



# Full wwPDB X-ray Structure Validation Report ⓘ

Nov 15, 2023 – 05:16 PM JST

PDB ID : 6JLJ  
Title : XFEL structure of cyanobacterial photosystem II (dark state, dataset1)  
Authors : Suga, M.; Shen, J.R.  
Deposited on : 2019-03-06  
Resolution : 2.15 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

---

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

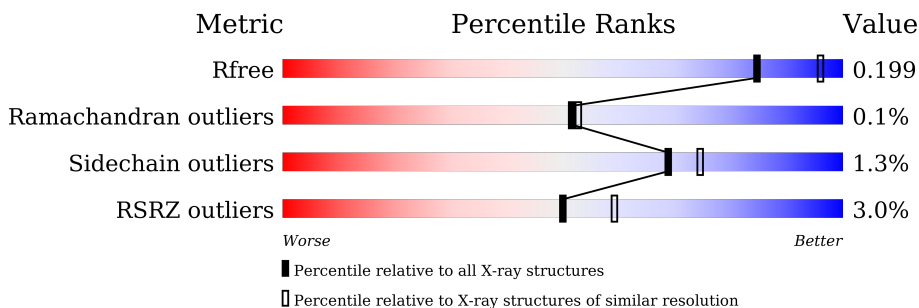
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

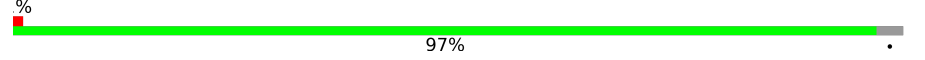
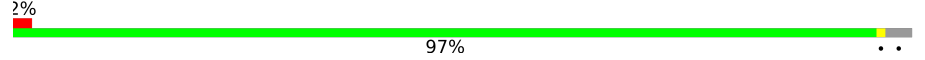
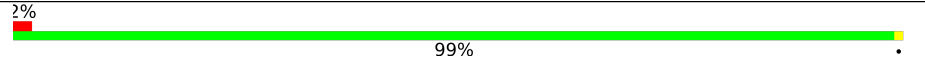
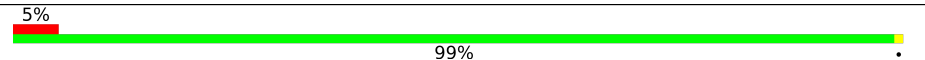
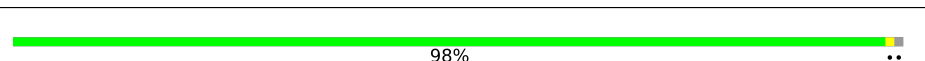
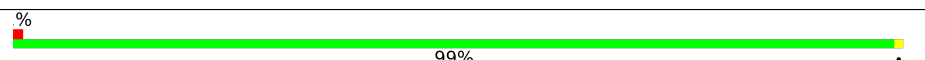
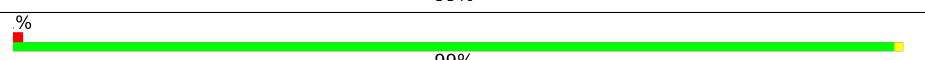
The reported resolution of this entry is 2.15 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1479 (2.16-2.16)
Ramachandran outliers	138981	1560 (2.16-2.16)
Sidechain outliers	138945	1559 (2.16-2.16)
RSRZ outliers	127900	1456 (2.16-2.16)

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

Mol	Chain	Length	Quality of chain
1	A	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% .

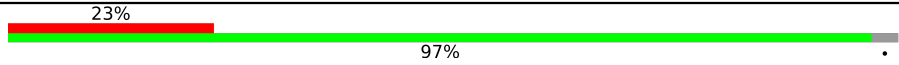
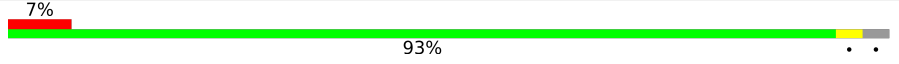
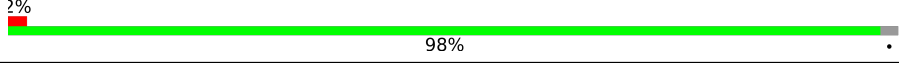
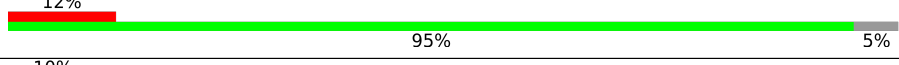
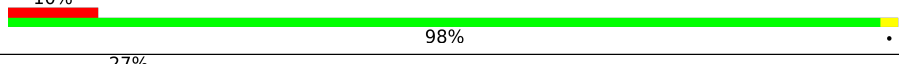
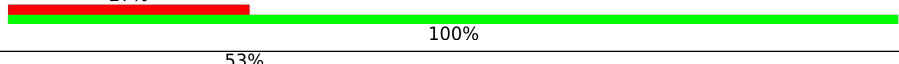
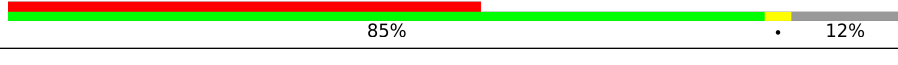
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
4	d	342	99%
5	E	84	10% 95%
5	e	84	11% 94%
6	F	44	5% 77% 23%
6	f	44	5% 70% 27%
7	H	65	5% 97%
7	h	65	3% 98%
8	I	38	5% 97%
8	i	38	5% 95% 5%
9	J	39	8% 97%
9	j	39	13% 97%
10	K	37	97%
10	k	37	97%
11	L	37	97%
11	l	37	5% 100%
12	M	36	6% 89% 6% 6%
12	m	36	92% 6%
13	O	244	2% 98%
13	o	244	2% 97%
14	T	32	88% 6% 6%
14	t	32	88% 6% 6%
15	U	104	91% 7%
15	u	104	93% 7%
16	V	137	100%
16	v	137	% 99%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
17	Y	30	
17	y	30	
18	X	40	
18	x	40	
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
24	CLA	A	405	X	-	-	-
24	CLA	B	602	X	-	-	-
24	CLA	B	603	X	-	-	-
24	CLA	B	604	X	-	-	-
24	CLA	B	605	X	-	-	-
24	CLA	B	606	X	-	-	-
24	CLA	B	607	X	-	-	-
24	CLA	B	608	X	-	-	-
24	CLA	B	610	X	-	-	-
24	CLA	B	611	X	-	-	-
24	CLA	B	612	X	-	-	-
24	CLA	B	613	X	-	-	-
24	CLA	B	614	X	-	-	-
24	CLA	B	615	X	-	-	-
24	CLA	B	616	X	-	-	-
24	CLA	B	617	X	-	-	-
24	CLA	C	502	X	-	-	-
24	CLA	C	504	X	-	-	-
24	CLA	C	505	X	-	-	-
24	CLA	C	506	X	-	-	-
24	CLA	C	507	X	-	-	-
24	CLA	C	508	X	-	-	-
24	CLA	C	509	X	-	-	-
24	CLA	C	510	X	-	-	-
24	CLA	C	511	X	-	-	-

Continued on next page...

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	C	512	X	-	-	-
24	CLA	C	513	X	-	-	-
24	CLA	C	514	X	-	-	-
24	CLA	D	402	X	-	-	-
24	CLA	D	403	X	-	-	-
24	CLA	a	409	X	-	-	-
24	CLA	a	412	X	-	-	-
24	CLA	b	610	X	-	-	-
24	CLA	b	611	X	-	-	-
24	CLA	b	612	X	-	-	-
24	CLA	b	613	X	-	-	-
24	CLA	b	614	X	-	-	-
24	CLA	b	615	X	-	-	-
24	CLA	b	616	X	-	-	-
24	CLA	b	618	X	-	-	-
24	CLA	b	619	X	-	-	-
24	CLA	b	621	X	-	-	-
24	CLA	b	622	X	-	-	-
24	CLA	b	623	X	-	-	-
24	CLA	b	624	X	-	-	-
24	CLA	b	625	X	-	-	-
24	CLA	c	505	X	-	-	-
24	CLA	c	507	X	-	-	-
24	CLA	c	508	X	-	-	-
24	CLA	c	509	X	-	-	-
24	CLA	c	510	X	-	-	-
24	CLA	c	511	X	-	-	-
24	CLA	c	512	X	-	-	-
24	CLA	c	513	X	-	-	-
24	CLA	c	514	X	-	-	-
24	CLA	c	515	X	-	-	-
24	CLA	c	516	X	-	-	-
24	CLA	c	517	X	-	-	-
24	CLA	d	402	X	-	-	-
24	CLA	d	403	X	-	-	-
24	CLA	d	404	X	-	-	-

## 2 Entry composition [i](#)

There are 40 unique types of molecules in this entry. The entry contains 54101 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	2634	1728	432	459	15	0	3	0
1	a	334	2645	1737	432	461	15	0	6	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	279	PRO	ARG	See sequence details	UNP P51765
a	279	PRO	ARG	See sequence details	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	4021	2639	667	702	13	0	10	0
2	b	503	4022	2644	664	701	13	0	12	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	3501	2291	584	613	13	0	4	0
3	c	455	3544	2323	589	619	13	0	6	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	19	ASN	-	See sequence details	UNP D0VWR7
C	20	SER	-	See sequence details	UNP D0VWR7

*Continued on next page...*

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
C	21	ILE	-	See sequence details	UNP D0VWR7
C	22	PHE	-	See sequence details	UNP D0VWR7
c	19	ASN	-	See sequence details	UNP D0VWR7
c	20	SER	-	See sequence details	UNP D0VWR7
c	21	ILE	-	See sequence details	UNP D0VWR7
c	22	PHE	-	See sequence details	UNP D0VWR7

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	341	Total	C	N	O	S	0	1	0
			2720	1802	444	462	12			
4	d	341	Total	C	N	O	S	0	1	0
			2720	1802	444	462	12			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	S	0	2	0
			668	436	107	125				
5	e	81	Total	C	N	O	S	0	2	0
			670	439	107	124				

- 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	32	Total	C	N	O	S	0	0	0
			257	175	43	38	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	65	Total	C	N	O	S	0	1	0
			519	346	85	86	2			
7	h	65	Total	C	N	O	S	0	0	0
			511	341	82	86	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
			280	187	43	48	2			

- 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	See sequence details	UNP P19054
K	39	TRP	VAL	See sequence details	UNP P19054
k	33	LEU	PHE	See sequence details	UNP P19054
k	39	TRP	VAL	See sequence details	UNP P19054

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			
11	l	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	34	Total	C	N	O	S	0	1	0
			274	184	40	49	1			

*Continued on next page...*



Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	m	34	269	179	40	49	1	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	8	LEU	PHE	See sequence details	UNP P12312
m	8	LEU	PHE	See sequence details	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	1903	1191	315	392	5	0	8	0
13	o	243	1891	1183	315	388	5	0	5	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	264	185	36	41	2	0	1	0
14	t	30	264	185	36	41	2	0	1	0

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	V	137	1072	680	180	208	4	0	1	0
16	v	137	1064	675	177	208	4	0	0	0

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	39	Total	C	N	O		0	0	0
			287	191	46	50				
18	x	38	Total	C	N	O		0	0	0
			281	188	45	48				

- 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	30	Total	C	N	O		98	0	0
			239	163	41	35				

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

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

- Molecule 22 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

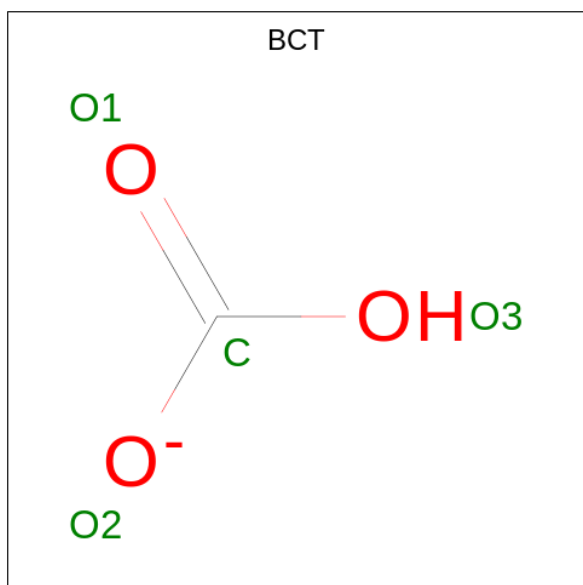
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	2	Total	Cl	0	0
			2	2		
22	U	1	Total	Cl	0	0
			1	1		

*Continued on next page...*

Continued from previous page...

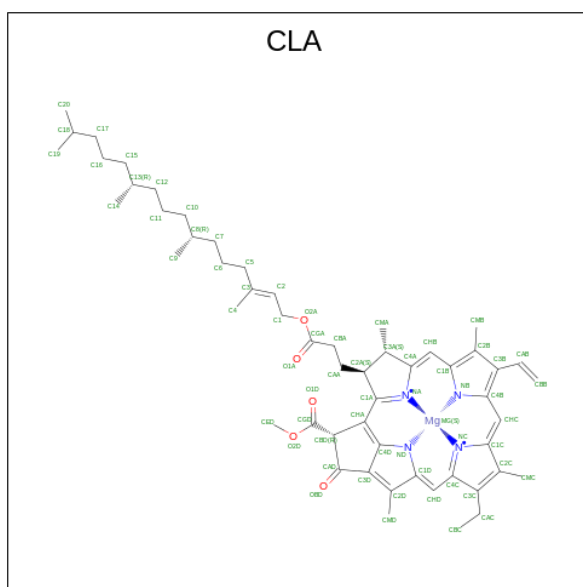
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	a	2	Total Cl 2 2	0	0
22	v	1	Total Cl 1 1	0	0

- Molecule 23 is BICARBONATE ION (three-letter code: BCT) (formula:  $\text{CHO}_3$ ).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	A	1	Total C O 4 1 3	0	0
23	a	1	Total C O 4 1 3	0	0

- Molecule 24 is CHLOROPHYLL A (three-letter code: CLA) (formula:  $\text{C}_{55}\text{H}_{72}\text{MgN}_4\text{O}_5$ ).



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

*Continued on next page...*

*Continued from previous page...*

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

*Continued on next page...*

*Continued from previous page...*

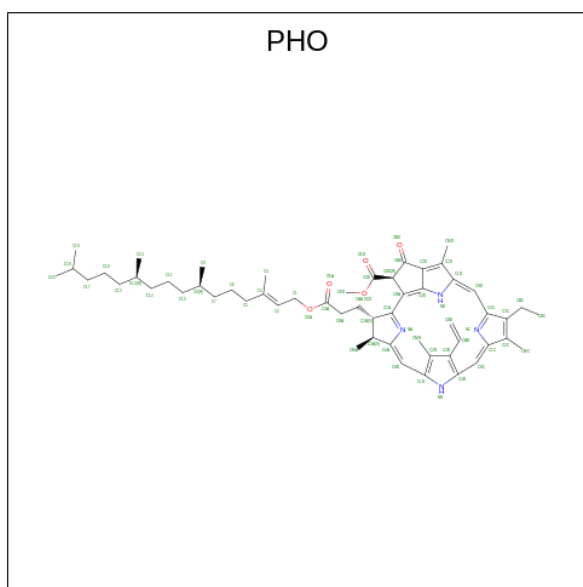
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
24	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5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

*Continued on next page...*

*Continued from previous page...*

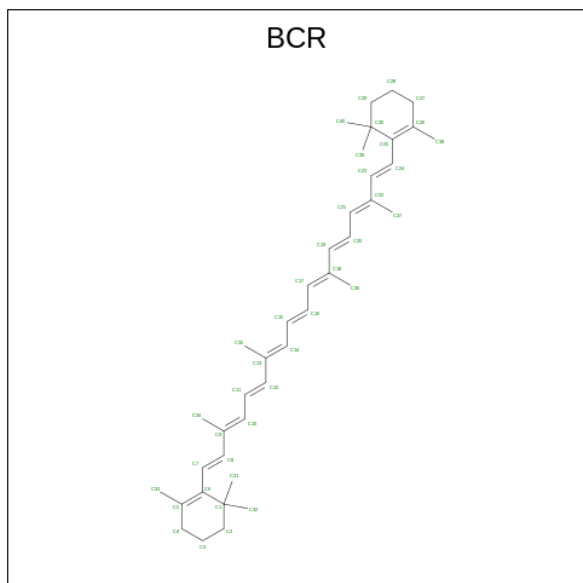
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5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

- Molecule 25 is PHEOPHYTIN A (three-letter code: PHO) (formula: C<sub>55</sub>H<sub>74</sub>N<sub>4</sub>O<sub>5</sub>).



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

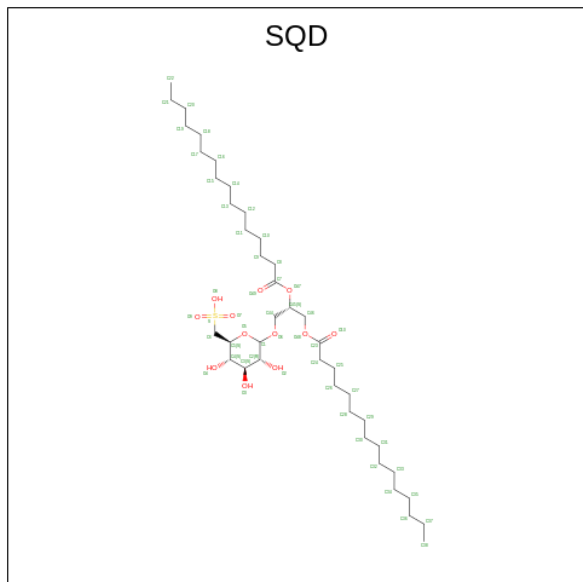
- Molecule 26 is BETA-CAROTENE (three-letter code: BCR) (formula:  $C_{40}H_{56}$ ).





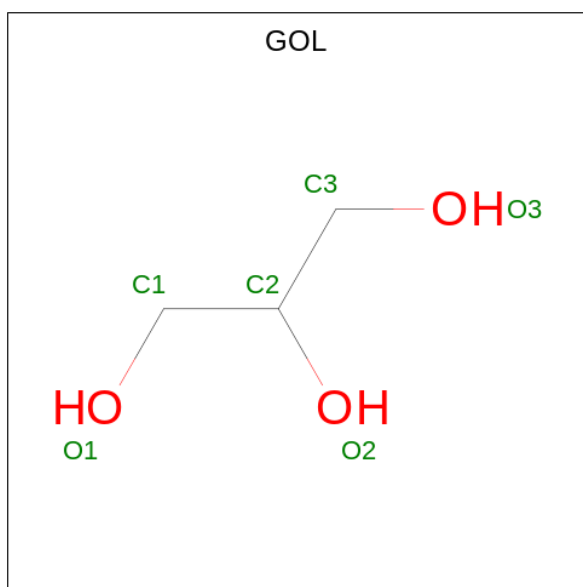
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	H	1	Total C 40 40	0	0
26	K	1	Total C 40 40	0	0
26	T	1	Total C 40 40	0	0
26	Y	1	Total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

- Molecule 27 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		
27	A	1	54	41	12	1	0	0
27	A	1	54	41	12	1	0	0
27	B	1	54	41	12	1	0	0
27	F	1	43	30	12	1	0	0
27	L	1	54	41	12	1	0	0
27	a	1	54	41	12	1	0	0
27	a	1	54	41	12	1	0	0
27	f	1	43	30	12	1	0	0

- Molecule 28 is GLYCEROL (three-letter code: GOL) (formula:  $C_3H_8O_3$ ).



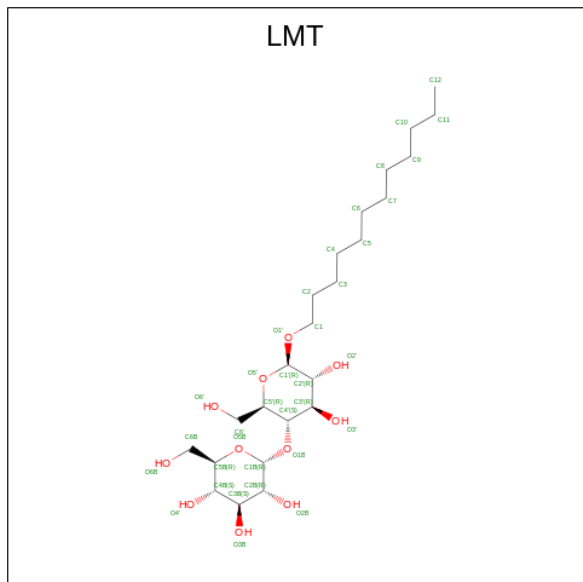
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O 6 3 3	0	0
28	A	1	Total C O 6 3 3	0	0
28	A	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	C	1	Total C O 6 3 3	0	0
28	C	1	Total C O 6 3 3	0	0
28	F	1	Total C O 6 3 3	0	0
28	O	1	Total C O 6 3 3	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
28	T	1	6	3	3	0	0
28	T	1	6	3	3	0	0
28	V	1	6	3	3	0	0
28	V	1	6	3	3	0	0
28	V	1	6	3	3	0	0
28	V	1	6	3	3	0	0
28	a	1	6	3	3	0	0
28	a	1	6	3	3	0	0
28	b	1	6	3	3	0	0
28	b	1	6	3	3	0	0
28	b	1	6	3	3	0	0
28	b	1	6	3	3	0	0
28	b	1	6	3	3	0	0
28	b	1	6	3	3	0	0
28	c	1	6	3	3	0	0
28	c	1	6	3	3	0	0
28	f	1	6	3	3	0	0
28	o	1	6	3	3	0	0
28	t	1	6	3	3	0	0
28	v	1	6	3	3	0	0
28	v	1	6	3	3	0	0
28	v	1	6	3	3	0	0

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



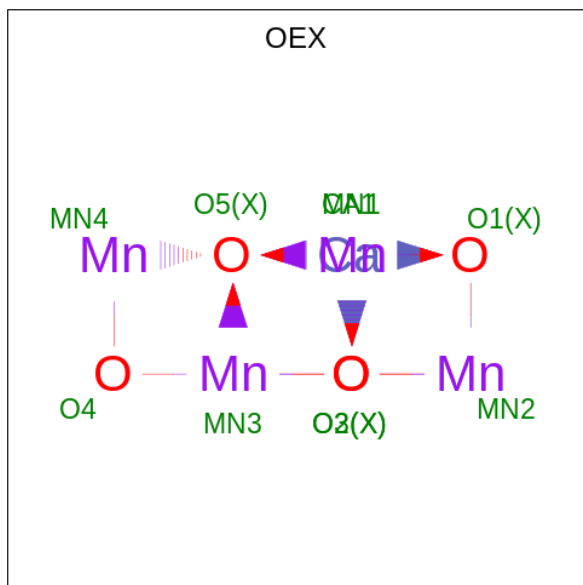
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A	1	Total C O 35 24 11	0	0
29	B	1	Total C O 35 24 11	0	0
29	B	1	Total C O 25 19 6	0	0
29	C	1	Total C O 35 24 11	0	0
29	F	1	Total C O 35 24 11	0	0
29	M	1	Total C O 35 24 11	0	0
29	M	1	Total C O 35 24 11	0	0
29	M	1	Total C O 35 24 11	0	0
29	T	1	Total C O 25 19 6	0	0
29	a	1	Total C O 35 24 11	0	0
29	a	1	Total C O 35 24 11	0	0
29	b	1	Total C O 25 19 6	0	0

*Continued on next page...*

Continued from previous page...

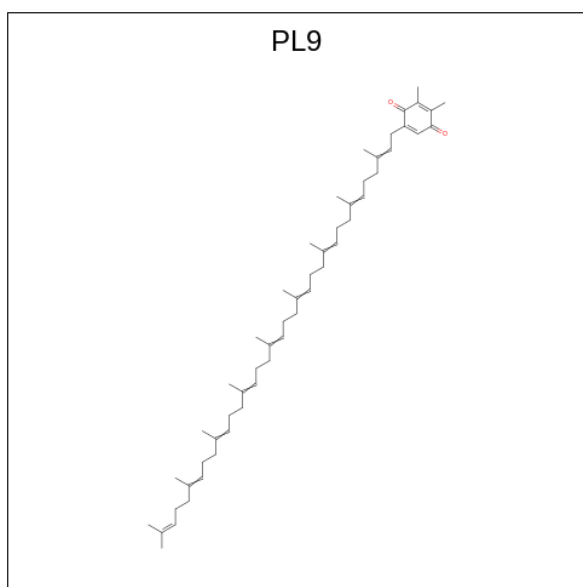
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	f	1	Total	C	O	0	0
			35	24	11		
29	m	1	Total	C	O	0	0
			35	24	11		

- Molecule 30 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula:  $\text{CaMn}_4\text{O}_5$ ).



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

- Molecule 31 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:  $\text{C}_{53}\text{H}_{80}\text{O}_2$ ).



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

- Molecule 32 is UNKNOWN LIGAND (three-letter code: UNL) (formula: ).

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	0
			28	23	5		
32	B	1	Total	C	O	0	0
			33	28	5		
32	C	1	Total	C	O	0	0
			34	29	5		
32	D	2	Total	C	O	0	0
			57	51	6		
32	I	1	Total	C	O	0	0
			40	35	5		
32	J	1	Total	C		0	0
			10	10			
32	M	1	Total	C		0	0
			10	10			
32	X	1	Total	C	O	0	0
			18	16	2		

*Continued on next page...*

Continued from previous page...

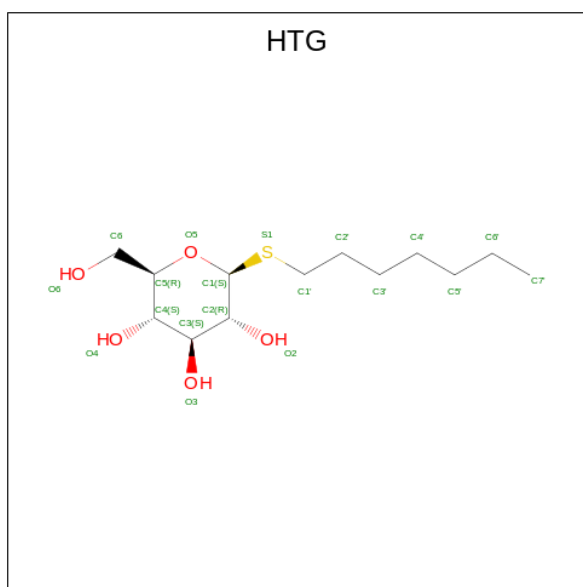
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	a	1	Total C O 30 25 5	0	0
32	b	1	Total C O 33 28 5	0	0
32	c	1	Total C O 32 27 5	0	0
32	d	3	Total C O 71 63 8	0	0
32	i	1	Total C O 40 35 5	0	0
32	j	1	Total C 10 10	0	0
32	m	1	Total C 10 10	0	0

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

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

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





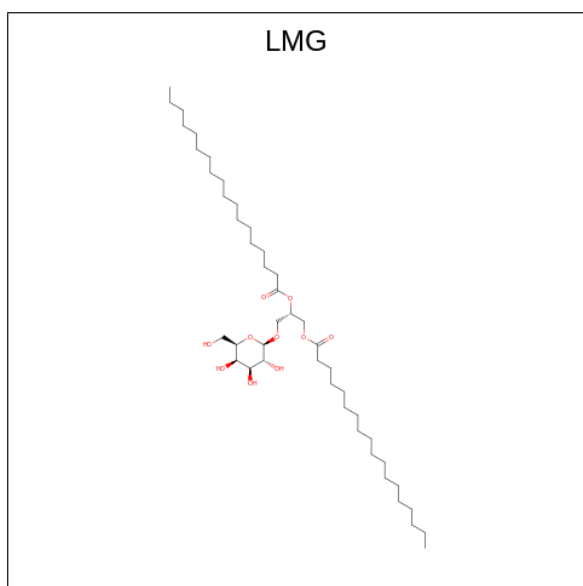
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
34	B	1	19	13	5	1	0	0
34	B	1	19	13	5	1	0	0
34	B	1	19	13	5	1	0	0
34	B	1	19	13	5	1	0	0
34	B	1	19	13	5	1	0	0
34	C	1	19	13	5	1	0	0
34	C	1	19	13	5	1	0	0
34	D	1	16	10	5	1	0	0
34	V	1	19	13	5	1	0	0
34	b	1	19	13	5	1	0	0
34	b	1	19	13	5	1	0	0
34	b	1	19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

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
34	c	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 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: C<sub>45</sub>H<sub>86</sub>O<sub>10</sub>).



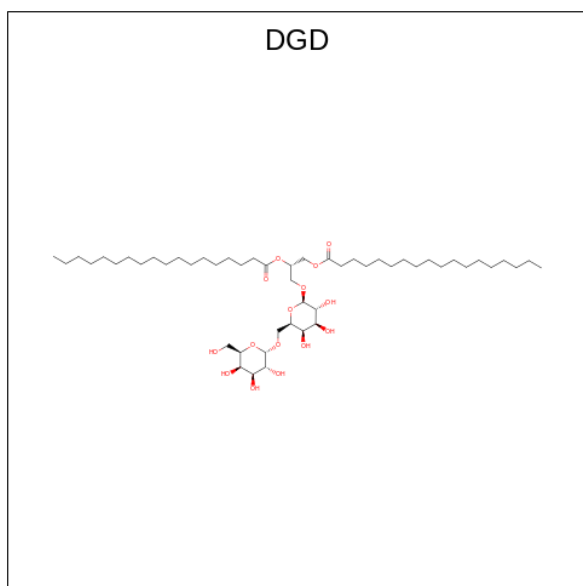
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
35	C	1	Total 51	C 41	O 10	0	0
35	C	1	Total 51	C 41	O 10	0	0
35	C	1	Total 51	C 41	O 10	0	0
35	J	1	Total 51	C 41	O 10	0	0
35	M	1	Total 51	C 41	O 10	0	0
35	Z	1	Total 37	C 27	O 10	0	0
35	a	1	Total 51	C 41	O 10	0	0
35	b	1	Total 51	C 41	O 10	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
35	c	1	Total	C	O	0	0
			51	41	10		
35	c	1	Total	C	O	0	0
			51	41	10		
35	j	1	Total	C	O	0	0
			51	41	10		
35	z	1	Total	C	O	0	0
			39	29	10		

- Molecule 36 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula:  $C_{51}H_{96}O_{15}$ ).



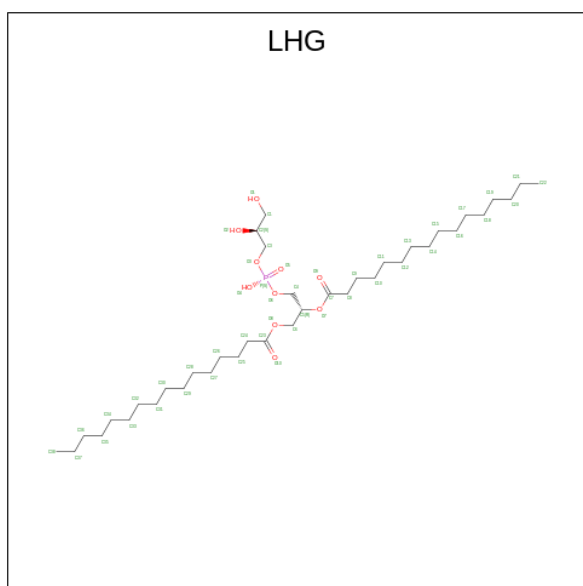
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
36	C	1	Total	C	O	0	0
			62	47	15		
36	C	1	Total	C	O	0	0
			62	47	15		
36	C	1	Total	C	O	0	0
			62	47	15		
36	D	1	Total	C	O	0	0
			52	42	10		
36	H	1	Total	C	O	0	0
			62	47	15		
36	c	1	Total	C	O	0	0
			62	47	15		
36	c	1	Total	C	O	0	0
			62	47	15		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
36	c	1	Total	C	O	0	0
			62	47	15		
36	e	1	Total	C	O	0	0
			62	47	15		
36	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 37 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: C<sub>38</sub>H<sub>75</sub>O<sub>10</sub>P).



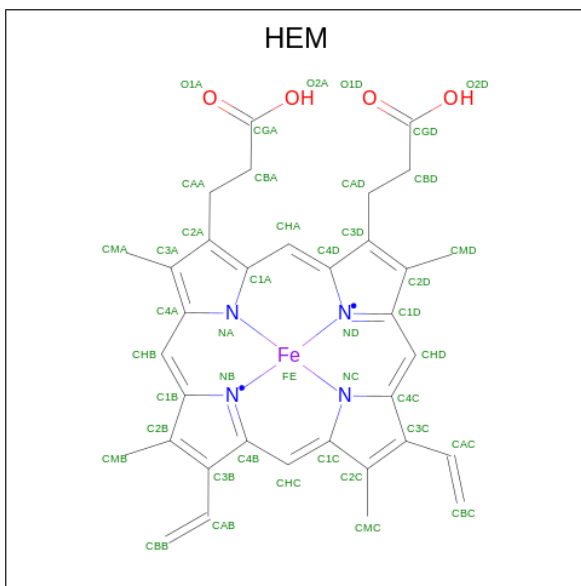
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	E	1	Total	C	O	P	0	0
			42	31	10	1		
37	L	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
37	e	1	Total	C	O	P	0	0
			42	31	10	1		
37	l	1	Total	C	O	P	0	0
			49	38	10	1		

- 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	E	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	V	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	e	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
38	v	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 water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	A	163	Total O 166 166	0	3
40	B	291	Total O 295 295	0	4
40	C	230	Total O 232 232	0	2
40	D	139	Total O 143 143	0	4
40	E	34	Total O 34 34	0	0
40	F	8	Total O 8 8	0	0
40	H	43	Total O 44 44	0	1
40	I	4	Total O 4 4	0	0
40	J	11	Total O 11 11	0	0
40	K	7	Total O 7 7	0	0
40	L	16	Total O 17 17	0	1
40	M	24	Total O 24 24	0	0
40	O	177	Total O 179 179	0	2
40	T	16	Total O 17 17	0	1
40	U	85	Total O 85 85	0	0
40	V	115	Total O 117 117	0	2
40	Y	4	Total O 4 4	0	0
40	X	8	Total O 8 8	0	0
40	Z	1	Total O 1 1	0	0
40	a	158	Total O 159 159	0	1
40	b	258	Total O 261 261	0	3
40	c	201	Total O 204 204	0	3

*Continued on next page...*

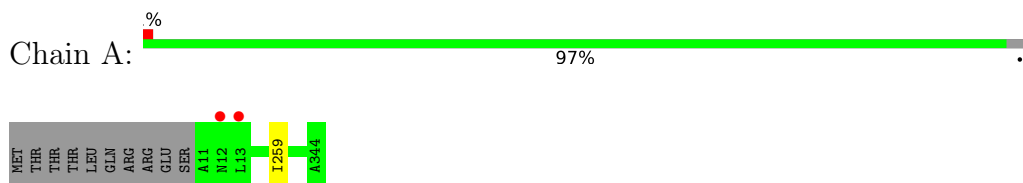
*Continued from previous page...*

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	d	128	Total O 131 131	0	3
40	e	20	Total O 20 20	0	0
40	f	8	Total O 8 8	0	0
40	h	42	Total O 42 42	0	0
40	i	6	Total O 6 6	0	0
40	j	6	Total O 6 6	0	0
40	k	7	Total O 7 7	0	0
40	l	8	Total O 8 8	0	0
40	m	14	Total O 14 14	0	0
40	o	163	Total O 163 163	0	0
40	t	9	Total O 9 9	0	0
40	u	91	Total O 91 91	0	0
40	v	82	Total O 83 83	0	1
40	y	2	Total O 2 2	0	0
40	x	6	Total O 6 6	0	0

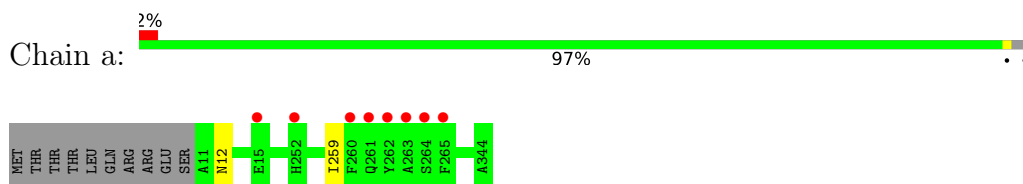
### 3 Residue-property plots [i](#)

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.

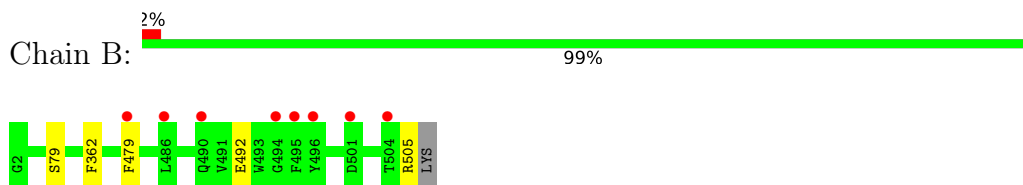
- Molecule 1: Photosystem II protein D1



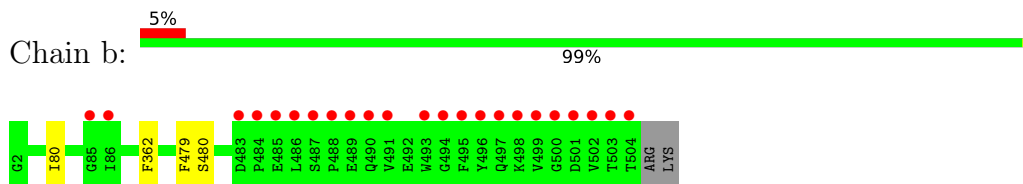
- Molecule 1: Photosystem II protein D1



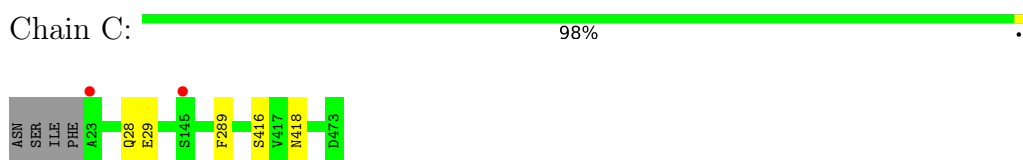
- Molecule 2: Photosystem II CP47 reaction center protein



- Molecule 2: Photosystem II CP47 reaction center protein



- Molecule 3: Photosystem II CP43 reaction center protein

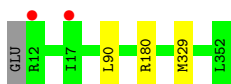


- Molecule 3: Photosystem II CP43 reaction center protein





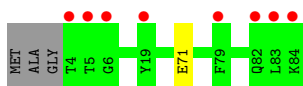
- Molecule 4: Photosystem II D2 protein



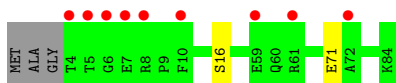
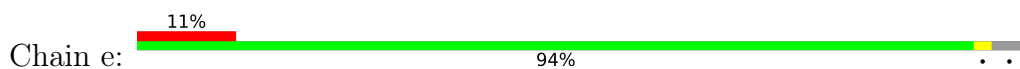
- Molecule 4: Photosystem II D2 protein



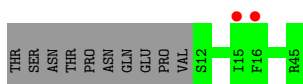
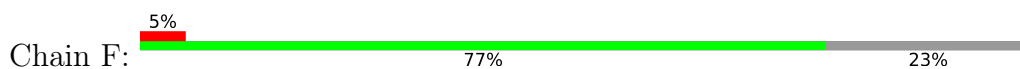
- Molecule 5: Cytochrome b559 subunit alpha



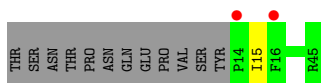
- Molecule 5: Cytochrome b559 subunit alpha



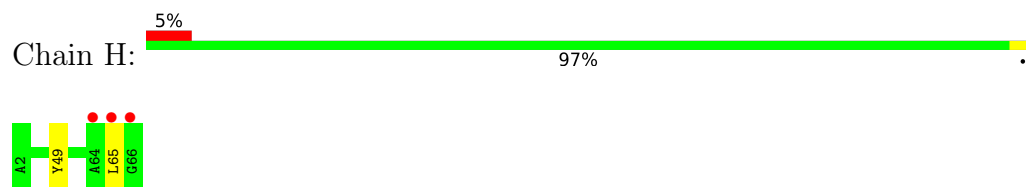
- Molecule 6: Cytochrome b559 subunit beta



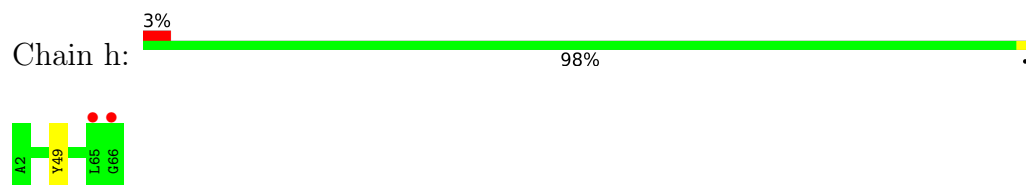
- Molecule 6: Cytochrome b559 subunit beta



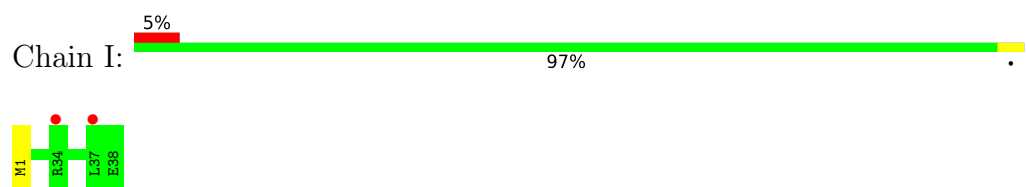
- Molecule 7: Photosystem II reaction center protein H



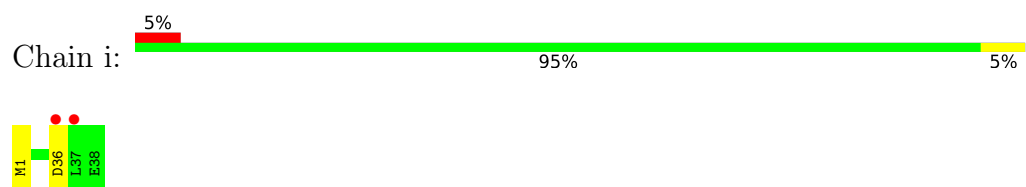
- Molecule 7: Photosystem II reaction center protein H



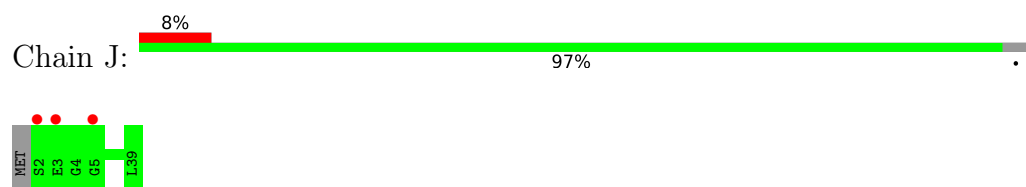
- Molecule 8: Photosystem II reaction center protein I



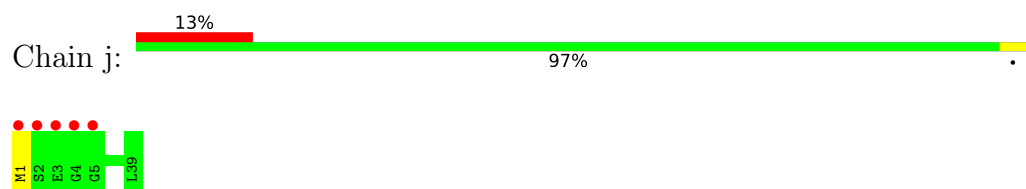
- Molecule 8: Photosystem II reaction center protein I



- Molecule 9: Photosystem II reaction center protein J



- Molecule 9: Photosystem II reaction center protein J



- Molecule 10: Photosystem II reaction center protein K





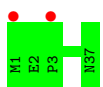
- Molecule 10: Photosystem II reaction center protein K



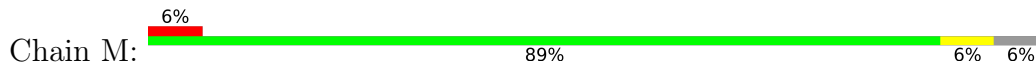
- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L



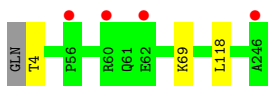
- Molecule 12: Photosystem II reaction center protein M



- Molecule 12: Photosystem II reaction center protein M

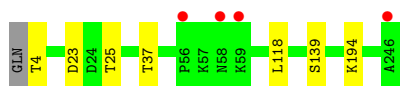


- Molecule 13: Photosystem II manganese-stabilizing polypeptide

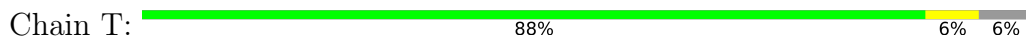


- Molecule 13: Photosystem II manganese-stabilizing polypeptide

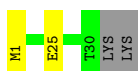
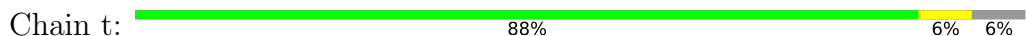




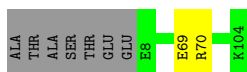
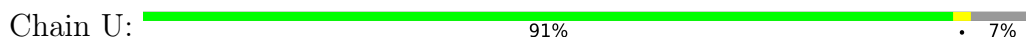
- Molecule 14: Photosystem II reaction center protein T



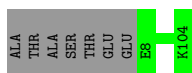
- Molecule 14: Photosystem II reaction center protein T



- Molecule 15: Photosystem II 12 kDa extrinsic protein



- Molecule 15: Photosystem II 12 kDa extrinsic protein



- Molecule 16: Cytochrome c-550



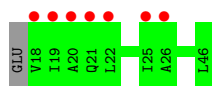
There are no outlier residues recorded for this chain.

- Molecule 16: Cytochrome c-550

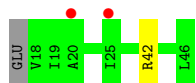
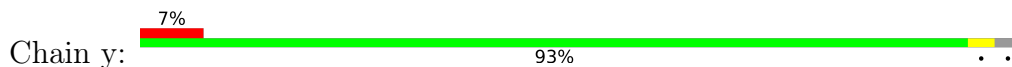


- Molecule 17: Photosystem II reaction center protein Ycf12

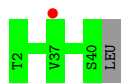




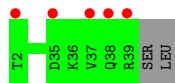
- Molecule 17: Photosystem II reaction center protein Ycf12



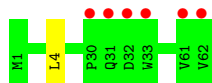
- Molecule 18: Photosystem II reaction center protein X



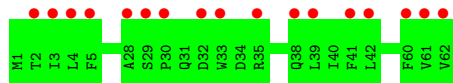
- Molecule 18: Photosystem II reaction center protein X



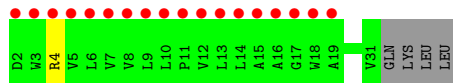
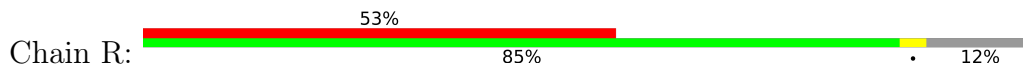
- Molecule 19: Photosystem II reaction center protein Z



- 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, $\alpha$ , $\beta$ , $\gamma$	121.97Å 228.72Å 286.98Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.99 – 2.15 178.86 – 2.00	Depositor EDS
% Data completeness (in resolution range)	100.0 (19.99-2.15) 99.9 (178.86-2.00)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.41 (at 2.00Å)	Xtrriage
Refinement program	PHENIX 1.9_1692	Depositor
R, $R_{free}$	0.152 , 0.198 0.154 , 0.199	Depositor DCC
$R_{free}$ test set	26827 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	35.0	Xtrriage
Anisotropy	0.684	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.37 , 79.2	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.97	EDS
Total number of atoms	54101	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	55.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.97% of the height of the origin peak. No significant pseudotranslation is detected.*

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

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

## 5 Model quality

### 5.1 Standard geometry

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

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	0.47	0/2728	0.57	0/3719
1	a	0.47	0/2748	0.56	0/3746
2	B	0.45	0/4191	0.53	0/5709
2	b	0.43	0/4198	0.53	0/5720
3	C	0.39	0/3626	0.50	0/4936
3	c	0.39	0/3676	0.51	0/5004
4	D	0.50	0/2818	0.56	0/3840
4	d	0.47	0/2818	0.54	0/3840
5	E	0.34	0/693	0.50	0/944
5	e	0.36	0/695	0.50	0/948
6	F	0.41	0/284	0.52	0/387
6	f	0.42	0/265	0.52	0/360
7	H	0.39	0/535	0.56	0/728
7	h	0.34	0/524	0.52	0/713
8	I	0.35	0/311	0.49	0/419
8	i	0.36	0/311	0.46	0/419
9	J	0.34	0/278	0.42	0/376
9	j	0.34	0/286	0.46	0/386
10	K	0.34	0/303	0.52	0/416
10	k	0.38	0/303	0.50	0/416
11	L	0.44	0/319	0.48	0/433
11	l	0.46	0/319	0.44	0/433
12	M	0.49	0/270	0.58	0/368
12	m	0.45	0/262	0.54	0/357
13	O	0.38	0/1958	0.56	0/2654
13	o	0.38	0/1937	0.55	0/2625
14	T	0.48	0/266	0.54	0/362
14	t	0.51	0/266	0.51	0/362
15	U	0.38	0/785	0.53	0/1064
15	u	0.41	0/785	0.54	0/1064
16	V	0.38	0/1096	0.51	0/1487

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
16	v	0.36	0/1085	0.52	0/1473
17	Y	0.37	0/216	0.51	0/289
17	y	0.31	0/216	0.46	0/289
18	X	0.31	0/290	0.47	0/392
18	x	0.32	0/284	0.47	0/384
19	Z	0.31	0/490	0.44	0/669
19	z	0.31	0/490	0.48	0/669
20	R	0.23	0/245	0.37	0/338
All	All	0.42	0/43170	0.53	0/58738

There are no bond length outliers.

There are no bond angle outliers.

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	335/344 (97%)	327 (98%)	7 (2%)	1 (0%)	41	37
1	a	338/344 (98%)	332 (98%)	5 (2%)	1 (0%)	41	37
2	B	512/505 (101%)	506 (99%)	6 (1%)	0	100	100
2	b	513/505 (102%)	502 (98%)	11 (2%)	0	100	100
3	C	453/455 (100%)	444 (98%)	7 (2%)	2 (0%)	34	29
3	c	459/455 (101%)	449 (98%)	8 (2%)	2 (0%)	34	29

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	D	340/342 (99%)	333 (98%)	7 (2%)	0	100	100
4	d	340/342 (99%)	332 (98%)	8 (2%)	0	100	100
5	E	81/84 (96%)	81 (100%)	0	0	100	100
5	e	81/84 (96%)	78 (96%)	3 (4%)	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	64/65 (98%)	60 (94%)	4 (6%)	0	100	100
7	h	63/65 (97%)	58 (92%)	5 (8%)	0	100	100
8	I	36/38 (95%)	34 (94%)	2 (6%)	0	100	100
8	i	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
9	J	36/39 (92%)	35 (97%)	1 (3%)	0	100	100
9	j	37/39 (95%)	36 (97%)	1 (3%)	0	100	100
10	K	35/37 (95%)	35 (100%)	0	0	100	100
10	k	35/37 (95%)	35 (100%)	0	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	33/36 (92%)	33 (100%)	0	0	100	100
12	m	32/36 (89%)	32 (100%)	0	0	100	100
13	O	249/244 (102%)	243 (98%)	6 (2%)	0	100	100
13	o	246/244 (101%)	240 (98%)	6 (2%)	0	100	100
14	T	29/32 (91%)	29 (100%)	0	0	100	100
14	t	29/32 (91%)	29 (100%)	0	0	100	100
15	U	95/104 (91%)	93 (98%)	2 (2%)	0	100	100
15	u	95/104 (91%)	93 (98%)	2 (2%)	0	100	100
16	V	136/137 (99%)	131 (96%)	5 (4%)	0	100	100
16	v	135/137 (98%)	130 (96%)	5 (4%)	0	100	100
17	Y	27/30 (90%)	27 (100%)	0	0	100	100
17	y	27/30 (90%)	26 (96%)	1 (4%)	0	100	100
18	X	37/40 (92%)	37 (100%)	0	0	100	100
18	x	36/40 (90%)	36 (100%)	0	0	100	100
19	Z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
20	R	28/34 (82%)	27 (96%)	1 (4%)	0	100	100
All	All	5282/5384 (98%)	5166 (98%)	110 (2%)	6 (0%)	51	53

All (6) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416[A]	SER
3	C	416[B]	SER
3	c	416[A]	SER
3	c	416[B]	SER
1	a	259	ILE
1	A	259	ILE

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

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	272/279 (98%)	272 (100%)	0	100	100
1	a	275/279 (99%)	274 (100%)	1 (0%)	91	93
2	B	412/403 (102%)	407 (99%)	5 (1%)	71	76
2	b	413/403 (102%)	409 (99%)	4 (1%)	76	81
3	C	356/356 (100%)	352 (99%)	4 (1%)	73	78
3	c	362/356 (102%)	354 (98%)	8 (2%)	52	55
4	D	277/277 (100%)	274 (99%)	3 (1%)	73	78
4	d	277/277 (100%)	274 (99%)	3 (1%)	73	78
5	E	74/73 (101%)	73 (99%)	1 (1%)	67	72
5	e	74/73 (101%)	72 (97%)	2 (3%)	44	46
6	F	28/38 (74%)	28 (100%)	0	100	100
6	f	26/38 (68%)	25 (96%)	1 (4%)	33	31
7	H	55/54 (102%)	53 (96%)	2 (4%)	35	33

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	h	54/54 (100%)	53 (98%)	1 (2%)	57	61
8	I	34/34 (100%)	34 (100%)	0	100	100
8	i	34/34 (100%)	33 (97%)	1 (3%)	42	42
9	J	26/27 (96%)	26 (100%)	0	100	100
9	j	27/27 (100%)	26 (96%)	1 (4%)	34	32
10	K	30/30 (100%)	29 (97%)	1 (3%)	38	37
10	k	30/30 (100%)	29 (97%)	1 (3%)	38	37
11	L	36/35 (103%)	35 (97%)	1 (3%)	43	44
11	l	36/35 (103%)	36 (100%)	0	100	100
12	M	31/32 (97%)	30 (97%)	1 (3%)	39	38
12	m	30/32 (94%)	30 (100%)	0	100	100
13	O	214/207 (103%)	211 (99%)	3 (1%)	67	72
13	o	211/207 (102%)	204 (97%)	7 (3%)	38	37
14	T	27/28 (96%)	25 (93%)	2 (7%)	13	9
14	t	27/28 (96%)	25 (93%)	2 (7%)	13	9
15	U	84/89 (94%)	83 (99%)	1 (1%)	71	76
15	u	84/89 (94%)	84 (100%)	0	100	100
16	V	118/117 (101%)	118 (100%)	0	100	100
16	v	117/117 (100%)	115 (98%)	2 (2%)	60	65
17	Y	22/23 (96%)	22 (100%)	0	100	100
17	y	22/23 (96%)	21 (96%)	1 (4%)	27	24
18	X	32/33 (97%)	32 (100%)	0	100	100
18	x	31/33 (94%)	31 (100%)	0	100	100
19	Z	52/52 (100%)	51 (98%)	1 (2%)	57	61
19	z	52/52 (100%)	52 (100%)	0	100	100
20	R	25/29 (86%)	24 (96%)	1 (4%)	31	29
All	All	4387/4403 (100%)	4326 (99%)	61 (1%)	69	72

All (61) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	B	79	SER
2	B	362	PHE

Continued on next page...

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	B	479	PHE
2	B	492	GLU
2	B	505	ARG
3	C	28	GLN
3	C	29	GLU
3	C	289	PHE
3	C	418	ASN
4	D	90	LEU
4	D	180	ARG
4	D	329	MET
5	E	71	GLU
7	H	49	TYR
7	H	65	LEU
10	K	17	ILE
11	L	13	ASN
12	M	5	GLN
13	O	4	THR
13	O	69	LYS
13	O	118	LEU
14	T	25[A]	GLU
14	T	25[B]	GLU
15	U	70	ARG
19	Z	4	LEU
20	R	4	ARG
1	a	12	ASN
2	b	80	ILE
2	b	362	PHE
2	b	479	PHE
2	b	480	SER
3	c	19	ASN
3	c	289	PHE
3	c	391	ARG
3	c	416[A]	SER
3	c	416[B]	SER
3	c	418	ASN
3	c	462[A]	GLU
3	c	462[B]	GLU
4	d	90	LEU
4	d	180	ARG
4	d	329	MET
5	e	16	SER
5	e	71	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	f	15	ILE
7	h	49	TYR
8	i	36	ASP
9	j	1	MET
10	k	17	ILE
13	o	4	THR
13	o	23	ASP
13	o	25	THR
13	o	37	THR
13	o	118	LEU
13	o	139	SER
13	o	194	LYS
14	t	25[A]	GLU
14	t	25[B]	GLU
16	v	2	GLU
16	v	110	LYS
17	y	42	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (20) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	315	ASN
2	B	53	ASN
2	B	331	ASN
2	B	490	GLN
4	D	61	HIS
4	D	83	ASN
4	D	332	GLN
11	L	13	ASN
13	O	124	ASN
13	O	147	ASN
19	Z	58	ASN
1	a	315	ASN
2	b	53	ASN
2	b	331	ASN
3	c	373	ASN
4	d	83	ASN
4	d	332	GLN
13	o	124	ASN
13	o	147	ASN
19	z	58	ASN

### 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	0.63	0	7,9,11	1.36	2 (28%)
14	FME	t	1	14	8,9,10	0.85	0	7,9,11	2.25	4 (57%)
8	FME	i	1	8	8,9,10	0.63	0	7,9,11	1.37	2 (28%)
12	FME	m	1	12	8,9,10	0.68	0	7,9,11	1.53	2 (28%)
14	FME	T	1	14	8,9,10	0.71	0	7,9,11	1.36	1 (14%)
8	FME	I	1	8	8,9,10	0.66	0	7,9,11	1.17	1 (14%)

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

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

There are no bond length outliers.

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	t	1	FME	CA-N-CN	-3.38	117.62	122.82
14	t	1	FME	C-CA-N	2.62	114.47	109.73
12	m	1	FME	CA-N-CN	-2.46	119.03	122.82
8	i	1	FME	CA-N-CN	-2.45	119.05	122.82
14	t	1	FME	O1-CN-N	-2.43	118.87	125.27
14	T	1	FME	O-C-CA	-2.30	118.76	124.78
14	t	1	FME	O-C-CA	-2.28	118.80	124.78
8	I	1	FME	O-C-CA	-2.19	119.04	124.78
12	m	1	FME	O1-CN-N	-2.16	119.58	125.27
8	i	1	FME	O-C-CA	-2.08	119.33	124.78
12	M	1	FME	O-C-CA	-2.07	119.35	124.78
12	M	1	FME	CA-N-CN	-2.03	119.69	122.82

There are no chirality outliers.

All (5) torsion outliers are listed below:

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

There are no ring outliers.

No monomer is involved in short contacts.

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 251 ligands modelled in this entry, 19 are monoatomic and 18 are unknown - leaving 214 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
36	DGD	C	518	-	63,63,67	0.89	2 (3%)	77,77,81	1.02	5 (6%)
24	CLA	b	624	-	65,73,73	2.02	15 (23%)	76,113,113	2.80	24 (31%)
24	CLA	c	515	3	65,73,73	2.04	15 (23%)	76,113,113	2.66	28 (36%)
24	CLA	B	608	40	65,73,73	2.02	17 (26%)	76,113,113	2.71	28 (36%)
38	HEM	v	205	16	41,50,50	1.31	5 (12%)	45,82,82	1.80	10 (22%)
24	CLA	C	513	-	65,73,73	2.04	16 (24%)	76,113,113	2.77	26 (34%)
28	GOL	B	631	-	5,5,5	0.37	0	5,5,5	0.38	0
24	CLA	B	613	-	65,73,73	2.02	16 (24%)	76,113,113	2.87	27 (35%)
34	HTG	b	607	-	19,19,19	1.08	2 (10%)	23,24,24	1.32	1 (4%)
25	PHO	a	411	-	51,69,69	1.88	9 (17%)	47,99,99	1.69	11 (23%)
24	CLA	D	402	-	65,73,73	1.99	16 (24%)	76,113,113	2.87	28 (36%)
24	CLA	c	508	40	65,73,73	2.06	17 (26%)	76,113,113	2.81	29 (38%)
25	PHO	d	401	-	51,69,69	1.82	8 (15%)	47,99,99	1.99	9 (19%)
29	LMT	F	102	-	36,36,36	0.46	0	47,47,47	1.01	2 (4%)
28	GOL	b	603	-	5,5,5	0.33	0	5,5,5	0.20	0
36	DGD	C	519	-	63,63,67	0.87	2 (3%)	77,77,81	0.88	2 (2%)
26	BCR	C	516	-	41,41,41	1.01	1 (2%)	56,56,56	1.53	13 (23%)
24	CLA	B	612	-	65,73,73	2.03	16 (24%)	76,113,113	2.74	25 (32%)
24	CLA	b	618	-	65,73,73	1.99	15 (23%)	76,113,113	2.75	28 (36%)
24	CLA	B	611	40	65,73,73	2.08	16 (24%)	76,113,113	2.72	31 (40%)
28	GOL	V	204	-	5,5,5	0.35	0	5,5,5	0.29	0
31	PL9	a	416	-	55,55,55	0.64	2 (3%)	68,69,69	1.91	18 (26%)
34	HTG	c	524	-	19,19,19	1.04	2 (10%)	23,24,24	1.49	1 (4%)
24	CLA	b	614	-	65,73,73	2.03	16 (24%)	76,113,113	2.93	26 (34%)
36	DGD	C	517	-	63,63,67	0.89	2 (3%)	77,77,81	1.12	7 (9%)
24	CLA	C	507	-	65,73,73	2.06	16 (24%)	76,113,113	2.68	26 (34%)
26	BCR	C	515	-	41,41,41	1.07	1 (2%)	56,56,56	1.57	7 (12%)
24	CLA	a	410	40	65,73,73	2.00	17 (26%)	76,113,113	2.82	28 (36%)
24	CLA	b	619	40	65,73,73	2.06	18 (27%)	76,113,113	2.80	29 (38%)
27	SQD	L	102	-	53,54,54	1.02	3 (5%)	62,65,65	1.58	10 (16%)
27	SQD	a	405	-	53,54,54	1.06	3 (5%)	62,65,65	1.24	6 (9%)
28	GOL	B	630	-	5,5,5	0.40	0	5,5,5	0.36	0
34	HTG	B	623	-	19,19,19	1.07	1 (5%)	23,24,24	1.09	1 (4%)
36	DGD	c	520	-	63,63,67	0.88	2 (3%)	77,77,81	0.98	4 (5%)
28	GOL	v	201	-	5,5,5	0.35	0	5,5,5	0.21	0
24	CLA	c	507	-	65,73,73	2.04	16 (24%)	76,113,113	2.66	24 (31%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
24	CLA	C	503	-	65,73,73	2.08	16 (24%)	76,113,113	2.69	26 (34%)
24	CLA	C	510	-	65,73,73	2.15	16 (24%)	76,113,113	2.69	26 (34%)
27	SQD	A	415	-	53,54,54	1.05	3 (5%)	62,65,65	1.15	4 (6%)
28	GOL	B	628	-	5,5,5	0.36	0	5,5,5	0.52	0
28	GOL	o	301	-	5,5,5	0.38	0	5,5,5	0.26	0
37	LHG	d	407	-	48,48,48	0.88	3 (6%)	51,54,54	1.04	5 (9%)
28	GOL	T	101	-	5,5,5	0.43	0	5,5,5	0.17	0
28	GOL	V	202	-	5,5,5	0.38	0	5,5,5	0.32	0
24	CLA	c	512	-	65,73,73	2.10	16 (24%)	76,113,113	2.72	28 (36%)
24	CLA	D	403	-	65,73,73	2.07	17 (26%)	76,113,113	2.73	26 (34%)
28	GOL	b	606	-	5,5,5	0.37	0	5,5,5	0.28	0
26	BCR	B	619	-	41,41,41	1.10	1 (2%)	56,56,56	1.38	6 (10%)
23	BCT	A	404	21	2,3,3	0.59	0	2,3,3	1.30	0
24	CLA	B	606	-	65,73,73	2.01	15 (23%)	76,113,113	2.86	27 (35%)
26	BCR	d	405	-	41,41,41	1.06	1 (2%)	56,56,56	1.65	13 (23%)
28	GOL	F	101	33	5,5,5	0.37	0	5,5,5	0.22	0
34	HTG	b	632	-	19,19,19	1.14	2 (10%)	23,24,24	1.75	3 (13%)
24	CLA	b	616	40	65,73,73	2.01	17 (26%)	76,113,113	2.76	27 (35%)
27	SQD	A	411	-	53,54,54	0.96	3 (5%)	62,65,65	1.52	11 (17%)
36	DGD	H	102	-	63,63,67	0.88	2 (3%)	77,77,81	1.00	6 (7%)
28	GOL	V	203	-	5,5,5	0.40	0	5,5,5	0.28	0
37	LHG	L	101	-	48,48,48	0.91	2 (4%)	51,54,54	1.11	5 (9%)
36	DGD	c	519	-	63,63,67	0.84	2 (3%)	77,77,81	1.12	7 (9%)
24	CLA	B	607	-	65,73,73	2.03	16 (24%)	76,113,113	2.85	28 (36%)
26	BCR	b	628	-	41,41,41	1.07	1 (2%)	56,56,56	1.25	7 (12%)
24	CLA	A	406	40	65,73,73	2.06	16 (24%)	76,113,113	2.84	29 (38%)
28	GOL	A	414	-	5,5,5	0.39	0	5,5,5	0.17	0
24	CLA	B	616	-	65,73,73	1.98	15 (23%)	76,113,113	2.81	27 (35%)
34	HTG	b	608	-	19,19,19	1.07	2 (10%)	23,24,24	1.27	3 (13%)
26	BCR	y	101	-	41,41,41	1.03	1 (2%)	56,56,56	1.57	9 (16%)
26	BCR	D	404	-	41,41,41	1.05	1 (2%)	56,56,56	1.73	14 (25%)
28	GOL	B	627	-	5,5,5	0.30	0	5,5,5	0.45	0
24	CLA	C	506	-	65,73,73	1.99	16 (24%)	76,113,113	2.61	24 (31%)
35	LMG	b	629	-	51,51,55	0.90	2 (3%)	59,59,63	1.01	3 (5%)
31	PL9	d	406	-	55,55,55	0.71	2 (3%)	68,69,69	1.54	16 (23%)
34	HTG	b	601	-	19,19,19	0.96	1 (5%)	23,24,24	1.04	1 (4%)
28	GOL	b	602	-	5,5,5	0.41	0	5,5,5	0.44	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
24	CLA	A	405	-	65,73,73	2.07	17 (26%)	76,113,113	2.68	30 (39%)
24	CLA	c	517	-	65,73,73	2.06	16 (24%)	76,113,113	2.76	29 (38%)
31	PL9	A	418	-	55,55,55	0.66	2 (3%)	68,69,69	1.77	20 (29%)
26	BCR	c	527	-	41,41,41	1.03	1 (2%)	56,56,56	1.53	8 (14%)
24	CLA	B	609	-	65,73,73	2.04	16 (24%)	76,113,113	2.68	29 (38%)
34	HTG	d	412	-	16,16,19	1.22	2 (12%)	20,21,24	1.80	3 (15%)
37	LHG	d	409	-	48,48,48	0.93	2 (4%)	51,54,54	1.05	2 (3%)
24	CLA	b	615	-	65,73,73	2.02	16 (24%)	76,113,113	2.82	27 (35%)
35	LMG	c	523	-	51,51,55	0.96	2 (3%)	59,59,63	1.22	7 (11%)
29	LMT	a	419	-	36,36,36	0.45	0	47,47,47	0.79	1 (2%)
28	GOL	T	102	-	5,5,5	0.40	0	5,5,5	0.30	0
24	CLA	a	412	-	65,73,73	2.03	16 (24%)	76,113,113	2.76	30 (39%)
28	GOL	a	402	-	5,5,5	0.38	0	5,5,5	0.27	0
28	GOL	B	636	-	5,5,5	0.41	0	5,5,5	0.57	0
29	LMT	m	102	-	36,36,36	0.49	0	47,47,47	0.98	2 (4%)
26	BCR	K	101	-	41,41,41	1.00	1 (2%)	56,56,56	1.43	11 (19%)
24	CLA	c	511	40	65,73,73	2.04	16 (24%)	76,113,113	2.72	24 (31%)
38	HEM	E	102	6,5	41,50,50	1.30	5 (12%)	45,82,82	1.93	10 (22%)
34	HTG	B	632	-	19,19,19	1.02	2 (10%)	23,24,24	1.39	3 (13%)
25	PHO	D	401	-	51,69,69	1.84	8 (15%)	47,99,99	1.56	9 (19%)
29	LMT	C	522	-	36,36,36	0.50	0	47,47,47	1.22	3 (6%)
24	CLA	C	502	-	65,73,73	2.01	15 (23%)	76,113,113	2.77	27 (35%)
31	PL9	D	405	-	55,55,55	0.65	1 (1%)	68,69,69	1.71	18 (26%)
36	DGD	D	406	-	52,52,67	1.02	3 (5%)	60,60,81	1.21	5 (8%)
36	DGD	e	101	-	63,63,67	0.93	2 (3%)	77,77,81	1.21	7 (9%)
24	CLA	c	513	-	65,73,73	2.13	16 (24%)	76,113,113	2.69	26 (34%)
34	HTG	V	206	-	19,19,19	1.04	2 (10%)	23,24,24	1.30	3 (13%)
24	CLA	C	512	3	65,73,73	2.09	15 (23%)	76,113,113	2.72	29 (38%)
24	CLA	A	407	40	65,73,73	2.01	16 (24%)	76,113,113	2.80	28 (36%)
24	CLA	C	504	-	65,73,73	2.06	16 (24%)	76,113,113	2.66	23 (30%)
37	LHG	D	409	-	48,48,48	0.96	2 (4%)	51,54,54	1.04	3 (5%)
34	HTG	B	625	-	19,19,19	1.04	2 (10%)	23,24,24	1.83	4 (17%)
24	CLA	b	610	40	65,73,73	2.08	16 (24%)	76,113,113	2.74	23 (30%)
24	CLA	b	625	-	65,73,73	2.05	16 (24%)	76,113,113	2.78	26 (34%)
28	GOL	a	401	-	5,5,5	0.42	0	5,5,5	0.46	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
24	CLA	a	409	-	65,73,73	2.09	16 (24%)	76,113,113	2.78	30 (39%)
27	SQD	a	414	-	53,54,54	0.97	3 (5%)	62,65,65	1.59	13 (20%)
24	CLA	b	611	-	65,73,73	2.06	17 (26%)	76,113,113	2.80	27 (35%)
28	GOL	t	102	-	5,5,5	0.45	0	5,5,5	0.12	0
37	LHG	E	101	-	41,41,48	1.03	2 (4%)	44,47,54	1.10	3 (6%)
26	BCR	Y	101	-	41,41,41	1.07	1 (2%)	56,56,56	1.53	9 (16%)
29	LMT	B	635	-	25,25,36	0.55	1 (4%)	30,30,47	0.80	1 (3%)
26	BCR	t	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.61	16 (28%)
27	SQD	F	103	-	42,43,54	1.15	3 (7%)	51,54,65	1.59	11 (21%)
25	PHO	A	408	-	51,69,69	1.89	8 (15%)	47,99,99	1.79	9 (19%)
29	LMT	f	103	-	36,36,36	0.48	0	47,47,47	0.94	2 (4%)
28	GOL	O	301	-	5,5,5	0.35	0	5,5,5	0.40	0
27	SQD	f	102	-	42,43,54	1.19	3 (7%)	51,54,65	1.47	8 (15%)
29	LMT	M	102	-	36,36,36	0.40	0	47,47,47	0.90	1 (2%)
24	CLA	d	402	40	65,73,73	2.08	16 (24%)	76,113,113	2.75	28 (36%)
26	BCR	h	101	-	41,41,41	1.04	1 (2%)	56,56,56	1.39	11 (19%)
24	CLA	C	505	40	65,73,73	2.08	16 (24%)	76,113,113	2.79	27 (35%)
26	BCR	H	101	-	41,41,41	1.09	1 (2%)	56,56,56	1.44	9 (16%)
28	GOL	c	501	-	5,5,5	0.37	0	5,5,5	0.29	0
28	GOL	C	525	-	5,5,5	0.38	0	5,5,5	0.73	0
28	GOL	C	526	-	5,5,5	0.34	0	5,5,5	0.52	0
24	CLA	B	614	-	65,73,73	2.07	15 (23%)	76,113,113	2.72	28 (36%)
24	CLA	C	514	-	65,73,73	2.04	16 (24%)	76,113,113	2.70	28 (36%)
37	LHG	e	102	-	41,41,48	1.03	2 (4%)	44,47,54	0.93	2 (4%)
29	LMT	T	104	-	25,25,36	0.52	0	30,30,47	0.92	1 (3%)
24	CLA	d	404	-	65,73,73	2.06	18 (27%)	76,113,113	2.81	29 (38%)
28	GOL	B	629	-	5,5,5	0.37	0	5,5,5	0.28	0
28	GOL	c	502	-	5,5,5	0.40	0	5,5,5	0.48	0
35	LMG	Z	101	-	37,37,55	0.96	2 (5%)	45,45,63	1.38	6 (13%)
24	CLA	b	617	-	65,73,73	2.10	16 (24%)	76,113,113	2.61	29 (38%)
28	GOL	b	605	-	5,5,5	0.37	0	5,5,5	0.30	0
35	LMG	C	520	-	51,51,55	0.95	2 (3%)	59,59,63	0.98	3 (5%)
28	GOL	v	203	-	5,5,5	0.41	0	5,5,5	0.27	0
29	LMT	M	105	-	36,36,36	0.47	0	47,47,47	0.85	0
29	LMT	b	630	-	25,25,36	0.52	0	30,30,47	0.64	0
34	HTG	C	524	-	19,19,19	1.01	2 (10%)	23,24,24	1.78	4 (17%)
26	BCR	b	627	-	41,41,41	1.00	1 (2%)	56,56,56	1.38	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
35	LMG	a	415	-	51,51,55	0.90	2 (3%)	59,59,63	1.17	5 (8%)
24	CLA	B	605	-	65,73,73	2.02	17 (26%)	76,113,113	2.73	28 (36%)
36	DGD	h	102	-	63,63,67	0.91	3 (4%)	77,77,81	0.92	4 (5%)
24	CLA	c	505	-	65,73,73	2.04	16 (24%)	76,113,113	2.73	27 (35%)
24	CLA	c	510	-	65,73,73	2.05	17 (26%)	76,113,113	2.74	29 (38%)
24	CLA	c	516	-	65,73,73	2.04	15 (23%)	76,113,113	2.85	29 (38%)
27	SQD	B	621	-	53,54,54	1.01	3 (5%)	62,65,65	1.53	9 (14%)
28	GOL	b	604	-	5,5,5	0.37	0	5,5,5	0.24	0
24	CLA	B	617	-	65,73,73	2.06	16 (24%)	76,113,113	2.72	26 (34%)
35	LMG	J	101	39	51,51,55	0.86	2 (3%)	59,59,63	0.99	4 (6%)
24	CLA	B	615	-	65,73,73	2.05	16 (24%)	76,113,113	2.82	27 (35%)
34	HTG	b	631	-	19,19,19	0.79	1 (5%)	23,24,24	1.26	2 (8%)
24	CLA	B	603	-	65,73,73	2.08	18 (27%)	76,113,113	2.85	26 (34%)
24	CLA	b	623	-	65,73,73	2.02	15 (23%)	76,113,113	2.86	30 (39%)
24	CLA	B	602	40	65,73,73	2.07	16 (24%)	76,113,113	2.78	26 (34%)
26	BCR	c	518	-	41,41,41	1.03	1 (2%)	56,56,56	1.45	8 (14%)
34	HTG	B	624	-	19,19,19	0.78	1 (5%)	23,24,24	1.56	3 (13%)
34	HTG	D	412	-	16,16,19	1.10	2 (12%)	20,21,24	1.49	1 (5%)
34	HTG	B	633	-	19,19,19	1.03	2 (10%)	23,24,24	1.41	1 (4%)
24	CLA	A	409	-	65,73,73	2.08	16 (24%)	76,113,113	2.71	29 (38%)
24	CLA	C	511	-	65,73,73	2.09	16 (24%)	76,113,113	2.68	30 (39%)
37	LHG	D	408	-	48,48,48	0.89	2 (4%)	51,54,54	0.89	4 (7%)
24	CLA	b	612	-	65,73,73	2.05	16 (24%)	76,113,113	2.84	30 (39%)
26	BCR	b	626	-	41,41,41	1.02	1 (2%)	56,56,56	1.45	8 (14%)
24	CLA	c	509	-	65,73,73	1.99	16 (24%)	76,113,113	2.65	23 (30%)
36	DGD	c	521	-	63,63,67	0.89	2 (3%)	77,77,81	1.01	4 (5%)
28	GOL	A	412	-	5,5,5	0.32	0	5,5,5	0.36	0
23	BCT	a	418	21	2,3,3	0.64	0	2,3,3	0.73	0
26	BCR	B	618	-	41,41,41	1.02	1 (2%)	56,56,56	1.38	7 (12%)
24	CLA	c	506	-	65,73,73	2.04	17 (26%)	76,113,113	2.64	26 (34%)
35	LMG	M	101	-	51,51,55	0.94	2 (3%)	59,59,63	1.02	3 (5%)
28	GOL	V	201	-	5,5,5	0.37	0	5,5,5	0.32	0
24	CLA	c	514	-	65,73,73	2.07	16 (24%)	76,113,113	2.74	30 (39%)
28	GOL	B	626	-	5,5,5	0.43	0	5,5,5	0.30	0
28	GOL	v	202	-	5,5,5	0.34	0	5,5,5	0.28	0
35	LMG	c	522	-	51,51,55	0.90	2 (3%)	59,59,63	1.12	4 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
34	HTG	C	523	-	19,19,19	0.99	2 (10%)	23,24,24	1.58	2 (8%)
37	LHG	d	408	-	48,48,48	0.88	2 (4%)	51,54,54	1.00	4 (7%)
30	OEX	A	417	1,40,3	0,15,15	-	-	-	-	-
26	BCR	a	413	-	41,41,41	1.07	1 (2%)	56,56,56	1.14	4 (7%)
26	BCR	B	620	-	41,41,41	1.05	1 (2%)	56,56,56	1.50	10 (17%)
38	HEM	V	205	16	41,50,50	1.36	6 (14%)	45,82,82	1.69	11 (24%)
24	CLA	b	621	-	65,73,73	2.05	17 (26%)	76,113,113	2.74	29 (38%)
29	LMT	a	404	-	36,36,36	0.48	1 (2%)	47,47,47	1.10	2 (4%)
29	LMT	B	622	-	36,36,36	0.43	0	47,47,47	1.06	2 (4%)
24	CLA	b	620	-	65,73,73	2.03	15 (23%)	76,113,113	2.74	27 (35%)
29	LMT	M	104	-	36,36,36	0.54	1 (2%)	47,47,47	1.04	4 (8%)
28	GOL	f	101	33	5,5,5	0.32	0	5,5,5	0.49	0
35	LMG	z	101	-	39,39,55	1.08	2 (5%)	47,47,63	1.11	3 (6%)
35	LMG	C	501	-	51,51,55	0.94	2 (3%)	59,59,63	1.10	4 (6%)
24	CLA	C	508	40	65,73,73	2.03	16 (24%)	76,113,113	2.66	25 (32%)
34	HTG	c	525	-	19,19,19	1.03	2 (10%)	23,24,24	1.49	3 (13%)
24	CLA	b	622	-	65,73,73	2.08	15 (23%)	76,113,113	2.63	27 (35%)
35	LMG	C	521	-	51,51,55	0.95	2 (3%)	59,59,63	1.18	5 (8%)
28	GOL	A	413	-	5,5,5	0.46	0	5,5,5	0.46	0
24	CLA	B	604	-	65,73,73	2.08	17 (26%)	76,113,113	2.70	28 (36%)
24	CLA	B	610	-	65,73,73	2.00	16 (24%)	76,113,113	2.71	27 (35%)
26	BCR	T	103	-	41,41,41	1.08	1 (2%)	56,56,56	1.62	13 (23%)
30	OEX	a	417	1,40,3	0,15,15	-	-	-	-	-
29	LMT	A	416	-	36,36,36	0.56	1 (2%)	47,47,47	1.28	3 (6%)
37	LHG	l	101	-	48,48,48	0.93	2 (4%)	51,54,54	0.98	3 (5%)
35	LMG	j	101	39	51,51,55	0.92	2 (3%)	59,59,63	1.04	3 (5%)
26	BCR	k	101	-	41,41,41	1.07	1 (2%)	56,56,56	1.47	11 (19%)
24	CLA	C	509	-	65,73,73	2.10	16 (24%)	76,113,113	2.77	27 (35%)
26	BCR	A	410	-	41,41,41	1.00	1 (2%)	56,56,56	1.23	7 (12%)
38	HEM	e	103	6,5	41,50,50	1.28	5 (12%)	45,82,82	1.75	10 (22%)
24	CLA	b	613	-	65,73,73	2.05	16 (24%)	76,113,113	2.70	29 (38%)
37	LHG	D	407	-	48,48,48	0.87	2 (4%)	51,54,54	1.11	5 (9%)
24	CLA	d	403	-	65,73,73	2.05	16 (24%)	76,113,113	2.78	27 (35%)

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
36	DGD	C	518	-	-	18/51/91/95	0/2/2/2
24	CLA	b	624	-	1/1/15/20	4/37/115/115	-
24	CLA	c	515	3	1/1/15/20	5/37/115/115	-
24	CLA	B	608	40	1/1/15/20	2/37/115/115	-
38	HEM	v	205	16	-	4/12/54/54	-
24	CLA	C	513	-	1/1/15/20	10/37/115/115	-
28	GOL	B	631	-	-	0/4/4/4	-
24	CLA	B	613	-	1/1/15/20	1/37/115/115	-
34	HTG	b	607	-	-	2/10/30/30	0/1/1/1
25	PHO	a	411	-	-	5/37/103/103	0/5/6/6
24	CLA	D	402	-	1/1/15/20	0/37/115/115	-
24	CLA	c	508	40	1/1/15/20	8/37/115/115	-
25	PHO	d	401	-	-	1/37/103/103	0/5/6/6
29	LMT	F	102	-	-	3/21/61/61	0/2/2/2
28	GOL	b	603	-	-	0/4/4/4	-
36	DGD	C	519	-	-	8/51/91/95	0/2/2/2
26	BCR	C	516	-	-	4/29/63/63	0/2/2/2
24	CLA	B	612	-	1/1/15/20	4/37/115/115	-
24	CLA	b	618	-	1/1/15/20	6/37/115/115	-
24	CLA	B	611	40	1/1/15/20	6/37/115/115	-
28	GOL	V	204	-	-	0/4/4/4	-
31	PL9	a	416	-	-	15/53/73/73	0/1/1/1
34	HTG	c	524	-	-	3/10/30/30	0/1/1/1
24	CLA	b	614	-	1/1/15/20	3/37/115/115	-
36	DGD	C	517	-	-	16/51/91/95	0/2/2/2
24	CLA	C	507	-	1/1/15/20	9/37/115/115	-
26	BCR	C	515	-	-	2/29/63/63	0/2/2/2
24	CLA	b	619	40	1/1/15/20	6/37/115/115	-
24	CLA	a	410	40	-	10/37/115/115	-
27	SQD	L	102	-	-	20/49/69/69	0/1/1/1
27	SQD	a	405	-	-	16/49/69/69	0/1/1/1
28	GOL	B	630	-	-	4/4/4/4	-
34	HTG	B	623	-	-	3/10/30/30	0/1/1/1
36	DGD	c	520	-	-	16/51/91/95	0/2/2/2

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	GOL	v	201	-	-	2/4/4/4	-
24	CLA	c	507	-	1/1/15/20	2/37/115/115	-
24	CLA	C	503	-	-	3/37/115/115	-
24	CLA	C	510	-	1/1/15/20	11/37/115/115	-
27	SQD	A	415	-	-	14/49/69/69	0/1/1/1
28	GOL	B	628	-	-	2/4/4/4	-
28	GOL	o	301	-	-	3/4/4/4	-
37	LHG	d	407	-	-	12/53/53/53	-
28	GOL	T	101	-	-	0/4/4/4	-
28	GOL	V	202	-	-	2/4/4/4	-
24	CLA	c	512	-	1/1/15/20	4/37/115/115	-
24	CLA	D	403	-	1/1/15/20	5/37/115/115	-
28	GOL	b	606	-	-	3/4/4/4	-
26	BCR	B	619	-	-	0/29/63/63	0/2/2/2
24	CLA	B	606	-	1/1/15/20	6/37/115/115	-
26	BCR	d	405	-	-	5/29/63/63	0/2/2/2
28	GOL	F	101	33	-	2/4/4/4	-
34	HTG	b	632	-	-	5/10/30/30	0/1/1/1
24	CLA	b	616	40	1/1/15/20	2/37/115/115	-
27	SQD	A	411	-	-	11/49/69/69	0/1/1/1
36	DGD	H	102	-	-	13/51/91/95	0/2/2/2
28	GOL	V	203	-	-	1/4/4/4	-
37	LHG	L	101	-	-	15/53/53/53	-
36	DGD	c	519	-	-	15/51/91/95	0/2/2/2
24	CLA	B	607	-	1/1/15/20	5/37/115/115	-
26	BCR	b	628	-	-	2/29/63/63	0/2/2/2
24	CLA	A	406	40	-	4/37/115/115	-
28	GOL	A	414	-	-	2/4/4/4	-
24	CLA	B	616	-	1/1/15/20	9/37/115/115	-
34	HTG	b	608	-	-	1/10/30/30	0/1/1/1
26	BCR	y	101	-	-	4/29/63/63	0/2/2/2
26	BCR	D	404	-	-	8/29/63/63	0/2/2/2
28	GOL	B	627	-	-	2/4/4/4	-
24	CLA	C	506	-	1/1/15/20	4/37/115/115	-
35	LMG	b	629	-	-	10/46/66/70	0/1/1/1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	PL9	d	406	-	-	3/53/73/73	0/1/1/1
34	HTG	b	601	-	-	3/10/30/30	0/1/1/1
28	GOL	b	602	-	-	4/4/4/4	-
24	CLA	A	405	-	1/1/15/20	4/37/115/115	-
24	CLA	c	517	-	1/1/15/20	5/37/115/115	-
31	PL9	A	418	-	-	13/53/73/73	0/1/1/1
26	BCR	c	527	-	-	0/29/63/63	0/2/2/2
24	CLA	B	609	-	-	1/37/115/115	-
34	HTG	d	412	-	-	0/7/27/30	0/1/1/1
37	LHG	d	409	-	-	13/53/53/53	-
24	CLA	b	615	-	1/1/15/20	11/37/115/115	-
35	LMG	c	523	-	-	3/46/66/70	0/1/1/1
29	LMT	a	419	-	-	5/21/61/61	0/2/2/2
28	GOL	T	102	-	-	2/4/4/4	-
24	CLA	a	412	-	1/1/15/20	9/37/115/115	-
28	GOL	a	402	-	-	2/4/4/4	-
28	GOL	B	636	-	-	0/4/4/4	-
29	LMT	m	102	-	-	5/21/61/61	0/2/2/2
26	BCR	K	101	-	-	1/29/63/63	0/2/2/2
24	CLA	c	511	40	1/1/15/20	5/37/115/115	-
38	HEM	E	102	6,5	-	7/12/54/54	-
34	HTG	B	632	-	-	3/10/30/30	0/1/1/1
25	PHO	D	401	-	-	5/37/103/103	0/5/6/6
29	LMT	C	522	-	-	10/21/61/61	0/2/2/2
24	CLA	C	502	-	1/1/15/20	5/37/115/115	-
31	PL9	D	405	-	-	8/53/73/73	0/1/1/1
36	DGD	D	406	-	-	21/47/67/95	0/1/1/2
36	DGD	e	101	-	-	26/51/91/95	0/2/2/2
24	CLA	c	513	-	1/1/15/20	11/37/115/115	-
34	HTG	V	206	-	-	4/10/30/30	0/1/1/1
24	CLA	C	512	3	1/1/15/20	3/37/115/115	-
24	CLA	A	407	40	-	3/37/115/115	-
24	CLA	C	504	-	1/1/15/20	1/37/115/115	-
37	LHG	D	409	-	-	14/53/53/53	-
34	HTG	B	625	-	-	5/10/30/30	0/1/1/1

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	b	610	40	1/1/15/20	16/37/115/115	-
24	CLA	b	625	-	1/1/15/20	8/37/115/115	-
28	GOL	a	401	-	-	2/4/4/4	-
24	CLA	a	409	-	1/1/15/20	6/37/115/115	-
27	SQD	a	414	-	-	15/49/69/69	0/1/1/1
24	CLA	b	611	-	1/1/15/20	5/37/115/115	-
28	GOL	t	102	-	-	0/4/4/4	-
37	LHG	E	101	-	-	22/46/46/53	-
26	BCR	Y	101	-	-	4/29/63/63	0/2/2/2
29	LMT	B	635	-	-	7/17/37/61	0/1/1/2
26	BCR	t	101	-	-	3/29/63/63	0/2/2/2
27	SQD	F	103	-	-	16/38/58/69	0/1/1/1
25	PHO	A	408	-	-	0/37/103/103	0/5/6/6
29	LMT	f	103	-	-	10/21/61/61	0/2/2/2
28	GOL	O	301	-	-	2/4/4/4	-
27	SQD	f	102	-	-	15/38/58/69	0/1/1/1
29	LMT	M	102	-	-	5/21/61/61	0/2/2/2
24	CLA	d	402	40	1/1/15/20	7/37/115/115	-
26	BCR	h	101	-	-	1/29/63/63	0/2/2/2
24	CLA	C	505	40	1/1/15/20	6/37/115/115	-
26	BCR	H	101	-	-	0/29/63/63	0/2/2/2
28	GOL	c	501	-	-	0/4/4/4	-
28	GOL	C	525	-	-	2/4/4/4	-
28	GOL	C	526	-	-	0/4/4/4	-
24	CLA	B	614	-	1/1/15/20	7/37/115/115	-
24	CLA	C	514	-	1/1/15/20	6/37/115/115	-
37	LHG	e	102	-	-	20/46/46/53	-
29	LMT	T	104	-	-	7/17/37/61	0/1/1/2
24	CLA	d	404	-	1/1/15/20	3/37/115/115	-
28	GOL	B	629	-	-	3/4/4/4	-
28	GOL	c	502	-	-	0/4/4/4	-
35	LMG	Z	101	-	-	14/31/51/70	0/1/1/1
24	CLA	b	617	-	-	3/37/115/115	-
28	GOL	b	605	-	-	2/4/4/4	-
35	LMG	C	520	-	-	11/46/66/70	0/1/1/1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	GOL	v	203	-	-	2/4/4/4	-
29	LMT	M	105	-	-	7/21/61/61	0/2/2/2
29	LMT	b	630	-	-	4/17/37/61	0/1/1/2
34	HTG	C	524	-	-	3/10/30/30	0/1/1/1
26	BCR	b	627	-	-	2/29/63/63	0/2/2/2
35	LMG	a	415	-	-	18/46/66/70	0/1/1/1
24	CLA	B	605	-	1/1/15/20	6/37/115/115	-
36	DGD	h	102	-	-	10/51/91/95	0/2/2/2
24	CLA	c	505	-	1/1/15/20	3/37/115/115	-
24	CLA	c	510	-	1/1/15/20	14/37/115/115	-
24	CLA	c	516	-	1/1/15/20	9/37/115/115	-
27	SQD	B	621	-	-	20/49/69/69	0/1/1/1
28	GOL	b	604	-	-	2/4/4/4	-
24	CLA	B	617	-	1/1/15/20	6/37/115/115	-
35	LMG	J	101	39	-	9/46/66/70	0/1/1/1
24	CLA	B	615	-	1/1/15/20	14/37/115/115	-
34	HTG	b	631	-	-	3/10/30/30	0/1/1/1
24	CLA	B	603	-	1/1/15/20	5/37/115/115	-
24	CLA	b	623	-	1/1/15/20	20/37/115/115	-
24	CLA	B	602	40	1/1/15/20	12/37/115/115	-
26	BCR	c	518	-	-	2/29/63/63	0/2/2/2
34	HTG	B	624	-	-	5/10/30/30	0/1/1/1
34	HTG	D	412	-	-	1/7/27/30	0/1/1/1
34	HTG	B	633	-	-	0/10/30/30	0/1/1/1
24	CLA	C	511	-	1/1/15/20	8/37/115/115	-
24	CLA	A	409	-	-	8/37/115/115	-
37	LHG	D	408	-	-	11/53/53/53	-
24	CLA	b	612	-	1/1/15/20	5/37/115/115	-
26	BCR	b	626	-	-	2/29/63/63	0/2/2/2
24	CLA	c	509	-	1/1/15/20	4/37/115/115	-
36	DGD	c	521	-	-	16/51/91/95	0/2/2/2
28	GOL	A	412	-	-	0/4/4/4	-
26	BCR	B	618	-	-	2/29/63/63	0/2/2/2
35	LMG	M	101	-	-	7/46/66/70	0/1/1/1
24	CLA	c	506	-	-	5/37/115/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	GOL	V	201	-	-	2/4/4/4	-
24	CLA	c	514	-	1/1/15/20	9/37/115/115	-
28	GOL	B	626	-	-	2/4/4/4	-
28	GOL	v	202	-	-	3/4/4/4	-
35	LMG	c	522	-	-	13/46/66/70	0/1/1/1
34	HTG	C	523	-	-	0/10/30/30	0/1/1/1
37	LHG	d	408	-	-	9/53/53/53	-
26	BCR	a	413	-	-	0/29/63/63	0/2/2/2
26	BCR	B	620	-	-	0/29/63/63	0/2/2/2
38	HEM	V	205	16	-	4/12/54/54	-
24	CLA	b	621	-	1/1/15/20	2/37/115/115	-
29	LMT	a	404	-	-	9/21/61/61	0/2/2/2
29	LMT	B	622	-	-	10/21/61/61	0/2/2/2
24	CLA	b	620	-	-	3/37/115/115	-
29	LMT	M	104	-	-	10/21/61/61	0/2/2/2
28	GOL	f	101	33	-	3/4/4/4	-
35	LMG	z	101	-	-	13/34/54/70	0/1/1/1
35	LMG	C	501	-	-	18/46/66/70	0/1/1/1
24	CLA	C	508	40	1/1/15/20	5/37/115/115	-
34	HTG	c	525	-	-	0/10/30/30	0/1/1/1
24	CLA	b	622	-	1/1/15/20	4/37/115/115	-
35	LMG	C	521	-	-	9/46/66/70	0/1/1/1
28	GOL	A	413	-	-	2/4/4/4	-
24	CLA	B	604	-	1/1/15/20	6/37/115/115	-
24	CLA	B	610	-	1/1/15/20	5/37/115/115	-
26	BCR	T	103	-	-	2/29/63/63	0/2/2/2
29	LMT	A	416	-	-	5/21/61/61	0/2/2/2
37	LHG	l	101	-	-	14/53/53/53	-
35	LMG	j	101	39	-	12/46/66/70	0/1/1/1
26	BCR	k	101	-	-	1/29/63/63	0/2/2/2
24	CLA	C	509	-	1/1/15/20	5/37/115/115	-
26	BCR	A	410	-	-	0/29/63/63	0/2/2/2
38	HEM	e	103	6,5	-	8/12/54/54	-
24	CLA	b	613	-	1/1/15/20	3/37/115/115	-
37	LHG	D	407	-	-	13/53/53/53	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	d	403	-	1/1/15/20	2/37/115/115	-

All (1334) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	510	CLA	C3B-C2B	6.54	1.49	1.40
24	C	505	CLA	C3B-C2B	6.48	1.49	1.40
24	B	605	CLA	C3B-C2B	6.45	1.49	1.40
24	c	513	CLA	C3B-C2B	6.44	1.49	1.40
24	B	613	CLA	C3B-C2B	6.38	1.49	1.40
25	A	408	PHO	C3B-C2B	6.36	1.49	1.40
24	C	509	CLA	C3B-C2B	6.34	1.49	1.40
24	d	402	CLA	C3B-C2B	6.31	1.49	1.40
24	b	613	CLA	C3B-C2B	6.30	1.49	1.40
24	a	409	CLA	C3B-C2B	6.28	1.49	1.40
24	b	620	CLA	C3B-C2B	6.26	1.49	1.40
24	b	621	CLA	C3B-C2B	6.25	1.49	1.40
24	B	617	CLA	C3B-C2B	6.24	1.49	1.40
24	C	512	CLA	C3B-C2B	6.23	1.49	1.40
24	b	622	CLA	C3B-C2B	6.23	1.49	1.40
24	D	402	CLA	C3B-C2B	6.23	1.49	1.40
24	c	510	CLA	C3B-C2B	6.21	1.49	1.40
24	c	505	CLA	C3B-C2B	6.18	1.48	1.40
24	c	512	CLA	C3B-C2B	6.17	1.48	1.40
24	b	625	CLA	C3B-C2B	6.13	1.48	1.40
24	d	404	CLA	C3B-C2B	6.11	1.48	1.40
25	D	401	PHO	C3B-C2B	6.11	1.48	1.40
24	c	511	CLA	C3B-C2B	6.09	1.48	1.40
24	A	406	CLA	C3B-C2B	6.09	1.48	1.40
25	a	411	PHO	C3B-C2B	6.08	1.48	1.40
24	c	515	CLA	C3B-C2B	6.07	1.48	1.40
24	B	603	CLA	C3B-C2B	6.07	1.48	1.40
24	B	614	CLA	C3B-C2B	6.02	1.48	1.40
24	c	514	CLA	C3B-C2B	6.01	1.48	1.40
24	C	511	CLA	C3B-C2B	6.01	1.48	1.40
24	b	619	CLA	C3B-C2B	5.97	1.48	1.40
24	c	508	CLA	C3B-C2B	5.97	1.48	1.40
24	b	612	CLA	C3B-C2B	5.96	1.48	1.40
24	C	503	CLA	C3B-C2B	5.96	1.48	1.40
24	b	623	CLA	C3B-C2B	5.95	1.48	1.40
24	B	615	CLA	C3B-C2B	5.93	1.48	1.40
24	A	405	CLA	C3B-C2B	5.92	1.48	1.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	610	CLA	C3B-C2B	5.91	1.48	1.40
24	b	617	CLA	C3B-C2B	5.89	1.48	1.40
24	d	403	CLA	C3B-C2B	5.87	1.48	1.40
24	B	609	CLA	C3B-C2B	5.87	1.48	1.40
24	B	612	CLA	C3B-C2B	5.85	1.48	1.40
25	A	408	PHO	C3D-C2D	5.84	1.49	1.39
24	A	409	CLA	C3B-C2B	5.84	1.48	1.40
24	C	506	CLA	C3B-C2B	5.80	1.48	1.40
24	C	508	CLA	C3B-C2B	5.80	1.48	1.40
24	b	615	CLA	C3B-C2B	5.80	1.48	1.40
25	d	401	PHO	C3B-C2B	5.79	1.48	1.40
24	D	403	CLA	C3B-C2B	5.79	1.48	1.40
24	B	614	CLA	C1D-ND	5.77	1.44	1.37
24	B	607	CLA	C3B-C2B	5.76	1.48	1.40
24	C	503	CLA	C1D-ND	5.74	1.44	1.37
24	c	509	CLA	C3B-C2B	5.73	1.48	1.40
24	c	516	CLA	C3B-C2B	5.73	1.48	1.40
24	C	513	CLA	C3B-C2B	5.71	1.48	1.40
24	B	602	CLA	C3B-C2B	5.69	1.48	1.40
24	c	506	CLA	C3B-C2B	5.68	1.48	1.40
24	B	608	CLA	C3B-C2B	5.67	1.48	1.40
24	C	504	CLA	C3C-C2C	5.66	1.48	1.36
24	B	603	CLA	C3C-C2C	5.65	1.48	1.36
24	C	509	CLA	C3C-C2C	5.61	1.48	1.36
24	b	611	CLA	C3B-C2B	5.57	1.48	1.40
24	B	604	CLA	C3C-C2C	5.56	1.48	1.36
25	a	411	PHO	C3D-C2D	5.55	1.49	1.39
24	b	624	CLA	C3B-C2B	5.55	1.48	1.40
24	b	610	CLA	C3C-C2C	5.54	1.48	1.36
24	a	410	CLA	C3B-C2B	5.54	1.48	1.40
24	d	402	CLA	C1D-ND	5.51	1.44	1.37
24	c	517	CLA	C3B-C2B	5.50	1.48	1.40
24	A	407	CLA	C3C-C2C	5.48	1.48	1.36
24	C	503	CLA	CHC-C1C	5.48	1.49	1.35
24	C	507	CLA	C3B-C2B	5.47	1.48	1.40
24	B	604	CLA	C3B-C2B	5.47	1.48	1.40
24	c	517	CLA	C3C-C2C	5.46	1.48	1.36
24	B	605	CLA	C1D-ND	5.46	1.44	1.37
24	B	611	CLA	C3C-C2C	5.46	1.48	1.36
25	d	401	PHO	C3D-C2D	5.45	1.49	1.39
25	D	401	PHO	C3D-C2D	5.45	1.49	1.39
24	b	619	CLA	C3C-C2C	5.45	1.48	1.36

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	617	CLA	C3C-C2C	5.44	1.48	1.36
24	C	514	CLA	C3B-C2B	5.44	1.47	1.40
24	B	611	CLA	C3B-C2B	5.43	1.47	1.40
24	b	614	CLA	C3C-C2C	5.43	1.48	1.36
24	A	406	CLA	C1D-ND	5.43	1.44	1.37
24	D	402	CLA	C3C-C2C	5.42	1.48	1.36
24	A	407	CLA	C3B-C2B	5.42	1.47	1.40
24	B	610	CLA	CHC-C1C	5.41	1.48	1.35
24	b	622	CLA	C3C-C2C	5.41	1.48	1.36
24	b	614	CLA	C3B-C2B	5.40	1.47	1.40
26	k	101	BCR	C23-C22	-5.39	1.34	1.45
24	c	512	CLA	C3C-C2C	5.39	1.48	1.36
24	c	513	CLA	C1D-ND	5.38	1.44	1.37
24	D	403	CLA	C1D-ND	5.38	1.44	1.37
24	c	516	CLA	CHC-C1C	5.38	1.48	1.35
24	a	409	CLA	C1D-ND	5.38	1.44	1.37
24	a	409	CLA	C3C-C2C	5.37	1.48	1.36
24	C	510	CLA	C3C-C2C	5.37	1.48	1.36
24	A	405	CLA	CHC-C1C	5.37	1.48	1.35
24	C	514	CLA	C3C-C2C	5.37	1.48	1.36
24	c	514	CLA	C3C-C2C	5.36	1.48	1.36
24	C	504	CLA	CHC-C1C	5.36	1.48	1.35
24	b	610	CLA	C1D-ND	5.35	1.44	1.37
24	D	403	CLA	C3C-C2C	5.35	1.48	1.36
24	A	406	CLA	C3C-C2C	5.34	1.48	1.36
24	C	510	CLA	C1D-ND	5.34	1.44	1.37
24	B	602	CLA	C1D-ND	5.33	1.44	1.37
24	C	513	CLA	C3C-C2C	5.33	1.48	1.36
24	b	613	CLA	C3C-C2C	5.33	1.48	1.36
24	C	511	CLA	C3C-C2C	5.32	1.48	1.36
26	b	628	BCR	C23-C22	-5.32	1.34	1.45
24	a	412	CLA	C3C-C2C	5.31	1.48	1.36
24	B	606	CLA	O2D-CGD	5.31	1.46	1.33
24	C	511	CLA	C1D-ND	5.31	1.44	1.37
24	B	606	CLA	C1D-ND	5.31	1.44	1.37
24	b	616	CLA	C3B-C2B	5.31	1.47	1.40
24	b	611	CLA	C3C-C2C	5.30	1.48	1.36
24	C	504	CLA	C1D-ND	5.30	1.44	1.37
24	c	507	CLA	CHC-C1C	5.30	1.48	1.35
24	b	624	CLA	C1D-ND	5.29	1.44	1.37
24	b	616	CLA	C3C-C2C	5.29	1.48	1.36
24	C	502	CLA	CHC-C1C	5.28	1.48	1.35

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	d	402	CLA	C3C-C2C	5.28	1.48	1.36
24	c	514	CLA	C1D-ND	5.28	1.44	1.37
24	C	507	CLA	C1D-ND	5.28	1.44	1.37
24	C	508	CLA	CHC-C1C	5.27	1.48	1.35
24	b	621	CLA	O2D-CGD	5.27	1.46	1.33
24	a	412	CLA	C3B-C2B	5.27	1.47	1.40
24	c	510	CLA	C3C-C2C	5.26	1.47	1.36
24	C	503	CLA	C3C-C2C	5.26	1.47	1.36
24	c	508	CLA	C3C-C2C	5.26	1.47	1.36
24	B	602	CLA	C3C-C2C	5.26	1.47	1.36
24	b	622	CLA	O2D-CGD	5.25	1.46	1.33
24	b	622	CLA	C1D-ND	5.25	1.44	1.37
24	B	615	CLA	C1D-ND	5.25	1.44	1.37
24	c	512	CLA	C1D-ND	5.25	1.44	1.37
24	C	504	CLA	C3B-C2B	5.24	1.47	1.40
24	B	608	CLA	C3C-C2C	5.24	1.47	1.36
24	B	616	CLA	C3B-C2B	5.24	1.47	1.40
24	B	603	CLA	CHC-C1C	5.24	1.48	1.35
24	A	409	CLA	C1D-ND	5.23	1.44	1.37
24	b	617	CLA	C1D-ND	5.23	1.44	1.37
24	c	513	CLA	C3C-C2C	5.23	1.47	1.36
24	c	516	CLA	C3C-C2C	5.22	1.47	1.36
24	C	512	CLA	C1D-ND	5.21	1.44	1.37
24	C	502	CLA	C1D-ND	5.21	1.44	1.37
24	C	505	CLA	CHC-C1C	5.21	1.48	1.35
24	c	509	CLA	C3C-C2C	5.21	1.47	1.36
24	d	404	CLA	C3C-C2C	5.20	1.47	1.36
24	A	407	CLA	CHC-C1C	5.20	1.48	1.35
24	c	517	CLA	CHC-C1C	5.20	1.48	1.35
24	B	616	CLA	O2D-CGD	5.20	1.45	1.33
24	C	502	CLA	C3B-C2B	5.20	1.47	1.40
24	d	404	CLA	O2D-CGD	5.19	1.45	1.33
24	c	506	CLA	C3C-C2C	5.19	1.47	1.36
24	C	509	CLA	O2D-CGD	5.19	1.45	1.33
24	B	606	CLA	CHC-C1C	5.19	1.48	1.35
24	a	412	CLA	C1D-ND	5.19	1.44	1.37
24	c	507	CLA	C3C-C2C	5.19	1.47	1.36
24	b	623	CLA	C3C-C2C	5.19	1.47	1.36
24	A	409	CLA	CHC-C1C	5.19	1.48	1.35
24	C	512	CLA	C3C-C2C	5.18	1.47	1.36
24	b	615	CLA	C3C-C2C	5.18	1.47	1.36
24	B	617	CLA	CHC-C1C	5.18	1.48	1.35

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	625	CLA	C1D-ND	5.17	1.44	1.37
24	b	624	CLA	C3C-C2C	5.17	1.47	1.36
24	a	410	CLA	CHC-C1C	5.17	1.48	1.35
24	b	620	CLA	O2D-CGD	5.17	1.45	1.33
24	C	508	CLA	C3C-C2C	5.17	1.47	1.36
24	B	611	CLA	C1D-ND	5.17	1.44	1.37
24	B	615	CLA	C3C-C2C	5.17	1.47	1.36
24	b	610	CLA	CHC-C1C	5.16	1.48	1.35
24	C	513	CLA	CHC-C1C	5.16	1.48	1.35
24	c	507	CLA	C3B-C2B	5.15	1.47	1.40
24	B	612	CLA	C3C-C2C	5.15	1.47	1.36
24	C	505	CLA	C3C-C2C	5.15	1.47	1.36
24	B	617	CLA	C1D-ND	5.14	1.44	1.37
24	b	623	CLA	O2D-CGD	5.14	1.45	1.33
24	B	604	CLA	CHC-C1C	5.14	1.48	1.35
24	B	616	CLA	CHC-C1C	5.14	1.48	1.35
24	a	409	CLA	CHC-C1C	5.13	1.48	1.35
24	c	510	CLA	C1D-ND	5.13	1.44	1.37
24	c	513	CLA	O2D-CGD	5.13	1.45	1.33
24	b	614	CLA	CHC-C1C	5.13	1.48	1.35
24	C	505	CLA	C1D-ND	5.13	1.44	1.37
24	c	516	CLA	O2D-CGD	5.12	1.45	1.33
24	C	507	CLA	C3C-C2C	5.12	1.47	1.36
24	c	517	CLA	C1D-ND	5.12	1.44	1.37
24	C	506	CLA	CHC-C1C	5.12	1.48	1.35
24	C	513	CLA	C1D-ND	5.11	1.44	1.37
24	C	506	CLA	C3C-C2C	5.11	1.47	1.36
24	c	511	CLA	C3C-C2C	5.11	1.47	1.36
24	b	613	CLA	C1D-ND	5.10	1.44	1.37
25	a	411	PHO	O2D-CGD	5.10	1.45	1.33
24	b	617	CLA	CHC-C1C	5.10	1.48	1.35
24	c	505	CLA	C3C-C2C	5.10	1.47	1.36
24	a	412	CLA	CHC-C1C	5.10	1.48	1.35
24	B	613	CLA	CHC-C1C	5.10	1.48	1.35
26	C	515	BCR	C23-C22	-5.09	1.35	1.45
24	B	606	CLA	C3C-C2C	5.09	1.47	1.36
24	b	621	CLA	C3C-C2C	5.09	1.47	1.36
24	B	614	CLA	C3C-C2C	5.08	1.47	1.36
26	Y	101	BCR	C23-C22	-5.08	1.35	1.45
24	B	617	CLA	O2D-CGD	5.08	1.45	1.33
24	C	511	CLA	O2D-CGD	5.07	1.45	1.33
24	d	403	CLA	C3C-C2C	5.07	1.47	1.36

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	409	CLA	C3C-C2C	5.07	1.47	1.36
24	c	513	CLA	CHC-C1C	5.07	1.48	1.35
24	B	610	CLA	C3C-C2C	5.06	1.47	1.36
24	B	602	CLA	CHC-C1C	5.05	1.47	1.35
24	b	618	CLA	C3C-C2C	5.05	1.47	1.36
24	c	509	CLA	CHC-C1C	5.05	1.47	1.35
24	d	403	CLA	CHC-C1C	5.05	1.47	1.35
24	C	510	CLA	CHC-C1C	5.05	1.47	1.35
24	A	409	CLA	O2D-CGD	5.05	1.45	1.33
24	b	618	CLA	O2D-CGD	5.05	1.45	1.33
24	A	405	CLA	C1D-ND	5.04	1.44	1.37
24	b	616	CLA	O2D-CGD	5.04	1.45	1.33
24	a	412	CLA	O2D-CGD	5.04	1.45	1.33
24	B	605	CLA	C3C-C2C	5.04	1.47	1.36
24	A	405	CLA	C3C-C2C	5.04	1.47	1.36
24	B	609	CLA	C3C-C2C	5.04	1.47	1.36
24	b	625	CLA	O2D-CGD	5.03	1.45	1.33
24	C	514	CLA	CHC-C1C	5.03	1.47	1.35
24	c	508	CLA	O2D-CGD	5.03	1.45	1.33
24	B	607	CLA	CHC-C1C	5.03	1.47	1.35
24	B	603	CLA	O2D-CGD	5.03	1.45	1.33
24	c	508	CLA	CHC-C1C	5.03	1.47	1.35
24	B	607	CLA	C3C-C2C	5.03	1.47	1.36
24	d	402	CLA	O2D-CGD	5.02	1.45	1.33
24	b	619	CLA	C1D-ND	5.02	1.44	1.37
24	B	613	CLA	C3C-C2C	5.02	1.47	1.36
24	b	615	CLA	C1D-ND	5.01	1.43	1.37
24	b	611	CLA	CHC-C1C	5.01	1.47	1.35
26	B	620	BCR	C23-C22	-5.00	1.35	1.45
24	B	617	CLA	C3C-C2C	5.00	1.47	1.36
24	c	508	CLA	C1D-ND	5.00	1.43	1.37
24	d	404	CLA	C1D-ND	5.00	1.43	1.37
24	b	614	CLA	O2D-CGD	5.00	1.45	1.33
24	c	515	CLA	C1D-ND	5.00	1.43	1.37
24	C	511	CLA	CHC-C1C	5.00	1.47	1.35
24	c	510	CLA	O2D-CGD	5.00	1.45	1.33
24	C	507	CLA	O2D-CGD	4.99	1.45	1.33
24	B	608	CLA	O2D-CGD	4.99	1.45	1.33
24	B	614	CLA	O2D-CGD	4.99	1.45	1.33
24	b	612	CLA	C3C-C2C	4.99	1.47	1.36
25	A	408	PHO	O2D-CGD	4.98	1.45	1.33
24	c	505	CLA	C1D-ND	4.98	1.43	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	H	101	BCR	C23-C22	-4.98	1.35	1.45
24	c	507	CLA	C1D-ND	4.98	1.43	1.37
24	b	623	CLA	C1D-ND	4.98	1.43	1.37
24	c	517	CLA	O2D-CGD	4.97	1.45	1.33
24	c	515	CLA	C3C-C2C	4.97	1.47	1.36
24	B	616	CLA	C1D-ND	4.96	1.43	1.37
24	a	410	CLA	C3C-C2C	4.96	1.47	1.36
24	d	404	CLA	CHC-C1C	4.96	1.47	1.35
24	C	510	CLA	O2D-CGD	4.96	1.45	1.33
24	b	611	CLA	C1D-ND	4.96	1.43	1.37
24	C	512	CLA	O2D-CGD	4.95	1.45	1.33
24	b	619	CLA	CHC-C1C	4.95	1.47	1.35
24	b	623	CLA	CHC-C1C	4.95	1.47	1.35
24	C	514	CLA	O2D-CGD	4.95	1.45	1.33
24	c	506	CLA	O2D-CGD	4.95	1.45	1.33
24	b	616	CLA	CHC-C1C	4.94	1.47	1.35
26	T	103	BCR	C23-C22	-4.94	1.35	1.45
24	C	509	CLA	CHC-C1C	4.94	1.47	1.35
24	C	513	CLA	O2D-CGD	4.93	1.45	1.33
24	c	514	CLA	CHC-C1C	4.93	1.47	1.35
24	B	603	CLA	C1D-ND	4.93	1.43	1.37
24	A	405	CLA	O2D-CGD	4.93	1.45	1.33
24	B	602	CLA	O2D-CGD	4.93	1.45	1.33
24	b	612	CLA	CHC-C1C	4.93	1.47	1.35
24	C	507	CLA	CHC-C1C	4.93	1.47	1.35
24	b	620	CLA	CHC-C1C	4.92	1.47	1.35
24	b	620	CLA	C3C-C2C	4.92	1.47	1.36
24	c	512	CLA	CHC-C1C	4.92	1.47	1.35
24	B	607	CLA	O2D-CGD	4.92	1.45	1.33
24	B	615	CLA	CHC-C1C	4.92	1.47	1.35
24	b	624	CLA	CHC-C1C	4.91	1.47	1.35
24	D	403	CLA	O2D-CGD	4.91	1.45	1.33
24	b	622	CLA	CHC-C1C	4.91	1.47	1.35
24	b	610	CLA	O2D-CGD	4.91	1.45	1.33
24	b	618	CLA	CHC-C1C	4.89	1.47	1.35
24	b	624	CLA	O2D-CGD	4.89	1.45	1.33
24	c	506	CLA	CHC-C1C	4.89	1.47	1.35
24	c	512	CLA	O2D-CGD	4.89	1.45	1.33
24	c	514	CLA	O2D-CGD	4.88	1.45	1.33
24	B	609	CLA	C1D-ND	4.88	1.43	1.37
24	B	608	CLA	CHC-C1C	4.88	1.47	1.35
24	A	407	CLA	O2D-CGD	4.88	1.45	1.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	610	CLA	O2D-CGD	4.88	1.45	1.33
24	c	511	CLA	CHC-C1C	4.87	1.47	1.35
24	c	505	CLA	O2D-CGD	4.87	1.45	1.33
24	b	612	CLA	O2D-CGD	4.87	1.45	1.33
24	c	516	CLA	C1D-ND	4.87	1.43	1.37
24	B	605	CLA	CHC-C1C	4.87	1.47	1.35
25	a	411	PHO	OBD-CAD	4.87	1.29	1.22
24	B	616	CLA	C3C-C2C	4.87	1.47	1.36
24	c	510	CLA	CHC-C1C	4.87	1.47	1.35
24	b	612	CLA	C1D-ND	4.86	1.43	1.37
24	D	402	CLA	C1D-ND	4.86	1.43	1.37
24	b	618	CLA	C3B-C2B	4.86	1.47	1.40
24	B	612	CLA	O2D-CGD	4.85	1.45	1.33
24	b	618	CLA	C1D-ND	4.85	1.43	1.37
24	b	621	CLA	C1D-ND	4.85	1.43	1.37
24	b	620	CLA	C1D-ND	4.84	1.43	1.37
24	c	506	CLA	C1D-ND	4.84	1.43	1.37
24	a	409	CLA	O2D-CGD	4.84	1.45	1.33
24	B	612	CLA	CHC-C1C	4.84	1.47	1.35
24	b	613	CLA	O2D-CGD	4.83	1.45	1.33
24	C	502	CLA	C3C-C2C	4.83	1.47	1.36
24	b	615	CLA	CHC-C1C	4.83	1.47	1.35
24	C	512	CLA	CHC-C1C	4.82	1.47	1.35
24	b	621	CLA	CHC-C1C	4.82	1.47	1.35
24	D	403	CLA	CHC-C1C	4.82	1.47	1.35
24	c	505	CLA	CHC-C1C	4.82	1.47	1.35
24	C	506	CLA	O2D-CGD	4.81	1.44	1.33
24	b	617	CLA	O2D-CGD	4.81	1.44	1.33
24	b	619	CLA	O2D-CGD	4.81	1.44	1.33
24	B	611	CLA	CHC-C1C	4.81	1.47	1.35
24	c	515	CLA	CHC-C1C	4.81	1.47	1.35
24	C	502	CLA	O2D-CGD	4.80	1.44	1.33
24	c	509	CLA	O2D-CGD	4.80	1.44	1.33
24	b	613	CLA	CHC-C1C	4.80	1.47	1.35
24	C	514	CLA	C1D-ND	4.80	1.43	1.37
24	A	406	CLA	O2D-CGD	4.79	1.44	1.33
24	C	509	CLA	C1D-ND	4.78	1.43	1.37
26	t	101	BCR	C23-C22	-4.78	1.35	1.45
24	B	606	CLA	C3B-C2B	4.78	1.47	1.40
24	C	503	CLA	O2D-CGD	4.77	1.44	1.33
24	D	402	CLA	O2D-CGD	4.77	1.44	1.33
24	a	410	CLA	O2D-CGD	4.76	1.44	1.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	614	CLA	C1D-ND	4.75	1.43	1.37
26	y	101	BCR	C23-C22	-4.75	1.35	1.45
26	C	516	BCR	C23-C22	-4.75	1.35	1.45
24	B	607	CLA	C1D-ND	4.75	1.43	1.37
26	c	527	BCR	C23-C22	-4.74	1.35	1.45
24	B	610	CLA	C3B-C2B	4.74	1.46	1.40
24	B	612	CLA	C1D-ND	4.73	1.43	1.37
24	C	508	CLA	O2D-CGD	4.73	1.44	1.33
24	c	511	CLA	C1D-ND	4.72	1.43	1.37
26	K	101	BCR	C23-C22	-4.71	1.35	1.45
24	B	615	CLA	O2D-CGD	4.71	1.44	1.33
26	d	405	BCR	C23-C22	-4.71	1.35	1.45
24	B	609	CLA	CHC-C1C	4.71	1.47	1.35
25	D	401	PHO	O2D-CGD	4.71	1.44	1.33
25	D	401	PHO	OBD-CAD	4.71	1.28	1.22
26	h	101	BCR	C23-C22	-4.70	1.35	1.45
24	B	602	CLA	O2A-CGA	4.70	1.47	1.33
24	b	611	CLA	O2D-CGD	4.69	1.44	1.33
25	d	401	PHO	O2D-CGD	4.69	1.44	1.33
24	B	609	CLA	O2D-CGD	4.69	1.44	1.33
24	D	402	CLA	CHC-C1C	4.68	1.47	1.35
24	B	611	CLA	O2D-CGD	4.68	1.44	1.33
24	c	507	CLA	O2D-CGD	4.66	1.44	1.33
24	d	402	CLA	CHC-C1C	4.66	1.46	1.35
24	c	511	CLA	O2D-CGD	4.66	1.44	1.33
24	c	515	CLA	O2D-CGD	4.66	1.44	1.33
24	d	403	CLA	C1D-ND	4.65	1.43	1.37
24	b	617	CLA	CHD-C1D	4.64	1.47	1.38
26	D	404	BCR	C23-C22	-4.64	1.36	1.45
24	b	625	CLA	CHC-C1C	4.63	1.46	1.35
24	B	613	CLA	O2D-CGD	4.62	1.44	1.33
27	A	415	SQD	O48-C23	4.61	1.46	1.33
24	C	508	CLA	C1D-ND	4.59	1.43	1.37
24	B	604	CLA	O2D-CGD	4.59	1.44	1.33
24	B	614	CLA	CHC-C1C	4.59	1.46	1.35
24	b	625	CLA	C3C-C2C	4.59	1.46	1.36
27	a	405	SQD	O48-C23	4.57	1.46	1.33
24	d	403	CLA	O2D-CGD	4.56	1.44	1.33
26	a	413	BCR	C23-C22	-4.56	1.36	1.45
24	c	507	CLA	CHD-C1D	4.55	1.47	1.38
24	B	611	CLA	CHD-C1D	4.55	1.47	1.38
24	C	504	CLA	O2D-CGD	4.54	1.44	1.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	510	CLA	O2A-CGA	4.54	1.46	1.33
27	f	102	SQD	O47-C7	4.53	1.47	1.34
36	D	406	DGD	O1G-C1A	4.53	1.46	1.33
24	C	505	CLA	O2D-CGD	4.52	1.44	1.33
24	b	611	CLA	CHD-C1D	4.52	1.47	1.38
24	B	604	CLA	C1D-ND	4.51	1.43	1.37
24	B	605	CLA	O2D-CGD	4.51	1.44	1.33
24	a	410	CLA	C1D-ND	4.51	1.43	1.37
24	B	612	CLA	CHD-C1D	4.51	1.47	1.38
26	c	518	BCR	C23-C22	-4.51	1.36	1.45
24	b	615	CLA	CHD-C1D	4.50	1.47	1.38
24	c	512	CLA	CHD-C1D	4.49	1.47	1.38
24	b	615	CLA	O2D-CGD	4.46	1.44	1.33
24	b	616	CLA	C1D-ND	4.46	1.43	1.37
24	c	512	CLA	O2A-CGA	4.45	1.46	1.33
26	B	618	BCR	C23-C22	-4.45	1.36	1.45
24	C	509	CLA	CHD-C1D	4.45	1.47	1.38
24	A	406	CLA	CHC-C1C	4.45	1.46	1.35
24	b	618	CLA	CHD-C1D	4.45	1.47	1.38
24	A	409	CLA	CHD-C1D	4.45	1.47	1.38
35	z	101	LMG	O8-C28	4.45	1.46	1.33
24	C	502	CLA	CHD-C1D	4.44	1.47	1.38
24	b	610	CLA	CHD-C1D	4.44	1.47	1.38
26	b	626	BCR	C23-C22	-4.44	1.36	1.45
24	C	507	CLA	CHD-C1D	4.44	1.47	1.38
24	b	624	CLA	O2A-CGA	4.43	1.46	1.33
24	C	511	CLA	CHD-C1D	4.43	1.47	1.38
24	B	608	CLA	C1D-ND	4.43	1.43	1.37
24	C	509	CLA	O2A-CGA	4.43	1.46	1.33
24	A	407	CLA	CHD-C1D	4.42	1.47	1.38
24	c	515	CLA	CHD-C1D	4.42	1.47	1.38
24	B	609	CLA	CHD-C1D	4.42	1.47	1.38
24	B	607	CLA	CHD-C1D	4.41	1.47	1.38
24	c	515	CLA	O2A-CGA	4.41	1.46	1.33
26	B	619	BCR	C23-C22	-4.41	1.36	1.45
24	B	608	CLA	CHD-C1D	4.40	1.46	1.38
24	B	610	CLA	C1D-ND	4.40	1.43	1.37
27	F	103	SQD	O47-C7	4.40	1.46	1.34
36	e	101	DGD	O2G-C1B	4.39	1.46	1.34
24	c	513	CLA	O2A-CGA	4.39	1.46	1.33
24	C	508	CLA	O2A-CGA	4.39	1.46	1.33
24	B	602	CLA	CHD-C1D	4.39	1.46	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A	410	BCR	C23-C22	-4.38	1.36	1.45
24	c	514	CLA	CHD-C1D	4.38	1.46	1.38
36	D	406	DGD	O2G-C1B	4.38	1.46	1.34
24	c	513	CLA	CHD-C1D	4.38	1.46	1.38
24	C	506	CLA	C1D-ND	4.37	1.43	1.37
37	E	101	LHG	O8-C23	4.37	1.46	1.33
24	b	610	CLA	O2A-CGA	4.37	1.46	1.33
24	c	511	CLA	O2A-CGA	4.37	1.46	1.33
24	a	409	CLA	CHD-C1D	4.37	1.46	1.38
24	C	513	CLA	O2A-CGA	4.36	1.46	1.33
35	C	520	LMG	O8-C28	4.36	1.46	1.33
24	B	610	CLA	O2A-CGA	4.35	1.46	1.33
24	C	510	CLA	CHD-C1D	4.34	1.46	1.38
27	B	621	SQD	O47-C7	4.34	1.46	1.34
24	b	616	CLA	CHD-C1D	4.33	1.46	1.38
27	a	405	SQD	O47-C7	4.32	1.46	1.34
24	B	609	CLA	O2A-CGA	4.32	1.46	1.33
35	C	501	LMG	O7-C10	4.32	1.46	1.34
24	C	512	CLA	O2A-CGA	4.32	1.46	1.33
24	C	514	CLA	CHD-C1D	4.32	1.46	1.38
24	D	403	CLA	CHD-C1D	4.31	1.46	1.38
24	a	409	CLA	CHD-C4C	4.31	1.49	1.39
35	C	521	LMG	O7-C10	4.31	1.46	1.34
24	c	506	CLA	CHD-C1D	4.30	1.46	1.38
24	d	403	CLA	CHD-C1D	4.30	1.46	1.38
24	B	617	CLA	CHD-C1D	4.30	1.46	1.38
24	C	512	CLA	CHD-C1D	4.30	1.46	1.38
37	l	101	LHG	O8-C23	4.30	1.45	1.33
36	e	101	DGD	O1G-C1A	4.29	1.45	1.33
24	b	625	CLA	CHD-C1D	4.29	1.46	1.38
24	d	402	CLA	O2A-CGA	4.28	1.45	1.33
37	D	409	LHG	O7-C7	4.27	1.46	1.34
24	d	402	CLA	CHD-C1D	4.27	1.46	1.38
37	e	102	LHG	O8-C23	4.27	1.45	1.33
24	C	504	CLA	CHD-C1D	4.26	1.46	1.38
24	C	506	CLA	CHD-C1D	4.26	1.46	1.38
24	d	404	CLA	O2A-CGA	4.26	1.45	1.33
24	B	606	CLA	O2A-CGA	4.26	1.45	1.33
37	d	409	LHG	O8-C23	4.26	1.45	1.33
35	c	523	LMG	O7-C10	4.25	1.46	1.34
24	b	617	CLA	O2A-CGA	4.24	1.45	1.33
24	B	604	CLA	CHD-C1D	4.24	1.46	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	C	518	DGD	O1G-C1A	4.24	1.45	1.33
24	C	507	CLA	O2A-CGA	4.24	1.45	1.33
27	f	102	SQD	O48-C23	4.24	1.45	1.33
35	C	501	LMG	O8-C28	4.24	1.45	1.33
24	c	509	CLA	C1D-ND	4.24	1.43	1.37
24	B	617	CLA	O2A-CGA	4.24	1.45	1.33
24	A	407	CLA	C1D-ND	4.23	1.43	1.37
24	b	615	CLA	O2A-CGA	4.23	1.45	1.33
24	c	517	CLA	O2A-CGA	4.23	1.45	1.33
24	B	605	CLA	CHD-C1D	4.23	1.46	1.38
24	c	516	CLA	O2A-CGA	4.23	1.45	1.33
24	A	406	CLA	O2A-CGA	4.23	1.45	1.33
24	c	517	CLA	CHD-C1D	4.22	1.46	1.38
24	b	622	CLA	CHD-C1D	4.22	1.46	1.38
35	c	523	LMG	O8-C28	4.22	1.45	1.33
26	b	627	BCR	C23-C22	-4.21	1.36	1.45
24	C	504	CLA	CHD-C4C	4.21	1.48	1.39
24	B	613	CLA	O2A-CGA	4.21	1.45	1.33
24	C	514	CLA	O2A-CGA	4.21	1.45	1.33
35	M	101	LMG	O8-C28	4.20	1.45	1.33
24	b	621	CLA	CHD-C1D	4.20	1.46	1.38
27	a	414	SQD	O48-C23	4.20	1.45	1.33
24	b	619	CLA	CHD-C1D	4.20	1.46	1.38
24	b	625	CLA	O2A-CGA	4.19	1.45	1.33
24	c	506	CLA	C3D-C2D	4.19	1.50	1.39
24	a	412	CLA	CHD-C4C	4.18	1.48	1.39
24	B	613	CLA	C1D-ND	4.18	1.42	1.37
24	B	610	CLA	CHD-C1D	4.18	1.46	1.38
24	A	409	CLA	O2A-CGA	4.18	1.45	1.33
24	a	410	CLA	O2A-CGA	4.18	1.45	1.33
35	a	415	LMG	O8-C28	4.18	1.45	1.33
36	c	521	DGD	O1G-C1A	4.17	1.45	1.33
24	C	513	CLA	CHD-C1D	4.17	1.46	1.38
24	D	402	CLA	O2A-CGA	4.17	1.45	1.33
35	c	522	LMG	O8-C28	4.17	1.45	1.33
24	B	603	CLA	CHD-C1D	4.17	1.46	1.38
27	L	102	SQD	O47-C7	4.16	1.46	1.34
36	C	517	DGD	O1G-C1A	4.16	1.45	1.33
24	b	623	CLA	O2A-CGA	4.16	1.45	1.33
24	C	502	CLA	O2A-CGA	4.16	1.45	1.33
34	B	623	HTG	C1'-S1	-4.16	1.76	1.81
24	c	510	CLA	CHD-C1D	4.16	1.46	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	C	521	LMG	O8-C28	4.15	1.45	1.33
24	b	614	CLA	CHD-C1D	4.15	1.46	1.38
36	h	102	DGD	O1G-C1A	4.15	1.45	1.33
37	e	102	LHG	O7-C7	4.15	1.46	1.34
36	H	102	DGD	O1G-C1A	4.15	1.45	1.33
24	B	616	CLA	O2A-CGA	4.15	1.45	1.33
24	C	508	CLA	CHD-C1D	4.14	1.46	1.38
24	b	612	CLA	CHD-C1D	4.14	1.46	1.38
24	C	507	CLA	CHD-C4C	4.14	1.48	1.39
37	L	101	LHG	O8-C23	4.14	1.45	1.33
36	h	102	DGD	O2G-C1B	4.13	1.46	1.34
24	B	615	CLA	O2A-CGA	4.13	1.45	1.33
24	C	505	CLA	O2A-CGA	4.13	1.45	1.33
27	A	415	SQD	O47-C7	4.13	1.45	1.34
24	b	620	CLA	O2A-CGA	4.12	1.45	1.33
24	d	403	CLA	CHD-C4C	4.12	1.48	1.39
24	b	617	CLA	CHD-C4C	4.12	1.48	1.39
36	C	519	DGD	O1G-C1A	4.12	1.45	1.33
25	d	401	PHO	O2A-CGA	4.12	1.45	1.33
24	C	504	CLA	O2A-CGA	4.12	1.45	1.33
24	b	625	CLA	C3D-C2D	4.11	1.50	1.39
35	b	629	LMG	O8-C28	4.11	1.45	1.33
35	Z	101	LMG	O7-C10	4.11	1.45	1.34
27	L	102	SQD	O48-C23	4.10	1.45	1.33
24	b	611	CLA	O2A-CGA	4.10	1.45	1.33
24	d	404	CLA	CHD-C1D	4.10	1.46	1.38
24	B	607	CLA	O2A-CGA	4.09	1.45	1.33
24	b	612	CLA	O2A-CGA	4.09	1.45	1.33
24	C	503	CLA	C3D-C2D	4.09	1.50	1.39
36	c	520	DGD	O1G-C1A	4.09	1.45	1.33
27	F	103	SQD	O48-C23	4.08	1.45	1.33
35	M	101	LMG	O7-C10	4.08	1.45	1.34
37	d	409	LHG	O7-C7	4.08	1.45	1.34
35	j	101	LMG	O8-C28	4.08	1.45	1.33
24	C	511	CLA	O2A-CGA	4.08	1.45	1.33
24	a	412	CLA	CHD-C1D	4.07	1.46	1.38
24	b	623	CLA	CHD-C4C	4.07	1.48	1.39
24	B	610	CLA	C3D-C2D	4.07	1.50	1.39
24	c	511	CLA	CHD-C1D	4.06	1.46	1.38
24	b	618	CLA	O2A-CGA	4.06	1.45	1.33
24	B	611	CLA	C3D-C2D	4.05	1.50	1.39
24	c	512	CLA	CHD-C4C	4.05	1.48	1.39

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A	408	PHO	OBD-CAD	4.05	1.28	1.22
35	z	101	LMG	O7-C10	4.05	1.45	1.34
24	A	406	CLA	C3D-C2D	4.05	1.50	1.39
24	B	609	CLA	C3D-C2D	4.05	1.50	1.39
24	c	517	CLA	CHD-C4C	4.05	1.48	1.39
24	c	505	CLA	O2A-CGA	4.04	1.45	1.33
25	d	401	PHO	C3C-C2C	4.04	1.49	1.37
24	B	604	CLA	O2A-CGA	4.04	1.45	1.33
24	b	611	CLA	CHD-C4C	4.04	1.48	1.39
24	b	610	CLA	CHD-C4C	4.04	1.48	1.39
34	b	632	HTG	C1'-S1	-4.04	1.76	1.81
24	b	613	CLA	CHD-C1D	4.03	1.46	1.38
24	c	505	CLA	CHD-C1D	4.03	1.46	1.38
37	D	408	LHG	O7-C7	4.03	1.45	1.34
24	a	412	CLA	O2A-CGA	4.03	1.45	1.33
24	c	516	CLA	CHD-C1D	4.03	1.46	1.38
24	B	604	CLA	C3D-C2D	4.03	1.50	1.39
24	c	507	CLA	CHD-C4C	4.03	1.48	1.39
24	B	608	CLA	O2A-CGA	4.02	1.45	1.33
24	c	506	CLA	CHD-C4C	4.02	1.48	1.39
24	b	613	CLA	O2A-CGA	4.02	1.45	1.33
24	c	509	CLA	CHD-C1D	4.02	1.46	1.38
24	A	406	CLA	CHD-C1D	4.02	1.46	1.38
24	A	407	CLA	OBD-CAD	4.02	1.29	1.22
24	c	507	CLA	O2A-CGA	4.02	1.45	1.33
24	b	620	CLA	CHD-C1D	4.02	1.46	1.38
24	C	512	CLA	CHD-C4C	4.01	1.48	1.39
24	c	515	CLA	C3D-C2D	4.01	1.50	1.39
24	C	507	CLA	C3D-C2D	4.01	1.50	1.39
24	B	612	CLA	C3D-C2D	4.01	1.50	1.39
24	B	607	CLA	CHD-C4C	4.01	1.48	1.39
24	A	405	CLA	CHD-C4C	4.00	1.48	1.39
24	c	513	CLA	CHD-C4C	4.00	1.48	1.39
37	E	101	LHG	O7-C7	4.00	1.45	1.34
24	d	403	CLA	O2A-CGA	3.99	1.45	1.33
24	C	512	CLA	C3D-C2D	3.99	1.50	1.39
35	j	101	LMG	O7-C10	3.99	1.45	1.34
24	B	603	CLA	O2A-CGA	3.99	1.45	1.33
27	B	621	SQD	O48-C23	3.99	1.45	1.33
24	c	514	CLA	CHD-C4C	3.99	1.48	1.39
24	C	513	CLA	C3D-C2D	3.99	1.50	1.39
24	C	505	CLA	CHD-C4C	3.99	1.48	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D	401	PHO	O2A-CGA	3.99	1.45	1.33
36	c	521	DGD	O2G-C1B	3.98	1.45	1.34
24	b	614	CLA	O2A-CGA	3.98	1.45	1.33
24	C	510	CLA	CHD-C4C	3.98	1.48	1.39
24	B	614	CLA	O2A-CGA	3.98	1.45	1.33
35	C	520	LMG	O7-C10	3.98	1.45	1.34
24	b	615	CLA	CHD-C4C	3.98	1.48	1.39
24	c	508	CLA	CHD-C1D	3.97	1.46	1.38
24	A	409	CLA	C3D-C2D	3.97	1.50	1.39
24	C	505	CLA	CHD-C1D	3.97	1.46	1.38
24	a	410	CLA	CHD-C1D	3.97	1.46	1.38
24	c	508	CLA	O2A-CGA	3.97	1.44	1.33
24	c	512	CLA	C3D-C2D	3.97	1.50	1.39
24	c	506	CLA	O2A-CGA	3.97	1.44	1.33
24	C	503	CLA	CHD-C1D	3.97	1.46	1.38
24	C	505	CLA	C3D-C2D	3.97	1.49	1.39
25	A	408	PHO	O2A-CGA	3.96	1.44	1.33
24	b	610	CLA	C3D-C2D	3.96	1.49	1.39
24	A	405	CLA	CHD-C1D	3.96	1.46	1.38
24	A	407	CLA	O2A-CGA	3.95	1.44	1.33
36	C	519	DGD	O2G-C1B	3.95	1.45	1.34
37	D	409	LHG	O8-C23	3.95	1.44	1.33
24	B	602	CLA	CHD-C4C	3.95	1.48	1.39
24	C	504	CLA	C3D-C2D	3.95	1.49	1.39
35	c	522	LMG	O7-C10	3.95	1.45	1.34
24	b	623	CLA	C3D-C2D	3.94	1.49	1.39
24	c	512	CLA	OBD-CAD	3.94	1.29	1.22
24	b	619	CLA	O2A-CGA	3.94	1.44	1.33
24	B	615	CLA	CHD-C4C	3.94	1.48	1.39
24	c	515	CLA	CHD-C4C	3.94	1.48	1.39
24	b	616	CLA	O2A-CGA	3.93	1.44	1.33
24	B	603	CLA	OBD-CAD	3.93	1.29	1.22
24	A	406	CLA	CHD-C4C	3.93	1.48	1.39
34	d	412	HTG	C1'-S1	-3.93	1.76	1.81
24	C	514	CLA	CHD-C4C	3.93	1.48	1.39
24	c	516	CLA	CHD-C4C	3.93	1.48	1.39
24	C	506	CLA	O2A-CGA	3.93	1.44	1.33
24	b	623	CLA	CHD-C1D	3.92	1.46	1.38
24	c	510	CLA	CHD-C4C	3.92	1.48	1.39
24	D	403	CLA	CHD-C4C	3.92	1.48	1.39
24	C	502	CLA	CHD-C4C	3.92	1.48	1.39
36	c	520	DGD	O2G-C1B	3.92	1.45	1.34

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	508	CLA	CHD-C4C	3.91	1.48	1.39
24	c	514	CLA	OBD-CAD	3.91	1.29	1.22
24	B	606	CLA	C3D-C2D	3.91	1.49	1.39
36	C	517	DGD	O2G-C1B	3.91	1.45	1.34
24	C	510	CLA	C3D-C2D	3.91	1.49	1.39
24	D	403	CLA	O2A-CGA	3.90	1.44	1.33
36	H	102	DGD	O2G-C1B	3.90	1.45	1.34
35	a	415	LMG	O7-C10	3.90	1.45	1.34
24	B	608	CLA	CHD-C4C	3.90	1.48	1.39
24	d	402	CLA	C3D-C2D	3.89	1.49	1.39
24	b	624	CLA	C3D-C2D	3.89	1.49	1.39
24	c	510	CLA	O2A-CGA	3.89	1.44	1.33
27	a	414	SQD	O47-C7	3.89	1.45	1.34
24	B	611	CLA	O2A-CGA	3.89	1.44	1.33
24	b	625	CLA	CHD-C4C	3.89	1.48	1.39
24	b	621	CLA	O2A-CGA	3.88	1.44	1.33
24	B	604	CLA	CHD-C4C	3.88	1.48	1.39
24	C	503	CLA	O2A-CGA	3.88	1.44	1.33
34	b	607	HTG	C1'-S1	-3.88	1.76	1.81
24	D	403	CLA	C3D-C2D	3.88	1.49	1.39
24	b	618	CLA	CHD-C4C	3.88	1.48	1.39
24	B	604	CLA	OBD-CAD	3.87	1.29	1.22
24	b	622	CLA	O2A-CGA	3.87	1.44	1.33
24	B	603	CLA	CHD-C4C	3.87	1.48	1.39
24	b	622	CLA	C3D-C2D	3.87	1.49	1.39
24	B	614	CLA	CHD-C4C	3.87	1.48	1.39
27	A	411	SQD	O48-C23	3.86	1.44	1.33
24	A	405	CLA	C3D-C2D	3.86	1.49	1.39
24	c	514	CLA	O2A-CGA	3.86	1.44	1.33
24	B	616	CLA	CHD-C1D	3.86	1.45	1.38
24	B	614	CLA	C3D-C2D	3.85	1.49	1.39
36	C	518	DGD	O2G-C1B	3.85	1.45	1.34
24	C	513	CLA	CHD-C4C	3.85	1.48	1.39
24	d	402	CLA	CHD-C4C	3.85	1.48	1.39
24	b	611	CLA	OBD-CAD	3.85	1.29	1.22
27	A	411	SQD	O47-C7	3.85	1.45	1.34
24	b	621	CLA	C3D-C2D	3.84	1.49	1.39
24	c	516	CLA	C3D-C2D	3.84	1.49	1.39
24	b	618	CLA	OBD-CAD	3.84	1.29	1.22
35	b	629	LMG	O7-C10	3.83	1.45	1.34
24	B	612	CLA	CHD-C4C	3.83	1.48	1.39
24	b	619	CLA	OBD-CAD	3.83	1.29	1.22

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	D	407	LHG	O8-C23	3.83	1.44	1.33
24	B	611	CLA	CHD-C4C	3.83	1.48	1.39
25	a	411	PHO	C3C-C2C	3.82	1.49	1.37
24	C	503	CLA	CHD-C4C	3.82	1.48	1.39
24	c	511	CLA	C3D-C2D	3.82	1.49	1.39
24	B	613	CLA	CHD-C1D	3.82	1.45	1.38
36	c	519	DGD	O1G-C1A	3.82	1.44	1.33
24	b	618	CLA	C3D-C2D	3.82	1.49	1.39
24	C	511	CLA	CHD-C4C	3.82	1.48	1.39
37	d	408	LHG	O7-C7	3.82	1.45	1.34
24	A	409	CLA	CHD-C4C	3.82	1.47	1.39
24	c	505	CLA	C3D-C2D	3.82	1.49	1.39
36	c	519	DGD	O2G-C1B	3.82	1.45	1.34
24	C	509	CLA	CHD-C4C	3.82	1.47	1.39
24	C	511	CLA	C3D-C2D	3.82	1.49	1.39
25	d	401	PHO	OBD-CAD	3.81	1.27	1.22
37	l	101	LHG	O7-C7	3.81	1.45	1.34
24	c	505	CLA	CHD-C4C	3.81	1.47	1.39
24	b	611	CLA	C3D-C2D	3.81	1.49	1.39
24	A	407	CLA	CHD-C4C	3.81	1.47	1.39
24	b	622	CLA	CHD-C4C	3.81	1.47	1.39
24	b	624	CLA	CHD-C1D	3.80	1.45	1.38
35	J	101	LMG	O8-C28	3.80	1.44	1.33
24	C	510	CLA	OBD-CAD	3.79	1.29	1.22
24	c	514	CLA	C3D-C2D	3.79	1.49	1.39
24	B	615	CLA	OBD-CAD	3.79	1.29	1.22
24	A	405	CLA	O2A-CGA	3.79	1.44	1.33
37	d	407	LHG	O8-C23	3.79	1.44	1.33
24	B	611	CLA	OBD-CAD	3.79	1.29	1.22
24	C	508	CLA	C3D-C2D	3.79	1.49	1.39
37	d	408	LHG	O8-C23	3.79	1.44	1.33
24	d	403	CLA	OBD-CAD	3.78	1.29	1.22
24	B	614	CLA	CHD-C1D	3.78	1.45	1.38
24	D	403	CLA	OBD-CAD	3.78	1.29	1.22
24	b	614	CLA	CHD-C4C	3.78	1.47	1.39
24	b	613	CLA	C3D-C2D	3.78	1.49	1.39
24	c	511	CLA	CHD-C4C	3.78	1.47	1.39
24	b	617	CLA	C3D-C2D	3.78	1.49	1.39
38	E	102	HEM	C4D-ND	-3.78	1.33	1.40
24	b	621	CLA	OBD-CAD	3.77	1.29	1.22
24	C	514	CLA	C3D-C2D	3.77	1.49	1.39
24	c	510	CLA	C3D-C2D	3.77	1.49	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D	401	PHO	C3C-C2C	3.77	1.48	1.37
24	B	605	CLA	CHD-C4C	3.77	1.47	1.39
24	c	513	CLA	C3D-C2D	3.77	1.49	1.39
24	B	602	CLA	C3D-C2D	3.76	1.49	1.39
24	A	407	CLA	C3D-C2D	3.76	1.49	1.39
24	B	606	CLA	OBD-CAD	3.76	1.29	1.22
24	b	616	CLA	CHD-C4C	3.76	1.47	1.39
24	c	516	CLA	OBD-CAD	3.76	1.29	1.22
24	b	620	CLA	CHD-C4C	3.76	1.47	1.39
24	B	606	CLA	CHD-C1D	3.76	1.45	1.38
24	c	513	CLA	OBD-CAD	3.76	1.29	1.22
24	b	619	CLA	CHD-C4C	3.76	1.47	1.39
37	D	408	LHG	O8-C23	3.76	1.44	1.33
24	b	617	CLA	OBD-CAD	3.76	1.29	1.22
24	D	402	CLA	C3D-C2D	3.75	1.49	1.39
24	B	617	CLA	C3D-C2D	3.75	1.49	1.39
24	B	606	CLA	CHD-C4C	3.75	1.47	1.39
24	a	410	CLA	OBD-CAD	3.75	1.28	1.22
24	d	404	CLA	CHD-C4C	3.75	1.47	1.39
24	B	609	CLA	CHD-C4C	3.75	1.47	1.39
24	c	508	CLA	C3D-C2D	3.74	1.49	1.39
24	a	412	CLA	C3D-C2D	3.74	1.49	1.39
34	V	206	HTG	C1'-S1	-3.74	1.76	1.81
24	a	412	CLA	OBD-CAD	3.74	1.28	1.22
24	B	615	CLA	C3D-C2D	3.73	1.49	1.39
24	B	616	CLA	CHD-C4C	3.73	1.47	1.39
24	B	617	CLA	CHD-C4C	3.73	1.47	1.39
24	C	505	CLA	OBD-CAD	3.72	1.28	1.22
24	c	509	CLA	CHD-C4C	3.72	1.47	1.39
24	b	620	CLA	C3D-C2D	3.72	1.49	1.39
24	B	614	CLA	OBD-CAD	3.72	1.28	1.22
24	B	602	CLA	OBD-CAD	3.72	1.28	1.22
24	C	502	CLA	C3D-C2D	3.72	1.49	1.39
37	L	101	LHG	O7-C7	3.71	1.44	1.34
24	B	613	CLA	C3D-C2D	3.71	1.49	1.39
24	d	403	CLA	C3D-C2D	3.71	1.49	1.39
24	b	624	CLA	OBD-CAD	3.71	1.28	1.22
24	c	507	CLA	OBD-CAD	3.71	1.28	1.22
24	b	625	CLA	OBD-CAD	3.71	1.28	1.22
24	d	404	CLA	C3D-C2D	3.70	1.49	1.39
24	c	507	CLA	C3D-C2D	3.70	1.49	1.39
24	c	509	CLA	O2A-CGA	3.70	1.44	1.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	605	CLA	O2A-CGA	3.70	1.44	1.33
24	B	615	CLA	CHD-C1D	3.70	1.45	1.38
24	c	517	CLA	C3D-C2D	3.69	1.49	1.39
38	V	205	HEM	C4D-ND	-3.68	1.34	1.40
24	C	511	CLA	OBD-CAD	3.67	1.28	1.22
24	C	506	CLA	CHD-C4C	3.67	1.47	1.39
24	A	409	CLA	OBD-CAD	3.67	1.28	1.22
24	b	612	CLA	C3D-C2D	3.66	1.49	1.39
35	J	101	LMG	O7-C10	3.66	1.44	1.34
24	C	509	CLA	C3D-C2D	3.65	1.49	1.39
24	B	610	CLA	OBD-CAD	3.65	1.28	1.22
34	b	608	HTG	C1'-S1	-3.65	1.76	1.81
24	c	511	CLA	OBD-CAD	3.64	1.28	1.22
24	d	402	CLA	OBD-CAD	3.64	1.28	1.22
24	b	624	CLA	CHD-C4C	3.64	1.47	1.39
24	A	406	CLA	OBD-CAD	3.64	1.28	1.22
24	B	612	CLA	O2A-CGA	3.64	1.44	1.33
24	c	509	CLA	C3D-C2D	3.64	1.49	1.39
24	a	410	CLA	CHD-C4C	3.63	1.47	1.39
24	C	512	CLA	OBD-CAD	3.63	1.28	1.22
24	b	619	CLA	C3D-C2D	3.62	1.49	1.39
24	D	402	CLA	CHD-C1D	3.62	1.45	1.38
24	B	617	CLA	OBD-CAD	3.62	1.28	1.22
25	A	408	PHO	C3C-C2C	3.62	1.48	1.37
24	B	603	CLA	C3D-C2D	3.61	1.49	1.39
34	B	633	HTG	C1'-S1	-3.61	1.76	1.81
34	B	625	HTG	C1'-S1	-3.60	1.76	1.81
24	b	614	CLA	OBD-CAD	3.60	1.28	1.22
38	v	205	HEM	C1B-NB	-3.60	1.34	1.40
24	b	612	CLA	OBD-CAD	3.60	1.28	1.22
24	a	409	CLA	OBD-CAD	3.60	1.28	1.22
24	c	508	CLA	OBD-CAD	3.59	1.28	1.22
24	b	616	CLA	C3D-C2D	3.59	1.48	1.39
24	C	513	CLA	OBD-CAD	3.58	1.28	1.22
24	B	610	CLA	CHD-C4C	3.58	1.47	1.39
34	B	632	HTG	C1'-S1	-3.58	1.76	1.81
24	c	505	CLA	OBD-CAD	3.58	1.28	1.22
24	b	620	CLA	OBD-CAD	3.58	1.28	1.22
24	D	402	CLA	CHD-C4C	3.58	1.47	1.39
24	C	508	CLA	CHD-C4C	3.57	1.47	1.39
24	B	609	CLA	OBD-CAD	3.57	1.28	1.22
24	b	612	CLA	CHD-C4C	3.57	1.47	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	410	CLA	C3D-C2D	3.56	1.48	1.39
24	B	607	CLA	OBD-CAD	3.56	1.28	1.22
24	B	612	CLA	OBD-CAD	3.56	1.28	1.22
34	c	525	HTG	C1'-S1	-3.55	1.76	1.81
24	b	621	CLA	CHD-C4C	3.55	1.47	1.39
24	b	615	CLA	C3D-C2D	3.55	1.48	1.39
34	c	524	HTG	C1'-S1	-3.55	1.76	1.81
25	a	411	PHO	O2A-CGA	3.54	1.43	1.33
24	B	613	CLA	OBD-CAD	3.52	1.28	1.22
24	B	605	CLA	C3D-C2D	3.52	1.48	1.39
37	D	407	LHG	O7-C7	3.52	1.44	1.34
24	a	409	CLA	O2A-CGA	3.52	1.43	1.33
24	a	409	CLA	C3D-C2D	3.52	1.48	1.39
34	D	412	HTG	C1'-S1	-3.51	1.76	1.81
24	c	515	CLA	OBD-CAD	3.51	1.28	1.22
34	C	524	HTG	C1'-S1	-3.51	1.76	1.81
38	V	205	HEM	C1B-NB	-3.51	1.34	1.40
24	b	614	CLA	C3D-C2D	3.50	1.48	1.39
24	B	616	CLA	OBD-CAD	3.50	1.28	1.22
24	C	502	CLA	OBD-CAD	3.49	1.28	1.22
24	B	616	CLA	C3D-C2D	3.49	1.48	1.39
24	c	517	CLA	OBD-CAD	3.49	1.28	1.22
24	C	509	CLA	OBD-CAD	3.49	1.28	1.22
24	b	616	CLA	OBD-CAD	3.47	1.28	1.22
24	b	610	CLA	OBD-CAD	3.47	1.28	1.22
25	A	408	PHO	CHA-CBD	-3.46	1.48	1.52
37	d	407	LHG	O7-C7	3.46	1.44	1.34
24	C	504	CLA	OBD-CAD	3.46	1.28	1.22
24	B	608	CLA	C3D-C2D	3.45	1.48	1.39
24	b	622	CLA	OBD-CAD	3.44	1.28	1.22
24	C	514	CLA	OBD-CAD	3.44	1.28	1.22
24	A	405	CLA	OBD-CAD	3.42	1.28	1.22
24	B	607	CLA	C3D-C2D	3.41	1.48	1.39
38	e	103	HEM	C4D-ND	-3.41	1.34	1.40
24	c	510	CLA	OBD-CAD	3.39	1.28	1.22
24	b	623	CLA	OBD-CAD	3.37	1.28	1.22
24	c	509	CLA	OBD-CAD	3.37	1.28	1.22
24	b	613	CLA	CHD-C4C	3.36	1.46	1.39
34	b	601	HTG	C1'-S1	-3.36	1.77	1.81
38	v	205	HEM	C4D-ND	-3.34	1.34	1.40
24	C	503	CLA	OBD-CAD	3.34	1.28	1.22
34	C	523	HTG	C1'-S1	-3.34	1.77	1.81

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	506	CLA	C3D-C2D	3.32	1.48	1.39
24	c	506	CLA	OBD-CAD	3.31	1.28	1.22
38	E	102	HEM	C1B-NB	-3.30	1.34	1.40
24	b	613	CLA	OBD-CAD	3.30	1.28	1.22
38	e	103	HEM	C1B-NB	-3.28	1.34	1.40
24	C	507	CLA	OBD-CAD	3.28	1.28	1.22
24	d	404	CLA	OBD-CAD	3.27	1.28	1.22
24	B	608	CLA	OBD-CAD	3.27	1.28	1.22
24	C	506	CLA	OBD-CAD	3.23	1.28	1.22
24	b	615	CLA	OBD-CAD	3.23	1.28	1.22
24	B	613	CLA	C1C-C2C	3.23	1.50	1.44
24	C	508	CLA	OBD-CAD	3.22	1.28	1.22
24	b	613	CLA	C4D-CHA	3.14	1.49	1.38
25	d	401	PHO	CHA-CBD	-3.13	1.48	1.52
24	C	508	CLA	C1C-C2C	3.12	1.50	1.44
24	B	613	CLA	CHD-C4C	3.11	1.46	1.39
25	a	411	PHO	CHA-CBD	-3.10	1.48	1.52
24	b	622	CLA	C4C-C3C	3.05	1.50	1.45
27	f	102	SQD	C6-S	-3.02	1.66	1.77
24	B	613	CLA	C1B-NB	-3.01	1.32	1.35
24	B	608	CLA	C4C-C3C	2.97	1.50	1.45
24	C	509	CLA	C4C-C3C	2.97	1.50	1.45
24	B	605	CLA	OBD-CAD	2.97	1.27	1.22
24	c	507	CLA	C1C-C2C	2.96	1.50	1.44
27	A	415	SQD	C6-S	-2.96	1.66	1.77
24	B	606	CLA	C1C-C2C	2.94	1.50	1.44
24	D	402	CLA	OBD-CAD	2.94	1.27	1.22
24	B	605	CLA	C4D-CHA	2.90	1.48	1.38
24	c	511	CLA	C4D-CHA	2.90	1.48	1.38
38	e	103	HEM	FE-NB	2.89	2.11	1.96
24	b	612	CLA	C1C-C2C	2.88	1.50	1.44
24	B	611	CLA	C4D-CHA	2.87	1.48	1.38
24	b	614	CLA	C1C-C2C	2.86	1.50	1.44
24	c	506	CLA	C4D-CHA	2.86	1.48	1.38
38	V	205	HEM	FE-NB	2.86	2.11	1.96
24	b	621	CLA	C1B-CHB	2.85	1.48	1.41
24	B	614	CLA	C4C-C3C	2.84	1.49	1.45
24	C	511	CLA	C1B-CHB	2.84	1.48	1.41
24	D	403	CLA	C4C-C3C	2.83	1.49	1.45
34	b	631	HTG	C1'-S1	-2.83	1.77	1.81
24	b	625	CLA	C1B-CHB	2.83	1.48	1.41
25	d	401	PHO	C3A-C2A	-2.83	1.52	1.54

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	509	CLA	C1C-C2C	2.82	1.50	1.44
24	c	517	CLA	C1C-C2C	2.81	1.50	1.44
24	C	512	CLA	C4D-CHA	2.81	1.48	1.38
24	A	405	CLA	C4C-C3C	2.80	1.49	1.45
24	C	508	CLA	C4B-CHC	2.80	1.48	1.41
24	c	509	CLA	C4C-C3C	2.79	1.49	1.45
24	B	614	CLA	C1B-CHB	2.79	1.48	1.41
27	a	405	SQD	C6-S	-2.78	1.67	1.77
24	b	621	CLA	C4D-CHA	2.78	1.48	1.38
34	B	624	HTG	C1'-S1	-2.78	1.77	1.81
24	B	604	CLA	C1C-C2C	2.78	1.49	1.44
24	C	510	CLA	C4C-C3C	2.77	1.49	1.45
24	c	509	CLA	C1C-C2C	2.77	1.49	1.44
24	C	508	CLA	C4D-CHA	2.77	1.48	1.38
24	C	511	CLA	C4D-CHA	2.77	1.48	1.38
38	E	102	HEM	FE-NB	2.76	2.10	1.96
24	C	504	CLA	C1C-C2C	2.76	1.49	1.44
24	C	512	CLA	C4C-C3C	2.76	1.49	1.45
24	a	409	CLA	C4C-C3C	2.75	1.49	1.45
24	B	616	CLA	C4B-CHC	2.75	1.48	1.41
38	v	205	HEM	FE-NB	2.75	2.10	1.96
24	A	406	CLA	C4D-CHA	2.74	1.48	1.38
27	F	103	SQD	C6-S	-2.74	1.67	1.77
24	b	622	CLA	C4D-CHA	2.73	1.48	1.38
24	b	617	CLA	C4D-CHA	2.73	1.48	1.38
24	C	512	CLA	C1B-CHB	2.72	1.48	1.41
24	A	409	CLA	C4B-CHC	2.72	1.48	1.41
24	A	405	CLA	C4D-CHA	2.72	1.48	1.38
24	c	511	CLA	C1C-C2C	2.72	1.49	1.44
24	b	624	CLA	C4D-CHA	2.72	1.48	1.38
24	B	612	CLA	C1B-CHB	2.72	1.48	1.41
24	B	611	CLA	C4C-C3C	2.72	1.49	1.45
24	B	614	CLA	C4D-CHA	2.71	1.48	1.38
27	A	411	SQD	C6-S	-2.71	1.67	1.77
24	b	620	CLA	C4D-CHA	2.71	1.48	1.38
24	b	616	CLA	C4D-CHA	2.71	1.48	1.38
24	C	504	CLA	C4B-CHC	2.69	1.48	1.41
24	B	612	CLA	C1C-C2C	2.69	1.49	1.44
24	A	409	CLA	C4D-CHA	2.69	1.48	1.38
24	B	604	CLA	C4B-CHC	2.69	1.48	1.41
24	B	617	CLA	C4D-CHA	2.69	1.48	1.38
24	C	505	CLA	C4D-CHA	2.68	1.47	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	615	CLA	C4D-CHA	2.68	1.47	1.38
24	b	616	CLA	C1B-NB	-2.68	1.32	1.35
24	B	607	CLA	C1C-C2C	2.68	1.49	1.44
24	C	505	CLA	C1B-CHB	2.67	1.48	1.41
24	c	512	CLA	C1B-CHB	2.67	1.48	1.41
24	c	513	CLA	C1B-CHB	2.67	1.48	1.41
24	C	510	CLA	C4D-CHA	2.67	1.47	1.38
24	c	513	CLA	C4D-CHA	2.67	1.47	1.38
24	C	503	CLA	C4D-CHA	2.66	1.47	1.38
24	b	617	CLA	C4B-CHC	2.65	1.48	1.41
24	B	607	CLA	C4D-CHA	2.65	1.47	1.38
24	B	608	CLA	C4D-CHA	2.65	1.47	1.38
24	B	609	CLA	C4C-C3C	2.65	1.49	1.45
24	c	505	CLA	C4D-CHA	2.65	1.47	1.38
24	D	402	CLA	C1C-C2C	2.65	1.49	1.44
24	B	615	CLA	C1C-C2C	2.64	1.49	1.44
24	a	410	CLA	C1C-C2C	2.64	1.49	1.44
24	c	517	CLA	C4B-CHC	2.63	1.48	1.41
24	C	503	CLA	C1C-C2C	2.63	1.49	1.44
24	C	506	CLA	C3D-C4D	-2.63	1.38	1.44
24	C	514	CLA	C4D-CHA	2.63	1.47	1.38
24	a	409	CLA	C1C-C2C	2.63	1.49	1.44
24	b	616	CLA	C1B-CHB	2.63	1.48	1.41
24	B	604	CLA	C4D-CHA	2.63	1.47	1.38
24	C	509	CLA	C4D-CHA	2.63	1.47	1.38
24	d	403	CLA	C4C-C3C	2.62	1.49	1.45
24	b	612	CLA	C4D-CHA	2.62	1.47	1.38
27	B	621	SQD	C6-S	-2.62	1.67	1.77
24	B	609	CLA	C4D-CHA	2.62	1.47	1.38
24	C	502	CLA	C4B-CHC	2.62	1.48	1.41
24	c	505	CLA	C4C-C3C	2.62	1.49	1.45
24	C	505	CLA	C1C-C2C	2.61	1.49	1.44
24	b	614	CLA	C3D-C4D	-2.61	1.38	1.44
24	c	509	CLA	C1B-CHB	2.61	1.48	1.41
24	C	513	CLA	C4D-CHA	2.61	1.47	1.38
24	b	625	CLA	C4D-CHA	2.61	1.47	1.38
24	c	508	CLA	C4D-CHA	2.60	1.47	1.38
24	B	607	CLA	C4C-C3C	2.60	1.49	1.45
24	b	615	CLA	C1C-C2C	2.60	1.49	1.44
35	Z	101	LMG	O8-C28	2.60	1.46	1.33
24	c	516	CLA	C1C-C2C	2.60	1.49	1.44
24	A	407	CLA	C1C-C2C	2.60	1.49	1.44

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	610	CLA	C4D-CHA	2.60	1.47	1.38
24	A	409	CLA	C1C-C2C	2.59	1.49	1.44
24	c	507	CLA	C4B-CHC	2.59	1.48	1.41
24	c	513	CLA	C1C-C2C	2.59	1.49	1.44
31	a	416	PL9	C6-C5	2.59	1.48	1.35
24	B	614	CLA	C1C-C2C	2.59	1.49	1.44
24	b	622	CLA	C1B-CHB	2.59	1.48	1.41
24	B	602	CLA	C4D-CHA	2.59	1.47	1.38
24	b	613	CLA	C1B-CHB	2.59	1.48	1.41
24	a	410	CLA	C1B-CHB	2.59	1.48	1.41
24	B	608	CLA	C4B-CHC	2.59	1.48	1.41
27	a	414	SQD	C6-S	-2.59	1.67	1.77
27	L	102	SQD	C6-S	-2.58	1.67	1.77
24	c	515	CLA	C4D-CHA	2.58	1.47	1.38
24	C	507	CLA	C4D-CHA	2.58	1.47	1.38
24	C	514	CLA	C1C-C2C	2.58	1.49	1.44
24	B	610	CLA	C3D-C4D	-2.58	1.38	1.44
24	b	622	CLA	C1C-C2C	2.58	1.49	1.44
24	C	503	CLA	C4B-CHC	2.58	1.48	1.41
24	B	610	CLA	C1B-CHB	2.58	1.48	1.41
24	c	514	CLA	C4D-CHA	2.58	1.47	1.38
24	b	611	CLA	C4D-CHA	2.57	1.47	1.38
24	b	611	CLA	C4C-C3C	2.57	1.49	1.45
24	B	603	CLA	C4D-CHA	2.57	1.47	1.38
24	C	502	CLA	C4D-CHA	2.57	1.47	1.38
24	B	612	CLA	C4D-CHA	2.57	1.47	1.38
31	A	418	PL9	C6-C5	2.56	1.48	1.35
24	c	516	CLA	C4B-CHC	2.56	1.48	1.41
24	b	610	CLA	C4D-CHA	2.56	1.47	1.38
24	B	615	CLA	C1B-CHB	2.56	1.48	1.41
24	C	506	CLA	C1B-CHB	2.56	1.48	1.41
24	C	502	CLA	C1C-C2C	2.56	1.49	1.44
24	b	616	CLA	C4B-CHC	2.56	1.48	1.41
24	b	620	CLA	C1B-CHB	2.56	1.48	1.41
24	d	403	CLA	C1B-CHB	2.56	1.48	1.41
24	b	616	CLA	C3D-C4D	-2.55	1.38	1.44
24	c	508	CLA	C1B-CHB	2.55	1.48	1.41
24	B	609	CLA	C1B-CHB	2.55	1.48	1.41
24	B	613	CLA	C4B-CHC	2.55	1.48	1.41
24	B	606	CLA	C4B-CHC	2.55	1.48	1.41
24	a	412	CLA	C1B-CHB	2.55	1.48	1.41
24	B	615	CLA	C4D-CHA	2.55	1.47	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	612	CLA	C4B-CHC	2.55	1.48	1.41
24	B	615	CLA	C4C-C3C	2.55	1.49	1.45
24	a	409	CLA	C4D-CHA	2.54	1.47	1.38
24	d	402	CLA	C1B-CHB	2.54	1.48	1.41
24	b	614	CLA	C4D-CHA	2.54	1.47	1.38
24	C	510	CLA	C1C-C2C	2.54	1.49	1.44
24	C	506	CLA	C4D-CHA	2.53	1.47	1.38
24	C	514	CLA	C4B-CHC	2.53	1.48	1.41
24	C	513	CLA	C1C-C2C	2.53	1.49	1.44
24	D	402	CLA	C4D-CHA	2.53	1.47	1.38
24	b	613	CLA	C4C-C3C	2.53	1.49	1.45
24	b	617	CLA	C1B-CHB	2.53	1.48	1.41
24	C	506	CLA	C1C-C2C	2.53	1.49	1.44
24	A	407	CLA	C4B-CHC	2.53	1.48	1.41
24	a	409	CLA	C4B-CHC	2.53	1.48	1.41
24	b	619	CLA	C4C-C3C	2.52	1.49	1.45
31	d	406	PL9	C6-C5	2.52	1.48	1.35
24	b	612	CLA	C1B-CHB	2.52	1.48	1.41
24	c	510	CLA	C1B-CHB	2.52	1.48	1.41
24	A	405	CLA	C1B-CHB	2.51	1.48	1.41
24	B	616	CLA	C1C-C2C	2.51	1.49	1.44
24	B	602	CLA	C1B-CHB	2.51	1.48	1.41
24	B	613	CLA	C1B-CHB	2.51	1.48	1.41
24	c	514	CLA	C1B-CHB	2.51	1.48	1.41
24	c	509	CLA	C4B-CHC	2.51	1.48	1.41
24	C	503	CLA	C1B-CHB	2.50	1.48	1.41
24	b	617	CLA	C1C-C2C	2.50	1.49	1.44
24	A	409	CLA	C1B-CHB	2.50	1.47	1.41
24	c	517	CLA	C4C-C3C	2.50	1.49	1.45
24	d	404	CLA	C1C-C2C	2.50	1.49	1.44
24	B	610	CLA	C4B-CHC	2.50	1.47	1.41
34	d	412	HTG	C1-S1	-2.50	1.76	1.80
24	a	412	CLA	C4D-CHA	2.49	1.47	1.38
24	B	603	CLA	C1C-C2C	2.49	1.49	1.44
24	c	507	CLA	C3D-C4D	-2.49	1.38	1.44
24	b	619	CLA	C4B-CHC	2.49	1.47	1.41
24	C	511	CLA	C1C-C2C	2.49	1.49	1.44
24	C	504	CLA	C4D-CHA	2.49	1.47	1.38
24	b	618	CLA	C1B-CHB	2.49	1.47	1.41
24	c	516	CLA	C4D-CHA	2.48	1.47	1.38
24	C	514	CLA	C4C-C3C	2.48	1.49	1.45
24	c	515	CLA	C1B-CHB	2.48	1.47	1.41

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	509	CLA	C4D-CHA	2.48	1.47	1.38
24	b	614	CLA	C1B-CHB	2.48	1.47	1.41
24	b	624	CLA	C1B-CHB	2.48	1.47	1.41
24	c	512	CLA	C4D-CHA	2.48	1.47	1.38
24	D	403	CLA	C4D-CHA	2.47	1.47	1.38
24	b	618	CLA	C4D-CHA	2.47	1.47	1.38
34	b	607	HTG	C1-S1	-2.47	1.76	1.80
24	C	506	CLA	C4B-CHC	2.47	1.47	1.41
24	c	508	CLA	C1C-C2C	2.47	1.49	1.44
24	b	615	CLA	C1B-CHB	2.46	1.47	1.41
24	B	615	CLA	C4B-CHC	2.46	1.47	1.41
24	b	619	CLA	C1B-CHB	2.46	1.47	1.41
24	b	610	CLA	C4B-CHC	2.46	1.47	1.41
24	b	612	CLA	C4B-CHC	2.46	1.47	1.41
24	b	616	CLA	C1C-C2C	2.46	1.49	1.44
24	B	617	CLA	C4B-CHC	2.46	1.47	1.41
24	c	507	CLA	C4C-C3C	2.45	1.49	1.45
24	B	605	CLA	C1B-CHB	2.45	1.47	1.41
24	d	404	CLA	C4B-CHC	2.45	1.47	1.41
24	C	511	CLA	C4C-C3C	2.45	1.49	1.45
24	c	508	CLA	C4B-CHC	2.45	1.47	1.41
24	d	404	CLA	C4D-CHA	2.44	1.47	1.38
24	B	617	CLA	C1B-CHB	2.44	1.47	1.41
31	D	405	PL9	C6-C5	2.44	1.48	1.35
24	A	407	CLA	C3D-C4D	-2.44	1.38	1.44
24	c	505	CLA	C1B-CHB	2.44	1.47	1.41
25	D	401	PHO	C3A-C2A	-2.44	1.52	1.54
24	c	517	CLA	C4D-CHA	2.44	1.47	1.38
24	a	410	CLA	C4D-CHA	2.44	1.47	1.38
24	b	615	CLA	C3D-C4D	-2.44	1.38	1.44
24	B	604	CLA	C1B-NB	-2.43	1.33	1.35
24	b	613	CLA	C1C-C2C	2.43	1.49	1.44
29	A	416	LMT	O1'-C1'	2.43	1.44	1.40
24	c	507	CLA	C4D-CHA	2.43	1.47	1.38
34	c	524	HTG	C1-S1	-2.43	1.77	1.80
24	c	510	CLA	C4D-CHA	2.43	1.47	1.38
24	C	507	CLA	C1B-CHB	2.43	1.47	1.41
24	B	613	CLA	C4C-C3C	2.42	1.49	1.45
24	C	509	CLA	C3D-C4D	-2.42	1.38	1.44
24	C	512	CLA	C1C-C2C	2.42	1.49	1.44
24	b	623	CLA	C3D-C4D	-2.42	1.38	1.44
24	d	404	CLA	C4C-C3C	2.42	1.49	1.45

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	514	CLA	C4C-C3C	2.42	1.49	1.45
24	B	609	CLA	C1C-C2C	2.42	1.49	1.44
24	B	602	CLA	C4B-CHC	2.42	1.47	1.41
24	c	506	CLA	C3D-C4D	-2.42	1.38	1.44
24	C	511	CLA	C4B-CHC	2.41	1.47	1.41
24	B	610	CLA	C1C-C2C	2.41	1.49	1.44
24	b	620	CLA	C4B-CHC	2.41	1.47	1.41
24	b	617	CLA	C3D-C4D	-2.41	1.38	1.44
24	C	513	CLA	C4B-CHC	2.41	1.47	1.41
24	B	616	CLA	C4D-CHA	2.41	1.47	1.38
24	C	510	CLA	C1B-CHB	2.40	1.47	1.41
24	B	604	CLA	C4C-C3C	2.40	1.49	1.45
24	d	403	CLA	C4B-CHC	2.40	1.47	1.41
24	C	513	CLA	C1B-CHB	2.40	1.47	1.41
24	b	612	CLA	C3D-C4D	-2.40	1.38	1.44
24	c	514	CLA	C1C-C2C	2.40	1.49	1.44
24	D	403	CLA	C1B-CHB	2.40	1.47	1.41
24	C	505	CLA	C3D-C4D	-2.40	1.38	1.44
24	d	402	CLA	C4B-CHC	2.39	1.47	1.41
24	B	604	CLA	C1B-CHB	2.39	1.47	1.41
24	C	506	CLA	C4C-C3C	2.39	1.49	1.45
24	b	621	CLA	C4B-CHC	2.39	1.47	1.41
24	c	513	CLA	C4C-C3C	2.39	1.49	1.45
24	c	510	CLA	C3D-C4D	-2.39	1.38	1.44
25	D	401	PHO	CHA-CBD	-2.39	1.49	1.52
24	b	617	CLA	C4C-C3C	2.39	1.49	1.45
24	d	403	CLA	C4D-CHA	2.38	1.46	1.38
34	b	632	HTG	C1-S1	-2.38	1.77	1.80
24	b	614	CLA	C4B-CHC	2.38	1.47	1.41
24	B	604	CLA	C3D-C4D	-2.38	1.38	1.44
34	c	525	HTG	C1-S1	-2.38	1.77	1.80
34	D	412	HTG	C1-S1	-2.37	1.77	1.80
24	b	625	CLA	C1C-NC	-2.37	1.34	1.37
24	A	406	CLA	C3D-C4D	-2.37	1.38	1.44
24	B	613	CLA	C4D-CHA	2.37	1.46	1.38
24	a	412	CLA	C4B-CHC	2.37	1.47	1.41
24	c	506	CLA	C1B-CHB	2.37	1.47	1.41
24	A	405	CLA	C3D-C4D	-2.37	1.38	1.44
24	c	509	CLA	C3D-C4D	-2.37	1.38	1.44
24	B	611	CLA	C4B-CHC	2.37	1.47	1.41
24	A	407	CLA	C4D-CHA	2.36	1.46	1.38
38	E	102	HEM	CHB-C1B	2.36	1.41	1.35

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	510	CLA	C4B-CHC	2.36	1.47	1.41
24	b	619	CLA	C4D-CHA	2.36	1.46	1.38
24	B	603	CLA	C4B-CHC	2.36	1.47	1.41
24	C	514	CLA	C3D-C4D	-2.36	1.38	1.44
24	d	404	CLA	C1B-CHB	2.36	1.47	1.41
38	V	205	HEM	C3B-C4B	2.35	1.49	1.44
24	b	621	CLA	C1C-C2C	2.35	1.49	1.44
24	c	517	CLA	C3D-C4D	-2.35	1.38	1.44
24	c	511	CLA	C1B-CHB	2.35	1.47	1.41
24	B	617	CLA	C3D-C4D	-2.35	1.38	1.44
24	B	603	CLA	C4C-C3C	2.35	1.49	1.45
36	D	406	DGD	O3G-C1D	2.35	1.44	1.40
24	B	606	CLA	C1B-CHB	2.35	1.47	1.41
24	B	607	CLA	C1B-CHB	2.35	1.47	1.41
24	D	402	CLA	C1B-CHB	2.35	1.47	1.41
34	C	523	HTG	C1-S1	-2.35	1.77	1.80
24	B	611	CLA	C1B-CHB	2.34	1.47	1.41
24	b	624	CLA	C4B-CHC	2.34	1.47	1.41
24	C	509	CLA	C4B-CHC	2.34	1.47	1.41
24	C	508	CLA	C1B-CHB	2.34	1.47	1.41
34	b	608	HTG	C1-S1	-2.34	1.77	1.80
24	c	513	CLA	C4B-CHC	2.33	1.47	1.41
24	C	507	CLA	C3D-C4D	-2.33	1.38	1.44
24	A	407	CLA	C4C-C3C	2.33	1.49	1.45
24	C	511	CLA	C3D-C4D	-2.33	1.38	1.44
24	d	402	CLA	C4D-CHA	2.33	1.46	1.38
24	d	403	CLA	C3D-C4D	-2.33	1.38	1.44
24	B	616	CLA	C1B-CHB	2.33	1.47	1.41
24	B	607	CLA	C4B-CHC	2.32	1.47	1.41
24	c	508	CLA	C4C-C3C	2.32	1.49	1.45
24	A	405	CLA	C1C-C2C	2.32	1.49	1.44
24	c	511	CLA	C4C-C3C	2.32	1.49	1.45
24	C	508	CLA	C4C-C3C	2.31	1.49	1.45
34	B	632	HTG	C1-S1	-2.31	1.77	1.80
24	C	507	CLA	C4C-C3C	2.31	1.49	1.45
24	B	602	CLA	C1C-C2C	2.31	1.49	1.44
24	b	611	CLA	C4B-CHC	2.31	1.47	1.41
24	b	620	CLA	C4C-C3C	2.31	1.49	1.45
24	D	403	CLA	C3D-C4D	-2.30	1.39	1.44
24	c	513	CLA	C3D-C4D	-2.30	1.39	1.44
24	B	603	CLA	C3D-C4D	-2.30	1.39	1.44
34	V	206	HTG	C1-S1	-2.30	1.77	1.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	510	CLA	C3D-C4D	-2.30	1.39	1.44
24	B	611	CLA	C3D-C4D	-2.30	1.39	1.44
24	D	402	CLA	C3D-C4D	-2.30	1.39	1.44
24	c	506	CLA	C1C-C2C	2.30	1.49	1.44
24	C	507	CLA	C1C-C2C	2.30	1.49	1.44
24	c	511	CLA	C4B-CHC	2.29	1.47	1.41
24	A	405	CLA	C4B-CHC	2.29	1.47	1.41
24	B	612	CLA	C4C-C3C	2.29	1.49	1.45
24	b	620	CLA	C3D-C4D	-2.29	1.39	1.44
24	d	402	CLA	C1C-C2C	2.29	1.49	1.44
24	D	403	CLA	C4B-CHC	2.28	1.47	1.41
24	D	403	CLA	C1C-C2C	2.28	1.49	1.44
24	a	412	CLA	C1C-C2C	2.28	1.49	1.44
24	C	505	CLA	C4B-CHC	2.28	1.47	1.41
24	a	410	CLA	C3D-C4D	-2.28	1.39	1.44
24	c	515	CLA	C4C-C3C	2.28	1.49	1.45
24	C	502	CLA	C1B-CHB	2.28	1.47	1.41
24	a	409	CLA	C3D-C4D	-2.27	1.39	1.44
24	d	403	CLA	C1B-NB	-2.27	1.33	1.35
24	B	605	CLA	C3D-C4D	-2.27	1.39	1.44
24	C	514	CLA	C1B-CHB	2.27	1.47	1.41
24	B	605	CLA	C1C-C2C	2.27	1.48	1.44
24	b	623	CLA	C4D-CHA	2.26	1.46	1.38
24	a	412	CLA	C3D-C4D	-2.25	1.39	1.44
24	B	607	CLA	C3D-C4D	-2.25	1.39	1.44
24	C	503	CLA	C4C-C3C	2.25	1.48	1.45
24	A	409	CLA	C4C-C3C	2.25	1.48	1.45
24	A	409	CLA	C3D-C4D	-2.25	1.39	1.44
24	b	611	CLA	C1B-CHB	2.25	1.47	1.41
24	c	514	CLA	C4B-CHC	2.24	1.47	1.41
24	c	508	CLA	C3D-C4D	-2.24	1.39	1.44
24	B	603	CLA	C1B-CHB	2.24	1.47	1.41
24	c	517	CLA	C1B-CHB	2.24	1.47	1.41
24	b	624	CLA	C1C-C2C	2.23	1.48	1.44
24	C	508	CLA	C3D-C4D	-2.23	1.39	1.44
24	A	405	CLA	C4B-NB	-2.23	1.33	1.35
38	E	102	HEM	C1D-ND	-2.23	1.34	1.38
24	b	611	CLA	C1C-C2C	2.23	1.48	1.44
24	A	406	CLA	C1C-C2C	2.22	1.48	1.44
24	c	510	CLA	C1C-C2C	2.22	1.48	1.44
24	B	615	CLA	C3D-C4D	-2.22	1.39	1.44
24	C	504	CLA	C1B-CHB	2.21	1.47	1.41

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	507	CLA	C4B-CHC	2.21	1.47	1.41
24	B	606	CLA	C4D-CHA	2.21	1.46	1.38
24	b	610	CLA	C3D-C4D	-2.21	1.39	1.44
24	B	609	CLA	C3D-C4D	-2.21	1.39	1.44
24	b	623	CLA	C4B-CHC	2.21	1.47	1.41
24	b	622	CLA	C3D-C4D	-2.21	1.39	1.44
24	a	409	CLA	C1B-CHB	2.20	1.47	1.41
24	b	610	CLA	C1C-C2C	2.20	1.48	1.44
24	c	515	CLA	C1C-C2C	2.20	1.48	1.44
24	A	406	CLA	C1B-CHB	2.20	1.47	1.41
24	b	618	CLA	C4B-CHC	2.20	1.47	1.41
24	b	621	CLA	C1C-NC	-2.20	1.34	1.37
24	b	623	CLA	C1B-CHB	2.19	1.47	1.41
24	b	614	CLA	C4C-C3C	2.19	1.48	1.45
24	C	513	CLA	C4C-C3C	2.19	1.48	1.45
24	b	615	CLA	C4B-CHC	2.19	1.47	1.41
24	C	512	CLA	C3D-C4D	-2.19	1.39	1.44
24	b	611	CLA	C1D-C2D	2.19	1.49	1.45
34	B	633	HTG	C1-S1	-2.19	1.77	1.80
24	b	618	CLA	C3D-C4D	-2.18	1.39	1.44
24	D	402	CLA	C4C-C3C	2.18	1.48	1.45
24	B	611	CLA	C4B-NB	-2.18	1.33	1.35
24	B	608	CLA	C1B-CHB	2.18	1.47	1.41
24	c	512	CLA	C3D-C4D	-2.18	1.39	1.44
24	d	404	CLA	C1D-C2D	2.18	1.49	1.45
24	c	506	CLA	C1C-NC	-2.18	1.34	1.37
24	c	510	CLA	C4B-CHC	2.18	1.47	1.41
24	B	608	CLA	C1C-C2C	2.18	1.48	1.44
24	B	610	CLA	C4C-C3C	2.17	1.48	1.45
24	C	504	CLA	C4C-C3C	2.17	1.48	1.45
38	e	103	HEM	CHB-C1B	2.17	1.40	1.35
24	b	610	CLA	C1B-CHB	2.17	1.47	1.41
24	B	608	CLA	C1B-NB	-2.16	1.33	1.35
24	c	510	CLA	C1B-NB	-2.16	1.33	1.35
24	b	619	CLA	C1C-C2C	2.16	1.48	1.44
24	B	617	CLA	C1C-C2C	2.16	1.48	1.44
24	C	502	CLA	C3D-C4D	-2.16	1.39	1.44
25	A	408	PHO	C3A-C2A	-2.15	1.52	1.54
31	d	406	PL9	C2-C3	2.15	1.40	1.34
24	C	504	CLA	C3D-C4D	-2.15	1.39	1.44
24	B	605	CLA	C4C-C3C	2.15	1.48	1.45
24	B	614	CLA	C4B-CHC	2.15	1.47	1.41

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	h	102	DGD	O5D-C1E	2.15	1.43	1.40
24	a	410	CLA	C4B-CHC	2.15	1.47	1.41
24	c	508	CLA	C1B-NB	-2.15	1.33	1.35
24	B	605	CLA	C1A-CHA	2.15	1.52	1.43
24	c	512	CLA	C4B-CHC	2.15	1.47	1.41
24	b	611	CLA	C3D-C4D	-2.14	1.39	1.44
24	b	623	CLA	C1C-C2C	2.14	1.48	1.44
24	A	406	CLA	C4B-CHC	2.14	1.46	1.41
24	C	509	CLA	C1B-CHB	2.14	1.46	1.41
24	d	404	CLA	C3D-C4D	-2.14	1.39	1.44
24	D	403	CLA	C1C-NC	-2.14	1.34	1.37
38	v	205	HEM	C1D-ND	-2.13	1.34	1.38
31	a	416	PL9	C2-C3	2.13	1.40	1.34
24	c	515	CLA	C4B-CHC	2.13	1.46	1.41
24	c	507	CLA	C1B-CHB	2.12	1.46	1.41
24	a	410	CLA	C4C-C3C	2.12	1.48	1.45
29	B	635	LMT	O1'-C1'	2.12	1.43	1.40
24	b	618	CLA	C1C-C2C	2.12	1.48	1.44
24	b	612	CLA	C4C-C3C	2.12	1.48	1.45
24	d	404	CLA	C1B-NB	-2.12	1.33	1.35
24	c	510	CLA	C4C-C3C	2.12	1.48	1.45
24	b	619	CLA	C3D-C4D	-2.12	1.39	1.44
24	B	616	CLA	C3D-C4D	-2.12	1.39	1.44
24	B	609	CLA	C4B-CHC	2.11	1.46	1.41
24	b	625	CLA	C4B-CHC	2.11	1.46	1.41
24	c	506	CLA	C4C-C3C	2.11	1.48	1.45
24	c	505	CLA	C3D-C4D	-2.11	1.39	1.44
24	c	506	CLA	C4B-CHC	2.11	1.46	1.41
25	a	411	PHO	CBD-CGD	-2.11	1.49	1.52
24	B	612	CLA	C3D-C4D	-2.11	1.39	1.44
24	b	621	CLA	C1A-CHA	2.11	1.51	1.43
24	b	613	CLA	C4B-CHC	2.11	1.46	1.41
24	B	608	CLA	C3D-C4D	-2.10	1.39	1.44
29	M	104	LMT	O1'-C1'	2.10	1.43	1.40
24	C	505	CLA	C4C-C3C	2.09	1.48	1.45
24	A	407	CLA	C1B-CHB	2.09	1.46	1.41
24	c	511	CLA	C3D-C4D	-2.09	1.39	1.44
24	A	406	CLA	C4C-C3C	2.09	1.48	1.45
29	a	404	LMT	O1'-C1'	2.09	1.43	1.40
24	C	513	CLA	C3D-C4D	-2.09	1.39	1.44
24	D	402	CLA	C4B-CHC	2.09	1.46	1.41
24	c	516	CLA	C1B-CHB	2.09	1.46	1.41

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	A	418	PL9	C2-C3	2.08	1.40	1.34
24	c	514	CLA	C3D-C4D	-2.08	1.39	1.44
24	c	512	CLA	C4C-C3C	2.08	1.48	1.45
24	B	603	CLA	C1B-NB	-2.06	1.33	1.35
24	c	505	CLA	C1C-C2C	2.06	1.48	1.44
24	B	602	CLA	C1D-C2D	2.06	1.49	1.45
24	B	617	CLA	C4C-C3C	2.05	1.48	1.45
24	c	505	CLA	C4B-CHC	2.05	1.46	1.41
38	V	205	HEM	CHB-C1B	2.05	1.40	1.35
24	B	605	CLA	C4B-CHC	2.05	1.46	1.41
24	b	610	CLA	C4C-C3C	2.05	1.48	1.45
24	d	402	CLA	C3D-C4D	-2.05	1.39	1.44
24	a	410	CLA	C1B-NB	-2.04	1.33	1.35
34	B	625	HTG	C1-S1	-2.04	1.77	1.80
24	b	615	CLA	C4C-C3C	2.04	1.48	1.45
37	d	407	LHG	O7-C5	-2.04	1.41	1.46
24	b	625	CLA	C3D-C4D	-2.04	1.39	1.44
24	b	625	CLA	C4C-C3C	2.04	1.48	1.45
25	a	411	PHO	C3A-C2A	-2.04	1.52	1.54
24	d	402	CLA	C1C-NC	-2.03	1.34	1.37
24	B	606	CLA	C3D-C4D	-2.03	1.39	1.44
24	C	503	CLA	C3D-C4D	-2.03	1.39	1.44
24	b	624	CLA	C4C-C3C	2.03	1.48	1.45
24	b	621	CLA	C4C-C3C	2.03	1.48	1.45
24	b	619	CLA	C1D-C2D	2.03	1.49	1.45
24	B	602	CLA	C4C-C3C	2.03	1.48	1.45
24	c	512	CLA	C1C-C2C	2.02	1.48	1.44
24	a	412	CLA	C4C-C3C	2.02	1.48	1.45
24	c	516	CLA	C3D-C4D	-2.02	1.39	1.44
38	e	103	HEM	C1D-ND	-2.02	1.34	1.38
38	V	205	HEM	C1D-ND	-2.02	1.34	1.38
24	b	616	CLA	C4C-C3C	2.01	1.48	1.45
34	C	524	HTG	C1-S1	-2.01	1.77	1.80
24	B	603	CLA	C1D-C2D	2.01	1.49	1.45
24	b	619	CLA	C1B-NB	-2.00	1.33	1.35
38	v	205	HEM	CHB-C1B	2.00	1.40	1.35
24	b	613	CLA	C3D-C4D	-2.00	1.39	1.44

All (2545) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	a	410	CLA	C1D-ND-C4D	-10.50	98.87	106.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	606	CLA	C1D-ND-C4D	-10.46	98.90	106.33
24	b	614	CLA	C1D-ND-C4D	-10.09	99.17	106.33
24	B	613	CLA	C1D-ND-C4D	-10.05	99.20	106.33
24	B	616	CLA	C1D-ND-C4D	-10.01	99.23	106.33
24	A	407	CLA	C1D-ND-C4D	-9.89	99.31	106.33
24	b	624	CLA	C1D-ND-C4D	-9.88	99.31	106.33
24	B	602	CLA	C1D-ND-C4D	-9.85	99.34	106.33
24	C	502	CLA	C1D-ND-C4D	-9.59	99.52	106.33
24	C	504	CLA	C1D-ND-C4D	-9.58	99.53	106.33
24	c	515	CLA	C1D-ND-C4D	-9.57	99.54	106.33
24	d	404	CLA	C1D-ND-C4D	-9.52	99.57	106.33
24	c	517	CLA	C1D-ND-C4D	-9.52	99.57	106.33
24	D	402	CLA	C1D-ND-C4D	-9.48	99.60	106.33
24	b	618	CLA	C1D-ND-C4D	-9.43	99.63	106.33
24	c	516	CLA	C1D-ND-C4D	-9.42	99.64	106.33
24	A	409	CLA	C1D-ND-C4D	-9.40	99.66	106.33
24	B	607	CLA	C1D-ND-C4D	-9.40	99.66	106.33
24	b	620	CLA	C1D-ND-C4D	-9.40	99.66	106.33
24	B	603	CLA	C1D-ND-C4D	-9.35	99.69	106.33
24	b	619	CLA	C1D-ND-C4D	-9.31	99.72	106.33
24	C	512	CLA	C1D-ND-C4D	-9.30	99.73	106.33
24	C	514	CLA	C1D-ND-C4D	-9.28	99.74	106.33
24	B	613	CLA	C2D-C1D-ND	9.28	116.94	110.10
24	a	409	CLA	C1D-ND-C4D	-9.26	99.76	106.33
24	a	412	CLA	C1D-ND-C4D	-9.25	99.77	106.33
24	C	513	CLA	C1D-ND-C4D	-9.23	99.78	106.33
24	b	623	CLA	C1D-ND-C4D	-9.21	99.80	106.33
24	c	507	CLA	C1D-ND-C4D	-9.18	99.81	106.33
24	c	508	CLA	C1D-ND-C4D	-9.18	99.81	106.33
24	B	615	CLA	C1D-ND-C4D	-9.16	99.83	106.33
24	B	606	CLA	C2D-C1D-ND	9.15	116.84	110.10
24	D	403	CLA	C1D-ND-C4D	-9.14	99.84	106.33
24	C	509	CLA	C1D-ND-C4D	-9.14	99.84	106.33
24	b	621	CLA	C1D-ND-C4D	-9.11	99.86	106.33
24	d	403	CLA	C1D-ND-C4D	-9.11	99.86	106.33
24	c	510	CLA	C1D-ND-C4D	-9.06	99.90	106.33
24	C	503	CLA	C1D-ND-C4D	-9.03	99.92	106.33
24	a	410	CLA	C2D-C1D-ND	9.02	116.75	110.10
24	B	612	CLA	C1D-ND-C4D	-9.00	99.94	106.33
24	A	406	CLA	C1D-ND-C4D	-8.94	99.98	106.33
24	b	624	CLA	C2D-C1D-ND	8.93	116.69	110.10
24	c	505	CLA	C1D-ND-C4D	-8.93	99.99	106.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	610	CLA	C1D-ND-C4D	-8.93	99.99	106.33
24	c	512	CLA	C1D-ND-C4D	-8.93	99.99	106.33
24	b	612	CLA	C1D-ND-C4D	-8.85	100.05	106.33
24	d	402	CLA	C1D-ND-C4D	-8.83	100.06	106.33
24	c	514	CLA	C1D-ND-C4D	-8.82	100.07	106.33
24	B	617	CLA	C1D-ND-C4D	-8.80	100.09	106.33
24	B	610	CLA	C1D-ND-C4D	-8.79	100.09	106.33
24	D	402	CLA	C2D-C1D-ND	8.79	116.58	110.10
24	B	614	CLA	C2D-C1D-ND	8.78	116.57	110.10
24	C	505	CLA	C1D-ND-C4D	-8.78	100.10	106.33
24	B	608	CLA	C1D-ND-C4D	-8.77	100.11	106.33
24	b	625	CLA	C1D-ND-C4D	-8.74	100.13	106.33
24	b	611	CLA	C1D-ND-C4D	-8.73	100.13	106.33
24	C	508	CLA	C1D-ND-C4D	-8.72	100.14	106.33
24	b	616	CLA	C1D-ND-C4D	-8.69	100.16	106.33
24	B	609	CLA	C1D-ND-C4D	-8.69	100.16	106.33
24	B	614	CLA	C1D-ND-C4D	-8.68	100.17	106.33
24	c	513	CLA	C1D-ND-C4D	-8.67	100.18	106.33
24	B	611	CLA	C1D-ND-C4D	-8.66	100.18	106.33
24	C	510	CLA	C1D-ND-C4D	-8.61	100.22	106.33
24	b	621	CLA	C2D-C1D-ND	8.60	116.44	110.10
24	c	516	CLA	C2D-C1D-ND	8.52	116.38	110.10
24	C	511	CLA	C1D-ND-C4D	-8.48	100.31	106.33
24	b	615	CLA	C1D-ND-C4D	-8.48	100.31	106.33
24	d	404	CLA	C2D-C1D-ND	8.47	116.35	110.10
24	b	623	CLA	C2D-C1D-ND	8.47	116.35	110.10
24	c	506	CLA	C1D-ND-C4D	-8.47	100.32	106.33
24	C	513	CLA	C2D-C1D-ND	8.45	116.33	110.10
24	c	509	CLA	C1D-ND-C4D	-8.44	100.34	106.33
24	C	507	CLA	C1D-ND-C4D	-8.43	100.35	106.33
24	C	506	CLA	C1D-ND-C4D	-8.42	100.35	106.33
24	B	604	CLA	C1D-ND-C4D	-8.42	100.35	106.33
24	c	511	CLA	C1D-ND-C4D	-8.35	100.40	106.33
24	B	616	CLA	C2D-C1D-ND	8.30	116.22	110.10
24	A	406	CLA	C2D-C1D-ND	8.27	116.20	110.10
24	C	508	CLA	C2D-C1D-ND	8.24	116.17	110.10
24	b	614	CLA	C2D-C1D-ND	8.23	116.17	110.10
24	C	503	CLA	C2D-C1D-ND	8.22	116.16	110.10
24	c	505	CLA	C2D-C1D-ND	8.22	116.16	110.10
24	C	505	CLA	C2D-C1D-ND	8.22	116.16	110.10
24	b	617	CLA	C1D-ND-C4D	-8.21	100.50	106.33
24	C	504	CLA	C2D-C1D-ND	8.16	116.12	110.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	409	CLA	C2D-C1D-ND	8.14	116.10	110.10
24	b	625	CLA	C2D-C1D-ND	8.14	116.10	110.10
24	b	622	CLA	C1D-ND-C4D	-8.14	100.56	106.33
24	c	508	CLA	C2D-C1D-ND	8.13	116.09	110.10
24	C	502	CLA	C2D-C1D-ND	8.11	116.08	110.10
24	B	607	CLA	C2D-C1D-ND	8.07	116.05	110.10
24	b	618	CLA	C2D-C1D-ND	8.06	116.04	110.10
24	C	512	CLA	C2D-C1D-ND	8.05	116.04	110.10
24	b	620	CLA	C2D-C1D-ND	8.04	116.03	110.10
24	a	412	CLA	C2D-C1D-ND	8.02	116.01	110.10
24	B	602	CLA	C2D-C1D-ND	8.00	116.00	110.10
24	c	515	CLA	C2D-C1D-ND	8.00	116.00	110.10
24	C	509	CLA	C2D-C1D-ND	8.00	116.00	110.10
24	A	407	CLA	C2D-C1D-ND	7.99	115.99	110.10
24	A	405	CLA	C1D-ND-C4D	-7.97	100.67	106.33
24	b	622	CLA	C2D-C1D-ND	7.95	115.96	110.10
24	B	615	CLA	C2D-C1D-ND	7.92	115.94	110.10
24	b	619	CLA	C2D-C1D-ND	7.91	115.94	110.10
24	d	402	CLA	C2D-C1D-ND	7.88	115.91	110.10
24	c	510	CLA	C2D-C1D-ND	7.87	115.90	110.10
24	B	617	CLA	C2D-C1D-ND	7.86	115.89	110.10
24	c	506	CLA	C2D-C1D-ND	7.82	115.87	110.10
24	B	610	CLA	C2D-C1D-ND	7.79	115.85	110.10
24	C	514	CLA	C2D-C1D-ND	7.78	115.84	110.10
24	c	511	CLA	C2D-C1D-ND	7.76	115.83	110.10
25	d	401	PHO	O2D-CGD-CBD	7.76	120.82	111.00
24	B	608	CLA	C2D-C1D-ND	7.74	115.81	110.10
24	B	603	CLA	C2D-C1D-ND	7.73	115.80	110.10
24	B	609	CLA	C2D-C1D-ND	7.72	115.79	110.10
24	b	610	CLA	C2D-C1D-ND	7.68	115.76	110.10
24	c	517	CLA	C2D-C1D-ND	7.67	115.76	110.10
24	B	612	CLA	C2D-C1D-ND	7.66	115.75	110.10
24	b	616	CLA	C2D-C1D-ND	7.63	115.73	110.10
24	D	403	CLA	C2D-C1D-ND	7.62	115.72	110.10
24	c	512	CLA	C2D-C1D-ND	7.61	115.71	110.10
24	B	605	CLA	CMD-C2D-C1D	7.60	138.11	124.71
24	B	611	CLA	C2D-C1D-ND	7.59	115.70	110.10
24	c	507	CLA	C2D-C1D-ND	7.58	115.69	110.10
24	b	615	CLA	C2D-C1D-ND	7.57	115.69	110.10
24	B	605	CLA	C1D-ND-C4D	-7.52	100.99	106.33
24	B	605	CLA	C2D-C1D-ND	7.48	115.61	110.10
24	a	409	CLA	C2D-C1D-ND	7.47	115.61	110.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	613	CLA	C2D-C1D-ND	7.47	115.61	110.10
24	c	513	CLA	C2D-C1D-ND	7.47	115.61	110.10
24	b	612	CLA	C2D-C1D-ND	7.44	115.58	110.10
24	b	611	CLA	C4A-NA-C1A	-7.42	103.37	106.71
24	c	514	CLA	C2D-C1D-ND	7.39	115.55	110.10
24	C	507	CLA	C2D-C1D-ND	7.29	115.47	110.10
24	b	614	CLA	CMD-C2D-C1D	7.24	137.47	124.71
24	b	615	CLA	C4A-NA-C1A	-7.24	103.45	106.71
24	d	403	CLA	C2D-C1D-ND	7.22	115.43	110.10
24	C	510	CLA	C2D-C1D-ND	7.22	115.42	110.10
24	b	613	CLA	C1D-ND-C4D	-7.15	101.26	106.33
24	b	616	CLA	CMD-C2D-C1D	7.14	137.30	124.71
24	b	611	CLA	C2D-C1D-ND	7.10	115.33	110.10
24	d	403	CLA	C4A-NA-C1A	-7.05	103.54	106.71
24	B	604	CLA	C2D-C1D-ND	7.02	115.28	110.10
24	C	511	CLA	C2D-C1D-ND	7.01	115.27	110.10
24	b	619	CLA	CMD-C2D-C1D	7.00	137.04	124.71
24	B	606	CLA	CHD-C4C-C3C	-6.99	114.56	124.84
25	a	411	PHO	O2D-CGD-CBD	6.96	119.81	111.00
24	c	509	CLA	C4A-NA-C1A	-6.95	103.58	106.71
24	C	505	CLA	CMD-C2D-C1D	6.91	136.90	124.71
24	b	614	CLA	CHD-C4C-C3C	-6.84	114.78	124.84
24	B	603	CLA	CMD-C2D-C1D	6.84	136.78	124.71
24	d	404	CLA	CMD-C2D-C1D	6.83	136.75	124.71
24	A	405	CLA	C2D-C1D-ND	6.75	115.08	110.10
24	b	617	CLA	C2D-C1D-ND	6.73	115.07	110.10
24	A	405	CLA	C4A-NA-C1A	-6.73	103.68	106.71
24	a	409	CLA	CMD-C2D-C1D	6.71	136.54	124.71
24	b	613	CLA	C2C-C1C-NC	6.70	116.25	109.97
24	b	614	CLA	CHD-C1D-ND	-6.66	118.33	124.45
24	C	506	CLA	C2D-C1D-ND	6.65	115.00	110.10
24	B	616	CLA	CMD-C2D-C1D	6.64	136.41	124.71
24	B	614	CLA	CMD-C2D-C1D	6.64	136.41	124.71
24	d	403	CLA	CMD-C2D-C1D	6.64	136.41	124.71
24	b	611	CLA	CMD-C2D-C1D	6.63	136.40	124.71
24	b	617	CLA	C4A-NA-C1A	-6.62	103.73	106.71
24	c	508	CLA	CMD-C2D-C1D	6.61	136.37	124.71
24	c	516	CLA	C4A-NA-C1A	-6.59	103.75	106.71
24	A	407	CLA	CHD-C1D-ND	-6.56	118.42	124.45
24	c	511	CLA	O2D-CGD-CBD	6.56	122.93	111.27
24	B	603	CLA	CHD-C1D-ND	-6.55	118.44	124.45
24	b	614	CLA	C4A-NA-C1A	-6.53	103.77	106.71

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	621	CLA	CHD-C4C-C3C	-6.51	115.26	124.84
24	B	616	CLA	CHD-C1D-ND	-6.51	118.47	124.45
24	c	509	CLA	C2D-C1D-ND	6.51	114.90	110.10
24	d	404	CLA	CHD-C1D-ND	-6.51	118.47	124.45
24	b	624	CLA	CMD-C2D-C1D	6.48	136.12	124.71
24	B	607	CLA	CMD-C2D-C1D	6.47	136.12	124.71
24	C	511	CLA	CMD-C2D-C1D	6.47	136.11	124.71
24	b	623	CLA	O2D-CGD-CBD	6.46	122.75	111.27
24	c	514	CLA	CMD-C2D-C1D	6.45	136.07	124.71
24	B	615	CLA	CMD-C2D-C1D	6.45	136.07	124.71
24	b	624	CLA	CHD-C4C-C3C	-6.44	115.37	124.84
24	c	517	CLA	CMD-C2D-C1D	6.43	136.05	124.71
24	b	613	CLA	CMD-C2D-C1D	6.43	136.05	124.71
24	C	508	CLA	CHD-C4C-C3C	-6.43	115.39	124.84
24	b	611	CLA	CHD-C1D-ND	-6.42	118.55	124.45
24	B	616	CLA	CHD-C4C-C3C	-6.42	115.41	124.84
24	B	613	CLA	CHD-C4C-C3C	-6.40	115.43	124.84
24	B	602	CLA	CMD-C2D-C1D	6.40	135.99	124.71
34	d	412	HTG	C1'-S1-C1	6.39	112.05	100.09
24	a	410	CLA	CHD-C4C-C3C	-6.39	115.44	124.84
24	d	403	CLA	CHD-C1D-ND	-6.39	118.58	124.45
24	c	517	CLA	C4A-NA-C1A	-6.37	103.84	106.71
24	B	614	CLA	C2C-C1C-NC	6.37	115.94	109.97
24	C	514	CLA	CHD-C1D-ND	-6.37	118.60	124.45
24	B	612	CLA	C4A-NA-C1A	-6.36	103.85	106.71
24	b	620	CLA	CMD-C2D-C1D	6.36	135.92	124.71
24	c	507	CLA	CMD-C2D-C1D	6.36	135.92	124.71
24	B	603	CLA	C4A-NA-C1A	-6.35	103.85	106.71
24	c	509	CLA	C2C-C1C-NC	6.34	115.92	109.97
24	d	403	CLA	C2C-C1C-NC	6.34	115.91	109.97
24	B	616	CLA	C4A-NA-C1A	-6.34	103.86	106.71
24	C	514	CLA	CMD-C2D-C1D	6.33	135.86	124.71
24	b	615	CLA	CMD-C2D-C1D	6.32	135.85	124.71
24	D	402	CLA	CHD-C4C-C3C	-6.32	115.55	124.84
24	b	610	CLA	CMD-C2D-C1D	6.32	135.85	124.71
24	b	612	CLA	CMD-C2D-C1D	6.31	135.84	124.71
24	C	506	CLA	C4A-NA-C1A	-6.31	103.87	106.71
34	C	523	HTG	C1'-S1-C1	6.30	111.88	100.09
24	C	504	CLA	CHD-C4C-C3C	-6.30	115.58	124.84
24	c	510	CLA	CMD-C2D-C1D	6.29	135.80	124.71
24	C	513	CLA	CHD-C4C-C3C	-6.29	115.59	124.84
24	B	608	CLA	CMD-C2D-C1D	6.29	135.79	124.71

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	403	CLA	CMD-C2D-C1D	6.29	135.79	124.71
24	B	607	CLA	C4A-NA-C1A	-6.26	103.89	106.71
24	B	605	CLA	C2C-C1C-NC	6.26	115.83	109.97
24	b	612	CLA	CHD-C4C-C3C	-6.25	115.65	124.84
24	A	405	CLA	CMD-C2D-C1D	6.25	135.72	124.71
24	B	602	CLA	CHD-C1D-ND	-6.24	118.72	124.45
24	b	610	CLA	O2D-CGD-CBD	6.24	122.36	111.27
24	c	511	CLA	CHD-C4C-C3C	-6.24	115.67	124.84
24	C	502	CLA	O2D-CGD-CBD	6.23	122.35	111.27
24	B	612	CLA	CHD-C4C-C3C	-6.23	115.68	124.84
24	B	607	CLA	CHD-C1D-ND	-6.22	118.74	124.45
24	C	505	CLA	CHD-C1D-ND	-6.21	118.75	124.45
24	b	616	CLA	CHD-C1D-ND	-6.20	118.76	124.45
24	c	517	CLA	CHD-C1D-ND	-6.18	118.77	124.45
24	c	505	CLA	CMD-C2D-C1D	6.18	135.60	124.71
24	b	619	CLA	C4A-NA-C1A	-6.18	103.93	106.71
24	c	516	CLA	CHD-C4C-C3C	-6.18	115.76	124.84
24	C	507	CLA	CMD-C2D-C1D	6.17	135.59	124.71
24	B	610	CLA	CHD-C4C-C3C	-6.17	115.77	124.84
24	c	508	CLA	CHD-C1D-ND	-6.16	118.79	124.45
24	C	503	CLA	CHD-C4C-C3C	-6.16	115.79	124.84
24	B	602	CLA	O2D-CGD-CBD	6.15	122.20	111.27
24	B	617	CLA	O2D-CGD-CBD	6.14	122.18	111.27
24	D	402	CLA	CMD-C2D-C1D	6.14	135.53	124.71
24	c	505	CLA	C2C-C1C-NC	6.14	115.72	109.97
24	b	615	CLA	CHD-C4C-C3C	-6.14	115.82	124.84
24	C	510	CLA	CMD-C2D-C1D	6.14	135.53	124.71
24	d	402	CLA	C2C-C1C-NC	6.13	115.71	109.97
25	A	408	PHO	O2D-CGD-CBD	6.12	118.75	111.00
24	b	622	CLA	C2C-C1C-NC	6.12	115.70	109.97
24	b	613	CLA	O2D-CGD-CBD	6.11	122.13	111.27
24	B	617	CLA	CHD-C4C-C3C	-6.10	115.87	124.84
24	a	412	CLA	CMD-C2D-C1D	6.10	135.47	124.71
24	c	513	CLA	CMD-C2D-C1D	6.10	135.47	124.71
24	b	616	CLA	C2C-C1C-NC	6.10	115.68	109.97
24	B	611	CLA	CMD-C2D-C1D	6.09	135.45	124.71
24	C	509	CLA	CMD-C2D-C1D	6.09	135.44	124.71
24	d	402	CLA	CHD-C4C-C3C	-6.08	115.90	124.84
24	B	603	CLA	CHD-C4C-C3C	-6.07	115.91	124.84
24	C	512	CLA	C2C-C1C-NC	6.06	115.65	109.97
24	B	610	CLA	CMD-C2D-C1D	6.06	135.40	124.71
24	C	509	CLA	CHD-C1D-ND	-6.06	118.89	124.45

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	406	CLA	C2C-C1C-NC	6.06	115.65	109.97
24	C	512	CLA	CMD-C2D-C1D	6.05	135.37	124.71
24	b	610	CLA	CHD-C4C-C3C	-6.05	115.95	124.84
24	b	618	CLA	CMD-C2D-C1D	6.04	135.35	124.71
24	b	616	CLA	CHD-C4C-C3C	-6.04	115.97	124.84
24	C	508	CLA	CMD-C2D-C1D	6.04	135.35	124.71
24	D	402	CLA	CHD-C1D-ND	-6.03	118.91	124.45
24	b	623	CLA	CHD-C1D-ND	-6.03	118.91	124.45
24	b	612	CLA	C4A-NA-C1A	-6.02	104.00	106.71
24	B	606	CLA	CMD-C2D-C1D	6.01	135.31	124.71
24	c	513	CLA	CHD-C4C-C3C	-6.01	116.01	124.84
24	A	406	CLA	CMD-C2D-C1D	6.00	135.29	124.71
24	B	609	CLA	C2C-C1C-NC	6.00	115.59	109.97
24	b	624	CLA	CHD-C1D-ND	-6.00	118.94	124.45
24	C	502	CLA	CMD-C2D-C1D	5.99	135.27	124.71
24	A	407	CLA	CMD-C2D-C1D	5.99	135.27	124.71
24	a	409	CLA	CHD-C1D-ND	-5.98	118.95	124.45
24	b	625	CLA	O2D-CGD-CBD	5.98	121.89	111.27
24	c	507	CLA	CHD-C4C-C3C	-5.97	116.07	124.84
24	b	610	CLA	CHD-C1D-ND	-5.96	118.97	124.45
24	b	613	CLA	CHD-C4C-C3C	-5.96	116.08	124.84
24	B	602	CLA	CHD-C4C-C3C	-5.95	116.10	124.84
24	C	511	CLA	CHD-C4C-C3C	-5.95	116.10	124.84
24	a	412	CLA	CHD-C4C-C3C	-5.95	116.10	124.84
24	A	409	CLA	CHD-C4C-C3C	-5.94	116.11	124.84
24	b	617	CLA	CMD-C2D-C1D	5.93	135.17	124.71
24	B	608	CLA	CHD-C1D-ND	-5.93	119.01	124.45
24	b	618	CLA	CHD-C4C-C3C	-5.93	116.13	124.84
24	d	404	CLA	CHD-C4C-C3C	-5.92	116.13	124.84
24	C	506	CLA	CMD-C2D-C1D	5.92	135.16	124.71
24	b	618	CLA	CHD-C1D-ND	-5.92	119.02	124.45
24	c	507	CLA	C4A-NA-C1A	-5.91	104.05	106.71
24	B	611	CLA	CHD-C1D-ND	-5.91	119.02	124.45
24	B	610	CLA	CHD-C1D-ND	-5.91	119.03	124.45
24	c	516	CLA	CHD-C1D-ND	-5.90	119.03	124.45
24	c	510	CLA	CHD-C1D-ND	-5.90	119.03	124.45
24	B	612	CLA	C2C-C1C-NC	5.90	115.50	109.97
24	c	511	CLA	C2C-C1C-NC	5.90	115.50	109.97
24	C	504	CLA	CHD-C1D-ND	-5.90	119.04	124.45
24	b	623	CLA	CMD-C2D-C1D	5.89	135.09	124.71
24	b	619	CLA	CHD-C1D-ND	-5.88	119.05	124.45
24	C	513	CLA	O2D-CGD-CBD	5.87	121.70	111.27

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	507	CLA	CHD-C1D-ND	-5.87	119.06	124.45
24	d	402	CLA	CMD-C2D-C1D	5.86	135.05	124.71
24	c	505	CLA	CHD-C1D-ND	-5.86	119.07	124.45
24	B	604	CLA	O2D-CGD-CBD	5.86	121.68	111.27
24	D	402	CLA	C2C-C1C-NC	5.86	115.46	109.97
24	C	504	CLA	CMD-C2D-C1D	5.85	135.03	124.71
24	B	604	CLA	CHD-C4C-C3C	-5.85	116.25	124.84
24	B	617	CLA	CMD-C2D-C1D	5.85	135.02	124.71
24	c	510	CLA	CHD-C4C-C3C	-5.84	116.25	124.84
24	b	623	CLA	CHD-C4C-C3C	-5.83	116.26	124.84
24	c	510	CLA	C2C-C1C-NC	5.83	115.43	109.97
24	c	511	CLA	CMD-C2D-C1D	5.83	134.98	124.71
24	A	406	CLA	CHD-C4C-C3C	-5.82	116.28	124.84
24	B	614	CLA	CHD-C4C-C3C	-5.81	116.29	124.84
24	B	617	CLA	C4A-NA-C1A	-5.81	104.09	106.71
24	c	516	CLA	O2D-CGD-CBD	5.81	121.58	111.27
24	b	625	CLA	CMD-C2D-C1D	5.80	134.94	124.71
24	B	605	CLA	CHD-C4C-C3C	-5.80	116.31	124.84
24	A	407	CLA	C4A-NA-C1A	-5.80	104.10	106.71
24	c	516	CLA	CMD-C2D-C1D	5.80	134.93	124.71
24	c	515	CLA	CHD-C4C-C3C	-5.79	116.32	124.84
24	C	506	CLA	CHD-C4C-C3C	-5.78	116.34	124.84
24	B	611	CLA	C2C-C1C-NC	5.78	115.39	109.97
24	B	615	CLA	CHD-C1D-ND	-5.78	119.14	124.45
34	D	412	HTG	C1'-S1-C1	5.77	110.89	100.09
24	a	412	CLA	CHD-C1D-ND	-5.77	119.15	124.45
24	B	615	CLA	CHD-C4C-C3C	-5.77	116.37	124.84
24	D	403	CLA	CHD-C1D-ND	-5.76	119.16	124.45
24	c	509	CLA	CHD-C4C-C3C	-5.76	116.38	124.84
24	c	512	CLA	C2C-C1C-NC	5.75	115.36	109.97
24	a	409	CLA	C4A-NA-C1A	-5.74	104.12	106.71
24	C	512	CLA	CHD-C4C-C3C	-5.74	116.41	124.84
24	B	609	CLA	CMD-C2D-C1D	5.74	134.82	124.71
24	c	514	CLA	C2C-C1C-NC	5.73	115.34	109.97
24	B	608	CLA	C2C-C1C-NC	5.72	115.33	109.97
25	D	401	PHO	O2D-CGD-CBD	5.72	118.24	111.00
24	b	620	CLA	C2C-C1C-NC	5.72	115.33	109.97
24	b	622	CLA	CMD-C2D-C1D	5.70	134.76	124.71
24	c	517	CLA	CHD-C4C-C3C	-5.69	116.47	124.84
24	b	625	CLA	CHD-C4C-C3C	-5.69	116.47	124.84
24	C	502	CLA	CHD-C1D-ND	-5.69	119.22	124.45
24	c	509	CLA	O2D-CGD-CBD	5.69	121.38	111.27

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	620	CLA	CHD-C1D-ND	-5.68	119.23	124.45
34	c	524	HTG	C1'-S1-C1	5.68	110.72	100.09
24	B	607	CLA	CHD-C4C-C3C	-5.68	116.50	124.84
24	c	512	CLA	CHD-C4C-C3C	-5.67	116.51	124.84
24	B	615	CLA	O2D-CGD-CBD	5.66	121.33	111.27
24	C	502	CLA	CHD-C4C-C3C	-5.66	116.52	124.84
24	C	506	CLA	C2C-C1C-NC	5.65	115.27	109.97
24	c	508	CLA	CHD-C4C-C3C	-5.65	116.53	124.84
24	A	407	CLA	CHD-C4C-C3C	-5.65	116.54	124.84
24	c	514	CLA	CHD-C4C-C3C	-5.65	116.54	124.84
24	B	613	CLA	CHD-C1D-ND	-5.65	119.27	124.45
24	b	617	CLA	CHD-C4C-C3C	-5.65	116.54	124.84
24	b	625	CLA	CHD-C1D-ND	-5.64	119.27	124.45
24	B	607	CLA	C2C-C1C-NC	5.64	115.25	109.97
24	b	619	CLA	CHD-C4C-C3C	-5.64	116.55	124.84
24	b	618	CLA	C2C-C1C-NC	5.62	115.24	109.97
24	b	621	CLA	C2C-C1C-NC	5.61	115.23	109.97
24	c	515	CLA	CHD-C1D-ND	-5.61	119.30	124.45
34	B	633	HTG	C1'-S1-C1	5.61	110.59	100.09
24	B	613	CLA	O2D-CGD-CBD	5.61	121.23	111.27
24	C	503	CLA	CMD-C2D-C1D	5.60	134.59	124.71
24	c	506	CLA	C4A-NA-C1A	-5.60	104.19	106.71
24	a	410	CLA	CMD-C2D-C1D	5.60	134.58	124.71
24	C	512	CLA	CHD-C1D-ND	-5.60	119.31	124.45
24	a	409	CLA	C2C-C1C-NC	5.60	115.21	109.97
24	B	604	CLA	C4A-NA-C1A	-5.59	104.19	106.71
24	c	506	CLA	CHD-C4C-C3C	-5.59	116.62	124.84
24	B	609	CLA	CHD-C4C-C3C	-5.59	116.63	124.84
24	b	612	CLA	O2D-CGD-CBD	5.58	121.19	111.27
24	c	514	CLA	CHD-C1D-ND	-5.58	119.33	124.45
24	C	509	CLA	CHD-C4C-C3C	-5.58	116.64	124.84
24	a	410	CLA	CHD-C1D-ND	-5.56	119.34	124.45
24	b	615	CLA	C2C-C1C-NC	5.56	115.19	109.97
24	a	412	CLA	C2C-C1C-NC	5.56	115.18	109.97
24	A	406	CLA	CHD-C1D-ND	-5.56	119.34	124.45
24	c	506	CLA	CHD-C1D-ND	-5.56	119.34	124.45
24	D	403	CLA	C2C-C1C-NC	5.56	115.18	109.97
24	C	507	CLA	CHD-C4C-C3C	-5.55	116.68	124.84
38	E	102	HEM	CHC-C4B-NB	5.55	130.46	124.43
24	C	514	CLA	CHD-C4C-C3C	-5.54	116.70	124.84
24	b	620	CLA	CHD-C4C-C3C	-5.52	116.73	124.84
24	B	606	CLA	CHD-C1D-ND	-5.52	119.38	124.45

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	615	CLA	CHD-C1D-ND	-5.52	119.38	124.45
24	c	513	CLA	C2C-C1C-NC	5.52	115.14	109.97
24	C	505	CLA	CHD-C4C-C3C	-5.51	116.74	124.84
27	f	102	SQD	O47-C7-C8	5.51	123.37	111.50
24	c	509	CLA	CMD-C2D-C1D	5.50	134.40	124.71
24	D	402	CLA	C4A-NA-C1A	-5.50	104.23	106.71
24	A	405	CLA	C2C-C1C-NC	5.50	115.12	109.97
24	A	409	CLA	CMD-C2D-C1D	5.50	134.40	124.71
24	C	509	CLA	O2D-CGD-CBD	5.50	121.03	111.27
24	C	513	CLA	CMD-C2D-C1D	5.49	134.38	124.71
24	c	508	CLA	C2C-C1C-NC	5.49	115.11	109.97
24	C	510	CLA	C2C-C1C-NC	5.48	115.10	109.97
24	C	504	CLA	C4A-NA-C1A	-5.47	104.25	106.71
24	A	407	CLA	O2D-CGD-CBD	5.46	120.98	111.27
24	B	615	CLA	C4A-NA-C1A	-5.46	104.25	106.71
24	C	510	CLA	CHD-C4C-C3C	-5.46	116.82	124.84
24	B	604	CLA	C2C-C1C-NC	5.45	115.08	109.97
24	C	507	CLA	C2C-C1C-NC	5.45	115.08	109.97
24	B	609	CLA	CHD-C1D-ND	-5.45	119.45	124.45
24	c	512	CLA	CHD-C1D-ND	-5.44	119.46	124.45
24	b	610	CLA	C4A-NA-C1A	-5.43	104.27	106.71
24	C	508	CLA	CHD-C1D-ND	-5.42	119.47	124.45
24	B	615	CLA	C2C-C1C-NC	5.42	115.05	109.97
24	c	505	CLA	O2D-CGD-CBD	5.41	120.88	111.27
24	c	512	CLA	CMD-C2D-C1D	5.41	134.25	124.71
24	C	509	CLA	C2C-C1C-NC	5.40	115.03	109.97
24	d	404	CLA	C4A-NA-C1A	-5.40	104.28	106.71
24	C	513	CLA	CHD-C1D-ND	-5.39	119.50	124.45
24	c	507	CLA	CHD-C1D-ND	-5.39	119.50	124.45
34	B	625	HTG	C1'-S1-C1	5.38	110.16	100.09
27	L	102	SQD	O6-C1-C2	5.37	116.69	108.30
24	b	612	CLA	C2C-C1C-NC	5.36	115.00	109.97
24	c	511	CLA	CHD-C1D-ND	-5.35	119.54	124.45
24	C	511	CLA	C2C-C1C-NC	5.35	114.98	109.97
24	a	409	CLA	CHD-C4C-C3C	-5.34	117.00	124.84
24	B	610	CLA	C4A-NA-C1A	-5.33	104.31	106.71
24	d	402	CLA	CHD-C1D-ND	-5.33	119.55	124.45
24	b	624	CLA	C2C-C1C-NC	5.33	114.97	109.97
24	C	508	CLA	O2D-CGD-CBD	5.32	120.72	111.27
24	b	625	CLA	C2C-C1C-NC	5.31	114.95	109.97
24	D	403	CLA	C4A-NA-C1A	-5.30	104.32	106.71
24	B	604	CLA	CMD-C2D-C1D	5.30	134.05	124.71

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	507	CLA	C4A-NA-C1A	-5.29	104.33	106.71
24	c	515	CLA	C2C-C1C-NC	5.29	114.92	109.97
34	c	525	HTG	C1'-S1-C1	5.28	109.97	100.09
24	C	509	CLA	C4A-NA-C1A	-5.28	104.33	106.71
24	C	510	CLA	CHD-C1D-ND	-5.28	119.60	124.45
24	B	611	CLA	CHD-C4C-C3C	-5.27	117.10	124.84
24	B	603	CLA	C2C-C1C-NC	5.26	114.90	109.97
24	B	612	CLA	CHD-C1D-ND	-5.26	119.62	124.45
27	B	621	SQD	O6-C1-C2	5.26	116.51	108.30
24	b	615	CLA	O2D-CGD-CBD	5.26	120.61	111.27
24	B	613	CLA	CMD-C2D-C1D	5.25	133.97	124.71
24	c	506	CLA	C2C-C1C-NC	5.25	114.89	109.97
24	B	607	CLA	O2D-CGD-CBD	5.25	120.60	111.27
24	B	614	CLA	C3D-C2D-C1D	-5.24	98.67	105.83
24	B	605	CLA	O2D-CGD-CBD	5.24	120.58	111.27
24	b	617	CLA	C2C-C1C-NC	5.23	114.88	109.97
24	b	614	CLA	C2C-C1C-NC	5.23	114.87	109.97
24	b	612	CLA	CHD-C1D-ND	-5.23	119.65	124.45
24	C	511	CLA	CHD-C1D-ND	-5.22	119.65	124.45
24	D	403	CLA	CHD-C4C-C3C	-5.22	117.17	124.84
27	a	414	SQD	O6-C1-C2	5.21	116.44	108.30
24	b	620	CLA	C4A-NA-C1A	-5.21	104.36	106.71
24	c	505	CLA	CHD-C4C-C3C	-5.20	117.19	124.84
24	B	608	CLA	C4A-NA-C1A	-5.20	104.37	106.71
34	C	524	HTG	C1'-S1-C1	5.20	109.82	100.09
24	b	611	CLA	CHD-C4C-C3C	-5.20	117.20	124.84
24	b	623	CLA	C2C-C1C-NC	5.19	114.83	109.97
24	B	612	CLA	CMD-C2D-C1D	5.18	133.85	124.71
24	c	508	CLA	O2D-CGD-CBD	5.18	120.47	111.27
24	C	505	CLA	C2C-C1C-NC	5.17	114.82	109.97
24	B	614	CLA	CHD-C1D-ND	-5.17	119.70	124.45
24	C	506	CLA	O2D-CGD-CBD	5.17	120.45	111.27
24	a	410	CLA	C2C-C1C-NC	5.16	114.80	109.97
24	C	514	CLA	C2C-C1C-NC	5.15	114.80	109.97
24	b	625	CLA	C4A-NA-C1A	-5.14	104.39	106.71
24	A	406	CLA	O2D-CGD-CBD	5.13	120.39	111.27
24	c	515	CLA	CMD-C2D-C1D	5.13	133.75	124.71
24	C	505	CLA	C3D-C2D-C1D	-5.13	98.84	105.83
24	C	502	CLA	C2C-C1C-NC	5.12	114.77	109.97
26	Y	101	BCR	C33-C5-C6	-5.12	118.78	124.53
24	C	503	CLA	CHD-C1D-ND	-5.12	119.75	124.45
24	b	622	CLA	CHD-C4C-C3C	-5.12	117.32	124.84

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	409	CLA	C2C-C1C-NC	5.12	114.76	109.97
24	A	406	CLA	C3D-C2D-C1D	-5.11	98.85	105.83
24	b	611	CLA	C2C-C1C-NC	5.10	114.75	109.97
24	d	404	CLA	C2C-C1C-NC	5.10	114.75	109.97
24	b	611	CLA	O2D-CGD-CBD	5.09	120.32	111.27
24	A	409	CLA	CHD-C1D-ND	-5.08	119.78	124.45
24	d	404	CLA	C3D-C2D-C1D	-5.08	98.89	105.83
24	c	512	CLA	C4A-NA-C1A	-5.08	104.42	106.71
24	C	513	CLA	C2C-C1C-NC	5.07	114.72	109.97
24	B	610	CLA	C2C-C1C-NC	5.06	114.71	109.97
34	B	625	HTG	O5-C1-C2	5.05	116.67	110.31
25	A	408	PHO	C1-C2-C3	-5.05	117.31	126.04
24	B	602	CLA	C2C-C1C-NC	5.04	114.70	109.97
25	d	401	PHO	C1-C2-C3	-5.04	117.32	126.04
24	B	608	CLA	CHD-C4C-C3C	-5.02	117.46	124.84
24	C	511	CLA	O2D-CGD-CBD	5.01	120.18	111.27
24	c	512	CLA	O2D-CGD-CBD	5.01	120.17	111.27
24	b	621	CLA	C3C-C4C-NC	5.01	116.19	110.57
24	c	508	CLA	C4A-NA-C1A	-5.01	104.45	106.71
27	F	103	SQD	O47-C7-C8	5.01	122.29	111.50
24	A	407	CLA	C3D-C4D-ND	5.00	118.33	110.24
24	C	514	CLA	C4A-NA-C1A	-5.00	104.46	106.71
34	b	632	HTG	C1'-S1-C1	5.00	109.44	100.09
24	C	505	CLA	O2D-CGD-CBD	4.99	120.14	111.27
24	c	509	CLA	C3C-C4C-NC	4.99	116.17	110.57
24	B	605	CLA	C3D-C2D-C1D	-4.99	99.03	105.83
24	c	513	CLA	O2D-CGD-CBD	4.98	120.11	111.27
24	c	506	CLA	CMD-C2D-C1D	4.98	133.49	124.71
24	b	623	CLA	C3D-C2D-C1D	-4.98	99.04	105.83
27	A	411	SQD	O47-C7-C8	4.97	122.21	111.50
26	t	101	BCR	C33-C5-C6	-4.96	118.96	124.53
38	E	102	HEM	CAD-CBD-CGD	4.96	124.28	113.60
24	b	622	CLA	C4A-NA-C1A	-4.96	104.48	106.71
24	B	605	CLA	CHD-C1D-ND	-4.95	119.90	124.45
24	b	622	CLA	C3D-C2D-C1D	-4.95	99.07	105.83
24	C	513	CLA	C4A-NA-C1A	-4.95	104.48	106.71
24	A	405	CLA	CHD-C4C-C3C	-4.95	117.57	124.84
24	B	609	CLA	O2D-CGD-CBD	4.95	120.06	111.27
24	B	613	CLA	C3C-C4C-NC	4.94	116.11	110.57
24	b	617	CLA	CHD-C1D-ND	-4.94	119.92	124.45
24	b	624	CLA	C3D-C2D-C1D	-4.94	99.09	105.83
24	c	513	CLA	C4A-NA-C1A	-4.93	104.49	106.71

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	402	CLA	C3D-C2D-C1D	-4.93	99.10	105.83
24	B	616	CLA	C2C-C1C-NC	4.93	114.59	109.97
34	B	624	HTG	C1'-S1-C1	4.93	109.31	100.09
24	C	504	CLA	C2C-C1C-NC	4.92	114.58	109.97
24	b	619	CLA	C2C-C1C-NC	4.92	114.58	109.97
24	C	503	CLA	C4A-NA-C1A	-4.92	104.50	106.71
24	b	616	CLA	O2D-CGD-CBD	4.92	120.00	111.27
24	A	406	CLA	C4A-NA-C1A	-4.92	104.50	106.71
24	C	510	CLA	C4A-NA-C1A	-4.92	104.50	106.71
24	c	513	CLA	CHD-C1D-ND	-4.91	119.94	124.45
24	C	510	CLA	C1-C2-C3	-4.90	117.57	126.04
24	B	603	CLA	O2D-CGD-CBD	4.87	119.93	111.27
24	A	405	CLA	CHD-C1D-ND	-4.87	119.98	124.45
24	c	511	CLA	C3C-C4C-NC	4.86	116.02	110.57
24	D	403	CLA	O2D-CGD-CBD	4.86	119.90	111.27
24	b	613	CLA	C3D-C2D-C1D	-4.84	99.22	105.83
24	b	622	CLA	CHD-C1D-ND	-4.84	120.00	124.45
24	c	505	CLA	C3D-C2D-C1D	-4.84	99.23	105.83
24	B	606	CLA	C3D-C2D-C1D	-4.84	99.23	105.83
24	b	624	CLA	C4A-NA-C1A	-4.83	104.53	106.71
24	B	613	CLA	C3D-C2D-C1D	-4.83	99.24	105.83
24	A	409	CLA	C4A-NA-C1A	-4.83	104.53	106.71
24	c	517	CLA	C2C-C1C-NC	4.83	114.50	109.97
34	C	524	HTG	C1-O5-C5	4.82	121.48	112.58
24	B	617	CLA	C2C-C1C-NC	4.82	114.49	109.97
24	B	606	CLA	O2D-CGD-CBD	4.82	119.83	111.27
24	b	621	CLA	O2D-CGD-CBD	4.81	119.82	111.27
24	c	508	CLA	C3D-C2D-C1D	-4.80	99.28	105.83
24	a	410	CLA	O2D-CGD-CBD	4.80	119.79	111.27
27	B	621	SQD	O47-C7-C8	4.79	121.83	111.50
24	c	514	CLA	O2D-CGD-CBD	4.79	119.78	111.27
24	B	613	CLA	C2C-C1C-NC	4.79	114.46	109.97
24	C	503	CLA	C2C-C1C-NC	4.79	114.46	109.97
24	b	610	CLA	C2C-C1C-NC	4.79	114.46	109.97
24	C	506	CLA	C3C-C4C-NC	4.78	115.94	110.57
24	C	502	CLA	C4A-NA-C1A	-4.78	104.56	106.71
24	c	507	CLA	C2C-C1C-NC	4.78	114.45	109.97
24	B	604	CLA	CHD-C1D-ND	-4.78	120.06	124.45
24	C	513	CLA	C3D-C2D-C1D	-4.77	99.32	105.83
24	b	615	CLA	C3D-C2D-C1D	-4.77	99.32	105.83
24	B	614	CLA	C3C-C4C-NC	4.77	115.92	110.57
24	c	510	CLA	C3D-C2D-C1D	-4.76	99.33	105.83

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	614	CLA	C3D-C2D-C1D	-4.76	99.33	105.83
24	b	625	CLA	C3D-C2D-C1D	-4.76	99.33	105.83
24	d	402	CLA	C3D-C2D-C1D	-4.76	99.33	105.83
24	C	508	CLA	C3D-C2D-C1D	-4.75	99.34	105.83
24	a	410	CLA	C3D-C2D-C1D	-4.75	99.35	105.83
24	C	509	CLA	C3D-C2D-C1D	-4.75	99.35	105.83
24	b	616	CLA	C3D-C2D-C1D	-4.75	99.35	105.83
24	B	615	CLA	C3D-C2D-C1D	-4.74	99.36	105.83
26	B	618	BCR	C33-C5-C6	-4.74	119.20	124.53
24	c	509	CLA	CHD-C1D-ND	-4.74	120.10	124.45
24	B	604	CLA	O2D-CGD-O1D	-4.73	114.59	123.84
24	a	410	CLA	C3D-C4D-ND	4.73	117.89	110.24
26	b	626	BCR	C33-C5-C6	-4.72	119.23	124.53
24	d	403	CLA	C3D-C4D-ND	4.72	117.87	110.24
36	C	517	DGD	O2G-C1B-C2B	4.72	121.67	111.50
24	b	614	CLA	O2D-CGD-CBD	4.72	119.65	111.27
24	B	606	CLA	C3D-C4D-ND	4.71	117.86	110.24
29	A	416	LMT	C1'-O5'-C5'	4.71	122.93	113.69
26	y	101	BCR	C33-C5-C6	-4.71	119.24	124.53
24	C	503	CLA	C3D-C2D-C1D	-4.70	99.42	105.83
24	A	407	CLA	C2C-C1C-NC	4.70	114.37	109.97
24	b	619	CLA	C3D-C2D-C1D	-4.70	99.42	105.83
24	C	503	CLA	O2D-CGD-CBD	4.69	119.61	111.27
24	B	617	CLA	CHD-C1D-ND	-4.69	120.14	124.45
24	b	619	CLA	O2D-CGD-CBD	4.69	119.60	111.27
24	d	402	CLA	O2D-CGD-CBD	4.68	119.59	111.27
24	A	406	CLA	C1C-C2C-C3C	-4.68	102.04	106.96
26	D	404	BCR	C7-C8-C9	-4.67	119.18	126.23
24	b	613	CLA	C4A-NA-C1A	-4.66	104.61	106.71
24	c	515	CLA	C3D-C4D-ND	4.66	117.77	110.24
24	b	614	CLA	C3D-C4D-ND	4.65	117.76	110.24
24	B	602	CLA	C3D-C4D-ND	4.65	117.75	110.24
34	b	632	HTG	O5-C1-C2	4.64	116.15	110.31
24	B	607	CLA	C3D-C2D-C1D	-4.64	99.50	105.83
24	b	618	CLA	C4A-NA-C1A	-4.64	104.62	106.71
24	c	516	CLA	C3D-C2D-C1D	-4.63	99.51	105.83
24	b	616	CLA	C1C-C2C-C3C	-4.63	102.09	106.96
24	b	618	CLA	C3D-C2D-C1D	-4.63	99.51	105.83
24	b	610	CLA	C3D-C2D-C1D	-4.63	99.52	105.83
24	b	614	CLA	C3C-C4C-NC	4.62	115.76	110.57
24	b	612	CLA	C3C-C4C-NC	4.62	115.75	110.57
27	L	102	SQD	O47-C7-C8	4.62	121.46	111.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	d	403	CLA	CHD-C4C-C3C	-4.62	118.05	124.84
24	b	623	CLA	C4A-NA-C1A	-4.62	104.63	106.71
24	B	606	CLA	C3C-C4C-NC	4.62	115.75	110.57
24	b	613	CLA	CHD-C1D-ND	-4.61	120.22	124.45
24	B	611	CLA	C3D-C2D-C1D	-4.60	99.55	105.83
24	a	412	CLA	C3D-C2D-C1D	-4.60	99.55	105.83
24	C	505	CLA	C4A-NA-C1A	-4.59	104.64	106.71
24	C	507	CLA	C3D-C2D-C1D	-4.59	99.57	105.83
24	B	616	CLA	C3D-C4D-ND	4.59	117.66	110.24
24	c	507	CLA	C3C-C4C-NC	4.59	115.71	110.57
24	C	502	CLA	C3D-C2D-C1D	-4.59	99.57	105.83
36	e	101	DGD	O2G-C1B-C2B	4.58	121.38	111.50
24	d	402	CLA	C1C-C2C-C3C	-4.58	102.14	106.96
24	D	402	CLA	C3C-C4C-NC	4.58	115.70	110.57
24	B	614	CLA	C4A-NA-C1A	-4.58	104.65	106.71
24	B	610	CLA	C3D-C2D-C1D	-4.57	99.59	105.83
24	c	506	CLA	O2D-CGD-CBD	4.57	119.39	111.27
24	b	618	CLA	C3D-C4D-ND	4.57	117.63	110.24
24	B	617	CLA	C3D-C2D-C1D	-4.57	99.59	105.83
26	B	620	BCR	C15-C14-C13	-4.56	120.80	127.31
24	b	613	CLA	C3C-C4C-NC	4.56	115.69	110.57
24	c	511	CLA	C3D-C2D-C1D	-4.56	99.61	105.83
24	B	616	CLA	C3D-C2D-C1D	-4.56	99.61	105.83
24	D	403	CLA	C3D-C2D-C1D	-4.55	99.62	105.83
24	B	608	CLA	O2D-CGD-CBD	4.55	119.35	111.27
24	C	510	CLA	O2D-CGD-CBD	4.55	119.35	111.27
24	B	608	CLA	C3D-C2D-C1D	-4.55	99.63	105.83
24	c	517	CLA	C3D-C4D-ND	4.54	117.59	110.24
35	C	521	LMG	O7-C10-C11	4.54	121.29	111.50
24	B	603	CLA	C3D-C2D-C1D	-4.54	99.63	105.83
24	A	409	CLA	C3C-C4C-NC	4.54	115.66	110.57
24	A	409	CLA	C3D-C2D-C1D	-4.54	99.64	105.83
24	C	504	CLA	C3C-C4C-NC	4.53	115.66	110.57
24	b	613	CLA	C1C-C2C-C3C	-4.53	102.19	106.96
24	c	511	CLA	C4A-NA-C1A	-4.53	104.67	106.71
24	b	621	CLA	C3D-C2D-C1D	-4.53	99.65	105.83
24	B	611	CLA	O2D-CGD-CBD	4.53	119.32	111.27
35	C	501	LMG	O7-C10-C11	4.53	121.26	111.50
24	a	412	CLA	O2D-CGD-CBD	4.52	119.31	111.27
24	C	508	CLA	C4A-NA-C1A	-4.52	104.67	106.71
24	c	506	CLA	C3D-C2D-C1D	-4.52	99.66	105.83
38	V	205	HEM	C1B-NB-C4B	4.52	109.74	105.07

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	504	CLA	C3D-C2D-C1D	-4.51	99.67	105.83
24	b	621	CLA	CMD-C2D-C1D	4.51	132.65	124.71
24	C	508	CLA	C3C-C4C-NC	4.50	115.62	110.57
35	a	415	LMG	O7-C10-C11	4.50	121.19	111.50
24	B	612	CLA	C3C-C4C-NC	4.49	115.61	110.57
24	B	613	CLA	C3D-C4D-ND	4.49	117.51	110.24
24	c	507	CLA	C3D-C2D-C1D	-4.48	99.71	105.83
35	c	523	LMG	O7-C10-C11	4.48	121.16	111.50
38	e	103	HEM	CHC-C4B-NB	4.48	129.30	124.43
24	C	508	CLA	C2C-C1C-NC	4.48	114.17	109.97
24	C	511	CLA	C1-C2-C3	-4.48	118.30	126.04
24	b	620	CLA	O2D-CGD-CBD	4.48	119.22	111.27
24	C	504	CLA	C3D-C4D-ND	4.47	117.47	110.24
24	c	516	CLA	C2C-C1C-NC	4.47	114.16	109.97
34	b	631	HTG	C1'-S1-C1	4.47	108.44	100.09
24	c	513	CLA	C3D-C2D-C1D	-4.46	99.74	105.83
24	d	404	CLA	O2D-CGD-CBD	4.45	119.18	111.27
24	C	511	CLA	C4A-NA-C1A	-4.45	104.70	106.71
24	a	412	CLA	C1C-C2C-C3C	-4.45	102.28	106.96
24	C	514	CLA	C3D-C4D-ND	4.45	117.44	110.24
24	b	619	CLA	C3D-C4D-ND	4.44	117.43	110.24
24	b	615	CLA	C3C-C4C-NC	4.44	115.55	110.57
24	C	514	CLA	C3D-C2D-C1D	-4.44	99.77	105.83
24	B	606	CLA	C2C-C1C-NC	4.44	114.13	109.97
24	c	512	CLA	C3D-C2D-C1D	-4.44	99.78	105.83
24	B	612	CLA	C3D-C4D-ND	4.44	117.41	110.24
24	a	410	CLA	C3C-C4C-NC	4.43	115.54	110.57
24	b	611	CLA	C3D-C4D-ND	4.43	117.41	110.24
24	C	502	CLA	C3D-C4D-ND	4.43	117.41	110.24
34	B	632	HTG	C1'-S1-C1	4.43	108.37	100.09
24	b	612	CLA	CAA-C2A-C3A	-4.42	100.66	112.78
24	C	512	CLA	C3D-C2D-C1D	-4.42	99.80	105.83
24	B	611	CLA	C4A-NA-C1A	-4.42	104.72	106.71
24	b	623	CLA	C1-C2-C3	-4.42	118.40	126.04
38	v	205	HEM	CHC-C4B-NB	4.42	129.23	124.43
24	A	409	CLA	C3D-C4D-ND	4.42	117.38	110.24
24	B	615	CLA	C3C-C4C-NC	4.41	115.52	110.57
24	B	603	CLA	C3D-C4D-ND	4.41	117.37	110.24
24	b	620	CLA	C3D-C2D-C1D	-4.41	99.82	105.83
24	C	507	CLA	O2D-CGD-CBD	4.41	119.10	111.27
24	b	616	CLA	C3C-C4C-NC	4.40	115.51	110.57
24	a	412	CLA	C4A-NA-C1A	-4.40	104.73	106.71

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	605	CLA	C3C-C4C-NC	4.40	115.50	110.57
24	c	517	CLA	C3D-C2D-C1D	-4.39	99.83	105.83
24	D	403	CLA	C3D-C4D-ND	4.39	117.34	110.24
24	c	505	CLA	C4A-NA-C1A	-4.38	104.73	106.71
24	b	612	CLA	C1D-CHD-C4C	-4.38	116.60	126.06
24	c	507	CLA	C3D-C4D-ND	4.38	117.33	110.24
34	b	607	HTG	C1'-S1-C1	4.38	108.28	100.09
24	b	620	CLA	C3D-C4D-ND	4.38	117.32	110.24
24	B	602	CLA	C3D-C2D-C1D	-4.37	99.87	105.83
24	c	512	CLA	C3D-C4D-ND	4.37	117.31	110.24
24	C	513	CLA	C3C-C4C-NC	4.36	115.47	110.57
24	c	509	CLA	C3D-C4D-ND	4.36	117.30	110.24
24	C	506	CLA	CHD-C1D-ND	-4.36	120.44	124.45
24	B	609	CLA	C3D-C2D-C1D	-4.36	99.88	105.83
24	C	503	CLA	C3C-C4C-NC	4.36	115.46	110.57
24	a	409	CLA	C3D-C2D-C1D	-4.36	99.88	105.83
24	d	404	CLA	C3D-C4D-ND	4.35	117.28	110.24
24	b	621	CLA	C1D-CHD-C4C	-4.35	116.68	126.06
24	b	615	CLA	C1D-CHD-C4C	-4.34	116.69	126.06
24	b	624	CLA	C3C-C4C-NC	4.34	115.44	110.57
24	B	609	CLA	C4A-NA-C1A	-4.34	104.76	106.71
36	e	101	DGD	O6E-C5E-C4E	4.33	117.56	109.69
24	D	402	CLA	O2D-CGD-CBD	4.33	118.96	111.27
24	B	604	CLA	C3C-C4C-NC	4.31	115.41	110.57
24	B	610	CLA	C3D-C4D-ND	4.31	117.21	110.24
24	b	612	CLA	C3D-C2D-C1D	-4.31	99.95	105.83
24	b	624	CLA	C3D-C4D-ND	4.31	117.20	110.24
24	B	609	CLA	C1C-C2C-C3C	-4.30	102.43	106.96
24	B	610	CLA	O2D-CGD-CBD	4.30	118.91	111.27
24	B	606	CLA	C4A-NA-C1A	-4.30	104.77	106.71
24	b	610	CLA	C3D-C4D-ND	4.29	117.18	110.24
27	A	411	SQD	O6-C1-C2	4.29	115.00	108.30
24	b	625	CLA	CAC-C3C-C4C	4.29	130.37	124.81
24	c	516	CLA	C3D-C4D-ND	4.28	117.17	110.24
27	L	102	SQD	C3-C4-C5	4.28	117.88	110.24
24	A	407	CLA	C3D-C2D-C1D	-4.28	99.99	105.83
38	E	102	HEM	C1B-NB-C4B	4.28	109.50	105.07
24	B	604	CLA	C3D-C4D-ND	4.28	117.16	110.24
24	b	618	CLA	O2D-CGD-CBD	4.28	118.87	111.27
24	c	514	CLA	C4A-NA-C1A	-4.28	104.78	106.71
24	B	612	CLA	O2D-CGD-CBD	4.27	118.86	111.27
24	B	616	CLA	C3C-C4C-NC	4.27	115.36	110.57

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	610	CLA	C3C-C4C-NC	4.26	115.35	110.57
26	H	101	BCR	C16-C17-C18	-4.26	121.23	127.31
24	b	611	CLA	C3D-C2D-C1D	-4.25	100.03	105.83
24	B	605	CLA	C4A-NA-C1A	-4.25	104.80	106.71
24	B	617	CLA	C1D-CHD-C4C	-4.25	116.90	126.06
24	b	623	CLA	O2D-CGD-O1D	-4.25	115.54	123.84
24	B	609	CLA	C3D-C4D-ND	4.25	117.11	110.24
24	C	511	CLA	C3D-C2D-C1D	-4.24	100.04	105.83
24	c	514	CLA	C3D-C2D-C1D	-4.24	100.04	105.83
24	c	508	CLA	C3D-C4D-ND	4.24	117.10	110.24
38	v	205	HEM	C1B-NB-C4B	4.24	109.45	105.07
24	b	621	CLA	CHD-C1D-ND	-4.24	120.56	124.45
24	C	512	CLA	C3B-C4B-NB	4.24	114.69	109.21
24	C	510	CLA	C3D-C2D-C1D	-4.23	100.05	105.83
24	a	409	CLA	C3D-C4D-ND	4.23	117.08	110.24
24	C	512	CLA	C3D-C4D-ND	4.23	117.08	110.24
24	B	607	CLA	C3D-C4D-ND	4.23	117.08	110.24
24	B	612	CLA	CMC-C2C-C1C	4.23	131.47	125.04
24	c	510	CLA	O2D-CGD-CBD	4.22	118.77	111.27
24	c	510	CLA	C3D-C4D-ND	4.22	117.07	110.24
24	b	616	CLA	C3D-C4D-ND	4.22	117.06	110.24
24	C	509	CLA	C3D-C4D-ND	4.21	117.05	110.24
24	c	514	CLA	C3D-C4D-ND	4.21	117.04	110.24
24	a	412	CLA	C3D-C4D-ND	4.21	117.04	110.24
24	c	510	CLA	C4A-NA-C1A	-4.21	104.81	106.71
24	c	513	CLA	C1D-CHD-C4C	-4.20	117.00	126.06
24	C	513	CLA	C3D-C4D-ND	4.19	117.02	110.24
24	b	623	CLA	C3D-C4D-ND	4.19	117.02	110.24
24	b	622	CLA	C3B-C4B-NB	4.19	114.62	109.21
24	C	505	CLA	CBC-CAC-C3C	-4.19	100.88	112.43
24	B	607	CLA	C1C-C2C-C3C	-4.19	102.55	106.96
24	A	405	CLA	CAC-C3C-C4C	4.19	130.24	124.81
24	B	606	CLA	C1D-CHD-C4C	-4.19	117.03	126.06
24	c	515	CLA	C3D-C2D-C1D	-4.18	100.12	105.83
24	B	604	CLA	C1C-C2C-C3C	-4.18	102.56	106.96
24	A	406	CLA	CBC-CAC-C3C	-4.18	100.91	112.43
27	a	414	SQD	O47-C7-C8	4.18	120.51	111.50
24	B	617	CLA	C3C-C4C-NC	4.18	115.26	110.57
24	A	405	CLA	C1D-CHD-C4C	-4.18	117.05	126.06
24	C	504	CLA	C1D-CHD-C4C	-4.18	117.05	126.06
24	D	402	CLA	C3D-C4D-ND	4.17	116.99	110.24
24	c	513	CLA	C3C-C4C-NC	4.17	115.25	110.57

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	512	CLA	C3C-C4C-NC	4.17	115.25	110.57
24	C	503	CLA	C1-C2-C3	-4.17	118.83	126.04
24	c	510	CLA	C1C-C2C-C3C	-4.17	102.57	106.96
24	B	611	CLA	C3D-C4D-ND	4.17	116.98	110.24
24	d	403	CLA	C3D-C2D-C1D	-4.17	100.14	105.83
36	D	406	DGD	O2G-C1B-C2B	4.17	120.48	111.50
24	A	406	CLA	C3D-C4D-ND	4.15	116.95	110.24
24	B	612	CLA	C3D-C2D-C1D	-4.15	100.17	105.83
24	c	507	CLA	C1D-CHD-C4C	-4.14	117.12	126.06
24	c	505	CLA	C3C-C4C-NC	4.14	115.22	110.57
24	d	402	CLA	C3D-C4D-ND	4.14	116.94	110.24
26	b	626	BCR	C7-C8-C9	-4.13	119.99	126.23
37	D	409	LHG	O7-C7-C8	4.13	120.40	111.50
24	C	511	CLA	C3D-C4D-ND	4.13	116.92	110.24
24	C	511	CLA	C3C-C4C-NC	4.13	115.20	110.57
25	d	401	PHO	O2D-CGD-O1D	-4.13	115.77	123.84
24	C	509	CLA	C3C-C4C-NC	4.12	115.20	110.57
24	C	507	CLA	C3D-C4D-ND	4.12	116.91	110.24
24	d	402	CLA	C1D-CHD-C4C	-4.12	117.16	126.06
24	C	506	CLA	C1D-CHD-C4C	-4.12	117.17	126.06
24	B	615	CLA	C3D-C4D-ND	4.12	116.90	110.24
24	C	514	CLA	C3C-C4C-NC	4.12	115.19	110.57
24	b	617	CLA	O2D-CGD-CBD	4.11	118.58	111.27
26	d	405	BCR	C24-C23-C22	-4.11	120.03	126.23
24	b	625	CLA	C3B-C4B-NB	4.11	114.52	109.21
24	c	515	CLA	C1D-CHD-C4C	-4.10	117.20	126.06
24	D	403	CLA	C3C-C4C-NC	4.10	115.17	110.57
24	C	512	CLA	C1D-CHD-C4C	-4.10	117.21	126.06
24	b	612	CLA	C3D-C4D-ND	4.10	116.87	110.24
24	b	625	CLA	C1D-CHD-C4C	-4.10	117.21	126.06
24	A	405	CLA	C3D-C2D-C1D	-4.10	100.24	105.83
27	B	621	SQD	O7-S-C6	4.10	111.81	106.94
24	b	619	CLA	C1-C2-C3	-4.09	118.96	126.04
24	B	605	CLA	C1D-CHD-C4C	-4.09	117.23	126.06
24	b	610	CLA	C1D-CHD-C4C	-4.09	117.23	126.06
24	D	402	CLA	C1C-C2C-C3C	-4.09	102.66	106.96
24	c	515	CLA	C4A-NA-C1A	-4.09	104.87	106.71
24	d	403	CLA	C1C-C2C-C3C	-4.09	102.66	106.96
29	A	416	LMT	O5'-C5'-C4'	4.08	118.36	109.75
26	T	103	BCR	C11-C10-C9	-4.08	121.49	127.31
24	B	608	CLA	C3D-C4D-ND	4.08	116.83	110.24
36	c	521	DGD	O2G-C1B-C2B	4.08	120.29	111.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	617	CLA	C3D-C2D-C1D	-4.08	100.27	105.83
24	A	406	CLA	C3B-C4B-NB	4.07	114.48	109.21
24	d	402	CLA	C4A-NA-C1A	-4.06	104.88	106.71
36	c	520	DGD	O2G-C1B-C2B	4.06	120.25	111.50
24	c	505	CLA	C3D-C4D-ND	4.05	116.80	110.24
24	C	510	CLA	C3D-C4D-ND	4.05	116.80	110.24
38	e	103	HEM	CHD-C1D-ND	4.04	128.82	124.43
24	a	410	CLA	C4A-NA-C1A	-4.04	104.89	106.71
31	a	416	PL9	C7-C3-C4	4.04	120.16	116.88
24	C	505	CLA	C1C-C2C-C3C	-4.04	102.71	106.96
24	b	619	CLA	C3C-C4C-NC	4.04	115.10	110.57
24	c	514	CLA	C4-C3-C5	4.03	122.06	115.27
24	B	614	CLA	C1C-C2C-C3C	-4.03	102.72	106.96
24	C	503	CLA	C3D-C4D-ND	4.03	116.76	110.24
24	a	409	CLA	C1-C2-C3	-4.03	119.07	126.04
24	B	605	CLA	C3B-C4B-NB	4.03	114.42	109.21
24	b	625	CLA	C3D-C4D-ND	4.03	116.75	110.24
24	b	617	CLA	C3C-C4C-NC	4.03	115.08	110.57
24	C	506	CLA	C3D-C4D-ND	4.02	116.74	110.24
24	B	612	CLA	C1C-C2C-C3C	-4.02	102.73	106.96
24	c	506	CLA	C3D-C4D-ND	4.02	116.74	110.24
24	B	615	CLA	O2D-CGD-O1D	-4.02	115.99	123.84
24	a	409	CLA	C1D-CHD-C4C	-4.01	117.40	126.06
24	c	508	CLA	C1C-C2C-C3C	-4.01	102.74	106.96
29	C	522	LMT	O1B-C4'-C3'	4.01	117.94	107.28
24	B	603	CLA	C3C-C4C-NC	4.01	115.06	110.57
24	C	510	CLA	C3C-C4C-NC	4.00	115.06	110.57
24	d	402	CLA	C3C-C4C-NC	4.00	115.06	110.57
24	B	603	CLA	C1C-C2C-C3C	-4.00	102.75	106.96
24	b	622	CLA	C3C-C4C-NC	4.00	115.06	110.57
29	B	622	LMT	O1B-C4'-C3'	4.00	117.92	107.28
35	Z	101	LMG	O7-C10-C11	4.00	120.12	111.50
24	B	617	CLA	C3D-C4D-ND	4.00	116.71	110.24
24	A	406	CLA	C1D-CHD-C4C	-4.00	117.43	126.06
24	c	509	CLA	C1C-C2C-C3C	-4.00	102.75	106.96
27	a	405	SQD	O47-C7-C8	4.00	120.11	111.50
24	b	620	CLA	CAC-C3C-C4C	3.99	129.99	124.81
24	b	624	CLA	C1D-CHD-C4C	-3.99	117.44	126.06
31	a	416	PL9	C22-C23-C24	-3.99	118.06	127.66
24	B	613	CLA	C4A-NA-C1A	-3.99	104.91	106.71
24	A	405	CLA	C3D-C4D-ND	3.98	116.68	110.24
24	B	616	CLA	C1D-CHD-C4C	-3.98	117.46	126.06

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	508	CLA	C3C-C4C-NC	3.98	115.04	110.57
24	C	508	CLA	CMC-C2C-C1C	3.98	131.11	125.04
24	b	618	CLA	C3C-C4C-NC	3.98	115.04	110.57
24	B	604	CLA	CAA-C2A-C3A	-3.98	101.87	112.78
24	c	517	CLA	O2D-CGD-CBD	3.98	118.34	111.27
24	C	502	CLA	C1C-C2C-C3C	-3.98	102.77	106.96
24	C	505	CLA	C3B-C4B-NB	3.97	114.35	109.21
24	b	617	CLA	C3D-C4D-ND	3.97	116.67	110.24
24	B	602	CLA	C4A-NA-C1A	-3.97	104.92	106.71
24	c	514	CLA	C1-C2-C3	-3.97	119.18	126.04
24	c	511	CLA	C1C-C2C-C3C	-3.97	102.78	106.96
24	B	612	CLA	C1D-CHD-C4C	-3.96	117.51	126.06
24	b	621	CLA	C4A-NA-C1A	-3.96	104.92	106.71
24	a	410	CLA	C1D-CHD-C4C	-3.96	117.52	126.06
24	c	510	CLA	C3C-C4C-NC	3.96	115.01	110.57
24	b	614	CLA	C1D-CHD-C4C	-3.96	117.52	126.06
24	B	615	CLA	CAC-C3C-C4C	3.96	129.94	124.81
26	D	404	BCR	C33-C5-C6	-3.96	120.08	124.53
24	B	605	CLA	C1C-C2C-C3C	-3.95	102.80	106.96
24	C	505	CLA	C3D-C4D-ND	3.95	116.63	110.24
24	C	512	CLA	C4A-NA-C1A	-3.95	104.93	106.71
24	c	513	CLA	C3D-C4D-ND	3.95	116.63	110.24
31	a	416	PL9	C32-C33-C34	-3.95	118.15	127.66
27	A	415	SQD	O48-C23-C24	3.94	124.29	111.91
24	b	613	CLA	C3B-C4B-NB	3.94	114.31	109.21
24	C	512	CLA	C3C-C4C-NC	3.94	114.99	110.57
24	b	611	CLA	O2D-CGD-O1D	-3.94	116.14	123.84
24	c	514	CLA	C1C-C2C-C3C	-3.94	102.82	106.96
24	b	623	CLA	C1C-C2C-C3C	-3.94	102.82	106.96
37	D	407	LHG	O7-C7-C8	3.93	119.98	111.50
24	C	502	CLA	C1D-CHD-C4C	-3.93	117.57	126.06
24	b	618	CLA	C1C-C2C-C3C	-3.93	102.82	106.96
24	b	622	CLA	C1C-C2C-C3C	-3.93	102.82	106.96
24	B	613	CLA	O2D-CGD-O1D	-3.93	116.15	123.84
36	D	406	DGD	C1D-C2D-C3D	3.93	118.18	110.00
24	c	516	CLA	C3C-C4C-NC	3.93	114.98	110.57
24	b	616	CLA	C4A-NA-C1A	-3.93	104.94	106.71
24	b	611	CLA	C3C-C4C-NC	3.93	114.97	110.57
24	c	514	CLA	C3C-C4C-NC	3.93	114.97	110.57
24	c	514	CLA	C3B-C4B-NB	3.92	114.28	109.21
24	c	512	CLA	C3B-C4B-NB	3.91	114.27	109.21
27	a	414	SQD	C44-O6-C1	-3.91	106.10	113.74

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	517	CLA	C1D-CHD-C4C	-3.91	117.63	126.06
24	c	506	CLA	C1D-CHD-C4C	-3.91	117.63	126.06
24	D	403	CLA	CAC-C3C-C4C	3.91	129.88	124.81
26	C	515	BCR	C15-C14-C13	-3.90	121.74	127.31
24	B	607	CLA	C1D-CHD-C4C	-3.90	117.65	126.06
24	b	621	CLA	C3D-C4D-ND	3.90	116.54	110.24
24	B	607	CLA	C3C-C4C-NC	3.90	114.94	110.57
24	b	620	CLA	C3C-C4C-NC	3.89	114.94	110.57
26	C	515	BCR	C16-C17-C18	-3.89	121.76	127.31
24	B	604	CLA	C1D-CHD-C4C	-3.89	117.67	126.06
24	c	508	CLA	C1D-CHD-C4C	-3.88	117.68	126.06
26	H	101	BCR	C38-C26-C25	-3.88	120.17	124.53
24	a	409	CLA	C3C-C4C-NC	3.88	114.92	110.57
24	b	613	CLA	C1D-CHD-C4C	-3.87	117.71	126.06
24	c	512	CLA	C1D-CHD-C4C	-3.87	117.72	126.06
24	C	513	CLA	C1D-CHD-C4C	-3.87	117.72	126.06
27	A	411	SQD	C45-O47-C7	-3.86	108.28	117.79
26	k	101	BCR	C24-C23-C22	-3.86	120.40	126.23
26	d	405	BCR	C38-C26-C25	-3.86	120.19	124.53
37	E	101	LHG	O7-C7-C8	3.86	119.82	111.50
24	c	507	CLA	O2D-CGD-CBD	3.86	118.12	111.27
26	D	404	BCR	C24-C23-C22	-3.86	120.41	126.23
24	C	512	CLA	C1C-C2C-C3C	-3.86	102.90	106.96
24	C	514	CLA	O2D-CGD-CBD	3.86	118.12	111.27
24	C	512	CLA	O2D-CGD-CBD	3.85	118.12	111.27
24	B	608	CLA	C1C-C2C-C3C	-3.85	102.90	106.96
24	a	409	CLA	C1C-C2C-C3C	-3.85	102.91	106.96
24	B	611	CLA	C3C-C4C-NC	3.85	114.89	110.57
24	c	505	CLA	C1C-C2C-C3C	-3.85	102.91	106.96
24	B	602	CLA	C1D-CHD-C4C	-3.85	117.76	126.06
24	B	614	CLA	C3B-C4B-NB	3.85	114.18	109.21
24	b	611	CLA	CAC-C3C-C4C	3.85	129.80	124.81
24	B	613	CLA	CMC-C2C-C1C	3.84	130.89	125.04
24	d	402	CLA	C3B-C4B-NB	3.84	114.17	109.21
24	C	504	CLA	O2D-CGD-CBD	3.84	118.09	111.27
24	c	511	CLA	C1D-CHD-C4C	-3.83	117.79	126.06
24	B	615	CLA	O2A-CGA-O1A	-3.83	113.92	123.59
24	B	611	CLA	CAA-C2A-C3A	-3.83	102.29	112.78
24	c	511	CLA	C3D-C4D-ND	3.83	116.43	110.24
24	C	508	CLA	C3D-C4D-ND	3.82	116.42	110.24
24	b	614	CLA	C1C-C2C-C3C	-3.82	102.94	106.96
24	A	405	CLA	C3C-C4C-NC	3.82	114.85	110.57

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	510	CLA	C3B-C4B-NB	3.81	114.14	109.21
24	C	503	CLA	C1D-CHD-C4C	-3.81	117.83	126.06
36	e	101	DGD	C3E-C4E-C5E	3.81	117.04	110.24
37	L	101	LHG	O7-C7-C8	3.81	119.71	111.50
24	C	507	CLA	C3C-C4C-NC	3.81	114.84	110.57
24	B	609	CLA	C3C-C4C-NC	3.81	114.84	110.57
24	B	608	CLA	C3C-C4C-NC	3.81	114.84	110.57
36	c	519	DGD	O2G-C1B-C2B	3.81	119.70	111.50
25	a	411	PHO	O1D-CGD-CBD	-3.81	118.40	124.74
24	d	404	CLA	C3C-C4C-NC	3.80	114.83	110.57
27	A	415	SQD	O47-C7-C8	3.80	119.69	111.50
24	C	502	CLA	CMC-C2C-C1C	3.80	130.83	125.04
24	C	511	CLA	C1D-CHD-C4C	-3.80	117.86	126.06
24	b	615	CLA	C1C-C2C-C3C	-3.80	102.96	106.96
24	C	502	CLA	O2D-CGD-O1D	-3.80	116.41	123.84
26	T	103	BCR	C15-C16-C17	-3.79	115.70	123.47
26	C	515	BCR	C7-C8-C9	-3.79	120.50	126.23
24	c	513	CLA	C1-C2-C3	-3.79	119.48	126.04
24	c	517	CLA	C3C-C4C-NC	3.79	114.82	110.57
26	k	101	BCR	C11-C10-C9	-3.79	121.91	127.31
24	b	610	CLA	O2D-CGD-O1D	-3.78	116.44	123.84
24	C	511	CLA	C3B-C4B-NB	3.78	114.10	109.21
24	c	505	CLA	C3B-C4B-NB	3.78	114.10	109.21
24	c	516	CLA	C1D-CHD-C4C	-3.78	117.91	126.06
24	b	625	CLA	C3C-C4C-NC	3.78	114.81	110.57
24	b	623	CLA	C3C-C4C-NC	3.77	114.80	110.57
24	c	512	CLA	C1C-C2C-C3C	-3.76	103.00	106.96
24	C	507	CLA	C1C-C2C-C3C	-3.76	103.00	106.96
38	V	205	HEM	CHC-C4B-NB	3.76	128.51	124.43
24	C	506	CLA	C3D-C2D-C1D	-3.76	100.70	105.83
24	C	505	CLA	C1D-CHD-C4C	-3.76	117.95	126.06
24	A	407	CLA	C3C-C4C-NC	3.76	114.78	110.57
38	e	103	HEM	C1B-NB-C4B	3.75	108.95	105.07
24	B	602	CLA	C3C-C4C-NC	3.75	114.78	110.57
24	b	610	CLA	C3C-C4C-NC	3.75	114.78	110.57
24	A	405	CLA	O2D-CGD-CBD	3.75	117.93	111.27
24	c	505	CLA	O2D-CGD-O1D	-3.74	116.52	123.84
24	a	412	CLA	C1D-CHD-C4C	-3.74	118.00	126.06
24	B	604	CLA	C3D-C2D-C1D	-3.73	100.74	105.83
24	B	602	CLA	O2D-CGD-O1D	-3.73	116.54	123.84
24	C	508	CLA	C1D-CHD-C4C	-3.73	118.01	126.06
24	C	505	CLA	C3C-C4C-NC	3.73	114.75	110.57

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	515	CLA	C3C-C4C-NC	3.73	114.75	110.57
24	c	510	CLA	C1D-CHD-C4C	-3.73	118.02	126.06
24	C	514	CLA	C1D-CHD-C4C	-3.72	118.02	126.06
24	c	515	CLA	C3B-C4B-NB	3.72	114.03	109.21
24	b	611	CLA	CAA-C2A-C3A	-3.72	102.58	112.78
24	A	409	CLA	O2D-CGD-CBD	3.72	117.88	111.27
31	d	406	PL9	C42-C43-C44	-3.72	118.71	127.66
24	B	608	CLA	CAA-C2A-C3A	-3.72	102.60	112.78
26	c	518	BCR	C7-C8-C9	-3.71	120.63	126.23
24	B	605	CLA	C1-C2-C3	-3.71	119.63	126.04
24	d	404	CLA	C1C-C2C-C3C	-3.71	103.06	106.96
27	a	405	SQD	O8-S-C6	3.70	111.64	105.74
24	b	620	CLA	C1C-C2C-C3C	-3.70	103.07	106.96
24	b	612	CLA	C1C-C2C-C3C	-3.70	103.07	106.96
24	c	506	CLA	C1C-C2C-C3C	-3.70	103.07	106.96
31	a	416	PL9	C15-C14-C16	3.69	121.48	115.27
24	a	412	CLA	C3C-C4C-NC	3.69	114.71	110.57
24	A	407	CLA	C1C-C2C-C3C	-3.69	103.08	106.96
24	c	506	CLA	C3C-C4C-NC	3.69	114.70	110.57
24	a	410	CLA	C1C-C2C-C3C	-3.68	103.08	106.96
24	D	402	CLA	C1D-CHD-C4C	-3.68	118.12	126.06
24	C	502	CLA	C3C-C4C-NC	3.68	114.70	110.57
24	d	403	CLA	C3B-C4B-NB	3.68	113.97	109.21
24	c	509	CLA	C1D-CHD-C4C	-3.68	118.12	126.06
24	b	615	CLA	C3D-C4D-ND	3.67	116.18	110.24
24	b	617	CLA	C1D-CHD-C4C	-3.67	118.14	126.06
24	d	403	CLA	O2D-CGD-CBD	3.67	117.79	111.27
24	c	513	CLA	C1C-C2C-C3C	-3.67	103.10	106.96
24	c	514	CLA	C1D-CHD-C4C	-3.67	118.15	126.06
24	b	623	CLA	C1D-CHD-C4C	-3.67	118.15	126.06
27	a	414	SQD	C1-C2-C3	-3.67	102.36	110.00
25	D	401	PHO	C1A-C2A-C3A	-3.66	99.35	102.84
24	B	609	CLA	C1D-CHD-C4C	-3.66	118.16	126.06
24	D	403	CLA	C3B-C4B-NB	3.66	113.94	109.21
24	A	409	CLA	C1D-CHD-C4C	-3.65	118.17	126.06
24	B	611	CLA	C1C-C2C-C3C	-3.65	103.11	106.96
24	B	603	CLA	C1D-CHD-C4C	-3.65	118.18	126.06
24	C	503	CLA	O2D-CGD-O1D	-3.65	116.70	123.84
24	B	609	CLA	C3B-C4B-NB	3.65	113.93	109.21
24	A	405	CLA	C1C-C2C-C3C	-3.65	103.12	106.96
24	D	403	CLA	C1D-CHD-C4C	-3.64	118.20	126.06
24	b	622	CLA	C3D-C4D-ND	3.64	116.13	110.24

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	622	CLA	C1-C2-C3	-3.64	119.75	126.04
24	C	502	CLA	CBC-CAC-C3C	-3.64	102.41	112.43
38	v	205	HEM	CHB-C1B-NB	3.63	128.87	124.38
26	y	101	BCR	C15-C14-C13	-3.63	122.13	127.31
24	C	509	CLA	C1D-CHD-C4C	-3.63	118.23	126.06
24	C	509	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
24	c	513	CLA	C3B-C4B-NB	3.63	113.90	109.21
24	C	510	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
24	b	615	CLA	C3B-C4B-NB	3.62	113.89	109.21
24	D	403	CLA	O2D-CGD-O1D	-3.62	116.76	123.84
24	B	602	CLA	C1C-C2C-C3C	-3.61	103.16	106.96
24	b	612	CLA	O2D-CGD-O1D	-3.61	116.78	123.84
24	C	507	CLA	C1D-CHD-C4C	-3.60	118.29	126.06
24	b	621	CLA	C3B-C4B-NB	3.60	113.86	109.21
24	d	404	CLA	C1D-CHD-C4C	-3.60	118.30	126.06
24	b	611	CLA	C1D-CHD-C4C	-3.59	118.31	126.06
24	b	621	CLA	C4C-C3C-C2C	-3.59	101.67	106.90
24	b	617	CLA	C1C-C2C-C3C	-3.59	103.18	106.96
24	c	517	CLA	C1C-C2C-C3C	-3.59	103.19	106.96
26	D	404	BCR	C38-C26-C25	-3.58	120.51	124.53
34	V	206	HTG	C1'-S1-C1	3.58	106.78	100.09
24	B	607	CLA	CMC-C2C-C1C	3.58	130.48	125.04
24	B	615	CLA	C1C-C2C-C3C	-3.57	103.20	106.96
35	c	522	LMG	O7-C10-C11	3.57	119.20	111.50
24	C	513	CLA	C1-C2-C3	-3.57	119.86	126.04
24	a	412	CLA	C1-C2-C3	-3.57	119.86	126.04
24	A	405	CLA	C3B-C4B-NB	3.57	113.83	109.21
24	C	512	CLA	CAC-C3C-C4C	3.57	129.44	124.81
24	b	619	CLA	C1D-CHD-C4C	-3.57	118.36	126.06
35	z	101	LMG	O7-C10-C11	3.57	119.19	111.50
24	C	510	CLA	C1D-CHD-C4C	-3.57	118.36	126.06
24	D	402	CLA	C3B-C4B-NB	3.57	113.82	109.21
24	C	507	CLA	CBC-CAC-C3C	-3.57	102.60	112.43
36	C	518	DGD	O2G-C1B-C2B	3.56	119.18	111.50
24	b	618	CLA	C1D-CHD-C4C	-3.56	118.37	126.06
24	b	619	CLA	CAC-C3C-C4C	3.56	129.43	124.81
29	C	522	LMT	C1'-O5'-C5'	3.56	120.68	113.69
26	b	627	BCR	C29-C30-C25	3.56	115.96	110.48
24	c	505	CLA	CAC-C3C-C4C	3.56	129.43	124.81
24	b	620	CLA	C1D-CHD-C4C	-3.56	118.39	126.06
27	a	405	SQD	O48-C23-C24	3.55	123.05	111.91
24	d	403	CLA	C3C-C4C-NC	3.55	114.55	110.57

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	620	CLA	C3B-C4B-NB	3.55	113.80	109.21
35	c	523	LMG	C3-C4-C5	3.55	116.57	110.24
31	a	416	PL9	C20-C19-C21	3.55	121.24	115.27
24	b	612	CLA	CMC-C2C-C1C	3.54	130.43	125.04
35	C	520	LMG	O7-C10-C11	3.54	119.13	111.50
24	b	614	CLA	O2D-CGD-O1D	-3.54	116.92	123.84
24	c	511	CLA	CMC-C2C-C1C	3.54	130.43	125.04
24	B	610	CLA	C1D-CHD-C4C	-3.53	118.44	126.06
24	B	616	CLA	C1C-C2C-C3C	-3.53	103.25	106.96
26	t	101	BCR	C15-C14-C13	3.53	132.34	127.31
24	A	407	CLA	C4-C3-C5	3.52	121.19	115.27
25	d	401	PHO	C4-C3-C5	3.51	121.17	115.27
24	A	406	CLA	C3C-C4C-NC	3.51	114.50	110.57
26	C	516	BCR	C33-C5-C6	-3.51	120.59	124.53
24	B	616	CLA	CMC-C2C-C1C	3.51	130.38	125.04
24	c	516	CLA	C1-C2-C3	-3.51	119.98	126.04
38	v	205	HEM	C4D-ND-C1D	3.50	108.69	105.07
24	C	514	CLA	C1C-C2C-C3C	-3.50	103.27	106.96
24	B	614	CLA	C3D-C4D-ND	3.50	115.91	110.24
24	B	608	CLA	C1D-CHD-C4C	-3.50	118.50	126.06
27	a	414	SQD	O8-S-C6	3.50	111.32	105.74
24	d	403	CLA	CAC-C3C-C4C	3.50	129.35	124.81
24	d	404	CLA	C3B-C4B-NB	3.50	113.73	109.21
35	c	523	LMG	O6-C5-C4	3.49	116.04	109.69
24	b	624	CLA	O2D-CGD-CBD	3.49	117.47	111.27
24	c	508	CLA	C4-C3-C5	3.49	121.14	115.27
24	B	612	CLA	CAC-C3C-C4C	3.49	129.34	124.81
24	C	509	CLA	C3B-C4B-NB	3.49	113.72	109.21
34	B	624	HTG	C1-O5-C5	3.49	119.01	112.58
29	a	404	LMT	O5'-C5'-C4'	3.48	117.09	109.75
24	B	606	CLA	CHD-C4C-NC	3.48	129.69	124.20
24	b	622	CLA	CAC-C3C-C4C	3.48	129.32	124.81
24	B	608	CLA	C3B-C4B-NB	3.47	113.70	109.21
24	b	615	CLA	CMC-C2C-C1C	3.47	130.33	125.04
24	b	616	CLA	C1D-CHD-C4C	-3.47	118.57	126.06
38	v	205	HEM	CHA-C4D-ND	3.47	128.67	124.38
24	c	511	CLA	O2D-CGD-O1D	-3.47	117.06	123.84
24	C	506	CLA	C1C-C2C-C3C	-3.46	103.31	106.96
24	C	513	CLA	C3B-C4B-NB	3.46	113.69	109.21
26	c	527	BCR	C11-C10-C9	-3.46	122.37	127.31
24	c	506	CLA	C3B-C4B-NB	3.46	113.68	109.21
26	K	101	BCR	C7-C8-C9	-3.46	121.01	126.23

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	516	CLA	C1C-C2C-C3C	-3.46	103.32	106.96
27	f	102	SQD	C1-O5-C5	3.46	120.48	113.69
24	c	507	CLA	CAC-C3C-C4C	3.46	129.29	124.81
24	b	619	CLA	C4C-C3C-C2C	-3.46	101.86	106.90
24	b	618	CLA	C3B-C4B-NB	3.46	113.68	109.21
24	B	612	CLA	C3B-C4B-NB	3.45	113.68	109.21
36	h	102	DGD	O2G-C1B-C2B	3.45	118.94	111.50
24	B	615	CLA	CMC-C2C-C1C	3.45	130.30	125.04
34	B	623	HTG	C1'-S1-C1	3.45	106.54	100.09
26	c	527	BCR	C16-C17-C18	-3.45	122.39	127.31
34	b	608	HTG	C1'-S1-C1	3.45	106.54	100.09
24	b	614	CLA	C4-C3-C5	3.45	121.07	115.27
31	D	405	PL9	C40-C39-C41	3.45	121.07	115.27
24	C	510	CLA	C3B-C4B-NB	3.45	113.66	109.21
31	a	416	PL9	C7-C8-C9	-3.44	121.06	126.79
24	B	606	CLA	CMC-C2C-C1C	3.44	130.28	125.04
25	d	401	PHO	C1A-C2A-C3A	-3.44	99.56	102.84
24	d	403	CLA	C1-C2-C3	-3.44	120.09	126.04
24	c	515	CLA	C1C-C2C-C3C	-3.44	103.34	106.96
37	d	409	LHG	O7-C7-C8	3.44	118.91	111.50
31	A	418	PL9	C20-C19-C21	3.44	121.05	115.27
24	D	402	CLA	C1-C2-C3	-3.44	120.10	126.04
26	b	627	BCR	C38-C26-C25	-3.43	120.67	124.53
24	C	505	CLA	O2D-CGD-O1D	-3.43	117.13	123.84
26	t	101	BCR	C15-C16-C17	-3.43	116.45	123.47
35	b	629	LMG	O7-C10-C11	3.43	118.89	111.50
24	C	511	CLA	C4-C3-C5	3.43	121.04	115.27
26	C	516	BCR	C7-C8-C9	-3.43	121.06	126.23
24	B	617	CLA	C3B-C4B-NB	3.42	113.64	109.21
31	A	418	PL9	C37-C38-C39	-3.42	119.42	127.66
24	c	509	CLA	C3D-C2D-C1D	-3.42	101.16	105.83
24	B	607	CLA	C3B-C4B-NB	3.42	113.63	109.21
24	B	610	CLA	CAC-C3C-C4C	3.42	129.25	124.81
24	c	507	CLA	C4C-C3C-C2C	-3.42	101.91	106.90
24	B	613	CLA	C3B-C4B-NB	3.42	113.63	109.21
29	a	404	LMT	C1'-O5'-C5'	3.41	120.39	113.69
26	B	619	BCR	C28-C27-C26	-3.41	107.98	114.08
24	C	511	CLA	C1C-C2C-C3C	-3.41	103.37	106.96
24	c	515	CLA	O2D-CGD-CBD	3.41	117.33	111.27
26	T	103	BCR	C33-C5-C6	-3.41	120.70	124.53
24	b	624	CLA	C1C-C2C-C3C	-3.41	103.37	106.96
24	b	615	CLA	O2D-CGD-O1D	-3.41	117.18	123.84

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	402	CLA	CMC-C2C-C1C	3.41	130.23	125.04
34	b	601	HTG	C1'-S1-C1	3.41	106.46	100.09
27	F	103	SQD	O6-C1-C2	3.40	113.61	108.30
24	D	403	CLA	C4C-C3C-C2C	-3.40	101.94	106.90
24	B	604	CLA	CMC-C2C-C1C	3.40	130.22	125.04
31	D	405	PL9	C42-C43-C44	-3.40	119.47	127.66
24	d	403	CLA	CHC-C1C-C2C	-3.40	117.33	126.72
24	C	513	CLA	C1C-C2C-C3C	-3.40	103.39	106.96
31	a	416	PL9	C17-C18-C19	-3.39	119.49	127.66
31	D	405	PL9	C7-C8-C9	-3.39	121.15	126.79
24	B	611	CLA	CAC-C3C-C4C	3.39	129.21	124.81
31	D	405	PL9	C10-C9-C11	3.39	120.97	115.27
24	c	515	CLA	CAC-C3C-C4C	3.39	129.21	124.81
24	a	409	CLA	CAA-C2A-C3A	-3.38	103.51	112.78
24	c	508	CLA	C3B-C4B-NB	3.38	113.59	109.21
24	B	602	CLA	C3B-C4B-NB	3.38	113.58	109.21
24	B	611	CLA	C1D-CHD-C4C	-3.38	118.76	126.06
24	B	613	CLA	CAC-C3C-C4C	3.38	129.20	124.81
24	B	614	CLA	C1D-CHD-C4C	-3.38	118.76	126.06
31	A	418	PL9	C32-C33-C34	-3.38	119.53	127.66
24	C	510	CLA	CAC-C3C-C4C	3.38	129.19	124.81
24	C	509	CLA	CMB-C2B-C3B	3.38	131.00	124.68
24	b	610	CLA	C1C-C2C-C3C	-3.38	103.41	106.96
24	B	615	CLA	O2A-CGA-CBA	3.38	122.50	111.91
24	A	409	CLA	CAC-C3C-C4C	3.37	129.18	124.81
24	b	624	CLA	C3B-C4B-NB	3.36	113.56	109.21
24	b	612	CLA	C3B-C4B-NB	3.36	113.55	109.21
24	B	607	CLA	O2D-CGD-O1D	-3.36	117.27	123.84
35	c	522	LMG	O8-C28-C29	3.36	122.44	111.91
24	a	412	CLA	C3B-C4B-NB	3.35	113.54	109.21
37	d	408	LHG	O7-C7-C8	3.35	118.72	111.50
24	B	611	CLA	O2A-CGA-CBA	3.34	122.40	111.91
24	c	510	CLA	C1-C2-C3	-3.34	120.26	126.04
24	A	406	CLA	CHC-C1C-C2C	-3.34	117.49	126.72
24	B	613	CLA	C4C-C3C-C2C	-3.34	102.03	106.90
24	B	613	CLA	C4-C3-C5	3.33	120.88	115.27
24	c	505	CLA	C1D-CHD-C4C	-3.33	118.87	126.06
24	b	614	CLA	CHD-C4C-NC	3.33	129.46	124.20
24	D	402	CLA	O2D-CGD-O1D	-3.33	117.32	123.84
24	b	625	CLA	CHC-C1C-C2C	-3.33	117.51	126.72
24	c	508	CLA	CBC-CAC-C3C	-3.33	103.25	112.43
24	B	615	CLA	C1D-CHD-C4C	-3.33	118.88	126.06

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	510	CLA	C1-O2A-CGA	3.33	125.18	116.44
24	C	506	CLA	CAC-C3C-C4C	3.33	129.13	124.81
24	B	611	CLA	C3B-C4B-NB	3.33	113.51	109.21
24	b	613	CLA	CMC-C2C-C1C	3.33	130.10	125.04
24	D	403	CLA	C1C-C2C-C3C	-3.32	103.46	106.96
24	b	622	CLA	CHC-C1C-C2C	-3.32	117.53	126.72
24	B	604	CLA	O2A-CGA-O1A	-3.32	115.21	123.59
25	A	408	PHO	C4-C3-C5	3.32	120.85	115.27
24	B	610	CLA	C3B-C4B-NB	3.31	113.50	109.21
24	b	614	CLA	C2A-C1A-CHA	-3.31	118.06	123.86
24	b	611	CLA	C4C-C3C-C2C	-3.31	102.07	106.90
24	A	407	CLA	O2D-CGD-O1D	-3.31	117.36	123.84
26	b	627	BCR	C15-C14-C13	-3.31	122.58	127.31
24	C	508	CLA	C1C-C2C-C3C	-3.31	103.48	106.96
26	B	618	BCR	C7-C8-C9	-3.31	121.24	126.23
24	C	504	CLA	C1C-C2C-C3C	-3.31	103.48	106.96
24	b	622	CLA	C1D-CHD-C4C	-3.31	118.93	126.06
26	B	618	BCR	C24-C23-C22	-3.30	121.24	126.23
35	J	101	LMG	O7-C10-C11	3.30	118.62	111.50
24	A	405	CLA	CAA-C2A-C3A	-3.30	103.74	112.78
24	d	402	CLA	CBC-CAC-C3C	-3.30	103.33	112.43
35	a	415	LMG	C8-O7-C10	-3.30	109.67	117.79
25	A	408	PHO	CMB-C2B-C3B	3.30	130.84	124.68
26	C	515	BCR	C33-C5-C6	-3.29	120.83	124.53
24	B	614	CLA	O2D-CGD-CBD	3.29	117.12	111.27
24	B	613	CLA	C1-C2-C3	-3.29	120.35	126.04
31	d	406	PL9	C10-C9-C11	3.29	120.81	115.27
24	B	610	CLA	C1C-C2C-C3C	-3.29	103.50	106.96
24	B	613	CLA	C1D-CHD-C4C	-3.29	118.97	126.06
24	C	504	CLA	C4C-C3C-C2C	-3.29	102.11	106.90
24	A	409	CLA	C4C-C3C-C2C	-3.28	102.11	106.90
24	b	625	CLA	CBC-CAC-C3C	-3.28	103.38	112.43
24	C	505	CLA	CMC-C2C-C1C	3.28	130.04	125.04
24	c	510	CLA	CBC-CAC-C3C	-3.28	103.39	112.43
31	d	406	PL9	C40-C39-C41	3.27	120.77	115.27
24	C	507	CLA	C3B-C4B-NB	3.27	113.44	109.21
24	B	614	CLA	C4C-C3C-C2C	-3.27	102.14	106.90
24	b	617	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
24	b	623	CLA	C3B-C4B-NB	3.26	113.43	109.21
24	A	406	CLA	CAA-C2A-C3A	-3.26	103.85	112.78
24	B	613	CLA	C1C-C2C-C3C	-3.26	103.53	106.96
35	M	101	LMG	O7-C10-C11	3.26	118.53	111.50

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	617	CLA	C4C-C3C-C2C	-3.26	102.15	106.90
24	C	514	CLA	C1-C2-C3	-3.26	120.41	126.04
27	F	103	SQD	O7-S-C6	3.25	110.81	106.94
37	l	101	LHG	O7-C7-C8	3.25	118.51	111.50
24	C	506	CLA	C4C-C3C-C2C	-3.25	102.16	106.90
31	A	418	PL9	C7-C3-C4	3.25	119.52	116.88
24	B	605	CLA	CAC-C3C-C4C	3.25	129.03	124.81
26	d	405	BCR	C7-C8-C9	-3.25	121.33	126.23
24	B	603	CLA	C3B-C4B-NB	3.24	113.40	109.21
24	c	509	CLA	O2D-CGD-O1D	-3.24	117.51	123.84
24	b	616	CLA	C3B-C4B-NB	3.24	113.40	109.21
24	b	615	CLA	CAC-C3C-C4C	3.24	129.01	124.81
24	C	503	CLA	C4C-C3C-C2C	-3.24	102.18	106.90
24	b	620	CLA	CHC-C1C-C2C	-3.24	117.77	126.72
24	c	509	CLA	CAC-C3C-C4C	3.23	129.01	124.81
24	B	606	CLA	C4C-C3C-C2C	-3.23	102.19	106.90
26	B	619	BCR	C29-C30-C25	3.23	115.46	110.48
27	f	102	SQD	O5-C5-C4	3.23	115.56	109.69
24	b	615	CLA	CMB-C2B-C3B	3.23	130.72	124.68
26	y	101	BCR	C16-C17-C18	-3.23	122.70	127.31
24	c	509	CLA	C4C-C3C-C2C	-3.23	102.19	106.90
24	B	611	CLA	CHC-C1C-C2C	-3.22	117.81	126.72
24	b	621	CLA	C1C-C2C-C3C	-3.22	103.57	106.96
24	b	610	CLA	CHD-C4C-NC	3.22	129.27	124.20
24	b	621	CLA	O2A-CGA-CBA	3.21	122.00	111.91
24	B	605	CLA	CHC-C1C-C2C	-3.21	117.84	126.72
24	b	616	CLA	CHC-C1C-C2C	-3.21	117.84	126.72
24	c	516	CLA	CHD-C4C-NC	3.21	129.26	124.20
24	b	621	CLA	C1-C2-C3	-3.21	120.50	126.04
24	B	616	CLA	C3B-C4B-NB	3.21	113.36	109.21
24	C	512	CLA	CHC-C1C-C2C	-3.21	117.85	126.72
24	b	610	CLA	C3B-C4B-NB	3.20	113.35	109.21
24	C	513	CLA	O2D-CGD-O1D	-3.20	117.57	123.84
24	B	611	CLA	CMA-C3A-C4A	-3.20	103.17	111.77
24	A	409	CLA	C1C-C2C-C3C	-3.20	103.59	106.96
24	c	507	CLA	C1-C2-C3	-3.20	120.51	126.04
24	b	621	CLA	C4-C3-C5	3.20	120.65	115.27
26	k	101	BCR	C20-C21-C22	-3.20	122.75	127.31
24	A	409	CLA	C1-C2-C3	-3.19	120.52	126.04
24	c	506	CLA	O2D-CGD-O1D	-3.19	117.60	123.84
24	B	616	CLA	CHD-C4C-NC	3.19	129.23	124.20
24	B	613	CLA	CMB-C2B-C3B	3.19	130.64	124.68

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	628	BCR	C38-C26-C25	-3.19	120.95	124.53
38	e	103	HEM	C4D-ND-C1D	3.18	108.36	105.07
26	b	626	BCR	C15-C14-C13	-3.18	122.77	127.31
26	d	405	BCR	C33-C5-C6	-3.18	120.95	124.53
26	B	619	BCR	C2-C1-C6	3.18	115.38	110.48
37	D	408	LHG	O7-C7-C8	3.18	118.35	111.50
24	b	616	CLA	CAA-C2A-C3A	-3.18	104.07	112.78
24	A	406	CLA	CHD-C4C-NC	3.18	129.21	124.20
24	C	503	CLA	C3B-C4B-NB	3.18	113.32	109.21
24	A	407	CLA	CBC-CAC-C3C	-3.18	103.68	112.43
24	B	617	CLA	CBC-CAC-C3C	-3.18	103.68	112.43
24	A	405	CLA	O2A-CGA-CBA	3.17	121.85	111.91
31	a	416	PL9	C10-C9-C11	3.17	120.60	115.27
24	b	624	CLA	CHD-C4C-NC	3.17	129.19	124.20
24	b	624	CLA	C4-C3-C5	3.17	120.60	115.27
24	a	412	CLA	CHD-C4C-NC	3.17	129.19	124.20
31	A	418	PL9	C53-C6-C1	3.16	121.45	114.99
24	B	615	CLA	C3B-C4B-NB	3.16	113.30	109.21
24	a	409	CLA	CMB-C2B-C3B	3.16	130.59	124.68
24	c	505	CLA	CHC-C1C-C2C	-3.16	117.98	126.72
27	A	411	SQD	O8-S-C6	3.15	110.76	105.74
24	B	611	CLA	C4C-C3C-C2C	-3.15	102.31	106.90
24	c	516	CLA	CMC-C2C-C1C	3.15	129.84	125.04
24	b	611	CLA	C3B-C4B-NB	3.15	113.28	109.21
24	C	503	CLA	O2A-CGA-O1A	-3.15	115.65	123.59
24	C	507	CLA	CAC-C3C-C4C	3.15	128.89	124.81
24	b	624	CLA	C4C-C3C-C2C	-3.15	102.31	106.90
24	d	402	CLA	C2A-C1A-CHA	-3.14	118.36	123.86
24	b	625	CLA	O2D-CGD-O1D	-3.14	117.69	123.84
24	b	613	CLA	CHC-C1C-C2C	-3.14	118.03	126.72
31	a	416	PL9	C42-C43-C44	-3.14	120.09	127.66
37	l	101	LHG	O8-C23-C24	3.14	121.77	111.91
24	b	625	CLA	C4C-C3C-C2C	-3.14	102.32	106.90
24	C	506	CLA	C3B-C4B-NB	3.14	113.27	109.21
24	B	602	CLA	O2A-CGA-CBA	3.13	121.74	111.91
31	a	416	PL9	C27-C28-C29	-3.13	120.11	127.66
24	C	510	CLA	CMB-C2B-C3B	3.13	130.54	124.68
34	C	524	HTG	O5-C5-C4	3.13	115.38	109.69
31	A	418	PL9	C45-C44-C46	3.13	120.53	115.27
24	C	510	CLA	O2D-CGD-O1D	-3.13	117.72	123.84
24	b	618	CLA	CBC-CAC-C3C	-3.12	103.82	112.43
24	b	617	CLA	C3B-C4B-NB	3.12	113.25	109.21

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	616	CLA	O2D-CGD-CBD	3.12	116.82	111.27
24	B	602	CLA	CHD-C4C-NC	3.12	129.12	124.20
24	B	615	CLA	C4-C3-C5	3.12	120.52	115.27
24	B	608	CLA	C1-C2-C3	-3.12	120.65	126.04
24	D	403	CLA	C4-C3-C5	3.12	120.52	115.27
24	D	403	CLA	CHC-C1C-C2C	-3.12	118.10	126.72
24	d	403	CLA	C1D-CHD-C4C	-3.12	119.33	126.06
24	b	610	CLA	C4-C3-C5	3.12	120.51	115.27
24	A	407	CLA	C1D-CHD-C4C	-3.11	119.34	126.06
24	C	513	CLA	C4C-C3C-C2C	-3.11	102.37	106.90
24	b	614	CLA	C4C-C3C-C2C	-3.11	102.37	106.90
26	D	404	BCR	C29-C30-C25	3.11	115.27	110.48
24	C	514	CLA	CAC-C3C-C4C	3.11	128.84	124.81
24	a	412	CLA	CAA-C2A-C3A	-3.11	104.27	112.78
24	d	403	CLA	C2A-C1A-CHA	-3.11	118.43	123.86
35	Z	101	LMG	O6-C5-C4	3.11	115.33	109.69
26	h	101	BCR	C16-C17-C18	-3.11	122.88	127.31
24	A	409	CLA	C4-C3-C5	3.10	120.49	115.27
26	c	518	BCR	C33-C5-C6	-3.10	121.05	124.53
24	B	615	CLA	C2A-C1A-CHA	-3.10	118.44	123.86
37	D	407	LHG	O8-C23-C24	3.10	121.63	111.91
24	a	410	CLA	CMC-C2C-C1C	3.09	129.75	125.04
26	T	103	BCR	C34-C9-C10	-3.09	118.59	122.92
24	B	604	CLA	O2A-CGA-CBA	3.09	121.61	111.91
24	B	606	CLA	C4-C3-C5	3.09	120.47	115.27
24	b	625	CLA	O2A-CGA-CBA	3.09	121.61	111.91
26	h	101	BCR	C38-C26-C25	-3.09	121.06	124.53
24	b	613	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
24	C	514	CLA	C4C-C3C-C2C	-3.09	102.39	106.90
24	A	407	CLA	C2A-C1A-CHA	-3.09	118.46	123.86
24	B	606	CLA	C1C-C2C-C3C	-3.09	103.71	106.96
24	C	511	CLA	C4C-C3C-C2C	-3.09	102.40	106.90
31	A	418	PL9	C8-C7-C3	3.09	120.70	111.98
24	b	618	CLA	CHC-C1C-C2C	-3.08	118.19	126.72
24	c	514	CLA	CHC-C1C-C2C	-3.08	118.19	126.72
24	C	503	CLA	C1C-C2C-C3C	-3.08	103.72	106.96
24	b	620	CLA	CBC-CAC-C3C	-3.08	103.94	112.43
24	d	404	CLA	CAC-C3C-C4C	3.08	128.81	124.81
24	c	511	CLA	C4C-C3C-C2C	-3.08	102.41	106.90
24	d	403	CLA	O2D-CGD-O1D	-3.08	117.82	123.84
24	B	609	CLA	CHC-C1C-C2C	-3.08	118.21	126.72
26	B	620	BCR	C32-C1-C6	-3.08	105.31	110.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	506	CLA	CAC-C3C-C4C	3.08	128.80	124.81
27	F	103	SQD	C3-C4-C5	3.08	115.73	110.24
24	d	402	CLA	O2D-CGD-O1D	-3.07	117.83	123.84
24	c	510	CLA	CHC-C1C-C2C	-3.07	118.22	126.72
24	d	402	CLA	CHD-C4C-NC	3.07	129.04	124.20
24	C	509	CLA	C4C-C3C-C2C	-3.07	102.43	106.90
24	d	402	CLA	CHC-C1C-C2C	-3.07	118.24	126.72
24	c	505	CLA	C4C-C3C-C2C	-3.07	102.43	106.90
24	b	621	CLA	O2A-CGA-O1A	-3.06	115.86	123.59
24	B	615	CLA	C4C-C3C-C2C	-3.06	102.43	106.90
36	H	102	DGD	O2G-C1B-C2B	3.06	118.10	111.50
29	T	104	LMT	C1'-O5'-C5'	3.06	119.70	113.69
24	B	609	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
24	B	603	CLA	CHD-C4C-NC	3.06	129.02	124.20
24	d	404	CLA	CHD-C4C-NC	3.06	129.02	124.20
24	B	603	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
24	C	507	CLA	C4-C3-C5	3.06	120.41	115.27
24	b	615	CLA	C4-C3-C5	3.06	120.41	115.27
24	C	507	CLA	C1-C2-C3	-3.06	120.76	126.04
24	b	611	CLA	C1C-C2C-C3C	-3.05	103.75	106.96
35	j	101	LMG	O7-C10-C11	3.05	118.08	111.50
27	L	102	SQD	O8-S-C6	3.05	110.60	105.74
31	D	405	PL9	C36-C37-C38	-3.05	101.87	111.88
24	a	410	CLA	CHD-C4C-NC	3.05	129.00	124.20
24	A	409	CLA	CAA-C2A-C3A	-3.04	104.44	112.78
24	a	409	CLA	C3B-C4B-NB	3.04	113.15	109.21
31	D	405	PL9	C53-C6-C1	3.04	121.21	114.99
24	B	613	CLA	C2A-C1A-CHA	-3.04	118.54	123.86
24	a	409	CLA	O2D-CGD-CBD	3.04	116.67	111.27
25	a	411	PHO	C1A-C2A-C3A	-3.04	99.95	102.84
24	a	412	CLA	CBC-CAC-C3C	-3.04	104.05	112.43
24	c	517	CLA	CMC-C2C-C1C	3.04	129.66	125.04
26	K	101	BCR	C33-C5-C6	-3.04	121.12	124.53
24	B	609	CLA	CMC-C2C-C1C	3.03	129.66	125.04
24	A	405	CLA	CMB-C2B-C3B	3.03	130.35	124.68
24	a	409	CLA	C2A-C1A-CHA	-3.03	118.56	123.86
26	c	527	BCR	C33-C5-C6	-3.03	121.12	124.53
24	c	514	CLA	CBC-CAC-C3C	-3.03	104.08	112.43
24	C	508	CLA	CHD-C4C-NC	3.03	128.98	124.20
24	c	515	CLA	C4-C3-C5	3.03	120.37	115.27
24	B	610	CLA	C4C-C3C-C2C	-3.03	102.48	106.90
26	Y	101	BCR	C15-C14-C13	-3.03	122.99	127.31

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	621	CLA	CAC-C3C-C4C	3.03	128.74	124.81
38	E	102	HEM	CBD-CAD-C3D	-3.02	104.23	112.63
24	B	610	CLA	CHC-C1C-C2C	-3.02	118.36	126.72
24	B	606	CLA	C2A-C1A-CHA	-3.02	118.58	123.86
24	c	511	CLA	C4-C3-C5	3.02	120.35	115.27
31	A	418	PL9	C22-C23-C24	-3.02	120.39	127.66
36	D	406	DGD	O1G-C1A-C2A	3.02	121.37	111.91
37	d	407	LHG	O8-C23-O10	-3.01	115.98	123.59
24	b	622	CLA	CED-O2D-CGD	3.01	122.75	115.94
24	b	624	CLA	CAC-C3C-C4C	3.01	128.72	124.81
24	B	616	CLA	CBC-CAC-C3C	-3.01	104.14	112.43
24	C	510	CLA	C4C-C3C-C2C	-3.01	102.51	106.90
24	C	513	CLA	CHD-C4C-NC	3.01	128.94	124.20
34	b	608	HTG	C1-O5-C5	3.01	118.13	112.58
24	b	623	CLA	CHD-C4C-NC	3.01	128.94	124.20
24	c	512	CLA	C4C-C3C-C2C	-3.00	102.52	106.90
35	C	520	LMG	O8-C28-C29	3.00	121.33	111.91
24	c	515	CLA	CMC-C2C-C1C	3.00	129.61	125.04
24	C	508	CLA	C4C-C3C-C2C	-3.00	102.53	106.90
24	c	512	CLA	CHC-C1C-C2C	-3.00	118.43	126.72
24	D	402	CLA	O2A-CGA-CBA	3.00	121.32	111.91
24	b	623	CLA	CBC-CAC-C3C	-3.00	104.17	112.43
38	V	205	HEM	CHB-C1B-NB	3.00	128.08	124.38
24	c	515	CLA	CHD-C4C-NC	3.00	128.92	124.20
24	A	406	CLA	CMB-C2B-C3B	2.99	130.28	124.68
24	b	611	CLA	CHC-C1C-C2C	-2.99	118.44	126.72
27	F	103	SQD	O5-C5-C4	2.99	115.13	109.69
24	B	608	CLA	CHC-C1C-C2C	-2.99	118.45	126.72
24	C	507	CLA	CHC-C1C-C2C	-2.99	118.45	126.72
24	c	507	CLA	CMC-C2C-C1C	2.99	129.59	125.04
24	a	410	CLA	C4C-C3C-C2C	-2.99	102.54	106.90
38	V	205	HEM	CHA-C4D-ND	2.99	128.07	124.38
24	b	614	CLA	C3B-C4B-NB	2.99	113.07	109.21
24	C	509	CLA	CHC-C1C-C2C	-2.99	118.46	126.72
24	B	603	CLA	CHC-C1C-C2C	-2.98	118.47	126.72
24	b	613	CLA	C3D-C4D-ND	2.98	115.07	110.24
24	A	409	CLA	C3B-C4B-NB	2.98	113.07	109.21
26	D	404	BCR	C28-C27-C26	-2.98	108.75	114.08
24	b	625	CLA	C1C-C2C-C3C	-2.98	103.82	106.96
24	b	619	CLA	C4-C3-C5	2.98	120.28	115.27
24	b	622	CLA	C4C-C3C-C2C	-2.98	102.56	106.90
24	B	607	CLA	C1-C2-C3	-2.98	120.90	126.04

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	514	CLA	C3B-C4B-NB	2.97	113.05	109.21
24	C	504	CLA	O2A-CGA-CBA	2.97	121.23	111.91
36	C	519	DGD	O2G-C1B-C2B	2.97	117.90	111.50
24	C	505	CLA	CAC-C3C-C4C	2.97	128.66	124.81
24	b	613	CLA	C1-C2-C3	-2.97	120.91	126.04
26	B	619	BCR	C37-C22-C21	-2.97	118.77	122.92
24	B	617	CLA	CHD-C4C-NC	2.96	128.88	124.20
24	B	610	CLA	CHD-C4C-NC	2.96	128.87	124.20
24	a	412	CLA	C4-C3-C5	2.96	120.25	115.27
31	a	416	PL9	C35-C34-C36	2.96	120.25	115.27
24	B	610	CLA	O2D-CGD-O1D	-2.96	118.06	123.84
24	b	612	CLA	C4C-C3C-C2C	-2.96	102.59	106.90
24	B	617	CLA	CAC-C3C-C4C	2.95	128.64	124.81
24	A	405	CLA	C4C-C3C-C2C	-2.95	102.59	106.90
24	c	513	CLA	C4C-C3C-C2C	-2.95	102.59	106.90
37	E	101	LHG	O8-C23-C24	2.95	121.17	111.91
26	B	620	BCR	C38-C26-C25	-2.95	121.22	124.53
24	b	610	CLA	CHC-C1C-C2C	-2.95	118.56	126.72
24	c	515	CLA	C1-C2-C3	-2.95	120.94	126.04
26	C	516	BCR	C24-C23-C22	-2.95	121.78	126.23
24	c	517	CLA	C1-C2-C3	-2.95	120.95	126.04
27	a	414	SQD	O9-S-C6	2.95	110.44	106.94
24	c	515	CLA	CHC-C1C-C2C	-2.95	118.57	126.72
24	d	403	CLA	O2A-CGA-CBA	2.94	121.15	111.91
37	D	409	LHG	O8-C23-C24	2.94	121.15	111.91
24	A	405	CLA	CHC-C1C-C2C	-2.94	118.58	126.72
24	c	506	CLA	CHC-C1C-C2C	-2.94	118.58	126.72
24	B	605	CLA	C3D-C4D-ND	2.94	115.00	110.24
24	C	511	CLA	CAC-C3C-C4C	2.94	128.63	124.81
24	b	617	CLA	C4C-C3C-C2C	-2.94	102.61	106.90
24	d	402	CLA	CAA-C2A-C3A	-2.94	104.73	112.78
25	D	401	PHO	C4-C3-C5	2.94	120.21	115.27
24	b	610	CLA	C4C-C3C-C2C	-2.94	102.62	106.90
24	b	618	CLA	CHD-C4C-NC	2.94	128.83	124.20
24	c	512	CLA	O2D-CGD-O1D	-2.93	118.10	123.84
24	b	619	CLA	C3B-C4B-NB	2.93	113.00	109.21
27	F	103	SQD	O48-C23-C24	2.93	121.11	111.91
31	a	416	PL9	C37-C38-C39	-2.93	120.60	127.66
35	j	101	LMG	O6-C5-C4	2.93	115.01	109.69
24	C	503	CLA	O2A-CGA-CBA	2.93	121.09	111.91
24	b	619	CLA	C1C-C2C-C3C	-2.93	103.88	106.96
24	a	410	CLA	O2D-CGD-O1D	-2.93	118.12	123.84

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	402	CLA	C4C-C3C-C2C	-2.92	102.64	106.90
24	A	405	CLA	O2A-CGA-O1A	-2.92	116.22	123.59
27	A	415	SQD	O48-C23-O10	-2.92	116.22	123.59
24	A	406	CLA	C4-C3-C5	2.92	120.18	115.27
37	L	101	LHG	C5-O7-C7	-2.92	110.61	117.79
24	b	624	CLA	CHC-C1C-C2C	-2.92	118.65	126.72
24	B	605	CLA	C4C-C3C-C2C	-2.92	102.65	106.90
36	H	102	DGD	C3G-O3G-C1D	-2.92	108.04	113.74
24	d	404	CLA	CAA-C2A-C3A	-2.92	104.79	112.78
24	B	606	CLA	C3B-C4B-NB	2.91	112.98	109.21
24	c	512	CLA	C1-C2-C3	-2.91	121.00	126.04
24	B	605	CLA	CMC-C2C-C1C	2.91	129.48	125.04
24	C	511	CLA	CHC-C1C-C2C	-2.91	118.67	126.72
24	B	603	CLA	C1-C2-C3	-2.91	121.01	126.04
31	A	418	PL9	C27-C28-C29	-2.91	120.65	127.66
24	c	512	CLA	CAC-C3C-C4C	2.91	128.59	124.81
24	a	409	CLA	CHC-C1C-C2C	-2.91	118.68	126.72
24	B	607	CLA	CAC-C3C-C4C	2.91	128.58	124.81
24	C	502	CLA	CHD-C4C-NC	2.91	128.78	124.20
24	C	503	CLA	CAC-C3C-C4C	2.90	128.58	124.81
24	c	507	CLA	C4-C3-C5	2.90	120.16	115.27
38	E	102	HEM	CBA-CAA-C2A	-2.90	107.67	112.62
24	c	509	CLA	CMC-C2C-C1C	2.90	129.46	125.04
24	a	410	CLA	C3B-C4B-NB	2.90	112.95	109.21
24	c	514	CLA	O2A-CGA-CBA	2.90	121.00	111.91
36	C	518	DGD	O1G-C1A-C2A	2.89	120.99	111.91
24	B	610	CLA	CBC-CAC-C3C	-2.89	104.45	112.43
24	d	404	CLA	CHC-C1C-C2C	-2.89	118.72	126.72
35	c	522	LMG	C8-O7-C10	-2.89	110.67	117.79
24	B	607	CLA	CHC-C1C-C2C	-2.89	118.73	126.72
24	C	505	CLA	C4-C3-C5	2.89	120.13	115.27
24	B	617	CLA	CHC-C1C-C2C	-2.89	118.74	126.72
24	c	508	CLA	CHC-C1C-C2C	-2.89	118.74	126.72
24	b	611	CLA	C4-C3-C5	2.88	120.12	115.27
24	b	612	CLA	CAC-C3C-C4C	2.88	128.55	124.81
24	b	623	CLA	C2A-C1A-CHA	-2.88	118.82	123.86
24	C	503	CLA	CHD-C4C-NC	2.88	128.75	124.20
24	C	504	CLA	CHD-C4C-NC	2.88	128.75	124.20
24	c	512	CLA	CAA-C2A-C3A	-2.88	104.89	112.78
24	b	622	CLA	O2D-CGD-CBD	2.88	116.38	111.27
38	E	102	HEM	CHD-C1D-ND	2.88	127.56	124.43
24	a	412	CLA	CHC-C1C-C2C	-2.88	118.76	126.72

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	513	CLA	CHD-C4C-NC	2.88	128.74	124.20
24	c	510	CLA	CHD-C4C-NC	2.88	128.74	124.20
24	b	623	CLA	O2A-CGA-CBA	2.88	120.93	111.91
38	V	205	HEM	C4D-ND-C1D	2.88	108.04	105.07
24	b	612	CLA	CMA-C3A-C2A	-2.88	102.23	113.83
24	b	615	CLA	CHC-C1C-C2C	-2.88	118.77	126.72
24	C	513	CLA	CHC-C1C-C2C	-2.87	118.77	126.72
24	a	409	CLA	CAA-C2A-C1A	-2.87	102.56	111.97
31	D	405	PL9	C32-C33-C34	-2.87	120.74	127.66
24	b	623	CLA	CMC-C2C-C1C	2.87	129.41	125.04
24	b	616	CLA	CBC-CAC-C3C	-2.87	104.52	112.43
24	c	517	CLA	C4C-C3C-C2C	-2.87	102.71	106.90
24	b	615	CLA	C4C-C3C-C2C	-2.87	102.72	106.90
24	D	402	CLA	CHD-C4C-NC	2.87	128.72	124.20
24	b	625	CLA	CHD-C4C-NC	2.87	128.72	124.20
24	B	602	CLA	CHC-C1C-C2C	-2.87	118.79	126.72
36	h	102	DGD	O1G-C1A-C2A	2.86	120.89	111.91
24	B	610	CLA	CMC-C2C-C1C	2.86	129.40	125.04
24	A	409	CLA	CED-O2D-CGD	2.86	122.41	115.94
24	c	510	CLA	CAA-C2A-C3A	-2.86	104.94	112.78
24	c	516	CLA	C4-C3-C5	2.86	120.08	115.27
24	B	612	CLA	CHD-C4C-NC	2.86	128.71	124.20
24	c	517	CLA	CHD-C4C-NC	2.86	128.71	124.20
26	y	101	BCR	C24-C23-C22	-2.86	121.92	126.23
24	B	616	CLA	C4C-C3C-C2C	-2.86	102.73	106.90
24	B	612	CLA	CHC-C1C-C2C	-2.86	118.82	126.72
24	C	512	CLA	C4C-C3C-C2C	-2.86	102.74	106.90
24	C	506	CLA	CHC-C1C-C2C	-2.85	118.83	126.72
24	C	511	CLA	CHD-C4C-NC	2.85	128.70	124.20
24	c	506	CLA	C4C-C3C-C2C	-2.85	102.74	106.90
24	a	409	CLA	CAC-C3C-C4C	2.85	128.51	124.81
24	B	617	CLA	C1C-C2C-C3C	-2.85	103.96	106.96
26	h	101	BCR	C11-C10-C9	-2.85	123.24	127.31
31	D	405	PL9	C15-C14-C16	2.85	120.06	115.27
31	A	418	PL9	C7-C8-C9	-2.85	122.05	126.79
24	b	621	CLA	CED-O2D-CGD	2.85	122.38	115.94
24	B	617	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
24	c	513	CLA	CHC-C1C-C2C	-2.85	118.84	126.72
24	c	516	CLA	C3B-C4B-NB	2.85	112.89	109.21
24	C	510	CLA	CHC-C1C-C2C	-2.85	118.85	126.72
31	a	416	PL9	C53-C6-C1	2.85	120.81	114.99
27	F	103	SQD	C44-O6-C1	-2.85	108.18	113.74

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	619	CLA	CAA-C2A-C3A	-2.84	104.99	112.78
24	B	605	CLA	C4-C3-C5	2.84	120.05	115.27
24	b	621	CLA	CHC-C1C-C2C	-2.84	118.86	126.72
25	D	401	PHO	CMA-C3A-C4A	-2.84	108.15	114.38
34	b	608	HTG	O5-C1-C2	2.84	113.89	110.31
24	A	407	CLA	CHD-C4C-NC	2.84	128.68	124.20
24	B	612	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
24	C	506	CLA	O2D-CGD-O1D	-2.84	118.28	123.84
26	c	527	BCR	C15-C14-C13	-2.84	123.26	127.31
26	d	405	BCR	C28-C27-C26	-2.84	109.00	114.08
24	b	617	CLA	CHC-C1C-C2C	-2.84	118.87	126.72
24	a	410	CLA	O2A-CGA-O1A	-2.84	116.43	123.59
24	c	513	CLA	O2A-CGA-CBA	2.84	120.81	111.91
24	B	614	CLA	CHC-C1C-C2C	-2.84	118.88	126.72
24	C	502	CLA	CAC-C3C-C4C	2.84	128.49	124.81
24	c	505	CLA	CBC-CAC-C3C	-2.83	104.62	112.43
24	c	506	CLA	CHD-C4C-NC	2.83	128.67	124.20
24	B	607	CLA	CBC-CAC-C3C	-2.83	104.62	112.43
24	a	410	CLA	CAA-C2A-C3A	-2.83	105.03	112.78
24	B	602	CLA	C4C-C3C-C2C	-2.83	102.78	106.90
24	b	613	CLA	CAC-C3C-C4C	2.83	128.48	124.81
24	c	513	CLA	CMC-C2C-C1C	2.83	129.34	125.04
26	T	103	BCR	C35-C13-C12	2.82	122.53	118.08
29	M	104	LMT	O5'-C5'-C4'	2.82	115.70	109.75
24	b	613	CLA	O2A-CGA-CBA	2.82	120.77	111.91
24	D	403	CLA	C2A-C1A-CHA	-2.82	118.92	123.86
31	A	418	PL9	C12-C13-C14	-2.82	120.87	127.66
37	D	407	LHG	C5-O7-C7	-2.82	110.85	117.79
37	d	407	LHG	O8-C23-C24	2.82	120.75	111.91
25	A	408	PHO	C1A-C2A-C3A	-2.82	100.16	102.84
24	B	615	CLA	CHC-C1C-C2C	-2.82	118.93	126.72
24	b	623	CLA	CHC-C1C-C2C	-2.82	118.93	126.72
24	C	502	CLA	C1-O2A-CGA	2.82	123.83	116.44
24	c	506	CLA	O2A-CGA-CBA	2.82	120.75	111.91
24	C	505	CLA	CHC-C1C-C2C	-2.82	118.93	126.72
24	d	404	CLA	C4C-C3C-C2C	-2.82	102.79	106.90
24	B	605	CLA	O2D-CGD-O1D	-2.81	118.33	123.84
24	c	514	CLA	C4C-C3C-C2C	-2.81	102.80	106.90
24	d	403	CLA	C4-C3-C5	2.81	120.00	115.27
31	D	405	PL9	C12-C13-C14	-2.81	120.89	127.66
24	B	608	CLA	C4C-C3C-C2C	-2.81	102.80	106.90
36	H	102	DGD	O1G-C1A-C2A	2.81	120.72	111.91

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	507	CLA	C1C-C2C-C3C	-2.81	104.00	106.96
36	c	519	DGD	O6D-C5D-C6D	2.81	112.33	106.67
24	C	509	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
24	b	615	CLA	CHD-C4C-NC	2.80	128.62	124.20
35	b	629	LMG	O8-C28-C29	2.80	120.71	111.91
35	M	101	LMG	O8-C28-C29	2.80	120.71	111.91
24	b	613	CLA	C4C-C3C-C2C	-2.80	102.81	106.90
24	b	618	CLA	O2D-CGD-O1D	-2.80	118.36	123.84
31	D	405	PL9	C7-C3-C4	2.80	119.15	116.88
24	B	603	CLA	C4C-C3C-C2C	-2.80	102.82	106.90
24	c	517	CLA	C2A-C1A-CHA	-2.80	118.97	123.86
38	e	103	HEM	CHA-C4D-ND	2.80	127.84	124.38
26	c	518	BCR	C15-C14-C13	-2.80	123.32	127.31
24	c	517	CLA	CAA-C2A-C3A	-2.80	105.12	112.78
24	c	506	CLA	C1-C2-C3	-2.80	121.20	126.04
24	C	507	CLA	C4C-C3C-C2C	-2.80	102.82	106.90
24	A	405	CLA	C2A-C1A-CHA	-2.79	118.97	123.86
24	b	616	CLA	CMC-C2C-C1C	2.79	129.29	125.04
24	A	407	CLA	C4C-C3C-C2C	-2.79	102.83	106.90
24	C	512	CLA	CHD-C4C-NC	2.79	128.60	124.20
24	c	515	CLA	C4C-C3C-C2C	-2.79	102.83	106.90
24	c	516	CLA	C4C-C3C-C2C	-2.79	102.83	106.90
24	b	615	CLA	O2A-CGA-CBA	2.79	120.67	111.91
24	C	512	CLA	CBC-CAC-C3C	-2.79	104.74	112.43
24	c	516	CLA	CBC-CAC-C3C	-2.79	104.74	112.43
35	z	101	LMG	O8-C28-C29	2.79	120.66	111.91
26	d	405	BCR	C29-C30-C25	2.79	114.77	110.48
24	b	612	CLA	O2A-CGA-CBA	2.79	120.65	111.91
29	f	103	LMT	C1B-O5B-C5B	2.79	119.16	113.69
24	b	612	CLA	CHD-C4C-NC	2.78	128.59	124.20
24	b	618	CLA	C4-C3-C5	2.78	119.95	115.27
26	c	518	BCR	C3-C4-C5	-2.78	109.11	114.08
24	C	502	CLA	C3B-C4B-NB	2.78	112.81	109.21
24	B	607	CLA	CMB-C2B-C3B	2.78	129.88	124.68
24	c	516	CLA	CMB-C2B-C3B	2.78	129.88	124.68
24	B	604	CLA	C2A-C1A-CHA	-2.78	119.00	123.86
24	c	508	CLA	C1-C2-C3	-2.78	121.24	126.04
26	b	628	BCR	C24-C23-C22	-2.77	122.05	126.23
26	b	627	BCR	C33-C5-C6	-2.77	121.42	124.53
24	B	607	CLA	CHD-C4C-NC	2.77	128.56	124.20
24	c	509	CLA	CHC-C1C-C2C	-2.77	119.07	126.72
24	C	512	CLA	CMC-C2C-C1C	2.77	129.25	125.04

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	e	103	HEM	CHB-C1B-NB	2.77	127.80	124.38
24	b	620	CLA	C4C-C3C-C2C	-2.77	102.87	106.90
24	B	603	CLA	CAA-C2A-C3A	-2.77	105.21	112.78
26	A	410	BCR	C38-C26-C25	-2.76	121.42	124.53
24	c	511	CLA	C1-C2-C3	-2.76	121.26	126.04
24	B	609	CLA	CBC-CAC-C3C	-2.76	104.81	112.43
24	B	617	CLA	C1-O2A-CGA	2.76	123.69	116.44
24	b	617	CLA	O2A-CGA-CBA	2.76	120.57	111.91
31	d	406	PL9	C20-C19-C21	2.76	119.92	115.27
24	D	402	CLA	CHC-C1C-C2C	-2.76	119.08	126.72
24	C	509	CLA	CAC-C3C-C4C	2.76	128.39	124.81
24	a	409	CLA	C4C-C3C-C2C	-2.76	102.88	106.90
37	D	407	LHG	O8-C23-O10	-2.76	116.63	123.59
24	c	510	CLA	C4-C3-C5	2.76	119.91	115.27
26	k	101	BCR	C7-C8-C9	-2.76	122.07	126.23
36	C	519	DGD	O1G-C1A-C2A	2.75	120.55	111.91
24	C	510	CLA	O2A-CGA-CBA	2.75	120.54	111.91
24	b	621	CLA	CHD-C4C-NC	2.75	128.54	124.20
26	h	101	BCR	C10-C11-C12	-2.75	114.64	123.22
26	y	101	BCR	C38-C26-C25	-2.75	121.44	124.53
37	L	101	LHG	O8-C23-C24	2.75	120.53	111.91
24	c	513	CLA	CAC-C3C-C4C	2.75	128.37	124.81
26	d	405	BCR	C3-C4-C5	-2.74	109.18	114.08
34	b	632	HTG	C1-O5-C5	2.74	117.64	112.58
24	B	609	CLA	CHD-C4C-NC	2.74	128.52	124.20
24	b	612	CLA	CMB-C2B-C3B	2.74	129.81	124.68
31	a	416	PL9	C40-C39-C41	2.74	119.88	115.27
24	B	611	CLA	CMB-C2B-C3B	2.74	129.81	124.68
24	b	616	CLA	CHD-C4C-NC	2.74	128.52	124.20
24	C	506	CLA	C4-C3-C5	2.74	119.88	115.27
24	B	603	CLA	CMA-C3A-C4A	-2.74	104.42	111.77
36	h	102	DGD	O1G-C1A-O1A	-2.74	116.68	123.59
37	d	407	LHG	O7-C7-C8	2.74	117.40	111.50
27	A	411	SQD	O9-S-C6	2.74	110.19	106.94
26	K	101	BCR	C24-C23-C22	-2.74	122.10	126.23
24	C	514	CLA	CHC-C1C-C2C	-2.74	119.15	126.72
27	L	102	SQD	O48-C23-C24	2.73	120.48	111.91
24	B	604	CLA	C3B-C4B-NB	2.73	112.74	109.21
24	b	618	CLA	C4C-C3C-C2C	-2.73	102.92	106.90
24	C	505	CLA	CHD-C4C-NC	2.73	128.50	124.20
24	c	505	CLA	CMB-C2B-C3B	2.73	129.78	124.68
24	B	605	CLA	O2A-CGA-O1A	-2.73	116.71	123.59

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	512	CLA	CMC-C2C-C1C	2.73	129.19	125.04
24	b	619	CLA	CHC-C1C-C2C	-2.72	119.19	126.72
38	e	103	HEM	CAD-CBD-CGD	2.72	119.47	113.60
24	c	508	CLA	C4C-C3C-C2C	-2.72	102.93	106.90
24	c	517	CLA	C4-C3-C5	2.72	119.85	115.27
24	c	517	CLA	O2A-CGA-CBA	2.72	120.45	111.91
24	d	403	CLA	C4C-C3C-C2C	-2.72	102.93	106.90
24	a	409	CLA	O2A-CGA-O1A	-2.72	116.73	123.59
24	A	407	CLA	CMC-C2C-C1C	2.72	129.18	125.04
24	c	514	CLA	CHD-C4C-NC	2.72	128.49	124.20
24	C	508	CLA	O2A-CGA-CBA	2.72	120.44	111.91
24	B	609	CLA	O2A-CGA-CBA	2.72	120.43	111.91
31	a	416	PL9	C25-C24-C26	2.71	119.84	115.27
26	Y	101	BCR	C37-C22-C23	2.71	122.35	118.08
24	d	404	CLA	CMC-C2C-C1C	2.71	129.17	125.04
26	B	620	BCR	C10-C11-C12	-2.71	114.75	123.22
24	b	623	CLA	CMB-C2B-C3B	2.71	129.75	124.68
24	C	507	CLA	CHD-C4C-NC	2.71	128.47	124.20
24	B	613	CLA	O2A-CGA-CBA	2.71	120.41	111.91
24	a	409	CLA	O2A-CGA-CBA	2.71	120.41	111.91
24	C	502	CLA	C4-C3-C5	2.71	119.83	115.27
24	c	511	CLA	C3B-C4B-NB	2.71	112.71	109.21
24	b	619	CLA	O2A-CGA-CBA	2.71	120.40	111.91
24	B	604	CLA	C4C-C3C-C2C	-2.71	102.95	106.90
24	A	407	CLA	C1-C2-C3	-2.71	121.36	126.04
37	e	102	LHG	O7-C7-C8	2.70	117.33	111.50
27	A	415	SQD	O8-S-C6	2.70	110.05	105.74
24	b	616	CLA	CED-O2D-CGD	2.70	122.05	115.94
24	B	606	CLA	O2A-CGA-CBA	2.70	120.38	111.91
24	c	510	CLA	C4C-C3C-C2C	-2.70	102.96	106.90
24	B	613	CLA	CHD-C4C-NC	2.70	128.46	124.20
24	C	510	CLA	C4-C3-C5	2.70	119.81	115.27
24	b	612	CLA	O2A-CGA-O1A	-2.70	116.79	123.59
31	a	416	PL9	C7-C3-C2	-2.70	119.75	123.30
24	C	509	CLA	C4-C3-C5	2.69	119.80	115.27
24	C	503	CLA	CHC-C1C-C2C	-2.69	119.27	126.72
25	d	401	PHO	CMB-C2B-C3B	2.69	129.72	124.68
24	B	612	CLA	C4C-C3C-C2C	-2.69	102.97	106.90
24	B	607	CLA	O2A-CGA-O1A	-2.69	116.80	123.59
27	L	102	SQD	C44-O6-C1	-2.69	108.48	113.74
24	c	508	CLA	CMB-C2B-C3B	2.69	129.71	124.68
26	B	619	BCR	C33-C5-C6	-2.69	121.51	124.53

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	516	CLA	O2A-CGA-CBA	2.69	120.34	111.91
27	B	621	SQD	O48-C23-C24	2.69	120.34	111.91
38	v	205	HEM	CHD-C1D-ND	2.68	127.35	124.43
37	D	409	LHG	O8-C23-O10	-2.68	116.82	123.59
24	D	402	CLA	CAA-C2A-C3A	-2.68	105.43	112.78
24	c	515	CLA	O2A-CGA-CBA	2.68	120.32	111.91
24	c	508	CLA	CHD-C4C-NC	2.68	128.43	124.20
24	c	515	CLA	CBC-CAC-C3C	-2.68	105.04	112.43
34	V	206	HTG	C1-C2-C3	-2.68	105.30	110.59
24	C	504	CLA	C3B-C4B-NB	2.68	112.67	109.21
24	A	409	CLA	CMC-C2C-C1C	2.68	129.12	125.04
31	D	405	PL9	C22-C23-C24	-2.68	121.21	127.66
26	c	518	BCR	C38-C26-C25	-2.68	121.52	124.53
25	d	401	PHO	C4A-C3A-C2A	-2.68	100.29	102.84
24	C	512	CLA	C4-C3-C5	2.67	119.77	115.27
24	B	614	CLA	C1-C2-C3	-2.67	121.42	126.04
24	D	403	CLA	CAA-C2A-C3A	-2.67	105.47	112.78
24	c	508	CLA	CMC-C2C-C1C	2.67	129.10	125.04
27	A	411	SQD	O48-C23-C24	2.67	120.28	111.91
25	A	408	PHO	O2D-CGD-O1D	-2.67	118.62	123.84
27	a	405	SQD	C3-C4-C5	2.67	115.00	110.24
24	b	612	CLA	CBC-CAC-C3C	-2.66	105.09	112.43
37	e	102	LHG	O8-C23-C24	2.66	120.25	111.91
29	m	102	LMT	O5'-C5'-C4'	2.66	115.36	109.75
24	C	510	CLA	CMC-C2C-C1C	2.66	129.09	125.04
24	b	620	CLA	CMC-C2C-C1C	2.66	129.09	125.04
24	C	511	CLA	O2A-CGA-CBA	2.66	120.24	111.91
24	C	507	CLA	CMC-C2C-C1C	2.65	129.08	125.04
24	c	507	CLA	C3B-C4B-NB	2.65	112.64	109.21
26	H	101	BCR	C15-C14-C13	-2.65	123.52	127.31
24	D	402	CLA	C2A-C1A-CHA	-2.65	119.22	123.86
27	B	621	SQD	C3-C4-C5	2.65	114.97	110.24
24	a	410	CLA	CHC-C1C-C2C	-2.65	119.39	126.72
24	C	514	CLA	O2A-CGA-CBA	2.65	120.22	111.91
24	B	603	CLA	C4-C3-C5	2.65	119.73	115.27
24	b	622	CLA	C4-C3-C5	2.65	119.73	115.27
31	d	406	PL9	C53-C6-C1	2.65	120.40	114.99
24	b	617	CLA	CHD-C4C-NC	2.65	128.37	124.20
24	B	616	CLA	CAC-C3C-C4C	2.65	128.24	124.81
31	A	418	PL9	C25-C24-C26	2.65	119.72	115.27
36	e	101	DGD	O5D-C1E-C2E	2.65	112.43	108.30
24	B	603	CLA	CMB-C2B-C3B	2.65	129.63	124.68

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	T	103	BCR	C12-C13-C14	-2.64	114.88	118.94
24	A	409	CLA	CMA-C3A-C4A	-2.64	104.67	111.77
24	b	614	CLA	O2A-CGA-O1A	-2.64	116.93	123.59
24	c	513	CLA	O2D-CGD-O1D	-2.64	118.68	123.84
24	b	618	CLA	O2A-CGA-CBA	2.64	120.19	111.91
36	H	102	DGD	O1G-C1A-O1A	-2.64	116.93	123.59
24	B	608	CLA	C2A-C1A-CHA	-2.64	119.25	123.86
24	b	625	CLA	C1-C2-C3	-2.64	121.48	126.04
26	A	410	BCR	C37-C22-C21	-2.64	119.23	122.92
24	B	608	CLA	C4-C3-C5	2.63	119.70	115.27
24	C	507	CLA	O2D-CGD-O1D	-2.63	118.69	123.84
24	b	619	CLA	CHD-C4C-NC	2.63	128.35	124.20
24	C	508	CLA	CAC-C3C-C4C	2.63	128.22	124.81
24	B	604	CLA	CHD-C4C-NC	2.63	128.35	124.20
26	b	627	BCR	C37-C22-C21	-2.63	119.24	122.92
37	d	409	LHG	O8-C23-C24	2.63	120.16	111.91
24	B	611	CLA	CAA-CBA-CGA	-2.63	105.58	113.25
24	B	606	CLA	O2D-CGD-O1D	-2.63	118.70	123.84
26	y	101	BCR	C21-C20-C19	-2.63	115.02	123.22
24	C	506	CLA	CMC-C2C-C1C	2.62	129.04	125.04
24	b	615	CLA	CBC-CAC-C3C	-2.62	105.20	112.43
24	c	515	CLA	C1-O2A-CGA	2.62	123.32	116.44
26	t	101	BCR	C1-C6-C7	2.62	123.19	115.78
24	b	620	CLA	CHD-C4C-NC	2.62	128.33	124.20
34	V	206	HTG	O5-C1-C2	-2.62	107.02	110.31
36	C	517	DGD	C2G-O2G-C1B	-2.62	111.34	117.79
24	b	615	CLA	O2A-CGA-O1A	-2.62	116.98	123.59
24	b	624	CLA	CMC-C2C-C1C	2.62	129.03	125.04
24	b	622	CLA	O2A-CGA-CBA	2.62	120.12	111.91
24	c	510	CLA	CMB-C2B-C3B	2.62	129.57	124.68
26	y	101	BCR	C10-C11-C12	-2.61	115.06	123.22
24	C	512	CLA	C1-C2-C3	-2.61	121.52	126.04
24	b	623	CLA	C4C-C3C-C2C	-2.61	103.09	106.90
24	b	612	CLA	CHC-C1C-C2C	-2.61	119.50	126.72
24	B	605	CLA	O2A-CGA-CBA	2.61	120.10	111.91
24	a	412	CLA	CMA-C3A-C2A	-2.61	103.29	113.83
35	C	521	LMG	O8-C28-C29	2.61	120.10	111.91
24	a	412	CLA	O2D-CGD-O1D	-2.61	118.74	123.84
24	C	512	CLA	O2D-CGD-O1D	-2.61	118.74	123.84
24	B	607	CLA	C4-C3-C5	2.61	119.66	115.27
27	f	102	SQD	O47-C7-O49	-2.61	117.40	123.70
24	c	508	CLA	O2D-CGD-O1D	-2.60	118.75	123.84

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	d	404	CLA	C2A-C1A-CHA	-2.60	119.31	123.86
24	C	514	CLA	C4-C3-C5	2.60	119.64	115.27
27	a	414	SQD	C45-O47-C7	-2.60	111.39	117.79
24	c	517	CLA	CAC-C3C-C4C	2.60	128.18	124.81
24	B	604	CLA	CHC-C1C-C2C	-2.60	119.54	126.72
24	b	614	CLA	CHC-C1C-C2C	-2.60	119.54	126.72
24	d	404	CLA	C4-C3-C5	2.59	119.64	115.27
31	D	405	PL9	C25-C24-C26	2.59	119.63	115.27
24	c	511	CLA	CHD-C4C-NC	2.59	128.29	124.20
24	C	504	CLA	CHC-C1C-C2C	-2.59	119.55	126.72
27	L	102	SQD	O7-S-C6	2.59	110.02	106.94
24	B	608	CLA	CAC-C3C-C4C	2.59	128.17	124.81
24	b	623	CLA	O2A-CGA-O1A	-2.59	117.06	123.59
26	c	527	BCR	C28-C27-C26	-2.59	109.45	114.08
24	c	512	CLA	C4-C3-C5	2.59	119.62	115.27
24	a	410	CLA	C4-C3-C5	2.58	119.62	115.27
24	C	514	CLA	CMC-C2C-C1C	2.58	128.97	125.04
26	C	516	BCR	C28-C27-C26	-2.58	109.47	114.08
24	c	511	CLA	CHC-C1C-C2C	-2.58	119.58	126.72
24	c	512	CLA	CMB-C2B-C3B	2.58	129.51	124.68
27	L	102	SQD	O47-C7-O49	-2.58	117.47	123.70
38	E	102	HEM	CHB-C1B-NB	2.58	127.57	124.38
24	B	609	CLA	C4C-C3C-C2C	-2.58	103.14	106.90
24	b	618	CLA	O2A-CGA-O1A	-2.58	117.08	123.59
24	C	511	CLA	CMC-C2C-C1C	2.58	128.97	125.04
24	C	508	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
24	A	405	CLA	CAA-C2A-C1A	-2.58	103.53	111.97
31	a	416	PL9	C51-C49-C50	2.58	120.30	114.60
26	K	101	BCR	C15-C14-C13	-2.58	123.64	127.31
24	c	515	CLA	CMB-C2B-C3B	2.57	129.49	124.68
26	Y	101	BCR	C10-C11-C12	-2.57	115.19	123.22
24	C	502	CLA	CHC-C1C-C2C	-2.57	119.61	126.72
31	d	406	PL9	C27-C28-C29	-2.57	121.47	127.66
31	d	406	PL9	C37-C38-C39	-2.57	121.47	127.66
24	b	623	CLA	CAA-C2A-C3A	-2.57	105.75	112.78
27	F	103	SQD	O9-S-C6	2.57	109.99	106.94
35	a	415	LMG	O8-C28-C29	2.57	119.97	111.91
25	d	401	PHO	CMC-C2C-C3C	2.57	129.78	124.94
24	c	512	CLA	CHD-C4C-NC	2.56	128.24	124.20
24	C	507	CLA	CAA-C2A-C3A	-2.56	105.76	112.78
26	C	516	BCR	C11-C10-C9	-2.56	123.65	127.31
24	A	409	CLA	CHC-C1C-C2C	-2.56	119.64	126.72

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	511	CLA	CBC-CAC-C3C	-2.56	105.37	112.43
24	b	618	CLA	C2A-C1A-CHA	-2.56	119.38	123.86
24	B	605	CLA	OBD-CAD-C3D	-2.56	122.36	128.52
24	b	617	CLA	C1-C2-C3	-2.56	121.62	126.04
24	B	602	CLA	C2A-C1A-CHA	-2.56	119.39	123.86
24	B	614	CLA	OBD-CAD-C3D	-2.56	122.37	128.52
24	B	609	CLA	CAC-C3C-C4C	2.56	128.13	124.81
24	b	613	CLA	CHD-C4C-NC	2.55	128.23	124.20
27	A	411	SQD	O48-C23-O10	-2.55	117.14	123.59
24	A	409	CLA	CHD-C4C-NC	2.55	128.23	124.20
24	A	405	CLA	CMC-C2C-C1C	2.55	128.93	125.04
24	C	512	CLA	O2A-CGA-CBA	2.55	119.92	111.91
24	b	617	CLA	OBD-CAD-C3D	-2.55	122.38	128.52
24	b	613	CLA	O2A-CGA-O1A	-2.55	117.15	123.59
35	C	521	LMG	C3-C4-C5	2.55	114.79	110.24
27	a	414	SQD	O48-C23-C24	2.55	119.91	111.91
26	h	101	BCR	C7-C8-C9	-2.55	122.38	126.23
24	c	511	CLA	CAC-C3C-C4C	2.55	128.12	124.81
24	c	507	CLA	O2A-CGA-CBA	2.55	119.91	111.91
34	B	625	HTG	C1-O5-C5	2.55	117.28	112.58
24	c	517	CLA	C3B-C4B-NB	2.55	112.50	109.21
24	C	505	CLA	C2A-C1A-CHA	-2.54	119.41	123.86
27	f	102	SQD	O48-C23-C24	2.54	119.89	111.91
24	d	403	CLA	CAA-C2A-C3A	-2.54	105.81	112.78
24	c	507	CLA	CHD-C4C-NC	2.54	128.21	124.20
24	d	404	CLA	O2A-CGA-CBA	2.54	119.89	111.91
31	A	418	PL9	C15-C14-C16	2.54	119.55	115.27
24	B	603	CLA	C2A-C1A-CHA	-2.54	119.42	123.86
24	b	619	CLA	CMB-C2B-C3B	2.54	129.43	124.68
36	e	101	DGD	C1E-O6E-C5E	2.54	118.67	113.69
35	J	101	LMG	C9-C8-C7	-2.54	105.78	111.79
27	A	411	SQD	O47-C7-O49	-2.54	117.57	123.70
36	c	521	DGD	O1G-C1A-C2A	2.54	119.87	111.91
24	B	602	CLA	CBC-CAC-C3C	-2.54	105.44	112.43
24	b	611	CLA	C1-C2-C3	-2.54	121.66	126.04
24	B	612	CLA	CBC-CAC-C3C	-2.53	105.44	112.43
24	b	612	CLA	C2A-C1A-CHA	-2.53	119.43	123.86
24	A	409	CLA	CHB-C4A-NA	2.53	128.02	124.51
34	c	525	HTG	C1-O5-C5	2.53	117.25	112.58
26	k	101	BCR	C10-C11-C12	-2.53	115.31	123.22
24	a	409	CLA	CMC-C2C-C1C	2.53	128.90	125.04
24	b	614	CLA	CMC-C2C-C1C	2.53	128.89	125.04

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	d	402	CLA	C4C-C3C-C2C	-2.53	103.21	106.90
25	A	408	PHO	C4A-C3A-C2A	-2.53	100.43	102.84
24	B	605	CLA	CHD-C4C-NC	2.53	128.19	124.20
24	c	516	CLA	CBA-CAA-C2A	-2.53	106.40	113.86
26	d	405	BCR	C2-C1-C6	2.53	114.37	110.48
24	c	516	CLA	O1D-CGD-CBD	-2.53	119.31	124.48
24	a	409	CLA	C1B-CHB-C4A	-2.53	125.11	130.12
34	C	524	HTG	O5-C1-C2	2.52	113.49	110.31
24	B	617	CLA	O2A-CGA-CBA	2.52	119.83	111.91
24	C	503	CLA	CMC-C2C-C1C	2.52	128.88	125.04
24	B	602	CLA	CMC-C2C-C1C	2.52	128.88	125.04
24	D	402	CLA	CBC-CAC-C3C	-2.52	105.48	112.43
24	B	607	CLA	O2A-CGA-CBA	2.52	119.82	111.91
24	c	508	CLA	C2A-C1A-CHA	-2.52	119.45	123.86
31	A	418	PL9	C30-C29-C31	2.52	119.51	115.27
24	C	506	CLA	C1-O2A-CGA	2.52	123.05	116.44
26	d	405	BCR	C15-C14-C13	-2.52	123.72	127.31
24	A	409	CLA	C2A-C1A-CHA	-2.52	119.46	123.86
26	c	527	BCR	C29-C30-C25	2.52	114.36	110.48
24	C	513	CLA	C4-C3-C5	2.52	119.50	115.27
36	e	101	DGD	O1G-C1A-C2A	2.51	119.80	111.91
24	b	619	CLA	O2D-CGD-O1D	-2.51	118.92	123.84
24	B	607	CLA	CAA-C2A-C3A	-2.51	105.90	112.78
24	B	602	CLA	CAC-C3C-C4C	2.51	128.07	124.81
24	b	621	CLA	CMC-C2C-C1C	2.51	128.86	125.04
35	a	415	LMG	C7-O1-C1	-2.51	108.83	113.74
34	B	625	HTG	C1-C2-C3	2.51	115.54	110.59
29	M	104	LMT	O5B-C5B-C4B	2.51	114.25	109.69
24	C	509	CLA	CHD-C4C-NC	2.51	128.16	124.20
24	B	612	CLA	C1-C2-C3	-2.51	121.70	126.04
26	a	413	BCR	C3-C4-C5	-2.51	109.60	114.08
26	c	527	BCR	C7-C8-C9	-2.51	122.45	126.23
26	k	101	BCR	C39-C30-C25	-2.51	106.23	110.30
35	Z	101	LMG	C1-O6-C5	2.50	118.60	113.69
35	c	523	LMG	O8-C28-C29	2.50	119.77	111.91
24	B	616	CLA	O2A-CGA-O1A	-2.50	117.27	123.59
24	a	412	CLA	C4C-C3C-C2C	-2.50	103.25	106.90
38	V	205	HEM	CHD-C1D-ND	2.50	127.15	124.43
24	b	610	CLA	CMB-C2B-C3B	2.50	129.36	124.68
24	b	617	CLA	CMB-C2B-C3B	2.50	129.35	124.68
24	c	508	CLA	CAC-C3C-C4C	2.50	128.05	124.81
24	A	406	CLA	O2A-CGA-O1A	-2.50	117.29	123.59

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	612	CLA	C2A-C1A-CHA	-2.50	119.50	123.86
24	c	517	CLA	CMB-C2B-C3B	2.50	129.35	124.68
26	K	101	BCR	C29-C30-C25	2.49	114.32	110.48
24	C	505	CLA	CMB-C2B-C3B	2.49	129.34	124.68
38	E	102	HEM	C4D-ND-C1D	2.49	107.65	105.07
24	a	410	CLA	O2A-CGA-CBA	2.49	119.73	111.91
24	c	505	CLA	O2A-CGA-CBA	2.49	119.73	111.91
24	c	517	CLA	CHC-C1C-C2C	-2.49	119.83	126.72
24	D	403	CLA	O2A-CGA-O1A	-2.49	117.31	123.59
24	b	620	CLA	O2D-CGD-O1D	-2.49	118.97	123.84
24	C	513	CLA	C1-O2A-CGA	2.49	122.97	116.44
24	B	611	CLA	CHB-C4A-NA	2.49	127.95	124.51
24	B	615	CLA	CMB-C2B-C3B	2.49	129.33	124.68
26	H	101	BCR	C24-C23-C22	-2.49	122.48	126.23
26	C	515	BCR	C20-C21-C22	-2.48	123.77	127.31
24	A	407	CLA	CHC-C1C-C2C	-2.48	119.85	126.72
36	c	519	DGD	C2G-O2G-C1B	-2.48	111.68	117.79
26	B	620	BCR	C3-C4-C5	-2.48	109.64	114.08
24	B	608	CLA	O2A-CGA-O1A	-2.48	117.33	123.59
25	a	411	PHO	CMA-C3A-C4A	-2.48	108.94	114.38
24	C	510	CLA	CHD-C4C-NC	2.48	128.12	124.20
36	D	406	DGD	C4D-C3D-C2D	2.48	115.16	110.82
24	a	410	CLA	C2A-C1A-CHA	-2.48	119.52	123.86
24	C	514	CLA	CHD-C4C-NC	2.48	128.11	124.20
24	B	606	CLA	CMB-C2B-C1B	2.48	132.27	128.46
26	h	101	BCR	C16-C15-C14	-2.48	118.40	123.47
34	d	412	HTG	C1-O5-C5	2.48	117.15	112.58
24	B	615	CLA	CHD-C4C-NC	2.48	128.11	124.20
24	d	402	CLA	C1-C2-C3	-2.48	121.76	126.04
24	c	516	CLA	CHC-C1C-C2C	-2.48	119.88	126.72
24	B	616	CLA	CED-O2D-CGD	2.47	121.53	115.94
24	c	509	CLA	C3B-C4B-NB	2.47	112.41	109.21
24	B	616	CLA	C2A-C1A-CHA	-2.47	119.53	123.86
24	C	509	CLA	C1-C2-C3	-2.47	121.77	126.04
31	A	418	PL9	C10-C9-C11	2.47	119.43	115.27
24	C	511	CLA	O2A-CGA-O1A	-2.47	117.36	123.59
24	C	504	CLA	O2D-CGD-O1D	-2.47	119.01	123.84
27	A	411	SQD	C1-C2-C3	-2.47	104.85	110.00
24	B	606	CLA	CHC-C1C-C2C	-2.47	119.89	126.72
24	A	407	CLA	C3B-C4B-NB	2.47	112.40	109.21
24	B	606	CLA	CAC-C3C-C4C	2.47	128.01	124.81
24	C	505	CLA	C4C-C3C-C2C	-2.47	103.30	106.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	614	CLA	O2A-CGA-CBA	2.46	119.64	111.91
24	b	620	CLA	O2A-CGA-CBA	2.46	119.64	111.91
24	B	616	CLA	CHC-C1C-C2C	-2.46	119.91	126.72
24	a	409	CLA	CHD-C4C-NC	2.46	128.08	124.20
38	v	205	HEM	CBA-CAA-C2A	-2.46	108.42	112.62
24	B	611	CLA	C4-C3-C5	2.46	119.41	115.27
24	B	608	CLA	CMC-C2C-C1C	2.46	128.78	125.04
26	t	101	BCR	C7-C6-C5	-2.45	115.52	121.46
31	D	405	PL9	C27-C28-C29	-2.45	121.75	127.66
24	C	512	CLA	C1-O2A-CGA	2.45	122.87	116.44
24	b	616	CLA	C4C-C3C-C2C	-2.45	103.33	106.90
24	a	409	CLA	C4-C3-C5	2.45	119.39	115.27
24	b	617	CLA	C2A-C1A-CHA	-2.45	119.58	123.86
37	d	408	LHG	O8-C23-C24	2.45	119.59	111.91
24	C	509	CLA	O2A-CGA-CBA	2.45	119.58	111.91
24	B	617	CLA	C2A-C1A-CHA	-2.45	119.58	123.86
24	c	510	CLA	CMC-C2C-C1C	2.44	128.76	125.04
26	t	101	BCR	C21-C20-C19	-2.44	115.59	123.22
24	b	625	CLA	C4-C3-C5	2.44	119.38	115.27
26	C	516	BCR	C21-C20-C19	-2.44	115.60	123.22
26	C	516	BCR	C15-C14-C13	-2.44	123.83	127.31
24	c	512	CLA	C2A-C1A-CHA	-2.44	119.59	123.86
24	C	502	CLA	C1-C2-C3	-2.44	121.82	126.04
31	a	416	PL9	C30-C29-C31	2.44	119.37	115.27
26	a	413	BCR	C33-C5-C6	-2.44	121.79	124.53
24	d	403	CLA	O2A-CGA-O1A	-2.44	117.44	123.59
24	B	607	CLA	C4C-C3C-C2C	-2.44	103.34	106.90
24	c	507	CLA	CHC-C1C-C2C	-2.44	119.98	126.72
24	B	607	CLA	C2A-C1A-CHA	-2.44	119.60	123.86
26	t	101	BCR	C2-C1-C6	2.43	114.23	110.48
24	B	608	CLA	CBC-CAC-C3C	-2.43	105.73	112.43
24	B	606	CLA	O2A-CGA-O1A	-2.43	117.46	123.59
26	K	101	BCR	C16-C17-C18	-2.43	123.84	127.31
24	B	610	CLA	C1-C2-C3	-2.43	121.85	126.04
24	b	624	CLA	C11-C10-C8	-2.42	108.08	115.92
24	a	412	CLA	CHB-C4A-NA	2.42	127.86	124.51
24	b	615	CLA	CAA-C2A-C3A	-2.42	106.14	112.78
24	c	516	CLA	O2D-CGD-O1D	-2.42	119.10	123.84
37	d	408	LHG	O8-C23-O10	-2.42	117.48	123.59
35	C	521	LMG	C8-O7-C10	-2.42	111.83	117.79
24	b	617	CLA	CBC-CAC-C3C	-2.42	105.77	112.43
24	B	611	CLA	CHD-C4C-NC	2.41	128.01	124.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	617	CLA	O1D-CGD-CBD	-2.41	119.54	124.48
24	d	402	CLA	C1-O2A-CGA	2.41	122.78	116.44
26	B	619	BCR	C31-C1-C6	-2.41	106.39	110.30
24	c	507	CLA	C2A-C1A-CHA	-2.41	119.64	123.86
31	A	418	PL9	C42-C43-C44	-2.41	121.86	127.66
24	a	412	CLA	CMC-C2C-C1C	2.41	128.71	125.04
24	c	506	CLA	O2A-CGA-O1A	-2.41	117.51	123.59
24	b	619	CLA	C2A-C1A-CHA	-2.41	119.65	123.86
26	C	515	BCR	C37-C22-C23	2.41	121.87	118.08
24	B	614	CLA	CAC-C3C-C4C	2.41	127.93	124.81
24	b	614	CLA	CAC-C3C-C2C	2.41	131.64	127.53
26	b	626	BCR	C16-C17-C18	-2.40	123.88	127.31
24	B	610	CLA	C1-O2A-CGA	2.40	122.74	116.44
27	F	103	SQD	O47-C7-O49	-2.40	117.90	123.70
24	B	605	CLA	C11-C10-C8	-2.40	108.16	115.92
36	c	520	DGD	O1G-C1A-C2A	2.40	119.44	111.91
26	A	410	BCR	C33-C5-C6	-2.40	121.83	124.53
26	t	101	BCR	C12-C13-C14	-2.40	115.26	118.94
24	b	620	CLA	C2A-C1A-CHA	-2.40	119.67	123.86
24	b	611	CLA	CMB-C2B-C3B	2.40	129.16	124.68
24	b	616	CLA	C2A-C1A-CHA	-2.40	119.67	123.86
24	c	514	CLA	O2A-CGA-O1A	-2.40	117.54	123.59
24	D	402	CLA	C4-C3-C5	2.40	119.30	115.27
24	C	509	CLA	C2A-C1A-CHA	-2.40	119.67	123.86
24	A	406	CLA	CAA-CBA-CGA	2.40	120.25	113.25
24	a	412	CLA	C2A-C1A-CHA	-2.40	119.67	123.86
35	Z	101	LMG	C1-C2-C3	2.39	114.98	110.00
24	b	611	CLA	O2A-CGA-CBA	2.39	119.42	111.91
35	c	522	LMG	O8-C28-O10	-2.39	117.56	123.59
24	B	604	CLA	CMA-C3A-C2A	-2.39	104.19	113.83
24	a	412	CLA	O2A-CGA-CBA	2.39	119.41	111.91
24	d	403	CLA	CMA-C3A-C2A	-2.39	104.19	113.83
37	L	101	LHG	O7-C7-O9	-2.39	117.93	123.70
24	c	515	CLA	O2D-CGD-O1D	-2.39	119.17	123.84
27	B	621	SQD	O47-C7-O49	-2.39	117.94	123.70
24	c	510	CLA	O2A-CGA-CBA	2.39	119.39	111.91
24	c	505	CLA	CMC-C2C-C1C	2.38	128.67	125.04
27	B	621	SQD	C44-O6-C1	-2.38	109.08	113.74
24	C	513	CLA	CMC-C2C-C1C	2.38	128.67	125.04
38	V	205	HEM	O2D-CGD-CBD	2.38	121.68	114.03
24	b	616	CLA	C4-C3-C5	2.38	119.28	115.27
29	M	104	LMT	O1B-C1B-C2B	2.38	114.27	108.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	611	CLA	CBC-CAC-C3C	-2.38	105.87	112.43
24	d	404	CLA	O2D-CGD-O1D	-2.38	119.19	123.84
24	C	502	CLA	C4C-C3C-C2C	-2.38	103.43	106.90
24	A	409	CLA	O2A-CGA-CBA	2.38	119.36	111.91
24	B	606	CLA	C1-C2-C3	-2.38	121.93	126.04
24	a	410	CLA	CAC-C3C-C4C	2.38	127.89	124.81
29	A	416	LMT	C4B-C3B-C2B	-2.37	106.68	110.82
24	B	612	CLA	CMB-C2B-C3B	2.37	129.12	124.68
24	C	513	CLA	O2A-CGA-CBA	2.37	119.35	111.91
24	d	402	CLA	CMA-C3A-C2A	-2.37	104.27	113.83
25	D	401	PHO	CMC-C2C-C3C	2.37	129.41	124.94
24	c	509	CLA	C2A-C1A-CHA	-2.37	119.72	123.86
24	C	514	CLA	C2A-C1A-CHA	-2.36	119.73	123.86
27	a	405	SQD	O48-C23-O10	-2.36	117.63	123.59
24	C	503	CLA	C2A-C1A-CHA	-2.36	119.73	123.86
26	H	101	BCR	C10-C11-C12	-2.36	115.85	123.22
26	C	515	BCR	C38-C26-C25	-2.36	121.88	124.53
24	d	404	CLA	CBC-CAC-C3C	-2.36	105.93	112.43
24	b	623	CLA	CHB-C4A-NA	2.36	127.77	124.51
29	C	522	LMT	O5'-C5'-C4'	2.36	114.72	109.75
24	C	508	CLA	O2A-CGA-O1A	-2.36	117.65	123.59
26	T	103	BCR	C16-C15-C14	2.36	128.30	123.47
35	c	523	LMG	C8-O7-C10	-2.36	111.99	117.79
26	K	101	BCR	C3-C4-C5	-2.35	109.88	114.08
24	c	517	CLA	O2D-CGD-O1D	-2.35	119.24	123.84
31	A	418	PL9	C17-C18-C19	-2.35	122.00	127.66
24	c	505	CLA	O2A-CGA-O1A	-2.35	117.66	123.59
24	c	506	CLA	CBC-CAC-C3C	-2.35	105.95	112.43
26	A	410	BCR	C24-C23-C22	-2.35	122.68	126.23
24	b	625	CLA	O2A-CGA-O1A	-2.35	117.66	123.59
36	C	517	DGD	O1G-C1A-O1A	-2.35	117.66	123.59
24	B	604	CLA	CAC-C3C-C4C	2.35	127.86	124.81
31	d	406	PL9	O1-C4-C3	-2.35	118.13	120.72
26	c	518	BCR	C21-C20-C19	-2.35	115.88	123.22
24	a	409	CLA	O2D-CGD-O1D	-2.35	119.24	123.84
24	D	402	CLA	CMB-C2B-C3B	2.35	129.07	124.68
24	c	510	CLA	O2A-CGA-O1A	-2.35	117.67	123.59
36	D	406	DGD	O6D-C5D-C6D	2.35	111.40	106.67
34	B	632	HTG	C3-C4-C5	2.35	114.42	110.24
26	Y	101	BCR	C28-C27-C26	-2.35	109.89	114.08
26	t	101	BCR	C20-C21-C22	-2.35	123.96	127.31
24	c	513	CLA	CMB-C2B-C3B	2.34	129.06	124.68

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	C	518	DGD	O1G-C1A-O1A	-2.34	117.68	123.59
24	c	513	CLA	C4-C3-C5	2.34	119.21	115.27
24	A	407	CLA	CAC-C3C-C4C	2.34	127.85	124.81
24	b	625	CLA	C2A-C1A-CHA	-2.34	119.77	123.86
24	B	608	CLA	CED-O2D-CGD	2.34	121.23	115.94
24	C	514	CLA	CAA-C2A-C3A	-2.34	106.38	112.78
24	b	614	CLA	O2A-CGA-CBA	2.34	119.24	111.91
24	b	610	CLA	C2A-C1A-CHA	-2.34	119.78	123.86
34	B	624	HTG	O5-C1-C2	2.33	113.25	110.31
24	C	508	CLA	CHC-C1C-C2C	-2.33	120.26	126.72
24	B	604	CLA	C1-O2A-CGA	2.33	122.57	116.44
24	A	406	CLA	C4C-C3C-C2C	-2.33	103.50	106.90
29	M	102	LMT	O6 <sup>?</sup> -C6 <sup>?</sup> -C5 <sup>?</sup>	-2.33	103.29	111.29
24	B	609	CLA	CHB-C4A-NA	2.33	127.74	124.51
29	F	102	LMT	C1B-O5B-C5B	2.33	118.26	113.69
35	Z	101	LMG	C9-O8-C28	2.33	122.95	117.10
24	B	613	CLA	CBC-CAC-C3C	-2.33	106.01	112.43
24	c	511	CLA	O2A-CGA-CBA	2.33	119.21	111.91
26	B	620	BCR	C28-C27-C26	-2.33	109.92	114.08
24	B	609	CLA	CAA-C2A-C3A	-2.32	106.41	112.78
31	d	406	PL9	C36-C37-C38	-2.32	104.25	111.88
31	D	405	PL9	C37-C38-C39	-2.32	122.07	127.66
36	c	520	DGD	C3B-C2B-C1B	-2.32	105.18	113.62
24	a	410	CLA	C1-C2-C3	-2.32	122.03	126.04
24	a	412	CLA	CMA-C3A-C4A	-2.32	105.54	111.77
27	L	102	SQD	C1-C2-C3	-2.32	105.17	110.00
24	b	621	CLA	O1D-CGD-CBD	-2.32	119.74	124.48
24	b	611	CLA	C2A-C1A-CHA	-2.32	119.81	123.86
24	c	510	CLA	O2D-CGD-O1D	-2.32	119.31	123.84
24	c	509	CLA	C4-C3-C5	2.32	119.17	115.27
29	m	102	LMT	C1 <sup>?</sup> -O5 <sup>?</sup> -C5 <sup>?</sup>	2.31	118.23	113.69
36	c	519	DGD	O2G-C1B-O1B	-2.31	118.11	123.70
26	t	101	BCR	C7-C8-C9	-2.31	122.74	126.23
24	c	510	CLA	CAC-C3C-C4C	2.31	127.81	124.81
24	c	512	CLA	O2A-CGA-CBA	2.31	119.15	111.91
24	A	406	CLA	C2A-C1A-CHA	-2.31	119.83	123.86
35	j	101	LMG	C1-O6-C5	2.31	118.22	113.69
24	C	512	CLA	CMB-C2B-C3B	2.31	128.99	124.68
24	C	508	CLA	CBC-CAC-C3C	-2.31	106.07	112.43
27	a	405	SQD	O5-C5-C4	2.30	113.88	109.69
24	c	508	CLA	C11-C10-C8	-2.30	108.47	115.92
24	b	613	CLA	CHA-C1A-NA	-2.30	121.12	126.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	506	CLA	CMC-C2C-C1C	2.30	128.54	125.04
24	A	406	CLA	CMA-C3A-C2A	-2.30	104.55	113.83
31	D	405	PL9	C51-C49-C50	2.30	119.68	114.60
24	b	611	CLA	CHD-C4C-NC	2.30	127.83	124.20
24	b	618	CLA	CMA-C3A-C4A	-2.30	105.59	111.77
24	C	513	CLA	CAC-C3C-C4C	2.30	127.79	124.81
26	b	626	BCR	C33-C5-C4	2.29	118.02	113.62
24	B	610	CLA	O2A-CGA-CBA	2.29	119.10	111.91
24	c	508	CLA	O2A-CGA-O1A	-2.29	117.81	123.59
24	B	603	CLA	CMC-C2C-C1C	2.29	128.53	125.04
24	C	504	CLA	O2A-CGA-O1A	-2.29	117.82	123.59
27	B	621	SQD	C1-C2-C3	-2.29	105.23	110.00
31	d	406	PL9	C25-C24-C26	2.29	119.12	115.27
24	B	609	CLA	C1-C2-C3	-2.29	122.09	126.04
24	A	406	CLA	O1D-CGD-CBD	-2.28	119.81	124.48
26	T	103	BCR	C21-C20-C19	-2.28	116.09	123.22
24	C	511	CLA	C2A-C1A-CHA	-2.28	119.87	123.86
26	Y	101	BCR	C40-C30-C25	-2.28	106.60	110.30
26	k	101	BCR	C15-C14-C13	-2.28	124.06	127.31
24	B	613	CLA	CHC-C1C-C2C	-2.28	120.42	126.72
36	h	102	DGD	C2G-O2G-C1B	-2.28	112.19	117.79
24	A	407	CLA	CAA-CBA-CGA	2.28	119.91	113.25
24	b	620	CLA	O2A-CGA-O1A	-2.28	117.85	123.59
36	C	517	DGD	C3G-C2G-C1G	-2.28	106.41	111.79
24	c	514	CLA	CAC-C3C-C4C	2.27	127.76	124.81
24	B	614	CLA	C2A-C1A-CHA	-2.27	119.88	123.86
24	B	614	CLA	CHD-C4C-NC	2.27	127.78	124.20
24	B	611	CLA	O2A-CGA-O1A	-2.27	117.86	123.59
24	d	404	CLA	CMB-C2B-C3B	2.27	128.93	124.68
26	T	103	BCR	C36-C18-C19	2.27	121.65	118.08
31	d	406	PL9	C15-C14-C16	2.27	119.09	115.27
35	Z	101	LMG	C8-O7-C10	-2.27	112.21	117.79
24	C	505	CLA	C1-O2A-CGA	2.27	122.39	116.44
26	b	628	BCR	C2-C1-C6	2.27	113.97	110.48
27	B	621	SQD	O9-S-C6	2.26	109.63	106.94
24	b	623	CLA	C4-C3-C5	2.26	119.08	115.27
26	D	404	BCR	C21-C20-C19	-2.26	116.16	123.22
24	B	616	CLA	C4-C3-C5	2.26	119.08	115.27
26	b	628	BCR	C8-C7-C6	-2.26	120.85	127.20
24	d	402	CLA	O2A-CGA-O1A	-2.26	117.89	123.59
24	B	602	CLA	CHB-C4A-NA	2.26	127.64	124.51
24	C	502	CLA	C2A-C1A-CHA	-2.26	119.91	123.86

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	L	102	SQD	O5-C5-C4	2.26	113.80	109.69
24	c	514	CLA	CMB-C2B-C3B	2.26	128.90	124.68
24	b	622	CLA	O2A-CGA-O1A	-2.26	117.90	123.59
24	D	403	CLA	O2A-CGA-CBA	2.26	118.99	111.91
24	C	507	CLA	C2A-C1A-CHA	-2.26	119.92	123.86
24	b	610	CLA	CAC-C3C-C4C	2.26	127.74	124.81
24	a	409	CLA	CHB-C4A-NA	2.25	127.63	124.51
24	B	604	CLA	CMB-C2B-C3B	2.25	128.89	124.68
25	D	401	PHO	C1-C2-C3	-2.25	122.15	126.04
37	d	408	LHG	C6-C5-C4	-2.25	106.46	111.79
26	B	620	BCR	C36-C18-C19	2.25	121.62	118.08
24	b	620	CLA	C1-C2-C3	-2.25	122.15	126.04
35	z	101	LMG	C8-O7-C10	-2.25	112.25	117.79
24	B	610	CLA	C2A-C1A-CHA	-2.25	119.92	123.86
26	B	618	BCR	C16-C17-C18	-2.25	124.10	127.31
37	D	407	LHG	O7-C7-O9	-2.25	118.27	123.70
37	L	101	LHG	O8-C23-O10	-2.25	117.92	123.59
24	B	614	CLA	O2D-CGD-O1D	-2.25	119.44	123.84
24	c	517	CLA	O2A-CGA-O1A	-2.25	117.92	123.59
24	A	405	CLA	O2D-CGD-O1D	-2.24	119.45	123.84
24	C	514	CLA	O2D-CGD-O1D	-2.24	119.45	123.84
24	B	602	CLA	C1-C2-C3	-2.24	122.17	126.04
31	d	406	PL9	C12-C13-C14	-2.24	122.27	127.66
35	C	501	LMG	O8-C28-C29	2.24	118.93	111.91
24	b	613	CLA	C6-C5-C3	-2.24	107.59	113.45
26	H	101	BCR	C29-C30-C25	2.23	113.92	110.48
24	b	624	CLA	O2A-CGA-O1A	-2.23	117.95	123.59
38	V	205	HEM	CMD-C2D-C1D	2.23	128.44	125.04
27	a	414	SQD	O47-C7-O49	-2.23	118.31	123.70
24	b	614	CLA	C1-C2-C3	-2.23	122.18	126.04
24	C	506	CLA	CHD-C4C-NC	2.23	127.72	124.20
24	B	614	CLA	CMC-C2C-C1C	2.23	128.44	125.04
27	A	411	SQD	C1-O5-C5	-2.23	109.31	113.69
38	V	205	HEM	CBA-CAA-C2A	-2.23	108.82	112.62
24	d	403	CLA	CMB-C2B-C3B	2.23	128.84	124.68
24	C	506	CLA	C2A-C1A-CHA	-2.23	119.97	123.86
24	C	503	CLA	C4-C3-C5	2.23	119.02	115.27
37	D	408	LHG	O8-C23-O10	-2.22	117.98	123.59
24	d	402	CLA	O2A-CGA-CBA	2.22	118.87	111.91
38	v	205	HEM	O2A-CGA-CBA	2.22	121.16	114.03
24	B	608	CLA	CHD-C4C-NC	2.22	127.70	124.20
24	B	613	CLA	O2A-CGA-O1A	-2.22	118.00	123.59

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	506	CLA	C4-C3-C5	2.22	119.00	115.27
26	T	103	BCR	C10-C11-C12	-2.22	116.30	123.22
24	b	617	CLA	C4-C3-C5	2.21	119.00	115.27
24	b	613	CLA	O1D-CGD-CBD	-2.21	119.95	124.48
24	B	609	CLA	C2A-C1A-CHA	-2.21	119.99	123.86
26	t	101	BCR	C35-C13-C12	2.21	121.56	118.08
24	B	614	CLA	C4-C3-C5	2.21	118.99	115.27
26	B	618	BCR	C15-C14-C13	-2.21	124.15	127.31
24	b	620	CLA	CMB-C2B-C3B	2.21	128.82	124.68
26	D	404	BCR	C1-C6-C7	2.21	122.03	115.78
26	A	410	BCR	C3-C4-C5	-2.21	110.13	114.08
36	c	521	DGD	C2G-O2G-C1B	-2.21	112.35	117.79
29	B	635	LMT	C1'-O5'-C5'	2.21	118.02	113.69
24	B	616	CLA	O2A-CGA-CBA	2.21	118.83	111.91
24	A	406	CLA	O2A-CGA-CBA	2.21	118.83	111.91
26	b	626	BCR	C10-C11-C12	-2.21	116.33	123.22
24	c	511	CLA	O1D-CGD-CBD	-2.20	119.98	124.48
24	c	515	CLA	CED-O2D-CGD	2.20	120.92	115.94
25	D	401	PHO	CBA-CAA-C2A	-2.20	107.38	113.81
24	A	407	CLA	O2A-CGA-O1A	-2.20	118.04	123.59
24	A	409	CLA	O2A-CGA-O1A	-2.20	118.04	123.59
24	B	608	CLA	O2A-CGA-CBA	2.20	118.82	111.91
24	b	625	CLA	CHC-C1C-NC	2.20	127.54	124.20
24	C	513	CLA	CHB-C4A-NA	2.20	127.56	124.51
26	D	404	BCR	C3-C4-C5	-2.20	110.15	114.08
24	b	615	CLA	C2A-C1A-CHA	-2.20	120.01	123.86
24	b	619	CLA	CAA-CBA-CGA	-2.20	106.83	113.25
29	B	622	LMT	C1-O1'-C1'	-2.20	110.19	113.84
24	b	619	CLA	CMC-C2C-C1C	2.20	128.39	125.04
24	D	402	CLA	O2A-CGA-O1A	-2.20	118.05	123.59
24	c	508	CLA	O2A-CGA-CBA	2.20	118.80	111.91
26	t	101	BCR	C11-C10-C9	-2.19	124.18	127.31
24	C	502	CLA	O2A-CGA-O1A	-2.19	118.05	123.59
24	C	514	CLA	CMB-C2B-C3B	2.19	128.78	124.68
25	a	411	PHO	C1-O2A-CGA	2.19	122.20	116.44
24	b	621	CLA	CAA-C2A-C3A	-2.19	106.77	112.78
24	b	623	CLA	CED-O2D-CGD	2.19	120.90	115.94
24	B	604	CLA	C4-C3-C5	2.19	118.96	115.27
24	b	611	CLA	CMA-C3A-C4A	-2.19	105.89	111.77
34	b	631	HTG	C1-C2-C3	2.19	114.92	110.59
24	D	403	CLA	CHD-C4C-NC	2.19	127.66	124.20
24	A	405	CLA	CMA-C3A-C4A	-2.19	105.89	111.77

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	k	101	BCR	C29-C30-C25	2.19	113.85	110.48
24	B	611	CLA	C1-C2-C3	-2.19	122.26	126.04
24	A	407	CLA	CAA-C2A-C3A	-2.19	106.78	112.78
25	a	411	PHO	C4-C3-C5	2.19	118.95	115.27
35	c	523	LMG	O8-C28-O10	-2.19	118.07	123.59
24	d	404	CLA	O2A-CGA-O1A	-2.19	118.07	123.59
26	t	101	BCR	C29-C28-C27	-2.19	106.49	111.38
38	e	103	HEM	CHD-C1D-C2D	-2.18	121.57	124.98
24	c	513	CLA	O2A-CGA-O1A	-2.18	118.08	123.59
24	c	508	CLA	CAA-C2A-C3A	-2.18	106.80	112.78
24	C	502	CLA	O2A-CGA-CBA	2.18	118.76	111.91
24	A	405	CLA	C1B-CHB-C4A	-2.18	125.80	130.12
26	D	404	BCR	C39-C30-C25	-2.18	106.76	110.30
35	b	629	LMG	O8-C28-O10	-2.18	118.10	123.59
24	B	615	CLA	OBD-CAD-C3D	-2.18	123.28	128.52
26	K	101	BCR	C2-C1-C6	2.18	113.83	110.48
24	c	506	CLA	C2A-C1A-CHA	-2.18	120.05	123.86
24	C	511	CLA	O2D-CGD-O1D	-2.18	119.58	123.84
27	F	103	SQD	C1-C2-C3	-2.18	105.47	110.00
24	A	409	CLA	CMB-C2B-C3B	2.18	128.75	124.68
24	B	616	CLA	C1-C2-C3	-2.18	122.28	126.04
24	b	619	CLA	CMA-C3A-C4A	-2.17	105.93	111.77
25	A	408	PHO	CMC-C2C-C3C	2.17	129.04	124.94
24	B	609	CLA	O2A-CGA-O1A	-2.17	118.11	123.59
38	v	205	HEM	O2D-CGD-CBD	2.17	121.00	114.03
24	B	617	CLA	C4-C3-C5	2.17	118.92	115.27
24	c	516	CLA	CAC-C3C-C4C	2.17	127.63	124.81
24	C	511	CLA	C6-C7-C8	-2.17	108.90	115.92
24	b	618	CLA	CED-O2D-CGD	2.17	120.84	115.94
24	b	622	CLA	CHD-C4C-NC	2.17	127.62	124.20
24	b	616	CLA	O2D-CGD-O1D	-2.17	119.60	123.84
26	h	101	BCR	C24-C23-C22	-2.17	122.96	126.23
24	b	610	CLA	O2A-CGA-CBA	2.17	118.71	111.91
26	b	626	BCR	C3-C4-C5	-2.17	110.21	114.08
24	b	616	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
24	c	514	CLA	C4-C3-C2	-2.17	118.12	123.68
38	E	102	HEM	O2A-CGA-CBA	2.17	120.99	114.03
24	c	510	CLA	C2A-C1A-CHA	-2.17	120.07	123.86
24	B	610	CLA	CMB-C2B-C1B	2.16	131.79	128.46
26	b	626	BCR	C29-C30-C25	2.16	113.81	110.48
27	a	414	SQD	C1-O5-C5	-2.16	109.44	113.69
26	T	103	BCR	C16-C17-C18	-2.16	124.23	127.31

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	618	BCR	C34-C9-C10	-2.16	119.90	122.92
26	c	518	BCR	C16-C17-C18	-2.16	124.23	127.31
24	c	505	CLA	OBD-CAD-C3D	-2.16	123.33	128.52
26	t	101	BCR	C23-C24-C25	-2.16	121.14	127.20
24	b	617	CLA	CMC-C2C-C1C	2.16	128.32	125.04
25	a	411	PHO	CMB-C2B-C3B	2.16	128.71	124.68
26	K	101	BCR	C10-C11-C12	-2.16	116.49	123.22
24	b	624	CLA	O2A-CGA-CBA	2.16	118.67	111.91
24	b	618	CLA	CMC-C2C-C1C	2.16	128.32	125.04
24	C	511	CLA	CMB-C2B-C3B	2.15	128.71	124.68
36	e	101	DGD	O2G-C1B-O1B	-2.15	118.50	123.70
24	B	612	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
36	H	102	DGD	C3E-C4E-C5E	-2.15	106.40	110.24
26	d	405	BCR	C29-C28-C27	-2.15	106.57	111.38
24	c	505	CLA	CHD-C4C-NC	2.15	127.59	124.20
26	B	620	BCR	C2-C1-C6	2.15	113.79	110.48
38	v	205	HEM	CMD-C2D-C1D	2.15	128.31	125.04
24	C	511	CLA	C4-C3-C2	-2.15	118.17	123.68
38	e	103	HEM	CMA-C3A-C4A	-2.15	125.16	128.46
24	C	504	CLA	CMC-C2C-C1C	2.15	128.31	125.04
24	C	509	CLA	CHB-C4A-NA	2.14	127.48	124.51
26	a	413	BCR	C8-C7-C6	-2.14	121.18	127.20
38	e	103	HEM	CBD-CAD-C3D	-2.14	106.67	112.63
24	C	512	CLA	CED-O2D-CGD	2.14	120.78	115.94
26	h	101	BCR	C36-C18-C17	-2.14	119.92	122.92
36	C	517	DGD	O1G-C1A-C2A	2.14	118.62	111.91
24	c	514	CLA	C2A-C1A-CHA	-2.14	120.12	123.86
24	c	514	CLA	O1D-CGD-CBD	-2.14	120.11	124.48
26	b	627	BCR	C32-C1-C6	-2.14	106.84	110.30
26	k	101	BCR	C34-C9-C10	-2.13	119.93	122.92
24	c	514	CLA	CHB-C4A-NA	2.13	127.46	124.51
24	C	504	CLA	C4-C3-C5	2.13	118.86	115.27
24	B	617	CLA	CMB-C2B-C3B	2.13	128.67	124.68
31	A	418	PL9	C7-C3-C2	-2.13	120.50	123.30
24	C	514	CLA	CBC-CAC-C3C	-2.13	106.56	112.43
24	A	406	CLA	CMA-C3A-C4A	-2.13	106.05	111.77
24	A	405	CLA	CHD-C4C-NC	2.13	127.56	124.20
31	D	405	PL9	C42-C41-C39	-2.13	105.98	112.98
26	C	516	BCR	C3-C4-C5	-2.13	110.28	114.08
24	B	606	CLA	CED-O2D-CGD	2.13	120.75	115.94
24	B	614	CLA	O2A-CGA-O1A	-2.12	118.23	123.59
24	C	514	CLA	O2A-CGA-O1A	-2.12	118.23	123.59

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	510	CLA	C2A-C1A-CHA	-2.12	120.14	123.86
36	c	521	DGD	C1D-O6D-C5D	2.12	117.86	113.69
26	Y	101	BCR	C24-C23-C22	-2.12	123.03	126.23
24	c	507	CLA	O2A-CGA-O1A	-2.12	118.24	123.59
24	B	611	CLA	O2D-CGD-O1D	-2.12	119.69	123.84
24	d	404	CLA	CGD-CBD-CAD	-2.12	103.87	110.73
26	H	101	BCR	C36-C18-C17	-2.12	119.95	122.92
24	b	614	CLA	OBD-CAD-C3D	-2.12	123.42	128.52
25	D	401	PHO	O1D-CGD-CBD	-2.12	121.21	124.74
26	b	628	BCR	C21-C20-C19	-2.12	116.61	123.22
27	f	102	SQD	O48-C23-O10	-2.12	118.25	123.59
26	d	405	BCR	C10-C11-C12	-2.12	116.61	123.22
24	b	623	CLA	C4-C3-C2	-2.12	118.25	123.68
24	b	612	CLA	C4-C3-C5	2.11	118.83	115.27
26	t	101	BCR	C37-C22-C23	2.11	121.41	118.08
35	C	501	LMG	C8-O7-C10	-2.11	112.59	117.79
26	d	405	BCR	C38-C26-C27	2.11	117.68	113.62
26	A	410	BCR	C8-C7-C6	-2.11	121.27	127.20
26	T	103	BCR	C2-C1-C6	2.11	113.73	110.48
24	a	410	CLA	CAA-CBA-CGA	2.11	119.42	113.25
35	C	521	LMG	O6-C5-C4	2.11	113.52	109.69
24	b	617	CLA	CMA-C3A-C4A	-2.11	106.11	111.77
24	b	617	CLA	CAC-C3C-C4C	2.11	127.55	124.81
36	C	517	DGD	O2G-C1B-O1B	-2.11	118.61	123.70
24	d	404	CLA	C6-C7-C8	-2.11	109.11	115.92
37	d	407	LHG	O7-C7-O9	-2.11	118.61	123.70
24	C	508	CLA	CED-O2D-CGD	2.11	120.70	115.94
24	c	505	CLA	C4-C3-C5	2.10	118.81	115.27
38	V	205	HEM	CAD-CBD-CGD	2.10	118.13	113.60
26	y	101	BCR	C40-C30-C25	-2.10	106.89	110.30
34	C	523	HTG	C1-O5-C5	2.10	116.46	112.58
26	H	101	BCR	C39-C30-C25	-2.10	106.89	110.30
24	B	611	CLA	CGD-CBD-CAD	-2.10	103.93	110.73
24	b	619	CLA	CMA-C3A-C2A	-2.10	105.35	113.83
24	B	614	CLA	CHB-C4A-NA	2.10	127.42	124.51
31	d	406	PL9	C40-C39-C38	-2.10	118.29	123.68
24	c	514	CLA	CMA-C3A-C4A	-2.10	106.13	111.77
24	C	512	CLA	C2A-C1A-CHA	-2.10	120.19	123.86
24	B	610	CLA	C7-C6-C5	-2.10	107.66	113.36
25	a	411	PHO	CBA-CAA-C2A	-2.10	107.68	113.81
24	C	509	CLA	OBD-CAD-C3D	-2.10	123.47	128.52
27	f	102	SQD	O9-S-C6	2.10	109.43	106.94

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	508	CLA	C1-C2-C3	-2.10	122.42	126.04
25	d	401	PHO	CMA-C3A-C4A	-2.10	109.78	114.38
24	B	609	CLA	CMA-C3A-C2A	-2.09	105.38	113.83
26	B	618	BCR	C21-C20-C19	-2.09	116.69	123.22
24	D	403	CLA	CHB-C4A-NA	2.09	127.41	124.51
26	h	101	BCR	C29-C30-C25	2.09	113.70	110.48
31	D	405	PL9	C45-C44-C46	2.09	118.79	115.27
24	B	614	CLA	CMA-C3A-C2A	-2.09	105.40	113.83
26	D	404	BCR	C15-C14-C13	-2.09	124.33	127.31
26	B	620	BCR	C23-C24-C25	-2.09	121.33	127.20
24	b	612	CLA	C7-C6-C5	-2.09	107.69	113.36
35	a	415	LMG	O7-C10-O9	-2.09	118.66	123.70
24	b	618	CLA	CAC-C3C-C4C	2.09	127.52	124.81
29	F	102	LMT	C2'-C3'-C4'	2.09	114.45	109.68
24	D	403	CLA	C1-C2-C3	-2.09	122.44	126.04
26	d	405	BCR	C21-C20-C19	-2.08	116.72	123.22
24	B	609	CLA	CMA-C3A-C4A	-2.08	106.18	111.77
24	C	506	CLA	CHA-C1A-NA	-2.08	121.63	126.40
36	c	519	DGD	O1G-C1A-C2A	2.08	118.44	111.91
29	M	104	LMT	C1B-O5B-C5B	2.08	117.77	113.69
24	c	512	CLA	C1B-CHB-C4A	-2.08	126.00	130.12
25	A	408	PHO	O2A-CGA-CBA	2.08	118.42	111.91
36	c	520	DGD	O1G-C1A-O1A	-2.08	118.35	123.59
25	a	411	PHO	CAA-CBA-CGA	-2.08	107.19	113.25
24	C	509	CLA	CAA-C2A-C3A	-2.08	107.09	112.78
31	A	418	PL9	C40-C39-C41	2.08	118.76	115.27
27	f	102	SQD	O7-S-C6	2.07	109.41	106.94
24	C	511	CLA	O1D-CGD-CBD	-2.07	120.24	124.48
27	a	414	SQD	O6-C44-C45	-2.07	105.89	110.90
24	B	605	CLA	CMD-C2D-C3D	-2.07	122.84	127.61
24	c	510	CLA	CGD-CBD-CAD	-2.07	104.02	110.73
31	A	418	PL9	C51-C49-C50	2.07	119.18	114.60
36	C	517	DGD	O3G-C3G-C2G	-2.07	105.90	110.90
24	c	509	CLA	CED-O2D-CGD	2.07	120.62	115.94
26	h	101	BCR	C20-C21-C22	-2.07	124.36	127.31
37	D	408	LHG	O8-C23-C24	2.07	118.40	111.91
26	k	101	BCR	C34-C9-C8	2.07	121.34	118.08
24	b	624	CLA	CBC-CAC-C3C	-2.07	106.73	112.43
26	D	404	BCR	C38-C26-C27	2.07	117.59	113.62
24	b	622	CLA	CMC-C2C-C1C	2.07	128.19	125.04
35	C	501	LMG	C7-O1-C1	-2.07	109.70	113.74
26	Y	101	BCR	C16-C17-C18	-2.07	124.36	127.31

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	503	CLA	CBC-CAC-C3C	-2.07	106.73	112.43
27	a	414	SQD	O48-C23-O10	-2.07	118.38	123.59
27	A	411	SQD	C44-O6-C1	-2.06	109.70	113.74
38	E	102	HEM	CHC-C4B-C3B	-2.06	121.41	124.57
24	A	406	CLA	O2D-CGD-O1D	-2.06	119.80	123.84
24	b	621	CLA	OBD-CAD-C3D	-2.06	123.55	128.52
26	A	410	BCR	C20-C21-C22	-2.06	124.37	127.31
24	c	509	CLA	CHD-C4C-NC	2.06	127.45	124.20
36	c	519	DGD	O5D-C6D-C5D	-2.06	105.23	109.05
29	a	419	LMT	C1B-O1B-C4'	-2.06	112.87	117.96
27	a	414	SQD	O9-S-O7	-2.06	106.82	113.95
24	b	613	CLA	CMB-C2B-C3B	2.06	128.53	124.68
24	b	622	CLA	CMA-C3A-C4A	-2.06	106.25	111.77
35	J	101	LMG	O8-C28-O10	-2.06	118.40	123.59
26	T	103	BCR	C29-C28-C27	-2.05	106.79	111.38
29	f	103	LMT	C4B-C3B-C2B	-2.05	107.24	110.82
27	F	103	SQD	O48-C23-O10	-2.05	118.41	123.59
24	b	622	CLA	CHA-C1A-NA	-2.05	121.69	126.40
26	k	101	BCR	C2-C1-C6	2.05	113.64	110.48
26	c	518	BCR	C37-C22-C21	-2.05	120.05	122.92
34	c	525	HTG	O5-C5-C4	2.05	113.42	109.69
24	C	505	CLA	CAA-C2A-C3A	-2.05	107.16	112.78
36	C	518	DGD	O2G-C1B-O1B	-2.05	118.75	123.70
24	C	504	CLA	C2A-C1A-CHA	-2.05	120.27	123.86
24	c	514	CLA	CED-O2D-CGD	2.05	120.57	115.94
37	E	101	LHG	O8-C23-O10	-2.05	118.42	123.59
24	C	507	CLA	CED-O2D-CGD	2.05	120.57	115.94
26	B	620	BCR	C36-C18-C17	-2.05	120.05	122.92
31	D	405	PL9	C40-C39-C38	-2.05	118.42	123.68
24	c	517	CLA	CED-O2D-CGD	2.05	120.57	115.94
36	H	102	DGD	C2G-O2G-C1B	-2.05	112.75	117.79
24	b	618	CLA	CMB-C2B-C1B	2.05	131.61	128.46
24	A	405	CLA	C11-C10-C8	-2.04	109.31	115.92
24	C	505	CLA	C11-C10-C8	-2.04	109.31	115.92
24	b	616	CLA	CAA-CBA-CGA	2.04	119.22	113.25
24	B	603	CLA	C1-O2A-CGA	2.04	121.80	116.44
37	D	408	LHG	O7-C7-O9	-2.04	118.77	123.70
24	c	513	CLA	C2A-C1A-CHA	-2.04	120.29	123.86
24	B	615	CLA	CBC-CAC-C3C	-2.04	106.80	112.43
26	K	101	BCR	C36-C18-C17	-2.04	120.06	122.92
26	D	404	BCR	C16-C17-C18	-2.04	124.40	127.31
26	b	628	BCR	C16-C17-C18	-2.04	124.40	127.31

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	512	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
31	d	406	PL9	C45-C44-C46	2.04	118.70	115.27
26	Y	101	BCR	C21-C20-C19	-2.04	116.86	123.22
24	B	605	CLA	CHA-C1A-NA	-2.04	121.73	126.40
35	C	520	LMG	O8-C28-O10	-2.04	118.45	123.59
26	a	413	BCR	C37-C22-C21	-2.04	120.07	122.92
24	A	407	CLA	CMA-C3A-C2A	-2.03	105.62	113.83
24	c	512	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
24	c	516	CLA	C1-O2A-CGA	2.03	121.78	116.44
26	b	627	BCR	C8-C7-C6	-2.03	121.49	127.20
24	c	517	CLA	CBC-CAC-C3C	-2.03	106.83	112.43
24	b	613	CLA	C6-C7-C8	-2.03	109.35	115.92
25	a	411	PHO	O2A-CGA-CBA	2.03	118.28	111.91
24	b	611	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
24	B	602	CLA	C4-C3-C5	2.03	118.68	115.27
24	B	608	CLA	O2D-CGD-O1D	-2.03	119.88	123.84
26	c	527	BCR	C11-C12-C13	-2.03	120.72	126.42
34	d	412	HTG	C4-C3-C2	-2.03	107.29	110.82
26	b	628	BCR	C15-C14-C13	-2.02	124.42	127.31
24	b	622	CLA	C2A-C1A-CHA	-2.02	120.32	123.86
26	K	101	BCR	C32-C1-C6	-2.02	107.02	110.30
24	A	405	CLA	CMA-C3A-C2A	-2.02	105.67	113.83
24	d	403	CLA	CHD-C4C-NC	2.02	127.39	124.20
26	H	101	BCR	C7-C8-C9	-2.02	123.18	126.23
24	a	412	CLA	OBD-CAD-C3D	-2.02	123.66	128.52
24	b	620	CLA	CMA-C3A-C4A	-2.02	106.35	111.77
38	V	205	HEM	O2A-CGA-CBA	2.02	120.51	114.03
26	D	404	BCR	C7-C6-C5	-2.02	116.58	121.46
25	a	411	PHO	CMC-C2C-C3C	2.02	128.75	124.94
36	C	518	DGD	C3G-O3G-C1D	-2.02	109.80	113.74
24	D	402	CLA	CMA-C3A-C4A	-2.02	106.35	111.77
24	b	621	CLA	C2A-C1A-CHA	-2.02	120.33	123.86
24	c	516	CLA	CMA-C3A-C4A	-2.02	106.36	111.77
24	a	412	CLA	C1B-CHB-C4A	-2.01	126.13	130.12
34	B	632	HTG	C6-C5-C4	-2.01	108.28	113.00
24	B	616	CLA	O2D-CGD-O1D	-2.01	119.90	123.84
26	C	516	BCR	C15-C16-C17	-2.01	119.35	123.47
26	C	516	BCR	C29-C28-C27	-2.01	106.88	111.38
24	C	513	CLA	C2A-C1A-CHA	-2.01	120.34	123.86
31	d	406	PL9	C11-C9-C8	-2.01	117.04	121.12
26	h	101	BCR	C37-C22-C21	-2.01	120.10	122.92
35	M	101	LMG	C9-C8-C7	-2.01	107.03	111.79

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	a	410	CLA	CMB-C2B-C3B	2.01	128.44	124.68
24	d	402	CLA	CAA-CBA-CGA	2.01	119.13	113.25
24	b	613	CLA	C4-C3-C5	2.01	118.65	115.27
35	c	523	LMG	O7-C10-O9	-2.01	118.84	123.70
24	b	616	CLA	O1D-CGD-CBD	-2.01	120.38	124.48
24	b	617	CLA	CAA-C2A-C3A	-2.01	107.28	112.78
26	C	516	BCR	C36-C18-C19	2.01	121.24	118.08
24	d	402	CLA	CED-O2D-CGD	2.01	120.48	115.94
31	d	406	PL9	C30-C29-C31	2.01	118.64	115.27
24	C	508	CLA	C3B-C4B-NB	2.01	111.80	109.21
24	b	612	CLA	C1-O2A-CGA	2.01	121.71	116.44
26	C	516	BCR	C37-C22-C23	2.00	121.24	118.08
26	C	516	BCR	C40-C30-C25	-2.00	107.05	110.30
26	t	101	BCR	C33-C5-C4	2.00	117.47	113.62
24	B	611	CLA	CHA-C1A-NA	-2.00	121.81	126.40
24	b	621	CLA	CHB-C4A-NA	2.00	127.28	124.51
24	c	505	CLA	CAA-C2A-C3A	-2.00	107.29	112.78
26	y	101	BCR	C11-C10-C9	-2.00	124.45	127.31
37	l	101	LHG	O8-C23-O10	-2.00	118.53	123.59
35	J	101	LMG	C7-O1-C1	-2.00	109.83	113.74
36	c	519	DGD	C4D-C3D-C2D	-2.00	107.33	110.82
25	D	401	PHO	O2A-CGA-CBA	2.00	118.19	111.91
24	c	515	CLA	C2A-C1A-CHA	-2.00	120.36	123.86
37	d	407	LHG	O4-P-O5	2.00	122.13	112.24

All (61) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
24	A	405	CLA	ND
24	B	602	CLA	ND
24	B	603	CLA	ND
24	B	604	CLA	ND
24	B	605	CLA	ND
24	B	606	CLA	ND
24	B	607	CLA	ND
24	B	608	CLA	ND
24	B	610	CLA	ND
24	B	611	CLA	ND
24	B	612	CLA	ND
24	B	613	CLA	ND
24	B	614	CLA	ND
24	B	615	CLA	ND

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atom</b>
24	B	616	CLA	ND
24	B	617	CLA	ND
24	C	502	CLA	ND
24	C	504	CLA	ND
24	C	505	CLA	ND
24	C	506	CLA	ND
24	C	507	CLA	ND
24	C	508	CLA	ND
24	C	509	CLA	ND
24	C	510	CLA	ND
24	C	511	CLA	ND
24	C	512	CLA	ND
24	C	513	CLA	ND
24	C	514	CLA	ND
24	D	402	CLA	ND
24	D	403	CLA	ND
24	a	409	CLA	ND
24	a	412	CLA	ND
24	b	610	CLA	ND
24	b	611	CLA	ND
24	b	612	CLA	ND
24	b	613	CLA	ND
24	b	614	CLA	ND
24	b	615	CLA	ND
24	b	616	CLA	ND
24	b	618	CLA	ND
24	b	619	CLA	ND
24	b	621	CLA	ND
24	b	622	CLA	ND
24	b	623	CLA	ND
24	b	624	CLA	ND
24	b	625	CLA	ND
24	c	505	CLA	ND
24	c	507	CLA	ND
24	c	508	CLA	ND
24	c	509	CLA	ND
24	c	510	CLA	ND
24	c	511	CLA	ND
24	c	512	CLA	ND
24	c	513	CLA	ND
24	c	514	CLA	ND
24	c	515	CLA	ND

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atom
24	c	516	CLA	ND
24	c	517	CLA	ND
24	d	402	CLA	ND
24	d	403	CLA	ND
24	d	404	CLA	ND

All (1297) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	406	CLA	CHA-CBD-CGD-O1D
24	A	406	CLA	CHA-CBD-CGD-O2D
24	B	602	CLA	CHA-CBD-CGD-O1D
24	B	606	CLA	C2-C3-C5-C6
24	B	606	CLA	C4-C3-C5-C6
24	B	607	CLA	CHA-CBD-CGD-O1D
24	B	607	CLA	CHA-CBD-CGD-O2D
24	B	615	CLA	CHA-CBD-CGD-O1D
24	B	615	CLA	CHA-CBD-CGD-O2D
24	B	615	CLA	CAD-CBD-CGD-O1D
24	B	615	CLA	CAD-CBD-CGD-O2D
24	C	508	CLA	CHA-CBD-CGD-O2D
24	C	510	CLA	C2-C1-O2A-CGA
24	b	614	CLA	C2-C3-C5-C6
24	b	614	CLA	C4-C3-C5-C6
24	b	615	CLA	CHA-CBD-CGD-O1D
24	b	615	CLA	CHA-CBD-CGD-O2D
24	b	623	CLA	CHA-CBD-CGD-O1D
24	b	623	CLA	CHA-CBD-CGD-O2D
24	b	623	CLA	CAD-CBD-CGD-O1D
24	b	623	CLA	CAD-CBD-CGD-O2D
24	b	623	CLA	C2-C3-C5-C6
24	b	623	CLA	C4-C3-C5-C6
24	c	512	CLA	CHA-CBD-CGD-O1D
24	c	512	CLA	CHA-CBD-CGD-O2D
26	B	618	BCR	C1-C6-C7-C8
26	D	404	BCR	C7-C8-C9-C10
26	D	404	BCR	C7-C8-C9-C34
26	D	404	BCR	C21-C22-C23-C24
26	D	404	BCR	C37-C22-C23-C24
26	Y	101	BCR	C1-C6-C7-C8
26	Y	101	BCR	C5-C6-C7-C8
26	d	405	BCR	C21-C22-C23-C24

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
26	d	405	BCR	C37-C22-C23-C24
26	d	405	BCR	C23-C24-C25-C30
26	y	101	BCR	C1-C6-C7-C8
26	y	101	BCR	C5-C6-C7-C8
26	y	101	BCR	C37-C22-C23-C24
27	A	415	SQD	O6-C44-C45-O47
27	B	621	SQD	O5-C1-O6-C44
27	B	621	SQD	O49-C7-O47-C45
27	B	621	SQD	C5-C6-S-O7
27	B	621	SQD	C5-C6-S-O8
27	B	621	SQD	C5-C6-S-O9
27	F	103	SQD	O49-C7-O47-C45
27	F	103	SQD	C8-C7-O47-C45
27	F	103	SQD	C5-C6-S-O7
27	L	102	SQD	O5-C1-O6-C44
27	L	102	SQD	O49-C7-O47-C45
27	a	405	SQD	O6-C44-C45-O47
27	a	405	SQD	O5-C5-C6-S
27	f	102	SQD	O49-C7-O47-C45
27	f	102	SQD	C8-C7-O47-C45
27	f	102	SQD	C5-C6-S-O7
27	f	102	SQD	C5-C6-S-O8
27	f	102	SQD	C5-C6-S-O9
28	A	413	GOL	C1-C2-C3-O3
28	A	414	GOL	C1-C2-C3-O3
28	B	627	GOL	O1-C1-C2-C3
28	B	628	GOL	O1-C1-C2-C3
28	B	630	GOL	O1-C1-C2-C3
28	B	630	GOL	C1-C2-C3-O3
28	C	525	GOL	O1-C1-C2-C3
28	F	101	GOL	O1-C1-C2-C3
28	O	301	GOL	O1-C1-C2-C3
28	T	102	GOL	O1-C1-C2-C3
28	V	201	GOL	C1-C2-C3-O3
28	a	401	GOL	C1-C2-C3-O3
28	a	402	GOL	O1-C1-C2-C3
28	b	606	GOL	O1-C1-C2-C3
28	f	101	GOL	O1-C1-C2-C3
29	A	416	LMT	C2'-C1'-O1'-C1
29	A	416	LMT	O5'-C1'-O1'-C1
29	B	635	LMT	C2'-C1'-O1'-C1
29	B	635	LMT	O5'-C1'-O1'-C1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
29	C	522	LMT	C2'-C1'-O1'-C1
29	C	522	LMT	O5'-C1'-O1'-C1
29	F	102	LMT	C2'-C1'-O1'-C1
29	F	102	LMT	O5'-C1'-O1'-C1
29	M	104	LMT	O5'-C1'-O1'-C1
29	T	104	LMT	C2'-C1'-O1'-C1
29	T	104	LMT	O5'-C1'-O1'-C1
29	a	404	LMT	C2'-C1'-O1'-C1
29	a	404	LMT	O5'-C1'-O1'-C1
29	a	419	LMT	C2'-C1'-O1'-C1
29	a	419	LMT	O5'-C1'-O1'-C1
29	b	630	LMT	C2'-C1'-O1'-C1
29	b	630	LMT	O5'-C1'-O1'-C1
29	f	103	LMT	C2'-C1'-O1'-C1
29	f	103	LMT	O5'-C1'-O1'-C1
31	a	416	PL9	C9-C11-C12-C13
31	a	416	PL9	C20-C19-C21-C22
34	B	624	HTG	C2'-C1'-S1-C1
34	B	625	HTG	O5-C1-S1-C1'
34	b	632	HTG	O5-C1-S1-C1'
34	b	632	HTG	C2'-C1'-S1-C1
34	c	524	HTG	C2'-C1'-S1-C1
35	C	521	LMG	C11-C10-O7-C8
35	Z	101	LMG	O6-C1-O1-C7
35	Z	101	LMG	O9-C10-O7-C8
35	Z	101	LMG	C11-C10-O7-C8
35	z	101	LMG	O6-C1-O1-C7
35	z	101	LMG	O9-C10-O7-C8
36	D	406	DGD	C2B-C1B-O2G-C2G
36	D	406	DGD	C2D-C1D-O3G-C3G
36	D	406	DGD	O6D-C1D-O3G-C3G
36	e	101	DGD	C2B-C1B-O2G-C2G
36	e	101	DGD	O1B-C1B-O2G-C2G
36	e	101	DGD	O6E-C1E-O5D-C6D
37	D	408	LHG	C4-O6-P-O4
37	E	101	LHG	C3-O3-P-O4
37	E	101	LHG	C3-O3-P-O5
37	E	101	LHG	C3-O3-P-O6
37	E	101	LHG	C4-O6-P-O5
37	L	101	LHG	C4-O6-P-O4
37	d	408	LHG	O2-C2-C3-O3
37	d	408	LHG	C3-O3-P-O4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
37	e	102	LHG	C3-O3-P-O5
37	e	102	LHG	C3-O3-P-O6
37	l	101	LHG	C4-O6-P-O4
37	l	101	LHG	C4-O6-P-O5
38	E	102	HEM	C2B-C3B-CAB-CBB
38	V	205	HEM	C2B-C3B-CAB-CBB
38	v	205	HEM	C2B-C3B-CAB-CBB
29	C	522	LMT	C3'-C4'-O1B-C1B
37	e	102	LHG	O10-C23-O8-C6
29	B	622	LMT	C3'-C4'-O1B-C1B
37	e	102	LHG	C24-C23-O8-C6
37	E	101	LHG	O10-C23-O8-C6
35	C	521	LMG	O9-C10-O7-C8
36	D	406	DGD	O1B-C1B-O2G-C2G
24	A	409	CLA	C3-C5-C6-C7
24	B	617	CLA	C3-C5-C6-C7
24	b	623	CLA	C3-C5-C6-C7
37	E	101	LHG	C24-C23-O8-C6
27	B	621	SQD	C8-C7-O47-C45
27	L	102	SQD	C8-C7-O47-C45
35	z	101	LMG	C11-C10-O7-C8
24	c	511	CLA	C4-C3-C5-C6
31	a	416	PL9	C12-C11-C9-C10
24	c	511	CLA	C2-C3-C5-C6
31	a	416	PL9	C18-C19-C21-C22
24	B	607	CLA	C2A-CAA-CBA-CGA
24	B	615	CLA	C3-C5-C6-C7
24	c	510	CLA	C3-C5-C6-C7
35	z	101	LMG	O6-C5-C6-O5
34	b	632	HTG	S1-C1'-C2'-C3'
26	T	103	BCR	C13-C14-C15-C16
29	M	104	LMT	O5'-C5'-C6'-O6'
37	E	101	LHG	O2-C2-C3-O3
24	B	602	CLA	C3-C5-C6-C7
24	c	509	CLA	CBD-CGD-O2D-CED
29	M	102	LMT	O5B-C5B-C6B-O6B
36	C	518	DGD	CBB-CCB-CDB-CEB
29	f	103	LMT	C4'-C5'-C6'-O6'
29	M	104	LMT	O5B-C5B-C6B-O6B
29	M	104	LMT	C4'-C5'-C6'-O6'
38	e	103	HEM	C3D-CAD-CBD-CGD
35	C	521	LMG	O6-C5-C6-O5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	B	615	CLA	C4-C3-C5-C6
31	A	418	PL9	C25-C24-C26-C27
31	a	416	PL9	C15-C14-C16-C17
31	a	416	PL9	C25-C24-C26-C27
31	A	418	PL9	C23-C24-C26-C27
31	a	416	PL9	C13-C14-C16-C17
31	a	416	PL9	C23-C24-C26-C27
24	b	615	CLA	C2A-CAA-CBA-CGA
35	z	101	LMG	C4-C5-C6-O5
31	D	405	PL9	C39-C41-C42-C43
31	d	406	PL9	C39-C41-C42-C43
24	C	510	CLA	CBA-CGA-O2A-C1
29	f	103	LMT	O5'-C5'-C6'-O6'
37	l	101	LHG	C7-C8-C9-C10
34	B	625	HTG	O5-C5-C6-O6
35	M	101	LMG	C15-C16-C17-C18
36	C	517	DGD	C2A-C3A-C4A-C5A
24	A	409	CLA	C13-C15-C16-C17
24	b	624	CLA	C10-C11-C12-C13
36	e	101	DGD	C2E-C1E-O5D-C6D
24	B	602	CLA	C11-C10-C8-C9
24	B	603	CLA	C14-C13-C15-C16
24	B	617	CLA	C6-C7-C8-C9
24	C	502	CLA	C11-C12-C13-C14
24	c	510	CLA	C6-C7-C8-C9
24	c	513	CLA	C11-C10-C8-C9
34	B	632	HTG	C4-C5-C6-O6
35	Z	101	LMG	C10-C11-C12-C13
24	B	615	CLA	C10-C11-C12-C13
24	C	509	CLA	C5-C6-C7-C8
38	e	103	HEM	C2A-CAA-CBA-CGA
24	B	617	CLA	C10-C11-C12-C13
24	C	502	CLA	C15-C16-C17-C18
24	b	615	CLA	C13-C15-C16-C17
24	c	512	CLA	C15-C16-C17-C18
29	B	622	LMT	O5B-C5B-C6B-O6B
35	C	521	LMG	C28-C29-C30-C31
35	c	522	LMG	C10-C11-C12-C13
37	L	101	LHG	C7-C8-C9-C10
34	b	601	HTG	C1'-C2'-C3'-C4'
29	m	102	LMT	O5'-C5'-C6'-O6'
24	B	602	CLA	C10-C11-C12-C13

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	B	615	CLA	C5-C6-C7-C8
24	B	615	CLA	C8-C10-C11-C12
24	B	616	CLA	C8-C10-C11-C12
36	C	517	DGD	C4A-C5A-C6A-C7A
28	A	413	GOL	O2-C2-C3-O3
28	B	627	GOL	O1-C1-C2-O2
28	B	628	GOL	O1-C1-C2-O2
28	T	102	GOL	O1-C1-C2-O2
28	b	605	GOL	O1-C1-C2-O2
28	f	101	GOL	O1-C1-C2-O2
24	C	510	CLA	O1A-CGA-O2A-C1
27	A	415	SQD	C23-C24-C25-C26
36	C	518	DGD	C1B-C2B-C3B-C4B
37	D	407	LHG	C23-C24-C25-C26
35	j	101	LMG	O6-C5-C6-O5
24	C	505	CLA	C15-C16-C17-C18
24	C	507	CLA	C13-C15-C16-C17
24	a	412	CLA	C8-C10-C11-C12
24	C	510	CLA	C3-C5-C6-C7
24	c	513	CLA	C3-C5-C6-C7
35	a	415	LMG	C17-C18-C19-C20
29	A	416	LMT	O5B-C5B-C6B-O6B
24	b	610	CLA	C2-C1-O2A-CGA
36	c	521	DGD	C1A-C2A-C3A-C4A
29	C	522	LMT	O5B-C5B-C6B-O6B
24	b	615	CLA	C12-C13-C15-C16
24	b	625	CLA	C11-C12-C13-C15
35	a	415	LMG	C10-C11-C12-C13
29	T	104	LMT	O1'-C1-C2-C3
29	M	102	LMT	C4B-C5B-C6B-O6B
36	e	101	DGD	O6D-C1D-O3G-C3G
24	b	623	CLA	C5-C6-C7-C8
34	V	206	HTG	S1-C1'-C2'-C3'
24	a	412	CLA	C10-C11-C12-C13
24	c	513	CLA	C13-C15-C16-C17
35	C	521	LMG	C4-C5-C6-O5
35	C	501	LMG	C11-C10-O7-C8
37	e	102	LHG	C11-C12-C13-C14
24	C	507	CLA	C5-C6-C7-C8
24	C	509	CLA	C10-C11-C12-C13
24	c	511	CLA	C5-C6-C7-C8
37	L	101	LHG	C4-O6-P-O3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
37	d	408	LHG	C3-O3-P-O6
37	l	101	LHG	C4-O6-P-O3
27	B	621	SQD	C7-C8-C9-C10
34	b	632	HTG	C1'-C2'-C3'-C4'
24	B	605	CLA	CBD-CGD-O2D-CED
37	E	101	LHG	C1-C2-C3-O3
35	C	501	LMG	O9-C10-O7-C8
24	B	615	CLA	C2-C3-C5-C6
24	b	623	CLA	C13-C15-C16-C17
24	b	622	CLA	CBD-CGD-O2D-CED
27	F	103	SQD	C26-C27-C28-C29
29	M	104	LMT	C4B-C5B-C6B-O6B
36	C	519	DGD	C8A-C9A-CAA-CBA
24	B	614	CLA	C13-C15-C16-C17
26	t	101	BCR	C13-C14-C15-C16
35	C	501	LMG	C11-C12-C13-C14
34	c	524	HTG	C1'-C2'-C3'-C4'
27	B	621	SQD	C31-C32-C33-C34
29	T	104	LMT	C4-C5-C6-C7
36	C	517	DGD	C4B-C5B-C6B-C7B
36	c	519	DGD	C5A-C6A-C7A-C8A
36	c	521	DGD	C6A-C7A-C8A-C9A
24	a	412	CLA	C16-C17-C18-C19
34	c	524	HTG	S1-C1'-C2'-C3'
27	A	411	SQD	C9-C10-C11-C12
36	C	518	DGD	C9A-CAA-CBA-CCA
37	e	102	LHG	C24-C25-C26-C27
29	T	104	LMT	C11-C10-C9-C8
34	B	624	HTG	C2'-C3'-C4'-C5'
35	j	101	LMG	C19-C20-C21-C22
36	D	406	DGD	C6A-C7A-C8A-C9A
36	c	520	DGD	C9A-CAA-CBA-CCA
37	L	101	LHG	C14-C15-C16-C17
27	A	415	SQD	C30-C31-C32-C33
36	e	101	DGD	CCA-CDA-CEA-CFA
36	e	101	DGD	C8B-C9B-CAB-CBB
37	D	408	LHG	O2-C2-C3-O3
29	M	104	LMT	C2-C3-C4-C5
36	H	102	DGD	CBB-CCB-CDB-CEB
27	A	415	SQD	C2-C1-O6-C44
29	B	622	LMT	C2'-C1'-O1'-C1
36	C	518	DGD	C2E-C1E-O5D-C6D

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	c	520	DGD	C2E-C1E-O5D-C6D
36	e	101	DGD	C2D-C1D-O3G-C3G
27	L	102	SQD	C12-C13-C14-C15
29	B	635	LMT	C3-C4-C5-C6
35	c	522	LMG	C34-C35-C36-C37
37	D	407	LHG	C24-C25-C26-C27
31	a	416	PL9	C12-C11-C9-C8
24	B	604	CLA	C6-C7-C8-C9
24	a	410	CLA	C11-C12-C13-C14
36	c	519	DGD	O6D-C5D-C6D-O5D
35	C	501	LMG	C14-C15-C16-C17
35	C	501	LMG	C30-C31-C32-C33
35	b	629	LMG	C32-C33-C34-C35
24	c	514	CLA	C8-C10-C11-C12
34	B	632	HTG	O5-C5-C6-O6
35	M	101	LMG	C36-C37-C38-C39
36	c	521	DGD	C7A-C8A-C9A-CAA
28	B	626	GOL	C1-C2-C3-O3
28	B	629	GOL	O1-C1-C2-C3
28	V	202	GOL	O1-C1-C2-C3
28	b	602	GOL	O1-C1-C2-C3
28	b	602	GOL	C1-C2-C3-O3
28	b	604	GOL	O1-C1-C2-C3
28	b	605	GOL	O1-C1-C2-C3
28	o	301	GOL	C1-C2-C3-O3
28	v	201	GOL	O1-C1-C2-C3
28	v	203	GOL	O1-C1-C2-C3
37	d	409	LHG	O1-C1-C2-C3
35	c	522	LMG	C11-C10-O7-C8
29	T	104	LMT	C7-C8-C9-C10
35	M	101	LMG	C29-C30-C31-C32
36	C	519	DGD	CAA-CBA-CCA-CDA
37	D	409	LHG	C29-C30-C31-C32
37	d	407	LHG	C32-C33-C34-C35
27	L	102	SQD	C27-C28-C29-C30
35	a	415	LMG	C21-C22-C23-C24
35	b	629	LMG	C38-C39-C40-C41
35	z	101	LMG	C12-C13-C14-C15
36	D	406	DGD	C2A-C3A-C4A-C5A
34	b	632	HTG	O5-C5-C6-O6
24	a	412	CLA	C16-C17-C18-C20
24	b	620	CLA	C16-C17-C18-C19

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	C	518	DGD	O6E-C1E-O5D-C6D
27	a	405	SQD	C31-C32-C33-C34
27	a	414	SQD	C11-C12-C13-C14
36	h	102	DGD	CAA-CBA-CCA-CDA
24	c	515	CLA	CBD-CGD-O2D-CED
35	C	520	LMG	C11-C12-C13-C14
35	J	101	LMG	C19-C20-C21-C22
27	L	102	SQD	C24-C23-O48-C46
27	a	414	SQD	C29-C30-C31-C32
29	M	104	LMT	C2-C1-O1'-C1'
27	a	405	SQD	C25-C26-C27-C28
35	M	101	LMG	C31-C32-C33-C34
36	C	517	DGD	C5B-C6B-C7B-C8B
37	l	101	LHG	C27-C28-C29-C30
36	c	521	DGD	C7B-C8B-C9B-CAB
37	D	407	LHG	C34-C35-C36-C37
29	a	404	LMT	C4B-C5B-C6B-O6B
27	B	621	SQD	C30-C31-C32-C33
35	j	101	LMG	C14-C15-C16-C17
36	C	517	DGD	C3B-C4B-C5B-C6B
36	C	517	DGD	O6D-C5D-C6D-O5D
36	e	101	DGD	O6D-C5D-C6D-O5D
34	C	524	HTG	O5-C5-C6-O6
27	A	415	SQD	C26-C27-C28-C29
36	c	520	DGD	C4A-C5A-C6A-C7A
24	C	511	CLA	C4-C3-C5-C6
31	D	405	PL9	C15-C14-C16-C17
24	c	516	CLA	CBA-CGA-O2A-C1
36	e	101	DGD	C2A-C1A-O1G-C1G
24	C	511	CLA	C2-C3-C5-C6
24	c	514	CLA	C2-C3-C5-C6
31	D	405	PL9	C13-C14-C16-C17
29	a	404	LMT	C2-C3-C4-C5
36	c	521	DGD	C6B-C7B-C8B-C9B
28	B	630	GOL	O1-C1-C2-O2
28	C	525	GOL	O1-C1-C2-O2
28	O	301	GOL	O1-C1-C2-O2
28	a	401	GOL	O2-C2-C3-O3
28	a	402	GOL	O1-C1-C2-O2
28	v	201	GOL	O1-C1-C2-O2
35	Z	101	LMG	C19-C20-C21-C22
36	c	519	DGD	C9A-CAA-CBA-CCA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	c	519	DGD	C8B-C9B-CAB-CBB
29	C	522	LMT	O5'-C5'-C6'-O6'
27	A	411	SQD	C14-C15-C16-C17
29	T	104	LMT	C1-C2-C3-C4
29	B	635	LMT	C11-C10-C9-C8
36	C	518	DGD	C1A-C2A-C3A-C4A
37	d	408	LHG	C1-C2-C3-O3
35	a	415	LMG	C29-C30-C31-C32
35	b	629	LMG	C16-C17-C18-C19
24	B	617	CLA	C2-C1-O2A-CGA
24	c	513	CLA	C2-C1-O2A-CGA
24	c	517	CLA	C10-C11-C12-C13
27	A	411	SQD	C13-C14-C15-C16
36	e	101	DGD	C2A-C3A-C4A-C5A
26	B	618	BCR	C5-C6-C7-C8
26	b	626	BCR	C1-C6-C7-C8
26	d	405	BCR	C23-C24-C25-C26
34	B	625	HTG	C3'-C4'-C5'-C6'
27	L	102	SQD	C35-C36-C37-C38
24	c	516	CLA	O1A-CGA-O2A-C1
24	B	602	CLA	C8-C10-C11-C12
24	c	514	CLA	C4-C3-C5-C6
24	B	604	CLA	C6-C7-C8-C10
24	B	615	CLA	C12-C13-C15-C16
24	C	506	CLA	C11-C12-C13-C15
24	C	507	CLA	C6-C7-C8-C10
24	a	410	CLA	C11-C12-C13-C15
24	b	612	CLA	C6-C7-C8-C10
25	D	401	PHO	C2-C3-C5-C6
27	L	102	SQD	O10-C23-O48-C46
36	e	101	DGD	O1A-C1A-O1G-C1G
35	c	522	LMG	O9-C10-O7-C8
24	C	513	CLA	CBA-CGA-O2A-C1
35	a	415	LMG	C12-C13-C14-C15
29	a	419	LMT	C6-C7-C8-C9
35	a	415	LMG	C14-C15-C16-C17
37	d	409	LHG	C31-C32-C33-C34
27	L	102	SQD	C30-C31-C32-C33
35	z	101	LMG	C15-C16-C17-C18
36	e	101	DGD	C2B-C3B-C4B-C5B
35	j	101	LMG	C38-C39-C40-C41
36	c	519	DGD	C4D-C5D-C6D-O5D

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	b	623	CLA	C16-C17-C18-C19
27	A	415	SQD	O5-C1-O6-C44
36	c	520	DGD	O6E-C1E-O5D-C6D
29	A	416	LMT	C6-C7-C8-C9
34	b	631	HTG	C2'-C3'-C4'-C5'
35	z	101	LMG	C13-C14-C15-C16
36	H	102	DGD	C3B-C4B-C5B-C6B
36	C	517	DGD	C1B-C2B-C3B-C4B
37	e	102	LHG	C23-C24-C25-C26
36	c	519	DGD	C7B-C8B-C9B-CAB
37	E	101	LHG	C24-C25-C26-C27
38	E	102	HEM	C4B-C3B-CAB-CBB
38	V	205	HEM	C4B-C3B-CAB-CBB
38	v	205	HEM	C4B-C3B-CAB-CBB
27	F	103	SQD	C31-C32-C33-C34
37	d	409	LHG	C29-C30-C31-C32
27	F	103	SQD	C2-C1-O6-C44
35	Z	101	LMG	O6-C5-C6-O5
37	D	409	LHG	C24-C23-O8-C6
27	L	102	SQD	C29-C30-C31-C32
37	D	407	LHG	C25-C26-C27-C28
37	l	101	LHG	C33-C34-C35-C36
34	b	601	HTG	C2'-C3'-C4'-C5'
35	b	629	LMG	C33-C34-C35-C36
36	c	519	DGD	O6E-C5E-C6E-O5E
24	b	610	CLA	C8-C10-C11-C12
24	c	508	CLA	C4-C3-C5-C6
25	D	401	PHO	C4-C3-C5-C6
35	C	501	LMG	C10-C11-C12-C13
34	B	625	HTG	C4-C5-C6-O6
24	c	508	CLA	C2-C3-C5-C6
31	A	418	PL9	C4-C3-C7-C8
31	a	416	PL9	C4-C3-C7-C8
27	L	102	SQD	C28-C29-C30-C31
24	B	615	CLA	C14-C13-C15-C16
24	C	506	CLA	C11-C12-C13-C14
24	C	507	CLA	C6-C7-C8-C9
24	b	612	CLA	C6-C7-C8-C9
24	b	619	CLA	C11-C12-C13-C14
24	b	623	CLA	C11-C12-C13-C14
24	b	625	CLA	C11-C12-C13-C14
24	c	513	CLA	C6-C7-C8-C9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
34	b	631	HTG	C3'-C4'-C5'-C6'
36	D	406	DGD	C8B-C9B-CAB-CBB
36	h	102	DGD	C5B-C6B-C7B-C8B
24	c	512	CLA	C1A-C2A-CAA-CBA
24	b	620	CLA	C16-C17-C18-C20
24	b	623	CLA	C16-C17-C18-C20
37	d	408	LHG	C34-C35-C36-C37
24	a	409	CLA	C2C-C3C-CAC-CBC
36	C	518	DGD	C8A-C9A-CAA-CBA
36	e	101	DGD	C5A-C6A-C7A-C8A
35	c	523	LMG	C10-C11-C12-C13
35	C	501	LMG	C32-C33-C34-C35
36	c	519	DGD	CAB-CBB-CCB-CDB
24	B	616	CLA	C13-C15-C16-C17
35	C	501	LMG	C12-C13-C14-C15
34	C	524	HTG	S1-C1'-C2'-C3'
36	c	520	DGD	C3B-C4B-C5B-C6B
24	C	512	CLA	CBA-CGA-O2A-C1
27	B	621	SQD	C24-C23-O48-C46
37	d	408	LHG	C24-C23-O8-C6
35	j	101	LMG	C17-C18-C19-C20
29	f	103	LMT	C5-C6-C7-C8
24	C	513	CLA	O1A-CGA-O2A-C1
24	c	510	CLA	C16-C17-C18-C19
36	C	517	DGD	C4D-C5D-C6D-O5D
27	A	415	SQD	O6-C44-C45-C46
27	B	621	SQD	C44-C45-C46-O48
27	B	621	SQD	C35-C36-C37-C38
27	F	103	SQD	C44-C45-C46-O48
27	a	405	SQD	O6-C44-C45-C46
27	a	414	SQD	O6-C44-C45-C46
35	Z	101	LMG	C7-C8-C9-O8
35	a	415	LMG	C7-C8-C9-O8
35	c	522	LMG	C7-C8-C9-O8
36	D	406	DGD	O1G-C1G-C2G-C3G
36	e	101	DGD	O1G-C1G-C2G-C3G
37	E	101	LHG	C4-C5-C6-O8
24	C	512	CLA	O1A-CGA-O2A-C1
37	d	408	LHG	O10-C23-O8-C6
35	C	521	LMG	C8-C7-O1-C1
36	C	518	DGD	C2G-C3G-O3G-C1D
36	c	520	DGD	C2G-C3G-O3G-C1D

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	c	520	DGD	C5D-C6D-O5D-C1E
29	C	522	LMT	C9-C10-C11-C12
36	H	102	DGD	CDB-CEB-CFB-CGB
35	b	629	LMG	C40-C41-C42-C43
36	D	406	DGD	C7A-C8A-C9A-CAA
36	C	517	DGD	O6E-C5E-C6E-O5E
37	E	101	LHG	C19-C20-C21-C22
29	B	622	LMT	O5'-C1'-O1'-C1
28	A	414	GOL	O2-C2-C3-O3
28	V	201	GOL	O2-C2-C3-O3
28	V	202	GOL	O1-C1-C2-O2
27	F	103	SQD	C30-C31-C32-C33
27	a	405	SQD	C28-C29-C30-C31
36	C	519	DGD	CDA-CEA-CFA-CGA
37	d	407	LHG	C29-C30-C31-C32
24	b	623	CLA	C10-C11-C12-C13
35	c	522	LMG	C20-C21-C22-C23
27	a	414	SQD	C9-C10-C11-C12
36	C	518	DGD	CAB-CBB-CCB-CDB
24	B	604	CLA	C5-C6-C7-C8
27	L	102	SQD	C24-C25-C26-C27
29	a	404	LMT	C7-C8-C9-C10
24	c	506	CLA	C16-C17-C18-C19
36	C	519	DGD	C2A-C1A-O1G-C1G
35	j	101	LMG	C36-C37-C38-C39
24	a	412	CLA	C15-C16-C17-C18
36	H	102	DGD	CDA-CEA-CFA-CGA
35	J	101	LMG	O6-C5-C6-O5
24	c	510	CLA	C15-C16-C17-C18
24	C	513	CLA	CBD-CGD-O2D-CED
24	D	403	CLA	C3-C5-C6-C7
36	H	102	DGD	C7B-C8B-C9B-CAB
24	c	509	CLA	O1D-CGD-O2D-CED
24	C	510	CLA	C5-C6-C7-C8
27	A	415	SQD	C24-C23-O48-C46
35	M	101	LMG	C16-C17-C18-C19
35	a	415	LMG	C33-C34-C35-C36
37	D	409	LHG	O10-C23-O8-C6
29	f	103	LMT	C4-C5-C6-C7
37	l	101	LHG	C12-C13-C14-C15
27	A	411	SQD	C7-C8-C9-C10
27	a	405	SQD	C23-C24-C25-C26

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	a	410	CLA	C10-C11-C12-C13
24	c	508	CLA	C15-C16-C17-C18
35	Z	101	LMG	C2-C1-O1-C7
27	f	102	SQD	O6-C44-C45-O47
35	c	522	LMG	O1-C7-C8-O7
37	L	101	LHG	C13-C14-C15-C16
27	a	414	SQD	C34-C35-C36-C37
36	e	101	DGD	C4D-C5D-C6D-O5D
24	B	602	CLA	C11-C10-C8-C7
24	B	603	CLA	C12-C13-C15-C16
24	B	616	CLA	C11-C12-C13-C15
24	B	616	CLA	C12-C13-C15-C16
24	C	513	CLA	C11-C10-C8-C7
24	b	610	CLA	C6-C7-C8-C10
24	b	623	CLA	C11-C12-C13-C15
24	c	513	CLA	C6-C7-C8-C10
24	c	513	CLA	C12-C13-C15-C16
35	j	101	LMG	C35-C36-C37-C38
24	B	616	CLA	C14-C13-C15-C16
24	C	513	CLA	C11-C10-C8-C9
24	a	410	CLA	C6-C7-C8-C9
24	a	410	CLA	C14-C13-C15-C16
24	b	610	CLA	C6-C7-C8-C9
24	b	610	CLA	C11-C10-C8-C9
24	b	615	CLA	C14-C13-C15-C16
24	c	510	CLA	C11-C10-C8-C9
24	c	513	CLA	C14-C13-C15-C16
35	j	101	LMG	C13-C14-C15-C16
36	c	521	DGD	C5B-C6B-C7B-C8B
37	e	102	LHG	C14-C15-C16-C17
24	b	613	CLA	C13-C15-C16-C17
27	A	415	SQD	C11-C12-C13-C14
29	B	635	LMT	C4-C5-C6-C7
24	c	515	CLA	O1D-CGD-O2D-CED
24	B	611	CLA	C16-C17-C18-C20
27	L	102	SQD	C11-C12-C13-C14
34	B	624	HTG	C1'-C2'-C3'-C4'
26	y	101	BCR	C21-C22-C23-C24
29	m	102	LMT	C2-C3-C4-C5
29	b	630	LMT	C3'-C4'-O1B-C1B
24	B	602	CLA	CBA-CGA-O2A-C1
24	b	610	CLA	CBA-CGA-O2A-C1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
35	C	501	LMG	C13-C14-C15-C16
36	H	102	DGD	C4E-C5E-C6E-O5E
35	a	415	LMG	C35-C36-C37-C38
24	c	516	CLA	C15-C16-C17-C18
37	l	101	LHG	O6-C4-C5-C6
31	a	416	PL9	C14-C16-C17-C18
29	a	404	LMT	O5B-C5B-C6B-O6B
24	C	511	CLA	CBA-CGA-O2A-C1
24	c	514	CLA	CBA-CGA-O2A-C1
29	M	105	LMT	O5'-C5'-C6'-O6'
35	c	523	LMG	O6-C5-C6-O5
27	B	621	SQD	C11-C10-C9-C8
27	a	414	SQD	C17-C18-C19-C20
36	H	102	DGD	C7A-C8A-C9A-CAA
31	A	418	PL9	C15-C14-C16-C17
31	a	416	PL9	C45-C44-C46-C47
27	B	621	SQD	O10-C23-O48-C46
34	B	632	HTG	C2'-C3'-C4'-C5'
24	B	611	CLA	C16-C17-C18-C19
37	L	101	LHG	C30-C31-C32-C33
36	c	521	DGD	C2A-C1A-O1G-C1G
24	C	514	CLA	C3A-C2A-CAA-CBA
24	b	617	CLA	C13-C15-C16-C17
27	L	102	SQD	C32-C33-C34-C35
29	B	635	LMT	C2-C3-C4-C5
36	D	406	DGD	C4B-C5B-C6B-C7B
27	F	103	SQD	C32-C33-C34-C35
35	C	520	LMG	C14-C15-C16-C17
35	c	522	LMG	C40-C41-C42-C43
24	c	515	CLA	CBA-CGA-O2A-C1
27	L	102	SQD	C44-C45-C46-O48
35	C	501	LMG	C7-C8-C9-O8
37	e	102	LHG	C4-C5-C6-O8
36	D	406	DGD	C1B-C2B-C3B-C4B
37	D	409	LHG	C12-C13-C14-C15
27	a	414	SQD	C15-C16-C17-C18
27	a	414	SQD	C19-C20-C21-C22
36	C	518	DGD	C6B-C7B-C8B-C9B
36	c	519	DGD	C2A-C3A-C4A-C5A
24	b	610	CLA	C16-C17-C18-C20
31	a	416	PL9	C43-C44-C46-C47
35	J	101	LMG	C13-C14-C15-C16

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	h	102	DGD	C9B-CAB-CBB-CCB
36	C	518	DGD	C4B-C5B-C6B-C7B
24	b	622	CLA	O1D-CGD-O2D-CED
28	B	630	GOL	O2-C2-C3-O3
28	F	101	GOL	O1-C1-C2-O2
28	b	602	GOL	O2-C2-C3-O3
28	b	604	GOL	O1-C1-C2-O2
28	v	203	GOL	O1-C1-C2-O2
27	f	102	SQD	C24-C25-C26-C27
36	C	519	DGD	O1A-C1A-O1G-C1G
35	j	101	LMG	C16-C17-C18-C19
36	c	520	DGD	C2A-C3A-C4A-C5A
36	c	521	DGD	CBA-CCA-CDA-CEA
29	B	622	LMT	O5B-C1B-O1B-C4'
27	a	414	SQD	O6-C44-C45-O47
35	Z	101	LMG	O1-C7-C8-O7
35	Z	101	LMG	O7-C8-C9-O8
36	D	406	DGD	O2G-C2G-C3G-O3G
29	a	404	LMT	C6-C7-C8-C9
29	M	105	LMT	O5'-C1'-O1'-C1
24	b	615	CLA	C10-C11-C12-C13
24	b	625	CLA	C10-C11-C12-C13
31	A	418	PL9	C13-C14-C16-C17
24	D	403	CLA	C11-C10-C8-C9
24	b	615	CLA	C11-C10-C8-C9
24	b	623	CLA	C11-C10-C8-C9
24	c	516	CLA	C11-C10-C8-C9
27	a	405	SQD	C19-C20-C21-C22
31	A	418	PL9	C2-C3-C7-C8
36	c	519	DGD	C3A-C4A-C5A-C6A
27	a	405	SQD	C27-C28-C29-C30
26	C	516	BCR	C1-C6-C7-C8
26	C	516	BCR	C5-C6-C7-C8
26	D	404	BCR	C1-C6-C7-C8
26	D	404	BCR	C23-C24-C25-C26
26	D	404	BCR	C23-C24-C25-C30
26	b	627	BCR	C23-C24-C25-C26
26	b	627	BCR	C23-C24-C25-C30
24	b	610	CLA	C10-C11-C12-C13
26	Y	101	BCR	C37-C22-C23-C24
27	B	621	SQD	C17-C18-C19-C20
26	Y	101	BCR	C21-C22-C23-C24

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
29	m	102	LMT	C1-C2-C3-C4
35	a	415	LMG	O9-C10-O7-C8
37	E	101	LHG	C8-C7-O7-C5
27	a	414	SQD	C35-C36-C37-C38
24	c	506	CLA	C16-C17-C18-C20
24	c	510	CLA	C16-C17-C18-C20
37	L	101	LHG	C16-C17-C18-C19
24	C	511	CLA	O1A-CGA-O2A-C1
24	b	610	CLA	O1A-CGA-O2A-C1
24	c	514	CLA	O1A-CGA-O2A-C1
27	A	415	SQD	O10-C23-O48-C46
36	c	521	DGD	C4A-C5A-C6A-C7A
37	e	102	LHG	O6-C4-C5-C6
36	h	102	DGD	O2G-C1B-C2B-C3B
35	C	520	LMG	C30-C31-C32-C33
36	e	101	DGD	C4A-C5A-C6A-C7A
24	c	510	CLA	C6-C7-C8-C10
24	c	510	CLA	C11-C10-C8-C7
24	c	516	CLA	C11-C10-C8-C7
36	C	518	DGD	C4A-C5A-C6A-C7A
24	b	619	CLA	C16-C17-C18-C20
27	a	414	SQD	C12-C13-C14-C15
36	e	101	DGD	C6A-C7A-C8A-C9A
37	D	409	LHG	C28-C29-C30-C31
35	C	520	LMG	C31-C32-C33-C34
24	c	515	CLA	O1A-CGA-O2A-C1
29	M	105	LMT	C5-C6-C7-C8
35	a	415	LMG	C11-C10-O7-C8
35	j	101	LMG	C15-C16-C17-C18
24	a	409	CLA	C4C-C3C-CAC-CBC
37	D	408	LHG	C13-C14-C15-C16
36	e	101	DGD	C7B-C8B-C9B-CAB
37	d	407	LHG	C25-C26-C27-C28
24	A	405	CLA	C13-C15-C16-C17
24	B	617	CLA	CAD-CBD-CGD-O2D
24	C	510	CLA	CAD-CBD-CGD-O2D
24	C	511	CLA	CAD-CBD-CGD-O2D
24	b	619	CLA	CAD-CBD-CGD-O2D
24	b	625	CLA	CAD-CBD-CGD-O2D
24	c	507	CLA	CAD-CBD-CGD-O2D
24	c	517	CLA	CAD-CBD-CGD-O2D
25	D	401	PHO	CAD-CBD-CGD-O2D

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
38	e	103	HEM	C2B-C3B-CAB-CBB
36	D	406	DGD	C5B-C6B-C7B-C8B
24	d	404	CLA	C15-C16-C17-C18
29	f	103	LMT	C9-C10-C11-C12
24	b	625	CLA	C4-C3-C5-C6
34	B	623	HTG	C3'-C4'-C5'-C6'
35	C	520	LMG	C29-C30-C31-C32
27	F	103	SQD	O5-C1-O6-C44
24	b	625	CLA	C2-C3-C5-C6
31	D	405	PL9	C9-C11-C12-C13
35	c	522	LMG	C36-C37-C38-C39
37	D	409	LHG	C24-C25-C26-C27
25	d	401	PHO	C2C-C3C-CAC-CBC
35	C	501	LMG	O1-C7-C8-C9
35	z	101	LMG	O1-C7-C8-C9
37	D	409	LHG	C2-C3-O3-P
37	d	409	LHG	C2-C3-O3-P
37	l	101	LHG	O6-C4-C5-O7
24	b	610	CLA	CAA-CBA-CGA-O2A
24	b	619	CLA	C2A-CAA-CBA-CGA
36	h	102	DGD	C6A-C7A-C8A-C9A
24	A	405	CLA	C16-C17-C18-C19
24	C	510	CLA	C16-C17-C18-C19
37	E	101	LHG	O9-C7-O7-C5
24	B	602	CLA	CHA-CBD-CGD-O2D
24	C	503	CLA	CHA-CBD-CGD-O1D
24	C	503	CLA	CHA-CBD-CGD-O2D
24	C	508	CLA	CHA-CBD-CGD-O1D
24	C	509	CLA	CHA-CBD-CGD-O1D
24	C	509	CLA	CHA-CBD-CGD-O2D
24	b	610	CLA	CHA-CBD-CGD-O1D
24	b	610	CLA	CHA-CBD-CGD-O2D
24	c	506	CLA	CHA-CBD-CGD-O1D
24	c	508	CLA	CHA-CBD-CGD-O1D
24	c	511	CLA	CHA-CBD-CGD-O1D
24	c	511	CLA	CHA-CBD-CGD-O2D
27	A	411	SQD	C18-C19-C20-C21
24	B	602	CLA	O1A-CGA-O2A-C1
27	F	103	SQD	C33-C34-C35-C36
35	b	629	LMG	C39-C40-C41-C42
29	M	105	LMT	C2'-C1'-O1'-C1
27	L	102	SQD	O47-C45-C46-O48

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
35	C	501	LMG	O7-C8-C9-O8
35	a	415	LMG	O7-C8-C9-O8
35	c	522	LMG	O7-C8-C9-O8
36	D	406	DGD	O1G-C1G-C2G-O2G
36	e	101	DGD	O1G-C1G-C2G-O2G
37	E	101	LHG	O7-C5-C6-O8
35	b	629	LMG	C37-C38-C39-C40
37	l	101	LHG	C17-C18-C19-C20
24	b	610	CLA	C16-C17-C18-C19
28	B	629	GOL	O1-C1-C2-O2
28	V	203	GOL	O2-C2-C3-O3
28	b	606	GOL	O1-C1-C2-O2
28	f	101	GOL	O2-C2-C3-O3
28	v	202	GOL	O1-C1-C2-O2
24	B	616	CLA	C4-C3-C5-C6
24	A	406	CLA	C2C-C3C-CAC-CBC
27	A	411	SQD	C16-C17-C18-C19
35	C	501	LMG	C36-C37-C38-C39
36	e	101	DGD	C9B-CAB-CBB-CCB
36	C	518	DGD	C3B-C4B-C5B-C6B
36	c	520	DGD	CCB-CDB-CEB-CFB
34	b	607	HTG	C4'-C5'-C6'-C7'
36	c	521	DGD	O1A-C1A-O1G-C1G
24	B	613	CLA	C8-C10-C11-C12
27	F	103	SQD	C5-C6-S-O8
26	C	516	BCR	C11-C12-C13-C35
26	b	628	BCR	C37-C22-C23-C24
28	b	606	GOL	C1-C2-C3-O3
28	o	301	GOL	O1-C1-C2-C3
36	c	520	DGD	C6A-C7A-C8A-C9A
24	b	621	CLA	C1A-C2A-CAA-CBA
24	B	616	CLA	C5-C6-C7-C8
34	b	601	HTG	C3'-C4'-C5'-C6'
37	D	408	LHG	C3-O3-P-O6
37	E	101	LHG	C4-O6-P-O3
36	H	102	DGD	O2G-C1B-C2B-C3B
24	b	612	CLA	C5-C6-C7-C8
35	C	520	LMG	C12-C13-C14-C15
36	C	518	DGD	C5A-C6A-C7A-C8A
35	C	520	LMG	O10-C28-O8-C9
37	L	101	LHG	C4-O6-P-O5
27	F	103	SQD	C34-C35-C36-C37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	B	612	CLA	C15-C16-C17-C18
24	b	621	CLA	C8-C10-C11-C12
24	c	513	CLA	C15-C16-C17-C18
31	a	416	PL9	C39-C41-C42-C43
37	d	407	LHG	C30-C31-C32-C33
29	M	105	LMT	C1-C2-C3-C4
35	M	101	LMG	C34-C35-C36-C37
37	d	407	LHG	C11-C10-C9-C8
36	c	520	DGD	C2B-C3B-C4B-C5B
24	b	619	CLA	C16-C17-C18-C19
27	a	405	SQD	C35-C36-C37-C38
24	B	602	CLA	CAD-CBD-CGD-O1D
24	B	606	CLA	CAD-CBD-CGD-O1D
24	B	610	CLA	CAD-CBD-CGD-O1D
24	C	503	CLA	CAD-CBD-CGD-O1D
24	b	610	CLA	CAD-CBD-CGD-O1D
24	b	614	CLA	CAD-CBD-CGD-O1D
24	c	506	CLA	CAD-CBD-CGD-O1D
24	c	508	CLA	CAD-CBD-CGD-O1D
24	c	510	CLA	CAD-CBD-CGD-O1D
27	A	415	SQD	O5-C5-C6-S
27	F	103	SQD	C5-C6-S-O9
27	f	102	SQD	C31-C32-C33-C34
35	C	520	LMG	C29-C28-O8-C9
24	A	407	CLA	C11-C10-C8-C7
24	A	409	CLA	C6-C7-C8-C10
24	B	612	CLA	C12-C13-C15-C16
24	B	616	CLA	C2-C3-C5-C6
24	B	617	CLA	C6-C7-C8-C10
24	a	410	CLA	C11-C10-C8-C7
24	b	623	CLA	C12-C13-C15-C16
24	c	513	CLA	C11-C10-C8-C7
34	V	206	HTG	C2-C1-S1-C1'
37	e	102	LHG	O6-C4-C5-O7
38	E	102	HEM	C2A-CAA-CBA-CGA
35	a	415	LMG	C19-C20-C21-C22
37	d	409	LHG	C9-C10-C11-C12
24	b	620	CLA	C8-C10-C11-C12
29	f	103	LMT	C2B-C1B-O1B-C4'
27	a	414	SQD	C27-C28-C29-C30
29	b	630	LMT	C6-C7-C8-C9
27	a	405	SQD	C24-C25-C26-C27

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
35	C	521	LMG	C14-C15-C16-C17
36	H	102	DGD	C5A-C6A-C7A-C8A
24	d	402	CLA	C2C-C3C-CAC-CBC
27	A	415	SQD	C24-C25-C26-C27
35	c	522	LMG	O1-C7-C8-C9
35	C	501	LMG	O1-C7-C8-O7
35	z	101	LMG	O1-C7-C8-O7
37	e	102	LHG	O7-C5-C6-O8
24	c	510	CLA	C10-C11-C12-C13
29	C	522	LMT	O1'-C1-C2-C3
34	B	623	HTG	C4'-C5'-C6'-C7'
36	e	101	DGD	CAA-CBA-CCA-CDA
36	C	518	DGD	C5D-C6D-O5D-C1E
24	B	614	CLA	C15-C16-C17-C18
24	C	510	CLA	C10-C11-C12-C13
24	C	510	CLA	C13-C15-C16-C17
24	C	502	CLA	C13-C15-C16-C17
31	d	406	PL9	C45-C44-C46-C47
29	B	622	LMT	C2B-C1B-O1B-C4'
31	d	406	PL9	C43-C44-C46-C47
29	F	102	LMT	C2-C3-C4-C5
24	D	403	CLA	C8-C10-C11-C12
24	B	612	CLA	C14-C13-C15-C16
35	a	415	LMG	C31-C32-C33-C34
24	C	514	CLA	C3-C5-C6-C7
29	a	404	LMT	C3-C4-C5-C6
24	d	402	CLA	C15-C16-C17-C18
27	L	102	SQD	C31-C32-C33-C34
35	C	520	LMG	C35-C36-C37-C38
36	D	406	DGD	C3B-C4B-C5B-C6B
37	D	407	LHG	C11-C10-C9-C8
29	A	416	LMT	O1'-C1-C2-C3
35	b	629	LMG	C17-C18-C19-C20
37	d	409	LHG	C30-C31-C32-C33
24	b	623	CLA	C15-C16-C17-C18
35	C	501	LMG	C18-C19-C20-C21
36	C	519	DGD	C9A-CAA-CBA-CCA
36	c	519	DGD	CBA-CCA-CDA-CEA
37	D	407	LHG	C33-C34-C35-C36
27	B	621	SQD	C46-C45-O47-C7
27	L	102	SQD	C46-C45-O47-C7
24	b	623	CLA	CBD-CGD-O2D-CED

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	c	505	CLA	C2A-CAA-CBA-CGA
24	C	512	CLA	C2-C1-O2A-CGA
24	b	622	CLA	C2-C1-O2A-CGA
27	a	414	SQD	C7-C8-C9-C10
37	D	407	LHG	C7-C8-C9-C10
37	d	407	LHG	C33-C34-C35-C36
24	C	510	CLA	C8-C10-C11-C12
24	a	412	CLA	O1A-CGA-O2A-C1
37	D	407	LHG	O10-C23-O8-C6
29	m	102	LMT	C11-C10-C9-C8
24	C	513	CLA	O1D-CGD-O2D-CED
31	D	405	PL9	C35-C34-C36-C37
26	C	515	BCR	C1-C6-C7-C8
26	C	515	BCR	C5-C6-C7-C8
26	D	404	BCR	C5-C6-C7-C8
26	b	626	BCR	C5-C6-C7-C8
37	E	101	LHG	C15-C16-C17-C18
24	b	624	CLA	C16-C17-C18-C19
36	C	517	DGD	O6E-C1E-O5D-C6D
24	B	611	CLA	C2A-CAA-CBA-CGA
29	M	104	LMT	C2'-C1'-O1'-C1
36	C	517	DGD	C2E-C1E-O5D-C6D
27	B	621	SQD	O47-C45-C46-O48
27	F	103	SQD	O47-C45-C46-O48
37	D	408	LHG	C4-O6-P-O3
37	e	102	LHG	C4-O6-P-O3
35	c	522	LMG	C39-C40-C41-C42
37	D	408	LHG	C11-C10-C9-C8
27	f	102	SQD	O6-C44-C45-C46
24	a	410	CLA	C12-C13-C15-C16
24	b	610	CLA	C11-C10-C8-C7
24	b	615	CLA	C11-C10-C8-C7
24	d	403	CLA	C11-C12-C13-C15
24	A	407	CLA	C11-C10-C8-C9
24	a	410	CLA	C11-C10-C8-C9
26	h	101	BCR	C9-C10-C11-C12
36	D	406	DGD	C2B-C3B-C4B-C5B
34	B	625	HTG	C2'-C3'-C4'-C5'
37	e	102	LHG	C13-C14-C15-C16
36	H	102	DGD	CCA-CDA-CEA-CFA
37	d	407	LHG	C34-C35-C36-C37
37	D	409	LHG	C25-C26-C27-C28

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
27	a	405	SQD	C24-C23-O48-C46
28	v	202	GOL	C1-C2-C3-O3
36	c	519	DGD	C1A-C2A-C3A-C4A
28	B	626	GOL	O2-C2-C3-O3
27	f	102	SQD	C34-C35-C36-C37
24	b	611	CLA	C16-C17-C18-C19
24	a	412	CLA	CBA-CGA-O2A-C1
27	a	405	SQD	O10-C23-O48-C46
36	c	519	DGD	O6E-C1E-O5D-C6D
26	k	101	BCR	C9-C10-C11-C12
29	C	522	LMT	C1-C2-C3-C4
29	f	103	LMT	C1-C2-C3-C4
31	A	418	PL9	C19-C21-C22-C23
27	a	405	SQD	C29-C30-C31-C32
34	B	624	HTG	C3'-C4'-C5'-C6'
35	J	101	LMG	C20-C21-C22-C23
38	e	103	HEM	C4B-C3B-CAB-CBB
24	B	605	CLA	C4-C3-C5-C6
24	B	607	CLA	C10-C11-C12-C13
24	b	618	CLA	C2-C3-C5-C6
37	d	409	LHG	O10-C23-O8-C6
37	E	101	LHG	C25-C26-C27-C28
24	B	602	CLA	C2-C1-O2A-CGA
24	C	514	CLA	C2-C1-O2A-CGA
24	c	515	CLA	C2-C1-O2A-CGA
24	c	517	CLA	C2-C1-O2A-CGA
27	L	102	SQD	C11-C10-C9-C8
29	B	622	LMT	O1'-C1-C2-C3
27	a	414	SQD	C10-C11-C12-C13
24	B	614	CLA	C10-C11-C12-C13
36	h	102	DGD	CCB-CDB-CEB-CFB
24	B	610	CLA	C3A-C2A-CAA-CBA
37	D	407	LHG	C17-C18-C19-C20
29	M	104	LMT	C9-C10-C11-C12
37	d	409	LHG	C33-C34-C35-C36
29	C	522	LMT	C2B-C1B-O1B-C4'
24	B	615	CLA	C6-C7-C8-C9
24	C	505	CLA	C11-C12-C13-C14
24	b	616	CLA	C6-C7-C8-C9
24	c	514	CLA	C11-C12-C13-C14
24	b	624	CLA	C16-C17-C18-C20
29	B	622	LMT	C5-C6-C7-C8

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
35	C	501	LMG	C17-C18-C19-C20
35	Z	101	LMG	O1-C7-C8-C9
36	h	102	DGD	O1G-C1G-C2G-C3G
38	E	102	HEM	CAD-CBD-CGD-O2D
37	e	102	LHG	C18-C19-C20-C21
38	E	102	HEM	CAD-CBD-CGD-O1D
34	b	631	HTG	C4-C5-C6-O6
27	f	102	SQD	C30-C31-C32-C33
37	L	101	LHG	C23-C24-C25-C26
37	l	101	LHG	C13-C14-C15-C16
38	e	103	HEM	CAA-CBA-CGA-O1A
24	a	412	CLA	C4-C3-C5-C6
31	A	418	PL9	C45-C44-C46-C47
24	C	507	CLA	C1A-C2A-CAA-CBA
24	c	505	CLA	C1A-C2A-CAA-CBA
24	d	402	CLA	C1A-C2A-CAA-CBA
37	D	407	LHG	C24-C23-O8-C6
24	B	604	CLA	C11-C10-C8-C7
24	C	502	CLA	C11-C12-C13-C15
24	C	507	CLA	C12-C13-C15-C16
24	C	508	CLA	C11-C10-C8-C7
24	D	403	CLA	C11-C10-C8-C7
24	a	410	CLA	C6-C7-C8-C10
24	b	625	CLA	C12-C13-C15-C16
24	C	511	CLA	C8-C10-C11-C12
34	C	524	HTG	C1'-C2'-C3'-C4'
24	C	513	CLA	C3-C5-C6-C7
36	H	102	DGD	O6E-C5E-C6E-O5E
24	d	402	CLA	C4C-C3C-CAC-CBC
35	J	101	LMG	C16-C17-C18-C19
37	d	407	LHG	C26-C27-C28-C29
24	b	612	CLA	C2A-CAA-CBA-CGA
24	A	409	CLA	C8-C10-C11-C12
24	B	605	CLA	C13-C15-C16-C17
35	j	101	LMG	C29-C30-C31-C32
37	L	101	LHG	C28-C29-C30-C31
35	C	520	LMG	C16-C17-C18-C19
35	C	521	LMG	C18-C19-C20-C21
24	a	410	CLA	C16-C17-C18-C20
24	c	517	CLA	C4-C3-C5-C6
31	A	418	PL9	C30-C29-C31-C32
27	a	414	SQD	C30-C31-C32-C33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
35	a	415	LMG	C28-C29-C30-C31
24	B	610	CLA	C2-C3-C5-C6
25	a	411	PHO	C2-C3-C5-C6
35	z	101	LMG	C16-C17-C18-C19
38	V	205	HEM	CAD-CBD-CGD-O2D
35	a	415	LMG	C22-C23-C24-C25
27	A	411	SQD	O6-C44-C45-O47
35	c	523	LMG	O7-C8-C9-O8
37	d	408	LHG	O7-C5-C6-O8
37	D	408	LHG	C1-C2-C3-O3
37	d	407	LHG	C1-C2-C3-O3
35	J	101	LMG	C30-C31-C32-C33
24	c	516	CLA	C2-C1-O2A-CGA
24	a	412	CLA	C2-C3-C5-C6
31	A	418	PL9	C43-C44-C46-C47
31	D	405	PL9	C33-C34-C36-C37
24	A	409	CLA	O1A-CGA-O2A-C1
27	A	411	SQD	C15-C16-C17-C18
27	A	415	SQD	C17-C18-C19-C20
36	c	520	DGD	C7A-C8A-C9A-CAA
24	B	615	CLA	C16-C17-C18-C19
37	L	101	LHG	C33-C34-C35-C36
37	D	408	LHG	C33-C34-C35-C36
36	C	517	DGD	O1A-C1A-O1G-C1G
29	B	635	LMT	C7-C8-C9-C10
24	B	606	CLA	O1A-CGA-O2A-C1
26	T	103	BCR	C5-C6-C7-C8
26	c	518	BCR	C1-C6-C7-C8
26	t	101	BCR	C5-C6-C7-C8
36	C	517	DGD	O2G-C1B-C2B-C3B
36	D	406	DGD	C1G-C2G-C3G-O3G
28	v	202	GOL	O1-C1-C2-C3
37	D	407	LHG	O1-C1-C2-C3
31	D	405	PL9	C45-C44-C46-C47
24	d	402	CLA	C13-C15-C16-C17
27	B	621	SQD	C34-C35-C36-C37
29	a	419	LMT	C7-C8-C9-C10
36	H	102	DGD	CBA-CCA-CDA-CEA
36	c	520	DGD	C9B-CAB-CBB-CCB
35	Z	101	LMG	C8-C7-O1-C1
36	c	519	DGD	C5D-C6D-O5D-C1E
27	L	102	SQD	C7-C8-C9-C10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	C	517	DGD	C2A-C1A-O1G-C1G
24	B	602	CLA	CAA-CBA-CGA-O2A
35	C	501	LMG	O8-C28-C29-C30
24	b	618	CLA	C16-C17-C18-C19
37	D	409	LHG	C33-C34-C35-C36
38	e	103	HEM	CAD-CBD-CGD-O1D
24	d	404	CLA	CBD-CGD-O2D-CED
35	J	101	LMG	C34-C35-C36-C37
37	e	102	LHG	C28-C29-C30-C31
38	V	205	HEM	CAD-CBD-CGD-O1D
24	C	505	CLA	C12-C13-C15-C16
24	c	514	CLA	C12-C13-C15-C16
24	c	517	CLA	C2-C3-C5-C6
24	A	405	CLA	C15-C16-C17-C18
36	h	102	DGD	CDA-CEA-CFA-CGA
28	o	301	GOL	O2-C2-C3-O3
24	C	514	CLA	O1A-CGA-O2A-C1
29	B	622	LMT	C4B-C5B-C6B-O6B
35	a	415	LMG	C30-C31-C32-C33
24	b	611	CLA	C16-C17-C18-C20
38	v	205	HEM	CAD-CBD-CGD-O2D
34	B	623	HTG	C2'-C1'-S1-C1
34	V	206	HTG	O5-C1-S1-C1'
34	b	608	HTG	O5-C1-S1-C1'
24	C	513	CLA	CAA-CBA-CGA-O2A
24	C	507	CLA	C4-C3-C5-C6
31	A	418	PL9	C20-C19-C21-C22
31	A	418	PL9	C40-C39-C41-C42
37	D	407	LHG	C11-C12-C13-C14
31	A	418	PL9	C28-C29-C31-C32
36	C	519	DGD	C6B-C7B-C8B-C9B
24	A	409	CLA	C6-C7-C8-C9
24	B	607	CLA	C11-C12-C13-C14
24	C	507	CLA	C14-C13-C15-C16
24	C	508	CLA	C11-C10-C8-C9
24	d	403	CLA	C11-C12-C13-C14
38	e	103	HEM	CAA-CBA-CGA-O2A
24	B	608	CLA	C3A-C2A-CAA-CBA
24	b	618	CLA	C3A-C2A-CAA-CBA
24	B	604	CLA	CAD-CBD-CGD-O2D
24	B	605	CLA	CAD-CBD-CGD-O2D
24	B	611	CLA	CAD-CBD-CGD-O2D

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	C	502	CLA	CAD-CBD-CGD-O2D
24	C	504	CLA	CAD-CBD-CGD-O2D
24	C	513	CLA	CAD-CBD-CGD-O2D
24	D	403	CLA	CAD-CBD-CGD-O2D
24	b	612	CLA	CAD-CBD-CGD-O2D
24	b	613	CLA	CAD-CBD-CGD-O2D
24	b	618	CLA	CAD-CBD-CGD-O2D
24	c	505	CLA	CAD-CBD-CGD-O2D
24	c	509	CLA	CAD-CBD-CGD-O2D
24	c	516	CLA	CAD-CBD-CGD-O2D
24	b	617	CLA	C2-C1-O2A-CGA
24	b	623	CLA	C2-C1-O2A-CGA
37	E	101	LHG	C23-C24-C25-C26
27	f	102	SQD	O47-C7-C8-C9
35	Z	101	LMG	O7-C10-C11-C12
24	b	618	CLA	C4-C3-C5-C6
25	a	411	PHO	C4-C3-C5-C6
31	a	416	PL9	C30-C29-C31-C32
29	m	102	LMT	O5'-C1'-O1'-C1
36	D	406	DGD	O1G-C1A-C2A-C3A
37	d	407	LHG	O8-C23-C24-C25
37	e	102	LHG	O8-C23-C24-C25
29	M	102	LMT	C3-C4-C5-C6
26	b	628	BCR	C21-C22-C23-C24
35	j	101	LMG	C11-C12-C13-C14
25	a	411	PHO	C2C-C3C-CAC-CBC
36	H	102	DGD	C1G-C2G-C3G-O3G
36	D	406	DGD	CBA-CCA-CDA-CEA
37	D	408	LHG	C26-C27-C28-C29
24	B	605	CLA	O1D-CGD-O2D-CED
24	B	603	CLA	O2A-C1-C2-C3
24	B	614	CLA	O2A-C1-C2-C3
24	b	611	CLA	O2A-C1-C2-C3
24	b	613	CLA	O2A-C1-C2-C3
24	d	404	CLA	O2A-C1-C2-C3
25	D	401	PHO	O2A-C1-C2-C3
25	a	411	PHO	O2A-C1-C2-C3
29	a	404	LMT	C4'-C5'-C6'-O6'
37	l	101	LHG	O7-C7-C8-C9
38	v	205	HEM	CAD-CBD-CGD-O1D
35	b	629	LMG	C20-C21-C22-C23
37	L	101	LHG	C18-C19-C20-C21

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	B	603	CLA	CHA-CBD-CGD-O1D
24	B	603	CLA	CHA-CBD-CGD-O2D
24	B	606	CLA	CHA-CBD-CGD-O1D
24	C	510	CLA	CHA-CBD-CGD-O2D
24	c	506	CLA	CHA-CBD-CGD-O2D
24	c	508	CLA	CHA-CBD-CGD-O2D
24	c	510	CLA	CHA-CBD-CGD-O1D
24	d	402	CLA	CHA-CBD-CGD-O1D
24	d	402	CLA	CHA-CBD-CGD-O2D
24	c	516	CLA	CAA-CBA-CGA-O2A
37	L	101	LHG	C26-C27-C28-C29
24	A	405	CLA	C16-C17-C18-C20
36	c	520	DGD	O2G-C1B-C2B-C3B
37	E	101	LHG	O8-C23-C24-C25
36	c	521	DGD	O6D-C5D-C6D-O5D
24	B	614	CLA	CAA-CBA-CGA-O2A
37	L	101	LHG	O7-C7-C8-C9
24	c	514	CLA	CAA-CBA-CGA-O2A
35	M	101	LMG	O8-C28-C29-C30
27	a	405	SQD	C34-C35-C36-C37
29	f	103	LMT	O5B-C1B-O1B-C4'
37	d	407	LHG	C7-C8-C9-C10
37	l	101	LHG	C28-C29-C30-C31
24	c	508	CLA	C12-C13-C15-C16
27	A	411	SQD	O49-C7-O47-C45
24	c	510	CLA	C13-C15-C16-C17
35	z	101	LMG	O7-C10-C11-C12
36	e	101	DGD	O2G-C1B-C2B-C3B
24	B	604	CLA	C11-C10-C8-C9
24	B	616	CLA	C11-C12-C13-C14
24	b	625	CLA	C14-C13-C15-C16
29	C	522	LMT	O5B-C1B-O1B-C4'
36	C	517	DGD	C6A-C7A-C8A-C9A
27	F	103	SQD	C7-C8-C9-C10
37	d	409	LHG	C24-C23-O8-C6
27	a	405	SQD	C32-C33-C34-C35
36	c	521	DGD	CCA-CDA-CEA-CFA
37	D	408	LHG	C32-C33-C34-C35
27	A	411	SQD	C8-C7-O47-C45
38	e	103	HEM	CAD-CBD-CGD-O2D
24	C	511	CLA	CAA-CBA-CGA-O2A
38	E	102	HEM	CAA-CBA-CGA-O1A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
36	D	406	DGD	O1A-C1A-C2A-C3A
37	d	409	LHG	C25-C26-C27-C28
37	e	102	LHG	C25-C26-C27-C28
28	B	629	GOL	C1-C2-C3-O3
31	D	405	PL9	C43-C44-C46-C47
29	M	105	LMT	C9-C10-C11-C12
35	J	101	LMG	C14-C15-C16-C17
24	C	513	CLA	CAA-CBA-CGA-O1A
26	K	101	BCR	C7-C8-C9-C10
26	d	405	BCR	C7-C8-C9-C10
27	A	415	SQD	C28-C29-C30-C31
24	A	409	CLA	CBA-CGA-O2A-C1
24	C	514	CLA	CBA-CGA-O2A-C1
37	d	409	LHG	C11-C10-C9-C8
24	B	610	CLA	C1A-C2A-CAA-CBA
24	C	514	CLA	C1A-C2A-CAA-CBA
24	c	510	CLA	C1A-C2A-CAA-CBA
27	f	102	SQD	C35-C36-C37-C38
36	C	518	DGD	CAA-CBA-CCA-CDA
29	B	622	LMT	C4-C5-C6-C7
29	M	105	LMT	C11-C10-C9-C8
35	a	415	LMG	C34-C35-C36-C37
36	c	521	DGD	CBB-CCB-CDB-CEB
36	h	102	DGD	C4E-C5E-C6E-O5E
37	d	409	LHG	O8-C23-C24-C25
36	c	521	DGD	C8A-C9A-CAA-CBA
24	a	409	CLA	C2A-CAA-CBA-CGA
24	b	611	CLA	C2A-CAA-CBA-CGA
37	d	408	LHG	C26-C27-C28-C29
24	A	407	CLA	C16-C17-C18-C20
37	d	407	LHG	O10-C23-C24-C25
24	B	609	CLA	C13-C15-C16-C17
25	a	411	PHO	C10-C11-C12-C13
36	C	517	DGD	CAA-CBA-CCA-CDA
37	D	407	LHG	C27-C28-C29-C30
36	C	518	DGD	O2G-C1B-C2B-C3B
35	z	101	LMG	O9-C10-C11-C12
27	B	621	SQD	C15-C16-C17-C18
36	c	519	DGD	C2E-C1E-O5D-C6D
34	b	607	HTG	C2'-C3'-C4'-C5'
35	c	522	LMG	C33-C34-C35-C36
37	D	408	LHG	C4-O6-P-O5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
37	D	409	LHG	C4-O6-P-O4
37	D	409	LHG	C4-O6-P-O5
37	e	102	LHG	C4-O6-P-O5
24	B	612	CLA	C16-C17-C18-C19
35	C	521	LMG	C13-C14-C15-C16
24	c	516	CLA	CAA-CBA-CGA-O1A
27	f	102	SQD	O49-C7-C8-C9
37	e	102	LHG	O10-C23-C24-C25
26	c	518	BCR	C5-C6-C7-C8
26	t	101	BCR	C1-C6-C7-C8
24	a	409	CLA	C13-C15-C16-C17
27	f	102	SQD	C7-C8-C9-C10
36	c	520	DGD	O1B-C1B-C2B-C3B
37	l	101	LHG	O9-C7-C8-C9
36	e	101	DGD	C3A-C4A-C5A-C6A
36	e	101	DGD	O1B-C1B-C2B-C3B
37	L	101	LHG	O9-C7-C8-C9
37	D	409	LHG	C10-C11-C12-C13
37	E	101	LHG	C10-C11-C12-C13
35	C	520	LMG	C28-C29-C30-C31
37	E	101	LHG	O10-C23-C24-C25
38	E	102	HEM	CAA-CBA-CGA-O2A
24	B	608	CLA	CAD-CBD-CGD-O1D
24	C	505	CLA	CAD-CBD-CGD-O1D
24	C	507	CLA	CAD-CBD-CGD-O1D
24	b	611	CLA	CAD-CBD-CGD-O1D
24	b	616	CLA	CAD-CBD-CGD-O1D
24	b	618	CLA	CAD-CBD-CGD-O1D
27	A	411	SQD	O5-C5-C6-S
35	Z	101	LMG	O9-C10-C11-C12
24	B	611	CLA	C14-C13-C15-C16
24	C	505	CLA	C14-C13-C15-C16
24	c	508	CLA	C14-C13-C15-C16
24	c	513	CLA	C11-C12-C13-C14
28	b	602	GOL	O1-C1-C2-O2
25	D	401	PHO	C10-C11-C12-C13
36	e	101	DGD	CAB-CBB-CCB-CDB
35	J	101	LMG	O7-C10-C11-C12
35	b	629	LMG	O8-C28-C29-C30
36	D	406	DGD	C6B-C7B-C8B-C9B
27	B	621	SQD	C12-C13-C14-C15
24	b	624	CLA	C13-C15-C16-C17

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
24	b	623	CLA	C2A-CAA-CBA-CGA
34	B	624	HTG	C4'-C5'-C6'-C7'
36	C	519	DGD	CBA-CCA-CDA-CEA
36	c	521	DGD	O1G-C1A-C2A-C3A
24	C	508	CLA	C5-C6-C7-C8
24	a	409	CLA	C15-C16-C17-C18
24	b	619	CLA	C15-C16-C17-C18
36	h	102	DGD	CDB-CEB-CFB-CGB
24	b	610	CLA	C4-C3-C5-C6
24	c	510	CLA	C4-C3-C5-C6
24	A	409	CLA	C10-C11-C12-C13
24	B	605	CLA	C2-C3-C5-C6
24	B	611	CLA	C12-C13-C15-C16
24	b	617	CLA	C11-C10-C8-C7
36	C	518	DGD	O1B-C1B-C2B-C3B
37	d	409	LHG	O10-C23-C24-C25
36	c	520	DGD	C8A-C9A-CAA-CBA
37	E	101	LHG	C14-C15-C16-C17
24	C	506	CLA	CAA-CBA-CGA-O2A
24	b	622	CLA	CAA-CBA-CGA-O2A
24	c	509	CLA	CAA-CBA-CGA-O2A
37	D	409	LHG	C9-C10-C11-C12
37	D	409	LHG	C19-C20-C21-C22
26	C	516	BCR	C11-C12-C13-C14
24	B	614	CLA	CAA-CBA-CGA-O1A
29	M	102	LMT	C2-C1-O1'-C1'
34	D	412	HTG	C1'-C2'-C3'-C4'
29	M	102	LMT	O5'-C1'-O1'-C1
24	C	505	CLA	C13-C15-C16-C17
24	b	615	CLA	C8-C10-C11-C12
24	b	615	CLA	C15-C16-C17-C18
24	C	511	CLA	CAA-CBA-CGA-O1A
36	c	521	DGD	O1A-C1A-C2A-C3A
24	B	606	CLA	CBA-CGA-O2A-C1
24	C	509	CLA	C13-C15-C16-C17
24	A	406	CLA	C4C-C3C-CAC-CBC
29	a	419	LMT	C5-C6-C7-C8
24	c	514	CLA	CAA-CBA-CGA-O1A
24	c	507	CLA	C2A-CAA-CBA-CGA
24	a	409	CLA	C16-C17-C18-C19
34	V	206	HTG	C2'-C3'-C4'-C5'
24	B	614	CLA	CBD-CGD-O2D-CED

*Continued on next page...*



Continued from previous page...

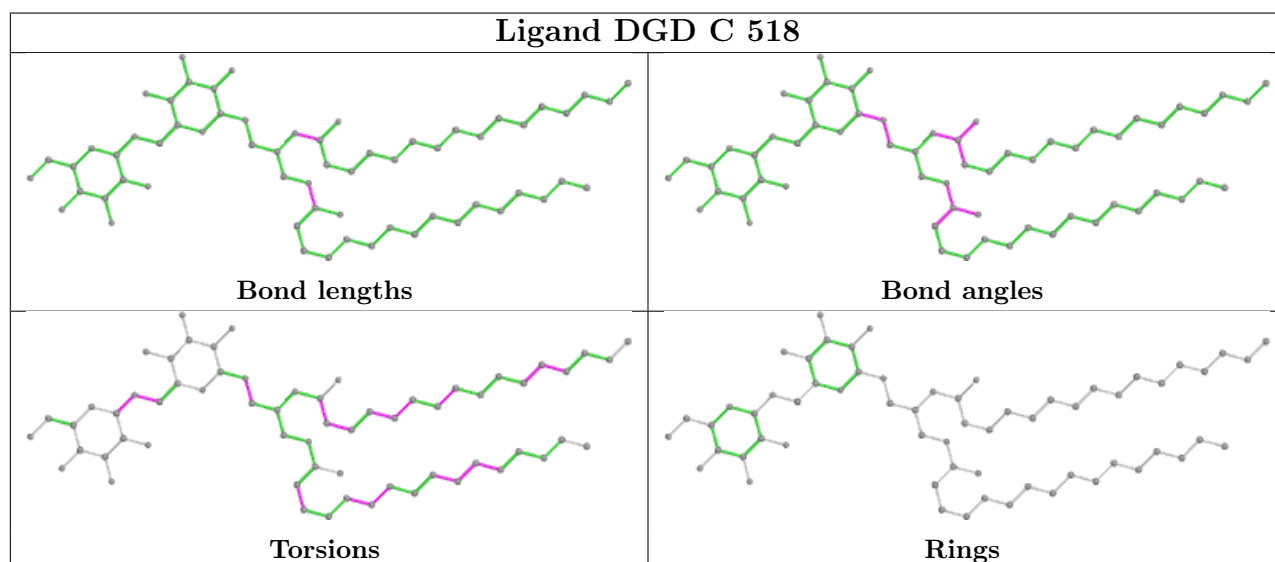
Mol	Chain	Res	Type	Atoms
24	C	506	CLA	CAA-CBA-CGA-O1A
24	B	610	CLA	C4-C3-C5-C6
35	C	501	LMG	O7-C10-C11-C12
29	M	104	LMT	C2B-C1B-O1B-C4'

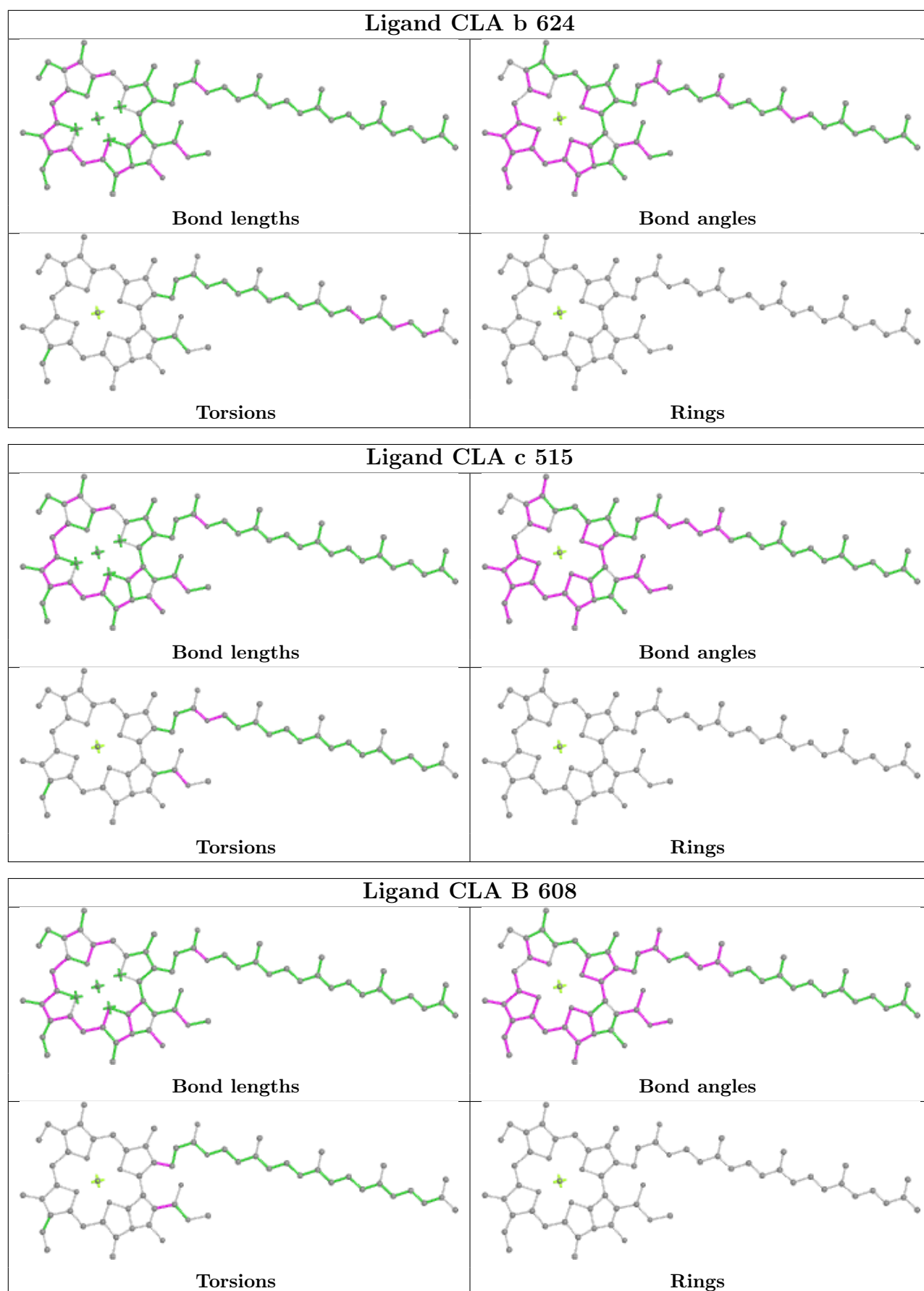
There are no ring outliers.

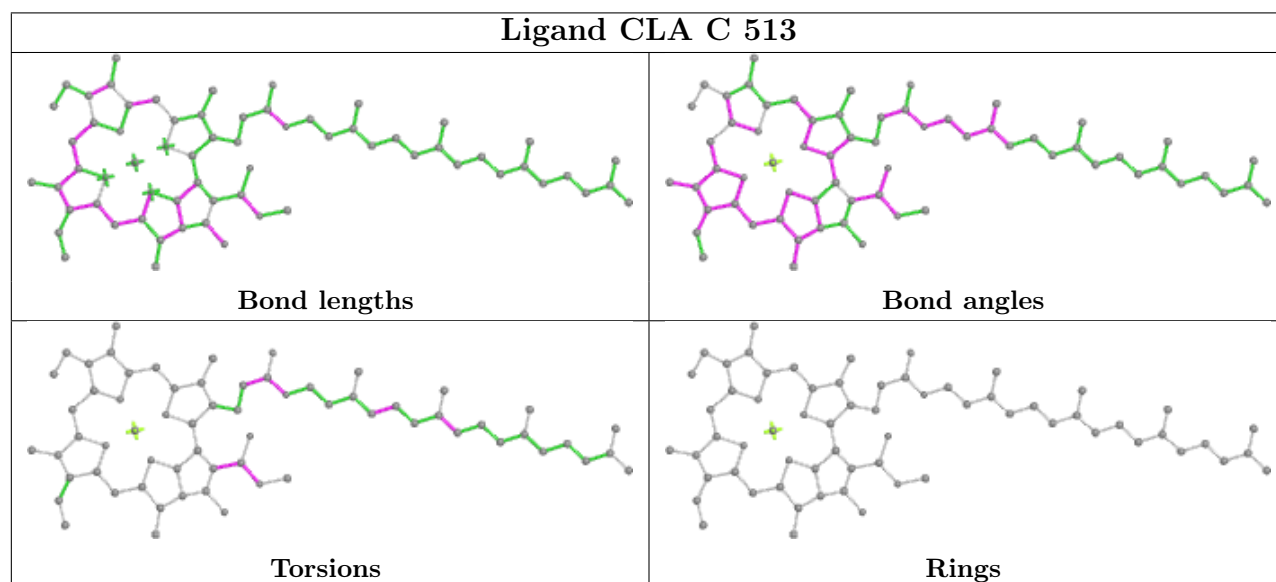
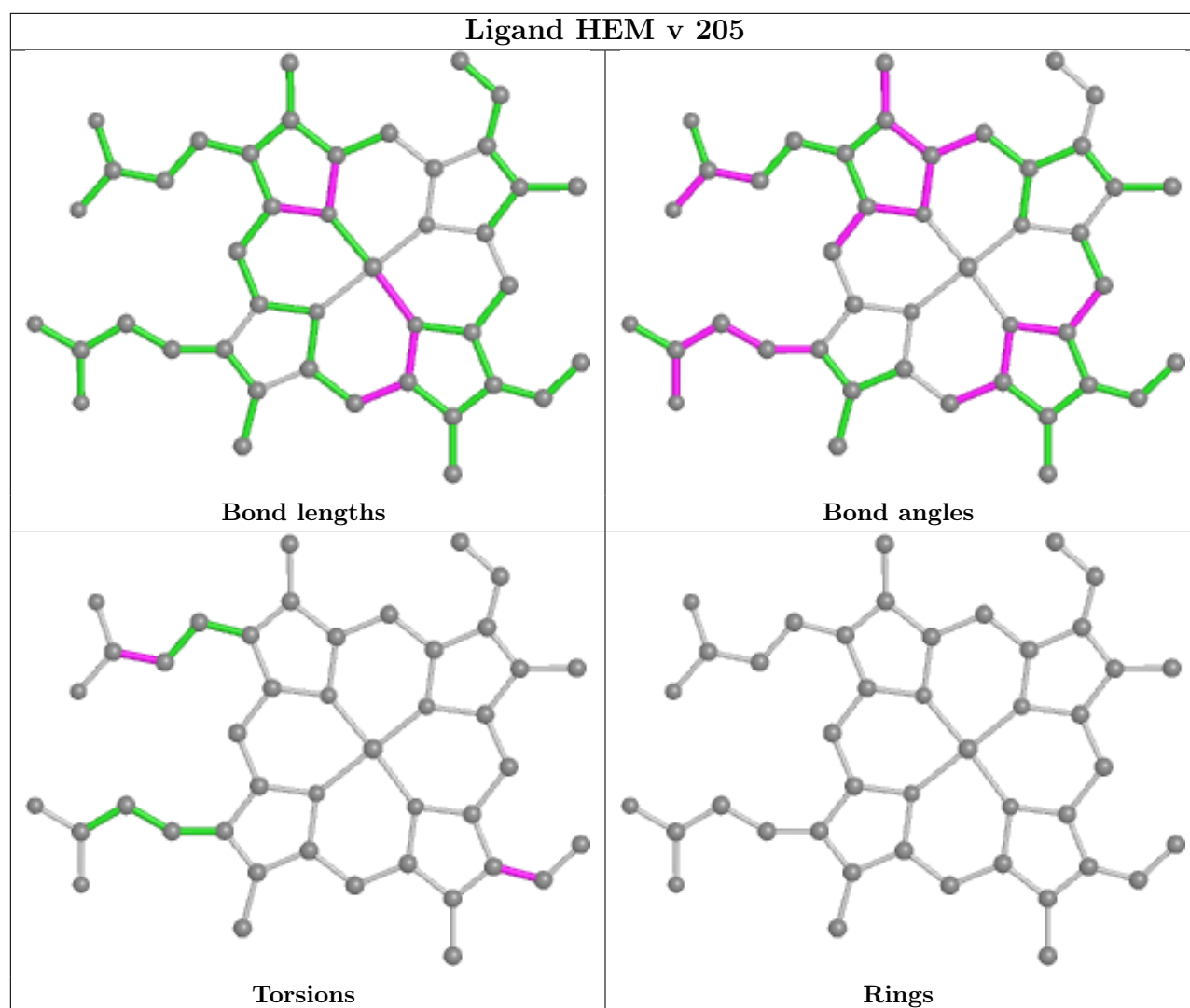
1 monomer is involved in 1 short contact:

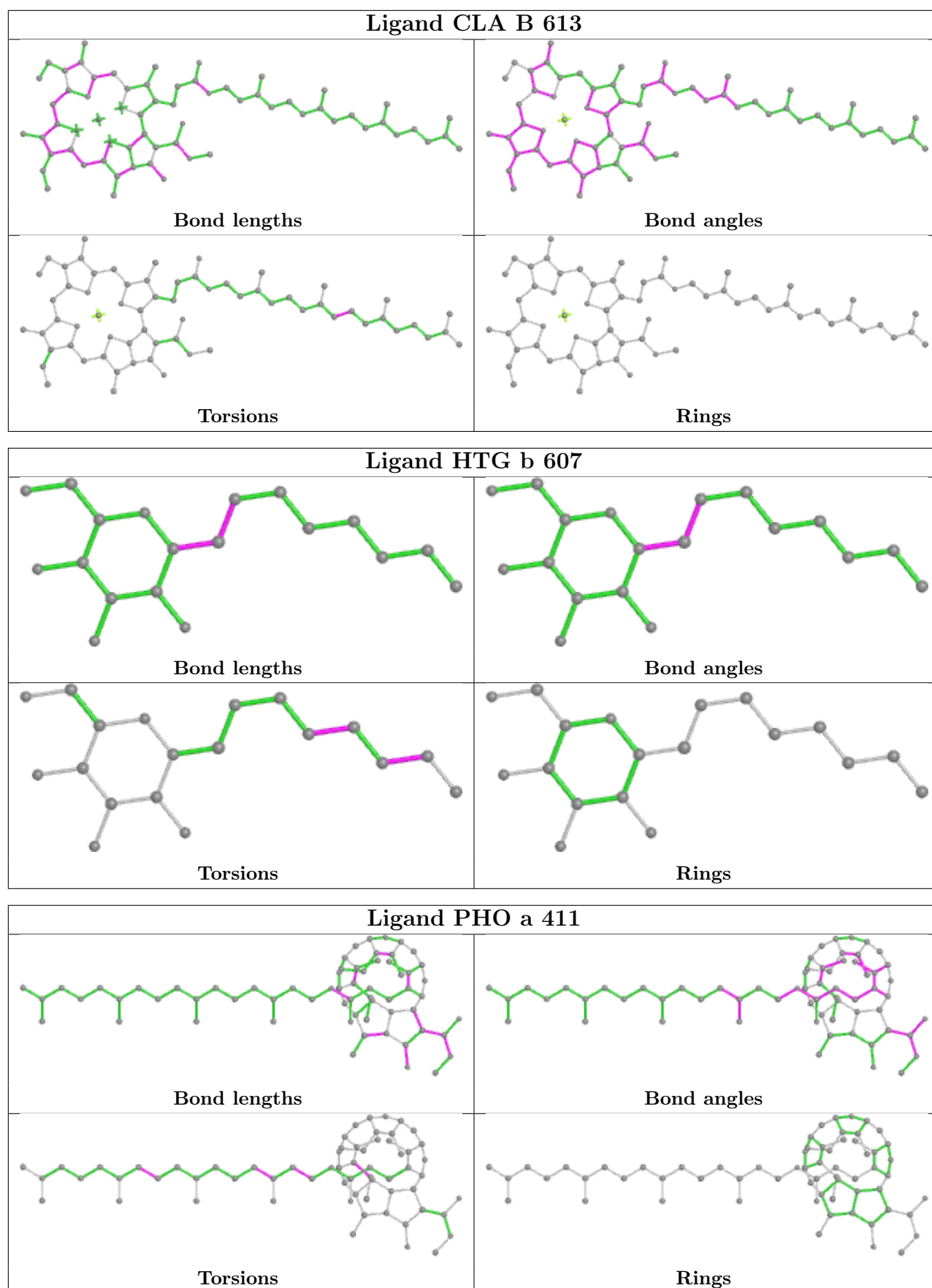
Mol	Chain	Res	Type	Clashes	Symm-Clashes
27	f	102	SQD	0	1

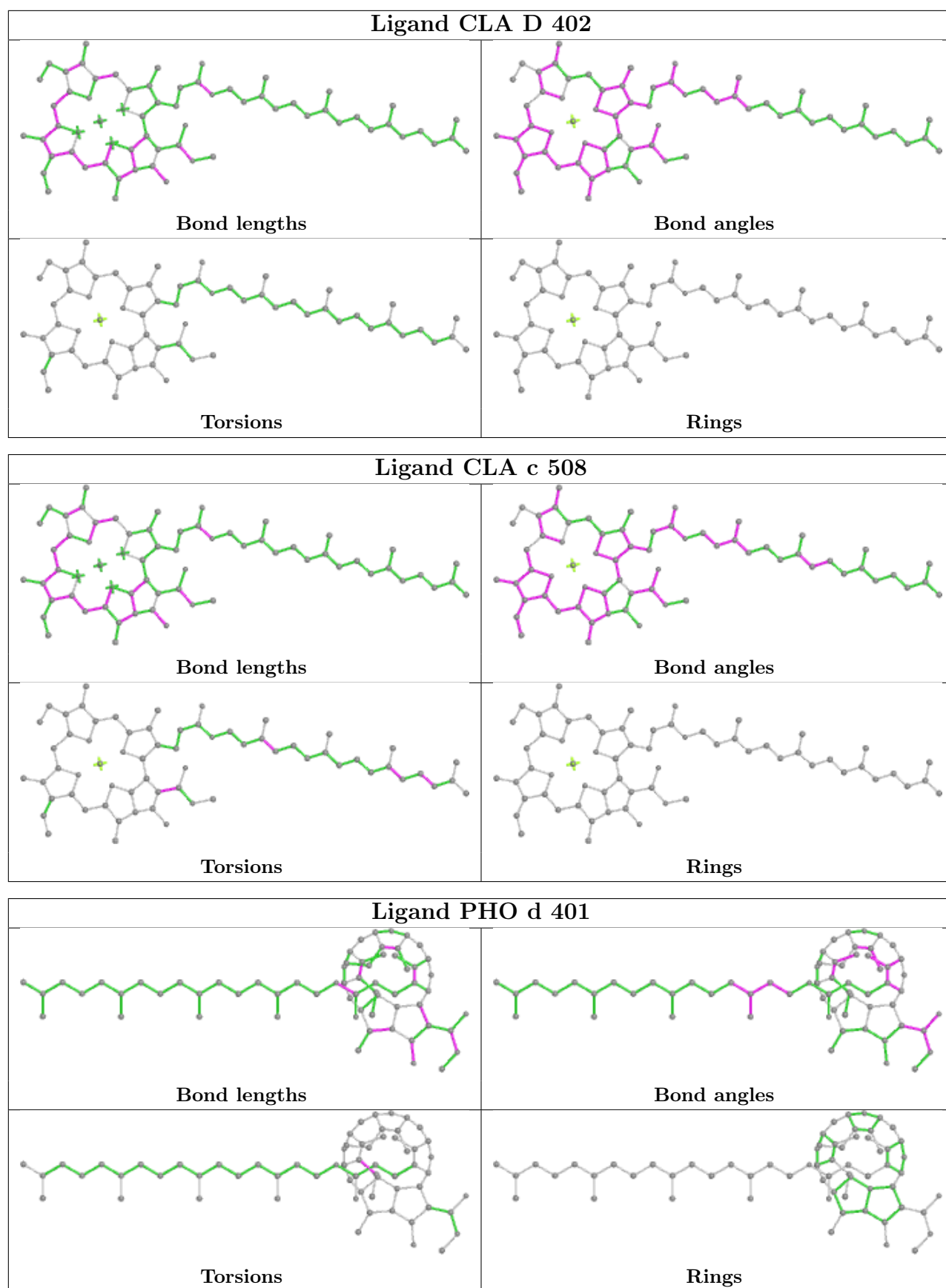
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

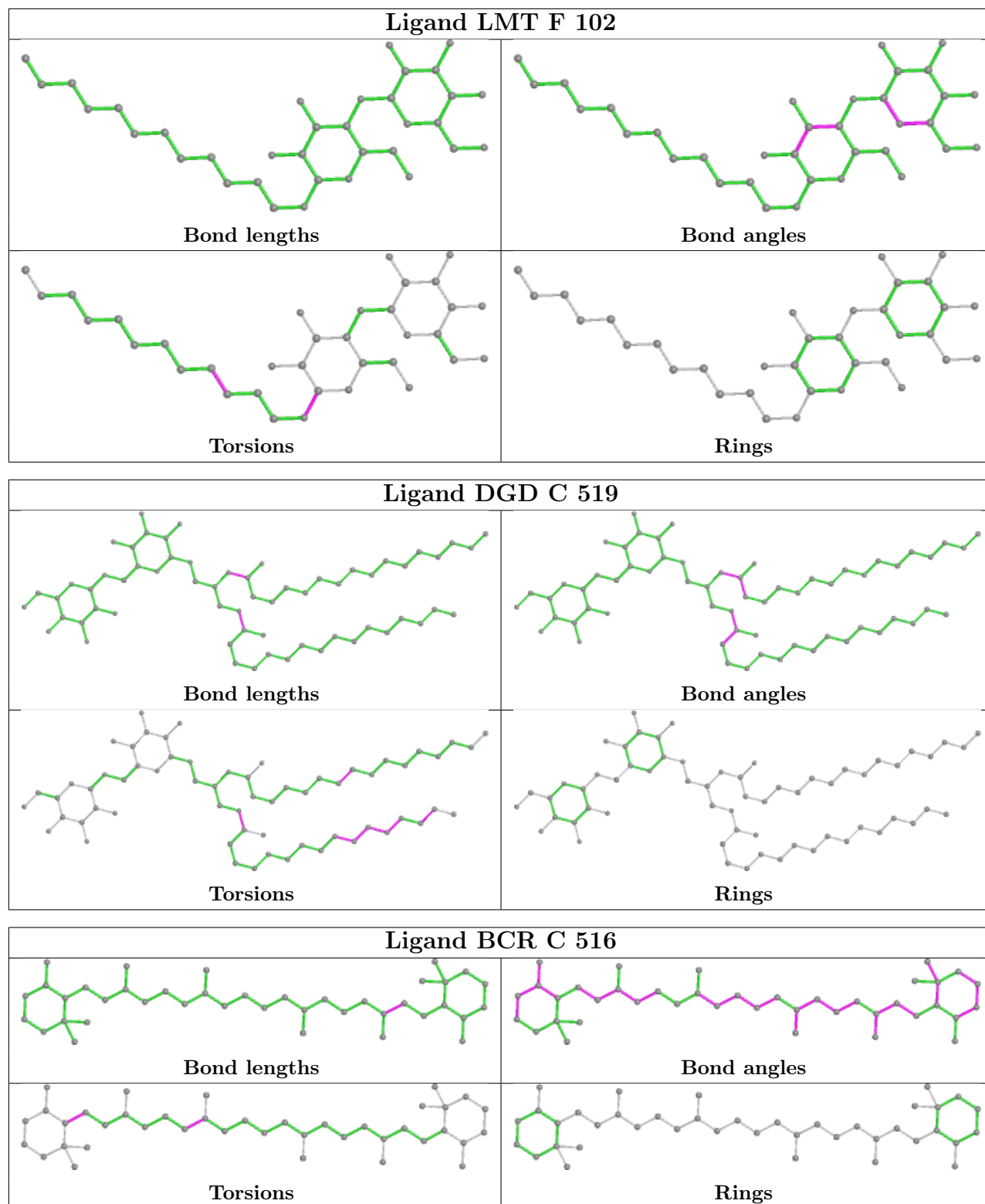


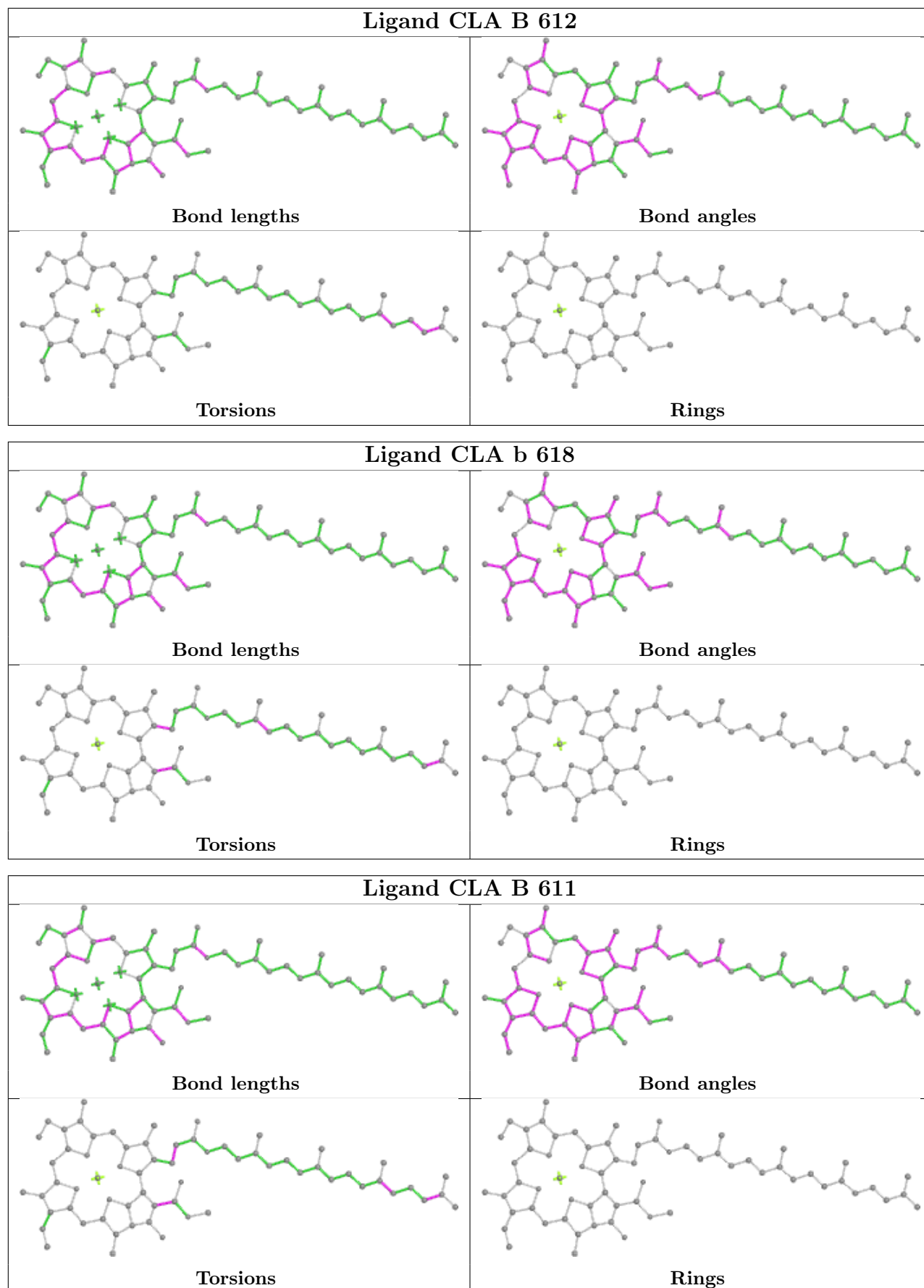


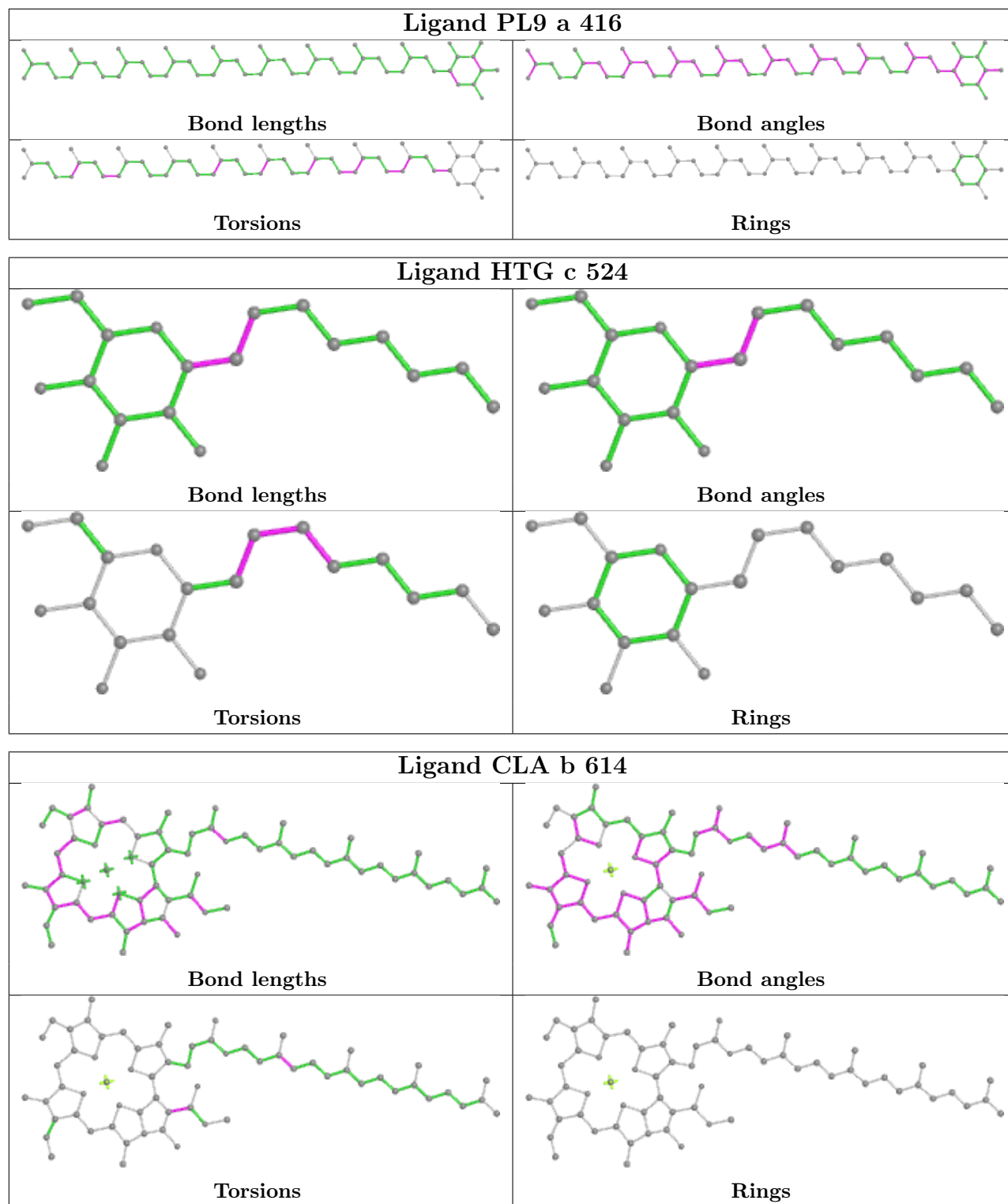




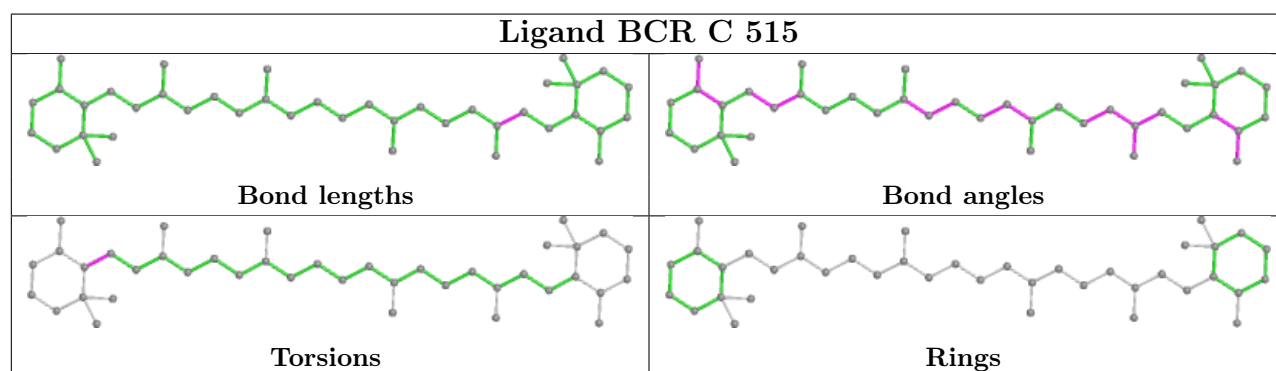
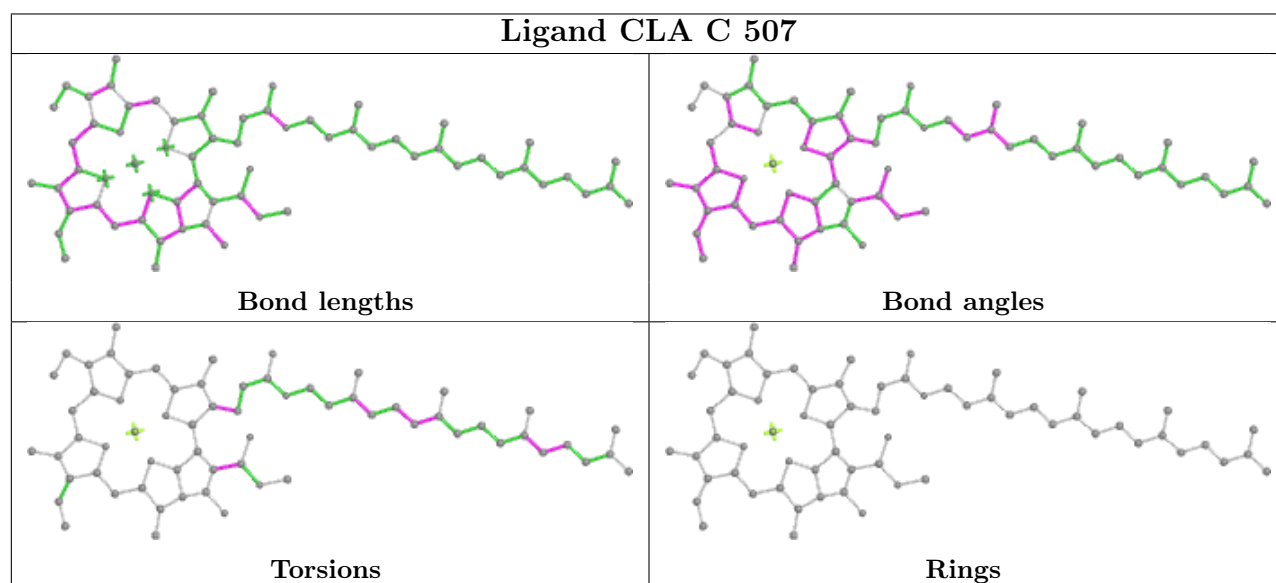
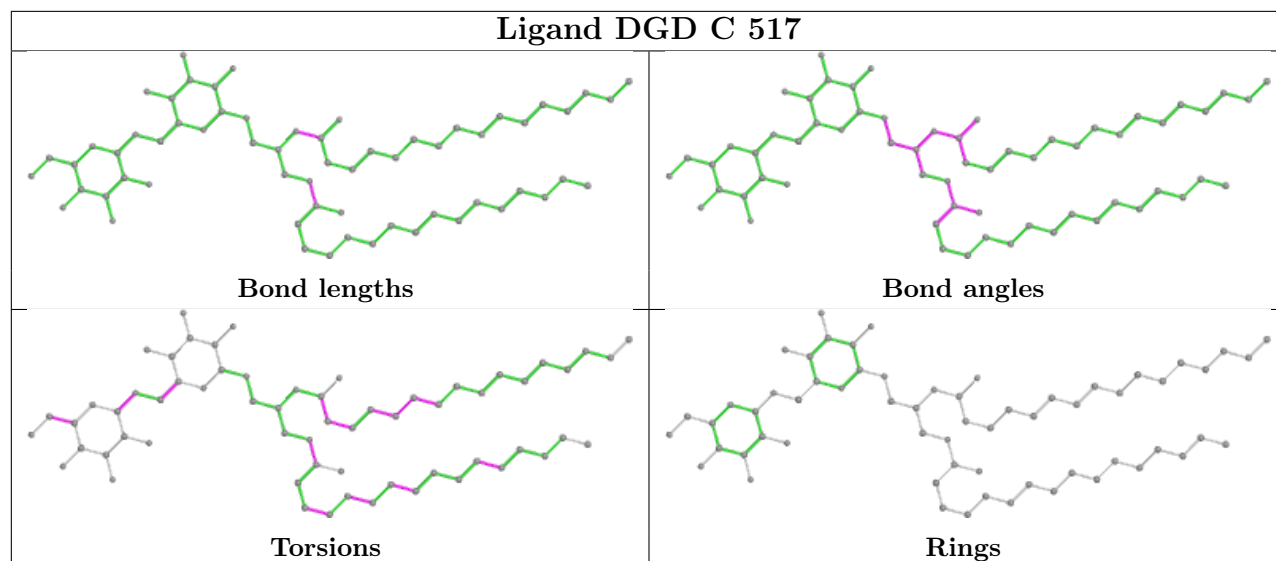


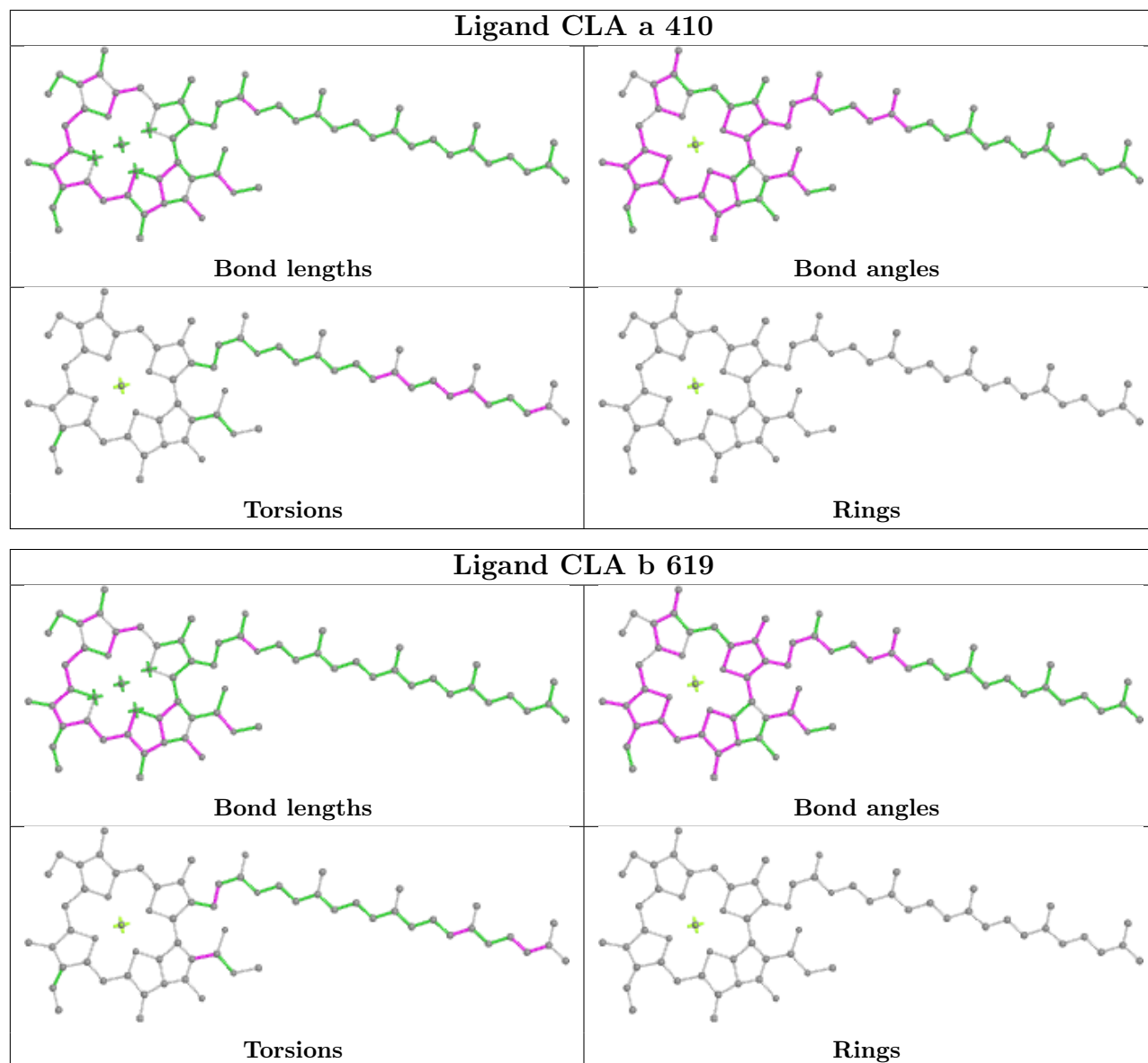


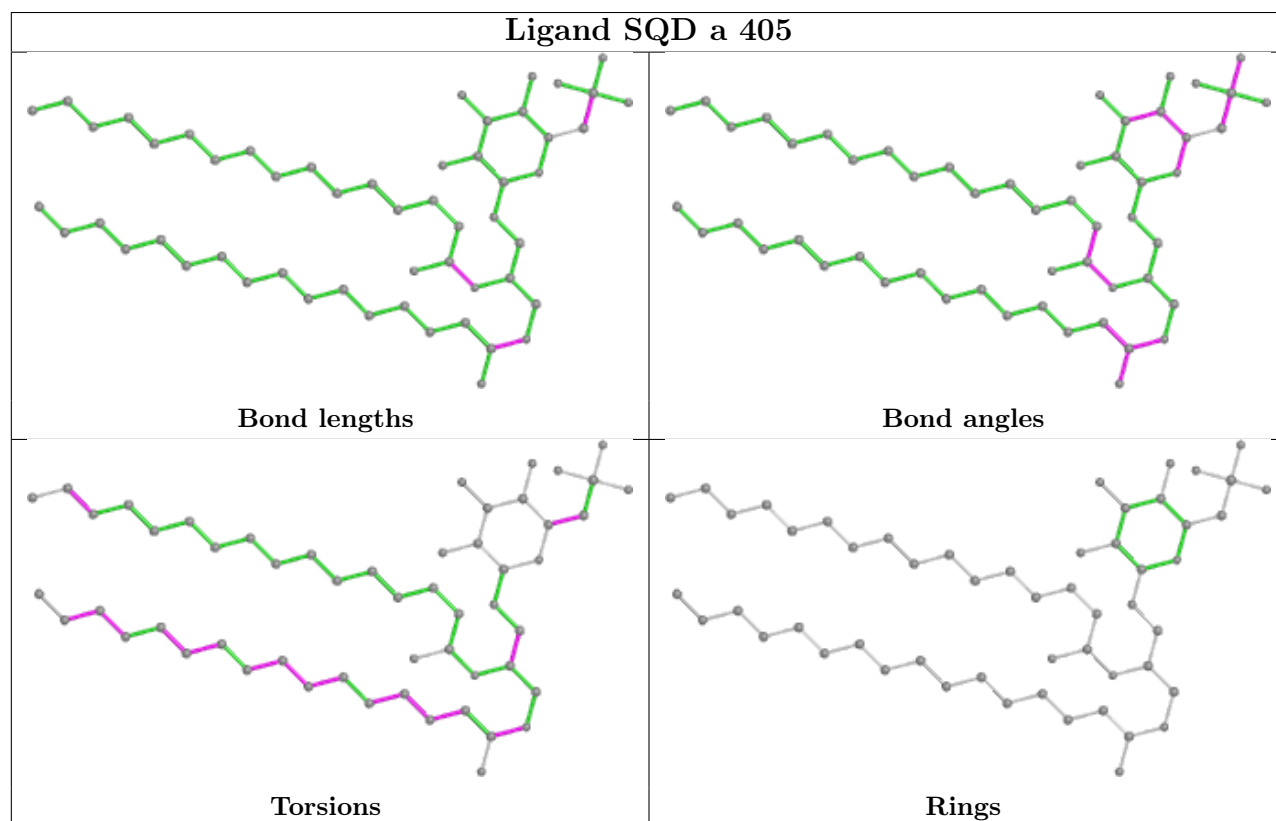
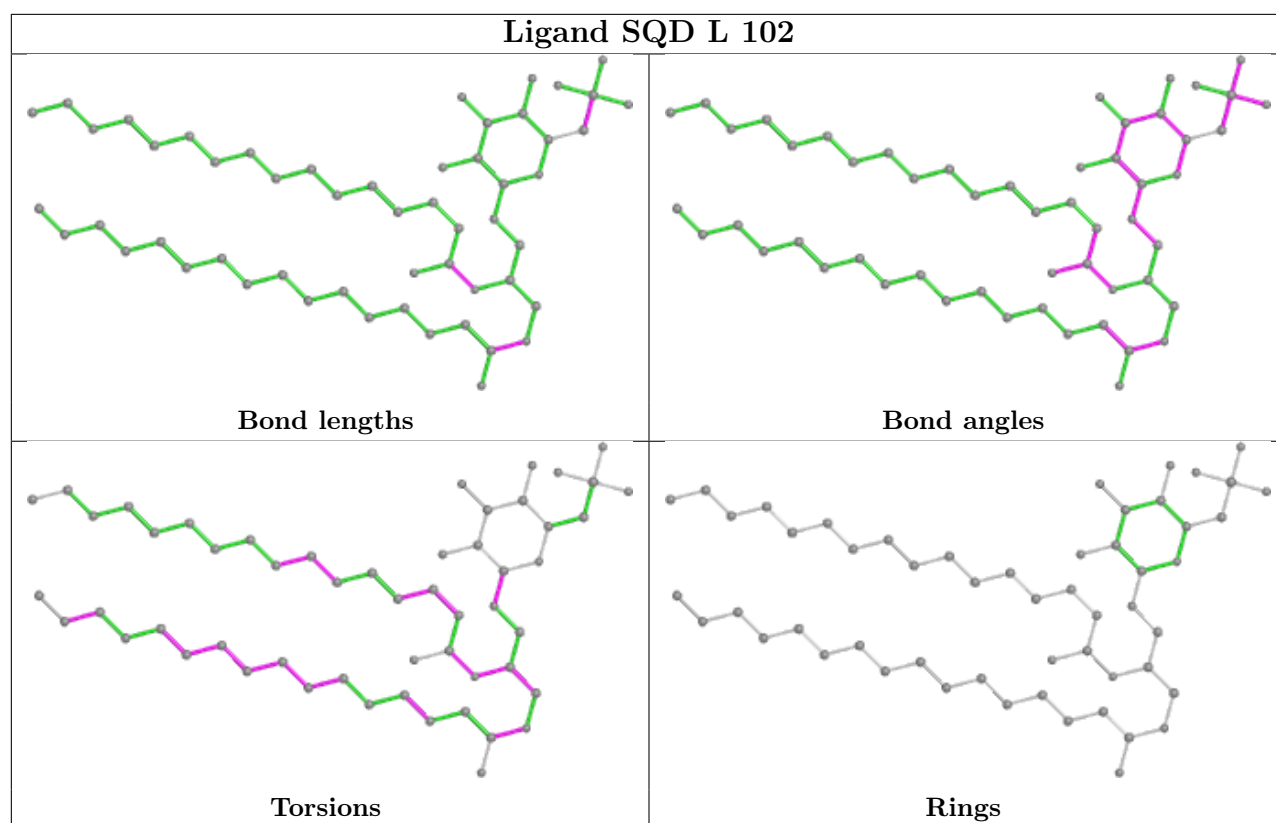


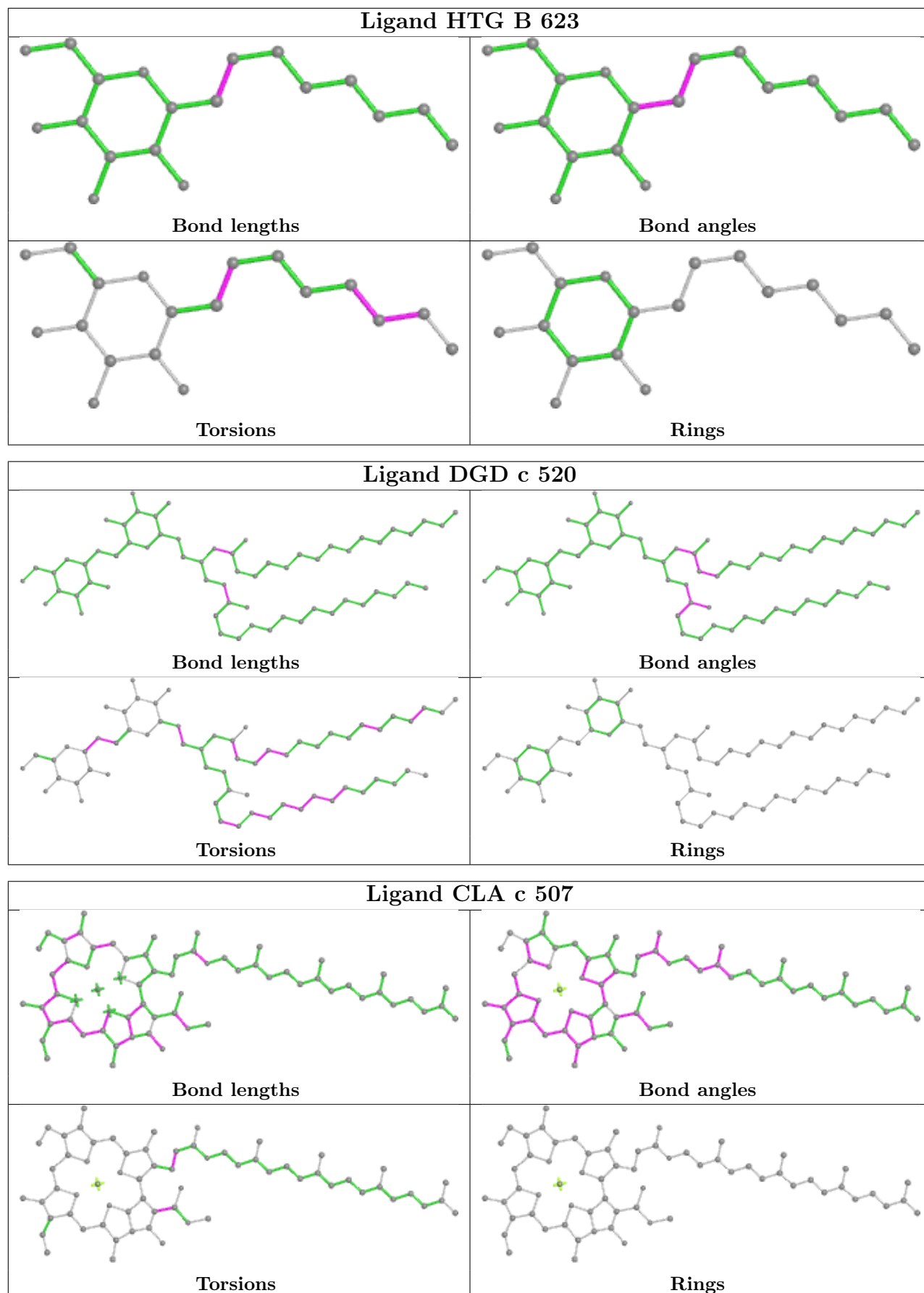


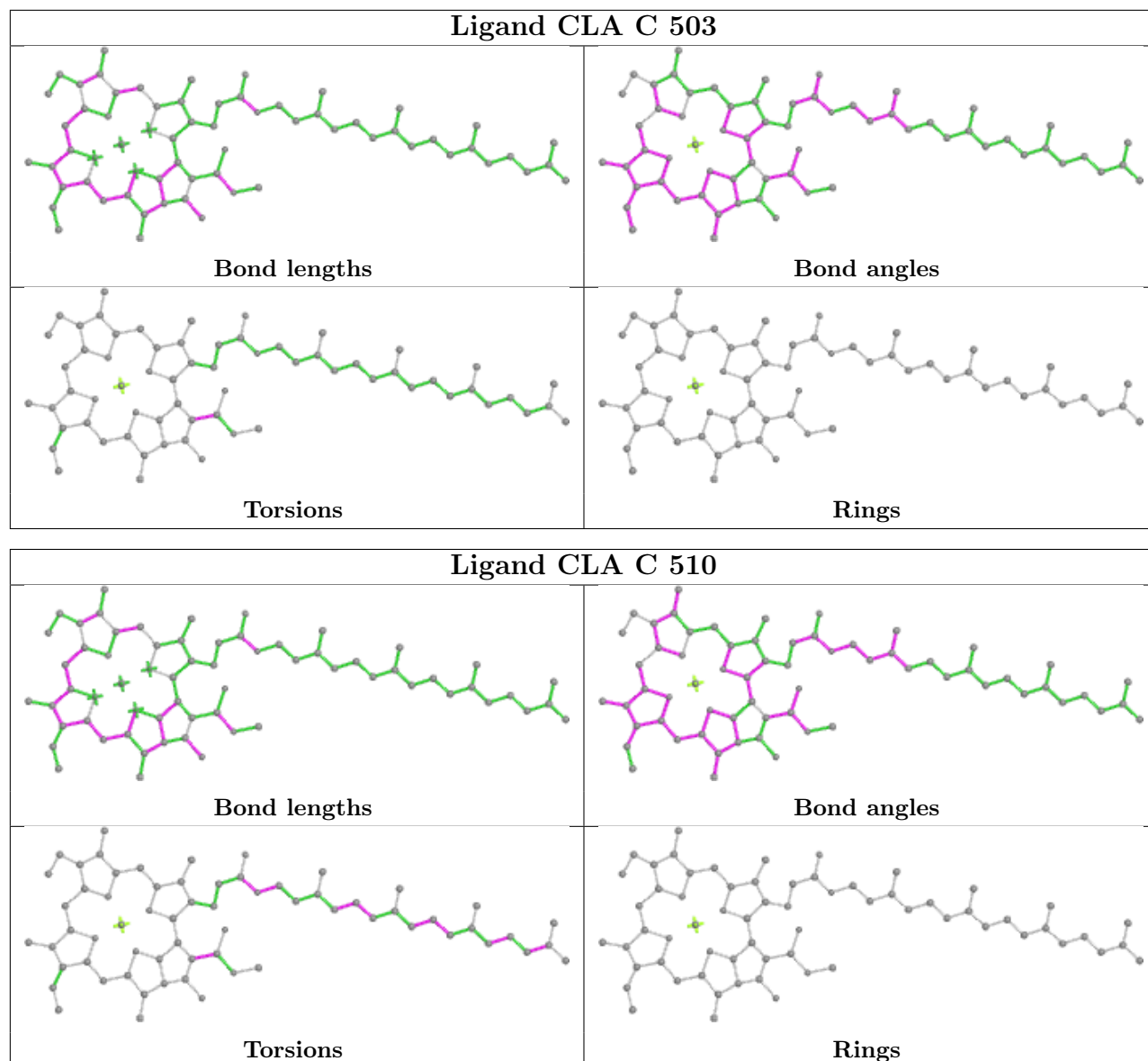


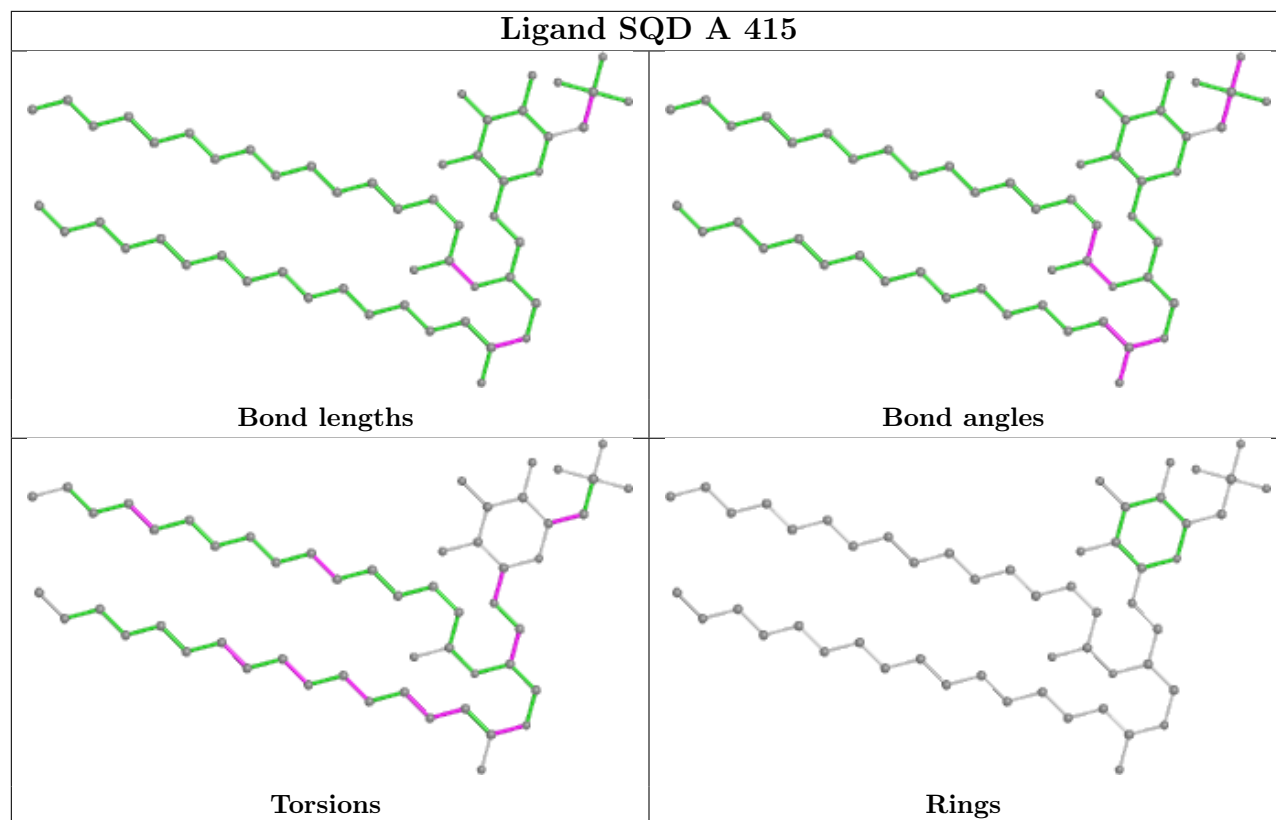


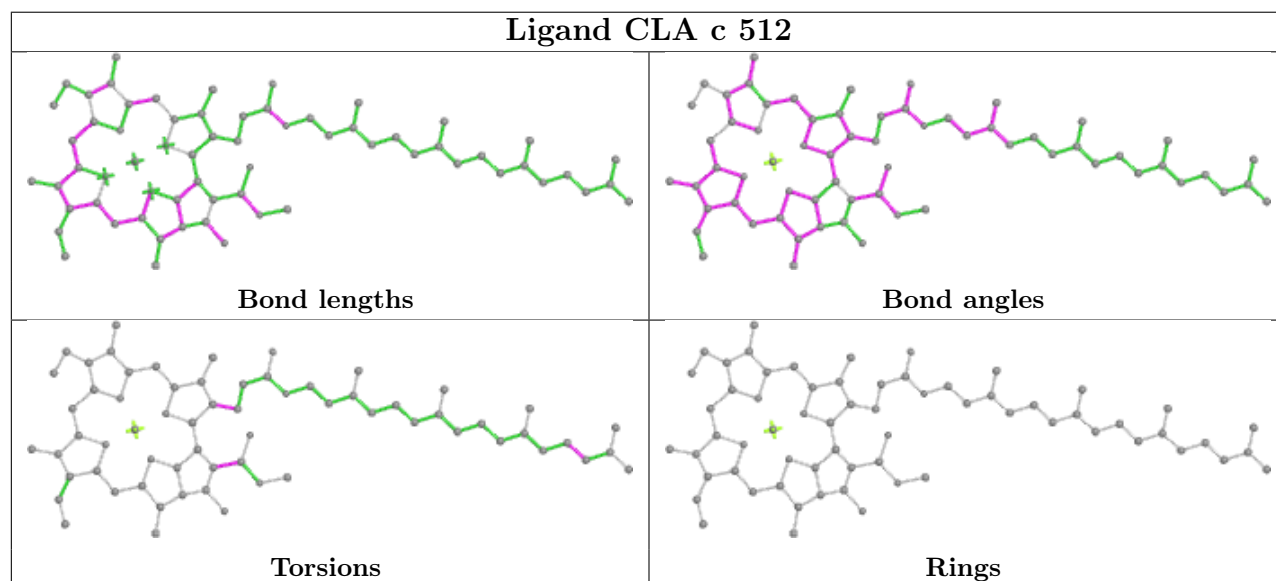
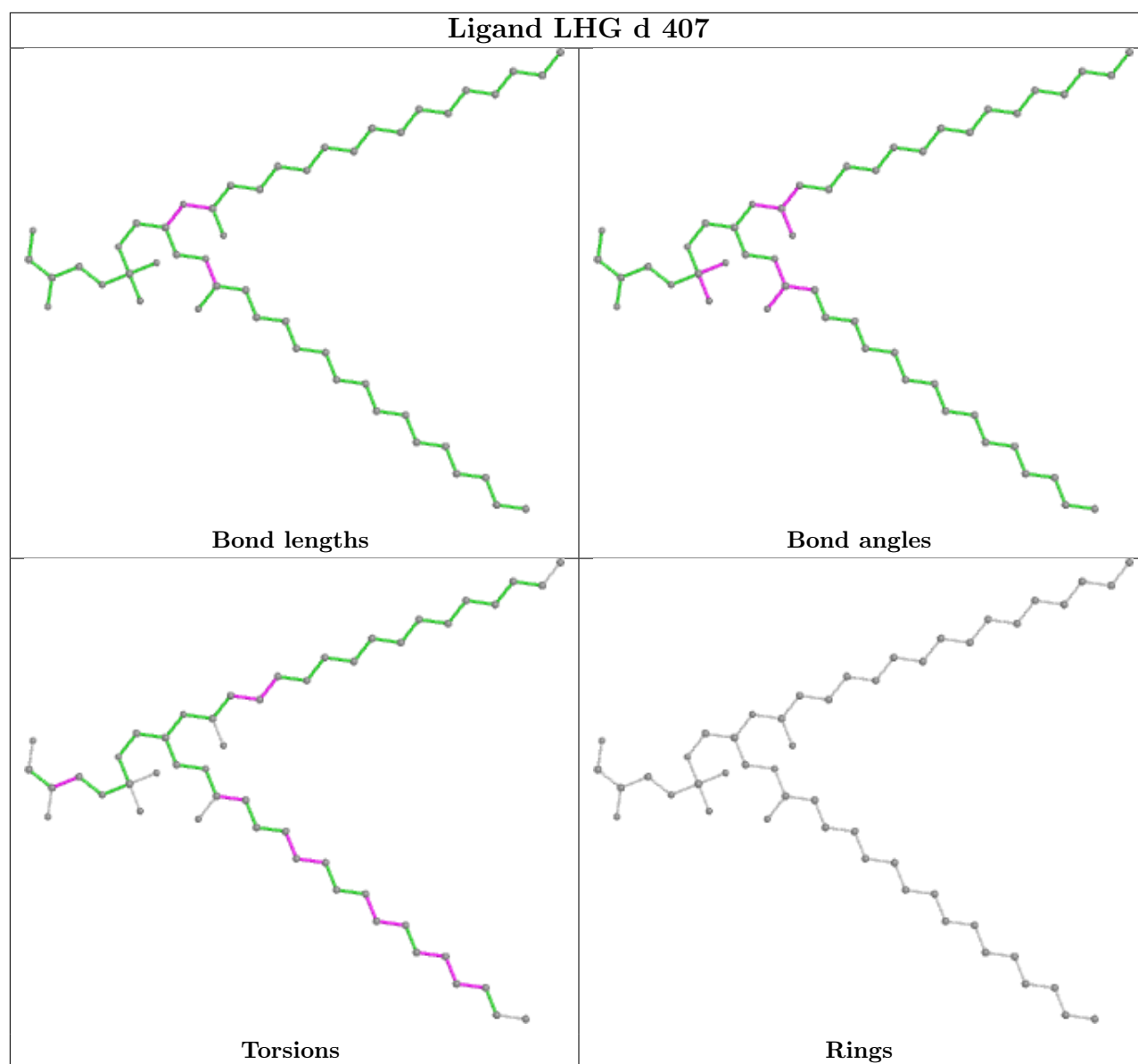


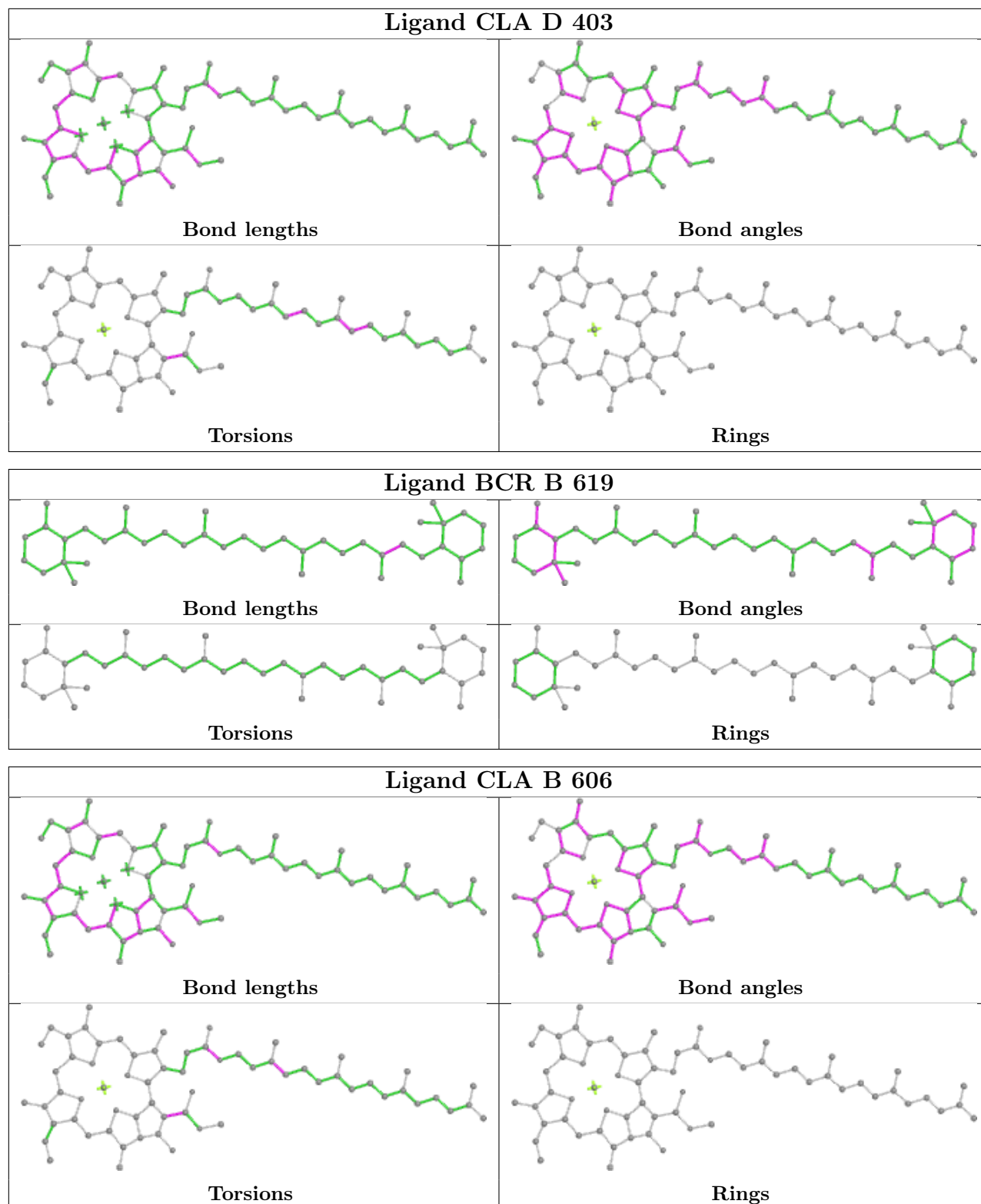




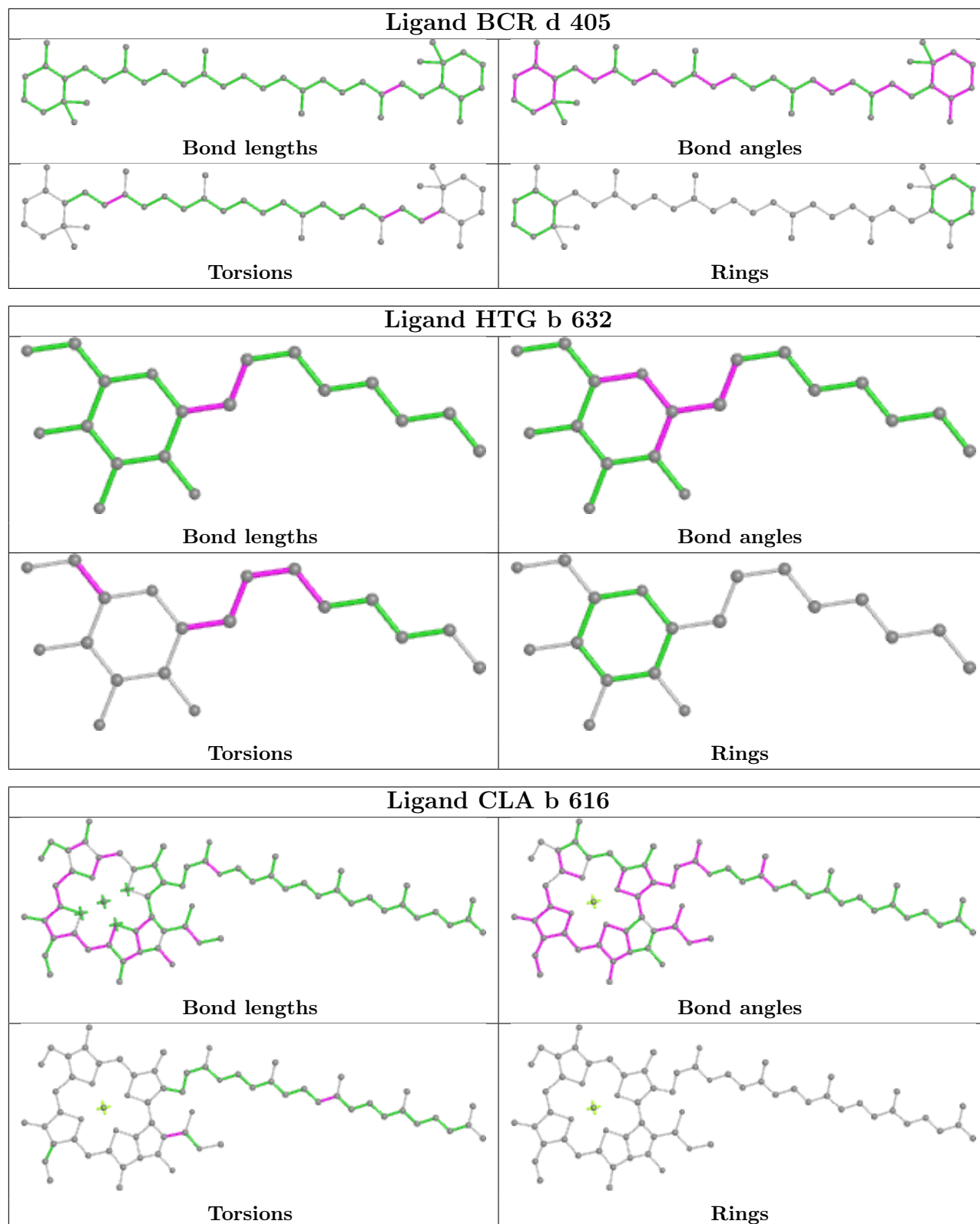


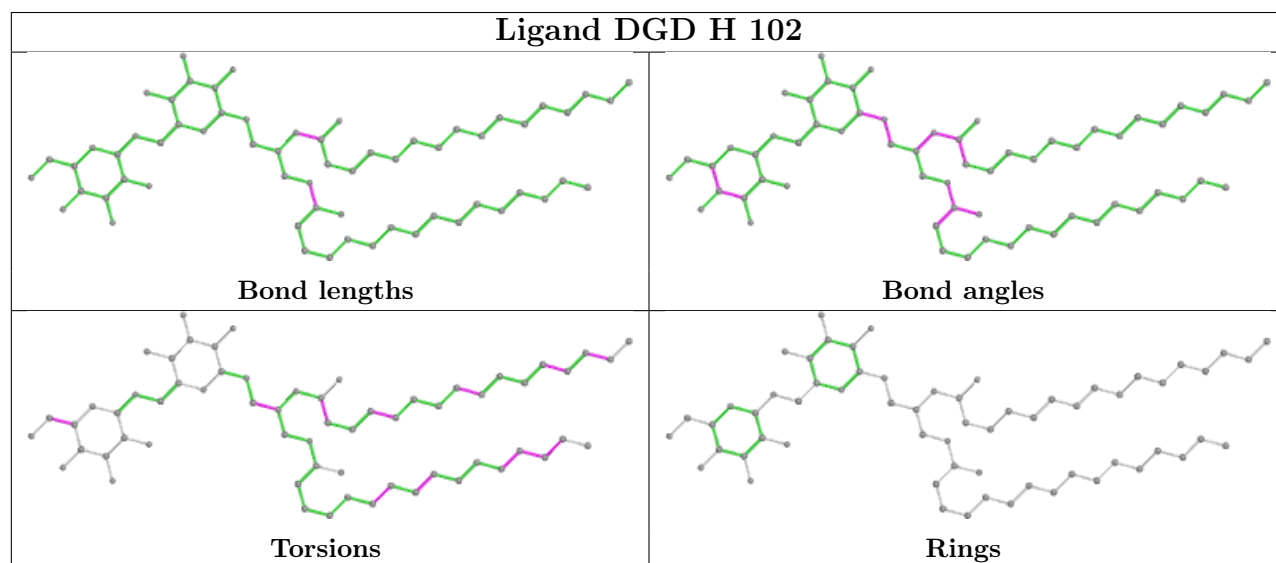
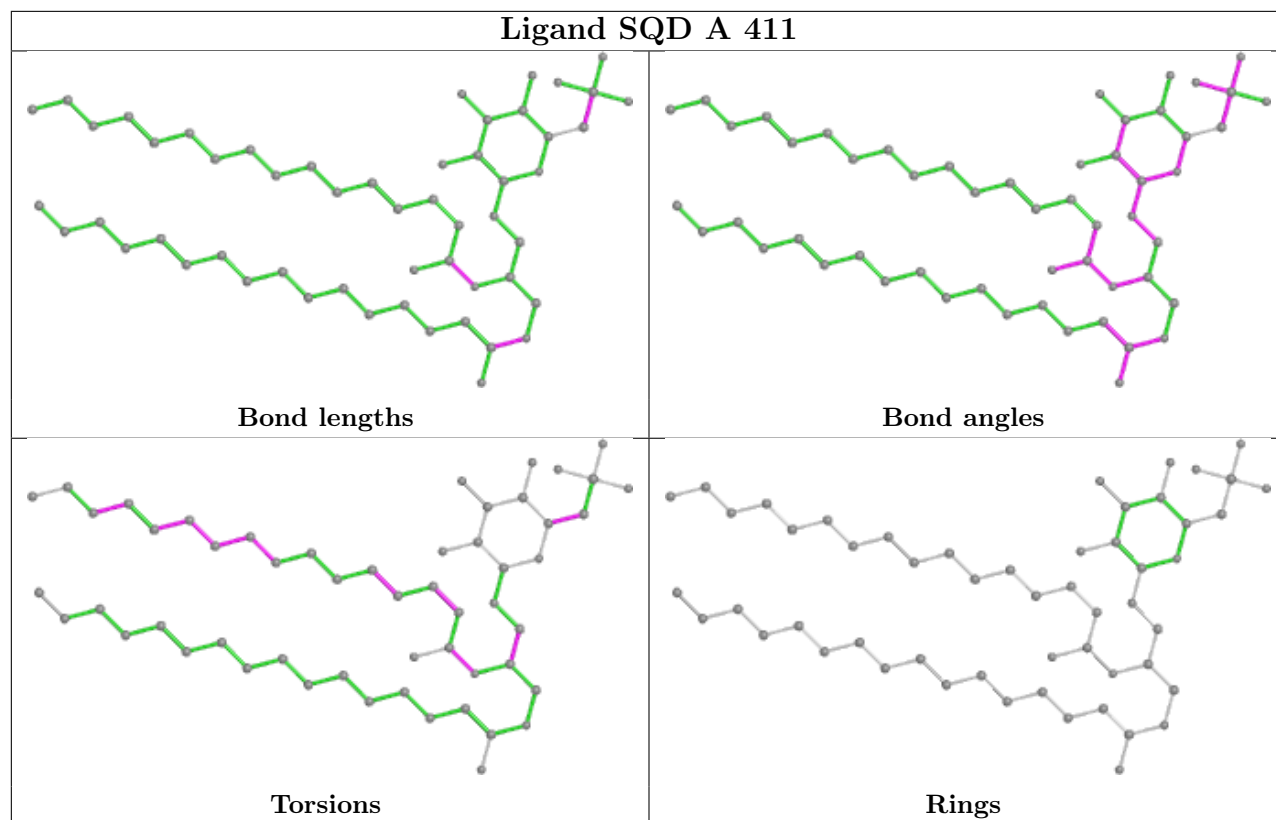


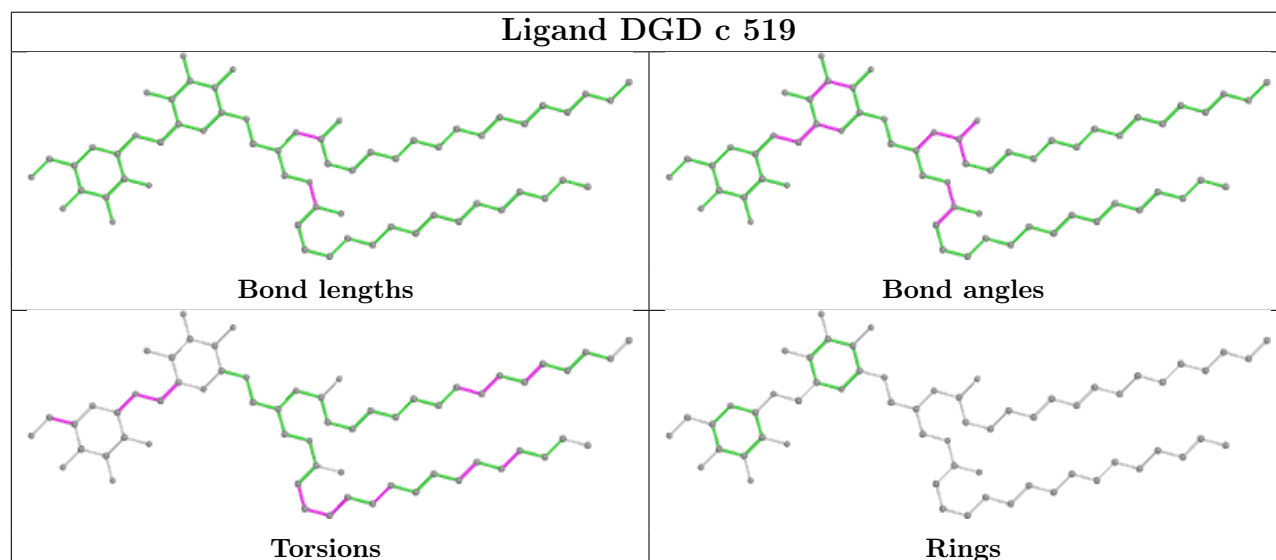
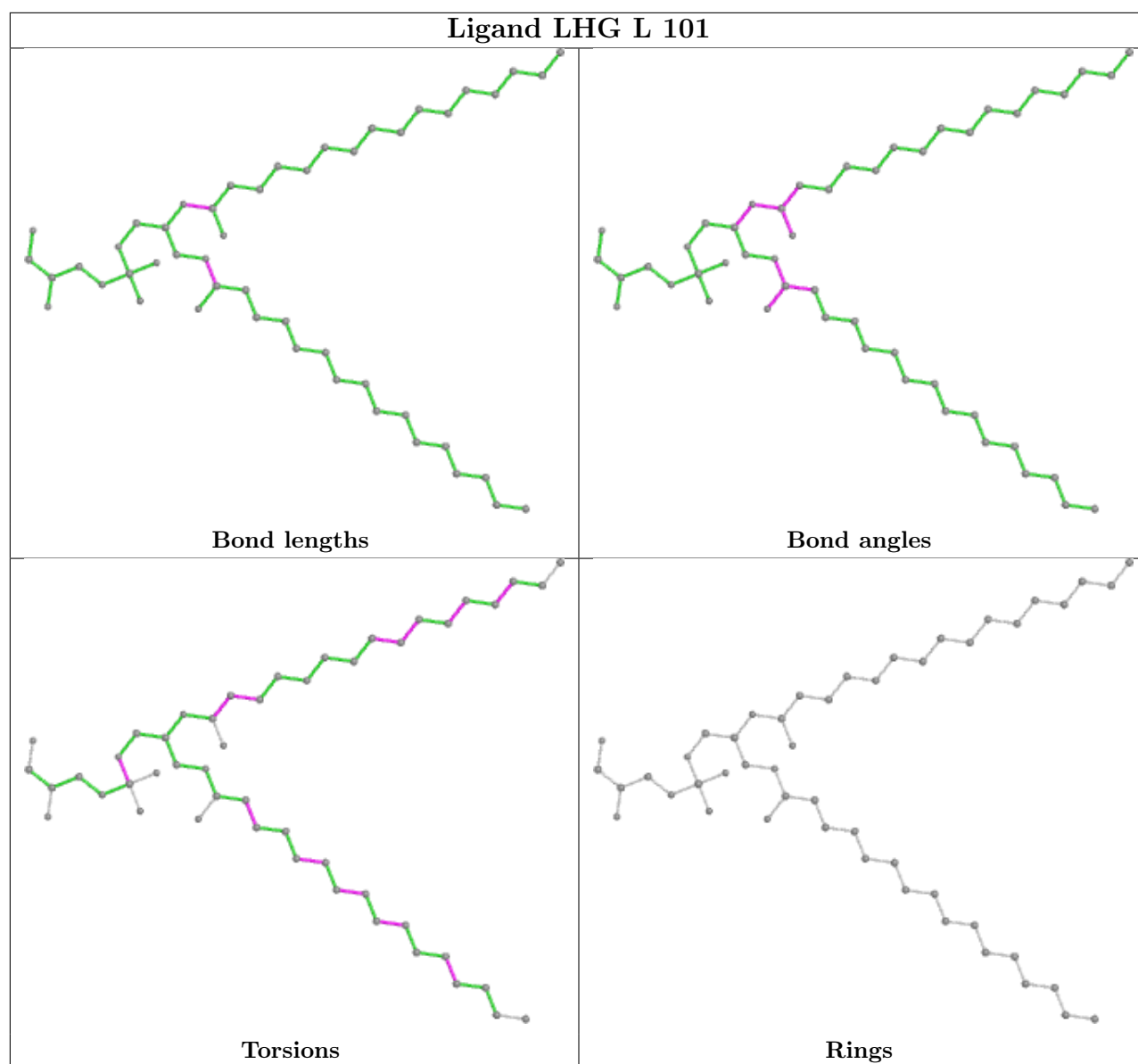


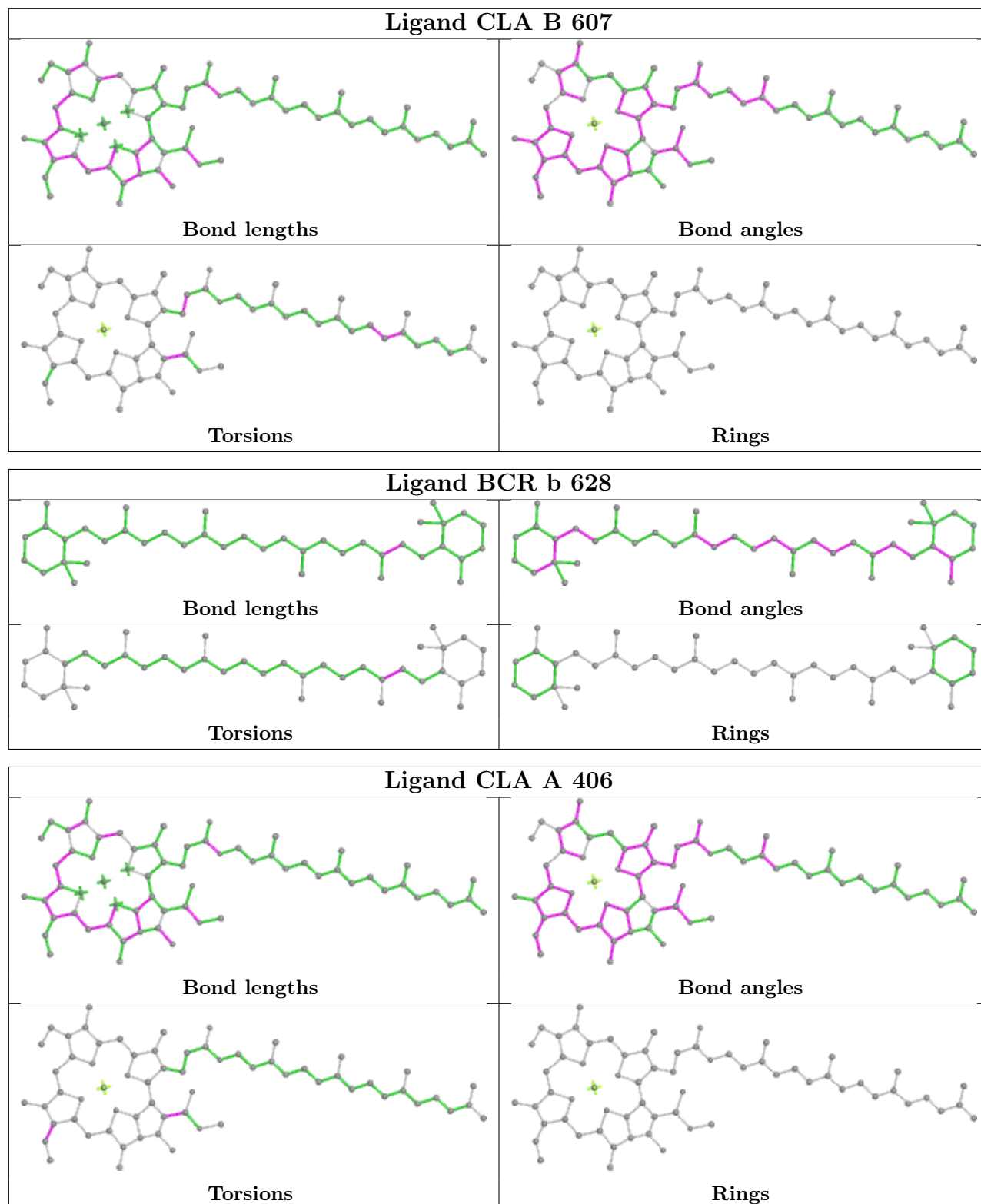


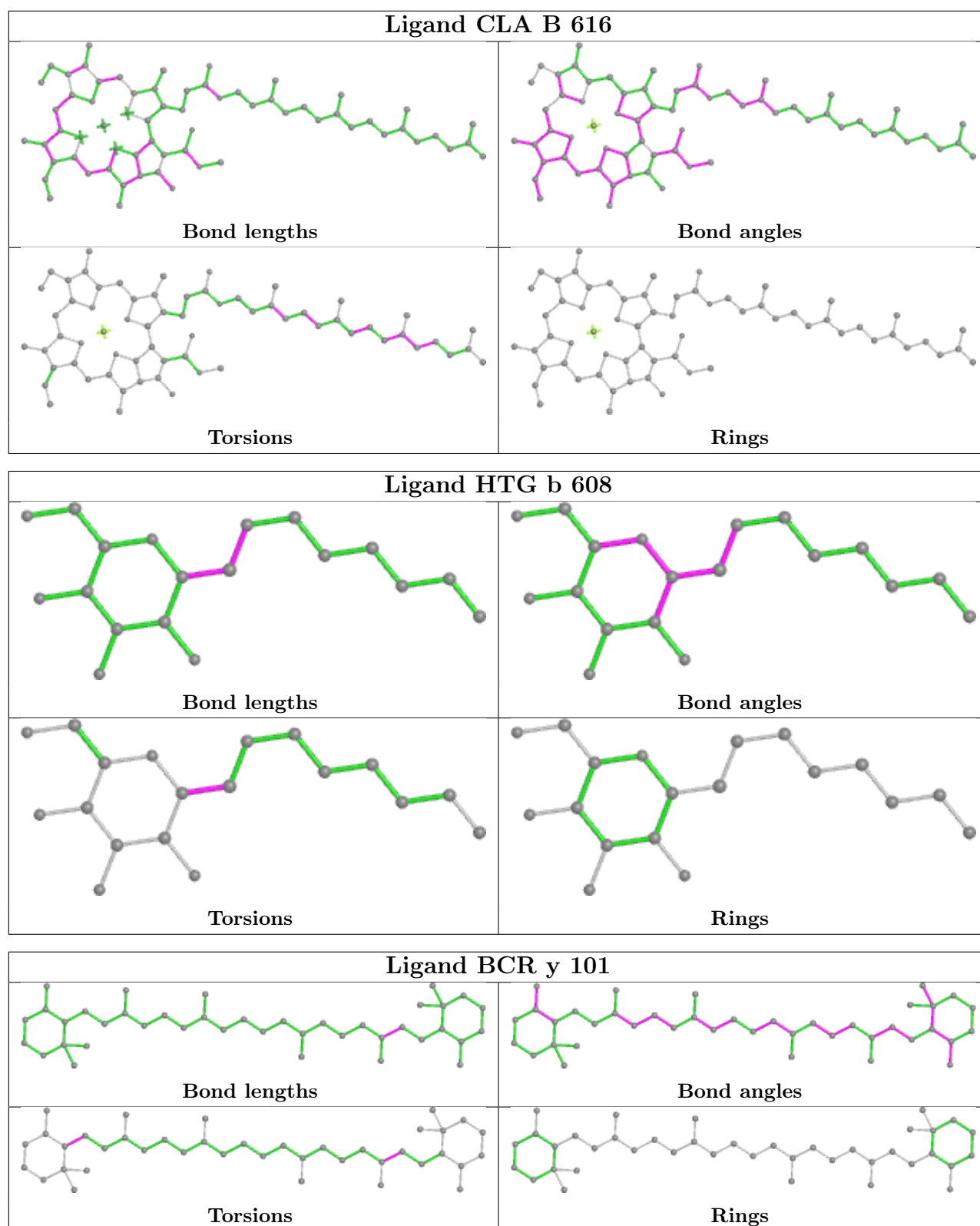


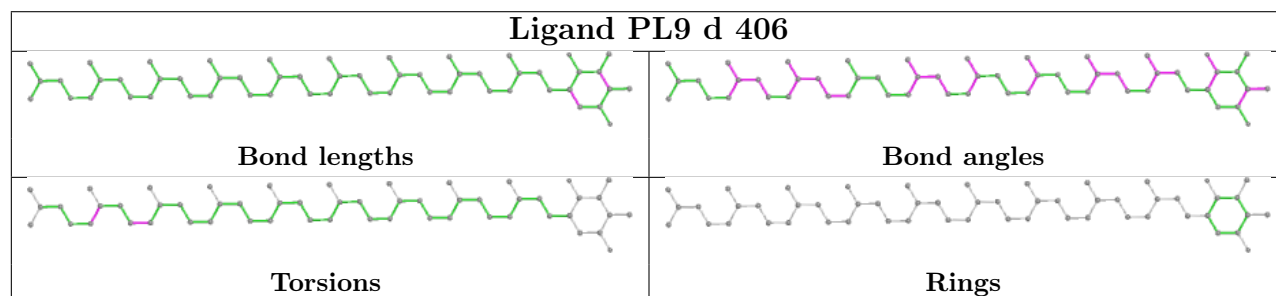
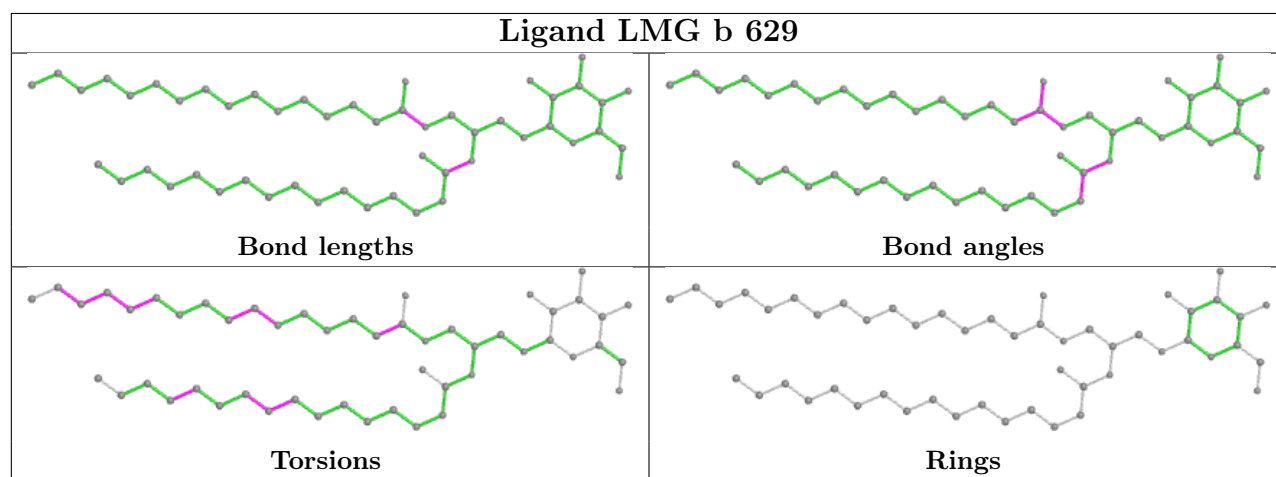
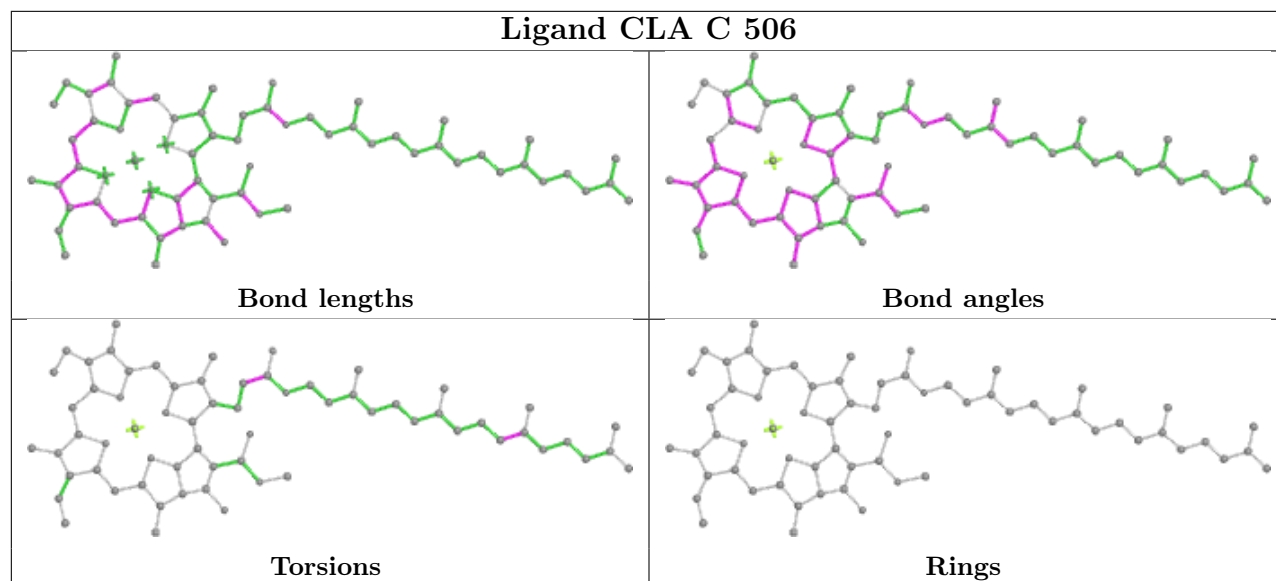
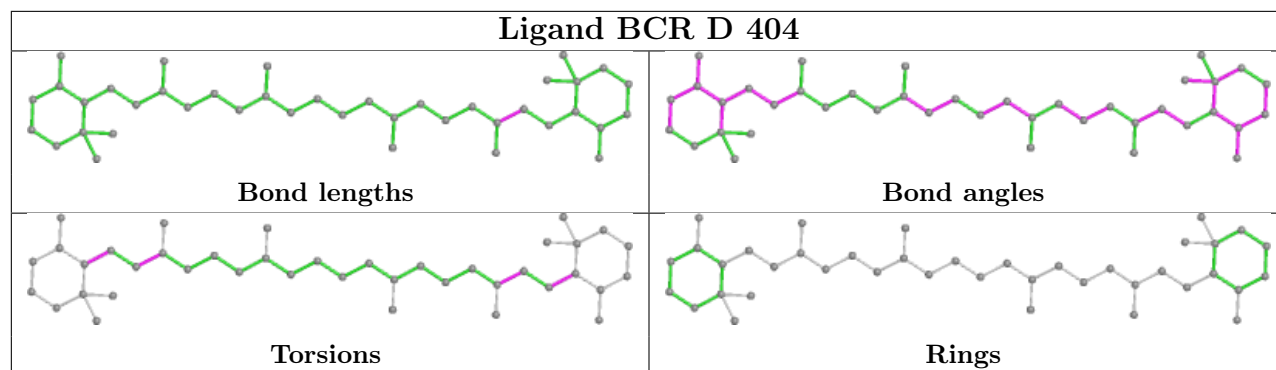


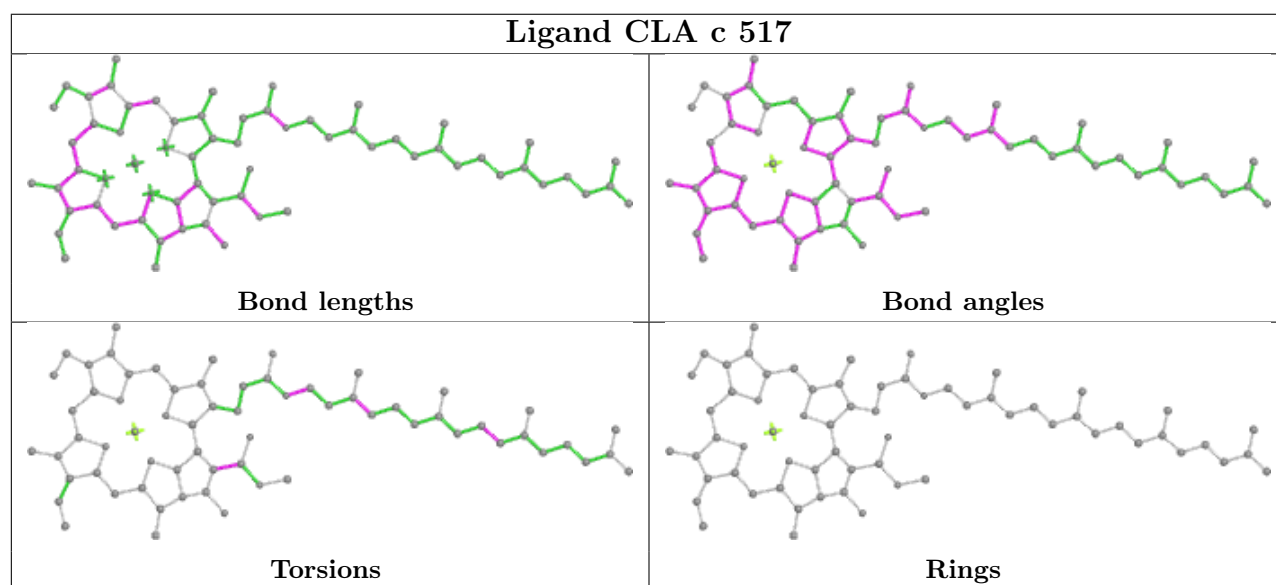
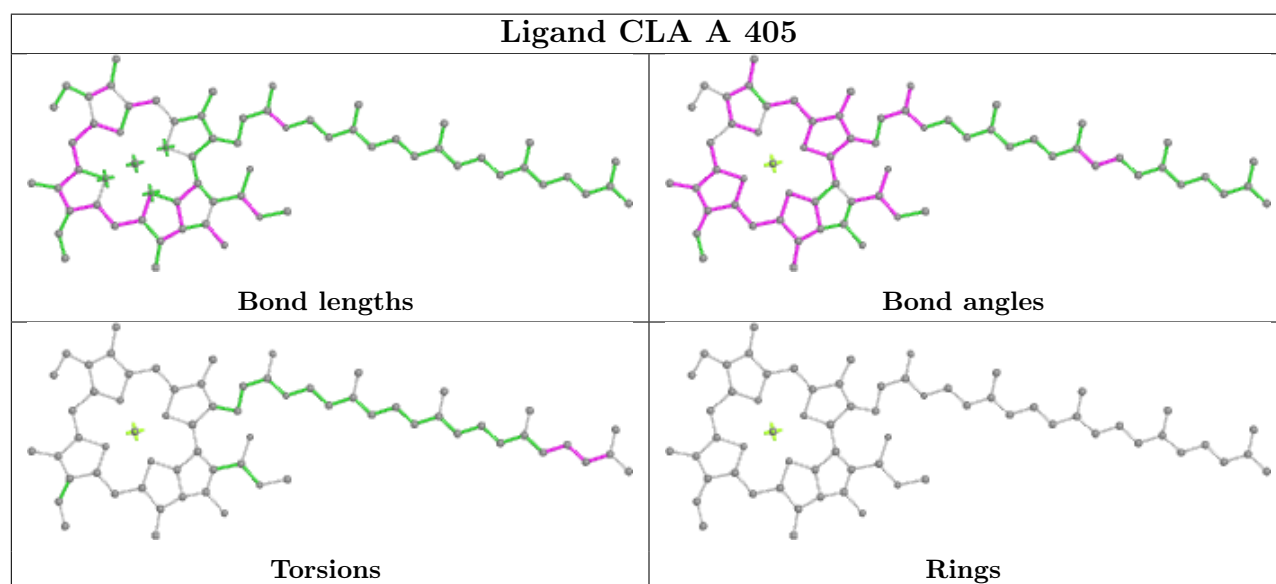
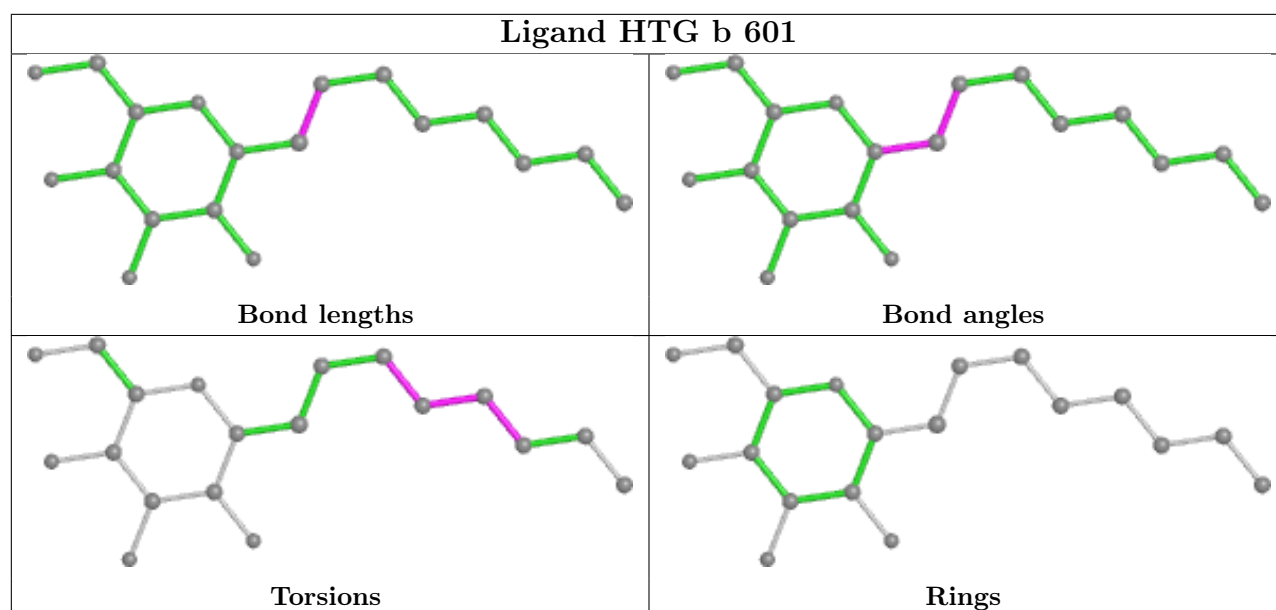


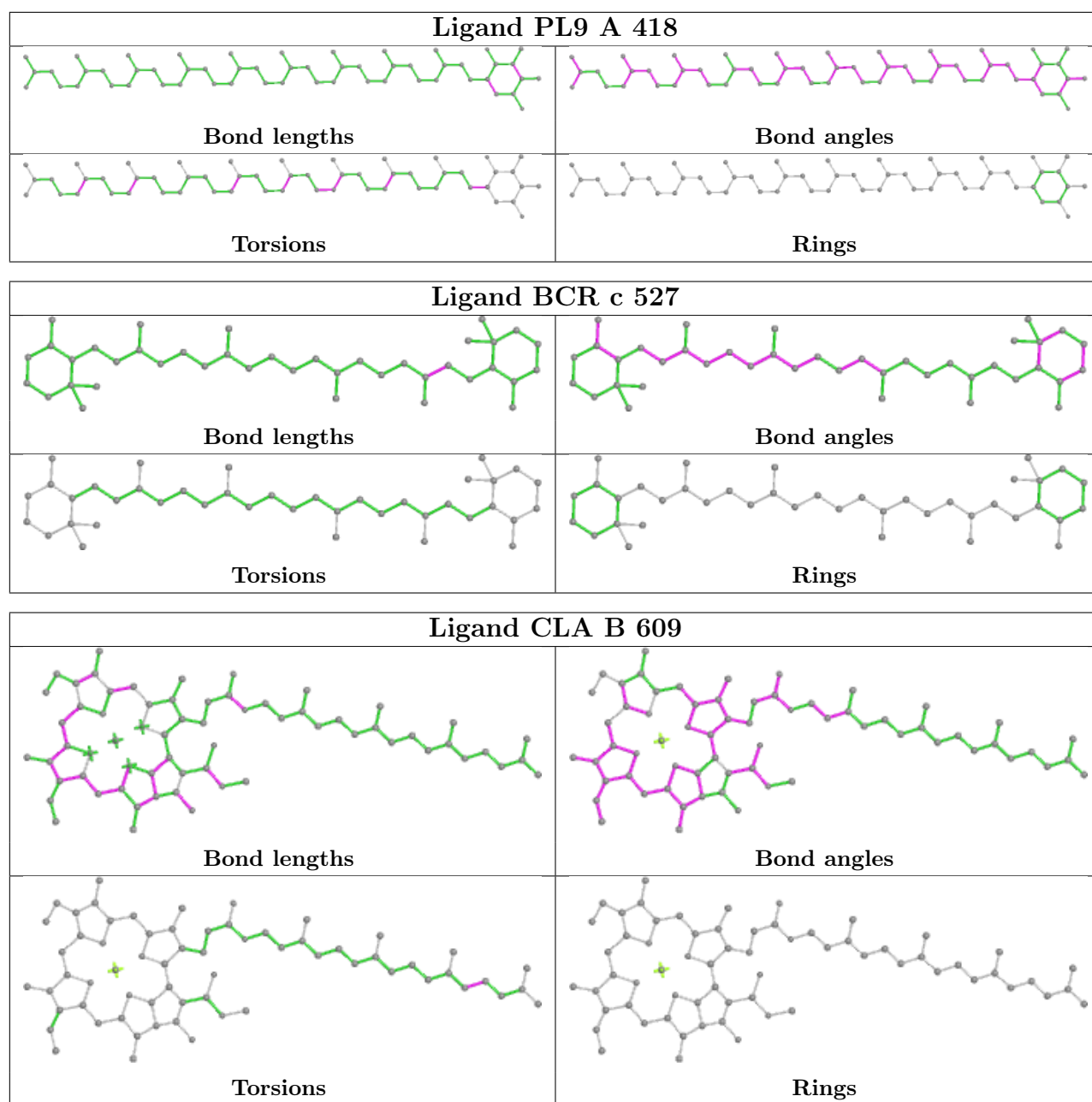




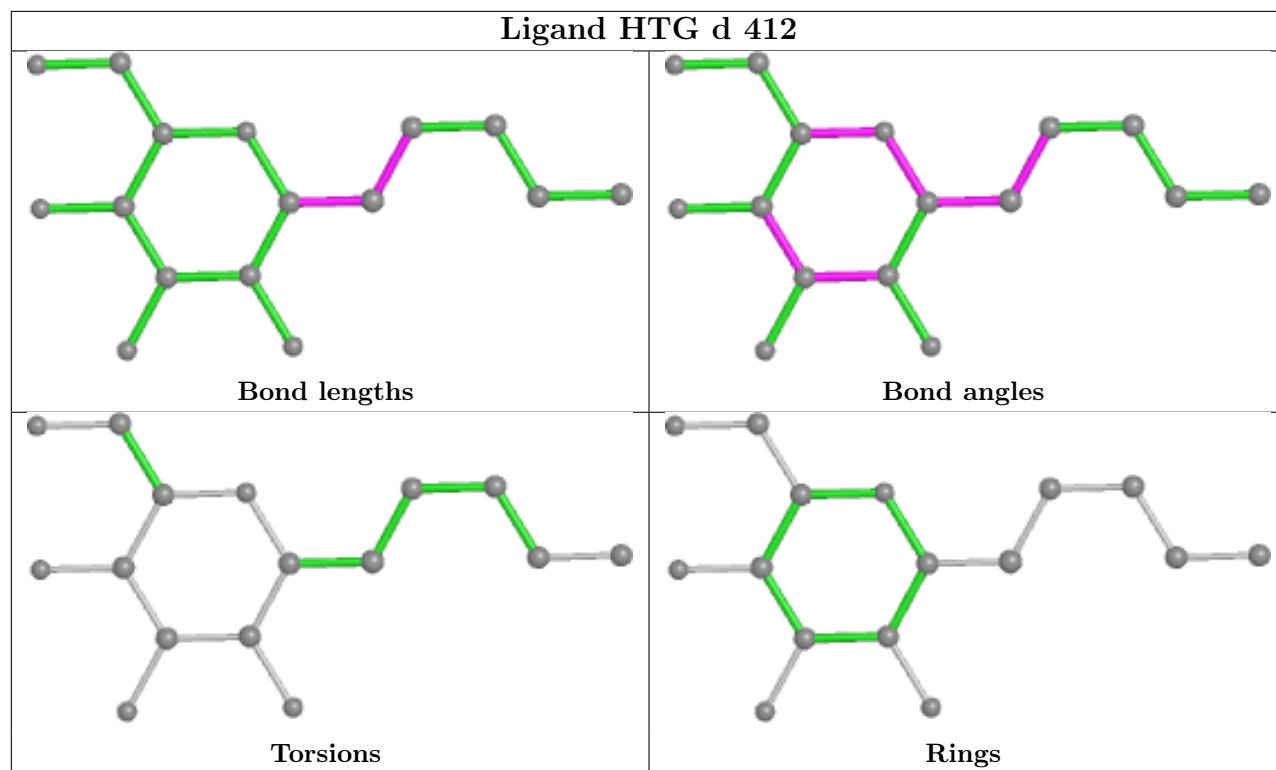


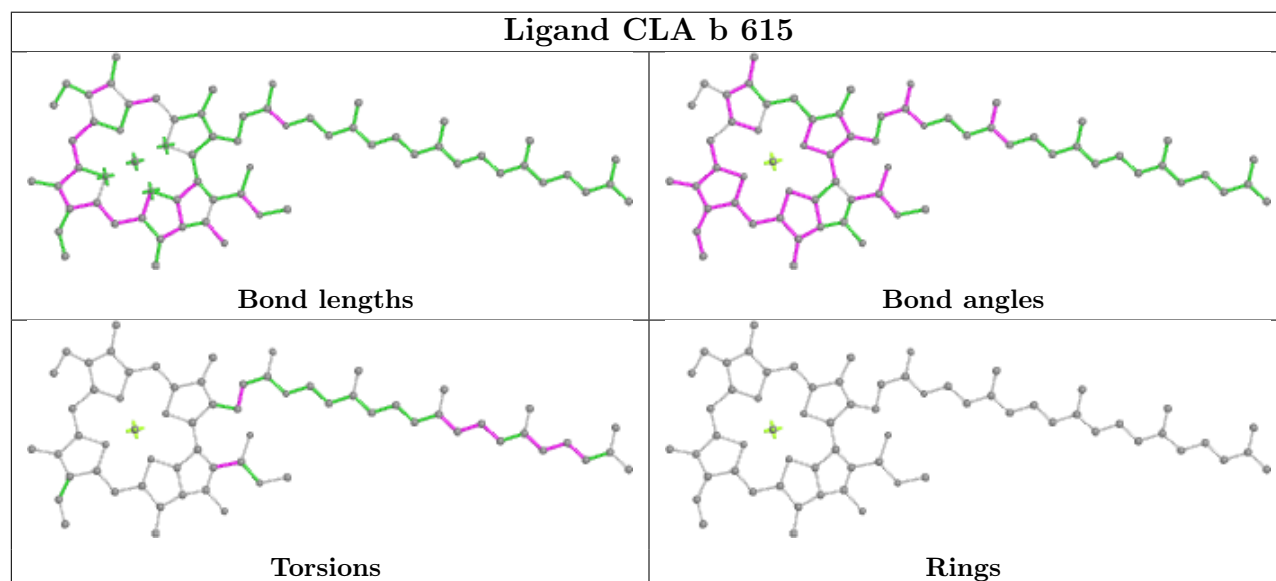
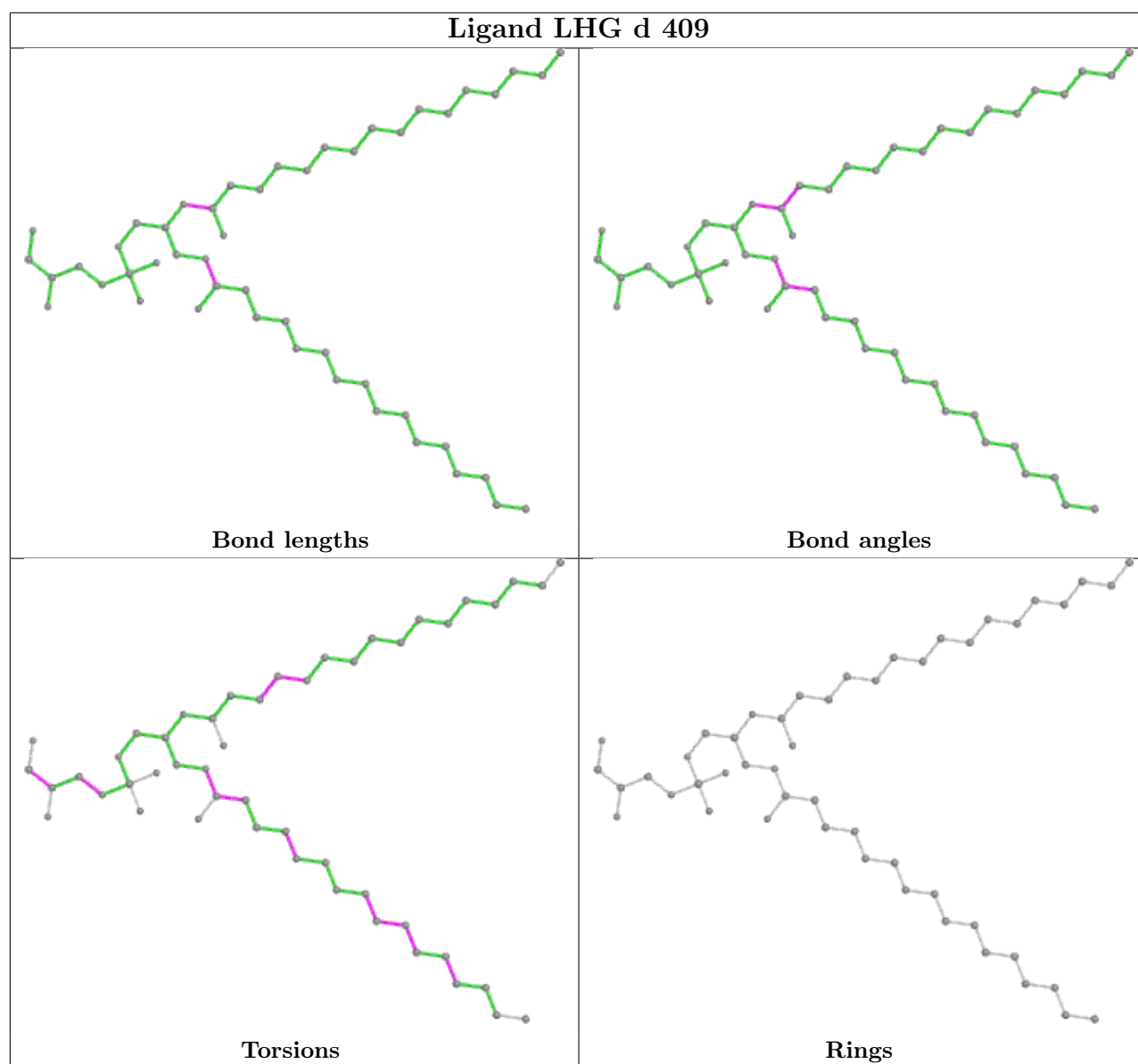


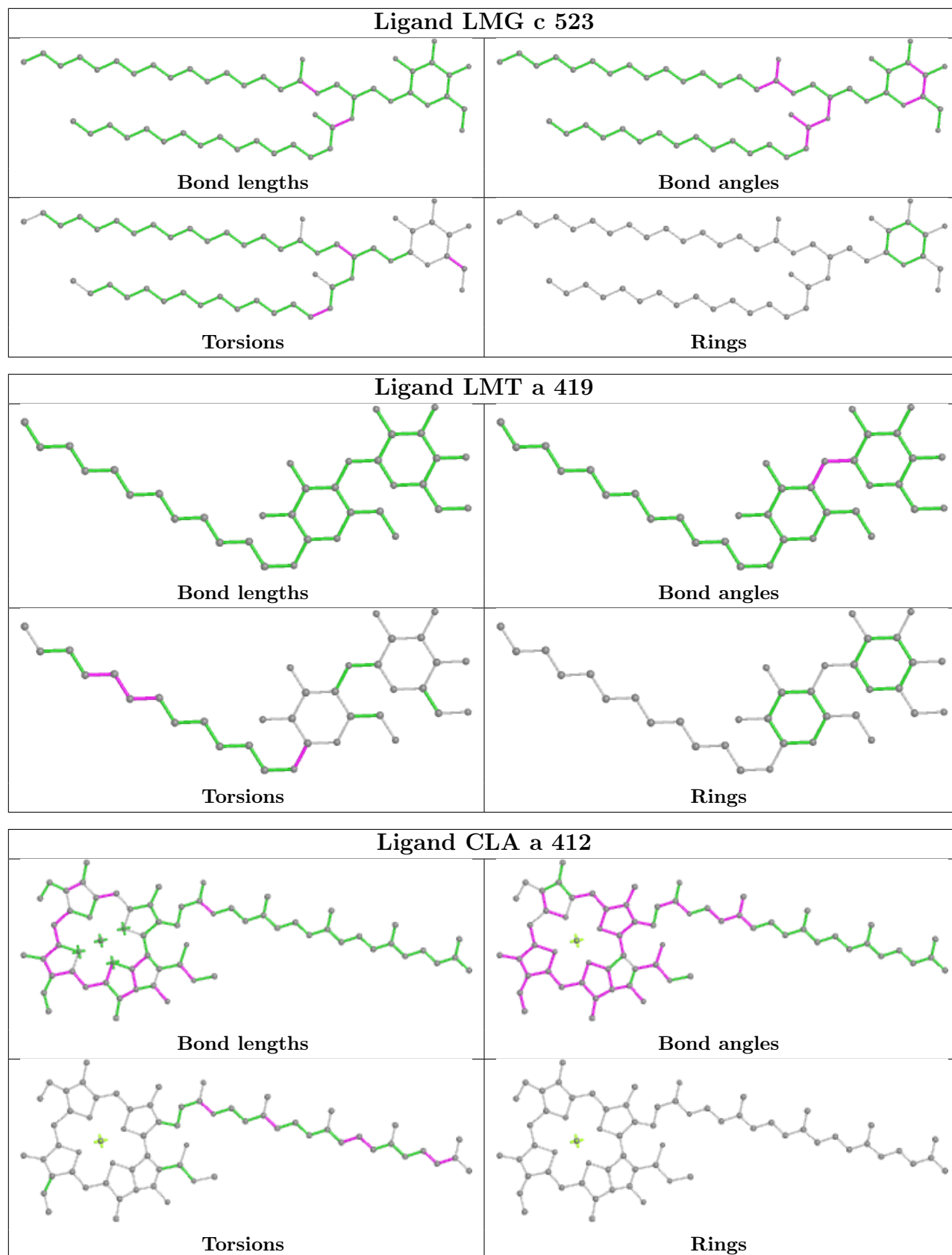


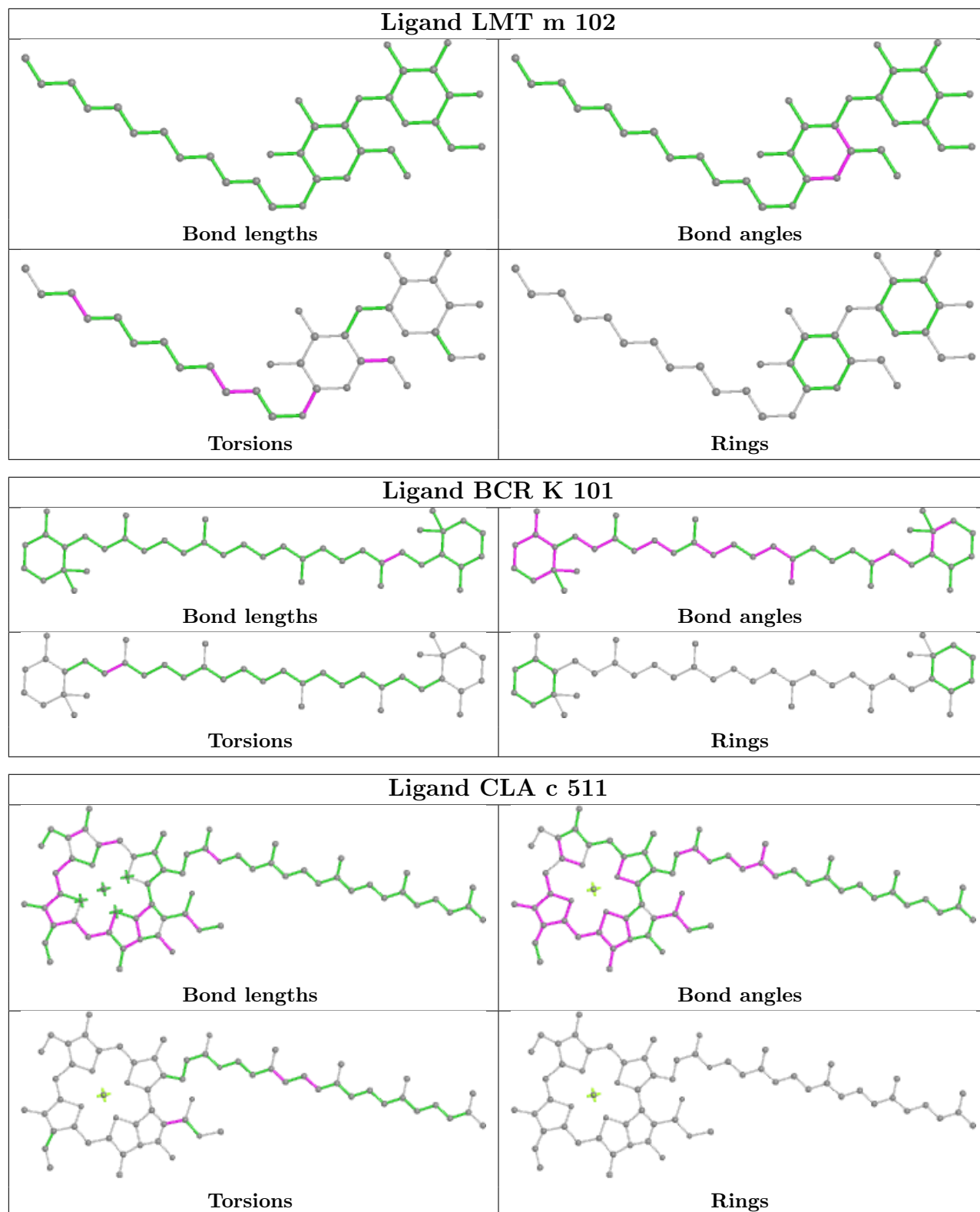


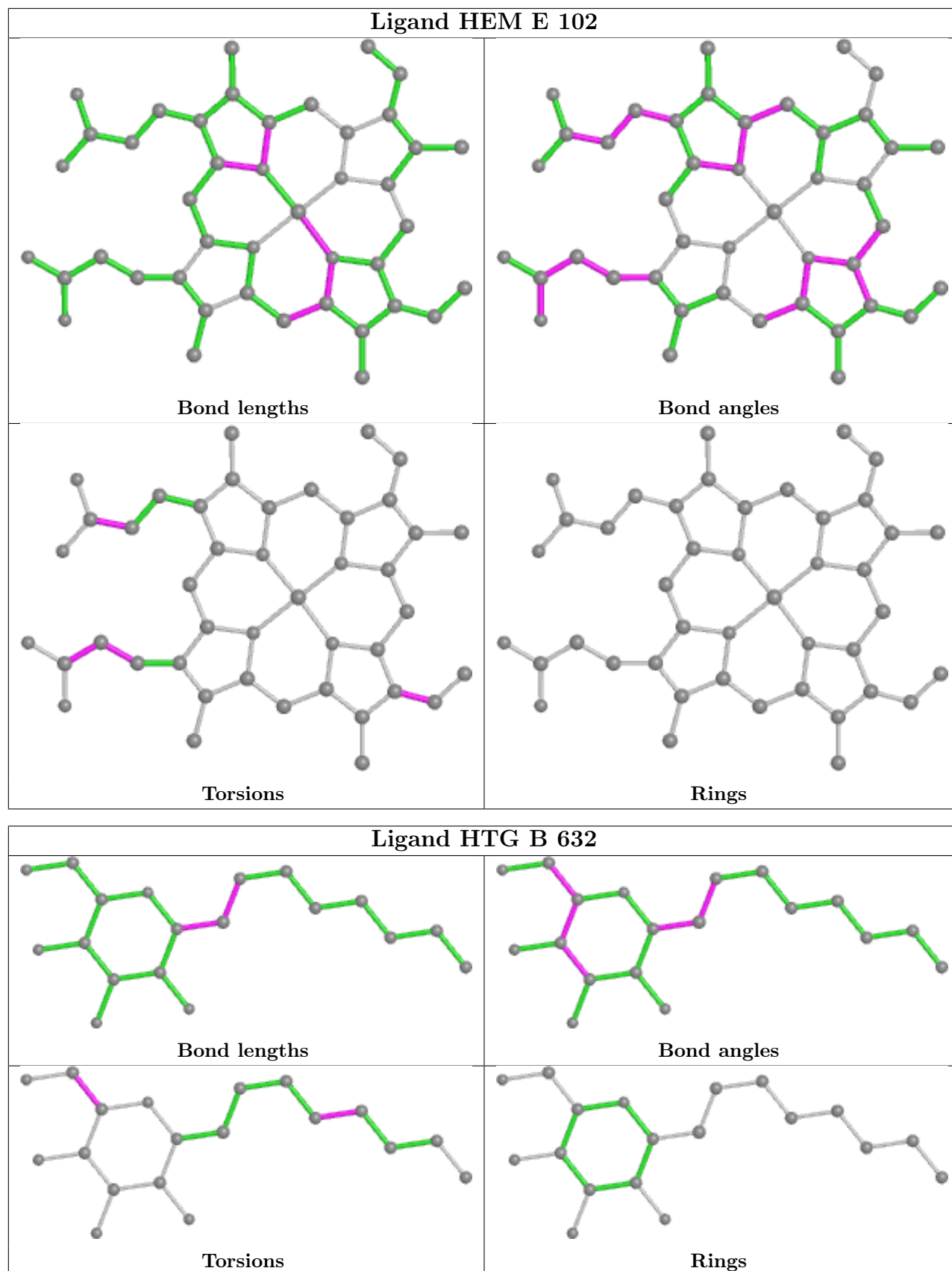


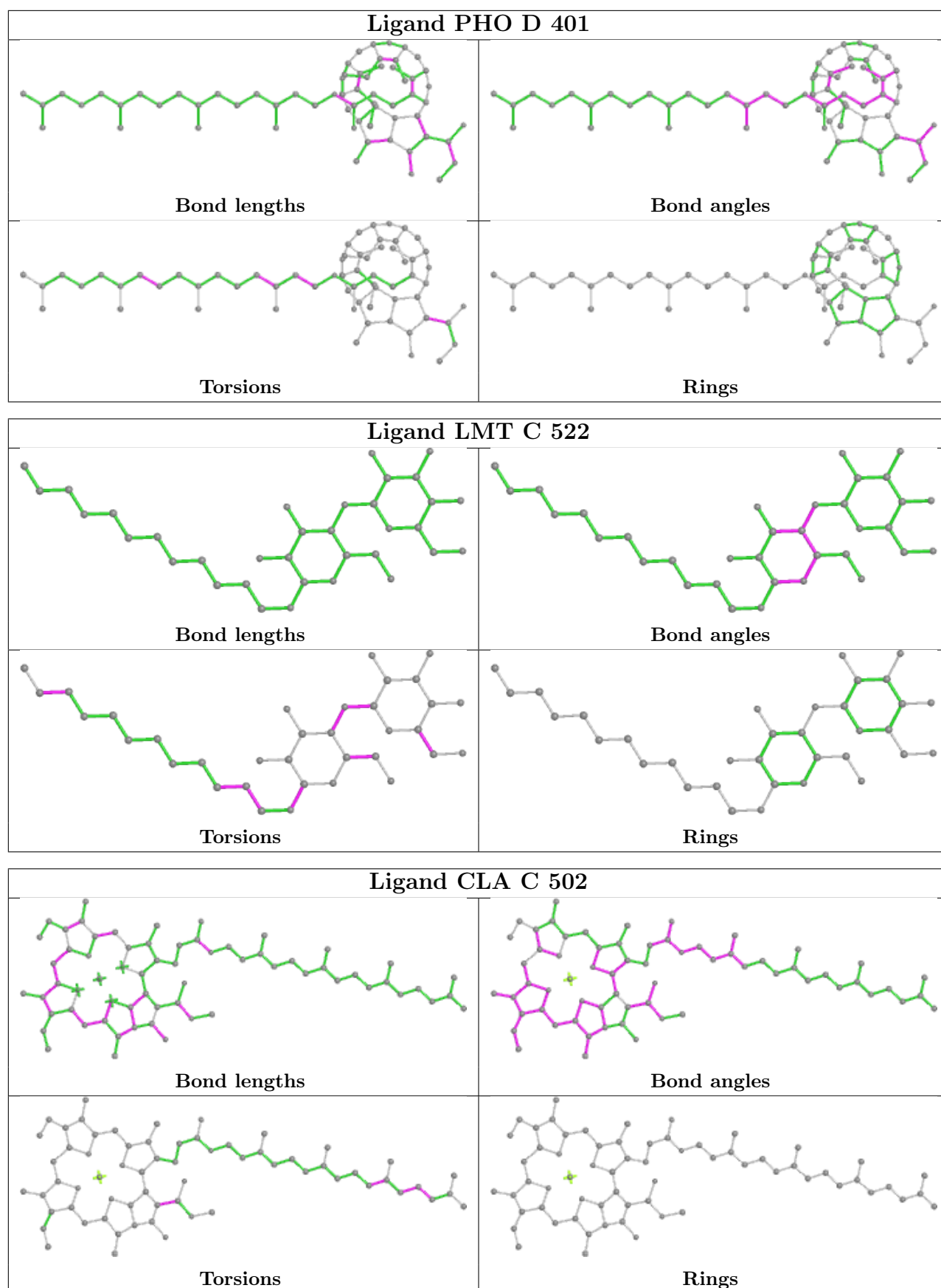


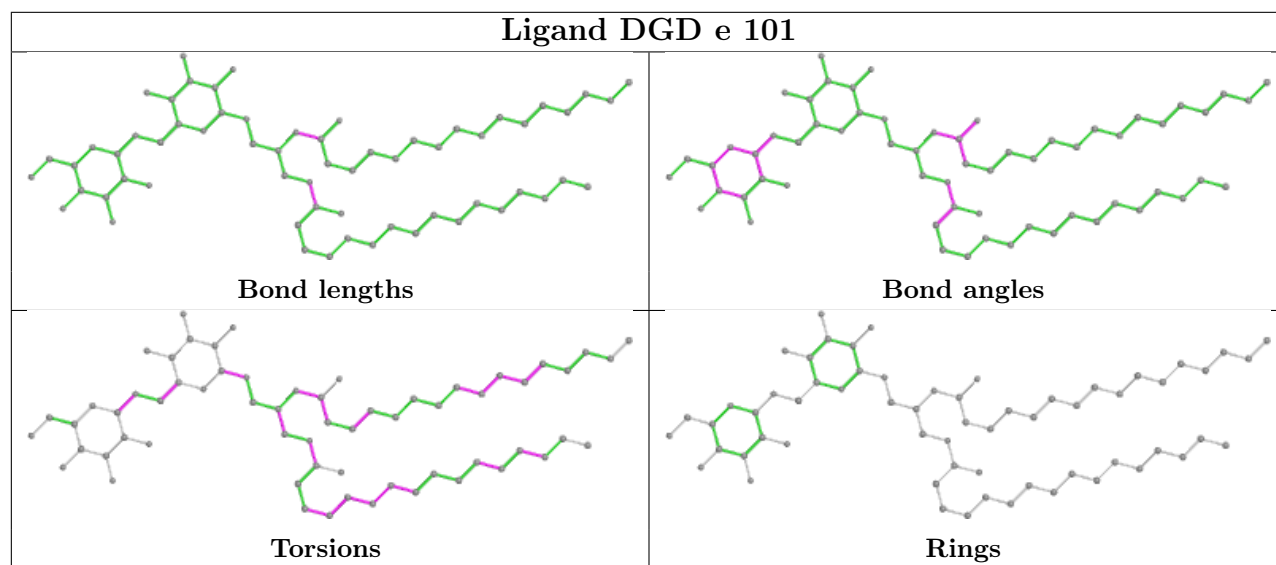
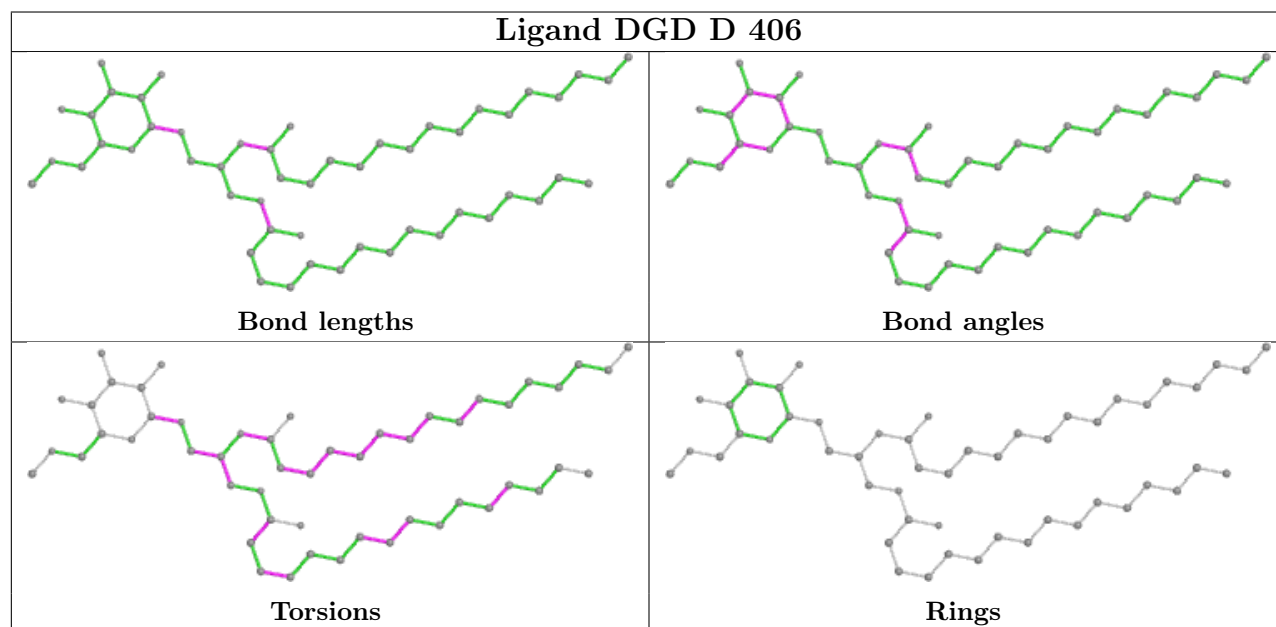
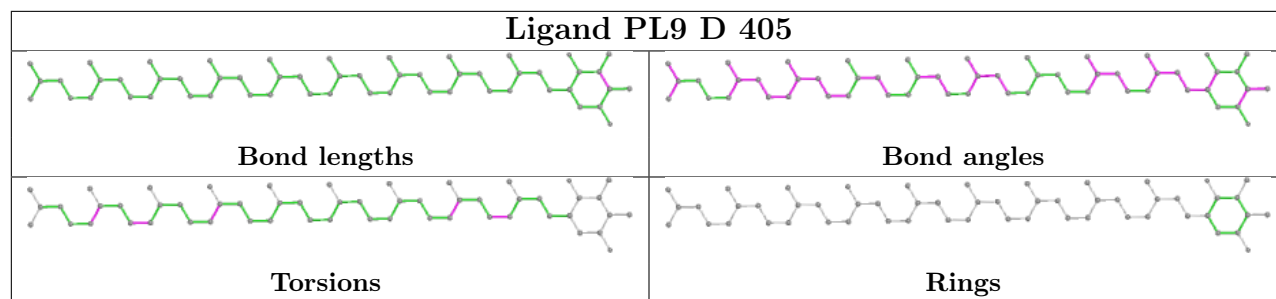


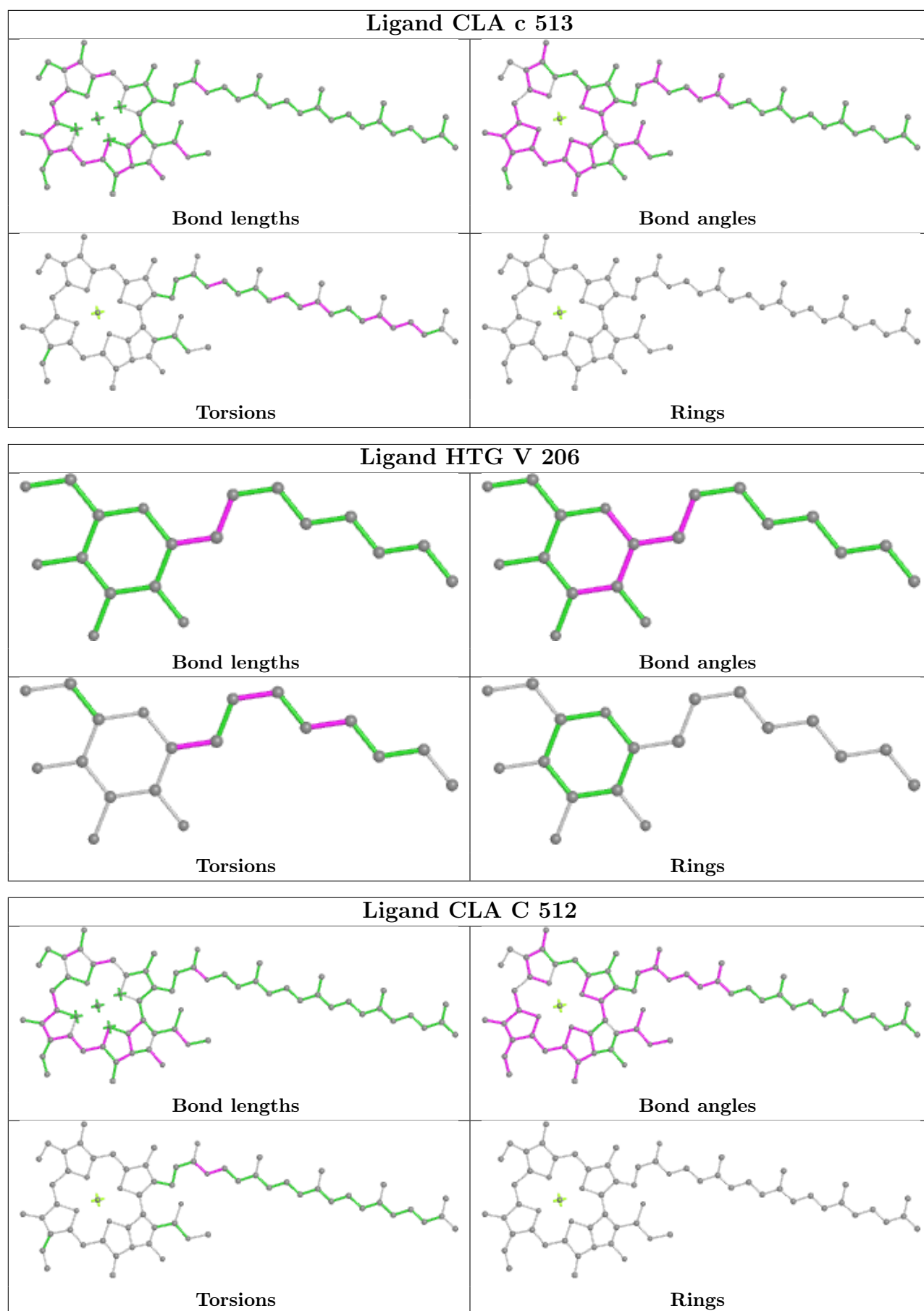




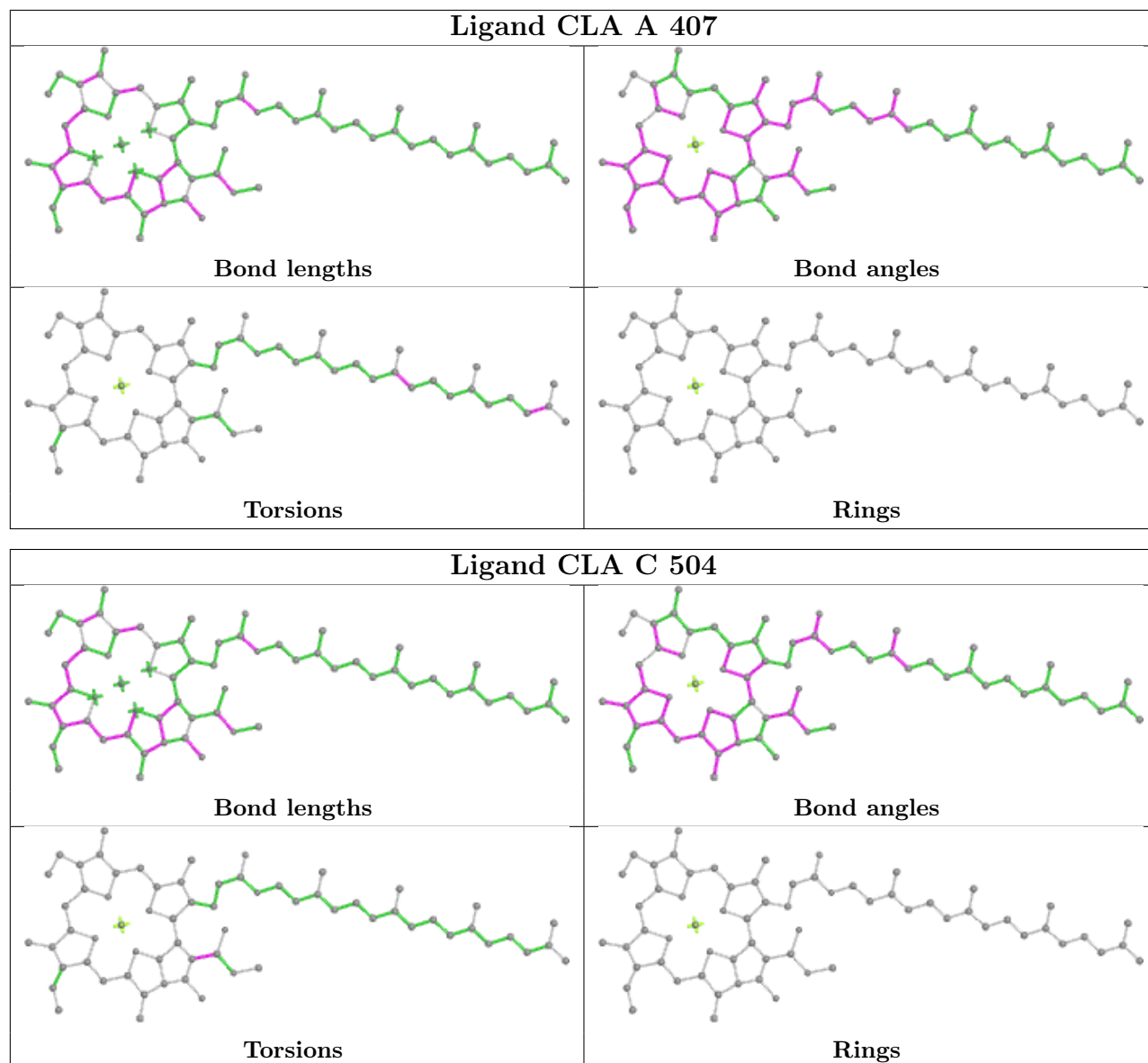


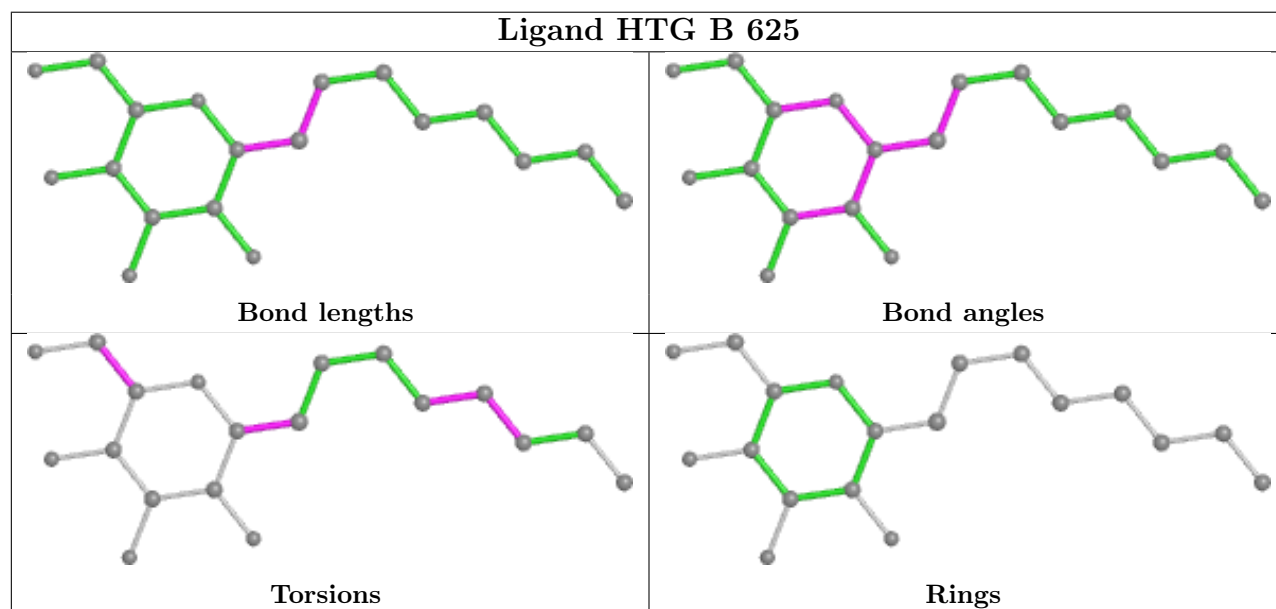
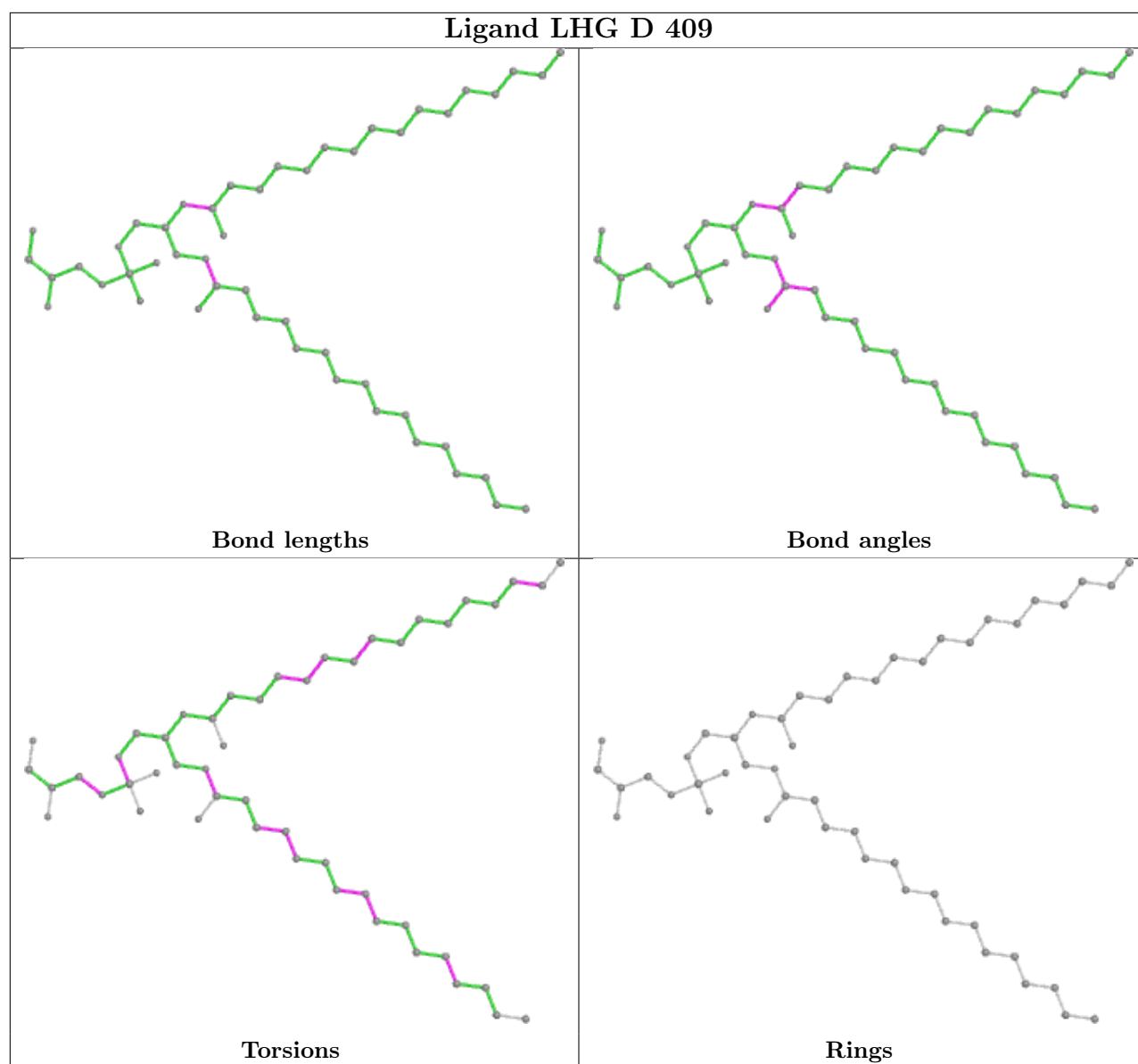


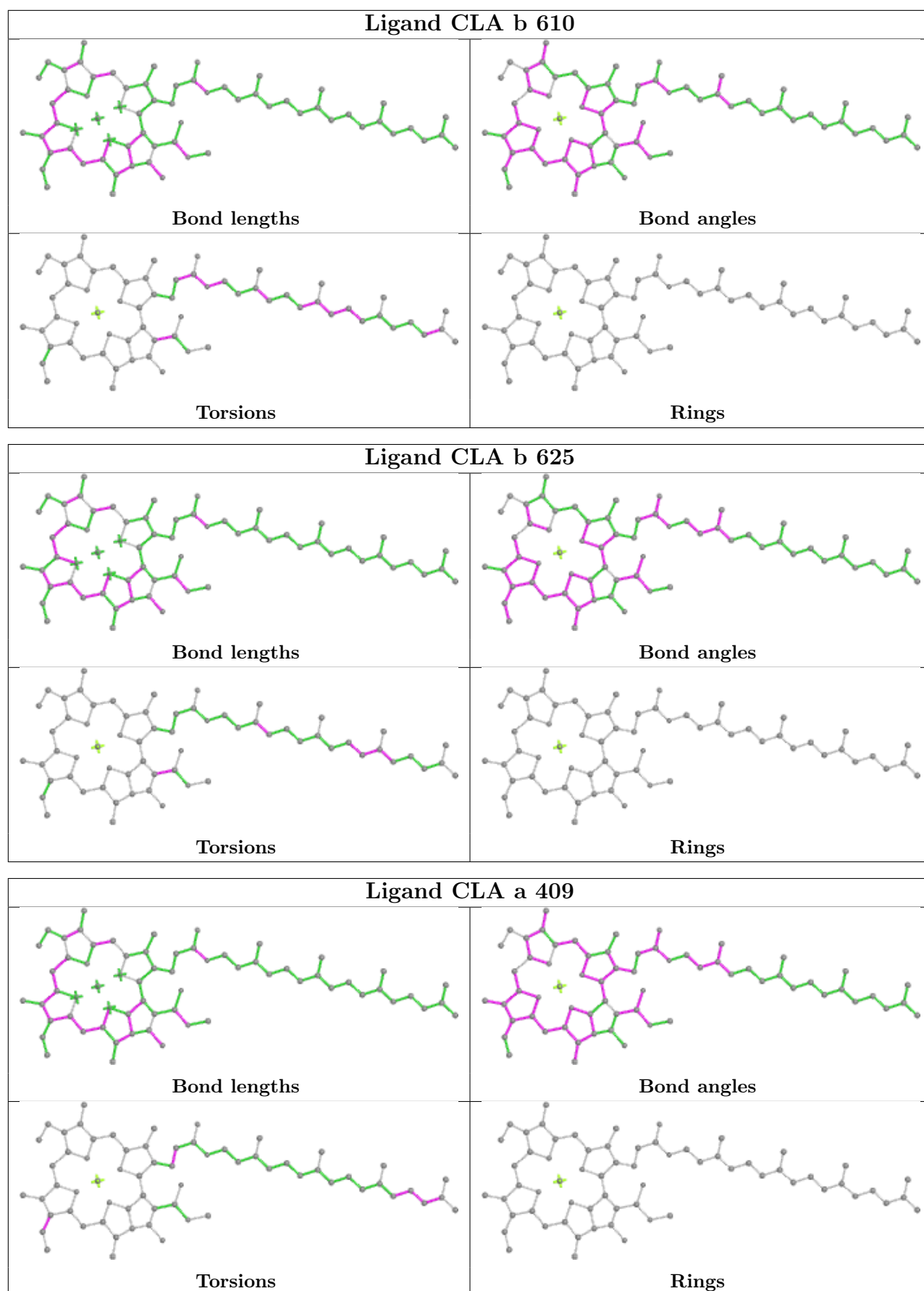


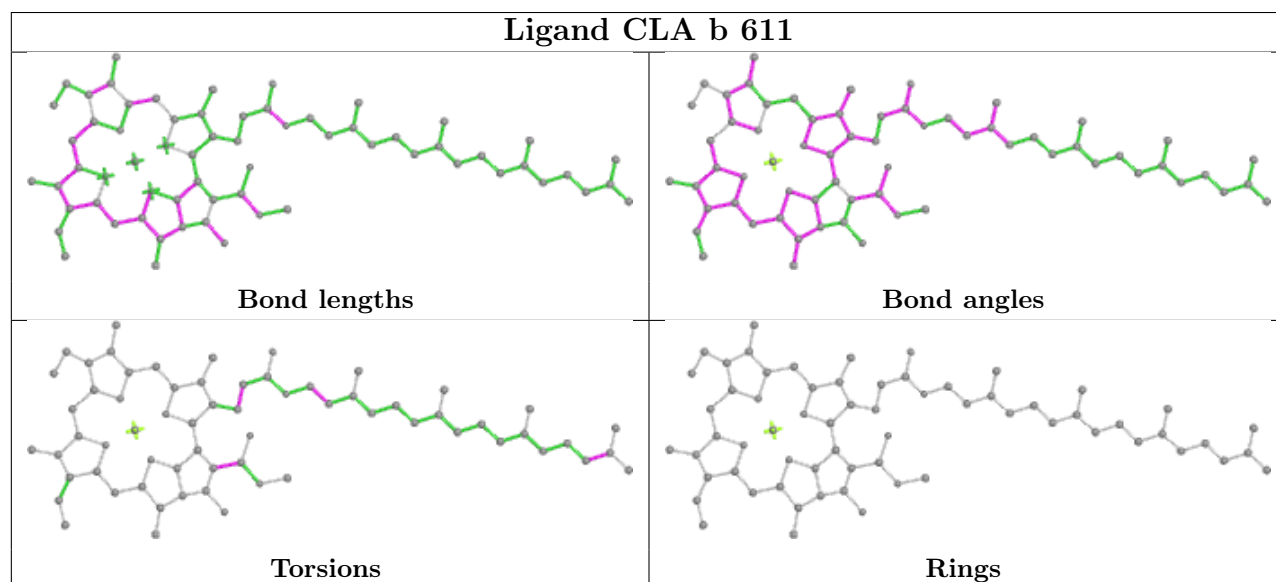
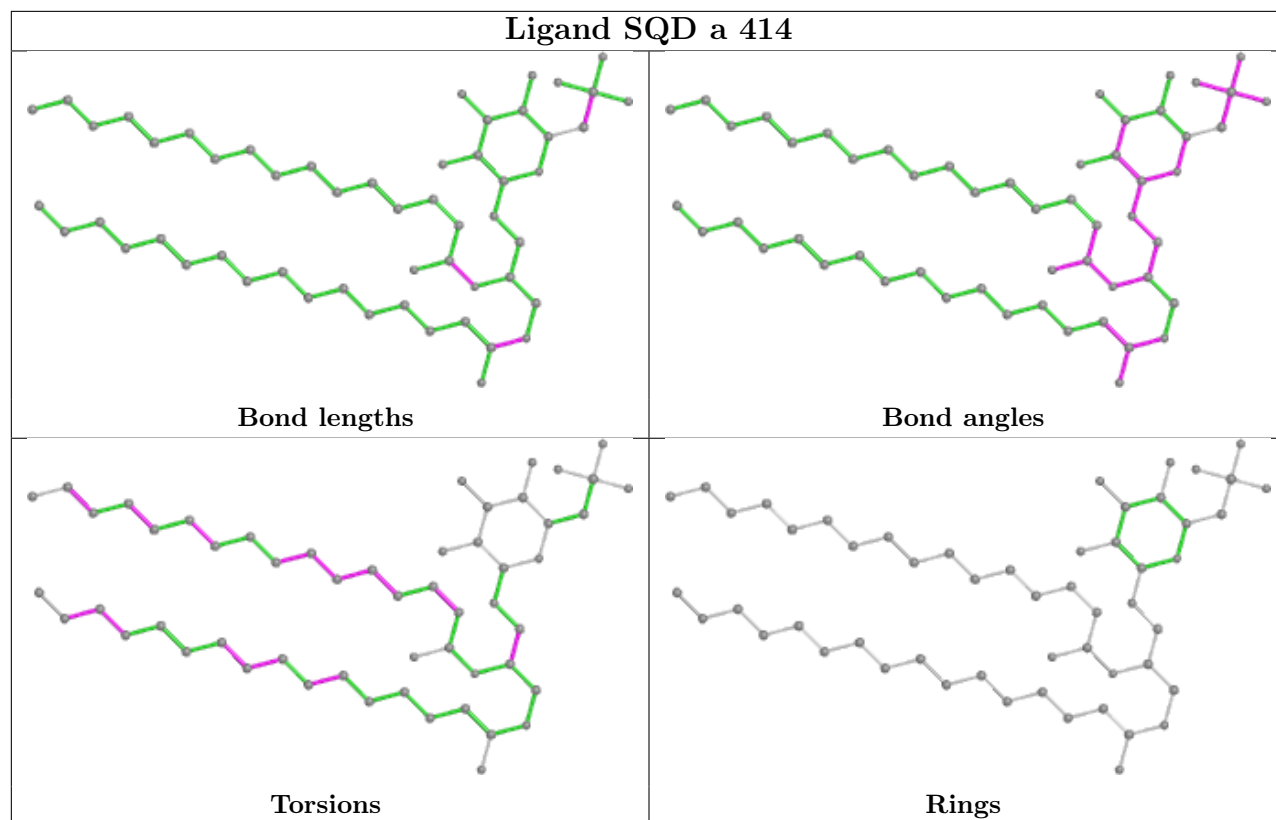


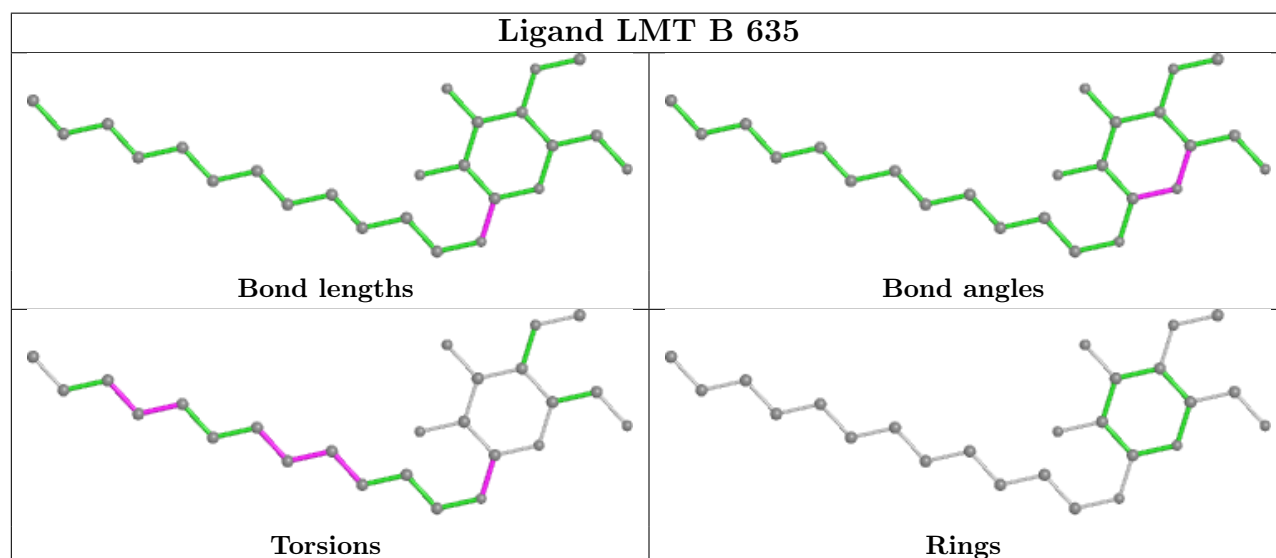
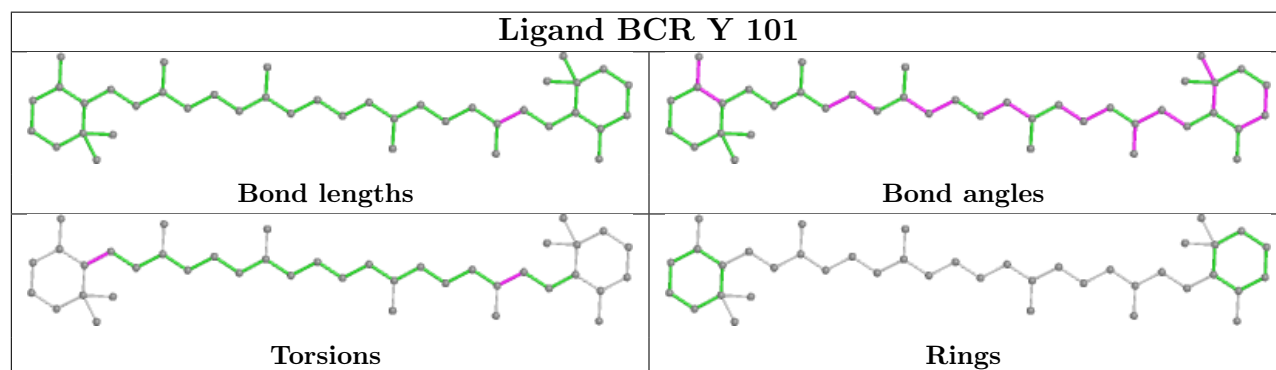
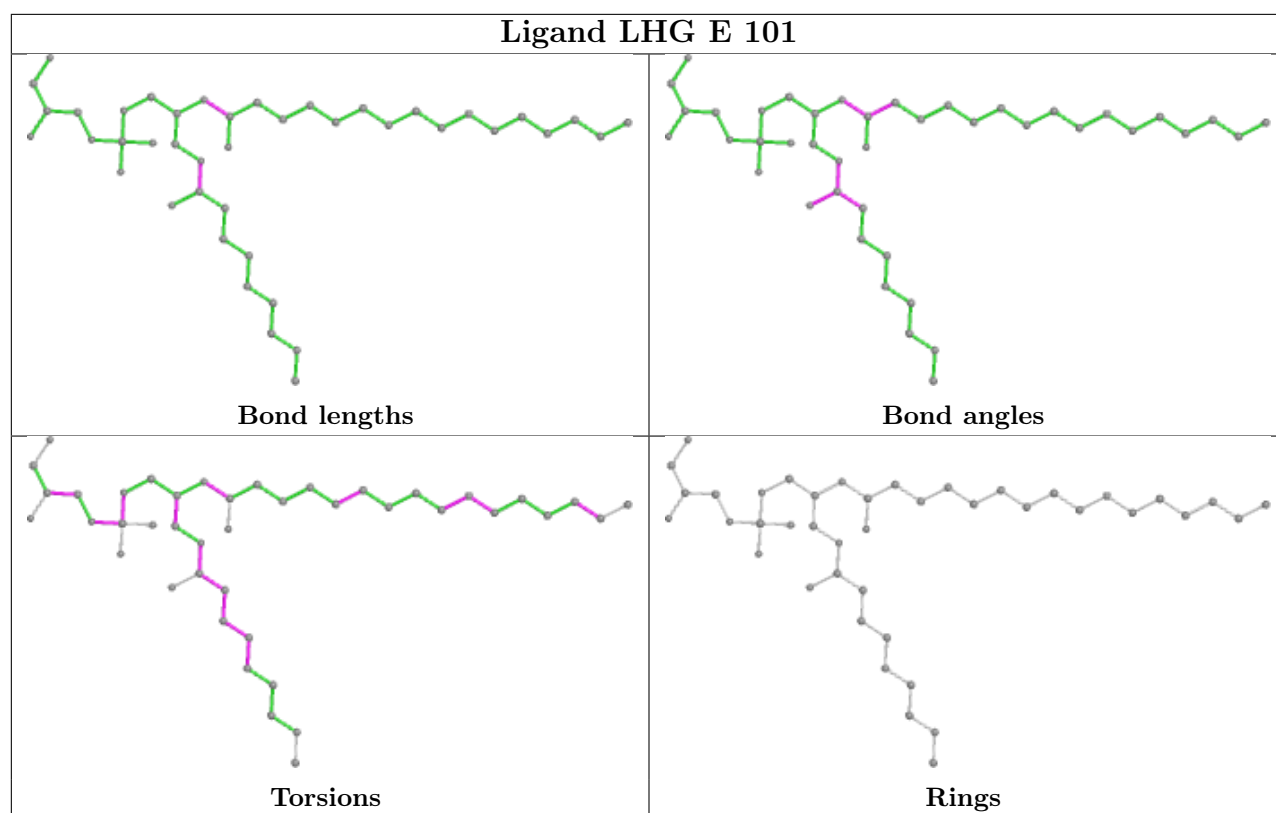


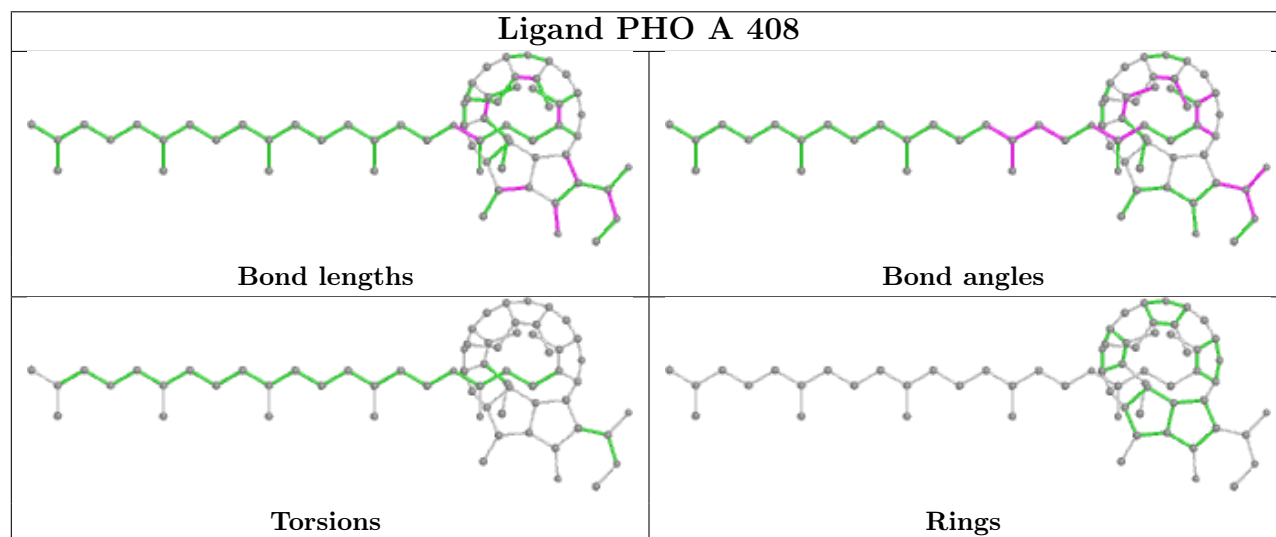
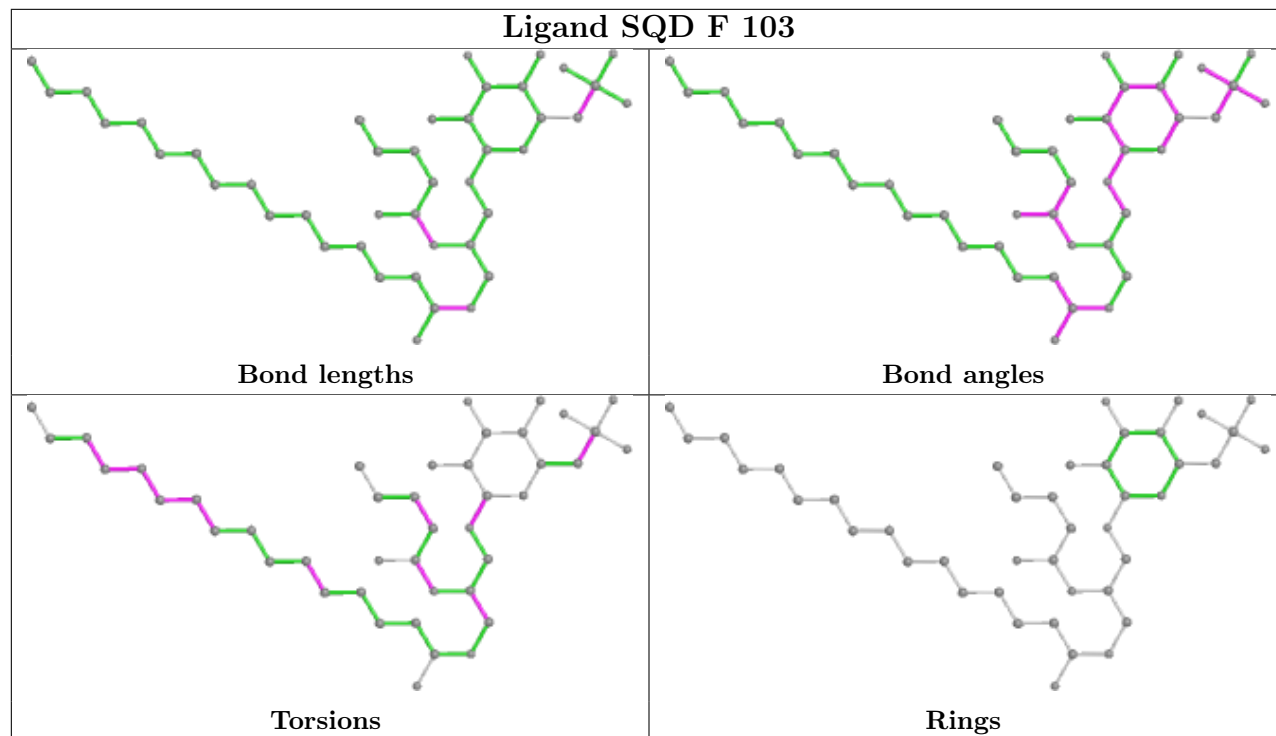
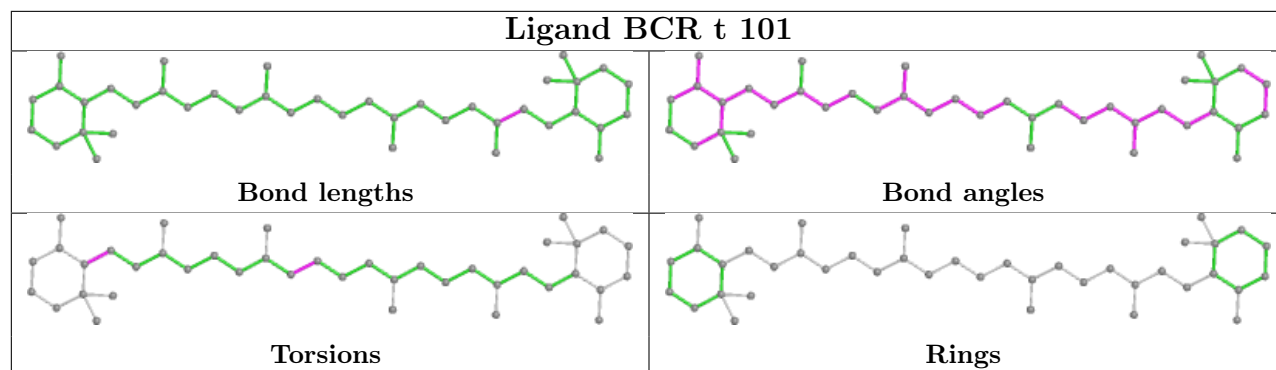


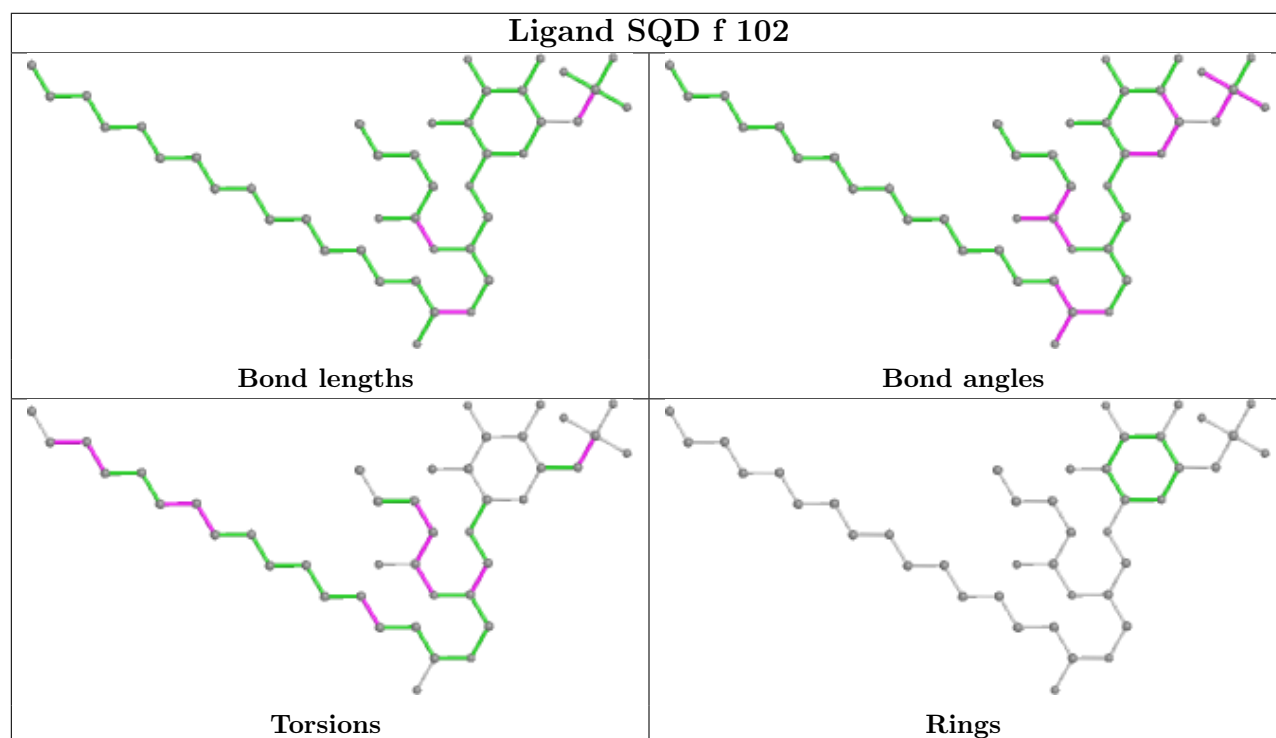
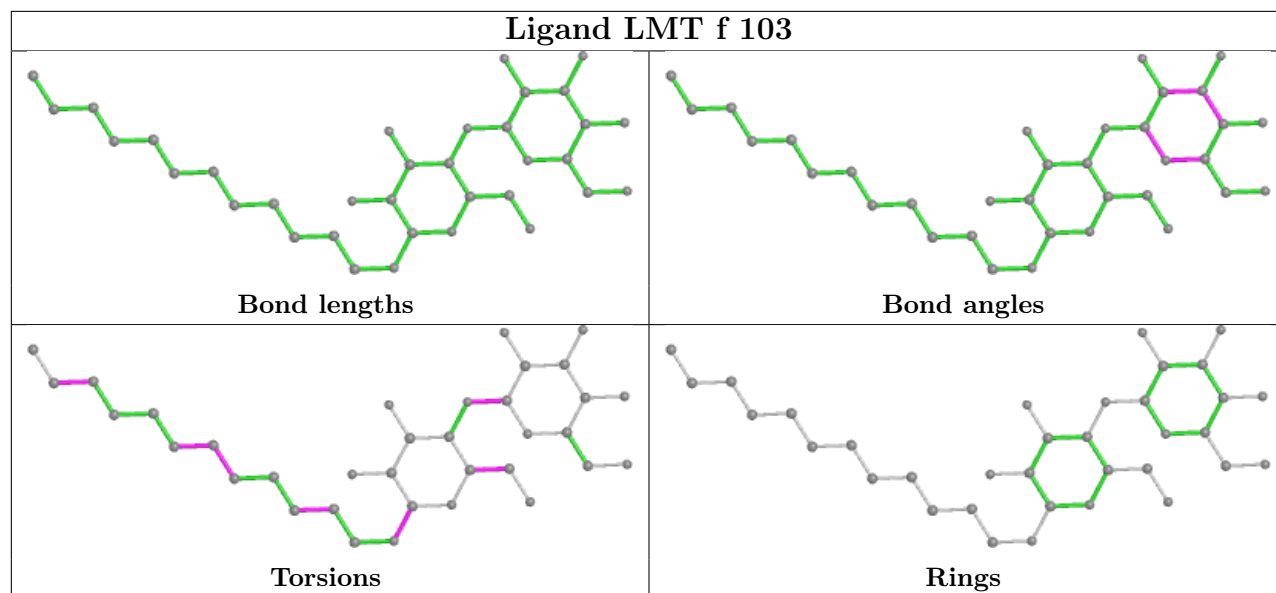


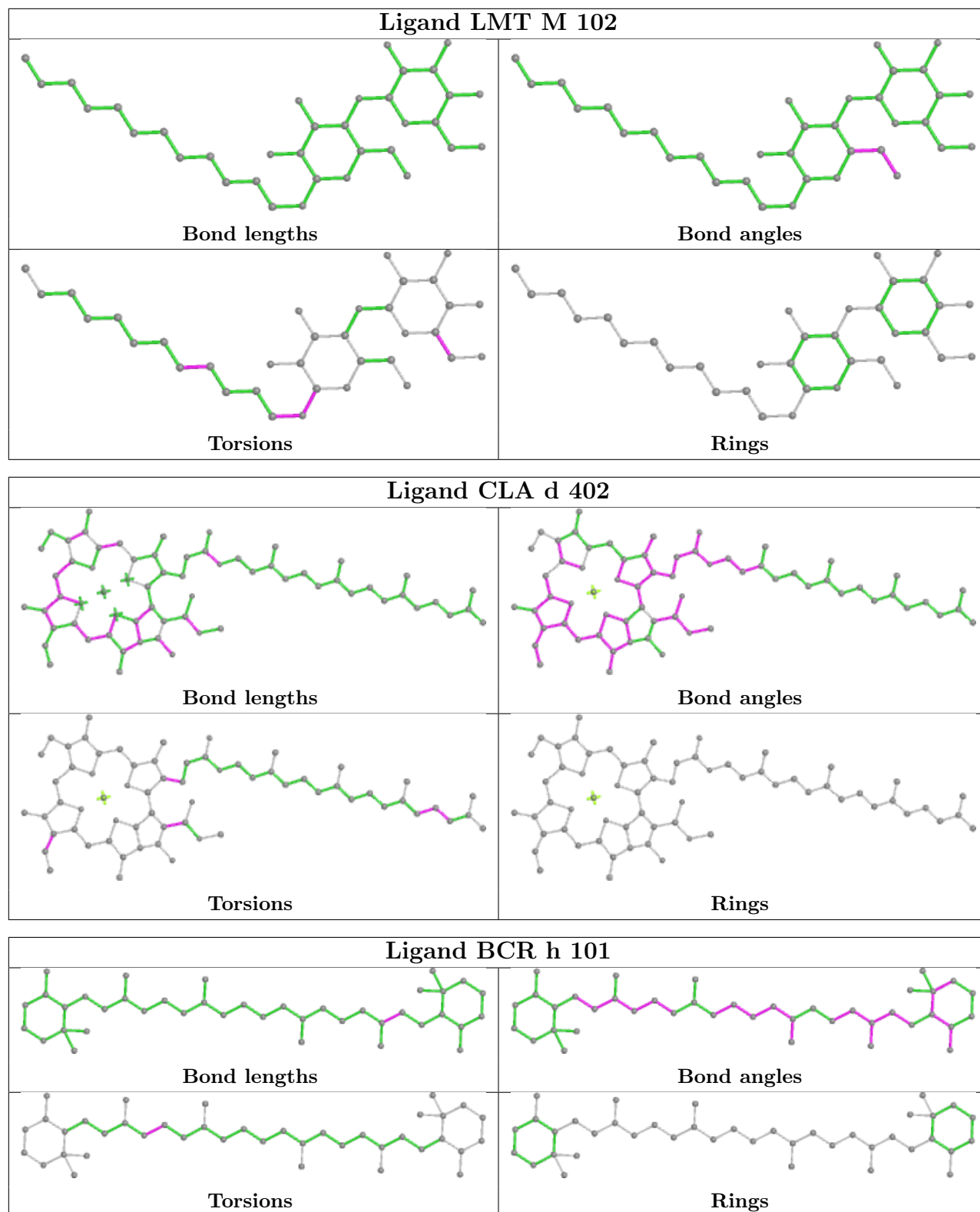




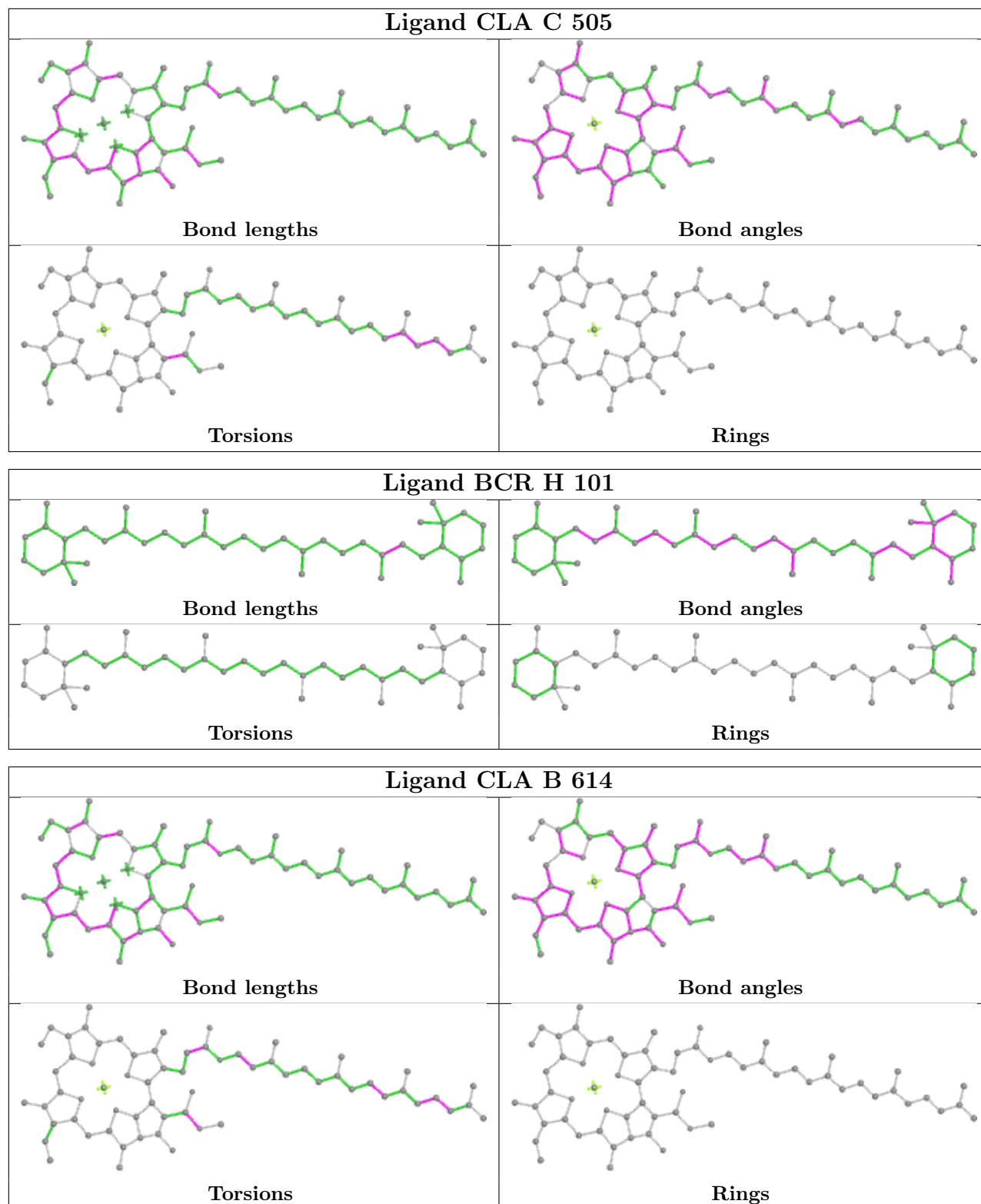


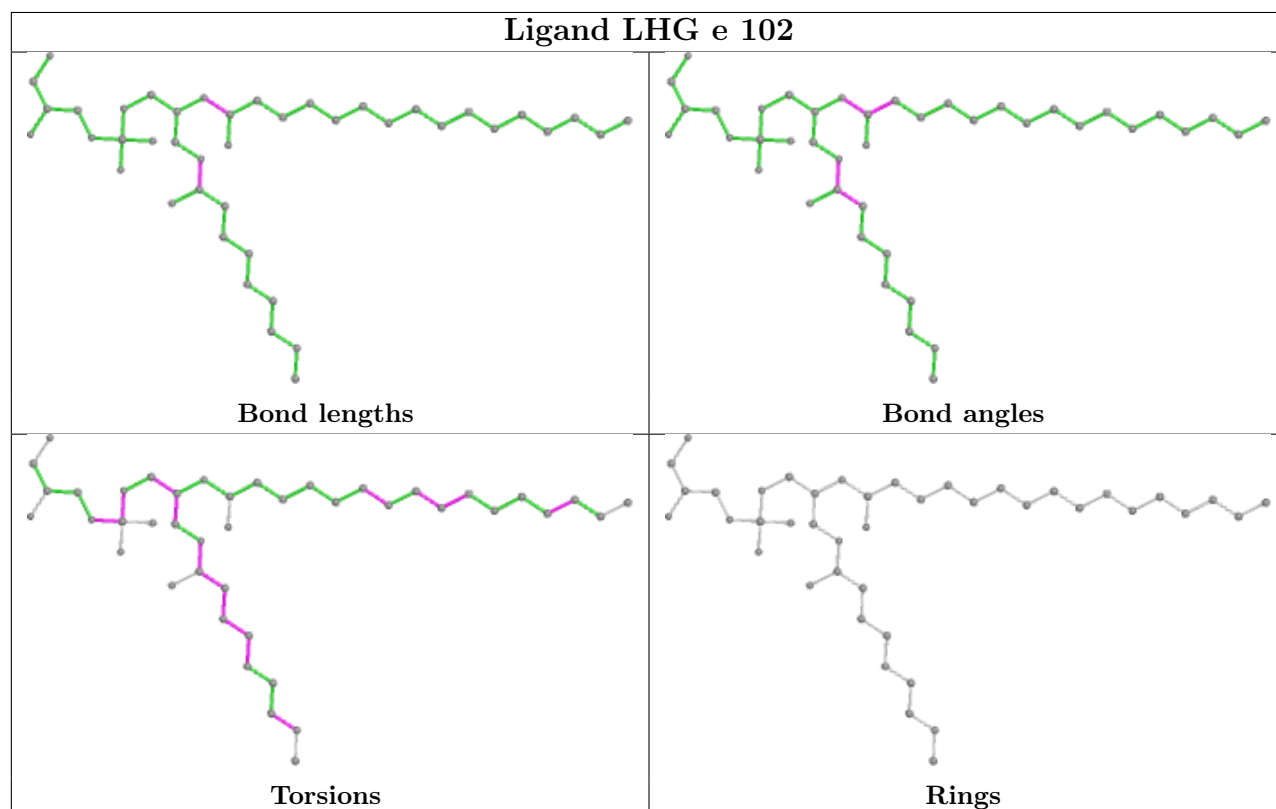
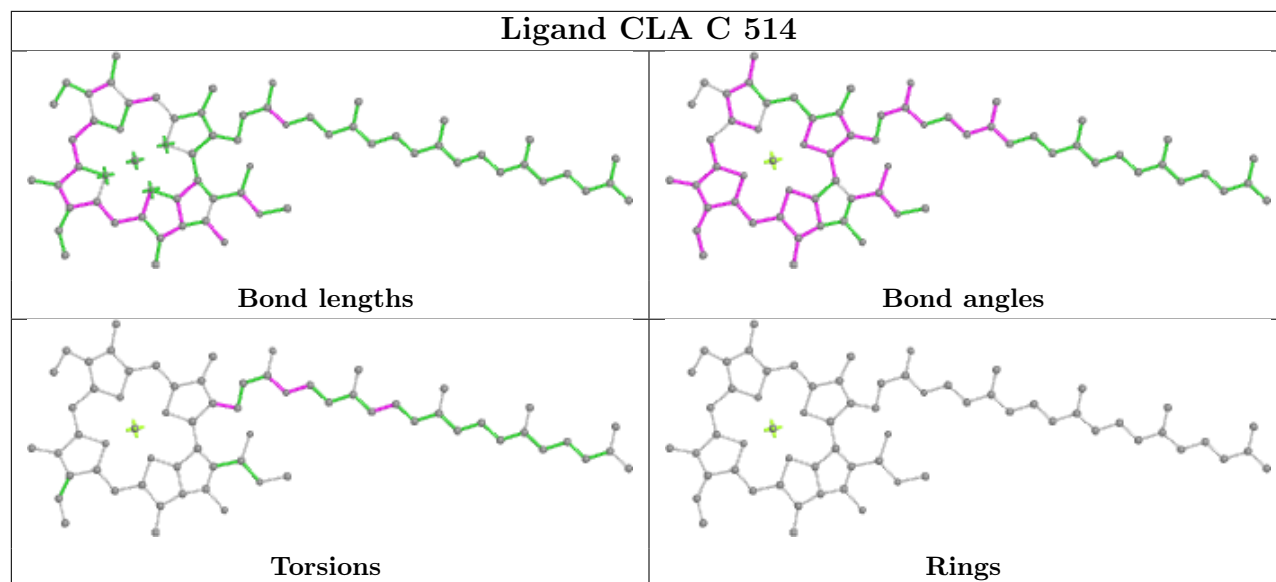


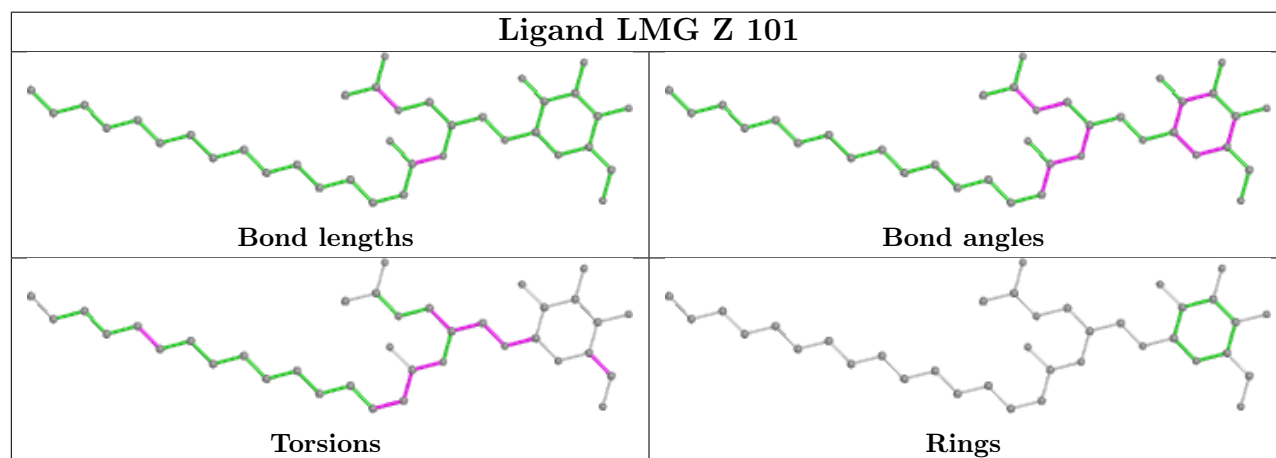
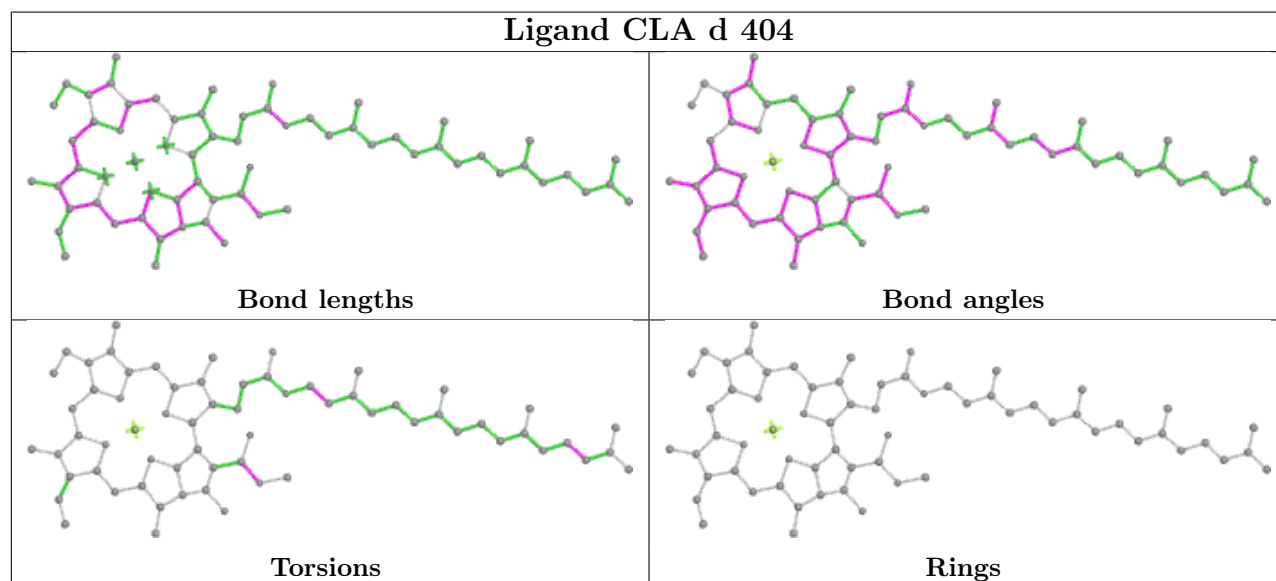
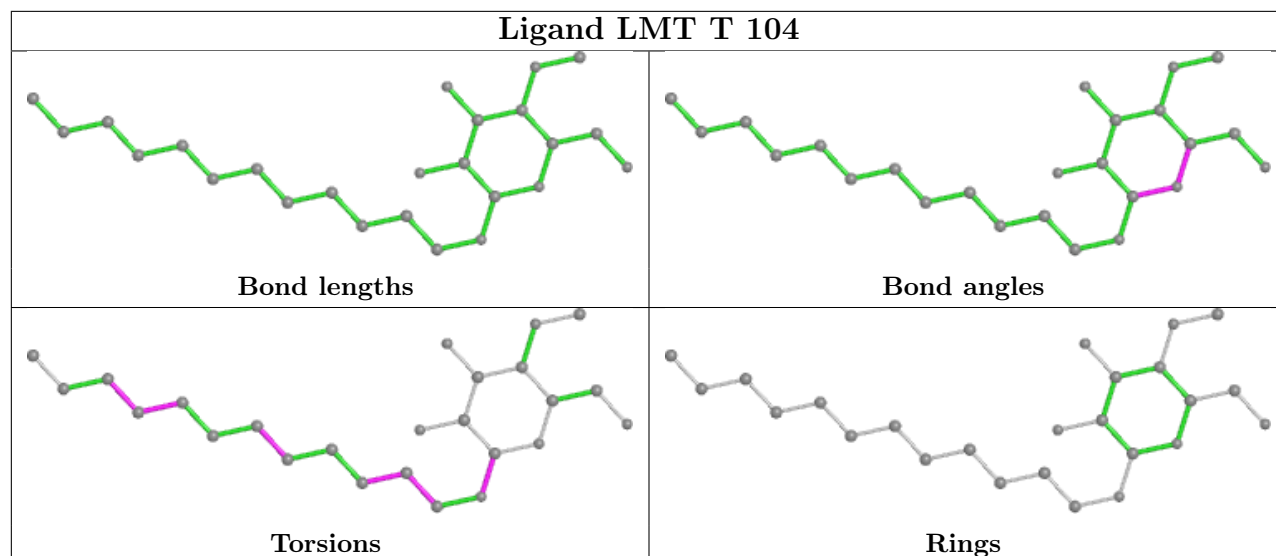


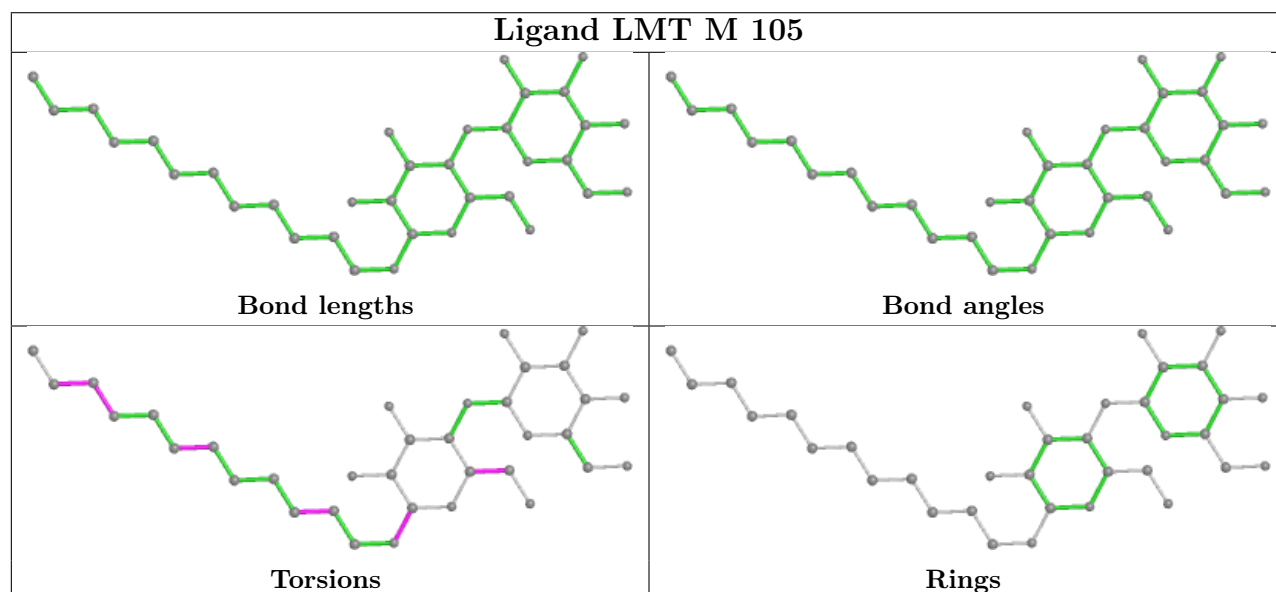
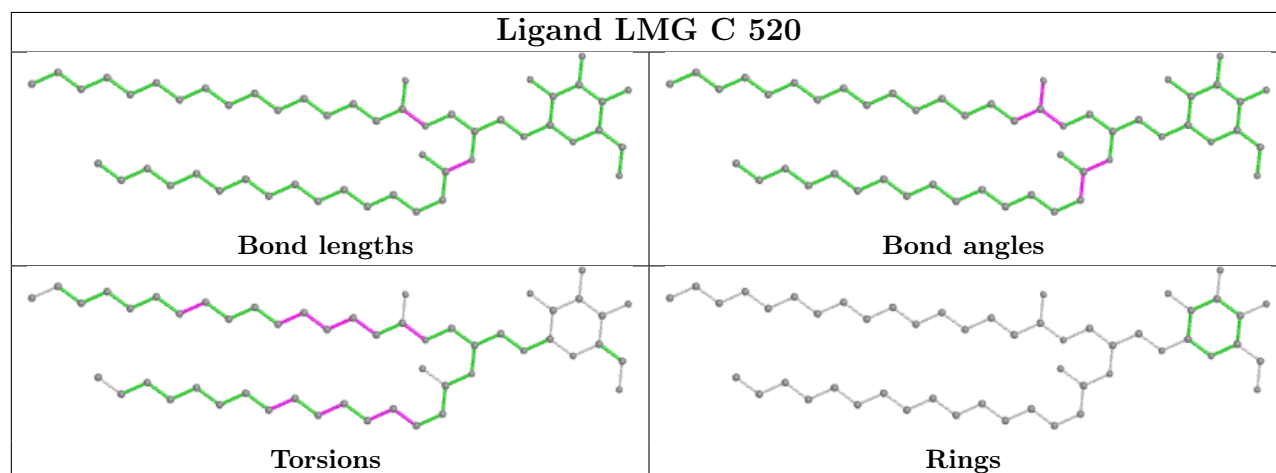
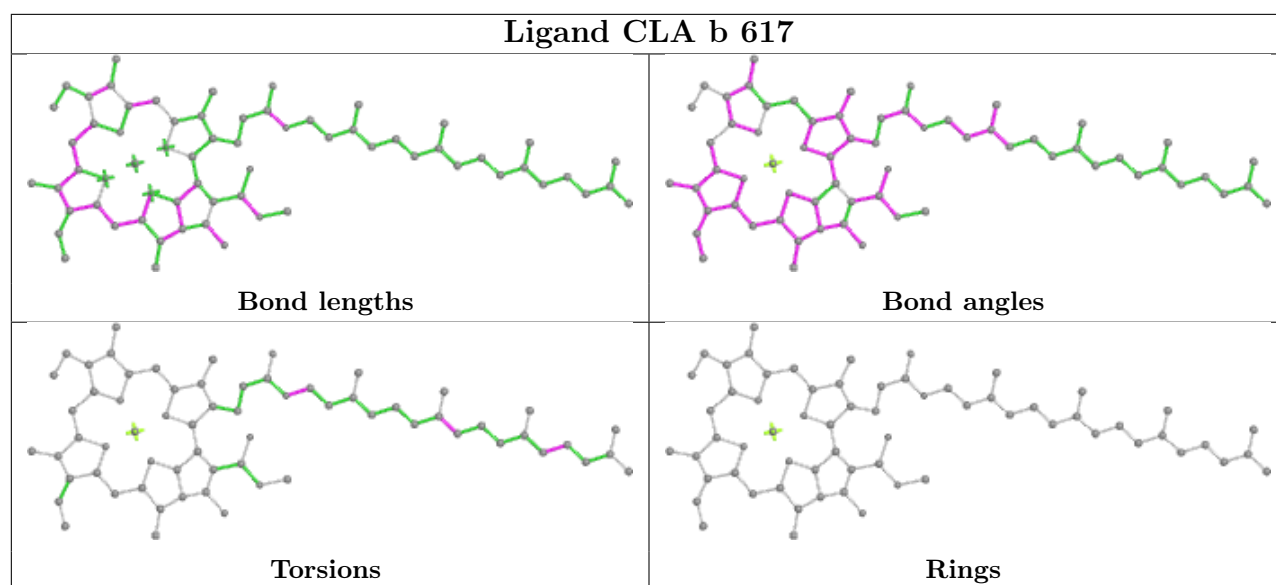


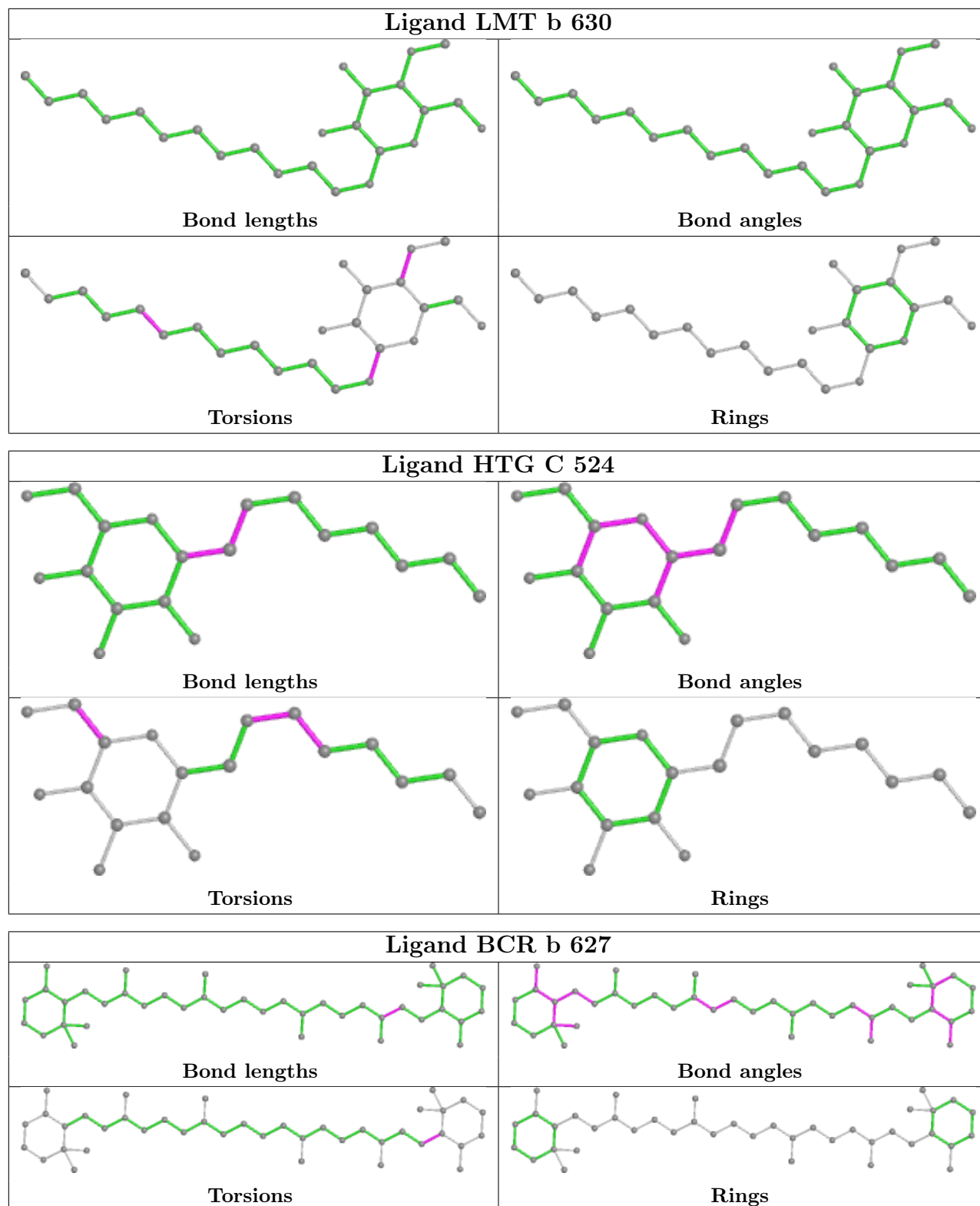


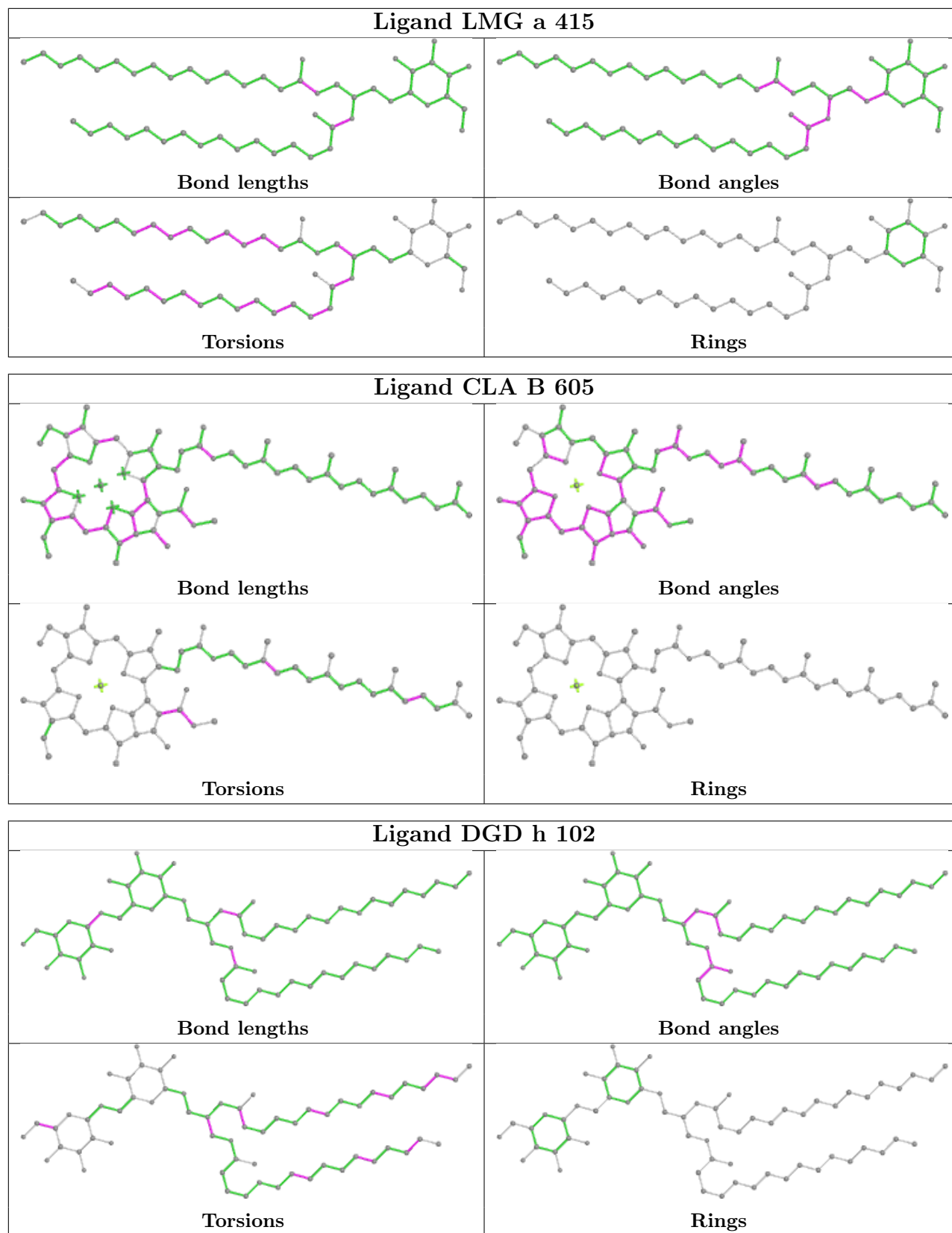


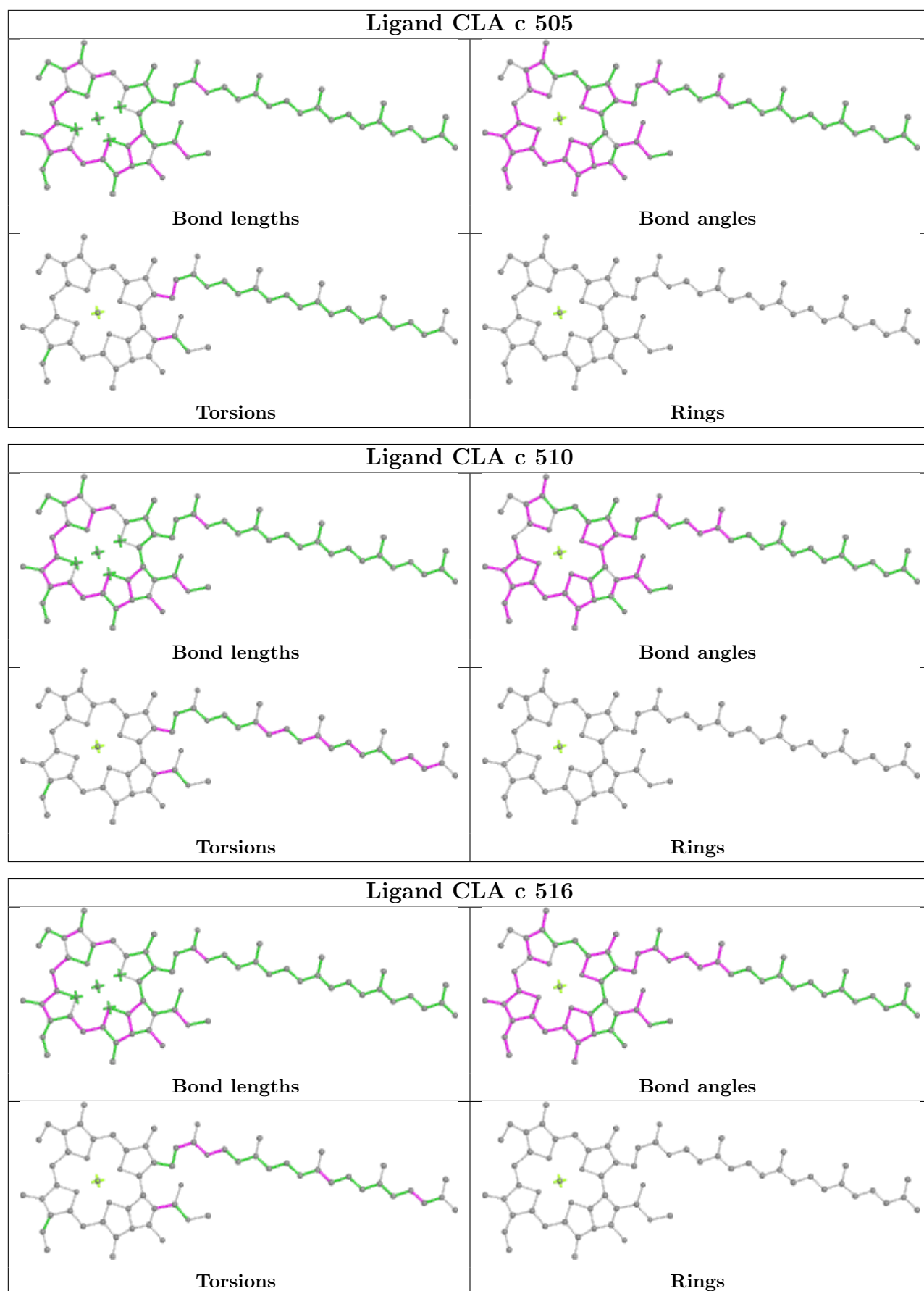


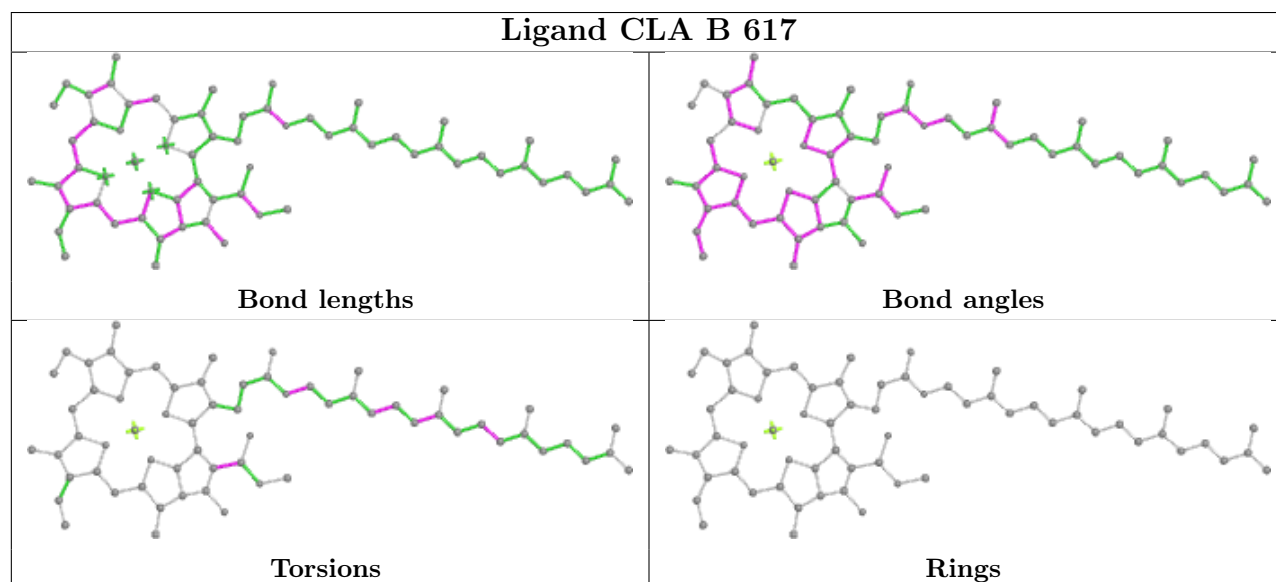
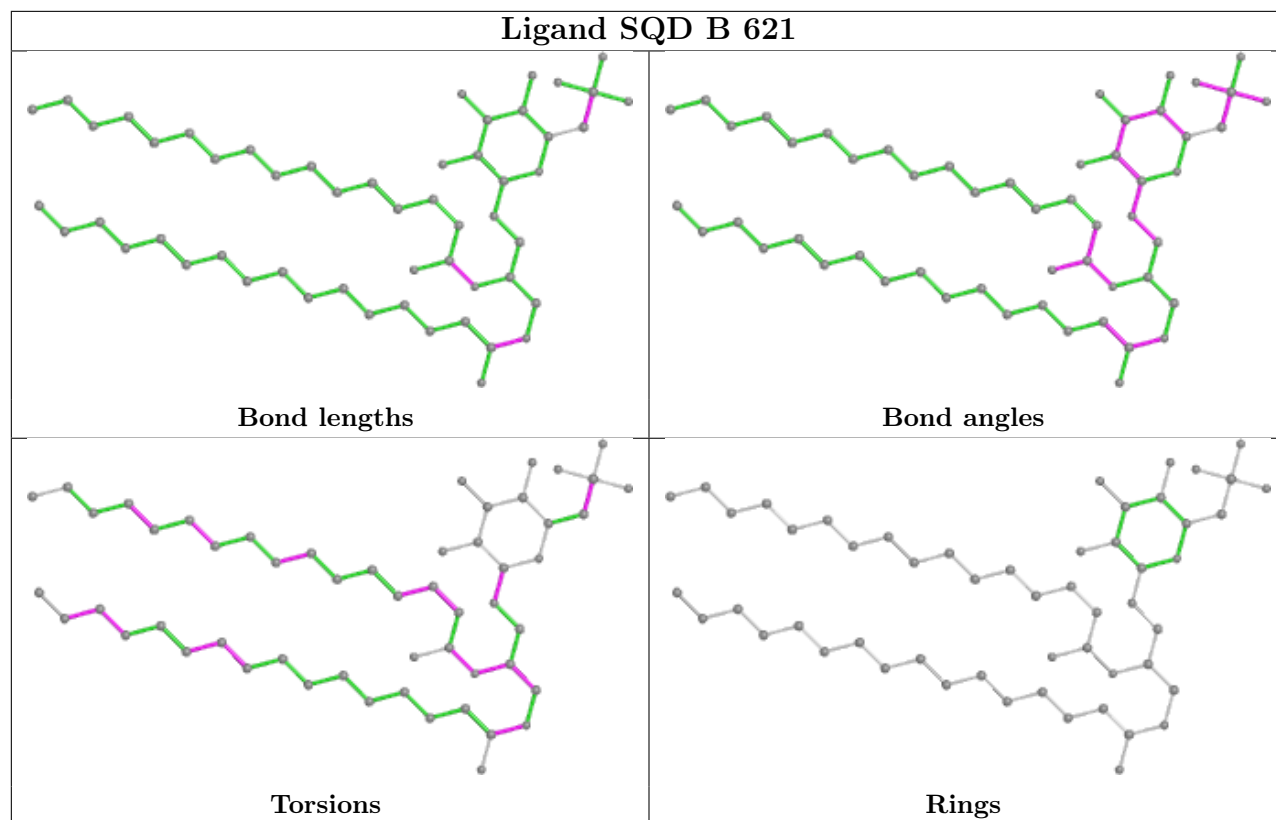




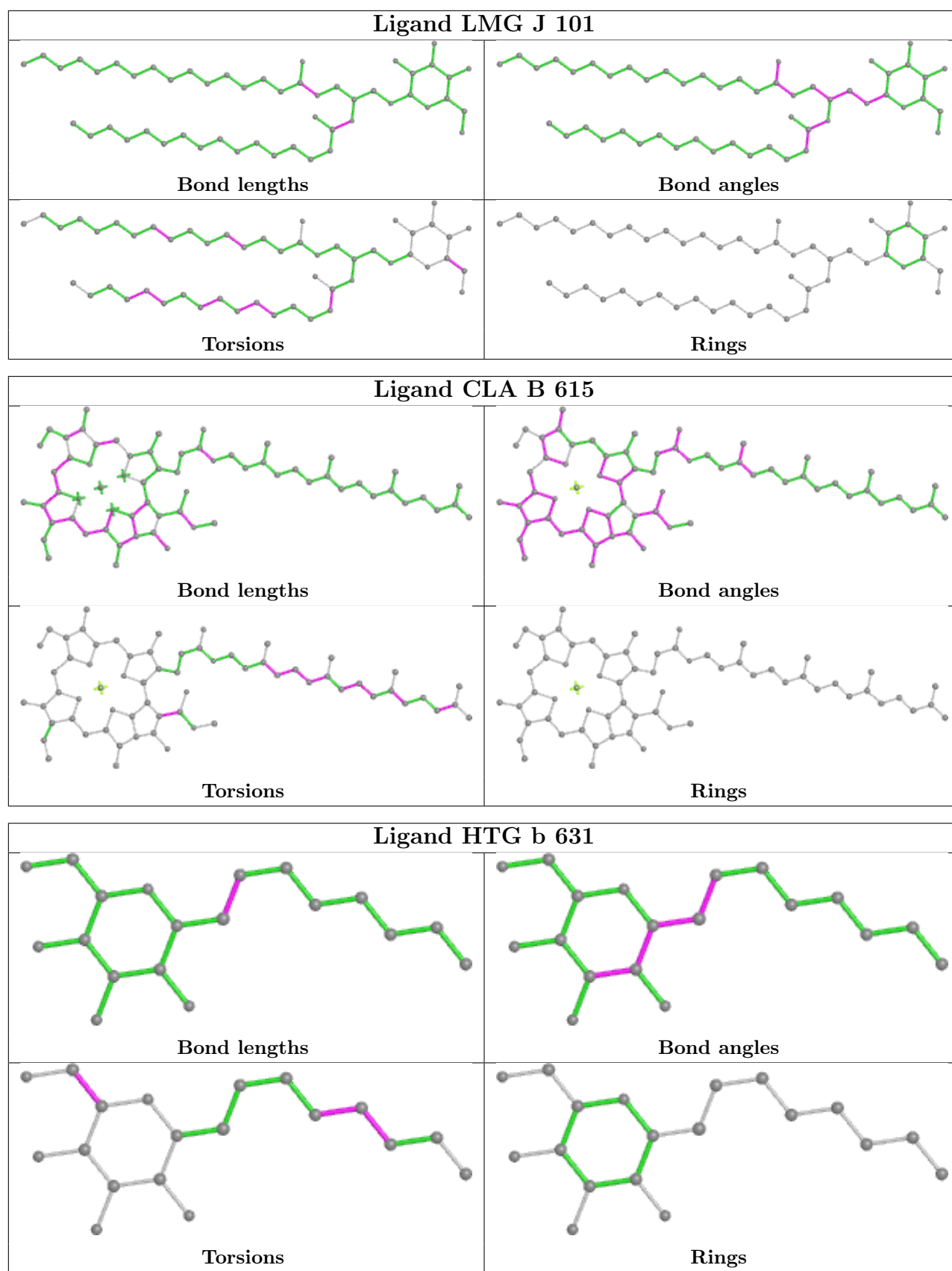


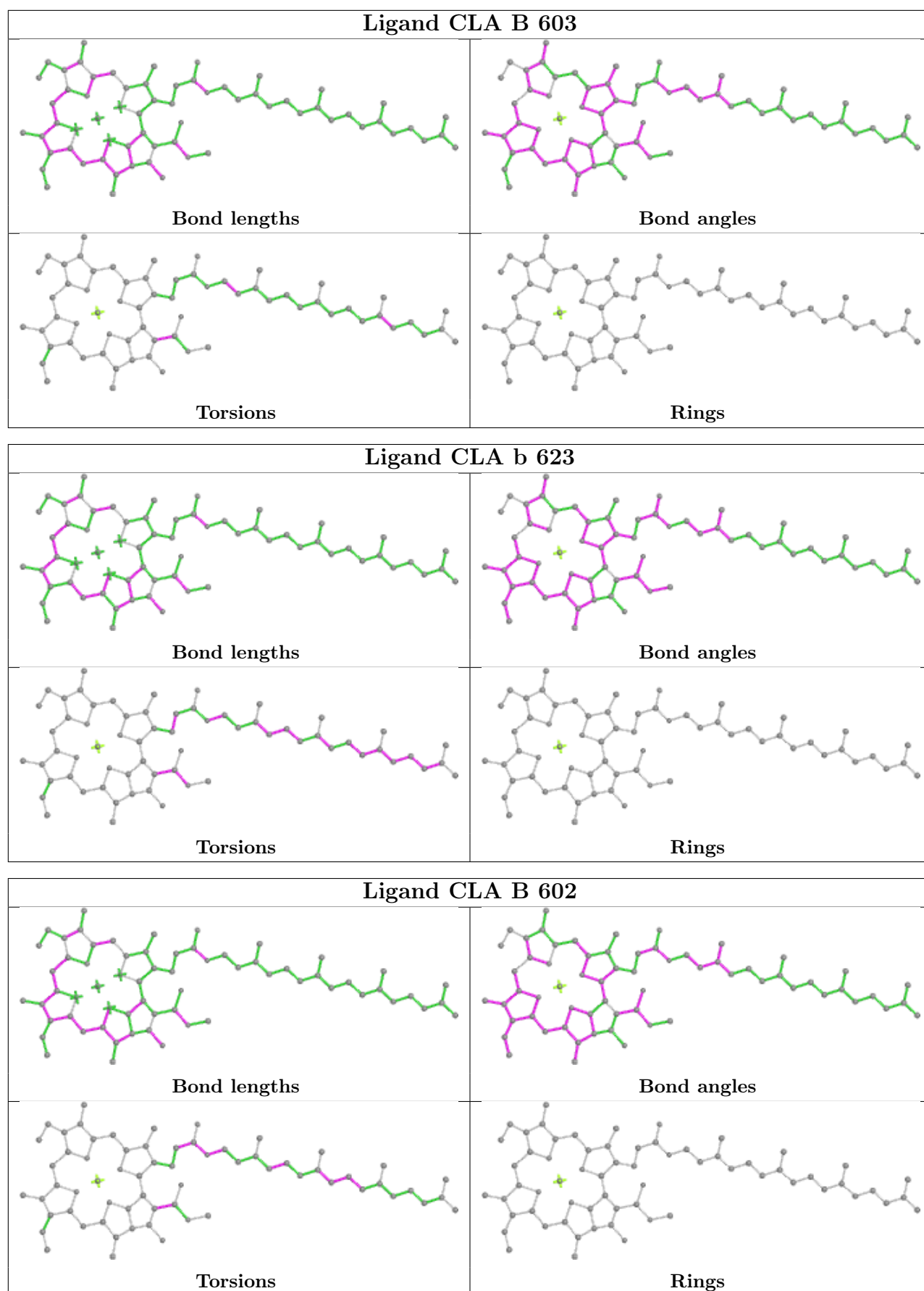


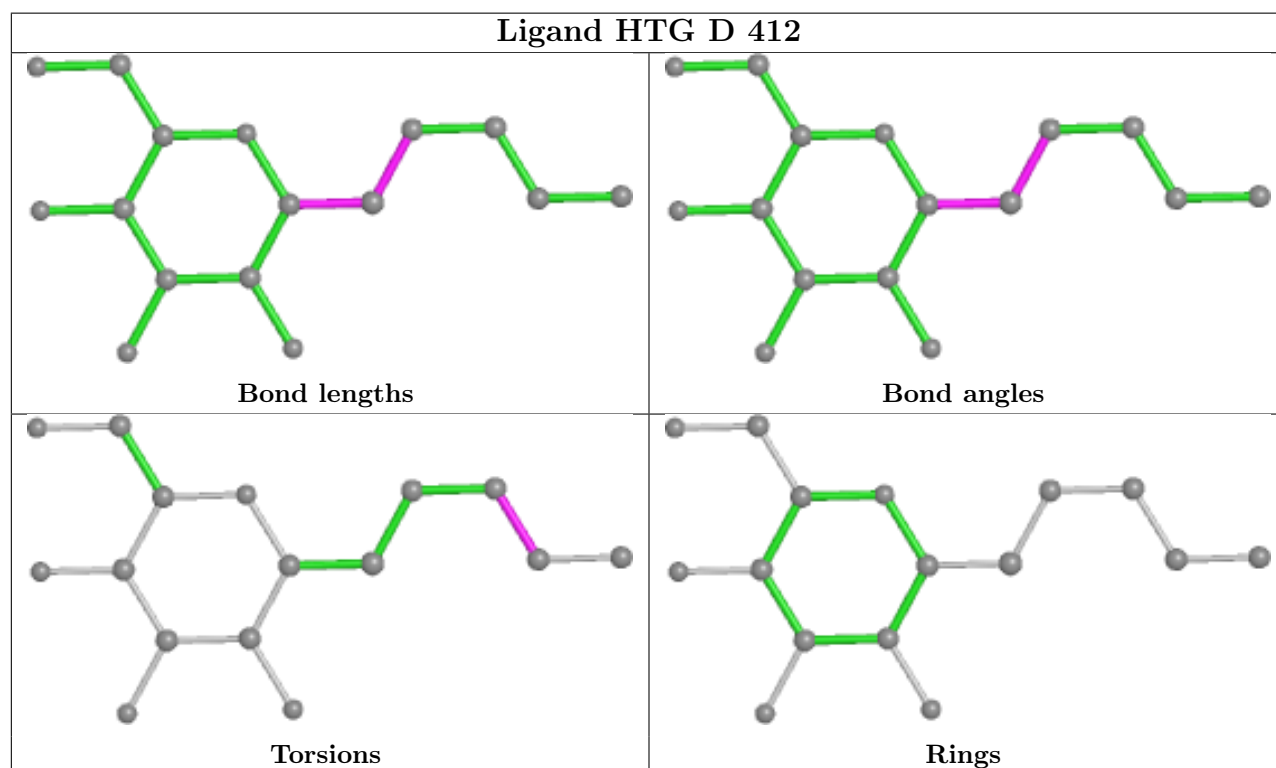
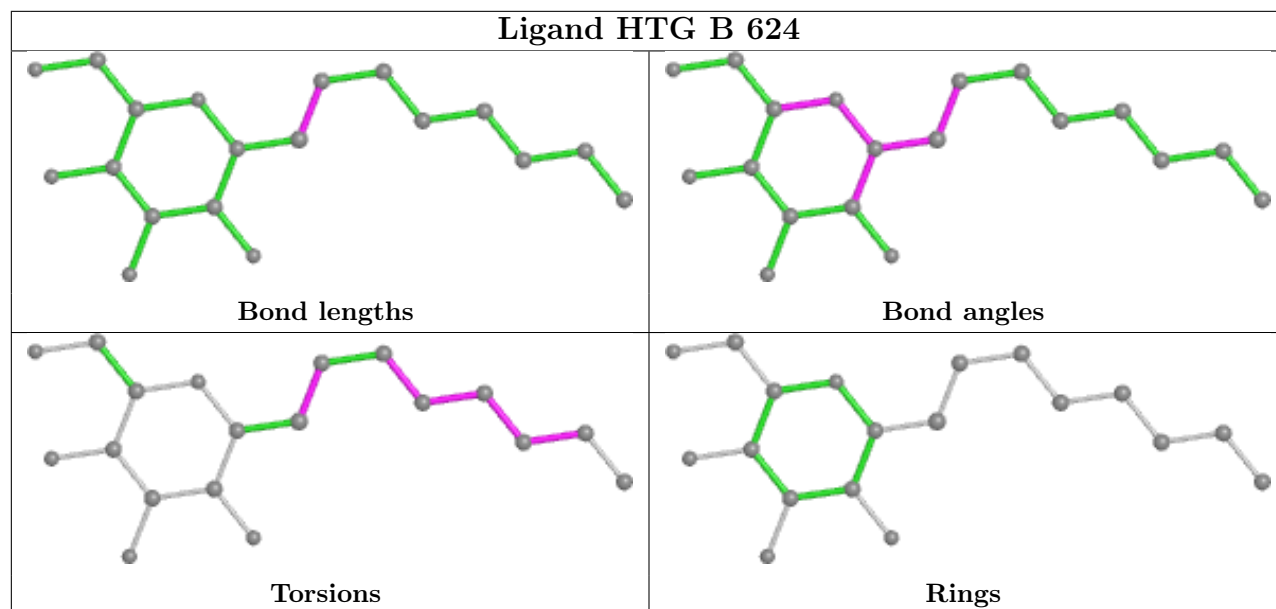
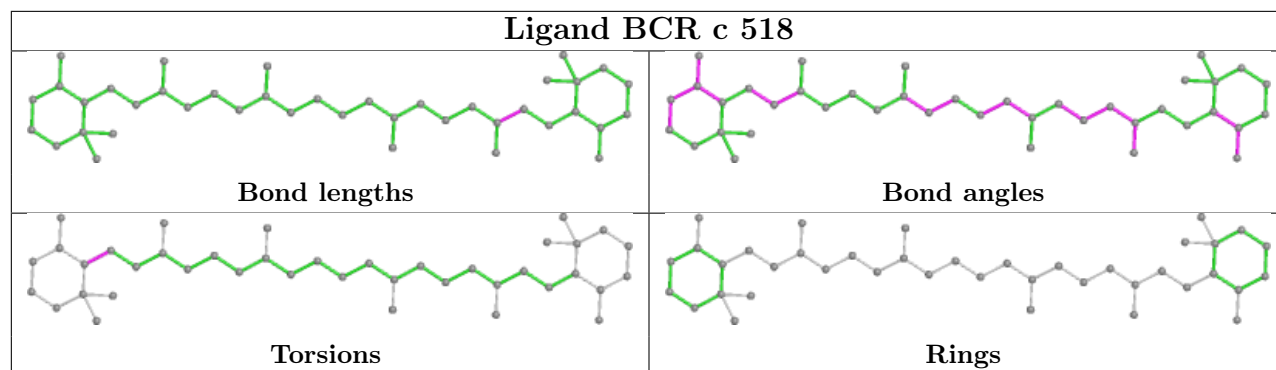


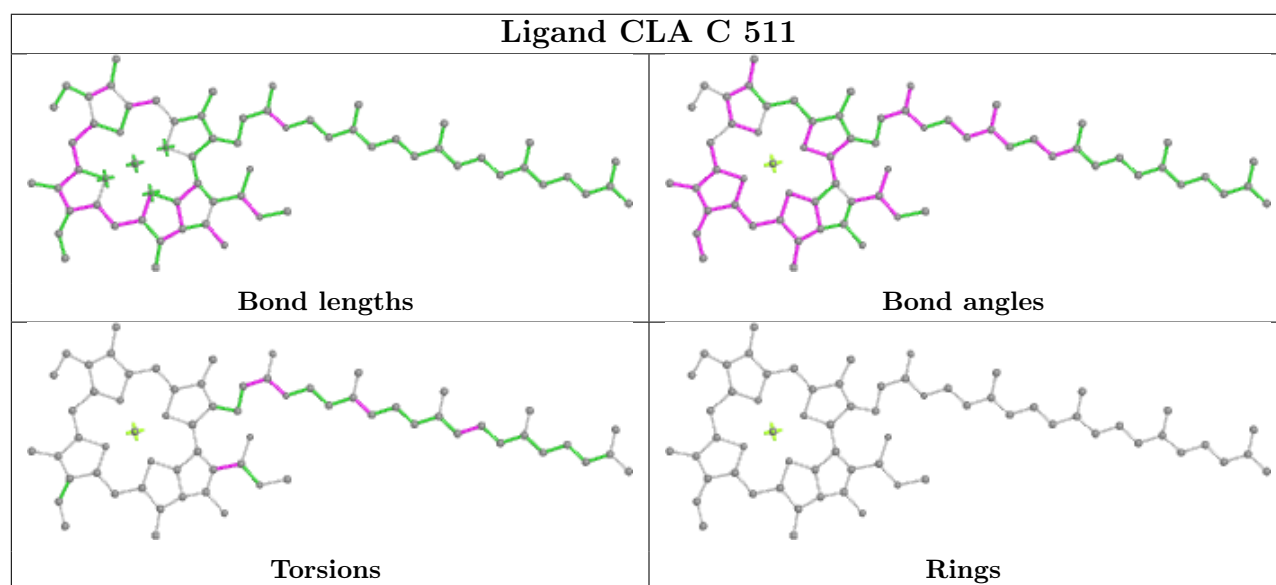
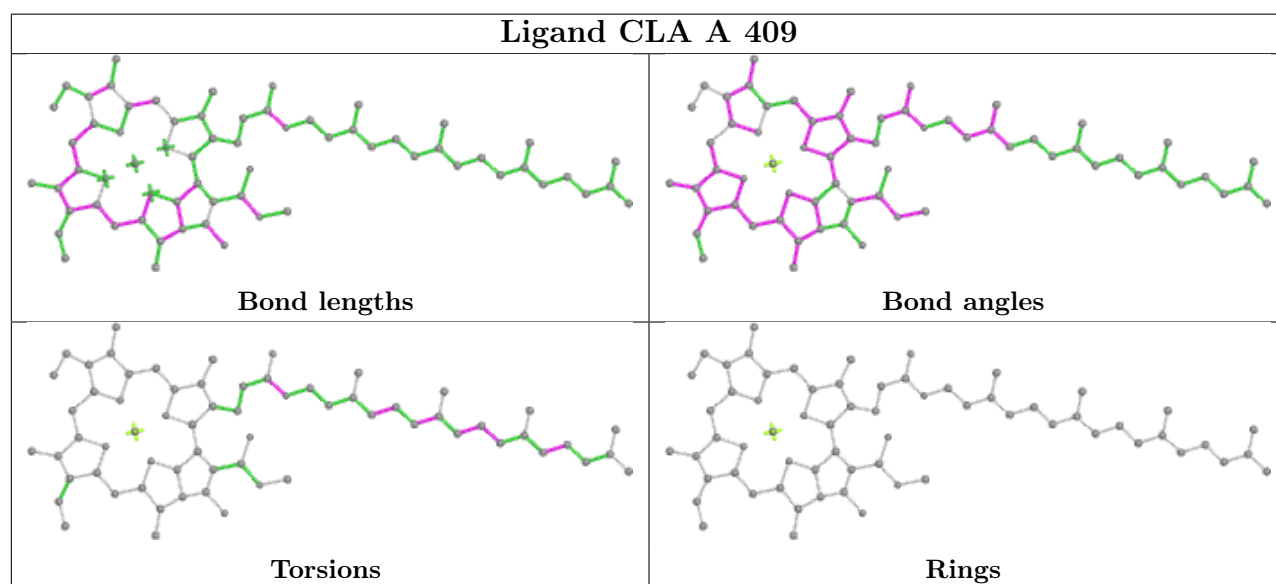
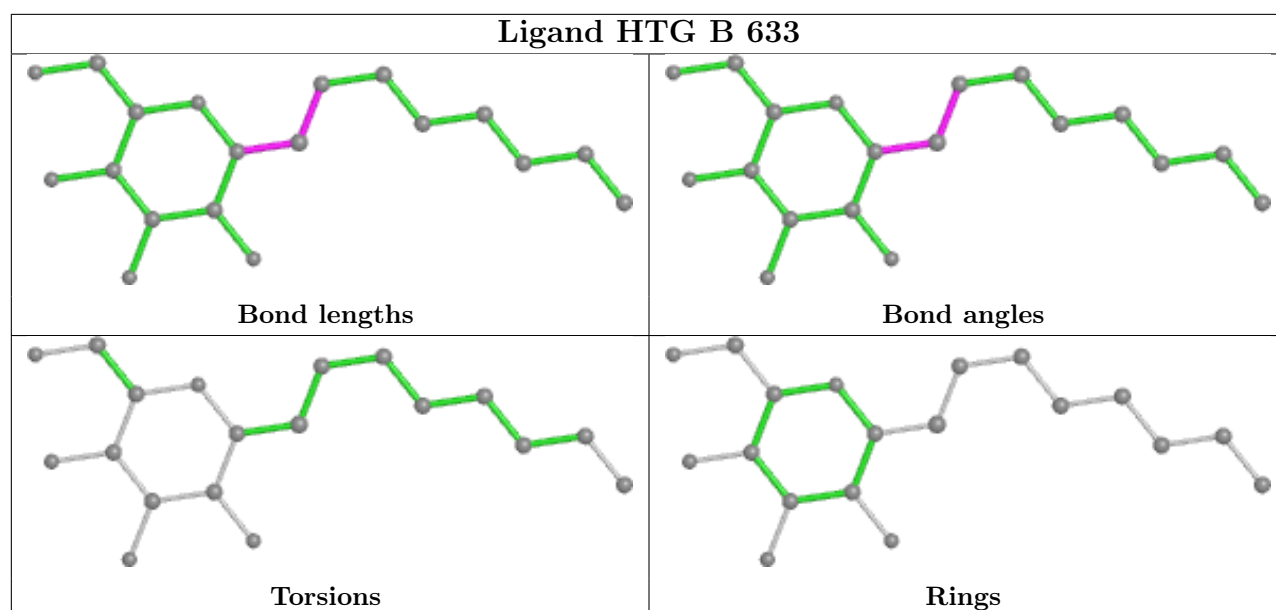


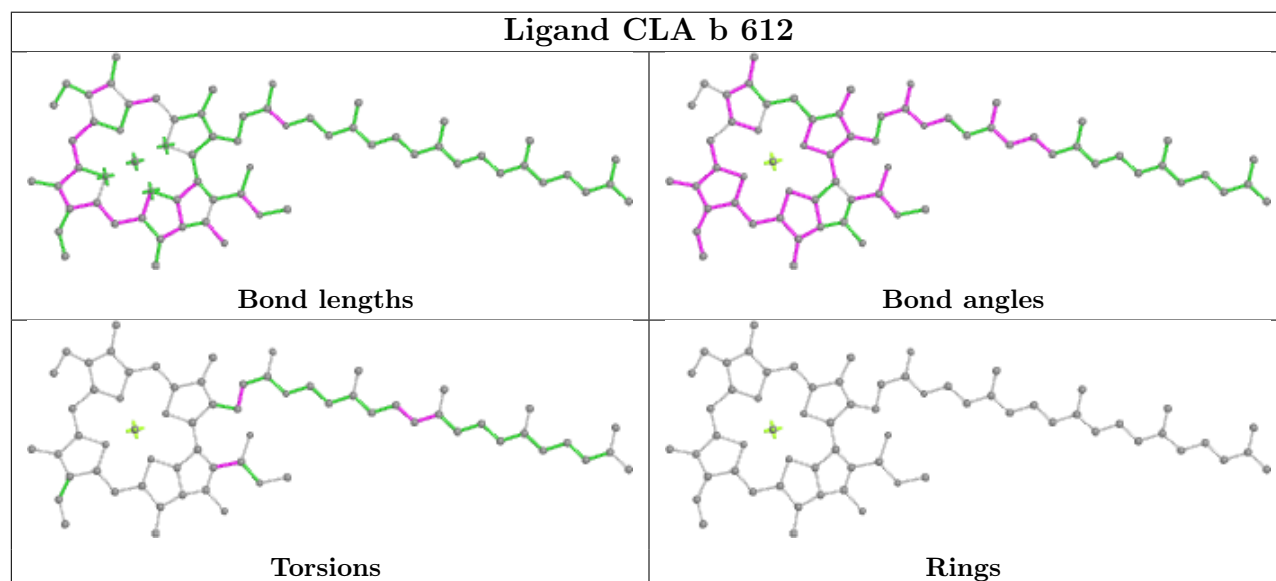
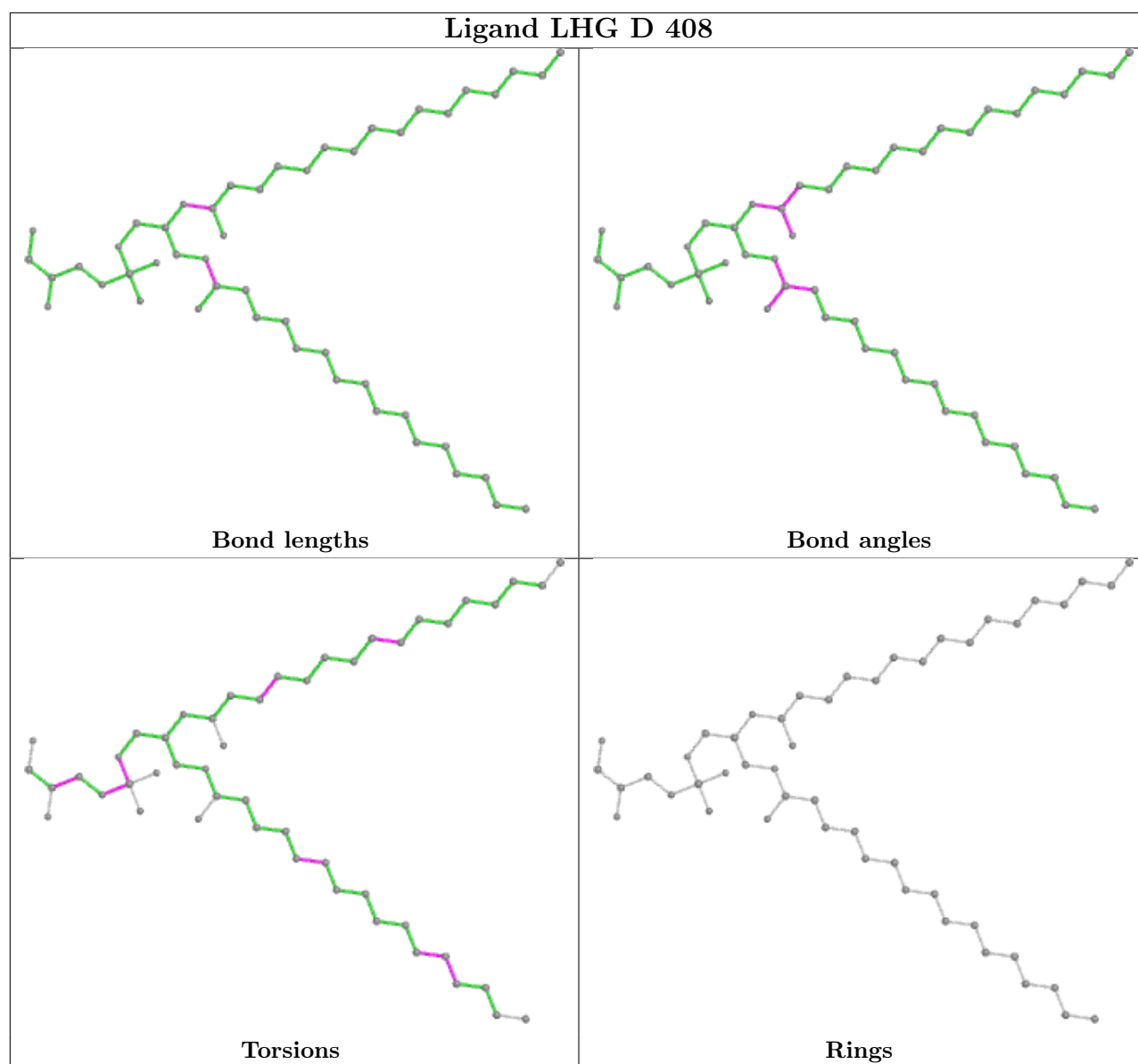


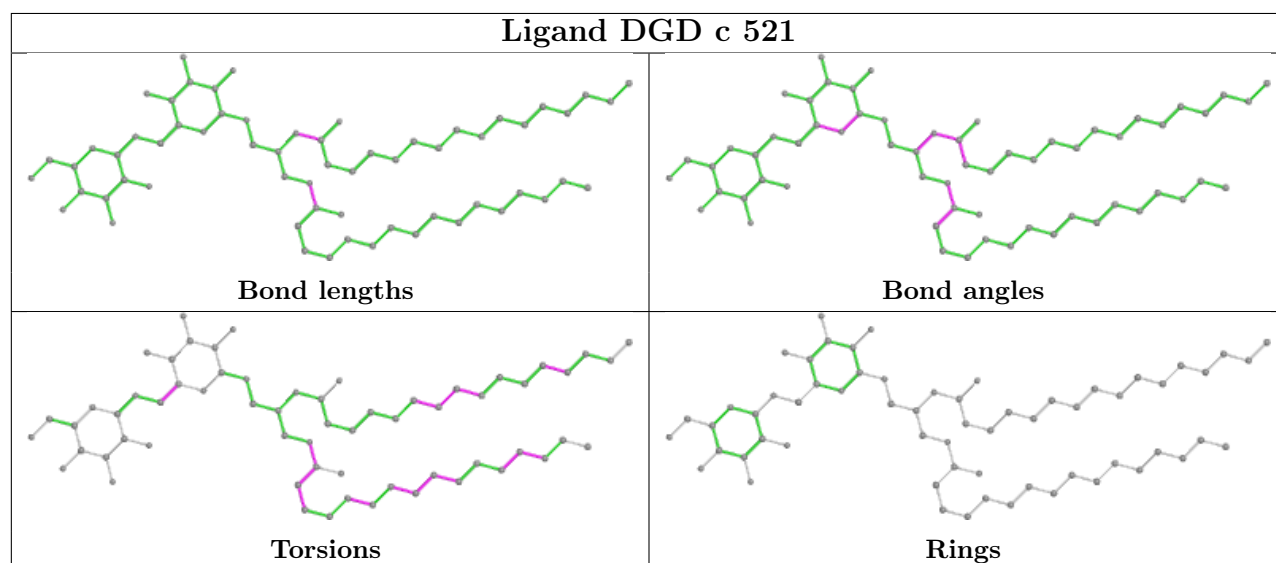
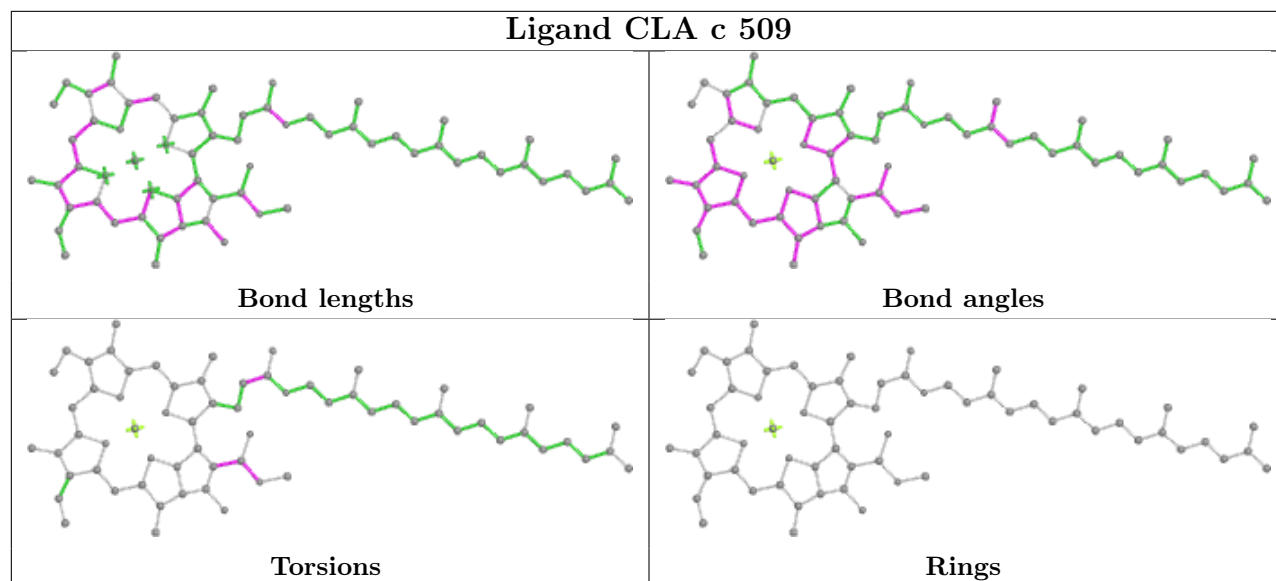
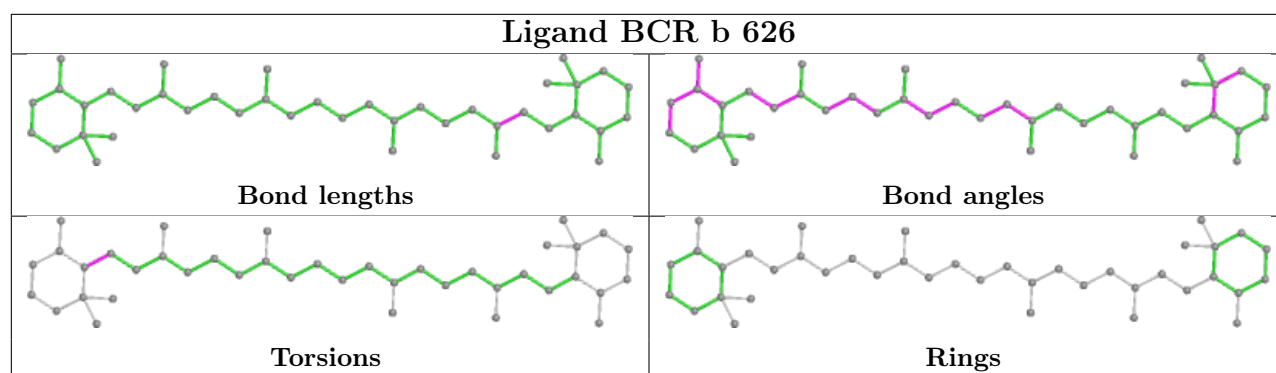


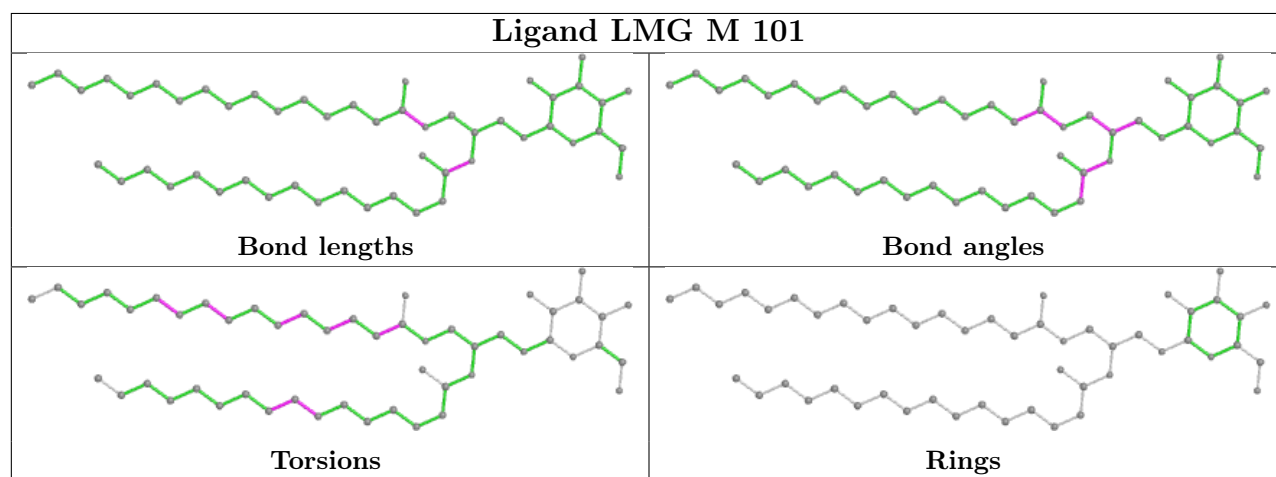
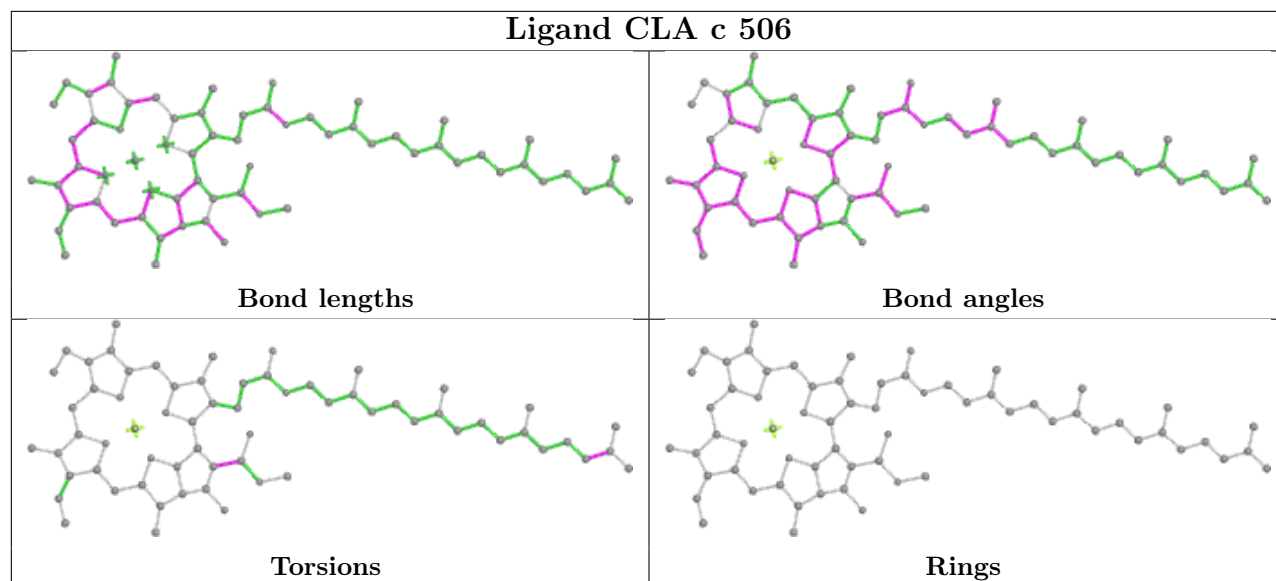
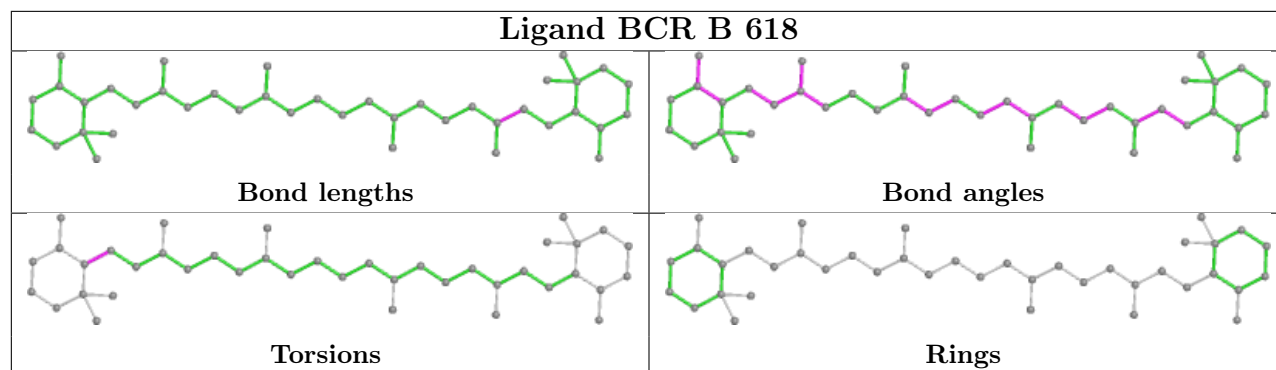


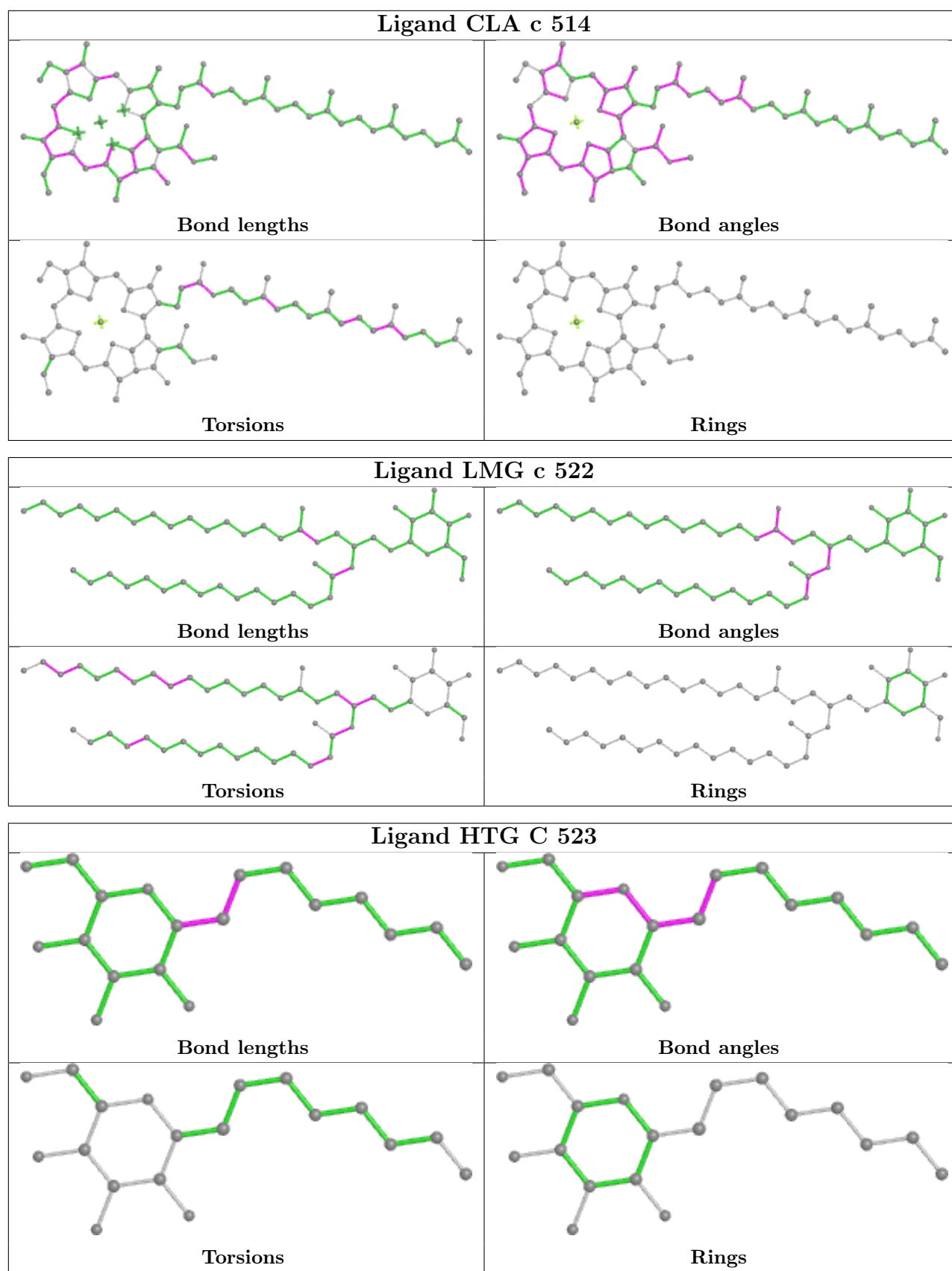




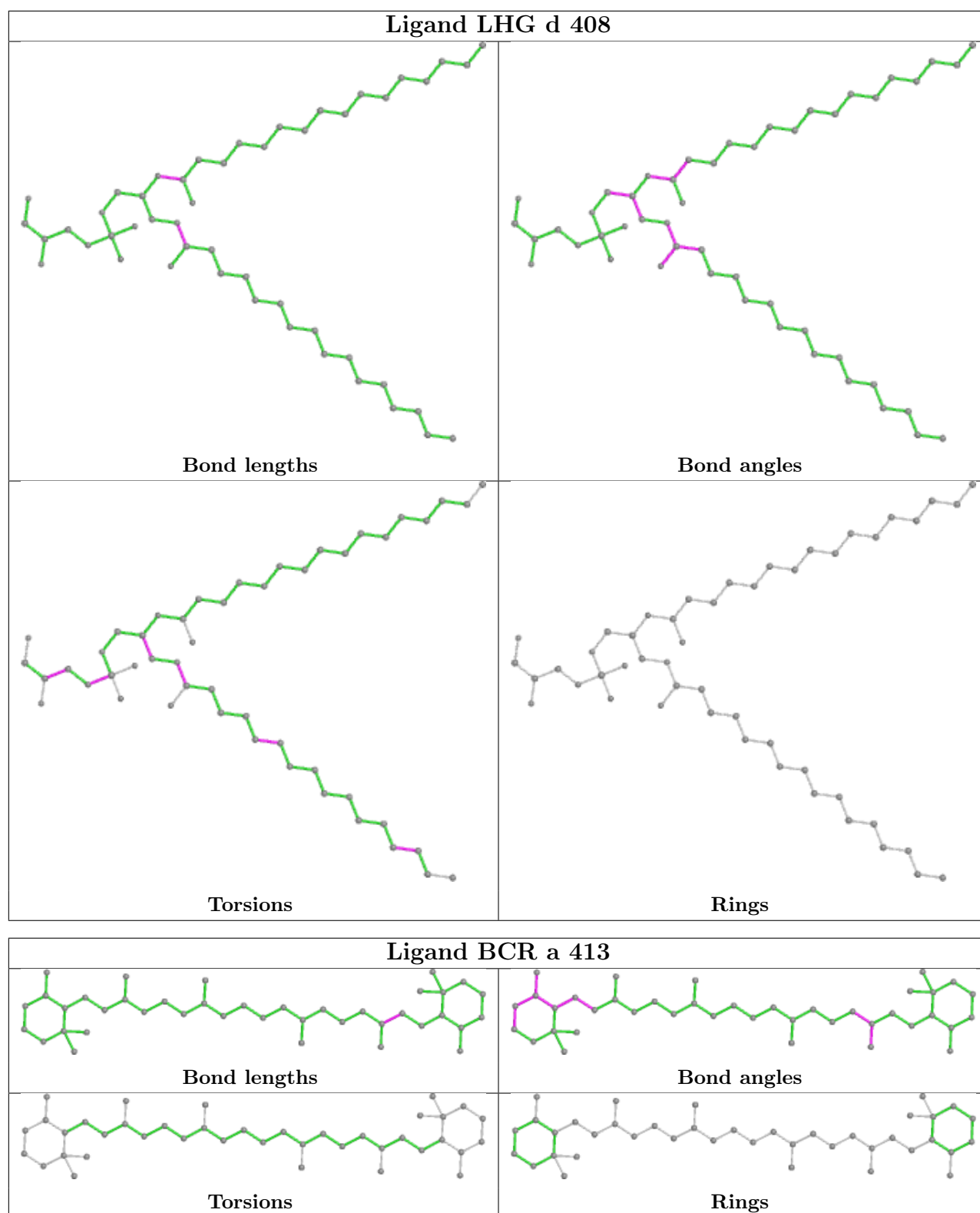


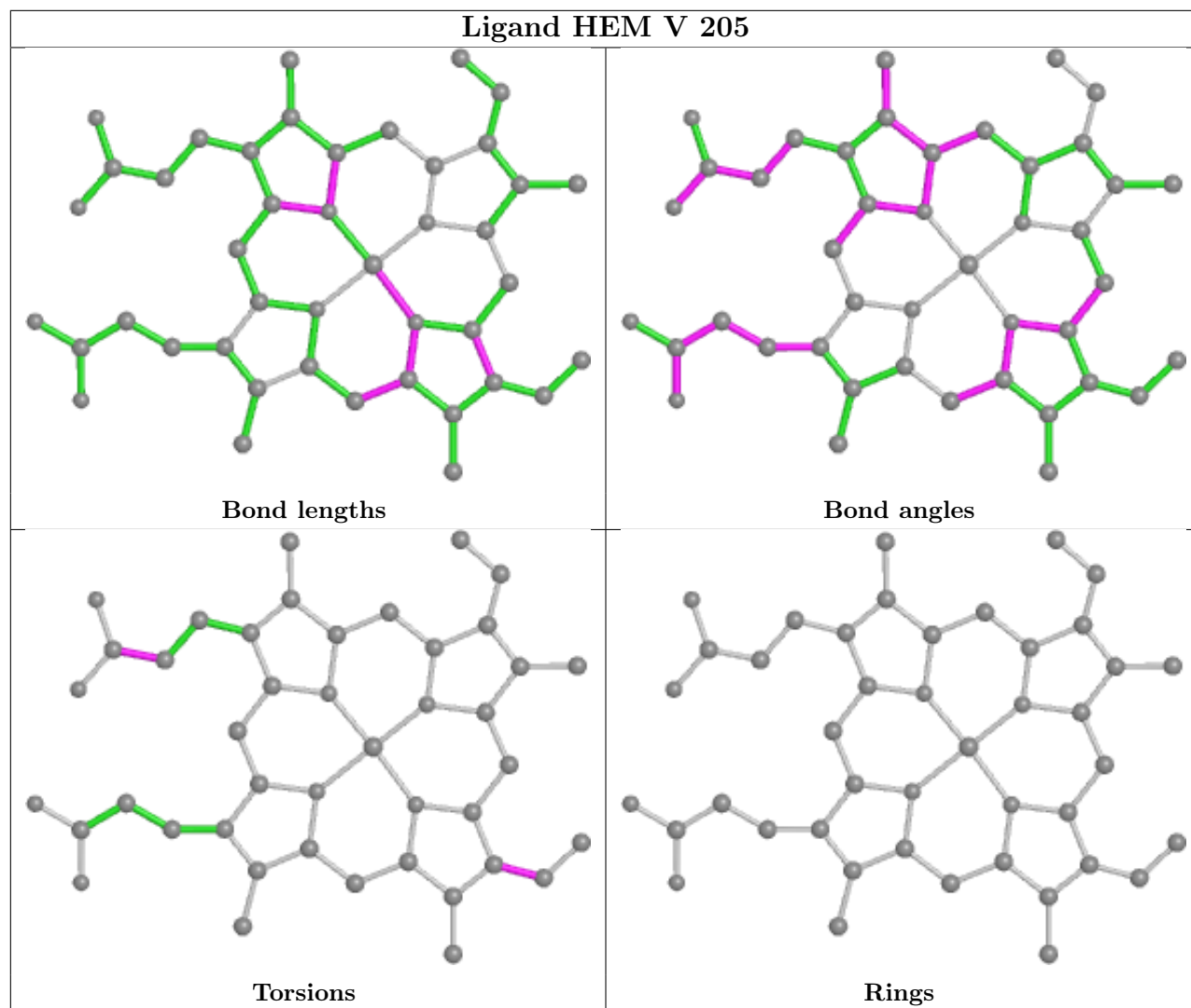
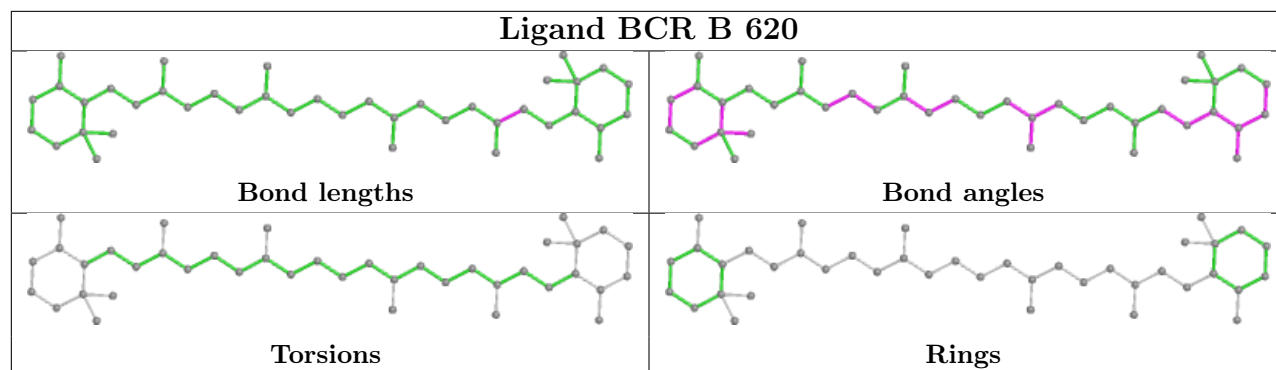


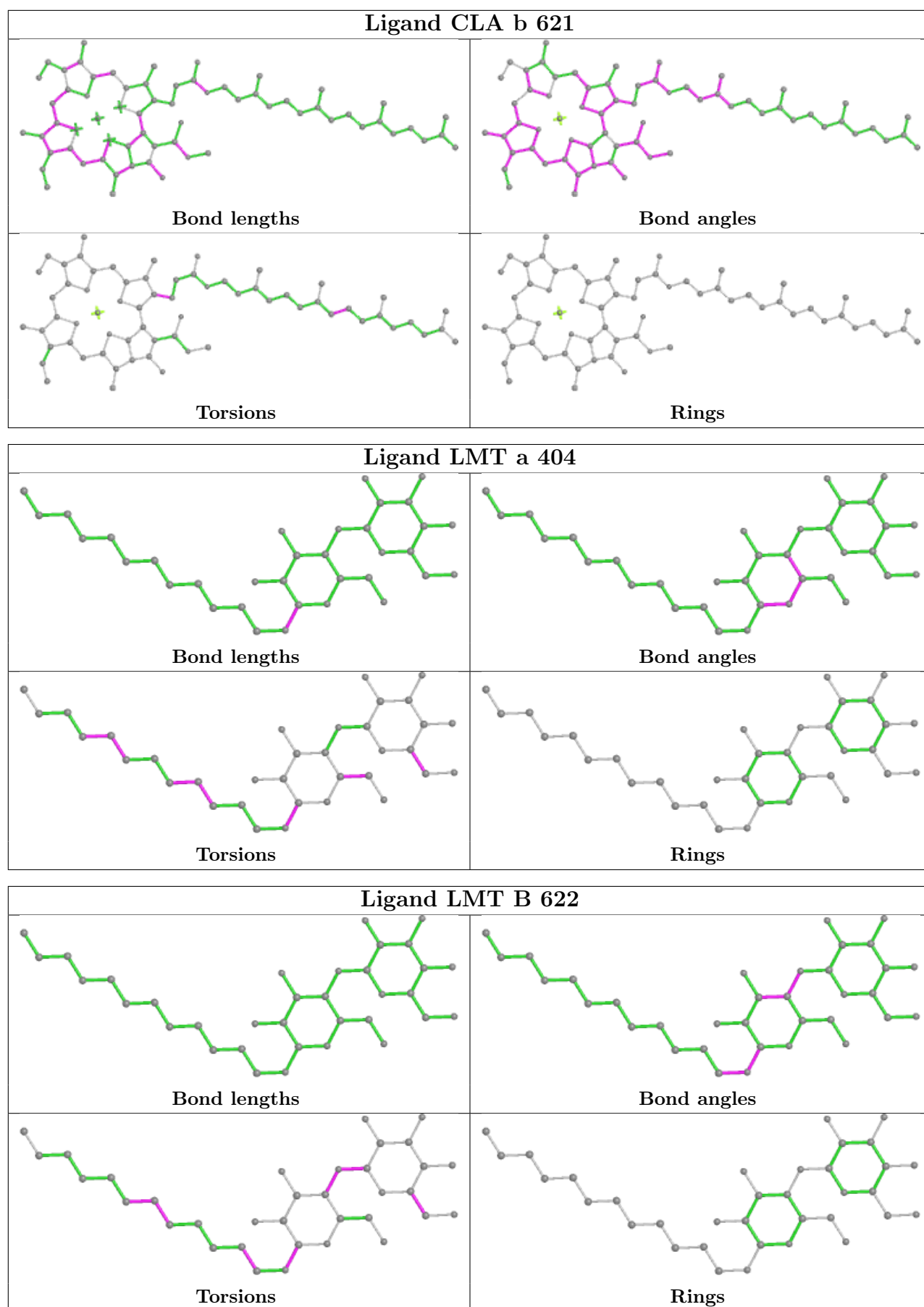


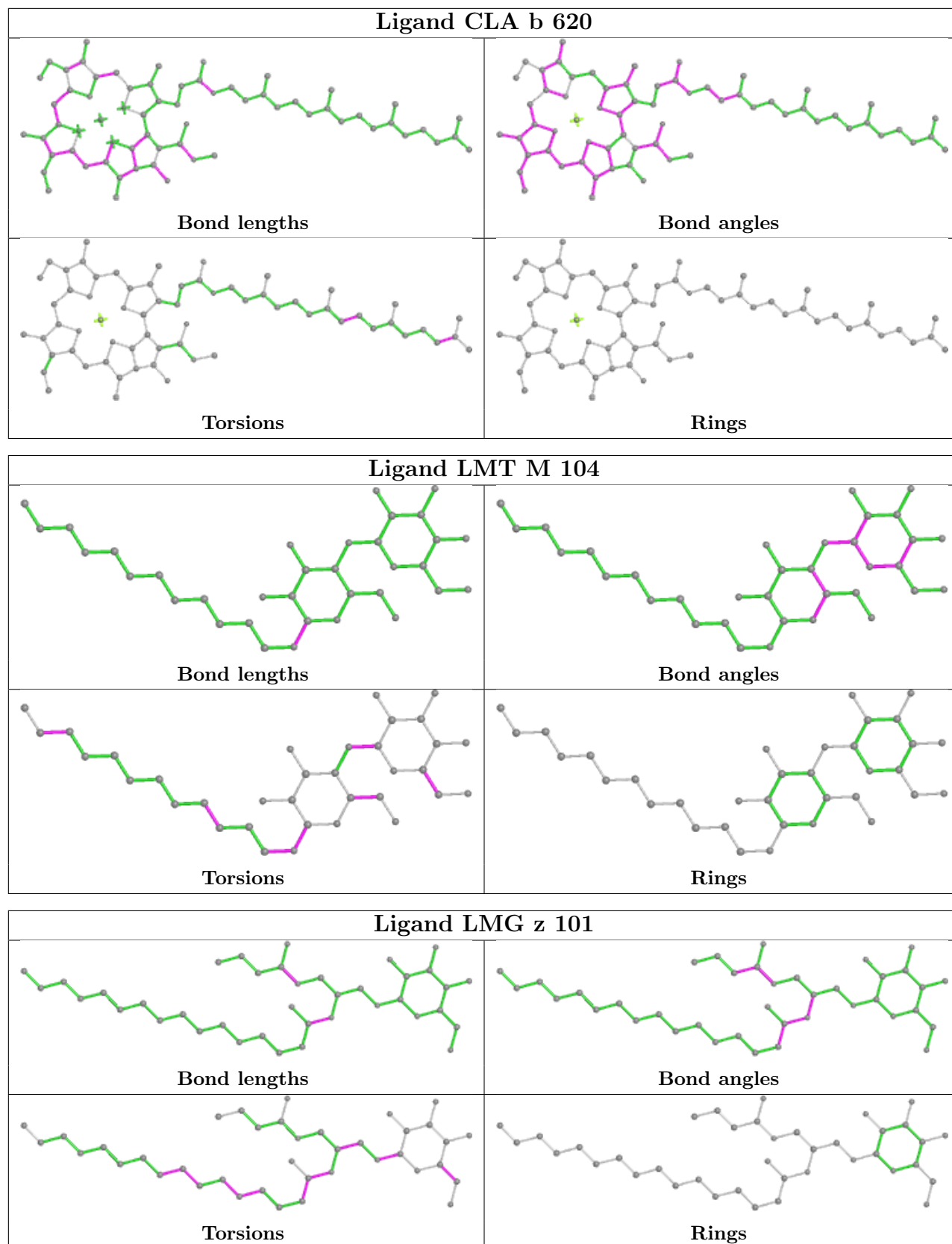


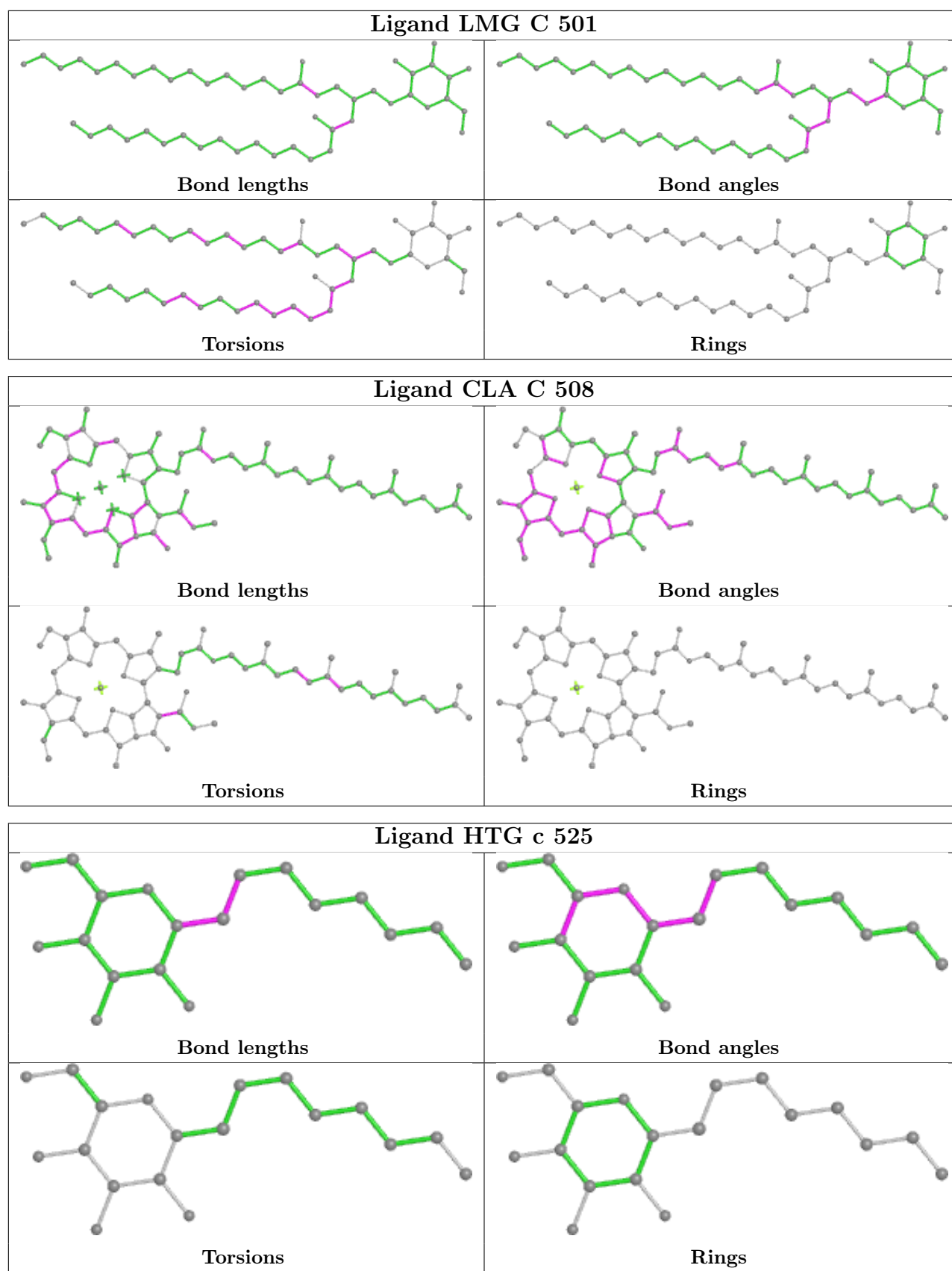


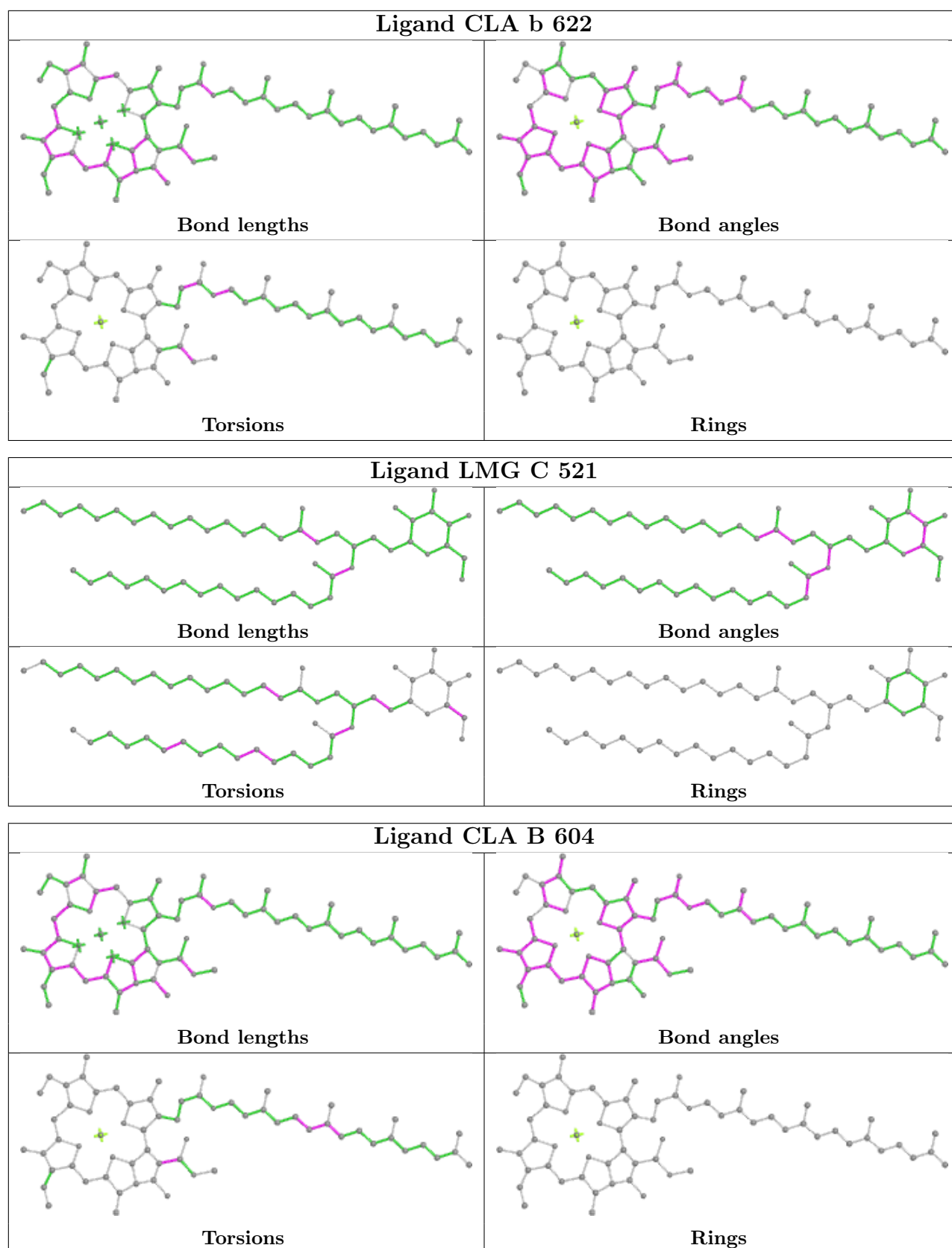


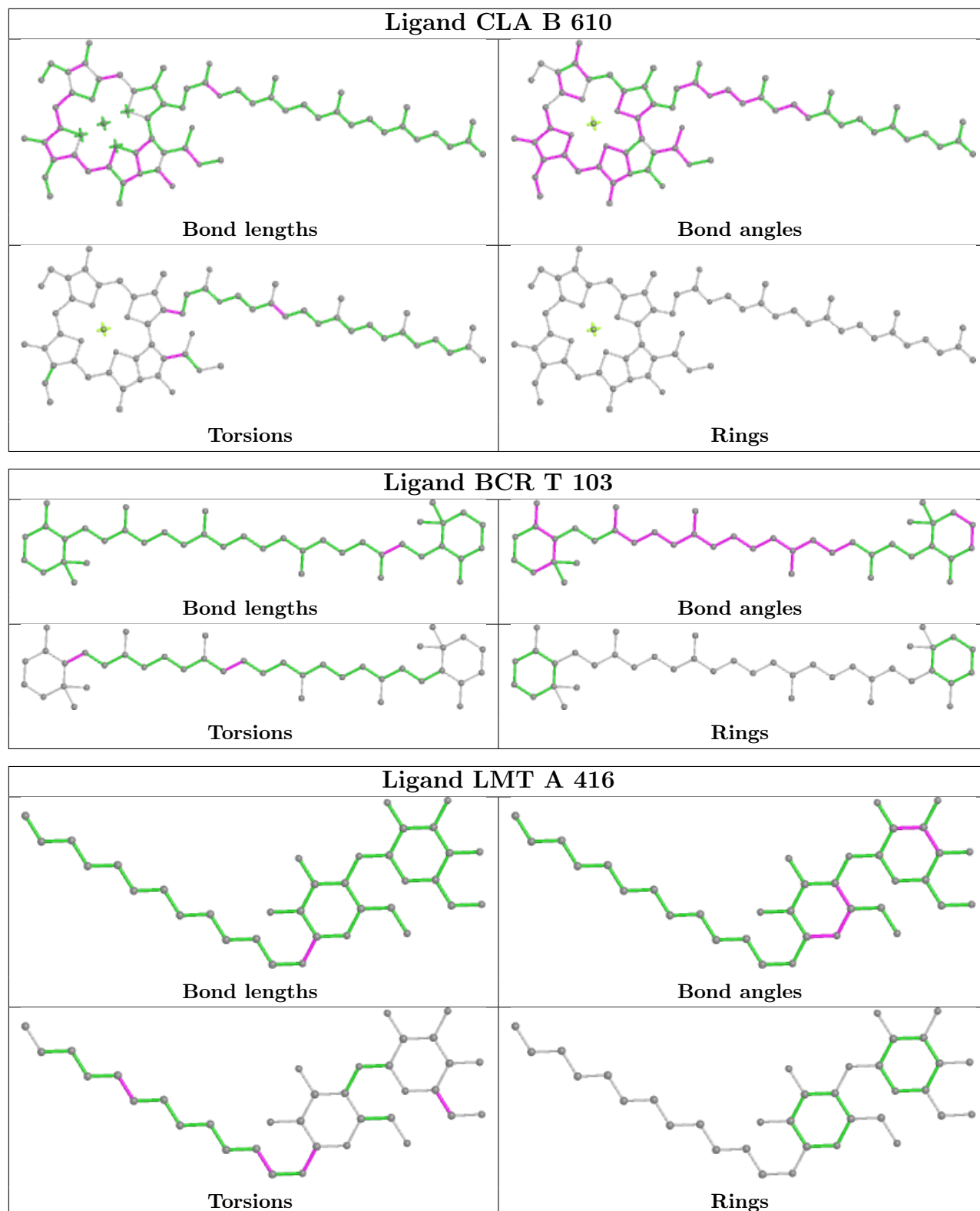


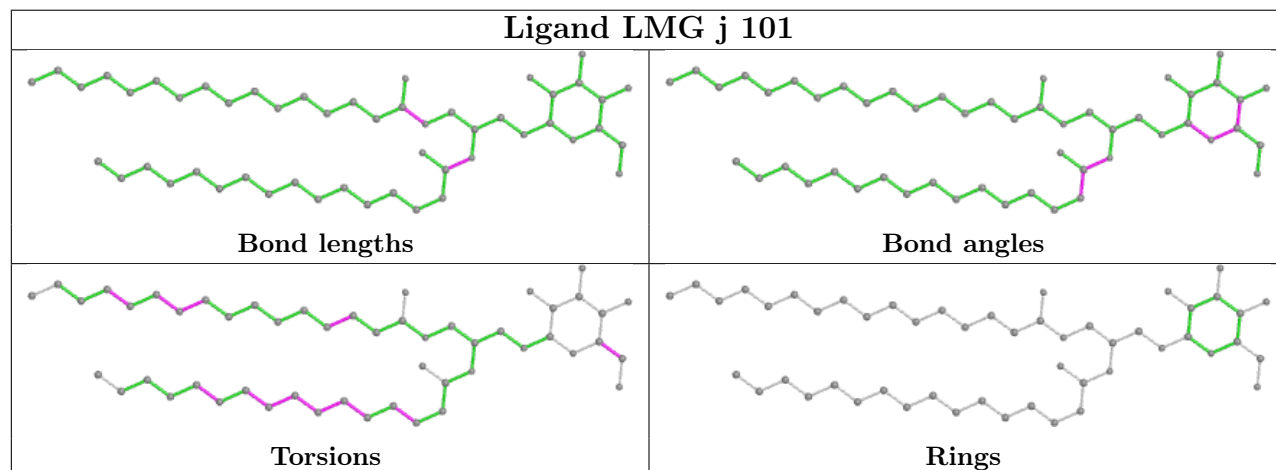
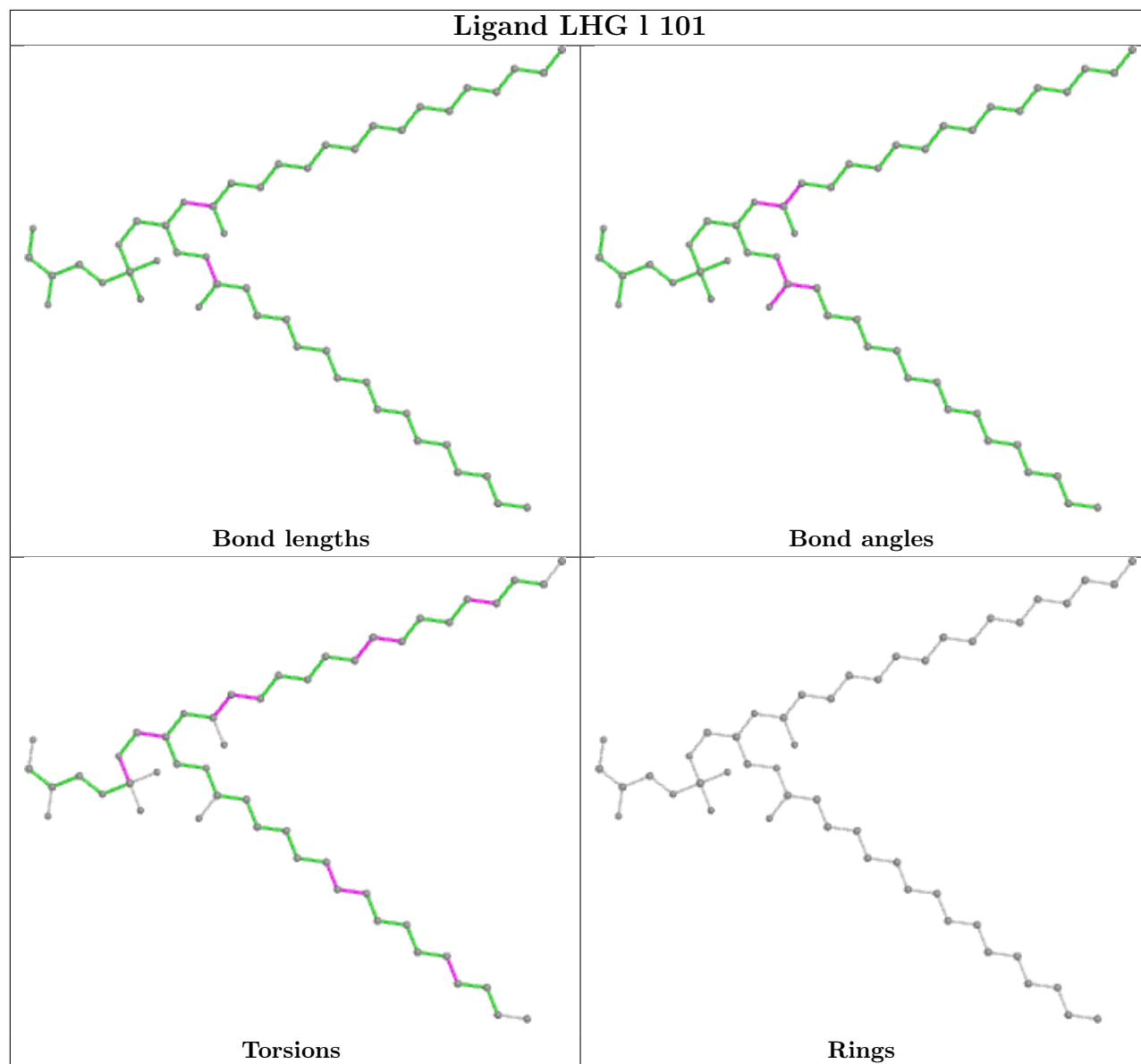




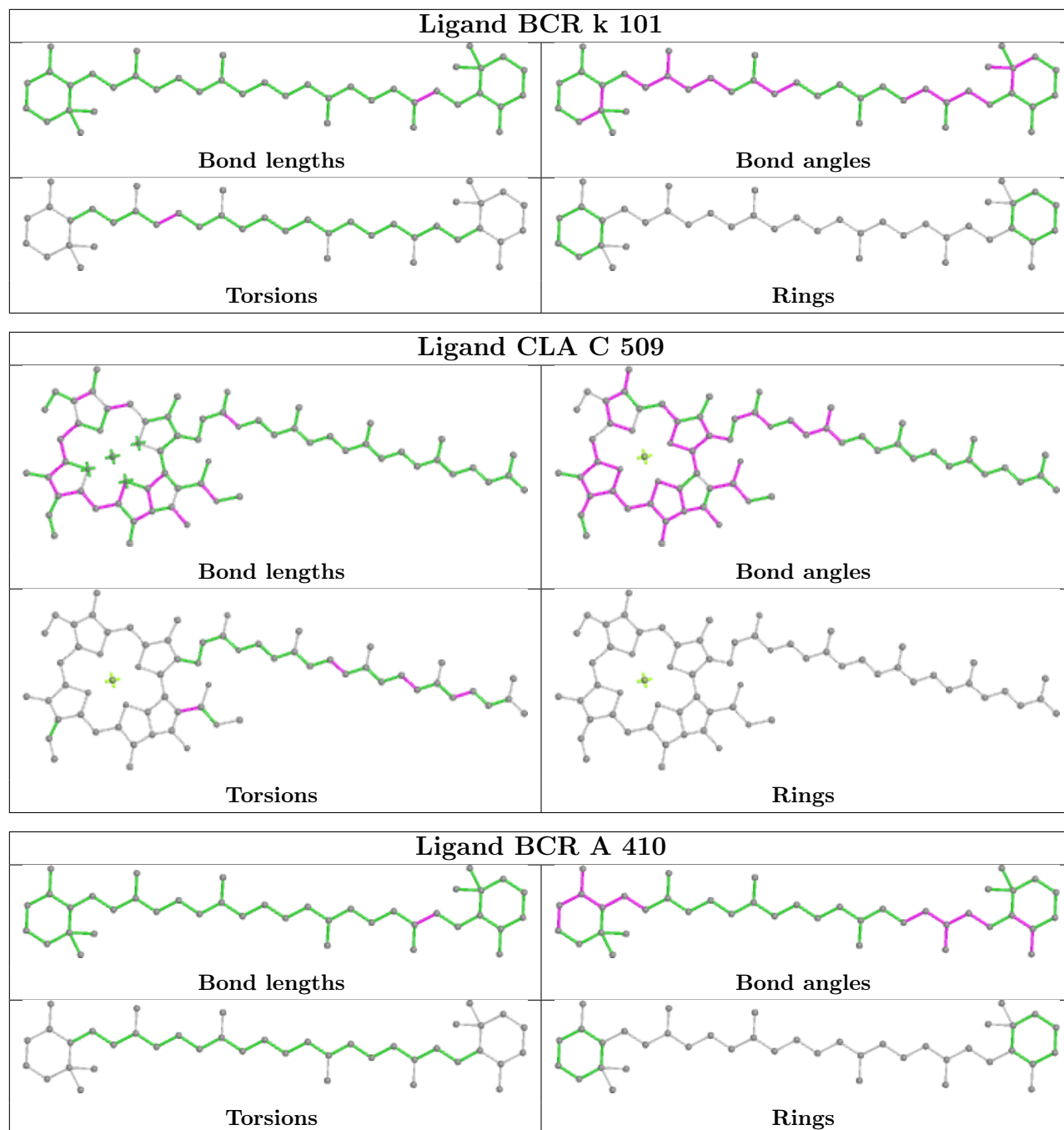


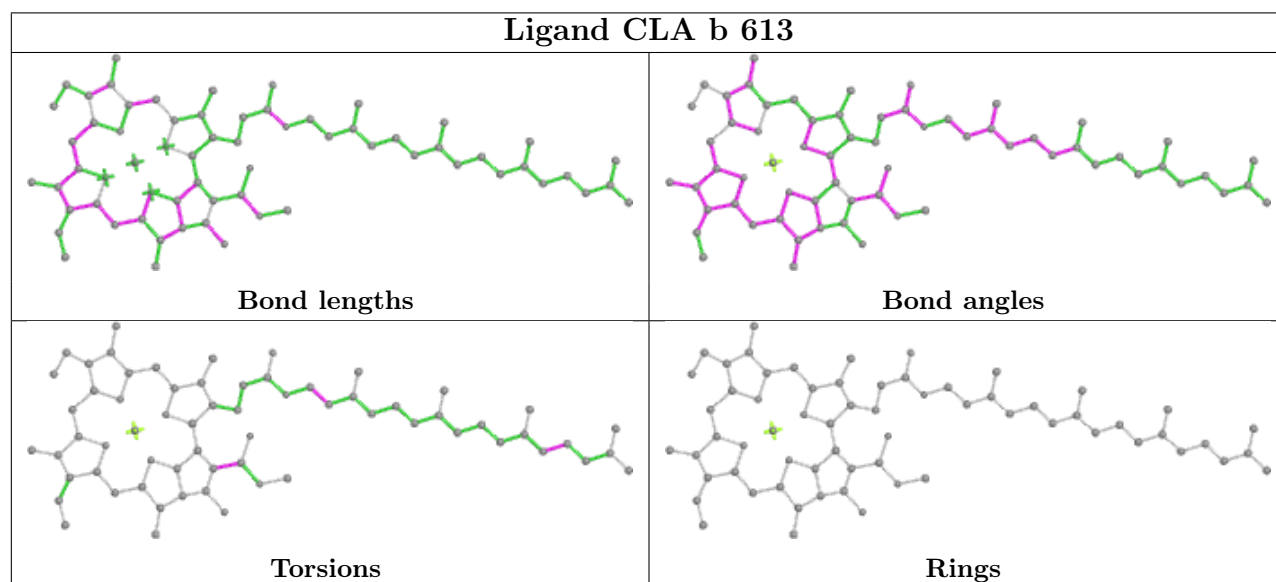
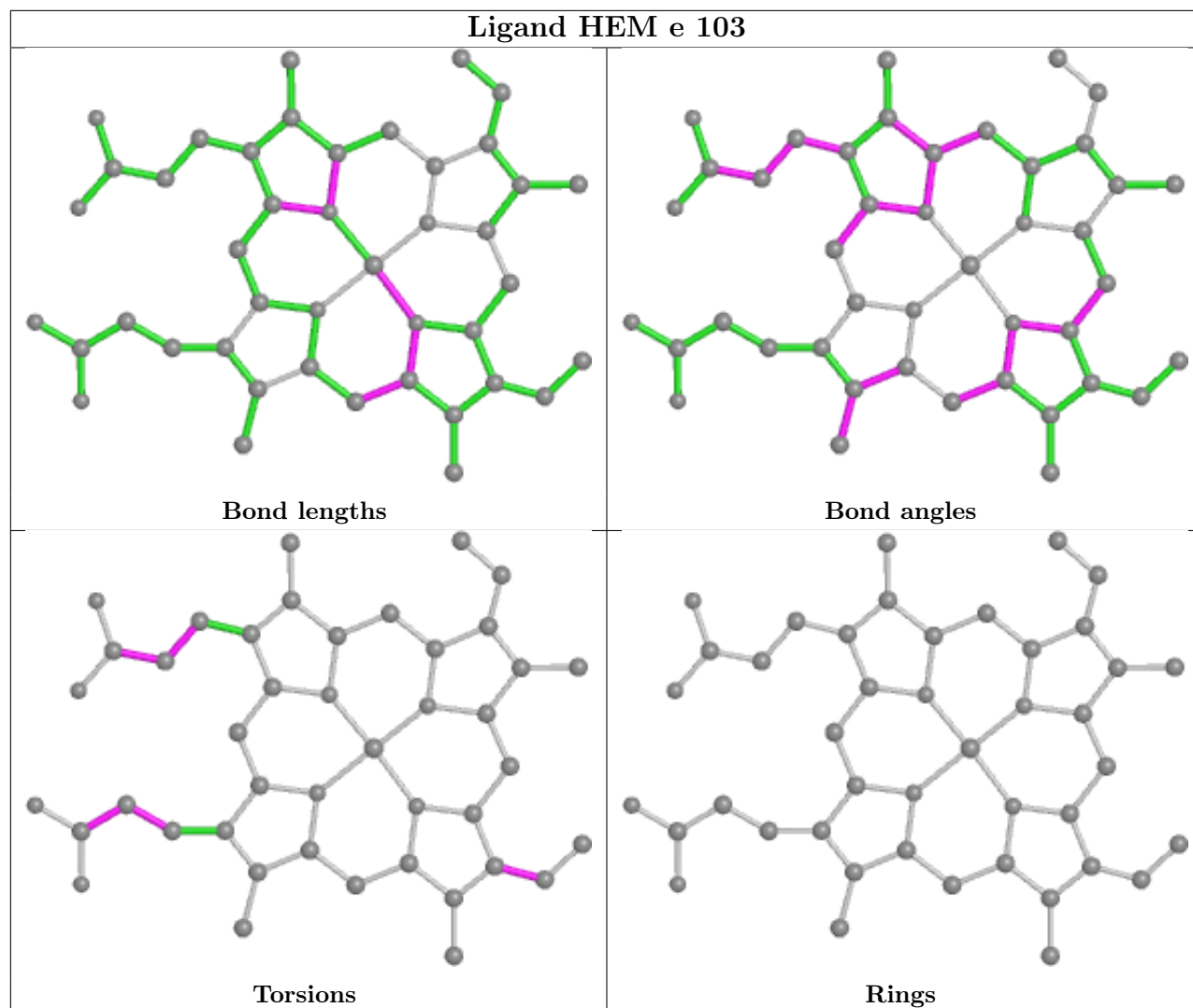


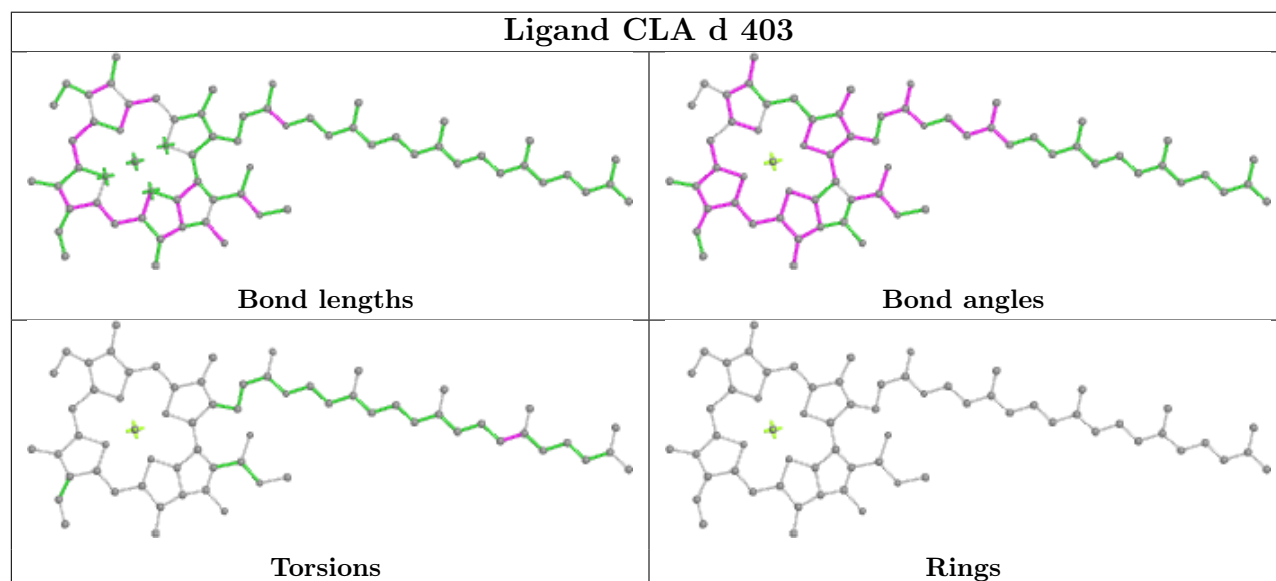
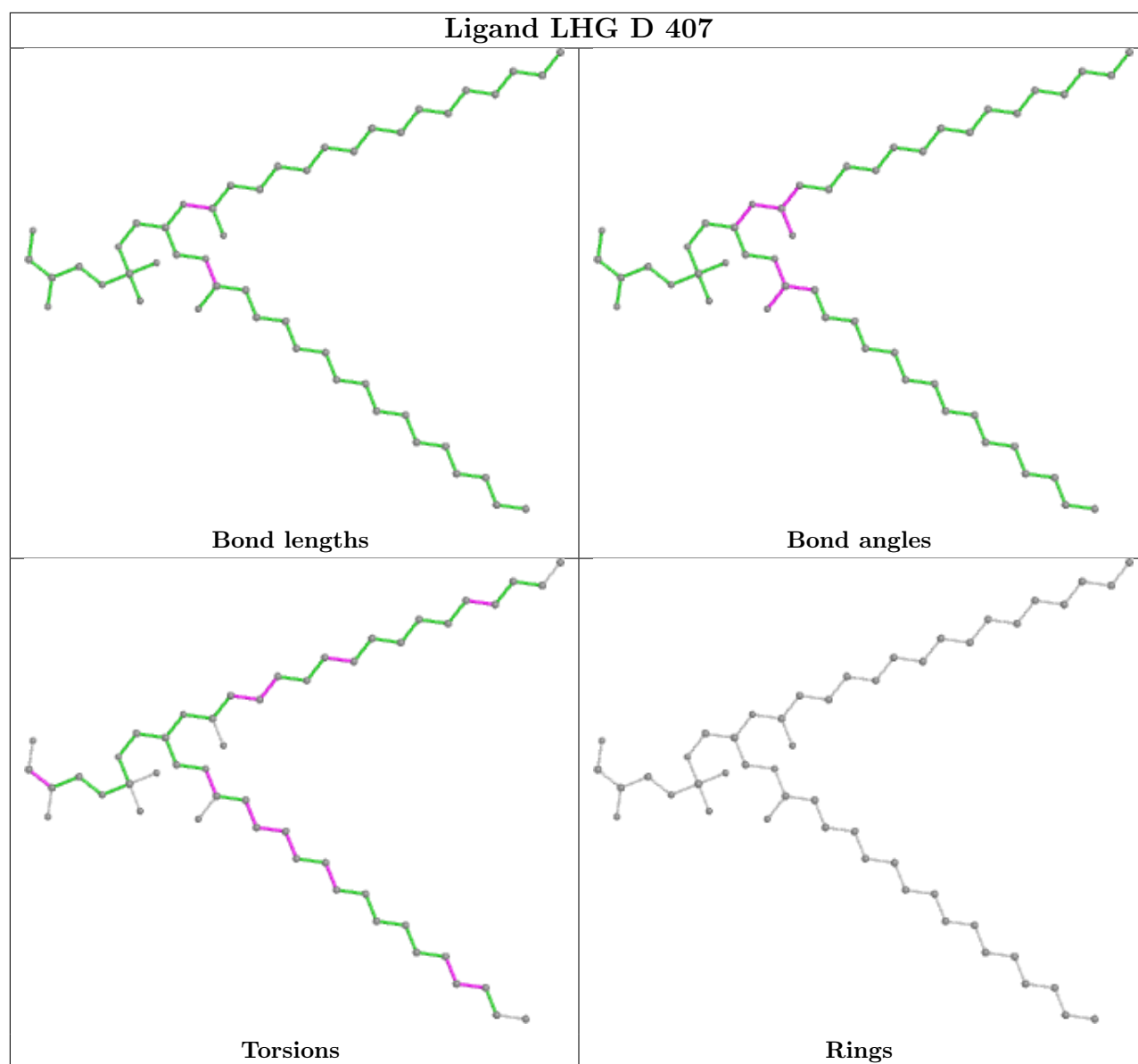












## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

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

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

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	334/344 (97%)	0.07	2 (0%) 89 91	30, 39, 69, 112	0
1	a	334/344 (97%)	0.15	8 (2%) 59 67	31, 40, 74, 141	0
2	B	504/505 (99%)	0.11	8 (1%) 72 77	30, 44, 78, 119	0
2	b	503/505 (99%)	0.21	23 (4%) 32 42	32, 45, 83, 174	0
3	C	451/455 (99%)	0.06	2 (0%) 92 94	35, 52, 70, 120	0
3	c	455/455 (100%)	0.08	3 (0%) 87 91	37, 53, 71, 124	0
4	D	341/342 (99%)	0.05	2 (0%) 89 91	30, 41, 64, 131	0
4	d	341/342 (99%)	0.01	0 100 100	31, 42, 65, 122	0
5	E	81/84 (96%)	0.56	8 (9%) 7 11	46, 64, 95, 127	0
5	e	81/84 (96%)	0.86	9 (11%) 5 7	47, 66, 118, 172	0
6	F	34/44 (77%)	0.32	2 (5%) 22 30	46, 57, 91, 98	0
6	f	32/44 (72%)	0.35	2 (6%) 20 27	47, 57, 115, 139	0
7	H	65/65 (100%)	0.22	3 (4%) 32 42	40, 54, 71, 154	0
7	h	65/65 (100%)	0.07	2 (3%) 49 58	43, 56, 77, 165	0
8	I	37/38 (97%)	0.17	2 (5%) 25 34	43, 53, 107, 152	0
8	i	37/38 (97%)	0.19	2 (5%) 25 34	42, 53, 100, 129	0
9	J	38/39 (97%)	0.52	3 (7%) 12 17	43, 61, 133, 171	0
9	j	39/39 (100%)	0.65	5 (12%) 3 5	48, 61, 130, 168	0
10	K	37/37 (100%)	0.12	0 100 100	53, 62, 77, 105	0
10	k	37/37 (100%)	0.22	0 100 100	53, 62, 80, 105	0
11	L	37/37 (100%)	0.16	0 100 100	30, 37, 101, 123	0
11	l	37/37 (100%)	0.24	2 (5%) 25 34	31, 36, 99, 122	0
12	M	33/36 (91%)	0.27	2 (6%) 21 28	33, 38, 63, 116	0
12	m	33/36 (91%)	0.19	0 100 100	33, 38, 71, 117	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	O	243/244 (99%)	0.07	4 (1%) 72 77	32, 50, 95, 134	0
13	o	243/244 (99%)	0.08	4 (1%) 72 77	33, 51, 102, 167	0
14	T	29/32 (90%)	0.14	0 100 100	31, 38, 65, 135	0
14	t	29/32 (90%)	0.10	0 100 100	32, 38, 66, 135	0
15	U	97/104 (93%)	-0.05	0 100 100	37, 48, 75, 118	0
15	u	97/104 (93%)	-0.05	0 100 100	41, 49, 72, 118	0
16	V	137/137 (100%)	0.04	0 100 100	35, 49, 78, 121	0
16	v	137/137 (100%)	0.06	2 (1%) 73 79	40, 55, 82, 123	0
17	Y	29/30 (96%)	1.76	7 (24%) 0 0	64, 77, 135, 141	0
17	y	29/30 (96%)	0.62	2 (6%) 16 23	67, 80, 135, 142	0
18	X	39/40 (97%)	0.37	1 (2%) 56 64	53, 62, 114, 138	0
18	x	38/40 (95%)	0.63	5 (13%) 3 4	53, 62, 110, 130	0
19	Z	62/62 (100%)	0.64	6 (9%) 7 11	65, 77, 122, 164	0
19	z	62/62 (100%)	1.17	17 (27%) 0 0	68, 79, 122, 165	0
20	R	18/34 (52%)	7.25	18 (100%) 0 0	106, 139, 173, 174	0
All	All	5275/5384 (97%)	0.18	156 (2%) 50 59	30, 48, 91, 174	0

All (156) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
17	Y	18	VAL	16.7
20	R	15	ALA	13.5
20	R	18	TRP	11.8
5	e	5	THR	11.8
20	R	9	LEU	10.4
20	R	6	LEU	9.5
2	b	496	TYR	9.5
2	b	494	GLY	8.8
20	R	16	ALA	8.6
2	b	495	PHE	8.5
19	z	3	ILE	8.2
17	Y	19	ILE	8.1
20	R	14	LEU	7.8
20	R	12	VAL	7.8
20	R	3	TRP	7.7
2	b	486	LEU	7.6
20	R	5	VAL	7.4

Continued on next page...

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	R	17	GLY	7.3
9	j	1	MET	7.2
20	R	13	LEU	6.6
20	R	8	VAL	6.6
2	b	499	VAL	6.3
2	b	489	GLU	6.2
1	a	264	SER	6.1
5	e	6	GLY	6.0
19	Z	62	VAL	6.0
20	R	19	ALA	5.9
5	e	4	THR	5.9
17	Y	20	ALA	5.9
13	O	56	PRO	5.8
20	R	11	PRO	5.1
7	h	65	LEU	5.0
2	b	487	SER	5.0
2	B	479	PHE	4.9
3	C	23	ALA	4.8
2	b	493	TRP	4.8
18	x	37	VAL	4.8
19	z	62	VAL	4.7
5	E	6	GLY	4.7
13	o	58	ASN	4.7
18	x	2	THR	4.7
18	x	38	GLN	4.7
17	Y	22	LEU	4.5
19	z	32	ASP	4.4
19	Z	31	GLN	4.3
9	J	5	GLY	4.2
5	E	5	THR	4.2
1	a	262	TYR	4.1
2	b	500	GLY	4.1
2	b	504	THR	4.0
2	B	495	PHE	4.0
19	Z	33	TRP	4.0
13	o	59	LYS	3.9
19	z	5	PHE	3.9
20	R	4	ARG	3.9
9	j	3	GLU	3.9
17	y	20	ALA	3.8
17	Y	21	GLN	3.8
13	O	60	ARG	3.7

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	R	10	LEU	3.7
2	b	498	LYS	3.7
2	b	485	GLU	3.6
7	h	66	GLY	3.6
8	I	37	LEU	3.6
2	b	484	PRO	3.6
2	b	488	PRO	3.6
1	a	261	GLN	3.5
20	R	7	VAL	3.5
9	j	4	GLY	3.5
3	c	140	LEU	3.4
18	X	37	VAL	3.4
5	e	7	GLU	3.4
19	z	2	THR	3.4
11	l	3	PRO	3.4
20	R	2	ASP	3.3
2	b	497	GLN	3.3
5	e	10	PHE	3.3
16	v	106	ASN	3.3
5	E	4	THR	3.3
19	z	38	GLN	3.2
19	z	33	TRP	3.2
19	z	35	ARG	3.2
4	D	12	ARG	3.2
8	I	34	ARG	3.2
2	B	496	TYR	3.2
13	o	246	ALA	3.1
6	F	16	PHE	3.1
2	B	494	GLY	3.1
2	b	86[A]	ILE	3.1
13	O	62	GLU	3.1
7	H	65	LEU	3.1
6	f	16	PHE	3.0
19	Z	61	VAL	2.9
17	Y	25	ILE	2.9
5	E	83	LEU	2.9
6	f	14	PRO	2.9
1	a	265	PHE	2.9
5	e	61	ARG	2.9
2	b	503	THR	2.9
2	b	502	VAL	2.8
2	B	504	THR	2.8

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
19	z	61	VAL	2.8
7	H	64	ALA	2.8
19	z	41	PHE	2.8
19	z	42	LEU	2.8
1	a	263	ALA	2.7
2	b	490	GLN	2.7
2	B	501	ASP	2.7
13	o	56	PRO	2.7
5	e	59	GLU	2.6
9	J	3	GLU	2.6
6	F	15	ILE	2.6
3	c	143	TYR	2.6
17	Y	26	ALA	2.5
19	z	28	ALA	2.5
5	E	84	LYS	2.5
2	B	486	LEU	2.5
2	b	491	VAL	2.5
1	A	12	ASN	2.5
9	j	2	SER	2.5
7	H	66	GLY	2.5
12	M	33	GLN	2.4
17	y	25	ILE	2.4
2	B	490	GLN	2.4
9	J	2	SER	2.4
2	b	85	GLY	2.4
2	b	483	ASP	2.4
5	E	79	PHE	2.4
1	A	13	LEU	2.4
1	a	260	PHE	2.4
18	x	39	ARG	2.3
3	c	50	LEU	2.3
19	z	29	SER	2.3
18	x	35	ASP	2.3
19	Z	30	PRO	2.3
3	C	145[A]	SER	2.3
5	E	19	TYR	2.2
2	b	501	ASP	2.2
9	j	5	GLY	2.2
13	O	246	ALA	2.2
1	a	252	HIS	2.2
12	M	34	LYS	2.2
19	z	4	LEU	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
19	z	39	LEU	2.1
8	i	36	ASP	2.1
5	E	82	GLN	2.1
5	e	8	ARG	2.1
19	Z	32	ASP	2.0
19	z	30	PRO	2.0
16	v	17	LYS	2.0
19	z	60	PHE	2.0
4	D	17	ILE	2.0
1	a	15	GLU	2.0
11	l	1	MET	2.0
5	e	72	ALA	2.0
8	i	37	LEU	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
14	FME	T	1	10/11	0.95	0.11	33,38,60,72	0
12	FME	M	1	10/11	0.97	0.14	33,52,85,91	0
8	FME	I	1	10/11	0.97	0.11	36,49,53,57	0
8	FME	i	1	10/11	0.97	0.12	39,51,57,61	0
12	FME	m	1	10/11	0.97	0.16	35,47,107,124	0
14	FME	t	1	10/11	0.97	0.11	28,40,49,83	0

## 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
36	DGD	e	101	62/66	0.46	0.39	68,115,177,183	0
29	LMT	F	102	35/35	0.59	0.32	81,117,147,150	0
29	LMT	C	522	35/35	0.60	0.30	83,119,152,161	0
32	UNL	C	528	34/-	0.61	0.23	68,109,132,133	0
37	LHG	e	102	42/49	0.61	0.30	68,134,167,175	0
29	LMT	M	104	35/35	0.63	0.26	44,96,137,144	0
29	LMT	b	630	25/35	0.64	0.28	70,95,151,153	0
34	HTG	d	412	16/19	0.65	0.21	64,114,125,129	0
36	DGD	D	406	52/66	0.65	0.27	62,106,145,154	0
32	UNL	a	403	30/-	0.66	0.24	69,90,128,130	0
29	LMT	a	419	35/35	0.69	0.35	86,112,130,132	0
29	LMT	f	103	35/35	0.69	0.28	74,122,151,156	0
29	LMT	B	622	35/35	0.70	0.28	62,118,148,153	0
32	UNL	j	102	10/-	0.71	0.23	64,78,93,97	0
34	HTG	D	412	16/19	0.71	0.26	70,142,157,160	0
32	UNL	A	419	28/-	0.71	0.19	63,86,104,104	0
27	SQD	f	102	43/54	0.72	0.28	86,119,144,148	0
32	UNL	c	526	32/-	0.72	0.23	63,98,133,141	0
35	LMG	Z	101	37/55	0.73	0.27	50,111,133,137	0
32	UNL	J	102	10/-	0.74	0.21	47,71,94,97	0
29	LMT	m	102	35/35	0.75	0.22	35,98,128,134	0
34	HTG	B	633	19/19	0.75	0.20	53,105,137,170	0
34	HTG	c	525	19/19	0.76	0.33	56,109,121,130	0
37	LHG	E	101	42/49	0.76	0.21	67,98,120,121	0
28	GOL	V	201	6/6	0.76	0.40	69,78,89,95	0
34	HTG	b	608	19/19	0.78	0.21	56,113,148,151	0
34	HTG	B	625	19/19	0.78	0.26	72,118,144,148	0
32	UNL	B	634	33/-	0.78	0.24	57,82,136,141	0
29	LMT	M	105	35/35	0.78	0.21	41,84,106,116	0
28	GOL	v	201	6/6	0.79	0.27	71,93,96,100	0
32	UNL	b	633	33/-	0.79	0.24	41,94,159,162	0
29	LMT	a	404	35/35	0.79	0.22	44,83,115,132	0
34	HTG	C	524	19/19	0.80	0.20	82,92,128,134	0
31	PL9	a	416	55/55	0.80	0.25	64,103,126,128	0
29	LMT	M	102	35/35	0.81	0.21	41,85,110,112	0
27	SQD	B	621	54/54	0.81	0.19	52,88,144,153	0
31	PL9	A	418	55/55	0.81	0.23	56,99,114,133	0
27	SQD	L	102	54/54	0.81	0.18	46,74,126,143	0
32	UNL	m	101	10/-	0.82	0.23	54,59,86,88	0
29	LMT	A	416	35/35	0.82	0.19	40,84,106,133	0
35	LMG	C	520	51/55	0.82	0.20	50,77,108,118	0
27	SQD	A	415	54/54	0.82	0.18	48,74,114,132	0
29	LMT	B	635	25/35	0.83	0.24	42,86,138,141	0

Continued on next page...

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
33	CA	b	609	1/1	0.83	0.15	137,137,137,137	0
32	UNL	M	103	10/-	0.83	0.20	48,61,72,79	0
32	UNL	i	101	40/-	0.83	0.22	49,77,144,146	0
27	SQD	a	405	54/54	0.83	0.17	43,78,123,126	0
35	LMG	z	101	39/55	0.84	0.22	63,116,139,159	0
32	UNL	d	411	36/-	0.84	0.18	54,77,132,138	0
35	LMG	C	521	51/55	0.84	0.20	55,109,128,136	0
32	UNL	I	101	40/-	0.84	0.22	41,84,148,161	0
35	LMG	a	415	51/55	0.84	0.20	57,82,99,102	0
35	LMG	c	523	51/55	0.85	0.22	49,107,130,130	0
28	GOL	b	606	6/6	0.85	0.17	63,79,87,89	0
34	HTG	b	632	19/19	0.85	0.23	66,115,147,147	0
28	GOL	T	102	6/6	0.86	0.27	106,113,118,120	0
32	UNL	X	101	18/-	0.86	0.16	56,75,101,102	0
36	DGD	C	518	62/66	0.86	0.15	37,55,95,113	0
34	HTG	B	624	19/19	0.86	0.18	48,66,92,98	0
28	GOL	A	414	6/6	0.86	0.20	53,77,82,88	0
29	LMT	T	104	25/35	0.86	0.22	34,84,134,140	0
35	LMG	b	629	51/55	0.86	0.17	41,51,73,89	0
35	LMG	C	501	51/55	0.87	0.17	49,84,108,116	0
28	GOL	O	301	6/6	0.87	0.11	68,79,81,88	0
35	LMG	c	522	51/55	0.87	0.17	51,86,112,114	0
32	UNL	D	411	40/-	0.87	0.16	56,80,133,139	0
34	HTG	b	631	19/19	0.87	0.23	58,68,84,96	0
28	GOL	V	204	6/6	0.88	0.20	68,81,85,94	0
28	GOL	v	202	6/6	0.88	0.22	74,80,100,114	0
36	DGD	h	102	62/66	0.88	0.16	34,50,68,82	0
27	SQD	F	103	43/54	0.88	0.20	75,102,123,134	0
34	HTG	c	524	19/19	0.88	0.12	89,95,108,128	0
32	UNL	d	413	18/-	0.89	0.18	52,71,109,110	0
28	GOL	B	630	6/6	0.89	0.29	51,67,75,83	0
28	GOL	B	636	6/6	0.89	0.13	48,57,65,65	0
24	CLA	c	517	65/65	0.89	0.17	57,80,96,104	0
33	CA	B	601	1/1	0.89	0.10	143,143,143,143	0
33	CA	F	104	1/1	0.89	0.07	84,84,84,84	0
28	GOL	c	502	6/6	0.89	0.41	75,86,99,108	0
33	CA	f	104	1/1	0.89	0.07	104,104,104,104	0
28	GOL	t	102	6/6	0.89	0.44	54,82,93,98	0
28	GOL	T	101	6/6	0.89	0.41	51,78,96,104	0
24	CLA	C	514	65/65	0.89	0.17	51,65,99,109	0
35	LMG	M	101	51/55	0.89	0.17	35,52,78,95	0
36	DGD	H	102	62/66	0.90	0.16	32,49,69,79	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
36	DGD	c	520	62/66	0.90	0.15	38,55,107,128	0
27	SQD	A	411	54/54	0.90	0.17	45,78,99,103	0
28	GOL	A	412	6/6	0.90	0.14	43,50,53,61	0
34	HTG	B	632	19/19	0.90	0.14	48,69,99,103	0
22	CL	v	204	1/1	0.90	0.08	94,94,94,94	0
34	HTG	V	206	19/19	0.91	0.23	61,91,114,204	0
34	HTG	b	607	19/19	0.91	0.15	46,75,81,82	0
36	DGD	c	521	62/66	0.91	0.15	38,52,94,99	0
24	CLA	c	511	65/65	0.91	0.14	42,55,70,76	0
28	GOL	C	525	6/6	0.91	0.25	54,60,75,81	0
37	LHG	D	407	49/49	0.91	0.19	31,49,67,73	0
36	DGD	C	519	62/66	0.91	0.14	36,48,73,86	0
27	SQD	a	414	54/54	0.91	0.15	49,79,106,110	0
35	LMG	J	101	51/55	0.92	0.17	38,58,111,127	0
24	CLA	b	618	65/65	0.92	0.14	36,48,60,71	0
24	CLA	C	507	65/65	0.92	0.14	46,64,107,116	0
34	HTG	C	523	19/19	0.92	0.15	72,86,102,106	0
24	CLA	C	505	65/65	0.92	0.15	34,48,82,94	0
24	CLA	b	616	65/65	0.92	0.14	24,36,48,52	0
34	HTG	B	623	19/19	0.92	0.15	40,54,75,76	0
35	LMG	j	101	51/55	0.92	0.16	46,58,105,117	0
28	GOL	a	402	6/6	0.92	0.24	73,83,89,92	0
28	GOL	A	413	6/6	0.92	0.27	51,54,63,67	0
32	UNL	d	410	17/-	0.93	0.18	48,69,97,101	0
28	GOL	B	626	6/6	0.93	0.17	44,52,59,85	0
28	GOL	B	628	6/6	0.93	0.14	52,71,84,87	0
34	HTG	b	601	19/19	0.93	0.12	40,50,74,83	0
24	CLA	b	611	65/65	0.93	0.15	33,45,55,59	0
24	CLA	b	615	65/65	0.93	0.14	31,45,89,103	0
24	CLA	C	502	65/65	0.93	0.13	38,51,77,91	0
24	CLA	C	508	65/65	0.93	0.14	42,54,68,76	0
24	CLA	b	625	65/65	0.93	0.14	35,54,102,112	0
24	CLA	c	507	65/65	0.93	0.14	41,53,65,83	0
36	DGD	c	519	62/66	0.93	0.13	38,48,98,105	0
24	CLA	c	510	65/65	0.93	0.13	44,63,92,115	0
24	CLA	C	512	65/65	0.93	0.13	41,57,68,83	0
24	CLA	c	512	65/65	0.93	0.13	36,49,116,129	0
24	CLA	B	602	65/65	0.93	0.15	43,60,100,128	0
26	BCR	b	627	40/40	0.93	0.15	31,41,60,69	0
37	LHG	D	409	49/49	0.93	0.18	36,54,115,128	0
28	GOL	f	101	6/6	0.93	0.21	76,84,86,91	0
37	LHG	d	408	49/49	0.93	0.17	32,41,57,86	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
28	GOL	o	301	6/6	0.93	0.18	71,80,88,106	0
37	LHG	l	101	49/49	0.93	0.16	37,46,58,66	0
24	CLA	B	610	65/65	0.94	0.14	34,47,56,66	0
28	GOL	b	605	6/6	0.94	0.23	67,80,108,110	0
24	CLA	B	614	65/65	0.94	0.14	26,37,63,84	0
24	CLA	b	620	65/65	0.94	0.13	28,40,52,59	0
24	CLA	b	623	65/65	0.94	0.14	27,41,88,115	0
24	CLA	C	509	65/65	0.94	0.13	36,50,110,126	0
32	UNL	D	410	17/-	0.94	0.15	37,68,83,91	0
24	CLA	c	505	65/65	0.94	0.12	42,55,66,70	0
36	DGD	C	517	62/66	0.94	0.14	32,47,94,98	0
24	CLA	B	615	65/65	0.94	0.14	27,41,91,103	0
24	CLA	c	508	65/65	0.94	0.13	38,55,73,80	0
24	CLA	c	509	65/65	0.94	0.13	36,47,70,78	0
24	CLA	C	513	65/65	0.94	0.11	46,63,85,92	0
24	CLA	B	603	65/65	0.94	0.13	33,44,51,54	0
24	CLA	D	403	65/65	0.94	0.14	38,52,104,119	0
28	GOL	B	629	6/6	0.94	0.14	48,57,63,72	0
24	CLA	c	514	65/65	0.94	0.12	41,53,63,77	0
24	CLA	c	515	65/65	0.94	0.13	43,54,75,87	0
24	CLA	c	516	65/65	0.94	0.13	47,65,83,91	0
24	CLA	b	610	65/65	0.94	0.15	43,69,104,133	0
24	CLA	C	504	65/65	0.94	0.14	39,50,60,64	0
37	LHG	L	101	49/49	0.94	0.16	31,44,56,61	0
26	BCR	c	527	40/40	0.94	0.12	57,74,86,89	0
37	LHG	d	409	49/49	0.94	0.18	34,55,108,115	0
26	BCR	y	101	40/40	0.94	0.14	44,61,74,84	0
24	CLA	B	607	65/65	0.94	0.14	31,43,93,105	0
24	CLA	B	616	65/65	0.95	0.13	34,47,65,76	0
28	GOL	F	101	6/6	0.95	0.21	70,74,77,77	0
24	CLA	C	510	65/65	0.95	0.14	41,54,76,80	0
26	BCR	d	405	40/40	0.95	0.15	40,55,77,83	0
26	BCR	k	101	40/40	0.95	0.15	45,62,73,75	0
24	CLA	b	617	65/65	0.95	0.13	34,45,55,58	0
28	GOL	V	202	6/6	0.95	0.14	40,47,51,59	0
28	GOL	V	203	6/6	0.95	0.14	59,61,61,68	0
24	CLA	a	409	65/65	0.95	0.14	28,35,51,55	0
31	PL9	D	405	55/55	0.95	0.16	26,38,51,69	0
24	CLA	B	608	65/65	0.95	0.14	24,36,50,55	0
31	PL9	d	406	55/55	0.95	0.15	26,38,48,58	0
24	CLA	b	621	65/65	0.95	0.13	29,42,50,56	0
24	CLA	c	513	65/65	0.95	0.13	42,54,74,88	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
24	CLA	A	405	65/65	0.95	0.15	25,33,49,67	0
24	CLA	b	624	65/65	0.95	0.12	34,46,60,73	0
24	CLA	b	612	65/65	0.95	0.13	34,44,57,62	0
24	CLA	b	614	65/65	0.95	0.14	29,39,49,58	0
24	CLA	d	402	65/65	0.95	0.13	27,35,43,55	0
24	CLA	d	404	65/65	0.95	0.13	37,52,101,114	0
37	LHG	D	408	49/49	0.95	0.16	27,42,64,86	0
28	GOL	v	203	6/6	0.95	0.19	47,53,61,71	0
26	BCR	B	620	40/40	0.95	0.14	32,46,59,65	0
26	BCR	C	515	40/40	0.95	0.13	49,65,78,83	0
37	LHG	d	407	49/49	0.95	0.17	37,51,64,71	0
26	BCR	D	404	40/40	0.95	0.14	38,51,93,99	0
26	BCR	H	101	40/40	0.95	0.13	36,51,67,73	0
26	BCR	K	101	40/40	0.95	0.14	43,55,63,69	0
26	BCR	T	103	40/40	0.95	0.12	28,47,64,68	0
23	BCT	A	404	4/4	0.96	0.13	52,54,73,86	0
24	CLA	B	611	65/65	0.96	0.14	36,47,54,68	0
24	CLA	B	612	65/65	0.96	0.15	26,37,51,59	0
24	CLA	b	619	65/65	0.96	0.13	36,46,56,60	0
24	CLA	C	511	65/65	0.96	0.12	39,49,62,82	0
24	CLA	d	403	65/65	0.96	0.14	27,38,59,62	0
24	CLA	B	613	65/65	0.96	0.12	28,38,48,55	0
25	PHO	A	408	64/64	0.96	0.14	29,42,52,56	0
25	PHO	D	401	64/64	0.96	0.13	25,35,41,43	0
25	PHO	d	401	64/64	0.96	0.14	29,42,50,56	0
28	GOL	B	627	6/6	0.96	0.19	47,62,83,99	0
26	BCR	B	619	40/40	0.96	0.15	29,41,56,60	0
24	CLA	b	622	65/65	0.96	0.14	26,39,55,61	0
22	CL	U	201	1/1	0.96	0.17	92,92,92,92	0
33	CA	o	302	1/1	0.96	0.07	91,91,91,91	0
24	CLA	B	604	65/65	0.96	0.13	34,44,53,61	0
24	CLA	B	605	65/65	0.96	0.13	26,37,70,75	0
24	CLA	B	617	65/65	0.96	0.15	36,52,114,120	0
24	CLA	c	506	65/65	0.96	0.13	39,54,67,74	0
26	BCR	Y	101	40/40	0.96	0.12	44,60,69,71	0
24	CLA	a	412	65/65	0.96	0.14	32,48,114,123	0
26	BCR	c	518	40/40	0.96	0.14	40,55,67,69	0
24	CLA	B	606	65/65	0.96	0.13	29,40,53,64	0
24	CLA	A	406	65/65	0.96	0.14	24,34,44,58	0
26	BCR	h	101	40/40	0.96	0.11	42,56,70,74	0
28	GOL	a	401	6/6	0.96	0.26	51,66,70,85	0
24	CLA	A	409	65/65	0.96	0.12	33,47,119,128	0

*Continued on next page...*

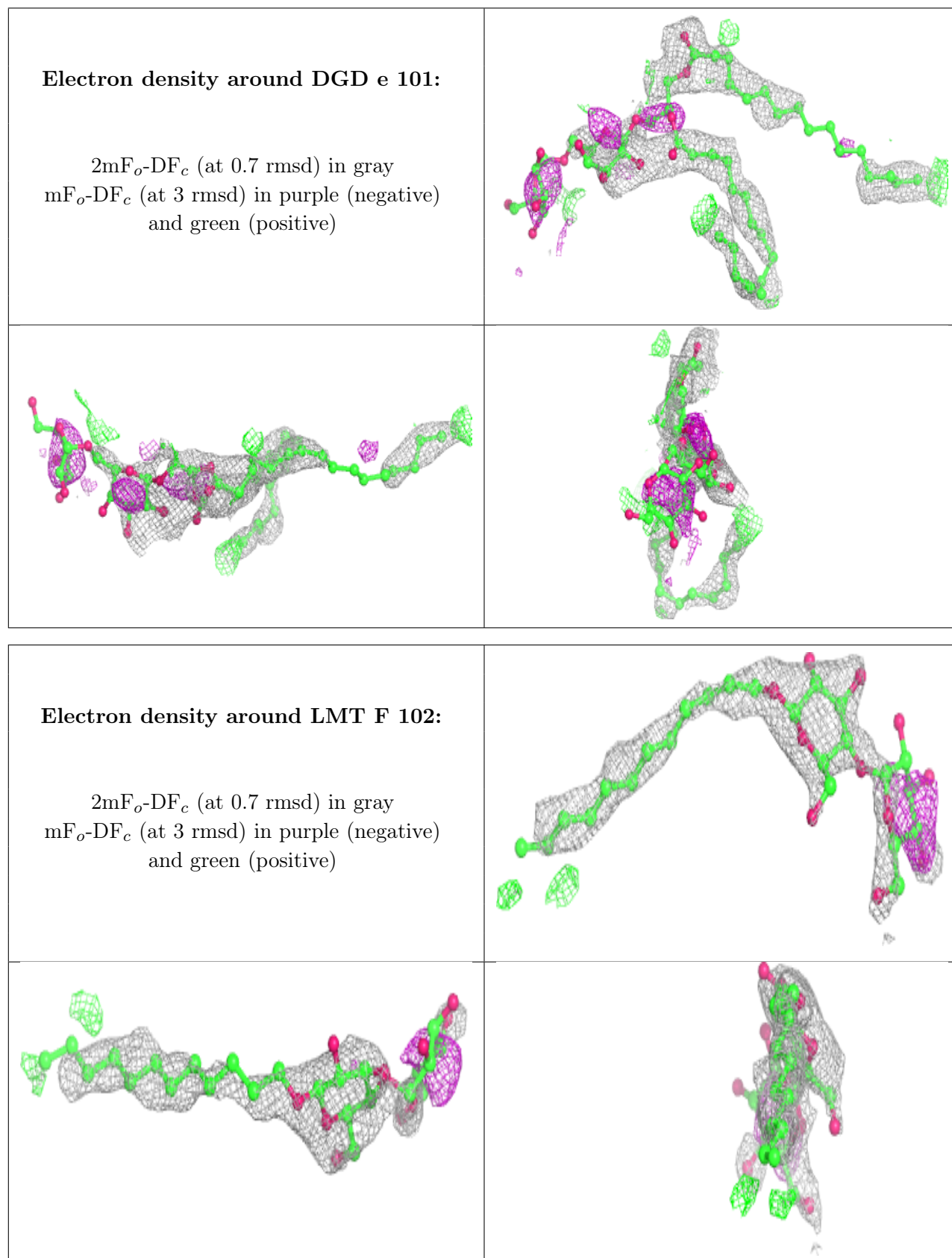
Continued from previous page...

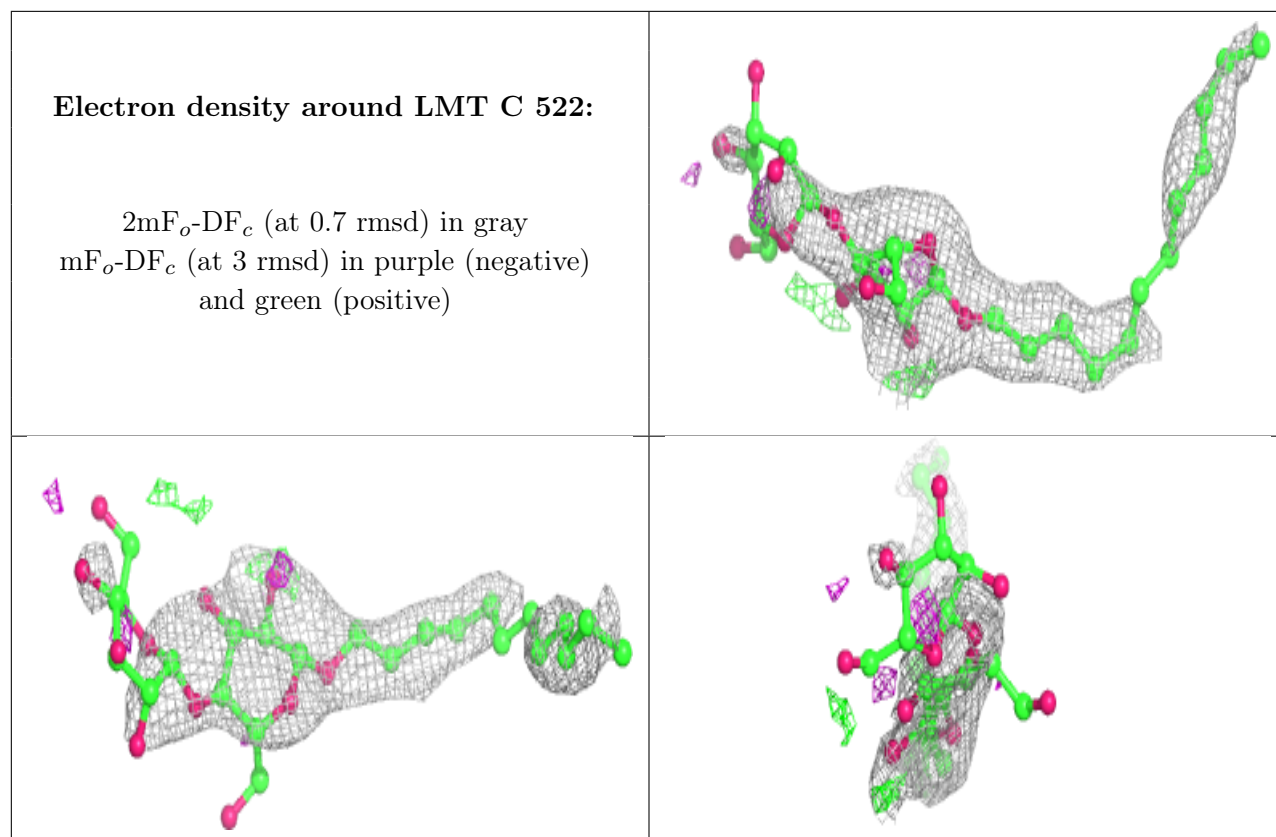
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
28	GOL	b	603	6/6	0.96	0.17	47,56,83,87	0
26	BCR	t	101	40/40	0.96	0.14	31,46,62,64	0
24	CLA	b	613	65/65	0.96	0.13	26,38,73,79	0
24	CLA	C	506	65/65	0.96	0.13	36,48,70,73	0
24	CLA	B	609	65/65	0.96	0.15	32,43,56,58	0
38	HEM	e	103	43/43	0.96	0.17	55,78,123,153	0
28	GOL	b	604	6/6	0.97	0.21	60,73,79,90	0
25	PHO	a	411	64/64	0.97	0.14	28,36,44,47	0
24	CLA	a	410	65/65	0.97	0.14	31,41,105,116	0
26	BCR	A	410	40/40	0.97	0.14	30,39,45,50	0
26	BCR	B	618	40/40	0.97	0.15	27,40,47,52	0
24	CLA	D	402	65/65	0.97	0.14	24,35,54,58	0
33	CA	O	302	1/1	0.97	0.04	84,84,84,84	0
26	BCR	a	413	40/40	0.97	0.12	30,41,52,56	0
26	BCR	b	626	40/40	0.97	0.15	30,42,49,49	0
24	CLA	C	503	65/65	0.97	0.13	37,46,61,71	0
26	BCR	b	628	40/40	0.97	0.14	39,50,66,77	0
24	CLA	A	407	65/65	0.97	0.13	28,40,98,118	0
28	GOL	B	631	6/6	0.97	0.29	40,73,74,83	0
28	GOL	b	602	6/6	0.97	0.21	56,60,69,93	0
38	HEM	E	102	43/43	0.97	0.14	44,64,81,93	0
26	BCR	C	516	40/40	0.97	0.15	39,54,64,65	0
33	CA	c	504	1/1	0.98	0.05	74,74,74,74	0
38	HEM	V	205	43/43	0.98	0.11	35,41,50,53	0
23	BCT	a	418	4/4	0.98	0.17	60,63,70,83	0
38	HEM	v	205	43/43	0.98	0.12	42,52,61,62	0
39	MG	j	103	1/1	0.98	0.18	57,57,57,57	0
22	CL	A	403	1/1	0.99	0.11	35,35,35,35	0
28	GOL	C	526	6/6	0.99	0.12	33,42,47,49	0
21	FE2	A	401	1/1	0.99	0.16	51,51,51,51	0
22	CL	a	408	1/1	0.99	0.11	41,41,41,41	0
33	CA	C	527	1/1	0.99	0.07	67,67,67,67	0
21	FE2	a	406	1/1	0.99	0.18	49,49,49,49	0
28	GOL	c	501	6/6	0.99	0.13	43,45,47,48	0
30	OEX	A	417	10/10	0.99	0.12	33,36,47,71	0
33	CA	c	503	1/1	0.99	0.07	66,66,66,66	0
30	OEX	a	417	10/10	0.99	0.12	32,40,64,67	0
39	MG	J	103	1/1	0.99	0.08	53,53,53,53	0
22	CL	A	402	1/1	0.99	0.13	32,32,32,32	0
22	CL	a	407	1/1	1.00	0.09	36,36,36,36	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers



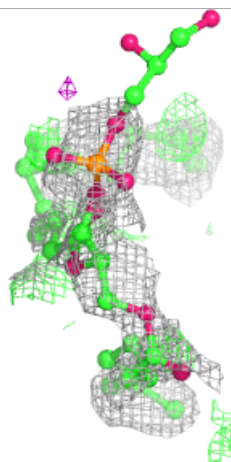
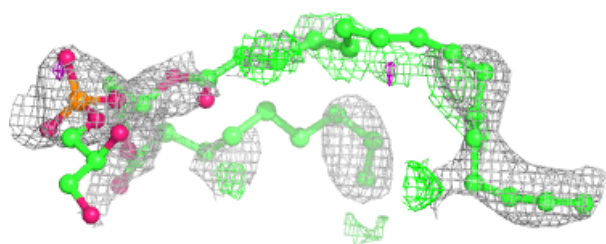
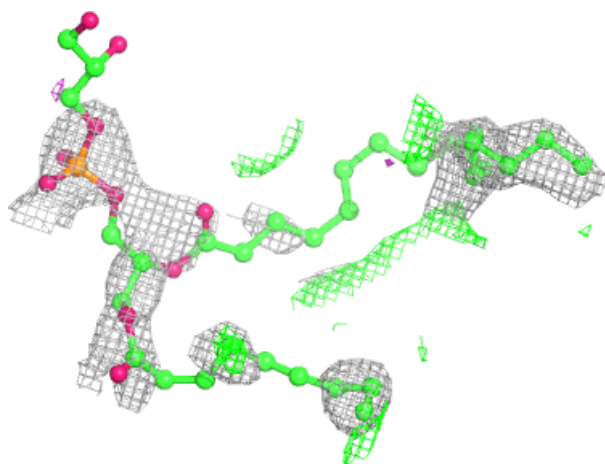
as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.





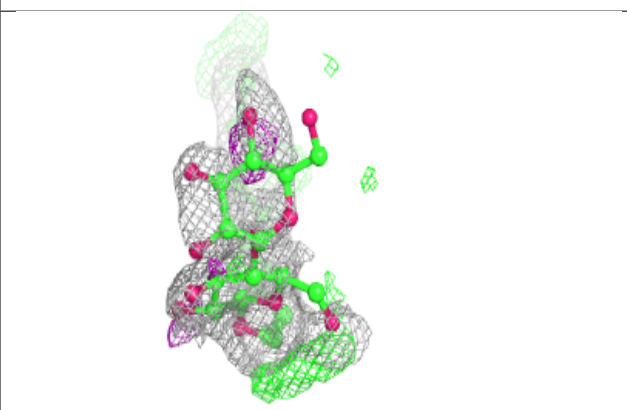
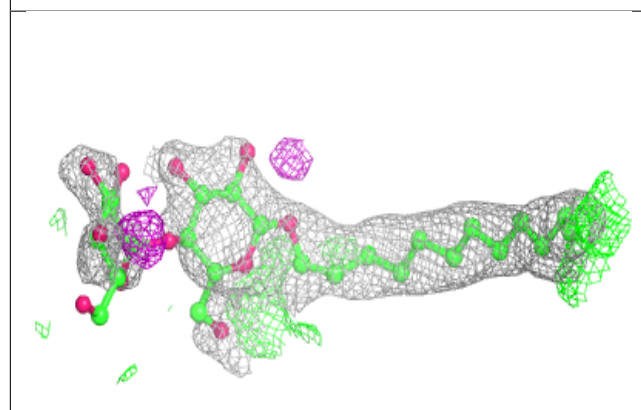
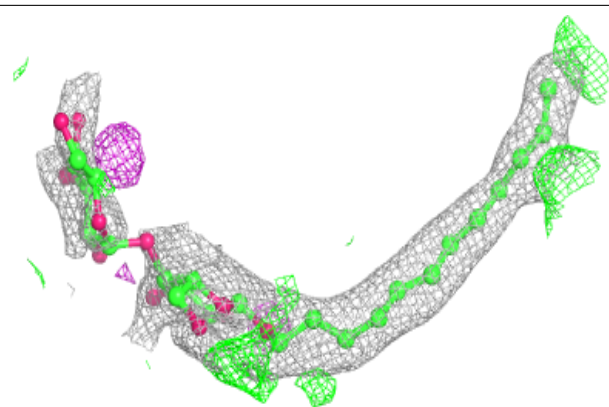
**Electron density around LHG e 102:**

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

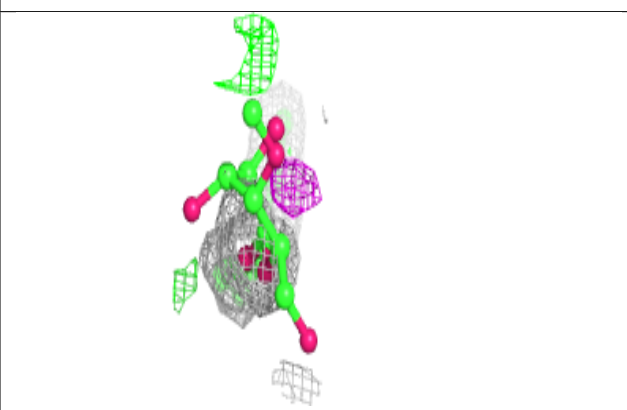
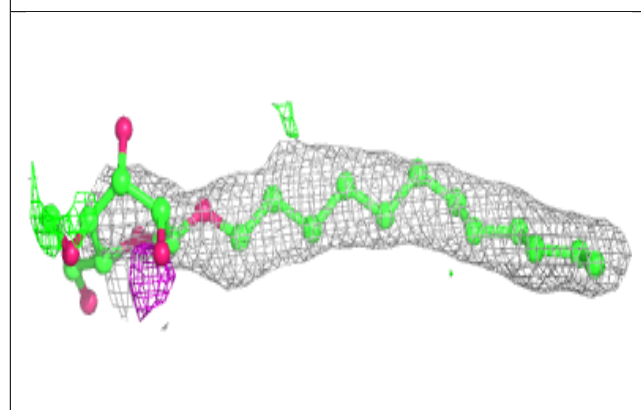
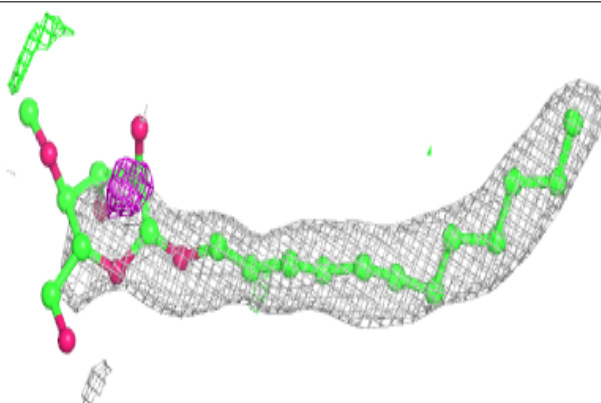


**Electron density around LMT M 104:**

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

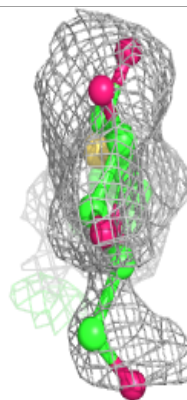
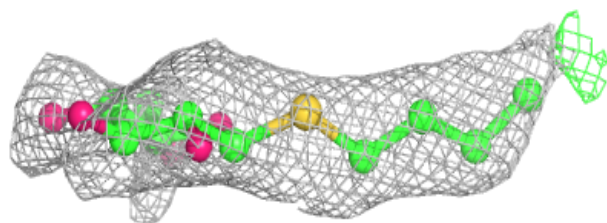
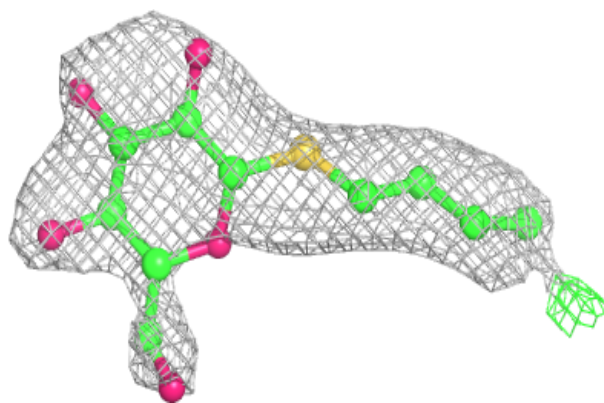
**Electron density around LMT b 630:**

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

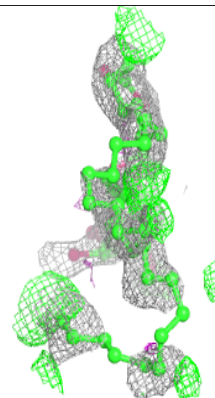
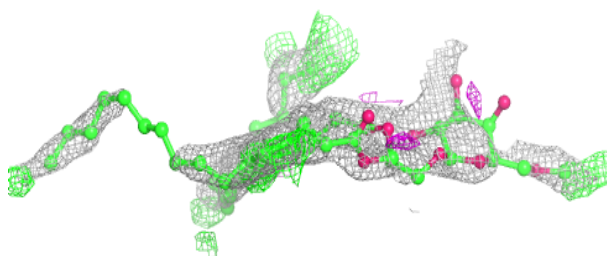
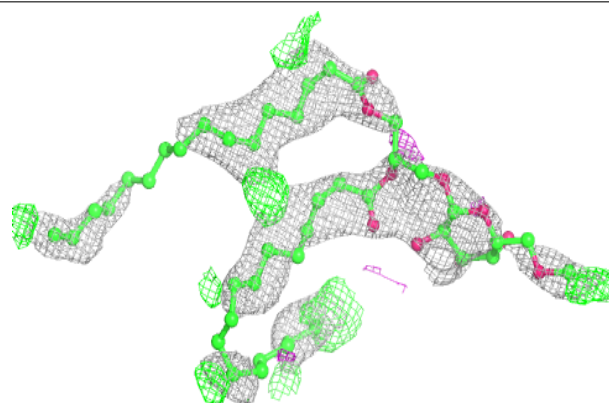


**Electron density around HTG d 412:**

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

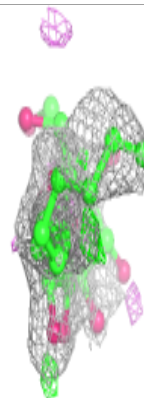
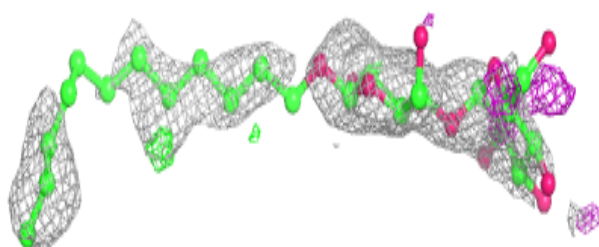
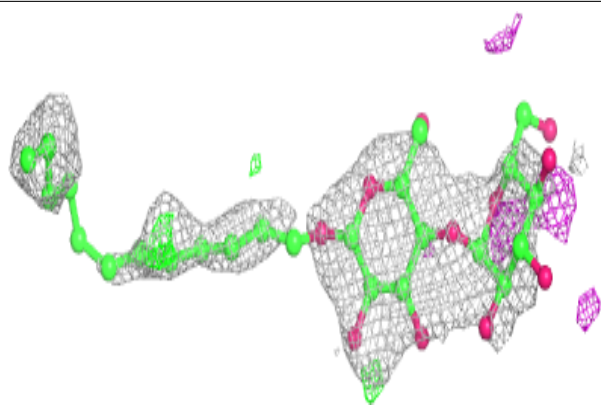
**Electron density around DGD D 406:**

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

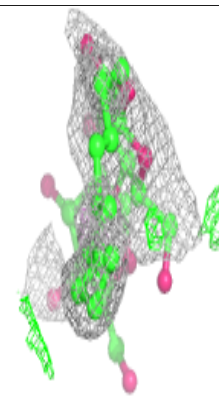
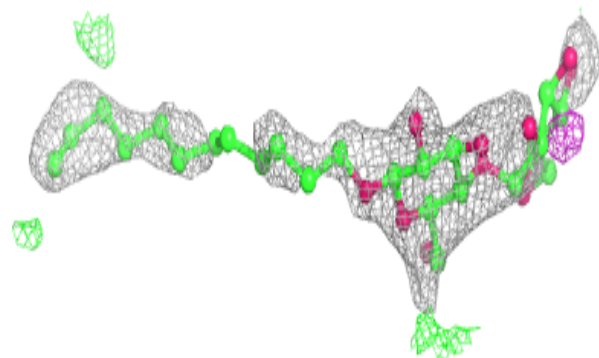
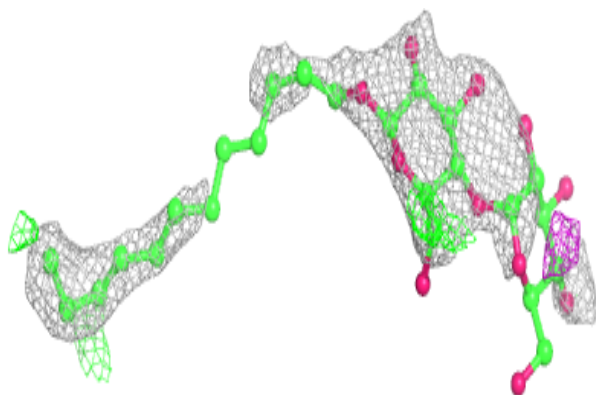


**Electron density around LMT a 419:**

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

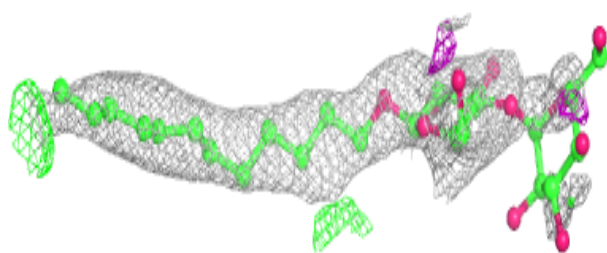
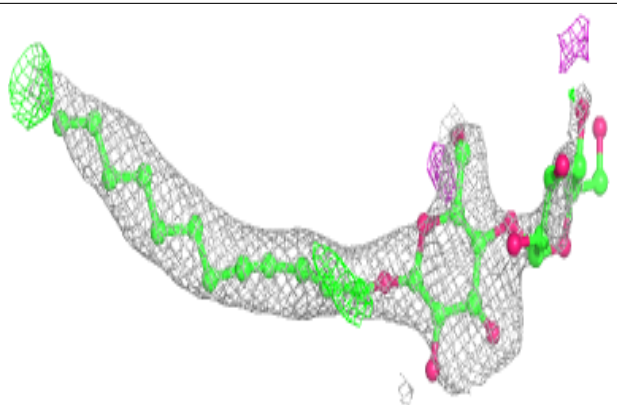
**Electron density around LMT f 103:**

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

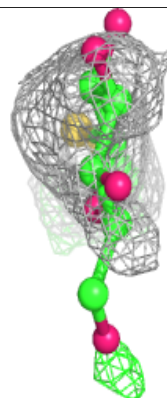
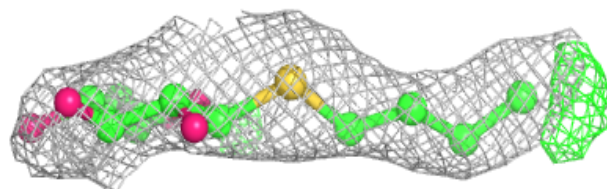
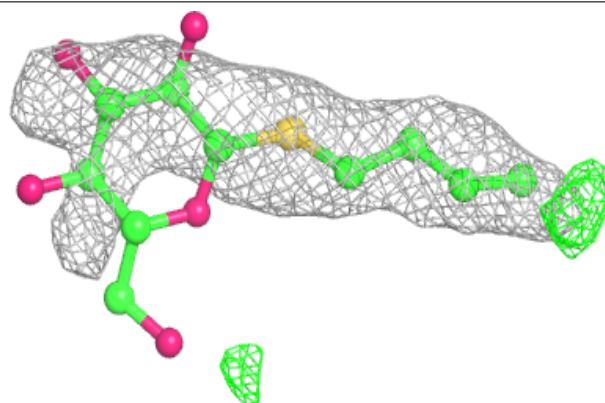


**Electron density around LMT B 622:**

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

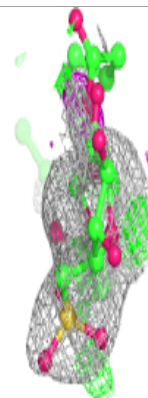
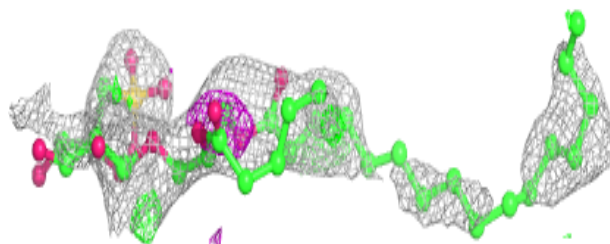
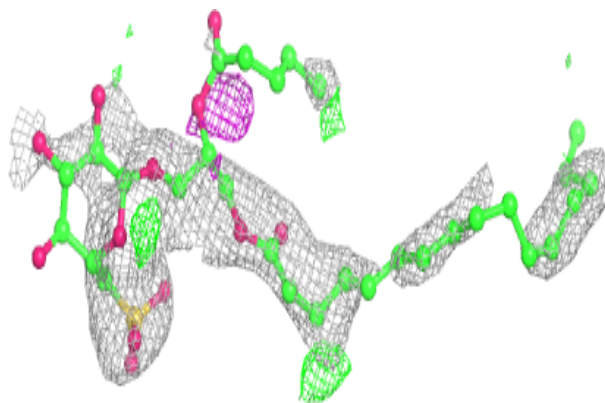
**Electron density around HTG D 412:**

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

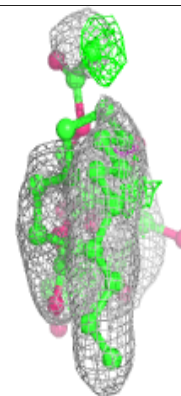
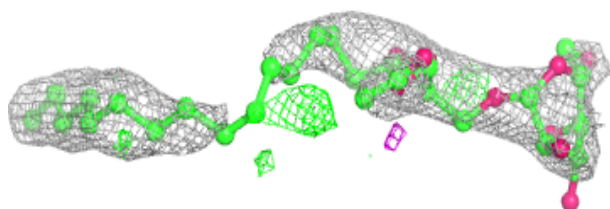
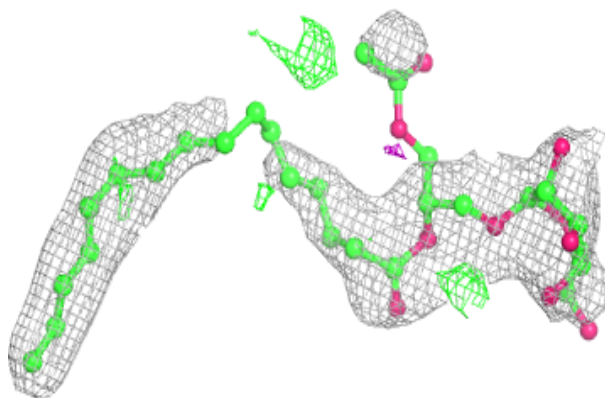


**Electron density around SQD f 102:**

$2mF_o-DF_c$  (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:**

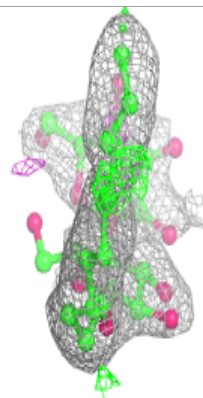
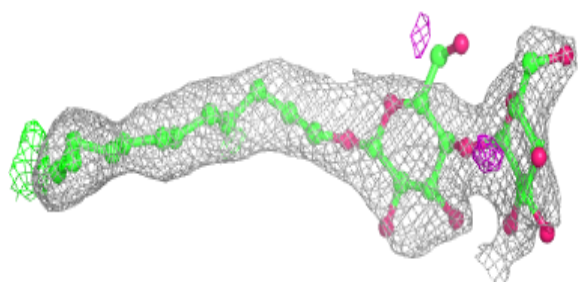
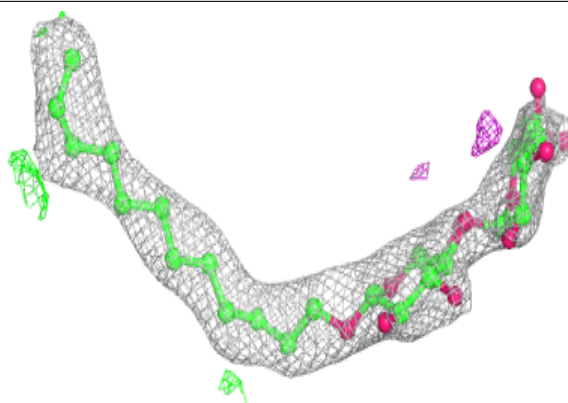
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



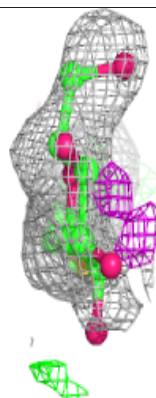
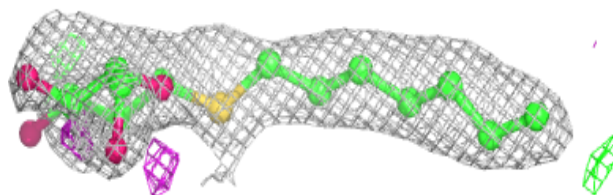
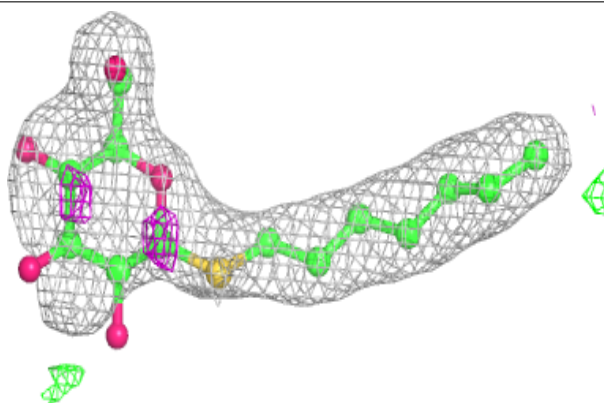


**Electron density around LMT m 102:**

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

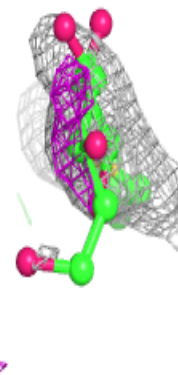
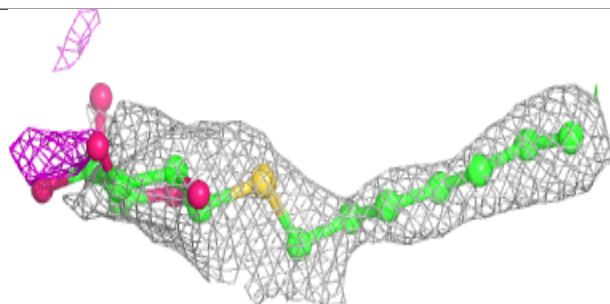
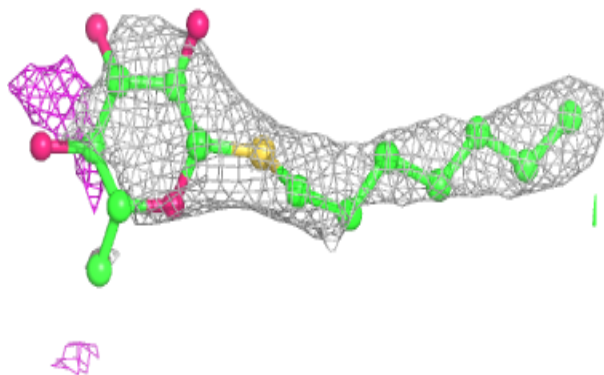
**Electron density around HTG B 633:**

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



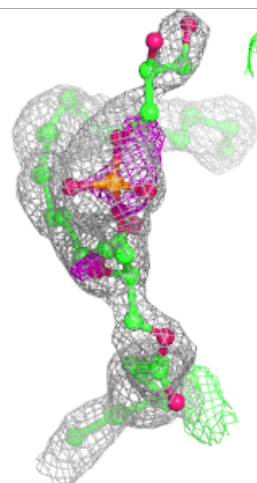
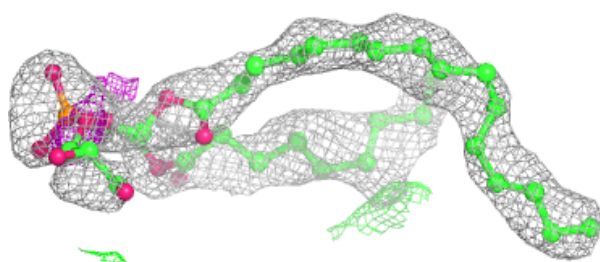
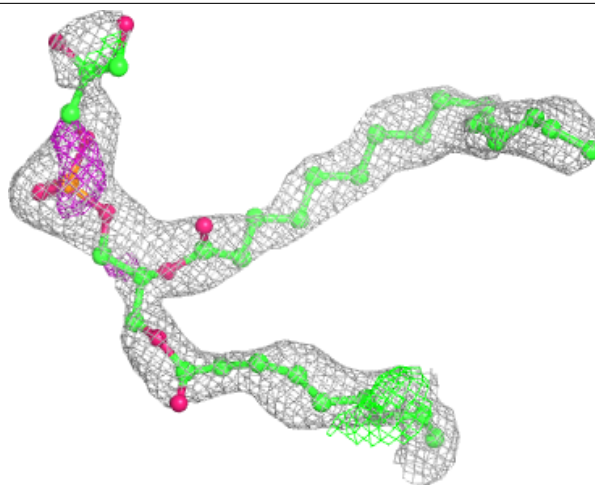
**Electron density around HTG c 525:**

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



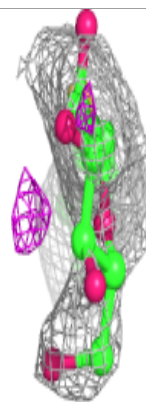
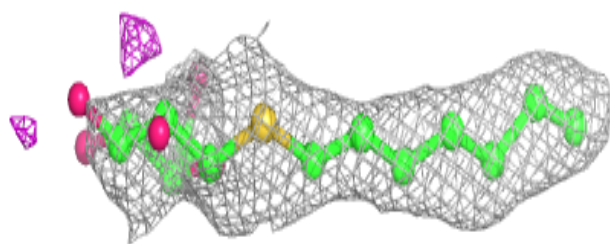
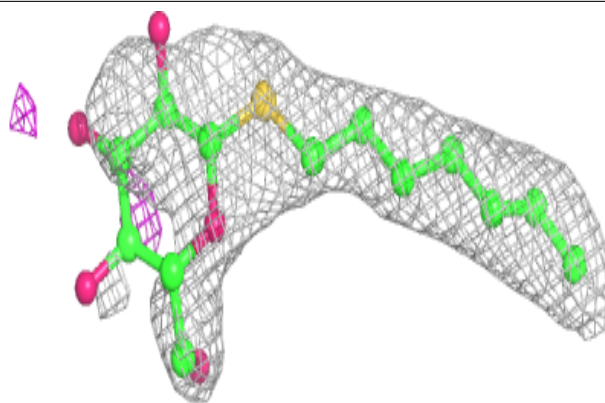
**Electron density around LHG E 101:**

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

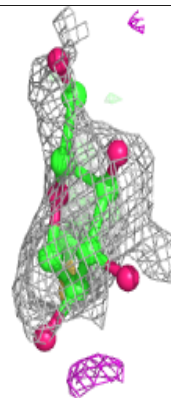
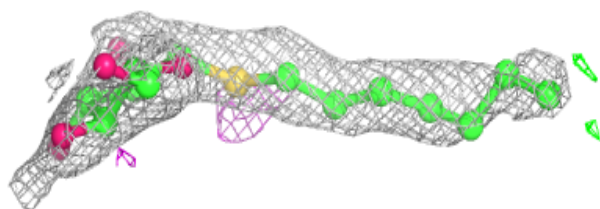
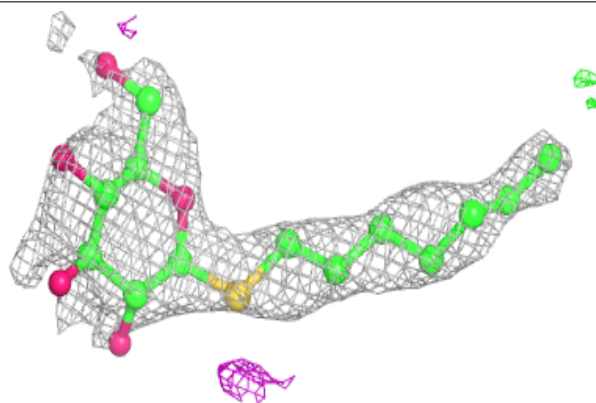


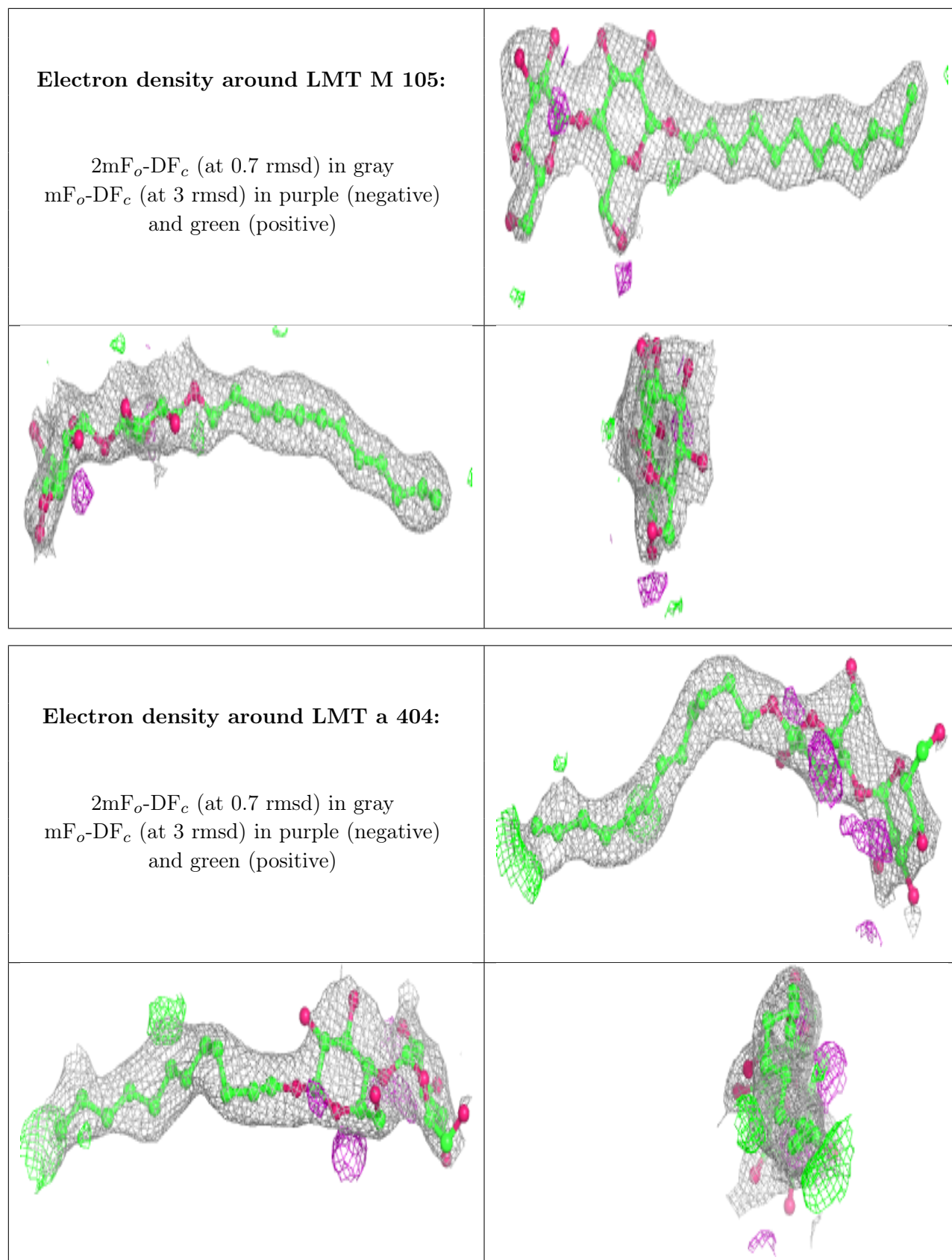
**Electron density around HTG b 608:**

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

**Electron density around HTG B 625:**

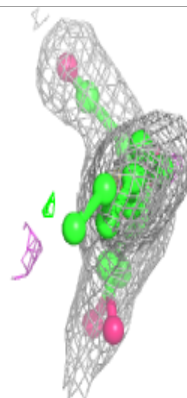
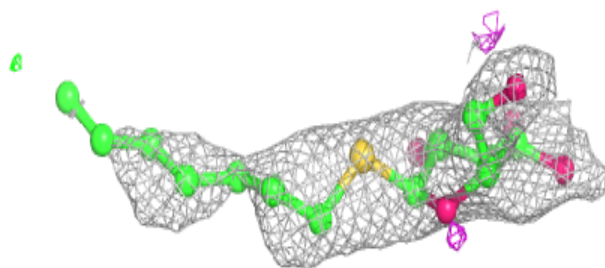
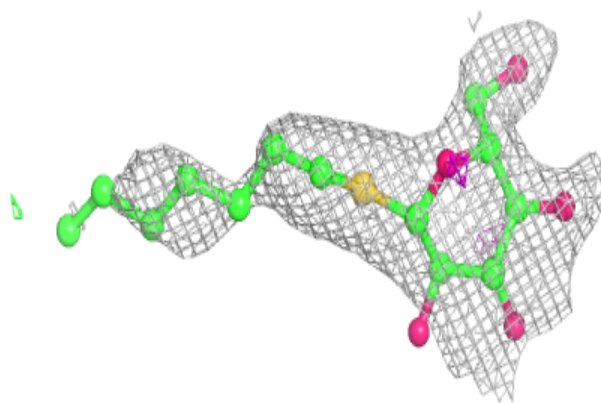
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



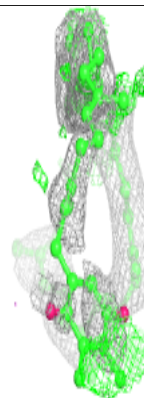
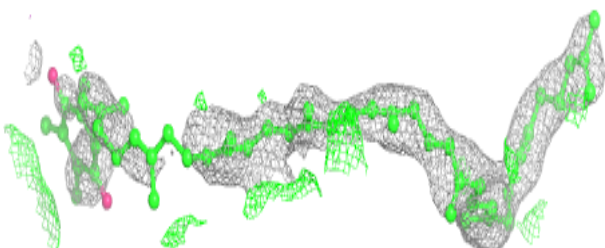
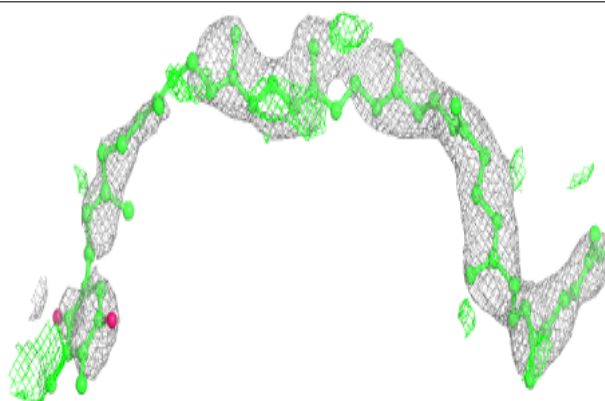


**Electron density around HTG C 524:**

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

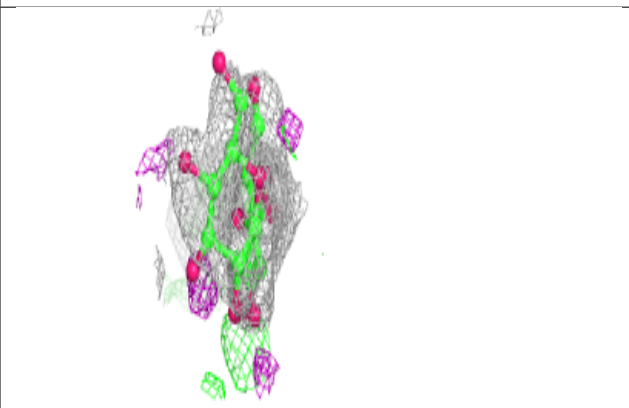
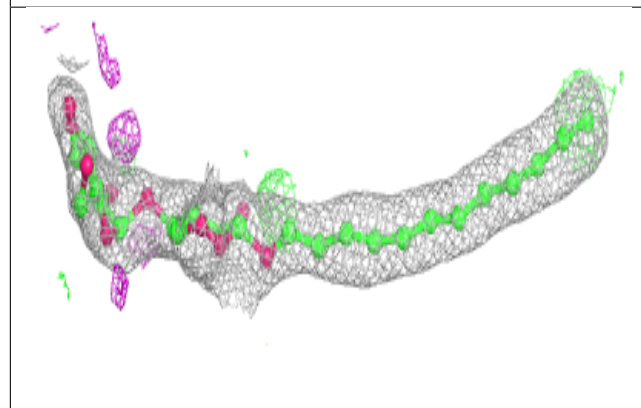
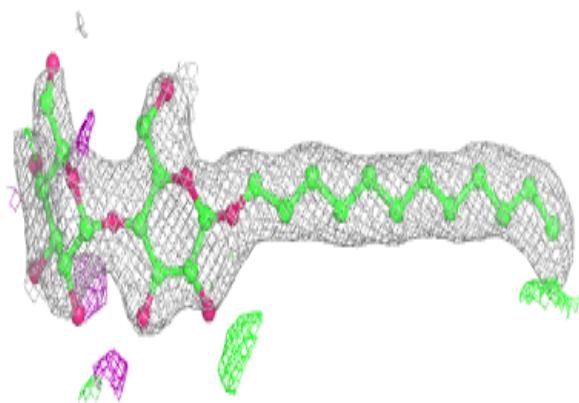
**Electron density around PL9 a 416:**

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

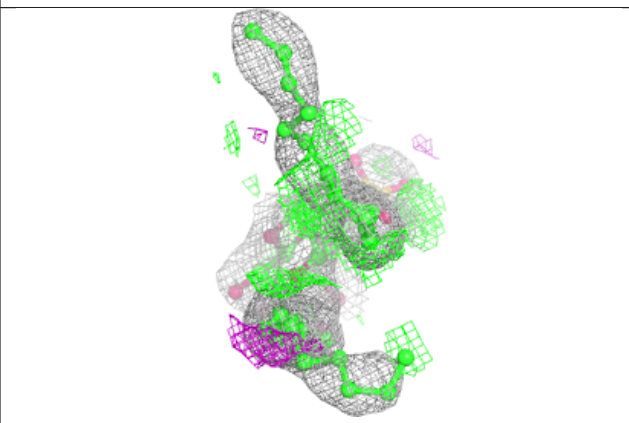
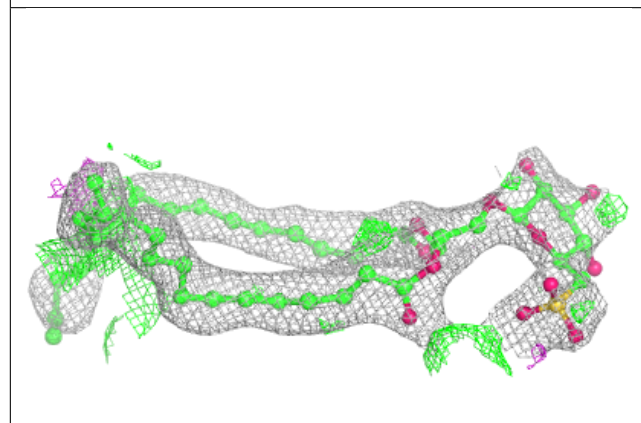
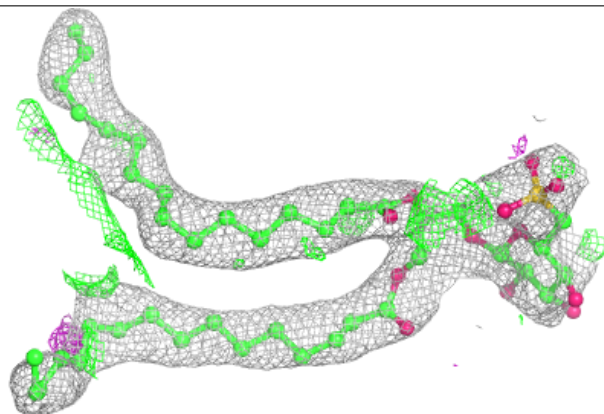


**Electron density around LMT M 102:**

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

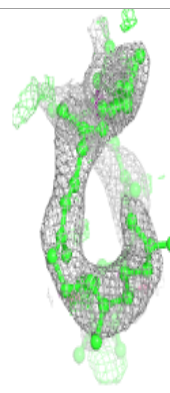
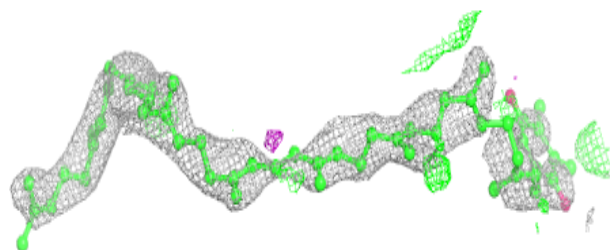
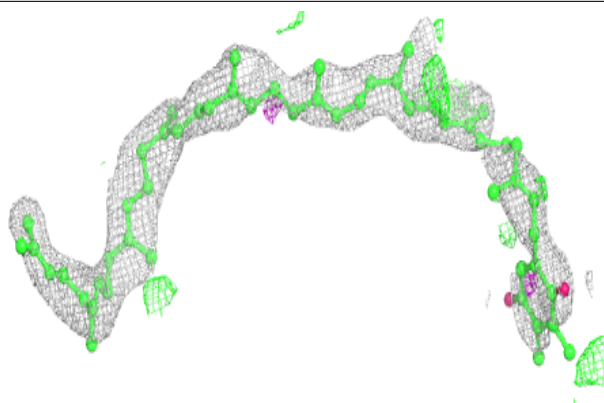
**Electron density around SQD B 621:**

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

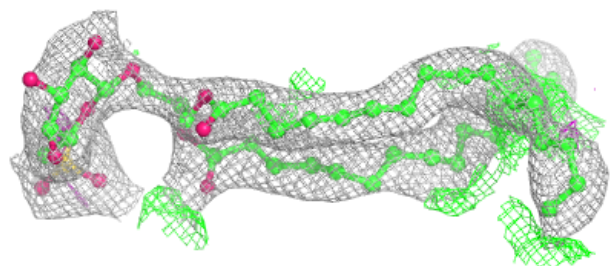
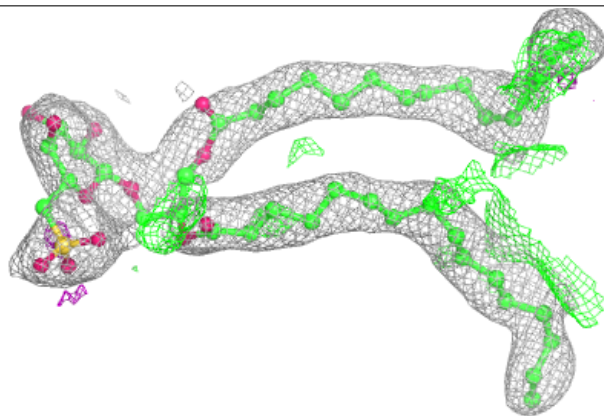


**Electron density around PL9 A 418:**

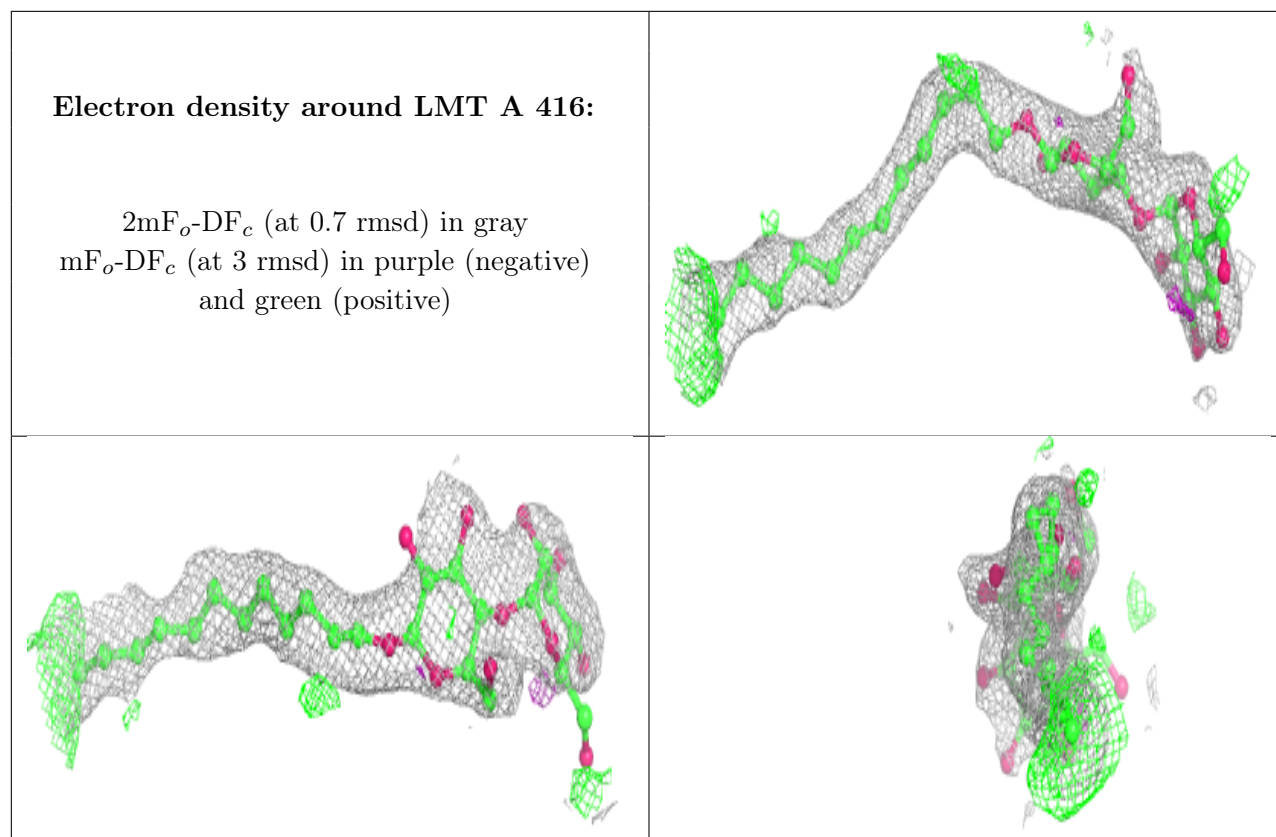
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around SQD L 102:**

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

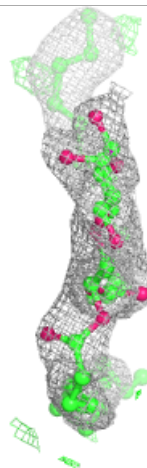
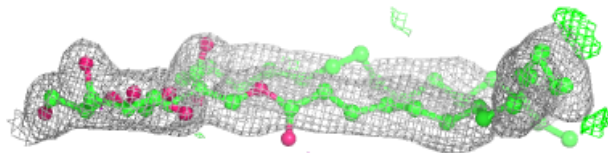
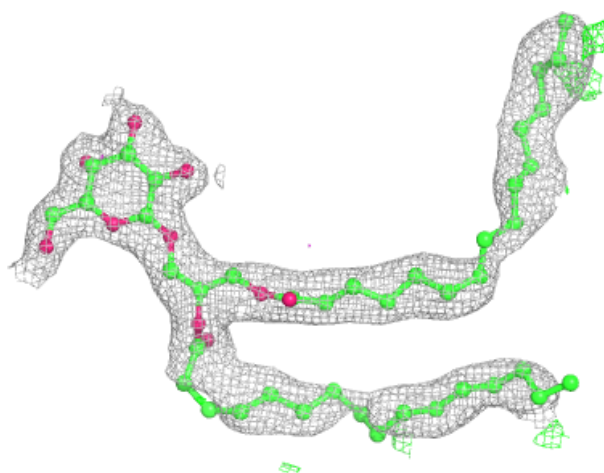






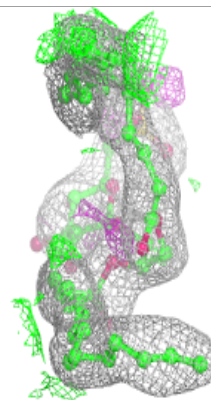
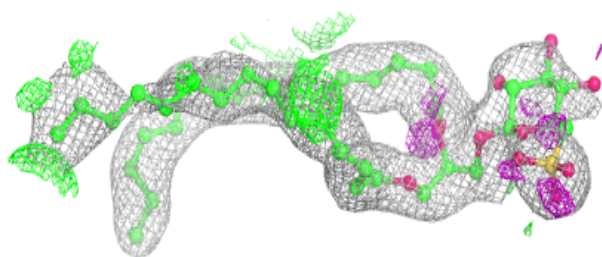
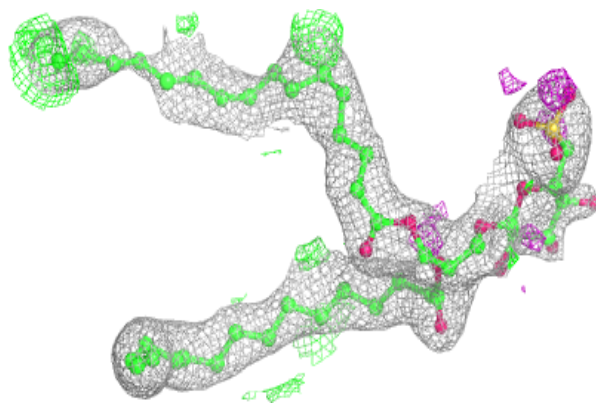
**Electron density around LMG C 520:**

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

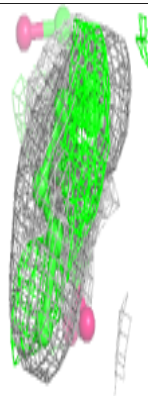
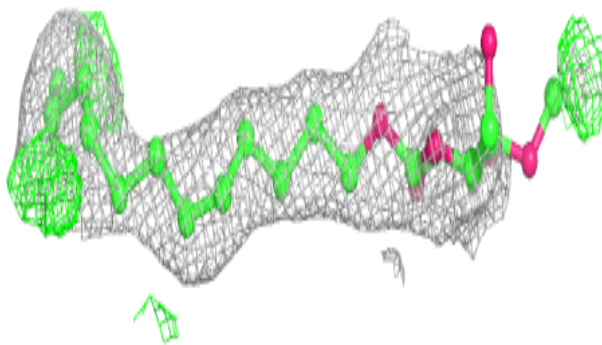
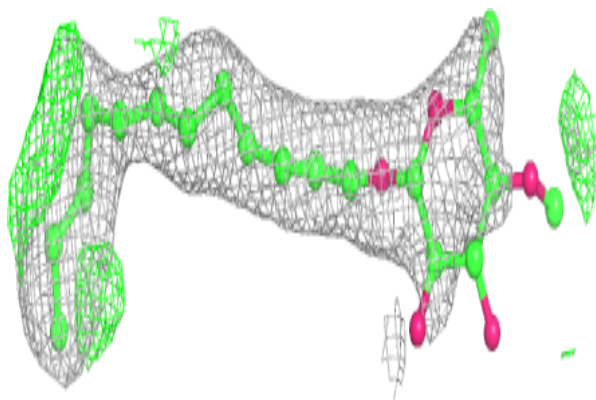


**Electron density around SQD A 415:**

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

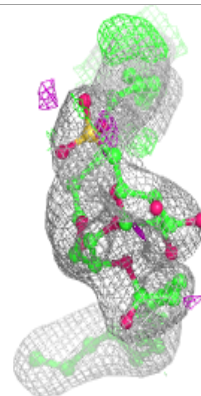
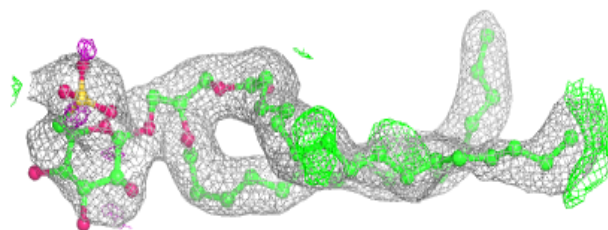
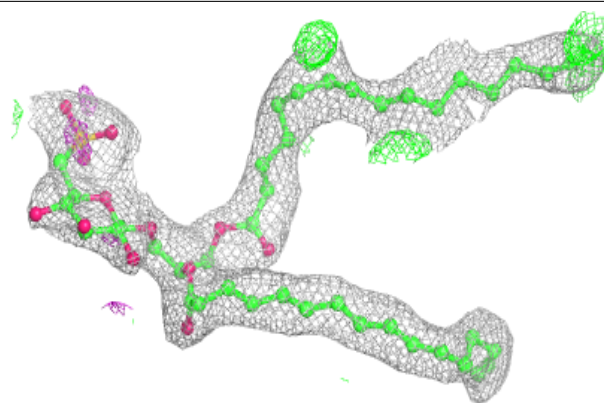
**Electron density around LMT B 635:**

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

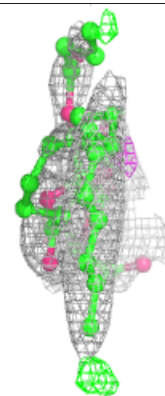
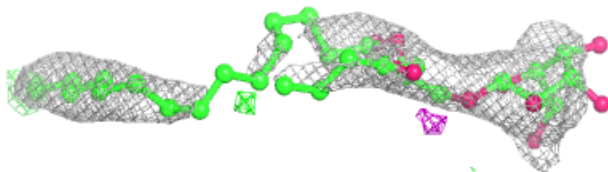
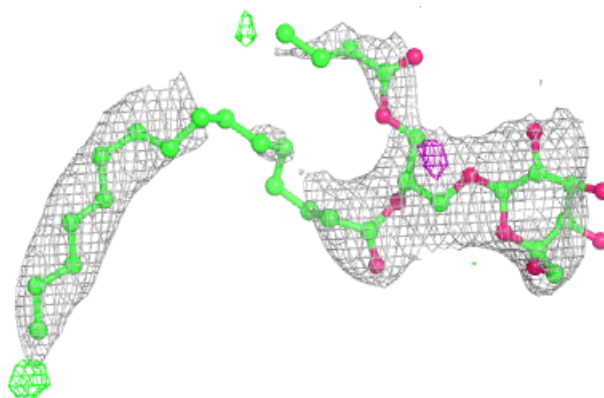


**Electron density around SQD a 405:**

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

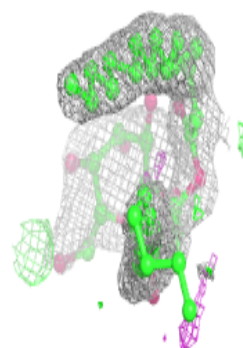
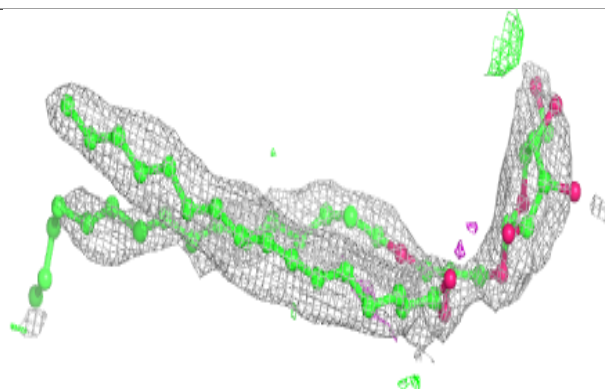
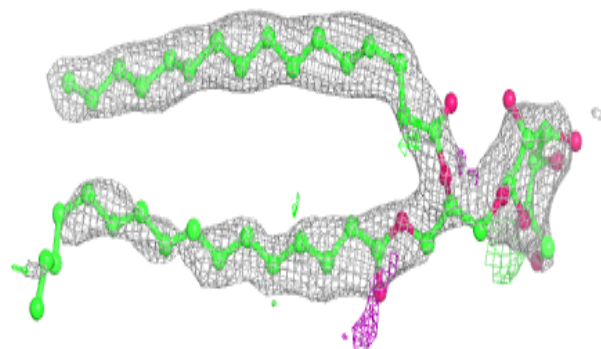
**Electron density around LMG z 101:**

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

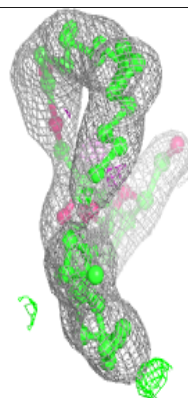
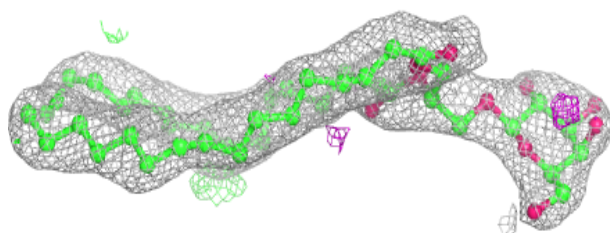
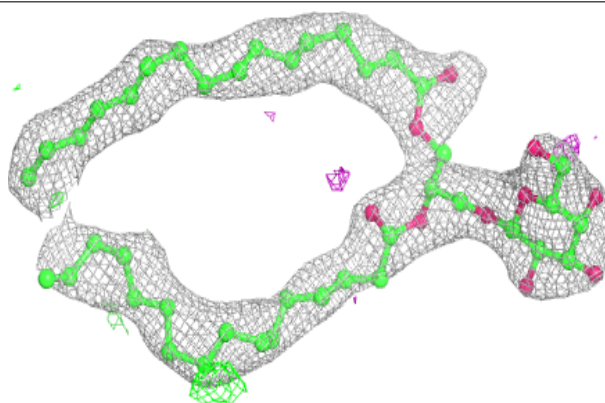


**Electron density around LMG C 521:**

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

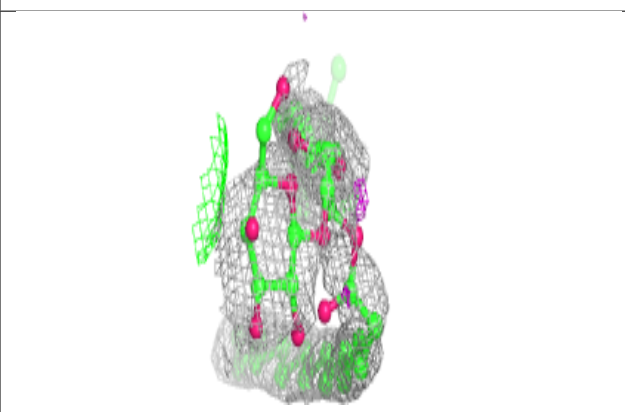
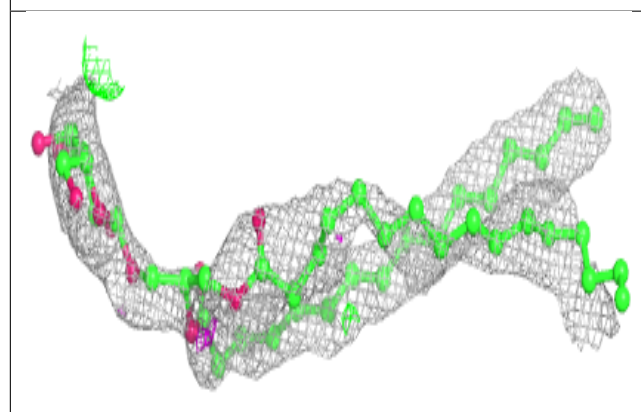
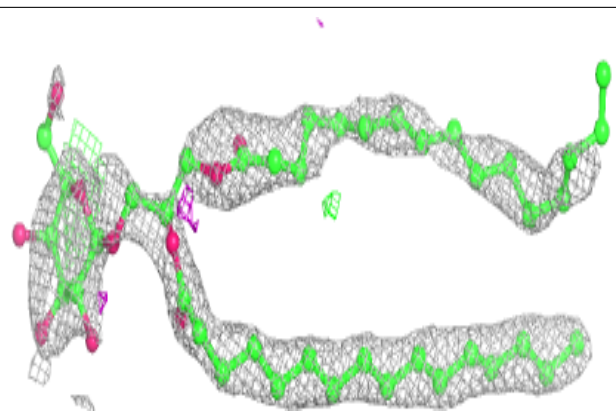
**Electron density around LMG a 415:**

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

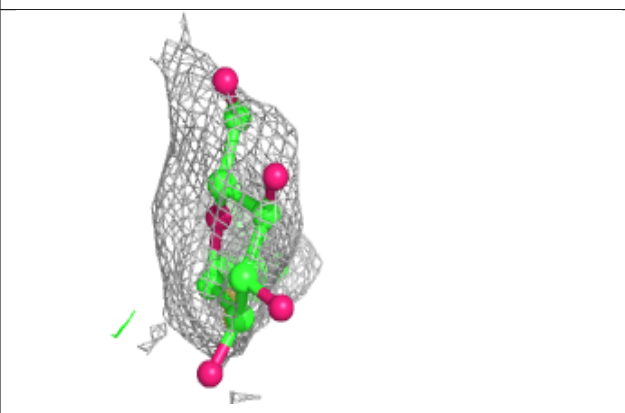
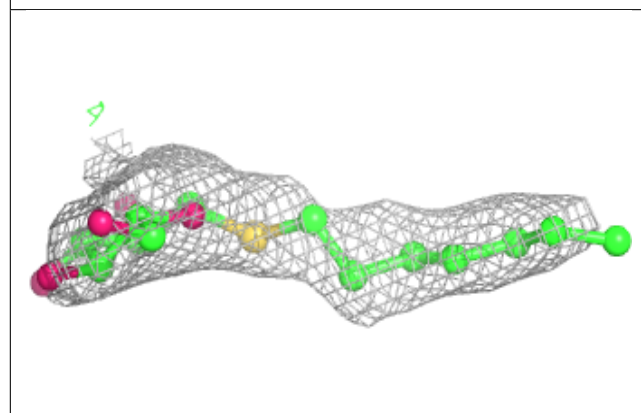
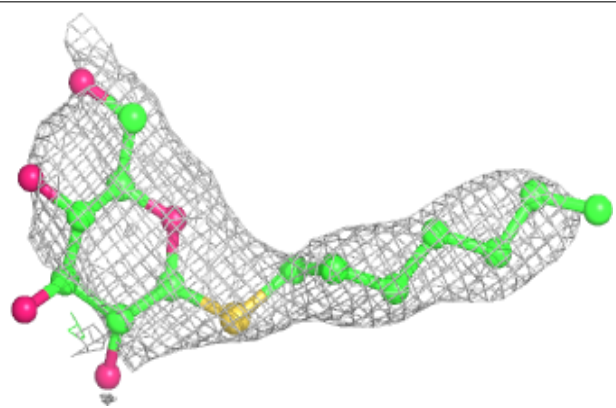


**Electron density around LMG c 523:**

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

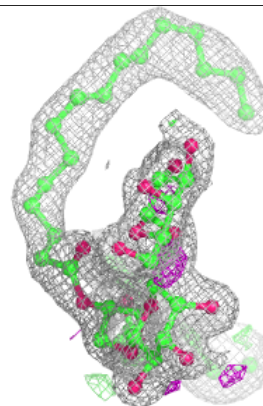
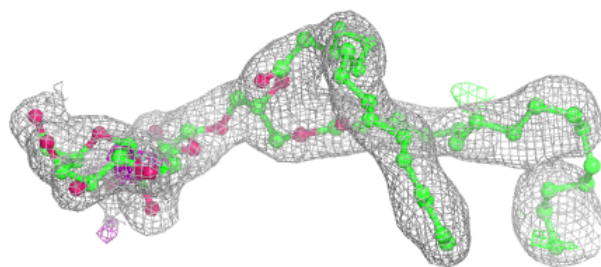
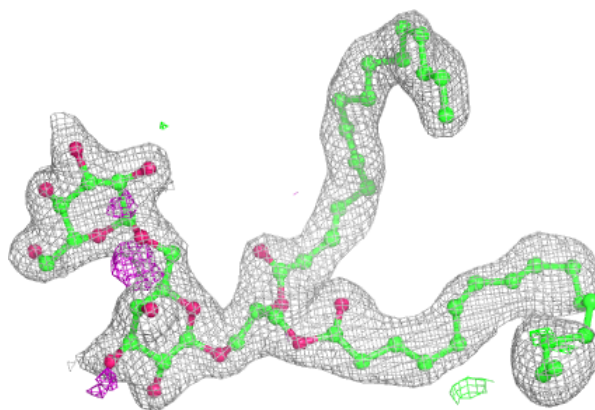
**Electron density around HTG b 632:**

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

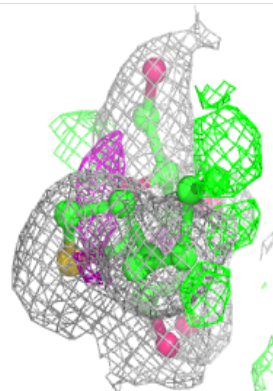
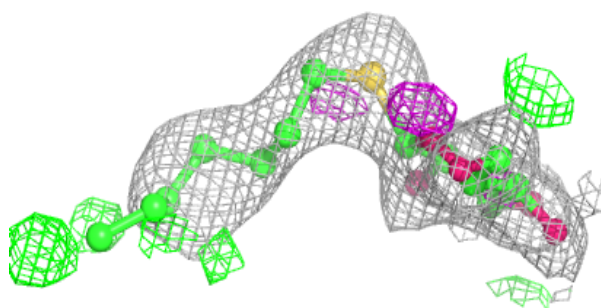
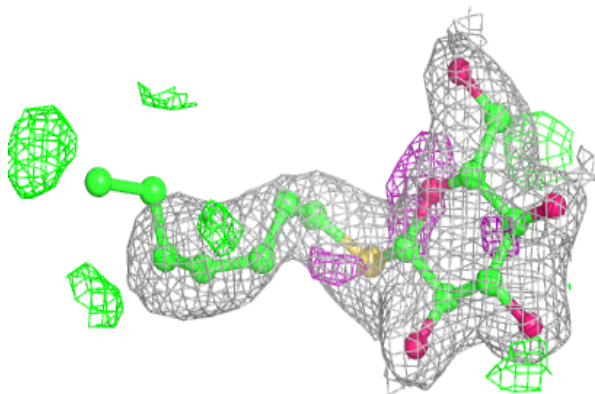


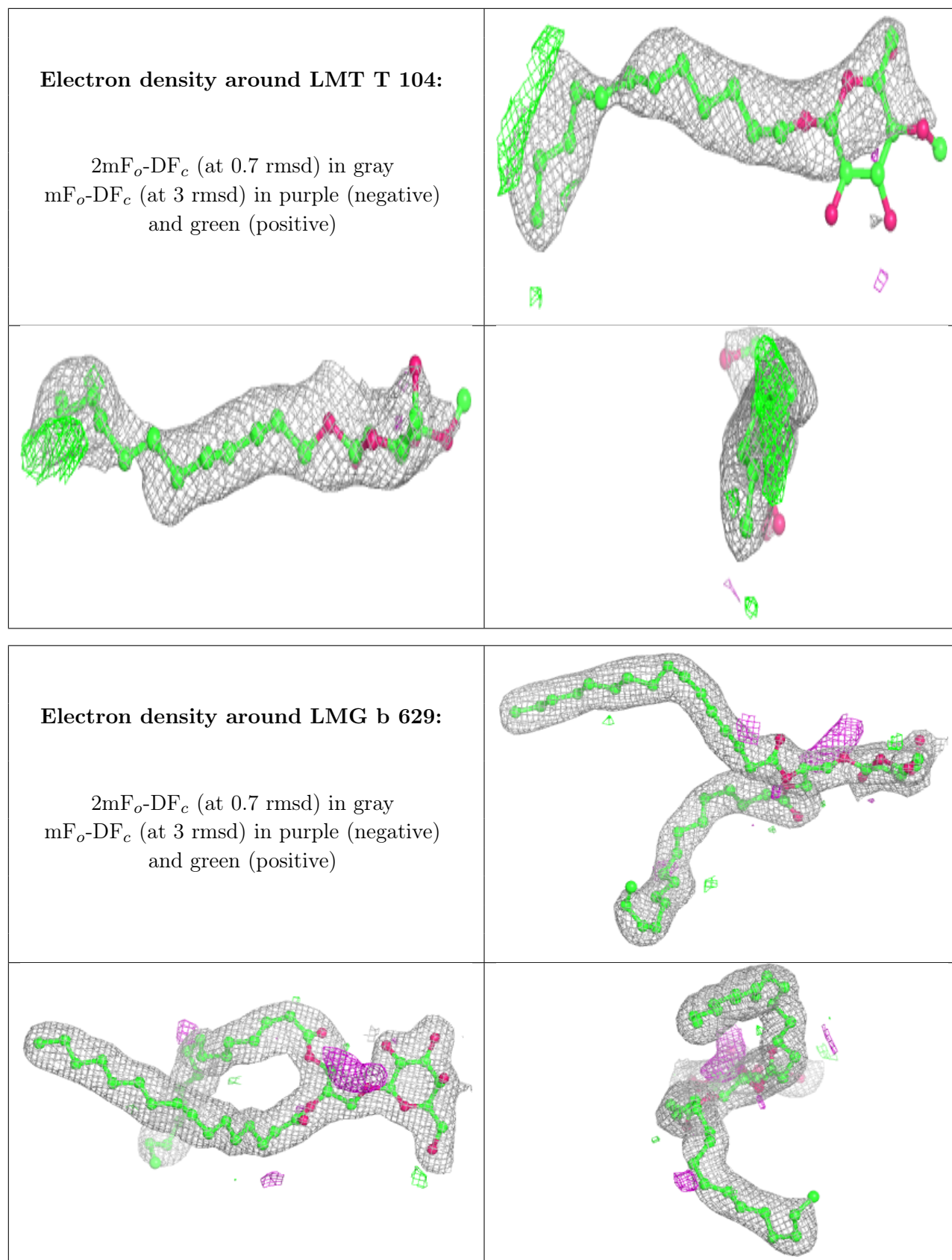
**Electron density around DGD C 518:**

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

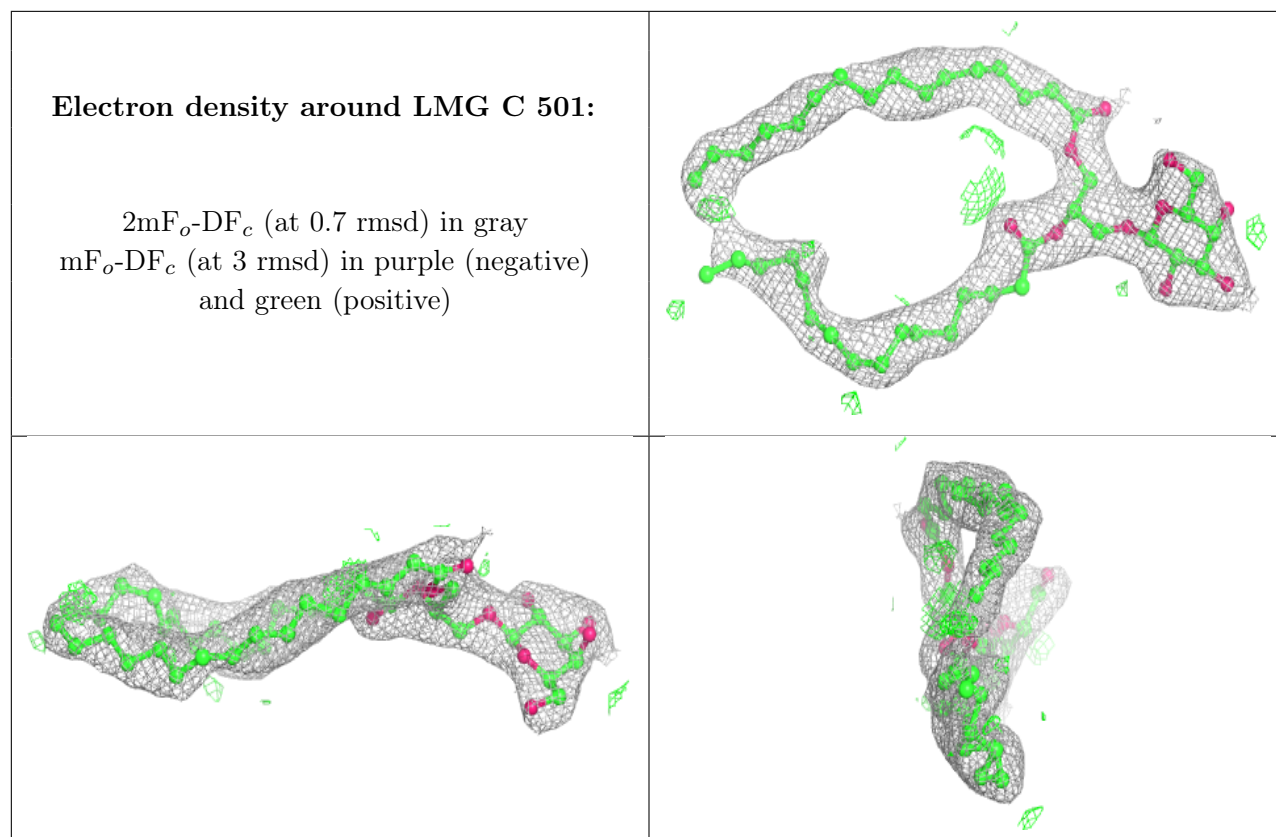
**Electron density around HTG B 624:**

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



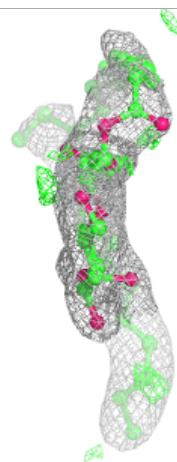
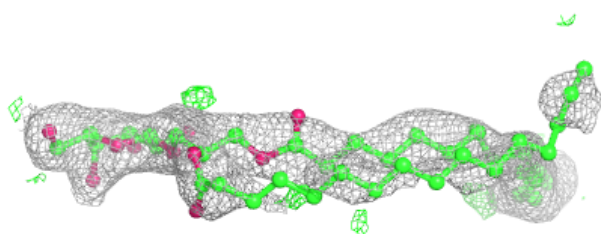
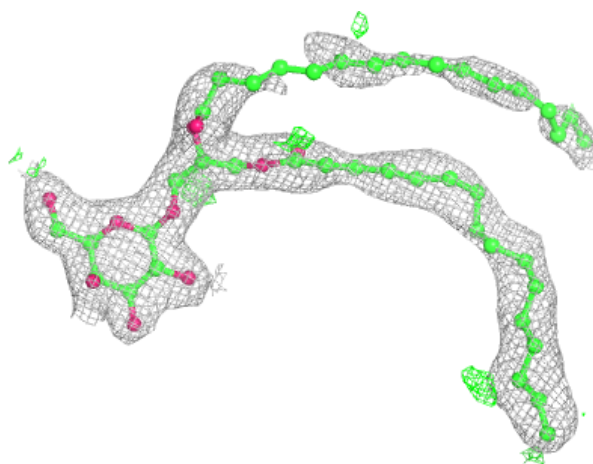






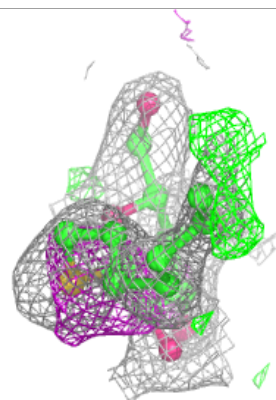
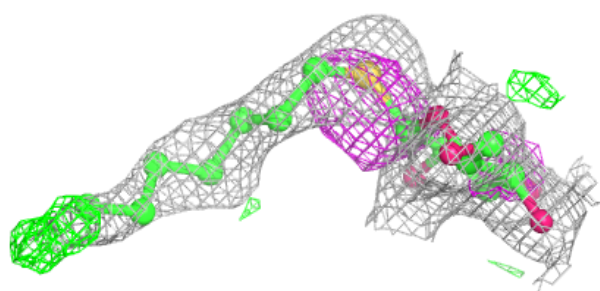
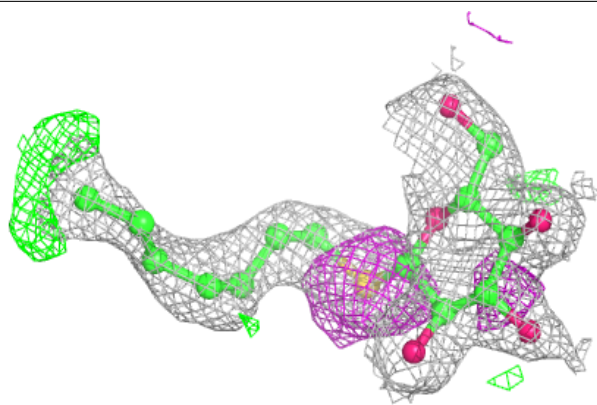
**Electron density around LMG c 522:**

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

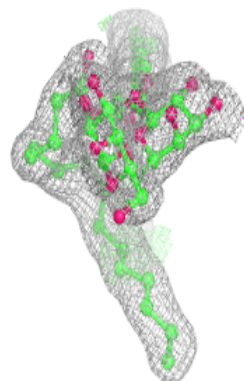
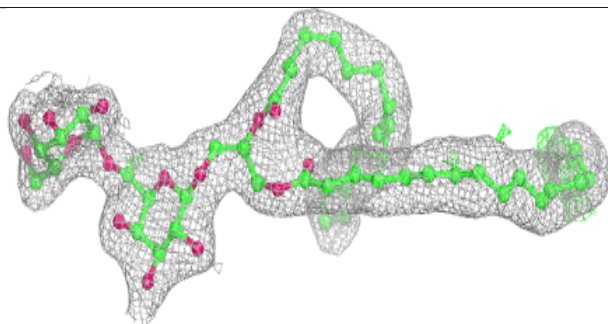
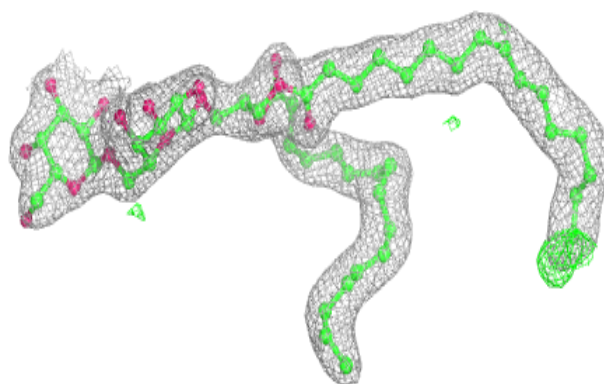


**Electron density around HTG b 631:**

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

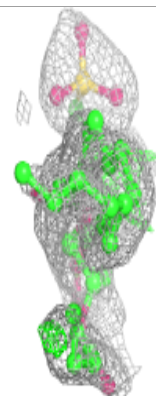
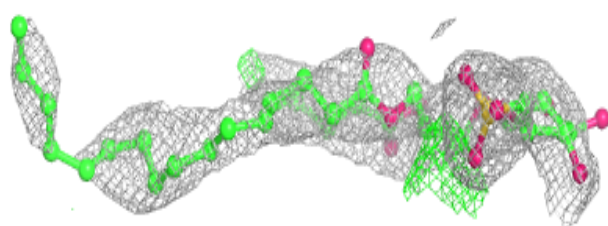
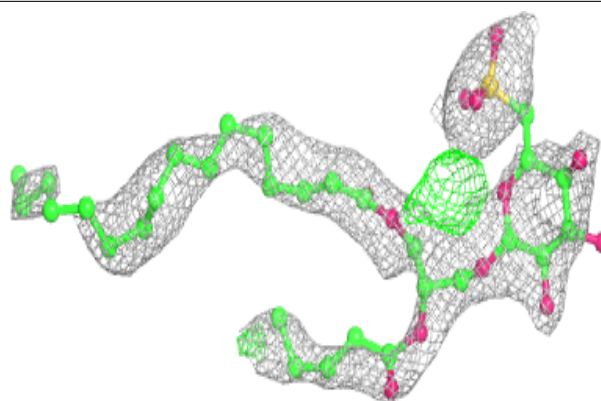
**Electron density around DGD h 102:**

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

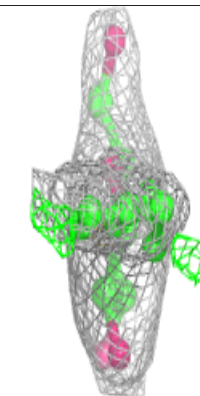
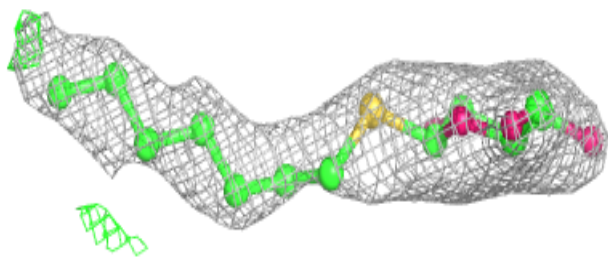
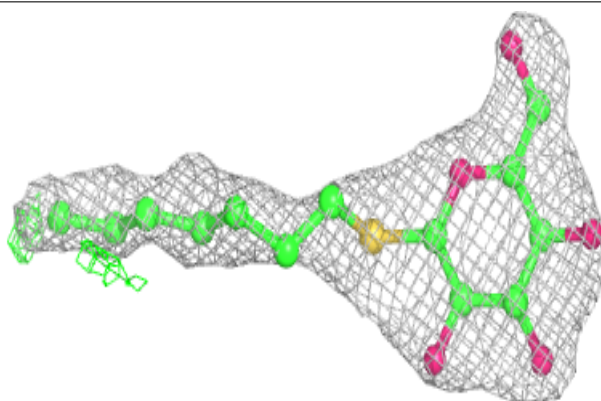


**Electron density around SQD F 103:**

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

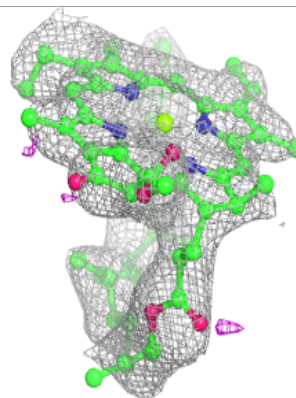
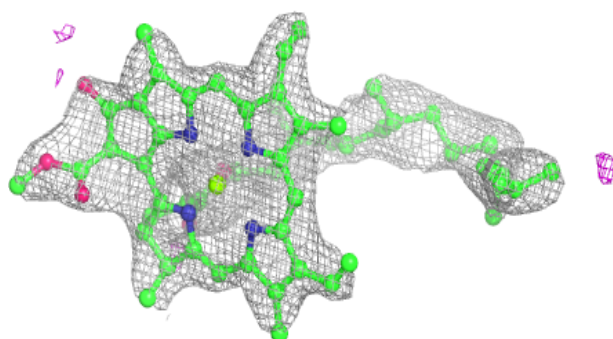
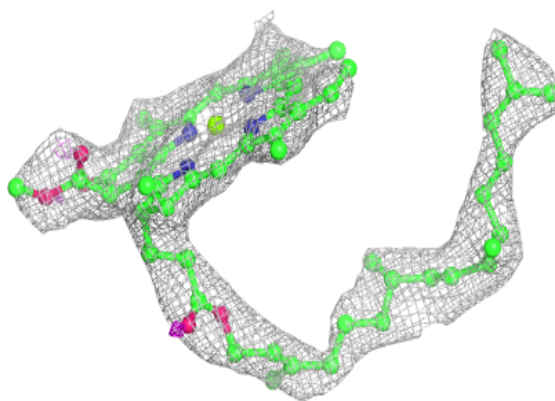
**Electron density around HTG c 524:**

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

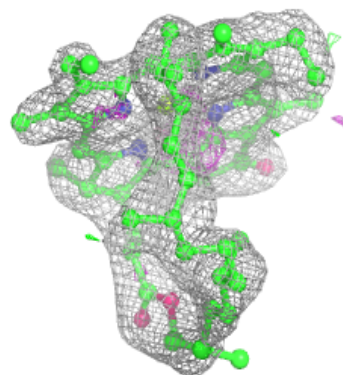
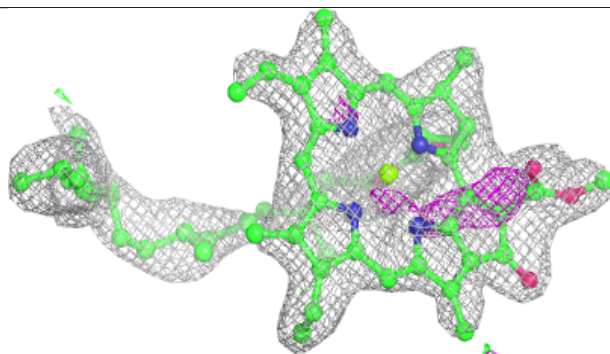
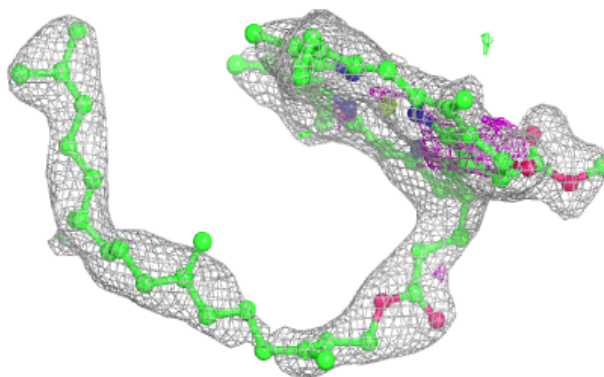


**Electron density around CLA c 517:**

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

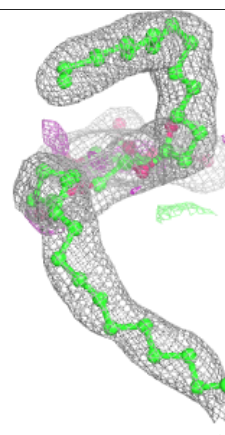
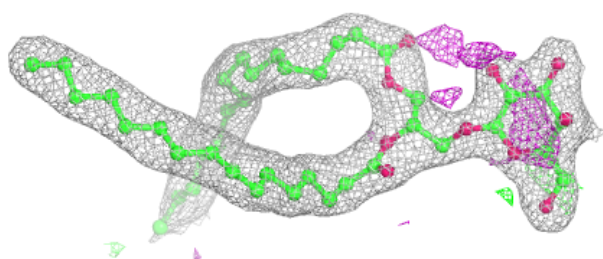
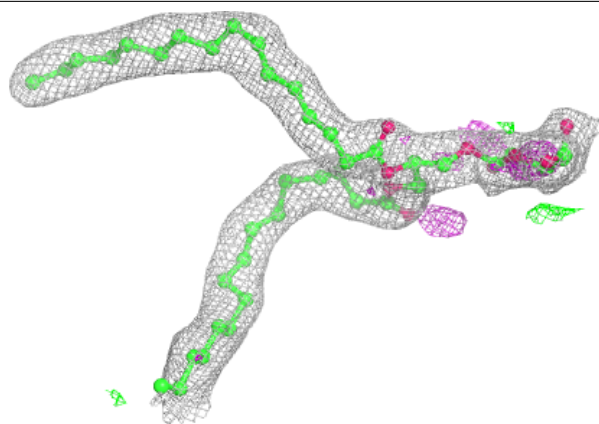
**Electron density around CLA C 514:**

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

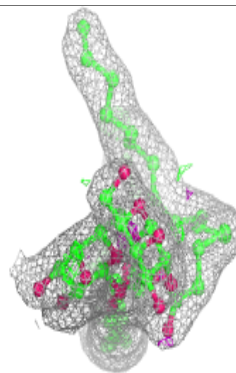
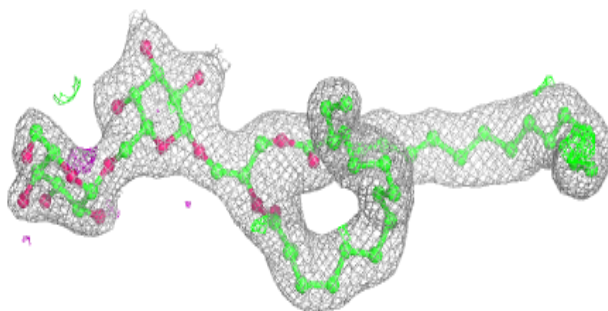
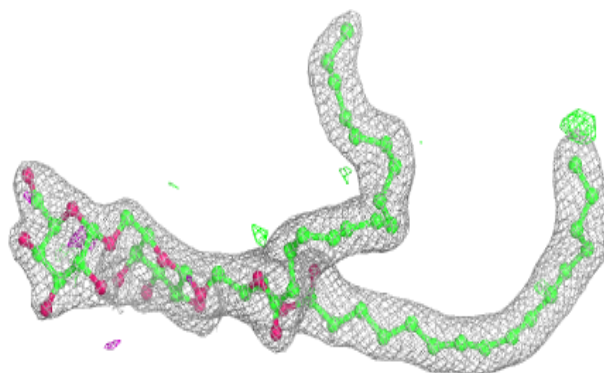


**Electron density around LMG M 101:**

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

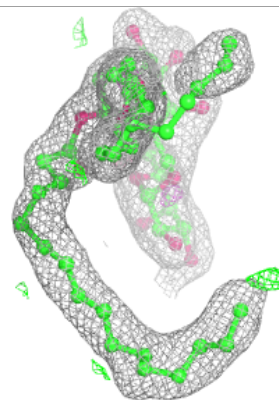
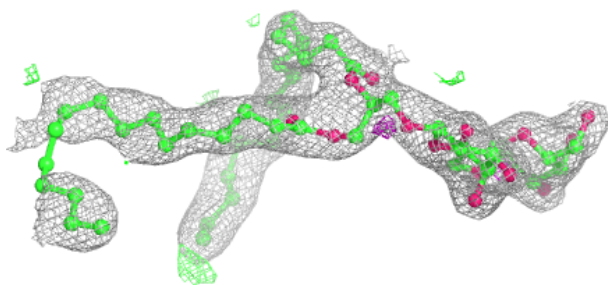
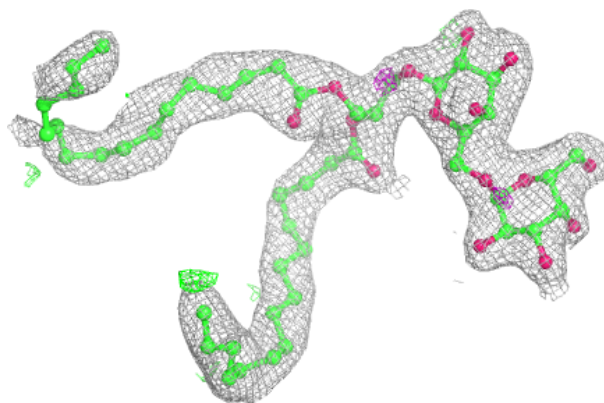
**Electron density around DGD H 102:**

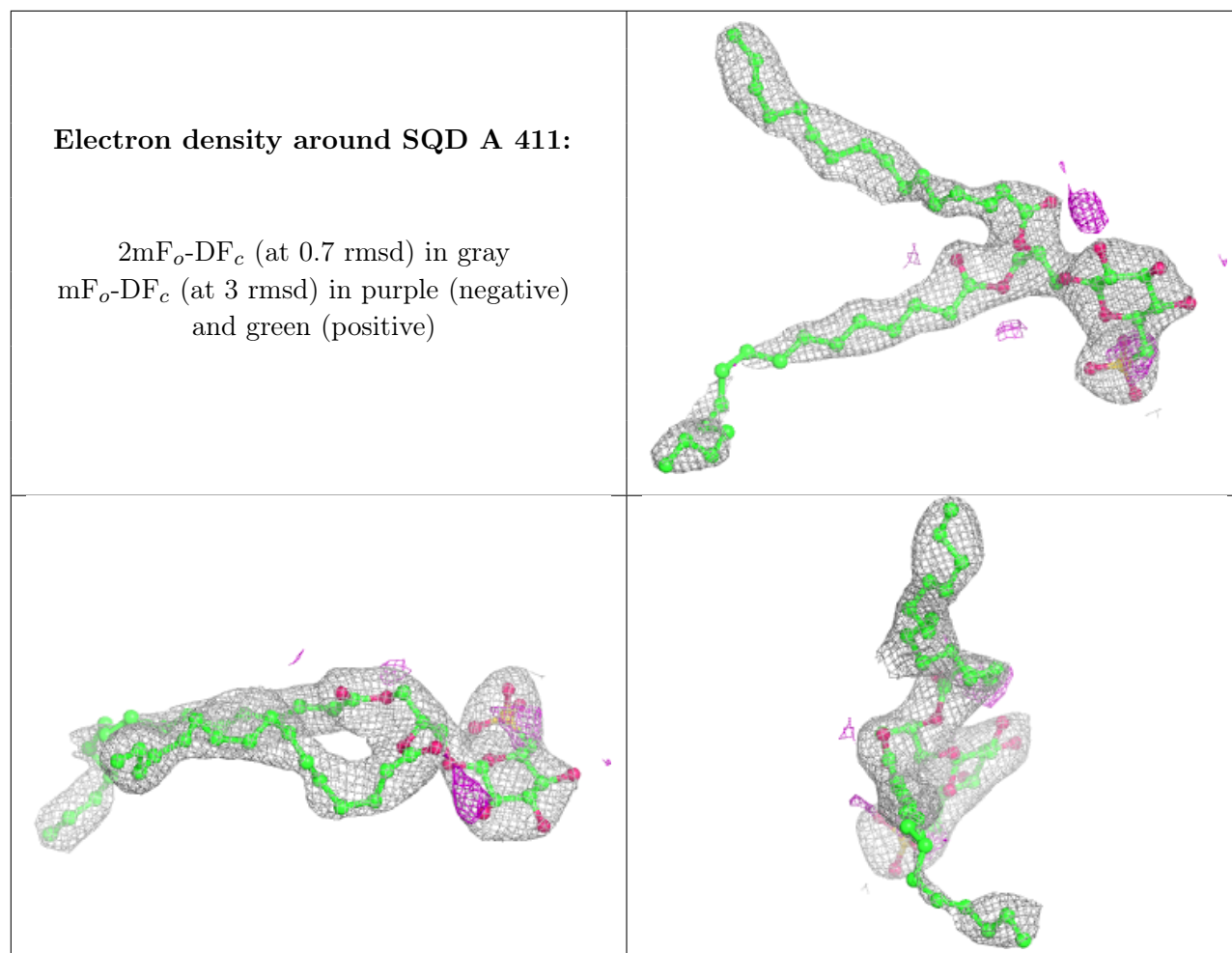
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around DGD 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)

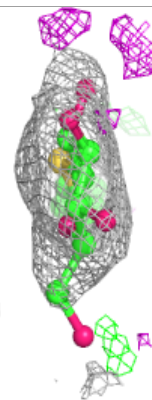
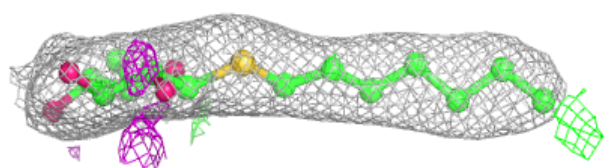
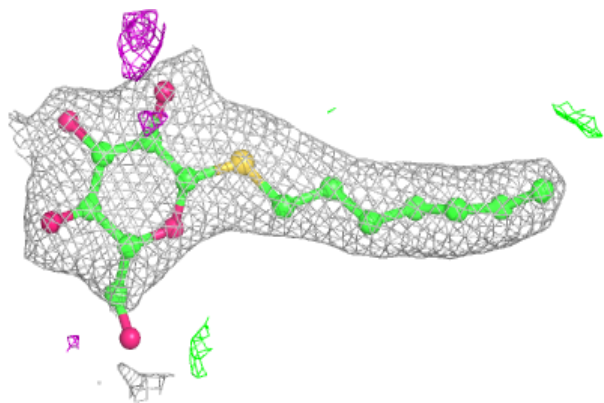




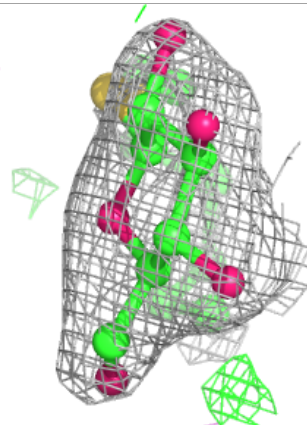
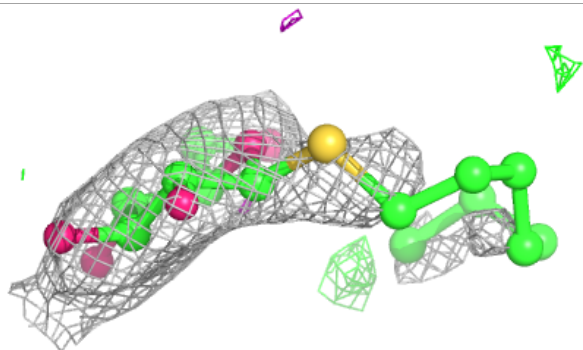
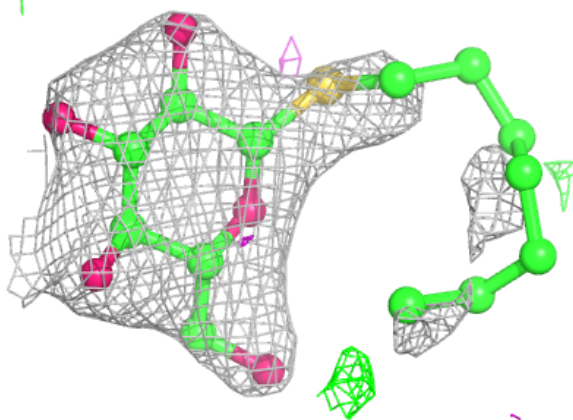


**Electron density around HTG B 632:**

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

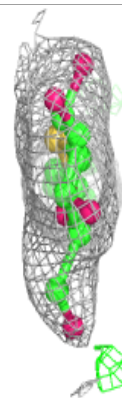
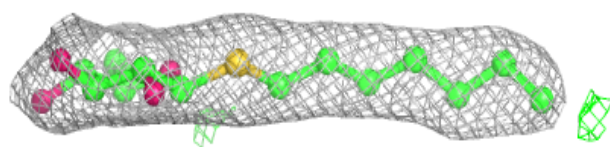
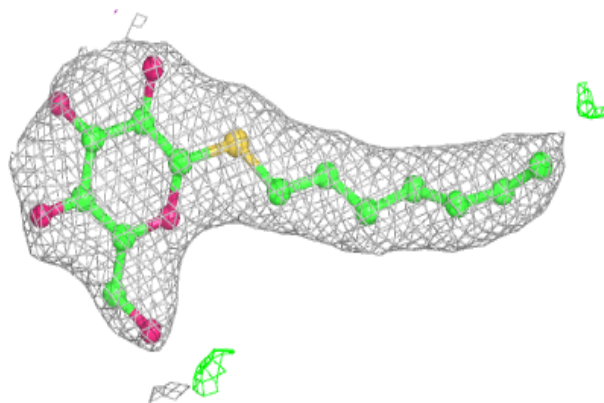
**Electron density around HTG V 206:**

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

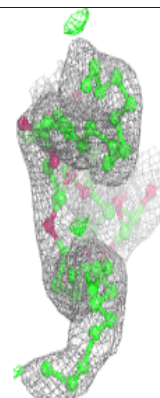
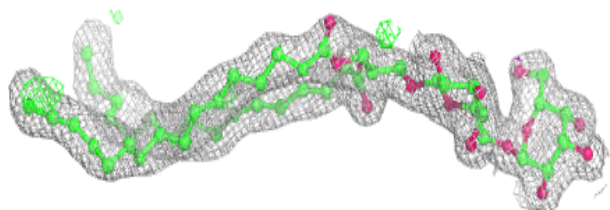
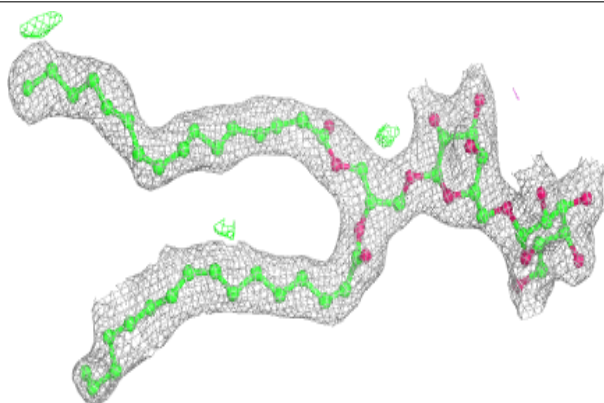


**Electron density around HTG b 607:**

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

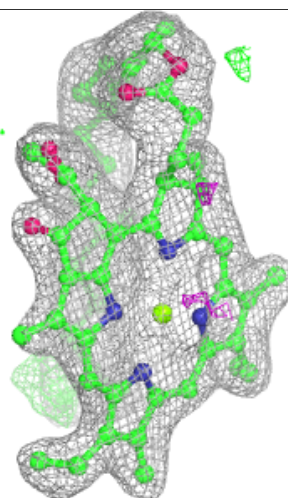
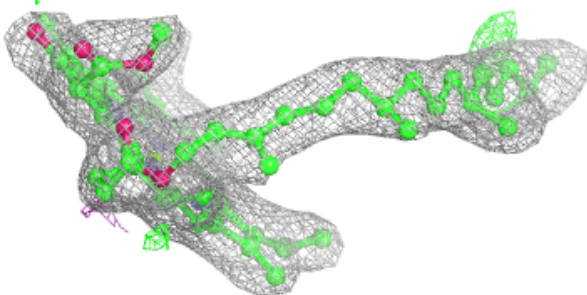
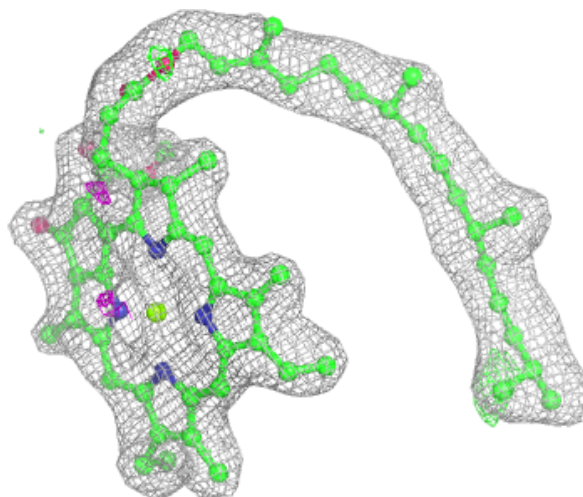
**Electron density around DGD c 521:**

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



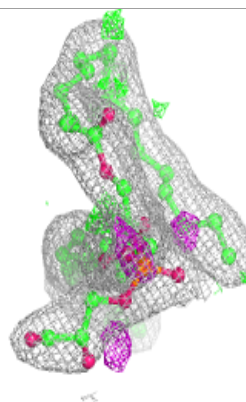
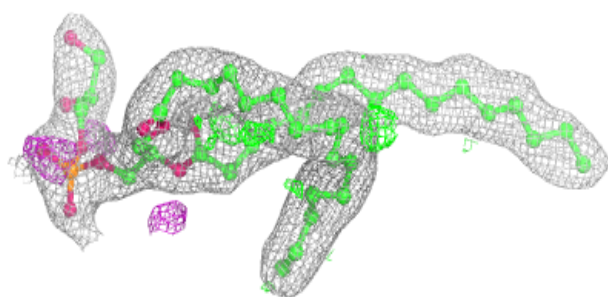
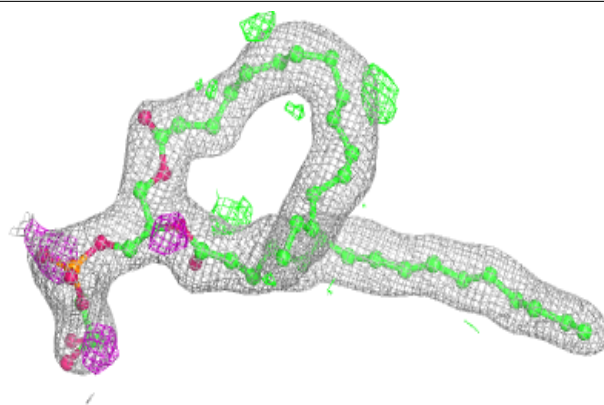
**Electron density around CLA c 511:**

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

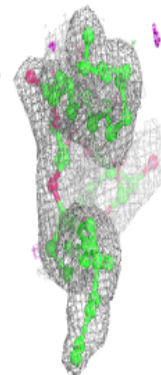
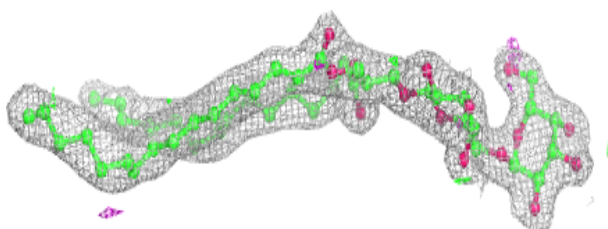
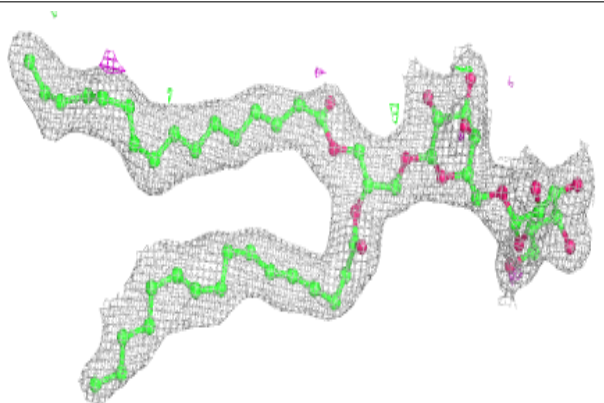


**Electron density around LHG D 407:**

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

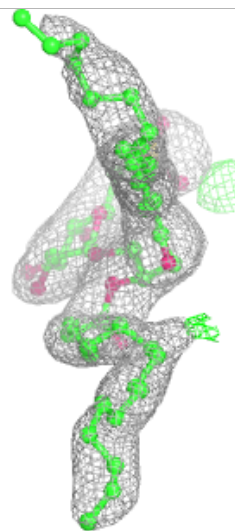
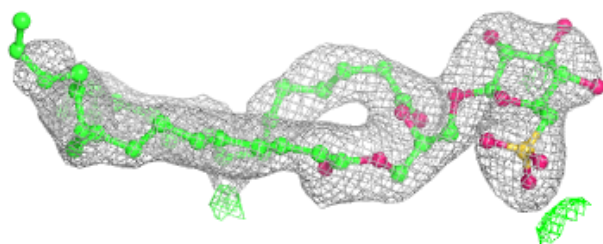
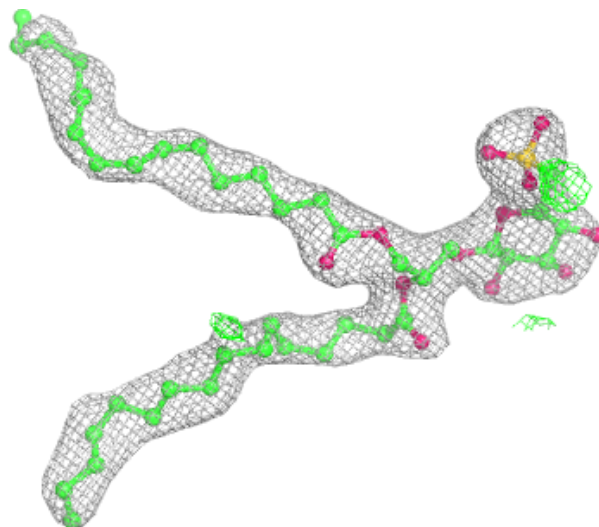
**Electron density around DGD C 519:**

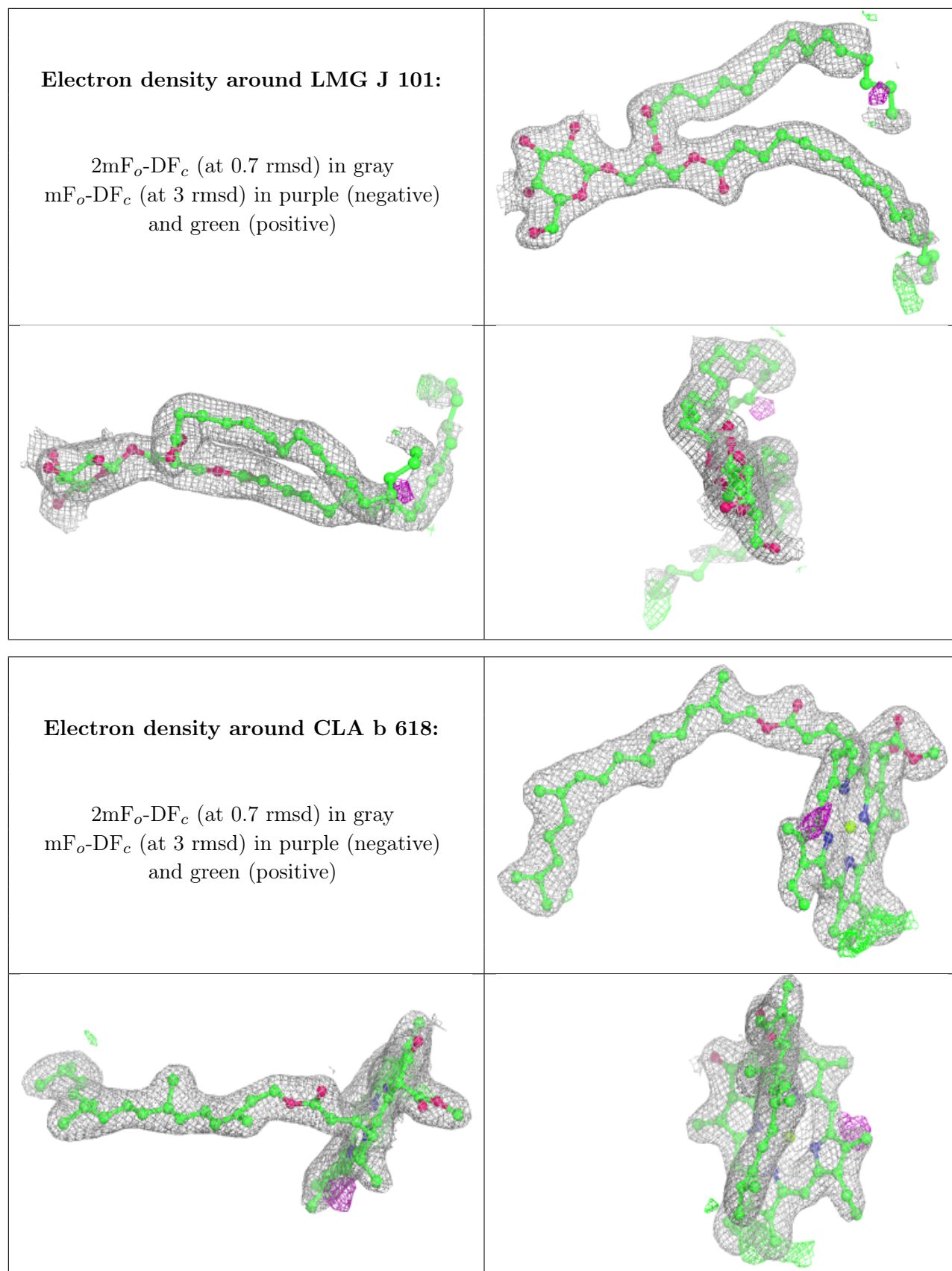
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around SQD a 414:**

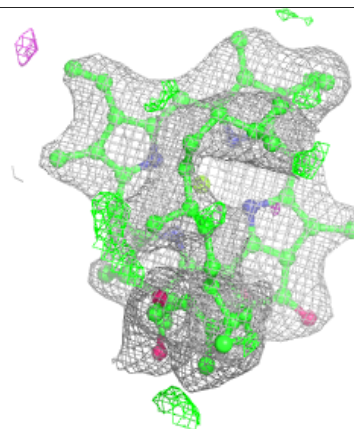
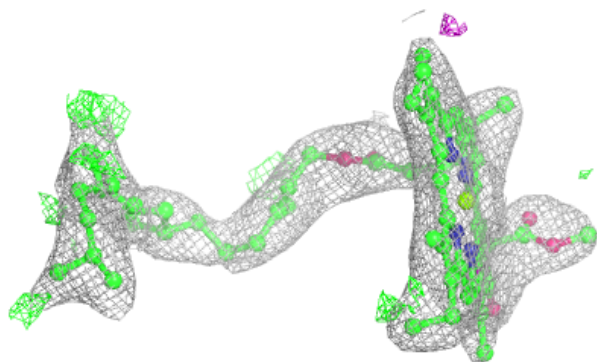
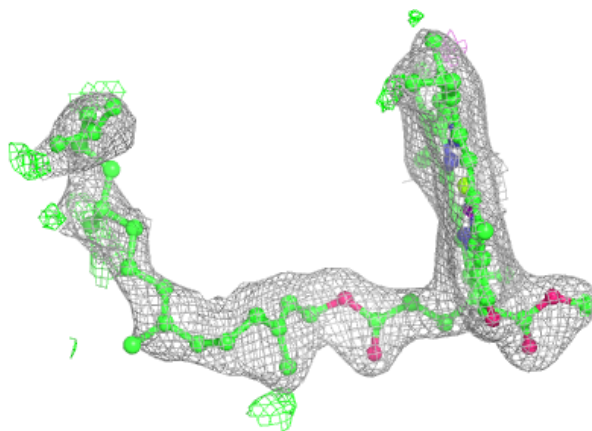
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



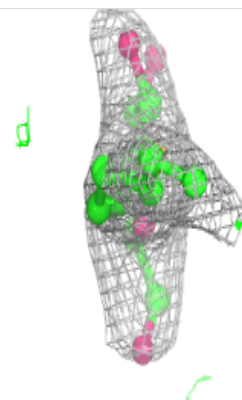
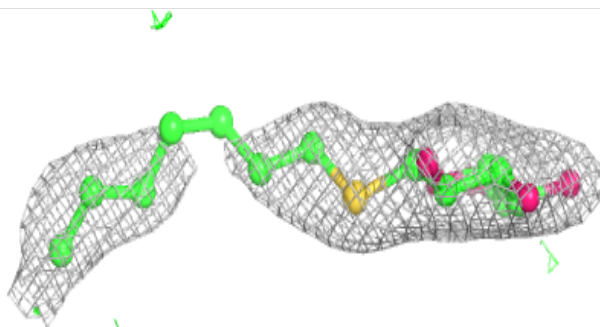
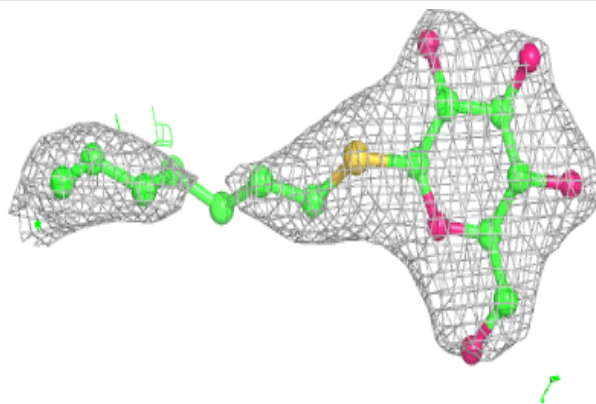


**Electron density around CLA C 507:**

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

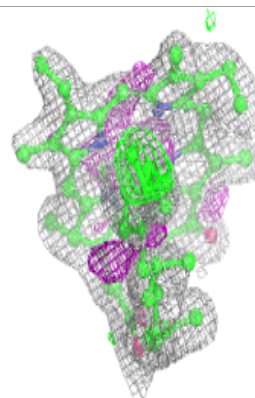
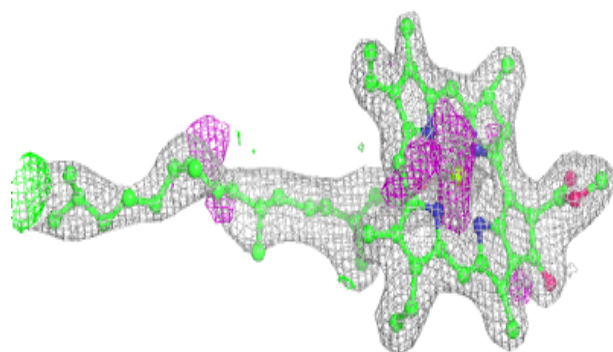
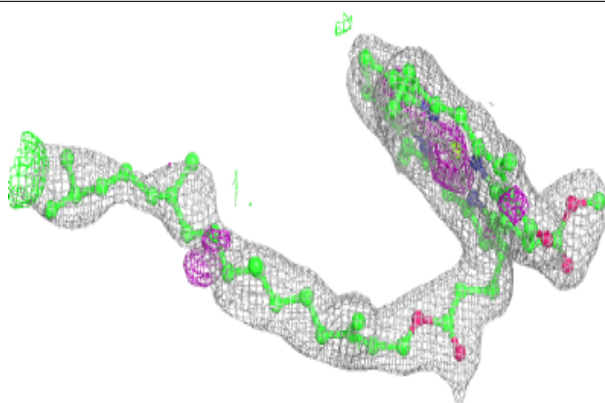
**Electron density around HTG C 523:**

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

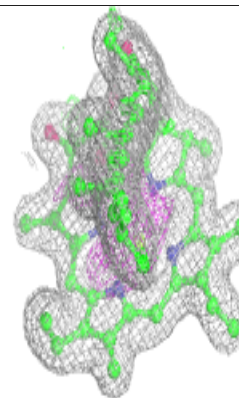
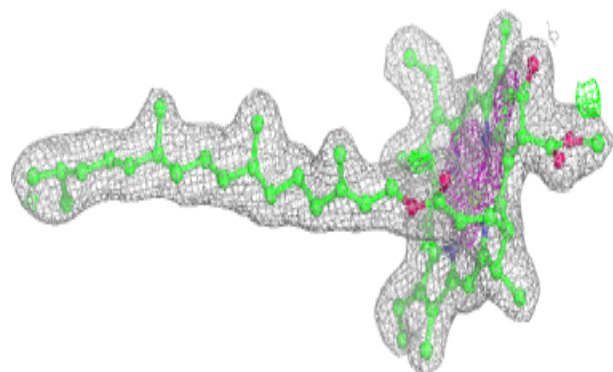
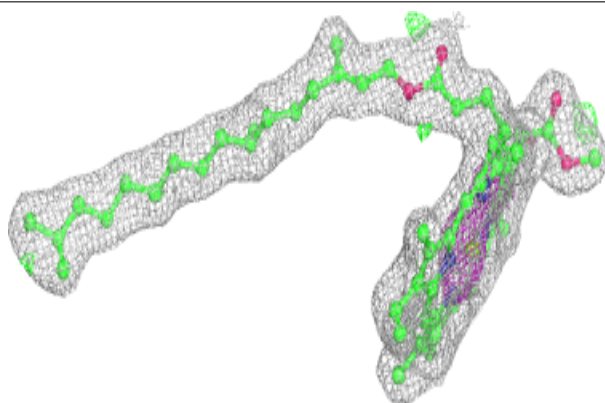


**Electron density around CLA C 505:**

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

**Electron density around CLA b 616:**

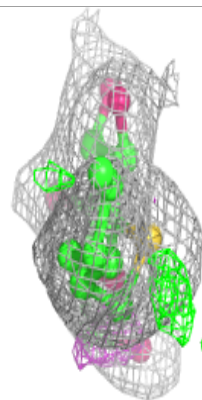
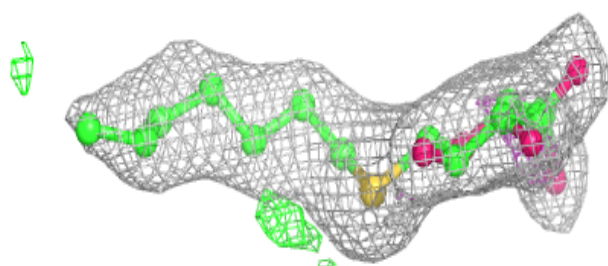
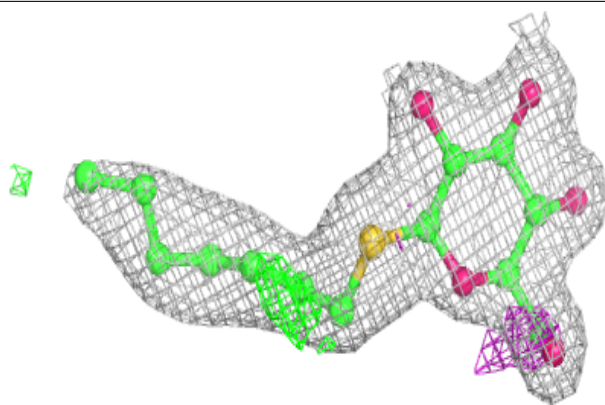
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



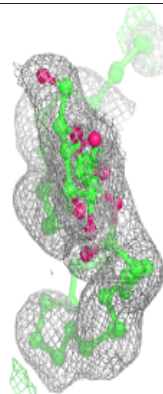
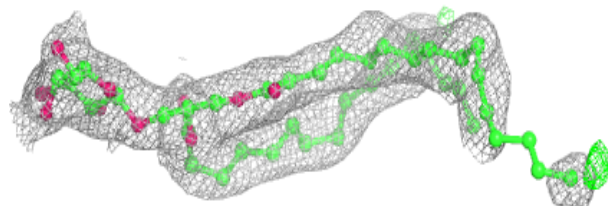
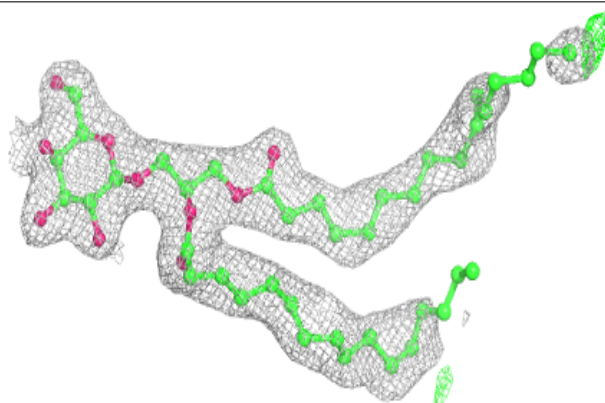


**Electron density around HTG B 623:**

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

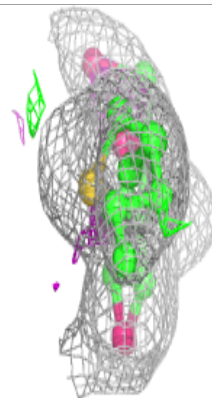
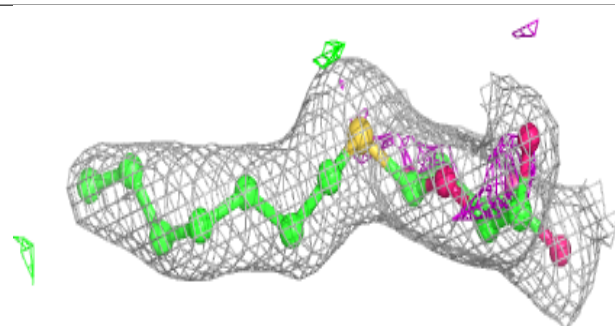
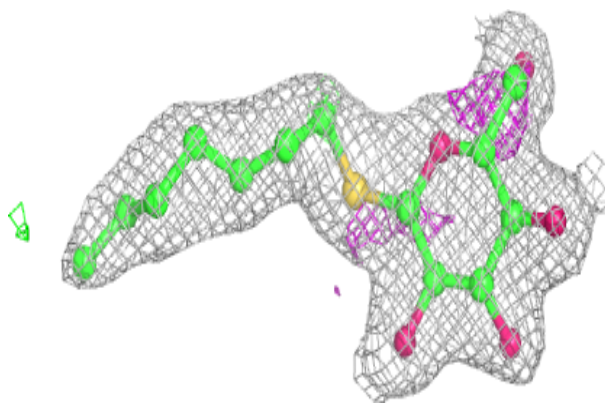
**Electron density around LMG j 101:**

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

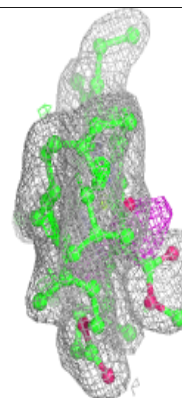
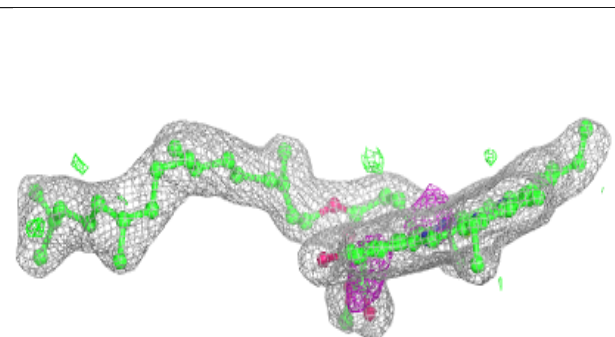
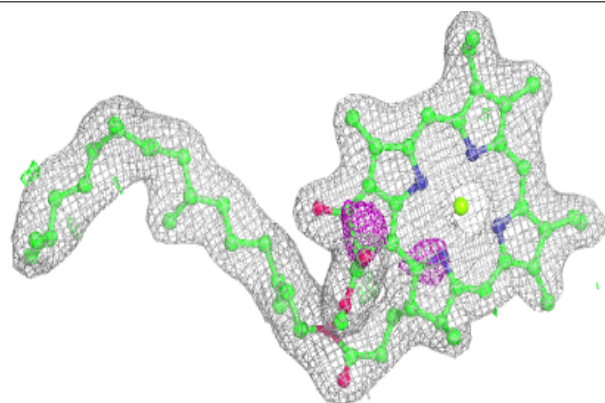


**Electron density around HTG b 601:**

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

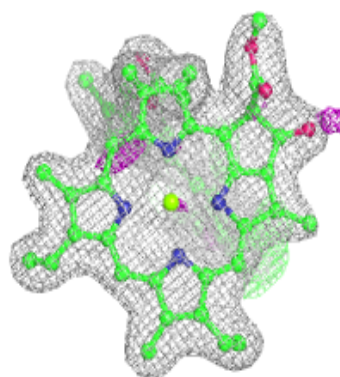
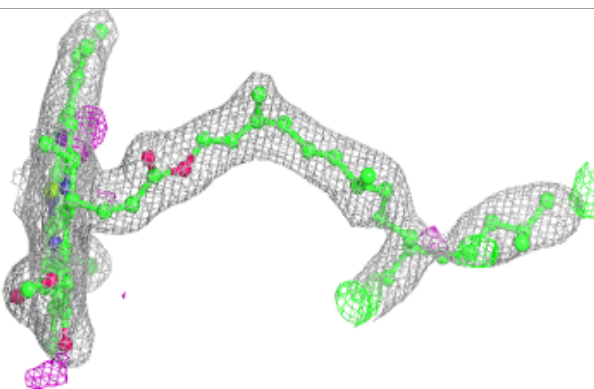
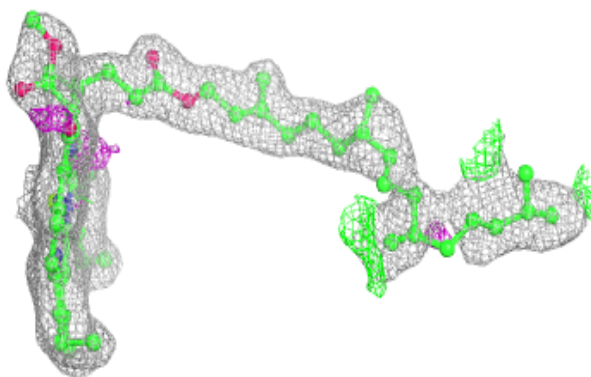
**Electron density around CLA b 611:**

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

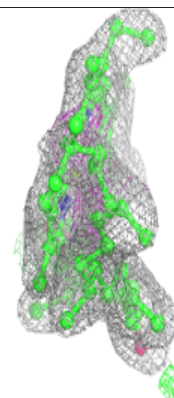
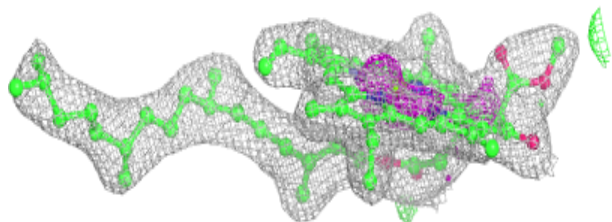
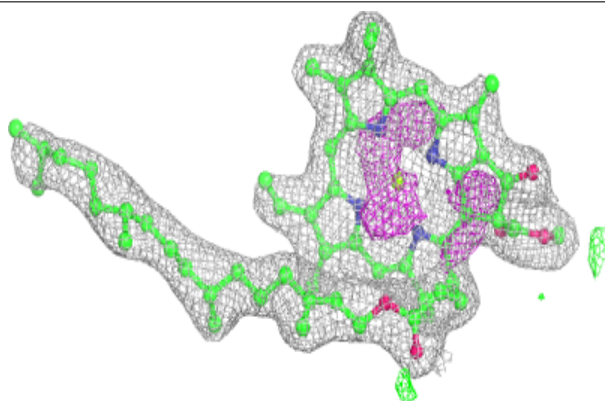


**Electron density around CLA b 615:**

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

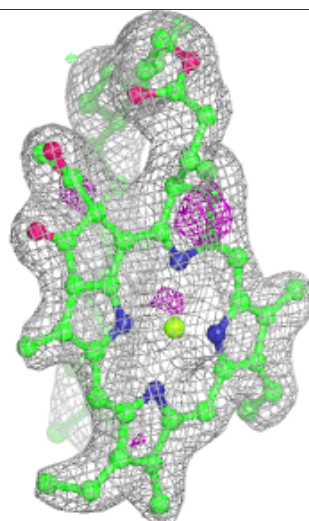
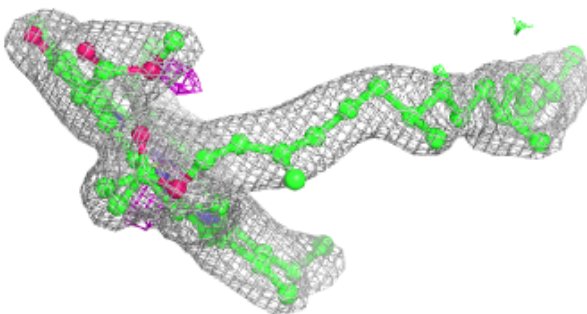
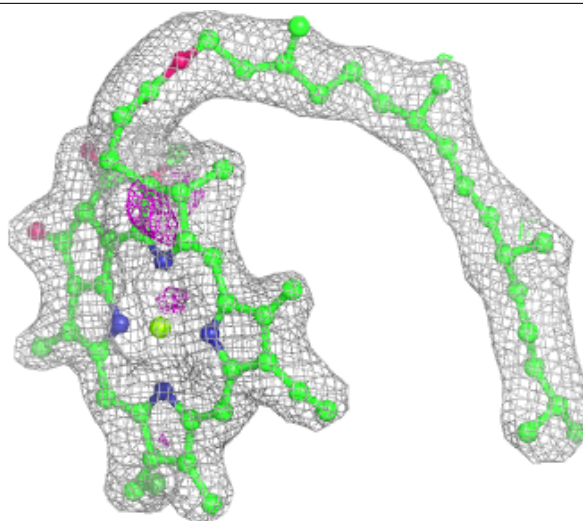
**Electron density around CLA C 502:**

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



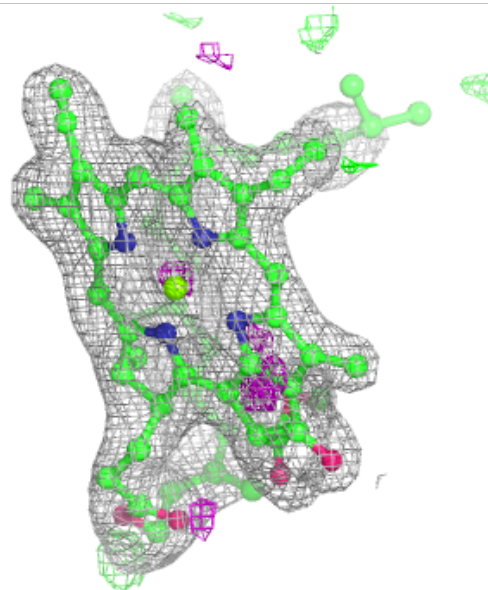
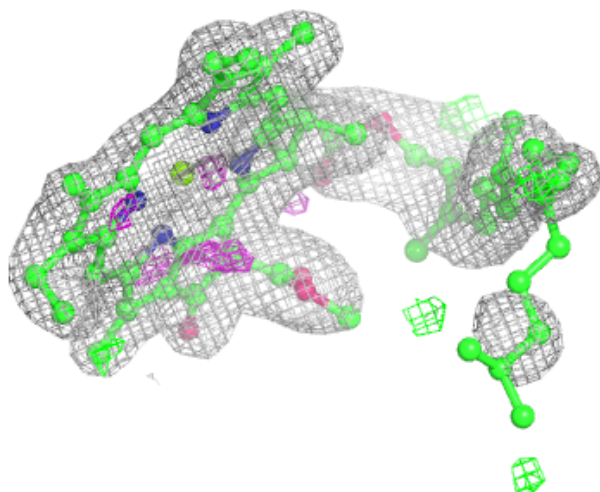
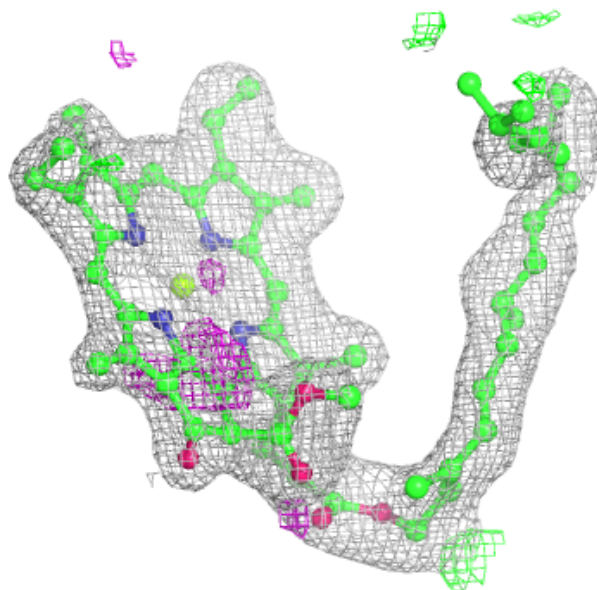
**Electron density around CLA C 508:**

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



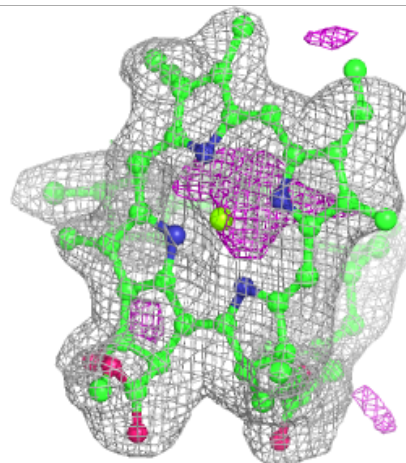
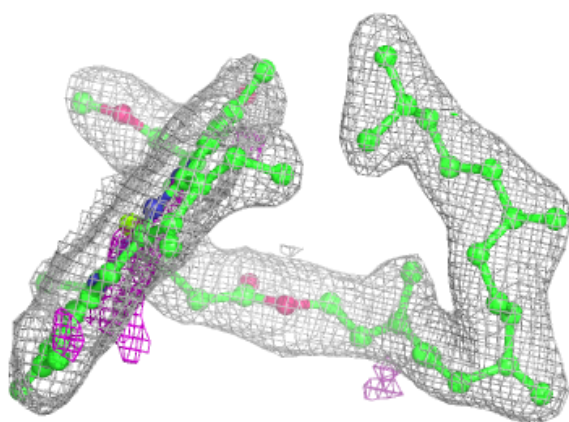
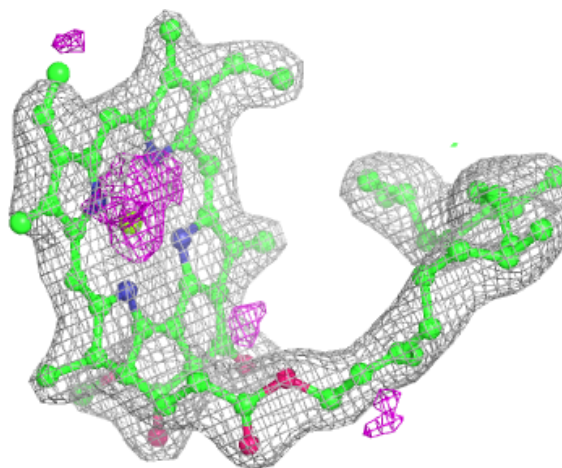
**Electron density around CLA b 625:**

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



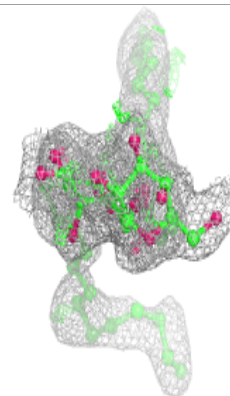
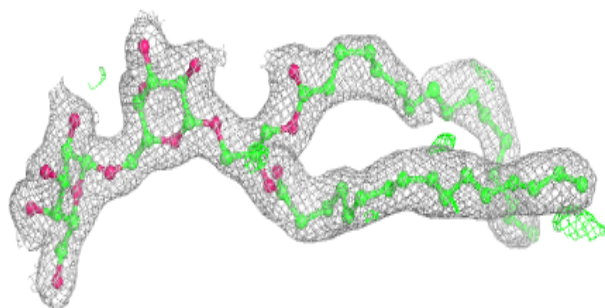
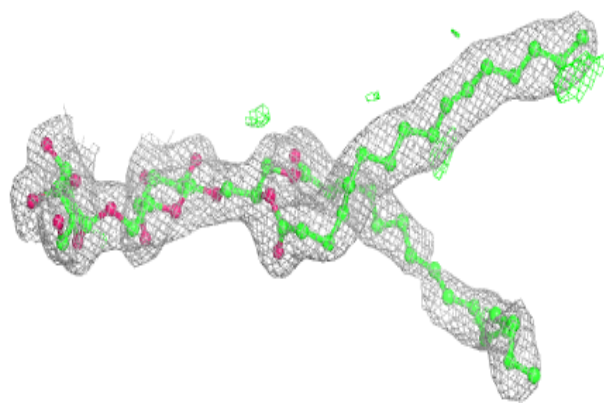
**Electron density around CLA c 507:**

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

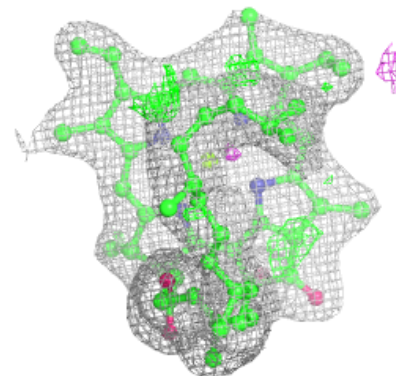
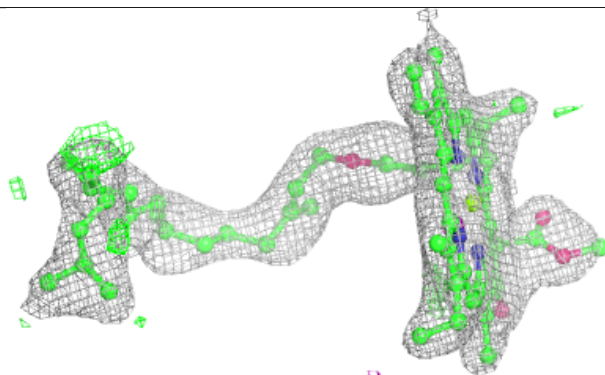
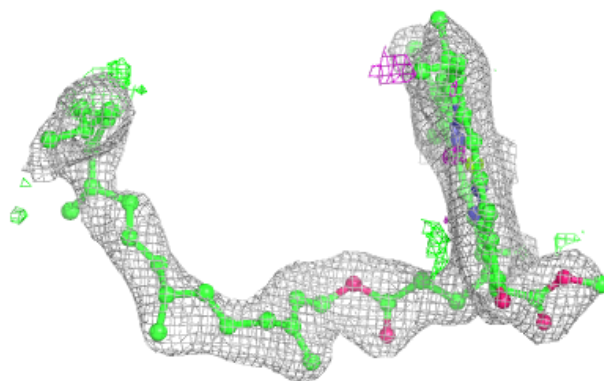


**Electron density around DGD c 519:**

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

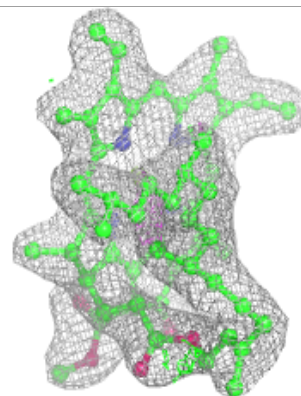
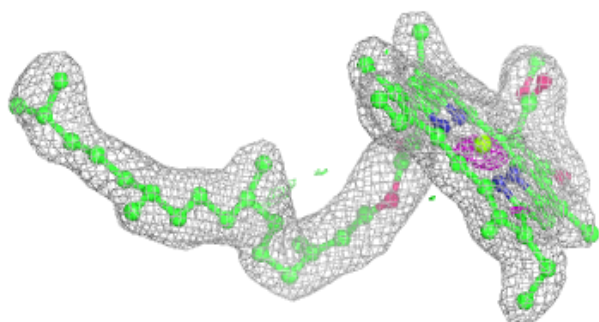
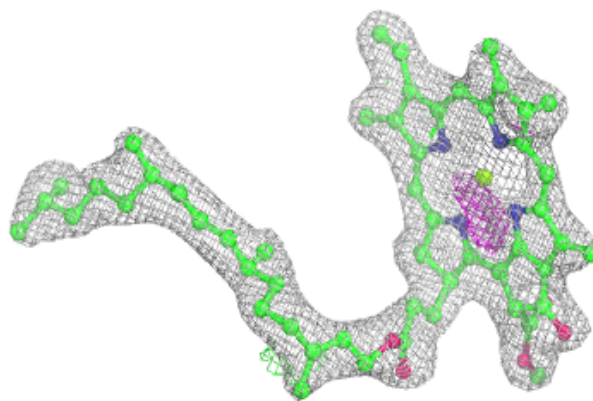
**Electron density around CLA c 510:**

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

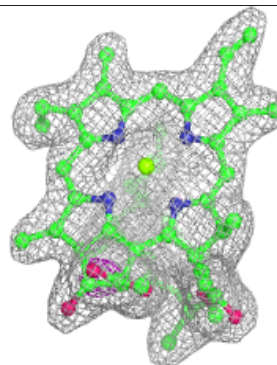
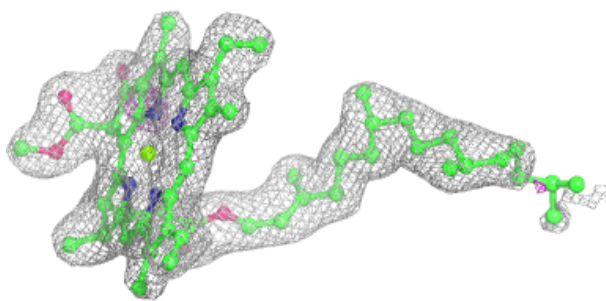
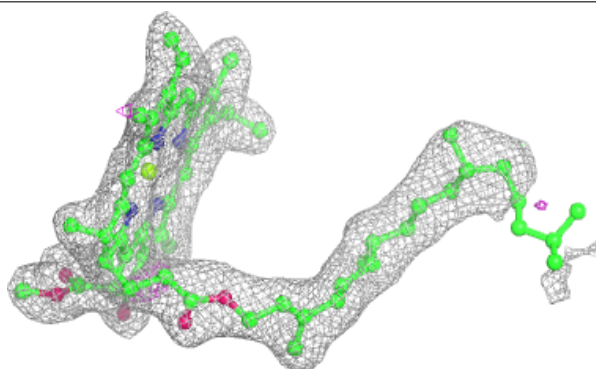


**Electron density around CLA C 512:**

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

**Electron density around CLA c 512:**

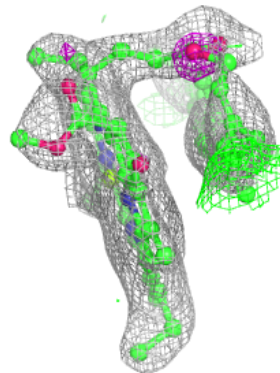
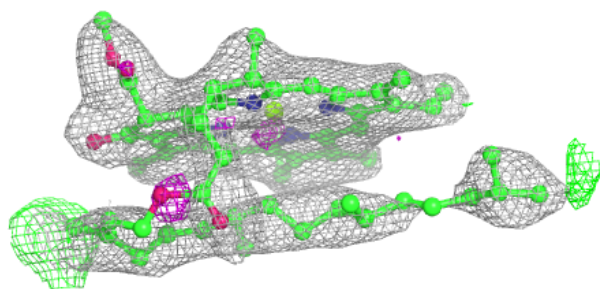
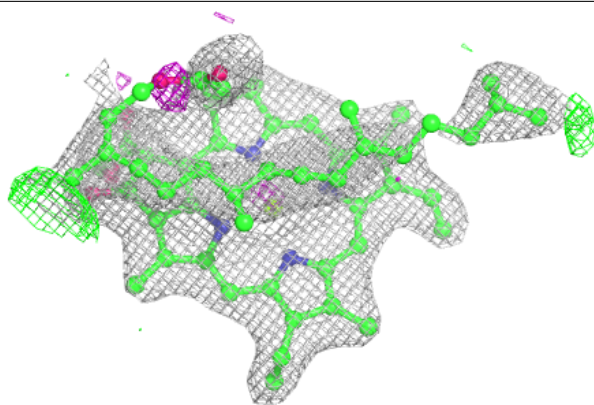
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



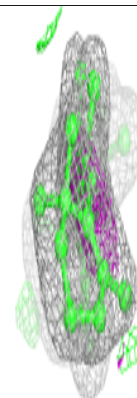
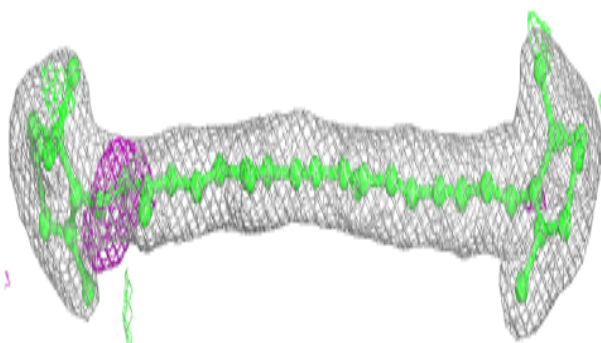
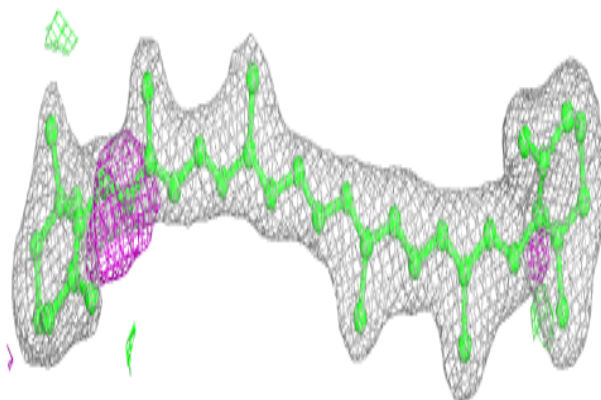


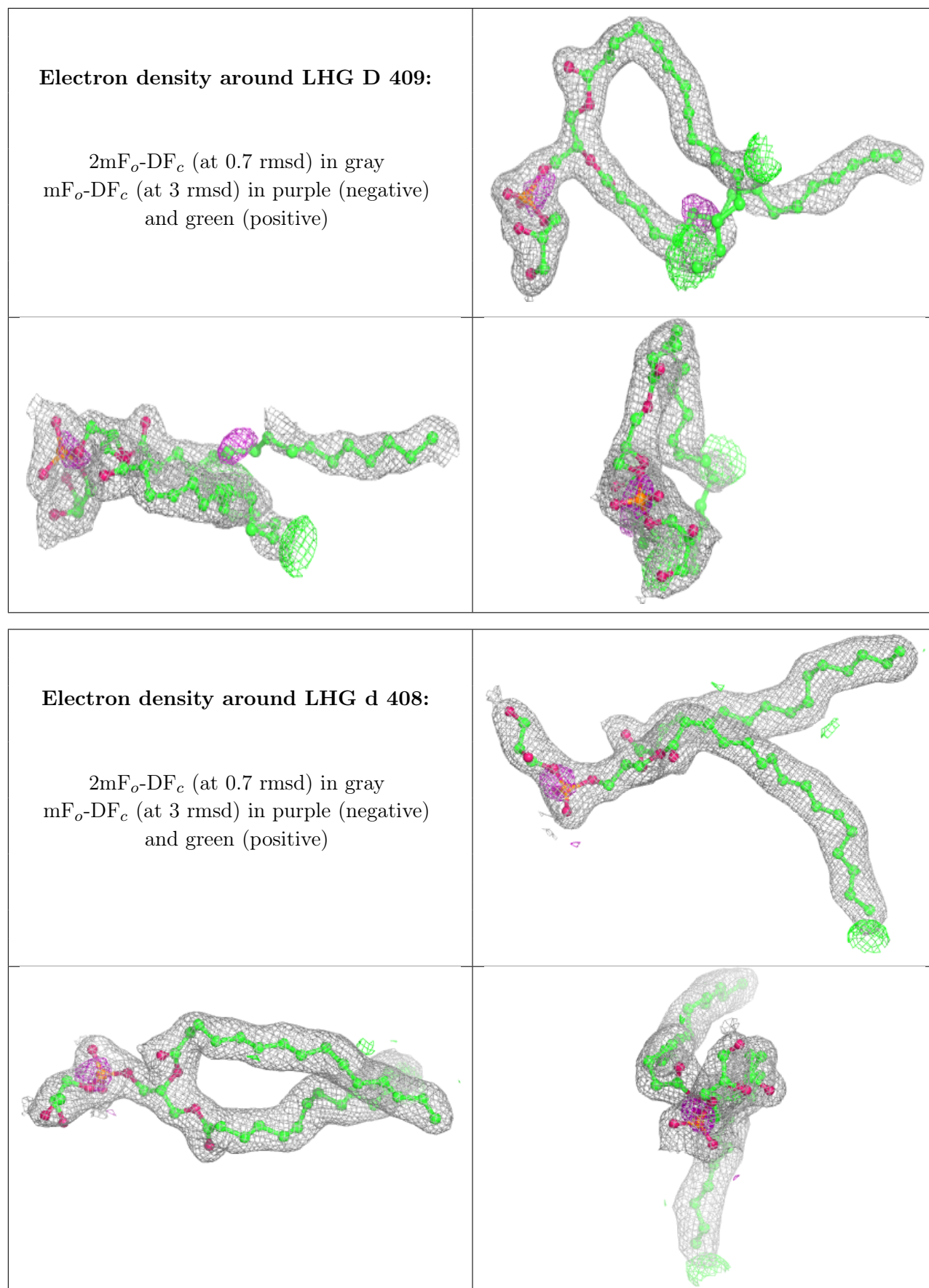
**Electron density around CLA B 602:**

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

**Electron density around BCR b 627:**

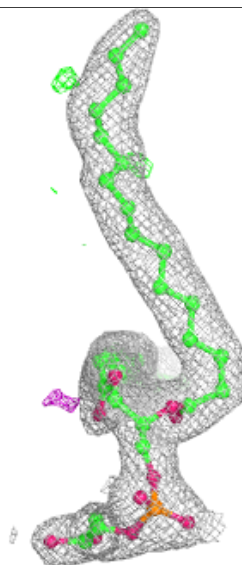
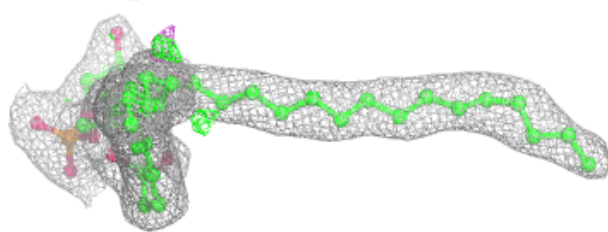
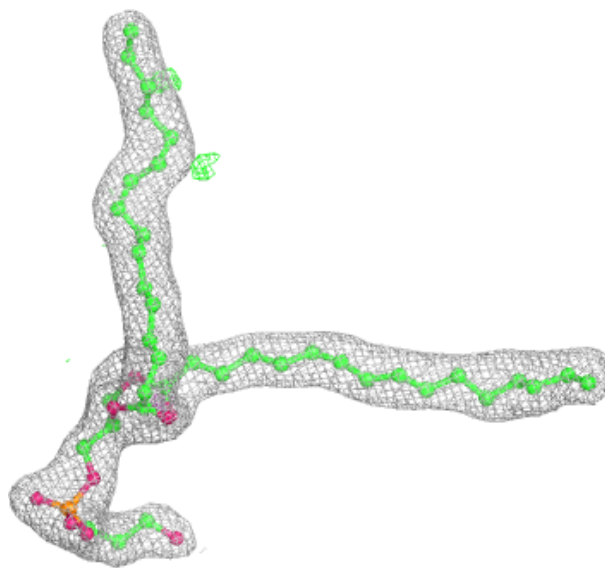
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

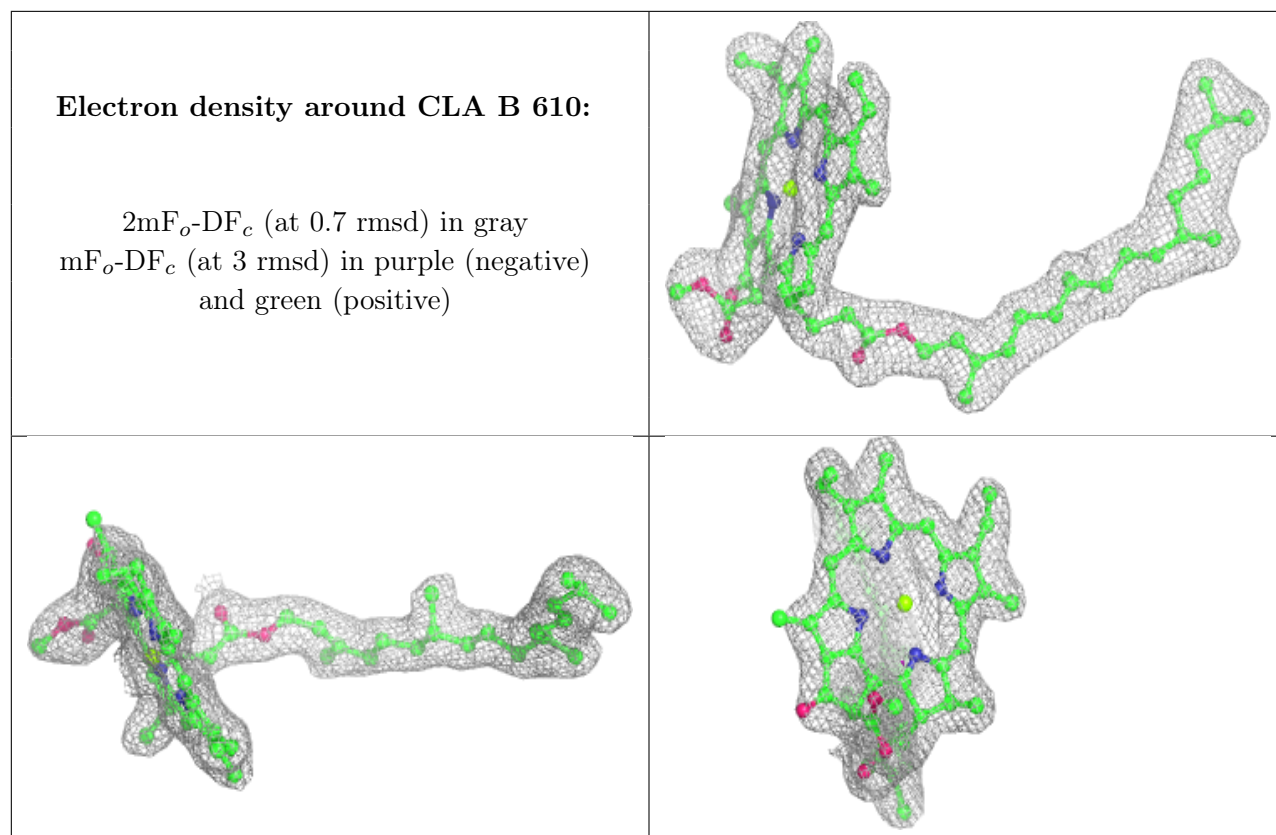




**Electron density around LHG 1 101:**

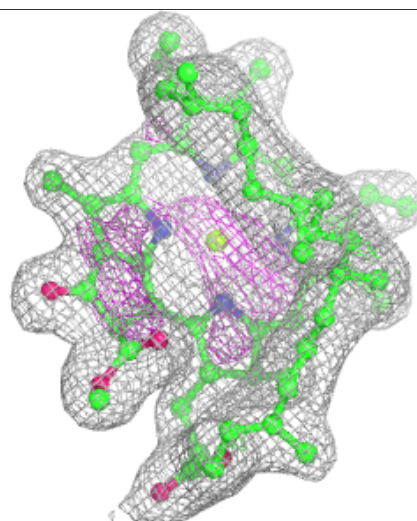
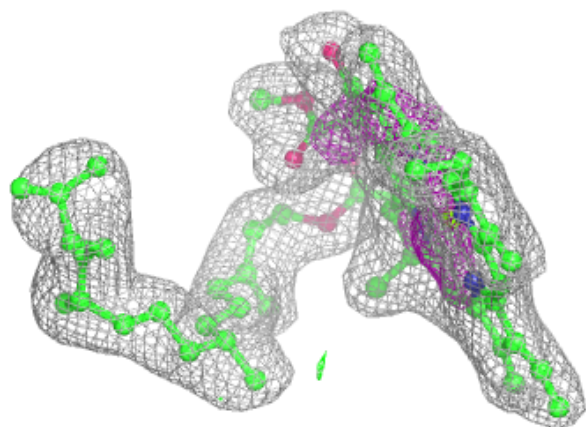
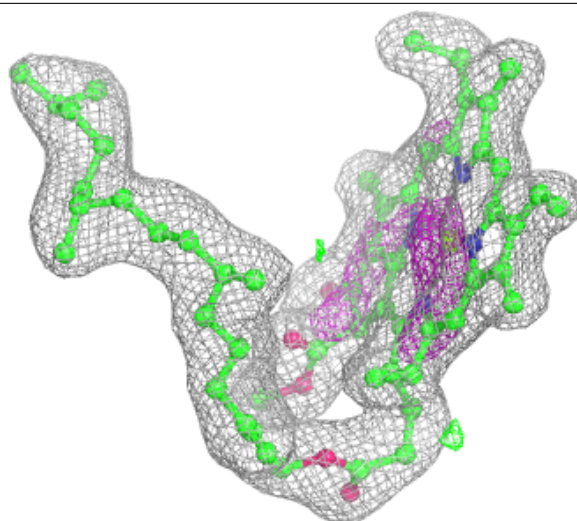
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





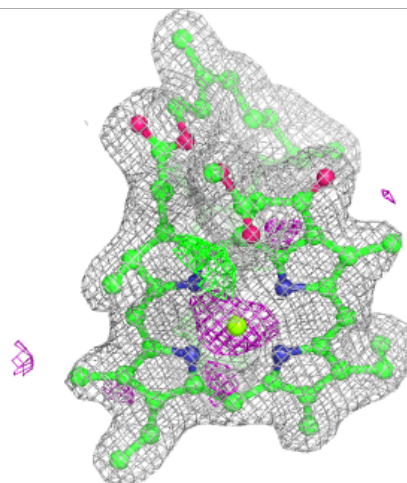
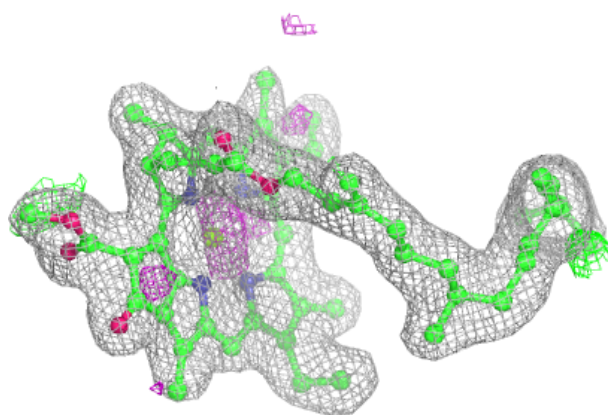
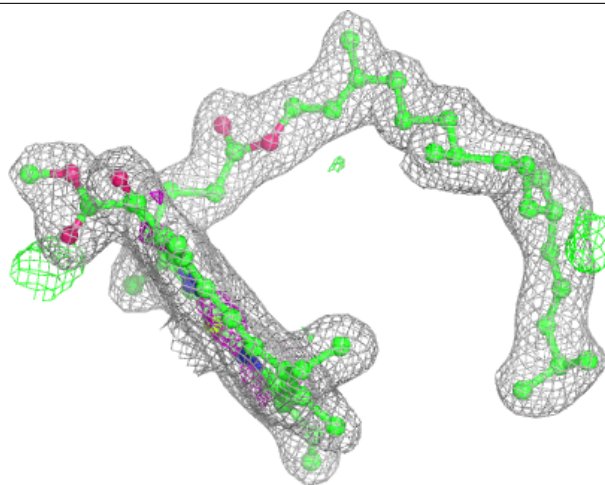
**Electron density around CLA B 614:**

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



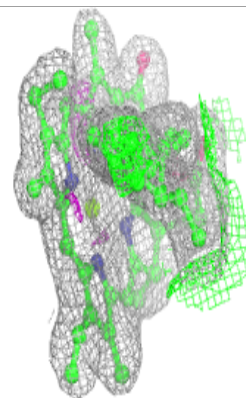
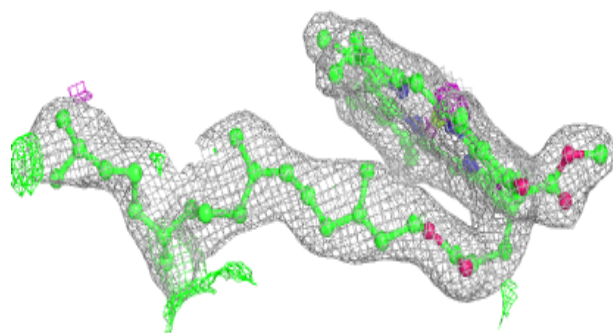
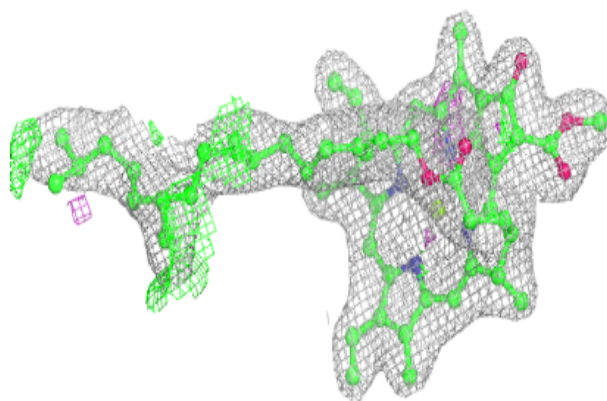
**Electron density around CLA b 620:**

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

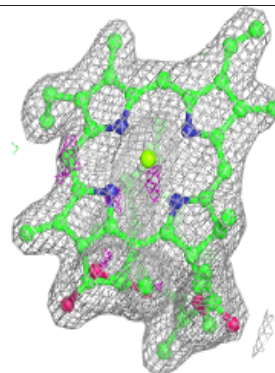
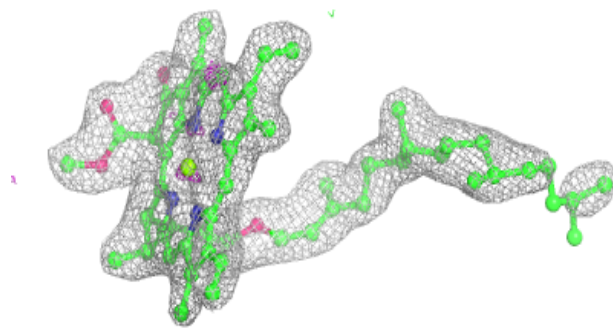
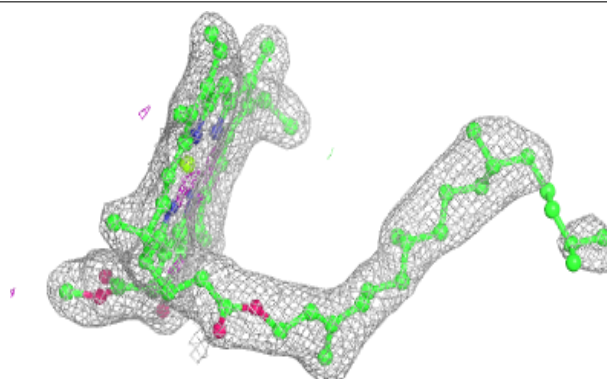


**Electron density around CLA b 623:**

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

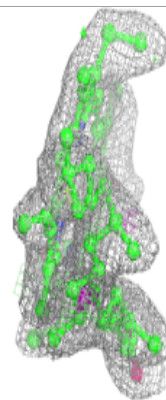
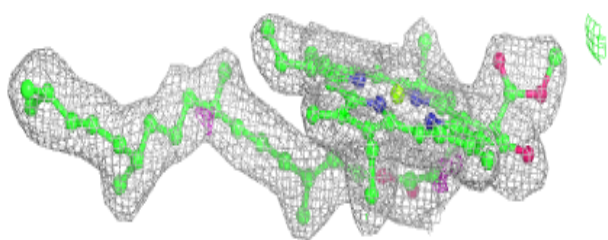
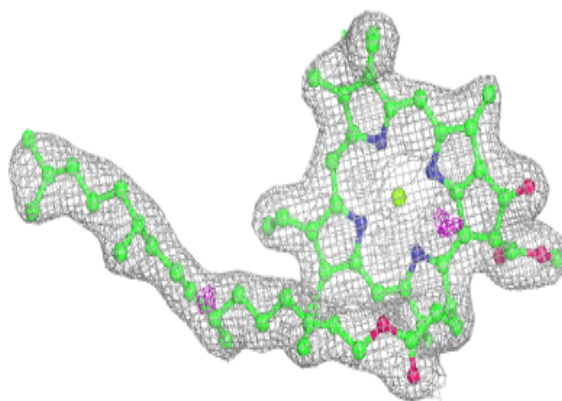
**Electron density around CLA C 509:**

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

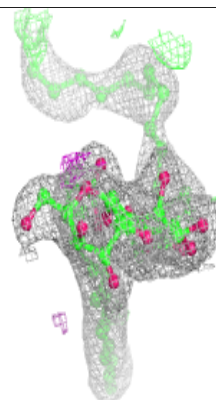
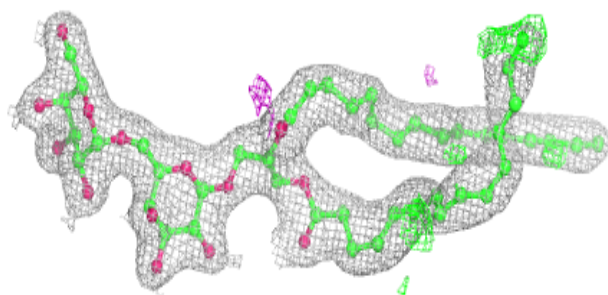
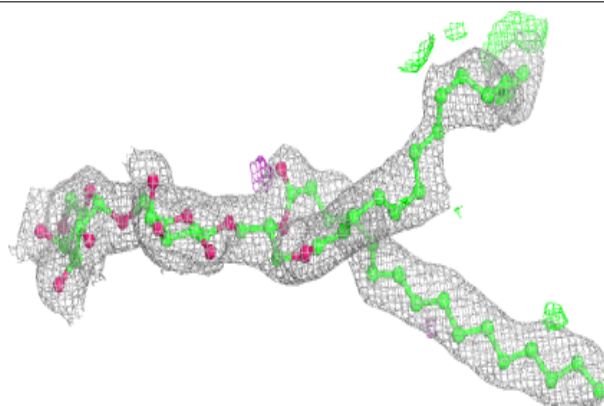


**Electron density around CLA c 505:**

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

**Electron density around DGD C 517:**

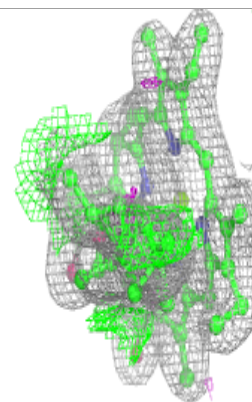
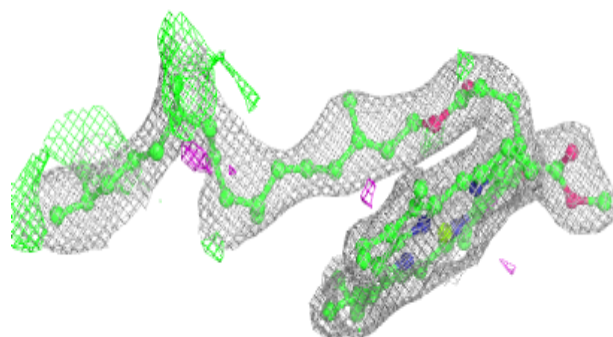
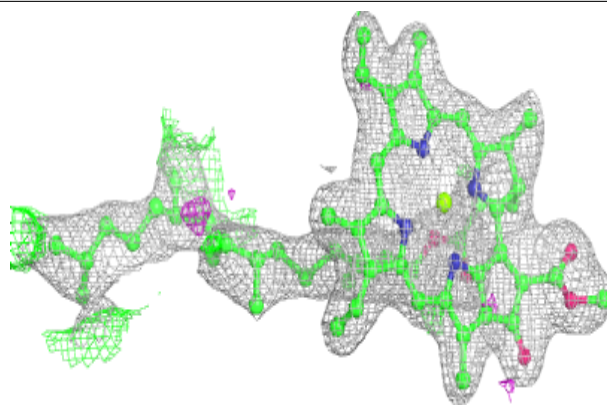
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



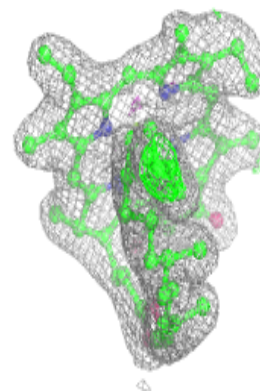
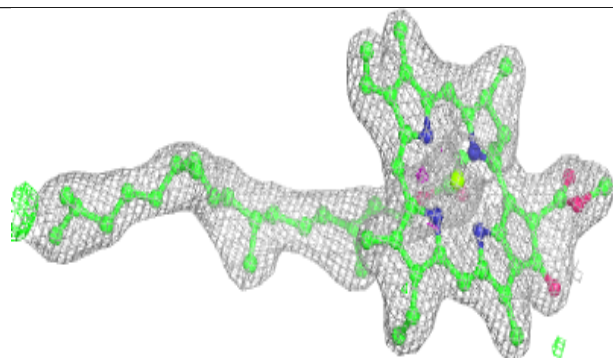
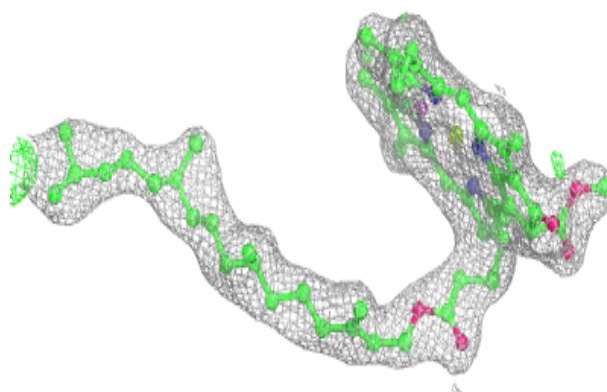


**Electron density around CLA B 615:**

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

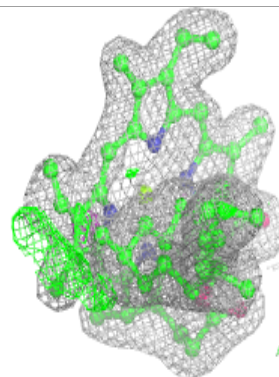
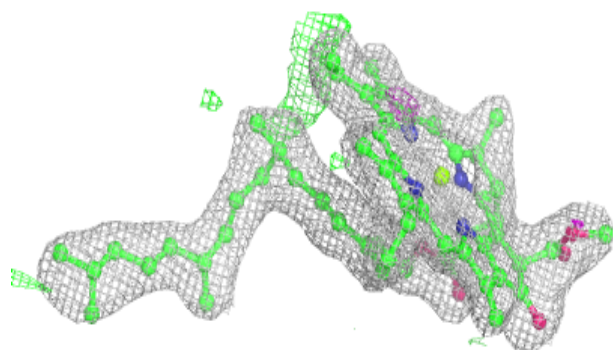
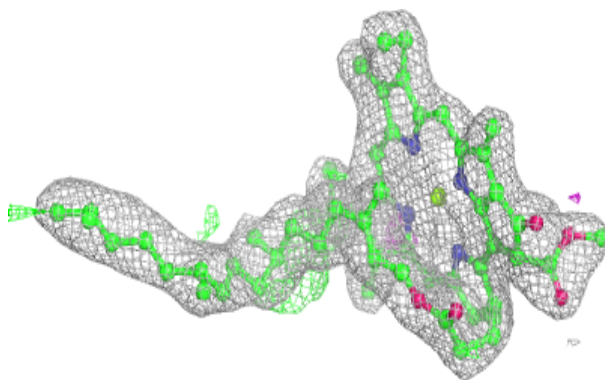
**Electron density around CLA c 508:**

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



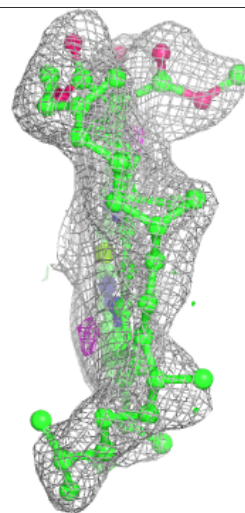
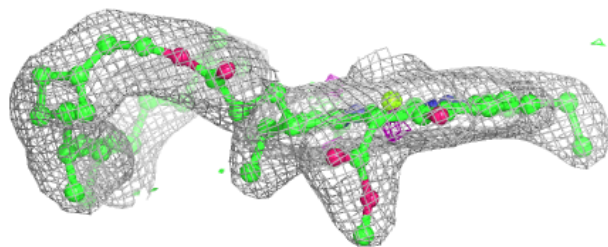
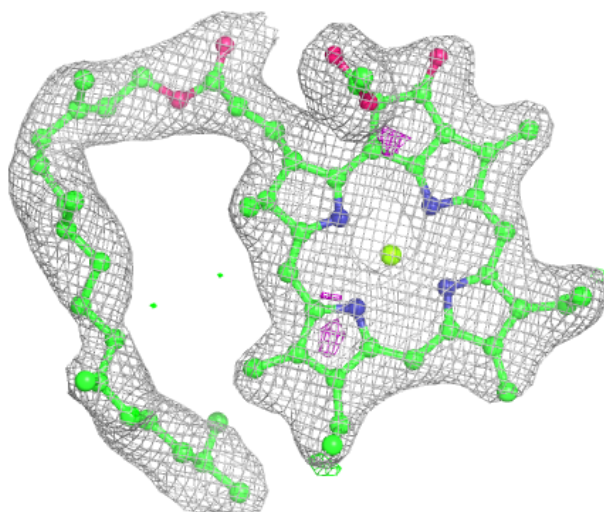
**Electron density around CLA c 509:**

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



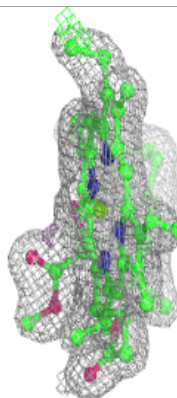
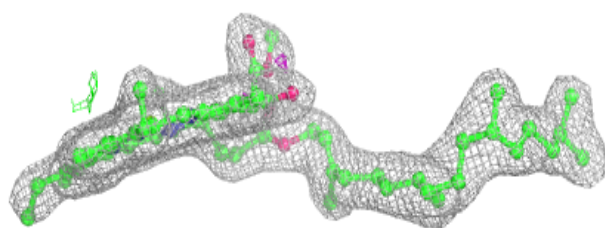
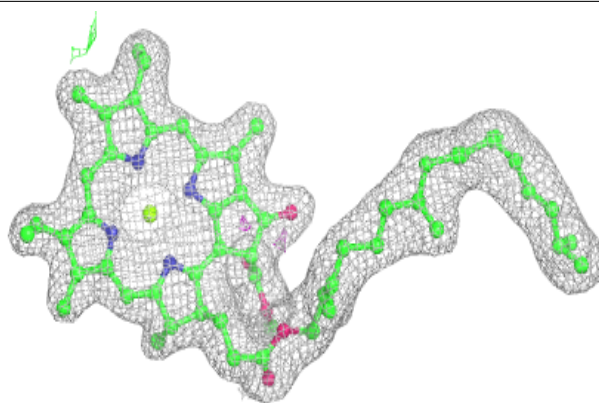
**Electron density around CLA C 513:**

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

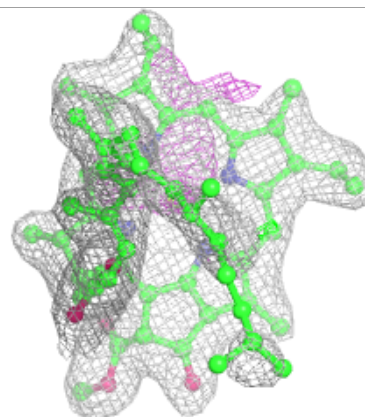
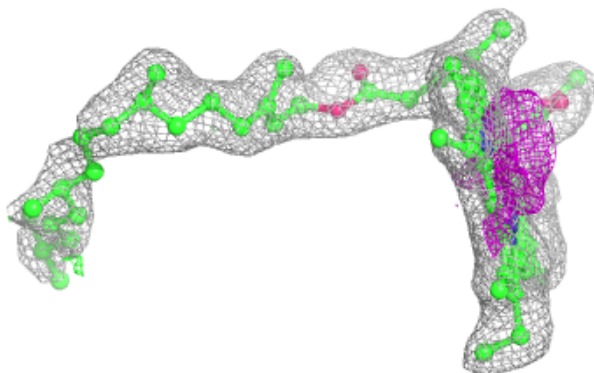
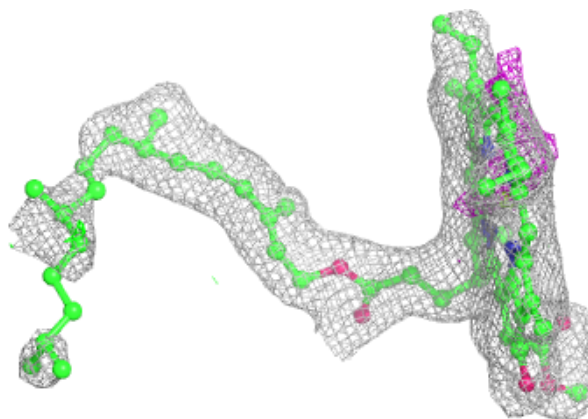


**Electron density around CLA B 603:**

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

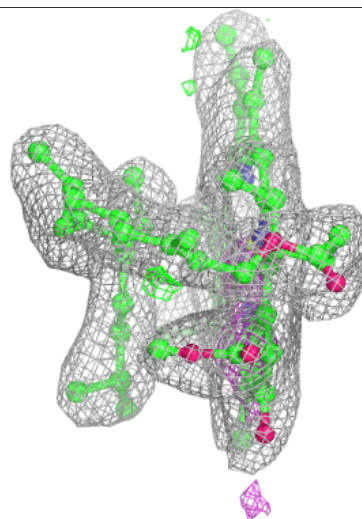
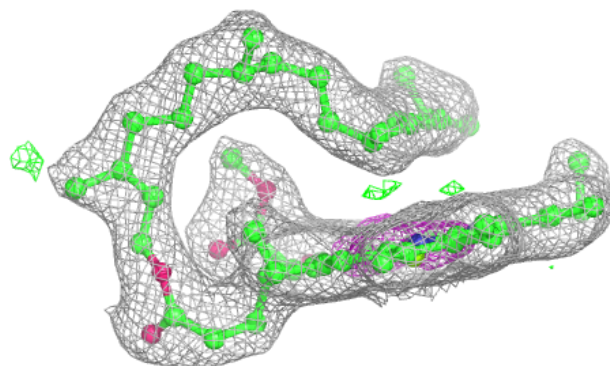
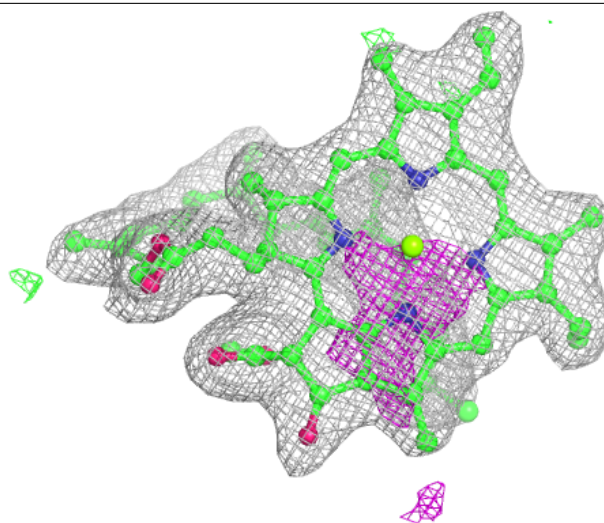
**Electron density around CLA D 403:**

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



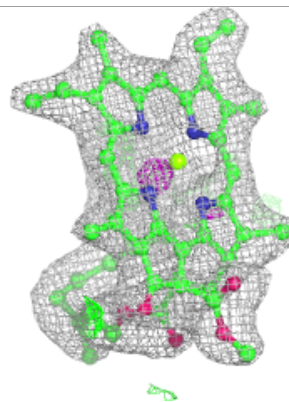
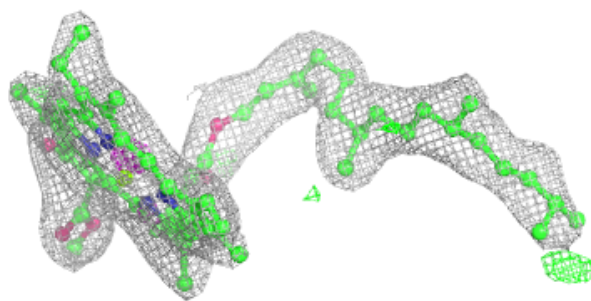
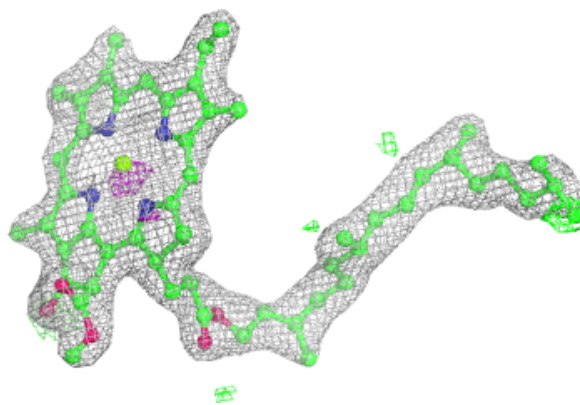
**Electron density around CLA c 514:**

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



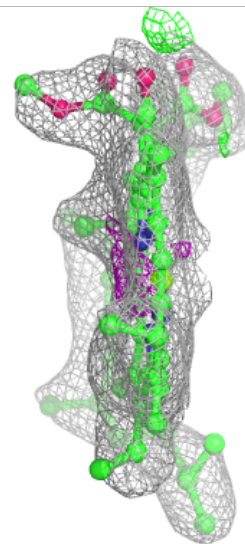
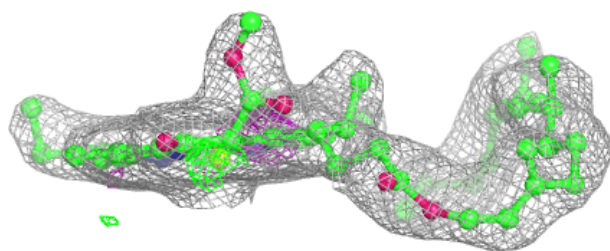
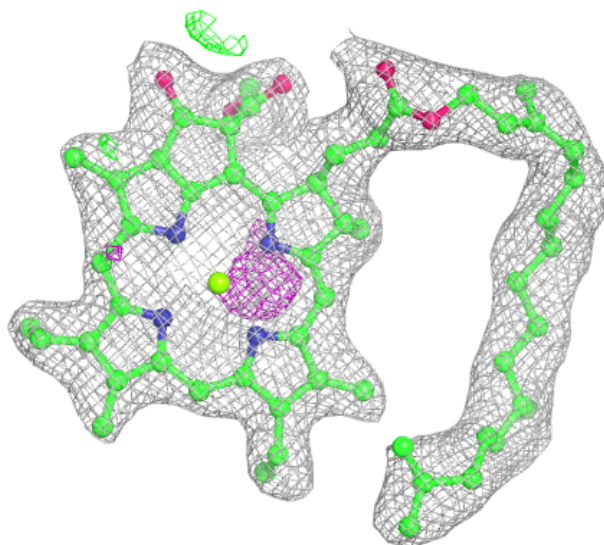
**Electron density around CLA c 515:**

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



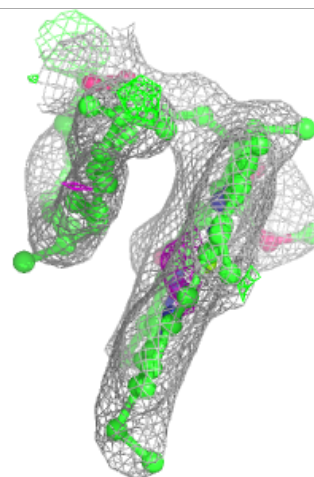
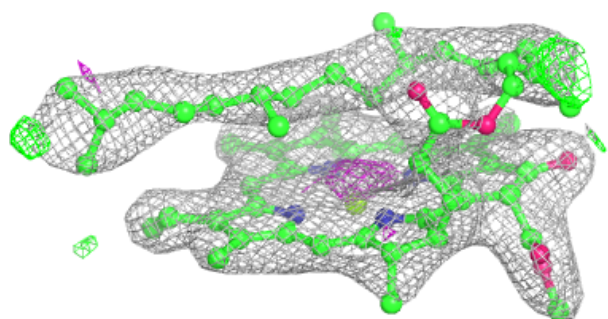
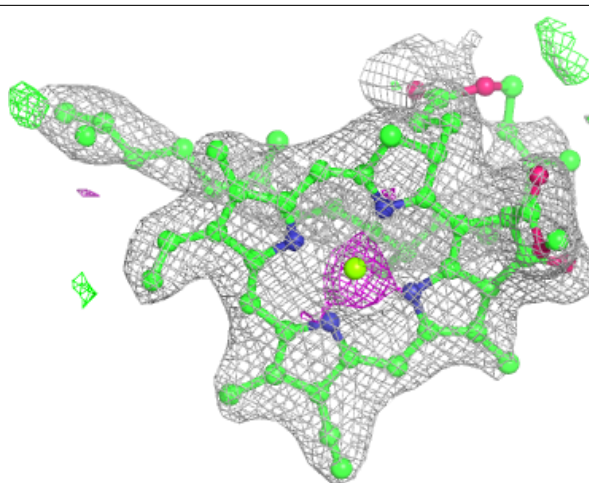
**Electron density around CLA c 516:**

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



**Electron density around CLA b 610:**

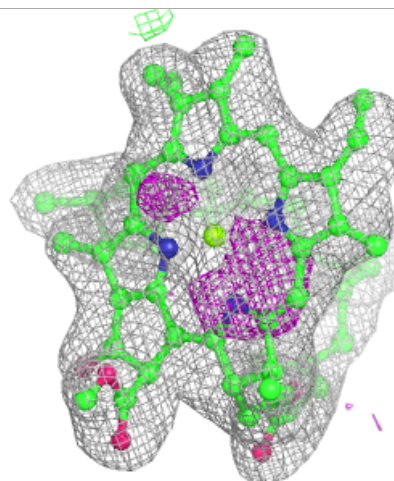
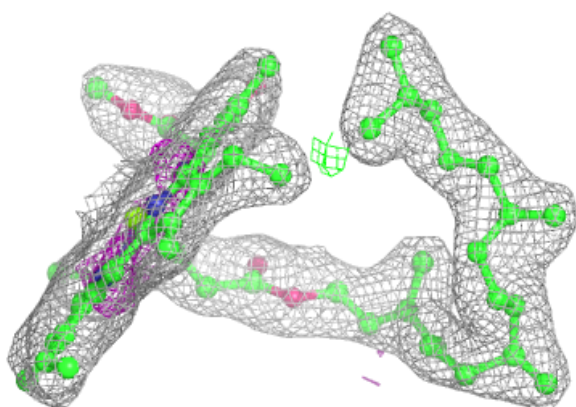
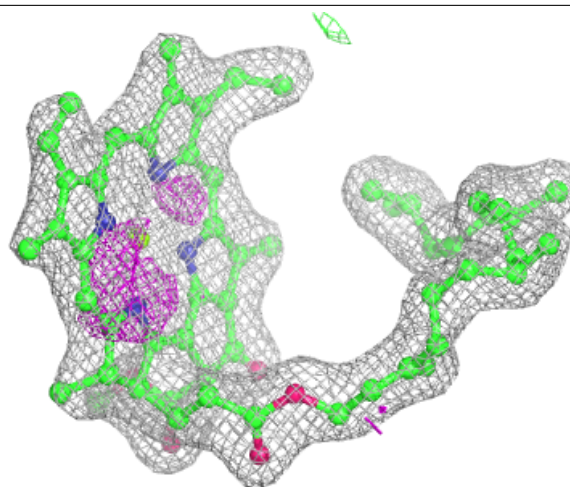
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





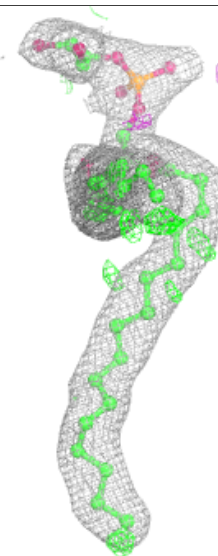
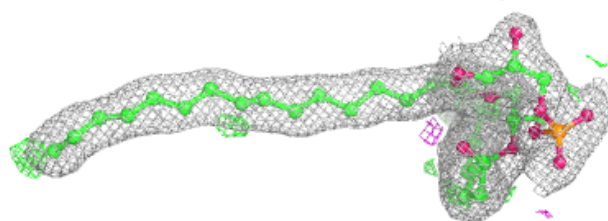
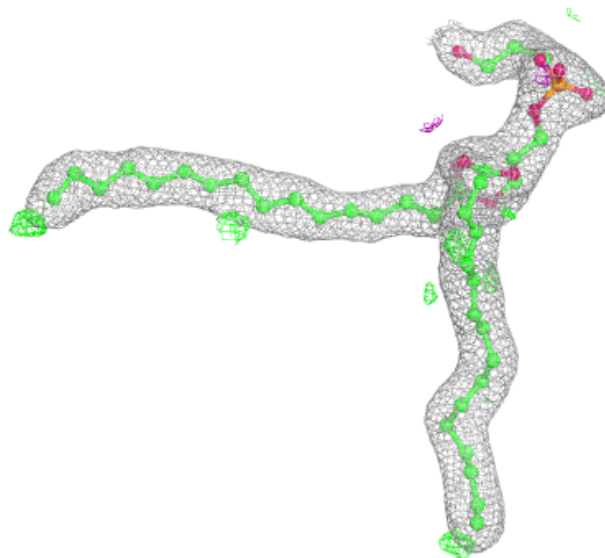
**Electron density around CLA C 504:**

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



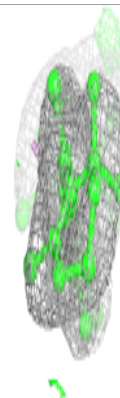
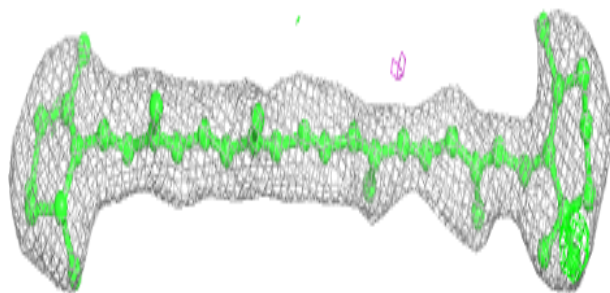
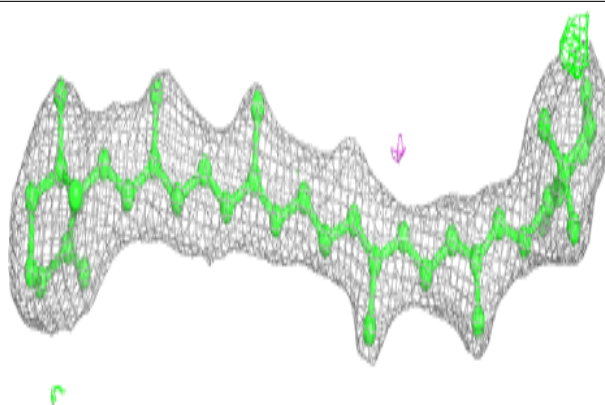
**Electron density around LHG L 101:**

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

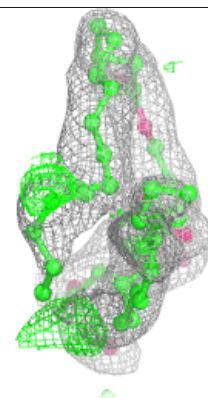
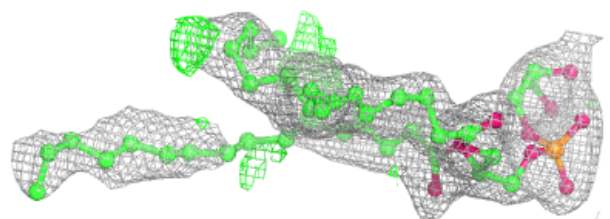
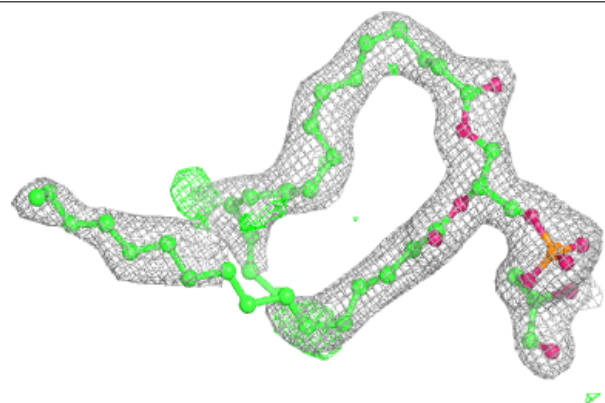


**Electron density around BCR c 527:**

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

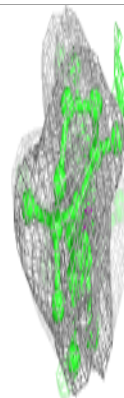
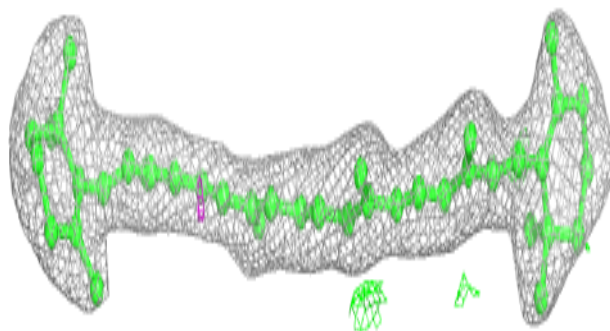
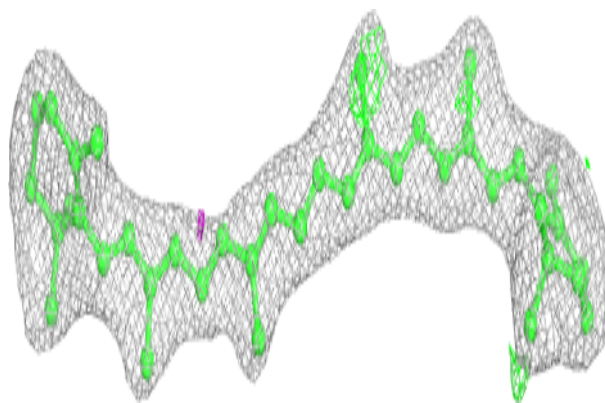
**Electron density around LHG d 409:**

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

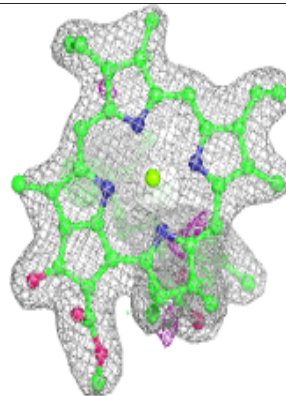
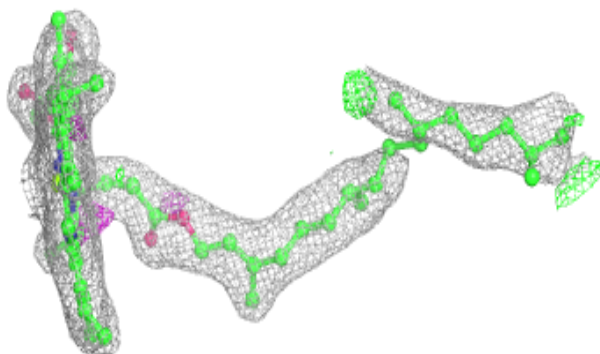
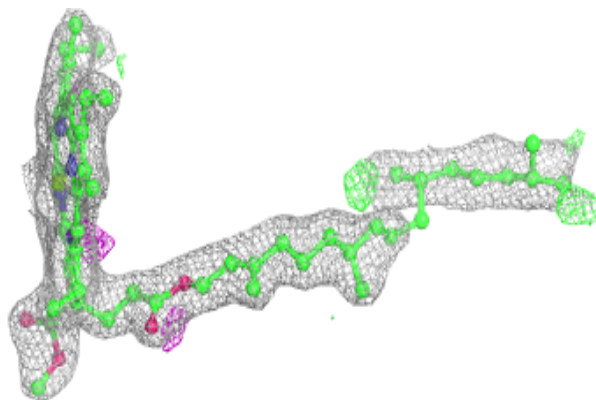


**Electron density around BCR y 101:**

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

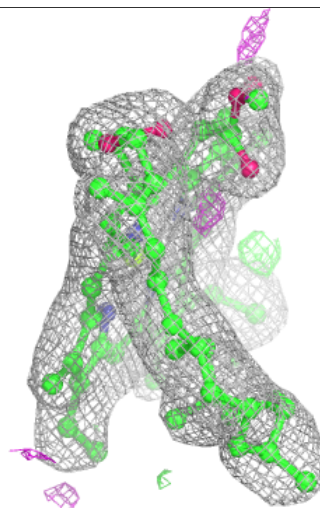
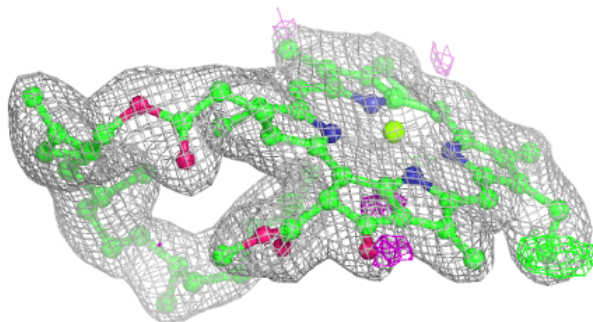
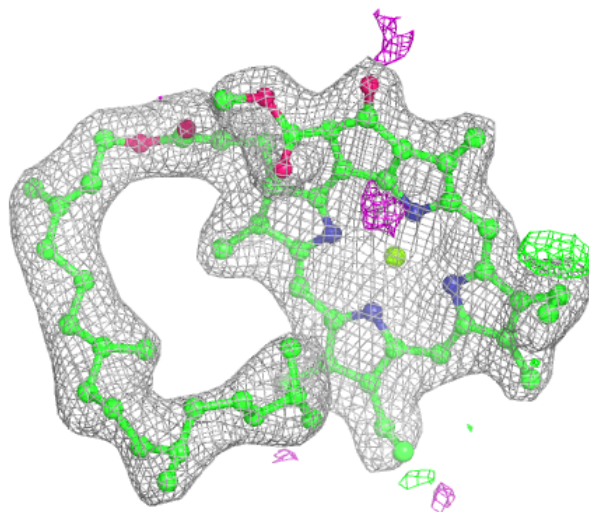
**Electron density around CLA B 607:**

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



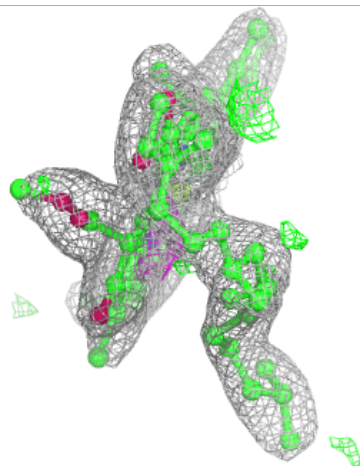
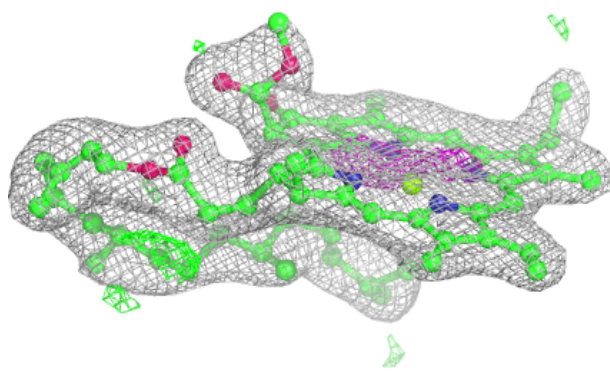
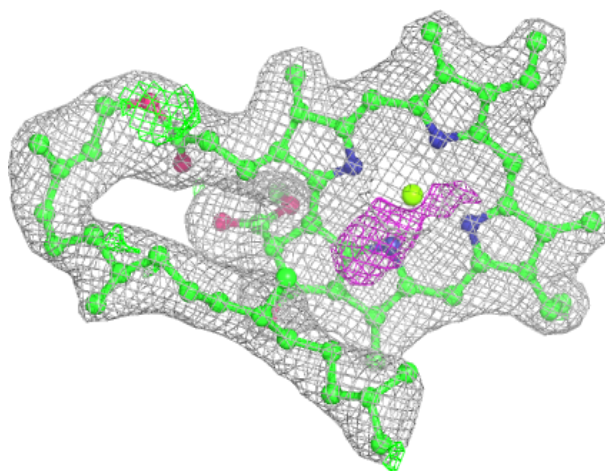
**Electron density around CLA B 616:**

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



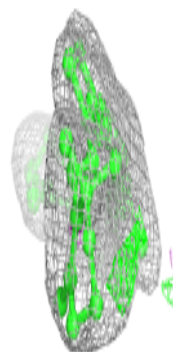
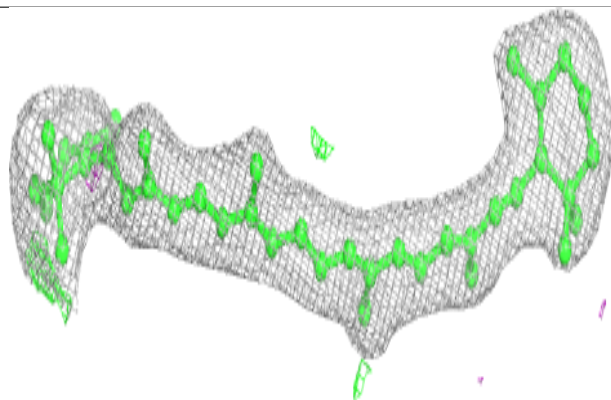
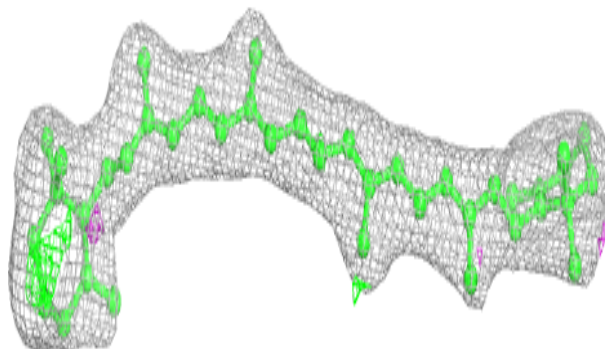
**Electron density around CLA C 510:**

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

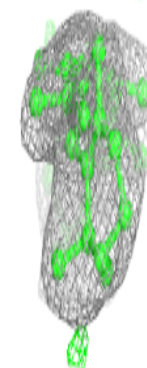
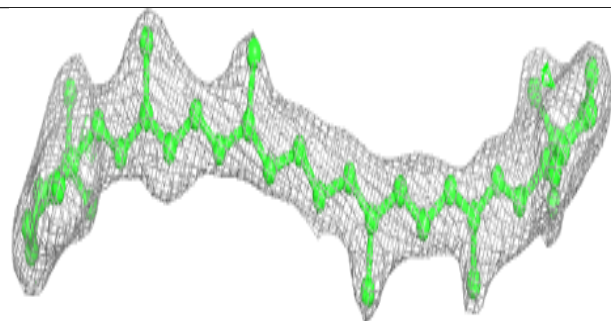
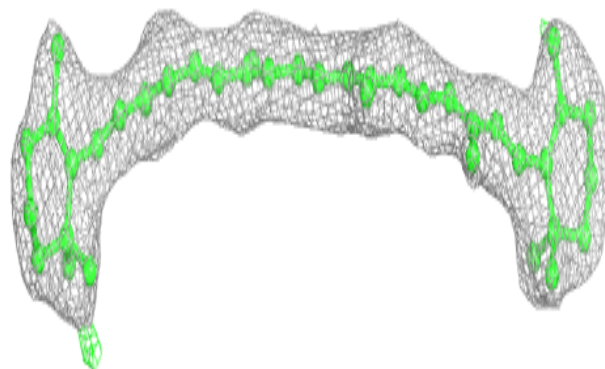


**Electron density around BCR d 405:**

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

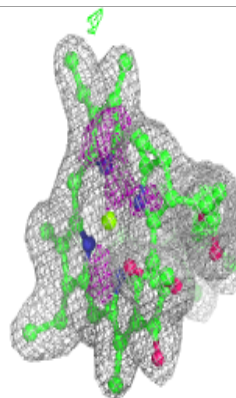
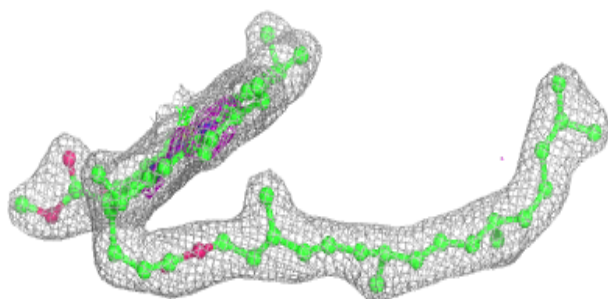
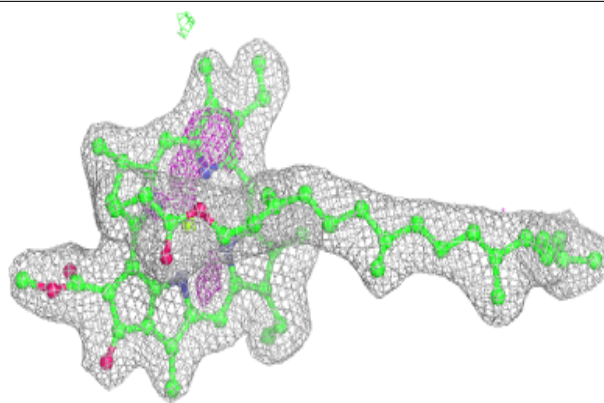
**Electron density around BCR k 101:**

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

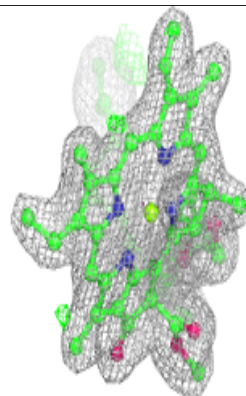
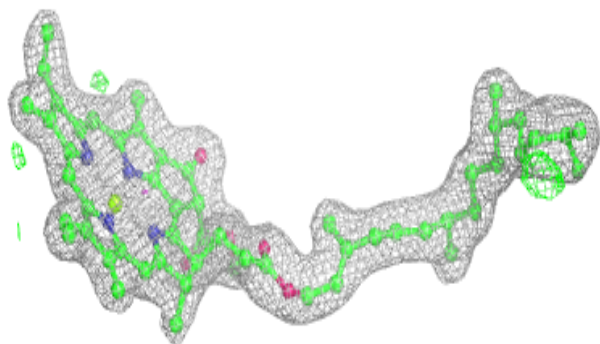
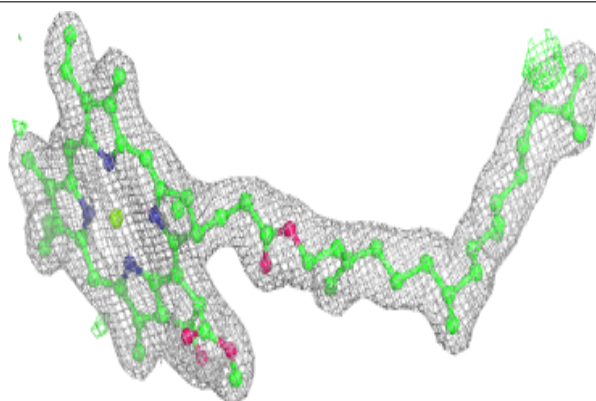


**Electron density around CLA b 617:**

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

**Electron density around CLA a 409:**

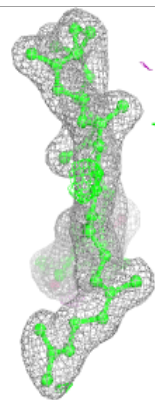
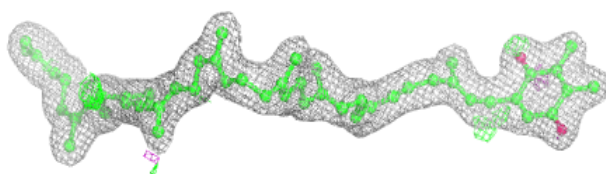
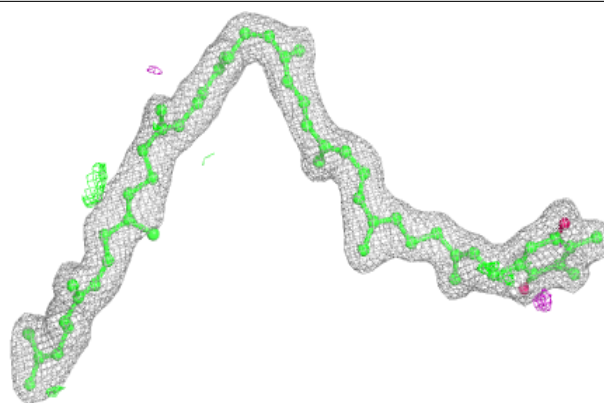
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



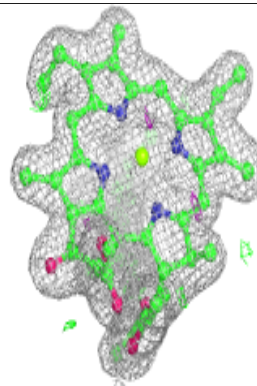
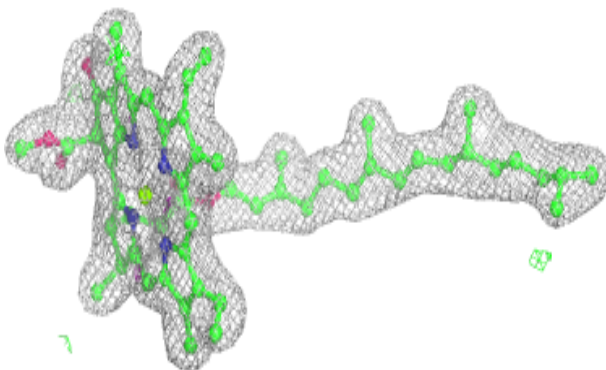
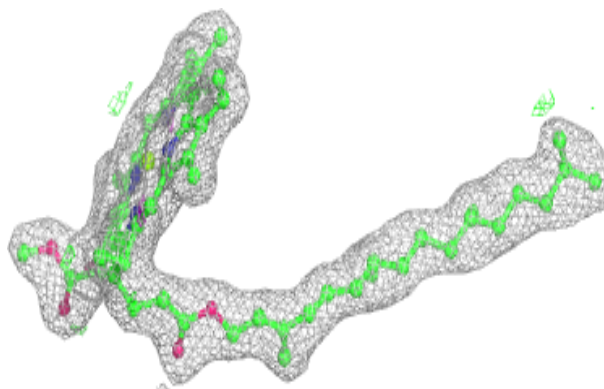


**Electron density around PL9 D 405:**

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

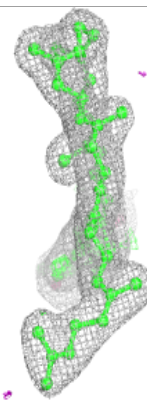
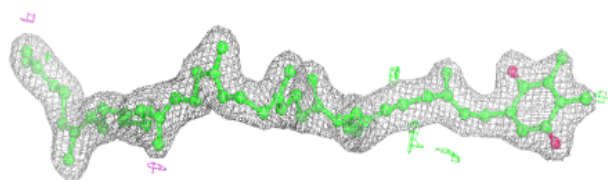
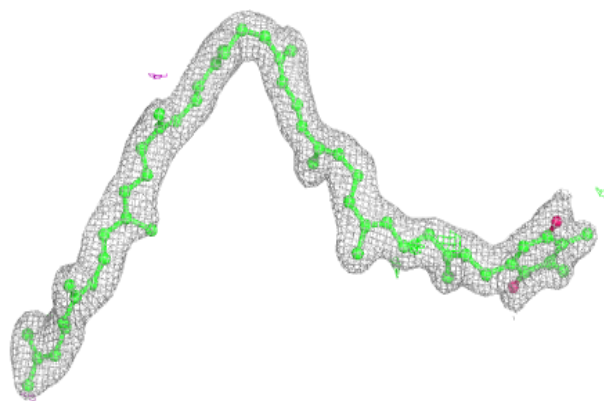
**Electron density around CLA B 608:**

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

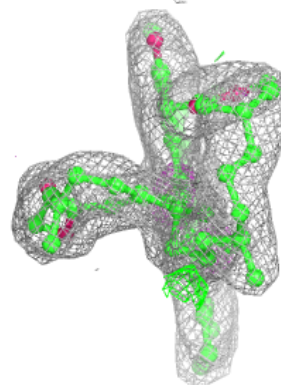
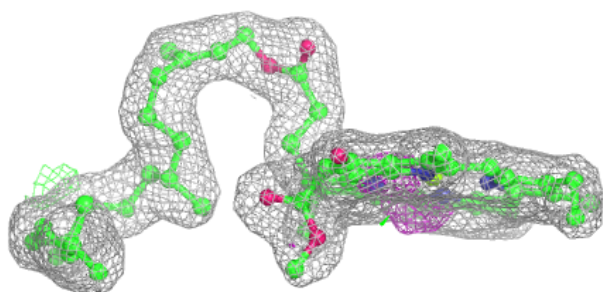
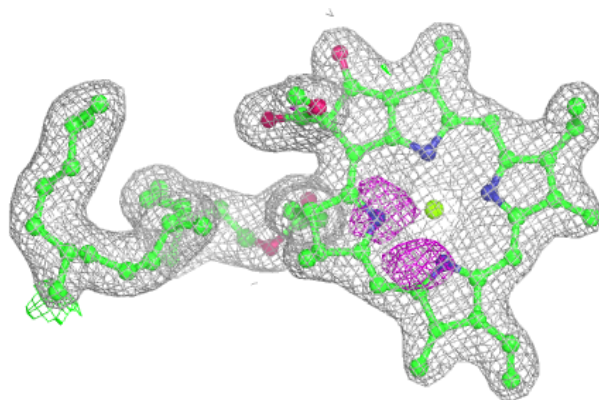


**Electron density around PL9 d 406:**

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

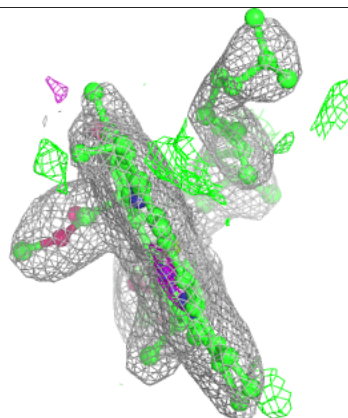
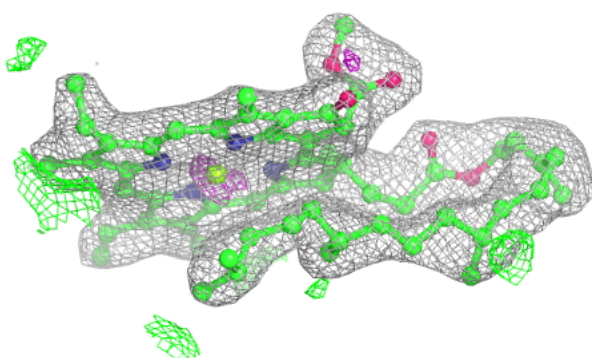
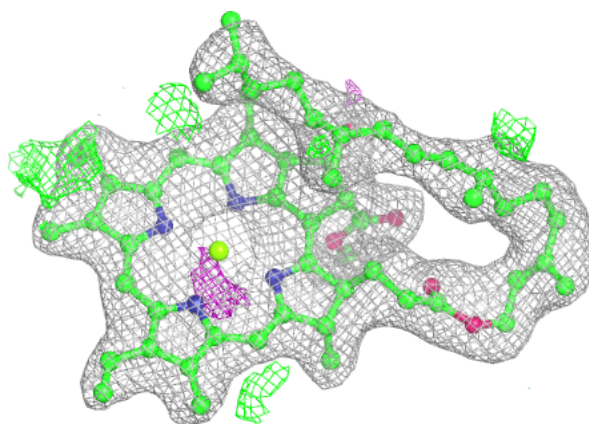
**Electron density around CLA b 621:**

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

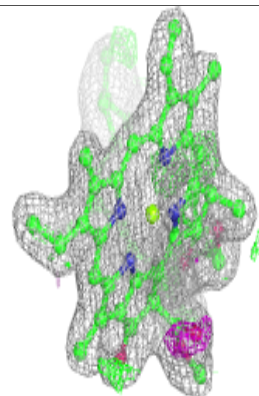
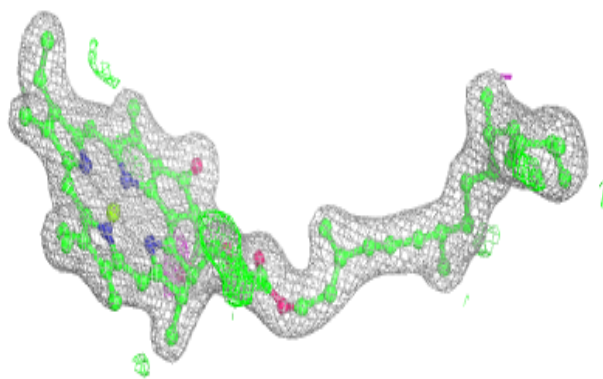
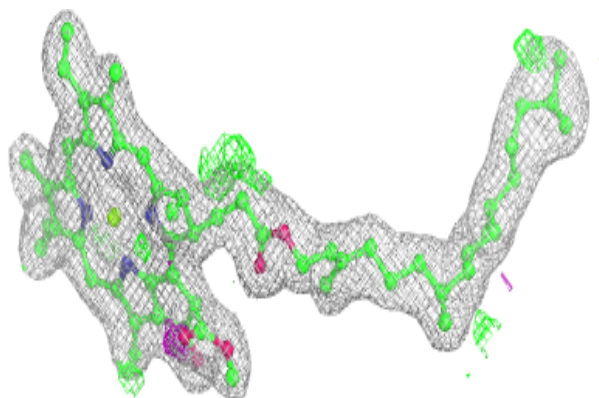


**Electron density around CLA c 513:**

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

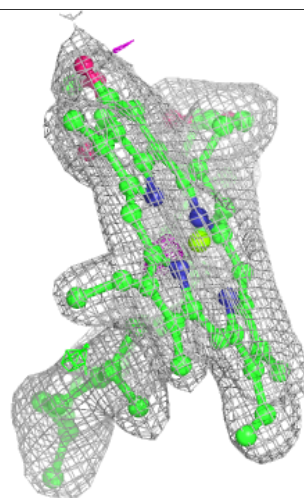
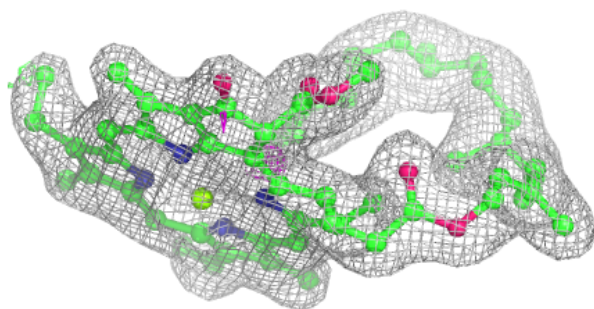
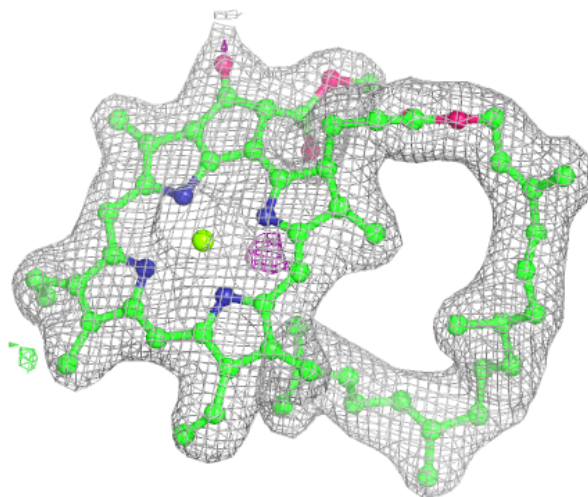
**Electron density around CLA A 405:**

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



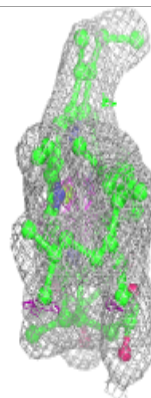
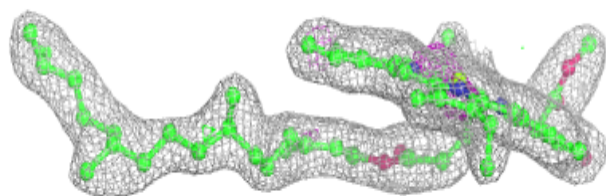
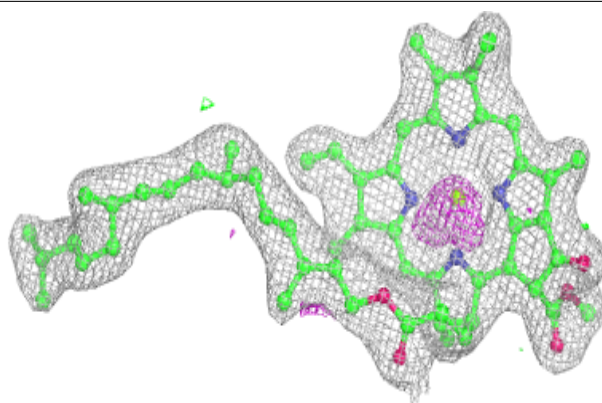
**Electron density around CLA b 624:**

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

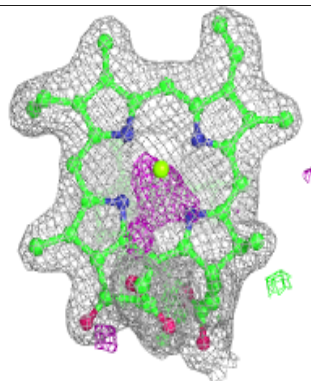
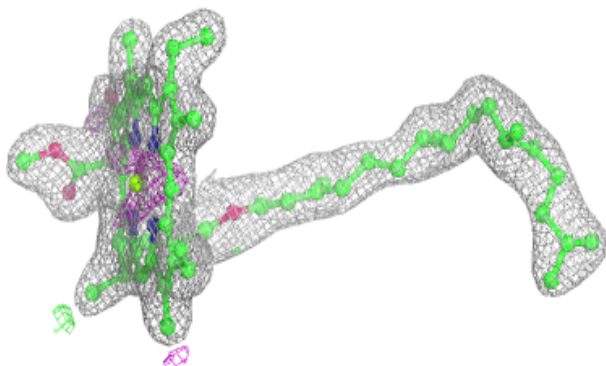
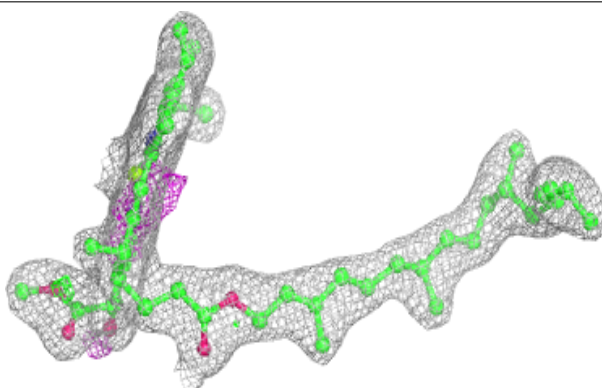


**Electron density around CLA b 612:**

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

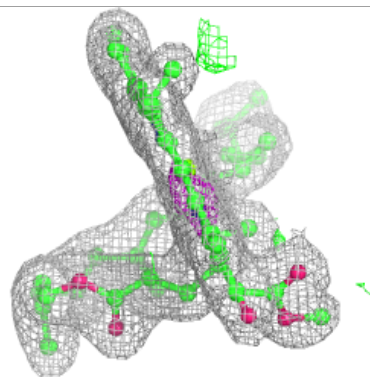
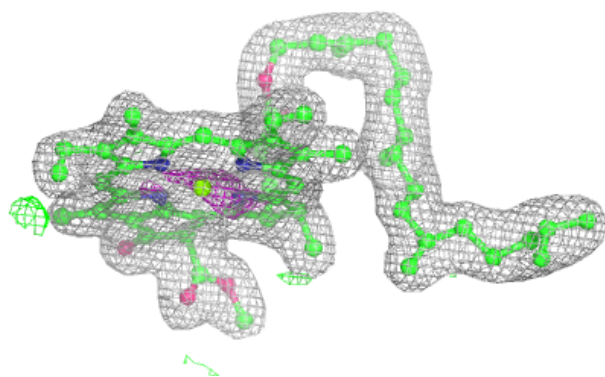
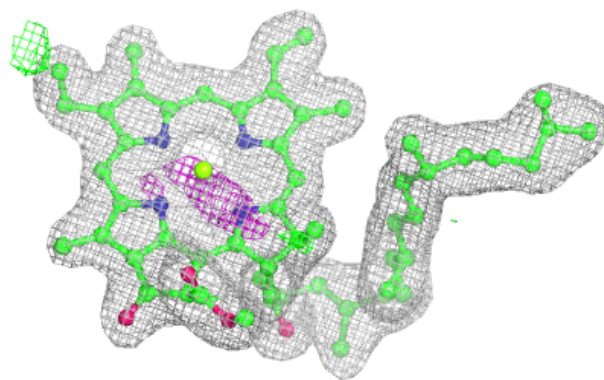
**Electron density around CLA b 614:**

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

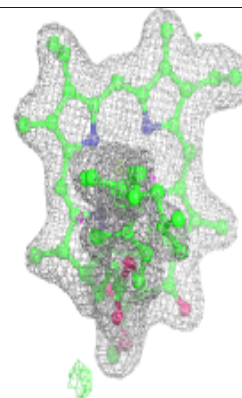
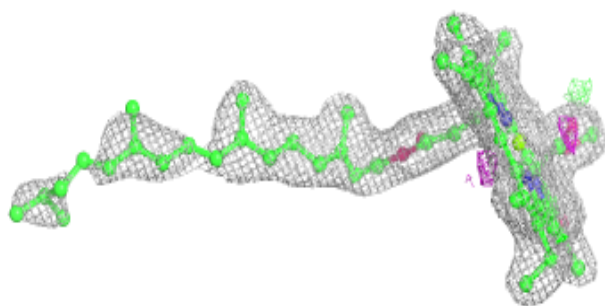
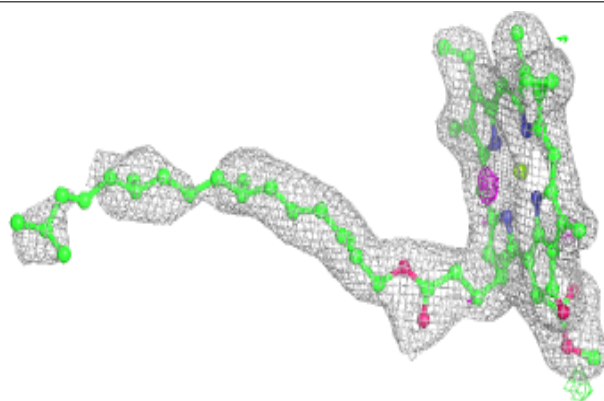


**Electron density around CLA d 402:**

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

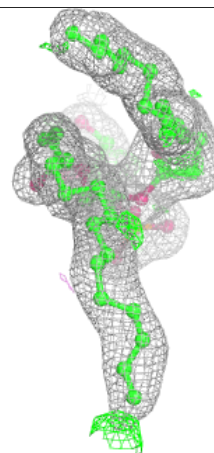
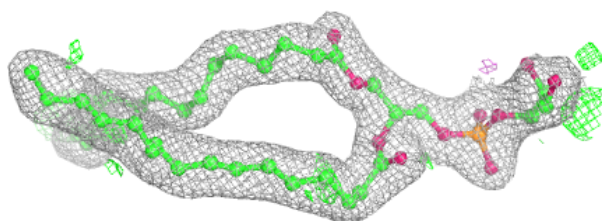
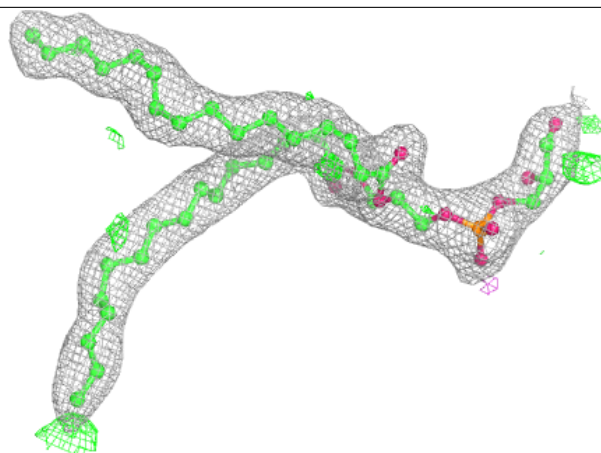
**Electron density around CLA d 404:**

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

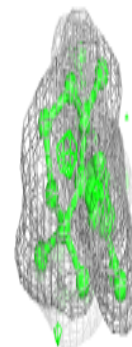
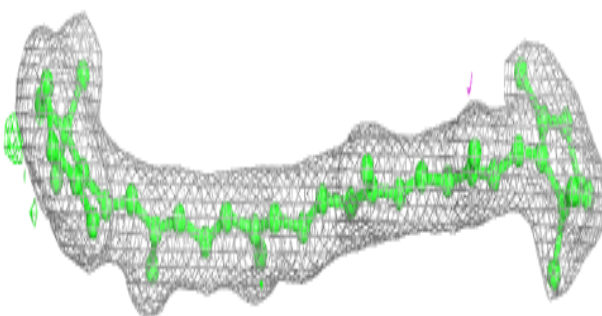
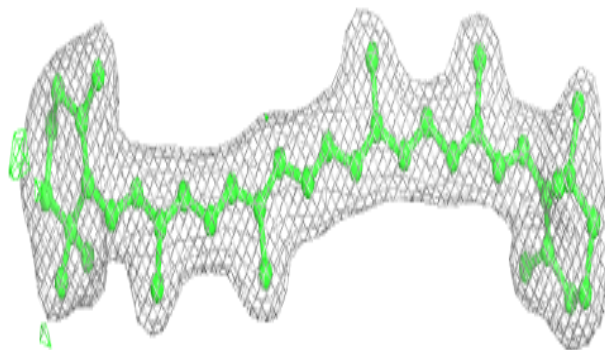


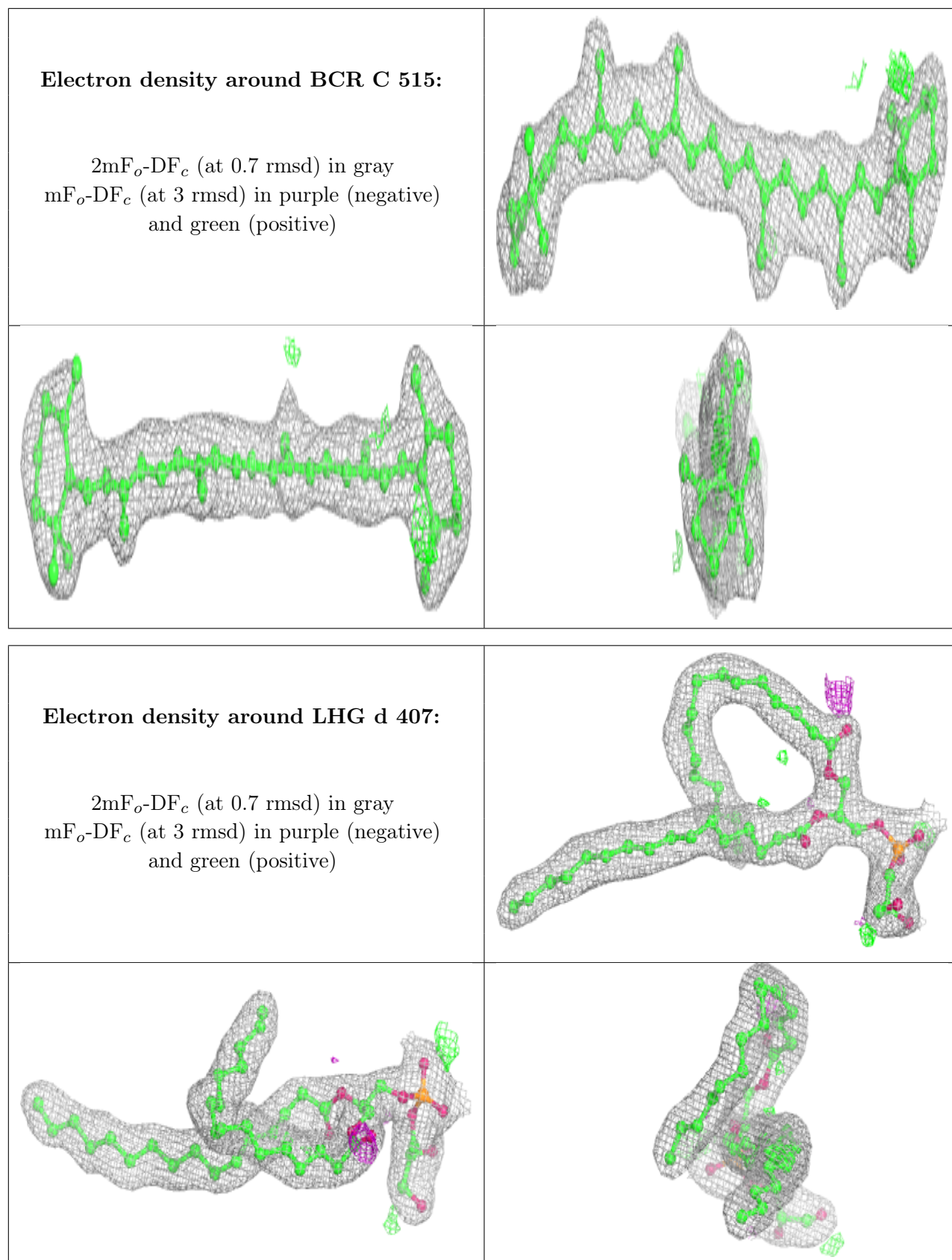
**Electron density around LHG D 408:**

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

**Electron density around BCR B 620:**

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

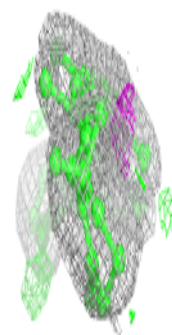
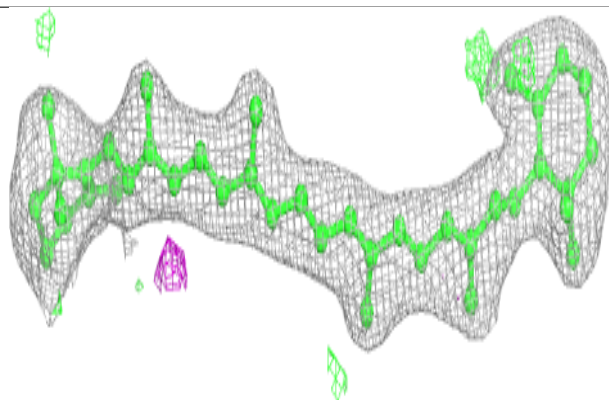
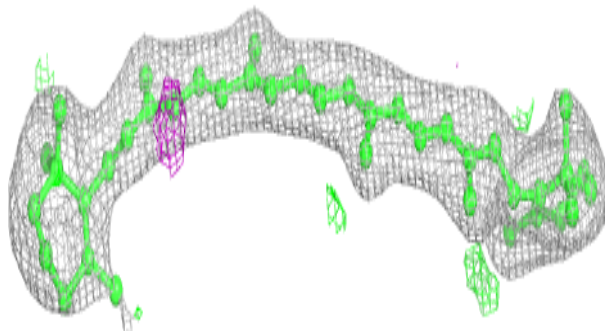




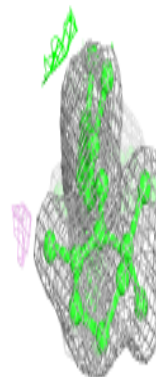
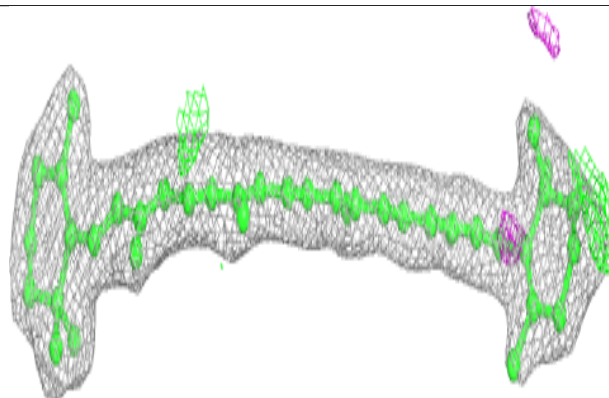
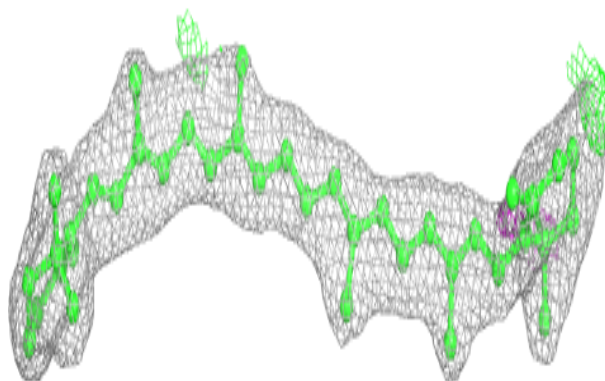


**Electron density around BCR D 404:**

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

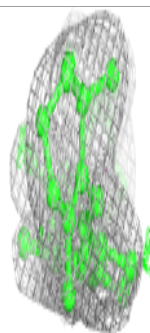
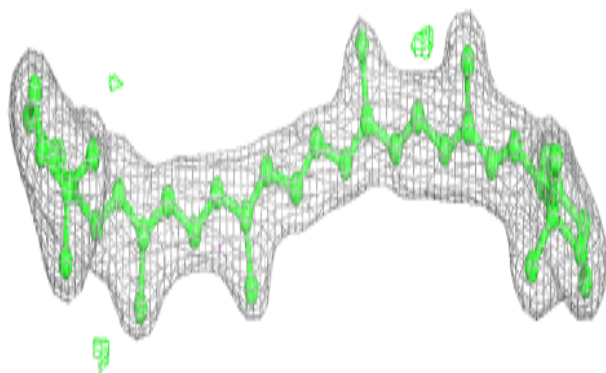
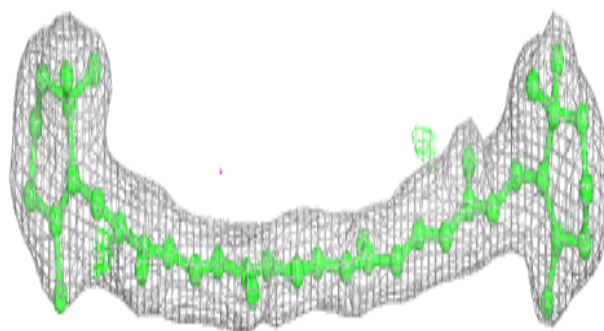
**Electron density around BCR H 101:**

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

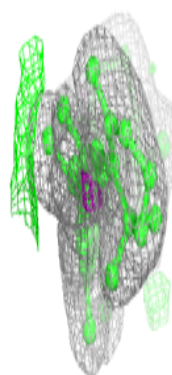
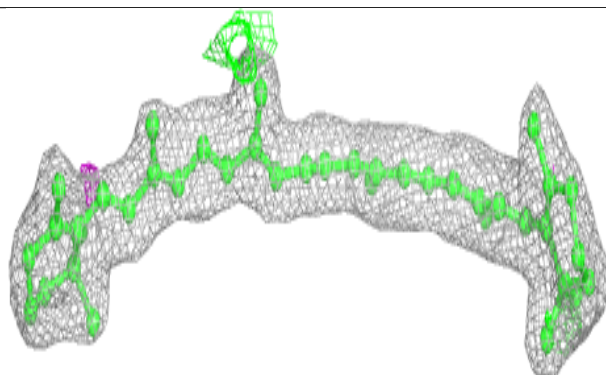
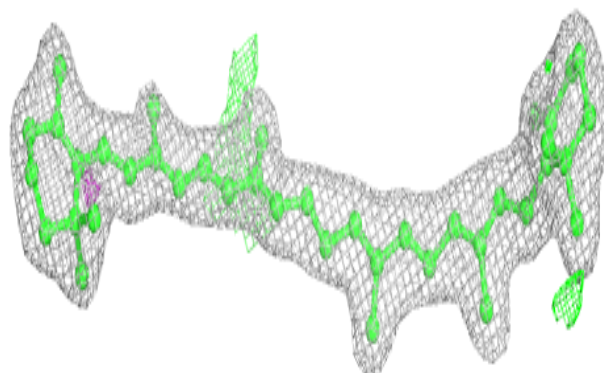


**Electron density around BCR K 101:**

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

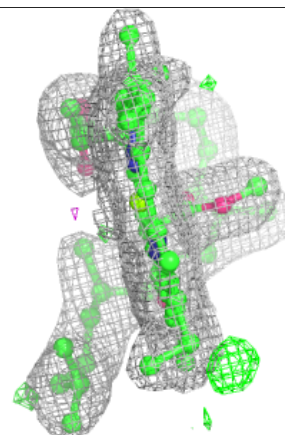
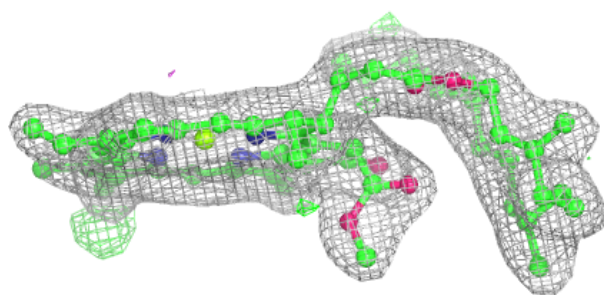
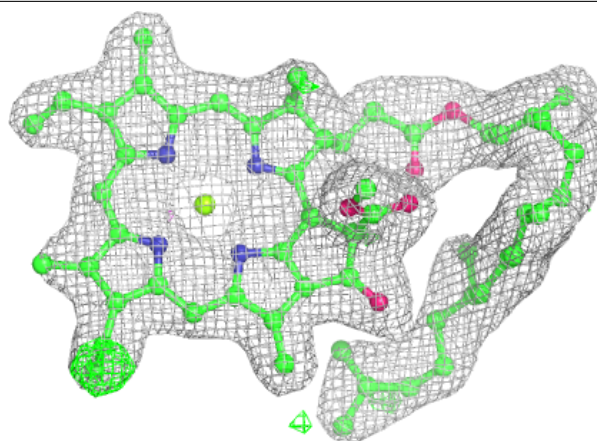
**Electron density around BCR T 103:**

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



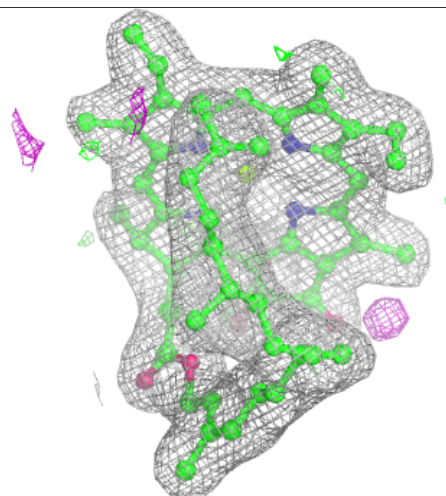
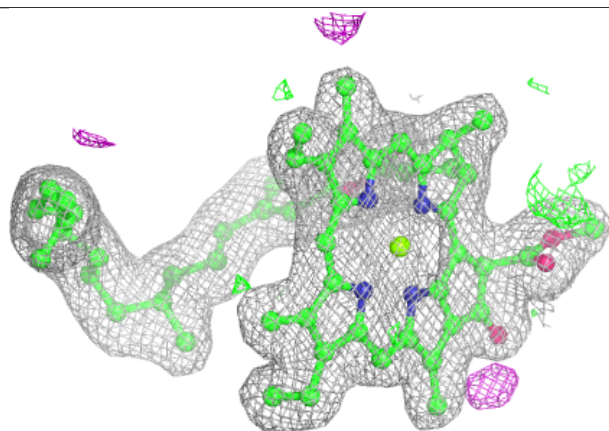
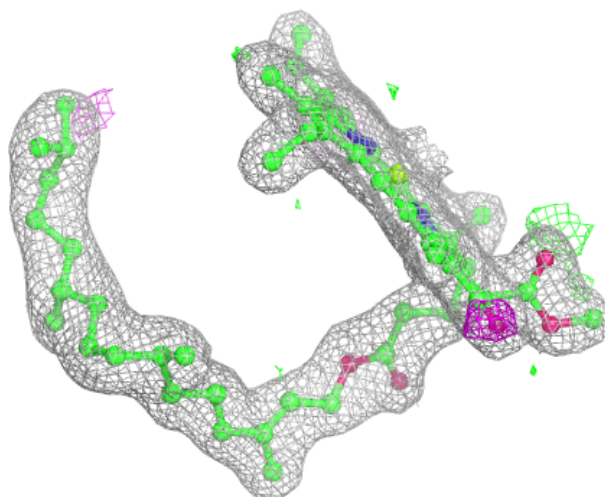
**Electron density around CLA B 611:**

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



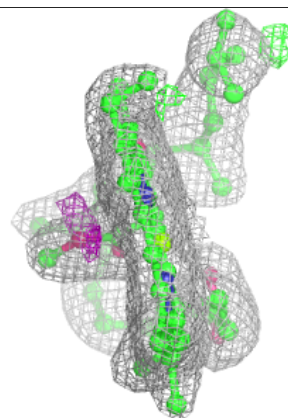
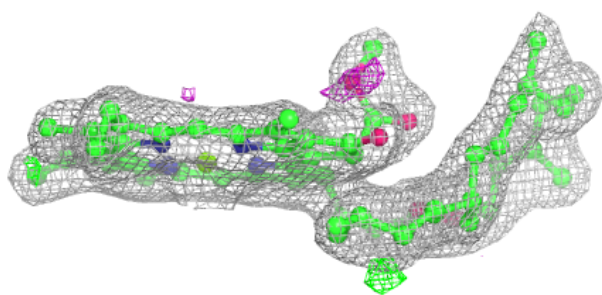
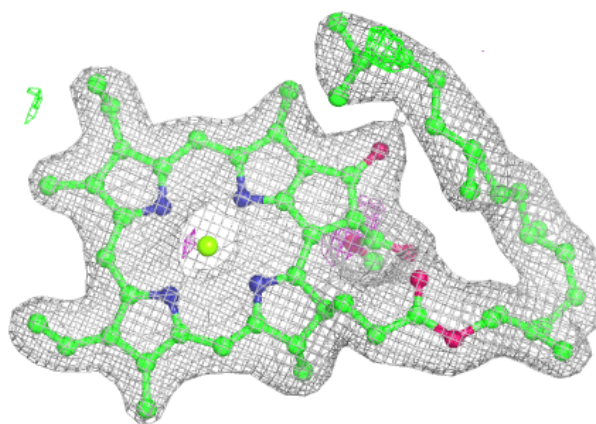
**Electron density around CLA B 612:**

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



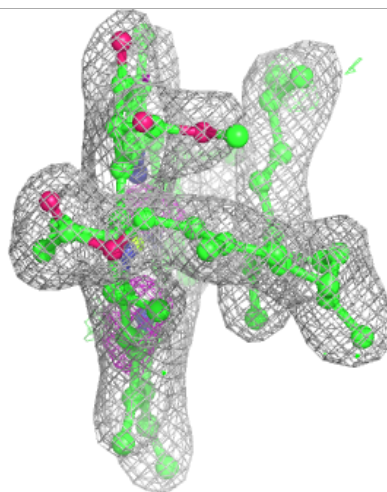
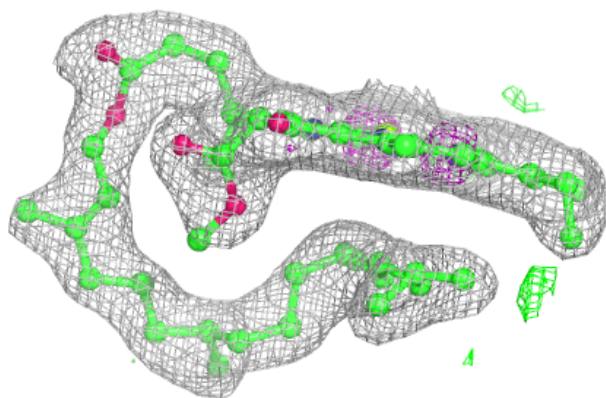
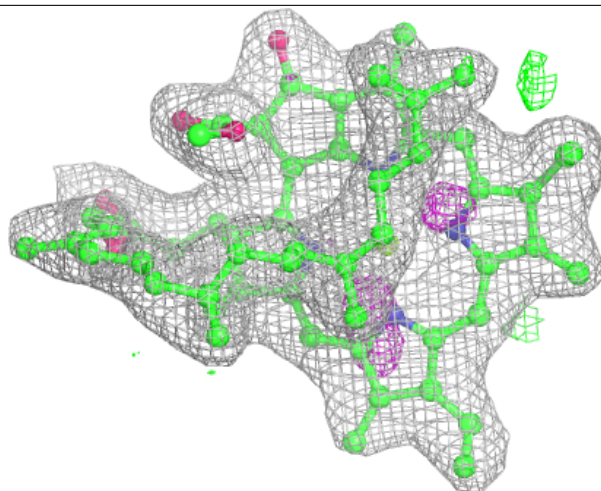
**Electron density around CLA b 619:**

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



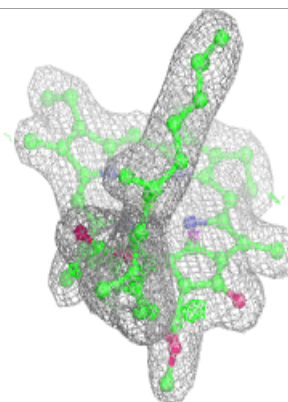
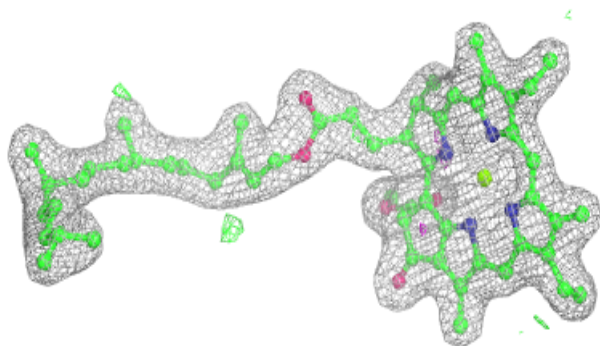
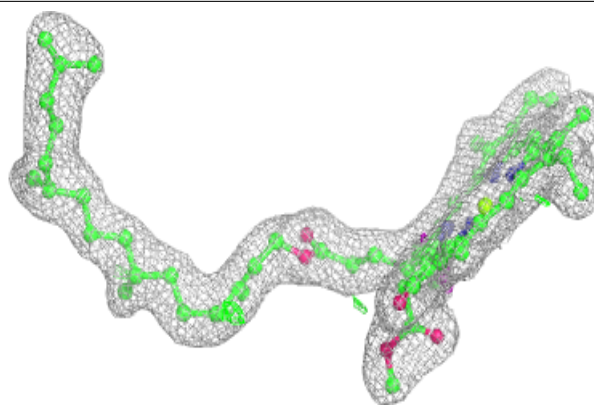
**Electron density around CLA C 511:**

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

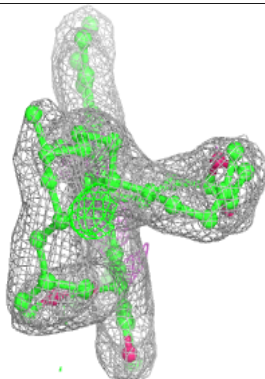
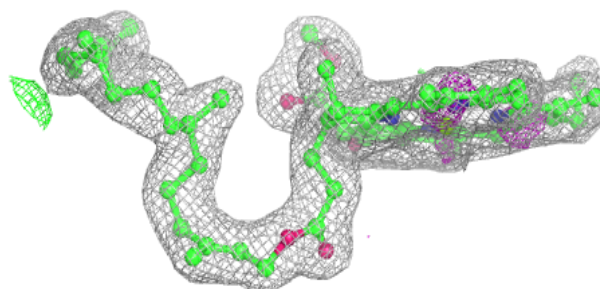
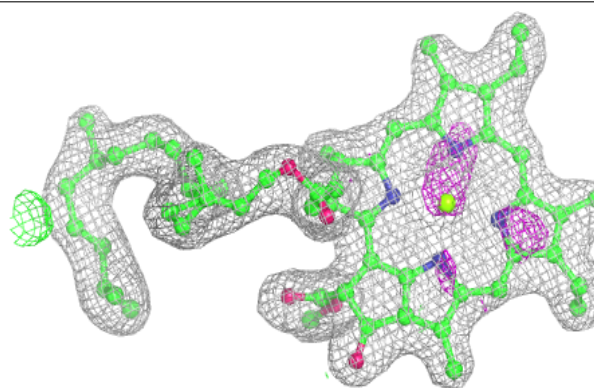


**Electron density around CLA d 403:**

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

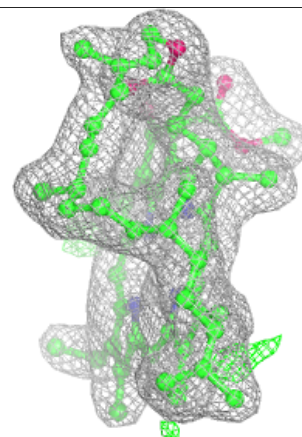
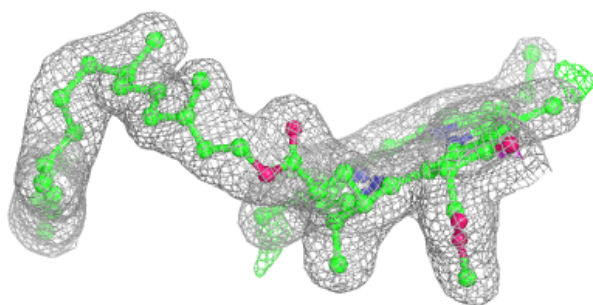
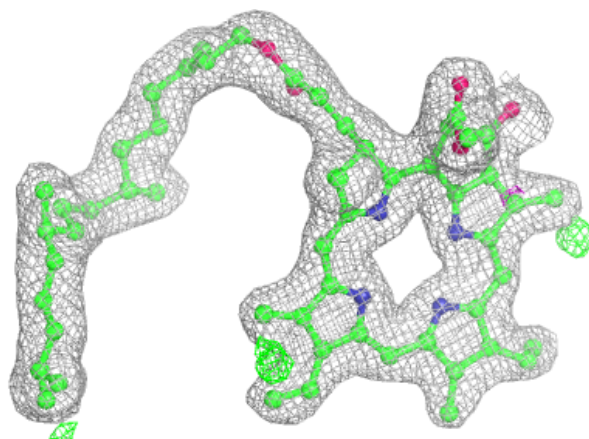
**Electron density around CLA B 613:**

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



**Electron density around PHO A 408:**

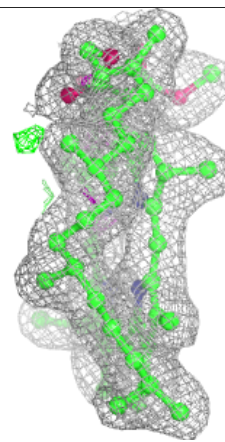
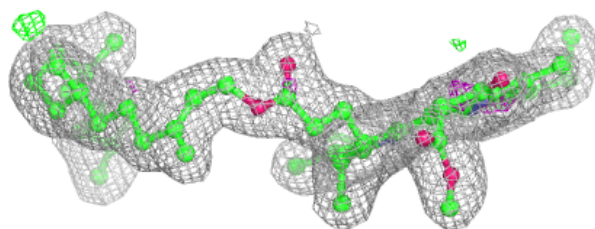
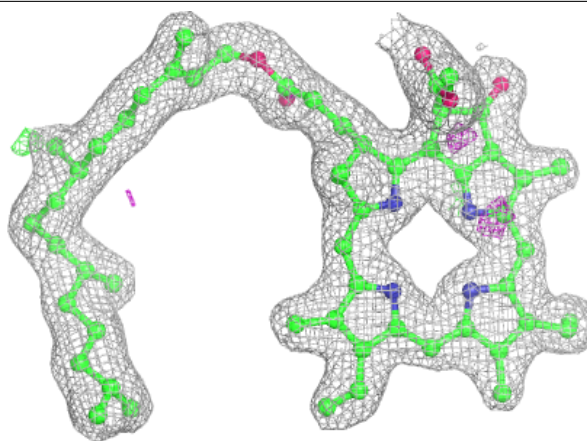
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





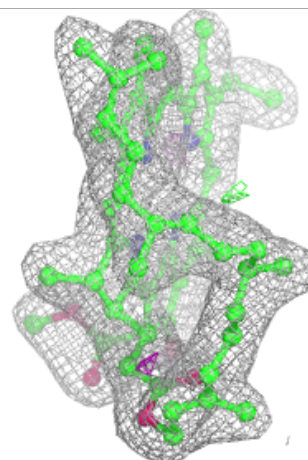
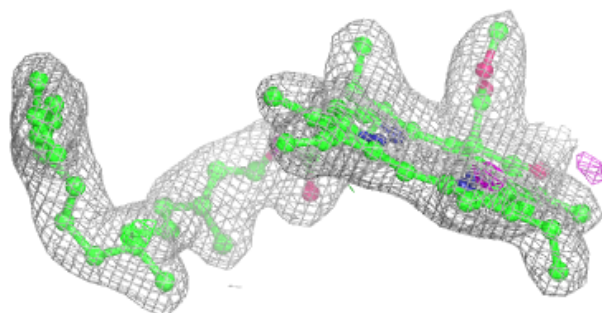
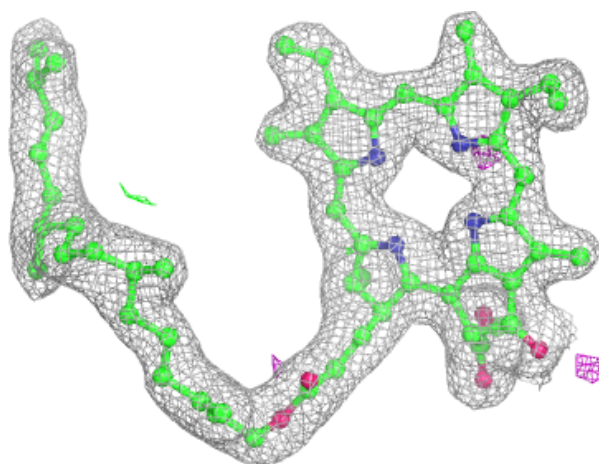
**Electron density around PHO D 401:**

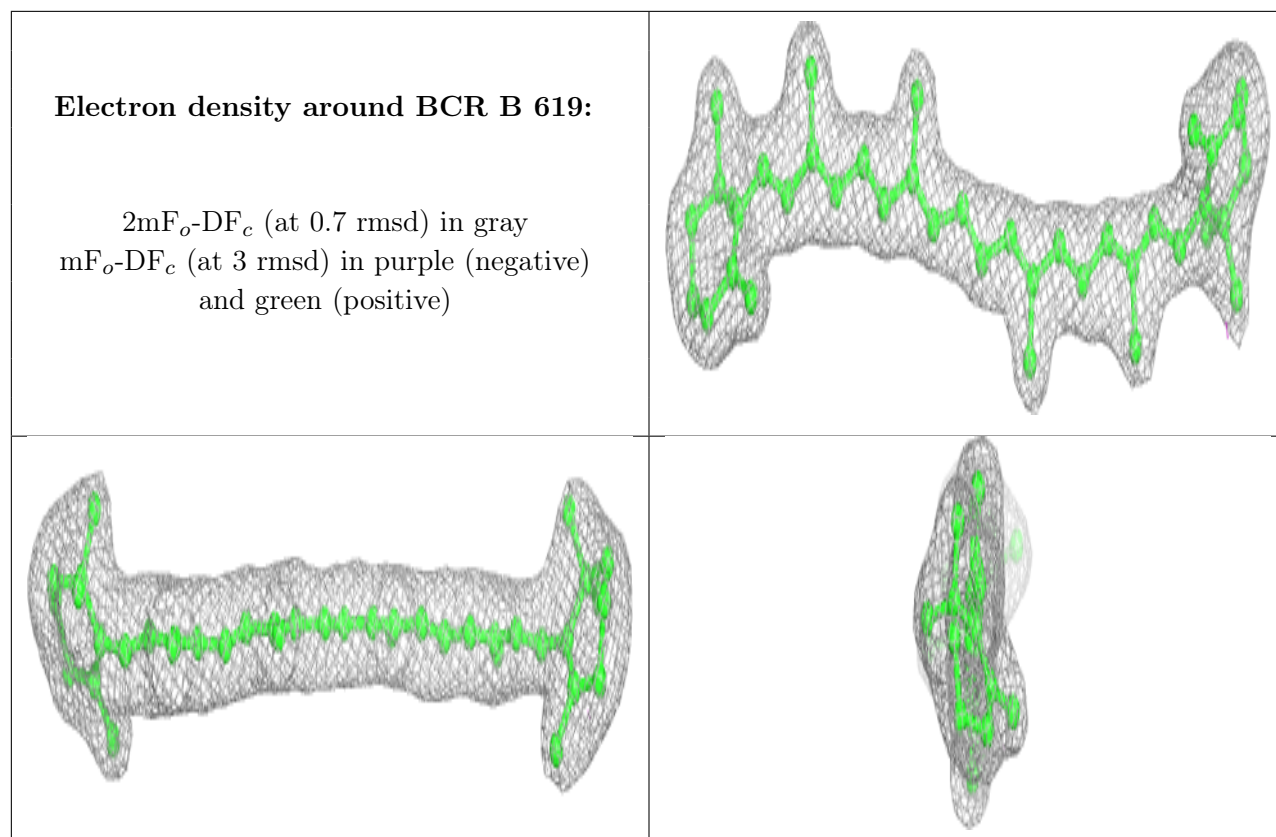
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around PHO d 401:**

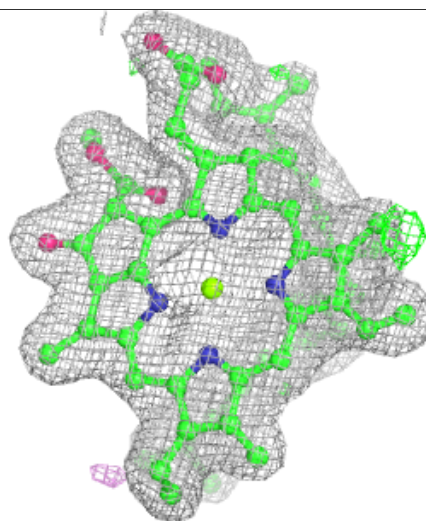
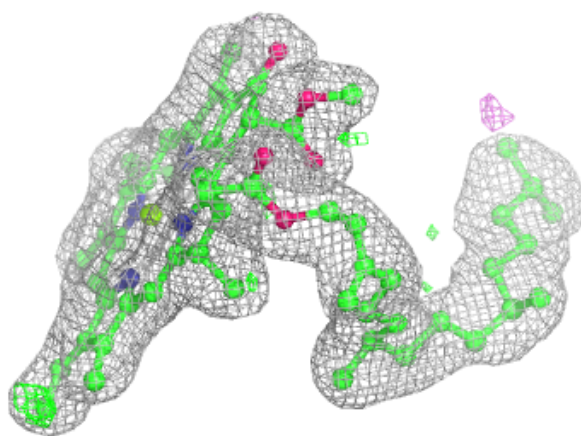
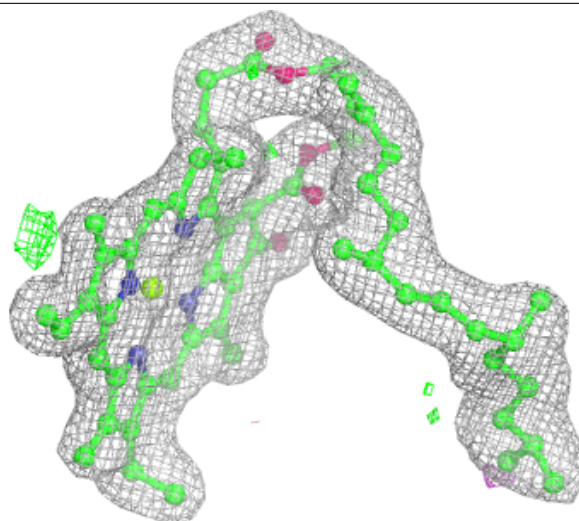
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





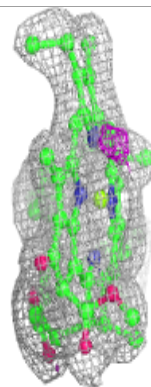
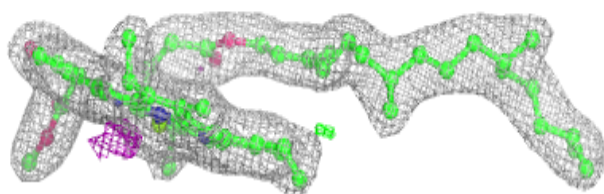
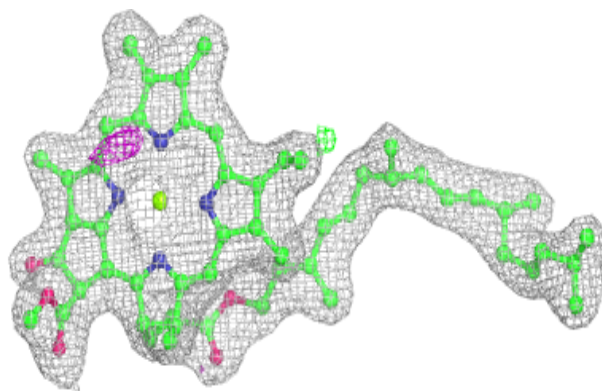
**Electron density around CLA b 622:**

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

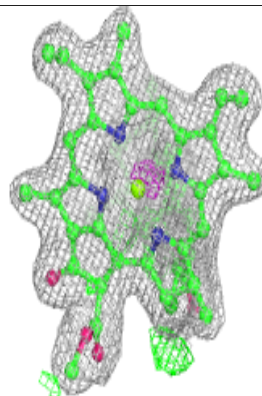
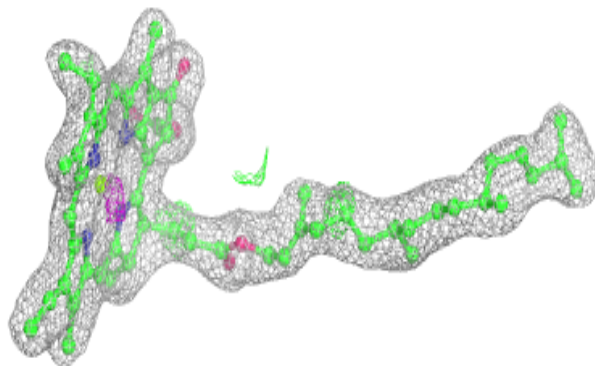
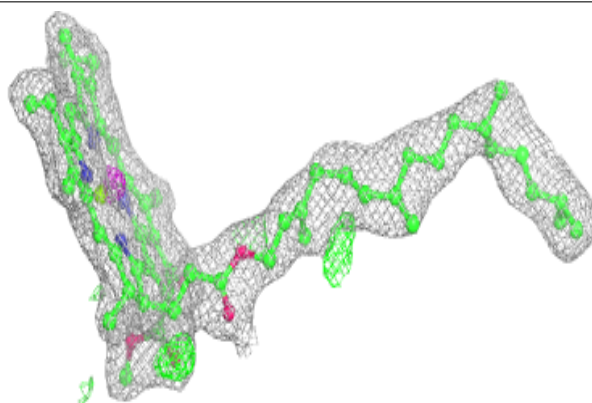


**Electron density around CLA B 604:**

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

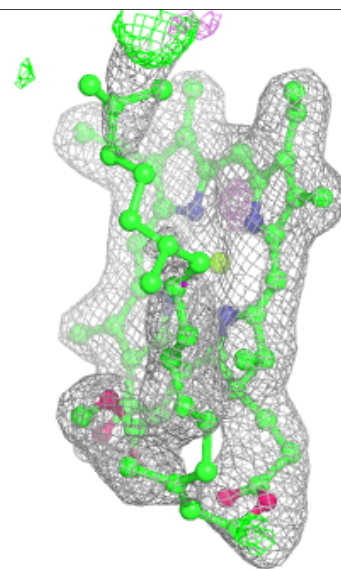
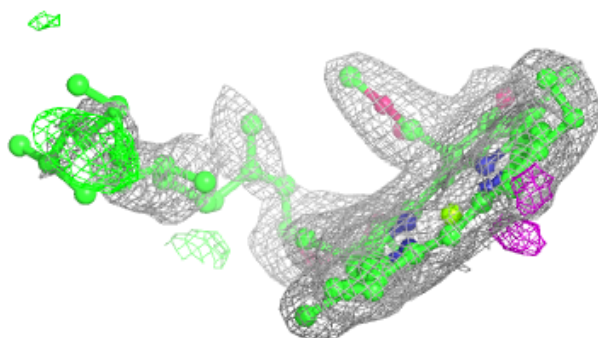
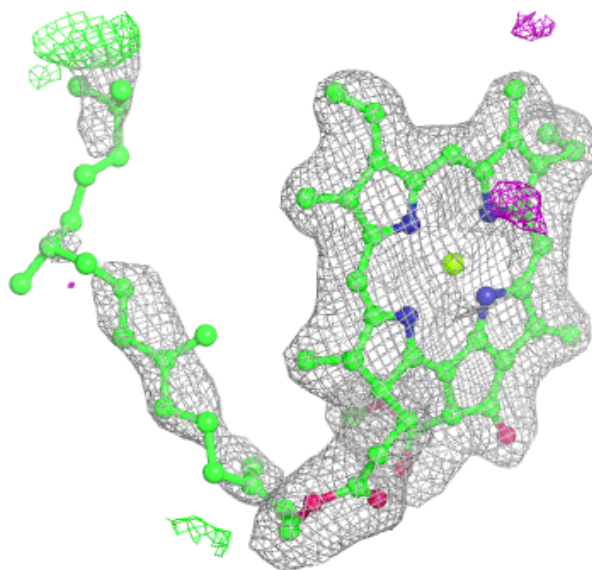
**Electron density around CLA B 605:**

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



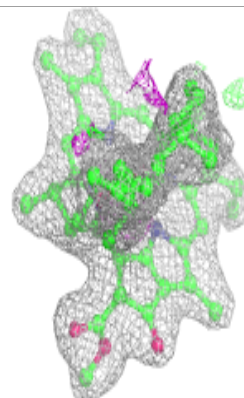
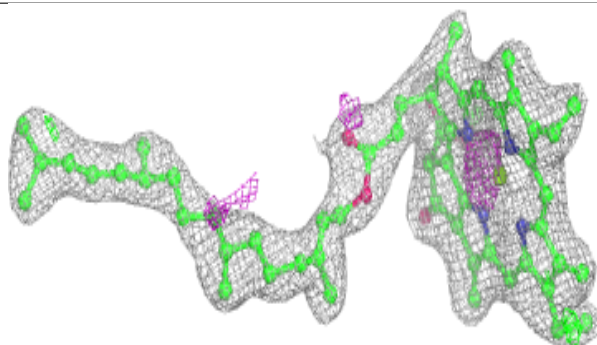
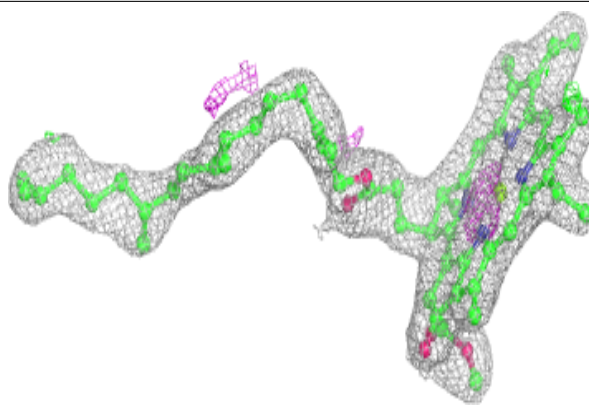
**Electron density around CLA B 617:**

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

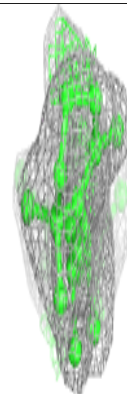
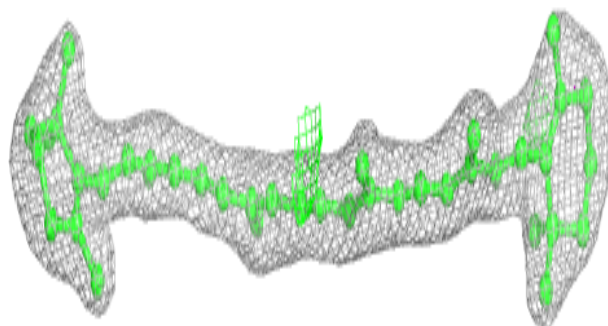
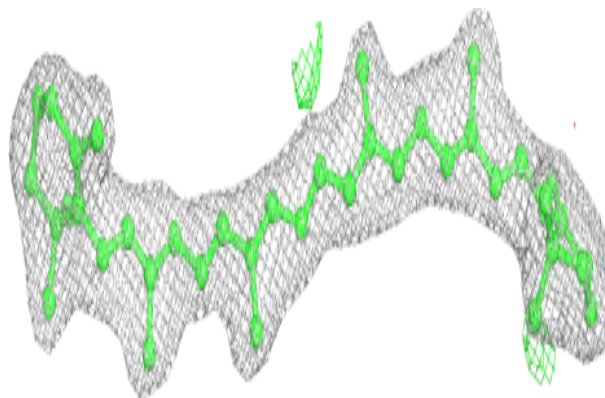


**Electron density around CLA c 506:**

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

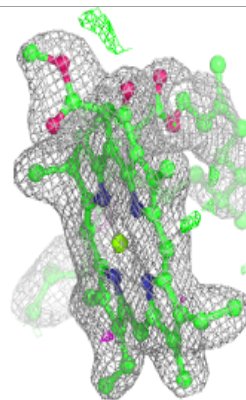
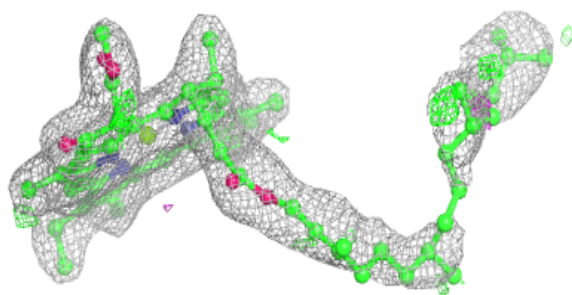
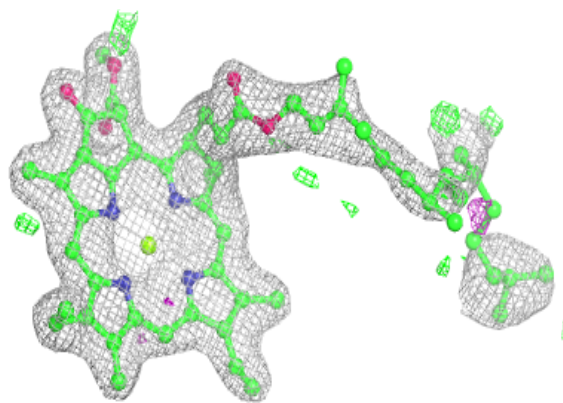
**Electron density around BCR Y 101:**

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

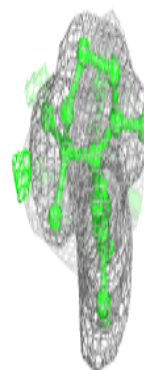
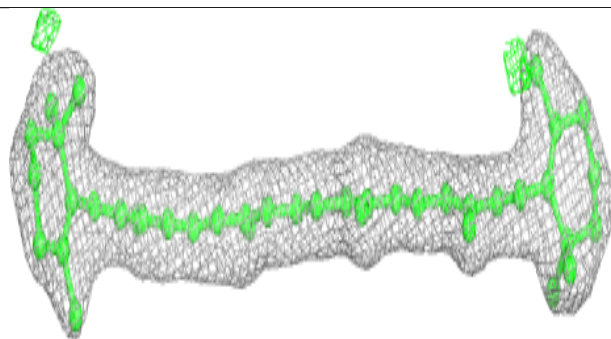
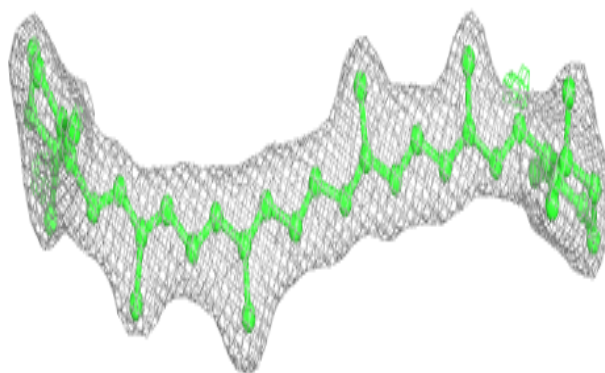


**Electron density around CLA a 412:**

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

**Electron density around BCR c 518:**

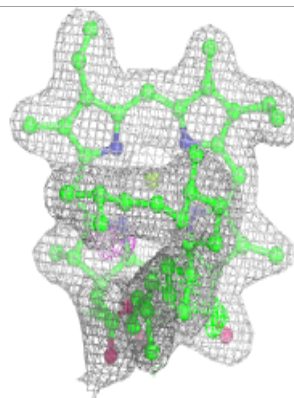
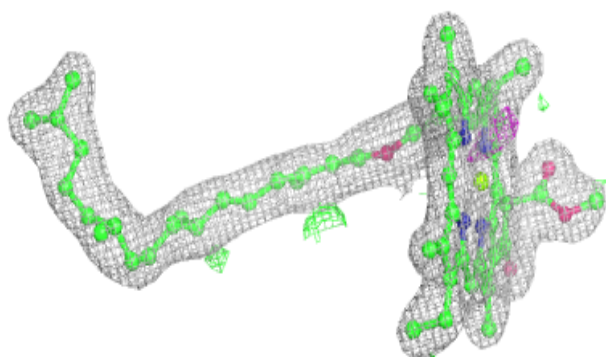
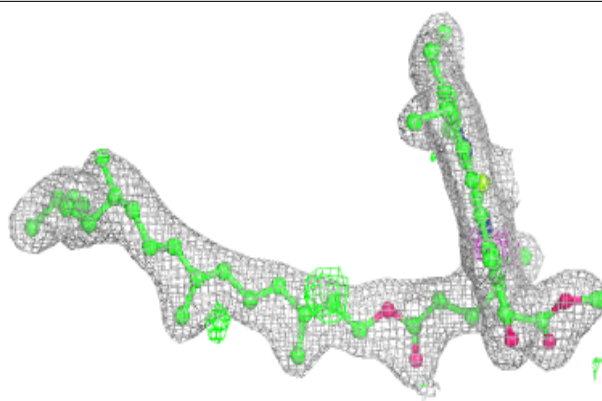
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



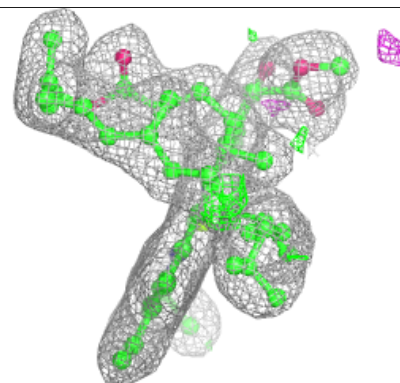
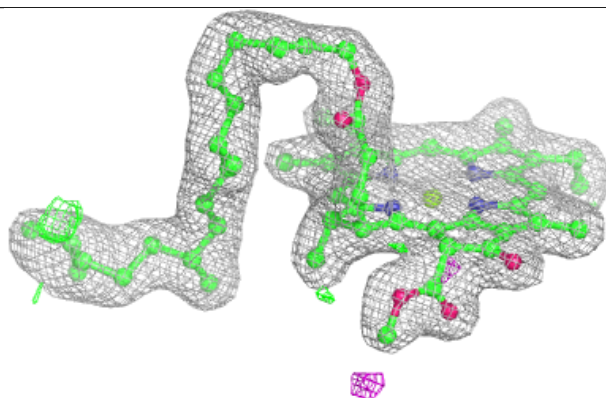
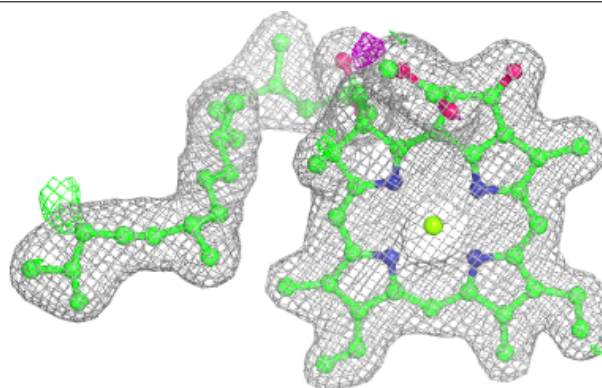


**Electron density around CLA B 606:**

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

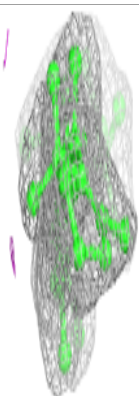
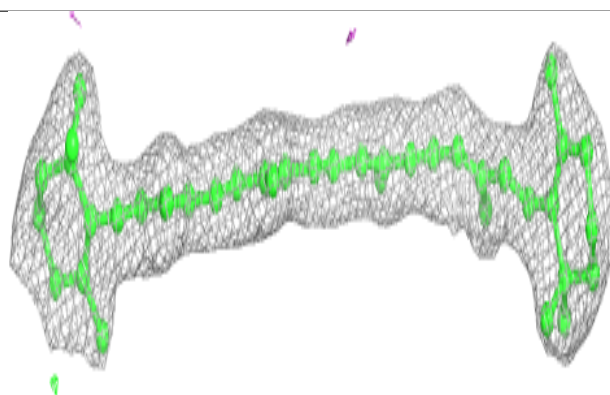
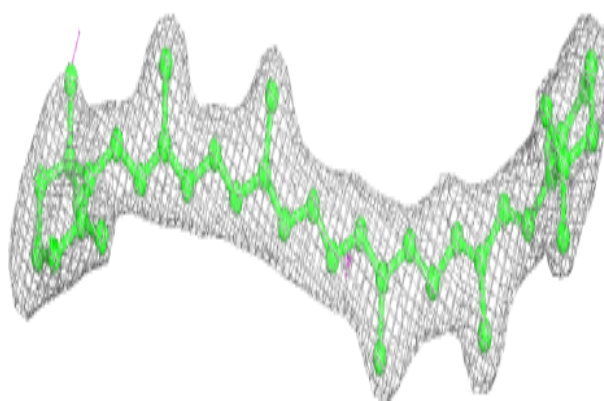
**Electron density around CLA A 406:**

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

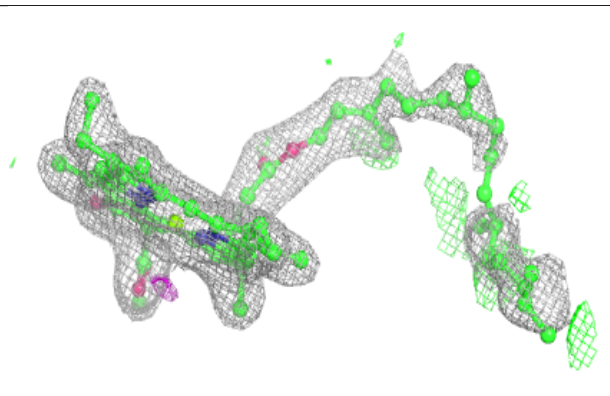
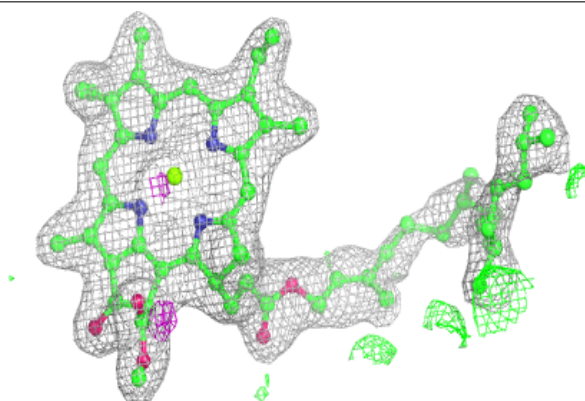


**Electron density around BCR h 101:**

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

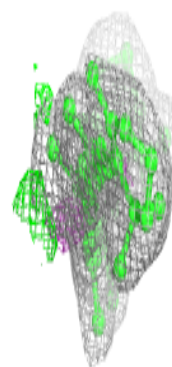
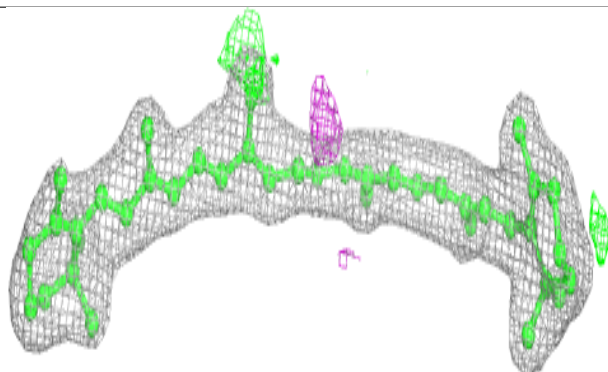
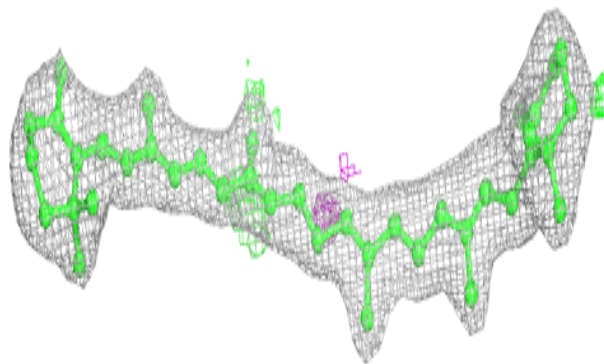
**Electron density around CLA A 409:**

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

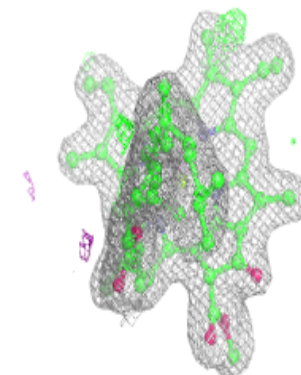
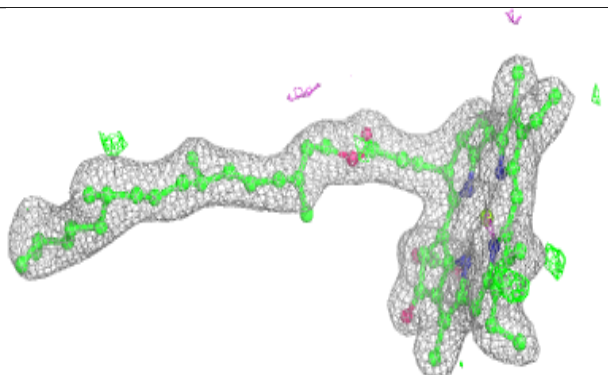
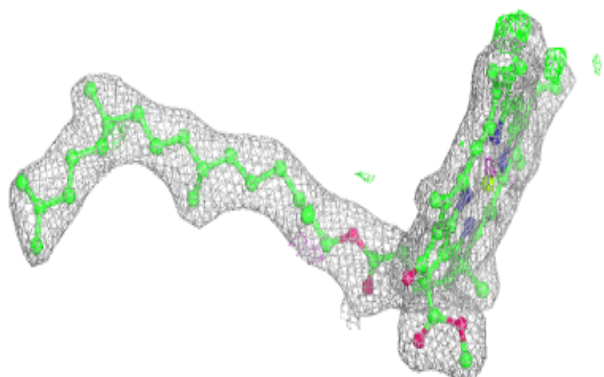


**Electron density around BCR t 101:**

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

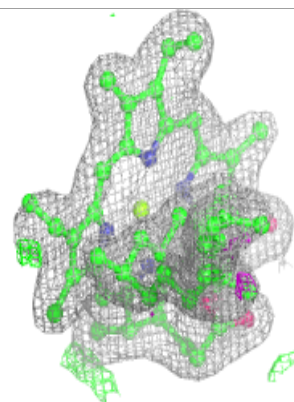
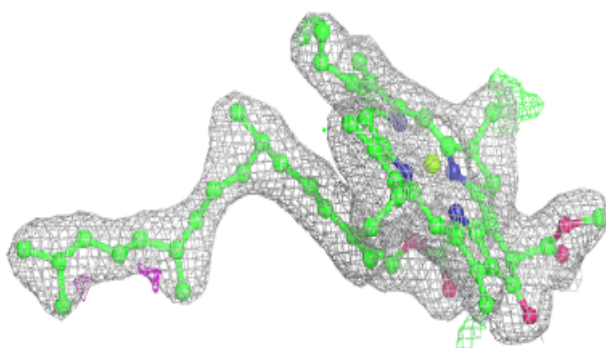
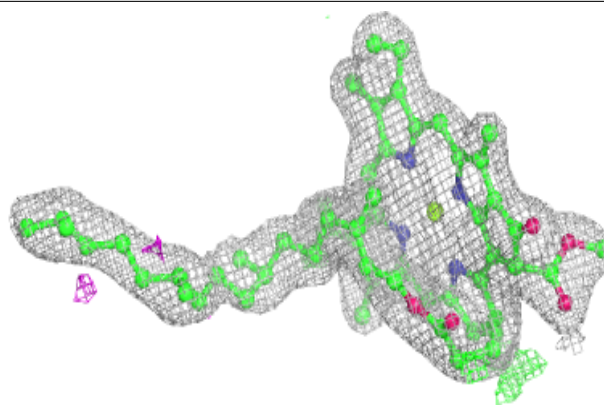
**Electron density around CLA b 613:**

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

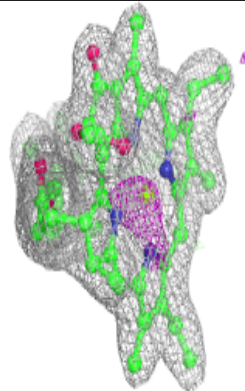
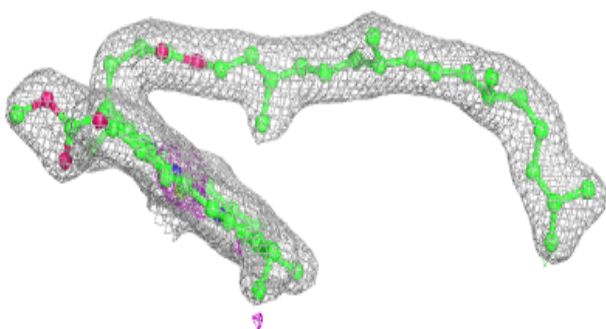
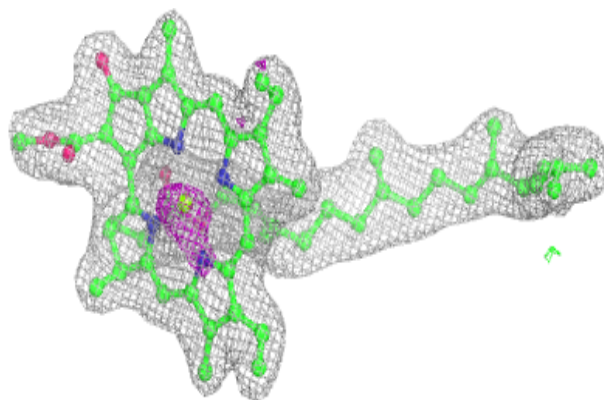


**Electron density around CLA C 506:**

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

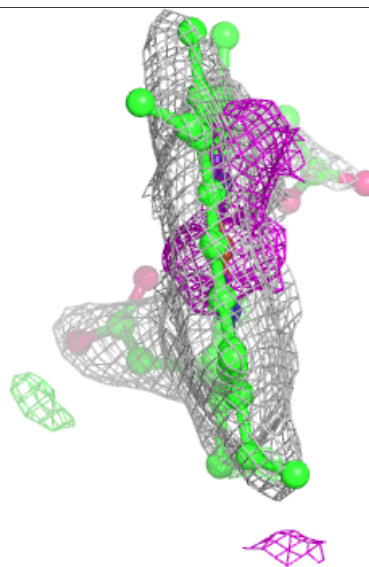
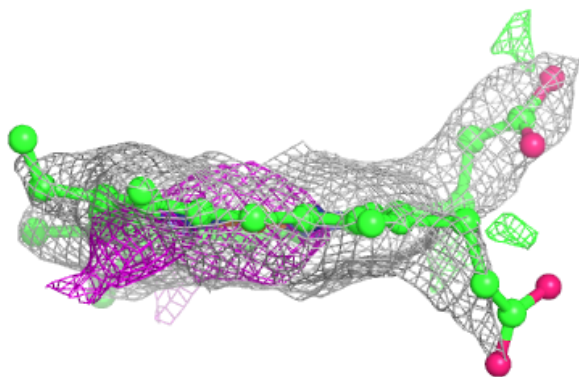
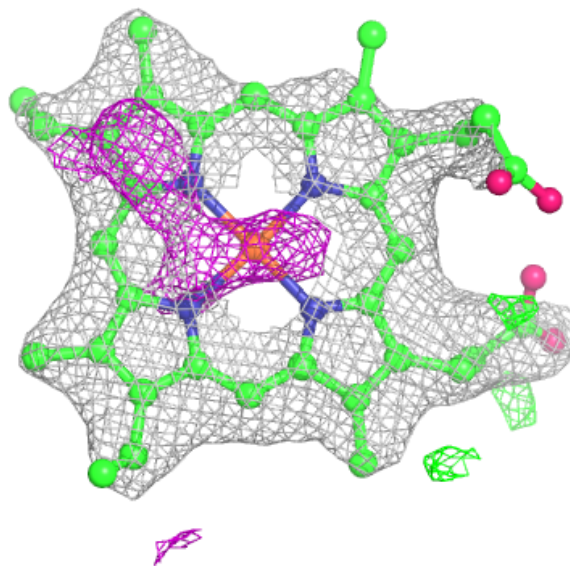
**Electron density around CLA B 609:**

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



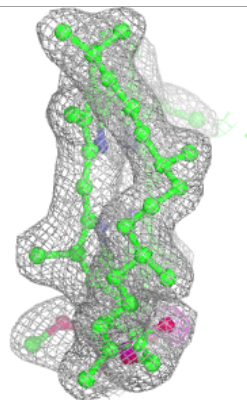
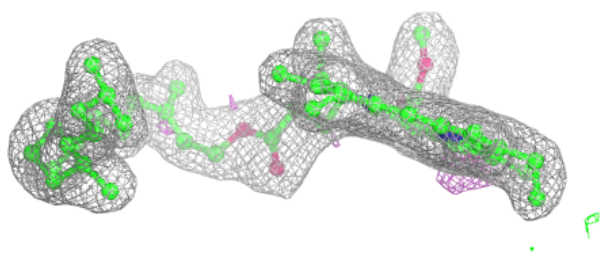
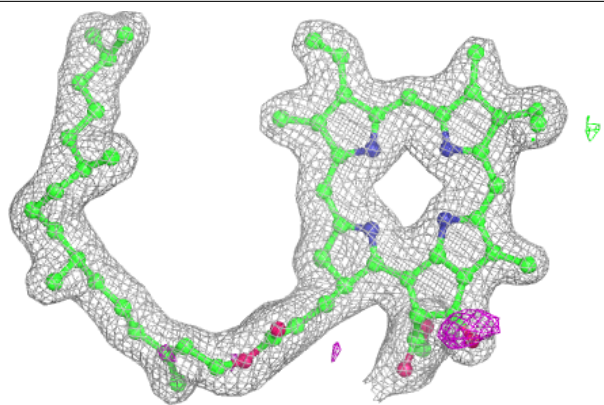
**Electron density around HEM e 103:**

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

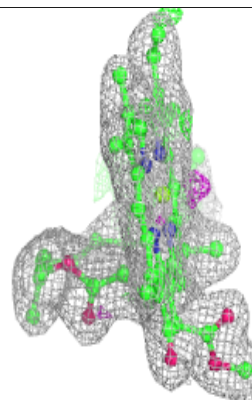
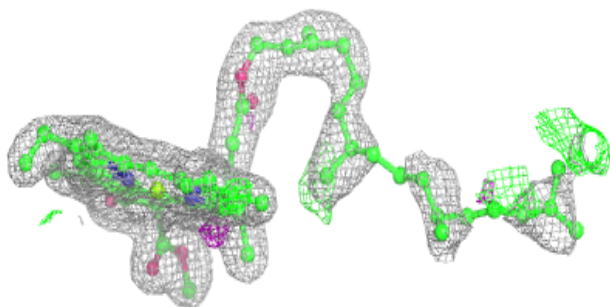
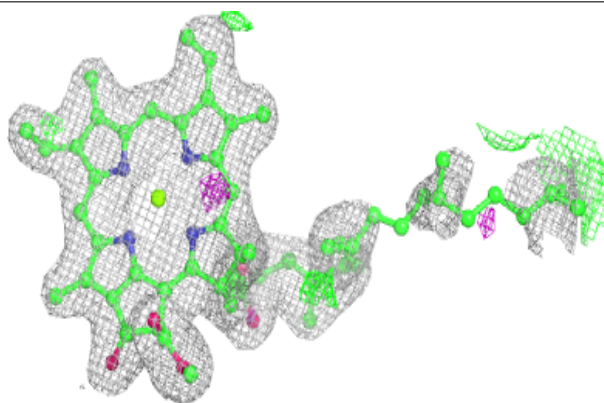


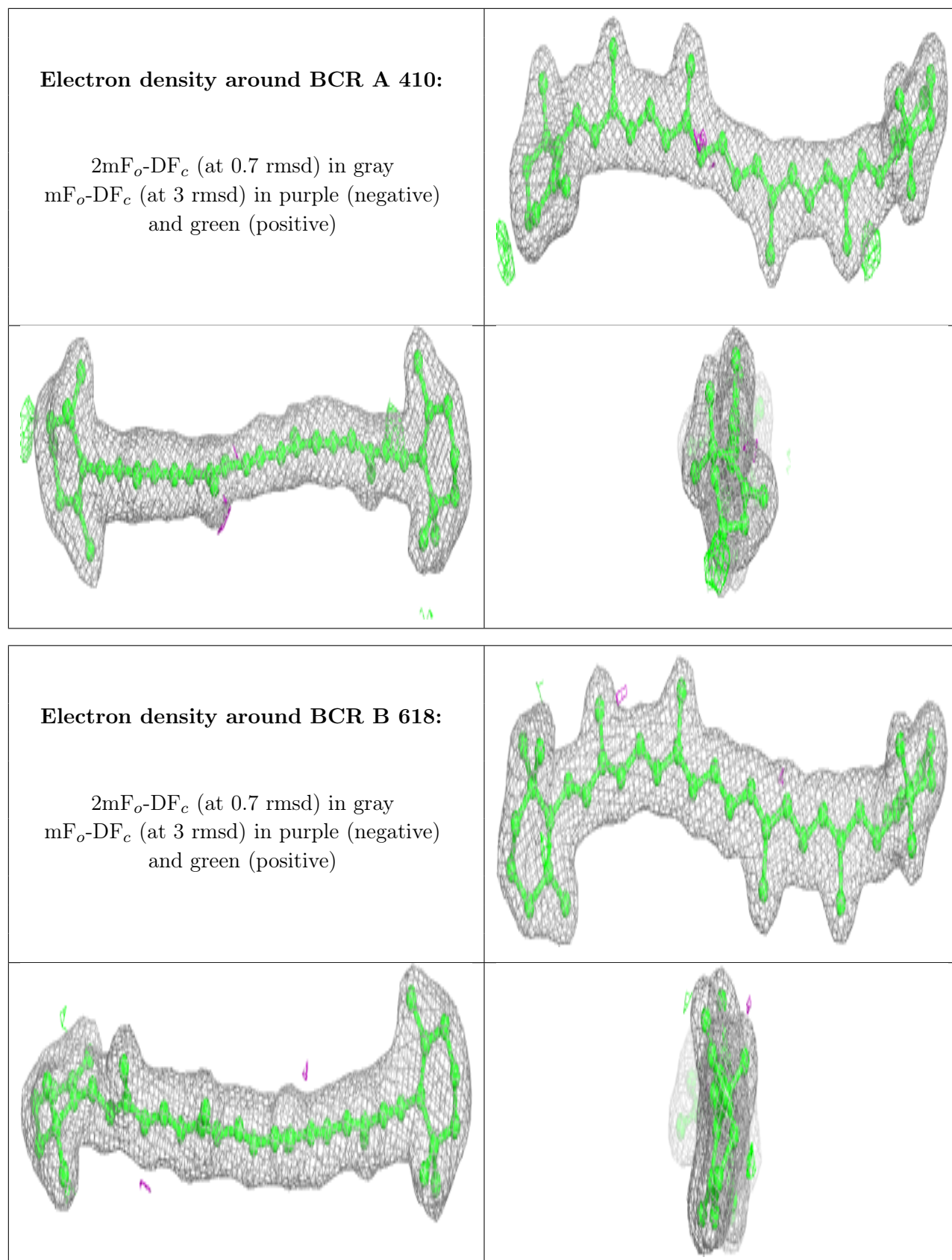
**Electron density around PHO a 411:**

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

**Electron density around CLA a 410:**

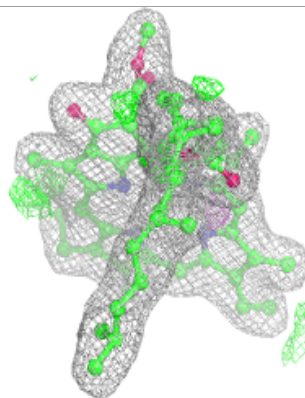
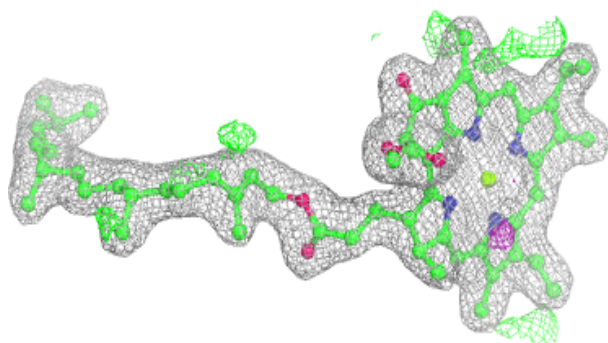
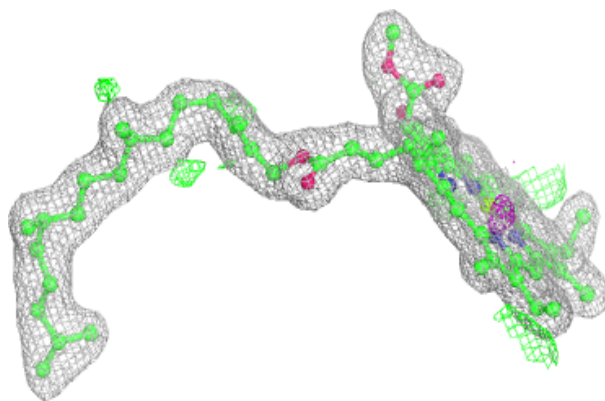
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



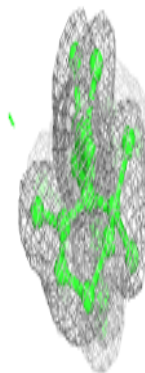
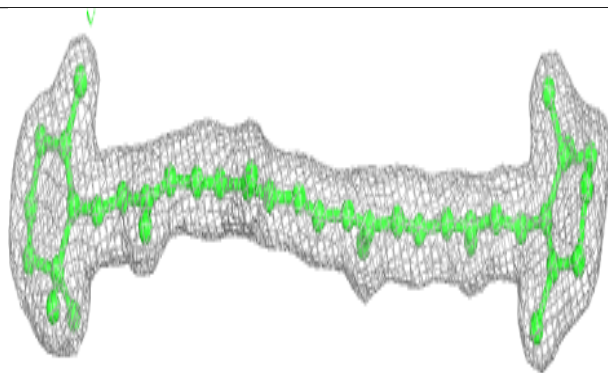
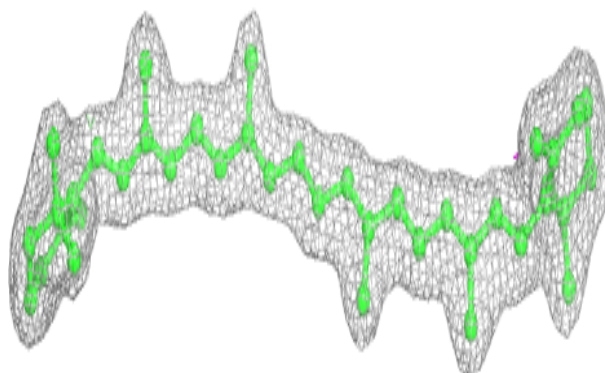


**Electron density around CLA D 402:**

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

**Electron density around BCR a 413:**

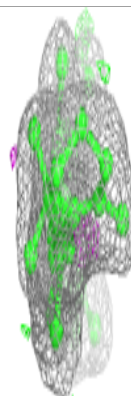
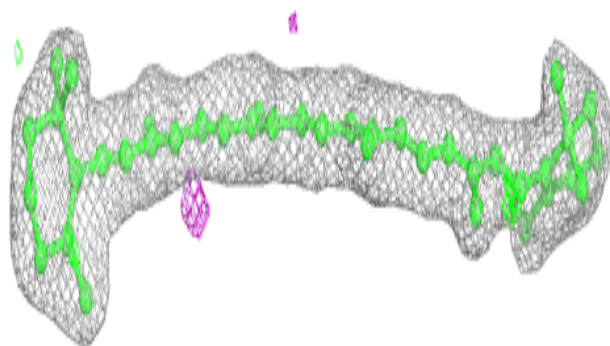
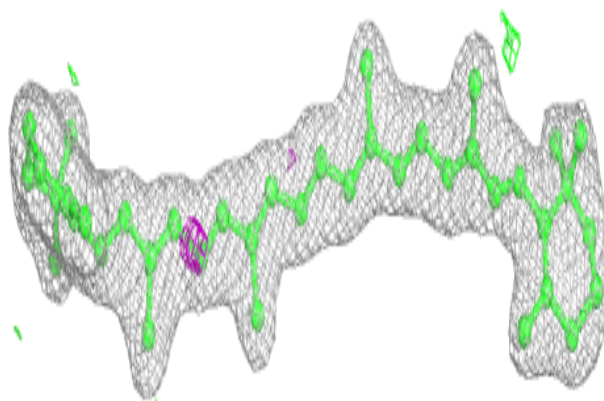
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



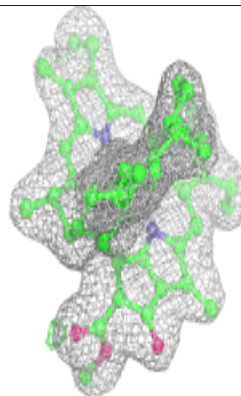
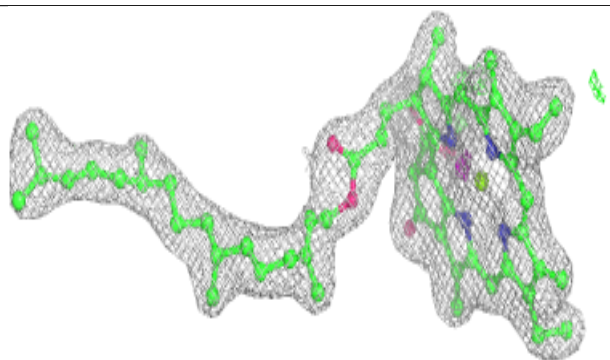
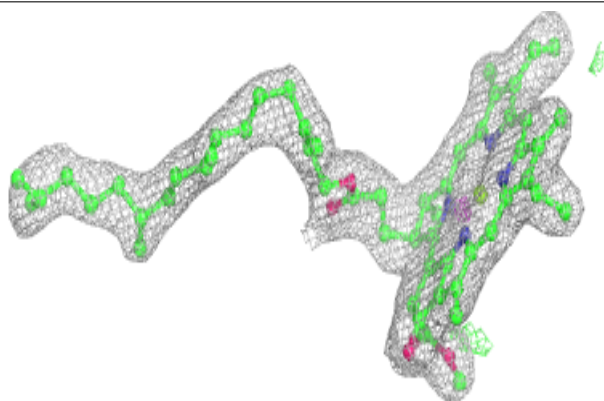


**Electron density around BCR b 626:**

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

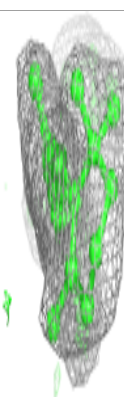
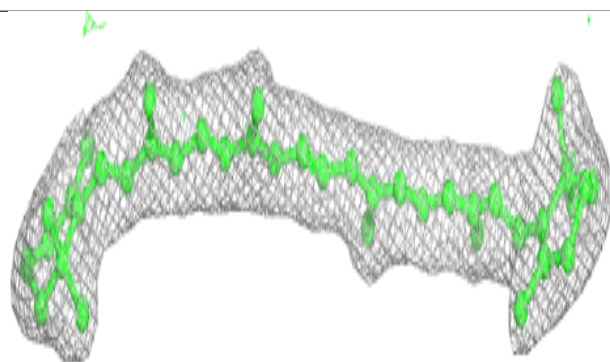
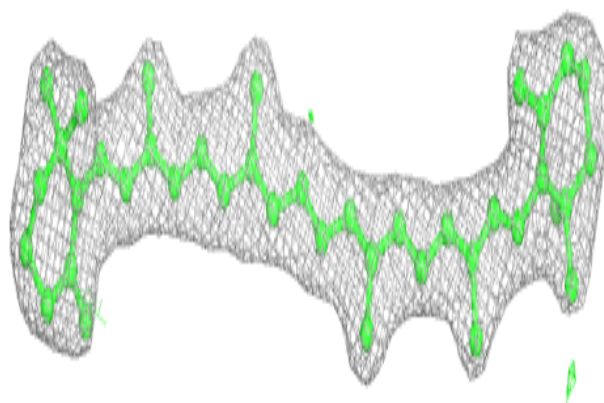
**Electron density around CLA C 503:**

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

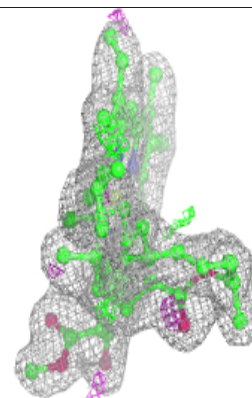
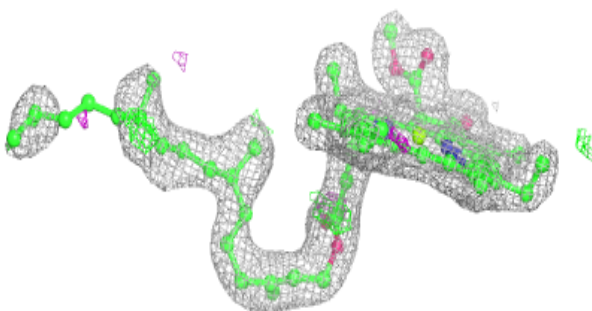
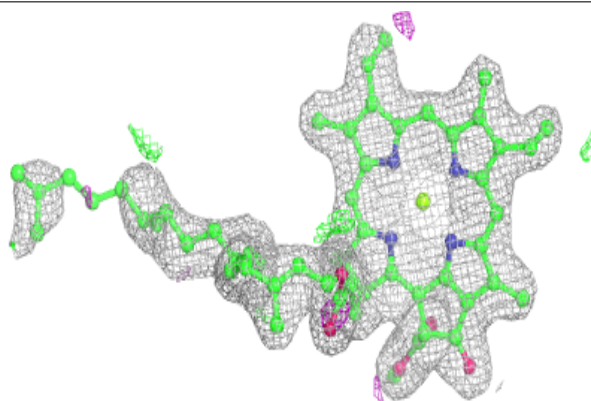


**Electron density around BCR b 628:**

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

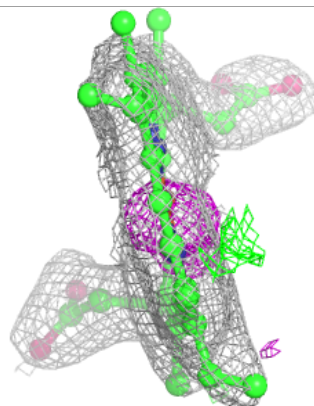
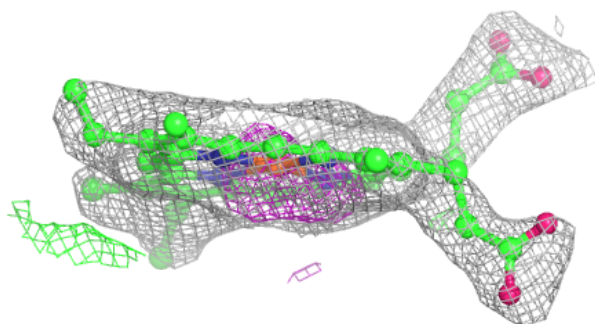
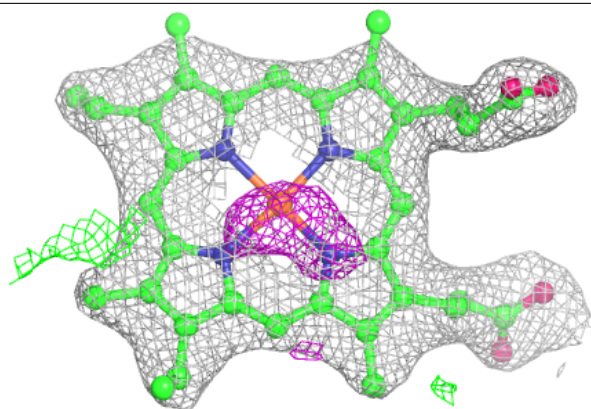
**Electron density around CLA A 407:**

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

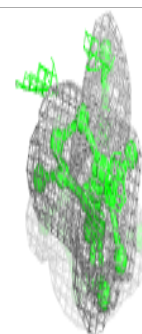
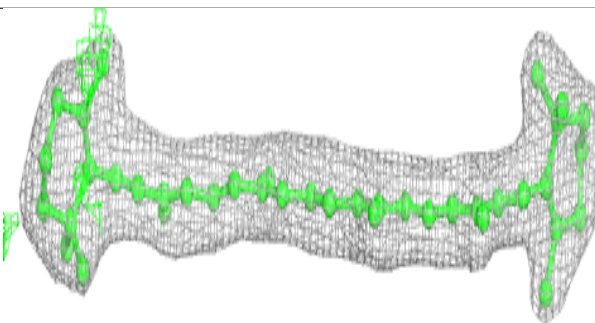
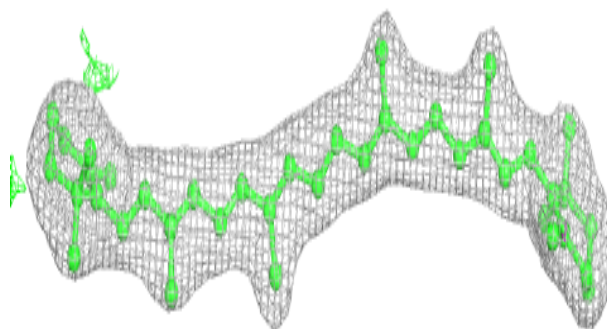


**Electron density around HEM E 102:**

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

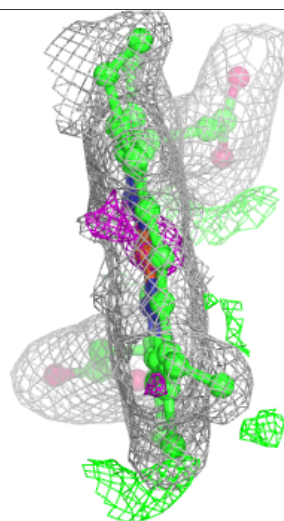
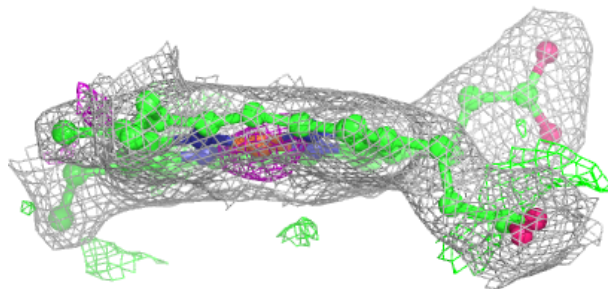
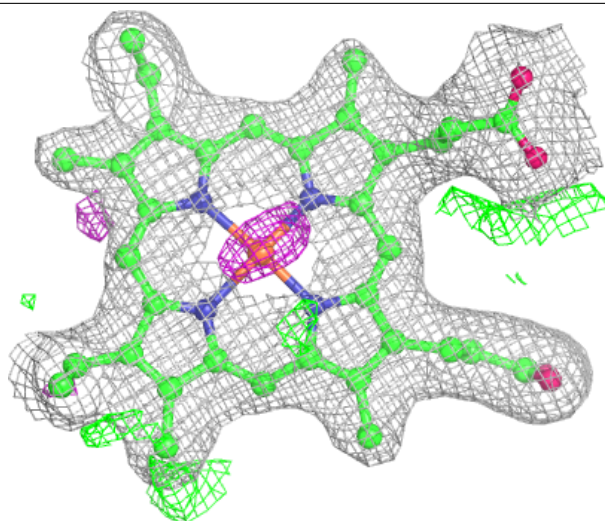
**Electron density around BCR C 516:**

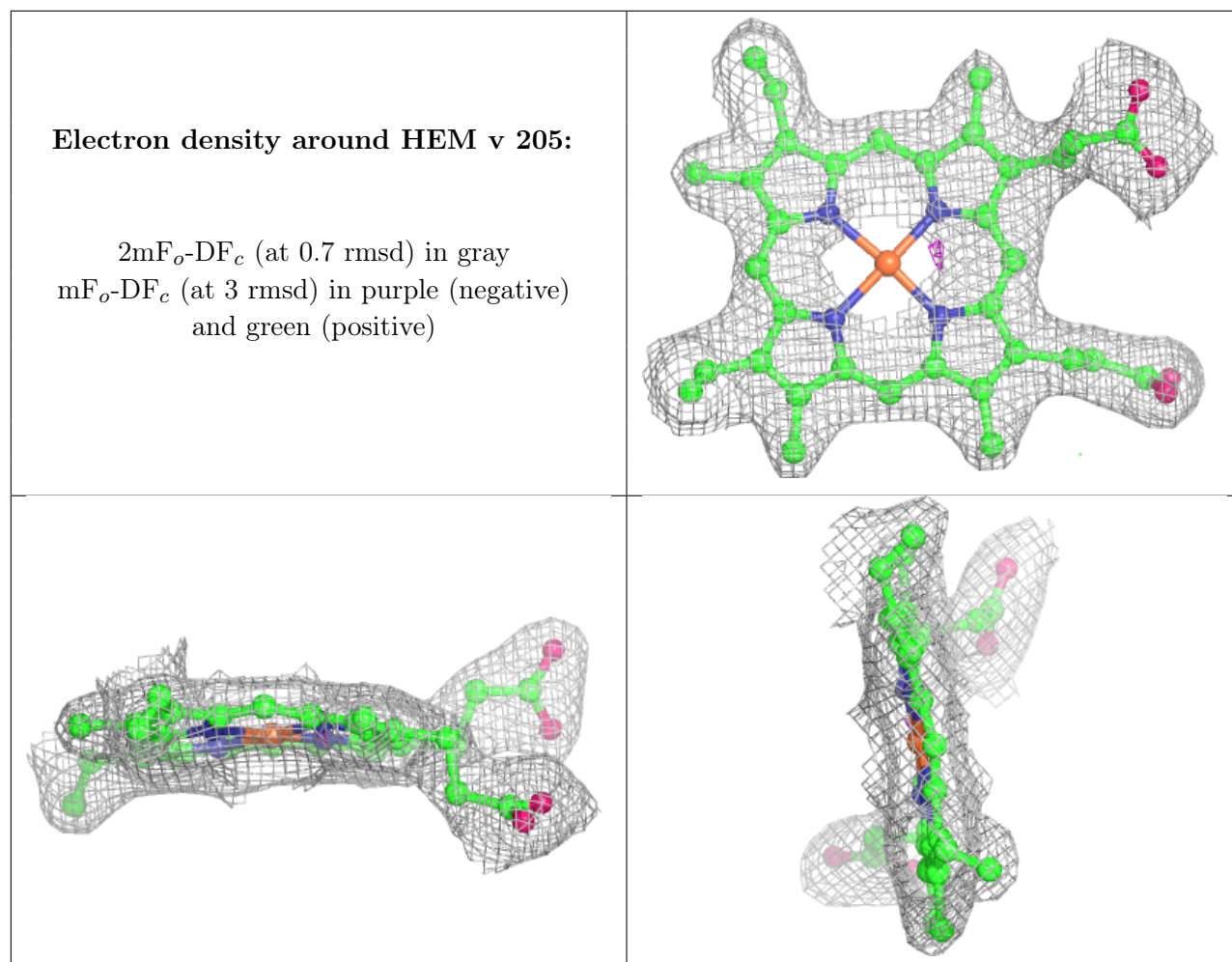
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around HEM V 205:**

$2mF_o-DF_c$  (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.