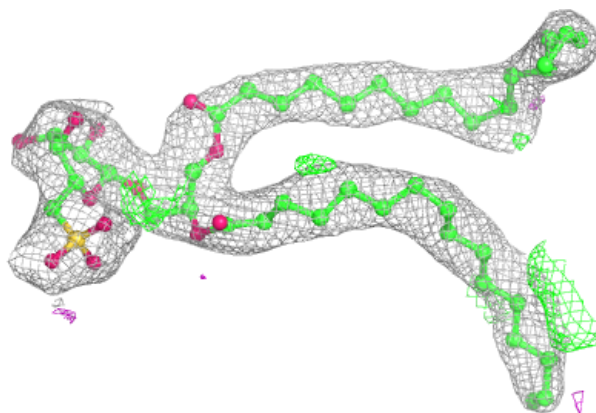


Electron density around LMG c 501:

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

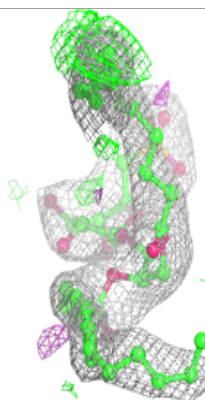
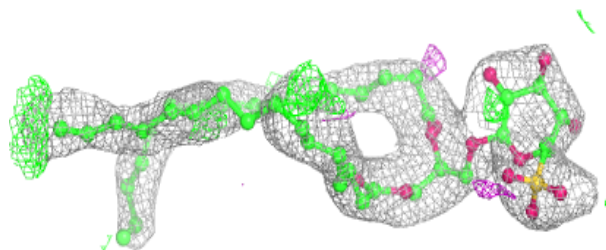
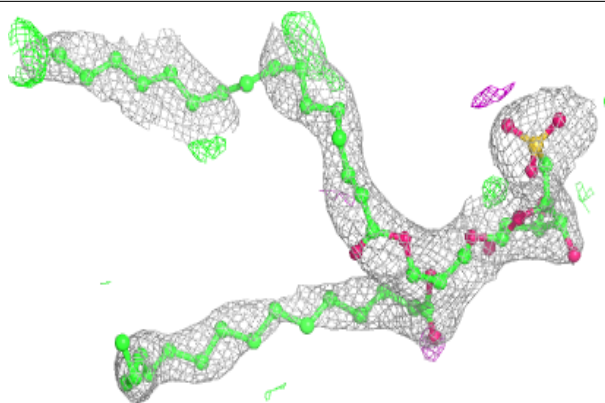
**Electron density around SQD B 620:**

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

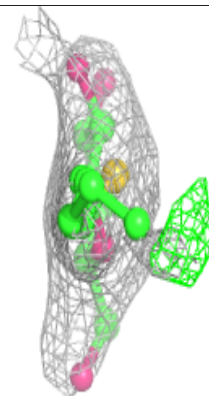
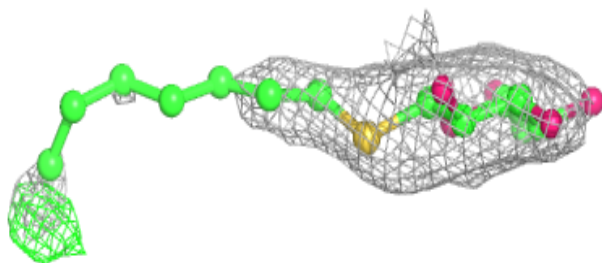
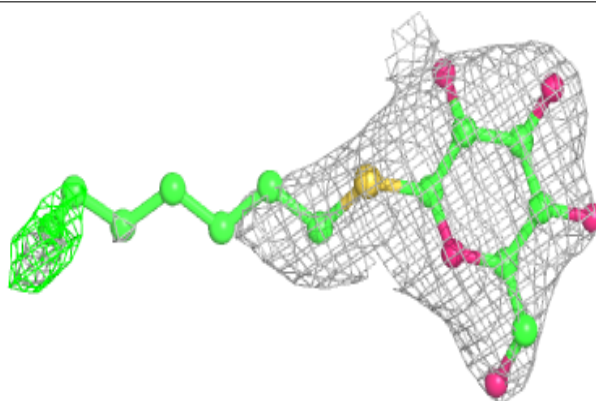


Electron density around SQD a 410:

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

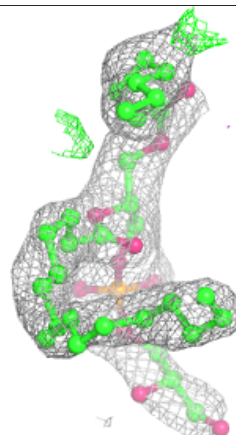
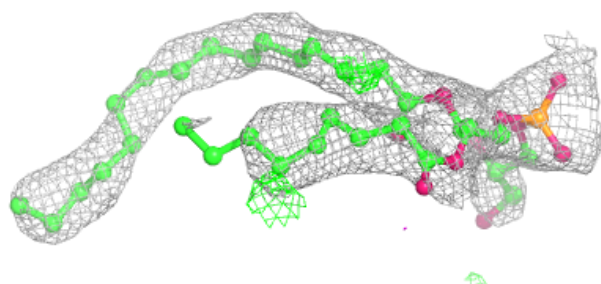
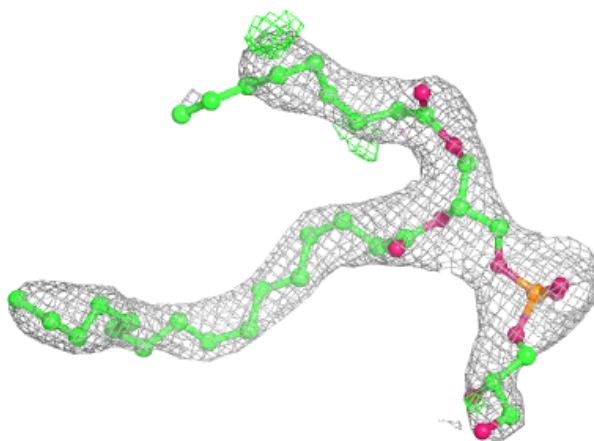
**Electron density around HTG c 522:**

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



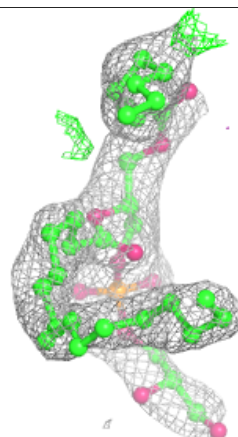
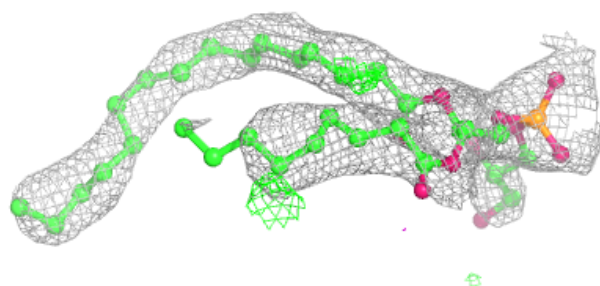
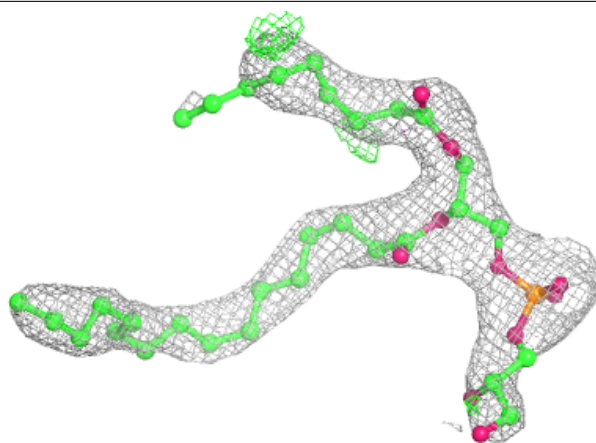
Electron density around LHG E 101 (A):

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

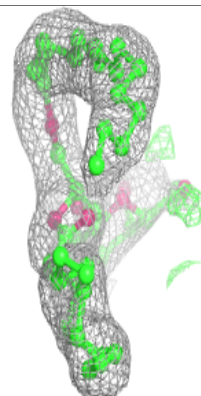
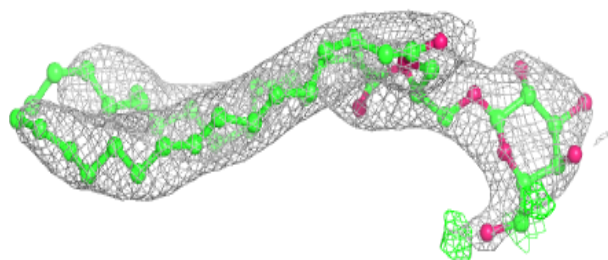
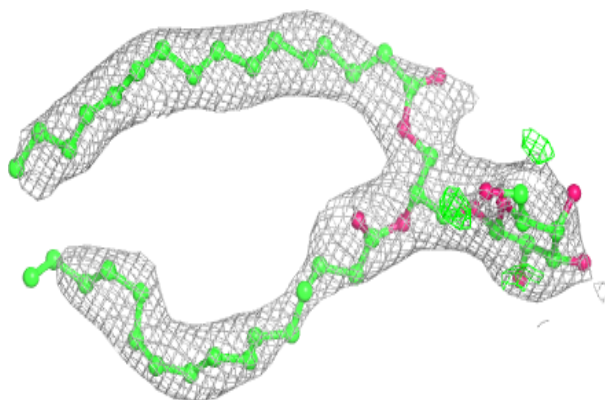


Electron density around LHG E 101 (B):

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

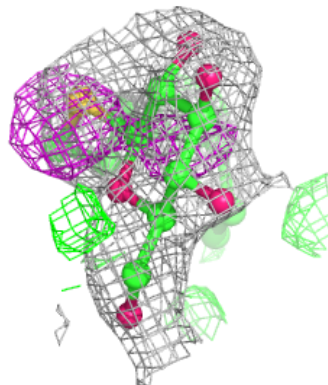
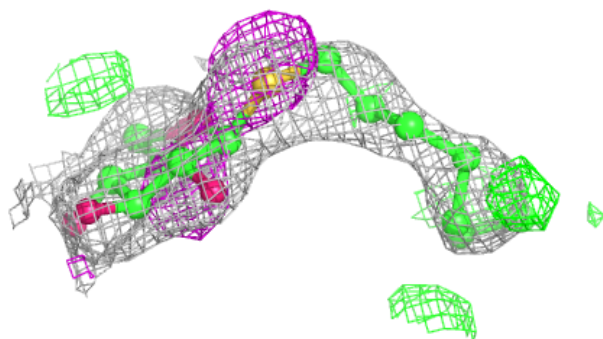
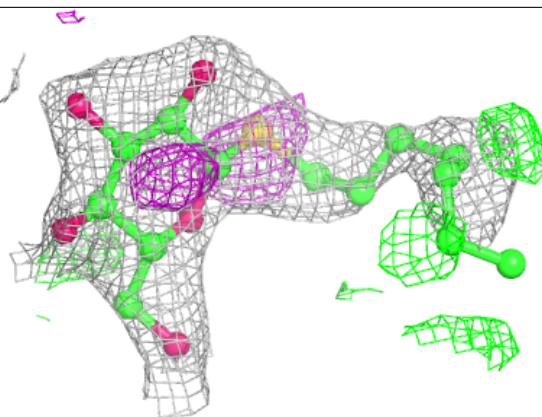
**Electron density around LMG A 418:**

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

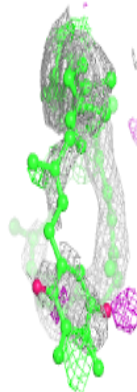
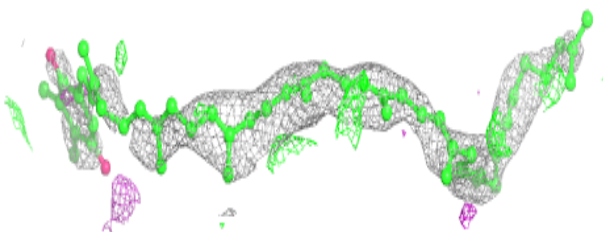
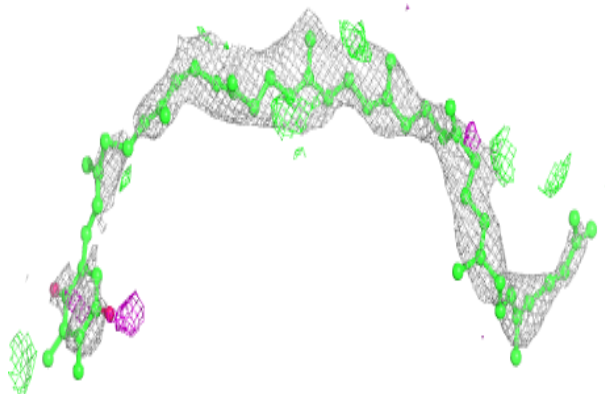


Electron density around HTG B 623:

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

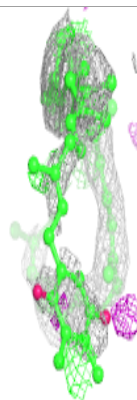
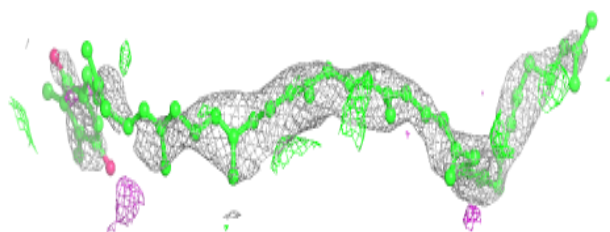
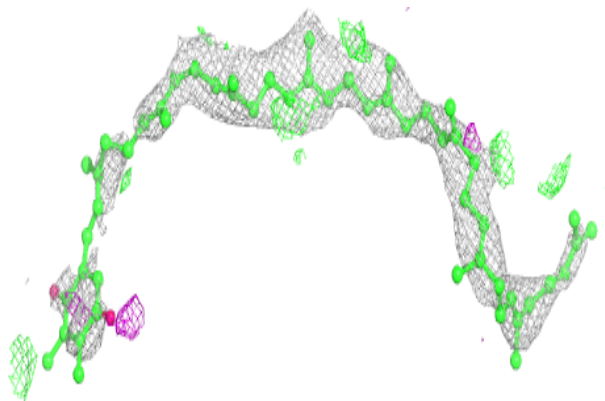
**Electron density around PL9 a 412 (A):**

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

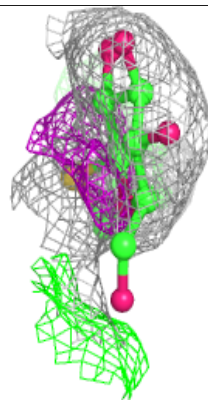
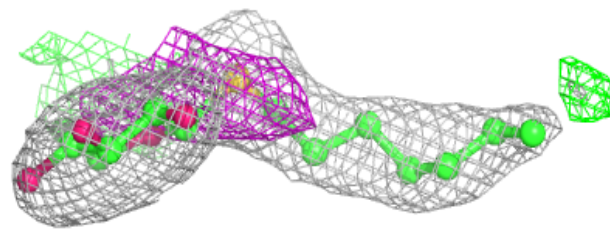
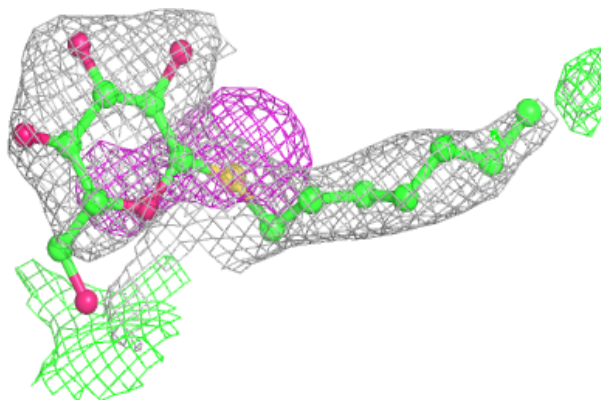


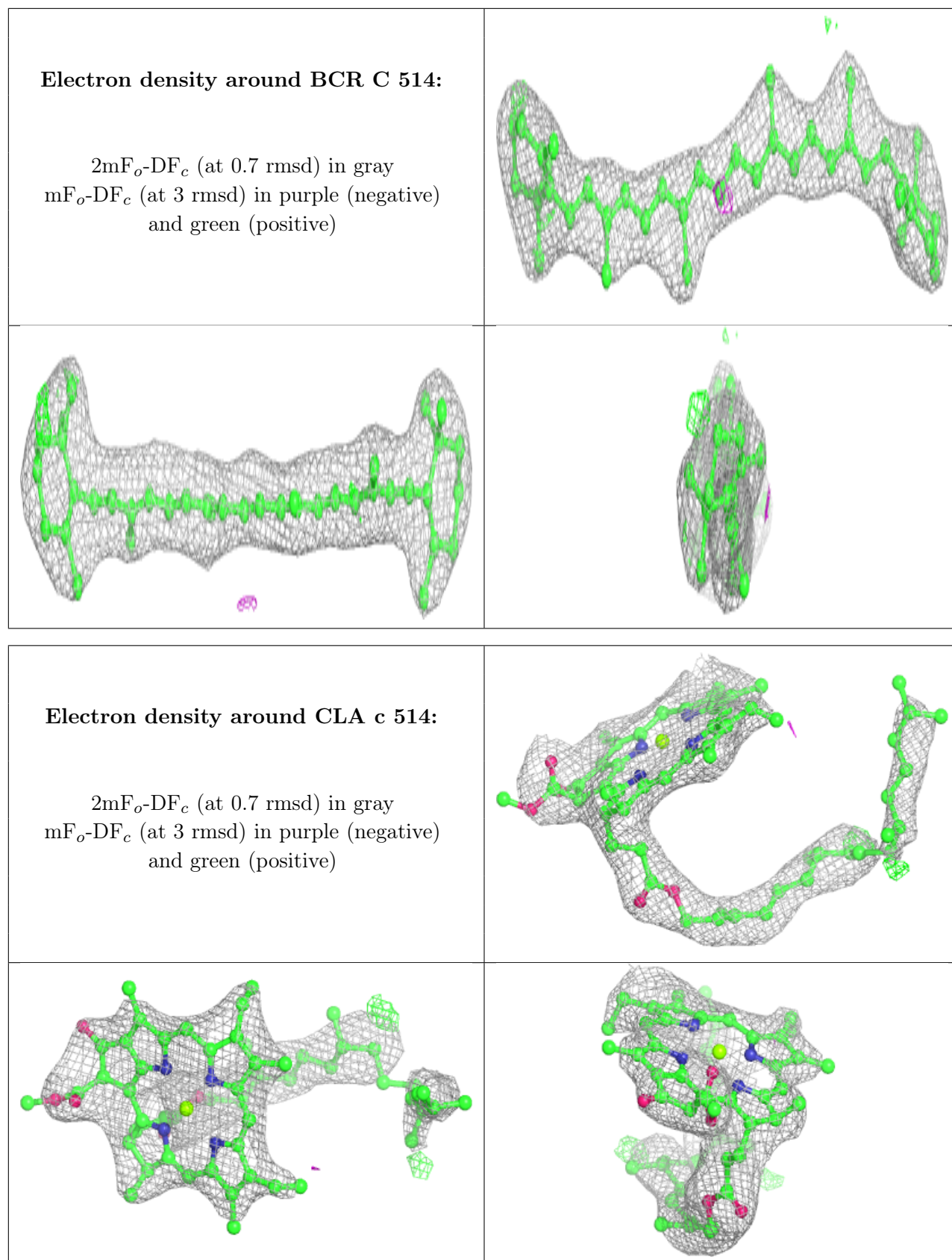
Electron density around PL9 a 412 (B):

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

**Electron density around HTG b 622:**

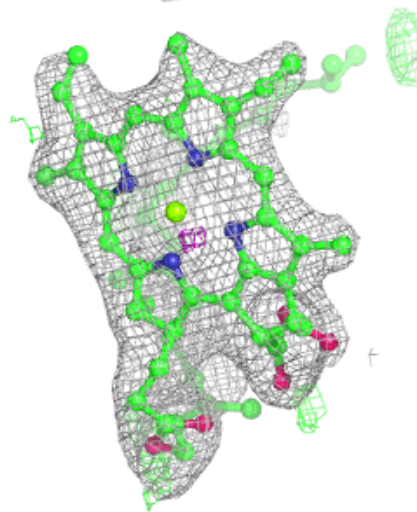
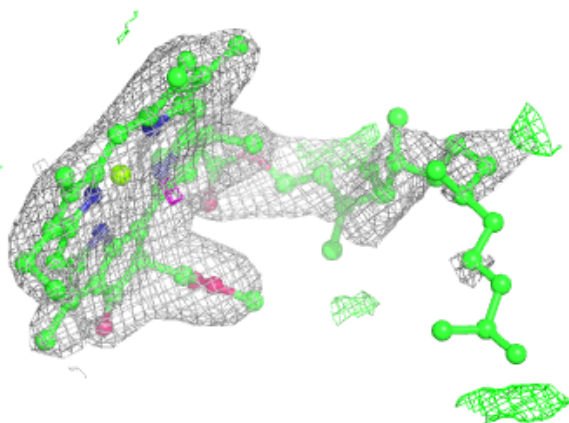
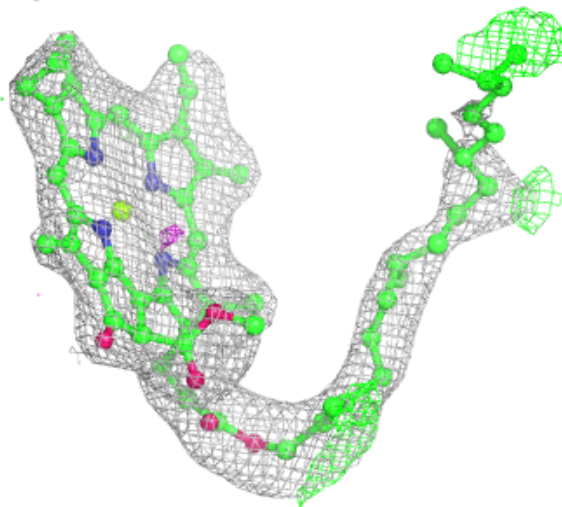
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





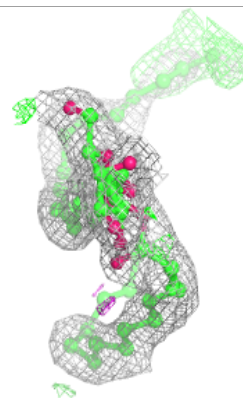
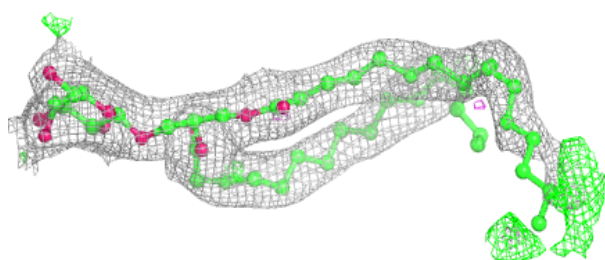
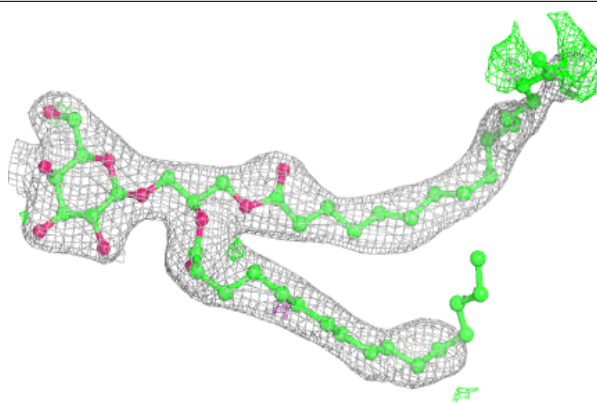
Electron density around CLA b 616:

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

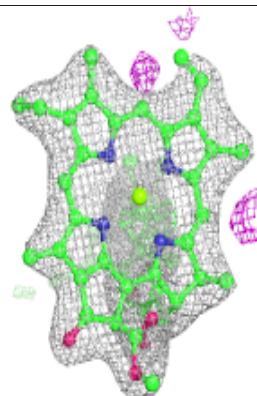
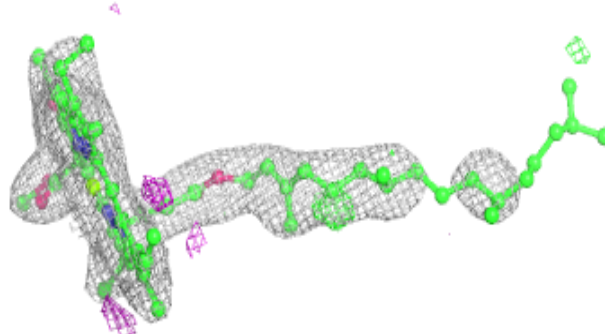
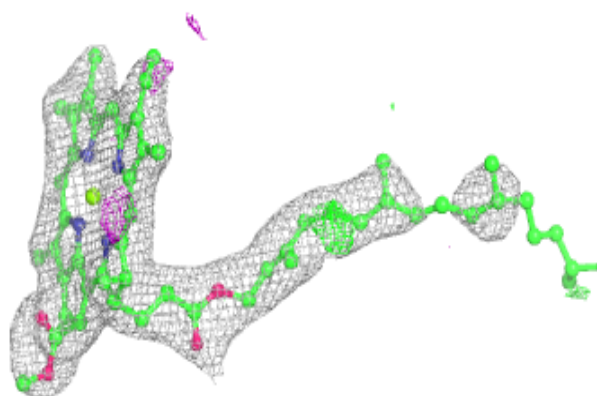


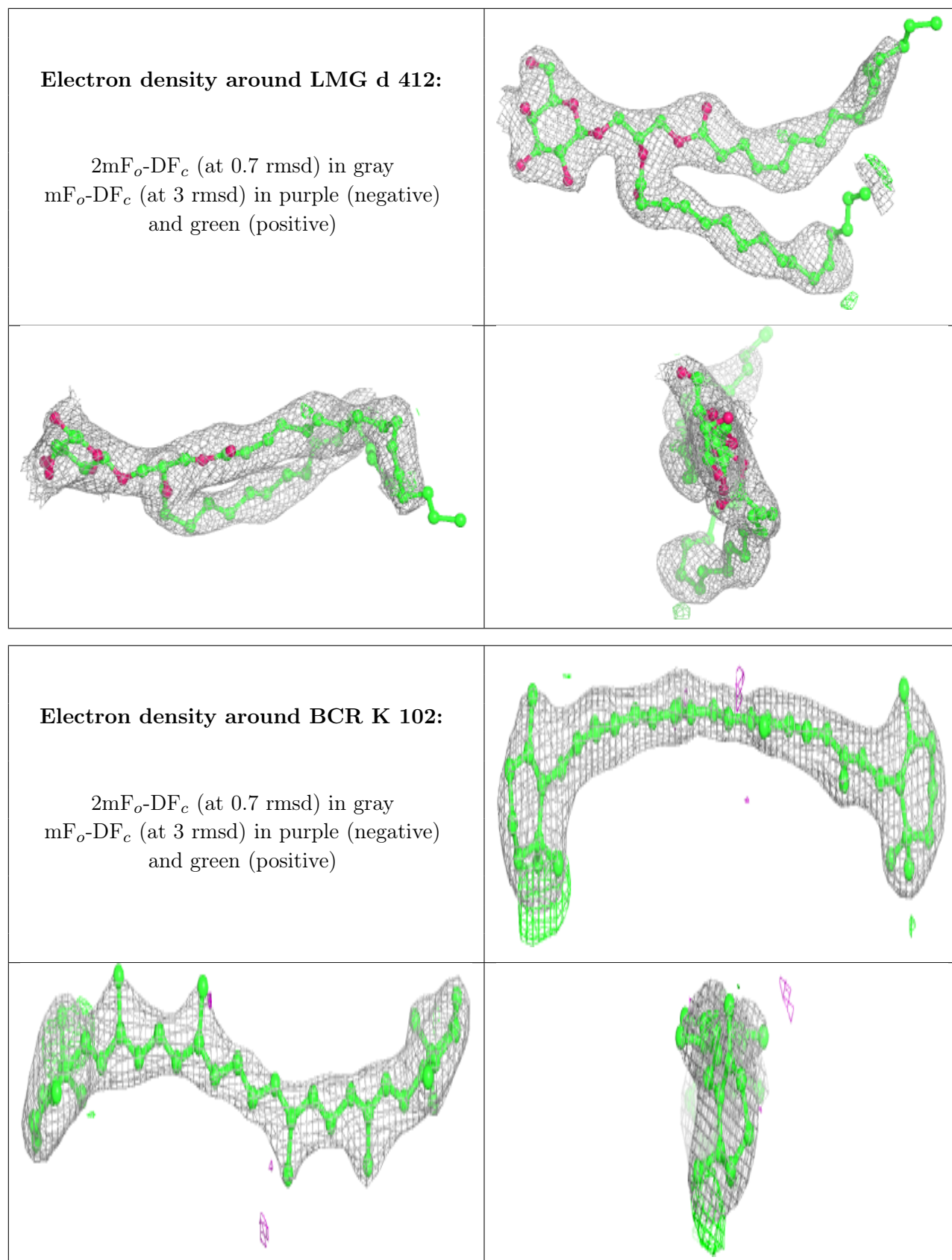
Electron density around LMG D 412:

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

**Electron density around CLA d 404:**

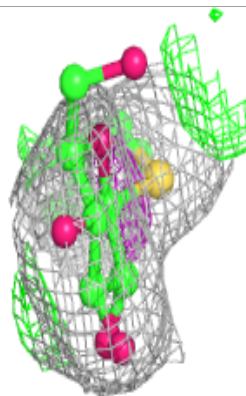
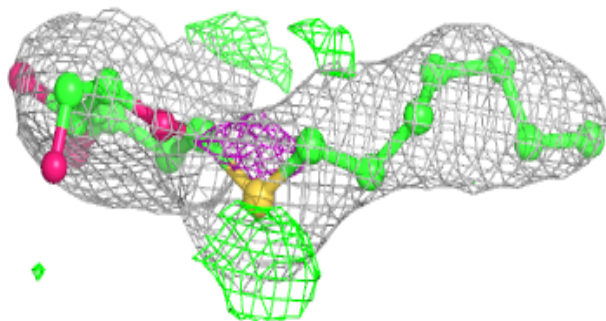
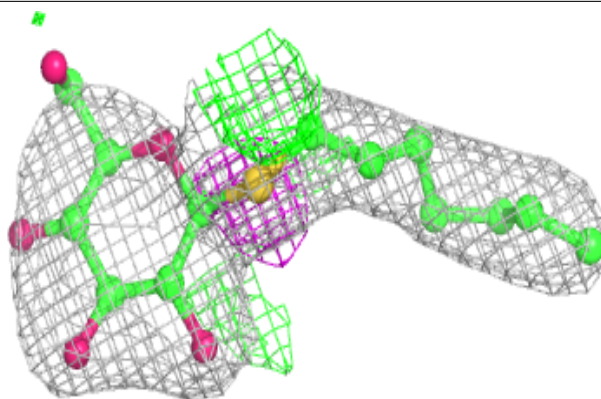
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



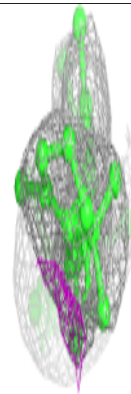
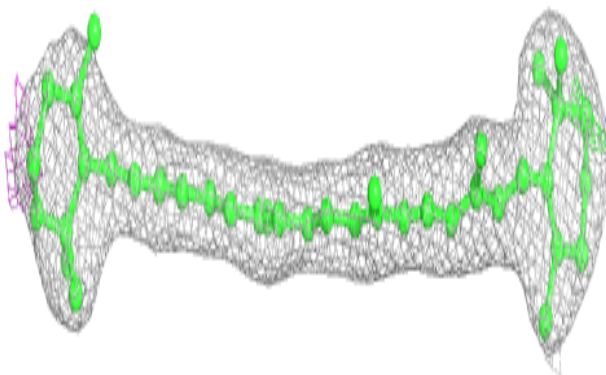
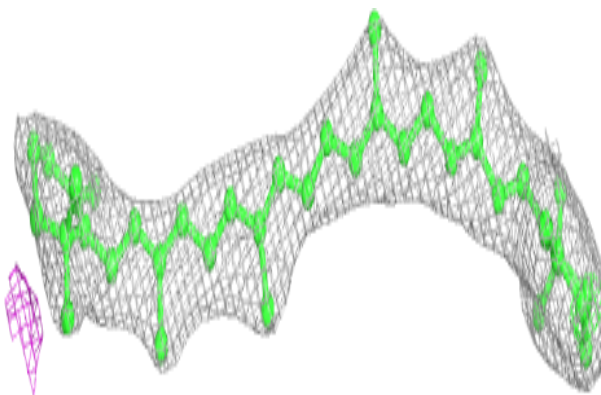


Electron density around HTG B 622:

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

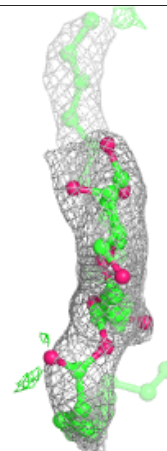
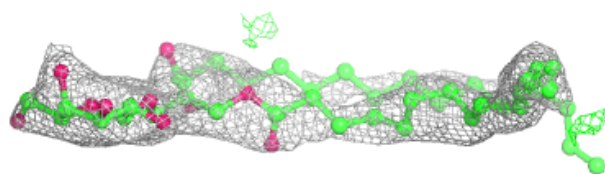
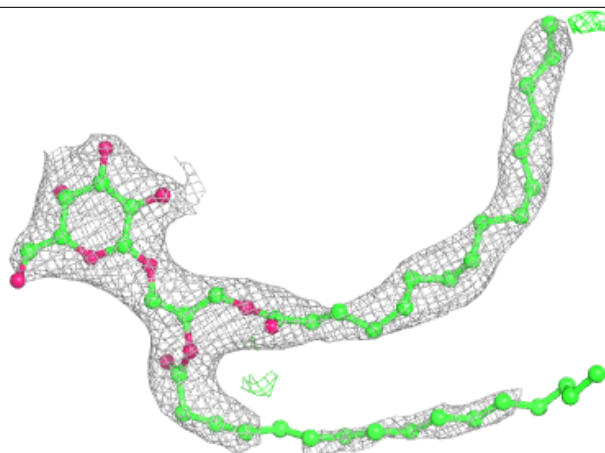
**Electron density around BCR h 101:**

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



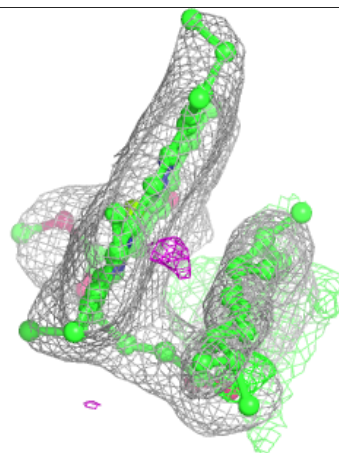
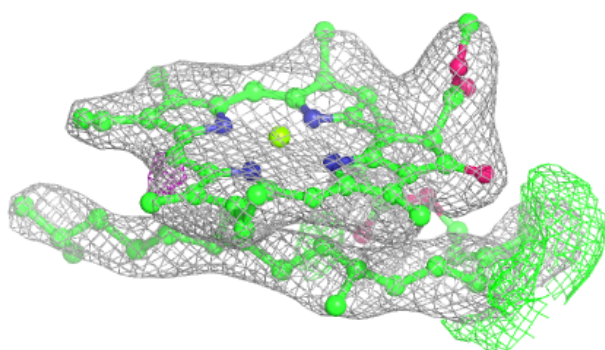
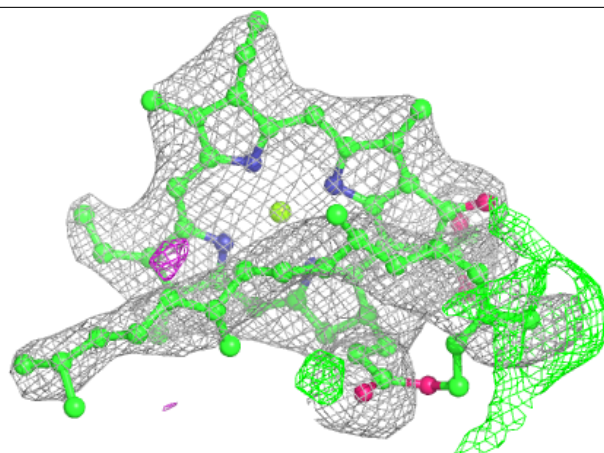
Electron density around LMG c 520:

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

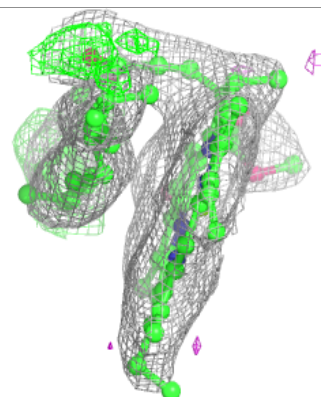
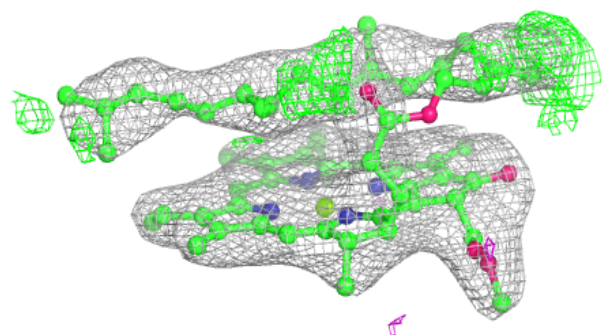
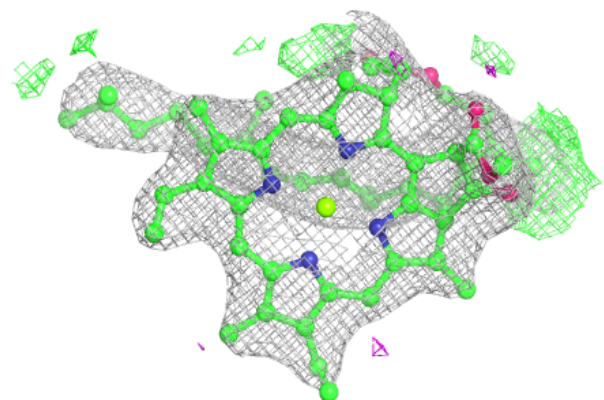


Electron density around CLA b 601:

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

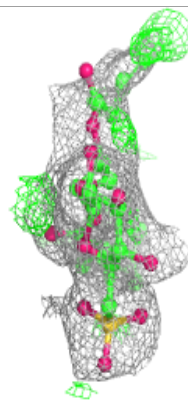
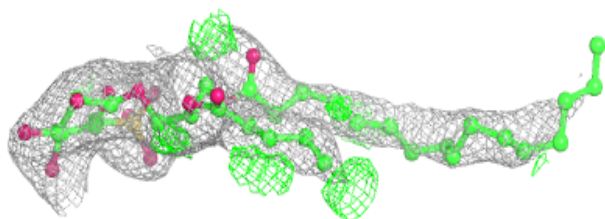
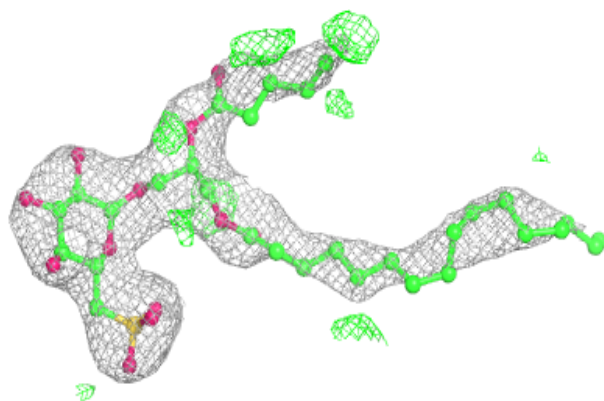
**Electron density around CLA B 601:**

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

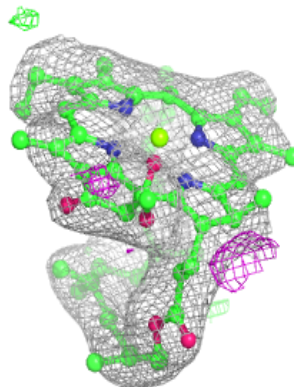
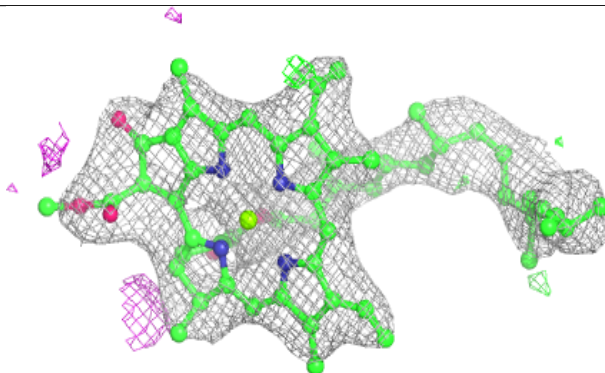
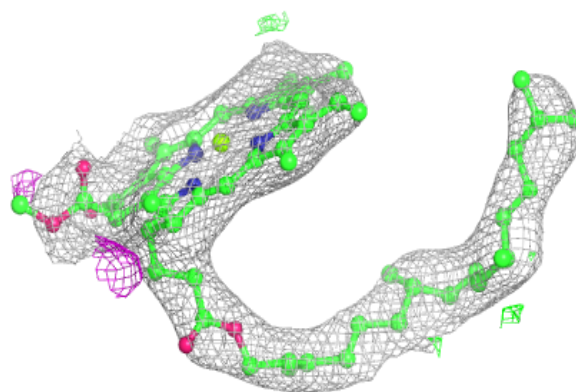


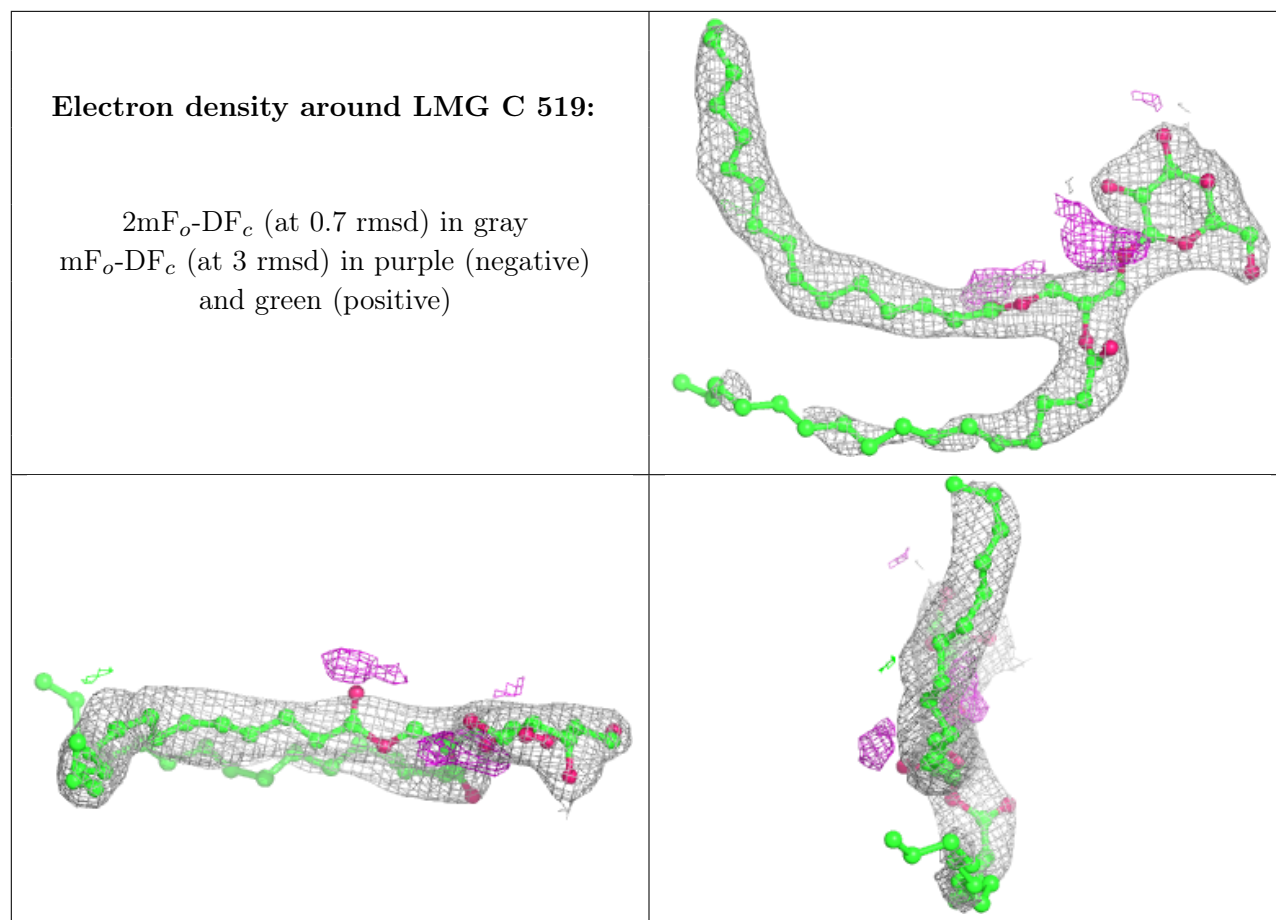
Electron density around SQD F 103:

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

**Electron density around CLA C 513:**

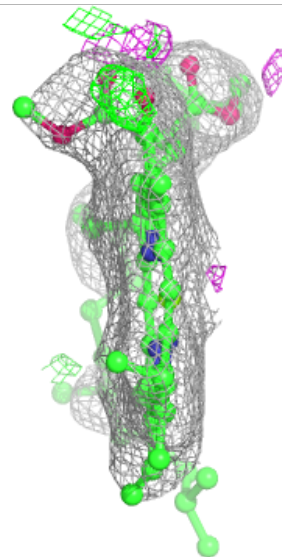
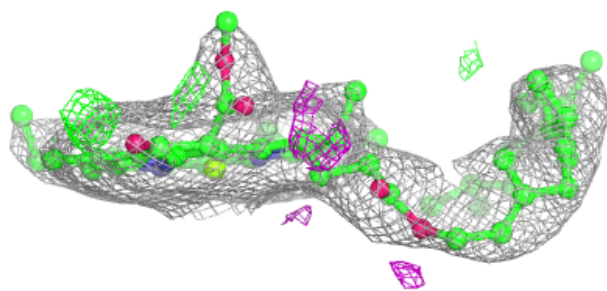
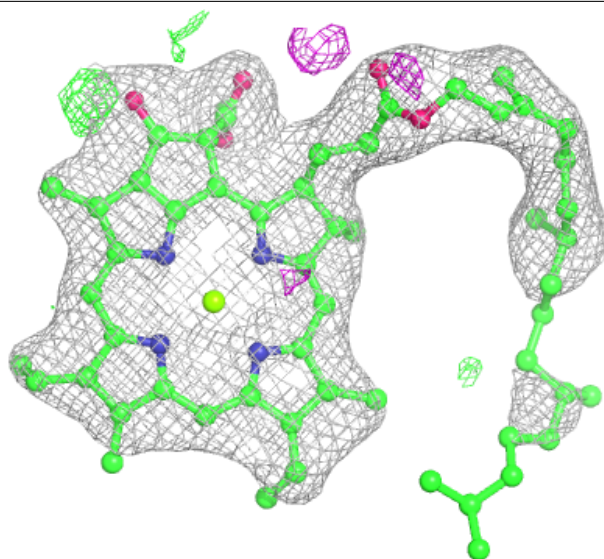
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

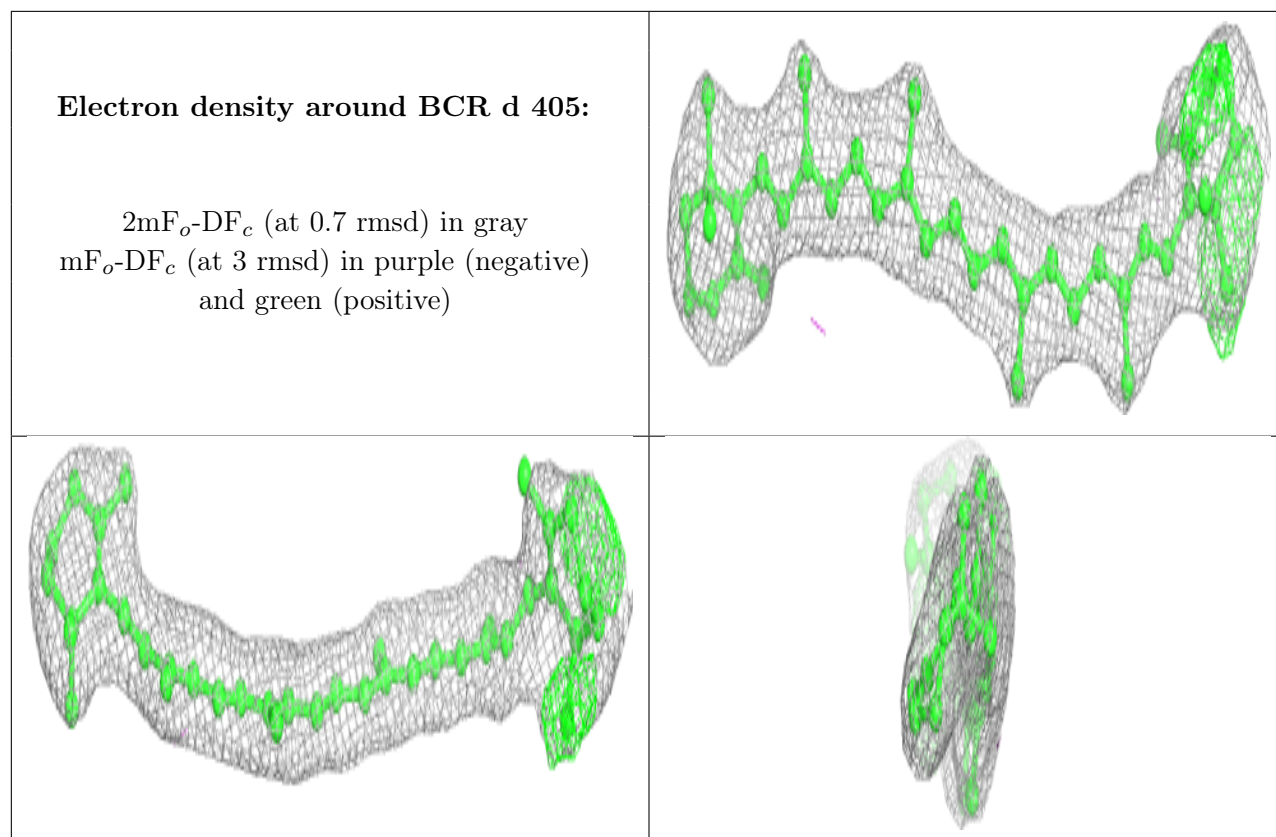




Electron density around CLA c 513:

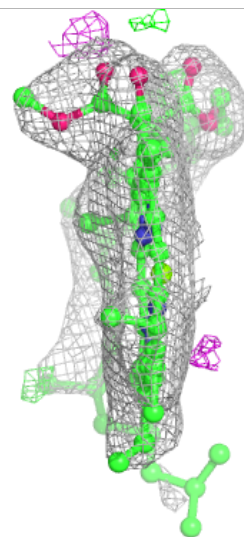
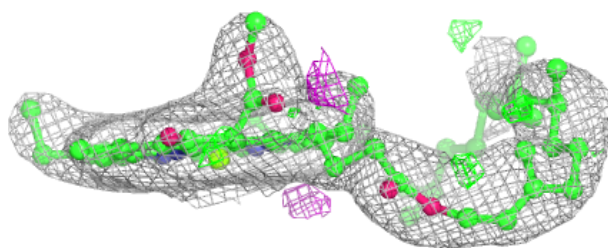
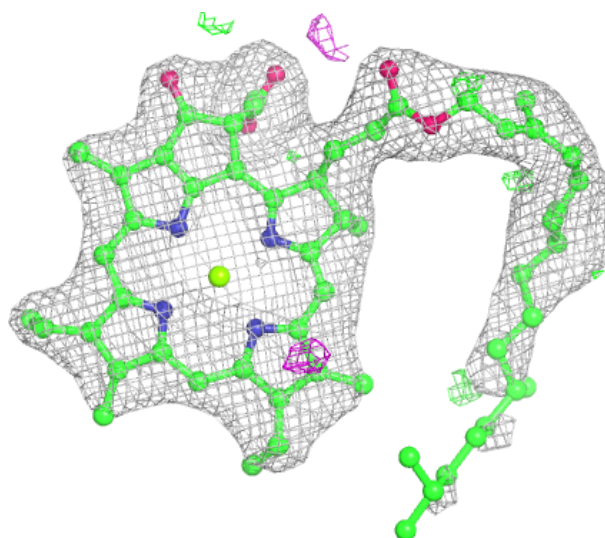
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

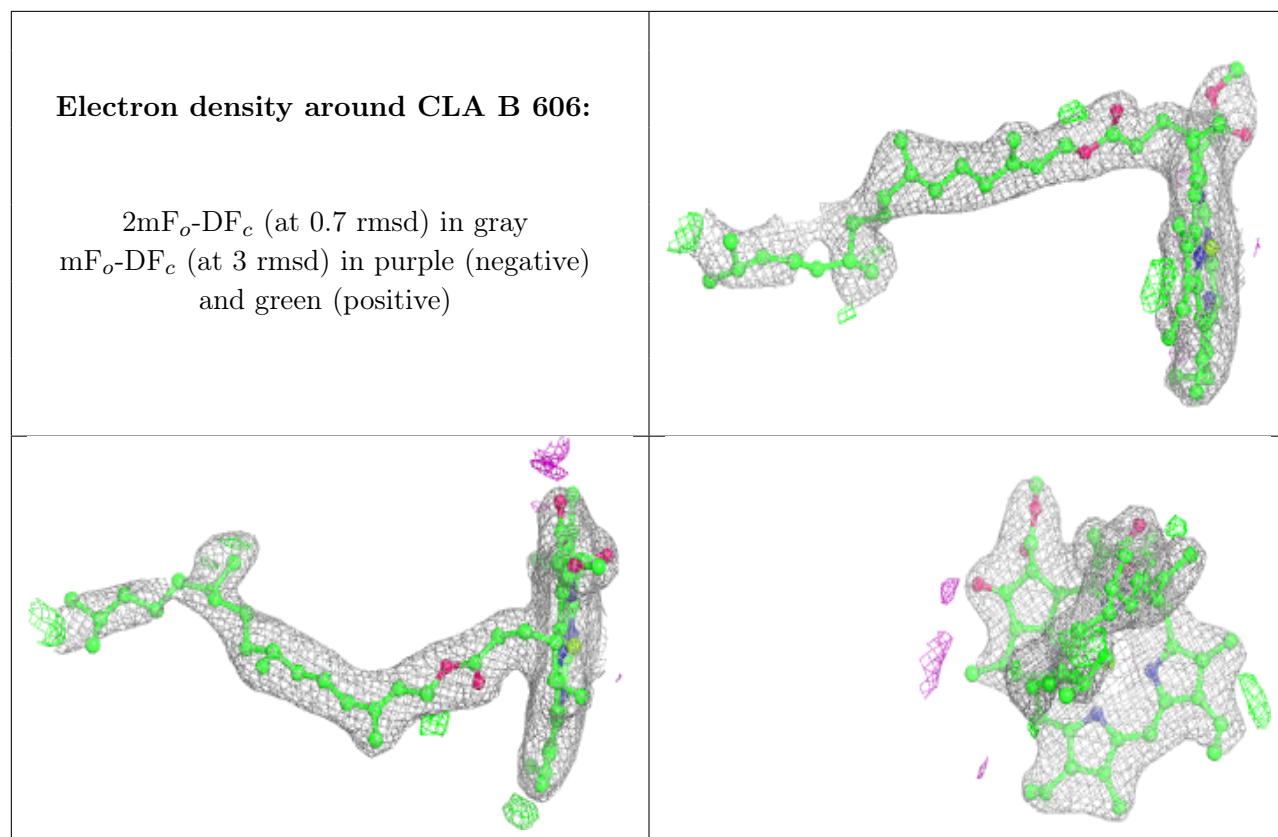




Electron density around CLA C 512:

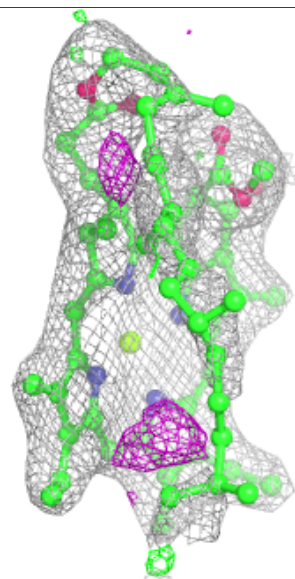
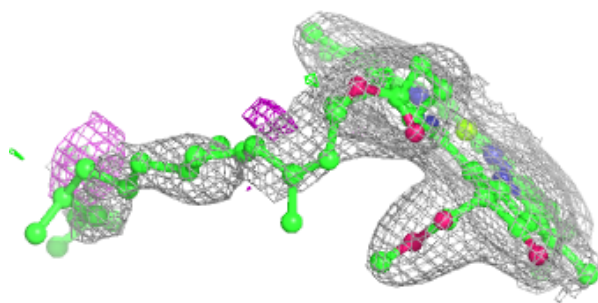
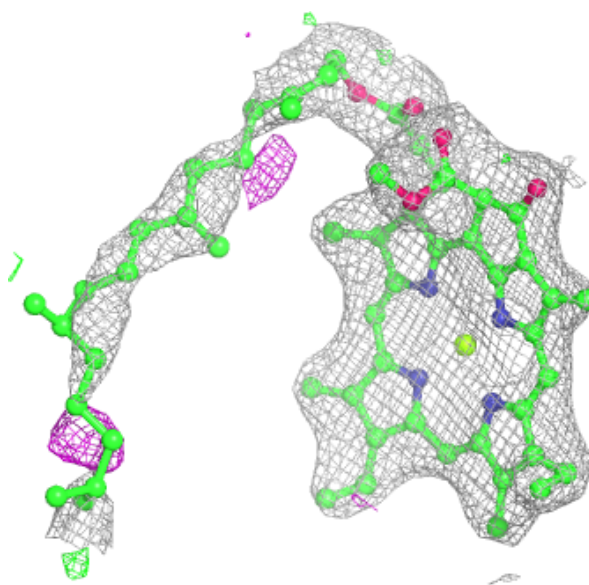
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

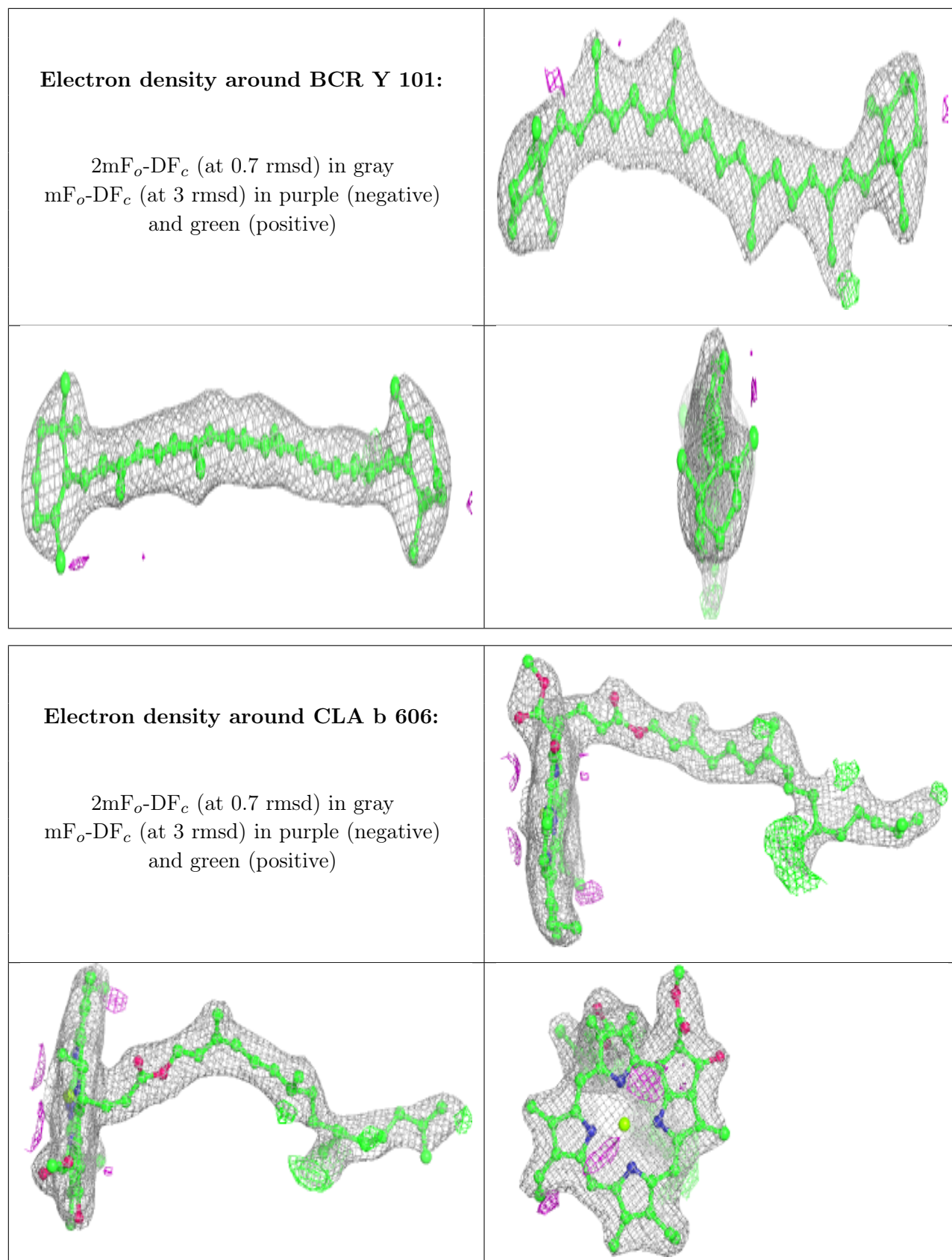




Electron density around CLA B 616:

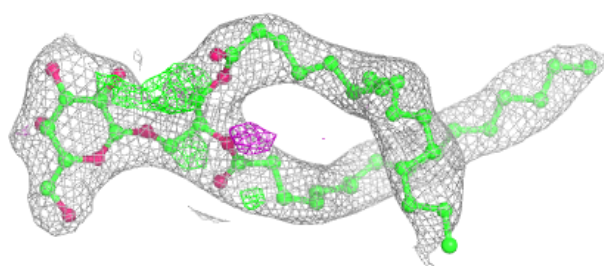
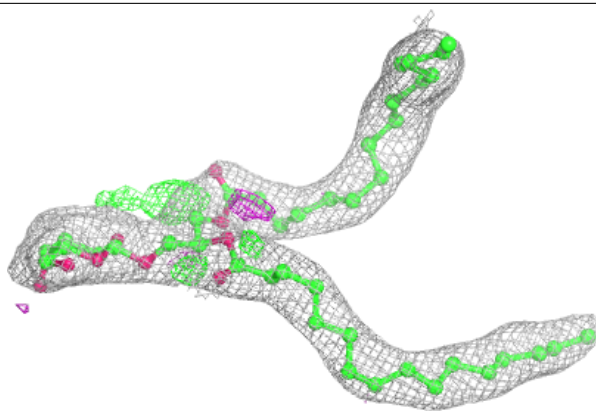
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



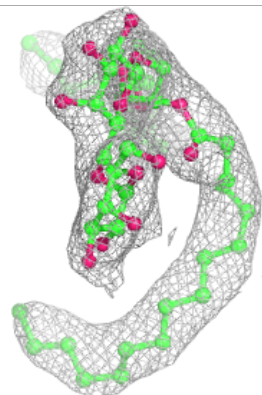
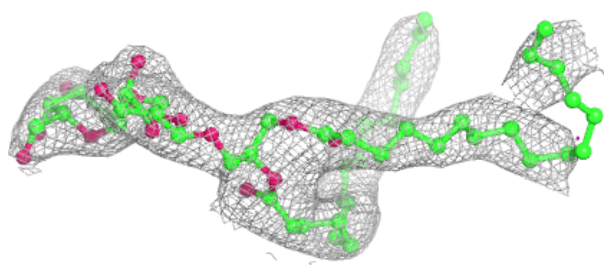
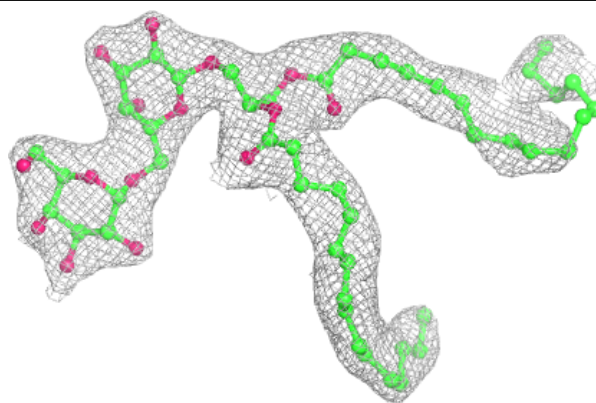


Electron density around LMG B 621:

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

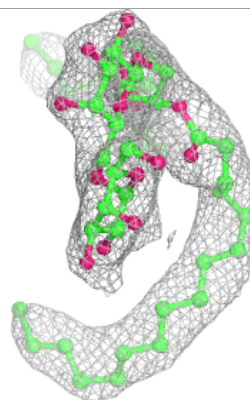
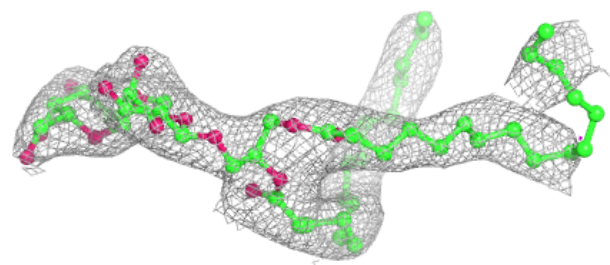
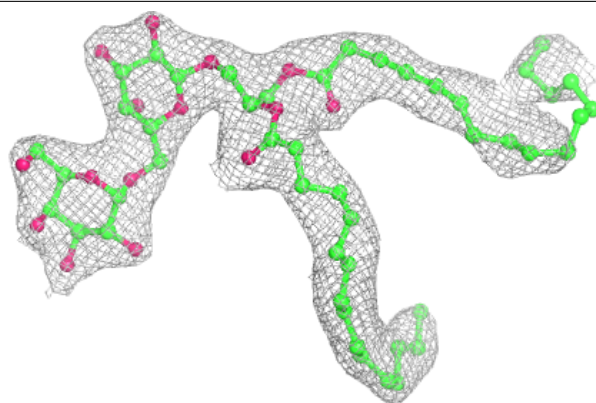
**Electron density around DGD c 518 (A):**

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

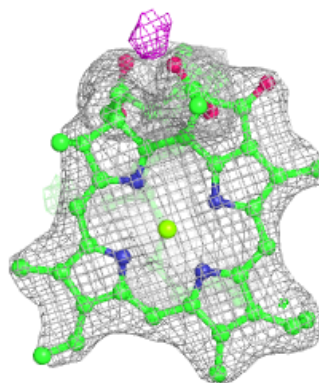
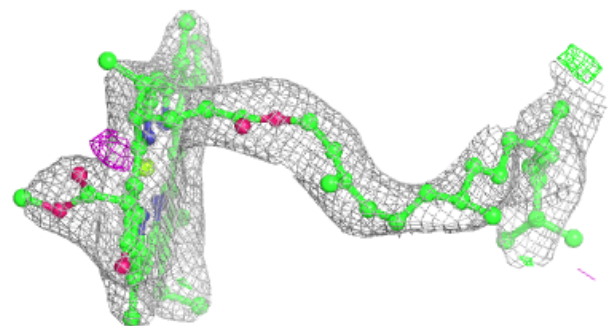
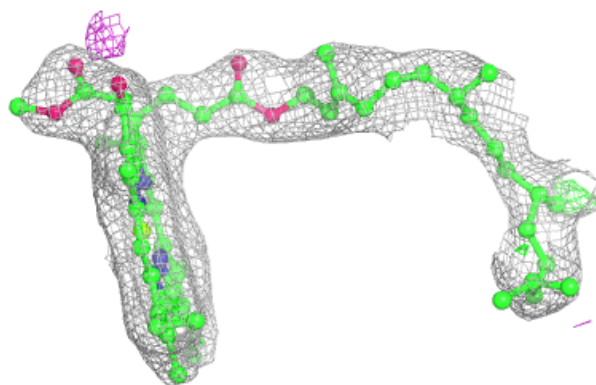


Electron density around DGD c 518 (B):

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

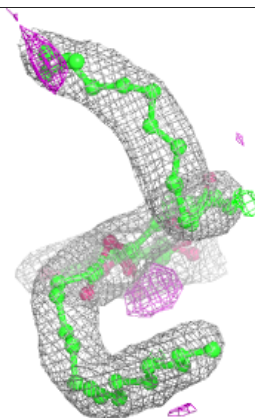
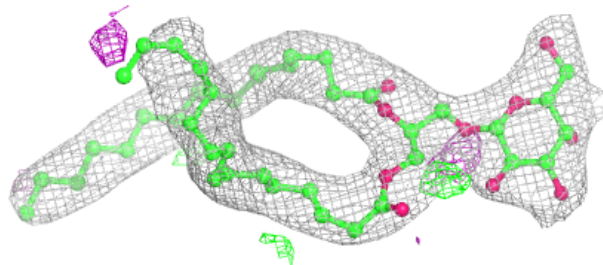
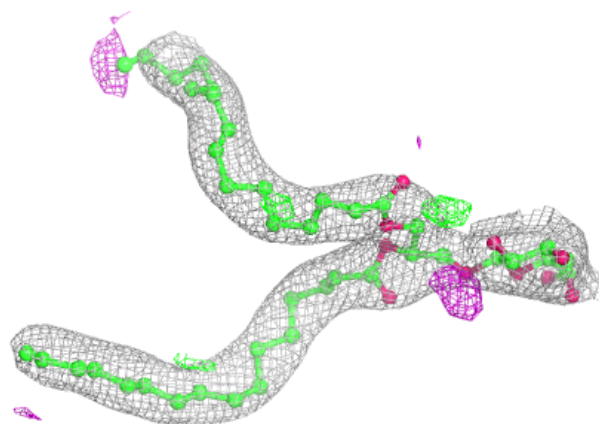
**Electron density around CLA C 506:**

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

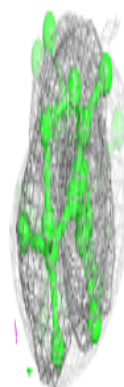
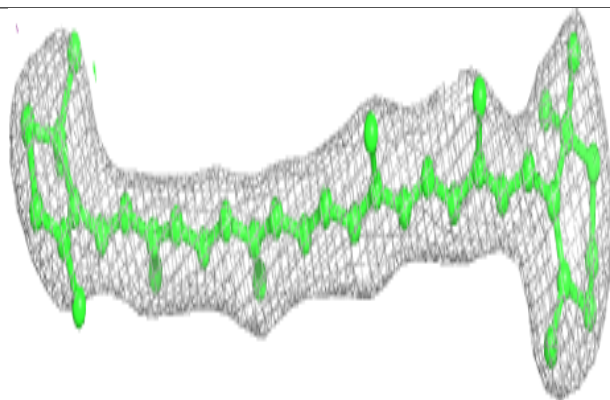
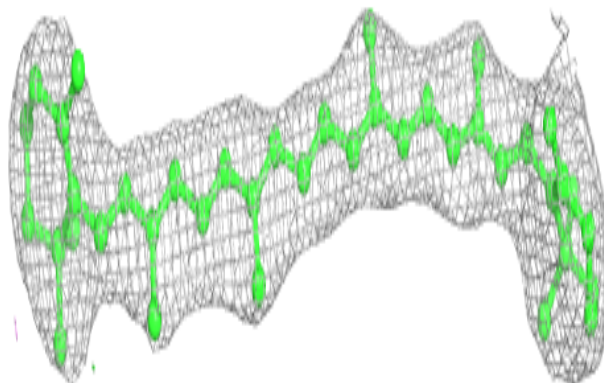


Electron density around LMG m 101:

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

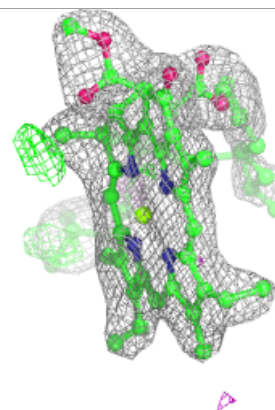
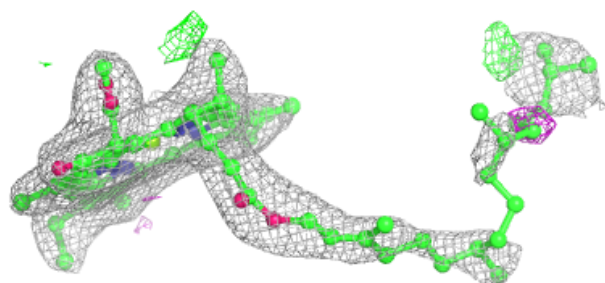
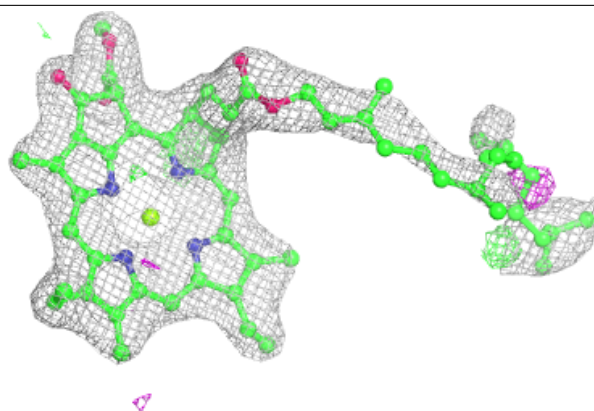
**Electron density around BCR c 515:**

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

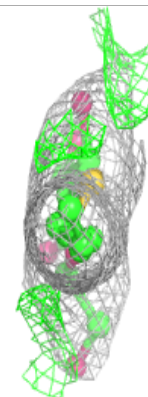
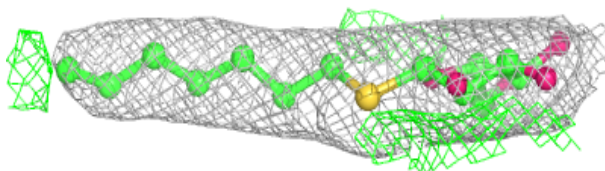
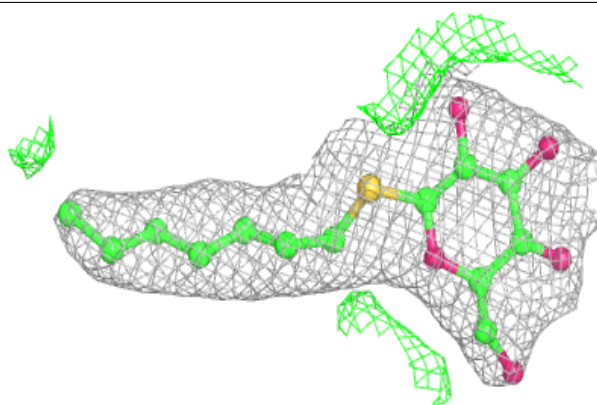


Electron density around CLA a 407:

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

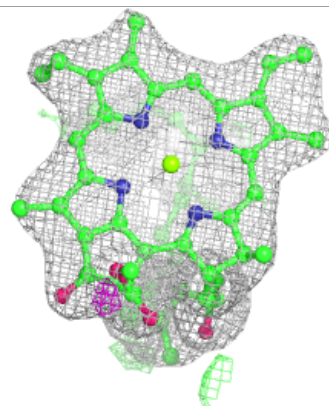
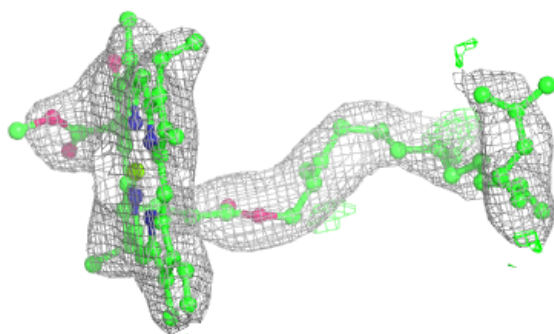
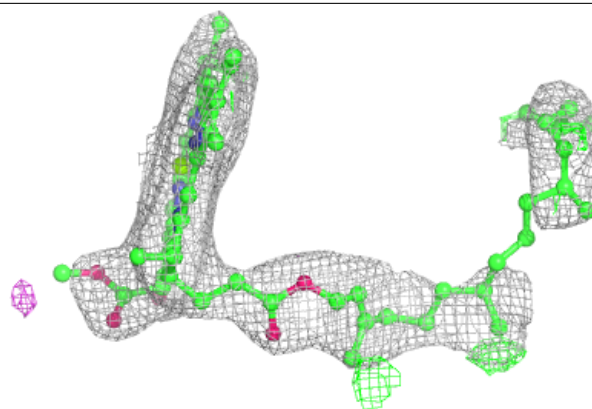
**Electron density around HTG b 625:**

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

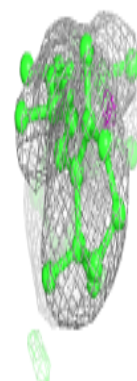
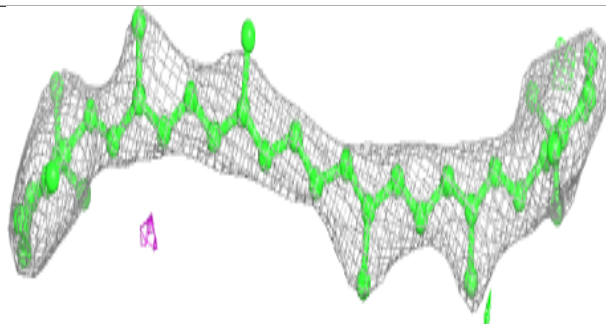
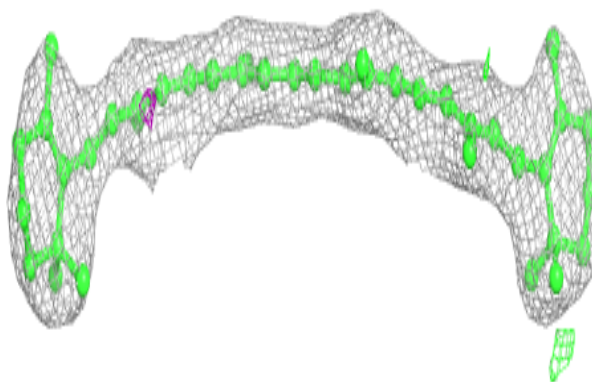


Electron density around CLA c 507:

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

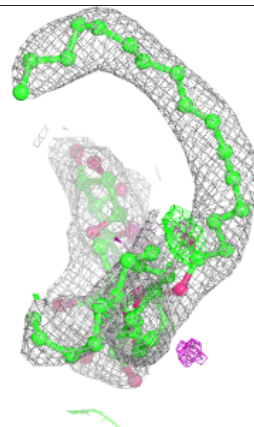
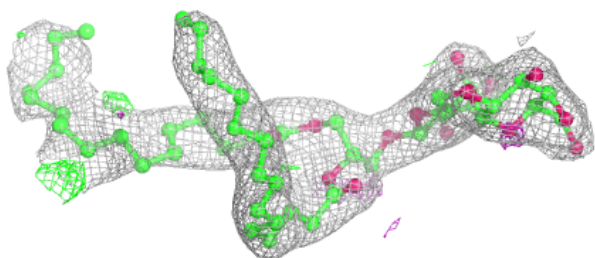
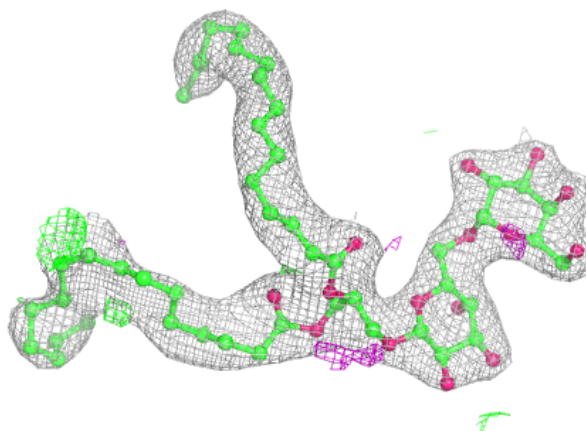
**Electron density around BCR k 101:**

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



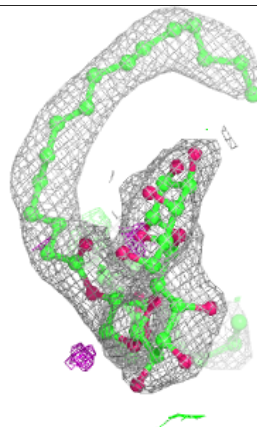
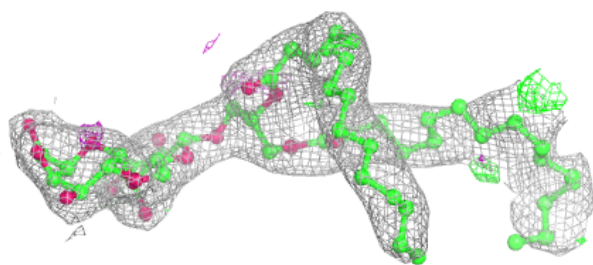
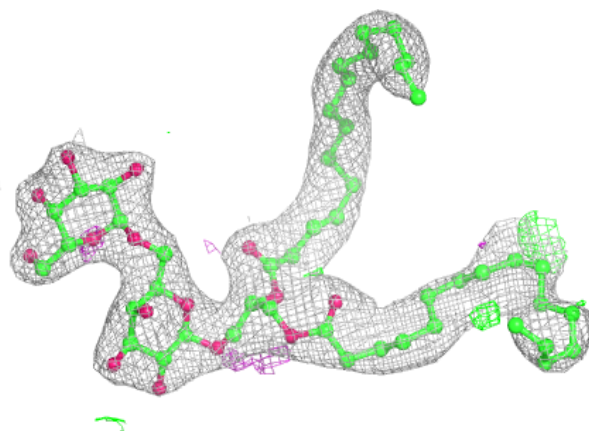
Electron density around DGD C 517 (A):

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

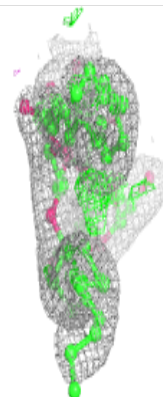
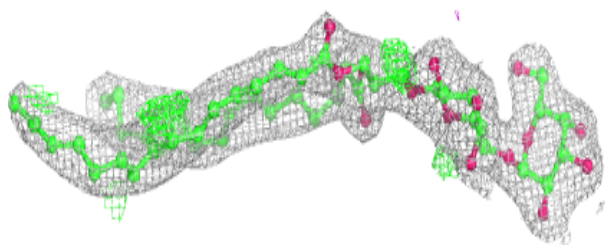
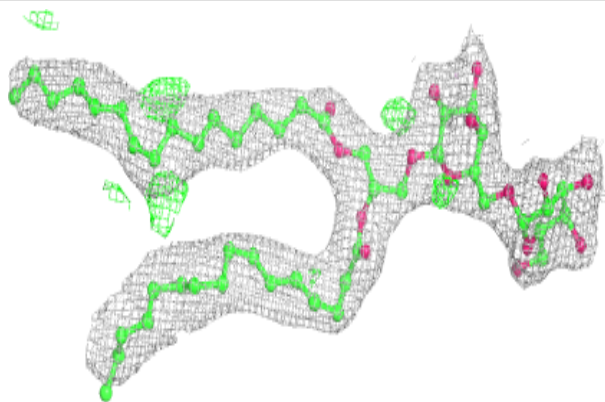


Electron density around DGD C 517 (B):

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

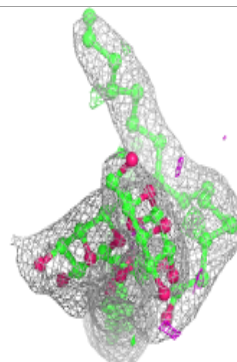
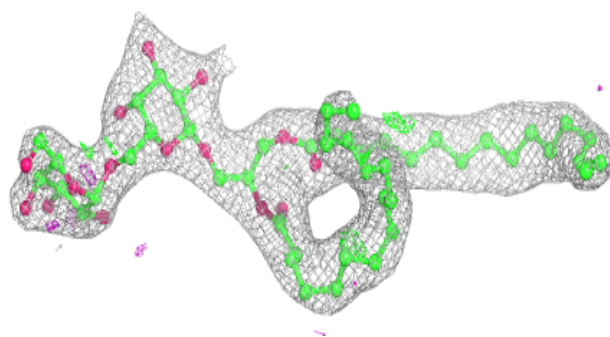
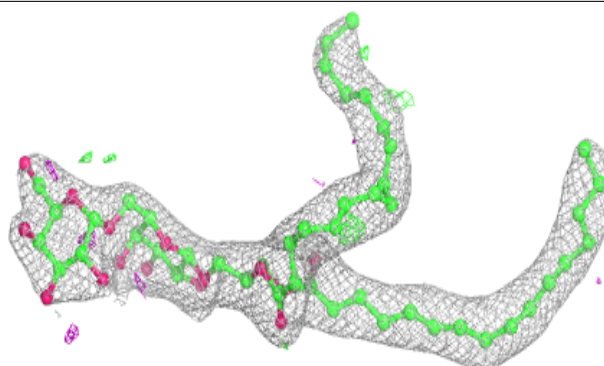
**Electron density around DGD C 518:**

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

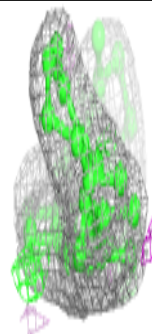
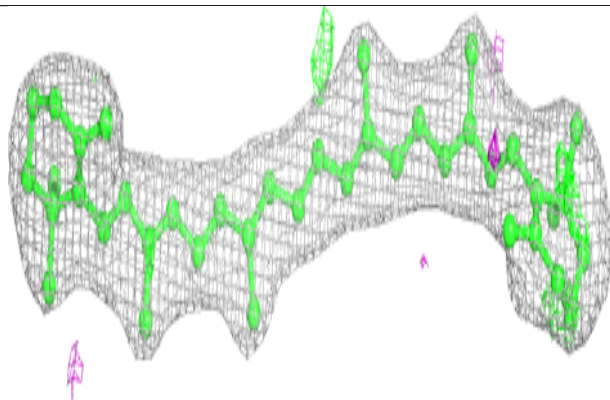
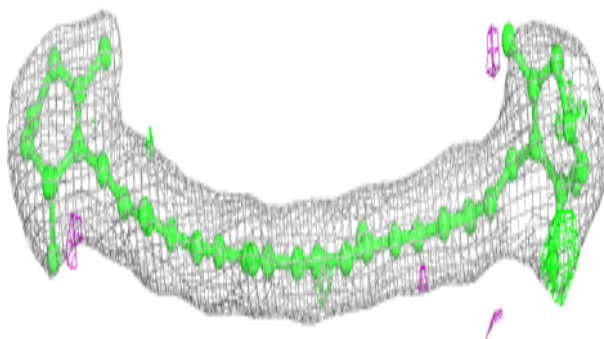


Electron density around DGD H 102:

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

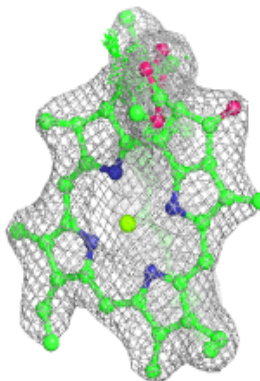
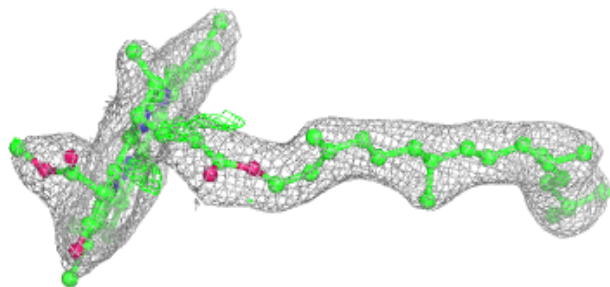
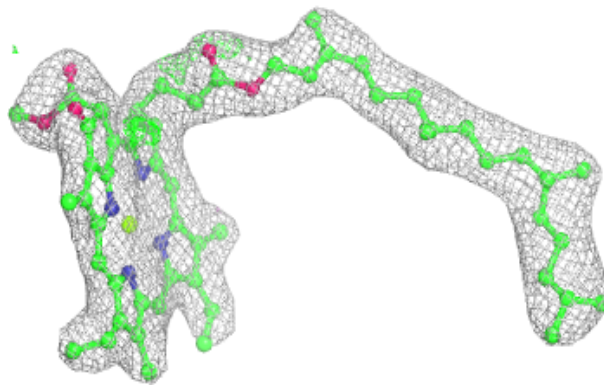
**Electron density around BCR D 405:**

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

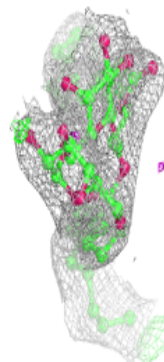
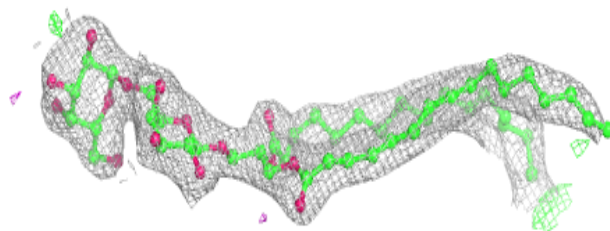
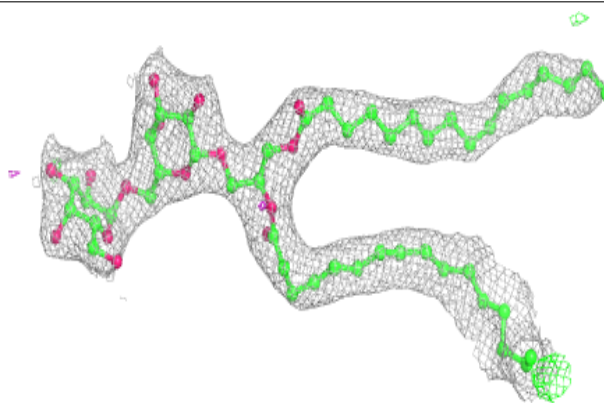


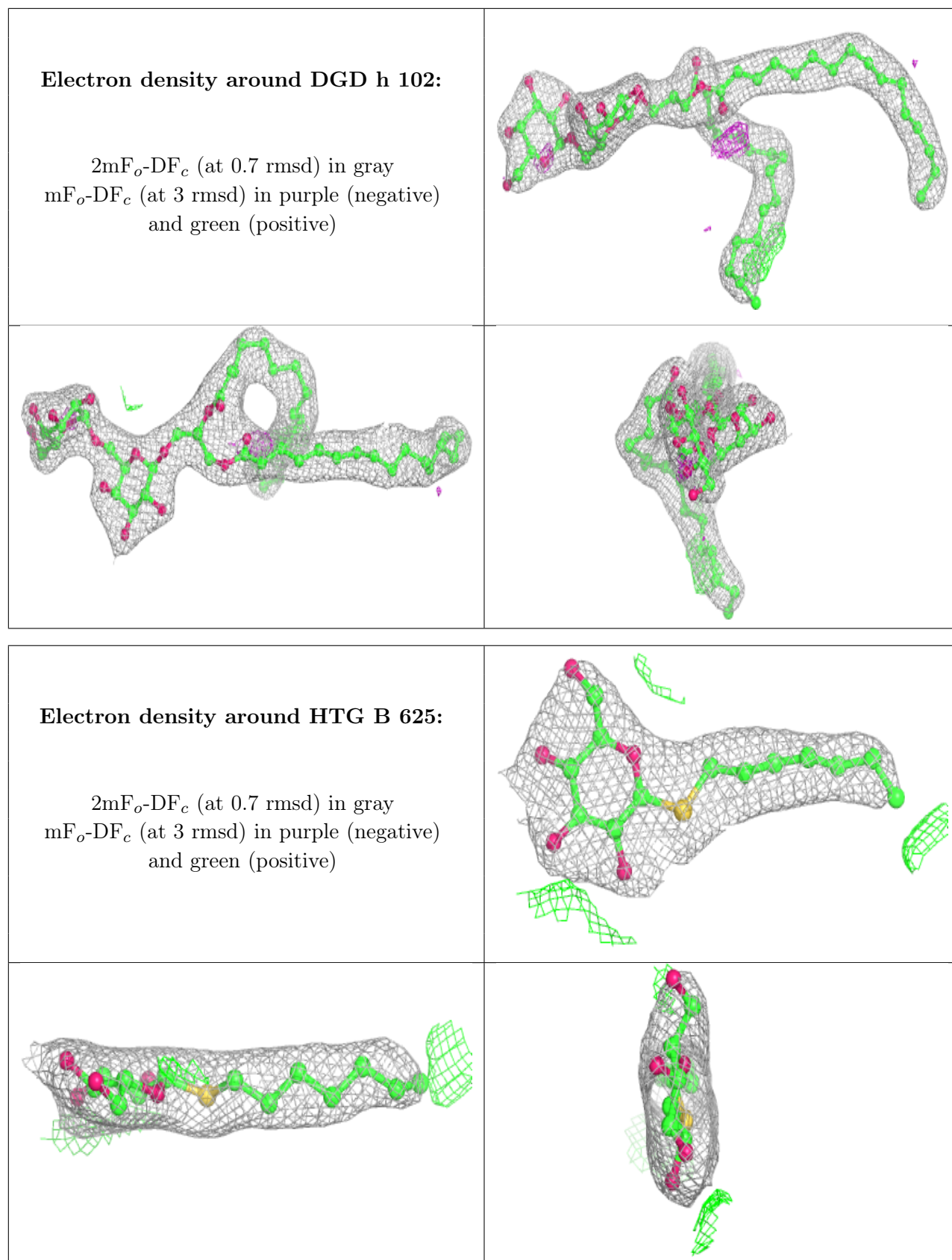
Electron density around CLA B 609:

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

**Electron density around DGD c 519:**

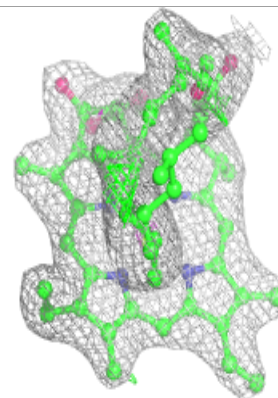
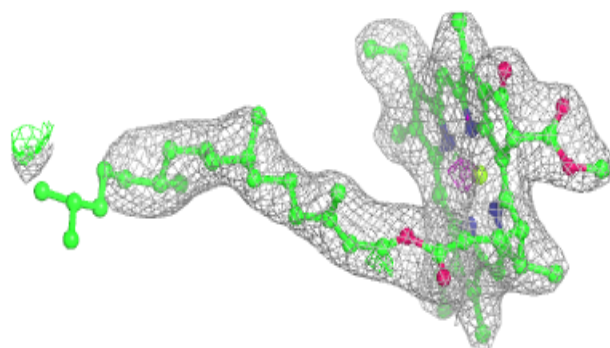
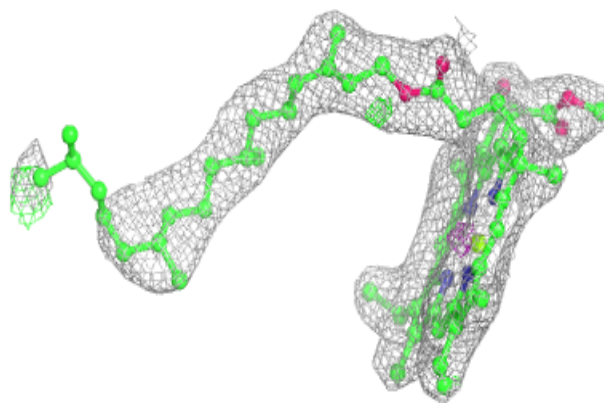
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



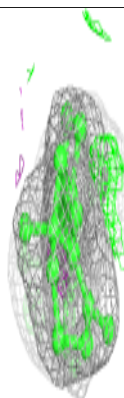
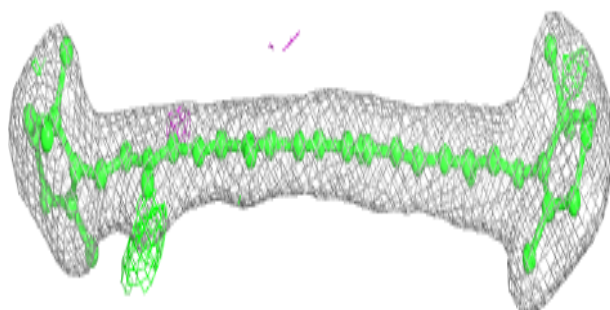
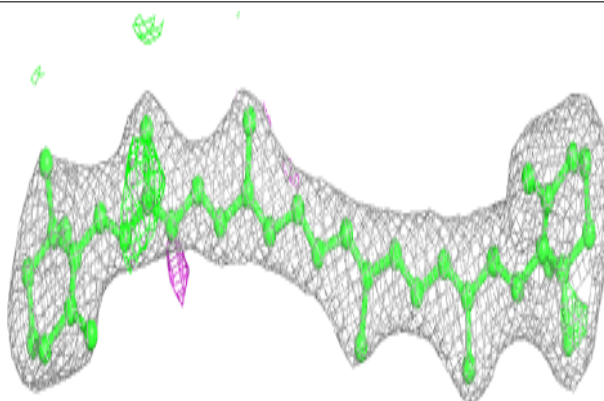


Electron density around CLA C 508:

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

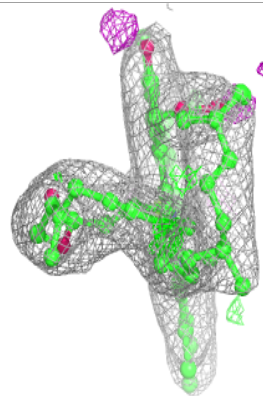
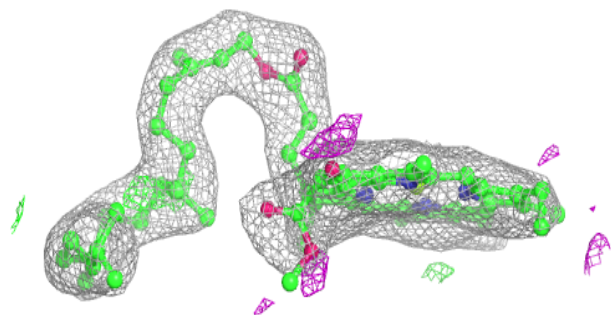
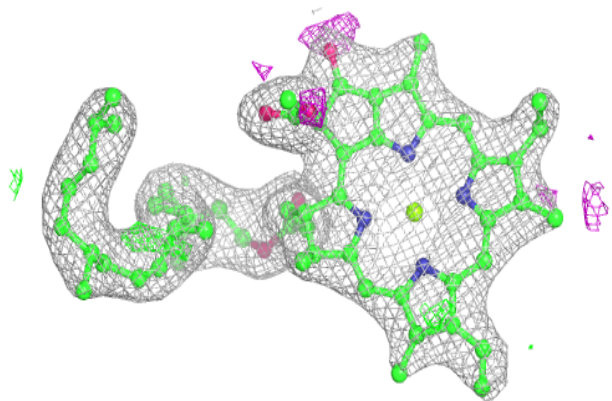
**Electron density around BCR b 618:**

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



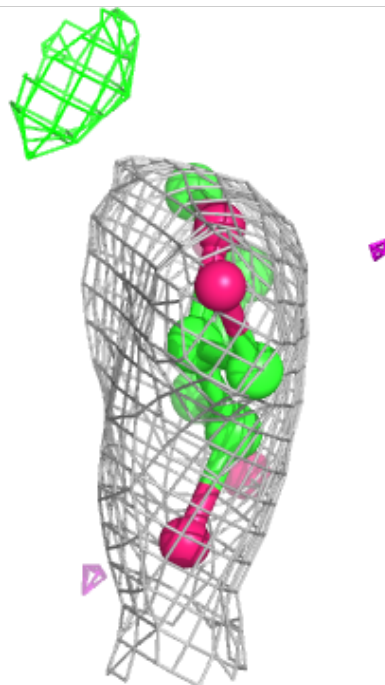
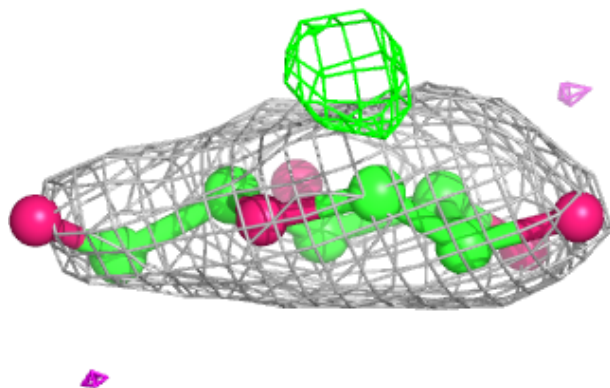
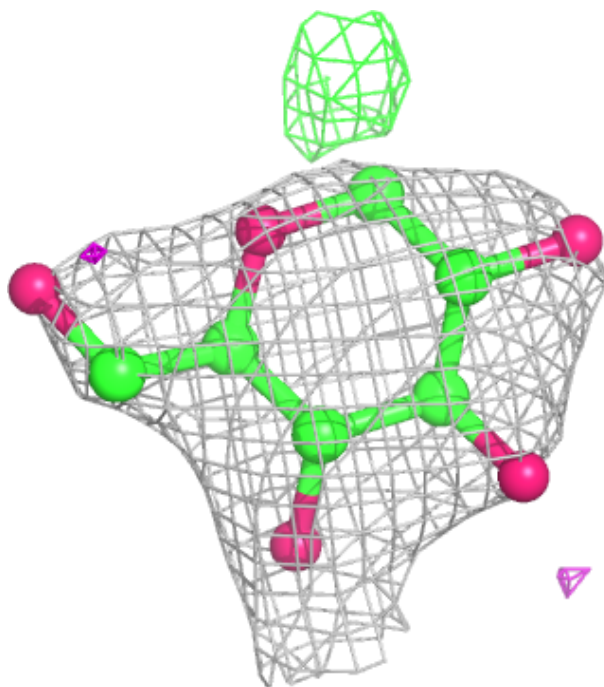
Electron density around CLA b 612:

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



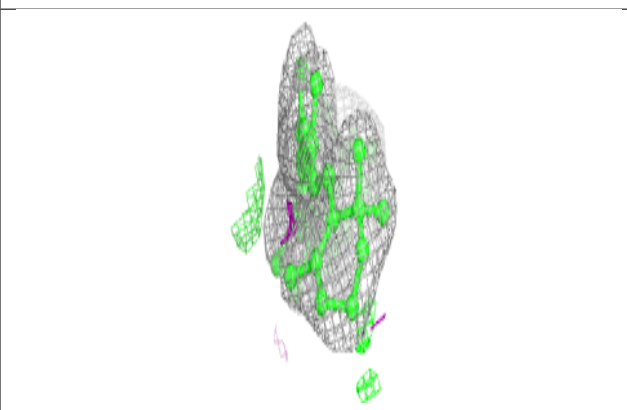
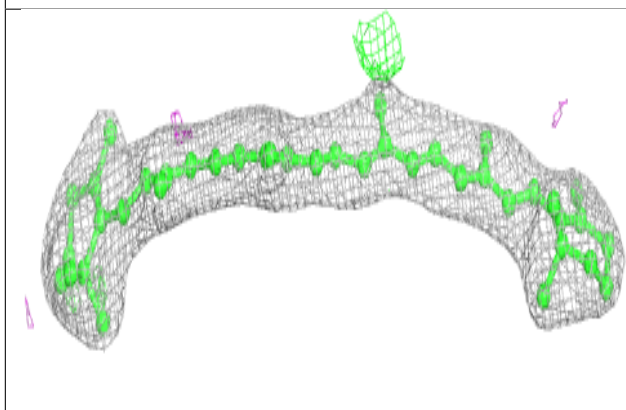
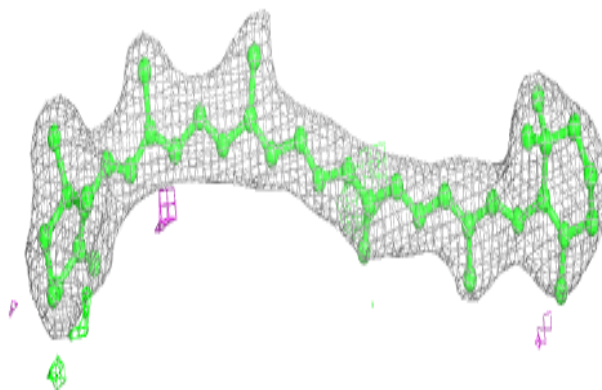
Electron density around HTG V 202:

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

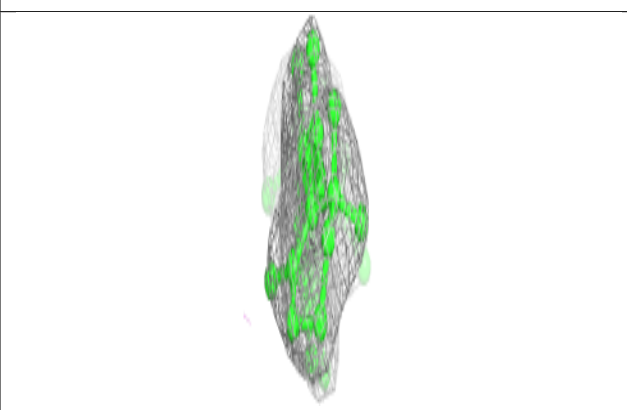
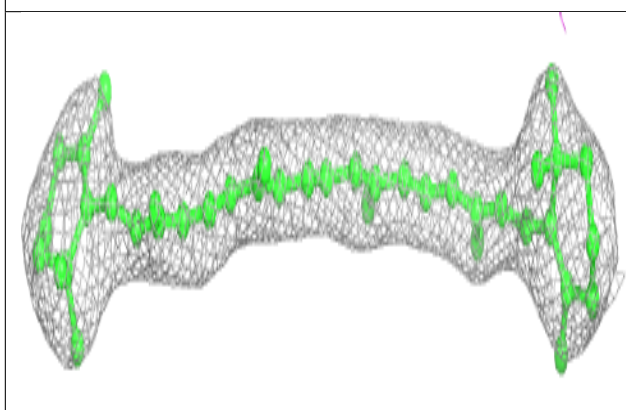
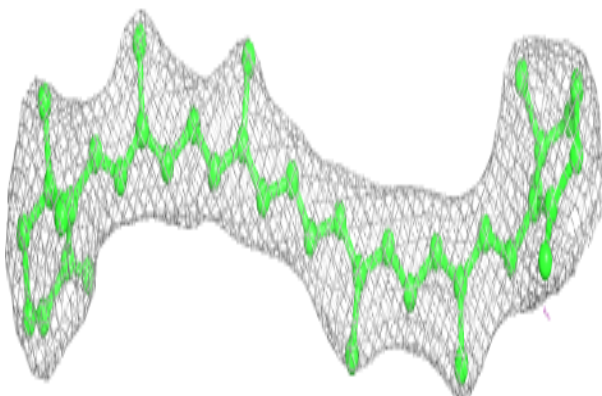


Electron density around BCR t 102:

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

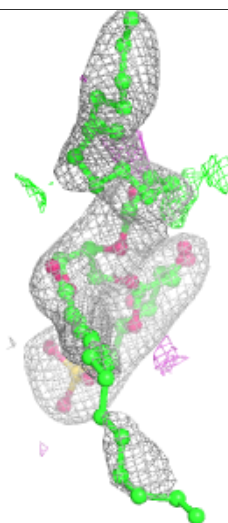
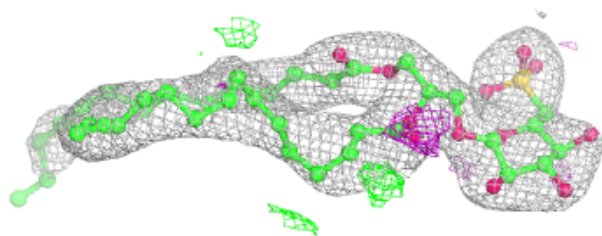
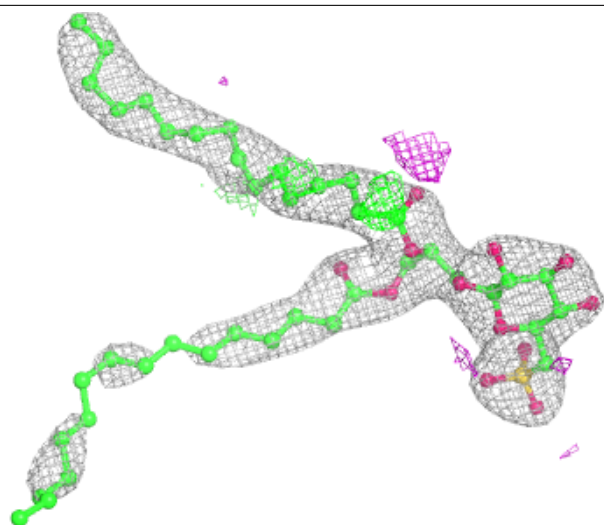
**Electron density around BCR y 101:**

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



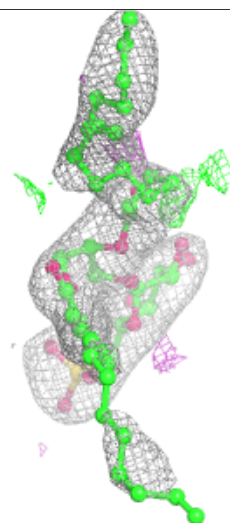
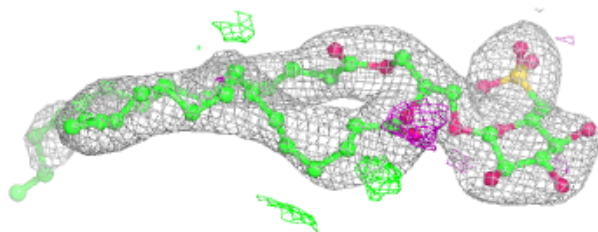
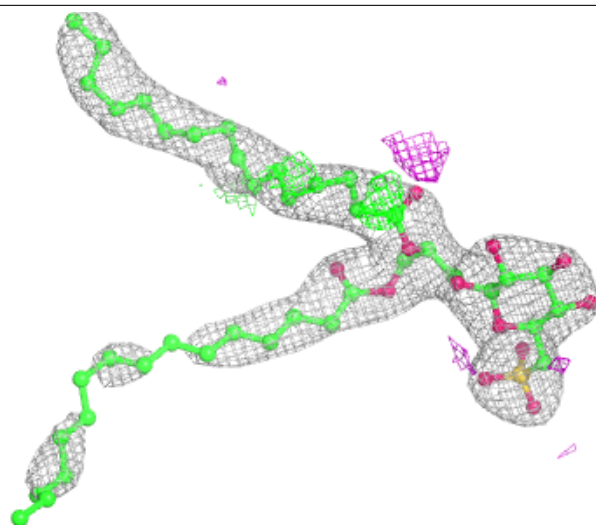
Electron density around SQD A 410 (A):

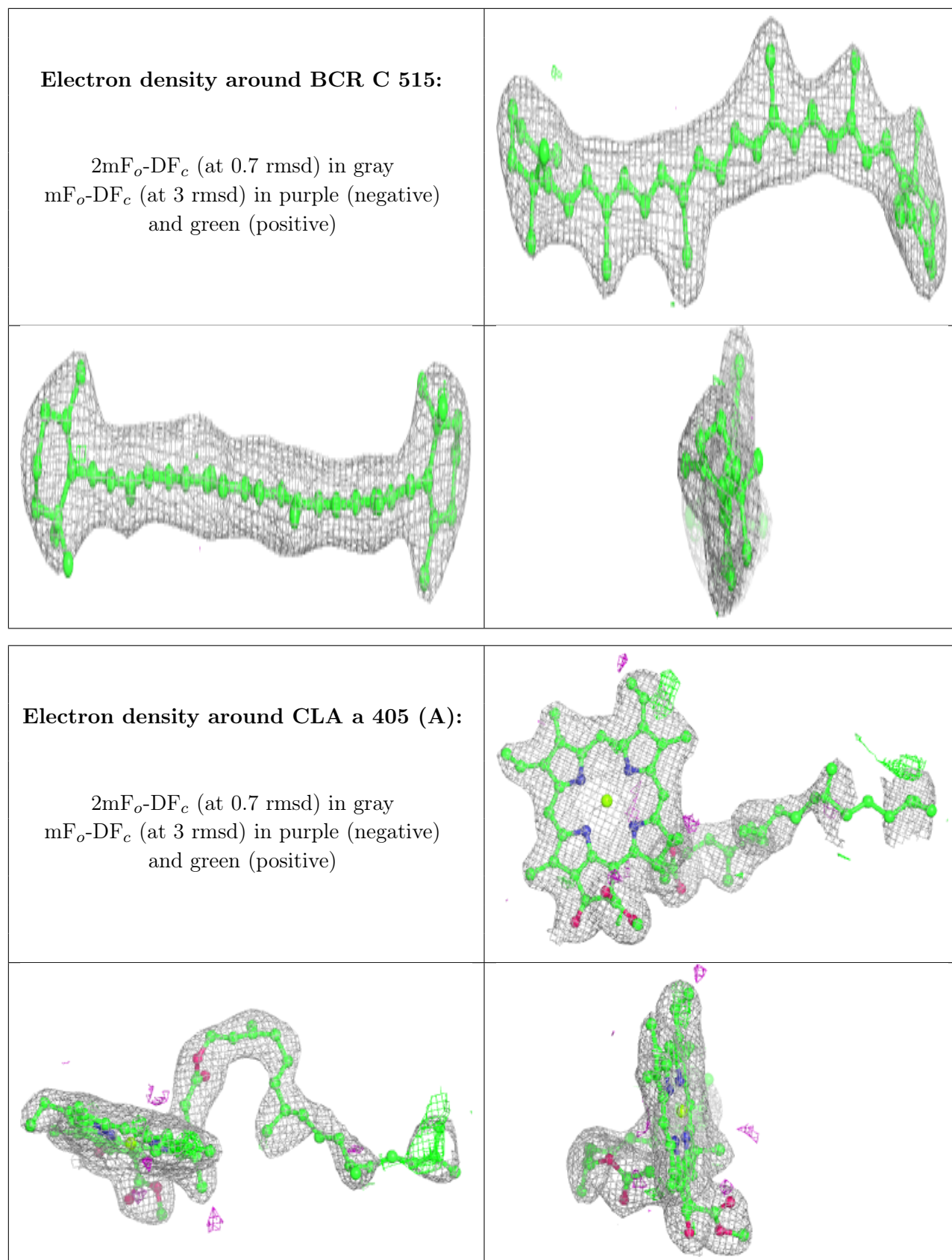
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

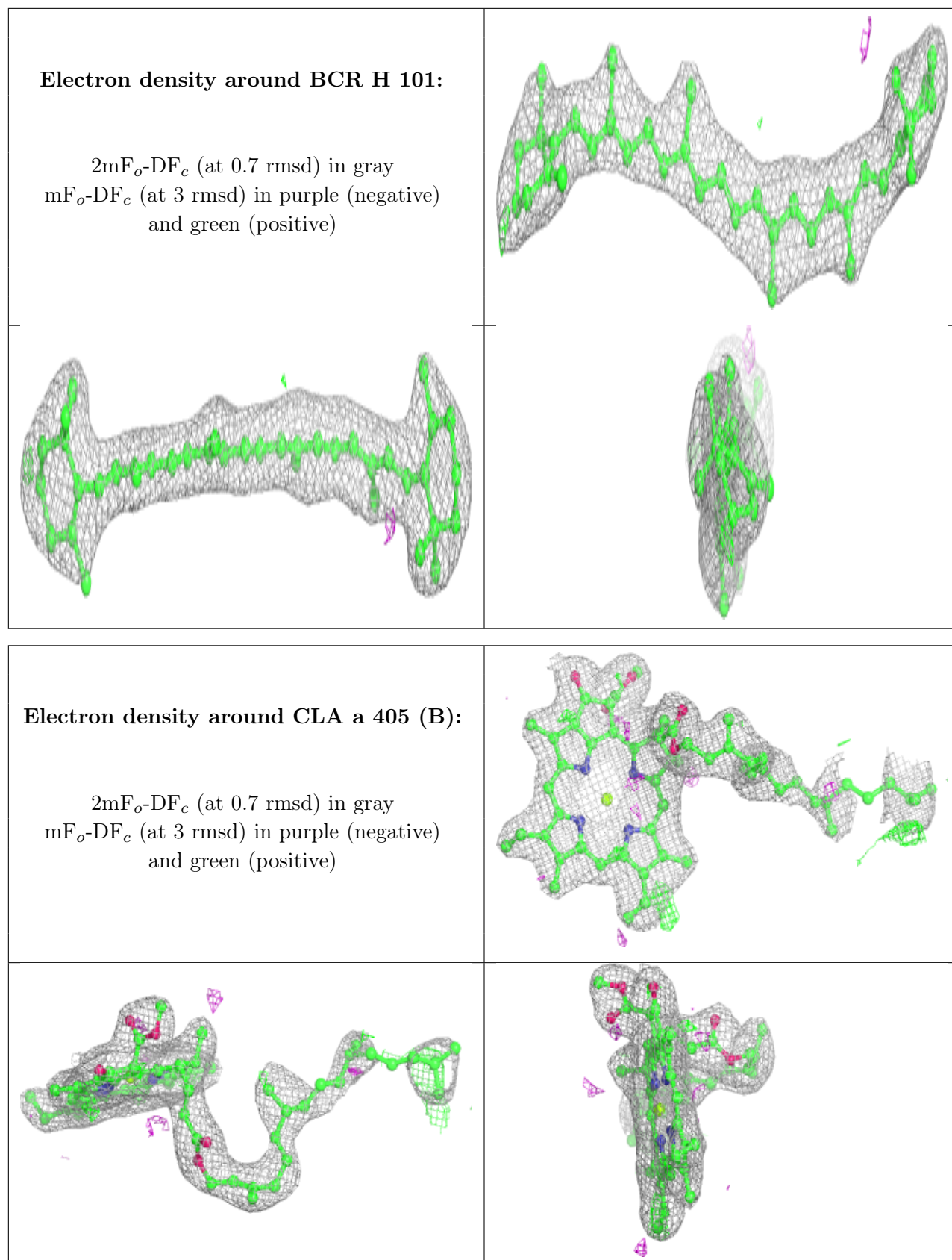


Electron density around SQD A 410 (B):

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

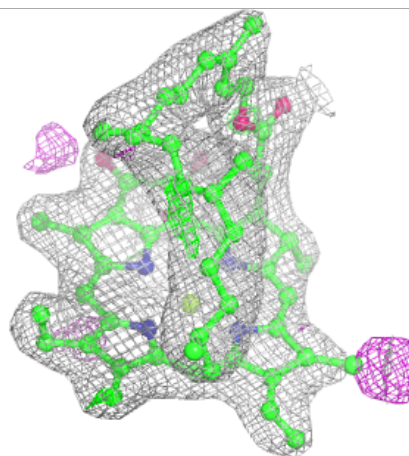
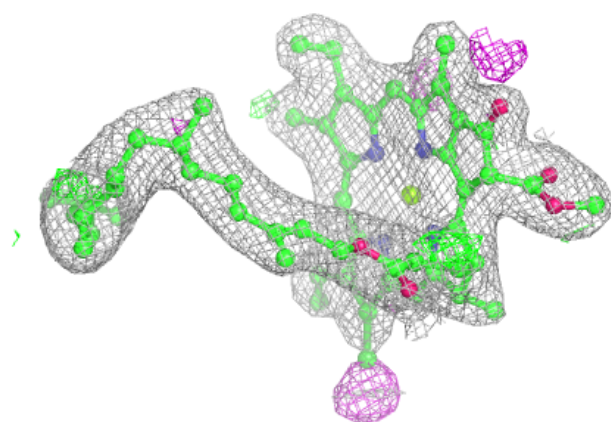
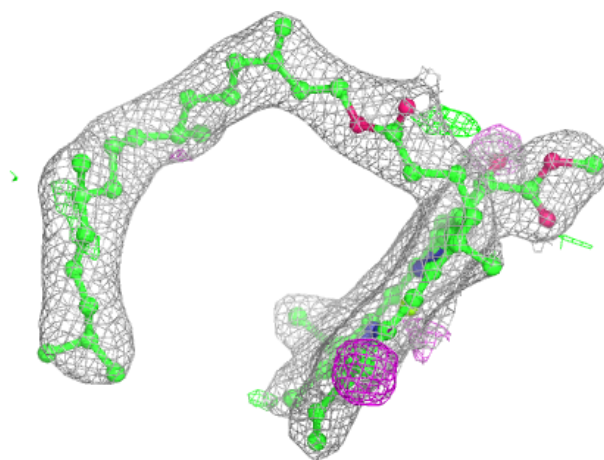






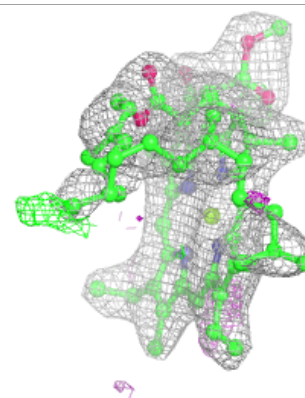
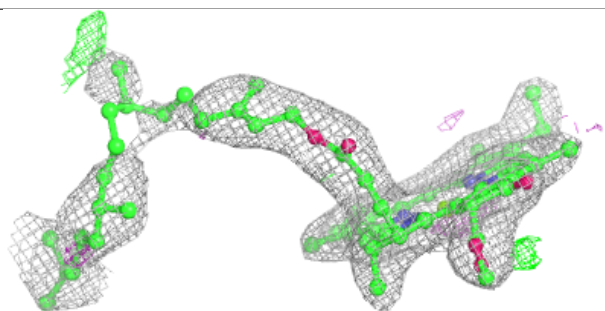
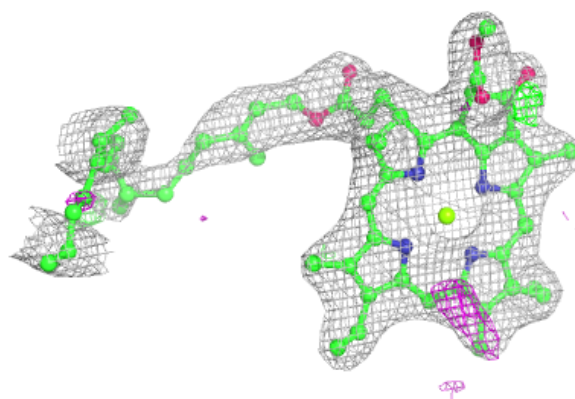
Electron density around CLA B 611:

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

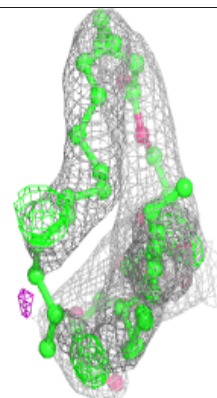
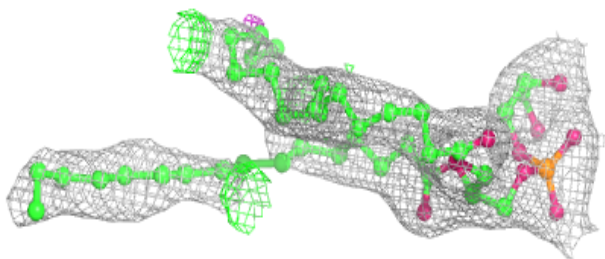
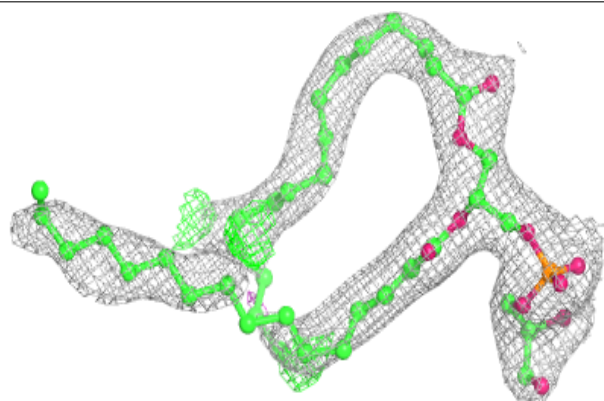


Electron density around CLA A 408:

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

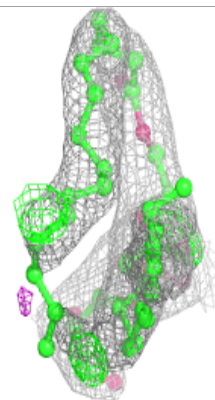
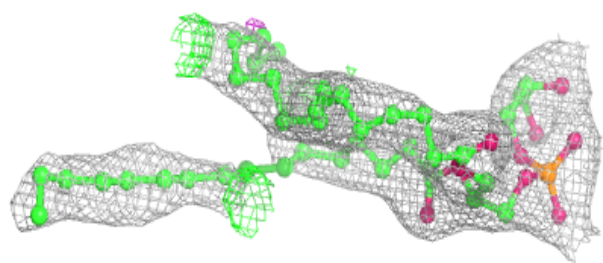
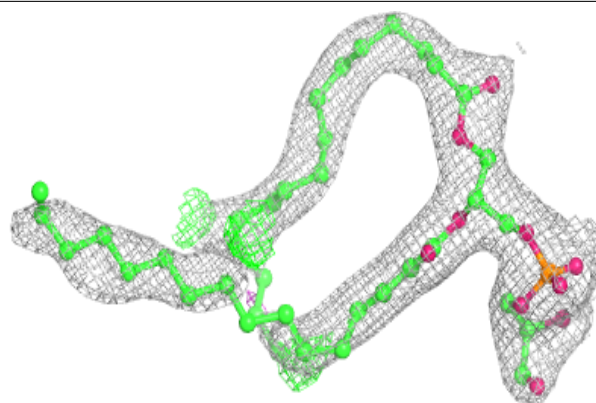
**Electron density around LHG d 408 (A):**

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

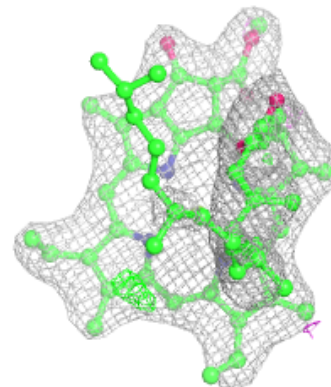
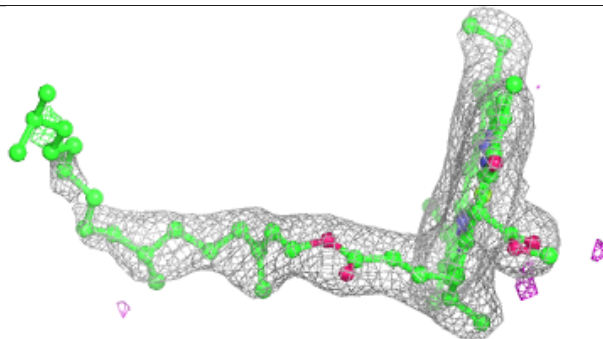
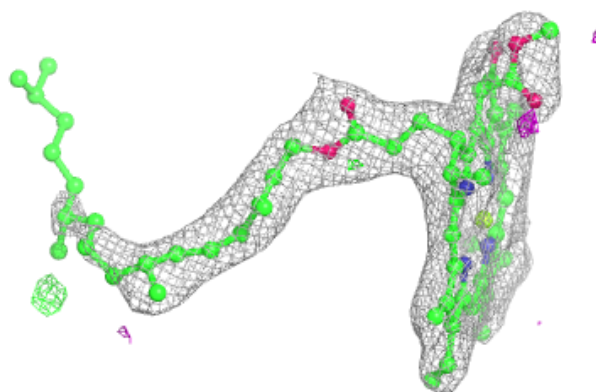


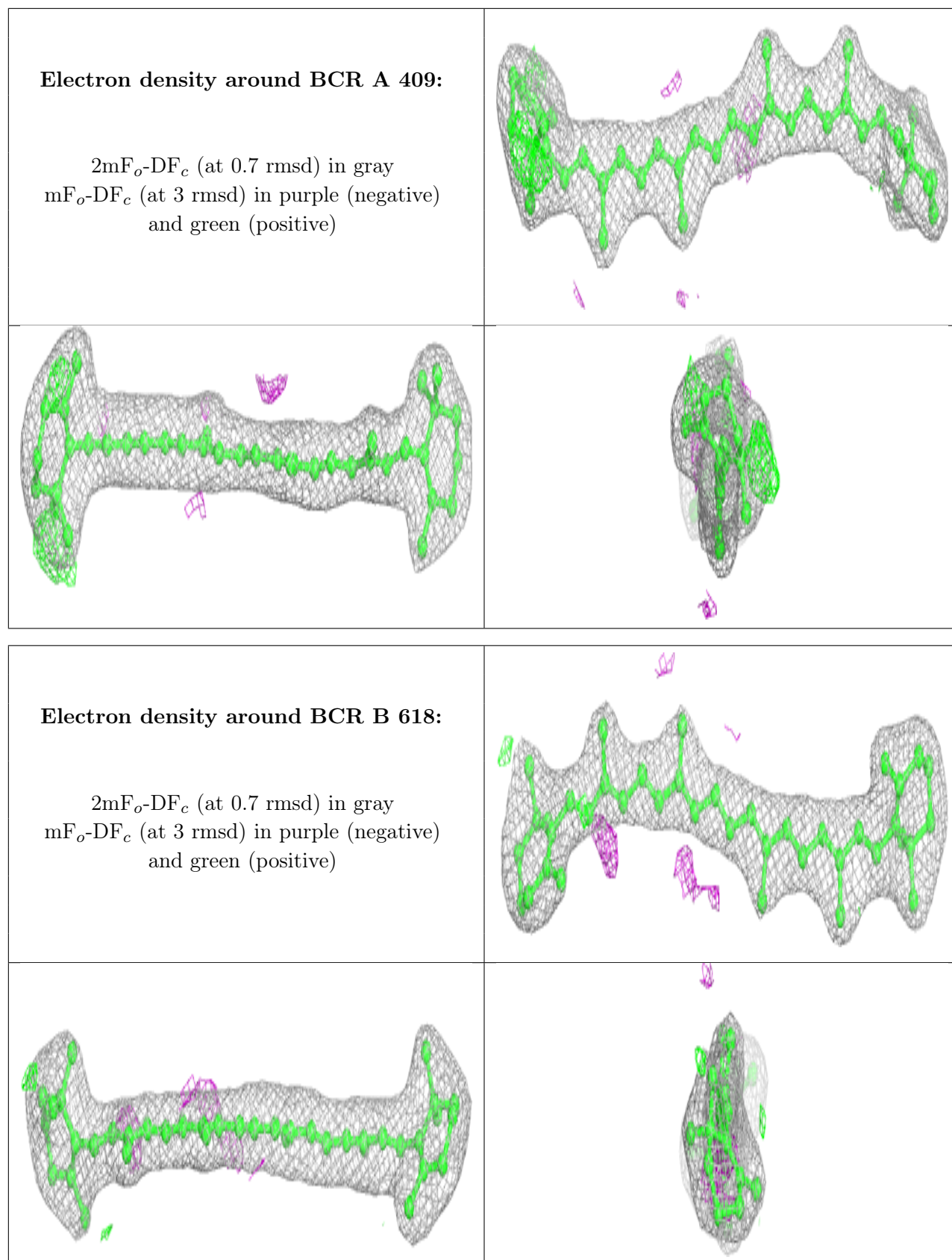
Electron density around LHG d 408 (B):

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

**Electron density around CLA D 404:**

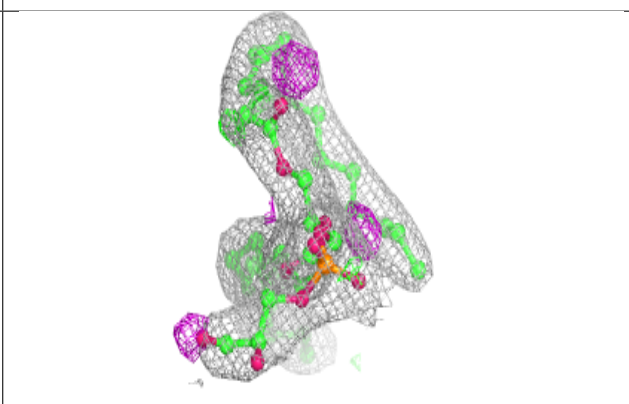
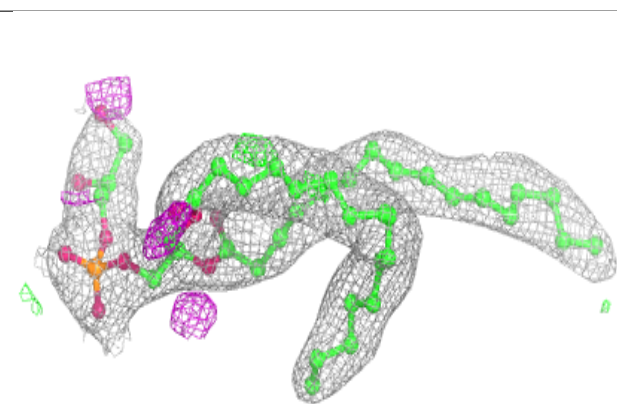
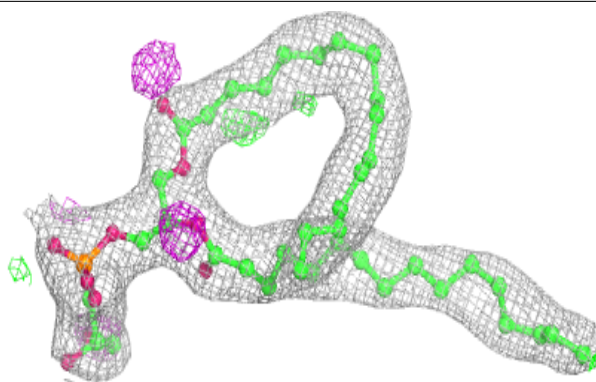
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



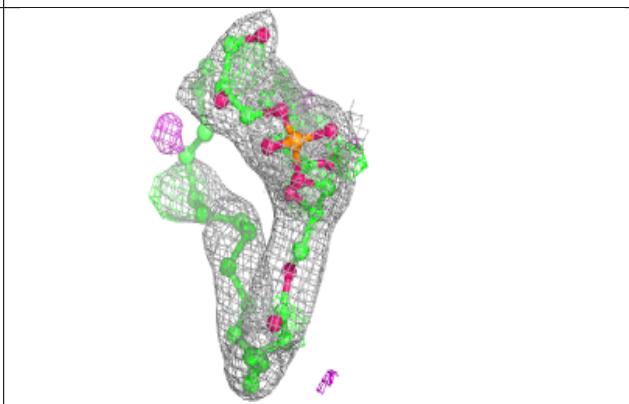
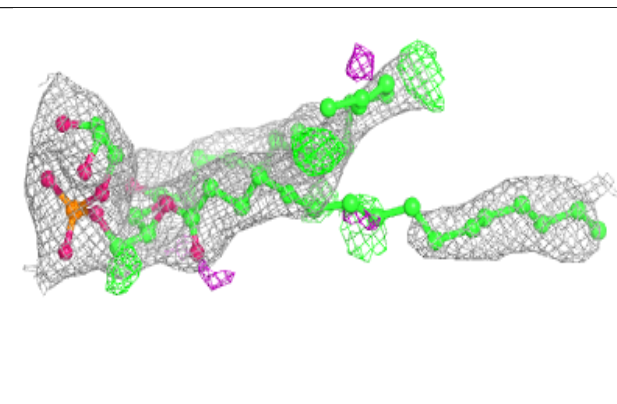
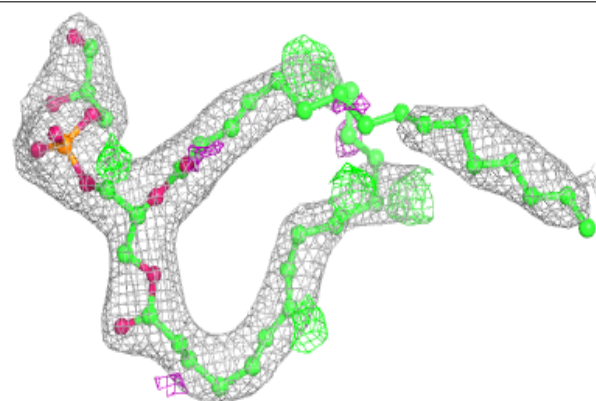


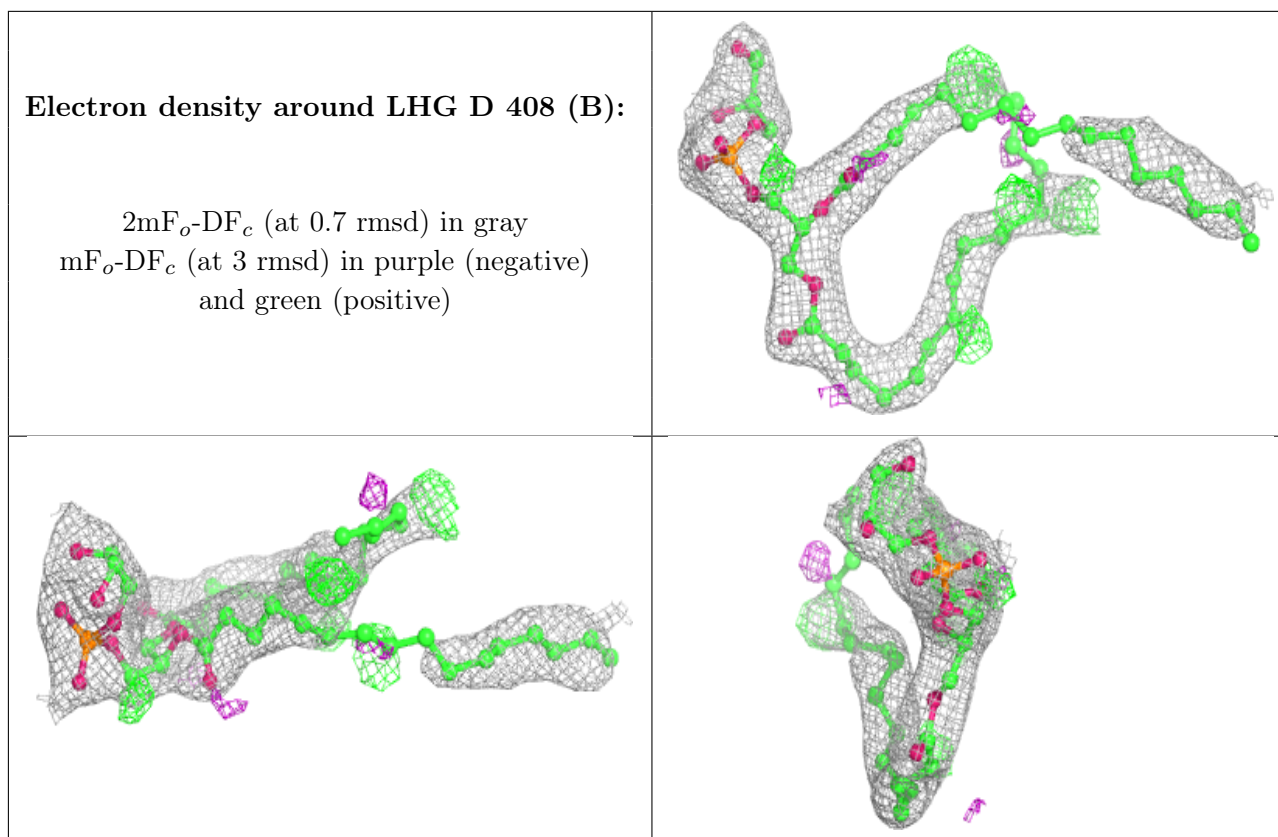
Electron density around LHG A 419 (B):

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

**Electron density around LHG D 408 (A):**

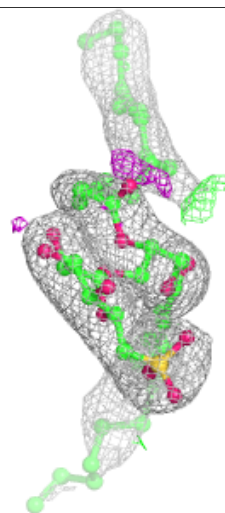
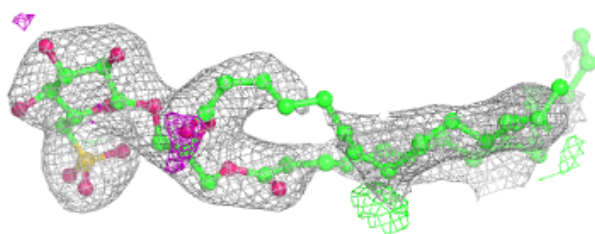
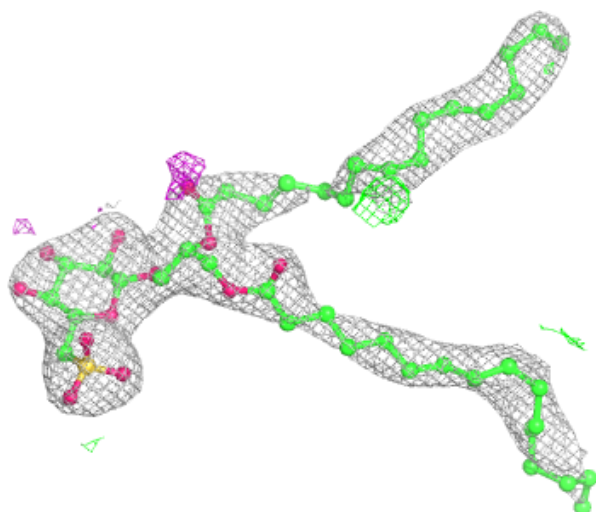
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





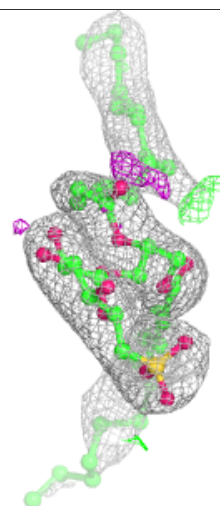
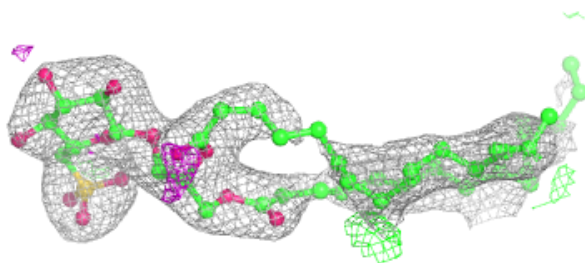
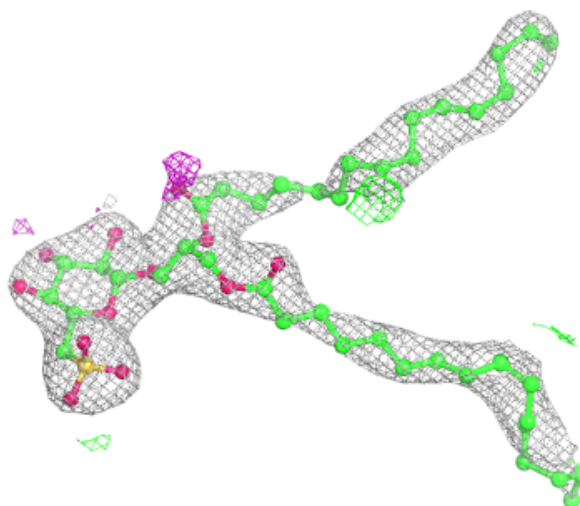
Electron density around SQD a 409 (A):

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



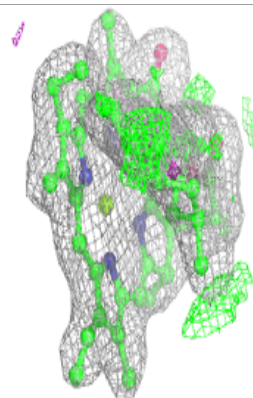
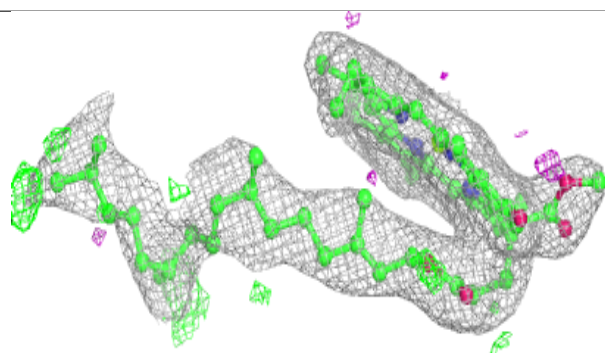
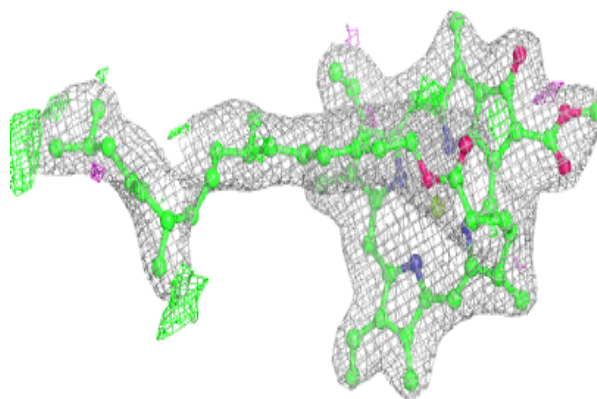
Electron density around SQD a 409 (B):

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

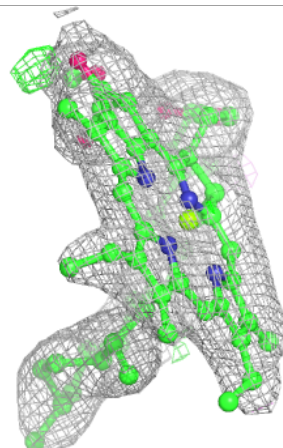
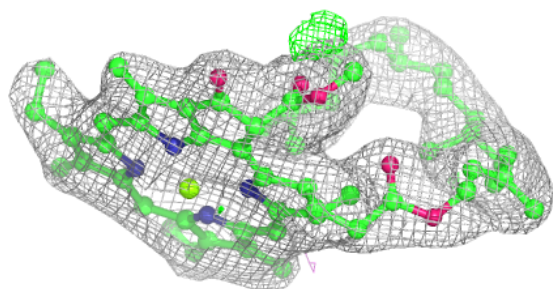
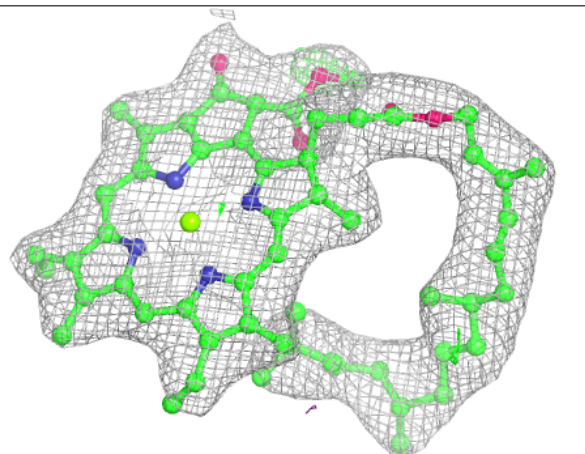


Electron density around CLA b 614:

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

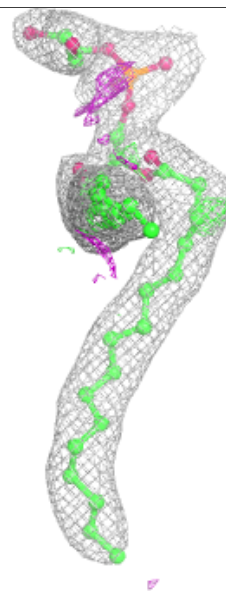
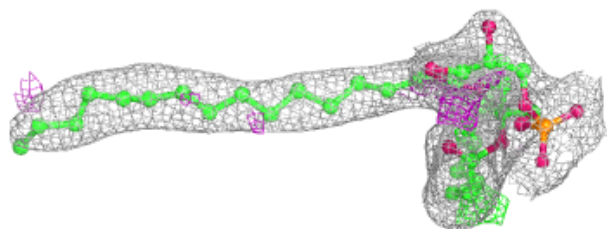
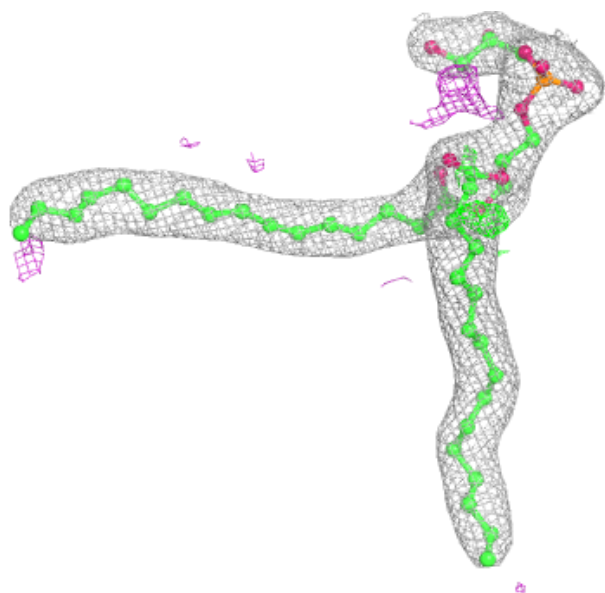
**Electron density around CLA b 615:**

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



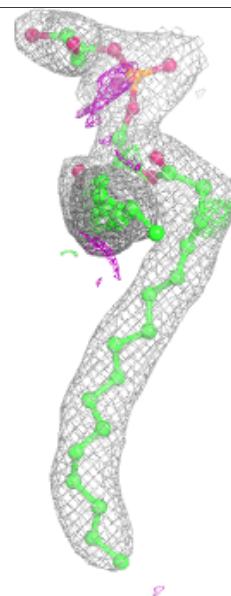
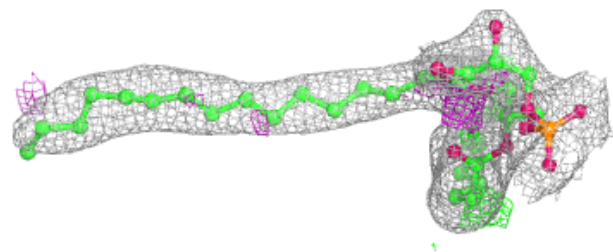
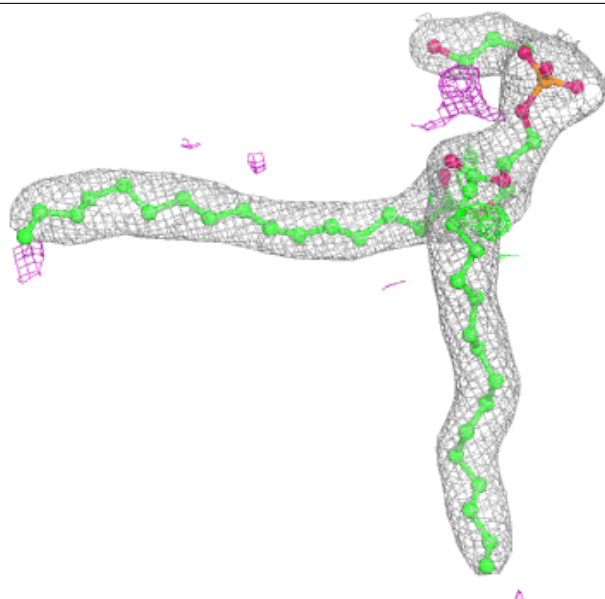
Electron density around LHG b 629 (A):

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



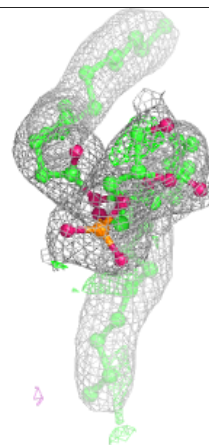
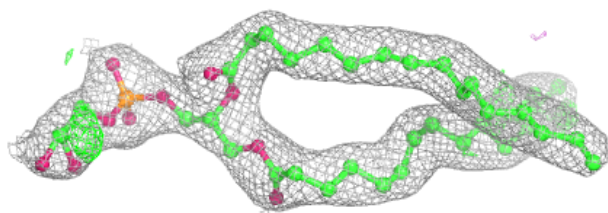
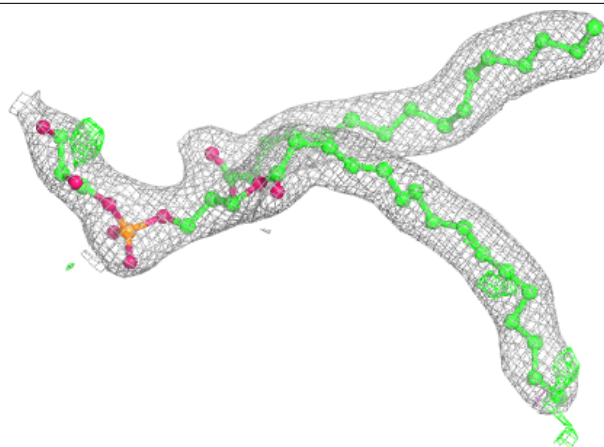
Electron density around LHG b 629 (B):

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



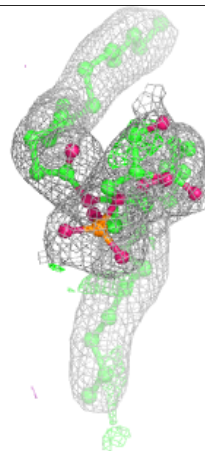
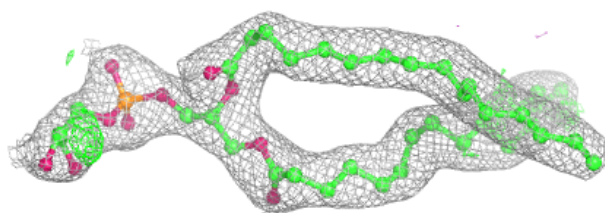
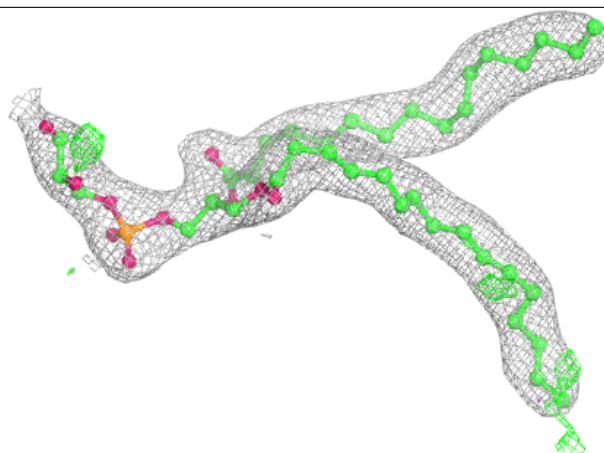
Electron density around LHG d 407 (A):

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

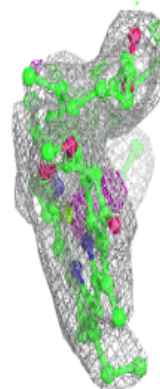
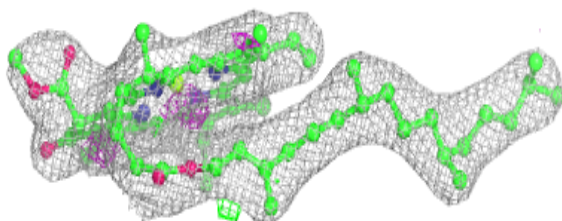
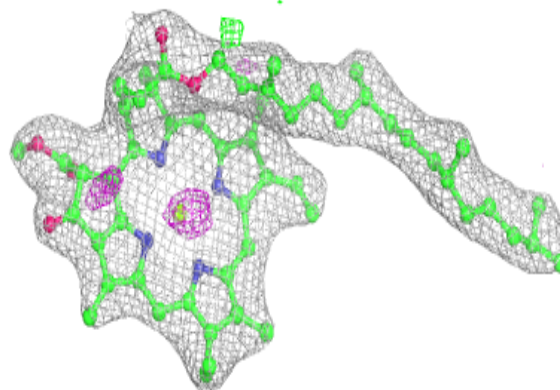


Electron density around LHG d 407 (B):

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

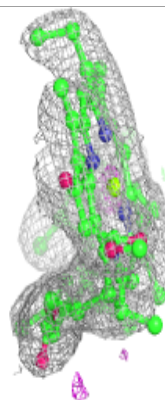
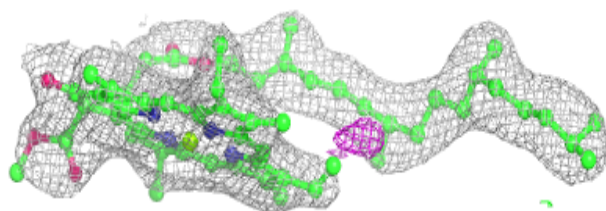
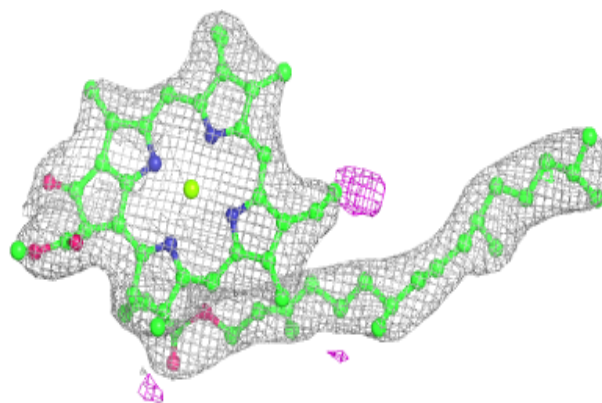
**Electron density around CLA C 501:**

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

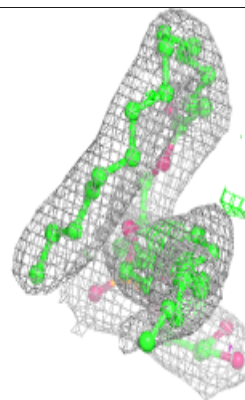
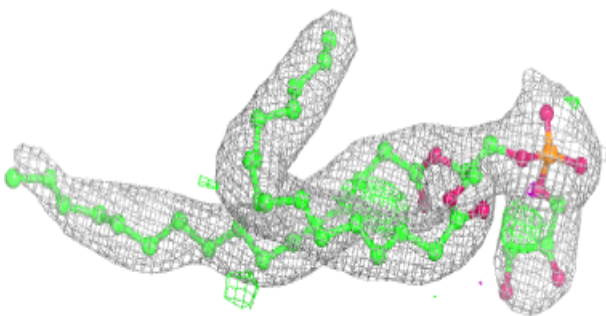
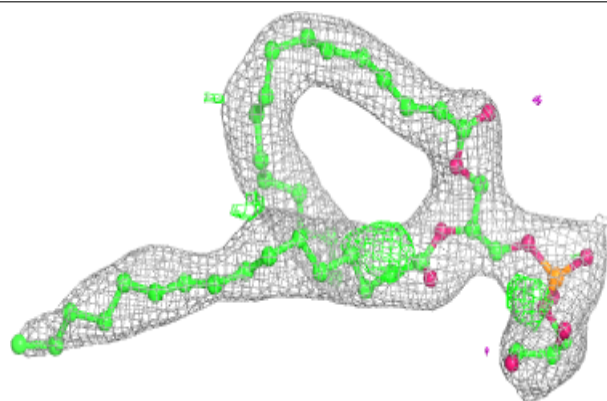


Electron density around CLA c 502:

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

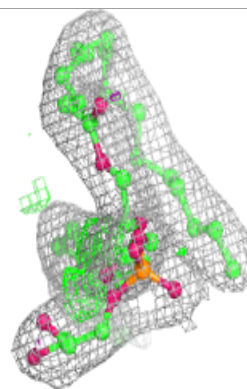
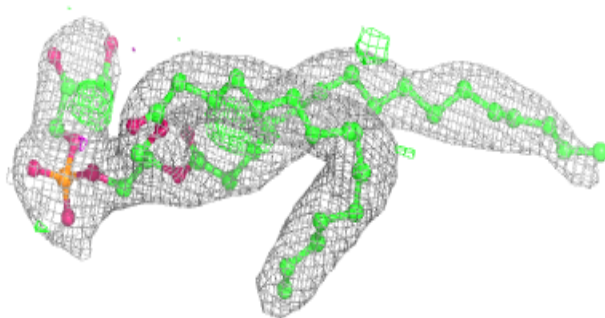
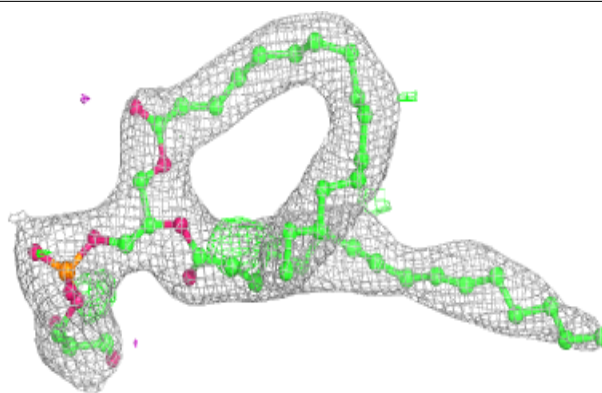
**Electron density around LHG d 414 (A):**

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

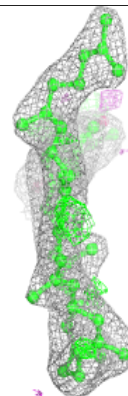
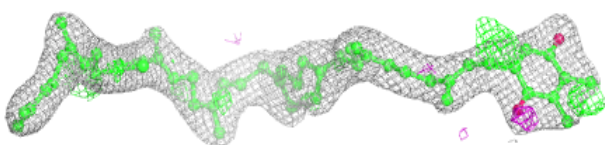
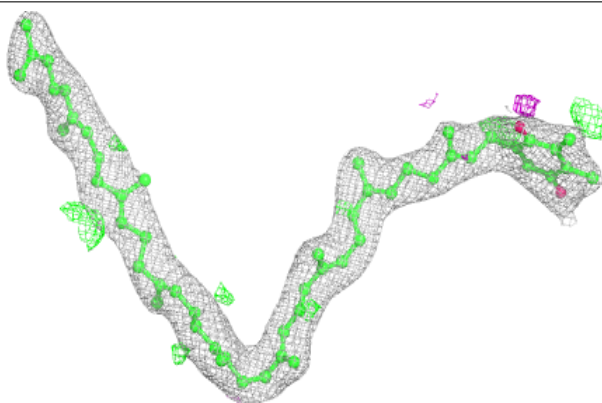


Electron density around LHG d 414 (B):

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

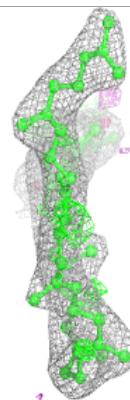
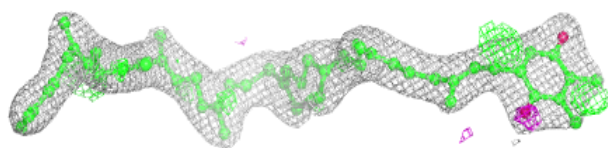
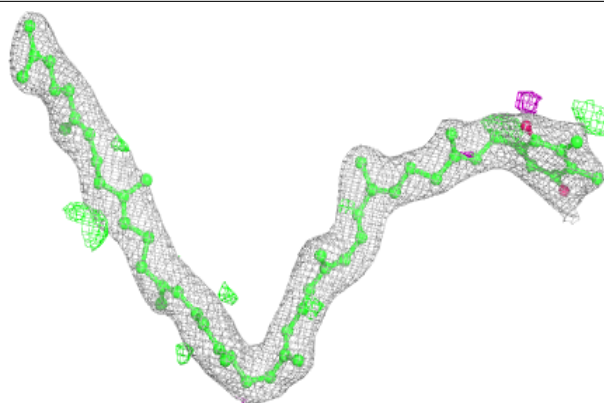
**Electron density around PL9 D 406 (A):**

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

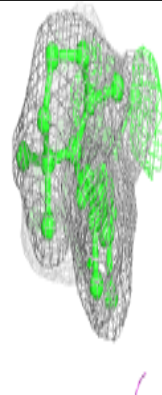
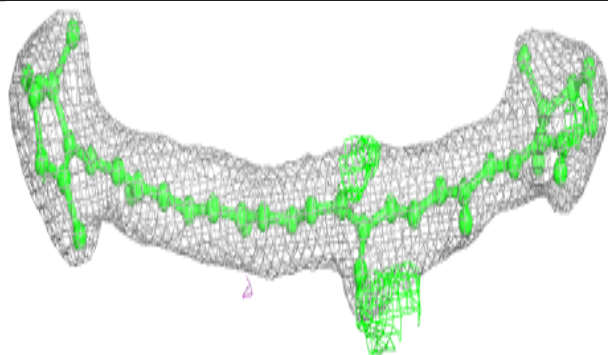
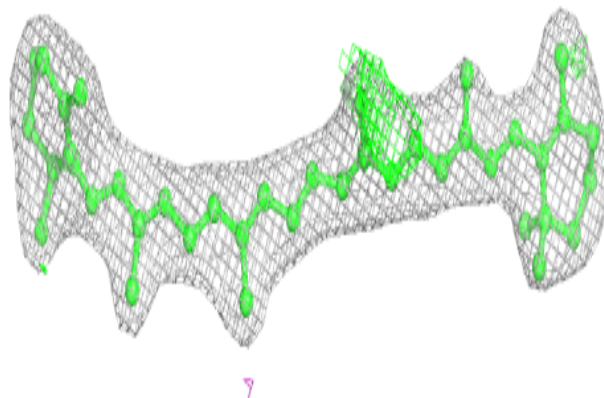


Electron density around PL9 D 406 (B):

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

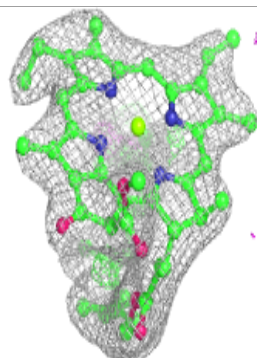
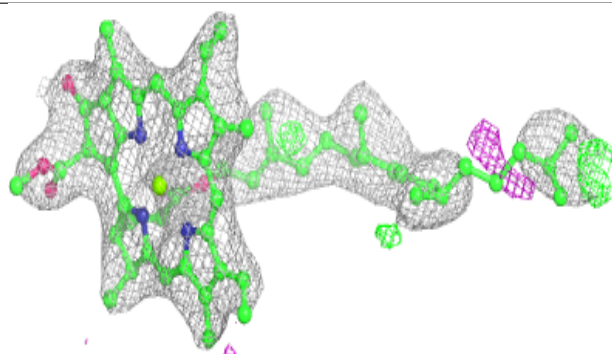
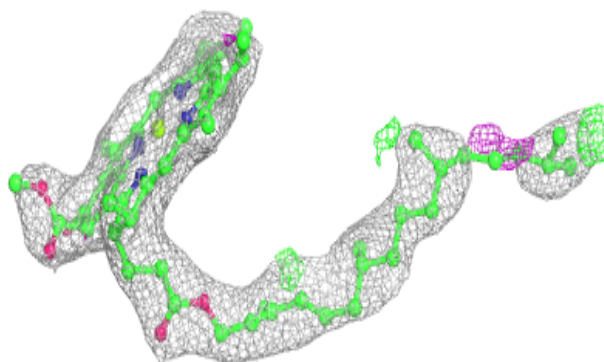
**Electron density around BCR T 101:**

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

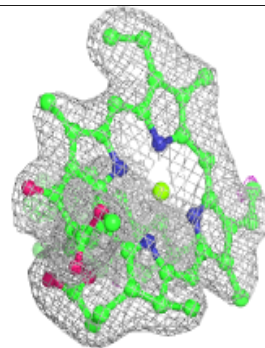
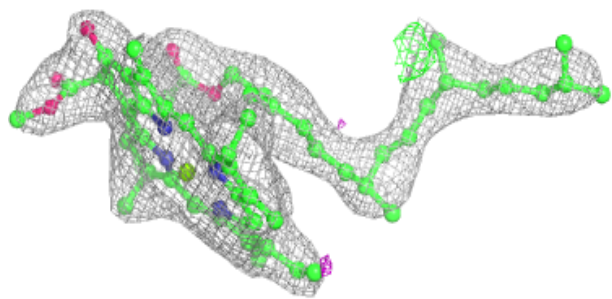
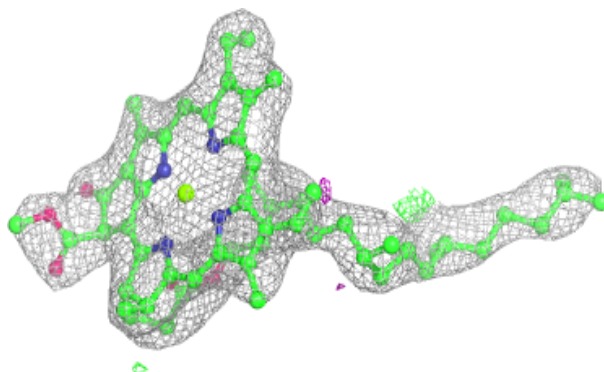


Electron density around CLA c 505:

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

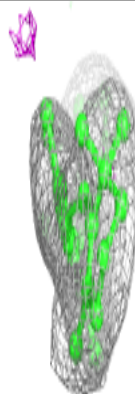
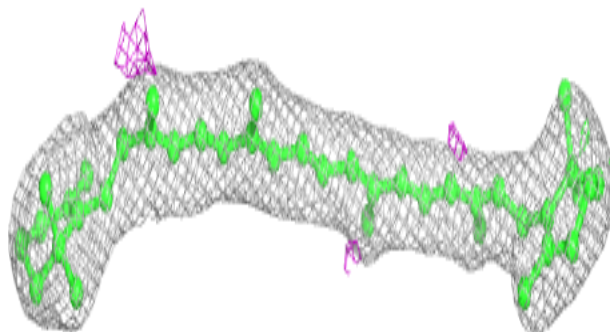
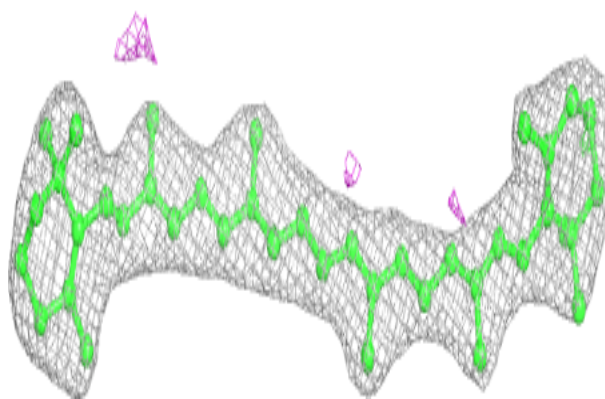
**Electron density around CLA c 506:**

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

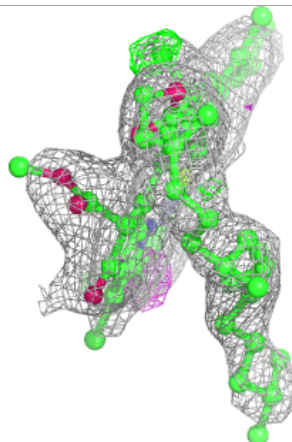
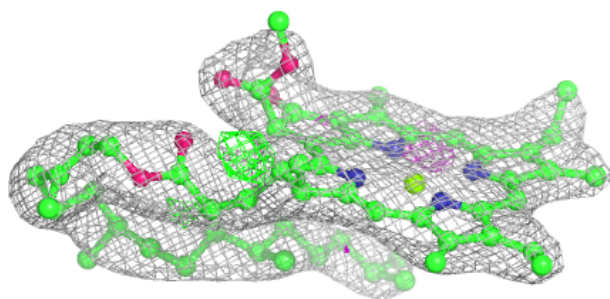
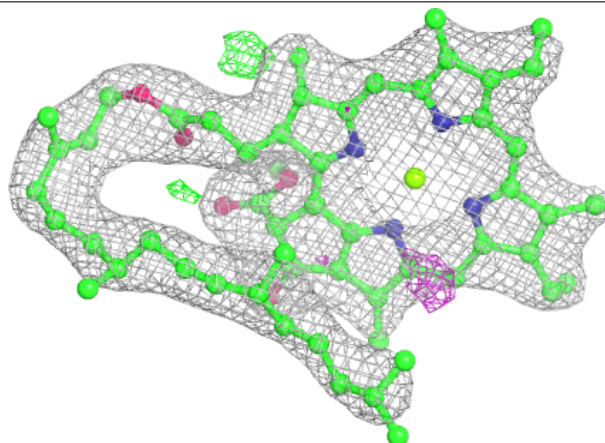


Electron density around BCR b 619:

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

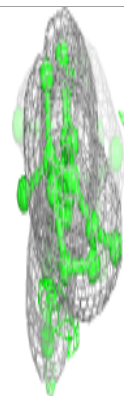
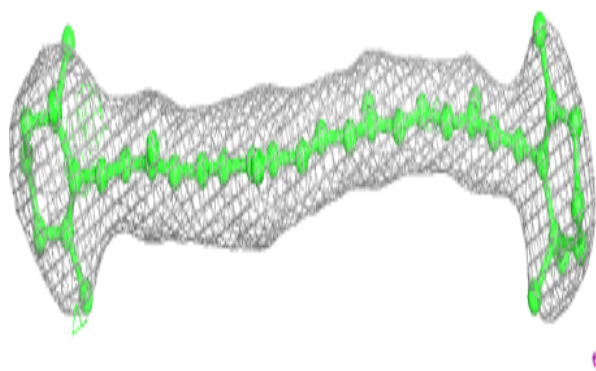
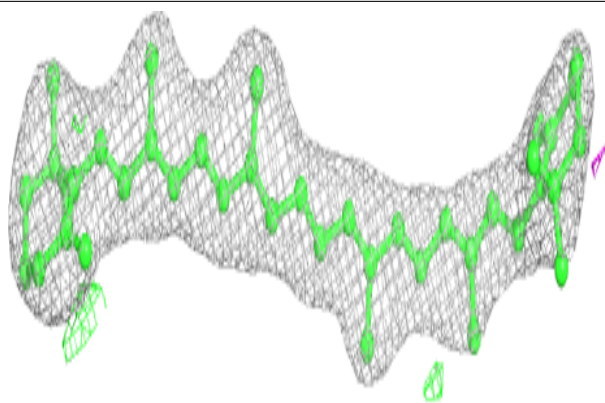
**Electron density around CLA C 509:**

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



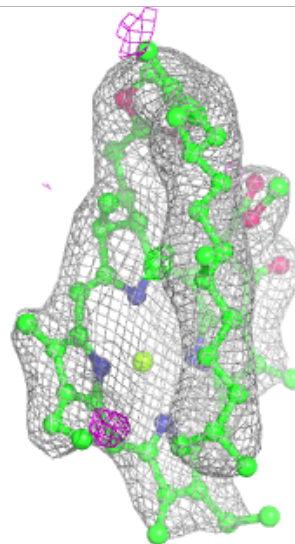
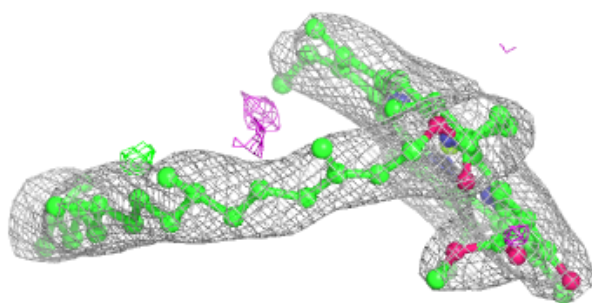
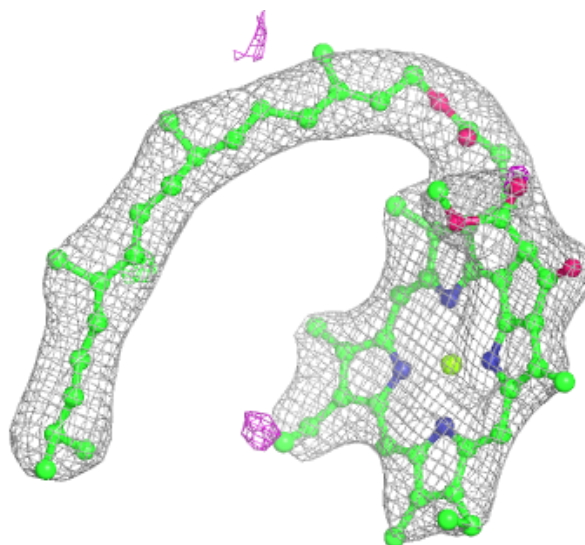
Electron density around BCR c 516:

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



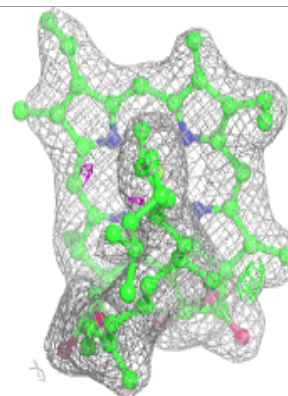
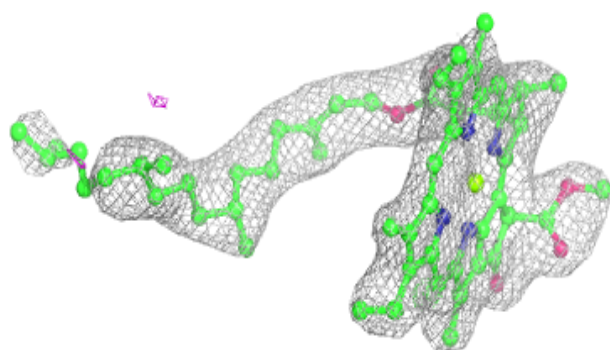
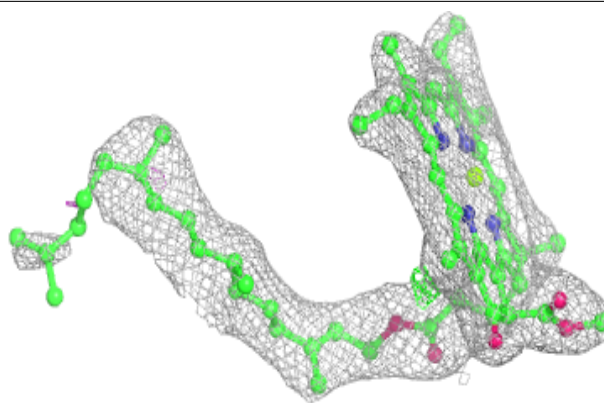
Electron density around CLA c 508:

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

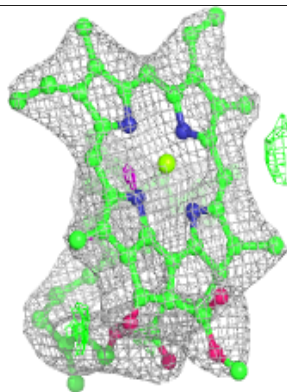
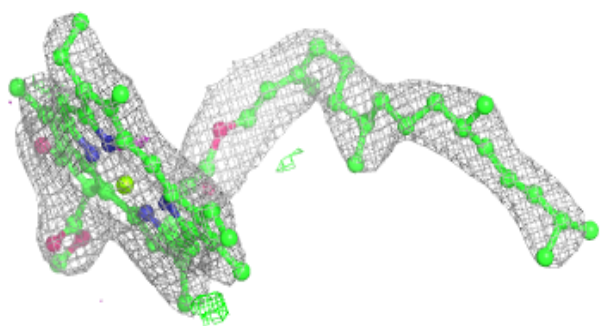
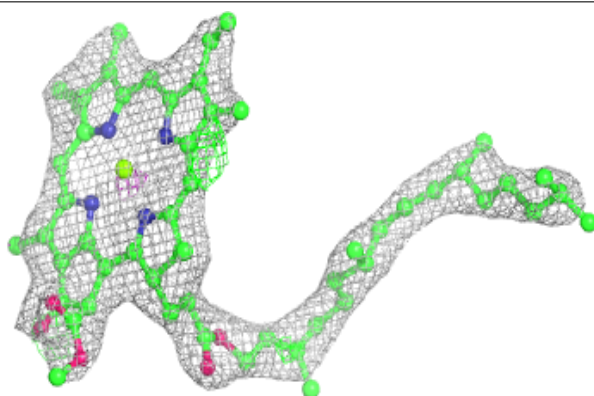


Electron density around CLA c 509:

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

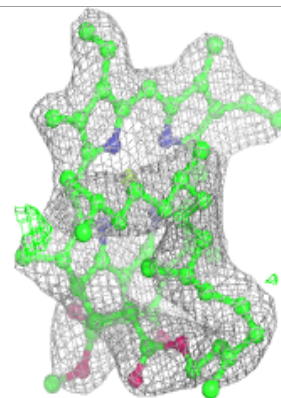
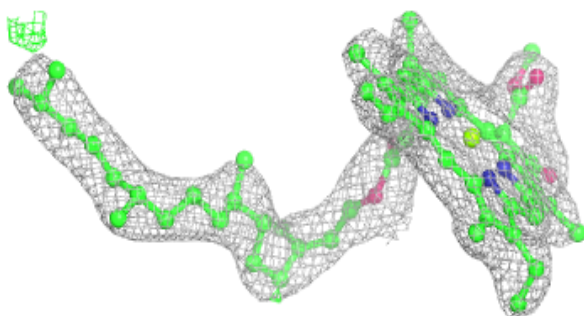
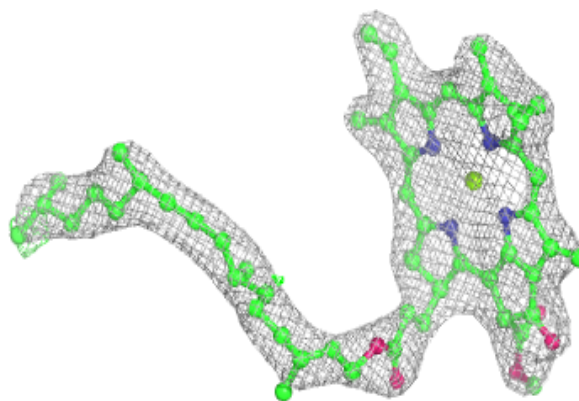
**Electron density around CLA c 512:**

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

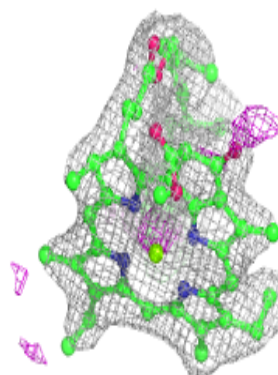
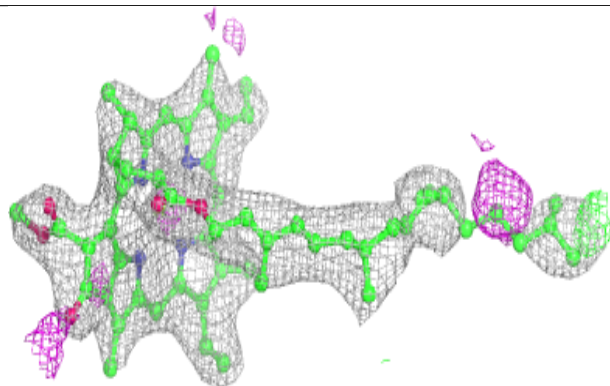
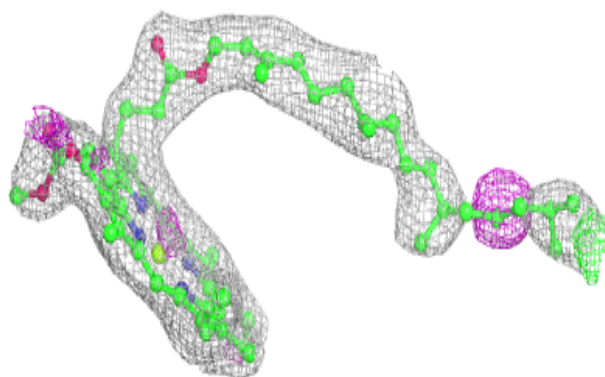


Electron density around CLA C 511:

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

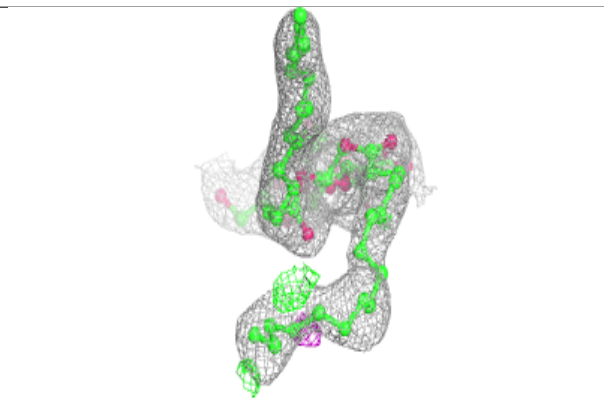
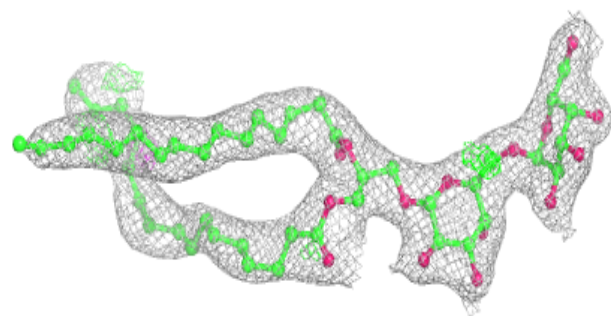
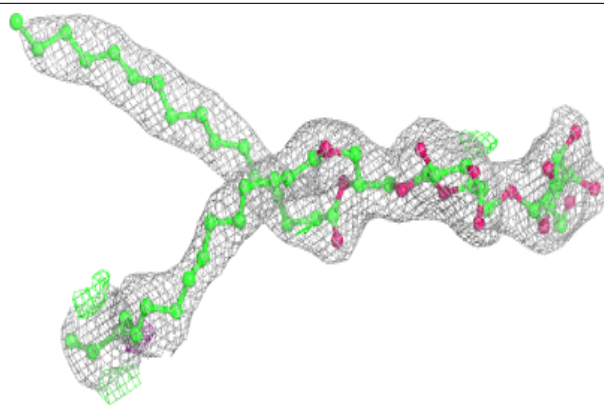
**Electron density around CLA C 504:**

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

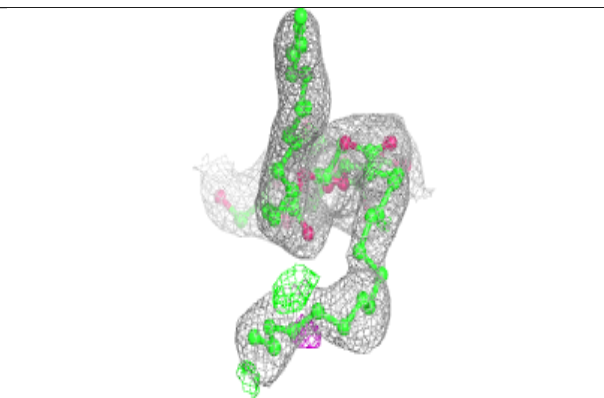
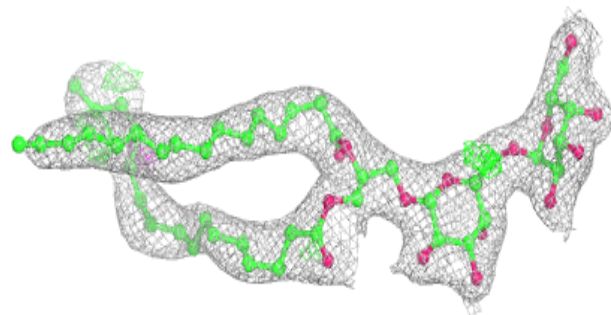
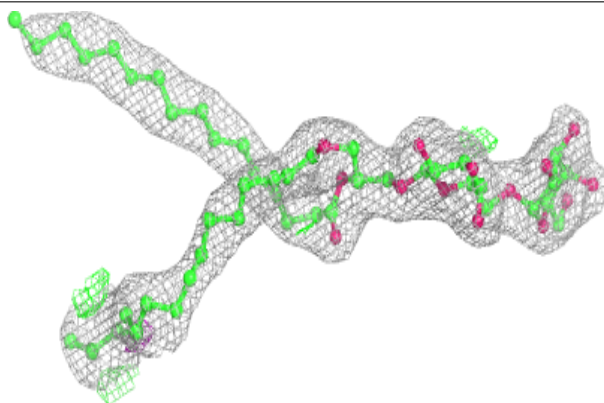


Electron density around DGD c 517 (A):

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

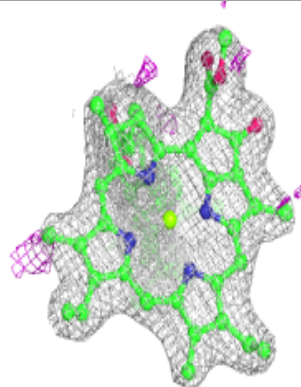
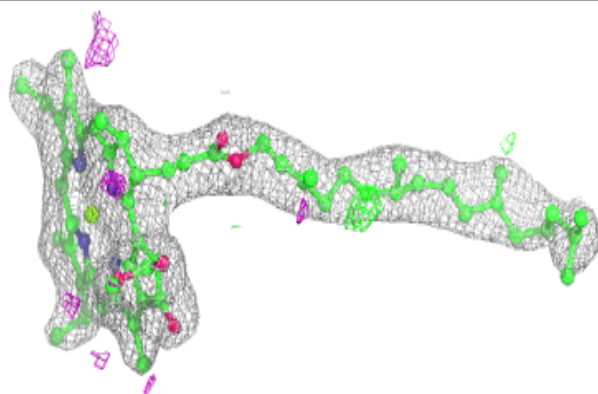
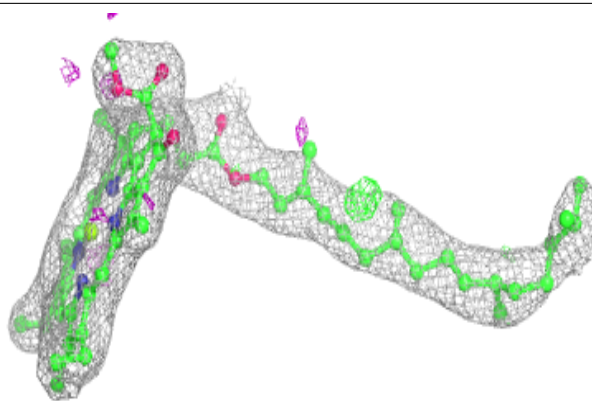
**Electron density around DGD c 517 (B):**

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

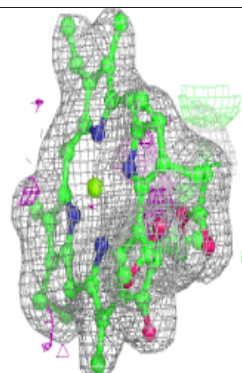
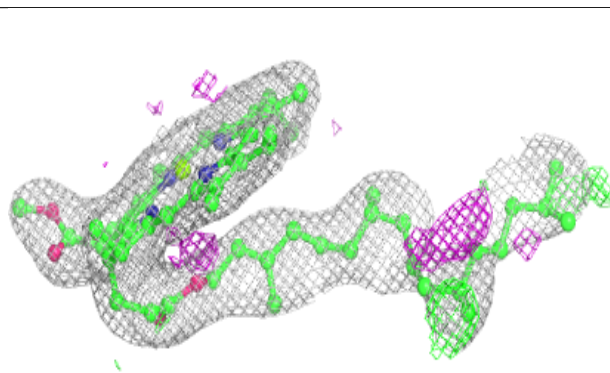
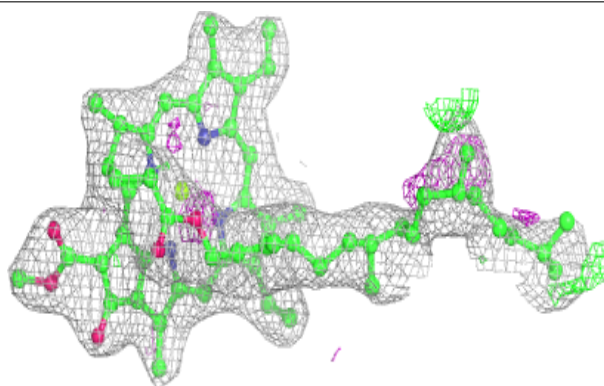


Electron density around CLA b 604:

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

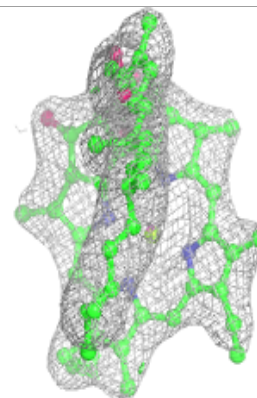
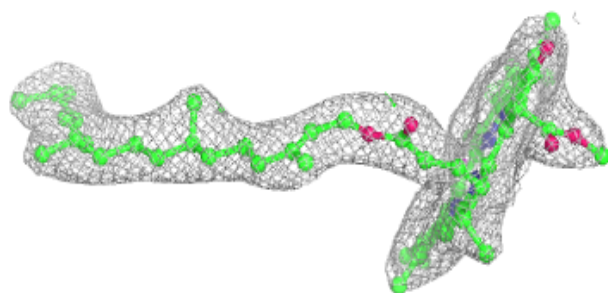
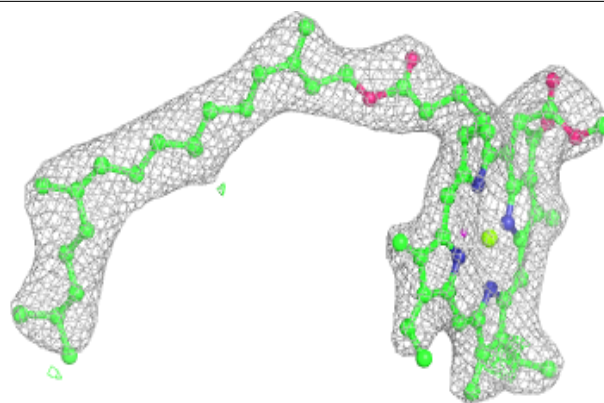
**Electron density around CLA B 614:**

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

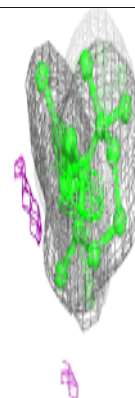
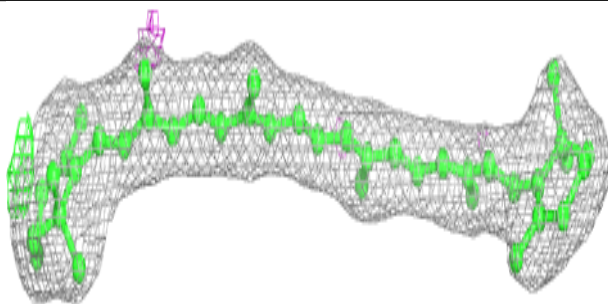
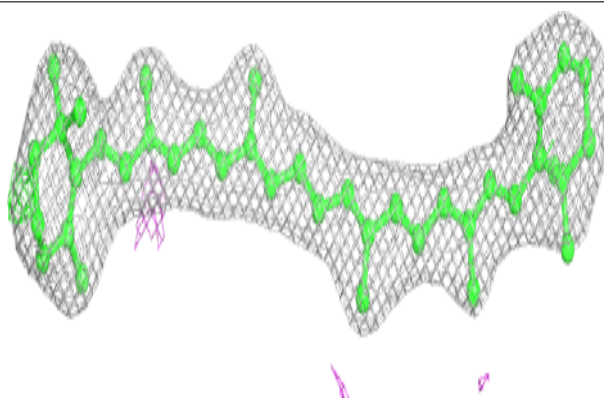


Electron density around CLA b 609:

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

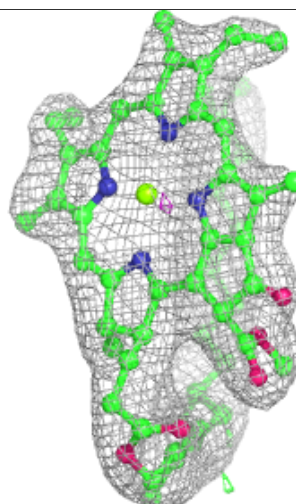
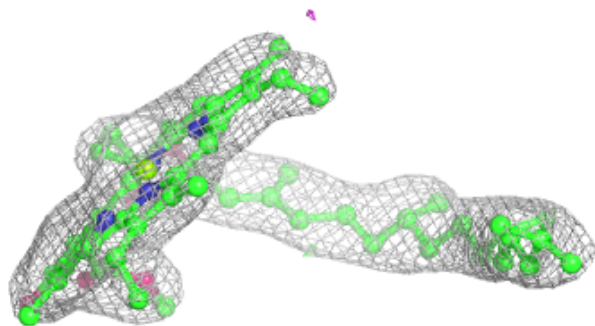
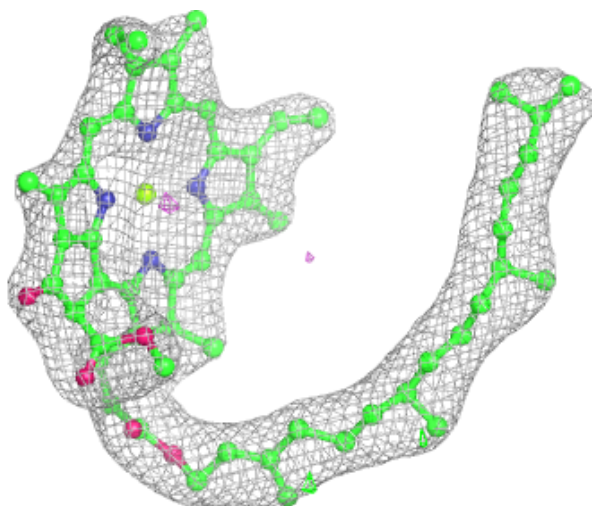
**Electron density around BCR B 619:**

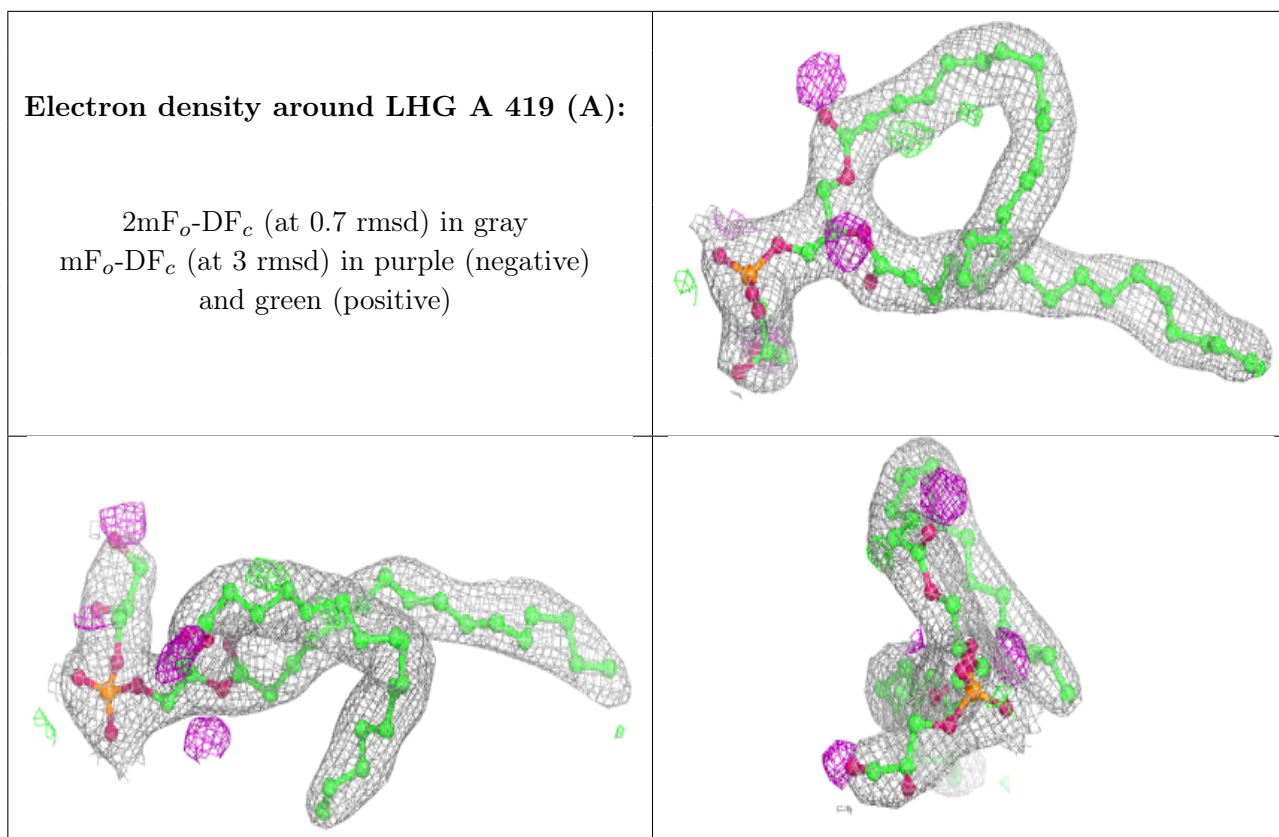
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CLA C 507:

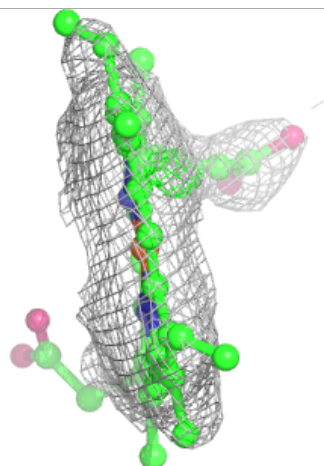
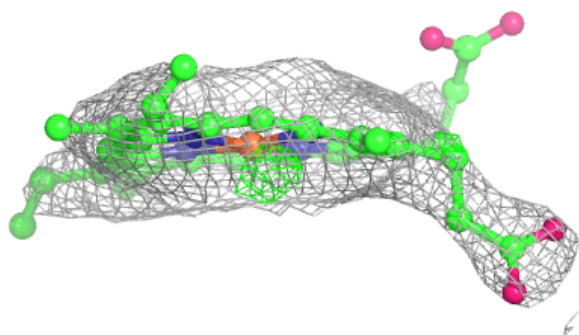
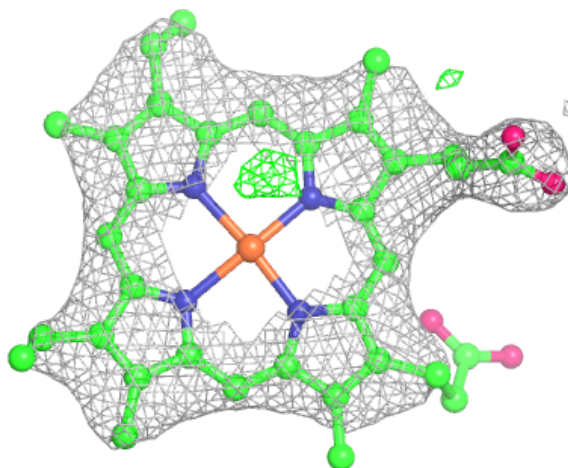
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





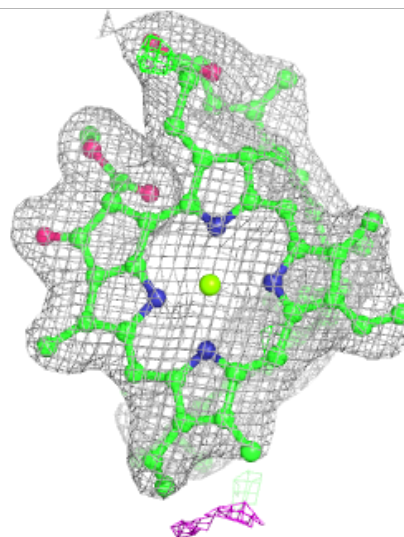
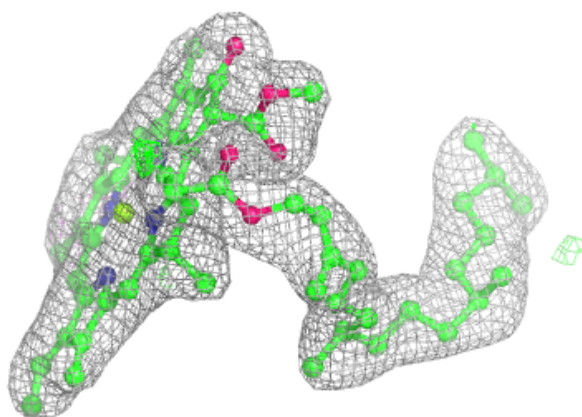
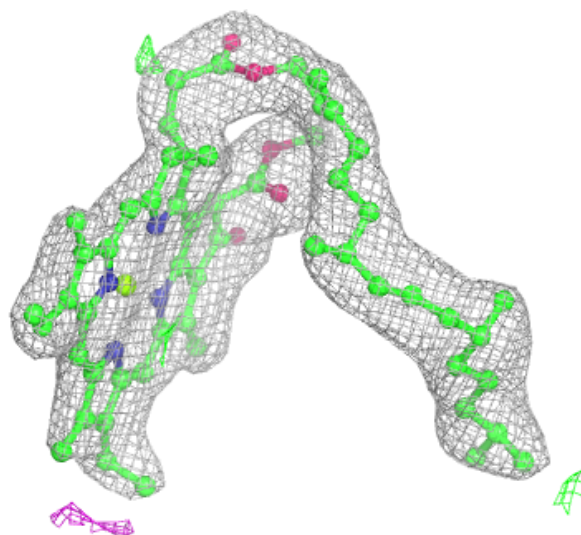
Electron density around HEM f 101:

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



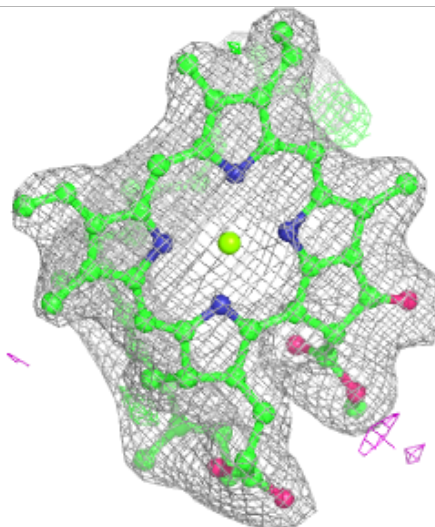
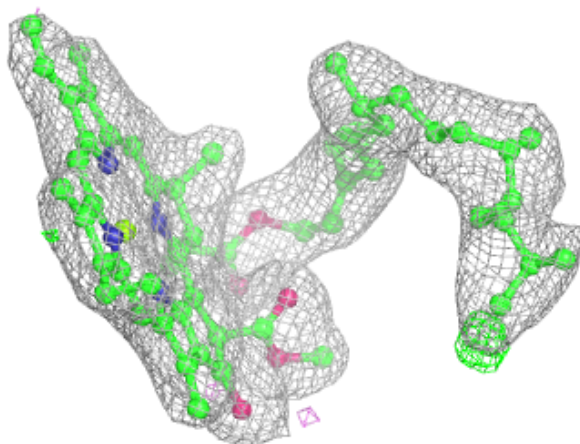
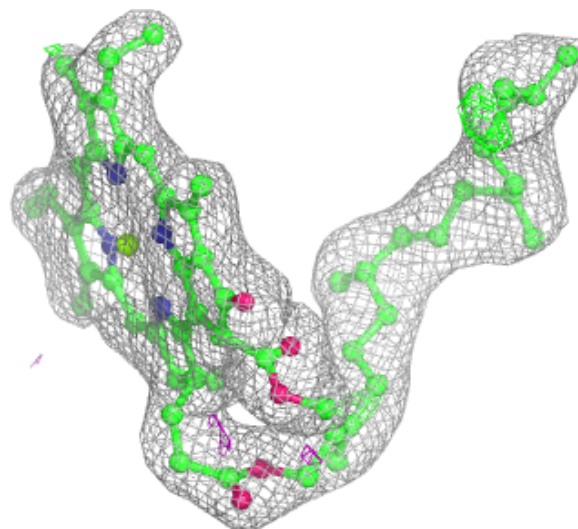
Electron density around CLA b 613:

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



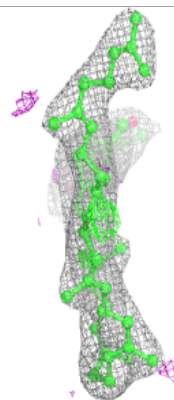
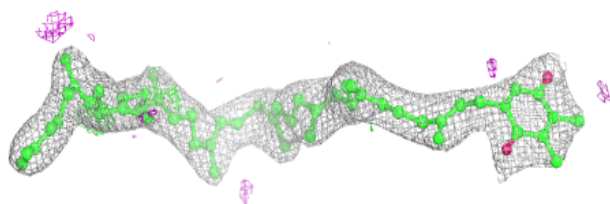
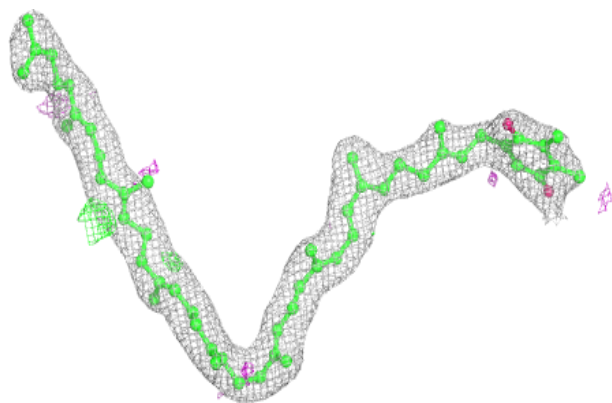
Electron density around CLA B 613:

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

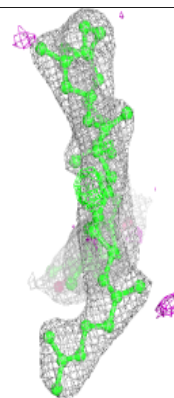
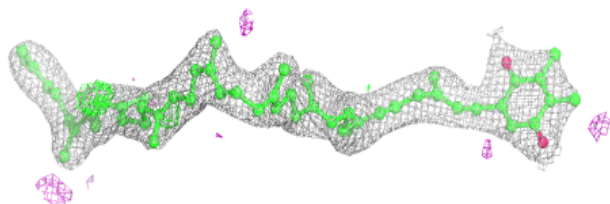
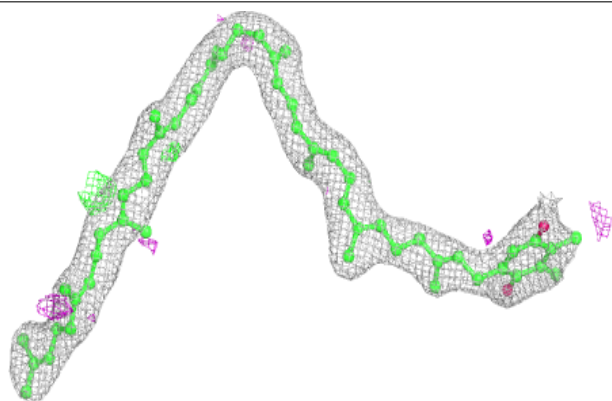


Electron density around PL9 d 406 (A):

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

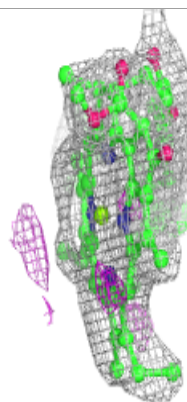
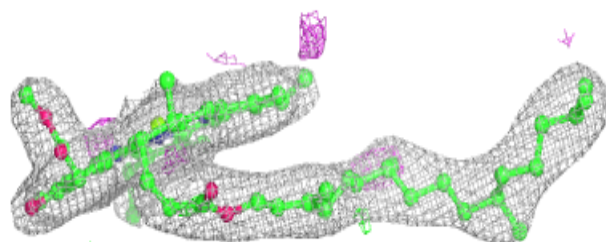
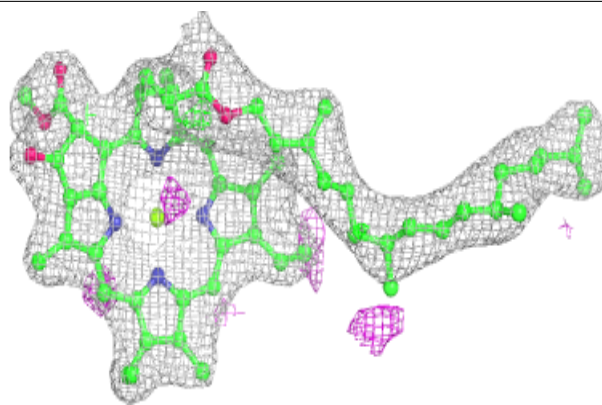
**Electron density around PL9 d 406 (B):**

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

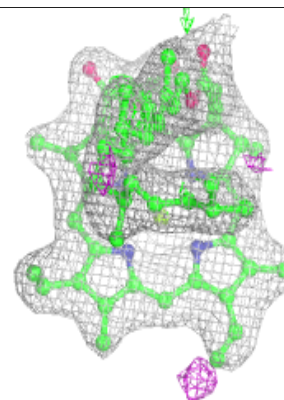
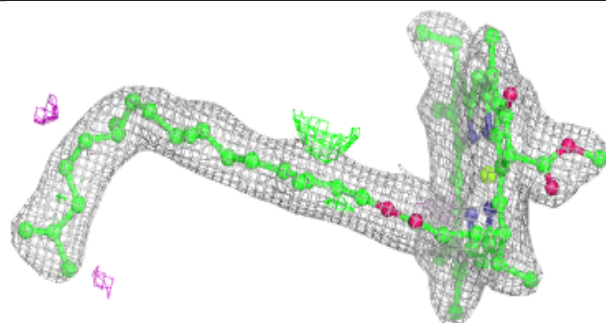
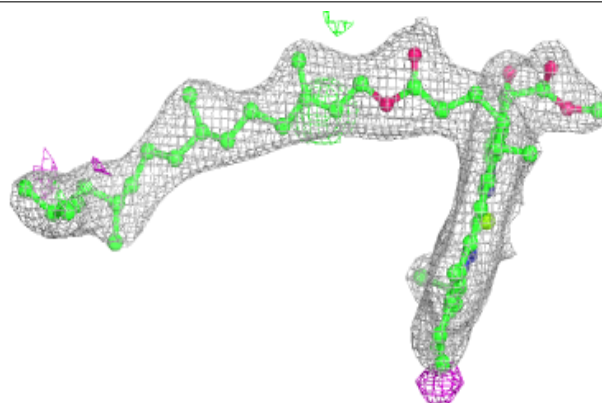


Electron density around CLA B 603:

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

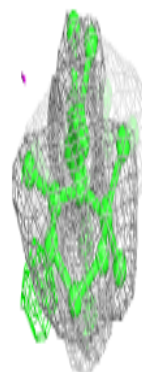
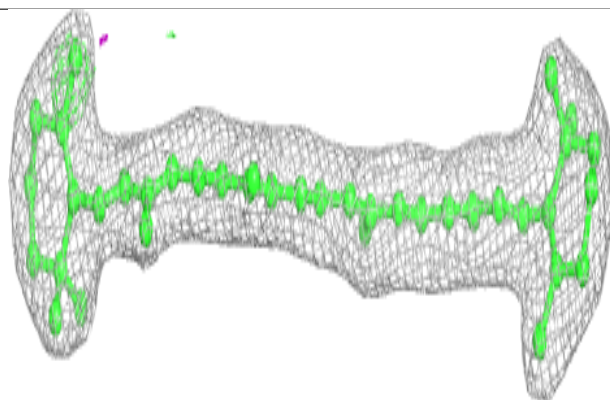
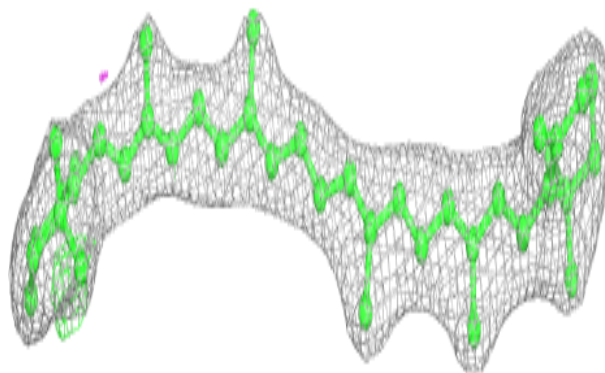
**Electron density around CLA B 605:**

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

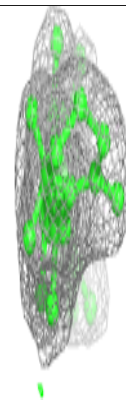
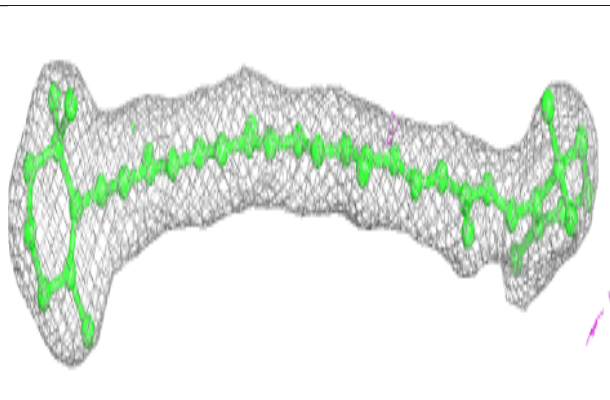
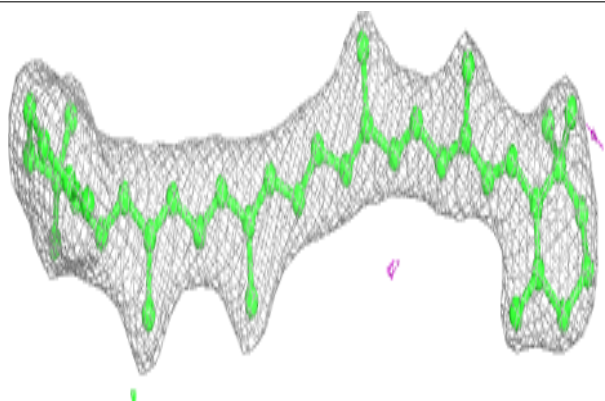


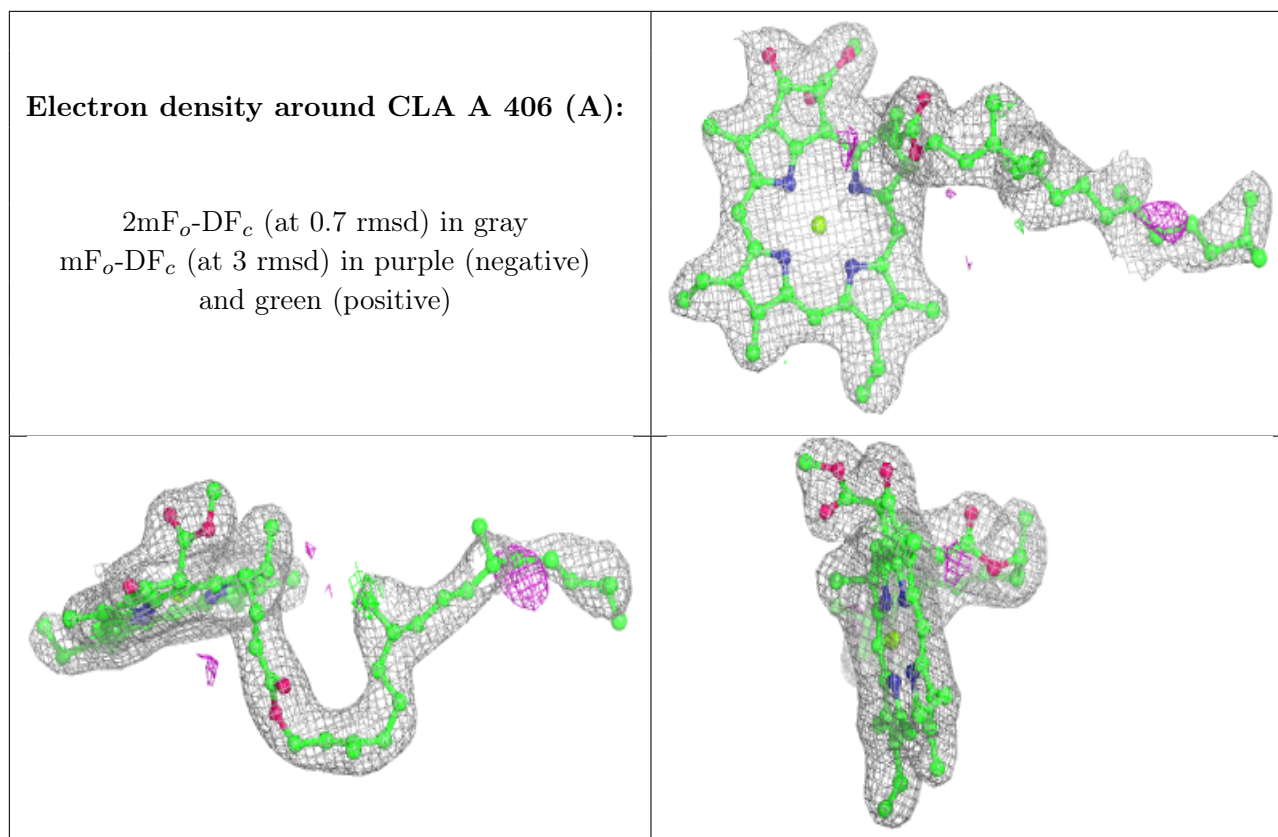
Electron density around BCR a 408:

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

**Electron density around BCR b 617:**

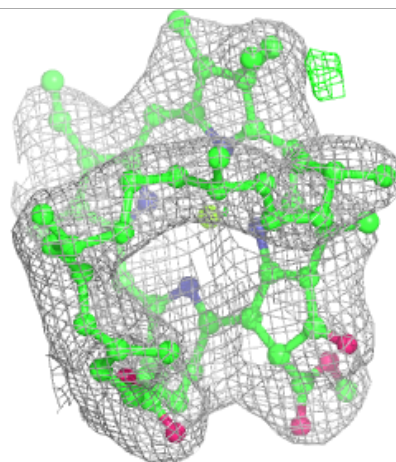
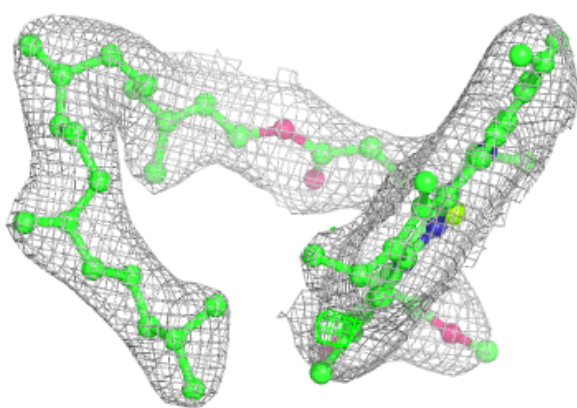
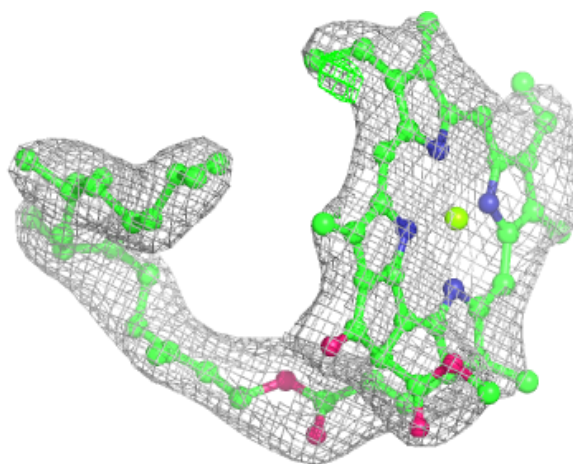
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





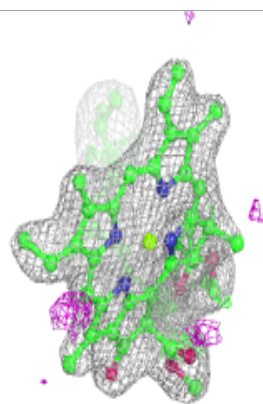
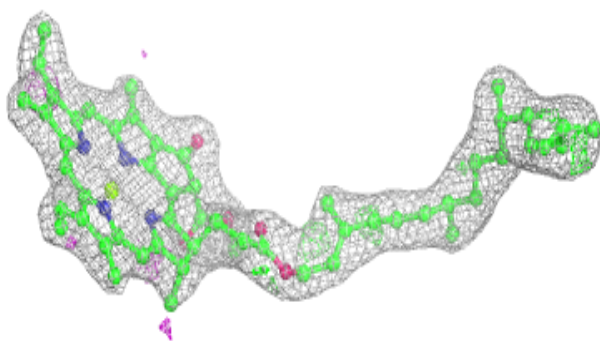
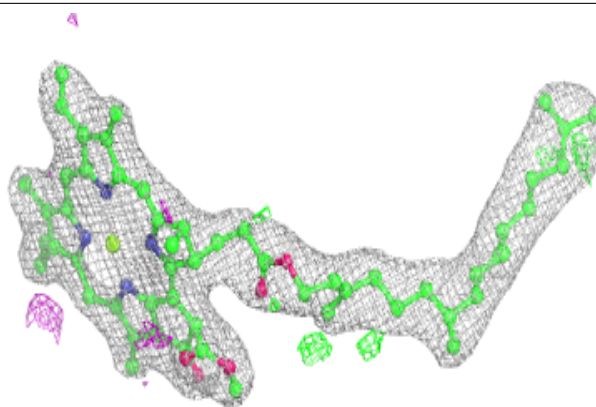
Electron density around CLA c 504:

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

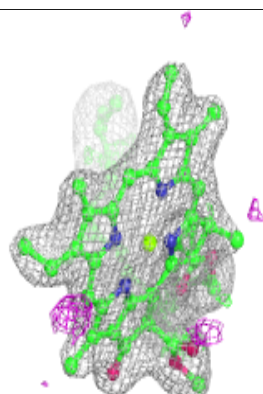
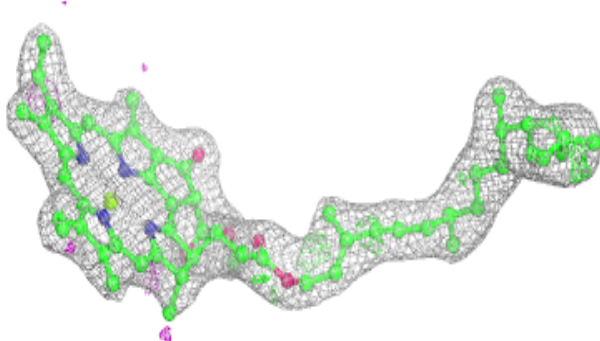
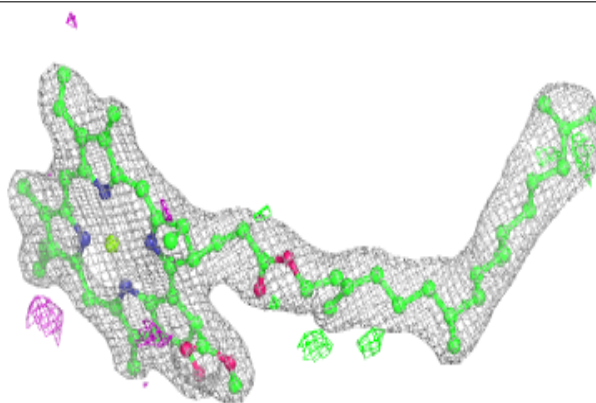


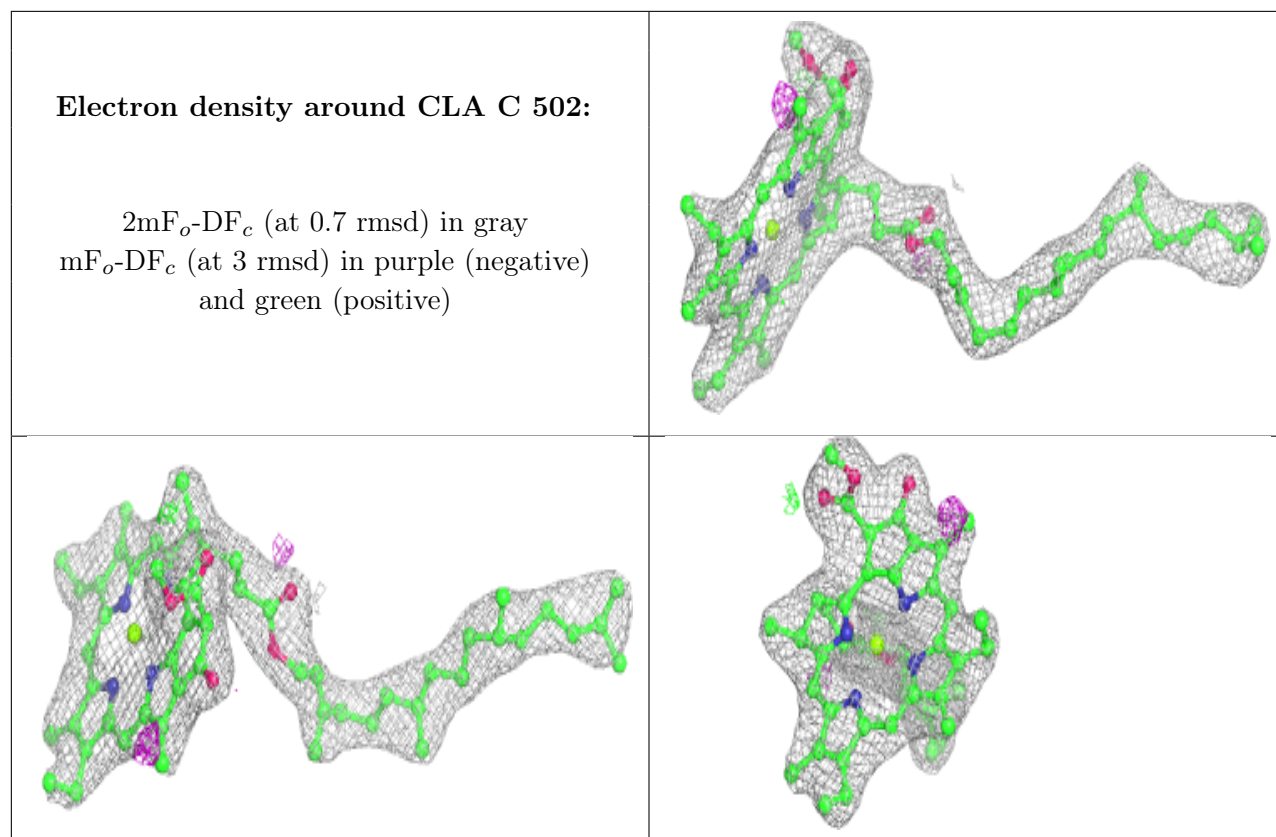
Electron density around CLA a 404 (A):

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

**Electron density around CLA a 404 (B):**

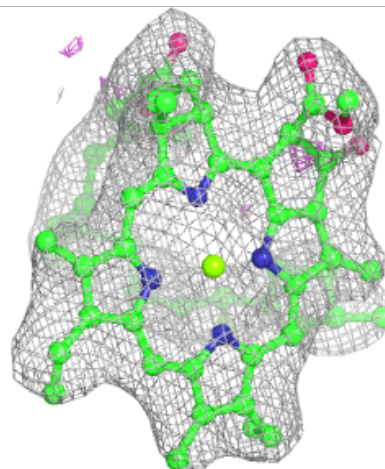
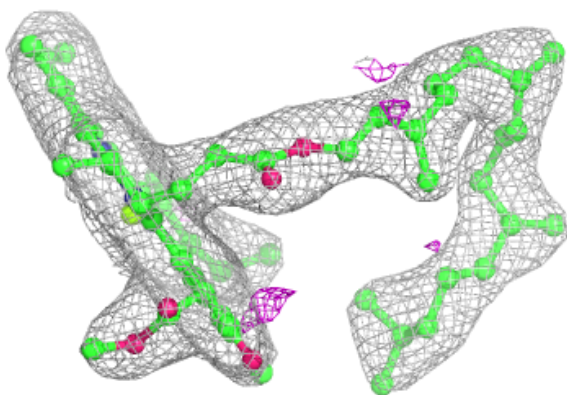
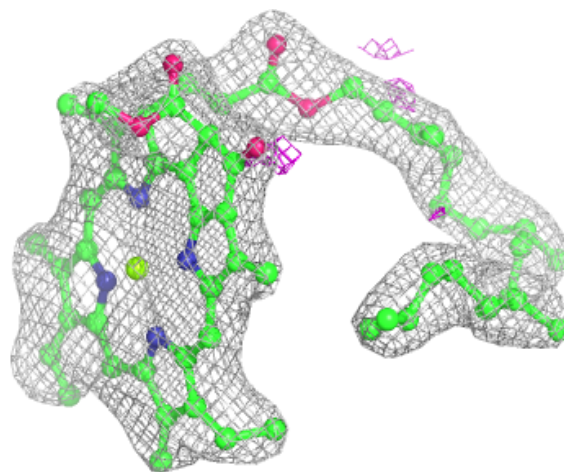
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





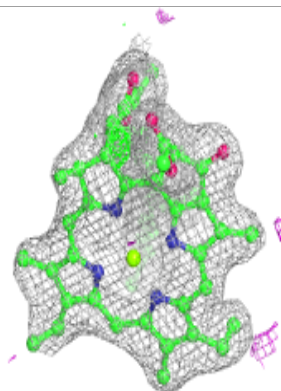
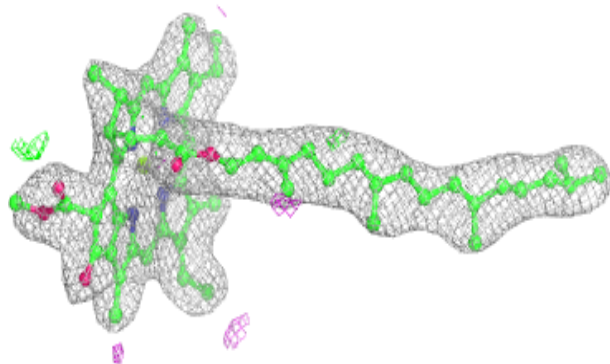
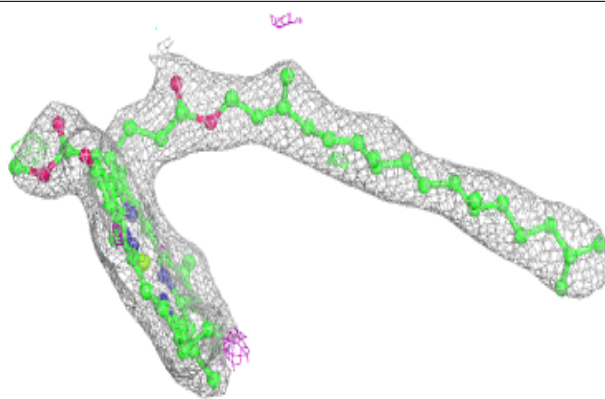
Electron density around CLA C 503:

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

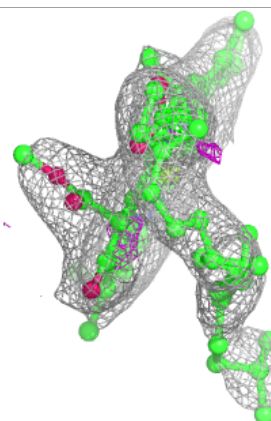
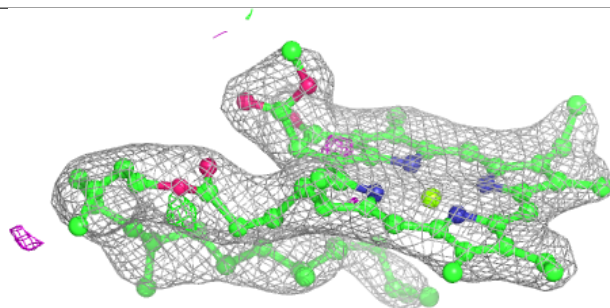
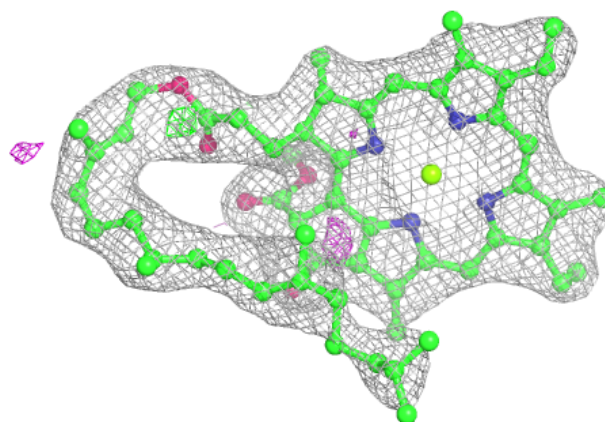


Electron density around CLA B 607:

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

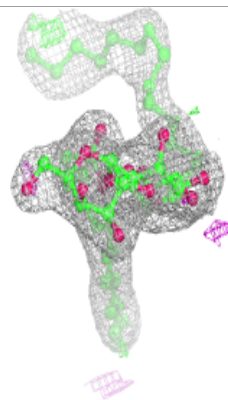
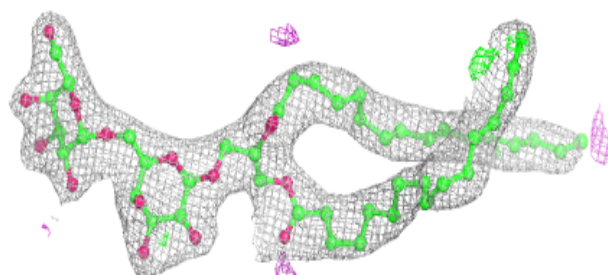
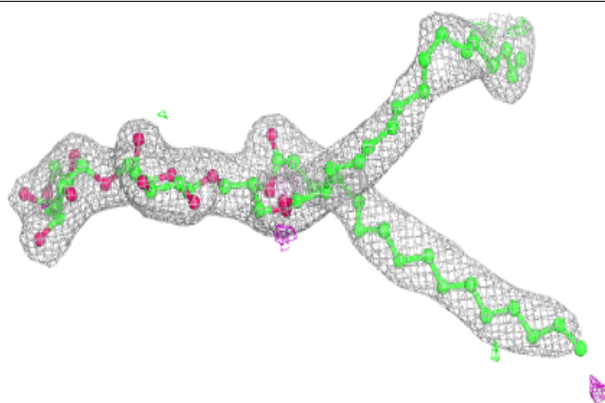
**Electron density around CLA c 510:**

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

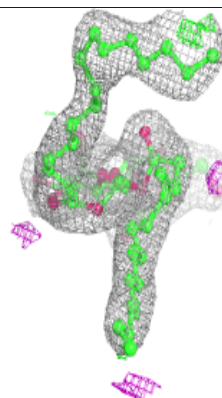
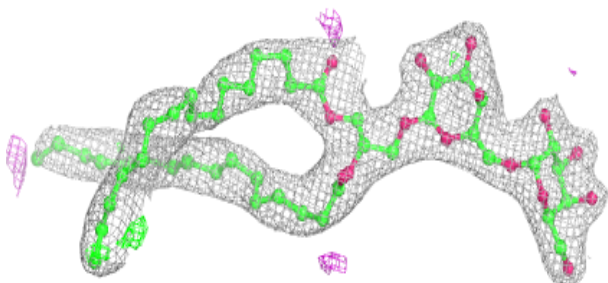
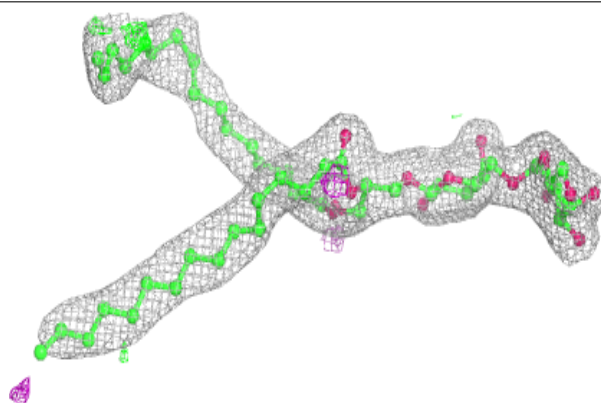


Electron density around DGD C 516 (A):

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

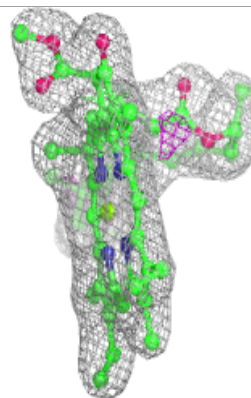
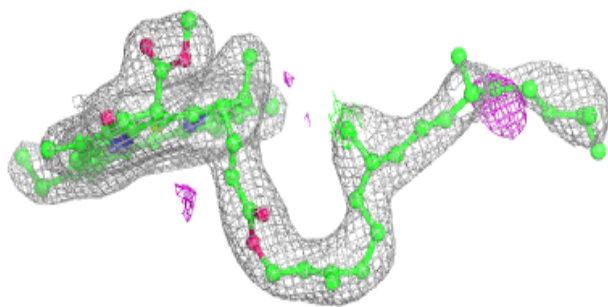
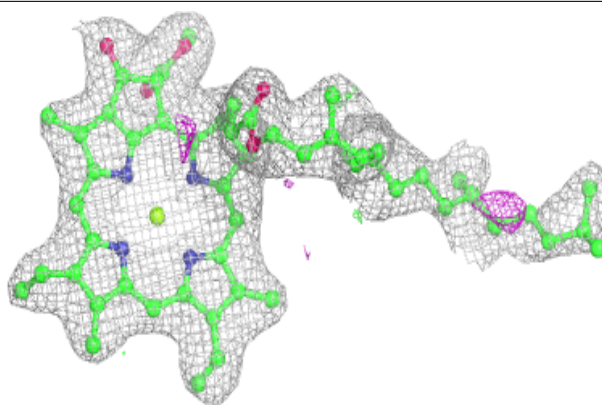
**Electron density around DGD C 516 (B):**

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

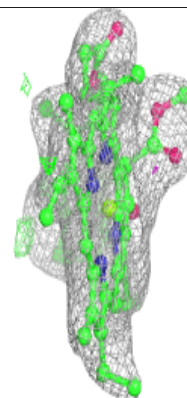
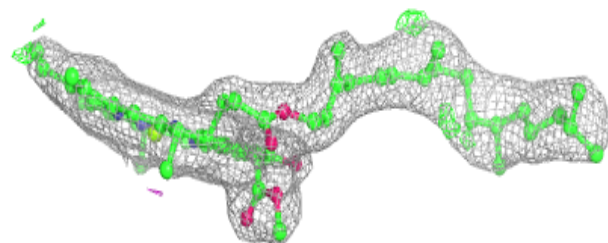
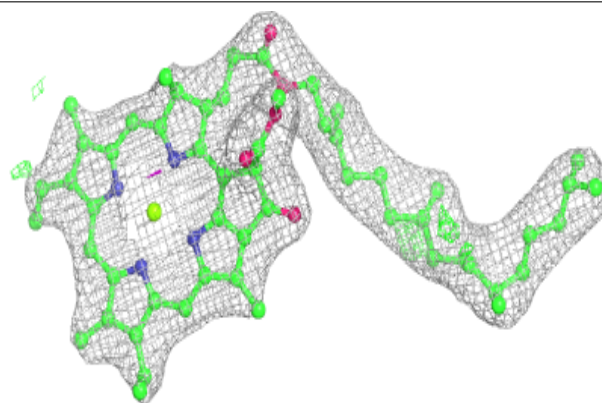


Electron density around CLA A 406 (B):

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

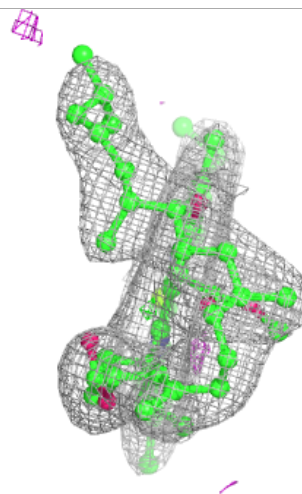
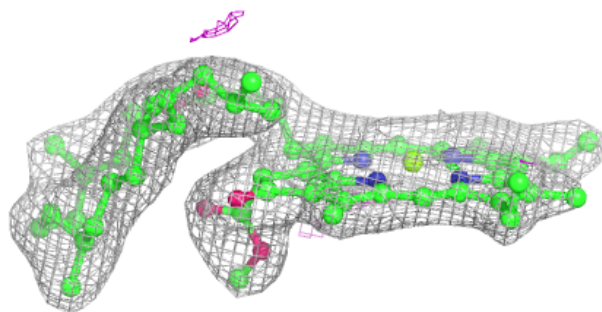
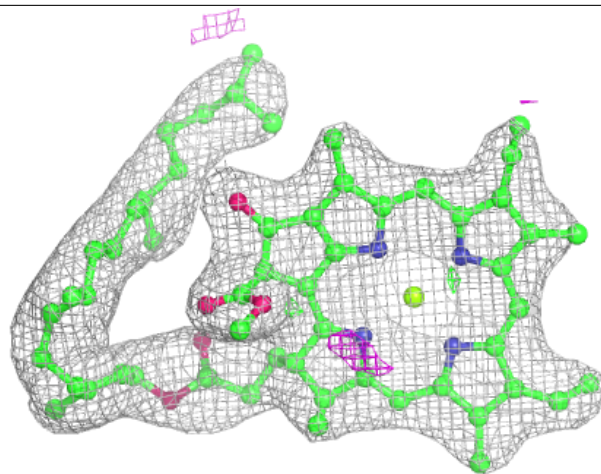
**Electron density around CLA b 602:**

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



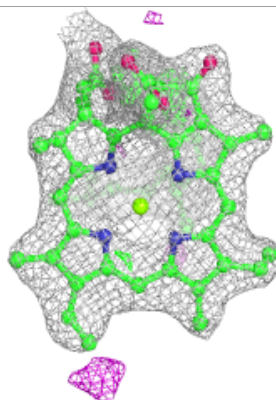
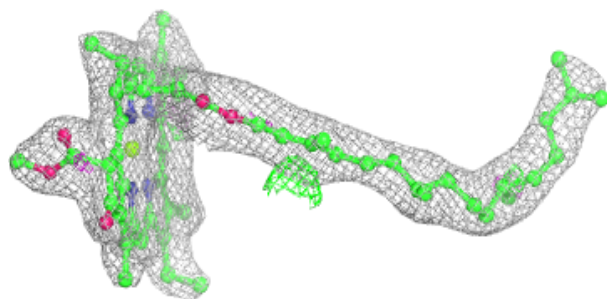
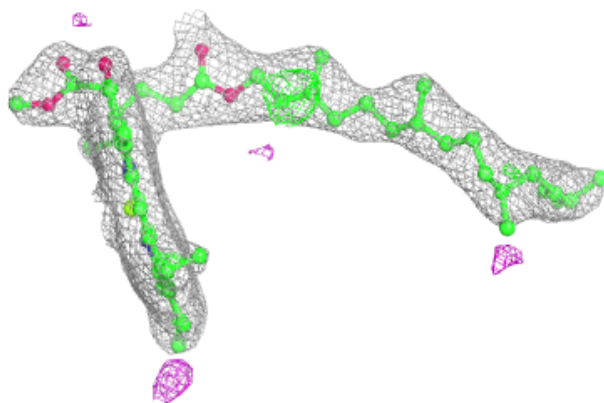
Electron density around CLA B 610:

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



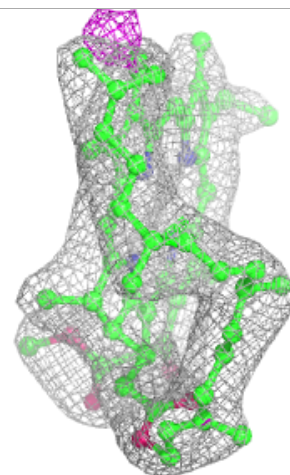
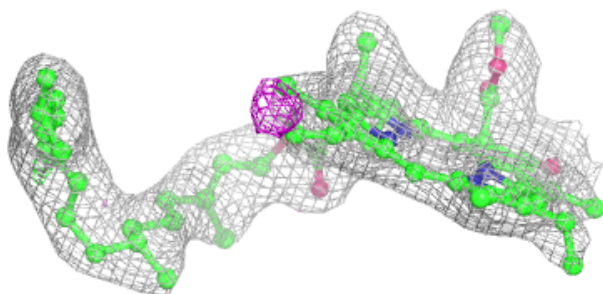
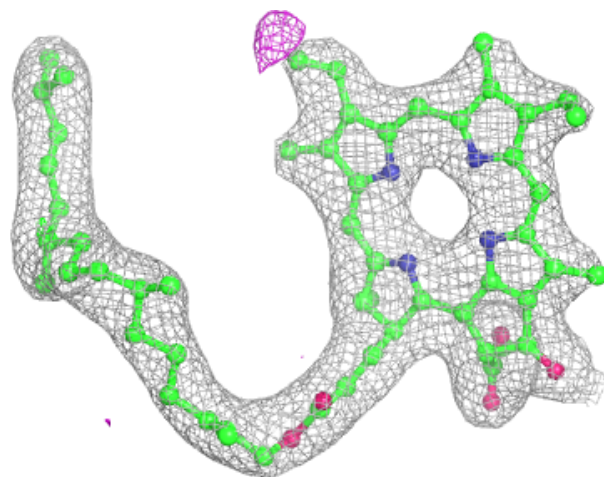
Electron density around CLA b 605:

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



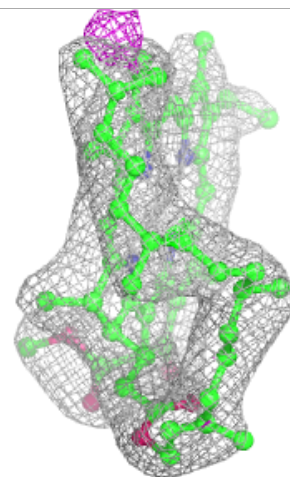
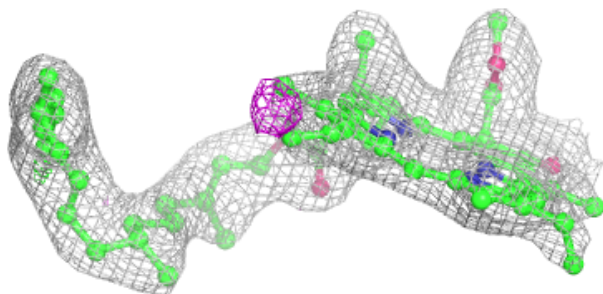
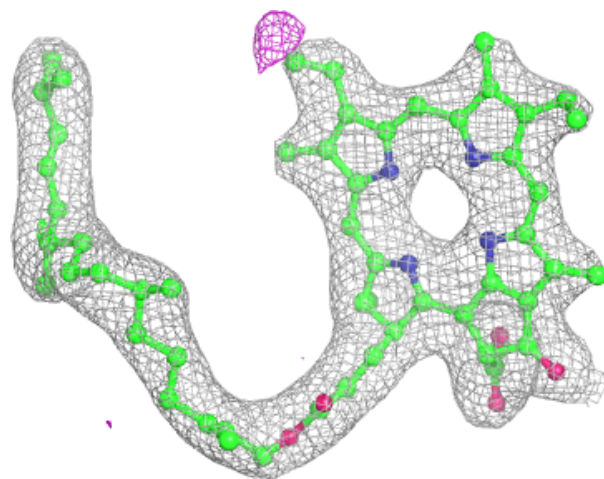
Electron density around PHO a 414 (A):

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



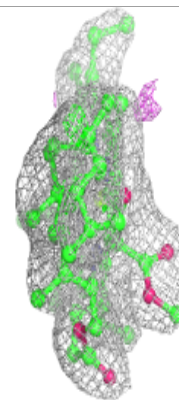
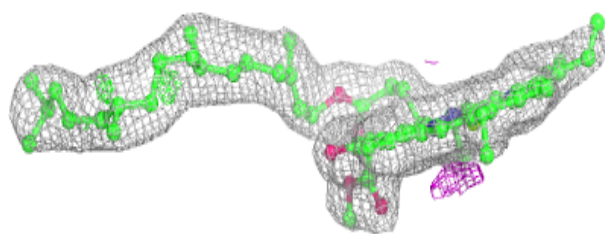
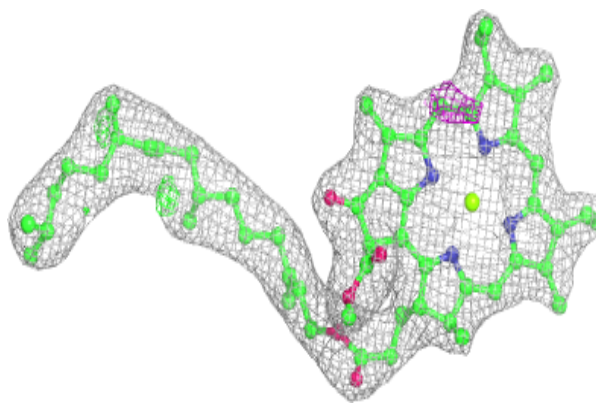
Electron density around PHO a 414 (B):

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

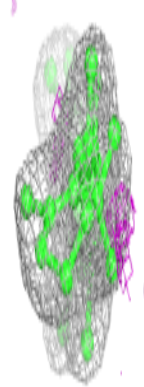
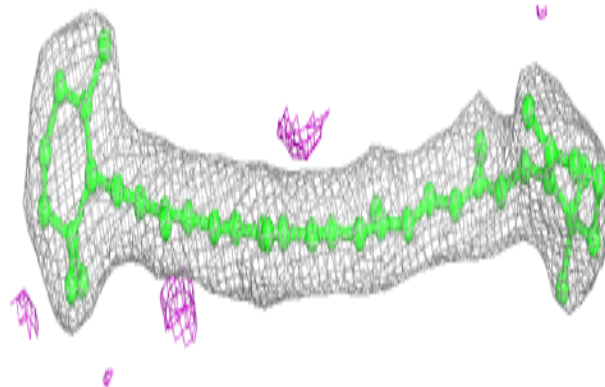
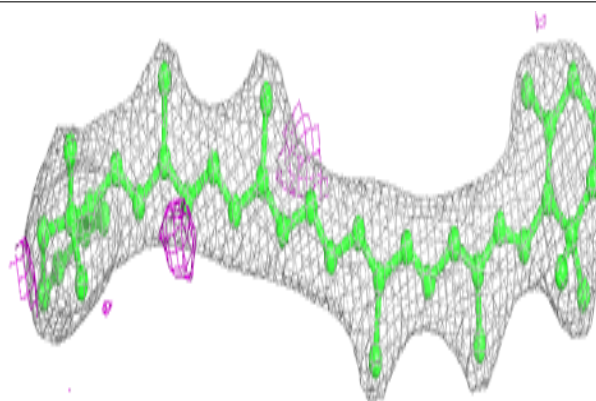


Electron density around CLA B 602:

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

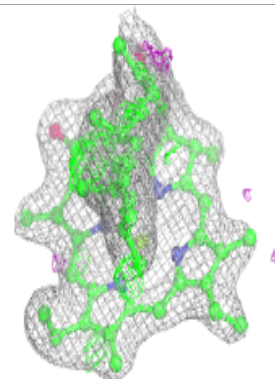
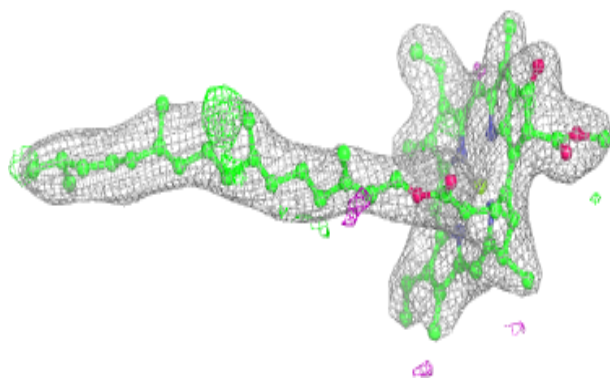
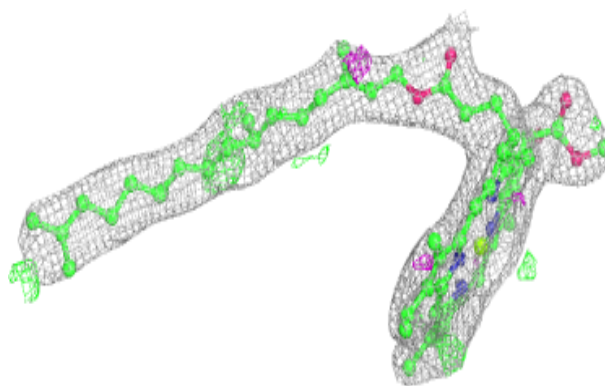
**Electron density around BCR B 617:**

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



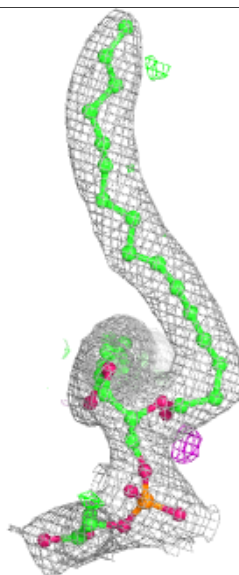
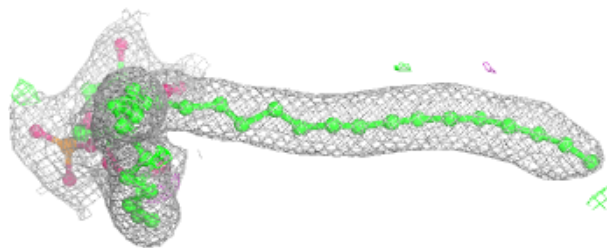
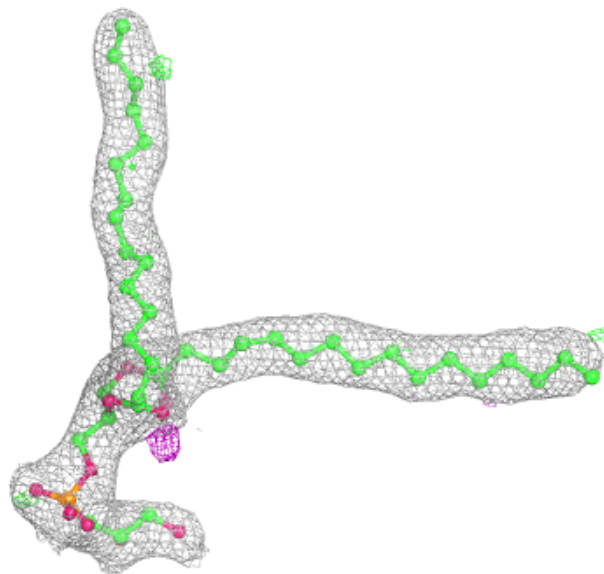
Electron density around CLA b 607:

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



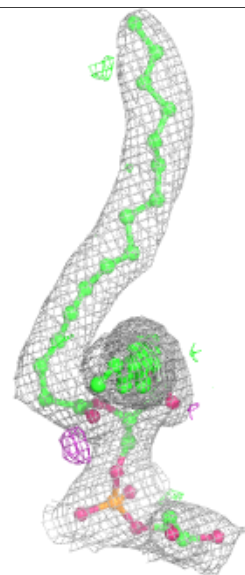
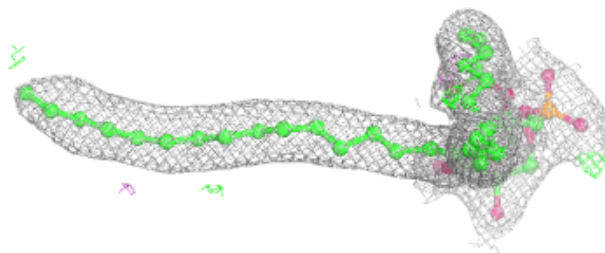
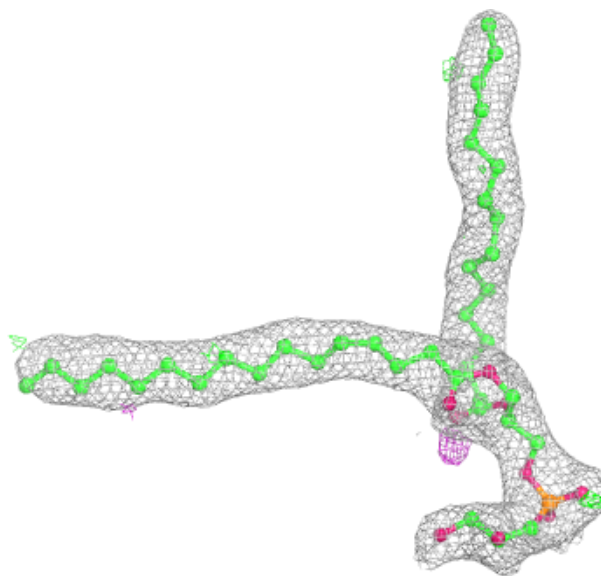
Electron density around LHG L 101 (A):

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



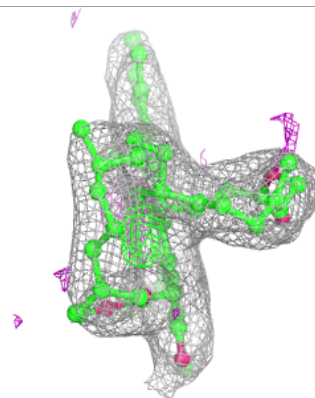
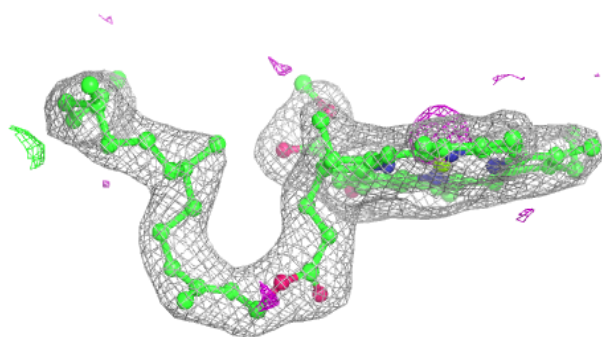
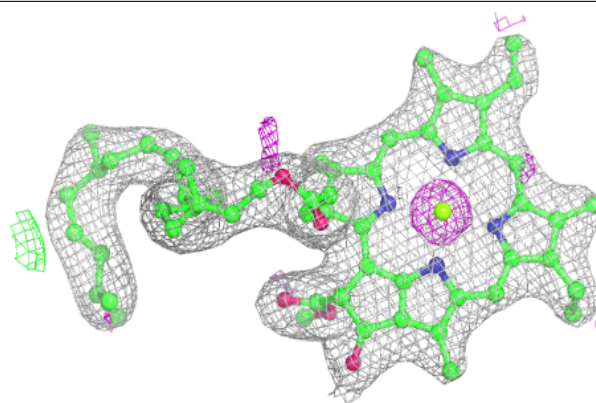
Electron density around LHG L 101 (B):

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

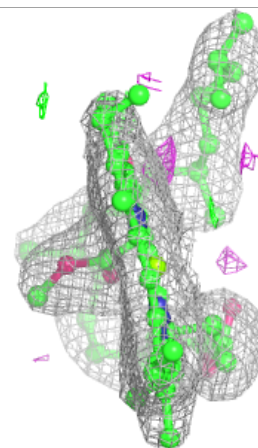
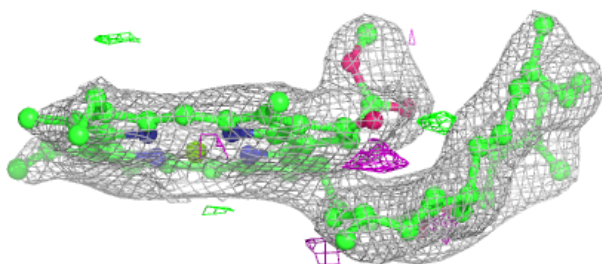
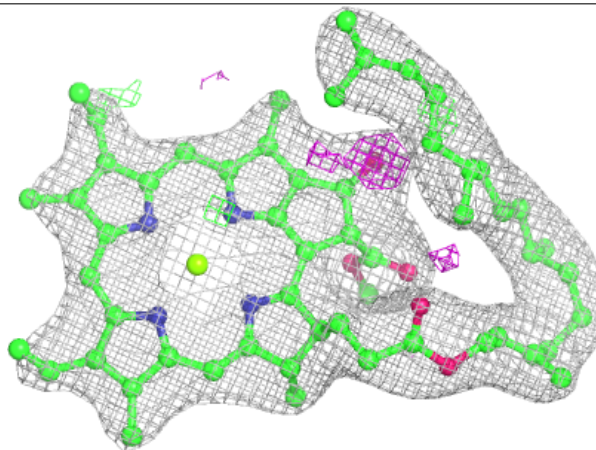


Electron density around CLA B 612:

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

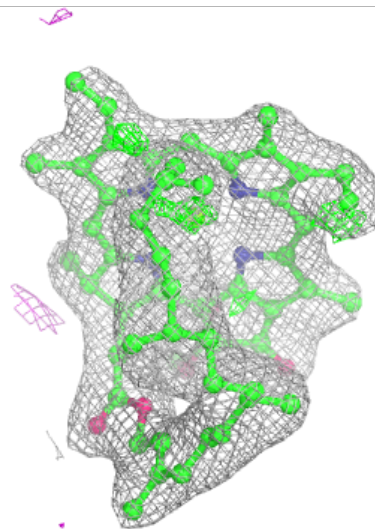
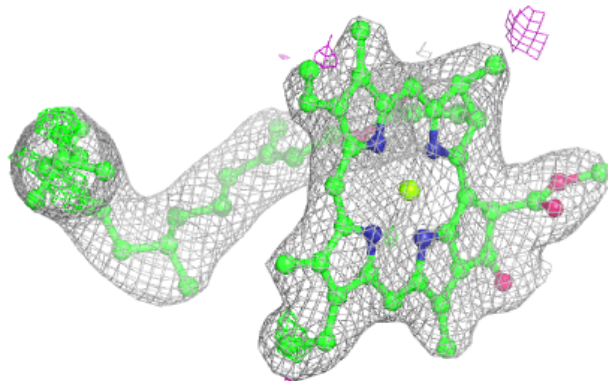
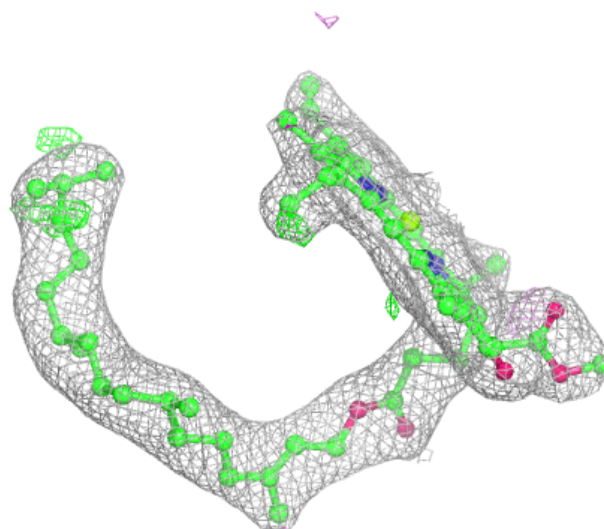
**Electron density around CLA b 610:**

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



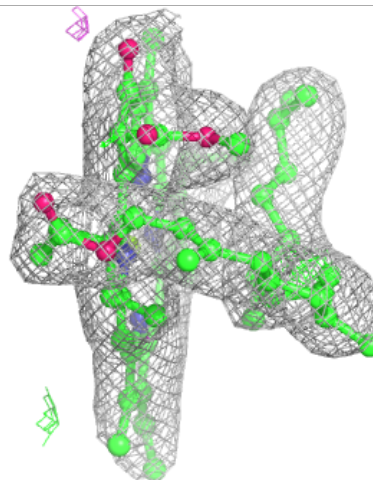
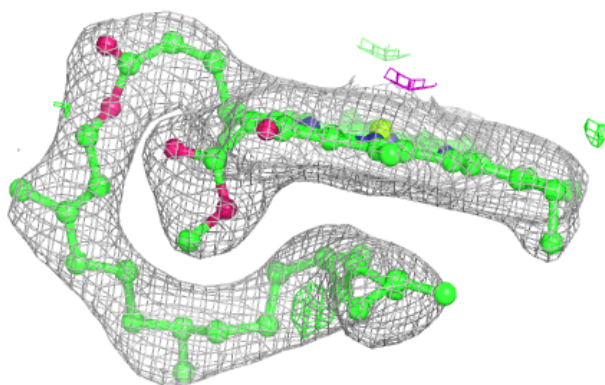
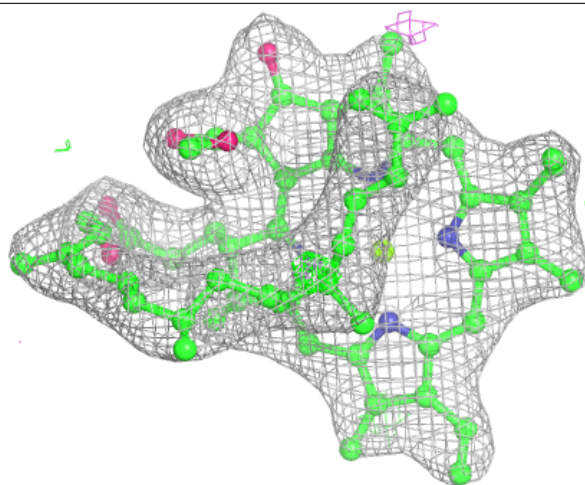
Electron density around CLA b 611:

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



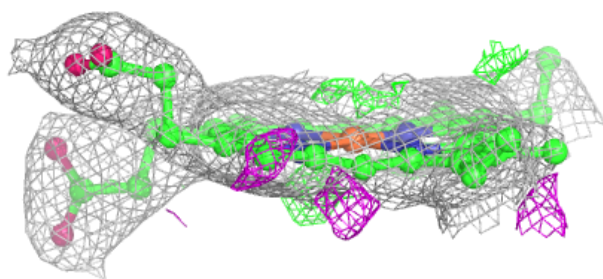
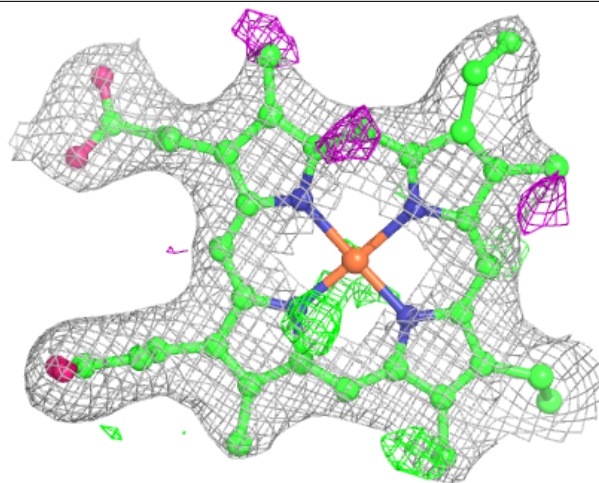
Electron density around CLA C 510:

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



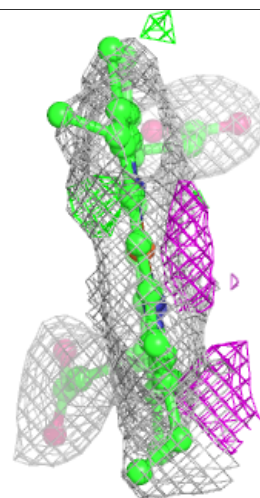
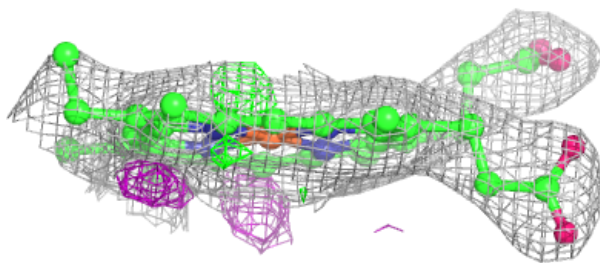
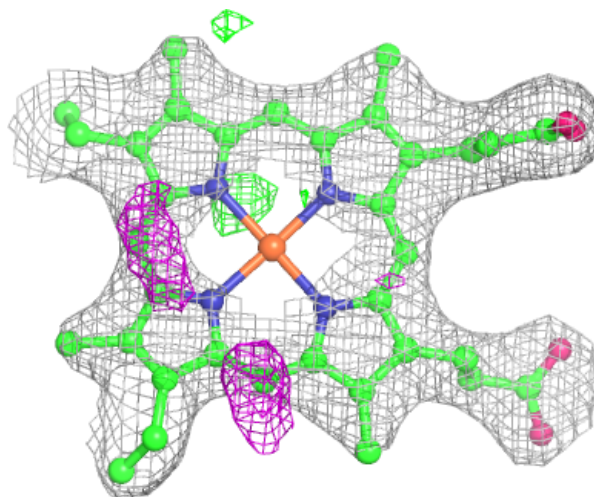
Electron density around HEC V 201:

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



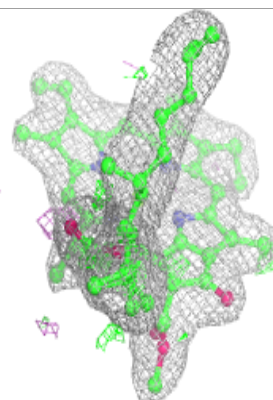
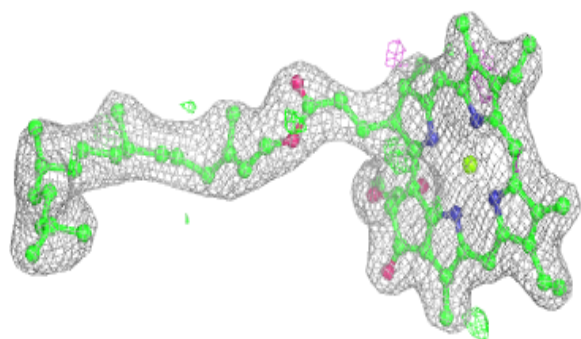
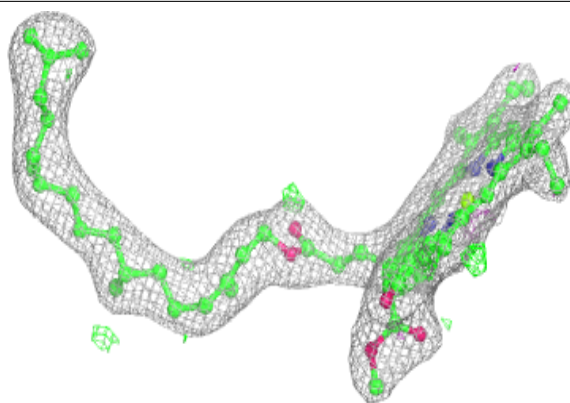
Electron density around HEC v 201:

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

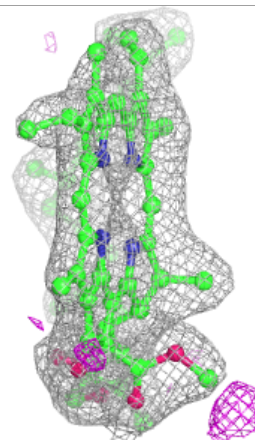
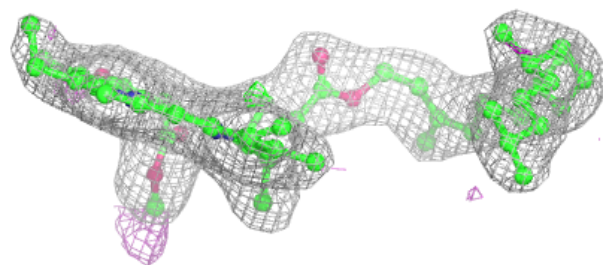
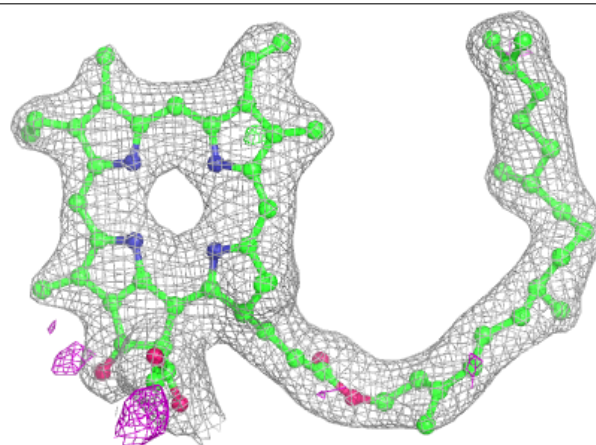


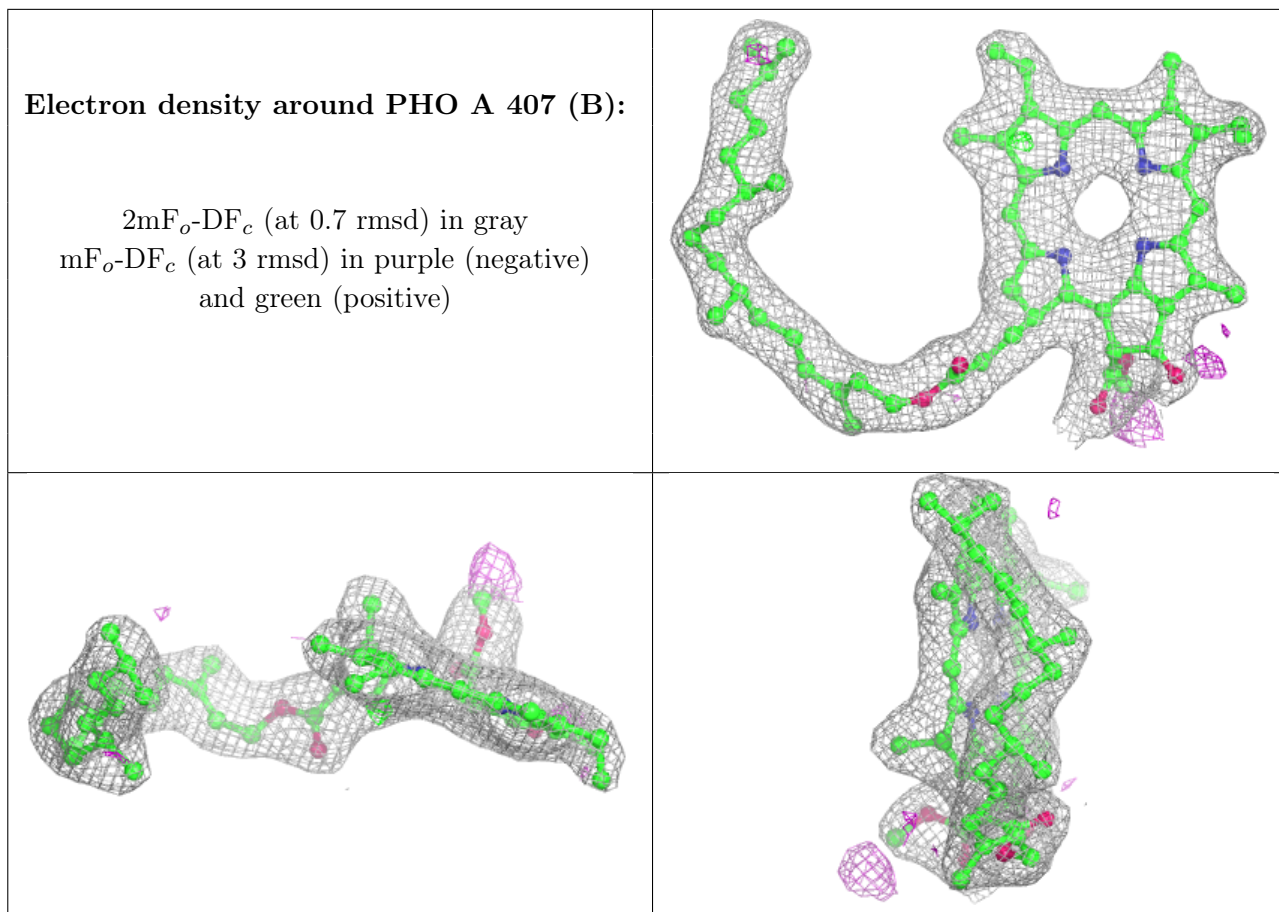
Electron density around CLA D 403 (A):

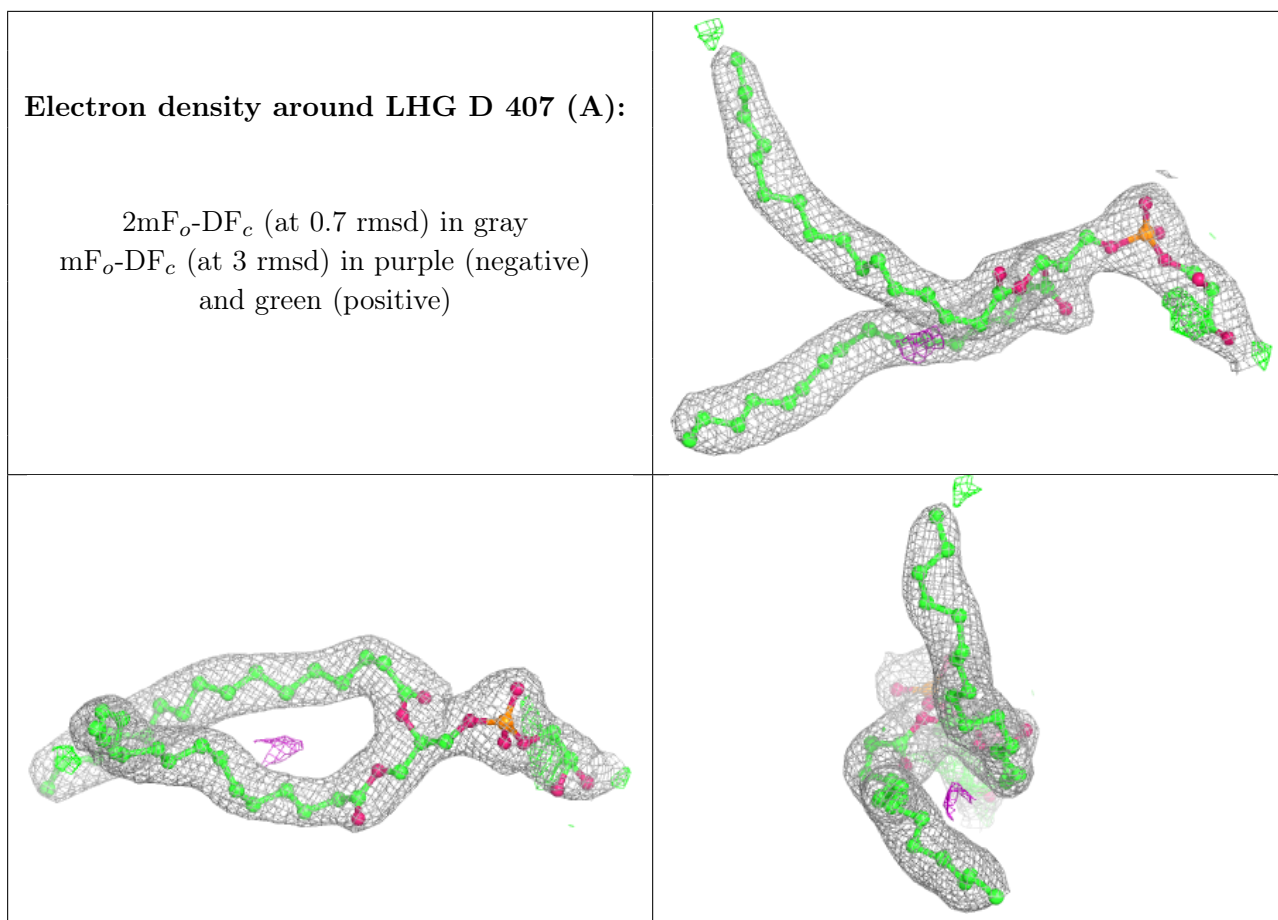
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around PHO A 407 (A):**

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

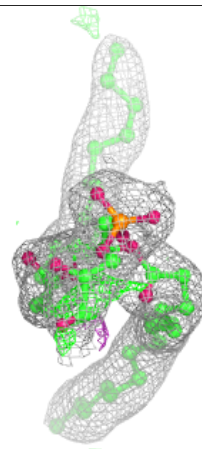
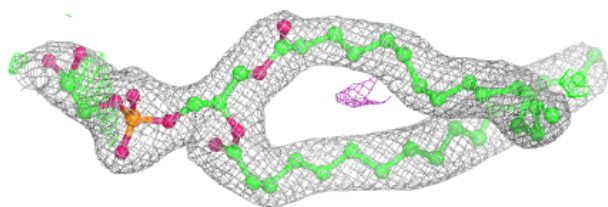
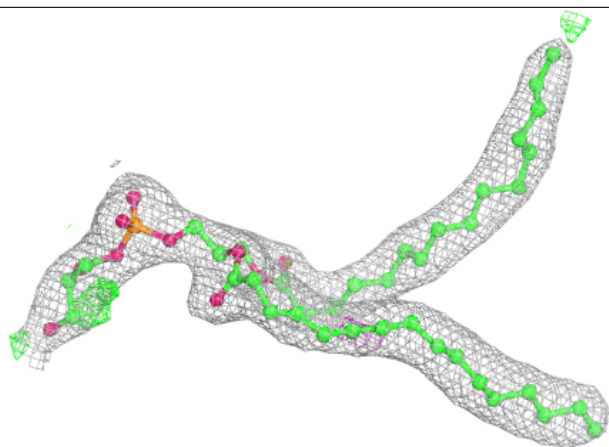


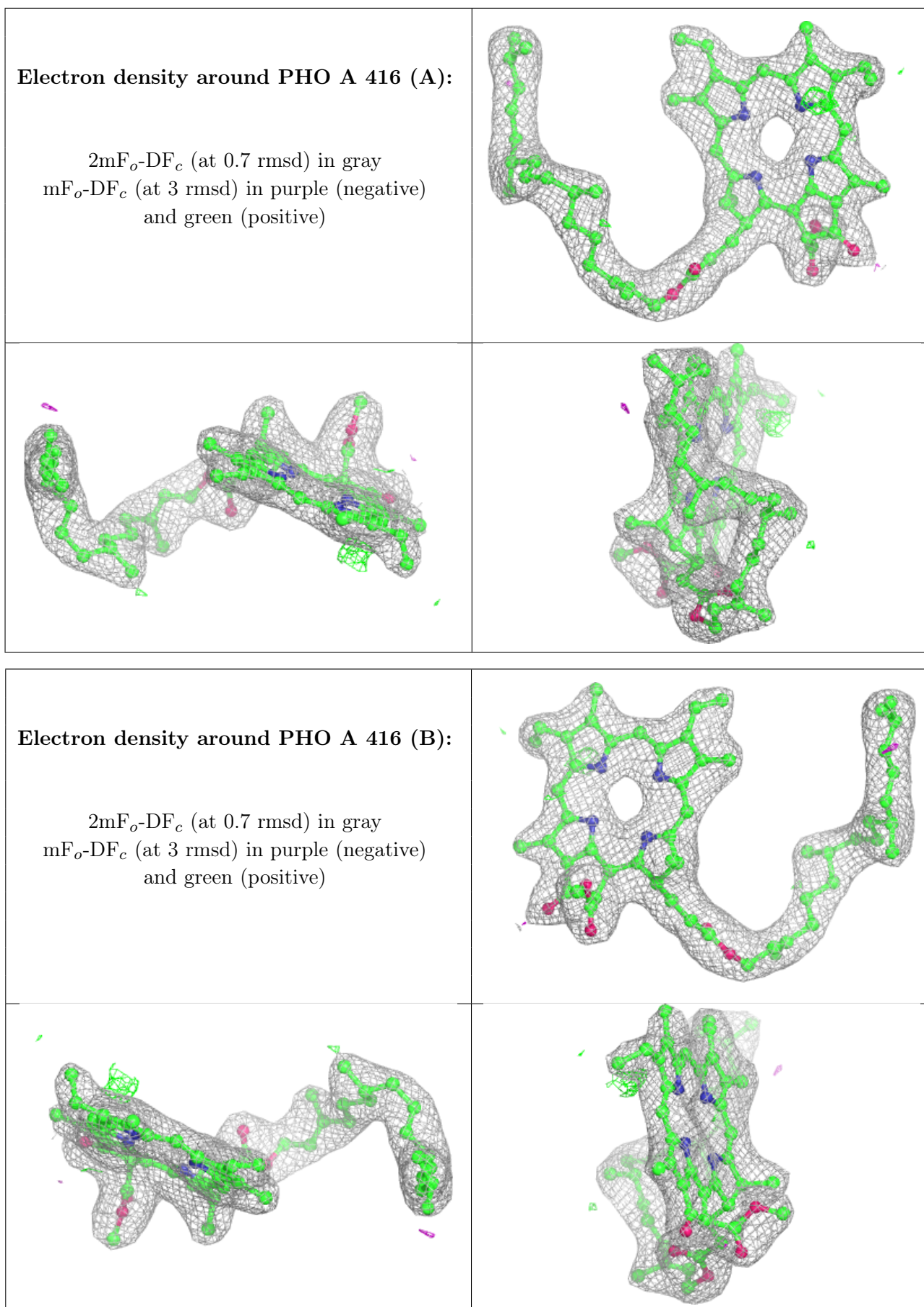




Electron density around LHG D 407 (B):

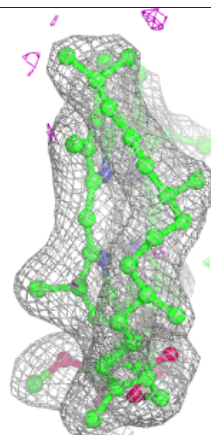
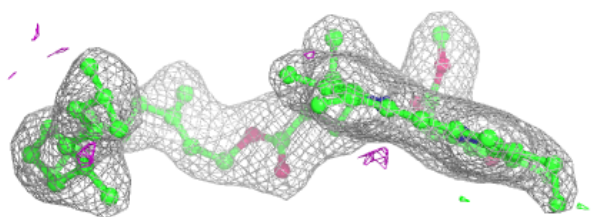
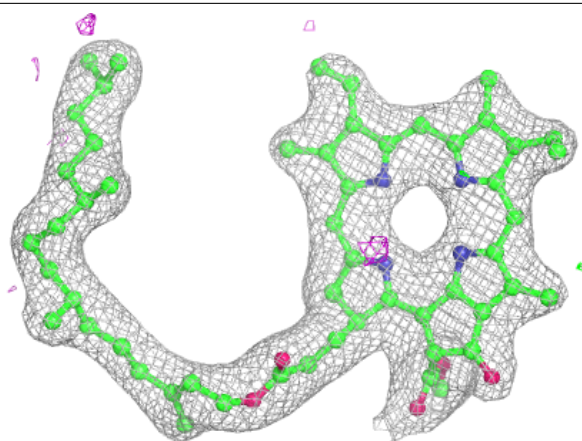
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





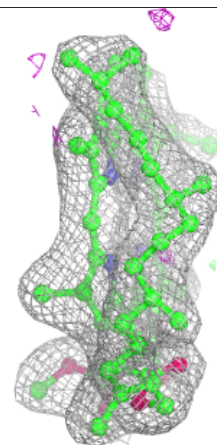
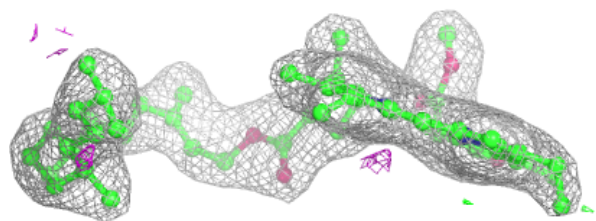
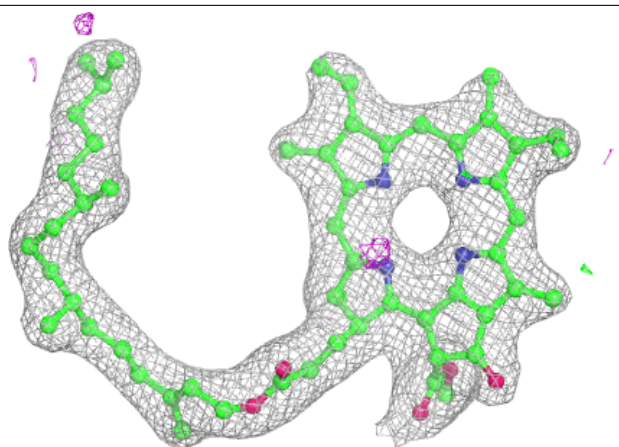
Electron density around PHO a 406 (A):

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

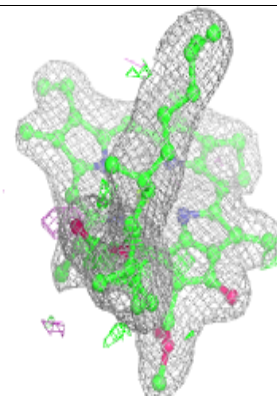
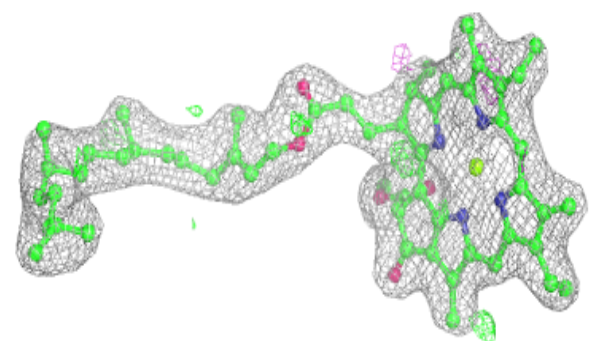
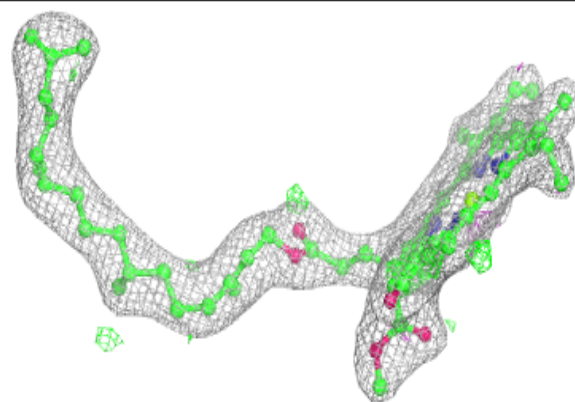


Electron density around PHO a 406 (B):

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

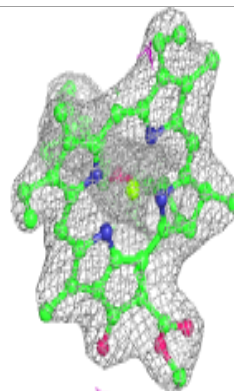
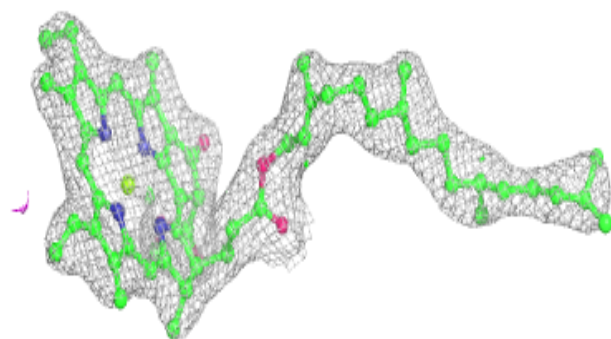
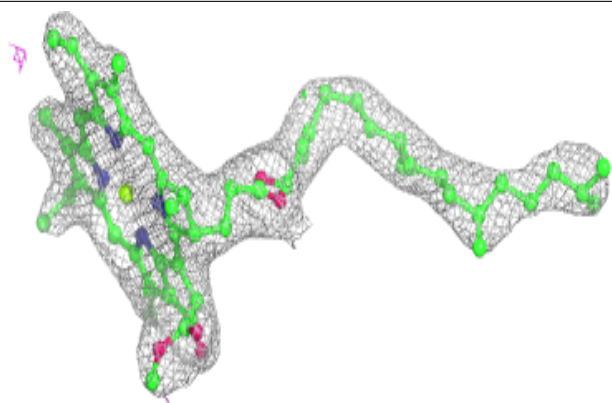
**Electron density around CLA D 403 (B):**

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

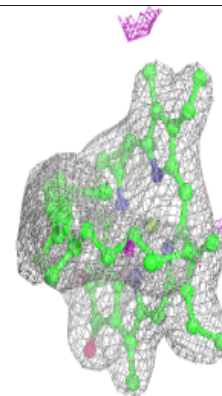
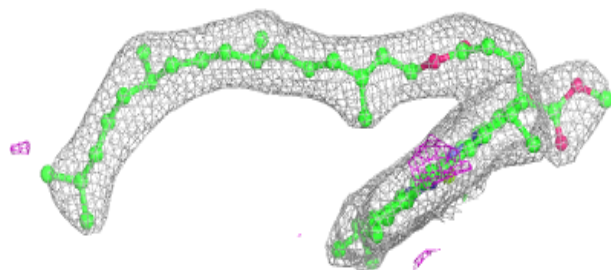
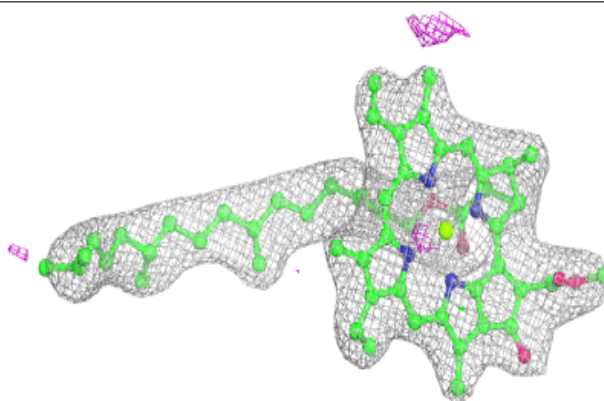


Electron density around CLA c 503:

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

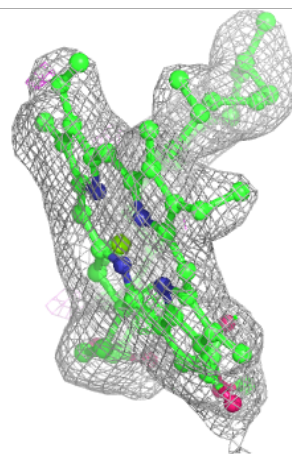
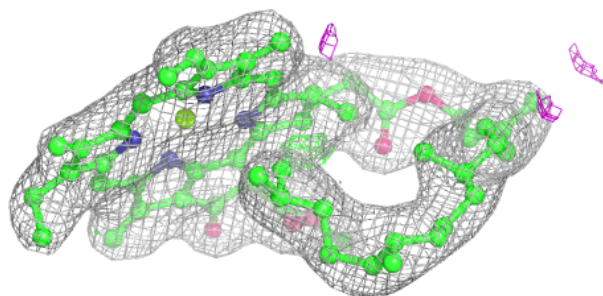
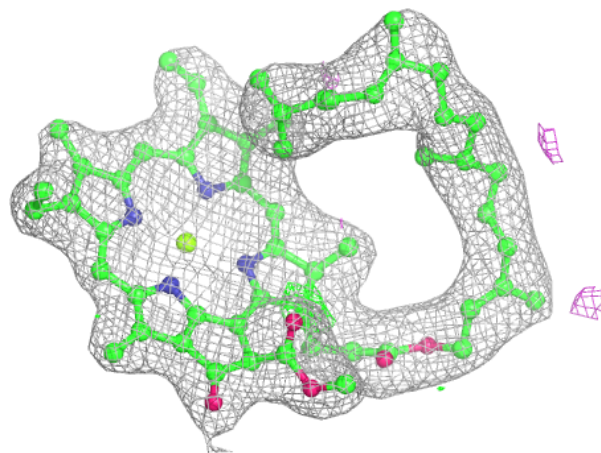
**Electron density around CLA B 608:**

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

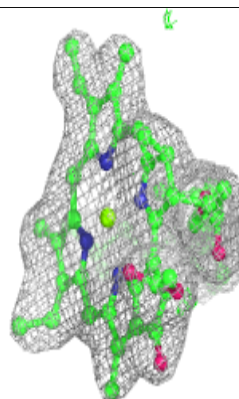
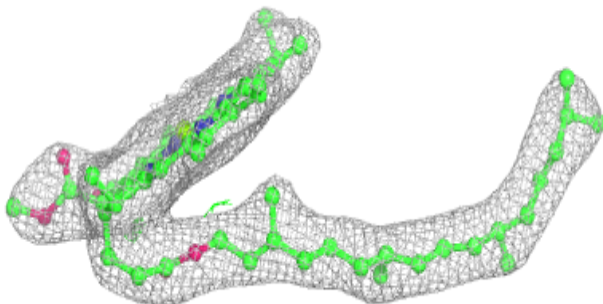
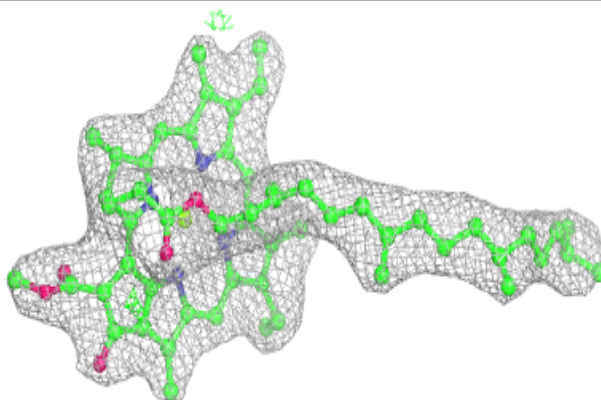


Electron density around CLA B 615:

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

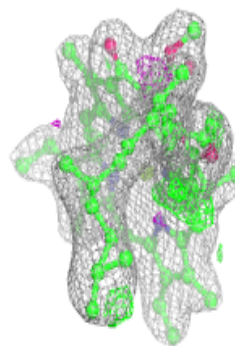
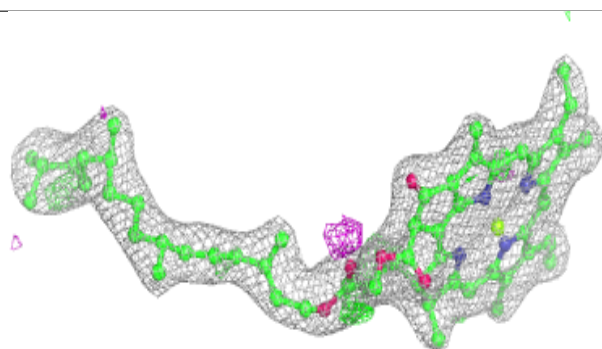
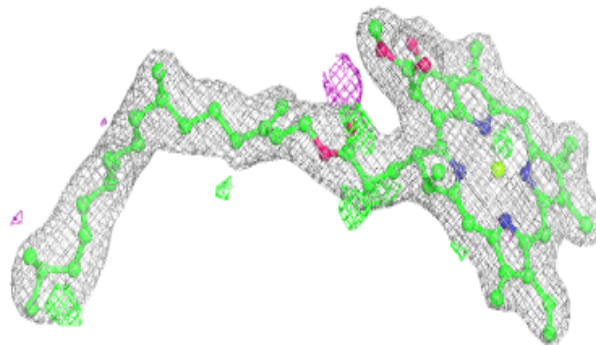
**Electron density around CLA b 608:**

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

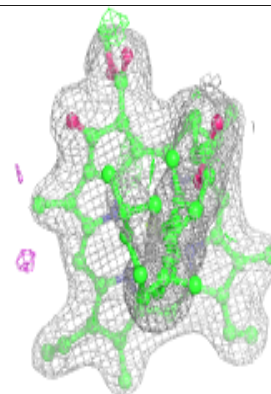
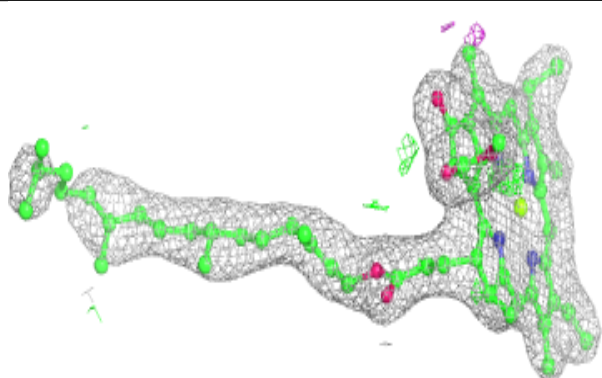
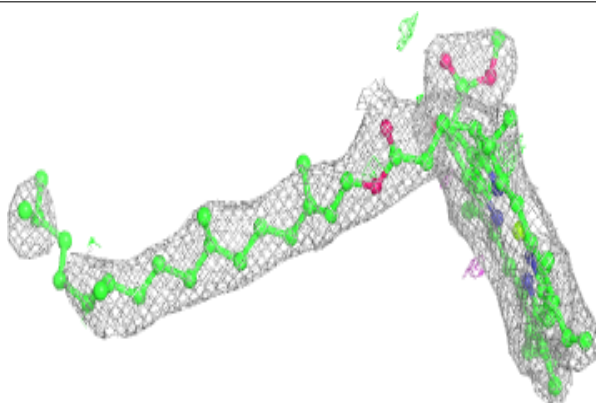


Electron density around CLA A 404 (B):

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

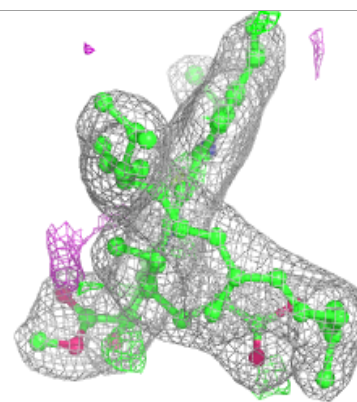
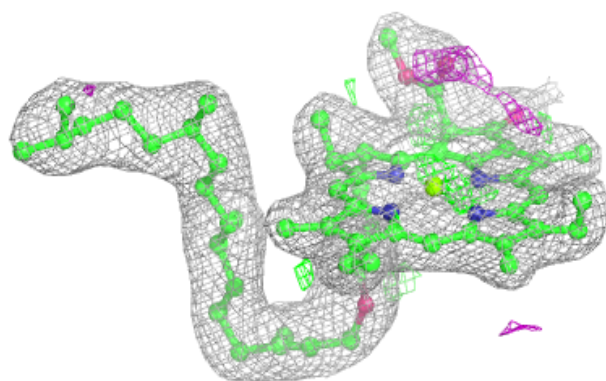
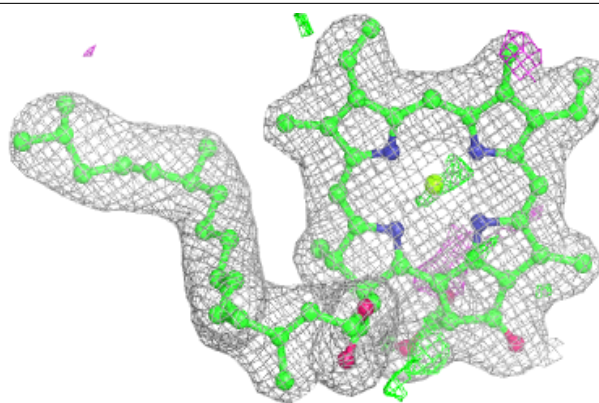
**Electron density around CLA B 604:**

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

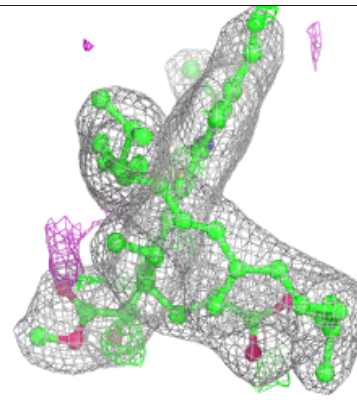
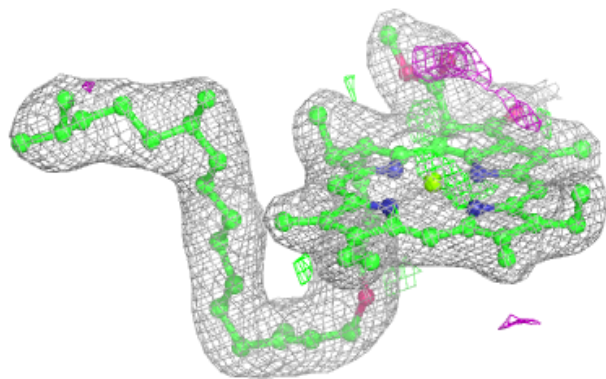
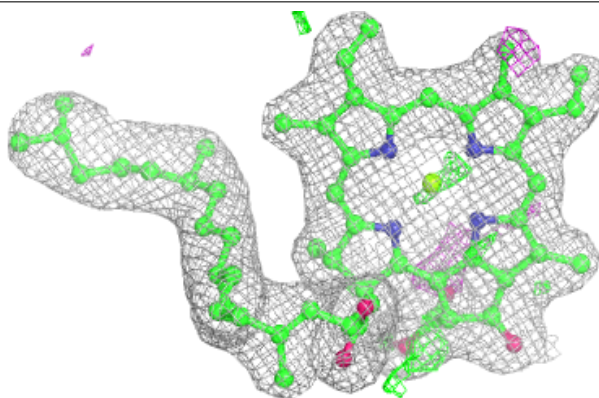


Electron density around CLA A 405 (A):

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

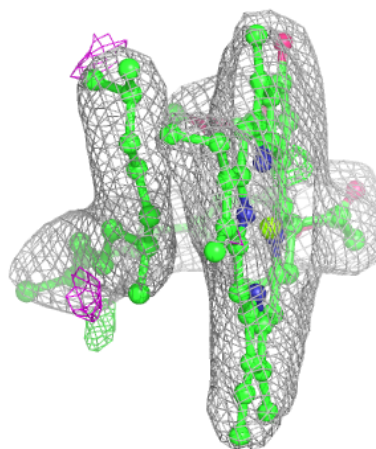
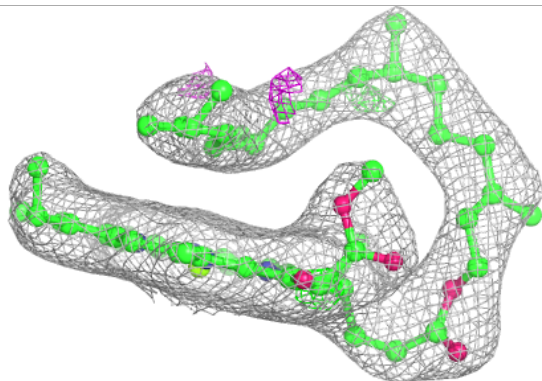
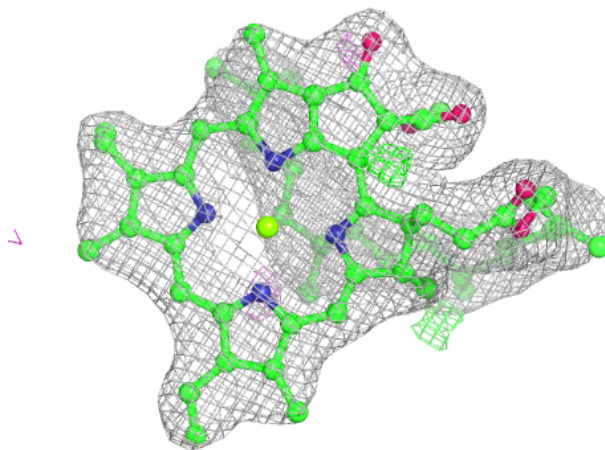
**Electron density around CLA A 405 (B):**

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



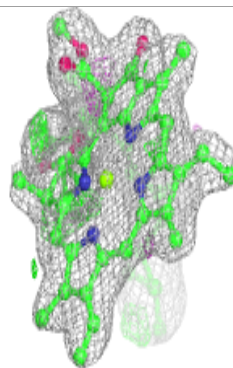
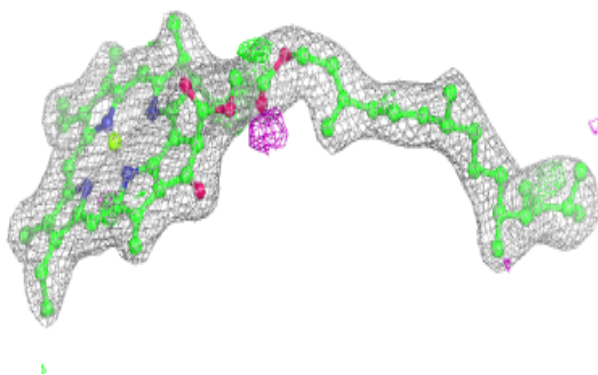
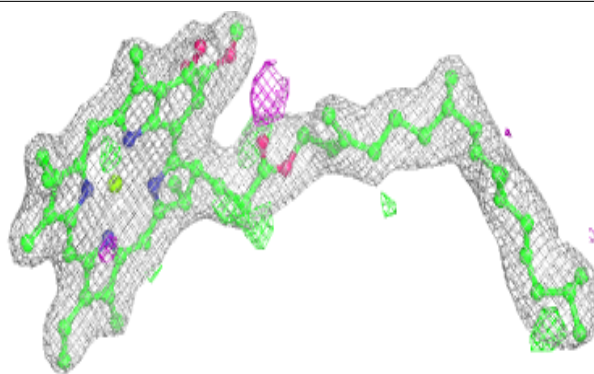
Electron density around CLA c 511:

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

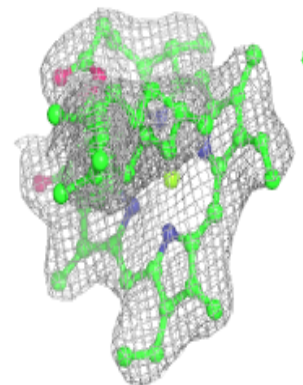
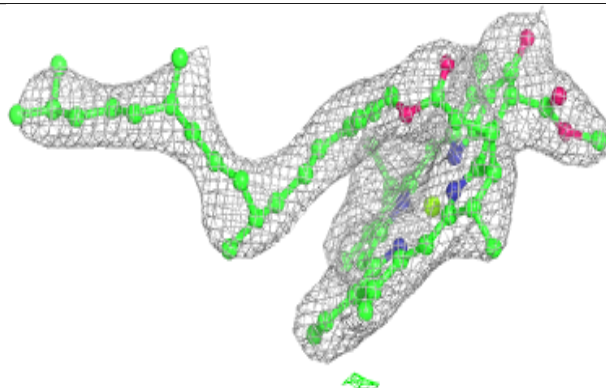
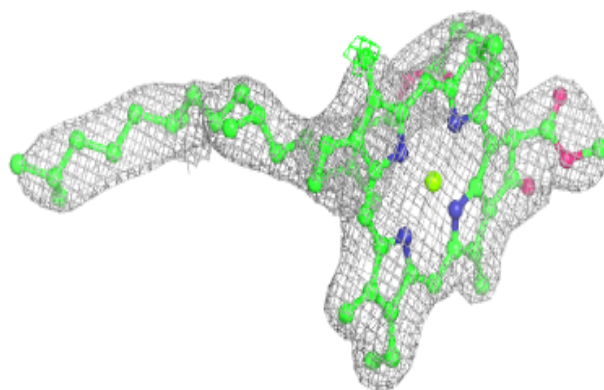


Electron density around CLA A 404 (A):

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

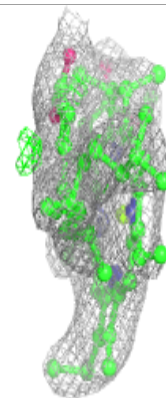
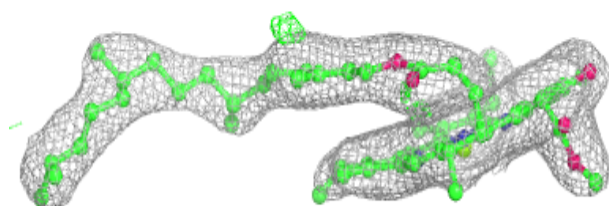
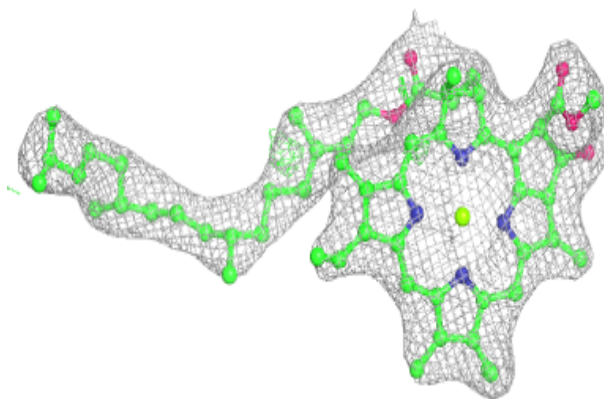
**Electron density around CLA C 505:**

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

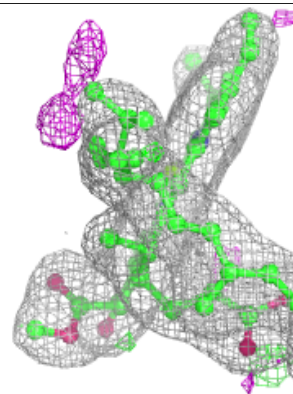
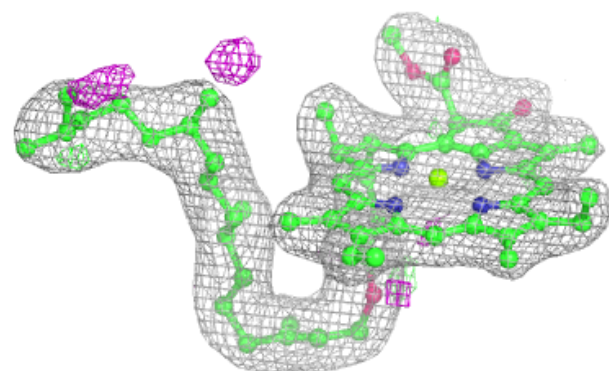
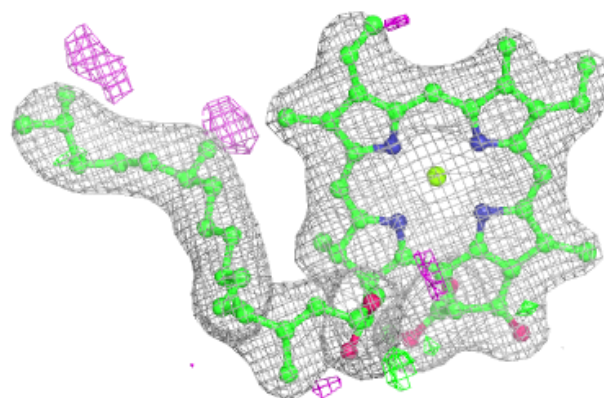


Electron density around CLA b 603:

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

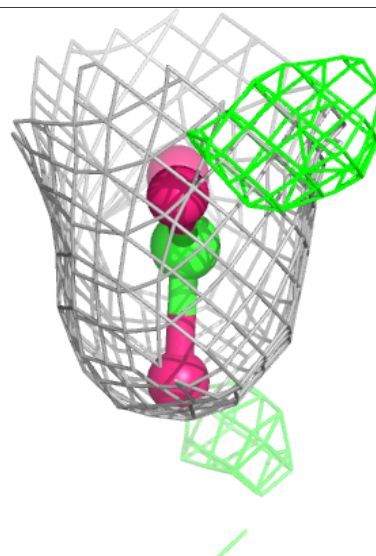
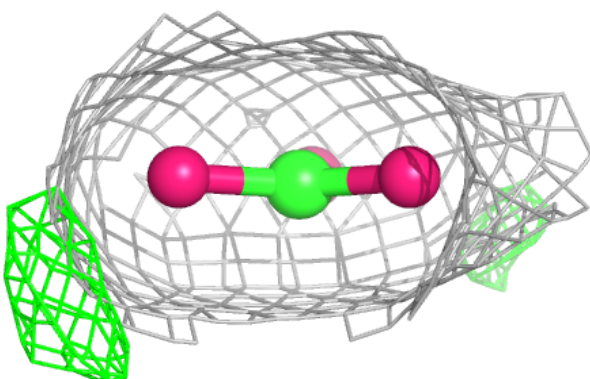
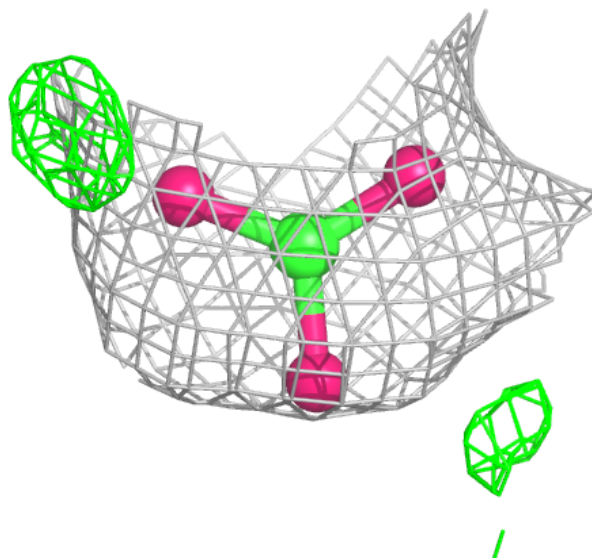
**Electron density around CLA d 402 (A):**

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



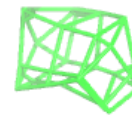
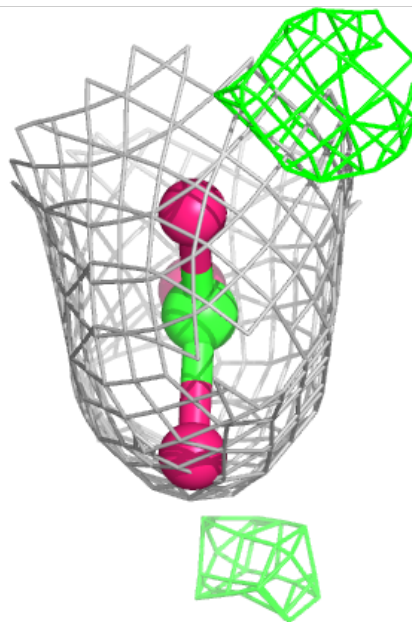
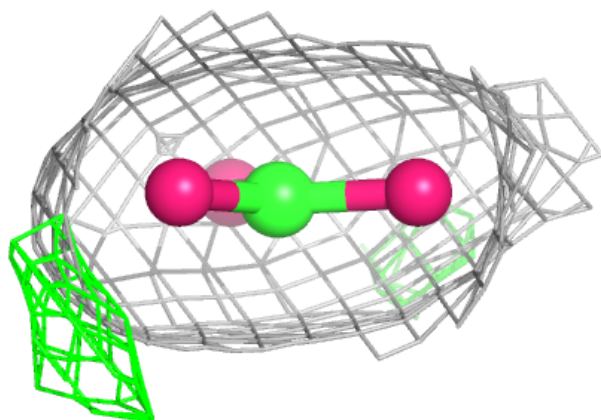
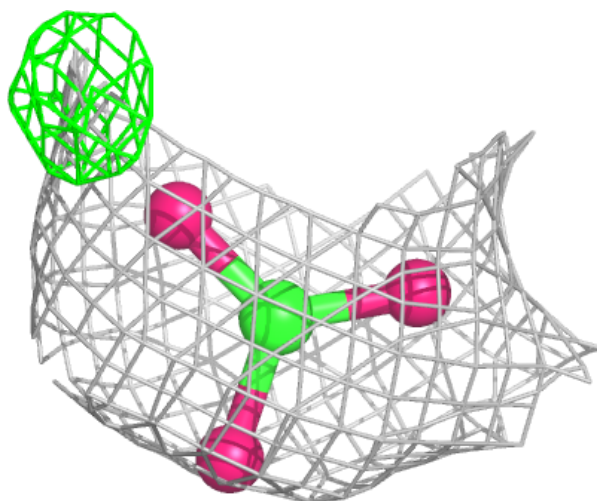
Electron density around BCT d 401 (A):

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



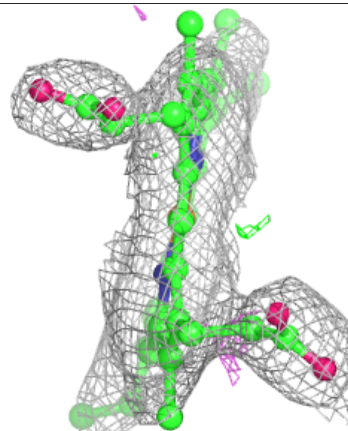
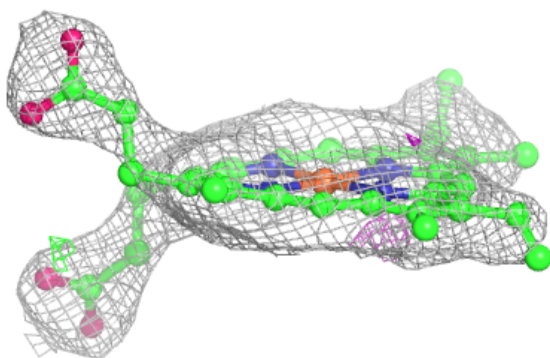
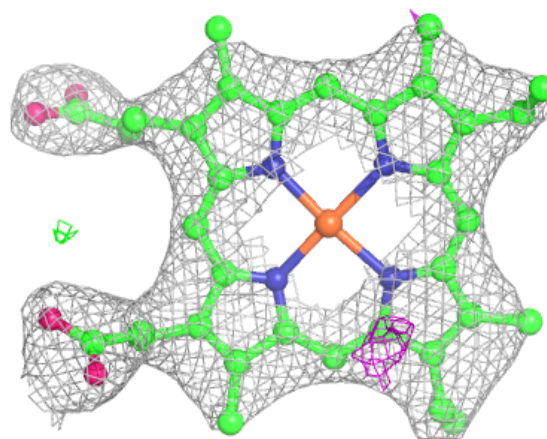
Electron density around BCT d 401 (B):

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

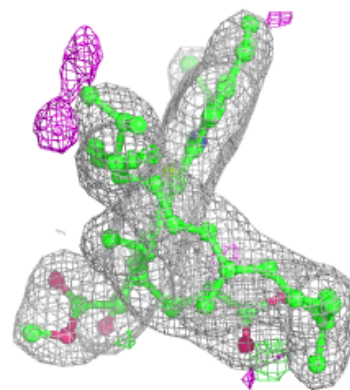
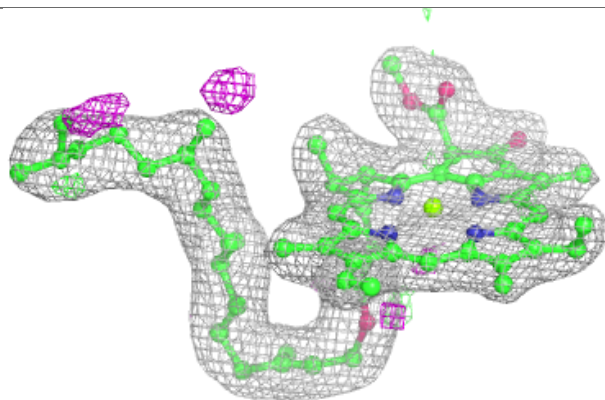
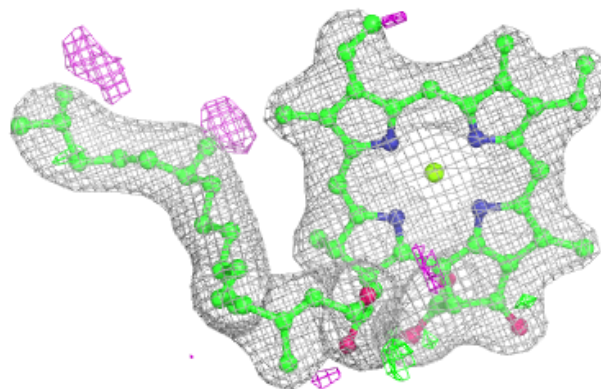


Electron density around HEM F 102:

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

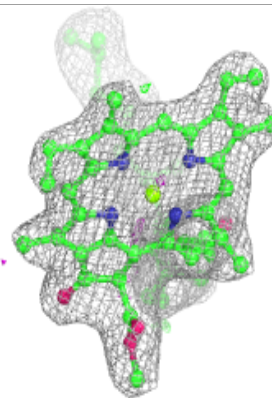
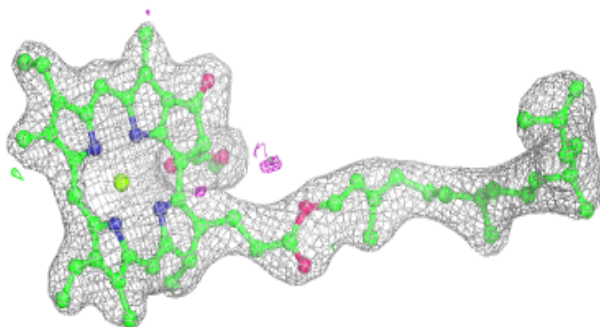
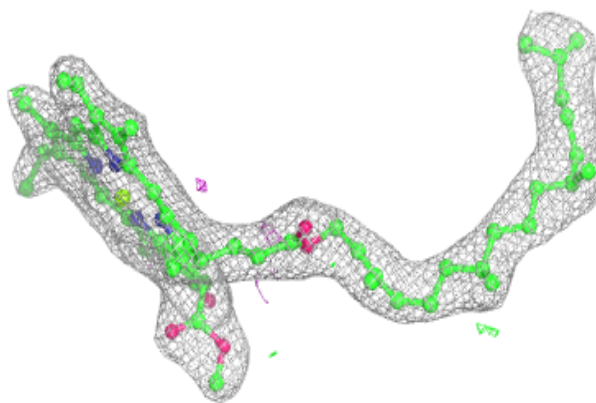
**Electron density around CLA d 402 (B):**

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

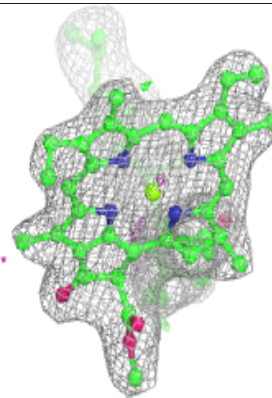
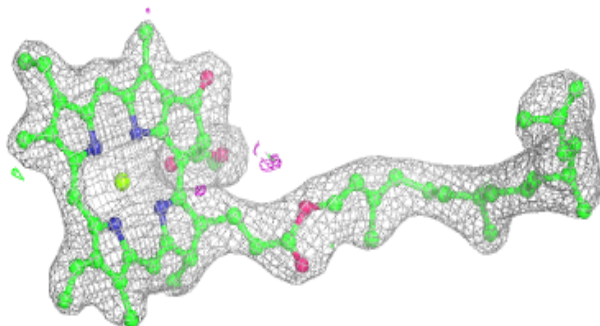
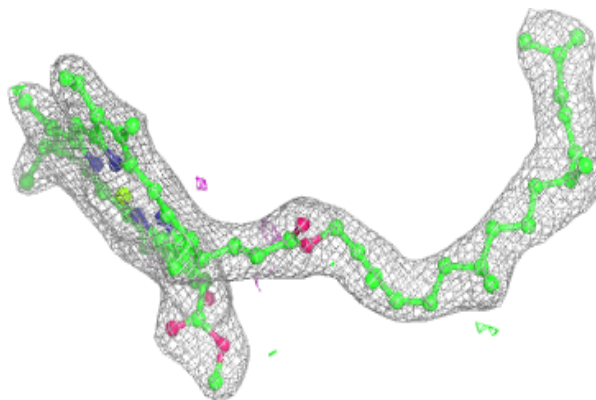


Electron density around CLA d 403 (A):

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

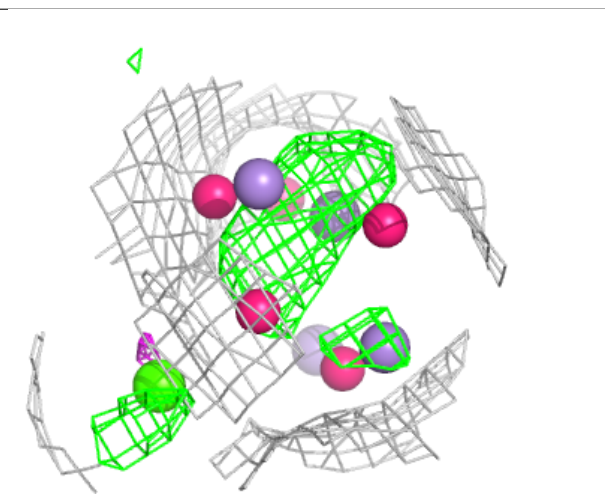
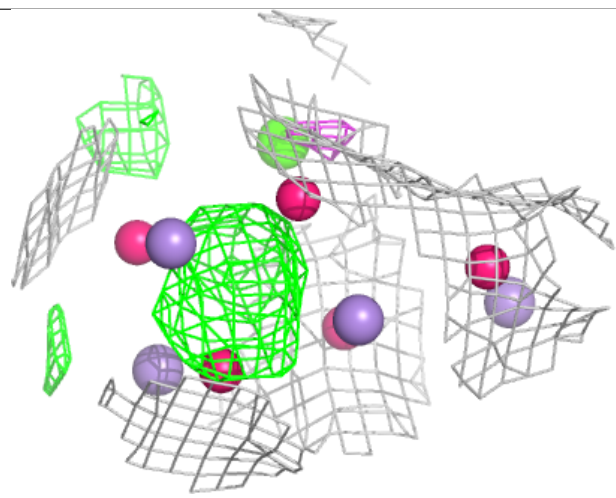
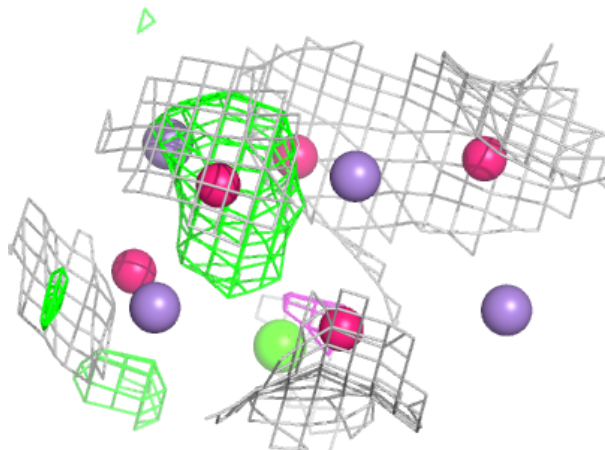
**Electron density around CLA d 403 (B):**

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



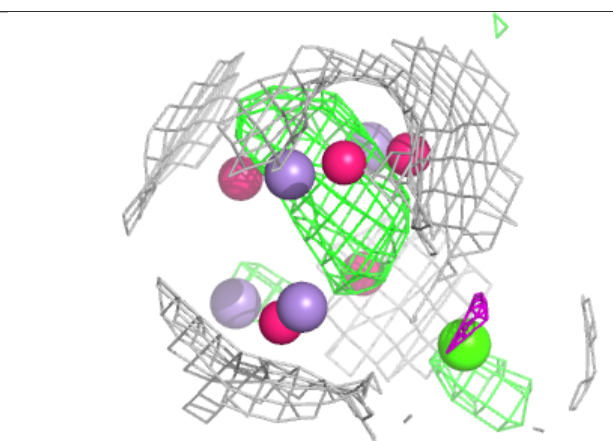
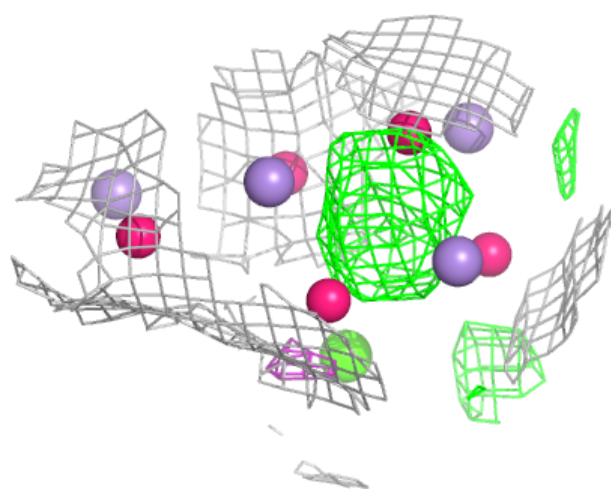
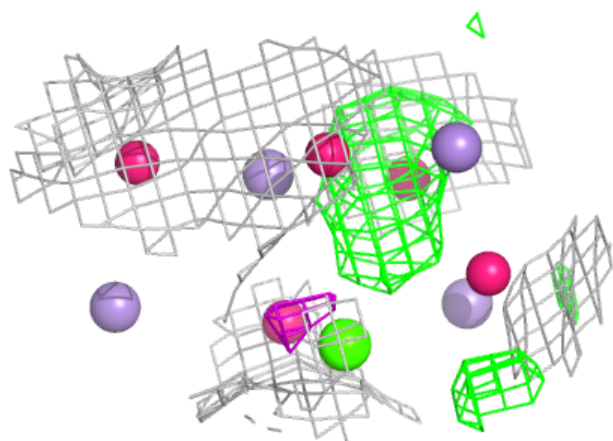
Electron density around OEX a 411 (A):

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



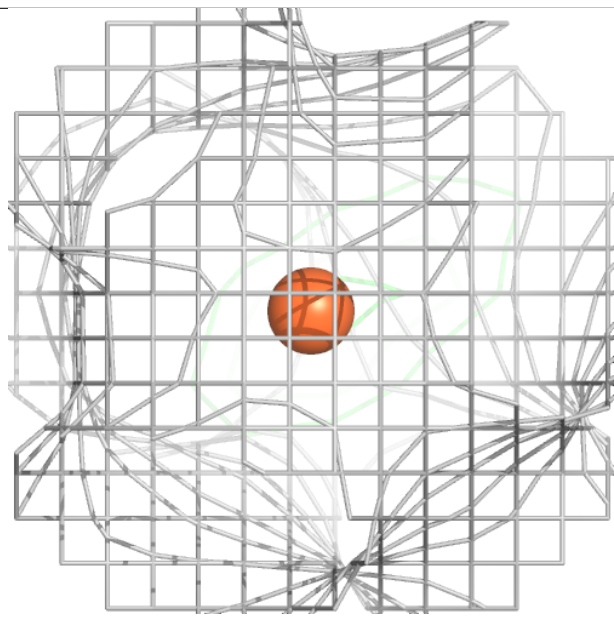
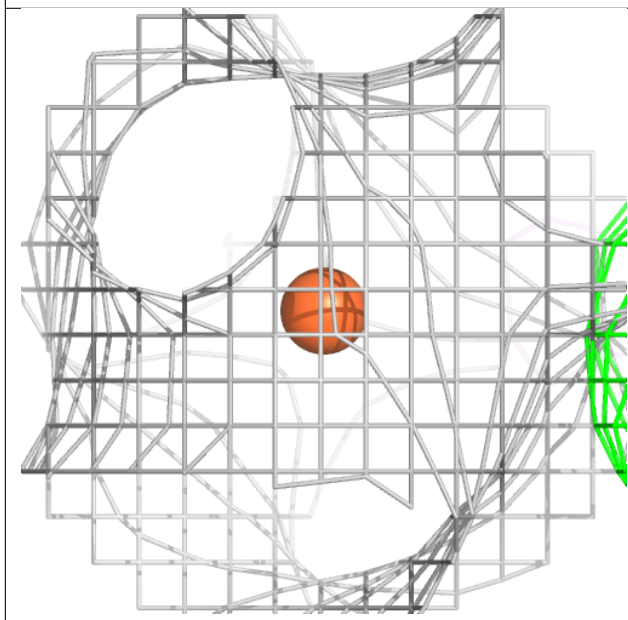
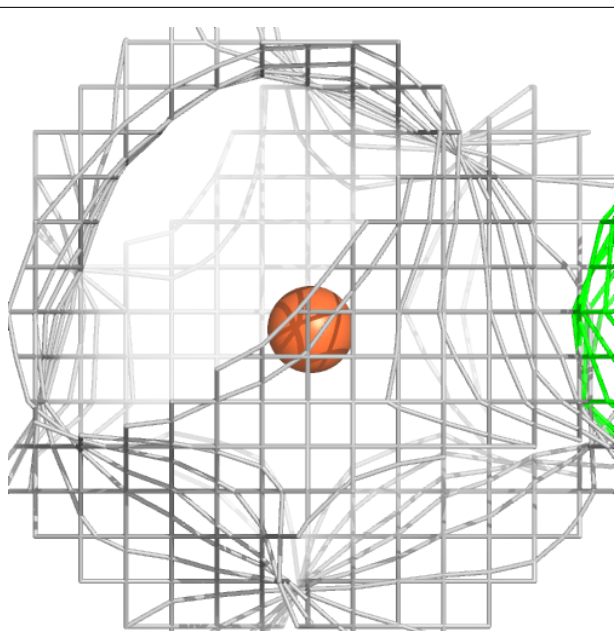
Electron density around OEX a 411 (B):

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



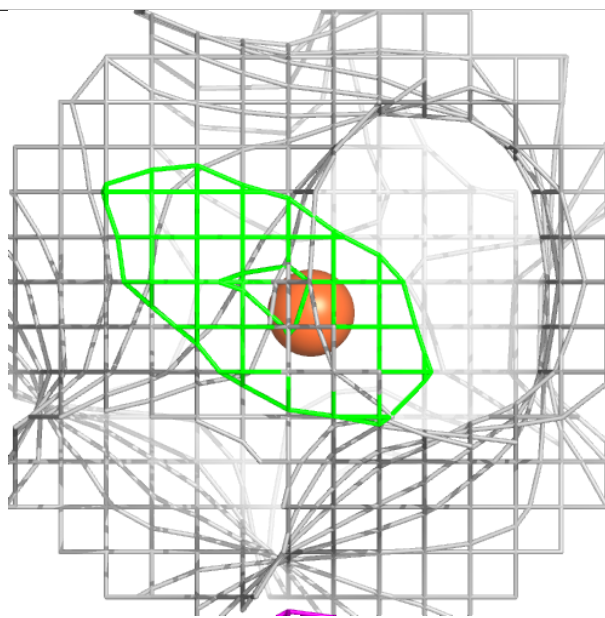
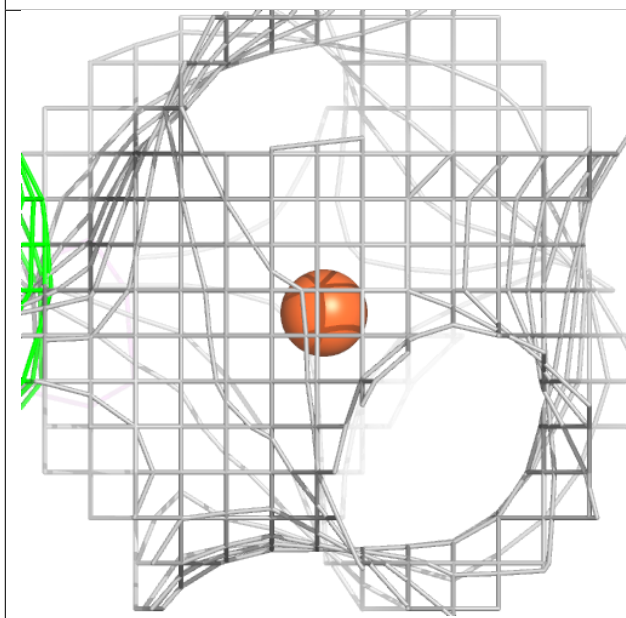
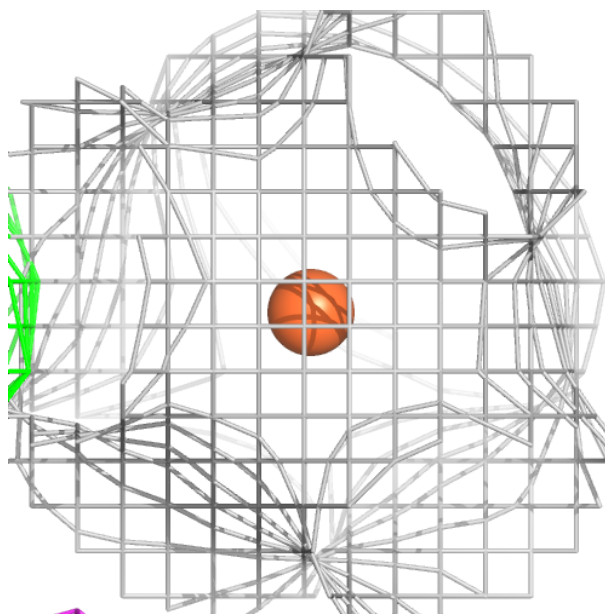
Electron density around FE2 A 401 (A):

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



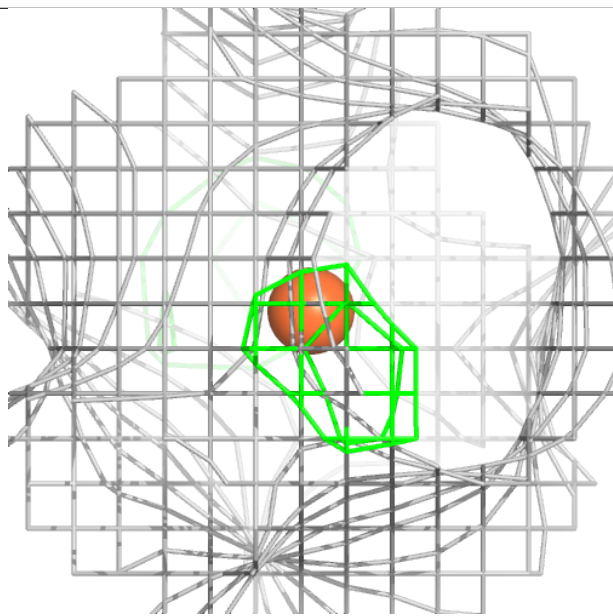
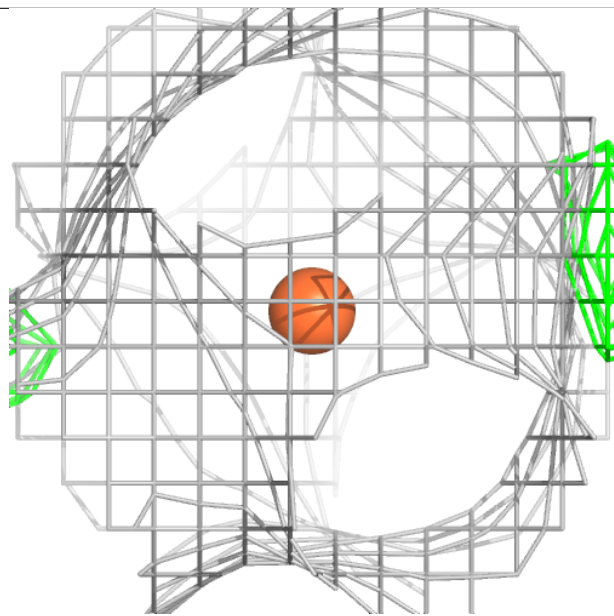
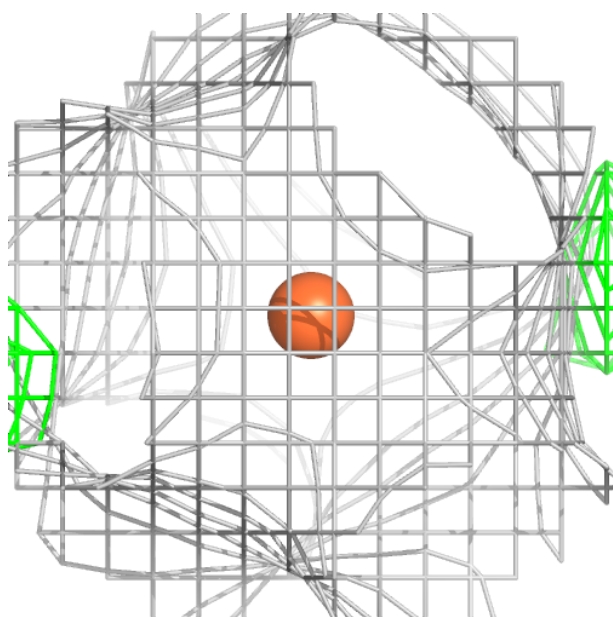
Electron density around FE2 A 401 (B):

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



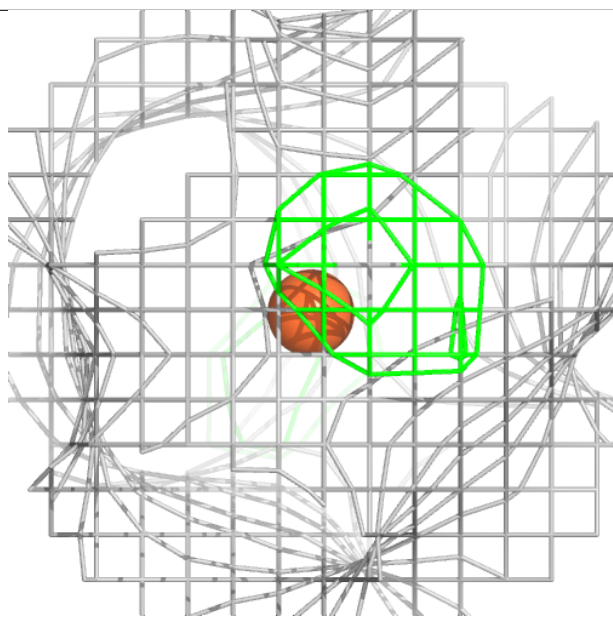
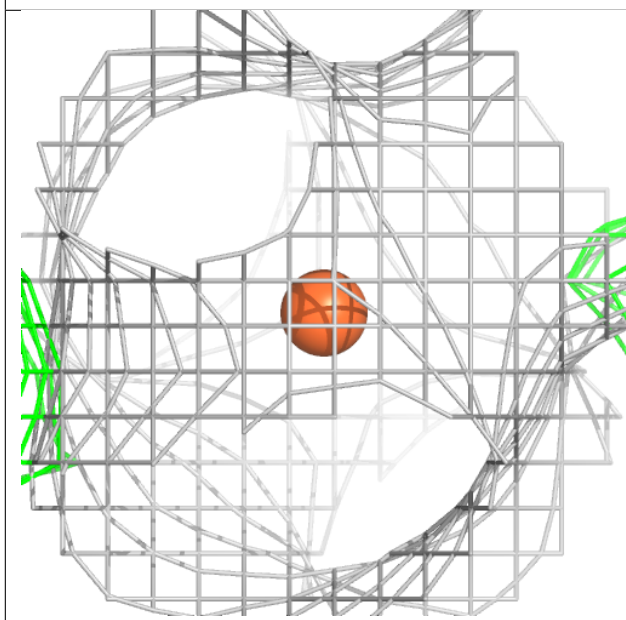
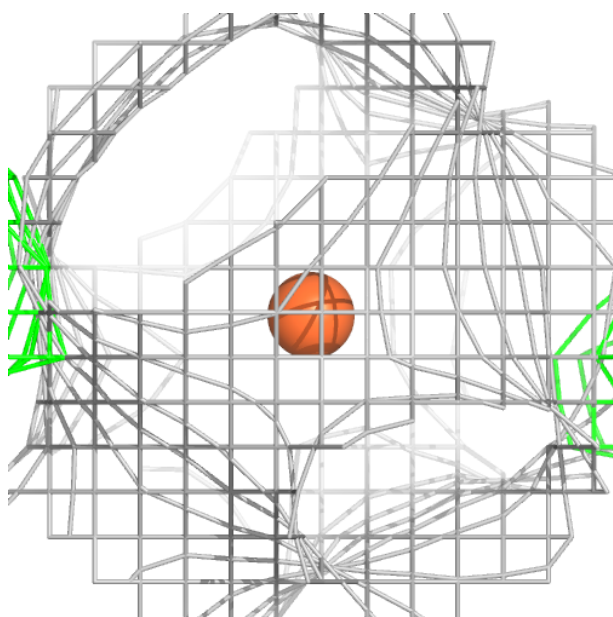
Electron density around FE2 a 401 (A):

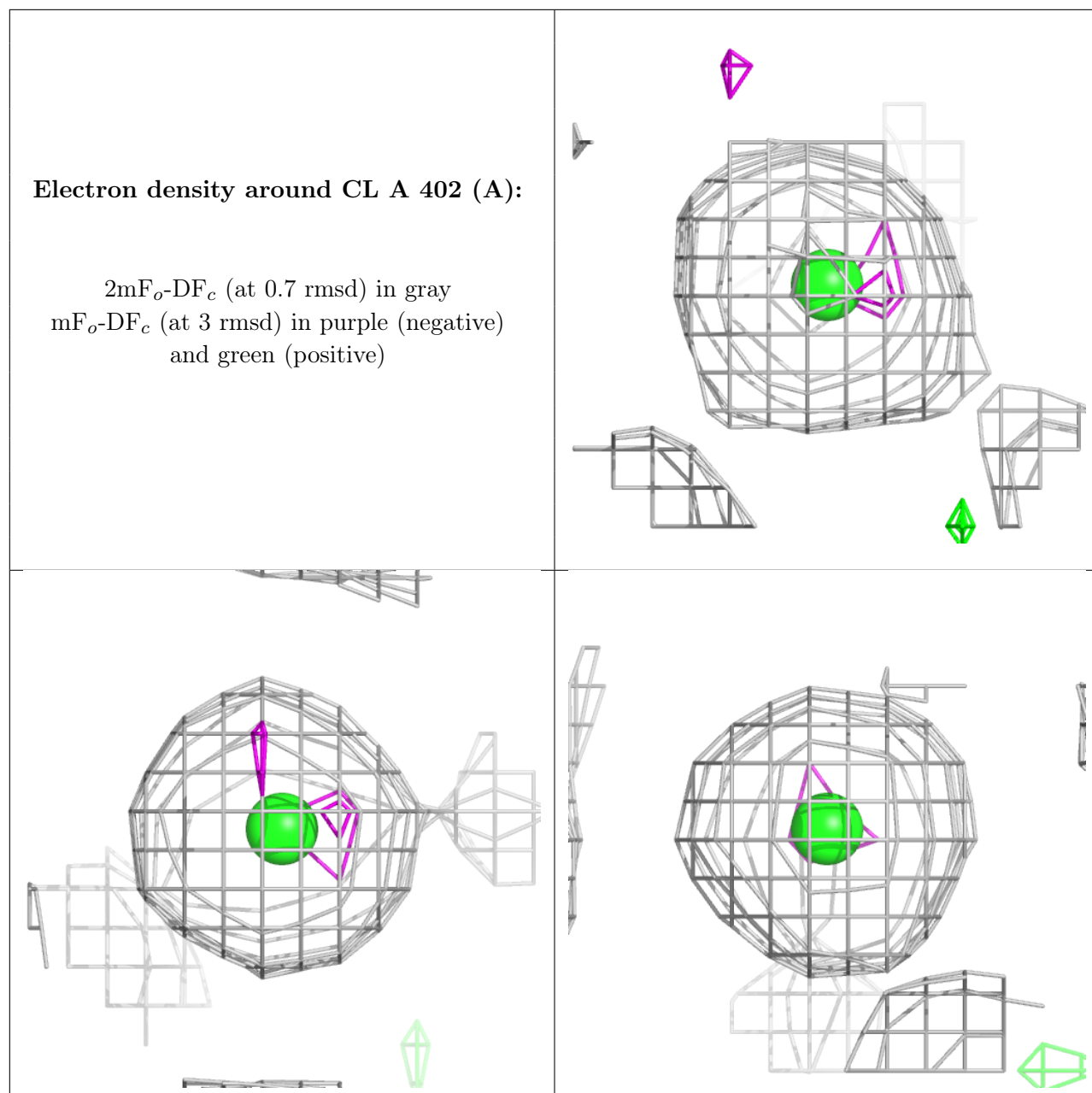
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

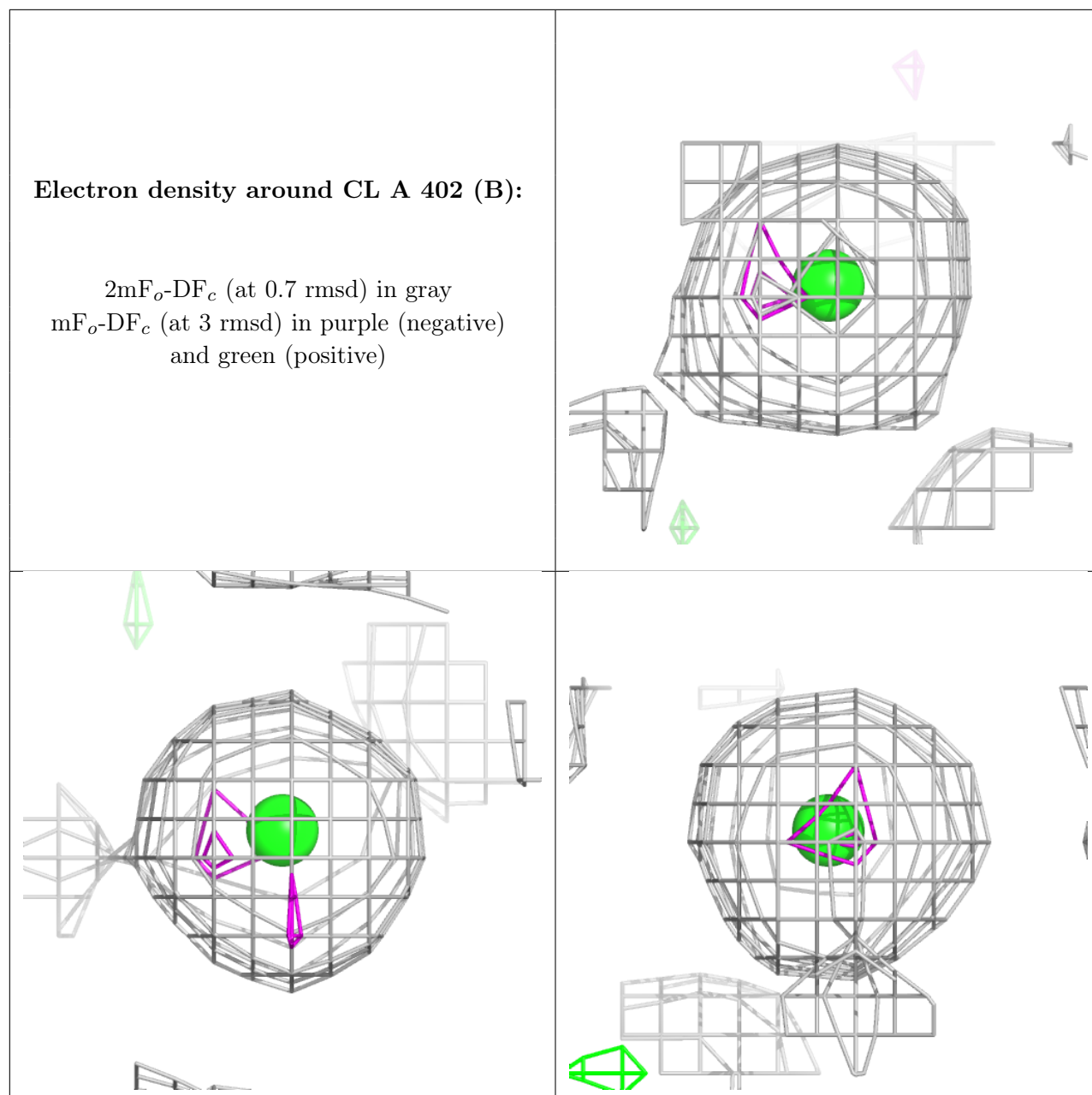


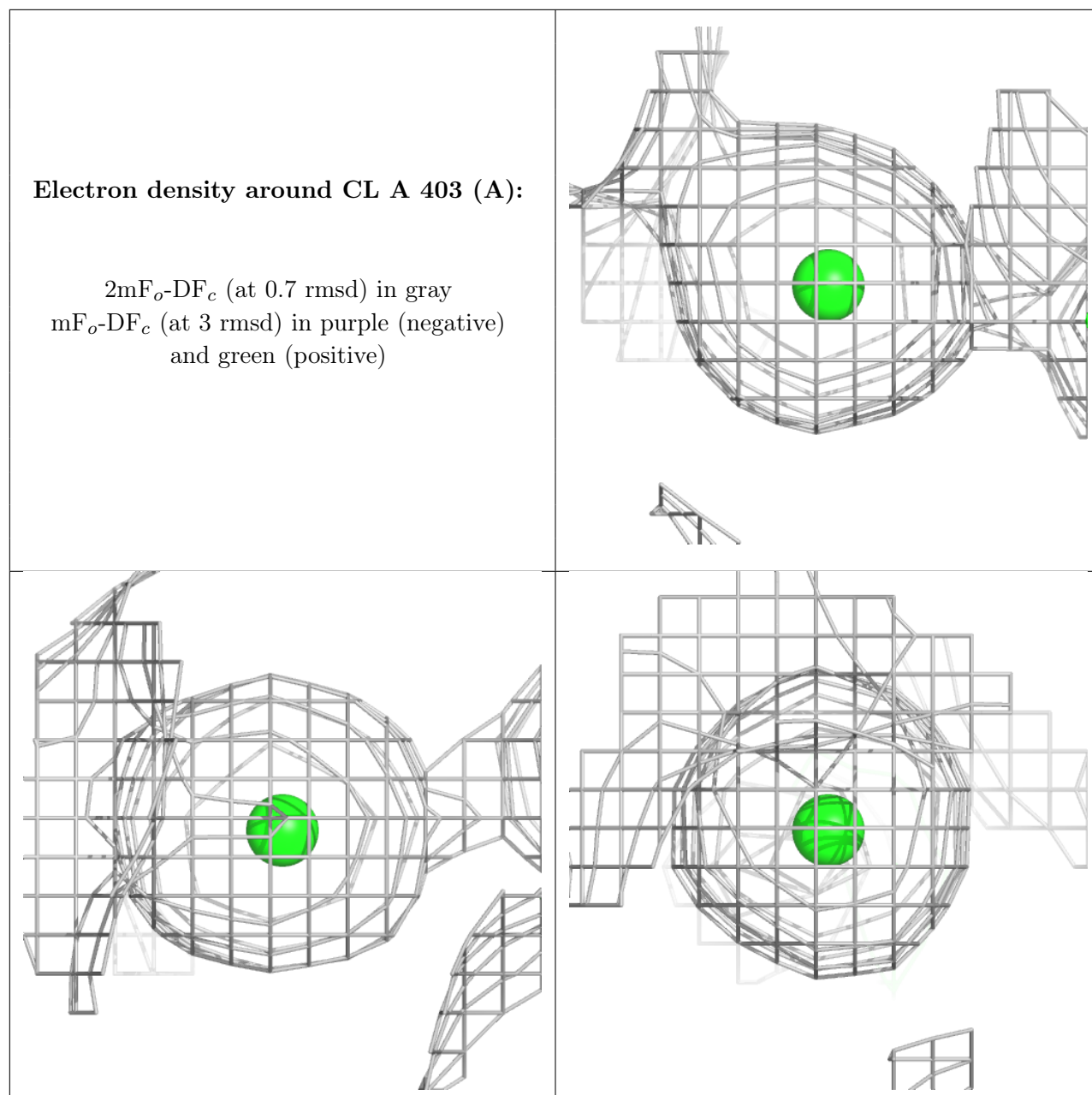
Electron density around FE2 a 401 (B):

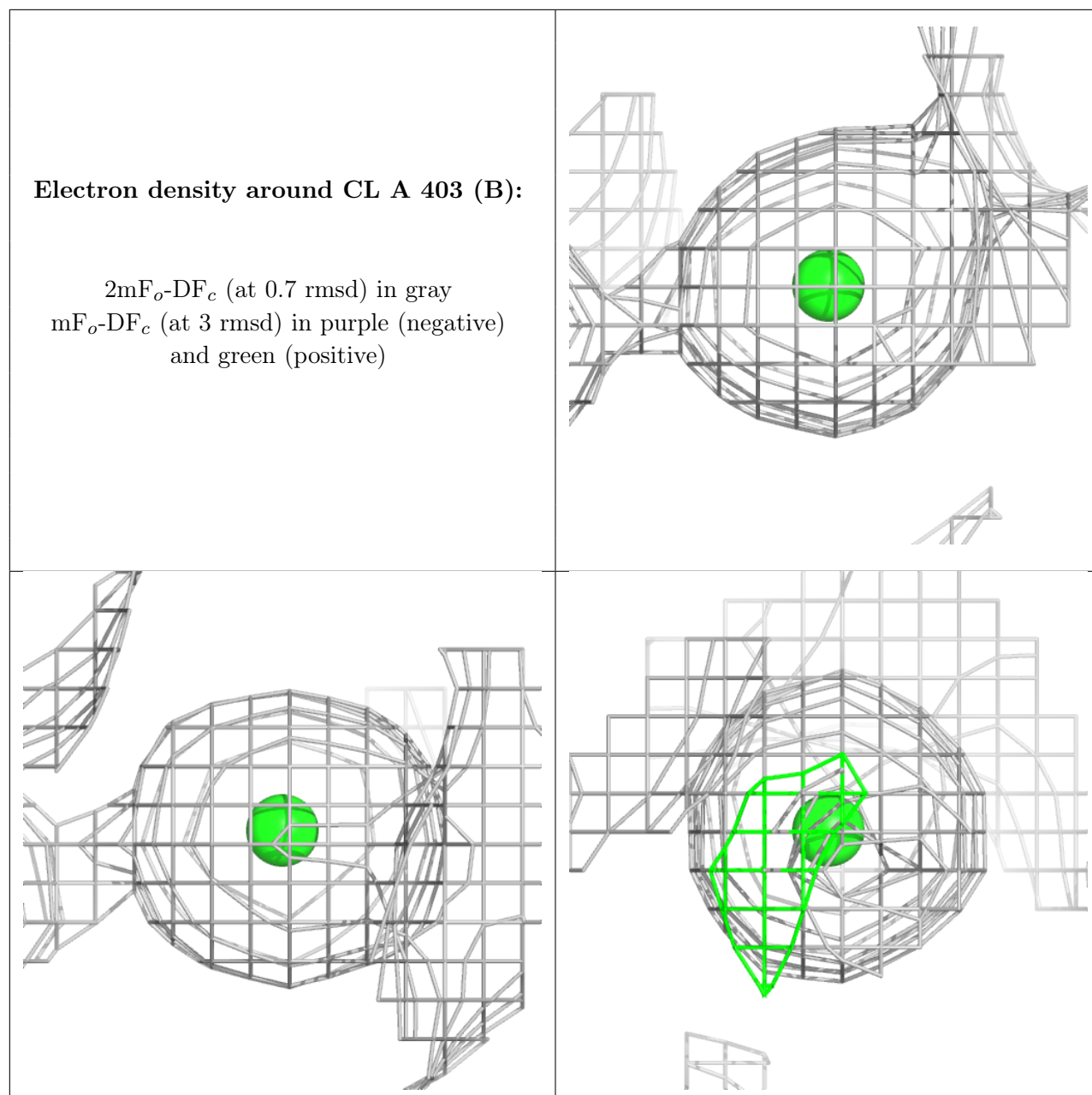
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

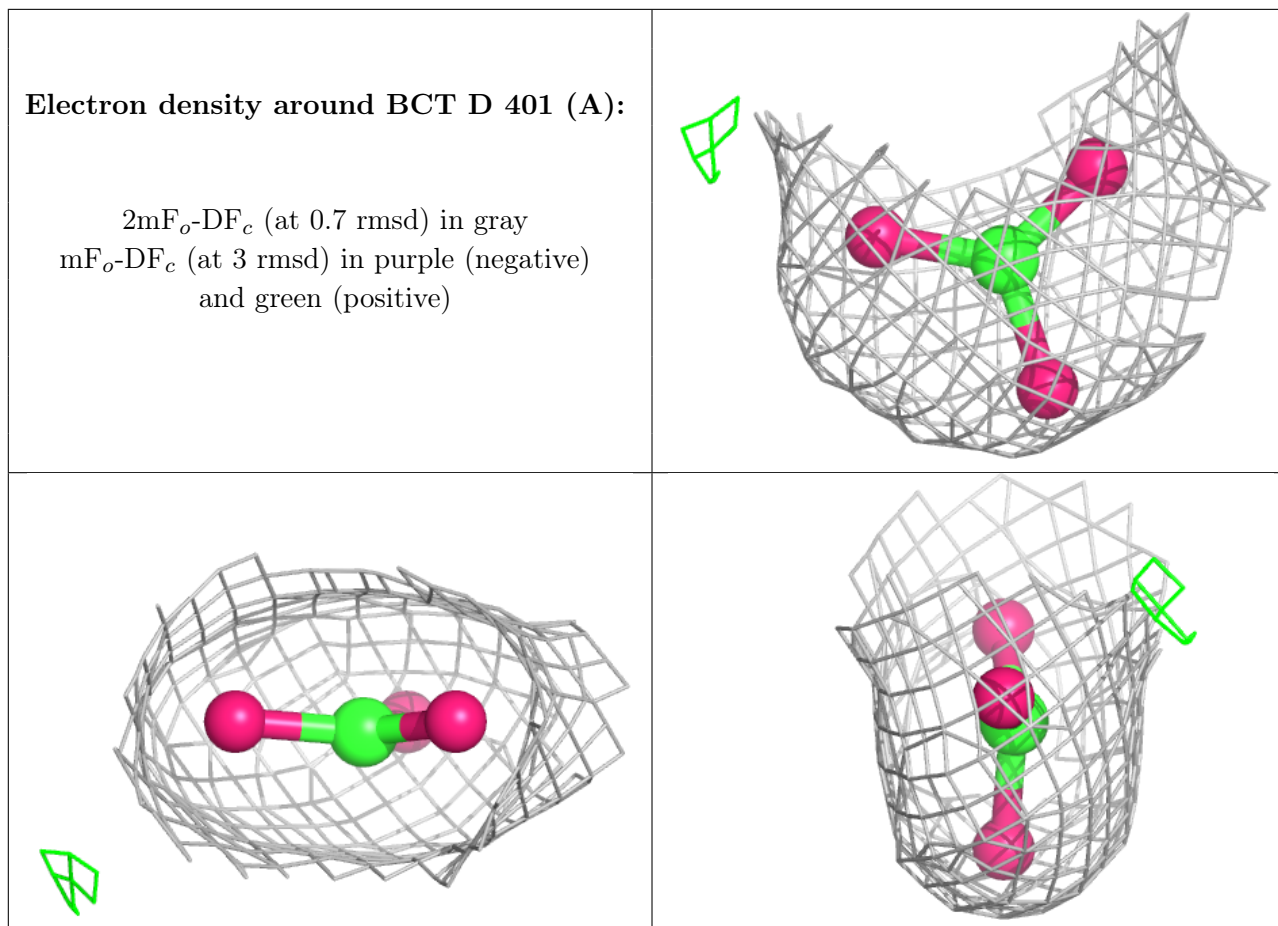






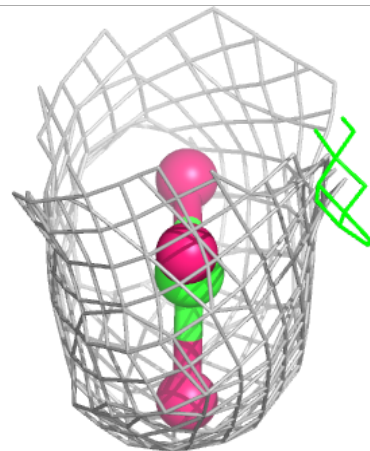
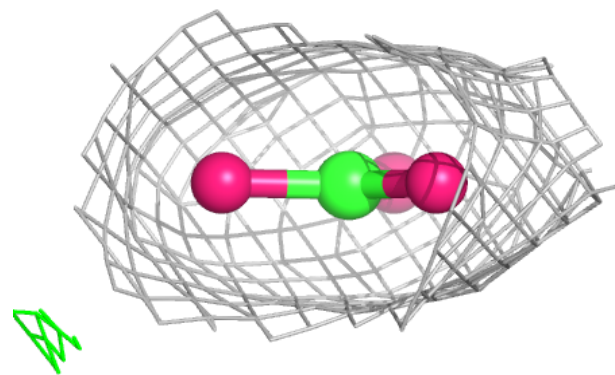
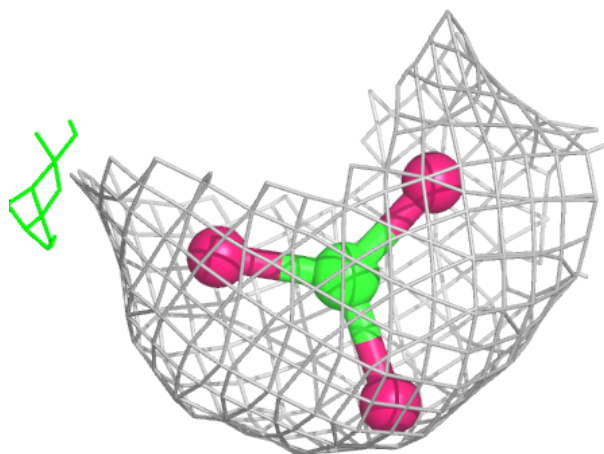






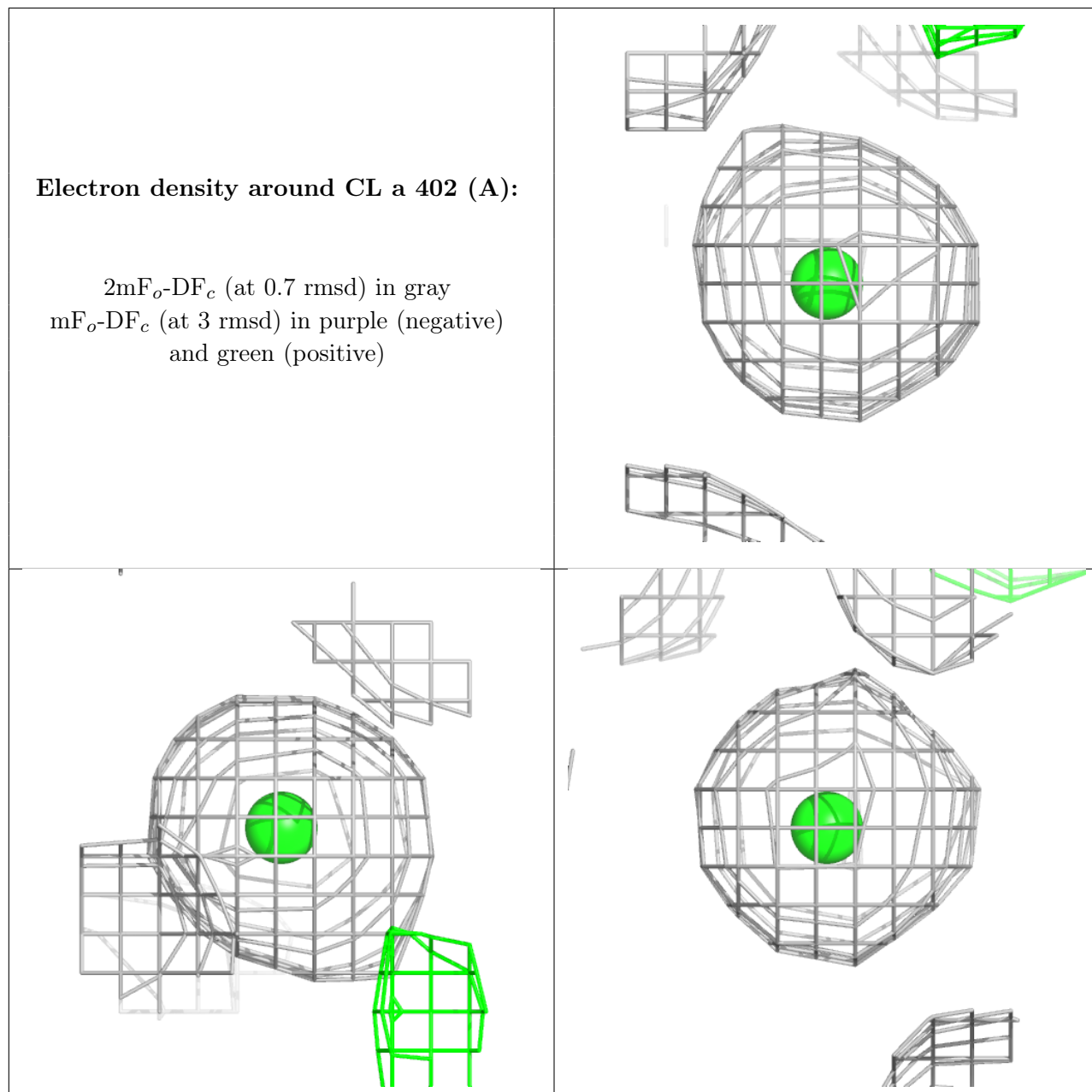
Electron density around BCT D 401 (B):

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



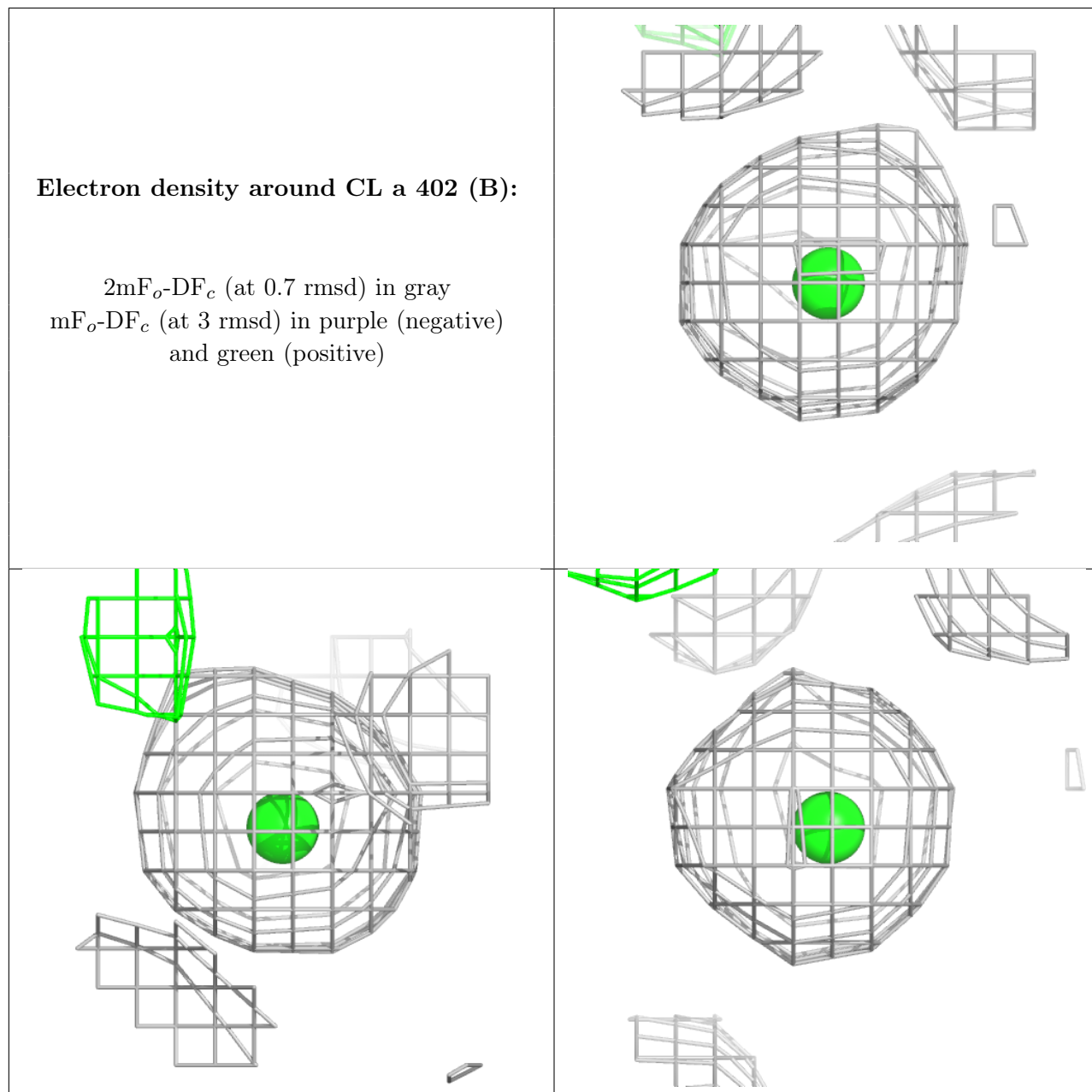
Electron density around CL a 402 (A):

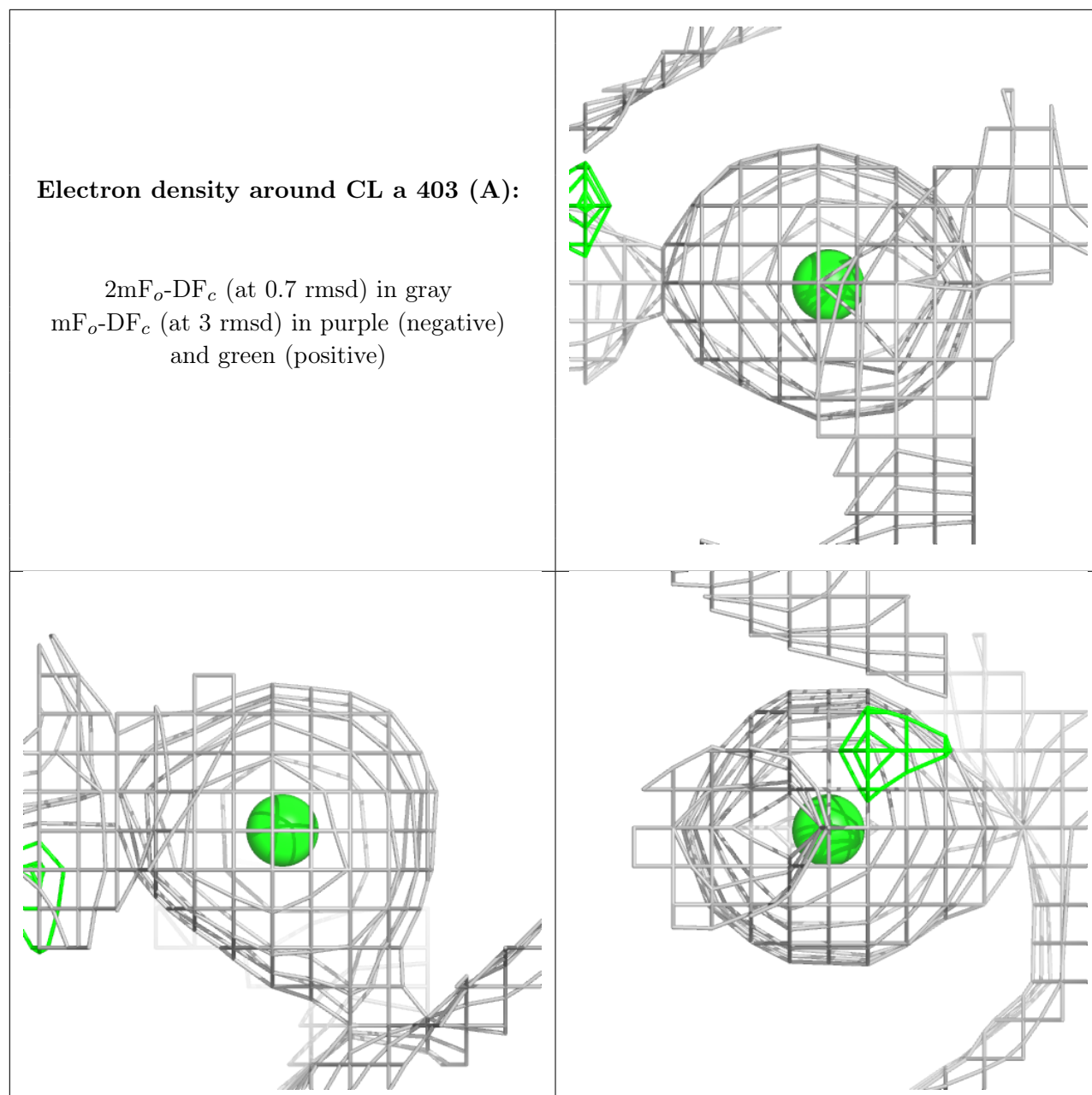
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CL a 402 (B):

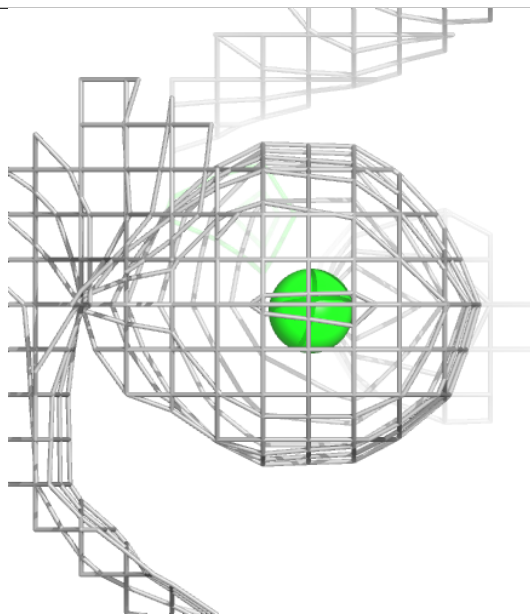
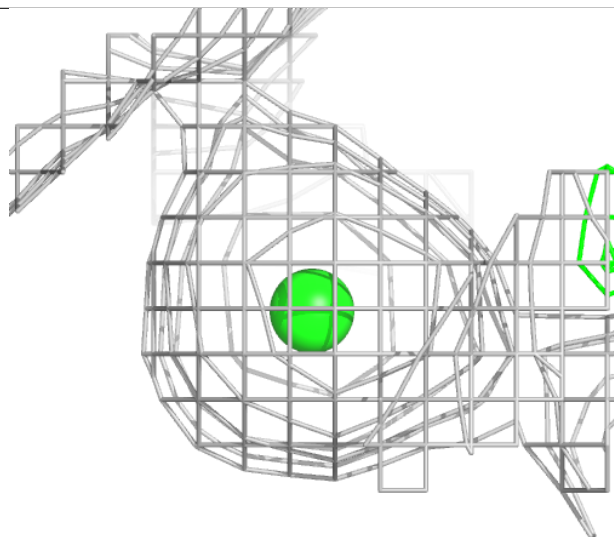
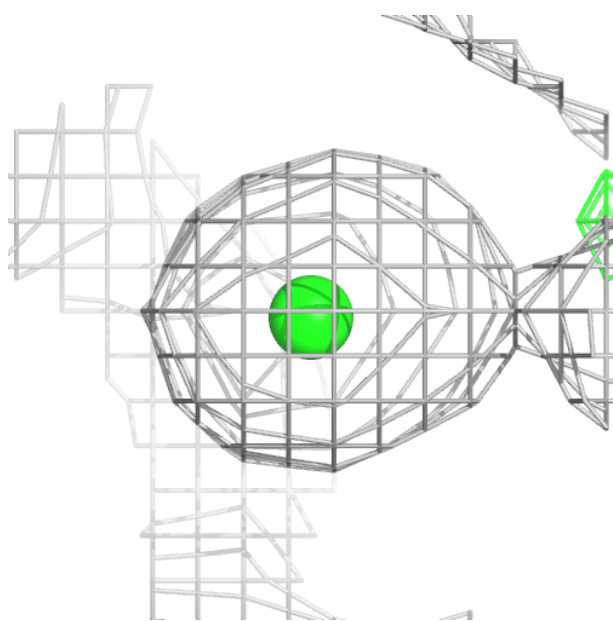
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





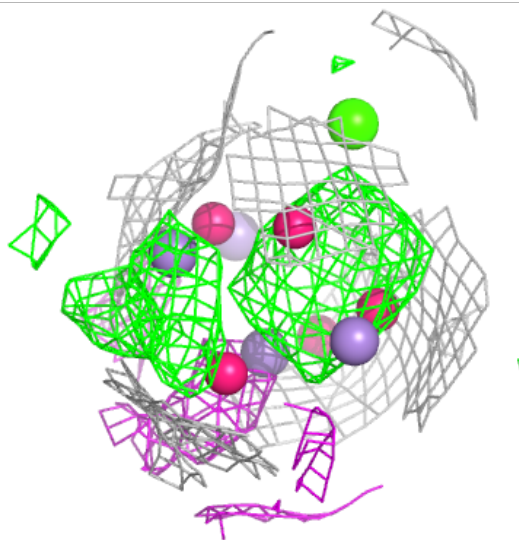
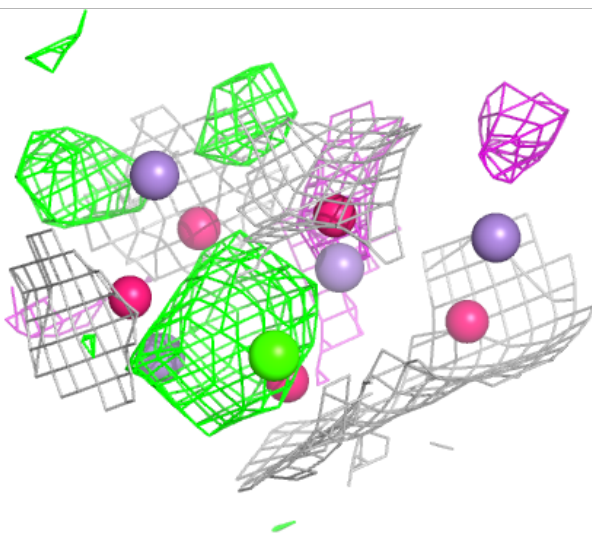
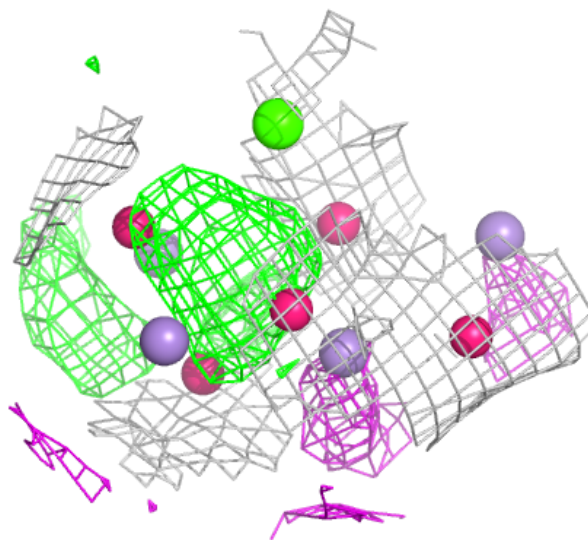
Electron density around CL a 403 (B):

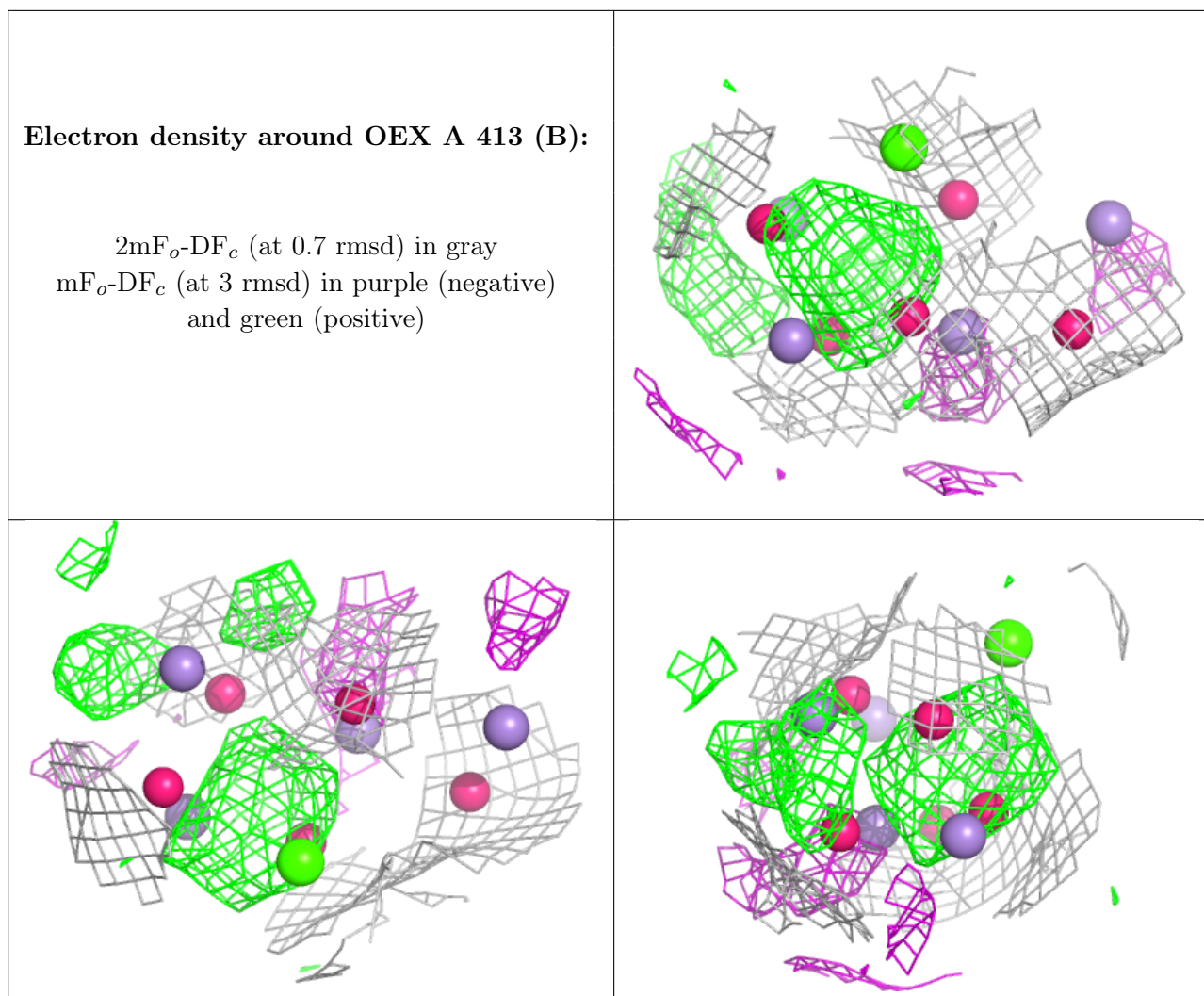
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around OEX A 413 (A):

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





6.5 Other polymers [i](#)

There are no such residues in this entry.