



# Full wwPDB X-ray Structure Validation Report ⓘ

Aug 20, 2020 – 09:52 PM BST

PDB ID : 4PBU  
Title : Serial Time-resolved crystallography of Photosystem II using a femtosecond X-ray laser The S1 state  
Authors : Kupitz, C.; Basu, S.; Grotjohann, I.; Fromme, R.; Zatsepin, N.; Rendek, K.N.; Hunter, M.; Shoeman, R.L.; White, T.A.; Wang, D.; James, D.; Yang, J.H.; Cobb, D.E.; Reeder, B.; Sierra, R.G.; Liu, H.; Barty, A.; Aquila, A.; Deponte, D.; Kirian, R.A.; Bari, S.; Bergkamp, J.J.; Beyerlein, K.; Bogan, M.J.; Caleman, C.; Chao, T.-C.; Conrad, C.E.; Davis, K.M.; Fleckenstein, H.; Galli, L.; Hau-Riege, S.P.; Kassemeyer, S.; Laksmono, H.; Liang, M.; Lomb, L.; Marchesini, S.; Martin, A.V.; Messerschmidt, M.; Milathianaki, D.; Nass, K.; Ros, A.; Roy-Chowdhury, S.; Schmidt, K.; Seibert, M.; Steinbrener, J.; Stellato, F.; Yan, L.; Yoon, C.; Moore, T.A.; Moore, A.L.; Pushkar, Y.; Williams, G.J.; Boutet, S.; Doak, R.B.; Weierstall, U.; Frank, M.; Chapman, H.N.; Spence, J.C.H.; Fromme, P.  
Deposited on : 2014-04-13  
Resolution : 5.00 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.

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : 2.13

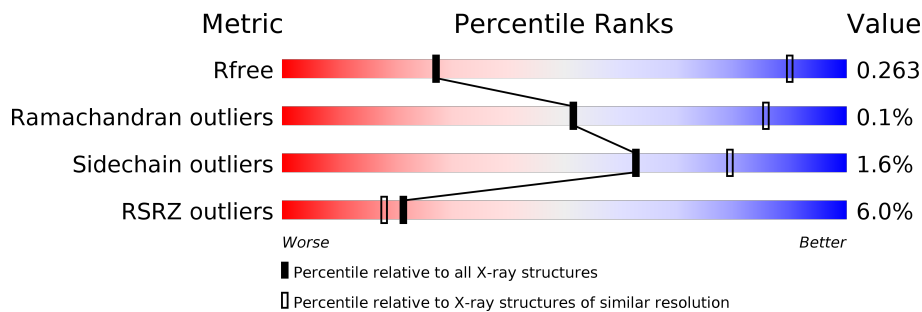
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

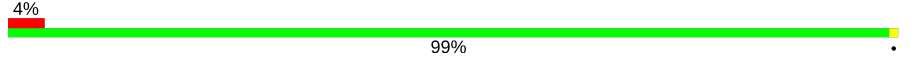
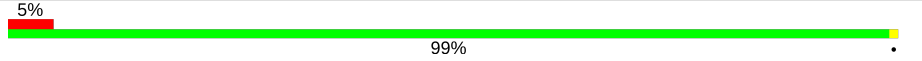
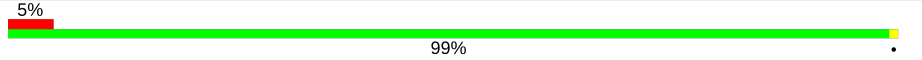
The reported resolution of this entry is 5.00 Å.

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	1140 (6.20-3.80)
Ramachandran outliers	138981	1146 (6.20-3.80)
Sidechain outliers	138945	1122 (6.20-3.80)
RSRZ outliers	127900	1010 (6.22-3.72)

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

Mol	Chain	Length	Quality of chain
1	A	334	 4% 99%
1	a	334	 5% 99%
2	B	504	 5% 99%

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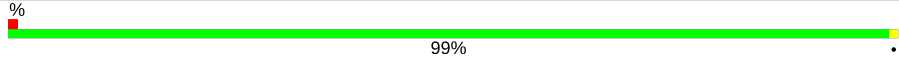
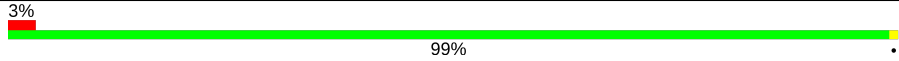
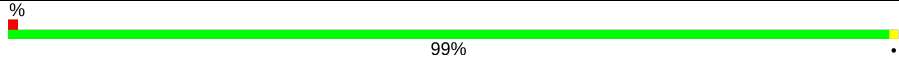
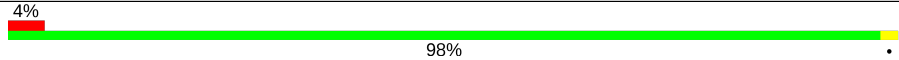
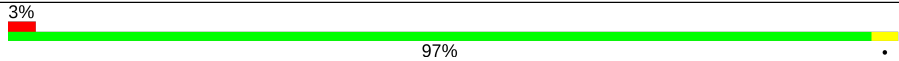
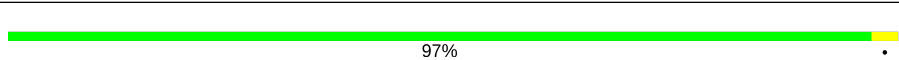
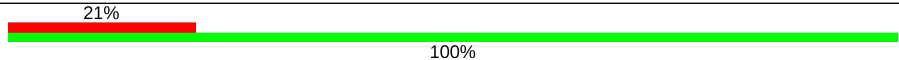
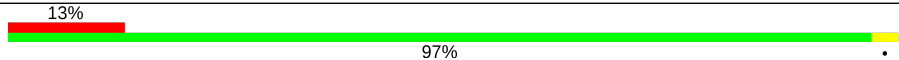
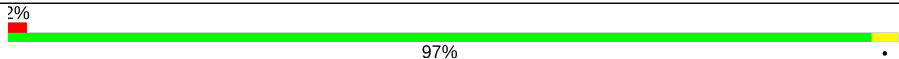
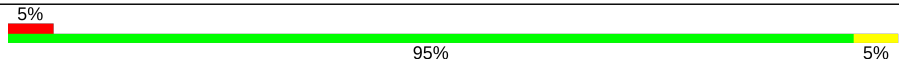
buster-report : 1.1.7 (2018)  
 Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
 Refmac : 5.8.0158  
 CCP4 : 7.0.044 (Gargrove)  
 Ideal geometry (proteins) : Engh & Huber (2001)  
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
 Validation Pipeline (wwPDB-VP) : 2.13

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Mol	Chain	Length	Quality of chain
2	b	504	10% 99%
3	C	455	9% 98%
3	c	455	5% 98%
4	D	342	7% 99%
4	d	342	6% 99%
5	E	81	10% 99%
5	e	81	5% 98%
6	F	34	3% 97%
6	f	34	6% 91% 6%
7	H	65	12% 95% 5%
7	h	65	17% 98%
8	I	38	8% 100%
8	i	38	5% 100%
9	J	40	8% 95% 5%
9	j	40	8% 100%
10	K	37	95% 5%
10	k	37	5% 95% 5%
11	L	37	8% 95% 5%
11	l	37	97%
12	M	34	15% 97%
12	m	34	3% 100%
13	O	243	% 95% 5%
13	o	243	4% 97%
14	T	30	7% 100%
14	t	30	3% 93% 7%

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Mol	Chain	Length	Quality of chain
15	U	97	 99%
15	u	97	 99%
16	V	137	 99%
16	v	137	 98%
17	Y	29	 97%
17	y	29	 97%
18	X	39	 100%
18	x	39	 97%
19	Z	62	 97%
19	z	62	 95%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CL	A	603	-	-	-	X
24	CLA	A	606	X	-	-	-
24	CLA	A	607	X	-	-	X
24	CLA	A	609	X	-	-	-
24	CLA	A	614	X	-	-	-
24	CLA	B	602	X	-	-	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	-	-	X
24	CLA	B	608	X	-	-	X
24	CLA	B	609	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	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	B	617	X	-	-	X
24	CLA	C	501	X	-	-	-
24	CLA	C	502	X	-	-	-
24	CLA	C	503	X	-	-	-
24	CLA	C	504	X	-	-	X
24	CLA	C	505	X	-	-	-
24	CLA	C	506	X	-	-	-
24	CLA	C	507	X	-	-	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	-	-	X
24	CLA	C	513	X	-	-	X
24	CLA	D	402	X	-	-	-
24	CLA	D	403	X	-	-	X
24	CLA	a	406	X	-	-	-
24	CLA	a	407	X	-	-	X
24	CLA	a	408	X	-	-	X
24	CLA	b	602	X	-	-	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	-	-	X
24	CLA	b	608	X	-	-	X
24	CLA	b	609	X	-	-	-
24	CLA	b	611	X	-	-	-
24	CLA	b	612	X	-	-	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	-	-	X
24	CLA	c	902	X	-	-	X
24	CLA	c	903	X	-	-	X
24	CLA	c	904	X	-	-	-
24	CLA	c	905	X	-	-	-
24	CLA	c	906	X	-	-	-
24	CLA	c	907	X	-	-	-
24	CLA	c	908	X	-	-	-
24	CLA	c	909	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	c	910	X	-	-	-
24	CLA	c	911	X	-	-	-
24	CLA	c	912	X	-	-	-
24	CLA	c	913	X	-	-	X
24	CLA	c	914	X	-	-	X
24	CLA	d	401	X	-	-	-
24	CLA	d	403	X	-	-	-
24	CLA	d	404	X	-	-	-
25	PHO	A	608	-	-	-	X
26	BCR	A	610	-	-	-	X
26	BCR	B	620	-	-	-	X
26	BCR	C	514	-	-	-	X
26	BCR	D	404	-	-	-	X
26	BCR	H	101	-	-	-	X
26	BCR	K	101	-	X	-	-
26	BCR	T	101	-	-	-	X
26	BCR	T	102	-	-	-	X
26	BCR	Y	101	-	-	-	X
26	BCR	a	409	-	-	-	X
26	BCR	b	618	-	-	-	X
26	BCR	b	619	-	-	-	X
26	BCR	c	915	-	-	-	X
26	BCR	c	918	-	-	-	X
26	BCR	f	101	-	X	-	X
26	BCR	h	101	-	-	-	X
26	BCR	k	101	-	-	-	X
26	BCR	k	102	-	X	-	X
27	PL9	A	611	-	-	-	X
27	PL9	D	405	-	-	-	X
27	PL9	a	410	-	-	-	X
27	PL9	d	405	-	-	-	X
28	SQD	A	612	-	-	-	X
28	SQD	A	613	-	-	-	X
28	SQD	a	411	-	-	-	X
28	SQD	d	407	-	-	-	X
28	SQD	l	101	-	-	-	X
29	LHG	A	615	-	-	-	X
29	LHG	D	408	-	-	-	X
29	LHG	a	413	-	-	-	X
30	CA	B	601	-	-	-	X
30	CA	F	102	-	-	-	X
30	CA	b	601	-	-	-	X

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<b>Mol</b>	<b>Type</b>	<b>Chain</b>	<b>Res</b>	<b>Chirality</b>	<b>Geometry</b>	<b>Clashes</b>	<b>Electron density</b>
30	CA	c	901	-	-	-	X
31	DGD	C	517	-	-	-	X
31	DGD	D	406	-	-	-	X
31	DGD	d	406	-	-	-	X

## 2 Entry composition [i](#)

There are 33 unique types of molecules in this entry. The entry contains 48924 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 Q(B) protein 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	334	Total 2620	C 1716	N 431	O 458	S 15	0	0	0
1	a	334	Total 2620	C 1716	N 431	O 458	S 15	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	286	ALA	THR	conflict	UNP P0A444
a	286	ALA	THR	conflict	UNP P0A444

- Molecule 2 is a protein called Photosystem II core light harvesting protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	504	Total 3969	C 2605	N 661	O 690	S 13	0	0	0
2	b	504	Total 3969	C 2605	N 661	O 690	S 13	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	451	Total 3486	C 2281	N 584	O 608	S 13	0	0	0
3	c	455	Total 3519	C 2303	N 589	O 614	S 13	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	342	Total 2726	C 1805	N 445	O 464	S 12	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	d	341	Total	C	N	O	S	0	0	0
			2717	1800	444	461	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	0	0	0
			662	432	107	123			
5	e	81	Total	C	N	O	0	0	0
			662	432	107	123			

- 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	0	0
			511	341	82	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
			312	210	48	53	1			
8	i	38	Total	C	N	O	S	0	0	0
			312	210	48	53	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	40	Total	C	N	O	S	0	0	0
			288	192	44	49	3			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	M	34	267	178	40	48	1	0	0	0
12	m	34	267	178	40	48	1	0	0	0

- 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	1865	1165	315	381	4	0	0	0
13	o	243	1865	1165	315	381	4	0	0	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	256	180	36	38	2	0	0	0
14	t	30	256	180	36	38	2	0	0	0

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

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

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

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

- 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			

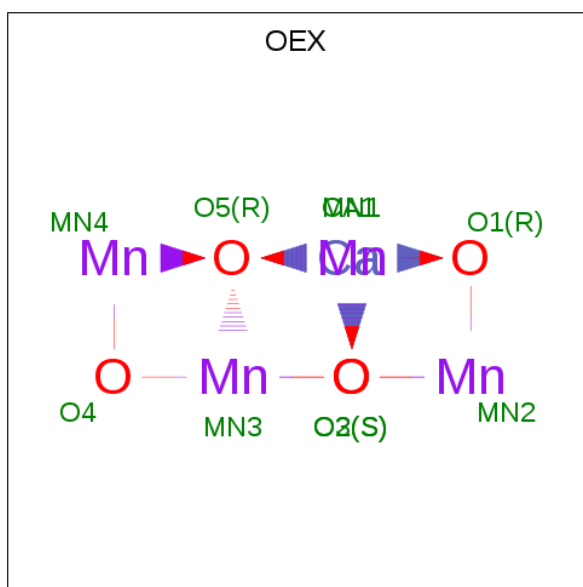
- Molecule 18 is a protein called Photosystem II reaction center X protein.

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

- 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 CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn<sub>4</sub>O<sub>5</sub>).



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

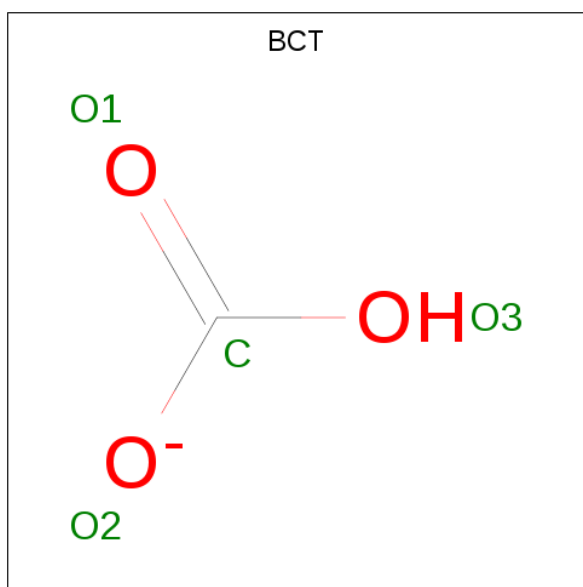
- Molecule 21 is FE (II) ION (three-letter code: FE2) (formula: Fe).

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

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

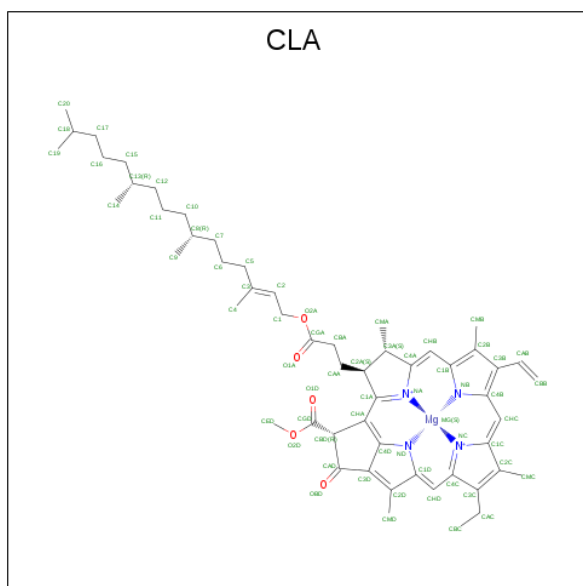
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Cl		
22	a	2	2	2	0	0
22	A	2	2	2	0	0
22	v	1	1	1	0	0
22	V	1	1	1	0	0

- Molecule 23 is BICARBONATE ION (three-letter code: BCT) (formula: CHO<sub>3</sub>).



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:  $C_{55}H_{72}MgN_4O_5$ ).



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

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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	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	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		
24	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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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	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	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		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
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		
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		

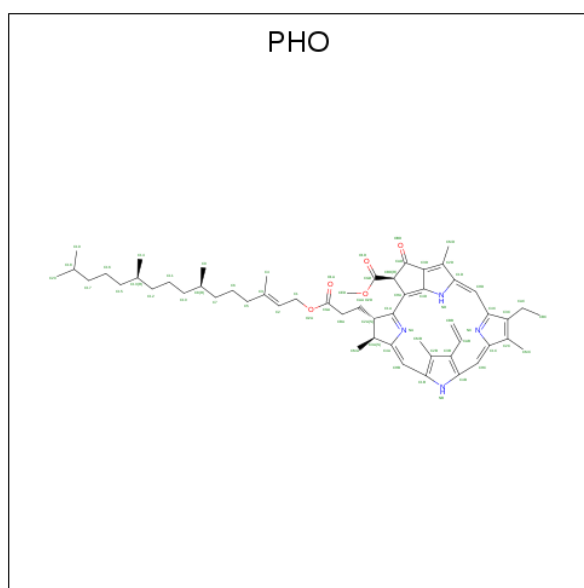
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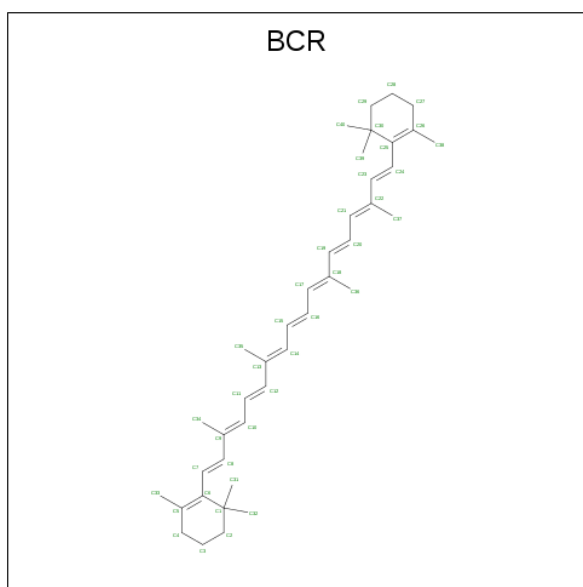
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 25 is PHEOPHYTIN A (three-letter code: PHO) (formula:  $C_{55}H_{74}N_4O_5$ ).



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

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



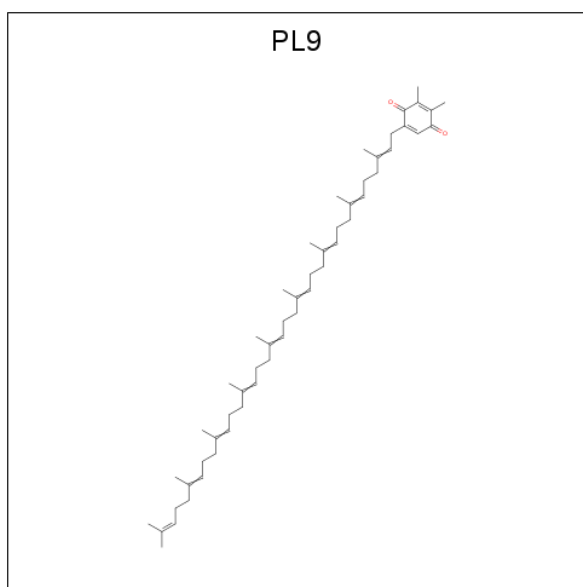
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	H	1	Total C 40 40	0	0
26	K	1	Total C 40 40	0	0
26	T	1	Total C 40 40	0	0
26	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

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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	f	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	k	1	Total C 40 40	0	0

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



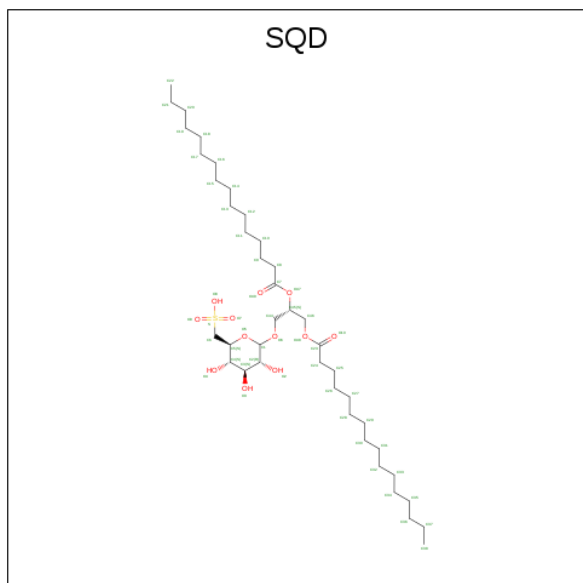
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C O 55 53 2	0	0
27	D	1	Total C O 55 53 2	0	0

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

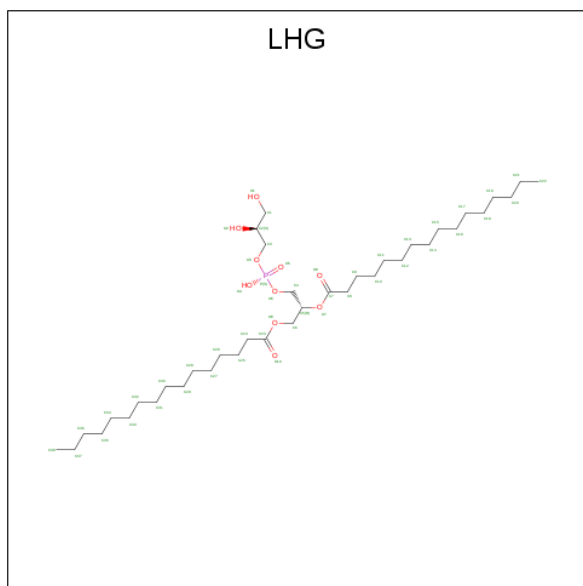
- Molecule 28 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: C<sub>41</sub>H<sub>78</sub>O<sub>12</sub>S).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
28	A	1	Total	C	O	S	0	0
			54	41	12	1		
28	A	1	Total	C	O	S	0	0
			54	41	12	1		
28	F	1	Total	C	O	S	0	0
			43	30	12	1		
28	L	1	Total	C	O	S	0	0
			54	41	12	1		
28	a	1	Total	C	O	S	0	0
			54	41	12	1		
28	a	1	Total	C	O	S	0	0
			54	41	12	1		
28	d	1	Total	C	O	S	0	0
			43	30	12	1		
28	l	1	Total	C	O	S	0	0
			54	41	12	1		

- Molecule 29 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
29	A	1	Total	C	O	P	0	0
			42	31	10	1		
29	B	1	Total	C	O	P	0	0
			49	38	10	1		
29	D	1	Total	C	O	P	0	0
			49	38	10	1		
29	D	1	Total	C	O	P	0	0
			49	38	10	1		
29	D	1	Total	C	O	P	0	0
			49	38	10	1		
29	a	1	Total	C	O	P	0	0
			42	31	10	1		
29	b	1	Total	C	O	P	0	0
			49	38	10	1		
29	d	1	Total	C	O	P	0	0
			49	38	10	1		
29	d	1	Total	C	O	P	0	0
			49	38	10	1		
29	d	1	Total	C	O	P	0	0
			49	38	10	1		

- Molecule 30 is CALCIUM ION (three-letter code: CA) (formula: Ca).

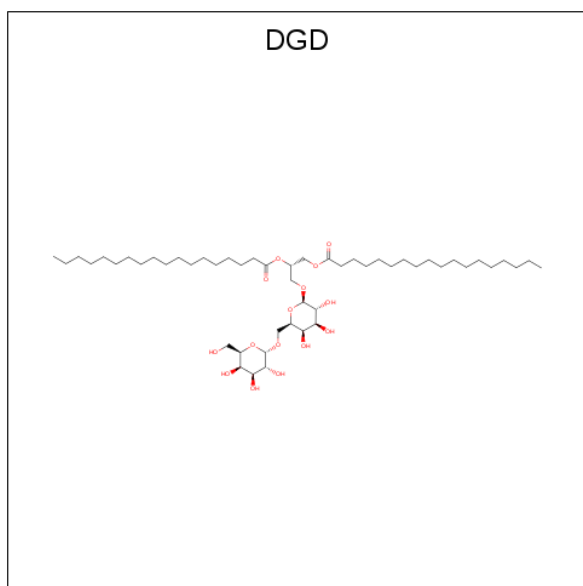
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
30	B	1	Total	Ca	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	c	1	Total Ca 1 1	0	0
30	F	1	Total Ca 1 1	0	0
30	o	1	Total Ca 1 1	0	0
30	O	1	Total Ca 1 1	0	0
30	b	1	Total Ca 1 1	0	0
30	f	1	Total Ca 1 1	0	0

- Molecule 31 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula:  $C_{51}H_{96}O_{15}$ ).



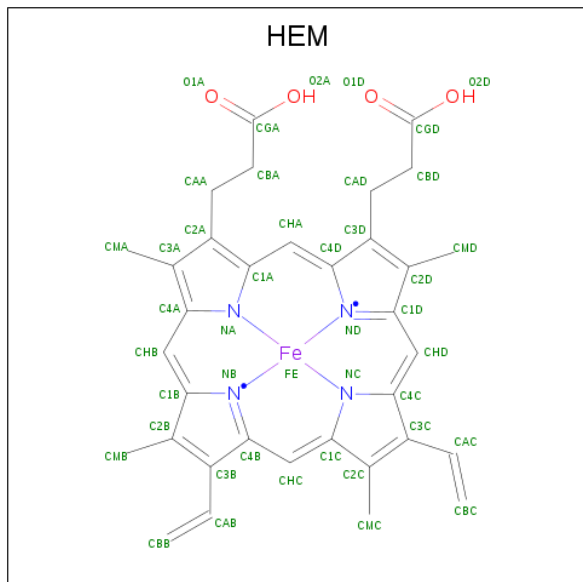
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	C	1	Total C O 62 47 15	0	0
31	C	1	Total C O 62 47 15	0	0
31	C	1	Total C O 62 47 15	0	0
31	D	1	Total C O 62 47 15	0	0
31	H	1	Total C O 62 47 15	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	c	1	Total	C	O	0	0
			62	47	15		
31	c	1	Total	C	O	0	0
			62	47	15		
31	d	1	Total	C	O	0	0
			62	47	15		
31	h	1	Total	C	O	0	0
			62	47	15		
31	j	1	Total	C	O	0	0
			62	47	15		

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



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

- Molecule 33 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

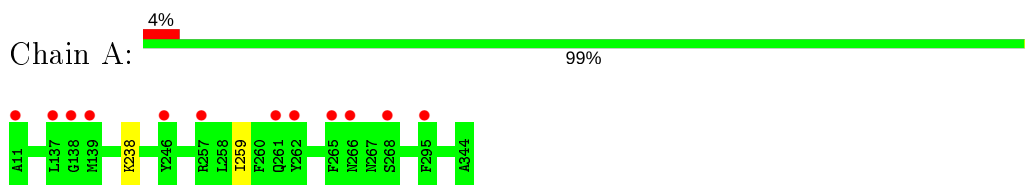
<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>		<b>ZeroOcc</b>	<b>AltConf</b>
33	j	1	Total	Mg	0	0
			1	1		



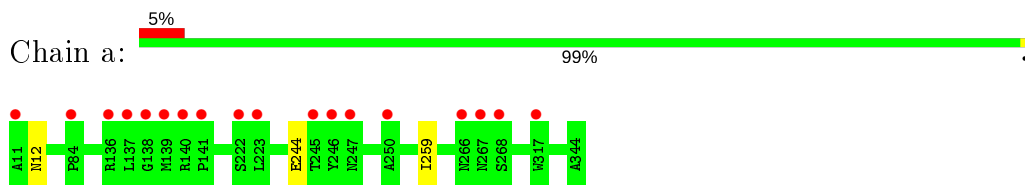
### 3 Residue-property plots [i](#)

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.

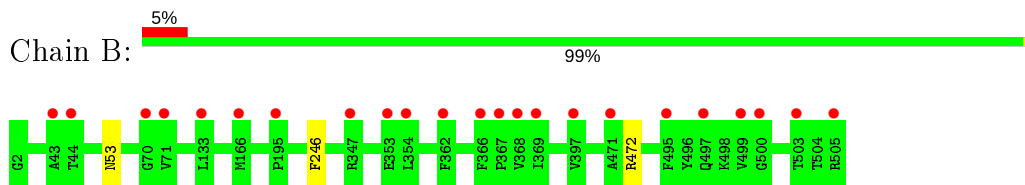
- Molecule 1: Photosystem Q(B) protein 1



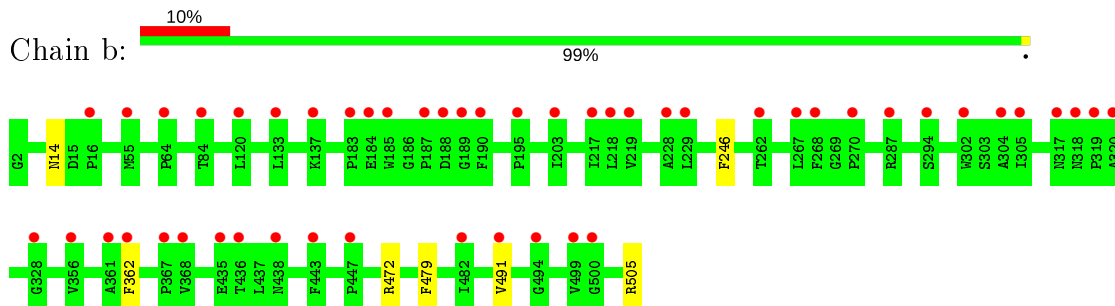
- Molecule 1: Photosystem Q(B) protein 1



- Molecule 2: Photosystem II core light harvesting protein

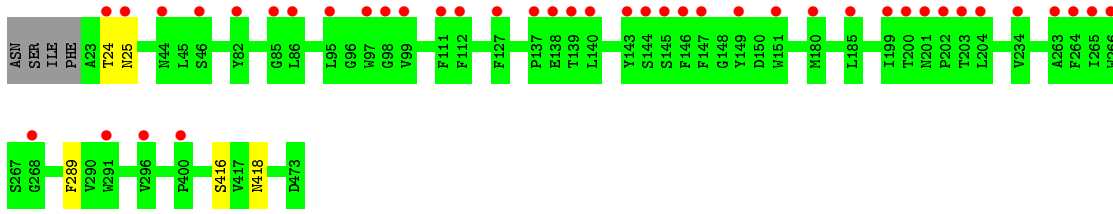


- Molecule 2: Photosystem II core light harvesting protein

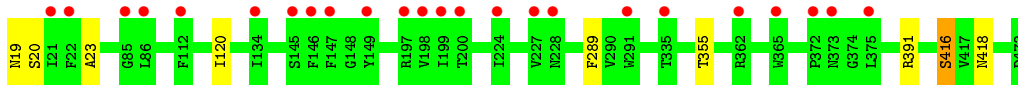


- Molecule 3: Photosystem II CP43 protein

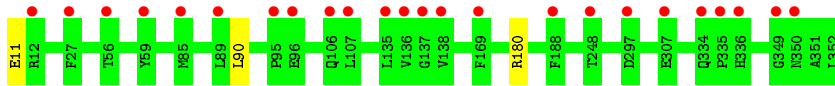




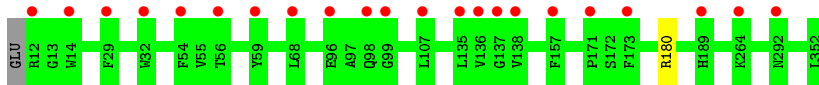
- Molecule 3: Photosystem II CP43 protein



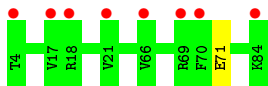
- Molecule 4: Photosystem II D2 protein



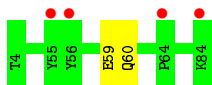
- Molecule 4: Photosystem II D2 protein



- Molecule 5: Cytochrome b559 subunit alpha



- Molecule 5: Cytochrome b559 subunit alpha

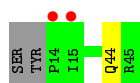
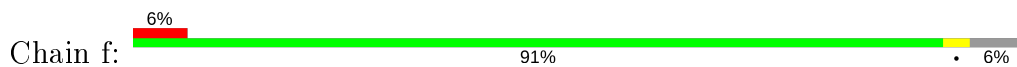


- Molecule 6: Cytochrome b559 subunit beta

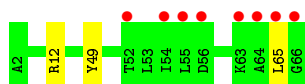




- Molecule 6: Cytochrome b559 subunit beta



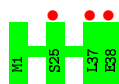
- Molecule 7: Photosystem II reaction center protein H



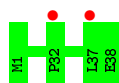
- Molecule 7: Photosystem II reaction center protein H



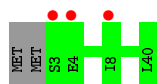
- Molecule 8: Photosystem II reaction center protein I



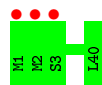
- Molecule 8: Photosystem II reaction center protein I



- Molecule 9: Photosystem II reaction center protein J



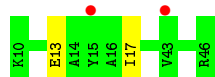
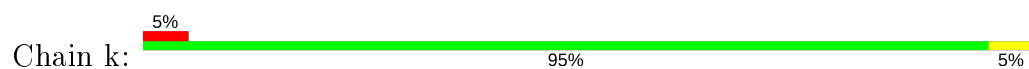
- Molecule 9: Photosystem II reaction center protein J



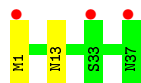
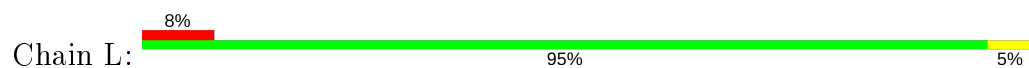
- Molecule 10: Photosystem II reaction center protein K



- Molecule 10: Photosystem II reaction center protein K



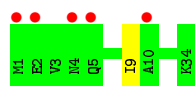
- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L



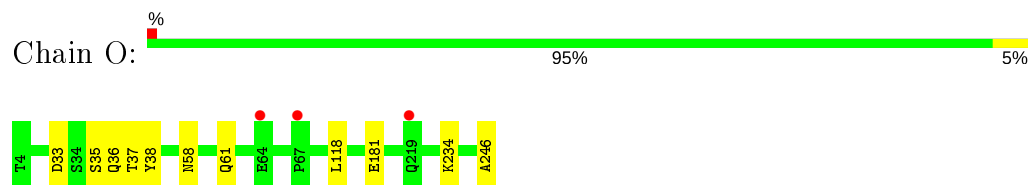
- Molecule 12: Photosystem II reaction center protein M



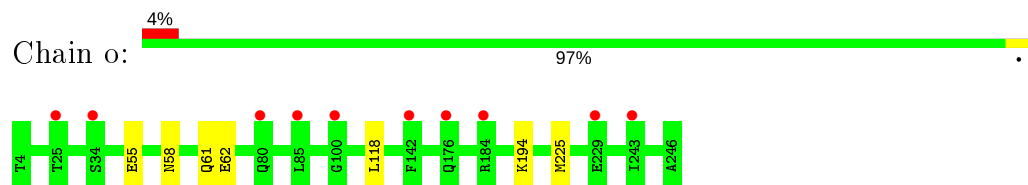
- Molecule 12: Photosystem II reaction center protein M



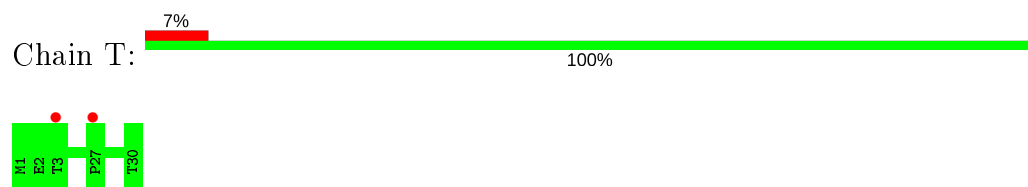
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



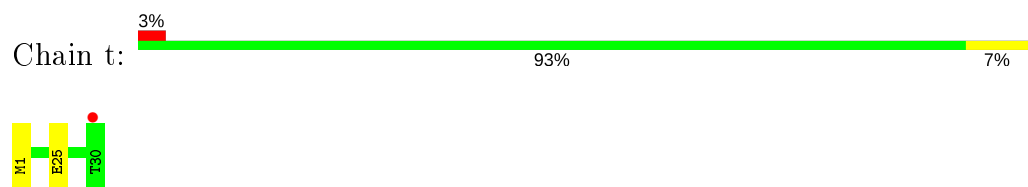
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



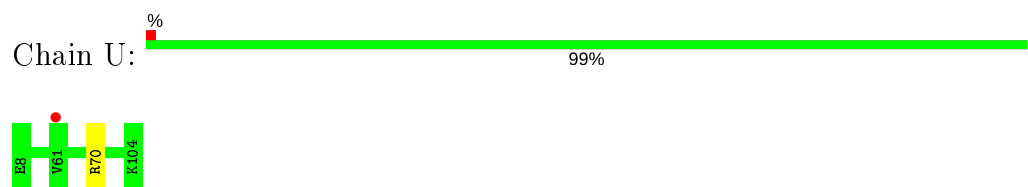
- Molecule 14: Photosystem II reaction center protein T



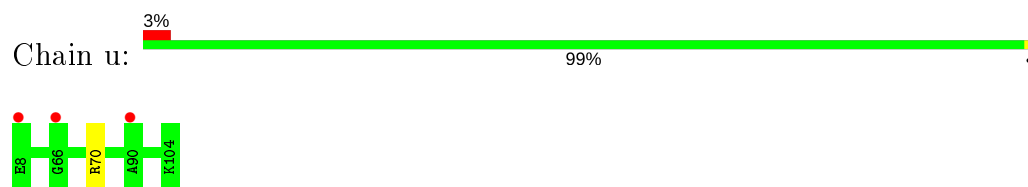
- Molecule 14: Photosystem II reaction center protein T



- Molecule 15: Photosystem II 12 kDa extrinsic protein

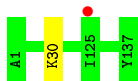


- Molecule 15: Photosystem II 12 kDa extrinsic protein



- Molecule 16: Cytochrome c-550

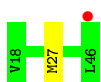




- Molecule 16: Cytochrome c-550



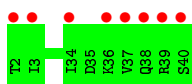
- Molecule 17: Photosystem II reaction center protein Ycf12



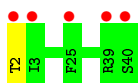
- Molecule 17: Photosystem II reaction center protein Ycf12



- Molecule 18: Photosystem II reaction center X protein



- Molecule 18: Photosystem II reaction center X protein



- Molecule 19: Photosystem II reaction center protein Z



- Molecule 19: Photosystem II reaction center protein Z



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	133.25Å 226.26Å 307.09Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	100.64 – 5.00 100.64 – 5.00	Depositor EDS
% Data completeness (in resolution range)	100.0 (100.64-5.00) 100.0 (100.64-5.00)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	2.10 (at 5.12Å)	Xtrriage
Refinement program	PHENIX (phenix.refine: 1.8.2_1309)	Depositor
R, $R_{free}$	0.261 , 0.262 0.259 , 0.263	Depositor DCC
$R_{free}$ test set	2056 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	285.1	Xtrriage
Anisotropy	0.304	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.32 , 56.0	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.43$ , $\langle L^2 \rangle = 0.26$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.88	EDS
Total number of atoms	48924	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	33.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.89% 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: LHG, MG, OEX, PHO, DGD, CL, CA, CLA, PL9, FE2, BCT, HEM, BCR, SQD

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	0.52	0/2705	0.55	0/3689
1	a	0.51	0/2705	0.54	0/3689
2	B	0.50	0/4109	0.54	0/5600
2	b	0.49	0/4109	0.53	0/5600
3	C	0.47	0/3599	0.51	0/4900
3	c	0.44	0/3633	0.50	0/4946
4	D	0.53	0/2821	0.55	0/3844
4	d	0.49	0/2812	0.53	0/3832
5	E	0.43	0/681	0.51	0/928
5	e	0.42	0/681	0.50	0/928
6	F	0.49	0/284	0.45	0/387
6	f	0.47	0/265	0.44	0/360
7	H	0.47	0/524	0.50	0/713
7	h	0.44	0/524	0.49	0/713
8	I	0.47	0/319	0.51	0/429
8	i	0.46	0/319	0.47	0/429
9	J	0.46	0/278	0.43	0/376
9	j	0.39	0/294	0.45	0/396
10	K	0.43	0/303	0.50	0/416
10	k	0.43	0/303	0.51	0/416
11	L	0.55	0/311	0.51	0/422
11	l	0.54	0/311	0.52	0/422
12	M	0.47	0/270	0.58	0/367
12	m	0.49	0/270	0.52	0/367
13	O	0.45	0/1896	0.58	0/2571
13	o	0.43	0/1896	0.56	0/2571
14	T	0.54	0/265	0.52	0/359
14	t	0.55	0/265	0.52	0/359
15	U	0.46	0/785	0.55	0/1064
15	u	0.45	0/785	0.55	0/1064
16	V	0.47	0/1085	0.53	0/1473
16	v	0.42	0/1085	0.52	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	Y	0.41	0/216	0.45	0/289
17	y	0.35	0/216	0.52	0/289
18	X	0.43	0/290	0.46	0/392
18	x	0.42	0/290	0.48	0/392
19	Z	0.41	0/490	0.45	0/669
19	z	0.40	0/490	0.47	0/669
All	All	0.48	0/42484	0.53	0/57803

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	332/334 (99%)	328 (99%)	3 (1%)	1 (0%)	41	76
1	a	332/334 (99%)	325 (98%)	6 (2%)	1 (0%)	41	76
2	B	502/504 (100%)	496 (99%)	6 (1%)	0	100	100
2	b	502/504 (100%)	492 (98%)	10 (2%)	0	100	100
3	C	449/455 (99%)	440 (98%)	8 (2%)	1 (0%)	47	81
3	c	453/455 (100%)	440 (97%)	12 (3%)	1 (0%)	47	81
4	D	340/342 (99%)	332 (98%)	8 (2%)	0	100	100
4	d	339/342 (99%)	333 (98%)	6 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	E	79/81 (98%)	78 (99%)	1 (1%)	0	100	100
5	e	79/81 (98%)	78 (99%)	1 (1%)	0	100	100
6	F	32/34 (94%)	32 (100%)	0	0	100	100
6	f	30/34 (88%)	30 (100%)	0	0	100	100
7	H	63/65 (97%)	58 (92%)	5 (8%)	0	100	100
7	h	63/65 (97%)	56 (89%)	7 (11%)	0	100	100
8	I	36/38 (95%)	34 (94%)	2 (6%)	0	100	100
8	i	36/38 (95%)	35 (97%)	1 (3%)	0	100	100
9	J	36/40 (90%)	36 (100%)	0	0	100	100
9	j	38/40 (95%)	38 (100%)	0	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	35/37 (95%)	35 (100%)	0	0	100	100
11	l	35/37 (95%)	35 (100%)	0	0	100	100
12	M	32/34 (94%)	32 (100%)	0	0	100	100
12	m	32/34 (94%)	32 (100%)	0	0	100	100
13	O	241/243 (99%)	233 (97%)	7 (3%)	1 (0%)	34	72
13	o	241/243 (99%)	231 (96%)	9 (4%)	1 (0%)	34	72
14	T	28/30 (93%)	27 (96%)	1 (4%)	0	100	100
14	t	28/30 (93%)	28 (100%)	0	0	100	100
15	U	95/97 (98%)	93 (98%)	2 (2%)	0	100	100
15	u	95/97 (98%)	93 (98%)	2 (2%)	0	100	100
16	V	135/137 (98%)	132 (98%)	3 (2%)	0	100	100
16	v	135/137 (98%)	130 (96%)	5 (4%)	0	100	100
17	Y	27/29 (93%)	27 (100%)	0	0	100	100
17	y	27/29 (93%)	26 (96%)	1 (4%)	0	100	100
18	X	37/39 (95%)	36 (97%)	1 (3%)	0	100	100
18	x	37/39 (95%)	35 (95%)	2 (5%)	0	100	100
19	Z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
19	z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
All	All	5191/5276 (98%)	5072 (98%)	113 (2%)	6 (0%)	51	86

All (6) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
13	O	58	ASN
13	o	58	ASN
3	C	416	SER
3	c	416	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	269/269 (100%)	268 (100%)	1 (0%)	91	94
1	a	269/269 (100%)	267 (99%)	2 (1%)	84	90
2	B	402/402 (100%)	399 (99%)	3 (1%)	84	90
2	b	402/402 (100%)	395 (98%)	7 (2%)	60	78
3	C	352/356 (99%)	348 (99%)	4 (1%)	73	85
3	c	356/356 (100%)	350 (98%)	6 (2%)	60	78
4	D	277/277 (100%)	274 (99%)	3 (1%)	73	85
4	d	276/277 (100%)	275 (100%)	1 (0%)	91	94
5	E	72/72 (100%)	71 (99%)	1 (1%)	67	81
5	e	72/72 (100%)	70 (97%)	2 (3%)	43	65
6	F	28/28 (100%)	27 (96%)	1 (4%)	35	59
6	f	26/28 (93%)	25 (96%)	1 (4%)	33	57
7	H	54/54 (100%)	51 (94%)	3 (6%)	21	48
7	h	54/54 (100%)	53 (98%)	1 (2%)	57	75
8	I	35/35 (100%)	35 (100%)	0	100	100
8	i	35/35 (100%)	35 (100%)	0	100	100
9	J	26/28 (93%)	26 (100%)	0	100	100
9	j	28/28 (100%)	28 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
10	K	30/30 (100%)	28 (93%)	2 (7%)	16	42
10	k	30/30 (100%)	28 (93%)	2 (7%)	16	42
11	L	35/35 (100%)	33 (94%)	2 (6%)	20	47
11	l	35/35 (100%)	34 (97%)	1 (3%)	42	64
12	M	31/31 (100%)	30 (97%)	1 (3%)	39	61
12	m	31/31 (100%)	31 (100%)	0	100	100
13	O	206/206 (100%)	202 (98%)	4 (2%)	57	75
13	o	206/206 (100%)	200 (97%)	6 (3%)	42	64
14	T	27/27 (100%)	27 (100%)	0	100	100
14	t	27/27 (100%)	25 (93%)	2 (7%)	13	40
15	U	84/84 (100%)	83 (99%)	1 (1%)	71	84
15	u	84/84 (100%)	83 (99%)	1 (1%)	71	84
16	V	117/117 (100%)	116 (99%)	1 (1%)	78	88
16	v	117/117 (100%)	114 (97%)	3 (3%)	46	67
17	Y	22/22 (100%)	21 (96%)	1 (4%)	27	53
17	y	22/22 (100%)	21 (96%)	1 (4%)	27	53
18	X	32/32 (100%)	32 (100%)	0	100	100
18	x	32/32 (100%)	31 (97%)	1 (3%)	40	62
19	Z	52/52 (100%)	50 (96%)	2 (4%)	33	57
19	z	52/52 (100%)	49 (94%)	3 (6%)	20	46
All	All	4305/4314 (100%)	4235 (98%)	70 (2%)	62	79

All (70) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	238	LYS
2	B	53	ASN
2	B	246	PHE
2	B	472	ARG
3	C	24	THR
3	C	25	ASN
3	C	289	PHE
3	C	418	ASN
4	D	11	GLU
4	D	90	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
4	D	180	ARG
5	E	71	GLU
6	F	44	GLN
7	H	12	ARG
7	H	49	TYR
7	H	65	LEU
10	K	13	GLU
10	K	17	ILE
11	L	1	MET
11	L	13	ASN
12	M	9	ILE
13	O	61	GLN
13	O	118	LEU
13	O	181	GLU
13	O	234	LYS
15	U	70	ARG
16	V	30	LYS
17	Y	27	MET
19	Z	6	GLN
19	Z	31	GLN
1	a	12	ASN
1	a	244	GLU
2	b	14	ASN
2	b	246	PHE
2	b	362	PHE
2	b	472	ARG
2	b	479	PHE
2	b	491	VAL
2	b	505	ARG
3	c	120	ILE
3	c	289	PHE
3	c	355	THR
3	c	391	ARG
3	c	416	SER
3	c	418	ASN
4	d	180	ARG
5	e	59	GLU
5	e	60	GLN
6	f	44	GLN
7	h	49	TYR
10	k	13	GLU
10	k	17	ILE

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Mol	Chain	Res	Type
11	l	1	MET
13	o	55	GLU
13	o	61	GLN
13	o	62	GLU
13	o	118	LEU
13	o	194	LYS
13	o	225	MET
14	t	1	MET
14	t	25	GLU
15	u	70	ARG
16	v	17	LYS
16	v	23	GLU
16	v	122	GLU
17	y	42	ARG
18	x	2	THR
19	z	1	MET
19	z	3	ILE
19	z	35	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (32) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	261	GLN
1	A	315	ASN
2	B	53	ASN
2	B	281	GLN
2	B	331	ASN
3	C	25	ASN
3	C	373	ASN
4	D	83	ASN
4	D	332	GLN
6	F	44	GLN
10	K	40	GLN
11	L	13	ASN
13	O	82	GLN
13	O	124	ASN
13	O	147	ASN
16	V	34	GLN
19	Z	58	ASN
1	a	315	ASN
2	b	53	ASN
2	b	281	GLN

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Mol	Chain	Res	Type
2	b	331	ASN
3	c	28	GLN
3	c	201	ASN
3	c	373	ASN
4	d	83	ASN
4	d	332	GLN
5	e	75	GLN
13	o	61	GLN
13	o	82	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](#)

There are no non-standard protein/DNA/RNA residues in this entry.

### 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

### 5.6 Ligand geometry [i](#)

Of 152 ligands modelled in this entry, 16 are monoatomic - leaving 136 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	$\# Z  > 2$
29	LHG	D	407	-	48,48,48	0.86	2 (4%)	51,54,54	0.99	4 (7%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
24	CLA	b	610	-	59,73,73	2.48	15 (25%)	67,113,113	1.98	14 (20%)
24	CLA	a	408	-	59,73,73	2.19	14 (23%)	67,113,113	2.05	18 (26%)
24	CLA	b	602	-	59,73,73	2.55	15 (25%)	67,113,113	2.10	17 (25%)
26	BCR	b	619	-	41,41,41	3.80	15 (36%)	56,56,56	8.49	42 (75%)
32	HEM	E	101	5,6	27,50,50	2.13	6 (22%)	17,82,82	2.04	4 (23%)
32	HEM	V	202	16	27,50,50	2.15	7 (25%)	17,82,82	1.89	4 (23%)
24	CLA	C	509	-	59,73,73	2.38	14 (23%)	67,113,113	2.21	17 (25%)
31	DGD	D	406	-	63,63,67	0.99	4 (6%)	77,77,81	1.02	6 (7%)
24	CLA	A	609	-	59,73,73	2.17	13 (22%)	67,113,113	2.04	17 (25%)
29	LHG	d	410	-	48,48,48	0.92	2 (4%)	51,54,54	0.95	4 (7%)
24	CLA	b	614	-	59,73,73	2.17	14 (23%)	67,113,113	2.10	17 (25%)
27	PL9	d	405	-	55,55,55	0.81	2 (3%)	68,69,69	1.32	10 (14%)
24	CLA	B	613	-	59,73,73	2.35	13 (22%)	67,113,113	2.11	15 (22%)
26	BCR	B	620	-	41,41,41	3.72	14 (34%)	56,56,56	8.42	41 (73%)
24	CLA	b	608	-	59,73,73	2.34	13 (22%)	67,113,113	2.08	16 (23%)
24	CLA	C	504	-	59,73,73	2.33	13 (22%)	67,113,113	2.14	15 (22%)
26	BCR	k	102	-	41,41,41	3.80	14 (34%)	56,56,56	8.42	42 (75%)
24	CLA	d	404	-	59,73,73	2.38	15 (25%)	67,113,113	1.97	18 (26%)
24	CLA	C	505	-	59,73,73	2.30	15 (25%)	67,113,113	2.06	14 (20%)
24	CLA	B	611	-	59,73,73	2.24	14 (23%)	67,113,113	2.02	16 (23%)
26	BCR	a	409	-	41,41,41	3.65	14 (34%)	56,56,56	7.80	33 (58%)
24	CLA	c	905	-	59,73,73	2.43	16 (27%)	67,113,113	2.08	15 (22%)
24	CLA	A	614	-	59,73,73	1.98	13 (22%)	67,113,113	2.01	15 (22%)
24	CLA	d	403	-	59,73,73	2.13	13 (22%)	67,113,113	2.01	15 (22%)
26	BCR	T	102	-	41,41,41	3.67	15 (36%)	56,56,56	7.23	37 (66%)
24	CLA	B	617	-	59,73,73	2.20	13 (22%)	67,113,113	2.06	19 (28%)
24	CLA	c	903	-	59,73,73	2.25	14 (23%)	67,113,113	2.13	16 (23%)
29	LHG	D	409	-	48,48,48	0.94	2 (4%)	51,54,54	0.90	3 (5%)
23	BCT	a	414	21	0,3,3	0.00	-	0,3,3	0.00	-
24	CLA	c	912	3	59,73,73	2.50	14 (23%)	67,113,113	2.19	15 (22%)
26	BCR	B	622	-	41,41,41	3.78	15 (36%)	56,56,56	7.59	36 (64%)
26	BCR	c	918	-	41,41,41	3.61	15 (36%)	56,56,56	7.55	36 (64%)
24	CLA	B	606	-	59,73,73	2.32	13 (22%)	67,113,113	2.00	16 (23%)
24	CLA	D	403	-	59,73,73	2.39	16 (27%)	67,113,113	2.04	15 (22%)
23	BCT	A	605	21	0,3,3	0.00	-	0,3,3	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
26	BCR	c	915	-	41,41,41	3.79	15 (36%)	56,56,56	8.54	39 (69%)
24	CLA	D	402	-	59,73,73	2.12	15 (25%)	67,113,113	1.98	18 (26%)
27	PL9	A	611	-	55,55,55	0.71	2 (3%)	68,69,69	1.56	13 (19%)
24	CLA	b	609	-	59,73,73	2.35	13 (22%)	67,113,113	2.01	15 (22%)
24	CLA	C	501	-	59,73,73	2.31	14 (23%)	67,113,113	2.14	16 (23%)
24	CLA	c	909	-	59,73,73	2.41	15 (25%)	67,113,113	2.01	13 (19%)
24	CLA	B	615	-	59,73,73	2.21	15 (25%)	67,113,113	2.09	17 (25%)
26	BCR	D	404	-	41,41,41	3.80	14 (34%)	56,56,56	7.77	40 (71%)
24	CLA	b	606	-	59,73,73	2.18	14 (23%)	67,113,113	2.06	16 (23%)
28	SQD	a	411	-	53,54,54	1.00	3 (5%)	62,65,65	1.57	10 (16%)
26	BCR	C	514	-	41,41,41	3.86	15 (36%)	56,56,56	8.41	36 (64%)
24	CLA	b	603	-	59,73,73	2.31	14 (23%)	67,113,113	1.89	15 (22%)
24	CLA	B	612	-	59,73,73	2.11	13 (22%)	67,113,113	2.10	15 (22%)
24	CLA	B	616	-	59,73,73	2.46	15 (25%)	67,113,113	2.09	15 (22%)
29	LHG	A	615	-	41,41,48	1.05	2 (4%)	44,47,54	1.06	3 (6%)
25	PHO	d	402	-	67,69,69	1.96	14 (20%)	85,99,99	1.82	15 (17%)
32	HEM	e	101	5,6	27,50,50	2.16	6 (22%)	17,82,82	1.87	5 (29%)
31	DGD	d	406	-	63,63,67	0.97	3 (4%)	77,77,81	0.95	4 (5%)
24	CLA	b	616	-	59,73,73	2.38	14 (23%)	67,113,113	2.11	14 (20%)
24	CLA	b	605	-	59,73,73	2.34	15 (25%)	67,113,113	2.33	16 (23%)
31	DGD	C	518	-	63,63,67	0.79	3 (4%)	77,77,81	0.90	3 (3%)
24	CLA	A	606	-	59,73,73	2.11	13 (22%)	67,113,113	1.92	15 (22%)
26	BCR	Y	101	-	41,41,41	3.83	14 (34%)	56,56,56	8.02	36 (64%)
28	SQD	F	101	-	42,43,54	1.21	3 (7%)	51,54,65	1.46	7 (13%)
24	CLA	B	604	-	59,73,73	2.21	15 (25%)	67,113,113	2.14	17 (25%)
24	CLA	c	913	-	59,73,73	2.58	15 (25%)	67,113,113	2.12	18 (26%)
26	BCR	H	101	-	41,41,41	3.80	14 (34%)	56,56,56	8.25	40 (71%)
24	CLA	B	610	-	59,73,73	2.19	14 (23%)	67,113,113	2.08	15 (22%)
26	BCR	b	618	-	41,41,41	3.70	14 (34%)	56,56,56	7.96	41 (73%)
24	CLA	C	511	3	59,73,73	2.50	14 (23%)	67,113,113	2.27	14 (20%)
31	DGD	H	102	-	63,63,67	0.92	3 (4%)	77,77,81	0.94	4 (5%)
24	CLA	B	607	-	59,73,73	2.48	15 (25%)	67,113,113	2.14	17 (25%)
24	CLA	B	602	-	59,73,73	2.54	14 (23%)	67,113,113	2.16	14 (20%)
24	CLA	c	902	-	59,73,73	2.33	15 (25%)	67,113,113	2.20	16 (23%)
24	CLA	C	507	-	59,73,73	2.50	14 (23%)	67,113,113	2.26	18 (26%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
26	BCR	C	515	-	41,41,41	3.82	14 (34%)	56,56,56	8.21	38 (67%)
26	BCR	h	101	-	41,41,41	3.79	14 (34%)	56,56,56	8.35	41 (73%)
31	DGD	j	101	-	63,63,67	0.87	3 (4%)	77,77,81	0.87	3 (3%)
24	CLA	c	906	-	59,73,73	2.28	14 (23%)	67,113,113	2.09	16 (23%)
24	CLA	C	503	-	59,73,73	2.51	14 (23%)	67,113,113	1.99	12 (17%)
26	BCR	k	101	-	41,41,41	3.88	14 (34%)	56,56,56	8.48	41 (73%)
24	CLA	b	615	-	59,73,73	2.17	14 (23%)	67,113,113	2.26	19 (28%)
32	HEM	v	202	16	27,50,50	2.18	6 (22%)	17,82,82	1.89	2 (11%)
31	DGD	C	517	-	63,63,67	0.88	2 (3%)	77,77,81	0.86	2 (2%)
28	SQD	A	613	-	53,54,54	1.05	3 (5%)	62,65,65	1.22	6 (9%)
24	CLA	C	510	-	59,73,73	2.24	14 (23%)	67,113,113	2.10	17 (25%)
26	BCR	f	101	-	41,41,41	3.82	14 (34%)	56,56,56	7.95	45 (80%)
29	LHG	d	409	-	48,48,48	0.84	2 (4%)	51,54,54	0.91	3 (5%)
24	CLA	a	407	-	59,73,73	2.12	14 (23%)	67,113,113	2.02	16 (23%)
29	LHG	D	408	-	48,48,48	0.90	2 (4%)	51,54,54	0.84	2 (3%)
24	CLA	c	904	-	59,73,73	2.63	15 (25%)	67,113,113	2.09	16 (23%)
28	SQD	a	402	-	53,54,54	1.06	3 (5%)	62,65,65	1.22	5 (8%)
27	PL9	D	405	-	55,55,55	0.80	1 (1%)	68,69,69	1.33	9 (13%)
24	CLA	c	914	-	59,73,73	2.66	15 (25%)	67,113,113	1.97	16 (23%)
24	CLA	a	406	-	59,73,73	2.11	14 (23%)	67,113,113	1.97	17 (25%)
31	DGD	h	102	-	63,63,67	0.90	3 (4%)	77,77,81	0.85	3 (3%)
24	CLA	c	907	-	59,73,73	2.27	14 (23%)	67,113,113	1.98	13 (19%)
24	CLA	b	611	-	59,73,73	2.26	15 (25%)	67,113,113	2.04	14 (20%)
26	BCR	A	610	-	41,41,41	3.71	14 (34%)	56,56,56	7.75	37 (66%)
24	CLA	b	617	-	59,73,73	2.33	15 (25%)	67,113,113	2.09	19 (28%)
28	SQD	A	612	-	53,54,54	0.98	3 (5%)	62,65,65	1.53	11 (17%)
24	CLA	C	513	-	59,73,73	2.66	14 (23%)	67,113,113	2.09	16 (23%)
24	CLA	C	512	-	59,73,73	2.71	15 (25%)	67,113,113	2.08	18 (26%)
26	BCR	K	101	-	41,41,41	3.76	14 (34%)	56,56,56	7.77	41 (73%)
24	CLA	d	401	-	59,73,73	2.33	12 (20%)	67,113,113	1.98	15 (22%)
29	LHG	B	621	-	48,48,48	0.89	2 (4%)	51,54,54	0.97	2 (3%)
24	CLA	B	614	-	59,73,73	2.29	15 (25%)	67,113,113	2.01	17 (25%)
20	OEX	a	401	1,3	0,15,15	0.00	-	-	-	-
31	DGD	c	916	-	63,63,67	0.85	3 (4%)	77,77,81	0.90	3 (3%)
24	CLA	b	607	-	59,73,73	2.59	14 (23%)	67,113,113	2.14	16 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	PHO	D	401	-	67,69,69	2.02	15 (22%)	85,99,99	1.92	18 (21%)
24	CLA	B	608	-	59,73,73	2.27	14 (23%)	67,113,113	2.02	15 (22%)
24	CLA	C	508	-	59,73,73	2.46	16 (27%)	67,113,113	2.03	12 (17%)
29	LHG	a	413	-	41,41,48	1.05	2 (4%)	44,47,54	0.90	2 (4%)
26	BCR	B	619	-	41,41,41	3.65	14 (34%)	56,56,56	7.72	41 (73%)
28	SQD	L	101	-	53,54,54	1.08	4 (7%)	62,65,65	1.43	9 (14%)
24	CLA	A	607	-	59,73,73	2.29	12 (20%)	67,113,113	2.17	17 (25%)
24	CLA	B	605	-	59,73,73	2.37	13 (22%)	67,113,113	2.29	16 (23%)
29	LHG	d	408	-	48,48,48	0.90	2 (4%)	51,54,54	0.95	3 (5%)
20	OEX	A	601	1,3	0,15,15	0.00	-	-	-	-
25	PHO	A	608	-	67,69,69	1.92	13 (19%)	85,99,99	1.91	16 (18%)
24	CLA	b	612	-	59,73,73	2.25	13 (22%)	67,113,113	2.12	15 (22%)
24	CLA	c	911	-	59,73,73	2.24	14 (23%)	67,113,113	2.04	15 (22%)
31	DGD	C	516	-	63,63,67	0.87	3 (4%)	77,77,81	0.98	2 (2%)
26	BCR	B	618	-	41,41,41	3.65	14 (34%)	56,56,56	7.51	38 (67%)
29	LHG	b	620	-	48,48,48	0.89	2 (4%)	51,54,54	0.98	3 (5%)
24	CLA	b	613	-	59,73,73	2.46	11 (18%)	67,113,113	2.21	16 (23%)
24	CLA	B	609	-	59,73,73	2.07	13 (22%)	67,113,113	2.00	18 (26%)
25	PHO	a	412	-	67,69,69	2.05	14 (20%)	85,99,99	1.89	17 (20%)
24	CLA	C	506	-	59,73,73	2.34	14 (23%)	67,113,113	2.13	15 (22%)
31	DGD	c	917	-	63,63,67	0.88	2 (3%)	77,77,81	0.81	2 (2%)
24	CLA	c	908	-	59,73,73	2.50	14 (23%)	67,113,113	2.34	15 (22%)
24	CLA	C	502	-	59,73,73	2.21	14 (23%)	67,113,113	1.96	14 (20%)
26	BCR	T	101	-	41,41,41	3.80	14 (34%)	56,56,56	7.07	39 (69%)
24	CLA	B	603	-	59,73,73	2.35	14 (23%)	67,113,113	1.92	14 (20%)
28	SQD	d	407	-	42,43,54	1.20	3 (7%)	51,54,65	1.43	7 (13%)
24	CLA	c	910	-	59,73,73	2.39	15 (25%)	67,113,113	2.24	17 (25%)
24	CLA	b	604	-	59,73,73	2.20	12 (20%)	67,113,113	2.01	17 (25%)
27	PL9	a	410	-	55,55,55	0.70	2 (3%)	68,69,69	1.57	17 (25%)
28	SQD	l	101	-	53,54,54	1.04	4 (7%)	62,65,65	1.36	8 (12%)

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
29	LHG	D	407	-	-	13/53/53/53	-
24	CLA	b	610	-	-	0/37/135/135	-
24	CLA	a	408	-	1/1/20/25	12/37/135/135	-
24	CLA	b	602	-	3/3/20/25	20/37/135/135	-
26	BCR	b	619	-	-	2/29/63/63	0/2/2/2
32	HEM	E	101	5,6	-	0/6/54/54	-
24	CLA	C	509	-	3/3/20/25	9/37/135/135	-
31	DGD	D	406	-	-	32/51/91/95	0/2/2/2
24	CLA	A	609	-	1/1/20/25	16/37/135/135	-
29	LHG	d	410	-	-	17/53/53/53	-
24	CLA	b	614	-	3/3/20/25	6/37/135/135	-
27	PL9	d	405	-	-	3/53/73/73	0/1/1/1
24	CLA	B	613	-	3/3/20/25	4/37/135/135	-
26	BCR	B	620	-	-	2/29/63/63	0/2/2/2
24	CLA	b	608	-	3/3/20/25	2/37/135/135	-
24	CLA	C	504	-	3/3/20/25	9/37/135/135	-
26	BCR	k	102	-	-	12/29/63/63	0/2/2/2
24	CLA	d	404	-	1/1/20/25	9/37/135/135	-
24	CLA	C	505	-	1/1/20/25	4/37/135/135	-
24	CLA	B	611	-	3/3/20/25	8/37/135/135	-
26	BCR	a	409	-	-	2/29/63/63	0/2/2/2
24	CLA	c	905	-	2/2/20/25	10/37/135/135	-
24	CLA	A	614	-	1/1/20/25	5/37/135/135	-
24	CLA	d	403	-	2/2/20/25	3/37/135/135	-
26	BCR	T	102	-	-	3/29/63/63	0/2/2/2
24	CLA	B	617	-	3/3/20/25	16/37/135/135	-
24	CLA	c	903	-	2/2/20/25	7/37/135/135	-
29	LHG	D	409	-	-	13/53/53/53	-
24	CLA	c	912	3	2/2/20/25	7/37/135/135	-
26	BCR	B	622	-	-	4/29/63/63	0/2/2/2
26	BCR	c	918	-	-	13/29/63/63	0/2/2/2
24	CLA	B	606	-	3/3/20/25	6/37/135/135	-
24	CLA	c	909	-	2/2/20/25	8/37/135/135	-
26	BCR	c	915	-	-	9/29/63/63	0/2/2/2
27	PL9	A	611	-	-	9/53/73/73	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	b	609	-	1/1/20/25	1/37/135/135	-
24	CLA	C	501	-	2/2/20/25	11/37/135/135	-
24	CLA	D	403	-	2/2/20/25	15/37/135/135	-
24	CLA	B	615	-	3/3/20/25	12/37/135/135	-
26	BCR	D	404	-	-	6/29/63/63	0/2/2/2
24	CLA	b	606	-	3/3/20/25	5/37/135/135	-
28	SQD	a	411	-	-	23/49/69/69	0/1/1/1
26	BCR	C	514	-	-	5/29/63/63	0/2/2/2
24	CLA	b	603	-	3/3/20/25	4/37/135/135	-
24	CLA	B	612	-	1/1/20/25	3/37/135/135	-
24	CLA	B	616	-	3/3/20/25	10/37/135/135	-
29	LHG	A	615	-	-	25/46/46/53	-
26	BCR	A	610	-	-	4/29/63/63	0/2/2/2
25	PHO	d	402	-	-	2/53/103/103	0/5/6/6
32	HEM	e	101	5,6	-	0/6/54/54	-
31	DGD	d	406	-	-	33/51/91/95	0/2/2/2
24	CLA	b	616	-	3/3/20/25	11/37/135/135	-
24	CLA	b	605	-	3/3/20/25	6/37/135/135	-
31	DGD	C	518	-	-	16/51/91/95	0/2/2/2
24	CLA	A	606	-	3/3/20/25	3/37/135/135	-
26	BCR	Y	101	-	-	2/29/63/63	0/2/2/2
28	SQD	F	101	-	-	16/38/58/69	0/1/1/1
24	CLA	B	604	-	3/3/20/25	5/37/135/135	-
24	CLA	c	913	-	3/3/20/25	14/37/135/135	-
26	BCR	H	101	-	-	8/29/63/63	0/2/2/2
24	CLA	B	610	-	2/2/20/25	4/37/135/135	-
26	BCR	b	618	-	-	3/29/63/63	0/2/2/2
24	CLA	C	511	3	2/2/20/25	2/37/135/135	-
31	DGD	H	102	-	-	15/51/91/95	0/2/2/2
24	CLA	B	607	-	2/2/20/25	9/37/135/135	-
24	CLA	B	602	-	2/2/20/25	17/37/135/135	-
24	CLA	c	902	-	3/3/20/25	5/37/135/135	-
24	CLA	C	507	-	3/3/20/25	10/37/135/135	-
26	BCR	C	515	-	-	4/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	BCR	h	101	-	-	9/29/63/63	0/2/2/2
31	DGD	j	101	-	-	18/51/91/95	0/2/2/2
24	CLA	c	906	-	2/2/20/25	6/37/135/135	-
24	CLA	C	503	-	3/3/20/25	1/37/135/135	-
26	BCR	k	101	-	-	8/29/63/63	0/2/2/2
24	CLA	b	615	-	3/3/20/25	19/37/135/135	-
32	HEM	v	202	16	-	0/6/54/54	-
31	DGD	C	517	-	-	25/51/91/95	0/2/2/2
28	SQD	A	613	-	-	23/49/69/69	0/1/1/1
24	CLA	C	510	-	3/3/20/25	9/37/135/135	-
26	BCR	f	101	-	-	7/29/63/63	0/2/2/2
29	LHG	d	409	-	-	11/53/53/53	-
24	CLA	a	407	-	2/2/20/25	10/37/135/135	-
29	LHG	D	408	-	-	14/53/53/53	-
24	CLA	c	904	-	1/1/20/25	4/37/135/135	-
28	SQD	a	402	-	-	23/49/69/69	0/1/1/1
24	CLA	c	911	-	3/3/20/25	9/37/135/135	-
24	CLA	c	914	-	2/2/20/25	16/37/135/135	-
25	PHO	a	412	-	-	4/53/103/103	0/5/6/6
31	DGD	h	102	-	-	12/51/91/95	0/2/2/2
24	CLA	c	907	-	2/2/20/25	11/37/135/135	-
24	CLA	b	611	-	3/3/20/25	4/37/135/135	-
24	CLA	c	908	-	3/3/20/25	9/37/135/135	-
24	CLA	b	617	-	3/3/20/25	12/37/135/135	-
28	SQD	A	612	-	-	16/49/69/69	0/1/1/1
24	CLA	C	513	-	2/2/20/25	10/37/135/135	-
24	CLA	C	512	-	3/3/20/25	10/37/135/135	-
26	BCR	K	101	-	-	11/29/63/63	0/2/2/2
24	CLA	d	401	-	1/1/20/25	6/37/135/135	-
29	LHG	B	621	-	-	17/53/53/53	-
24	CLA	B	614	-	3/3/20/25	2/37/135/135	-
32	HEM	V	202	16	-	0/6/54/54	-
31	DGD	c	916	-	-	23/51/91/95	0/2/2/2
24	CLA	b	607	-	2/2/20/25	12/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	PHO	D	401	-	-	5/53/103/103	0/5/6/6
24	CLA	B	608	-	3/3/20/25	2/37/135/135	-
24	CLA	C	508	-	2/2/20/25	7/37/135/135	-
29	LHG	a	413	-	-	25/46/46/53	-
26	BCR	B	619	-	-	4/29/63/63	0/2/2/2
28	SQD	L	101	-	-	29/49/69/69	0/1/1/1
24	CLA	A	607	-	2/2/20/25	8/37/135/135	-
24	CLA	B	605	-	3/3/20/25	7/37/135/135	-
29	LHG	d	408	-	-	11/53/53/53	-
24	CLA	C	506	-	3/3/20/25	14/37/135/135	-
25	PHO	A	608	-	-	4/53/103/103	0/5/6/6
24	CLA	b	612	-	2/2/20/25	4/37/135/135	-
27	PL9	D	405	-	-	1/53/73/73	0/1/1/1
31	DGD	C	516	-	-	24/51/91/95	0/2/2/2
26	BCR	B	618	-	-	5/29/63/63	0/2/2/2
29	LHG	b	620	-	-	17/53/53/53	-
24	CLA	b	613	-	3/3/20/25	5/37/135/135	-
24	CLA	B	609	-	1/1/20/25	2/37/135/135	-
24	CLA	a	406	-	3/3/20/25	3/37/135/135	-
31	DGD	c	917	-	-	18/51/91/95	0/2/2/2
24	CLA	D	402	-	1/1/20/25	4/37/135/135	-
24	CLA	C	502	-	1/1/20/25	8/37/135/135	-
26	BCR	T	101	-	-	2/29/63/63	0/2/2/2
24	CLA	B	603	-	3/3/20/25	4/37/135/135	-
28	SQD	d	407	-	-	22/38/58/69	0/1/1/1
24	CLA	c	910	-	3/3/20/25	10/37/135/135	-
24	CLA	b	604	-	3/3/20/25	8/37/135/135	-
27	PL9	a	410	-	-	9/53/73/73	0/1/1/1
28	SQD	l	101	-	-	28/49/69/69	0/1/1/1

All (1460) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	512	CLA	MG-NA	14.06	2.39	2.06
24	c	914	CLA	MG-NC	12.56	2.36	2.06
24	b	613	CLA	MG-NA	12.54	2.36	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	913	CLA	MG-NA	12.23	2.35	2.06
24	B	605	CLA	MG-NA	12.05	2.34	2.06
24	B	616	CLA	MG-NA	11.79	2.34	2.06
24	b	607	CLA	MG-NA	11.61	2.33	2.06
24	C	513	CLA	MG-NA	11.55	2.33	2.06
24	C	511	CLA	MG-NA	11.41	2.33	2.06
24	C	507	CLA	MG-NA	11.40	2.33	2.06
24	d	401	CLA	MG-NA	11.29	2.33	2.06
24	B	607	CLA	MG-NA	11.19	2.32	2.06
24	C	503	CLA	MG-NC	11.10	2.32	2.06
24	B	613	CLA	MG-NA	10.93	2.32	2.06
24	A	607	CLA	MG-NA	10.92	2.32	2.06
24	b	609	CLA	MG-NA	10.67	2.31	2.06
24	C	509	CLA	MG-NA	10.32	2.30	2.06
24	B	602	CLA	MG-NA	10.25	2.30	2.06
24	C	508	CLA	MG-NA	10.15	2.30	2.06
24	b	610	CLA	MG-NC	10.00	2.30	2.06
24	c	904	CLA	MG-NA	9.99	2.30	2.06
24	b	616	CLA	MG-NA	9.92	2.29	2.06
24	B	614	CLA	MG-NA	9.84	2.29	2.06
24	b	602	CLA	MG-NC	9.83	2.29	2.06
24	c	910	CLA	MG-NA	9.80	2.29	2.06
24	C	506	CLA	MG-NA	9.74	2.29	2.06
24	B	606	CLA	MG-NA	9.67	2.29	2.06
24	b	617	CLA	MG-NA	9.52	2.28	2.06
24	c	904	CLA	MG-NC	9.49	2.28	2.06
24	b	606	CLA	MG-NA	9.40	2.28	2.06
24	C	505	CLA	MG-NA	9.38	2.28	2.06
24	c	912	CLA	MG-NC	9.37	2.28	2.06
24	D	403	CLA	MG-NA	9.32	2.28	2.06
24	B	603	CLA	MG-NA	9.24	2.28	2.06
24	b	605	CLA	MG-NA	9.23	2.28	2.06
24	b	604	CLA	MG-NA	9.15	2.28	2.06
24	C	501	CLA	MG-NA	9.15	2.28	2.06
24	c	902	CLA	MG-NA	9.14	2.28	2.06
24	B	608	CLA	MG-NA	9.08	2.27	2.06
24	c	909	CLA	MG-NA	9.08	2.27	2.06
24	C	510	CLA	MG-NA	9.03	2.27	2.06
24	d	404	CLA	MG-NA	9.02	2.27	2.06
24	c	907	CLA	MG-NA	8.97	2.27	2.06
24	b	603	CLA	MG-NC	8.96	2.27	2.06
26	c	918	BCR	C8-C9	-8.92	1.26	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	b	619	BCR	C8-C9	-8.86	1.26	1.45
26	B	622	BCR	C8-C9	-8.81	1.27	1.45
26	C	514	BCR	C8-C9	-8.79	1.27	1.45
26	C	514	BCR	C12-C13	-8.77	1.27	1.45
24	c	905	CLA	MG-NC	8.76	2.27	2.06
26	c	915	BCR	C8-C9	-8.75	1.27	1.45
24	b	608	CLA	MG-NA	8.75	2.27	2.06
24	B	612	CLA	MG-NA	8.74	2.27	2.06
24	c	908	CLA	MG-NA	8.73	2.27	2.06
26	D	404	BCR	C8-C9	-8.71	1.27	1.45
26	c	918	BCR	C12-C13	-8.70	1.27	1.45
26	K	101	BCR	C8-C9	-8.69	1.27	1.45
26	h	101	BCR	C8-C9	-8.69	1.27	1.45
26	k	101	BCR	C8-C9	-8.68	1.27	1.45
26	f	101	BCR	C8-C9	-8.66	1.27	1.45
26	H	101	BCR	C19-C18	-8.66	1.27	1.45
26	T	101	BCR	C8-C9	-8.64	1.27	1.45
26	f	101	BCR	C19-C18	-8.64	1.27	1.45
26	k	101	BCR	C12-C13	-8.63	1.27	1.45
26	C	515	BCR	C8-C9	-8.62	1.27	1.45
26	Y	101	BCR	C8-C9	-8.61	1.27	1.45
26	h	101	BCR	C19-C18	-8.60	1.27	1.45
24	b	611	CLA	MG-NA	8.59	2.26	2.06
26	k	101	BCR	C19-C18	-8.59	1.27	1.45
24	c	908	CLA	MG-NC	8.58	2.26	2.06
26	Y	101	BCR	C19-C18	-8.57	1.27	1.45
26	k	102	BCR	C8-C9	-8.55	1.27	1.45
24	b	612	CLA	MG-NA	8.55	2.26	2.06
26	B	620	BCR	C8-C9	-8.54	1.27	1.45
26	k	102	BCR	C19-C18	-8.53	1.27	1.45
26	Y	101	BCR	C12-C13	-8.52	1.27	1.45
26	B	622	BCR	C12-C13	-8.50	1.27	1.45
26	C	514	BCR	C19-C18	-8.50	1.27	1.45
26	T	101	BCR	C12-C13	-8.49	1.27	1.45
26	B	620	BCR	C12-C13	-8.49	1.27	1.45
26	c	918	BCR	C19-C18	-8.48	1.27	1.45
24	c	906	CLA	MG-NA	8.48	2.26	2.06
26	k	102	BCR	C12-C13	-8.47	1.27	1.45
26	C	515	BCR	C19-C18	-8.47	1.27	1.45
26	B	618	BCR	C8-C9	-8.46	1.27	1.45
26	H	101	BCR	C12-C13	-8.46	1.27	1.45
24	B	604	CLA	MG-NA	8.46	2.26	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	H	101	BCR	C8-C9	-8.46	1.27	1.45
26	b	618	BCR	C8-C9	-8.44	1.27	1.45
26	b	619	BCR	C12-C13	-8.43	1.27	1.45
26	D	404	BCR	C19-C18	-8.43	1.27	1.45
26	B	619	BCR	C8-C9	-8.43	1.27	1.45
26	b	619	BCR	C19-C18	-8.43	1.27	1.45
26	C	515	BCR	C12-C13	-8.43	1.27	1.45
26	T	102	BCR	C8-C9	-8.40	1.27	1.45
26	K	101	BCR	C19-C18	-8.40	1.27	1.45
26	A	610	BCR	C8-C9	-8.39	1.27	1.45
26	c	915	BCR	C19-C18	-8.39	1.27	1.45
26	b	618	BCR	C12-C13	-8.39	1.27	1.45
26	c	915	BCR	C12-C13	-8.36	1.28	1.45
26	h	101	BCR	C12-C13	-8.36	1.28	1.45
26	T	101	BCR	C19-C18	-8.35	1.28	1.45
26	D	404	BCR	C12-C13	-8.33	1.28	1.45
26	B	622	BCR	C19-C18	-8.32	1.28	1.45
26	f	101	BCR	C12-C13	-8.30	1.28	1.45
24	c	903	CLA	MG-NA	8.29	2.26	2.06
26	B	619	BCR	C19-C18	-8.28	1.28	1.45
26	T	102	BCR	C19-C18	-8.28	1.28	1.45
26	K	101	BCR	C12-C13	-8.27	1.28	1.45
26	B	618	BCR	C12-C13	-8.26	1.28	1.45
26	T	102	BCR	C12-C13	-8.23	1.28	1.45
26	A	610	BCR	C12-C13	-8.23	1.28	1.45
26	A	610	BCR	C19-C18	-8.21	1.28	1.45
26	a	409	BCR	C8-C9	-8.20	1.28	1.45
26	B	620	BCR	C19-C18	-8.16	1.28	1.45
26	B	619	BCR	C12-C13	-8.15	1.28	1.45
26	a	409	BCR	C12-C13	-8.14	1.28	1.45
26	b	618	BCR	C19-C18	-8.11	1.28	1.45
26	a	409	BCR	C19-C18	-8.10	1.28	1.45
24	C	502	CLA	MG-NA	8.07	2.25	2.06
26	B	618	BCR	C19-C18	-8.03	1.28	1.45
24	C	504	CLA	MG-NC	8.00	2.25	2.06
26	k	101	BCR	C20-C21	-7.69	1.19	1.43
26	f	101	BCR	C20-C21	-7.66	1.19	1.43
24	c	912	CLA	MG-NA	7.65	2.24	2.06
24	a	407	CLA	MG-NA	7.64	2.24	2.06
26	Y	101	BCR	C20-C21	-7.60	1.19	1.43
24	d	403	CLA	MG-NA	7.60	2.24	2.06
24	a	408	CLA	MG-NA	7.59	2.24	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	D	404	BCR	C20-C21	-7.57	1.20	1.43
26	k	102	BCR	C20-C21	-7.55	1.20	1.43
26	C	514	BCR	C20-C21	-7.54	1.20	1.43
26	k	101	BCR	C16-C17	-7.54	1.20	1.43
24	c	911	CLA	MG-NC	7.52	2.24	2.06
26	C	515	BCR	C20-C21	-7.52	1.20	1.43
26	H	101	BCR	C20-C21	-7.52	1.20	1.43
26	f	101	BCR	C16-C17	-7.52	1.20	1.43
26	C	514	BCR	C16-C17	-7.51	1.20	1.43
26	Y	101	BCR	C16-C17	-7.51	1.20	1.43
26	C	515	BCR	C16-C17	-7.49	1.20	1.43
26	h	101	BCR	C20-C21	-7.48	1.20	1.43
26	b	619	BCR	C20-C21	-7.47	1.20	1.43
26	c	915	BCR	C20-C21	-7.45	1.20	1.43
26	K	101	BCR	C20-C21	-7.44	1.20	1.43
26	h	101	BCR	C16-C17	-7.43	1.20	1.43
24	B	611	CLA	MG-NA	7.43	2.23	2.06
26	H	101	BCR	C16-C17	-7.42	1.20	1.43
26	k	102	BCR	C16-C17	-7.42	1.20	1.43
26	b	619	BCR	C16-C17	-7.40	1.20	1.43
24	a	406	CLA	MG-NA	7.38	2.23	2.06
26	T	101	BCR	C16-C17	-7.38	1.20	1.43
24	b	615	CLA	MG-NC	7.38	2.23	2.06
26	c	915	BCR	C16-C17	-7.38	1.20	1.43
26	B	622	BCR	C16-C17	-7.37	1.20	1.43
26	D	404	BCR	C16-C17	-7.37	1.20	1.43
24	c	905	CLA	MG-NA	7.36	2.23	2.06
26	T	101	BCR	C20-C21	-7.36	1.20	1.43
26	A	610	BCR	C20-C21	-7.36	1.20	1.43
26	B	620	BCR	C16-C17	-7.32	1.20	1.43
26	B	619	BCR	C20-C21	-7.31	1.20	1.43
26	A	610	BCR	C16-C17	-7.31	1.20	1.43
26	b	618	BCR	C20-C21	-7.31	1.20	1.43
26	K	101	BCR	C16-C17	-7.29	1.20	1.43
26	B	622	BCR	C20-C21	-7.27	1.20	1.43
26	T	102	BCR	C16-C17	-7.26	1.20	1.43
26	a	409	BCR	C16-C17	-7.26	1.21	1.43
26	c	918	BCR	C20-C21	-7.24	1.21	1.43
26	B	620	BCR	C20-C21	-7.24	1.21	1.43
26	B	618	BCR	C20-C21	-7.24	1.21	1.43
26	B	618	BCR	C16-C17	-7.19	1.21	1.43
26	T	102	BCR	C20-C21	-7.19	1.21	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	b	618	BCR	C16-C17	-7.18	1.21	1.43
24	A	606	CLA	MG-NA	7.18	2.23	2.06
26	B	619	BCR	C16-C17	-7.14	1.21	1.43
26	a	409	BCR	C20-C21	-7.07	1.21	1.43
24	B	615	CLA	MG-NC	7.05	2.23	2.06
24	B	602	CLA	MG-NC	6.98	2.22	2.06
24	b	614	CLA	MG-NA	6.98	2.22	2.06
24	c	909	CLA	MG-NC	6.97	2.22	2.06
24	b	602	CLA	MG-NA	6.87	2.22	2.06
24	C	513	CLA	MG-NC	6.80	2.22	2.06
24	C	504	CLA	MG-NA	6.79	2.22	2.06
24	B	617	CLA	MG-NA	6.71	2.22	2.06
26	k	101	BCR	C21-C22	-6.64	1.27	1.35
24	B	610	CLA	MG-NA	6.57	2.21	2.06
26	c	918	BCR	C21-C22	-6.50	1.27	1.35
24	B	615	CLA	MG-NA	6.38	2.21	2.06
26	H	101	BCR	C21-C22	-6.35	1.27	1.35
24	B	610	CLA	MG-NC	6.35	2.21	2.06
26	C	515	BCR	C21-C22	-6.33	1.27	1.35
26	f	101	BCR	C21-C22	-6.30	1.27	1.35
26	D	404	BCR	C21-C22	-6.29	1.27	1.35
26	T	101	BCR	C21-C22	-6.27	1.27	1.35
26	c	915	BCR	C17-C18	-6.26	1.27	1.35
26	Y	101	BCR	C21-C22	-6.25	1.27	1.35
26	h	101	BCR	C21-C22	-6.24	1.27	1.35
26	b	619	BCR	C21-C22	-6.24	1.27	1.35
24	B	609	CLA	MG-NA	6.22	2.21	2.06
26	K	101	BCR	C21-C22	-6.22	1.27	1.35
26	C	514	BCR	C17-C18	-6.21	1.27	1.35
26	B	622	BCR	C21-C22	-6.20	1.27	1.35
26	Y	101	BCR	C17-C18	-6.20	1.27	1.35
26	k	101	BCR	C17-C18	-6.18	1.27	1.35
26	T	101	BCR	C16-C15	-6.18	1.19	1.36
26	f	101	BCR	C17-C18	-6.17	1.27	1.35
24	b	605	CLA	MG-NC	6.17	2.20	2.06
26	b	619	BCR	C16-C15	-6.17	1.19	1.36
26	C	514	BCR	C16-C15	-6.17	1.19	1.36
26	C	514	BCR	C21-C22	-6.17	1.27	1.35
26	c	915	BCR	C16-C15	-6.15	1.20	1.36
26	k	102	BCR	C17-C18	-6.12	1.27	1.35
26	B	619	BCR	C21-C22	-6.09	1.27	1.35
26	b	618	BCR	C17-C18	-6.09	1.27	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	611	CLA	MG-NC	6.08	2.20	2.06
24	b	610	CLA	MG-NA	6.08	2.20	2.06
26	B	622	BCR	C17-C18	-6.08	1.27	1.35
26	C	515	BCR	C16-C15	-6.06	1.20	1.36
26	k	101	BCR	C16-C15	-6.06	1.20	1.36
24	D	403	CLA	MG-NC	6.06	2.20	2.06
26	k	102	BCR	C16-C15	-6.05	1.20	1.36
26	f	101	BCR	C16-C15	-6.05	1.20	1.36
26	B	622	BCR	C16-C15	-6.05	1.20	1.36
26	D	404	BCR	C17-C18	-6.04	1.27	1.35
26	B	620	BCR	C21-C22	-6.04	1.27	1.35
26	C	515	BCR	C17-C18	-6.03	1.27	1.35
26	Y	101	BCR	C16-C15	-6.02	1.20	1.36
26	A	610	BCR	C16-C15	-6.01	1.20	1.36
24	C	507	CLA	C3B-C2B	6.00	1.48	1.40
26	c	915	BCR	C21-C22	-6.00	1.27	1.35
24	A	609	CLA	MG-NC	6.00	2.20	2.06
26	b	619	BCR	C17-C18	-6.00	1.27	1.35
26	h	101	BCR	C17-C18	-5.99	1.27	1.35
24	b	607	CLA	MG-NC	5.99	2.20	2.06
26	T	101	BCR	C17-C18	-5.99	1.27	1.35
26	K	101	BCR	C16-C15	-5.96	1.20	1.36
24	b	608	CLA	MG-NC	5.96	2.20	2.06
26	A	610	BCR	C17-C18	-5.95	1.27	1.35
26	h	101	BCR	C16-C15	-5.95	1.20	1.36
26	D	404	BCR	C16-C15	-5.94	1.20	1.36
26	B	620	BCR	C16-C15	-5.94	1.20	1.36
26	B	618	BCR	C16-C15	-5.94	1.20	1.36
26	T	102	BCR	C16-C15	-5.93	1.20	1.36
26	H	101	BCR	C16-C15	-5.92	1.20	1.36
24	D	402	CLA	MG-NA	5.91	2.20	2.06
26	B	618	BCR	C21-C22	-5.90	1.28	1.35
26	a	409	BCR	C16-C15	-5.86	1.20	1.36
26	k	102	BCR	C21-C22	-5.86	1.28	1.35
26	K	101	BCR	C17-C18	-5.86	1.28	1.35
26	H	101	BCR	C17-C18	-5.84	1.28	1.35
26	A	610	BCR	C21-C22	-5.84	1.28	1.35
24	C	513	CLA	C3B-C2B	5.83	1.48	1.40
26	b	618	BCR	C16-C15	-5.83	1.20	1.36
26	b	618	BCR	C21-C22	-5.82	1.28	1.35
24	D	402	CLA	MG-NC	5.82	2.20	2.06
26	a	409	BCR	C17-C18	-5.75	1.28	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	910	CLA	OBD-CAD	5.75	1.30	1.22
25	a	412	PHO	CHB-C1B	5.73	1.49	1.38
26	Y	101	BCR	C11-C12	-5.71	1.19	1.34
26	C	514	BCR	C11-C12	-5.71	1.19	1.34
24	A	609	CLA	MG-NA	5.69	2.19	2.06
26	B	620	BCR	C17-C18	-5.69	1.28	1.35
26	A	610	BCR	C20-C19	-5.69	1.19	1.34
24	d	404	CLA	MG-NC	5.68	2.19	2.06
24	C	503	CLA	MG-NA	5.67	2.19	2.06
26	k	101	BCR	C11-C12	-5.67	1.20	1.34
26	T	102	BCR	C17-C18	-5.67	1.28	1.35
26	c	918	BCR	C17-C18	-5.66	1.28	1.35
26	k	101	BCR	C20-C19	-5.65	1.20	1.34
26	C	515	BCR	C20-C19	-5.64	1.20	1.34
26	k	102	BCR	C20-C19	-5.63	1.20	1.34
26	H	101	BCR	C20-C19	-5.63	1.20	1.34
24	B	603	CLA	C3B-C2B	5.63	1.48	1.40
26	c	918	BCR	C11-C12	-5.63	1.20	1.34
26	D	404	BCR	C20-C19	-5.61	1.20	1.34
26	a	409	BCR	C21-C22	-5.61	1.28	1.35
26	Y	101	BCR	C20-C19	-5.61	1.20	1.34
26	B	620	BCR	C11-C12	-5.61	1.20	1.34
26	T	101	BCR	C11-C12	-5.60	1.20	1.34
24	c	912	CLA	C3B-C2B	5.60	1.48	1.40
26	f	101	BCR	C20-C19	-5.60	1.20	1.34
26	T	102	BCR	C21-C22	-5.59	1.28	1.35
24	b	602	CLA	CHC-C1C	5.58	1.49	1.35
26	b	619	BCR	C11-C12	-5.58	1.20	1.34
26	C	514	BCR	C20-C19	-5.58	1.20	1.34
26	k	102	BCR	C11-C12	-5.56	1.20	1.34
26	c	915	BCR	C20-C19	-5.56	1.20	1.34
26	B	622	BCR	C11-C12	-5.56	1.20	1.34
26	D	404	BCR	C11-C12	-5.55	1.20	1.34
24	C	508	CLA	C3C-C2C	5.55	1.48	1.36
24	C	508	CLA	C3B-C2B	5.55	1.48	1.40
32	e	101	HEM	C3D-C2D	5.54	1.54	1.37
24	B	617	CLA	C3B-C2B	5.52	1.48	1.40
25	D	401	PHO	C3B-C2B	5.52	1.48	1.37
26	f	101	BCR	C11-C12	-5.52	1.20	1.34
24	B	603	CLA	CHC-C1C	5.52	1.49	1.35
24	C	503	CLA	C3B-C2B	5.52	1.48	1.40
24	c	902	CLA	C3B-C2B	5.51	1.48	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	B	619	BCR	C16-C15	-5.50	1.21	1.36
26	B	622	BCR	C20-C19	-5.50	1.20	1.34
24	c	914	CLA	C3C-C2C	5.49	1.48	1.36
26	h	101	BCR	C20-C19	-5.49	1.20	1.34
26	T	101	BCR	C20-C19	-5.49	1.20	1.34
26	B	618	BCR	C17-C18	-5.49	1.28	1.35
26	C	515	BCR	C11-C12	-5.49	1.20	1.34
24	b	617	CLA	C3B-C2B	5.49	1.48	1.40
24	c	905	CLA	C3C-C2C	5.48	1.48	1.36
26	T	102	BCR	C11-C12	-5.47	1.20	1.34
24	b	602	CLA	O2D-CGD	5.47	1.46	1.33
24	c	911	CLA	MG-NA	5.47	2.19	2.06
24	B	603	CLA	C3C-C2C	5.47	1.48	1.36
24	c	914	CLA	C3B-C2B	5.46	1.47	1.40
26	K	101	BCR	C11-C12	-5.46	1.20	1.34
26	h	101	BCR	C11-C12	-5.46	1.20	1.34
26	K	101	BCR	C20-C19	-5.45	1.20	1.34
24	c	914	CLA	CHC-C1C	5.45	1.49	1.35
26	b	618	BCR	C11-C12	-5.45	1.20	1.34
26	c	915	BCR	C11-C12	-5.45	1.20	1.34
25	A	608	PHO	CHB-C1B	5.45	1.49	1.38
26	H	101	BCR	C11-C12	-5.44	1.20	1.34
24	c	906	CLA	C3B-C2B	5.44	1.47	1.40
24	B	613	CLA	CHC-C1C	5.43	1.48	1.35
24	c	904	CLA	C3B-C2B	5.43	1.47	1.40
24	c	913	CLA	C3C-C2C	5.43	1.48	1.36
24	d	404	CLA	C3B-C2B	5.43	1.47	1.40
26	B	620	BCR	C20-C19	-5.42	1.20	1.34
24	C	512	CLA	C3C-C2C	5.41	1.48	1.36
26	a	409	BCR	C11-C12	-5.41	1.20	1.34
24	C	503	CLA	C3C-C2C	5.41	1.48	1.36
24	b	616	CLA	MG-NC	5.40	2.19	2.06
24	C	502	CLA	CHC-C1C	5.40	1.48	1.35
24	b	607	CLA	C3B-C2B	5.40	1.47	1.40
24	b	603	CLA	C3C-C2C	5.40	1.48	1.36
24	b	603	CLA	CHC-C1C	5.39	1.48	1.35
24	C	501	CLA	C3B-C2B	5.38	1.47	1.40
24	B	606	CLA	MG-NC	5.38	2.19	2.06
26	B	619	BCR	C20-C19	-5.38	1.20	1.34
24	b	608	CLA	CHC-C1C	5.37	1.48	1.35
24	C	513	CLA	C3C-C2C	5.37	1.48	1.36
24	c	904	CLA	CHC-C1C	5.36	1.48	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	512	CLA	CHC-C1C	5.36	1.48	1.35
24	b	611	CLA	C3C-C2C	5.36	1.48	1.36
24	c	908	CLA	C3C-C2C	5.36	1.48	1.36
24	b	608	CLA	C3C-C2C	5.35	1.48	1.36
24	C	512	CLA	C3B-C2B	5.35	1.47	1.40
24	b	616	CLA	C3B-C2B	5.34	1.47	1.40
26	b	619	BCR	C20-C19	-5.34	1.20	1.34
24	b	610	CLA	CHC-C1C	5.34	1.48	1.35
24	b	617	CLA	CHC-C1C	5.34	1.48	1.35
24	c	906	CLA	CHC-C1C	5.34	1.48	1.35
24	c	910	CLA	C3B-C2B	5.33	1.47	1.40
24	c	903	CLA	C3B-C2B	5.33	1.47	1.40
26	B	619	BCR	C11-C12	-5.33	1.20	1.34
26	B	619	BCR	C17-C18	-5.33	1.28	1.35
24	b	612	CLA	MG-NC	5.32	2.18	2.06
24	C	507	CLA	CHC-C1C	5.32	1.48	1.35
24	c	909	CLA	C3C-C2C	5.32	1.48	1.36
26	c	918	BCR	C11-C10	-5.32	1.27	1.43
24	C	503	CLA	CHC-C1C	5.31	1.48	1.35
24	c	904	CLA	C3C-C2C	5.31	1.48	1.36
24	B	602	CLA	CHC-C1C	5.31	1.48	1.35
24	C	513	CLA	CHC-C1C	5.30	1.48	1.35
24	b	612	CLA	C3B-C2B	5.30	1.47	1.40
32	E	101	HEM	C3D-C2D	5.29	1.53	1.37
24	C	507	CLA	C3C-C2C	5.29	1.48	1.36
24	c	907	CLA	C3B-C2B	5.29	1.47	1.40
26	B	618	BCR	C11-C12	-5.29	1.21	1.34
24	c	907	CLA	C3C-C2C	5.28	1.47	1.36
24	c	912	CLA	CHC-C1C	5.28	1.48	1.35
26	H	101	BCR	C11-C10	-5.27	1.27	1.43
24	B	613	CLA	C3B-C2B	5.27	1.47	1.40
24	b	603	CLA	C3B-C2B	5.27	1.47	1.40
24	d	404	CLA	C3C-C2C	5.27	1.47	1.36
24	c	907	CLA	O2D-CGD	5.27	1.46	1.33
26	C	514	BCR	C11-C10	-5.27	1.27	1.43
24	B	616	CLA	C3C-C2C	5.27	1.47	1.36
24	c	913	CLA	CHC-C1C	5.27	1.48	1.35
24	C	501	CLA	CHC-C1C	5.27	1.48	1.35
24	a	408	CLA	C3B-C2B	5.27	1.47	1.40
25	a	412	PHO	CHC-C1C	5.26	1.48	1.38
24	C	504	CLA	C3B-C2B	5.26	1.47	1.40
24	d	401	CLA	C3C-C2C	5.26	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	606	CLA	CHC-C1C	5.25	1.48	1.35
24	c	914	CLA	O2D-CGD	5.25	1.46	1.33
26	D	404	BCR	C11-C10	-5.25	1.27	1.43
24	b	610	CLA	O2D-CGD	5.25	1.46	1.33
24	b	607	CLA	C3C-C2C	5.25	1.47	1.36
26	A	610	BCR	C11-C12	-5.25	1.21	1.34
26	T	102	BCR	C20-C19	-5.24	1.21	1.34
32	v	202	HEM	C3D-C2D	5.24	1.53	1.37
24	C	505	CLA	C3B-C2B	5.24	1.47	1.40
25	d	402	PHO	C3C-C2C	5.23	1.47	1.36
24	B	602	CLA	O2D-CGD	5.23	1.46	1.33
24	A	606	CLA	C3C-C2C	5.23	1.47	1.36
25	A	608	PHO	C3B-C2B	5.23	1.47	1.37
26	c	918	BCR	C15-C14	-5.22	1.27	1.43
24	B	607	CLA	CHC-C1C	5.22	1.48	1.35
24	c	909	CLA	O2D-CGD	5.22	1.45	1.33
26	b	618	BCR	C20-C19	-5.21	1.21	1.34
24	C	506	CLA	CHC-C1C	5.21	1.48	1.35
24	B	617	CLA	MG-NC	5.21	2.18	2.06
24	b	606	CLA	O2D-CGD	5.21	1.45	1.33
24	B	607	CLA	C3C-C2C	5.21	1.47	1.36
24	D	402	CLA	C3B-C2B	5.21	1.47	1.40
26	C	515	BCR	C11-C10	-5.21	1.27	1.43
24	b	615	CLA	MG-NA	5.21	2.18	2.06
26	k	101	BCR	C11-C10	-5.20	1.27	1.43
24	c	905	CLA	O2D-CGD	5.20	1.45	1.33
24	b	609	CLA	C3B-C2B	5.20	1.47	1.40
24	B	611	CLA	C3C-C2C	5.20	1.47	1.36
24	B	602	CLA	C3C-C2C	5.20	1.47	1.36
24	c	908	CLA	C3B-C2B	5.19	1.47	1.40
24	c	911	CLA	C3B-C2B	5.19	1.47	1.40
26	a	409	BCR	C20-C19	-5.19	1.21	1.34
24	b	602	CLA	C3B-C2B	5.18	1.47	1.40
24	C	508	CLA	CHC-C1C	5.18	1.48	1.35
26	b	619	BCR	C11-C10	-5.18	1.27	1.43
24	B	611	CLA	CHC-C1C	5.18	1.48	1.35
24	a	406	CLA	OBD-CAD	5.18	1.29	1.22
24	c	913	CLA	C3B-C2B	5.18	1.47	1.40
24	c	903	CLA	O2D-CGD	5.17	1.45	1.33
24	C	505	CLA	CHC-C1C	5.17	1.48	1.35
26	B	622	BCR	C11-C10	-5.17	1.27	1.43
24	A	609	CLA	CHC-C1C	5.17	1.48	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	612	CLA	CHC-C1C	5.16	1.48	1.35
26	k	101	BCR	C15-C14	-5.16	1.27	1.43
24	b	602	CLA	C3C-C2C	5.16	1.47	1.36
24	c	913	CLA	O2D-CGD	5.16	1.45	1.33
24	B	614	CLA	CHC-C1C	5.16	1.48	1.35
24	b	607	CLA	CHC-C1C	5.16	1.48	1.35
24	d	403	CLA	C3B-C2B	5.16	1.47	1.40
24	c	912	CLA	C3C-C2C	5.16	1.47	1.36
26	T	101	BCR	C11-C10	-5.15	1.27	1.43
24	B	606	CLA	C3C-C2C	5.15	1.47	1.36
26	k	102	BCR	C11-C10	-5.15	1.27	1.43
24	b	610	CLA	C3C-C2C	5.15	1.47	1.36
24	D	403	CLA	CHC-C1C	5.15	1.48	1.35
24	b	606	CLA	CHC-C1C	5.14	1.48	1.35
24	C	510	CLA	C3C-C2C	5.14	1.47	1.36
24	C	513	CLA	O2D-CGD	5.14	1.45	1.33
26	T	101	BCR	C15-C14	-5.14	1.27	1.43
26	Y	101	BCR	C11-C10	-5.14	1.27	1.43
24	D	403	CLA	C3B-C2B	5.14	1.47	1.40
24	C	505	CLA	C3C-C2C	5.13	1.47	1.36
24	c	905	CLA	C3B-C2B	5.13	1.47	1.40
24	C	509	CLA	O2D-CGD	5.13	1.45	1.33
26	f	101	BCR	C15-C14	-5.13	1.27	1.43
26	C	514	BCR	C15-C14	-5.12	1.27	1.43
26	k	102	BCR	C15-C14	-5.12	1.27	1.43
24	c	911	CLA	C3C-C2C	5.12	1.47	1.36
24	d	404	CLA	CHC-C1C	5.12	1.48	1.35
24	D	403	CLA	C3C-C2C	5.12	1.47	1.36
24	C	506	CLA	O2D-CGD	5.11	1.45	1.33
24	b	604	CLA	C3C-C2C	5.11	1.47	1.36
25	a	412	PHO	C3C-C2C	5.11	1.47	1.36
24	b	616	CLA	O2D-CGD	5.11	1.45	1.33
24	c	911	CLA	O2D-CGD	5.11	1.45	1.33
24	c	912	CLA	O2D-CGD	5.11	1.45	1.33
24	b	617	CLA	O2D-CGD	5.11	1.45	1.33
24	B	615	CLA	CHC-C1C	5.11	1.48	1.35
24	A	609	CLA	C3B-C2B	5.10	1.47	1.40
26	f	101	BCR	C11-C10	-5.10	1.27	1.43
26	A	610	BCR	C11-C10	-5.10	1.27	1.43
24	b	611	CLA	CHC-C1C	5.10	1.48	1.35
24	b	607	CLA	O2D-CGD	5.09	1.45	1.33
24	C	508	CLA	O2D-CGD	5.09	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	613	CLA	C3C-C2C	5.09	1.47	1.36
25	D	401	PHO	CHB-C1B	5.09	1.48	1.38
25	a	412	PHO	C3B-C2B	5.09	1.47	1.37
26	C	515	BCR	C15-C14	-5.09	1.27	1.43
24	b	605	CLA	C3C-C2C	5.09	1.47	1.36
24	b	605	CLA	CHC-C1C	5.08	1.48	1.35
24	C	511	CLA	O2D-CGD	5.08	1.45	1.33
26	c	918	BCR	C20-C19	-5.08	1.21	1.34
24	B	609	CLA	C3C-C2C	5.08	1.47	1.36
24	b	604	CLA	CHC-C1C	5.08	1.48	1.35
24	b	609	CLA	C3C-C2C	5.08	1.47	1.36
24	A	606	CLA	CHC-C1C	5.08	1.48	1.35
24	B	607	CLA	C3B-C2B	5.08	1.47	1.40
24	B	609	CLA	C3B-C2B	5.08	1.47	1.40
26	H	101	BCR	C15-C14	-5.08	1.27	1.43
24	A	609	CLA	OBD-CAD	5.07	1.29	1.22
24	A	609	CLA	C3C-C2C	5.07	1.47	1.36
24	b	613	CLA	CHC-C1C	5.07	1.48	1.35
24	b	609	CLA	CHC-C1C	5.07	1.48	1.35
24	B	610	CLA	CHC-C1C	5.07	1.48	1.35
24	B	608	CLA	C3C-C2C	5.07	1.47	1.36
24	B	617	CLA	CHC-C1C	5.07	1.48	1.35
24	d	403	CLA	C3C-C2C	5.06	1.47	1.36
24	C	511	CLA	C3C-C2C	5.06	1.47	1.36
24	C	506	CLA	C3B-C2B	5.06	1.47	1.40
24	c	908	CLA	CHC-C1C	5.06	1.47	1.35
24	B	616	CLA	CHC-C1C	5.05	1.47	1.35
26	Y	101	BCR	C15-C14	-5.05	1.27	1.43
24	b	614	CLA	C3B-C2B	5.05	1.47	1.40
24	C	507	CLA	O2D-CGD	5.05	1.45	1.33
24	d	401	CLA	CHC-C1C	5.05	1.47	1.35
26	c	915	BCR	C11-C10	-5.05	1.27	1.43
24	b	604	CLA	O2D-CGD	5.05	1.45	1.33
24	a	408	CLA	CHC-C1C	5.05	1.47	1.35
26	K	101	BCR	C11-C10	-5.05	1.27	1.43
26	h	101	BCR	C11-C10	-5.05	1.27	1.43
24	C	508	CLA	MG-NC	5.04	2.18	2.06
26	h	101	BCR	C15-C14	-5.04	1.27	1.43
24	C	512	CLA	O2D-CGD	5.04	1.45	1.33
25	d	402	PHO	C3B-C2B	5.04	1.47	1.37
25	a	412	PHO	O2D-CGD	5.04	1.45	1.33
24	C	506	CLA	C3C-C2C	5.04	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	511	CLA	CHC-C1C	5.04	1.47	1.35
24	B	617	CLA	C3C-C2C	5.04	1.47	1.36
26	B	620	BCR	C11-C10	-5.03	1.27	1.43
24	c	910	CLA	O2D-CGD	5.03	1.45	1.33
26	b	618	BCR	C11-C10	-5.03	1.27	1.43
26	B	618	BCR	C20-C19	-5.03	1.21	1.34
24	b	614	CLA	CHC-C1C	5.03	1.47	1.35
24	b	603	CLA	OBD-CAD	5.03	1.29	1.22
24	B	604	CLA	C3B-C2B	5.03	1.47	1.40
24	B	609	CLA	O2D-CGD	5.03	1.45	1.33
24	A	606	CLA	C3B-C2B	5.03	1.47	1.40
24	b	616	CLA	CHC-C1C	5.02	1.47	1.35
24	B	608	CLA	CHC-C1C	5.02	1.47	1.35
26	B	618	BCR	C11-C10	-5.02	1.27	1.43
26	T	102	BCR	C11-C10	-5.02	1.27	1.43
24	b	611	CLA	O2D-CGD	5.02	1.45	1.33
26	b	619	BCR	C15-C14	-5.01	1.27	1.43
24	c	905	CLA	CHC-C1C	5.01	1.47	1.35
26	D	404	BCR	C15-C14	-5.01	1.27	1.43
24	C	509	CLA	C3C-C2C	5.01	1.47	1.36
24	B	614	CLA	C3C-C2C	5.01	1.47	1.36
24	b	614	CLA	O2D-CGD	5.01	1.45	1.33
24	C	509	CLA	OBD-CAD	5.00	1.29	1.22
24	C	502	CLA	O2D-CGD	5.00	1.45	1.33
24	a	408	CLA	C3C-C2C	5.00	1.47	1.36
26	B	622	BCR	C15-C14	-5.00	1.27	1.43
24	a	407	CLA	C3C-C2C	5.00	1.47	1.36
24	c	910	CLA	C3C-C2C	5.00	1.47	1.36
24	b	614	CLA	C3C-C2C	5.00	1.47	1.36
24	c	902	CLA	C3C-C2C	4.99	1.47	1.36
24	B	608	CLA	C3B-C2B	4.99	1.47	1.40
24	c	902	CLA	CHC-C1C	4.99	1.47	1.35
24	C	509	CLA	CHC-C1C	4.99	1.47	1.35
24	D	402	CLA	C3C-C2C	4.99	1.47	1.36
26	B	620	BCR	C15-C14	-4.99	1.28	1.43
24	c	903	CLA	CHC-C1C	4.99	1.47	1.35
25	A	608	PHO	C3C-C2C	4.98	1.47	1.36
24	C	501	CLA	C3C-C2C	4.98	1.47	1.36
24	c	907	CLA	CHC-C1C	4.98	1.47	1.35
26	a	409	BCR	C11-C10	-4.98	1.28	1.43
25	a	412	PHO	C1A-NA	-4.98	1.27	1.37
24	c	909	CLA	CHC-C1C	4.98	1.47	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	d	402	PHO	O2D-CGD	4.97	1.45	1.33
24	C	510	CLA	C3B-C2B	4.97	1.47	1.40
24	C	504	CLA	CHC-C1C	4.97	1.47	1.35
24	b	614	CLA	OBD-CAD	4.97	1.29	1.22
24	c	911	CLA	CHC-C1C	4.96	1.47	1.35
24	B	605	CLA	C3C-C2C	4.96	1.47	1.36
24	B	610	CLA	C3C-C2C	4.96	1.47	1.36
25	d	402	PHO	CHB-C1B	4.96	1.48	1.38
26	K	101	BCR	C15-C14	-4.96	1.28	1.43
25	D	401	PHO	O2D-CGD	4.96	1.45	1.33
24	b	604	CLA	C3B-C2B	4.96	1.47	1.40
24	C	504	CLA	C3C-C2C	4.96	1.47	1.36
24	b	616	CLA	C3C-C2C	4.96	1.47	1.36
24	C	510	CLA	OBD-CAD	4.95	1.29	1.22
24	b	606	CLA	C3C-C2C	4.95	1.47	1.36
24	b	617	CLA	C3C-C2C	4.95	1.47	1.36
24	C	505	CLA	O2D-CGD	4.95	1.45	1.33
24	d	403	CLA	CHC-C1C	4.95	1.47	1.35
26	c	915	BCR	C15-C14	-4.94	1.28	1.43
24	a	406	CLA	C3B-C2B	4.94	1.47	1.40
24	C	509	CLA	C3B-C2B	4.94	1.47	1.40
24	B	608	CLA	MG-NC	4.93	2.18	2.06
26	B	619	BCR	C11-C10	-4.93	1.28	1.43
32	V	202	HEM	C3D-C2D	4.93	1.52	1.37
26	A	610	BCR	C15-C14	-4.93	1.28	1.43
24	c	910	CLA	CHC-C1C	4.93	1.47	1.35
24	B	604	CLA	CHC-C1C	4.93	1.47	1.35
24	B	614	CLA	C3B-C2B	4.92	1.47	1.40
24	B	607	CLA	O2D-CGD	4.92	1.45	1.33
24	c	906	CLA	C3C-C2C	4.92	1.47	1.36
24	b	610	CLA	OBD-CAD	4.92	1.29	1.22
24	B	617	CLA	O2D-CGD	4.91	1.45	1.33
24	b	608	CLA	O2D-CGD	4.91	1.45	1.33
24	B	616	CLA	O2D-CGD	4.91	1.45	1.33
24	B	602	CLA	C3B-C2B	4.91	1.47	1.40
25	D	401	PHO	C3C-C2C	4.91	1.47	1.36
24	A	614	CLA	C3C-C2C	4.90	1.47	1.36
26	c	918	BCR	C23-C22	-4.90	1.35	1.45
26	a	409	BCR	C15-C14	-4.90	1.28	1.43
26	C	515	BCR	C23-C22	-4.90	1.35	1.45
24	C	502	CLA	C3C-C2C	4.90	1.47	1.36
24	A	614	CLA	OBD-CAD	4.90	1.29	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	606	CLA	O2D-CGD	4.89	1.45	1.33
24	C	510	CLA	O2D-CGD	4.89	1.45	1.33
24	a	407	CLA	O2D-CGD	4.89	1.45	1.33
24	a	406	CLA	C3C-C2C	4.89	1.47	1.36
26	T	101	BCR	C23-C22	-4.88	1.35	1.45
24	B	606	CLA	O2D-CGD	4.88	1.45	1.33
24	b	608	CLA	C3D-C2D	4.88	1.48	1.39
24	C	511	CLA	C3B-C2B	4.88	1.47	1.40
24	B	604	CLA	O2D-CGD	4.87	1.45	1.33
24	c	904	CLA	O2D-CGD	4.87	1.45	1.33
24	b	611	CLA	OBD-CAD	4.87	1.29	1.22
24	c	903	CLA	C3C-C2C	4.87	1.47	1.36
24	B	615	CLA	C3C-C2C	4.86	1.47	1.36
24	B	613	CLA	C3C-C2C	4.86	1.47	1.36
24	a	407	CLA	CHC-C1C	4.86	1.47	1.35
26	T	102	BCR	C15-C14	-4.86	1.28	1.43
24	b	615	CLA	C3C-C2C	4.86	1.47	1.36
26	k	101	BCR	C23-C22	-4.85	1.35	1.45
24	b	615	CLA	C3B-C2B	4.85	1.47	1.40
24	b	613	CLA	O2D-CGD	4.85	1.45	1.33
24	B	613	CLA	O2D-CGD	4.84	1.45	1.33
24	b	612	CLA	O2D-CGD	4.84	1.45	1.33
24	b	608	CLA	C3B-C2B	4.84	1.47	1.40
24	c	909	CLA	C3B-C2B	4.84	1.47	1.40
26	h	101	BCR	C23-C22	-4.83	1.35	1.45
26	b	618	BCR	C23-C22	-4.83	1.35	1.45
24	b	609	CLA	OBD-CAD	4.83	1.29	1.22
24	B	611	CLA	C3B-C2B	4.83	1.47	1.40
24	A	614	CLA	C3B-C2B	4.82	1.47	1.40
24	d	401	CLA	C3B-C2B	4.82	1.47	1.40
24	B	617	CLA	OBD-CAD	4.82	1.29	1.22
26	D	404	BCR	C23-C22	-4.81	1.35	1.45
24	c	914	CLA	OBD-CAD	4.81	1.29	1.22
24	B	615	CLA	O2D-CGD	4.81	1.44	1.33
24	A	607	CLA	C3C-C2C	4.80	1.46	1.36
24	c	903	CLA	OBD-CAD	4.80	1.29	1.22
24	B	604	CLA	C3C-C2C	4.80	1.46	1.36
24	c	912	CLA	OBD-CAD	4.79	1.29	1.22
26	b	618	BCR	C15-C14	-4.79	1.28	1.43
24	b	615	CLA	O2D-CGD	4.79	1.44	1.33
26	k	102	BCR	C23-C22	-4.79	1.35	1.45
26	Y	101	BCR	C23-C22	-4.79	1.35	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	606	CLA	OBD-CAD	4.79	1.29	1.22
24	B	610	CLA	C3B-C2B	4.78	1.47	1.40
24	c	902	CLA	O2D-CGD	4.78	1.44	1.33
24	C	510	CLA	CHC-C1C	4.78	1.47	1.35
24	b	610	CLA	C3B-C2B	4.78	1.47	1.40
24	b	609	CLA	O2D-CGD	4.77	1.44	1.33
24	A	607	CLA	C3B-C2B	4.77	1.47	1.40
24	a	408	CLA	O2D-CGD	4.77	1.44	1.33
24	b	605	CLA	O2D-CGD	4.77	1.44	1.33
24	A	614	CLA	MG-NA	4.76	2.17	2.06
26	K	101	BCR	C23-C22	-4.76	1.35	1.45
26	B	619	BCR	C15-C14	-4.76	1.28	1.43
24	D	402	CLA	OBD-CAD	4.75	1.28	1.22
24	C	503	CLA	O2D-CGD	4.75	1.44	1.33
24	A	607	CLA	CHC-C1C	4.75	1.47	1.35
26	B	618	BCR	C23-C22	-4.75	1.35	1.45
24	c	911	CLA	OBD-CAD	4.75	1.28	1.22
26	C	514	BCR	C23-C22	-4.75	1.35	1.45
24	B	605	CLA	CHC-C1C	4.75	1.47	1.35
24	B	608	CLA	O2D-CGD	4.75	1.44	1.33
24	B	602	CLA	O2A-CGA	4.74	1.47	1.33
24	C	511	CLA	MG-NC	4.74	2.17	2.06
24	C	511	CLA	OBD-CAD	4.74	1.28	1.22
26	B	618	BCR	C15-C14	-4.73	1.28	1.43
26	a	409	BCR	C23-C22	-4.73	1.35	1.45
24	b	612	CLA	C3C-C2C	4.73	1.46	1.36
24	B	604	CLA	OBD-CAD	4.72	1.28	1.22
24	B	616	CLA	C3B-C2B	4.72	1.46	1.40
24	c	906	CLA	OBD-CAD	4.72	1.28	1.22
24	B	603	CLA	OBD-CAD	4.72	1.28	1.22
24	b	605	CLA	C3B-C2B	4.72	1.46	1.40
24	B	607	CLA	OBD-CAD	4.72	1.28	1.22
24	b	615	CLA	CHC-C1C	4.71	1.47	1.35
24	b	602	CLA	O2A-CGA	4.71	1.47	1.33
24	C	502	CLA	C3B-C2B	4.71	1.46	1.40
24	B	612	CLA	CHC-C1C	4.71	1.47	1.35
24	b	604	CLA	OBD-CAD	4.71	1.28	1.22
26	f	101	BCR	C23-C22	-4.70	1.35	1.45
24	C	504	CLA	O2D-CGD	4.70	1.44	1.33
26	H	101	BCR	C23-C22	-4.69	1.35	1.45
24	D	403	CLA	O2D-CGD	4.69	1.44	1.33
24	a	408	CLA	OBD-CAD	4.69	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	501	CLA	O2D-CGD	4.69	1.44	1.33
24	B	609	CLA	MG-NC	4.69	2.17	2.06
24	b	613	CLA	C3B-C2B	4.69	1.46	1.40
24	B	612	CLA	C3C-C2C	4.69	1.46	1.36
25	D	401	PHO	C1A-NA	-4.68	1.28	1.37
24	D	402	CLA	O2D-CGD	4.68	1.44	1.33
24	c	905	CLA	OBD-CAD	4.67	1.28	1.22
25	D	401	PHO	CHC-C1C	4.67	1.47	1.38
24	a	406	CLA	O2D-CGD	4.66	1.44	1.33
24	A	607	CLA	O2D-CGD	4.66	1.44	1.33
24	c	902	CLA	MG-NC	4.66	2.17	2.06
24	d	404	CLA	O2D-CGD	4.65	1.44	1.33
24	D	402	CLA	CHC-C1C	4.65	1.46	1.35
24	b	614	CLA	MG-NC	4.65	2.17	2.06
24	C	513	CLA	OBD-CAD	4.64	1.28	1.22
24	b	602	CLA	OBD-CAD	4.64	1.28	1.22
24	A	614	CLA	CHC-C1C	4.63	1.46	1.35
24	B	609	CLA	CHC-C1C	4.63	1.46	1.35
24	A	607	CLA	OBD-CAD	4.62	1.28	1.22
26	b	619	BCR	C23-C22	-4.59	1.36	1.45
26	c	915	BCR	C23-C22	-4.59	1.36	1.45
24	B	602	CLA	OBD-CAD	4.59	1.28	1.22
24	C	504	CLA	OBD-CAD	4.59	1.28	1.22
25	A	608	PHO	O2D-CGD	4.59	1.44	1.33
24	B	605	CLA	C3B-C2B	4.58	1.46	1.40
28	F	101	SQD	O48-C23	4.57	1.46	1.33
24	B	615	CLA	C3B-C2B	4.57	1.46	1.40
24	b	611	CLA	C3B-C2B	4.57	1.46	1.40
24	c	903	CLA	MG-NC	4.57	2.17	2.06
24	C	501	CLA	OBD-CAD	4.57	1.28	1.22
24	c	902	CLA	OBD-CAD	4.57	1.28	1.22
24	c	908	CLA	OBD-CAD	4.57	1.28	1.22
24	B	611	CLA	O2D-CGD	4.56	1.44	1.33
26	B	619	BCR	C23-C22	-4.56	1.36	1.45
24	d	404	CLA	OBD-CAD	4.56	1.28	1.22
24	B	610	CLA	OBD-CAD	4.55	1.28	1.22
24	C	502	CLA	OBD-CAD	4.54	1.28	1.22
24	C	508	CLA	C3D-C2D	4.53	1.47	1.39
24	b	613	CLA	OBD-CAD	4.53	1.28	1.22
24	B	612	CLA	O2D-CGD	4.53	1.44	1.33
24	c	906	CLA	MG-NC	4.53	2.17	2.06
31	D	406	DGD	O1G-C1A	4.53	1.46	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A	608	PHO	C1A-NA	-4.52	1.28	1.37
24	c	906	CLA	O2D-CGD	4.52	1.44	1.33
24	B	603	CLA	C3D-C2D	4.52	1.47	1.39
24	B	607	CLA	MG-NC	4.51	2.17	2.06
24	C	505	CLA	OBD-CAD	4.51	1.28	1.22
31	D	406	DGD	O2G-C1B	4.51	1.47	1.34
24	c	914	CLA	MG-NA	4.51	2.17	2.06
24	B	614	CLA	O2D-CGD	4.51	1.44	1.33
26	B	620	BCR	C23-C22	-4.51	1.36	1.45
24	b	616	CLA	OBD-CAD	4.50	1.28	1.22
24	b	607	CLA	OBD-CAD	4.49	1.28	1.22
25	d	402	PHO	CHC-C1C	4.49	1.47	1.38
28	F	101	SQD	O47-C7	4.49	1.47	1.34
24	B	610	CLA	O2D-CGD	4.49	1.44	1.33
24	c	908	CLA	O2D-CGD	4.48	1.44	1.33
29	A	615	LHG	O8-C23	4.48	1.46	1.33
28	a	402	SQD	O48-C23	4.48	1.46	1.33
31	d	406	DGD	O2G-C1B	4.48	1.46	1.34
25	D	401	PHO	CHD-C1D	4.47	1.47	1.38
24	C	502	CLA	MG-NC	4.47	2.16	2.06
26	T	102	BCR	C23-C22	-4.46	1.36	1.45
24	B	606	CLA	C3B-C2B	4.46	1.46	1.40
24	c	913	CLA	O2A-CGA	4.46	1.46	1.33
25	d	402	PHO	C1A-NA	-4.46	1.28	1.37
24	C	507	CLA	OBD-CAD	4.45	1.28	1.22
24	C	508	CLA	OBD-CAD	4.45	1.28	1.22
28	A	613	SQD	O48-C23	4.45	1.46	1.33
28	d	407	SQD	O47-C7	4.45	1.46	1.34
24	B	617	CLA	C3D-C2D	4.45	1.47	1.39
24	B	605	CLA	O2D-CGD	4.44	1.44	1.33
24	D	403	CLA	OBD-CAD	4.44	1.28	1.22
24	C	506	CLA	OBD-CAD	4.43	1.28	1.22
24	B	612	CLA	C3B-C2B	4.43	1.46	1.40
24	b	617	CLA	O2A-CGA	4.43	1.46	1.33
24	a	406	CLA	CHC-C1C	4.43	1.46	1.35
28	L	101	SQD	O47-C7	4.43	1.46	1.34
24	b	617	CLA	OBD-CAD	4.43	1.28	1.22
24	d	404	CLA	C3D-C2D	4.43	1.47	1.39
28	d	407	SQD	O48-C23	4.42	1.46	1.33
24	B	616	CLA	OBD-CAD	4.42	1.28	1.22
24	c	907	CLA	OBD-CAD	4.42	1.28	1.22
24	C	513	CLA	C3D-C2D	4.42	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	617	CLA	C3D-C2D	4.42	1.47	1.39
24	b	616	CLA	C3D-C2D	4.41	1.47	1.39
24	B	603	CLA	O2D-CGD	4.41	1.44	1.33
28	L	101	SQD	O48-C23	4.41	1.46	1.33
24	c	913	CLA	MG-NC	4.40	2.16	2.06
26	B	622	BCR	C23-C22	-4.40	1.36	1.45
28	a	402	SQD	O47-C7	4.40	1.46	1.34
26	A	610	BCR	C23-C22	-4.40	1.36	1.45
24	B	611	CLA	OBD-CAD	4.40	1.28	1.22
24	b	615	CLA	O2A-CGA	4.40	1.46	1.33
25	a	412	PHO	CHD-C1D	4.40	1.47	1.38
24	A	609	CLA	O2D-CGD	4.39	1.43	1.33
24	C	511	CLA	C3D-C2D	4.39	1.47	1.39
24	c	913	CLA	OBD-CAD	4.38	1.28	1.22
28	l	101	SQD	O47-C7	4.37	1.46	1.34
29	a	413	LHG	O8-C23	4.37	1.46	1.33
24	c	910	CLA	MG-NC	4.37	2.16	2.06
24	d	403	CLA	O2A-CGA	4.36	1.46	1.33
25	A	608	PHO	CHC-C1C	4.36	1.47	1.38
24	B	604	CLA	C3D-C2D	4.36	1.47	1.39
24	c	914	CLA	O2A-CGA	4.36	1.46	1.33
24	B	606	CLA	OBD-CAD	4.35	1.28	1.22
24	B	613	CLA	OBD-CAD	4.34	1.28	1.22
24	b	611	CLA	MG-NC	4.34	2.16	2.06
24	b	605	CLA	OBD-CAD	4.34	1.28	1.22
24	C	506	CLA	O2A-CGA	4.33	1.46	1.33
24	c	908	CLA	O2A-CGA	4.33	1.46	1.33
24	a	407	CLA	MG-NC	4.33	2.16	2.06
29	a	413	LHG	O7-C7	4.33	1.46	1.34
31	d	406	DGD	O1G-C1A	4.33	1.46	1.33
24	C	504	CLA	C3D-C2D	4.33	1.47	1.39
25	d	402	PHO	CHD-C1D	4.32	1.47	1.38
24	B	614	CLA	C3D-C2D	4.32	1.47	1.39
24	c	902	CLA	O2A-CGA	4.31	1.45	1.33
32	V	202	HEM	C3C-C2C	-4.30	1.34	1.40
24	c	909	CLA	OBD-CAD	4.30	1.28	1.22
24	C	512	CLA	C3D-C2D	4.30	1.47	1.39
24	B	615	CLA	OBD-CAD	4.30	1.28	1.22
24	B	608	CLA	OBD-CAD	4.29	1.28	1.22
24	B	609	CLA	OBD-CAD	4.29	1.28	1.22
32	v	202	HEM	C3C-C2C	-4.29	1.34	1.40
24	B	617	CLA	O2A-CGA	4.29	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	909	CLA	C3D-C2D	4.29	1.47	1.39
24	b	612	CLA	C3D-C2D	4.29	1.47	1.39
24	A	607	CLA	C3D-C2D	4.28	1.47	1.39
28	A	613	SQD	O47-C7	4.28	1.46	1.34
24	a	408	CLA	O2A-CGA	4.28	1.45	1.33
24	c	908	CLA	C3D-C2D	4.28	1.47	1.39
24	b	610	CLA	C3D-C2D	4.28	1.47	1.39
24	b	603	CLA	O2D-CGD	4.27	1.43	1.33
24	D	402	CLA	O2A-CGA	4.27	1.45	1.33
24	b	606	CLA	C3B-C2B	4.27	1.46	1.40
24	d	404	CLA	O2A-CGA	4.27	1.45	1.33
24	a	407	CLA	C3D-C2D	4.26	1.47	1.39
24	c	914	CLA	C3D-C2D	4.26	1.47	1.39
24	b	608	CLA	OBD-CAD	4.25	1.28	1.22
24	C	507	CLA	O2A-CGA	4.25	1.45	1.33
24	C	509	CLA	O2A-CGA	4.25	1.45	1.33
24	B	611	CLA	C3D-C2D	4.24	1.47	1.39
24	C	501	CLA	C3D-C2D	4.24	1.47	1.39
24	C	512	CLA	O2A-CGA	4.24	1.45	1.33
24	b	615	CLA	OBD-CAD	4.23	1.28	1.22
24	c	912	CLA	C3D-C2D	4.23	1.47	1.39
24	A	614	CLA	O2D-CGD	4.22	1.43	1.33
24	A	614	CLA	C3D-C2D	4.22	1.47	1.39
24	c	905	CLA	C3D-C2D	4.22	1.47	1.39
26	c	918	BCR	C16-C17	-4.22	1.30	1.43
24	d	401	CLA	OBD-CAD	4.22	1.28	1.22
29	A	615	LHG	O7-C7	4.22	1.46	1.34
24	C	512	CLA	OBD-CAD	4.21	1.28	1.22
24	B	610	CLA	C3D-C2D	4.21	1.47	1.39
28	a	411	SQD	O48-C23	4.21	1.45	1.33
24	b	603	CLA	MG-NA	4.19	2.16	2.06
31	c	917	DGD	O1G-C1A	4.19	1.45	1.33
24	C	503	CLA	O2A-CGA	4.19	1.45	1.33
24	A	609	CLA	O2A-CGA	4.18	1.45	1.33
24	c	907	CLA	O2A-CGA	4.17	1.45	1.33
24	b	607	CLA	C3D-C2D	4.17	1.46	1.39
24	D	403	CLA	C3D-C2D	4.17	1.46	1.39
24	b	614	CLA	O2A-CGA	4.17	1.45	1.33
24	c	903	CLA	C3D-C2D	4.16	1.46	1.39
24	C	513	CLA	O2A-CGA	4.16	1.45	1.33
24	B	609	CLA	C3D-C2D	4.16	1.46	1.39
24	c	912	CLA	O2A-CGA	4.15	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	407	CLA	C3B-C2B	4.15	1.46	1.40
24	b	613	CLA	C3D-C2D	4.15	1.46	1.39
24	D	403	CLA	O2A-CGA	4.15	1.45	1.33
24	b	602	CLA	C3D-C2D	4.14	1.46	1.39
24	B	616	CLA	C3D-C2D	4.14	1.46	1.39
24	B	614	CLA	OBD-CAD	4.14	1.28	1.22
24	C	509	CLA	MG-NC	4.13	2.16	2.06
24	d	401	CLA	O2A-CGA	4.13	1.45	1.33
24	C	511	CLA	O2A-CGA	4.13	1.45	1.33
24	b	612	CLA	OBD-CAD	4.13	1.28	1.22
31	C	517	DGD	O1G-C1A	4.13	1.45	1.33
24	B	610	CLA	O2A-CGA	4.13	1.45	1.33
24	c	904	CLA	OBD-CAD	4.12	1.28	1.22
24	d	401	CLA	O2D-CGD	4.12	1.43	1.33
24	B	612	CLA	OBD-CAD	4.12	1.28	1.22
29	D	409	LHG	O8-C23	4.11	1.45	1.33
24	C	505	CLA	C3D-C2D	4.11	1.46	1.39
24	B	616	CLA	O2A-CGA	4.11	1.45	1.33
28	A	612	SQD	O47-C7	4.10	1.45	1.34
24	B	607	CLA	O2A-CGA	4.10	1.45	1.33
24	b	607	CLA	O2A-CGA	4.10	1.45	1.33
28	l	101	SQD	O48-C23	4.09	1.45	1.33
24	c	910	CLA	O2A-CGA	4.09	1.45	1.33
24	B	606	CLA	C3D-C2D	4.09	1.46	1.39
24	C	507	CLA	C3D-C2D	4.09	1.46	1.39
24	c	911	CLA	O2A-CGA	4.09	1.45	1.33
24	a	408	CLA	C3D-C2D	4.08	1.46	1.39
24	c	913	CLA	C3D-C2D	4.07	1.46	1.39
24	B	608	CLA	C3D-C2D	4.07	1.46	1.39
24	d	403	CLA	C3D-C2D	4.07	1.46	1.39
24	d	403	CLA	OBD-CAD	4.07	1.28	1.22
24	b	610	CLA	O2A-CGA	4.06	1.45	1.33
24	b	603	CLA	C3D-C2D	4.06	1.46	1.39
24	c	906	CLA	O2A-CGA	4.06	1.45	1.33
24	B	615	CLA	O2A-CGA	4.05	1.45	1.33
24	A	614	CLA	MG-NC	4.05	2.15	2.06
24	C	501	CLA	O2A-CGA	4.05	1.45	1.33
32	E	101	HEM	C3C-C2C	-4.05	1.34	1.40
31	h	102	DGD	O1G-C1A	4.04	1.45	1.33
24	C	510	CLA	C3D-C2D	4.04	1.46	1.39
32	v	202	HEM	C3B-C2B	-4.04	1.34	1.40
24	c	906	CLA	C3D-C2D	4.04	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	904	CLA	C3D-C2D	4.04	1.46	1.39
24	A	606	CLA	C3D-C2D	4.03	1.46	1.39
24	C	502	CLA	O2A-CGA	4.03	1.45	1.33
24	B	615	CLA	C3D-C2D	4.03	1.46	1.39
24	C	501	CLA	MG-NC	4.03	2.15	2.06
28	a	411	SQD	O47-C7	4.03	1.45	1.34
24	B	604	CLA	O2A-CGA	4.03	1.45	1.33
24	b	614	CLA	C3D-C2D	4.02	1.46	1.39
32	V	202	HEM	C3B-CAB	4.02	1.56	1.47
29	b	620	LHG	O8-C23	4.02	1.45	1.33
24	b	604	CLA	C3D-C2D	4.02	1.46	1.39
24	b	605	CLA	C3D-C2D	4.02	1.46	1.39
32	v	202	HEM	C3C-CAC	4.01	1.56	1.47
29	B	621	LHG	O8-C23	4.01	1.45	1.33
29	d	408	LHG	O8-C23	4.00	1.45	1.33
32	v	202	HEM	C3B-CAB	4.00	1.56	1.47
24	C	508	CLA	O2A-CGA	4.00	1.45	1.33
24	C	502	CLA	C3D-C2D	4.00	1.46	1.39
24	A	609	CLA	C3D-C2D	4.00	1.46	1.39
24	C	504	CLA	O2A-CGA	4.00	1.45	1.33
32	E	101	HEM	C3B-C2B	-4.00	1.34	1.40
24	B	603	CLA	MG-NC	3.99	2.15	2.06
31	j	101	DGD	O1G-C1A	3.99	1.45	1.33
24	b	615	CLA	C3D-C2D	3.99	1.46	1.39
24	b	612	CLA	O2A-CGA	3.99	1.45	1.33
28	A	612	SQD	O48-C23	3.99	1.45	1.33
24	C	509	CLA	C3D-C2D	3.98	1.46	1.39
24	d	403	CLA	MG-NC	3.98	2.15	2.06
24	C	506	CLA	C3D-C2D	3.97	1.46	1.39
24	b	613	CLA	O2A-CGA	3.97	1.45	1.33
24	b	603	CLA	O2A-CGA	3.97	1.44	1.33
24	A	614	CLA	O2A-CGA	3.97	1.44	1.33
31	h	102	DGD	O2G-C1B	3.96	1.45	1.34
29	D	407	LHG	O8-C23	3.96	1.44	1.33
24	d	403	CLA	O2D-CGD	3.96	1.42	1.33
31	C	518	DGD	O1G-C1A	3.95	1.44	1.33
24	B	613	CLA	C3D-C2D	3.95	1.46	1.39
32	e	101	HEM	C3C-C2C	-3.95	1.34	1.40
31	H	102	DGD	O1G-C1A	3.95	1.44	1.33
24	b	609	CLA	C3D-C2D	3.95	1.46	1.39
24	C	510	CLA	O2A-CGA	3.95	1.44	1.33
24	c	910	CLA	C3D-C2D	3.95	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	407	CLA	OBD-CAD	3.94	1.27	1.22
29	D	408	LHG	O8-C23	3.94	1.44	1.33
31	C	516	DGD	O2G-C1B	3.94	1.45	1.34
25	A	608	PHO	O2A-CGA	3.93	1.44	1.33
31	c	916	DGD	O1G-C1A	3.93	1.44	1.33
24	c	909	CLA	O2A-CGA	3.93	1.44	1.33
24	c	905	CLA	O2A-CGA	3.93	1.44	1.33
24	B	609	CLA	O2A-CGA	3.93	1.44	1.33
24	a	407	CLA	O2A-CGA	3.93	1.44	1.33
32	V	202	HEM	C3B-C2B	-3.92	1.34	1.40
24	C	503	CLA	C3D-C2D	3.92	1.46	1.39
24	d	401	CLA	C3D-C2D	3.92	1.46	1.39
24	B	607	CLA	C3D-C2D	3.92	1.46	1.39
24	b	606	CLA	OBD-CAD	3.91	1.27	1.22
29	d	410	LHG	O8-C23	3.91	1.44	1.33
31	C	516	DGD	O1G-C1A	3.90	1.44	1.33
24	B	612	CLA	C3D-C2D	3.89	1.46	1.39
29	D	409	LHG	O7-C7	3.89	1.45	1.34
32	V	202	HEM	C3C-CAC	3.89	1.55	1.47
24	C	505	CLA	O2A-CGA	3.88	1.44	1.33
24	B	611	CLA	O2A-CGA	3.87	1.44	1.33
24	b	609	CLA	O2A-CGA	3.87	1.44	1.33
31	H	102	DGD	O2G-C1B	3.86	1.45	1.34
24	c	902	CLA	C3D-C2D	3.85	1.46	1.39
24	c	903	CLA	O2A-CGA	3.85	1.44	1.33
24	A	607	CLA	O2A-CGA	3.84	1.44	1.33
25	a	412	PHO	O2A-CGA	3.84	1.44	1.33
24	b	611	CLA	C3D-C2D	3.84	1.46	1.39
29	B	621	LHG	O7-C7	3.82	1.45	1.34
24	B	605	CLA	OBD-CAD	3.82	1.27	1.22
29	d	410	LHG	O7-C7	3.82	1.45	1.34
24	c	904	CLA	O2A-CGA	3.82	1.44	1.33
24	b	616	CLA	O2A-CGA	3.82	1.44	1.33
24	C	503	CLA	OBD-CAD	3.81	1.27	1.22
32	E	101	HEM	C3B-CAB	3.80	1.55	1.47
24	B	605	CLA	O2A-CGA	3.79	1.44	1.33
24	a	406	CLA	O2A-CGA	3.79	1.44	1.33
24	b	605	CLA	O2A-CGA	3.79	1.44	1.33
32	e	101	HEM	C3B-C2B	-3.78	1.35	1.40
31	C	517	DGD	O2G-C1B	3.77	1.44	1.34
29	D	408	LHG	O7-C7	3.77	1.44	1.34
32	e	101	HEM	C3B-CAB	3.76	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	602	CLA	C3D-C2D	3.76	1.46	1.39
29	b	620	LHG	O7-C7	3.76	1.44	1.34
24	b	604	CLA	O2A-CGA	3.76	1.44	1.33
24	B	606	CLA	O2A-CGA	3.74	1.44	1.33
25	A	608	PHO	CHD-C1D	3.74	1.45	1.38
24	c	907	CLA	C3D-C2D	3.73	1.46	1.39
32	e	101	HEM	C3C-CAC	3.73	1.55	1.47
24	c	911	CLA	C3D-C2D	3.72	1.46	1.39
24	B	616	CLA	MG-NC	3.72	2.15	2.06
24	D	402	CLA	C3D-C2D	3.71	1.46	1.39
24	b	606	CLA	C3D-C2D	3.71	1.46	1.39
24	a	406	CLA	C3D-C2D	3.71	1.46	1.39
24	B	613	CLA	O2A-CGA	3.70	1.44	1.33
25	D	401	PHO	O2A-CGA	3.70	1.44	1.33
24	b	611	CLA	O2A-CGA	3.70	1.44	1.33
24	B	614	CLA	O2A-CGA	3.69	1.44	1.33
29	d	408	LHG	O7-C7	3.69	1.44	1.34
24	B	605	CLA	C3D-C2D	3.69	1.46	1.39
24	a	408	CLA	MG-NC	3.68	2.15	2.06
24	a	406	CLA	MG-NC	3.65	2.14	2.06
25	D	401	PHO	OBD-CAD	3.65	1.28	1.22
29	d	409	LHG	O8-C23	3.63	1.44	1.33
24	b	606	CLA	O2A-CGA	3.63	1.43	1.33
31	c	916	DGD	O2G-C1B	3.62	1.44	1.34
31	j	101	DGD	O2G-C1B	3.62	1.44	1.34
32	E	101	HEM	C3C-CAC	3.61	1.55	1.47
24	b	608	CLA	O2A-CGA	3.59	1.43	1.33
24	C	512	CLA	MG-NC	3.58	2.14	2.06
29	d	409	LHG	O7-C7	3.57	1.44	1.34
25	d	402	PHO	CHD-C4C	3.55	1.48	1.40
31	c	917	DGD	O2G-C1B	3.55	1.44	1.34
24	b	607	CLA	C1D-C2D	3.51	1.50	1.42
24	B	602	CLA	C1D-C2D	3.51	1.50	1.42
24	B	612	CLA	MG-NC	3.49	2.14	2.06
25	d	402	PHO	O2A-CGA	3.48	1.43	1.33
24	A	606	CLA	O2A-CGA	3.48	1.43	1.33
24	B	607	CLA	C1D-C2D	3.47	1.50	1.42
24	B	603	CLA	O2A-CGA	3.46	1.43	1.33
24	B	612	CLA	O2A-CGA	3.45	1.43	1.33
24	b	610	CLA	C1D-C2D	3.44	1.50	1.42
24	b	602	CLA	C1D-C2D	3.42	1.50	1.42
24	C	505	CLA	MG-NC	3.39	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	C	518	DGD	O2G-C1B	3.39	1.43	1.34
24	d	404	CLA	C1D-C2D	3.38	1.50	1.42
24	C	501	CLA	C1D-C2D	3.37	1.50	1.42
26	c	918	BCR	C16-C15	-3.37	1.27	1.36
24	c	914	CLA	C1D-C2D	3.37	1.50	1.42
24	B	603	CLA	C1D-C2D	3.37	1.50	1.42
24	c	907	CLA	C1D-C2D	3.36	1.50	1.42
24	b	603	CLA	C1D-C2D	3.34	1.50	1.42
24	c	902	CLA	C1D-C2D	3.34	1.50	1.42
24	B	614	CLA	MG-NC	3.33	2.14	2.06
25	D	401	PHO	CHC-C4B	3.33	1.48	1.40
24	C	513	CLA	C1D-C2D	3.29	1.50	1.42
24	C	506	CLA	C1D-C2D	3.28	1.50	1.42
24	C	506	CLA	MG-NC	3.27	2.14	2.06
24	B	608	CLA	O2A-CGA	3.27	1.42	1.33
24	b	605	CLA	C1D-C2D	3.27	1.50	1.42
24	C	503	CLA	C1D-C2D	3.27	1.50	1.42
25	a	412	PHO	OBD-CAD	3.25	1.28	1.22
24	C	504	CLA	C1D-C2D	3.24	1.49	1.42
24	b	612	CLA	C1B-CHB	3.23	1.50	1.41
24	A	607	CLA	C1D-C2D	3.23	1.49	1.42
24	a	406	CLA	C1D-C2D	3.23	1.49	1.42
24	B	610	CLA	C1D-C2D	3.22	1.49	1.42
24	c	904	CLA	C1D-C2D	3.21	1.49	1.42
24	d	401	CLA	C1D-C2D	3.21	1.49	1.42
24	A	614	CLA	C1D-C2D	3.20	1.49	1.42
24	c	902	CLA	C1B-CHB	3.20	1.49	1.41
25	d	402	PHO	CHC-C4B	3.19	1.47	1.40
24	c	906	CLA	C1D-C2D	3.19	1.49	1.42
24	C	510	CLA	C1D-C2D	3.19	1.49	1.42
25	a	412	PHO	CHC-C4B	3.18	1.47	1.40
29	D	407	LHG	O7-C7	3.18	1.43	1.34
24	D	403	CLA	C1B-CHB	3.17	1.49	1.41
24	c	908	CLA	C1D-C2D	3.17	1.49	1.42
24	C	510	CLA	C1B-CHB	3.15	1.49	1.41
24	c	911	CLA	C1D-C2D	3.15	1.49	1.42
24	c	908	CLA	C1B-CHB	3.15	1.49	1.41
24	B	608	CLA	C1D-C2D	3.15	1.49	1.42
24	C	509	CLA	C1D-C2D	3.14	1.49	1.42
24	B	608	CLA	C1B-CHB	3.13	1.49	1.41
24	B	615	CLA	C1D-C2D	3.13	1.49	1.42
24	a	407	CLA	C1D-C2D	3.13	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	608	CLA	C1B-CHB	3.13	1.49	1.41
24	c	905	CLA	C1D-C2D	3.12	1.49	1.42
24	C	508	CLA	C1D-C2D	3.12	1.49	1.42
25	d	402	PHO	OBD-CAD	3.11	1.27	1.22
24	B	605	CLA	C1D-C2D	3.11	1.49	1.42
24	b	610	CLA	C1B-CHB	3.11	1.49	1.41
24	C	506	CLA	C1B-CHB	3.10	1.49	1.41
24	C	507	CLA	C1D-C2D	3.10	1.49	1.42
24	c	912	CLA	C1D-C2D	3.10	1.49	1.42
24	B	614	CLA	C1B-CHB	3.10	1.49	1.41
24	B	606	CLA	C1B-CHB	3.09	1.49	1.41
24	A	606	CLA	MG-NC	3.09	2.13	2.06
24	B	603	CLA	C1B-CHB	3.09	1.49	1.41
24	a	408	CLA	C1D-C2D	3.09	1.49	1.42
24	c	913	CLA	C1D-C2D	3.09	1.49	1.42
24	b	609	CLA	C1D-C2D	3.08	1.49	1.42
24	B	604	CLA	MG-NC	3.08	2.13	2.06
24	c	912	CLA	C1B-CHB	3.08	1.49	1.41
24	b	607	CLA	C1B-CHB	3.07	1.49	1.41
24	b	602	CLA	C4B-CHC	3.07	1.49	1.41
24	C	512	CLA	C1D-C2D	3.06	1.49	1.42
24	c	906	CLA	C1B-CHB	3.06	1.49	1.41
24	d	403	CLA	C1D-C2D	3.06	1.49	1.42
24	b	613	CLA	C1B-CHB	3.06	1.49	1.41
24	C	511	CLA	C1B-CHB	3.06	1.49	1.41
24	B	616	CLA	C1D-C2D	3.06	1.49	1.42
24	c	909	CLA	C1D-C2D	3.05	1.49	1.42
24	B	602	CLA	C4B-CHC	3.04	1.49	1.41
24	C	505	CLA	C1B-CHB	3.04	1.49	1.41
24	c	910	CLA	C1D-C2D	3.03	1.49	1.42
24	c	913	CLA	C1B-CHB	3.03	1.49	1.41
24	c	904	CLA	C1B-CHB	3.03	1.49	1.41
24	B	615	CLA	C1B-CHB	3.03	1.49	1.41
24	B	607	CLA	C1B-CHB	3.02	1.49	1.41
24	A	609	CLA	C1B-CHB	3.02	1.49	1.41
24	C	513	CLA	C1B-CHB	3.01	1.49	1.41
24	C	512	CLA	C1B-CHB	3.01	1.49	1.41
25	A	608	PHO	CHD-C4C	3.01	1.47	1.40
24	C	505	CLA	C1D-C2D	3.00	1.49	1.42
24	B	604	CLA	C1D-C2D	3.00	1.49	1.42
24	b	605	CLA	C1B-CHB	3.00	1.49	1.41
24	c	914	CLA	C1B-CHB	2.99	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	B	613	CLA	C1D-C2D	2.98	1.49	1.42
25	d	402	PHO	C3D-C2D	2.98	1.47	1.39
24	C	504	CLA	C1B-CHB	2.98	1.49	1.41
24	C	502	CLA	C1D-C2D	2.98	1.49	1.42
24	C	507	CLA	C1B-CHB	2.97	1.49	1.41
24	C	508	CLA	C1B-CHB	2.97	1.49	1.41
25	A	608	PHO	OBD-CAD	2.97	1.27	1.22
24	B	612	CLA	C1D-C2D	2.96	1.49	1.42
24	D	403	CLA	C1D-C2D	2.95	1.49	1.42
24	b	608	CLA	C1D-C2D	2.95	1.49	1.42
24	b	616	CLA	C1D-C2D	2.95	1.49	1.42
25	a	412	PHO	C3D-C4D	-2.95	1.34	1.43
24	b	602	CLA	C1B-CHB	2.95	1.49	1.41
24	c	903	CLA	C1B-CHB	2.95	1.49	1.41
24	b	614	CLA	C1D-C2D	2.95	1.49	1.42
25	a	412	PHO	C3D-C2D	2.94	1.47	1.39
24	a	408	CLA	C1B-CHB	2.94	1.49	1.41
24	b	609	CLA	C1B-CHB	2.93	1.49	1.41
24	B	605	CLA	C1B-CHB	2.92	1.49	1.41
24	B	617	CLA	C1D-C2D	2.92	1.49	1.42
24	b	606	CLA	C1D-C2D	2.92	1.49	1.42
24	b	617	CLA	C1D-C2D	2.92	1.49	1.42
25	a	412	PHO	CHD-C4C	2.92	1.47	1.40
24	B	611	CLA	C1D-C2D	2.91	1.49	1.42
24	b	615	CLA	C1B-CHB	2.91	1.49	1.41
24	b	604	CLA	C1D-C2D	2.90	1.49	1.42
24	C	511	CLA	C1D-C2D	2.89	1.49	1.42
24	C	513	CLA	C4B-CHC	2.89	1.49	1.41
24	c	909	CLA	C1B-CHB	2.89	1.49	1.41
24	b	617	CLA	MG-NC	2.88	2.13	2.06
24	B	613	CLA	C1B-CHB	2.88	1.49	1.41
24	a	407	CLA	C1B-CHB	2.88	1.49	1.41
24	b	603	CLA	C1B-CHB	2.88	1.49	1.41
24	B	614	CLA	C1D-C2D	2.87	1.49	1.42
24	d	401	CLA	C1B-CHB	2.87	1.49	1.41
24	B	610	CLA	C1B-CHB	2.87	1.49	1.41
24	B	604	CLA	C1B-CHB	2.87	1.49	1.41
25	D	401	PHO	C3D-C2D	2.86	1.46	1.39
24	c	907	CLA	C1B-CHB	2.85	1.48	1.41
24	b	617	CLA	C1B-CHB	2.85	1.48	1.41
24	A	606	CLA	C1D-C2D	2.85	1.49	1.42
24	b	615	CLA	C1D-C2D	2.85	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A	608	PHO	CHC-C4B	2.85	1.47	1.40
24	c	911	CLA	C1B-CHB	2.84	1.48	1.41
24	C	503	CLA	C4B-CHC	2.84	1.48	1.41
25	D	401	PHO	C3D-C4D	-2.84	1.34	1.43
24	C	507	CLA	MG-NC	2.84	2.13	2.06
24	C	501	CLA	C1B-CHB	2.84	1.48	1.41
24	c	904	CLA	C4B-CHC	2.83	1.48	1.41
24	c	905	CLA	C1B-CHB	2.83	1.48	1.41
24	b	602	CLA	C1C-C2C	2.82	1.50	1.44
28	d	407	SQD	C6-S	-2.82	1.67	1.77
24	c	903	CLA	C1D-C2D	2.81	1.48	1.42
24	b	611	CLA	C1D-C2D	2.81	1.48	1.42
24	c	914	CLA	C4B-CHC	2.81	1.48	1.41
24	B	616	CLA	C1B-CHB	2.80	1.48	1.41
25	D	401	PHO	CHD-C4C	2.79	1.46	1.40
24	C	505	CLA	C4B-CHC	2.79	1.48	1.41
24	b	614	CLA	C1B-CHB	2.79	1.48	1.41
28	A	612	SQD	C6-S	-2.78	1.67	1.77
24	c	908	CLA	C4B-CHC	2.78	1.48	1.41
24	c	910	CLA	C1B-CHB	2.77	1.48	1.41
24	B	617	CLA	C1B-CHB	2.77	1.48	1.41
24	B	606	CLA	C1D-C2D	2.77	1.48	1.42
24	C	503	CLA	C1C-C2C	2.76	1.49	1.44
24	b	611	CLA	C4B-CHC	2.76	1.48	1.41
24	b	604	CLA	C1B-CHB	2.76	1.48	1.41
28	a	411	SQD	C6-S	-2.76	1.67	1.77
28	a	402	SQD	C6-S	-2.75	1.67	1.77
24	C	504	CLA	CHD-C4C	2.75	1.49	1.41
27	a	410	PL9	C6-C5	2.75	1.49	1.35
24	d	404	CLA	C1B-CHB	2.75	1.48	1.41
27	A	611	PL9	C6-C5	2.75	1.49	1.35
25	A	608	PHO	C3D-C4D	-2.75	1.35	1.43
24	B	611	CLA	C1B-CHB	2.75	1.48	1.41
24	B	603	CLA	C4B-CHC	2.74	1.48	1.41
24	b	616	CLA	C1B-CHB	2.74	1.48	1.41
24	c	913	CLA	C4B-CHC	2.74	1.48	1.41
24	A	606	CLA	C1B-CHB	2.73	1.48	1.41
24	C	503	CLA	C1B-CHB	2.73	1.48	1.41
24	C	502	CLA	C1B-CHB	2.73	1.48	1.41
28	A	613	SQD	C6-S	-2.72	1.67	1.77
24	C	509	CLA	C1B-CHB	2.72	1.48	1.41
24	b	607	CLA	C4B-CHC	2.72	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	b	617	CLA	C4B-CHC	2.71	1.48	1.41
24	C	501	CLA	C4B-CHC	2.71	1.48	1.41
27	d	405	PL9	C6-C5	2.70	1.49	1.35
24	c	906	CLA	C4B-CHC	2.70	1.48	1.41
24	b	611	CLA	C1B-CHB	2.70	1.48	1.41
24	b	613	CLA	C1D-C2D	2.69	1.48	1.42
26	c	918	BCR	C24-C25	-2.69	1.35	1.45
24	B	602	CLA	C1B-CHB	2.68	1.48	1.41
24	C	507	CLA	C4B-CHC	2.68	1.48	1.41
24	b	606	CLA	C1B-CHB	2.68	1.48	1.41
24	c	908	CLA	C1C-C2C	2.68	1.49	1.44
27	D	405	PL9	C6-C5	2.67	1.49	1.35
24	b	603	CLA	CHD-C4C	2.67	1.48	1.41
24	B	615	CLA	C1C-NC	-2.67	1.33	1.37
28	F	101	SQD	C6-S	-2.66	1.67	1.77
24	A	609	CLA	C4B-CHC	2.66	1.48	1.41
24	B	612	CLA	C1B-CHB	2.66	1.48	1.41
24	B	602	CLA	C1C-C2C	2.65	1.49	1.44
24	c	914	CLA	C1C-C2C	2.64	1.49	1.44
24	D	403	CLA	C4B-CHC	2.64	1.48	1.41
24	B	611	CLA	C4B-CHC	2.63	1.48	1.41
24	c	914	CLA	CHD-C4C	2.63	1.48	1.41
24	B	607	CLA	C4B-CHC	2.63	1.48	1.41
24	b	603	CLA	C4B-CHC	2.63	1.48	1.41
24	C	501	CLA	CHD-C4C	2.62	1.48	1.41
24	C	506	CLA	C4B-CHC	2.61	1.48	1.41
24	A	606	CLA	C4B-CHC	2.61	1.48	1.41
24	C	512	CLA	CHD-C4C	2.61	1.48	1.41
24	C	507	CLA	C1C-C2C	2.61	1.49	1.44
24	C	508	CLA	C4B-CHC	2.60	1.48	1.41
26	K	101	BCR	C24-C25	-2.59	1.35	1.45
24	b	602	CLA	CHD-C4C	2.59	1.48	1.41
31	H	102	DGD	O5D-C1E	2.58	1.44	1.40
24	C	512	CLA	C4B-CHC	2.58	1.48	1.41
26	C	515	BCR	C24-C25	-2.58	1.36	1.45
24	d	404	CLA	C4B-CHC	2.58	1.48	1.41
24	d	404	CLA	CHD-C4C	2.58	1.48	1.41
24	c	904	CLA	C1C-C2C	2.57	1.49	1.44
24	c	906	CLA	C1C-C2C	2.57	1.49	1.44
24	c	906	CLA	CHD-C4C	2.57	1.48	1.41
26	C	514	BCR	C24-C25	-2.57	1.36	1.45
24	b	609	CLA	C4B-CHC	2.57	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	911	CLA	C4B-CHC	2.57	1.48	1.41
24	b	612	CLA	C1D-C2D	2.56	1.48	1.42
24	B	609	CLA	C1B-CHB	2.56	1.48	1.41
25	d	402	PHO	C3D-C4D	-2.56	1.35	1.43
24	c	907	CLA	MG-NC	2.56	2.12	2.06
24	B	613	CLA	C4B-CHC	2.56	1.48	1.41
24	C	513	CLA	C1C-C2C	2.55	1.49	1.44
24	A	609	CLA	C1D-C2D	2.55	1.48	1.42
24	c	907	CLA	CHD-C4C	2.55	1.48	1.41
24	C	512	CLA	C1C-C2C	2.55	1.49	1.44
24	c	902	CLA	C4B-CHC	2.55	1.48	1.41
26	H	101	BCR	C24-C25	-2.54	1.36	1.45
24	B	617	CLA	C4B-CHC	2.54	1.48	1.41
24	D	402	CLA	C4B-CHC	2.54	1.48	1.41
26	k	101	BCR	C24-C25	-2.54	1.36	1.45
24	c	909	CLA	C4B-CHC	2.54	1.48	1.41
26	h	101	BCR	C24-C25	-2.53	1.36	1.45
25	A	608	PHO	C3D-C2D	2.53	1.46	1.39
28	L	101	SQD	C6-S	-2.53	1.68	1.77
24	b	606	CLA	MG-NC	2.53	2.12	2.06
26	Y	101	BCR	C24-C25	-2.53	1.36	1.45
24	C	511	CLA	C4B-CHC	2.52	1.48	1.41
26	B	618	BCR	C24-C25	-2.52	1.36	1.45
24	c	905	CLA	C4B-CHC	2.52	1.48	1.41
24	B	609	CLA	C1D-C2D	2.52	1.48	1.42
24	B	614	CLA	C4B-CHC	2.52	1.48	1.41
26	c	915	BCR	C24-C25	-2.51	1.36	1.45
24	B	608	CLA	CHD-C4C	2.51	1.48	1.41
26	k	102	BCR	C24-C25	-2.51	1.36	1.45
24	B	613	CLA	CHD-C4C	2.51	1.48	1.41
24	c	909	CLA	C1C-NC	-2.50	1.34	1.37
24	C	502	CLA	C4B-CHC	2.50	1.47	1.41
24	c	905	CLA	C1C-C2C	2.50	1.49	1.44
24	B	603	CLA	CHD-C4C	2.50	1.48	1.41
26	T	102	BCR	C24-C25	-2.50	1.36	1.45
26	b	619	BCR	C24-C25	-2.50	1.36	1.45
24	D	402	CLA	C1B-CHB	2.50	1.47	1.41
24	C	506	CLA	CHD-C4C	2.50	1.48	1.41
24	b	613	CLA	C4B-CHC	2.50	1.47	1.41
24	b	607	CLA	CHD-C4C	2.50	1.48	1.41
24	b	615	CLA	C4B-CHC	2.49	1.47	1.41
26	B	620	BCR	C24-C25	-2.49	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	912	CLA	CHD-C4C	2.49	1.48	1.41
24	B	610	CLA	C4B-CHC	2.49	1.47	1.41
24	C	503	CLA	CHD-C4C	2.49	1.48	1.41
26	A	610	BCR	C24-C25	-2.49	1.36	1.45
26	B	622	BCR	C24-C25	-2.48	1.36	1.45
26	D	404	BCR	C24-C25	-2.48	1.36	1.45
25	a	412	PHO	C3B-C4B	2.48	1.48	1.43
24	c	907	CLA	C4B-CHC	2.48	1.47	1.41
24	c	912	CLA	C4B-CHC	2.48	1.47	1.41
24	b	610	CLA	CHD-C4C	2.48	1.48	1.41
24	C	505	CLA	CHD-C4C	2.48	1.48	1.41
24	c	910	CLA	C1C-C2C	2.47	1.49	1.44
24	B	612	CLA	C4B-CHC	2.47	1.47	1.41
24	a	406	CLA	C1B-CHB	2.46	1.47	1.41
28	l	101	SQD	C6-S	-2.46	1.68	1.77
24	D	403	CLA	CHD-C4C	2.46	1.48	1.41
24	c	910	CLA	C4B-CHC	2.46	1.47	1.41
24	B	602	CLA	CHD-C4C	2.45	1.48	1.41
26	b	618	BCR	C24-C25	-2.45	1.36	1.45
24	b	617	CLA	C1C-C2C	2.44	1.49	1.44
24	d	403	CLA	C1B-CHB	2.44	1.47	1.41
24	A	607	CLA	C1B-CHB	2.44	1.47	1.41
24	C	507	CLA	CHD-C4C	2.44	1.48	1.41
24	B	616	CLA	CHD-C4C	2.44	1.48	1.41
24	b	614	CLA	C4B-CHC	2.43	1.47	1.41
24	d	403	CLA	C4B-CHC	2.43	1.47	1.41
24	B	607	CLA	CHD-C4C	2.43	1.48	1.41
24	B	616	CLA	C4B-CHC	2.43	1.47	1.41
26	f	101	BCR	C24-C25	-2.43	1.36	1.45
24	B	606	CLA	C4B-CHC	2.43	1.47	1.41
24	C	513	CLA	CHD-C4C	2.43	1.48	1.41
24	C	511	CLA	CHD-C4C	2.42	1.48	1.41
24	b	610	CLA	C4B-CHC	2.42	1.47	1.41
24	A	614	CLA	C1B-CHB	2.42	1.47	1.41
24	C	510	CLA	CHD-C4C	2.42	1.48	1.41
26	T	101	BCR	C24-C25	-2.42	1.36	1.45
24	A	614	CLA	C4B-CHC	2.42	1.47	1.41
24	c	902	CLA	CHD-C4C	2.42	1.48	1.41
24	c	903	CLA	C4B-CHC	2.41	1.47	1.41
24	b	616	CLA	C4B-CHC	2.41	1.47	1.41
24	c	907	CLA	C1C-C2C	2.40	1.49	1.44
24	b	606	CLA	C4B-CHC	2.40	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	913	CLA	CHD-C4C	2.40	1.48	1.41
24	D	402	CLA	C1D-C2D	2.40	1.48	1.42
24	b	608	CLA	C4B-CHC	2.40	1.47	1.41
24	c	908	CLA	CHD-C4C	2.39	1.48	1.41
24	b	611	CLA	C4C-C3C	2.39	1.49	1.45
24	A	606	CLA	CHD-C4C	2.39	1.47	1.41
24	B	604	CLA	C4B-CHC	2.38	1.47	1.41
24	a	407	CLA	C4B-CHC	2.38	1.47	1.41
24	C	506	CLA	C1C-C2C	2.37	1.49	1.44
24	C	509	CLA	C4B-CHC	2.37	1.47	1.41
24	C	501	CLA	C1C-C2C	2.37	1.49	1.44
24	b	607	CLA	C1C-C2C	2.36	1.49	1.44
24	c	913	CLA	C1C-C2C	2.36	1.49	1.44
24	c	911	CLA	CHD-C4C	2.36	1.47	1.41
24	b	615	CLA	CHD-C4C	2.35	1.47	1.41
25	D	401	PHO	C3B-C4B	2.35	1.48	1.43
24	b	609	CLA	CHD-C4C	2.35	1.47	1.41
24	B	614	CLA	CHD-C4C	2.35	1.47	1.41
24	d	404	CLA	C4C-C3C	2.34	1.49	1.45
24	C	509	CLA	CHD-C4C	2.34	1.47	1.41
24	b	605	CLA	C1C-C2C	2.34	1.49	1.44
24	C	508	CLA	CHD-C4C	2.33	1.47	1.41
24	b	608	CLA	CHD-C4C	2.33	1.47	1.41
24	b	611	CLA	CHD-C4C	2.33	1.47	1.41
24	C	510	CLA	C4B-CHC	2.33	1.47	1.41
24	c	909	CLA	C1C-C2C	2.33	1.49	1.44
24	c	904	CLA	CHD-C4C	2.33	1.47	1.41
24	d	401	CLA	C4B-CHC	2.33	1.47	1.41
24	B	605	CLA	CHD-C4C	2.32	1.47	1.41
24	b	616	CLA	CHD-C4C	2.32	1.47	1.41
26	B	619	BCR	C24-C25	-2.31	1.36	1.45
31	h	102	DGD	O5D-C1E	2.31	1.44	1.40
24	B	603	CLA	C1C-C2C	2.31	1.49	1.44
24	a	408	CLA	CHD-C4C	2.30	1.47	1.41
24	B	609	CLA	CHD-C4C	2.30	1.47	1.41
24	B	608	CLA	C4B-CHC	2.30	1.47	1.41
24	A	607	CLA	CHD-C4C	2.30	1.47	1.41
24	D	403	CLA	C1C-C2C	2.30	1.49	1.44
24	d	404	CLA	C1C-C2C	2.29	1.49	1.44
24	b	610	CLA	C4C-C3C	2.28	1.49	1.45
24	a	408	CLA	C4B-CHC	2.28	1.47	1.41
24	B	614	CLA	C1C-C2C	2.28	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	505	CLA	C1C-C2C	2.27	1.49	1.44
24	b	611	CLA	C1C-C2C	2.27	1.49	1.44
24	b	603	CLA	C1C-C2C	2.26	1.48	1.44
24	B	607	CLA	C1C-C2C	2.26	1.48	1.44
26	a	409	BCR	C24-C25	-2.26	1.37	1.45
24	C	508	CLA	C4C-C3C	2.26	1.48	1.45
24	B	616	CLA	C1C-C2C	2.26	1.48	1.44
24	b	604	CLA	CHD-C4C	2.26	1.47	1.41
24	C	504	CLA	C4B-CHC	2.26	1.47	1.41
24	A	609	CLA	CHD-C4C	2.26	1.47	1.41
24	C	510	CLA	MG-NC	2.24	2.11	2.06
24	b	610	CLA	C1C-C2C	2.23	1.48	1.44
24	B	615	CLA	CHD-C4C	2.23	1.47	1.41
24	C	510	CLA	C1C-C2C	2.23	1.48	1.44
24	B	611	CLA	CHD-C4C	2.23	1.47	1.41
24	c	903	CLA	CHD-C4C	2.23	1.47	1.41
24	C	512	CLA	C4C-C3C	2.22	1.48	1.45
24	B	615	CLA	C4B-CHC	2.22	1.47	1.41
31	j	101	DGD	O2G-C2G	-2.21	1.41	1.46
27	A	611	PL9	C2-C3	2.21	1.40	1.34
24	d	403	CLA	C1C-C2C	2.21	1.48	1.44
24	c	903	CLA	C1C-C2C	2.21	1.48	1.44
24	B	605	CLA	C4B-CHC	2.20	1.47	1.41
26	B	622	BCR	C8-C7	-2.20	1.26	1.33
24	c	905	CLA	C1C-NC	-2.20	1.34	1.37
24	C	511	CLA	C1C-C2C	2.20	1.48	1.44
24	b	615	CLA	C1C-C2C	2.19	1.48	1.44
31	D	406	DGD	O5D-C1E	2.19	1.43	1.40
24	B	611	CLA	C1C-NC	-2.18	1.34	1.37
24	C	509	CLA	C4C-C3C	2.17	1.48	1.45
24	c	905	CLA	CHD-C4C	2.17	1.47	1.41
31	d	406	DGD	O5D-C1E	2.17	1.43	1.40
24	b	612	CLA	C4B-CHC	2.17	1.47	1.41
24	B	605	CLA	MG-NC	2.17	2.11	2.06
24	B	604	CLA	CHD-C4C	2.17	1.47	1.41
24	b	612	CLA	CHD-C4C	2.16	1.47	1.41
25	d	402	PHO	C3B-C4B	2.16	1.47	1.43
24	b	605	CLA	C1C-NC	-2.16	1.34	1.37
24	c	914	CLA	C4C-C3C	2.16	1.48	1.45
24	B	617	CLA	CHD-C4C	2.16	1.47	1.41
24	b	606	CLA	C1C-C2C	2.16	1.48	1.44
24	C	508	CLA	C1C-C2C	2.16	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	L	101	SQD	O6-C1	2.15	1.43	1.40
24	D	403	CLA	C4C-C3C	2.15	1.48	1.45
24	b	617	CLA	C1C-NC	-2.15	1.34	1.37
24	c	904	CLA	C4C-C3C	2.15	1.48	1.45
24	b	606	CLA	CHD-C4C	2.15	1.47	1.41
32	e	101	HEM	CAA-C2A	2.14	1.55	1.52
24	B	604	CLA	C1C-NC	-2.14	1.34	1.37
24	b	604	CLA	C4B-CHC	2.14	1.46	1.41
24	b	614	CLA	C1C-C2C	2.14	1.48	1.44
24	d	401	CLA	CHD-C4C	2.14	1.47	1.41
24	b	605	CLA	C4B-CHC	2.13	1.46	1.41
24	b	609	CLA	C1C-C2C	2.13	1.48	1.44
24	c	910	CLA	C1C-NC	-2.13	1.34	1.37
24	a	406	CLA	C4B-CHC	2.13	1.46	1.41
24	D	403	CLA	C1C-NC	-2.13	1.34	1.37
27	d	405	PL9	C2-C3	2.12	1.40	1.34
26	T	102	BCR	C8-C7	-2.12	1.26	1.33
24	C	502	CLA	CHD-C4C	2.12	1.47	1.41
24	a	406	CLA	CHD-C4C	2.11	1.47	1.41
24	c	902	CLA	C1C-C2C	2.11	1.48	1.44
24	c	912	CLA	C1C-C2C	2.11	1.48	1.44
24	c	913	CLA	C4C-C3C	2.10	1.48	1.45
24	B	613	CLA	C1C-C2C	2.10	1.48	1.44
24	B	612	CLA	CHD-C4C	2.10	1.47	1.41
24	B	610	CLA	CHD-C4C	2.10	1.47	1.41
24	C	505	CLA	C4C-C3C	2.10	1.48	1.45
24	c	905	CLA	C4C-C3C	2.10	1.48	1.45
24	b	617	CLA	CHD-C4C	2.10	1.47	1.41
24	D	402	CLA	CHD-C4C	2.09	1.47	1.41
28	l	101	SQD	O6-C1	2.09	1.43	1.40
31	D	406	DGD	O3G-C1D	2.09	1.43	1.40
24	b	614	CLA	CHD-C4C	2.09	1.47	1.41
24	a	407	CLA	CHD-C4C	2.09	1.47	1.41
24	D	402	CLA	C4C-C3C	2.09	1.48	1.45
24	A	607	CLA	C4B-CHC	2.08	1.46	1.41
24	B	609	CLA	C4B-CHC	2.08	1.46	1.41
24	a	408	CLA	C1C-C2C	2.08	1.48	1.44
24	a	406	CLA	C1C-NC	-2.08	1.34	1.37
24	B	604	CLA	C1C-C2C	2.07	1.48	1.44
25	D	401	PHO	CHB-C4A	-2.07	1.34	1.40
31	C	518	DGD	O2G-C2G	-2.07	1.41	1.46
24	c	910	CLA	CHD-C4C	2.07	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	c	909	CLA	C4C-C3C	2.07	1.48	1.45
24	B	614	CLA	C1C-NC	-2.06	1.34	1.37
24	B	615	CLA	C1C-C2C	2.05	1.48	1.44
24	b	616	CLA	C1C-C2C	2.05	1.48	1.44
24	B	607	CLA	C4C-C3C	2.05	1.48	1.45
32	E	101	HEM	CAA-C2A	2.05	1.55	1.52
31	C	516	DGD	O5D-C1E	2.04	1.43	1.40
24	D	402	CLA	C1C-C2C	2.04	1.48	1.44
24	b	605	CLA	CHD-C4C	2.04	1.46	1.41
24	C	508	CLA	C1C-NC	-2.03	1.34	1.37
24	A	614	CLA	CHD-C4C	2.03	1.46	1.41
26	c	915	BCR	C8-C7	-2.03	1.26	1.33
32	v	202	HEM	C1D-ND	2.03	1.40	1.36
26	c	918	BCR	C8-C7	-2.03	1.26	1.33
24	b	602	CLA	C4C-C3C	2.02	1.48	1.45
31	c	916	DGD	O5D-C1E	2.02	1.43	1.40
24	a	407	CLA	C1C-C2C	2.02	1.48	1.44
24	B	610	CLA	C1C-NC	-2.02	1.34	1.37
24	c	902	CLA	C4C-C3C	2.02	1.48	1.45
26	C	514	BCR	C8-C7	-2.02	1.26	1.33
24	C	502	CLA	C1C-C2C	2.02	1.48	1.44
32	V	202	HEM	CMA-C3A	2.02	1.55	1.51
26	b	619	BCR	C8-C7	-2.02	1.27	1.33
24	B	616	CLA	C4C-C3C	2.01	1.48	1.45
24	c	911	CLA	C1C-C2C	2.01	1.48	1.44
24	B	608	CLA	C1C-NC	-2.01	1.34	1.37
27	a	410	PL9	C2-C3	2.00	1.39	1.34
24	B	606	CLA	CHD-C4C	2.00	1.46	1.41
32	V	202	HEM	CAA-C2A	2.00	1.55	1.52

All (2221) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	619	BCR	C20-C21-C22	30.20	170.41	127.31
26	H	101	BCR	C20-C21-C22	26.89	165.69	127.31
26	c	915	BCR	C20-C21-C22	26.83	165.60	127.31
26	C	514	BCR	C15-C16-C17	26.78	178.33	123.47
26	k	101	BCR	C16-C17-C18	26.63	165.32	127.31
26	h	101	BCR	C20-C21-C22	26.63	165.32	127.31
26	B	620	BCR	C20-C21-C22	26.55	165.20	127.31
26	C	515	BCR	C20-C21-C22	25.70	163.98	127.31
26	Y	101	BCR	C20-C21-C22	25.53	163.75	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	620	BCR	C16-C17-C18	25.39	163.55	127.31
26	B	620	BCR	C15-C16-C17	25.33	175.36	123.47
26	b	619	BCR	C16-C17-C18	25.32	163.45	127.31
26	H	101	BCR	C15-C16-C17	25.30	175.30	123.47
26	A	610	BCR	C20-C21-C22	25.20	163.28	127.31
26	C	514	BCR	C16-C17-C18	25.11	163.14	127.31
26	b	618	BCR	C16-C17-C18	25.09	163.12	127.31
26	c	915	BCR	C16-C17-C18	25.03	163.03	127.31
26	c	915	BCR	C15-C16-C17	24.77	174.22	123.47
26	k	101	BCR	C15-C16-C17	24.71	174.09	123.47
26	h	101	BCR	C15-C16-C17	24.53	173.73	123.47
26	B	618	BCR	C16-C17-C18	24.20	161.85	127.31
26	k	102	BCR	C15-C16-C17	24.10	172.85	123.47
26	C	515	BCR	C15-C16-C17	23.72	172.06	123.47
26	k	102	BCR	C20-C21-C22	23.50	160.84	127.31
26	k	102	BCR	C16-C17-C18	23.47	160.81	127.31
26	Y	101	BCR	C16-C17-C18	23.33	160.61	127.31
26	f	101	BCR	C15-C16-C17	23.23	171.07	123.47
26	D	404	BCR	C15-C16-C17	23.22	171.03	123.47
26	f	101	BCR	C16-C17-C18	23.20	160.42	127.31
26	C	514	BCR	C20-C21-C22	23.04	160.19	127.31
26	D	404	BCR	C20-C21-C22	22.47	159.38	127.31
26	k	101	BCR	C20-C21-C22	22.42	159.31	127.31
26	K	101	BCR	C15-C16-C17	22.35	169.26	123.47
26	B	622	BCR	C16-C17-C18	22.35	159.20	127.31
26	c	918	BCR	C16-C15-C14	22.32	169.20	123.47
26	D	404	BCR	C16-C17-C18	22.30	159.14	127.31
26	a	409	BCR	C16-C17-C18	22.21	159.01	127.31
26	a	409	BCR	C15-C16-C17	22.10	168.74	123.47
26	B	619	BCR	C20-C21-C22	21.92	158.59	127.31
26	c	915	BCR	C16-C15-C14	21.91	168.36	123.47
26	C	515	BCR	C16-C15-C14	21.80	168.12	123.47
26	a	409	BCR	C20-C21-C22	21.59	158.13	127.31
26	A	610	BCR	C16-C17-C18	21.56	158.09	127.31
26	T	102	BCR	C16-C17-C18	21.43	157.89	127.31
26	T	101	BCR	C15-C16-C17	21.18	166.87	123.47
26	h	101	BCR	C16-C17-C18	21.06	157.36	127.31
26	K	101	BCR	C20-C21-C22	20.98	157.25	127.31
26	b	618	BCR	C20-C21-C22	20.95	157.21	127.31
26	B	622	BCR	C15-C16-C17	20.93	166.34	123.47
26	C	514	BCR	C16-C15-C14	20.72	165.92	123.47
26	Y	101	BCR	C15-C16-C17	20.68	165.83	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	C	515	BCR	C16-C17-C18	20.65	156.79	127.31
26	B	619	BCR	C16-C17-C18	20.57	156.66	127.31
26	H	101	BCR	C16-C17-C18	20.52	156.60	127.31
26	c	918	BCR	C20-C21-C22	20.43	156.47	127.31
26	T	101	BCR	C16-C15-C14	20.36	165.19	123.47
26	c	918	BCR	C16-C17-C18	20.23	156.18	127.31
26	D	404	BCR	C16-C15-C14	20.15	164.75	123.47
26	T	102	BCR	C15-C16-C17	20.15	164.74	123.47
26	b	619	BCR	C15-C16-C17	19.96	164.36	123.47
26	c	918	BCR	C15-C16-C17	19.93	164.31	123.47
26	B	618	BCR	C15-C16-C17	19.70	163.82	123.47
26	B	622	BCR	C20-C21-C22	19.36	154.95	127.31
26	K	101	BCR	C16-C15-C14	19.18	162.77	123.47
26	K	101	BCR	C16-C17-C18	18.72	154.03	127.31
26	f	101	BCR	C20-C21-C22	18.58	153.83	127.31
26	B	620	BCR	C16-C15-C14	18.38	161.13	123.47
26	T	102	BCR	C20-C21-C22	18.35	153.50	127.31
26	h	101	BCR	C16-C15-C14	18.19	160.74	123.47
26	B	622	BCR	C16-C15-C14	18.17	160.69	123.47
26	A	610	BCR	C15-C16-C17	18.12	160.59	123.47
26	B	618	BCR	C20-C21-C22	18.07	153.09	127.31
26	h	101	BCR	C21-C20-C19	17.88	179.01	123.22
26	k	102	BCR	C16-C15-C14	17.82	159.97	123.47
26	k	101	BCR	C16-C15-C14	17.31	158.93	123.47
26	T	101	BCR	C16-C17-C18	17.23	151.91	127.31
26	f	101	BCR	C16-C15-C14	17.11	158.53	123.47
26	k	102	BCR	C21-C20-C19	17.03	176.37	123.22
26	C	514	BCR	C21-C20-C19	16.94	176.07	123.22
26	c	915	BCR	C21-C20-C19	16.85	175.79	123.22
26	b	618	BCR	C15-C16-C17	16.72	157.73	123.47
26	Y	101	BCR	C16-C15-C14	16.51	157.30	123.47
26	a	409	BCR	C16-C15-C14	16.49	157.26	123.47
26	b	618	BCR	C19-C18-C17	16.35	144.03	118.94
26	C	515	BCR	C21-C20-C19	16.29	174.04	123.22
26	T	102	BCR	C16-C15-C14	16.20	156.66	123.47
26	H	101	BCR	C16-C15-C14	16.07	156.40	123.47
26	k	101	BCR	C21-C20-C19	16.04	173.27	123.22
26	B	619	BCR	C15-C16-C17	16.02	156.29	123.47
26	B	619	BCR	C16-C15-C14	15.85	155.95	123.47
26	b	619	BCR	C21-C20-C19	15.73	172.30	123.22
26	B	618	BCR	C19-C18-C17	15.47	142.68	118.94
26	c	918	BCR	C21-C20-C19	15.21	170.69	123.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	918	BCR	C11-C12-C13	15.18	169.06	126.42
26	H	101	BCR	C21-C20-C19	14.96	169.92	123.22
26	b	619	BCR	C16-C15-C14	14.85	153.90	123.47
26	Y	101	BCR	C21-C20-C19	14.61	168.81	123.22
26	A	610	BCR	C16-C15-C14	14.61	153.39	123.47
26	B	619	BCR	C21-C20-C19	14.60	168.78	123.22
26	C	515	BCR	C11-C10-C9	14.45	147.93	127.31
26	B	619	BCR	C19-C18-C17	14.33	140.93	118.94
26	B	618	BCR	C16-C15-C14	14.13	152.43	123.47
26	K	101	BCR	C15-C14-C13	14.13	147.47	127.31
26	k	101	BCR	C20-C19-C18	13.99	165.72	126.42
26	T	101	BCR	C20-C21-C22	13.97	147.25	127.31
26	H	101	BCR	C11-C10-C9	13.86	147.09	127.31
26	K	101	BCR	C21-C20-C19	13.73	166.05	123.22
26	f	101	BCR	C7-C8-C9	13.68	146.90	126.23
26	B	619	BCR	C15-C14-C13	13.53	146.62	127.31
26	c	918	BCR	C10-C11-C12	13.50	165.34	123.22
26	b	618	BCR	C11-C10-C9	13.38	146.41	127.31
26	B	620	BCR	C21-C20-C19	13.32	164.77	123.22
26	B	619	BCR	C11-C10-C9	13.28	146.26	127.31
26	B	620	BCR	C19-C18-C17	13.23	139.24	118.94
26	Y	101	BCR	C11-C10-C9	13.08	145.97	127.31
26	k	102	BCR	C20-C19-C18	12.88	162.60	126.42
26	B	622	BCR	C21-C20-C19	12.88	163.40	123.22
26	c	918	BCR	C20-C19-C18	12.85	162.51	126.42
26	b	619	BCR	C15-C14-C13	12.78	145.54	127.31
26	B	622	BCR	C10-C11-C12	12.77	163.06	123.22
26	k	101	BCR	C19-C18-C17	12.75	138.51	118.94
26	A	610	BCR	C21-C20-C19	12.72	162.93	123.22
26	C	514	BCR	C20-C19-C18	12.67	162.02	126.42
26	b	619	BCR	C11-C10-C9	12.66	145.38	127.31
26	Y	101	BCR	C19-C18-C17	12.66	138.37	118.94
26	D	404	BCR	C21-C20-C19	12.64	162.68	123.22
26	B	620	BCR	C11-C10-C9	12.59	145.28	127.31
26	k	102	BCR	C11-C10-C9	12.58	145.27	127.31
26	b	619	BCR	C19-C18-C17	12.51	138.15	118.94
26	A	610	BCR	C19-C18-C17	12.47	138.08	118.94
24	c	908	CLA	C4A-NA-C1A	12.47	112.31	106.71
26	b	618	BCR	C16-C15-C14	12.46	148.99	123.47
26	B	622	BCR	C20-C19-C18	12.42	161.31	126.42
26	C	515	BCR	C20-C19-C18	12.36	161.14	126.42
26	k	102	BCR	C15-C14-C13	12.35	144.94	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	k	102	BCR	C10-C11-C12	12.27	161.49	123.22
26	K	101	BCR	C20-C19-C18	12.23	160.78	126.42
26	K	101	BCR	C19-C18-C17	12.23	137.70	118.94
26	T	101	BCR	C11-C10-C9	12.22	144.75	127.31
26	f	101	BCR	C19-C18-C17	12.22	137.69	118.94
26	T	102	BCR	C19-C18-C17	12.16	137.60	118.94
26	h	101	BCR	C15-C14-C13	12.16	144.66	127.31
26	C	514	BCR	C10-C11-C12	11.94	160.49	123.22
24	C	511	CLA	C4A-NA-C1A	11.89	112.05	106.71
26	k	101	BCR	C7-C8-C9	11.88	144.18	126.23
26	a	409	BCR	C19-C18-C17	11.85	137.13	118.94
26	k	101	BCR	C11-C10-C9	11.81	144.17	127.31
26	b	618	BCR	C21-C20-C19	11.78	159.98	123.22
26	c	915	BCR	C10-C11-C12	11.75	159.89	123.22
26	T	101	BCR	C10-C11-C12	11.74	159.85	123.22
26	c	918	BCR	C7-C8-C9	11.70	143.92	126.23
26	B	618	BCR	C12-C13-C14	11.70	136.90	118.94
24	C	507	CLA	C4A-NA-C1A	11.67	111.95	106.71
26	a	409	BCR	C23-C22-C21	11.65	136.82	118.94
26	a	409	BCR	C11-C10-C9	11.64	143.92	127.31
26	h	101	BCR	C11-C10-C9	11.64	143.92	127.31
26	T	101	BCR	C11-C12-C13	11.55	158.86	126.42
26	H	101	BCR	C15-C14-C13	11.52	143.75	127.31
26	b	618	BCR	C15-C14-C13	11.52	143.75	127.31
26	C	515	BCR	C15-C14-C13	11.50	143.73	127.31
24	b	605	CLA	C4A-NA-C1A	11.46	111.86	106.71
26	b	619	BCR	C10-C11-C12	11.45	158.95	123.22
26	Y	101	BCR	C15-C14-C13	11.37	143.54	127.31
26	a	409	BCR	C15-C14-C13	11.37	143.54	127.31
26	f	101	BCR	C21-C20-C19	11.35	158.65	123.22
26	A	610	BCR	C11-C10-C9	11.35	143.50	127.31
26	k	102	BCR	C19-C18-C17	11.33	136.33	118.94
26	K	101	BCR	C11-C12-C13	11.30	158.16	126.42
26	T	102	BCR	C15-C14-C13	11.28	143.41	127.31
26	b	619	BCR	C7-C8-C9	11.27	143.27	126.23
26	T	102	BCR	C21-C20-C19	11.27	158.38	123.22
26	c	915	BCR	C15-C14-C13	11.24	143.35	127.31
26	f	101	BCR	C11-C10-C9	11.21	143.31	127.31
26	B	622	BCR	C19-C18-C17	11.19	136.12	118.94
26	h	101	BCR	C20-C19-C18	11.19	157.85	126.42
26	B	618	BCR	C21-C20-C19	11.19	158.14	123.22
24	c	912	CLA	C4A-NA-C1A	11.16	111.72	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	Y	101	BCR	C20-C19-C18	11.14	157.72	126.42
26	A	610	BCR	C23-C22-C21	11.10	135.97	118.94
26	B	622	BCR	C15-C14-C13	11.05	143.08	127.31
26	B	618	BCR	C11-C10-C9	11.01	143.03	127.31
26	c	915	BCR	C20-C19-C18	10.99	157.28	126.42
26	a	409	BCR	C10-C11-C12	10.91	157.25	123.22
26	H	101	BCR	C20-C19-C18	10.90	157.04	126.42
26	B	622	BCR	C11-C12-C13	10.89	157.00	126.42
24	B	605	CLA	C4A-NA-C1A	10.88	111.60	106.71
26	A	610	BCR	C12-C13-C14	10.87	135.63	118.94
26	A	610	BCR	C15-C14-C13	10.79	142.72	127.31
26	b	618	BCR	C12-C13-C14	10.79	135.50	118.94
26	K	101	BCR	C10-C11-C12	10.79	156.88	123.22
26	T	101	BCR	C20-C19-C18	10.76	156.63	126.42
26	H	101	BCR	C19-C18-C17	10.75	135.43	118.94
26	k	102	BCR	C11-C12-C13	10.73	156.57	126.42
26	B	618	BCR	C20-C19-C18	10.71	156.52	126.42
26	B	619	BCR	C20-C19-C18	10.69	156.45	126.42
26	f	101	BCR	C20-C19-C18	10.65	156.34	126.42
24	c	904	CLA	C4A-NA-C1A	10.65	111.49	106.71
26	C	514	BCR	C11-C12-C13	10.62	156.24	126.42
26	B	620	BCR	C36-C18-C17	-10.58	108.10	122.92
26	k	101	BCR	C15-C14-C13	10.56	142.39	127.31
26	C	514	BCR	C19-C18-C17	10.55	135.13	118.94
26	D	404	BCR	C15-C14-C13	10.54	142.35	127.31
26	h	101	BCR	C11-C12-C13	10.53	156.00	126.42
26	k	101	BCR	C10-C11-C12	10.51	156.01	123.22
26	a	409	BCR	C11-C12-C13	10.47	155.84	126.42
26	a	409	BCR	C21-C20-C19	10.46	155.87	123.22
24	B	616	CLA	C4A-NA-C1A	10.42	111.39	106.71
26	b	619	BCR	C11-C12-C13	10.38	155.58	126.42
26	D	404	BCR	C11-C10-C9	10.35	142.09	127.31
26	B	622	BCR	C11-C10-C9	10.33	142.05	127.31
26	b	618	BCR	C10-C11-C12	10.31	155.38	123.22
26	B	620	BCR	C15-C14-C13	10.29	141.99	127.31
26	a	409	BCR	C12-C13-C14	10.28	134.72	118.94
26	b	618	BCR	C7-C8-C9	10.26	141.75	126.23
26	f	101	BCR	C11-C12-C13	10.22	155.12	126.42
26	T	101	BCR	C21-C20-C19	10.19	155.00	123.22
26	B	620	BCR	C10-C11-C12	10.16	154.92	123.22
26	T	102	BCR	C11-C12-C13	10.14	154.89	126.42
26	C	515	BCR	C10-C11-C12	10.12	154.78	123.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	k	102	BCR	C7-C8-C9	10.11	141.51	126.23
24	C	513	CLA	C4A-NA-C1A	10.10	111.25	106.71
24	c	902	CLA	C4A-NA-C1A	10.10	111.25	106.71
26	B	620	BCR	C11-C12-C13	10.09	154.77	126.42
26	b	618	BCR	C20-C19-C18	10.08	154.74	126.42
26	b	618	BCR	C23-C22-C21	10.07	134.40	118.94
24	B	602	CLA	C4A-NA-C1A	10.07	111.23	106.71
26	h	101	BCR	C10-C11-C12	10.07	154.63	123.22
26	T	102	BCR	C12-C13-C14	10.06	134.38	118.94
24	b	612	CLA	C4A-NA-C1A	10.06	111.23	106.71
24	b	613	CLA	C4A-NA-C1A	9.99	111.20	106.71
24	c	910	CLA	C4A-NA-C1A	9.95	111.18	106.71
26	c	915	BCR	C11-C12-C13	9.94	154.33	126.42
26	c	915	BCR	C11-C10-C9	9.92	141.46	127.31
24	b	616	CLA	C4A-NA-C1A	9.89	111.15	106.71
24	C	509	CLA	C4A-NA-C1A	9.88	111.15	106.71
26	h	101	BCR	C19-C18-C17	9.84	134.03	118.94
24	b	607	CLA	C4A-NA-C1A	9.82	111.12	106.71
26	T	101	BCR	C15-C14-C13	9.81	141.31	127.31
26	T	102	BCR	C20-C19-C18	9.81	153.96	126.42
24	c	906	CLA	C4A-NA-C1A	9.79	111.11	106.71
24	c	913	CLA	C4A-NA-C1A	9.78	111.11	106.71
26	T	101	BCR	C19-C18-C17	9.78	133.95	118.94
26	A	610	BCR	C37-C22-C21	-9.78	109.22	122.92
24	C	504	CLA	C4A-NA-C1A	9.74	111.08	106.71
26	A	610	BCR	C11-C12-C13	9.74	153.76	126.42
26	C	514	BCR	C7-C8-C9	9.72	140.92	126.23
26	C	514	BCR	C15-C14-C13	9.71	141.17	127.31
24	C	506	CLA	C4A-NA-C1A	9.70	111.07	106.71
24	c	903	CLA	C4A-NA-C1A	9.70	111.07	106.71
26	f	101	BCR	C29-C30-C25	9.67	125.38	110.48
26	c	915	BCR	C19-C18-C17	9.63	133.71	118.94
26	C	515	BCR	C19-C18-C17	9.62	133.70	118.94
26	A	610	BCR	C10-C11-C12	9.60	153.19	123.22
26	k	101	BCR	C11-C12-C13	9.59	153.36	126.42
26	K	101	BCR	C12-C13-C14	9.59	133.66	118.94
26	C	515	BCR	C12-C13-C14	9.58	133.63	118.94
24	C	505	CLA	C4A-NA-C1A	9.56	111.01	106.71
24	B	613	CLA	C4A-NA-C1A	9.55	111.00	106.71
24	C	510	CLA	C4A-NA-C1A	9.54	110.99	106.71
24	b	615	CLA	C4A-NA-C1A	9.50	110.98	106.71
26	h	101	BCR	C24-C23-C22	9.50	140.59	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	619	BCR	C12-C13-C14	9.49	133.51	118.94
26	H	101	BCR	C10-C11-C12	9.49	152.83	123.22
26	T	102	BCR	C11-C10-C9	9.49	140.85	127.31
26	D	404	BCR	C20-C19-C18	9.49	153.07	126.42
26	D	404	BCR	C19-C18-C17	9.48	133.48	118.94
26	H	101	BCR	C12-C13-C14	9.48	133.48	118.94
24	b	611	CLA	C4A-NA-C1A	9.46	110.96	106.71
26	b	619	BCR	C20-C19-C18	9.42	152.88	126.42
26	D	404	BCR	C11-C12-C13	9.41	152.86	126.42
26	a	409	BCR	C7-C8-C9	9.39	140.42	126.23
26	B	618	BCR	C11-C12-C13	9.37	152.75	126.42
26	f	101	BCR	C15-C14-C13	9.37	140.69	127.31
26	B	620	BCR	C20-C19-C18	9.36	152.71	126.42
24	b	602	CLA	C4A-NA-C1A	9.36	110.91	106.71
24	B	610	CLA	C4A-NA-C1A	9.33	110.90	106.71
26	K	101	BCR	C7-C8-C9	9.31	140.30	126.23
24	b	608	CLA	C4A-NA-C1A	9.30	110.89	106.71
24	D	403	CLA	C4A-NA-C1A	9.28	110.88	106.71
26	H	101	BCR	C11-C12-C13	9.26	152.44	126.42
26	B	620	BCR	C7-C8-C9	9.24	140.20	126.23
24	b	614	CLA	C4A-NA-C1A	9.16	110.83	106.71
26	h	101	BCR	C7-C8-C9	9.16	140.07	126.23
24	B	612	CLA	C4A-NA-C1A	9.12	110.81	106.71
24	C	512	CLA	C4A-NA-C1A	9.12	110.81	106.71
26	D	404	BCR	C30-C25-C26	-9.10	109.80	122.61
24	C	501	CLA	C4A-NA-C1A	9.03	110.77	106.71
26	c	915	BCR	C7-C8-C9	9.02	139.86	126.23
24	B	607	CLA	C4A-NA-C1A	9.01	110.76	106.71
24	c	909	CLA	C4A-NA-C1A	9.00	110.75	106.71
24	B	614	CLA	C4A-NA-C1A	9.00	110.75	106.71
26	a	409	BCR	C24-C23-C22	8.99	139.83	126.23
26	B	619	BCR	C23-C22-C21	8.96	132.69	118.94
24	C	503	CLA	C4A-NA-C1A	8.95	110.73	106.71
26	f	101	BCR	C10-C11-C12	8.94	151.12	123.22
26	T	102	BCR	C10-C11-C12	8.91	151.03	123.22
26	T	101	BCR	C7-C8-C9	8.89	139.67	126.23
26	K	101	BCR	C11-C10-C9	8.89	140.00	127.31
24	C	508	CLA	C4A-NA-C1A	8.87	110.69	106.71
24	B	611	CLA	C4A-NA-C1A	8.85	110.69	106.71
26	B	622	BCR	C7-C8-C9	8.85	139.60	126.23
26	k	102	BCR	C23-C22-C21	8.81	132.46	118.94
24	b	617	CLA	C4A-NA-C1A	8.77	110.65	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	H	101	BCR	C23-C22-C21	8.77	132.40	118.94
26	B	619	BCR	C36-C18-C19	-8.76	104.28	118.08
26	B	620	BCR	C23-C22-C21	8.75	132.37	118.94
24	c	905	CLA	C4A-NA-C1A	8.71	110.62	106.71
26	B	618	BCR	C36-C18-C17	-8.69	110.75	122.92
26	B	619	BCR	C24-C23-C22	8.66	139.32	126.23
26	B	618	BCR	C10-C11-C12	8.62	150.11	123.22
26	a	409	BCR	C20-C19-C18	8.61	150.62	126.42
26	A	610	BCR	C20-C19-C18	8.53	150.37	126.42
26	C	515	BCR	C11-C12-C13	8.53	150.37	126.42
26	Y	101	BCR	C33-C5-C4	-8.53	97.23	113.62
26	b	618	BCR	C36-C18-C17	-8.51	111.00	122.92
24	B	617	CLA	C4A-NA-C1A	8.47	110.51	106.71
26	b	619	BCR	C23-C22-C21	8.42	131.86	118.94
26	c	918	BCR	C11-C10-C9	8.41	139.31	127.31
24	c	914	CLA	C4A-NA-C1A	8.37	110.47	106.71
24	b	610	CLA	C4A-NA-C1A	8.37	110.47	106.71
26	K	101	BCR	C23-C22-C21	8.36	131.78	118.94
26	D	404	BCR	C29-C30-C25	8.34	123.32	110.48
26	Y	101	BCR	C11-C12-C13	8.34	149.84	126.42
26	b	618	BCR	C36-C18-C19	-8.32	104.96	118.08
26	B	618	BCR	C15-C14-C13	8.32	139.18	127.31
26	c	915	BCR	C24-C23-C22	8.31	138.79	126.23
24	c	911	CLA	C4A-NA-C1A	8.30	110.44	106.71
26	A	610	BCR	C36-C18-C17	-8.29	111.31	122.92
24	c	907	CLA	C4A-NA-C1A	8.20	110.39	106.71
26	D	404	BCR	C32-C1-C6	8.18	123.56	110.30
26	C	514	BCR	C11-C10-C9	8.17	138.97	127.31
26	B	622	BCR	C24-C23-C22	8.17	138.58	126.23
26	T	102	BCR	C36-C18-C17	-8.15	111.51	122.92
24	B	615	CLA	C4A-NA-C1A	8.11	110.35	106.71
26	f	101	BCR	C23-C22-C21	8.10	131.37	118.94
24	A	609	CLA	C4A-NA-C1A	8.07	110.33	106.71
26	D	404	BCR	C12-C13-C14	8.01	131.23	118.94
26	k	101	BCR	C12-C13-C14	7.99	131.20	118.94
24	B	606	CLA	C4A-NA-C1A	7.97	110.29	106.71
24	B	608	CLA	C4A-NA-C1A	7.96	110.29	106.71
26	c	915	BCR	C23-C22-C21	7.94	131.12	118.94
24	d	404	CLA	C4A-NA-C1A	7.93	110.27	106.71
24	B	604	CLA	C4A-NA-C1A	7.93	110.27	106.71
26	k	102	BCR	C12-C13-C14	7.91	131.07	118.94
26	H	101	BCR	C7-C8-C9	7.89	138.16	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	b	619	BCR	C36-C18-C17	-7.89	111.87	122.92
26	B	619	BCR	C7-C8-C9	7.89	138.15	126.23
26	A	610	BCR	C7-C8-C9	7.88	138.15	126.23
26	Y	101	BCR	C10-C11-C12	7.86	147.74	123.22
24	A	607	CLA	C4A-NA-C1A	7.85	110.23	106.71
24	C	502	CLA	C4A-NA-C1A	7.84	110.23	106.71
26	A	610	BCR	C35-C13-C14	-7.84	111.94	122.92
26	B	618	BCR	C8-C9-C10	7.83	130.96	118.94
24	a	408	CLA	C4A-NA-C1A	7.80	110.21	106.71
26	B	619	BCR	C10-C11-C12	7.77	147.47	123.22
26	b	618	BCR	C11-C12-C13	7.76	148.22	126.42
26	k	102	BCR	C37-C22-C21	-7.69	112.16	122.92
25	a	412	PHO	CMD-C2D-C1D	7.68	136.89	125.06
26	h	101	BCR	C12-C13-C14	7.67	130.71	118.94
26	B	618	BCR	C35-C13-C12	-7.66	106.01	118.08
26	f	101	BCR	C30-C25-C26	-7.65	111.84	122.61
26	A	610	BCR	C27-C26-C25	7.65	133.83	122.73
26	a	409	BCR	C36-C18-C17	-7.63	112.24	122.92
25	D	401	PHO	CMD-C2D-C1D	7.62	136.80	125.06
26	Y	101	BCR	C7-C8-C9	7.62	137.75	126.23
26	k	101	BCR	C36-C18-C19	-7.60	106.10	118.08
24	B	603	CLA	C4A-NA-C1A	7.60	110.12	106.71
26	c	915	BCR	C12-C13-C14	7.57	130.56	118.94
26	b	619	BCR	C12-C13-C14	7.56	130.54	118.94
26	Y	101	BCR	C33-C5-C6	7.52	132.98	124.53
26	h	101	BCR	C23-C22-C21	7.51	130.46	118.94
26	H	101	BCR	C37-C22-C21	-7.46	112.47	122.92
25	A	608	PHO	CMD-C2D-C1D	7.46	136.55	125.06
26	Y	101	BCR	C12-C13-C14	7.45	130.37	118.94
26	T	101	BCR	C33-C5-C6	7.45	132.89	124.53
26	a	409	BCR	C37-C22-C21	-7.45	112.49	122.92
26	C	514	BCR	C38-C26-C27	-7.43	99.34	113.62
26	b	618	BCR	C24-C23-C22	7.39	137.40	126.23
26	b	618	BCR	C40-C30-C25	7.34	122.21	110.30
26	B	618	BCR	C36-C18-C19	-7.30	106.57	118.08
24	A	614	CLA	C2C-C1C-NC	7.28	116.79	109.97
26	B	620	BCR	C12-C13-C14	7.24	130.05	118.94
26	B	619	BCR	C30-C25-C26	-7.23	112.44	122.61
26	T	102	BCR	C23-C22-C21	7.21	130.00	118.94
26	Y	101	BCR	C37-C22-C21	-7.20	112.83	122.92
26	D	404	BCR	C10-C11-C12	7.18	145.63	123.22
26	k	102	BCR	C36-C18-C17	-7.17	112.88	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	609	CLA	C4A-NA-C1A	7.16	109.92	106.71
26	T	101	BCR	C36-C18-C17	-7.15	112.91	122.92
26	T	101	BCR	C12-C13-C14	7.14	129.90	118.94
26	c	918	BCR	C19-C18-C17	7.13	129.89	118.94
26	f	101	BCR	C8-C7-C6	7.11	147.17	127.20
26	f	101	BCR	C8-C9-C10	7.06	129.78	118.94
26	k	101	BCR	C33-C5-C4	-7.05	100.08	113.62
26	k	101	BCR	C33-C5-C6	7.04	132.44	124.53
26	B	622	BCR	C12-C13-C14	7.04	129.75	118.94
24	d	401	CLA	C4A-NA-C1A	7.00	109.85	106.71
26	B	618	BCR	C24-C23-C22	6.99	136.80	126.23
26	B	622	BCR	C33-C5-C6	6.98	132.37	124.53
25	d	402	PHO	CMD-C2D-C1D	6.93	135.74	125.06
24	A	607	CLA	C2C-C1C-NC	6.88	116.42	109.97
26	H	101	BCR	C36-C18-C19	-6.84	107.30	118.08
26	Y	101	BCR	C36-C18-C19	-6.83	107.32	118.08
26	C	514	BCR	C36-C18-C17	-6.82	113.36	122.92
26	A	610	BCR	C38-C26-C27	-6.81	100.53	113.62
24	a	406	CLA	C2C-C1C-NC	6.81	116.35	109.97
26	b	619	BCR	C37-C22-C21	-6.80	113.39	122.92
24	B	605	CLA	C2C-C1C-NC	6.80	116.34	109.97
26	f	101	BCR	C32-C1-C6	6.80	121.32	110.30
26	f	101	BCR	C36-C18-C19	-6.75	107.44	118.08
26	B	622	BCR	C36-C18-C17	-6.74	113.48	122.92
26	h	101	BCR	C36-C18-C17	-6.74	113.48	122.92
26	H	101	BCR	C8-C9-C10	6.74	129.28	118.94
26	B	618	BCR	C23-C22-C21	6.73	129.27	118.94
24	B	609	CLA	C2C-C1C-NC	6.73	116.28	109.97
26	T	101	BCR	C8-C7-C6	6.72	146.08	127.20
26	C	515	BCR	C23-C22-C21	6.67	129.18	118.94
24	d	403	CLA	C4A-NA-C1A	6.66	109.70	106.71
26	k	101	BCR	C23-C22-C21	6.61	129.08	118.94
24	a	407	CLA	C2C-C1C-NC	6.60	116.16	109.97
26	C	515	BCR	C24-C23-C22	6.60	136.21	126.23
26	K	101	BCR	C36-C18-C19	-6.58	107.70	118.08
26	T	102	BCR	C24-C23-C22	6.58	136.17	126.23
26	B	618	BCR	C34-C9-C10	-6.57	113.72	122.92
24	b	603	CLA	C4A-NA-C1A	6.57	109.66	106.71
26	T	102	BCR	C35-C13-C14	-6.57	113.72	122.92
26	Y	101	BCR	C29-C30-C25	6.56	120.58	110.48
24	d	403	CLA	C2C-C1C-NC	6.53	116.09	109.97
24	b	606	CLA	C4A-NA-C1A	6.52	109.64	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	K	101	BCR	C37-C22-C21	-6.49	113.83	122.92
26	C	514	BCR	C33-C5-C6	6.47	131.79	124.53
24	d	401	CLA	C2C-C1C-NC	6.45	116.02	109.97
26	c	915	BCR	C36-C18-C17	-6.42	113.93	122.92
26	k	102	BCR	C38-C26-C27	-6.41	101.30	113.62
32	E	101	HEM	CBD-CAD-C3D	-6.41	100.67	112.48
26	B	622	BCR	C23-C22-C21	6.39	128.75	118.94
26	H	101	BCR	C32-C1-C6	6.36	120.61	110.30
26	f	101	BCR	C12-C13-C14	6.34	128.67	118.94
24	D	402	CLA	C4A-NA-C1A	6.32	109.55	106.71
26	b	619	BCR	C33-C5-C4	-6.31	101.48	113.62
24	B	604	CLA	C2C-C1C-NC	6.27	115.84	109.97
26	B	619	BCR	C11-C12-C13	6.25	143.97	126.42
26	B	619	BCR	C8-C9-C10	6.25	128.53	118.94
26	b	618	BCR	C29-C30-C25	6.24	120.09	110.48
24	b	604	CLA	C2C-C1C-NC	6.23	115.81	109.97
26	A	610	BCR	C8-C9-C10	6.20	128.45	118.94
24	A	606	CLA	C4A-NA-C1A	6.19	109.49	106.71
26	B	619	BCR	C23-C24-C25	6.18	144.56	127.20
26	f	101	BCR	C37-C22-C21	-6.18	114.26	122.92
26	B	620	BCR	C8-C9-C10	6.18	128.42	118.94
26	Y	101	BCR	C36-C18-C17	-6.14	114.32	122.92
26	b	619	BCR	C33-C5-C6	6.14	131.42	124.53
24	a	408	CLA	C2C-C1C-NC	6.13	115.72	109.97
26	K	101	BCR	C8-C7-C6	6.12	144.39	127.20
26	C	514	BCR	C24-C23-C22	6.12	135.48	126.23
24	a	407	CLA	C4A-NA-C1A	6.11	109.45	106.71
24	C	504	CLA	C2C-C1C-NC	6.09	115.68	109.97
26	b	618	BCR	C38-C26-C27	-6.09	101.92	113.62
26	b	618	BCR	C35-C13-C14	-6.08	114.41	122.92
26	T	101	BCR	C24-C23-C22	6.07	135.41	126.23
24	C	509	CLA	C2C-C1C-NC	6.04	115.63	109.97
24	A	609	CLA	C2C-C1C-NC	6.04	115.63	109.97
24	c	902	CLA	C2C-C1C-NC	6.04	115.63	109.97
26	C	515	BCR	C31-C1-C6	6.02	120.06	110.30
24	B	610	CLA	C2C-C1C-NC	6.02	115.61	109.97
24	D	402	CLA	C2C-C1C-NC	6.01	115.60	109.97
26	a	409	BCR	C35-C13-C14	-6.01	114.51	122.92
26	B	618	BCR	C7-C8-C9	6.00	135.30	126.23
26	B	622	BCR	C37-C22-C21	-6.00	114.52	122.92
24	b	614	CLA	C2C-C1C-NC	6.00	115.59	109.97
26	H	101	BCR	C34-C9-C10	-5.99	114.53	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	608	CLA	C2C-C1C-NC	5.97	115.57	109.97
24	C	501	CLA	O2D-CGD-CBD	5.97	121.88	111.27
24	B	612	CLA	C2C-C1C-NC	5.97	115.56	109.97
26	k	101	BCR	C8-C7-C6	5.97	143.96	127.20
26	k	102	BCR	C8-C7-C6	5.96	143.93	127.20
26	K	101	BCR	C36-C18-C17	-5.95	114.59	122.92
24	b	605	CLA	C2C-C1C-NC	5.94	115.54	109.97
26	B	619	BCR	C38-C26-C27	-5.86	102.35	113.62
26	a	409	BCR	C37-C22-C23	-5.86	108.84	118.08
26	B	619	BCR	C37-C22-C21	-5.86	114.72	122.92
24	b	606	CLA	C2C-C1C-NC	5.85	115.46	109.97
26	C	514	BCR	C12-C13-C14	5.85	127.92	118.94
26	H	101	BCR	C33-C5-C4	-5.84	102.40	113.62
26	f	101	BCR	C40-C30-C39	5.84	126.44	108.53
26	c	918	BCR	C15-C14-C13	5.83	135.63	127.31
24	b	615	CLA	C2C-C1C-NC	5.83	115.44	109.97
26	C	514	BCR	C38-C26-C25	5.83	131.08	124.53
26	k	101	BCR	C29-C30-C25	5.83	119.45	110.48
26	c	915	BCR	C8-C9-C10	5.81	127.86	118.94
26	k	101	BCR	C37-C22-C21	-5.81	114.79	122.92
26	C	515	BCR	C7-C8-C9	5.81	135.01	126.23
24	C	510	CLA	C2C-C1C-NC	5.80	115.41	109.97
26	B	619	BCR	C36-C18-C17	-5.80	114.79	122.92
24	b	610	CLA	C2C-C1C-NC	5.80	115.41	109.97
26	D	404	BCR	C23-C22-C21	5.80	127.83	118.94
26	H	101	BCR	C30-C25-C26	-5.79	114.46	122.61
26	B	619	BCR	C35-C13-C14	-5.79	114.82	122.92
24	b	604	CLA	C4A-NA-C1A	5.76	109.30	106.71
24	B	614	CLA	C2C-C1C-NC	5.76	115.37	109.97
26	h	101	BCR	C39-C30-C25	5.76	119.64	110.30
26	h	101	BCR	C37-C22-C21	-5.75	114.87	122.92
26	f	101	BCR	C36-C18-C17	-5.74	114.88	122.92
26	b	618	BCR	C33-C5-C4	-5.73	102.61	113.62
24	B	615	CLA	C2C-C1C-NC	5.71	115.33	109.97
26	Y	101	BCR	C30-C25-C26	-5.71	114.57	122.61
26	T	102	BCR	C8-C9-C10	5.69	127.67	118.94
26	B	619	BCR	C29-C30-C25	5.67	119.21	110.48
26	h	101	BCR	C8-C9-C10	5.66	127.63	118.94
26	T	102	BCR	C38-C26-C27	-5.66	102.74	113.62
24	C	506	CLA	C2C-C1C-NC	5.66	115.27	109.97
26	C	514	BCR	C8-C7-C6	5.65	143.07	127.20
26	b	619	BCR	C38-C26-C27	-5.64	102.78	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	602	CLA	O2D-CGD-CBD	5.62	121.25	111.27
26	B	618	BCR	C38-C26-C27	-5.61	102.84	113.62
26	k	102	BCR	C33-C5-C4	-5.61	102.84	113.62
24	a	406	CLA	C4A-NA-C1A	5.61	109.23	106.71
24	c	908	CLA	C2C-C1C-NC	5.60	115.21	109.97
24	d	404	CLA	C2C-C1C-NC	5.59	115.21	109.97
24	A	606	CLA	C2C-C1C-NC	5.59	115.21	109.97
26	h	101	BCR	C8-C7-C6	5.59	142.90	127.20
26	b	618	BCR	C37-C22-C21	-5.58	115.11	122.92
24	c	911	CLA	C2C-C1C-NC	5.57	115.19	109.97
24	C	501	CLA	C2C-C1C-NC	5.56	115.18	109.97
26	B	622	BCR	C8-C7-C6	5.56	142.82	127.20
26	c	918	BCR	C38-C26-C25	5.56	130.77	124.53
26	k	102	BCR	C33-C5-C6	5.54	130.75	124.53
24	B	606	CLA	C2C-C1C-NC	5.53	115.16	109.97
28	a	411	SQD	O6-C1-C2	5.52	116.93	108.30
26	k	102	BCR	C38-C26-C25	5.52	130.73	124.53
26	Y	101	BCR	C24-C23-C22	5.52	134.57	126.23
24	b	613	CLA	C3C-C4C-NC	5.51	116.75	110.57
24	b	613	CLA	C2C-C1C-NC	5.50	115.12	109.97
26	T	101	BCR	C2-C1-C6	5.50	118.94	110.48
24	c	910	CLA	C2C-C1C-NC	5.49	115.12	109.97
26	c	918	BCR	C38-C26-C27	-5.48	103.09	113.62
24	C	505	CLA	C2C-C1C-NC	5.46	115.09	109.97
26	k	101	BCR	C38-C26-C27	-5.45	103.14	113.62
24	B	607	CLA	C2C-C1C-NC	5.45	115.08	109.97
24	b	608	CLA	C2C-C1C-NC	5.45	115.08	109.97
26	Y	101	BCR	C8-C9-C10	5.44	127.29	118.94
24	b	609	CLA	C2C-C1C-NC	5.43	115.06	109.97
26	B	620	BCR	C33-C5-C4	-5.43	103.18	113.62
26	T	102	BCR	C7-C8-C9	5.42	134.43	126.23
24	c	903	CLA	O2D-CGD-CBD	5.41	120.89	111.27
26	b	618	BCR	C30-C25-C26	-5.41	114.99	122.61
26	K	101	BCR	C8-C9-C10	5.41	127.24	118.94
25	d	402	PHO	O2D-CGD-CBD	5.40	120.87	111.27
24	C	511	CLA	C2C-C1C-NC	5.40	115.03	109.97
26	D	404	BCR	C36-C18-C17	-5.40	115.36	122.92
24	C	508	CLA	C2C-C1C-NC	5.39	115.02	109.97
24	b	602	CLA	O2D-CGD-CBD	5.39	120.84	111.27
25	a	412	PHO	O2D-CGD-CBD	5.39	120.84	111.27
26	H	101	BCR	C33-C5-C6	5.38	130.57	124.53
24	C	502	CLA	C2C-C1C-NC	5.38	115.01	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	k	101	BCR	C36-C18-C17	-5.38	115.39	122.92
32	v	202	HEM	CBD-CAD-C3D	-5.38	102.57	112.48
26	A	610	BCR	C30-C25-C26	-5.35	115.08	122.61
24	B	611	CLA	C2C-C1C-NC	5.34	114.98	109.97
26	C	514	BCR	C29-C30-C25	5.34	118.70	110.48
24	B	613	CLA	C2C-C1C-NC	5.33	114.96	109.97
24	b	611	CLA	C2C-C1C-NC	5.32	114.95	109.97
26	b	618	BCR	C8-C9-C10	5.31	127.08	118.94
24	c	905	CLA	C2C-C1C-NC	5.30	114.93	109.97
24	b	615	CLA	O2D-CGD-CBD	5.30	120.68	111.27
26	b	618	BCR	C34-C9-C8	-5.29	109.74	118.08
26	a	409	BCR	C27-C26-C25	5.29	130.41	122.73
26	a	409	BCR	C8-C9-C10	5.29	127.06	118.94
24	b	612	CLA	C2C-C1C-NC	5.28	114.92	109.97
24	b	616	CLA	C2C-C1C-NC	5.27	114.91	109.97
26	c	915	BCR	C37-C22-C21	-5.27	115.55	122.92
24	B	617	CLA	C2C-C1C-NC	5.26	114.90	109.97
24	B	616	CLA	C2C-C1C-NC	5.25	114.89	109.97
24	B	612	CLA	C3C-C4C-NC	5.25	116.46	110.57
26	H	101	BCR	C35-C13-C12	-5.25	109.81	118.08
24	C	507	CLA	C2C-C1C-NC	5.24	114.88	109.97
24	D	403	CLA	C2C-C1C-NC	5.24	114.88	109.97
26	Y	101	BCR	C8-C7-C6	5.24	141.91	127.20
26	K	101	BCR	C35-C13-C14	-5.23	115.59	122.92
26	B	622	BCR	C33-C5-C4	-5.22	103.59	113.62
24	c	913	CLA	C2C-C1C-NC	5.22	114.86	109.97
26	B	620	BCR	C37-C22-C23	-5.22	109.86	118.08
24	c	909	CLA	C2C-C1C-NC	5.21	114.85	109.97
24	b	617	CLA	C3C-C4C-NC	5.21	116.41	110.57
26	b	618	BCR	C37-C22-C23	-5.21	109.87	118.08
24	D	402	CLA	C3C-C4C-NC	5.20	116.40	110.57
26	C	515	BCR	C35-C13-C12	-5.19	109.89	118.08
32	V	202	HEM	CBD-CAD-C3D	-5.19	102.91	112.48
26	A	610	BCR	C24-C23-C22	5.19	134.08	126.23
26	C	515	BCR	C37-C22-C21	-5.19	115.66	122.92
24	c	912	CLA	C2C-C1C-NC	5.18	114.83	109.97
26	Y	101	BCR	C23-C22-C21	5.18	126.89	118.94
24	A	614	CLA	C1C-C2C-C3C	-5.17	101.52	106.96
26	C	515	BCR	C8-C7-C6	5.17	141.73	127.20
26	D	404	BCR	C8-C9-C10	5.17	126.87	118.94
26	Y	101	BCR	C34-C9-C10	-5.15	115.71	122.92
26	K	101	BCR	C23-C24-C25	5.15	141.66	127.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	605	CLA	C3C-C4C-NC	5.15	116.34	110.57
24	C	503	CLA	C2C-C1C-NC	5.15	114.79	109.97
25	A	608	PHO	C3D-C2D-C1D	-5.14	98.38	105.87
26	b	618	BCR	C27-C26-C25	5.14	130.19	122.73
24	b	607	CLA	C2C-C1C-NC	5.14	114.79	109.97
26	b	619	BCR	C36-C18-C19	-5.14	109.98	118.08
24	c	907	CLA	C2C-C1C-NC	5.12	114.77	109.97
26	D	404	BCR	C34-C9-C10	-5.11	115.77	122.92
24	C	512	CLA	O2D-CGD-CBD	5.11	120.34	111.27
24	B	606	CLA	C3C-C4C-NC	5.10	116.29	110.57
26	D	404	BCR	C24-C23-C22	5.10	133.94	126.23
24	b	609	CLA	O2D-CGD-CBD	5.09	120.30	111.27
24	C	506	CLA	O2D-CGD-CBD	5.08	120.30	111.27
26	b	619	BCR	C38-C26-C25	5.07	130.22	124.53
26	b	618	BCR	C35-C13-C12	-5.07	110.09	118.08
24	b	606	CLA	C3C-C4C-NC	5.07	116.25	110.57
24	b	605	CLA	C3C-C4C-NC	5.06	116.25	110.57
26	D	404	BCR	C39-C30-C29	-5.06	88.67	108.91
24	c	903	CLA	C2C-C1C-NC	5.06	114.71	109.97
24	a	407	CLA	C3C-C4C-NC	5.05	116.24	110.57
26	b	619	BCR	C29-C30-C25	5.05	118.25	110.48
26	H	101	BCR	C29-C30-C25	5.05	118.25	110.48
26	c	915	BCR	C23-C24-C25	5.05	141.38	127.20
26	k	101	BCR	C35-C13-C14	-5.04	115.86	122.92
26	k	101	BCR	C24-C23-C22	5.04	133.85	126.23
24	B	617	CLA	C3C-C4C-NC	5.03	116.21	110.57
26	C	514	BCR	C33-C5-C4	-5.03	103.95	113.62
26	f	101	BCR	C38-C26-C27	-5.03	103.95	113.62
24	b	617	CLA	O2D-CGD-CBD	5.03	120.20	111.27
24	b	617	CLA	C2C-C1C-NC	5.02	114.67	109.97
26	a	409	BCR	C30-C25-C26	-5.02	115.54	122.61
24	c	910	CLA	C3C-C4C-NC	5.02	116.20	110.57
24	b	614	CLA	C3C-C4C-NC	5.01	116.19	110.57
26	B	619	BCR	C40-C30-C25	5.01	118.42	110.30
24	A	614	CLA	C4A-NA-C1A	5.00	108.96	106.71
24	B	609	CLA	C4A-NA-C1A	5.00	108.95	106.71
26	Y	101	BCR	C35-C13-C14	-5.00	115.92	122.92
26	C	515	BCR	C36-C18-C19	-4.99	110.21	118.08
32	e	101	HEM	CBD-CAD-C3D	-4.98	103.30	112.48
26	B	618	BCR	C2-C1-C6	4.98	118.14	110.48
24	b	606	CLA	O2D-CGD-CBD	4.98	120.11	111.27
26	C	515	BCR	C38-C26-C27	-4.97	104.06	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	918	BCR	C37-C22-C21	-4.96	115.97	122.92
26	T	102	BCR	C39-C30-C25	4.96	118.34	110.30
26	f	101	BCR	C23-C24-C25	4.96	141.13	127.20
24	A	607	CLA	C1C-C2C-C3C	-4.95	101.75	106.96
26	C	515	BCR	C29-C30-C25	4.95	118.09	110.48
24	c	913	CLA	O2D-CGD-CBD	4.94	120.05	111.27
24	c	909	CLA	C3C-C4C-NC	4.93	116.10	110.57
24	B	602	CLA	C2C-C1C-NC	4.93	114.59	109.97
26	T	101	BCR	C33-C5-C4	-4.93	104.15	113.62
24	B	604	CLA	O2D-CGD-CBD	4.91	120.00	111.27
26	D	404	BCR	C7-C8-C9	4.91	133.65	126.23
26	h	101	BCR	C34-C9-C10	-4.91	116.05	122.92
26	B	620	BCR	C24-C23-C22	4.89	133.62	126.23
26	T	101	BCR	C38-C26-C27	-4.89	104.23	113.62
24	C	504	CLA	O2D-CGD-CBD	4.88	119.94	111.27
26	C	514	BCR	C2-C1-C6	4.88	117.99	110.48
26	C	515	BCR	C36-C18-C17	-4.88	116.09	122.92
26	D	404	BCR	C8-C7-C6	4.88	140.90	127.20
25	D	401	PHO	C3D-C2D-C1D	-4.88	98.77	105.87
26	f	101	BCR	C39-C30-C29	-4.87	89.41	108.91
24	a	408	CLA	C3C-C4C-NC	4.87	116.03	110.57
26	B	622	BCR	C36-C18-C19	-4.87	110.40	118.08
24	c	904	CLA	C2C-C1C-NC	4.87	114.53	109.97
26	Y	101	BCR	C4-C5-C6	4.86	129.79	122.73
24	C	512	CLA	C2C-C1C-NC	4.86	114.52	109.97
24	c	910	CLA	O2D-CGD-CBD	4.85	119.89	111.27
24	B	616	CLA	C3C-C4C-NC	4.84	116.00	110.57
24	B	609	CLA	O2D-CGD-CBD	4.84	119.86	111.27
27	a	410	PL9	C7-C3-C4	4.84	120.81	116.88
24	A	607	CLA	O2D-CGD-CBD	4.83	119.86	111.27
24	c	906	CLA	C2C-C1C-NC	4.82	114.49	109.97
24	c	905	CLA	O2D-CGD-CBD	4.82	119.83	111.27
26	D	404	BCR	C4-C5-C6	4.81	129.72	122.73
24	d	401	CLA	C3C-C4C-NC	4.80	115.95	110.57
26	c	918	BCR	C8-C7-C6	4.80	140.68	127.20
24	c	903	CLA	C3C-C4C-NC	4.80	115.95	110.57
24	A	614	CLA	C3C-C4C-NC	4.79	115.94	110.57
24	B	603	CLA	C2C-C1C-NC	4.78	114.45	109.97
26	k	101	BCR	C2-C1-C6	4.78	117.84	110.48
26	C	515	BCR	C38-C26-C25	4.76	129.88	124.53
24	d	403	CLA	C3C-C4C-NC	4.76	115.91	110.57
26	T	101	BCR	C23-C22-C21	4.76	126.25	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	d	401	CLA	C1C-C2C-C3C	-4.76	101.95	106.96
24	B	613	CLA	O2D-CGD-CBD	4.75	119.71	111.27
26	A	610	BCR	C36-C18-C19	-4.74	110.61	118.08
26	a	409	BCR	C36-C18-C19	-4.73	110.63	118.08
26	C	514	BCR	C27-C26-C25	4.72	129.58	122.73
28	A	612	SQD	O6-C1-C2	4.71	115.65	108.30
26	c	918	BCR	C33-C5-C4	-4.71	104.57	113.62
25	a	412	PHO	C3D-C2D-C1D	-4.70	99.02	105.87
24	b	603	CLA	C2C-C1C-NC	4.70	114.38	109.97
26	h	101	BCR	C38-C26-C27	-4.69	104.61	113.62
26	B	619	BCR	C27-C26-C25	4.69	129.54	122.73
24	C	509	CLA	O2D-CGD-CBD	4.69	119.59	111.27
24	B	604	CLA	C3C-C4C-NC	4.68	115.82	110.57
26	B	619	BCR	C33-C5-C4	-4.68	104.63	113.62
26	Y	101	BCR	C23-C24-C25	4.67	140.32	127.20
24	b	612	CLA	C3C-C4C-NC	4.67	115.80	110.57
26	f	101	BCR	C24-C23-C22	4.66	133.28	126.23
24	B	604	CLA	C1C-C2C-C3C	-4.66	102.06	106.96
26	K	101	BCR	C35-C13-C12	-4.65	110.75	118.08
24	C	506	CLA	C3C-C4C-NC	4.65	115.78	110.57
26	k	102	BCR	C8-C9-C10	4.64	126.07	118.94
24	c	914	CLA	C2C-C1C-NC	4.64	114.32	109.97
26	a	409	BCR	C35-C13-C12	-4.64	110.76	118.08
26	T	102	BCR	C23-C24-C25	4.64	140.24	127.20
24	c	906	CLA	O2D-CGD-CBD	4.64	119.51	111.27
24	c	902	CLA	C1C-C2C-C3C	-4.64	102.08	106.96
26	B	622	BCR	C23-C24-C25	4.63	140.21	127.20
24	B	613	CLA	C3C-C4C-NC	4.63	115.76	110.57
26	c	918	BCR	C24-C23-C22	4.63	133.22	126.23
24	B	615	CLA	O2D-CGD-CBD	4.62	119.48	111.27
26	k	102	BCR	C36-C18-C19	-4.62	110.79	118.08
26	C	514	BCR	C35-C13-C12	-4.62	110.80	118.08
26	B	619	BCR	C2-C1-C6	4.62	117.59	110.48
25	d	402	PHO	C3D-C2D-C1D	-4.62	99.15	105.87
26	b	619	BCR	C8-C7-C6	4.61	140.15	127.20
24	C	504	CLA	C1C-C2C-C3C	-4.61	102.11	106.96
26	D	404	BCR	C33-C5-C4	-4.60	104.77	113.62
24	A	606	CLA	C3C-C4C-NC	4.60	115.73	110.57
26	C	515	BCR	C35-C13-C14	-4.60	116.47	122.92
24	a	406	CLA	C3C-C4C-NC	4.60	115.73	110.57
24	c	908	CLA	O2D-CGD-CBD	4.60	119.43	111.27
28	l	101	SQD	O6-C1-C2	4.59	115.48	108.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	k	102	BCR	C39-C30-C25	4.59	117.75	110.30
24	B	605	CLA	C1C-C2C-C3C	-4.59	102.13	106.96
24	a	407	CLA	C1C-C2C-C3C	-4.59	102.13	106.96
24	C	513	CLA	C2C-C1C-NC	4.58	114.26	109.97
24	b	604	CLA	O2D-CGD-CBD	4.58	119.40	111.27
24	B	602	CLA	C4D-C3D-CAD	4.58	111.02	108.47
24	B	609	CLA	C3C-C4C-NC	4.57	115.70	110.57
24	C	508	CLA	O2D-CGD-CBD	4.57	119.38	111.27
26	T	102	BCR	C36-C18-C19	-4.57	110.88	118.08
26	T	102	BCR	C38-C26-C25	4.57	129.66	124.53
24	c	910	CLA	C4D-C3D-CAD	4.56	111.01	108.47
24	c	911	CLA	C4D-C3D-CAD	4.56	111.01	108.47
24	B	611	CLA	C3C-C4C-NC	4.56	115.68	110.57
24	b	608	CLA	C3C-C4C-NC	4.55	115.67	110.57
24	b	612	CLA	O2D-CGD-CBD	4.55	119.35	111.27
26	B	622	BCR	C2-C1-C6	4.55	117.48	110.48
24	B	610	CLA	O2D-CGD-CBD	4.55	119.35	111.27
24	C	502	CLA	C3C-C4C-NC	4.54	115.67	110.57
26	c	915	BCR	C35-C13-C14	-4.53	116.57	122.92
31	D	406	DGD	O2G-C1B-C2B	4.52	121.25	111.50
26	k	102	BCR	C24-C23-C22	4.52	133.07	126.23
24	b	604	CLA	C1C-C2C-C3C	-4.52	102.21	106.96
24	c	914	CLA	O2D-CGD-CBD	4.52	119.29	111.27
24	b	609	CLA	C3C-C4C-NC	4.52	115.64	110.57
26	k	101	BCR	C30-C25-C26	-4.51	116.27	122.61
24	d	403	CLA	C1C-C2C-C3C	-4.50	102.22	106.96
24	b	602	CLA	C2C-C1C-NC	4.50	114.19	109.97
26	B	620	BCR	C34-C9-C8	-4.49	111.00	118.08
24	b	616	CLA	C3C-C4C-NC	4.49	115.60	110.57
26	D	404	BCR	C35-C13-C12	-4.49	111.01	118.08
26	k	101	BCR	C1-C6-C5	-4.48	116.30	122.61
24	a	406	CLA	CAC-C3C-C4C	4.48	130.63	124.81
26	c	915	BCR	C2-C1-C6	4.48	117.38	110.48
24	C	511	CLA	C3C-C4C-NC	4.48	115.60	110.57
24	b	603	CLA	O2D-CGD-CBD	4.48	119.23	111.27
24	c	907	CLA	C3C-C4C-NC	4.47	115.59	110.57
26	a	409	BCR	C2-C1-C6	4.47	117.36	110.48
24	B	610	CLA	C3C-C4C-NC	4.47	115.58	110.57
26	B	618	BCR	C37-C22-C23	-4.46	111.04	118.08
24	C	505	CLA	O2D-CGD-CBD	4.46	119.19	111.27
24	a	408	CLA	O2D-CGD-CBD	4.45	119.18	111.27
26	h	101	BCR	C23-C24-C25	4.45	139.70	127.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	614	CLA	O2D-CGD-CBD	4.45	119.17	111.27
24	d	404	CLA	C1C-C2C-C3C	-4.44	102.28	106.96
24	C	503	CLA	C3C-C4C-NC	4.44	115.55	110.57
24	c	911	CLA	C3C-C4C-NC	4.44	115.55	110.57
26	H	101	BCR	C35-C13-C14	-4.44	116.71	122.92
26	T	101	BCR	C35-C13-C14	-4.43	116.71	122.92
24	C	501	CLA	O2D-CGD-O1D	-4.43	115.17	123.84
26	h	101	BCR	C33-C5-C4	-4.43	105.10	113.62
24	b	616	CLA	O2D-CGD-CBD	4.42	119.13	111.27
24	A	607	CLA	C3B-C4B-NB	4.42	114.92	109.21
26	c	918	BCR	C2-C1-C6	4.42	117.28	110.48
24	A	607	CLA	C3C-C4C-NC	4.42	115.52	110.57
24	b	611	CLA	C3C-C4C-NC	4.41	115.52	110.57
24	C	507	CLA	O2D-CGD-CBD	4.41	119.11	111.27
24	B	614	CLA	C3C-C4C-NC	4.41	115.52	110.57
24	a	406	CLA	C1C-C2C-C3C	-4.41	102.32	106.96
26	c	915	BCR	C40-C30-C25	4.40	117.44	110.30
24	C	509	CLA	C3C-C4C-NC	4.40	115.51	110.57
24	B	609	CLA	C1C-C2C-C3C	-4.40	102.33	106.96
26	D	404	BCR	C36-C18-C19	-4.40	111.15	118.08
26	B	620	BCR	C29-C30-C25	4.39	117.24	110.48
24	c	908	CLA	C3C-C4C-NC	4.39	115.49	110.57
24	b	607	CLA	O2D-CGD-CBD	4.38	119.06	111.27
26	C	514	BCR	C32-C1-C6	4.38	117.41	110.30
25	D	401	PHO	C4C-C3C-C2C	-4.38	101.94	106.78
26	B	620	BCR	C8-C7-C6	4.38	139.50	127.20
24	b	604	CLA	C3C-C4C-NC	4.38	115.48	110.57
26	b	619	BCR	C39-C30-C25	4.37	117.39	110.30
24	C	505	CLA	C3C-C4C-NC	4.37	115.47	110.57
26	Y	101	BCR	C1-C6-C5	-4.37	116.46	122.61
28	d	407	SQD	O47-C7-C8	4.36	120.90	111.50
26	C	514	BCR	C30-C25-C26	-4.36	116.47	122.61
28	A	612	SQD	O47-C7-C8	4.36	120.89	111.50
24	b	613	CLA	O2D-CGD-CBD	4.36	119.01	111.27
28	A	612	SQD	O9-S-C6	4.35	112.11	106.94
24	c	906	CLA	C3C-C4C-NC	4.35	115.45	110.57
26	c	915	BCR	C27-C26-C25	4.35	129.04	122.73
26	B	618	BCR	C30-C25-C26	-4.34	116.50	122.61
26	f	101	BCR	C34-C9-C10	-4.34	116.84	122.92
26	c	918	BCR	C36-C18-C17	-4.34	116.85	122.92
24	b	610	CLA	O2D-CGD-CBD	4.33	118.96	111.27
26	D	404	BCR	C23-C24-C25	4.33	139.35	127.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	D	404	BCR	C38-C26-C27	-4.32	105.31	113.62
24	C	509	CLA	C1C-C2C-C3C	-4.32	102.41	106.96
24	C	513	CLA	O2D-CGD-CBD	4.32	118.94	111.27
24	c	912	CLA	C3C-C4C-NC	4.32	115.41	110.57
24	c	908	CLA	C1C-C2C-C3C	-4.31	102.42	106.96
24	A	609	CLA	C1C-C2C-C3C	-4.31	102.42	106.96
26	h	101	BCR	C30-C25-C26	-4.31	116.54	122.61
24	c	907	CLA	C4D-C3D-CAD	4.31	110.87	108.47
31	C	516	DGD	O2G-C1B-C2B	4.30	120.77	111.50
24	B	609	CLA	C3B-C4B-NB	4.30	114.77	109.21
31	d	406	DGD	O2G-C1B-C2B	4.30	120.77	111.50
24	C	508	CLA	C3C-C4C-NC	4.30	115.39	110.57
24	b	610	CLA	C3C-C4C-NC	4.30	115.39	110.57
28	a	411	SQD	O9-S-C6	4.30	112.05	106.94
26	b	618	BCR	C23-C24-C25	4.28	139.23	127.20
24	c	902	CLA	O2D-CGD-CBD	4.28	118.87	111.27
24	c	904	CLA	C3C-C4C-NC	4.27	115.36	110.57
25	A	608	PHO	C2D-C1D-ND	4.27	116.23	109.79
26	B	619	BCR	C8-C7-C6	4.27	139.19	127.20
24	B	608	CLA	C1C-C2C-C3C	-4.27	102.47	106.96
26	a	409	BCR	C8-C7-C6	4.26	139.16	127.20
24	B	603	CLA	C3C-C4C-NC	4.26	115.35	110.57
26	H	101	BCR	C28-C27-C26	4.26	121.68	114.08
24	C	509	CLA	C4D-C3D-CAD	4.26	110.84	108.47
24	B	607	CLA	C3C-C4C-NC	4.26	115.34	110.57
26	k	102	BCR	C2-C1-C6	4.25	117.02	110.48
24	b	615	CLA	C1C-C2C-C3C	-4.25	102.49	106.96
24	c	905	CLA	C3C-C4C-NC	4.25	115.34	110.57
24	B	612	CLA	O2D-CGD-CBD	4.24	118.81	111.27
26	B	620	BCR	C2-C1-C6	4.24	117.01	110.48
26	b	619	BCR	C24-C23-C22	4.24	132.64	126.23
24	B	614	CLA	C1C-C2C-C3C	-4.24	102.50	106.96
24	b	615	CLA	C3C-C4C-NC	4.24	115.33	110.57
24	C	510	CLA	C3C-C4C-NC	4.23	115.32	110.57
26	h	101	BCR	C28-C27-C26	4.23	121.63	114.08
24	B	607	CLA	O2D-CGD-O1D	-4.23	115.57	123.84
26	b	619	BCR	C35-C13-C14	-4.23	117.00	122.92
26	Y	101	BCR	C38-C26-C27	-4.23	105.50	113.62
25	A	608	PHO	O2D-CGD-CBD	4.22	118.77	111.27
26	k	102	BCR	C35-C13-C14	-4.21	117.02	122.92
24	C	512	CLA	C3C-C4C-NC	4.21	115.30	110.57
28	L	101	SQD	O6-C1-C2	4.21	114.88	108.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	606	CLA	C4-C3-C5	4.21	122.35	115.27
24	B	604	CLA	C3B-C4B-NB	4.20	114.64	109.21
26	c	915	BCR	C30-C25-C26	-4.20	116.70	122.61
26	C	514	BCR	C23-C22-C21	4.20	125.38	118.94
26	B	620	BCR	C30-C25-C26	-4.19	116.71	122.61
24	B	608	CLA	C3B-C4B-NB	4.19	114.63	109.21
24	C	501	CLA	C1C-C2C-C3C	-4.18	102.56	106.96
26	b	619	BCR	C8-C9-C10	4.18	125.36	118.94
24	A	609	CLA	C3C-C4C-NC	4.18	115.26	110.57
26	B	618	BCR	C29-C30-C25	4.18	116.91	110.48
24	C	511	CLA	O2D-CGD-CBD	4.17	118.69	111.27
28	d	407	SQD	O6-C1-C2	4.17	114.81	108.30
26	C	514	BCR	C36-C18-C19	-4.17	111.51	118.08
26	B	620	BCR	C35-C13-C14	-4.17	117.09	122.92
26	B	618	BCR	C35-C13-C14	-4.16	117.09	122.92
26	h	101	BCR	C35-C13-C12	-4.16	111.52	118.08
26	B	619	BCR	C33-C5-C6	4.16	129.20	124.53
26	C	515	BCR	C33-C5-C4	-4.15	105.64	113.62
26	b	619	BCR	C23-C24-C25	4.15	138.86	127.20
28	F	101	SQD	O6-C1-C2	4.15	114.78	108.30
26	c	918	BCR	C23-C24-C25	4.15	138.85	127.20
24	b	602	CLA	C3C-C4C-NC	4.15	115.22	110.57
24	A	609	CLA	O2D-CGD-CBD	4.14	118.62	111.27
26	a	409	BCR	C29-C30-C25	4.14	116.85	110.48
24	C	513	CLA	C3C-C4C-NC	4.13	115.21	110.57
25	D	401	PHO	CAC-C3C-C4C	4.13	129.73	125.22
26	k	101	BCR	C40-C30-C25	4.13	116.99	110.30
24	C	507	CLA	C1C-C2C-C3C	-4.12	102.62	106.96
26	B	620	BCR	C23-C24-C25	4.12	138.78	127.20
24	B	615	CLA	C3C-C4C-NC	4.12	115.19	110.57
26	C	514	BCR	C23-C24-C25	4.11	138.74	127.20
26	a	409	BCR	C23-C24-C25	4.10	138.73	127.20
25	A	608	PHO	C4C-C3C-C2C	-4.10	102.24	106.78
24	c	912	CLA	O2D-CGD-CBD	4.10	118.55	111.27
26	B	618	BCR	C38-C26-C25	4.10	129.13	124.53
26	B	620	BCR	C33-C5-C6	4.08	129.11	124.53
24	a	407	CLA	O2D-CGD-CBD	4.08	118.52	111.27
24	c	913	CLA	C3C-C4C-NC	4.08	115.15	110.57
25	A	608	PHO	C2C-C1C-NC	4.08	115.94	109.79
26	T	102	BCR	C29-C30-C25	4.08	116.76	110.48
26	b	619	BCR	C39-C30-C29	-4.08	92.59	108.91
26	k	101	BCR	C38-C26-C25	4.08	129.11	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	603	CLA	C3C-C4C-NC	4.08	115.14	110.57
26	C	515	BCR	C8-C9-C10	4.07	125.19	118.94
26	h	101	BCR	C4-C5-C6	4.07	128.65	122.73
26	B	619	BCR	C35-C13-C12	-4.07	111.66	118.08
24	B	602	CLA	C3C-C4C-NC	4.07	115.14	110.57
24	C	502	CLA	O2D-CGD-CBD	4.07	118.50	111.27
24	c	905	CLA	C1C-C2C-C3C	-4.07	102.68	106.96
28	a	411	SQD	O47-C7-C8	4.07	120.27	111.50
26	T	101	BCR	C8-C9-C10	4.06	125.18	118.94
26	H	101	BCR	C8-C7-C6	4.06	138.61	127.20
26	T	101	BCR	C30-C25-C26	-4.06	116.90	122.61
26	T	102	BCR	C8-C7-C6	4.06	138.59	127.20
26	k	102	BCR	C23-C24-C25	4.05	138.59	127.20
26	b	618	BCR	C33-C5-C6	4.05	129.07	124.53
24	b	609	CLA	C1C-C2C-C3C	-4.04	102.71	106.96
24	b	605	CLA	O2D-CGD-CBD	4.03	118.44	111.27
26	H	101	BCR	C38-C26-C27	-4.03	105.87	113.62
26	H	101	BCR	C36-C18-C17	-4.03	117.27	122.92
24	c	911	CLA	O2D-CGD-CBD	4.03	118.43	111.27
25	D	401	PHO	O2D-CGD-CBD	4.03	118.43	111.27
24	d	403	CLA	C3B-C4B-NB	4.03	114.42	109.21
24	a	408	CLA	C1C-C2C-C3C	-4.02	102.73	106.96
25	a	412	PHO	C4C-C3C-C2C	-4.02	102.33	106.78
26	T	102	BCR	C37-C22-C23	-4.02	111.75	118.08
24	b	607	CLA	C1C-C2C-C3C	-4.02	102.73	106.96
24	c	911	CLA	C1C-C2C-C3C	-4.01	102.74	106.96
26	T	101	BCR	C27-C26-C25	4.01	128.55	122.73
24	D	403	CLA	C3C-C4C-NC	4.00	115.06	110.57
24	c	914	CLA	C4D-C3D-CAD	4.00	110.70	108.47
26	c	915	BCR	C29-C30-C25	4.00	116.64	110.48
24	C	503	CLA	C1C-C2C-C3C	-4.00	102.75	106.96
24	c	913	CLA	C1C-C2C-C3C	-3.99	102.76	106.96
24	c	902	CLA	C3C-C4C-NC	3.99	115.05	110.57
26	T	102	BCR	C2-C1-C6	3.99	116.62	110.48
24	D	403	CLA	C1C-C2C-C3C	-3.98	102.77	106.96
25	A	608	PHO	C3C-C4C-NC	3.98	116.45	110.28
24	b	602	CLA	C4D-C3D-CAD	3.98	110.69	108.47
24	b	604	CLA	C4-C3-C5	3.98	121.97	115.27
24	b	615	CLA	C3B-C4B-NB	3.98	114.36	109.21
24	b	607	CLA	C3C-C4C-NC	3.98	115.03	110.57
26	A	610	BCR	C23-C24-C25	3.97	138.35	127.20
24	b	605	CLA	C1C-C2C-C3C	-3.96	102.79	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	507	CLA	C3C-C4C-NC	3.96	115.01	110.57
29	A	615	LHG	O7-C7-C8	3.96	120.04	111.50
24	B	602	CLA	C1C-C2C-C3C	-3.96	102.80	106.96
26	k	102	BCR	C32-C1-C6	3.95	116.71	110.30
24	C	513	CLA	C4D-C3D-CAD	3.95	110.67	108.47
26	h	101	BCR	C1-C6-C5	-3.95	117.05	122.61
24	B	603	CLA	O2D-CGD-CBD	3.95	118.28	111.27
28	L	101	SQD	O47-C7-C8	3.95	120.01	111.50
24	B	617	CLA	O2D-CGD-CBD	3.94	118.27	111.27
26	c	915	BCR	C31-C1-C6	3.93	116.68	110.30
24	B	607	CLA	C1C-C2C-C3C	-3.93	102.82	106.96
26	c	918	BCR	C29-C30-C25	3.93	116.54	110.48
26	B	620	BCR	C37-C22-C21	-3.93	117.42	122.92
26	f	101	BCR	C35-C13-C14	-3.93	117.42	122.92
26	K	101	BCR	C38-C26-C27	-3.93	106.07	113.62
26	f	101	BCR	C32-C1-C2	-3.92	93.21	108.91
24	C	510	CLA	C1C-C2C-C3C	-3.92	102.83	106.96
26	T	102	BCR	C35-C13-C12	-3.92	111.90	118.08
26	K	101	BCR	C30-C25-C26	-3.92	117.09	122.61
24	a	406	CLA	C3B-C4B-NB	3.92	114.28	109.21
24	B	606	CLA	C4-C3-C5	3.92	121.86	115.27
26	k	102	BCR	C35-C13-C12	-3.92	111.91	118.08
26	B	622	BCR	C35-C13-C14	-3.91	117.44	122.92
26	b	619	BCR	C32-C1-C6	3.91	116.64	110.30
26	C	515	BCR	C31-C1-C2	-3.91	93.28	108.91
24	C	506	CLA	C1C-C2C-C3C	-3.90	102.86	106.96
24	c	914	CLA	C3C-C4C-NC	3.90	114.94	110.57
24	c	910	CLA	C1C-C2C-C3C	-3.89	102.86	106.96
24	c	907	CLA	O2D-CGD-CBD	3.89	118.18	111.27
24	b	606	CLA	C1C-C2C-C3C	-3.89	102.87	106.96
24	C	510	CLA	C3B-C4B-NB	3.89	114.23	109.21
24	C	501	CLA	C3C-C4C-NC	3.88	114.93	110.57
26	B	618	BCR	C23-C24-C25	3.88	138.11	127.20
24	B	610	CLA	C1C-C2C-C3C	-3.88	102.88	106.96
24	b	608	CLA	O2D-CGD-CBD	3.88	118.15	111.27
25	d	402	PHO	C2C-C1C-NC	3.87	115.64	109.79
26	T	102	BCR	C39-C30-C29	-3.87	93.41	108.91
24	A	606	CLA	C3B-C4B-NB	3.87	114.22	109.21
24	C	508	CLA	C1C-C2C-C3C	-3.87	102.89	106.96
26	C	514	BCR	C32-C1-C2	-3.87	93.44	108.91
26	B	619	BCR	C40-C30-C29	-3.87	93.44	108.91
24	d	404	CLA	O2D-CGD-CBD	3.87	118.14	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	611	CLA	O2D-CGD-CBD	3.87	118.14	111.27
24	b	614	CLA	C1C-C2C-C3C	-3.86	102.90	106.96
24	C	511	CLA	C1C-C2C-C3C	-3.86	102.90	106.96
24	A	606	CLA	CMB-C2B-C3B	3.85	131.89	124.68
26	b	618	BCR	C4-C5-C6	3.85	128.32	122.73
26	D	404	BCR	C37-C22-C21	-3.84	117.54	122.92
24	C	503	CLA	O2D-CGD-CBD	3.84	118.09	111.27
24	B	608	CLA	C3C-C4C-NC	3.84	114.88	110.57
24	C	513	CLA	C1C-C2C-C3C	-3.83	102.93	106.96
26	c	915	BCR	C1-C6-C5	-3.83	117.22	122.61
26	f	101	BCR	C38-C26-C25	3.83	128.83	124.53
26	a	409	BCR	C34-C9-C8	-3.83	112.05	118.08
24	B	606	CLA	O2D-CGD-CBD	3.83	118.06	111.27
26	C	515	BCR	C2-C1-C6	3.82	116.37	110.48
28	L	101	SQD	O7-S-C6	3.82	111.48	106.94
24	b	603	CLA	CMB-C2B-C3B	3.82	131.82	124.68
26	c	918	BCR	C23-C22-C21	3.82	124.80	118.94
24	b	616	CLA	C1C-C2C-C3C	-3.82	102.94	106.96
24	d	404	CLA	C3B-C4B-NB	3.81	114.14	109.21
24	c	914	CLA	C1C-C2C-C3C	-3.81	102.95	106.96
28	L	101	SQD	C3-C4-C5	3.80	117.02	110.24
25	A	608	PHO	C4A-NA-C1A	3.80	111.21	108.14
24	a	408	CLA	C3B-C4B-NB	3.79	114.12	109.21
24	b	613	CLA	CAC-C3C-C4C	3.79	129.73	124.81
24	c	905	CLA	C4D-C3D-CAD	3.79	110.58	108.47
26	b	618	BCR	C8-C7-C6	3.79	137.83	127.20
24	C	510	CLA	O2D-CGD-CBD	3.78	117.99	111.27
24	B	615	CLA	C1C-C2C-C3C	-3.78	102.98	106.96
26	h	101	BCR	C32-C1-C6	3.78	116.43	110.30
24	b	614	CLA	C3B-C4B-NB	3.78	114.09	109.21
24	b	611	CLA	C4D-C3D-CAD	3.77	110.58	108.47
29	b	620	LHG	O7-C7-C8	3.77	119.63	111.50
25	D	401	PHO	C2D-C1D-ND	3.77	115.48	109.79
26	B	622	BCR	C31-C1-C6	3.77	116.42	110.30
26	B	618	BCR	C8-C7-C6	3.76	137.78	127.20
24	b	613	CLA	C4C-C3C-C2C	-3.76	101.41	106.90
26	c	915	BCR	C33-C5-C4	-3.76	106.39	113.62
24	B	607	CLA	O2D-CGD-CBD	3.76	117.95	111.27
24	c	907	CLA	C1C-C2C-C3C	-3.76	103.01	106.96
26	b	619	BCR	C30-C25-C26	-3.76	117.32	122.61
26	c	915	BCR	C8-C7-C6	3.76	137.75	127.20
24	A	606	CLA	C1C-C2C-C3C	-3.75	103.01	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	c	915	BCR	C34-C9-C8	-3.75	112.17	118.08
24	B	616	CLA	C1C-C2C-C3C	-3.75	103.02	106.96
27	D	405	PL9	C40-C39-C41	3.74	121.57	115.27
24	b	603	CLA	C1C-C2C-C3C	-3.74	103.02	106.96
24	A	614	CLA	C3B-C4B-NB	3.74	114.05	109.21
26	h	101	BCR	C38-C26-C25	3.74	128.73	124.53
26	k	101	BCR	C34-C9-C8	-3.73	112.19	118.08
24	A	609	CLA	C3B-C4B-NB	3.73	114.03	109.21
28	F	101	SQD	O47-C7-C8	3.73	119.54	111.50
24	b	604	CLA	O2D-CGD-O1D	-3.73	116.55	123.84
27	d	405	PL9	C40-C39-C41	3.72	121.53	115.27
31	C	517	DGD	O2G-C1B-C2B	3.72	119.51	111.50
25	a	412	PHO	C2D-C1D-ND	3.72	115.40	109.79
24	b	607	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
24	c	902	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
28	l	101	SQD	O7-S-C6	3.71	111.34	106.94
26	h	101	BCR	C39-C30-C29	-3.71	94.08	108.91
25	d	402	PHO	C2D-C1D-ND	3.71	115.38	109.79
25	d	402	PHO	C4C-C3C-C2C	-3.70	102.68	106.78
26	B	622	BCR	C40-C30-C25	3.70	116.31	110.30
24	b	610	CLA	C1C-C2C-C3C	-3.70	103.06	106.96
25	D	401	PHO	C2B-C1B-NB	3.70	115.38	109.79
24	c	904	CLA	C1C-C2C-C3C	-3.69	103.07	106.96
26	h	101	BCR	C29-C30-C25	3.69	116.17	110.48
26	H	101	BCR	C24-C23-C22	3.69	131.81	126.23
28	l	101	SQD	O47-C7-C8	3.69	119.45	111.50
26	K	101	BCR	C32-C1-C6	3.69	116.28	110.30
26	C	515	BCR	C33-C5-C6	3.69	128.67	124.53
26	K	101	BCR	C33-C5-C4	-3.69	106.53	113.62
26	D	404	BCR	C35-C13-C14	-3.69	117.76	122.92
24	c	913	CLA	C4D-C3D-CAD	3.69	110.53	108.47
26	h	101	BCR	C35-C13-C14	-3.68	117.76	122.92
24	d	401	CLA	C3B-C4B-NB	3.68	113.97	109.21
24	b	617	CLA	CMB-C2B-C3B	3.68	131.56	124.68
26	f	101	BCR	C2-C1-C6	3.68	116.14	110.48
26	C	514	BCR	C37-C22-C21	-3.68	117.77	122.92
25	D	401	PHO	C3C-C4C-NC	3.67	115.97	110.28
24	c	912	CLA	C1C-C2C-C3C	-3.66	103.10	106.96
24	c	909	CLA	O2D-CGD-CBD	3.66	117.78	111.27
24	b	611	CLA	C1C-C2C-C3C	-3.66	103.11	106.96
24	b	609	CLA	C3B-C4B-NB	3.66	113.94	109.21
24	b	602	CLA	C1C-C2C-C3C	-3.66	103.11	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	612	CLA	C1C-C2C-C3C	-3.65	103.11	106.96
25	d	402	PHO	C3C-C4C-NC	3.65	115.94	110.28
28	a	402	SQD	O47-C7-C8	3.65	119.37	111.50
24	C	504	CLA	C3B-C4B-NB	3.65	113.93	109.21
24	B	605	CLA	C3B-C4B-NB	3.65	113.93	109.21
24	C	512	CLA	C1C-C2C-C3C	-3.65	103.12	106.96
26	B	618	BCR	C27-C26-C25	3.65	128.03	122.73
24	B	611	CLA	O2D-CGD-CBD	3.65	117.75	111.27
24	b	604	CLA	C3B-C4B-NB	3.64	113.92	109.21
24	c	909	CLA	C4C-C3C-C2C	-3.64	101.59	106.90
24	b	612	CLA	C1C-C2C-C3C	-3.64	103.13	106.96
24	C	505	CLA	C1C-C2C-C3C	-3.63	103.14	106.96
26	c	915	BCR	C36-C18-C19	-3.63	112.36	118.08
24	a	407	CLA	C3B-C4B-NB	3.63	113.90	109.21
27	A	611	PL9	C20-C19-C21	3.63	121.37	115.27
24	c	903	CLA	C3B-C4B-NB	3.62	113.90	109.21
24	b	605	CLA	CAC-C3C-C4C	3.62	129.51	124.81
26	c	915	BCR	C38-C26-C27	-3.62	106.66	113.62
24	c	902	CLA	C3B-C4B-NB	3.62	113.89	109.21
26	K	101	BCR	C2-C1-C6	3.62	116.05	110.48
24	b	615	CLA	C4D-C3D-CAD	3.62	110.49	108.47
26	Y	101	BCR	C27-C26-C25	3.62	127.98	122.73
24	B	603	CLA	C1C-C2C-C3C	-3.61	103.16	106.96
24	C	502	CLA	C1C-C2C-C3C	-3.61	103.16	106.96
24	D	402	CLA	C3B-C4B-NB	3.60	113.87	109.21
26	k	102	BCR	C27-C26-C25	3.60	127.96	122.73
24	c	910	CLA	C3B-C4B-NB	3.60	113.86	109.21
26	b	619	BCR	C2-C1-C6	3.60	116.02	110.48
24	C	509	CLA	C3B-C4B-NB	3.60	113.86	109.21
24	B	607	CLA	C4D-C3D-CAD	3.59	110.47	108.47
26	h	101	BCR	C2-C1-C6	3.59	116.01	110.48
24	B	605	CLA	O2D-CGD-CBD	3.59	117.65	111.27
24	C	511	CLA	C3B-C4B-NB	3.59	113.85	109.21
26	A	610	BCR	C35-C13-C12	-3.58	112.44	118.08
24	c	909	CLA	C1C-C2C-C3C	-3.58	103.19	106.96
26	f	101	BCR	C31-C1-C6	3.58	116.10	110.30
24	A	609	CLA	C4-C3-C5	3.57	121.28	115.27
24	C	503	CLA	CMB-C2B-C3B	3.57	131.36	124.68
24	A	607	CLA	CMB-C2B-C3B	3.57	131.36	124.68
24	D	403	CLA	C3B-C4B-NB	3.57	113.83	109.21
24	B	611	CLA	C1C-C2C-C3C	-3.57	103.20	106.96
26	b	619	BCR	C35-C13-C12	-3.57	112.46	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	508	CLA	C3B-C4B-NB	3.57	113.82	109.21
24	B	613	CLA	CAC-C3C-C4C	3.57	129.44	124.81
24	c	912	CLA	C4D-C3D-CAD	3.57	110.46	108.47
24	c	908	CLA	O2D-CGD-O1D	-3.56	116.88	123.84
26	h	101	BCR	C36-C18-C19	-3.55	112.48	118.08
24	b	617	CLA	C4C-C3C-C2C	-3.54	101.73	106.90
26	T	102	BCR	C4-C5-C6	3.54	127.87	122.73
24	D	402	CLA	C1C-C2C-C3C	-3.54	103.24	106.96
24	B	610	CLA	C3B-C4B-NB	3.54	113.78	109.21
24	B	617	CLA	C4C-C3C-C2C	-3.54	101.75	106.90
24	c	911	CLA	C3B-C4B-NB	3.52	113.77	109.21
24	b	608	CLA	C3B-C4B-NB	3.52	113.76	109.21
26	H	101	BCR	C23-C24-C25	3.52	137.09	127.20
24	b	608	CLA	C1C-C2C-C3C	-3.52	103.25	106.96
24	B	615	CLA	C3B-C4B-NB	3.52	113.76	109.21
26	k	102	BCR	C40-C30-C25	3.51	115.99	110.30
26	B	619	BCR	C37-C22-C23	-3.51	112.55	118.08
24	B	606	CLA	C1C-C2C-C3C	-3.51	103.27	106.96
24	C	511	CLA	C4D-C3D-CAD	3.51	110.43	108.47
26	A	610	BCR	C33-C5-C4	-3.51	106.88	113.62
26	T	102	BCR	C30-C25-C26	-3.50	117.68	122.61
26	T	102	BCR	C37-C22-C21	-3.50	118.02	122.92
24	c	902	CLA	C4D-C3D-CAD	3.50	110.42	108.47
26	D	404	BCR	C1-C6-C5	-3.50	117.69	122.61
24	B	604	CLA	O2D-CGD-O1D	-3.49	117.00	123.84
24	B	614	CLA	C3B-C4B-NB	3.49	113.72	109.21
26	K	101	BCR	C24-C23-C22	3.49	131.51	126.23
24	b	612	CLA	C3B-C4B-NB	3.49	113.72	109.21
24	c	903	CLA	C1C-C2C-C3C	-3.48	103.29	106.96
24	c	909	CLA	C3B-C4B-NB	3.48	113.71	109.21
25	d	402	PHO	C4A-NA-C1A	3.48	110.95	108.14
28	A	613	SQD	O9-S-C6	3.47	111.07	106.94
26	D	404	BCR	C27-C26-C25	3.47	127.78	122.73
26	a	409	BCR	C33-C5-C4	-3.47	106.94	113.62
24	B	605	CLA	CED-O2D-CGD	3.46	123.76	115.94
24	B	616	CLA	C3B-C4B-NB	3.46	113.68	109.21
26	k	101	BCR	C27-C26-C25	3.46	127.75	122.73
24	B	611	CLA	C3B-C4B-NB	3.45	113.68	109.21
25	a	412	PHO	O2D-CGD-O1D	-3.45	117.09	123.84
26	B	620	BCR	C36-C18-C19	-3.44	112.65	118.08
28	a	402	SQD	O9-S-C6	3.44	111.03	106.94
26	B	620	BCR	C27-C26-C25	3.44	127.72	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	D	404	BCR	C32-C1-C2	-3.43	95.17	108.91
24	b	609	CLA	CMB-C2B-C3B	3.43	131.10	124.68
24	B	612	CLA	C3B-C4B-NB	3.43	113.65	109.21
24	b	605	CLA	C3B-C4B-NB	3.43	113.65	109.21
24	c	904	CLA	O2D-CGD-CBD	3.43	117.36	111.27
24	b	608	CLA	C4-C3-C5	3.43	121.04	115.27
24	B	606	CLA	C4C-C3C-C2C	-3.43	101.90	106.90
26	B	620	BCR	C4-C5-C6	3.43	127.71	122.73
25	A	608	PHO	C2B-C1B-NB	3.43	114.96	109.79
24	D	402	CLA	CMB-C2B-C3B	3.42	131.08	124.68
24	b	615	CLA	C4-C3-C5	3.42	121.02	115.27
24	c	905	CLA	C3B-C4B-NB	3.42	113.63	109.21
24	c	907	CLA	C3B-C4B-NB	3.41	113.62	109.21
24	B	615	CLA	C4-C3-C5	3.41	121.00	115.27
24	d	403	CLA	C4-C3-C5	3.41	121.00	115.27
24	b	613	CLA	C3B-C4B-NB	3.40	113.61	109.21
24	C	504	CLA	C3C-C4C-NC	3.40	114.38	110.57
26	f	101	BCR	C33-C5-C4	-3.40	107.09	113.62
26	T	102	BCR	C1-C6-C5	-3.40	117.83	122.61
24	c	905	CLA	C4-C3-C5	3.39	120.98	115.27
24	c	906	CLA	C1C-C2C-C3C	-3.39	103.39	106.96
26	a	409	BCR	C38-C26-C27	-3.39	107.10	113.62
25	a	412	PHO	C4A-NA-C1A	3.39	110.88	108.14
28	A	613	SQD	O47-C7-C8	3.39	118.80	111.50
24	C	502	CLA	CAC-C3C-C4C	3.38	129.20	124.81
25	D	401	PHO	C4A-NA-C1A	3.38	110.87	108.14
24	d	401	CLA	O2D-CGD-CBD	3.38	117.27	111.27
26	A	610	BCR	C34-C9-C8	-3.38	112.75	118.08
26	c	918	BCR	C12-C13-C14	3.38	124.12	118.94
24	D	402	CLA	C4C-C3C-C2C	-3.37	101.98	106.90
26	c	918	BCR	C33-C5-C6	3.37	128.31	124.53
24	d	404	CLA	C3C-C4C-NC	3.36	114.34	110.57
26	Y	101	BCR	C2-C1-C6	3.36	115.66	110.48
24	B	615	CLA	O2D-CGD-O1D	-3.36	117.28	123.84
26	C	515	BCR	C40-C30-C25	3.36	115.74	110.30
24	B	617	CLA	CAC-C3C-C4C	3.35	129.16	124.81
26	T	102	BCR	C27-C26-C25	3.35	127.59	122.73
24	b	606	CLA	CAC-C3C-C4C	3.35	129.15	124.81
28	A	612	SQD	O8-S-C6	3.35	111.07	105.74
29	d	410	LHG	O7-C7-C8	3.35	118.71	111.50
26	B	622	BCR	C35-C13-C12	-3.34	112.81	118.08
26	H	101	BCR	C27-C26-C25	3.34	127.58	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	604	CLA	C4D-C3D-CAD	3.33	110.33	108.47
24	b	610	CLA	CAC-C3C-C4C	3.33	129.13	124.81
29	D	407	LHG	O8-C23-C24	3.33	122.34	111.91
24	b	614	CLA	O2D-CGD-CBD	3.33	117.18	111.27
24	b	616	CLA	C3B-C4B-NB	3.32	113.51	109.21
24	b	606	CLA	CMC-C2C-C1C	3.31	130.09	125.04
24	A	614	CLA	CBC-CAC-C3C	-3.31	103.30	112.43
28	a	411	SQD	C1-C2-C3	-3.31	103.10	110.00
26	B	620	BCR	C35-C13-C12	-3.31	112.86	118.08
24	B	604	CLA	CMC-C2C-C1C	3.31	130.08	125.04
24	B	611	CLA	C4C-C3C-C2C	-3.31	102.08	106.90
26	c	915	BCR	C35-C13-C12	-3.31	112.87	118.08
24	A	607	CLA	CAC-C3C-C4C	3.31	129.10	124.81
24	B	613	CLA	C1C-C2C-C3C	-3.31	103.48	106.96
25	A	608	PHO	C4D-ND-C1D	-3.31	100.82	106.76
26	c	915	BCR	C33-C5-C6	3.30	128.24	124.53
26	k	101	BCR	C8-C9-C10	3.30	124.00	118.94
28	A	612	SQD	C1-C2-C3	-3.29	103.14	110.00
26	k	101	BCR	C23-C24-C25	3.29	136.45	127.20
24	b	602	CLA	O2A-CGA-CBA	3.29	122.24	111.91
24	b	605	CLA	C4C-C3C-C2C	-3.29	102.10	106.90
24	B	617	CLA	C3B-C4B-NB	3.29	113.46	109.21
25	d	402	PHO	C2B-C1B-NB	3.29	114.75	109.79
32	v	202	HEM	C1D-C2D-C3D	-3.28	104.71	107.00
24	b	617	CLA	C3B-C4B-NB	3.28	113.45	109.21
24	C	505	CLA	C4D-C3D-CAD	3.28	110.30	108.47
29	a	413	LHG	O7-C7-C8	3.28	118.57	111.50
24	D	402	CLA	O2D-CGD-O1D	-3.28	117.43	123.84
26	k	101	BCR	C4-C5-C6	3.27	127.48	122.73
24	d	403	CLA	O2D-CGD-O1D	-3.27	117.44	123.84
28	d	407	SQD	O9-S-C6	3.27	110.83	106.94
24	C	512	CLA	C4-C3-C5	3.27	120.77	115.27
24	C	512	CLA	C4D-C3D-CAD	3.27	110.29	108.47
26	b	618	BCR	C1-C6-C5	-3.27	118.01	122.61
24	b	615	CLA	C1-C2-C3	-3.26	120.40	126.04
26	K	101	BCR	C31-C1-C6	3.26	115.59	110.30
24	C	506	CLA	C4D-C3D-CAD	3.26	110.29	108.47
26	k	101	BCR	C35-C13-C12	-3.26	112.94	118.08
24	b	615	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
24	c	910	CLA	C4C-C3C-C2C	-3.26	102.15	106.90
24	b	604	CLA	CMB-C2B-C3B	3.26	130.77	124.68
24	C	511	CLA	C1-O2A-CGA	3.26	124.99	116.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	605	CLA	C4D-C3D-CAD	3.25	110.28	108.47
24	c	903	CLA	C4C-C3C-C2C	-3.25	102.16	106.90
24	B	613	CLA	C4-C3-C5	3.25	120.73	115.27
25	a	412	PHO	C3C-C4C-NC	3.25	115.31	110.28
26	b	619	BCR	C34-C9-C8	-3.24	112.98	118.08
24	C	508	CLA	C4C-C3C-C2C	-3.24	102.18	106.90
24	B	616	CLA	C4C-C3C-C2C	-3.24	102.18	106.90
24	C	502	CLA	C3B-C4B-NB	3.24	113.39	109.21
24	b	617	CLA	CAC-C3C-C4C	3.23	129.01	124.81
32	V	202	HEM	C1D-C2D-C3D	-3.23	104.75	107.00
24	B	610	CLA	CAC-C3C-C4C	3.23	129.00	124.81
24	D	403	CLA	O2D-CGD-CBD	3.23	117.00	111.27
28	F	101	SQD	O7-S-C6	3.22	110.77	106.94
24	B	613	CLA	CMB-C2B-C3B	3.22	130.70	124.68
26	B	618	BCR	C32-C1-C6	3.22	115.51	110.30
24	b	616	CLA	CMB-C2B-C3B	3.21	130.69	124.68
26	A	610	BCR	C30-C25-C24	3.21	124.87	115.78
24	c	906	CLA	CMB-C2B-C3B	3.21	130.69	124.68
26	B	619	BCR	C34-C9-C8	-3.21	113.02	118.08
24	B	609	CLA	CMB-C2B-C3B	3.21	130.69	124.68
25	a	412	PHO	C2B-C1B-NB	3.21	114.63	109.79
24	c	914	CLA	CMB-C2B-C3B	3.20	130.67	124.68
25	D	401	PHO	C4-C3-C5	3.20	120.66	115.27
25	D	401	PHO	C2C-C1C-NC	3.20	114.61	109.79
24	B	608	CLA	CED-O2D-CGD	3.20	123.17	115.94
24	C	507	CLA	C4D-C3D-CAD	3.19	110.25	108.47
24	b	614	CLA	C4C-C3C-C2C	-3.19	102.24	106.90
24	c	912	CLA	C3B-C4B-NB	3.19	113.34	109.21
24	B	612	CLA	C4C-C3C-C2C	-3.19	102.25	106.90
26	B	619	BCR	C34-C9-C10	-3.19	118.46	122.92
24	a	406	CLA	C4D-C3D-CAD	3.19	110.25	108.47
26	c	915	BCR	C31-C1-C2	-3.19	96.15	108.91
31	h	102	DGD	O2G-C1B-C2B	3.18	118.36	111.50
24	B	607	CLA	C3B-C4B-NB	3.18	113.32	109.21
26	B	619	BCR	C38-C26-C25	3.18	128.10	124.53
24	D	402	CLA	O2D-CGD-CBD	3.18	116.92	111.27
24	B	603	CLA	C4-C3-C5	3.18	120.61	115.27
24	b	611	CLA	C4C-C3C-C2C	-3.17	102.27	106.90
24	B	613	CLA	C4C-C3C-C2C	-3.17	102.28	106.90
31	C	518	DGD	O3G-C3G-C2G	-3.17	103.26	110.90
29	D	409	LHG	O7-C7-C8	3.16	118.32	111.50
24	a	407	CLA	CAC-C3C-C4C	3.16	128.91	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	507	CLA	CBC-CAC-C3C	-3.16	103.72	112.43
24	b	608	CLA	C4C-C3C-C2C	-3.15	102.30	106.90
24	B	616	CLA	C4D-C3D-CAD	3.15	110.23	108.47
26	T	101	BCR	C34-C9-C8	-3.15	113.12	118.08
26	A	610	BCR	C40-C30-C25	3.14	115.40	110.30
26	k	102	BCR	C30-C25-C26	-3.14	118.19	122.61
24	C	513	CLA	O2D-CGD-O1D	-3.14	117.70	123.84
24	b	609	CLA	C4D-C3D-CAD	3.14	110.22	108.47
26	T	101	BCR	C36-C18-C19	-3.14	113.13	118.08
24	B	616	CLA	O2D-CGD-CBD	3.13	116.84	111.27
26	c	918	BCR	C32-C1-C6	3.13	115.38	110.30
25	d	402	PHO	C1C-C2C-C3C	-3.13	102.91	106.51
24	b	610	CLA	C3B-C4B-NB	3.13	113.26	109.21
24	b	617	CLA	C1C-C2C-C3C	-3.13	103.67	106.96
26	c	918	BCR	C39-C30-C25	3.13	115.37	110.30
24	C	506	CLA	C4-C3-C5	3.13	120.53	115.27
24	C	504	CLA	CMB-C2B-C3B	3.12	130.52	124.68
28	A	613	SQD	O6-C1-C2	3.11	113.16	108.30
24	A	606	CLA	C4D-C3D-CAD	3.11	110.20	108.47
24	b	613	CLA	C4-C3-C5	3.10	120.49	115.27
24	C	502	CLA	C4C-C3C-C2C	-3.10	102.37	106.90
24	A	607	CLA	C4-C3-C5	3.10	120.49	115.27
27	a	410	PL9	C25-C24-C26	3.10	120.49	115.27
25	a	412	PHO	C4D-ND-C1D	-3.10	101.19	106.76
24	B	603	CLA	CMB-C2B-C3B	3.10	130.48	124.68
24	C	511	CLA	C4C-C3C-C2C	-3.10	102.38	106.90
24	C	510	CLA	C4D-C3D-CAD	3.10	110.20	108.47
24	c	904	CLA	C4C-C3C-C2C	-3.10	102.39	106.90
24	b	611	CLA	C3B-C4B-NB	3.10	113.21	109.21
24	B	608	CLA	CBC-CAC-C3C	-3.09	103.90	112.43
24	b	607	CLA	C3B-C4B-NB	3.09	113.21	109.21
29	B	621	LHG	O7-C7-C8	3.09	118.16	111.50
26	f	101	BCR	C27-C26-C25	3.09	127.22	122.73
24	b	606	CLA	C4C-C3C-C2C	-3.09	102.39	106.90
24	A	607	CLA	CMC-C2C-C1C	3.09	129.74	125.04
25	A	608	PHO	C1C-C2C-C3C	-3.08	102.97	106.51
24	b	610	CLA	C4C-C3C-C2C	-3.08	102.41	106.90
26	B	622	BCR	C3-C4-C5	3.07	119.56	114.08
24	d	401	CLA	CBC-CAC-C3C	-3.07	103.96	112.43
24	C	506	CLA	C4C-C3C-C2C	-3.07	102.42	106.90
24	b	613	CLA	C1C-C2C-C3C	-3.07	103.73	106.96
26	k	102	BCR	C31-C1-C6	3.07	115.28	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	a	411	SQD	O8-S-C6	3.07	110.63	105.74
31	c	916	DGD	O2G-C1B-C2B	3.07	118.11	111.50
24	C	507	CLA	C4-C3-C5	3.07	120.43	115.27
28	F	101	SQD	O9-S-C6	3.06	110.58	106.94
24	b	608	CLA	CAC-C3C-C4C	3.06	128.78	124.81
26	f	101	BCR	C40-C30-C29	-3.06	96.67	108.91
24	b	605	CLA	CMC-C2C-C1C	3.06	129.70	125.04
24	c	905	CLA	C4C-C3C-C2C	-3.06	102.44	106.90
24	B	603	CLA	C4D-C3D-CAD	3.06	110.17	108.47
26	c	918	BCR	C36-C18-C19	-3.05	113.27	118.08
26	b	618	BCR	C40-C30-C29	-3.05	96.69	108.91
26	K	101	BCR	C27-C26-C25	3.05	127.16	122.73
26	D	404	BCR	C3-C2-C1	3.05	125.52	114.60
24	b	616	CLA	CMC-C2C-C1C	3.05	129.69	125.04
25	D	401	PHO	C4D-ND-C1D	-3.05	101.28	106.76
24	A	606	CLA	O2D-CGD-CBD	3.04	116.68	111.27
24	c	907	CLA	C4C-C3C-C2C	-3.04	102.46	106.90
26	T	102	BCR	C34-C9-C8	-3.04	113.28	118.08
24	C	513	CLA	CMB-C2B-C3B	3.04	130.37	124.68
24	B	617	CLA	O2D-CGD-O1D	-3.04	117.90	123.84
24	B	615	CLA	CAC-C3C-C4C	3.03	128.74	124.81
24	c	912	CLA	C4-C3-C5	3.03	120.37	115.27
24	c	906	CLA	C4D-C3D-CAD	3.03	110.16	108.47
24	B	610	CLA	C4C-C3C-C2C	-3.03	102.48	106.90
24	B	603	CLA	C4C-C3C-C2C	-3.03	102.49	106.90
26	c	918	BCR	C4-C5-C6	3.02	127.11	122.73
24	d	403	CLA	CMB-C2B-C3B	3.02	130.33	124.68
24	B	604	CLA	C4-C3-C5	3.02	120.35	115.27
24	a	408	CLA	C4C-C3C-C2C	-3.02	102.50	106.90
26	A	610	BCR	C33-C5-C6	3.01	127.91	124.53
26	c	915	BCR	C37-C22-C23	-3.01	113.33	118.08
26	B	620	BCR	C30-C25-C24	3.01	124.30	115.78
24	c	904	CLA	CMB-C2B-C3B	3.01	130.31	124.68
24	C	504	CLA	C4-C3-C5	3.01	120.33	115.27
24	c	906	CLA	CAC-C3C-C4C	3.01	128.71	124.81
25	a	412	PHO	C2C-C1C-NC	3.01	114.33	109.79
24	c	906	CLA	C4C-C3C-C2C	-3.01	102.52	106.90
24	B	603	CLA	C3B-C4B-NB	3.00	113.09	109.21
24	b	603	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
26	b	619	BCR	C4-C5-C6	3.00	127.09	122.73
26	C	515	BCR	C34-C9-C8	-3.00	113.35	118.08
24	C	512	CLA	C4C-C3C-C2C	-2.99	102.53	106.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	612	CLA	CMC-C2C-C1C	2.99	129.60	125.04
24	c	905	CLA	CMB-C2B-C3B	2.99	130.28	124.68
26	C	515	BCR	C30-C25-C26	-2.99	118.40	122.61
24	c	912	CLA	C4C-C3C-C2C	-2.99	102.54	106.90
26	K	101	BCR	C34-C9-C10	-2.99	118.73	122.92
24	a	406	CLA	CMB-C2B-C3B	2.99	130.27	124.68
24	B	602	CLA	O2A-CGA-CBA	2.99	121.28	111.91
29	D	407	LHG	O8-C23-O10	-2.99	116.06	123.59
24	C	501	CLA	C3B-C4B-NB	2.99	113.07	109.21
26	f	101	BCR	C34-C9-C8	-2.98	113.38	118.08
28	d	407	SQD	C44-O6-C1	-2.98	107.91	113.74
26	b	618	BCR	C38-C26-C25	2.98	127.88	124.53
24	C	504	CLA	CAC-C3C-C4C	2.98	128.68	124.81
25	a	412	PHO	C4-C3-C5	2.98	120.28	115.27
29	d	408	LHG	O7-C7-C8	2.98	117.92	111.50
26	T	101	BCR	C35-C13-C12	-2.98	113.39	118.08
24	b	602	CLA	O2D-CGD-O1D	-2.98	118.02	123.84
24	c	908	CLA	C4-C3-C5	2.97	120.27	115.27
24	c	906	CLA	C3B-C4B-NB	2.97	113.05	109.21
24	C	505	CLA	CMC-C2C-C1C	2.97	129.57	125.04
29	A	615	LHG	O8-C23-C24	2.97	121.24	111.91
24	C	505	CLA	CAC-C3C-C4C	2.97	128.67	124.81
26	B	619	BCR	C1-C6-C5	-2.97	118.43	122.61
24	b	603	CLA	C3B-C4B-NB	2.97	113.05	109.21
24	B	615	CLA	C4C-C3C-C2C	-2.97	102.58	106.90
24	b	602	CLA	C1-O2A-CGA	2.97	124.22	116.44
24	b	603	CLA	C4D-C3D-CAD	2.96	110.12	108.47
24	c	908	CLA	C3B-C4B-NB	2.96	113.04	109.21
24	c	911	CLA	C4C-C3C-C2C	-2.96	102.58	106.90
24	B	609	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
24	C	513	CLA	C4C-C3C-C2C	-2.96	102.59	106.90
26	H	101	BCR	C4-C5-C6	2.96	127.02	122.73
27	D	405	PL9	C53-C6-C1	2.95	121.03	114.99
26	A	610	BCR	C34-C9-C10	-2.95	118.80	122.92
24	D	402	CLA	C4D-C3D-CAD	2.94	110.11	108.47
24	C	505	CLA	C4C-C3C-C2C	-2.94	102.61	106.90
26	T	101	BCR	C37-C22-C21	-2.94	118.80	122.92
24	B	604	CLA	CMB-C2B-C3B	2.94	130.18	124.68
26	A	610	BCR	C31-C1-C6	2.94	115.07	110.30
24	B	608	CLA	C1-C2-C3	-2.94	120.96	126.04
24	a	406	CLA	C4C-C3C-C2C	-2.94	102.62	106.90
26	b	619	BCR	C27-C26-C25	2.93	126.99	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	617	CLA	C1C-C2C-C3C	-2.93	103.87	106.96
28	F	101	SQD	O48-C23-C24	2.93	121.11	111.91
26	k	102	BCR	C29-C30-C25	2.93	115.00	110.48
24	A	606	CLA	C4C-C3C-C2C	-2.93	102.62	106.90
24	a	408	CLA	CMB-C2B-C3B	2.93	130.16	124.68
24	d	403	CLA	O2D-CGD-CBD	2.93	116.47	111.27
24	c	902	CLA	C4-C3-C5	2.93	120.20	115.27
28	A	613	SQD	O48-C23-C24	2.93	121.10	111.91
26	K	101	BCR	C40-C30-C25	2.93	115.05	110.30
25	D	401	PHO	C1-C2-C3	-2.93	120.98	126.04
24	c	904	CLA	C3B-C4B-NB	2.92	112.99	109.21
24	C	503	CLA	C4C-C3C-C2C	-2.92	102.64	106.90
27	A	611	PL9	C30-C29-C31	2.92	120.18	115.27
24	B	615	CLA	CBC-CAC-C3C	-2.92	104.38	112.43
31	H	102	DGD	O2G-C1B-C2B	2.92	117.79	111.50
24	B	613	CLA	C3B-C4B-NB	2.92	112.98	109.21
24	c	913	CLA	C4C-C3C-C2C	-2.92	102.65	106.90
26	B	618	BCR	C37-C22-C21	-2.92	118.84	122.92
27	A	611	PL9	C25-C24-C26	2.91	120.17	115.27
24	D	403	CLA	C4C-C3C-C2C	-2.91	102.65	106.90
24	c	907	CLA	CED-O2D-CGD	2.91	122.52	115.94
27	A	611	PL9	C7-C3-C4	2.90	119.24	116.88
24	a	407	CLA	C4C-C3C-C2C	-2.90	102.67	106.90
24	b	606	CLA	C3B-C4B-NB	2.90	112.96	109.21
24	b	614	CLA	C1-C2-C3	-2.90	121.02	126.04
24	b	612	CLA	C1-C2-C3	-2.90	121.03	126.04
24	B	607	CLA	C4-C3-C5	2.89	120.14	115.27
24	A	614	CLA	C4-C3-C5	2.89	120.14	115.27
24	B	617	CLA	CMB-C2B-C3B	2.89	130.09	124.68
24	c	910	CLA	C4-C3-C5	2.89	120.13	115.27
31	H	102	DGD	O1G-C1A-C2A	2.89	120.98	111.91
27	A	611	PL9	C32-C33-C34	-2.89	120.70	127.66
24	b	607	CLA	C4D-C3D-CAD	2.89	110.08	108.47
24	c	914	CLA	C4C-C3C-C2C	-2.89	102.69	106.90
24	B	611	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
24	c	906	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
27	d	405	PL9	C53-C6-C1	2.88	120.89	114.99
24	b	609	CLA	C4C-C3C-C2C	-2.88	102.70	106.90
24	C	512	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	d	402	PHO	O2D-CGD-O1D	-2.88	118.21	123.84
26	k	101	BCR	C39-C30-C29	-2.88	97.40	108.91
24	B	612	CLA	C1-C2-C3	-2.88	121.07	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	622	BCR	C1-C6-C5	-2.88	118.56	122.61
24	B	605	CLA	C4C-C3C-C2C	-2.88	102.71	106.90
24	B	607	CLA	C4C-C3C-C2C	-2.87	102.71	106.90
24	c	904	CLA	C4D-C3D-CAD	2.87	110.07	108.47
27	A	611	PL9	C53-C6-C1	2.87	120.86	114.99
24	b	605	CLA	O2D-CGD-O1D	-2.87	118.22	123.84
26	A	610	BCR	C8-C7-C6	2.87	135.27	127.20
27	a	410	PL9	C7-C3-C2	-2.87	119.52	123.30
24	C	509	CLA	C4C-C3C-C2C	-2.87	102.71	106.90
27	A	611	PL9	C15-C14-C16	2.87	120.10	115.27
26	c	918	BCR	C1-C6-C5	-2.87	118.57	122.61
24	b	616	CLA	C4C-C3C-C2C	-2.86	102.72	106.90
24	C	504	CLA	O2D-CGD-O1D	-2.86	118.24	123.84
24	b	612	CLA	C4C-C3C-C2C	-2.86	102.73	106.90
24	b	607	CLA	C4-C3-C5	2.86	120.08	115.27
31	H	102	DGD	O1G-C1A-O1A	-2.86	116.38	123.59
24	b	604	CLA	CMC-C2C-C1C	2.85	129.38	125.04
24	b	602	CLA	C4C-C3C-C2C	-2.85	102.74	106.90
24	a	407	CLA	C4-C3-C5	2.85	120.06	115.27
24	c	903	CLA	C1-C2-C3	-2.85	121.12	126.04
24	C	507	CLA	CMB-C2B-C3B	2.85	130.00	124.68
24	C	505	CLA	C3B-C4B-NB	2.84	112.89	109.21
24	C	507	CLA	C3B-C4B-NB	2.84	112.88	109.21
24	B	608	CLA	C4-C3-C5	2.84	120.05	115.27
24	B	609	CLA	C4C-C3C-C2C	-2.84	102.76	106.90
24	a	406	CLA	O2D-CGD-O1D	-2.84	118.29	123.84
24	B	608	CLA	O2D-CGD-CBD	2.84	116.31	111.27
26	a	409	BCR	C33-C5-C6	2.84	127.72	124.53
24	b	603	CLA	C4-C3-C5	2.84	120.05	115.27
24	B	607	CLA	O1D-CGD-CBD	-2.84	118.68	124.48
26	B	618	BCR	C39-C30-C25	2.83	114.89	110.30
24	C	510	CLA	CMB-C2B-C3B	2.83	129.97	124.68
24	b	616	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
29	d	408	LHG	O8-C23-C24	2.82	120.77	111.91
24	C	506	CLA	O2D-CGD-O1D	-2.82	118.32	123.84
24	d	403	CLA	C4C-C3C-C2C	-2.82	102.78	106.90
24	B	615	CLA	C4D-C3D-CAD	2.82	110.04	108.47
24	b	609	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
24	C	510	CLA	C4C-C3C-C2C	-2.82	102.79	106.90
26	f	101	BCR	C4-C5-C6	2.82	126.82	122.73
28	A	612	SQD	C45-O47-C7	-2.82	110.86	117.79
26	b	618	BCR	C32-C1-C6	2.81	114.86	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	903	CLA	C4D-C3D-CAD	2.81	110.04	108.47
24	A	614	CLA	CMB-C2B-C3B	2.81	129.93	124.68
24	a	408	CLA	CAC-C3C-C4C	2.80	128.45	124.81
26	H	101	BCR	C39-C30-C29	-2.80	97.69	108.91
24	c	908	CLA	C4C-C3C-C2C	-2.80	102.81	106.90
28	a	402	SQD	O48-C23-C24	2.80	120.69	111.91
24	a	407	CLA	CBC-CAC-C3C	-2.80	104.72	112.43
24	B	614	CLA	C4C-C3C-C2C	-2.80	102.82	106.90
28	a	411	SQD	C1-O5-C5	-2.79	108.20	113.69
26	B	620	BCR	C39-C30-C25	2.79	114.83	110.30
25	A	608	PHO	CAC-C3C-C4C	2.79	128.27	125.22
24	A	606	CLA	CAC-C3C-C4C	2.79	128.44	124.81
25	d	402	PHO	CAC-C3C-C4C	2.79	128.27	125.22
24	C	503	CLA	C3B-C4B-NB	2.79	112.82	109.21
24	D	402	CLA	CAC-C3C-C4C	2.79	128.43	124.81
24	B	603	CLA	O2D-CGD-O1D	-2.79	118.39	123.84
24	a	408	CLA	CMC-C2C-C1C	2.78	129.28	125.04
24	C	508	CLA	CMB-C2B-C3B	2.78	129.89	124.68
24	B	602	CLA	CMC-C2C-C1C	2.78	129.28	125.04
28	A	612	SQD	C44-O6-C1	-2.78	108.30	113.74
24	B	605	CLA	C4-C3-C5	2.78	119.95	115.27
26	f	101	BCR	C37-C22-C23	-2.78	113.69	118.08
24	b	616	CLA	CAC-C3C-C4C	2.78	128.42	124.81
26	K	101	BCR	C31-C1-C2	-2.78	97.79	108.91
24	A	609	CLA	C4D-C3D-CAD	2.78	110.02	108.47
24	c	903	CLA	CAC-C3C-C4C	2.78	128.41	124.81
24	b	605	CLA	C4D-C3D-CAD	2.78	110.02	108.47
24	b	607	CLA	C4C-C3C-C2C	-2.78	102.85	106.90
24	b	612	CLA	CBC-CAC-C3C	-2.78	104.77	112.43
26	Y	101	BCR	C35-C13-C12	-2.78	113.70	118.08
27	a	410	PL9	C53-C6-C1	2.78	120.67	114.99
24	C	502	CLA	O2D-CGD-O1D	-2.78	118.41	123.84
27	A	611	PL9	C35-C34-C36	2.77	119.94	115.27
26	b	619	BCR	C1-C6-C5	-2.77	118.70	122.61
24	C	501	CLA	C4D-C3D-CAD	2.77	110.02	108.47
28	l	101	SQD	C1-O5-C5	-2.77	108.25	113.69
24	b	615	CLA	CED-O2D-CGD	2.77	122.20	115.94
24	c	904	CLA	C4-C3-C5	2.77	119.92	115.27
24	b	612	CLA	C4D-C3D-CAD	2.77	110.01	108.47
24	B	613	CLA	CED-O2D-CGD	2.76	122.19	115.94
26	T	102	BCR	C34-C9-C10	-2.76	119.05	122.92
26	H	101	BCR	C32-C1-C31	-2.76	100.06	108.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	508	CLA	C4-C3-C5	2.76	119.91	115.27
26	C	514	BCR	C39-C30-C29	-2.76	97.89	108.91
27	a	410	PL9	C35-C34-C36	2.75	119.90	115.27
26	c	918	BCR	C8-C9-C10	2.75	123.17	118.94
24	C	505	CLA	CMB-C2B-C3B	2.75	129.83	124.68
24	d	401	CLA	CHD-C4C-C3C	-2.75	120.80	124.84
24	C	512	CLA	C3B-C4B-NB	2.75	112.76	109.21
24	C	503	CLA	C4D-C3D-CAD	2.75	110.00	108.47
24	c	904	CLA	C1-C2-C3	-2.74	121.30	126.04
24	d	404	CLA	C4D-C3D-CAD	2.74	110.00	108.47
24	c	909	CLA	C4-C3-C5	2.74	119.88	115.27
24	C	510	CLA	CHD-C4C-C3C	-2.74	120.81	124.84
24	B	606	CLA	C3B-C4B-NB	2.73	112.75	109.21
24	C	513	CLA	C3B-C4B-NB	2.73	112.75	109.21
28	a	411	SQD	C44-O6-C1	-2.73	108.40	113.74
24	B	602	CLA	C4C-C3C-C2C	-2.73	102.91	106.90
24	A	614	CLA	CAC-C3C-C4C	2.73	128.35	124.81
28	l	101	SQD	O48-C23-C24	2.73	120.47	111.91
27	a	410	PL9	C20-C19-C21	2.73	119.86	115.27
24	B	611	CLA	C4D-C3D-CAD	2.73	109.99	108.47
24	b	603	CLA	C4C-C3C-C2C	-2.73	102.92	106.90
24	c	912	CLA	O2D-CGD-O1D	-2.73	118.51	123.84
24	c	910	CLA	CMB-C2B-C3B	2.72	129.77	124.68
26	K	101	BCR	C37-C22-C23	-2.72	113.79	118.08
26	h	101	BCR	C37-C22-C23	-2.72	113.79	118.08
26	T	101	BCR	C29-C30-C25	2.72	114.67	110.48
26	b	618	BCR	C2-C1-C6	2.72	114.66	110.48
28	L	101	SQD	O48-C23-C24	2.71	120.42	111.91
24	C	501	CLA	CAC-C3C-C4C	2.71	128.33	124.81
24	c	911	CLA	C4-C3-C5	2.71	119.83	115.27
31	c	917	DGD	O2G-C1B-C2B	2.71	117.34	111.50
24	c	903	CLA	CMB-C2B-C3B	2.71	129.75	124.68
26	h	101	BCR	C27-C26-C25	2.71	126.67	122.73
24	b	615	CLA	CAC-C3C-C4C	2.71	128.32	124.81
24	c	913	CLA	C3B-C4B-NB	2.70	112.71	109.21
24	b	613	CLA	O2D-CGD-O1D	-2.70	118.55	123.84
24	B	612	CLA	CAC-C3C-C4C	2.70	128.32	124.81
28	l	101	SQD	O8-S-C6	2.70	110.05	105.74
24	b	604	CLA	C5-C3-C2	-2.70	115.65	121.12
24	C	510	CLA	CMC-C2C-C1C	2.70	129.15	125.04
24	b	602	CLA	CMC-C2C-C1C	2.70	129.15	125.04
24	C	506	CLA	C3B-C4B-NB	2.70	112.70	109.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	410	PL9	C30-C29-C31	2.70	119.81	115.27
24	c	906	CLA	CMC-C2C-C1C	2.70	129.15	125.04
26	T	101	BCR	C1-C6-C5	-2.70	118.81	122.61
24	A	607	CLA	CBC-CAC-C3C	-2.70	104.99	112.43
27	a	410	PL9	C40-C39-C41	2.70	119.81	115.27
24	C	511	CLA	O2D-CGD-O1D	-2.70	118.57	123.84
28	a	411	SQD	O5-C1-C2	-2.70	104.64	110.35
24	c	913	CLA	C4-C3-C5	2.69	119.80	115.27
27	A	611	PL9	C40-C39-C41	2.69	119.80	115.27
28	L	101	SQD	C4-C3-C2	2.69	115.52	110.82
24	b	612	CLA	CMC-C2C-C1C	2.69	129.13	125.04
24	D	402	CLA	C4-C3-C5	2.68	119.78	115.27
24	B	609	CLA	O2A-CGA-CBA	2.68	120.32	111.91
24	c	911	CLA	CMB-C2B-C3B	2.68	129.69	124.68
24	b	612	CLA	CAC-C3C-C4C	2.68	128.28	124.81
26	c	918	BCR	C30-C25-C26	-2.67	118.85	122.61
24	A	609	CLA	C4C-C3C-C2C	-2.67	103.00	106.90
26	K	101	BCR	C29-C30-C25	2.67	114.59	110.48
24	b	617	CLA	O2A-CGA-CBA	2.67	120.29	111.91
24	B	610	CLA	O2D-CGD-O1D	-2.67	118.61	123.84
26	D	404	BCR	C2-C1-C6	2.67	114.59	110.48
24	B	614	CLA	O2D-CGD-CBD	2.67	116.01	111.27
24	b	612	CLA	O2D-CGD-O1D	-2.67	118.62	123.84
24	b	617	CLA	O1D-CGD-CBD	-2.67	119.03	124.48
26	Y	101	BCR	C39-C30-C29	-2.66	98.25	108.91
24	c	913	CLA	C1-O2A-CGA	2.66	123.43	116.44
24	B	608	CLA	C4C-C3C-C2C	-2.66	103.02	106.90
24	c	910	CLA	O2D-CGD-O1D	-2.66	118.63	123.84
28	L	101	SQD	O9-S-C6	2.66	110.10	106.94
26	B	619	BCR	C1-C6-C7	2.66	123.30	115.78
24	D	403	CLA	CAC-C3C-C4C	2.66	128.26	124.81
24	B	612	CLA	CHD-C4C-C3C	-2.66	120.93	124.84
24	B	609	CLA	CAC-C3C-C4C	2.66	128.26	124.81
24	B	604	CLA	C4C-C3C-C2C	-2.66	103.03	106.90
31	j	101	DGD	O1G-C1A-C2A	2.65	120.24	111.91
24	b	604	CLA	C4D-C3D-CAD	2.65	109.95	108.47
24	B	602	CLA	C3B-C4B-NB	2.65	112.64	109.21
24	d	401	CLA	C4-C3-C5	2.65	119.73	115.27
25	d	402	PHO	C4D-ND-C1D	-2.65	102.00	106.76
24	c	905	CLA	CAC-C3C-C4C	2.65	128.25	124.81
24	B	614	CLA	CMB-C2B-C3B	2.65	129.63	124.68
26	f	101	BCR	C35-C13-C12	-2.65	113.91	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	912	CLA	C1-O2A-CGA	2.65	123.38	116.44
24	C	511	CLA	C4-C3-C5	2.64	119.72	115.27
24	C	503	CLA	C4-C3-C5	2.64	119.72	115.27
24	B	611	CLA	O2A-CGA-CBA	2.64	120.20	111.91
24	d	404	CLA	CMB-C2B-C3B	2.64	129.62	124.68
24	b	615	CLA	O2A-CGA-CBA	2.64	120.18	111.91
24	b	608	CLA	CMB-C2B-C3B	2.63	129.61	124.68
31	h	102	DGD	O1G-C1A-C2A	2.63	120.18	111.91
24	b	614	CLA	CAC-C3C-C4C	2.63	128.23	124.81
26	A	610	BCR	C29-C30-C25	2.63	114.53	110.48
24	b	608	CLA	CED-O2D-CGD	2.63	121.89	115.94
24	B	617	CLA	O2A-CGA-CBA	2.63	120.17	111.91
26	c	918	BCR	C39-C30-C29	-2.63	98.38	108.91
28	d	407	SQD	O48-C23-C24	2.63	120.16	111.91
27	a	410	PL9	C37-C38-C39	-2.63	121.33	127.66
26	B	618	BCR	C39-C30-C29	-2.62	98.41	108.91
24	B	612	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
24	C	502	CLA	C4-C3-C5	2.62	119.68	115.27
31	D	406	DGD	O5D-C1E-C2E	2.62	112.39	108.30
26	H	101	BCR	C29-C28-C27	-2.62	105.53	111.38
28	a	402	SQD	C3-C4-C5	2.62	114.91	110.24
26	T	101	BCR	C23-C24-C25	2.62	134.55	127.20
24	C	507	CLA	C4C-C3C-C2C	-2.61	103.09	106.90
24	c	912	CLA	CMB-C2B-C3B	2.61	129.57	124.68
24	c	914	CLA	O2D-CGD-O1D	-2.61	118.73	123.84
24	b	605	CLA	CMB-C2B-C3B	2.61	129.56	124.68
24	b	607	CLA	O1D-CGD-CBD	-2.61	119.15	124.48
31	d	406	DGD	O1G-C1A-C2A	2.61	120.09	111.91
31	C	516	DGD	O3G-C3G-C2G	-2.61	104.61	110.90
24	D	403	CLA	CED-O2D-CGD	2.61	121.83	115.94
24	b	617	CLA	CED-O2D-CGD	2.60	121.83	115.94
24	b	614	CLA	CMB-C2B-C3B	2.60	129.54	124.68
24	A	609	CLA	CAC-C3C-C4C	2.60	128.18	124.81
24	C	513	CLA	CMC-C2C-C1C	2.60	129.00	125.04
26	k	102	BCR	C34-C9-C10	-2.60	119.28	122.92
24	D	403	CLA	C4D-C3D-CAD	2.60	109.92	108.47
24	b	615	CLA	C4C-C3C-C2C	-2.60	103.11	106.90
24	C	509	CLA	CAC-C3C-C4C	2.59	128.18	124.81
24	A	606	CLA	O2D-CGD-O1D	-2.59	118.77	123.84
24	D	403	CLA	CMB-C2B-C3B	2.59	129.53	124.68
24	C	501	CLA	CMC-C2C-C1C	2.59	128.99	125.04
27	D	405	PL9	C7-C3-C4	2.59	118.98	116.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	614	CLA	CHD-C4C-C3C	-2.59	121.03	124.84
24	B	616	CLA	C4-C3-C5	2.59	119.63	115.27
24	C	504	CLA	C1-O2A-CGA	2.59	123.23	116.44
24	B	612	CLA	C4D-C3D-CAD	2.59	109.91	108.47
24	c	903	CLA	O2D-CGD-O1D	-2.58	118.79	123.84
24	D	403	CLA	O2D-CGD-O1D	-2.58	118.79	123.84
24	D	402	CLA	CHD-C4C-C3C	-2.58	121.05	124.84
26	C	515	BCR	C23-C24-C25	2.58	134.44	127.20
24	C	512	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
32	E	101	HEM	C1D-C2D-C3D	-2.58	105.20	107.00
24	b	615	CLA	CBC-CAC-C3C	-2.58	105.33	112.43
27	A	611	PL9	C10-C9-C11	2.58	119.60	115.27
31	D	406	DGD	O1G-C1A-C2A	2.57	119.98	111.91
26	f	101	BCR	C3-C2-C1	2.57	123.80	114.60
27	A	611	PL9	C37-C38-C39	-2.57	121.46	127.66
26	K	101	BCR	C34-C9-C8	-2.57	114.02	118.08
24	d	401	CLA	C4C-C3C-C2C	-2.57	103.15	106.90
31	C	518	DGD	O1G-C1A-C2A	2.57	119.98	111.91
24	b	613	CLA	C1-C2-C3	-2.57	121.60	126.04
24	b	605	CLA	CED-O2D-CGD	2.57	121.75	115.94
24	d	401	CLA	CMB-C2B-C3B	2.57	129.48	124.68
24	b	606	CLA	OBD-CAD-C3D	-2.57	123.72	127.98
24	c	908	CLA	C4D-C3D-CAD	2.57	109.90	108.47
24	D	402	CLA	CMC-C2C-C1C	2.56	128.94	125.04
26	C	514	BCR	C39-C30-C25	2.56	114.45	110.30
26	B	622	BCR	C30-C25-C26	-2.56	119.01	122.61
31	C	517	DGD	O2G-C1B-O1B	-2.56	117.52	123.70
24	c	902	CLA	C4C-C3C-C2C	-2.56	103.17	106.90
24	B	611	CLA	C4-C3-C5	2.56	119.58	115.27
26	B	622	BCR	C31-C1-C2	-2.56	98.68	108.91
24	b	613	CLA	CMC-C2C-C1C	2.56	128.93	125.04
24	d	404	CLA	O2D-CGD-O1D	-2.56	118.84	123.84
24	B	614	CLA	CHD-C4C-C3C	-2.55	121.08	124.84
24	C	503	CLA	CMC-C2C-C1C	2.55	128.93	125.04
24	C	512	CLA	C1-C2-C3	-2.55	121.63	126.04
24	C	506	CLA	CAC-C3C-C4C	2.55	128.12	124.81
26	B	618	BCR	C4-C5-C6	2.55	126.44	122.73
24	A	609	CLA	CED-O2D-CGD	2.55	121.70	115.94
26	c	918	BCR	C40-C30-C25	2.55	114.43	110.30
24	b	604	CLA	C4C-C3C-C2C	-2.55	103.19	106.90
26	h	101	BCR	C40-C30-C39	-2.55	100.71	108.53
24	B	609	CLA	O1D-CGD-CBD	-2.54	119.28	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	a	412	PHO	CMB-C2B-C1B	2.54	128.98	125.06
24	c	908	CLA	CMC-C2C-C1C	2.54	128.91	125.04
24	b	609	CLA	C4-C3-C5	2.54	119.55	115.27
24	B	614	CLA	C4-C3-C5	2.54	119.54	115.27
24	C	501	CLA	CBC-CAC-C3C	-2.54	105.43	112.43
26	k	102	BCR	C4-C5-C6	2.54	126.41	122.73
28	a	402	SQD	O6-C1-C2	2.54	112.26	108.30
24	C	509	CLA	O2D-CGD-O1D	-2.53	118.88	123.84
24	B	613	CLA	CMC-C2C-C1C	2.53	128.90	125.04
24	c	914	CLA	O2A-CGA-CBA	2.53	119.86	111.91
24	C	501	CLA	C1-O2A-CGA	2.53	123.09	116.44
24	b	605	CLA	O2A-CGA-CBA	2.53	119.86	111.91
24	D	403	CLA	C4-C3-C5	2.53	119.53	115.27
24	C	502	CLA	C4D-C3D-CAD	2.53	109.88	108.47
24	c	914	CLA	CMC-C2C-C1C	2.53	128.89	125.04
24	C	506	CLA	CMB-C2B-C3B	2.53	129.41	124.68
26	T	101	BCR	C37-C22-C23	-2.52	114.10	118.08
26	K	101	BCR	C33-C5-C6	2.52	127.36	124.53
24	A	609	CLA	CMB-C2B-C3B	2.51	129.38	124.68
26	f	101	BCR	C3-C4-C5	2.51	118.56	114.08
24	B	614	CLA	O2D-CGD-O1D	-2.51	118.93	123.84
28	A	613	SQD	O8-S-C6	2.51	109.74	105.74
26	C	515	BCR	C1-C6-C5	-2.51	119.08	122.61
29	D	407	LHG	O7-C7-C8	2.50	116.90	111.50
24	b	607	CLA	C1-C2-C3	-2.50	121.71	126.04
24	c	908	CLA	O2A-CGA-CBA	2.50	119.77	111.91
24	C	501	CLA	C4C-C3C-C2C	-2.49	103.26	106.90
24	c	902	CLA	CBC-CAC-C3C	-2.49	105.56	112.43
24	B	607	CLA	C1-C2-C3	-2.49	121.74	126.04
28	A	612	SQD	C1-O5-C5	-2.49	108.81	113.69
24	A	609	CLA	CMC-C2C-C1C	2.49	128.82	125.04
26	D	404	BCR	C30-C25-C24	2.49	122.81	115.78
26	h	101	BCR	C30-C25-C24	2.48	122.80	115.78
26	H	101	BCR	C39-C30-C25	2.48	114.33	110.30
24	C	507	CLA	O1D-CGD-CBD	-2.48	119.40	124.48
28	a	411	SQD	O48-C23-C24	2.48	119.69	111.91
24	c	910	CLA	CMC-C2C-C1C	2.48	128.82	125.04
32	E	101	HEM	CBA-CAA-C2A	-2.48	107.92	112.49
24	b	607	CLA	C1-O2A-CGA	2.47	122.94	116.44
27	a	410	PL9	C32-C33-C34	-2.47	121.70	127.66
25	a	412	PHO	C1C-C2C-C3C	-2.47	103.67	106.51
24	b	606	CLA	O2D-CGD-O1D	-2.47	119.01	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	607	CLA	CMB-C2B-C3B	2.47	129.30	124.68
26	B	618	BCR	C2-C3-C4	2.47	116.90	111.38
24	c	906	CLA	CED-O2D-CGD	2.47	121.52	115.94
24	a	408	CLA	C4-C3-C5	2.46	119.41	115.27
25	d	402	PHO	CHD-C1D-ND	-2.46	119.46	124.58
24	b	616	CLA	C4-C3-C5	2.46	119.41	115.27
26	B	620	BCR	C1-C6-C5	-2.46	119.15	122.61
25	D	401	PHO	CED-O2D-CGD	2.46	121.50	115.94
24	C	507	CLA	CMC-C2C-C1C	2.46	128.78	125.04
24	c	908	CLA	CBC-CAC-C3C	-2.46	105.66	112.43
24	B	602	CLA	O2D-CGD-O1D	-2.46	119.04	123.84
24	d	404	CLA	O1D-CGD-CBD	-2.46	119.46	124.48
24	b	602	CLA	O1D-CGD-CBD	-2.45	119.46	124.48
24	b	611	CLA	CMB-C2B-C3B	2.45	129.27	124.68
24	b	613	CLA	CHD-C4C-C3C	-2.45	121.23	124.84
24	c	913	CLA	O2A-CGA-CBA	2.45	119.60	111.91
26	B	618	BCR	C1-C6-C5	-2.45	119.16	122.61
24	b	602	CLA	CMB-C2B-C3B	2.45	129.26	124.68
26	f	101	BCR	C28-C27-C26	2.45	118.45	114.08
26	b	619	BCR	C37-C22-C23	-2.45	114.22	118.08
25	a	412	PHO	CHD-C1D-ND	-2.45	119.49	124.58
24	c	913	CLA	O2D-CGD-O1D	-2.44	119.06	123.84
26	B	622	BCR	C1-C6-C7	2.44	122.69	115.78
24	C	509	CLA	O2A-CGA-CBA	2.44	119.58	111.91
24	B	610	CLA	C1-C2-C3	-2.44	121.82	126.04
24	C	502	CLA	CMC-C2C-C1C	2.44	128.76	125.04
24	B	612	CLA	CMB-C2B-C3B	2.44	129.24	124.68
24	a	408	CLA	CHD-C4C-C3C	-2.44	121.25	124.84
24	C	513	CLA	C4-C3-C5	2.44	119.37	115.27
26	k	102	BCR	C30-C25-C24	2.43	122.66	115.78
29	a	413	LHG	O8-C23-C24	2.43	119.54	111.91
24	a	406	CLA	O2D-CGD-CBD	2.43	115.59	111.27
24	C	512	CLA	CED-O2D-CGD	2.43	121.44	115.94
24	b	603	CLA	O2A-CGA-CBA	2.43	119.53	111.91
24	b	613	CLA	O2A-CGA-CBA	2.43	119.53	111.91
24	c	914	CLA	C3B-C4B-NB	2.43	112.35	109.21
26	B	620	BCR	C40-C30-C39	-2.43	101.08	108.53
24	B	617	CLA	C4D-C3D-CAD	2.43	109.82	108.47
24	B	602	CLA	CMB-C2B-C3B	2.42	129.22	124.68
24	b	615	CLA	CHB-C4A-NA	2.42	127.86	124.51
32	e	101	HEM	CBA-CAA-C2A	-2.42	108.03	112.49
24	C	510	CLA	CAC-C3C-C4C	2.42	127.94	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	512	CLA	O2A-CGA-CBA	2.42	119.49	111.91
24	b	613	CLA	CED-O2D-CGD	2.42	121.40	115.94
24	A	607	CLA	O2D-CGD-O1D	-2.42	119.12	123.84
24	B	615	CLA	CMB-C2B-C3B	2.41	129.19	124.68
26	T	101	BCR	C3-C4-C5	2.41	118.38	114.08
27	A	611	PL9	C45-C44-C46	2.41	119.33	115.27
24	C	511	CLA	CAC-C3C-C4C	2.41	127.94	124.81
26	B	618	BCR	C33-C5-C4	-2.41	108.99	113.62
29	d	410	LHG	O8-C23-C24	2.41	119.46	111.91
24	b	609	CLA	CAC-C3C-C4C	2.41	127.93	124.81
24	C	505	CLA	CED-O2D-CGD	2.40	121.38	115.94
24	C	513	CLA	CAC-C3C-C4C	2.40	127.93	124.81
24	b	614	CLA	O2A-CGA-CBA	2.40	119.45	111.91
24	b	604	CLA	CAC-C3C-C4C	2.40	127.93	124.81
25	a	412	PHO	CAC-C3C-C4C	2.40	127.84	125.22
26	H	101	BCR	C30-C25-C24	2.40	122.56	115.78
24	C	508	CLA	C1D-CHD-C4C	2.40	125.72	122.56
31	c	916	DGD	O3G-C3G-C2G	-2.40	105.12	110.90
24	A	614	CLA	CHC-C1C-C2C	-2.40	120.09	126.72
24	B	616	CLA	CMB-C2B-C3B	2.40	129.16	124.68
24	c	910	CLA	CED-O2D-CGD	2.40	121.36	115.94
26	T	101	BCR	C38-C26-C25	2.39	127.22	124.53
24	C	504	CLA	CMC-C2C-C1C	2.39	128.68	125.04
26	k	101	BCR	C32-C1-C6	2.39	114.17	110.30
24	C	512	CLA	CAC-C3C-C4C	2.39	127.91	124.81
24	B	615	CLA	C1-O2A-CGA	2.39	122.71	116.44
24	A	614	CLA	CMC-C2C-C1C	2.38	128.67	125.04
24	b	612	CLA	CMB-C2B-C3B	2.38	129.14	124.68
24	a	406	CLA	C7-C6-C5	-2.38	106.88	113.36
24	B	606	CLA	O2A-CGA-O1A	-2.38	117.57	123.59
24	B	610	CLA	CED-O2D-CGD	2.38	121.33	115.94
26	B	620	BCR	C31-C1-C6	2.38	114.16	110.30
24	C	513	CLA	O2A-CGA-CBA	2.38	119.37	111.91
24	d	404	CLA	C4C-C3C-C2C	-2.38	103.43	106.90
24	A	607	CLA	C4C-C3C-C2C	-2.38	103.43	106.90
24	B	611	CLA	CMB-C2B-C3B	2.38	129.12	124.68
24	B	614	CLA	CBC-CAC-C3C	-2.37	105.88	112.43
25	D	401	PHO	O2D-CGD-O1D	-2.37	119.19	123.84
24	d	404	CLA	C4-C3-C5	2.37	119.27	115.27
24	B	617	CLA	O1D-CGD-CBD	-2.37	119.63	124.48
24	B	608	CLA	CMB-C2B-C3B	2.37	129.12	124.68
24	B	611	CLA	CHB-C4A-NA	2.37	127.79	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	B	610	CLA	CMB-C2B-C3B	2.37	129.11	124.68
27	d	405	PL9	C15-C14-C16	2.37	119.25	115.27
24	b	617	CLA	CHD-C4C-C3C	-2.37	121.36	124.84
24	B	603	CLA	C1-C2-C3	-2.37	121.95	126.04
24	B	607	CLA	O2A-CGA-CBA	2.36	119.33	111.91
26	T	101	BCR	C40-C30-C25	2.36	114.13	110.30
31	D	406	DGD	O6D-C5D-C6D	2.36	111.43	106.67
24	b	614	CLA	O2D-CGD-O1D	-2.36	119.22	123.84
24	b	615	CLA	O2A-CGA-O1A	-2.36	117.64	123.59
24	C	509	CLA	CMB-C2B-C3B	2.36	129.09	124.68
24	b	614	CLA	C4D-C3D-CAD	2.36	109.78	108.47
25	D	401	PHO	C1C-C2C-C3C	-2.36	103.80	106.51
24	b	611	CLA	C4-C3-C5	2.36	119.23	115.27
29	d	410	LHG	O4-P-O5	2.36	123.88	112.24
24	c	911	CLA	CAC-C3C-C4C	2.35	127.86	124.81
24	b	602	CLA	C3B-C4B-NB	2.35	112.25	109.21
31	D	406	DGD	O6E-C5E-C6E	2.35	112.28	106.44
24	b	607	CLA	CAC-C3C-C4C	2.35	127.86	124.81
26	B	619	BCR	C4-C5-C6	2.35	126.14	122.73
26	c	918	BCR	C27-C26-C25	2.35	126.14	122.73
26	h	101	BCR	C28-C29-C30	2.35	123.00	114.60
24	A	607	CLA	C4D-C3D-CAD	2.35	109.78	108.47
24	c	902	CLA	CMC-C2C-C1C	2.35	128.61	125.04
27	D	405	PL9	C7-C8-C9	-2.35	122.89	126.79
24	C	501	CLA	CMB-C2B-C3B	2.34	129.06	124.68
26	H	101	BCR	C28-C29-C30	2.34	122.98	114.60
27	D	405	PL9	C35-C34-C36	2.34	119.21	115.27
26	C	514	BCR	C3-C4-C5	2.34	118.26	114.08
24	b	603	CLA	C1-O2A-CGA	2.34	122.58	116.44
24	A	614	CLA	CHD-C4C-C3C	-2.34	121.40	124.84
24	B	604	CLA	O2A-CGA-O1A	-2.34	117.69	123.59
26	T	101	BCR	C1-C6-C7	2.34	122.39	115.78
24	d	403	CLA	CHD-C4C-C3C	-2.34	121.40	124.84
24	B	612	CLA	CBC-CAC-C3C	-2.34	105.99	112.43
24	B	614	CLA	O2A-CGA-CBA	2.33	119.23	111.91
24	b	602	CLA	C4-C3-C5	2.33	119.20	115.27
24	B	602	CLA	O1D-CGD-CBD	-2.33	119.71	124.48
24	b	610	CLA	C7-C6-C5	-2.33	107.03	113.36
26	B	619	BCR	C29-C28-C27	-2.33	106.17	111.38
24	B	615	CLA	CMC-C2C-C1C	2.33	128.59	125.04
24	b	602	CLA	CED-O2D-CGD	2.33	121.20	115.94
24	C	508	CLA	CAC-C3C-C4C	2.33	127.83	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	614	CLA	C4C-C3C-C2C	-2.33	103.50	106.90
26	b	618	BCR	C40-C30-C39	-2.33	101.39	108.53
24	C	510	CLA	O2D-CGD-O1D	-2.32	119.29	123.84
26	K	101	BCR	C4-C5-C6	2.32	126.11	122.73
24	C	506	CLA	CMC-C2C-C1C	2.32	128.58	125.04
31	h	102	DGD	O1G-C1A-O1A	-2.32	117.73	123.59
26	B	620	BCR	C32-C1-C2	-2.32	99.62	108.91
24	d	403	CLA	OBD-CAD-C3D	-2.32	124.13	127.98
24	c	905	CLA	C7-C6-C5	-2.32	107.06	113.36
24	d	403	CLA	CMC-C2C-C1C	2.32	128.57	125.04
24	a	406	CLA	CHC-C1C-C2C	-2.32	120.31	126.72
24	a	408	CLA	O2A-CGA-CBA	2.32	119.18	111.91
26	K	101	BCR	C1-C6-C5	-2.32	119.35	122.61
24	b	611	CLA	O2A-CGA-CBA	2.32	119.18	111.91
29	d	409	LHG	O8-C23-C24	2.32	119.17	111.91
24	B	617	CLA	C1-O2A-CGA	2.31	122.52	116.44
24	B	605	CLA	CAC-C3C-C4C	2.31	127.81	124.81
27	D	405	PL9	C10-C9-C11	2.31	119.16	115.27
24	c	909	CLA	CED-O2D-CGD	2.31	121.16	115.94
29	D	408	LHG	O8-C23-C24	2.31	119.16	111.91
31	j	101	DGD	O1G-C1A-O1A	-2.31	117.77	123.59
24	B	603	CLA	CED-O2D-CGD	2.31	121.15	115.94
24	b	605	CLA	C4-C3-C5	2.31	119.15	115.27
32	e	101	HEM	CAD-CBD-CGD	2.31	116.54	112.67
24	b	605	CLA	O2A-CGA-O1A	-2.31	117.77	123.59
27	d	405	PL9	C20-C19-C21	2.30	119.15	115.27
26	T	101	BCR	C32-C1-C6	2.30	114.04	110.30
24	b	608	CLA	CMC-C2C-C1C	2.30	128.55	125.04
24	C	504	CLA	C4C-C3C-C2C	-2.30	103.54	106.90
24	C	513	CLA	CHD-C4C-NC	-2.30	120.58	124.20
26	f	101	BCR	C1-C6-C5	-2.30	119.37	122.61
29	d	408	LHG	O8-C23-O10	-2.30	117.79	123.59
24	c	904	CLA	CAC-C3C-C4C	2.30	127.79	124.81
26	B	622	BCR	C38-C26-C27	-2.30	109.20	113.62
24	c	914	CLA	CED-O2D-CGD	2.30	121.13	115.94
25	D	401	PHO	CHD-C1D-ND	-2.30	119.80	124.58
24	c	909	CLA	C1-C2-C3	-2.30	122.07	126.04
24	c	902	CLA	CMB-C2B-C3B	2.29	128.97	124.68
24	B	613	CLA	O2D-CGD-O1D	-2.29	119.35	123.84
31	c	917	DGD	O1G-C1A-C2A	2.29	119.10	111.91
24	a	406	CLA	C4-C3-C5	2.29	119.13	115.27
24	B	616	CLA	O2D-CGD-O1D	-2.29	119.36	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	C	515	BCR	C27-C26-C25	2.29	126.06	122.73
24	B	611	CLA	CAC-C3C-C4C	2.29	127.78	124.81
24	C	512	CLA	C1-O2A-CGA	2.29	122.44	116.44
31	j	101	DGD	O2G-C1B-C2B	2.28	116.42	111.50
29	d	409	LHG	O7-C7-C8	2.28	116.42	111.50
24	a	408	CLA	CED-O2D-CGD	2.28	121.10	115.94
24	c	906	CLA	CBC-CAC-C3C	-2.28	106.14	112.43
24	c	909	CLA	CMB-C2B-C3B	2.28	128.95	124.68
24	b	617	CLA	O2D-CGD-O1D	-2.28	119.38	123.84
26	Y	101	BCR	C28-C27-C26	2.28	118.15	114.08
24	B	608	CLA	C4D-C3D-CAD	2.28	109.74	108.47
24	b	611	CLA	CAC-C3C-C4C	2.28	127.77	124.81
24	b	617	CLA	C4D-C3D-CAD	2.28	109.74	108.47
24	a	407	CLA	CED-O2D-CGD	2.28	121.09	115.94
24	b	609	CLA	CMC-C2C-C1C	2.27	128.50	125.04
27	d	405	PL9	C7-C8-C9	-2.27	123.01	126.79
25	d	402	PHO	CMC-C2C-C1C	2.27	128.56	125.06
24	B	609	CLA	C4-C3-C5	2.27	119.09	115.27
24	B	606	CLA	CED-O2D-CGD	2.27	121.07	115.94
24	c	910	CLA	C1-O2A-CGA	2.27	122.40	116.44
24	c	908	CLA	O1D-CGD-CBD	-2.27	119.84	124.48
26	Y	101	BCR	C30-C25-C24	2.27	122.19	115.78
25	A	608	PHO	CMB-C2B-C1B	2.27	128.56	125.06
26	k	102	BCR	C31-C1-C2	-2.27	99.84	108.91
27	D	405	PL9	C27-C28-C29	-2.26	122.21	127.66
24	A	606	CLA	C4-C3-C5	2.26	119.08	115.27
24	b	606	CLA	CHD-C4C-C3C	-2.26	121.51	124.84
24	d	403	CLA	O2A-CGA-CBA	2.26	119.01	111.91
24	a	406	CLA	CHD-C4C-NC	-2.26	120.64	124.20
31	D	406	DGD	O2G-C1B-O1B	-2.26	118.24	123.70
24	C	502	CLA	CMB-C2B-C3B	2.26	128.91	124.68
28	A	613	SQD	C3-C4-C5	2.26	114.27	110.24
26	C	515	BCR	C37-C22-C23	-2.26	114.52	118.08
24	b	604	CLA	CBC-CAC-C3C	-2.26	106.20	112.43
24	b	617	CLA	CMC-C2C-C1C	2.26	128.48	125.04
27	a	410	PL9	C45-C44-C46	2.25	119.06	115.27
24	d	401	CLA	C1-O2A-CGA	2.25	122.36	116.44
24	B	609	CLA	C11-C12-C13	-2.25	108.64	115.92
24	b	610	CLA	C1D-CHD-C4C	2.25	125.53	122.56
24	b	613	CLA	CMB-C2B-C3B	2.25	128.89	124.68
24	b	603	CLA	C1-C2-C3	-2.25	122.15	126.04
27	a	410	PL9	C10-C9-C11	2.25	119.06	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	A	608	PHO	CHD-C1D-ND	-2.25	119.89	124.58
24	A	609	CLA	O2A-CGA-CBA	2.25	118.97	111.91
24	C	510	CLA	O2A-CGA-CBA	2.25	118.97	111.91
26	a	409	BCR	C1-C6-C5	-2.25	119.45	122.61
24	c	903	CLA	C4-C3-C5	2.25	119.05	115.27
24	c	907	CLA	CMC-C2C-C1C	2.24	128.46	125.04
24	B	606	CLA	O2D-CGD-O1D	-2.24	119.45	123.84
24	A	606	CLA	CMC-C2C-C1C	2.24	128.46	125.04
24	B	616	CLA	CED-O2D-CGD	2.24	121.01	115.94
24	C	507	CLA	CED-O2D-CGD	2.24	121.00	115.94
25	D	401	PHO	CMB-C2B-C1B	2.24	128.51	125.06
24	b	612	CLA	C7-C6-C5	-2.24	107.28	113.36
25	a	412	PHO	C1-C2-C3	-2.24	122.17	126.04
26	k	101	BCR	C31-C1-C2	-2.24	99.96	108.91
24	B	614	CLA	C1D-CHD-C4C	2.24	125.51	122.56
28	F	101	SQD	O48-C23-O10	-2.24	117.95	123.59
24	d	404	CLA	CBC-CAC-C3C	-2.23	106.27	112.43
24	B	605	CLA	CMC-C2C-C1C	2.23	128.44	125.04
24	c	907	CLA	CMB-C2B-C3B	2.23	128.85	124.68
24	c	911	CLA	O2A-CGA-CBA	2.23	118.91	111.91
24	B	614	CLA	CMC-C2C-C1C	2.23	128.44	125.04
24	a	408	CLA	C1-C2-C3	-2.23	122.19	126.04
26	D	404	BCR	C37-C22-C23	-2.23	114.57	118.08
28	A	612	SQD	O48-C23-C24	2.23	118.90	111.91
24	c	907	CLA	C4-C3-C5	2.22	119.01	115.27
24	d	404	CLA	C1-O2A-CGA	2.22	122.28	116.44
26	A	610	BCR	C37-C22-C23	-2.22	114.58	118.08
24	c	910	CLA	CAC-C3C-C4C	2.22	127.69	124.81
24	C	509	CLA	CHD-C4C-NC	-2.22	120.71	124.20
24	B	603	CLA	C1-O2A-CGA	2.22	122.26	116.44
24	c	904	CLA	CHD-C4C-NC	-2.22	120.71	124.20
24	c	903	CLA	O2A-CGA-CBA	2.22	118.86	111.91
24	A	609	CLA	C1-O2A-CGA	2.22	122.26	116.44
24	c	914	CLA	C4-C3-C5	2.22	119.00	115.27
24	A	607	CLA	CED-O2D-CGD	2.22	120.95	115.94
29	d	409	LHG	O8-C23-O10	-2.22	118.00	123.59
24	a	407	CLA	C1-O2A-CGA	2.22	122.26	116.44
24	B	605	CLA	O2A-CGA-CBA	2.22	118.86	111.91
26	c	915	BCR	C40-C30-C29	-2.21	100.05	108.91
24	C	502	CLA	CHD-C4C-C3C	-2.21	121.59	124.84
29	A	615	LHG	O8-C23-O10	-2.21	118.01	123.59
24	b	603	CLA	CED-O2D-CGD	2.21	120.94	115.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	c	911	CLA	O2D-CGD-O1D	-2.21	119.52	123.84
24	b	608	CLA	CBC-CAC-C3C	-2.21	106.34	112.43
24	B	617	CLA	CED-O2D-CGD	2.21	120.93	115.94
24	c	905	CLA	O1D-CGD-CBD	-2.21	119.97	124.48
31	d	406	DGD	O2G-C1B-O1B	-2.21	118.37	123.70
24	D	402	CLA	CED-O2D-CGD	2.21	120.93	115.94
25	A	608	PHO	C1C-NC-C4C	-2.21	102.35	106.51
24	c	910	CLA	O2A-CGA-CBA	2.20	118.82	111.91
24	c	909	CLA	CAC-C3C-C2C	2.20	131.30	127.53
26	b	619	BCR	C32-C1-C2	-2.20	100.10	108.91
24	c	913	CLA	CAC-C3C-C4C	2.20	127.67	124.81
26	k	101	BCR	C1-C6-C7	2.20	122.00	115.78
24	d	401	CLA	CED-O2D-CGD	2.20	120.90	115.94
24	B	615	CLA	CED-O2D-CGD	2.19	120.89	115.94
24	d	403	CLA	C4D-C3D-CAD	2.19	109.69	108.47
24	b	607	CLA	O2A-CGA-CBA	2.19	118.78	111.91
24	b	604	CLA	O2A-CGA-O1A	-2.19	118.07	123.59
24	c	904	CLA	O2D-CGD-O1D	-2.19	119.56	123.84
26	k	101	BCR	C30-C25-C24	2.19	121.96	115.78
26	A	610	BCR	C28-C27-C26	-2.18	110.18	114.08
24	C	511	CLA	CED-O2D-CGD	2.18	120.88	115.94
24	C	507	CLA	O2A-CGA-CBA	2.18	118.76	111.91
27	d	405	PL9	C35-C34-C36	2.18	118.94	115.27
24	B	617	CLA	CHD-C4C-C3C	-2.18	121.63	124.84
26	b	618	BCR	C1-C6-C7	2.18	121.95	115.78
28	A	612	SQD	O48-C23-O10	-2.18	118.09	123.59
26	B	620	BCR	C38-C26-C27	-2.18	109.43	113.62
24	B	614	CLA	C1-C2-C3	-2.18	122.28	126.04
26	k	102	BCR	C37-C22-C23	-2.18	114.65	118.08
27	a	410	PL9	C42-C43-C44	-2.18	122.42	127.66
26	k	102	BCR	C39-C30-C29	-2.18	100.20	108.91
26	k	102	BCR	C34-C9-C8	-2.18	114.65	118.08
24	b	617	CLA	C1-O2A-CGA	2.18	122.15	116.44
32	e	101	HEM	CMA-C3A-C4A	-2.17	125.12	128.46
24	B	607	CLA	CMB-C2B-C3B	2.17	128.74	124.68
29	D	409	LHG	O4-P-O5	2.17	122.98	112.24
24	B	605	CLA	O2D-CGD-O1D	-2.17	119.60	123.84
24	b	609	CLA	O2A-CGA-CBA	2.17	118.71	111.91
24	B	608	CLA	C1-O2A-CGA	2.17	122.13	116.44
24	c	905	CLA	CHD-C4C-NC	-2.17	120.79	124.20
24	d	404	CLA	CAC-C3C-C4C	2.17	127.62	124.81
24	b	609	CLA	O2A-CGA-O1A	-2.16	118.13	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	D	402	CLA	O2A-CGA-CBA	2.16	118.69	111.91
26	C	514	BCR	C40-C30-C29	-2.16	100.26	108.91
26	b	619	BCR	C2-C3-C4	2.16	116.21	111.38
27	a	410	PL9	C22-C23-C24	-2.16	122.46	127.66
31	H	102	DGD	O6E-C5E-C6E	2.16	111.81	106.44
32	V	202	HEM	CMA-C3A-C4A	-2.16	125.14	128.46
24	c	905	CLA	CMC-C2C-C1C	2.16	128.32	125.04
24	B	616	CLA	C1-O2A-CGA	2.15	122.10	116.44
24	b	608	CLA	C1-C2-C3	-2.15	122.32	126.04
27	d	405	PL9	C36-C37-C38	-2.15	104.80	111.88
24	B	609	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
24	c	906	CLA	C1-O2A-CGA	2.15	122.09	116.44
26	f	101	BCR	C30-C25-C24	2.15	121.87	115.78
24	b	616	CLA	C4D-C3D-CAD	2.15	109.67	108.47
24	c	912	CLA	CAC-C3C-C4C	2.14	127.59	124.81
24	c	913	CLA	C1-C2-C3	-2.14	122.34	126.04
29	D	408	LHG	O7-C7-C8	2.14	116.12	111.50
24	C	501	CLA	C4-C3-C5	2.14	118.87	115.27
24	B	613	CLA	C1D-CHD-C4C	2.14	125.38	122.56
24	a	407	CLA	C1-C2-C3	-2.14	122.34	126.04
24	d	404	CLA	CMC-C2C-C1C	2.14	128.29	125.04
26	B	622	BCR	C27-C26-C25	2.14	125.83	122.73
24	B	617	CLA	CBC-CAC-C3C	-2.14	106.54	112.43
29	D	407	LHG	O4-P-O5	2.14	122.80	112.24
24	c	914	CLA	C1-O2A-CGA	2.14	122.05	116.44
24	C	503	CLA	CED-O2D-CGD	2.13	120.76	115.94
24	A	614	CLA	O2D-CGD-O1D	-2.13	119.67	123.84
27	d	405	PL9	C25-C24-C26	2.13	118.86	115.27
24	b	614	CLA	C1-O2A-CGA	2.13	122.03	116.44
24	c	913	CLA	CED-O2D-CGD	2.13	120.75	115.94
24	B	617	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
24	b	615	CLA	CMB-C2B-C3B	2.13	128.66	124.68
24	C	509	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
26	D	404	BCR	C38-C26-C25	2.13	126.92	124.53
24	B	613	CLA	O2A-CGA-CBA	2.13	118.58	111.91
24	c	912	CLA	O2A-CGA-CBA	2.12	118.57	111.91
24	C	504	CLA	C7-C6-C5	-2.12	107.59	113.36
29	D	409	LHG	O8-C23-C24	2.12	118.57	111.91
24	b	610	CLA	C4D-C3D-CAD	2.12	109.65	108.47
24	A	609	CLA	O2D-CGD-O1D	-2.12	119.69	123.84
24	c	910	CLA	O1D-CGD-CBD	-2.12	120.14	124.48
24	B	610	CLA	CBC-CAC-C3C	-2.12	106.58	112.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	619	BCR	C28-C29-C30	2.12	122.19	114.60
27	D	405	PL9	C7-C3-C2	-2.12	120.51	123.30
26	C	514	BCR	C2-C3-C4	2.12	116.12	111.38
24	B	607	CLA	C1-O2A-CGA	2.12	122.01	116.44
24	C	505	CLA	C1-O2A-CGA	2.12	122.00	116.44
24	b	604	CLA	O2A-CGA-CBA	2.12	118.55	111.91
31	d	406	DGD	O5D-C1E-C2E	2.12	111.61	108.30
32	e	101	HEM	C1D-C2D-C3D	-2.12	105.52	107.00
29	b	620	LHG	O7-C7-O9	-2.12	118.59	123.70
24	c	902	CLA	O2A-CGA-CBA	2.11	118.54	111.91
24	A	606	CLA	O2A-CGA-CBA	2.11	118.54	111.91
27	a	410	PL9	C15-C14-C16	2.11	118.83	115.27
24	B	606	CLA	C4D-C3D-CAD	2.11	109.65	108.47
24	D	402	CLA	CAA-CBA-CGA	-2.11	107.08	113.25
24	B	606	CLA	CHD-C4C-C3C	-2.11	121.74	124.84
24	A	607	CLA	C1-O2A-CGA	2.11	121.98	116.44
26	c	915	BCR	C34-C9-C10	-2.11	119.97	122.92
26	B	620	BCR	C3-C2-C1	2.11	122.14	114.60
24	B	617	CLA	C4-C3-C5	2.11	118.81	115.27
28	L	101	SQD	O5-C1-C2	-2.11	105.89	110.35
24	d	404	CLA	C1D-CHD-C4C	2.11	125.34	122.56
32	V	202	HEM	C4C-C3C-C2C	2.10	108.37	106.90
26	K	101	BCR	C29-C28-C27	-2.10	106.67	111.38
24	b	606	CLA	C1D-CHD-C4C	2.10	125.33	122.56
24	b	610	CLA	O2D-CGD-O1D	-2.10	119.73	123.84
24	C	512	CLA	CMC-C2C-C1C	2.10	128.24	125.04
27	D	405	PL9	C51-C49-C50	2.10	119.24	114.60
24	B	605	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
24	B	614	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
24	B	605	CLA	CHD-C4C-NC	-2.10	120.90	124.20
24	C	508	CLA	O2D-CGD-O1D	-2.10	119.73	123.84
26	A	610	BCR	C2-C1-C6	2.10	113.71	110.48
24	B	609	CLA	CHC-C1C-C2C	-2.10	120.92	126.72
26	K	101	BCR	C1-C6-C7	2.10	121.71	115.78
32	E	101	HEM	CMA-C3A-C4A	-2.10	125.24	128.46
27	d	405	PL9	C10-C9-C11	2.10	118.80	115.27
24	B	611	CLA	O2A-CGA-O1A	-2.10	118.30	123.59
24	c	913	CLA	CMC-C2C-C1C	2.09	128.23	125.04
24	b	608	CLA	CHD-C4C-C3C	-2.09	121.76	124.84
26	k	101	BCR	C28-C27-C26	2.09	117.81	114.08
24	b	602	CLA	CAC-C3C-C4C	2.09	127.52	124.81
26	D	404	BCR	C24-C25-C26	2.09	126.53	121.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	a	408	CLA	CBC-CAC-C3C	-2.09	106.67	112.43
31	C	518	DGD	O1G-C1A-O1A	-2.09	118.32	123.59
24	d	401	CLA	CMC-C2C-C1C	2.09	128.22	125.04
28	a	411	SQD	C45-O47-C7	-2.09	112.65	117.79
24	B	604	CLA	CHD-C4C-C3C	-2.09	121.77	124.84
26	T	102	BCR	C33-C5-C6	-2.09	122.19	124.53
28	L	101	SQD	O47-C7-O49	-2.09	118.66	123.70
24	B	604	CLA	CAC-C3C-C4C	2.09	127.52	124.81
24	C	511	CLA	CMC-C2C-C1C	2.08	128.21	125.04
24	A	609	CLA	CHB-C4A-NA	2.08	127.39	124.51
24	C	501	CLA	C1-C2-C3	-2.08	122.44	126.04
24	C	510	CLA	O1D-CGD-CBD	-2.08	120.22	124.48
24	b	610	CLA	CMC-C2C-C1C	2.08	128.21	125.04
24	b	610	CLA	C1-C2-C3	-2.08	122.44	126.04
24	B	604	CLA	O2A-CGA-CBA	2.08	118.44	111.91
24	D	403	CLA	CBC-CAC-C3C	-2.08	106.70	112.43
24	B	604	CLA	CBC-CAC-C3C	-2.08	106.70	112.43
24	B	602	CLA	C1-O2A-CGA	2.08	121.90	116.44
24	B	607	CLA	CMC-C2C-C1C	2.08	128.20	125.04
24	c	904	CLA	O2A-CGA-CBA	2.08	118.43	111.91
26	b	619	BCR	C3-C2-C1	2.08	122.03	114.60
24	c	911	CLA	C1-C2-C3	-2.08	122.45	126.04
24	B	609	CLA	C11-C10-C8	-2.07	109.22	115.92
24	c	912	CLA	CMC-C2C-C1C	2.07	128.19	125.04
24	a	406	CLA	CBC-CAC-C3C	-2.07	106.72	112.43
28	F	101	SQD	C3-C4-C5	2.07	113.93	110.24
24	d	404	CLA	CED-O2D-CGD	2.07	120.61	115.94
24	b	611	CLA	O2A-CGA-O1A	-2.07	118.38	123.59
24	a	407	CLA	O2A-CGA-CBA	2.07	118.39	111.91
27	A	611	PL9	C51-C49-C50	2.06	119.16	114.60
24	a	407	CLA	CHC-C1C-C2C	-2.06	121.01	126.72
29	d	410	LHG	O8-C23-O10	-2.06	118.38	123.59
24	c	911	CLA	CMC-C2C-C1C	2.06	128.18	125.04
24	B	616	CLA	C11-C10-C8	-2.06	109.25	115.92
24	b	611	CLA	O2D-CGD-O1D	-2.06	119.80	123.84
24	B	606	CLA	CAC-C3C-C4C	2.06	127.49	124.81
28	A	612	SQD	O5-C1-C2	-2.06	105.98	110.35
24	a	407	CLA	CMC-C2C-C1C	2.06	128.18	125.04
24	B	610	CLA	C4D-C3D-CAD	2.06	109.62	108.47
24	A	607	CLA	CHC-C1C-C2C	-2.06	121.02	126.72
24	B	615	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
24	b	614	CLA	C4-C3-C5	2.06	118.73	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	616	CLA	O2A-CGA-CBA	2.06	118.37	111.91
28	d	407	SQD	O47-C45-C46	2.06	115.85	108.40
24	c	904	CLA	CMC-C2C-C1C	2.06	128.17	125.04
24	C	509	CLA	C4-C3-C5	2.06	118.73	115.27
26	c	915	BCR	C39-C30-C25	2.05	113.63	110.30
26	b	619	BCR	C28-C27-C26	2.05	117.75	114.08
24	b	617	CLA	CBC-CAC-C3C	-2.05	106.77	112.43
24	a	408	CLA	C4D-C3D-CAD	2.05	109.61	108.47
24	c	903	CLA	O1D-CGD-CBD	-2.05	120.28	124.48
26	T	101	BCR	C2-C3-C4	2.05	115.97	111.38
24	B	606	CLA	CMC-C2C-C1C	2.05	128.16	125.04
24	C	504	CLA	C4D-C3D-CAD	2.05	109.61	108.47
24	C	505	CLA	O2D-CGD-O1D	-2.05	119.83	123.84
27	a	410	PL9	C27-C28-C29	-2.05	122.72	127.66
24	C	510	CLA	C4-C3-C5	2.05	118.72	115.27
24	B	610	CLA	CMC-C2C-C1C	2.05	128.16	125.04
24	c	914	CLA	CAC-C3C-C4C	2.05	127.47	124.81
24	b	617	CLA	C4-C3-C5	2.05	118.71	115.27
24	b	606	CLA	C1-C2-C3	-2.05	122.51	126.04
24	C	509	CLA	C1-O2A-CGA	2.04	121.81	116.44
24	C	506	CLA	O2A-CGA-CBA	2.04	118.32	111.91
24	B	609	CLA	CMC-C2C-C1C	2.04	128.15	125.04
24	C	509	CLA	CHC-C1C-C2C	-2.04	121.08	126.72
26	C	515	BCR	C4-C5-C6	2.04	125.69	122.73
24	C	507	CLA	O2D-CGD-O1D	-2.04	119.86	123.84
24	C	507	CLA	OBD-CAD-C3D	-2.04	124.60	127.98
27	d	405	PL9	C7-C3-C4	2.04	118.53	116.88
24	c	902	CLA	C1-O2A-CGA	2.04	121.78	116.44
24	b	614	CLA	CED-O2D-CGD	2.03	120.54	115.94
26	B	620	BCR	C40-C30-C25	2.03	113.60	110.30
24	C	512	CLA	O1D-CGD-CBD	-2.03	120.33	124.48
26	B	622	BCR	C37-C22-C23	-2.03	114.88	118.08
27	a	410	PL9	C51-C49-C50	2.03	119.09	114.60
24	c	913	CLA	O1D-CGD-CBD	-2.03	120.33	124.48
24	c	902	CLA	CAC-C3C-C4C	2.03	127.44	124.81
24	a	406	CLA	O2A-CGA-CBA	2.03	118.28	111.91
24	c	903	CLA	CMC-C2C-C1C	2.03	128.13	125.04
24	D	403	CLA	C6-C7-C8	-2.03	109.36	115.92
26	H	101	BCR	C40-C30-C29	-2.03	100.79	108.91
24	B	606	CLA	CMB-C2B-C3B	2.03	128.47	124.68
24	b	615	CLA	CMC-C2C-C1C	2.03	128.13	125.04
26	B	622	BCR	C8-C9-C10	2.03	122.05	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	C	507	CLA	C1-O2A-CGA	2.03	121.76	116.44
24	b	608	CLA	C1-O2A-CGA	2.03	121.76	116.44
24	B	607	CLA	CAC-C3C-C4C	2.02	127.44	124.81
24	c	906	CLA	O2A-CGA-CBA	2.02	118.26	111.91
28	l	101	SQD	C4-C3-C2	2.02	114.36	110.82
24	A	606	CLA	CHC-C1C-C2C	-2.02	121.13	126.72
28	d	407	SQD	O7-S-C6	2.02	109.34	106.94
24	c	907	CLA	O2A-CGA-CBA	2.02	118.24	111.91
29	b	620	LHG	O8-C23-C24	2.02	118.23	111.91
24	d	401	CLA	O2D-CGD-O1D	-2.01	119.90	123.84
26	c	918	BCR	C35-C13-C12	-2.01	114.90	118.08
29	B	621	LHG	O4-P-O5	2.01	122.19	112.24
24	c	909	CLA	O2D-CGD-O1D	-2.01	119.90	123.84
24	c	908	CLA	CHD-C4C-C3C	-2.01	121.88	124.84
26	b	618	BCR	C31-C1-C6	2.01	113.56	110.30
24	B	616	CLA	CMC-C2C-C1C	2.01	128.10	125.04
28	l	101	SQD	O9-S-C6	2.01	109.33	106.94
24	B	608	CLA	CHB-C4A-NA	2.01	127.29	124.51
24	b	606	CLA	CED-O2D-CGD	2.01	120.48	115.94
24	C	510	CLA	O2A-CGA-O1A	-2.01	118.53	123.59
24	a	408	CLA	O2D-CGD-O1D	-2.01	119.91	123.84
24	c	913	CLA	CMB-C2B-C3B	2.01	128.43	124.68
24	C	506	CLA	O1D-CGD-CBD	-2.01	120.38	124.48
24	C	513	CLA	CED-O2D-CGD	2.01	120.47	115.94
31	c	916	DGD	C2G-O2G-C1B	-2.01	112.85	117.79
25	A	608	PHO	O1D-CGD-CBD	-2.00	120.38	124.48
24	D	402	CLA	O2A-CGA-O1A	-2.00	118.54	123.59
24	B	611	CLA	CAA-CBA-CGA	-2.00	107.40	113.25

All (163) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
24	a	408	CLA	NC
24	b	602	CLA	NC
24	b	602	CLA	ND
24	b	602	CLA	NA
24	C	509	CLA	NC
24	C	509	CLA	ND
24	C	509	CLA	NA
24	b	614	CLA	NC
24	b	614	CLA	ND
24	b	614	CLA	NA

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atom</b>
24	B	613	CLA	NA
24	B	613	CLA	NC
24	B	613	CLA	ND
24	b	608	CLA	NC
24	b	608	CLA	ND
24	b	608	CLA	NA
24	C	504	CLA	NC
24	C	504	CLA	ND
24	C	504	CLA	NA
24	d	404	CLA	NC
24	C	505	CLA	ND
24	B	611	CLA	NC
24	B	611	CLA	ND
24	B	611	CLA	NA
24	c	905	CLA	NC
24	c	905	CLA	NA
24	A	614	CLA	NA
24	d	403	CLA	ND
24	d	403	CLA	NA
24	B	617	CLA	NC
24	B	617	CLA	ND
24	B	617	CLA	NA
24	c	903	CLA	NC
24	c	903	CLA	NA
24	c	912	CLA	NC
24	c	912	CLA	NA
24	B	606	CLA	NC
24	B	606	CLA	ND
24	B	606	CLA	NA
24	D	403	CLA	NC
24	D	403	CLA	NA
24	b	609	CLA	NC
24	C	501	CLA	NC
24	C	501	CLA	NA
24	c	909	CLA	NC
24	c	909	CLA	NA
24	B	615	CLA	NC
24	B	615	CLA	ND
24	B	615	CLA	NA
24	b	606	CLA	NC
24	b	606	CLA	ND
24	b	606	CLA	NA

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atom</b>
24	b	603	CLA	NC
24	b	603	CLA	ND
24	b	603	CLA	NA
24	B	612	CLA	NC
24	B	616	CLA	NC
24	B	616	CLA	ND
24	B	616	CLA	NA
24	A	609	CLA	NC
24	b	616	CLA	NC
24	b	616	CLA	ND
24	b	616	CLA	NA
24	b	605	CLA	NC
24	b	605	CLA	ND
24	b	605	CLA	NA
24	A	606	CLA	NC
24	A	606	CLA	ND
24	A	606	CLA	NA
24	B	604	CLA	NC
24	B	604	CLA	ND
24	B	604	CLA	NA
24	c	913	CLA	NC
24	c	913	CLA	NA
24	c	913	CLA	ND
24	B	610	CLA	NC
24	B	610	CLA	ND
24	C	511	CLA	NC
24	C	511	CLA	NA
24	B	607	CLA	NC
24	B	607	CLA	NA
24	B	602	CLA	ND
24	B	602	CLA	NA
24	c	902	CLA	NC
24	c	902	CLA	ND
24	c	902	CLA	NA
24	C	507	CLA	NC
24	C	507	CLA	ND
24	C	507	CLA	NA
24	c	906	CLA	ND
24	c	906	CLA	NA
24	C	503	CLA	NC
24	C	503	CLA	ND
24	C	503	CLA	NA

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atom</b>
24	b	615	CLA	NC
24	b	615	CLA	ND
24	b	615	CLA	NA
24	C	510	CLA	NC
24	C	510	CLA	ND
24	C	510	CLA	NA
24	a	407	CLA	NC
24	a	407	CLA	NA
24	c	904	CLA	NC
24	c	911	CLA	NC
24	c	911	CLA	ND
24	c	911	CLA	NA
24	c	914	CLA	NC
24	c	914	CLA	NA
24	a	406	CLA	NC
24	a	406	CLA	ND
24	a	406	CLA	NA
24	c	907	CLA	ND
24	c	907	CLA	NA
24	b	611	CLA	NC
24	b	611	CLA	ND
24	b	611	CLA	NA
24	D	402	CLA	ND
24	b	617	CLA	NC
24	b	617	CLA	ND
24	b	617	CLA	NA
24	C	513	CLA	NC
24	C	513	CLA	NA
24	C	512	CLA	NC
24	C	512	CLA	NA
24	C	512	CLA	ND
24	d	401	CLA	NA
24	B	614	CLA	NC
24	B	614	CLA	ND
24	B	614	CLA	NA
24	b	607	CLA	NC
24	b	607	CLA	ND
24	B	608	CLA	NC
24	B	608	CLA	ND
24	B	608	CLA	NA
24	C	508	CLA	NC
24	C	508	CLA	NA

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Mol	Chain	Res	Type	Atom
24	A	607	CLA	NC
24	A	607	CLA	NA
24	B	605	CLA	NC
24	B	605	CLA	ND
24	B	605	CLA	NA
24	b	612	CLA	NC
24	b	612	CLA	NA
24	b	613	CLA	NA
24	b	613	CLA	NC
24	b	613	CLA	ND
24	B	609	CLA	NC
24	C	506	CLA	NC
24	C	506	CLA	ND
24	C	506	CLA	NA
24	c	908	CLA	NC
24	c	908	CLA	ND
24	c	908	CLA	NA
24	C	502	CLA	NA
24	B	603	CLA	NC
24	B	603	CLA	ND
24	B	603	CLA	NA
24	c	910	CLA	NC
24	c	910	CLA	ND
24	c	910	CLA	NA
24	b	604	CLA	NC
24	b	604	CLA	ND
24	b	604	CLA	NA

All (1265) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	b	602	CLA	C2-C1-O2A-CGA
24	b	602	CLA	CHA-CBD-CGD-O2D
26	b	619	BCR	C10-C11-C12-C13
31	D	406	DGD	C2B-C1B-O2G-C2G
31	D	406	DGD	C2D-C1D-O3G-C3G
31	D	406	DGD	C2E-C1E-O5D-C6D
31	D	406	DGD	O6E-C1E-O5D-C6D
24	b	614	CLA	C11-C12-C13-C15
26	k	102	BCR	C10-C11-C12-C13
26	k	102	BCR	C20-C21-C22-C23
26	k	102	BCR	C20-C21-C22-C37

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Mol	Chain	Res	Type	Atoms
26	c	918	BCR	C9-C10-C11-C12
26	c	918	BCR	C10-C11-C12-C13
26	c	918	BCR	C11-C12-C13-C14
26	c	918	BCR	C11-C12-C13-C35
26	c	918	BCR	C14-C15-C16-C17
26	c	918	BCR	C17-C18-C19-C20
26	c	918	BCR	C36-C18-C19-C20
26	c	918	BCR	C18-C19-C20-C21
24	B	606	CLA	C2-C3-C5-C6
24	B	606	CLA	C4-C3-C5-C6
27	A	611	PL9	C9-C11-C12-C13
27	A	611	PL9	C18-C19-C21-C22
27	A	611	PL9	C20-C19-C21-C22
27	A	611	PL9	C19-C21-C22-C23
27	A	611	PL9	C24-C26-C27-C28
24	c	909	CLA	CHA-CBD-CGD-O1D
24	c	909	CLA	CHA-CBD-CGD-O2D
24	B	615	CLA	CHA-CBD-CGD-O1D
24	B	615	CLA	CAD-CBD-CGD-O1D
24	B	615	CLA	CAD-CBD-CGD-O2D
26	D	404	BCR	C14-C15-C16-C17
26	D	404	BCR	C22-C23-C24-C25
26	D	404	BCR	C23-C24-C25-C26
26	C	514	BCR	C14-C15-C16-C17
26	C	514	BCR	C18-C19-C20-C21
24	b	603	CLA	CHA-CBD-CGD-O1D
29	A	615	LHG	O9-C7-O7-C5
29	A	615	LHG	C8-C7-O7-C5
31	d	406	DGD	C2B-C1B-O2G-C2G
31	d	406	DGD	C2D-C1D-O3G-C3G
31	d	406	DGD	C2E-C1E-O5D-C6D
31	d	406	DGD	O6E-C1E-O5D-C6D
28	F	101	SQD	C2-C1-O6-C44
28	F	101	SQD	O5-C1-O6-C44
26	H	101	BCR	C10-C11-C12-C13
26	H	101	BCR	C18-C19-C20-C21
24	B	602	CLA	CHA-CBD-CGD-O1D
24	C	507	CLA	CHA-CBD-CGD-O1D
26	C	515	BCR	C14-C15-C16-C17
26	C	515	BCR	C18-C19-C20-C21
26	h	101	BCR	C14-C15-C16-C17
26	h	101	BCR	C18-C19-C20-C21

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Mol	Chain	Res	Type	Atoms
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
28	A	613	SQD	O6-C44-C45-O47
29	d	409	LHG	C1-C2-C3-O3
29	d	409	LHG	C3-O3-P-O5
29	d	409	LHG	C4-O6-P-O4
29	D	408	LHG	O1-C1-C2-C3
29	D	408	LHG	O2-C2-C3-O3
29	D	408	LHG	C3-O3-P-O5
29	D	408	LHG	C4-O6-P-O4
28	a	402	SQD	O6-C44-C45-O47
26	f	101	BCR	C14-C15-C16-C17
26	f	101	BCR	C21-C22-C23-C24
26	f	101	BCR	C37-C22-C23-C24
26	f	101	BCR	C22-C23-C24-C25
26	c	915	BCR	C11-C12-C13-C14
26	c	915	BCR	C11-C12-C13-C35
26	c	915	BCR	C14-C15-C16-C17
26	c	915	BCR	C15-C16-C17-C18
26	c	915	BCR	C18-C19-C20-C21
26	K	101	BCR	C10-C11-C12-C13
26	K	101	BCR	C17-C18-C19-C20
26	K	101	BCR	C36-C18-C19-C20
26	K	101	BCR	C18-C19-C20-C21
24	d	401	CLA	CHA-CBD-CGD-O2D
29	B	621	LHG	C4-O6-P-O4
29	B	621	LHG	C4-O6-P-O5
24	b	607	CLA	CHA-CBD-CGD-O1D
24	C	508	CLA	CHA-CBD-CGD-O1D
24	C	508	CLA	CHA-CBD-CGD-O2D
29	a	413	LHG	O1-C1-C2-O2
29	a	413	LHG	C1-C2-C3-O3
28	L	101	SQD	O5-C1-O6-C44
28	L	101	SQD	C8-C7-O47-C45
28	L	101	SQD	O5-C5-C6-S
26	B	618	BCR	C10-C11-C12-C13
26	B	618	BCR	C11-C12-C13-C35
29	b	620	LHG	C4-O6-P-O4
29	b	620	LHG	C4-O6-P-O5
24	c	908	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
24	C	502	CLA	CHA-CBD-CGD-O1D
24	C	502	CLA	CAD-CBD-CGD-O1D
28	d	407	SQD	C46-C45-O47-C7
28	d	407	SQD	C8-C7-O47-C45
27	a	410	PL9	C9-C11-C12-C13
27	a	410	PL9	C14-C16-C17-C18
27	a	410	PL9	C24-C26-C27-C28
28	l	101	SQD	C8-C7-O47-C45
28	l	101	SQD	O5-C5-C6-S
29	A	615	LHG	O10-C23-O8-C6
28	F	101	SQD	O10-C23-O48-C46
29	A	615	LHG	C24-C23-O8-C6
28	F	101	SQD	C24-C23-O48-C46
24	c	914	CLA	CBD-CGD-O2D-CED
24	C	513	CLA	CBD-CGD-O2D-CED
24	b	602	CLA	O1A-CGA-O2A-C1
31	D	406	DGD	O1B-C1B-O2G-C2G
31	d	406	DGD	O1B-C1B-O2G-C2G
28	L	101	SQD	O49-C7-O47-C45
28	d	407	SQD	O49-C7-O47-C45
24	B	615	CLA	C3-C5-C6-C7
24	b	605	CLA	C3-C5-C6-C7
24	b	602	CLA	CBA-CGA-O2A-C1
24	B	617	CLA	CBA-CGA-O2A-C1
24	C	513	CLA	O1D-CGD-O2D-CED
24	b	606	CLA	C4-C3-C5-C6
24	B	602	CLA	C3-C5-C6-C7
28	l	101	SQD	O49-C7-O47-C45
26	c	918	BCR	C19-C20-C21-C22
26	D	404	BCR	C15-C16-C17-C18
24	C	508	CLA	CBD-CGD-O2D-CED
29	d	409	LHG	O2-C2-C3-O3
29	a	413	LHG	O2-C2-C3-O3
24	b	615	CLA	C3-C5-C6-C7
24	B	617	CLA	O1A-CGA-O2A-C1
31	d	406	DGD	O1A-C1A-O1G-C1G
31	D	406	DGD	O6E-C5E-C6E-O5E
24	c	902	CLA	O1D-CGD-O2D-CED
24	b	602	CLA	C3-C5-C6-C7
31	d	406	DGD	C2A-C1A-O1G-C1G
24	b	615	CLA	C4-C3-C5-C6
24	b	615	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
24	B	607	CLA	C2A-CAA-CBA-CGA
24	b	607	CLA	C2A-CAA-CBA-CGA
31	d	406	DGD	O6D-C1D-O3G-C3G
27	A	611	PL9	C14-C16-C17-C18
24	c	914	CLA	O1D-CGD-O2D-CED
29	D	408	LHG	C1-C2-C3-O3
28	l	101	SQD	C24-C23-O48-C46
24	c	902	CLA	CBD-CGD-O2D-CED
26	C	515	BCR	C15-C16-C17-C18
26	h	101	BCR	C19-C20-C21-C22
31	c	917	DGD	C1A-C2A-C3A-C4A
28	d	407	SQD	C23-C24-C25-C26
24	b	606	CLA	C2-C3-C5-C6
24	b	602	CLA	C11-C10-C8-C9
24	C	509	CLA	C6-C7-C8-C9
24	C	504	CLA	C11-C12-C13-C14
24	c	905	CLA	C11-C12-C13-C14
24	C	501	CLA	C11-C12-C13-C14
24	B	602	CLA	C11-C10-C8-C9
24	c	907	CLA	C6-C7-C8-C9
24	C	502	CLA	C14-C13-C15-C16
24	c	912	CLA	O1D-CGD-O2D-CED
24	b	607	CLA	O1D-CGD-O2D-CED
26	B	620	BCR	C37-C22-C23-C24
26	K	101	BCR	C7-C8-C9-C34
31	c	917	DGD	C3B-C4B-C5B-C6B
31	D	406	DGD	C4E-C5E-C6E-O5E
31	D	406	DGD	C1A-C2A-C3A-C4A
31	j	101	DGD	C1A-C2A-C3A-C4A
28	l	101	SQD	O10-C23-O48-C46
24	B	616	CLA	C5-C6-C7-C8
24	A	609	CLA	C10-C11-C12-C13
29	d	410	LHG	C10-C11-C12-C13
24	d	403	CLA	C15-C16-C17-C18
24	A	609	CLA	C13-C15-C16-C17
24	B	602	CLA	C10-C11-C12-C13
29	D	407	LHG	C23-C24-C25-C26
28	a	402	SQD	C23-C24-C25-C26
24	b	602	CLA	C10-C11-C12-C13
24	C	509	CLA	C8-C10-C11-C12
24	B	615	CLA	C5-C6-C7-C8
24	B	615	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
24	c	907	CLA	C10-C11-C12-C13
29	D	408	LHG	O1-C1-C2-O2
31	d	406	DGD	C1B-C2B-C3B-C4B
31	C	517	DGD	C1B-C2B-C3B-C4B
28	L	101	SQD	C7-C8-C9-C10
24	b	614	CLA	C8-C10-C11-C12
24	B	607	CLA	C13-C15-C16-C17
24	b	607	CLA	C15-C16-C17-C18
24	a	408	CLA	C10-C11-C12-C13
24	b	602	CLA	C8-C10-C11-C12
24	D	403	CLA	C8-C10-C11-C12
24	b	615	CLA	C8-C10-C11-C12
24	c	914	CLA	C10-C11-C12-C13
24	C	506	CLA	C5-C6-C7-C8
31	D	406	DGD	C1B-C2B-C3B-C4B
29	A	615	LHG	C7-C8-C9-C10
28	A	613	SQD	C23-C24-C25-C26
24	c	912	CLA	CBD-CGD-O2D-CED
24	c	905	CLA	C11-C12-C13-C15
24	b	615	CLA	C6-C7-C8-C10
24	c	914	CLA	C11-C10-C8-C7
24	b	607	CLA	C12-C13-C15-C16
26	k	102	BCR	C19-C20-C21-C22
26	c	918	BCR	C15-C16-C17-C18
26	C	514	BCR	C15-C16-C17-C18
26	C	514	BCR	C19-C20-C21-C22
24	D	403	CLA	C10-C11-C12-C13
24	B	607	CLA	C15-C16-C17-C18
24	b	615	CLA	C13-C15-C16-C17
24	a	407	CLA	C15-C16-C17-C18
31	D	406	DGD	O6D-C1D-O3G-C3G
24	A	607	CLA	C13-C15-C16-C17
24	c	910	CLA	C13-C15-C16-C17
27	a	410	PL9	C19-C21-C22-C23
26	Y	101	BCR	C10-C11-C12-C13
26	h	101	BCR	C10-C11-C12-C13
26	k	101	BCR	C10-C11-C12-C13
26	k	101	BCR	C18-C19-C20-C21
24	C	509	CLA	C13-C15-C16-C17
24	b	607	CLA	C8-C10-C11-C12
24	B	612	CLA	C15-C16-C17-C18
24	A	609	CLA	C15-C16-C17-C18

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
24	b	617	CLA	C15-C16-C17-C18
24	B	617	CLA	C10-C11-C12-C13
24	C	501	CLA	C15-C16-C17-C18
24	b	612	CLA	C13-C15-C16-C17
24	C	506	CLA	C10-C11-C12-C13
29	D	408	LHG	C3-O3-P-O6
29	B	621	LHG	C4-O6-P-O3
29	b	620	LHG	C4-O6-P-O3
24	b	609	CLA	C13-C15-C16-C17
24	A	607	CLA	C16-C17-C18-C20
26	h	101	BCR	C15-C16-C17-C18
26	c	915	BCR	C19-C20-C21-C22
29	A	615	LHG	C14-C15-C16-C17
31	d	406	DGD	C8B-C9B-CAB-CBB
31	C	518	DGD	C9B-CAB-CBB-CCB
28	A	612	SQD	C11-C12-C13-C14
29	b	620	LHG	C14-C15-C16-C17
29	b	620	LHG	C28-C29-C30-C31
31	c	917	DGD	C5A-C6A-C7A-C8A
24	b	613	CLA	C13-C15-C16-C17
26	c	918	BCR	C20-C21-C22-C37
26	H	101	BCR	C20-C21-C22-C37
26	C	515	BCR	C20-C21-C22-C37
26	h	101	BCR	C20-C21-C22-C37
26	c	915	BCR	C20-C21-C22-C37
26	B	619	BCR	C20-C21-C22-C37
31	D	406	DGD	CCA-CDA-CEA-CFA
31	D	406	DGD	C7B-C8B-C9B-CAB
29	d	410	LHG	C15-C16-C17-C18
28	a	411	SQD	C26-C27-C28-C29
28	a	411	SQD	C29-C30-C31-C32
29	A	615	LHG	C24-C25-C26-C27
28	F	101	SQD	C29-C30-C31-C32
28	F	101	SQD	C34-C35-C36-C37
31	j	101	DGD	C6A-C7A-C8A-C9A
28	A	613	SQD	C15-C16-C17-C18
28	a	402	SQD	C34-C35-C36-C37
29	B	621	LHG	C12-C13-C14-C15
29	a	413	LHG	C11-C10-C9-C8
31	C	516	DGD	C4B-C5B-C6B-C7B
28	l	101	SQD	C11-C10-C9-C8
28	l	101	SQD	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
28	l	101	SQD	C15-C16-C17-C18
24	a	408	CLA	C16-C17-C18-C19
24	b	602	CLA	C16-C17-C18-C20
24	c	912	CLA	C16-C17-C18-C19
24	a	407	CLA	C16-C17-C18-C20
24	C	506	CLA	C16-C17-C18-C19
24	c	910	CLA	C16-C17-C18-C19
28	d	407	SQD	C24-C23-O48-C46
31	D	406	DGD	C2A-C3A-C4A-C5A
31	d	406	DGD	CCA-CDA-CEA-CFA
31	d	406	DGD	CCB-CDB-CEB-CFB
28	F	101	SQD	C26-C27-C28-C29
29	b	620	LHG	C13-C14-C15-C16
28	l	101	SQD	C46-C45-O47-C7
24	b	616	CLA	C13-C15-C16-C17
24	b	615	CLA	C15-C16-C17-C18
31	D	406	DGD	C9B-CAB-CBB-CCB
28	a	411	SQD	C33-C34-C35-C36
31	d	406	DGD	C2A-C3A-C4A-C5A
31	d	406	DGD	C9B-CAB-CBB-CCB
31	C	517	DGD	C9A-CAA-CBA-CCA
28	a	402	SQD	C28-C29-C30-C31
28	A	612	SQD	C28-C29-C30-C31
29	D	407	LHG	C32-C33-C34-C35
29	d	410	LHG	C17-C18-C19-C20
31	h	102	DGD	CCA-CDA-CEA-CFA
28	A	612	SQD	C12-C13-C14-C15
28	A	612	SQD	C15-C16-C17-C18
31	D	406	DGD	CBA-CCA-CDA-CEA
29	d	410	LHG	C31-C32-C33-C34
28	a	411	SQD	C27-C28-C29-C30
31	d	406	DGD	C3B-C4B-C5B-C6B
31	C	517	DGD	C9B-CAB-CBB-CCB
31	C	516	DGD	C5B-C6B-C7B-C8B
29	b	620	LHG	C25-C26-C27-C28
31	c	917	DGD	C3A-C4A-C5A-C6A
28	l	101	SQD	C12-C13-C14-C15
31	C	517	DGD	C1A-C2A-C3A-C4A
26	c	918	BCR	C20-C21-C22-C23
26	C	514	BCR	C20-C21-C22-C23
26	H	101	BCR	C20-C21-C22-C23
26	c	915	BCR	C20-C21-C22-C23

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Mol	Chain	Res	Type	Atoms
26	K	101	BCR	C20-C21-C22-C23
26	B	619	BCR	C20-C21-C22-C23
31	d	406	DGD	C6A-C7A-C8A-C9A
31	C	517	DGD	CBB-CCB-CDB-CEB
31	c	916	DGD	C4B-C5B-C6B-C7B
28	d	407	SQD	C24-C25-C26-C27
28	l	101	SQD	C17-C18-C19-C20
28	l	101	SQD	C18-C19-C20-C21
28	l	101	SQD	C24-C25-C26-C27
24	b	616	CLA	C5-C6-C7-C8
24	c	907	CLA	C15-C16-C17-C18
24	B	614	CLA	C15-C16-C17-C18
24	b	602	CLA	C16-C17-C18-C19
24	D	403	CLA	C16-C17-C18-C19
24	c	909	CLA	C16-C17-C18-C19
24	b	615	CLA	C16-C17-C18-C19
24	c	910	CLA	C16-C17-C18-C20
24	c	911	CLA	C4-C3-C5-C6
29	d	410	LHG	C18-C19-C20-C21
31	H	102	DGD	C7A-C8A-C9A-CAA
31	c	916	DGD	C2B-C3B-C4B-C5B
29	a	413	LHG	C24-C25-C26-C27
29	d	408	LHG	C30-C31-C32-C33
29	b	620	LHG	C27-C28-C29-C30
24	b	614	CLA	C11-C12-C13-C14
24	B	604	CLA	C6-C7-C8-C9
24	b	615	CLA	C11-C12-C13-C14
24	b	617	CLA	C14-C13-C15-C16
24	c	910	CLA	C14-C13-C15-C16
31	d	406	DGD	C1A-C2A-C3A-C4A
29	A	615	LHG	C25-C26-C27-C28
31	C	518	DGD	C2A-C3A-C4A-C5A
28	F	101	SQD	C24-C25-C26-C27
31	j	101	DGD	CBB-CCB-CDB-CEB
24	a	406	CLA	C2C-C3C-CAC-CBC
31	h	102	DGD	C6A-C7A-C8A-C9A
28	L	101	SQD	C34-C35-C36-C37
29	b	620	LHG	C29-C30-C31-C32
28	d	407	SQD	C25-C26-C27-C28
24	B	617	CLA	C8-C10-C11-C12
31	D	406	DGD	CCB-CDB-CEB-CFB
31	C	517	DGD	C3A-C4A-C5A-C6A

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Mol	Chain	Res	Type	Atoms
31	C	517	DGD	C6B-C7B-C8B-C9B
28	a	402	SQD	C26-C27-C28-C29
28	A	612	SQD	C16-C17-C18-C19
28	L	101	SQD	C31-C32-C33-C34
31	c	917	DGD	CBA-CCA-CDA-CEA
28	l	101	SQD	C29-C30-C31-C32
29	D	407	LHG	O1-C1-C2-C3
29	a	413	LHG	O1-C1-C2-C3
26	B	618	BCR	C11-C12-C13-C14
29	D	407	LHG	C29-C30-C31-C32
28	a	411	SQD	C11-C12-C13-C14
28	A	613	SQD	C16-C17-C18-C19
29	B	621	LHG	C13-C14-C15-C16
31	c	916	DGD	C8A-C9A-CAA-CBA
31	C	516	DGD	C6A-C7A-C8A-C9A
29	b	620	LHG	C32-C33-C34-C35
28	l	101	SQD	C27-C28-C29-C30
29	a	413	LHG	C23-C24-C25-C26
29	d	410	LHG	C12-C13-C14-C15
28	a	411	SQD	C24-C25-C26-C27
28	a	411	SQD	C25-C26-C27-C28
29	A	615	LHG	C18-C19-C20-C21
31	H	102	DGD	CBA-CCA-CDA-CEA
31	j	101	DGD	C2A-C3A-C4A-C5A
31	j	101	DGD	CBA-CCA-CDA-CEA
31	C	517	DGD	CAA-CBA-CCA-CDA
28	a	402	SQD	C10-C11-C12-C13
28	A	612	SQD	C9-C10-C11-C12
29	a	413	LHG	C13-C14-C15-C16
29	a	413	LHG	C14-C15-C16-C17
28	L	101	SQD	C11-C10-C9-C8
28	L	101	SQD	C11-C12-C13-C14
28	L	101	SQD	C24-C25-C26-C27
29	d	408	LHG	C25-C26-C27-C28
31	C	516	DGD	C4A-C5A-C6A-C7A
31	C	516	DGD	CAB-CBB-CCB-CDB
25	a	412	PHO	C2C-C3C-CAC-CBC
28	d	407	SQD	C26-C27-C28-C29
28	d	407	SQD	C27-C28-C29-C30
28	l	101	SQD	C14-C15-C16-C17
28	l	101	SQD	C32-C33-C34-C35
24	c	903	CLA	C16-C17-C18-C19

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
24	b	617	CLA	C16-C17-C18-C20
24	a	408	CLA	C15-C16-C17-C18
31	D	406	DGD	C8B-C9B-CAB-CBB
29	d	410	LHG	C9-C10-C11-C12
31	d	406	DGD	C7B-C8B-C9B-CAB
31	C	517	DGD	CAB-CBB-CCB-CDB
28	A	613	SQD	C26-C27-C28-C29
29	B	621	LHG	C11-C12-C13-C14
29	a	413	LHG	C16-C17-C18-C19
28	a	411	SQD	C16-C17-C18-C19
28	A	613	SQD	C28-C29-C30-C31
31	c	917	DGD	CCA-CDA-CEA-CFA
28	d	407	SQD	C31-C32-C33-C34
29	A	615	LHG	C13-C14-C15-C16
29	a	413	LHG	C11-C12-C13-C14
31	C	516	DGD	C8B-C9B-CAB-CBB
24	C	506	CLA	O1D-CGD-O2D-CED
29	d	410	LHG	C13-C14-C15-C16
31	c	917	DGD	CAA-CBA-CCA-CDA
26	c	918	BCR	C13-C14-C15-C16
28	F	101	SQD	C31-C32-C33-C34
28	a	402	SQD	C16-C17-C18-C19
28	l	101	SQD	C16-C17-C18-C19
28	l	101	SQD	C28-C29-C30-C31
24	b	615	CLA	C16-C17-C18-C20
24	a	407	CLA	C16-C17-C18-C19
29	A	615	LHG	C26-C27-C28-C29
31	d	406	DGD	CAA-CBA-CCA-CDA
29	a	413	LHG	C18-C19-C20-C21
28	L	101	SQD	C10-C11-C12-C13
31	j	101	DGD	C7A-C8A-C9A-CAA
31	d	406	DGD	C5A-C6A-C7A-C8A
31	C	517	DGD	C4A-C5A-C6A-C7A
29	D	408	LHG	C16-C17-C18-C19
29	b	620	LHG	C12-C13-C14-C15
27	a	410	PL9	C15-C14-C16-C17
24	c	911	CLA	C2-C3-C5-C6
27	a	410	PL9	C13-C14-C16-C17
28	F	101	SQD	C30-C31-C32-C33
29	D	407	LHG	C24-C25-C26-C27
29	D	409	LHG	C15-C16-C17-C18
31	d	406	DGD	C3A-C4A-C5A-C6A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
31	d	406	DGD	C4B-C5B-C6B-C7B
25	D	401	PHO	C2C-C3C-CAC-CBC
28	d	407	SQD	O10-C23-O48-C46
31	C	516	DGD	O6D-C5D-C6D-O5D
24	c	903	CLA	C16-C17-C18-C20
24	c	909	CLA	C16-C17-C18-C20
24	C	507	CLA	C16-C17-C18-C19
24	B	605	CLA	C13-C15-C16-C17
24	b	616	CLA	C10-C11-C12-C13
28	A	612	SQD	C32-C33-C34-C35
24	B	617	CLA	C2-C1-O2A-CGA
29	d	410	LHG	C34-C35-C36-C37
29	D	409	LHG	C29-C30-C31-C32
28	a	411	SQD	C9-C10-C11-C12
29	A	615	LHG	C27-C28-C29-C30
31	c	916	DGD	C9A-CAA-CBA-CCA
24	a	408	CLA	C16-C17-C18-C20
26	H	101	BCR	C23-C24-C25-C26
26	B	618	BCR	C1-C6-C7-C8
26	B	618	BCR	C5-C6-C7-C8
29	D	408	LHG	C32-C33-C34-C35
28	A	613	SQD	C24-C23-O48-C46
24	b	607	CLA	C10-C11-C12-C13
24	C	506	CLA	C13-C15-C16-C17
28	F	101	SQD	C8-C7-O47-C45
31	H	102	DGD	C9B-CAB-CBB-CCB
31	C	517	DGD	C3B-C4B-C5B-C6B
28	a	402	SQD	C11-C12-C13-C14
29	d	408	LHG	C29-C30-C31-C32
31	C	518	DGD	C6B-C7B-C8B-C9B
28	L	101	SQD	C32-C33-C34-C35
29	D	409	LHG	C10-C11-C12-C13
28	d	407	SQD	C32-C33-C34-C35
24	C	504	CLA	C11-C12-C13-C15
24	B	611	CLA	C12-C13-C15-C16
24	B	617	CLA	C6-C7-C8-C10
24	B	604	CLA	C6-C7-C8-C10
24	b	615	CLA	C11-C12-C13-C15
24	C	510	CLA	C2-C3-C5-C6
24	a	407	CLA	C6-C7-C8-C10
24	b	617	CLA	C12-C13-C15-C16
24	A	607	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
24	c	910	CLA	C12-C13-C15-C16
24	C	504	CLA	C13-C15-C16-C17
26	k	102	BCR	C15-C16-C17-C18
24	b	617	CLA	C16-C17-C18-C19
28	l	101	SQD	C7-C8-C9-C10
31	j	101	DGD	C3B-C4B-C5B-C6B
28	L	101	SQD	C29-C30-C31-C32
24	c	911	CLA	O1D-CGD-O2D-CED
28	a	411	SQD	C14-C15-C16-C17
28	L	101	SQD	C18-C19-C20-C21
24	c	908	CLA	O1D-CGD-O2D-CED
31	H	102	DGD	C9A-CAA-CBA-CCA
29	d	409	LHG	C11-C10-C9-C8
29	A	615	LHG	C15-C16-C17-C18
28	A	612	SQD	C30-C31-C32-C33
29	a	413	LHG	C15-C16-C17-C18
26	k	102	BCR	C6-C7-C8-C9
26	K	101	BCR	C6-C7-C8-C9
24	d	404	CLA	C16-C17-C18-C19
24	C	501	CLA	C13-C15-C16-C17
24	b	617	CLA	C5-C6-C7-C8
29	B	621	LHG	C7-C8-C9-C10
26	B	622	BCR	C18-C19-C20-C21
26	D	404	BCR	C18-C19-C20-C21
31	D	406	DGD	C3A-C4A-C5A-C6A
31	C	516	DGD	C3B-C4B-C5B-C6B
31	c	917	DGD	C8A-C9A-CAA-CBA
24	b	604	CLA	CBD-CGD-O2D-CED
28	F	101	SQD	O49-C7-O47-C45
29	a	413	LHG	O7-C5-C6-O8
31	D	406	DGD	C9A-CAA-CBA-CCA
24	c	912	CLA	C16-C17-C18-C20
31	c	916	DGD	O6D-C5D-C6D-O5D
31	D	406	DGD	C4B-C5B-C6B-C7B
29	d	410	LHG	C27-C28-C29-C30
31	C	518	DGD	CBA-CCA-CDA-CEA
24	d	404	CLA	C8-C10-C11-C12
24	C	510	CLA	C4-C3-C5-C6
27	A	611	PL9	C4-C3-C7-C8
27	a	410	PL9	C4-C3-C7-C8
31	C	518	DGD	C6A-C7A-C8A-C9A
29	d	409	LHG	C32-C33-C34-C35

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
31	c	916	DGD	C6A-C7A-C8A-C9A
24	B	611	CLA	C14-C13-C15-C16
24	B	617	CLA	C6-C7-C8-C9
24	D	403	CLA	C11-C10-C8-C9
24	B	616	CLA	C14-C13-C15-C16
24	b	615	CLA	C6-C7-C8-C9
24	a	407	CLA	C6-C7-C8-C9
24	c	914	CLA	C11-C10-C8-C9
24	b	611	CLA	C11-C12-C13-C14
24	b	607	CLA	C14-C13-C15-C16
24	A	607	CLA	C6-C7-C8-C9
24	b	612	CLA	C14-C13-C15-C16
28	F	101	SQD	C23-C24-C25-C26
24	c	904	CLA	O1D-CGD-O2D-CED
28	A	613	SQD	C18-C19-C20-C21
28	A	612	SQD	C34-C35-C36-C37
28	A	613	SQD	O10-C23-O48-C46
24	b	602	CLA	C1A-C2A-CAA-CBA
24	c	914	CLA	C1A-C2A-CAA-CBA
24	D	403	CLA	C16-C17-C18-C20
24	B	605	CLA	C16-C17-C18-C20
31	H	102	DGD	CBB-CCB-CDB-CEB
26	H	101	BCR	C15-C16-C17-C18
26	h	101	BCR	C9-C10-C11-C12
26	k	101	BCR	C19-C20-C21-C22
25	D	401	PHO	O1D-CGD-O2D-CED
24	a	408	CLA	C8-C10-C11-C12
24	a	408	CLA	C13-C15-C16-C17
24	C	507	CLA	C5-C6-C7-C8
24	b	604	CLA	C5-C6-C7-C8
29	d	409	LHG	C3-O3-P-O6
31	c	917	DGD	C9A-CAA-CBA-CCA
24	D	403	CLA	C13-C15-C16-C17
24	c	910	CLA	C15-C16-C17-C18
29	a	413	LHG	C7-C8-C9-C10
24	C	507	CLA	C16-C17-C18-C20
24	C	506	CLA	C16-C17-C18-C20
31	h	102	DGD	C9A-CAA-CBA-CCA
28	L	101	SQD	C27-C28-C29-C30
29	a	413	LHG	C26-C27-C28-C29
31	C	517	DGD	C8B-C9B-CAB-CBB
28	L	101	SQD	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
31	C	516	DGD	C7B-C8B-C9B-CAB
24	c	905	CLA	C10-C11-C12-C13
24	c	912	CLA	C13-C15-C16-C17
24	b	616	CLA	C8-C10-C11-C12
24	b	605	CLA	C15-C16-C17-C18
28	a	411	SQD	C12-C13-C14-C15
31	h	102	DGD	CBB-CCB-CDB-CEB
29	d	408	LHG	C7-C8-C9-C10
31	D	406	DGD	CAA-CBA-CCA-CDA
28	A	612	SQD	C27-C28-C29-C30
24	A	609	CLA	C16-C17-C18-C19
24	b	616	CLA	C16-C17-C18-C19
24	A	607	CLA	C16-C17-C18-C19
24	B	607	CLA	O1D-CGD-O2D-CED
28	a	411	SQD	C19-C20-C21-C22
29	A	615	LHG	C11-C10-C9-C8
31	d	406	DGD	O1G-C1G-C2G-C3G
28	A	613	SQD	O6-C44-C45-C46
24	d	401	CLA	C2C-C3C-CAC-CBC
29	B	621	LHG	C32-C33-C34-C35
28	d	407	SQD	C35-C36-C37-C38
24	C	509	CLA	C10-C11-C12-C13
24	c	910	CLA	C10-C11-C12-C13
31	d	406	DGD	CAB-CBB-CCB-CDB
28	F	101	SQD	C35-C36-C37-C38
31	C	516	DGD	C8A-C9A-CAA-CBA
31	C	517	DGD	C2G-C3G-O3G-C1D
31	C	517	DGD	C5D-C6D-O5D-C1E
31	c	917	DGD	C5D-C6D-O5D-C1E
28	a	402	SQD	C19-C20-C21-C22
29	a	413	LHG	C19-C20-C21-C22
29	a	413	LHG	C28-C29-C30-C31
28	L	101	SQD	C35-C36-C37-C38
28	a	411	SQD	C35-C36-C37-C38
28	L	101	SQD	C13-C14-C15-C16
28	d	407	SQD	C34-C35-C36-C37
27	a	410	PL9	C39-C41-C42-C43
28	A	613	SQD	C19-C20-C21-C22
28	a	402	SQD	C29-C30-C31-C32
31	h	102	DGD	CAA-CBA-CCA-CDA
31	c	916	DGD	O6E-C5E-C6E-O5E
29	d	410	LHG	C35-C36-C37-C38

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Mol	Chain	Res	Type	Atoms
24	b	615	CLA	C10-C11-C12-C13
31	h	102	DGD	C5B-C6B-C7B-C8B
28	A	612	SQD	C35-C36-C37-C38
31	C	516	DGD	O6E-C5E-C6E-O5E
28	a	411	SQD	C30-C31-C32-C33
29	d	409	LHG	C16-C17-C18-C19
28	a	411	SQD	C23-C24-C25-C26
24	b	614	CLA	C16-C17-C18-C19
24	b	603	CLA	C16-C17-C18-C19
24	c	907	CLA	C16-C17-C18-C19
31	j	101	DGD	C2A-C1A-O1G-C1G
24	C	512	CLA	CBA-CGA-O2A-C1
24	B	613	CLA	C13-C15-C16-C17
29	d	408	LHG	C24-C25-C26-C27
24	A	609	CLA	C5-C6-C7-C8
29	d	410	LHG	C16-C17-C18-C19
29	d	410	LHG	C19-C20-C21-C22
31	d	406	DGD	C6B-C7B-C8B-C9B
29	D	407	LHG	C27-C28-C29-C30
31	C	516	DGD	C6B-C7B-C8B-C9B
24	C	512	CLA	O1D-CGD-O2D-CED
31	H	102	DGD	CDB-CEB-CFB-CGB
28	a	402	SQD	C9-C10-C11-C12
28	a	402	SQD	C13-C14-C15-C16
24	a	408	CLA	CBA-CGA-O2A-C1
31	C	517	DGD	C7B-C8B-C9B-CAB
28	l	101	SQD	C19-C20-C21-C22
26	k	101	BCR	C20-C21-C22-C23
31	H	102	DGD	C6B-C7B-C8B-C9B
29	a	413	LHG	C25-C26-C27-C28
24	c	911	CLA	C8-C10-C11-C12
24	C	512	CLA	O1A-CGA-O2A-C1
24	A	609	CLA	C16-C17-C18-C20
31	c	916	DGD	CDA-CEA-CFA-CGA
31	c	916	DGD	C4D-C5D-C6D-O5D
24	b	602	CLA	C11-C10-C8-C7
24	d	404	CLA	C6-C7-C8-C10
24	B	617	CLA	C11-C12-C13-C15
24	D	403	CLA	C11-C10-C8-C7
24	C	501	CLA	C11-C12-C13-C15
24	B	616	CLA	C12-C13-C15-C16
24	A	609	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
24	b	605	CLA	C6-C7-C8-C10
24	B	602	CLA	C6-C7-C8-C10
24	B	602	CLA	C11-C10-C8-C7
24	a	407	CLA	C11-C10-C8-C7
24	C	513	CLA	C6-C7-C8-C10
24	C	512	CLA	C11-C10-C8-C7
24	b	607	CLA	C11-C12-C13-C15
24	C	508	CLA	C11-C10-C8-C7
24	b	612	CLA	C12-C13-C15-C16
24	C	506	CLA	C11-C12-C13-C15
24	a	408	CLA	O1A-CGA-O2A-C1
24	c	905	CLA	C11-C10-C8-C9
24	B	617	CLA	C11-C12-C13-C14
24	C	501	CLA	C14-C13-C15-C16
24	b	605	CLA	C6-C7-C8-C9
24	b	617	CLA	C11-C12-C13-C14
24	C	513	CLA	C11-C12-C13-C14
24	b	607	CLA	C11-C12-C13-C14
24	C	508	CLA	C11-C10-C8-C9
24	C	506	CLA	C11-C12-C13-C14
24	c	908	CLA	C11-C10-C8-C9
31	D	406	DGD	C5A-C6A-C7A-C8A
28	A	612	SQD	C14-C15-C16-C17
24	C	507	CLA	C2A-CAA-CBA-CGA
29	A	615	LHG	C19-C20-C21-C22
31	d	406	DGD	C8A-C9A-CAA-CBA
24	d	404	CLA	C16-C17-C18-C20
24	B	617	CLA	C16-C17-C18-C20
24	b	616	CLA	C16-C17-C18-C20
24	B	605	CLA	C16-C17-C18-C19
31	j	101	DGD	CDB-CEB-CFB-CGB
28	A	613	SQD	C25-C26-C27-C28
31	C	516	DGD	C5A-C6A-C7A-C8A
31	D	406	DGD	C6A-C7A-C8A-C9A
31	C	516	DGD	CAA-CBA-CCA-CDA
28	L	101	SQD	C24-C23-O48-C46
31	C	517	DGD	CDB-CEB-CFB-CGB
28	A	612	SQD	C19-C20-C21-C22
29	D	407	LHG	C25-C26-C27-C28
28	d	407	SQD	C33-C34-C35-C36
28	A	613	SQD	O5-C1-O6-C44
24	c	914	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
28	A	613	SQD	C31-C32-C33-C34
31	C	518	DGD	C8B-C9B-CAB-CBB
29	b	620	LHG	C26-C27-C28-C29
31	c	917	DGD	C2B-C3B-C4B-C5B
31	c	916	DGD	C2A-C3A-C4A-C5A
24	B	604	CLA	C16-C17-C18-C20
31	j	101	DGD	C9B-CAB-CBB-CCB
28	a	402	SQD	C15-C16-C17-C18
31	c	916	DGD	CAB-CBB-CCB-CDB
24	B	609	CLA	C13-C15-C16-C17
24	B	602	CLA	CBA-CGA-O2A-C1
24	B	602	CLA	CAA-CBA-CGA-O2A
31	c	916	DGD	C5B-C6B-C7B-C8B
24	a	406	CLA	C4C-C3C-CAC-CBC
26	k	102	BCR	C9-C10-C11-C12
29	D	409	LHG	C12-C13-C14-C15
28	l	101	SQD	C35-C36-C37-C38
24	B	616	CLA	C13-C15-C16-C17
24	C	508	CLA	C5-C6-C7-C8
31	C	518	DGD	C3B-C4B-C5B-C6B
28	A	613	SQD	C32-C33-C34-C35
24	c	912	CLA	CBA-CGA-O2A-C1
28	a	411	SQD	C10-C11-C12-C13
31	D	406	DGD	O1G-C1G-C2G-C3G
29	a	413	LHG	C4-C5-C6-O8
28	L	101	SQD	C44-C45-C46-O48
28	d	407	SQD	C44-C45-C46-O48
28	l	101	SQD	C44-C45-C46-O48
31	D	406	DGD	CAB-CBB-CCB-CDB
31	h	102	DGD	CDB-CEB-CFB-CGB
31	c	917	DGD	C4B-C5B-C6B-C7B
25	a	412	PHO	C4C-C3C-CAC-CBC
25	A	608	PHO	C4-C3-C5-C6
24	b	603	CLA	C16-C17-C18-C20
31	D	406	DGD	C5B-C6B-C7B-C8B
31	d	406	DGD	C4A-C5A-C6A-C7A
31	C	516	DGD	C4D-C5D-C6D-O5D
31	j	101	DGD	O1A-C1A-O1G-C1G
31	h	102	DGD	O2G-C1B-C2B-C3B
28	A	613	SQD	C35-C36-C37-C38
28	d	407	SQD	C28-C29-C30-C31
24	B	616	CLA	C10-C11-C12-C13

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
31	c	916	DGD	CAA-CBA-CCA-CDA
28	L	101	SQD	O47-C45-C46-O48
28	d	407	SQD	O47-C45-C46-O48
28	l	101	SQD	O47-C45-C46-O48
24	c	907	CLA	C13-C15-C16-C17
31	h	102	DGD	CDA-CEA-CFA-CGA
24	b	614	CLA	C16-C17-C18-C20
24	B	602	CLA	C16-C17-C18-C20
24	c	914	CLA	C16-C17-C18-C19
28	l	101	SQD	C30-C31-C32-C33
24	a	408	CLA	C3-C5-C6-C7
24	d	403	CLA	C2-C1-O2A-CGA
24	D	402	CLA	C2-C1-O2A-CGA
24	B	615	CLA	C11-C12-C13-C14
24	B	615	CLA	C14-C13-C15-C16
24	c	913	CLA	C11-C10-C8-C9
24	C	507	CLA	C11-C10-C8-C9
24	a	407	CLA	C11-C12-C13-C14
24	c	911	CLA	C6-C7-C8-C9
29	B	621	LHG	C33-C34-C35-C36
24	B	607	CLA	C8-C10-C11-C12
24	B	602	CLA	C15-C16-C17-C18
24	A	614	CLA	C2C-C3C-CAC-CBC
28	a	402	SQD	C24-C25-C26-C27
29	b	620	LHG	C31-C32-C33-C34
26	T	102	BCR	C1-C6-C7-C8
26	T	102	BCR	C5-C6-C7-C8
26	D	404	BCR	C23-C24-C25-C30
26	H	101	BCR	C23-C24-C25-C30
26	h	101	BCR	C23-C24-C25-C26
26	h	101	BCR	C23-C24-C25-C30
24	C	508	CLA	O1D-CGD-O2D-CED
29	D	409	LHG	C13-C14-C15-C16
31	j	101	DGD	C6B-C7B-C8B-C9B
29	B	621	LHG	C14-C15-C16-C17
29	a	413	LHG	C17-C18-C19-C20
31	c	917	DGD	C8B-C9B-CAB-CBB
26	K	101	BCR	C7-C8-C9-C10
24	C	502	CLA	C15-C16-C17-C18
29	B	621	LHG	C34-C35-C36-C37
28	L	101	SQD	C16-C17-C18-C19
26	A	610	BCR	C14-C15-C16-C17

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Atoms</b>
29	D	407	LHG	C13-C14-C15-C16
24	C	501	CLA	C16-C17-C18-C19
24	C	502	CLA	C16-C17-C18-C20
31	H	102	DGD	CCB-CDB-CEB-CFB
25	D	401	PHO	C4C-C3C-CAC-CBC
31	C	517	DGD	C8A-C9A-CAA-CBA
28	a	402	SQD	C18-C19-C20-C21
24	c	905	CLA	C11-C10-C8-C7
24	B	617	CLA	C12-C13-C15-C16
24	D	403	CLA	C6-C7-C8-C10
24	C	501	CLA	C12-C13-C15-C16
24	B	615	CLA	C11-C12-C13-C15
24	B	612	CLA	C12-C13-C15-C16
24	B	616	CLA	C11-C10-C8-C7
24	c	913	CLA	C11-C10-C8-C7
24	C	507	CLA	C11-C10-C8-C7
24	a	407	CLA	C11-C12-C13-C15
24	c	907	CLA	C11-C10-C8-C7
24	b	617	CLA	C11-C12-C13-C15
24	C	513	CLA	C11-C12-C13-C15
25	A	608	PHO	C2-C3-C5-C6
24	c	908	CLA	C11-C10-C8-C7
29	d	410	LHG	C32-C33-C34-C35
24	D	402	CLA	C2C-C3C-CAC-CBC
26	a	409	BCR	C19-C20-C21-C22
26	B	622	BCR	C13-C14-C15-C16
26	K	101	BCR	C19-C20-C21-C22
28	L	101	SQD	O10-C23-O48-C46
29	D	407	LHG	C15-C16-C17-C18
28	a	402	SQD	C31-C32-C33-C34
26	k	101	BCR	C20-C21-C22-C37
24	c	907	CLA	C3-C5-C6-C7
24	B	617	CLA	C16-C17-C18-C19
28	F	101	SQD	C11-C10-C9-C8
28	a	402	SQD	C25-C26-C27-C28
29	B	621	LHG	C24-C25-C26-C27
24	C	503	CLA	C8-C10-C11-C12
31	C	518	DGD	C4A-C5A-C6A-C7A
24	b	602	CLA	CAD-CBD-CGD-O2D
24	B	611	CLA	CAD-CBD-CGD-O2D
24	B	617	CLA	CAD-CBD-CGD-O2D
24	C	501	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
24	A	606	CLA	CAD-CBD-CGD-O2D
24	c	913	CLA	CAD-CBD-CGD-O2D
24	c	902	CLA	CAD-CBD-CGD-O2D
24	C	512	CLA	CAD-CBD-CGD-O2D
25	D	401	PHO	CAD-CBD-CGD-O2D
25	d	402	PHO	CAD-CBD-CGD-O2D
29	D	409	LHG	C16-C17-C18-C19
29	D	409	LHG	C17-C18-C19-C20
24	c	904	CLA	CBA-CGA-O2A-C1
24	c	914	CLA	CBA-CGA-O2A-C1
24	b	615	CLA	O1D-CGD-O2D-CED
28	A	613	SQD	C24-C25-C26-C27
29	A	615	LHG	O6-C4-C5-O7
24	c	902	CLA	C13-C15-C16-C17
24	b	608	CLA	C3-C5-C6-C7
28	d	407	SQD	O47-C7-C8-C9
26	f	101	BCR	C10-C11-C12-C13
29	D	408	LHG	C11-C10-C9-C8
26	B	622	BCR	C14-C15-C16-C17
24	B	604	CLA	C16-C17-C18-C19
24	c	907	CLA	C16-C17-C18-C20
24	C	510	CLA	O1D-CGD-O2D-CED
24	b	602	CLA	CHA-CBD-CGD-O1D
24	C	504	CLA	CHA-CBD-CGD-O1D
24	c	903	CLA	CHA-CBD-CGD-O1D
24	c	903	CLA	CHA-CBD-CGD-O2D
24	B	606	CLA	CHA-CBD-CGD-O1D
24	B	607	CLA	CHA-CBD-CGD-O1D
24	B	602	CLA	CHA-CBD-CGD-O2D
24	C	507	CLA	CHA-CBD-CGD-O2D
25	a	412	PHO	CHA-CBD-CGD-O1D
24	c	912	CLA	O1A-CGA-O2A-C1
24	B	602	CLA	O1A-CGA-O2A-C1
31	H	102	DGD	CCA-CDA-CEA-CFA
28	A	613	SQD	C2-C1-O6-C44
31	d	406	DGD	O1G-C1G-C2G-O2G
24	D	403	CLA	O1D-CGD-O2D-CED
28	A	613	SQD	C29-C30-C31-C32
31	c	916	DGD	C5A-C6A-C7A-C8A
24	C	501	CLA	C16-C17-C18-C20
24	B	602	CLA	C16-C17-C18-C19
28	A	613	SQD	C27-C28-C29-C30

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Mol	Chain	Res	Type	Atoms
31	D	406	DGD	CDB-CEB-CFB-CGB
24	D	403	CLA	C6-C7-C8-C9
24	B	612	CLA	C14-C13-C15-C16
24	A	609	CLA	C11-C12-C13-C14
24	c	907	CLA	C11-C10-C8-C9
24	c	904	CLA	O1A-CGA-O2A-C1
24	c	914	CLA	O1A-CGA-O2A-C1
26	k	102	BCR	C36-C18-C19-C20
26	A	610	BCR	C36-C18-C19-C20
29	d	410	LHG	O1-C1-C2-C3
31	d	406	DGD	C7A-C8A-C9A-CAA
31	C	517	DGD	C5A-C6A-C7A-C8A
29	D	409	LHG	C27-C28-C29-C30
24	C	506	CLA	C1A-C2A-CAA-CBA
24	b	607	CLA	C16-C17-C18-C19
28	a	411	SQD	C31-C32-C33-C34
24	c	910	CLA	C2-C1-O2A-CGA
31	H	102	DGD	C5B-C6B-C7B-C8B
29	D	408	LHG	C26-C27-C28-C29
26	B	619	BCR	C19-C20-C21-C22
24	B	611	CLA	C8-C10-C11-C12
29	d	409	LHG	C26-C27-C28-C29
24	A	609	CLA	O1D-CGD-O2D-CED
29	d	410	LHG	C2-C3-O3-P
29	D	409	LHG	C2-C3-O3-P
24	b	612	CLA	O1D-CGD-O2D-CED
29	A	615	LHG	C10-C11-C12-C13
31	C	518	DGD	C9A-CAA-CBA-CCA
29	d	409	LHG	C3-O3-P-O4
29	D	408	LHG	C3-O3-P-O4
24	B	611	CLA	C16-C17-C18-C19
31	C	517	DGD	CBA-CCA-CDA-CEA
29	B	621	LHG	C31-C32-C33-C34
24	B	614	CLA	C13-C15-C16-C17
27	d	405	PL9	C39-C41-C42-C43
24	b	616	CLA	O1D-CGD-O2D-CED
28	A	613	SQD	C9-C10-C11-C12
24	c	911	CLA	C16-C17-C18-C19
24	b	604	CLA	C16-C17-C18-C20
31	C	517	DGD	CDA-CEA-CFA-CGA
29	d	408	LHG	C15-C16-C17-C18
24	b	602	CLA	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
24	C	504	CLA	CAD-CBD-CGD-O1D
24	c	905	CLA	CAD-CBD-CGD-O1D
24	c	903	CLA	CAD-CBD-CGD-O1D
24	B	606	CLA	CAD-CBD-CGD-O1D
24	b	606	CLA	CAD-CBD-CGD-O1D
24	B	602	CLA	CAD-CBD-CGD-O1D
28	A	612	SQD	C23-C24-C25-C26
28	L	101	SQD	C19-C20-C21-C22
24	B	605	CLA	C3-C5-C6-C7
28	F	101	SQD	C28-C29-C30-C31
31	D	406	DGD	CBB-CCB-CDB-CEB
24	b	602	CLA	C6-C7-C8-C10
24	b	602	CLA	C11-C12-C13-C15
24	C	509	CLA	C6-C7-C8-C10
24	C	504	CLA	C12-C13-C15-C16
24	d	404	CLA	C11-C12-C13-C15
24	c	905	CLA	C12-C13-C15-C16
24	D	403	CLA	C11-C12-C13-C15
24	D	403	CLA	C12-C13-C15-C16
24	B	615	CLA	C12-C13-C15-C16
24	c	907	CLA	C6-C7-C8-C10
24	b	617	CLA	C11-C10-C8-C7
24	A	607	CLA	C11-C10-C8-C7
24	C	506	CLA	C6-C7-C8-C10
24	c	908	CLA	C11-C12-C13-C15
24	c	913	CLA	O1A-CGA-O2A-C1
24	B	616	CLA	C16-C17-C18-C20
28	a	402	SQD	O6-C44-C45-C46
31	D	406	DGD	O1G-C1G-C2G-O2G
29	A	615	LHG	O7-C5-C6-O8
31	c	916	DGD	CCA-CDA-CEA-CFA
31	C	516	DGD	CBA-CCA-CDA-CEA
29	D	407	LHG	C33-C34-C35-C36
31	H	102	DGD	CDA-CEA-CFA-CGA
31	c	917	DGD	C2G-C3G-O3G-C1D
29	B	621	LHG	C26-C27-C28-C29
31	C	516	DGD	CDA-CEA-CFA-CGA
24	c	913	CLA	CBA-CGA-O2A-C1
31	H	102	DGD	O2G-C1B-C2B-C3B
24	b	602	CLA	C6-C7-C8-C9
24	C	504	CLA	C14-C13-C15-C16
24	B	617	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
24	c	906	CLA	C11-C12-C13-C14
24	C	512	CLA	C11-C10-C8-C9
24	A	607	CLA	C11-C10-C8-C9
24	C	513	CLA	C3-C5-C6-C7
24	c	914	CLA	C16-C17-C18-C20
28	l	101	SQD	C13-C14-C15-C16
28	a	402	SQD	O5-C1-O6-C44
26	f	101	BCR	C13-C14-C15-C16
29	d	410	LHG	C25-C26-C27-C28
31	j	101	DGD	C5A-C6A-C7A-C8A
31	c	916	DGD	C8B-C9B-CAB-CBB
26	k	102	BCR	C17-C18-C19-C20
24	d	401	CLA	C4C-C3C-CAC-CBC
29	B	621	LHG	C25-C26-C27-C28
28	L	101	SQD	C14-C15-C16-C17
31	j	101	DGD	O6D-C5D-C6D-O5D
31	d	406	DGD	CDA-CEA-CFA-CGA
28	L	101	SQD	C46-C45-O47-C7
24	C	509	CLA	C2-C1-O2A-CGA
24	B	602	CLA	C2-C1-O2A-CGA
24	b	615	CLA	C2-C1-O2A-CGA
31	C	516	DGD	C1B-C2B-C3B-C4B
26	T	102	BCR	C14-C15-C16-C17
26	b	618	BCR	C14-C15-C16-C17
28	a	402	SQD	C27-C28-C29-C30
31	c	917	DGD	C4A-C5A-C6A-C7A
24	b	613	CLA	C10-C11-C12-C13
26	k	101	BCR	C5-C6-C7-C8
24	c	911	CLA	C16-C17-C18-C20
24	C	512	CLA	C16-C17-C18-C19
31	C	516	DGD	O6E-C1E-O5D-C6D
31	c	917	DGD	O6E-C1E-O5D-C6D
26	B	622	BCR	C20-C21-C22-C23
31	C	517	DGD	C2E-C1E-O5D-C6D
28	a	402	SQD	C2-C1-O6-C44
31	c	917	DGD	C2E-C1E-O5D-C6D
29	A	615	LHG	C4-O6-P-O3
29	B	621	LHG	C11-C10-C9-C8
27	d	405	PL9	C43-C44-C46-C47
24	c	903	CLA	C11-C12-C13-C15
24	c	911	CLA	C6-C7-C8-C10
24	C	506	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
28	a	411	SQD	C34-C35-C36-C37
31	h	102	DGD	CCB-CDB-CEB-CFB
24	d	404	CLA	C6-C7-C8-C9
24	B	616	CLA	C11-C10-C8-C9
24	A	609	CLA	C11-C10-C8-C9
24	B	602	CLA	C6-C7-C8-C9
24	a	407	CLA	C11-C10-C8-C9
24	C	513	CLA	C6-C7-C8-C9
24	C	506	CLA	C6-C7-C8-C9
24	B	611	CLA	C16-C17-C18-C20
31	C	518	DGD	C7A-C8A-C9A-CAA
24	C	502	CLA	C16-C17-C18-C19
26	A	610	BCR	C17-C18-C19-C20
24	c	908	CLA	C5-C6-C7-C8
24	B	616	CLA	C16-C17-C18-C19
27	a	410	PL9	C2-C3-C7-C8
31	c	916	DGD	C7A-C8A-C9A-CAA
29	d	408	LHG	C32-C33-C34-C35
31	c	916	DGD	C4A-C5A-C6A-C7A
26	b	619	BCR	C22-C23-C24-C25
24	B	606	CLA	CBD-CGD-O2D-CED
28	a	411	SQD	C24-C23-O48-C46
31	C	517	DGD	O6E-C1E-O5D-C6D
27	D	405	PL9	C39-C41-C42-C43
29	A	615	LHG	C17-C18-C19-C20
26	A	610	BCR	C18-C19-C20-C21
24	b	604	CLA	C16-C17-C18-C19
31	C	518	DGD	CAB-CBB-CCB-CDB
27	d	405	PL9	C45-C44-C46-C47
24	c	906	CLA	C4-C3-C5-C6
24	c	906	CLA	C2-C3-C5-C6
24	C	510	CLA	O1A-CGA-O2A-C1
29	a	413	LHG	O10-C23-O8-C6
24	B	611	CLA	C13-C15-C16-C17
24	c	913	CLA	C15-C16-C17-C18
31	C	517	DGD	C4B-C5B-C6B-C7B
28	A	613	SQD	C10-C11-C12-C13
31	C	516	DGD	C2B-C3B-C4B-C5B
24	A	606	CLA	C2C-C3C-CAC-CBC
24	b	613	CLA	CBA-CGA-O2A-C1
24	c	913	CLA	C3A-C2A-CAA-CBA
29	b	620	LHG	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
28	a	411	SQD	O10-C23-O48-C46
29	a	413	LHG	C24-C23-O8-C6
29	A	615	LHG	C9-C10-C11-C12
24	b	602	CLA	C11-C12-C13-C14
24	b	614	CLA	C14-C13-C15-C16
24	c	903	CLA	C11-C12-C13-C14
24	c	913	CLA	C6-C7-C8-C9
24	c	914	CLA	C11-C12-C13-C14
29	D	409	LHG	C28-C29-C30-C31
31	C	516	DGD	CBB-CCB-CDB-CEB
26	b	618	BCR	C16-C17-C18-C36
31	H	102	DGD	O1G-C1G-C2G-C3G
24	C	510	CLA	C8-C10-C11-C12
24	C	512	CLA	C16-C17-C18-C20
24	C	510	CLA	CBA-CGA-O2A-C1
31	c	916	DGD	O6E-C1E-O5D-C6D
27	A	611	PL9	C2-C3-C7-C8
24	b	613	CLA	C3-C5-C6-C7
24	B	617	CLA	C13-C15-C16-C17
24	c	913	CLA	C1A-C2A-CAA-CBA
28	d	407	SQD	C11-C10-C9-C8
24	a	408	CLA	C11-C10-C8-C7
24	C	504	CLA	C11-C10-C8-C7
24	A	609	CLA	C12-C13-C15-C16
24	b	616	CLA	C11-C10-C8-C7
24	c	914	CLA	C6-C7-C8-C10
24	C	502	CLA	C12-C13-C15-C16
29	d	408	LHG	C23-C24-C25-C26
31	H	102	DGD	CAA-CBA-CCA-CDA
29	d	408	LHG	C26-C27-C28-C29
24	C	501	CLA	C2A-CAA-CBA-CGA
24	d	403	CLA	C13-C15-C16-C17
31	c	917	DGD	CBB-CCB-CDB-CEB
31	d	406	DGD	CBB-CCB-CDB-CEB
29	A	615	LHG	O6-C4-C5-C6
28	d	407	SQD	C29-C30-C31-C32
24	c	914	CLA	C5-C6-C7-C8
24	C	513	CLA	C16-C17-C18-C19
31	H	102	DGD	O1G-C1G-C2G-O2G
28	A	612	SQD	O6-C44-C45-O47
24	b	611	CLA	C15-C16-C17-C18
24	c	913	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
29	b	620	LHG	C30-C31-C32-C33
24	b	613	CLA	O1A-CGA-O2A-C1
26	B	620	BCR	C23-C24-C25-C30
26	k	102	BCR	C1-C6-C7-C8
26	k	101	BCR	C1-C6-C7-C8
26	c	915	BCR	C23-C24-C25-C30
26	Y	101	BCR	C15-C16-C17-C18
26	T	101	BCR	C13-C14-C15-C16
24	C	513	CLA	C4-C3-C5-C6
24	c	908	CLA	C15-C16-C17-C18
29	D	407	LHG	C31-C32-C33-C34
24	B	610	CLA	C2-C3-C5-C6
28	a	411	SQD	C7-C8-C9-C10
24	b	606	CLA	C13-C15-C16-C17
26	a	409	BCR	C14-C15-C16-C17
31	c	916	DGD	C5D-C6D-O5D-C1E
24	c	908	CLA	C2A-CAA-CBA-CGA
24	c	906	CLA	C11-C12-C13-C15
24	b	604	CLA	C6-C7-C8-C10
31	j	101	DGD	C8A-C9A-CAA-CBA
31	C	518	DGD	C2A-C1A-O1G-C1G
29	D	408	LHG	C13-C14-C15-C16
31	h	102	DGD	C9B-CAB-CBB-CCB
31	C	518	DGD	O1A-C1A-O1G-C1G
24	C	512	CLA	CAA-CBA-CGA-O2A
24	B	602	CLA	CAA-CBA-CGA-O1A
24	C	507	CLA	C4-C3-C5-C6
24	d	404	CLA	C11-C12-C13-C14
24	c	905	CLA	C14-C13-C15-C16
24	D	403	CLA	C11-C12-C13-C14
24	B	607	CLA	C11-C12-C13-C14
24	C	510	CLA	C6-C7-C8-C9
24	b	617	CLA	C11-C10-C8-C9
24	c	908	CLA	C11-C12-C13-C14
24	b	604	CLA	C6-C7-C8-C9
28	L	101	SQD	C33-C34-C35-C36
31	j	101	DGD	C2B-C3B-C4B-C5B
24	B	604	CLA	C13-C15-C16-C17
31	d	406	DGD	O1G-C1A-C2A-C3A
24	C	509	CLA	CAD-CBD-CGD-O2D
24	B	613	CLA	CAD-CBD-CGD-O2D
24	d	404	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
24	C	505	CLA	CAD-CBD-CGD-O2D
24	D	403	CLA	CAD-CBD-CGD-O2D
24	B	610	CLA	CAD-CBD-CGD-O2D
24	C	510	CLA	CAD-CBD-CGD-O2D
24	c	904	CLA	CAD-CBD-CGD-O2D
24	c	911	CLA	CAD-CBD-CGD-O2D
24	a	406	CLA	CAD-CBD-CGD-O2D
24	b	611	CLA	CAD-CBD-CGD-O2D
24	b	617	CLA	CAD-CBD-CGD-O2D
24	B	605	CLA	CAD-CBD-CGD-O2D
25	A	608	PHO	CAD-CBD-CGD-O2D
24	c	910	CLA	CAD-CBD-CGD-O2D
24	c	913	CLA	C3-C5-C6-C7
24	A	609	CLA	O1A-CGA-O2A-C1
24	A	614	CLA	C4C-C3C-CAC-CBC
31	j	101	DGD	CDA-CEA-CFA-CGA
28	L	101	SQD	C17-C18-C19-C20
26	k	101	BCR	C11-C12-C13-C14
29	A	615	LHG	C4-C5-C6-O8
29	a	413	LHG	O6-C4-C5-O7
29	A	615	LHG	O7-C7-C8-C9
28	l	101	SQD	O48-C23-C24-C25
29	b	620	LHG	C35-C36-C37-C38
24	C	509	CLA	O2A-C1-C2-C3
24	d	404	CLA	O2A-C1-C2-C3
24	b	605	CLA	O2A-C1-C2-C3
24	D	402	CLA	O2A-C1-C2-C3
24	B	605	CLA	O2A-C1-C2-C3
25	A	608	PHO	O2A-C1-C2-C3
24	B	603	CLA	O2A-C1-C2-C3
24	c	910	CLA	O2A-C1-C2-C3
25	d	402	PHO	O2A-C1-C2-C3
26	B	619	BCR	C14-C15-C16-C17
24	b	604	CLA	C13-C15-C16-C17
29	d	408	LHG	C11-C12-C13-C14
24	C	509	CLA	CHA-CBD-CGD-O1D
24	B	611	CLA	CHA-CBD-CGD-O1D
24	c	905	CLA	CHA-CBD-CGD-O1D
24	c	905	CLA	CHA-CBD-CGD-O2D
24	A	614	CLA	CHA-CBD-CGD-O1D
24	A	614	CLA	CHA-CBD-CGD-O2D
24	B	617	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
24	B	615	CLA	CHA-CBD-CGD-O2D
24	b	606	CLA	CHA-CBD-CGD-O1D
24	b	603	CLA	CHA-CBD-CGD-O2D
24	b	605	CLA	CHA-CBD-CGD-O2D
24	B	607	CLA	CHA-CBD-CGD-O2D
24	a	407	CLA	CHA-CBD-CGD-O2D
24	d	401	CLA	CHA-CBD-CGD-O1D
24	b	607	CLA	CHA-CBD-CGD-O2D
25	D	401	PHO	CHA-CBD-CGD-O1D
24	B	608	CLA	CHA-CBD-CGD-O2D
24	A	607	CLA	CHA-CBD-CGD-O2D
25	a	412	PHO	CHA-CBD-CGD-O2D
24	C	502	CLA	CHA-CBD-CGD-O2D
24	B	603	CLA	CHA-CBD-CGD-O1D
24	B	603	CLA	CHA-CBD-CGD-O2D
29	a	413	LHG	O6-C4-C5-C6
26	b	618	BCR	C16-C17-C18-C19
24	B	607	CLA	C16-C17-C18-C20
31	D	406	DGD	O2G-C2G-C3G-O3G
24	c	909	CLA	C10-C11-C12-C13
31	C	518	DGD	O6D-C5D-C6D-O5D
29	D	407	LHG	C34-C35-C36-C37
31	D	406	DGD	O1G-C1A-C2A-C3A
28	a	411	SQD	O48-C23-C24-C25
31	C	518	DGD	O1G-C1A-C2A-C3A
24	A	609	CLA	C4-C3-C5-C6
24	c	909	CLA	C11-C10-C8-C7
24	A	609	CLA	C11-C12-C13-C15
24	c	913	CLA	CAA-CBA-CGA-O2A
24	a	408	CLA	C11-C10-C8-C9
24	C	504	CLA	C11-C10-C8-C9
24	C	505	CLA	C14-C13-C15-C16
24	D	403	CLA	C14-C13-C15-C16
24	c	909	CLA	C11-C10-C8-C9
24	b	616	CLA	C11-C10-C8-C9
24	b	616	CLA	C14-C13-C15-C16
24	c	914	CLA	C6-C7-C8-C9
24	d	401	CLA	C11-C12-C13-C14
24	B	605	CLA	C6-C7-C8-C9
26	H	101	BCR	C9-C10-C11-C12
26	k	102	BCR	C14-C15-C16-C17
28	a	402	SQD	C5-C6-S-O8

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Mol	Chain	Res	Type	Atoms
28	A	612	SQD	C18-C19-C20-C21
24	C	512	CLA	CAA-CBA-CGA-O1A
24	A	606	CLA	C4C-C3C-CAC-CBC
24	C	513	CLA	C16-C17-C18-C20
24	B	610	CLA	C4-C3-C5-C6
29	D	409	LHG	C33-C34-C35-C36
27	A	611	PL9	C26-C27-C28-C29
24	B	606	CLA	C13-C15-C16-C17
24	A	609	CLA	CBA-CGA-O2A-C1
28	A	613	SQD	C11-C12-C13-C14
24	c	909	CLA	C13-C15-C16-C17
29	d	408	LHG	C13-C14-C15-C16
26	K	101	BCR	C14-C15-C16-C17
31	c	916	DGD	C2E-C1E-O5D-C6D
31	C	516	DGD	C2E-C1E-O5D-C6D
28	d	407	SQD	C2-C1-O6-C44
29	d	409	LHG	C4-O6-P-O5
29	D	408	LHG	C4-O6-P-O5
29	D	409	LHG	C19-C20-C21-C22
31	D	406	DGD	O1A-C1A-C2A-C3A
24	c	913	CLA	CAA-CBA-CGA-O1A
28	l	101	SQD	O10-C23-C24-C25
31	C	518	DGD	O1A-C1A-C2A-C3A
29	b	620	LHG	O7-C7-C8-C9
26	k	102	BCR	C18-C19-C20-C21
26	T	101	BCR	C18-C19-C20-C21
31	d	406	DGD	O1A-C1A-C2A-C3A
24	b	617	CLA	C8-C10-C11-C12
31	h	102	DGD	O1B-C1B-C2B-C3B
24	b	602	CLA	C4-C3-C5-C6
24	b	608	CLA	CAD-CBD-CGD-O1D
24	B	610	CLA	CAD-CBD-CGD-O1D
28	a	402	SQD	C5-C6-S-O9
24	B	608	CLA	CAD-CBD-CGD-O1D
24	B	609	CLA	CAD-CBD-CGD-O1D
24	B	603	CLA	CAD-CBD-CGD-O1D
24	B	613	CLA	O1A-CGA-O2A-C1
29	A	615	LHG	O9-C7-C8-C9
24	A	614	CLA	C11-C12-C13-C14
24	A	609	CLA	C14-C13-C15-C16
24	C	511	CLA	C6-C7-C8-C9
24	C	506	CLA	C14-C13-C15-C16

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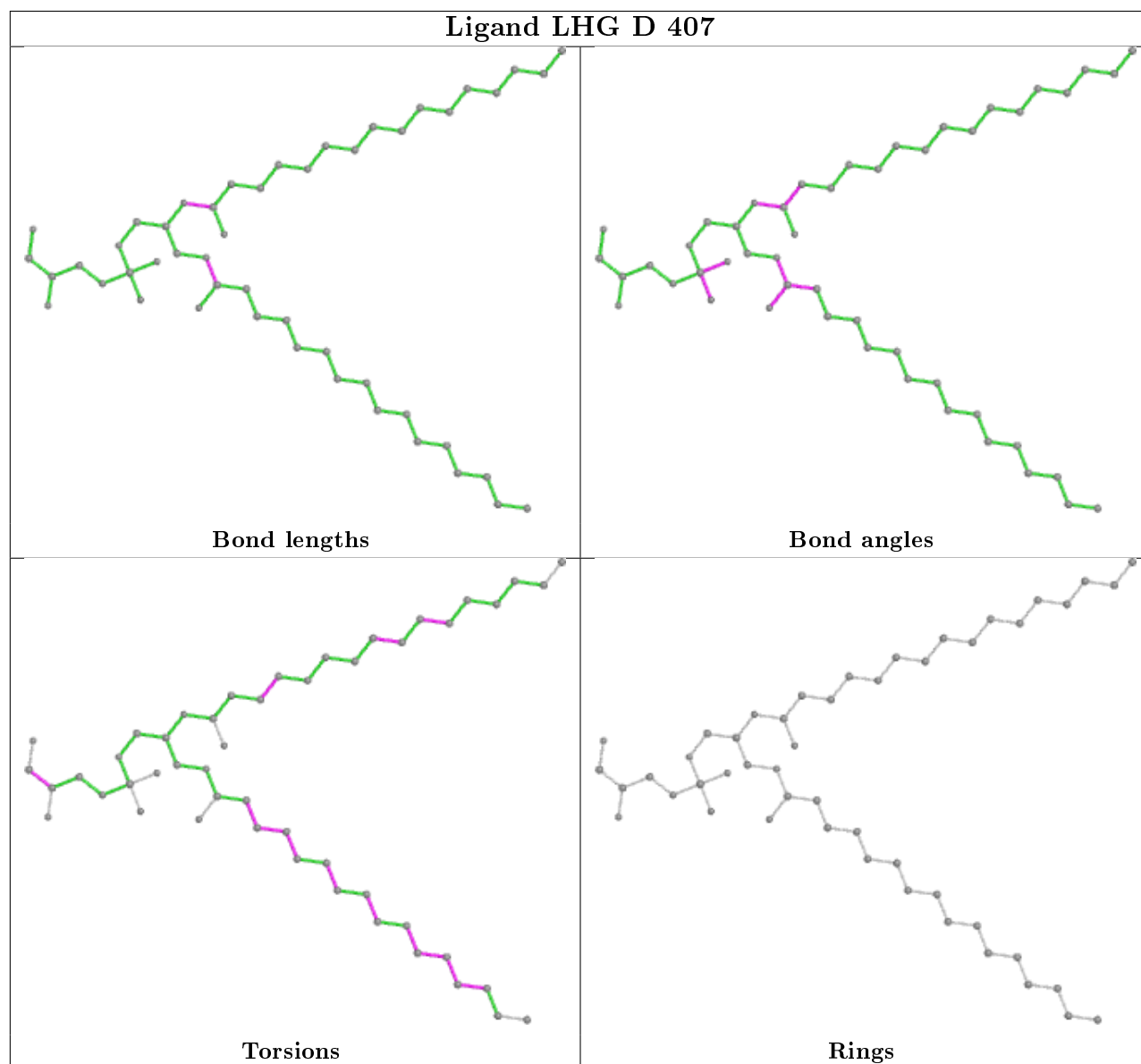
Mol	Chain	Res	Type	Atoms
28	a	411	SQD	O10-C23-C24-C25
29	D	407	LHG	C11-C10-C9-C8
31	j	101	DGD	O1G-C1A-C2A-C3A
24	c	906	CLA	CAA-CBA-CGA-O2A
28	L	101	SQD	C45-C46-O48-C23
31	C	517	DGD	C6A-C7A-C8A-C9A
24	b	604	CLA	C2A-CAA-CBA-CGA
31	c	916	DGD	O2G-C1B-C2B-C3B
31	C	516	DGD	C3A-C4A-C5A-C6A
31	C	516	DGD	C9A-CAA-CBA-CCA
29	B	621	LHG	C5-C6-O8-C23
24	B	616	CLA	C15-C16-C17-C18
24	C	505	CLA	C12-C13-C15-C16
24	B	615	CLA	C11-C10-C8-C7
24	b	616	CLA	C12-C13-C15-C16
24	c	913	CLA	C12-C13-C15-C16
24	C	511	CLA	C6-C7-C8-C10
24	C	507	CLA	C11-C12-C13-C15
24	C	510	CLA	C6-C7-C8-C10
24	c	914	CLA	C11-C12-C13-C15
24	c	907	CLA	C12-C13-C15-C16
24	D	402	CLA	C12-C13-C15-C16
24	d	401	CLA	C11-C12-C13-C15
24	c	906	CLA	CAA-CBA-CGA-O1A
24	c	902	CLA	CAA-CBA-CGA-O2A
31	C	517	DGD	O2G-C1B-C2B-C3B
31	c	916	DGD	O1B-C1B-C2B-C3B
26	f	101	BCR	C9-C10-C11-C12
26	K	101	BCR	C9-C10-C11-C12
24	b	611	CLA	C16-C17-C18-C20
24	B	613	CLA	C8-C10-C11-C12
24	C	505	CLA	CAA-CBA-CGA-O2A
24	C	501	CLA	CAA-CBA-CGA-O2A
24	C	506	CLA	C15-C16-C17-C18
24	a	408	CLA	O1D-CGD-O2D-CED
29	D	409	LHG	O8-C23-C24-C25

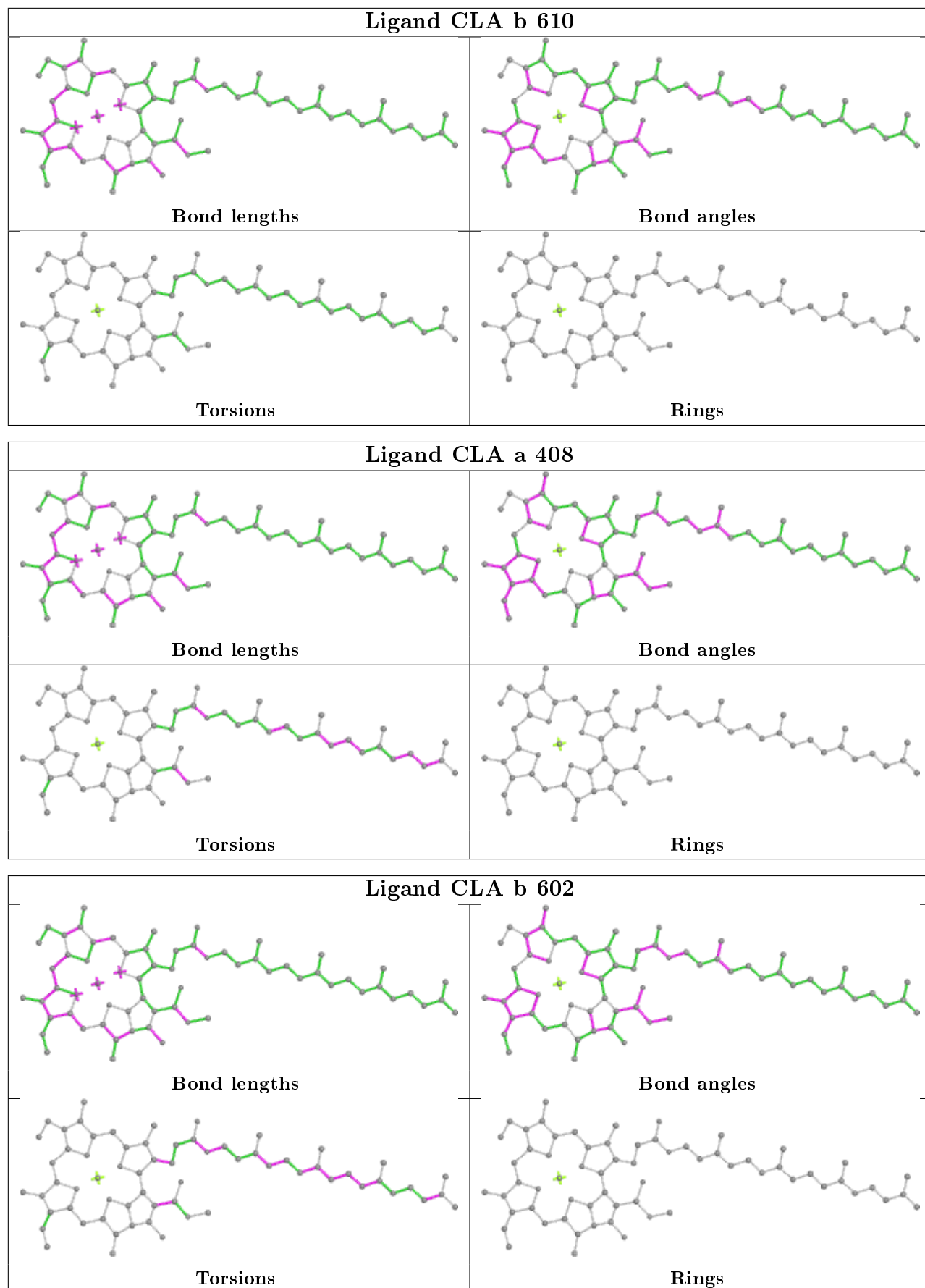
There are no ring outliers.

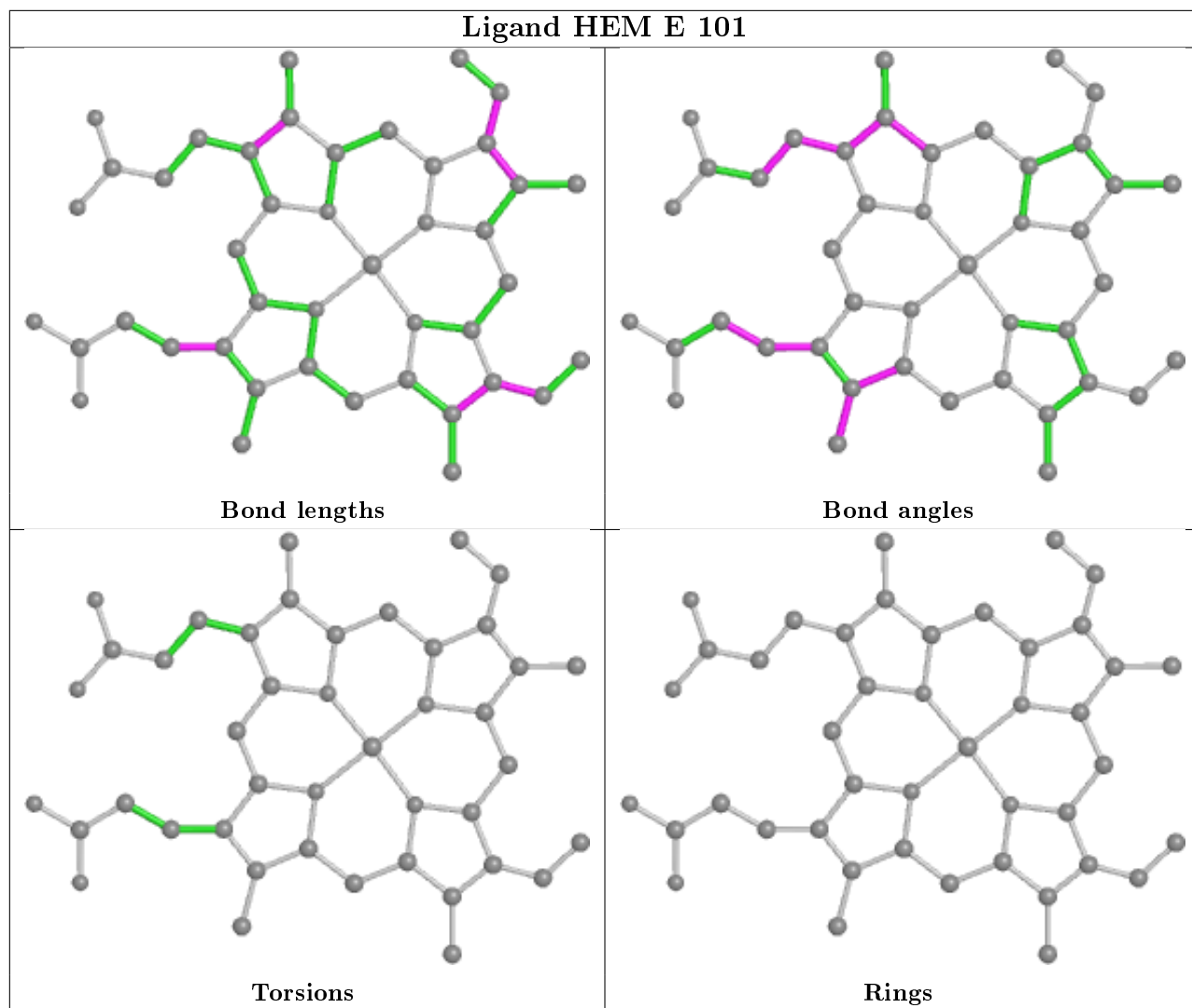
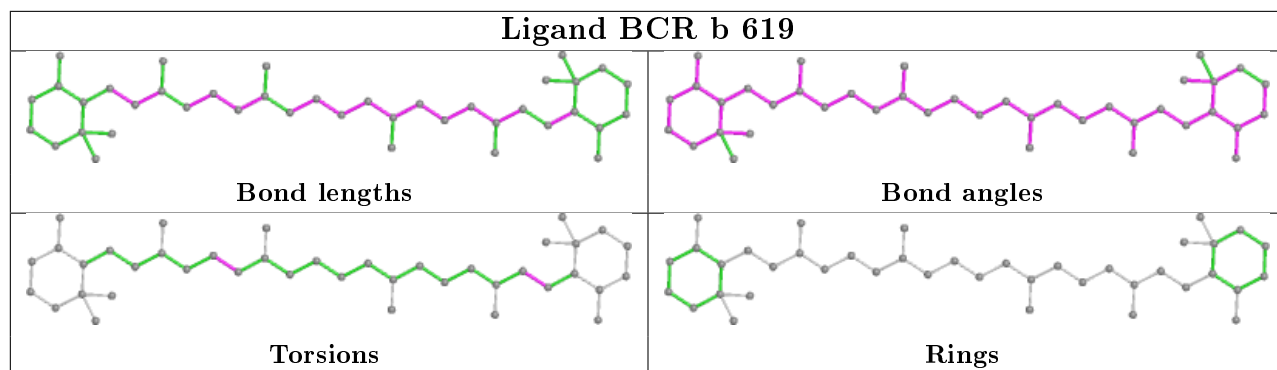
No monomer is involved in short contacts.

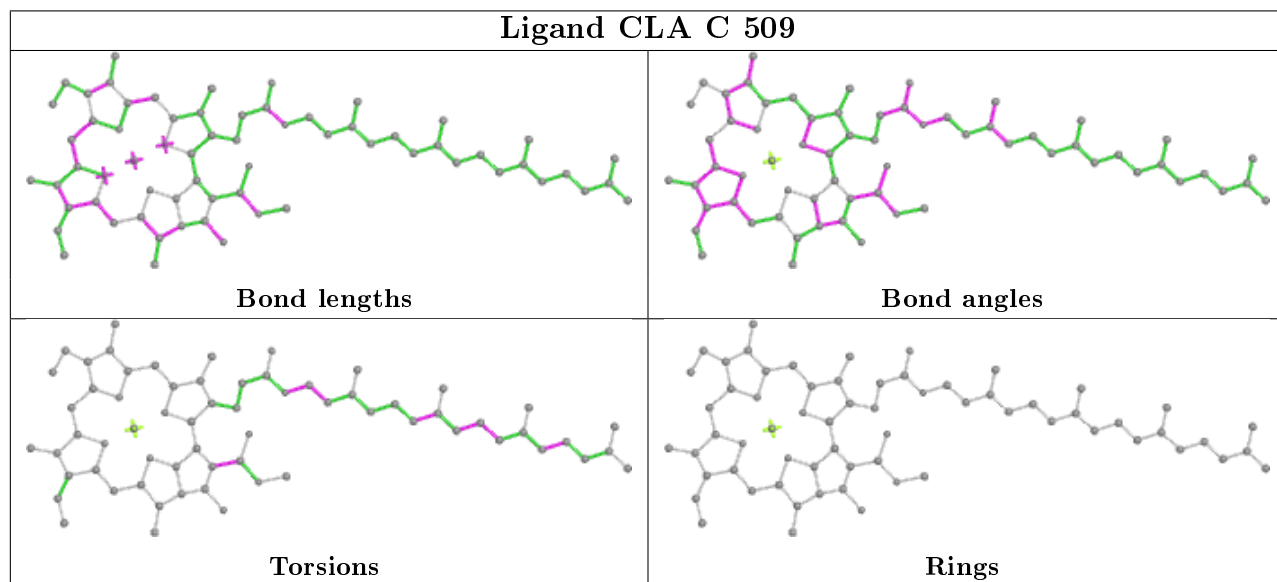
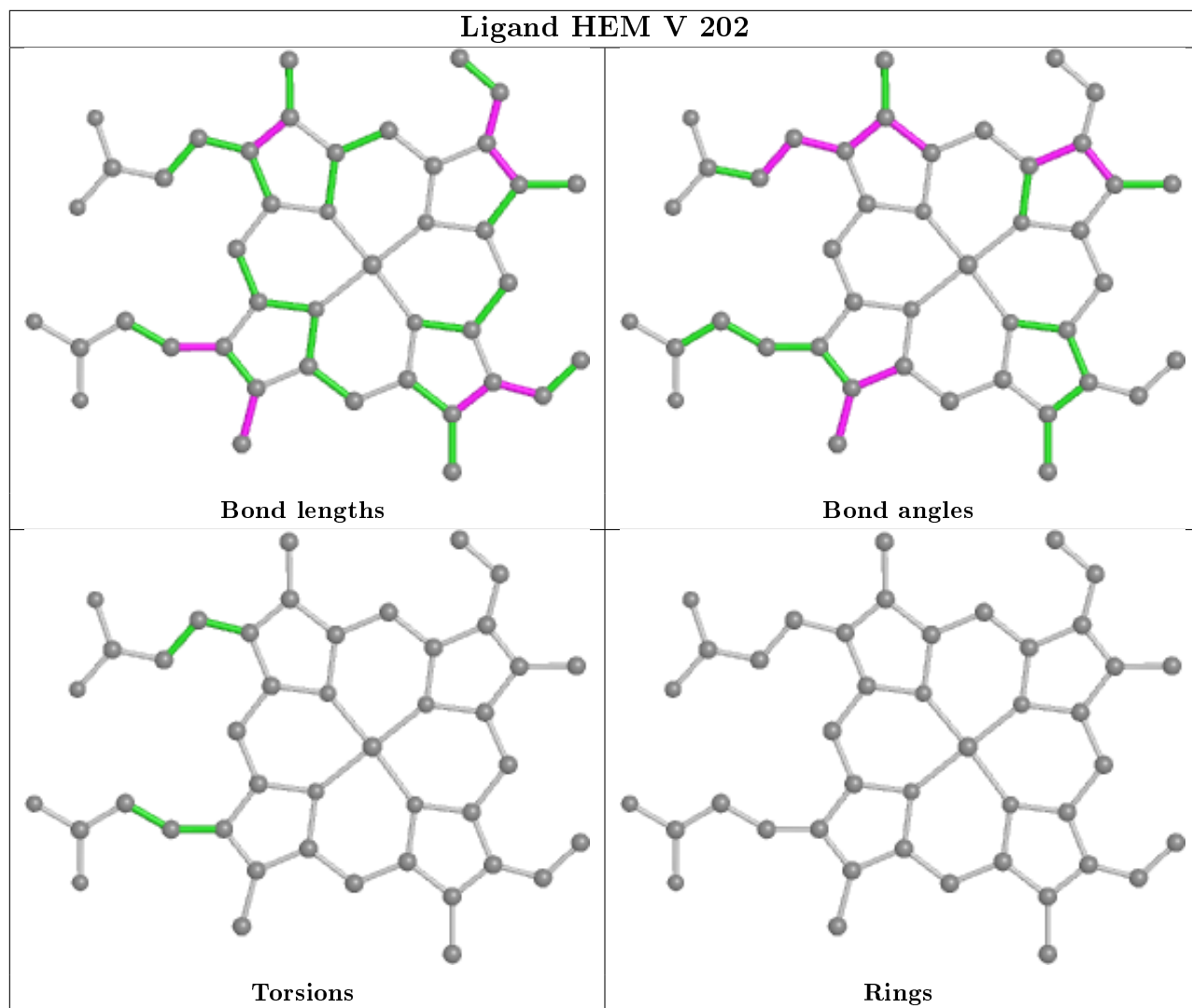
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will

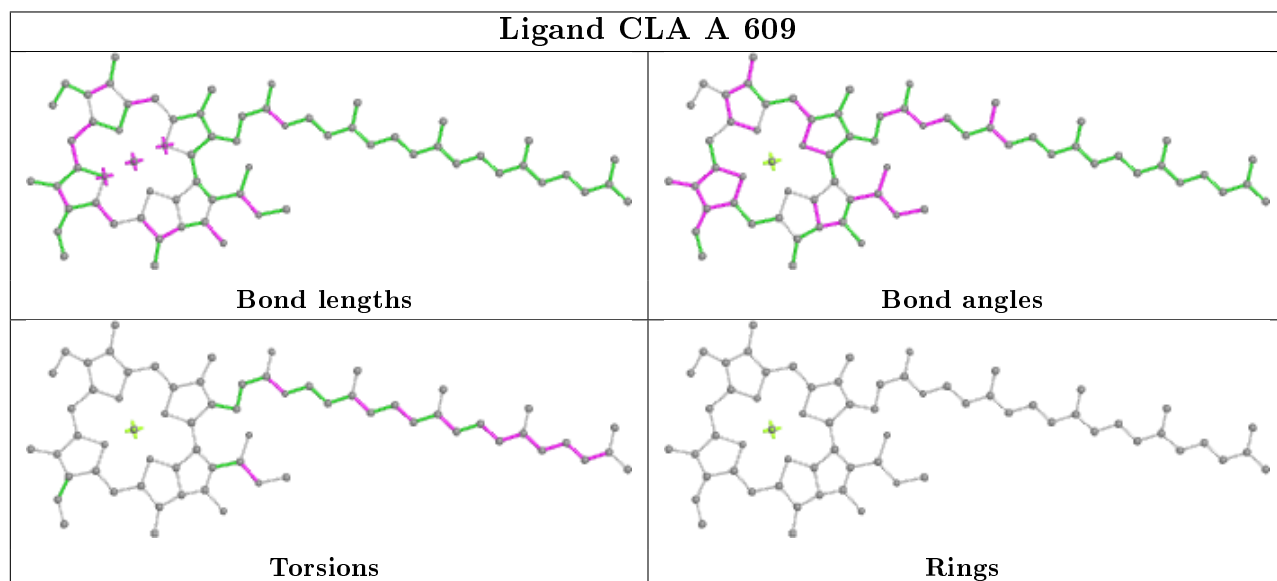
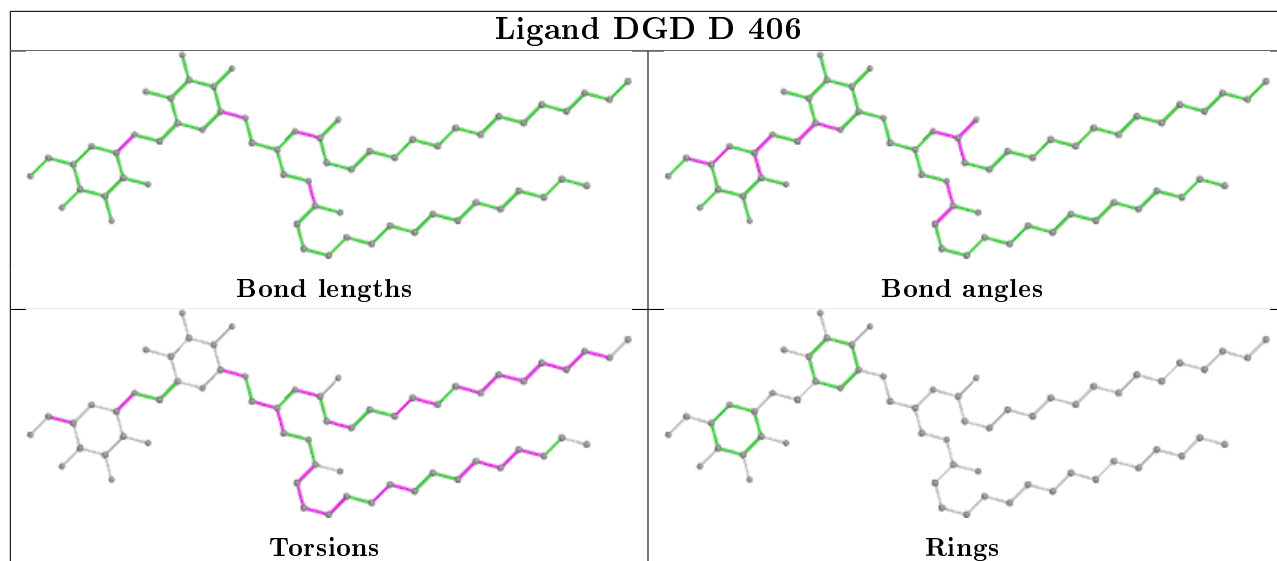
also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

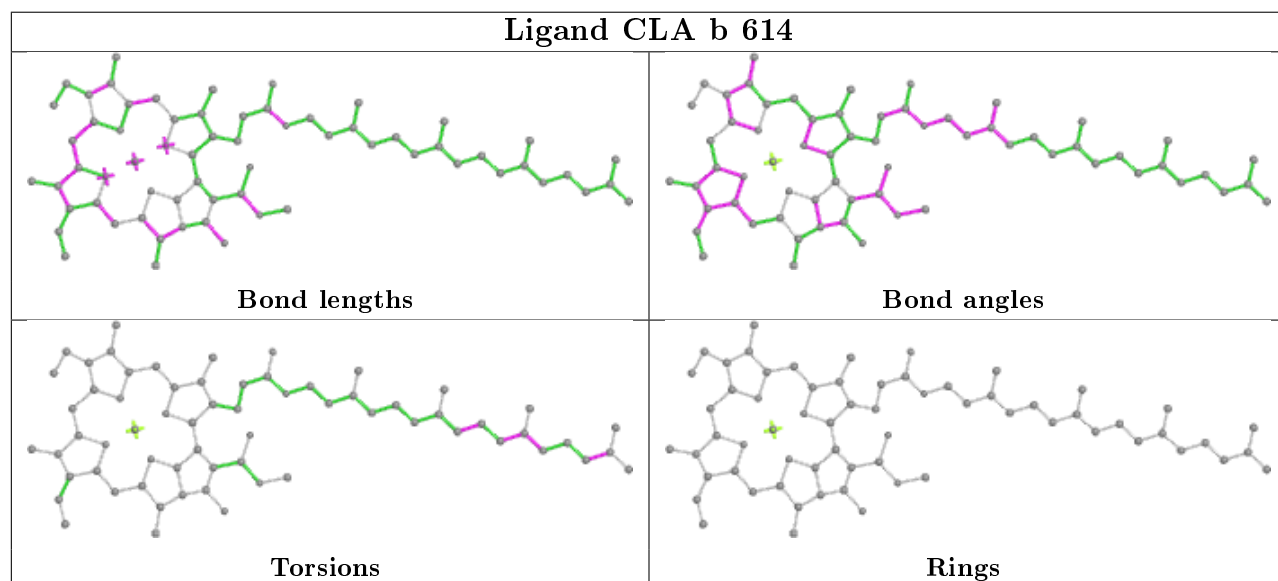
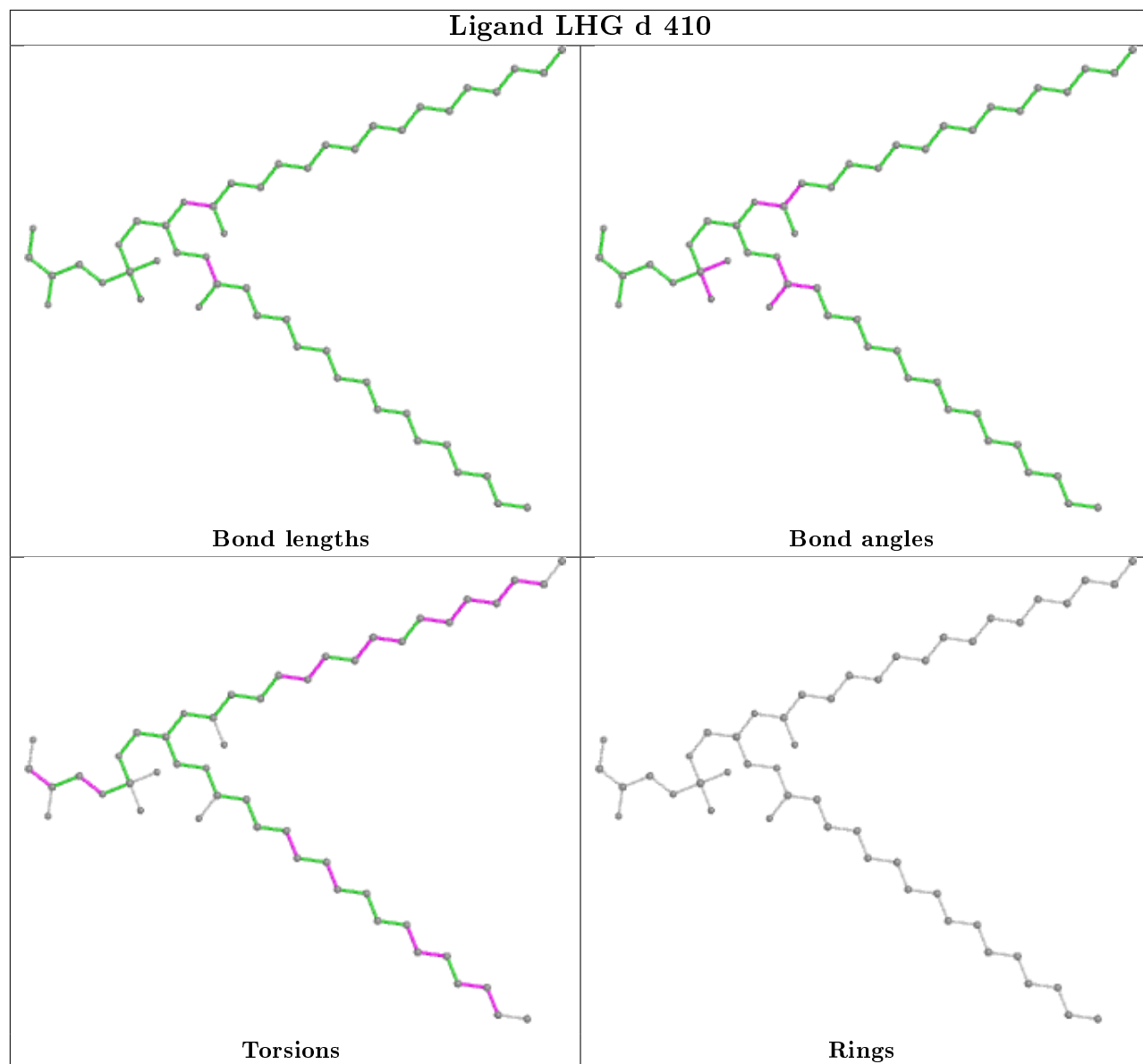




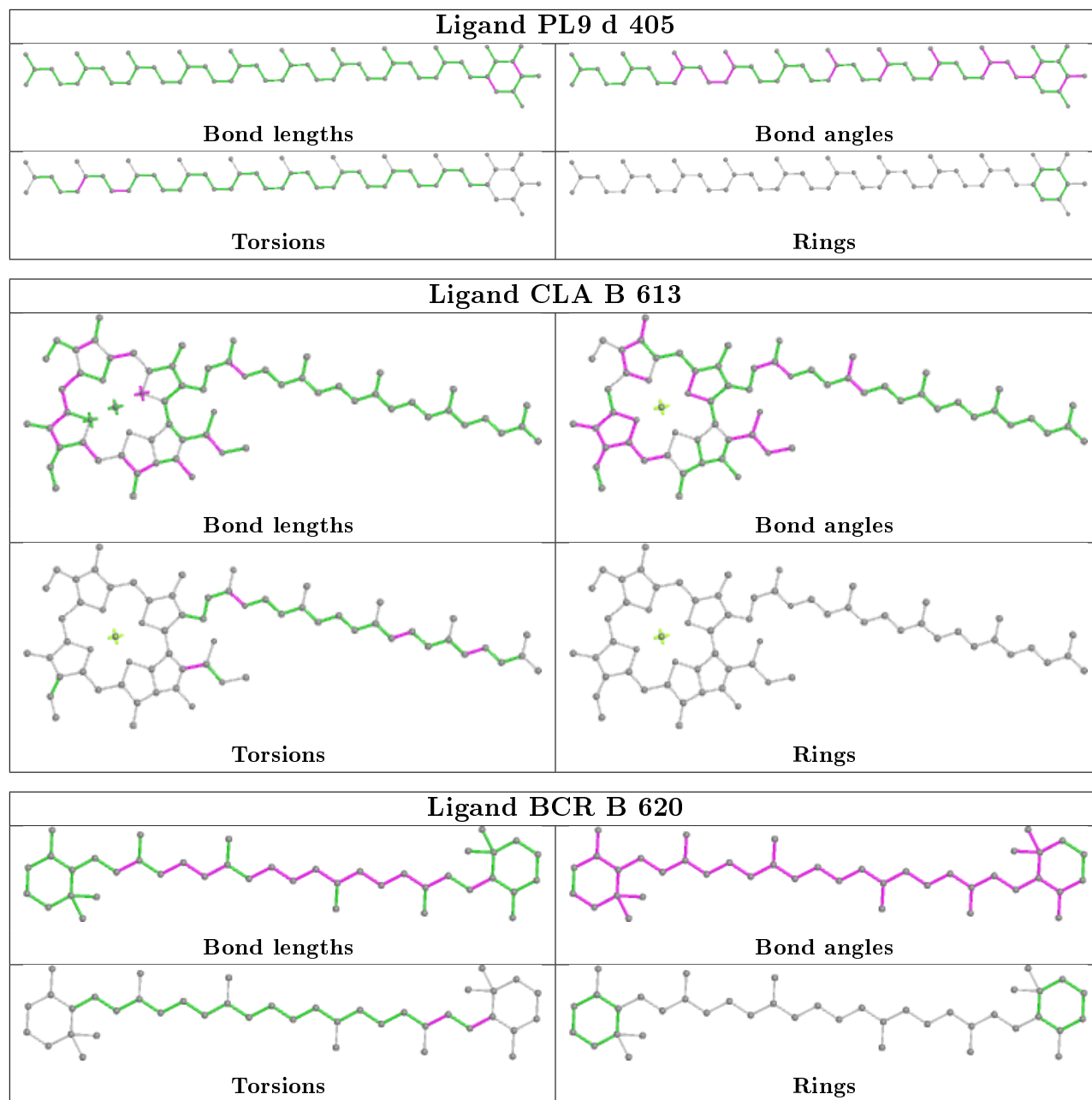


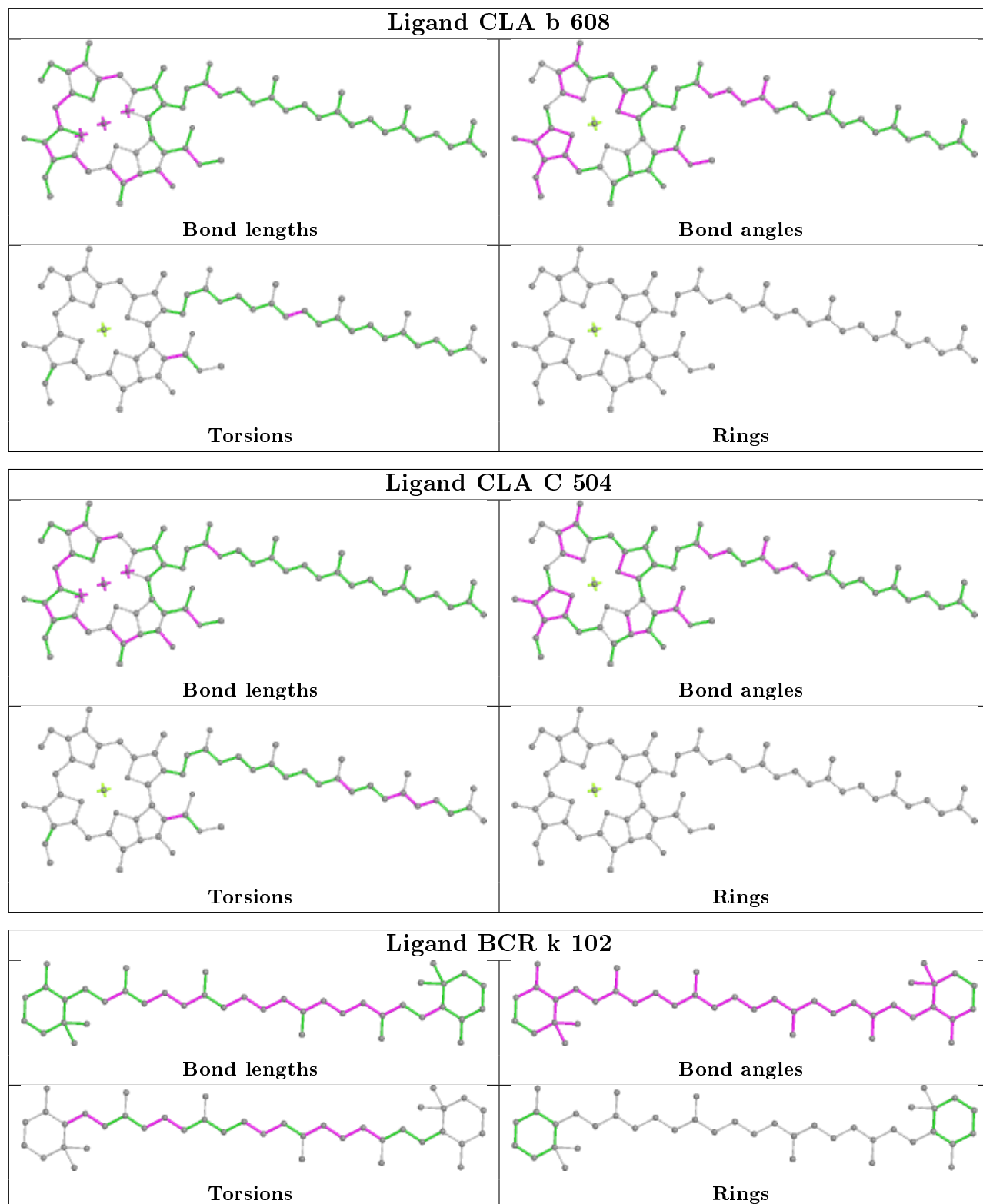


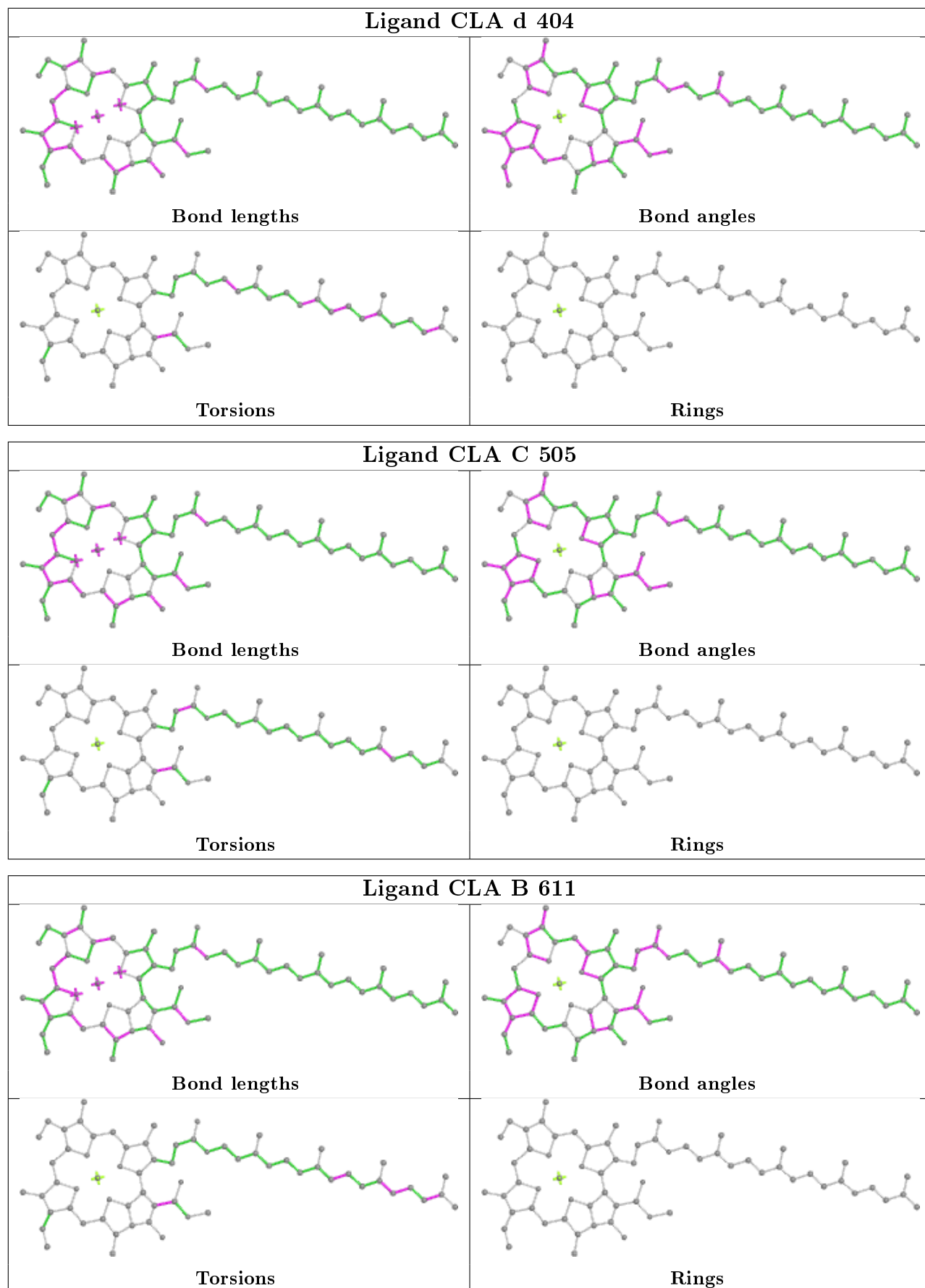


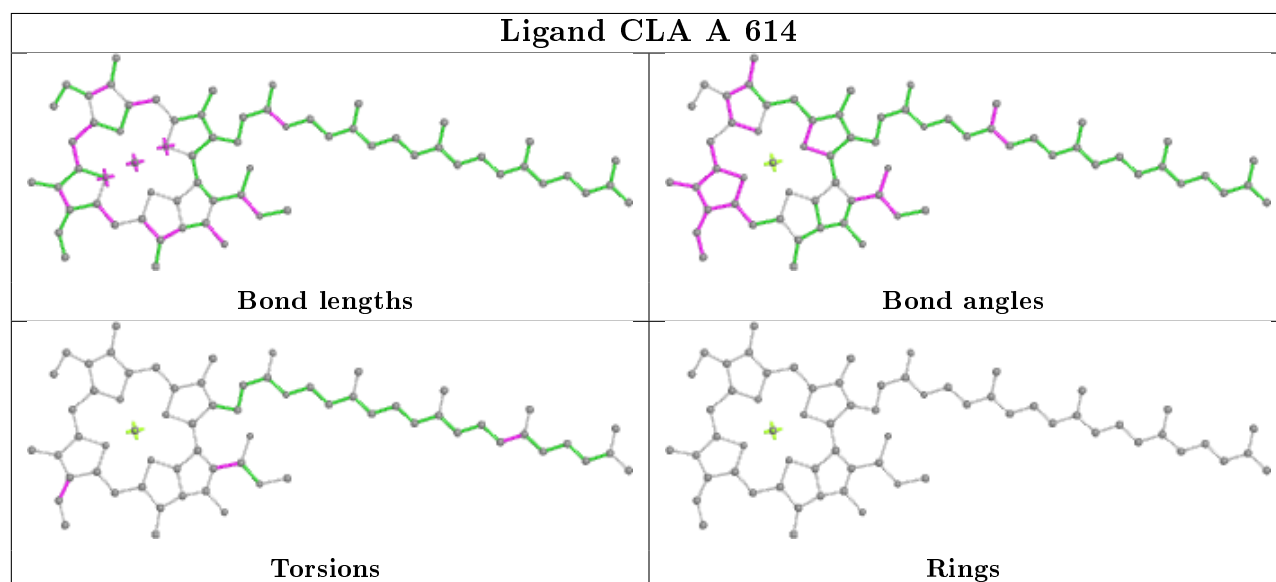
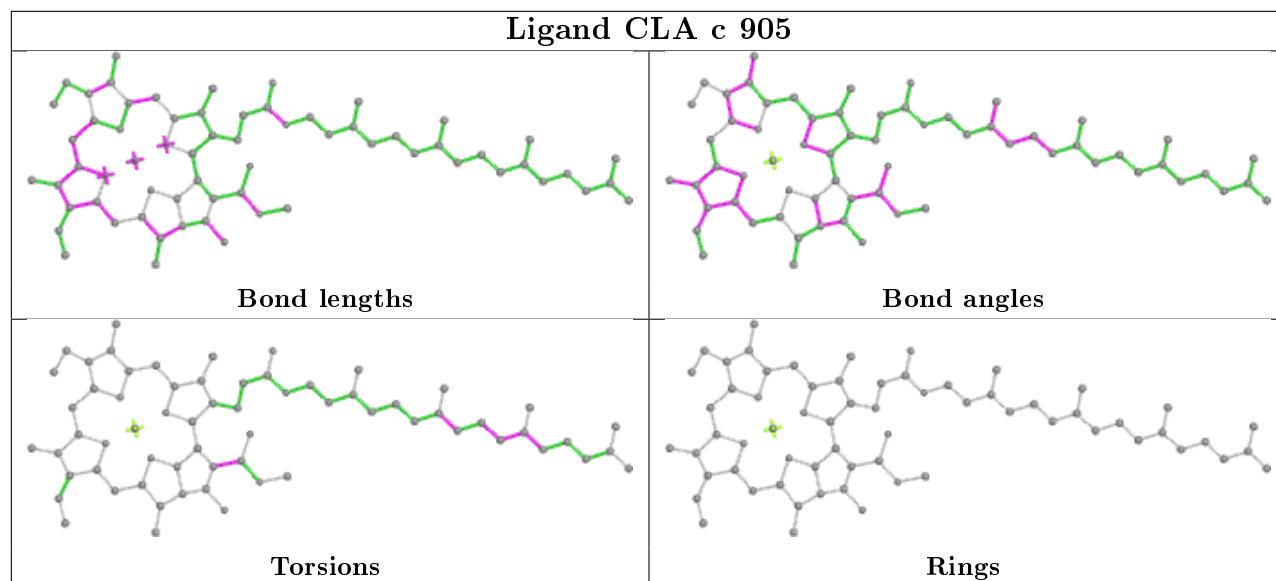
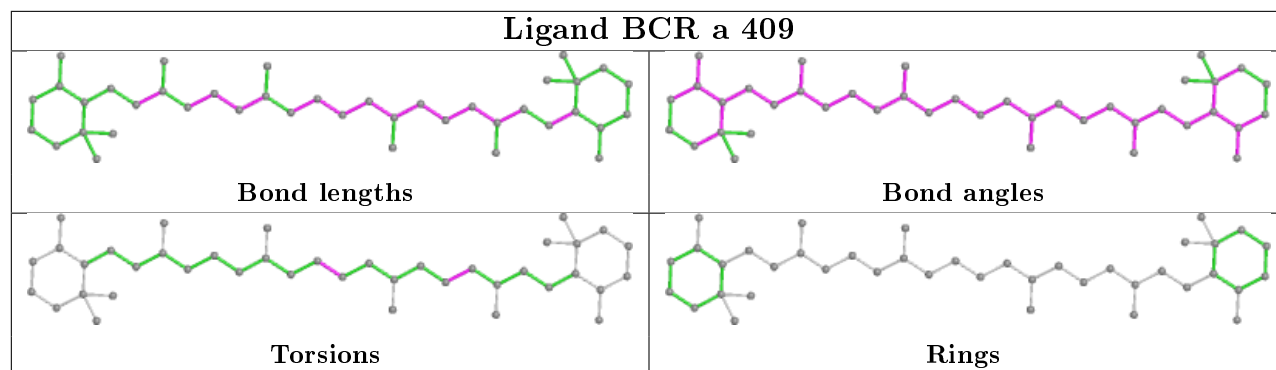


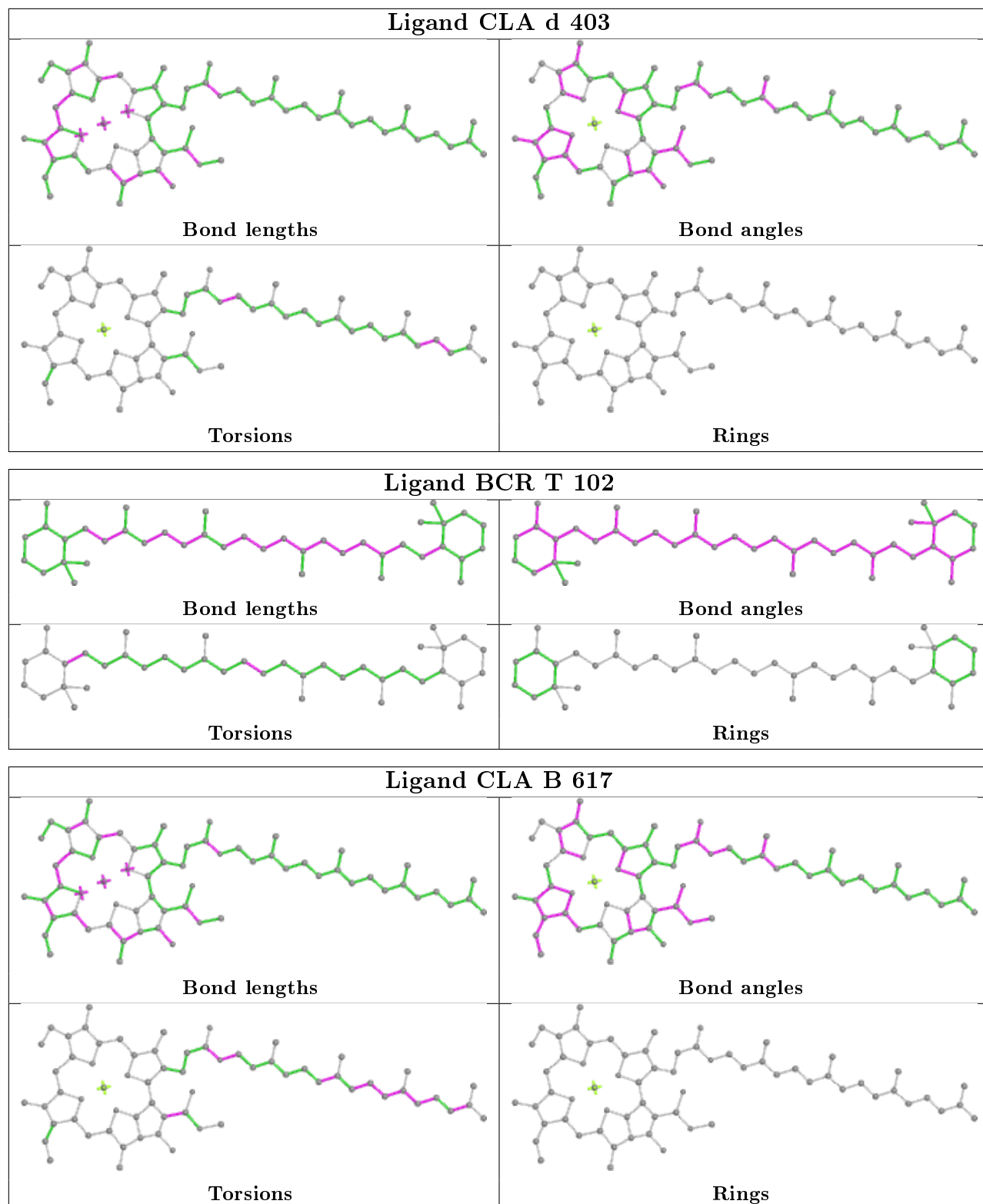


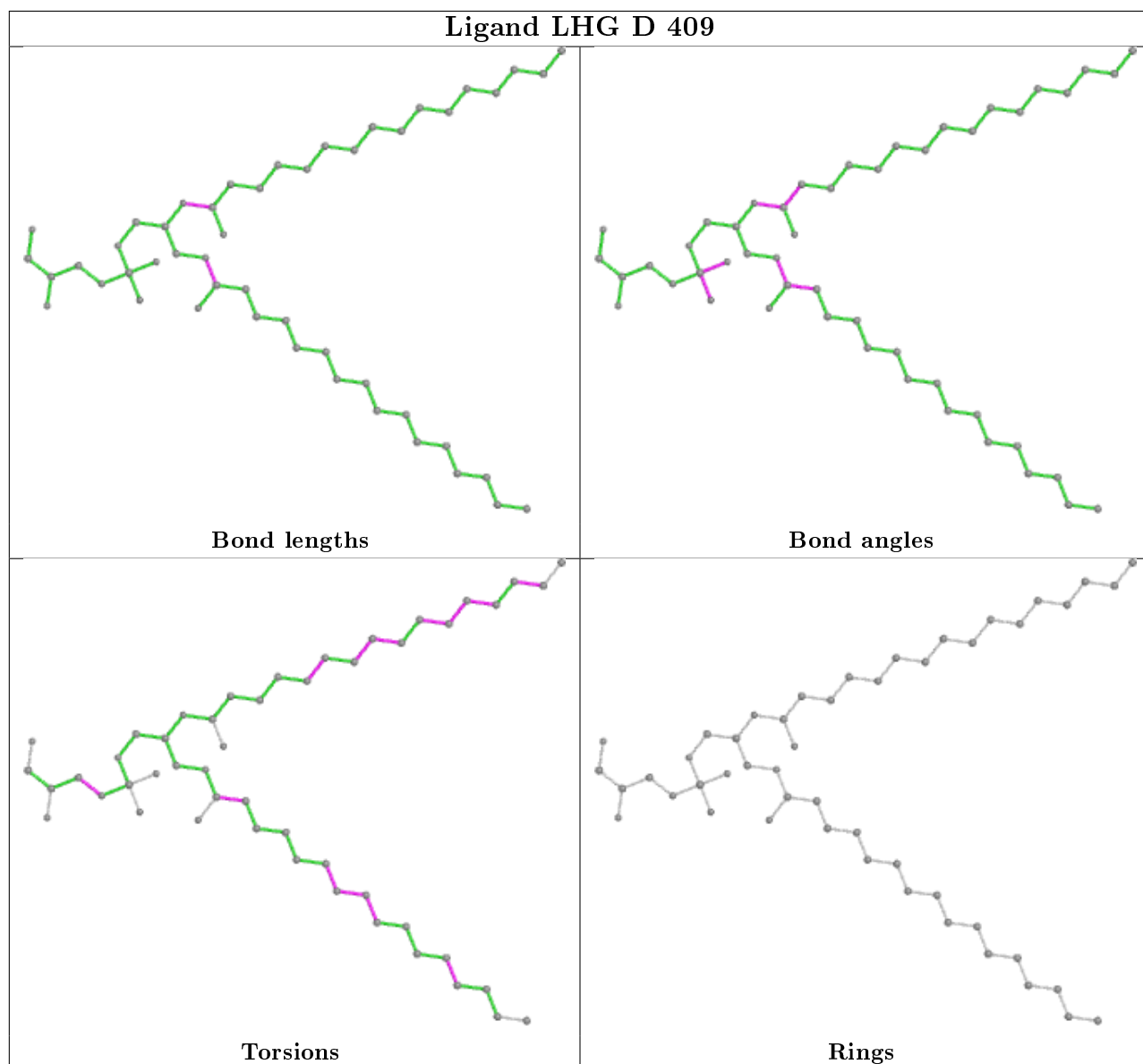
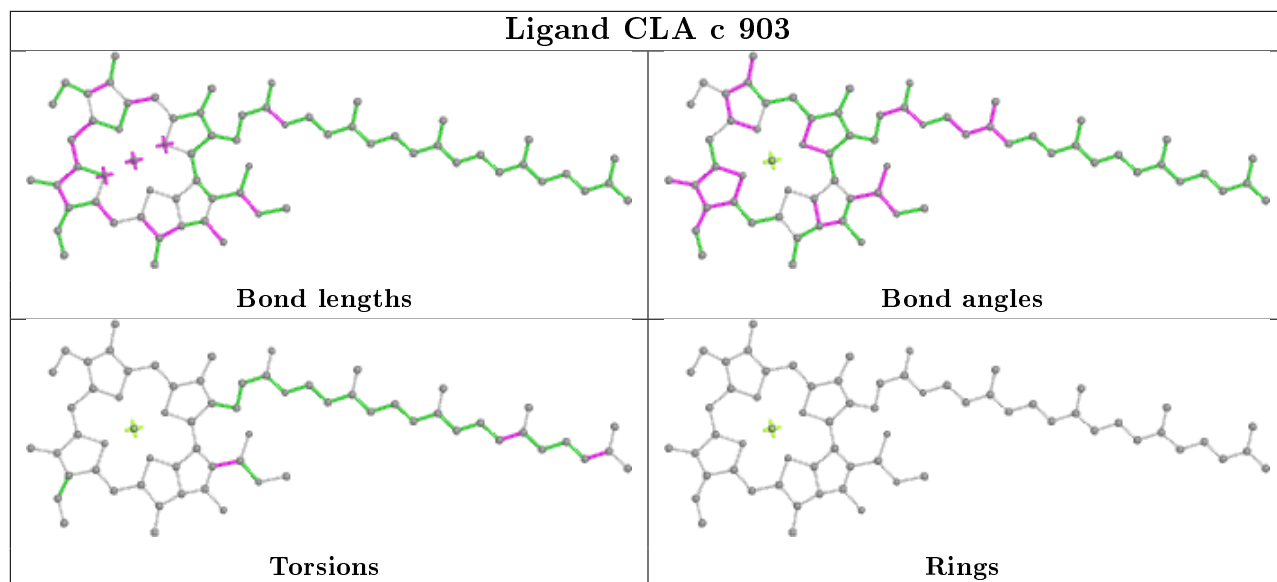


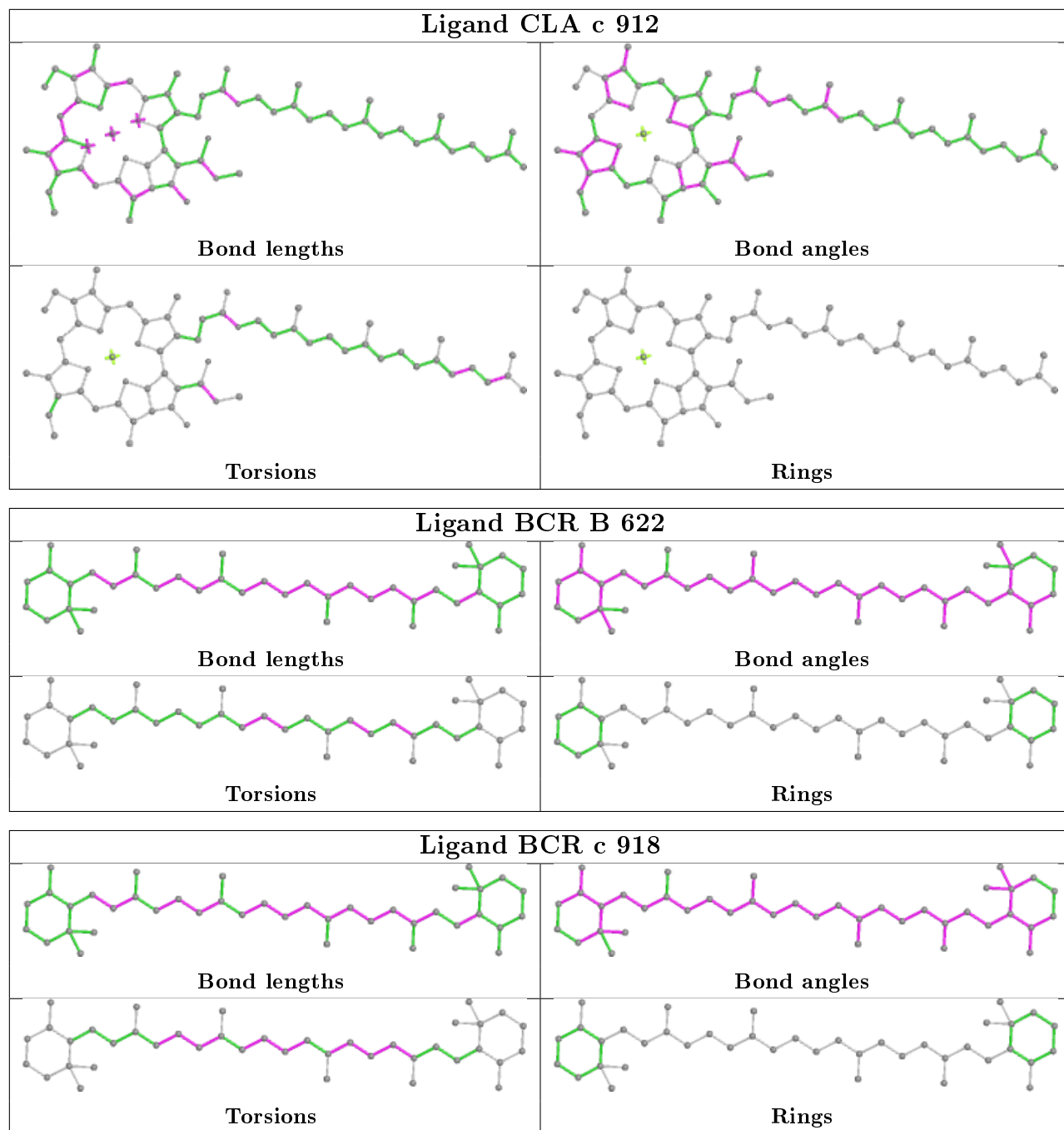


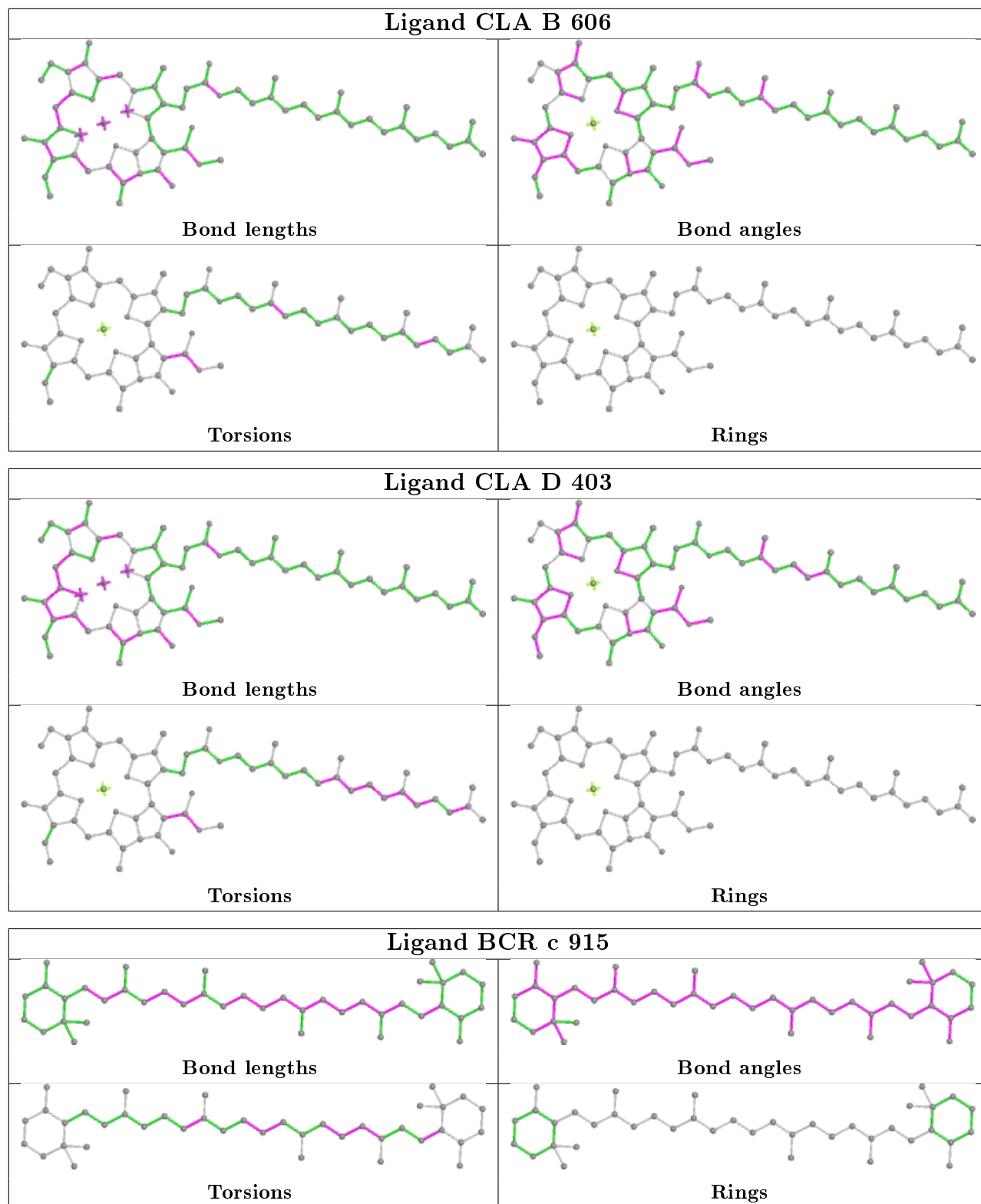




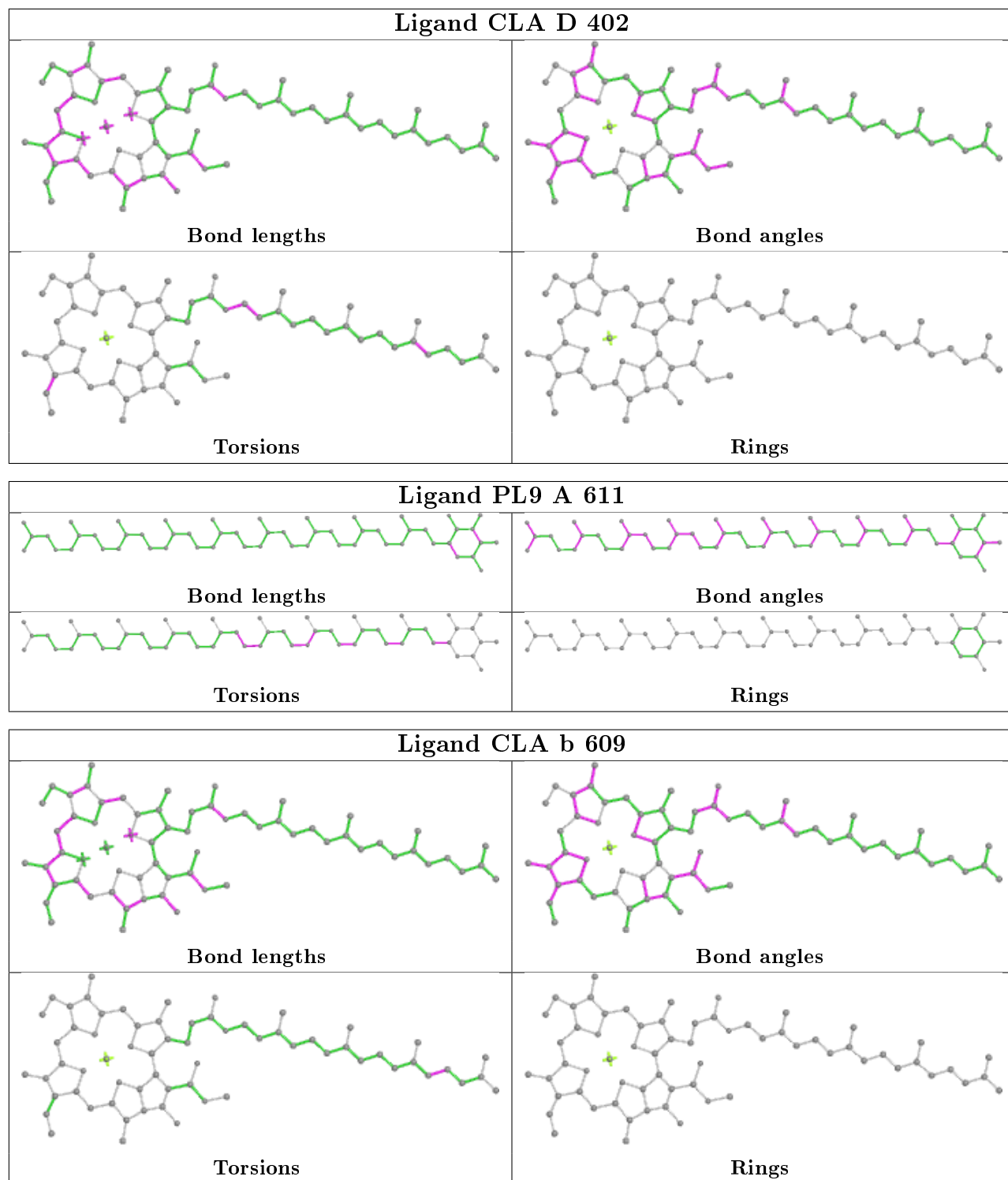


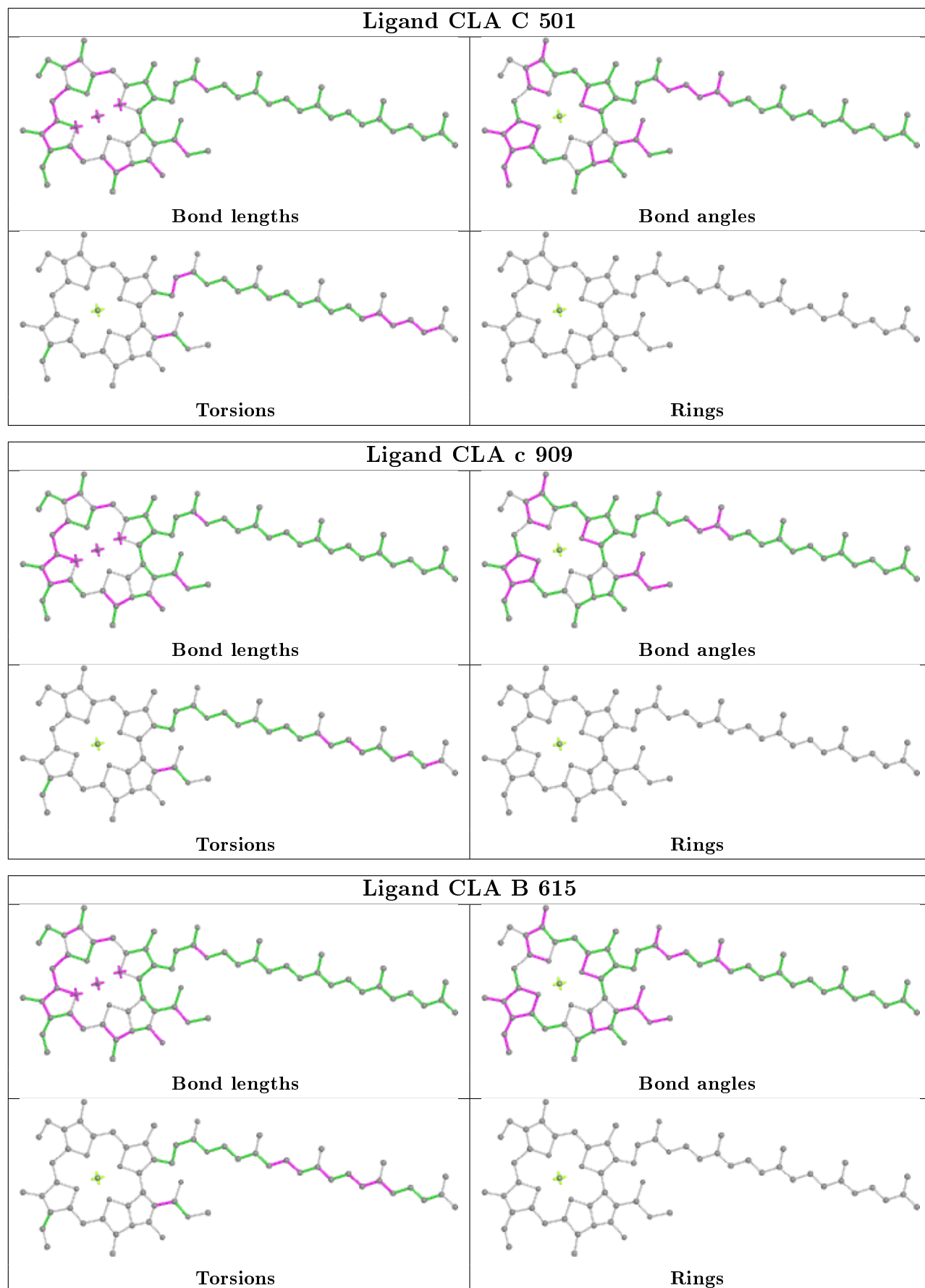


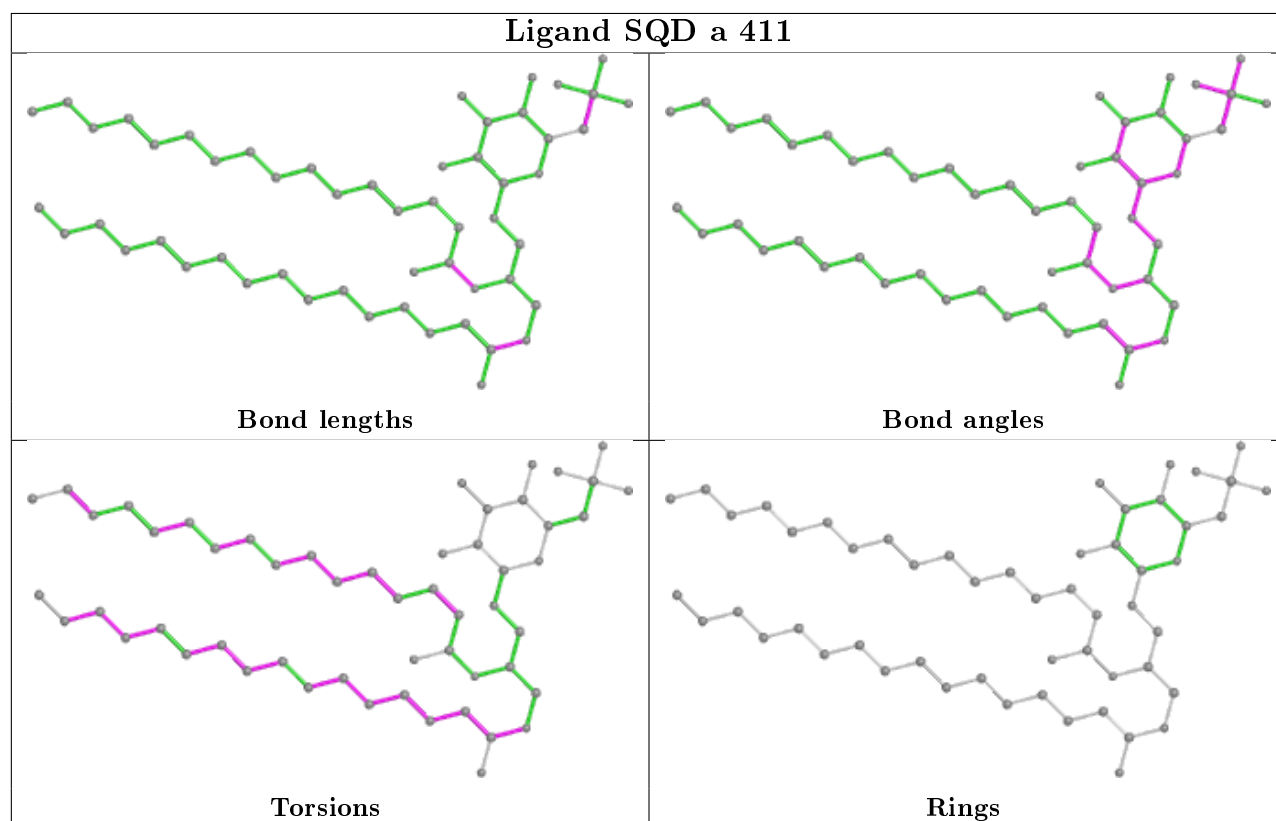
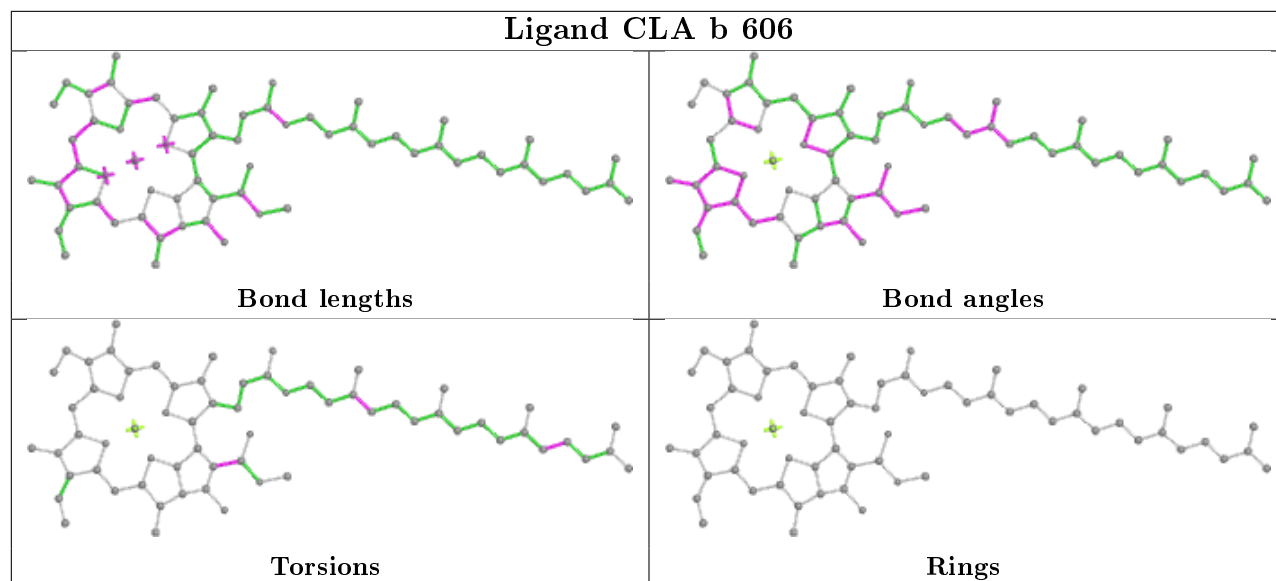
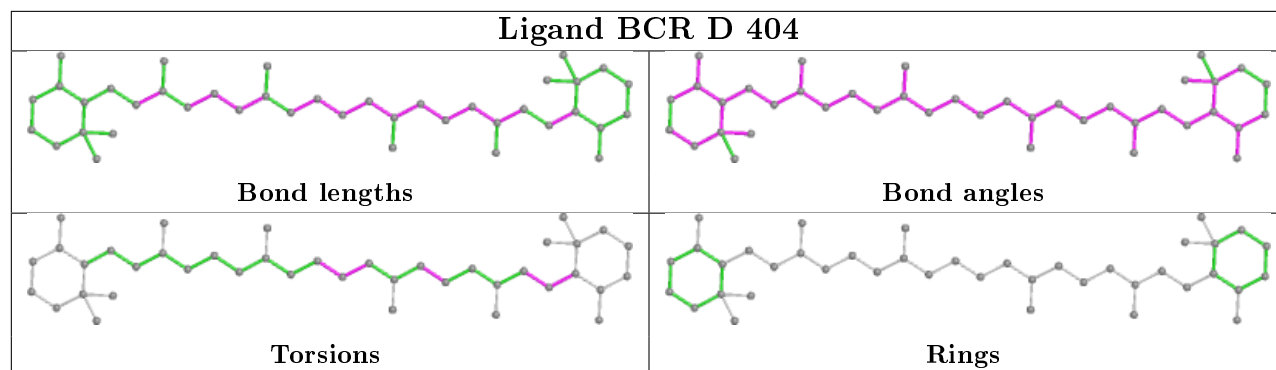


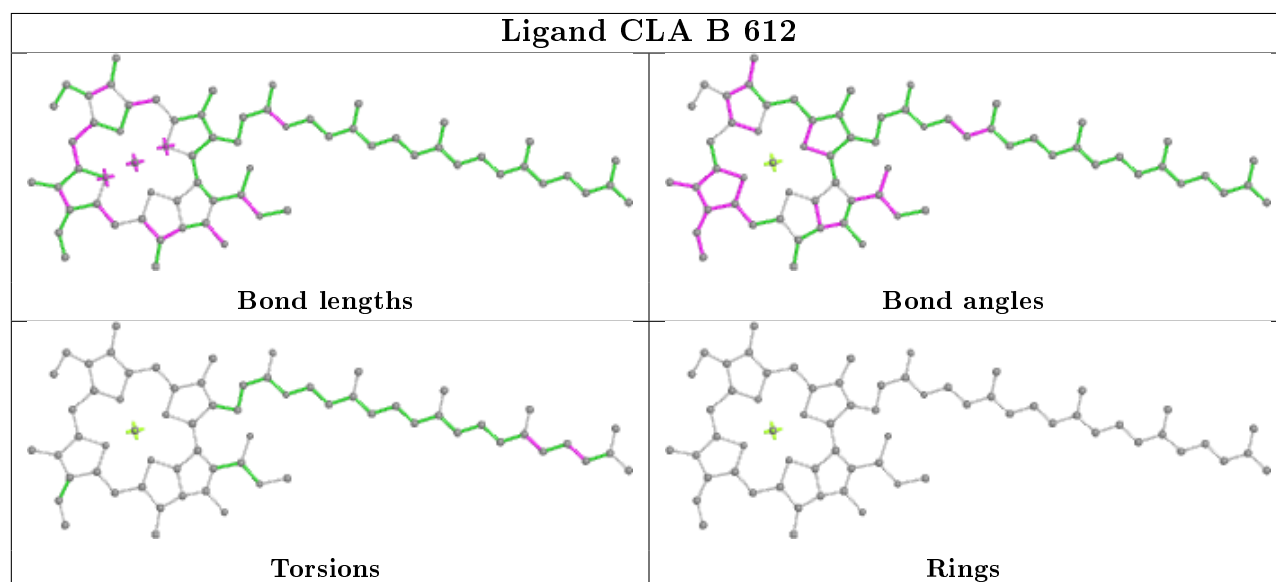
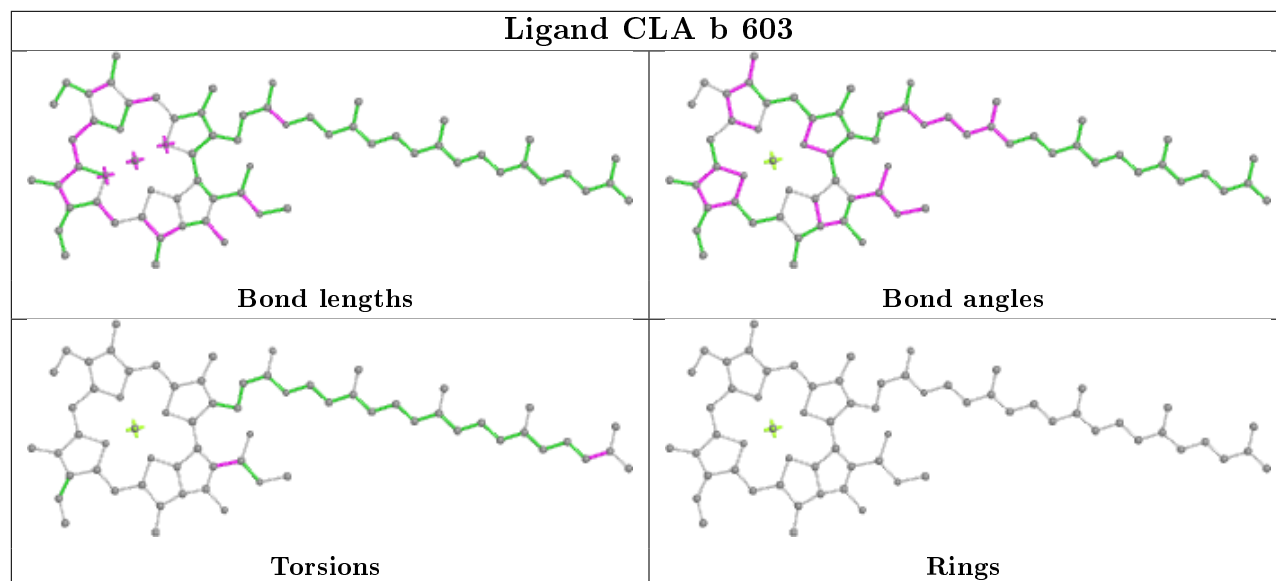
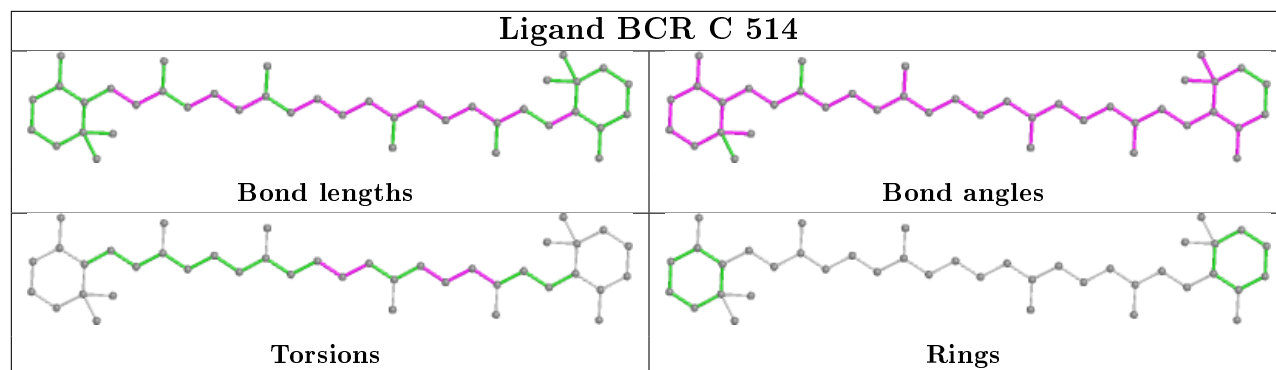


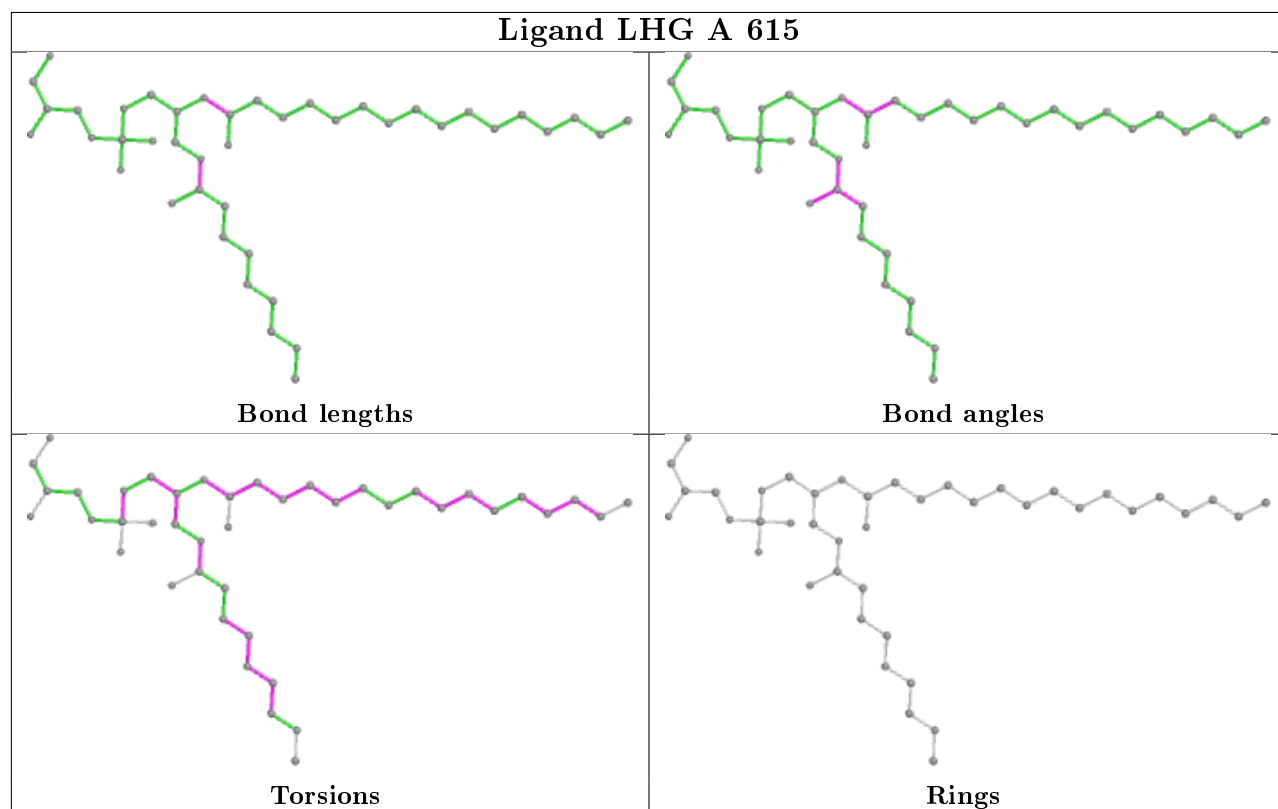
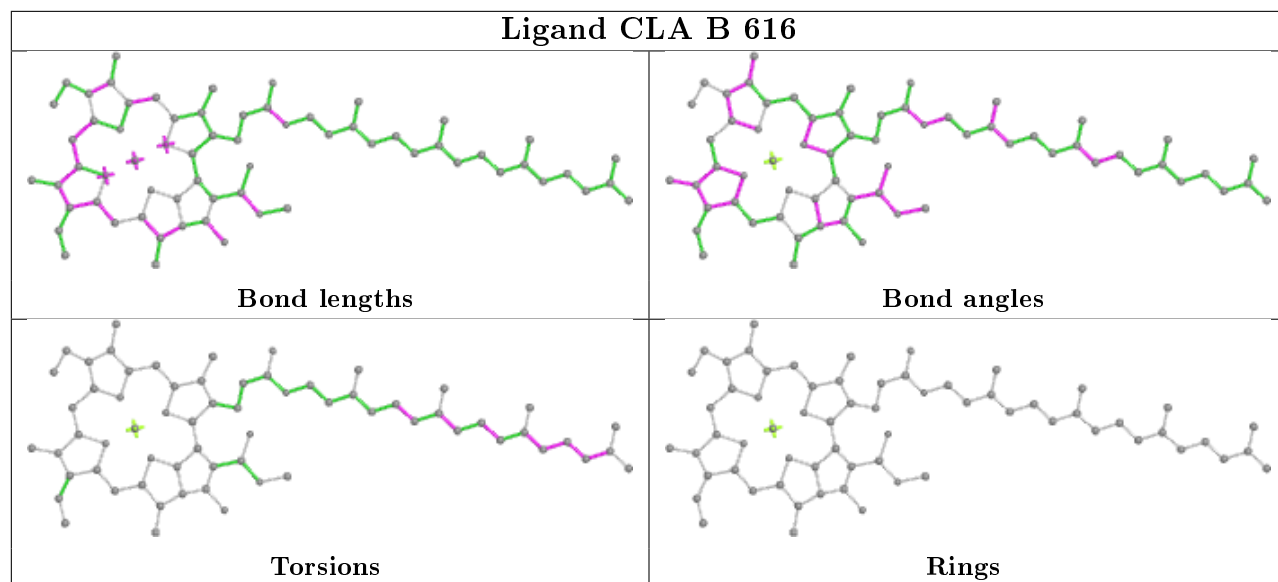


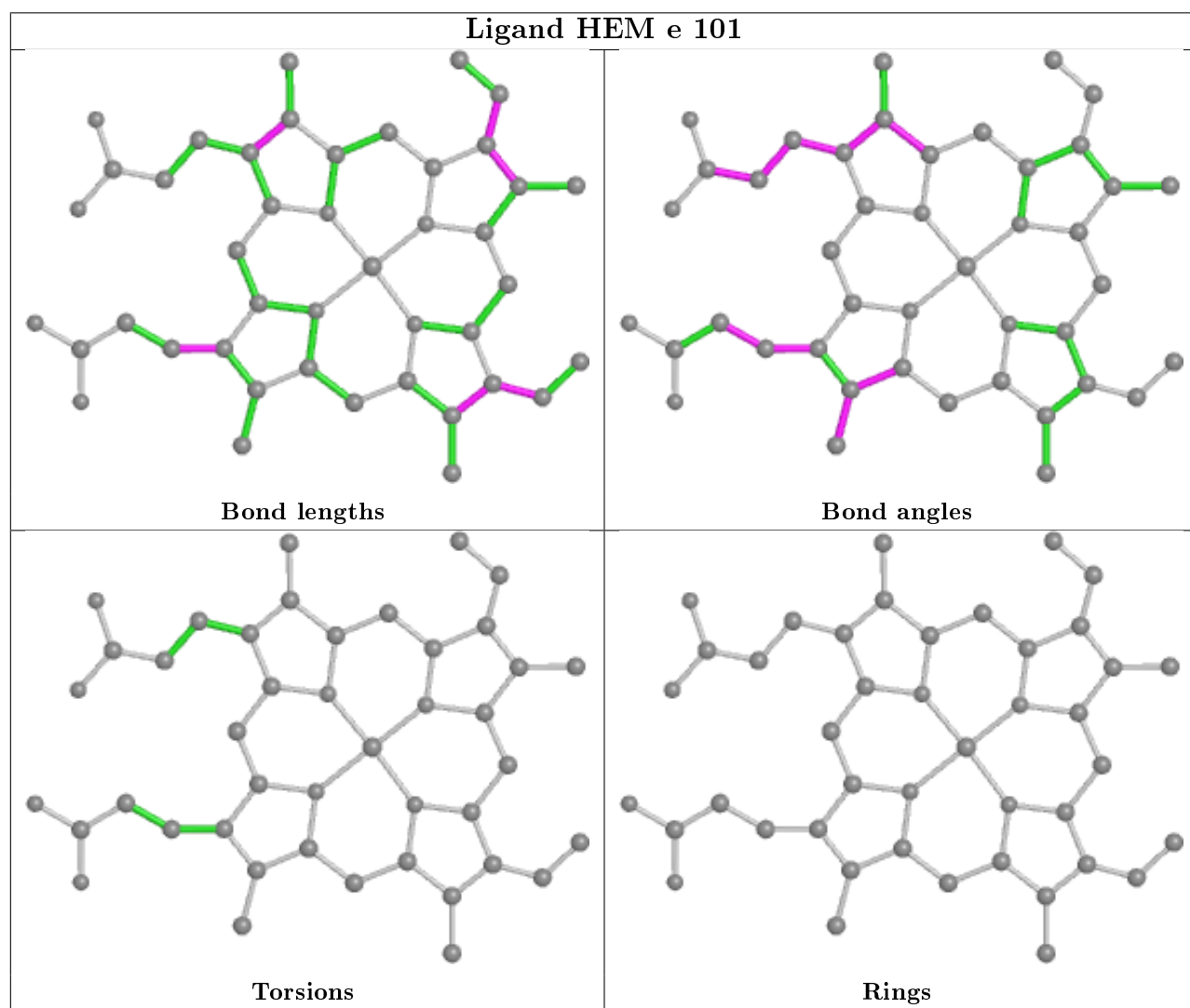
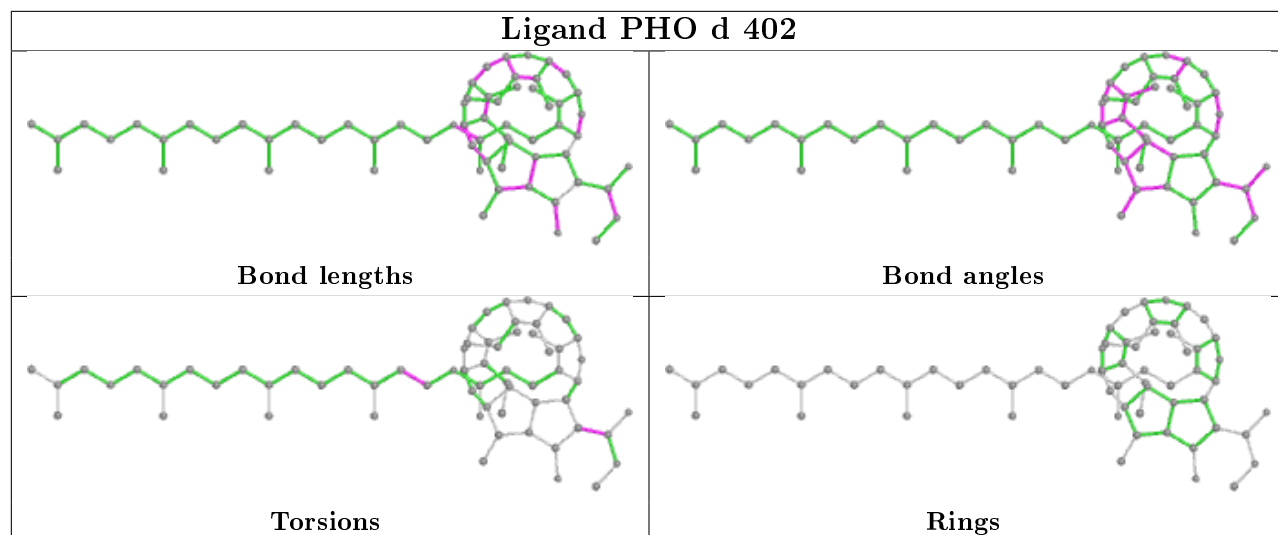


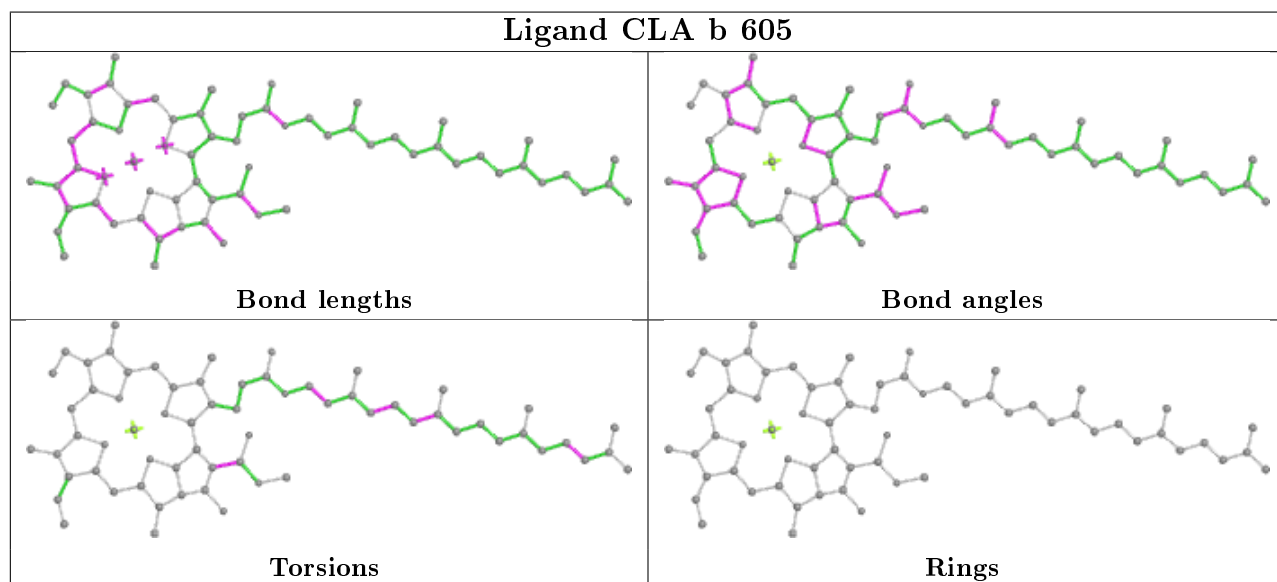
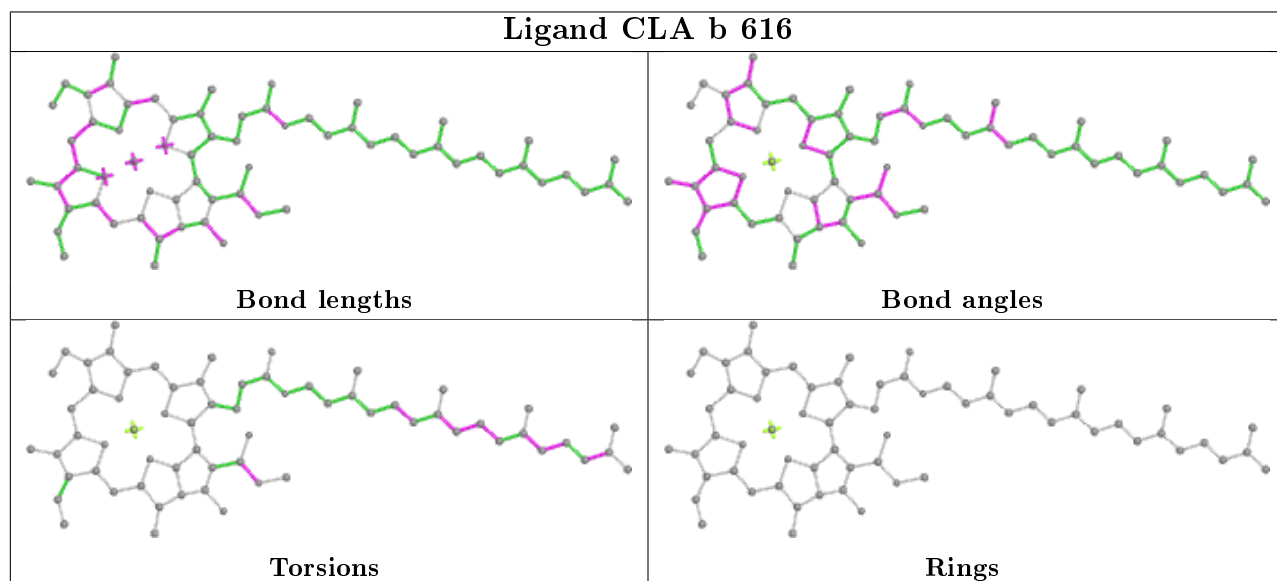
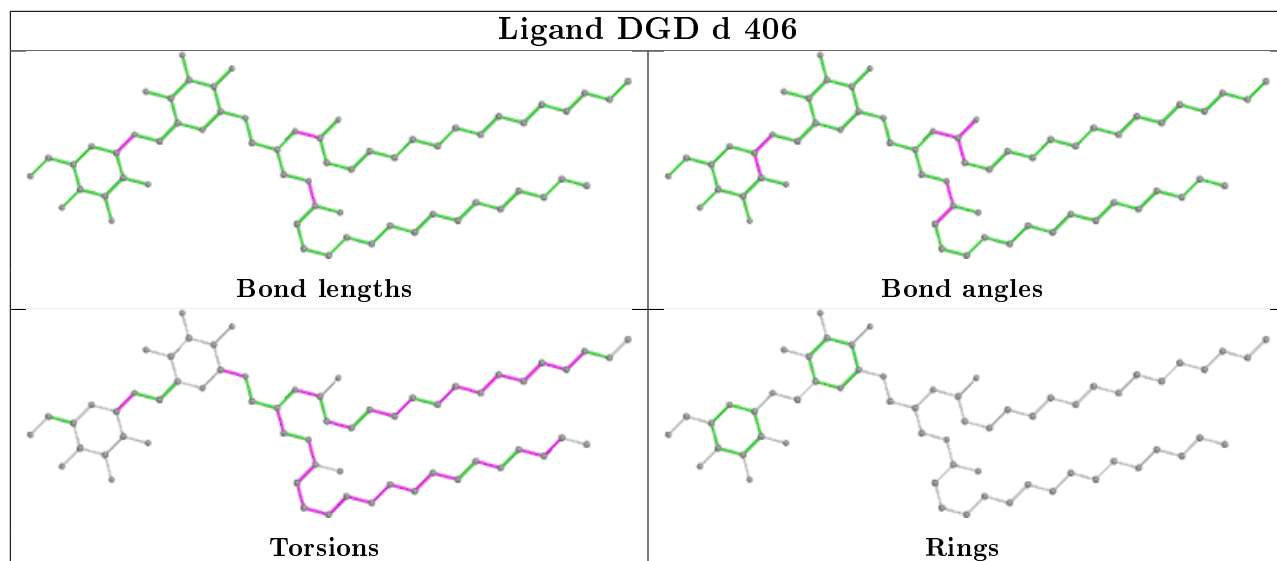


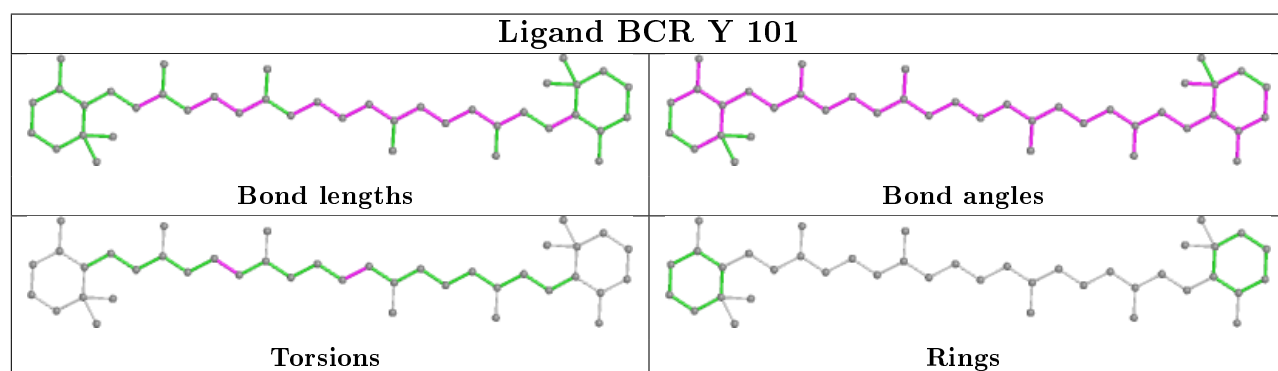
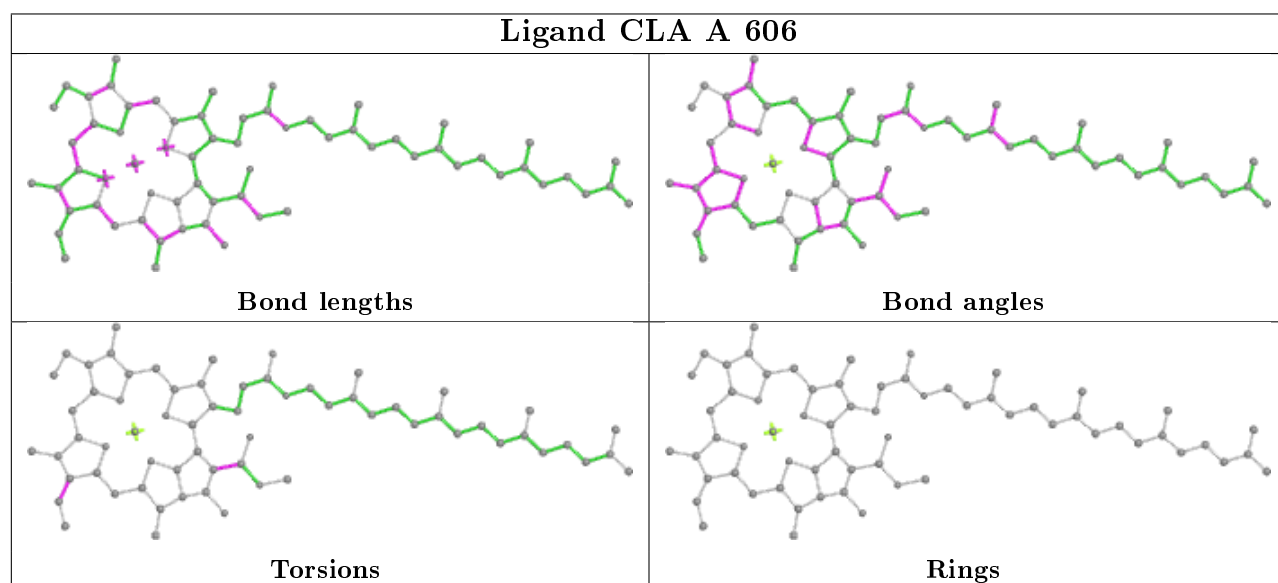
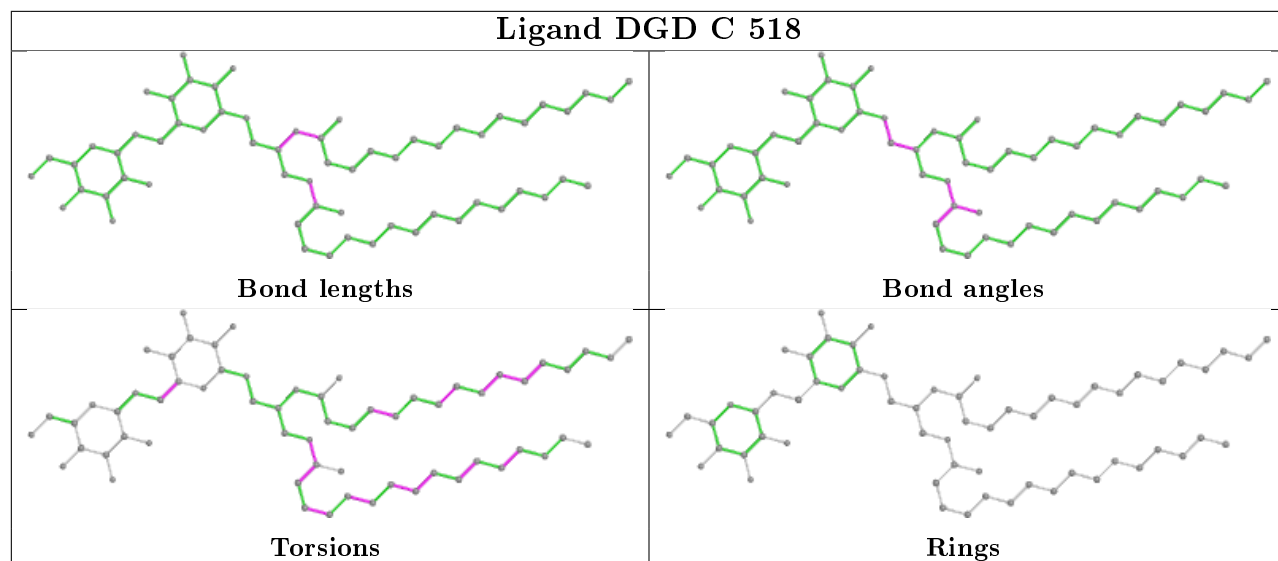




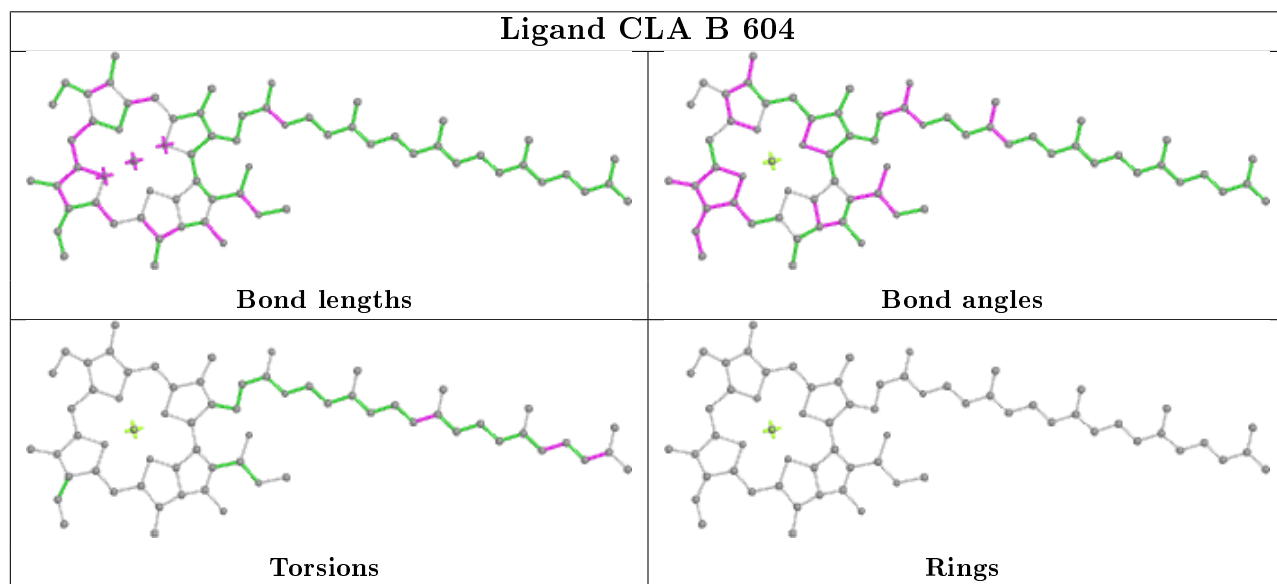
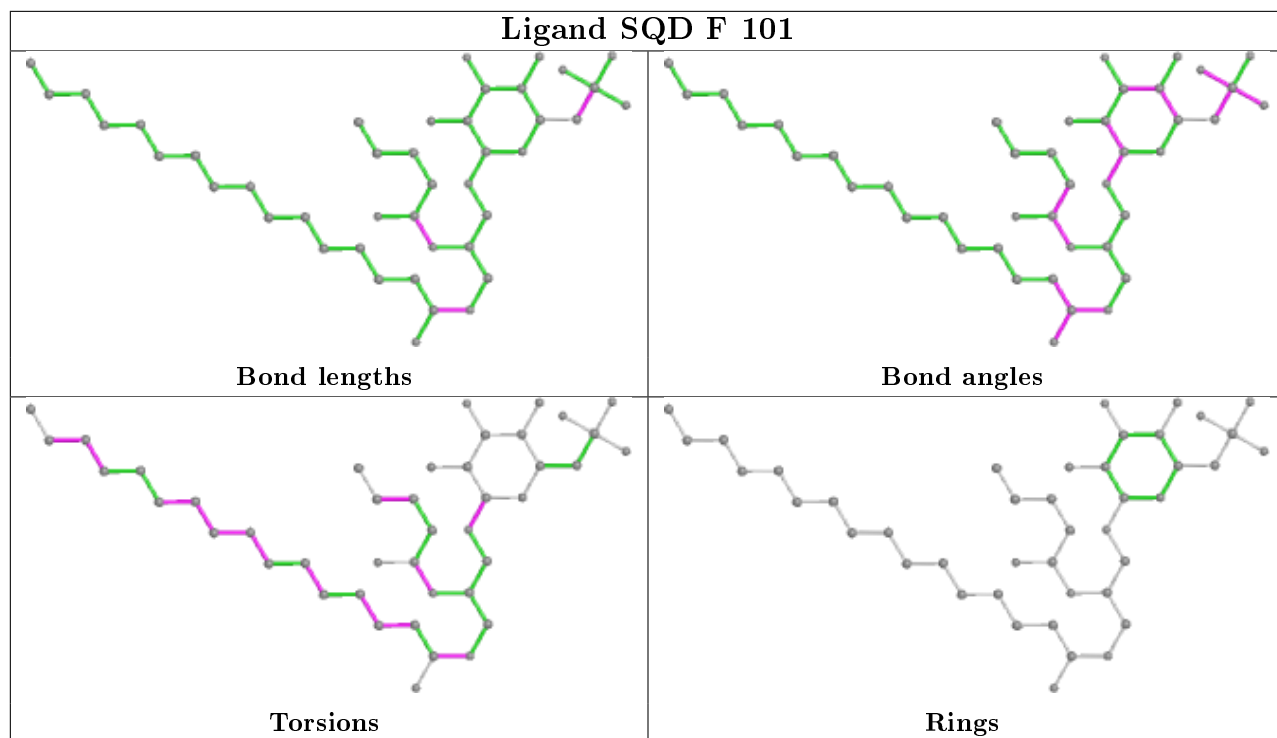


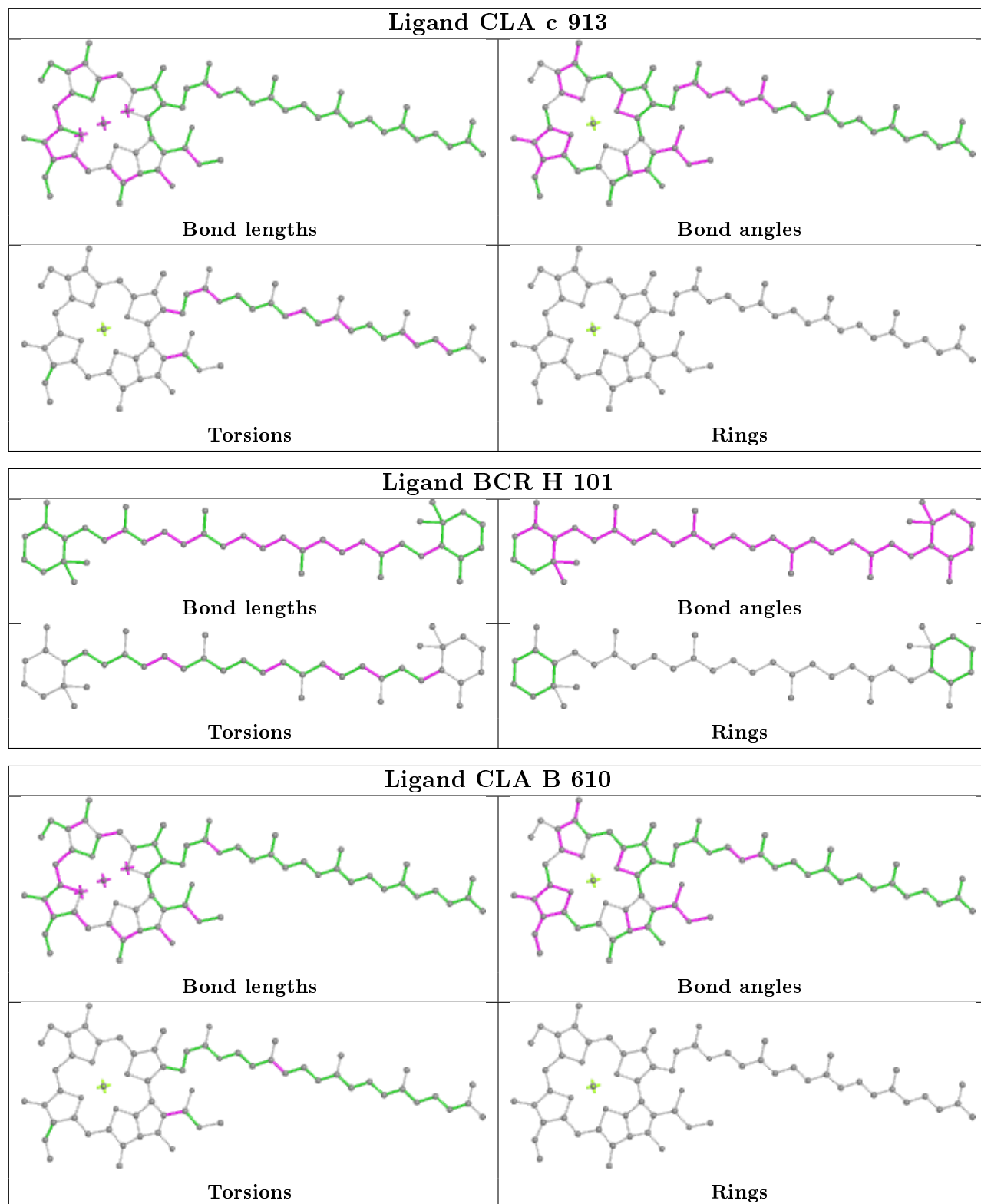


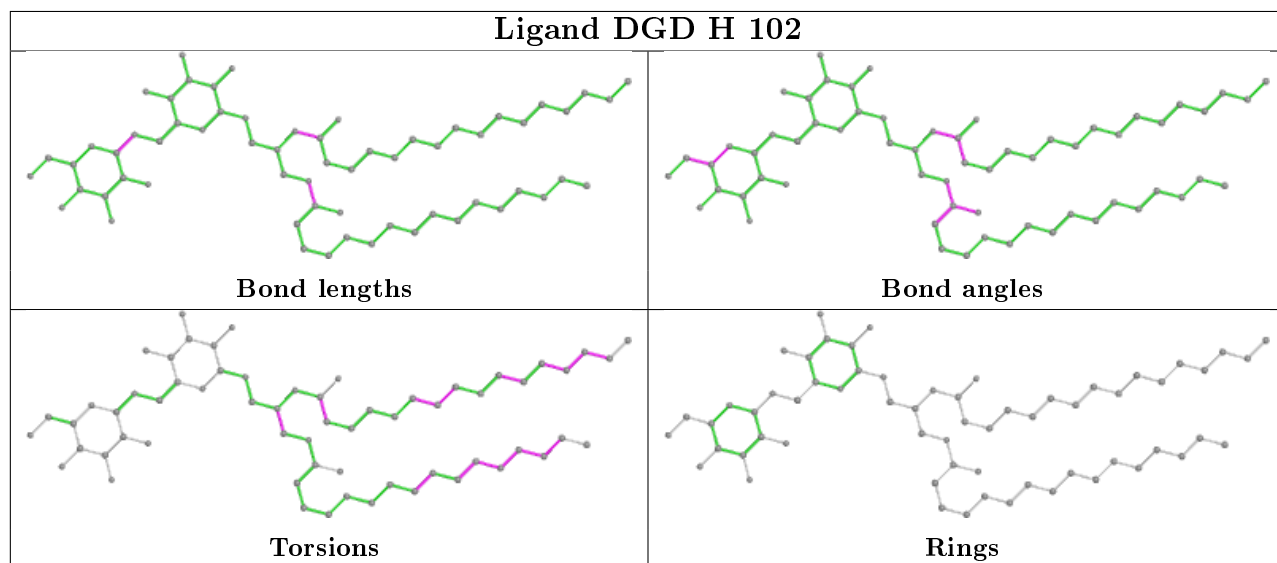
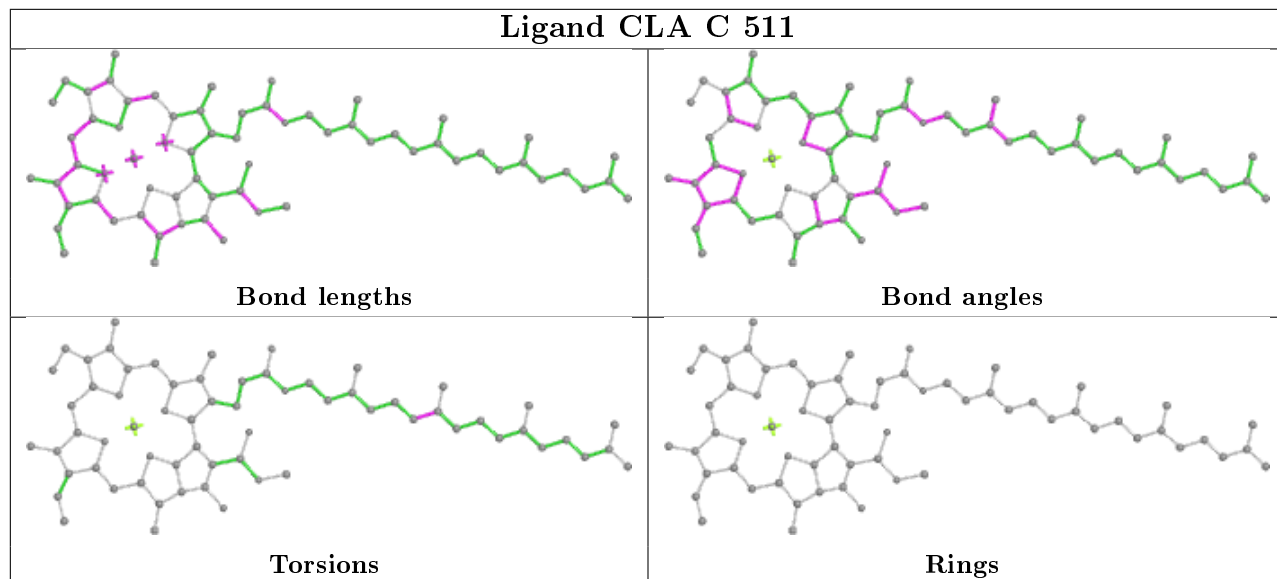
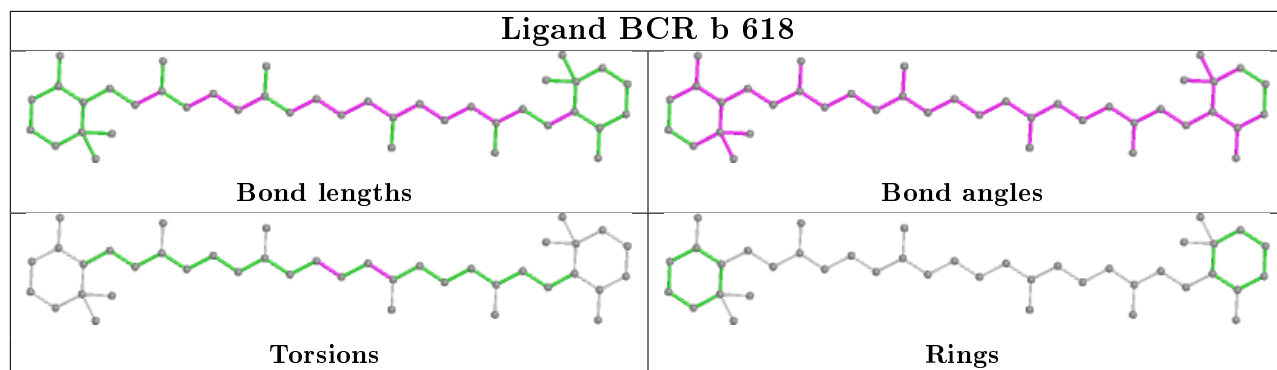


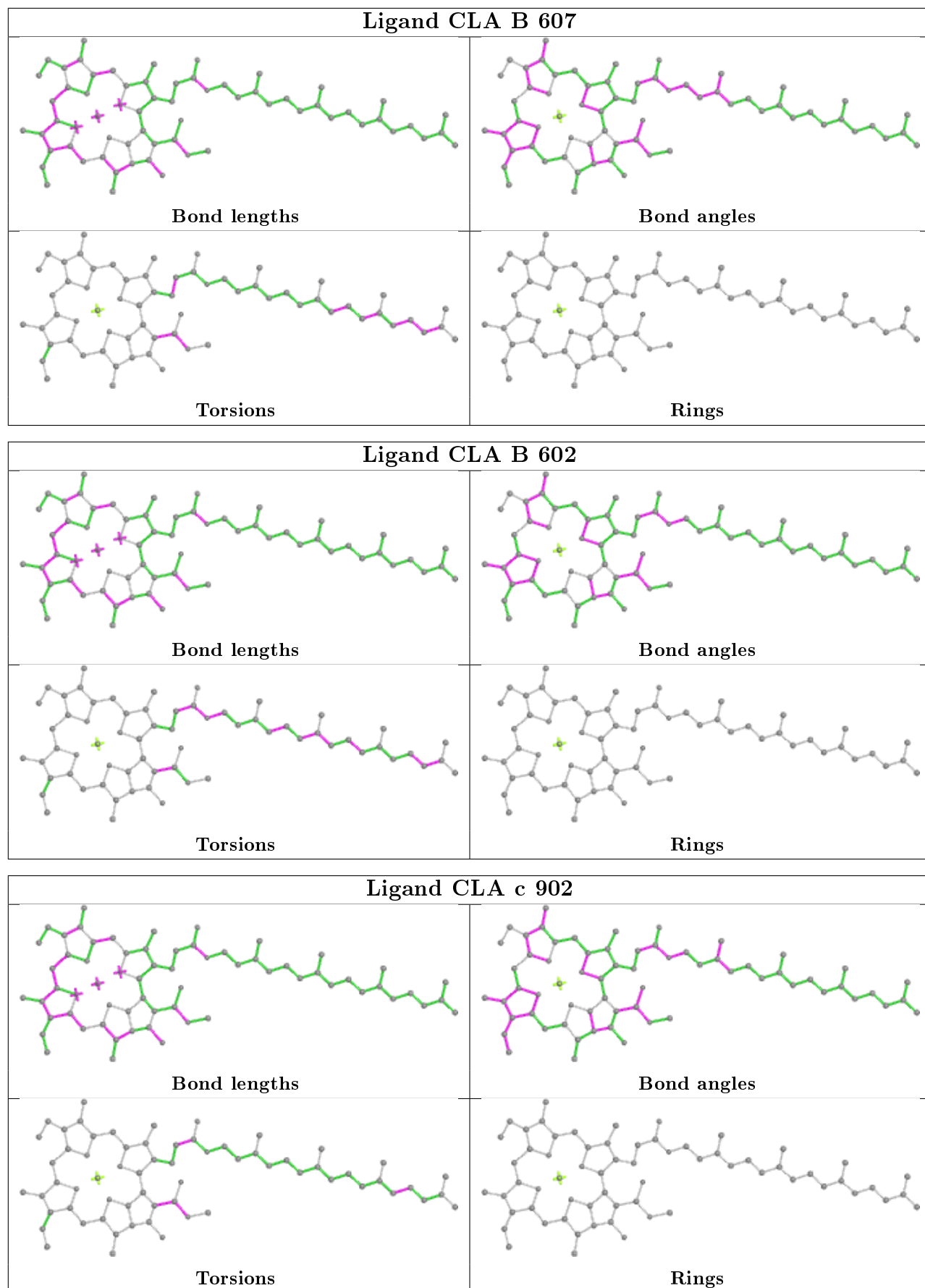


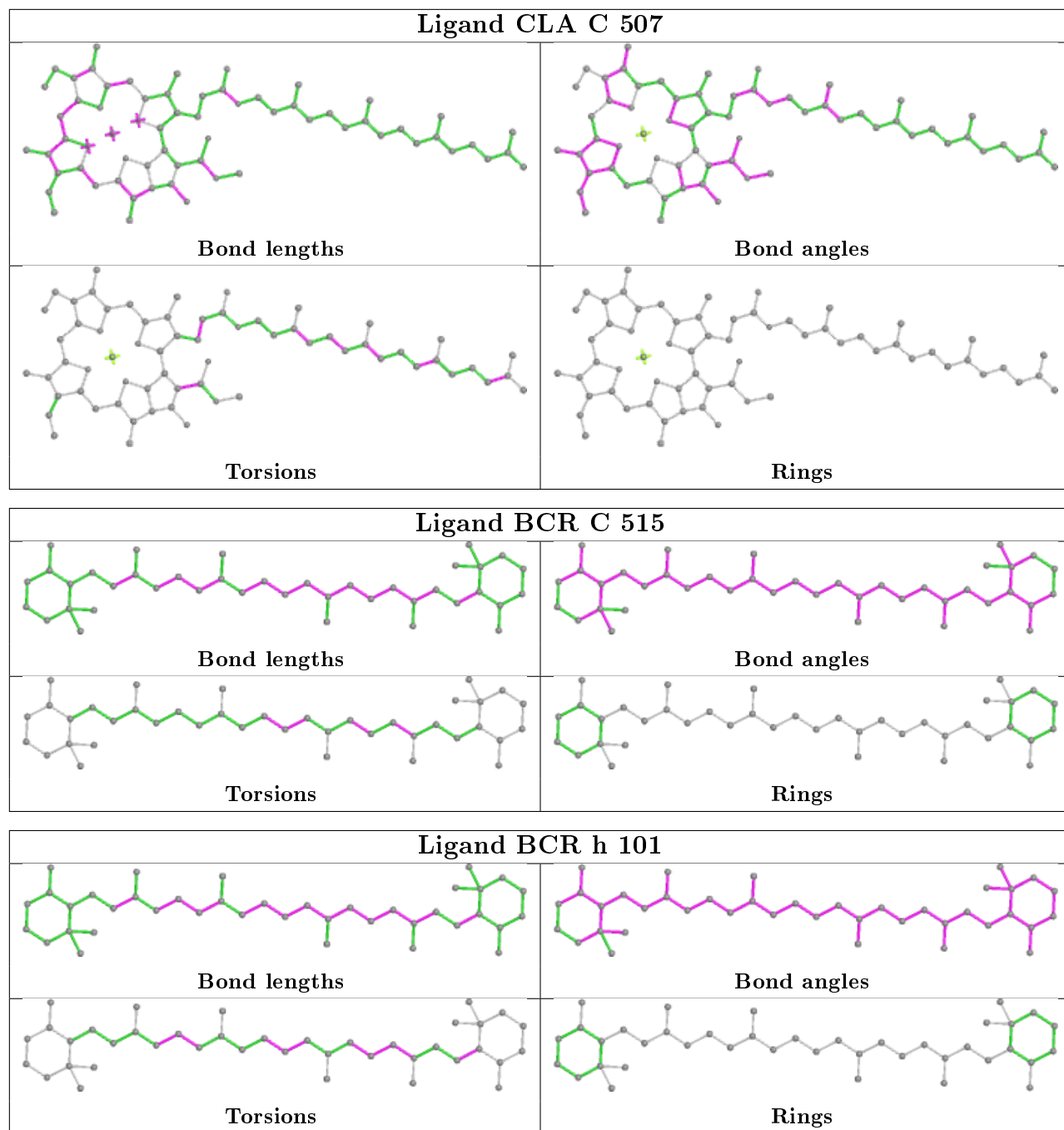


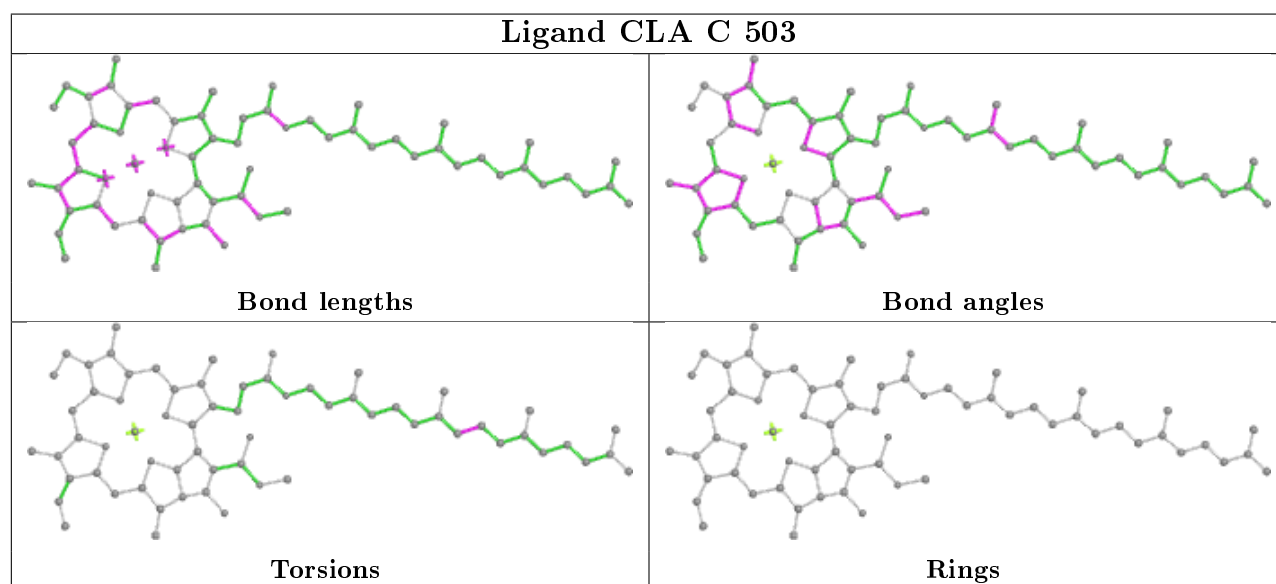
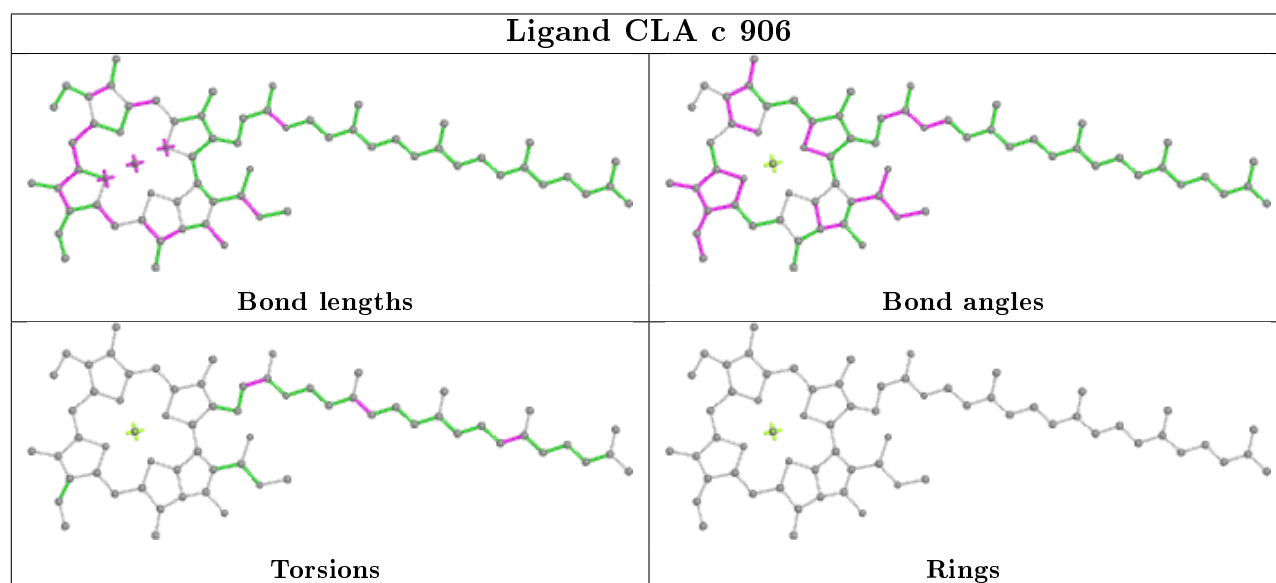
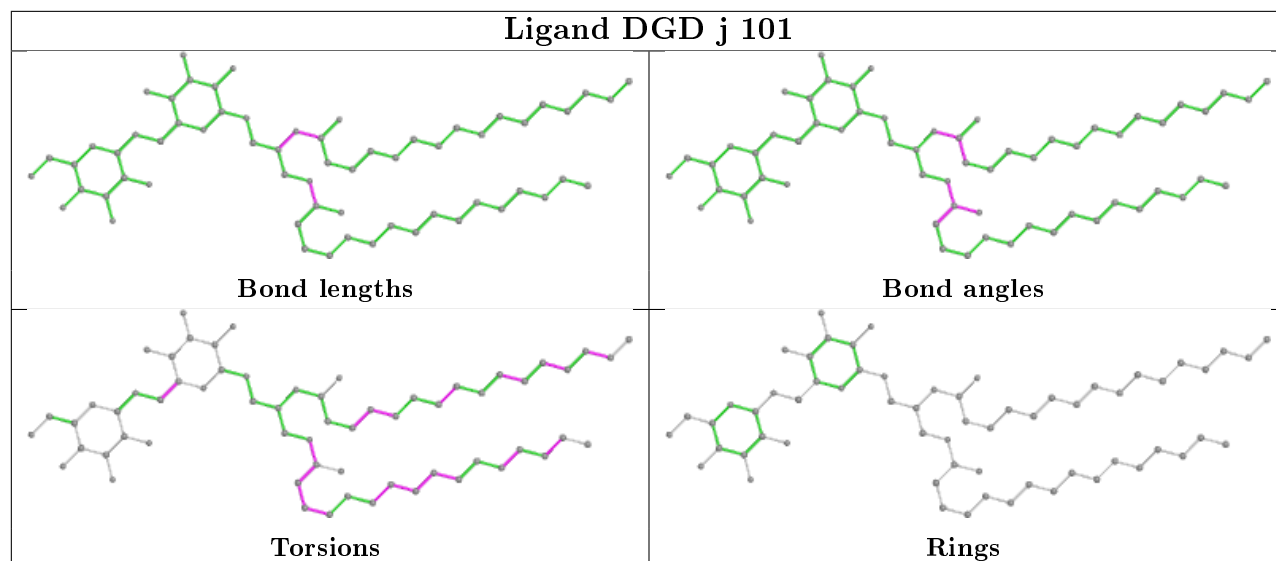


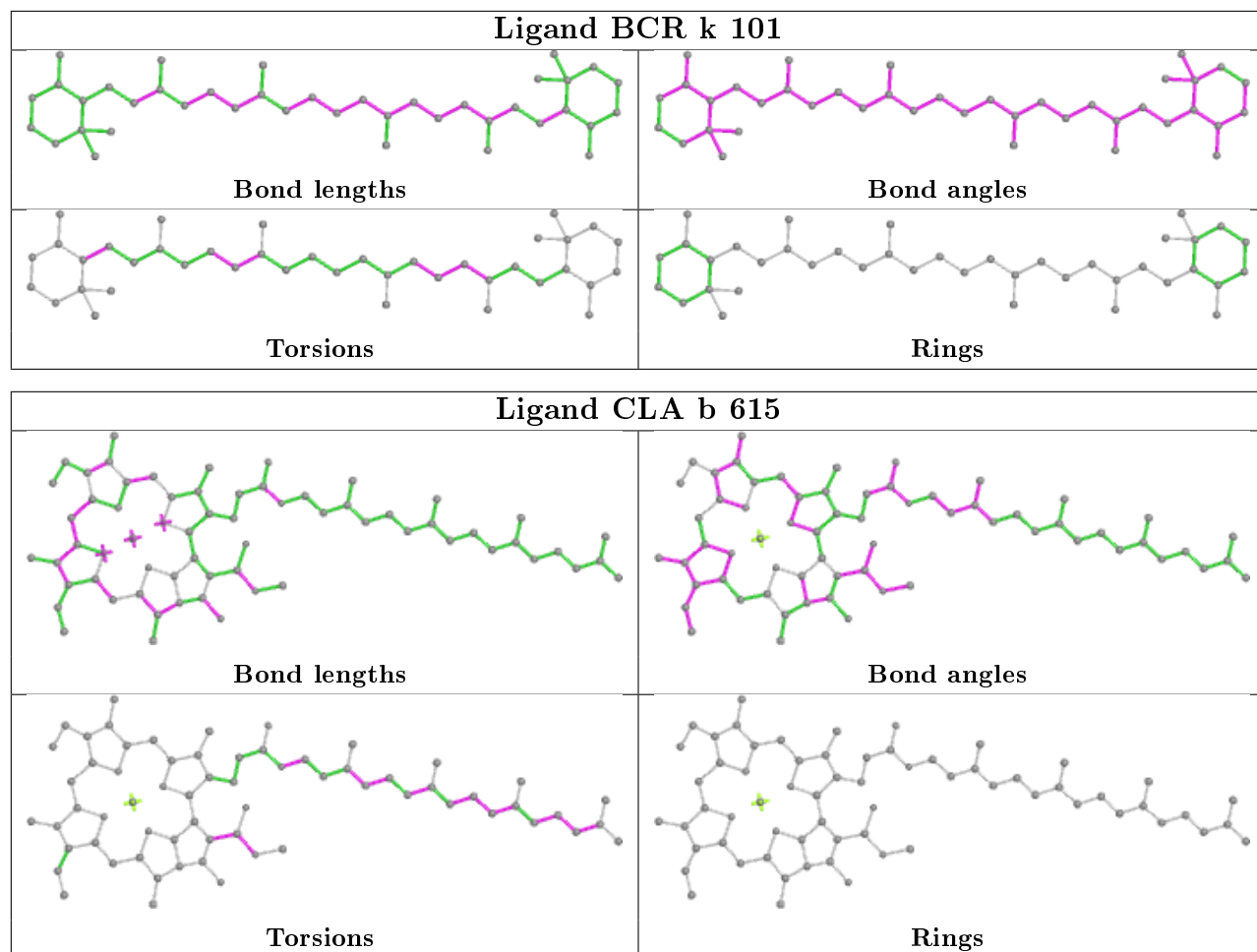


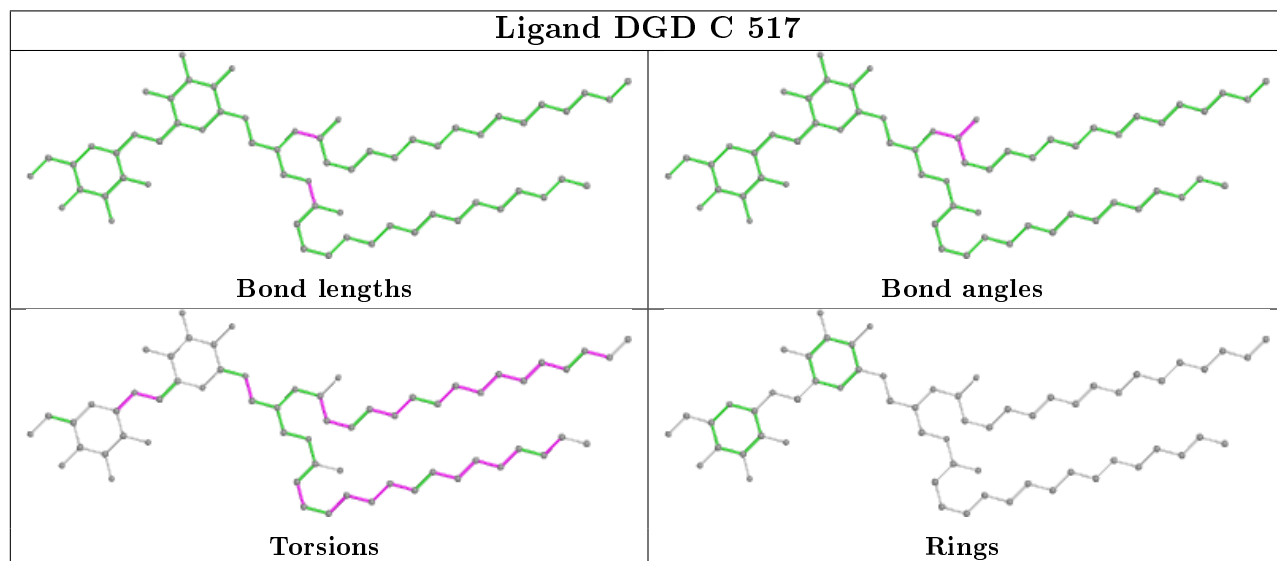
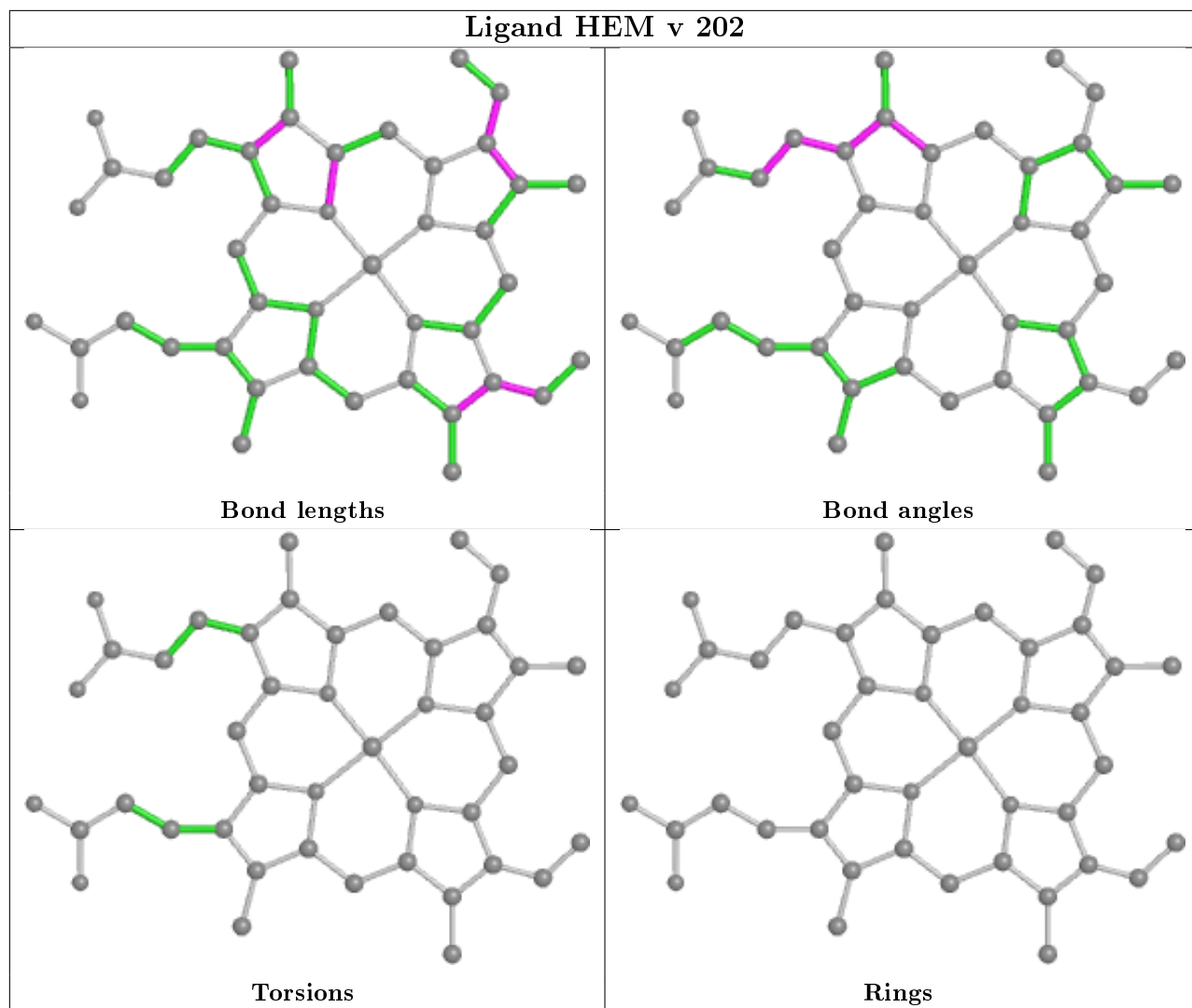




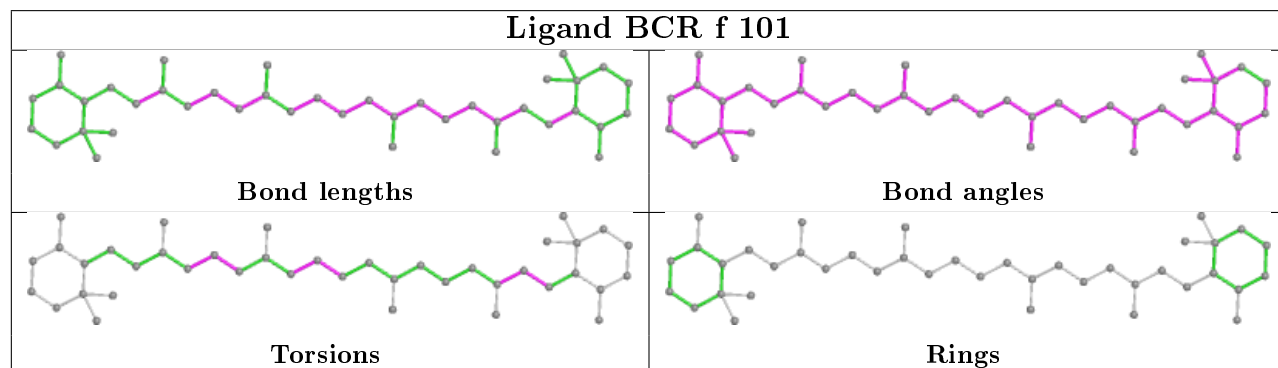
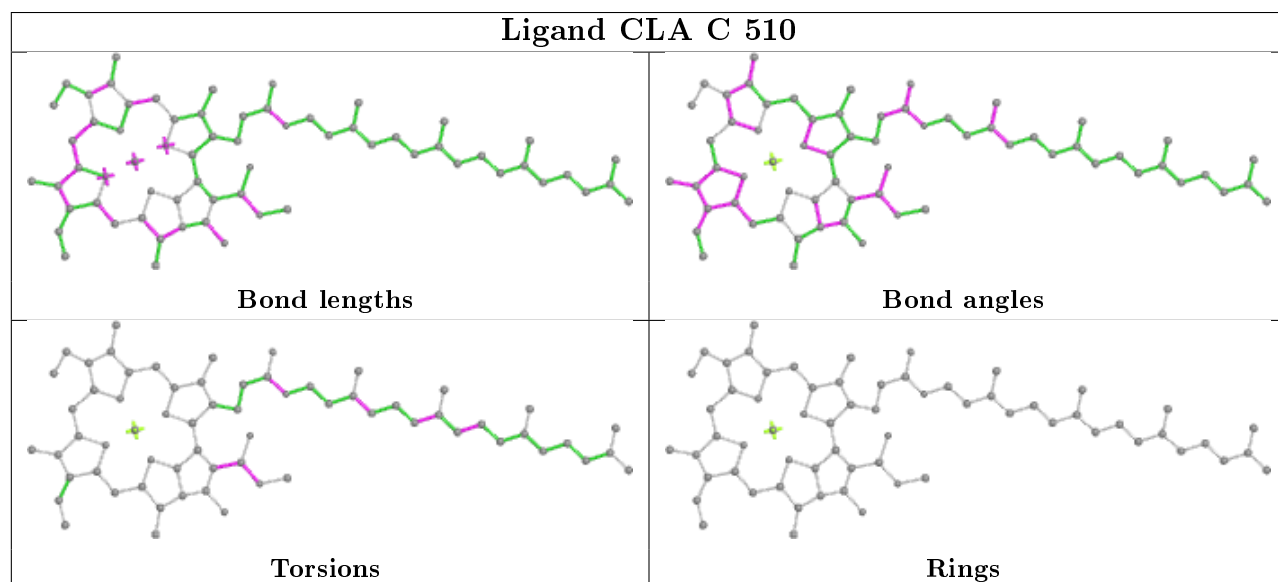
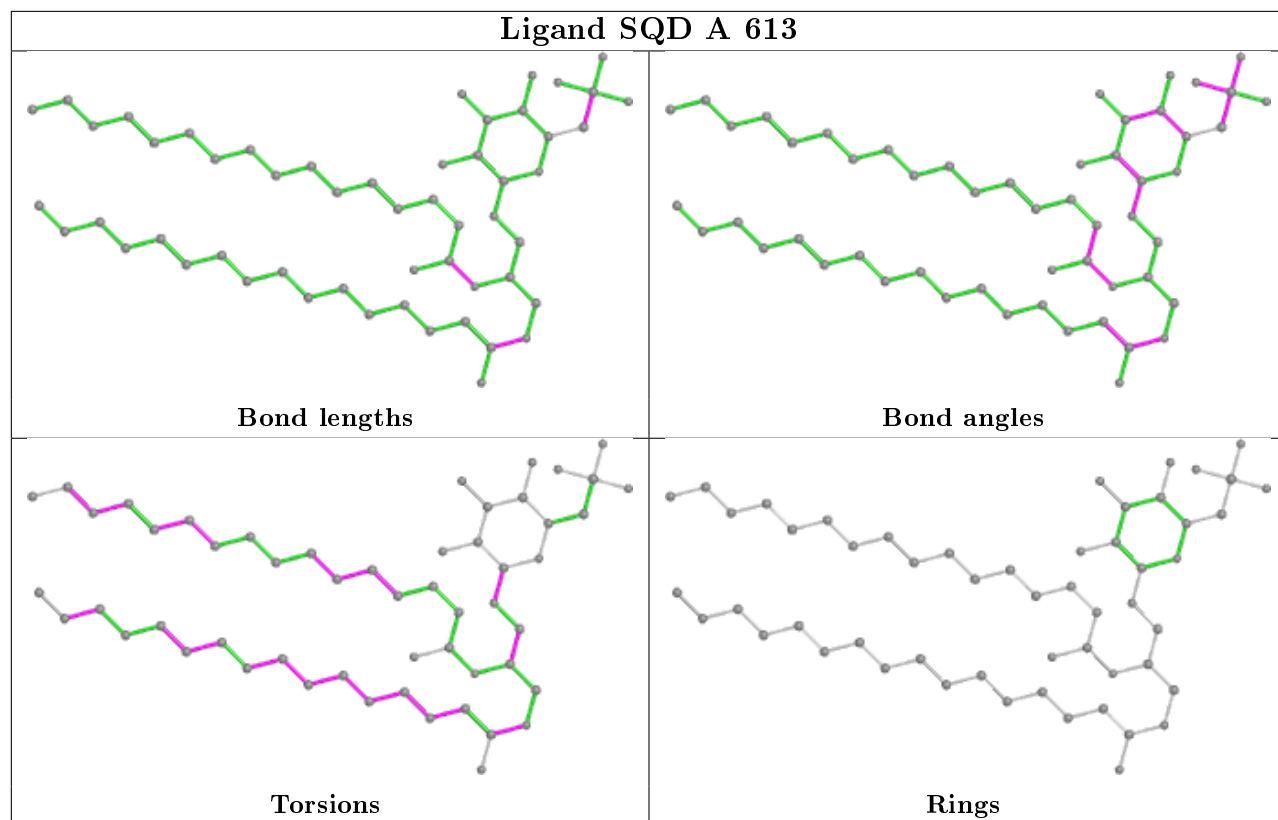


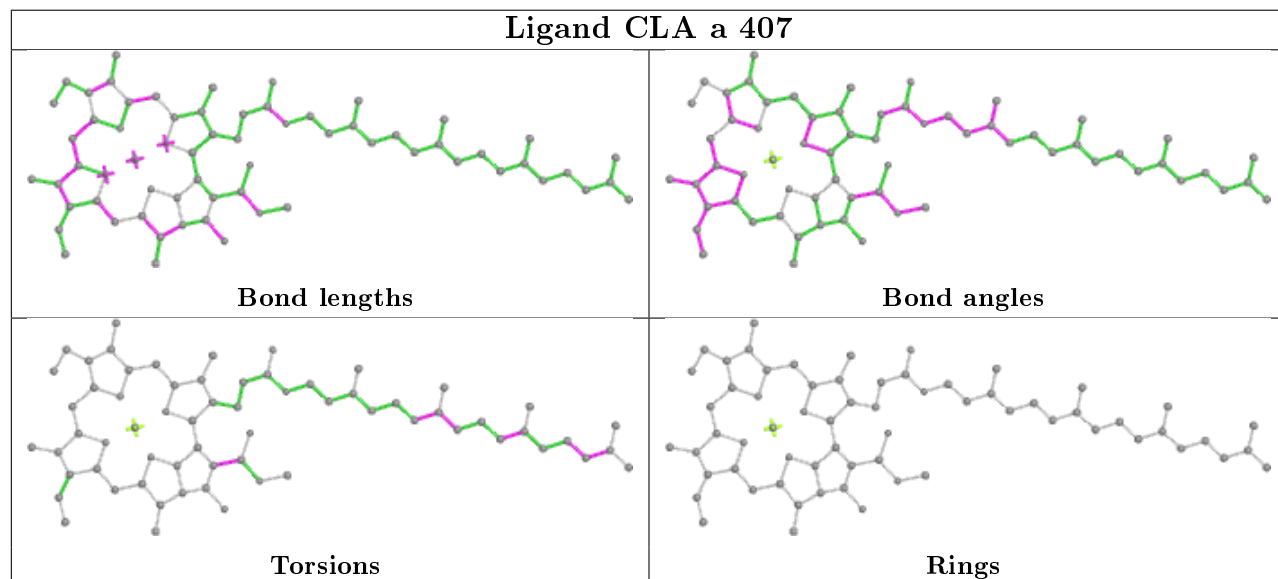
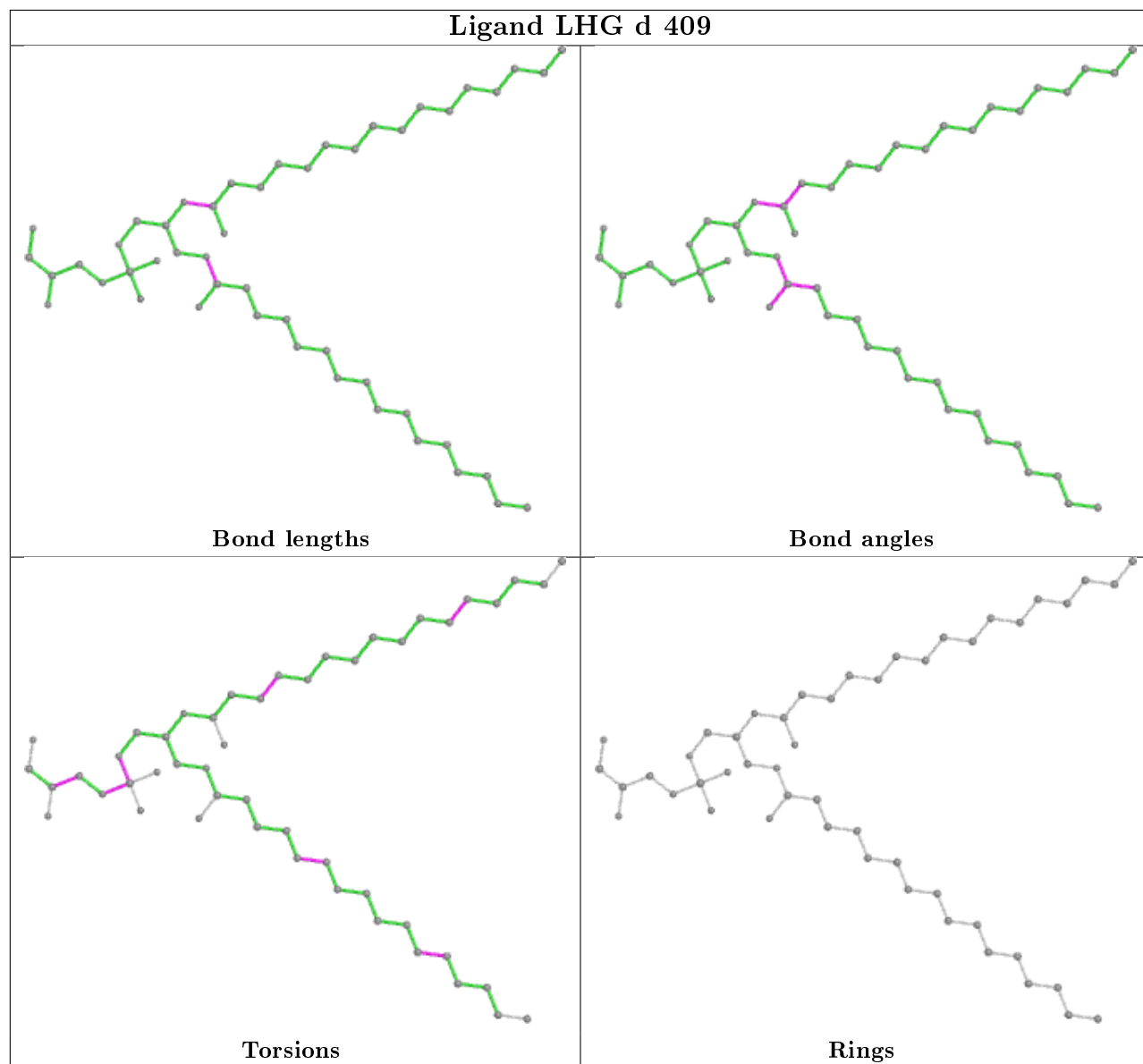


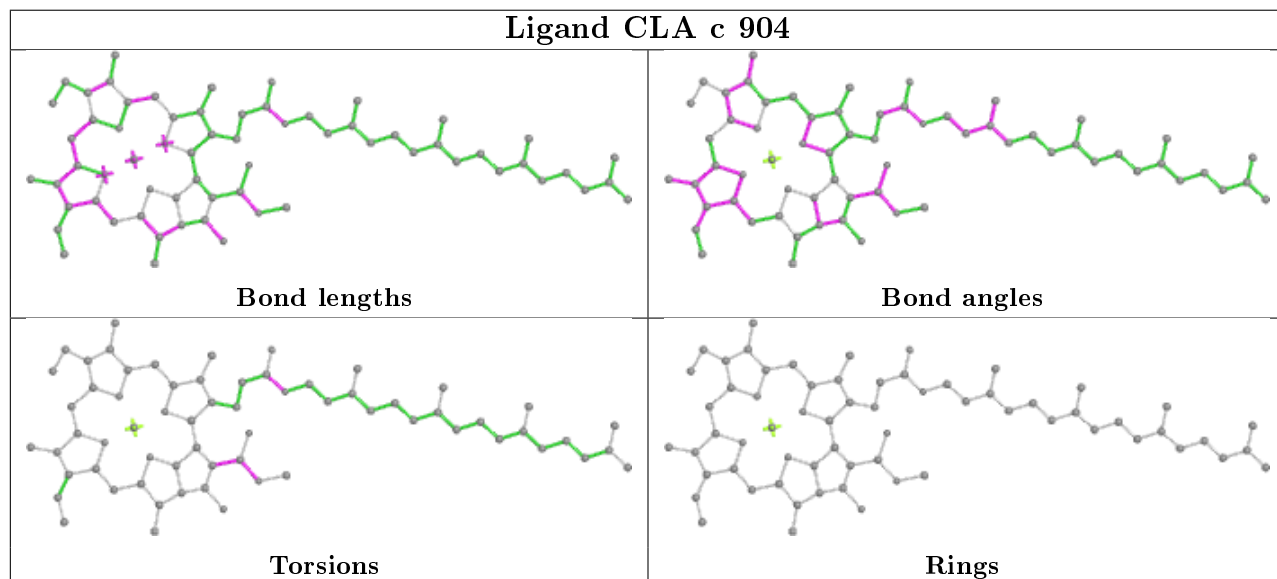
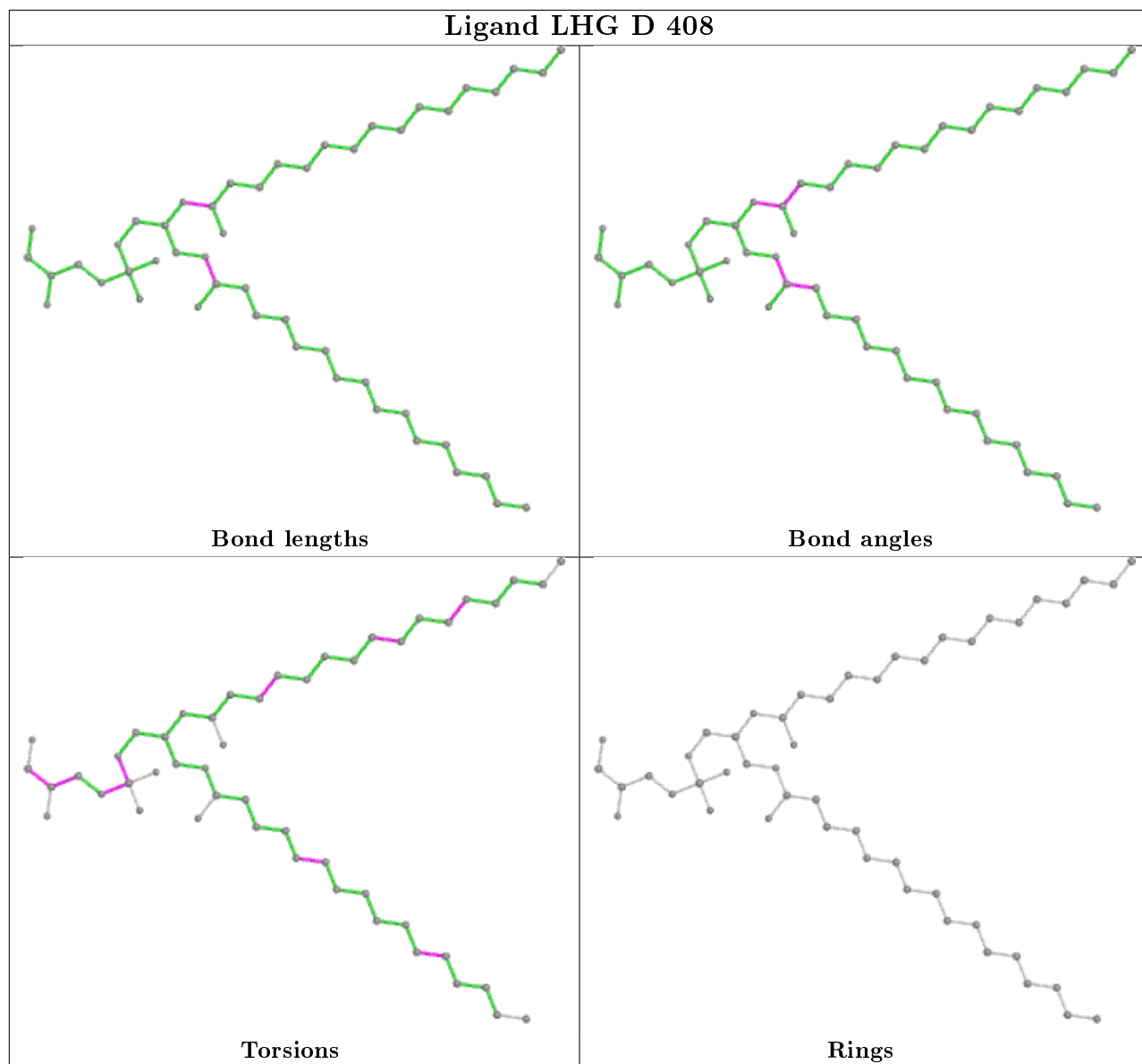


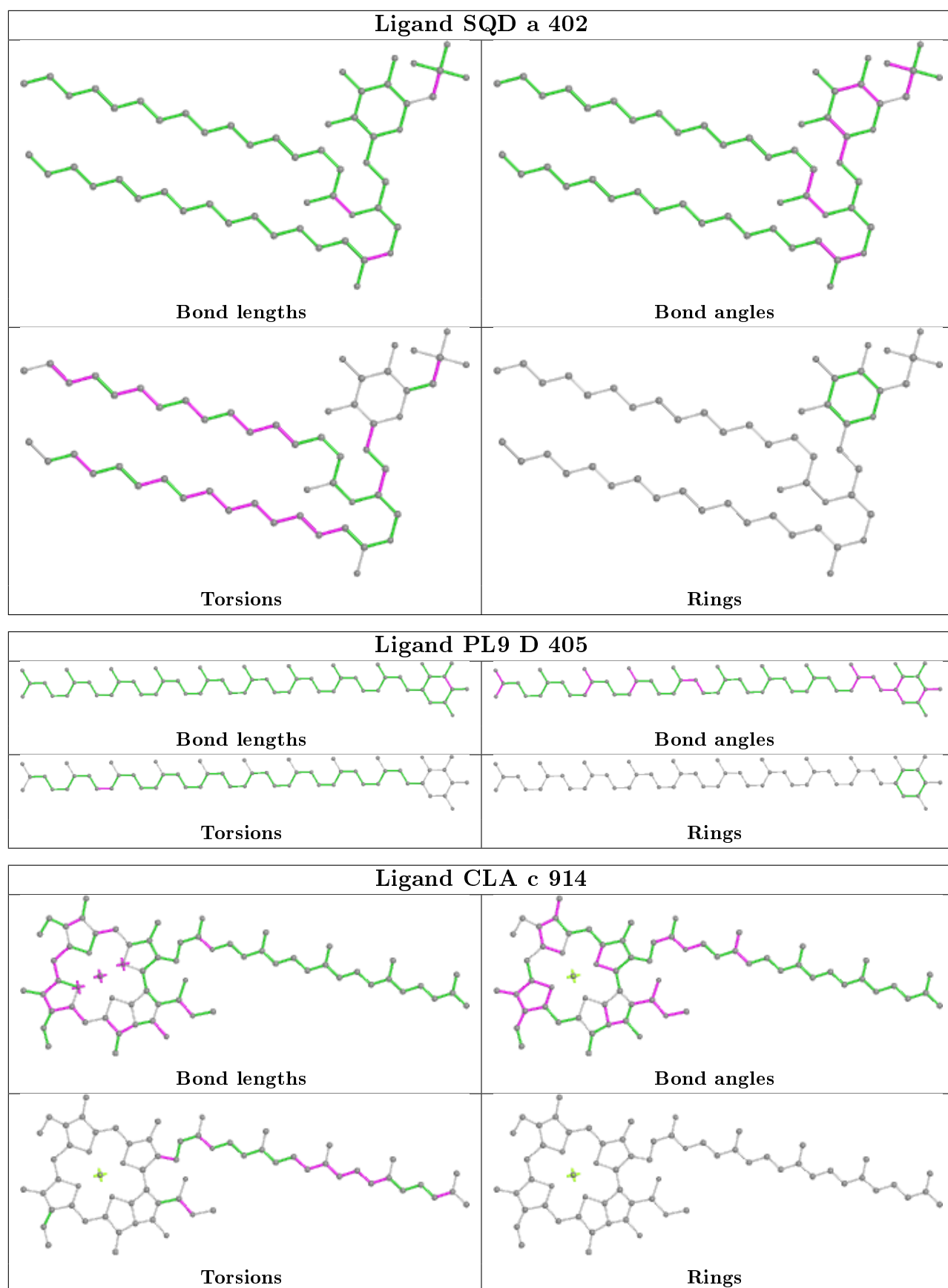


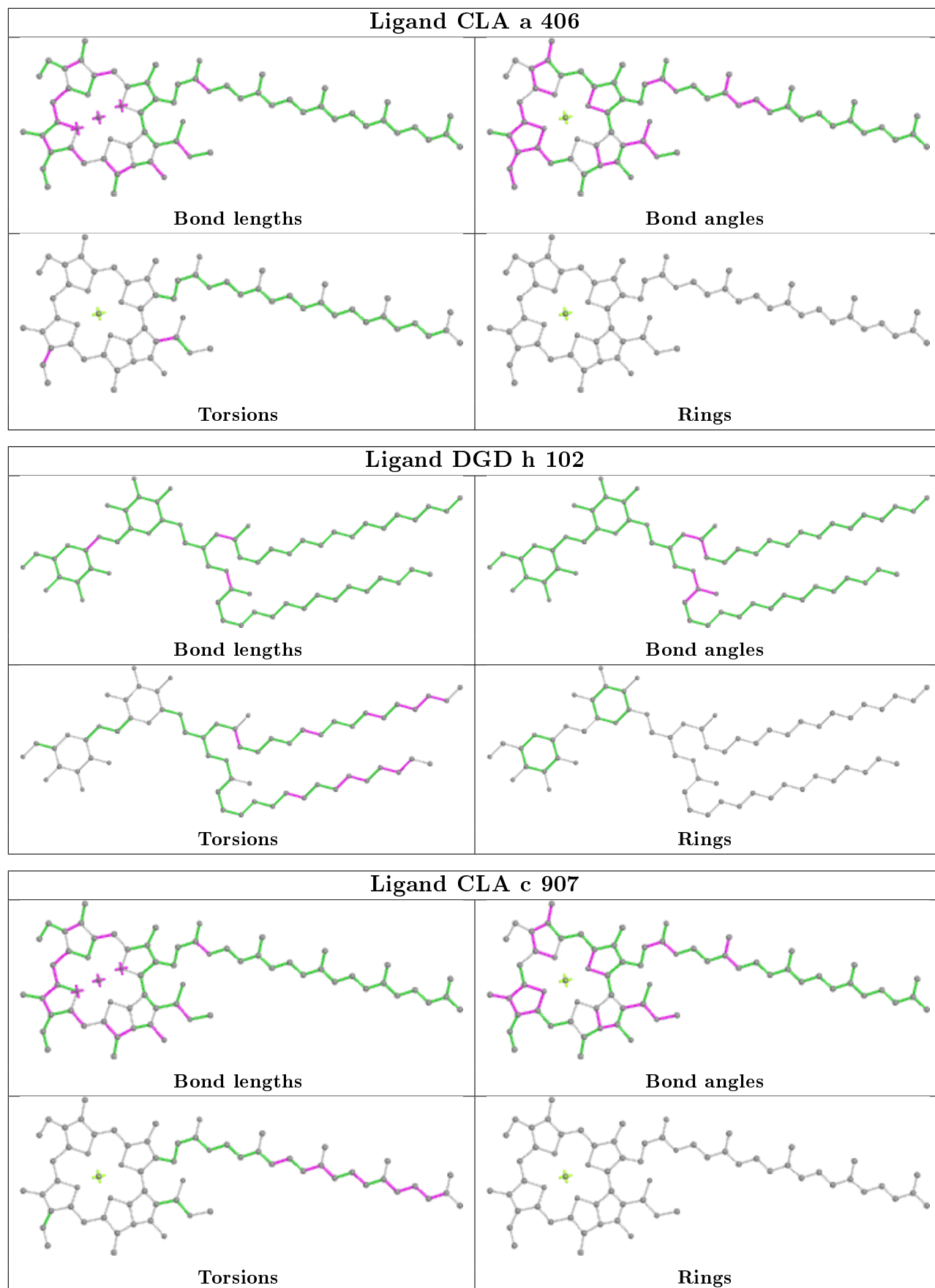


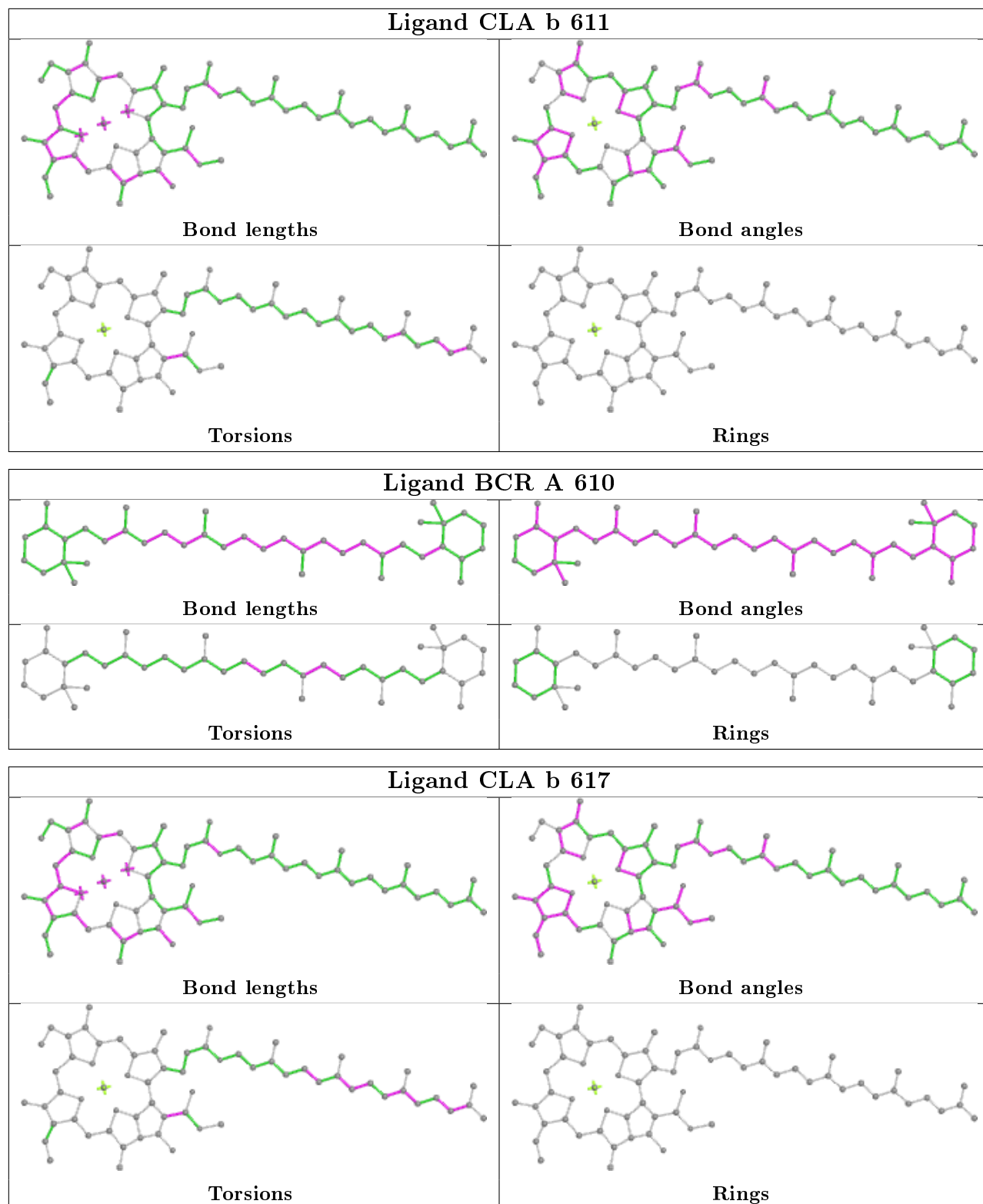


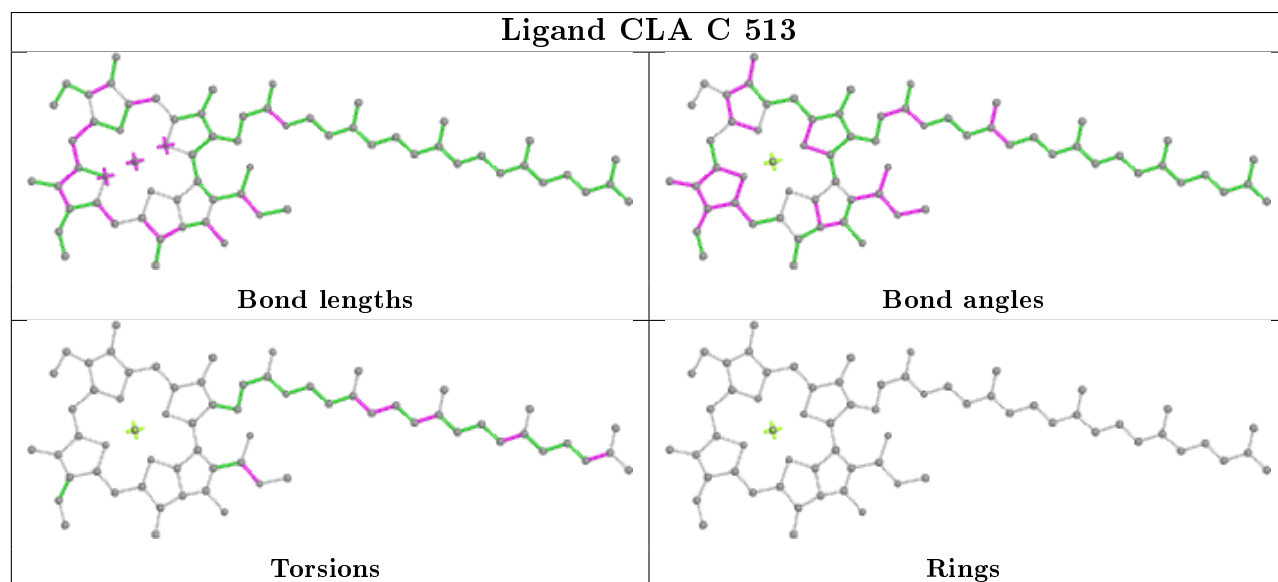
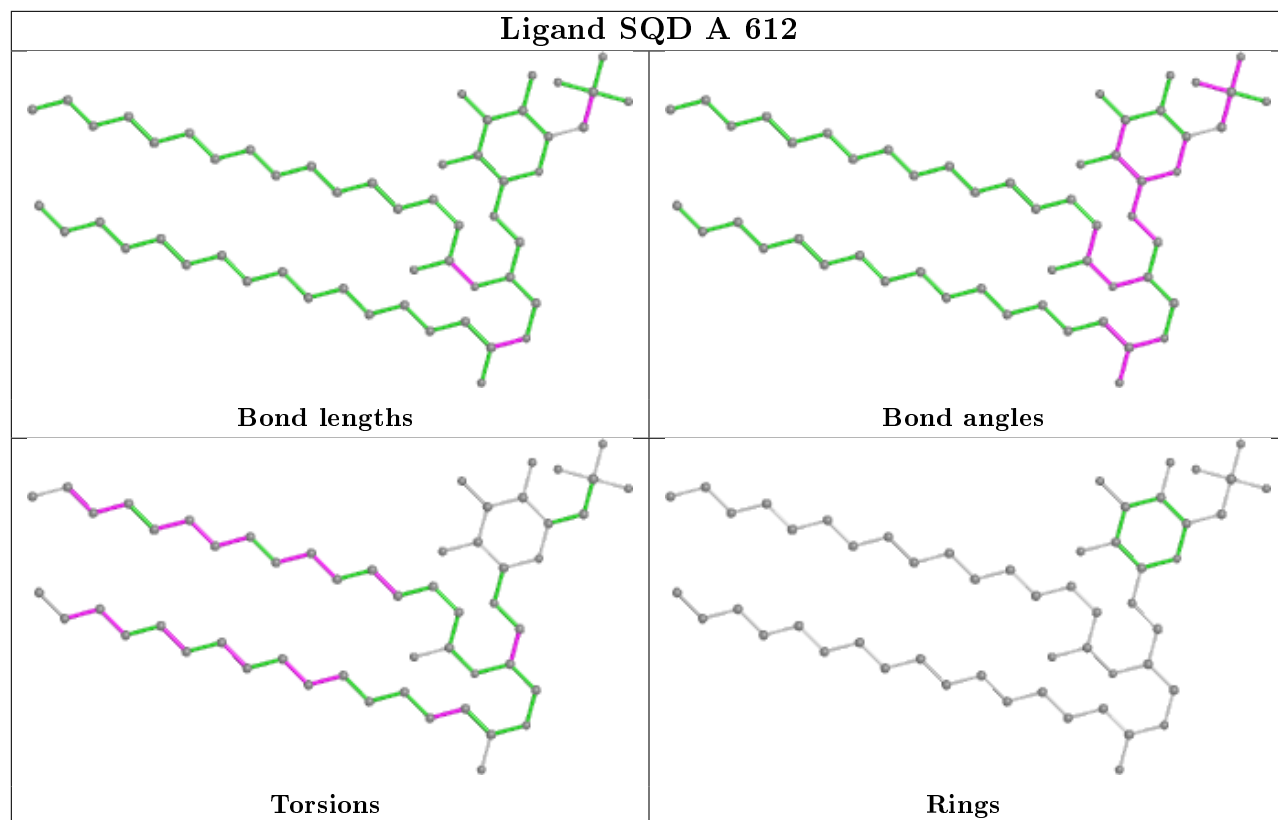


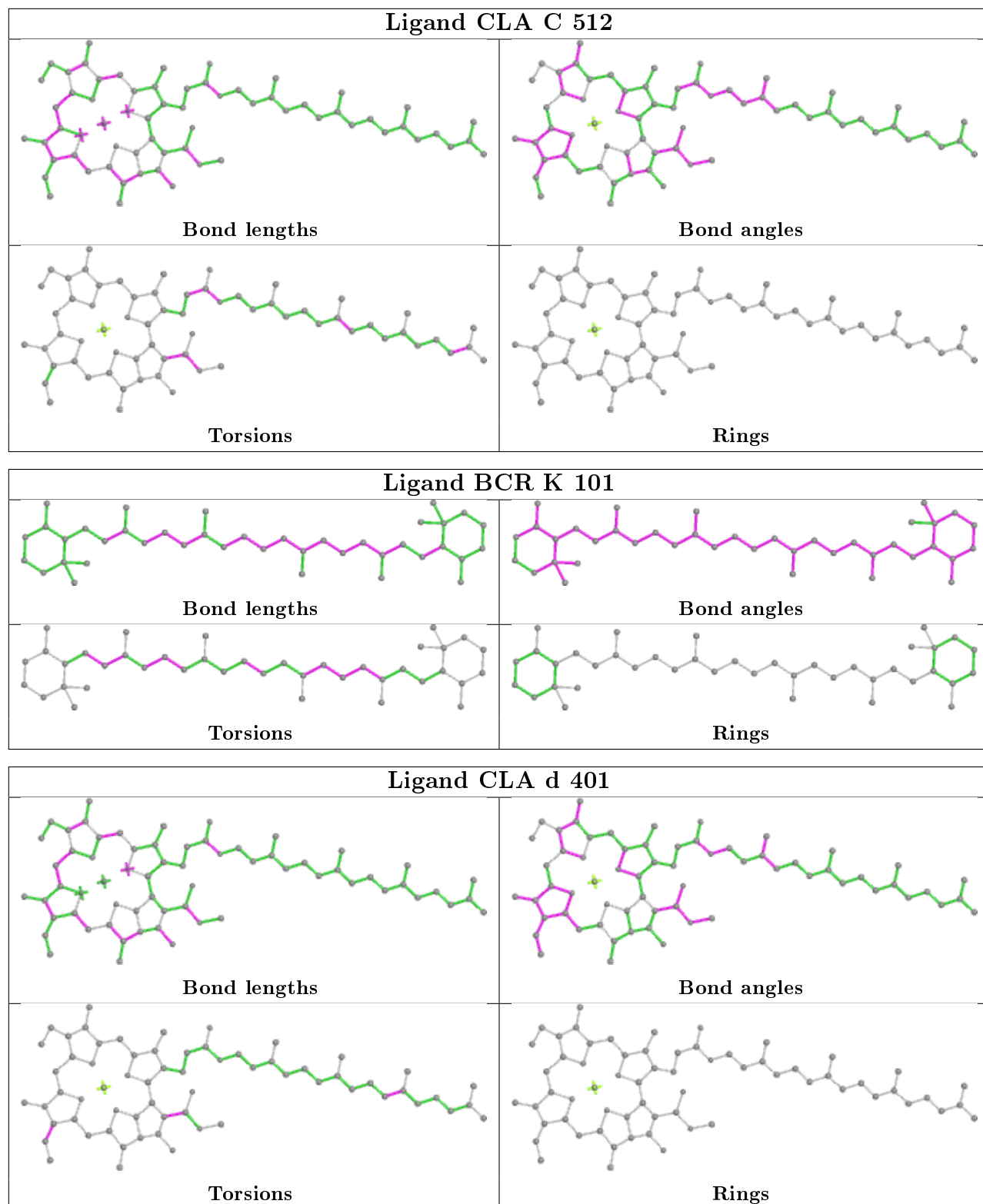




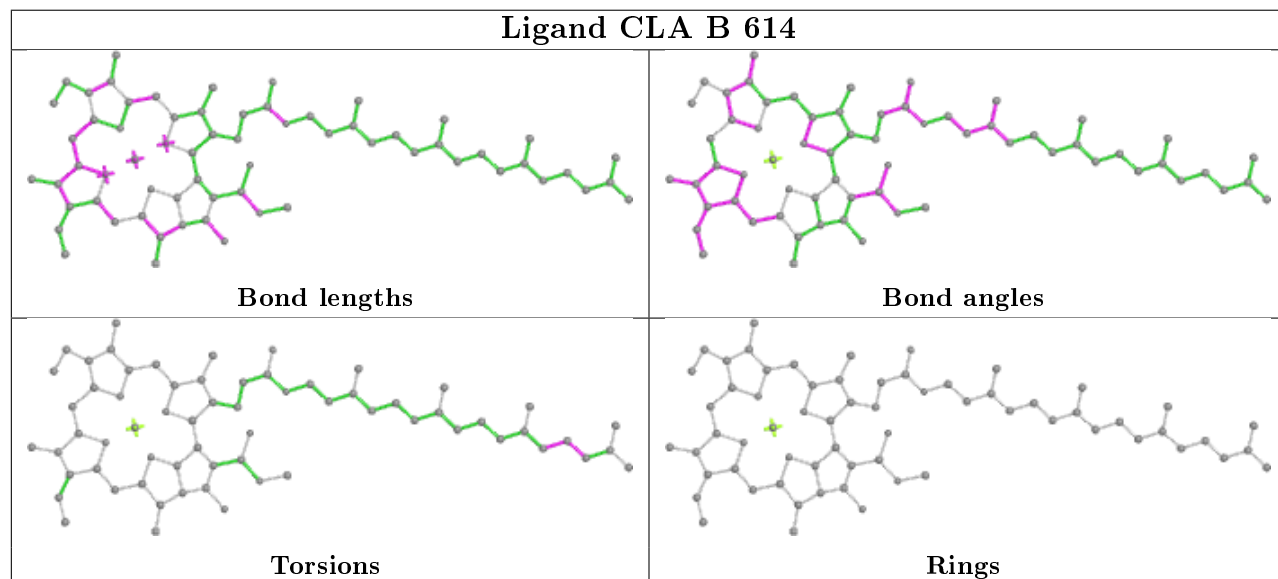
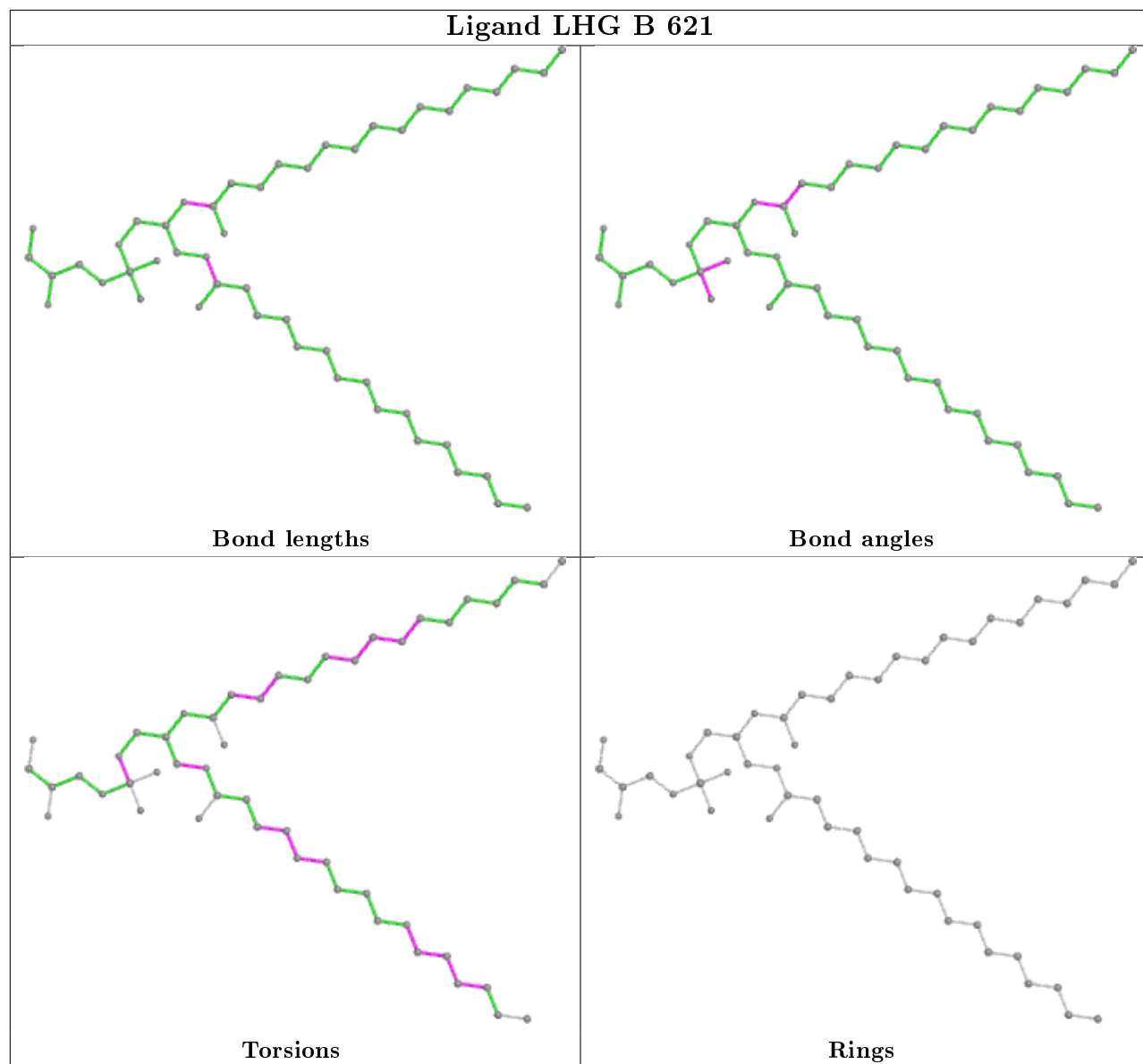


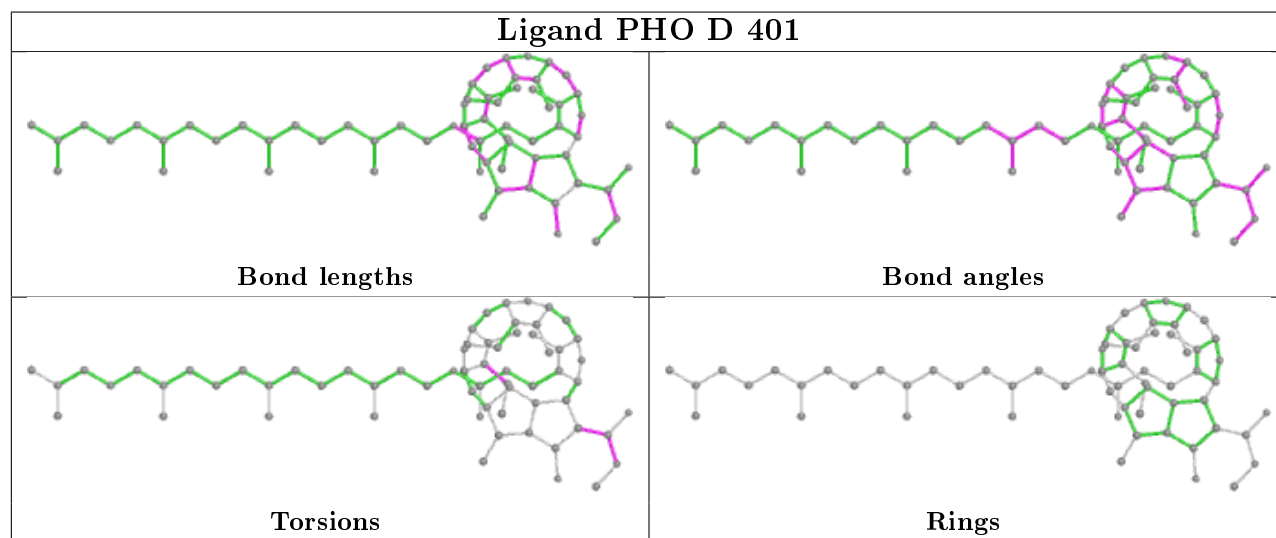
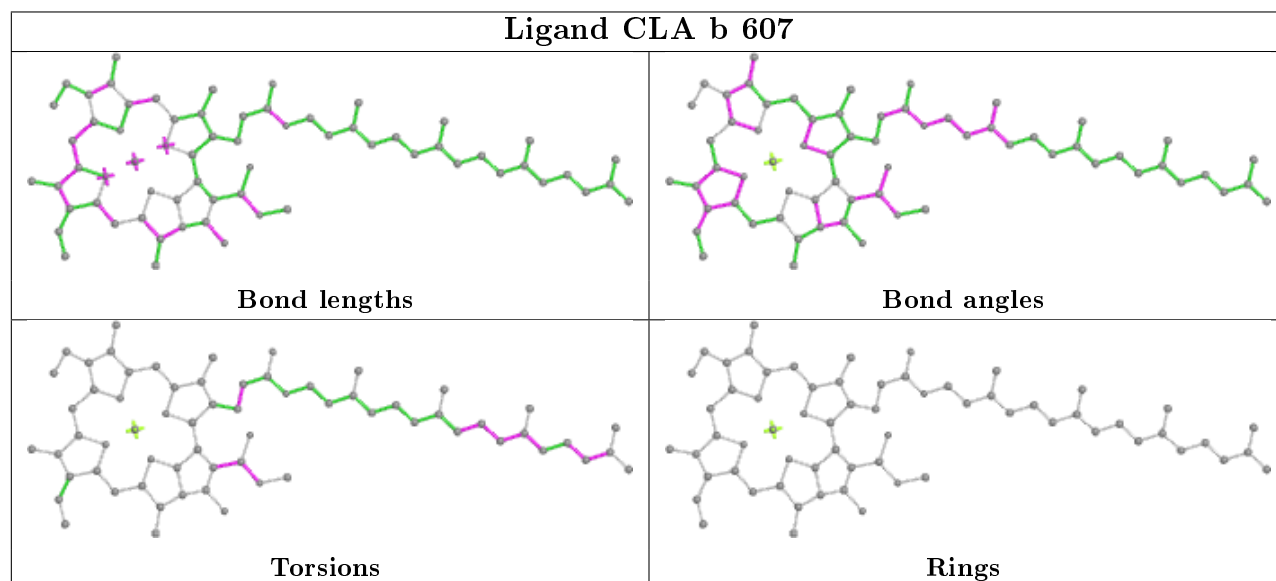
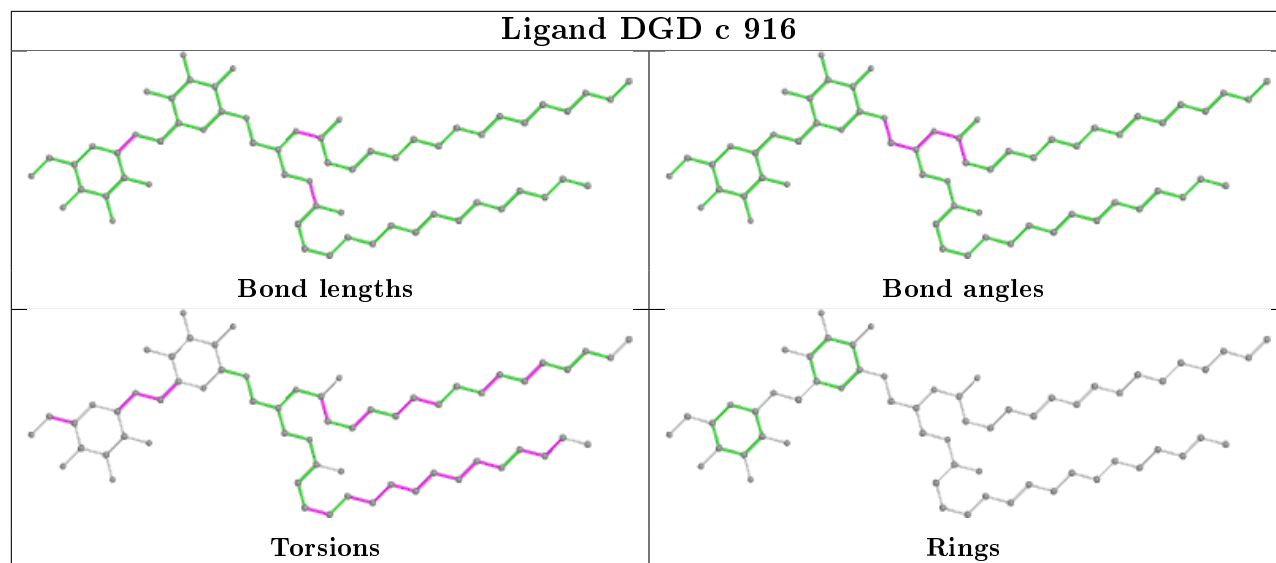


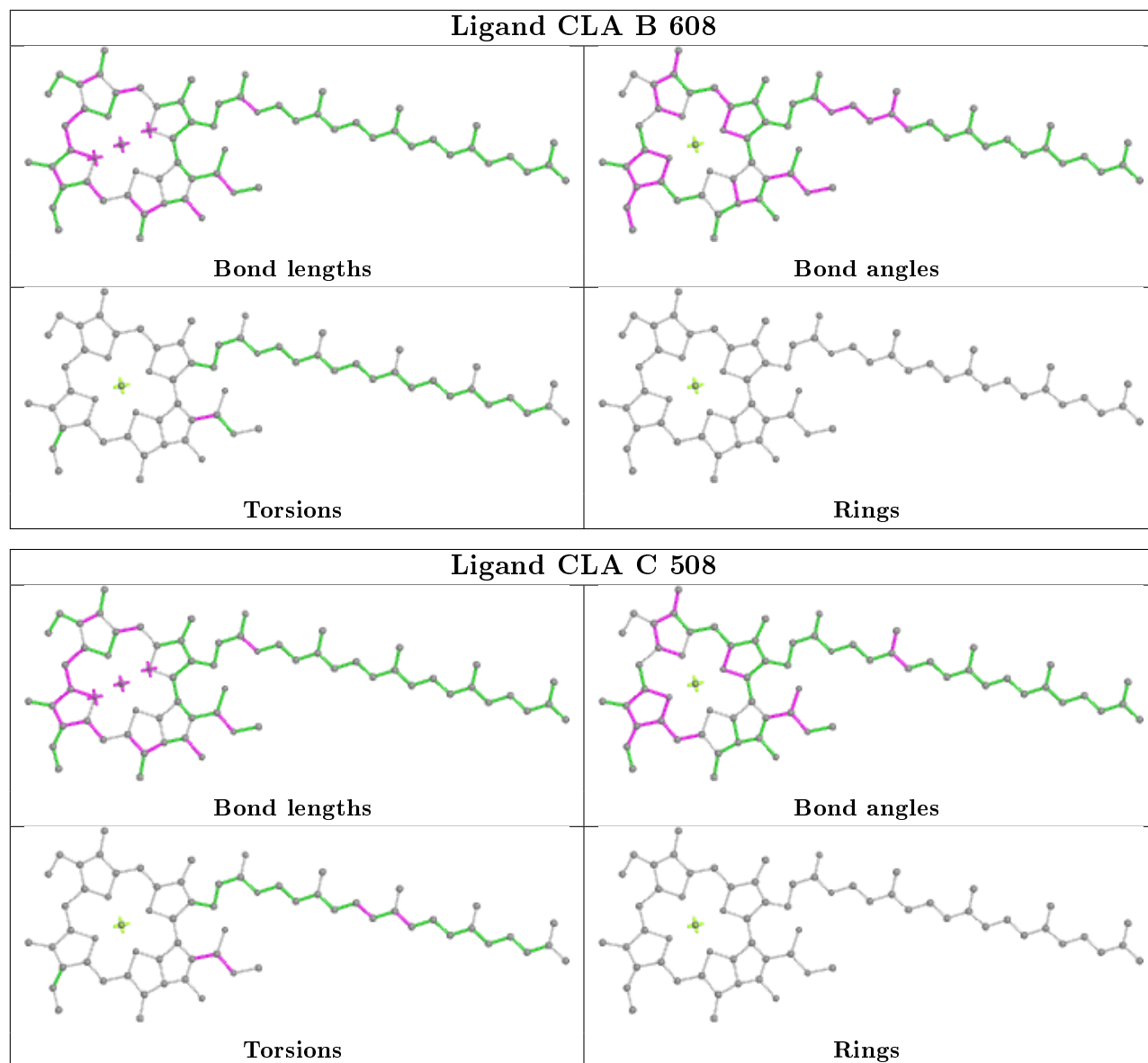


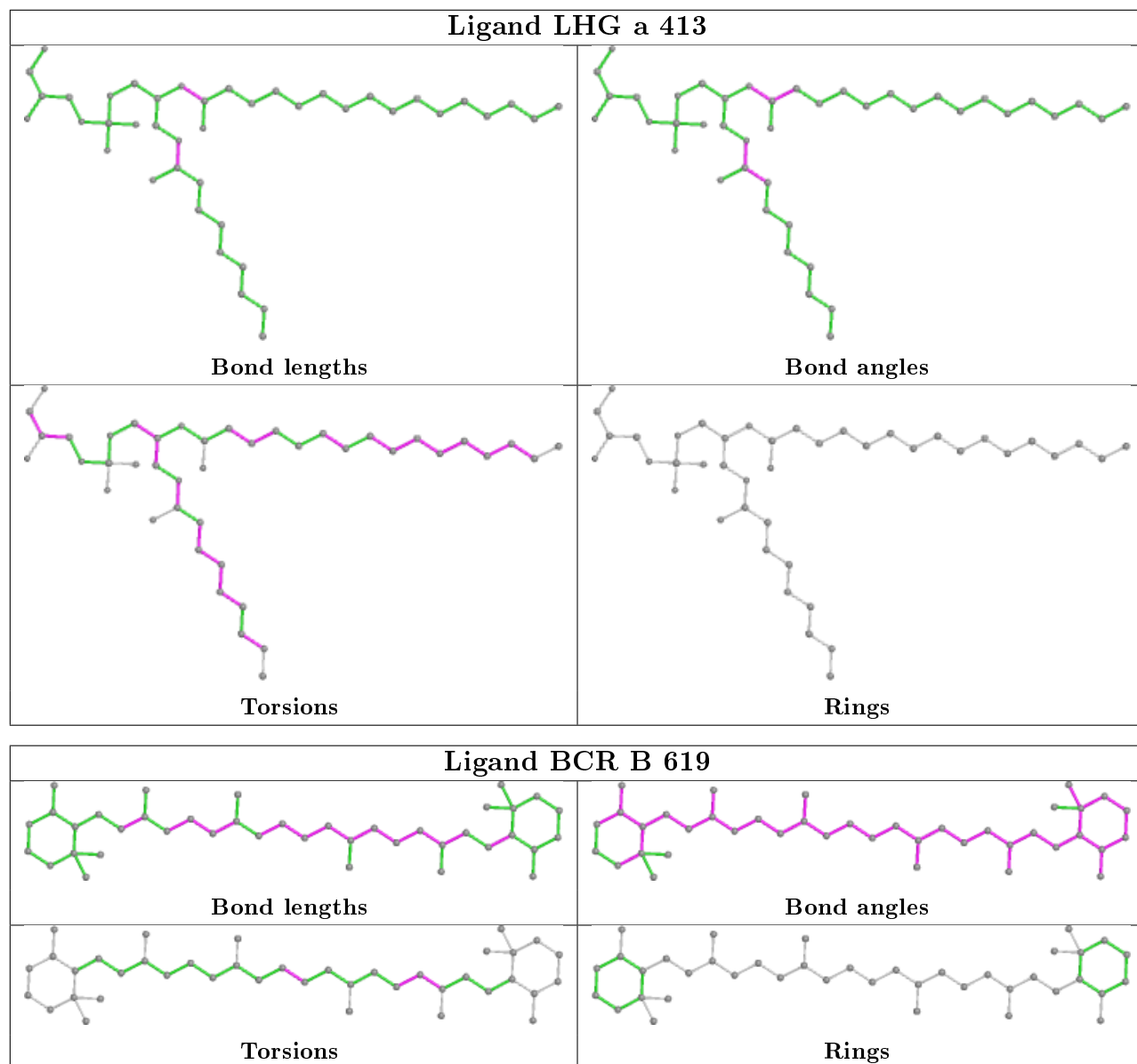


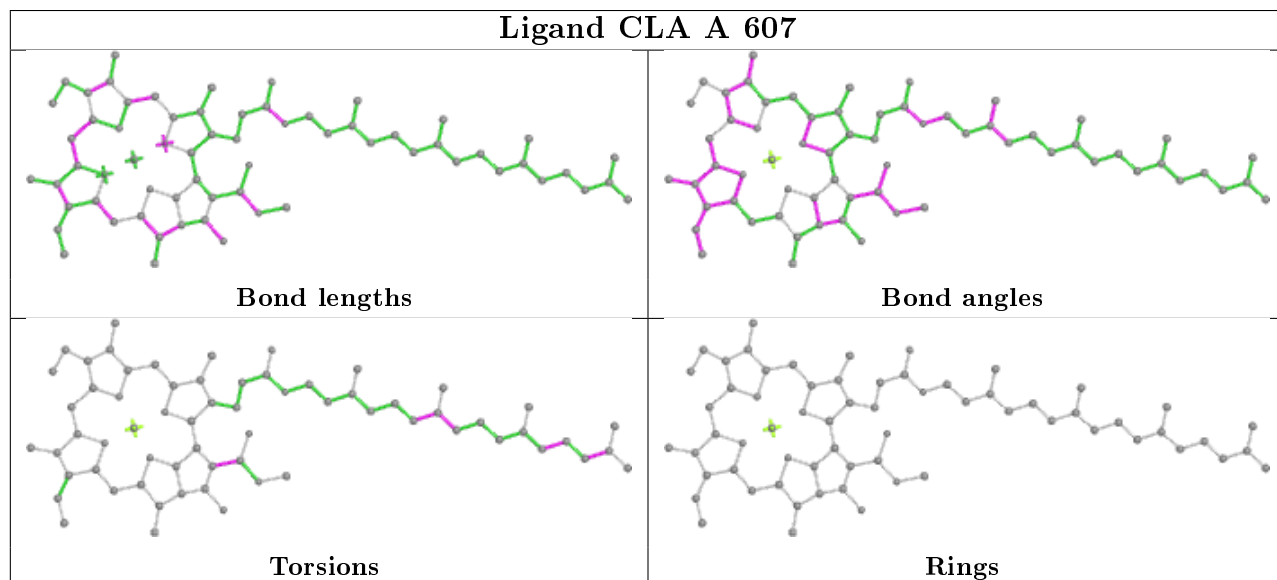
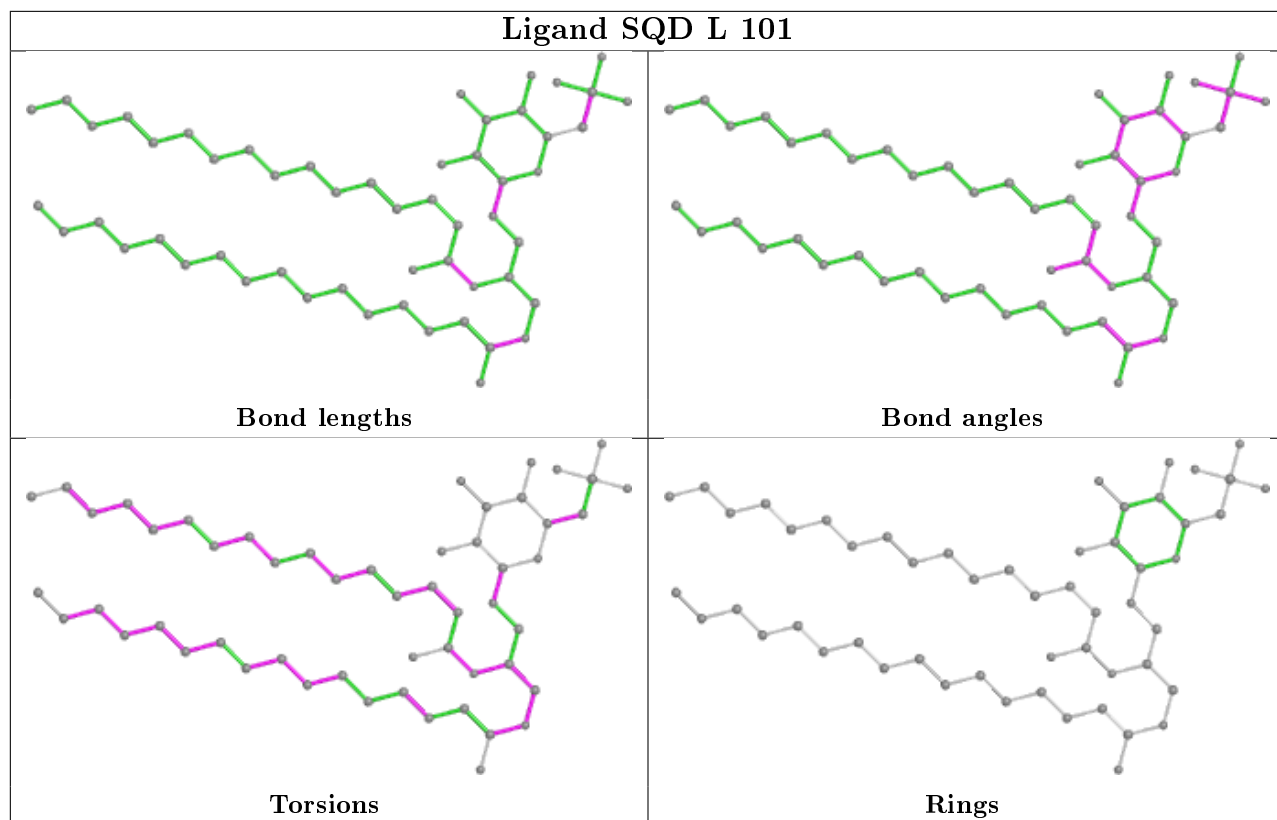


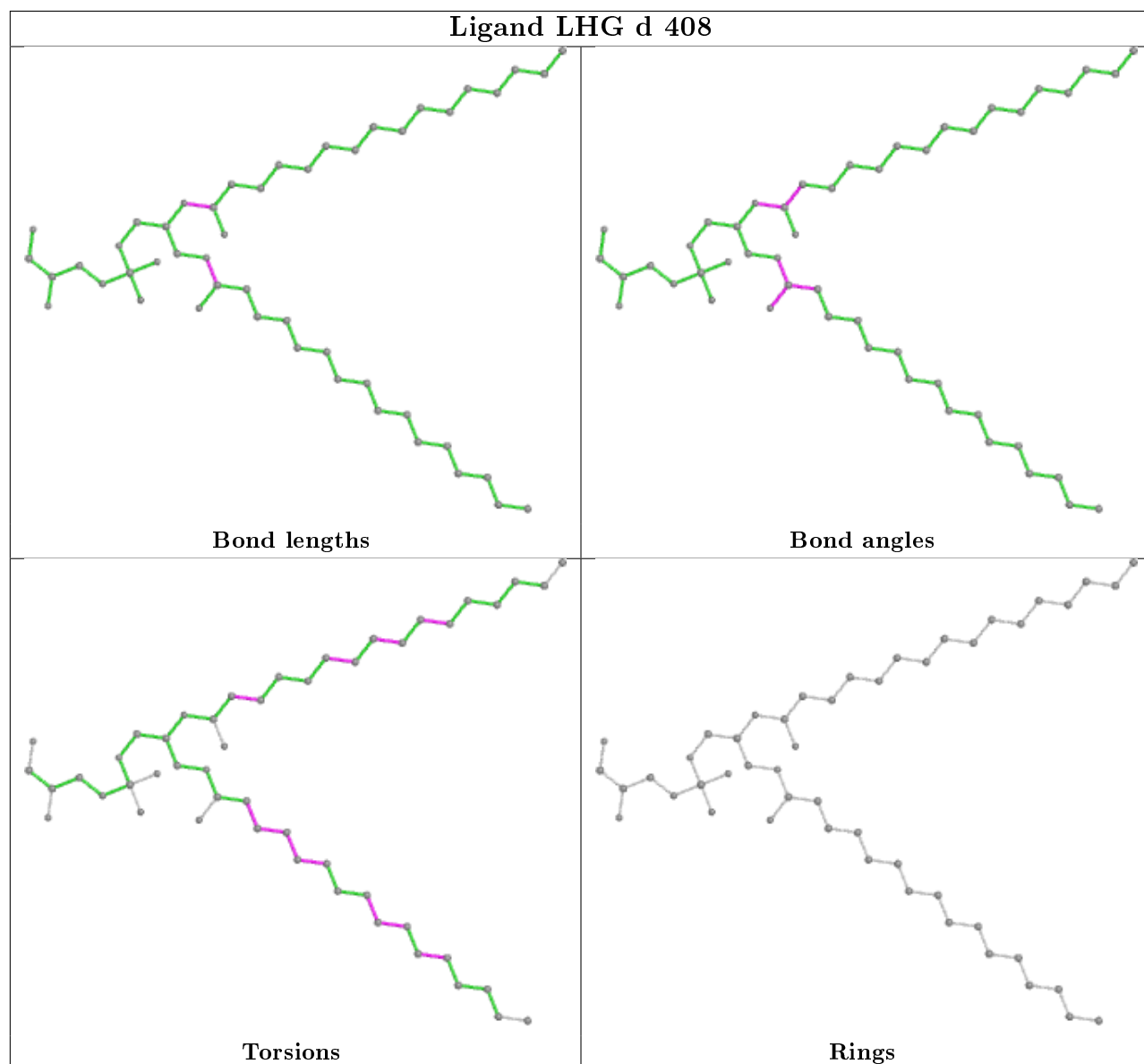
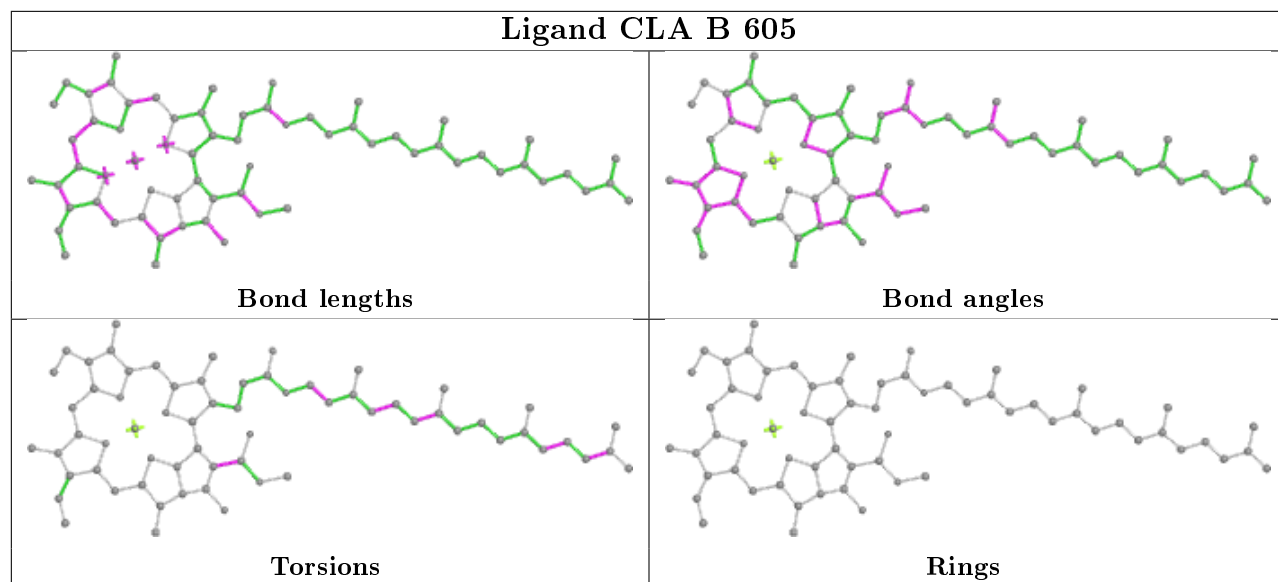


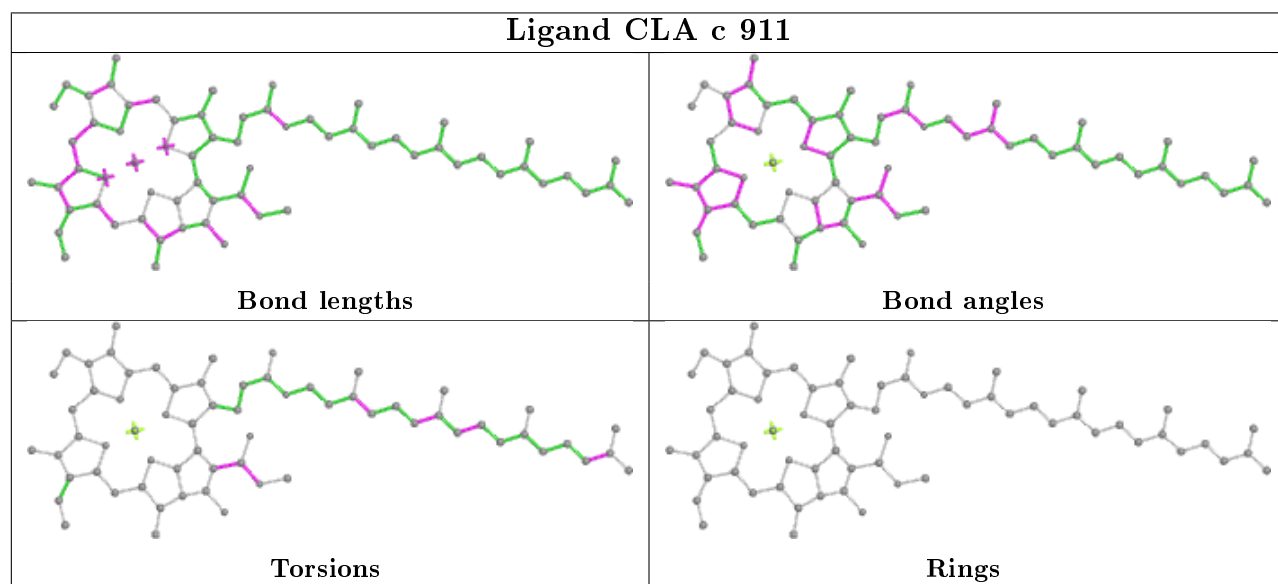
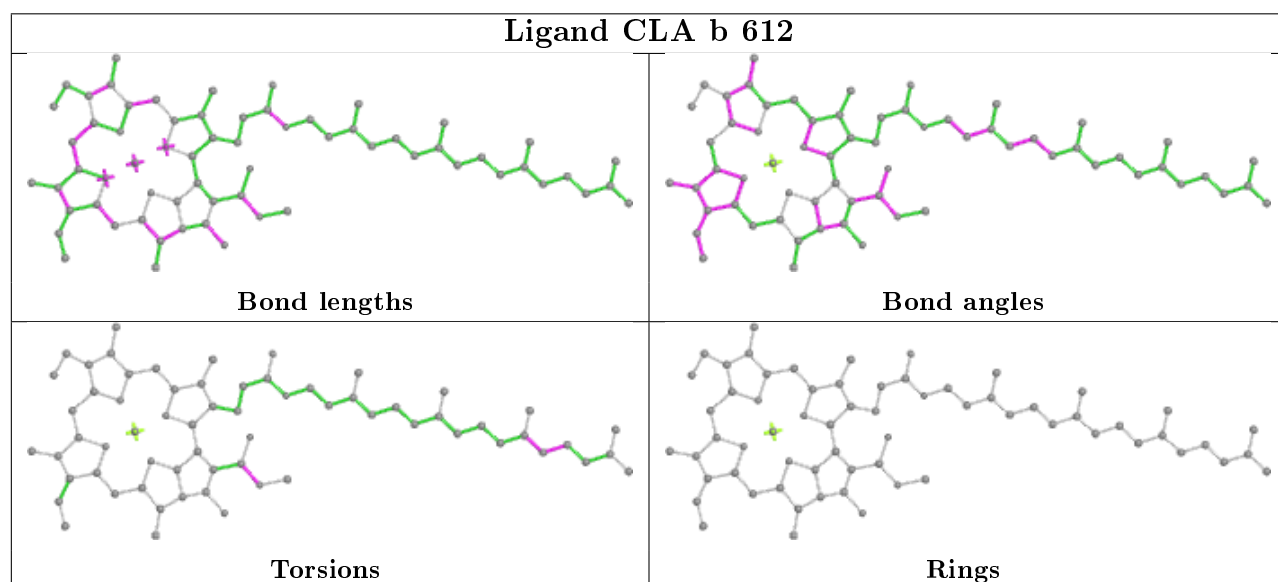
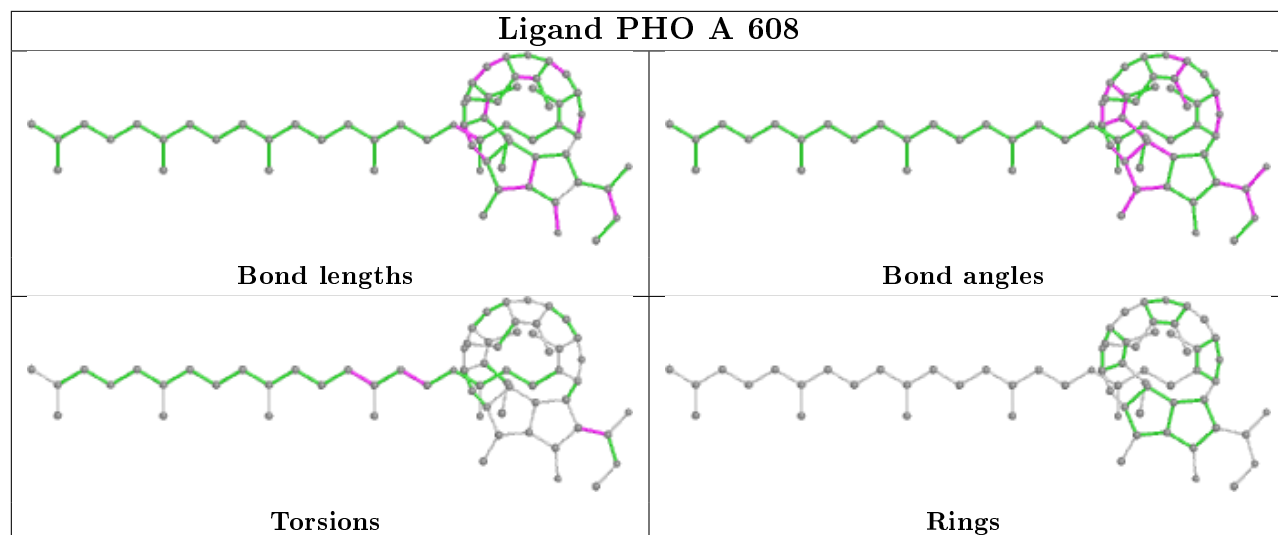


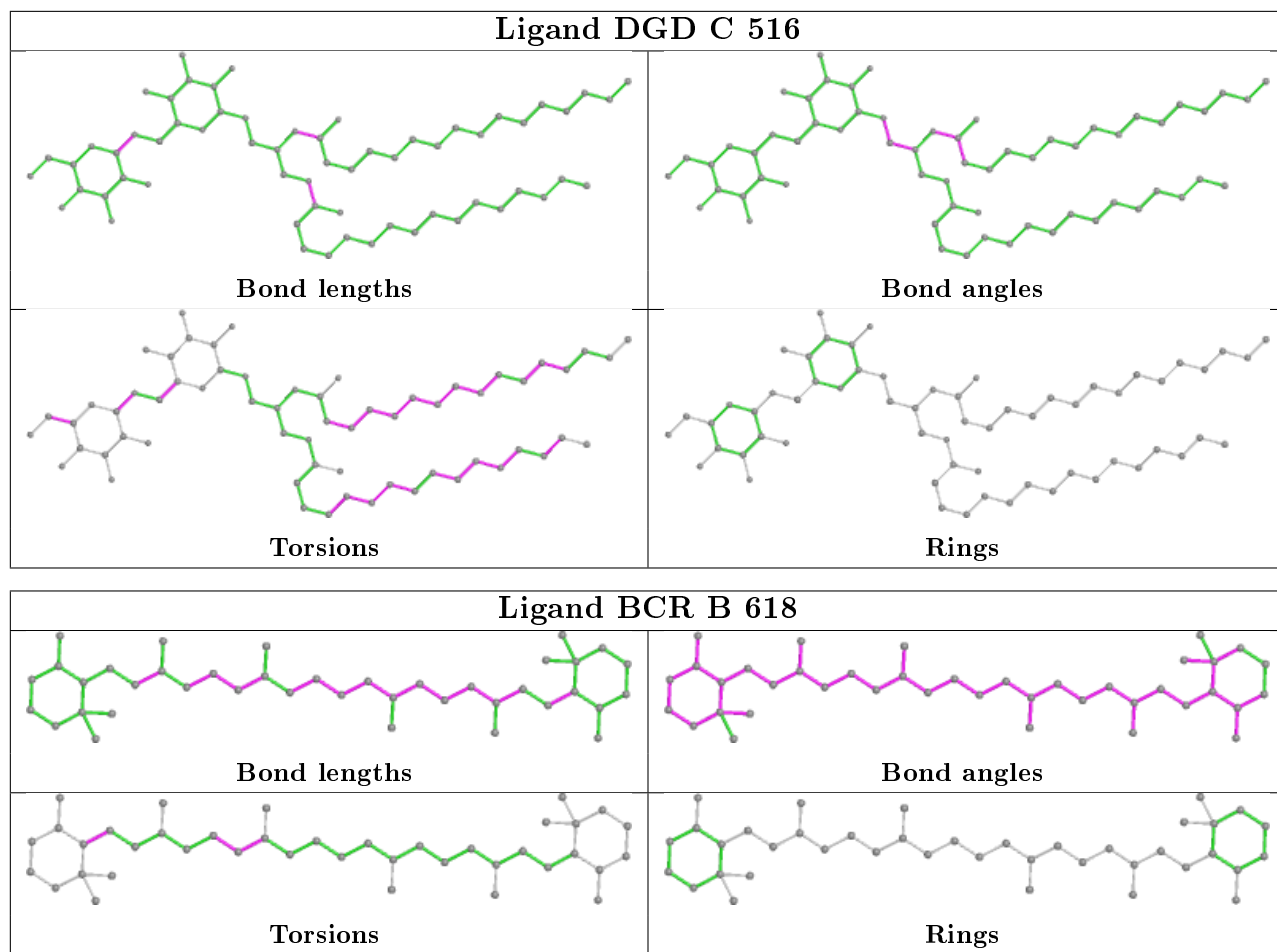




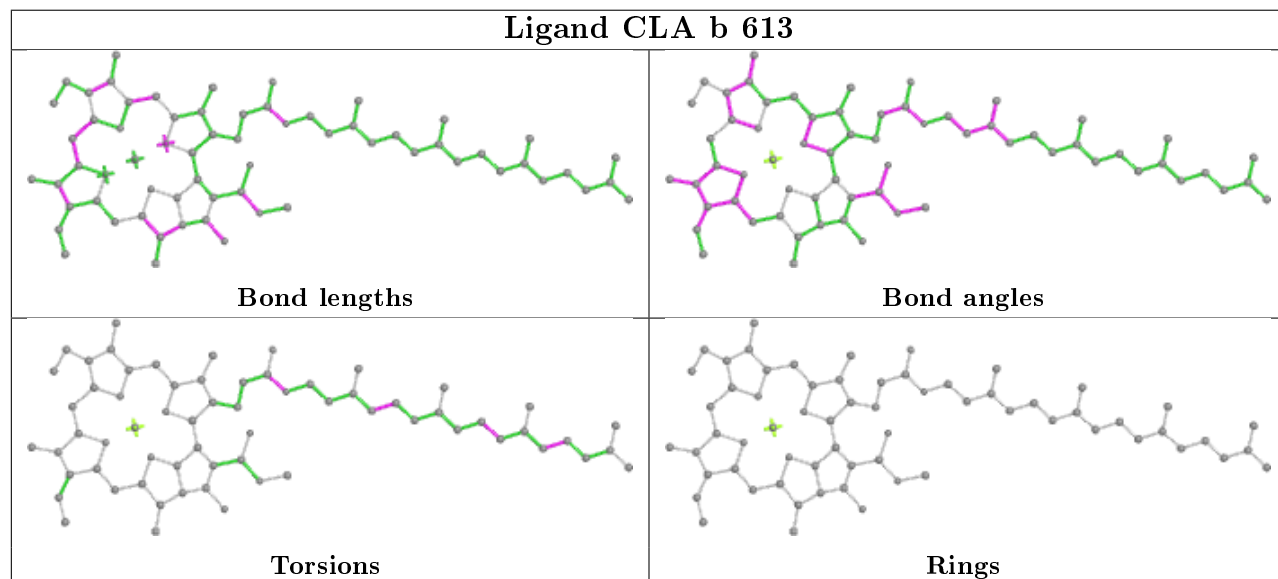
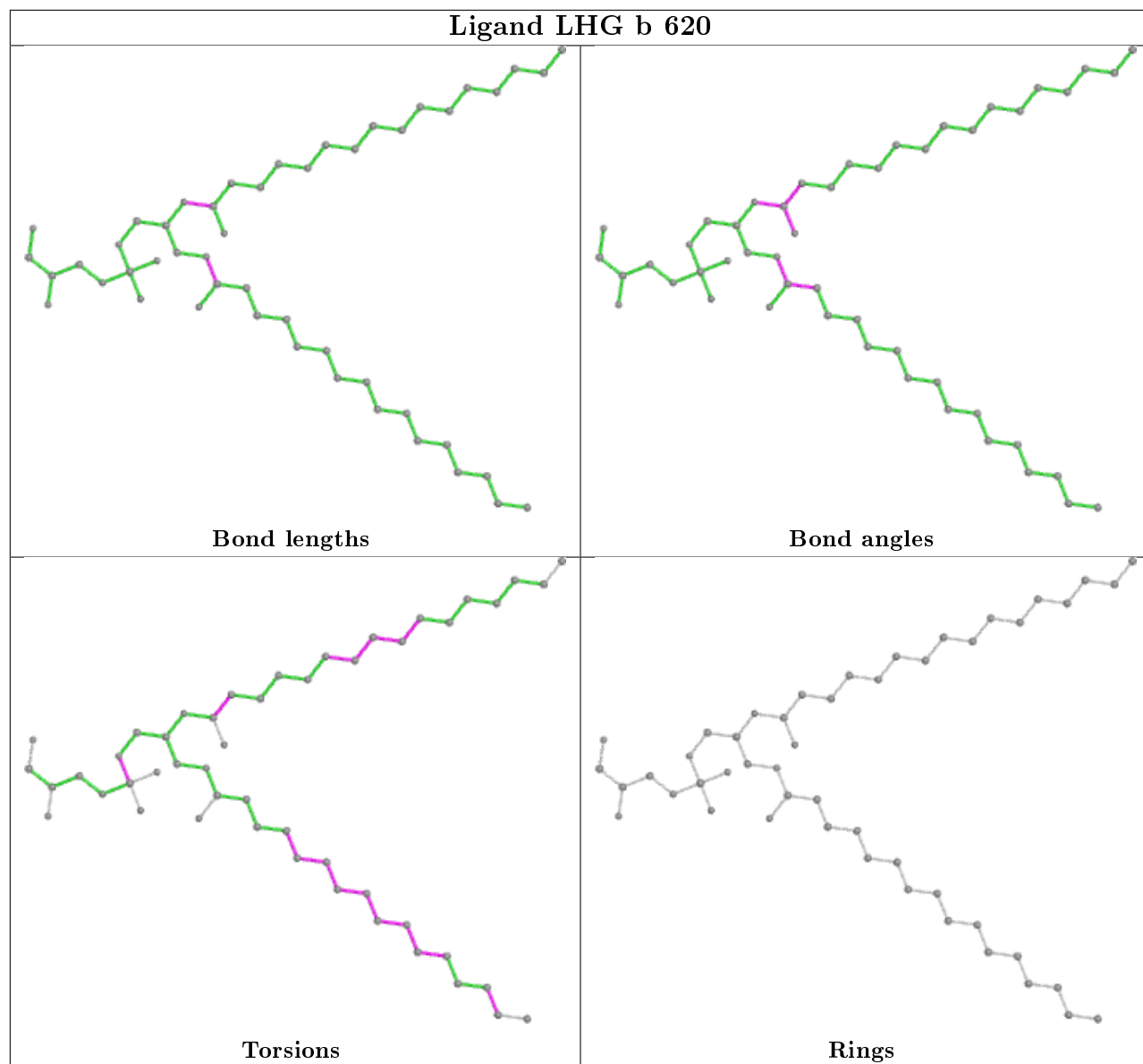


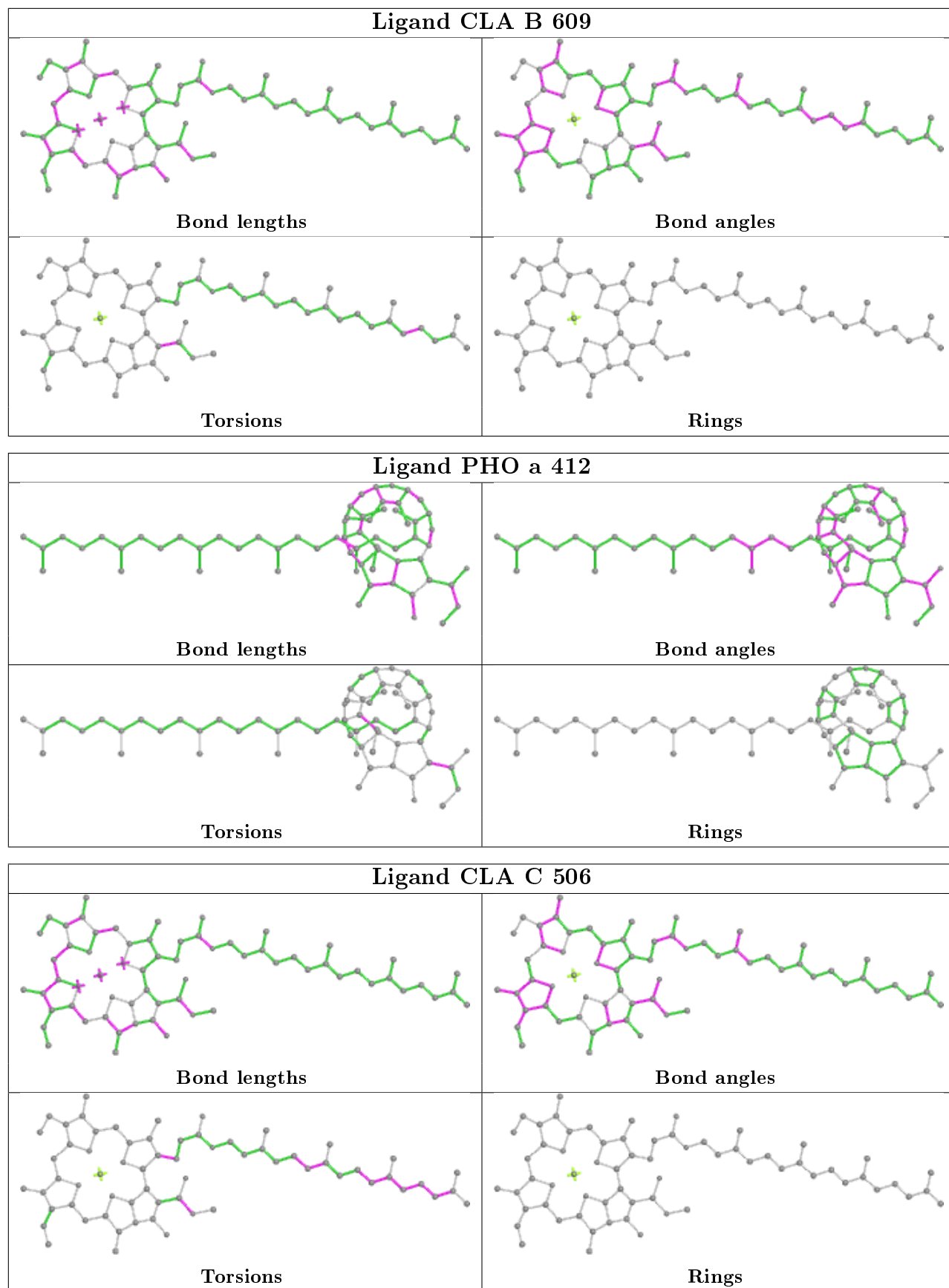


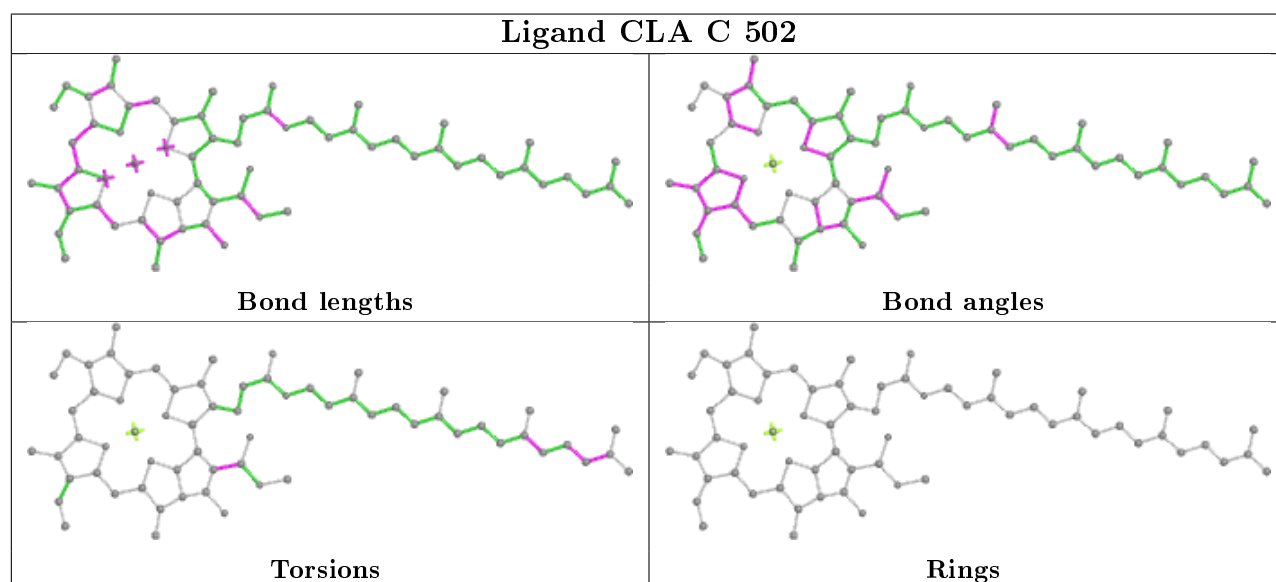
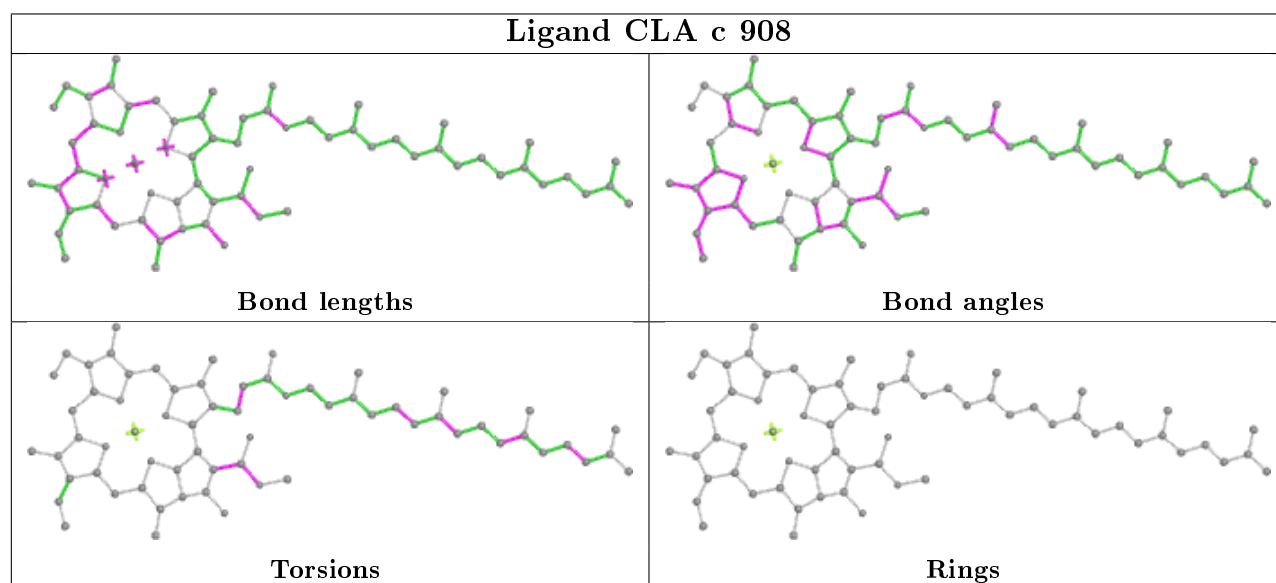
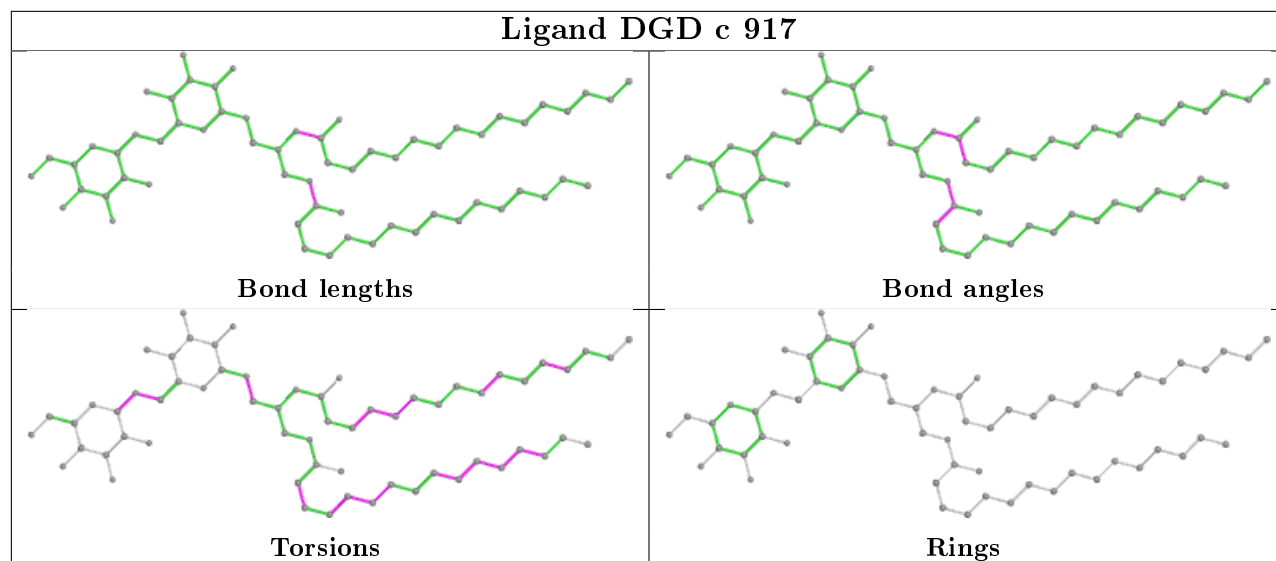


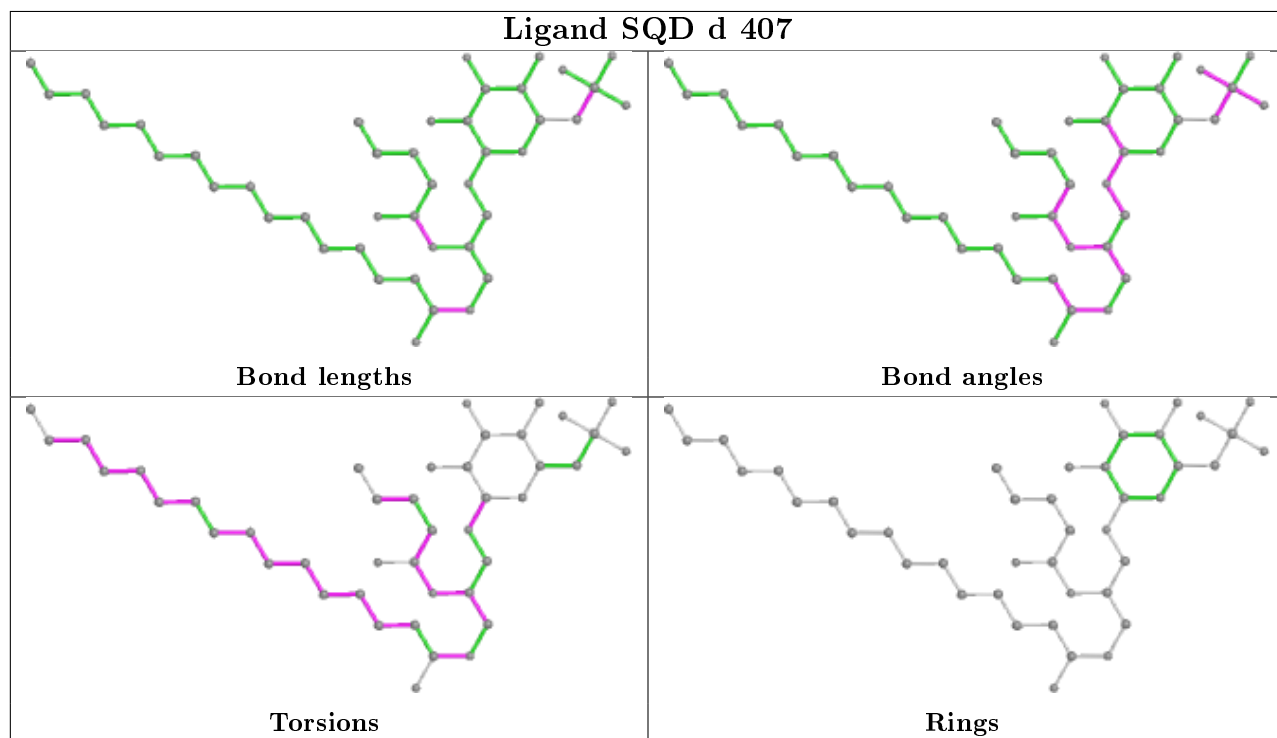
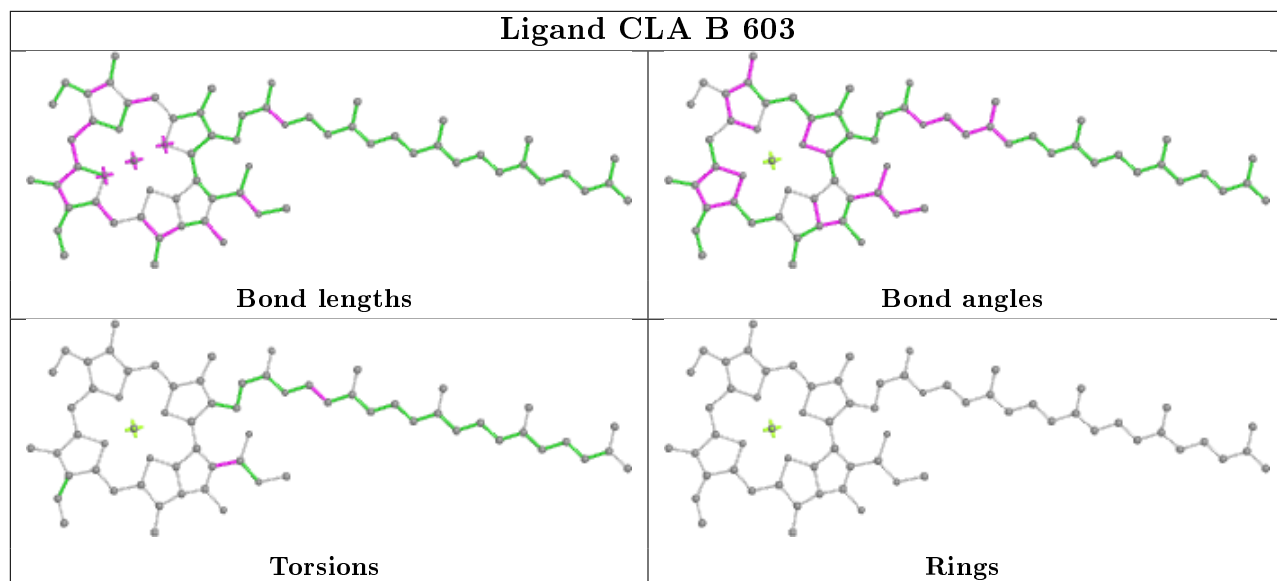
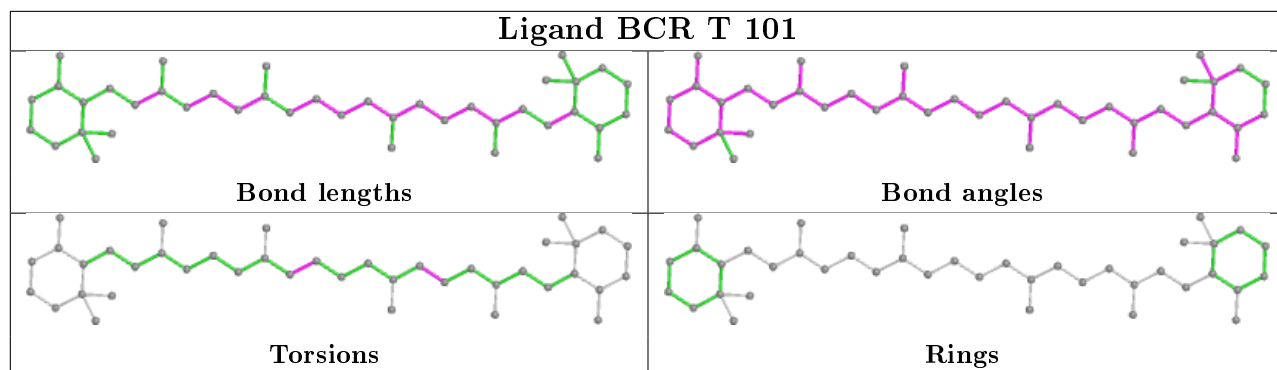


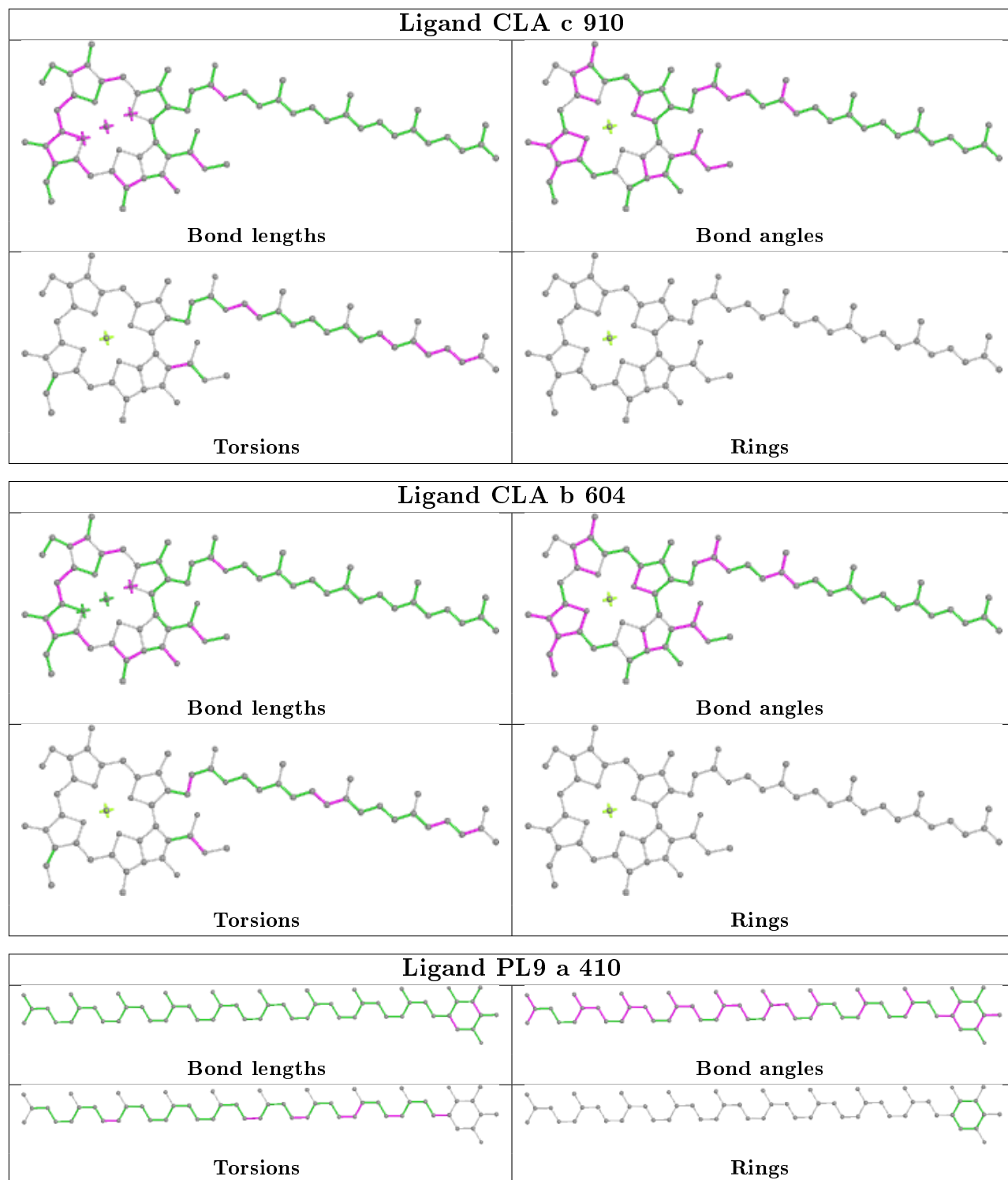


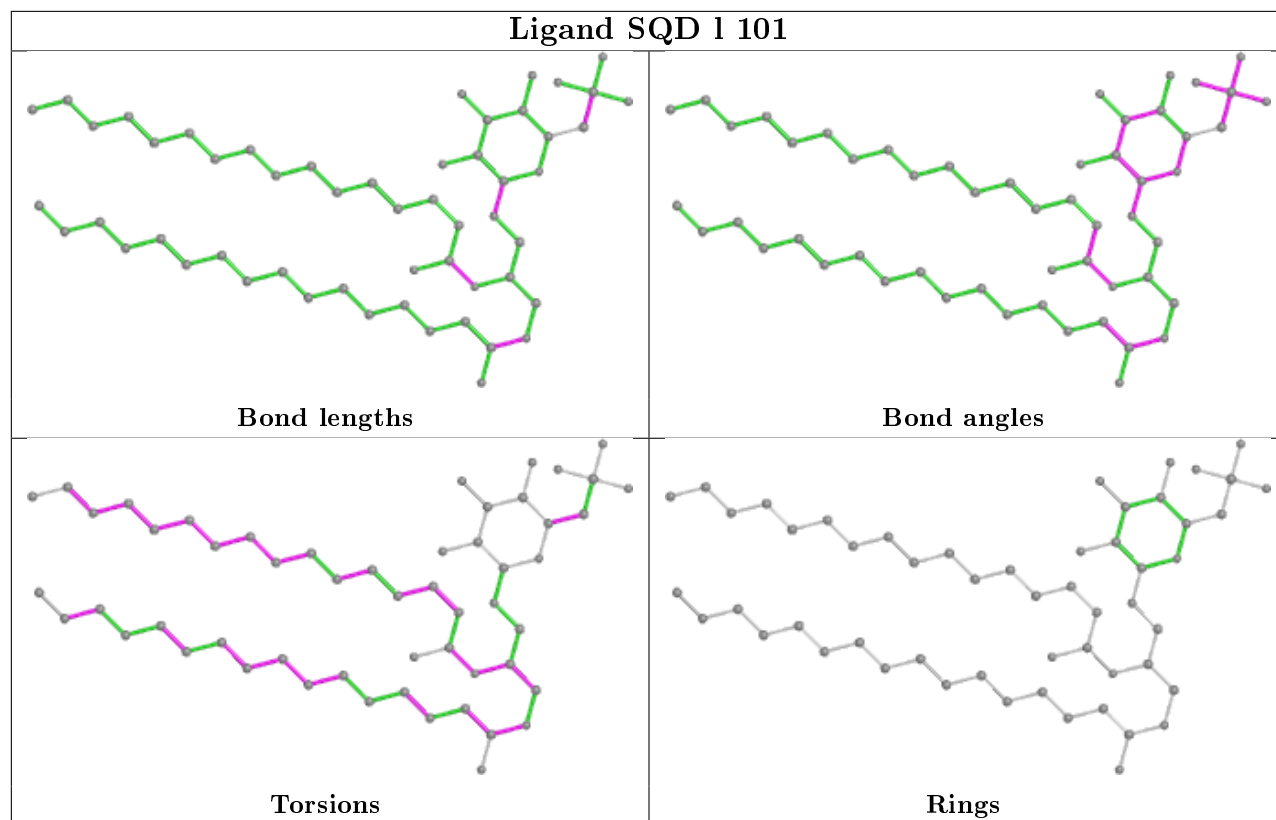












## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

## 6 Fit of model and data i

### 6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	334/334 (100%)	0.38	12 (3%) 42 35	16, 22, 43, 53	0
1	a	334/334 (100%)	0.39	18 (5%) 25 22	19, 24, 45, 62	0
2	B	504/504 (100%)	0.26	23 (4%) 32 27	18, 27, 49, 70	0
2	b	504/504 (100%)	0.53	50 (9%) 7 7	20, 29, 52, 93	0
3	C	451/455 (99%)	0.44	42 (9%) 8 8	21, 31, 44, 56	0
3	c	455/455 (100%)	0.27	24 (5%) 26 23	24, 34, 45, 59	0
4	D	342/342 (100%)	0.60	24 (7%) 16 13	17, 23, 39, 61	0
4	d	341/342 (99%)	0.52	22 (6%) 18 15	19, 26, 42, 59	0
5	E	81/81 (100%)	0.58	8 (9%) 7 7	27, 40, 57, 63	0
5	e	81/81 (100%)	0.23	4 (4%) 29 26	34, 45, 67, 76	0
6	F	34/34 (100%)	-0.10	1 (2%) 51 41	28, 33, 58, 61	0
6	f	32/34 (94%)	-0.05	2 (6%) 20 16	30, 36, 60, 62	0
7	H	65/65 (100%)	0.57	8 (12%) 4 5	23, 34, 40, 58	0
7	h	65/65 (100%)	1.06	11 (16%) 1 2	28, 37, 48, 58	0
8	I	38/38 (100%)	0.30	3 (7%) 12 11	26, 33, 65, 68	0
8	i	38/38 (100%)	-0.01	2 (5%) 26 23	29, 34, 62, 65	0
9	J	38/40 (95%)	0.50	3 (7%) 12 11	26, 37, 68, 72	0
9	j	40/40 (100%)	-0.10	3 (7%) 14 12	31, 42, 76, 80	0
10	K	37/37 (100%)	0.05	0 100 100	33, 38, 45, 47	0
10	k	37/37 (100%)	0.23	2 (5%) 25 22	38, 43, 55, 58	0
11	L	37/37 (100%)	0.53	3 (8%) 12 11	17, 22, 50, 59	0
11	l	37/37 (100%)	0.39	0 100 100	19, 22, 55, 62	0
12	M	34/34 (100%)	0.96	5 (14%) 2 3	21, 23, 36, 52	0
12	m	34/34 (100%)	0.67	1 (2%) 51 41	21, 25, 37, 53	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	O	243/243 (100%)	0.18	3 (1%) 79 70	18, 32, 55, 71	0
13	o	243/243 (100%)	0.31	10 (4%) 37 31	21, 35, 61, 72	0
14	T	30/30 (100%)	0.65	2 (6%) 17 15	19, 23, 44, 52	0
14	t	30/30 (100%)	0.66	1 (3%) 46 37	20, 24, 44, 51	0
15	U	97/97 (100%)	0.04	1 (1%) 82 74	23, 30, 48, 50	0
15	u	97/97 (100%)	0.25	3 (3%) 49 39	25, 31, 37, 47	0
16	V	137/137 (100%)	0.05	1 (0%) 87 82	23, 28, 39, 48	0
16	v	137/137 (100%)	0.07	6 (4%) 34 29	27, 37, 51, 57	0
17	Y	29/29 (100%)	0.44	1 (3%) 45 37	42, 48, 75, 77	0
17	y	29/29 (100%)	0.04	0 100 100	50, 56, 75, 76	0
18	X	39/39 (100%)	0.63	8 (20%) 1 1	33, 40, 66, 68	0
18	x	39/39 (100%)	0.87	5 (12%) 3 5	37, 43, 75, 77	0
19	Z	62/62 (100%)	0.28	1 (1%) 72 62	39, 48, 68, 72	0
19	z	62/62 (100%)	0.32	3 (4%) 30 26	53, 61, 82, 87	0
All	All	5267/5276 (99%)	0.37	316 (5%) 21 18	16, 30, 56, 93	0

All (316) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
18	x	40	SER	8.2
7	H	65	LEU	6.5
4	D	137	GLY	6.0
4	D	136	VAL	5.9
6	f	14	PRO	5.7
4	D	59	TYR	5.7
3	C	138	GLU	5.5
4	d	136	VAL	5.4
3	c	373	ASN	5.3
15	u	8	GLU	5.2
4	D	135	LEU	5.2
1	a	138	GLY	5.1
3	C	264	PHE	5.1
9	J	3	SER	5.0
1	a	139	MET	4.9
3	C	137	PRO	4.8
4	D	107	LEU	4.8
3	C	147	PHE	4.7

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
3	C	97	TRP	4.7
18	x	3	ILE	4.6
2	b	187	PRO	4.5
3	C	143	TYR	4.5
3	C	265	ILE	4.4
18	x	2	THR	4.4
7	H	66	GLY	4.3
2	b	362	PHE	4.3
7	H	56	ASP	4.2
18	X	2	THR	4.2
2	b	491	VAL	4.2
2	b	443	PHE	4.1
3	C	24	THR	4.0
6	f	15	ILE	4.0
3	C	146	PHE	3.9
1	a	137	LEU	3.9
4	D	27	PHE	3.9
2	b	219	VAL	3.9
2	b	435	GLU	3.9
2	B	500	GLY	3.8
4	D	12	ARG	3.8
3	c	146	PHE	3.8
3	C	263	ALA	3.8
3	C	203	THR	3.8
3	C	200	THR	3.8
4	D	106	GLN	3.7
1	a	250	ALA	3.7
2	b	499	VAL	3.7
4	d	292	ASN	3.7
13	o	25	THR	3.7
5	E	70	PHE	3.7
2	b	218	LEU	3.7
2	b	319	PRO	3.7
3	C	145	SER	3.6
3	C	99	VAL	3.6
2	b	262	THR	3.6
1	A	266	ASN	3.6
1	a	222	SER	3.6
2	b	185	TRP	3.5
2	b	318	ASN	3.5
4	d	135	LEU	3.5
12	M	1	MET	3.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
3	c	227	VAL	3.5
19	z	62	VAL	3.5
3	C	144	SER	3.5
4	d	12	ARG	3.5
7	h	65	LEU	3.5
3	C	266	TRP	3.5
3	C	202	PRO	3.4
1	A	137	LEU	3.4
2	B	505	ARG	3.4
3	C	85	GLY	3.4
4	D	350	ASN	3.3
3	C	199	ILE	3.3
3	c	198	VAL	3.3
7	H	64	ALA	3.3
7	h	56	ASP	3.3
9	j	2	MET	3.3
4	D	138	VAL	3.3
4	d	171	PRO	3.3
5	E	84	LYS	3.3
7	H	54	ILE	3.3
4	d	137	GLY	3.3
5	e	84	LYS	3.3
2	b	361	ALA	3.2
7	H	55	LEU	3.2
18	X	39	ARG	3.2
3	C	400	PRO	3.2
1	A	261	GLN	3.2
2	b	447	PRO	3.2
3	C	151	TRP	3.2
4	d	59	TYR	3.2
1	a	317	TRP	3.1
10	k	43	VAL	3.1
18	X	38	GLN	3.1
2	B	368	VAL	3.1
7	H	63	LYS	3.1
1	a	247	ASN	3.1
2	b	229	LEU	3.1
3	c	200	THR	3.0
4	d	107	LEU	3.0
16	v	135	VAL	3.0
4	D	85	MET	3.0
1	a	11	ALA	3.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
3	c	228	ASN	3.0
16	v	21	LEU	3.0
4	D	169	PHE	3.0
3	C	201	ASN	3.0
3	c	372	PRO	3.0
2	b	305	ILE	3.0
4	D	96	GLU	3.0
11	L	37	ASN	3.0
4	D	95	PRO	2.9
9	j	1	MET	2.9
2	b	217	ILE	2.9
2	b	304	ALA	2.9
3	c	147	PHE	2.9
2	b	500	GLY	2.9
4	d	264	LYS	2.9
6	F	12	SER	2.9
2	B	367	PRO	2.9
2	B	353	GLU	2.9
3	C	111	PHE	2.9
7	h	55	LEU	2.8
3	c	365	TRP	2.8
7	h	11	LEU	2.8
2	b	287	ARG	2.8
5	e	55	TYR	2.8
17	Y	46	LEU	2.8
4	d	68	LEU	2.8
1	A	138	GLY	2.8
3	c	86	LEU	2.8
18	X	37	VAL	2.8
2	B	499	VAL	2.8
12	M	4	ASN	2.8
3	C	139	THR	2.7
4	d	56	THR	2.7
10	k	15	TYR	2.7
1	A	262	TYR	2.7
4	D	336	HIS	2.7
19	z	27	TYR	2.7
13	o	80	GLN	2.7
2	B	471	ALA	2.7
2	b	183	PRO	2.7
3	C	46	SER	2.7
19	Z	1	MET	2.7

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
2	b	267	LEU	2.6
18	x	39	ARG	2.6
2	b	438	ASN	2.6
1	a	140	ARG	2.6
2	b	317	ASN	2.6
9	J	4	GLU	2.6
15	U	61	VAL	2.6
2	B	43	ALA	2.6
7	h	62	TRP	2.6
13	o	85	LEU	2.6
14	T	27	PRO	2.6
2	b	367	PRO	2.6
2	B	70	GLY	2.6
19	z	24	PRO	2.6
4	d	98	GLN	2.6
2	B	366	PHE	2.6
9	j	3	SER	2.6
13	o	142	PHE	2.6
2	B	195	PRO	2.6
5	E	66	VAL	2.6
2	B	369	ILE	2.6
1	a	268	SER	2.5
2	b	195	PRO	2.5
13	o	100	GLY	2.5
2	B	133	LEU	2.5
3	c	134	ILE	2.5
3	C	180	MET	2.5
3	c	197	ARG	2.5
7	h	54	ILE	2.5
2	b	228	ALA	2.5
9	J	8	ILE	2.5
2	b	320	ALA	2.5
7	h	23	PRO	2.5
5	E	17	VAL	2.5
12	M	2	GLU	2.5
3	c	335	THR	2.5
4	D	307	GLU	2.5
5	e	64	PRO	2.5
1	A	11	ALA	2.5
8	I	38	GLU	2.5
16	v	48	THR	2.5
3	c	199	ILE	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
2	b	328	GLY	2.5
2	b	133	LEU	2.4
3	C	86	LEU	2.4
18	X	36	LYS	2.4
2	B	362	PHE	2.4
2	b	436	THR	2.4
13	O	64	GLU	2.4
8	i	37	LEU	2.4
2	B	347	ARG	2.4
3	C	149	TYR	2.4
3	c	224	ILE	2.4
4	D	335	PRO	2.4
8	I	37	LEU	2.4
12	m	7	GLY	2.4
2	b	188	ASP	2.4
3	C	291	TRP	2.4
3	C	268	GLY	2.4
2	b	55	MET	2.4
2	b	494	GLY	2.4
3	C	98	GLY	2.4
3	C	296	VAL	2.4
1	a	245	THR	2.4
2	b	84	THR	2.4
5	E	21	VAL	2.4
15	u	66	GLY	2.4
1	A	257	ARG	2.4
2	B	166	MET	2.4
2	b	203	ILE	2.3
13	o	176	GLN	2.3
1	a	266	ASN	2.3
3	C	112	PHE	2.3
3	c	112	PHE	2.3
2	b	64	PRO	2.3
4	d	14	TRP	2.3
16	v	23	GLU	2.3
8	I	25	SER	2.3
16	V	125	ILE	2.3
4	d	32	TRP	2.3
2	B	497	GLN	2.3
1	A	295	PHE	2.3
2	B	71	VAL	2.3
2	b	302	TRP	2.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
18	x	25	PHE	2.3
3	c	22	PHE	2.3
4	D	89	LEU	2.3
2	b	189	GLY	2.3
4	D	349	GLY	2.3
2	b	294	SER	2.3
5	E	4	THR	2.2
4	d	96	GLU	2.2
7	h	57	GLY	2.2
12	M	10	ALA	2.2
1	a	223	LEU	2.2
2	B	354	LEU	2.2
3	c	149	TYR	2.2
18	X	34	ILE	2.2
1	a	136	ARG	2.2
1	A	265	PHE	2.2
13	o	184	ARG	2.2
14	t	30	THR	2.2
18	X	3	ILE	2.2
1	A	139	MET	2.2
2	B	44	THR	2.2
13	o	229	GLU	2.2
3	C	82	TYR	2.2
3	C	44	ASN	2.2
2	B	495	PHE	2.2
3	C	185	LEU	2.2
1	A	268	SER	2.2
4	D	56	THR	2.2
16	v	136	TYR	2.2
2	b	16	PRO	2.2
16	v	137	TYR	2.2
12	M	5	GLN	2.2
13	o	243	ILE	2.2
1	A	246	TYR	2.2
3	C	140	LEU	2.2
13	O	67	PRO	2.2
3	C	204	LEU	2.2
3	c	145	SER	2.1
7	h	27	THR	2.1
14	T	3	THR	2.1
2	b	270	PRO	2.1
5	E	18	ARG	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
2	b	137	LYS	2.1
2	b	268	PHE	2.1
1	a	84	PRO	2.1
3	C	127	PHE	2.1
4	D	334	GLN	2.1
1	a	141	PRO	2.1
15	u	90	ALA	2.1
2	b	368	VAL	2.1
4	d	173	PHE	2.1
7	h	21	VAL	2.1
1	a	246	TYR	2.1
2	b	482	ILE	2.1
4	D	188	PHE	2.1
3	c	375	LEU	2.1
4	d	99	GLY	2.1
7	h	18	TYR	2.1
3	C	234	VAL	2.1
8	i	32	PRO	2.1
3	c	21	ILE	2.1
3	C	25	ASN	2.1
11	L	33	SER	2.1
2	B	503	THR	2.1
4	d	54	PHE	2.1
4	D	248	THR	2.1
3	c	362	ARG	2.1
13	o	34	SER	2.1
2	b	190	PHE	2.1
4	d	138	VAL	2.1
3	c	291	TRP	2.1
4	D	297	ASP	2.1
4	d	157	PHE	2.1
4	d	189	HIS	2.0
5	E	69	ARG	2.0
7	H	52	THR	2.0
3	c	85	GLY	2.0
3	C	95	LEU	2.0
4	d	29	PHE	2.0
1	a	267	ASN	2.0
2	b	120	LEU	2.0
2	b	356	VAL	2.0
11	L	1	MET	2.0
13	O	219	GLN	2.0

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Mol	Chain	Res	Type	RSRZ
18	X	40	SER	2.0
5	e	56	TYR	2.0
2	B	397	VAL	2.0
2	b	184	GLU	2.0

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

There are no non-standard protein/DNA/RNA residues in this entry.

## 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
30	CA	f	102	1/1	0.22	0.38	58,58,58,58	0
27	PL9	a	410	55/55	0.27	1.66	63,80,85,85	0
26	BCR	k	101	40/40	0.34	1.07	37,41,45,45	0
30	CA	b	601	1/1	0.44	1.04	77,77,77,77	0
26	BCR	f	101	40/40	0.46	0.98	30,34,48,49	0
22	CL	v	201	1/1	0.49	0.40	60,60,60,60	0
29	LHG	a	413	42/49	0.50	0.71	95,107,110,111	0
30	CA	B	601	1/1	0.52	0.59	76,76,76,76	0
26	BCR	a	409	40/40	0.53	0.47	21,26,29,29	0
31	DGD	D	406	62/66	0.54	1.28	77,89,103,103	0
26	BCR	D	404	40/40	0.55	0.92	25,30,48,49	0
26	BCR	k	102	40/40	0.55	2.00	33,44,47,48	0
26	BCR	b	619	40/40	0.57	1.00	30,34,41,42	0
33	MG	j	102	1/1	0.58	0.19	34,34,34,34	0
30	CA	F	102	1/1	0.58	0.44	56,56,56,56	0
31	DGD	d	406	62/66	0.59	0.91	80,91,105,105	0
30	CA	c	901	1/1	0.59	0.43	46,46,46,46	0
27	PL9	A	611	55/55	0.59	2.02	52,69,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
24	CLA	b	607	65/65	0.62	0.56	26,30,41,42	0
24	CLA	b	617	65/65	0.63	0.85	27,33,74,75	0
26	BCR	B	620	40/40	0.63	0.52	27,33,39,39	0
26	BCR	A	610	40/40	0.63	0.63	22,27,32,32	0
29	LHG	A	615	42/49	0.64	1.14	69,83,86,86	0
26	BCR	B	622	40/40	0.64	0.37	23,34,41,41	0
24	CLA	B	602	65/65	0.65	0.84	32,41,66,66	0
26	BCR	Y	101	40/40	0.65	1.59	34,38,39,39	0
24	CLA	a	407	65/65	0.65	0.73	19,23,63,65	0
28	SQD	A	612	54/54	0.66	0.81	49,57,66,67	0
26	BCR	H	101	40/40	0.67	1.31	26,33,42,42	0
26	BCR	T	101	40/40	0.67	0.44	25,37,44,45	0
22	CL	V	201	1/1	0.69	0.15	50,50,50,50	0
27	PL9	D	405	55/55	0.70	0.55	19,23,29,32	0
26	BCR	B	618	40/40	0.70	0.35	23,27,28,29	0
26	BCR	T	102	40/40	0.71	0.42	25,29,31,31	0
28	SQD	d	407	43/54	0.71	0.94	84,90,93,94	0
24	CLA	C	513	65/65	0.71	1.17	39,45,64,64	0
24	CLA	b	602	65/65	0.71	1.20	38,46,68,68	0
26	BCR	c	915	40/40	0.72	1.72	30,37,41,42	0
28	SQD	a	411	54/54	0.72	0.51	50,60,75,76	0
26	BCR	b	618	40/40	0.72	0.43	24,28,39,39	0
24	CLA	D	403	65/65	0.72	0.95	24,27,65,67	0
24	CLA	b	608	65/65	0.73	0.46	19,23,30,32	0
24	CLA	B	607	65/65	0.73	0.55	24,28,40,41	0
26	BCR	C	514	40/40	0.73	1.35	37,43,47,47	0
28	SQD	l	101	54/54	0.73	0.41	57,69,84,85	0
27	PL9	d	405	55/55	0.74	0.41	19,25,29,31	0
29	LHG	D	407	49/49	0.74	0.39	29,34,41,41	0
24	CLA	a	408	65/65	0.74	0.72	20,24,75,75	0
24	CLA	B	608	65/65	0.75	0.41	17,20,32,34	0
28	SQD	A	613	54/54	0.76	0.49	50,63,68,68	0
24	CLA	c	914	65/65	0.76	1.06	46,51,73,74	0
24	CLA	B	617	65/65	0.76	0.44	22,29,77,78	0
26	BCR	c	918	40/40	0.76	1.72	50,52,58,58	0
24	CLA	C	512	65/65	0.76	1.32	37,41,62,63	0
25	PHO	A	608	64/64	0.77	0.55	16,21,25,26	0
24	CLA	b	612	65/65	0.77	0.48	20,23,37,41	0
24	CLA	c	902	65/65	0.77	1.47	30,33,41,45	0
28	SQD	a	402	54/54	0.78	0.38	51,67,75,76	0
31	DGD	C	517	62/66	0.78	0.47	23,35,62,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
24	CLA	c	903	65/65	0.78	0.85	25,28,42,45	0
26	BCR	B	619	40/40	0.78	0.31	21,28,40,40	0
28	SQD	L	101	54/54	0.78	0.39	58,66,80,80	0
24	CLA	c	913	65/65	0.78	1.24	38,42,62,63	0
24	CLA	b	615	65/65	0.78	0.35	22,26,65,66	0
26	BCR	h	101	40/40	0.79	1.14	29,37,45,45	0
29	LHG	D	408	49/49	0.79	0.52	24,28,37,40	0
24	CLA	A	607	65/65	0.79	0.85	19,21,63,65	0
22	CL	A	603	1/1	0.79	0.47	24,24,24,24	0
24	CLA	a	406	65/65	0.80	0.50	18,20,28,33	0
24	CLA	C	507	65/65	0.80	1.13	29,33,52,53	0
25	PHO	D	401	64/64	0.80	1.05	19,22,28,32	0
24	CLA	C	504	65/65	0.80	0.68	25,28,54,54	0
24	CLA	B	616	65/65	0.80	0.59	25,27,45,46	0
24	CLA	b	616	65/65	0.80	1.05	27,30,45,46	0
24	CLA	b	614	65/65	0.80	0.38	21,24,44,45	0
24	CLA	B	615	65/65	0.80	0.39	20,24,60,61	0
29	LHG	d	408	49/49	0.80	0.40	29,37,41,42	0
24	CLA	d	404	65/65	0.81	0.78	26,31,67,68	0
22	CL	a	404	1/1	0.81	0.64	28,28,28,28	0
24	CLA	b	605	65/65	0.81	0.81	20,25,53,55	0
26	BCR	C	515	40/40	0.81	1.82	30,37,40,41	0
31	DGD	c	917	62/66	0.82	0.41	28,36,64,65	0
24	CLA	C	508	65/65	0.82	0.75	25,29,54,58	0
28	SQD	F	101	43/54	0.83	0.81	67,74,78,79	0
29	LHG	D	409	49/49	0.83	0.81	26,33,62,64	0
25	PHO	d	402	64/64	0.83	0.50	18,22,24,25	0
24	CLA	b	606	65/65	0.83	0.81	21,24,32,33	0
24	CLA	B	606	65/65	0.83	0.70	19,23,34,35	0
25	PHO	a	412	64/64	0.84	0.80	20,25,30,33	0
29	LHG	d	409	49/49	0.84	0.35	23,27,38,40	0
31	DGD	C	518	62/66	0.84	0.54	22,31,52,56	0
24	CLA	A	614	65/65	0.84	0.49	14,18,29,35	0
31	DGD	c	916	62/66	0.85	0.48	24,35,60,61	0
24	CLA	c	904	65/65	0.85	0.89	26,37,39,40	0
24	CLA	b	613	65/65	0.85	0.66	21,26,33,35	0
24	CLA	D	402	65/65	0.85	0.82	13,18,34,35	0
24	CLA	d	401	65/65	0.85	0.44	17,20,27,31	0
24	CLA	c	908	65/65	0.85	0.98	28,32,50,51	0
29	LHG	b	620	49/49	0.86	0.32	24,31,46,50	0
26	BCR	K	101	40/40	0.86	1.83	29,33,37,37	0
24	CLA	B	609	65/65	0.86	0.97	20,24,31,31	0

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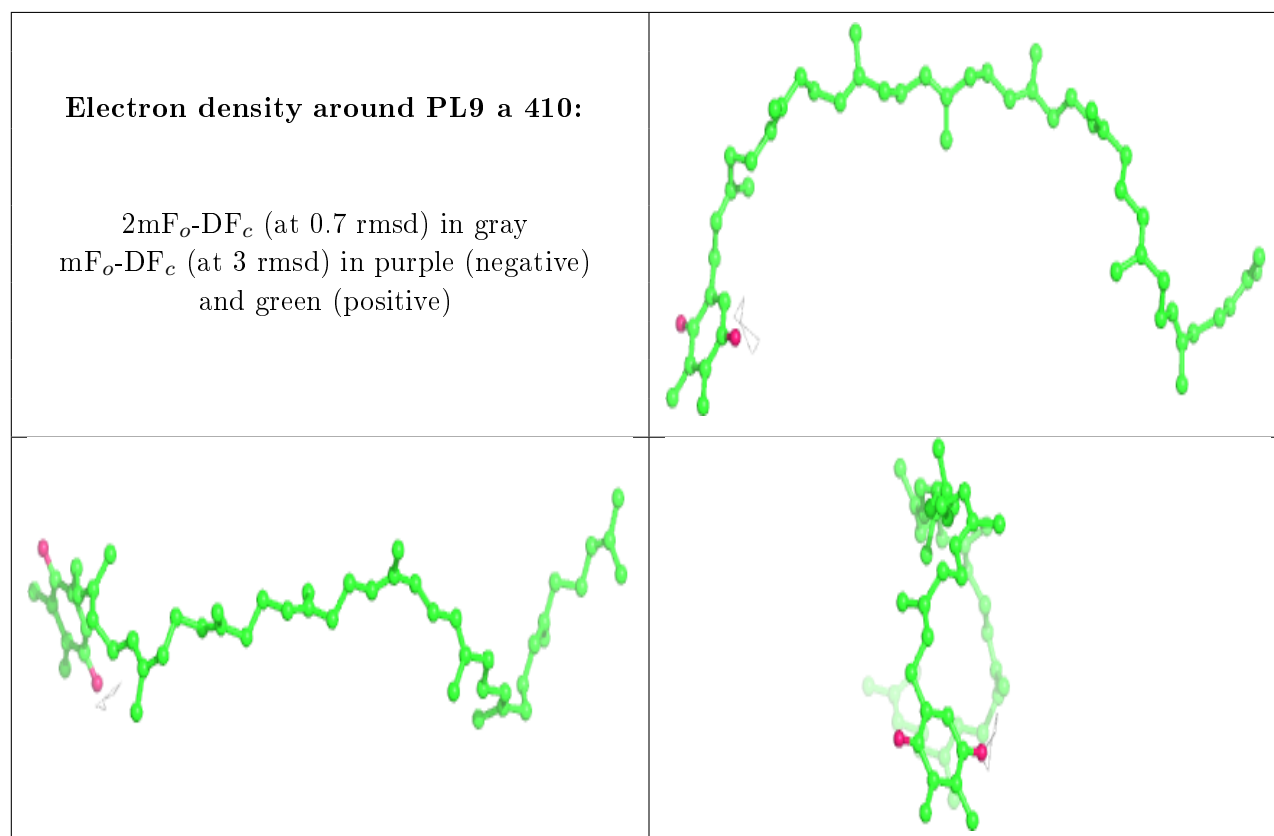
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
29	LHG	d	410	49/49	0.86	0.72	28,34,66,67	0
24	CLA	B	612	65/65	0.86	0.45	19,21,32,34	0
24	CLA	A	606	65/65	0.86	0.65	15,19,25,34	0
24	CLA	d	403	65/65	0.87	0.72	18,21,38,39	0
24	CLA	c	910	65/65	0.87	0.88	27,30,46,46	0
24	CLA	c	912	65/65	0.87	0.77	32,37,43,44	0
31	DGD	h	102	62/66	0.87	0.89	29,36,43,44	0
24	CLA	c	907	65/65	0.87	0.78	30,35,64,64	0
24	CLA	C	506	65/65	0.88	0.68	31,38,74,75	0
24	CLA	b	603	65/65	0.88	0.97	26,29,36,37	0
24	CLA	B	613	65/65	0.88	0.54	20,24,30,31	0
24	CLA	A	609	65/65	0.88	0.63	21,24,71,72	0
24	CLA	C	501	65/65	0.88	0.92	29,32,44,46	0
24	CLA	C	509	65/65	0.89	1.01	29,32,46,47	0
24	CLA	c	905	65/65	0.89	0.56	28,30,55,56	0
24	CLA	C	503	65/65	0.89	0.64	27,31,35,36	0
31	DGD	C	516	62/66	0.89	0.43	23,33,61,62	0
30	CA	O	301	1/1	0.89	0.17	49,49,49,49	0
24	CLA	C	510	65/65	0.90	0.72	24,28,35,37	0
31	DGD	j	101	62/66	0.90	0.43	25,34,52,55	0
24	CLA	c	906	65/65	0.90	0.77	28,31,44,44	0
32	HEM	V	202	43/43	0.90	0.52	23,24,27,29	0
24	CLA	b	611	65/65	0.90	0.74	25,28,34,37	0
24	CLA	B	611	65/65	0.90	0.80	21,25,32,37	0
31	DGD	H	102	62/66	0.90	1.04	26,32,38,40	0
24	CLA	B	604	65/65	0.90	0.88	18,22,31,35	0
24	CLA	c	909	65/65	0.90	0.59	27,29,57,60	0
24	CLA	B	603	65/65	0.91	1.10	23,26,32,32	0
24	CLA	c	911	65/65	0.91	0.68	26,30,39,40	0
24	CLA	B	610	65/65	0.91	0.80	23,28,31,32	0
29	LHG	B	621	49/49	0.91	0.31	23,31,43,44	0
22	CL	A	604	1/1	0.91	0.33	21,21,21,21	0
24	CLA	C	502	65/65	0.91	0.65	24,26,39,42	0
24	CLA	B	605	65/65	0.91	0.49	19,22,50,51	0
24	CLA	b	609	65/65	0.92	1.10	22,27,38,39	0
24	CLA	b	610	65/65	0.92	0.93	28,31,33,36	0
24	CLA	B	614	65/65	0.92	0.33	19,22,45,47	0
32	HEM	e	101	43/43	0.92	0.41	43,46,52,55	0
24	CLA	C	505	65/65	0.93	0.78	28,30,44,45	0
32	HEM	v	202	43/43	0.93	0.57	28,31,34,36	0
20	OEX	A	601	10/10	0.93	0.34	22,23,26,26	0
32	HEM	E	101	43/43	0.93	0.67	39,42,45,47	0

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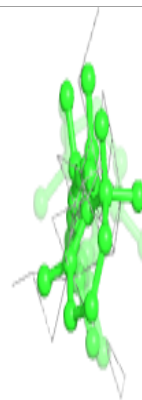
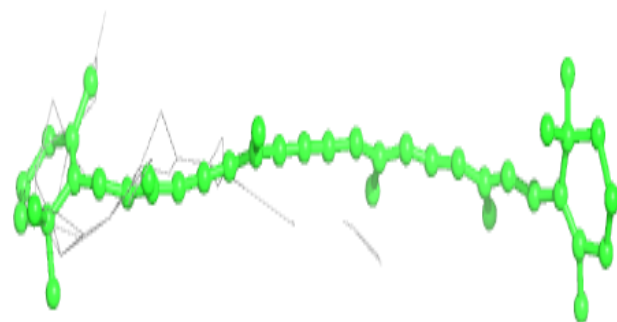
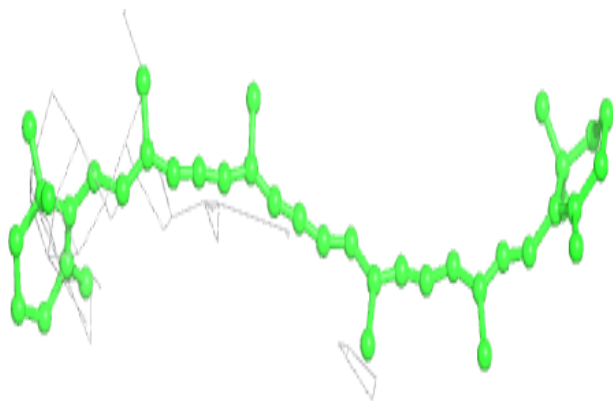
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
24	CLA	C	511	65/65	0.93	0.96	29,34,37,38	0
22	CL	a	405	1/1	0.94	0.26	26,26,26,26	0
21	FE2	a	403	1/1	0.95	0.22	27,27,27,27	0
24	CLA	b	604	65/65	0.95	1.07	23,26,35,38	0
20	OEX	a	401	10/10	0.95	0.35	25,27,28,28	0
23	BCT	A	605	4/4	0.95	0.44	39,39,40,42	0
30	CA	o	301	1/1	0.95	0.09	51,51,51,51	0
23	BCT	a	414	4/4	0.97	0.96	34,34,35,37	0
21	FE2	A	602	1/1	0.99	0.10	26,26,26,26	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.

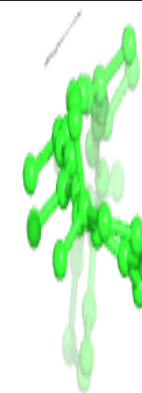
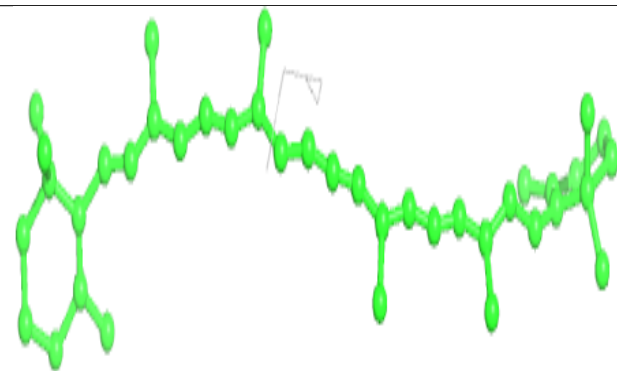
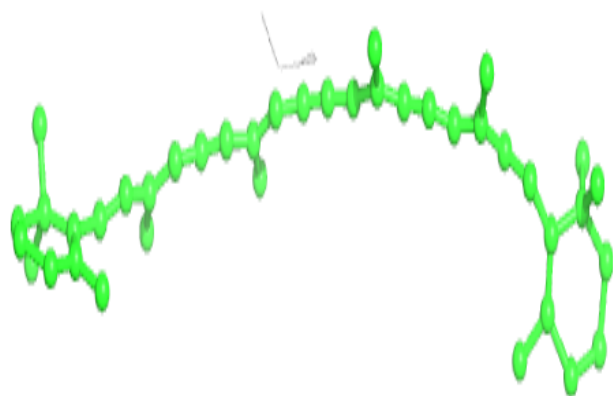


**Electron density around BCR k 101:**

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

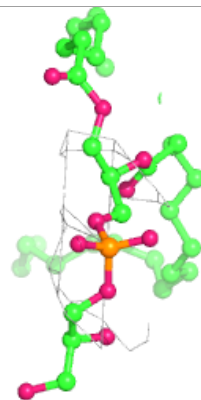
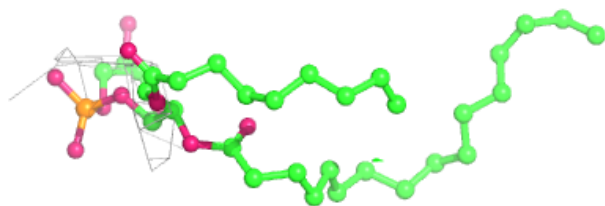
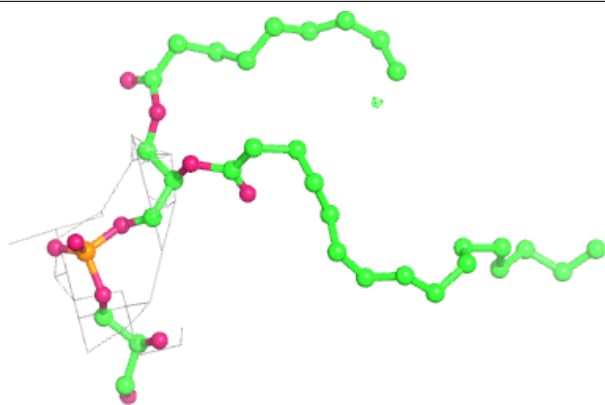
**Electron density around BCR f 101:**

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

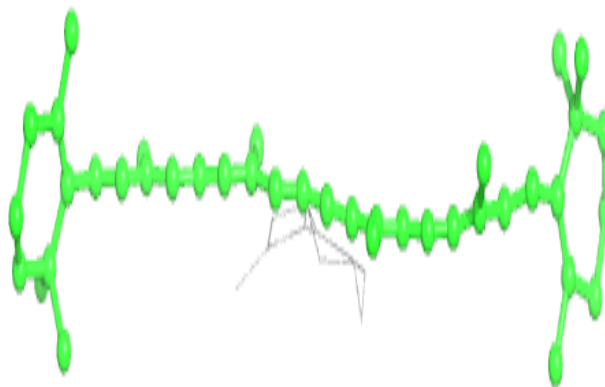
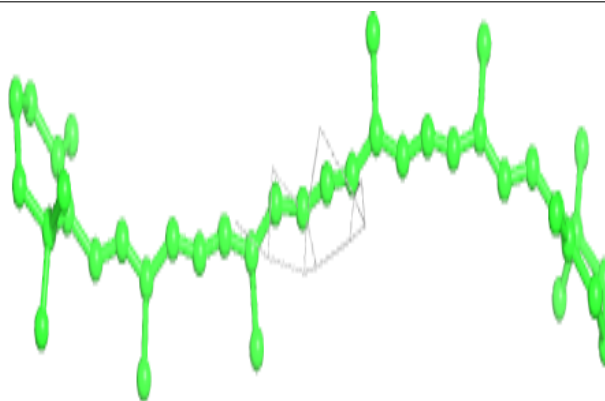


**Electron density around LHG a 413:**

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

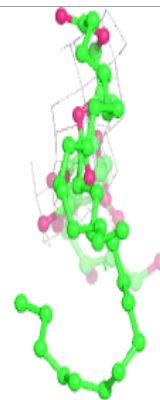
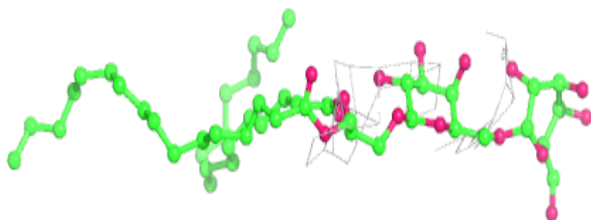
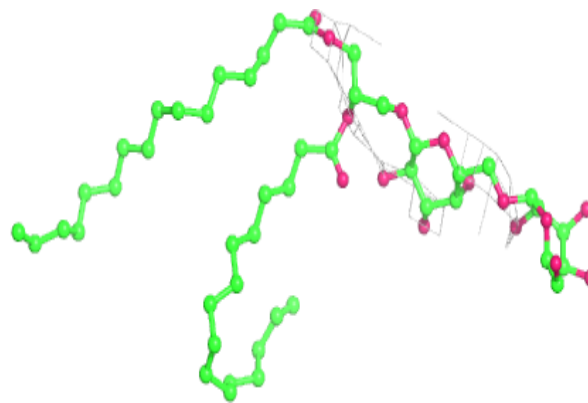
**Electron density around BCR a 409:**

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

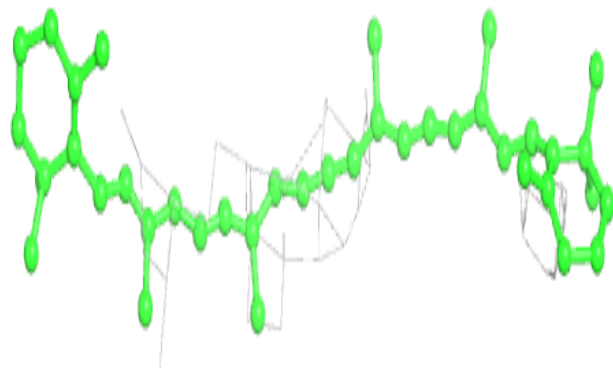
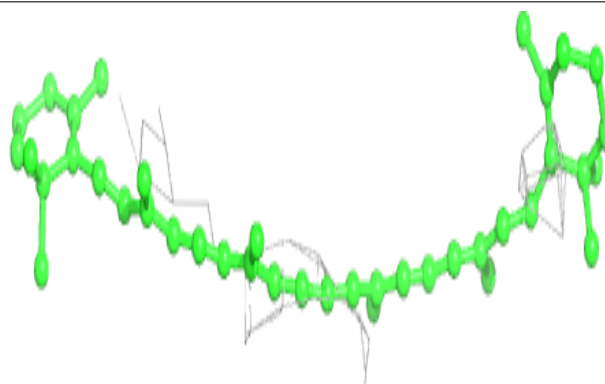


**Electron density around DGD D 406:**

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

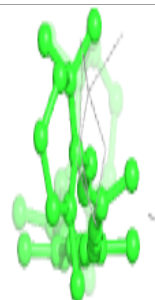
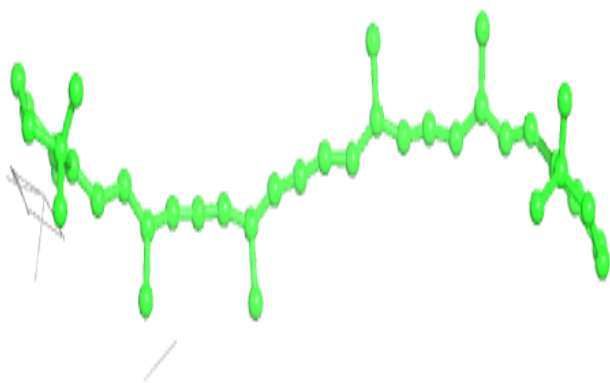
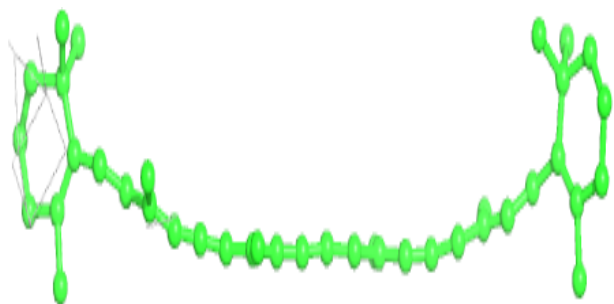
**Electron density around BCR D 404:**

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

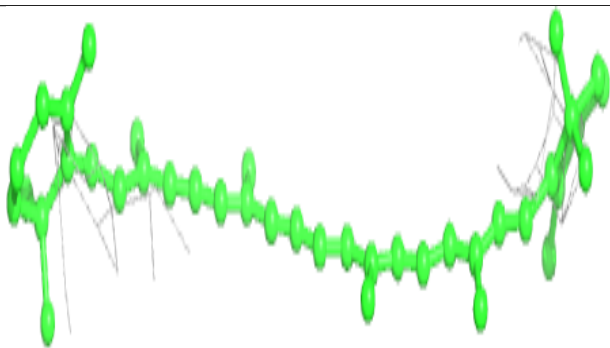
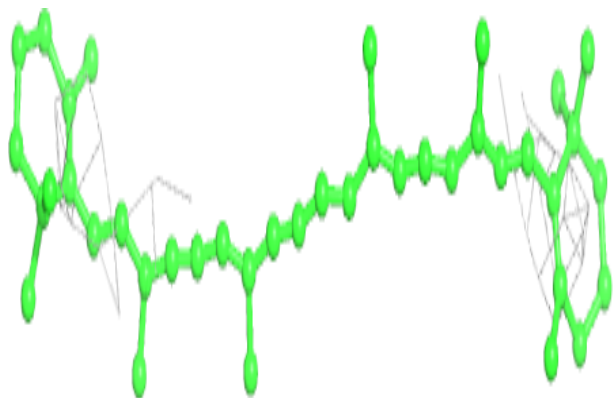


**Electron density around BCR k 102:**

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

**Electron density around BCR b 619:**

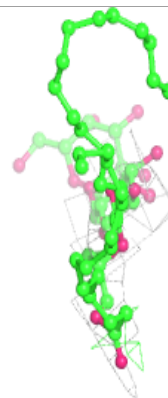
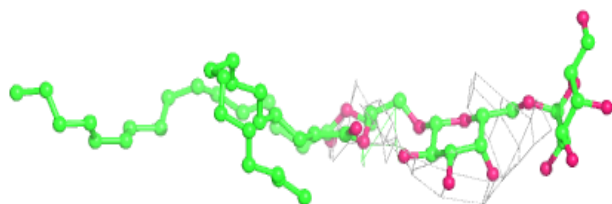
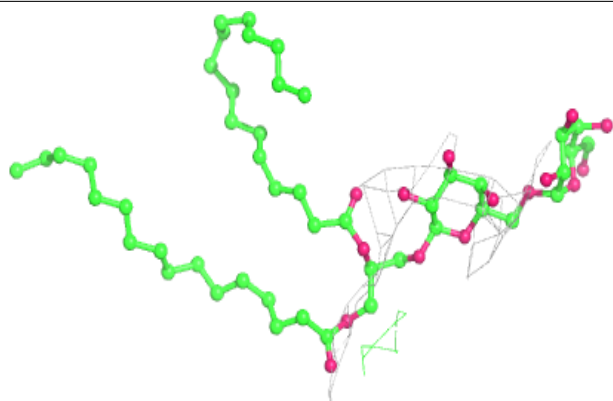
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



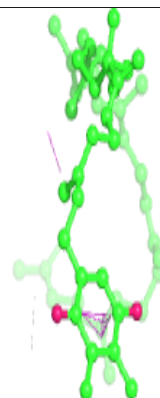
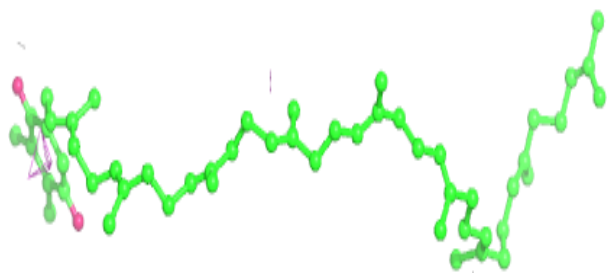
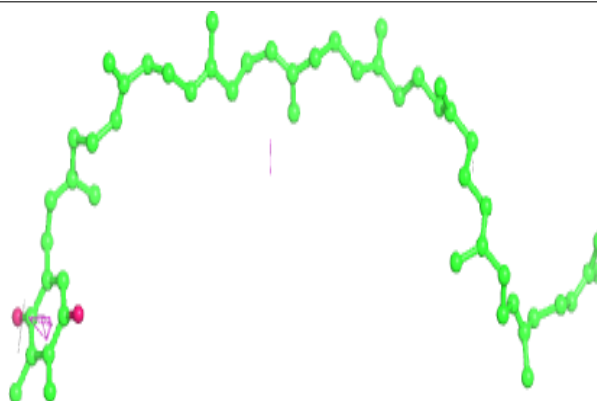


**Electron density around DGD d 406:**

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

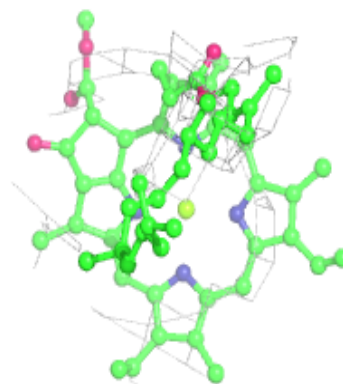
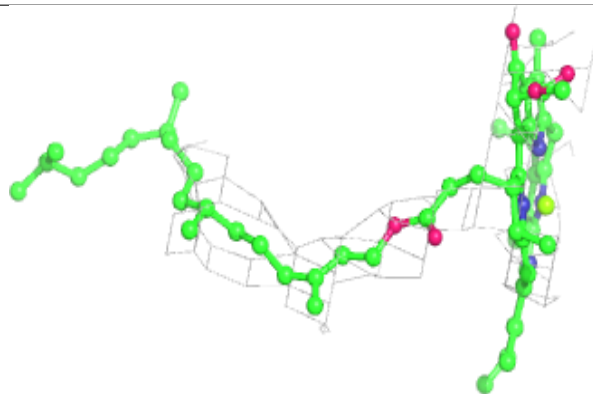
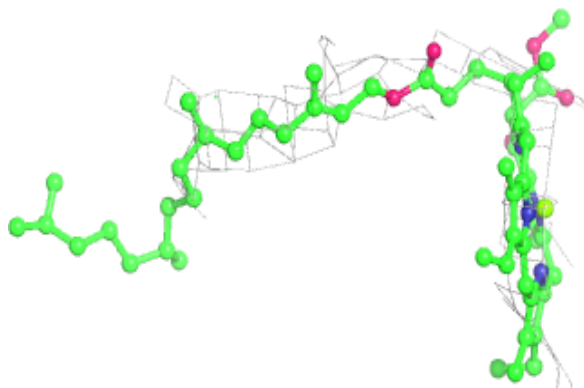
**Electron density around PL9 A 611:**

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



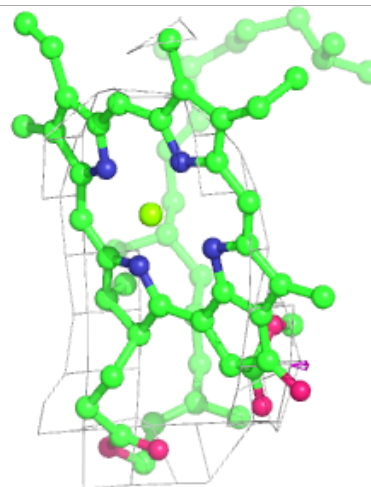
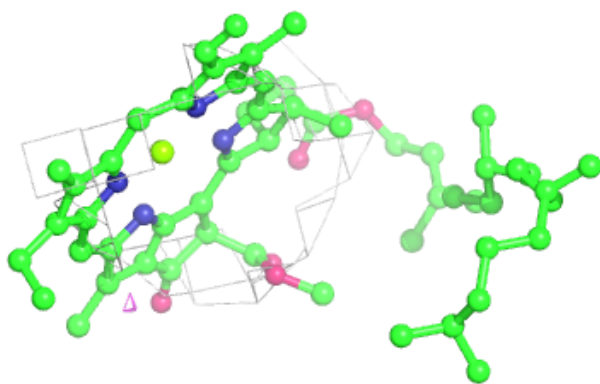
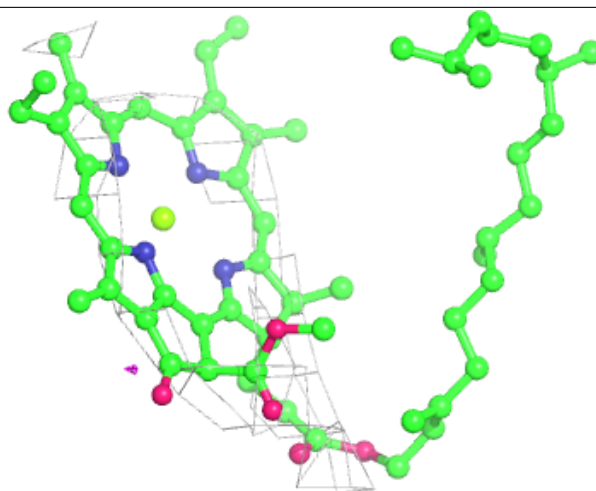
**Electron density around CLA b 607:**

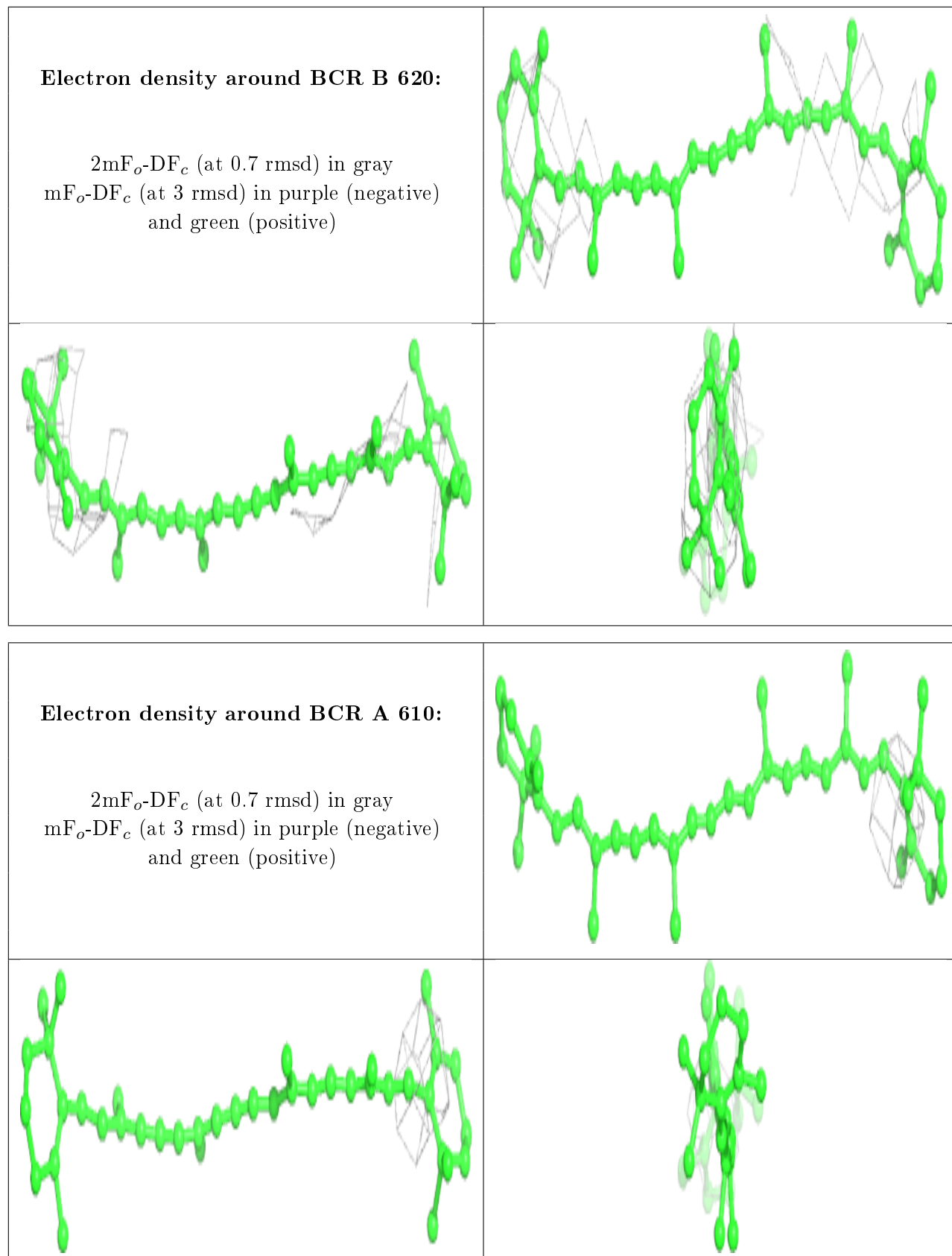
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

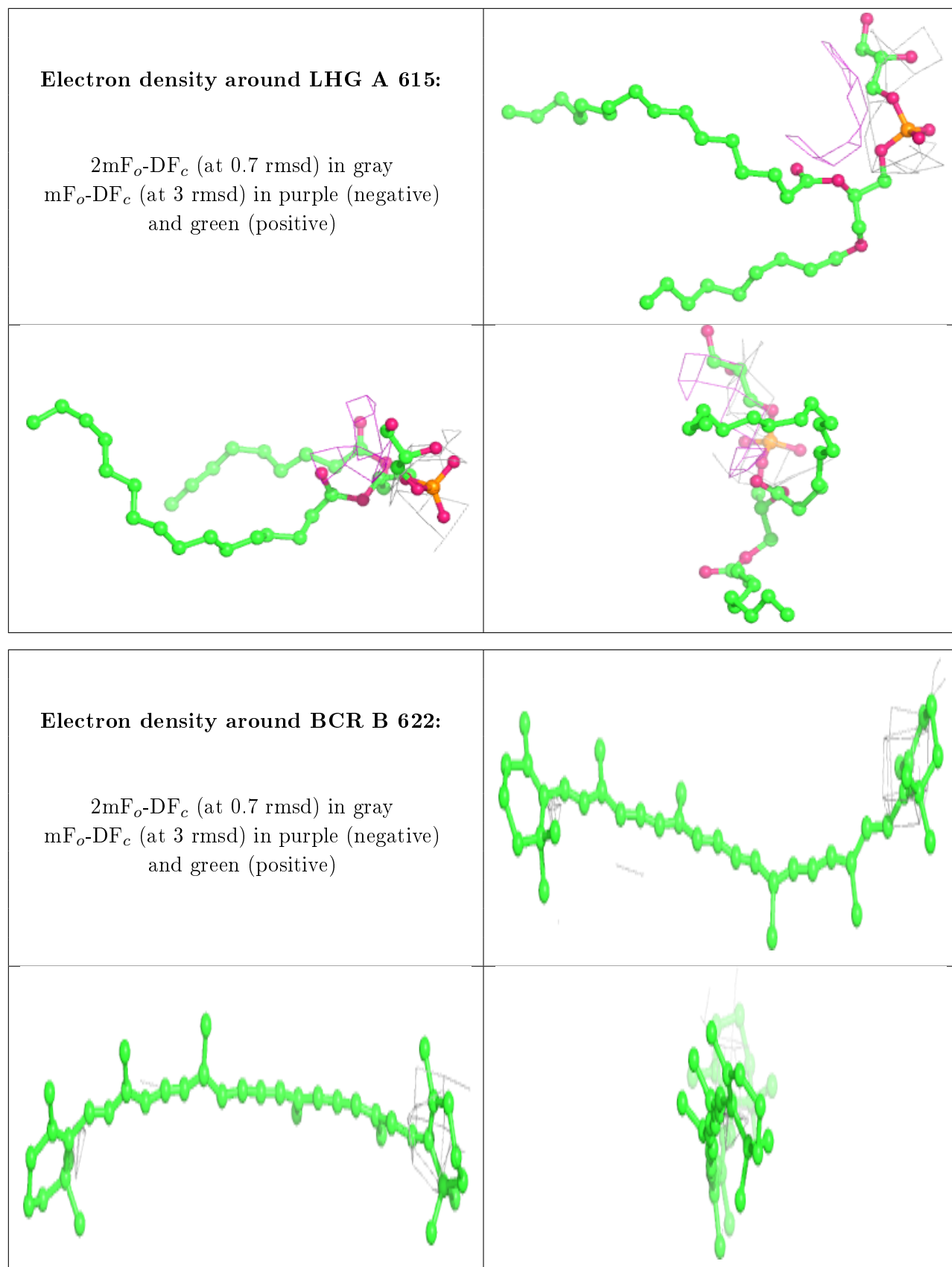


**Electron density around CLA b 617:**

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

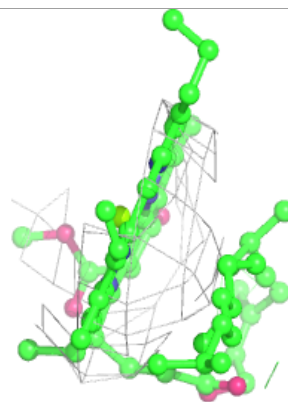
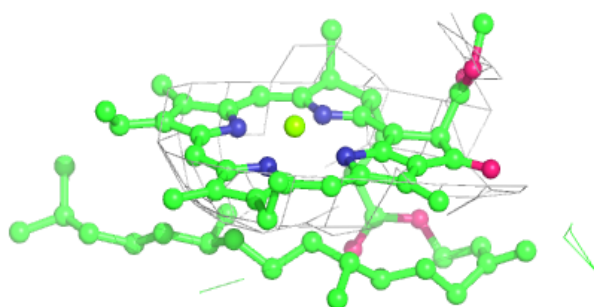
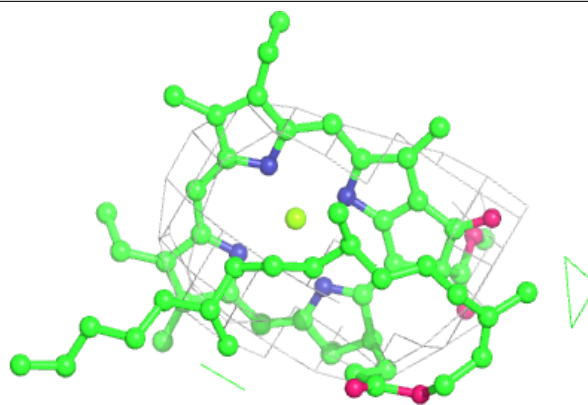




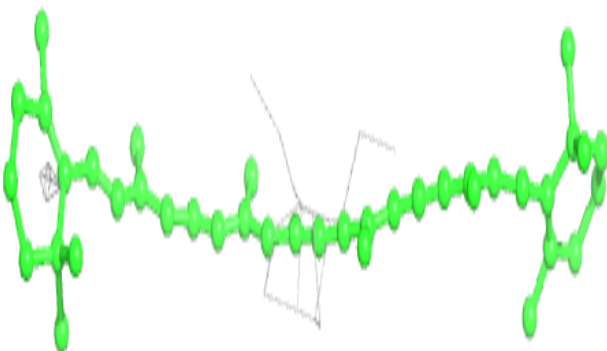
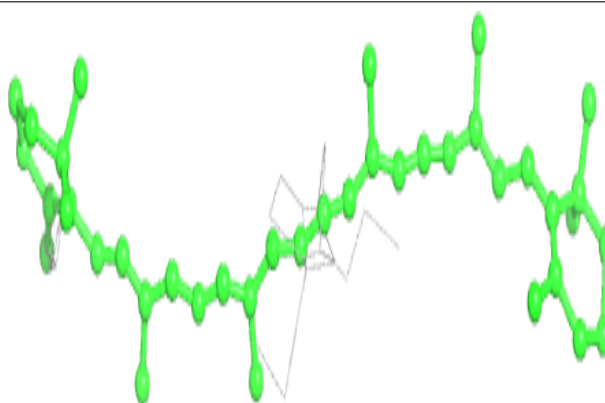


**Electron density around CLA B 602:**

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

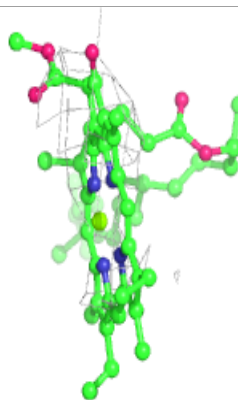
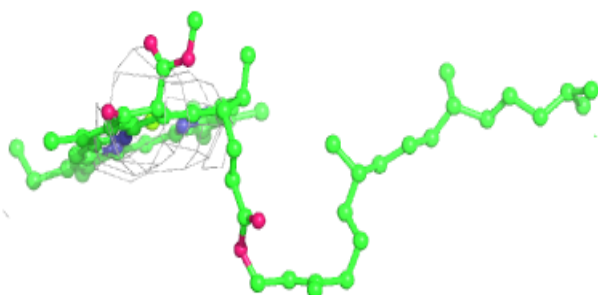
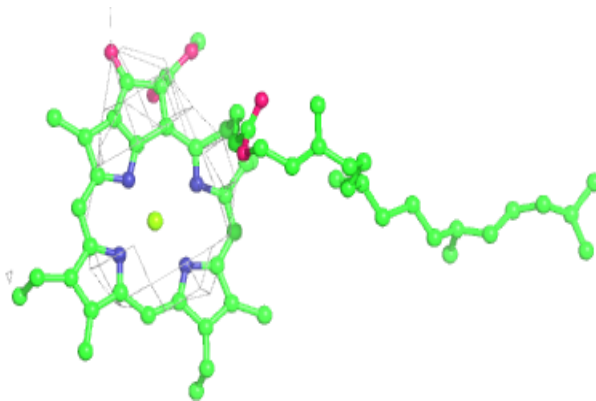
**Electron density around BCR Y 101:**

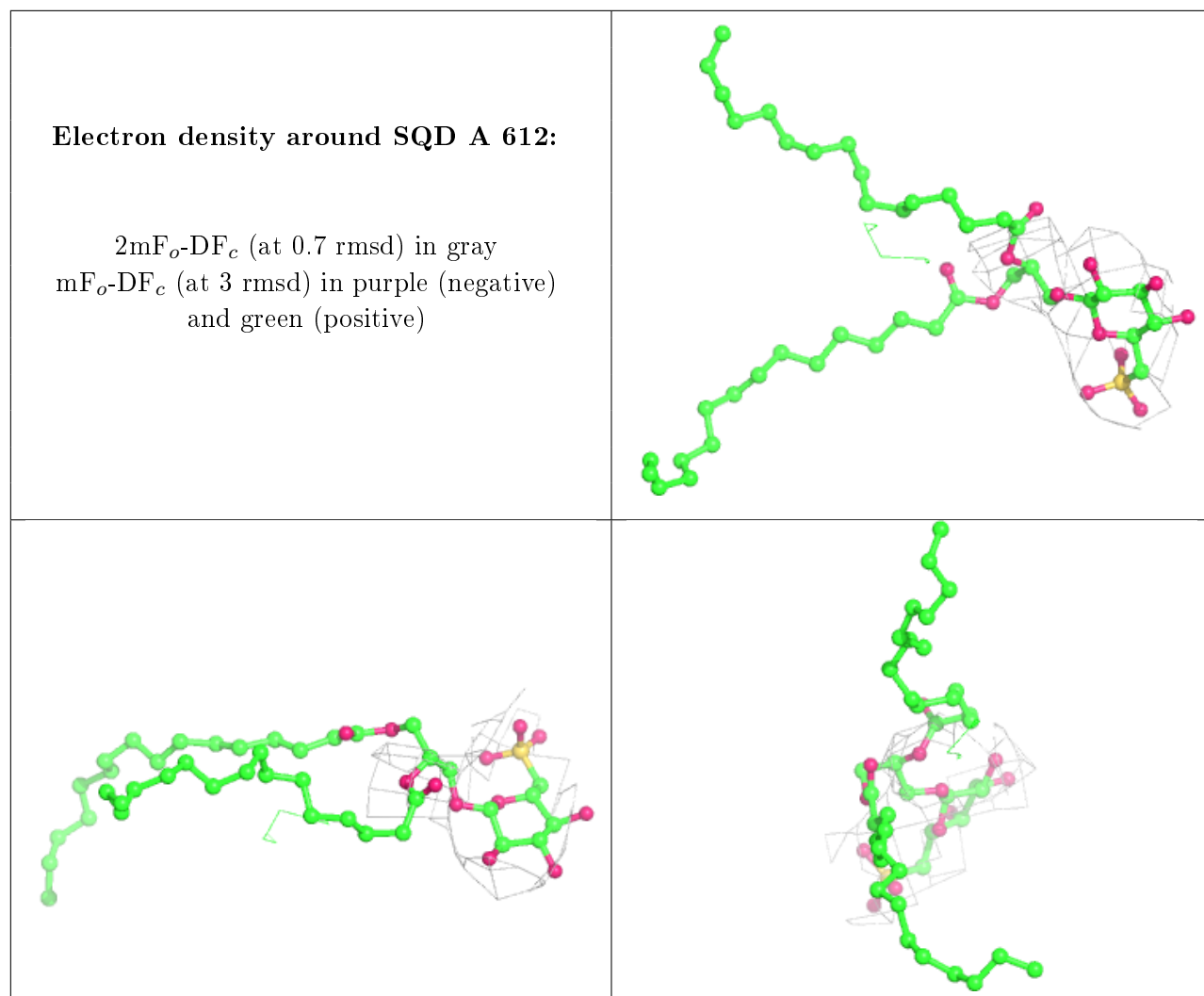
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA a 407:**

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

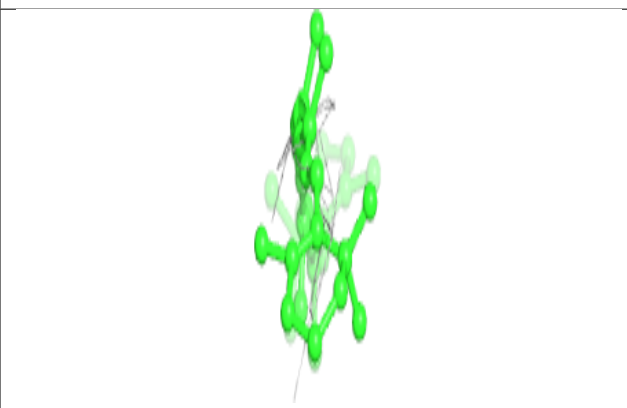
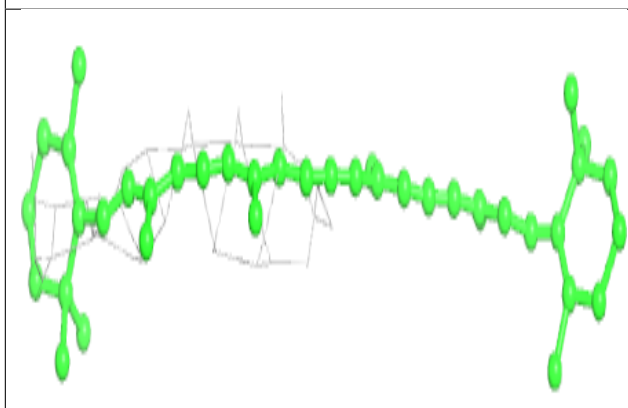
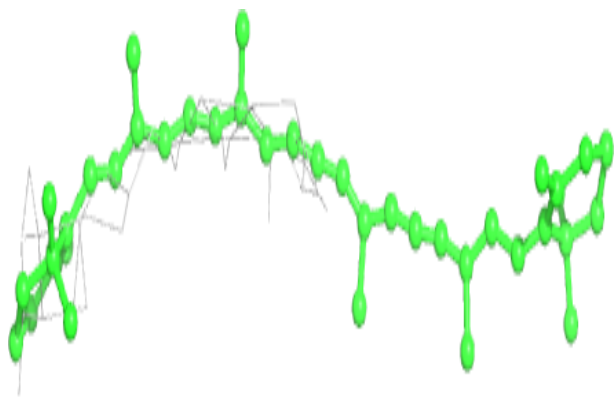




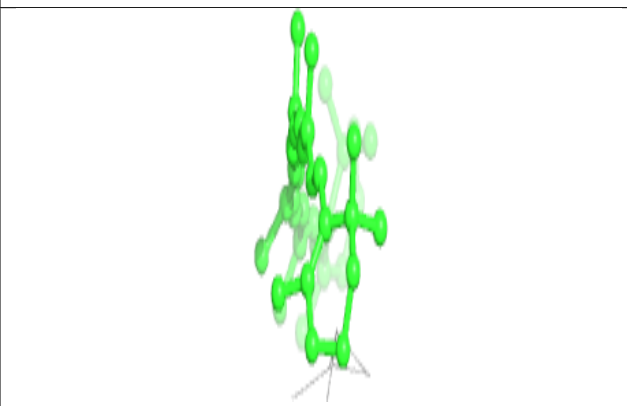
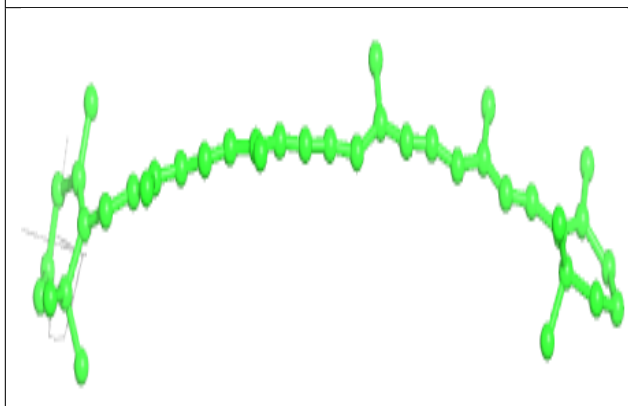
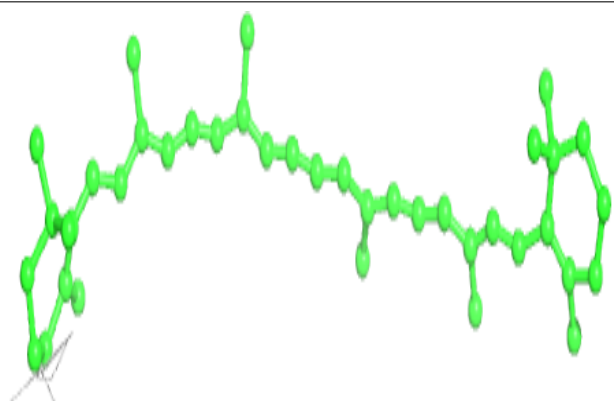


**Electron density around BCR H 101:**

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

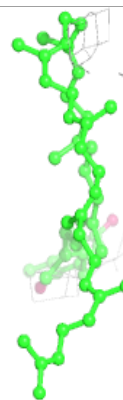
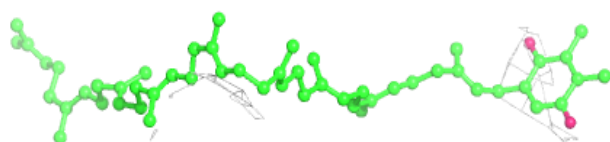
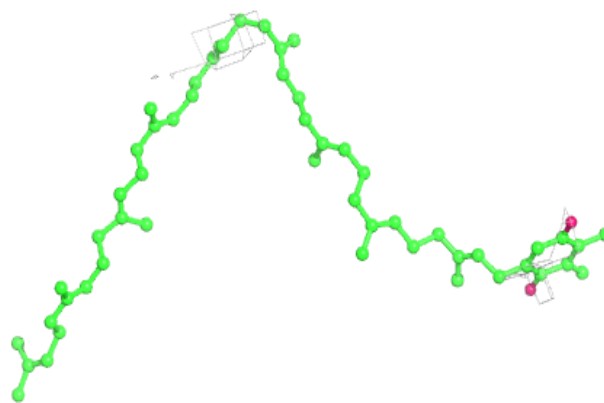
**Electron density around BCR T 101:**

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

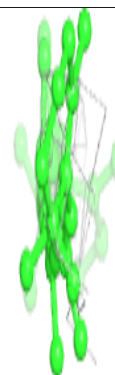
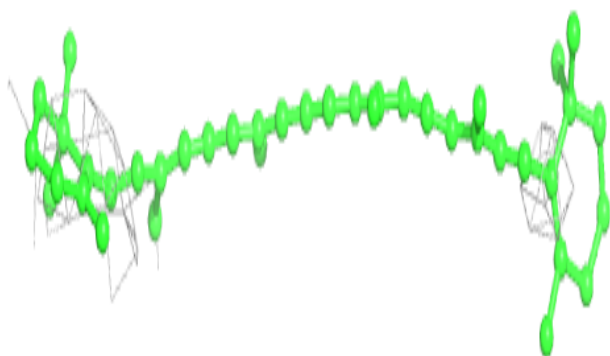
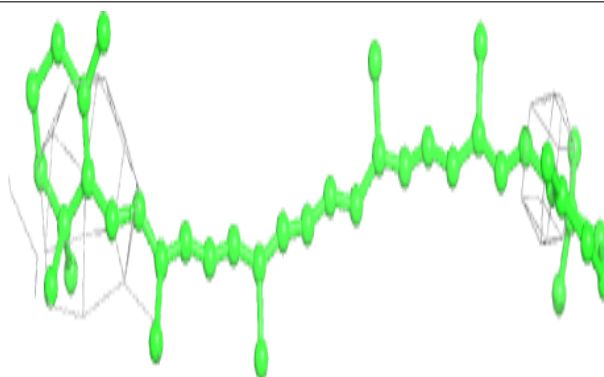


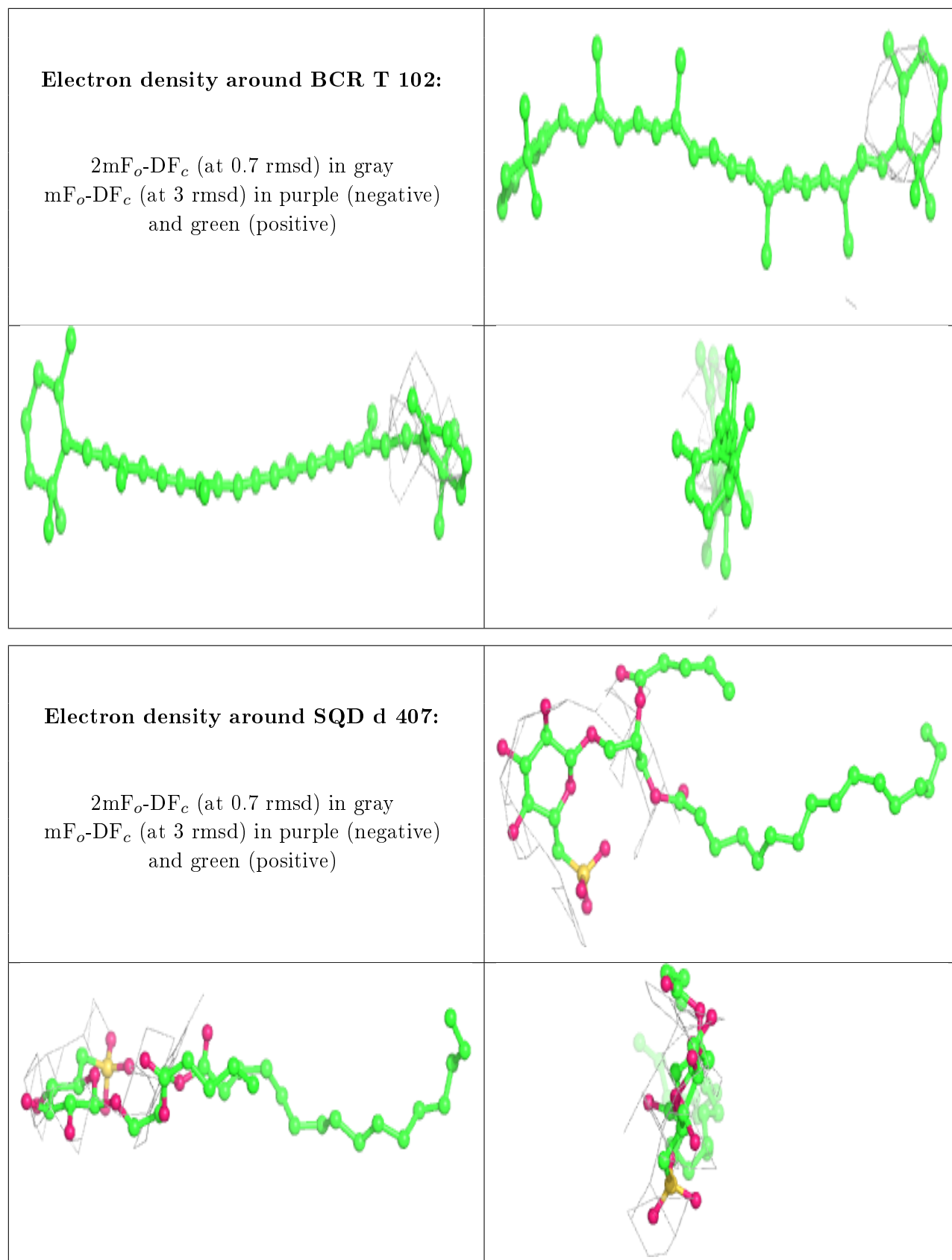
**Electron density around PL9 D 405:**

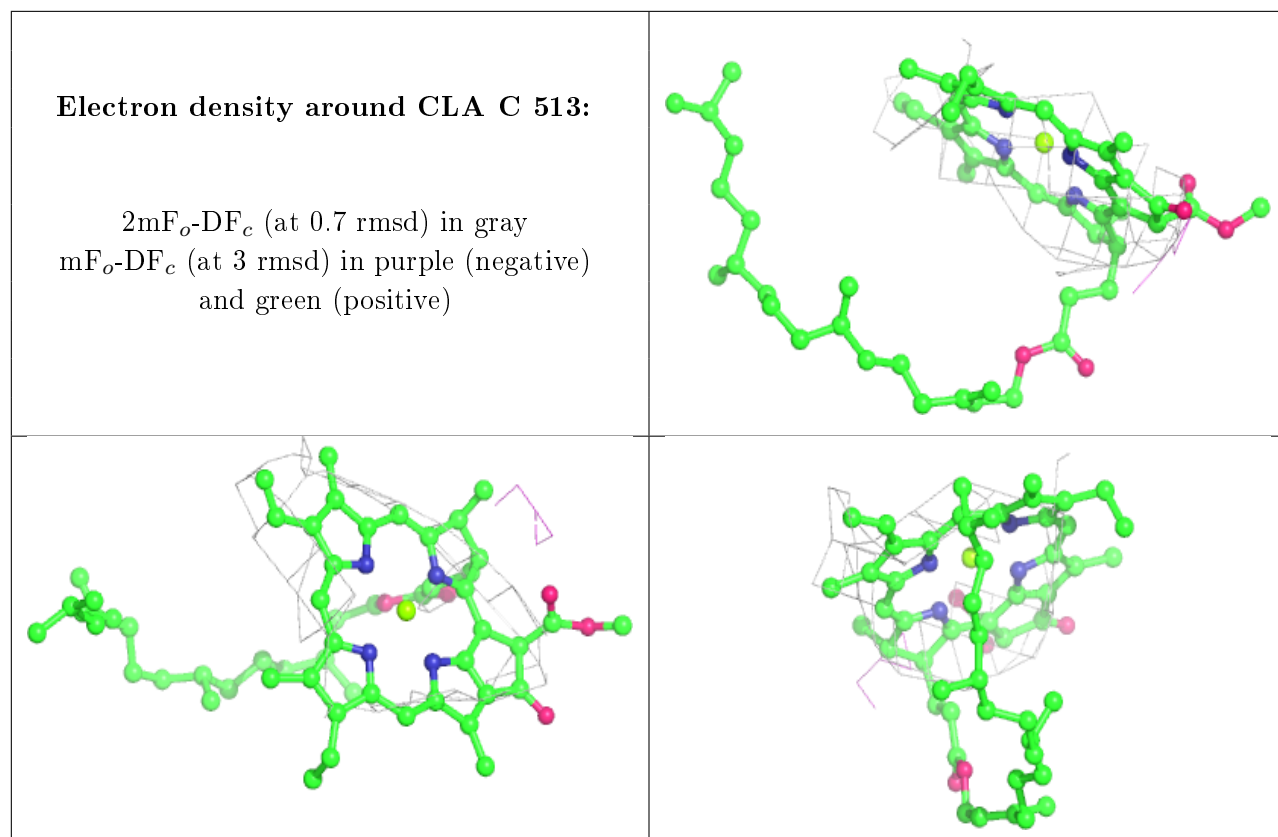
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around BCR B 618:**

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

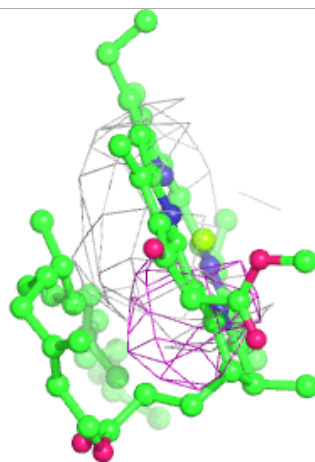
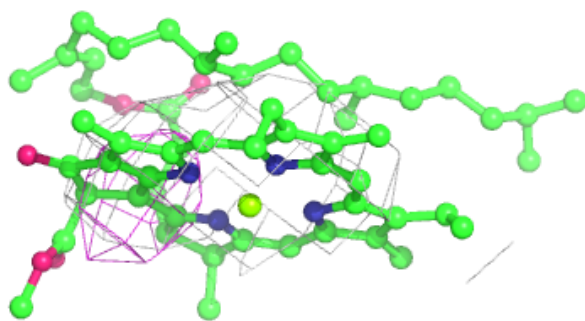
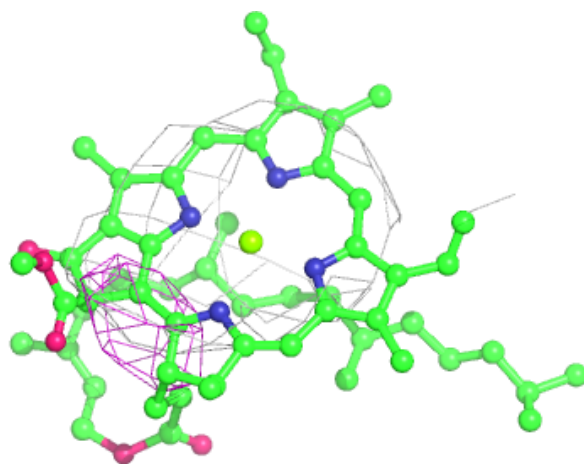


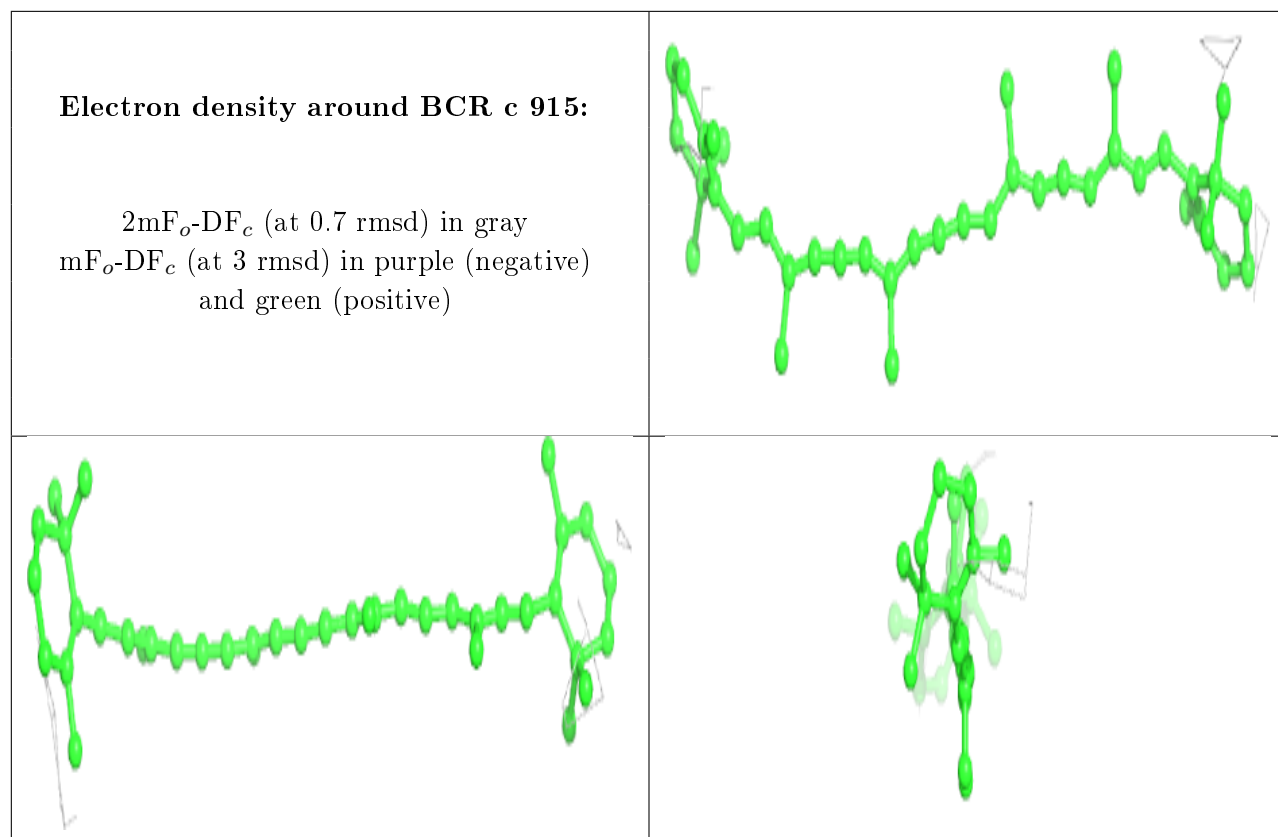




**Electron density around CLA b 602:**

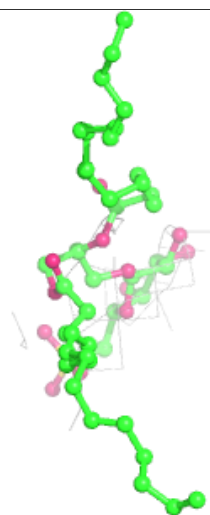
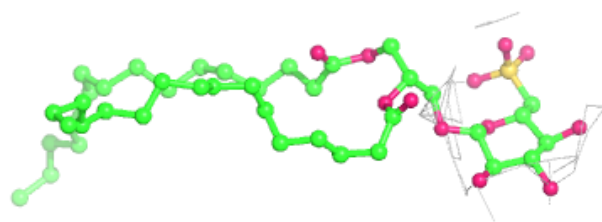
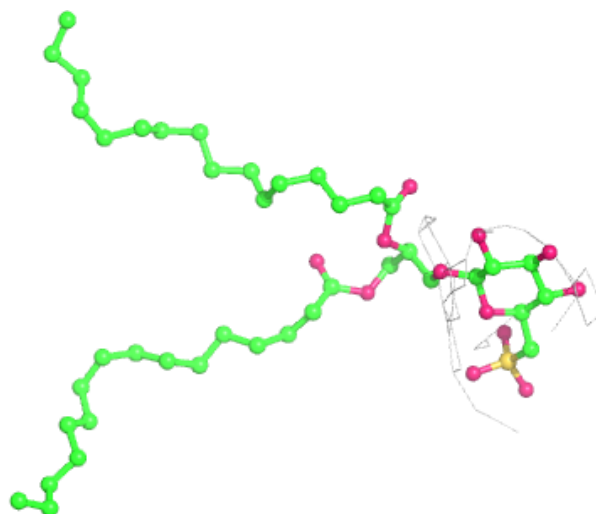
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





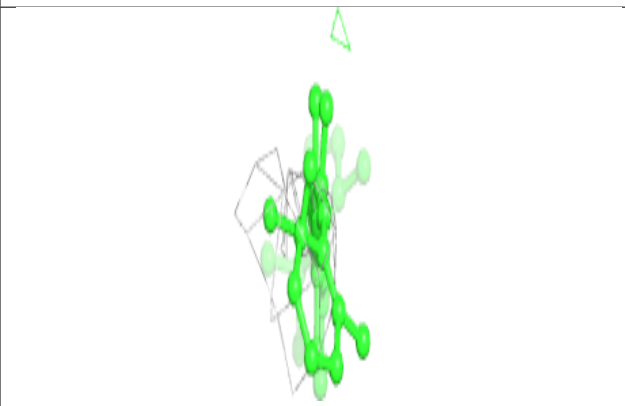
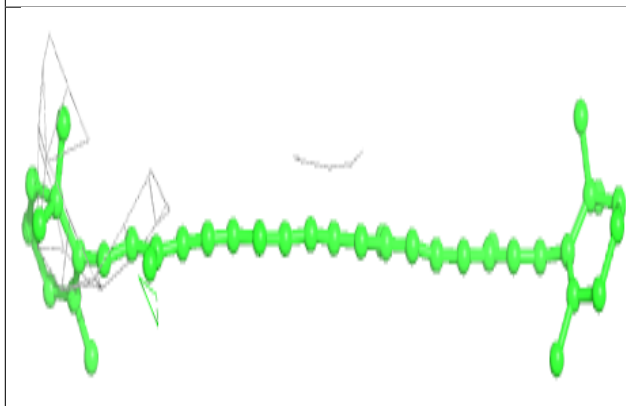
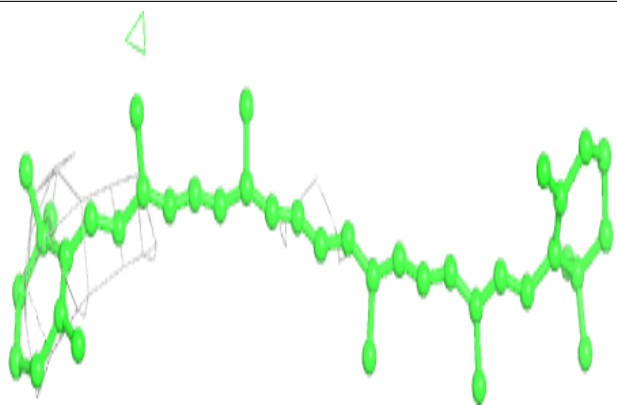
**Electron density around SQD a 411:**

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

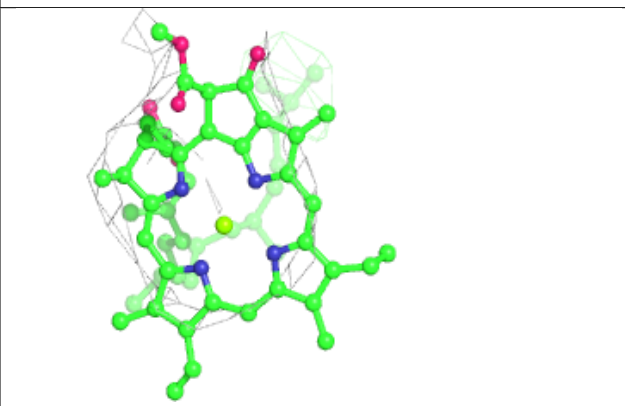
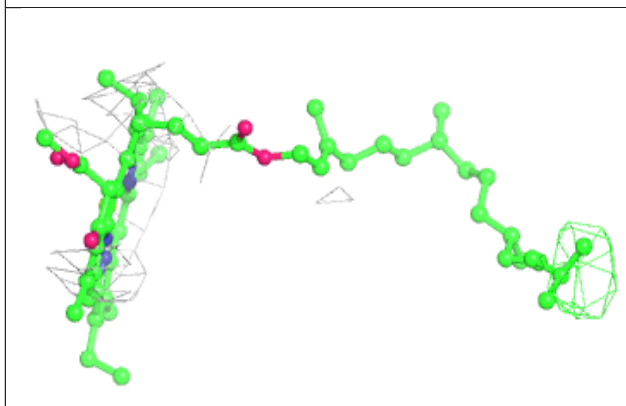
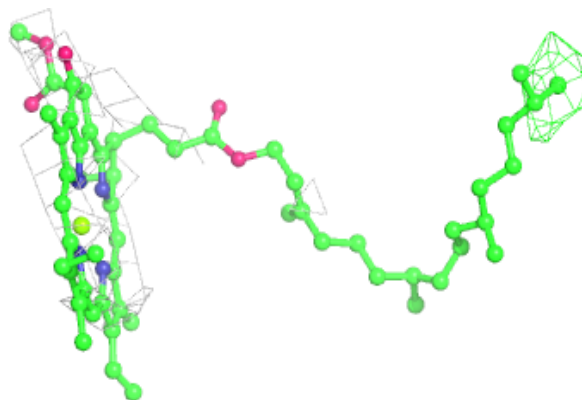


**Electron density around BCR b 618:**

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

**Electron density around CLA D 403:**

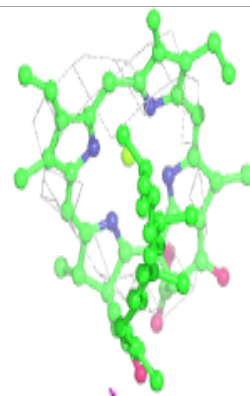
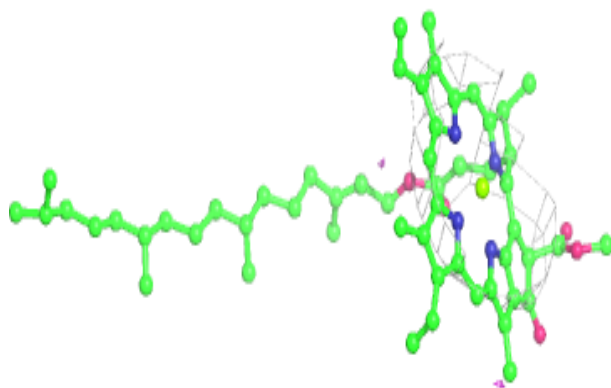
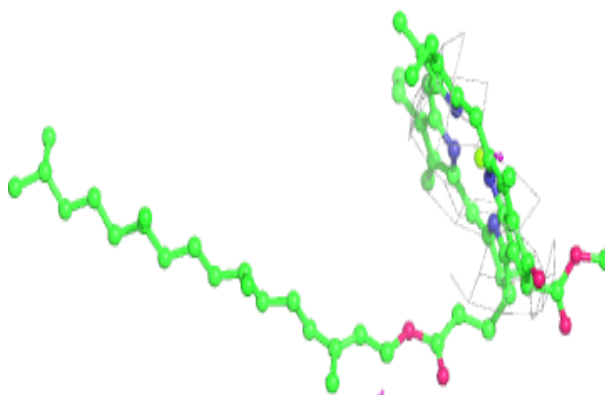
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



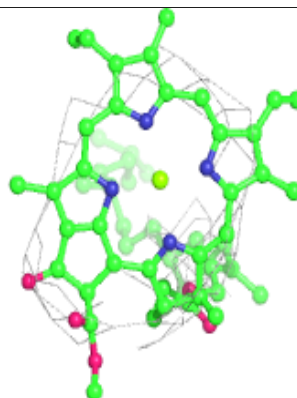
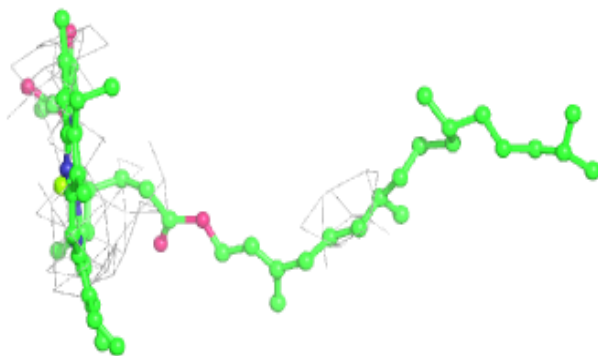
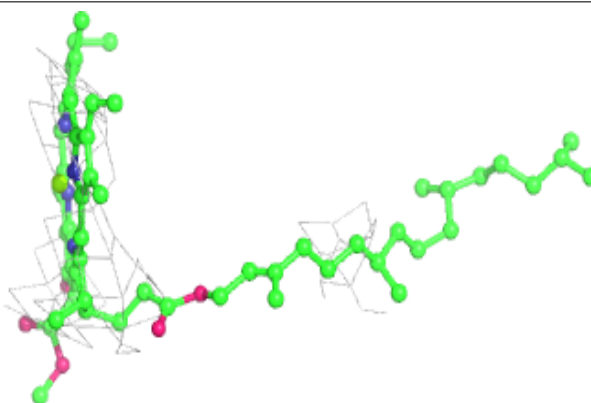


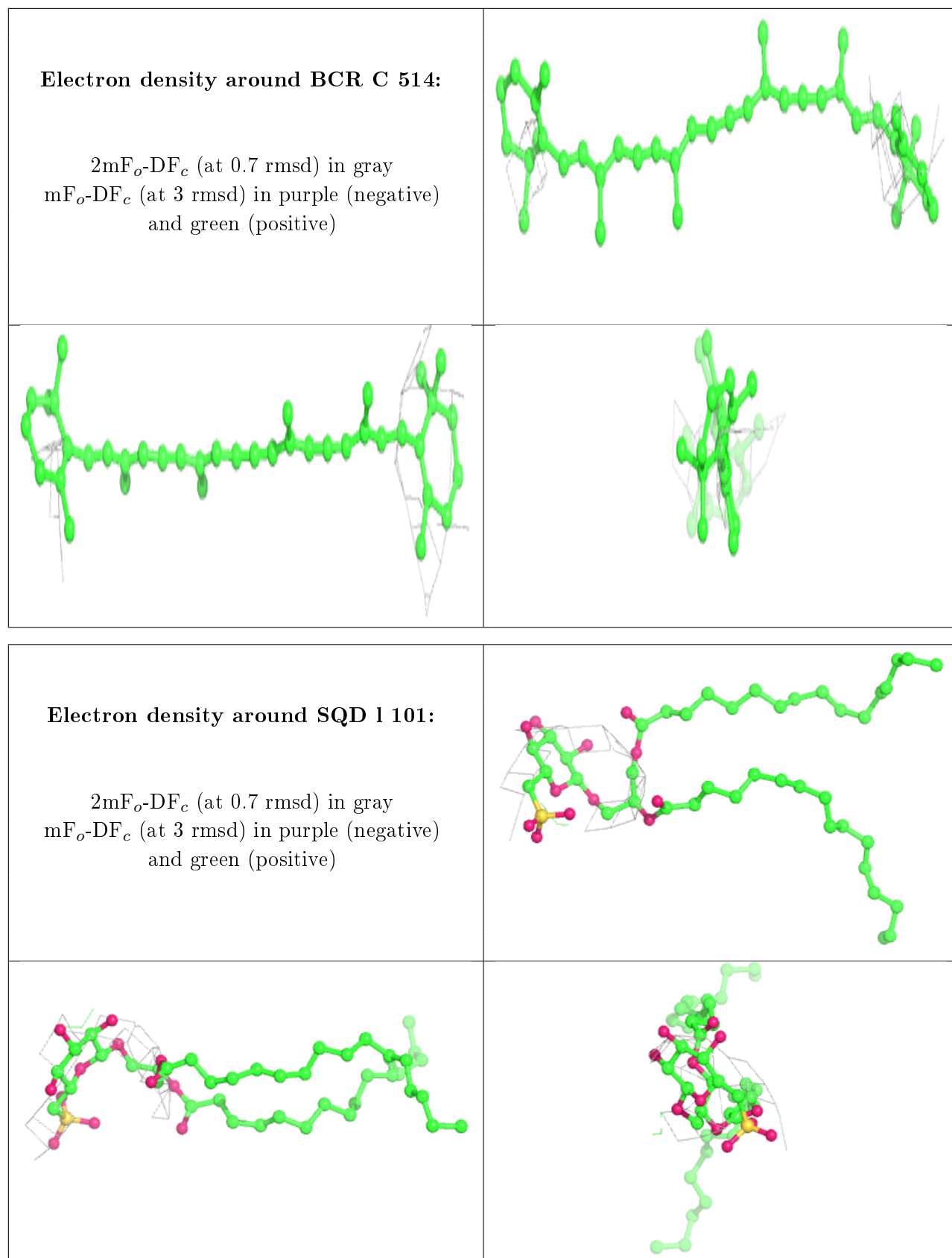
**Electron density around CLA b 608:**

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

**Electron density around CLA B 607:**

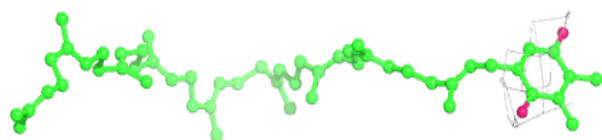
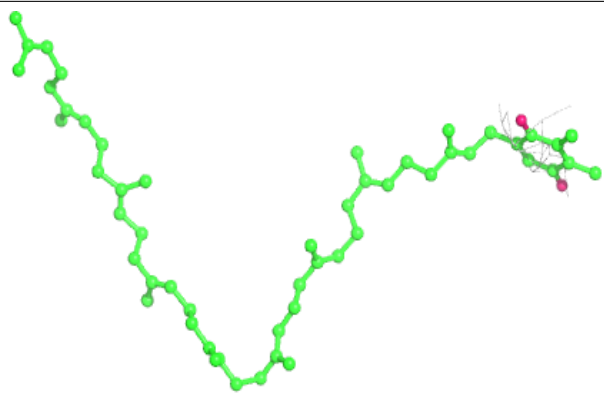
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



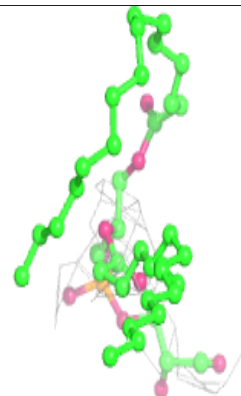
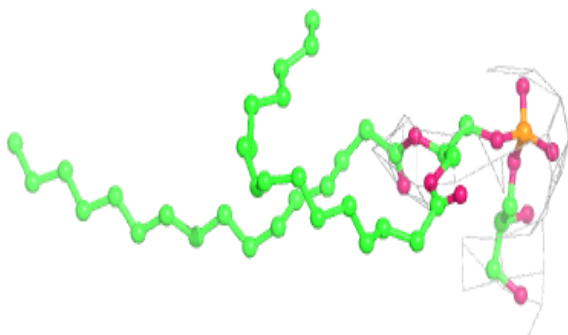
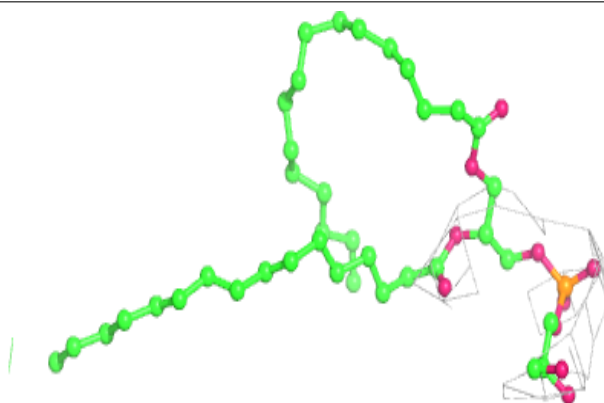


**Electron density around PL9 d 405:**

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

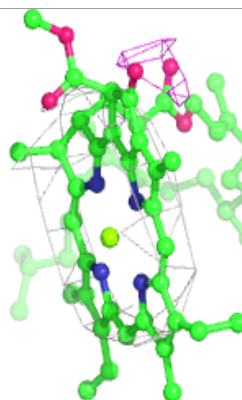
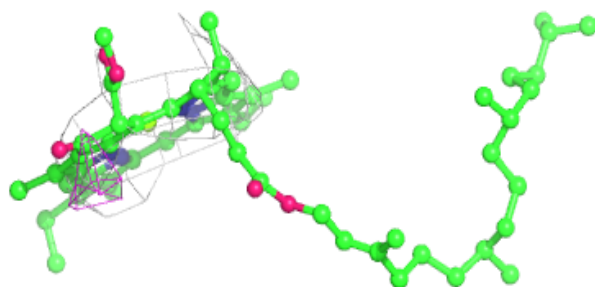
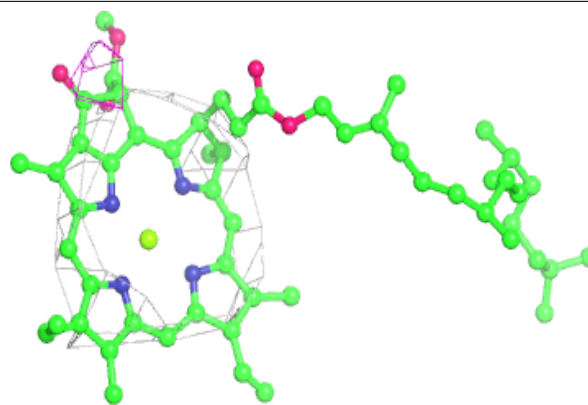
**Electron density around LHG D 407:**

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

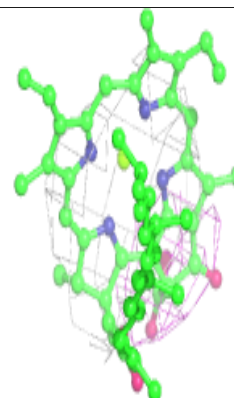
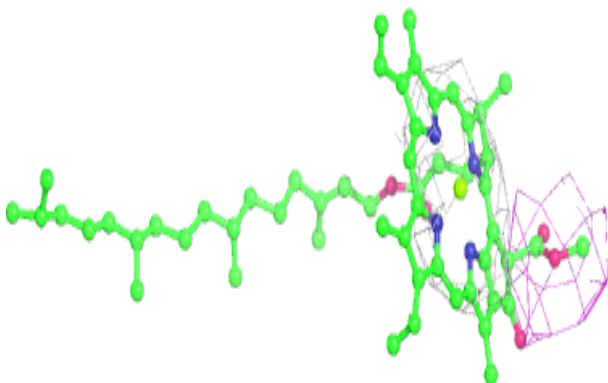
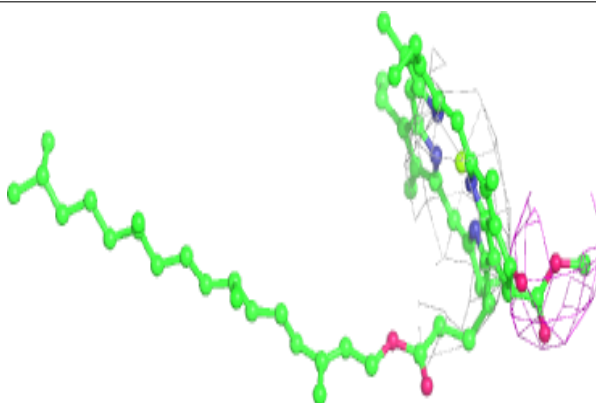


**Electron density around CLA a 408:**

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

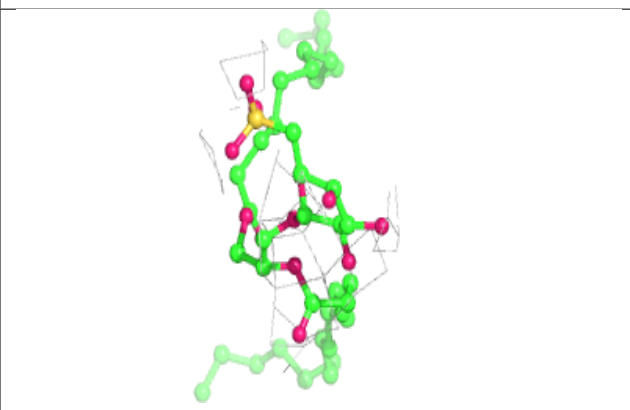
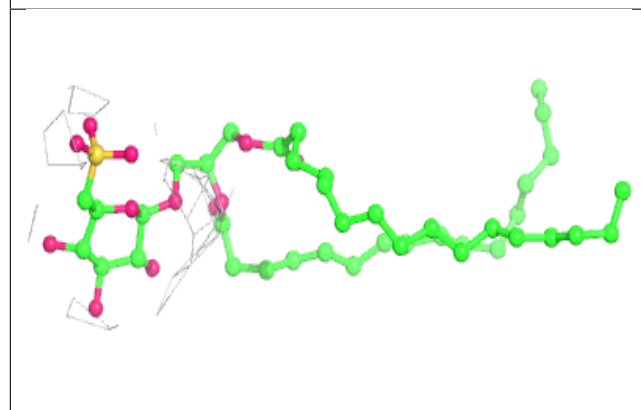
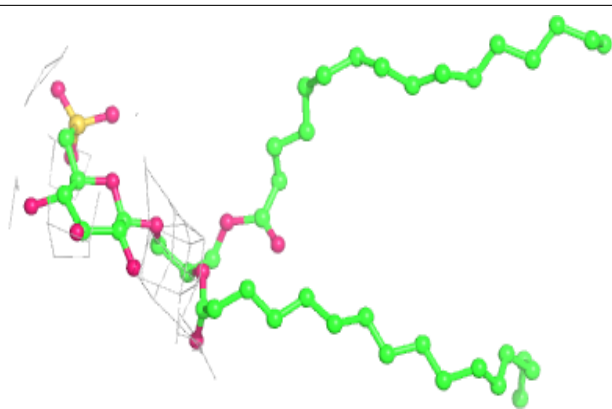
**Electron density around CLA B 608:**

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

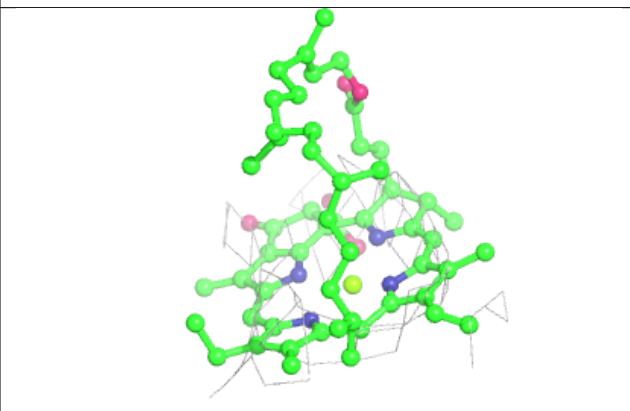
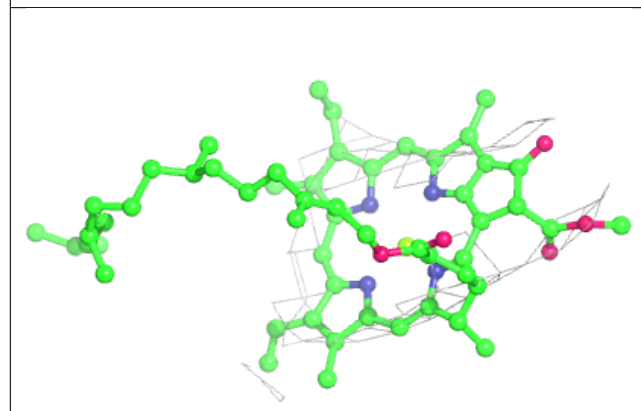
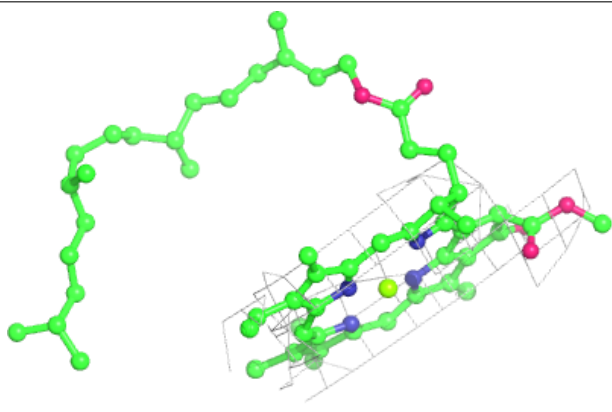


**Electron density around SQD A 613:**

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

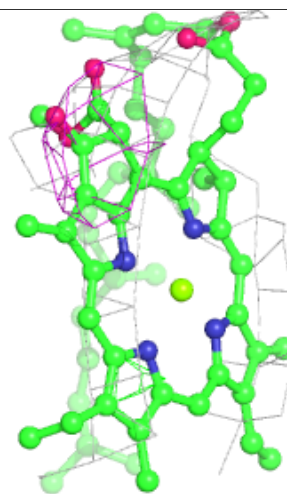
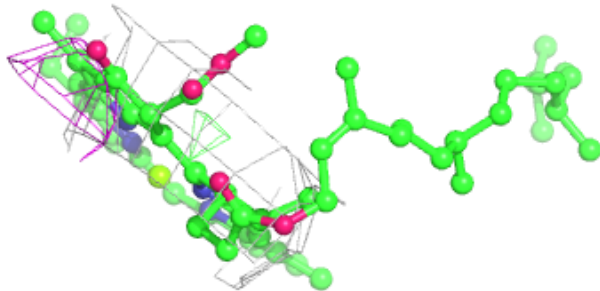
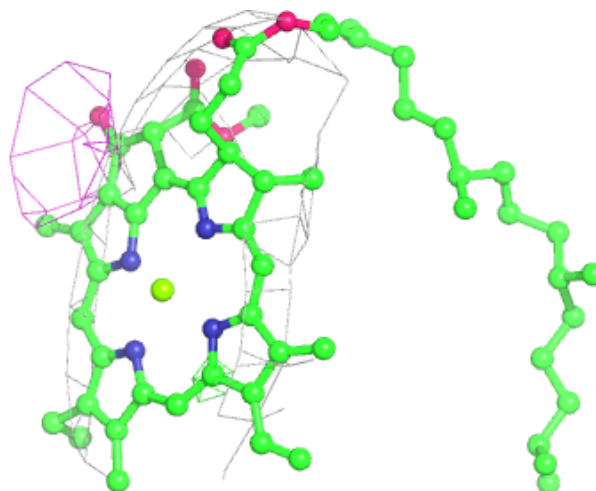
**Electron density around CLA c 914:**

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



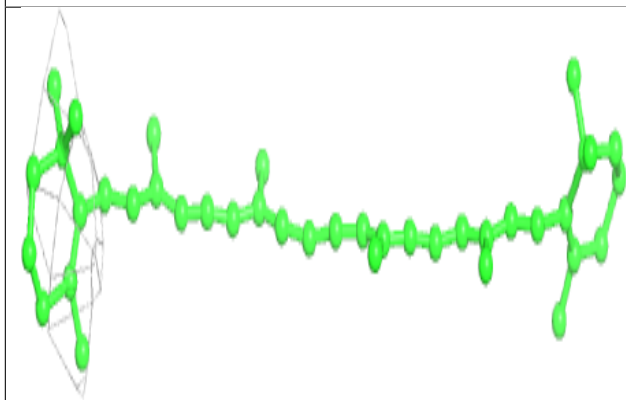
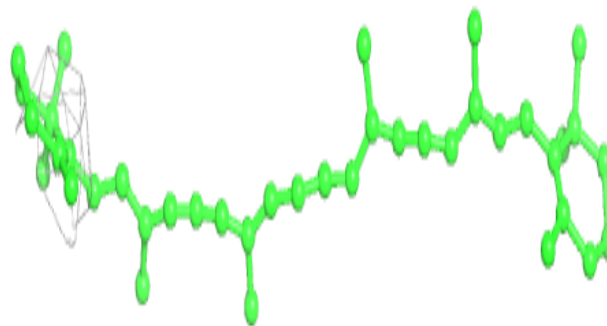
**Electron density around CLA B 617:**

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



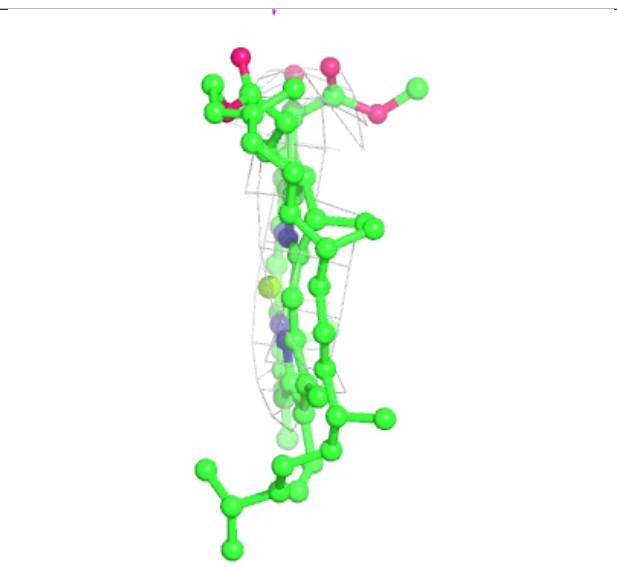
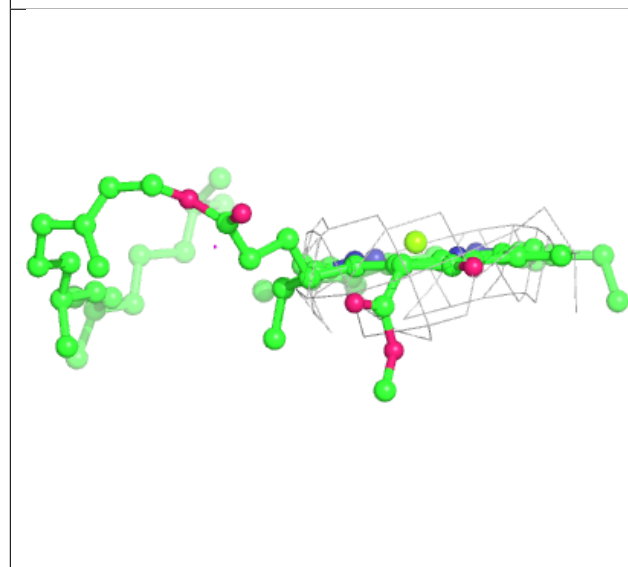
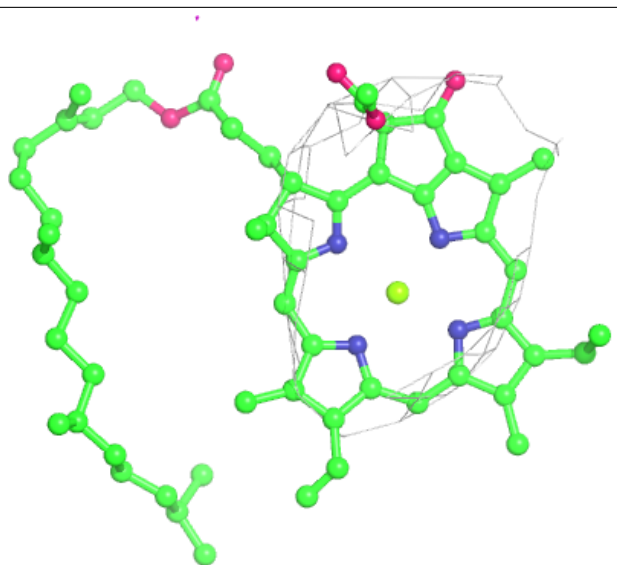
**Electron density around BCR c 918:**

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

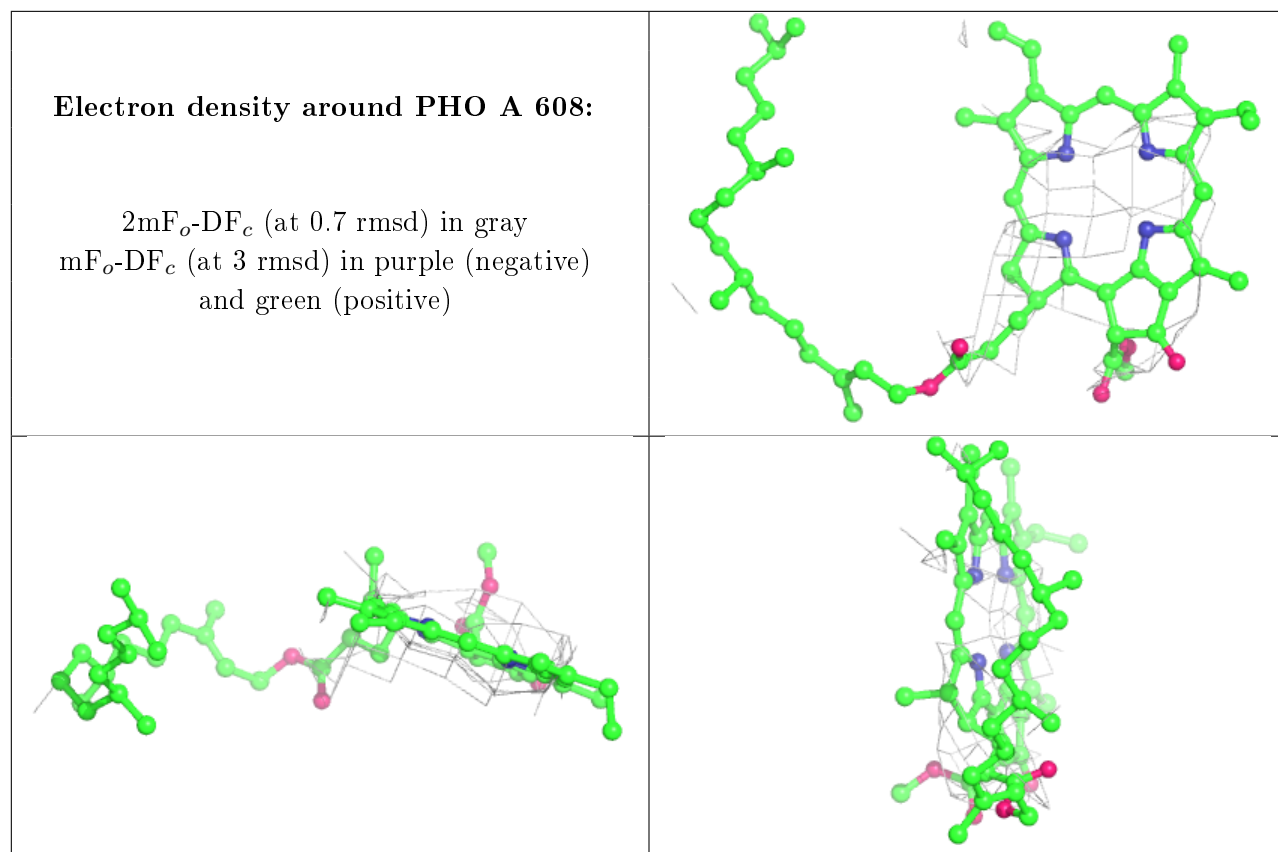


**Electron density around CLA C 512:**

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

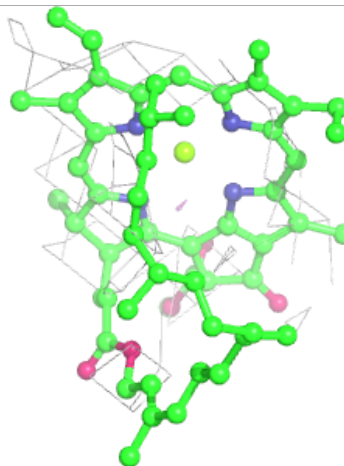
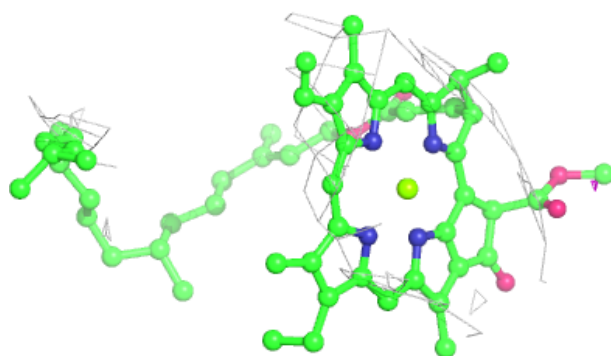
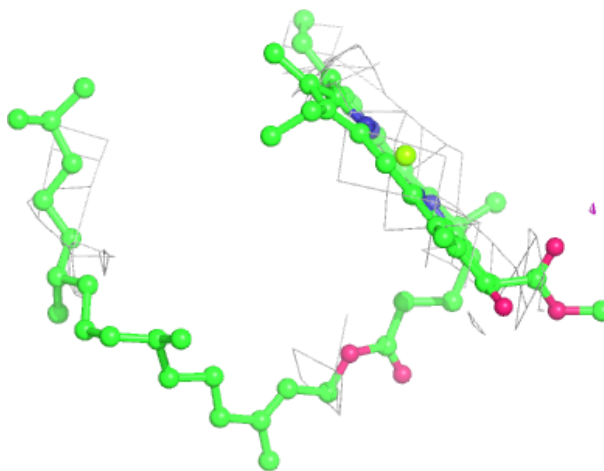






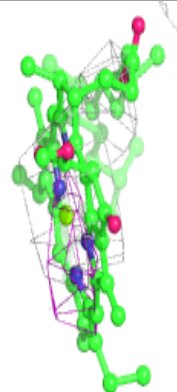
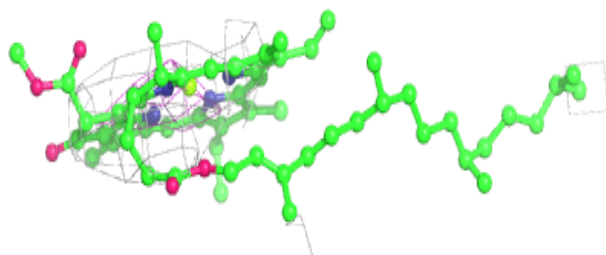
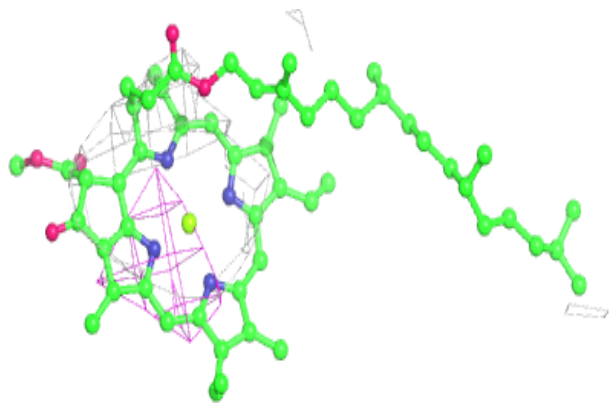
**Electron density around CLA b 612:**

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

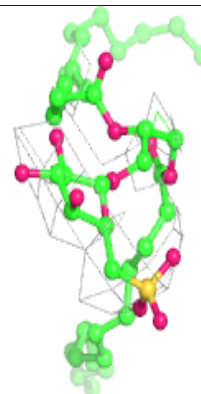
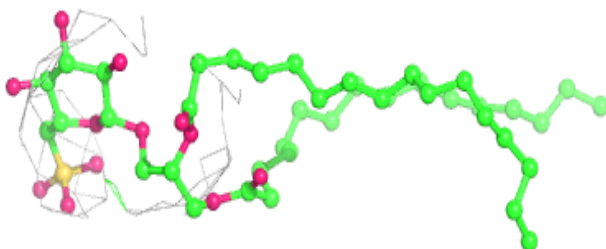
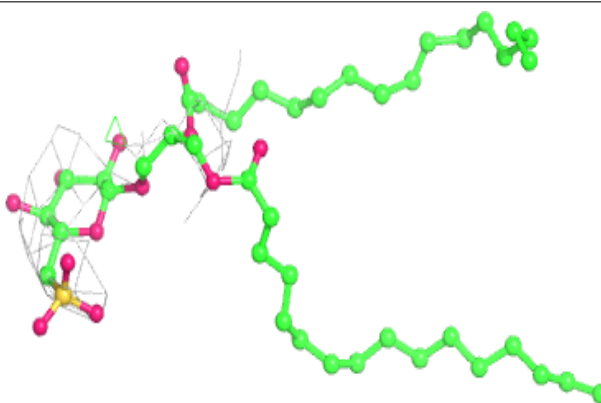


**Electron density around CLA c 902:**

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

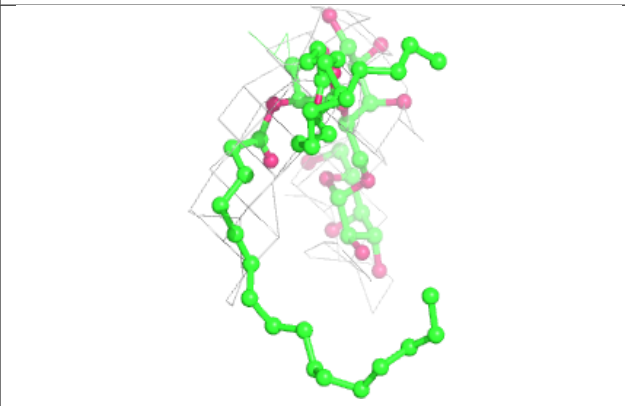
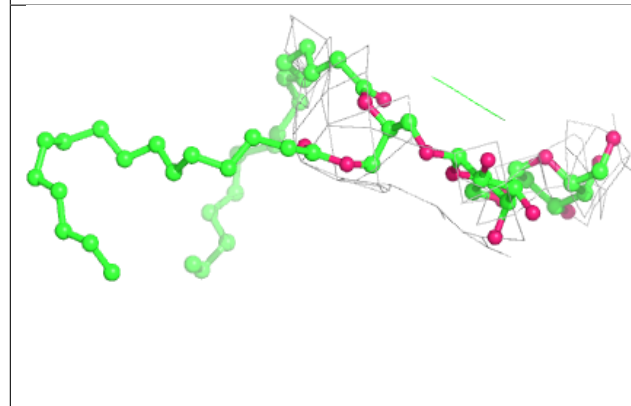
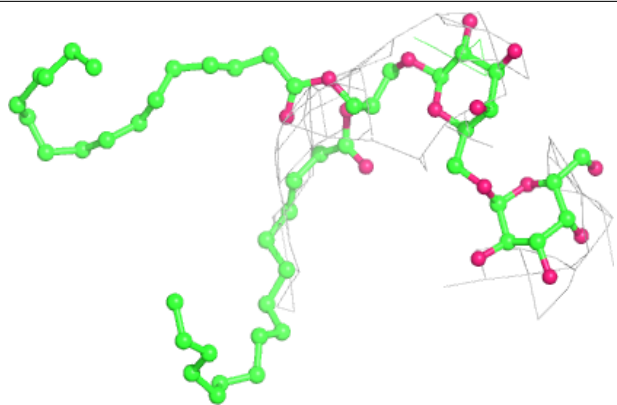
**Electron density around SQD a 402:**

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

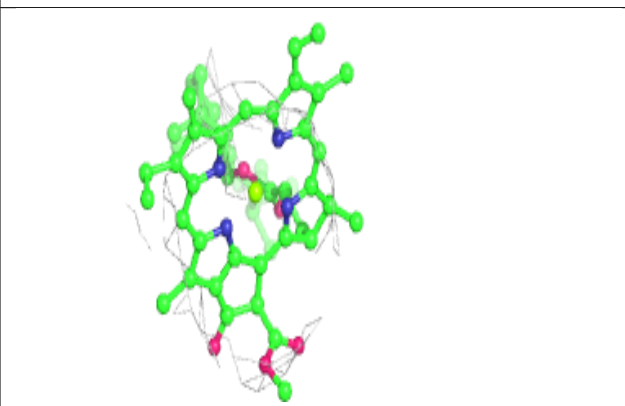
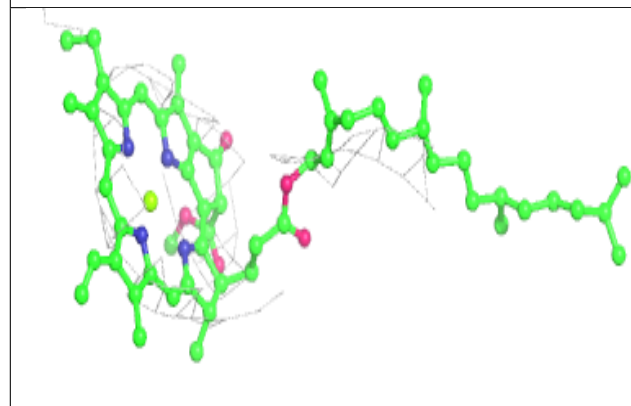
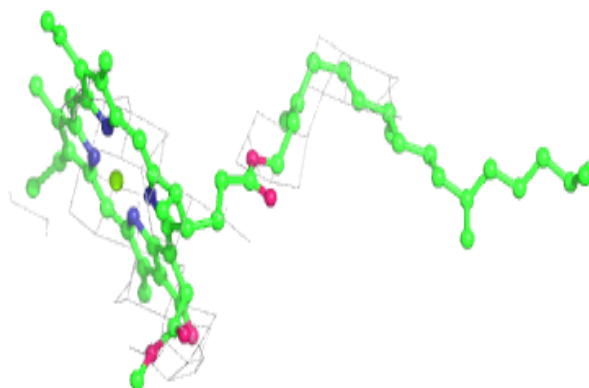


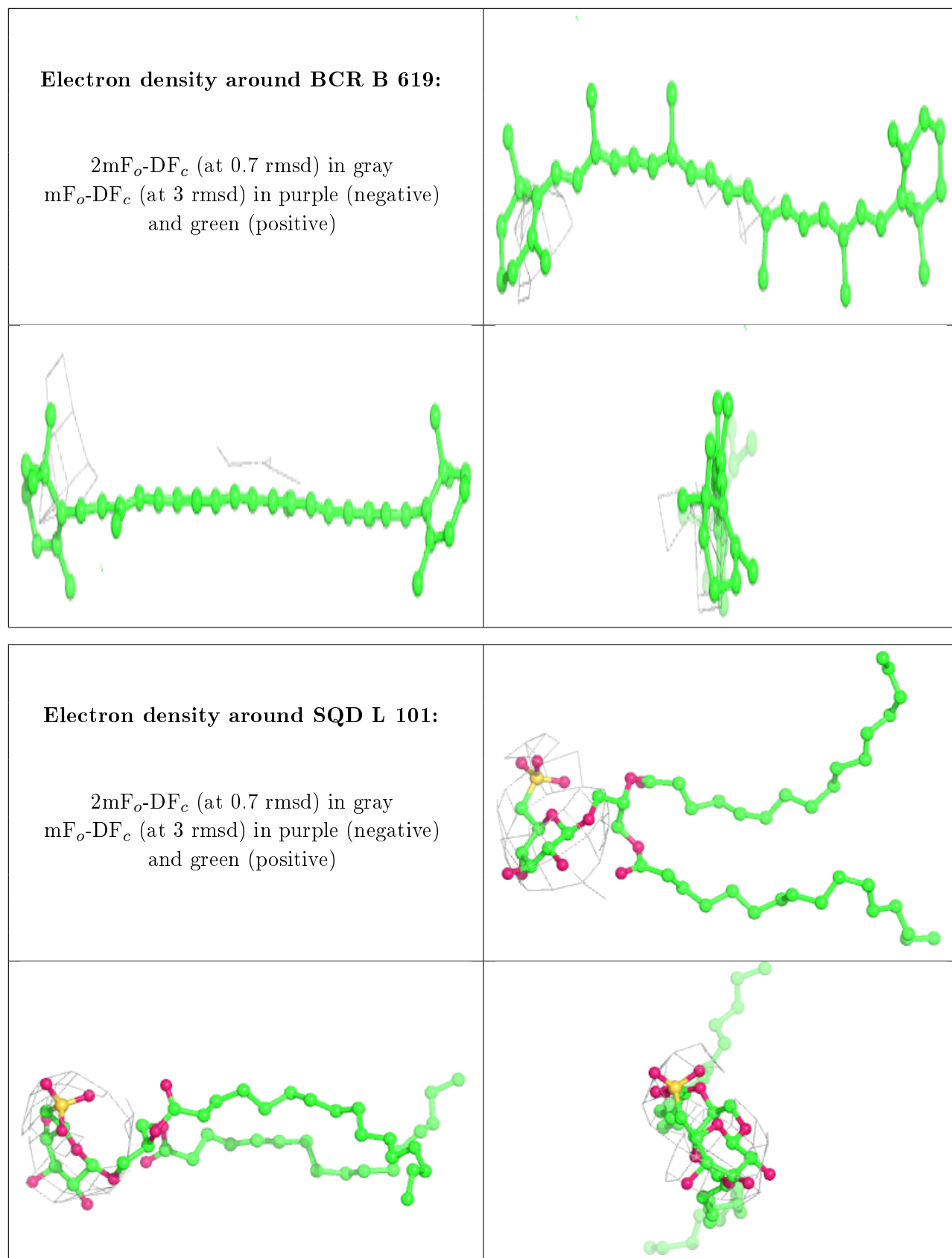
**Electron density around DGD C 517:**

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

**Electron density around CLA c 903:**

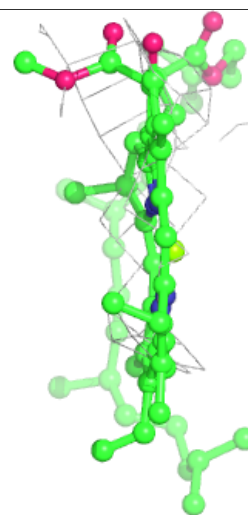
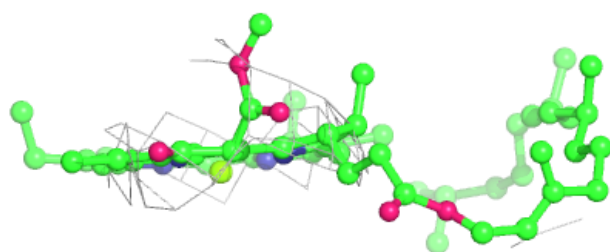
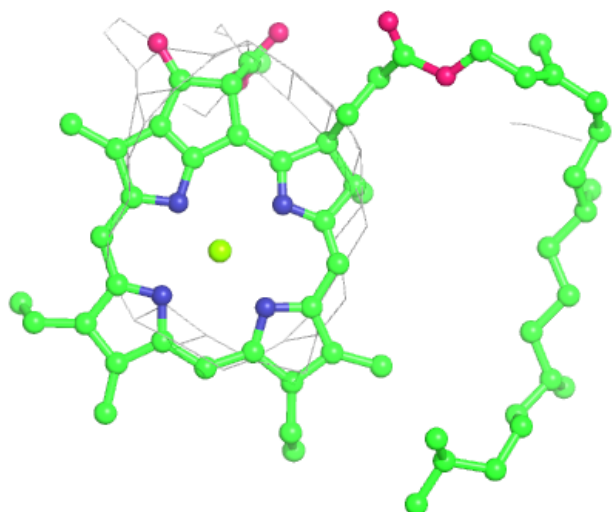
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





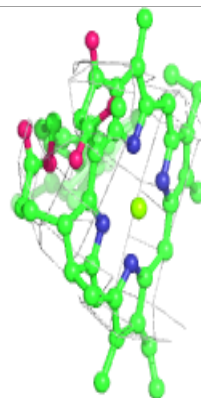
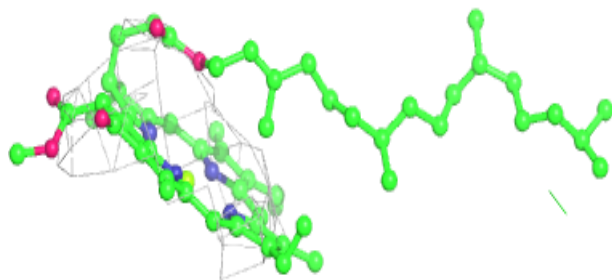
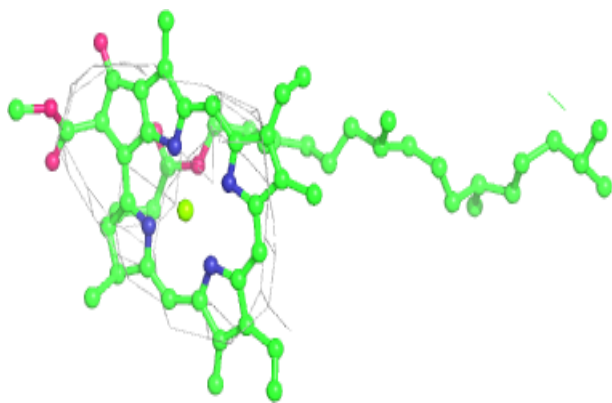
**Electron density around CLA c 913:**

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

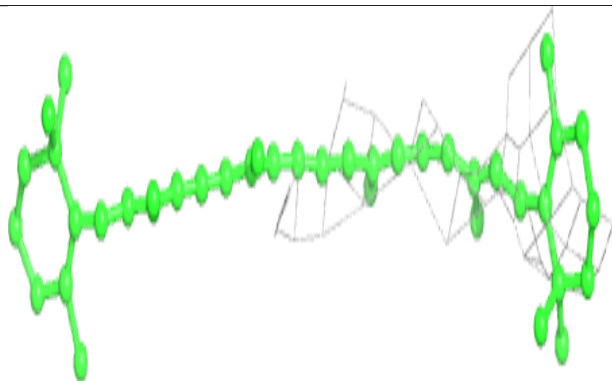
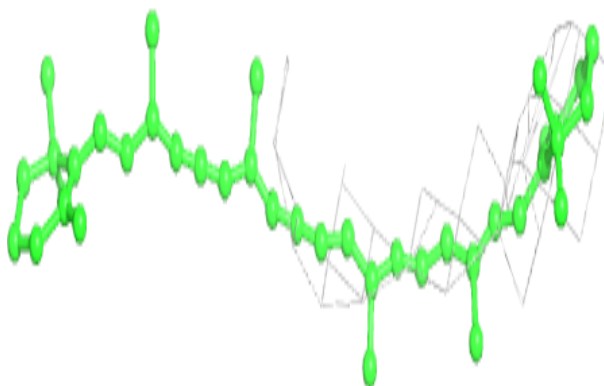


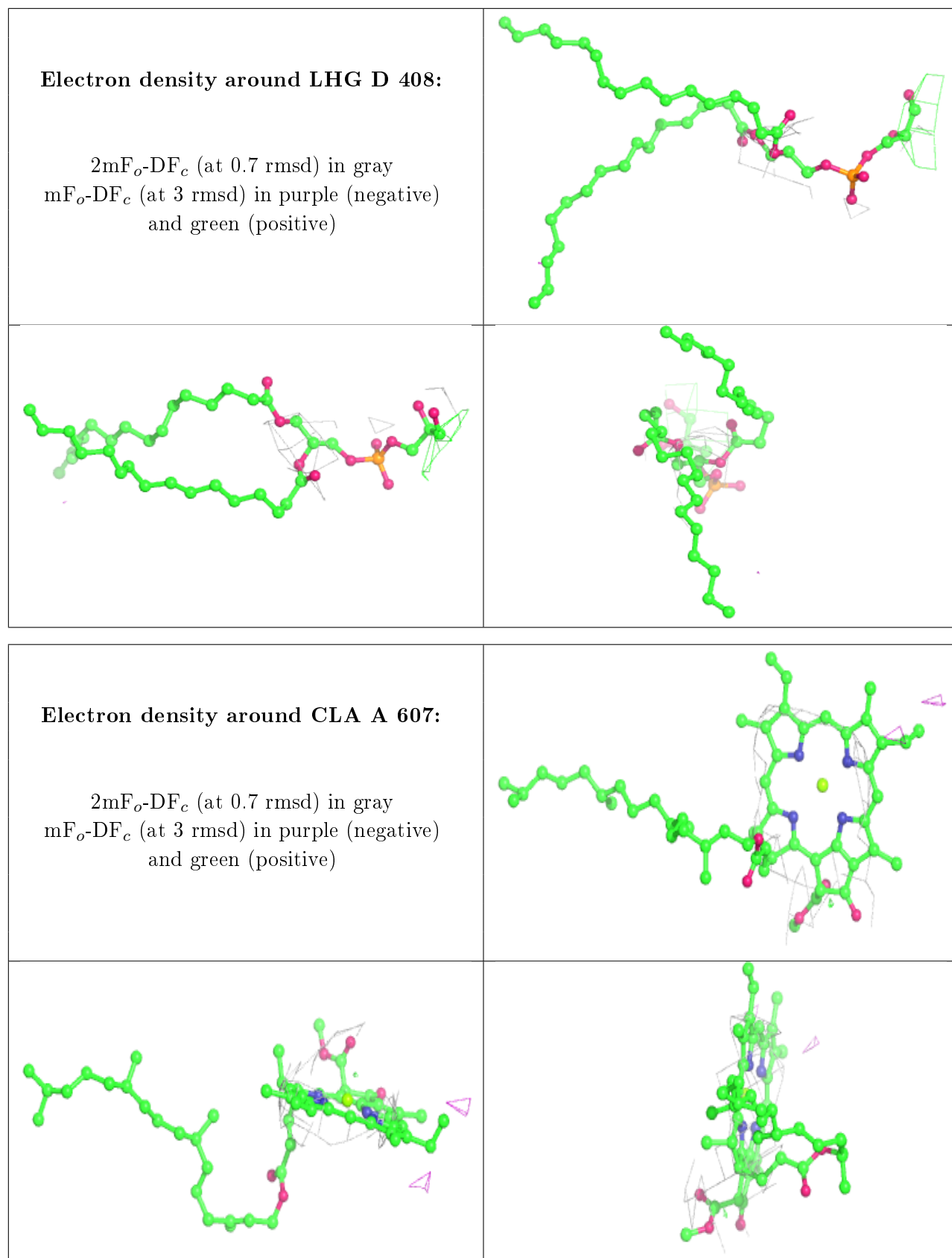
**Electron density around CLA b 615:**

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

**Electron density around 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)

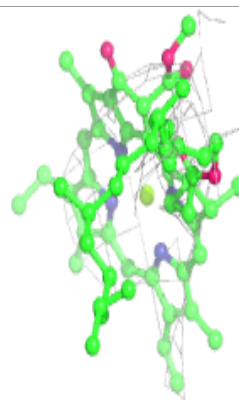
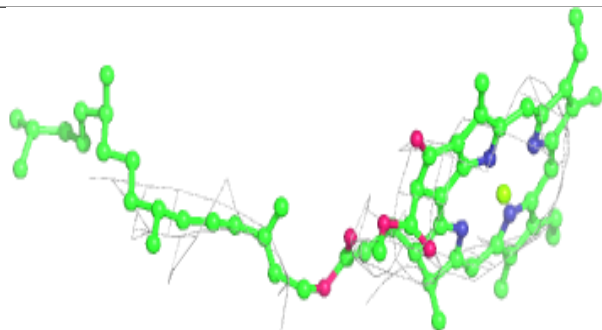
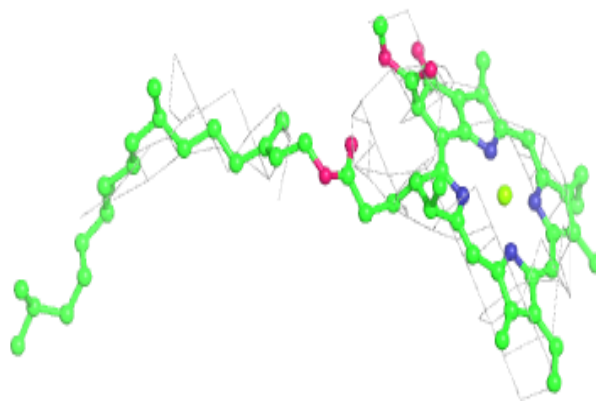






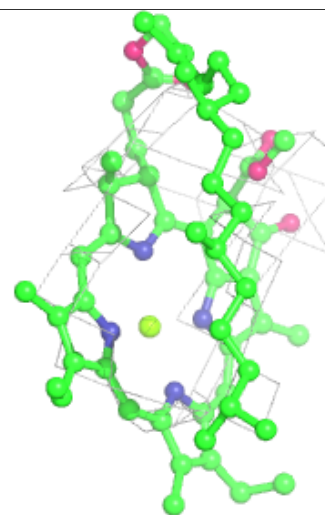
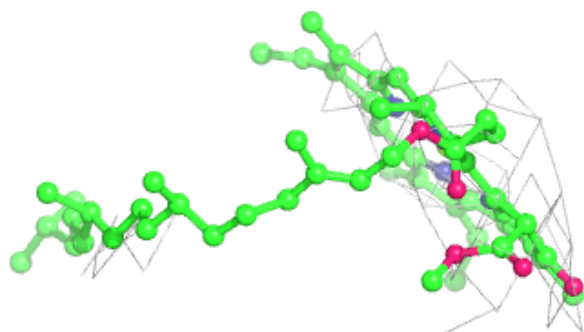
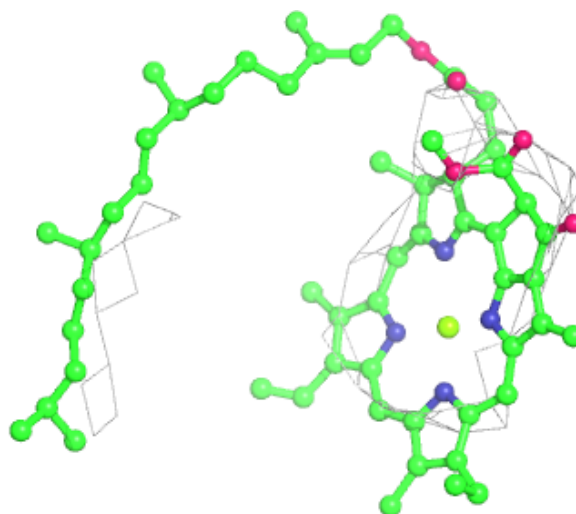
**Electron density around CLA a 406:**

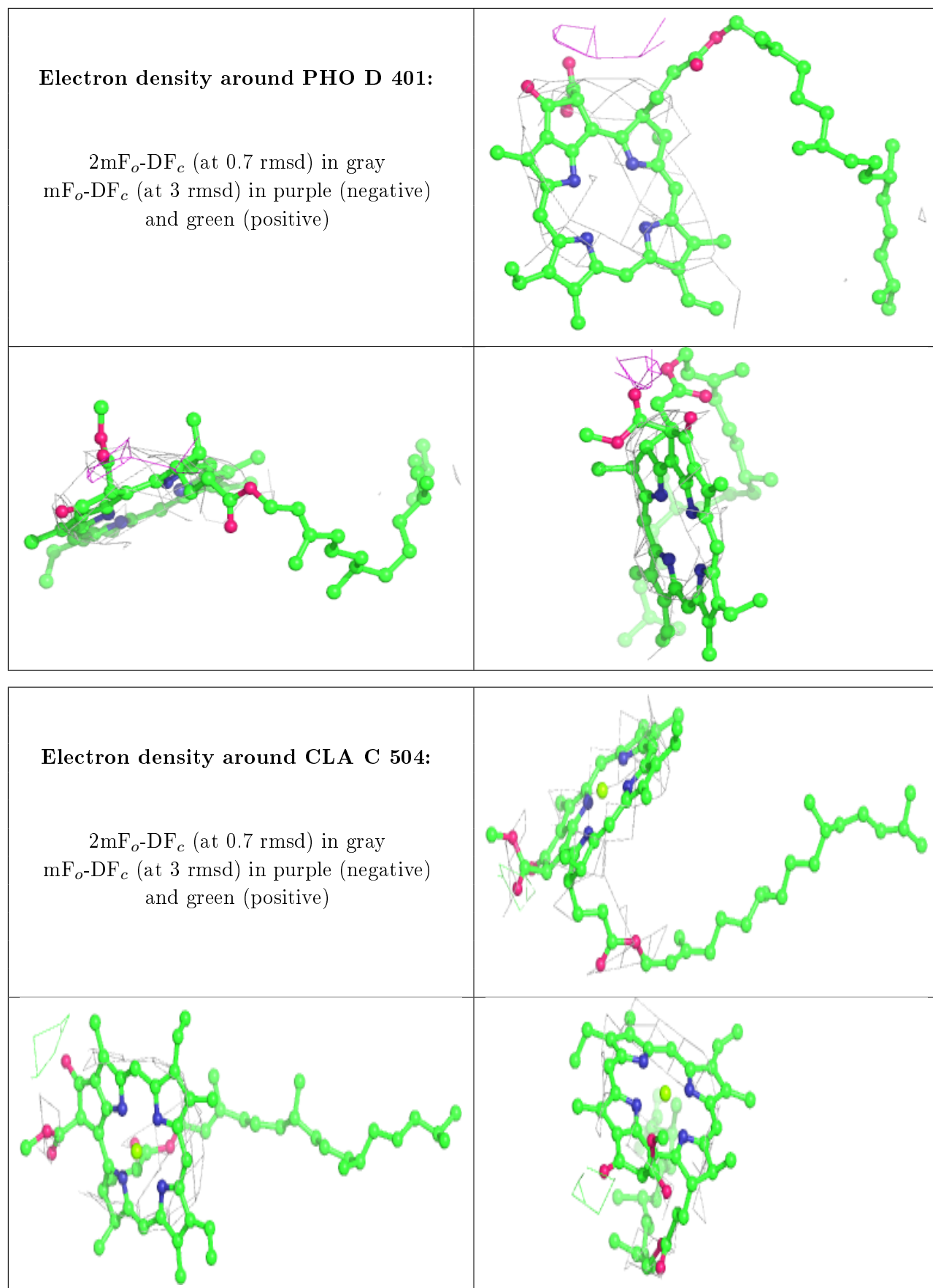
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA C 507:**

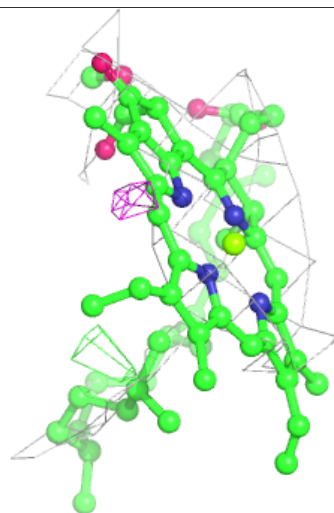
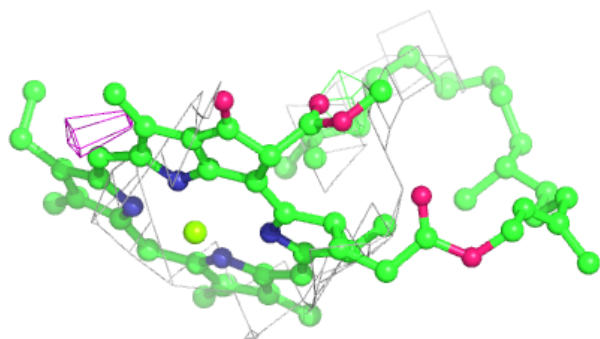
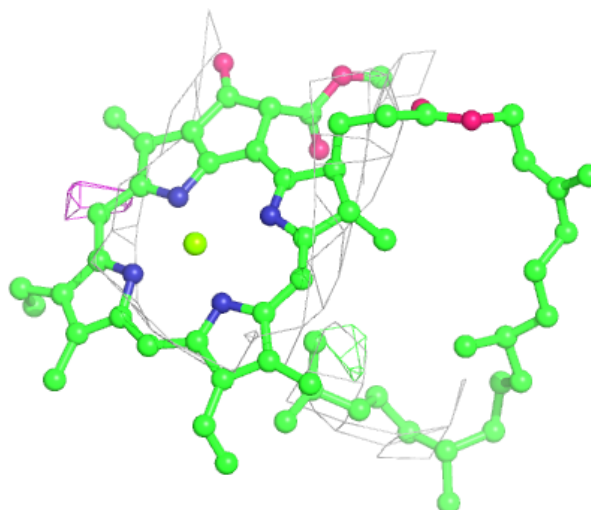
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





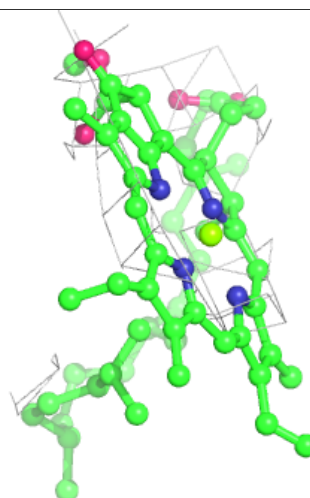
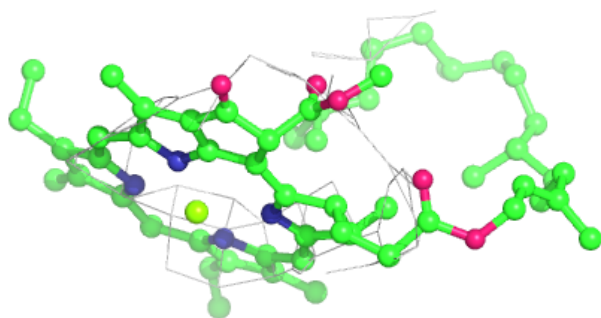
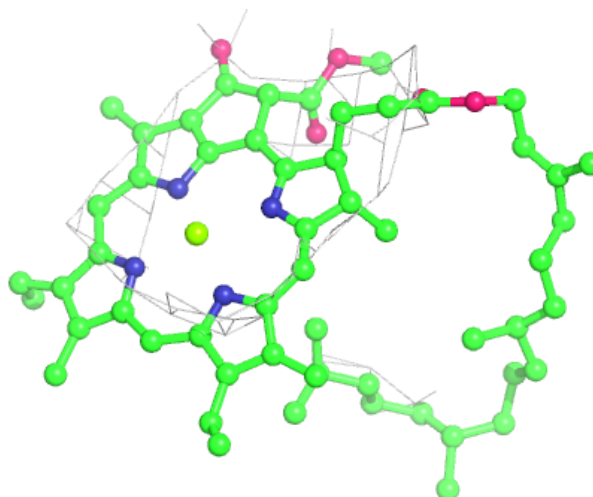
**Electron density around CLA B 616:**

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



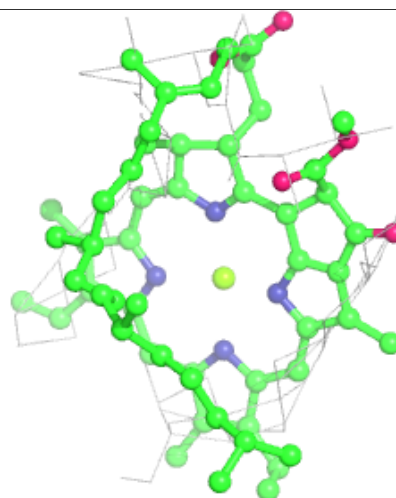
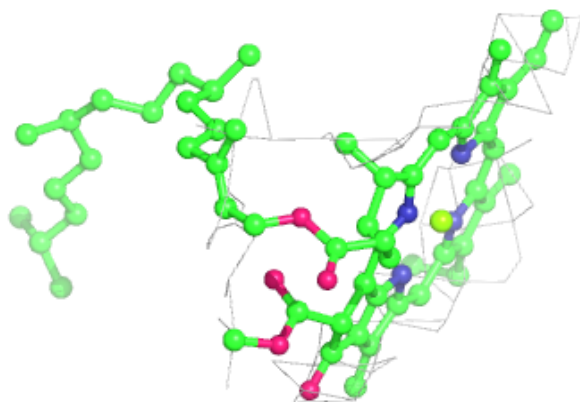
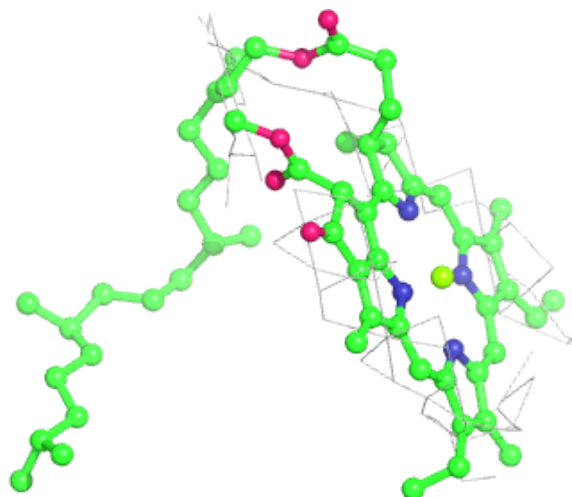
**Electron density around CLA b 616:**

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



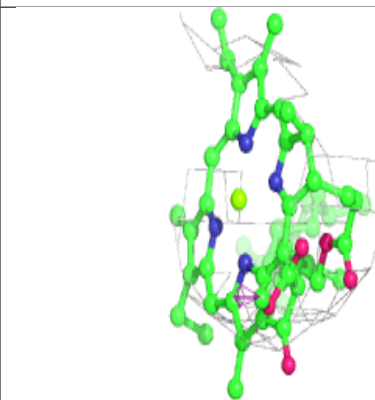
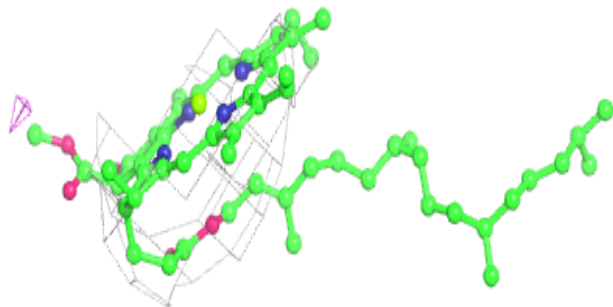
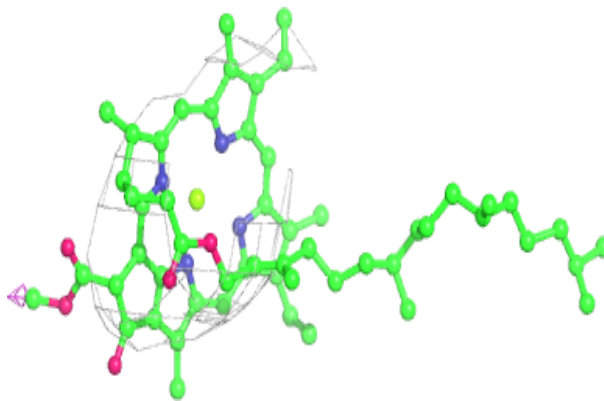
**Electron density around CLA b 614:**

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

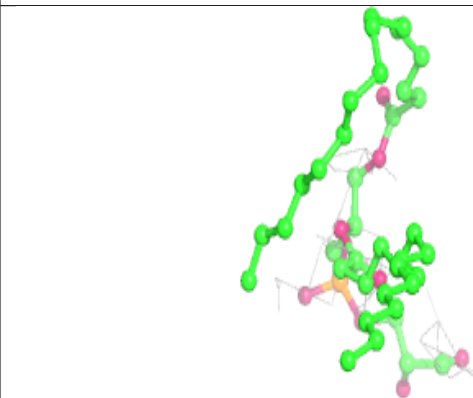
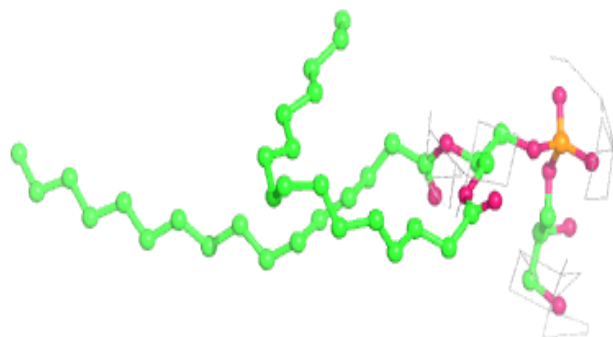
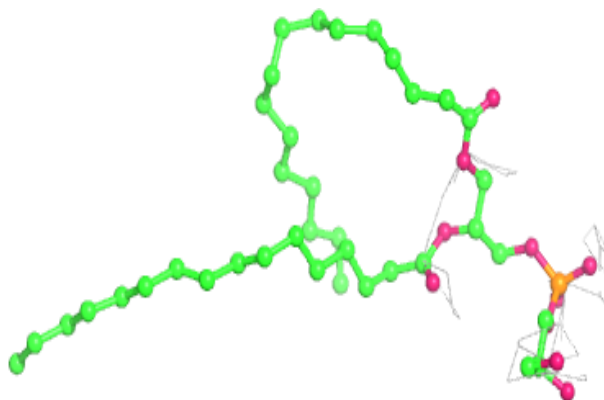


**Electron density around CLA B 615:**

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

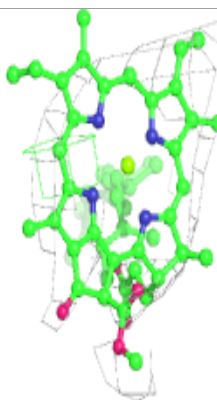
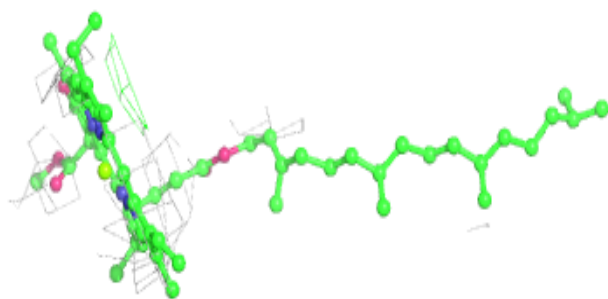
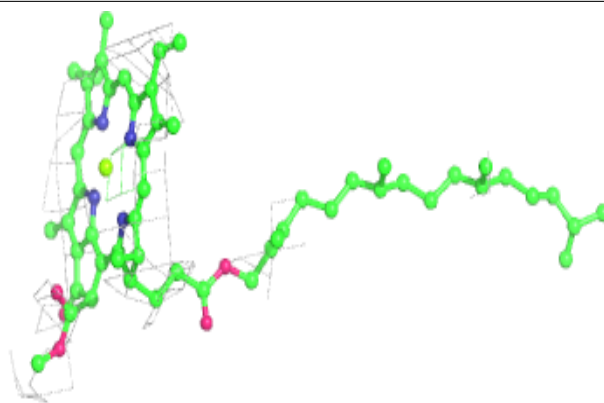
**Electron density around LHG d 408:**

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

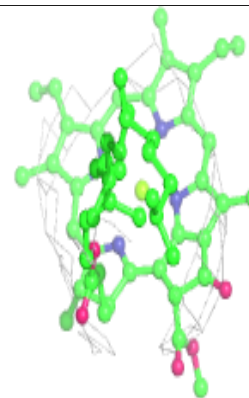
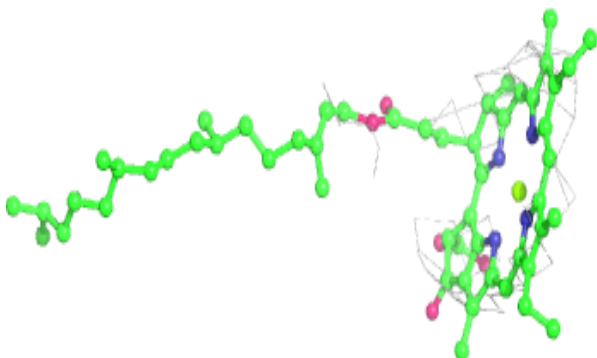
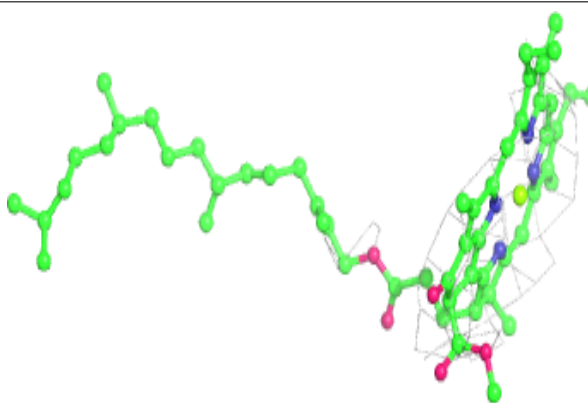


**Electron density around CLA d 404:**

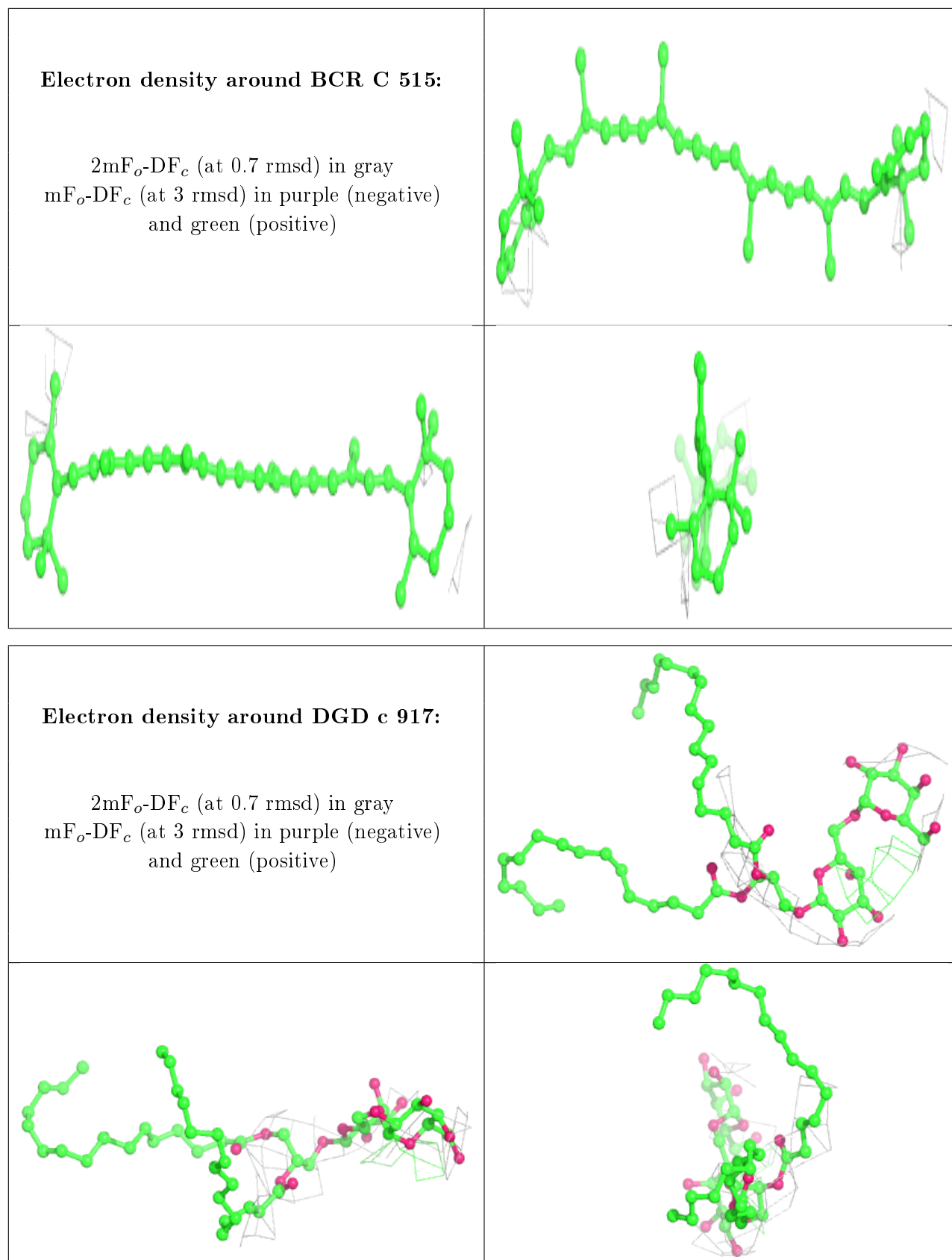
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around CLA b 605:**

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

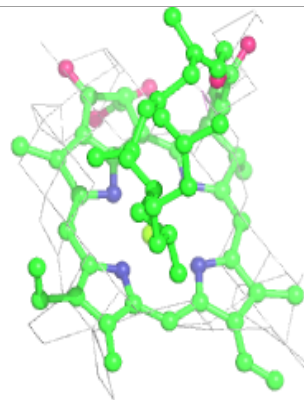
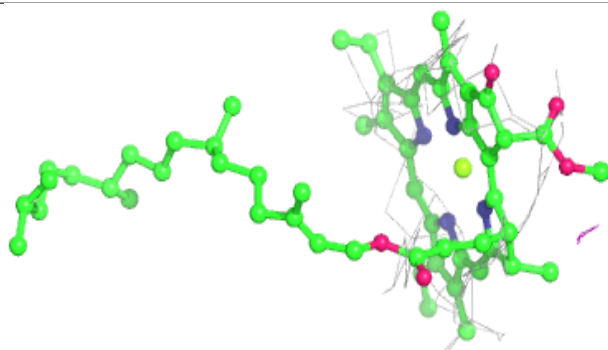
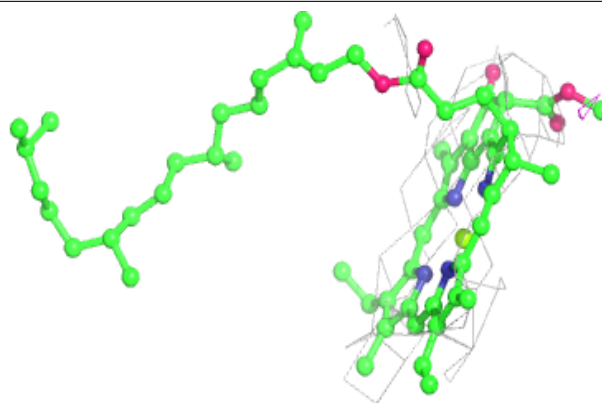




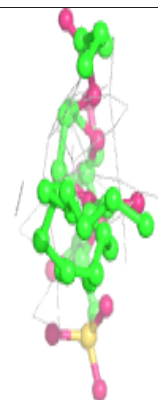
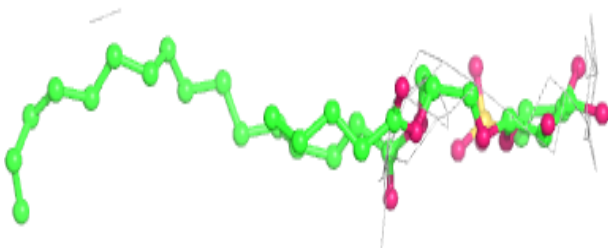
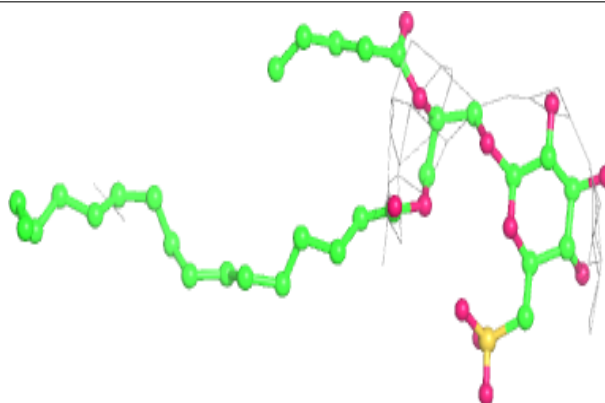


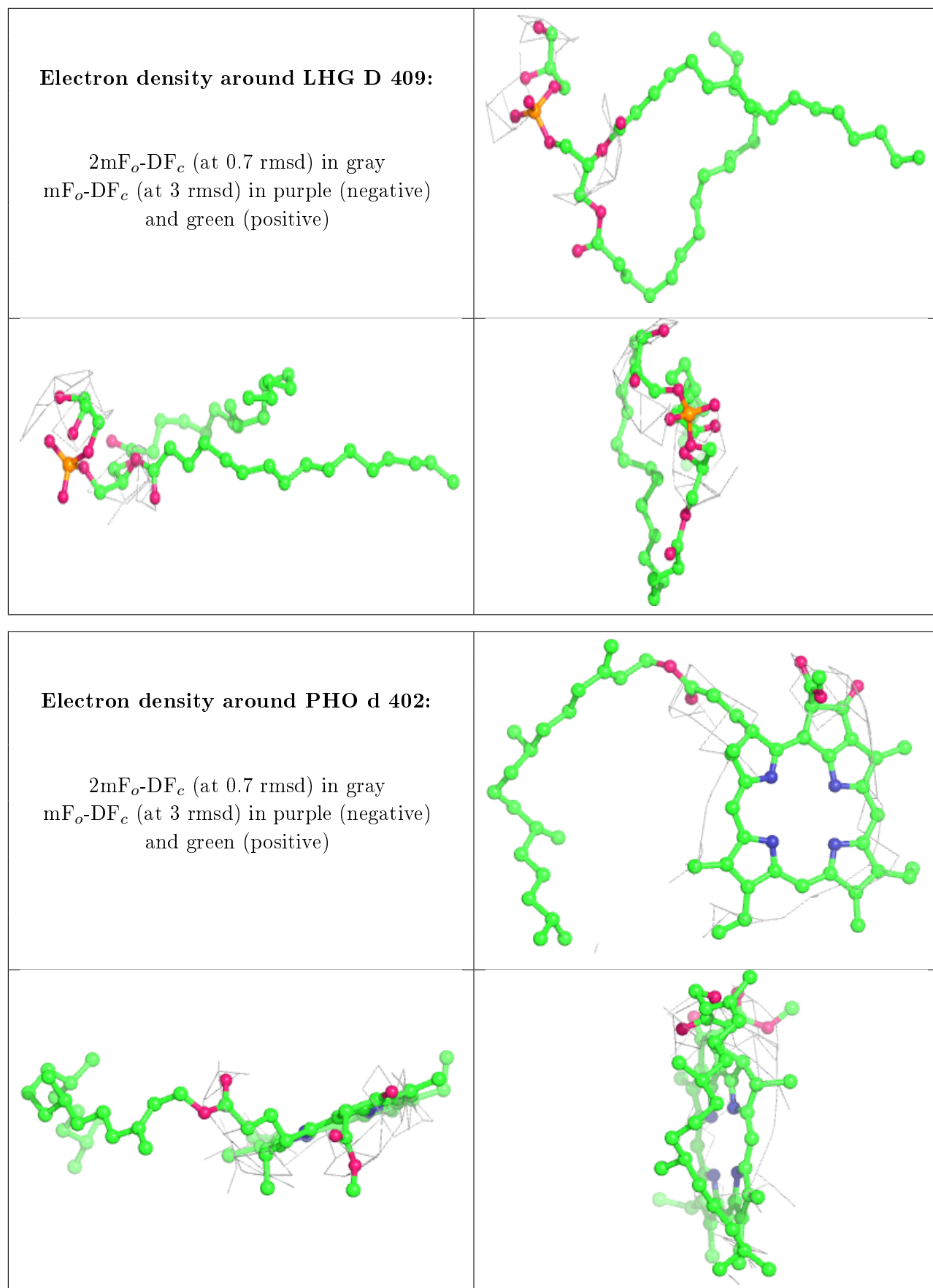
**Electron density around CLA C 508:**

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

**Electron density around SQD F 101:**

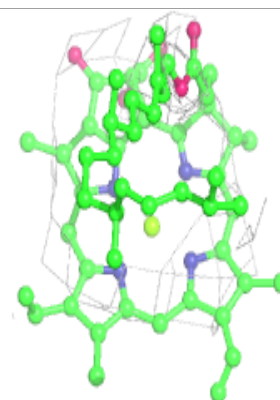
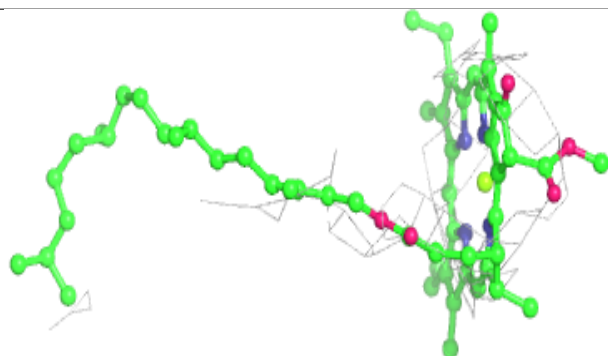
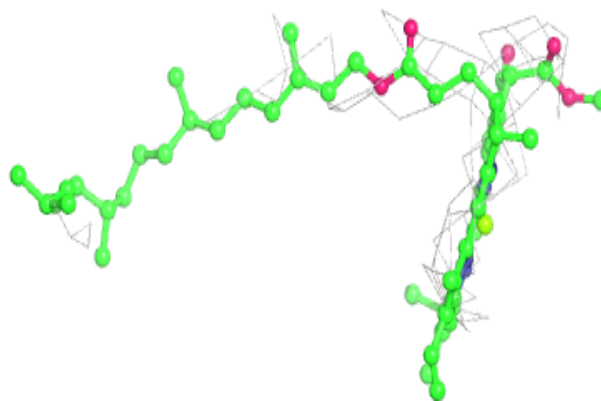
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



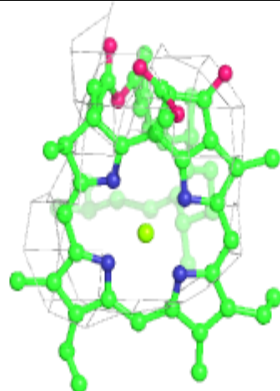
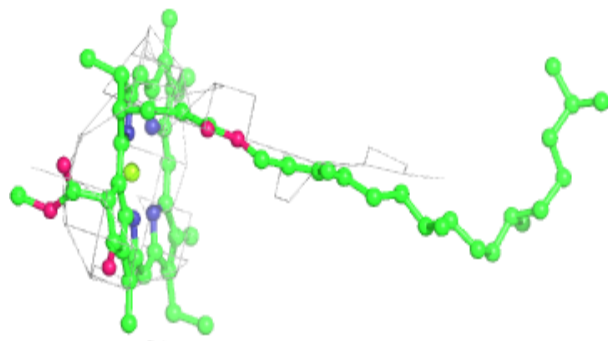


**Electron density around CLA b 606:**

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

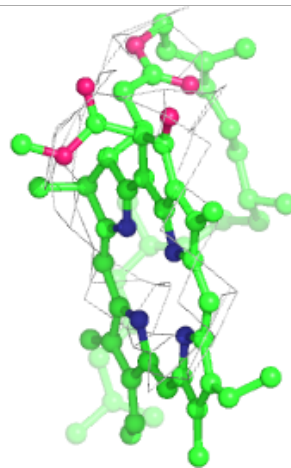
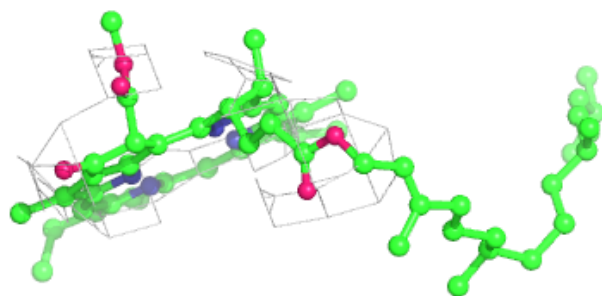
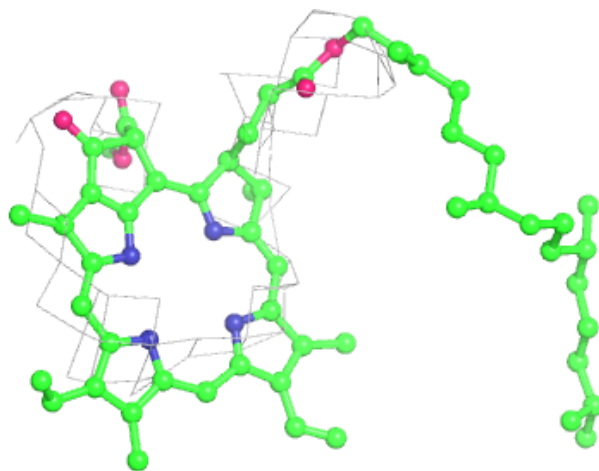
**Electron density around CLA B 606:**

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



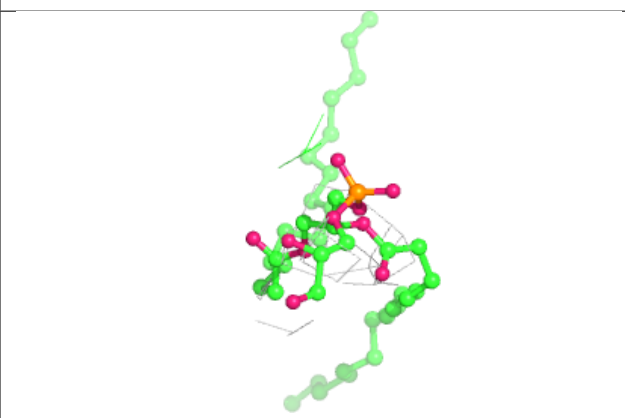
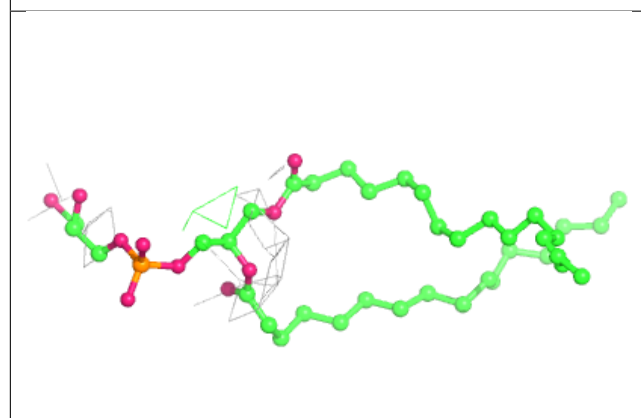
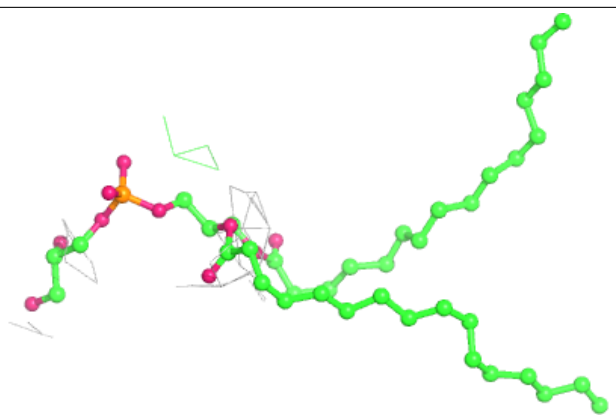
**Electron density around PHO a 412:**

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

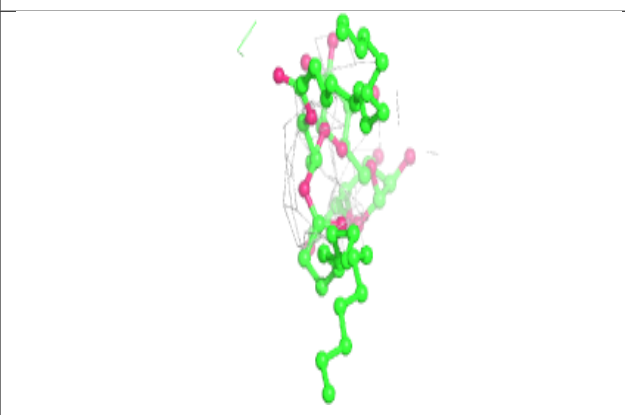
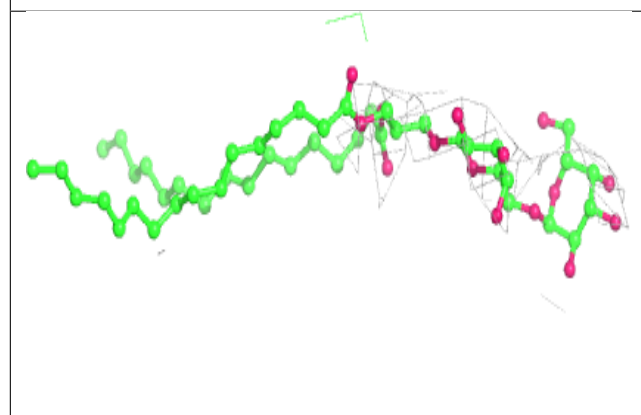
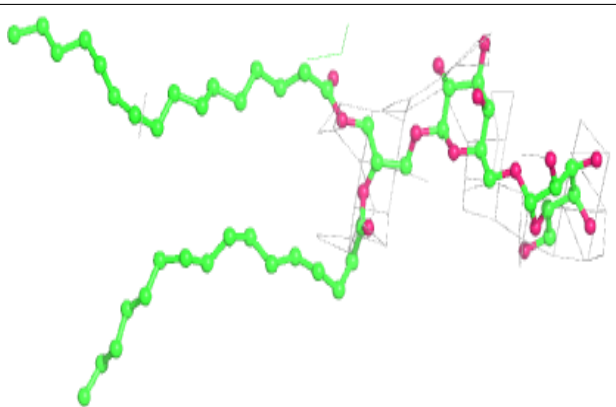


**Electron density around LHG d 409:**

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

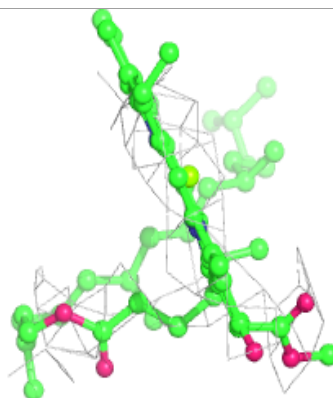
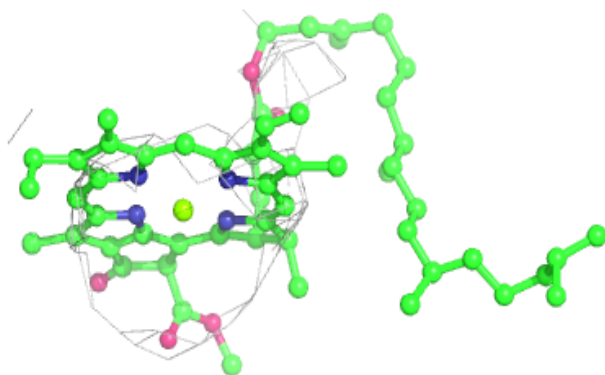
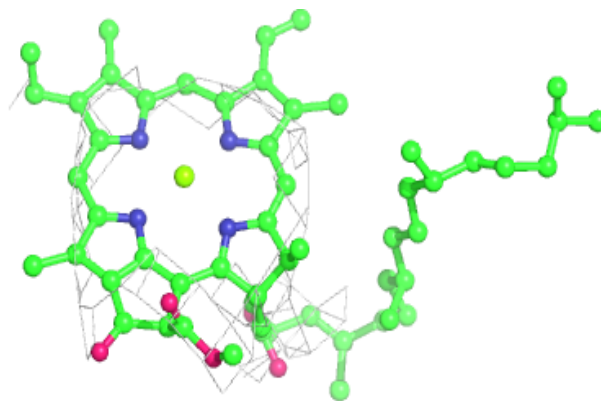
**Electron density around DGD C 518:**

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

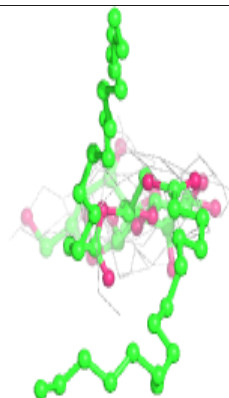
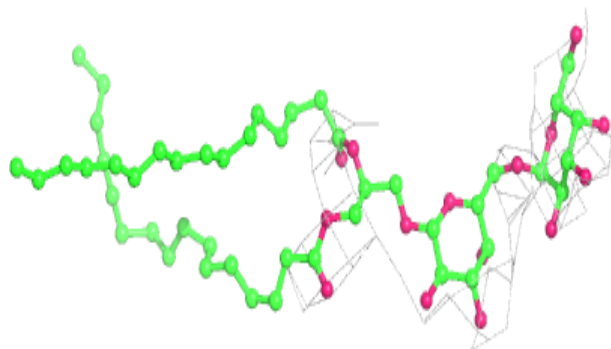
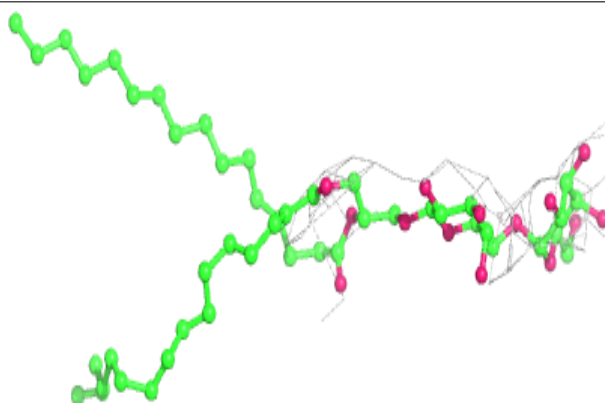


**Electron density around CLA A 614:**

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

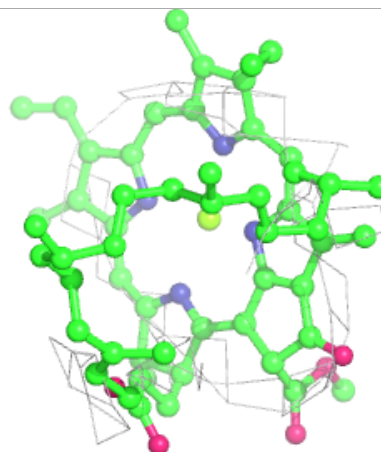
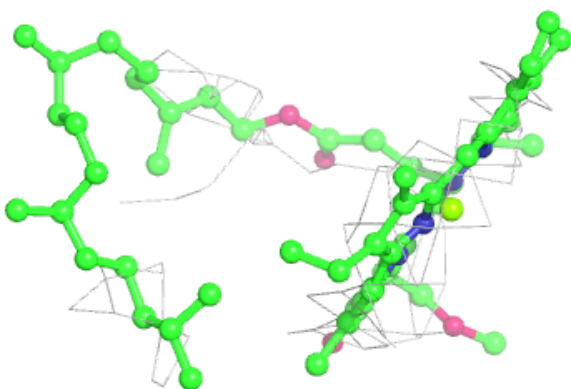
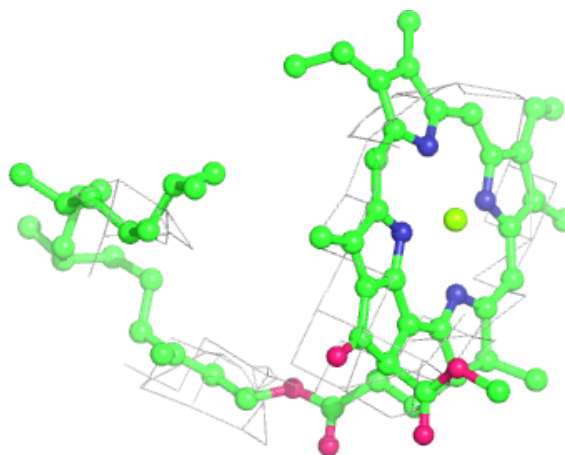
**Electron density around DGD c 916:**

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



**Electron density around CLA c 904:**

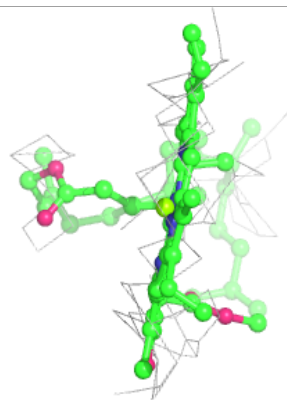
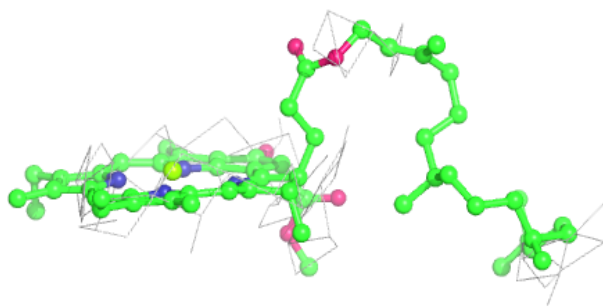
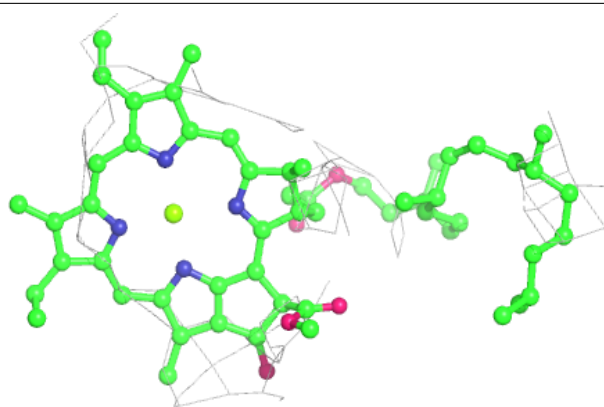
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



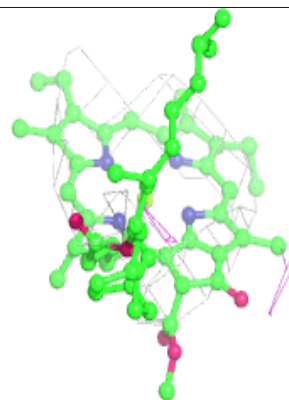
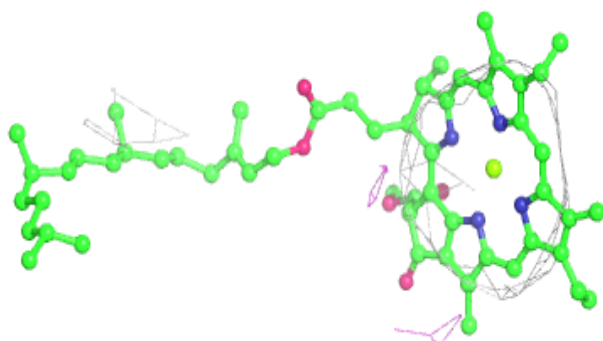
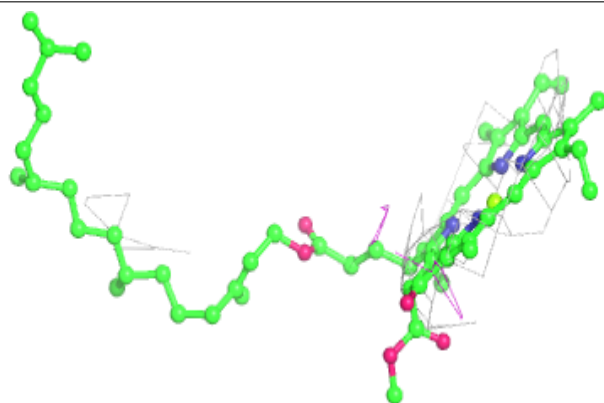


**Electron density around CLA b 613:**

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

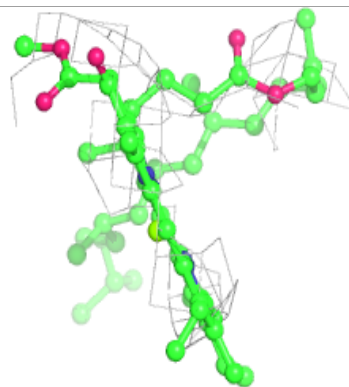
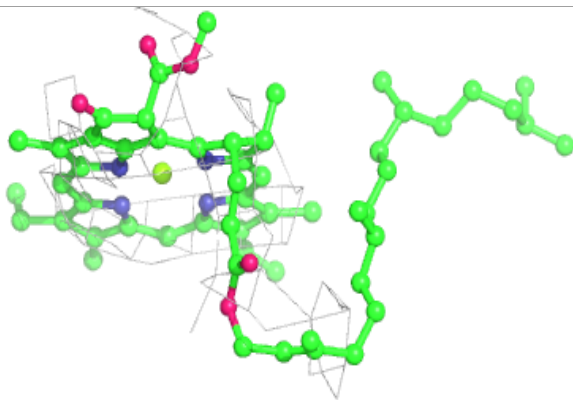
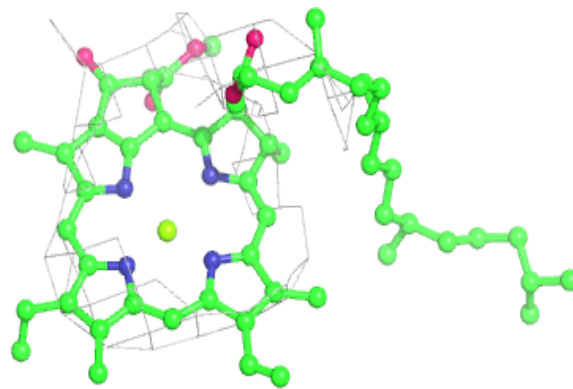
**Electron density around CLA D 402:**

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



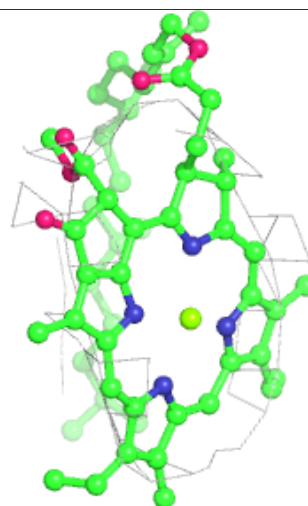
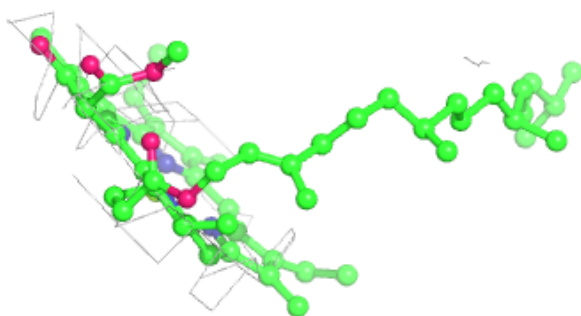
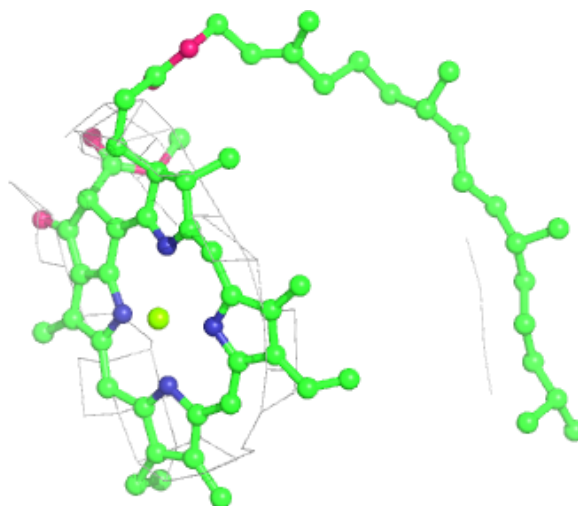
**Electron density around CLA d 401:**

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



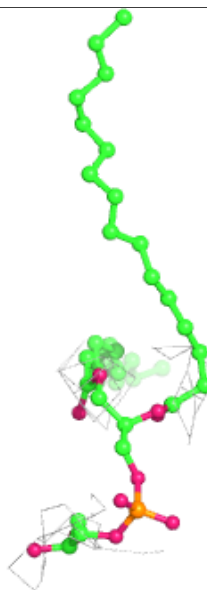
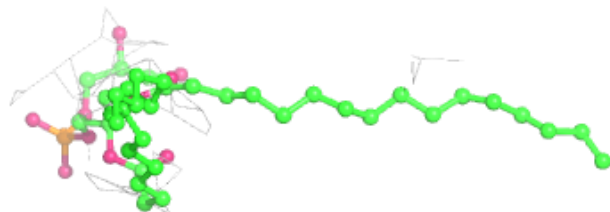
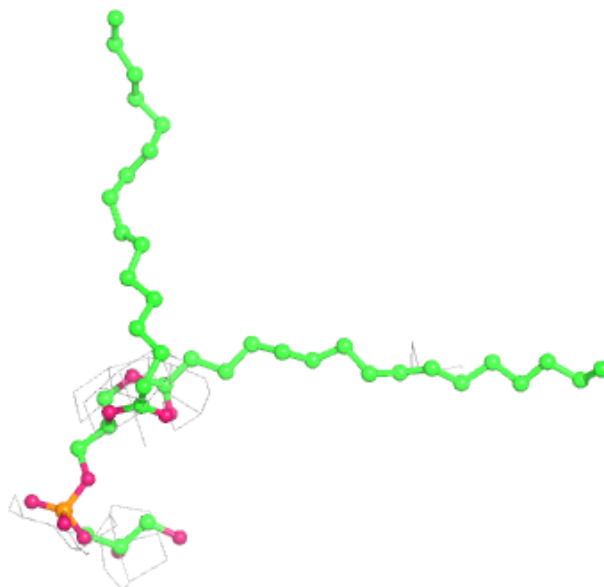
**Electron density around CLA c 908:**

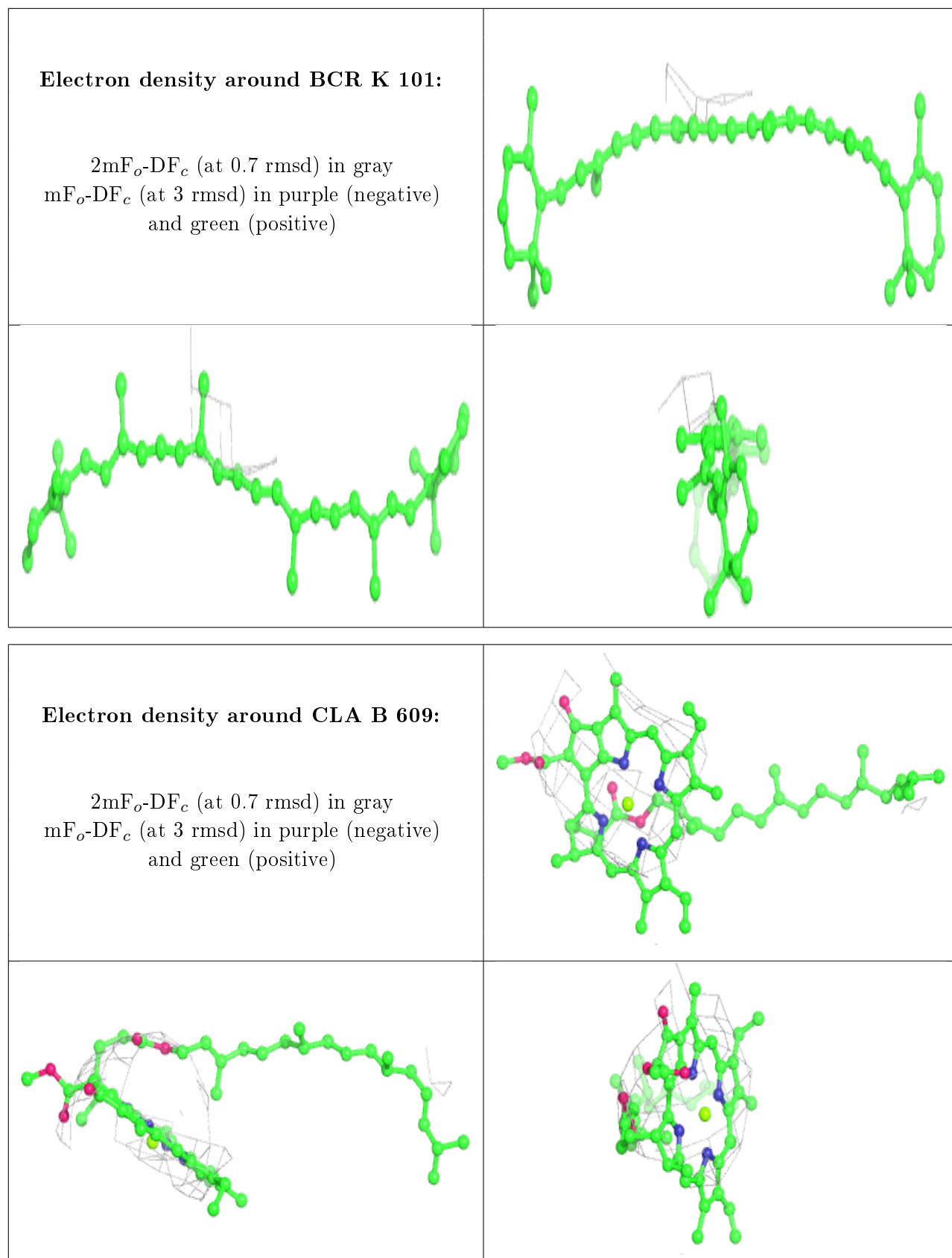
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

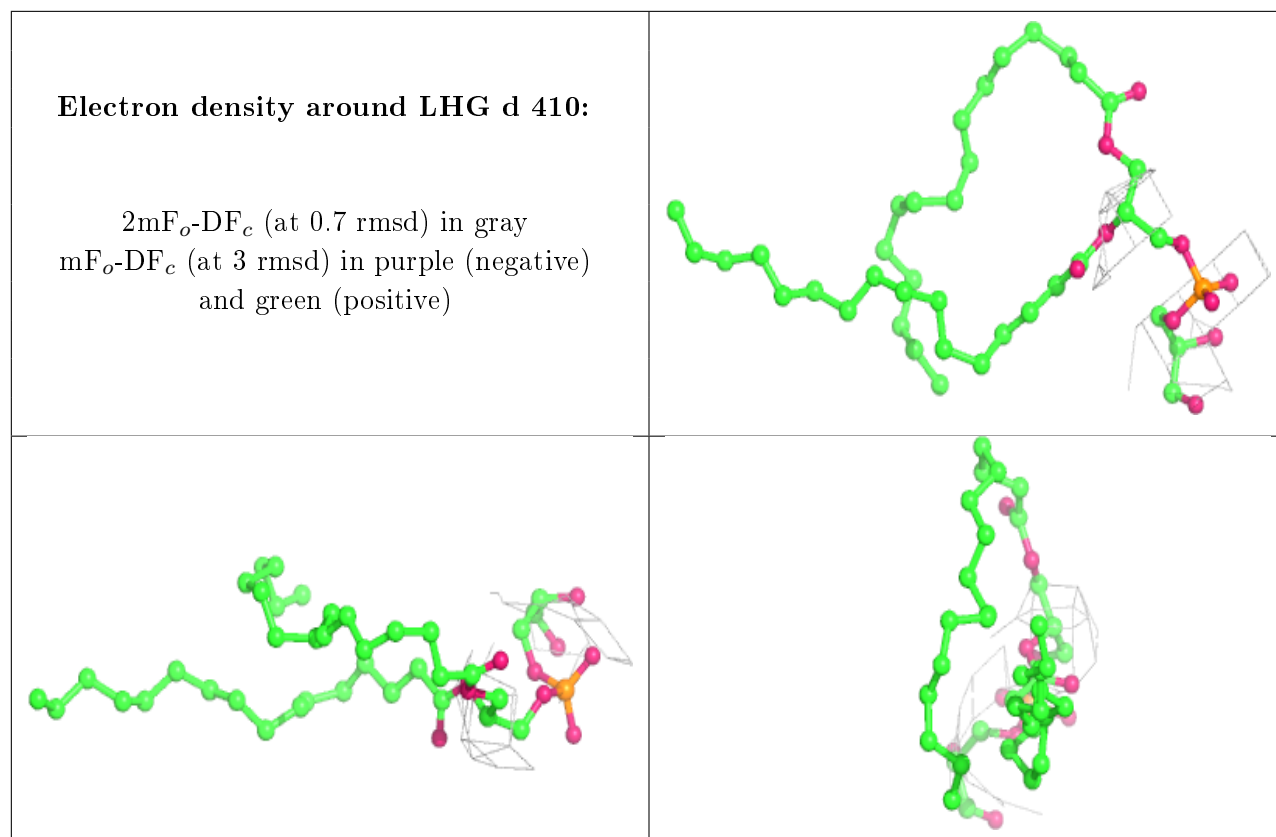


**Electron density around LHG b 620:**

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

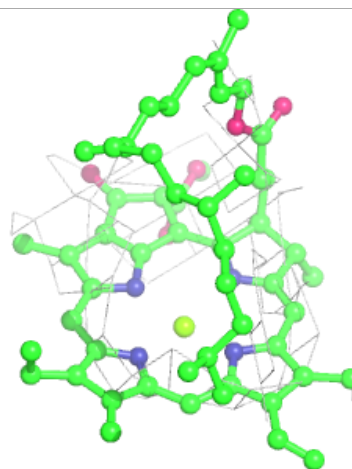
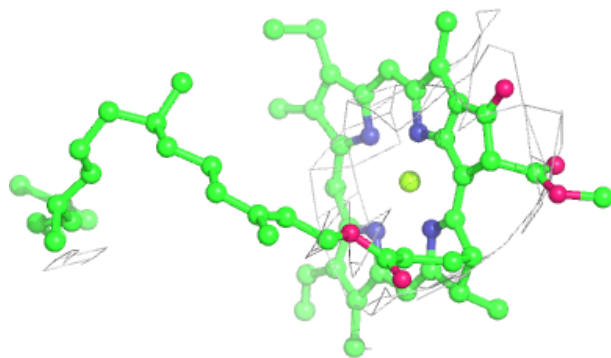
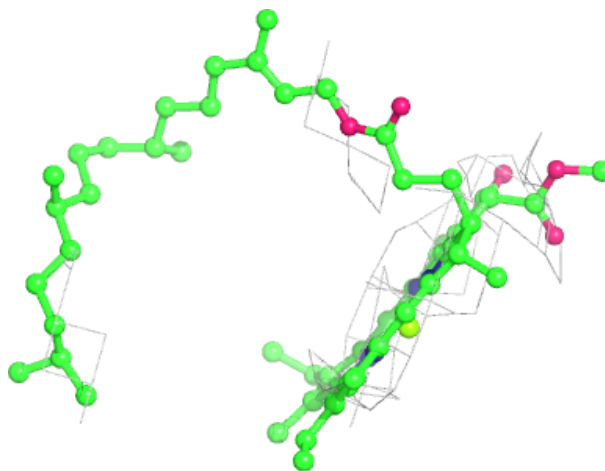






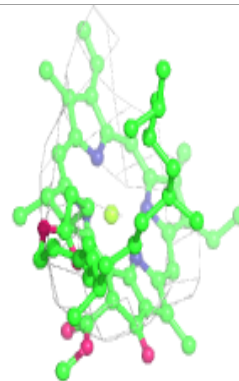
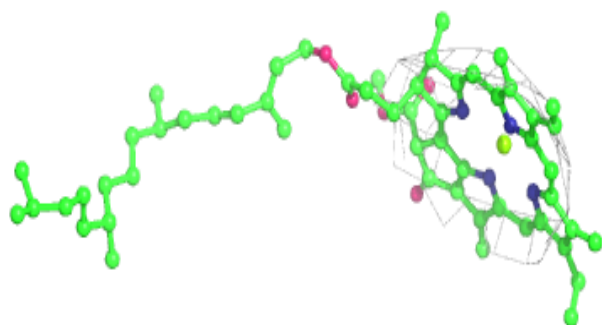
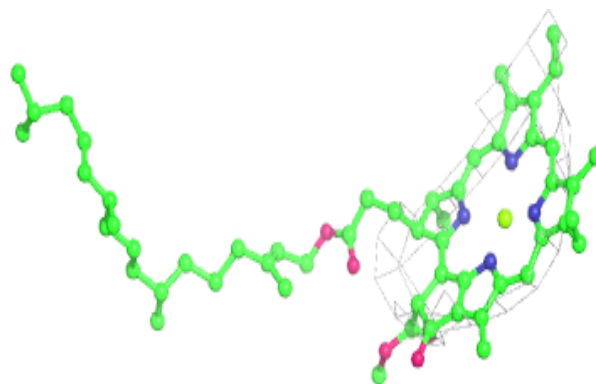
**Electron density around CLA B 612:**

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

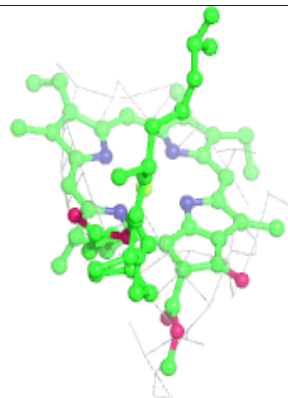
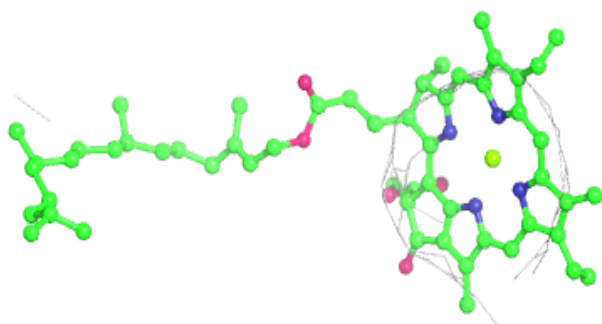
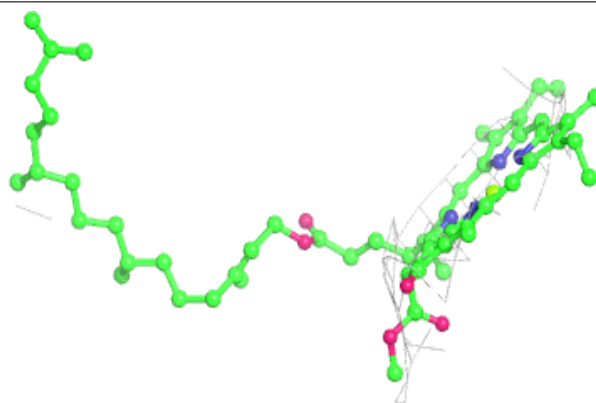


**Electron density around CLA A 606:**

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

**Electron density around CLA d 403:**

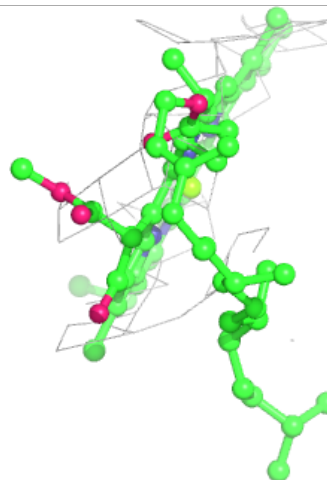
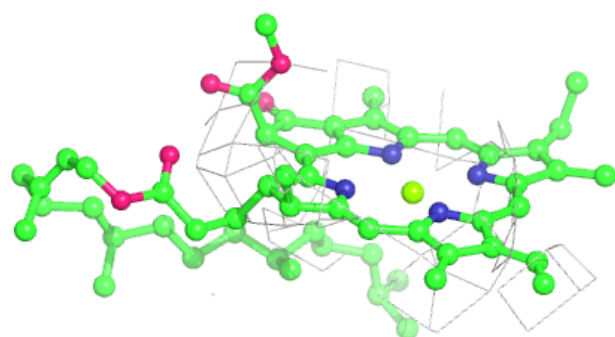
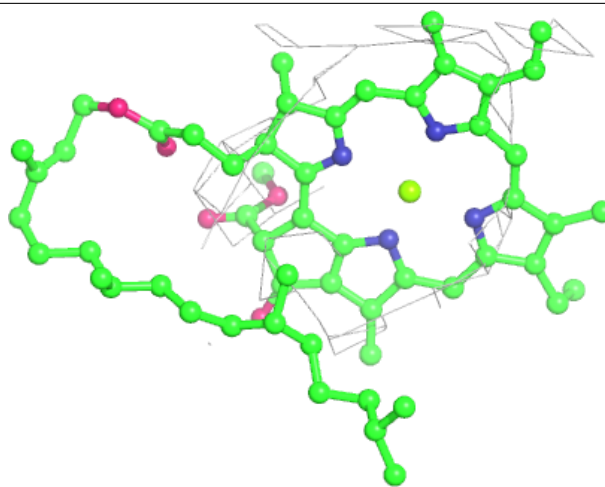
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





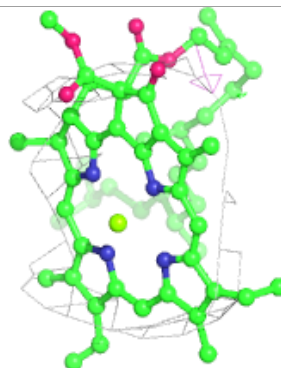
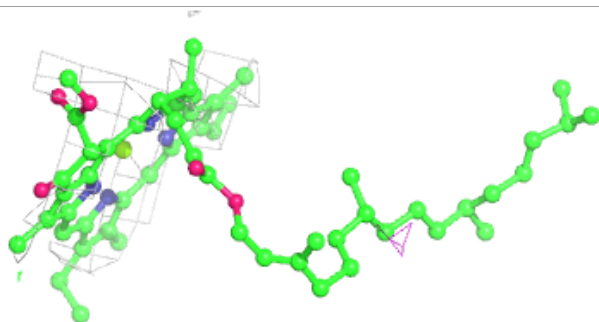
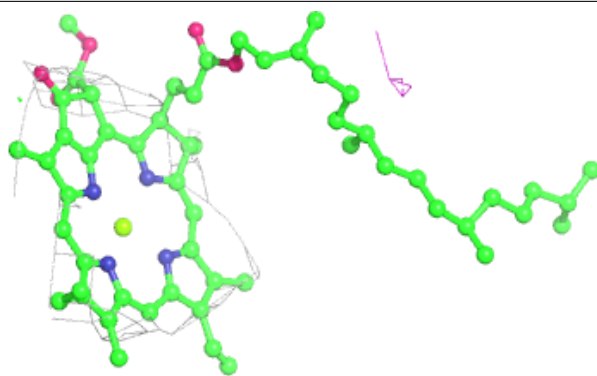
**Electron density around CLA c 910:**

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

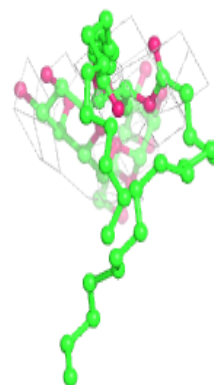
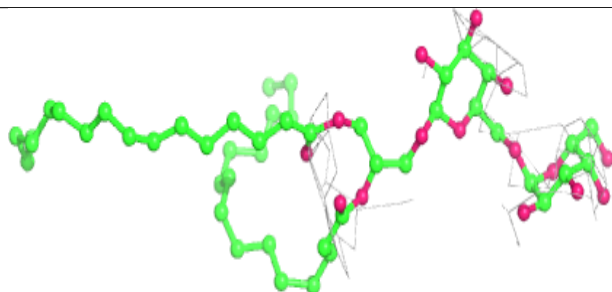
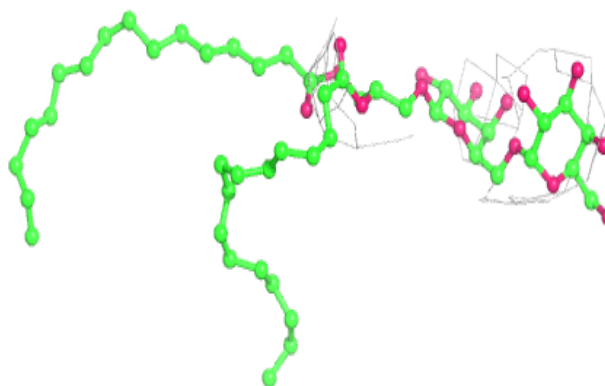


**Electron density around CLA c 912:**

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

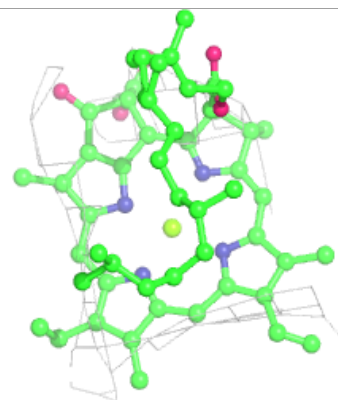
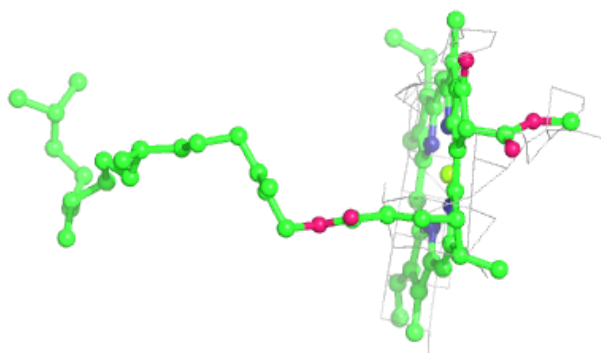
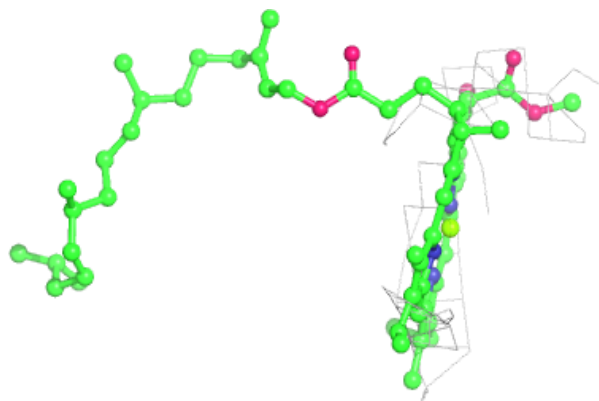
**Electron density around DGD h 102:**

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

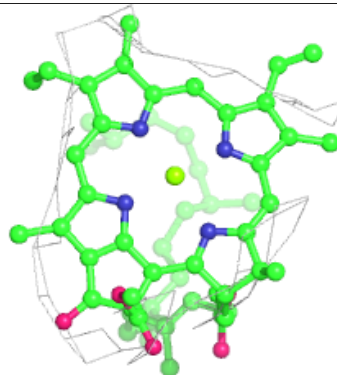
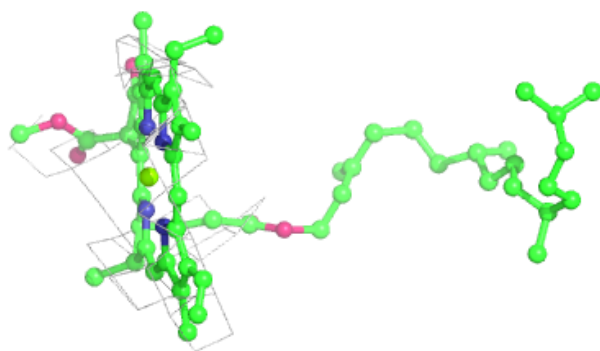
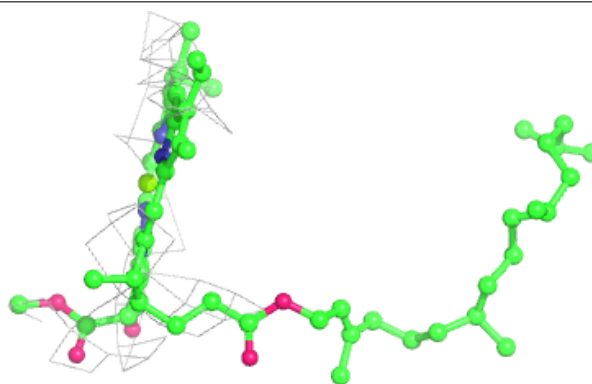


**Electron density around CLA c 907:**

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

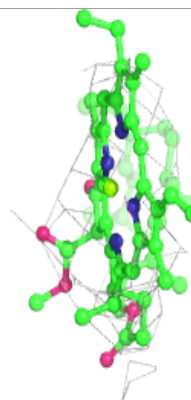
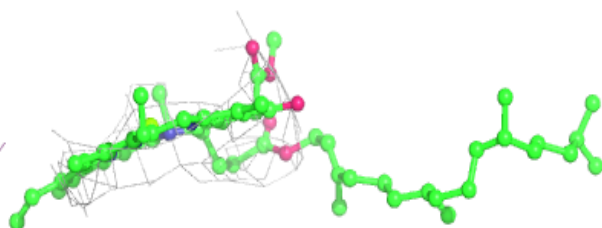
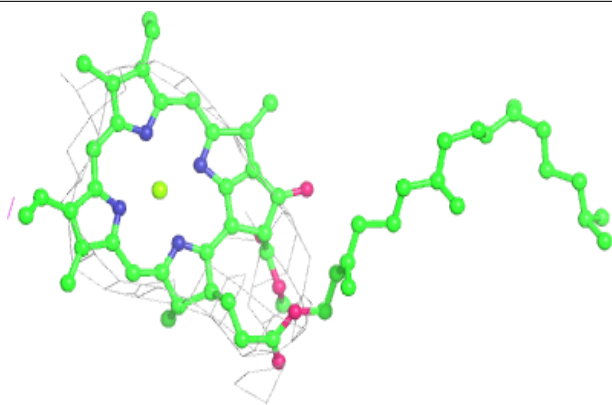
**Electron density around CLA C 506:**

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

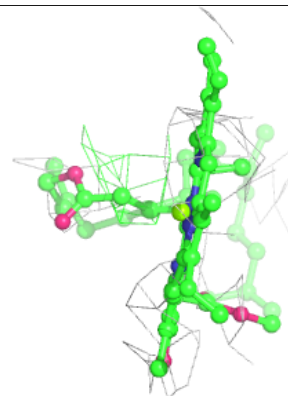
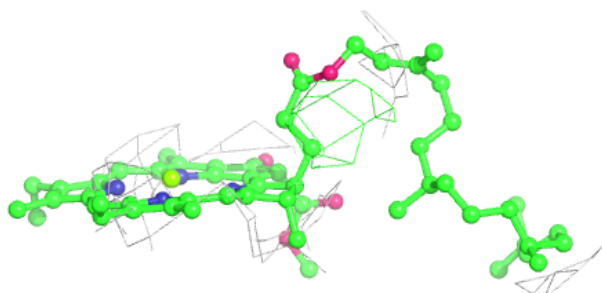
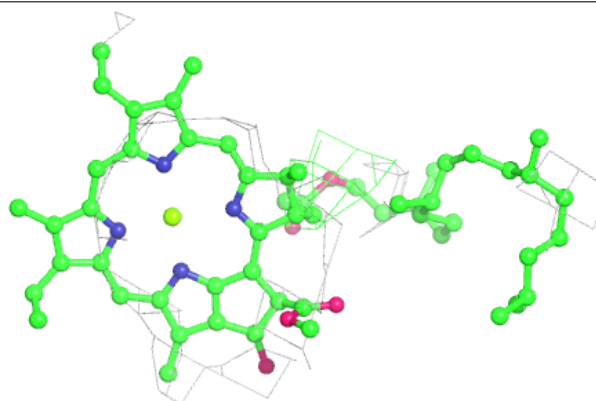


**Electron density around CLA b 603:**

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

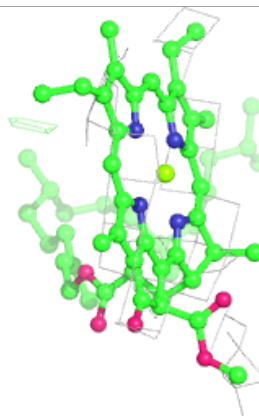
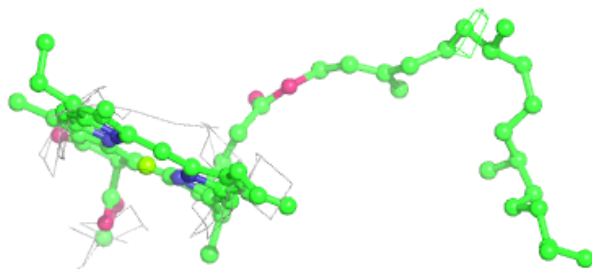
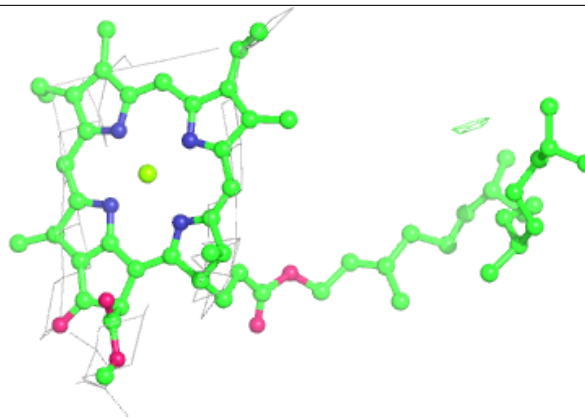
**Electron density around CLA B 613:**

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

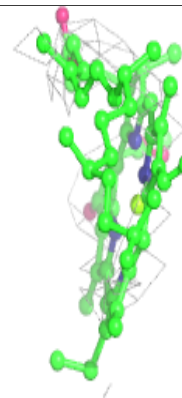
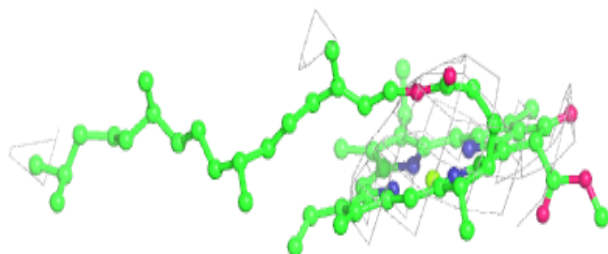
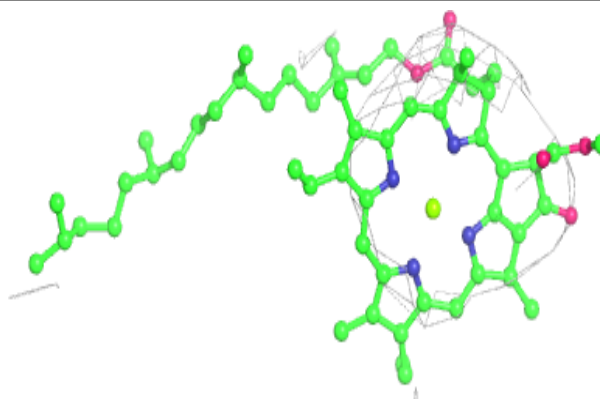


**Electron density around CLA A 609:**

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

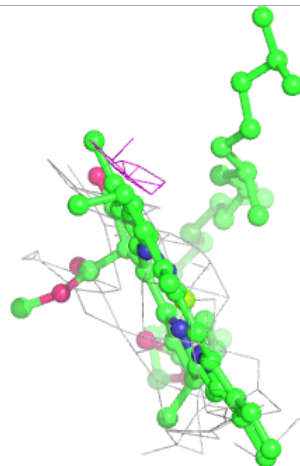
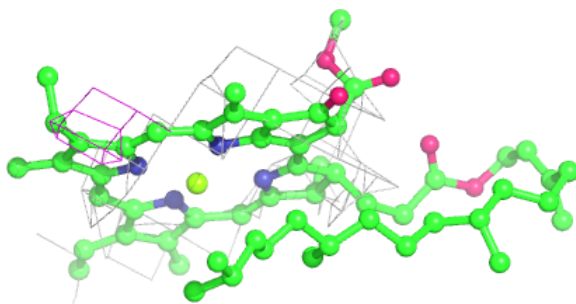
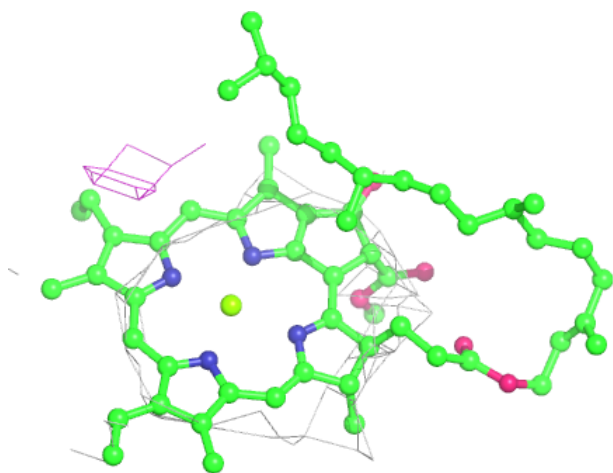
**Electron density around CLA C 501:**

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



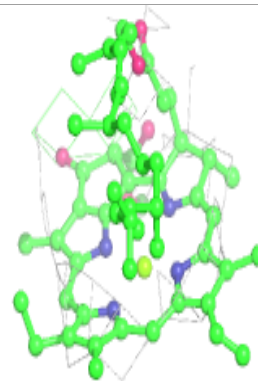
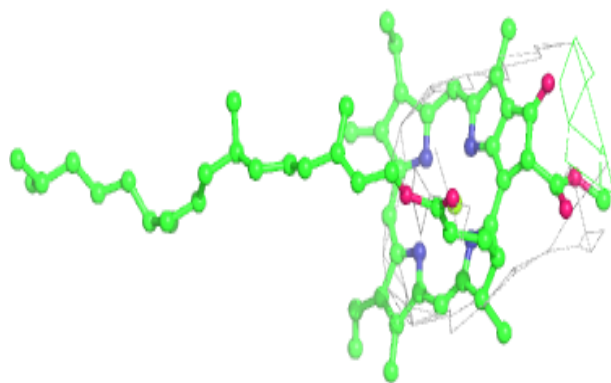
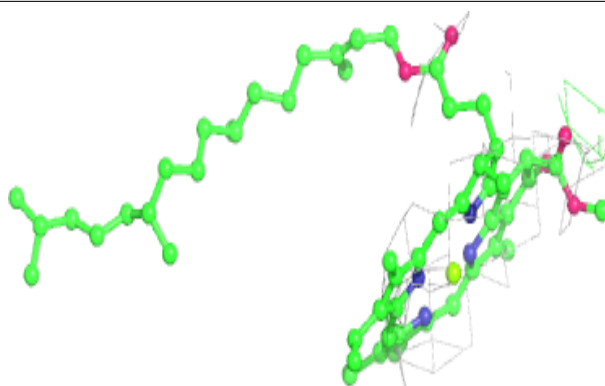
**Electron density around CLA C 509:**

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



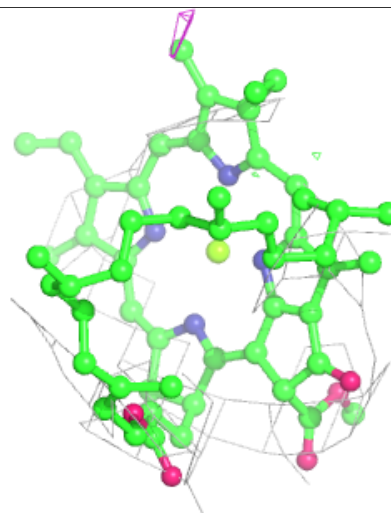
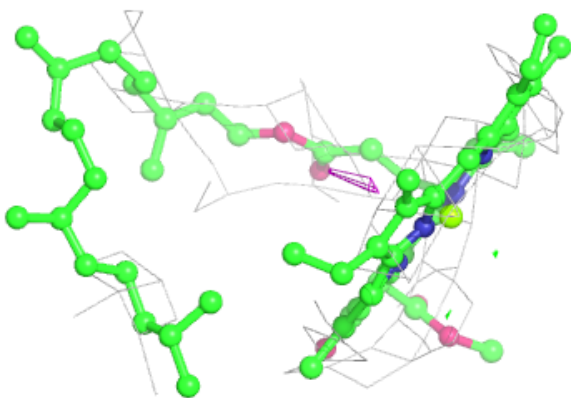
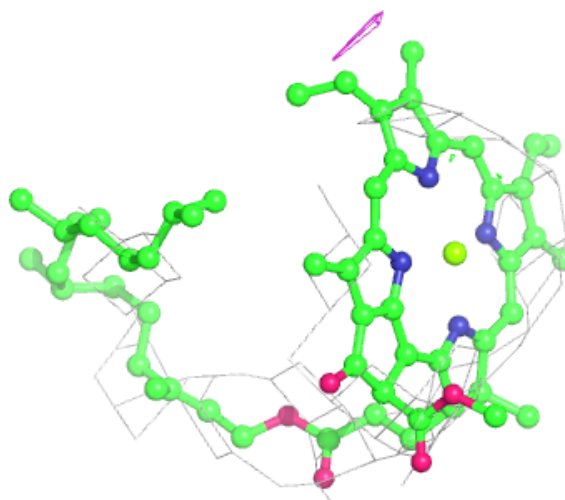
**Electron density around CLA c 905:**

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

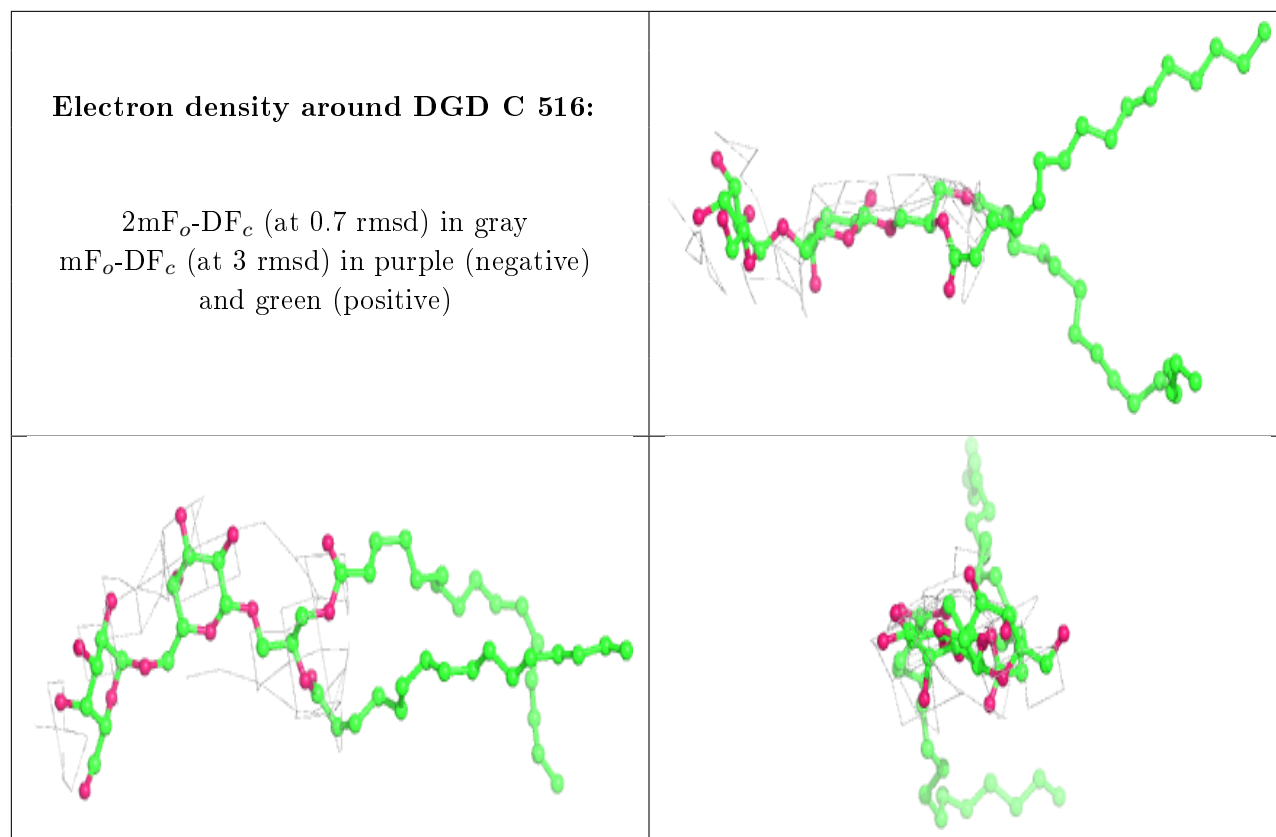


**Electron density around CLA C 503:**

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

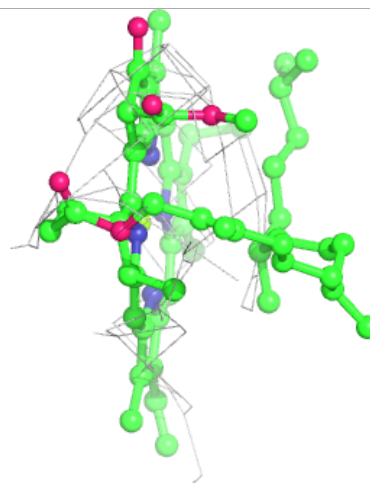
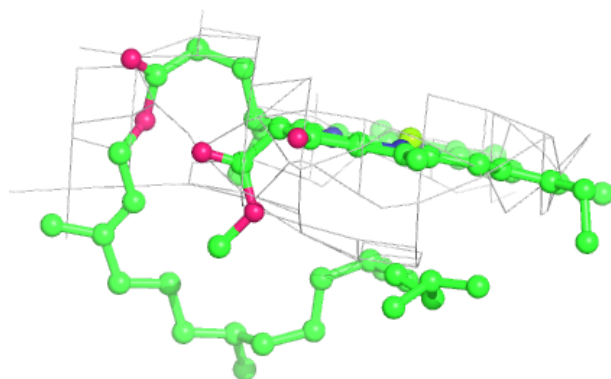
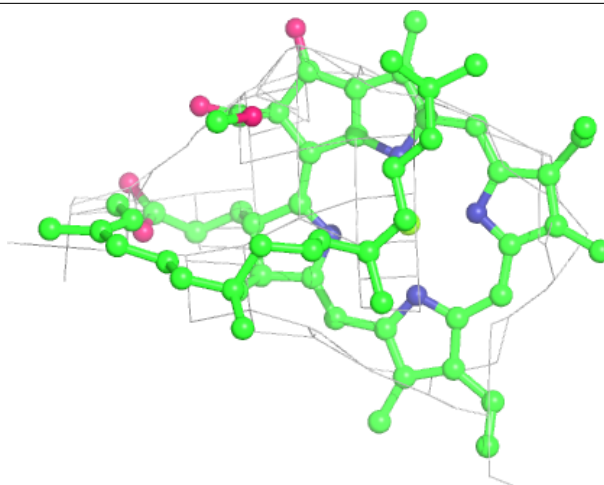






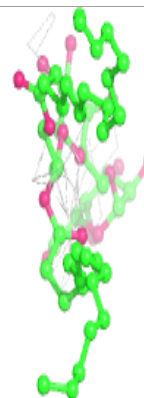
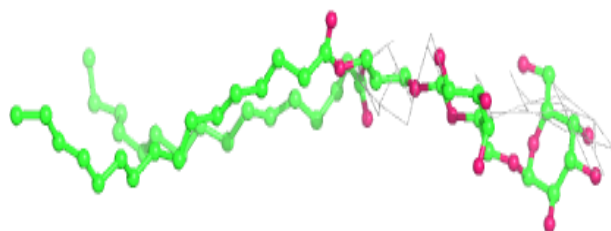
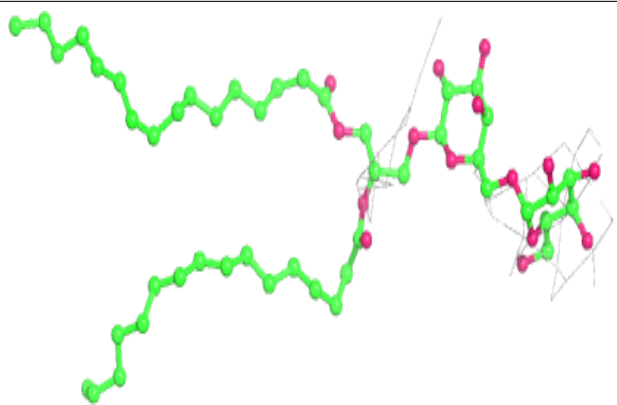
**Electron density around CLA C 510:**

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

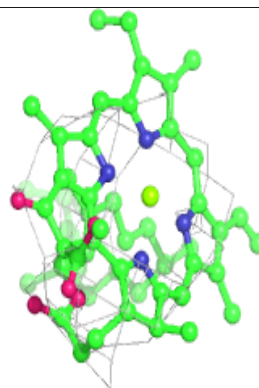
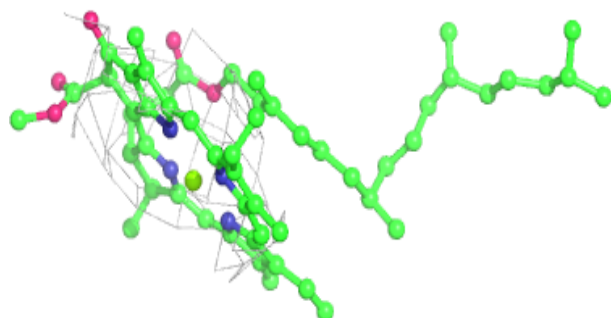
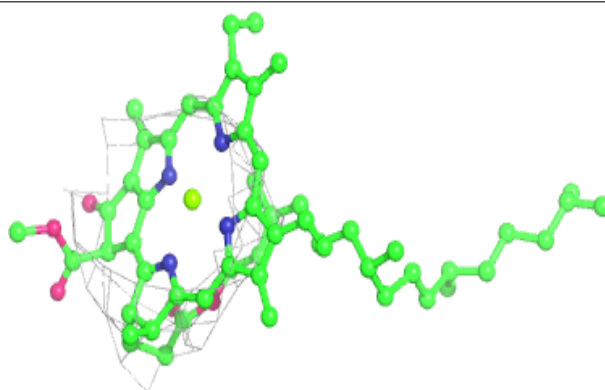


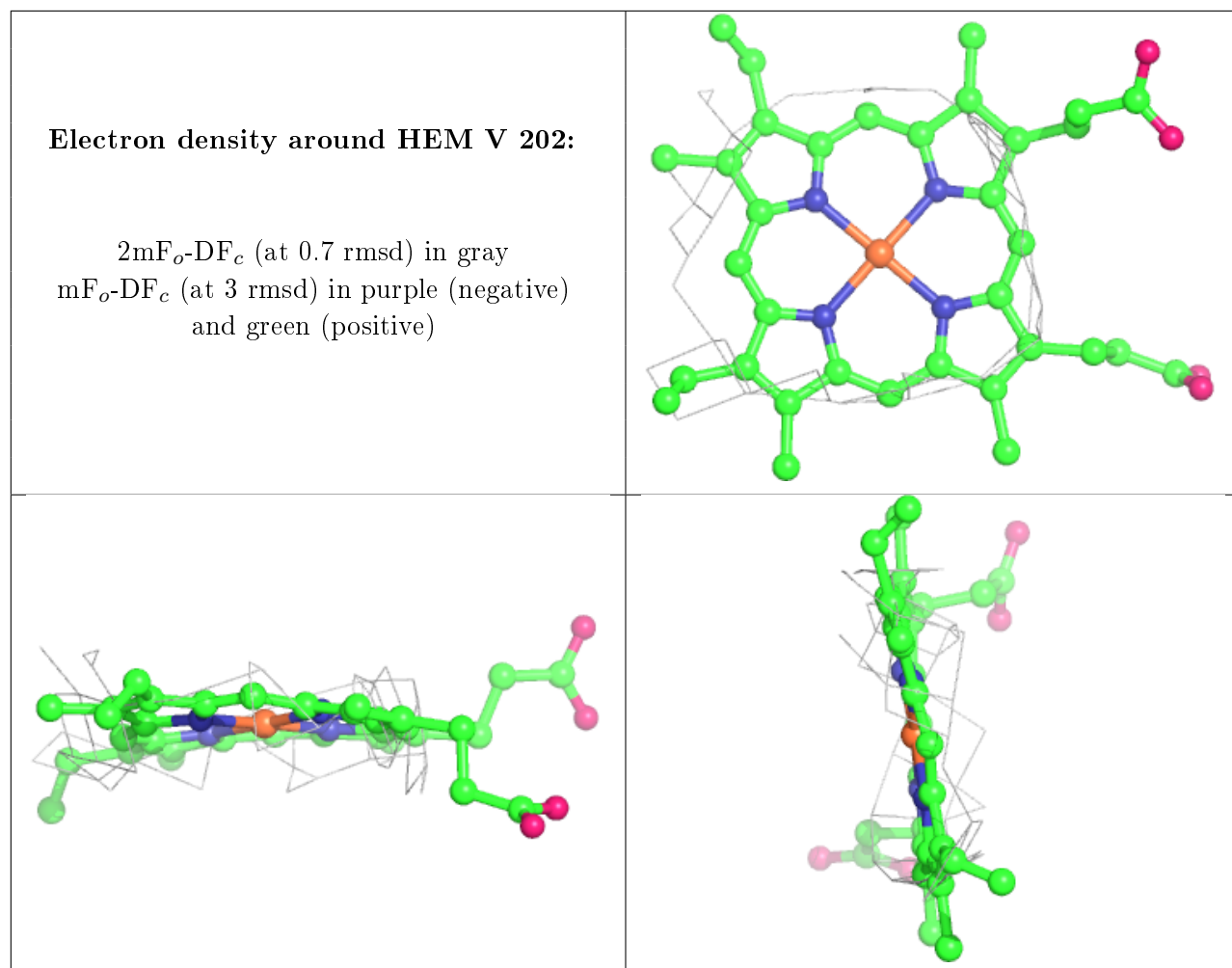
**Electron density around DGD j 101:**

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

**Electron density around CLA c 906:**

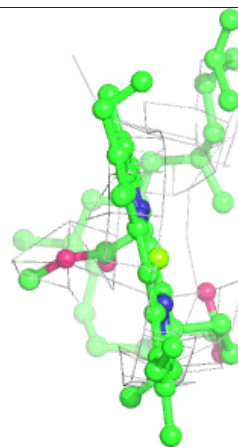
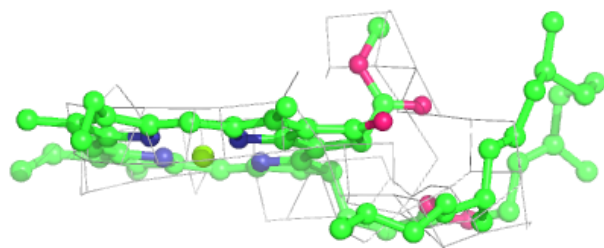
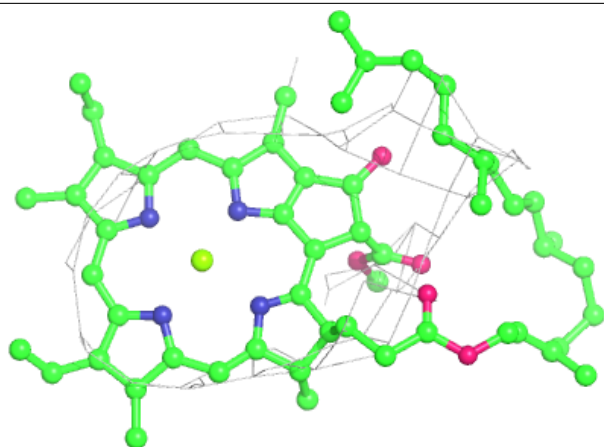
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





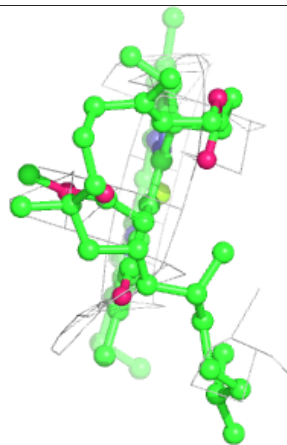
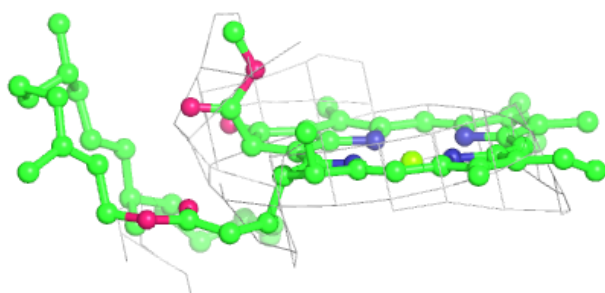
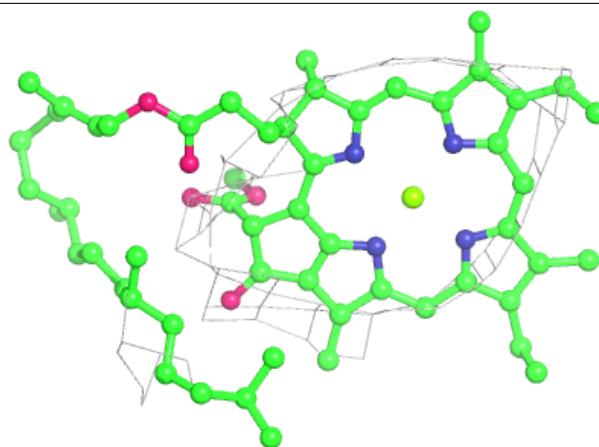
**Electron density around CLA b 611:**

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

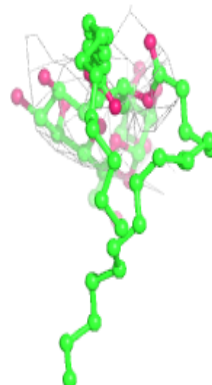
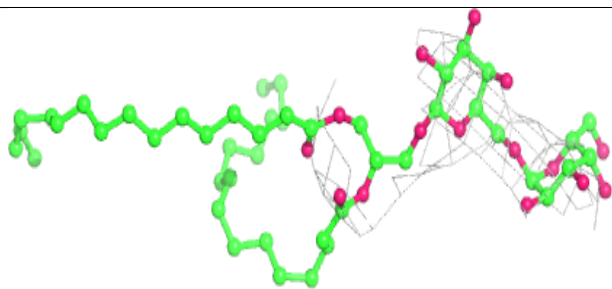
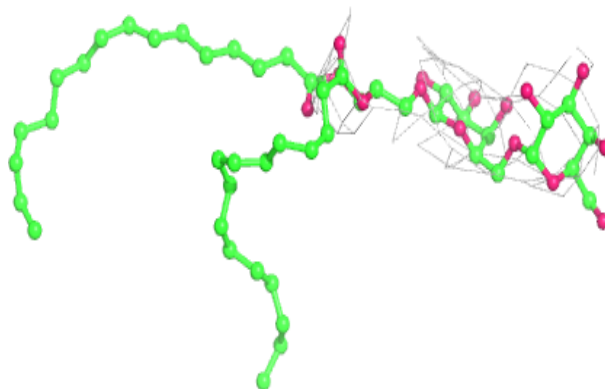


**Electron density around CLA B 611:**

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

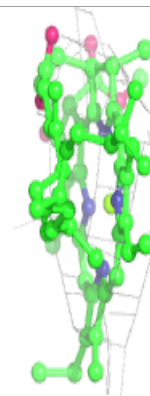
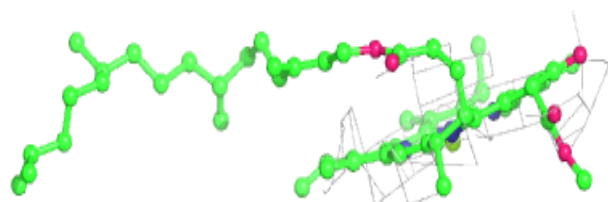
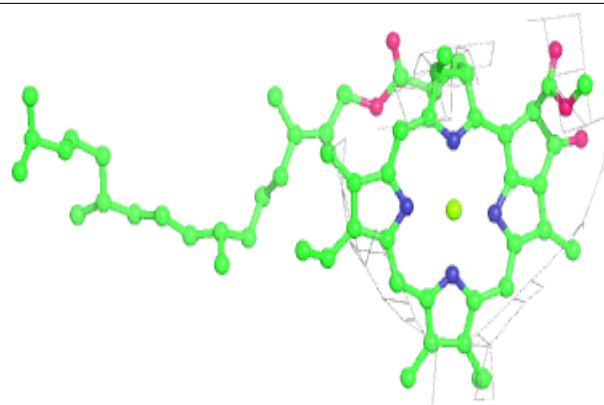
**Electron density around DGD H 102:**

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

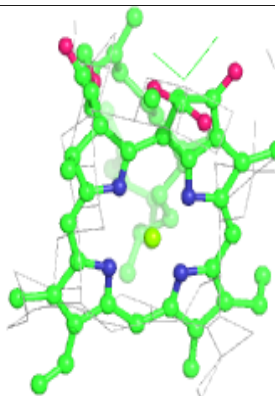
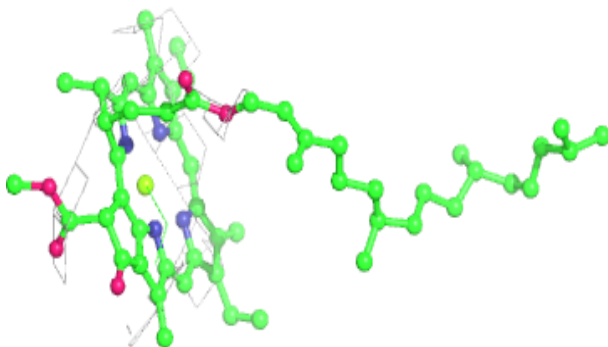
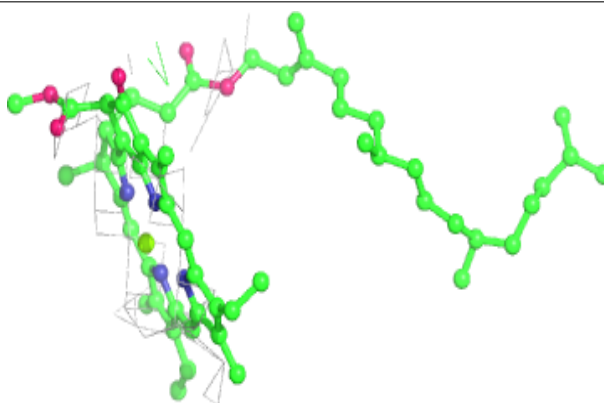


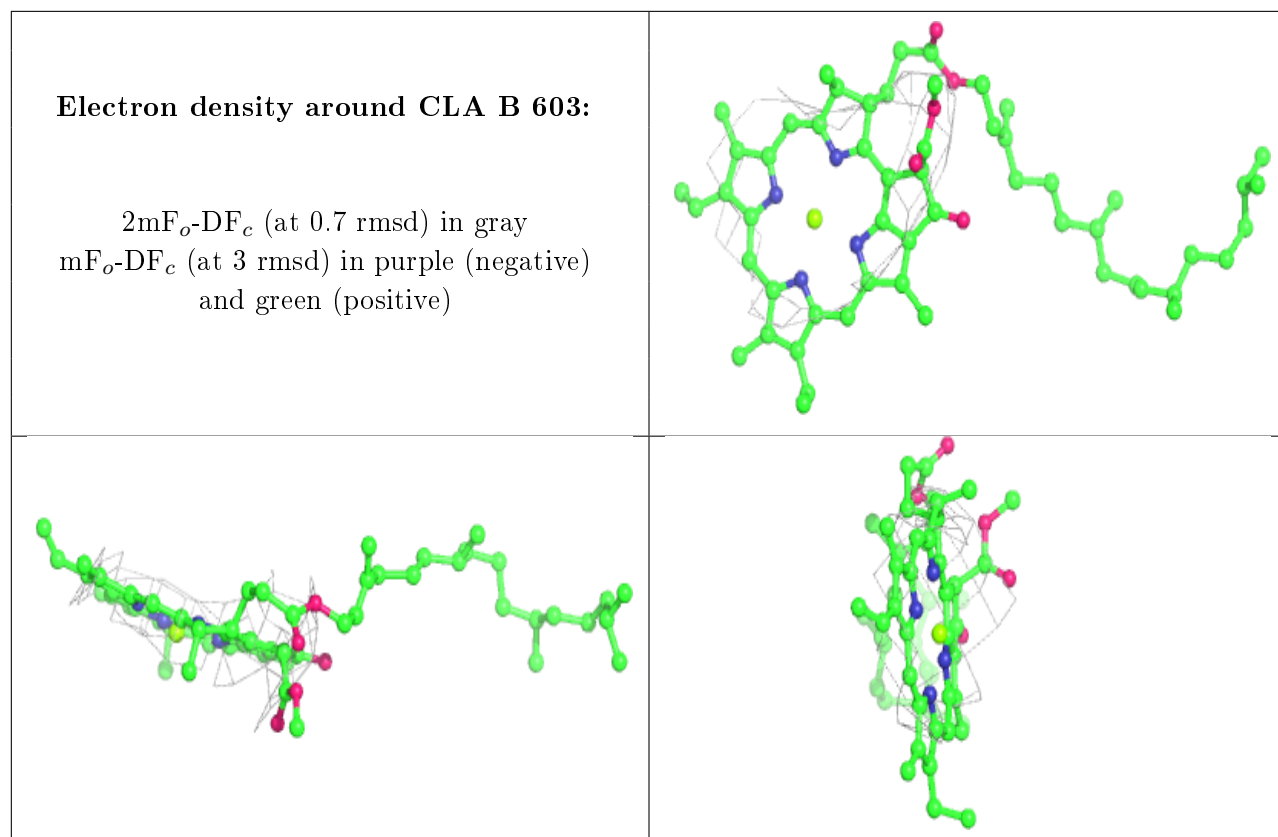
**Electron density around CLA B 604:**

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

**Electron density around CLA c 909:**

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

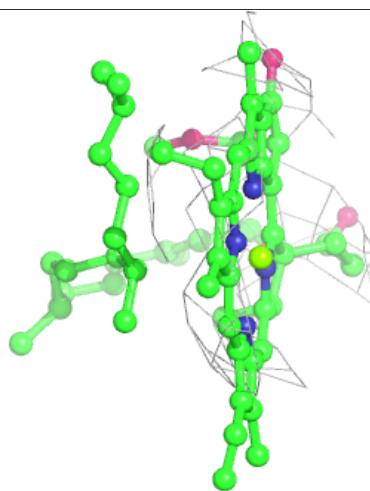
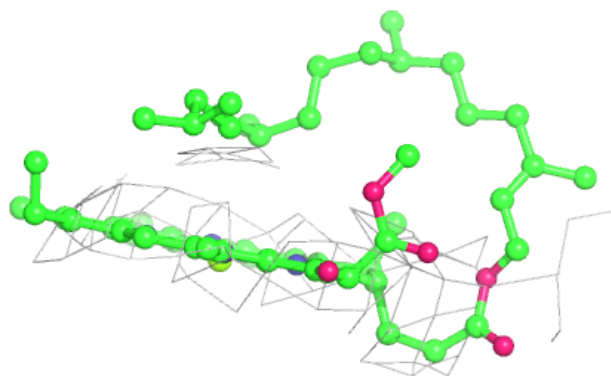
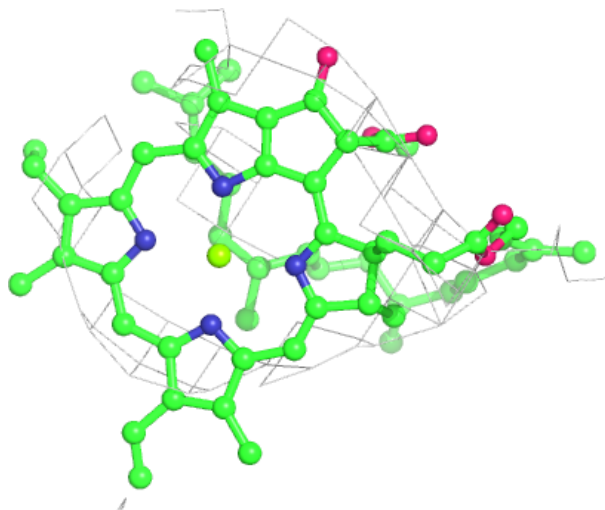






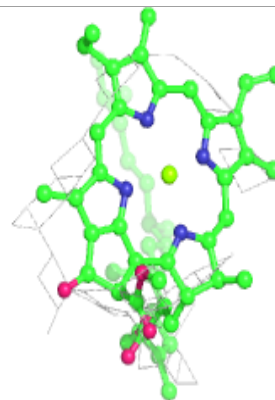
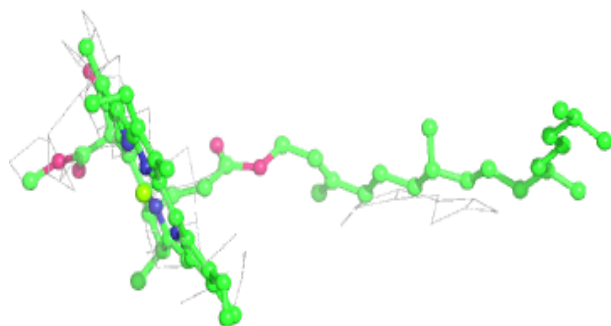
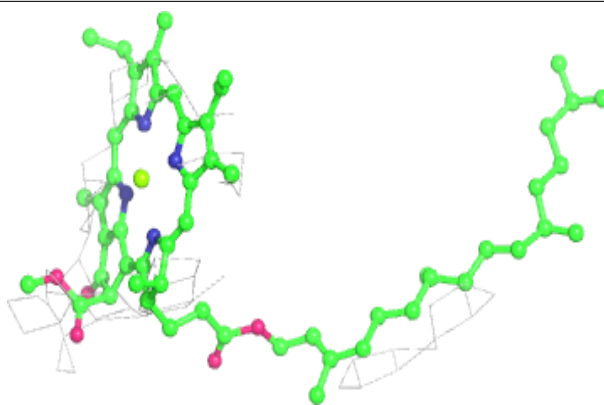
**Electron density around CLA c 911:**

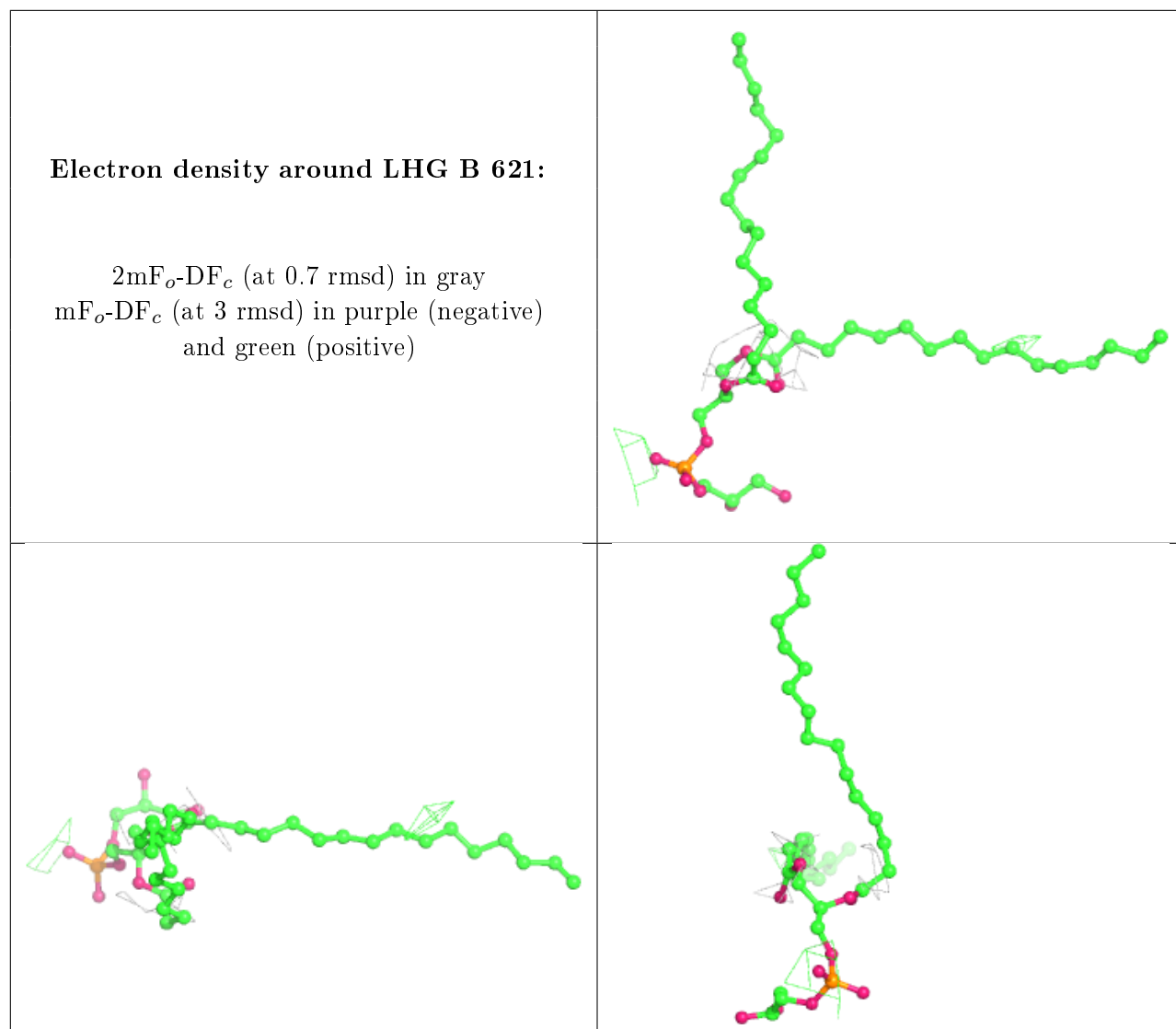
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA B 610:**

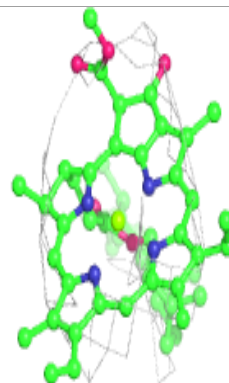
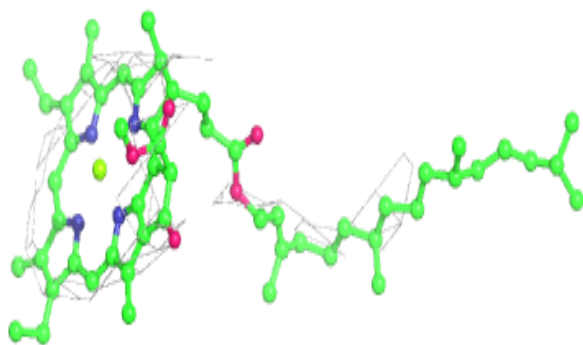
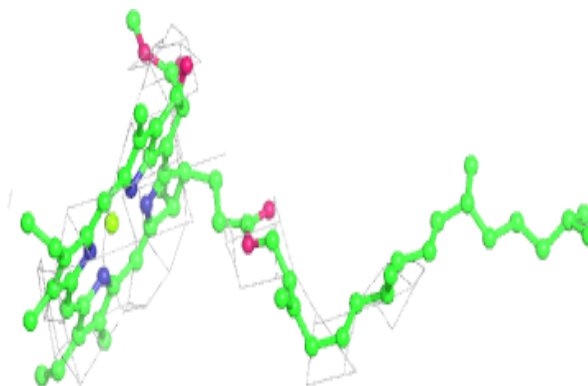
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



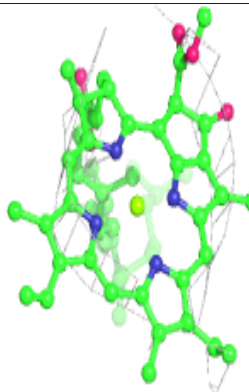
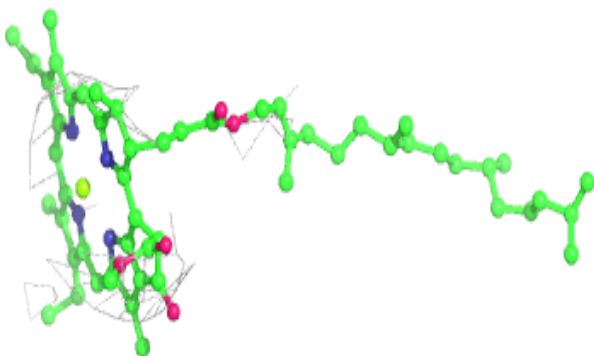
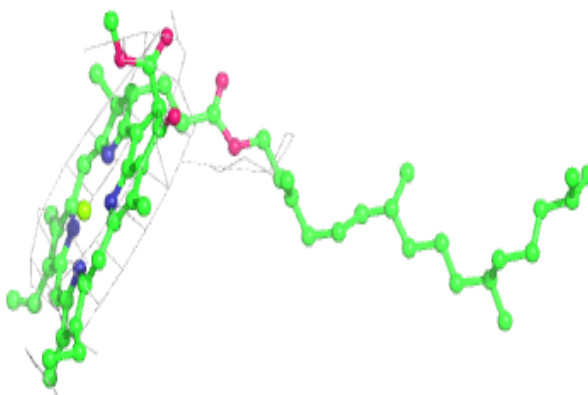


**Electron density around CLA C 502:**

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

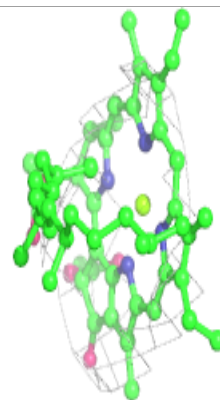
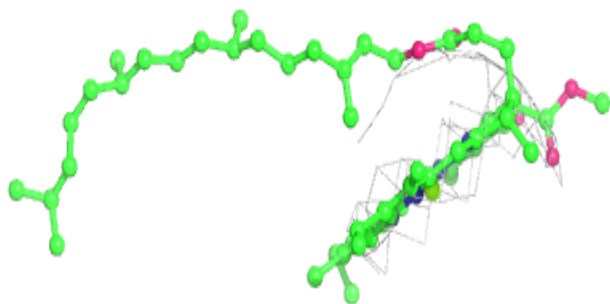
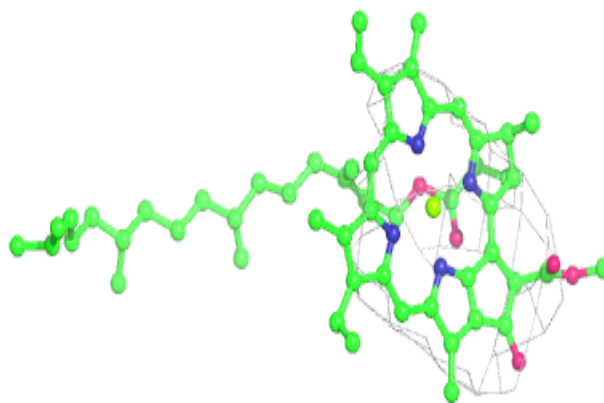
**Electron density around CLA B 605:**

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

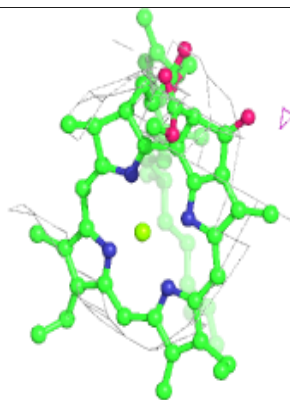
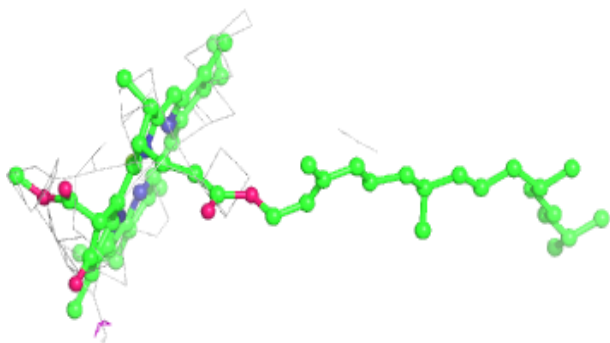
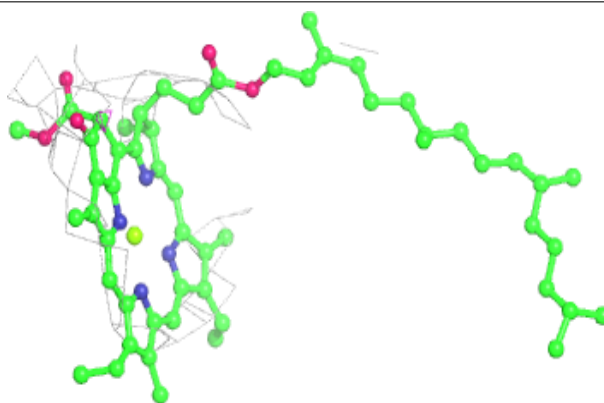


**Electron density around CLA b 609:**

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

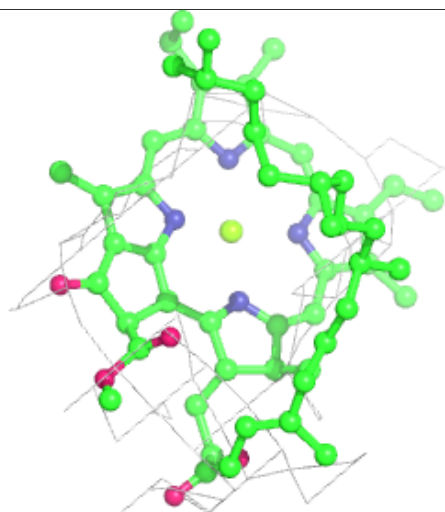
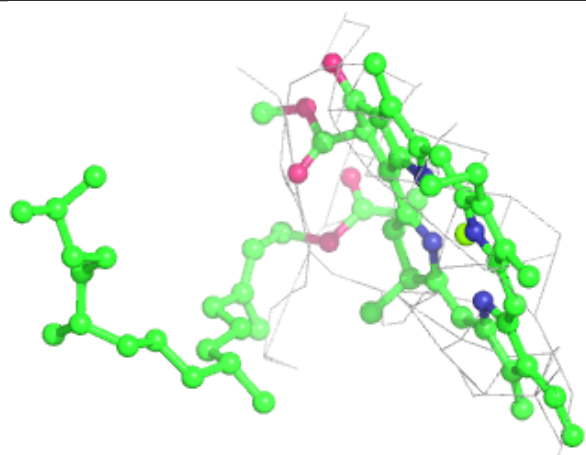
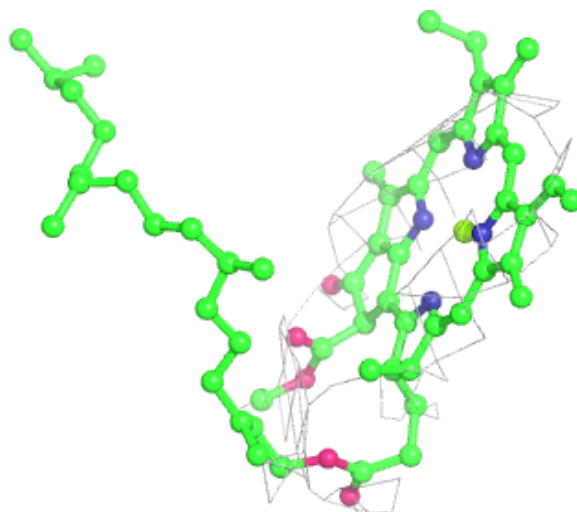
**Electron density around CLA b 610:**

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



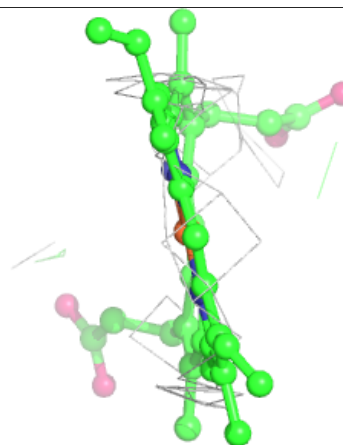
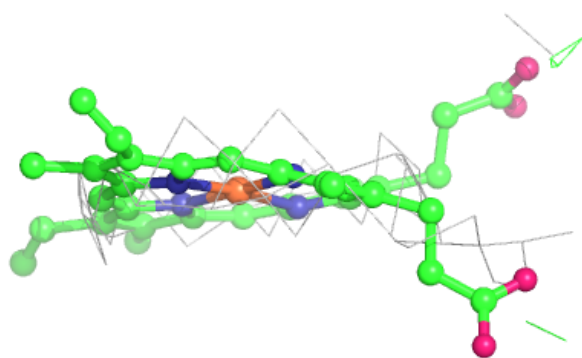
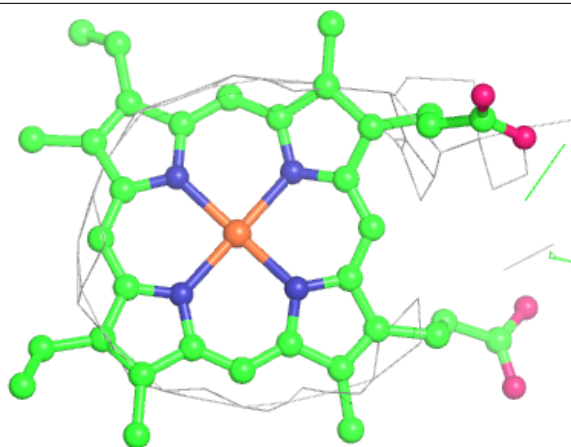
**Electron density around CLA B 614:**

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

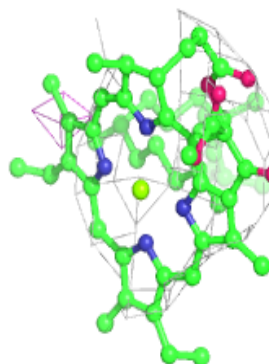
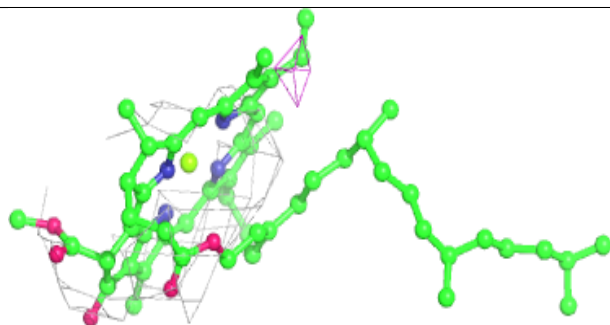
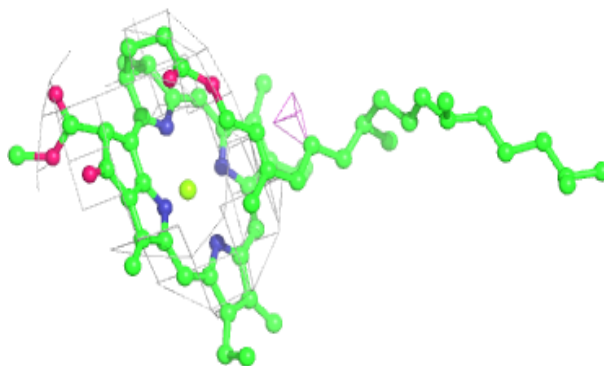


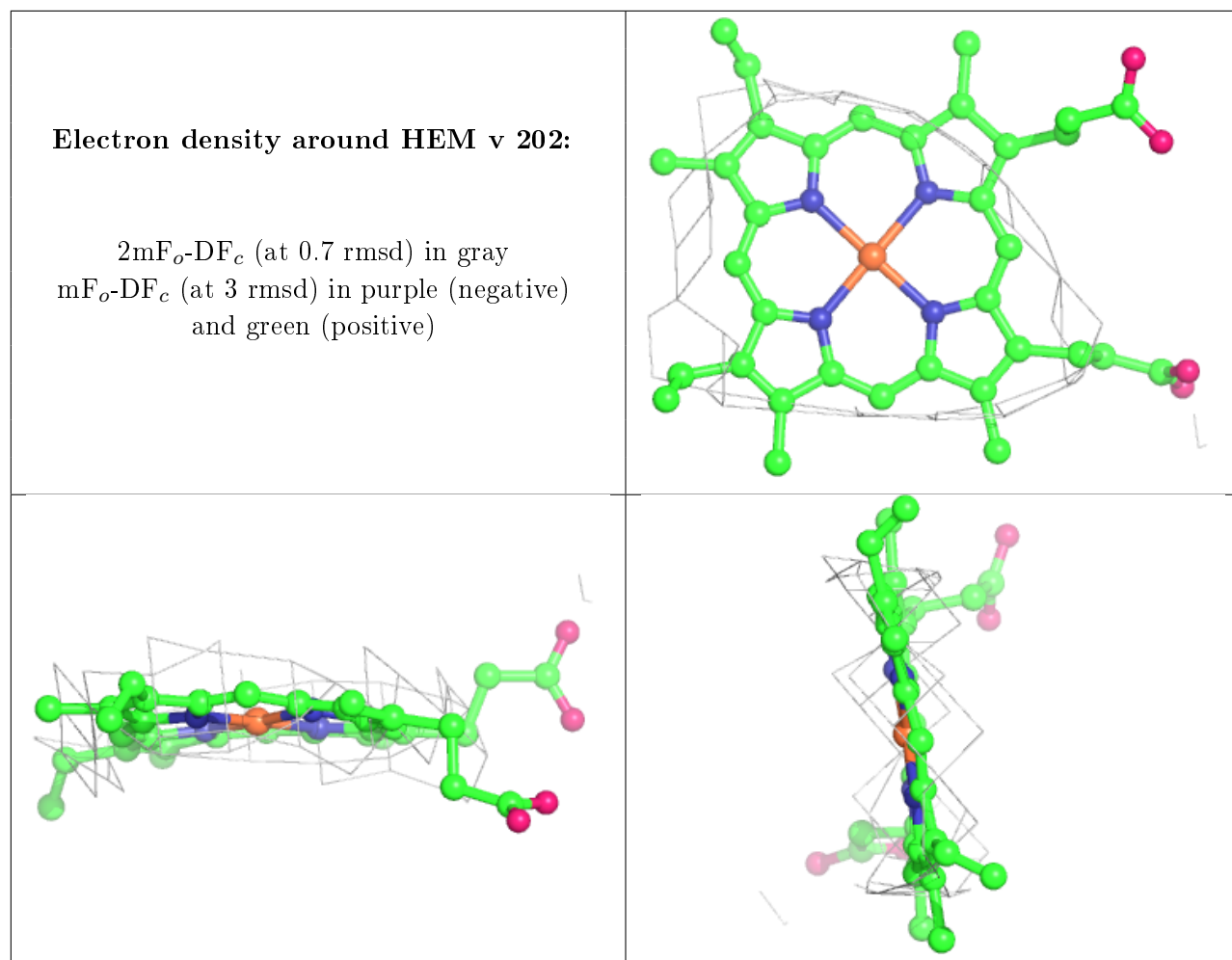
**Electron density around HEM e 101:**

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

**Electron density around 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)

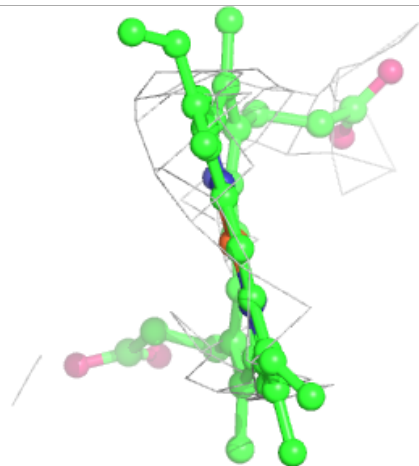
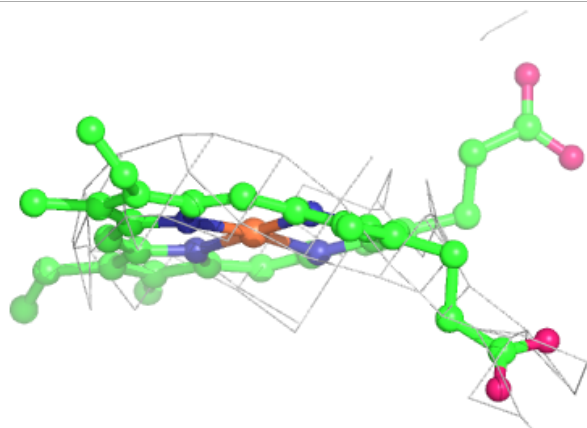
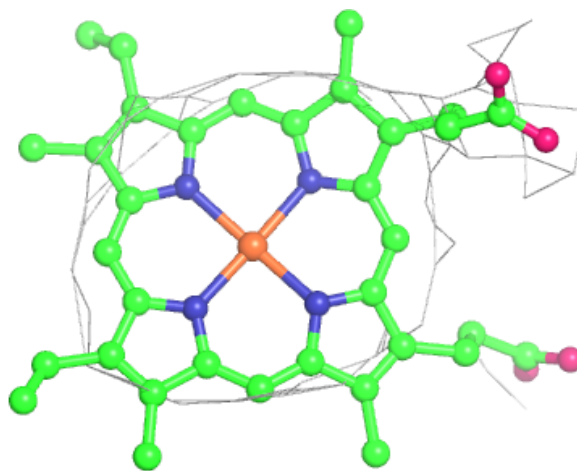






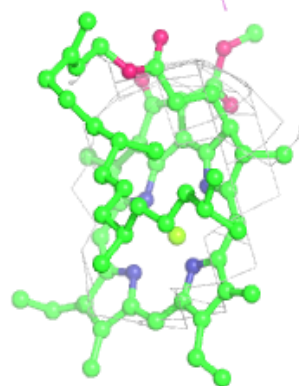
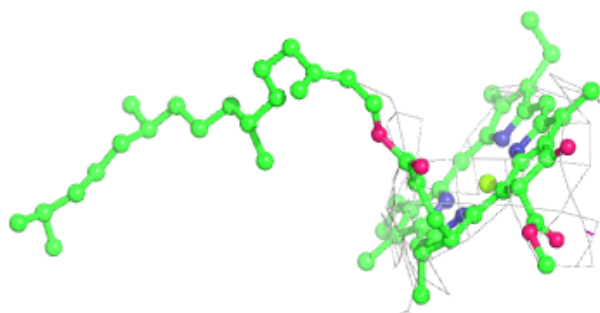
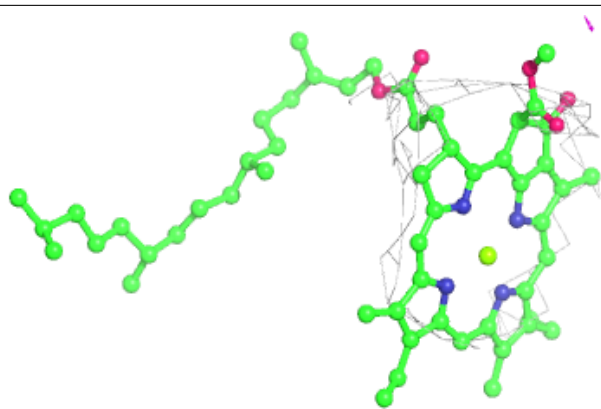
**Electron density around HEM E 101:**

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

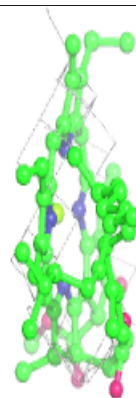
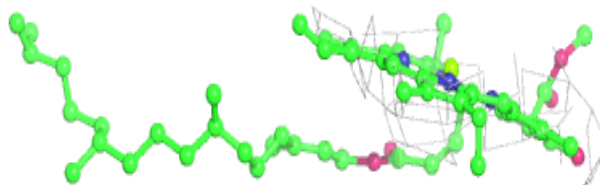
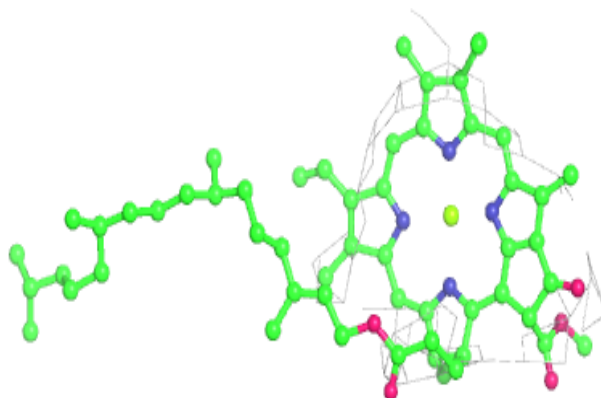


**Electron density around CLA C 511:**

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

**Electron density around CLA b 604:**

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



## 6.5 Other polymers

There are no such residues in this entry.