



# Full wwPDB X-ray Structure Validation Report i

Aug 19, 2020 – 05:28 AM BST

PDB ID : 4YUU  
Title : Crystal structure of oxygen-evolving photosystem II from a red alga  
Authors : Ago, H.; Shen, J.-R.  
Deposited on : 2015-03-19  
Resolution : 2.77 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 i symbol.

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The following versions of software and data (see [references](#) ①) 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
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)	:	2.13.1

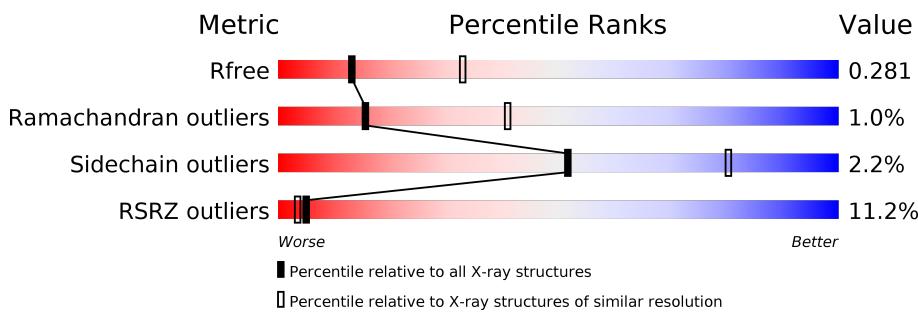
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

## X-RAY DIFFRACTION

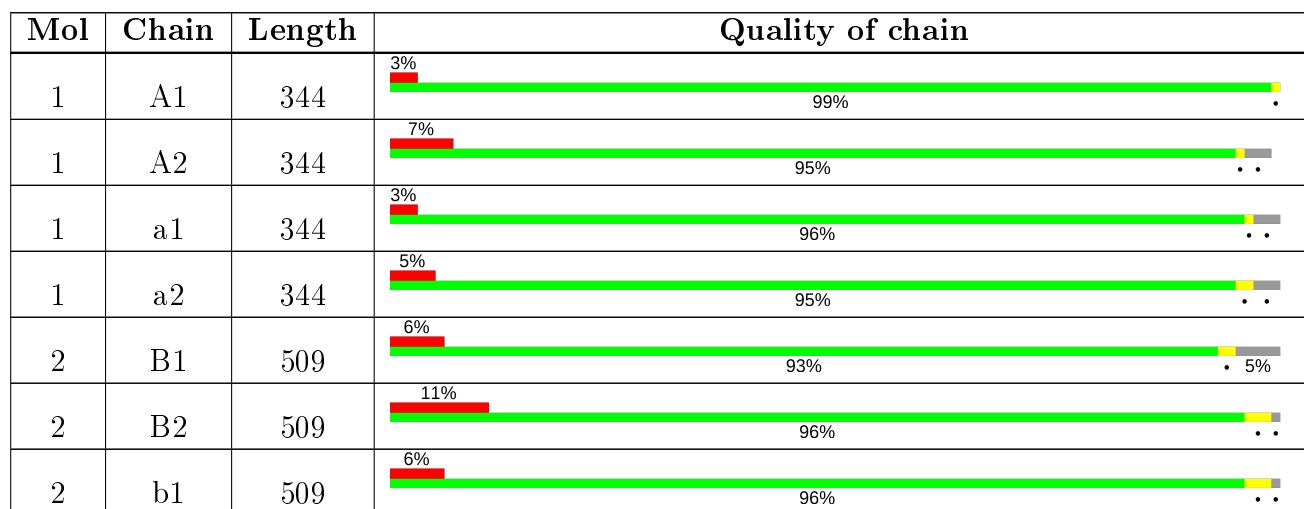
The reported resolution of this entry is 2.77 Å.

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	4107 (2.80-2.76)
Ramachandran outliers	138981	4487 (2.80-2.76)
Sidechain outliers	138945	4489 (2.80-2.76)
RSRZ outliers	127900	4027 (2.80-2.76)

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



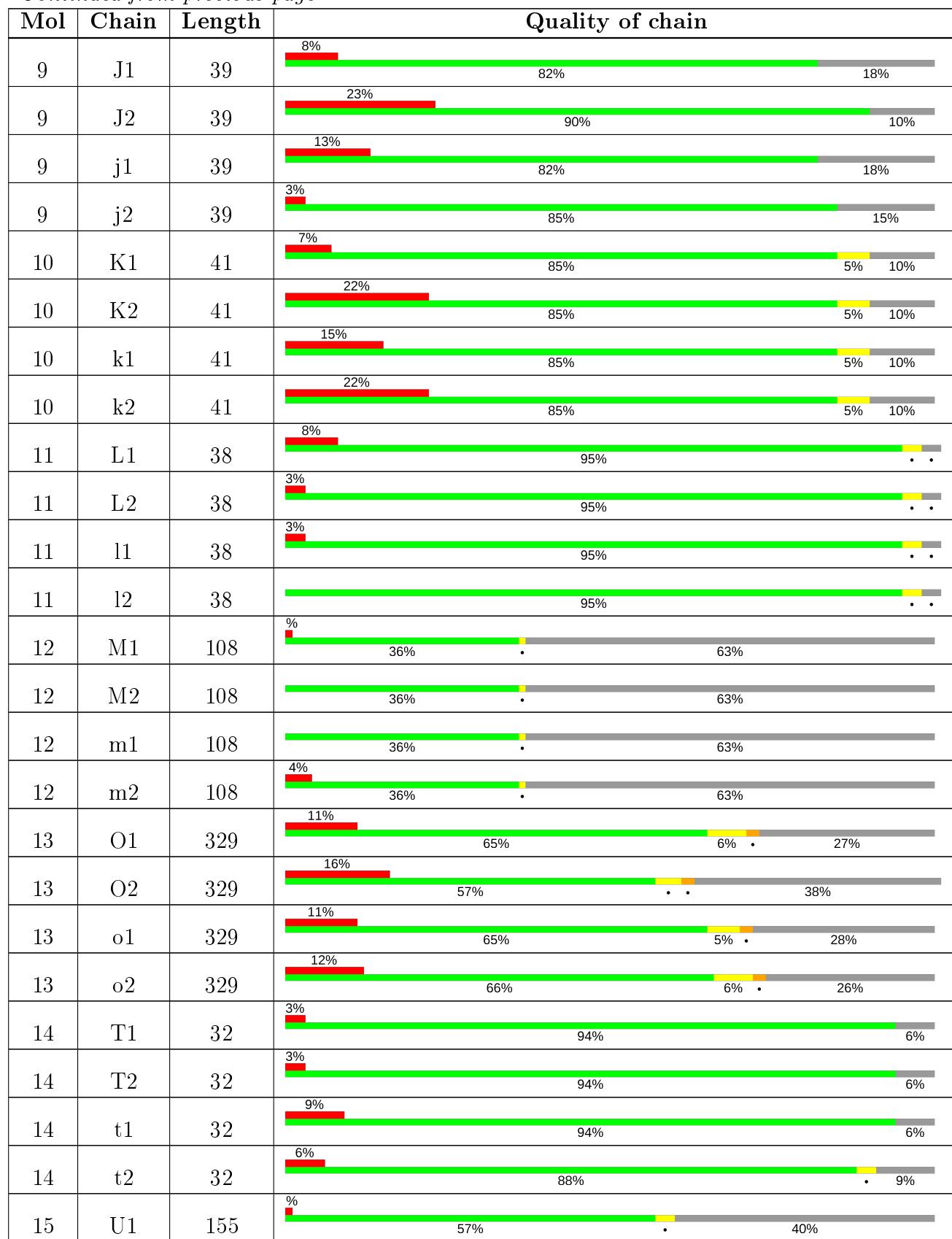
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Mol	Chain	Length	Quality of chain		
2	b2	509	8%	92%	6%
3	C1	460	6%	96%	..
3	C2	460	17%	96%	..
3	c1	460	5%	96%	..
3	c2	460	6%	96%	..
4	D1	351	6%	95%	..
4	D2	351	9%	96%	..
4	d1	351	2%	96%	..
4	d2	351	5%	96%	..
5	E1	84	29%	73%	27%
5	E2	84	37%	75%	25%
5	e1	84	15%	67%	.. 32%
5	e2	84	26%	71%	29%
6	F1	43	5%	63%	.. 35%
6	F2	43	19%	70%	.. 28%
6	f1	43	7%	65%	.. 33%
6	f2	43	16%	65%	.. 33%
7	H1	67	13%	87%	.. 10%
7	H2	67	15%	91%	.. 7%
7	h1	67	4%	90%	.. 7%
7	h2	67	19%	90%	.. 7%
8	I1	38	5%	87%	.. 11%
8	I2	38	5%	89%	.. 8%
8	i1	38	3%	87%	.. 11%
8	i2	38	5%	84%	.. 13%

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Mol	Chain	Length	Quality of chain			
15	U2	155	13%	55%	.	42%
15	u1	155	8%	57%	.	40%
15	u2	155	3%	56%	.	40%
16	V1	155	3%	79%	..	17%
16	V2	155	25%	79%	..	17%
16	v1	155	8%	78%	..	17%
16	v2	155	8%	79%	..	17%
17	Y1	35	9%	77%		23%
17	Y2	35	23%	71%		29%
17	y1	35	17%	77%		23%
17	y2	35	14%	77%		23%
18	X1	40	25%	70%	.	28%
18	X2	40	28%	75%	.	23%
18	x1	40	15%	85%	5% 10%	
18	x2	40	33%	78%	.	20%
19	S1	46	11%	54%		46%
19	S2	46	35%	65%		35%
19	s1	46	24%	87%		13%
19	s2	46	28%	100%		
20	W1	25	4%	84%		16%
20	W2	25		84%		16%
20	w1	25	16%	100%		
20	w2	25	4%	80%		20%
21	Q2	218	25%	49%	.	49%
21	q1	218	21%	47%		52%

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Mol	Chain	Length	Quality of chain			
22	Z2	62	32%	95%	5%	
22	z2	62	11%	95%	5%	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	BCR	K1	101	-	-	-	X
23	BCR	K2	102	-	-	-	X
23	BCR	k1	101	-	-	-	X
23	BCR	z2	101	-	-	-	X
25	CLA	A1	403	X	-	-	-
25	CLA	A1	404	X	-	-	-
25	CLA	A1	405	X	-	-	-
25	CLA	A1	406	X	-	-	-
25	CLA	A2	402	X	-	-	-
25	CLA	A2	403	X	-	-	-
25	CLA	A2	404	X	-	-	-
25	CLA	B1	604	X	-	-	-
25	CLA	B1	605	X	-	-	-
25	CLA	B1	606	X	-	-	-
25	CLA	B1	607	X	-	-	-
25	CLA	B1	608	X	-	-	-
25	CLA	B1	609	X	-	-	-
25	CLA	B1	610	X	-	-	-
25	CLA	B1	611	X	-	-	-
25	CLA	B1	612	X	-	-	-
25	CLA	B1	613	X	-	-	-
25	CLA	B1	614	X	-	-	-
25	CLA	B1	615	X	-	-	-
25	CLA	B1	616	X	-	-	-
25	CLA	B1	617	X	-	-	-
25	CLA	B1	618	X	-	-	-
25	CLA	B1	619	X	-	-	-
25	CLA	B2	604	X	-	-	-
25	CLA	B2	605	X	-	-	-
25	CLA	B2	606	X	-	-	-
25	CLA	B2	607	X	-	-	-
25	CLA	B2	608	X	-	-	-
25	CLA	B2	609	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	B2	610	X	-	-	-
25	CLA	B2	611	X	-	-	-
25	CLA	B2	612	X	-	-	-
25	CLA	B2	613	X	-	-	-
25	CLA	B2	614	X	-	-	-
25	CLA	B2	615	X	-	-	-
25	CLA	B2	616	X	-	-	-
25	CLA	B2	617	X	-	-	-
25	CLA	B2	618	X	-	-	-
25	CLA	B2	619	X	-	-	-
25	CLA	C1	502	X	-	-	-
25	CLA	C1	503	X	-	-	-
25	CLA	C1	504	X	-	-	-
25	CLA	C1	505	X	-	-	-
25	CLA	C1	506	X	-	-	-
25	CLA	C1	507	X	-	-	-
25	CLA	C1	508	X	-	-	-
25	CLA	C1	509	X	-	-	-
25	CLA	C1	510	X	-	-	-
25	CLA	C1	511	X	-	-	-
25	CLA	C1	512	X	-	-	-
25	CLA	C1	513	X	-	-	-
25	CLA	C1	514	X	-	-	-
25	CLA	C2	503	X	-	-	-
25	CLA	C2	504	X	-	-	-
25	CLA	C2	505	X	-	-	-
25	CLA	C2	506	X	-	-	-
25	CLA	C2	507	X	-	-	-
25	CLA	C2	508	X	-	-	-
25	CLA	C2	509	X	-	-	-
25	CLA	C2	510	X	-	-	-
25	CLA	C2	511	X	-	-	-
25	CLA	C2	513	X	-	-	-
25	CLA	C2	516	X	-	-	-
25	CLA	C2	518	X	-	-	-
25	CLA	D1	402	X	-	-	-
25	CLA	D1	403	X	-	-	-
25	CLA	D2	401	X	-	-	-
25	CLA	D2	404	X	-	-	-
25	CLA	D2	406	X	-	-	-
25	CLA	K2	101	X	-	-	-
25	CLA	a1	403	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	a1	404	X	-	-	-
25	CLA	a1	405	X	-	-	-
25	CLA	a2	404	X	-	-	-
25	CLA	a2	405	X	-	-	-
25	CLA	a2	413	X	-	-	-
25	CLA	b1	604	X	-	-	-
25	CLA	b1	605	X	-	-	-
25	CLA	b1	606	X	-	-	-
25	CLA	b1	607	X	-	-	-
25	CLA	b1	608	X	-	-	-
25	CLA	b1	609	X	-	-	-
25	CLA	b1	610	X	-	-	-
25	CLA	b1	611	X	-	-	-
25	CLA	b1	612	X	-	-	-
25	CLA	b1	613	X	-	-	-
25	CLA	b1	614	X	-	-	-
25	CLA	b1	615	X	-	-	-
25	CLA	b1	616	X	-	-	-
25	CLA	b1	617	X	-	-	-
25	CLA	b1	619	X	-	-	-
25	CLA	b1	620	X	-	-	-
25	CLA	b2	604	X	-	-	-
25	CLA	b2	606	X	-	-	-
25	CLA	b2	608	X	-	-	-
25	CLA	b2	609	X	-	-	-
25	CLA	b2	610	X	-	-	-
25	CLA	b2	611	X	-	-	-
25	CLA	b2	612	X	-	-	-
25	CLA	b2	613	X	-	-	-
25	CLA	b2	614	X	-	-	-
25	CLA	b2	615	X	-	-	-
25	CLA	b2	616	X	-	-	-
25	CLA	b2	617	X	-	-	-
25	CLA	b2	618	X	-	-	-
25	CLA	b2	619	X	-	-	-
25	CLA	b2	620	X	-	-	-
25	CLA	b2	624	X	-	-	-
25	CLA	c1	503	X	-	-	-
25	CLA	c1	504	X	-	-	-
25	CLA	c1	505	X	-	-	-
25	CLA	c1	506	X	-	-	-
25	CLA	c1	507	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	c1	508	X	-	-	-
25	CLA	c1	509	X	-	-	-
25	CLA	c1	510	X	-	-	-
25	CLA	c1	511	X	-	-	-
25	CLA	c1	512	X	-	-	-
25	CLA	c1	513	X	-	-	-
25	CLA	c1	515	X	-	-	-
25	CLA	c1	516	X	-	-	-
25	CLA	c2	502	X	-	-	-
25	CLA	c2	503	X	-	-	-
25	CLA	c2	504	X	-	-	-
25	CLA	c2	505	X	-	-	-
25	CLA	c2	506	X	-	-	-
25	CLA	c2	507	X	-	-	-
25	CLA	c2	508	X	-	-	-
25	CLA	c2	509	X	-	-	-
25	CLA	c2	510	X	-	-	-
25	CLA	c2	511	X	-	-	-
25	CLA	c2	512	X	-	-	-
25	CLA	c2	513	X	-	-	-
25	CLA	c2	515	X	-	-	-
25	CLA	d1	401	X	-	-	-
25	CLA	d1	404	X	-	-	-
25	CLA	d1	406	X	-	-	-
25	CLA	d2	402	X	-	-	-
25	CLA	d2	404	X	-	-	-
25	CLA	d2	405	X	-	-	-
28	UNL	C2	501	-	-	-	X
28	UNL	C2	517	-	-	-	X
28	UNL	D1	410	-	-	-	X
28	UNL	H2	102	-	-	-	X
28	UNL	J2	101	-	-	-	X
28	UNL	X2	101	-	-	-	X
28	UNL	b1	623	-	-	-	X
28	UNL	b1	630	-	-	-	X
28	UNL	d2	410	-	-	-	X
28	UNL	j1	101	-	-	-	X
29	LMG	C2	515	-	-	-	X
29	LMG	j2	101	-	-	-	X
32	GOL	C1	518	-	-	-	X
33	LHG	b2	625	-	-	-	X
35	LMT	c1	517	-	-	-	X

## 2 Entry composition (i)

There are 40 unique types of molecules in this entry. The entry contains 92765 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A1	344	Total	C 2609	N 1708	O 425	S 462	14	0	0
1	a1	334	Total	C 2564	N 1676	O 421	S 454	13	0	0
1	A2	332	Total	C 2475	N 1607	O 411	S 444	13	0	1
1	a2	334	Total	C 2513	N 1638	O 410	S 452	13	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B1	483	Total	C 3703	N 2426	O 624	S 641	12	0	0
2	b1	503	Total	C 3881	N 2549	O 646	S 674	12	0	1
2	B2	503	Total	C 3770	N 2460	O 645	S 654	11	0	0
2	b2	481	Total	C 3681	N 2418	O 620	S 631	12	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C1	449	Total	C 3392	N 2215	O 573	S 594	10	0	0
3	c1	449	Total	C 3439	N 2241	O 577	S 611	10	0	2
3	C2	444	Total	C 3145	N 2028	O 545	S 564	8	0	0
3	c2	448	Total	C 3386	N 2201	O 578	S 597	10	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D1	337	Total	C	N	O	S			
			2615	1736	422	447	10	0	0	0
4	d1	339	Total	C	N	O	S			
			2678	1775	433	460	10	0	0	0
4	D2	340	Total	C	N	O	S			
			2585	1713	422	440	10	0	0	0
4	d2	340	Total	C	N	O	S			
			2643	1756	425	452	10	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E1	61	Total	C	N	O				
			405	264	68	73		0	0	0
5	e1	57	Total	C	N	O				
			427	280	71	76		0	0	0
5	E2	63	Total	C	N	O				
			430	279	72	79		0	0	0
5	e2	60	Total	C	N	O				
			421	279	71	71		0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F1	28	Total	C	N	O	S			
			213	144	36	32	1	0	0	0
6	f1	29	Total	C	N	O	S			
			227	158	36	32	1	0	0	0
6	F2	31	Total	C	N	O	S			
			229	153	41	34	1	0	0	0
6	f2	29	Total	C	N	O	S			
			225	157	34	33	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H1	60	Total	C	N	O	S			
			433	289	69	73	2	0	0	0
7	h1	62	Total	C	N	O	S			
			470	317	71	80	2	0	0	0
7	H2	62	Total	C	N	O	S			
			443	294	72	75	2	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	h2	62	Total	C 450	N 302	O 69	S 77	2	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I1	34	Total	C 274	N 184	O 42	S 45	3	0	0
8	i1	34	Total	C 280	N 188	O 44	S 45	3	0	0
8	I2	35	Total	C 265	N 177	O 41	S 45	2	0	0
8	i2	33	Total	C 261	N 174	O 40	S 44	3	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J1	32	Total	C 220	N 148	O 33	S 39	0	0	0
9	j1	32	Total	C 224	N 152	O 33	S 39	0	0	0
9	J2	35	Total	C 231	N 154	O 36	S 41	0	0	0
9	j2	33	Total	C 228	N 153	O 34	S 41	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	K1	37	Total	C 279	N 195	O 39	S 44	1	0	0
10	k1	37	Total	C 280	N 198	O 39	S 42	1	0	0
10	K2	37	Total	C 250	N 171	O 39	S 40	0	0	0
10	k2	37	Total	C 269	N 185	O 40	S 43	1	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	L1	37	Total C	N	O		0	0	0
			292	197	46	49			
11	l1	37	Total C	N	O		0	0	0
			299	203	47	49			
11	L2	37	Total C	N	O		0	0	0
			299	202	46	51			
11	l2	37	Total C	N	O		0	0	0
			299	202	46	51			

- Molecule 12 is a protein called PHOTOSYSTEM II REACTION CENTER PROTEIN M.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
12	M1	40	Total C	N	O	S	0	0	0
			285	189	44	50	2		
12	m1	40	Total C	N	O	S	0	0	0
			285	189	44	50	2		
12	M2	40	Total C	N	O	S	0	0	0
			284	188	46	48	2		
12	m2	40	Total C	N	O	S	0	0	0
			287	189	46	50	2		

- Molecule 13 is a protein called PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
13	O1	240	Total C	N	O	S	0	0	0
			1674	1074	276	316	8		
13	o1	238	Total C	N	O	S	0	0	0
			1692	1070	282	332	8		
13	O2	205	Total C	N	O	S	0	0	0
			1376	870	237	262	7		
13	o2	245	Total C	N	O	S	0	0	0
			1768	1123	296	341	8		

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	T1	30	Total C	N	O	S	0	0	0
			241	168	36	36	1		
14	t1	30	Total C	N	O	S	0	0	0
			246	173	36	36	1		
14	T2	30	Total C	N	O	S	0	0	0
			240	170	33	36	1		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	t2	29	Total	C 235	N 167	O 32	S 35	1	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	U1	93	Total	C 691	N 445	O 116	S 129	1	0	0
15	u1	93	Total	C 703	N 449	O 119	S 134	1	0	0
15	U2	90	Total	C 577	N 355	O 103	S 118	1	0	0
15	u2	93	Total	C 708	N 455	O 120	S 132	1	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
U1	-51	MET	-	initiating methionine	UNP Q9ZQS5
u1	-51	MET	-	initiating methionine	UNP Q9ZQS5
U2	-51	MET	-	initiating methionine	UNP Q9ZQS5
u2	-51	MET	-	initiating methionine	UNP Q9ZQS5

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V1	129	Total	C 917	N 579	O 159	S 175	4	0	0
16	v1	129	Total	C 921	N 577	O 163	S 177	4	0	0
16	V2	129	Total	C 845	N 521	O 152	S 168	4	0	0
16	v2	129	Total	C 963	N 608	O 168	S 183	4	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y1	27	Total	C 170	N 111	O 29	S 30	0	0	0
17	y1	27	Total	C 195	N 133	O 30	S 32	0	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
17	Y2	25	Total C N O 159 104 27 28	0	0	0
17	y2	27	Total C N O 188 126 30 32	0	0	0

- Molecule 18 is a protein called PHOTOSYSTEM II REACTION CENTER PROTEIN X.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
18	X1	29	Total C N O 197 135 30 32	0	0	0
18	x1	36	Total C N O S 255 174 38 42 1	0	0	0
18	X2	31	Total C N O S 215 149 33 32 1	0	0	0
18	x2	32	Total C N O 218 147 35 36	0	0	0

- Molecule 19 is a protein called PEPTIDE CHAIN UNASSIGNED.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
19	S1	25	Total C N O 164 113 26 25	0	0	0
19	s1	40	Total C N O 263 182 41 40	0	0	0
19	S2	30	Total C N O 191 130 31 30	0	0	0
19	s2	46	Total C N O 281 188 47 46	0	0	0

- Molecule 20 is a protein called PEPTIDE CHAIN UNASSIGNED.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
20	W1	21	Total C N O 134 91 21 22	0	0	0
20	w1	25	Total C N O 152 101 25 26	0	0	0
20	W2	21	Total C N O 129 86 21 22	0	0	0
20	w2	20	Total C N O 127 86 20 21	0	0	0

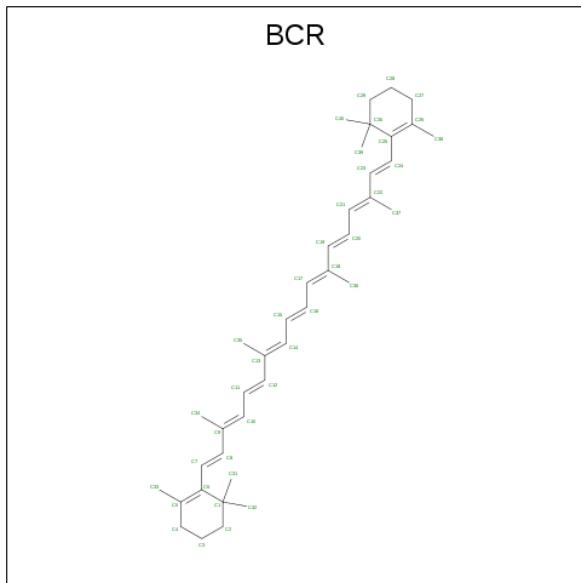
- Molecule 21 is a protein called Extrinsic protein in photosystem II.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	q1	105	Total C 645	N 399	O 115	S 127	4	0	0
21	Q2	111	Total C 676	N 417	O 123	S 133	3	0	0

- Molecule 22 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
22	Z2	59	Total C 351	N 224	O 61	S 65	1	0	0
22	z2	59	Total C 381	N 250	O 63	S 67	1	0	0

- Molecule 23 is BETA-CAROTENE (three-letter code: BCR) (formula: C<sub>40</sub>H<sub>56</sub>).



Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
23	A1	1	Total C 40 40		0	0
23	B1	1	Total C 40 40		0	0
23	B1	1	Total C 40 40		0	0
23	B1	1	Total C 40 40		0	0
23	C1	1	Total C 40 40		0	0
23	C1	1	Total C 40 40		0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	D1	1	Total C 40 40	0	0
23	H1	1	Total C 22 22	0	0
23	J1	1	Total C 40 40	0	0
23	K1	1	Total C 31 31	0	0
23	a1	1	Total C 40 40	0	0
23	b1	1	Total C 40 40	0	0
23	b1	1	Total C 40 40	0	0
23	b1	1	Total C 40 40	0	0
23	c1	1	Total C 40 40	0	0
23	c1	1	Total C 40 40	0	0
23	d1	1	Total C 40 40	0	0
23	h1	1	Total C 40 40	0	0
23	k1	1	Total C 40 40	0	0
23	A2	1	Total C 40 40	0	0
23	B2	1	Total C 40 40	0	0
23	B2	1	Total C 40 40	0	0
23	B2	1	Total C 40 40	0	0
23	C2	1	Total C 40 40	0	0
23	F2	1	Total C 40 40	0	0
23	H2	1	Total C 24 24	0	0
23	K2	1	Total C 40 40	0	0

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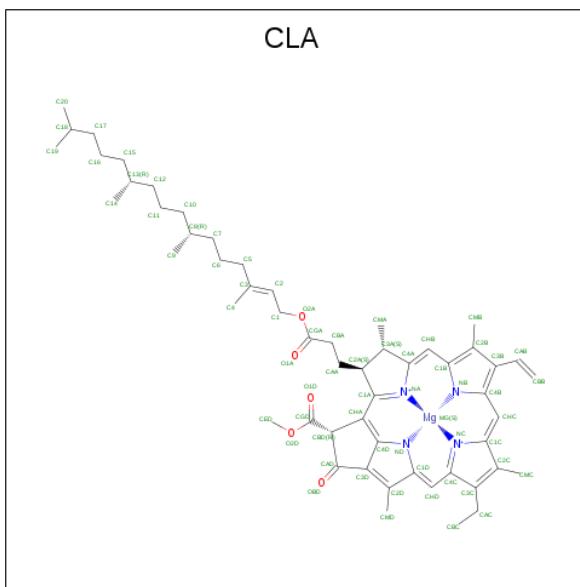
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	K2	1	Total C 29 29	0	0
23	a2	1	Total C 40 40	0	0
23	b2	1	Total C 40 40	0	0
23	b2	1	Total C 40 40	0	0
23	b2	1	Total C 40 40	0	0
23	c2	1	Total C 40 40	0	0
23	d2	1	Total C 40 40	0	0
23	h2	1	Total C 40 40	0	0
23	j2	1	Total C 40 40	0	0
23	k2	1	Total C 40 40	0	0
23	z2	1	Total C 40 40	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
24	a1	1	Total Cl 1 1	0	0
24	A2	1	Total Cl 1 1	0	0
24	A1	1	Total Cl 1 1	0	0
24	a2	1	Total Cl 1 1	0	0

- Molecule 25 is CHLOROPHYLL A (three-letter code: CLA) (formula: C<sub>55</sub>H<sub>72</sub>MgN<sub>4</sub>O<sub>5</sub>).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	A1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	A1	1	Total 51	C 41	Mg 1	N 4	O 5	0	0
25	A1	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
25	A1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 42	C 34	Mg 1	N 4	O 3	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 60	C 50	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 62	C 52	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
25	B1	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	B1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B1	1	Total	C	Mg	N	O	0	0
			58	48	1	4	5		
25	B1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	C1	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
25	D1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	D1	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	a1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a1	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	a1	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
25	c1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d1	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	A2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	A2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	A2	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	B2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		

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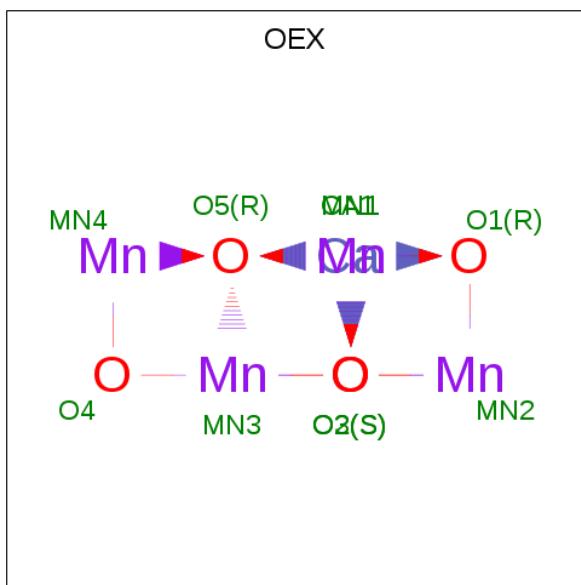
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	C2	1	Total	C	Mg	N	O	0	0
			53	43	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
25	C2	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
25	D2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	D2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	D2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	K2	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
25	a2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a2	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			42	34	1	4	3		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		

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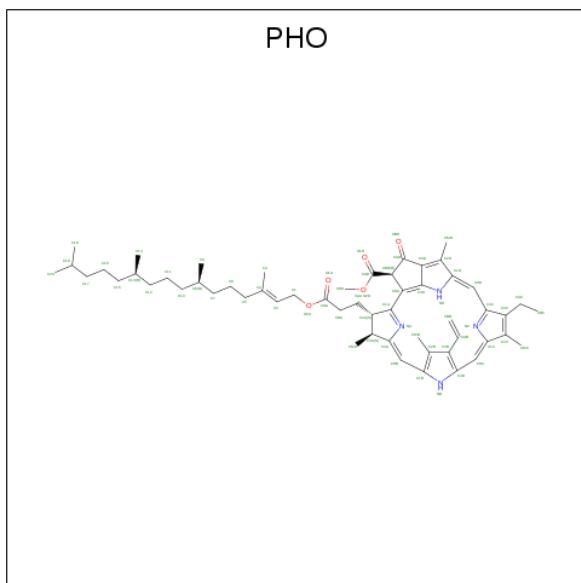
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
25	c2	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
25	d2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d2	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
25	d2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 26 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		
26	A1	1	10	1	4	5	0	0
26	a1	1	10	1	4	5	0	0
26	A2	1	10	1	4	5	0	0
26	a2	1	10	1	4	5	0	0

- Molecule 27 is PHEOPHYTIN A (three-letter code: PHO) (formula: C<sub>55</sub>H<sub>74</sub>N<sub>4</sub>O<sub>5</sub>).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
27	A1	1	Total	C 64	N 55	O 4	0	0
27	D1	1	Total	C 63	N 54	O 4	0	0
27	a1	1	Total	C 64	N 55	O 4	0	0
27	d1	1	Total	C 64	N 55	O 4	0	0
27	A2	1	Total	C 64	N 55	O 4	0	0
27	D2	1	Total	C 64	N 55	O 4	0	0
27	a2	1	Total	C 64	N 55	O 4	0	0
27	d2	1	Total	C 64	N 55	O 4	0	0

- Molecule 28 is UNKNOWN LIGAND (three-letter code: UNL) (formula: ).

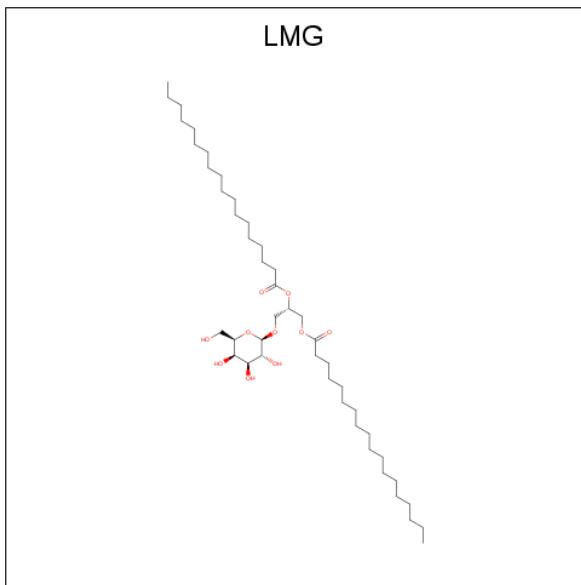
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf	
28	I2	2	Total	C 31	N 31	0	0
28	d1	1	Total	C 12	N 12	0	0
28	F2	1	Total	C 16	N 16	0	0
28	m2	2	Total	C 36	N 36	0	0
28	W2	1	Total	C 9	N 9	0	0
28	c2	1	Total	C 15	N 15	0	0
28	J2	1	Total	C 10	N 10	0	0
28	A2	2	Total	C 28	N 28	0	0
28	j1	1	Total	C 17	N 17	0	0
28	i2	1	Total	C 14	N 14	0	0
28	d2	2	Total	C 25	N 25	0	0
28	B2	4	Total	C 58	N 58	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	b1	7	Total C 92 92	0	0
28	t1	2	Total C 27 27	0	0
28	m1	1	Total C 6 6	0	0
28	a2	4	Total C 55 55	0	0
28	K2	1	Total C 5 5	0	0
28	A1	1	Total C 14 14	0	0
28	l1	1	Total C 12 12	0	0
28	b2	1	Total C 12 12	0	0
28	x1	1	Total C 15 15	0	0
28	X2	1	Total C 7 7	0	0
28	k2	4	Total C 30 30	0	0
28	a1	1	Total C 11 11	0	0
28	D1	1	Total C 6 6	0	0
28	H2	1	Total C 5 5	0	0
28	M2	1	Total C 11 11	0	0
28	C2	2	Total C 24 24	0	0
28	B1	3	Total C 41 41	0	0

- Molecule 29 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: C<sub>45</sub>H<sub>86</sub>O<sub>10</sub>).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A1	1	Total	C	O	0	0
			43	33	10		
29	A1	1	Total	C	O	0	0
			41	31	10		
29	B1	1	Total	C	O	0	0
			31	21	10		
29	B1	1	Total	C	O	0	0
			48	38	10		
29	C1	1	Total	C	O	0	0
			48	38	10		
29	D1	1	Total	C	O	0	0
			35	25	10		
29	M1	1	Total	C	O	0	0
			31	27	4		
29	a1	1	Total	C	O	0	0
			51	41	10		
29	b1	1	Total	C	O	0	0
			38	28	10		
29	b1	1	Total	C	O	0	0
			39	29	10		
29	b1	1	Total	C	O	0	0
			40	30	10		
29	c1	1	Total	C	O	0	0
			55	45	10		
29	d1	1	Total	C	O	0	0
			33	23	10		
29	d1	1	Total	C	O	0	0
			35	30	5		

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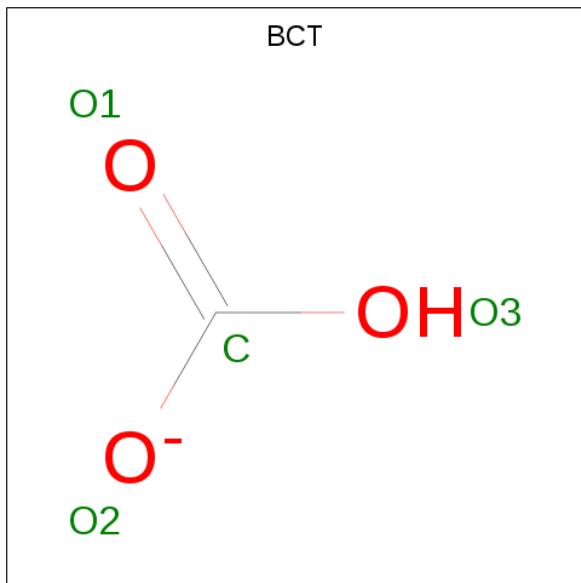
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A2	1	Total C O 29 19 10	0	0
29	B2	1	Total C O 40 30 10	0	0
29	B2	1	Total C O 37 27 10	0	0
29	C2	1	Total C O 24 14 10	0	0
29	F2	1	Total C O 35 25 10	0	0
29	I2	1	Total C O 34 24 10	0	0
29	a2	1	Total C O 44 34 10	0	0
29	b2	1	Total C O 39 29 10	0	0
29	c2	1	Total C O 26 16 10	0	0
29	d2	1	Total C O 27 17 10	0	0
29	j2	1	Total C O 50 40 10	0	0

- Molecule 30 is FE (III) ION (three-letter code: FE) (formula: Fe).

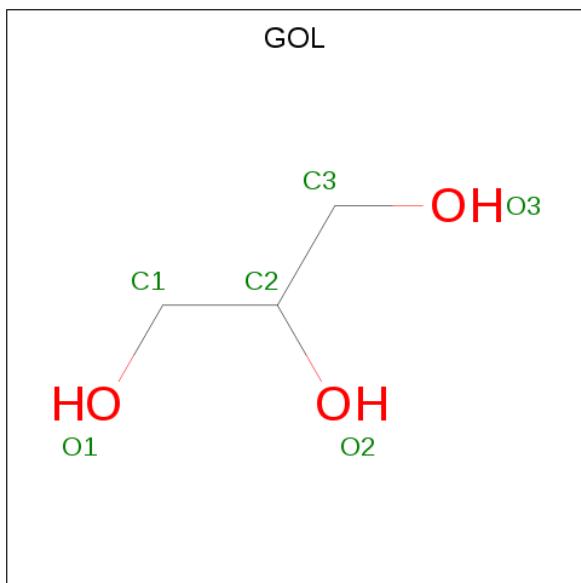
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	a1	1	Total Fe 1 1	0	0
30	A2	1	Total Fe 1 1	0	0
30	A1	1	Total Fe 1 1	0	0
30	a2	1	Total Fe 1 1	0	0

- Molecule 31 is BICARBONATE ION (three-letter code: BCT) (formula: CHO<sub>3</sub>).



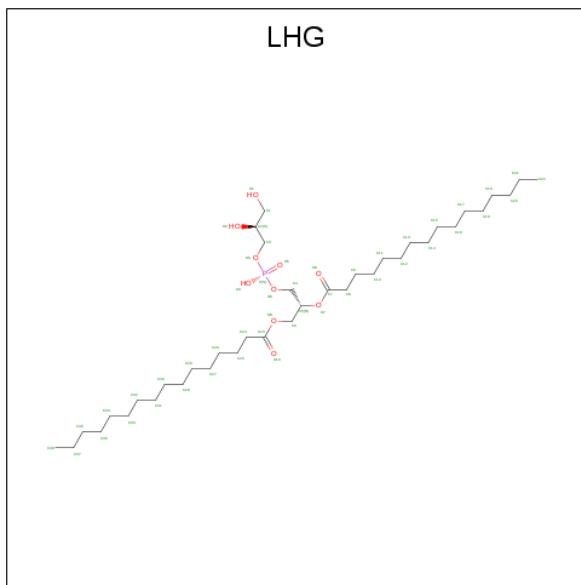
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	A1	1	Total C O 4 1 3	0	0
31	a1	1	Total C O 4 1 3	0	0
31	A2	1	Total C O 4 1 3	0	0
31	a2	1	Total C O 4 1 3	0	0

- Molecule 32 is GLYCEROL (three-letter code: GOL) (formula: C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	B1	1	Total	C	O	0	0
			6	3	3		
32	C1	1	Total	C	O	0	0
			6	3	3		
32	a1	1	Total	C	O	0	0
			6	3	3		
32	b1	1	Total	C	O	0	0
			6	3	3		
32	c1	1	Total	C	O	0	0
			6	3	3		
32	i1	1	Total	C	O	0	0
			6	3	3		
32	C2	1	Total	C	O	0	0
			6	3	3		
32	a2	1	Total	C	O	0	0
			6	3	3		
32	c2	1	Total	C	O	0	0
			6	3	3		

- Molecule 33 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: C<sub>38</sub>H<sub>75</sub>O<sub>10</sub>P).



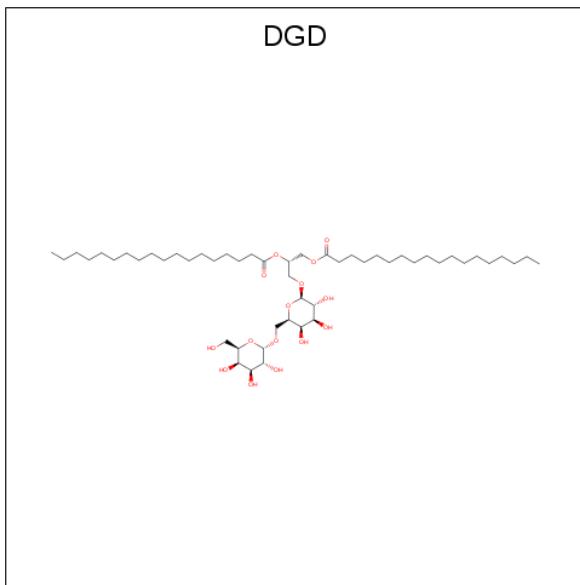
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
33	B1	1	Total	C	O	P	0	0
			49	38	10	1		
33	D1	1	Total	C	O	P	0	0
			49	38	10	1		

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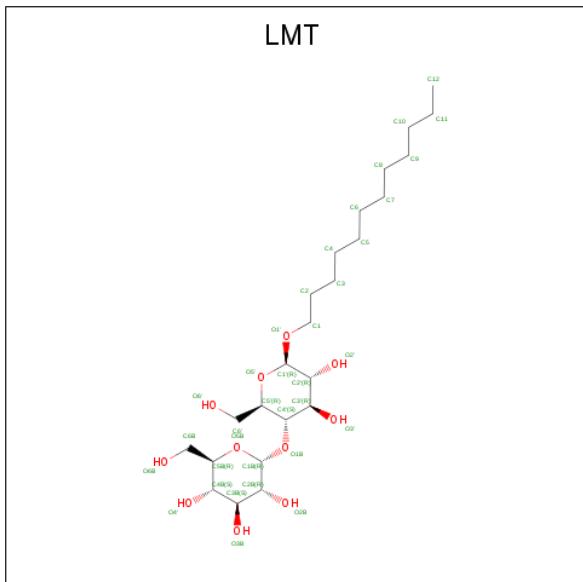
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	D1	1	Total C O P 49 38 10 1	0	0
33	L1	1	Total C O P 41 30 10 1	0	0
33	a1	1	Total C O P 43 32 10 1	0	0
33	b1	1	Total C O P 49 38 10 1	0	0
33	d1	1	Total C O P 32 21 10 1	0	0
33	d1	1	Total C O P 49 38 10 1	0	0
33	l1	1	Total C O P 49 38 10 1	0	0
33	A2	1	Total C O P 33 22 10 1	0	0
33	B2	1	Total C O P 42 31 10 1	0	0
33	D2	1	Total C O P 49 38 10 1	0	0
33	D2	1	Total C O P 49 38 10 1	0	0
33	L2	1	Total C O P 49 38 10 1	0	0
33	a2	1	Total C O P 30 19 10 1	0	0
33	b2	1	Total C O P 43 32 10 1	0	0
33	d2	1	Total C O P 49 38 10 1	0	0
33	d2	1	Total C O P 49 38 10 1	0	0
33	l2	1	Total C O P 44 33 10 1	0	0

- Molecule 34 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: C<sub>51</sub>H<sub>96</sub>O<sub>15</sub>).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	C1	1	Total C O 52 37 15	0	0
34	C1	1	Total C O 62 47 15	0	0
34	C1	1	Total C O 64 49 15	0	0
34	H1	1	Total C O 62 47 15	0	0
34	c1	1	Total C O 51 36 15	0	0
34	c1	1	Total C O 62 47 15	0	0
34	c1	1	Total C O 62 47 15	0	0
34	h1	1	Total C O 62 47 15	0	0
34	C2	1	Total C O 33 18 15	0	0
34	H2	1	Total C O 62 47 15	0	0
34	c2	1	Total C O 62 47 15	0	0
34	c2	1	Total C O 52 37 15	0	0
34	c2	1	Total C O 62 47 15	0	0
34	h2	1	Total C O 62 47 15	0	0

- Molecule 35 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: C<sub>24</sub>H<sub>46</sub>O<sub>11</sub>).



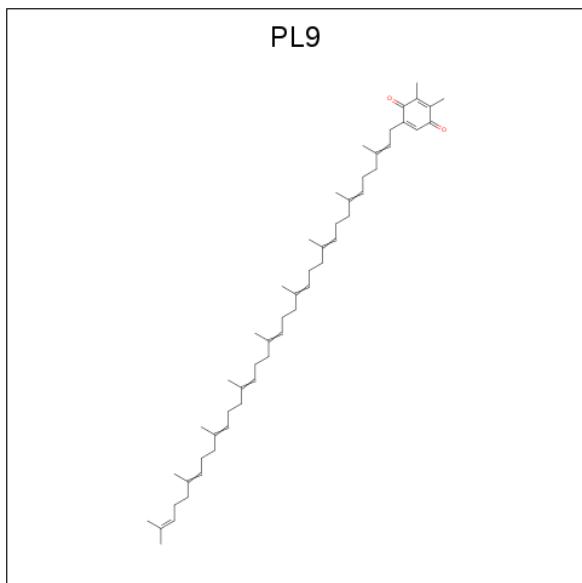
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	C1	1	Total C O 35 24 11	0	0
35	L1	1	Total C 12 12	0	0
35	M1	1	Total C 11 11	0	0
35	M1	1	Total C O 24 18 6	0	0
35	T1	1	Total C 12 12	0	0
35	c1	1	Total C O 33 22 11	0	0
35	l1	1	Total C O 24 18 6	0	0
35	m1	1	Total C O 35 24 11	0	0
35	a2	1	Total C O 35 24 11	0	0
35	b2	1	Total C O 35 24 11	0	0
35	b2	1	Total C O 35 24 11	0	0
35	i2	1	Total C 7 7	0	0

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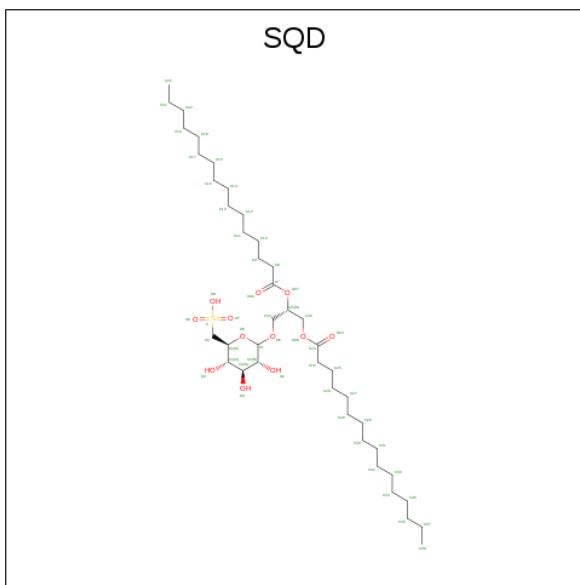
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	m2	1	Total C O 30 19 11	0	0
35	m2	1	Total C O 29 18 11	0	0

- Molecule 36 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<sub>53</sub>H<sub>80</sub>O<sub>2</sub>).



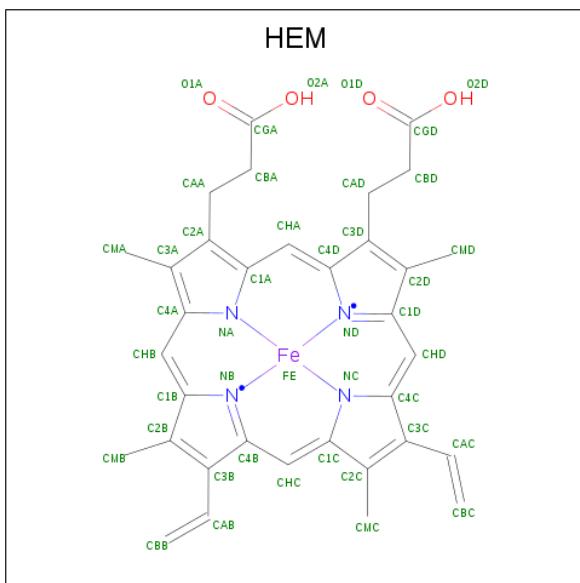
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	D1	1	Total C O 55 53 2	0	0
36	d1	1	Total C O 55 53 2	0	0
36	D2	1	Total C O 55 53 2	0	0
36	d2	1	Total C O 55 53 2	0	0

- Molecule 37 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
37	D1	1	Total	C	O	S	0	0
			35	22	12	1		
37	B2	1	Total	C	O	S	0	0
			45	32	12	1		
37	D2	1	Total	C	O	S	0	0
			25	12	12	1		
37	b2	1	Total	C	O	S	0	0
			45	32	12	1		

- Molecule 38 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: C<sub>34</sub>H<sub>32</sub>FeN<sub>4</sub>O<sub>4</sub>).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
38	E1	1	Total	C 43	34	1	4	4	0
38	V1	1	Total	C 43	34	1	4	4	0
38	f1	1	Total	C 43	34	1	4	4	0
38	v1	1	Total	C 43	34	1	4	4	0
38	E2	1	Total	C 43	34	1	4	4	0
38	V2	1	Total	C 43	34	1	4	4	0
38	e2	1	Total	C 43	34	1	4	4	0
38	v2	1	Total	C 43	34	1	4	4	0

- Molecule 39 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
39	O1	1	Total Ca 1 1		0	0
39	o2	1	Total Ca 1 1		0	0

- Molecule 40 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
40	A1	2	Total O 2 2		0	0
40	B1	1	Total O 1 1		0	0
40	a1	4	Total O 4 4		0	0
40	c1	2	Total O 2 2		0	0
40	A2	2	Total O 2 2		0	0
40	a2	4	Total O 4 4		0	0
40	b2	1	Total O 1 1		0	0
40	c2	1	Total O 1 1		0	0

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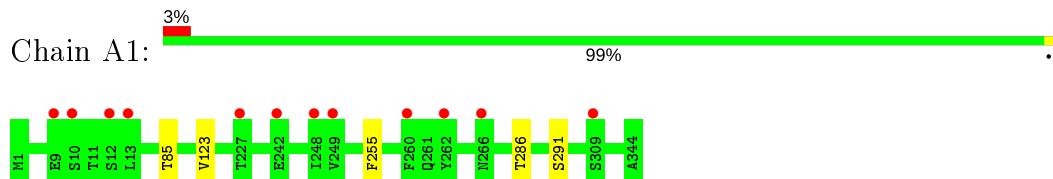
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	d2	1	Total    O 1      1	0	0

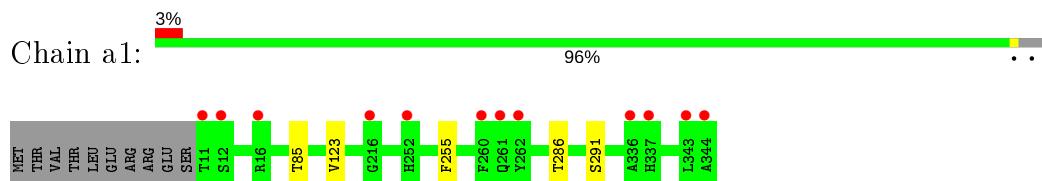
### 3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ( $RSRZ > 2$ ). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

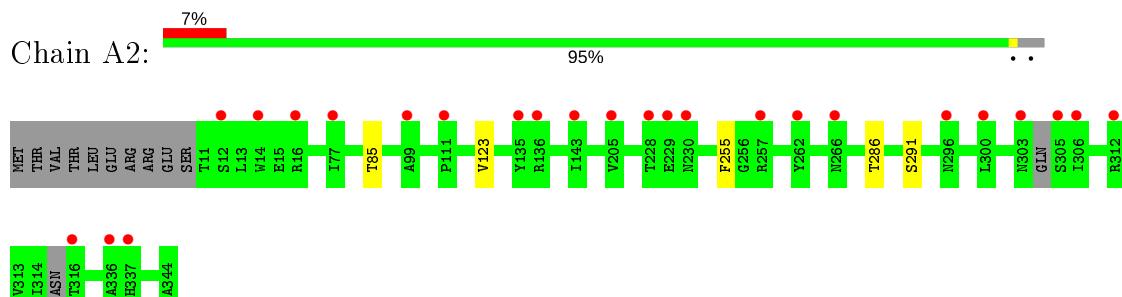
- Molecule 1: Photosystem II protein D1



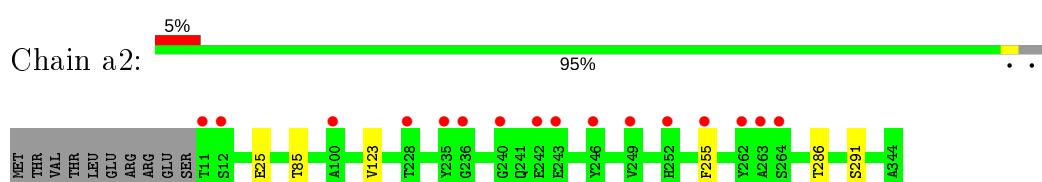
- Molecule 1: Photosystem II protein D1



- Molecule 1: Photosystem II protein D1

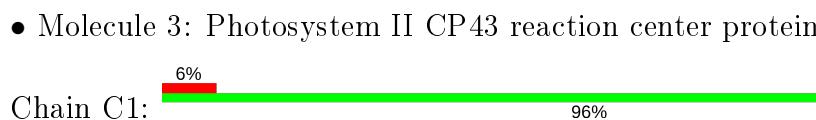
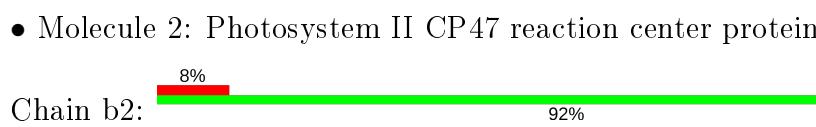
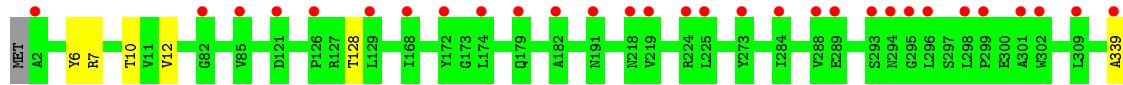
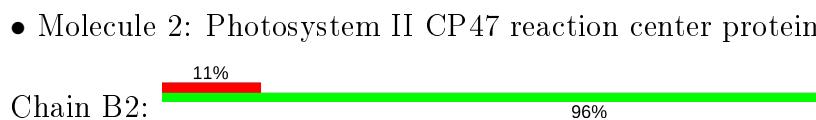
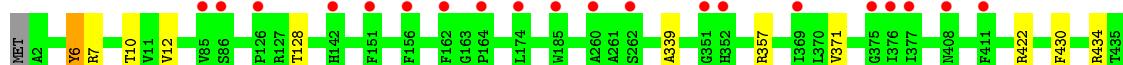
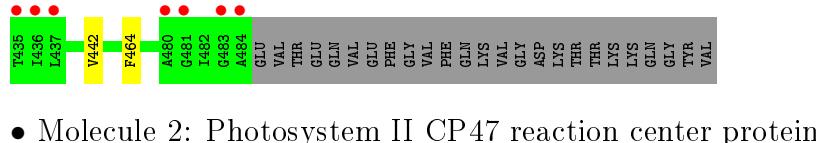
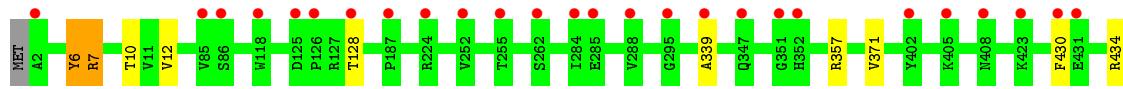


- Molecule 1: Photosystem II protein D1

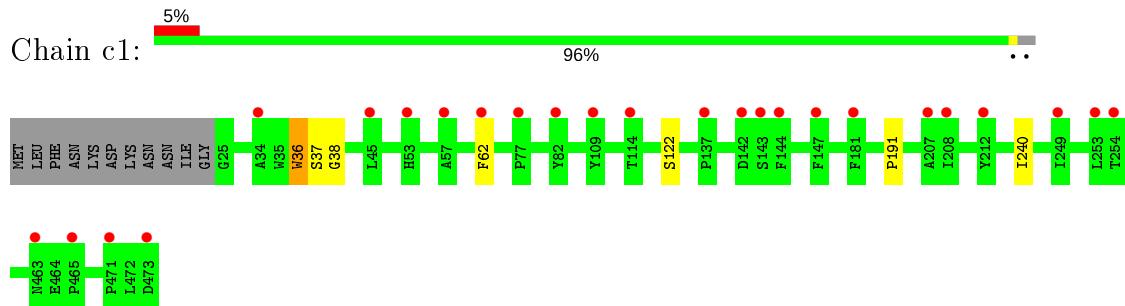


- Molecule 2: Photosystem II CP47 reaction center protein

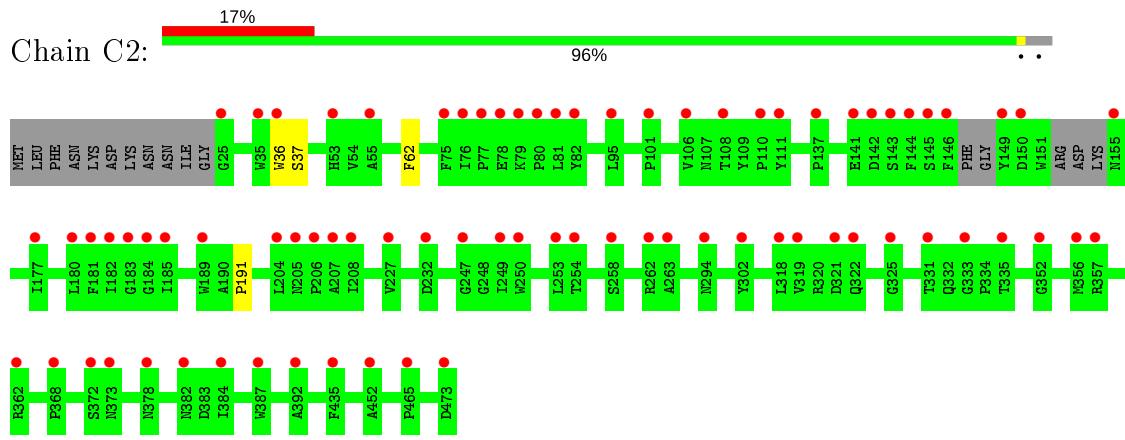




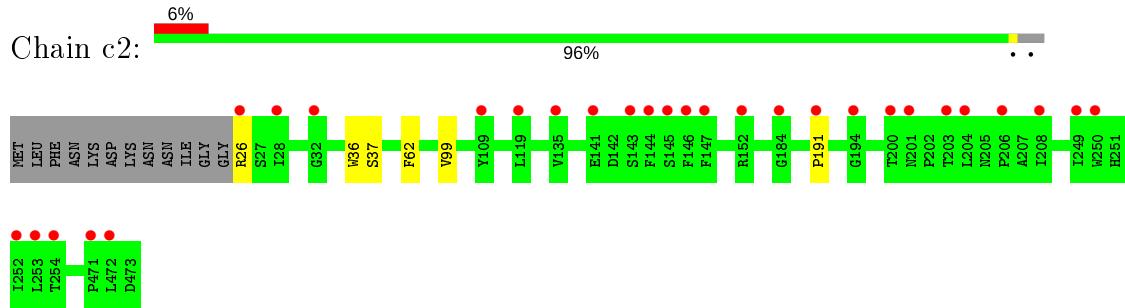
- Molecule 3: Photosystem II CP43 reaction center protein



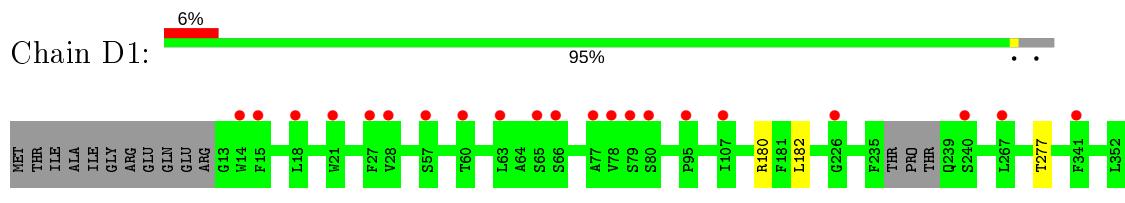
- Molecule 3: Photosystem II CP43 reaction center protein



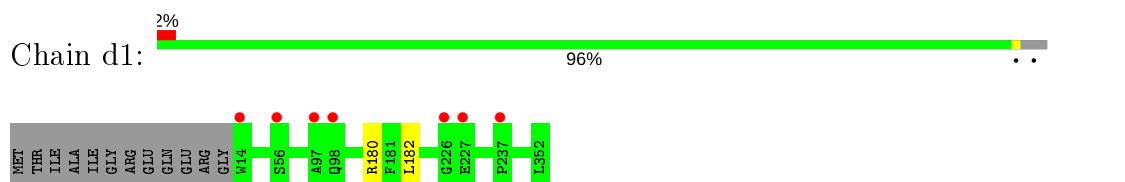
- Molecule 3: Photosystem II CP43 reaction center protein



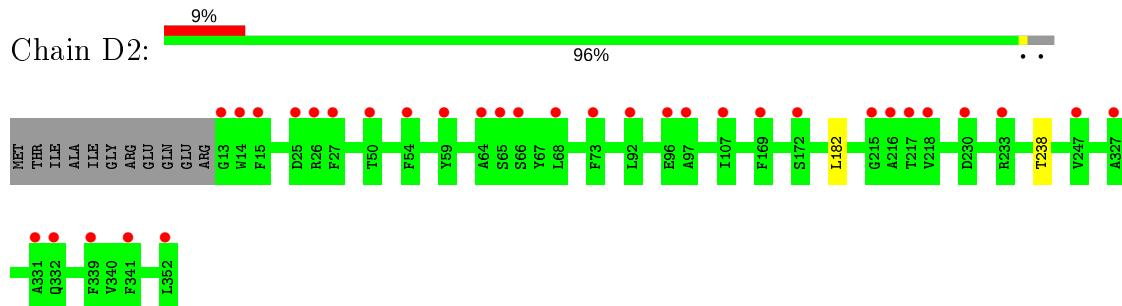
- Molecule 4: Photosystem II D2 protein



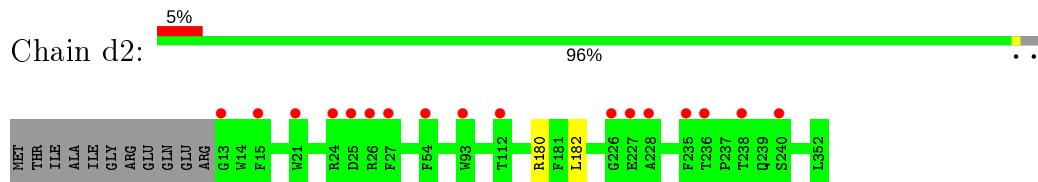
- Molecule 4: Photosystem II D2 protein



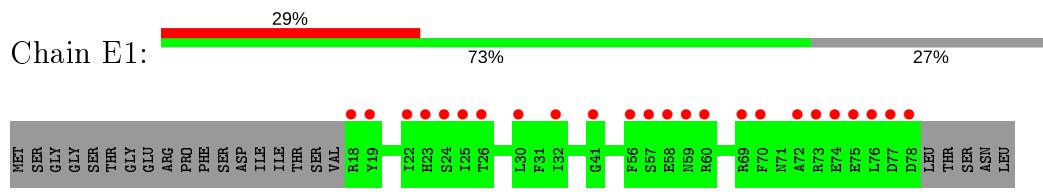
- Molecule 4: Photosystem II D2 protein



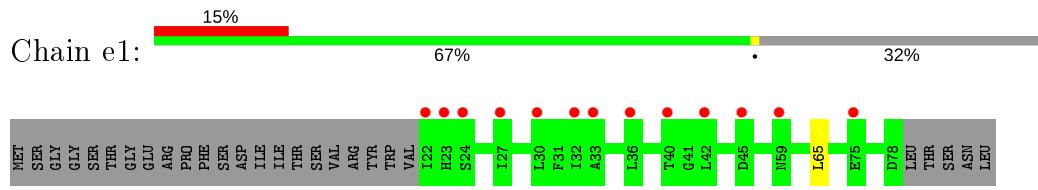
- Molecule 4: Photosystem II D2 protein



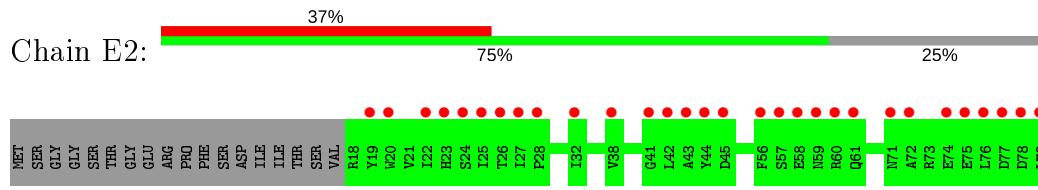
- Molecule 5: Cytochrome b559 subunit alpha



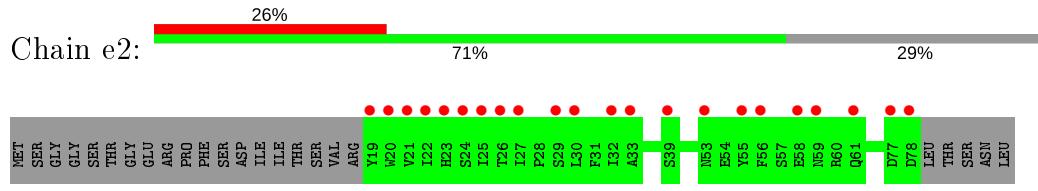
- Molecule 5: Cytochrome b559 subunit alpha



- Molecule 5: Cytochrome b559 subunit alpha



- Molecule 5: Cytochrome b559 subunit alpha



- Molecule 6: Cytochrome b559 subunit beta



- Molecule 6: Cytochrome b559 subunit beta



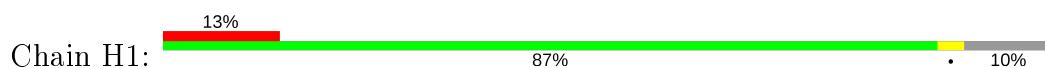
- Molecule 6: Cytochrome b559 subunit beta



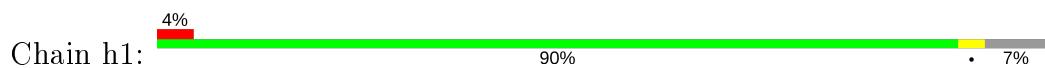
- Molecule 6: Cytochrome b559 subunit beta



- Molecule 7: Photosystem II reaction center protein H



- Molecule 7: Photosystem II reaction center protein H



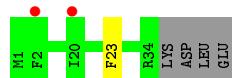
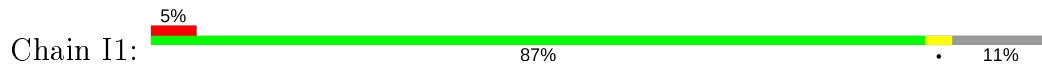
- Molecule 7: Photosystem II reaction center protein H



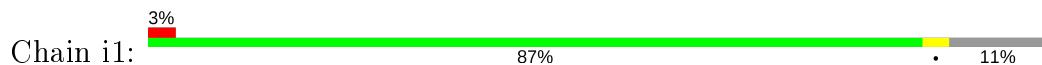
- Molecule 7: Photosystem II reaction center protein H



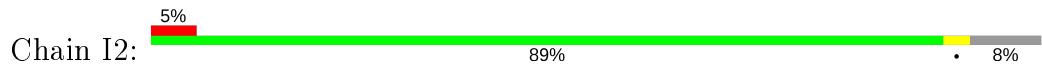
- Molecule 8: Photosystem II reaction center protein I



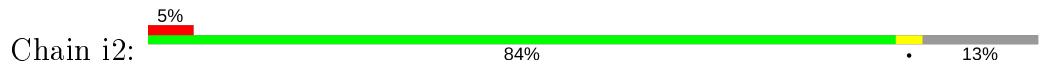
- Molecule 8: Photosystem II reaction center protein I



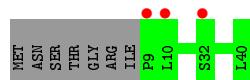
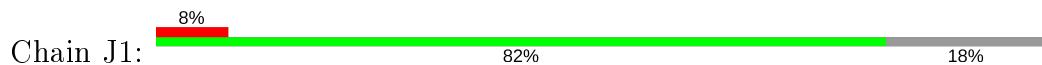
- Molecule 8: Photosystem II reaction center protein I



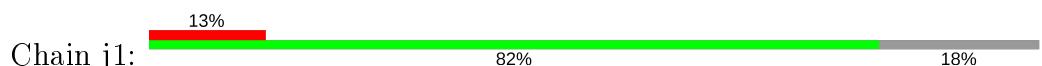
- Molecule 8: Photosystem II reaction center protein I



- Molecule 9: Photosystem II reaction center protein J

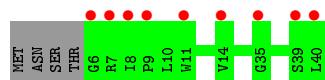


- Molecule 9: Photosystem II reaction center protein J

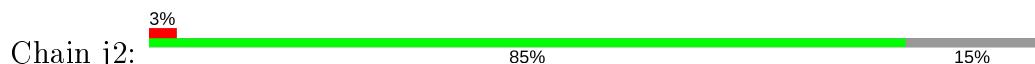




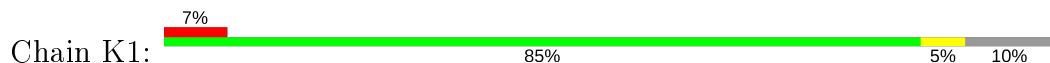
- Molecule 9: Photosystem II reaction center protein J



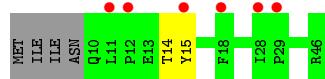
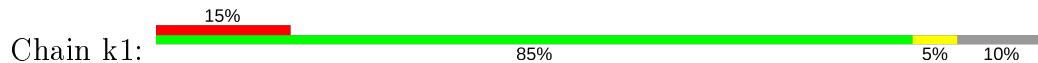
- Molecule 9: Photosystem II reaction center protein J



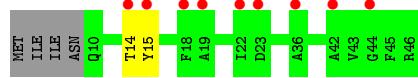
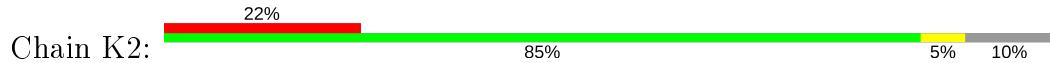
- Molecule 10: Photosystem II reaction center protein K



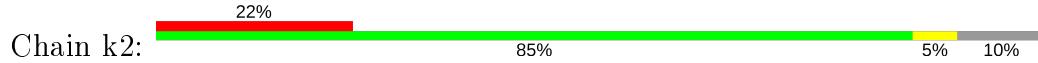
- Molecule 10: Photosystem II reaction center protein K



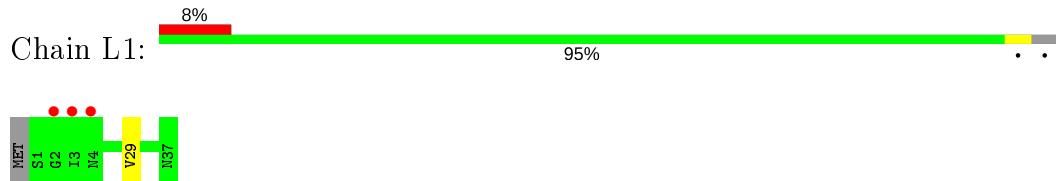
- Molecule 10: Photosystem II reaction center protein K



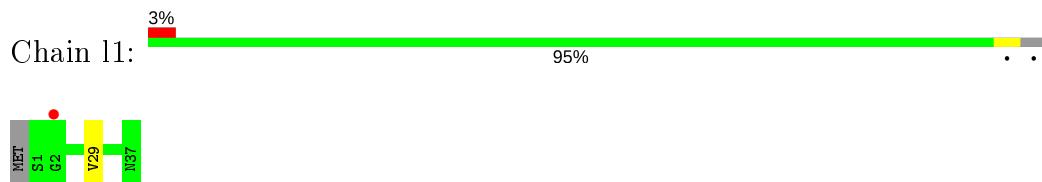
- Molecule 10: Photosystem II reaction center protein K



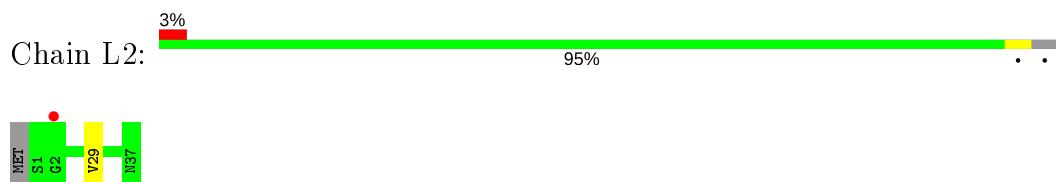
- Molecule 11: Photosystem II reaction center protein L



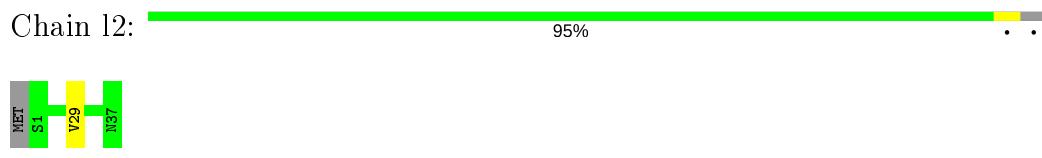
- Molecule 11: Photosystem II reaction center protein L



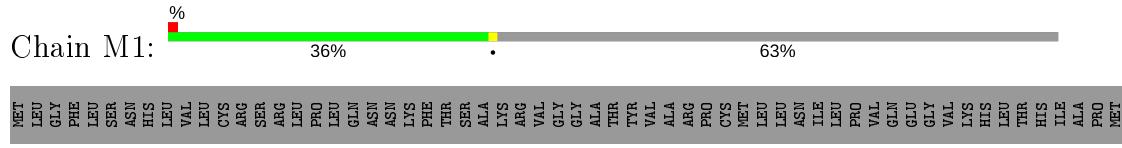
- Molecule 11: Photosystem II reaction center protein L



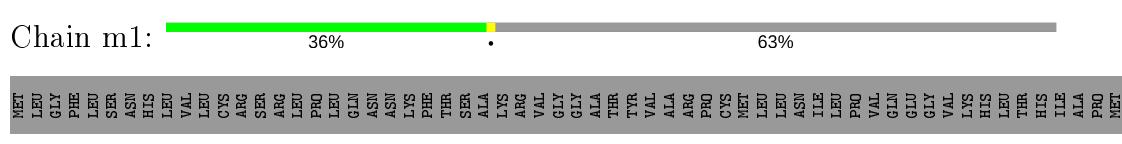
- Molecule 11: Photosystem II reaction center protein L



- Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M

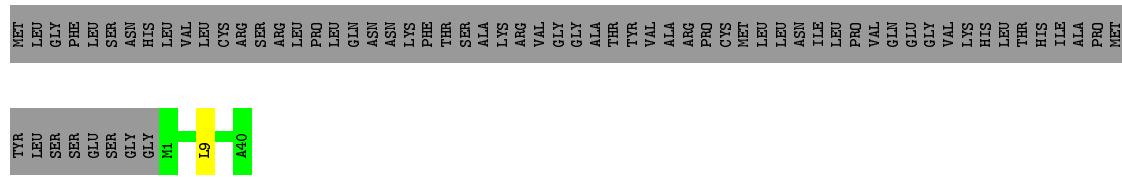


- Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M



- Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M





- Molecule 12: PHOTOSYSTEM II REACTION CENTER PROTEIN M

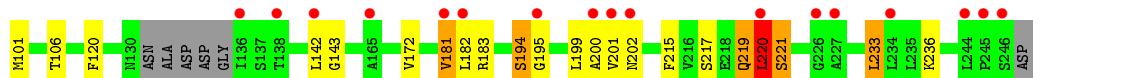
Chain m2: 63%



- Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSB0

Chain O1: 11%

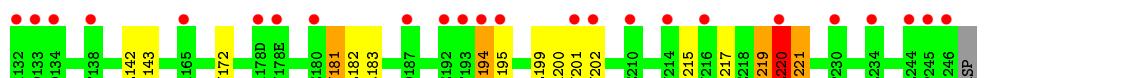
A horizontal progress bar consisting of a red segment followed by a long green segment. The red segment is labeled "11%" above it. The green segment is labeled "65%" above its center. To the right of the green segment is a small orange segment labeled "6%", and further to the right is a grey segment labeled "27%".



- Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO

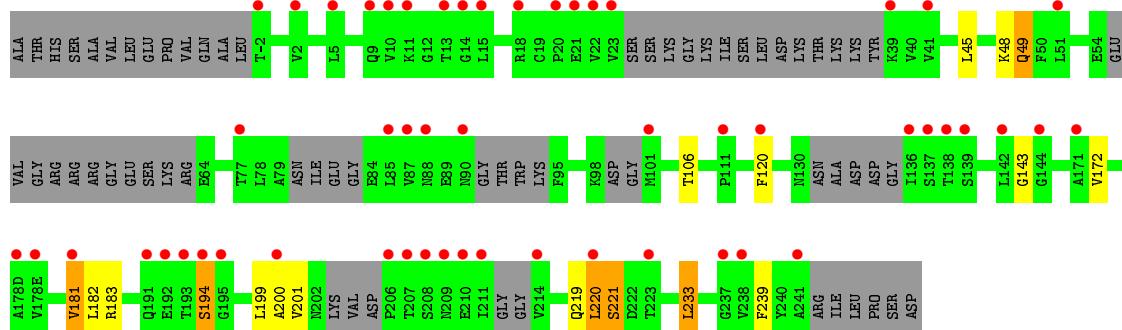
Chain o1: 65%

A horizontal progress bar with a red segment at the beginning labeled '11%', followed by a long green segment labeled '65%', then a small yellow segment labeled '5%', and finally a grey segment labeled '28%'.



#### • Molecule 13: PHOTOSYSTEM II MANGANESE STABILIZING POLYPEPTIDE, PSBQ





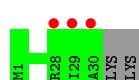
• Molecule 13: PHOTOSYSTEM II MANGANESE-STABILIZING POLYPEPTIDE, PSBO



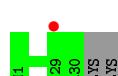
• Molecule 14: Photosystem II reaction center protein T



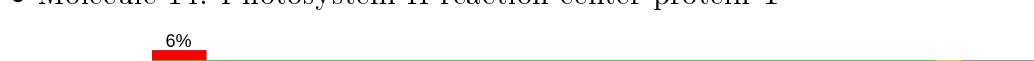
• Molecule 14: Photosystem II reaction center protein T

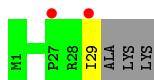


• Molecule 14: Photosystem II reaction center protein T

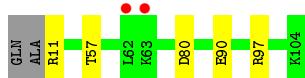


• Molecule 14: Photosystem II reaction center protein T





- Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic



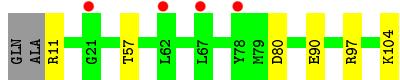
- Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic



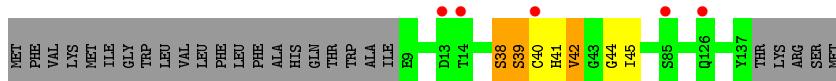
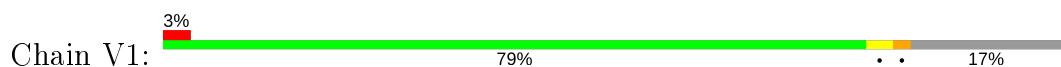
- Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic



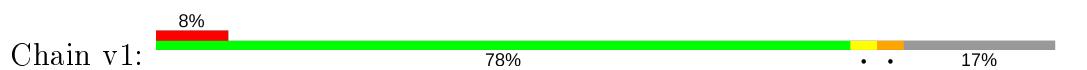
- Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic



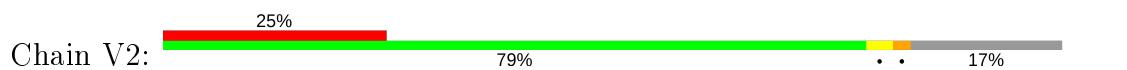
- Molecule 15: Photosystem II 12 kDa extrinsic protein, chloroplastic



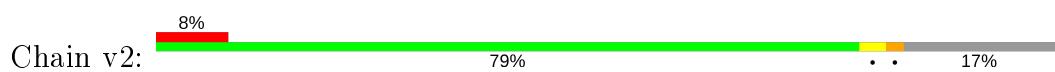
- Molecule 16: Cytochrome c-550



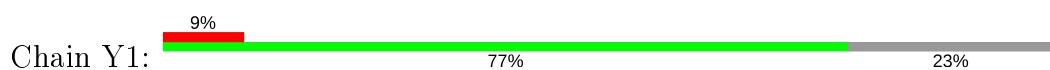
- Molecule 16: Cytochrome c-550



- Molecule 16: Cytochrome c-550



- Molecule 17: Photosystem II reaction center protein Ycf12



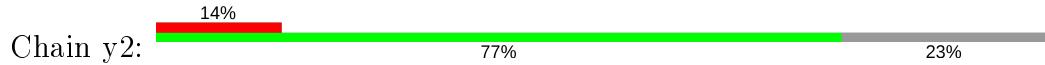
- Molecule 17: Photosystem II reaction center protein Ycf12



- Molecule 17: Photosystem II reaction center protein Ycf12



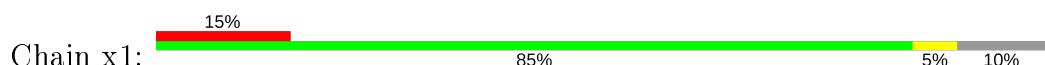
- Molecule 17: Photosystem II reaction center protein Ycf12



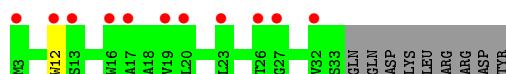
- Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X



- ### • Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X



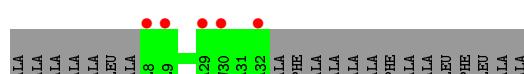
- ## • Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X



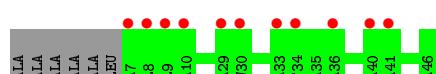
- #### • Molecule 18: PHOTOSYSTEM II REACTION CENTER PROTEIN X



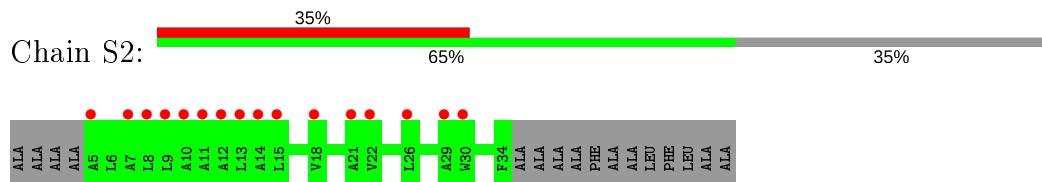
- Molecule 10: BERTIDE CHAIN UNASSIGNED



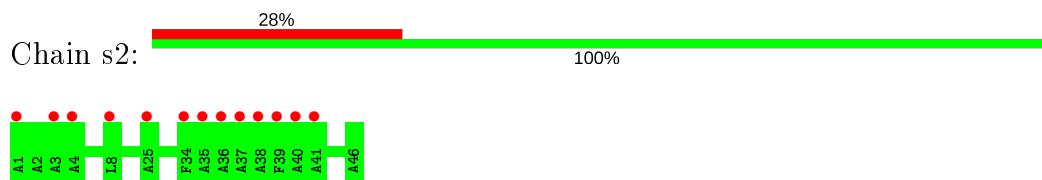
- Malavalli-10; REFTIDE CHAIN UNASSIGNED



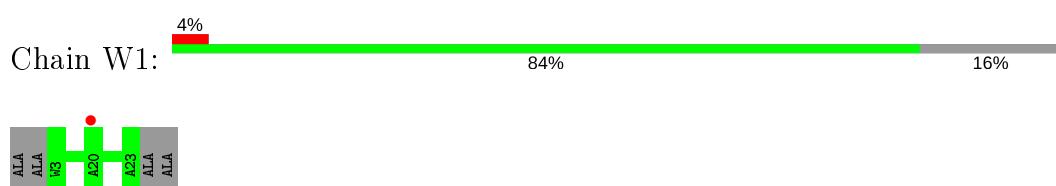
- ### • Molecule 10: BERTIDE CHAIN UNASSIGNED



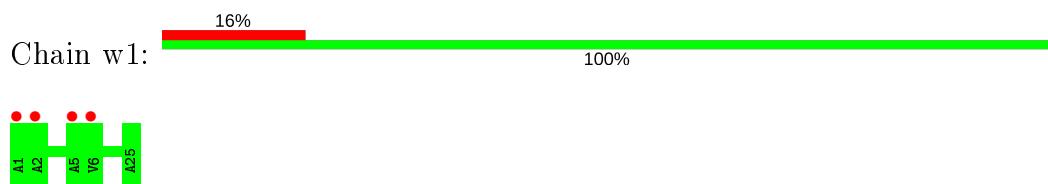
- Molecule 19: PEPTIDE CHAIN UNASSIGNED



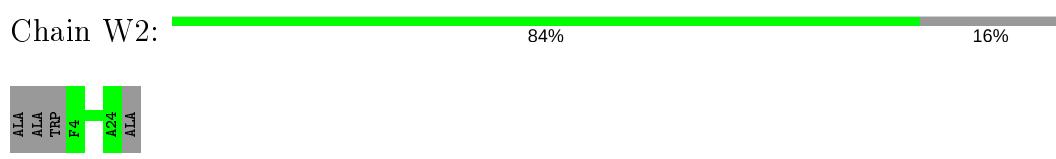
- Molecule 20: PEPTIDE CHAIN UNASSIGNED



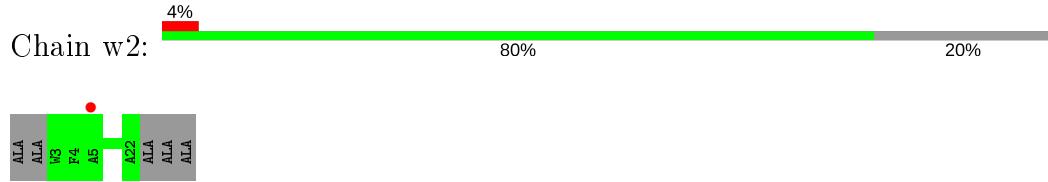
- Molecule 20: PEPTIDE CHAIN UNASSIGNED



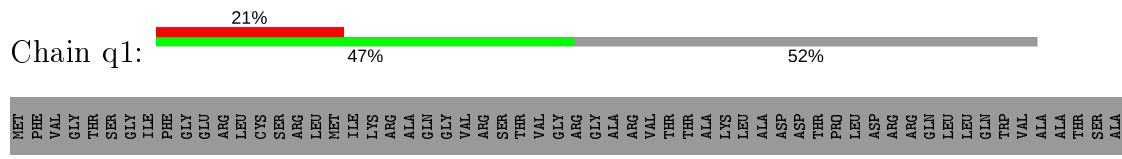
- Molecule 20: PEPTIDE CHAIN UNASSIGNED

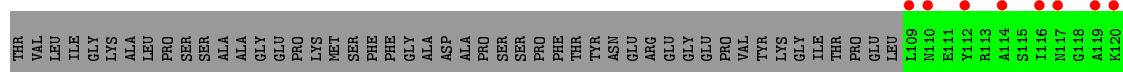


- Molecule 20: PEPTIDE CHAIN UNASSIGNED



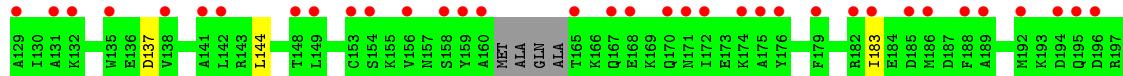
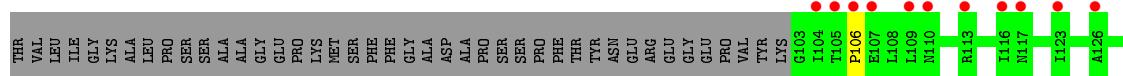
- Molecule 21: Extrinsic protein in photosystem II



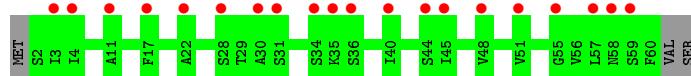




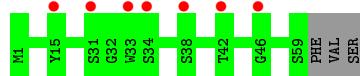

- Molecule 21: Extrinsic protein in photosystem II



- Molecule 22: Photosystem II reaction center protein Z



- Molecule 22: Photosystem II reaction center protein Z



## 4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	210.44Å 240.31Å 300.06Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	10.00 – 2.77 29.78 – 2.77	Depositor EDS
% Data completeness (in resolution range)	99.7 (10.00-2.77) 99.5 (29.78-2.77)	Depositor EDS
$R_{merge}$	0.10	Depositor
$R_{sym}$	(Not available)	Depositor
$< I/\sigma(I) >$ <sup>1</sup>	1.48 (at 2.76Å)	Xtriage
Refinement program	PHENIX 1.9_1692	Depositor
$R$ , $R_{free}$	0.249 , 0.278 0.254 , 0.281	Depositor DCC
$R_{free}$ test set	19164 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	68.0	Xtriage
Anisotropy	0.616	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.31 , 69.0	EDS
L-test for twinning <sup>2</sup>	$<  L  > = 0.49$ , $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.91	EDS
Total number of atoms	92765	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	68.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.84% 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  $< |L| >$ ,  $< L^2 >$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 5 Model quality i

### 5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: LHG, GOL, OEX, PHO, DGD, CL, CA, LMT, CLA, PL9, FE, BCT, HEM, LMG, UNL, 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	A1	0.28	0/2685	0.43	0/3673
1	A2	0.29	0/2548	0.43	0/3481
1	a1	0.28	0/2642	0.42	0/3612
1	a2	0.28	0/2586	0.43	0/3538
2	B1	0.33	0/3830	0.48	3/5227 (0.1%)
2	B2	0.33	0/3897	0.48	2/5323 (0.0%)
2	b1	0.36	1/4015 (0.0%)	0.49	2/5473 (0.0%)
2	b2	0.33	0/3808	0.48	2/5197 (0.0%)
3	C1	0.28	0/3501	0.43	0/4782
3	C2	0.27	0/3242	0.42	0/4441
3	c1	0.30	0/3555	0.43	0/4850
3	c2	0.27	0/3495	0.42	0/4773
4	D1	0.35	0/2704	0.46	0/3688
4	D2	0.34	0/2675	0.46	0/3655
4	d1	0.35	0/2772	0.46	0/3783
4	d2	0.35	0/2736	0.46	0/3734
5	E1	0.24	0/418	0.38	0/577
5	E2	0.25	0/443	0.39	0/614
5	e1	0.24	0/440	0.39	0/603
5	e2	0.24	0/434	0.37	0/598
6	F1	0.45	0/220	0.51	0/299
6	F2	0.43	0/236	0.51	0/320
6	f1	0.44	0/235	0.50	0/319
6	f2	0.45	0/234	0.49	0/318
7	H1	0.23	0/443	0.40	0/606
7	H2	0.23	0/453	0.38	0/619
7	h1	0.23	0/481	0.41	0/657
7	h2	0.23	0/461	0.38	0/631
8	I1	0.26	0/283	0.35	0/381
8	I2	0.26	0/273	0.35	0/371
8	i1	0.26	0/289	0.36	0/389

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
8	i2	0.27	0/270	0.34	0/364
9	J1	0.23	0/225	0.35	0/307
9	J2	0.22	0/236	0.35	0/324
9	j1	0.23	0/229	0.34	0/313
9	j2	0.22	0/233	0.36	0/319
10	K1	0.38	0/289	0.53	0/399
10	K2	0.38	0/258	0.52	0/359
10	k1	0.37	0/290	0.53	0/401
10	k2	0.38	0/278	0.52	0/385
11	L1	0.49	0/301	0.58	0/410
11	L2	0.47	0/308	0.57	0/419
11	l1	0.49	0/308	0.58	0/418
11	l2	0.48	0/308	0.58	0/418
12	M1	0.39	0/288	0.59	0/391
12	M2	0.38	0/287	0.58	0/390
12	m1	0.38	0/288	0.59	0/391
12	m2	0.38	0/290	0.59	0/394
13	O1	0.66	2/1700 (0.1%)	0.91	15/2315 (0.6%)
13	O2	0.63	1/1387 (0.1%)	0.85	7/1881 (0.4%)
13	o1	0.63	2/1716 (0.1%)	0.90	13/2330 (0.6%)
13	o2	0.65	2/1794 (0.1%)	0.91	14/2434 (0.6%)
14	T1	0.26	0/248	0.39	0/337
14	T2	0.25	0/247	0.38	0/337
14	t1	0.25	0/253	0.39	0/344
14	t2	0.26	0/242	0.39	0/330
15	U1	0.46	0/709	0.68	2/970 (0.2%)
15	U2	0.45	0/588	1.15	3/809 (0.4%)
15	u1	0.46	0/721	0.67	2/981 (0.2%)
15	u2	0.44	0/726	0.66	2/988 (0.2%)
16	V1	0.48	0/937	0.67	4/1281 (0.3%)
16	V2	0.46	1/858 (0.1%)	0.62	1/1177 (0.1%)
16	v1	0.47	0/941	0.67	4/1284 (0.3%)
16	v2	0.46	0/983	0.66	4/1337 (0.3%)
17	Y1	0.43	0/171	0.52	0/236
17	Y2	0.44	0/159	0.53	0/219
17	y1	0.41	0/198	0.50	0/274
17	y2	0.42	0/191	0.50	0/264
18	X1	0.26	0/202	0.43	0/278
18	X2	0.25	0/222	0.43	0/307
18	x1	0.29	0/262	0.44	0/363
18	x2	0.34	0/225	0.46	0/312
19	S1	0.25	0/167	0.36	0/231
19	S2	0.25	0/194	0.36	0/268

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
19	s1	0.26	0/269	0.33	0/371
19	s2	0.24	0/285	0.34	0/395
20	W1	0.20	0/134	0.37	0/186
20	W2	0.20	0/129	0.38	0/179
20	w1	0.20	0/152	0.36	0/211
20	w2	0.21	0/127	0.37	0/176
21	Q2	0.41	0/682	0.47	0/937
21	q1	0.40	0/650	0.50	1/893 (0.1%)
22	Z2	0.20	0/353	0.37	0/487
22	z2	0.22	0/387	0.38	0/532
All	All	0.37	9/79929 (0.0%)	0.53	81/109188 (0.1%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
13	O1	0	2
13	O2	0	4
13	o1	0	3
13	o2	0	3
16	V1	0	3
16	V2	0	3
16	v1	0	3
16	v2	0	3
All	All	0	24

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	O1	221	SER	N-CA	6.20	1.58	1.46
13	o2	221	SER	N-CA	6.10	1.58	1.46
13	o1	221	SER	N-CA	6.00	1.58	1.46
13	O1	220	LEU	N-CA	5.81	1.57	1.46
13	o2	220	LEU	N-CA	5.81	1.57	1.46
13	o1	220	LEU	N-CA	5.73	1.57	1.46
13	O2	221	SER	N-CA	5.50	1.57	1.46
16	V2	42	VAL	CA-C	-5.45	1.38	1.52
2	b1	422	ARG	C-O	5.30	1.33	1.23

All (81) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	U2	11	ARG	NE-CZ-NH1	-19.49	110.56	120.30
15	U2	11	ARG	NE-CZ-NH2	17.62	129.11	120.30
13	o1	99	ASP	CB-CG-OD1	-10.04	109.26	118.30
15	U2	11	ARG	CD-NE-CZ	9.31	136.64	123.60
13	o1	195	GLY	CA-C-O	-8.28	105.69	120.60
13	o2	195	GLY	CA-C-O	-8.27	105.71	120.60
13	O1	195	GLY	CA-C-O	-8.20	105.83	120.60
16	v2	42	VAL	CA-C-N	-8.15	99.90	116.20
16	v1	42	VAL	CA-C-N	-8.14	99.93	116.20
16	V1	42	VAL	CA-C-N	-8.09	100.01	116.20
13	O1	215	PHE	C-N-CA	-7.67	102.53	121.70
13	o1	215	PHE	C-N-CA	-7.65	102.58	121.70
13	o2	215	PHE	C-N-CA	-7.64	102.61	121.70
13	O2	239	PHE	C-N-CA	-7.60	102.70	121.70
13	O1	194	SER	C-N-CA	-7.50	106.54	122.30
13	o1	194	SER	C-N-CA	-7.44	106.68	122.30
13	o2	194	SER	C-N-CA	-7.42	106.72	122.30
16	V2	42	VAL	CA-C-N	-7.04	102.13	116.20
13	o2	233	LEU	CB-CG-CD1	-6.98	99.13	111.00
15	U1	11	ARG	NE-CZ-NH2	-6.85	116.88	120.30
13	O1	220	LEU	CA-CB-CG	6.79	130.91	115.30
13	o1	99	ASP	CB-CG-OD2	6.77	124.39	118.30
15	u2	11	ARG	NE-CZ-NH2	-6.77	116.92	120.30
13	o2	220	LEU	CA-CB-CG	6.66	130.61	115.30
13	o1	220	LEU	CA-CB-CG	6.59	130.47	115.30
13	O1	219	GLN	N-CA-C	6.57	128.74	111.00
13	o2	219	GLN	N-CA-C	6.57	128.73	111.00
15	u1	11	ARG	NE-CZ-NH2	-6.54	117.03	120.30
13	o1	143	GLY	C-N-CA	-6.45	108.76	122.30
13	o2	143	GLY	C-N-CA	-6.42	108.81	122.30
13	O1	143	GLY	C-N-CA	-6.40	108.85	122.30
13	o1	219	GLN	N-CA-C	6.38	128.22	111.00
13	O1	220	LEU	C-N-CA	6.35	137.59	121.70
13	O2	220	LEU	C-N-CA	6.35	137.57	121.70
13	o2	220	LEU	C-N-CA	6.34	137.55	121.70
16	v2	42	VAL	N-CA-CB	6.33	125.44	111.50
16	V1	42	VAL	N-CA-CB	6.33	125.43	111.50
13	O2	194	SER	C-N-CA	-6.32	109.03	122.30
13	O2	233	LEU	CB-CG-CD1	-6.32	100.26	111.00
16	v1	42	VAL	N-CA-CB	6.29	125.35	111.50
13	o1	220	LEU	C-N-CA	6.16	137.10	121.70
13	O1	233	LEU	CB-CG-CD1	-6.08	100.66	111.00
2	B1	430	PHE	C-N-CA	-5.90	106.95	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	o2	217	SER	C-N-CA	-5.87	107.03	121.70
13	o2	221	SER	N-CA-C	5.86	126.82	111.00
13	O1	221	SER	N-CA-C	5.84	126.78	111.00
13	O1	217	SER	C-N-CA	-5.84	107.10	121.70
13	o2	219	GLN	C-N-CA	-5.78	107.25	121.70
13	O1	219	GLN	C-N-CA	-5.77	107.27	121.70
2	b1	430	PHE	C-N-CA	-5.73	107.38	121.70
13	o1	219	GLN	C-N-CA	-5.68	107.50	121.70
13	O1	220	LEU	CB-CG-CD2	5.67	120.64	111.00
15	u2	11	ARG	NE-CZ-NH1	5.62	123.11	120.30
15	u1	11	ARG	NE-CZ-NH1	5.57	123.08	120.30
13	o2	92	THR	C-N-CA	-5.54	107.84	121.70
13	O1	92	THR	C-N-CA	-5.54	107.85	121.70
13	o1	221	SER	N-CA-C	5.54	125.96	111.00
13	o2	220	LEU	CB-CG-CD2	5.48	120.31	111.00
15	U1	11	ARG	NE-CZ-NH1	5.46	123.03	120.30
16	v2	42	VAL	CA-C-O	5.45	131.55	120.10
13	o1	220	LEU	CB-CG-CD2	5.45	120.26	111.00
16	v1	42	VAL	CA-C-O	5.45	131.54	120.10
13	o1	217	SER	C-N-CA	-5.44	108.09	121.70
2	b2	430	PHE	C-N-CA	-5.42	108.14	121.70
13	O2	221	SER	N-CA-C	5.41	125.59	111.00
16	V1	42	VAL	CA-C-O	5.39	131.43	120.10
2	B2	430	PHE	C-N-CA	-5.39	108.23	121.70
21	q1	144	LEU	CA-CB-CG	5.34	127.59	115.30
13	O2	143	GLY	C-N-CA	-5.33	111.11	122.30
13	O2	220	LEU	O-C-N	5.31	131.20	122.70
13	o2	178(F)	GLY	N-CA-C	5.26	126.24	113.10
2	b2	339	ALA	N-CA-C	5.21	125.06	111.00
2	b1	339	ALA	N-CA-C	5.19	125.01	111.00
2	B1	339	ALA	N-CA-C	5.16	124.92	111.00
2	B2	339	ALA	N-CA-C	5.13	124.86	111.00
13	O1	221	SER	CB-CA-C	-5.09	100.43	110.10
16	V1	42	VAL	N-CA-C	-5.09	97.27	111.00
13	O1	236	LYS	C-N-CA	-5.08	111.63	122.30
16	v2	42	VAL	N-CA-C	-5.07	97.31	111.00
16	v1	42	VAL	N-CA-C	-5.03	97.43	111.00
2	B1	7	ARG	NE-CZ-NH1	-5.02	117.79	120.30

There are no chirality outliers.

All (24) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
13	O1	194	SER	Peptide
13	O1	220	LEU	Peptide
13	O2	194	SER	Peptide
13	O2	220	LEU	Mainchain
13	O2	45	LEU	Mainchain
13	O2	49	GLN	Peptide
16	V1	38	SER	Peptide
16	V1	41	HIS	Peptide
16	V1	44	GLY	Peptide
16	V2	38	SER	Peptide
16	V2	41	HIS	Peptide
16	V2	44	GLY	Peptide
13	o1	194	SER	Peptide
13	o1	220	LEU	Peptide
13	o1	98	LYS	Peptide
13	o2	178(E)	VAL	Peptide
13	o2	194	SER	Peptide
13	o2	220	LEU	Peptide
16	v1	38	SER	Peptide
16	v1	41	HIS	Peptide
16	v1	44	GLY	Peptide
16	v2	38	SER	Peptide
16	v2	41	HIS	Peptide
16	v2	44	GLY	Peptide

## 5.2 Too-close contacts [\(i\)](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

## 5.3 Torsion angles [\(i\)](#)

### 5.3.1 Protein backbone [\(i\)](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A1	342/344 (99%)	328 (96%)	14 (4%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A2	327/344 (95%)	318 (97%)	9 (3%)	0	100 100
1	a1	332/344 (96%)	323 (97%)	9 (3%)	0	100 100
1	a2	332/344 (96%)	323 (97%)	9 (3%)	0	100 100
2	B1	481/509 (94%)	456 (95%)	23 (5%)	2 (0%)	34 64
2	B2	501/509 (98%)	474 (95%)	26 (5%)	1 (0%)	47 76
2	b1	502/509 (99%)	474 (94%)	26 (5%)	2 (0%)	34 64
2	b2	479/509 (94%)	454 (95%)	23 (5%)	2 (0%)	34 64
3	C1	447/460 (97%)	424 (95%)	20 (4%)	3 (1%)	22 50
3	C2	438/460 (95%)	416 (95%)	19 (4%)	3 (1%)	22 50
3	c1	449/460 (98%)	426 (95%)	19 (4%)	4 (1%)	17 44
3	c2	446/460 (97%)	424 (95%)	19 (4%)	3 (1%)	22 50
4	D1	333/351 (95%)	318 (96%)	15 (4%)	0	100 100
4	D2	338/351 (96%)	322 (95%)	16 (5%)	0	100 100
4	d1	337/351 (96%)	321 (95%)	16 (5%)	0	100 100
4	d2	338/351 (96%)	323 (96%)	15 (4%)	0	100 100
5	E1	59/84 (70%)	57 (97%)	2 (3%)	0	100 100
5	E2	61/84 (73%)	59 (97%)	2 (3%)	0	100 100
5	e1	55/84 (66%)	54 (98%)	1 (2%)	0	100 100
5	e2	58/84 (69%)	57 (98%)	1 (2%)	0	100 100
6	F1	26/43 (60%)	26 (100%)	0	0	100 100
6	F2	29/43 (67%)	29 (100%)	0	0	100 100
6	f1	27/43 (63%)	27 (100%)	0	0	100 100
6	f2	27/43 (63%)	26 (96%)	1 (4%)	0	100 100
7	H1	56/67 (84%)	53 (95%)	2 (4%)	1 (2%)	8 25
7	H2	60/67 (90%)	54 (90%)	5 (8%)	1 (2%)	9 27
7	h1	60/67 (90%)	57 (95%)	2 (3%)	1 (2%)	9 27
7	h2	60/67 (90%)	56 (93%)	3 (5%)	1 (2%)	9 27
8	I1	32/38 (84%)	32 (100%)	0	0	100 100
8	I2	33/38 (87%)	32 (97%)	1 (3%)	0	100 100
8	i1	32/38 (84%)	32 (100%)	0	0	100 100
8	i2	31/38 (82%)	31 (100%)	0	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
9	J1	30/39 (77%)	30 (100%)	0	0	100 100
9	J2	33/39 (85%)	33 (100%)	0	0	100 100
9	j1	30/39 (77%)	30 (100%)	0	0	100 100
9	j2	31/39 (80%)	31 (100%)	0	0	100 100
10	K1	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1 4
10	K2	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1 4
10	k1	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1 4
10	k2	35/41 (85%)	31 (89%)	2 (6%)	2 (6%)	1 4
11	L1	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	4 14
11	L2	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	4 14
11	l1	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	4 14
11	l2	35/38 (92%)	33 (94%)	1 (3%)	1 (3%)	4 14
12	M1	38/108 (35%)	30 (79%)	8 (21%)	0	100 100
12	M2	38/108 (35%)	30 (79%)	8 (21%)	0	100 100
12	m1	38/108 (35%)	30 (79%)	8 (21%)	0	100 100
12	m2	38/108 (35%)	30 (79%)	8 (21%)	0	100 100
13	O1	234/329 (71%)	210 (90%)	14 (6%)	10 (4%)	2 7
13	O2	187/329 (57%)	165 (88%)	14 (8%)	8 (4%)	2 7
13	o1	230/329 (70%)	204 (89%)	16 (7%)	10 (4%)	2 7
13	o2	239/329 (73%)	212 (89%)	15 (6%)	12 (5%)	2 5
14	T1	28/32 (88%)	28 (100%)	0	0	100 100
14	T2	28/32 (88%)	28 (100%)	0	0	100 100
14	t1	28/32 (88%)	28 (100%)	0	0	100 100
14	t2	27/32 (84%)	27 (100%)	0	0	100 100
15	U1	91/155 (59%)	85 (93%)	6 (7%)	0	100 100
15	U2	86/155 (56%)	81 (94%)	5 (6%)	0	100 100
15	u1	91/155 (59%)	87 (96%)	4 (4%)	0	100 100
15	u2	91/155 (59%)	85 (93%)	6 (7%)	0	100 100
16	V1	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	3 9
16	V2	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	3 9
16	v1	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	3 9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
16	v2	127/155 (82%)	115 (91%)	7 (6%)	5 (4%)	3 9
17	Y1	25/35 (71%)	24 (96%)	1 (4%)	0	100 100
17	Y2	23/35 (66%)	22 (96%)	1 (4%)	0	100 100
17	y1	25/35 (71%)	24 (96%)	1 (4%)	0	100 100
17	y2	25/35 (71%)	24 (96%)	1 (4%)	0	100 100
18	X1	27/40 (68%)	27 (100%)	0	0	100 100
18	X2	29/40 (72%)	29 (100%)	0	0	100 100
18	x1	34/40 (85%)	33 (97%)	1 (3%)	0	100 100
18	x2	30/40 (75%)	30 (100%)	0	0	100 100
19	S1	23/46 (50%)	23 (100%)	0	0	100 100
19	S2	28/46 (61%)	27 (96%)	1 (4%)	0	100 100
19	s1	38/46 (83%)	34 (90%)	4 (10%)	0	100 100
19	s2	44/46 (96%)	37 (84%)	7 (16%)	0	100 100
20	W1	19/25 (76%)	19 (100%)	0	0	100 100
20	W2	19/25 (76%)	19 (100%)	0	0	100 100
20	w1	23/25 (92%)	21 (91%)	2 (9%)	0	100 100
20	w2	18/25 (72%)	18 (100%)	0	0	100 100
21	Q2	107/218 (49%)	102 (95%)	3 (3%)	2 (2%)	8 23
21	q1	101/218 (46%)	97 (96%)	3 (3%)	1 (1%)	15 41
22	Z2	57/62 (92%)	55 (96%)	2 (4%)	0	100 100
22	z2	57/62 (92%)	55 (96%)	2 (4%)	0	100 100
All	All	10304/12316 (84%)	9726 (94%)	479 (5%)	99 (1%)	15 41

All (99) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C1	36	TRP
3	C1	37	SER
10	K1	14	THR
13	O1	49	GLN
13	O1	99	ASP
13	O1	199	LEU
13	O1	201	VAL
13	O1	202	ASN
16	V1	39	SER

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Mol	Chain	Res	Type
16	V1	40	CYS
3	c1	36	TRP
3	c1	37	SER
10	k1	14	THR
13	o1	49	GLN
13	o1	99	ASP
13	o1	199	LEU
13	o1	201	VAL
13	o1	202	ASN
16	v1	39	SER
16	v1	40	CYS
3	C2	36	TRP
3	C2	37	SER
10	K2	14	THR
13	O2	49	GLN
13	O2	199	LEU
13	O2	200	ALA
13	O2	201	VAL
16	V2	39	SER
16	V2	40	CYS
16	V2	42	VAL
21	Q2	106	PRO
3	c2	36	TRP
3	c2	37	SER
10	k2	14	THR
13	o2	49	GLN
13	o2	99	ASP
13	o2	178(F)	GLY
13	o2	199	LEU
13	o2	201	VAL
13	o2	202	ASN
16	v2	39	SER
16	v2	40	CYS
2	B1	7	ARG
10	K1	15	TYR
13	O1	51	LEU
13	O1	181	VAL
13	O1	182	LEU
13	O1	200	ALA
16	V1	42	VAL
2	b1	7	ARG
10	k1	15	TYR

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Mol	Chain	Res	Type
13	o1	51	LEU
13	o1	181	VAL
13	o1	182	LEU
13	o1	200	ALA
16	v1	42	VAL
2	B2	7	ARG
10	K2	15	TYR
13	O2	48	LYS
13	O2	181	VAL
13	O2	182	LEU
2	b2	7	ARG
10	k2	15	TYR
13	o2	51	LEU
13	o2	181	VAL
13	o2	182	LEU
13	o2	200	ALA
16	v2	42	VAL
13	O1	120	PHE
16	V1	45	ILE
13	o1	120	PHE
16	v1	45	ILE
21	q1	144	LEU
13	O2	120	PHE
16	V2	45	ILE
21	Q2	144	LEU
13	o2	120	PHE
16	V1	38	SER
16	v1	38	SER
16	V2	38	SER
16	v2	38	SER
16	v2	45	ILE
2	B1	6	TYR
7	H1	26	GLY
7	h1	26	GLY
7	H2	26	GLY
2	b2	6	TYR
7	h2	26	GLY
3	C1	191	PRO
2	b1	6	TYR
3	c1	191	PRO
3	C2	191	PRO
3	c2	191	PRO

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Mol	Chain	Res	Type
13	o2	198	GLU
11	l1	29	VAL
11	L2	29	VAL
11	l2	29	VAL
11	L1	29	VAL
3	c1	38	GLY

### 5.3.2 Protein sidechains [\(1\)](#)

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	A1	261/282 (93%)	256 (98%)	5 (2%)	57 83
1	A2	239/282 (85%)	234 (98%)	5 (2%)	53 81
1	a1	261/282 (93%)	256 (98%)	5 (2%)	57 83
1	a2	249/282 (88%)	243 (98%)	6 (2%)	49 78
2	B1	360/415 (87%)	351 (98%)	9 (2%)	47 77
2	B2	351/415 (85%)	341 (97%)	10 (3%)	43 74
2	b1	380/415 (92%)	369 (97%)	11 (3%)	42 73
2	b2	352/415 (85%)	342 (97%)	10 (3%)	43 74
3	C1	320/364 (88%)	317 (99%)	3 (1%)	78 92
3	C2	261/364 (72%)	260 (100%)	1 (0%)	91 96
3	c1	338/364 (93%)	334 (99%)	4 (1%)	71 90
3	c2	323/364 (89%)	320 (99%)	3 (1%)	78 92
4	D1	255/283 (90%)	252 (99%)	3 (1%)	71 90
4	D2	238/283 (84%)	236 (99%)	2 (1%)	81 93
4	d1	267/283 (94%)	265 (99%)	2 (1%)	84 94
4	d2	258/283 (91%)	256 (99%)	2 (1%)	81 93
5	E1	28/75 (37%)	28 (100%)	0	100 100
5	E2	34/75 (45%)	34 (100%)	0	100 100
5	e1	38/75 (51%)	37 (97%)	1 (3%)	46 76

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
5	e2	33/75 (44%)	33 (100%)	0	100 100
6	F1	18/36 (50%)	17 (94%)	1 (6%)	21 48
6	F2	17/36 (47%)	16 (94%)	1 (6%)	19 46
6	f1	20/36 (56%)	19 (95%)	1 (5%)	24 53
6	f2	19/36 (53%)	18 (95%)	1 (5%)	22 51
7	H1	39/58 (67%)	38 (97%)	1 (3%)	46 76
7	H2	38/58 (66%)	38 (100%)	0	100 100
7	h1	47/58 (81%)	46 (98%)	1 (2%)	53 81
7	h2	42/58 (72%)	41 (98%)	1 (2%)	49 78
8	I1	30/36 (83%)	29 (97%)	1 (3%)	38 69
8	I2	26/36 (72%)	25 (96%)	1 (4%)	33 64
8	i1	32/36 (89%)	31 (97%)	1 (3%)	40 71
8	i2	28/36 (78%)	27 (96%)	1 (4%)	35 66
9	J1	20/32 (62%)	20 (100%)	0	100 100
9	J2	19/32 (59%)	19 (100%)	0	100 100
9	j1	22/32 (69%)	22 (100%)	0	100 100
9	j2	22/32 (69%)	22 (100%)	0	100 100
10	K1	26/36 (72%)	26 (100%)	0	100 100
10	K2	18/36 (50%)	18 (100%)	0	100 100
10	k1	27/36 (75%)	27 (100%)	0	100 100
10	k2	24/36 (67%)	24 (100%)	0	100 100
11	L1	31/35 (89%)	31 (100%)	0	100 100
11	L2	33/35 (94%)	33 (100%)	0	100 100
11	l1	33/35 (94%)	33 (100%)	0	100 100
11	l2	32/35 (91%)	32 (100%)	0	100 100
12	M1	26/88 (30%)	25 (96%)	1 (4%)	33 64
12	M2	26/88 (30%)	25 (96%)	1 (4%)	33 64
12	m1	26/88 (30%)	25 (96%)	1 (4%)	33 64
12	m2	27/88 (31%)	26 (96%)	1 (4%)	34 65
13	O1	148/266 (56%)	138 (93%)	10 (7%)	16 39
13	O2	110/266 (41%)	103 (94%)	7 (6%)	17 42

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
13	o1	156/266 (59%)	148 (95%)	8 (5%)	24 53
13	o2	168/266 (63%)	159 (95%)	9 (5%)	22 50
14	T1	24/28 (86%)	24 (100%)	0	100 100
14	T2	25/28 (89%)	25 (100%)	0	100 100
14	t1	26/28 (93%)	26 (100%)	0	100 100
14	t2	25/28 (89%)	24 (96%)	1 (4%)	31 62
15	U1	63/122 (52%)	59 (94%)	4 (6%)	18 43
15	U2	40/122 (33%)	37 (92%)	3 (8%)	13 34
15	u1	66/122 (54%)	62 (94%)	4 (6%)	18 45
15	u2	69/122 (57%)	64 (93%)	5 (7%)	14 36
16	V1	88/132 (67%)	87 (99%)	1 (1%)	73 90
16	V2	70/132 (53%)	69 (99%)	1 (1%)	67 87
16	v1	88/132 (67%)	85 (97%)	3 (3%)	37 68
16	v2	100/132 (76%)	99 (99%)	1 (1%)	76 91
17	Y1	11/33 (33%)	11 (100%)	0	100 100
17	Y2	13/33 (39%)	13 (100%)	0	100 100
17	y1	18/33 (54%)	18 (100%)	0	100 100
17	y2	16/33 (48%)	16 (100%)	0	100 100
18	X1	17/34 (50%)	16 (94%)	1 (6%)	19 46
18	X2	16/34 (47%)	15 (94%)	1 (6%)	18 43
18	x1	23/34 (68%)	21 (91%)	2 (9%)	10 27
18	x2	17/34 (50%)	16 (94%)	1 (6%)	19 46
19	S1	10/20 (50%)	10 (100%)	0	100 100
19	S2	10/20 (50%)	10 (100%)	0	100 100
19	s1	15/20 (75%)	15 (100%)	0	100 100
19	s2	13/20 (65%)	13 (100%)	0	100 100
20	W1	12/13 (92%)	12 (100%)	0	100 100
20	W2	10/13 (77%)	10 (100%)	0	100 100
20	w1	11/13 (85%)	11 (100%)	0	100 100
20	w2	11/13 (85%)	11 (100%)	0	100 100
21	Q2	35/175 (20%)	33 (94%)	2 (6%)	20 48

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
21	q1	33/175 (19%)	32 (97%)	1 (3%)	41 72
22	Z2	22/54 (41%)	22 (100%)	0	100 100
22	z2	28/54 (52%)	28 (100%)	0	100 100
All	All	7221/10010 (72%)	7059 (98%)	162 (2%)	52 80

All (162) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A1	85	THR
1	A1	123	VAL
1	A1	255	PHE
1	A1	286	THR
1	A1	291	SER
2	B1	6	TYR
2	B1	10	THR
2	B1	12	VAL
2	B1	128	THR
2	B1	357	ARG
2	B1	371	VAL
2	B1	434	ARG
2	B1	442	VAL
2	B1	464	PHE
3	C1	62	PHE
3	C1	99	VAL
3	C1	240	ILE
4	D1	180	ARG
4	D1	182	LEU
4	D1	277	THR
6	F1	41	GLN
7	H1	49	TYR
8	I1	23	PHE
12	M1	9	LEU
13	O1	101	MET
13	O1	106	THR
13	O1	142	LEU
13	O1	172	VAL
13	O1	181	VAL
13	O1	183	ARG
13	O1	219	GLN
13	O1	220	LEU
13	O1	221	SER

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Mol	Chain	Res	Type
13	O1	233	LEU
15	U1	57	THR
15	U1	80	ASP
15	U1	90	GLU
15	U1	97	ARG
16	V1	39	SER
18	X1	32	VAL
1	a1	85	THR
1	a1	123	VAL
1	a1	255	PHE
1	a1	286	THR
1	a1	291	SER
2	b1	6	TYR
2	b1	10	THR
2	b1	12	VAL
2	b1	128	THR
2	b1	357	ARG
2	b1	371	VAL
2	b1	434	ARG
2	b1	442	VAL
2	b1	464	PHE
2	b1	479	PHE
2	b1	490	VAL
3	c1	36	TRP
3	c1	62	PHE
3	c1	122	SER
3	c1	240	ILE
4	d1	180	ARG
4	d1	182	LEU
5	e1	65	LEU
6	f1	41	GLN
7	h1	49	TYR
8	i1	23	PHE
12	m1	9	LEU
13	o1	106	THR
13	o1	142	LEU
13	o1	172	VAL
13	o1	181	VAL
13	o1	183	ARG
13	o1	219	GLN
13	o1	220	LEU
13	o1	221	SER

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Mol	Chain	Res	Type
15	u1	57	THR
15	u1	80	ASP
15	u1	90	GLU
15	u1	97	ARG
16	v1	25	GLN
16	v1	39	SER
16	v1	40	CYS
18	x1	12	TRP
18	x1	32	VAL
21	q1	137	ASP
1	A2	85	THR
1	A2	123	VAL
1	A2	255	PHE
1	A2	286	THR
1	A2	291	SER
2	B2	6	TYR
2	B2	10	THR
2	B2	12	VAL
2	B2	128	THR
2	B2	357	ARG
2	B2	371	VAL
2	B2	434	ARG
2	B2	442	VAL
2	B2	464	PHE
2	B2	490	VAL
3	C2	62	PHE
4	D2	182	LEU
4	D2	238	THR
6	F2	41	GLN
8	I2	23	PHE
12	M2	9	LEU
13	O2	106	THR
13	O2	172	VAL
13	O2	181	VAL
13	O2	183	ARG
13	O2	219	GLN
13	O2	221	SER
13	O2	233	LEU
15	U2	80	ASP
15	U2	90	GLU
15	U2	97	ARG
16	V2	39	SER

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Mol	Chain	Res	Type
18	X2	12	TRP
21	Q2	137	ASP
21	Q2	183	ILE
1	a2	25	GLU
1	a2	85	THR
1	a2	123	VAL
1	a2	255	PHE
1	a2	286	THR
1	a2	291	SER
2	b2	6	TYR
2	b2	10	THR
2	b2	12	VAL
2	b2	128	THR
2	b2	357	ARG
2	b2	371	VAL
2	b2	434	ARG
2	b2	442	VAL
2	b2	464	PHE
2	b2	479	PHE
3	c2	26	ARG
3	c2	62	PHE
3	c2	99	VAL
4	d2	180	ARG
4	d2	182	LEU
6	f2	41	GLN
7	h2	49	TYR
8	i2	23	PHE
12	m2	9	LEU
13	o2	106	THR
13	o2	142	LEU
13	o2	172	VAL
13	o2	181	VAL
13	o2	183	ARG
13	o2	219	GLN
13	o2	220	LEU
13	o2	221	SER
13	o2	233	LEU
14	t2	29	ILE
15	u2	57	THR
15	u2	80	ASP
15	u2	90	GLU
15	u2	97	ARG

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Mol	Chain	Res	Type
15	u2	104	LYS
16	v2	39	SER
18	x2	12	TRP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (25) such sidechains are listed below:

Mol	Chain	Res	Type
1	A1	234	ASN
2	B1	216	HIS
2	B1	223	GLN
2	B1	365	ASN
3	C1	56	HIS
3	C1	107	ASN
3	C1	418	ASN
13	O1	109	GLN
2	b1	216	HIS
2	b1	223	GLN
2	b1	365	ASN
2	b1	489	GLN
3	c1	56	HIS
3	c1	418	ASN
13	o1	109	GLN
21	q1	170	GLN
2	B2	216	HIS
3	C2	56	HIS
13	O2	109	GLN
16	V2	122	GLN
2	b2	216	HIS
2	b2	365	ASN
3	c2	56	HIS
13	o2	109	GLN
18	x2	34	GLN

### 5.3.3 RNA [\(i\)](#)

There are no RNA molecules in this entry.

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

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 353 ligands modelled in this entry, 52 are unknown and 10 are monoatomic - leaving 291 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z  > 2$	Counts	RMSZ	# $ Z  > 2$
25	CLA	B1	613	-	59,73,73	1.47	6 (10%)	67,113,113	1.51	9 (13%)
25	CLA	D2	404	-	55,69,73	1.49	4 (7%)	62,108,113	1.52	10 (16%)
25	CLA	C1	506	-	59,73,73	1.42	5 (8%)	67,113,113	1.46	9 (13%)
25	CLA	B1	608	-	59,73,73	1.42	5 (8%)	67,113,113	1.45	7 (10%)
29	LMG	b1	631	-	40,40,55	1.08	2 (5%)	48,48,63	1.23	5 (10%)
23	BCR	J1	101	-	41,41,41	0.75	0	56,56,56	2.10	16 (28%)
38	HEM	v2	201	16	27,50,50	2.19	6 (22%)	17,82,82	1.35	2 (11%)
29	LMG	D1	406	-	35,35,55	1.11	2 (5%)	43,43,63	1.07	3 (6%)
25	CLA	b2	613	-	59,73,73	1.44	5 (8%)	67,113,113	1.45	8 (11%)
25	CLA	b2	620	40	59,73,73	1.44	5 (8%)	67,113,113	1.51	9 (13%)
25	CLA	B1	606	-	59,73,73	1.41	5 (8%)	67,113,113	1.48	9 (13%)
23	BCR	j2	102	-	41,41,41	0.73	0	56,56,56	2.08	18 (32%)
33	LHG	b1	622	-	48,48,48	0.92	2 (4%)	51,54,54	1.04	5 (9%)
23	BCR	B2	603	-	41,41,41	0.69	0	56,56,56	1.84	12 (21%)
27	PHO	d1	403	-	67,69,69	2.13	16 (23%)	85,99,99	1.91	19 (22%)
25	CLA	C2	511	-	44,58,73	1.64	6 (13%)	49,95,113	1.78	9 (18%)
25	CLA	A1	403	-	59,73,73	1.50	8 (13%)	67,113,113	1.39	8 (11%)
25	CLA	a1	405	-	44,58,73	1.62	5 (11%)	49,95,113	1.73	10 (20%)
25	CLA	b2	611	-	59,73,73	1.42	5 (8%)	67,113,113	1.49	9 (13%)
31	BCT	A2	413	30	0,3,3	0.00	-	0,3,3	0.00	-
26	OEX	A1	407	1,3,40	0,15,15	0.00	-	-	-	-
29	LMG	F2	402	-	35,35,55	1.13	2 (5%)	43,43,63	1.03	3 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
23	BCR	k1	101	-	41,41,41	0.71	0	56,56,56	2.03	15 (26%)
35	LMT	l1	101	-	24,24,36	0.47	0	29,29,47	0.83	2 (6%)
25	CLA	B2	609	-	59,73,73	1.42	6 (10%)	67,113,113	1.54	9 (13%)
25	CLA	c1	507	-	59,73,73	1.44	5 (8%)	67,113,113	1.47	8 (11%)
32	GOL	a2	415	-	5,5,5	0.36	0	5,5,5	0.39	0
25	CLA	d2	402	-	59,73,73	1.43	5 (8%)	67,113,113	1.53	9 (13%)
35	LMT	M1	103	-	24,24,36	0.46	0	29,29,47	0.56	0
25	CLA	B2	619	-	59,73,73	1.42	5 (8%)	67,113,113	1.46	9 (13%)
33	LHG	B1	621	-	48,48,48	0.92	2 (4%)	51,54,54	1.01	3 (5%)
29	LMG	B2	620	-	40,40,55	1.07	3 (7%)	48,48,63	1.05	4 (8%)
25	CLA	b2	604	-	36,50,73	1.80	5 (13%)	39,85,113	1.76	7 (17%)
27	PHO	D1	407	-	66,68,69	2.15	16 (24%)	83,97,99	1.96	21 (25%)
23	BCR	C1	501	-	41,41,41	0.70	0	56,56,56	1.80	14 (25%)
23	BCR	b2	603	-	41,41,41	0.70	0	56,56,56	1.91	13 (23%)
33	LHG	d1	407	-	48,48,48	0.91	2 (4%)	51,54,54	1.05	3 (5%)
34	DGD	C2	512	-	34,34,67	1.16	2 (5%)	46,47,81	1.06	2 (4%)
25	CLA	c2	506	-	55,69,73	1.50	5 (9%)	62,108,113	1.62	11 (17%)
26	OEX	A2	406	1,3,40	0,15,15	0.00	-	-	-	-
25	CLA	A2	403	-	55,69,73	1.51	5 (9%)	62,108,113	1.45	8 (12%)
25	CLA	K2	101	-	49,63,73	1.57	5 (10%)	55,101,113	1.56	9 (16%)
36	PL9	D1	408	-	55,55,55	0.64	2 (3%)	68,69,69	1.76	16 (23%)
25	CLA	C2	516	-	40,54,73	1.70	5 (12%)	44,90,113	1.70	8 (18%)
35	LMT	M1	102	-	10,10,36	0.24	0	9,9,47	0.57	0
33	LHG	D2	403	-	48,48,48	0.92	2 (4%)	51,54,54	1.03	3 (5%)
25	CLA	C2	505	-	59,73,73	1.44	5 (8%)	67,113,113	1.46	8 (11%)
25	CLA	b1	605	-	59,73,73	1.44	5 (8%)	67,113,113	1.51	7 (10%)
27	PHO	a1	411	-	67,69,69	2.11	17 (25%)	85,99,99	1.88	20 (23%)
25	CLA	d1	406	-	59,73,73	1.44	5 (8%)	67,113,113	1.51	9 (13%)
37	SQD	D1	409	-	34,35,54	1.53	4 (11%)	43,46,65	1.41	6 (13%)
25	CLA	c1	504	-	59,73,73	1.40	5 (8%)	67,113,113	1.48	8 (11%)
25	CLA	B1	619	40	59,73,73	1.44	4 (6%)	67,113,113	1.51	9 (13%)
25	CLA	b2	610	-	59,73,73	1.42	5 (8%)	67,113,113	1.47	9 (13%)
25	CLA	B1	610	-	59,73,73	1.44	5 (8%)	67,113,113	1.42	9 (13%)
23	BCR	d1	405	-	41,41,41	0.71	0	56,56,56	1.86	12 (21%)
25	CLA	C1	502	-	59,73,73	1.38	4 (6%)	67,113,113	1.51	8 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
23	BCR	a2	402	-	41,41,41	0.67	0	56,56,56	1.64	12 (21%)
25	CLA	c1	506	40	59,73,73	1.43	5 (8%)	67,113,113	1.52	9 (13%)
25	CLA	c2	515	-	40,54,73	1.69	5 (12%)	44,90,113	1.72	7 (15%)
25	CLA	b1	617	-	59,73,73	1.45	5 (8%)	67,113,113	1.45	8 (11%)
23	BCR	b1	602	-	41,41,41	0.69	0	56,56,56	2.05	18 (32%)
23	BCR	C1	521	-	41,41,41	0.69	0	56,56,56	1.94	13 (23%)
35	LMT	b2	623	-	36,36,36	0.38	0	47,47,47	0.84	0
25	CLA	c1	503	-	59,73,73	1.37	5 (8%)	67,113,113	1.51	9 (13%)
25	CLA	c2	512	3	59,73,73	1.43	5 (8%)	67,113,113	1.41	9 (13%)
23	BCR	z2	101	-	41,41,41	0.70	0	56,56,56	1.76	10 (17%)
23	BCR	b2	601	-	41,41,41	0.70	0	56,56,56	1.97	16 (28%)
33	LHG	a2	407	-	29,29,48	1.09	2 (6%)	30,34,54	1.02	1 (3%)
37	SQD	D2	402	-	24,25,54	1.94	4 (16%)	31,35,65	1.66	6 (19%)
35	LMT	C1	519	-	36,36,36	0.35	0	47,47,47	0.70	1 (2%)
29	LMG	d1	411	-	34,34,55	1.10	2 (5%)	36,36,63	1.14	3 (8%)
25	CLA	c2	510	-	48,62,73	1.63	5 (10%)	53,99,113	1.53	8 (15%)
25	CLA	B2	616	-	48,62,73	1.61	5 (10%)	53,99,113	1.60	9 (16%)
29	LMG	b1	621	-	38,38,55	1.11	2 (5%)	46,46,63	1.07	2 (4%)
23	BCR	D1	401	-	41,41,41	0.72	0	56,56,56	1.98	13 (23%)
32	GOL	a1	406	-	5,5,5	0.35	0	5,5,5	0.28	0
33	LHG	L2	101	-	48,48,48	0.93	2 (4%)	51,54,54	1.10	4 (7%)
23	BCR	b1	601	-	41,41,41	0.69	0	56,56,56	1.83	14 (25%)
25	CLA	a2	404	-	59,73,73	1.46	7 (11%)	67,113,113	1.41	9 (13%)
23	BCR	h1	102	-	41,41,41	0.68	0	56,56,56	1.89	17 (30%)
29	LMG	a2	412	-	44,44,55	1.01	2 (4%)	52,52,63	1.11	5 (9%)
29	LMG	A1	410	-	43,43,55	1.03	2 (4%)	51,51,63	1.11	4 (7%)
25	CLA	c1	509	40	59,73,73	1.43	5 (8%)	67,113,113	1.46	8 (11%)
32	GOL	i1	101	-	5,5,5	0.42	0	5,5,5	0.20	0
25	CLA	b2	606	-	59,73,73	1.42	5 (8%)	67,113,113	1.49	8 (11%)
33	LHG	L1	101	-	40,40,48	1.01	2 (5%)	43,46,54	1.10	4 (9%)
25	CLA	C2	503	-	59,73,73	1.42	5 (8%)	67,113,113	1.51	7 (10%)
25	CLA	C1	509	-	59,73,73	1.43	5 (8%)	67,113,113	1.60	10 (14%)
25	CLA	b2	614	-	59,73,73	1.40	5 (8%)	67,113,113	1.47	9 (13%)
33	LHG	d1	402	-	31,31,48	1.16	2 (6%)	34,37,54	1.35	3 (8%)
25	CLA	b1	613	-	59,73,73	1.43	7 (11%)	67,113,113	1.51	10 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
33	LHG	b2	625	-	42,42,48	1.00	2 (4%)	45,48,54	1.08	3 (6%)
33	LHG	A2	405	-	32,32,48	1.13	2 (6%)	35,38,54	1.07	2 (5%)
26	OEX	a1	408	1,3,40	0,15,15	0.00	-	-	-	-
25	CLA	b1	608	-	59,73,73	1.44	5 (8%)	67,113,113	1.47	8 (11%)
25	CLA	d1	401	-	59,73,73	1.45	5 (8%)	67,113,113	1.48	10 (14%)
29	LMG	B1	626	-	48,48,55	0.98	2 (4%)	56,56,63	1.18	3 (5%)
23	BCR	B2	602	-	41,41,41	0.68	0	56,56,56	2.02	14 (25%)
25	CLA	c2	509	-	59,73,73	1.41	5 (8%)	67,113,113	1.59	10 (14%)
25	CLA	C2	513	-	47,61,73	1.64	5 (10%)	52,98,113	1.56	7 (13%)
25	CLA	b1	606	-	59,73,73	1.41	5 (8%)	67,113,113	1.47	9 (13%)
23	BCR	F2	401	-	41,41,41	0.72	0	56,56,56	2.18	18 (32%)
25	CLA	B2	610	-	59,73,73	1.42	5 (8%)	67,113,113	1.46	8 (11%)
25	CLA	C1	504	-	59,73,73	1.45	4 (6%)	67,113,113	1.41	9 (13%)
25	CLA	D2	401	-	59,73,73	1.42	5 (8%)	67,113,113	1.50	9 (13%)
25	CLA	B2	611	-	59,73,73	1.42	5 (8%)	67,113,113	1.46	9 (13%)
25	CLA	c2	507	-	48,62,73	1.59	5 (10%)	53,99,113	1.62	8 (15%)
27	PHO	A1	408	-	67,69,69	2.09	17 (25%)	85,99,99	1.92	20 (23%)
33	LHG	a1	407	-	42,42,48	1.01	2 (4%)	45,48,54	1.09	3 (6%)
25	CLA	C1	511	-	59,73,73	1.44	5 (8%)	67,113,113	1.45	8 (11%)
38	HEM	v1	201	16	27,50,50	2.18	6 (22%)	17,82,82	1.44	3 (17%)
25	CLA	B1	607	-	54,68,73	1.52	5 (9%)	61,107,113	1.45	8 (13%)
23	BCR	B1	602	-	41,41,41	0.69	0	56,56,56	1.95	12 (21%)
29	LMG	b2	622	-	39,39,55	1.07	2 (5%)	47,47,63	1.01	3 (6%)
25	CLA	b2	609	-	55,69,73	1.46	6 (10%)	62,108,113	1.54	8 (12%)
25	CLA	D2	406	-	59,73,73	1.45	5 (8%)	67,113,113	1.48	9 (13%)
25	CLA	C1	507	-	59,73,73	1.47	6 (10%)	67,113,113	1.43	10 (14%)
33	LHG	D1	405	-	48,48,48	0.93	2 (4%)	51,54,54	1.00	3 (5%)
34	DGD	C1	517	-	65,65,67	0.86	2 (3%)	79,79,81	0.85	3 (3%)
23	BCR	b2	602	-	41,41,41	0.70	0	56,56,56	2.13	17 (30%)
23	BCR	c2	501	-	41,41,41	0.80	1 (2%)	56,56,56	3.50	20 (35%)
25	CLA	b2	619	-	53,67,73	1.53	6 (11%)	59,105,113	1.52	7 (11%)
33	LHG	D1	404	-	48,48,48	0.93	2 (4%)	51,54,54	1.04	4 (7%)
23	BCR	B1	603	-	41,41,41	0.69	0	56,56,56	1.72	11 (19%)
25	CLA	d2	404	-	44,58,73	1.66	5 (11%)	49,95,113	1.68	8 (16%)
36	PL9	D2	408	-	55,55,55	0.62	1 (1%)	68,69,69	1.73	19 (27%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	CLA	B2	612	-	59,73,73	1.43	5 (8%)	67,113,113	1.48	10 (14%)
29	LMG	B1	622	-	31,31,55	1.20	2 (6%)	39,39,63	1.19	4 (10%)
23	BCR	B1	601	-	41,41,41	0.69	0	56,56,56	1.90	15 (26%)
25	CLA	B2	614	-	59,73,73	1.40	5 (8%)	67,113,113	1.48	10 (14%)
23	BCR	H1	102	-	22,22,41	0.69	0	29,29,56	1.71	6 (20%)
23	BCR	c1	501	-	41,41,41	0.70	0	56,56,56	2.10	13 (23%)
25	CLA	a1	404	-	54,68,73	1.55	6 (11%)	61,107,113	1.42	10 (16%)
25	CLA	B1	611	-	56,70,73	1.50	4 (7%)	63,109,113	1.49	11 (17%)
34	DGD	c1	518	-	63,63,67	0.87	2 (3%)	77,77,81	1.00	5 (6%)
34	DGD	h2	102	-	63,63,67	0.87	2 (3%)	77,77,81	0.91	2 (2%)
31	BCT	a1	413	30	0,3,3	0.00	-	0,3,3	0.00	-
25	CLA	C2	504	-	40,54,73	1.70	5 (12%)	44,90,113	1.68	7 (15%)
25	CLA	b2	624	-	59,73,73	1.41	5 (8%)	67,113,113	1.48	8 (11%)
25	CLA	c2	503	-	59,73,73	1.44	5 (8%)	67,113,113	1.49	8 (11%)
25	CLA	b1	610	-	59,73,73	1.43	5 (8%)	67,113,113	1.49	11 (16%)
34	DGD	H2	101	-	63,63,67	0.88	2 (3%)	77,77,81	0.91	3 (3%)
25	CLA	c2	502	-	59,73,73	1.42	5 (8%)	67,113,113	1.45	8 (11%)
38	HEM	E2	101	5	27,50,50	2.17	6 (22%)	17,82,82	1.40	2 (11%)
25	CLA	c1	515	-	49,63,73	1.56	5 (10%)	55,101,113	1.62	8 (14%)
25	CLA	c2	504	-	59,73,73	1.43	5 (8%)	67,113,113	1.45	8 (11%)
34	DGD	C1	515	-	53,53,67	0.96	2 (3%)	67,67,81	1.01	4 (5%)
34	DGD	h1	101	-	63,63,67	0.88	2 (3%)	77,77,81	0.96	4 (5%)
25	CLA	A1	406	-	59,73,73	1.48	5 (8%)	67,113,113	1.55	11 (16%)
25	CLA	B1	609	-	59,73,73	1.43	5 (8%)	67,113,113	1.74	12 (17%)
23	BCR	c1	502	-	41,41,41	0.75	0	56,56,56	2.09	14 (25%)
25	CLA	b2	616	-	54,68,73	1.53	5 (9%)	61,107,113	1.52	10 (16%)
35	LMT	m2	103	-	31,31,36	0.44	0	42,42,47	0.91	1 (2%)
25	CLA	b1	611	-	59,73,73	1.42	5 (8%)	67,113,113	1.41	9 (13%)
23	BCR	K2	102	-	41,41,41	0.72	0	56,56,56	2.07	16 (28%)
25	CLA	B1	615	-	59,73,73	1.40	5 (8%)	67,113,113	1.47	9 (13%)
25	CLA	c1	513	3	54,68,73	1.50	5 (9%)	61,107,113	1.51	7 (11%)
23	BCR	h2	101	-	41,41,41	0.68	0	56,56,56	1.79	14 (25%)
25	CLA	d2	405	-	59,73,73	1.43	5 (8%)	67,113,113	1.42	9 (13%)
35	LMT	c1	517	-	34,34,36	0.43	0	45,45,47	0.68	1 (2%)
38	HEM	e2	101	5,6	27,50,50	2.18	5 (18%)	17,82,82	1.39	3 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	CLA	b2	615	-	54,68,73	1.49	5 (9%)	61,107,113	1.54	10 (16%)
25	CLA	B1	618	-	52,66,73	1.53	6 (11%)	58,104,113	1.55	7 (12%)
25	CLA	c1	511	-	59,73,73	1.39	5 (8%)	67,113,113	1.50	9 (13%)
33	LHG	l2	101	-	43,43,48	1.00	2 (4%)	46,49,54	1.07	4 (8%)
27	PHO	D2	407	-	67,69,69	2.12	17 (25%)	85,99,99	2.01	21 (24%)
25	CLA	B1	605	-	59,73,73	1.44	5 (8%)	67,113,113	1.44	8 (11%)
32	GOL	c1	521	-	5,5,5	0.36	0	5,5,5	0.31	0
29	LMG	B2	621	-	37,37,55	0.95	3 (8%)	45,45,63	1.11	3 (6%)
23	BCR	H2	103	-	24,24,41	0.71	0	31,31,56	1.67	8 (25%)
23	BCR	K1	101	-	31,31,41	0.70	0	40,40,56	2.32	14 (35%)
25	CLA	c1	516	-	59,73,73	1.40	4 (6%)	67,113,113	1.45	9 (13%)
25	CLA	C2	518	-	35,49,73	1.81	5 (14%)	38,84,113	1.91	9 (23%)
34	DGD	c1	514	-	52,52,67	0.96	2 (3%)	66,66,81	1.04	4 (6%)
25	CLA	C2	508	-	44,58,73	1.64	5 (11%)	49,95,113	1.72	9 (18%)
32	GOL	c2	518	-	5,5,5	0.37	0	5,5,5	0.26	0
32	GOL	C2	514	-	5,5,5	0.36	0	5,5,5	0.31	0
33	LHG	l1	102	-	48,48,48	0.92	2 (4%)	51,54,54	1.07	4 (7%)
27	PHO	a2	416	-	67,69,69	2.11	16 (23%)	85,99,99	1.88	22 (25%)
37	SQD	B2	623	-	44,45,54	1.31	4 (9%)	53,56,65	1.22	6 (11%)
25	CLA	C1	514	-	36,53,73	1.79	4 (11%)	39,89,113	1.76	7 (17%)
25	CLA	B1	617	-	59,73,73	1.41	5 (8%)	67,113,113	1.47	9 (13%)
25	CLA	b1	620	-	59,73,73	1.46	5 (8%)	67,113,113	1.48	9 (13%)
33	LHG	d2	406	-	48,48,48	0.92	2 (4%)	51,54,54	1.00	4 (7%)
31	BCT	a2	417	30	0,3,3	0.00	-	0,3,3	0.00	-
25	CLA	b1	604	-	59,73,73	1.47	5 (8%)	67,113,113	1.39	8 (11%)
23	BCR	a1	401	-	41,41,41	0.69	0	56,56,56	1.73	14 (25%)
35	LMT	i2	102	-	6,6,36	0.28	0	5,5,47	0.44	0
25	CLA	C1	510	-	59,73,73	1.45	5 (8%)	67,113,113	1.40	7 (10%)
35	LMT	L1	102	-	11,11,36	0.25	0	10,10,47	0.57	0
23	BCR	C2	502	-	41,41,41	0.70	0	56,56,56	1.88	12 (21%)
25	CLA	B2	608	-	59,73,73	1.42	5 (8%)	67,113,113	1.46	9 (13%)
29	LMG	c2	519	-	26,26,55	1.60	3 (11%)	32,33,63	1.30	2 (6%)
33	LHG	D2	405	-	48,48,48	0.92	2 (4%)	51,54,54	1.02	4 (7%)
25	CLA	B1	614	-	59,73,73	1.42	5 (8%)	67,113,113	1.48	9 (13%)
25	CLA	C2	509	-	59,73,73	1.43	5 (8%)	67,113,113	1.46	9 (13%)
25	CLA	C2	506	-	59,73,73	1.41	5 (8%)	67,113,113	1.49	10 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	CLA	a1	403	-	59,73,73	1.51	7 (11%)	67,113,113	1.37	8 (11%)
29	LMG	d2	407	-	27,27,55	1.36	2 (7%)	35,35,63	1.29	3 (8%)
25	CLA	b1	616	-	59,73,73	1.43	6 (10%)	67,113,113	1.46	8 (11%)
35	LMT	m1	101	-	36,36,36	0.42	0	47,47,47	0.68	0
25	CLA	c2	508	40	59,73,73	1.44	5 (8%)	67,113,113	1.43	9 (13%)
29	LMG	c1	519	-	55,55,55	0.91	2 (3%)	63,63,63	0.95	2 (3%)
33	LHG	d2	403	-	48,48,48	0.94	2 (4%)	51,54,54	1.02	3 (5%)
25	CLA	a2	405	-	59,73,73	1.38	5 (8%)	67,113,113	1.46	10 (14%)
25	CLA	B2	613	-	59,73,73	1.44	5 (8%)	67,113,113	1.59	10 (14%)
27	PHO	A2	407	-	67,69,69	2.10	17 (25%)	85,99,99	1.93	21 (24%)
25	CLA	b2	608	-	59,73,73	1.47	5 (8%)	67,113,113	1.40	8 (11%)
25	CLA	b1	619	-	59,73,73	1.45	6 (10%)	67,113,113	1.46	8 (11%)
23	BCR	A1	401	-	41,41,41	0.68	0	56,56,56	1.74	11 (19%)
29	LMG	I2	101	-	34,34,55	1.15	2 (5%)	42,42,63	1.13	3 (7%)
23	BCR	k2	501	-	41,41,41	0.68	0	56,56,56	2.04	16 (28%)
29	LMG	d1	408	-	33,33,55	1.15	2 (6%)	41,41,63	1.10	3 (7%)
32	GOL	b1	618	-	5,5,5	0.35	0	5,5,5	0.39	0
23	BCR	K2	104	-	29,29,41	0.55	0	40,41,56	1.67	10 (25%)
25	CLA	B2	617	-	59,73,73	1.43	5 (8%)	67,113,113	1.47	8 (11%)
35	LMT	T1	101	-	11,11,36	0.25	0	10,10,47	0.58	0
29	LMG	C1	520	-	48,48,55	0.97	2 (4%)	56,56,63	1.00	3 (5%)
25	CLA	C1	503	-	54,68,73	1.47	5 (9%)	61,107,113	1.52	8 (13%)
25	CLA	A2	404	-	45,59,73	1.71	5 (11%)	50,96,113	1.58	9 (18%)
25	CLA	A1	404	-	45,59,73	1.64	5 (11%)	50,96,113	1.65	8 (16%)
25	CLA	c1	510	-	59,73,73	1.42	6 (10%)	67,113,113	1.56	11 (16%)
25	CLA	B2	618	-	54,68,73	1.53	6 (11%)	61,107,113	1.55	9 (14%)
25	CLA	D1	402	-	59,73,73	1.40	5 (8%)	67,113,113	1.48	8 (11%)
25	CLA	b1	612	-	59,73,73	1.43	5 (8%)	67,113,113	1.50	9 (13%)
31	BCT	A1	413	30	0,3,3	0.00	-	0,3,3	0.00	-
25	CLA	c2	513	-	48,62,73	1.57	5 (10%)	53,99,113	1.64	9 (16%)
25	CLA	c1	512	-	59,73,73	1.42	5 (8%)	67,113,113	1.48	7 (10%)
25	CLA	C1	508	-	59,73,73	1.43	5 (8%)	67,113,113	1.46	7 (10%)
34	DGD	c1	520	-	63,63,67	0.87	2 (3%)	77,77,81	0.86	2 (2%)
38	HEM	E1	101	5,6	27,50,50	2.18	6 (22%)	17,82,82	1.40	2 (11%)
25	CLA	C2	510	-	36,53,73	1.76	5 (13%)	39,89,113	1.80	7 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
29	LMG	C2	515	-	24,24,55	1.18	2 (8%)	32,32,63	1.05	2 (6%)
25	CLA	b1	607	-	59,73,73	1.50	5 (8%)	67,113,113	1.46	10 (14%)
38	HEM	V1	201	16	27,50,50	2.18	6 (22%)	17,82,82	1.42	3 (17%)
23	BCR	A2	401	-	41,41,41	0.69	0	56,56,56	2.02	16 (28%)
25	CLA	b2	612	-	59,73,73	1.48	7 (11%)	67,113,113	1.51	8 (11%)
25	CLA	b1	609	-	59,73,73	1.45	5 (8%)	67,113,113	1.45	9 (13%)
25	CLA	B1	604	-	36,50,73	1.82	5 (13%)	39,85,113	1.74	7 (17%)
29	LMG	b1	624	-	39,39,55	1.08	2 (5%)	47,47,63	1.31	5 (10%)
25	CLA	c2	505	-	59,73,73	1.40	5 (8%)	67,113,113	1.49	9 (13%)
25	CLA	B1	616	-	59,73,73	1.49	5 (8%)	67,113,113	1.40	9 (13%)
25	CLA	C1	512	-	59,73,73	1.40	5 (8%)	67,113,113	1.50	10 (14%)
25	CLA	b2	618	-	59,73,73	1.44	5 (8%)	67,113,113	1.46	9 (13%)
25	CLA	b1	615	-	53,67,73	1.46	5 (9%)	59,105,113	1.56	10 (16%)
25	CLA	b2	617	-	59,73,73	1.44	5 (8%)	67,113,113	1.42	9 (13%)
29	LMG	M1	101	-	30,30,55	1.20	3 (10%)	32,32,63	1.33	3 (9%)
32	GOL	C1	518	-	5,5,5	0.37	0	5,5,5	0.23	0
26	OEX	a2	408	1,3,40	0,15,15	0.00	-	-	-	-
27	PHO	d2	408	-	67,69,69	2.12	17 (25%)	85,99,99	1.93	19 (22%)
25	CLA	B2	605	-	59,73,73	1.43	5 (8%)	67,113,113	1.49	9 (13%)
29	LMG	a1	412	-	51,51,55	0.95	2 (3%)	59,59,63	1.07	4 (6%)
37	SQD	b2	605	-	44,45,54	1.30	4 (9%)	53,56,65	1.16	4 (7%)
34	DGD	H1	101	-	63,63,67	0.88	2 (3%)	77,77,81	0.92	3 (3%)
29	LMG	j2	101	-	50,50,55	0.94	2 (4%)	58,58,63	1.03	2 (3%)
34	DGD	c2	514	-	63,63,67	0.87	2 (3%)	77,77,81	0.97	4 (5%)
25	CLA	c2	511	-	59,73,73	1.43	5 (8%)	67,113,113	1.44	7 (10%)
29	LMG	A2	412	-	29,29,55	1.07	2 (6%)	37,37,63	1.10	2 (5%)
34	DGD	c2	517	-	63,63,67	0.89	2 (3%)	77,77,81	0.84	2 (2%)
33	LHG	B2	627	-	41,41,48	1.03	2 (4%)	44,47,54	1.08	3 (6%)
36	PL9	d1	409	-	55,55,55	0.64	2 (3%)	68,69,69	1.78	20 (29%)
32	GOL	B1	620	-	5,5,5	0.35	0	5,5,5	0.32	0
25	CLA	B1	612	-	59,73,73	1.47	5 (8%)	67,113,113	1.47	8 (11%)
34	DGD	c2	516	-	53,53,67	0.96	2 (3%)	67,67,81	1.03	3 (4%)
25	CLA	c1	505	-	59,73,73	1.43	4 (6%)	67,113,113	1.44	8 (11%)
34	DGD	C1	516	-	63,63,67	0.85	2 (3%)	77,77,81	1.00	4 (5%)
25	CLA	C2	507	-	36,53,73	1.81	5 (13%)	39,89,113	1.82	7 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
25	CLA	D1	403	-	45,59,73	1.62	4 (8%)	50,96,113	1.63	7 (14%)
35	LMT	m2	104	-	30,30,36	0.47	0	41,41,47	0.81	1 (2%)
25	CLA	d1	404	40	59,73,73	1.50	4 (6%)	67,113,113	1.50	10 (14%)
25	CLA	B2	607	-	59,73,73	1.45	5 (8%)	67,113,113	1.47	10 (14%)
35	LMT	a2	406	-	36,36,36	0.45	0	47,47,47	0.66	1 (2%)
25	CLA	A2	402	-	59,73,73	1.53	7 (11%)	67,113,113	1.41	8 (11%)
25	CLA	A1	405	-	49,63,73	1.64	6 (12%)	55,101,113	1.56	11 (20%)
25	CLA	B2	604	-	35,49,73	1.83	4 (11%)	38,84,113	1.80	8 (21%)
23	BCR	d2	401	-	41,41,41	0.70	0	56,56,56	2.11	16 (28%)
29	LMG	A1	412	-	41,41,55	1.06	2 (4%)	49,49,63	1.02	3 (6%)
36	PL9	d2	409	-	55,55,55	0.64	1 (1%)	68,69,69	1.72	16 (23%)
38	HEM	V2	201	16	27,50,50	2.21	5 (18%)	17,82,82	1.37	2 (11%)
25	CLA	a2	413	-	44,58,73	1.66	5 (11%)	49,95,113	1.59	8 (16%)
25	CLA	B2	606	-	59,73,73	1.43	5 (8%)	67,113,113	1.44	7 (10%)
38	HEM	f1	101	6	27,50,50	2.18	6 (22%)	17,82,82	1.34	2 (11%)
25	CLA	C1	505	-	59,73,73	1.39	5 (8%)	67,113,113	1.53	8 (11%)
25	CLA	c1	508	-	44,58,73	1.69	5 (11%)	49,95,113	1.69	11 (22%)
35	LMT	b2	621	-	36,36,36	0.41	0	47,47,47	0.69	0
23	BCR	b1	603	-	41,41,41	0.72	0	56,56,56	1.75	11 (19%)
25	CLA	B2	615	-	59,73,73	1.42	5 (8%)	67,113,113	1.49	10 (14%)
25	CLA	b1	614	-	59,73,73	1.40	5 (8%)	67,113,113	1.52	9 (13%)
23	BCR	B2	601	-	41,41,41	0.70	0	56,56,56	1.92	15 (26%)
25	CLA	C1	513	3	55,69,73	1.49	5 (9%)	62,108,113	1.48	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
25	CLA	B1	613	-	3/3/20/25	13/37/135/135	-
25	CLA	D2	404	-	3/3/19/25	11/33/131/135	-
25	CLA	C1	506	-	3/3/20/25	15/37/135/135	-
25	CLA	B1	608	-	3/3/20/25	14/37/135/135	-
29	LMG	b1	631	-	-	7/35/55/70	0/1/1/1
23	BCR	J1	101	-	-	9/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	HEM	v2	201	16	-	1/6/54/54	-
29	LMG	D1	406	-	-	4/30/50/70	0/1/1/1
25	CLA	b2	613	-	3/3/20/25	6/37/135/135	-
25	CLA	b2	620	40	3/3/20/25	20/37/135/135	-
25	CLA	B1	606	-	3/3/20/25	18/37/135/135	-
23	BCR	j2	102	-	-	9/29/63/63	0/2/2/2
33	LHG	b1	622	-	-	14/53/53/53	-
23	BCR	B2	603	-	-	2/29/63/63	0/2/2/2
27	PHO	d1	403	-	-	5/53/103/103	0/5/6/6
25	CLA	C2	511	-	3/3/17/25	4/19/117/135	-
25	CLA	A1	403	-	3/3/20/25	10/37/135/135	-
25	CLA	a1	405	-	3/3/17/25	6/19/117/135	-
33	LHG	D2	405	-	-	16/53/53/53	-
25	CLA	B2	612	-	3/3/20/25	9/37/135/135	-
29	LMG	F2	402	-	-	2/30/50/70	0/1/1/1
23	BCR	k1	101	-	-	5/29/63/63	0/2/2/2
35	LMT	l1	101	-	-	3/15/35/61	0/1/1/2
25	CLA	B2	609	-	3/3/20/25	9/37/135/135	-
25	CLA	c1	507	-	3/3/20/25	16/37/135/135	-
32	GOL	a2	415	-	-	2/4/4/4	-
25	CLA	d2	402	-	3/3/20/25	11/37/135/135	-
29	LMG	a2	412	-	-	6/39/59/70	0/1/1/1
35	LMT	M1	103	-	-	3/15/35/61	0/1/1/2
25	CLA	B2	619	-	3/3/20/25	17/37/135/135	-
25	CLA	C1	513	3	3/3/19/25	13/33/131/135	-
29	LMG	B2	620	-	-	8/35/55/70	0/1/1/1
23	BCR	c1	502	-	-	5/29/63/63	0/2/2/2
27	PHO	D1	407	-	-	6/51/101/103	0/5/6/6
32	GOL	C2	514	-	-	2/4/4/4	-
23	BCR	C1	501	-	-	4/29/63/63	0/2/2/2
23	BCR	b2	603	-	-	0/29/63/63	0/2/2/2
33	LHG	d1	407	-	-	14/53/53/53	-
34	DGD	C2	512	-	-	1/20/60/95	0/2/2/2
25	CLA	c2	506	-	3/3/19/25	11/33/131/135	-
35	LMT	L1	102	-	-	1/9/9/61	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	A2	403	-	3/3/19/25	7/33/131/135	-
25	CLA	K2	101	-	3/3/18/25	11/25/123/135	-
25	CLA	b1	612	-	3/3/20/25	11/37/135/135	-
25	CLA	C2	516	-	3/3/16/25	6/15/113/135	-
25	CLA	B1	616	-	3/3/20/25	9/37/135/135	-
33	LHG	D2	403	-	-	10/53/53/53	-
25	CLA	C2	505	-	3/3/20/25	15/37/135/135	-
25	CLA	b1	605	-	3/3/20/25	7/37/135/135	-
27	PHO	a1	411	-	-	7/53/103/103	0/5/6/6
25	CLA	d1	406	-	3/3/20/25	14/37/135/135	-
37	SQD	D1	409	-	-	2/29/49/69	0/1/1/1
25	CLA	c1	504	-	3/3/20/25	7/37/135/135	-
25	CLA	B1	619	40	3/3/20/25	16/37/135/135	-
25	CLA	b2	610	-	3/3/20/25	7/37/135/135	-
25	CLA	B1	610	-	3/3/20/25	13/37/135/135	-
23	BCR	d1	405	-	-	8/29/63/63	0/2/2/2
25	CLA	C1	502	-	3/3/20/25	15/37/135/135	-
23	BCR	a2	402	-	-	3/29/63/63	0/2/2/2
25	CLA	c1	506	40	3/3/20/25	15/37/135/135	-
25	CLA	c2	515	-	3/3/16/25	5/15/113/135	-
25	CLA	b1	617	-	3/3/20/25	3/37/135/135	-
23	BCR	b1	602	-	-	3/29/63/63	0/2/2/2
23	BCR	C1	521	-	-	0/29/63/63	0/2/2/2
35	LMT	b2	623	-	-	1/21/61/61	0/2/2/2
25	CLA	c1	503	-	3/3/20/25	15/37/135/135	-
25	CLA	c2	512	3	3/3/20/25	13/37/135/135	-
25	CLA	a2	404	-	3/3/20/25	7/37/135/135	-
23	BCR	b2	601	-	-	0/29/63/63	0/2/2/2
33	LHG	a2	407	-	-	11/33/33/53	-
37	SQD	D2	402	-	-	4/18/38/69	0/1/1/1
35	LMT	C1	519	-	-	2/21/61/61	0/2/2/2
29	LMG	d1	411	-	-	2/36/36/70	-
25	CLA	c2	510	-	3/3/17/25	8/24/122/135	-
25	CLA	B2	616	-	3/3/17/25	7/24/122/135	-
29	LMG	b1	621	-	-	6/33/53/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	LMT	T1	101	-	-	0/9/9/61	-
23	BCR	D1	401	-	-	8/29/63/63	0/2/2/2
32	GOL	a1	406	-	-	2/4/4/4	-
33	LHG	L2	101	-	-	16/53/53/53	-
35	LMT	M1	102	-	-	1/8/8/61	-
25	CLA	C2	508	-	3/3/17/25	7/19/117/135	-
23	BCR	h1	102	-	-	5/29/63/63	0/2/2/2
25	CLA	A1	405	-	3/3/18/25	3/25/123/135	-
29	LMG	A1	410	-	-	4/38/58/70	0/1/1/1
32	GOL	i1	101	-	-	2/4/4/4	-
25	CLA	b2	606	-	3/3/20/25	14/37/135/135	-
33	LHG	L1	101	-	-	14/45/45/53	-
25	CLA	C2	503	-	3/3/20/25	16/37/135/135	-
25	CLA	C1	509	-	3/3/20/25	18/37/135/135	-
25	CLA	b2	614	-	3/3/20/25	17/37/135/135	-
33	LHG	d1	402	-	-	12/36/36/53	-
25	CLA	b1	613	-	3/3/20/25	6/37/135/135	-
33	LHG	b2	625	-	-	5/47/47/53	-
33	LHG	A2	405	-	-	10/37/37/53	-
25	CLA	B1	612	-	3/3/20/25	9/37/135/135	-
25	CLA	b1	608	-	3/3/20/25	15/37/135/135	-
25	CLA	d1	401	-	3/3/20/25	10/37/135/135	-
29	LMG	B1	626	-	-	12/43/63/70	0/1/1/1
23	BCR	a1	401	-	-	2/29/63/63	0/2/2/2
23	BCR	B2	602	-	-	2/29/63/63	0/2/2/2
25	CLA	C2	513	-	3/3/17/25	0/23/121/135	-
25	CLA	b1	606	-	3/3/20/25	17/37/135/135	-
23	BCR	F2	401	-	-	9/29/63/63	0/2/2/2
25	CLA	B2	610	-	3/3/20/25	6/37/135/135	-
27	PHO	A2	407	-	-	10/53/103/103	0/5/6/6
25	CLA	D2	401	-	3/3/20/25	6/37/135/135	-
25	CLA	B2	611	-	3/3/20/25	8/37/135/135	-
25	CLA	c2	507	-	3/3/17/25	5/24/122/135	-
27	PHO	A1	408	-	-	7/53/103/103	0/5/6/6

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	LHG	a1	407	-	-	14/47/47/53	-
25	CLA	C1	511	-	3/3/20/25	12/37/135/135	-
38	HEM	v1	201	16	-	1/6/54/54	-
33	LHG	D1	404	-	-	11/53/53/53	-
25	CLA	b1	619	-	3/3/20/25	17/37/135/135	-
29	LMG	b2	622	-	-	0/34/54/70	0/1/1/1
25	CLA	b2	609	-	3/3/19/25	10/33/131/135	-
25	CLA	D2	406	-	3/3/20/25	14/37/135/135	-
25	CLA	C1	507	-	3/3/20/25	20/37/135/135	-
33	LHG	D1	405	-	-	14/53/53/53	-
34	DGD	C1	517	-	-	6/53/93/95	0/2/2/2
23	BCR	b2	602	-	-	6/29/63/63	0/2/2/2
23	BCR	c2	501	-	-	14/29/63/63	0/2/2/2
25	CLA	b2	619	-	3/3/18/25	10/30/128/135	-
25	CLA	c2	504	-	3/3/20/25	10/37/135/135	-
23	BCR	B1	603	-	-	1/29/63/63	0/2/2/2
25	CLA	d2	404	-	3/3/17/25	2/19/117/135	-
36	PL9	D2	408	-	-	7/53/73/73	0/1/1/1
29	LMG	B1	622	-	-	2/26/46/70	0/1/1/1
23	BCR	B1	601	-	-	0/29/63/63	0/2/2/2
25	CLA	B2	614	-	3/3/20/25	12/37/135/135	-
23	BCR	H1	102	-	-	3/15/32/63	0/1/1/2
23	BCR	B1	602	-	-	5/29/63/63	0/2/2/2
23	BCR	c1	501	-	-	0/29/63/63	0/2/2/2
25	CLA	a1	404	-	3/3/19/25	7/31/129/135	-
25	CLA	B1	611	-	2/2/19/25	10/34/132/135	-
34	DGD	c1	518	-	-	10/51/91/95	0/2/2/2
34	DGD	h2	102	-	-	9/51/91/95	0/2/2/2
25	CLA	C2	504	-	3/3/16/25	8/15/113/135	-
25	CLA	b2	624	-	3/3/20/25	9/37/135/135	-
25	CLA	c2	503	-	3/3/20/25	13/37/135/135	-
25	CLA	b1	610	-	3/3/20/25	2/37/135/135	-
34	DGD	H2	101	-	-	7/51/91/95	0/2/2/2
25	CLA	c2	502	-	3/3/20/25	13/37/135/135	-
38	HEM	E2	101	5	-	0/6/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	c1	515	-	3/3/18/25	9/25/123/135	-
25	CLA	B2	615	-	3/3/20/25	11/37/135/135	-
36	PL9	d2	409	-	-	8/53/73/73	0/1/1/1
34	DGD	C1	515	-	-	10/41/81/95	0/2/2/2
34	DGD	h1	101	-	-	9/51/91/95	0/2/2/2
25	CLA	A1	406	-	3/3/20/25	11/37/135/135	-
25	CLA	B1	609	-	3/3/20/25	10/37/135/135	-
25	CLA	b2	604	-	3/3/15/25	4/10/108/135	-
25	CLA	b2	616	-	3/3/19/25	9/31/129/135	-
35	LMT	m2	103	-	-	5/16/56/61	0/2/2/2
25	CLA	b1	611	-	3/3/20/25	6/37/135/135	-
23	BCR	K2	102	-	-	7/29/63/63	0/2/2/2
25	CLA	B1	615	-	3/3/20/25	15/37/135/135	-
25	CLA	c1	513	3	3/3/19/25	5/31/129/135	-
23	BCR	h2	101	-	-	4/29/63/63	0/2/2/2
25	CLA	d2	405	-	3/3/20/25	9/37/135/135	-
35	LMT	c1	517	-	-	1/19/59/61	0/2/2/2
38	HEM	e2	101	5,6	-	0/6/54/54	-
25	CLA	b2	615	-	3/3/19/25	8/31/129/135	-
25	CLA	B1	618	-	3/3/18/25	3/29/127/135	-
25	CLA	c1	511	-	3/3/20/25	10/37/135/135	-
33	LHG	l2	101	-	-	20/48/48/53	-
27	PHO	D2	407	-	-	10/53/103/103	0/5/6/6
25	CLA	B1	605	-	3/3/20/25	9/37/135/135	-
32	GOL	c1	521	-	-	2/4/4/4	-
29	LMG	B2	621	-	-	8/31/51/70	0/1/1/1
23	BCR	H2	103	-	-	3/17/34/63	0/1/1/2
23	BCR	b1	601	-	-	0/29/63/63	0/2/2/2
25	CLA	c1	516	-	3/3/20/25	11/37/135/135	-
25	CLA	C2	518	-	3/3/15/25	4/8/106/135	-
25	CLA	b1	620	-	3/3/20/25	16/37/135/135	-
32	GOL	c2	518	-	-	2/4/4/4	-
33	LHG	B1	621	-	-	11/53/53/53	-
33	LHG	l1	102	-	-	18/53/53/53	-
25	CLA	c2	509	-	3/3/20/25	11/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
37	SQD	B2	623	-	-	2/40/60/69	0/1/1/1
25	CLA	B1	617	-	3/3/20/25	12/37/135/135	-
34	DGD	c1	514	-	-	9/40/80/95	0/2/2/2
25	CLA	b2	612	-	3/3/20/25	10/37/135/135	-
25	CLA	b1	604	-	3/3/20/25	14/37/135/135	-
25	CLA	C1	514	-	3/3/16/25	2/11/111/135	-
35	LMT	i2	102	-	-	0/4/4/61	-
25	CLA	C1	510	-	3/3/20/25	8/37/135/135	-
25	CLA	B2	607	-	3/3/20/25	7/37/135/135	-
23	BCR	z2	101	-	-	0/29/63/63	0/2/2/2
35	LMT	a2	406	-	-	5/21/61/61	0/2/2/2
23	BCR	C2	502	-	-	0/29/63/63	0/2/2/2
25	CLA	B2	608	-	3/3/20/25	18/37/135/135	-
29	LMG	c2	519	-	-	3/20/40/70	0/1/1/1
25	CLA	b2	611	-	3/3/20/25	5/37/135/135	-
25	CLA	B1	614	-	3/3/20/25	12/37/135/135	-
25	CLA	C2	509	-	3/3/20/25	14/37/135/135	-
25	CLA	C2	506	-	3/3/20/25	14/37/135/135	-
25	CLA	a1	403	-	3/3/20/25	6/37/135/135	-
27	PHO	a2	416	-	-	8/53/103/103	0/5/6/6
29	LMG	d2	407	-	-	3/21/41/70	0/1/1/1
25	CLA	b1	616	-	3/3/20/25	15/37/135/135	-
35	LMT	m1	101	-	-	8/21/61/61	0/2/2/2
25	CLA	c2	508	40	3/3/20/25	14/37/135/135	-
29	LMG	c1	519	-	-	9/50/70/70	0/1/1/1
33	LHG	d2	403	-	-	13/53/53/53	-
25	CLA	a2	405	-	3/3/20/25	13/37/135/135	-
25	CLA	B2	613	-	3/3/20/25	12/37/135/135	-
25	CLA	C1	504	-	3/3/20/25	6/37/135/135	-
25	CLA	b2	608	-	3/3/20/25	12/37/135/135	-
25	CLA	A2	402	-	3/3/20/25	10/37/135/135	-
23	BCR	A1	401	-	-	2/29/63/63	0/2/2/2
29	LMG	I2	101	-	-	3/29/49/70	0/1/1/1
23	BCR	k2	501	-	-	0/29/63/63	0/2/2/2
29	LMG	d1	408	-	-	2/28/48/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	GOL	b1	618	-	-	4/4/4/4	-
23	BCR	K2	104	-	-	2/12/46/63	0/2/2/2
25	CLA	B2	617	-	3/3/20/25	7/37/135/135	-
25	CLA	b1	607	-	3/3/20/25	10/37/135/135	-
29	LMG	C1	520	-	-	8/43/63/70	0/1/1/1
25	CLA	C1	503	-	3/3/19/25	11/31/129/135	-
25	CLA	A2	404	-	3/3/17/25	8/21/119/135	-
25	CLA	A1	404	-	3/3/17/25	7/21/119/135	-
29	LMG	M1	101	-	-	4/31/31/70	-
25	CLA	B2	618	-	3/3/19/25	4/31/129/135	-
25	CLA	D1	402	-	3/3/20/25	7/37/135/135	-
36	PL9	D1	408	-	-	7/53/73/73	0/1/1/1
25	CLA	c2	513	-	3/3/17/25	7/24/122/135	-
25	CLA	c1	512	-	3/3/20/25	15/37/135/135	-
25	CLA	C1	508	-	3/3/20/25	11/37/135/135	-
34	DGD	c1	520	-	-	8/51/91/95	0/2/2/2
38	HEM	E1	101	5,6	-	0/6/54/54	-
25	CLA	C2	510	-	3/3/16/25	4/11/111/135	-
29	LMG	C2	515	-	-	0/18/38/70	0/1/1/1
29	LMG	A1	412	-	-	7/36/56/70	0/1/1/1
38	HEM	V1	201	16	-	1/6/54/54	-
23	BCR	A2	401	-	-	0/29/63/63	0/2/2/2
33	LHG	d2	406	-	-	10/53/53/53	-
25	CLA	b1	609	-	3/3/20/25	11/37/135/135	-
25	CLA	B1	604	-	3/3/15/25	4/10/108/135	-
29	LMG	b1	624	-	-	3/34/54/70	0/1/1/1
25	CLA	c2	505	-	3/3/20/25	14/37/135/135	-
25	CLA	b2	618	-	3/3/20/25	4/37/135/135	-
25	CLA	b1	615	-	3/3/18/25	7/30/128/135	-
25	CLA	b2	617	-	3/3/20/25	16/37/135/135	-
25	CLA	C1	512	-	3/3/20/25	14/37/135/135	-
27	PHO	d2	408	-	-	6/53/103/103	0/5/6/6
25	CLA	B2	605	-	3/3/20/25	9/37/135/135	-
29	LMG	a1	412	-	-	12/46/66/70	0/1/1/1
37	SQD	b2	605	-	-	10/40/60/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	DGD	H1	101	-	-	12/51/91/95	0/2/2/2
29	LMG	j2	101	-	-	7/45/65/70	0/1/1/1
34	DGD	c2	514	-	-	16/51/91/95	0/2/2/2
29	LMG	A2	412	-	-	5/23/43/70	0/1/1/1
34	DGD	c2	517	-	-	7/51/91/95	0/2/2/2
33	LHG	B2	627	-	-	8/46/46/53	-
32	GOL	B1	620	-	-	2/4/4/4	-
36	PL9	d1	409	-	-	9/53/73/73	0/1/1/1
23	BCR	K1	101	-	-	5/26/43/63	0/1/1/2
34	DGD	c2	516	-	-	6/41/81/95	0/2/2/2
25	CLA	c1	505	-	3/3/20/25	5/37/135/135	-
34	DGD	C1	516	-	-	9/51/91/95	0/2/2/2
25	CLA	C2	507	-	3/3/16/25	4/11/111/135	-
25	CLA	D1	403	-	3/3/17/25	4/21/119/135	-
35	LMT	m2	104	-	-	4/15/55/61	0/2/2/2
25	CLA	d1	404	40	3/3/20/25	8/37/135/135	-
25	CLA	B1	607	-	3/3/19/25	7/31/129/135	-
25	CLA	c1	509	40	3/3/20/25	15/37/135/135	-
32	GOL	C1	518	-	-	2/4/4/4	-
25	CLA	B2	604	-	3/3/15/25	4/8/106/135	-
23	BCR	d2	401	-	-	8/29/63/63	0/2/2/2
25	CLA	c1	510	-	3/3/20/25	10/37/135/135	-
38	HEM	V2	201	16	-	1/6/54/54	-
25	CLA	a2	413	-	3/3/17/25	5/19/117/135	-
25	CLA	B2	606	-	3/3/20/25	11/37/135/135	-
38	HEM	f1	101	6	-	2/6/54/54	-
25	CLA	C1	505	-	3/3/20/25	11/37/135/135	-
25	CLA	c1	508	-	3/3/17/25	5/19/117/135	-
35	LMT	b2	621	-	-	1/21/61/61	0/2/2/2
23	BCR	b1	603	-	-	4/29/63/63	0/2/2/2
25	CLA	c2	511	-	3/3/20/25	15/37/135/135	-
25	CLA	b1	614	-	3/3/20/25	14/37/135/135	-
23	BCR	B2	601	-	-	0/29/63/63	0/2/2/2

All (1037) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	d1	404	CLA	C4B-NB	8.30	1.42	1.35
25	A2	402	CLA	C4B-NB	8.28	1.42	1.35
25	A2	404	CLA	C4B-NB	8.24	1.42	1.35
25	b1	607	CLA	C4B-NB	8.19	1.42	1.35
25	A1	406	CLA	C4B-NB	8.16	1.42	1.35
25	B2	618	CLA	C4B-NB	8.09	1.42	1.35
25	B1	616	CLA	C4B-NB	8.03	1.42	1.35
25	c2	510	CLA	C4B-NB	7.98	1.42	1.35
25	a1	404	CLA	C4B-NB	7.98	1.42	1.35
25	B1	612	CLA	C4B-NB	7.94	1.42	1.35
25	b1	604	CLA	C4B-NB	7.94	1.42	1.35
25	C2	513	CLA	C4B-NB	7.92	1.42	1.35
25	b2	608	CLA	C4B-NB	7.92	1.42	1.35
25	a1	403	CLA	C4B-NB	7.92	1.42	1.35
25	A1	405	CLA	C4B-NB	7.91	1.42	1.35
25	b2	612	CLA	C4B-NB	7.91	1.42	1.35
25	A2	403	CLA	C4B-NB	7.90	1.42	1.35
25	B1	611	CLA	C4B-NB	7.88	1.42	1.35
25	A1	403	CLA	C4B-NB	7.87	1.42	1.35
25	b1	619	CLA	C4B-NB	7.86	1.42	1.35
25	C1	507	CLA	C4B-NB	7.84	1.42	1.35
25	b1	620	CLA	C4B-NB	7.83	1.42	1.35
25	C1	504	CLA	C4B-NB	7.83	1.42	1.35
25	b2	619	CLA	C4B-NB	7.83	1.42	1.35
25	b2	616	CLA	C4B-NB	7.83	1.42	1.35
25	B2	607	CLA	C4B-NB	7.80	1.42	1.35
25	B1	613	CLA	C4B-NB	7.80	1.42	1.35
25	d1	401	CLA	C4B-NB	7.80	1.42	1.35
25	D2	406	CLA	C4B-NB	7.78	1.42	1.35
25	c2	506	CLA	C4B-NB	7.77	1.42	1.35
25	b1	609	CLA	C4B-NB	7.77	1.42	1.35
25	B2	613	CLA	C4B-NB	7.76	1.42	1.35
25	C1	510	CLA	C4B-NB	7.76	1.42	1.35
25	B2	616	CLA	C4B-NB	7.75	1.42	1.35
25	B1	618	CLA	C4B-NB	7.73	1.42	1.35
25	B1	604	CLA	C4B-NB	7.73	1.42	1.35
25	B1	619	CLA	C4B-NB	7.73	1.42	1.35
25	C2	507	CLA	C4B-NB	7.73	1.42	1.35
25	d1	406	CLA	C4B-NB	7.72	1.42	1.35
25	C1	511	CLA	C4B-NB	7.71	1.42	1.35
25	b2	615	CLA	C4B-NB	7.70	1.42	1.35
25	B2	615	CLA	C4B-NB	7.70	1.42	1.35
25	c1	506	CLA	C4B-NB	7.69	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	508	CLA	C4B-NB	7.69	1.42	1.35
25	c2	503	CLA	C4B-NB	7.69	1.42	1.35
25	b2	620	CLA	C4B-NB	7.69	1.42	1.35
25	B1	607	CLA	C4B-NB	7.69	1.42	1.35
25	d2	402	CLA	C4B-NB	7.68	1.42	1.35
25	b1	617	CLA	C4B-NB	7.67	1.42	1.35
25	c1	515	CLA	C4B-NB	7.67	1.42	1.35
25	D2	404	CLA	C4B-NB	7.66	1.42	1.35
25	b2	618	CLA	C4B-NB	7.66	1.42	1.35
25	d2	404	CLA	C4B-NB	7.65	1.42	1.35
25	c2	508	CLA	C4B-NB	7.65	1.42	1.35
25	B1	610	CLA	C4B-NB	7.65	1.42	1.35
25	C2	505	CLA	C4B-NB	7.64	1.42	1.35
25	C1	513	CLA	C4B-NB	7.64	1.42	1.35
25	c2	502	CLA	C4B-NB	7.64	1.42	1.35
25	c1	513	CLA	C4B-NB	7.62	1.42	1.35
25	C2	518	CLA	C4B-NB	7.62	1.42	1.35
25	B1	605	CLA	C4B-NB	7.61	1.42	1.35
25	C1	508	CLA	C4B-NB	7.61	1.42	1.35
25	b2	613	CLA	C4B-NB	7.61	1.42	1.35
25	B2	610	CLA	C4B-NB	7.61	1.42	1.35
25	c1	505	CLA	C4B-NB	7.61	1.42	1.35
25	b2	604	CLA	C4B-NB	7.60	1.42	1.35
25	C2	503	CLA	C4B-NB	7.60	1.42	1.35
25	B1	614	CLA	C4B-NB	7.60	1.42	1.35
25	c2	507	CLA	C4B-NB	7.58	1.42	1.35
25	A1	404	CLA	C4B-NB	7.58	1.42	1.35
25	c2	511	CLA	C4B-NB	7.58	1.42	1.35
25	b1	610	CLA	C4B-NB	7.57	1.42	1.35
25	c2	504	CLA	C4B-NB	7.57	1.42	1.35
25	b1	608	CLA	C4B-NB	7.56	1.42	1.35
25	B2	604	CLA	C4B-NB	7.56	1.42	1.35
25	B2	606	CLA	C4B-NB	7.56	1.42	1.35
25	C2	508	CLA	C4B-NB	7.56	1.42	1.35
25	c2	513	CLA	C4B-NB	7.55	1.41	1.35
25	b1	605	CLA	C4B-NB	7.55	1.41	1.35
25	B2	617	CLA	C4B-NB	7.55	1.41	1.35
25	B2	614	CLA	C4B-NB	7.55	1.41	1.35
25	C2	509	CLA	C4B-NB	7.55	1.41	1.35
25	d2	405	CLA	C4B-NB	7.55	1.41	1.35
25	b2	617	CLA	C4B-NB	7.55	1.41	1.35
25	b1	612	CLA	C4B-NB	7.55	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	605	CLA	C4B-NB	7.54	1.41	1.35
25	a2	413	CLA	C4B-NB	7.54	1.41	1.35
25	c2	512	CLA	C4B-NB	7.54	1.41	1.35
25	B1	615	CLA	C4B-NB	7.53	1.41	1.35
25	B2	611	CLA	C4B-NB	7.52	1.41	1.35
25	c1	512	CLA	C4B-NB	7.52	1.41	1.35
25	B2	609	CLA	C4B-NB	7.51	1.41	1.35
25	D2	401	CLA	C4B-NB	7.51	1.41	1.35
25	c1	507	CLA	C4B-NB	7.51	1.41	1.35
25	B2	612	CLA	C4B-NB	7.51	1.41	1.35
25	c1	510	CLA	C4B-NB	7.51	1.41	1.35
25	K2	101	CLA	C4B-NB	7.50	1.41	1.35
25	b2	606	CLA	C4B-NB	7.49	1.41	1.35
25	B1	609	CLA	C4B-NB	7.49	1.41	1.35
25	c1	509	CLA	C4B-NB	7.48	1.41	1.35
25	B2	619	CLA	C4B-NB	7.48	1.41	1.35
25	C2	506	CLA	C4B-NB	7.48	1.41	1.35
25	C2	511	CLA	C4B-NB	7.48	1.41	1.35
25	C1	514	CLA	C4B-NB	7.48	1.41	1.35
25	B1	608	CLA	C4B-NB	7.47	1.41	1.35
25	b2	610	CLA	C4B-NB	7.47	1.41	1.35
25	b2	611	CLA	C4B-NB	7.47	1.41	1.35
25	C1	506	CLA	C4B-NB	7.45	1.41	1.35
25	b1	614	CLA	C4B-NB	7.45	1.41	1.35
25	a2	404	CLA	C4B-NB	7.45	1.41	1.35
25	B2	608	CLA	C4B-NB	7.44	1.41	1.35
25	C1	509	CLA	C4B-NB	7.44	1.41	1.35
25	b2	614	CLA	C4B-NB	7.44	1.41	1.35
25	b1	611	CLA	C4B-NB	7.44	1.41	1.35
25	D1	403	CLA	C4B-NB	7.43	1.41	1.35
25	c2	515	CLA	C4B-NB	7.43	1.41	1.35
25	c2	509	CLA	C4B-NB	7.43	1.41	1.35
25	B1	617	CLA	C4B-NB	7.42	1.41	1.35
25	b2	624	CLA	C4B-NB	7.42	1.41	1.35
25	c1	516	CLA	C4B-NB	7.42	1.41	1.35
25	b1	606	CLA	C4B-NB	7.41	1.41	1.35
25	C2	504	CLA	C4B-NB	7.41	1.41	1.35
25	b1	613	CLA	C4B-NB	7.41	1.41	1.35
25	C2	516	CLA	C4B-NB	7.41	1.41	1.35
25	C1	505	CLA	C4B-NB	7.40	1.41	1.35
25	b2	609	CLA	C4B-NB	7.40	1.41	1.35
25	b1	616	CLA	C4B-NB	7.38	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B1	606	CLA	C4B-NB	7.38	1.41	1.35
25	C1	512	CLA	C4B-NB	7.37	1.41	1.35
25	C2	510	CLA	C4B-NB	7.37	1.41	1.35
25	a1	405	CLA	C4B-NB	7.37	1.41	1.35
25	c2	505	CLA	C4B-NB	7.36	1.41	1.35
25	C1	503	CLA	C4B-NB	7.36	1.41	1.35
25	b1	615	CLA	C4B-NB	7.33	1.41	1.35
25	c1	511	CLA	C4B-NB	7.33	1.41	1.35
25	C1	502	CLA	C4B-NB	7.32	1.41	1.35
25	D1	402	CLA	C4B-NB	7.28	1.41	1.35
25	c1	504	CLA	C4B-NB	7.26	1.41	1.35
25	a2	405	CLA	C4B-NB	7.14	1.41	1.35
25	c1	503	CLA	C4B-NB	7.05	1.41	1.35
37	D2	402	SQD	O7-S	6.36	1.63	1.45
29	c2	519	LMG	O7-C10	5.61	1.45	1.33
27	D2	407	PHO	C3C-C2C	5.51	1.48	1.36
27	a1	411	PHO	C3C-C2C	5.51	1.48	1.36
27	a2	416	PHO	C3C-C2C	5.50	1.48	1.36
27	D1	407	PHO	C3C-C2C	5.50	1.48	1.36
38	E1	101	HEM	C3D-C2D	5.48	1.53	1.37
38	e2	101	HEM	C3D-C2D	5.48	1.53	1.37
38	E2	101	HEM	C3D-C2D	5.47	1.53	1.37
38	V1	201	HEM	C3D-C2D	5.46	1.53	1.37
38	V2	201	HEM	C3D-C2D	5.45	1.53	1.37
27	D1	407	PHO	CHC-C1C	5.45	1.49	1.38
38	f1	101	HEM	C3D-C2D	5.45	1.53	1.37
27	d1	403	PHO	CHC-C1C	5.44	1.49	1.38
38	v1	201	HEM	C3D-C2D	5.43	1.53	1.37
27	A1	408	PHO	C3C-C2C	5.42	1.48	1.36
38	v2	201	HEM	C3D-C2D	5.42	1.53	1.37
27	A2	407	PHO	C3C-C2C	5.38	1.48	1.36
27	a2	416	PHO	CHC-C1C	5.38	1.49	1.38
27	d1	403	PHO	C3C-C2C	5.37	1.48	1.36
27	d2	408	PHO	C3C-C2C	5.37	1.48	1.36
27	a1	411	PHO	CHB-C1B	5.34	1.49	1.38
27	A1	408	PHO	CHB-C1B	5.32	1.49	1.38
27	d2	408	PHO	O2D-CGD	5.29	1.46	1.33
27	a2	416	PHO	CHB-C1B	5.28	1.48	1.38
27	A2	407	PHO	CHB-C1B	5.28	1.48	1.38
27	D1	407	PHO	C3B-C2B	5.27	1.48	1.37
27	d2	408	PHO	CHC-C1C	5.25	1.48	1.38
27	D1	407	PHO	CHB-C1B	5.25	1.48	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	d1	403	PHO	C3B-C2B	5.24	1.47	1.37
27	D2	407	PHO	C3B-C2B	5.23	1.47	1.37
27	D2	407	PHO	CHB-C1B	5.23	1.48	1.38
27	d1	403	PHO	O2D-CGD	5.22	1.45	1.33
27	D1	407	PHO	O2D-CGD	5.21	1.45	1.33
27	d2	408	PHO	C3B-C2B	5.21	1.47	1.37
27	D2	407	PHO	CHC-C1C	5.20	1.48	1.38
27	D2	407	PHO	O2D-CGD	5.18	1.45	1.33
27	a1	411	PHO	CHC-C1C	5.18	1.48	1.38
27	d2	408	PHO	CHB-C1B	5.17	1.48	1.38
27	a2	416	PHO	O2D-CGD	5.16	1.45	1.33
27	a1	411	PHO	C3B-C2B	5.15	1.47	1.37
27	A2	407	PHO	CHC-C1C	5.15	1.48	1.38
27	a1	411	PHO	O2D-CGD	5.15	1.45	1.33
27	A2	407	PHO	O2D-CGD	5.12	1.45	1.33
27	d1	403	PHO	CHB-C1B	5.11	1.48	1.38
27	A1	408	PHO	CHC-C1C	5.10	1.48	1.38
27	A1	408	PHO	O2D-CGD	5.03	1.45	1.33
27	A1	408	PHO	C3B-C2B	5.01	1.47	1.37
27	A2	407	PHO	C3B-C2B	5.00	1.47	1.37
27	a2	416	PHO	C3B-C2B	4.98	1.47	1.37
27	D2	407	PHO	CHD-C1D	4.97	1.48	1.38
27	A2	407	PHO	CHD-C1D	4.94	1.48	1.38
27	d2	408	PHO	CHD-C1D	4.90	1.48	1.38
27	d1	403	PHO	CHD-C1D	4.88	1.48	1.38
29	d2	407	LMG	O7-C10	4.85	1.46	1.35
27	a1	411	PHO	CHD-C1D	4.84	1.48	1.38
27	D1	407	PHO	CHD-C1D	4.83	1.48	1.38
27	A1	408	PHO	CHD-C1D	4.82	1.48	1.38
34	C2	512	DGD	O2G-C1B	4.80	1.46	1.35
37	D2	402	SQD	O47-C7	4.77	1.46	1.35
27	a2	416	PHO	CHD-C1D	4.76	1.47	1.38
37	D1	409	SQD	O47-C7	4.73	1.45	1.35
38	V2	201	HEM	C3B-C2B	-4.71	1.33	1.40
38	v2	201	HEM	C3C-C2C	-4.69	1.33	1.40
38	f1	101	HEM	C3B-C2B	-4.66	1.33	1.40
37	B2	623	SQD	O8-S	4.66	1.64	1.47
38	V1	201	HEM	C3C-C2C	-4.64	1.33	1.40
37	D1	409	SQD	O8-S	4.63	1.64	1.47
38	E2	101	HEM	C3B-C2B	-4.63	1.34	1.40
38	v1	201	HEM	C3C-C2C	-4.62	1.34	1.40
37	b2	605	SQD	O8-S	4.62	1.63	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	E1	101	HEM	C3B-C2B	-4.60	1.34	1.40
38	e2	101	HEM	C3B-C2B	-4.57	1.34	1.40
38	V2	201	HEM	C3C-C2C	-4.47	1.34	1.40
29	a1	412	LMG	O8-C28	4.39	1.46	1.33
29	B1	626	LMG	O8-C28	4.38	1.46	1.33
29	A1	412	LMG	O8-C28	4.38	1.46	1.33
29	b1	621	LMG	O8-C28	4.38	1.46	1.33
29	b1	621	LMG	O7-C10	4.38	1.46	1.34
34	c1	514	DGD	O1G-C1A	4.37	1.46	1.33
29	b2	622	LMG	O8-C28	4.33	1.46	1.33
33	B2	627	LHG	O8-C23	4.33	1.46	1.33
34	c2	517	DGD	O1G-C1A	4.32	1.46	1.33
29	A1	410	LMG	O8-C28	4.31	1.45	1.33
34	c1	520	DGD	O1G-C1A	4.30	1.45	1.33
34	C1	515	DGD	O1G-C1A	4.30	1.45	1.33
29	b1	624	LMG	O8-C28	4.30	1.45	1.33
29	I2	101	LMG	O8-C28	4.30	1.45	1.33
29	b1	631	LMG	O7-C10	4.29	1.46	1.34
37	B2	623	SQD	O48-C23	4.29	1.45	1.33
29	d2	407	LMG	O8-C28	4.29	1.45	1.33
29	j2	101	LMG	O8-C28	4.28	1.45	1.33
29	b1	631	LMG	O8-C28	4.28	1.45	1.33
29	d1	408	LMG	O8-C28	4.28	1.45	1.33
34	h1	101	DGD	O1G-C1A	4.28	1.45	1.33
29	c2	519	LMG	O8-C28	4.27	1.45	1.33
29	C1	520	LMG	O8-C28	4.26	1.45	1.33
37	b2	605	SQD	O47-C7	4.26	1.46	1.34
29	d1	411	LMG	O8-C28	4.26	1.45	1.33
33	b2	625	LHG	O8-C23	4.26	1.45	1.33
33	a1	407	LHG	O8-C23	4.26	1.45	1.33
27	d1	403	PHO	O2A-CGA	4.26	1.45	1.33
33	d1	402	LHG	O8-C23	4.25	1.45	1.33
29	F2	402	LMG	O8-C28	4.25	1.45	1.33
33	a1	407	LHG	O7-C7	4.25	1.46	1.34
29	b1	624	LMG	O7-C10	4.25	1.46	1.34
29	c1	519	LMG	O8-C28	4.25	1.45	1.33
29	B1	622	LMG	O8-C28	4.24	1.45	1.33
33	a2	407	LHG	O7-C7	4.24	1.46	1.34
29	M1	101	LMG	O8-C28	4.24	1.45	1.33
29	c1	519	LMG	O7-C10	4.24	1.46	1.34
37	D1	409	SQD	O48-C23	4.24	1.45	1.33
34	c2	516	DGD	O1G-C1A	4.24	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	b2	605	SQD	O48-C23	4.24	1.45	1.33
29	B1	626	LMG	O7-C10	4.23	1.46	1.34
33	l1	102	LHG	O8-C23	4.23	1.45	1.33
34	C1	517	DGD	O1G-C1A	4.23	1.45	1.33
33	d2	403	LHG	O8-C23	4.23	1.45	1.33
34	h2	102	DGD	O1G-C1A	4.22	1.45	1.33
33	D1	405	LHG	O8-C23	4.21	1.45	1.33
33	A2	405	LHG	O7-C7	4.21	1.46	1.34
34	H2	101	DGD	O1G-C1A	4.21	1.45	1.33
27	d2	408	PHO	O2A-CGA	4.21	1.45	1.33
29	B2	620	LMG	O8-C28	4.21	1.45	1.33
34	c2	514	DGD	O1G-C1A	4.20	1.45	1.33
33	D1	404	LHG	O8-C23	4.20	1.45	1.33
29	D1	406	LMG	O8-C28	4.20	1.45	1.33
33	L2	101	LHG	O8-C23	4.20	1.45	1.33
34	H1	101	DGD	O2G-C1B	4.20	1.46	1.34
34	c1	518	DGD	O1G-C1A	4.20	1.45	1.33
29	A2	412	LMG	O7-C10	4.20	1.46	1.34
34	H1	101	DGD	O1G-C1A	4.20	1.45	1.33
29	B2	620	LMG	O7-C10	4.20	1.46	1.34
29	a2	412	LMG	O8-C28	4.19	1.45	1.33
29	M1	101	LMG	O7-C10	4.19	1.46	1.34
29	F2	402	LMG	O7-C10	4.19	1.46	1.34
27	a2	416	PHO	O2A-CGA	4.19	1.45	1.33
29	d1	411	LMG	O7-C10	4.18	1.46	1.34
27	D1	407	PHO	O2A-CGA	4.17	1.45	1.33
34	H2	101	DGD	O2G-C1B	4.17	1.46	1.34
33	B1	621	LHG	O8-C23	4.17	1.45	1.33
33	l2	101	LHG	O8-C23	4.17	1.45	1.33
29	C2	515	LMG	O7-C10	4.17	1.46	1.34
29	I2	101	LMG	O7-C10	4.16	1.46	1.34
34	c2	516	DGD	O2G-C1B	4.16	1.46	1.34
33	d1	402	LHG	O7-C7	4.15	1.46	1.34
34	C1	516	DGD	O1G-C1A	4.15	1.45	1.33
29	a1	412	LMG	O7-C10	4.15	1.46	1.34
33	b2	625	LHG	O7-C7	4.14	1.46	1.34
29	a2	412	LMG	O7-C10	4.14	1.46	1.34
33	d2	406	LHG	O8-C23	4.14	1.45	1.33
33	D2	405	LHG	O8-C23	4.14	1.45	1.33
33	l2	101	LHG	O7-C7	4.14	1.46	1.34
33	A2	405	LHG	O8-C23	4.14	1.45	1.33
37	B2	623	SQD	O47-C7	4.13	1.46	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	L1	101	LHG	O8-C23	4.13	1.45	1.33
34	c2	514	DGD	O2G-C1B	4.13	1.45	1.34
34	h2	102	DGD	O2G-C1B	4.13	1.45	1.34
33	D2	403	LHG	O8-C23	4.13	1.45	1.33
33	B2	627	LHG	O7-C7	4.12	1.45	1.34
29	C1	520	LMG	O7-C10	4.12	1.45	1.34
34	c1	518	DGD	O2G-C1B	4.12	1.45	1.34
29	A1	410	LMG	O7-C10	4.11	1.45	1.34
29	b2	622	LMG	O7-C10	4.11	1.45	1.34
34	c2	517	DGD	O2G-C1B	4.11	1.45	1.34
29	A1	412	LMG	O7-C10	4.11	1.45	1.34
29	B1	622	LMG	O7-C10	4.11	1.45	1.34
34	c1	514	DGD	O2G-C1B	4.09	1.45	1.34
34	C1	515	DGD	O2G-C1B	4.09	1.45	1.34
27	A1	408	PHO	O2A-CGA	4.09	1.45	1.33
34	h1	101	DGD	O2G-C1B	4.09	1.45	1.34
29	B2	621	LMG	O7-C10	4.08	1.45	1.34
33	D1	404	LHG	O7-C7	4.08	1.45	1.34
33	d1	407	LHG	O8-C23	4.07	1.45	1.33
33	b1	622	LHG	O8-C23	4.07	1.45	1.33
29	j2	101	LMG	O7-C10	4.06	1.45	1.34
33	d2	403	LHG	O7-C7	4.06	1.45	1.34
34	C1	517	DGD	O2G-C1B	4.05	1.45	1.34
34	C1	516	DGD	O2G-C1B	4.05	1.45	1.34
29	D1	406	LMG	O7-C10	4.04	1.45	1.34
27	A2	407	PHO	O2A-CGA	4.04	1.45	1.33
34	c1	520	DGD	O2G-C1B	4.03	1.45	1.34
33	D1	405	LHG	O7-C7	4.03	1.45	1.34
27	D2	407	PHO	O2A-CGA	4.02	1.45	1.33
33	b1	622	LHG	O7-C7	4.02	1.45	1.34
33	L1	101	LHG	O7-C7	4.02	1.45	1.34
27	a1	411	PHO	O2A-CGA	4.00	1.45	1.33
33	D2	403	LHG	O7-C7	3.98	1.45	1.34
33	L2	101	LHG	O7-C7	3.98	1.45	1.34
33	d1	407	LHG	O7-C7	3.96	1.45	1.34
29	d1	408	LMG	O7-C10	3.95	1.45	1.34
33	B1	621	LHG	O7-C7	3.94	1.45	1.34
33	D2	405	LHG	O7-C7	3.93	1.45	1.34
38	v2	201	HEM	C3B-CAB	3.92	1.55	1.47
33	d2	406	LHG	O7-C7	3.91	1.45	1.34
38	f1	101	HEM	C3C-C2C	-3.90	1.35	1.40
38	e2	101	HEM	C3C-CAC	3.89	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	l1	102	LHG	O7-C7	3.89	1.45	1.34
38	V1	201	HEM	C3B-C2B	-3.87	1.35	1.40
38	E2	101	HEM	C3C-CAC	3.87	1.55	1.47
38	v1	201	HEM	C3B-C2B	-3.87	1.35	1.40
38	E1	101	HEM	C3C-CAC	3.86	1.55	1.47
27	d1	403	PHO	OBD-CAD	3.84	1.29	1.22
38	V1	201	HEM	C3B-CAB	3.84	1.55	1.47
38	v2	201	HEM	C3C-CAC	3.83	1.55	1.47
38	v1	201	HEM	C3B-CAB	3.83	1.55	1.47
38	v1	201	HEM	C3C-CAC	3.82	1.55	1.47
38	f1	101	HEM	C3C-CAC	3.80	1.55	1.47
27	D2	407	PHO	OBD-CAD	3.80	1.29	1.22
38	e2	101	HEM	C3C-C2C	-3.80	1.35	1.40
38	V2	201	HEM	C3C-CAC	3.79	1.55	1.47
38	E1	101	HEM	C3C-C2C	-3.78	1.35	1.40
38	v2	201	HEM	C3B-C2B	-3.76	1.35	1.40
27	a2	416	PHO	CHC-C4B	3.75	1.49	1.40
38	E2	101	HEM	C3C-C2C	-3.75	1.35	1.40
27	D1	407	PHO	OBD-CAD	3.75	1.28	1.22
27	D1	407	PHO	CHC-C4B	3.74	1.49	1.40
38	V1	201	HEM	C3C-CAC	3.74	1.55	1.47
38	e2	101	HEM	C3B-CAB	3.70	1.55	1.47
27	d2	408	PHO	OBD-CAD	3.70	1.28	1.22
25	A2	402	CLA	CHC-C1C	3.67	1.44	1.35
38	E1	101	HEM	C3B-CAB	3.66	1.55	1.47
25	a1	403	CLA	CHC-C1C	3.66	1.44	1.35
27	d1	403	PHO	C4A-NA	-3.65	1.26	1.35
27	a2	416	PHO	OBD-CAD	3.65	1.28	1.22
38	E2	101	HEM	C3B-CAB	3.65	1.55	1.47
27	A2	407	PHO	OBD-CAD	3.64	1.28	1.22
27	a1	411	PHO	CHC-C4B	3.64	1.48	1.40
27	a2	416	PHO	C4A-NA	-3.63	1.26	1.35
27	d1	403	PHO	CHC-C4B	3.63	1.48	1.40
27	a1	411	PHO	CHD-C4C	3.62	1.48	1.40
25	A1	403	CLA	CHC-C1C	3.61	1.44	1.35
27	A1	408	PHO	OBD-CAD	3.61	1.28	1.22
27	A1	408	PHO	C4A-NA	-3.61	1.26	1.35
27	d2	408	PHO	CHC-C4B	3.58	1.48	1.40
38	f1	101	HEM	C3B-CAB	3.58	1.55	1.47
38	V2	201	HEM	C3B-CAB	3.58	1.55	1.47
27	d2	408	PHO	C4A-NA	-3.56	1.26	1.35
27	A2	407	PHO	CHC-C4B	3.56	1.48	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a2	404	CLA	CHC-C1C	3.56	1.44	1.35
27	D2	407	PHO	C4A-NA	-3.55	1.26	1.35
27	A2	407	PHO	C4A-NA	-3.54	1.26	1.35
27	D2	407	PHO	CHC-C4B	3.54	1.48	1.40
27	D1	407	PHO	C4A-NA	-3.53	1.26	1.35
27	A2	407	PHO	CHD-C4C	3.53	1.48	1.40
27	D2	407	PHO	CHD-C4C	3.52	1.48	1.40
27	a1	411	PHO	C4A-NA	-3.52	1.26	1.35
27	d1	403	PHO	CHD-C4C	3.51	1.48	1.40
27	A1	408	PHO	CHC-C4B	3.48	1.48	1.40
27	a1	411	PHO	OBD-CAD	3.48	1.28	1.22
27	d2	408	PHO	CHD-C4C	3.45	1.48	1.40
27	D1	407	PHO	CHD-C4C	3.45	1.48	1.40
25	A1	405	CLA	CHC-C1C	3.43	1.43	1.35
27	a2	416	PHO	CHD-C4C	3.41	1.48	1.40
25	b1	607	CLA	CHC-C1C	3.40	1.43	1.35
25	b1	604	CLA	CHC-C1C	3.38	1.43	1.35
27	A1	408	PHO	CHD-C4C	3.36	1.48	1.40
25	d2	404	CLA	CHC-C1C	3.36	1.43	1.35
25	B2	610	CLA	CHC-C1C	3.35	1.43	1.35
25	b1	605	CLA	CHC-C1C	3.35	1.43	1.35
25	B1	616	CLA	CHC-C1C	3.34	1.43	1.35
25	a1	404	CLA	CHC-C1C	3.33	1.43	1.35
25	a2	413	CLA	CHC-C1C	3.33	1.43	1.35
25	b1	620	CLA	CHC-C1C	3.33	1.43	1.35
25	b2	624	CLA	CHC-C1C	3.33	1.43	1.35
25	C1	507	CLA	CHC-C1C	3.32	1.43	1.35
25	A2	404	CLA	CHC-C1C	3.32	1.43	1.35
25	C2	513	CLA	CHC-C1C	3.31	1.43	1.35
25	B1	619	CLA	CHC-C1C	3.31	1.43	1.35
25	B2	606	CLA	CHC-C1C	3.30	1.43	1.35
25	B2	616	CLA	CHC-C1C	3.29	1.43	1.35
25	c1	506	CLA	CHC-C1C	3.28	1.43	1.35
25	B1	606	CLA	CHC-C1C	3.28	1.43	1.35
25	b2	617	CLA	CHC-C1C	3.28	1.43	1.35
25	d1	406	CLA	CHC-C1C	3.28	1.43	1.35
27	a1	411	PHO	CHB-C4A	3.27	1.48	1.40
25	B2	619	CLA	CHC-C1C	3.27	1.43	1.35
25	b1	616	CLA	CHC-C1C	3.27	1.43	1.35
25	A1	404	CLA	CHC-C1C	3.27	1.43	1.35
34	C2	512	DGD	O1G-C1A	3.27	1.46	1.33
25	b1	608	CLA	CHC-C1C	3.26	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b1	609	CLA	CHC-C1C	3.26	1.43	1.35
25	B2	607	CLA	CHC-C1C	3.26	1.43	1.35
37	D2	402	SQD	O48-C23	3.26	1.45	1.33
25	b1	606	CLA	CHC-C1C	3.26	1.43	1.35
25	b2	606	CLA	CHC-C1C	3.25	1.43	1.35
25	B2	604	CLA	CHC-C1C	3.25	1.43	1.35
25	B1	612	CLA	CHC-C1C	3.24	1.43	1.35
25	B1	610	CLA	CHC-C1C	3.24	1.43	1.35
33	a2	407	LHG	O8-C23	3.24	1.45	1.33
25	A2	403	CLA	CHC-C1C	3.24	1.43	1.35
25	B2	609	CLA	CHC-C1C	3.23	1.43	1.35
25	b2	604	CLA	CHC-C1C	3.23	1.43	1.35
25	b2	615	CLA	CHC-C1C	3.23	1.43	1.35
25	c1	504	CLA	CHC-C1C	3.23	1.43	1.35
25	C2	507	CLA	CHC-C1C	3.23	1.43	1.35
25	C1	510	CLA	CHC-C1C	3.23	1.43	1.35
25	b1	610	CLA	CHC-C1C	3.23	1.43	1.35
25	C1	504	CLA	CHC-C1C	3.23	1.43	1.35
25	D1	403	CLA	CHC-C1C	3.23	1.43	1.35
25	c2	506	CLA	CHC-C1C	3.23	1.43	1.35
27	A2	407	PHO	CHB-C4A	3.23	1.48	1.40
25	C2	504	CLA	CHC-C1C	3.23	1.43	1.35
25	c1	515	CLA	CHC-C1C	3.23	1.43	1.35
25	C2	506	CLA	CHC-C1C	3.23	1.43	1.35
25	B1	604	CLA	CHC-C1C	3.22	1.43	1.35
25	d1	404	CLA	CHC-C1C	3.22	1.43	1.35
25	c2	510	CLA	CHC-C1C	3.22	1.43	1.35
27	D1	407	PHO	CHB-C4A	3.22	1.48	1.40
25	D2	404	CLA	CHC-C1C	3.22	1.43	1.35
25	B1	617	CLA	CHC-C1C	3.21	1.43	1.35
25	B1	615	CLA	CHC-C1C	3.21	1.43	1.35
25	d2	402	CLA	CHC-C1C	3.21	1.43	1.35
25	c2	515	CLA	CHC-C1C	3.21	1.43	1.35
25	A1	406	CLA	CHC-C1C	3.21	1.43	1.35
27	D2	407	PHO	CHB-C4A	3.21	1.48	1.40
25	b2	616	CLA	CHC-C1C	3.21	1.43	1.35
25	C2	508	CLA	CHC-C1C	3.21	1.43	1.35
25	B1	618	CLA	CHC-C1C	3.20	1.43	1.35
25	c1	505	CLA	CHC-C1C	3.20	1.43	1.35
25	b2	608	CLA	CHC-C1C	3.20	1.43	1.35
25	B2	605	CLA	CHC-C1C	3.20	1.43	1.35
25	C1	514	CLA	CHC-C1C	3.20	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B1	614	CLA	CHC-C1C	3.20	1.43	1.35
25	B1	605	CLA	CHC-C1C	3.20	1.43	1.35
25	D2	406	CLA	CHC-C1C	3.19	1.43	1.35
25	B1	611	CLA	CHC-C1C	3.19	1.43	1.35
25	c1	513	CLA	CHC-C1C	3.19	1.43	1.35
29	c2	519	LMG	O7-C8	-3.19	1.43	1.46
25	c1	507	CLA	CHC-C1C	3.19	1.43	1.35
25	B1	609	CLA	CHC-C1C	3.18	1.43	1.35
25	d1	401	CLA	CHC-C1C	3.18	1.43	1.35
25	C2	503	CLA	CHC-C1C	3.18	1.43	1.35
25	c1	512	CLA	CHC-C1C	3.18	1.43	1.35
25	C2	518	CLA	CHC-C1C	3.18	1.43	1.35
25	c1	508	CLA	CHC-C1C	3.18	1.43	1.35
25	b2	611	CLA	CHC-C1C	3.18	1.43	1.35
25	C2	505	CLA	CHC-C1C	3.18	1.43	1.35
25	B1	607	CLA	CHC-C1C	3.18	1.43	1.35
25	B2	608	CLA	CHC-C1C	3.17	1.43	1.35
25	b1	612	CLA	CHC-C1C	3.17	1.43	1.35
25	K2	101	CLA	CHC-C1C	3.17	1.43	1.35
25	C1	511	CLA	CHC-C1C	3.17	1.43	1.35
25	b2	618	CLA	CHC-C1C	3.17	1.43	1.35
25	b2	613	CLA	CHC-C1C	3.17	1.43	1.35
25	b2	619	CLA	CHC-C1C	3.17	1.43	1.35
25	b1	615	CLA	CHC-C1C	3.17	1.43	1.35
25	c2	508	CLA	CHC-C1C	3.16	1.43	1.35
25	B2	611	CLA	CHC-C1C	3.16	1.43	1.35
25	c2	504	CLA	CHC-C1C	3.16	1.43	1.35
25	b2	620	CLA	CHC-C1C	3.16	1.43	1.35
25	c2	509	CLA	CHC-C1C	3.16	1.43	1.35
25	b1	619	CLA	CHC-C1C	3.16	1.43	1.35
25	B2	613	CLA	CHC-C1C	3.16	1.43	1.35
25	b1	617	CLA	CHC-C1C	3.16	1.43	1.35
25	B1	608	CLA	CHC-C1C	3.16	1.43	1.35
25	c1	511	CLA	CHC-C1C	3.15	1.43	1.35
25	D2	401	CLA	CHC-C1C	3.15	1.43	1.35
25	c2	513	CLA	CHC-C1C	3.15	1.43	1.35
25	B2	615	CLA	CHC-C1C	3.15	1.43	1.35
25	c1	516	CLA	CHC-C1C	3.15	1.43	1.35
25	c2	503	CLA	CHC-C1C	3.15	1.43	1.35
25	b1	611	CLA	CHC-C1C	3.15	1.43	1.35
25	C1	512	CLA	CHC-C1C	3.15	1.43	1.35
25	C1	509	CLA	CMB-C2B	-3.14	1.45	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b1	614	CLA	CHC-C1C	3.14	1.43	1.35
25	C1	508	CLA	CHC-C1C	3.14	1.43	1.35
25	C2	510	CLA	CHC-C1C	3.14	1.43	1.35
25	C1	506	CLA	CHC-C1C	3.14	1.43	1.35
25	B2	617	CLA	CHC-C1C	3.14	1.43	1.35
25	c2	505	CLA	CHC-C1C	3.14	1.43	1.35
27	A1	408	PHO	CHB-C4A	3.14	1.47	1.40
25	C1	503	CLA	CHC-C1C	3.13	1.43	1.35
25	c2	507	CLA	CHC-C1C	3.13	1.43	1.35
25	c1	510	CLA	CHC-C1C	3.13	1.43	1.35
25	c1	509	CLA	CHC-C1C	3.13	1.43	1.35
25	a2	405	CLA	CHC-C1C	3.13	1.43	1.35
25	c2	511	CLA	CHC-C1C	3.13	1.43	1.35
25	b2	610	CLA	CHC-C1C	3.12	1.43	1.35
27	d1	403	PHO	CHB-C4A	3.12	1.47	1.40
25	B2	612	CLA	CHC-C1C	3.12	1.43	1.35
25	C1	505	CLA	CHC-C1C	3.12	1.43	1.35
25	c2	502	CLA	CHC-C1C	3.11	1.42	1.35
25	b2	609	CLA	CHC-C1C	3.11	1.42	1.35
25	B2	614	CLA	CHC-C1C	3.11	1.42	1.35
27	d2	408	PHO	CHB-C4A	3.11	1.47	1.40
25	b2	612	CLA	CMB-C2B	-3.11	1.45	1.51
25	B1	613	CLA	CHC-C1C	3.10	1.42	1.35
25	a1	405	CLA	CHC-C1C	3.09	1.42	1.35
25	c2	512	CLA	CHC-C1C	3.09	1.42	1.35
25	C2	509	CLA	CHC-C1C	3.09	1.42	1.35
25	B2	618	CLA	CHC-C1C	3.08	1.42	1.35
27	a2	416	PHO	CHB-C4A	3.08	1.47	1.40
25	C1	513	CLA	CHC-C1C	3.08	1.42	1.35
25	C2	516	CLA	CHC-C1C	3.08	1.42	1.35
25	C1	509	CLA	CHC-C1C	3.06	1.42	1.35
25	c1	503	CLA	CHC-C1C	3.05	1.42	1.35
25	b2	612	CLA	CHC-C1C	3.05	1.42	1.35
25	C2	511	CLA	CHC-C1C	3.04	1.42	1.35
25	b1	613	CLA	CHC-C1C	3.03	1.42	1.35
25	C1	502	CLA	CHC-C1C	3.02	1.42	1.35
25	b2	614	CLA	CHC-C1C	3.02	1.42	1.35
25	d2	405	CLA	CHC-C1C	3.02	1.42	1.35
27	a1	411	PHO	C3D-C4D	-3.01	1.34	1.43
27	d1	403	PHO	C3D-C4D	-3.00	1.34	1.43
25	D1	402	CLA	CHC-C1C	2.99	1.42	1.35
25	b1	613	CLA	CMB-C2B	-2.97	1.45	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	D1	409	SQD	C6-S	-2.96	1.66	1.77
27	A2	407	PHO	C3D-C4D	-2.96	1.34	1.43
25	B1	613	CLA	CMB-C2B	-2.95	1.45	1.51
37	B2	623	SQD	C6-S	-2.91	1.66	1.77
37	D2	402	SQD	C6-S	-2.90	1.66	1.77
27	d1	403	PHO	C3D-C2D	2.90	1.47	1.39
27	A1	408	PHO	C3D-C4D	-2.90	1.34	1.43
27	d2	408	PHO	C3D-C4D	-2.89	1.34	1.43
27	D2	407	PHO	C3D-C4D	-2.87	1.34	1.43
27	D1	407	PHO	C3D-C2D	2.87	1.47	1.39
27	a2	416	PHO	C3D-C4D	-2.85	1.34	1.43
25	d1	404	CLA	C1D-C2D	2.85	1.49	1.42
27	D1	407	PHO	C3D-C4D	-2.84	1.34	1.43
25	a1	404	CLA	C1D-C2D	2.83	1.49	1.42
25	D2	406	CLA	C1D-C2D	2.83	1.49	1.42
25	B1	610	CLA	C1D-C2D	2.82	1.49	1.42
27	D2	407	PHO	C3D-C2D	2.82	1.46	1.39
25	C1	514	CLA	C1D-C2D	2.81	1.48	1.42
37	b2	605	SQD	C6-S	-2.81	1.67	1.77
25	c1	516	CLA	C1D-C2D	2.81	1.48	1.42
25	B2	613	CLA	CMB-C2B	-2.81	1.45	1.51
25	a2	413	CLA	C1D-C2D	2.80	1.48	1.42
25	c1	503	CLA	C1D-C2D	2.80	1.48	1.42
25	b1	608	CLA	C1D-C2D	2.80	1.48	1.42
27	d2	408	PHO	C3D-C2D	2.80	1.46	1.39
27	a1	411	PHO	C3D-C2D	2.80	1.46	1.39
25	c1	506	CLA	C1D-C2D	2.79	1.48	1.42
25	A1	405	CLA	C1D-C2D	2.79	1.48	1.42
25	b2	617	CLA	C1D-C2D	2.78	1.48	1.42
25	c2	505	CLA	C1D-C2D	2.78	1.48	1.42
25	a1	405	CLA	C1D-C2D	2.78	1.48	1.42
25	d2	402	CLA	C1D-C2D	2.77	1.48	1.42
27	A1	408	PHO	C3D-C2D	2.77	1.46	1.39
25	B2	619	CLA	C1D-C2D	2.77	1.48	1.42
25	b1	620	CLA	C1D-C2D	2.76	1.48	1.42
25	B1	616	CLA	C1D-C2D	2.76	1.48	1.42
25	a1	403	CLA	C1D-C2D	2.76	1.48	1.42
25	c1	508	CLA	C1D-C2D	2.76	1.48	1.42
25	B2	604	CLA	C1D-C2D	2.75	1.48	1.42
25	B2	612	CLA	C1D-C2D	2.75	1.48	1.42
25	C2	516	CLA	C1D-C2D	2.75	1.48	1.42
25	b1	607	CLA	CMB-C2B	-2.75	1.45	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	608	CLA	C1D-C2D	2.75	1.48	1.42
25	C1	513	CLA	C1D-C2D	2.74	1.48	1.42
25	d1	406	CLA	C1D-C2D	2.74	1.48	1.42
25	A2	404	CLA	C1D-C2D	2.74	1.48	1.42
25	b2	608	CLA	C1D-C2D	2.74	1.48	1.42
25	c2	515	CLA	C1D-C2D	2.74	1.48	1.42
25	c2	512	CLA	C1D-C2D	2.74	1.48	1.42
25	C1	510	CLA	C1D-C2D	2.73	1.48	1.42
25	C2	503	CLA	C1D-C2D	2.73	1.48	1.42
25	c1	513	CLA	C1D-C2D	2.73	1.48	1.42
25	C2	504	CLA	C1D-C2D	2.73	1.48	1.42
25	C1	503	CLA	C1D-C2D	2.73	1.48	1.42
27	a2	416	PHO	C3D-C2D	2.72	1.46	1.39
25	b2	620	CLA	C1D-C2D	2.72	1.48	1.42
25	C1	505	CLA	C1D-C2D	2.72	1.48	1.42
25	C2	513	CLA	C1D-C2D	2.72	1.48	1.42
25	B2	616	CLA	C1D-C2D	2.72	1.48	1.42
25	a2	404	CLA	C1D-C2D	2.72	1.48	1.42
25	B2	611	CLA	C1D-C2D	2.72	1.48	1.42
25	d2	405	CLA	C1D-C2D	2.71	1.48	1.42
25	b2	611	CLA	C1D-C2D	2.71	1.48	1.42
25	C2	511	CLA	C1D-C2D	2.71	1.48	1.42
25	d1	401	CLA	C1D-C2D	2.71	1.48	1.42
25	D2	404	CLA	C1D-C2D	2.71	1.48	1.42
25	C2	508	CLA	C1D-C2D	2.71	1.48	1.42
25	B1	605	CLA	C1D-C2D	2.71	1.48	1.42
25	b2	619	CLA	C1D-C2D	2.71	1.48	1.42
25	B1	609	CLA	C1D-C2D	2.71	1.48	1.42
25	B1	608	CLA	C1D-C2D	2.70	1.48	1.42
25	C2	510	CLA	C1D-C2D	2.70	1.48	1.42
25	b2	610	CLA	C1D-C2D	2.70	1.48	1.42
25	a2	405	CLA	C1D-C2D	2.70	1.48	1.42
25	B1	612	CLA	C1D-C2D	2.69	1.48	1.42
25	b2	624	CLA	C1D-C2D	2.69	1.48	1.42
25	C1	509	CLA	C1D-C2D	2.69	1.48	1.42
25	B1	617	CLA	C1D-C2D	2.69	1.48	1.42
25	d2	404	CLA	C1D-C2D	2.69	1.48	1.42
25	c2	510	CLA	C1D-C2D	2.69	1.48	1.42
25	c2	509	CLA	C1D-C2D	2.69	1.48	1.42
25	b1	616	CLA	C1D-C2D	2.69	1.48	1.42
25	B1	604	CLA	C1D-C2D	2.69	1.48	1.42
25	B1	611	CLA	C1D-C2D	2.68	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c1	504	CLA	C1D-C2D	2.68	1.48	1.42
25	C2	505	CLA	C1D-C2D	2.68	1.48	1.42
25	A1	406	CLA	C1D-C2D	2.68	1.48	1.42
25	C2	511	CLA	CMB-C2B	-2.68	1.46	1.51
25	c1	510	CLA	C1D-C2D	2.68	1.48	1.42
25	b1	610	CLA	C1D-C2D	2.68	1.48	1.42
25	C1	504	CLA	C1D-C2D	2.68	1.48	1.42
25	B1	607	CLA	C1D-C2D	2.67	1.48	1.42
25	D1	403	CLA	C1D-C2D	2.67	1.48	1.42
25	A2	403	CLA	C1D-C2D	2.67	1.48	1.42
25	B2	617	CLA	C1D-C2D	2.67	1.48	1.42
25	b1	617	CLA	C1D-C2D	2.67	1.48	1.42
25	b2	613	CLA	C1D-C2D	2.67	1.48	1.42
27	A2	407	PHO	C3D-C2D	2.67	1.46	1.39
25	C1	511	CLA	C1D-C2D	2.66	1.48	1.42
25	b2	604	CLA	C1D-C2D	2.66	1.48	1.42
25	c2	507	CLA	C1D-C2D	2.66	1.48	1.42
25	C1	502	CLA	C1D-C2D	2.66	1.48	1.42
27	D1	407	PHO	C3B-C4B	2.66	1.48	1.43
25	c2	509	CLA	CMB-C2B	-2.66	1.46	1.51
25	B2	610	CLA	C1D-C2D	2.66	1.48	1.42
25	C2	506	CLA	C1D-C2D	2.66	1.48	1.42
25	B2	605	CLA	C1D-C2D	2.65	1.48	1.42
25	c1	512	CLA	C1D-C2D	2.65	1.48	1.42
25	A2	402	CLA	C1D-C2D	2.65	1.48	1.42
25	A1	403	CLA	C1D-C2D	2.65	1.48	1.42
25	c2	502	CLA	C1D-C2D	2.65	1.48	1.42
25	c1	505	CLA	C1D-C2D	2.65	1.48	1.42
25	C1	507	CLA	C1D-C2D	2.65	1.48	1.42
27	d1	403	PHO	C3B-C4B	2.65	1.48	1.43
25	D2	401	CLA	C1D-C2D	2.64	1.48	1.42
25	c1	508	CLA	CMB-C2B	-2.64	1.46	1.51
25	C1	512	CLA	C1D-C2D	2.64	1.48	1.42
25	b1	604	CLA	C1D-C2D	2.63	1.48	1.42
25	B1	614	CLA	C1D-C2D	2.63	1.48	1.42
25	b2	618	CLA	C1D-C2D	2.63	1.48	1.42
25	c1	511	CLA	C1D-C2D	2.63	1.48	1.42
25	b2	616	CLA	CMB-C2B	-2.63	1.46	1.51
25	B2	606	CLA	C1D-C2D	2.63	1.48	1.42
25	c2	504	CLA	C1D-C2D	2.63	1.48	1.42
25	A1	404	CLA	C1D-C2D	2.62	1.48	1.42
25	c2	513	CLA	C1D-C2D	2.62	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b2	609	CLA	C1D-C2D	2.62	1.48	1.42
25	c1	509	CLA	C1D-C2D	2.62	1.48	1.42
25	b2	616	CLA	C1D-C2D	2.62	1.48	1.42
25	b1	605	CLA	C1D-C2D	2.62	1.48	1.42
25	b1	613	CLA	C1D-C2D	2.62	1.48	1.42
25	D1	402	CLA	C1D-C2D	2.62	1.48	1.42
25	c2	511	CLA	C1D-C2D	2.62	1.48	1.42
25	c1	515	CLA	C1D-C2D	2.61	1.48	1.42
25	B1	619	CLA	C1D-C2D	2.61	1.48	1.42
25	B2	609	CLA	C1D-C2D	2.61	1.48	1.42
25	C2	509	CLA	C1D-C2D	2.61	1.48	1.42
25	b1	609	CLA	C1D-C2D	2.61	1.48	1.42
25	b1	619	CLA	C1D-C2D	2.60	1.48	1.42
27	D2	407	PHO	C3B-C4B	2.60	1.48	1.43
25	b2	606	CLA	C1D-C2D	2.60	1.48	1.42
25	b1	606	CLA	C1D-C2D	2.60	1.48	1.42
25	B1	615	CLA	C1D-C2D	2.60	1.48	1.42
25	C2	518	CLA	C1D-C2D	2.60	1.48	1.42
25	C1	508	CLA	C1D-C2D	2.60	1.48	1.42
27	a2	416	PHO	C3B-C4B	2.59	1.48	1.43
25	b1	612	CLA	C1D-C2D	2.59	1.48	1.42
25	c1	507	CLA	C1D-C2D	2.58	1.48	1.42
25	c2	503	CLA	C1D-C2D	2.58	1.48	1.42
25	B1	610	CLA	CMB-C2B	-2.58	1.46	1.51
27	d2	408	PHO	C3B-C4B	2.58	1.48	1.43
36	D2	408	PL9	C6-C5	2.58	1.48	1.35
25	b1	611	CLA	C1D-C2D	2.57	1.48	1.42
25	B1	618	CLA	C1D-C2D	2.57	1.48	1.42
25	b2	615	CLA	C1D-C2D	2.57	1.48	1.42
25	K2	101	CLA	C1D-C2D	2.57	1.48	1.42
25	b1	607	CLA	C1D-C2D	2.56	1.48	1.42
25	b2	614	CLA	C1D-C2D	2.56	1.48	1.42
25	c1	509	CLA	CMB-C2B	-2.56	1.46	1.51
25	A2	402	CLA	CMB-C2B	-2.56	1.46	1.51
25	b2	612	CLA	C1D-C2D	2.56	1.48	1.42
25	c2	508	CLA	C1D-C2D	2.55	1.48	1.42
29	C2	515	LMG	O8-C28	2.55	1.45	1.33
36	D1	408	PL9	C6-C5	2.54	1.48	1.35
25	c2	506	CLA	C1D-C2D	2.54	1.48	1.42
29	A2	412	LMG	O8-C28	2.54	1.45	1.33
36	d1	409	PL9	C6-C5	2.54	1.48	1.35
25	c1	510	CLA	CMB-C2B	-2.54	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C2	507	CLA	C1D-C2D	2.53	1.48	1.42
25	B2	618	CLA	C1D-C2D	2.53	1.48	1.42
25	B1	606	CLA	C1D-C2D	2.52	1.48	1.42
25	B2	607	CLA	CMB-C2B	-2.52	1.46	1.51
25	c2	507	CLA	CMB-C2B	-2.52	1.46	1.51
36	d2	409	PL9	C6-C5	2.52	1.48	1.35
25	b1	614	CLA	C1D-C2D	2.51	1.48	1.42
25	B2	607	CLA	C1D-C2D	2.51	1.48	1.42
25	B1	607	CLA	CMB-C2B	-2.51	1.46	1.51
29	B2	621	LMG	O8-C28	2.51	1.45	1.33
27	a1	411	PHO	C3B-C4B	2.50	1.48	1.43
25	b1	615	CLA	C1D-C2D	2.50	1.48	1.42
25	b1	610	CLA	CMB-C2B	-2.50	1.46	1.51
25	A2	404	CLA	CMB-C2B	-2.50	1.46	1.51
25	A1	405	CLA	CMB-C2B	-2.50	1.46	1.51
25	A1	403	CLA	CMB-C2B	-2.50	1.46	1.51
25	B2	614	CLA	C1D-C2D	2.49	1.48	1.42
25	B2	615	CLA	C1D-C2D	2.49	1.48	1.42
25	b1	619	CLA	CMB-C2B	-2.49	1.46	1.51
25	d1	404	CLA	CMB-C2B	-2.49	1.46	1.51
25	c2	503	CLA	CMB-C2B	-2.49	1.46	1.51
25	d2	402	CLA	CMB-C2B	-2.49	1.46	1.51
25	B2	613	CLA	C1D-C2D	2.48	1.48	1.42
25	B1	616	CLA	CMB-C2B	-2.48	1.46	1.51
27	A2	407	PHO	C3B-C4B	2.48	1.48	1.43
25	C1	507	CLA	CMB-C2B	-2.48	1.46	1.51
25	b2	620	CLA	CMB-C2B	-2.48	1.46	1.51
25	B1	613	CLA	C1D-C2D	2.47	1.48	1.42
25	C2	513	CLA	CMB-C2B	-2.47	1.46	1.51
25	B2	606	CLA	CMB-C2B	-2.46	1.46	1.51
25	b1	604	CLA	CMB-C2B	-2.46	1.46	1.51
25	C2	509	CLA	CMB-C2B	-2.46	1.46	1.51
25	K2	101	CLA	CMB-C2B	-2.46	1.46	1.51
25	D2	404	CLA	CMB-C2B	-2.45	1.46	1.51
25	a1	404	CLA	CMB-C2B	-2.45	1.46	1.51
25	A1	406	CLA	CMB-C2B	-2.45	1.46	1.51
25	C1	504	CLA	CMB-C2B	-2.44	1.46	1.51
25	B2	617	CLA	CMB-C2B	-2.44	1.46	1.51
25	B1	606	CLA	CMB-C2B	-2.44	1.46	1.51
25	b2	611	CLA	CMB-C2B	-2.44	1.46	1.51
25	c1	507	CLA	CMB-C2B	-2.44	1.46	1.51
25	B1	614	CLA	CMB-C2B	-2.44	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	A2	403	CLA	CMB-C2B	-2.43	1.46	1.51
25	B2	616	CLA	CMB-C2B	-2.43	1.46	1.51
25	b2	618	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	606	CLA	CMB-C2B	-2.43	1.46	1.51
25	B1	619	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	609	CLA	CMB-C2B	-2.43	1.46	1.51
25	C2	516	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	611	CLA	CMB-C2B	-2.43	1.46	1.51
25	B1	612	CLA	CMB-C2B	-2.43	1.46	1.51
25	a2	405	CLA	CMB-C2B	-2.43	1.46	1.51
25	b1	616	CLA	CMB-C2B	-2.42	1.46	1.51
25	C1	510	CLA	CMB-C2B	-2.42	1.46	1.51
25	C1	506	CLA	CMB-C2B	-2.42	1.46	1.51
25	C2	506	CLA	CMB-C2B	-2.42	1.46	1.51
25	c2	512	CLA	CMB-C2B	-2.41	1.46	1.51
25	B2	618	CLA	CMB-C2B	-2.41	1.46	1.51
25	a2	413	CLA	CMB-C2B	-2.41	1.46	1.51
25	a2	404	CLA	CMB-C2B	-2.41	1.46	1.51
25	b2	609	CLA	CMB-C2B	-2.41	1.46	1.51
25	b1	620	CLA	CMB-C2B	-2.41	1.46	1.51
25	c2	504	CLA	CMB-C2B	-2.41	1.46	1.51
25	B1	611	CLA	CMB-C2B	-2.41	1.46	1.51
25	C2	508	CLA	CMB-C2B	-2.41	1.46	1.51
25	C1	506	CLA	C1D-C2D	2.41	1.48	1.42
25	B1	609	CLA	CMB-C2B	-2.41	1.46	1.51
27	A1	408	PHO	C3B-C4B	2.41	1.48	1.43
25	d2	404	CLA	CMB-C2B	-2.40	1.46	1.51
25	c1	515	CLA	CMB-C2B	-2.40	1.46	1.51
25	b2	613	CLA	CMB-C2B	-2.40	1.46	1.51
25	D2	406	CLA	CMB-C2B	-2.40	1.46	1.51
25	C1	513	CLA	CMB-C2B	-2.40	1.46	1.51
25	B1	618	CLA	CMB-C2B	-2.40	1.46	1.51
25	C1	514	CLA	CMB-C2B	-2.40	1.46	1.51
25	b1	617	CLA	CMB-C2B	-2.40	1.46	1.51
25	c2	506	CLA	CMB-C2B	-2.40	1.46	1.51
25	c2	508	CLA	CMB-C2B	-2.40	1.46	1.51
25	A2	402	CLA	C3B-C2B	-2.40	1.37	1.40
25	B1	605	CLA	CMB-C2B	-2.39	1.46	1.51
25	a1	403	CLA	CMB-C2B	-2.39	1.46	1.51
25	C1	503	CLA	CMB-C2B	-2.39	1.46	1.51
25	b2	610	CLA	CMB-C2B	-2.39	1.46	1.51
25	B2	619	CLA	CMB-C2B	-2.39	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D2	401	CLA	CMB-C2B	-2.39	1.46	1.51
25	B2	609	CLA	CMB-C2B	-2.39	1.46	1.51
25	B2	612	CLA	CMB-C2B	-2.39	1.46	1.51
25	c1	503	CLA	CMB-C2B	-2.39	1.46	1.51
25	c1	506	CLA	CMB-C2B	-2.38	1.46	1.51
25	c2	513	CLA	CMB-C2B	-2.38	1.46	1.51
25	b1	614	CLA	CMB-C2B	-2.38	1.46	1.51
25	b2	608	CLA	CMB-C2B	-2.38	1.46	1.51
25	b2	617	CLA	CMB-C2B	-2.38	1.46	1.51
25	C2	505	CLA	CMB-C2B	-2.38	1.46	1.51
25	c1	505	CLA	CMB-C2B	-2.38	1.46	1.51
25	B2	604	CLA	CMB-C2B	-2.38	1.46	1.51
25	C1	511	CLA	CMB-C2B	-2.38	1.46	1.51
25	b1	608	CLA	CMB-C2B	-2.38	1.46	1.51
25	c2	510	CLA	CMB-C2B	-2.38	1.46	1.51
25	B2	608	CLA	CMB-C2B	-2.38	1.46	1.51
25	B2	605	CLA	CMB-C2B	-2.38	1.46	1.51
25	b2	624	CLA	CMB-C2B	-2.37	1.46	1.51
25	C2	510	CLA	CMB-C2B	-2.37	1.46	1.51
25	c1	512	CLA	CMB-C2B	-2.37	1.46	1.51
25	C1	508	CLA	CMB-C2B	-2.36	1.46	1.51
25	C2	518	CLA	CMB-C2B	-2.36	1.46	1.51
25	c2	505	CLA	CMB-C2B	-2.36	1.46	1.51
25	b2	615	CLA	CMB-C2B	-2.36	1.46	1.51
25	c2	511	CLA	CMB-C2B	-2.36	1.46	1.51
25	b1	612	CLA	CMB-C2B	-2.36	1.46	1.51
25	B2	614	CLA	CMB-C2B	-2.36	1.46	1.51
25	B1	604	CLA	CMB-C2B	-2.36	1.46	1.51
25	B1	608	CLA	CMB-C2B	-2.36	1.46	1.51
25	b2	606	CLA	CMB-C2B	-2.36	1.46	1.51
25	A1	404	CLA	CMB-C2B	-2.36	1.46	1.51
25	A1	403	CLA	CMD-C2D	-2.36	1.46	1.51
25	C1	512	CLA	CMB-C2B	-2.35	1.46	1.51
25	c1	513	CLA	CMB-C2B	-2.35	1.46	1.51
25	D1	403	CLA	CMB-C2B	-2.35	1.46	1.51
25	a1	405	CLA	CMB-C2B	-2.35	1.46	1.51
25	C2	503	CLA	CMB-C2B	-2.35	1.46	1.51
25	c1	516	CLA	CMB-C2B	-2.35	1.46	1.51
25	C2	507	CLA	CMB-C2B	-2.34	1.46	1.51
25	c2	502	CLA	CMB-C2B	-2.34	1.46	1.51
25	C1	505	CLA	CMB-C2B	-2.34	1.46	1.51
25	d1	406	CLA	CMB-C2B	-2.34	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c2	501	BCR	C19-C18	2.34	1.51	1.45
25	b1	605	CLA	CMB-C2B	-2.33	1.46	1.51
25	C1	506	CLA	CMD-C2D	-2.33	1.46	1.51
25	b2	619	CLA	CMB-C2B	-2.33	1.46	1.51
25	b2	604	CLA	CMB-C2B	-2.33	1.46	1.51
25	B1	617	CLA	CMB-C2B	-2.32	1.46	1.51
25	C2	504	CLA	CMB-C2B	-2.32	1.46	1.51
25	a2	404	CLA	C3B-C2B	-2.32	1.37	1.40
25	c2	515	CLA	CMB-C2B	-2.32	1.46	1.51
25	d2	405	CLA	CMB-C2B	-2.31	1.46	1.51
27	d2	408	PHO	C1D-C2D	2.30	1.50	1.45
25	A1	405	CLA	C3B-C2B	-2.30	1.37	1.40
25	c1	511	CLA	CMB-C2B	-2.30	1.46	1.51
25	C1	502	CLA	CMB-C2B	-2.29	1.46	1.51
25	B2	610	CLA	CMB-C2B	-2.29	1.46	1.51
25	B2	615	CLA	CMB-C2B	-2.29	1.46	1.51
25	A1	403	CLA	C3B-C2B	-2.29	1.37	1.40
25	b2	614	CLA	CMD-C2D	-2.29	1.46	1.51
25	B1	615	CLA	CMB-C2B	-2.28	1.46	1.51
25	a2	413	CLA	CMD-C2D	-2.28	1.46	1.51
25	b2	614	CLA	CMB-C2B	-2.28	1.46	1.51
27	D1	407	PHO	C1D-C2D	2.28	1.50	1.45
25	B2	611	CLA	CMB-C2B	-2.28	1.46	1.51
25	c1	504	CLA	CMB-C2B	-2.28	1.46	1.51
25	D1	402	CLA	CMB-C2B	-2.27	1.46	1.51
25	d1	401	CLA	CMB-C2B	-2.27	1.46	1.51
25	b1	614	CLA	CMD-C2D	-2.27	1.46	1.51
25	c1	507	CLA	CMD-C2D	-2.25	1.46	1.51
25	c1	512	CLA	CMD-C2D	-2.24	1.46	1.51
27	D2	407	PHO	C1D-C2D	2.24	1.50	1.45
25	C1	512	CLA	CMD-C2D	-2.23	1.46	1.51
25	a1	403	CLA	CMD-C2D	-2.23	1.46	1.51
25	c1	511	CLA	CMD-C2D	-2.23	1.46	1.51
25	a2	404	CLA	CMD-C2D	-2.23	1.46	1.51
25	K2	101	CLA	CMD-C2D	-2.23	1.46	1.51
27	d1	403	PHO	C1D-C2D	2.22	1.50	1.45
25	b1	615	CLA	CMB-C2B	-2.22	1.47	1.51
25	C2	507	CLA	CMD-C2D	-2.22	1.46	1.51
27	A2	407	PHO	C1D-C2D	2.21	1.50	1.45
25	c2	506	CLA	CMD-C2D	-2.20	1.46	1.51
27	a2	416	PHO	C1D-C2D	2.20	1.50	1.45
27	a1	411	PHO	C4C-C3C	2.20	1.49	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	607	CLA	CMD-C2D	-2.20	1.46	1.51
25	A1	404	CLA	CMD-C2D	-2.19	1.46	1.51
27	A1	408	PHO	C4C-C3C	2.19	1.49	1.45
25	c1	513	CLA	CMD-C2D	-2.19	1.46	1.51
25	B2	614	CLA	CMD-C2D	-2.19	1.46	1.51
25	b2	619	CLA	CMC-C2C	-2.18	1.46	1.50
25	B1	614	CLA	CMD-C2D	-2.18	1.46	1.51
25	B1	613	CLA	CMD-C2D	-2.18	1.46	1.51
29	M1	101	LMG	O7-C8	-2.18	1.43	1.47
25	B1	613	CLA	C3B-C2B	-2.18	1.37	1.40
27	A1	408	PHO	C1D-C2D	2.18	1.50	1.45
25	A1	403	CLA	CMC-C2C	-2.18	1.46	1.50
27	a1	411	PHO	C1D-C2D	2.17	1.50	1.45
25	C1	511	CLA	CMD-C2D	-2.16	1.46	1.51
25	b2	612	CLA	C3B-C2B	-2.16	1.37	1.40
25	a1	403	CLA	C3B-C2B	-2.16	1.37	1.40
25	C1	510	CLA	CMD-C2D	-2.15	1.46	1.51
25	B2	613	CLA	CMD-C2D	-2.15	1.46	1.51
25	a1	404	CLA	C3B-C2B	-2.15	1.37	1.40
25	c2	513	CLA	CMD-C2D	-2.14	1.46	1.51
25	c2	510	CLA	CMD-C2D	-2.14	1.46	1.51
25	B2	618	CLA	CMC-C2C	-2.13	1.46	1.50
25	b2	612	CLA	CMD-C2D	-2.13	1.46	1.51
25	A2	402	CLA	CMC-C2C	-2.13	1.46	1.50
25	b1	613	CLA	C3B-C2B	-2.13	1.37	1.40
25	B1	616	CLA	CMD-C2D	-2.12	1.46	1.51
25	D2	401	CLA	CMD-C2D	-2.12	1.46	1.51
25	C1	513	CLA	CMD-C2D	-2.11	1.46	1.51
25	B2	616	CLA	CMD-C2D	-2.11	1.46	1.51
25	b1	615	CLA	CMD-C2D	-2.11	1.46	1.51
25	C1	507	CLA	C3C-C2C	2.11	1.41	1.36
25	b1	613	CLA	CMD-C2D	-2.11	1.46	1.51
38	f1	101	HEM	CAA-C2A	2.11	1.55	1.52
25	A2	404	CLA	CMD-C2D	-2.11	1.46	1.51
25	b1	617	CLA	CMD-C2D	-2.11	1.46	1.51
25	b2	606	CLA	CMD-C2D	-2.10	1.46	1.51
25	b1	606	CLA	CMD-C2D	-2.10	1.46	1.51
25	b1	605	CLA	CMD-C2D	-2.10	1.46	1.51
25	B1	618	CLA	CMD-C2D	-2.10	1.46	1.51
25	B2	606	CLA	CMD-C2D	-2.10	1.46	1.51
25	c1	504	CLA	CMD-C2D	-2.10	1.46	1.51
25	C1	509	CLA	CMD-C2D	-2.10	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a2	404	CLA	C3B-CAB	-2.10	1.43	1.47
27	D2	407	PHO	C4C-C3C	2.10	1.49	1.45
25	b1	619	CLA	CMD-C2D	-2.10	1.46	1.51
25	B1	607	CLA	CMD-C2D	-2.10	1.46	1.51
25	d2	405	CLA	CMD-C2D	-2.10	1.46	1.51
25	b1	609	CLA	CMD-C2D	-2.10	1.46	1.51
25	C2	516	CLA	CMD-C2D	-2.10	1.46	1.51
25	c2	511	CLA	CMD-C2D	-2.09	1.46	1.51
25	b2	608	CLA	CMD-C2D	-2.09	1.46	1.51
25	c2	505	CLA	CMD-C2D	-2.09	1.46	1.51
25	a1	404	CLA	CMD-C2D	-2.09	1.46	1.51
25	C1	505	CLA	CMD-C2D	-2.09	1.46	1.51
25	c2	512	CLA	CMD-C2D	-2.09	1.46	1.51
25	C2	509	CLA	CMD-C2D	-2.09	1.46	1.51
25	b2	615	CLA	CMD-C2D	-2.09	1.46	1.51
25	b2	624	CLA	CMD-C2D	-2.09	1.46	1.51
25	A1	405	CLA	CMD-C2D	-2.09	1.46	1.51
25	a1	405	CLA	CMD-C2D	-2.08	1.46	1.51
25	C2	518	CLA	CMD-C2D	-2.08	1.46	1.51
25	d1	401	CLA	CMD-C2D	-2.08	1.46	1.51
25	B1	604	CLA	CMD-C2D	-2.08	1.46	1.51
25	B2	608	CLA	CMD-C2D	-2.08	1.46	1.51
25	b2	619	CLA	CMD-C2D	-2.08	1.46	1.51
25	B1	606	CLA	CMD-C2D	-2.08	1.46	1.51
25	C2	506	CLA	CMD-C2D	-2.08	1.46	1.51
25	c1	506	CLA	CMD-C2D	-2.08	1.46	1.51
25	B1	609	CLA	CMD-C2D	-2.08	1.46	1.51
25	c2	508	CLA	CMD-C2D	-2.08	1.46	1.51
27	d2	408	PHO	C4C-C3C	2.08	1.49	1.45
25	b1	607	CLA	CMD-C2D	-2.08	1.46	1.51
25	c1	515	CLA	CMD-C2D	-2.07	1.46	1.51
25	B1	612	CLA	CMD-C2D	-2.07	1.46	1.51
25	B2	617	CLA	CMD-C2D	-2.07	1.46	1.51
25	b2	611	CLA	CMD-C2D	-2.07	1.46	1.51
25	B2	618	CLA	CMD-C2D	-2.07	1.46	1.51
25	B1	608	CLA	CMD-C2D	-2.07	1.46	1.51
25	D1	402	CLA	CMD-C2D	-2.07	1.46	1.51
25	B1	618	CLA	CMC-C2C	-2.07	1.46	1.50
25	b2	613	CLA	CMD-C2D	-2.07	1.46	1.51
25	c1	509	CLA	CMD-C2D	-2.07	1.46	1.51
36	D1	408	PL9	C2-C3	2.06	1.40	1.34
25	c2	509	CLA	CMD-C2D	-2.06	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B2	609	CLA	CMC-C2C	-2.06	1.46	1.50
27	A2	407	PHO	C4C-C3C	2.06	1.49	1.45
25	b2	620	CLA	CMD-C2D	-2.06	1.46	1.51
25	b1	612	CLA	CMD-C2D	-2.06	1.46	1.51
25	B2	605	CLA	CMD-C2D	-2.06	1.46	1.51
25	C1	508	CLA	CMD-C2D	-2.06	1.46	1.51
25	B2	615	CLA	CMD-C2D	-2.06	1.46	1.51
25	B1	610	CLA	CMD-C2D	-2.06	1.46	1.51
25	B2	610	CLA	CMD-C2D	-2.05	1.46	1.51
29	B2	620	LMG	O1-C1	2.05	1.43	1.40
25	c1	503	CLA	CMD-C2D	-2.05	1.46	1.51
38	V1	201	HEM	CAA-C2A	2.05	1.55	1.52
25	B2	612	CLA	CMD-C2D	-2.05	1.46	1.51
25	b1	619	CLA	CMC-C2C	-2.05	1.46	1.50
25	c2	504	CLA	CMD-C2D	-2.05	1.46	1.51
25	B2	611	CLA	CMD-C2D	-2.05	1.46	1.51
25	a2	405	CLA	CMD-C2D	-2.04	1.46	1.51
25	C2	504	CLA	CMD-C2D	-2.04	1.46	1.51
25	B1	615	CLA	CMD-C2D	-2.04	1.46	1.51
25	c1	508	CLA	CMD-C2D	-2.04	1.46	1.51
25	b2	609	CLA	CMC-C2C	-2.04	1.46	1.50
25	A2	403	CLA	CMD-C2D	-2.04	1.46	1.51
25	C2	511	CLA	CMC-C2C	-2.04	1.46	1.50
25	b2	618	CLA	CMD-C2D	-2.04	1.46	1.51
25	B2	609	CLA	CMD-C2D	-2.04	1.46	1.51
25	C2	513	CLA	CMD-C2D	-2.04	1.46	1.51
25	c2	502	CLA	CMD-C2D	-2.04	1.46	1.51
25	b2	609	CLA	CMD-C2D	-2.04	1.46	1.51
25	c1	510	CLA	CMC-C2C	-2.04	1.46	1.50
25	b1	620	CLA	CMD-C2D	-2.04	1.46	1.51
25	C2	503	CLA	CMD-C2D	-2.04	1.46	1.51
25	B1	617	CLA	CMD-C2D	-2.04	1.46	1.51
25	b1	613	CLA	CMC-C2C	-2.04	1.46	1.50
25	d2	404	CLA	CMD-C2D	-2.03	1.46	1.51
25	c1	510	CLA	CMD-C2D	-2.03	1.46	1.51
25	b2	616	CLA	CMD-C2D	-2.03	1.46	1.51
25	C2	511	CLA	CMD-C2D	-2.03	1.46	1.51
25	c2	503	CLA	CMD-C2D	-2.03	1.46	1.51
25	a1	403	CLA	CMC-C2C	-2.03	1.46	1.50
38	E1	101	HEM	CAA-C2A	2.03	1.55	1.52
25	b1	604	CLA	CMD-C2D	-2.03	1.46	1.51
25	C2	505	CLA	CMD-C2D	-2.03	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	d1	409	PL9	C2-C3	2.02	1.40	1.34
25	b1	610	CLA	CMD-C2D	-2.02	1.46	1.51
25	D2	406	CLA	CMD-C2D	-2.02	1.46	1.51
25	c2	515	CLA	CMD-C2D	-2.02	1.46	1.51
25	C1	507	CLA	CMD-C2D	-2.02	1.46	1.51
25	C2	508	CLA	CMD-C2D	-2.02	1.46	1.51
38	E2	101	HEM	CAA-C2A	2.02	1.55	1.52
25	A1	406	CLA	CMD-C2D	-2.02	1.46	1.51
25	c2	507	CLA	CMD-C2D	-2.02	1.46	1.51
25	b1	616	CLA	CMD-C2D	-2.02	1.46	1.51
25	b2	617	CLA	CMD-C2D	-2.02	1.46	1.51
25	b2	604	CLA	CMD-C2D	-2.02	1.46	1.51
25	A1	403	CLA	C3B-CAB	-2.02	1.43	1.47
38	v1	201	HEM	CAA-C2A	2.02	1.55	1.52
25	b1	608	CLA	CMD-C2D	-2.01	1.46	1.51
25	d1	406	CLA	CMD-C2D	-2.01	1.46	1.51
25	d2	402	CLA	CMD-C2D	-2.01	1.46	1.51
25	b2	610	CLA	CMD-C2D	-2.01	1.46	1.51
29	B2	621	LMG	O1-C1	2.01	1.43	1.40
25	C1	503	CLA	CMD-C2D	-2.01	1.46	1.51
25	B1	605	CLA	CMD-C2D	-2.01	1.46	1.51
25	C2	510	CLA	CMD-C2D	-2.01	1.46	1.51
25	b1	611	CLA	CMD-C2D	-2.00	1.46	1.51
25	A2	402	CLA	CMD-C2D	-2.00	1.46	1.51
25	b1	616	CLA	C3B-C2B	-2.00	1.37	1.40
25	b2	612	CLA	CMC-C2C	-2.00	1.46	1.50
38	v2	201	HEM	CAA-C2A	2.00	1.55	1.52
25	B2	619	CLA	CMD-C2D	-2.00	1.46	1.51

All (2211) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c2	501	BCR	C36-C18-C17	-10.87	107.70	122.92
23	c2	501	BCR	C24-C23-C22	-9.36	112.09	126.23
27	A2	407	PHO	CMD-C2D-C1D	9.25	139.31	125.06
27	D2	407	PHO	CMD-C2D-C1D	9.14	139.13	125.06
23	c2	501	BCR	C16-C17-C18	9.01	140.16	127.31
27	a1	411	PHO	CMD-C2D-C1D	8.99	138.91	125.06
27	D1	407	PHO	CMD-C2D-C1D	8.95	138.85	125.06
27	d2	408	PHO	CMD-C2D-C1D	8.95	138.84	125.06
27	a2	416	PHO	CMD-C2D-C1D	8.90	138.77	125.06
27	A1	408	PHO	CMD-C2D-C1D	8.87	138.72	125.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	d1	403	PHO	CMD-C2D-C1D	8.83	138.66	125.06
23	c2	501	BCR	C16-C15-C14	-7.18	108.77	123.47
25	c1	509	CLA	C4A-NA-C1A	7.10	109.90	106.71
25	C1	506	CLA	C4A-NA-C1A	7.05	109.88	106.71
25	b2	609	CLA	C4A-NA-C1A	6.98	109.84	106.71
25	C1	512	CLA	C4A-NA-C1A	6.97	109.84	106.71
25	C1	502	CLA	C4A-NA-C1A	6.95	109.83	106.71
25	c1	507	CLA	C4A-NA-C1A	6.95	109.83	106.71
25	B1	606	CLA	C4A-NA-C1A	6.93	109.82	106.71
25	B2	608	CLA	C4A-NA-C1A	6.93	109.82	106.71
25	D1	402	CLA	C4A-NA-C1A	6.91	109.81	106.71
25	b2	606	CLA	C4A-NA-C1A	6.89	109.81	106.71
25	b2	616	CLA	C4A-NA-C1A	6.88	109.80	106.71
25	D2	401	CLA	C4A-NA-C1A	6.87	109.79	106.71
25	d1	401	CLA	C4A-NA-C1A	6.85	109.78	106.71
25	B2	618	CLA	C4A-NA-C1A	6.84	109.78	106.71
25	B2	614	CLA	C4A-NA-C1A	6.83	109.78	106.71
25	C2	510	CLA	C4A-NA-C1A	6.82	109.77	106.71
25	c2	504	CLA	C4A-NA-C1A	6.79	109.76	106.71
25	C2	503	CLA	C4A-NA-C1A	6.77	109.75	106.71
25	C1	505	CLA	C4A-NA-C1A	6.77	109.75	106.71
25	C2	505	CLA	C4A-NA-C1A	6.76	109.74	106.71
25	C2	511	CLA	C4A-NA-C1A	6.76	109.74	106.71
25	C2	516	CLA	C4A-NA-C1A	6.73	109.73	106.71
23	B2	602	BCR	C7-C8-C9	-6.73	116.06	126.23
25	b1	616	CLA	C4A-NA-C1A	6.73	109.73	106.71
23	c2	501	BCR	C23-C22-C21	6.73	129.27	118.94
25	B1	608	CLA	C4A-NA-C1A	6.73	109.73	106.71
25	C2	509	CLA	C4A-NA-C1A	6.72	109.73	106.71
25	c2	503	CLA	C4A-NA-C1A	6.72	109.73	106.71
25	d2	402	CLA	C4A-NA-C1A	6.72	109.72	106.71
25	C2	507	CLA	C4A-NA-C1A	6.71	109.72	106.71
25	B2	616	CLA	C4A-NA-C1A	6.70	109.72	106.71
25	b2	619	CLA	C4A-NA-C1A	6.70	109.72	106.71
25	C2	518	CLA	C4A-NA-C1A	6.70	109.72	106.71
25	b2	615	CLA	C4A-NA-C1A	6.68	109.71	106.71
25	c2	502	CLA	C4A-NA-C1A	6.68	109.71	106.71
25	K2	101	CLA	C4A-NA-C1A	6.68	109.71	106.71
25	c1	513	CLA	C4A-NA-C1A	6.66	109.70	106.71
25	B2	609	CLA	C4A-NA-C1A	6.66	109.70	106.71
25	c1	503	CLA	C4A-NA-C1A	6.66	109.70	106.71
25	A1	406	CLA	C4A-NA-C1A	6.65	109.70	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c1	506	CLA	C4A-NA-C1A	6.65	109.70	106.71
25	c1	510	CLA	C4A-NA-C1A	6.65	109.69	106.71
25	c2	508	CLA	C4A-NA-C1A	6.64	109.69	106.71
25	c1	505	CLA	C4A-NA-C1A	6.64	109.69	106.71
25	c1	515	CLA	C4A-NA-C1A	6.63	109.69	106.71
25	b1	606	CLA	C4A-NA-C1A	6.62	109.68	106.71
25	B2	615	CLA	C4A-NA-C1A	6.62	109.68	106.71
25	D2	406	CLA	C4A-NA-C1A	6.60	109.67	106.71
25	c2	513	CLA	C4A-NA-C1A	6.59	109.67	106.71
25	b2	618	CLA	C4A-NA-C1A	6.58	109.66	106.71
25	a1	405	CLA	C4A-NA-C1A	6.56	109.66	106.71
25	c2	506	CLA	C4A-NA-C1A	6.56	109.66	106.71
25	b2	614	CLA	C4A-NA-C1A	6.56	109.65	106.71
25	B1	615	CLA	C4A-NA-C1A	6.54	109.65	106.71
25	b1	617	CLA	C4A-NA-C1A	6.54	109.65	106.71
25	B1	619	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	B1	614	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	B2	606	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	b1	620	CLA	C4A-NA-C1A	6.53	109.64	106.71
25	c1	511	CLA	C4A-NA-C1A	6.51	109.63	106.71
25	b2	620	CLA	C4A-NA-C1A	6.50	109.63	106.71
25	B1	604	CLA	C4A-NA-C1A	6.48	109.62	106.71
25	C1	504	CLA	C4A-NA-C1A	6.46	109.61	106.71
25	c1	512	CLA	C4A-NA-C1A	6.46	109.61	106.71
23	b2	602	BCR	C7-C8-C9	-6.45	116.48	126.23
25	B1	613	CLA	C4A-NA-C1A	6.45	109.61	106.71
25	A1	404	CLA	C4A-NA-C1A	6.44	109.60	106.71
25	b1	609	CLA	C4A-NA-C1A	6.44	109.60	106.71
25	C2	508	CLA	C4A-NA-C1A	6.44	109.60	106.71
25	c2	515	CLA	C4A-NA-C1A	6.43	109.59	106.71
25	C1	508	CLA	C4A-NA-C1A	6.42	109.59	106.71
25	b2	604	CLA	C4A-NA-C1A	6.41	109.59	106.71
25	c2	511	CLA	C4A-NA-C1A	6.41	109.59	106.71
25	b1	614	CLA	C4A-NA-C1A	6.40	109.58	106.71
25	c2	505	CLA	C4A-NA-C1A	6.40	109.58	106.71
25	B2	604	CLA	C4A-NA-C1A	6.39	109.58	106.71
25	C1	503	CLA	C4A-NA-C1A	6.38	109.58	106.71
25	b1	619	CLA	C4A-NA-C1A	6.38	109.57	106.71
25	b1	607	CLA	C4A-NA-C1A	6.37	109.57	106.71
25	B2	613	CLA	C4A-NA-C1A	6.35	109.56	106.71
25	b1	608	CLA	C4A-NA-C1A	6.34	109.56	106.71
25	b1	615	CLA	C4A-NA-C1A	6.34	109.56	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B2	617	CLA	C4A-NA-C1A	6.34	109.56	106.71
25	B2	619	CLA	C4A-NA-C1A	6.33	109.55	106.71
25	b1	612	CLA	C4A-NA-C1A	6.33	109.55	106.71
25	c1	504	CLA	C4A-NA-C1A	6.33	109.55	106.71
25	C1	511	CLA	C4A-NA-C1A	6.31	109.54	106.71
25	C2	504	CLA	C4A-NA-C1A	6.30	109.54	106.71
25	d2	405	CLA	C4A-NA-C1A	6.28	109.53	106.71
25	C1	513	CLA	C4A-NA-C1A	6.28	109.53	106.71
25	B2	607	CLA	C4A-NA-C1A	6.27	109.53	106.71
25	C1	510	CLA	C4A-NA-C1A	6.27	109.53	106.71
25	c1	516	CLA	C4A-NA-C1A	6.27	109.52	106.71
25	c2	510	CLA	C4A-NA-C1A	6.26	109.52	106.71
25	b2	617	CLA	C4A-NA-C1A	6.26	109.52	106.71
25	c2	507	CLA	C4A-NA-C1A	6.26	109.52	106.71
25	A2	404	CLA	C4A-NA-C1A	6.25	109.52	106.71
25	d1	406	CLA	C4A-NA-C1A	6.23	109.51	106.71
25	C1	514	CLA	C4A-NA-C1A	6.22	109.50	106.71
25	D2	404	CLA	C4A-NA-C1A	6.21	109.50	106.71
25	b2	613	CLA	C4A-NA-C1A	6.21	109.50	106.71
23	b1	602	BCR	C7-C8-C9	-6.21	116.85	126.23
25	B1	607	CLA	C4A-NA-C1A	6.21	109.50	106.71
25	b1	605	CLA	C4A-NA-C1A	6.21	109.50	106.71
25	B1	605	CLA	C4A-NA-C1A	6.20	109.49	106.71
25	c2	509	CLA	C4A-NA-C1A	6.20	109.49	106.71
25	b2	610	CLA	C4A-NA-C1A	6.17	109.48	106.71
25	B2	612	CLA	C4A-NA-C1A	6.16	109.48	106.71
25	C2	506	CLA	C4A-NA-C1A	6.15	109.47	106.71
25	B1	609	CLA	C4A-NA-C1A	6.13	109.46	106.71
25	b2	612	CLA	C4A-NA-C1A	6.13	109.46	106.71
25	b2	611	CLA	C4A-NA-C1A	6.13	109.46	106.71
25	B1	616	CLA	C4A-NA-C1A	6.12	109.46	106.71
25	B1	618	CLA	C4A-NA-C1A	6.10	109.45	106.71
25	d1	404	CLA	C4A-NA-C1A	6.08	109.44	106.71
25	b2	608	CLA	C4A-NA-C1A	6.07	109.44	106.71
25	c2	512	CLA	C4A-NA-C1A	6.06	109.43	106.71
25	B2	605	CLA	C4A-NA-C1A	6.06	109.43	106.71
25	B1	617	CLA	C4A-NA-C1A	6.05	109.43	106.71
25	b2	624	CLA	C4A-NA-C1A	5.99	109.40	106.71
25	C2	513	CLA	C4A-NA-C1A	5.98	109.39	106.71
25	b1	610	CLA	C4A-NA-C1A	5.97	109.39	106.71
25	a2	405	CLA	C4A-NA-C1A	5.96	109.39	106.71
25	B1	612	CLA	C4A-NA-C1A	5.94	109.38	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b1	604	CLA	C4A-NA-C1A	5.94	109.38	106.71
25	B1	611	CLA	C4A-NA-C1A	5.93	109.37	106.71
23	c2	501	BCR	C20-C21-C22	5.89	135.72	127.31
25	C1	509	CLA	C4A-NA-C1A	5.89	109.35	106.71
25	D1	403	CLA	C4A-NA-C1A	5.89	109.35	106.71
25	d2	404	CLA	C4A-NA-C1A	5.86	109.34	106.71
25	B2	610	CLA	C4A-NA-C1A	5.81	109.32	106.71
25	B2	611	CLA	C4A-NA-C1A	5.80	109.31	106.71
25	b1	611	CLA	C4A-NA-C1A	5.77	109.30	106.71
23	K1	101	BCR	C24-C23-C22	-5.75	120.52	126.59
23	c2	501	BCR	C37-C22-C21	-5.74	114.88	122.92
25	B1	609	CLA	CAC-C3C-C4C	5.73	132.25	124.81
25	c1	508	CLA	C4A-NA-C1A	5.67	109.25	106.71
25	A2	403	CLA	C4A-NA-C1A	5.62	109.23	106.71
25	b1	613	CLA	C4A-NA-C1A	5.61	109.23	106.71
23	J1	101	BCR	C20-C21-C22	-5.60	119.32	127.31
23	B1	602	BCR	C7-C8-C9	-5.57	117.82	126.23
23	k1	101	BCR	C20-C21-C22	-5.54	119.40	127.31
25	C1	507	CLA	C4A-NA-C1A	5.53	109.19	106.71
23	B1	602	BCR	C11-C10-C9	-5.53	119.42	127.31
23	c2	501	BCR	C15-C16-C17	5.51	134.76	123.47
23	j2	102	BCR	C33-C5-C6	-5.51	118.34	124.53
25	A2	402	CLA	C4A-NA-C1A	5.49	109.17	106.71
23	D1	401	BCR	C7-C8-C9	-5.47	117.97	126.23
23	F2	401	BCR	C20-C21-C22	-5.47	119.51	127.31
29	c2	519	LMG	O7-C10-O9	-5.46	118.62	125.57
25	B1	610	CLA	C4A-NA-C1A	5.46	109.16	106.71
23	K1	101	BCR	C15-C14-C13	-5.44	119.54	127.31
23	c2	501	BCR	C19-C18-C17	5.43	127.28	118.94
25	a2	413	CLA	C4A-NA-C1A	5.39	109.13	106.71
23	J1	101	BCR	C33-C5-C6	-5.34	118.53	124.53
25	A1	403	CLA	C4A-NA-C1A	5.34	109.11	106.71
23	B2	602	BCR	C11-C10-C9	-5.30	119.74	127.31
23	j2	102	BCR	C20-C21-C22	-5.29	119.76	127.31
23	F2	401	BCR	C7-C8-C9	-5.26	118.28	126.23
23	c1	502	BCR	C15-C14-C13	-5.21	119.88	127.31
23	c1	501	BCR	C11-C10-C9	-5.16	119.95	127.31
25	A1	405	CLA	C4A-NA-C1A	5.13	109.01	106.71
23	d1	405	BCR	C7-C8-C9	-5.11	118.52	126.23
23	k1	101	BCR	C33-C5-C6	-5.10	118.80	124.53
25	a1	404	CLA	C4A-NA-C1A	5.08	108.99	106.71
27	a1	411	PHO	O2D-CGD-CBD	5.06	120.27	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	a2	404	CLA	C4A-NA-C1A	5.06	108.98	106.71
27	A1	408	PHO	O2D-CGD-CBD	5.05	120.24	111.27
27	D1	407	PHO	O2D-CGD-CBD	5.05	120.23	111.27
27	d1	403	PHO	O2D-CGD-CBD	5.03	120.21	111.27
27	D2	407	PHO	O2D-CGD-CBD	5.03	120.21	111.27
23	c1	501	BCR	C15-C14-C13	-5.01	120.16	127.31
37	D1	409	SQD	O47-C7-C8	5.00	120.29	111.09
37	D2	402	SQD	O47-C7-C8	5.00	120.28	111.09
23	c1	501	BCR	C16-C17-C18	-4.98	120.20	127.31
27	A2	407	PHO	O2D-CGD-CBD	4.96	120.08	111.27
27	a2	416	PHO	O2D-CGD-CBD	4.94	120.06	111.27
23	b2	602	BCR	C20-C21-C22	-4.93	120.27	127.31
23	c1	502	BCR	C24-C23-C22	-4.93	118.78	126.23
29	b1	624	LMG	O7-C10-C11	4.92	122.10	111.50
23	d2	401	BCR	C16-C17-C18	-4.91	120.30	127.31
29	d2	407	LMG	O7-C10-C11	4.91	120.12	111.09
25	a1	403	CLA	C4A-NA-C1A	4.90	108.91	106.71
23	c1	502	BCR	C20-C21-C22	-4.90	120.32	127.31
23	H1	102	BCR	C15-C14-C13	-4.89	120.33	127.31
23	D1	401	BCR	C11-C10-C9	-4.89	120.33	127.31
34	C2	512	DGD	O2G-C1B-C2B	4.88	120.07	111.09
23	j2	102	BCR	C15-C14-C13	-4.88	120.35	127.31
23	C2	502	BCR	C15-C14-C13	-4.87	120.36	127.31
23	h2	101	BCR	C15-C14-C13	-4.86	120.38	127.31
23	D1	401	BCR	C16-C17-C18	-4.80	120.45	127.31
23	k2	501	BCR	C24-C23-C22	-4.78	119.01	126.23
23	J1	101	BCR	C24-C23-C22	-4.77	119.03	126.23
25	C1	509	CLA	CMB-C2B-C1B	-4.75	121.16	128.46
23	A2	401	BCR	C28-C27-C26	-4.71	105.66	114.08
23	F2	401	BCR	C15-C14-C13	-4.70	120.60	127.31
23	k2	501	BCR	C20-C21-C22	-4.70	120.60	127.31
23	h1	102	BCR	C16-C17-C18	-4.69	120.61	127.31
27	D2	407	PHO	C1-C2-C3	-4.69	117.93	126.04
25	B2	613	CLA	CMB-C2B-C1B	-4.68	121.27	128.46
23	K2	102	BCR	C24-C23-C22	-4.68	119.16	126.23
23	K2	102	BCR	C20-C21-C22	-4.68	120.63	127.31
23	k2	501	BCR	C15-C14-C13	-4.67	120.64	127.31
23	C1	521	BCR	C11-C10-C9	-4.66	120.66	127.31
27	d2	408	PHO	O2D-CGD-CBD	4.64	119.52	111.27
33	d1	402	LHG	O7-C7-C8	4.64	121.50	111.50
36	D1	408	PL9	C7-C8-C9	-4.63	119.08	126.79
23	A2	401	BCR	C7-C8-C9	-4.62	119.25	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	D2	408	PL9	C7-C8-C9	-4.62	119.10	126.79
23	A2	401	BCR	C16-C17-C18	-4.61	120.73	127.31
23	B2	601	BCR	C28-C27-C26	-4.60	105.86	114.08
23	c1	501	BCR	C20-C21-C22	-4.60	120.75	127.31
23	C1	501	BCR	C15-C14-C13	-4.58	120.77	127.31
23	B2	601	BCR	C15-C14-C13	-4.54	120.84	127.31
23	b2	601	BCR	C28-C27-C26	-4.52	106.00	114.08
37	b2	605	SQD	O47-C7-C8	4.52	121.23	111.50
23	c1	502	BCR	C36-C18-C19	4.52	125.19	118.08
36	d2	409	PL9	C7-C8-C9	-4.50	119.30	126.79
36	d1	409	PL9	C7-C8-C9	-4.50	119.30	126.79
23	c2	501	BCR	C38-C26-C25	-4.49	119.48	124.53
25	B2	610	CLA	CMB-C2B-C1B	-4.49	121.56	128.46
23	A2	401	BCR	C11-C10-C9	-4.49	120.90	127.31
23	F2	401	BCR	C36-C18-C19	4.48	125.14	118.08
23	h1	102	BCR	C20-C21-C22	-4.48	120.92	127.31
23	B1	601	BCR	C28-C27-C26	-4.48	106.08	114.08
23	c1	502	BCR	C7-C8-C9	-4.47	119.48	126.23
23	b2	601	BCR	C15-C14-C13	-4.46	120.95	127.31
23	K1	101	BCR	C33-C5-C6	-4.42	119.56	124.53
29	M1	101	LMG	O7-C10-C11	4.42	121.03	111.50
27	d2	408	PHO	C3D-C2D-C1D	-4.42	99.43	105.87
34	c2	516	DGD	O2G-C1B-C2B	4.42	121.02	111.50
23	j2	102	BCR	C24-C23-C22	-4.41	119.57	126.23
23	C2	502	BCR	C20-C21-C22	-4.40	121.03	127.31
23	c2	501	BCR	C36-C18-C19	4.40	125.00	118.08
23	c2	501	BCR	C7-C8-C9	-4.40	119.59	126.23
23	K1	101	BCR	C16-C17-C18	-4.39	121.04	127.31
23	K2	104	BCR	C28-C27-C26	-4.39	106.24	114.08
34	c1	518	DGD	O2G-C1B-C2B	4.39	120.95	111.50
25	c2	509	CLA	CMB-C2B-C1B	-4.38	121.73	128.46
25	b1	610	CLA	CMB-C2B-C1B	-4.38	121.73	128.46
23	B2	603	BCR	C15-C14-C13	-4.38	121.07	127.31
29	B1	626	LMG	O7-C10-C11	4.37	120.92	111.50
23	B1	601	BCR	C7-C8-C9	-4.37	119.64	126.23
23	k2	501	BCR	C16-C17-C18	-4.36	121.08	127.31
23	d2	401	BCR	C20-C21-C22	-4.36	121.09	127.31
23	C1	521	BCR	C15-C14-C13	-4.35	121.10	127.31
23	b2	603	BCR	C15-C14-C13	-4.34	121.12	127.31
23	K2	102	BCR	C36-C18-C19	4.33	124.90	118.08
23	b2	603	BCR	C7-C8-C9	-4.33	119.69	126.23
29	b1	621	LMG	O7-C10-C11	4.32	120.82	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	D2	407	PHO	C3D-C2D-C1D	-4.31	99.59	105.87
27	a1	411	PHO	C3D-C2D-C1D	-4.31	99.59	105.87
29	b1	631	LMG	O7-C10-C11	4.30	120.77	111.50
27	D1	407	PHO	C3D-C2D-C1D	-4.29	99.62	105.87
27	d1	403	PHO	C3D-C2D-C1D	-4.29	99.63	105.87
25	b2	624	CLA	CMB-C2B-C1B	-4.28	121.88	128.46
27	A2	407	PHO	C3D-C2D-C1D	-4.28	99.63	105.87
27	a2	416	PHO	C3D-C2D-C1D	-4.28	99.64	105.87
23	b1	602	BCR	C35-C13-C12	4.27	124.80	118.08
23	J1	101	BCR	C15-C14-C13	-4.25	121.24	127.31
23	K2	102	BCR	C15-C14-C13	-4.25	121.24	127.31
23	b2	603	BCR	C11-C10-C9	-4.24	121.25	127.31
25	c1	506	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
37	B2	623	SQD	O47-C7-C8	4.23	120.62	111.50
23	J1	101	BCR	C36-C18-C19	4.22	124.73	118.08
23	b2	602	BCR	C15-C14-C13	-4.22	121.29	127.31
29	A2	412	LMG	O7-C10-C11	4.22	120.59	111.50
34	c1	514	DGD	O2G-C1B-C2B	4.21	120.56	111.50
34	C1	515	DGD	O2G-C1B-C2B	4.20	120.55	111.50
27	A1	408	PHO	C3D-C2D-C1D	-4.19	99.76	105.87
23	d2	401	BCR	C38-C26-C25	-4.19	119.82	124.53
23	z2	101	BCR	C15-C14-C13	-4.19	121.33	127.31
23	c1	502	BCR	C33-C5-C6	-4.18	119.84	124.53
23	h1	102	BCR	C28-C27-C26	-4.17	106.62	114.08
23	k1	101	BCR	C24-C23-C22	-4.17	119.93	126.23
23	b1	601	BCR	C28-C27-C26	-4.16	106.64	114.08
23	d2	401	BCR	C11-C10-C9	-4.15	121.38	127.31
25	b1	615	CLA	CMB-C2B-C1B	-4.15	122.08	128.46
34	H1	101	DGD	O2G-C1B-C2B	4.15	120.44	111.50
29	j2	101	LMG	O7-C10-C11	4.15	120.44	111.50
23	z2	101	BCR	C16-C17-C18	-4.15	121.39	127.31
25	b1	614	CLA	CMB-C2B-C1B	-4.14	122.11	128.46
33	L2	101	LHG	O7-C7-C8	4.13	120.41	111.50
34	C1	516	DGD	O2G-C1B-C2B	4.13	120.40	111.50
23	D1	401	BCR	C24-C23-C22	-4.13	120.00	126.23
23	c1	501	BCR	C24-C23-C22	-4.13	120.00	126.23
23	A2	401	BCR	C33-C5-C6	-4.12	119.90	124.53
29	I2	101	LMG	O7-C10-C11	4.12	120.39	111.50
34	c2	514	DGD	O2G-C1B-C2B	4.12	120.37	111.50
23	B1	602	BCR	C28-C27-C26	-4.10	106.75	114.08
23	C1	521	BCR	C16-C17-C18	-4.10	121.46	127.31
23	k1	101	BCR	C36-C18-C19	4.08	124.50	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	j2	102	BCR	C36-C18-C19	4.07	124.49	118.08
23	B2	602	BCR	C16-C17-C18	-4.07	121.50	127.31
29	C1	520	LMG	O7-C10-C11	4.07	120.27	111.50
23	C2	502	BCR	C16-C17-C18	-4.07	121.50	127.31
29	d1	408	LMG	O7-C10-C11	4.06	120.26	111.50
33	l2	101	LHG	O7-C7-C8	4.06	120.26	111.50
23	B2	603	BCR	C7-C8-C9	-4.06	120.10	126.23
25	c1	511	CLA	CMB-C2B-C1B	-4.05	122.23	128.46
25	C2	506	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
23	D1	401	BCR	C33-C5-C6	-4.05	119.98	124.53
33	a2	407	LHG	O7-C7-C8	4.04	120.21	111.50
23	B2	603	BCR	C11-C10-C9	-4.04	121.55	127.31
25	B2	615	CLA	CMB-C2B-C1B	-4.03	122.27	128.46
23	b2	601	BCR	C7-C8-C9	-4.03	120.14	126.23
33	B2	627	LHG	O7-C7-C8	4.02	120.17	111.50
34	h1	101	DGD	O2G-C1B-C2B	4.02	120.16	111.50
25	B1	614	CLA	CMB-C2B-C1B	-4.01	122.30	128.46
25	c1	504	CLA	CMB-C2B-C1B	-4.00	122.31	128.46
33	l1	102	LHG	O7-C7-C8	4.00	120.12	111.50
23	K1	101	BCR	C3-C4-C5	-3.99	106.94	114.08
23	h2	101	BCR	C11-C10-C9	-3.99	121.61	127.31
33	b2	625	LHG	O7-C7-C8	3.99	120.10	111.50
23	b2	602	BCR	C24-C23-C22	-3.99	120.21	126.23
29	F2	402	LMG	O7-C10-C11	3.98	120.09	111.50
23	c2	501	BCR	C11-C10-C9	-3.98	121.63	127.31
23	d2	401	BCR	C24-C23-C22	-3.98	120.22	126.23
23	b2	603	BCR	C24-C23-C22	-3.97	120.23	126.23
29	A1	412	LMG	O7-C10-C11	3.97	120.06	111.50
23	k2	501	BCR	C11-C10-C9	-3.97	121.64	127.31
25	c1	515	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
23	a1	401	BCR	C33-C5-C6	-3.96	120.08	124.53
23	b2	601	BCR	C11-C10-C9	-3.96	121.66	127.31
33	a1	407	LHG	O7-C7-C8	3.95	120.02	111.50
23	B1	601	BCR	C24-C23-C22	-3.95	120.27	126.23
27	D1	407	PHO	C1-C2-C3	-3.95	119.22	126.04
23	k1	101	BCR	C15-C14-C13	-3.94	121.68	127.31
29	B2	621	LMG	O7-C10-C11	3.94	120.00	111.50
23	D1	401	BCR	C15-C14-C13	-3.94	121.69	127.31
23	d1	405	BCR	C33-C5-C6	-3.94	120.11	124.53
25	C1	505	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
25	c1	512	CLA	CMB-C2B-C1B	-3.94	122.41	128.46
25	C2	508	CLA	CMB-C2B-C1B	-3.93	122.42	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	610	CLA	CMB-C2B-C1B	-3.93	122.42	128.46
33	d1	407	LHG	O7-C7-C8	3.93	119.97	111.50
25	c2	513	CLA	CMB-C2B-C1B	-3.93	122.43	128.46
23	d2	401	BCR	C15-C14-C13	-3.93	121.71	127.31
23	K1	101	BCR	C11-C10-C9	-3.92	121.71	127.31
23	b1	603	BCR	C15-C14-C13	-3.92	121.71	127.31
25	C1	511	CLA	CMB-C2B-C1B	-3.91	122.45	128.46
23	A1	401	BCR	C16-C17-C18	-3.91	121.73	127.31
23	d2	401	BCR	C1-C6-C5	-3.91	117.11	122.61
23	C1	521	BCR	C24-C23-C22	-3.91	120.33	126.23
23	h1	102	BCR	C24-C23-C22	-3.90	120.34	126.23
23	F2	401	BCR	C11-C10-C9	-3.90	121.75	127.31
25	b1	613	CLA	O2A-CGA-O1A	-3.89	113.77	123.59
33	D1	404	LHG	O7-C7-C8	3.89	119.88	111.50
23	d2	401	BCR	C3-C4-C5	-3.89	107.14	114.08
25	D1	403	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
23	b1	603	BCR	C11-C10-C9	-3.89	121.76	127.31
25	c2	507	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
27	d2	408	PHO	C1-C2-C3	-3.88	119.33	126.04
23	F2	401	BCR	C24-C23-C22	-3.88	120.37	126.23
29	a2	412	LMG	O7-C10-C11	3.87	119.85	111.50
25	c1	513	CLA	CMB-C2B-C1B	-3.87	122.51	128.46
33	D2	405	LHG	O7-C7-C8	3.87	119.85	111.50
25	b2	614	CLA	CMB-C2B-C1B	-3.87	122.52	128.46
25	d2	404	CLA	CMB-C2B-C1B	-3.87	122.52	128.46
23	c1	502	BCR	C11-C10-C9	-3.86	121.80	127.31
29	A1	410	LMG	O7-C10-C11	3.86	119.82	111.50
23	b1	603	BCR	C7-C8-C9	-3.86	120.41	126.23
33	L1	101	LHG	O7-C7-C8	3.86	119.81	111.50
25	d1	406	CLA	CMB-C2B-C1B	-3.86	122.54	128.46
23	B2	602	BCR	C38-C26-C25	-3.85	120.20	124.53
25	C2	511	CLA	CMB-C2B-C1B	-3.85	122.55	128.46
36	d2	409	PL9	C22-C23-C24	-3.84	118.41	127.66
25	C2	507	CLA	CMB-C2B-C1B	-3.84	122.56	128.46
33	b1	622	LHG	O7-C7-C8	3.84	119.78	111.50
23	A1	401	BCR	C7-C8-C9	-3.84	120.43	126.23
25	b2	615	CLA	CMB-C2B-C1B	-3.84	122.56	128.46
29	D1	406	LMG	O7-C10-C11	3.84	119.77	111.50
23	b2	602	BCR	C16-C17-C18	-3.84	121.84	127.31
23	a2	402	BCR	C38-C26-C25	-3.84	120.22	124.53
34	C1	517	DGD	O2G-C1B-C2B	3.83	119.76	111.50
25	B1	615	CLA	CMB-C2B-C1B	-3.83	122.58	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	b1	624	LMG	O1-C1-C2	3.83	114.28	108.30
25	B2	614	CLA	CMB-C2B-C1B	-3.83	122.58	128.46
23	d1	405	BCR	C24-C23-C22	-3.83	120.45	126.23
29	d1	411	LMG	O7-C10-C11	3.82	119.74	111.50
34	H2	101	DGD	O2G-C1B-C2B	3.82	119.74	111.50
23	B1	603	BCR	C15-C14-C13	-3.82	121.86	127.31
27	D2	407	PHO	C4A-NA-C1A	3.82	111.23	108.14
33	D1	405	LHG	O7-C7-C8	3.82	119.73	111.50
27	d1	403	PHO	C1-C2-C3	-3.82	119.44	126.04
23	d1	405	BCR	C11-C10-C9	-3.82	121.86	127.31
23	a1	401	BCR	C11-C10-C9	-3.82	121.86	127.31
25	b1	605	CLA	CMB-C2B-C1B	-3.82	122.60	128.46
23	C1	521	BCR	C7-C8-C9	-3.80	120.49	126.23
36	D1	408	PL9	C22-C23-C24	-3.80	118.50	127.66
25	d1	404	CLA	CMB-C2B-C1B	-3.80	122.62	128.46
23	b1	601	BCR	C15-C14-C13	-3.80	121.88	127.31
23	C2	502	BCR	C7-C8-C9	-3.80	120.50	126.23
23	K2	104	BCR	C33-C5-C6	-3.80	120.26	124.53
25	C1	512	CLA	CMB-C2B-C1B	-3.80	122.63	128.46
23	c1	501	BCR	C7-C8-C9	-3.79	120.50	126.23
25	B2	610	CLA	CMB-C2B-C3B	3.79	131.76	124.68
23	B2	601	BCR	C20-C21-C22	-3.79	121.91	127.31
29	B1	622	LMG	O7-C10-C11	3.79	119.66	111.50
25	b2	612	CLA	CMB-C2B-C1B	-3.77	122.66	128.46
23	B1	603	BCR	C7-C8-C9	-3.77	120.53	126.23
23	c2	501	BCR	C3-C4-C5	-3.77	107.34	114.08
25	B2	605	CLA	CMB-C2B-C1B	-3.76	122.68	128.46
29	a1	412	LMG	O7-C10-C11	3.76	119.60	111.50
25	c1	516	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
25	b1	613	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
25	B2	609	CLA	CMB-C2B-C1B	-3.76	122.69	128.46
23	B1	601	BCR	C15-C14-C13	-3.75	121.95	127.31
23	b2	603	BCR	C38-C26-C25	-3.75	120.31	124.53
25	c2	505	CLA	CMB-C2B-C1B	-3.75	122.70	128.46
23	a1	401	BCR	C38-C26-C25	-3.75	120.32	124.53
23	b1	601	BCR	C7-C8-C9	-3.74	120.58	126.23
25	b2	613	CLA	CMB-C2B-C1B	-3.74	122.72	128.46
23	b2	602	BCR	C11-C10-C9	-3.73	121.99	127.31
23	A1	401	BCR	C33-C5-C6	-3.73	120.34	124.53
23	b1	602	BCR	C28-C27-C26	-3.73	107.42	114.08
23	b2	602	BCR	C38-C26-C25	-3.73	120.34	124.53
25	c2	515	CLA	CMB-C2B-C1B	-3.72	122.75	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B2	603	BCR	C20-C21-C22	-3.72	122.00	127.31
33	d2	406	LHG	O7-C7-C8	3.72	119.51	111.50
25	b2	606	CLA	CMB-C2B-C1B	-3.72	122.75	128.46
23	B1	602	BCR	C16-C17-C18	-3.71	122.01	127.31
23	a1	401	BCR	C7-C8-C9	-3.71	120.63	126.23
23	C1	501	BCR	C7-C8-C9	-3.71	120.64	126.23
25	c2	506	CLA	CMB-C2B-C1B	-3.70	122.77	128.46
23	A1	401	BCR	C15-C14-C13	-3.70	122.03	127.31
25	B1	619	CLA	CMB-C2B-C1B	-3.70	122.78	128.46
23	b2	603	BCR	C16-C17-C18	-3.70	122.03	127.31
25	b2	611	CLA	CMB-C2B-C1B	-3.70	122.78	128.46
23	K2	104	BCR	C7-C8-C9	-3.69	120.65	126.23
23	J1	101	BCR	C11-C10-C9	-3.69	122.04	127.31
23	c2	501	BCR	C33-C5-C6	-3.69	120.38	124.53
25	c2	506	CLA	O2D-CGD-O1D	-3.69	116.62	123.84
23	d2	401	BCR	C4-C5-C6	-3.69	117.38	122.73
25	b2	620	CLA	CMB-C2B-C1B	-3.69	122.80	128.46
29	c1	519	LMG	O7-C10-C11	3.68	119.43	111.50
23	B2	602	BCR	C15-C14-C13	-3.68	122.06	127.31
33	d2	403	LHG	O7-C7-C8	3.68	119.42	111.50
36	d1	409	PL9	C22-C23-C24	-3.68	118.81	127.66
23	d1	405	BCR	C16-C17-C18	-3.67	122.07	127.31
27	d2	408	PHO	C4C-C3C-C2C	-3.67	102.72	106.78
29	B2	620	LMG	O7-C10-C11	3.66	119.40	111.50
23	z2	101	BCR	C11-C10-C9	-3.66	122.08	127.31
23	B1	601	BCR	C33-C5-C6	-3.66	120.42	124.53
25	c1	505	CLA	CMB-C2B-C1B	-3.66	122.84	128.46
23	C2	502	BCR	C11-C10-C9	-3.65	122.10	127.31
23	b2	601	BCR	C33-C5-C6	-3.65	120.43	124.53
23	K2	102	BCR	C3-C4-C5	-3.65	107.56	114.08
23	K2	102	BCR	C16-C17-C18	-3.65	122.10	127.31
23	b1	602	BCR	C16-C17-C18	-3.65	122.11	127.31
36	d1	409	PL9	C42-C43-C44	-3.65	118.88	127.66
23	A1	401	BCR	C38-C26-C25	-3.64	120.44	124.53
25	C2	518	CLA	CMB-C2B-C1B	-3.64	122.87	128.46
23	B1	603	BCR	C11-C10-C9	-3.64	122.12	127.31
29	b2	622	LMG	O7-C10-C11	3.63	119.33	111.50
27	A1	408	PHO	C4C-C3C-C2C	-3.63	102.77	106.78
23	F2	401	BCR	C33-C5-C6	-3.62	120.46	124.53
23	B2	603	BCR	C38-C26-C25	-3.62	120.46	124.53
34	h2	102	DGD	O2G-C1B-C2B	3.62	119.30	111.50
27	D2	407	PHO	C4C-C3C-C2C	-3.62	102.78	106.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	d1	403	PHO	C2B-C1B-NB	3.62	115.25	109.79
34	c2	517	DGD	O2G-C1B-C2B	3.62	119.29	111.50
25	B1	612	CLA	CMB-C2B-C1B	-3.61	122.91	128.46
23	k2	501	BCR	C7-C8-C9	-3.61	120.78	126.23
33	D2	403	LHG	O7-C7-C8	3.61	119.27	111.50
25	C2	503	CLA	CMB-C2B-C1B	-3.61	122.92	128.46
25	B2	611	CLA	CMB-C2B-C1B	-3.61	122.92	128.46
25	a1	405	CLA	O2D-CGD-O1D	-3.61	116.79	123.84
23	B2	603	BCR	C24-C23-C22	-3.60	120.79	126.23
25	c1	503	CLA	CMB-C2B-C1B	-3.60	122.93	128.46
25	b2	624	CLA	CMB-C2B-C3B	3.60	131.41	124.68
23	B1	601	BCR	C11-C10-C9	-3.60	122.17	127.31
36	D2	408	PL9	C42-C43-C44	-3.60	119.00	127.66
23	b2	601	BCR	C16-C17-C18	-3.59	122.18	127.31
23	k1	101	BCR	C11-C10-C9	-3.59	122.19	127.31
25	A1	406	CLA	CMB-C2B-C1B	-3.59	122.95	128.46
27	d2	408	PHO	C2B-C1B-NB	3.59	115.20	109.79
23	B2	601	BCR	C33-C5-C6	-3.58	120.50	124.53
23	B1	603	BCR	C16-C17-C18	-3.58	122.20	127.31
25	C1	507	CLA	CMB-C2B-C1B	-3.58	122.96	128.46
23	h2	101	BCR	C16-C17-C18	-3.57	122.21	127.31
25	B1	617	CLA	CMB-C2B-C1B	-3.57	122.98	128.46
25	c1	510	CLA	CMB-C2B-C1B	-3.57	122.98	128.46
27	d1	403	PHO	C4C-C3C-C2C	-3.56	102.84	106.78
25	B1	609	CLA	CMB-C2B-C1B	-3.56	122.99	128.46
27	a2	416	PHO	C2B-C1B-NB	3.55	115.15	109.79
25	c1	506	CLA	CMB-C2B-C3B	3.55	131.32	124.68
25	C2	504	CLA	CMB-C2B-C1B	-3.55	123.01	128.46
25	b1	609	CLA	CMB-C2B-C1B	-3.55	123.01	128.46
23	K1	101	BCR	C7-C8-C9	-3.55	120.88	126.23
23	b1	601	BCR	C33-C5-C6	-3.54	120.55	124.53
27	a2	416	PHO	C4C-C3C-C2C	-3.54	102.86	106.78
36	D1	408	PL9	C37-C38-C39	-3.54	119.14	127.66
25	B2	606	CLA	CMB-C2B-C1B	-3.54	123.03	128.46
25	D2	404	CLA	CMB-C2B-C1B	-3.53	123.03	128.46
23	K2	102	BCR	C11-C10-C9	-3.53	122.27	127.31
25	C1	514	CLA	CMB-C2B-C1B	-3.53	123.04	128.46
25	b1	610	CLA	CMB-C2B-C3B	3.53	131.28	124.68
27	D1	407	PHO	C2B-C1B-NB	3.53	115.11	109.79
25	B2	619	CLA	CMB-C2B-C1B	-3.52	123.06	128.46
23	b2	603	BCR	C20-C21-C22	-3.51	122.30	127.31
25	C2	505	CLA	CMB-C2B-C1B	-3.51	123.08	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b2	608	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
25	C2	513	CLA	CMB-C2B-C1B	-3.50	123.08	128.46
25	B1	611	CLA	O2D-CGD-O1D	-3.50	116.99	123.84
25	b1	615	CLA	CMB-C2B-C3B	3.50	131.23	124.68
23	B2	602	BCR	C20-C21-C22	-3.50	122.31	127.31
25	B1	605	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
25	C1	503	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
23	B1	602	BCR	C24-C23-C22	-3.50	120.95	126.23
25	B2	617	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
25	B2	608	CLA	CMB-C2B-C1B	-3.50	123.09	128.46
23	C1	501	BCR	C11-C10-C9	-3.50	122.32	127.31
25	B2	607	CLA	O2D-CGD-O1D	-3.49	117.00	123.84
25	B2	612	CLA	CMB-C2B-C1B	-3.49	123.10	128.46
23	B2	603	BCR	C16-C17-C18	-3.49	122.33	127.31
23	B2	601	BCR	C7-C8-C9	-3.49	120.96	126.23
27	D1	407	PHO	C4C-C3C-C2C	-3.48	102.93	106.78
36	D2	408	PL9	C22-C23-C24	-3.48	119.28	127.66
25	b1	606	CLA	O2D-CGD-O1D	-3.48	117.03	123.84
25	C1	504	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
25	D2	401	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
25	b2	612	CLA	O2A-CGA-O1A	-3.48	114.82	123.59
33	B1	621	LHG	O7-C7-C8	3.47	118.99	111.50
27	D2	407	PHO	C2B-C1B-NB	3.47	115.03	109.79
23	d1	405	BCR	C15-C14-C13	-3.47	122.36	127.31
23	K2	102	BCR	C33-C5-C6	-3.47	120.63	124.53
25	A1	404	CLA	CMB-C2B-C1B	-3.47	123.14	128.46
25	C1	502	CLA	CMB-C2B-C1B	-3.47	123.14	128.46
34	c1	520	DGD	O2G-C1B-C2B	3.46	118.97	111.50
23	k2	501	BCR	C3-C4-C5	-3.46	107.89	114.08
25	B2	613	CLA	CMB-C2B-C3B	3.46	131.16	124.68
25	C2	509	CLA	CMB-C2B-C1B	-3.46	123.14	128.46
27	A2	407	PHO	C2B-C1B-NB	3.46	115.01	109.79
23	B2	601	BCR	C16-C17-C18	-3.46	122.38	127.31
23	C1	521	BCR	C20-C21-C22	-3.45	122.38	127.31
25	C1	509	CLA	O2D-CGD-O1D	-3.45	117.09	123.84
23	F2	401	BCR	C16-C17-C18	-3.45	122.39	127.31
23	C2	502	BCR	C24-C23-C22	-3.45	121.02	126.23
25	B1	606	CLA	CMB-C2B-C1B	-3.45	123.17	128.46
23	b1	602	BCR	C20-C21-C22	-3.45	122.39	127.31
23	b1	601	BCR	C16-C17-C18	-3.44	122.40	127.31
25	B1	611	CLA	CMB-C2B-C1B	-3.44	123.18	128.46
25	c1	508	CLA	CMB-C2B-C1B	-3.43	123.19	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	A2	404	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	C1	508	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	b1	614	CLA	CMB-C2B-C3B	3.43	131.10	124.68
25	c1	504	CLA	CMB-C2B-C3B	3.43	131.10	124.68
25	c2	509	CLA	CMB-C2B-C3B	3.43	131.09	124.68
25	a2	405	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
23	b2	603	BCR	C33-C5-C6	-3.43	120.68	124.53
25	b1	619	CLA	CMB-C2B-C1B	-3.43	123.20	128.46
23	a1	401	BCR	C16-C17-C18	-3.42	122.42	127.31
23	b1	603	BCR	C38-C26-C25	-3.42	120.69	124.53
27	a1	411	PHO	C4C-C3C-C2C	-3.41	103.00	106.78
25	b1	608	CLA	O2D-CGD-O1D	-3.41	117.16	123.84
36	d2	409	PL9	C30-C29-C31	3.41	121.02	115.27
25	a2	413	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
25	B1	618	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
25	d2	402	CLA	CMB-C2B-C1B	-3.41	123.22	128.46
27	A1	408	PHO	C2B-C1B-NB	3.40	114.92	109.79
25	C2	510	CLA	CMB-C2B-C1B	-3.40	123.24	128.46
23	a2	402	BCR	C11-C10-C9	-3.40	122.46	127.31
23	b1	603	BCR	C16-C17-C18	-3.40	122.46	127.31
25	B1	609	CLA	CAC-C3C-C2C	-3.39	121.72	127.53
25	c2	511	CLA	CMB-C2B-C1B	-3.39	123.25	128.46
25	d1	401	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
25	B2	604	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
25	B2	613	CLA	O2A-CGA-O1A	-3.38	115.07	123.59
25	B1	613	CLA	CMB-C2B-C1B	-3.38	123.27	128.46
25	A2	402	CLA	CMB-C2B-C1B	-3.38	123.28	128.46
25	b1	607	CLA	CMB-C2B-C1B	-3.38	123.28	128.46
25	C2	506	CLA	CMB-C2B-C3B	3.37	130.99	124.68
25	C2	516	CLA	CMB-C2B-C1B	-3.37	123.28	128.46
23	z2	101	BCR	C33-C5-C6	-3.37	120.75	124.53
23	a2	402	BCR	C7-C8-C9	-3.37	121.15	126.23
25	C1	510	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
23	h2	101	BCR	C7-C8-C9	-3.36	121.16	126.23
25	c1	509	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
25	b1	617	CLA	CMB-C2B-C1B	-3.35	123.31	128.46
25	B2	615	CLA	CMB-C2B-C3B	3.35	130.95	124.68
25	b2	609	CLA	CMB-C2B-C1B	-3.35	123.31	128.46
36	D1	408	PL9	C15-C14-C16	3.35	120.91	115.27
23	K2	102	BCR	C36-C18-C17	-3.35	118.23	122.92
25	c1	507	CLA	CMB-C2B-C1B	-3.35	123.32	128.46
27	a1	411	PHO	C2B-C1B-NB	3.35	114.84	109.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	619	CLA	O2D-CGD-O1D	-3.35	117.30	123.84
25	b2	610	CLA	CMB-C2B-C1B	-3.34	123.32	128.46
25	c1	511	CLA	CMB-C2B-C3B	3.34	130.93	124.68
25	B2	605	CLA	O2D-CGD-O1D	-3.34	117.30	123.84
25	b1	605	CLA	CMB-C2B-C3B	3.34	130.93	124.68
25	b1	614	CLA	O2D-CGD-O1D	-3.34	117.31	123.84
23	H2	103	BCR	C15-C14-C13	-3.34	122.55	127.31
29	C2	515	LMG	O7-C10-C11	3.34	120.11	110.80
25	b1	612	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
25	b2	604	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
25	b2	617	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
25	A1	406	CLA	O2D-CGD-O1D	-3.33	117.33	123.84
23	b2	602	BCR	C28-C27-C26	-3.32	108.14	114.08
25	D1	403	CLA	CMB-C2B-C3B	3.32	130.90	124.68
25	a1	405	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
25	C1	509	CLA	CMB-C2B-C3B	3.32	130.88	124.68
25	c2	502	CLA	CMB-C2B-C1B	-3.31	123.37	128.46
23	b1	601	BCR	C11-C10-C9	-3.31	122.58	127.31
25	A1	403	CLA	CMB-C2B-C1B	-3.31	123.38	128.46
36	d1	409	PL9	C20-C19-C21	3.31	120.84	115.27
25	b1	606	CLA	CMB-C2B-C1B	-3.31	123.38	128.46
27	A2	407	PHO	C4A-NA-C1A	3.31	110.81	108.14
23	B1	602	BCR	C20-C21-C22	-3.30	122.59	127.31
25	C1	513	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
33	d1	402	LHG	C5-O7-C7	-3.30	109.67	117.79
25	C2	508	CLA	CMB-C2B-C3B	3.30	130.85	124.68
25	c1	507	CLA	O2D-CGD-O1D	-3.30	117.39	123.84
25	D2	404	CLA	O2D-CGD-O1D	-3.30	117.39	123.84
23	h2	101	BCR	C3-C4-C5	-3.30	108.19	114.08
27	A2	407	PHO	C4C-C3C-C2C	-3.29	103.14	106.78
23	C1	521	BCR	C38-C26-C25	-3.29	120.83	124.53
25	C2	518	CLA	O2D-CGD-O1D	-3.29	117.40	123.84
25	A1	405	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
23	C2	502	BCR	C38-C26-C25	-3.29	120.83	124.53
25	c1	510	CLA	O2D-CGD-O1D	-3.28	117.42	123.84
25	b2	618	CLA	CMB-C2B-C1B	-3.28	123.42	128.46
36	D1	408	PL9	C30-C29-C31	3.28	120.79	115.27
23	B2	601	BCR	C24-C23-C22	-3.28	121.28	126.23
23	d2	401	BCR	C33-C5-C4	3.28	119.91	113.62
25	C1	505	CLA	CMB-C2B-C3B	3.28	130.81	124.68
25	b1	608	CLA	CMB-C2B-C1B	-3.28	123.43	128.46
25	a1	403	CLA	CMB-C2B-C1B	-3.28	123.43	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c2	505	CLA	O2D-CGD-O1D	-3.27	117.44	123.84
34	C1	516	DGD	C2G-O2G-C1B	-3.27	109.73	117.79
25	B1	610	CLA	O2D-CGD-O1D	-3.27	117.45	123.84
25	b1	604	CLA	CMB-C2B-C1B	-3.27	123.44	128.46
25	B1	604	CLA	CMB-C2B-C1B	-3.27	123.44	128.46
25	D2	406	CLA	CMB-C2B-C1B	-3.27	123.44	128.46
23	b1	602	BCR	C35-C13-C14	-3.27	118.35	122.92
25	c2	513	CLA	CMB-C2B-C3B	3.26	130.78	124.68
25	d1	401	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
23	k2	501	BCR	C28-C27-C26	-3.26	108.25	114.08
25	b2	614	CLA	CMB-C2B-C3B	3.26	130.78	124.68
27	A1	408	PHO	CAC-C3C-C4C	3.26	128.77	125.22
25	B2	616	CLA	O2D-CGD-O1D	-3.25	117.47	123.84
25	d2	405	CLA	CMB-C2B-C1B	-3.25	123.46	128.46
25	c1	515	CLA	CMB-C2B-C3B	3.25	130.76	124.68
25	c1	512	CLA	CMB-C2B-C3B	3.25	130.76	124.68
25	B2	618	CLA	CMB-C2B-C1B	-3.25	123.47	128.46
25	C1	511	CLA	CMB-C2B-C3B	3.25	130.75	124.68
23	b2	601	BCR	C20-C21-C22	-3.24	122.68	127.31
23	A2	401	BCR	C15-C14-C13	-3.24	122.68	127.31
36	d2	409	PL9	C25-C24-C26	3.24	120.73	115.27
25	d2	402	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
25	b2	612	CLA	O2D-CGD-O1D	-3.24	117.50	123.84
25	B2	616	CLA	CMB-C2B-C1B	-3.24	123.49	128.46
25	d1	406	CLA	O2D-CGD-O1D	-3.24	117.51	123.84
25	B2	605	CLA	CMB-C2B-C3B	3.24	130.73	124.68
23	c1	501	BCR	C33-C5-C6	-3.24	120.89	124.53
25	c2	509	CLA	O2D-CGD-O1D	-3.23	117.52	123.84
25	B2	609	CLA	O2D-CGD-O1D	-3.23	117.52	123.84
25	c2	504	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
25	B1	613	CLA	O2A-CGA-O1A	-3.23	115.45	123.59
23	z2	101	BCR	C7-C8-C9	-3.23	121.36	126.23
25	b1	605	CLA	O2D-CGD-O1D	-3.23	117.53	123.84
25	b1	609	CLA	O2D-CGD-O1D	-3.22	117.53	123.84
25	b2	616	CLA	CMB-C2B-C1B	-3.22	123.51	128.46
23	d1	405	BCR	C38-C26-C25	-3.22	120.92	124.53
23	B2	601	BCR	C11-C10-C9	-3.21	122.72	127.31
25	B2	619	CLA	O2D-CGD-O1D	-3.21	117.55	123.84
23	h1	102	BCR	C15-C14-C13	-3.21	122.72	127.31
23	A1	401	BCR	C11-C10-C9	-3.21	122.73	127.31
25	A2	403	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
25	B1	615	CLA	CMB-C2B-C3B	3.21	130.68	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	D1	402	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
29	B1	626	LMG	O8-C28-C29	3.21	121.97	111.91
25	c1	513	CLA	CMB-C2B-C3B	3.21	130.68	124.68
25	d1	406	CLA	CMB-C2B-C3B	3.21	130.68	124.68
25	C2	511	CLA	O2D-CGD-O1D	-3.21	117.57	123.84
23	B1	601	BCR	C16-C17-C18	-3.20	122.74	127.31
25	B1	614	CLA	CMB-C2B-C3B	3.20	130.67	124.68
25	c2	510	CLA	CMB-C2B-C1B	-3.20	123.54	128.46
25	b2	613	CLA	CMB-C2B-C3B	3.20	130.67	124.68
23	C2	502	BCR	C33-C5-C6	-3.20	120.93	124.53
25	B1	618	CLA	O2D-CGD-O1D	-3.20	117.58	123.84
25	c2	512	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
25	b2	619	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
27	D1	407	PHO	C4A-NA-C1A	3.20	110.72	108.14
25	d2	404	CLA	CMB-C2B-C3B	3.19	130.65	124.68
27	A1	408	PHO	C4A-NA-C1A	3.19	110.72	108.14
27	A2	407	PHO	C2C-C1C-NC	3.19	114.60	109.79
23	B1	602	BCR	C15-C14-C13	-3.19	122.76	127.31
23	J1	101	BCR	C16-C17-C18	-3.18	122.77	127.31
27	A1	408	PHO	C2C-C1C-NC	3.18	114.58	109.79
23	k2	501	BCR	C38-C26-C25	-3.17	120.96	124.53
27	d2	408	PHO	C4A-NA-C1A	3.17	110.70	108.14
25	B1	616	CLA	CMB-C2B-C1B	-3.17	123.59	128.46
25	b2	615	CLA	CMB-C2B-C3B	3.16	130.60	124.68
25	C2	507	CLA	CMB-C2B-C3B	3.16	130.60	124.68
25	a2	404	CLA	CMB-C2B-C1B	-3.16	123.60	128.46
23	b2	601	BCR	C24-C23-C22	-3.16	121.46	126.23
23	C1	521	BCR	C3-C4-C5	-3.16	108.44	114.08
25	b2	620	CLA	O2D-CGD-O1D	-3.16	117.67	123.84
25	C2	507	CLA	O2D-CGD-O1D	-3.16	117.67	123.84
25	B2	609	CLA	CMB-C2B-C3B	3.15	130.58	124.68
25	B2	618	CLA	O2D-CGD-O1D	-3.15	117.67	123.84
25	c1	508	CLA	O2D-CGD-O1D	-3.15	117.67	123.84
33	d1	402	LHG	O8-C23-C24	3.15	119.65	111.38
25	b2	606	CLA	CMB-C2B-C3B	3.15	130.57	124.68
23	z2	101	BCR	C20-C21-C22	-3.15	122.81	127.31
36	d1	409	PL9	C15-C14-C16	3.15	120.57	115.27
23	b1	602	BCR	C24-C23-C22	-3.15	121.48	126.23
25	B2	607	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
25	B1	608	CLA	O2D-CGD-O1D	-3.15	117.68	123.84
25	c2	515	CLA	CMB-C2B-C3B	3.15	130.57	124.68
25	b1	611	CLA	CMB-C2B-C1B	-3.15	123.63	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c2	508	CLA	CMB-C2B-C1B	-3.14	123.63	128.46
23	a2	402	BCR	C15-C14-C13	-3.14	122.83	127.31
23	a2	402	BCR	C16-C17-C18	-3.14	122.83	127.31
23	d2	401	BCR	C28-C27-C26	-3.14	108.47	114.08
25	C1	512	CLA	CMB-C2B-C3B	3.14	130.55	124.68
36	D1	408	PL9	C25-C24-C26	3.14	120.55	115.27
25	B2	614	CLA	CMB-C2B-C3B	3.13	130.54	124.68
23	B2	602	BCR	C24-C23-C22	-3.13	121.50	126.23
23	C1	501	BCR	C3-C4-C5	-3.13	108.49	114.08
33	A2	405	LHG	O7-C7-C8	3.13	119.53	110.80
37	D2	402	SQD	C45-O47-C7	-3.13	112.06	117.90
25	c1	503	CLA	CMB-C2B-C3B	3.13	130.53	124.68
23	z2	101	BCR	C24-C23-C22	-3.13	121.51	126.23
25	c2	505	CLA	CMB-C2B-C3B	3.13	130.53	124.68
25	b1	616	CLA	O2D-CGD-O1D	-3.12	117.73	123.84
25	c2	507	CLA	CMB-C2B-C3B	3.12	130.52	124.68
23	F2	401	BCR	C36-C18-C17	-3.12	118.55	122.92
25	c2	506	CLA	CMB-C2B-C3B	3.12	130.51	124.68
25	c1	515	CLA	O2D-CGD-O1D	-3.12	117.74	123.84
25	c1	516	CLA	CMB-C2B-C3B	3.12	130.51	124.68
23	a2	402	BCR	C33-C5-C6	-3.12	121.03	124.53
23	c1	501	BCR	C33-C5-C4	3.11	119.60	113.62
25	C1	506	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
25	B2	611	CLA	C1-C2-C3	-3.11	120.66	126.04
25	C2	503	CLA	O2D-CGD-O1D	-3.11	117.75	123.84
25	c1	506	CLA	O2D-CGD-O1D	-3.11	117.76	123.84
25	B1	613	CLA	CMD-C2D-C3D	3.10	130.49	124.68
25	B1	607	CLA	O2D-CGD-O1D	-3.10	117.77	123.84
23	k1	101	BCR	C38-C26-C25	-3.10	121.05	124.53
25	D2	406	CLA	O2D-CGD-O1D	-3.10	117.78	123.84
25	C1	506	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
36	d1	409	PL9	C27-C28-C29	-3.09	120.21	127.66
33	l1	102	LHG	C5-O7-C7	-3.09	110.18	117.79
25	K2	101	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
25	d2	404	CLA	O2D-CGD-O1D	-3.09	117.80	123.84
25	B1	608	CLA	CMB-C2B-C1B	-3.09	123.72	128.46
23	k2	501	BCR	C33-C5-C6	-3.09	121.06	124.53
23	h2	101	BCR	C33-C5-C6	-3.09	121.06	124.53
23	z2	101	BCR	C38-C26-C25	-3.09	121.06	124.53
23	C1	501	BCR	C16-C17-C18	-3.08	122.91	127.31
25	b1	607	CLA	O2D-CGD-O1D	-3.08	117.81	123.84
27	D1	407	PHO	C4-C3-C5	3.08	120.45	115.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b2	617	CLA	O2D-CGD-O1D	-3.07	117.83	123.84
25	c1	503	CLA	O2D-CGD-O1D	-3.07	117.83	123.84
33	L2	101	LHG	C5-O7-C7	-3.07	110.23	117.79
36	d2	409	PL9	C17-C18-C19	-3.07	120.26	127.66
25	B2	611	CLA	CMB-C2B-C3B	3.07	130.42	124.68
25	c1	505	CLA	CMB-C2B-C3B	3.07	130.41	124.68
25	c2	502	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
25	d1	404	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
25	B1	616	CLA	O2D-CGD-O1D	-3.06	117.85	123.84
25	c2	503	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
23	c1	502	BCR	C15-C16-C17	-3.06	117.21	123.47
36	D2	408	PL9	C15-C14-C16	3.06	120.42	115.27
25	b2	620	CLA	CMB-C2B-C3B	3.06	130.40	124.68
25	c2	503	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
25	b1	620	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
25	C1	507	CLA	O2D-CGD-O1D	-3.06	117.86	123.84
36	D1	408	PL9	C32-C33-C34	-3.05	120.31	127.66
25	C1	502	CLA	O2D-CGD-O1D	-3.05	117.87	123.84
23	k1	101	BCR	C16-C17-C18	-3.05	122.96	127.31
23	a1	401	BCR	C24-C23-C22	-3.05	121.63	126.23
23	c1	501	BCR	C3-C4-C5	-3.05	108.64	114.08
23	C1	501	BCR	C24-C23-C22	-3.04	121.64	126.23
25	C2	506	CLA	O2D-CGD-O1D	-3.04	117.89	123.84
25	C2	518	CLA	CMB-C2B-C3B	3.04	130.37	124.68
25	B1	609	CLA	C1D-CHD-C4C	3.04	126.57	122.56
25	b2	611	CLA	CMB-C2B-C3B	3.03	130.35	124.68
27	a2	416	PHO	CBA-CAA-C2A	-3.03	104.91	113.86
25	B2	619	CLA	CMB-C2B-C3B	3.03	130.35	124.68
25	C2	503	CLA	CMB-C2B-C3B	3.03	130.35	124.68
25	b2	606	CLA	O2D-CGD-O1D	-3.03	117.92	123.84
23	j2	102	BCR	C11-C10-C9	-3.03	122.99	127.31
29	B1	622	LMG	O8-C28-C29	3.03	121.41	111.91
27	d2	408	PHO	C2C-C1C-NC	3.03	114.36	109.79
36	d1	409	PL9	C17-C18-C19	-3.03	120.37	127.66
36	d2	409	PL9	C37-C38-C39	-3.03	120.37	127.66
27	a1	411	PHO	C2C-C1C-NC	3.03	114.36	109.79
25	D1	402	CLA	O2D-CGD-O1D	-3.02	117.92	123.84
23	b1	601	BCR	C3-C4-C5	-3.02	108.68	114.08
25	B1	605	CLA	CMB-C2B-C3B	3.02	130.33	124.68
25	B1	609	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
25	C2	508	CLA	O2D-CGD-O1D	-3.02	117.93	123.84
23	H1	102	BCR	C33-C5-C6	-3.02	121.14	124.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c1	501	BCR	C38-C26-C25	-3.02	121.14	124.53
25	C1	508	CLA	O2D-CGD-O1D	-3.02	117.94	123.84
23	c2	501	BCR	C33-C5-C4	3.02	119.41	113.62
27	a2	416	PHO	C2D-C1D-ND	3.01	114.34	109.79
25	C1	514	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
23	B1	603	BCR	C33-C5-C6	-3.01	121.15	124.53
25	D1	403	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
23	b1	603	BCR	C24-C23-C22	-3.01	121.69	126.23
25	C2	504	CLA	CMB-C2B-C3B	3.01	130.30	124.68
25	B1	614	CLA	O2D-CGD-O1D	-3.01	117.96	123.84
23	b1	602	BCR	C15-C14-C13	-3.01	123.02	127.31
27	d2	408	PHO	CAC-C3C-C4C	3.00	128.50	125.22
25	B1	619	CLA	CMB-C2B-C3B	3.00	130.29	124.68
23	b1	602	BCR	C34-C9-C10	-3.00	118.72	122.92
25	C2	504	CLA	O2D-CGD-O1D	-3.00	117.97	123.84
27	D2	407	PHO	C2C-C1C-NC	3.00	114.31	109.79
25	C1	509	CLA	O2A-CGA-O1A	-3.00	116.03	123.59
25	C2	505	CLA	O2D-CGD-O1D	-2.99	117.99	123.84
25	B1	610	CLA	CMB-C2B-C3B	2.99	130.27	124.68
25	B1	606	CLA	O2D-CGD-O1D	-2.99	118.00	123.84
25	A2	404	CLA	O2D-CGD-O1D	-2.98	118.00	123.84
25	b1	620	CLA	O2D-CGD-O1D	-2.98	118.01	123.84
36	D2	408	PL9	C37-C38-C39	-2.98	120.48	127.66
25	B1	617	CLA	CMB-C2B-C3B	2.98	130.25	124.68
27	A1	408	PHO	C3C-C4C-NC	2.98	114.90	110.28
23	F2	401	BCR	C28-C27-C26	-2.98	108.76	114.08
25	B1	617	CLA	O2D-CGD-O1D	-2.98	118.01	123.84
27	d2	408	PHO	C2D-C1D-ND	2.98	114.28	109.79
27	D2	407	PHO	CHD-C1D-ND	-2.98	118.38	124.58
25	C1	514	CLA	CMB-C2B-C3B	2.98	130.25	124.68
25	b1	604	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
25	b1	612	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
25	C1	503	CLA	CMB-C2B-C3B	2.97	130.24	124.68
25	B2	617	CLA	O2D-CGD-O1D	-2.97	118.03	123.84
23	K2	102	BCR	C38-C26-C25	-2.97	121.19	124.53
29	a1	412	LMG	O8-C28-C29	2.97	121.22	111.91
23	j2	102	BCR	C30-C25-C26	-2.97	118.43	122.61
25	C1	507	CLA	CMB-C2B-C3B	2.97	130.23	124.68
25	b2	611	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
25	b1	616	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
23	J1	101	BCR	C38-C26-C25	-2.96	121.20	124.53
25	B2	613	CLA	O2D-CGD-O1D	-2.96	118.05	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c2	504	CLA	O2D-CGD-O1D	-2.96	118.05	123.84
25	c2	508	CLA	O2D-CGD-O1D	-2.96	118.06	123.84
25	B1	609	CLA	CMB-C2B-C3B	2.96	130.21	124.68
23	b1	602	BCR	C33-C5-C6	-2.95	121.21	124.53
25	C1	505	CLA	O2D-CGD-O1D	-2.95	118.06	123.84
25	C1	502	CLA	CMB-C2B-C3B	2.95	130.21	124.68
27	a1	411	PHO	C4A-NA-C1A	2.95	110.52	108.14
23	B1	603	BCR	C38-C26-C25	-2.95	121.22	124.53
23	F2	401	BCR	C38-C26-C27	2.95	119.28	113.62
23	B1	603	BCR	C20-C21-C22	-2.95	123.10	127.31
25	c2	515	CLA	O2D-CGD-O1D	-2.95	118.08	123.84
23	c2	501	BCR	C34-C9-C10	-2.95	118.80	122.92
27	A2	407	PHO	C1C-C2C-C3C	-2.95	103.12	106.51
34	c1	518	DGD	C2G-O2G-C1B	-2.95	110.54	117.79
23	B2	601	BCR	C29-C30-C25	2.94	115.01	110.48
27	D1	407	PHO	C2D-C1D-ND	2.94	114.23	109.79
36	D2	408	PL9	C27-C28-C29	-2.94	120.58	127.66
23	A2	401	BCR	C38-C26-C27	2.94	119.27	113.62
27	a2	416	PHO	C3C-C4C-NC	2.94	114.84	110.28
23	K2	104	BCR	C3-C4-C5	-2.94	108.83	114.08
27	D1	407	PHO	CHD-C1D-ND	-2.94	118.46	124.58
23	B1	603	BCR	C28-C27-C26	-2.94	108.83	114.08
23	a1	401	BCR	C15-C14-C13	-2.94	123.12	127.31
25	C1	513	CLA	O2D-CGD-O1D	-2.94	118.10	123.84
23	b1	601	BCR	C29-C30-C25	2.93	115.00	110.48
25	c1	516	CLA	O2D-CGD-O1D	-2.93	118.11	123.84
25	C1	508	CLA	CMB-C2B-C3B	2.93	130.16	124.68
23	C1	501	BCR	C38-C26-C25	-2.93	121.24	124.53
27	A1	408	PHO	C2D-C1D-ND	2.93	114.21	109.79
25	C2	511	CLA	CMB-C2B-C3B	2.93	130.16	124.68
25	a2	405	CLA	CMB-C2B-C3B	2.93	130.15	124.68
25	A2	403	CLA	O2D-CGD-O1D	-2.93	118.12	123.84
25	B2	608	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	C2	505	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	b2	617	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	b2	610	CLA	O2D-CGD-O1D	-2.92	118.14	123.84
27	d2	408	PHO	C3C-C4C-NC	2.92	114.80	110.28
25	B1	606	CLA	CMB-C2B-C3B	2.91	130.13	124.68
23	C1	521	BCR	C33-C5-C6	-2.91	121.26	124.53
25	B2	611	CLA	O2D-CGD-O1D	-2.91	118.14	123.84
23	C1	501	BCR	C33-C5-C6	-2.91	121.26	124.53
25	B2	606	CLA	CMB-C2B-C3B	2.91	130.13	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	612	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
25	A1	404	CLA	CMB-C2B-C3B	2.91	130.12	124.68
34	C2	512	DGD	C2G-O2G-C1B	-2.91	112.47	117.90
25	c2	512	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
25	B1	613	CLA	O2D-CGD-O1D	-2.91	118.15	123.84
25	A1	406	CLA	CHB-C4A-NA	2.91	128.53	124.51
27	a1	411	PHO	CAC-C3C-C4C	2.91	128.39	125.22
36	D2	408	PL9	C20-C19-C21	2.91	120.16	115.27
25	B2	617	CLA	CMB-C2B-C3B	2.91	130.12	124.68
27	A2	407	PHO	C4-C3-C5	2.91	120.16	115.27
25	b2	608	CLA	CMB-C2B-C3B	2.90	130.11	124.68
25	b2	610	CLA	C1-C2-C3	-2.90	121.02	126.04
25	B2	608	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	C1	503	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	a2	413	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	D2	404	CLA	CMB-C2B-C3B	2.90	130.10	124.68
25	b1	613	CLA	CMD-C2D-C3D	2.90	130.10	124.68
25	d2	405	CLA	O2D-CGD-O1D	-2.90	118.17	123.84
25	b1	610	CLA	O2D-CGD-O1D	-2.90	118.18	123.84
25	D2	401	CLA	CMB-C2B-C3B	2.90	130.09	124.68
36	D1	408	PL9	C20-C19-C21	2.89	120.14	115.27
27	A1	408	PHO	C4-C3-C5	2.89	120.13	115.27
27	D2	407	PHO	C2D-C1D-ND	2.89	114.15	109.79
27	d1	403	PHO	C2C-C1C-NC	2.89	114.15	109.79
25	B1	612	CLA	CMB-C2B-C3B	2.89	130.08	124.68
23	A1	401	BCR	C20-C21-C22	-2.89	123.19	127.31
23	A2	401	BCR	C23-C24-C25	-2.89	119.10	127.20
25	C2	509	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	C2	510	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	d1	401	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	a2	405	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
27	d1	403	PHO	C4A-NA-C1A	2.88	110.47	108.14
27	A2	407	PHO	C2D-C1D-ND	2.88	114.14	109.79
25	b1	609	CLA	CMB-C2B-C3B	2.88	130.07	124.68
25	B1	605	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
25	c1	510	CLA	CMB-C2B-C3B	2.88	130.07	124.68
23	b1	603	BCR	C28-C27-C26	-2.88	108.93	114.08
29	b1	631	LMG	O1-C1-C2	2.88	112.80	108.30
25	b2	604	CLA	O2D-CGD-O1D	-2.88	118.21	123.84
23	c1	502	BCR	C38-C26-C25	-2.88	121.30	124.53
27	d1	403	PHO	C2D-C1D-ND	2.88	114.13	109.79
25	b2	618	CLA	O2D-CGD-O1D	-2.88	118.21	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	604	CLA	O2D-CGD-O1D	-2.88	118.22	123.84
36	d1	409	PL9	C53-C6-C1	2.87	120.87	114.99
23	b2	602	BCR	C1-C6-C5	-2.87	118.57	122.61
25	b2	612	CLA	CMD-C2D-C3D	2.87	130.05	124.68
27	D1	407	PHO	C3C-C4C-NC	2.87	114.73	110.28
25	B2	612	CLA	CMB-C2B-C3B	2.87	130.05	124.68
25	b2	608	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
25	a2	413	CLA	CMB-C2B-C3B	2.87	130.04	124.68
25	a1	404	CLA	O2D-CGD-O1D	-2.87	118.23	123.84
25	B1	607	CLA	CMB-C2B-C1B	-2.86	124.06	128.46
29	B1	622	LMG	C8-O7-C10	-2.86	110.74	117.79
25	C1	504	CLA	CMB-C2B-C3B	2.86	130.03	124.68
34	c2	516	DGD	O1G-C1A-C2A	2.86	120.89	111.91
25	D2	401	CLA	O2D-CGD-O1D	-2.86	118.24	123.84
27	d1	403	PHO	O2D-CGD-O1D	-2.86	118.24	123.84
36	d1	409	PL9	C32-C33-C34	-2.86	120.77	127.66
25	A1	403	CLA	O2D-CGD-O1D	-2.86	118.25	123.84
23	j2	102	BCR	C38-C26-C25	-2.86	121.32	124.53
29	A1	410	LMG	C8-O7-C10	-2.86	110.75	117.79
33	D2	403	LHG	O8-C23-C24	2.86	120.87	111.91
36	d2	409	PL9	C32-C33-C34	-2.86	120.78	127.66
29	a2	412	LMG	O8-C28-C29	2.86	120.87	111.91
25	C2	513	CLA	O2D-CGD-O1D	-2.86	118.26	123.84
23	H2	103	BCR	C11-C10-C9	-2.85	123.24	127.31
27	a2	416	PHO	C2C-C1C-NC	2.85	114.09	109.79
23	C1	501	BCR	C15-C16-C17	-2.85	117.63	123.47
25	B2	613	CLA	CMD-C2D-C3D	2.85	130.01	124.68
25	a1	404	CLA	CMB-C2B-C1B	-2.85	124.08	128.46
27	A2	407	PHO	CMD-C2D-C3D	-2.85	121.06	127.61
25	B2	604	CLA	CMB-C2B-C3B	2.85	130.01	124.68
27	a2	416	PHO	C4A-NA-C1A	2.85	110.44	108.14
25	b2	613	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
36	d2	409	PL9	C53-C6-C1	2.85	120.81	114.99
33	b2	625	LHG	O8-C23-C24	2.84	120.83	111.91
23	A2	401	BCR	C29-C30-C25	2.84	114.86	110.48
23	A2	401	BCR	C20-C21-C22	-2.84	123.26	127.31
25	A1	406	CLA	O2D-CGD-CBD	2.84	116.31	111.27
25	b2	610	CLA	CMB-C2B-C3B	2.84	129.99	124.68
25	c2	511	CLA	O2D-CGD-O1D	-2.84	118.30	123.84
25	b2	609	CLA	O2D-CGD-O1D	-2.83	118.30	123.84
27	D2	407	PHO	O2A-CGA-CBA	2.83	120.80	111.91
38	v1	201	HEM	CBD-CAD-C3D	-2.83	107.26	112.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	d2	407	LMG	C8-O7-C10	-2.83	112.62	117.90
29	B2	620	LMG	O8-C28-C29	2.83	120.79	111.91
25	d1	404	CLA	CMB-C2B-C3B	2.83	129.97	124.68
33	a1	407	LHG	O8-C23-C24	2.83	120.79	111.91
25	c2	507	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
25	A1	406	CLA	CMB-C2B-C3B	2.83	129.97	124.68
25	A1	405	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
27	d1	403	PHO	C3C-C4C-NC	2.83	114.66	110.28
25	b2	616	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
25	c2	511	CLA	CMB-C2B-C3B	2.82	129.96	124.68
36	d2	409	PL9	C15-C14-C16	2.82	120.02	115.27
23	K2	102	BCR	C33-C5-C4	2.82	119.03	113.62
27	a1	411	PHO	C2D-C1D-ND	2.82	114.05	109.79
25	b1	619	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
25	c2	513	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
23	b2	601	BCR	C38-C26-C25	-2.82	121.36	124.53
25	B1	609	CLA	CBC-CAC-C3C	2.82	120.19	112.43
25	b2	614	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
27	a2	416	PHO	C1-C2-C3	-2.81	121.18	126.04
36	D2	408	PL9	C40-C39-C41	2.81	120.00	115.27
25	B2	606	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
25	A1	404	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
25	C2	513	CLA	CMB-C2B-C3B	2.80	129.93	124.68
27	D2	407	PHO	C3C-C4C-NC	2.80	114.63	110.28
23	B1	601	BCR	C29-C30-C25	2.80	114.80	110.48
25	b1	606	CLA	CMB-C2B-C3B	2.80	129.92	124.68
25	A1	405	CLA	C1B-CHB-C4A	-2.80	124.57	130.12
33	B2	627	LHG	O8-C23-C24	2.80	120.70	111.91
27	D2	407	PHO	CAC-C3C-C4C	2.80	128.28	125.22
25	B2	615	CLA	CMD-C2D-C3D	2.80	129.92	124.68
27	D1	407	PHO	C2C-C1C-NC	2.80	114.02	109.79
27	A1	408	PHO	C1C-C2C-C3C	-2.80	103.29	106.51
27	A2	407	PHO	C3C-C4C-NC	2.79	114.61	110.28
29	M1	101	LMG	O8-C28-C29	2.79	120.67	111.91
23	b1	603	BCR	C20-C21-C22	-2.79	123.33	127.31
36	d2	409	PL9	C20-C19-C21	2.79	119.97	115.27
25	C2	509	CLA	CHB-C4A-NA	2.79	128.37	124.51
25	d2	405	CLA	CMB-C2B-C3B	2.79	129.90	124.68
25	b2	609	CLA	CMB-C2B-C3B	2.79	129.90	124.68
25	C2	516	CLA	O2D-CGD-O1D	-2.78	118.39	123.84
25	C2	510	CLA	O2D-CGD-O1D	-2.78	118.39	123.84
37	D1	409	SQD	O48-C23-C24	2.78	120.64	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	K1	101	BCR	C20-C21-C22	-2.78	123.34	127.31
23	k1	101	BCR	C7-C8-C9	-2.78	122.03	126.23
25	b2	604	CLA	CMB-C2B-C3B	2.78	129.88	124.68
27	d1	403	PHO	CAC-C3C-C4C	2.78	128.25	125.22
23	b2	602	BCR	C3-C4-C5	-2.78	109.11	114.08
25	B1	619	CLA	CMD-C2D-C3D	2.78	129.88	124.68
37	D1	409	SQD	C45-O47-C7	-2.77	112.73	117.90
23	B2	603	BCR	C33-C5-C6	-2.77	121.42	124.53
25	c1	509	CLA	CMB-C2B-C3B	2.77	129.86	124.68
25	b1	613	CLA	O2D-CGD-O1D	-2.77	118.42	123.84
25	c1	507	CLA	CMB-C2B-C3B	2.77	129.86	124.68
25	b1	617	CLA	CMB-C2B-C3B	2.77	129.86	124.68
25	b1	615	CLA	O2D-CGD-O1D	-2.77	118.43	123.84
27	a2	416	PHO	C4-C3-C5	2.77	119.92	115.27
25	C1	513	CLA	CMB-C2B-C3B	2.77	129.85	124.68
25	B2	610	CLA	O2D-CGD-O1D	-2.77	118.43	123.84
27	D2	407	PHO	CAA-CBA-CGA	-2.76	105.17	113.25
25	B1	618	CLA	CMB-C2B-C3B	2.76	129.85	124.68
23	h2	101	BCR	C38-C26-C25	-2.76	121.43	124.53
25	c1	513	CLA	O2D-CGD-O1D	-2.76	118.44	123.84
23	b1	602	BCR	C11-C10-C9	-2.76	123.37	127.31
23	b1	602	BCR	C8-C9-C10	2.76	123.17	118.94
23	b2	601	BCR	C38-C26-C27	2.76	118.91	113.62
27	D2	407	PHO	CMD-C2D-C3D	-2.76	121.28	127.61
25	B2	614	CLA	O2D-CGD-O1D	-2.75	118.46	123.84
23	b2	603	BCR	C28-C27-C26	-2.75	109.17	114.08
25	C1	512	CLA	CHB-C4A-NA	2.75	128.31	124.51
25	b1	608	CLA	CMB-C2B-C3B	2.75	129.82	124.68
25	D1	402	CLA	CMB-C2B-C3B	2.75	129.82	124.68
23	K2	104	BCR	C33-C5-C4	2.75	118.89	113.62
25	B1	615	CLA	O2D-CGD-O1D	-2.75	118.47	123.84
27	a1	411	PHO	C1C-C2C-C3C	-2.75	103.36	106.51
36	D2	408	PL9	C30-C29-C31	2.75	119.89	115.27
23	b1	601	BCR	C24-C23-C22	-2.75	122.09	126.23
29	b1	624	LMG	C8-O7-C10	-2.74	111.03	117.79
25	c1	509	CLA	CHB-C4A-NA	2.74	128.31	124.51
25	C1	512	CLA	O2D-CGD-O1D	-2.74	118.47	123.84
25	C2	516	CLA	CMB-C2B-C3B	2.74	129.81	124.68
25	B1	611	CLA	CMB-C2B-C3B	2.74	129.81	124.68
25	d2	402	CLA	CHB-C4A-NA	2.74	128.31	124.51
25	c2	504	CLA	CMB-C2B-C3B	2.74	129.81	124.68
25	c2	503	CLA	CMD-C2D-C3D	2.74	129.81	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a1	411	PHO	O2D-CGD-O1D	-2.74	118.48	123.84
25	b1	611	CLA	CMD-C2D-C3D	2.74	129.80	124.68
25	c1	504	CLA	O2D-CGD-O1D	-2.73	118.49	123.84
25	D2	406	CLA	CHB-C4A-NA	2.73	128.29	124.51
34	h2	102	DGD	O1G-C1A-C2A	2.73	120.48	111.91
25	d2	402	CLA	CMB-C2B-C3B	2.73	129.79	124.68
25	c1	510	CLA	CMD-C2D-C3D	2.73	129.78	124.68
36	D1	408	PL9	C27-C28-C29	-2.73	121.09	127.66
33	b1	622	LHG	O8-C23-C24	2.73	120.47	111.91
23	b2	601	BCR	C29-C30-C25	2.73	114.68	110.48
25	c1	508	CLA	CMB-C2B-C3B	2.73	129.78	124.68
25	a1	403	CLA	CMB-C2B-C3B	2.73	129.78	124.68
25	A1	404	CLA	CHB-C4A-NA	2.72	128.28	124.51
25	a1	405	CLA	CMB-C2B-C3B	2.72	129.77	124.68
25	b2	615	CLA	O2D-CGD-O1D	-2.72	118.52	123.84
27	d2	408	PHO	C4-C3-C5	2.72	119.85	115.27
25	b1	617	CLA	CHB-C4A-NA	2.72	128.27	124.51
27	d1	403	PHO	CHD-C1D-ND	-2.72	118.92	124.58
25	B2	609	CLA	CMD-C2D-C3D	2.72	129.76	124.68
25	c2	510	CLA	O2D-CGD-O1D	-2.72	118.53	123.84
27	A2	407	PHO	CMB-C2B-C1B	2.72	129.25	125.06
23	c1	502	BCR	C37-C22-C21	-2.72	119.12	122.92
29	d1	411	LMG	O8-C28-C29	2.72	120.43	111.91
25	c2	502	CLA	CMB-C2B-C3B	2.72	129.76	124.68
25	b1	605	CLA	C1B-CHB-C4A	-2.71	124.75	130.12
25	b2	618	CLA	CMB-C2B-C3B	2.71	129.75	124.68
37	D1	409	SQD	O8-S-C6	2.71	110.06	105.74
34	h1	101	DGD	O1G-C1A-C2A	2.71	120.41	111.91
27	a1	411	PHO	C3C-C4C-NC	2.70	114.47	110.28
23	b1	602	BCR	C3-C4-C5	-2.70	109.25	114.08
27	A1	408	PHO	O2D-CGD-O1D	-2.70	118.56	123.84
27	d2	408	PHO	CHD-C1D-ND	-2.70	118.95	124.58
25	B2	607	CLA	O2D-CGD-CBD	2.70	116.07	111.27
33	d1	407	LHG	C5-O7-C7	-2.70	111.14	117.79
33	D1	404	LHG	O8-C23-C24	2.70	120.37	111.91
25	c2	509	CLA	O2A-CGA-O1A	-2.70	116.79	123.59
25	K2	101	CLA	O2D-CGD-O1D	-2.70	118.57	123.84
25	C1	510	CLA	O2D-CGD-O1D	-2.69	118.57	123.84
36	d2	409	PL9	C25-C24-C23	-2.69	116.77	123.68
36	D2	408	PL9	C53-C6-C1	2.69	120.50	114.99
36	D1	408	PL9	C17-C18-C19	-2.69	121.18	127.66
25	K2	101	CLA	CHB-C4A-NA	2.69	128.24	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B2	614	CLA	CMD-C2D-C3D	2.69	129.72	124.68
23	b1	601	BCR	C20-C21-C22	-2.69	123.47	127.31
25	A2	402	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
23	b2	602	BCR	C33-C5-C4	2.69	118.78	113.62
23	B1	601	BCR	C38-C26-C27	2.69	118.78	113.62
34	H1	101	DGD	O1G-C1A-C2A	2.69	120.34	111.91
23	C1	521	BCR	C33-C5-C4	2.69	118.78	113.62
25	b2	619	CLA	O2D-CGD-O1D	-2.69	118.58	123.84
25	d2	402	CLA	O2D-CGD-CBD	2.69	116.04	111.27
23	c1	502	BCR	C36-C18-C17	-2.69	119.16	122.92
25	a1	405	CLA	CHB-C4A-NA	2.69	128.23	124.51
27	a1	411	PHO	C1-C2-C3	-2.69	121.40	126.04
25	A1	404	CLA	C1B-CHB-C4A	-2.68	124.80	130.12
25	b1	612	CLA	CMB-C2B-C3B	2.68	129.70	124.68
36	D2	408	PL9	C25-C24-C26	2.68	119.78	115.27
25	a2	404	CLA	CMB-C2B-C3B	2.68	129.70	124.68
25	b1	611	CLA	CMB-C2B-C3B	2.68	129.70	124.68
23	h1	102	BCR	C33-C5-C6	-2.68	121.52	124.53
23	b1	601	BCR	C38-C26-C25	-2.68	121.52	124.53
27	D1	407	PHO	C1C-C2C-C3C	-2.68	103.43	106.51
33	L2	101	LHG	O8-C23-C24	2.68	120.31	111.91
29	A1	410	LMG	O8-C28-C29	2.68	120.31	111.91
36	D2	408	PL9	C32-C33-C34	-2.68	121.22	127.66
36	D1	408	PL9	C53-C6-C1	2.68	120.46	114.99
25	b1	617	CLA	O2D-CGD-O1D	-2.68	118.61	123.84
27	A2	407	PHO	CAC-C3C-C4C	2.68	128.14	125.22
29	c2	519	LMG	O8-C28-C29	2.67	120.30	111.91
23	h1	102	BCR	C29-C30-C25	2.67	114.59	110.48
23	K2	104	BCR	C29-C30-C25	2.67	114.59	110.48
25	B1	604	CLA	CMB-C2B-C3B	2.67	129.68	124.68
25	a2	404	CLA	OBD-CAD-CBD	-2.67	122.08	125.89
27	D2	407	PHO	C4-C3-C5	2.67	119.76	115.27
27	a2	416	PHO	C1C-C2C-C3C	-2.67	103.44	106.51
27	d2	408	PHO	C1C-C2C-C3C	-2.67	103.44	106.51
23	d2	401	BCR	C16-C15-C14	-2.67	118.01	123.47
33	l1	102	LHG	O8-C23-C24	2.67	120.28	111.91
36	d1	409	PL9	C37-C38-C39	-2.67	121.24	127.66
27	A1	408	PHO	C1-C2-C3	-2.66	121.44	126.04
25	b1	619	CLA	CMB-C2B-C3B	2.66	129.66	124.68
25	B2	612	CLA	O2D-CGD-O1D	-2.66	118.63	123.84
25	a1	403	CLA	O2D-CGD-O1D	-2.66	118.64	123.84
25	C1	506	CLA	CMD-C2D-C3D	2.66	129.65	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C1	510	CLA	CMB-C2B-C3B	2.66	129.65	124.68
29	B1	626	LMG	C8-O7-C10	-2.66	111.25	117.79
25	C1	509	CLA	CMD-C2D-C3D	2.66	129.65	124.68
27	a1	411	PHO	CMD-C2D-C3D	-2.66	121.50	127.61
33	d2	406	LHG	O8-C23-C24	2.66	120.25	111.91
25	B2	617	CLA	CHB-C4A-NA	2.66	128.18	124.51
33	l2	101	LHG	O8-C23-C24	2.66	120.24	111.91
25	c1	511	CLA	O2D-CGD-O1D	-2.66	118.65	123.84
23	j2	102	BCR	C37-C22-C21	-2.65	119.20	122.92
25	c1	512	CLA	O2D-CGD-O1D	-2.65	118.65	123.84
27	d1	403	PHO	O2A-CGA-CBA	2.65	120.23	111.91
27	d2	408	PHO	O2A-CGA-CBA	2.65	120.23	111.91
25	C2	509	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
27	A1	408	PHO	CMD-C2D-C3D	-2.65	121.52	127.61
27	D1	407	PHO	CMD-C2D-C3D	-2.65	121.52	127.61
23	a2	402	BCR	C23-C24-C25	-2.65	119.76	127.20
23	J1	101	BCR	C36-C18-C17	-2.65	119.21	122.92
27	d1	403	PHO	C4-C3-C5	2.65	119.73	115.27
25	c1	505	CLA	O2D-CGD-O1D	-2.65	118.66	123.84
29	j2	101	LMG	O8-C28-C29	2.65	120.21	111.91
29	B2	620	LMG	C8-O7-C10	-2.64	111.28	117.79
36	D1	408	PL9	C25-C24-C23	-2.64	116.90	123.68
25	b2	624	CLA	O2D-CGD-O1D	-2.64	118.67	123.84
23	B1	602	BCR	C38-C26-C25	-2.64	121.56	124.53
25	b1	612	CLA	CMD-C2D-C3D	2.64	129.62	124.68
34	c2	514	DGD	C2G-O2G-C1B	-2.64	111.29	117.79
25	A1	406	CLA	C1B-CHB-C4A	-2.64	124.89	130.12
25	B2	616	CLA	CMB-C2B-C3B	2.64	129.62	124.68
23	h1	102	BCR	C11-C10-C9	-2.64	123.55	127.31
23	a1	401	BCR	C40-C30-C25	-2.64	106.03	110.30
25	C1	505	CLA	CHB-C4A-NA	2.63	128.16	124.51
25	A1	405	CLA	CMB-C2B-C3B	2.63	129.60	124.68
25	d1	404	CLA	CHB-C4A-NA	2.63	128.15	124.51
25	D1	402	CLA	C1B-CHB-C4A	-2.63	124.91	130.12
36	D1	408	PL9	C10-C9-C11	2.63	119.69	115.27
27	D2	407	PHO	CMB-C2B-C1B	2.63	129.11	125.06
25	A1	403	CLA	CMB-C2B-C3B	2.63	129.59	124.68
25	B1	608	CLA	CMB-C2B-C3B	2.63	129.59	124.68
23	A2	401	BCR	C16-C15-C14	-2.63	118.09	123.47
23	D1	401	BCR	C38-C26-C25	-2.63	121.58	124.53
25	B2	615	CLA	O2D-CGD-O1D	-2.62	118.71	123.84
27	a2	416	PHO	C4D-ND-C1D	-2.62	102.04	106.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	d1	409	PL9	C30-C29-C31	2.62	119.68	115.27
25	b2	616	CLA	CHB-C4A-NA	2.62	128.13	124.51
23	a1	401	BCR	C20-C21-C22	-2.62	123.57	127.31
29	B2	621	LMG	O1-C1-C2	2.62	112.39	108.30
27	D2	407	PHO	C1C-C2C-C3C	-2.62	103.50	106.51
27	a2	416	PHO	CMD-C2D-C3D	-2.62	121.59	127.61
25	a2	404	CLA	C1B-CHB-C4A	-2.62	124.94	130.12
23	H2	103	BCR	C33-C5-C6	-2.62	121.59	124.53
29	B2	621	LMG	C7-O1-C1	-2.62	108.63	113.74
23	h2	101	BCR	C21-C20-C19	-2.61	115.06	123.22
25	c2	508	CLA	CHB-C4A-NA	2.61	128.13	124.51
36	d1	409	PL9	C25-C24-C26	2.61	119.67	115.27
23	j2	102	BCR	C16-C17-C18	-2.61	123.58	127.31
25	B2	618	CLA	CMD-C2D-C3D	2.61	129.56	124.68
23	B1	601	BCR	C38-C26-C25	-2.61	121.60	124.53
25	c2	512	CLA	CMB-C2B-C3B	2.61	129.56	124.68
33	d2	403	LHG	O8-C23-C24	2.61	120.09	111.91
34	C1	515	DGD	O1G-C1A-C2A	2.61	120.09	111.91
33	D2	405	LHG	C5-O7-C7	-2.61	111.37	117.79
23	A2	401	BCR	C33-C5-C4	2.61	118.62	113.62
23	K1	101	BCR	C33-C5-C4	2.61	118.62	113.62
25	c2	509	CLA	C1B-CHB-C4A	-2.61	124.96	130.12
27	a1	411	PHO	CMB-C2B-C1B	2.61	129.08	125.06
33	B1	621	LHG	O8-C23-C24	2.60	120.08	111.91
23	c1	501	BCR	C8-C7-C6	-2.60	119.89	127.20
25	c1	503	CLA	CHB-C4A-NA	2.60	128.11	124.51
27	A1	408	PHO	CMB-C2B-C1B	2.60	129.07	125.06
25	B1	611	CLA	O2D-CGD-CBD	2.60	115.89	111.27
25	b1	604	CLA	CMB-C2B-C3B	2.60	129.55	124.68
29	a2	412	LMG	O1-C1-C2	2.60	112.36	108.30
29	b2	622	LMG	O8-C28-C29	2.60	120.07	111.91
23	A1	401	BCR	C24-C23-C22	-2.60	122.30	126.23
36	d1	409	PL9	C40-C39-C41	2.60	119.65	115.27
25	D2	406	CLA	CMB-C2B-C3B	2.60	129.54	124.68
23	b1	603	BCR	C1-C6-C5	-2.60	118.95	122.61
29	I2	101	LMG	O8-C28-C29	2.60	120.06	111.91
29	b1	631	LMG	C8-O7-C10	-2.60	111.39	117.79
23	a2	402	BCR	C20-C21-C22	-2.60	123.60	127.31
25	B1	615	CLA	CHB-C4A-NA	2.60	128.10	124.51
27	A1	408	PHO	CBA-CAA-C2A	-2.60	106.20	113.86
27	d1	403	PHO	C1C-C2C-C3C	-2.60	103.53	106.51
25	C2	518	CLA	CHB-C4A-NA	2.60	128.10	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B2	619	CLA	C1B-CHB-C4A	-2.59	124.98	130.12
25	b1	612	CLA	C1-C2-C3	-2.59	121.56	126.04
25	A1	405	CLA	CHB-C4A-NA	2.59	128.10	124.51
25	B1	606	CLA	CMD-C2D-C3D	2.59	129.53	124.68
25	b2	618	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	c2	508	CLA	CMB-C2B-C3B	2.59	129.52	124.68
25	b1	620	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	B2	615	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	c1	504	CLA	CMD-C2D-C3D	2.59	129.52	124.68
25	b2	609	CLA	CHB-C4A-NA	2.59	128.09	124.51
33	L1	101	LHG	O8-C23-C24	2.59	120.02	111.91
25	C2	518	CLA	CMD-C2D-C3D	2.58	129.51	124.68
27	A1	408	PHO	C4D-ND-C1D	-2.58	102.12	106.76
23	K2	102	BCR	C37-C22-C21	-2.58	119.30	122.92
25	c1	510	CLA	CHB-C4A-NA	2.58	128.08	124.51
25	b1	607	CLA	CHB-C4A-NA	2.58	128.08	124.51
25	c1	510	CLA	O2A-CGA-O1A	-2.58	117.07	123.59
37	B2	623	SQD	C45-O47-C7	-2.58	111.43	117.79
25	b2	606	CLA	CHB-C4A-NA	2.58	128.08	124.51
23	h1	102	BCR	C10-C11-C12	-2.58	115.16	123.22
25	b2	606	CLA	CMD-C2D-C3D	2.58	129.51	124.68
23	A1	401	BCR	C3-C4-C5	-2.58	109.47	114.08
25	c2	507	CLA	CMD-C2D-C3D	2.58	129.50	124.68
25	C1	511	CLA	O2D-CGD-O1D	-2.58	118.80	123.84
25	b1	619	CLA	CHB-C4A-NA	2.58	128.08	124.51
29	b1	631	LMG	C7-O1-C1	-2.58	108.70	113.74
25	C2	511	CLA	O2A-CGA-O1A	-2.58	117.09	123.59
23	J1	101	BCR	C7-C8-C9	-2.58	122.34	126.23
25	b1	619	CLA	CMD-C2D-C3D	2.58	129.50	124.68
25	B1	615	CLA	CMD-C2D-C3D	2.58	129.50	124.68
23	d2	401	BCR	C38-C26-C27	2.57	118.56	113.62
33	A2	405	LHG	O8-C23-C24	2.57	119.98	111.91
27	A2	407	PHO	C1-C2-C3	-2.57	121.59	126.04
25	C2	506	CLA	CHB-C4A-NA	2.57	128.07	124.51
25	c1	515	CLA	CMD-C2D-C3D	2.57	129.49	124.68
25	c1	507	CLA	CMD-C2D-C3D	2.57	129.49	124.68
25	A1	405	CLA	CAC-C3C-C4C	2.57	128.15	124.81
37	B2	623	SQD	O9-S-C6	2.57	109.99	106.94
25	b2	609	CLA	CMD-C2D-C3D	2.57	129.49	124.68
25	B1	618	CLA	CMD-C2D-C3D	2.57	129.49	124.68
25	b2	614	CLA	CMD-C2D-C3D	2.57	129.49	124.68
25	b2	613	CLA	C1B-CHB-C4A	-2.57	125.03	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	d1	403	PHO	CMD-C2D-C3D	-2.57	121.71	127.61
25	B1	610	CLA	C1B-CHB-C4A	-2.57	125.03	130.12
35	c1	517	LMT	C1B-O1B-C4'	-2.57	111.61	117.96
23	H2	103	BCR	C7-C8-C9	-2.57	122.36	126.23
25	b1	610	CLA	CHB-C4A-NA	2.57	128.06	124.51
25	B2	604	CLA	O2D-CGD-O1D	-2.56	118.82	123.84
23	B1	602	BCR	C34-C9-C10	-2.56	119.33	122.92
34	c2	514	DGD	O1G-C1A-C2A	2.56	119.95	111.91
27	d2	408	PHO	CMD-C2D-C3D	-2.56	121.72	127.61
25	c2	509	CLA	CMD-C2D-C3D	2.56	129.47	124.68
23	J1	101	BCR	C8-C7-C6	-2.56	120.01	127.20
25	C2	508	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	B2	618	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	a1	405	CLA	O2D-CGD-CBD	2.56	115.82	111.27
23	A2	401	BCR	C24-C23-C22	-2.56	122.37	126.23
25	b2	620	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	C1	503	CLA	CMD-C2D-C3D	2.56	129.47	124.68
25	B2	609	CLA	O2A-CGA-O1A	-2.56	117.13	123.59
25	a2	405	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
25	B1	619	CLA	CHB-C4A-NA	2.56	128.05	124.51
25	K2	101	CLA	CMB-C2B-C3B	2.55	129.46	124.68
23	k1	101	BCR	C37-C22-C21	-2.55	119.34	122.92
34	H2	101	DGD	O1G-C1A-C2A	2.55	119.92	111.91
25	A1	406	CLA	CMD-C2D-C3D	2.55	129.46	124.68
23	B1	601	BCR	C20-C21-C22	-2.55	123.67	127.31
36	d2	409	PL9	C10-C9-C11	2.55	119.56	115.27
25	d2	404	CLA	CHB-C4A-NA	2.55	128.04	124.51
34	c1	514	DGD	O1G-C1A-C2A	2.55	119.92	111.91
25	C2	506	CLA	CMD-C2D-C3D	2.55	129.45	124.68
25	c2	504	CLA	CMD-C2D-C3D	2.55	129.45	124.68
23	F2	401	BCR	C38-C26-C25	-2.55	121.66	124.53
25	B1	605	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
25	c1	508	CLA	C1B-CHB-C4A	-2.55	125.06	130.12
25	a2	405	CLA	CHB-C4A-NA	2.55	128.04	124.51
33	l2	101	LHG	C5-O7-C7	-2.55	111.51	117.79
25	C1	505	CLA	C1B-CHB-C4A	-2.55	125.07	130.12
33	D2	405	LHG	O8-C23-C24	2.55	119.91	111.91
23	A2	401	BCR	C38-C26-C25	-2.55	121.67	124.53
25	B2	616	CLA	CHB-C4A-NA	2.55	128.03	124.51
25	B1	616	CLA	CMB-C2B-C3B	2.55	129.44	124.68
25	D2	404	CLA	CMD-C2D-C3D	2.55	129.44	124.68
25	C1	506	CLA	CMB-C2B-C3B	2.55	129.44	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a1	411	PHO	C4-C3-C5	2.54	119.55	115.27
29	a1	412	LMG	C8-O7-C10	-2.54	111.53	117.79
23	F2	401	BCR	C27-C26-C25	-2.54	119.04	122.73
25	B1	609	CLA	CMD-C2D-C3D	2.54	129.44	124.68
25	B2	607	CLA	CHB-C4A-NA	2.54	128.03	124.51
25	c2	513	CLA	CHB-C4A-NA	2.54	128.03	124.51
25	b2	615	CLA	CHB-C4A-NA	2.54	128.03	124.51
23	b2	602	BCR	C38-C26-C27	2.54	118.50	113.62
25	B1	614	CLA	CMD-C2D-C3D	2.54	129.43	124.68
29	M1	101	LMG	C8-O7-C10	-2.54	114.61	117.88
34	c1	518	DGD	O1G-C1A-C2A	2.54	119.87	111.91
25	b1	616	CLA	C1B-CHB-C4A	-2.54	125.09	130.12
29	C1	520	LMG	O8-C28-C29	2.54	119.87	111.91
25	c2	503	CLA	CHB-C4A-NA	2.54	128.02	124.51
25	c1	506	CLA	CHB-C4A-NA	2.54	128.02	124.51
25	c2	505	CLA	CHB-C4A-NA	2.53	128.02	124.51
25	B1	606	CLA	CHB-C4A-NA	2.53	128.02	124.51
25	C1	503	CLA	CHB-C4A-NA	2.53	128.02	124.51
23	A2	401	BCR	C27-C26-C25	-2.53	119.05	122.73
36	d2	409	PL9	C27-C28-C29	-2.53	121.56	127.66
25	A2	402	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
25	b2	618	CLA	CMD-C2D-C3D	2.53	129.42	124.68
29	a2	412	LMG	C8-O7-C10	-2.53	111.56	117.79
27	A2	407	PHO	CBA-CAA-C2A	-2.53	106.39	113.86
25	b2	619	CLA	CMB-C2B-C3B	2.53	129.41	124.68
25	b2	608	CLA	C1B-CHB-C4A	-2.53	125.10	130.12
25	A2	402	CLA	CMB-C2B-C3B	2.53	129.41	124.68
33	L1	101	LHG	C5-O7-C7	-2.53	111.57	117.79
27	D1	407	PHO	O2A-CGA-CBA	2.53	119.83	111.91
25	b2	617	CLA	CHB-C4A-NA	2.53	128.00	124.51
25	b1	605	CLA	CMD-C2D-C3D	2.52	129.40	124.68
25	b1	609	CLA	CMD-C2D-C3D	2.52	129.40	124.68
25	C2	505	CLA	CMD-C2D-C3D	2.52	129.40	124.68
25	a1	404	CLA	C1B-CHB-C4A	-2.52	125.12	130.12
25	D1	403	CLA	CMD-C2D-C3D	2.52	129.40	124.68
25	c1	512	CLA	CHB-C4A-NA	2.52	128.00	124.51
27	A2	407	PHO	C4D-ND-C1D	-2.52	102.23	106.76
25	c1	505	CLA	CMD-C2D-C3D	2.52	129.39	124.68
23	B2	602	BCR	C34-C9-C10	-2.52	119.39	122.92
37	D2	402	SQD	O9-S-C6	2.52	109.93	106.94
23	C1	501	BCR	C21-C20-C19	-2.52	115.36	123.22
25	b1	616	CLA	CMB-C2B-C3B	2.52	129.38	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B2	605	CLA	C1B-CHB-C4A	-2.52	125.14	130.12
23	B2	602	BCR	C28-C27-C26	-2.52	109.59	114.08
25	d1	404	CLA	O2D-CGD-CBD	2.51	115.74	111.27
25	C2	506	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
25	C1	507	CLA	CMD-C2D-C3D	2.51	129.38	124.68
35	C1	519	LMT	C1B-O1B-C4'	-2.51	111.74	117.96
38	V1	201	HEM	CAD-CBD-CGD	-2.51	108.45	112.67
23	b1	602	BCR	C29-C30-C25	2.51	114.35	110.48
25	C2	513	CLA	CHB-C4A-NA	2.51	127.99	124.51
37	B2	623	SQD	O48-C23-C24	2.51	119.80	111.91
35	m2	104	LMT	O1B-C1B-C2B	2.51	114.61	108.10
23	k1	101	BCR	C33-C5-C4	2.51	118.44	113.62
25	C2	511	CLA	CHB-C4A-NA	2.51	127.99	124.51
27	d2	408	PHO	C4D-ND-C1D	-2.51	102.25	106.76
25	a1	405	CLA	C1B-CHB-C4A	-2.51	125.15	130.12
23	D1	401	BCR	C16-C15-C14	-2.51	118.33	123.47
25	C2	503	CLA	CHB-C4A-NA	2.51	127.98	124.51
25	c2	512	CLA	CHB-C4A-NA	2.51	127.98	124.51
25	b1	616	CLA	CHB-C4A-NA	2.51	127.98	124.51
25	b1	610	CLA	C1B-CHB-C4A	-2.51	125.15	130.12
25	c2	508	CLA	CMD-C2D-C3D	2.51	129.37	124.68
36	D1	408	PL9	C51-C49-C50	2.51	120.14	114.60
23	b2	602	BCR	C4-C5-C6	-2.51	119.09	122.73
25	d2	404	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
25	d1	404	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
25	b2	617	CLA	C1B-CHB-C4A	-2.50	125.16	130.12
27	d1	403	PHO	C4D-ND-C1D	-2.50	102.26	106.76
25	c2	513	CLA	CMD-C2D-C3D	2.50	129.36	124.68
25	B2	605	CLA	CMD-C2D-C3D	2.50	129.36	124.68
29	b1	631	LMG	O8-C28-C29	2.50	119.76	111.91
25	c1	511	CLA	CHB-C4A-NA	2.50	127.97	124.51
25	b1	613	CLA	CMB-C2B-C3B	2.50	129.35	124.68
25	d2	404	CLA	CMD-C2D-C3D	2.50	129.35	124.68
25	A2	402	CLA	CMD-C2D-C3D	2.50	129.35	124.68
25	b1	614	CLA	CHB-C4A-NA	2.50	127.97	124.51
23	A1	401	BCR	C23-C24-C25	-2.50	120.18	127.20
25	B2	619	CLA	CHB-C4A-NA	2.50	127.97	124.51
25	b1	606	CLA	CHB-C4A-NA	2.50	127.97	124.51
25	c2	506	CLA	CMD-C2D-C3D	2.50	129.35	124.68
25	a2	404	CLA	O2D-CGD-O1D	-2.49	118.96	123.84
25	D2	401	CLA	CMD-C2D-C3D	2.49	129.35	124.68
25	b2	616	CLA	CMB-C2B-C3B	2.49	129.35	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c2	511	CLA	CHB-C4A-NA	2.49	127.96	124.51
25	b1	604	CLA	CMD-C2D-C3D	2.49	129.34	124.68
25	b2	604	CLA	CMD-C2D-C3D	2.49	129.34	124.68
25	B2	604	CLA	CAA-C2A-C3A	-2.49	110.28	116.10
25	c2	503	CLA	CMB-C2B-C3B	2.49	129.34	124.68
25	b1	613	CLA	C4D-C3D-CAD	-2.49	107.08	108.47
23	h1	102	BCR	C38-C26-C25	-2.49	121.73	124.53
29	A1	412	LMG	O8-C28-C29	2.49	119.72	111.91
25	c2	502	CLA	CHB-C4A-NA	2.49	127.96	124.51
25	C1	508	CLA	CHB-C4A-NA	2.49	127.95	124.51
25	c2	515	CLA	CHB-C4A-NA	2.49	127.95	124.51
25	d2	405	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
23	H1	102	BCR	C7-C8-C9	-2.49	122.47	126.23
25	a1	404	CLA	CAC-C3C-C4C	2.49	128.04	124.81
25	c2	506	CLA	O2D-CGD-CBD	2.49	115.69	111.27
25	b2	624	CLA	CMD-C2D-C3D	2.49	129.33	124.68
25	c1	510	CLA	C1B-CHB-C4A	-2.49	125.19	130.12
23	h1	102	BCR	C3-C4-C5	-2.49	109.64	114.08
29	I2	101	LMG	C8-O7-C10	-2.49	111.67	117.79
25	b1	616	CLA	CMD-C2D-C3D	2.48	129.33	124.68
25	B1	604	CLA	CHB-C4A-NA	2.48	127.95	124.51
25	c1	506	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
25	b1	609	CLA	O2A-CGA-O1A	-2.48	117.33	123.59
25	B2	614	CLA	CHB-C4A-NA	2.48	127.94	124.51
25	d2	402	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
23	b1	602	BCR	C38-C26-C25	-2.48	121.74	124.53
23	k1	101	BCR	C36-C18-C17	-2.48	119.45	122.92
25	A2	403	CLA	CHB-C4A-NA	2.48	127.94	124.51
25	c1	507	CLA	C1B-CHB-C4A	-2.48	125.21	130.12
25	B2	608	CLA	CHB-C4A-NA	2.48	127.94	124.51
25	c2	510	CLA	CHB-C4A-NA	2.48	127.94	124.51
23	a2	402	BCR	C24-C23-C22	-2.48	122.49	126.23
25	C1	502	CLA	CMD-C2D-C3D	2.48	129.31	124.68
25	b1	620	CLA	C1B-CHB-C4A	-2.47	125.22	130.12
25	b2	620	CLA	C1B-CHB-C4A	-2.47	125.22	130.12
23	B1	603	BCR	C24-C23-C22	-2.47	122.50	126.23
27	D1	407	PHO	C4D-ND-C1D	-2.47	102.31	106.76
23	D1	401	BCR	C28-C27-C26	-2.47	109.66	114.08
29	c1	519	LMG	O8-C28-C29	2.47	119.67	111.91
37	b2	605	SQD	O48-C23-C24	2.47	119.67	111.91
25	b1	611	CLA	O2D-CGD-O1D	-2.47	119.00	123.84
27	a1	411	PHO	O2A-CGA-CBA	2.47	119.66	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C2	510	CLA	CMD-C2D-C3D	2.47	129.30	124.68
25	B1	608	CLA	CHB-C4A-NA	2.47	127.93	124.51
38	V2	201	HEM	CAD-CBD-CCG	-2.47	108.53	112.67
25	C1	511	CLA	CHB-C4A-NA	2.47	127.93	124.51
29	b1	621	LMG	O8-C28-C29	2.47	119.65	111.91
25	c2	506	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	c1	504	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	a2	413	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	b1	620	CLA	CMB-C2B-C3B	2.47	129.30	124.68
25	B2	604	CLA	CHB-C4A-NA	2.47	127.92	124.51
25	B1	613	CLA	C4D-C3D-CAD	-2.47	107.09	108.47
25	C1	508	CLA	CMD-C2D-C3D	2.47	129.29	124.68
25	b1	608	CLA	C1B-CHB-C4A	-2.47	125.23	130.12
25	b1	606	CLA	CMD-C2D-C3D	2.47	129.29	124.68
25	c1	504	CLA	CHB-C4A-NA	2.47	127.92	124.51
25	D1	403	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	C2	508	CLA	CMD-C2D-C3D	2.46	129.28	124.68
25	C1	504	CLA	CMD-C2D-C3D	2.46	129.28	124.68
25	b2	614	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	C2	510	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	B1	609	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	B2	608	CLA	C1B-CHB-C4A	-2.46	125.24	130.12
25	C1	502	CLA	CHB-C4A-NA	2.46	127.92	124.51
25	A1	403	CLA	C1B-CHB-C4A	-2.46	125.24	130.12
25	b2	604	CLA	CHB-C4A-NA	2.46	127.91	124.51
25	B1	611	CLA	CMD-C2D-C3D	2.46	129.28	124.68
25	A2	403	CLA	CMB-C2B-C3B	2.46	129.28	124.68
25	b2	612	CLA	CMB-C2B-C3B	2.46	129.28	124.68
25	D1	402	CLA	CMD-C2D-C3D	2.46	129.28	124.68
25	B2	616	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
23	C2	502	BCR	C3-C4-C5	-2.46	109.69	114.08
25	A2	403	CLA	C1B-CHB-C4A	-2.46	125.25	130.12
25	a2	413	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
25	B2	611	CLA	CMD-C2D-C3D	2.45	129.27	124.68
25	a1	405	CLA	C1-C2-C3	-2.45	122.78	126.75
23	a2	402	BCR	C3-C4-C5	-2.45	109.70	114.08
25	C2	504	CLA	CHB-C4A-NA	2.45	127.90	124.51
27	D1	407	PHO	CAC-C3C-C4C	2.45	127.90	125.22
25	B2	610	CLA	CMD-C2D-C3D	2.45	129.27	124.68
23	F2	401	BCR	C30-C25-C26	-2.45	119.16	122.61
25	B1	612	CLA	CMD-C2D-C3D	2.45	129.26	124.68
25	C1	510	CLA	CHB-C4A-NA	2.45	127.90	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c1	508	CLA	C1D-CHD-C4C	2.45	125.79	122.56
25	B1	619	CLA	C1B-CHB-C4A	-2.45	125.27	130.12
25	b2	619	CLA	CHB-C4A-NA	2.45	127.90	124.51
25	c2	509	CLA	CHB-C4A-NA	2.45	127.90	124.51
36	D2	408	PL9	C10-C9-C11	2.45	119.39	115.27
25	A2	404	CLA	CMB-C2B-C3B	2.45	129.26	124.68
25	c2	510	CLA	CMB-C2B-C3B	2.45	129.26	124.68
25	c1	509	CLA	CMD-C2D-C3D	2.45	129.26	124.68
25	A2	403	CLA	CMD-C2D-C3D	2.45	129.26	124.68
36	d1	409	PL9	C12-C13-C14	-2.45	121.77	127.66
25	b1	605	CLA	CHB-C4A-NA	2.45	127.89	124.51
25	c1	515	CLA	CHB-C4A-NA	2.45	127.89	124.51
25	C2	505	CLA	CHB-C4A-NA	2.44	127.89	124.51
25	A2	404	CLA	O2A-CGA-O1A	-2.44	117.43	123.59
23	J1	101	BCR	C33-C5-C4	2.44	118.31	113.62
25	c1	510	CLA	O2D-CGD-CBD	2.44	115.61	111.27
25	D2	406	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	B2	610	CLA	C1B-CHB-C4A	-2.44	125.28	130.12
25	a1	404	CLA	CHB-C4A-NA	2.44	127.89	124.51
25	B2	612	CLA	CHB-C4A-NA	2.44	127.88	124.51
25	B2	606	CLA	CHB-C4A-NA	2.44	127.88	124.51
27	D2	407	PHO	C4D-ND-C1D	-2.44	102.38	106.76
25	B2	612	CLA	C1-C2-C3	-2.44	121.83	126.04
25	b2	610	CLA	CMD-C2D-C3D	2.44	129.24	124.68
23	a1	401	BCR	C28-C27-C26	-2.44	109.73	114.08
23	c2	501	BCR	C28-C27-C26	-2.44	109.73	114.08
25	D2	404	CLA	CHB-C4A-NA	2.44	127.88	124.51
25	b1	608	CLA	C1-C2-C3	-2.44	121.83	126.04
25	C2	516	CLA	CHB-C4A-NA	2.43	127.88	124.51
25	b2	611	CLA	CHB-C4A-NA	2.43	127.88	124.51
25	a1	403	CLA	C1B-CHB-C4A	-2.43	125.30	130.12
25	C2	511	CLA	CMD-C2D-C3D	2.43	129.23	124.68
25	b2	615	CLA	CMD-C2D-C3D	2.43	129.23	124.68
36	d1	409	PL9	C25-C24-C23	-2.43	117.44	123.68
29	A2	412	LMG	C8-O7-C10	-2.43	111.81	117.79
25	a2	413	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	B1	611	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	B1	606	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	B2	619	CLA	O2D-CGD-CBD	2.43	115.58	111.27
25	A2	404	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	C1	514	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	B2	604	CLA	CMD-C2D-C3D	2.43	129.22	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C2	509	CLA	CMD-C2D-C3D	2.43	129.22	124.68
34	h1	101	DGD	C2G-O2G-C1B	-2.43	111.82	117.79
25	b1	615	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	c2	505	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	b1	607	CLA	CMB-C2B-C3B	2.43	129.22	124.68
25	b2	624	CLA	C1B-CHB-C4A	-2.43	125.31	130.12
25	B1	612	CLA	CHB-C4A-NA	2.43	127.87	124.51
25	B2	609	CLA	CHB-C4A-NA	2.42	127.86	124.51
25	C1	503	CLA	C1B-CHB-C4A	-2.42	125.32	130.12
36	D2	408	PL9	C45-C44-C46	2.42	119.35	115.27
25	B1	617	CLA	CMD-C2D-C3D	2.42	129.21	124.68
25	B2	610	CLA	CHB-C4A-NA	2.42	127.86	124.51
25	B1	616	CLA	C1B-CHB-C4A	-2.42	125.32	130.12
25	C1	505	CLA	CMD-C2D-C3D	2.42	129.21	124.68
25	b1	615	CLA	CMD-C2D-C3D	2.42	129.21	124.68
36	D2	408	PL9	C17-C18-C19	-2.42	121.83	127.66
25	b1	613	CLA	C1B-CHB-C4A	-2.42	125.33	130.12
23	B2	603	BCR	C28-C27-C26	-2.42	109.76	114.08
23	d1	405	BCR	C20-C21-C22	-2.42	123.86	127.31
25	B1	617	CLA	CHB-C4A-NA	2.42	127.86	124.51
25	b2	620	CLA	CMD-C2D-C3D	2.42	129.20	124.68
25	b1	610	CLA	CMD-C2D-C3D	2.42	129.20	124.68
23	B1	602	BCR	C38-C26-C27	2.42	118.26	113.62
25	d2	405	CLA	C1D-CHD-C4C	2.42	125.75	122.56
25	B2	607	CLA	CMB-C2B-C3B	2.41	129.19	124.68
25	c1	515	CLA	O2A-CGA-O1A	-2.41	117.50	123.59
25	c2	507	CLA	CHB-C4A-NA	2.41	127.85	124.51
25	D2	401	CLA	CHB-C4A-NA	2.41	127.85	124.51
25	b1	606	CLA	C1B-CHB-C4A	-2.41	125.34	130.12
25	d1	406	CLA	CHB-C4A-NA	2.41	127.85	124.51
23	j2	102	BCR	C38-C26-C27	2.41	118.25	113.62
25	C2	507	CLA	CMD-C2D-C3D	2.41	129.19	124.68
27	a1	411	PHO	C4D-ND-C1D	-2.41	102.43	106.76
25	B1	618	CLA	CHB-C4A-NA	2.41	127.84	124.51
25	B1	610	CLA	CHB-C4A-NA	2.41	127.84	124.51
25	A1	406	CLA	C4D-C3D-CAD	-2.41	107.13	108.47
25	C1	507	CLA	C1B-CHB-C4A	-2.41	125.35	130.12
25	C1	504	CLA	O2D-CGD-O1D	-2.41	119.13	123.84
23	d1	405	BCR	C16-C15-C14	-2.41	118.55	123.47
25	B2	607	CLA	CMD-C2D-C3D	2.41	129.18	124.68
25	C2	511	CLA	C1B-CHB-C4A	-2.40	125.36	130.12
25	c1	508	CLA	CHB-C4A-NA	2.40	127.83	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	608	CLA	CMD-C2D-C3D	2.40	129.17	124.68
25	c1	508	CLA	C1-C2-C3	-2.40	122.87	126.75
25	b1	612	CLA	CHB-C4A-NA	2.40	127.83	124.51
35	l1	101	LMT	O1'-C1'-C2'	2.40	112.05	108.30
25	c1	516	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	B1	614	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	C1	509	CLA	C1B-CHB-C4A	-2.40	125.36	130.12
25	b1	615	CLA	O2A-CGA-O1A	-2.40	117.54	123.59
25	C1	513	CLA	CHB-C4A-NA	2.40	127.83	124.51
25	B2	611	CLA	C1B-CHB-C4A	-2.40	125.37	130.12
25	b1	614	CLA	CMD-C2D-C3D	2.39	129.16	124.68
25	B2	618	CLA	CMB-C2B-C3B	2.39	129.16	124.68
25	C1	504	CLA	CHB-C4A-NA	2.39	127.82	124.51
23	b2	601	BCR	C3-C4-C5	-2.39	109.80	114.08
23	d2	401	BCR	C8-C7-C6	-2.39	120.48	127.20
38	V2	201	HEM	CBA-CAA-C2A	-2.39	108.07	112.49
23	H2	103	BCR	C3-C4-C5	-2.39	109.81	114.08
25	c1	503	CLA	C1B-CHB-C4A	-2.39	125.38	130.12
25	b2	611	CLA	CMD-C2D-C3D	2.39	129.15	124.68
25	c2	502	CLA	CMD-C2D-C3D	2.39	129.15	124.68
25	C1	514	CLA	CMD-C2D-C3D	2.39	129.15	124.68
33	D1	405	LHG	C5-O7-C7	-2.39	111.91	117.79
23	J1	101	BCR	C37-C22-C21	-2.39	119.58	122.92
25	d1	406	CLA	CMD-C2D-C3D	2.39	129.14	124.68
25	b2	613	CLA	CHB-C4A-NA	2.38	127.81	124.51
23	h1	102	BCR	C7-C8-C9	-2.38	122.63	126.23
25	d2	405	CLA	CMD-C2D-C3D	2.38	129.14	124.68
25	C2	513	CLA	CMD-C2D-C3D	2.38	129.14	124.68
25	d2	402	CLA	CMD-C2D-C3D	2.38	129.13	124.68
25	B1	616	CLA	CHB-C4A-NA	2.38	127.80	124.51
25	c2	504	CLA	CHB-C4A-NA	2.38	127.80	124.51
27	a2	416	PHO	CHD-C1D-ND	-2.38	119.63	124.58
25	b2	610	CLA	CHB-C4A-NA	2.38	127.80	124.51
27	A2	407	PHO	CHD-C1D-ND	-2.38	119.63	124.58
37	b2	605	SQD	O9-S-C6	2.38	109.76	106.94
25	C1	512	CLA	CMD-C2D-C3D	2.38	129.12	124.68
23	k2	501	BCR	C38-C26-C27	2.38	118.18	113.62
25	b2	613	CLA	CMD-C2D-C3D	2.37	129.12	124.68
25	B1	605	CLA	CHB-C4A-NA	2.37	127.80	124.51
23	C1	521	BCR	C15-C16-C17	-2.37	118.61	123.47
25	b2	624	CLA	CHB-C4A-NA	2.37	127.79	124.51
25	B2	615	CLA	C4D-C3D-CAD	-2.37	107.15	108.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	612	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	c1	513	CLA	CHB-C4A-NA	2.37	127.79	124.51
25	B1	608	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
25	b2	609	CLA	C1B-CHB-C4A	-2.37	125.42	130.12
33	B2	627	LHG	C5-O7-C7	-2.37	111.95	117.79
25	b2	619	CLA	CMD-C2D-C3D	2.37	129.11	124.68
25	B1	604	CLA	CMD-C2D-C3D	2.37	129.11	124.68
25	B1	607	CLA	CHB-C4A-NA	2.37	127.79	124.51
25	b2	611	CLA	C1-C2-C3	-2.37	121.95	126.04
37	b2	605	SQD	O7-S-C6	2.37	109.75	106.94
23	B1	601	BCR	C3-C4-C5	-2.37	109.85	114.08
25	B2	617	CLA	CMD-C2D-C3D	2.36	129.10	124.68
25	d1	404	CLA	CMD-C2D-C3D	2.36	129.10	124.68
25	b2	620	CLA	O2D-CGD-CBD	2.36	115.47	111.27
23	c2	501	BCR	C38-C26-C27	2.36	118.16	113.62
25	c2	515	CLA	CMD-C2D-C3D	2.36	129.10	124.68
25	b2	611	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
25	b1	604	CLA	CHB-C4A-NA	2.36	127.78	124.51
25	c1	512	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
25	d1	401	CLA	C1B-CHB-C4A	-2.36	125.44	130.12
27	d2	408	PHO	CMB-C2B-C1B	2.36	128.70	125.06
35	a2	406	LMT	C1B-O1B-C4'	-2.36	112.12	117.96
25	D2	401	CLA	C1B-CHB-C4A	-2.36	125.45	130.12
25	D1	403	CLA	C1B-CHB-C4A	-2.36	125.45	130.12
25	B1	605	CLA	CMD-C2D-C3D	2.36	129.09	124.68
34	C1	515	DGD	C2G-O2G-C1B	-2.36	111.99	117.79
27	D1	407	PHO	O2D-CGD-O1D	-2.36	119.23	123.84
25	c2	509	CLA	O2D-CGD-CBD	2.36	115.45	111.27
25	A1	406	CLA	O2A-CGA-O1A	-2.36	117.65	123.59
25	d1	401	CLA	O2D-CGD-CBD	2.36	115.45	111.27
33	D1	405	LHG	O8-C23-C24	2.35	119.30	111.91
25	c1	509	CLA	O2D-CGD-O1D	-2.35	119.23	123.84
25	B1	609	CLA	C1B-CHB-C4A	-2.35	125.45	130.12
25	B2	609	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	C1	506	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	b1	609	CLA	CHB-C4A-NA	2.35	127.76	124.51
25	d1	401	CLA	O2A-CGA-O1A	-2.35	117.66	123.59
23	H1	102	BCR	C11-C10-C9	-2.35	123.95	127.31
25	C2	509	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	K2	101	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	C1	514	CLA	C1B-CHB-C4A	-2.35	125.46	130.12
25	b1	617	CLA	C1B-CHB-C4A	-2.35	125.47	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B2	605	CLA	CHB-C4A-NA	2.35	127.76	124.51
25	B2	612	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
27	a2	416	PHO	CAC-C3C-C4C	2.34	127.78	125.22
36	d2	409	PL9	C51-C49-C50	2.34	119.78	114.60
25	c1	503	CLA	CMD-C2D-C3D	2.34	129.06	124.68
25	b2	610	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
25	C2	508	CLA	C1-C2-C3	-2.34	122.96	126.75
25	A2	404	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
25	C2	503	CLA	CMD-C2D-C3D	2.34	129.06	124.68
25	C1	507	CLA	CHB-C4A-NA	2.34	127.75	124.51
25	b1	607	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
25	B2	606	CLA	C1B-CHB-C4A	-2.34	125.48	130.12
23	h1	102	BCR	C16-C15-C14	-2.34	118.68	123.47
36	D1	408	PL9	C45-C44-C46	2.34	119.21	115.27
25	A1	403	CLA	CHB-C4A-NA	2.34	127.75	124.51
23	B2	602	BCR	C3-C4-C5	-2.34	109.90	114.08
25	C2	507	CLA	CHB-C4A-NA	2.34	127.75	124.51
25	B2	604	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
23	j2	102	BCR	C36-C18-C17	-2.34	119.65	122.92
25	d1	401	CLA	CHB-C4A-NA	2.34	127.74	124.51
25	b1	612	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
25	d1	406	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
25	d2	404	CLA	C1-C2-C3	-2.34	122.97	126.75
23	h2	101	BCR	C23-C24-C25	-2.34	120.64	127.20
25	B1	617	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
25	b1	608	CLA	CMD-C2D-C3D	2.33	129.05	124.68
25	b1	616	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
25	B2	614	CLA	O2A-CGA-O1A	-2.33	117.70	123.59
25	c1	512	CLA	CMD-C2D-C3D	2.33	129.04	124.68
23	K2	104	BCR	C38-C26-C27	2.33	118.10	113.62
29	d1	408	LMG	C8-O7-C10	-2.33	112.05	117.79
23	K2	102	BCR	C7-C8-C9	-2.33	122.71	126.23
27	a2	416	PHO	CMB-C2B-C1B	2.33	128.65	125.06
23	K1	101	BCR	C7-C6-C5	-2.33	115.82	121.46
25	B2	617	CLA	C1B-CHB-C4A	-2.33	125.50	130.12
23	a2	402	BCR	C21-C20-C19	-2.33	115.95	123.22
25	b2	606	CLA	C1B-CHB-C4A	-2.33	125.51	130.12
37	D2	402	SQD	O6-C1-C2	2.32	111.93	108.30
25	D1	402	CLA	CHB-C4A-NA	2.32	127.72	124.51
25	C2	516	CLA	CMD-C2D-C3D	2.32	129.02	124.68
25	B1	606	CLA	O2A-CGA-O1A	-2.32	117.74	123.59
25	B1	611	CLA	C4D-C3D-CAD	-2.32	107.18	108.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c2	511	CLA	CMD-C2D-C3D	2.32	129.01	124.68
25	B2	613	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
25	b1	611	CLA	C1B-CHB-C4A	-2.32	125.53	130.12
36	d1	409	PL9	C45-C44-C46	2.32	119.17	115.27
25	B1	611	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	b1	606	CLA	O2A-CGA-O1A	-2.31	117.75	123.59
25	b1	611	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	c1	507	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	a2	413	CLA	C1-C2-C3	-2.31	123.01	126.75
25	c1	516	CLA	C1B-CHB-C4A	-2.31	125.54	130.12
25	c1	505	CLA	CHB-C4A-NA	2.31	127.71	124.51
25	C2	518	CLA	O2D-CGD-CBD	2.31	115.37	111.27
29	d1	408	LMG	O8-C28-C29	2.31	119.15	111.91
25	B1	613	CLA	CHB-C4A-NA	2.31	127.70	124.51
23	C1	501	BCR	C23-C24-C25	-2.31	120.73	127.20
25	b1	617	CLA	CMD-C2D-C3D	2.31	128.99	124.68
23	b2	602	BCR	C37-C22-C21	-2.31	119.69	122.92
25	b1	607	CLA	CMD-C2D-C3D	2.30	128.99	124.68
25	C1	509	CLA	O2D-CGD-CBD	2.30	115.36	111.27
25	b1	608	CLA	CHB-C4A-NA	2.30	127.70	124.51
33	b1	622	LHG	C5-O7-C7	-2.30	112.12	117.79
25	c2	515	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
25	B1	607	CLA	CMD-C2D-C3D	2.30	128.98	124.68
25	b2	604	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
23	B2	601	BCR	C38-C26-C27	2.30	118.03	113.62
25	d1	401	CLA	CMD-C2D-C3D	2.30	128.97	124.68
25	B2	607	CLA	O2A-CGA-O1A	-2.30	117.80	123.59
23	b2	601	BCR	C23-C24-C25	-2.30	120.76	127.20
34	c2	517	DGD	O1G-C1A-C2A	2.30	119.11	111.91
23	k1	101	BCR	C8-C7-C6	-2.29	120.76	127.20
25	b2	616	CLA	O2A-CGA-O1A	-2.29	117.81	123.59
25	A1	404	CLA	O2A-CGA-O1A	-2.29	117.81	123.59
25	B1	613	CLA	CMB-C2B-C3B	2.29	128.96	124.68
35	m2	103	LMT	C1B-O5B-C5B	-2.29	109.19	113.69
25	b2	619	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
25	C2	518	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
25	D2	406	CLA	O2D-CGD-CBD	2.29	115.34	111.27
27	A2	407	PHO	O2A-CGA-CBA	2.29	119.09	111.91
25	b1	610	CLA	O2A-CGA-O1A	-2.29	117.82	123.59
23	a1	401	BCR	C23-C24-C25	-2.29	120.78	127.20
25	c2	506	CLA	CHB-C4A-NA	2.29	127.67	124.51
25	A2	402	CLA	CHB-C4A-NA	2.29	127.67	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A2	407	PHO	O2D-CGD-O1D	-2.29	119.37	123.84
25	B2	612	CLA	CMD-C2D-C3D	2.28	128.95	124.68
25	B2	616	CLA	O2A-CGA-O1A	-2.28	117.83	123.59
25	c1	509	CLA	C1B-CHB-C4A	-2.28	125.59	130.12
25	B2	611	CLA	CHB-C4A-NA	2.28	127.67	124.51
25	C2	504	CLA	CMD-C2D-C3D	2.28	128.94	124.68
36	D2	408	PL9	C35-C34-C36	2.28	119.11	115.27
29	F2	402	LMG	C8-O7-C10	-2.28	112.18	117.79
25	b1	604	CLA	C1B-CHB-C4A	-2.28	125.60	130.12
23	b2	601	BCR	C33-C5-C4	2.28	117.99	113.62
25	C2	510	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
34	c1	520	DGD	O1G-C1A-C2A	2.28	119.05	111.91
23	B1	603	BCR	C29-C30-C25	2.28	113.99	110.48
25	D2	404	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
25	a1	405	CLA	O2A-CGA-O1A	-2.28	117.85	123.59
25	B1	604	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
25	C1	512	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
23	D1	401	BCR	C21-C20-C19	-2.28	116.12	123.22
25	b2	608	CLA	CHB-C4A-NA	2.27	127.66	124.51
23	b1	602	BCR	C38-C26-C27	2.27	117.98	113.62
25	c2	505	CLA	CMD-C2D-C3D	2.27	128.93	124.68
25	c2	512	CLA	C1B-CHB-C4A	-2.27	125.61	130.12
25	C2	513	CLA	C1B-CHB-C4A	-2.27	125.61	130.12
23	c1	502	BCR	C16-C17-C18	-2.27	124.06	127.31
25	C1	504	CLA	O2A-CGA-O1A	-2.27	117.86	123.59
25	c2	511	CLA	C1B-CHB-C4A	-2.27	125.62	130.12
25	c1	506	CLA	CMD-C2D-C3D	2.27	128.92	124.68
23	h1	102	BCR	C38-C26-C27	2.26	117.97	113.62
23	B2	601	BCR	C3-C4-C5	-2.26	110.04	114.08
27	a1	411	PHO	CHD-C1D-ND	-2.26	119.87	124.58
25	B2	613	CLA	CHB-C4A-NA	2.26	127.64	124.51
25	C1	508	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
27	D2	407	PHO	O2D-CGD-O1D	-2.26	119.42	123.84
38	E1	101	HEM	C1D-C2D-C3D	-2.26	105.42	107.00
25	C2	508	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	B2	618	CLA	O2D-CGD-CBD	2.26	115.28	111.27
25	C2	507	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
25	D2	406	CLA	CMD-C2D-C3D	2.26	128.90	124.68
25	B2	615	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
25	C1	513	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
25	d1	401	CLA	C1D-CHD-C4C	2.26	125.54	122.56
25	d2	405	CLA	CHB-C4A-NA	2.26	127.63	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	C2	515	LMG	C8-O7-C10	-2.26	112.23	117.79
25	b1	619	CLA	C1B-CHB-C4A	-2.26	125.65	130.12
25	C1	506	CLA	O2D-CGD-CBD	2.26	115.28	111.27
25	c1	511	CLA	CMD-C2D-C3D	2.25	128.90	124.68
25	c2	507	CLA	C1B-CHB-C4A	-2.25	125.65	130.12
33	d2	403	LHG	C5-O7-C7	-2.25	112.25	117.79
25	a2	404	CLA	CHB-C4A-NA	2.25	127.63	124.51
23	B1	602	BCR	C1-C6-C5	-2.25	119.44	122.61
25	b1	607	CLA	O2D-CGD-CBD	2.25	115.27	111.27
29	A1	412	LMG	C8-O7-C10	-2.25	112.25	117.79
25	b2	615	CLA	O2A-CGA-O1A	-2.25	117.91	123.59
25	b2	612	CLA	C1B-CHB-C4A	-2.25	125.66	130.12
23	B2	602	BCR	C23-C24-C25	-2.25	120.88	127.20
25	B2	606	CLA	CMD-C2D-C3D	2.25	128.89	124.68
23	h2	101	BCR	C15-C16-C17	-2.25	118.87	123.47
25	D2	404	CLA	C1-C2-C3	-2.25	122.16	126.04
25	C2	503	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
25	C1	510	CLA	C1B-CHB-C4A	-2.25	125.67	130.12
25	A1	405	CLA	CMD-C2D-C3D	2.25	128.88	124.68
27	A1	408	PHO	O2A-CGA-CBA	2.24	118.95	111.91
25	C1	506	CLA	CHB-C4A-NA	2.24	127.61	124.51
25	B1	613	CLA	C1B-CHB-C4A	-2.24	125.67	130.12
25	c1	507	CLA	O2D-CGD-CBD	2.24	115.25	111.27
34	c1	518	DGD	O6D-C5D-C6D	2.24	111.19	106.67
23	k2	501	BCR	C8-C7-C6	-2.24	120.92	127.20
25	B1	607	CLA	CMB-C2B-C3B	2.24	128.86	124.68
25	C2	504	CLA	C1B-CHB-C4A	-2.23	125.69	130.12
23	b2	601	BCR	C15-C16-C17	-2.23	118.90	123.47
25	c1	508	CLA	CMD-C2D-C3D	2.23	128.86	124.68
25	b2	618	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
25	B1	618	CLA	C1B-CHB-C4A	-2.23	125.69	130.12
23	B2	601	BCR	C15-C16-C17	-2.23	118.90	123.47
23	z2	101	BCR	C28-C27-C26	-2.23	110.09	114.08
29	D1	406	LMG	O8-C28-C29	2.23	118.91	111.91
25	C1	506	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
23	b1	603	BCR	C33-C5-C6	-2.23	122.02	124.53
25	B2	615	CLA	O2A-CGA-O1A	-2.23	117.97	123.59
25	C2	518	CLA	CAA-C2A-C3A	-2.23	110.90	116.10
23	c1	501	BCR	C4-C5-C6	-2.23	119.50	122.73
23	F2	401	BCR	C15-C16-C17	-2.23	118.91	123.47
25	B2	611	CLA	O2A-CGA-O1A	-2.23	117.97	123.59
38	e2	101	HEM	CMC-C2C-C3C	2.23	128.84	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C1	510	CLA	CMD-C2D-C3D	2.23	128.84	124.68
38	E1	101	HEM	CMC-C2C-C3C	2.22	128.84	124.68
25	B1	607	CLA	O2A-CGA-O1A	-2.22	117.98	123.59
27	d2	408	PHO	O2D-CGD-O1D	-2.22	119.49	123.84
23	j2	102	BCR	C8-C7-C6	-2.22	120.96	127.20
25	C1	503	CLA	OBD-CAD-CBD	-2.22	122.72	125.89
25	C1	502	CLA	C1B-CHB-C4A	-2.22	125.72	130.12
25	c1	505	CLA	O2A-CGA-O1A	-2.22	117.99	123.59
25	c2	503	CLA	OBD-CAD-CBD	-2.22	122.72	125.89
25	b2	616	CLA	CMD-C2D-C3D	2.22	128.83	124.68
36	d1	409	PL9	C51-C49-C50	2.22	119.50	114.60
25	B1	616	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
25	b2	615	CLA	C1B-CHB-C4A	-2.22	125.73	130.12
23	h2	101	BCR	C33-C5-C4	2.22	117.87	113.62
25	C2	516	CLA	C1B-CHB-C4A	-2.22	125.73	130.12
25	c2	512	CLA	C1D-CHD-C4C	2.22	125.48	122.56
25	b2	624	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
25	B1	615	CLA	O2A-CGA-O1A	-2.21	118.00	123.59
23	K1	101	BCR	C1-C6-C7	2.21	122.04	115.78
34	C1	516	DGD	O1G-C1A-C2A	2.21	118.86	111.91
25	c1	516	CLA	CMD-C2D-C3D	2.21	128.82	124.68
29	d1	411	LMG	C8-O7-C10	-2.21	112.34	117.79
25	b1	609	CLA	C1B-CHB-C4A	-2.21	125.73	130.12
23	k2	501	BCR	C33-C5-C4	2.21	117.86	113.62
25	b2	617	CLA	CMD-C2D-C3D	2.21	128.81	124.68
25	A1	403	CLA	O2A-CGA-O1A	-2.21	118.01	123.59
33	b1	622	LHG	O8-C23-O10	-2.21	118.02	123.59
25	B1	609	CLA	O2A-CGA-O1A	-2.21	118.02	123.59
23	b1	601	BCR	C38-C26-C27	2.21	117.85	113.62
23	h1	102	BCR	C39-C30-C25	-2.21	106.72	110.30
25	B2	619	CLA	CMD-C2D-C3D	2.21	128.81	124.68
25	c2	503	CLA	C1B-CHB-C4A	-2.21	125.75	130.12
23	B2	603	BCR	C3-C4-C5	-2.20	110.14	114.08
23	b2	602	BCR	C33-C5-C6	-2.20	122.05	124.53
37	D2	402	SQD	O8-S-C6	2.20	109.25	105.74
25	a2	404	CLA	O2A-CGA-O1A	-2.20	118.03	123.59
27	D1	407	PHO	CMB-C2B-C1B	2.20	128.45	125.06
25	b1	620	CLA	CMD-C2D-C3D	2.20	128.80	124.68
29	a1	412	LMG	O1-C1-C2	2.20	111.74	108.30
25	a2	405	CLA	CAC-C3C-C4C	2.20	127.67	124.81
33	d1	407	LHG	O8-C23-C24	2.20	118.81	111.91
23	j2	102	BCR	C33-C5-C4	2.20	117.84	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a2	416	PHO	O1D-CGD-CBD	-2.20	119.98	124.48
23	K1	101	BCR	C16-C15-C14	-2.20	118.97	123.47
38	E2	101	HEM	CMC-C2C-C3C	2.20	128.79	124.68
23	b2	603	BCR	C33-C5-C4	2.20	117.84	113.62
25	c2	513	CLA	C1B-CHB-C4A	-2.20	125.77	130.12
25	C1	511	CLA	CMD-C2D-C3D	2.20	128.79	124.68
25	b1	614	CLA	C1D-CHD-C4C	2.20	125.46	122.56
25	c1	508	CLA	O2A-CGA-O1A	-2.20	118.05	123.59
25	b2	606	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
25	c2	510	CLA	CMD-C2D-C3D	2.19	128.78	124.68
25	B1	615	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	c1	515	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
25	B2	616	CLA	CMD-C2D-C3D	2.19	128.78	124.68
25	B1	610	CLA	CMD-C2D-C3D	2.19	128.78	124.68
25	B2	613	CLA	O2D-CGD-CBD	2.19	115.16	111.27
25	B2	618	CLA	C1B-CHB-C4A	-2.19	125.78	130.12
23	J1	101	BCR	C38-C26-C27	2.19	117.82	113.62
25	C1	513	CLA	CMD-C2D-C3D	2.19	128.77	124.68
25	a1	404	CLA	C1D-CHD-C4C	2.19	125.44	122.56
25	b2	614	CLA	C1B-CHB-C4A	-2.19	125.79	130.12
23	C1	521	BCR	C8-C7-C6	-2.18	121.07	127.20
23	K1	101	BCR	C35-C13-C14	-2.18	119.86	122.92
38	f1	101	HEM	C1D-C2D-C3D	-2.18	105.48	107.00
38	E2	101	HEM	C1D-C2D-C3D	-2.18	105.48	107.00
34	H1	101	DGD	C2G-O2G-C1B	-2.18	112.43	117.79
23	B2	602	BCR	C38-C26-C27	2.18	117.80	113.62
36	D2	408	PL9	C12-C13-C14	-2.18	122.42	127.66
38	v1	201	HEM	CMB-C2B-C3B	2.18	128.75	124.68
23	C2	502	BCR	C28-C27-C26	-2.18	110.19	114.08
34	C1	517	DGD	O1G-C1A-C2A	2.18	118.74	111.91
36	D1	408	PL9	C42-C43-C44	-2.18	122.42	127.66
25	b2	609	CLA	O2A-CGA-O1A	-2.18	118.10	123.59
25	c1	510	CLA	C4D-C3D-CAD	-2.18	107.26	108.47
23	c1	502	BCR	C20-C19-C18	2.17	132.53	126.42
25	b2	612	CLA	CHB-C4A-NA	2.17	127.52	124.51
25	C2	505	CLA	C1B-CHB-C4A	-2.17	125.81	130.12
29	D1	406	LMG	C8-O7-C10	-2.17	112.44	117.79
25	c2	502	CLA	C1B-CHB-C4A	-2.17	125.81	130.12
23	h1	102	BCR	C36-C18-C17	-2.17	119.88	122.92
23	H1	102	BCR	C3-C4-C5	-2.17	110.20	114.08
23	C1	501	BCR	C20-C21-C22	-2.17	124.21	127.31
25	b1	604	CLA	O2A-CGA-O1A	-2.17	118.11	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	d1	404	CLA	OBD-CAD-CBD	-2.17	122.79	125.89
33	L2	101	LHG	O7-C7-O9	-2.17	118.45	123.70
33	D1	404	LHG	C5-O7-C7	-2.17	112.44	117.79
23	F2	401	BCR	C33-C5-C4	2.17	117.78	113.62
25	b1	610	CLA	OBD-CAD-CBD	-2.17	122.80	125.89
25	b1	611	CLA	C4D-C3D-CAD	-2.17	107.26	108.47
25	c2	509	CLA	C4D-C3D-CAD	-2.17	107.26	108.47
25	a1	403	CLA	OBD-CAD-CBD	-2.17	122.80	125.89
25	c2	508	CLA	C1B-CHB-C4A	-2.17	125.82	130.12
33	d2	406	LHG	C5-O7-C7	-2.17	112.46	117.79
34	c1	518	DGD	O2G-C1B-O1B	-2.17	118.47	123.70
34	C1	517	DGD	C2G-O2G-C1B	-2.16	112.46	117.79
23	K2	104	BCR	C8-C7-C6	-2.16	121.12	127.20
25	B1	614	CLA	C1B-CHB-C4A	-2.16	125.83	130.12
25	b2	618	CLA	C1B-CHB-C4A	-2.16	125.83	130.12
25	K2	101	CLA	CMD-C2D-C3D	2.16	128.72	124.68
25	B1	617	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
25	c1	505	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
25	B2	609	CLA	C1-C2-C3	-2.16	122.31	126.04
29	a2	412	LMG	C7-O1-C1	-2.16	109.52	113.74
25	A2	402	CLA	O2A-CGA-O1A	-2.16	118.14	123.59
23	B2	601	BCR	C33-C5-C4	2.16	117.77	113.62
23	B1	601	BCR	C27-C26-C25	-2.16	119.60	122.73
23	K2	102	BCR	C8-C7-C6	-2.16	121.14	127.20
25	b2	616	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
29	b2	622	LMG	C8-O7-C10	-2.16	112.48	117.79
25	A2	404	CLA	CMD-C2D-C3D	2.16	128.71	124.68
25	b2	608	CLA	CMD-C2D-C3D	2.16	128.71	124.68
25	b1	611	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
23	b2	603	BCR	C34-C9-C10	-2.15	119.91	122.92
25	a2	405	CLA	CMD-C2D-C3D	2.15	128.71	124.68
23	C2	502	BCR	C15-C16-C17	-2.15	119.06	123.47
25	b1	607	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
23	B1	602	BCR	C29-C30-C25	2.15	113.79	110.48
27	a2	416	PHO	CED-O2D-CGD	2.15	120.80	115.94
25	b1	619	CLA	O2A-CGA-O1A	-2.15	118.17	123.59
33	l1	102	LHG	O7-C7-O9	-2.15	118.51	123.70
23	J1	101	BCR	C28-C27-C26	-2.15	110.24	114.08
25	B2	605	CLA	C4D-C3D-CAD	-2.15	107.27	108.47
25	C1	511	CLA	C1B-CHB-C4A	-2.15	125.86	130.12
23	c1	502	BCR	C19-C18-C17	-2.15	115.64	118.94
23	a1	401	BCR	C21-C20-C19	-2.15	116.52	123.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	k2	501	BCR	C11-C12-C13	-2.15	120.38	126.42
25	d1	406	CLA	C1D-CHD-C4C	2.15	125.39	122.56
25	b1	614	CLA	C1B-CHB-C4A	-2.15	125.87	130.12
25	c2	510	CLA	C1B-CHB-C4A	-2.14	125.87	130.12
25	a2	405	CLA	O2A-CGA-O1A	-2.14	118.18	123.59
25	C1	511	CLA	C1D-CHD-C4C	2.14	125.39	122.56
23	B2	602	BCR	C2-C1-C6	2.14	113.78	110.48
33	a1	407	LHG	O8-C23-O10	-2.14	118.19	123.59
25	b2	610	CLA	O2A-CGA-O1A	-2.14	118.19	123.59
25	B2	613	CLA	C4D-C3D-CAD	-2.14	107.28	108.47
36	D2	408	PL9	C25-C24-C23	-2.14	118.19	123.68
25	C1	512	CLA	O2A-CGA-O1A	-2.14	118.19	123.59
23	b2	603	BCR	C38-C26-C27	2.14	117.73	113.62
38	v2	201	HEM	CMA-C3A-C4A	-2.14	125.18	128.46
25	B2	617	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
25	C1	507	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
25	D2	404	CLA	C1D-CHD-C4C	2.13	125.38	122.56
25	A1	403	CLA	CMD-C2D-C3D	2.13	128.67	124.68
29	b1	624	LMG	O8-C28-C29	2.13	118.61	111.91
25	c2	504	CLA	C1B-CHB-C4A	-2.13	125.89	130.12
25	K2	101	CLA	C1D-CHD-C4C	2.13	125.37	122.56
25	b2	608	CLA	O2A-CGA-O1A	-2.13	118.21	123.59
25	c2	512	CLA	CMD-C2D-C3D	2.13	128.66	124.68
23	j2	102	BCR	C7-C8-C9	-2.13	123.02	126.23
23	B2	601	BCR	C38-C26-C25	-2.13	122.14	124.53
25	a1	404	CLA	CMB-C2B-C3B	2.13	128.66	124.68
23	a1	401	BCR	C38-C26-C27	2.13	117.71	113.62
25	c1	506	CLA	C1D-CHD-C4C	2.13	125.37	122.56
25	C2	506	CLA	C4D-C3D-CAD	-2.13	107.28	108.47
25	b2	614	CLA	C1D-CHD-C4C	2.13	125.37	122.56
25	B1	614	CLA	C1D-CHD-C4C	2.13	125.37	122.56
23	h2	101	BCR	C28-C27-C26	-2.13	110.28	114.08
23	K2	104	BCR	C27-C26-C25	-2.13	119.64	122.73
29	d2	407	LMG	O8-C28-C29	2.13	118.58	111.91
36	d1	409	PL9	C12-C11-C9	-2.13	105.98	112.98
25	b1	620	CLA	O2D-CGD-CBD	2.13	115.05	111.27
25	C1	507	CLA	C1D-CHD-C4C	2.13	125.36	122.56
25	c1	503	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
25	A1	405	CLA	C1D-CHD-C4C	2.12	125.36	122.56
25	D2	406	CLA	OBD-CAD-CBD	-2.12	122.86	125.89
23	b1	601	BCR	C33-C5-C4	2.12	117.69	113.62
25	D2	401	CLA	C1D-CHD-C4C	2.12	125.36	122.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C1	521	BCR	C28-C27-C26	-2.12	110.29	114.08
25	C1	513	CLA	C1D-CHD-C4C	2.12	125.36	122.56
25	B2	612	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
25	A1	405	CLA	C4D-C3D-CAD	-2.12	107.29	108.47
23	K2	102	BCR	C38-C26-C27	2.12	117.68	113.62
25	a2	404	CLA	CMD-C2D-C3D	2.12	128.64	124.68
25	C2	505	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
37	B2	623	SQD	O8-S-C6	2.12	109.11	105.74
23	C1	501	BCR	C33-C5-C4	2.12	117.68	113.62
25	b1	612	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
25	D2	401	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
38	e2	101	HEM	CAA-CBA-CGA	-2.12	109.12	112.67
23	H2	103	BCR	C16-C15-C14	-2.12	119.14	123.47
37	D1	409	SQD	O48-C23-O10	-2.12	118.25	123.59
27	A1	408	PHO	CHD-C1D-ND	-2.11	120.18	124.58
25	B2	607	CLA	C1B-CHB-C4A	-2.11	125.93	130.12
33	l2	101	LHG	O8-C23-O10	-2.11	118.26	123.59
23	H2	103	BCR	C10-C11-C12	-2.11	116.62	123.22
25	B2	610	CLA	O2A-CGA-O1A	-2.11	118.26	123.59
25	B2	612	CLA	C1D-CHD-C4C	2.11	125.34	122.56
25	A2	404	CLA	O2D-CGD-CBD	2.11	115.02	111.27
25	d2	405	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
25	B1	611	CLA	C1D-CHD-C4C	2.11	125.34	122.56
38	v2	201	HEM	CMB-C2B-C3B	2.11	128.63	124.68
25	C1	504	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
25	c1	513	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
23	h1	102	BCR	C8-C7-C6	-2.11	121.28	127.20
23	b2	602	BCR	C10-C11-C12	-2.11	116.64	123.22
25	b2	613	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
25	c2	508	CLA	O2A-CGA-O1A	-2.11	118.28	123.59
25	B1	607	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
25	b1	615	CLA	C1B-CHB-C4A	-2.11	125.94	130.12
37	D2	402	SQD	O7-S-C6	2.11	109.44	106.94
25	c1	511	CLA	C1B-CHB-C4A	-2.11	125.95	130.12
25	c2	504	CLA	O2A-CGA-O1A	-2.11	118.28	123.59
23	h2	101	BCR	C8-C7-C6	-2.11	121.29	127.20
23	j2	102	BCR	C15-C16-C17	-2.10	119.16	123.47
25	B2	608	CLA	O2A-CGA-O1A	-2.10	118.28	123.59
23	A2	401	BCR	C3-C4-C5	-2.10	110.32	114.08
25	B1	619	CLA	C4D-C3D-CAD	-2.10	107.30	108.47
25	a1	403	CLA	CHB-C4A-NA	2.10	127.42	124.51
33	D1	404	LHG	O8-C23-O10	-2.10	118.29	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b2	611	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
25	B2	608	CLA	CMD-C2D-C3D	2.10	128.61	124.68
27	D1	407	PHO	CED-O2D-CGD	2.10	120.68	115.94
34	H2	101	DGD	O6D-C5D-C6D	2.10	110.90	106.67
23	H2	103	BCR	C16-C17-C18	-2.10	120.73	124.69
23	F2	401	BCR	C3-C4-C5	-2.10	110.33	114.08
25	C1	504	CLA	C1D-CHD-C4C	2.10	125.33	122.56
33	D2	403	LHG	O8-C23-O10	-2.10	118.30	123.59
29	b1	624	LMG	O7-C10-O9	-2.10	118.64	123.70
25	c2	505	CLA	C1D-CHD-C4C	2.10	125.33	122.56
38	f1	101	HEM	CMC-C2C-C3C	2.10	128.60	124.68
25	c1	513	CLA	C1B-CHB-C4A	-2.10	125.97	130.12
25	B1	615	CLA	C4D-C3D-CAD	-2.09	107.30	108.47
34	c2	516	DGD	O1G-C1A-O1A	-2.09	118.31	123.59
25	B1	611	CLA	O2A-CGA-O1A	-2.09	118.31	123.59
25	b1	620	CLA	C1D-CHD-C4C	2.09	125.32	122.56
23	c1	501	BCR	C15-C16-C17	-2.09	119.19	123.47
25	c1	510	CLA	OBD-CAD-CBD	-2.09	122.90	125.89
23	d1	405	BCR	C3-C4-C5	-2.09	110.34	114.08
23	d1	405	BCR	C21-C20-C19	-2.09	116.69	123.22
23	d1	405	BCR	C34-C9-C10	-2.09	119.99	122.92
23	C2	502	BCR	C33-C5-C4	2.09	117.63	113.62
23	k1	101	BCR	C28-C27-C26	-2.09	110.34	114.08
23	b2	601	BCR	C27-C26-C25	-2.09	119.70	122.73
23	B1	601	BCR	C21-C20-C19	-2.09	116.69	123.22
36	d2	409	PL9	C35-C34-C36	2.09	118.79	115.27
34	C1	515	DGD	O2G-C1B-O1B	-2.09	118.66	123.70
23	d2	401	BCR	C37-C22-C21	-2.09	120.00	122.92
25	B2	607	CLA	C1-C2-C3	-2.09	122.43	126.04
25	b1	614	CLA	O2A-CGA-O1A	-2.09	118.33	123.59
23	D1	401	BCR	C3-C4-C5	-2.09	110.35	114.08
25	A1	404	CLA	CMD-C2D-C3D	2.09	128.58	124.68
25	D1	402	CLA	O2A-CGA-O1A	-2.09	118.33	123.59
37	D1	409	SQD	O9-S-C6	2.08	109.42	106.94
29	F2	402	LMG	O8-C28-C29	2.08	118.45	111.91
25	b1	617	CLA	O2A-CGA-O1A	-2.08	118.33	123.59
25	a1	405	CLA	CMD-C2D-C3D	2.08	128.57	124.68
25	C2	506	CLA	OBD-CAD-CBD	-2.08	122.92	125.89
25	B1	610	CLA	O2A-CGA-O1A	-2.08	118.34	123.59
25	b1	615	CLA	C4D-C3D-CAD	-2.08	107.31	108.47
33	b1	622	LHG	O7-C7-O9	-2.08	118.68	123.70
25	c2	512	CLA	O2A-CGA-O1A	-2.08	118.35	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a1	411	PHO	CMC-C2C-C1C	2.08	128.26	125.06
23	B1	601	BCR	C33-C5-C4	2.08	117.60	113.62
25	C1	502	CLA	O2D-CGD-CBD	2.07	114.95	111.27
25	C1	505	CLA	C1D-CHD-C4C	2.07	125.29	122.56
23	a1	401	BCR	C34-C9-C10	-2.07	120.02	122.92
23	h2	101	BCR	C37-C22-C23	2.07	121.34	118.08
33	B1	621	LHG	C5-O7-C7	-2.07	112.69	117.79
23	K2	102	BCR	C28-C27-C26	-2.07	110.38	114.08
25	b1	615	CLA	C1D-CHD-C4C	2.07	125.29	122.56
23	d2	401	BCR	C20-C19-C18	-2.07	120.61	126.42
23	F2	401	BCR	C23-C24-C25	-2.07	121.39	127.20
34	c1	514	DGD	C1E-O6E-C5E	-2.07	109.63	113.69
23	B2	603	BCR	C11-C12-C13	-2.07	120.61	126.42
25	c2	506	CLA	O2A-CGA-O1A	-2.07	118.38	123.59
23	J1	101	BCR	C15-C16-C17	-2.07	119.24	123.47
27	d1	403	PHO	CMB-C2B-C1B	2.07	128.25	125.06
25	C2	506	CLA	C1D-CHD-C4C	2.07	125.28	122.56
25	B2	614	CLA	C1B-CHB-C4A	-2.06	126.03	130.12
25	c2	510	CLA	C1D-CHD-C4C	2.06	125.28	122.56
36	d2	409	PL9	C45-C44-C46	2.06	118.74	115.27
25	c2	506	CLA	C1D-CHD-C4C	2.06	125.28	122.56
25	b2	616	CLA	O2D-CGD-CBD	2.06	114.94	111.27
25	c2	506	CLA	CBC-CAC-C3C	2.06	118.12	112.43
38	e2	101	HEM	C1D-C2D-C3D	-2.06	105.56	107.00
25	C1	507	CLA	CBC-CAC-C3C	2.06	118.12	112.43
25	B2	605	CLA	O1D-CGD-CBD	2.06	128.70	124.48
25	C2	516	CLA	C1D-CHD-C4C	2.06	125.28	122.56
25	B1	614	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
25	c2	513	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
25	c1	516	CLA	O2A-CGA-O1A	-2.06	118.39	123.59
25	c1	511	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
37	B2	623	SQD	O6-C1-C2	2.06	111.52	108.30
27	A2	407	PHO	CMC-C2C-C1C	2.06	128.23	125.06
25	C2	511	CLA	O2D-CGD-CBD	2.06	114.92	111.27
25	a1	404	CLA	O2A-CGA-O1A	-2.06	118.40	123.59
35	l1	101	LMT	C1-O1'-C1'	-2.06	110.43	113.84
23	b1	602	BCR	C11-C12-C13	2.06	132.19	126.42
25	C1	509	CLA	CHB-C4A-NA	2.06	127.35	124.51
38	V1	201	HEM	CMB-C2B-C3B	2.05	128.52	124.68
25	B2	608	CLA	C1-C2-C3	-2.05	122.49	126.04
33	d2	406	LHG	O8-C23-O10	-2.05	118.41	123.59
25	B2	618	CLA	C4D-C3D-CAD	-2.05	107.33	108.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	D1	407	PHO	CMC-C2C-C1C	2.05	128.23	125.06
29	B2	620	LMG	O8-C28-O10	-2.05	118.41	123.59
25	d1	406	CLA	O2D-CGD-CBD	2.05	114.91	111.27
25	c1	516	CLA	C1D-CHD-C4C	2.05	125.27	122.56
25	A1	406	CLA	C1D-CHD-C4C	2.05	125.27	122.56
23	B1	603	BCR	C3-C4-C5	-2.05	110.42	114.08
25	c2	513	CLA	C1D-CHD-C4C	2.05	125.26	122.56
25	c2	502	CLA	O2A-CGA-O1A	-2.05	118.42	123.59
25	d2	402	CLA	C1-C2-C3	-2.05	122.50	126.04
25	c1	504	CLA	OBD-CAD-CBD	-2.05	122.97	125.89
23	a2	402	BCR	C16-C15-C14	-2.05	119.28	123.47
23	k1	101	BCR	C20-C19-C18	2.05	132.17	126.42
25	b1	613	CLA	CHB-C4A-NA	2.05	127.34	124.51
25	b1	609	CLA	O2D-CGD-CBD	2.05	114.90	111.27
23	K1	101	BCR	C36-C18-C17	-2.05	120.06	122.92
23	c2	501	BCR	C1-C6-C7	2.05	121.56	115.78
25	C1	512	CLA	C1D-CHD-C4C	2.05	125.26	122.56
25	b1	606	CLA	O2D-CGD-CBD	2.04	114.90	111.27
25	B1	619	CLA	O2D-CGD-CBD	2.04	114.90	111.27
25	b2	615	CLA	C4D-C3D-CAD	-2.04	107.33	108.47
25	B1	616	CLA	C1D-CHD-C4C	2.04	125.26	122.56
38	V1	201	HEM	CMA-C3A-C4A	-2.04	125.32	128.46
25	b2	617	CLA	O2A-CGA-O1A	-2.04	118.44	123.59
33	L1	101	LHG	O7-C7-O9	-2.04	118.77	123.70
25	b2	620	CLA	C1D-CHD-C4C	2.04	125.25	122.56
25	b2	615	CLA	C1D-CHD-C4C	2.04	125.25	122.56
25	C2	509	CLA	C1D-CHD-C4C	2.04	125.25	122.56
34	c2	514	DGD	O6D-C5D-C6D	2.04	110.79	106.67
36	D2	408	PL9	C51-C49-C50	2.04	119.11	114.60
23	b2	603	BCR	C3-C4-C5	-2.04	110.44	114.08
27	a2	416	PHO	CMC-C2C-C1C	2.04	128.21	125.06
33	D2	405	LHG	O7-C7-O9	-2.04	118.77	123.70
23	A1	401	BCR	C33-C5-C4	2.04	117.53	113.62
23	B2	602	BCR	C16-C15-C14	-2.04	119.30	123.47
25	b2	617	CLA	C1D-CHD-C4C	2.03	125.24	122.56
23	j2	102	BCR	C19-C18-C17	-2.03	115.82	118.94
25	A2	403	CLA	O2A-CGA-O1A	-2.03	118.46	123.59
25	B2	616	CLA	C1D-CHD-C4C	2.03	125.24	122.56
25	B2	615	CLA	C1D-CHD-C4C	2.03	125.24	122.56
23	b1	603	BCR	C35-C13-C14	-2.03	120.08	122.92
25	B1	606	CLA	C1-C2-C3	-2.03	122.53	126.04
23	B2	603	BCR	C33-C5-C4	2.03	117.52	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	A1	405	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
25	d1	404	CLA	C4D-C3D-CAD	-2.03	107.34	108.47
25	C2	508	CLA	O2A-CGA-O1A	-2.03	118.47	123.59
25	c1	503	CLA	OBD-CAD-CBD	-2.03	123.00	125.89
25	b1	610	CLA	C1D-CHD-C4C	2.03	125.23	122.56
25	c2	505	CLA	O2D-CGD-CBD	2.03	114.87	111.27
29	A1	410	LMG	C7-O1-C1	-2.03	109.78	113.74
25	B2	619	CLA	C4D-C3D-CAD	-2.03	107.34	108.47
25	K2	101	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
25	C1	512	CLA	OBD-CAD-CBD	-2.03	123.00	125.89
34	c1	514	DGD	O2G-C1B-O1B	-2.03	118.81	123.70
25	a2	405	CLA	C1D-CHD-C4C	2.03	125.23	122.56
29	C1	520	LMG	C8-O7-C10	-2.02	112.81	117.79
29	B1	622	LMG	O8-C28-O10	-2.02	118.48	123.59
34	h1	101	DGD	O2G-C1B-O1B	-2.02	118.81	123.70
25	B2	614	CLA	C1D-CHD-C4C	2.02	125.23	122.56
25	b1	613	CLA	OBD-CAD-CBD	-2.02	123.01	125.89
23	z2	101	BCR	C8-C7-C6	-2.02	121.53	127.20
25	b1	610	CLA	C4D-C3D-CAD	-2.02	107.34	108.47
38	v1	201	HEM	C1D-C2D-C3D	-2.02	105.59	107.00
23	K2	104	BCR	C38-C26-C25	-2.02	122.26	124.53
33	b2	625	LHG	C5-O7-C7	-2.02	112.82	117.79
23	C1	501	BCR	C36-C18-C19	2.02	121.26	118.08
23	j2	102	BCR	C10-C11-C12	-2.02	116.92	123.22
25	b2	616	CLA	C1D-CHD-C4C	2.02	125.22	122.56
25	b2	618	CLA	C1D-CHD-C4C	2.02	125.22	122.56
23	k2	501	BCR	C20-C19-C18	-2.02	120.75	126.42
36	d1	409	PL9	C47-C46-C44	-2.02	106.35	112.98
25	C2	509	CLA	O2A-CGA-O1A	-2.02	118.50	123.59
25	B1	612	CLA	O2A-CGA-O1A	-2.01	118.51	123.59
23	b1	601	BCR	C35-C13-C14	-2.01	120.10	122.92
25	a1	403	CLA	O2A-CGA-O1A	-2.01	118.51	123.59
23	k2	501	BCR	C37-C22-C21	-2.01	120.10	122.92
23	D1	401	BCR	C34-C9-C10	-2.01	120.11	122.92
25	a1	404	CLA	CMD-C2D-C3D	2.01	128.44	124.68
27	D2	407	PHO	O1D-CGD-CBD	-2.01	120.37	124.48
25	b2	614	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
25	c2	508	CLA	C1D-CHD-C4C	2.01	125.21	122.56
25	D2	404	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
23	B2	601	BCR	C27-C26-C25	-2.01	119.81	122.73
25	c1	506	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
23	D1	401	BCR	C33-C5-C4	2.01	117.47	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B1	605	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
25	C1	509	CLA	OBD-CAD-CBD	-2.01	123.03	125.89
25	c2	507	CLA	C1D-CHD-C4C	2.01	125.21	122.56
25	c1	508	CLA	CAC-C3C-C4C	2.01	127.41	124.81
36	d1	409	PL9	C10-C9-C11	2.01	118.65	115.27
25	c1	511	CLA	C1D-CHD-C4C	2.01	125.20	122.56
25	B2	614	CLA	C1-C2-C3	-2.01	122.58	126.04
25	B1	617	CLA	C1D-CHD-C4C	2.00	125.20	122.56
25	B1	610	CLA	C1D-CHD-C4C	2.00	125.20	122.56
23	b1	602	BCR	C39-C30-C25	-2.00	107.05	110.30
25	B1	616	CLA	CMD-C2D-C3D	2.00	128.42	124.68
23	H1	102	BCR	C8-C7-C6	-2.00	121.58	127.20
27	a2	416	PHO	O2A-CGA-CBA	2.00	118.19	111.91
34	C1	516	DGD	O2G-C1B-O1B	-2.00	118.86	123.70
23	b2	602	BCR	C34-C9-C10	-2.00	120.12	122.92
25	b1	607	CLA	C1D-CHD-C4C	2.00	125.20	122.56
25	c1	509	CLA	O2A-CGA-O1A	-2.00	118.54	123.59

All (419) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
25	D2	404	CLA	NC
25	D2	404	CLA	ND
25	D2	404	CLA	NA
25	B1	608	CLA	NC
25	B1	608	CLA	ND
25	B1	608	CLA	NA
25	b2	613	CLA	NC
25	b2	613	CLA	ND
25	b2	613	CLA	NA
25	b2	620	CLA	NC
25	b2	620	CLA	ND
25	b2	620	CLA	NA
25	a1	405	CLA	NC
25	a1	405	CLA	ND
25	a1	405	CLA	NA
25	B2	619	CLA	NC
25	B2	619	CLA	ND
25	B2	619	CLA	NA
25	B2	616	CLA	NC
25	B2	616	CLA	ND
25	B2	616	CLA	NA

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Mol	Chain	Res	Type	Atom
25	c2	510	CLA	NC
25	c2	510	CLA	ND
25	c2	510	CLA	NA
25	b2	606	CLA	NC
25	b2	606	CLA	ND
25	b2	606	CLA	NA
25	b1	608	CLA	NC
25	b1	608	CLA	ND
25	b1	608	CLA	NA
25	b1	606	CLA	NC
25	b1	606	CLA	ND
25	b1	606	CLA	NA
25	D2	401	CLA	NC
25	D2	401	CLA	ND
25	D2	401	CLA	NA
25	C1	511	CLA	NC
25	C1	511	CLA	ND
25	C1	511	CLA	NA
25	b2	619	CLA	NC
25	b2	619	CLA	ND
25	b2	619	CLA	NA
25	C2	504	CLA	NC
25	C2	504	CLA	ND
25	C2	504	CLA	NA
25	b2	624	CLA	NC
25	b2	624	CLA	ND
25	b2	624	CLA	NA
25	c2	503	CLA	NC
25	c2	503	CLA	ND
25	c2	503	CLA	NA
25	b2	604	CLA	NC
25	b2	604	CLA	ND
25	b2	604	CLA	NA
25	d2	405	CLA	NC
25	d2	405	CLA	ND
25	d2	405	CLA	NA
25	c1	516	CLA	NC
25	c1	516	CLA	ND
25	c1	516	CLA	NA
25	b1	604	CLA	NC
25	b1	604	CLA	ND
25	b1	604	CLA	NA

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Mol	Chain	Res	Type	Atom
25	B2	607	CLA	NC
25	B2	607	CLA	ND
25	B2	607	CLA	NA
25	b2	611	CLA	NC
25	b2	611	CLA	ND
25	b2	611	CLA	NA
25	b1	616	CLA	NC
25	b1	616	CLA	ND
25	b1	616	CLA	NA
25	B2	613	CLA	NC
25	B2	613	CLA	ND
25	B2	613	CLA	NA
25	b1	619	CLA	NC
25	b1	619	CLA	ND
25	b1	619	CLA	NA
25	A2	404	CLA	NC
25	A2	404	CLA	ND
25	A2	404	CLA	NA
25	C1	508	CLA	NC
25	C1	508	CLA	ND
25	C1	508	CLA	NA
25	C2	510	CLA	NC
25	C2	510	CLA	ND
25	C2	510	CLA	NA
25	b1	609	CLA	NC
25	b1	609	CLA	ND
25	b1	609	CLA	NA
25	b2	617	CLA	NC
25	b2	617	CLA	ND
25	b2	617	CLA	NA
25	B1	607	CLA	NC
25	B1	607	CLA	ND
25	B1	607	CLA	NA
25	B2	604	CLA	NC
25	B2	604	CLA	ND
25	B2	604	CLA	NA
25	C1	505	CLA	NC
25	C1	505	CLA	ND
25	C1	505	CLA	NA
25	b1	614	CLA	NC
25	b1	614	CLA	ND
25	b1	614	CLA	NA

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Mol	Chain	Res	Type	Atom
25	B1	613	CLA	NC
25	B1	613	CLA	ND
25	B1	613	CLA	NA
25	C1	506	CLA	NC
25	C1	506	CLA	ND
25	C1	506	CLA	NA
25	c2	506	CLA	NC
25	c2	506	CLA	ND
25	c2	506	CLA	NA
25	C2	505	CLA	NC
25	C2	505	CLA	ND
25	C2	505	CLA	NA
25	A1	406	CLA	NC
25	A1	406	CLA	ND
25	A1	406	CLA	NA
25	c1	506	CLA	NC
25	c1	506	CLA	ND
25	c1	506	CLA	NA
25	a2	404	CLA	NC
25	a2	404	CLA	ND
25	a2	404	CLA	NA
25	C2	503	CLA	NC
25	C2	503	CLA	ND
25	C2	503	CLA	NA
25	C1	509	CLA	NC
25	C1	509	CLA	ND
25	C1	509	CLA	NA
25	b1	613	CLA	NC
25	b1	613	CLA	ND
25	b1	613	CLA	NA
25	B2	610	CLA	NC
25	B2	610	CLA	ND
25	B2	610	CLA	NA
25	c2	515	CLA	NC
25	c2	515	CLA	ND
25	c2	515	CLA	NA
25	d2	404	CLA	NC
25	d2	404	CLA	ND
25	d2	404	CLA	NA
25	c1	515	CLA	NC
25	c1	515	CLA	ND
25	c1	515	CLA	NA

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Mol	Chain	Res	Type	Atom
25	B2	615	CLA	NC
25	B2	615	CLA	ND
25	B2	615	CLA	NA
25	B1	609	CLA	NC
25	B1	609	CLA	ND
25	B1	609	CLA	NA
25	c1	513	CLA	NC
25	c1	513	CLA	ND
25	c1	513	CLA	NA
25	b2	615	CLA	NC
25	b2	615	CLA	ND
25	b2	615	CLA	NA
25	C2	518	CLA	NC
25	C2	518	CLA	ND
25	C2	518	CLA	NA
25	b1	620	CLA	NC
25	b1	620	CLA	ND
25	b1	620	CLA	NA
25	C2	509	CLA	NC
25	C2	509	CLA	ND
25	C2	509	CLA	NA
25	C2	506	CLA	NC
25	C2	506	CLA	ND
25	C2	506	CLA	NA
25	c2	508	CLA	NC
25	c2	508	CLA	ND
25	c2	508	CLA	NA
25	C1	510	CLA	NC
25	C1	510	CLA	ND
25	C1	510	CLA	NA
25	B2	617	CLA	NC
25	B2	617	CLA	ND
25	B2	617	CLA	NA
25	c2	505	CLA	NC
25	c2	505	CLA	ND
25	c2	505	CLA	NA
25	c1	510	CLA	NC
25	c1	510	CLA	ND
25	c1	510	CLA	NA
25	c1	509	CLA	NC
25	c1	509	CLA	ND
25	c1	509	CLA	NA

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Mol	Chain	Res	Type	Atom
25	B1	606	CLA	NC
25	B1	606	CLA	ND
25	B1	606	CLA	NA
25	B2	612	CLA	NC
25	B2	612	CLA	ND
25	B2	612	CLA	NA
25	B2	609	CLA	NC
25	B2	609	CLA	ND
25	B2	609	CLA	NA
25	c1	507	CLA	NC
25	c1	507	CLA	ND
25	c1	507	CLA	NA
25	C1	513	CLA	NC
25	C1	513	CLA	ND
25	C1	513	CLA	NA
25	A2	403	CLA	NC
25	A2	403	CLA	ND
25	A2	403	CLA	NA
25	b1	612	CLA	NC
25	b1	612	CLA	ND
25	b1	612	CLA	NA
25	b1	605	CLA	NC
25	b1	605	CLA	ND
25	b1	605	CLA	NA
25	d1	406	CLA	NC
25	d1	406	CLA	ND
25	d1	406	CLA	NA
25	b2	610	CLA	NC
25	b2	610	CLA	ND
25	b2	610	CLA	NA
25	B1	610	CLA	NC
25	B1	610	CLA	ND
25	B1	610	CLA	NA
25	c2	512	CLA	NC
25	c2	512	CLA	ND
25	c2	512	CLA	NA
25	B2	614	CLA	NC
25	B2	614	CLA	ND
25	B2	614	CLA	NA
25	C2	508	CLA	NC
25	C2	508	CLA	ND
25	C2	508	CLA	NA

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Mol	Chain	Res	Type	Atom
25	C2	513	CLA	NC
25	C2	513	CLA	ND
25	C2	513	CLA	NA
25	c2	507	CLA	NC
25	c2	507	CLA	ND
25	c2	507	CLA	NA
25	A1	405	CLA	NC
25	A1	405	CLA	ND
25	A1	405	CLA	NA
25	b2	609	CLA	NC
25	b2	609	CLA	ND
25	b2	609	CLA	NA
25	C1	507	CLA	NC
25	C1	507	CLA	ND
25	C1	507	CLA	NA
25	B1	611	CLA	NC
25	B1	611	CLA	NA
25	b1	610	CLA	NC
25	b1	610	CLA	ND
25	b1	610	CLA	NA
25	c2	502	CLA	NC
25	c2	502	CLA	ND
25	c2	502	CLA	NA
25	b1	611	CLA	NC
25	b1	611	CLA	ND
25	b1	611	CLA	NA
25	B1	615	CLA	NC
25	B1	615	CLA	ND
25	B1	615	CLA	NA
25	B1	618	CLA	NC
25	B1	618	CLA	ND
25	B1	618	CLA	NA
25	c1	511	CLA	NC
25	c1	511	CLA	ND
25	c1	511	CLA	NA
25	B1	605	CLA	NC
25	B1	605	CLA	ND
25	B1	605	CLA	NA
25	c2	509	CLA	NC
25	c2	509	CLA	ND
25	c2	509	CLA	NA
25	B1	617	CLA	NC

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Mol	Chain	Res	Type	Atom
25	B1	617	CLA	ND
25	B1	617	CLA	NA
25	a1	403	CLA	NC
25	a1	403	CLA	ND
25	a1	403	CLA	NA
25	b1	607	CLA	NC
25	b1	607	CLA	ND
25	b1	607	CLA	NA
25	c1	512	CLA	NC
25	c1	512	CLA	ND
25	c1	512	CLA	NA
25	B1	604	CLA	NC
25	B1	604	CLA	ND
25	B1	604	CLA	NA
25	b1	615	CLA	NC
25	b1	615	CLA	ND
25	b1	615	CLA	NA
25	C1	512	CLA	NC
25	C1	512	CLA	ND
25	C1	512	CLA	NA
25	C2	507	CLA	NC
25	C2	507	CLA	ND
25	C2	507	CLA	NA
25	D1	403	CLA	NC
25	D1	403	CLA	ND
25	D1	403	CLA	NA
25	d1	404	CLA	NC
25	d1	404	CLA	ND
25	d1	404	CLA	NA
25	C2	511	CLA	NC
25	C2	511	CLA	ND
25	C2	511	CLA	NA
25	A1	403	CLA	NC
25	A1	403	CLA	ND
25	A1	403	CLA	NA
25	d2	402	CLA	NC
25	d2	402	CLA	ND
25	d2	402	CLA	NA
25	K2	101	CLA	NC
25	K2	101	CLA	ND
25	K2	101	CLA	NA
25	C2	516	CLA	NC

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Mol	Chain	Res	Type	Atom
25	C2	516	CLA	ND
25	C2	516	CLA	NA
25	B1	616	CLA	NC
25	B1	616	CLA	ND
25	B1	616	CLA	NA
25	c1	504	CLA	NC
25	c1	504	CLA	ND
25	c1	504	CLA	NA
25	B1	619	CLA	NC
25	B1	619	CLA	ND
25	B1	619	CLA	NA
25	C1	502	CLA	NC
25	C1	502	CLA	ND
25	C1	502	CLA	NA
25	b1	617	CLA	NC
25	b1	617	CLA	ND
25	b1	617	CLA	NA
25	c1	503	CLA	NC
25	c1	503	CLA	ND
25	c1	503	CLA	NA
25	b2	614	CLA	NC
25	b2	614	CLA	ND
25	b2	614	CLA	NA
25	B1	612	CLA	NC
25	B1	612	CLA	ND
25	B1	612	CLA	NA
25	d1	401	CLA	NC
25	d1	401	CLA	ND
25	d1	401	CLA	NA
25	B2	611	CLA	NC
25	B2	611	CLA	ND
25	B2	611	CLA	NA
25	D2	406	CLA	NC
25	D2	406	CLA	ND
25	D2	406	CLA	NA
25	c2	504	CLA	NC
25	c2	504	CLA	ND
25	c2	504	CLA	NA
25	a1	404	CLA	NC
25	a1	404	CLA	ND
25	a1	404	CLA	NA
25	c2	511	CLA	NC

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Mol	Chain	Res	Type	Atom
25	c2	511	CLA	ND
25	c2	511	CLA	NA
25	b2	616	CLA	NC
25	b2	616	CLA	ND
25	b2	616	CLA	NA
25	c1	505	CLA	NC
25	c1	505	CLA	ND
25	c1	505	CLA	NA
25	b2	612	CLA	NC
25	b2	612	CLA	ND
25	b2	612	CLA	NA
25	C1	514	CLA	NC
25	C1	514	CLA	ND
25	C1	514	CLA	NA
25	B2	608	CLA	NC
25	B2	608	CLA	ND
25	B2	608	CLA	NA
25	B1	614	CLA	NC
25	B1	614	CLA	ND
25	B1	614	CLA	NA
25	a2	405	CLA	NC
25	a2	405	CLA	ND
25	a2	405	CLA	NA
25	C1	504	CLA	NC
25	C1	504	CLA	ND
25	C1	504	CLA	NA
25	b2	608	CLA	NC
25	b2	608	CLA	ND
25	b2	608	CLA	NA
25	A2	402	CLA	NC
25	A2	402	CLA	ND
25	A2	402	CLA	NA
25	C1	503	CLA	NC
25	C1	503	CLA	ND
25	C1	503	CLA	NA
25	A1	404	CLA	NC
25	A1	404	CLA	ND
25	A1	404	CLA	NA
25	B2	618	CLA	NC
25	B2	618	CLA	ND
25	B2	618	CLA	NA
25	D1	402	CLA	NC

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Mol	Chain	Res	Type	Atom
25	D1	402	CLA	ND
25	D1	402	CLA	NA
25	c2	513	CLA	NC
25	c2	513	CLA	ND
25	c2	513	CLA	NA
25	a2	413	CLA	NC
25	a2	413	CLA	ND
25	a2	413	CLA	NA
25	b2	618	CLA	NC
25	b2	618	CLA	ND
25	b2	618	CLA	NA
25	B2	605	CLA	NC
25	B2	605	CLA	ND
25	B2	605	CLA	NA
25	B2	606	CLA	NC
25	B2	606	CLA	ND
25	B2	606	CLA	NA
25	c1	508	CLA	NC
25	c1	508	CLA	ND
25	c1	508	CLA	NA

All (2187) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
25	b2	620	CLA	CBD-CGD-O2D-CED
25	a1	405	CLA	C1A-C2A-CAA-CBA
25	a1	405	CLA	C3A-C2A-CAA-CBA
33	B1	621	LHG	C3-O3-P-O4
33	B1	621	LHG	C3-O3-P-O5
33	B1	621	LHG	C3-O3-P-O6
33	d1	407	LHG	C4-O6-P-O3
33	d1	407	LHG	C4-O6-P-O4
33	d1	407	LHG	C4-O6-P-O5
33	D2	403	LHG	O1-C1-C2-C3
33	D2	403	LHG	C3-O3-P-O4
25	B2	616	CLA	CHA-CBD-CGD-O1D
25	B2	616	CLA	CAD-CBD-CGD-O1D
25	B2	616	CLA	CAD-CBD-CGD-O2D
33	a2	407	LHG	C4-O6-P-O3
33	a2	407	LHG	C4-O6-P-O4
33	a2	407	LHG	C4-O6-P-O5
37	D2	402	SQD	O10-C23-O48-C46

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Mol	Chain	Res	Type	Atoms
29	A1	410	LMG	O1-C7-C8-O7
33	b2	625	LHG	C4-O6-P-O3
33	b2	625	LHG	C4-O6-P-O5
33	b2	625	LHG	C8-C7-O7-C5
25	b1	608	CLA	C2-C3-C5-C6
25	b1	608	CLA	C4-C3-C5-C6
25	b1	606	CLA	C2-C3-C5-C6
25	b1	606	CLA	C4-C3-C5-C6
38	v1	201	HEM	C3D-CAD-CBD-CGD
23	b2	602	BCR	C1-C6-C7-C8
23	b2	602	BCR	C5-C6-C7-C8
25	b2	619	CLA	CBD-CGD-O2D-CED
36	D2	408	PL9	C34-C36-C37-C38
25	C2	504	CLA	CHA-CBD-CGD-O1D
25	C2	504	CLA	CHA-CBD-CGD-O2D
25	C2	504	CLA	CAD-CBD-CGD-O1D
25	b2	624	CLA	C11-C10-C8-C9
25	c2	503	CLA	C1A-C2A-CAA-CBA
25	c2	503	CLA	C3A-C2A-CAA-CBA
25	b2	604	CLA	CHA-CBD-CGD-O1D
25	b2	604	CLA	CAD-CBD-CGD-O1D
25	b2	604	CLA	CAD-CBD-CGD-O2D
32	c2	518	GOL	O1-C1-C2-C3
32	C2	514	GOL	O1-C1-C2-C3
33	l1	102	LHG	C3-O3-P-O4
33	l1	102	LHG	C3-O3-P-O5
33	l1	102	LHG	C3-O3-P-O6
33	l1	102	LHG	C4-O6-P-O4
33	l1	102	LHG	C4-O6-P-O5
33	d2	406	LHG	C4-O6-P-O4
33	d2	406	LHG	C4-O6-P-O5
23	C1	501	BCR	C7-C8-C9-C10
23	C1	501	BCR	C7-C8-C9-C34
25	b1	616	CLA	CAD-CBD-CGD-O1D
25	b1	616	CLA	CAD-CBD-CGD-O2D
25	b1	619	CLA	CBD-CGD-O2D-CED
25	A2	404	CLA	CHA-CBD-CGD-O1D
25	A2	404	CLA	CHA-CBD-CGD-O2D
25	A2	404	CLA	C4-C3-C5-C6
33	b1	622	LHG	C3-O3-P-O5
33	b1	622	LHG	C4-O6-P-O5
25	C1	508	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
25	C1	508	CLA	C4-C3-C5-C6
25	C2	510	CLA	C1A-C2A-CAA-CBA
25	C2	510	CLA	C2A-CAA-CBA-CGA
38	V1	201	HEM	C3D-CAD-CBD-CGD
25	b2	617	CLA	CHA-CBD-CGD-O1D
25	b2	617	CLA	CHA-CBD-CGD-O2D
23	d2	401	BCR	C7-C8-C9-C10
23	d2	401	BCR	C7-C8-C9-C34
23	d2	401	BCR	C23-C24-C25-C26
25	B2	604	CLA	CHA-CBD-CGD-O1D
25	B2	604	CLA	CHA-CBD-CGD-O2D
25	B2	604	CLA	CAD-CBD-CGD-O1D
38	V2	201	HEM	C3D-CAD-CBD-CGD
25	B1	613	CLA	C11-C12-C13-C14
36	D1	408	PL9	C34-C36-C37-C38
32	C1	518	GOL	O1-C1-C2-C3
25	C2	505	CLA	CHA-CBD-CGD-O1D
25	C2	505	CLA	CHA-CBD-CGD-O2D
25	A1	406	CLA	CHA-CBD-CGD-O1D
25	A1	406	CLA	CHA-CBD-CGD-O2D
23	j2	102	BCR	C1-C6-C7-C8
23	j2	102	BCR	C5-C6-C7-C8
23	j2	102	BCR	C7-C8-C9-C10
23	j2	102	BCR	C7-C8-C9-C34
23	d1	405	BCR	C7-C8-C9-C10
23	d1	405	BCR	C7-C8-C9-C34
23	d1	405	BCR	C21-C22-C23-C24
23	d1	405	BCR	C37-C22-C23-C24
35	b2	623	LMT	C2-C1-O1'-C1'
25	C2	503	CLA	C1A-C2A-CAA-CBA
25	C1	509	CLA	CHA-CBD-CGD-O1D
25	C1	509	CLA	CHA-CBD-CGD-O2D
33	d1	402	LHG	C1-C2-C3-O3
33	d1	402	LHG	C3-O3-P-O5
33	d1	402	LHG	C4-O6-P-O3
33	a1	407	LHG	C3-O3-P-O5
33	a1	407	LHG	C4-O6-P-O4
25	c1	515	CLA	CHA-CBD-CGD-O1D
25	c1	515	CLA	CHA-CBD-CGD-O2D
25	B1	609	CLA	C2C-C3C-CAC-CBC
25	B1	609	CLA	C4C-C3C-CAC-CBC
33	l2	101	LHG	C3-O3-P-O4

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Mol	Chain	Res	Type	Atoms
33	l2	101	LHG	C3-O3-P-O5
33	l2	101	LHG	C4-O6-P-O3
33	l2	101	LHG	C4-O6-P-O4
33	l2	101	LHG	C4-O6-P-O5
32	c1	521	GOL	O1-C1-C2-C3
25	b1	620	CLA	CBD-CGD-O2D-CED
25	b1	620	CLA	C4-C3-C5-C6
25	b1	620	CLA	C11-C10-C8-C9
25	c2	508	CLA	C11-C10-C8-C9
25	c2	508	CLA	C11-C12-C13-C14
23	K1	101	BCR	C1-C6-C7-C8
23	K1	101	BCR	C5-C6-C7-C8
23	K1	101	BCR	C36-C18-C19-C20
25	c1	510	CLA	CHA-CBD-CGD-O1D
25	c1	510	CLA	CHA-CBD-CGD-O2D
25	b2	610	CLA	C6-C7-C8-C9
29	b1	621	LMG	C11-C10-O7-C8
25	C2	508	CLA	CBD-CGD-O2D-CED
37	b2	605	SQD	O5-C1-O6-C44
37	b2	605	SQD	C8-C7-O47-C45
33	A2	405	LHG	C3-O3-P-O5
33	A2	405	LHG	C4-O6-P-O3
33	A2	405	LHG	C4-O6-P-O5
23	F2	401	BCR	C7-C8-C9-C10
23	F2	401	BCR	C7-C8-C9-C34
23	F2	401	BCR	C21-C22-C23-C24
23	F2	401	BCR	C37-C22-C23-C24
25	c2	507	CLA	CBD-CGD-O2D-CED
25	C1	507	CLA	CHA-CBD-CGD-O1D
25	C1	507	CLA	CHA-CBD-CGD-O2D
23	c2	501	BCR	C1-C6-C7-C8
23	c2	501	BCR	C5-C6-C7-C8
23	c2	501	BCR	C7-C8-C9-C10
23	c2	501	BCR	C7-C8-C9-C34
23	c2	501	BCR	C11-C12-C13-C14
23	c2	501	BCR	C11-C12-C13-C35
33	D1	404	LHG	C3-O3-P-O5
33	D1	404	LHG	C4-O6-P-O4
33	D1	404	LHG	C4-O6-P-O5
25	B1	611	CLA	CHA-CBD-CGD-O1D
25	B1	611	CLA	CHA-CBD-CGD-O2D
25	B1	611	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
23	K2	102	BCR	C5-C6-C7-C8
23	K2	102	BCR	C7-C8-C9-C10
23	K2	102	BCR	C7-C8-C9-C34
25	B1	618	CLA	CBD-CGD-O2D-CED
29	c2	519	LMG	O9-C10-O7-C8
25	c2	509	CLA	CHA-CBD-CGD-O1D
25	c2	509	CLA	CHA-CBD-CGD-O2D
29	M1	101	LMG	C11-C10-O7-C8
25	B1	604	CLA	CHA-CBD-CGD-O1D
25	B1	604	CLA	CHA-CBD-CGD-O2D
25	C1	512	CLA	C12-C13-C15-C16
23	D1	401	BCR	C7-C8-C9-C10
23	D1	401	BCR	C7-C8-C9-C34
33	B2	627	LHG	C4-O6-P-O5
36	d1	409	PL9	C34-C36-C37-C38
25	C2	507	CLA	C2A-CAA-CBA-CGA
25	C2	507	CLA	CBD-CGD-O2D-CED
25	d1	404	CLA	CHA-CBD-CGD-O1D
25	d1	404	CLA	CHA-CBD-CGD-O2D
36	d2	409	PL9	C34-C36-C37-C38
32	a2	415	GOL	O1-C1-C2-C3
25	d2	402	CLA	CHA-CBD-CGD-O1D
25	d2	402	CLA	CHA-CBD-CGD-O2D
23	c1	502	BCR	C7-C8-C9-C34
25	B1	616	CLA	CHA-CBD-CGD-O1D
25	B1	616	CLA	CHA-CBD-CGD-O2D
25	B1	616	CLA	CAD-CBD-CGD-O1D
25	c1	504	CLA	CHA-CBD-CGD-O1D
25	c1	504	CLA	CHA-CBD-CGD-O2D
25	c1	504	CLA	CAD-CBD-CGD-O1D
25	B1	619	CLA	CBD-CGD-O2D-CED
25	c1	503	CLA	CHA-CBD-CGD-O1D
25	c1	503	CLA	CHA-CBD-CGD-O2D
25	c1	503	CLA	CAD-CBD-CGD-O1D
33	L2	101	LHG	C3-O3-P-O4
33	L2	101	LHG	C4-O6-P-O5
33	L1	101	LHG	C3-O3-P-O4
33	L1	101	LHG	C4-O6-P-O4
33	L1	101	LHG	C4-O6-P-O5
25	b2	614	CLA	C6-C7-C8-C10
25	b2	614	CLA	C11-C10-C8-C9
25	B1	612	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
23	B2	602	BCR	C7-C8-C9-C10
23	B2	602	BCR	C7-C8-C9-C34
33	D1	405	LHG	C4-O6-P-O3
33	D1	405	LHG	C4-O6-P-O4
33	D1	405	LHG	C4-O6-P-O5
33	d2	403	LHG	O1-C1-C2-C3
33	d2	403	LHG	C3-O3-P-O4
33	d2	403	LHG	C4-O6-P-O3
25	c2	511	CLA	CBD-CGD-O2D-CED
25	c2	511	CLA	C2-C3-C5-C6
25	c2	511	CLA	C4-C3-C5-C6
25	b2	612	CLA	CHA-CBD-CGD-O1D
25	b2	612	CLA	CHA-CBD-CGD-O2D
25	B2	608	CLA	C2-C3-C5-C6
25	B2	608	CLA	C4-C3-C5-C6
33	D2	405	LHG	C3-O3-P-O5
33	D2	405	LHG	C4-O6-P-O3
33	D2	405	LHG	C4-O6-P-O5
35	m1	101	LMT	C2'-C1'-O1'-C1
35	m1	101	LMT	O5'-C1'-O1'-C1
32	b1	618	GOL	O1-C1-C2-C3
32	b1	618	GOL	C1-C2-C3-O3
25	C1	503	CLA	CHA-CBD-CGD-O1D
25	C1	503	CLA	CHA-CBD-CGD-O2D
25	A1	404	CLA	C1A-C2A-CAA-CBA
25	A1	404	CLA	C3A-C2A-CAA-CBA
25	A1	404	CLA	CHA-CBD-CGD-O1D
25	A1	404	CLA	CHA-CBD-CGD-O2D
25	B2	618	CLA	CBD-CGD-O2D-CED
25	a2	413	CLA	CHA-CBD-CGD-O1D
25	a2	413	CLA	CHA-CBD-CGD-O2D
25	B2	605	CLA	CHA-CBD-CGD-O1D
25	B2	605	CLA	CBD-CGD-O2D-CED
29	a1	412	LMG	O1-C7-C8-O7
25	B2	606	CLA	CBD-CGD-O2D-CED
25	B2	606	CLA	C2-C3-C5-C6
25	B2	606	CLA	C4-C3-C5-C6
25	B2	606	CLA	C11-C10-C8-C9
25	c1	508	CLA	CHA-CBD-CGD-O1D
25	c1	508	CLA	CHA-CBD-CGD-O2D
25	c1	508	CLA	CBD-CGD-O2D-CED
25	b2	619	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
25	b1	619	CLA	O1D-CGD-O2D-CED
25	C1	507	CLA	O1D-CGD-O2D-CED
25	c1	508	CLA	O1D-CGD-O2D-CED
35	m1	101	LMT	C5'-C4'-O1B-C1B
25	B1	618	CLA	O1D-CGD-O2D-CED
25	B2	619	CLA	CBD-CGD-O2D-CED
25	b2	606	CLA	CBD-CGD-O2D-CED
25	b1	606	CLA	CBD-CGD-O2D-CED
25	C2	504	CLA	CBD-CGD-O2D-CED
25	c2	503	CLA	CBD-CGD-O2D-CED
25	C2	503	CLA	CBD-CGD-O2D-CED
25	B1	606	CLA	CBD-CGD-O2D-CED
25	b1	612	CLA	CBD-CGD-O2D-CED
25	C1	507	CLA	CBD-CGD-O2D-CED
25	c2	502	CLA	CBD-CGD-O2D-CED
25	B1	605	CLA	CBD-CGD-O2D-CED
25	C2	516	CLA	CBD-CGD-O2D-CED
25	C1	502	CLA	CBD-CGD-O2D-CED
25	c1	503	CLA	CBD-CGD-O2D-CED
25	B1	611	CLA	O1D-CGD-O2D-CED
35	m2	104	LMT	O5B-C1B-O1B-C4'
25	b2	606	CLA	O1D-CGD-O2D-CED
25	b1	606	CLA	O1D-CGD-O2D-CED
25	B1	606	CLA	O1D-CGD-O2D-CED
25	B1	619	CLA	O1D-CGD-O2D-CED
25	c2	511	CLA	O1D-CGD-O2D-CED
25	B2	618	CLA	O1D-CGD-O2D-CED
25	B1	608	CLA	CBD-CGD-O2D-CED
25	b2	613	CLA	CBD-CGD-O2D-CED
25	B2	607	CLA	CBD-CGD-O2D-CED
25	B1	607	CLA	CBD-CGD-O2D-CED
25	c2	512	CLA	CBD-CGD-O2D-CED
25	K2	101	CLA	CBD-CGD-O2D-CED
25	c1	504	CLA	CBD-CGD-O2D-CED
25	c2	504	CLA	CBD-CGD-O2D-CED
25	C1	503	CLA	CBD-CGD-O2D-CED
25	b2	620	CLA	O1D-CGD-O2D-CED
25	b1	620	CLA	O1D-CGD-O2D-CED
25	C2	508	CLA	O1D-CGD-O2D-CED
25	C2	507	CLA	O1D-CGD-O2D-CED
25	B2	606	CLA	O1D-CGD-O2D-CED
25	c2	506	CLA	C4C-C3C-CAC-CBC

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Mol	Chain	Res	Type	Atoms
25	B1	612	CLA	O1D-CGD-O2D-CED
25	B2	605	CLA	O1D-CGD-O2D-CED
25	b1	614	CLA	CBD-CGD-O2D-CED
25	C2	518	CLA	CBD-CGD-O2D-CED
25	C1	513	CLA	CBD-CGD-O2D-CED
25	b2	610	CLA	CBD-CGD-O2D-CED
25	A2	402	CLA	CBD-CGD-O2D-CED
25	C2	504	CLA	O1D-CGD-O2D-CED
25	c2	507	CLA	O1D-CGD-O2D-CED
33	b2	625	LHG	O9-C7-O7-C5
29	b1	621	LMG	O9-C10-O7-C8
37	b2	605	SQD	O49-C7-O47-C45
29	M1	101	LMG	O9-C10-O7-C8
35	m2	104	LMT	C2B-C1B-O1B-C4'
25	C1	502	CLA	O1D-CGD-O2D-CED
25	c2	510	CLA	C3-C5-C6-C7
25	b2	619	CLA	C3-C5-C6-C7
25	B2	607	CLA	C3-C5-C6-C7
25	b2	617	CLA	C3-C5-C6-C7
25	B1	613	CLA	C3-C5-C6-C7
25	b1	620	CLA	C3-C5-C6-C7
25	A2	403	CLA	C3-C5-C6-C7
25	c2	512	CLA	C3-C5-C6-C7
25	c2	507	CLA	C3-C5-C6-C7
25	B1	611	CLA	C3-C5-C6-C7
25	c2	503	CLA	CBA-CGA-O2A-C1
25	c2	506	CLA	CBA-CGA-O2A-C1
25	c2	506	CLA	C2C-C3C-CAC-CBC
25	c2	503	CLA	O1D-CGD-O2D-CED
25	D1	403	CLA	CBD-CGD-O2D-CED
25	C2	516	CLA	CBA-CGA-O2A-C1
25	C2	503	CLA	C4-C3-C5-C6
25	C2	509	CLA	C4-C3-C5-C6
25	C2	506	CLA	C4-C3-C5-C6
25	c1	509	CLA	C4-C3-C5-C6
36	d1	409	PL9	C20-C19-C21-C22
25	b1	620	CLA	C2-C3-C5-C6
25	C1	511	CLA	CBD-CGD-O2D-CED
25	b2	611	CLA	C2A-CAA-CBA-CGA
25	b1	609	CLA	C2A-CAA-CBA-CGA
25	B2	609	CLA	C2A-CAA-CBA-CGA
25	a1	403	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
25	B2	619	CLA	C3-C5-C6-C7
25	c2	506	CLA	C3-C5-C6-C7
25	B1	610	CLA	C3-C5-C6-C7
25	B1	619	CLA	C3-C5-C6-C7
25	C2	506	CLA	CBA-CGA-O2A-C1
25	c1	507	CLA	CBA-CGA-O2A-C1
29	B1	626	LMG	C29-C28-O8-C9
25	b1	612	CLA	O1D-CGD-O2D-CED
25	C2	505	CLA	CBD-CGD-O2D-CED
25	C1	509	CLA	CBD-CGD-O2D-CED
25	c1	513	CLA	CBD-CGD-O2D-CED
25	B1	605	CLA	O1D-CGD-O2D-CED
25	C2	516	CLA	O1D-CGD-O2D-CED
25	C2	506	CLA	O1A-CGA-O2A-C1
29	B1	626	LMG	O10-C28-O8-C9
23	K1	101	BCR	C19-C20-C21-C22
25	b2	617	CLA	CBD-CGD-O2D-CED
25	C1	505	CLA	CBD-CGD-O2D-CED
25	d1	406	CLA	CBD-CGD-O2D-CED
25	B1	610	CLA	CBD-CGD-O2D-CED
25	D2	406	CLA	CBD-CGD-O2D-CED
25	C2	503	CLA	O1D-CGD-O2D-CED
33	d1	402	LHG	O2-C2-C3-O3
25	B2	613	CLA	C3-C5-C6-C7
25	C1	507	CLA	C3-C5-C6-C7
25	c2	503	CLA	O1A-CGA-O2A-C1
25	c2	506	CLA	O1A-CGA-O2A-C1
29	F2	402	LMG	C11-C10-O7-C8
25	D2	404	CLA	CBD-CGD-O2D-CED
25	d2	404	CLA	CBD-CGD-O2D-CED
25	b1	607	CLA	CBD-CGD-O2D-CED
25	b1	615	CLA	CBD-CGD-O2D-CED
25	b2	616	CLA	CBD-CGD-O2D-CED
29	B1	626	LMG	O6-C5-C6-O5
27	D2	407	PHO	NC-C1C-CHC-C4B
25	c2	502	CLA	O1D-CGD-O2D-CED
25	c1	510	CLA	CBD-CGD-O2D-CED
25	C1	506	CLA	CBA-CGA-O2A-C1
25	B2	619	CLA	O1D-CGD-O2D-CED
29	A2	412	LMG	C4-C5-C6-O5
25	c1	507	CLA	O1A-CGA-O2A-C1
27	D2	407	PHO	NB-C4B-CHC-C1C

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Mol	Chain	Res	Type	Atoms
25	B1	608	CLA	C4-C3-C5-C6
25	B1	606	CLA	C4-C3-C5-C6
25	B1	608	CLA	C2-C3-C5-C6
25	B1	606	CLA	C2-C3-C5-C6
36	d1	409	PL9	C18-C19-C21-C22
25	C2	511	CLA	CBD-CGD-O2D-CED
25	B1	609	CLA	C2A-CAA-CBA-CGA
25	A2	402	CLA	C2A-CAA-CBA-CGA
25	C1	506	CLA	O1A-CGA-O2A-C1
29	I2	101	LMG	O6-C1-O1-C7
36	D2	408	PL9	C29-C31-C32-C33
36	D2	408	PL9	C44-C46-C47-C48
36	D1	408	PL9	C14-C16-C17-C18
36	d1	409	PL9	C19-C21-C22-C23
36	d1	409	PL9	C29-C31-C32-C33
36	d2	409	PL9	C9-C11-C12-C13
36	d2	409	PL9	C14-C16-C17-C18
25	C2	516	CLA	O1A-CGA-O2A-C1
25	c1	507	CLA	C3-C5-C6-C7
25	B1	619	CLA	CBA-CGA-O2A-C1
25	C2	506	CLA	CBD-CGD-O2D-CED
35	m2	103	LMT	C4'-C5'-C6'-O6'
25	c1	503	CLA	O1D-CGD-O2D-CED
25	B1	608	CLA	O1D-CGD-O2D-CED
33	a2	407	LHG	C1-C2-C3-O3
29	F2	402	LMG	O9-C10-O7-C8
25	K2	101	CLA	O1D-CGD-O2D-CED
34	C1	516	DGD	O6E-C5E-C6E-O5E
35	m1	101	LMT	O5B-C5B-C6B-O6B
34	c1	520	DGD	O6E-C5E-C6E-O5E
29	B1	626	LMG	C4-C5-C6-O5
35	m1	101	LMT	C4B-C5B-C6B-O6B
25	b1	619	CLA	C10-C11-C12-C13
25	a2	404	CLA	C8-C10-C11-C12
25	b1	613	CLA	C15-C16-C17-C18
34	c1	520	DGD	C4E-C5E-C6E-O5E
25	b2	615	CLA	C8-C10-C11-C12
25	b2	618	CLA	C10-C11-C12-C13
29	A2	412	LMG	O6-C5-C6-O5
25	d1	406	CLA	C4-C3-C5-C6
25	C2	503	CLA	C2-C3-C5-C6
25	C2	509	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
25	c1	509	CLA	C2-C3-C5-C6
25	D2	404	CLA	C11-C10-C8-C9
25	b2	613	CLA	C14-C13-C15-C16
25	b2	620	CLA	C6-C7-C8-C9
25	B2	619	CLA	C6-C7-C8-C9
25	b2	606	CLA	C11-C10-C8-C9
25	b1	608	CLA	C11-C10-C8-C9
25	b2	619	CLA	C11-C10-C8-C9
25	d2	405	CLA	C11-C10-C8-C9
25	B2	613	CLA	C11-C12-C13-C14
25	b2	617	CLA	C6-C7-C8-C9
25	b2	617	CLA	C11-C10-C8-C9
25	C1	506	CLA	C11-C12-C13-C14
25	c1	506	CLA	C11-C12-C13-C14
25	C2	509	CLA	C11-C12-C13-C14
25	C1	510	CLA	C14-C13-C15-C16
25	c2	505	CLA	C11-C12-C13-C14
25	c1	509	CLA	C11-C10-C8-C9
25	c1	509	CLA	C11-C12-C13-C14
25	B1	606	CLA	C14-C13-C15-C16
25	B2	612	CLA	C11-C12-C13-C14
25	c1	507	CLA	C11-C10-C8-C9
25	b1	612	CLA	C11-C12-C13-C14
25	b2	609	CLA	C11-C12-C13-C14
25	B1	611	CLA	C11-C12-C13-C14
25	c2	502	CLA	C11-C12-C13-C14
25	b1	611	CLA	C6-C7-C8-C9
25	B1	619	CLA	C6-C7-C8-C9
25	B1	612	CLA	C11-C12-C13-C14
25	B2	611	CLA	C6-C7-C8-C9
25	b2	612	CLA	C11-C12-C13-C14
25	B1	614	CLA	C11-C10-C8-C9
25	b2	608	CLA	C11-C10-C8-C9
25	C1	503	CLA	C6-C7-C8-C9
25	B1	607	CLA	O1D-CGD-O2D-CED
25	c2	504	CLA	O1D-CGD-O2D-CED
25	A1	403	CLA	CBD-CGD-O2D-CED
25	C1	507	CLA	C2C-C3C-CAC-CBC
25	D2	404	CLA	C8-C10-C11-C12
25	C1	511	CLA	C10-C11-C12-C13
23	B1	602	BCR	C7-C8-C9-C34
23	d2	401	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
23	J1	101	BCR	C7-C8-C9-C34
23	J1	101	BCR	C36-C18-C19-C20
23	j2	102	BCR	C36-C18-C19-C20
23	D1	401	BCR	C37-C22-C23-C24
23	B1	602	BCR	C7-C8-C9-C10
23	d2	401	BCR	C21-C22-C23-C24
23	D1	401	BCR	C21-C22-C23-C24
25	b2	606	CLA	C10-C11-C12-C13
25	C1	505	CLA	C5-C6-C7-C8
25	b1	614	CLA	C10-C11-C12-C13
25	C2	509	CLA	C8-C10-C11-C12
25	c2	505	CLA	C8-C10-C11-C12
25	B1	610	CLA	C8-C10-C11-C12
25	c2	512	CLA	O1D-CGD-O2D-CED
25	c1	516	CLA	CBA-CGA-O2A-C1
25	b2	620	CLA	C15-C16-C17-C18
25	d2	405	CLA	C10-C11-C12-C13
25	B2	613	CLA	C13-C15-C16-C17
25	B1	607	CLA	C8-C10-C11-C12
25	a2	404	CLA	C15-C16-C17-C18
25	B1	609	CLA	C8-C10-C11-C12
25	b2	615	CLA	C10-C11-C12-C13
25	b1	612	CLA	C15-C16-C17-C18
25	C1	507	CLA	C5-C6-C7-C8
25	B1	615	CLA	C8-C10-C11-C12
25	a1	404	CLA	C8-C10-C11-C12
25	B2	608	CLA	C10-C11-C12-C13
25	B2	608	CLA	C15-C16-C17-C18
27	D1	407	PHO	NC-C1C-CHC-C4B
25	b2	620	CLA	C10-C11-C12-C13
25	b1	606	CLA	C13-C15-C16-C17
25	C1	511	CLA	C5-C6-C7-C8
25	b1	604	CLA	C15-C16-C17-C18
25	b1	609	CLA	C15-C16-C17-C18
25	B1	613	CLA	C10-C11-C12-C13
25	B2	615	CLA	C8-C10-C11-C12
25	b1	620	CLA	C5-C6-C7-C8
25	B1	606	CLA	C8-C10-C11-C12
25	B2	609	CLA	C15-C16-C17-C18
25	c1	507	CLA	C10-C11-C12-C13
25	d1	406	CLA	C8-C10-C11-C12
25	c2	512	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
25	C1	507	CLA	C8-C10-C11-C12
25	c1	511	CLA	C10-C11-C12-C13
25	a1	403	CLA	C8-C10-C11-C12
25	b1	607	CLA	C13-C15-C16-C17
25	B1	619	CLA	C15-C16-C17-C18
25	c2	511	CLA	C13-C15-C16-C17
25	a2	405	CLA	C13-C15-C16-C17
25	a2	405	CLA	C15-C16-C17-C18
25	C1	504	CLA	C8-C10-C11-C12
25	A2	402	CLA	C8-C10-C11-C12
25	b2	613	CLA	O1D-CGD-O2D-CED
25	c1	504	CLA	O1D-CGD-O2D-CED
32	i1	101	GOL	O1-C1-C2-O2
37	D1	409	SQD	C23-C24-C25-C26
25	a2	405	CLA	CBD-CGD-O2D-CED
25	B2	607	CLA	O1D-CGD-O2D-CED
25	C1	503	CLA	O1D-CGD-O2D-CED
25	B2	619	CLA	C15-C16-C17-C18
25	b1	608	CLA	C15-C16-C17-C18
25	b1	614	CLA	C8-C10-C11-C12
25	C1	509	CLA	C10-C11-C12-C13
25	B2	612	CLA	C15-C16-C17-C18
25	b1	605	CLA	C13-C15-C16-C17
25	d1	406	CLA	C15-C16-C17-C18
27	D2	407	PHO	C15-C16-C17-C18
25	B2	608	CLA	C5-C6-C7-C8
34	c2	514	DGD	O6E-C5E-C6E-O5E
25	c2	506	CLA	C10-C11-C12-C13
25	c1	506	CLA	C8-C10-C11-C12
25	C1	509	CLA	C13-C15-C16-C17
25	C1	507	CLA	C15-C16-C17-C18
25	b1	615	CLA	C8-C10-C11-C12
25	c1	512	CLA	CBD-CGD-O2D-CED
35	m2	103	LMT	C4B-C5B-C6B-O6B
25	C1	505	CLA	C8-C10-C11-C12
25	b1	614	CLA	C13-C15-C16-C17
25	B1	613	CLA	C13-C15-C16-C17
25	a2	404	CLA	C13-C15-C16-C17
25	c1	509	CLA	C8-C10-C11-C12
25	c1	507	CLA	C8-C10-C11-C12
25	C1	506	CLA	C11-C12-C13-C15
25	C2	505	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
25	C2	505	CLA	C11-C10-C8-C7
25	C1	509	CLA	C12-C13-C15-C16
25	B1	609	CLA	C12-C13-C15-C16
25	B1	606	CLA	C11-C10-C8-C7
25	C1	507	CLA	C12-C13-C15-C16
25	B1	615	CLA	C11-C10-C8-C7
25	B1	615	CLA	C12-C13-C15-C16
25	b1	607	CLA	C6-C7-C8-C10
25	b1	615	CLA	C11-C10-C8-C7
25	b2	612	CLA	C12-C13-C15-C16
25	B1	614	CLA	C6-C7-C8-C10
25	b2	620	CLA	C3-C5-C6-C7
25	c2	513	CLA	CBA-CGA-O2A-C1
25	A1	403	CLA	C2A-CAA-CBA-CGA
25	K2	101	CLA	C2A-CAA-CBA-CGA
25	B2	605	CLA	C2A-CAA-CBA-CGA
25	C2	518	CLA	O1D-CGD-O2D-CED
25	b2	610	CLA	O1D-CGD-O2D-CED
25	A2	402	CLA	O1D-CGD-O2D-CED
25	C1	505	CLA	C15-C16-C17-C18
25	b1	620	CLA	C15-C16-C17-C18
25	B1	615	CLA	C5-C6-C7-C8
25	b2	618	CLA	C13-C15-C16-C17
25	b1	609	CLA	CBD-CGD-O2D-CED
25	C1	506	CLA	CBD-CGD-O2D-CED
25	b2	624	CLA	C10-C11-C12-C13
25	B2	613	CLA	C10-C11-C12-C13
25	B2	606	CLA	C5-C6-C7-C8
25	b1	614	CLA	O1D-CGD-O2D-CED
36	D2	408	PL9	C14-C16-C17-C18
36	D1	408	PL9	C9-C11-C12-C13
29	D1	406	LMG	C10-C11-C12-C13
33	a2	407	LHG	O2-C2-C3-O3
25	B1	611	CLA	C13-C15-C16-C17
25	b2	619	CLA	C5-C6-C7-C8
25	C2	505	CLA	C8-C10-C11-C12
25	C2	506	CLA	C10-C11-C12-C13
25	B1	611	CLA	C5-C6-C7-C8
25	c2	509	CLA	C10-C11-C12-C13
25	C1	513	CLA	O1D-CGD-O2D-CED
25	c1	516	CLA	O1A-CGA-O2A-C1
25	B1	619	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
25	c2	515	CLA	CBA-CGA-O2A-C1
35	a2	406	LMT	O1'-C1-C2-C3
25	b1	606	CLA	C10-C11-C12-C13
25	C1	505	CLA	C10-C11-C12-C13
25	C1	509	CLA	C15-C16-C17-C18
25	c1	505	CLA	C5-C6-C7-C8
35	m2	103	LMT	O5'-C5'-C6'-O6'
29	c1	519	LMG	C11-C10-O7-C8
25	b1	606	CLA	C5-C6-C7-C8
25	b1	604	CLA	C8-C10-C11-C12
25	c2	506	CLA	C5-C6-C7-C8
25	B2	615	CLA	C13-C15-C16-C17
25	b1	620	CLA	C8-C10-C11-C12
25	c2	505	CLA	C10-C11-C12-C13
25	B1	606	CLA	C5-C6-C7-C8
25	c2	512	CLA	C15-C16-C17-C18
25	C1	507	CLA	C10-C11-C12-C13
25	c2	504	CLA	C8-C10-C11-C12
25	D1	402	CLA	C15-C16-C17-C18
33	l1	102	LHG	C4-O6-P-O3
33	d2	406	LHG	C4-O6-P-O3
33	d1	402	LHG	C3-O3-P-O6
33	a1	407	LHG	C3-O3-P-O6
33	a1	407	LHG	C4-O6-P-O3
33	l2	101	LHG	C3-O3-P-O6
33	A2	405	LHG	C3-O3-P-O6
33	D1	404	LHG	C3-O3-P-O6
33	D1	404	LHG	C4-O6-P-O3
33	B2	627	LHG	C4-O6-P-O3
33	L1	101	LHG	C4-O6-P-O3
25	b2	609	CLA	C3-C5-C6-C7
25	B1	617	CLA	C10-C11-C12-C13
25	C1	512	CLA	C13-C15-C16-C17
25	D1	403	CLA	O1D-CGD-O2D-CED
29	c1	519	LMG	O9-C10-O7-C8
25	b1	616	CLA	C4-C3-C5-C6
25	K2	101	CLA	C4-C3-C5-C6
25	b2	608	CLA	C4-C3-C5-C6
25	C2	506	CLA	C2-C3-C5-C6
25	C1	508	CLA	C5-C6-C7-C8
25	C2	509	CLA	C10-C11-C12-C13
34	C1	516	DGD	C6A-C7A-C8A-C9A

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Mol	Chain	Res	Type	Atoms
25	C2	503	CLA	C2A-CAA-CBA-CGA
25	c2	508	CLA	C2A-CAA-CBA-CGA
25	c1	507	CLA	C2A-CAA-CBA-CGA
25	b1	612	CLA	C2A-CAA-CBA-CGA
25	b2	609	CLA	C2A-CAA-CBA-CGA
25	B1	605	CLA	C2A-CAA-CBA-CGA
25	c1	503	CLA	C2A-CAA-CBA-CGA
25	B1	612	CLA	C2A-CAA-CBA-CGA
25	b2	620	CLA	C16-C17-C18-C20
25	C2	503	CLA	C16-C17-C18-C19
25	b1	620	CLA	C16-C17-C18-C20
25	b1	613	CLA	C3-C5-C6-C7
25	B2	619	CLA	CBA-CGA-O2A-C1
25	K2	101	CLA	CBA-CGA-O2A-C1
25	c1	511	CLA	C8-C10-C11-C12
34	c2	514	DGD	C7A-C8A-C9A-CAA
29	A1	410	LMG	C11-C10-O7-C8
29	b1	631	LMG	C11-C10-O7-C8
29	a2	412	LMG	C11-C10-O7-C8
29	a1	412	LMG	C11-C10-O7-C8
25	c1	511	CLA	C13-C15-C16-C17
33	a2	407	LHG	C9-C10-C11-C12
33	D1	405	LHG	C9-C10-C11-C12
34	c1	518	DGD	C7A-C8A-C9A-CAA
25	d2	405	CLA	C16-C17-C18-C19
25	b1	616	CLA	C16-C17-C18-C19
25	B2	615	CLA	C16-C17-C18-C20
25	C1	502	CLA	C16-C17-C18-C19
33	I2	101	LHG	C11-C10-C9-C8
29	c1	519	LMG	C41-C42-C43-C44
29	a1	412	LMG	C14-C15-C16-C17
25	C1	509	CLA	O1D-CGD-O2D-CED
25	c1	513	CLA	O1D-CGD-O2D-CED
29	A1	410	LMG	O9-C10-O7-C8
29	b1	631	LMG	O9-C10-O7-C8
29	a1	412	LMG	O9-C10-O7-C8
25	c2	509	CLA	CBD-CGD-O2D-CED
33	I2	101	LHG	C9-C10-C11-C12
34	c2	514	DGD	C4B-C5B-C6B-C7B
33	L1	101	LHG	C10-C11-C12-C13
25	C1	511	CLA	O1D-CGD-O2D-CED
25	C2	505	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
34	h2	102	DGD	CBB-CCB-CDB-CEB
33	D2	405	LHG	C10-C11-C12-C13
25	C1	505	CLA	O1D-CGD-O2D-CED
33	l1	102	LHG	O2-C2-C3-O3
25	B1	607	CLA	C3-C5-C6-C7
34	c1	514	DGD	C2E-C1E-O5D-C6D
34	c2	516	DGD	C2E-C1E-O5D-C6D
34	C1	515	DGD	C2E-C1E-O5D-C6D
33	A2	405	LHG	C29-C30-C31-C32
25	C1	506	CLA	C5-C6-C7-C8
25	B2	619	CLA	O1A-CGA-O2A-C1
25	b1	606	CLA	C16-C17-C18-C20
25	C1	505	CLA	C16-C17-C18-C20
25	c2	505	CLA	C16-C17-C18-C20
25	c1	509	CLA	C16-C17-C18-C20
25	K2	101	CLA	C6-C7-C8-C10
25	b1	604	CLA	C4-C3-C5-C6
33	d2	406	LHG	C30-C31-C32-C33
25	K2	101	CLA	C2-C3-C5-C6
25	B1	608	CLA	C11-C12-C13-C14
25	B2	619	CLA	C11-C12-C13-C14
25	C1	508	CLA	C11-C10-C8-C9
25	A1	406	CLA	C11-C12-C13-C14
25	C2	509	CLA	C11-C10-C8-C9
25	c1	510	CLA	C11-C10-C8-C9
25	C1	513	CLA	C11-C12-C13-C14
25	B1	611	CLA	C6-C7-C8-C9
25	b1	610	CLA	C11-C12-C13-C14
27	A2	407	PHO	C11-C10-C8-C9
25	C1	512	CLA	C14-C13-C15-C16
25	c1	504	CLA	C6-C7-C8-C9
25	c1	503	CLA	C14-C13-C15-C16
25	b2	614	CLA	C6-C7-C8-C9
25	c2	511	CLA	C14-C13-C15-C16
25	c2	510	CLA	C5-C6-C7-C8
33	l1	102	LHG	C11-C12-C13-C14
25	C1	513	CLA	C10-C11-C12-C13
25	b2	610	CLA	C5-C6-C7-C8
25	c1	505	CLA	C8-C10-C11-C12
25	c2	513	CLA	O1A-CGA-O2A-C1
23	b2	602	BCR	C7-C8-C9-C34
34	C1	515	DGD	C3B-C4B-C5B-C6B

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Mol	Chain	Res	Type	Atoms
32	B1	620	GOL	O1-C1-C2-C3
32	i1	101	GOL	O1-C1-C2-C3
23	b2	602	BCR	C7-C8-C9-C10
23	c1	502	BCR	C7-C8-C9-C10
25	b1	604	CLA	C3-C5-C6-C7
29	a2	412	LMG	O9-C10-O7-C8
25	c1	510	CLA	C15-C16-C17-C18
25	B1	615	CLA	C13-C15-C16-C17
25	B1	618	CLA	C8-C10-C11-C12
34	c1	518	DGD	C5B-C6B-C7B-C8B
29	a1	412	LMG	C17-C18-C19-C20
33	b1	622	LHG	C17-C18-C19-C20
33	L2	101	LHG	C14-C15-C16-C17
29	a1	412	LMG	C13-C14-C15-C16
25	b2	620	CLA	C16-C17-C18-C19
25	b1	616	CLA	C16-C17-C18-C20
25	C2	503	CLA	C16-C17-C18-C20
25	c2	502	CLA	C16-C17-C18-C19
25	c2	502	CLA	C16-C17-C18-C20
25	c1	503	CLA	C16-C17-C18-C19
25	C1	503	CLA	C11-C12-C13-C14
25	C1	503	CLA	C11-C12-C13-C15
34	c1	514	DGD	O6E-C1E-O5D-C6D
34	c2	516	DGD	O6E-C1E-O5D-C6D
34	C1	515	DGD	O6E-C1E-O5D-C6D
25	C1	510	CLA	C10-C11-C12-C13
33	I2	101	LHG	C11-C12-C13-C14
25	c2	510	CLA	CBD-CGD-O2D-CED
25	D2	406	CLA	O1D-CGD-O2D-CED
29	B2	620	LMG	C10-C11-C12-C13
25	B2	615	CLA	C15-C16-C17-C18
33	I1	102	LHG	C25-C26-C27-C28
29	c1	519	LMG	C35-C36-C37-C38
25	B2	605	CLA	C3-C5-C6-C7
35	m2	104	LMT	O5'-C5'-C6'-O6'
25	b2	617	CLA	O1D-CGD-O2D-CED
25	D2	401	CLA	C3A-C2A-CAA-CBA
25	C2	510	CLA	C3A-C2A-CAA-CBA
25	c1	515	CLA	C3A-C2A-CAA-CBA
25	C1	512	CLA	C3A-C2A-CAA-CBA
25	C1	507	CLA	C4C-C3C-CAC-CBC
23	H1	102	BCR	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
23	H2	103	BCR	C16-C17-C18-C19
25	b1	606	CLA	C16-C17-C18-C19
25	C1	505	CLA	C16-C17-C18-C19
25	B2	615	CLA	C16-C17-C18-C19
25	c1	510	CLA	C16-C17-C18-C19
25	B1	615	CLA	C16-C17-C18-C20
27	d2	408	PHO	NC-C1C-CHC-C4B
29	A1	412	LMG	C39-C40-C41-C42
29	B2	621	LMG	C7-C8-C9-O8
25	C1	508	CLA	CBD-CGD-O2D-CED
25	C1	511	CLA	C3-C5-C6-C7
34	h1	101	DGD	C1A-C2A-C3A-C4A
25	c1	512	CLA	C5-C6-C7-C8
27	a1	411	PHO	C4-C3-C5-C6
27	A2	407	PHO	C4-C3-C5-C6
25	b1	608	CLA	CBA-CGA-O2A-C1
25	B2	613	CLA	C2-C3-C5-C6
27	A2	407	PHO	C2-C3-C5-C6
25	b2	612	CLA	C2-C3-C5-C6
29	d1	411	LMG	C11-C10-O7-C8
29	B1	622	LMG	C11-C10-O7-C8
35	M1	103	LMT	C7-C8-C9-C10
33	D1	405	LHG	C33-C34-C35-C36
27	D2	407	PHO	C2C-C1C-CHC-C4B
25	a2	404	CLA	C2A-CAA-CBA-CGA
25	c1	509	CLA	C2A-CAA-CBA-CGA
33	D2	403	LHG	O1-C1-C2-O2
32	C2	514	GOL	O1-C1-C2-O2
32	b1	618	GOL	O1-C1-C2-O2
33	d1	407	LHG	C30-C31-C32-C33
25	c1	506	CLA	C16-C17-C18-C20
33	B1	621	LHG	O2-C2-C3-O3
25	c2	505	CLA	CBA-CGA-O2A-C1
25	K2	101	CLA	O1A-CGA-O2A-C1
29	d1	411	LMG	O9-C10-O7-C8
29	B1	622	LMG	O9-C10-O7-C8
34	c2	514	DGD	O6D-C5D-C6D-O5D
25	c2	513	CLA	C2-C1-O2A-CGA
34	c2	514	DGD	C5B-C6B-C7B-C8B
25	b2	617	CLA	C10-C11-C12-C13
25	B2	617	CLA	C15-C16-C17-C18
25	B1	615	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
34	c2	517	DGD	CAA-CBA-CCA-CDA
23	k1	101	BCR	C1-C6-C7-C8
23	k1	101	BCR	C5-C6-C7-C8
23	C1	501	BCR	C1-C6-C7-C8
23	C1	501	BCR	C5-C6-C7-C8
23	d2	401	BCR	C5-C6-C7-C8
23	d2	401	BCR	C23-C24-C25-C30
23	b1	603	BCR	C5-C6-C7-C8
23	J1	101	BCR	C1-C6-C7-C8
23	J1	101	BCR	C5-C6-C7-C8
23	d1	405	BCR	C1-C6-C7-C8
23	d1	405	BCR	C5-C6-C7-C8
23	h2	101	BCR	C1-C6-C7-C8
23	h2	101	BCR	C5-C6-C7-C8
23	F2	401	BCR	C1-C6-C7-C8
23	F2	401	BCR	C5-C6-C7-C8
23	c2	501	BCR	C23-C24-C25-C26
23	c2	501	BCR	C23-C24-C25-C30
23	K2	102	BCR	C1-C6-C7-C8
23	D1	401	BCR	C1-C6-C7-C8
23	D1	401	BCR	C5-C6-C7-C8
23	D1	401	BCR	C23-C24-C25-C30
25	B1	607	CLA	CBA-CGA-O2A-C1
25	c1	506	CLA	CBA-CGA-O2A-C1
25	d1	404	CLA	CBA-CGA-O2A-C1
25	b1	616	CLA	C13-C15-C16-C17
25	C2	503	CLA	C5-C6-C7-C8
25	B1	619	CLA	C10-C11-C12-C13
29	B2	620	LMG	C11-C10-O7-C8
33	D1	405	LHG	C32-C33-C34-C35
33	l2	101	LHG	C10-C11-C12-C13
25	C1	514	CLA	C2A-CAA-CBA-CGA
25	b1	608	CLA	C10-C11-C12-C13
25	C2	506	CLA	C5-C6-C7-C8
25	B2	606	CLA	C10-C11-C12-C13
25	C1	506	CLA	C4-C3-C5-C6
25	c2	512	CLA	C4-C3-C5-C6
25	d2	404	CLA	O1D-CGD-O2D-CED
25	B1	610	CLA	O1D-CGD-O2D-CED
25	B1	608	CLA	C11-C12-C13-C15
25	b2	620	CLA	C11-C12-C13-C15
25	B2	619	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
25	b2	606	CLA	C11-C10-C8-C7
25	b1	608	CLA	C11-C12-C13-C15
27	A1	408	PHO	C2-C3-C5-C6
25	b1	604	CLA	C2-C3-C5-C6
25	B2	613	CLA	C11-C10-C8-C7
25	b1	609	CLA	C6-C7-C8-C10
36	D1	408	PL9	C38-C39-C41-C42
25	A1	406	CLA	C11-C12-C13-C15
25	C1	509	CLA	C11-C10-C8-C7
27	a1	411	PHO	C2-C3-C5-C6
25	B2	615	CLA	C12-C13-C15-C16
27	a2	416	PHO	C2-C3-C5-C6
25	B2	617	CLA	C11-C12-C13-C15
25	c1	510	CLA	C11-C10-C8-C7
25	B2	609	CLA	C11-C12-C13-C15
25	c1	507	CLA	C6-C7-C8-C10
25	b1	612	CLA	C11-C10-C8-C7
25	d1	406	CLA	C2-C3-C5-C6
25	C1	507	CLA	C11-C12-C13-C15
25	b1	610	CLA	C11-C12-C13-C15
25	C1	512	CLA	C11-C10-C8-C7
25	A1	403	CLA	C11-C10-C8-C7
25	B2	611	CLA	C2-C3-C5-C6
25	c2	504	CLA	C12-C13-C15-C16
25	c2	511	CLA	C12-C13-C15-C16
25	B2	608	CLA	C11-C12-C13-C15
25	C1	504	CLA	C11-C10-C8-C7
25	b2	608	CLA	C11-C10-C8-C7
25	a1	404	CLA	C2C-C3C-CAC-CBC
25	C1	513	CLA	C8-C10-C11-C12
25	C1	502	CLA	C5-C6-C7-C8
25	b1	620	CLA	C16-C17-C18-C19
25	c2	505	CLA	C16-C17-C18-C19
25	c1	509	CLA	C16-C17-C18-C19
25	B1	610	CLA	C16-C17-C18-C20
25	d1	406	CLA	O1D-CGD-O2D-CED
29	B2	620	LMG	O9-C10-O7-C8
34	C1	517	DGD	C1A-C2A-C3A-C4A
25	D1	403	CLA	CBA-CGA-O2A-C1
25	c1	505	CLA	CBA-CGA-O2A-C1
27	D2	407	PHO	C3B-C4B-CHC-C1C
25	B1	612	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
25	b1	615	CLA	O1D-CGD-O2D-CED
25	C1	505	CLA	C13-C15-C16-C17
25	b1	608	CLA	O1A-CGA-O2A-C1
25	c2	505	CLA	O1A-CGA-O2A-C1
25	a1	403	CLA	CBD-CGD-O2D-CED
25	C2	509	CLA	C16-C17-C18-C20
25	B1	619	CLA	C16-C17-C18-C20
25	b1	620	CLA	C10-C11-C12-C13
25	b2	609	CLA	C8-C10-C11-C12
33	l1	102	LHG	C7-C8-C9-C10
33	d1	402	LHG	C8-C7-O7-C5
33	B2	627	LHG	C8-C7-O7-C5
25	D2	404	CLA	O1D-CGD-O2D-CED
33	l1	102	LHG	C11-C10-C9-C8
29	B1	626	LMG	C36-C37-C38-C39
25	K2	101	CLA	C3-C5-C6-C7
35	m2	103	LMT	O1'-C1-C2-C3
34	C1	517	DGD	CAA-CBA-CCA-CDA
34	H2	101	DGD	CBB-CCB-CDB-CEB
25	c1	510	CLA	O1D-CGD-O2D-CED
25	d2	405	CLA	C16-C17-C18-C20
33	L1	101	LHG	C16-C17-C18-C19
29	D1	406	LMG	O6-C5-C6-O5
25	B1	616	CLA	C10-C11-C12-C13
27	A1	408	PHO	C4-C3-C5-C6
25	B2	613	CLA	C4-C3-C5-C6
36	D1	408	PL9	C40-C39-C41-C42
27	a2	416	PHO	C4-C3-C5-C6
25	B2	611	CLA	C4-C3-C5-C6
25	b2	612	CLA	C4-C3-C5-C6
25	b1	616	CLA	C2-C3-C5-C6
25	c2	512	CLA	C2-C3-C5-C6
25	b2	608	CLA	C2-C3-C5-C6
25	b1	615	CLA	C10-C11-C12-C13
25	b2	620	CLA	C11-C12-C13-C14
25	b1	608	CLA	C11-C12-C13-C14
25	b1	604	CLA	C11-C12-C13-C14
25	b1	609	CLA	C6-C7-C8-C9
25	C2	505	CLA	C6-C7-C8-C9
25	C1	509	CLA	C11-C10-C8-C9
25	C1	509	CLA	C14-C13-C15-C16
27	a1	411	PHO	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
25	B1	609	CLA	C14-C13-C15-C16
25	C1	510	CLA	C11-C12-C13-C14
25	B2	617	CLA	C11-C12-C13-C14
25	c2	505	CLA	C6-C7-C8-C9
25	B1	606	CLA	C11-C12-C13-C14
25	B2	609	CLA	C11-C12-C13-C14
25	c2	512	CLA	C11-C12-C13-C14
25	B2	614	CLA	C14-C13-C15-C16
25	C1	507	CLA	C11-C12-C13-C14
25	C1	507	CLA	C14-C13-C15-C16
25	B1	617	CLA	C11-C12-C13-C14
27	A2	407	PHO	C6-C7-C8-C9
25	b1	607	CLA	C6-C7-C8-C9
25	d1	401	CLA	C6-C7-C8-C9
25	B1	607	CLA	O1A-CGA-O2A-C1
34	c1	518	DGD	C4B-C5B-C6B-C7B
25	b1	607	CLA	C3-C5-C6-C7
25	C2	511	CLA	O1D-CGD-O2D-CED
25	b2	616	CLA	O1D-CGD-O2D-CED
25	b2	613	CLA	C2A-CAA-CBA-CGA
29	c2	519	LMG	O6-C5-C6-O5
25	C2	506	CLA	C8-C10-C11-C12
25	c1	506	CLA	O1A-CGA-O2A-C1
25	b1	607	CLA	O1D-CGD-O2D-CED
25	b2	620	CLA	C1A-C2A-CAA-CBA
25	A2	404	CLA	C1A-C2A-CAA-CBA
25	c1	515	CLA	C1A-C2A-CAA-CBA
25	A2	403	CLA	C1A-C2A-CAA-CBA
25	c2	502	CLA	C1A-C2A-CAA-CBA
25	C1	512	CLA	C1A-C2A-CAA-CBA
25	B1	619	CLA	C1A-C2A-CAA-CBA
25	C1	502	CLA	C1A-C2A-CAA-CBA
25	c1	503	CLA	C1A-C2A-CAA-CBA
25	a1	404	CLA	C1A-C2A-CAA-CBA
25	c1	505	CLA	C1A-C2A-CAA-CBA
25	a2	405	CLA	C1A-C2A-CAA-CBA
25	c1	506	CLA	C16-C17-C18-C19
25	c1	510	CLA	C16-C17-C18-C20
25	B1	610	CLA	C16-C17-C18-C19
25	B1	615	CLA	C16-C17-C18-C19
25	B1	619	CLA	C16-C17-C18-C19
25	C1	502	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
34	c2	514	DGD	C2B-C1B-O2G-C2G
29	j2	101	LMG	C41-C42-C43-C44
33	D2	405	LHG	C13-C14-C15-C16
25	b2	611	CLA	C15-C16-C17-C18
25	c1	513	CLA	C5-C6-C7-C8
35	m2	104	LMT	C1-C2-C3-C4
33	D2	403	LHG	C3-O3-P-O6
33	B2	627	LHG	C3-O3-P-O6
33	d1	407	LHG	C14-C15-C16-C17
34	c2	517	DGD	C4A-C5A-C6A-C7A
33	D2	405	LHG	C11-C12-C13-C14
25	B2	609	CLA	C10-C11-C12-C13
25	d1	406	CLA	C10-C11-C12-C13
25	D2	406	CLA	C10-C11-C12-C13
25	C2	505	CLA	CBA-CGA-O2A-C1
33	D2	405	LHG	O6-C4-C5-C6
25	A1	403	CLA	O1D-CGD-O2D-CED
34	H1	101	DGD	O6E-C5E-C6E-O5E
27	d2	408	PHO	NB-C4B-CHC-C1C
25	c1	503	CLA	C16-C17-C18-C20
25	C2	506	CLA	O1D-CGD-O2D-CED
33	D2	403	LHG	C7-C8-C9-C10
25	c2	509	CLA	CBA-CGA-O2A-C1
33	B1	621	LHG	C1-C2-C3-O3
29	d1	408	LMG	O6-C5-C6-O5
29	b1	621	LMG	C4-C5-C6-O5
25	B1	605	CLA	C13-C15-C16-C17
25	A1	403	CLA	C15-C16-C17-C18
34	h1	101	DGD	CAA-CBA-CCA-CDA
25	D1	403	CLA	O1A-CGA-O2A-C1
25	d1	404	CLA	O1A-CGA-O2A-C1
33	d1	407	LHG	C33-C34-C35-C36
25	B1	606	CLA	C16-C17-C18-C19
27	d2	408	PHO	C3B-C4B-CHC-C1C
29	a2	412	LMG	C7-C8-C9-O8
33	A2	405	LHG	C4-C5-C6-O8
35	a2	406	LMT	C3-C4-C5-C6
25	B1	617	CLA	C8-C10-C11-C12
29	b1	631	LMG	C15-C16-C17-C18
33	L2	101	LHG	C11-C10-C9-C8
29	j2	101	LMG	O6-C5-C6-O5
35	m2	103	LMT	O5B-C5B-C6B-O6B

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Mol	Chain	Res	Type	Atoms
25	b2	617	CLA	C15-C16-C17-C18
25	c2	509	CLA	C8-C10-C11-C12
35	a2	406	LMT	O5B-C5B-C6B-O6B
25	c1	505	CLA	O1A-CGA-O2A-C1
25	C2	504	CLA	CBA-CGA-O2A-C1
25	B1	612	CLA	C13-C15-C16-C17
34	c1	518	DGD	O6E-C5E-C6E-O5E
32	C1	518	GOL	O1-C1-C2-O2
32	B1	620	GOL	O1-C1-C2-O2
32	a2	415	GOL	O1-C1-C2-O2
32	b1	618	GOL	O2-C2-C3-O3
34	c1	514	DGD	C6B-C7B-C8B-C9B
25	b2	608	CLA	C10-C11-C12-C13
33	l1	102	LHG	C9-C10-C11-C12
25	b1	604	CLA	C13-C15-C16-C17
25	B2	615	CLA	C10-C11-C12-C13
29	d2	407	LMG	O6-C5-C6-O5
35	M1	103	LMT	O5'-C5'-C6'-O6'
34	h2	102	DGD	O6E-C5E-C6E-O5E
29	a1	412	LMG	O6-C5-C6-O5
25	c2	515	CLA	O1A-CGA-O2A-C1
25	b1	611	CLA	C4-C3-C5-C6
33	L2	101	LHG	C23-C24-C25-C26
29	A1	412	LMG	C28-C29-C30-C31
25	C2	509	CLA	C16-C17-C18-C19
25	c1	511	CLA	CBD-CGD-O2D-CED
25	B1	617	CLA	CBD-CGD-O2D-CED
25	C1	511	CLA	C8-C10-C11-C12
25	a2	405	CLA	C10-C11-C12-C13
34	c2	514	DGD	C4D-C5D-C6D-O5D
35	b2	621	LMT	O5'-C5'-C6'-O6'
25	B2	612	CLA	C2A-CAA-CBA-CGA
25	C1	507	CLA	C2-C1-O2A-CGA
34	C1	515	DGD	C6B-C7B-C8B-C9B
25	c1	512	CLA	O1D-CGD-O2D-CED
33	d2	403	LHG	C31-C32-C33-C34
25	A2	404	CLA	CBA-CGA-O2A-C1
25	C1	513	CLA	CBA-CGA-O2A-C1
25	D2	406	CLA	CBA-CGA-O2A-C1
25	c2	509	CLA	O1A-CGA-O2A-C1
25	a2	405	CLA	O1D-CGD-O2D-CED
25	a2	405	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
27	D1	407	PHO	NB-C4B-CHC-C1C
25	b1	609	CLA	C3-C5-C6-C7
25	B1	619	CLA	C5-C6-C7-C8
29	b1	631	LMG	C2-C1-O1-C7
29	B2	621	LMG	O7-C8-C9-O8
35	M1	103	LMT	O1'-C1-C2-C3
33	B2	627	LHG	O9-C7-O7-C5
25	C2	505	CLA	O1A-CGA-O2A-C1
33	B1	621	LHG	C7-C8-C9-C10
33	b1	622	LHG	C7-C8-C9-C10
25	B1	613	CLA	C4-C3-C5-C6
36	d2	409	PL9	C40-C39-C41-C42
33	b1	622	LHG	C12-C13-C14-C15
25	A1	405	CLA	C2C-C3C-CAC-CBC
25	B2	619	CLA	C6-C7-C8-C10
25	b1	608	CLA	C11-C10-C8-C7
25	b2	619	CLA	C11-C10-C8-C7
25	b1	604	CLA	C6-C7-C8-C10
25	b1	604	CLA	C11-C12-C13-C15
25	b1	616	CLA	C12-C13-C15-C16
25	b1	614	CLA	C11-C12-C13-C15
25	B1	613	CLA	C11-C10-C8-C7
25	C1	506	CLA	C12-C13-C15-C16
25	c1	506	CLA	C11-C12-C13-C15
25	C2	503	CLA	C12-C13-C15-C16
25	b1	620	CLA	C12-C13-C15-C16
25	C2	509	CLA	C11-C12-C13-C15
25	C1	510	CLA	C11-C12-C13-C15
25	c2	505	CLA	C11-C12-C13-C15
25	B1	606	CLA	C11-C12-C13-C15
25	c2	512	CLA	C11-C12-C13-C15
25	B2	614	CLA	C11-C12-C13-C15
25	B2	614	CLA	C12-C13-C15-C16
25	c1	511	CLA	C11-C10-C8-C7
25	c2	509	CLA	C11-C12-C13-C15
25	B1	617	CLA	C11-C12-C13-C15
25	B1	617	CLA	C12-C13-C15-C16
27	A2	407	PHO	C6-C7-C8-C10
25	c1	512	CLA	C6-C7-C8-C10
25	c1	503	CLA	C12-C13-C15-C16
25	b2	612	CLA	C11-C12-C13-C15
25	a2	405	CLA	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
25	b2	618	CLA	C12-C13-C15-C16
25	C1	505	CLA	C3-C5-C6-C7
25	C2	509	CLA	C3-C5-C6-C7
25	b2	612	CLA	C3-C5-C6-C7
25	B1	608	CLA	C11-C10-C8-C9
25	C1	511	CLA	C14-C13-C15-C16
25	b1	604	CLA	C6-C7-C8-C9
25	b2	611	CLA	C14-C13-C15-C16
25	b1	614	CLA	C11-C12-C13-C14
25	C1	506	CLA	C14-C13-C15-C16
25	C2	505	CLA	C11-C10-C8-C9
25	C2	503	CLA	C14-C13-C15-C16
25	b1	620	CLA	C14-C13-C15-C16
25	B1	606	CLA	C6-C7-C8-C9
25	c1	507	CLA	C14-C13-C15-C16
25	B2	614	CLA	C11-C12-C13-C14
25	c2	502	CLA	C14-C13-C15-C16
25	B1	615	CLA	C11-C10-C8-C9
25	c1	511	CLA	C11-C10-C8-C9
25	c2	509	CLA	C11-C12-C13-C14
25	B1	617	CLA	C14-C13-C15-C16
25	b1	607	CLA	C11-C12-C13-C14
25	c1	512	CLA	C6-C7-C8-C9
25	C1	502	CLA	C11-C12-C13-C14
25	D2	406	CLA	C11-C10-C8-C9
25	D2	406	CLA	C11-C12-C13-C14
25	B2	608	CLA	C11-C12-C13-C14
25	b2	618	CLA	C14-C13-C15-C16
33	d1	407	LHG	C9-C10-C11-C12
33	L1	101	LHG	C11-C12-C13-C14
25	A1	404	CLA	CBA-CGA-O2A-C1
25	C2	503	CLA	C8-C10-C11-C12
25	C1	506	CLA	C2A-CAA-CBA-CGA
34	h2	102	DGD	C3B-C4B-C5B-C6B
27	D1	407	PHO	C3B-C4B-CHC-C1C
25	B1	608	CLA	C15-C16-C17-C18
25	B1	606	CLA	C16-C17-C18-C20
33	L1	101	LHG	C11-C10-C9-C8
25	C1	503	CLA	C3-C5-C6-C7
25	B2	617	CLA	C10-C11-C12-C13
29	j2	101	LMG	C11-C10-O7-C8
37	b2	605	SQD	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
25	c2	513	CLA	C6-C7-C8-C9
25	A1	406	CLA	CBA-CGA-O2A-C1
25	B2	619	CLA	C10-C11-C12-C13
25	c2	509	CLA	C15-C16-C17-C18
34	h1	101	DGD	O2G-C1B-C2B-C3B
25	c1	516	CLA	C16-C17-C18-C19
25	b1	604	CLA	C5-C6-C7-C8
25	b2	616	CLA	C10-C11-C12-C13
33	d1	407	LHG	O6-C4-C5-C6
33	a2	407	LHG	O6-C4-C5-C6
33	l1	102	LHG	O6-C4-C5-C6
33	l2	101	LHG	O6-C4-C5-C6
33	L1	101	LHG	O6-C4-C5-C6
33	d2	403	LHG	O6-C4-C5-C6
35	a2	406	LMT	C4-C5-C6-C7
25	c2	504	CLA	CBA-CGA-O2A-C1
25	C1	510	CLA	C13-C15-C16-C17
25	A2	403	CLA	C10-C11-C12-C13
25	B1	613	CLA	C2-C3-C5-C6
25	C1	506	CLA	C2-C3-C5-C6
36	d2	409	PL9	C38-C39-C41-C42
25	C1	506	CLA	O1D-CGD-O2D-CED
33	a1	407	LHG	O2-C2-C3-O3
33	d1	402	LHG	O9-C7-O7-C5
25	D2	404	CLA	C14-C13-C15-C16
25	C1	513	CLA	C14-C13-C15-C16
33	b1	622	LHG	C18-C19-C20-C21
25	C1	512	CLA	CBA-CGA-O2A-C1
25	a2	413	CLA	CBA-CGA-O2A-C1
29	c1	519	LMG	C10-C11-C12-C13
25	C1	513	CLA	O1A-CGA-O2A-C1
25	b2	620	CLA	C3A-C2A-CAA-CBA
25	A2	404	CLA	C3A-C2A-CAA-CBA
25	A1	406	CLA	C3A-C2A-CAA-CBA
25	C1	507	CLA	C3A-C2A-CAA-CBA
25	D2	406	CLA	C3A-C2A-CAA-CBA
33	L2	101	LHG	C11-C12-C13-C14
37	b2	605	SQD	C24-C25-C26-C27
34	C1	516	DGD	C4B-C5B-C6B-C7B
25	c1	506	CLA	C10-C11-C12-C13
25	d2	402	CLA	CBA-CGA-O2A-C1
33	d1	402	LHG	C4-C5-C6-O8

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Mol	Chain	Res	Type	Atoms
37	b2	605	SQD	C44-C45-C46-O48
34	H1	101	DGD	O1G-C1G-C2G-C3G
34	h2	102	DGD	O1G-C1G-C2G-C3G
29	a1	412	LMG	C7-C8-C9-O8
33	D2	405	LHG	C30-C31-C32-C33
25	D1	402	CLA	O2A-C1-C2-C3
25	B2	614	CLA	C13-C15-C16-C17
34	C1	516	DGD	O6D-C5D-C6D-O5D
29	b1	631	LMG	O8-C28-C29-C30
25	B1	615	CLA	C4-C3-C5-C6
25	K2	101	CLA	C6-C7-C8-C9
25	b1	611	CLA	C2-C3-C5-C6
25	C1	508	CLA	O1D-CGD-O2D-CED
34	c1	518	DGD	O6D-C5D-C6D-O5D
27	A1	408	PHO	C15-C16-C17-C18
33	L1	101	LHG	C3-O3-P-O6
35	m1	101	LMT	O1'-C1-C2-C3
25	b1	609	CLA	O1D-CGD-O2D-CED
27	D1	407	PHO	C2C-C1C-CHC-C4B
25	D2	406	CLA	C3-C5-C6-C7
33	d2	403	LHG	O1-C1-C2-O2
25	b1	619	CLA	C15-C16-C17-C18
33	D2	405	LHG	C32-C33-C34-C35
33	a2	407	LHG	O6-C4-C5-O7
33	A2	405	LHG	O6-C4-C5-O7
33	d2	403	LHG	O6-C4-C5-O7
33	D2	405	LHG	O6-C4-C5-O7
25	b2	624	CLA	CBA-CGA-O2A-C1
33	L2	101	LHG	C10-C11-C12-C13
25	b2	615	CLA	C11-C12-C13-C15
34	c1	518	DGD	C3B-C4B-C5B-C6B
25	b2	620	CLA	C5-C6-C7-C8
25	A2	404	CLA	O1A-CGA-O2A-C1
25	D2	406	CLA	O1A-CGA-O2A-C1
29	a2	412	LMG	O7-C8-C9-O8
33	A2	405	LHG	O7-C5-C6-O8
29	B1	626	LMG	O7-C8-C9-O8
29	A1	412	LMG	O7-C8-C9-O8
25	b2	609	CLA	CBD-CGD-O2D-CED
27	a1	411	PHO	C13-C15-C16-C17
25	B2	619	CLA	C8-C10-C11-C12
33	B1	621	LHG	C31-C32-C33-C34

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Mol	Chain	Res	Type	Atoms
34	c2	514	DGD	O1B-C1B-O2G-C2G
25	c1	507	CLA	C2-C1-O2A-CGA
25	c2	507	CLA	C2-C1-O2A-CGA
33	L2	101	LHG	C15-C16-C17-C18
25	c1	512	CLA	C10-C11-C12-C13
25	b2	620	CLA	C14-C13-C15-C16
25	b1	606	CLA	C14-C13-C15-C16
25	B2	607	CLA	C6-C7-C8-C9
25	C1	509	CLA	C6-C7-C8-C9
25	b1	613	CLA	C11-C12-C13-C14
25	B1	609	CLA	C11-C10-C8-C9
25	c1	507	CLA	C11-C12-C13-C14
25	d1	406	CLA	C11-C12-C13-C14
25	b2	609	CLA	C11-C10-C8-C9
25	B1	605	CLA	C14-C13-C15-C16
25	b1	615	CLA	C11-C10-C8-C9
25	d2	402	CLA	C11-C10-C8-C9
25	b2	616	CLA	C6-C7-C8-C9
25	B1	614	CLA	C6-C7-C8-C9
33	D1	404	LHG	C30-C31-C32-C33
25	b2	611	CLA	C13-C15-C16-C17
25	b1	613	CLA	C5-C6-C7-C8
25	A1	404	CLA	C4-C3-C5-C6
25	C2	509	CLA	C2A-CAA-CBA-CGA
25	a1	403	CLA	O1D-CGD-O2D-CED
25	C1	509	CLA	C16-C17-C18-C19
25	A1	403	CLA	C16-C17-C18-C19
27	d1	403	PHO	NC-C1C-CHC-C4B
23	B2	603	BCR	C23-C24-C25-C26
23	a2	402	BCR	C23-C24-C25-C26
23	a2	402	BCR	C23-C24-C25-C30
23	h1	102	BCR	C23-C24-C25-C26
23	d2	401	BCR	C1-C6-C7-C8
23	b1	603	BCR	C1-C6-C7-C8
23	d1	405	BCR	C23-C24-C25-C26
23	A1	401	BCR	C23-C24-C25-C26
23	H1	102	BCR	C1-C6-C7-C8
23	H1	102	BCR	C5-C6-C7-C8
23	D1	401	BCR	C23-C24-C25-C26
25	b2	624	CLA	C13-C15-C16-C17
25	B2	617	CLA	C8-C10-C11-C12
25	C1	503	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
29	b1	621	LMG	C34-C35-C36-C37
29	b1	624	LMG	C32-C33-C34-C35
25	c1	508	CLA	C2C-C3C-CAC-CBC
25	c2	509	CLA	O1D-CGD-O2D-CED
23	K1	101	BCR	C17-C18-C19-C20
25	B1	604	CLA	C1A-C2A-CAA-CBA
25	B1	615	CLA	C15-C16-C17-C18
25	c2	510	CLA	O1D-CGD-O2D-CED
34	h1	101	DGD	C6B-C7B-C8B-C9B
25	c1	513	CLA	C11-C12-C13-C15
29	d2	407	LMG	C28-C29-C30-C31
25	b2	608	CLA	C5-C6-C7-C8
34	H1	101	DGD	C3B-C4B-C5B-C6B
25	b2	606	CLA	C8-C10-C11-C12
25	C1	510	CLA	C8-C10-C11-C12
33	d1	402	LHG	O6-C4-C5-C6
33	D1	405	LHG	O6-C4-C5-C6
27	d2	408	PHO	C2C-C1C-CHC-C4B
33	a2	407	LHG	C11-C12-C13-C14
33	l2	101	LHG	C25-C26-C27-C28
25	b2	620	CLA	C6-C7-C8-C10
25	b2	620	CLA	C12-C13-C15-C16
25	B2	619	CLA	C12-C13-C15-C16
25	C1	511	CLA	C12-C13-C15-C16
25	b2	624	CLA	C11-C10-C8-C7
25	B2	607	CLA	C6-C7-C8-C10
25	B2	613	CLA	C11-C12-C13-C15
25	C1	508	CLA	C6-C7-C8-C10
25	b2	617	CLA	C11-C10-C8-C7
25	B1	613	CLA	C11-C12-C13-C15
25	c1	506	CLA	C12-C13-C15-C16
25	B2	610	CLA	C12-C13-C15-C16
25	b1	620	CLA	C11-C10-C8-C7
25	C2	506	CLA	C12-C13-C15-C16
25	c2	508	CLA	C11-C10-C8-C7
25	c2	508	CLA	C11-C12-C13-C15
25	c2	505	CLA	C12-C13-C15-C16
25	c1	509	CLA	C11-C12-C13-C15
25	B1	606	CLA	C6-C7-C8-C10
25	c1	507	CLA	C12-C13-C15-C16
25	A2	403	CLA	C11-C12-C13-C15
25	d1	406	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
25	c2	512	CLA	C12-C13-C15-C16
25	b2	609	CLA	C11-C10-C8-C7
25	c1	511	CLA	C11-C12-C13-C15
25	B1	617	CLA	C11-C10-C8-C7
25	b1	607	CLA	C11-C12-C13-C15
25	A1	403	CLA	C11-C12-C13-C15
25	B1	619	CLA	C12-C13-C15-C16
25	b2	614	CLA	C11-C10-C8-C7
25	b2	614	CLA	C11-C12-C13-C15
25	c2	511	CLA	C6-C7-C8-C10
25	B1	614	CLA	C11-C10-C8-C7
25	B1	614	CLA	C11-C12-C13-C15
25	b2	608	CLA	C11-C12-C13-C15
25	B2	606	CLA	C11-C10-C8-C7
29	C1	520	LMG	C30-C31-C32-C33
33	D2	405	LHG	C11-C10-C9-C8
23	c2	501	BCR	C15-C16-C17-C18
25	c1	516	CLA	C16-C17-C18-C20
25	b2	615	CLA	C11-C12-C13-C14
27	a2	416	PHO	C16-C17-C18-C19
29	j2	101	LMG	O9-C10-O7-C8
34	c2	516	DGD	C1A-C2A-C3A-C4A
25	A1	404	CLA	O1A-CGA-O2A-C1
25	c1	516	CLA	C2A-CAA-CBA-CGA
25	c2	506	CLA	C2A-CAA-CBA-CGA
34	h1	101	DGD	CBB-CCB-CDB-CEB
25	A1	405	CLA	CBA-CGA-O2A-C1
25	b2	614	CLA	CBA-CGA-O2A-C1
25	B2	611	CLA	CBA-CGA-O2A-C1
25	b2	606	CLA	C5-C6-C7-C8
25	B2	613	CLA	C8-C10-C11-C12
25	C2	504	CLA	CAD-CBD-CGD-O2D
25	c1	516	CLA	CAD-CBD-CGD-O2D
25	C2	510	CLA	CAD-CBD-CGD-O2D
25	b1	614	CLA	CAD-CBD-CGD-O2D
27	a1	411	PHO	C2B-C3B-CAB-CBB
25	b2	615	CLA	CAD-CBD-CGD-O2D
25	C2	506	CLA	CAD-CBD-CGD-O2D
29	c1	519	LMG	C9-C8-O7-C10
27	d1	403	PHO	CAD-CBD-CGD-O2D
25	C1	513	CLA	CAD-CBD-CGD-O2D
25	c2	502	CLA	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
25	B1	615	CLA	CAD-CBD-CGD-O2D
27	A2	407	PHO	C2B-C3B-CAB-CBB
25	c1	512	CLA	CAD-CBD-CGD-O2D
25	B1	616	CLA	CAD-CBD-CGD-O2D
25	B2	606	CLA	CAD-CBD-CGD-O2D
34	C1	517	DGD	C6B-C7B-C8B-C9B
25	B1	616	CLA	C8-C10-C11-C12
25	B2	608	CLA	C16-C17-C18-C19
29	b1	631	LMG	O6-C1-O1-C7
29	B2	621	LMG	O6-C1-O1-C7
37	B2	623	SQD	O5-C1-O6-C44
25	c1	512	CLA	C8-C10-C11-C12
36	D2	408	PL9	C9-C11-C12-C13
29	A1	410	LMG	O1-C7-C8-C9
29	c1	519	LMG	O1-C7-C8-C9
29	B1	626	LMG	O1-C7-C8-C9
33	D1	404	LHG	C4-C5-C6-O8
29	C1	520	LMG	C7-C8-C9-O8
29	a1	412	LMG	O1-C7-C8-C9
33	l1	102	LHG	O6-C4-C5-O7
33	D1	405	LHG	O6-C4-C5-O7
25	b1	619	CLA	C5-C6-C7-C8
25	B1	610	CLA	C13-C15-C16-C17
34	c1	514	DGD	CBB-CCB-CDB-CEB
25	C1	509	CLA	C16-C17-C18-C20
25	B1	608	CLA	CHA-CBD-CGD-O1D
25	b2	613	CLA	CHA-CBD-CGD-O1D
25	b2	613	CLA	CHA-CBD-CGD-O2D
25	a1	405	CLA	CHA-CBD-CGD-O1D
25	a1	405	CLA	CHA-CBD-CGD-O2D
25	c2	503	CLA	CHA-CBD-CGD-O1D
25	c2	503	CLA	CHA-CBD-CGD-O2D
25	b2	604	CLA	CHA-CBD-CGD-O2D
25	b1	609	CLA	CHA-CBD-CGD-O1D
25	b1	609	CLA	CHA-CBD-CGD-O2D
25	c1	506	CLA	CHA-CBD-CGD-O1D
25	c1	506	CLA	CHA-CBD-CGD-O2D
25	C2	506	CLA	CHA-CBD-CGD-O1D
25	c2	508	CLA	CHA-CBD-CGD-O1D
25	c2	508	CLA	CHA-CBD-CGD-O2D
25	C2	508	CLA	CHA-CBD-CGD-O1D
25	C2	508	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
25	B1	605	CLA	CHA-CBD-CGD-O1D
25	B1	605	CLA	CHA-CBD-CGD-O2D
25	C1	512	CLA	CHA-CBD-CGD-O1D
25	C1	512	CLA	CHA-CBD-CGD-O2D
25	C2	511	CLA	CHA-CBD-CGD-O1D
25	C2	511	CLA	CHA-CBD-CGD-O2D
25	C1	502	CLA	CHA-CBD-CGD-O1D
25	b2	614	CLA	CHA-CBD-CGD-O1D
25	c2	504	CLA	CHA-CBD-CGD-O1D
25	c2	504	CLA	CHA-CBD-CGD-O2D
25	b2	616	CLA	CHA-CBD-CGD-O1D
25	B2	608	CLA	CHA-CBD-CGD-O1D
25	B2	608	CLA	CHA-CBD-CGD-O2D
25	B2	605	CLA	CHA-CBD-CGD-O2D
25	b2	624	CLA	O1A-CGA-O2A-C1
25	A1	406	CLA	O1A-CGA-O2A-C1
25	C1	512	CLA	O1A-CGA-O2A-C1
25	c2	504	CLA	O1A-CGA-O2A-C1
25	a2	413	CLA	O1A-CGA-O2A-C1
34	C1	515	DGD	C7B-C8B-C9B-CAB
34	h2	102	DGD	O1G-C1G-C2G-O2G
29	B1	626	LMG	C14-C15-C16-C17
25	d2	402	CLA	O1A-CGA-O2A-C1
32	a1	406	GOL	O1-C1-C2-O2
32	c2	518	GOL	O1-C1-C2-O2
32	c1	521	GOL	O1-C1-C2-O2
34	c2	514	DGD	C2B-C3B-C4B-C5B
25	B2	619	CLA	C14-C13-C15-C16
25	c2	503	CLA	C14-C13-C15-C16
25	c1	516	CLA	C11-C12-C13-C14
25	c2	505	CLA	C14-C13-C15-C16
25	c1	511	CLA	C11-C12-C13-C14
25	A1	403	CLA	C11-C12-C13-C14
25	B1	619	CLA	C14-C13-C15-C16
25	b2	614	CLA	C11-C12-C13-C14
25	B1	614	CLA	C11-C12-C13-C14
34	C1	516	DGD	C4D-C5D-C6D-O5D
25	B2	611	CLA	O1A-CGA-O2A-C1
25	b2	616	CLA	C8-C10-C11-C12
23	J1	101	BCR	C17-C18-C19-C20
35	l1	101	LMT	O1'-C1-C2-C3
25	D2	401	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
25	c1	516	CLA	C1A-C2A-CAA-CBA
25	c2	515	CLA	C1A-C2A-CAA-CBA
25	D2	406	CLA	C1A-C2A-CAA-CBA
25	C1	514	CLA	C1A-C2A-CAA-CBA
34	c1	518	DGD	C4D-C5D-C6D-O5D
25	C1	512	CLA	C2-C1-O2A-CGA
25	B2	609	CLA	CBD-CGD-O2D-CED
25	c1	512	CLA	CBA-CGA-O2A-C1
29	B2	621	LMG	C17-C18-C19-C20
25	d1	404	CLA	C15-C16-C17-C18
33	a2	407	LHG	C3-O3-P-O6
33	b2	625	LHG	C3-O3-P-O6
33	L2	101	LHG	C4-O6-P-O3
33	d2	403	LHG	C3-O3-P-O6
33	D2	405	LHG	C3-O3-P-O6
34	c2	517	DGD	C2B-C3B-C4B-C5B
34	C1	516	DGD	C4E-C5E-C6E-O5E
25	B1	617	CLA	O1D-CGD-O2D-CED
33	D2	403	LHG	C3-O3-P-O5
33	d1	402	LHG	C3-O3-P-O4
33	d1	402	LHG	C4-O6-P-O4
33	a1	407	LHG	C3-O3-P-O4
33	a1	407	LHG	C4-O6-P-O5
33	A2	405	LHG	C3-O3-P-O4
33	D1	404	LHG	C3-O3-P-O4
33	B2	627	LHG	C4-O6-P-O4
33	L1	101	LHG	C3-O3-P-O5
33	d2	403	LHG	C4-O6-P-O4
25	C1	508	CLA	C16-C17-C18-C19
25	c2	508	CLA	C16-C17-C18-C20
25	b1	617	CLA	C16-C17-C18-C20
25	a2	405	CLA	C16-C17-C18-C19
25	B2	605	CLA	C8-C10-C11-C12
25	b1	619	CLA	CBA-CGA-O2A-C1
25	B1	613	CLA	CBA-CGA-O2A-C1
36	d1	409	PL9	C9-C11-C12-C13
36	d1	409	PL9	C44-C46-C47-C48
25	c2	507	CLA	C6-C7-C8-C9
25	C1	502	CLA	C2A-CAA-CBA-CGA
25	c1	515	CLA	C3-C5-C6-C7
25	C1	502	CLA	C15-C16-C17-C18
25	b2	608	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
25	b2	614	CLA	O1A-CGA-O2A-C1
25	A1	403	CLA	C16-C17-C18-C20
34	c1	514	DGD	C8B-C9B-CAB-CBB
25	A2	404	CLA	C2-C3-C5-C6
25	b2	617	CLA	CAD-CBD-CGD-O1D
25	c1	506	CLA	CAD-CBD-CGD-O1D
25	C2	508	CLA	CAD-CBD-CGD-O1D
25	C1	507	CLA	CAD-CBD-CGD-O1D
25	b1	611	CLA	CAD-CBD-CGD-O1D
25	B1	604	CLA	CAD-CBD-CGD-O1D
25	B2	608	CLA	CAD-CBD-CGD-O1D
25	C1	503	CLA	CAD-CBD-CGD-O1D
34	C1	515	DGD	C1A-C2A-C3A-C4A
33	d2	406	LHG	C14-C15-C16-C17
34	H1	101	DGD	CCB-CDB-CEB-CFB
25	B1	613	CLA	O1A-CGA-O2A-C1
33	D2	403	LHG	C1-C2-C3-O3
33	l1	102	LHG	C1-C2-C3-O3
25	b1	615	CLA	C11-C12-C13-C14
25	b2	606	CLA	C16-C17-C18-C19
25	a2	404	CLA	C16-C17-C18-C19
25	b1	607	CLA	C16-C17-C18-C19
25	C1	512	CLA	C16-C17-C18-C20
25	D2	404	CLA	C11-C10-C8-C7
33	d1	407	LHG	O6-C4-C5-O7
25	b1	608	CLA	C6-C7-C8-C10
25	C1	511	CLA	C6-C7-C8-C10
25	b2	624	CLA	C3A-C2A-CAA-CBA
25	d2	405	CLA	C11-C10-C8-C7
25	C1	509	CLA	C11-C12-C13-C15
33	d1	402	LHG	O6-C4-C5-O7
25	B2	610	CLA	C11-C12-C13-C15
33	l2	101	LHG	O6-C4-C5-O7
25	c2	508	CLA	C6-C7-C8-C10
25	c2	508	CLA	C12-C13-C15-C16
25	B2	617	CLA	C11-C10-C8-C7
25	c1	507	CLA	C11-C10-C8-C7
25	d1	406	CLA	C6-C7-C8-C10
25	B1	610	CLA	C6-C7-C8-C10
25	B1	611	CLA	C11-C12-C13-C15
25	c2	502	CLA	C11-C12-C13-C15
25	B1	616	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
25	B1	619	CLA	C6-C7-C8-C10
33	L1	101	LHG	O6-C4-C5-O7
25	d1	401	CLA	C11-C12-C13-C15
25	B2	611	CLA	C6-C7-C8-C10
25	c2	504	CLA	C11-C10-C8-C7
25	D1	402	CLA	C11-C12-C13-C15
34	H1	101	DGD	C8A-C9A-CAA-CBA
25	C1	513	CLA	C3-C5-C6-C7
25	A1	405	CLA	O1A-CGA-O2A-C1
33	D1	405	LHG	C11-C10-C9-C8
25	b1	620	CLA	C13-C15-C16-C17
34	c2	517	DGD	CCB-CDB-CEB-CFB
25	b2	620	CLA	C2A-CAA-CBA-CGA
25	b1	608	CLA	C16-C17-C18-C19
25	A1	406	CLA	C16-C17-C18-C19
25	c2	503	CLA	C3-C5-C6-C7
38	f1	101	HEM	C1A-C2A-CAA-CBA
38	f1	101	HEM	C3A-C2A-CAA-CBA
29	c1	519	LMG	O1-C7-C8-O7
37	b2	605	SQD	O47-C45-C46-O48
29	B1	626	LMG	O1-C7-C8-O7
29	b1	624	LMG	O1-C7-C8-O7
29	C1	520	LMG	C33-C34-C35-C36
34	c1	520	DGD	C8A-C9A-CAA-CBA
25	B2	610	CLA	CBA-CGA-O2A-C1
34	C1	516	DGD	C3B-C4B-C5B-C6B
25	B1	609	CLA	C15-C16-C17-C18
25	b2	609	CLA	O1D-CGD-O2D-CED
25	c1	511	CLA	O1D-CGD-O2D-CED
25	b1	619	CLA	O1A-CGA-O2A-C1
25	c1	512	CLA	O1A-CGA-O2A-C1
25	b1	606	CLA	C11-C10-C8-C9
25	b1	616	CLA	C14-C13-C15-C16
25	C1	508	CLA	C6-C7-C8-C9
25	c1	506	CLA	C11-C10-C8-C9
25	c1	506	CLA	C14-C13-C15-C16
27	a2	416	PHO	C14-C13-C15-C16
25	B1	606	CLA	C11-C10-C8-C9
25	B2	612	CLA	C14-C13-C15-C16
25	b1	612	CLA	C14-C13-C15-C16
25	c2	512	CLA	C14-C13-C15-C16
25	d1	404	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
25	c2	511	CLA	C6-C7-C8-C9
25	b2	608	CLA	C11-C12-C13-C14
25	c2	513	CLA	C3-C5-C6-C7
29	B2	620	LMG	C30-C31-C32-C33
25	B2	610	CLA	O1A-CGA-O2A-C1
23	k1	101	BCR	C18-C19-C20-C21
23	J1	101	BCR	C18-C19-C20-C21
23	j2	102	BCR	C18-C19-C20-C21
23	b1	602	BCR	C10-C11-C12-C13
23	F2	401	BCR	C18-C19-C20-C21
23	c2	501	BCR	C18-C19-C20-C21
23	K2	102	BCR	C18-C19-C20-C21
23	c1	502	BCR	C18-C19-C20-C21
23	J1	101	BCR	C7-C8-C9-C10
27	D2	407	PHO	C4-C3-C5-C6
25	B2	608	CLA	CBD-CGD-O2D-CED
33	d1	407	LHG	C11-C10-C9-C8
25	b2	614	CLA	C16-C17-C18-C19
25	B2	619	CLA	C5-C6-C7-C8
25	c1	516	CLA	C5-C6-C7-C8
37	b2	605	SQD	C46-C45-O47-C7
25	C1	509	CLA	O1A-CGA-O2A-C1
25	A2	402	CLA	CBA-CGA-O2A-C1
25	B2	608	CLA	O1D-CGD-O2D-CED
25	B2	607	CLA	C8-C10-C11-C12
27	A1	408	PHO	C2-C1-O2A-CGA
27	D2	407	PHO	C2-C1-O2A-CGA
25	b2	614	CLA	C2-C1-O2A-CGA
25	d1	401	CLA	C2-C1-O2A-CGA
25	C2	504	CLA	O1A-CGA-O2A-C1
25	K2	101	CLA	C2C-C3C-CAC-CBC
29	j2	101	LMG	C38-C39-C40-C41
34	C1	517	DGD	O6D-C5D-C6D-O5D
25	c2	513	CLA	C5-C6-C7-C8
25	B2	612	CLA	CBA-CGA-O2A-C1
25	A2	402	CLA	O1A-CGA-O2A-C1
25	A2	402	CLA	C16-C17-C18-C19
25	B2	619	CLA	C13-C15-C16-C17
25	b1	619	CLA	C4-C3-C5-C6
23	h1	102	BCR	C1-C6-C7-C8
23	h1	102	BCR	C23-C24-C25-C30
23	B1	602	BCR	C23-C24-C25-C26

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Mol	Chain	Res	Type	Atoms
23	b2	602	BCR	C23-C24-C25-C26
23	d1	405	BCR	C23-C24-C25-C30
23	A1	401	BCR	C23-C24-C25-C30
23	h2	101	BCR	C23-C24-C25-C30
29	M1	101	LMG	C31-C32-C33-C34
33	b1	622	LHG	C11-C12-C13-C14
34	H2	101	DGD	C2B-C3B-C4B-C5B
25	C1	508	CLA	C16-C17-C18-C20
25	B2	612	CLA	O1A-CGA-O2A-C1
34	H1	101	DGD	O1G-C1G-C2G-O2G
34	h2	102	DGD	C4B-C5B-C6B-C7B
33	d1	407	LHG	C3-O3-P-O6
33	d2	406	LHG	C3-O3-P-O6
33	b1	622	LHG	C3-O3-P-O6
33	D1	405	LHG	C3-O3-P-O6
29	B1	626	LMG	C7-C8-C9-O8
33	L1	101	LHG	C12-C13-C14-C15
25	B1	612	CLA	C5-C6-C7-C8
25	c1	516	CLA	C11-C12-C13-C15
25	b2	611	CLA	C12-C13-C15-C16
25	b1	609	CLA	C11-C12-C13-C15
25	c2	502	CLA	C12-C13-C15-C16
25	D2	406	CLA	C11-C12-C13-C15
25	b2	616	CLA	C6-C7-C8-C10
25	B2	610	CLA	C11-C12-C13-C14
25	C2	506	CLA	C14-C13-C15-C16
25	A2	403	CLA	C11-C12-C13-C14
25	d1	406	CLA	C6-C7-C8-C9
25	B1	610	CLA	C6-C7-C8-C9
25	B1	615	CLA	C14-C13-C15-C16
25	B1	617	CLA	C11-C10-C8-C9
25	b1	614	CLA	C16-C17-C18-C19
25	A1	406	CLA	C16-C17-C18-C20
25	c2	508	CLA	C16-C17-C18-C19
27	A2	407	PHO	C16-C17-C18-C19
25	C2	505	CLA	C5-C6-C7-C8
33	B1	621	LHG	C25-C26-C27-C28
25	b2	617	CLA	C2A-CAA-CBA-CGA
34	H2	101	DGD	C3B-C4B-C5B-C6B
33	D2	405	LHG	C12-C13-C14-C15
27	A1	408	PHO	C16-C17-C18-C19
25	b1	607	CLA	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
33	a1	407	LHG	C12-C13-C14-C15
29	A1	412	LMG	C29-C28-O8-C9
34	C1	516	DGD	CBA-CCA-CDA-CEA
25	c1	516	CLA	C8-C10-C11-C12
25	c2	506	CLA	C12-C13-C15-C16
27	d1	403	PHO	C2C-C1C-CHC-C4B
25	C1	513	CLA	C12-C13-C15-C16
29	I2	101	LMG	C11-C10-O7-C8
25	D2	404	CLA	C4-C3-C5-C6
25	b2	620	CLA	C4-C3-C5-C6
25	B1	615	CLA	C2-C3-C5-C6
33	b1	622	LHG	C13-C14-C15-C16
25	b1	617	CLA	C16-C17-C18-C19
25	a1	405	CLA	CBA-CGA-O2A-C1
25	C1	509	CLA	CBA-CGA-O2A-C1
34	c1	520	DGD	O6D-C5D-C6D-O5D
25	b1	616	CLA	O1A-CGA-O2A-C1
25	b1	616	CLA	CBA-CGA-O2A-C1
37	b2	605	SQD	C14-C15-C16-C17
25	b2	606	CLA	C16-C17-C18-C20
25	b1	609	CLA	C16-C17-C18-C19
25	a2	405	CLA	C16-C17-C18-C20
25	c1	503	CLA	C15-C16-C17-C18
33	D2	403	LHG	C28-C29-C30-C31
29	I2	101	LMG	O9-C10-O7-C8
33	d2	406	LHG	O6-C4-C5-C6
34	C1	515	DGD	O1A-C1A-O1G-C1G
25	c1	515	CLA	CAA-CBA-CGA-O2A
25	c1	515	CLA	C5-C6-C7-C8
25	b2	612	CLA	C10-C11-C12-C13
33	b1	622	LHG	C28-C29-C30-C31
34	h1	101	DGD	C5B-C6B-C7B-C8B
29	B2	621	LMG	C19-C20-C21-C22
25	b2	608	CLA	CBA-CGA-O2A-C1
34	c2	517	DGD	CBB-CCB-CDB-CEB
33	d2	403	LHG	C13-C14-C15-C16
27	a1	411	PHO	C4B-C3B-CAB-CBB
33	I2	101	LHG	C26-C27-C28-C29
34	H2	101	DGD	CCB-CDB-CEB-CFB
25	B2	616	CLA	C4-C3-C5-C6
25	C1	511	CLA	C4-C3-C5-C6
27	d1	403	PHO	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
25	b2	608	CLA	O1A-CGA-O2A-C1
25	a2	404	CLA	C2-C1-O2A-CGA
25	c1	515	CLA	C2-C1-O2A-CGA
25	b2	615	CLA	C2-C1-O2A-CGA
25	A1	403	CLA	C2-C1-O2A-CGA
34	c1	518	DGD	C8B-C9B-CAB-CBB
34	c1	514	DGD	CDB-CEB-CFB-CGB
25	C1	512	CLA	C10-C11-C12-C13
25	C1	510	CLA	C2A-CAA-CBA-CGA
25	b1	605	CLA	C2A-CAA-CBA-CGA
25	c2	502	CLA	C2A-CAA-CBA-CGA
33	L2	101	LHG	O7-C5-C6-O8
34	c1	514	DGD	C7B-C8B-C9B-CAB
25	d2	402	CLA	C3A-C2A-CAA-CBA
25	c1	513	CLA	C11-C12-C13-C14
34	c1	520	DGD	CBA-CCA-CDA-CEA
25	B1	614	CLA	CBA-CGA-O2A-C1
34	H1	101	DGD	C7A-C8A-C9A-CAA
34	H1	101	DGD	C6B-C7B-C8B-C9B
34	c2	514	DGD	CAA-CBA-CCA-CDA
25	b2	606	CLA	C14-C13-C15-C16
27	A1	408	PHO	C11-C10-C8-C9
25	C1	505	CLA	C11-C12-C13-C14
25	b1	614	CLA	C14-C13-C15-C16
25	B2	615	CLA	C14-C13-C15-C16
25	c2	505	CLA	C11-C10-C8-C9
25	B2	614	CLA	C11-C10-C8-C9
25	B1	605	CLA	C6-C7-C8-C9
25	C1	512	CLA	C6-C7-C8-C9
25	B2	611	CLA	C14-C13-C15-C16
25	a1	404	CLA	C11-C10-C8-C9
25	B2	608	CLA	C11-C10-C8-C9
25	a2	405	CLA	C11-C10-C8-C9
25	B2	605	CLA	C13-C15-C16-C17
29	B1	626	LMG	C33-C34-C35-C36
34	H1	101	DGD	C9B-CAB-CBB-CCB
25	d2	405	CLA	C15-C16-C17-C18
23	k1	101	BCR	C20-C21-C22-C37
23	J1	101	BCR	C20-C21-C22-C37
23	j2	102	BCR	C20-C21-C22-C37
23	b1	602	BCR	C11-C10-C9-C34
23	F2	401	BCR	C20-C21-C22-C37

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Mol	Chain	Res	Type	Atoms
23	c2	501	BCR	C16-C17-C18-C36
23	c2	501	BCR	C20-C21-C22-C37
23	K2	102	BCR	C20-C21-C22-C37
23	c1	502	BCR	C20-C21-C22-C37
34	H2	101	DGD	O1G-C1G-C2G-C3G
25	C1	508	CLA	C2A-CAA-CBA-CGA
33	L1	101	LHG	C9-C10-C11-C12
25	A2	402	CLA	C16-C17-C18-C20
25	d2	405	CLA	O2A-C1-C2-C3
33	D2	403	LHG	O2-C2-C3-O3
34	C1	515	DGD	C2A-C1A-O1G-C1G
25	a1	404	CLA	CBA-CGA-O2A-C1
35	C1	519	LMT	O5'-C1'-O1'-C1
25	B2	609	CLA	O1D-CGD-O2D-CED
29	B2	620	LMG	C29-C30-C31-C32
25	B1	610	CLA	C4-C3-C5-C6
25	A1	406	CLA	C1A-C2A-CAA-CBA
25	d1	406	CLA	C1A-C2A-CAA-CBA
25	C1	507	CLA	C1A-C2A-CAA-CBA
25	C1	504	CLA	C1A-C2A-CAA-CBA
25	B2	619	CLA	C11-C10-C8-C7
25	c2	503	CLA	C6-C7-C8-C10
25	B2	613	CLA	C12-C13-C15-C16
25	b1	619	CLA	C12-C13-C15-C16
25	C1	506	CLA	C11-C10-C8-C7
25	c2	512	CLA	C6-C7-C8-C10
25	B2	614	CLA	C6-C7-C8-C10
25	b1	611	CLA	C6-C7-C8-C10
25	B1	616	CLA	C12-C13-C15-C16
25	d1	401	CLA	C12-C13-C15-C16
25	C1	503	CLA	C6-C7-C8-C10
25	b2	620	CLA	C8-C10-C11-C12
23	h1	102	BCR	C9-C10-C11-C12
23	B1	602	BCR	C9-C10-C11-C12
34	c1	520	DGD	CAA-CBA-CCA-CDA
33	b1	622	LHG	C4-O6-P-O3
33	L2	101	LHG	C3-O3-P-O6
25	b1	605	CLA	CAA-CBA-CGA-O2A
25	a1	405	CLA	O1A-CGA-O2A-C1
35	m1	101	LMT	C2-C3-C4-C5
25	c2	502	CLA	C15-C16-C17-C18
25	C2	505	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
25	d2	402	CLA	C15-C16-C17-C18
25	B1	614	CLA	C10-C11-C12-C13
33	b1	622	LHG	C31-C32-C33-C34
34	h1	101	DGD	C9B-CAB-CBB-CCB
29	j2	101	LMG	C15-C16-C17-C18
33	A2	405	LHG	O6-C4-C5-C6
25	c2	508	CLA	C8-C10-C11-C12
25	C1	513	CLA	C4-C3-C5-C6
25	b2	617	CLA	C8-C10-C11-C12
25	B1	606	CLA	C13-C15-C16-C17
33	L2	101	LHG	C12-C13-C14-C15
23	k1	101	BCR	C20-C21-C22-C23
23	J1	101	BCR	C20-C21-C22-C23
23	j2	102	BCR	C20-C21-C22-C23
23	b1	602	BCR	C11-C10-C9-C8
23	F2	401	BCR	C20-C21-C22-C23
23	c2	501	BCR	C16-C17-C18-C19
23	c2	501	BCR	C20-C21-C22-C23
23	K2	102	BCR	C20-C21-C22-C23
23	c1	502	BCR	C20-C21-C22-C23
37	D1	409	SQD	O6-C44-C45-O47
37	B2	623	SQD	O6-C44-C45-O47
29	b1	621	LMG	O1-C7-C8-O7
34	c1	520	DGD	C9A-CAA-CBA-CCA
34	C1	516	DGD	CAA-CBA-CCA-CDA
25	d1	406	CLA	C13-C15-C16-C17
33	b1	622	LHG	C10-C11-C12-C13
25	B1	614	CLA	O1A-CGA-O2A-C1
33	a1	407	LHG	C1-C2-C3-O3
25	c2	504	CLA	C15-C16-C17-C18
36	D1	408	PL9	C35-C34-C36-C37
36	d1	409	PL9	C45-C44-C46-C47
36	d2	409	PL9	C35-C34-C36-C37
25	b1	604	CLA	C2-C1-O2A-CGA
25	d1	406	CLA	C2-C1-O2A-CGA
25	a1	403	CLA	C2-C1-O2A-CGA
27	A2	407	PHO	C2-C1-O2A-CGA
25	c2	511	CLA	C5-C6-C7-C8
25	b2	606	CLA	C11-C12-C13-C14
25	b1	606	CLA	C11-C12-C13-C14
25	b2	617	CLA	C11-C12-C13-C14
25	c1	512	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
35	l1	101	LMT	C1-C2-C3-C4
33	D1	405	LHG	C14-C15-C16-C17
34	H1	101	DGD	CBB-CCB-CDB-CEB
25	B2	616	CLA	C2A-CAA-CBA-CGA
25	B2	614	CLA	C16-C17-C18-C19
34	h1	101	DGD	O1B-C1B-C2B-C3B
23	B2	603	BCR	C23-C24-C25-C30
23	a2	402	BCR	C1-C6-C7-C8
23	h1	102	BCR	C5-C6-C7-C8
23	B1	602	BCR	C23-C24-C25-C30
23	b2	602	BCR	C23-C24-C25-C30
23	b1	603	BCR	C23-C24-C25-C30
23	h2	101	BCR	C23-C24-C25-C26
23	H2	103	BCR	C1-C6-C7-C8
23	a1	401	BCR	C23-C24-C25-C30
23	K2	104	BCR	C23-C24-C25-C30
23	B1	603	BCR	C23-C24-C25-C30
33	B1	621	LHG	C11-C12-C13-C14
34	H1	101	DGD	O2G-C1B-C2B-C3B
33	d2	403	LHG	C16-C17-C18-C19
32	a1	406	GOL	O1-C1-C2-C3
34	H1	101	DGD	C5B-C6B-C7B-C8B
29	a1	412	LMG	C12-C13-C14-C15
23	j2	102	BCR	C17-C18-C19-C20
27	D2	407	PHO	C2-C3-C5-C6
25	b1	606	CLA	C8-C10-C11-C12
25	B1	617	CLA	C5-C6-C7-C8
29	d2	407	LMG	C8-C7-O1-C1
35	M1	102	LMT	C2-C3-C4-C5
25	b2	619	CLA	C11-C12-C13-C14
29	A1	412	LMG	O10-C28-O8-C9
25	B1	607	CLA	C11-C12-C13-C15
25	A1	406	CLA	C15-C16-C17-C18
33	L2	101	LHG	O6-C4-C5-O7
34	c2	514	DGD	C6A-C7A-C8A-C9A
25	B2	608	CLA	C2A-CAA-CBA-CGA
25	B2	605	CLA	CAA-CBA-CGA-O2A
25	C2	508	CLA	CBA-CGA-O2A-C1
34	C2	512	DGD	O6D-C5D-C6D-O5D
25	D2	404	CLA	C3-C5-C6-C7
33	L2	101	LHG	O6-C4-C5-C6
25	C2	508	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
36	D2	408	PL9	C25-C24-C26-C27
25	C2	505	CLA	C12-C13-C15-C16
25	B2	612	CLA	C11-C12-C13-C15
25	B2	612	CLA	C12-C13-C15-C16
25	b1	612	CLA	C12-C13-C15-C16
25	c1	512	CLA	C12-C13-C15-C16
25	d1	404	CLA	C11-C12-C13-C15
25	C2	509	CLA	C5-C6-C7-C8
33	d2	406	LHG	C33-C34-C35-C36
34	h1	101	DGD	C3B-C4B-C5B-C6B
33	a1	407	LHG	C28-C29-C30-C31
34	C1	517	DGD	C3B-C4B-C5B-C6B
34	h2	102	DGD	O2G-C1B-C2B-C3B
33	D2	405	LHG	O7-C7-C8-C9
33	l1	102	LHG	C27-C28-C29-C30
29	j2	101	LMG	C42-C43-C44-C45
37	D2	402	SQD	O47-C45-C46-O48
33	D1	404	LHG	O7-C5-C6-O8
29	C1	520	LMG	C29-C28-O8-C9
25	b1	616	CLA	C15-C16-C17-C18
25	C1	502	CLA	C3-C5-C6-C7
34	c1	514	DGD	O2G-C1B-C2B-C3B
25	C2	516	CLA	CAA-CBA-CGA-O2A
34	h2	102	DGD	C8A-C9A-CAA-CBA
25	B2	614	CLA	O1A-CGA-O2A-C1
33	d1	407	LHG	O7-C7-C8-C9
25	b2	619	CLA	C4-C3-C5-C6
36	D1	408	PL9	C25-C24-C26-C27
25	d2	405	CLA	C5-C6-C7-C8
25	d2	402	CLA	C10-C11-C12-C13
25	b2	620	CLA	C2-C3-C5-C6
25	C1	513	CLA	C2-C3-C5-C6
25	B1	614	CLA	CAA-CBA-CGA-O2A
25	D2	404	CLA	C12-C13-C15-C16
25	A2	403	CLA	C12-C13-C15-C16
25	D2	404	CLA	C11-C12-C13-C14
25	b1	608	CLA	C6-C7-C8-C9
25	C1	511	CLA	C6-C7-C8-C9
25	c2	503	CLA	C11-C10-C8-C9
25	C1	509	CLA	C11-C12-C13-C14
25	B2	610	CLA	C14-C13-C15-C16
25	c2	508	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
25	c2	508	CLA	C14-C13-C15-C16
25	B2	617	CLA	C11-C10-C8-C9
25	c2	512	CLA	C6-C7-C8-C9
25	C1	507	CLA	C6-C7-C8-C9
25	b2	614	CLA	C14-C13-C15-C16
25	a2	405	CLA	C14-C13-C15-C16
25	D1	402	CLA	C11-C12-C13-C14
25	C2	503	CLA	C3A-C2A-CAA-CBA
25	d1	401	CLA	C3A-C2A-CAA-CBA
25	a2	413	CLA	C3A-C2A-CAA-CBA
34	H2	101	DGD	C6B-C7B-C8B-C9B
25	b2	610	CLA	O1A-CGA-O2A-C1
29	C1	520	LMG	O10-C28-O8-C9
29	B2	621	LMG	O7-C10-C11-C12
29	C1	520	LMG	O7-C10-C11-C12
34	h2	102	DGD	C6B-C7B-C8B-C9B
25	b2	606	CLA	CAD-CBD-CGD-O2D
25	b1	606	CLA	CAD-CBD-CGD-O2D
27	A1	408	PHO	CAD-CBD-CGD-O2D
25	b2	619	CLA	CAD-CBD-CGD-O2D
25	B2	607	CLA	CAD-CBD-CGD-O2D
25	B2	604	CLA	CAD-CBD-CGD-O2D
25	C1	506	CLA	CAD-CBD-CGD-O2D
25	c2	515	CLA	CAD-CBD-CGD-O2D
25	B1	609	CLA	CAD-CBD-CGD-O2D
27	a2	416	PHO	C2B-C3B-CAB-CBB
27	a2	416	PHO	CAD-CBD-CGD-O2D
25	B1	606	CLA	CAD-CBD-CGD-O2D
25	B2	612	CLA	CAD-CBD-CGD-O2D
25	B2	609	CLA	CAD-CBD-CGD-O2D
25	c1	507	CLA	CAD-CBD-CGD-O2D
25	b1	612	CLA	CAD-CBD-CGD-O2D
25	B1	610	CLA	CAD-CBD-CGD-O2D
25	C2	507	CLA	CAD-CBD-CGD-O2D
25	c1	504	CLA	CAD-CBD-CGD-O2D
25	B1	619	CLA	CAD-CBD-CGD-O2D
25	c1	503	CLA	CAD-CBD-CGD-O2D
25	B2	611	CLA	CAD-CBD-CGD-O2D
25	b2	608	CLA	CAD-CBD-CGD-O2D
25	A2	402	CLA	CAD-CBD-CGD-O2D
25	B2	618	CLA	CAD-CBD-CGD-O2D
25	b1	613	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
25	c2	510	CLA	C2A-CAA-CBA-CGA
25	B2	606	CLA	C2A-CAA-CBA-CGA
25	b1	605	CLA	C8-C10-C11-C12
25	c2	511	CLA	C2-C1-O2A-CGA
25	D2	401	CLA	CAA-CBA-CGA-O2A
33	l1	102	LHG	O7-C7-C8-C9
25	c1	512	CLA	CAA-CBA-CGA-O2A
25	c2	511	CLA	CAA-CBA-CGA-O2A
29	B2	621	LMG	C18-C19-C20-C21
25	b2	610	CLA	CBA-CGA-O2A-C1
34	c2	514	DGD	C3B-C4B-C5B-C6B
29	A2	412	LMG	O6-C1-O1-C7
25	A2	403	CLA	C14-C13-C15-C16
25	b2	609	CLA	C14-C13-C15-C16
29	b1	624	LMG	O1-C7-C8-C9
29	A1	412	LMG	C7-C8-C9-O8
33	d2	403	LHG	C28-C29-C30-C31
25	B2	614	CLA	CBA-CGA-O2A-C1
34	c2	517	DGD	O6D-C5D-C6D-O5D
29	A2	412	LMG	O7-C10-C11-C12
35	m1	101	LMT	C7-C8-C9-C10
25	D2	401	CLA	O2A-C1-C2-C3
25	a2	404	CLA	O2A-C1-C2-C3
25	c1	515	CLA	O2A-C1-C2-C3
25	d1	401	CLA	O2A-C1-C2-C3
33	B1	621	LHG	C15-C16-C17-C18
33	B1	621	LHG	C28-C29-C30-C31
34	C1	517	DGD	C4A-C5A-C6A-C7A
27	a2	416	PHO	C4B-C3B-CAB-CBB
27	A2	407	PHO	C4B-C3B-CAB-CBB
25	b1	606	CLA	C2A-CAA-CBA-CGA
25	c2	515	CLA	C2A-CAA-CBA-CGA
25	B2	614	CLA	C10-C11-C12-C13
27	A2	407	PHO	C8-C10-C11-C12
25	a1	404	CLA	O1A-CGA-O2A-C1
25	b1	614	CLA	C16-C17-C18-C20
25	B2	609	CLA	C16-C17-C18-C19
34	c1	520	DGD	CBB-CCB-CDB-CEB
29	b1	631	LMG	O10-C28-C29-C30
25	B1	608	CLA	CHA-CBD-CGD-O2D
25	B2	616	CLA	CHA-CBD-CGD-O2D
25	c2	510	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
25	c2	510	CLA	CHA-CBD-CGD-O2D
25	b1	616	CLA	CHA-CBD-CGD-O1D
25	b1	616	CLA	CHA-CBD-CGD-O2D
25	B2	613	CLA	CHA-CBD-CGD-O1D
25	B2	613	CLA	CHA-CBD-CGD-O2D
25	b1	619	CLA	CHA-CBD-CGD-O2D
25	B1	613	CLA	CHA-CBD-CGD-O1D
25	B1	613	CLA	CHA-CBD-CGD-O2D
27	D1	407	PHO	CHA-CBD-CGD-O2D
25	C2	518	CLA	CHA-CBD-CGD-O1D
25	C2	518	CLA	CHA-CBD-CGD-O2D
25	C2	509	CLA	CHA-CBD-CGD-O1D
25	C2	509	CLA	CHA-CBD-CGD-O2D
25	c2	505	CLA	CHA-CBD-CGD-O1D
25	c1	509	CLA	CHA-CBD-CGD-O1D
25	c1	509	CLA	CHA-CBD-CGD-O2D
27	d1	403	PHO	NB-C4B-CHC-C1C
25	b1	605	CLA	CHA-CBD-CGD-O2D
25	b1	611	CLA	CHA-CBD-CGD-O1D
25	c1	511	CLA	CHA-CBD-CGD-O1D
27	D2	407	PHO	CHA-CBD-CGD-O2D
25	C1	502	CLA	CHA-CBD-CGD-O2D
25	B1	612	CLA	CHA-CBD-CGD-O1D
25	D2	406	CLA	CHA-CBD-CGD-O1D
25	D2	406	CLA	CHA-CBD-CGD-O2D
25	c2	511	CLA	CHA-CBD-CGD-O1D
25	c2	511	CLA	CHA-CBD-CGD-O2D
25	b2	616	CLA	CHA-CBD-CGD-O2D
25	c2	513	CLA	CHA-CBD-CGD-O1D
27	d2	408	PHO	CHA-CBD-CGD-O1D
27	d2	408	PHO	CHA-CBD-CGD-O2D
25	B2	606	CLA	CHA-CBD-CGD-O2D
25	c2	503	CLA	C4-C3-C5-C6
25	b2	614	CLA	CAA-CBA-CGA-O2A
33	D1	404	LHG	C32-C33-C34-C35
33	d2	406	LHG	O7-C7-C8-C9
25	B1	605	CLA	CAA-CBA-CGA-O2A
34	C1	515	DGD	O1G-C1G-C2G-O2G
29	a2	412	LMG	O1-C7-C8-O7
33	B2	627	LHG	O7-C5-C6-O8
33	D2	403	LHG	C31-C32-C33-C34
25	C2	505	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
27	D2	407	PHO	C13-C15-C16-C17
25	B1	617	CLA	C15-C16-C17-C18
25	a1	404	CLA	C4C-C3C-CAC-CBC
25	b1	614	CLA	CAA-CBA-CGA-O2A
29	D1	406	LMG	O7-C10-C11-C12
25	B1	609	CLA	C16-C17-C18-C20
25	B2	608	CLA	C16-C17-C18-C20
33	a1	407	LHG	O1-C1-C2-O2
25	c1	503	CLA	CAA-CBA-CGA-O2A
25	C1	502	CLA	C4-C3-C5-C6
29	A1	412	LMG	C36-C37-C38-C39
33	d1	407	LHG	O9-C7-C8-C9
33	l2	101	LHG	C12-C13-C14-C15
29	B2	620	LMG	C31-C32-C33-C34
25	b2	606	CLA	C11-C12-C13-C15
25	b1	606	CLA	C11-C12-C13-C15
25	c1	506	CLA	C11-C10-C8-C7
25	b1	613	CLA	C11-C12-C13-C15
25	c1	509	CLA	C11-C10-C8-C7
25	b2	610	CLA	C6-C7-C8-C10
25	b2	609	CLA	C11-C12-C13-C15
29	M1	101	LMG	C11-C12-C13-C14
34	c2	514	DGD	O6E-C1E-O5D-C6D
33	a1	407	LHG	O8-C23-C24-C25
25	D1	402	CLA	CAA-CBA-CGA-O2A
25	b1	619	CLA	C11-C12-C13-C14
25	b1	619	CLA	C14-C13-C15-C16
25	b1	612	CLA	C11-C10-C8-C9
25	d1	401	CLA	C11-C12-C13-C14
25	C1	504	CLA	C11-C10-C8-C9
25	C2	516	CLA	CAA-CBA-CGA-O1A
23	H2	103	BCR	C9-C10-C11-C12
29	B2	620	LMG	C11-C12-C13-C14
25	C2	503	CLA	CAA-CBA-CGA-O2A
25	b2	615	CLA	CAA-CBA-CGA-O2A
33	l2	101	LHG	O7-C7-C8-C9
37	D2	402	SQD	C5-C6-S-O8
25	B1	614	CLA	C16-C17-C18-C19
25	B1	608	CLA	C2A-CAA-CBA-CGA
25	b2	606	CLA	C2A-CAA-CBA-CGA
33	d1	407	LHG	C7-C8-C9-C10
34	c2	514	DGD	C8B-C9B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
34	c2	516	DGD	O2G-C1B-C2B-C3B
36	D2	408	PL9	C23-C24-C26-C27
25	b1	619	CLA	C2-C3-C5-C6
29	b1	621	LMG	O6-C5-C6-O5
34	c1	514	DGD	O1B-C1B-C2B-C3B
34	c2	516	DGD	O1B-C1B-C2B-C3B
29	B2	621	LMG	O9-C10-C11-C12
25	c1	512	CLA	CAA-CBA-CGA-O1A
25	b1	619	CLA	C13-C15-C16-C17
25	c2	502	CLA	C5-C6-C7-C8
33	D1	405	LHG	C12-C13-C14-C15
25	b2	624	CLA	C1A-C2A-CAA-CBA
25	C2	506	CLA	C1A-C2A-CAA-CBA
25	d2	402	CLA	C1A-C2A-CAA-CBA
25	d1	401	CLA	C1A-C2A-CAA-CBA
25	b2	615	CLA	CAA-CBA-CGA-O1A
25	c2	511	CLA	CAA-CBA-CGA-O1A
25	b2	619	CLA	C2-C1-O2A-CGA
25	c1	512	CLA	C2-C1-O2A-CGA
29	c2	519	LMG	C29-C28-O8-C9
25	C1	504	CLA	CBA-CGA-O2A-C1
25	b2	614	CLA	CAA-CBA-CGA-O1A
33	D2	405	LHG	O9-C7-C8-C9
25	B1	614	CLA	CAA-CBA-CGA-O1A
25	a2	405	CLA	C2C-C3C-CAC-CBC
33	D1	405	LHG	O7-C7-C8-C9
29	B1	626	LMG	C34-C35-C36-C37
25	b1	619	CLA	C16-C17-C18-C20
25	b1	605	CLA	C16-C17-C18-C20
25	d1	404	CLA	C16-C17-C18-C20
29	C1	520	LMG	O9-C10-C11-C12
25	B1	608	CLA	C13-C15-C16-C17
34	c1	518	DGD	CBA-CCA-CDA-CEA
38	v2	201	HEM	C3D-CAD-CBD-CGD
25	B2	615	CLA	CAA-CBA-CGA-O2A
25	d1	401	CLA	CAA-CBA-CGA-O2A
25	B1	608	CLA	C5-C6-C7-C8
33	l2	101	LHG	O9-C7-O7-C5
33	l1	102	LHG	O9-C7-C8-C9
33	l2	101	LHG	O9-C7-C8-C9
35	C1	519	LMT	C2'-C1'-O1'-C1
34	c2	514	DGD	C2E-C1E-O5D-C6D

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Mol	Chain	Res	Type	Atoms
25	C2	503	CLA	C13-C15-C16-C17
35	l1	101	LMT	C7-C8-C9-C10
33	B2	627	LHG	C3-O3-P-O4
33	L2	101	LHG	C3-O3-P-O5
33	d2	403	LHG	C3-O3-P-O5
27	a1	411	PHO	C16-C17-C18-C19
29	a1	412	LMG	O7-C8-C9-O8
25	C2	503	CLA	CAA-CBA-CGA-O1A
33	a1	407	LHG	O10-C23-C24-C25
25	D1	402	CLA	CAA-CBA-CGA-O1A
29	A2	412	LMG	O9-C10-C11-C12
29	C1	520	LMG	C37-C38-C39-C40
23	b1	603	BCR	C23-C24-C25-C26
23	a1	401	BCR	C23-C24-C25-C26
23	K2	104	BCR	C23-C24-C25-C26
25	c1	509	CLA	C10-C11-C12-C13
25	D2	401	CLA	CAA-CBA-CGA-O1A
27	a2	416	PHO	C16-C17-C18-C20
25	b1	616	CLA	C2A-CAA-CBA-CGA
25	B1	606	CLA	C2A-CAA-CBA-CGA
25	B1	616	CLA	C2A-CAA-CBA-CGA
33	L2	101	LHG	C9-C10-C11-C12
33	a1	407	LHG	C32-C33-C34-C35
25	C1	511	CLA	C2-C3-C5-C6
25	B1	608	CLA	CAD-CBD-CGD-O1D
37	D2	402	SQD	C5-C6-S-O9
25	b1	608	CLA	CAD-CBD-CGD-O1D
25	B1	613	CLA	CAD-CBD-CGD-O1D
25	c2	506	CLA	CAD-CBD-CGD-O1D
25	c2	505	CLA	CAD-CBD-CGD-O1D
25	c1	509	CLA	C3-C5-C6-C7
37	b2	605	SQD	C44-C45-O47-C7
25	C1	502	CLA	CAD-CBD-CGD-O1D
25	b2	614	CLA	CAD-CBD-CGD-O1D
25	B1	612	CLA	CAD-CBD-CGD-O1D
25	b2	616	CLA	CAD-CBD-CGD-O1D
25	C1	504	CLA	O1A-CGA-O2A-C1
33	d2	406	LHG	O9-C7-C8-C9
29	D1	406	LMG	O9-C10-C11-C12
25	c1	503	CLA	CAA-CBA-CGA-O1A
35	a2	406	LMT	C5-C6-C7-C8
33	D2	405	LHG	C33-C34-C35-C36

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Mol	Chain	Res	Type	Atoms
25	B2	608	CLA	C13-C15-C16-C17
25	b1	604	CLA	C14-C13-C15-C16
25	B1	610	CLA	C11-C12-C13-C14
25	d2	402	CLA	C6-C7-C8-C9
25	d1	401	CLA	C14-C13-C15-C16
25	b2	612	CLA	C14-C13-C15-C16
25	B2	608	CLA	C14-C13-C15-C16
29	a1	412	LMG	C18-C19-C20-C21
34	c2	517	DGD	CBA-CCA-CDA-CEA
25	c2	506	CLA	C14-C13-C15-C16
25	B2	618	CLA	O1A-CGA-O2A-C1
25	b1	614	CLA	CAA-CBA-CGA-O1A
29	B2	620	LMG	C29-C28-O8-C9
25	C1	502	CLA	CAA-CBA-CGA-O2A
25	c2	510	CLA	C6-C7-C8-C9
33	l2	101	LHG	C29-C30-C31-C32
36	d2	409	PL9	C25-C24-C26-C27
25	D2	404	CLA	C2-C3-C5-C6
25	B2	616	CLA	C2-C3-C5-C6
25	b1	606	CLA	C11-C10-C8-C7
25	D2	401	CLA	C12-C13-C15-C16
25	b2	624	CLA	C6-C7-C8-C10
25	d2	405	CLA	C12-C13-C15-C16
25	b1	604	CLA	C12-C13-C15-C16
25	b1	619	CLA	C11-C12-C13-C15
25	b2	617	CLA	C6-C7-C8-C10
25	b2	617	CLA	C12-C13-C15-C16
25	b1	614	CLA	C12-C13-C15-C16
25	B2	615	CLA	C11-C10-C8-C7
25	C1	510	CLA	C12-C13-C15-C16
25	B1	610	CLA	C2-C3-C5-C6
25	B2	614	CLA	C11-C10-C8-C7
25	a1	403	CLA	C11-C10-C8-C7
25	d2	402	CLA	C6-C7-C8-C10
25	b1	617	CLA	C12-C13-C15-C16
25	b2	614	CLA	C12-C13-C15-C16
25	A2	402	CLA	C11-C10-C8-C7
29	d1	408	LMG	O7-C10-C11-C12
25	c1	507	CLA	CAA-CBA-CGA-O2A
29	c1	519	LMG	C33-C34-C35-C36
25	c1	507	CLA	CAA-CBA-CGA-O1A
33	D1	405	LHG	O9-C7-C8-C9

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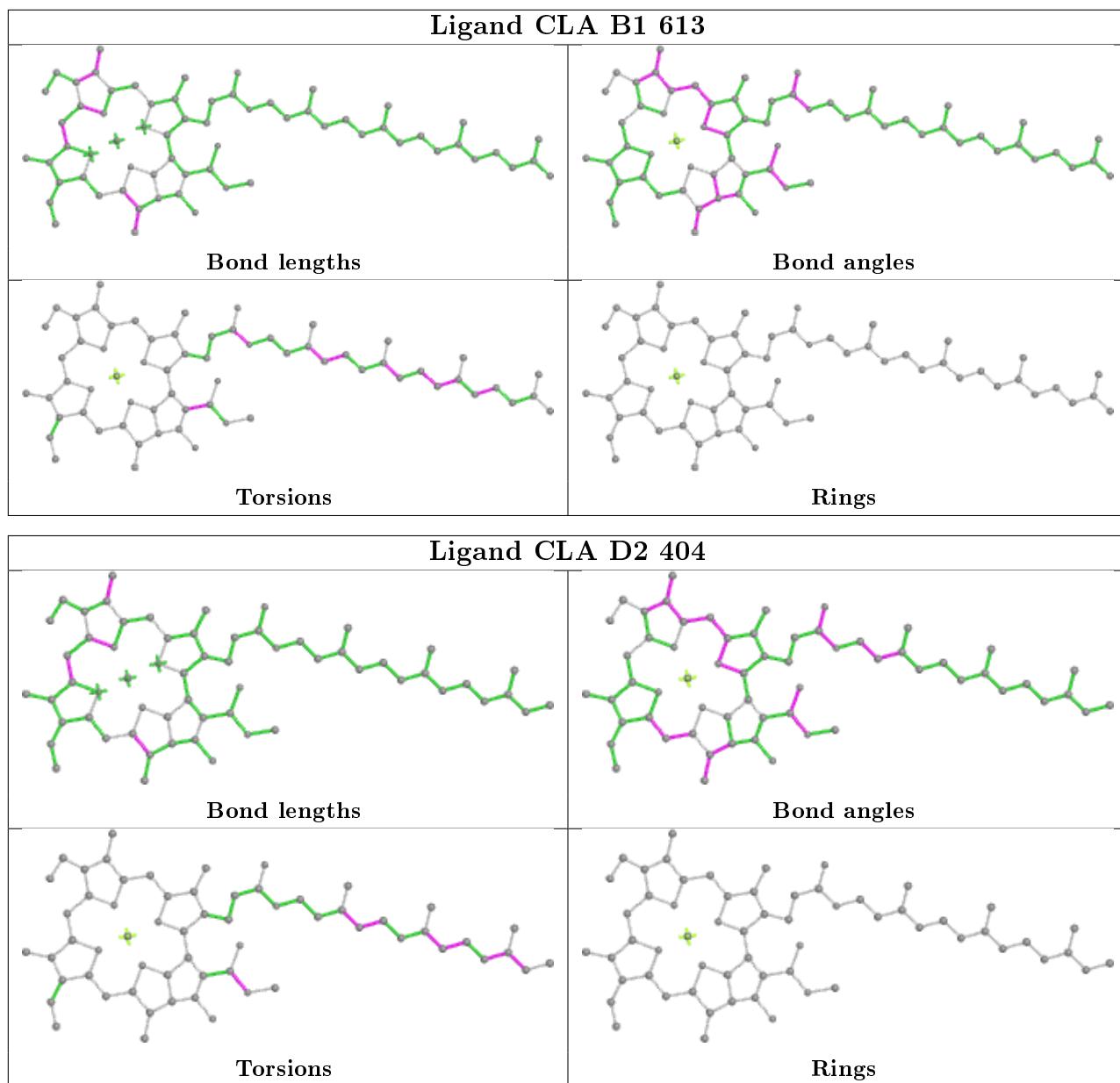
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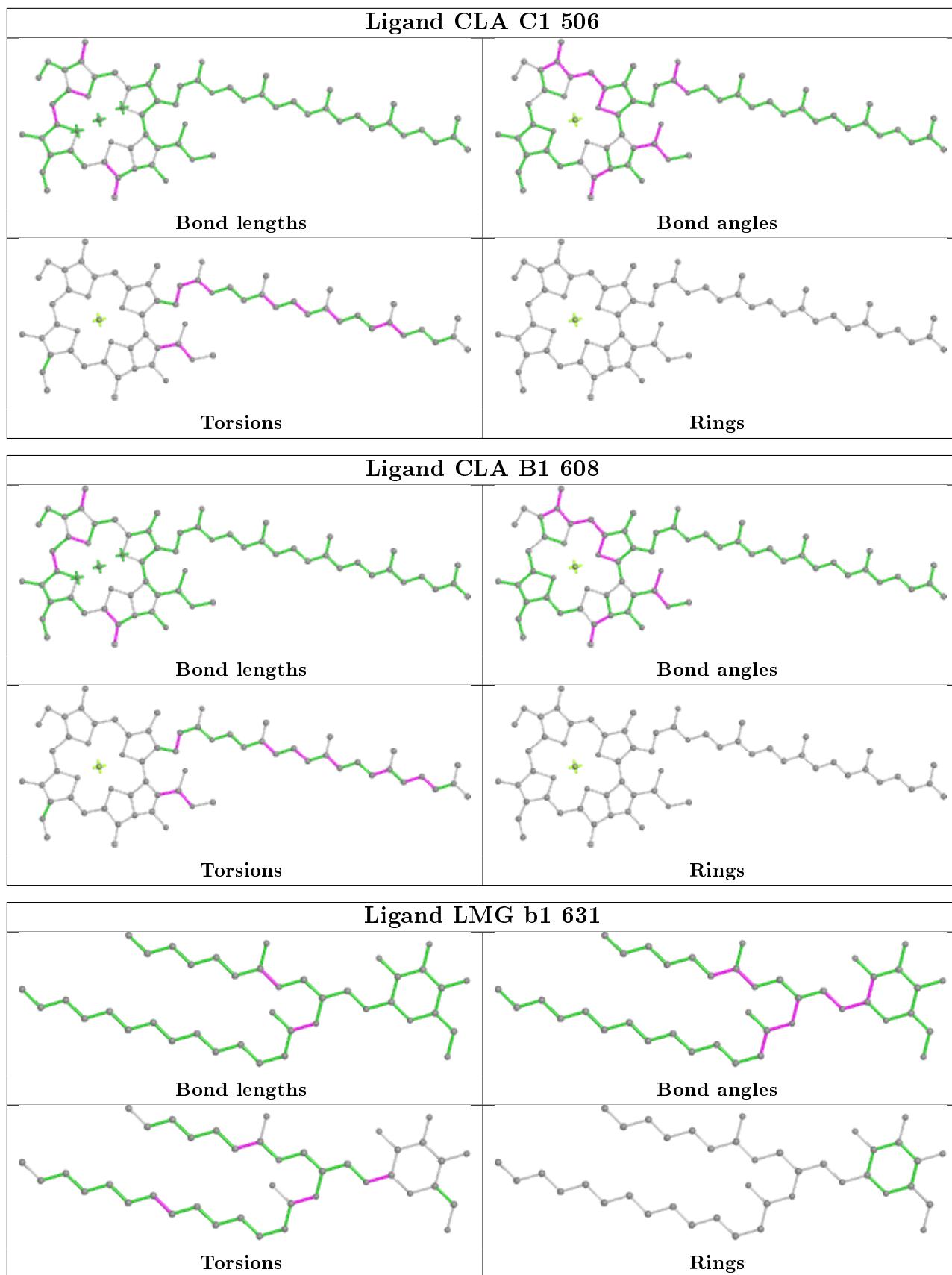
Mol	Chain	Res	Type	Atoms
34	c1	518	DGD	C2A-C3A-C4A-C5A
25	C1	506	CLA	CAA-CBA-CGA-O2A
34	C1	515	DGD	O2G-C1B-C2B-C3B
33	D1	404	LHG	O8-C23-C24-C25
25	B1	615	CLA	CAA-CBA-CGA-O2A
34	c2	516	DGD	C3B-C4B-C5B-C6B
35	L1	102	LMT	C3-C4-C5-C6
35	c1	517	LMT	O5'-C1'-O1'-C1
27	D1	407	PHO	C8-C10-C11-C12
25	b1	612	CLA	C13-C15-C16-C17
34	c2	514	DGD	CBA-CCA-CDA-CEA
25	B2	615	CLA	CAA-CBA-CGA-O1A
36	d1	409	PL9	C14-C16-C17-C18
36	d2	409	PL9	C29-C31-C32-C33
25	b1	619	CLA	C8-C10-C11-C12
25	c1	509	CLA	C5-C6-C7-C8
25	b2	614	CLA	C13-C15-C16-C17
25	D2	406	CLA	C15-C16-C17-C18
33	b1	622	LHG	C25-C26-C27-C28
33	l2	101	LHG	O2-C2-C3-O3
33	a2	407	LHG	O7-C7-C8-C9
29	a2	412	LMG	O8-C28-C29-C30
34	H2	101	DGD	O2G-C1B-C2B-C3B
25	D1	402	CLA	C5-C6-C7-C8
25	b1	608	CLA	C13-C15-C16-C17
25	c1	510	CLA	C13-C15-C16-C17
25	b1	605	CLA	C15-C16-C17-C18

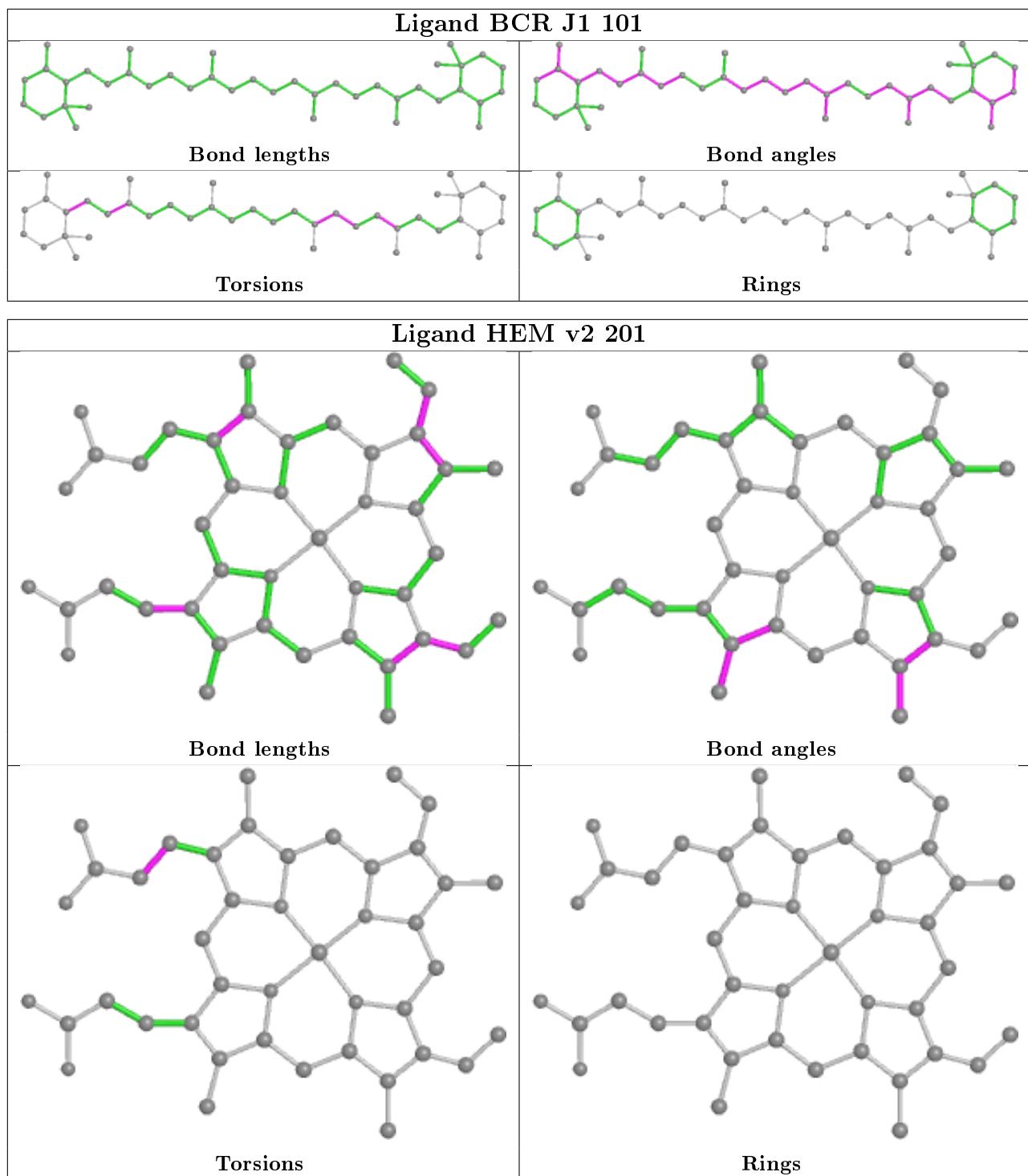
There are no ring outliers.

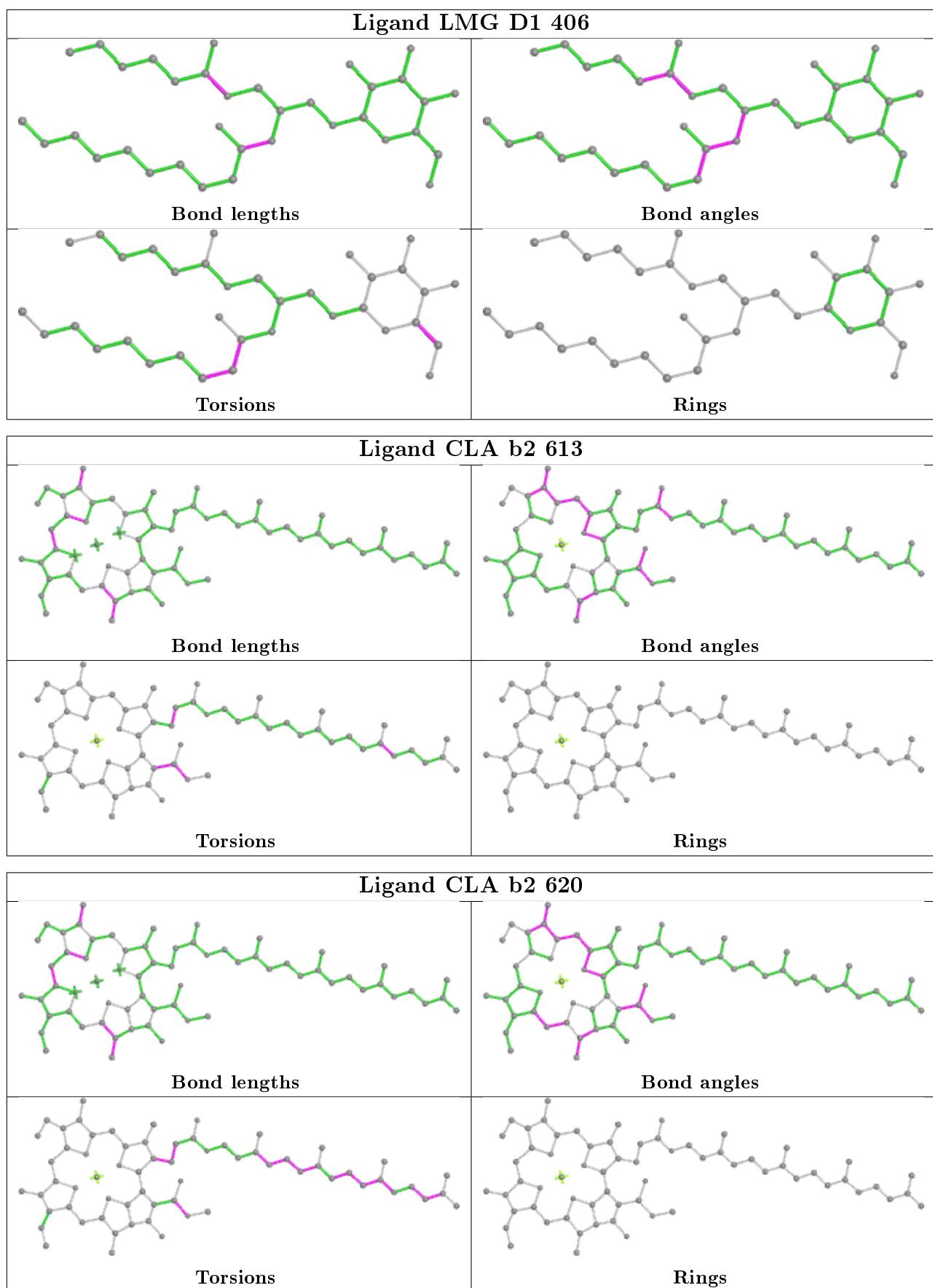
No monomer is involved in short contacts.

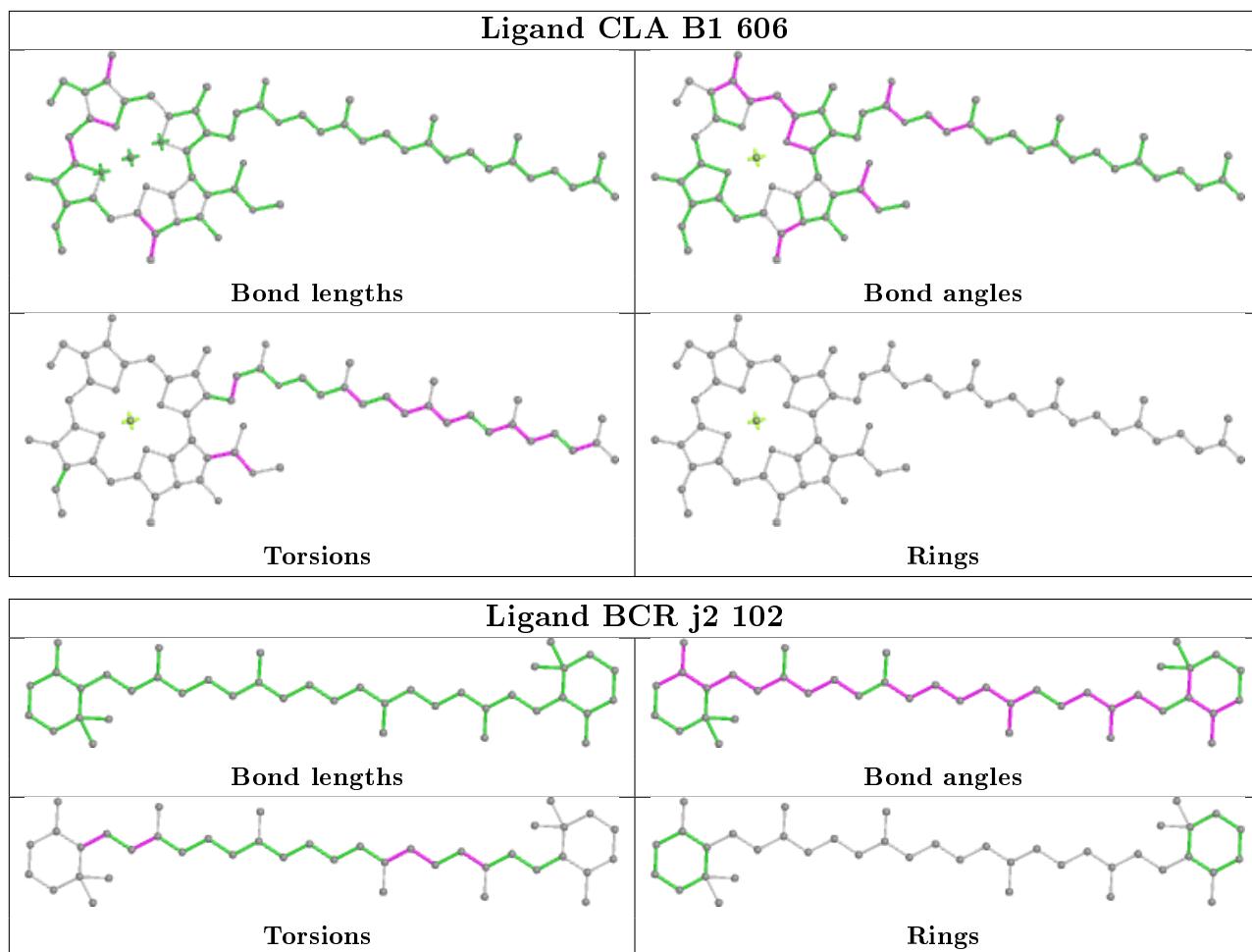
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

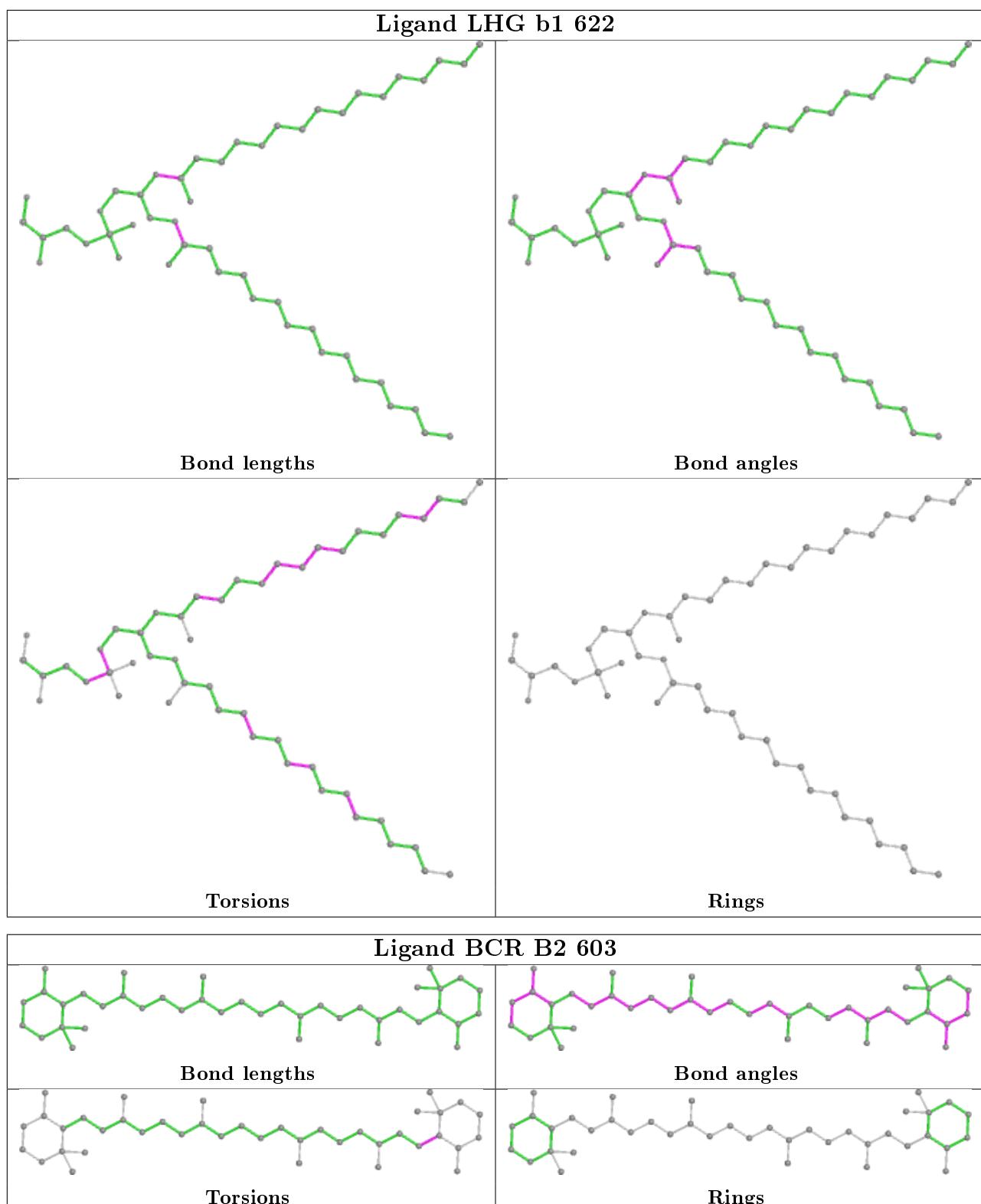


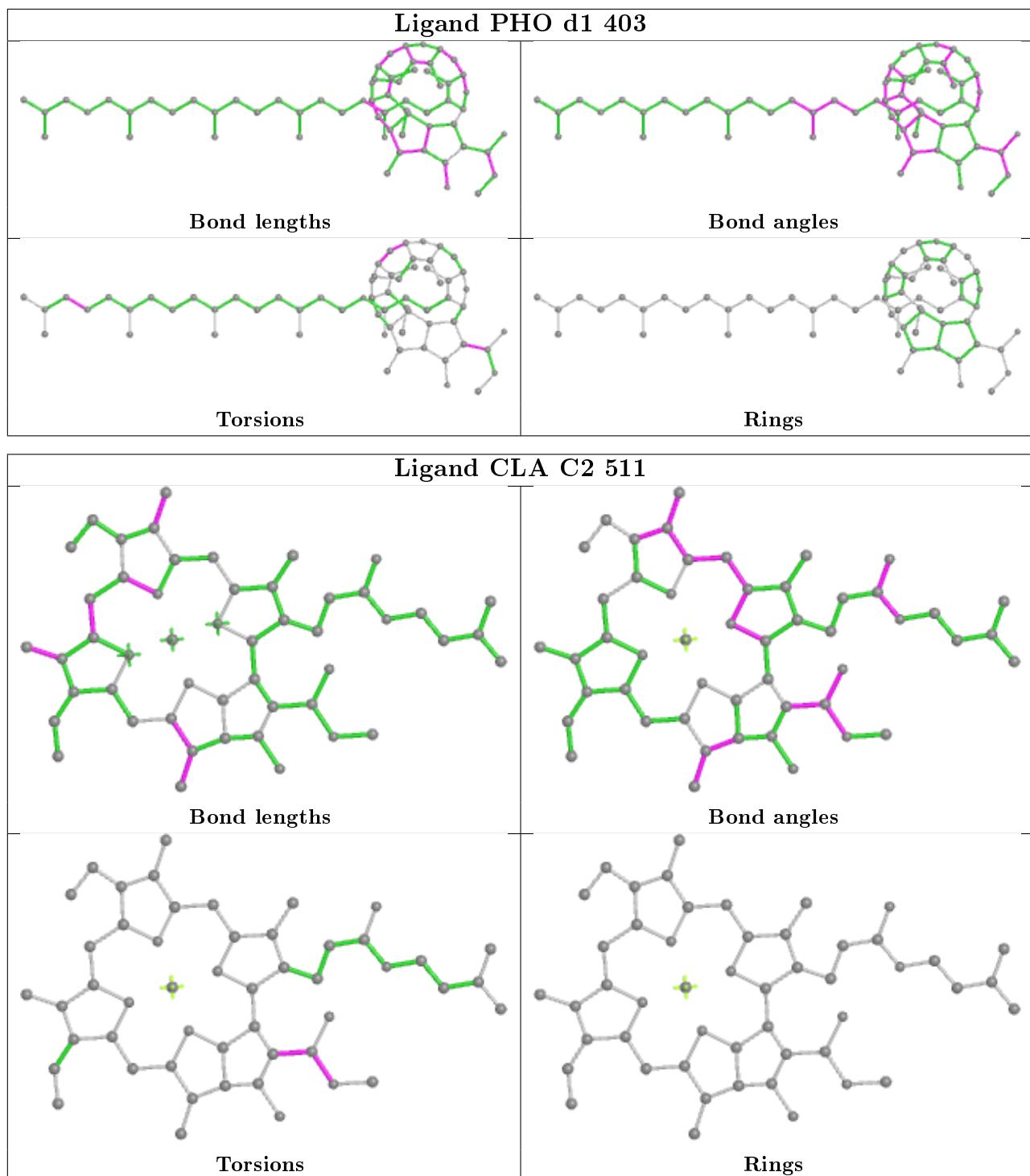


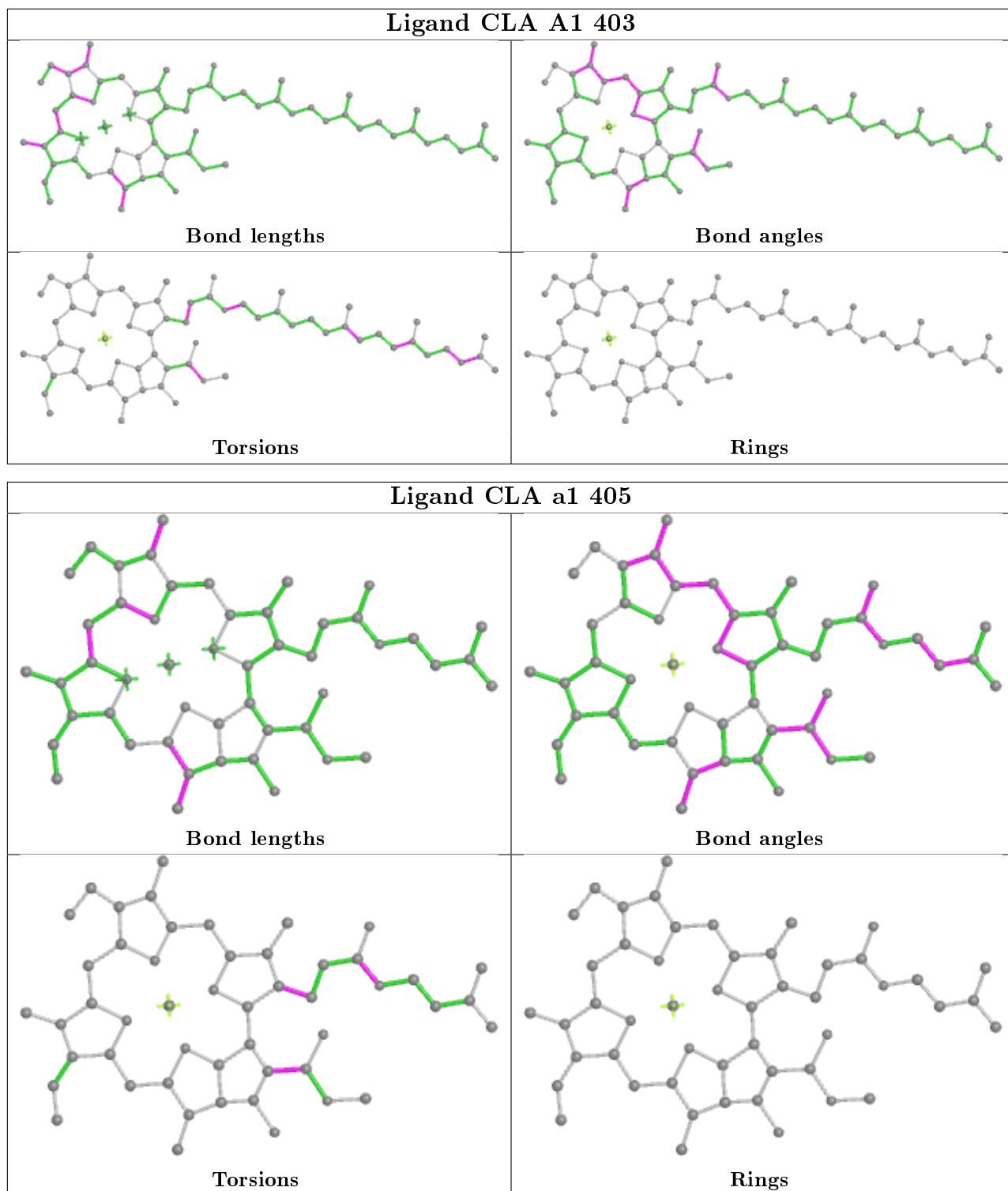


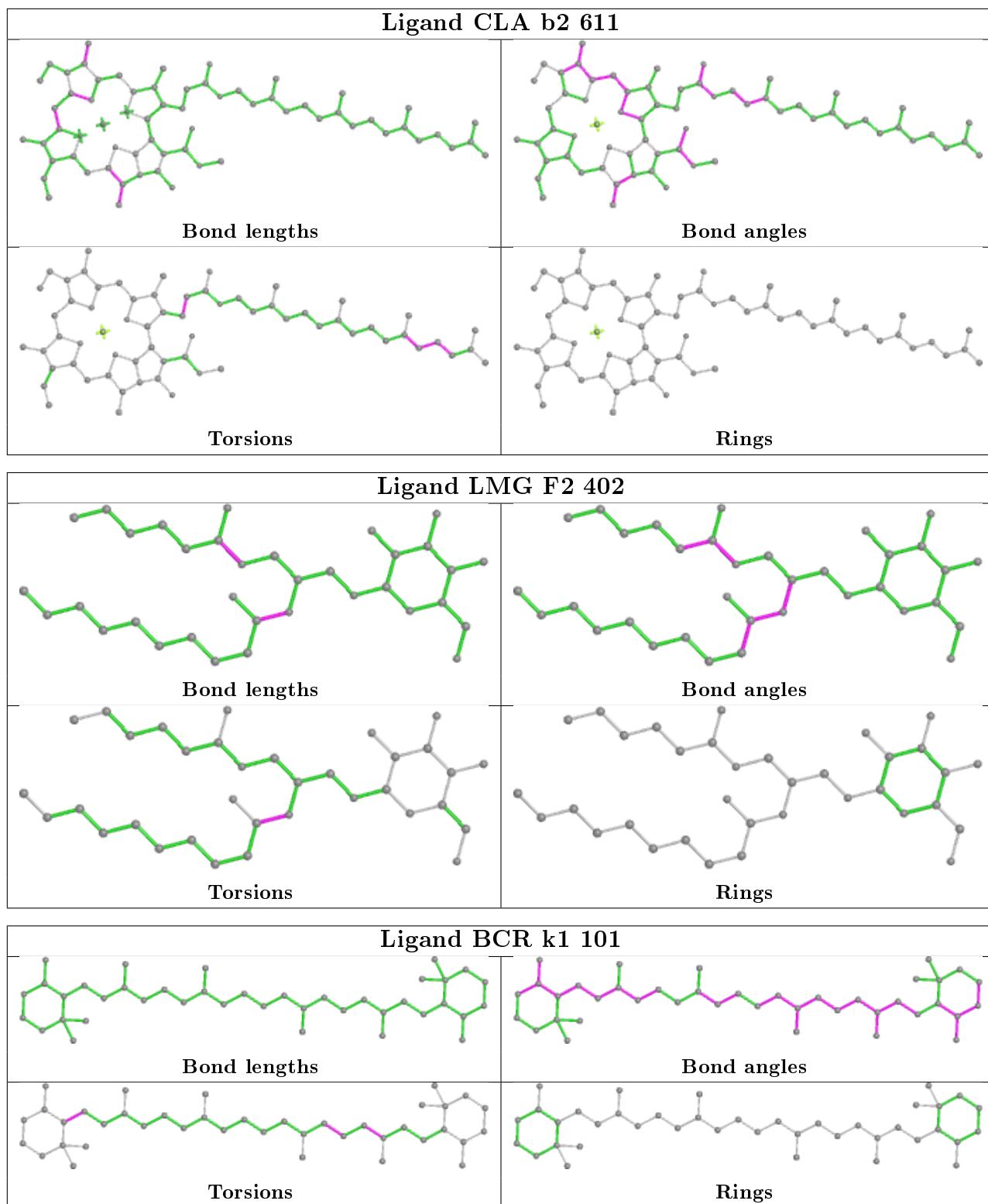


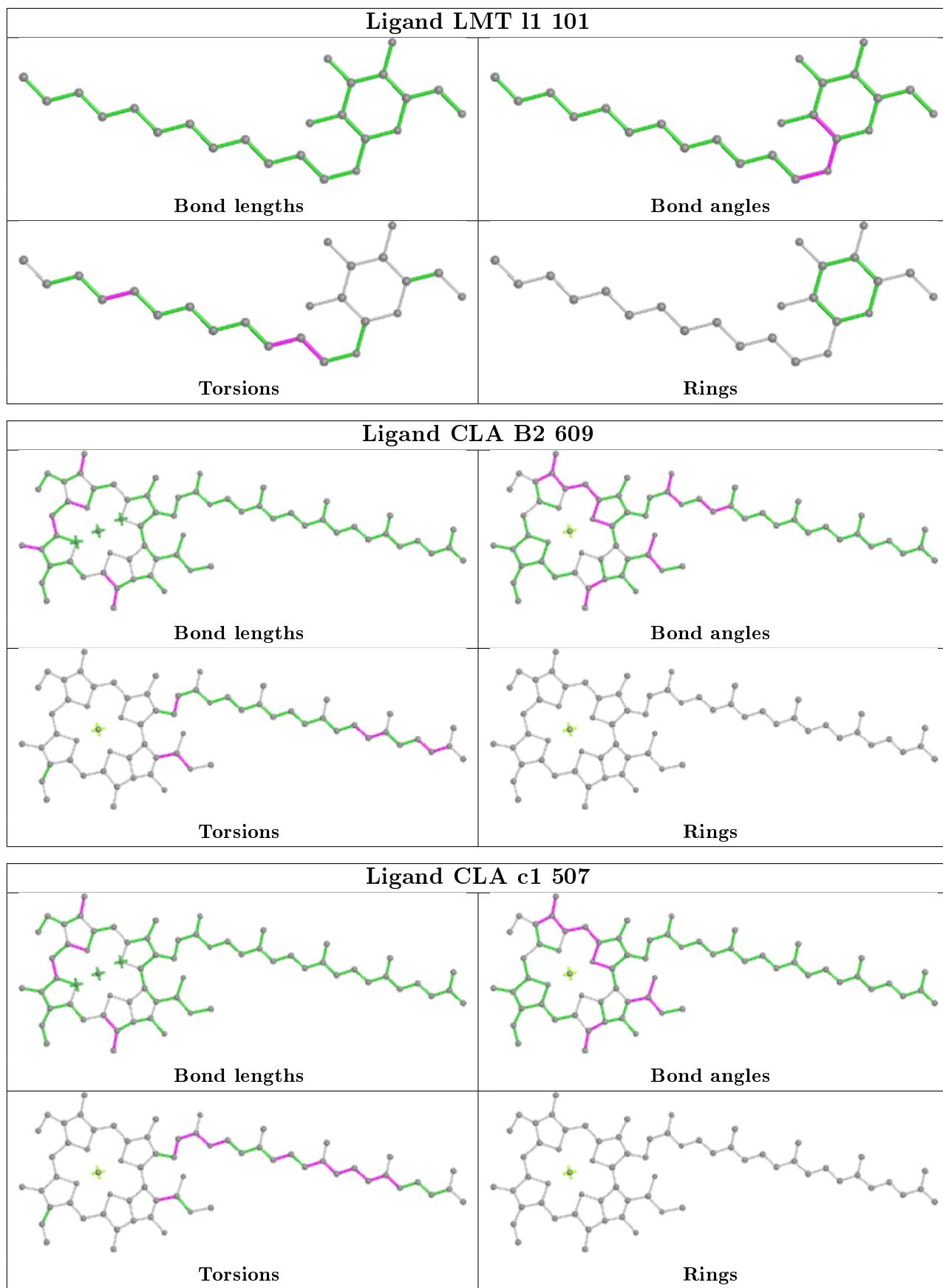


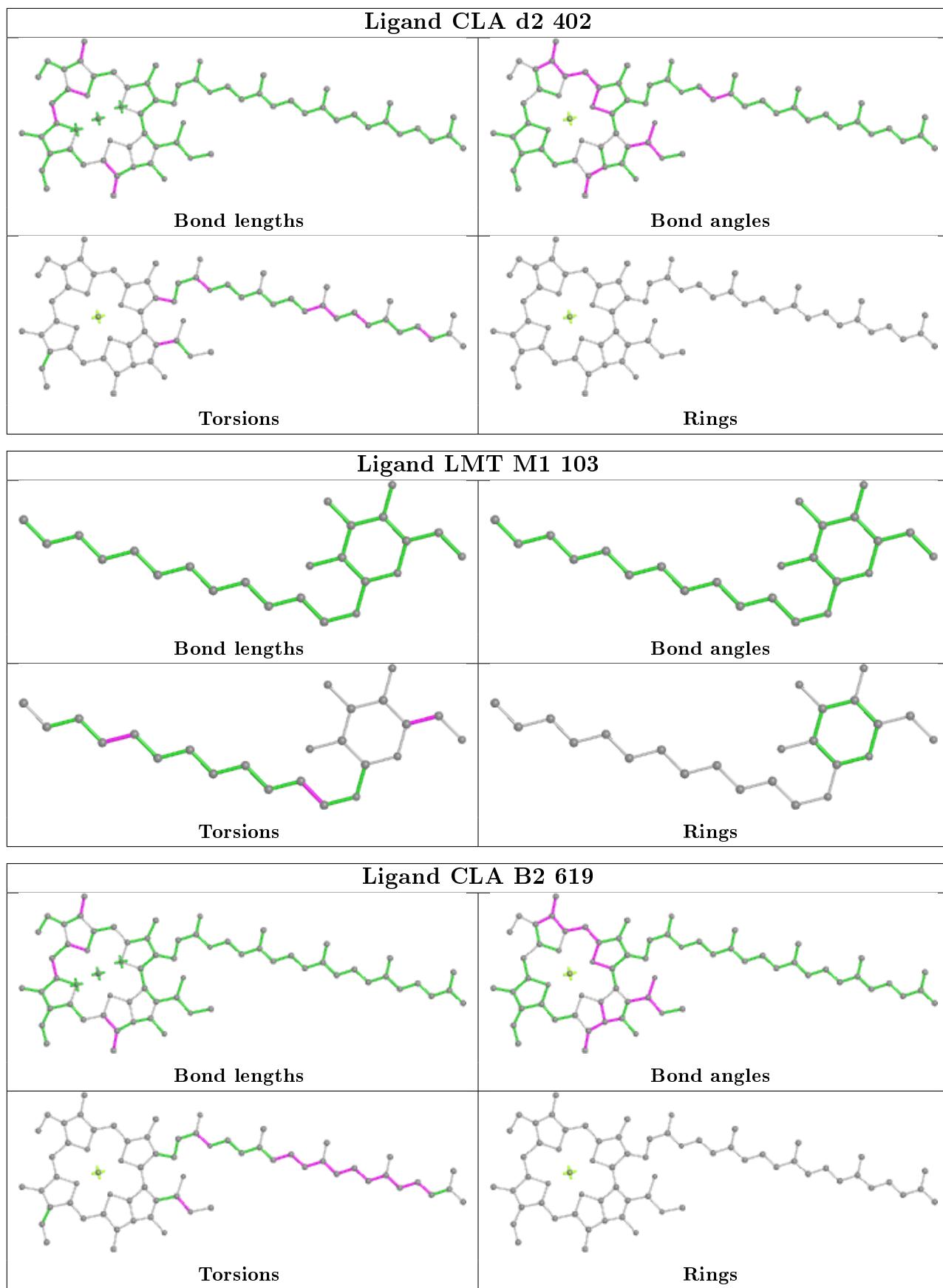


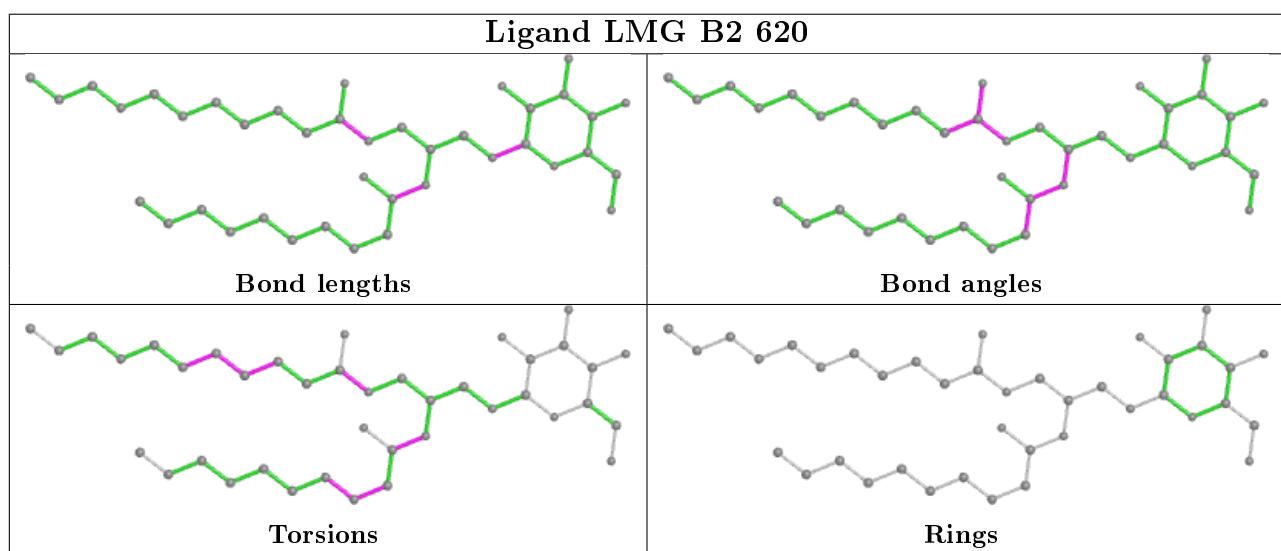
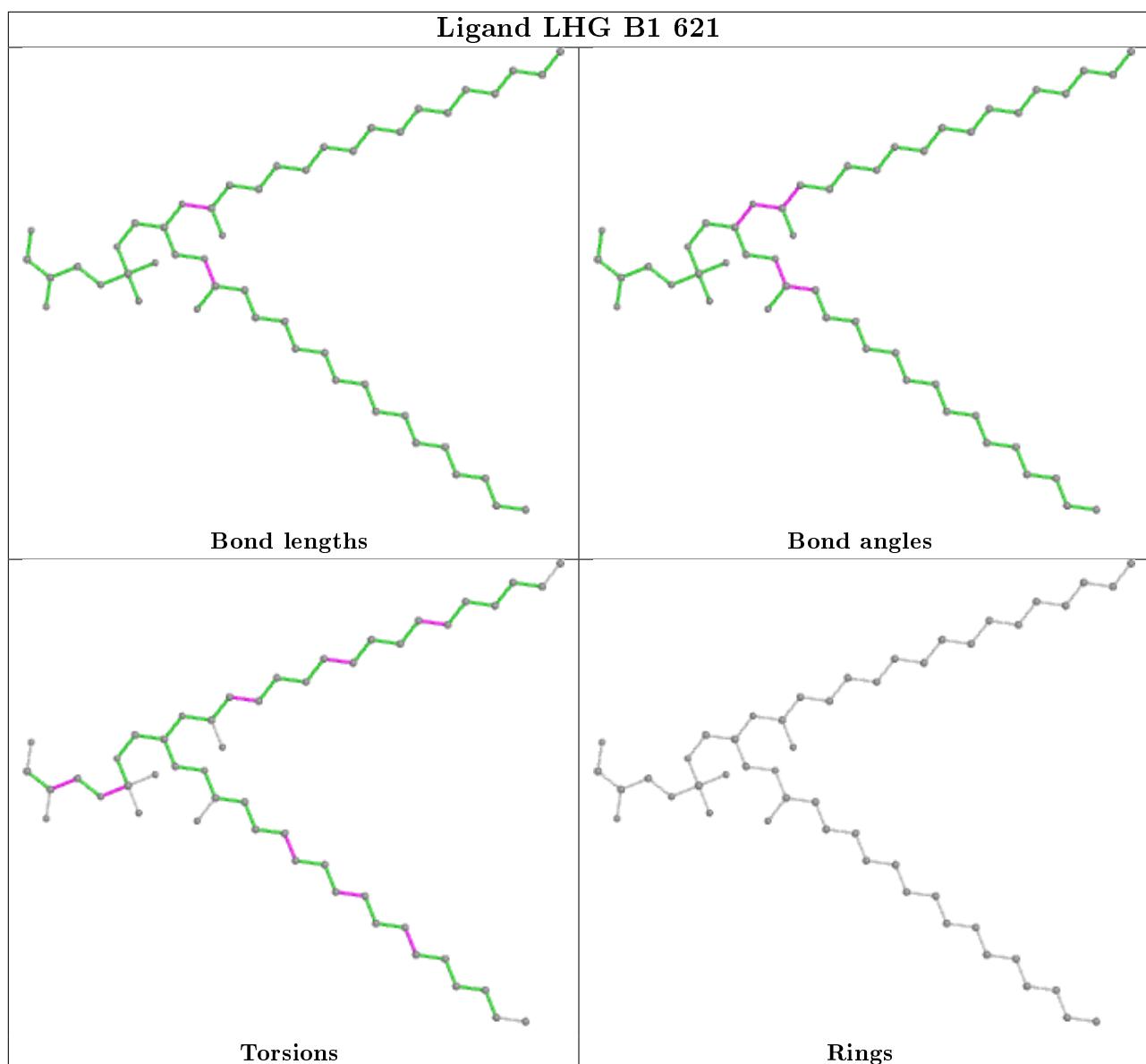


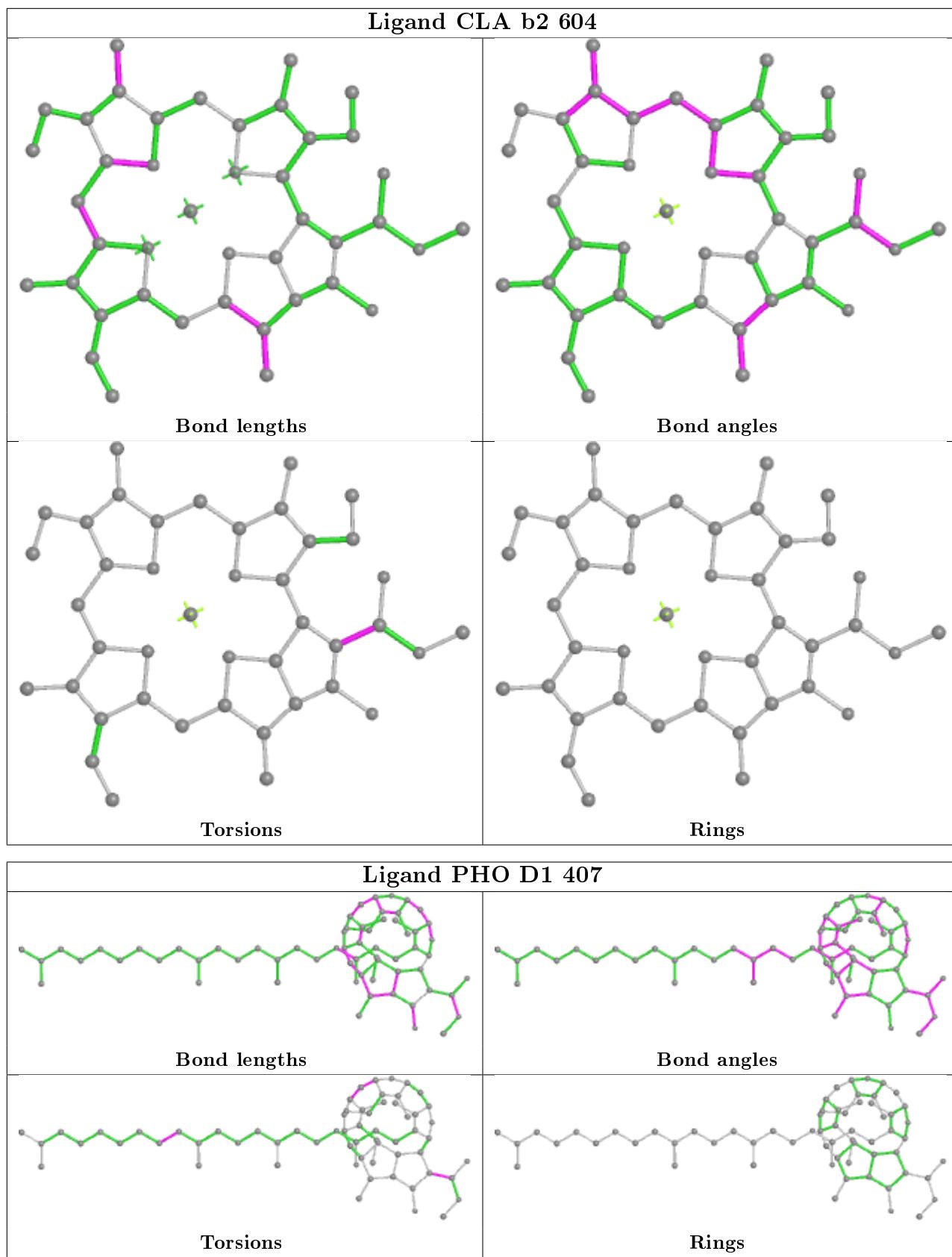


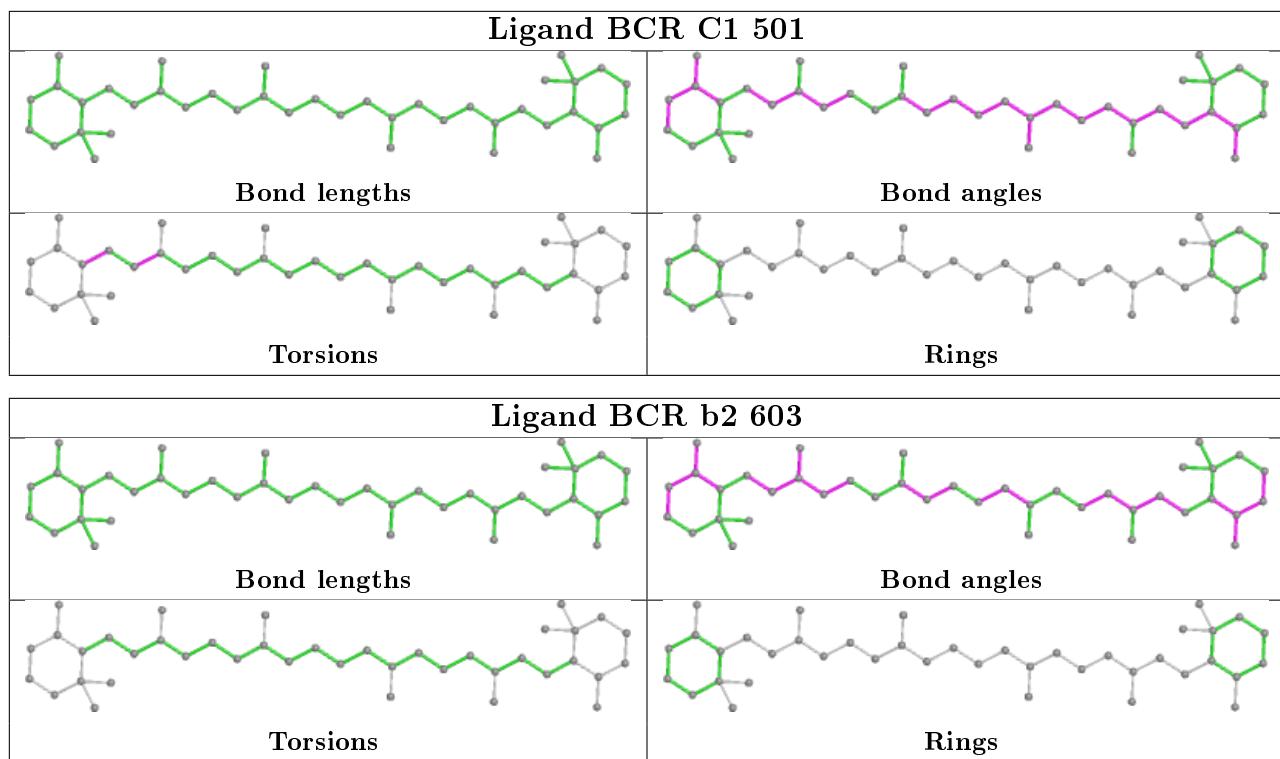


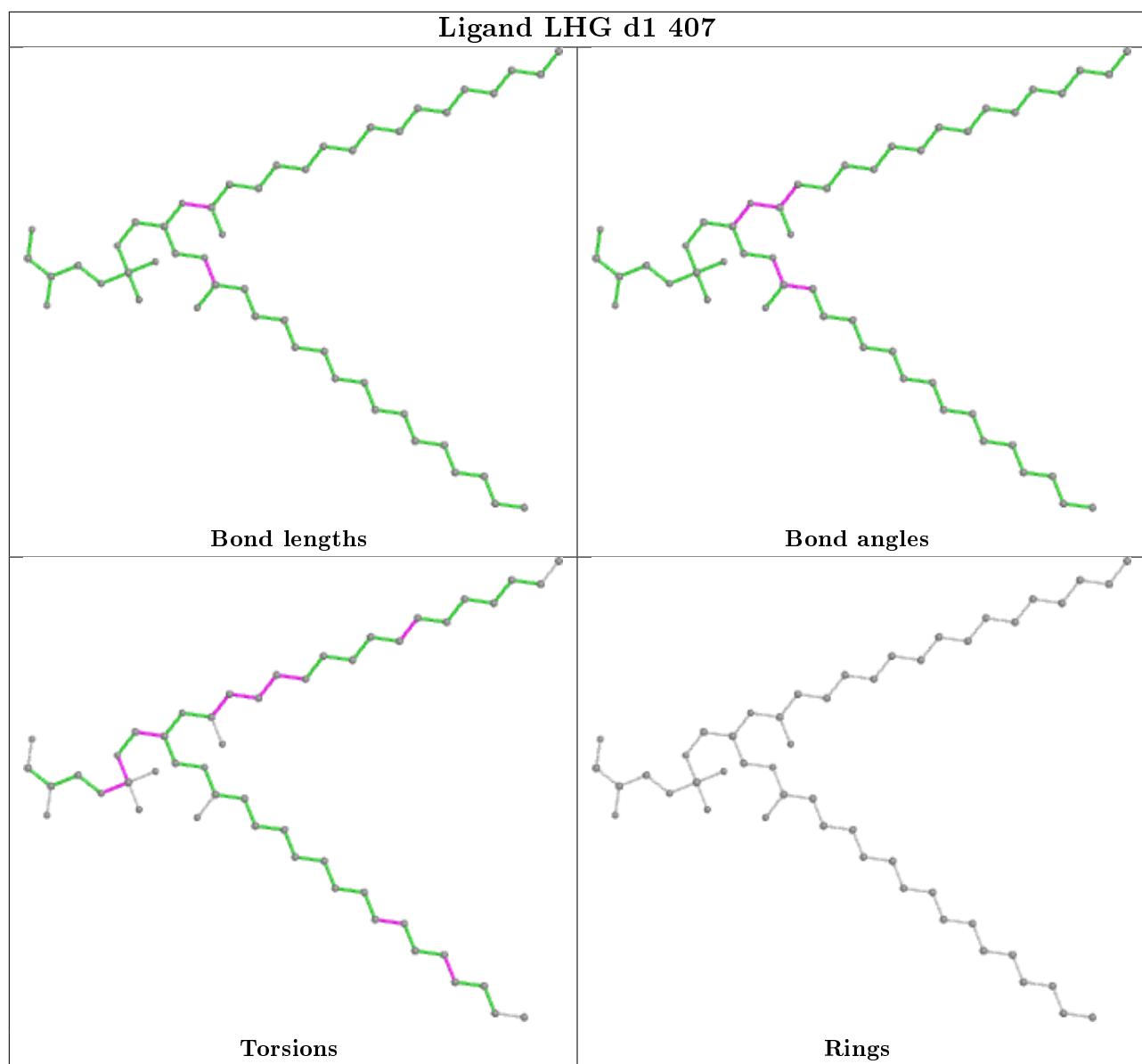


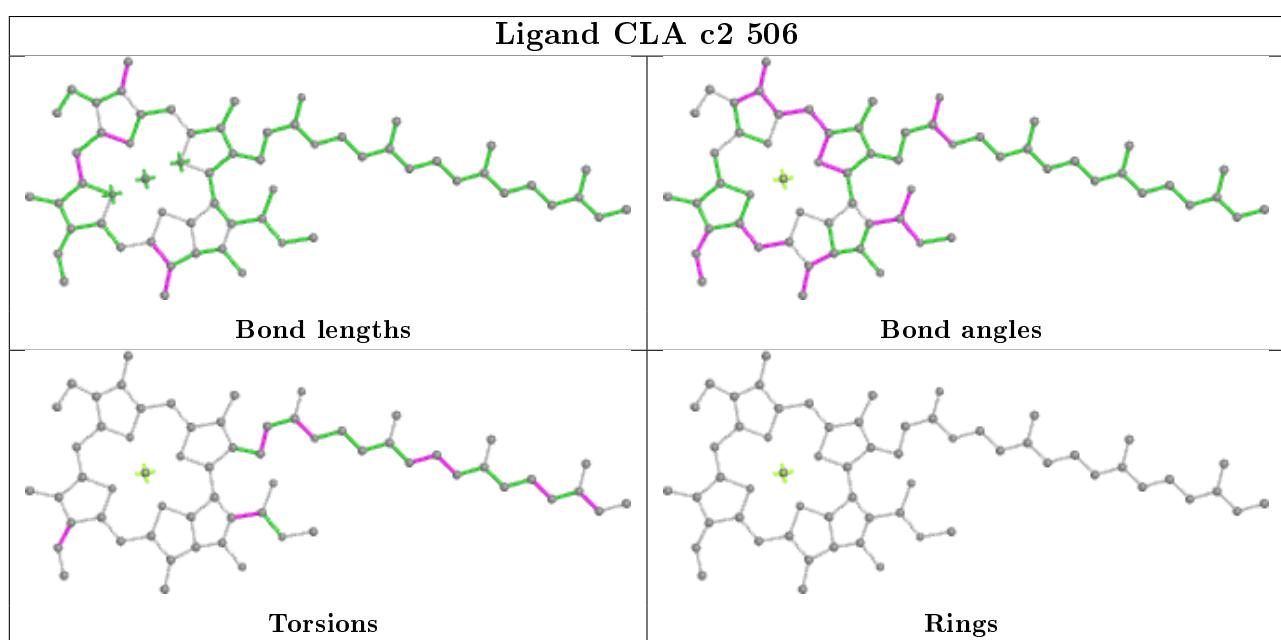
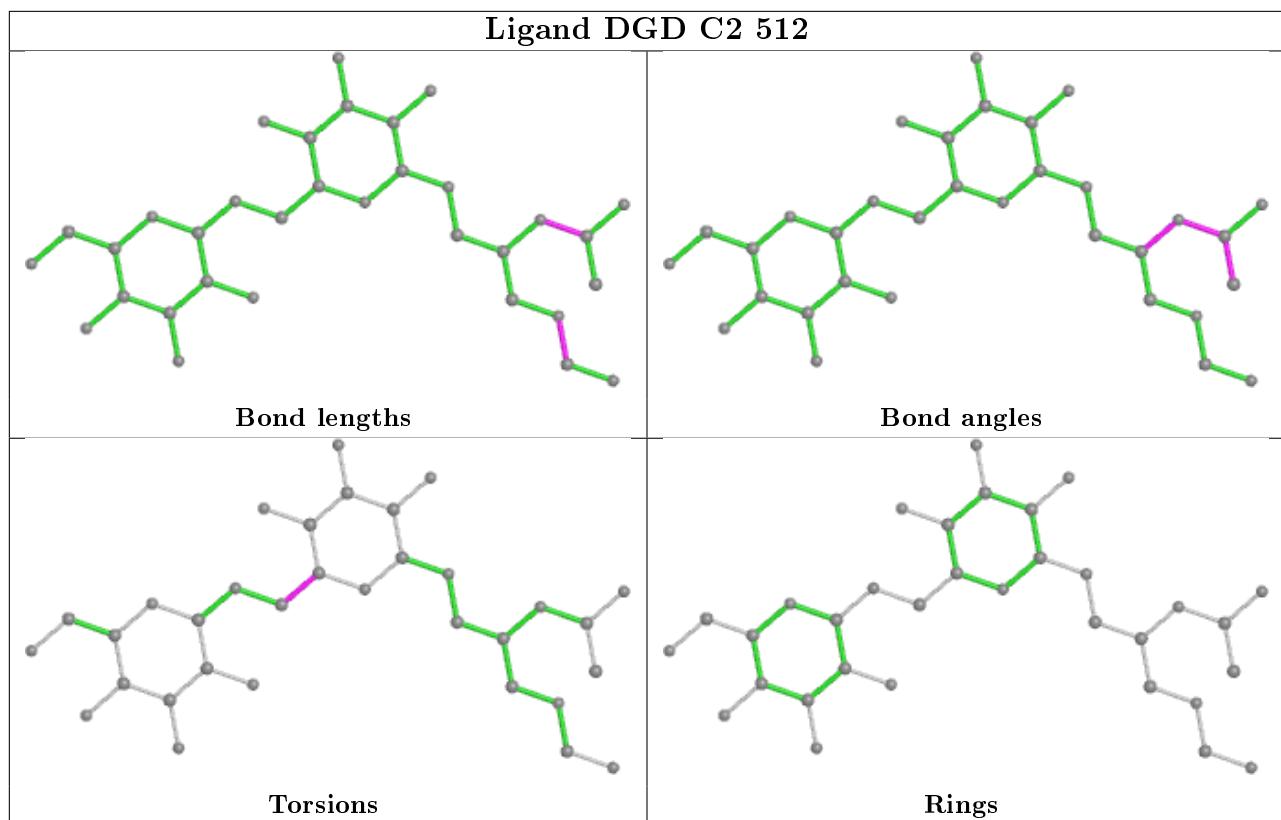


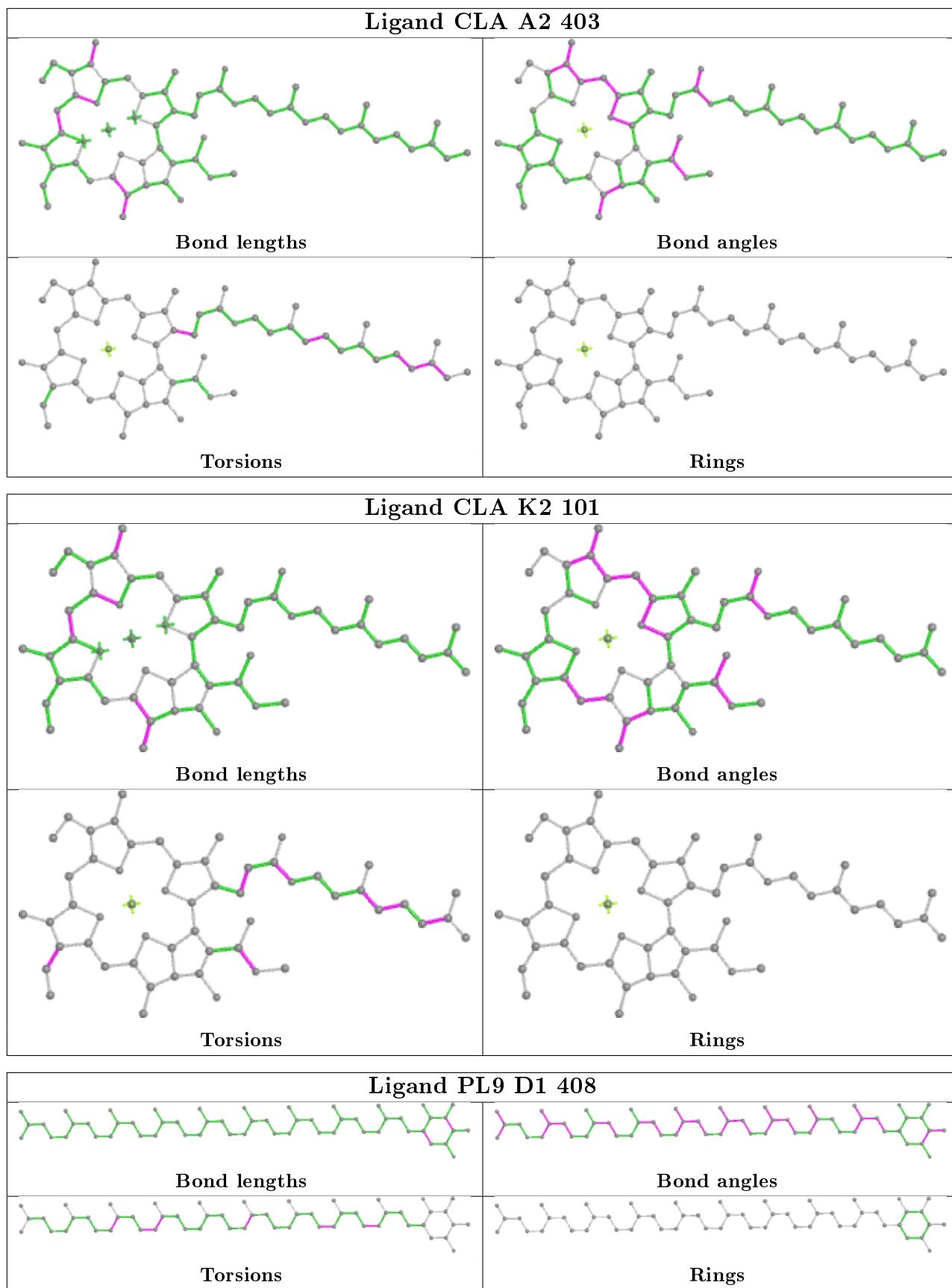


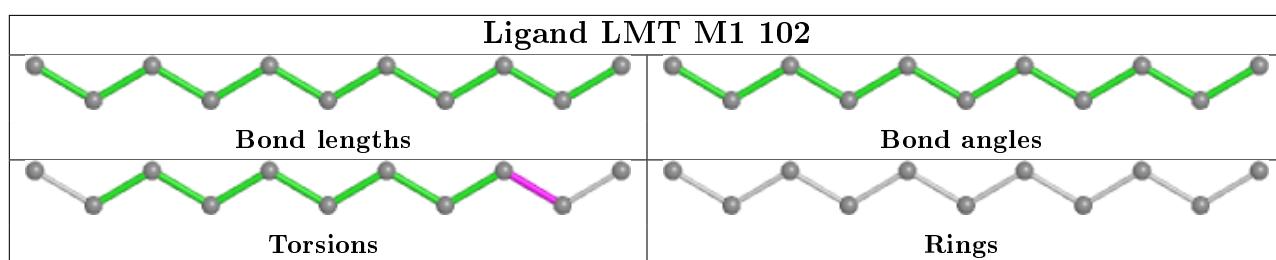
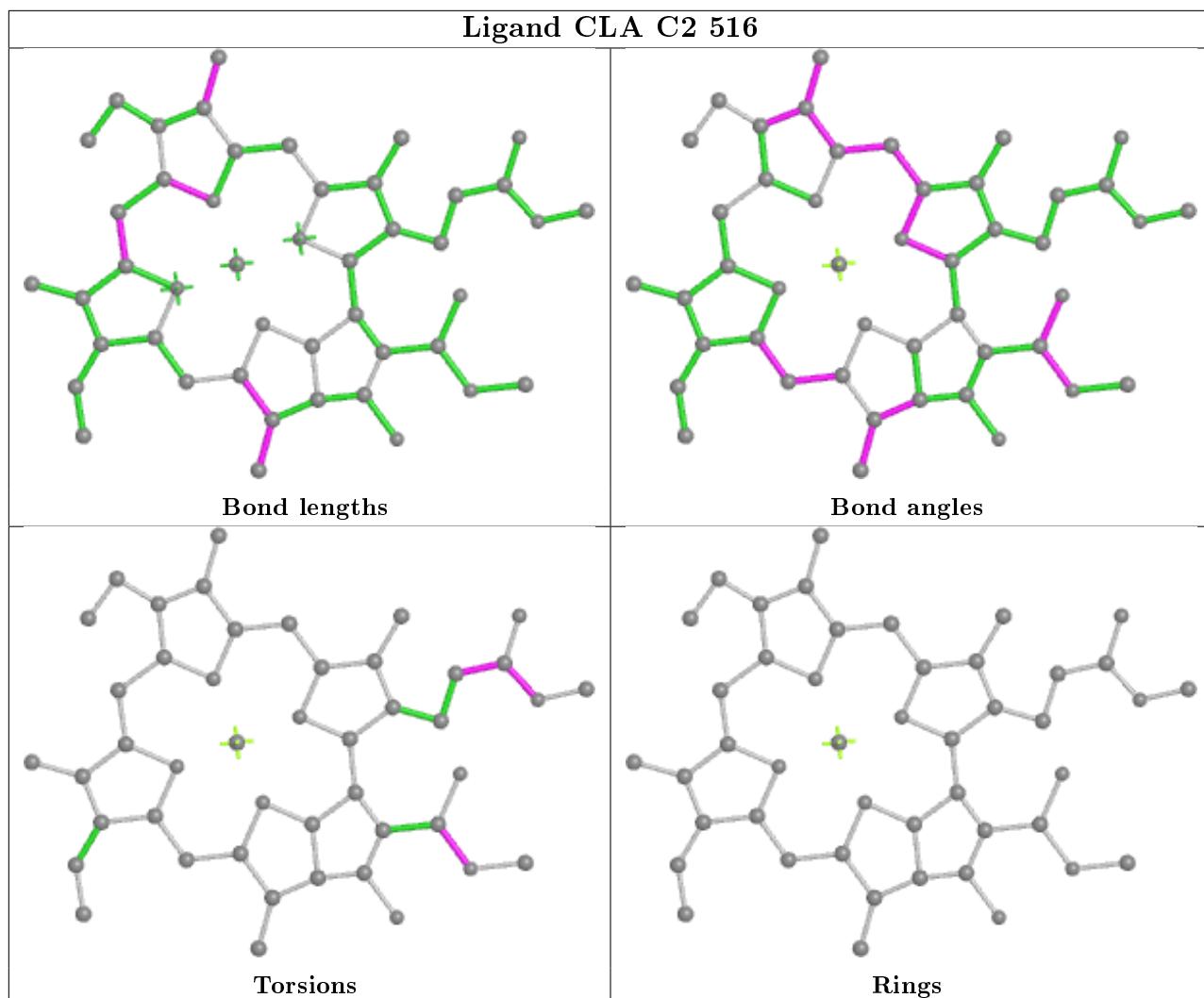


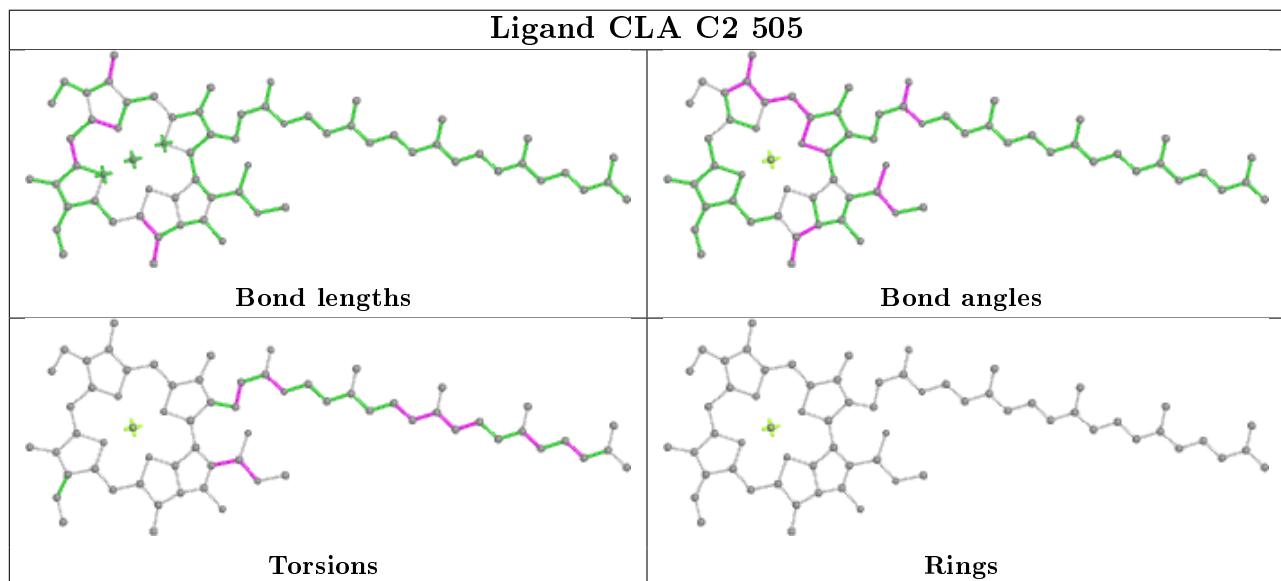
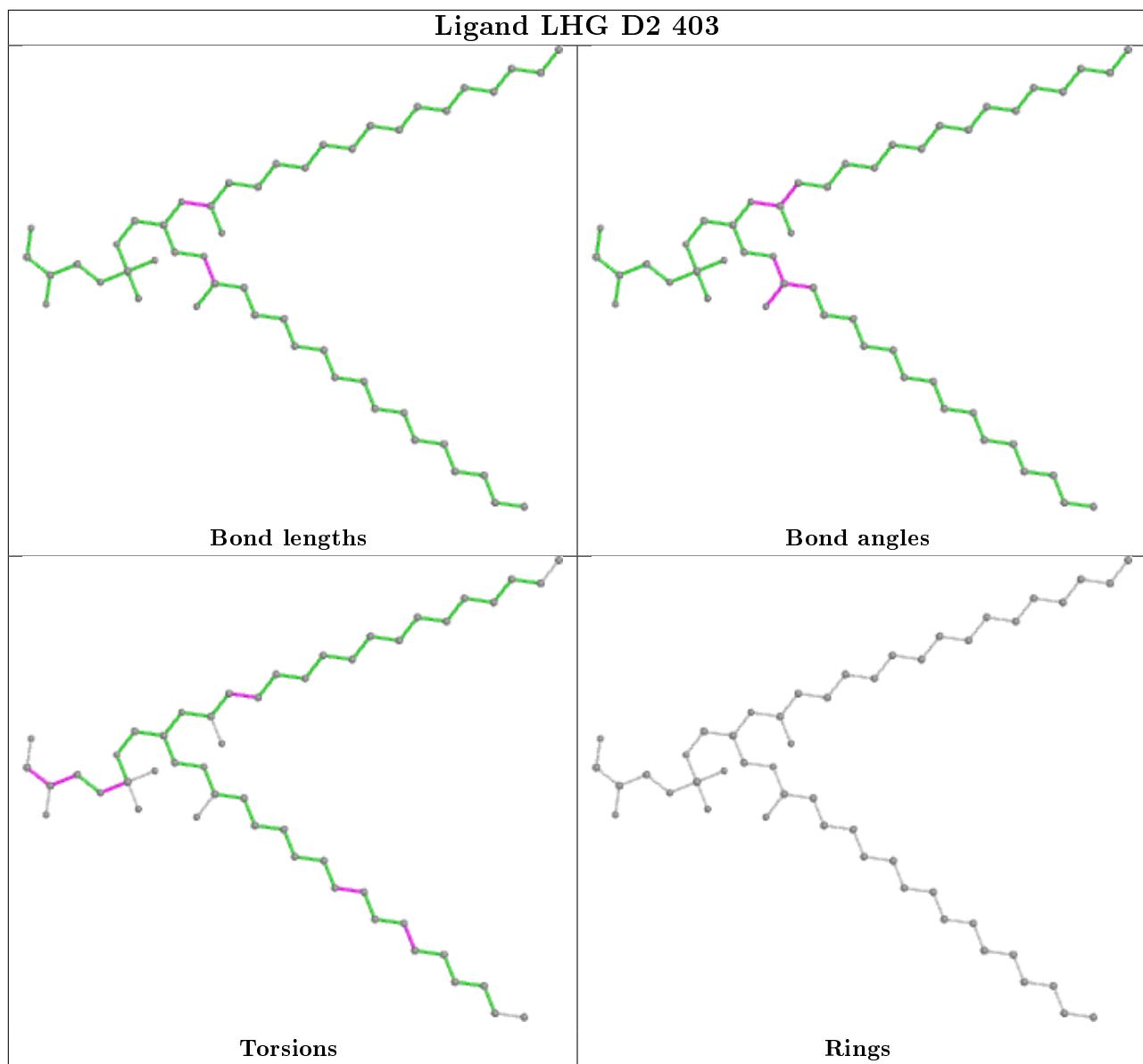


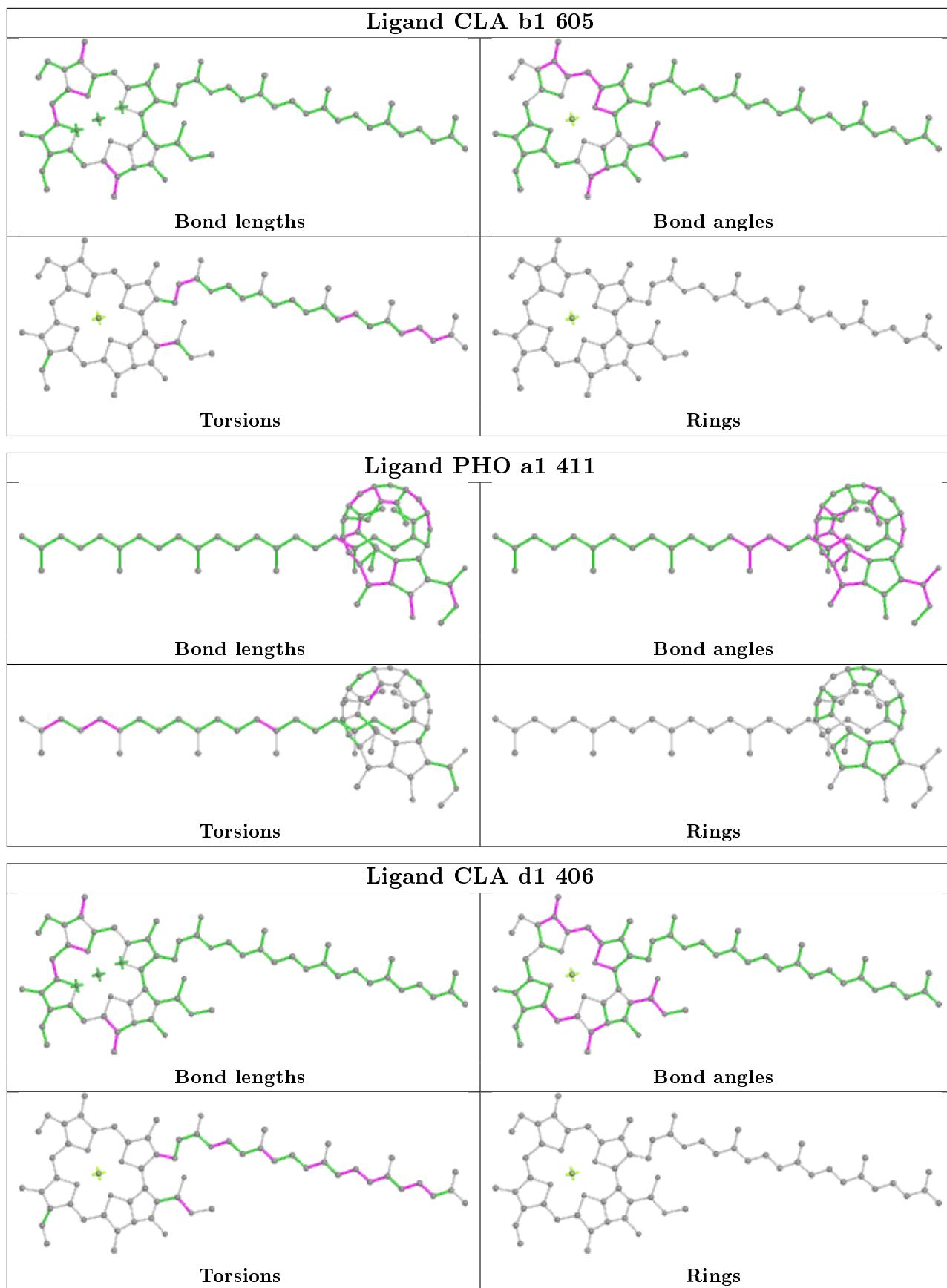


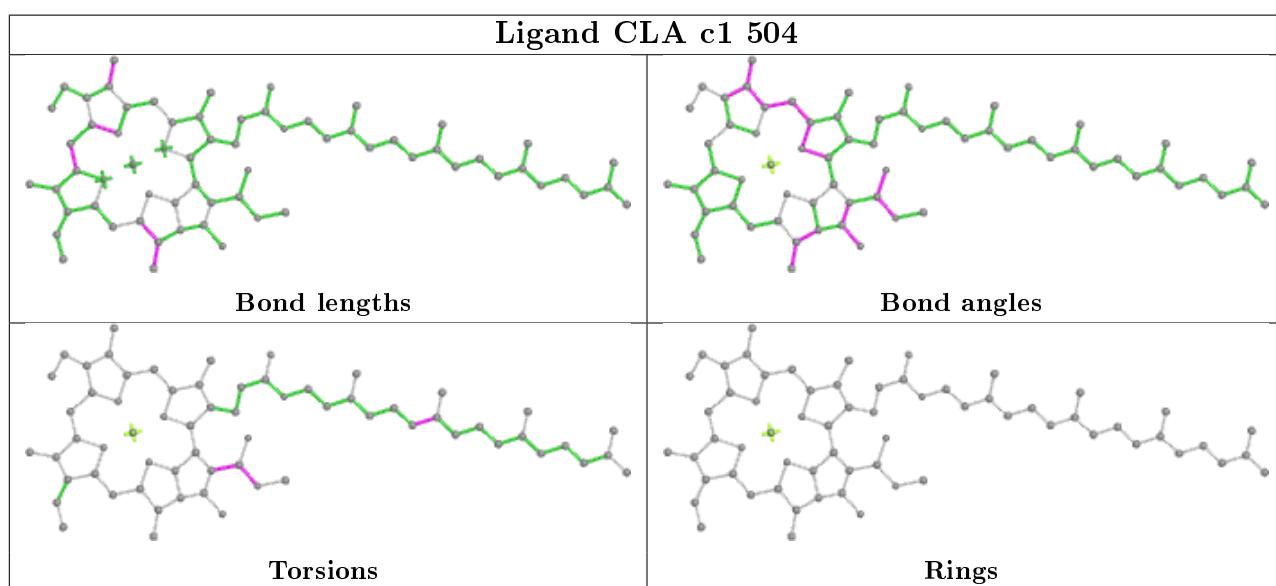
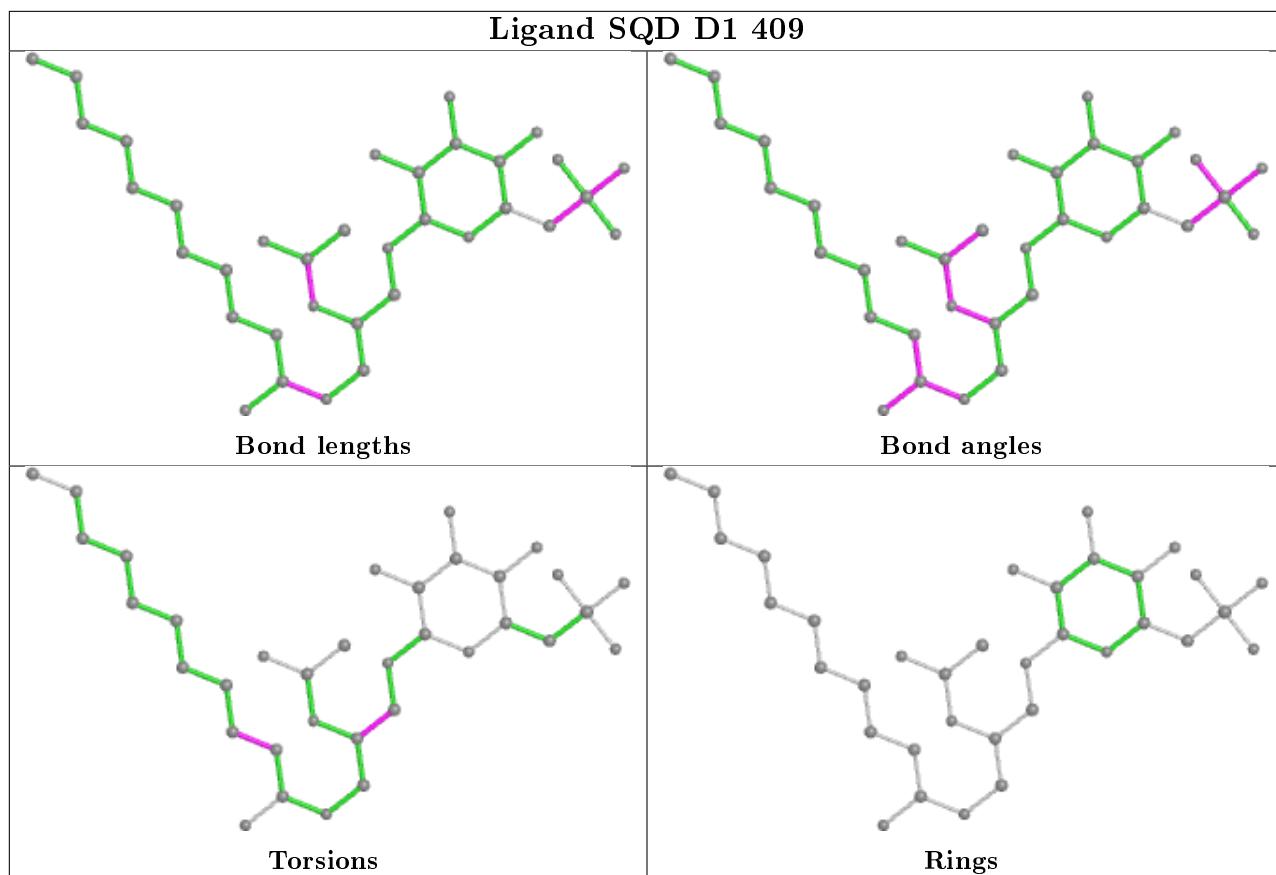


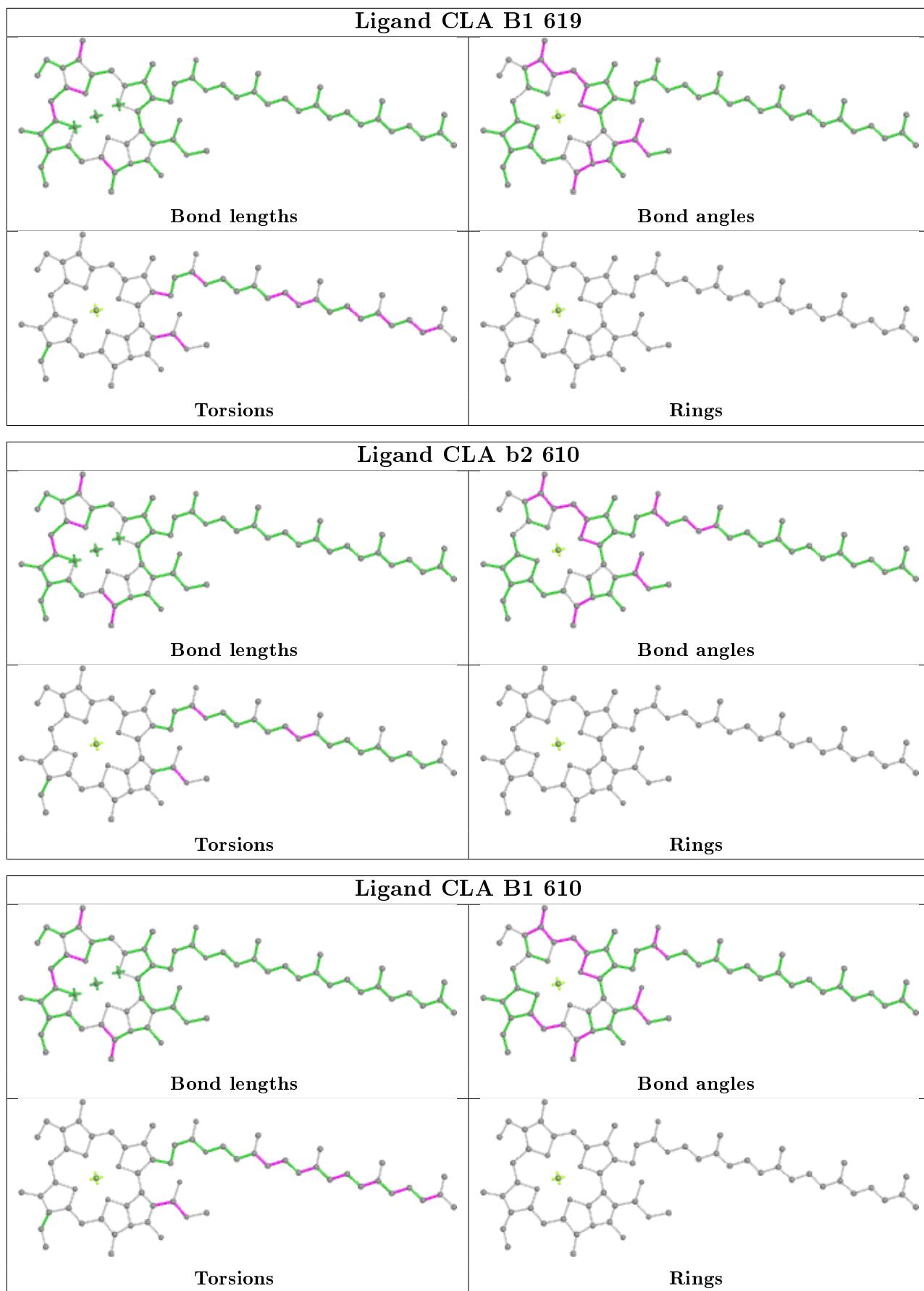


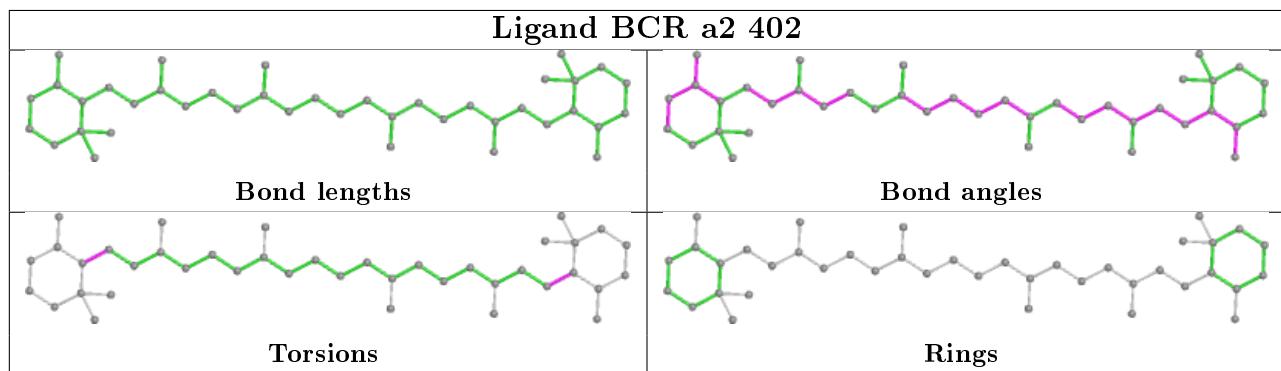
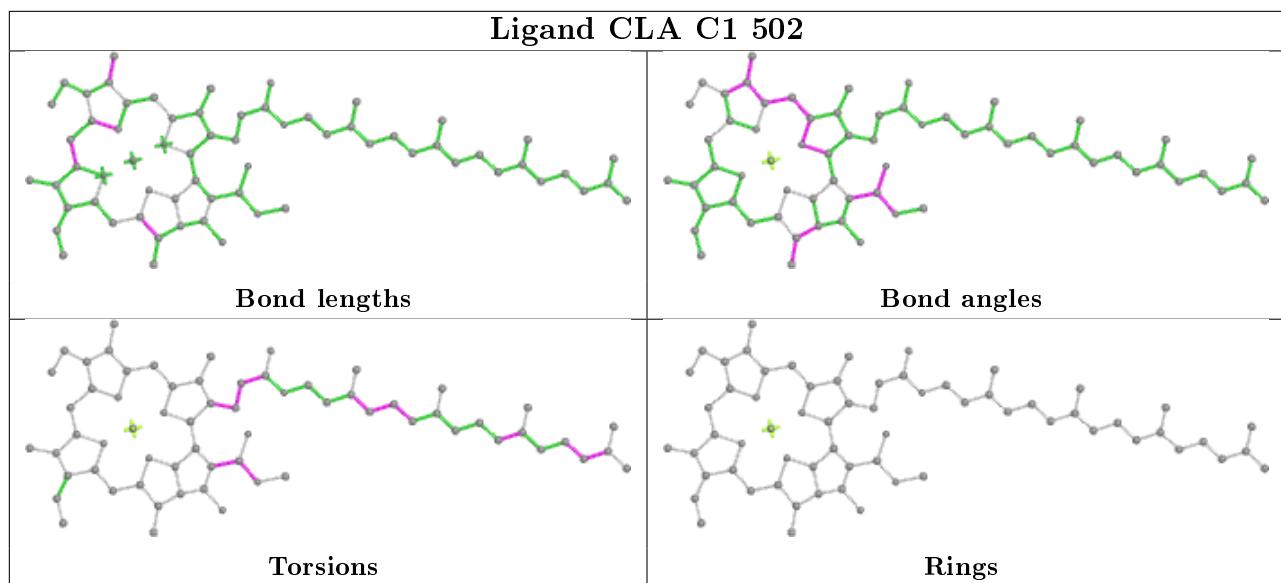
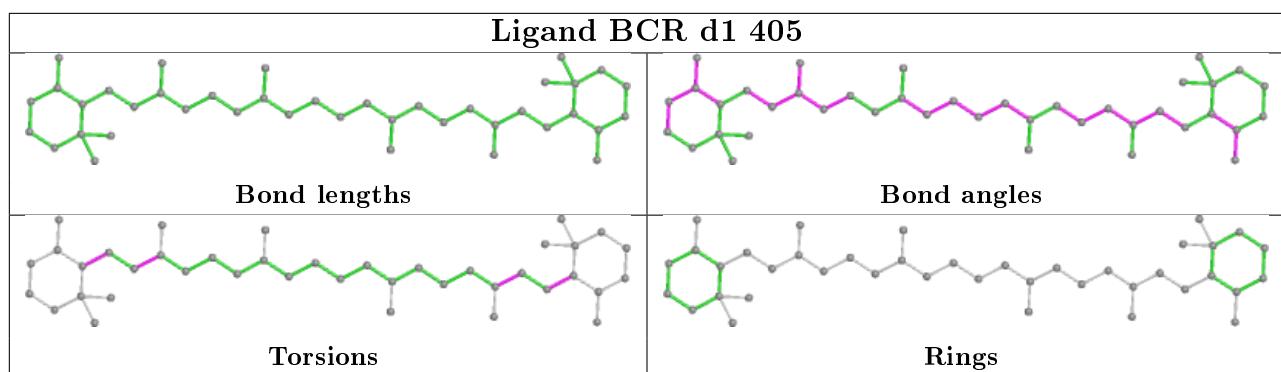


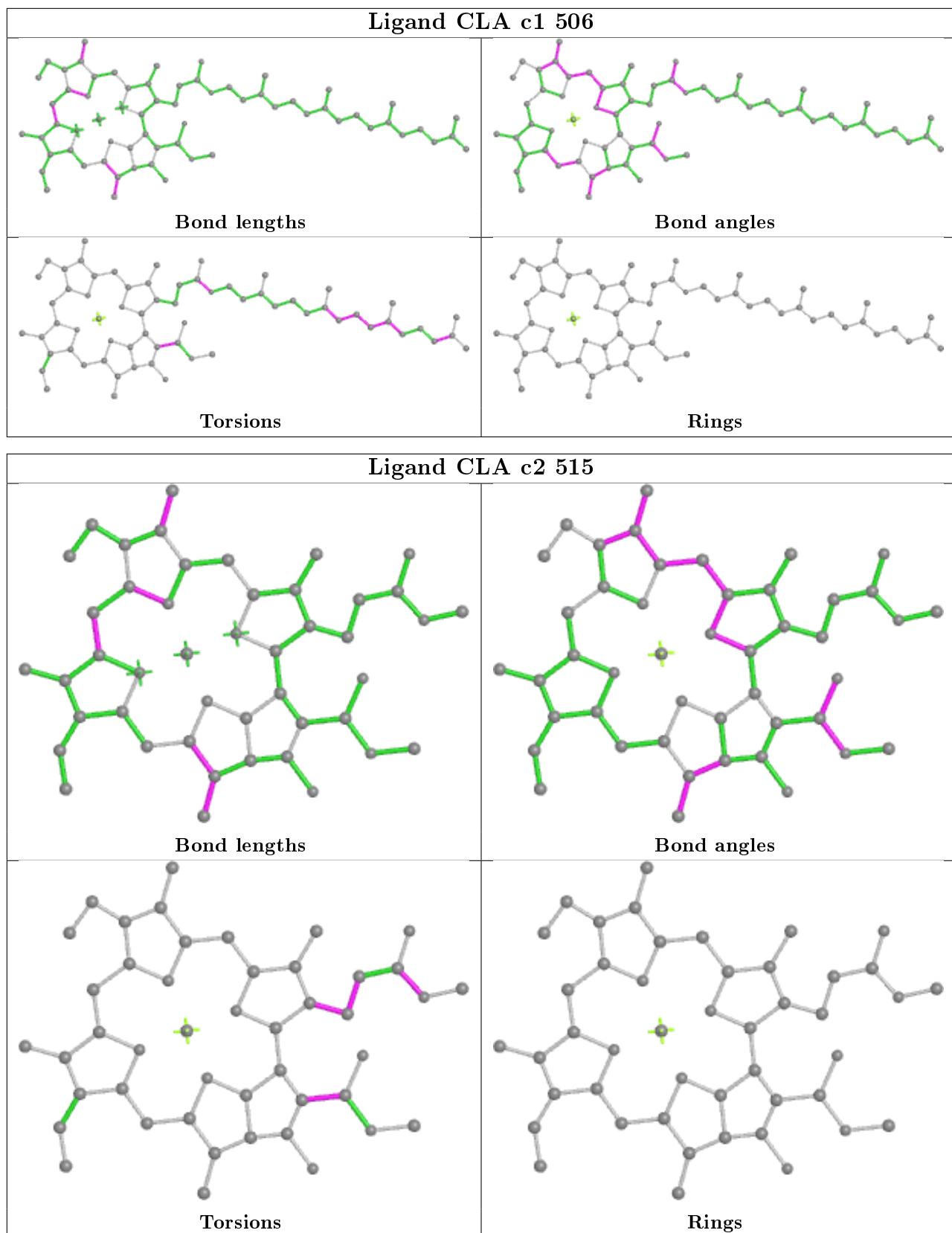


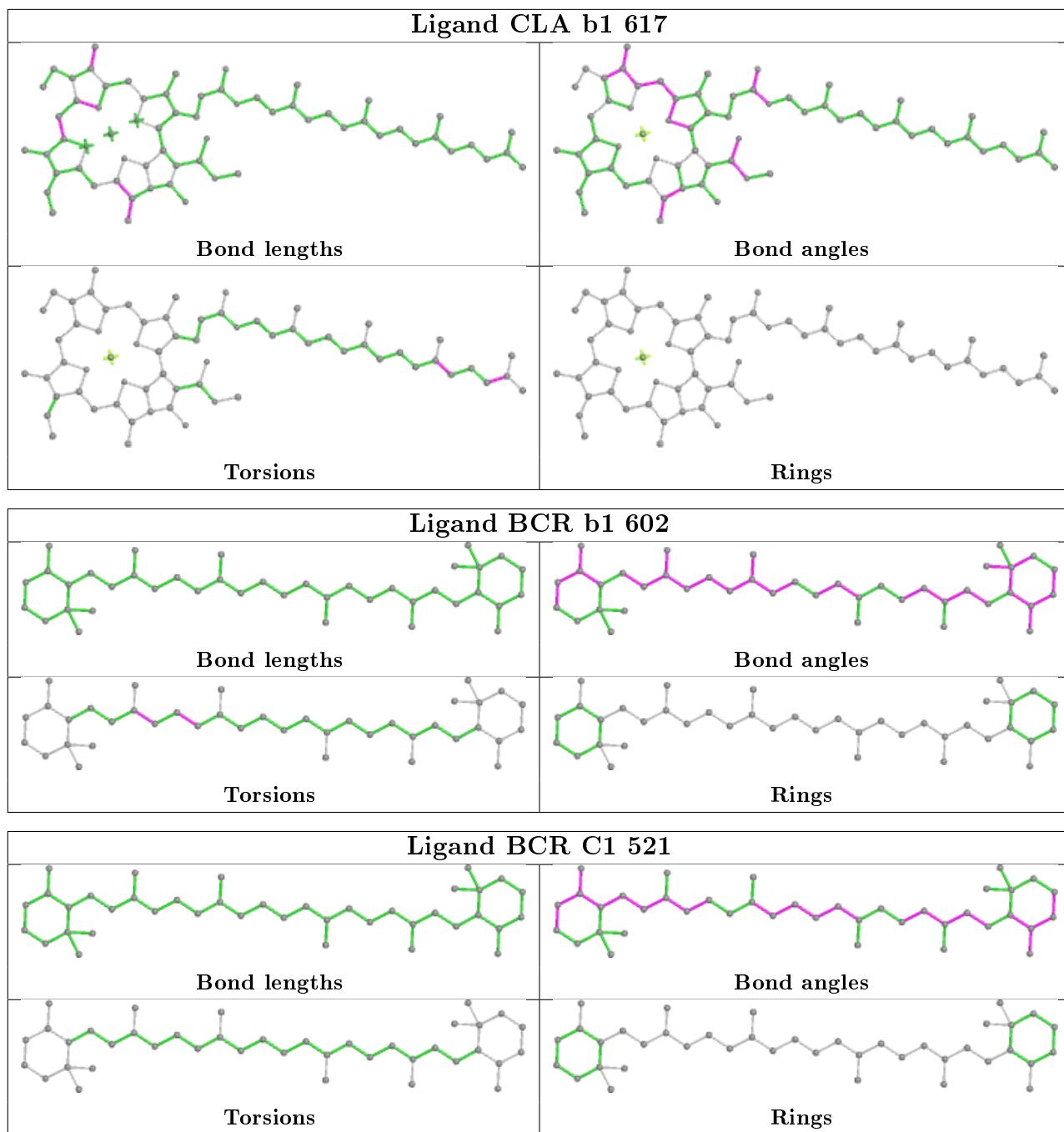


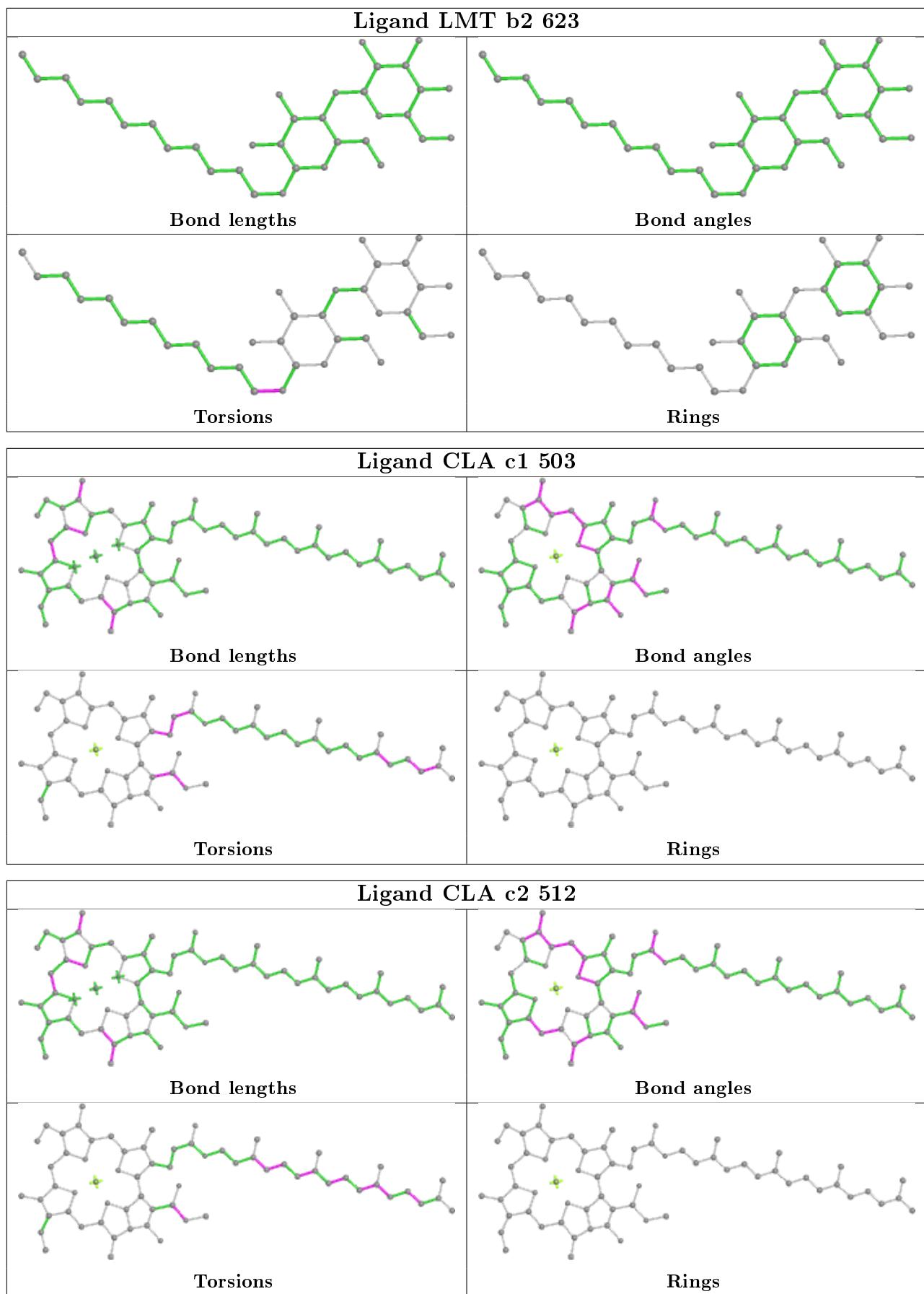


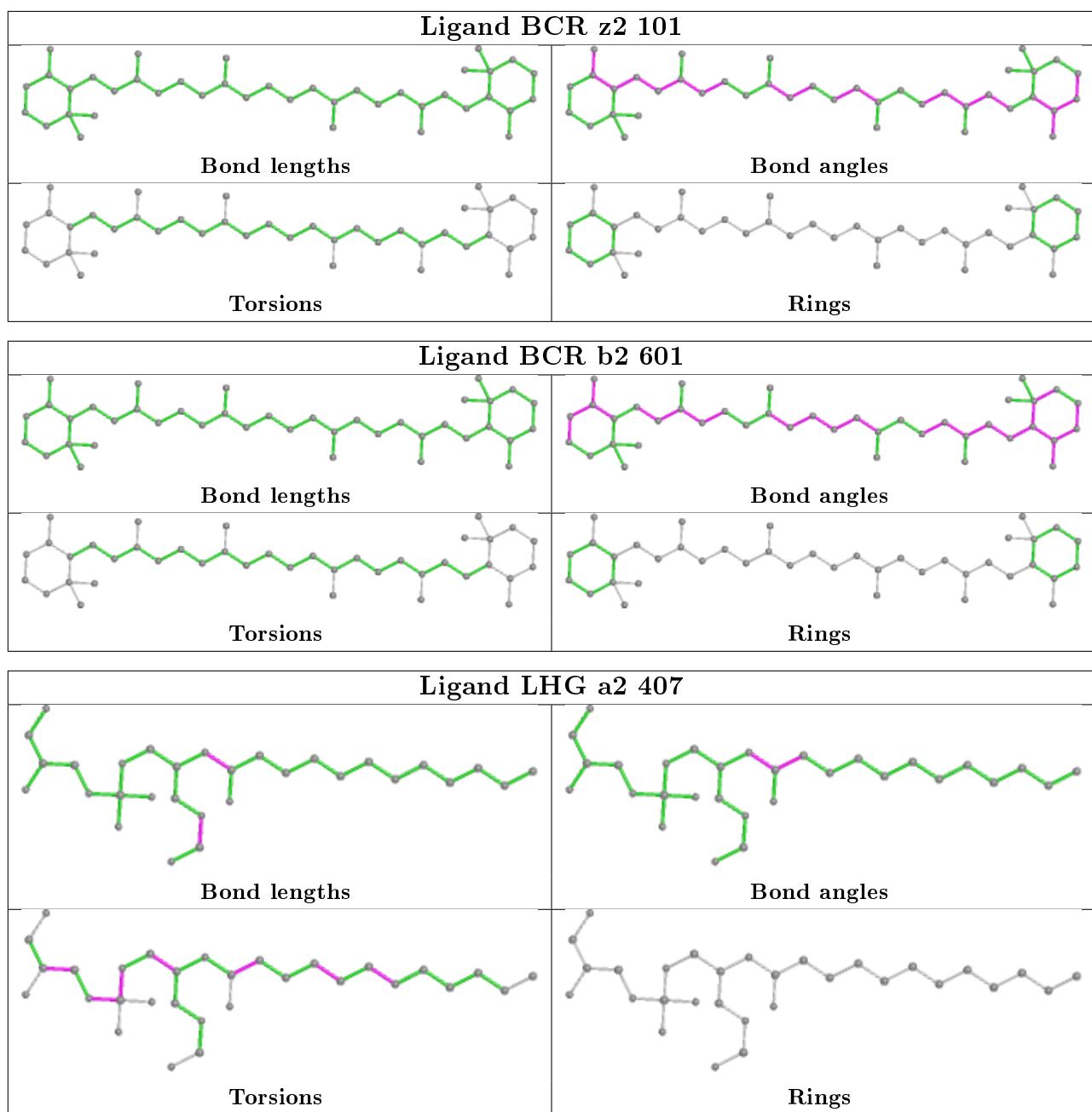


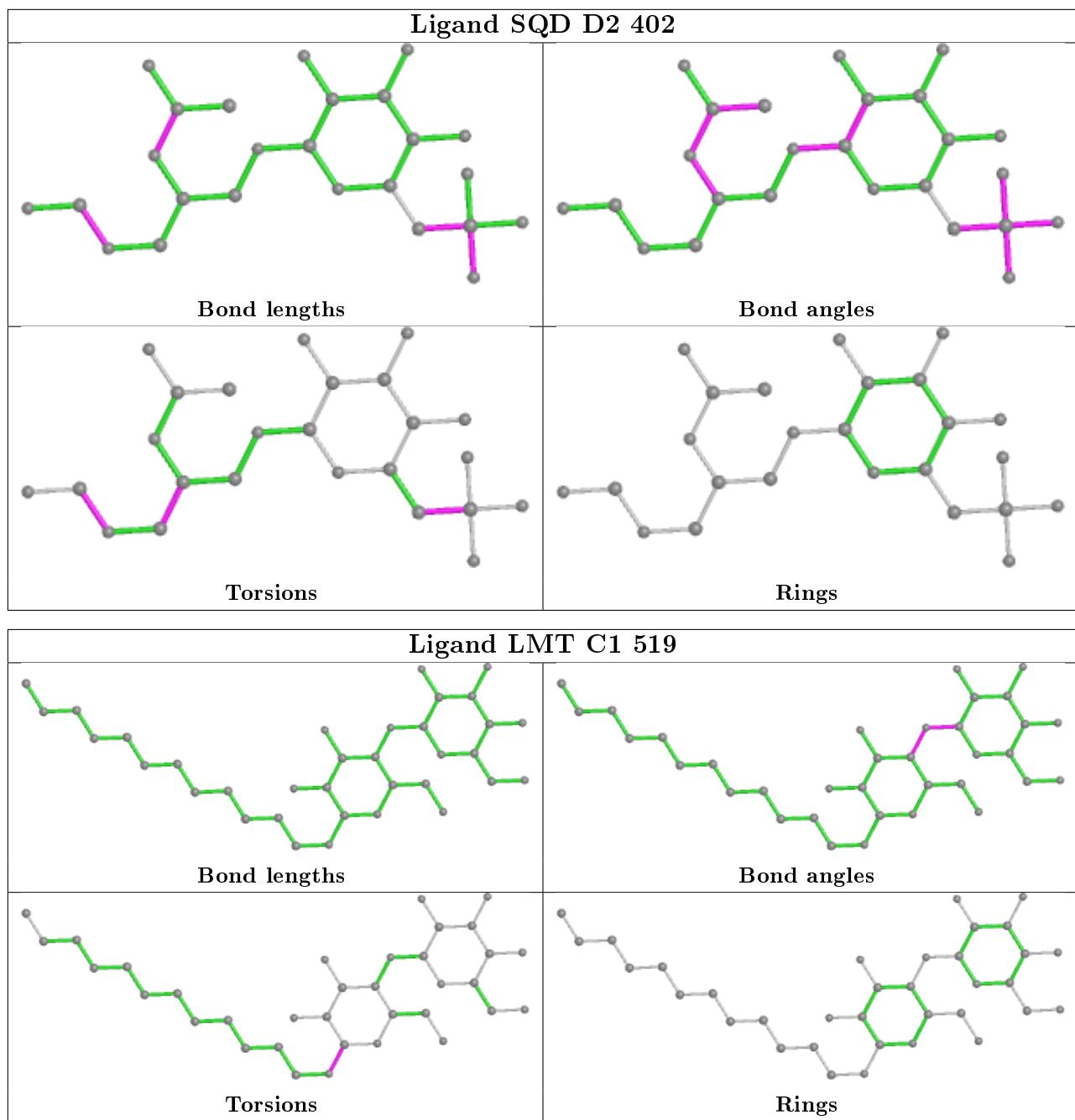


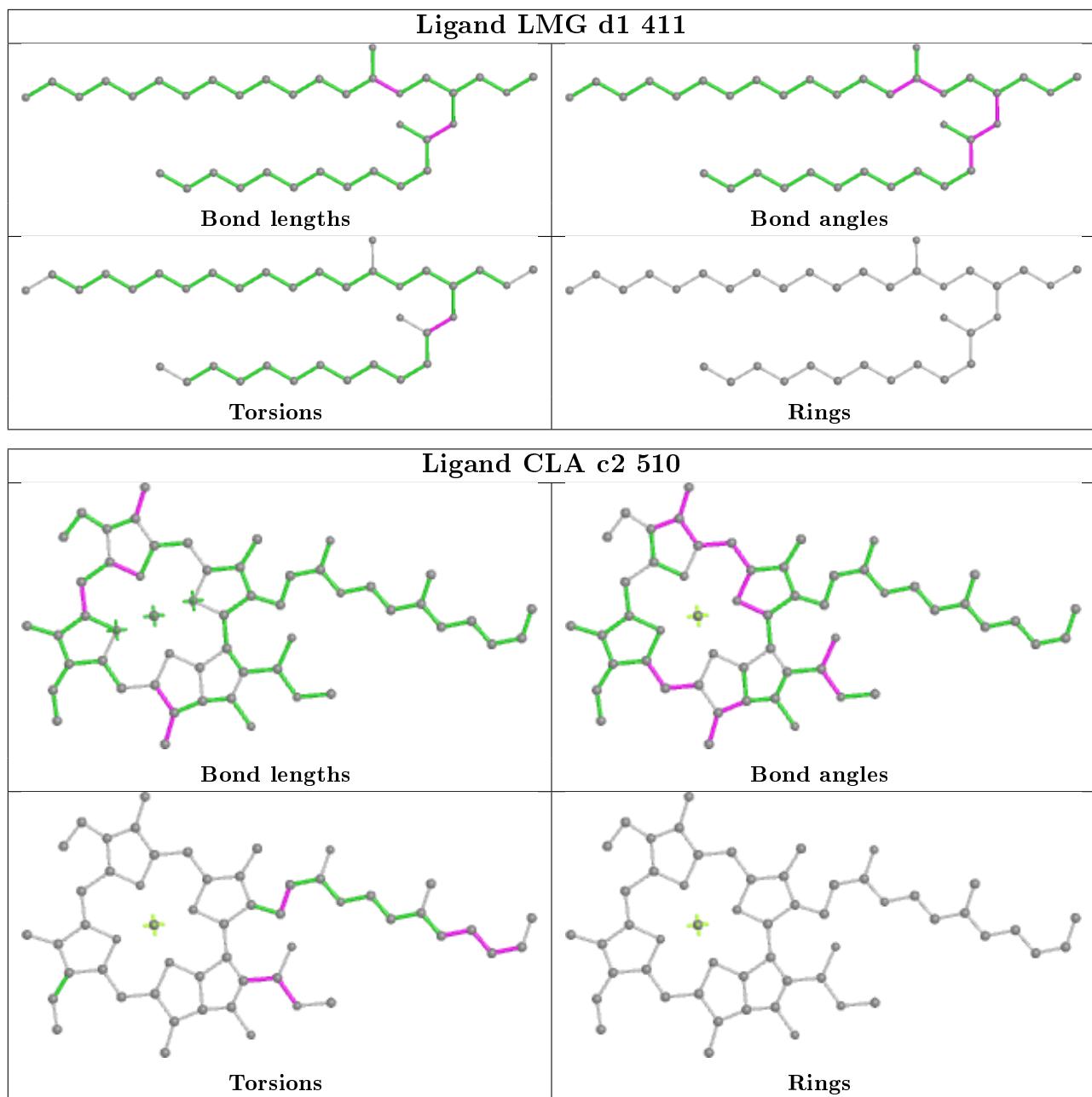


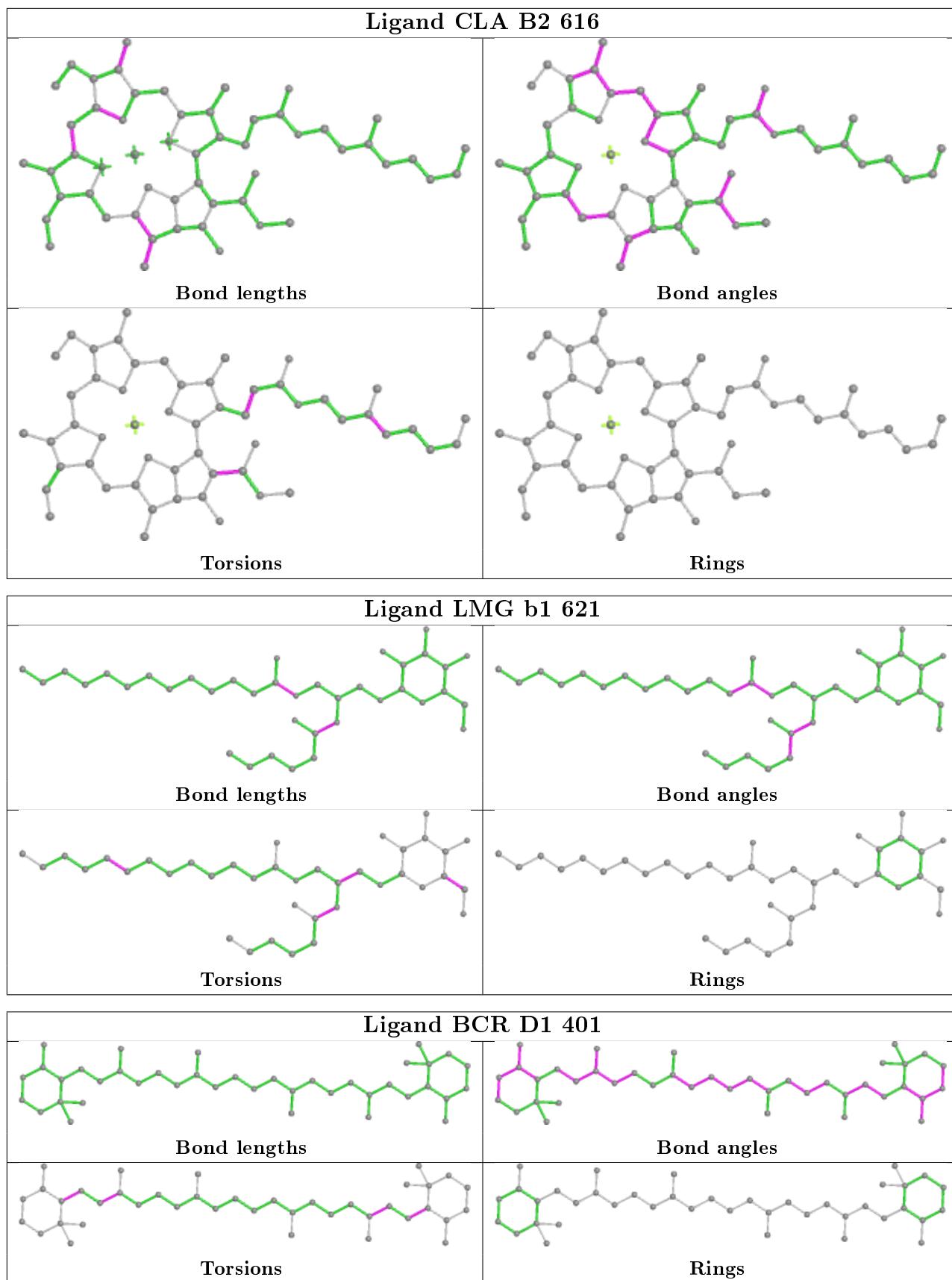


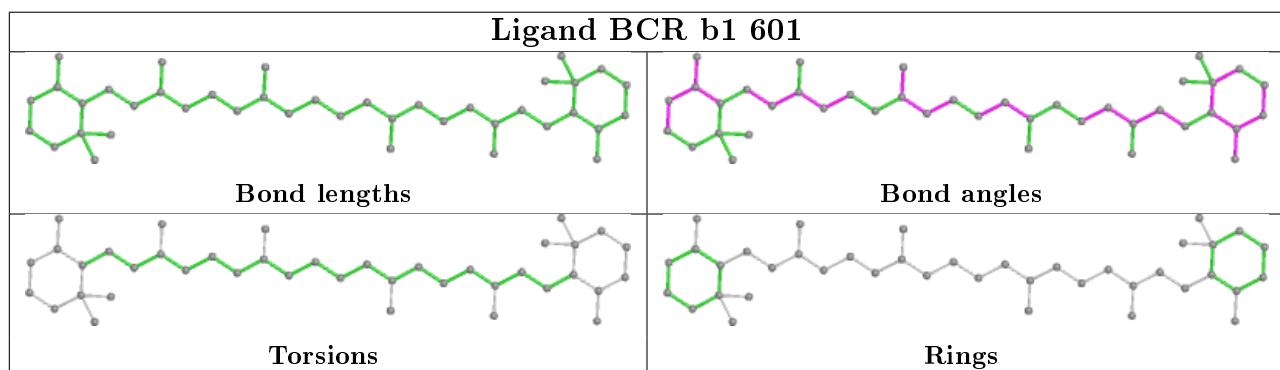
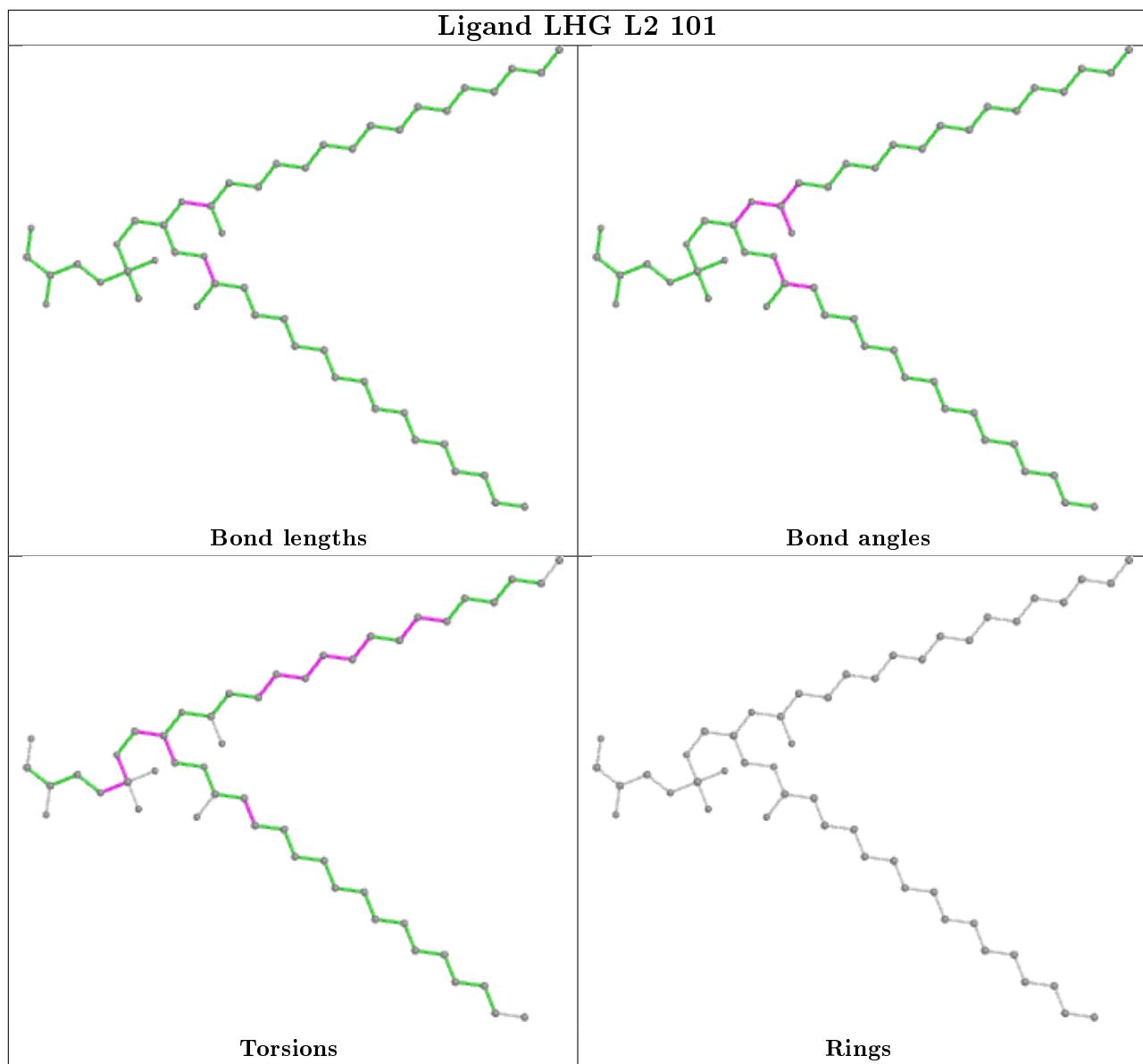


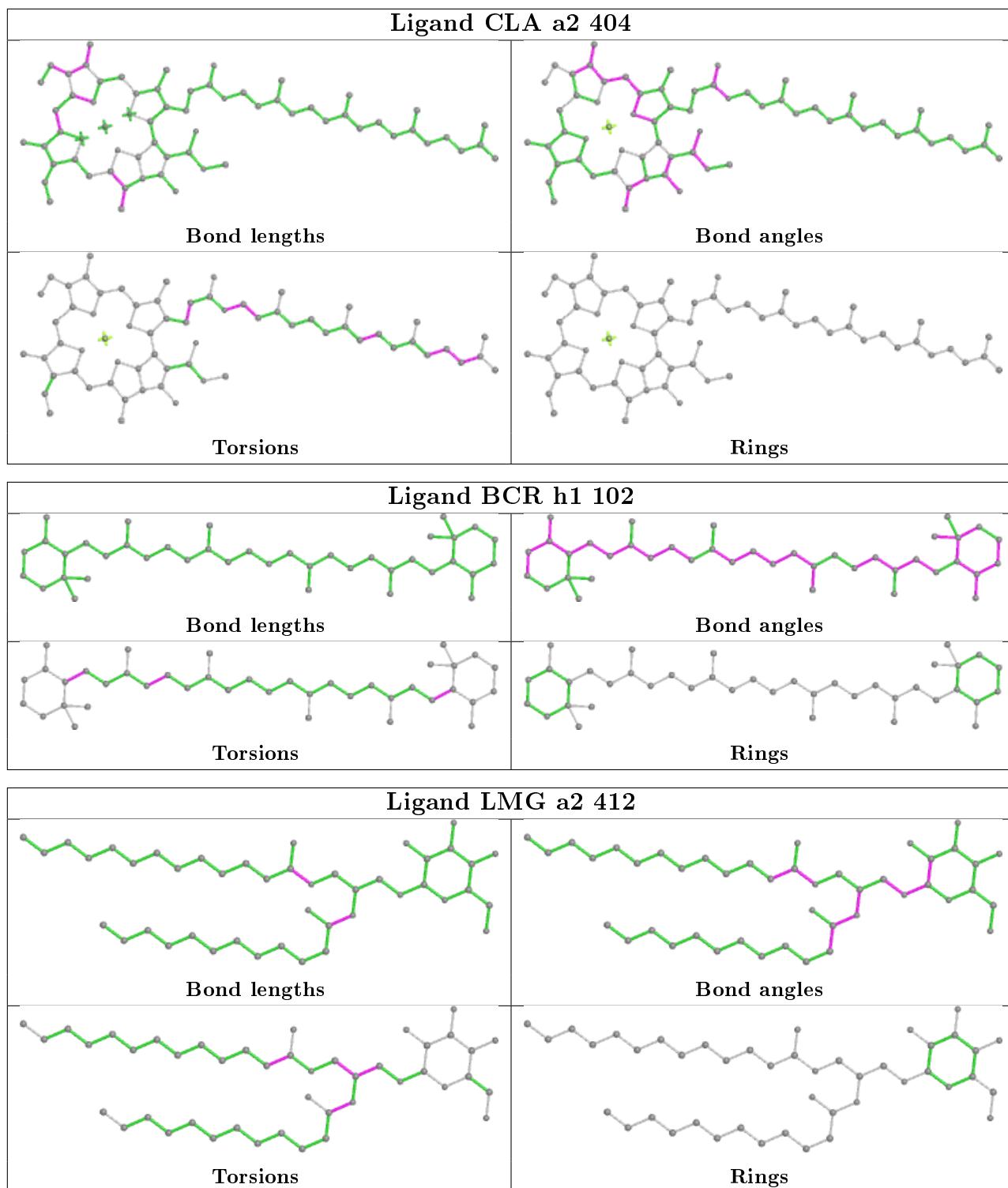


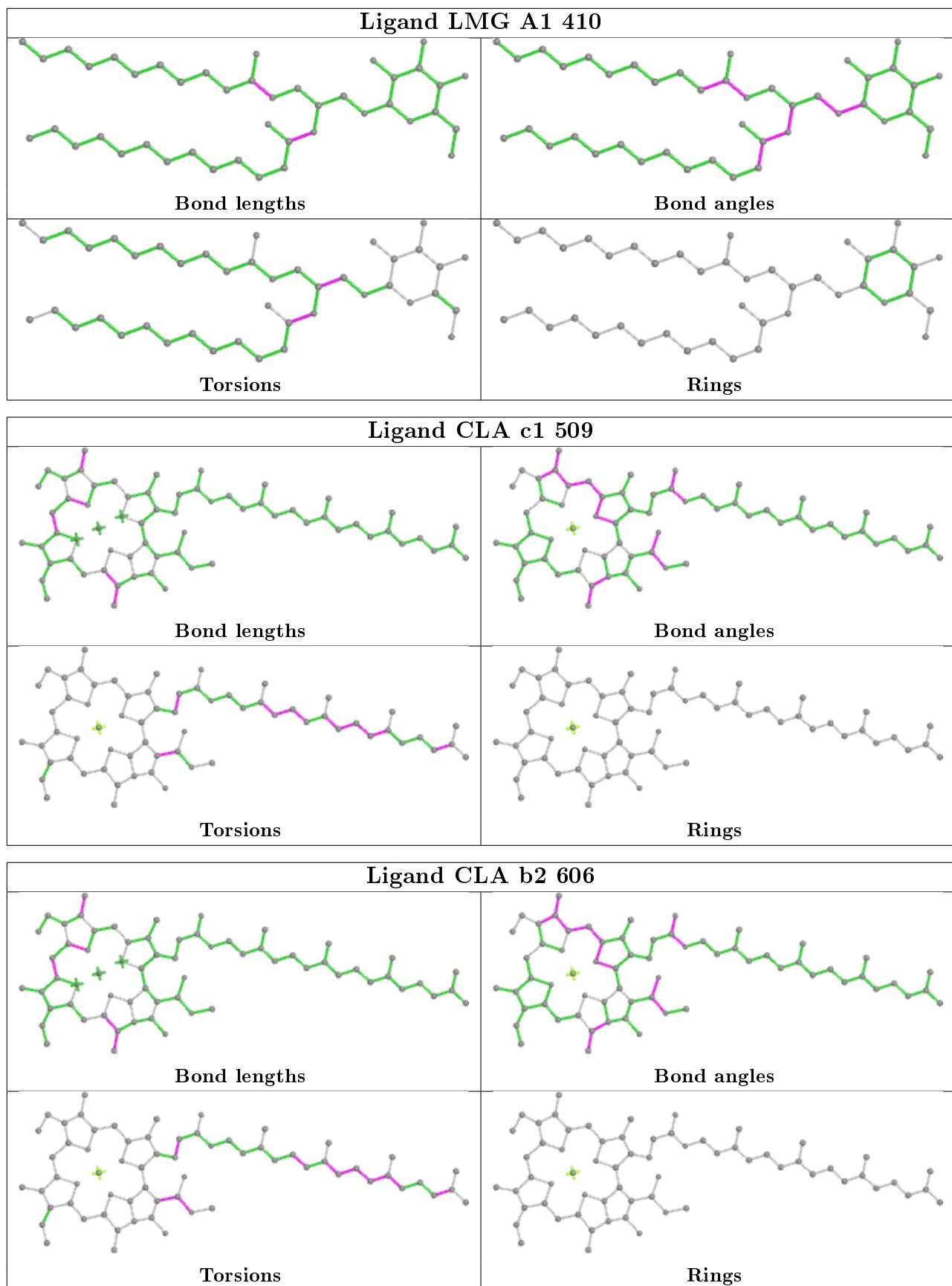


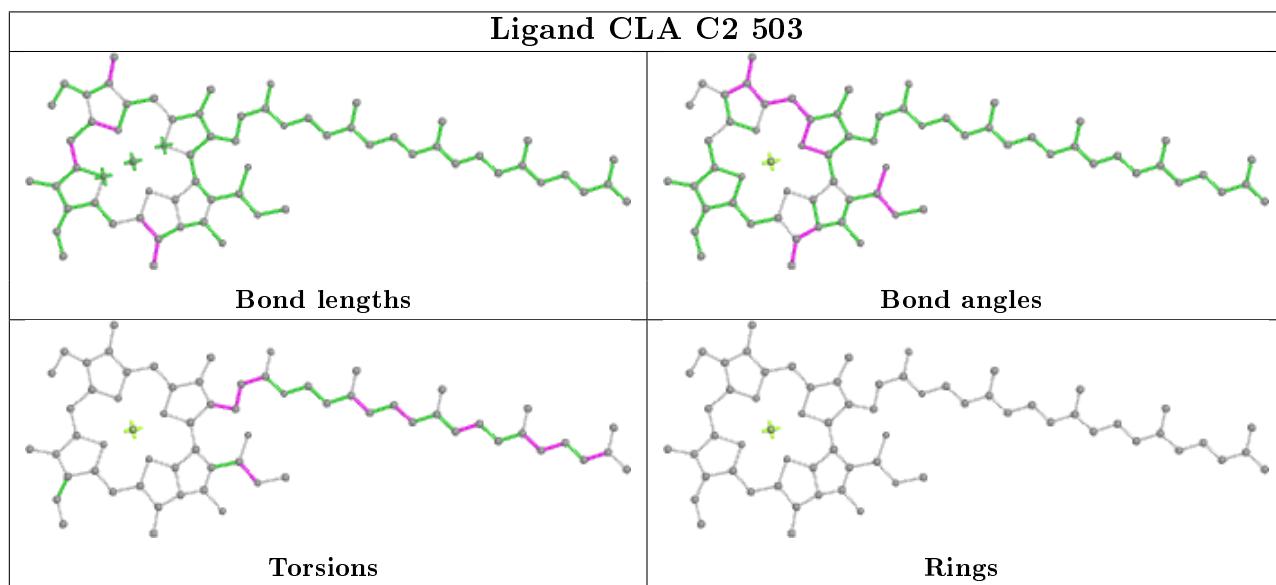
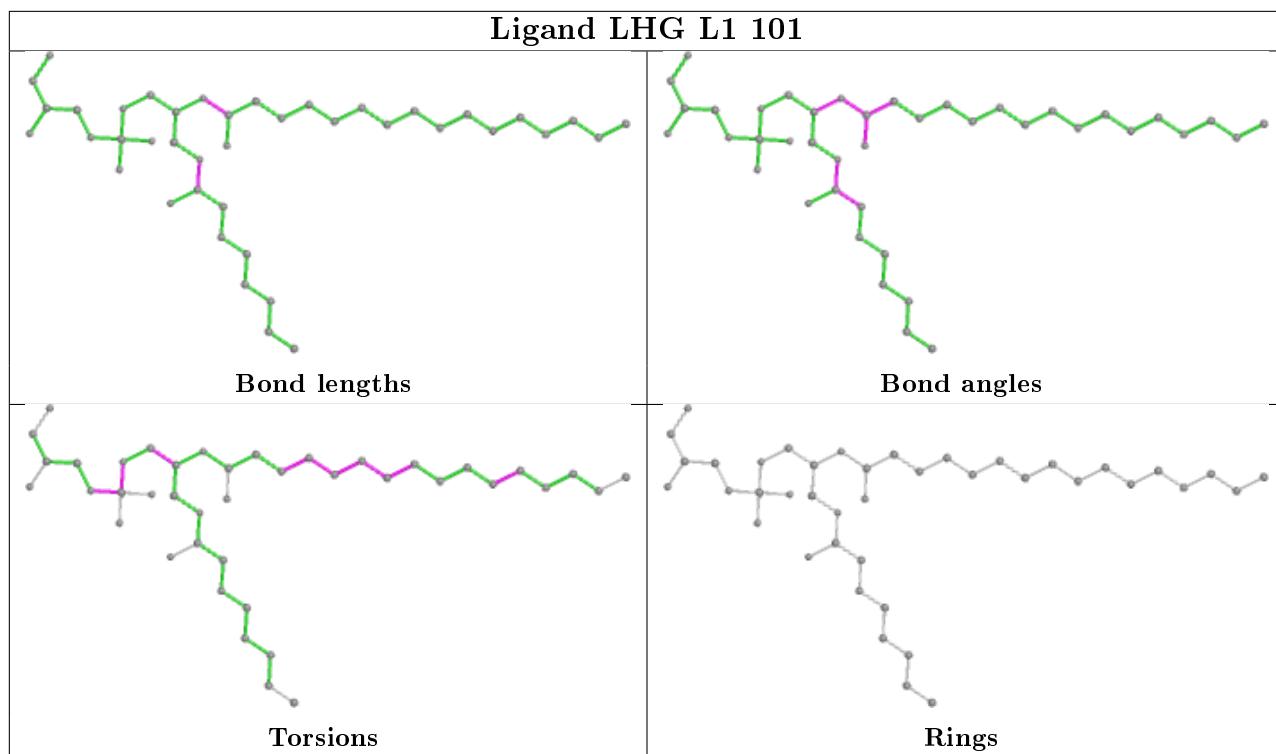


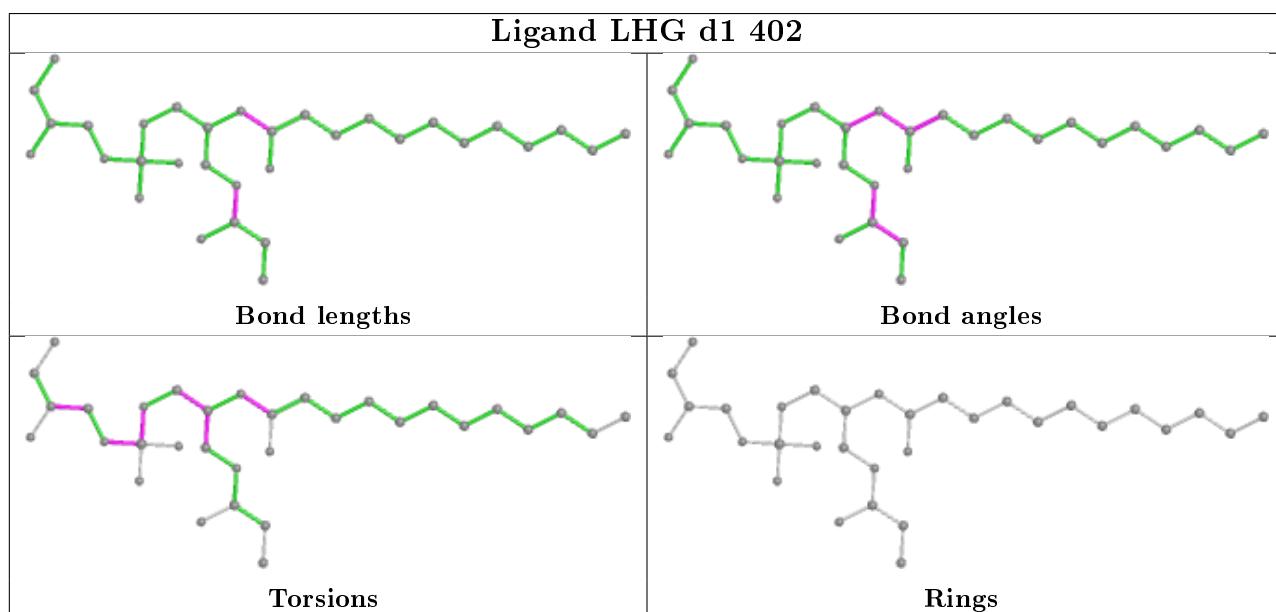
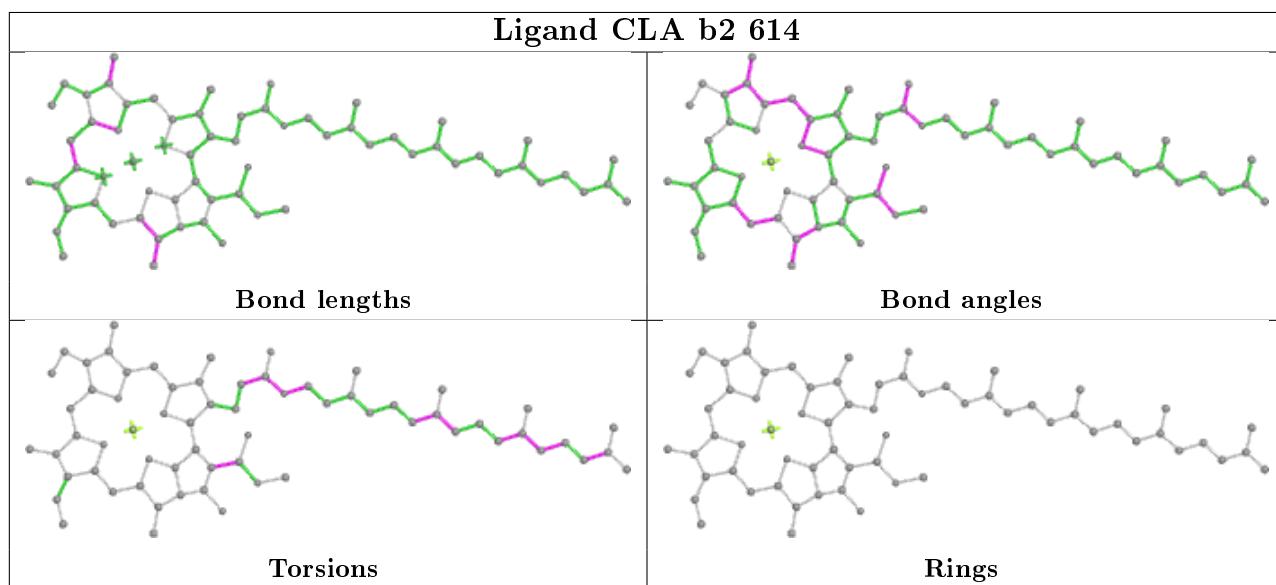
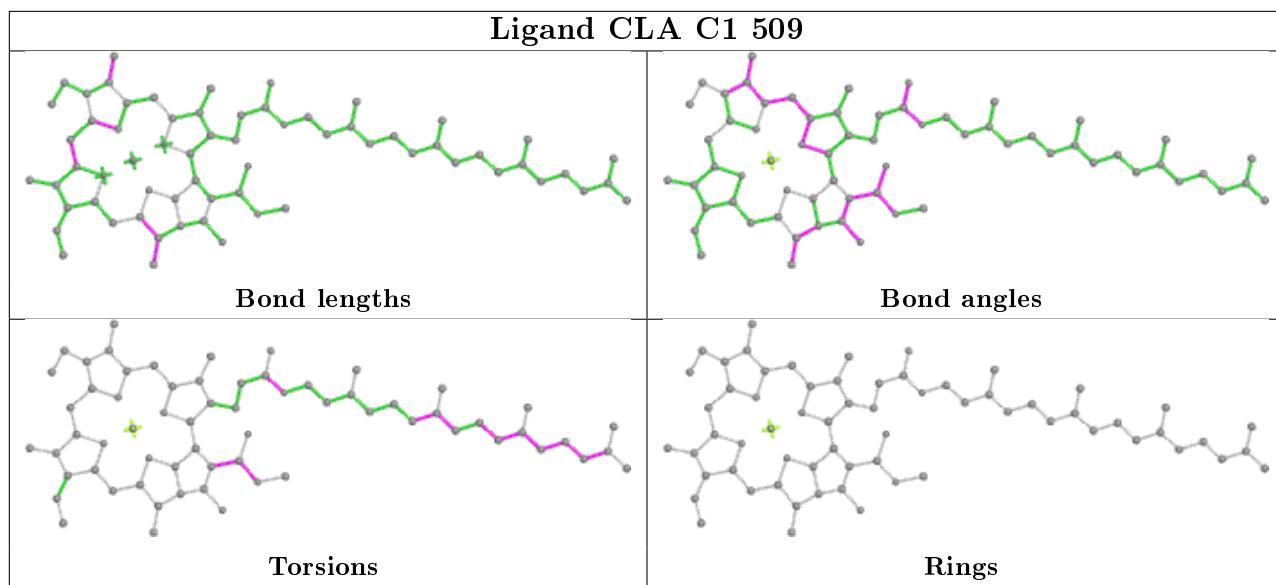


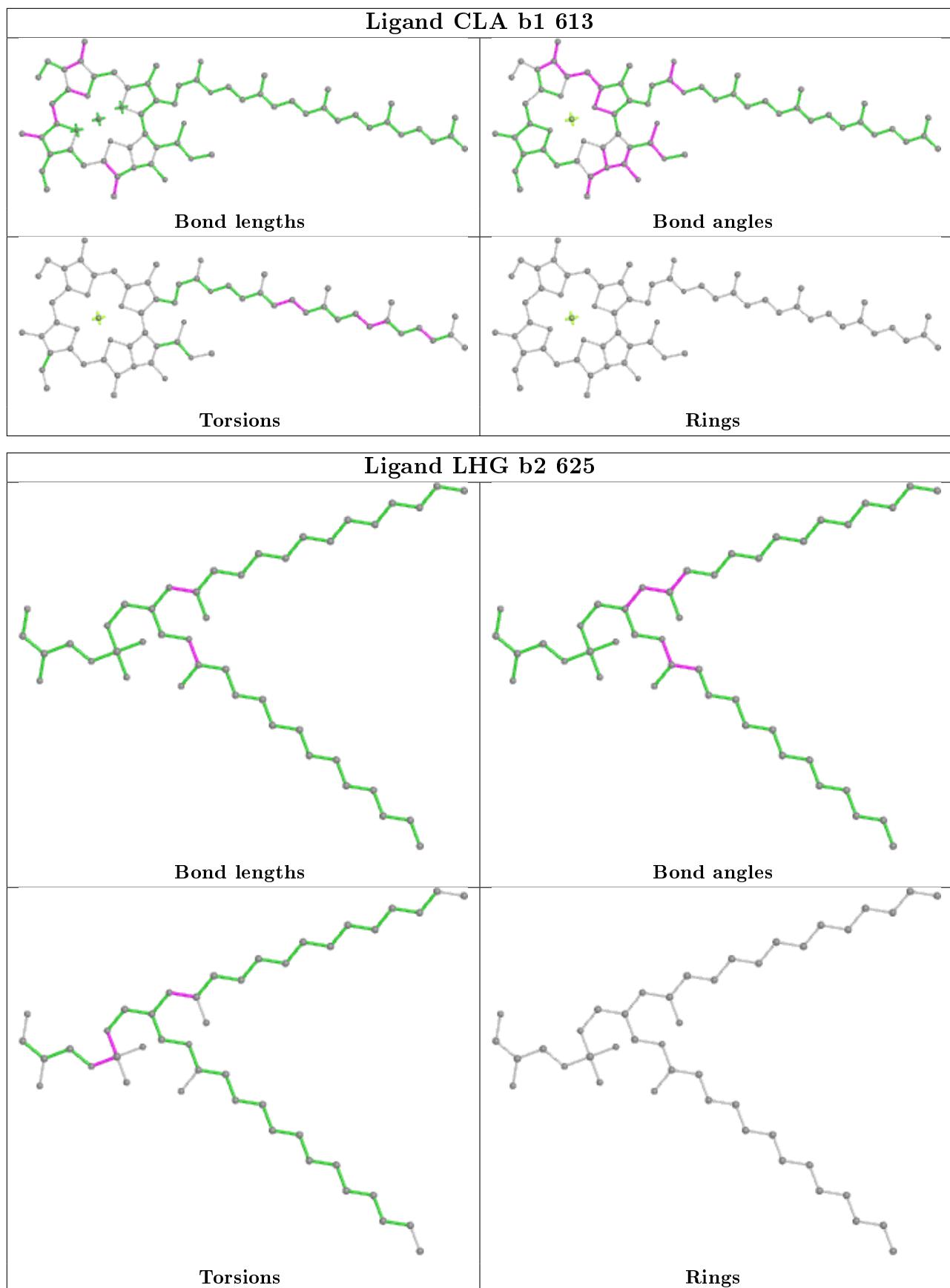


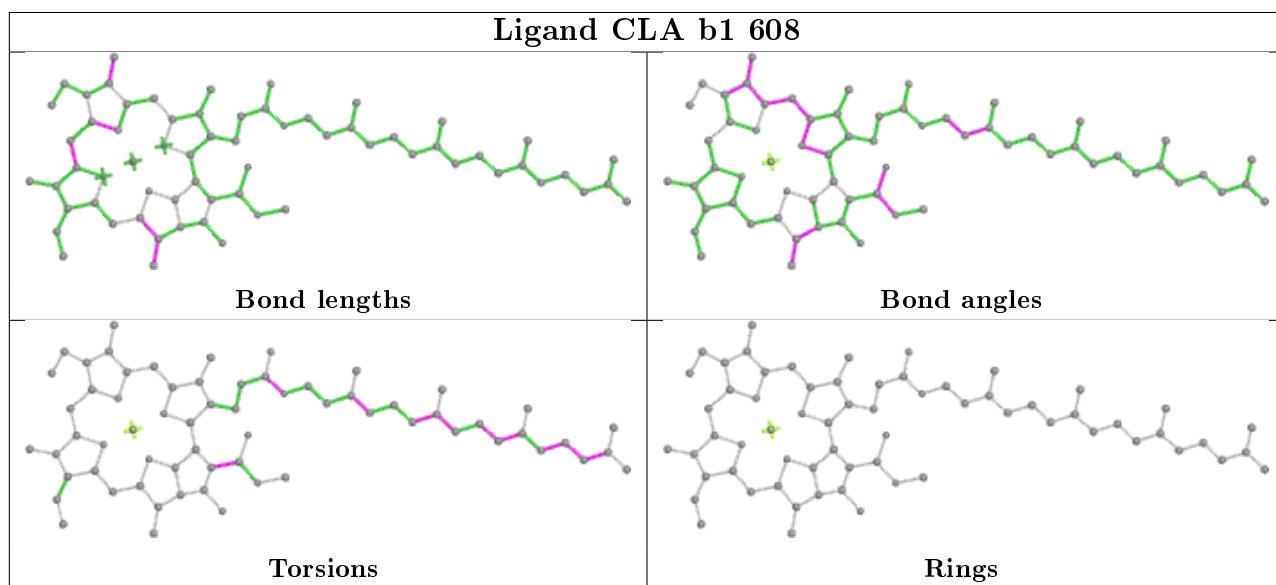
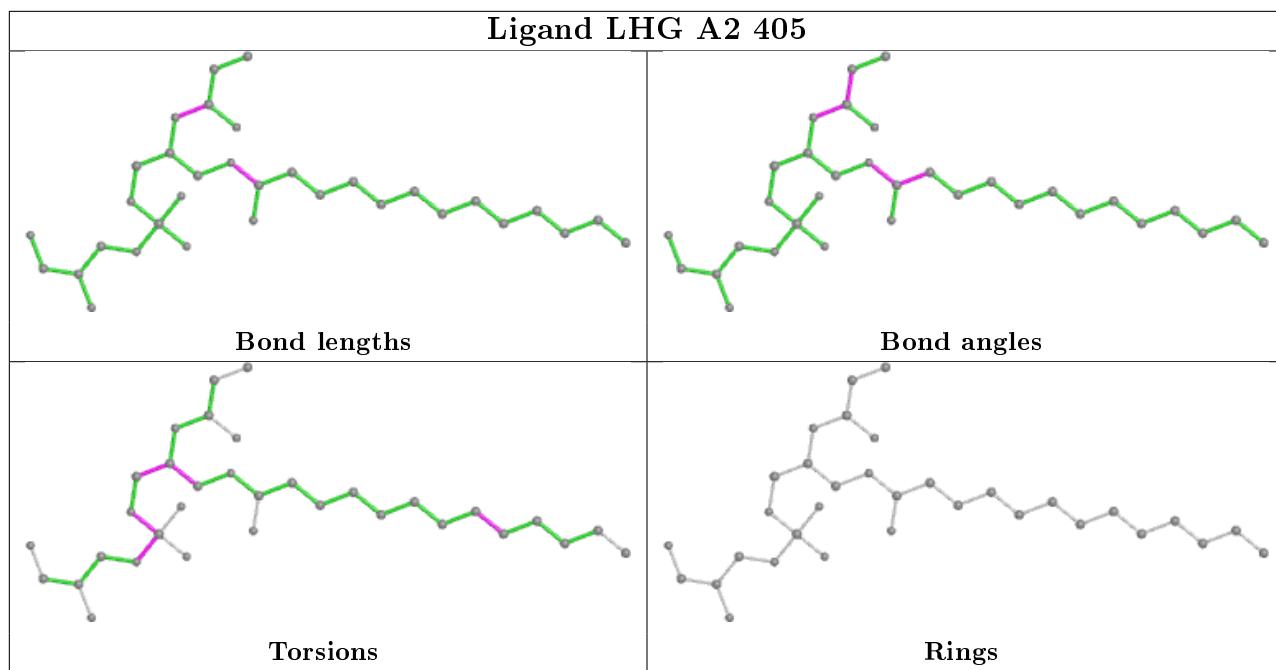


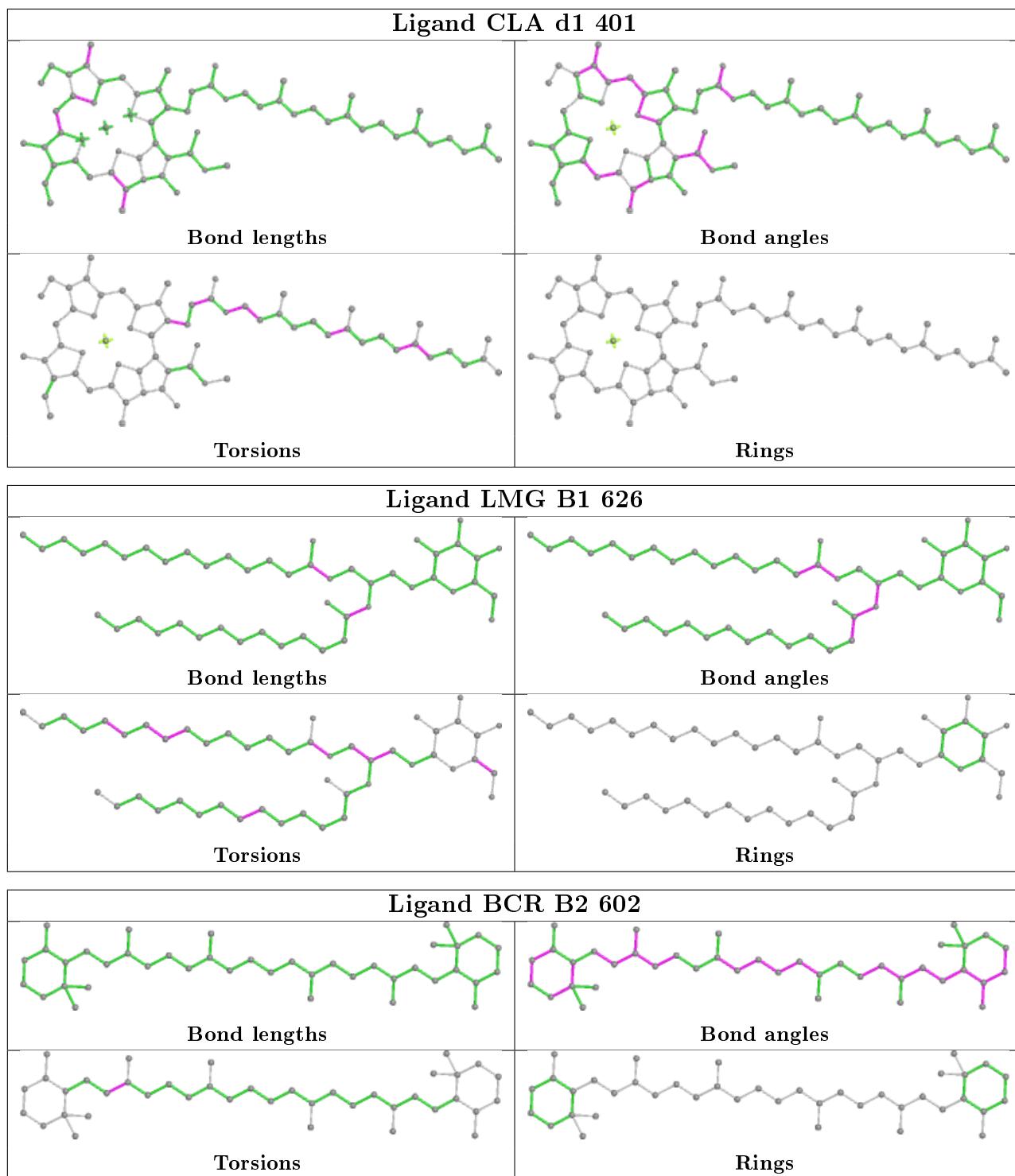


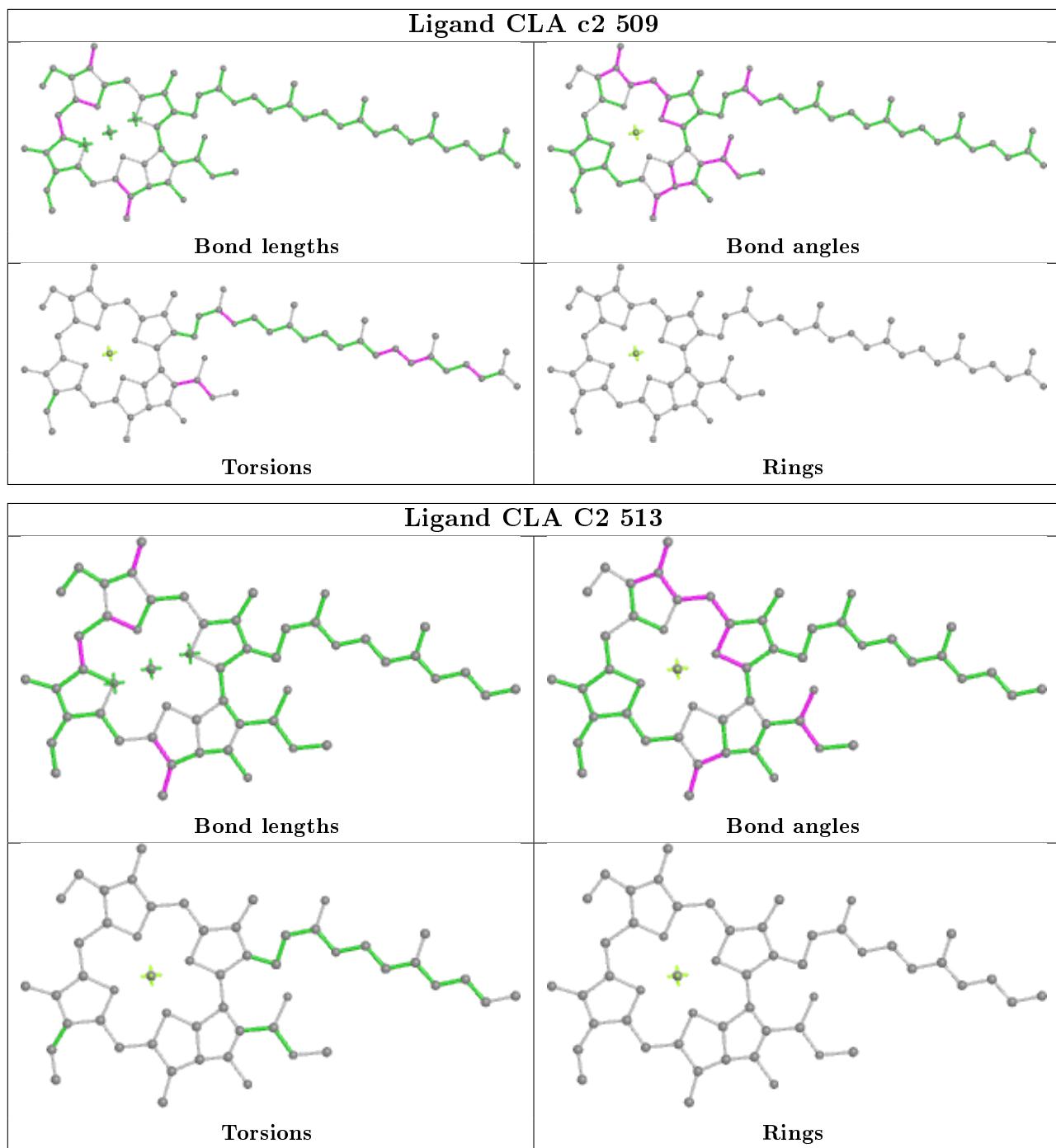


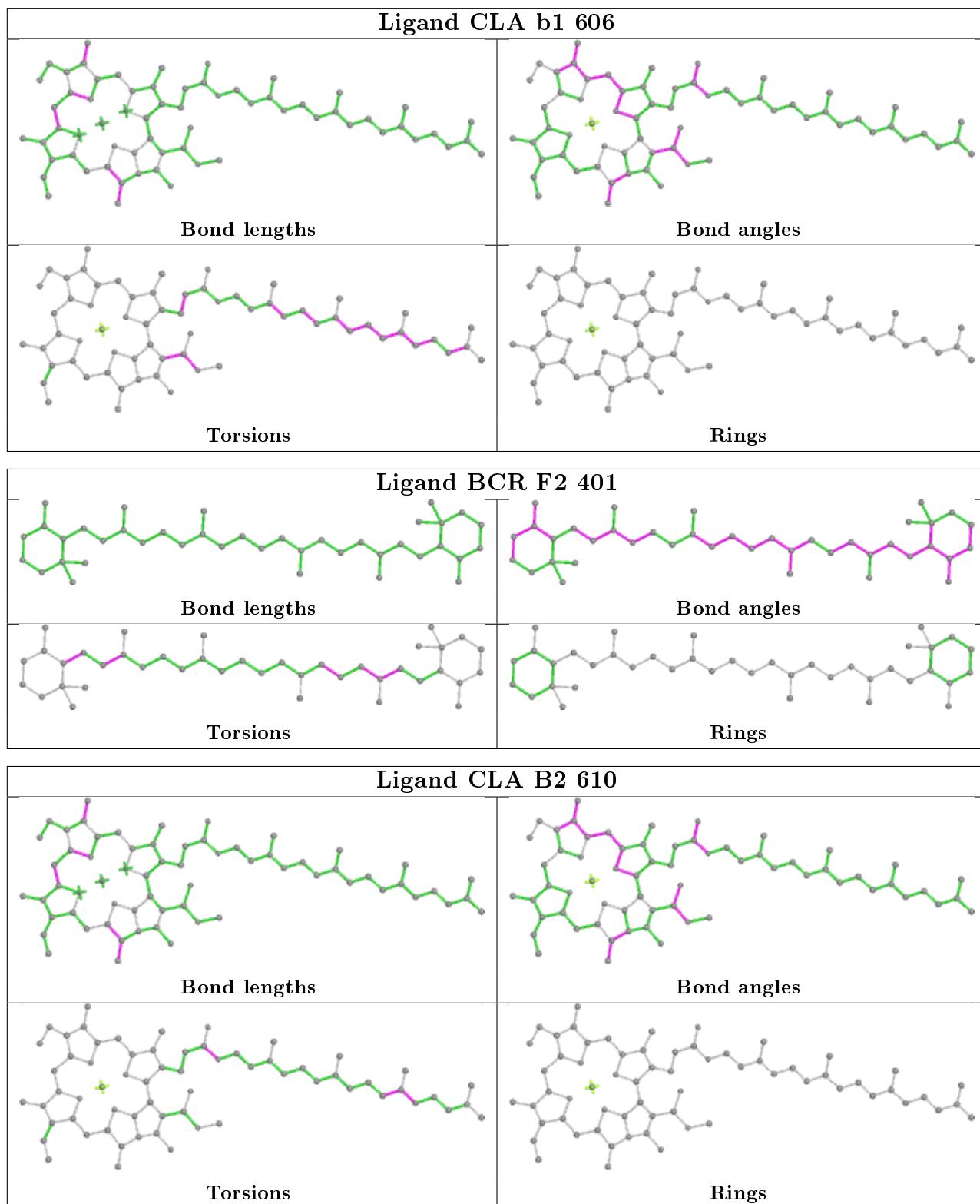


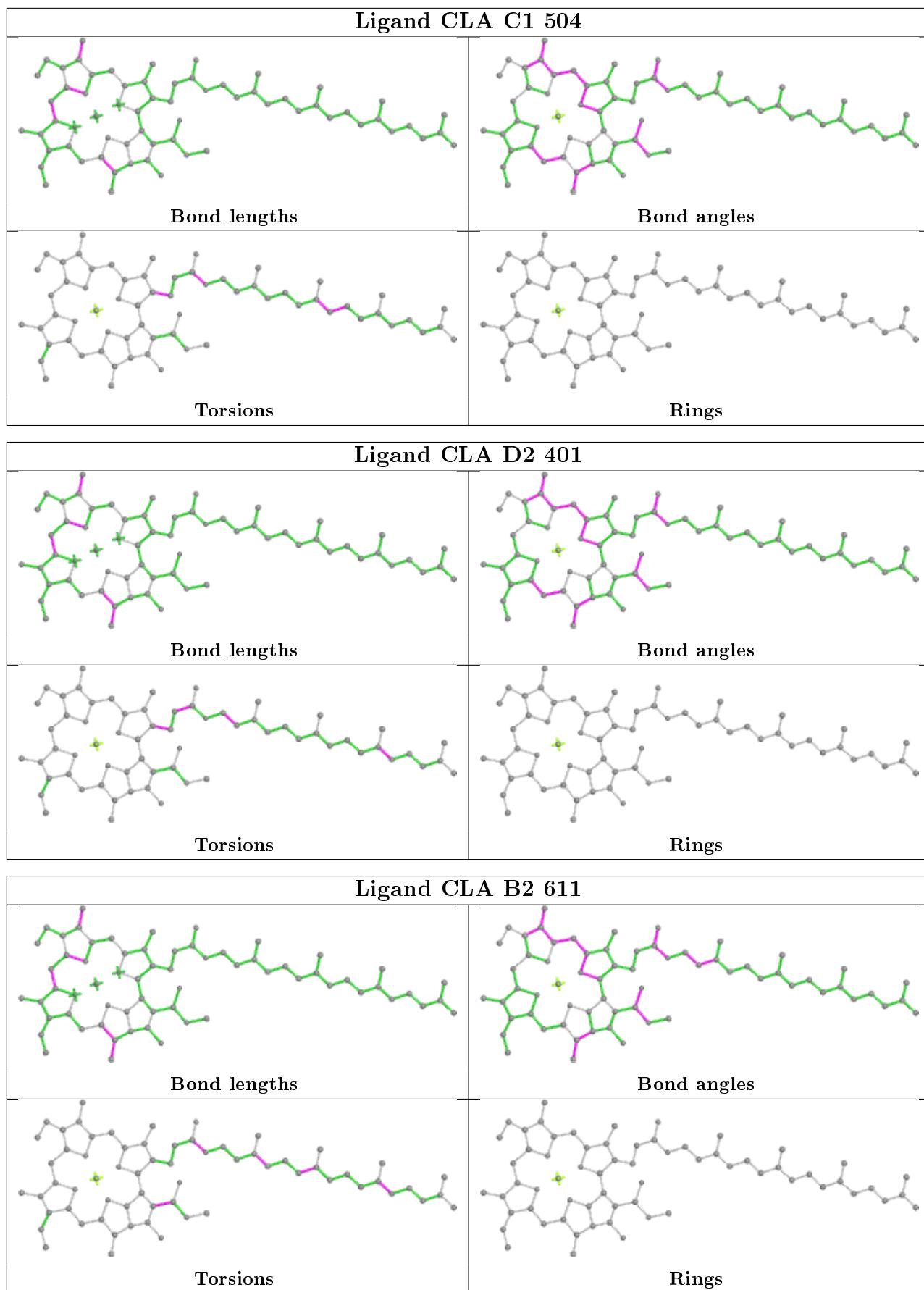


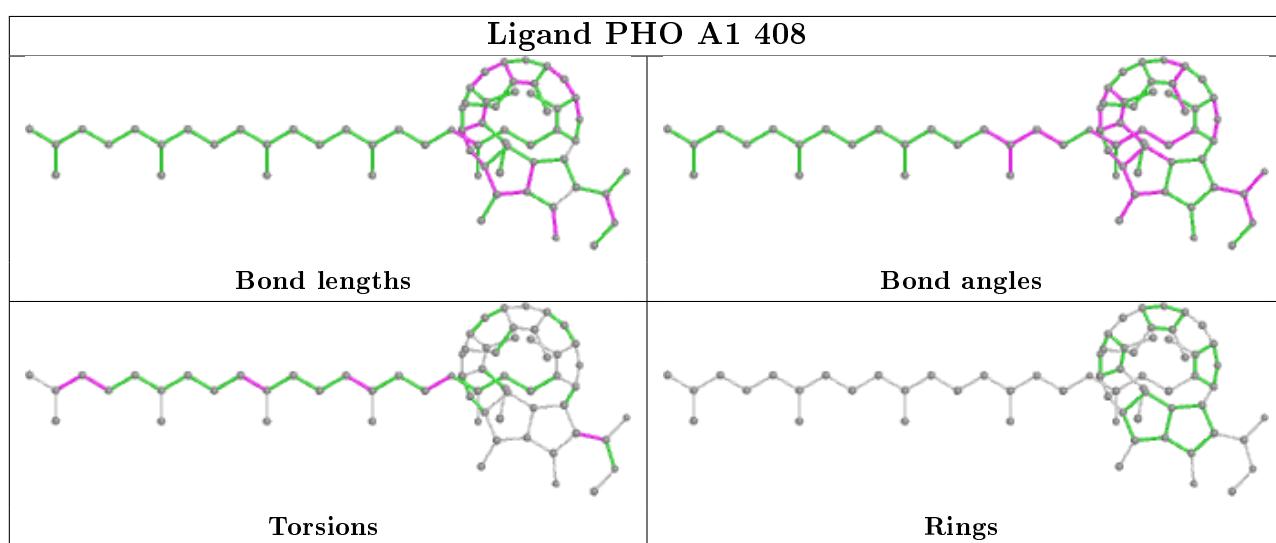
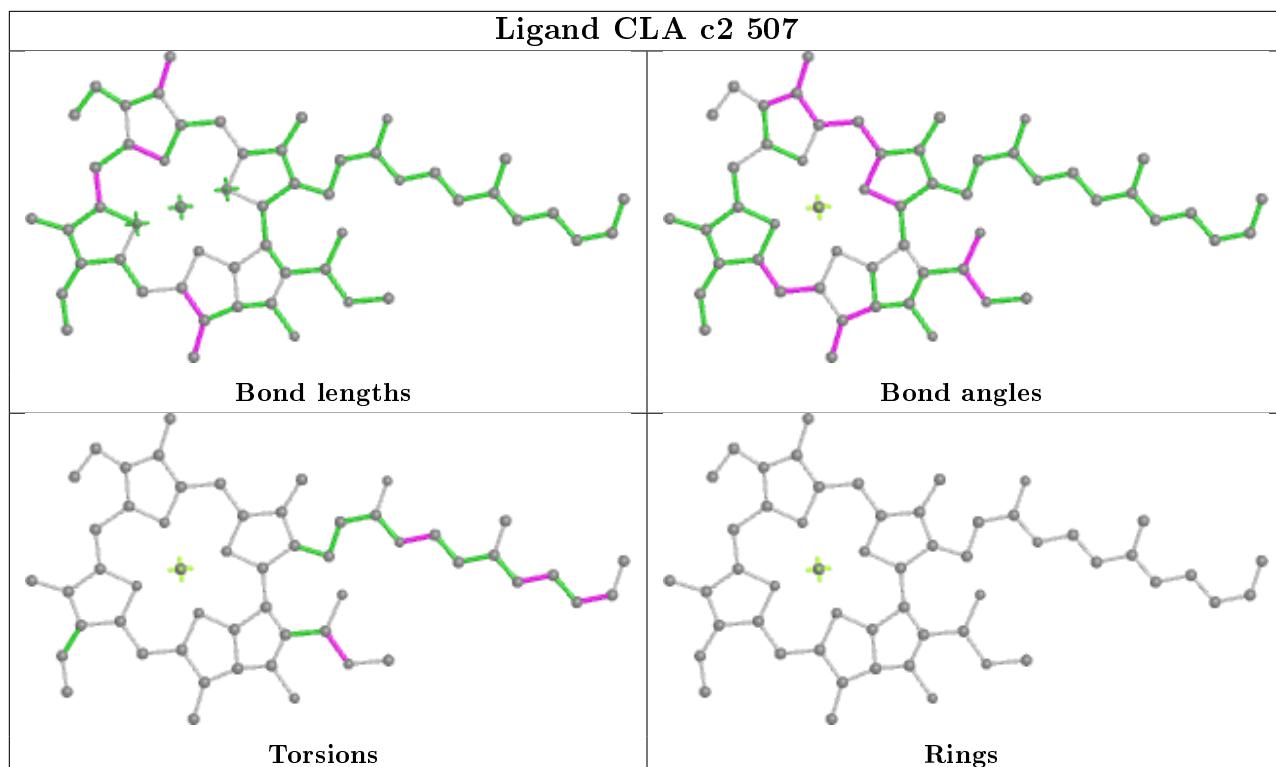


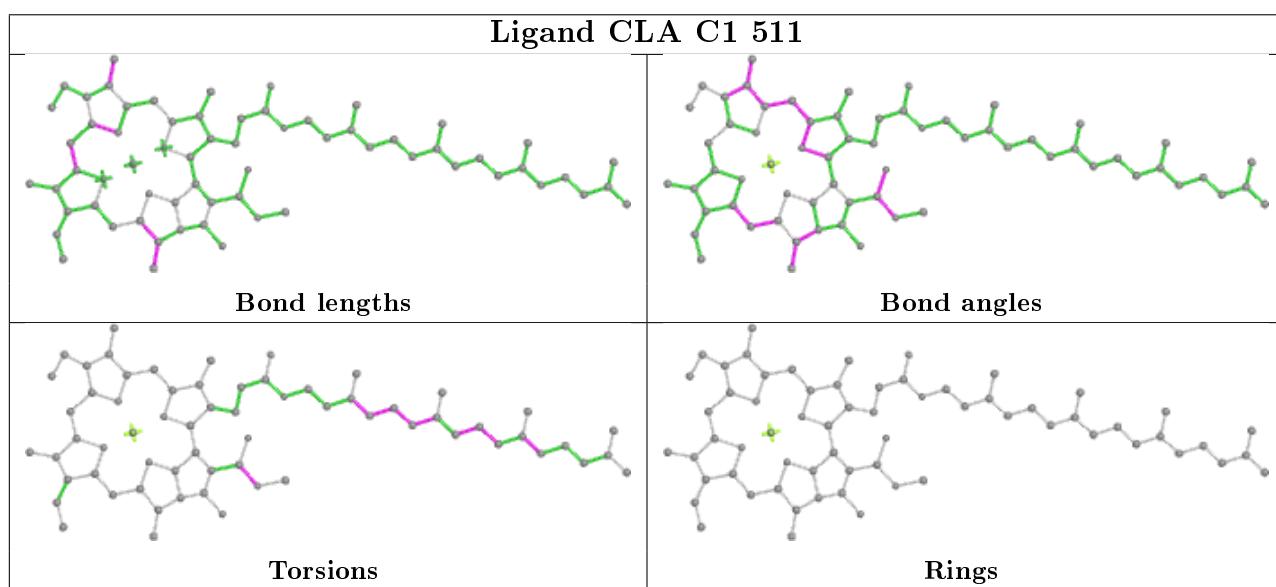
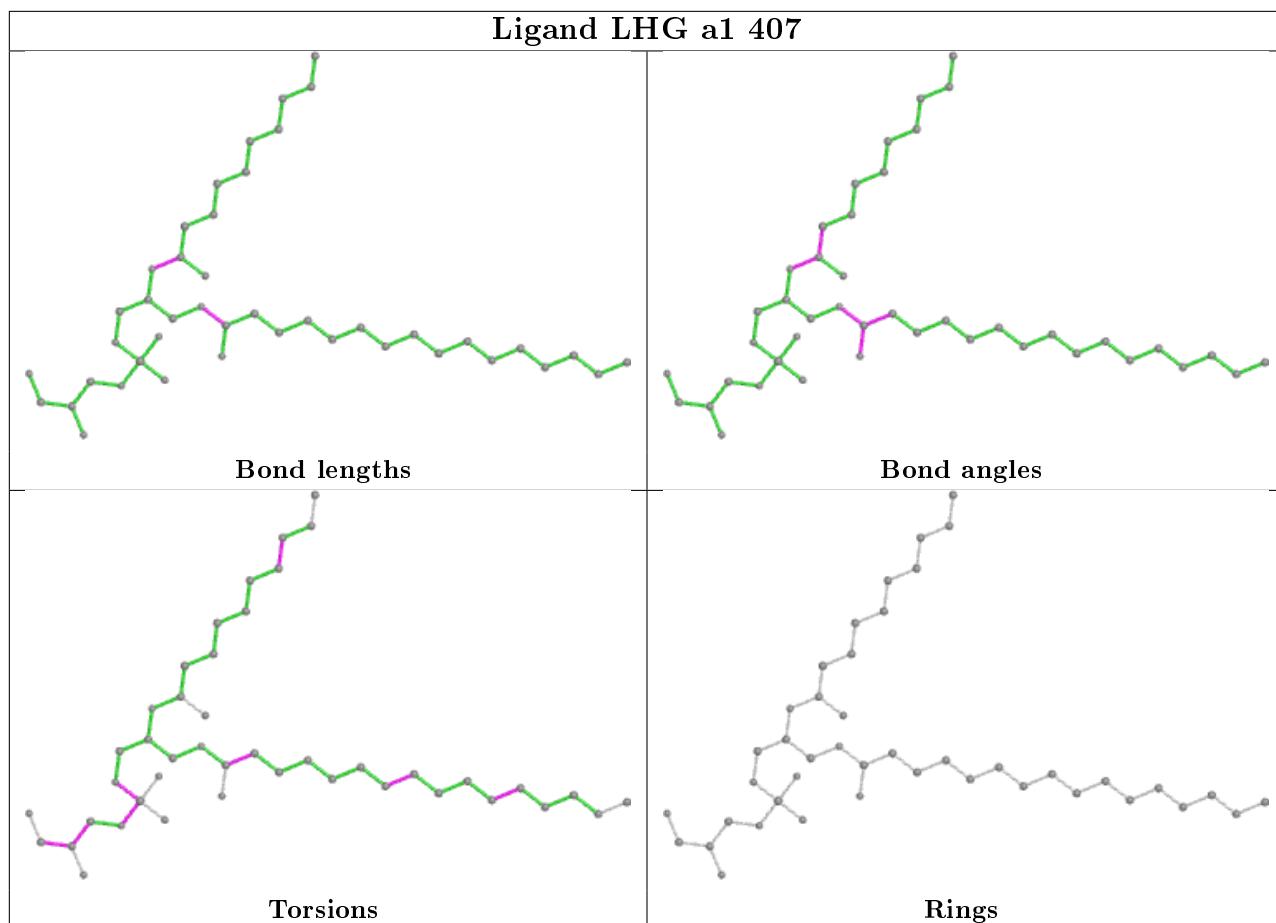


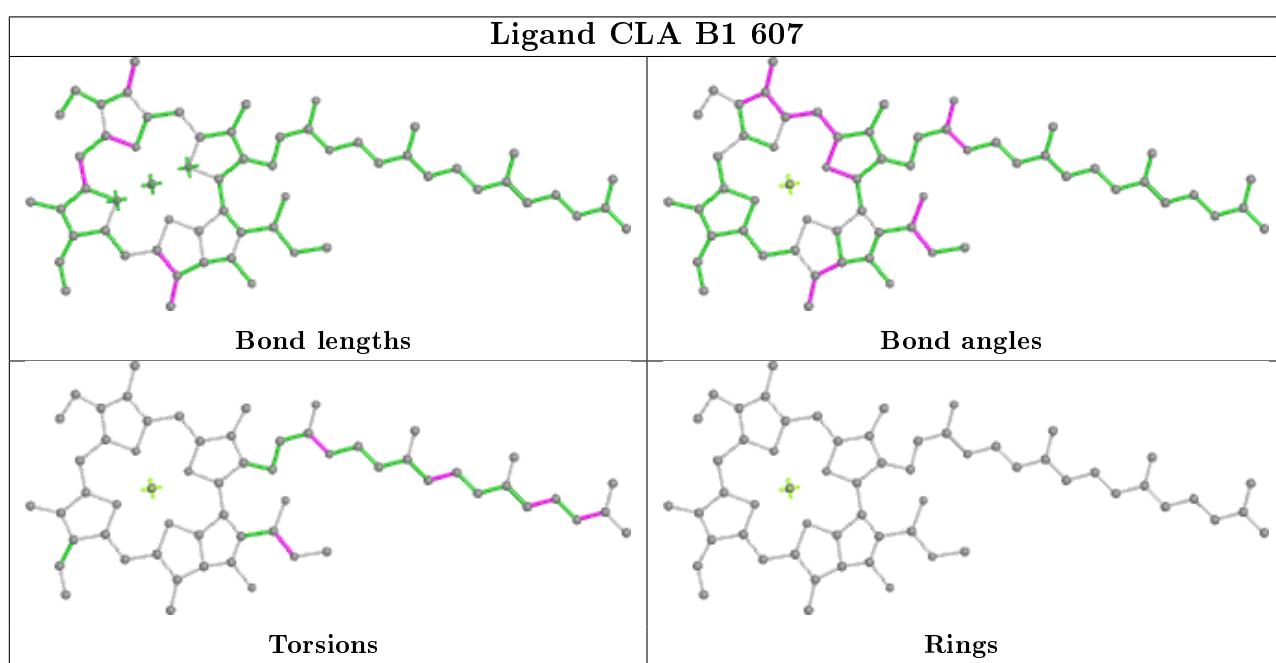
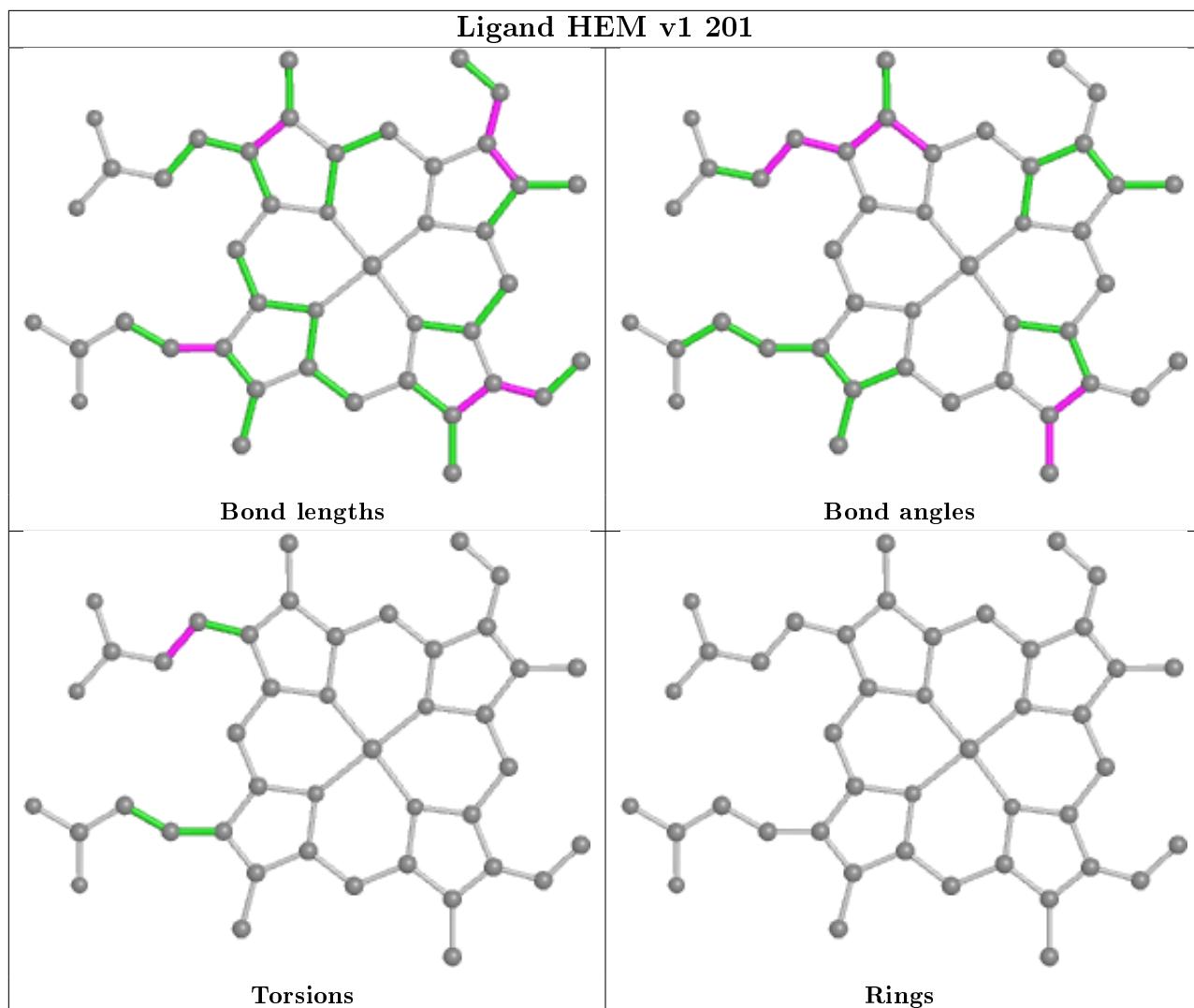


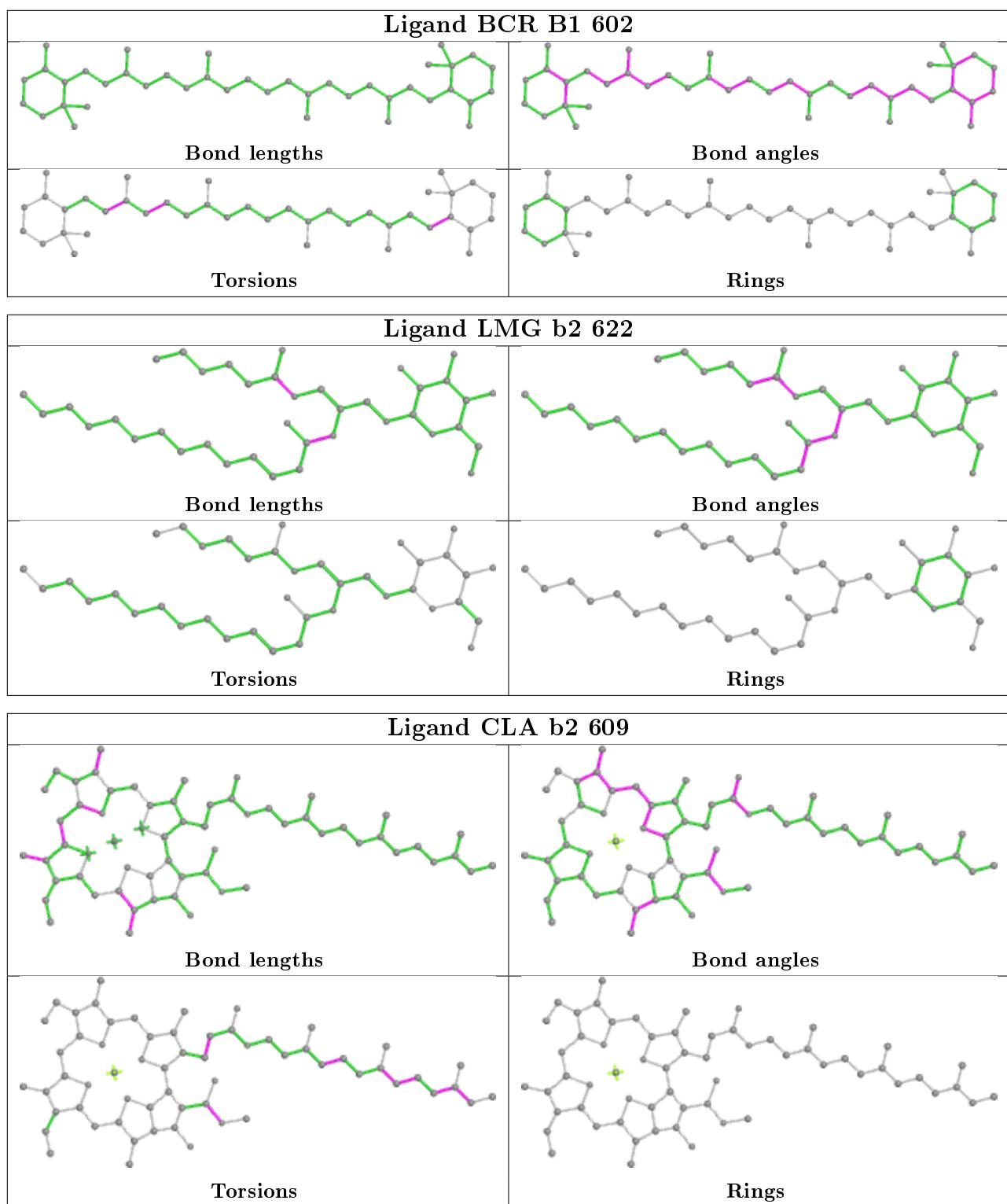


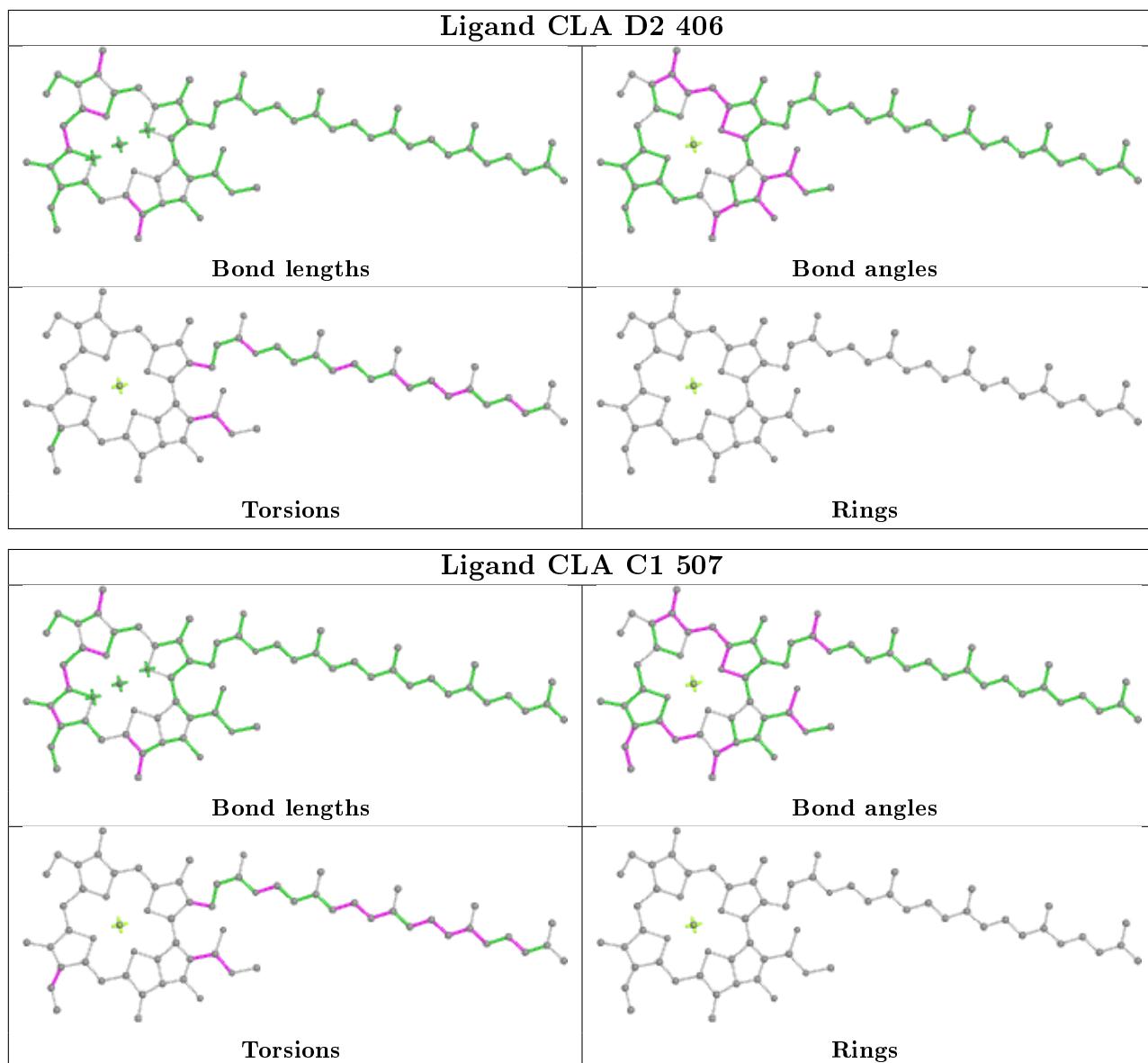


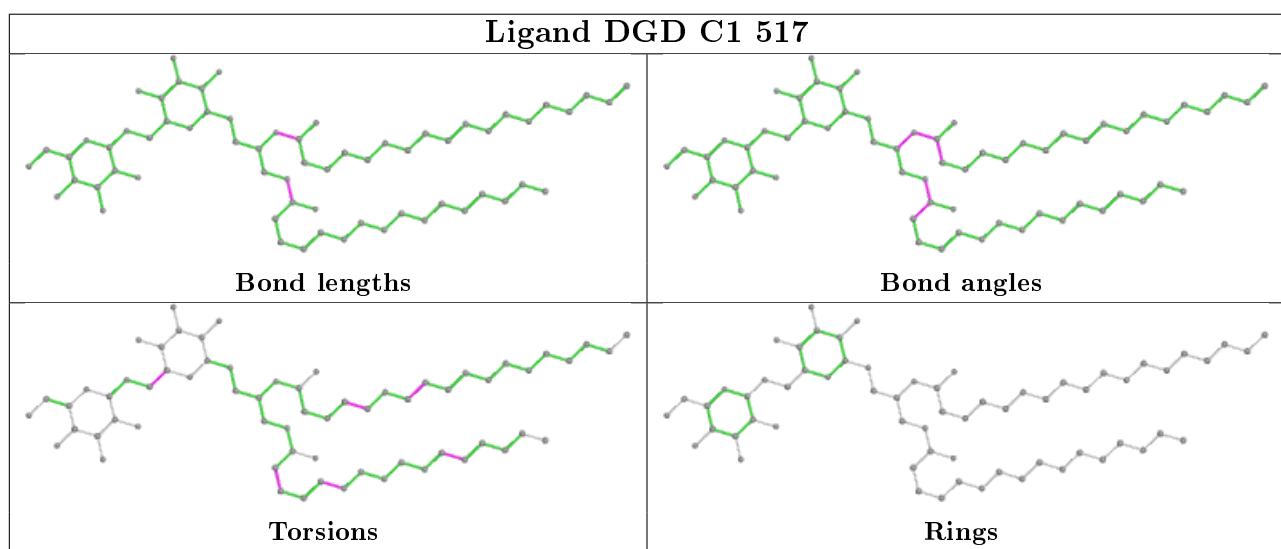
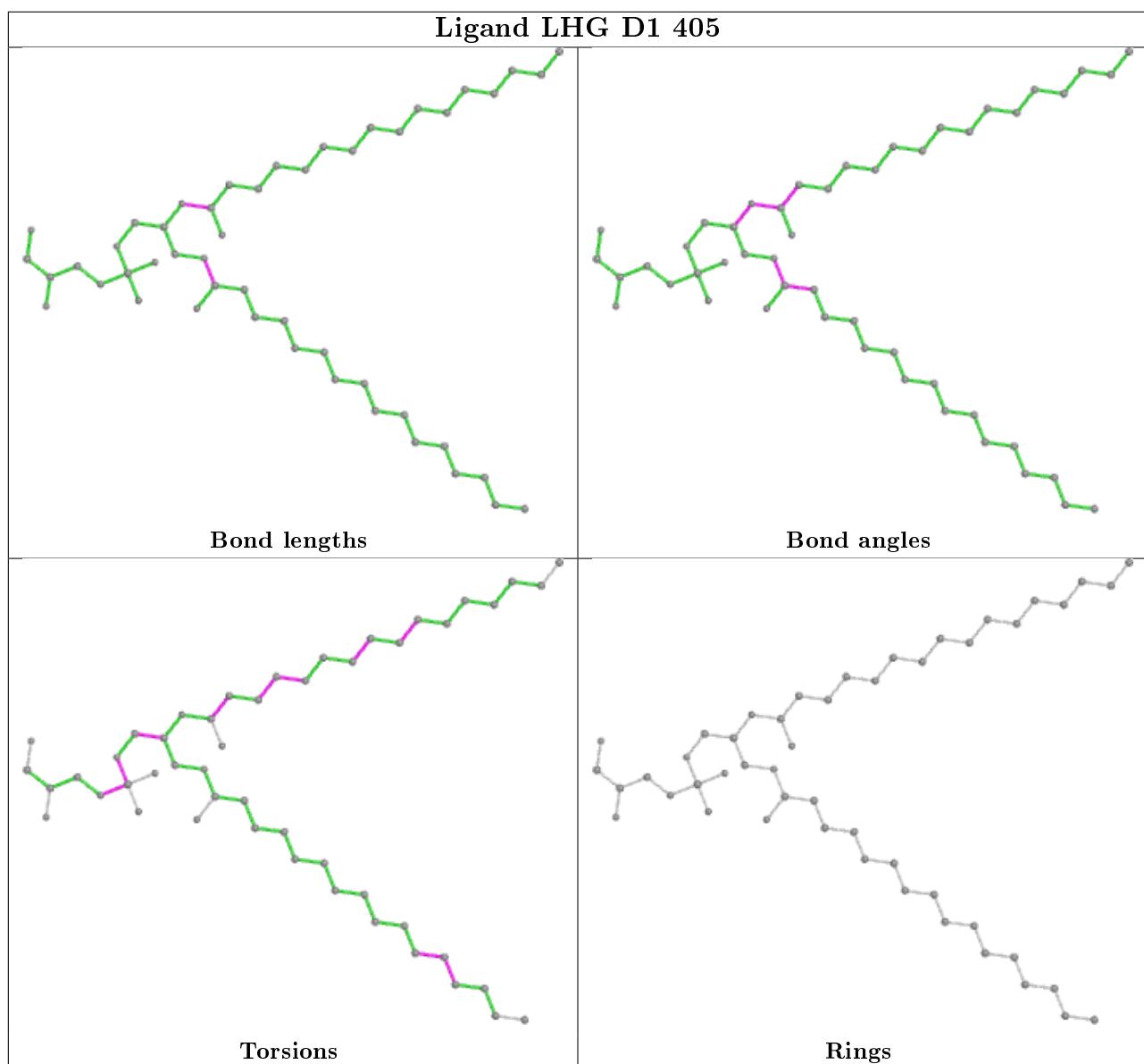


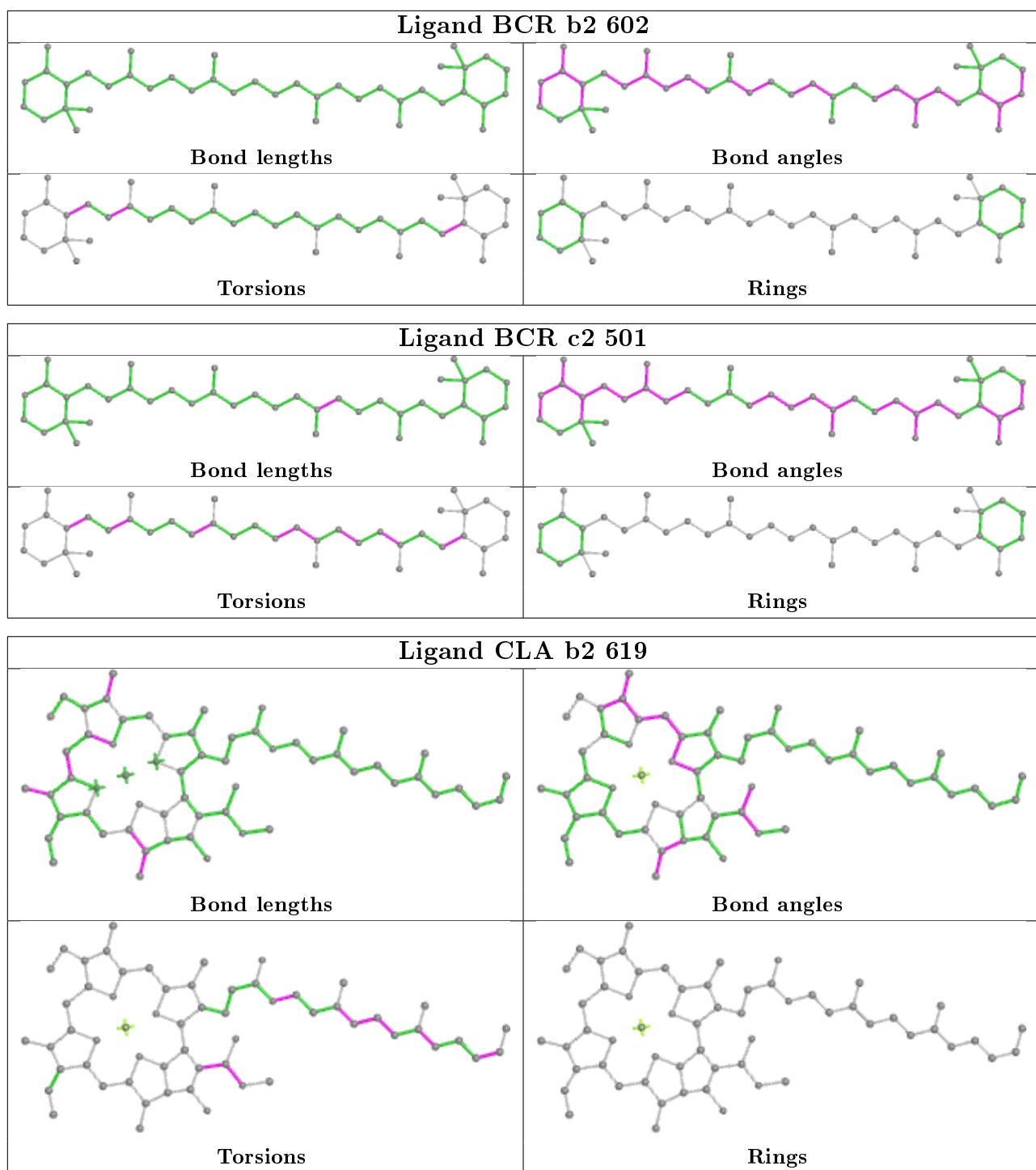


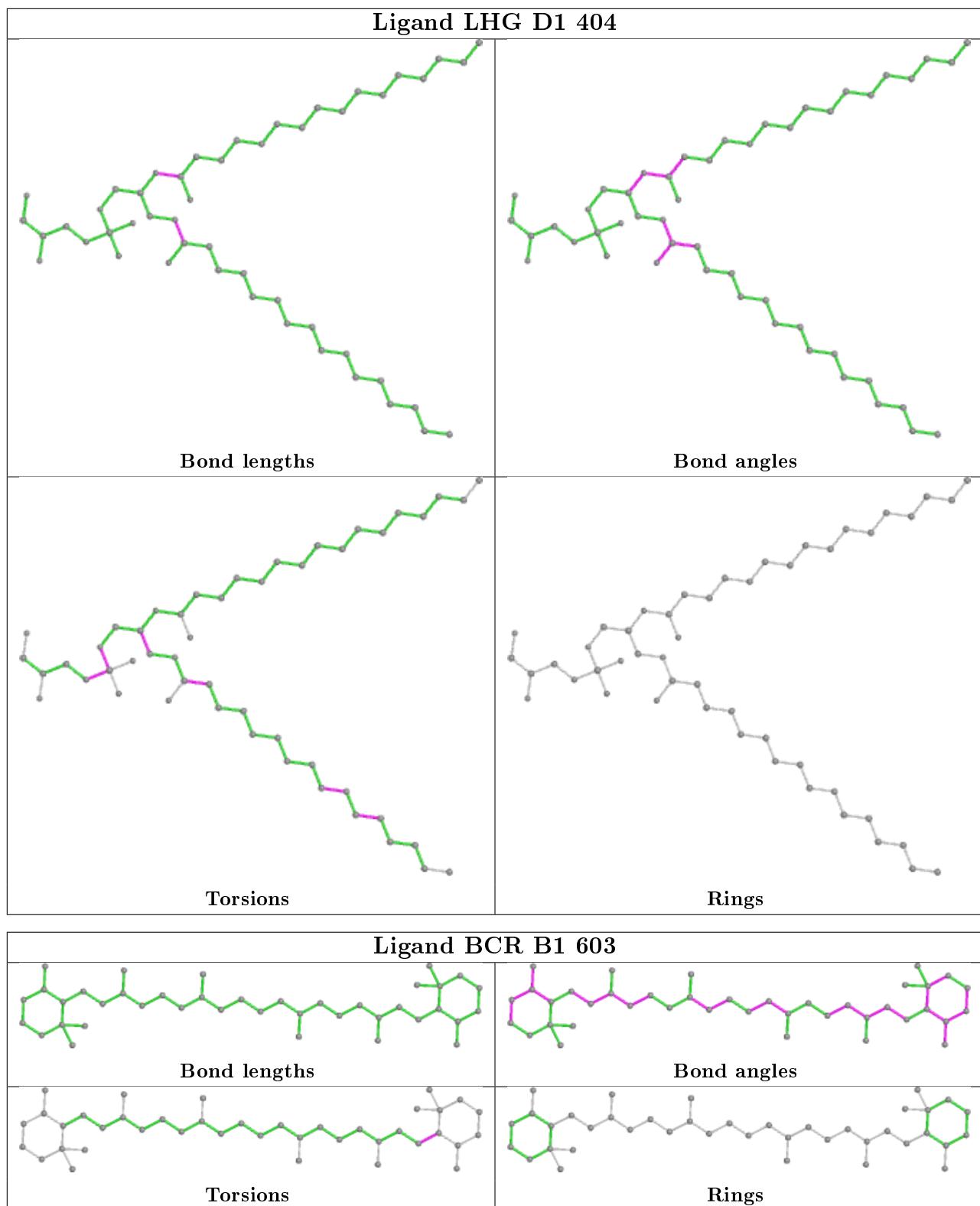


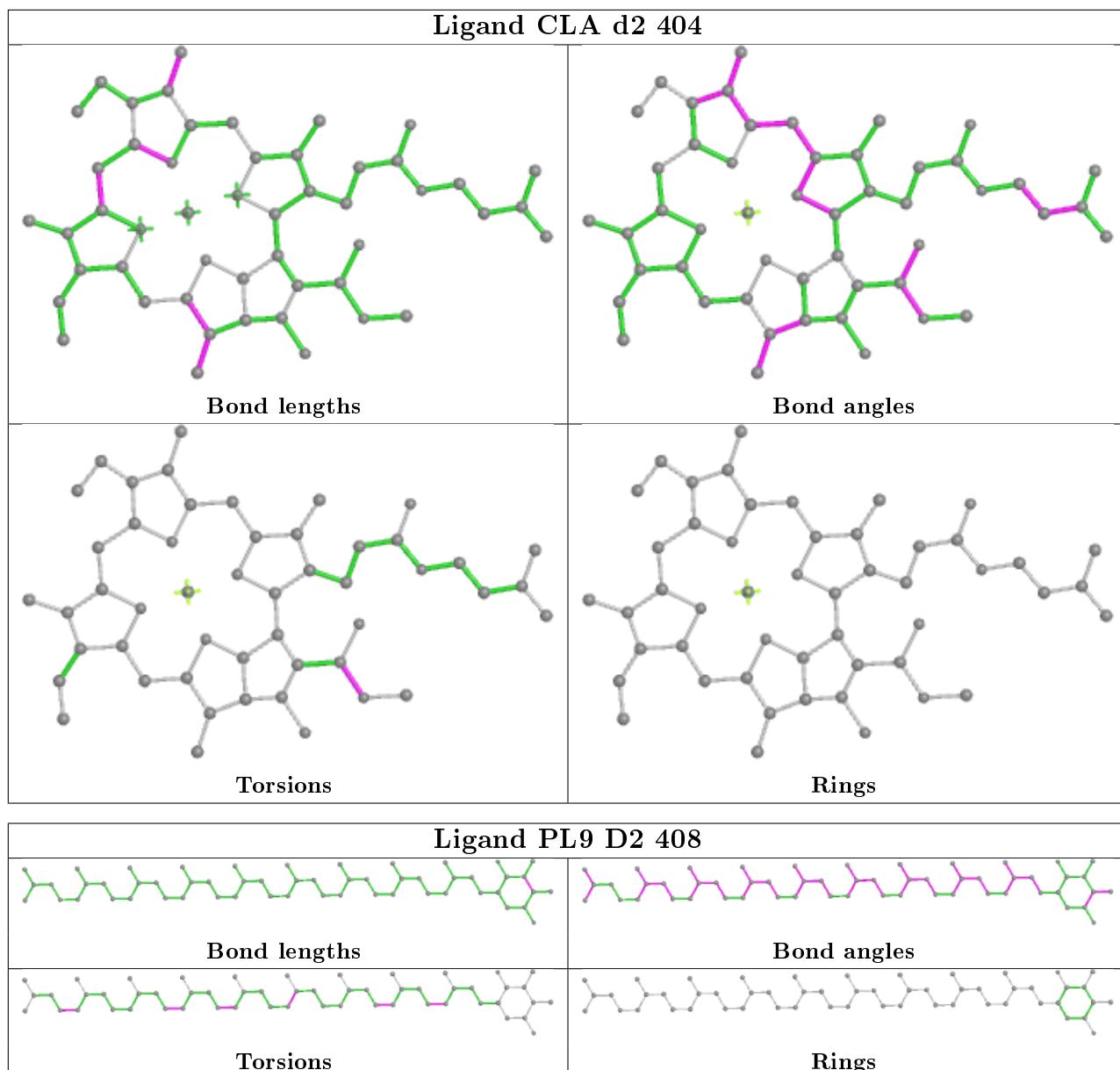


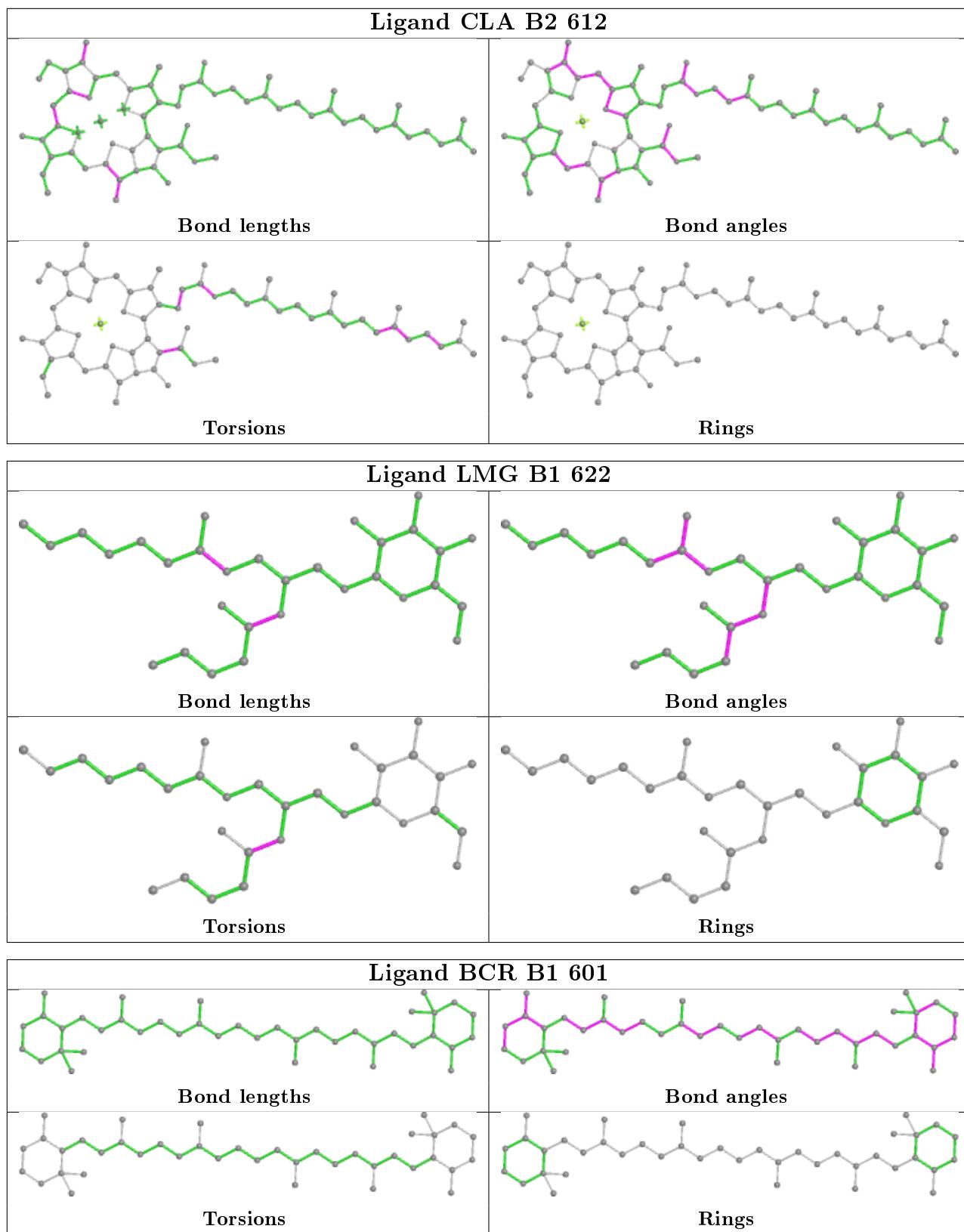


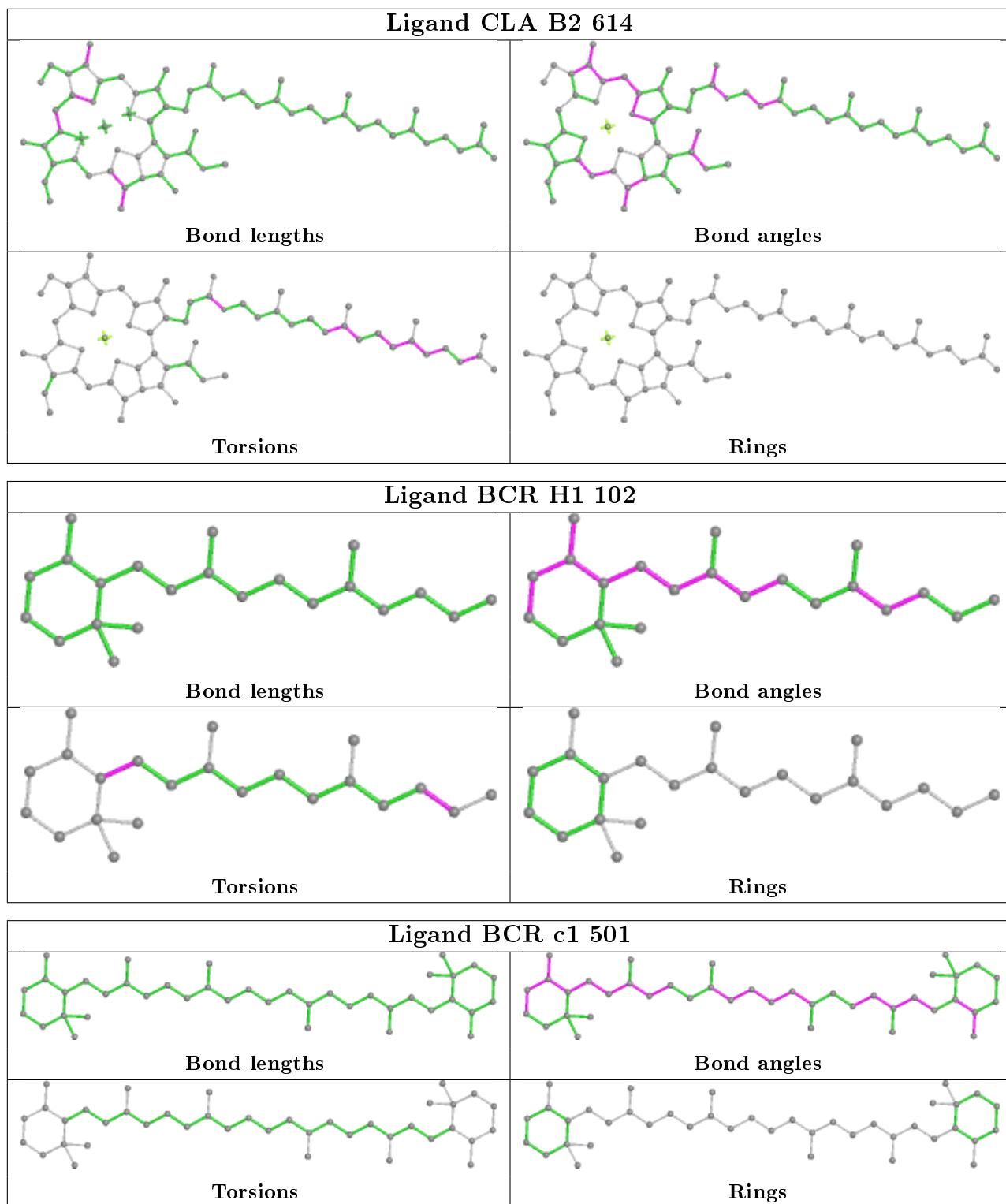


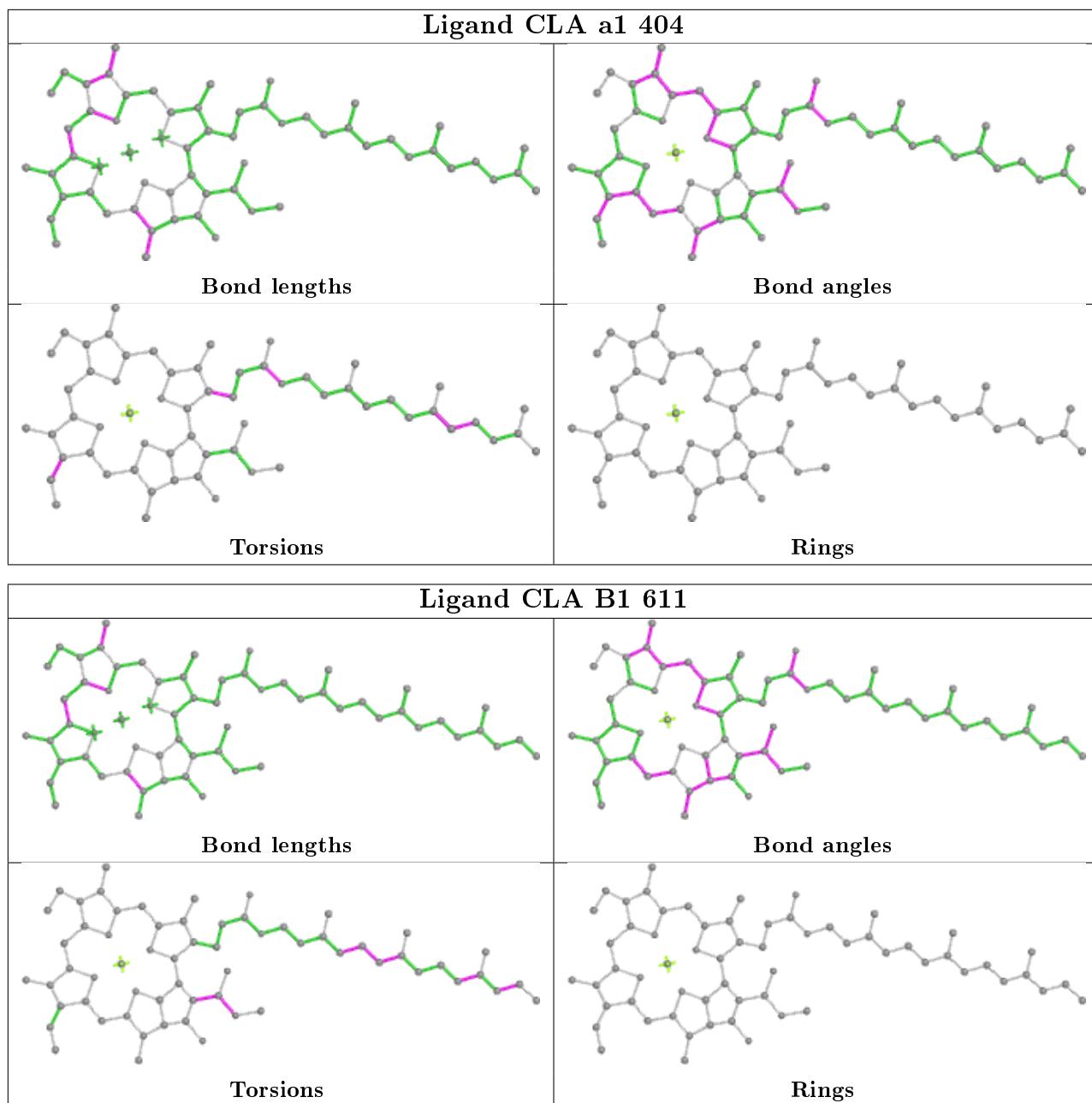


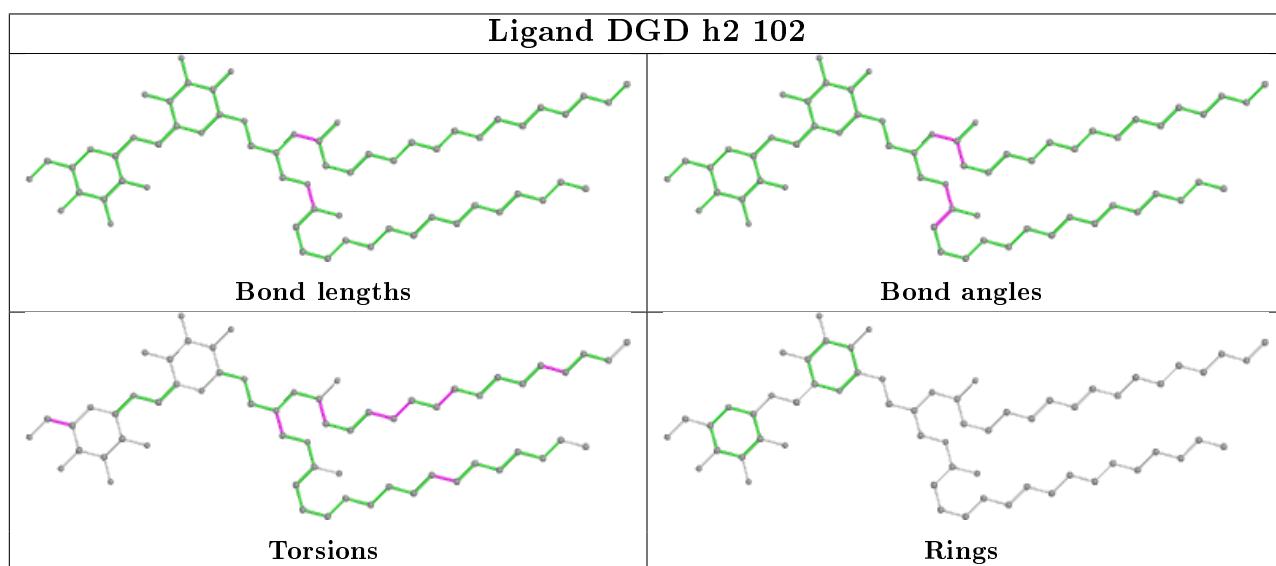
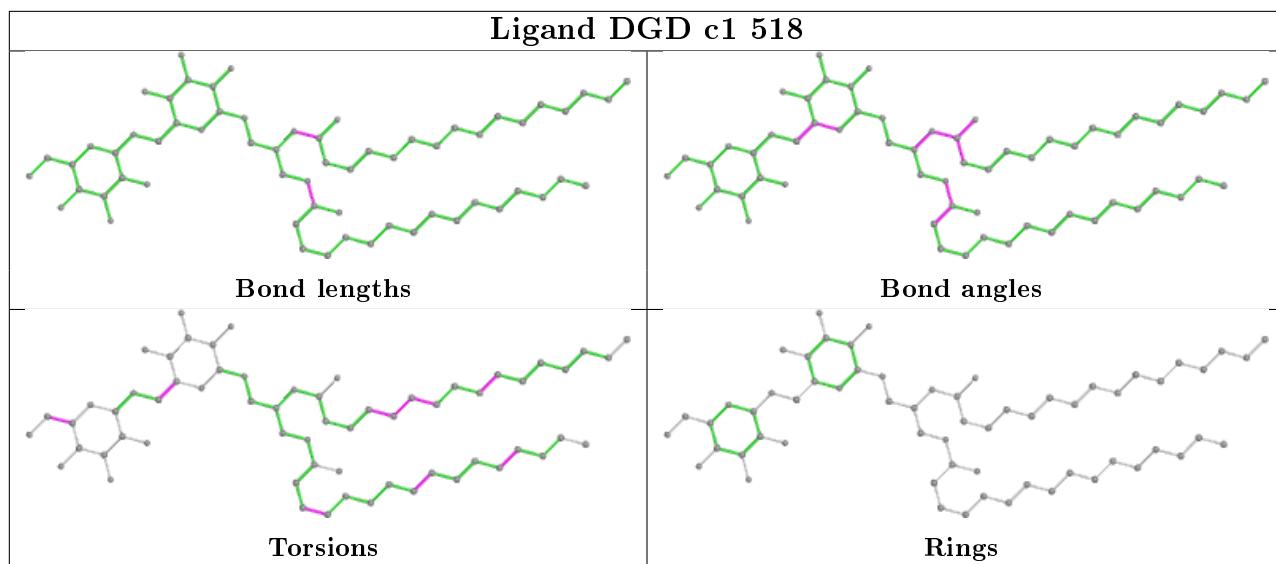


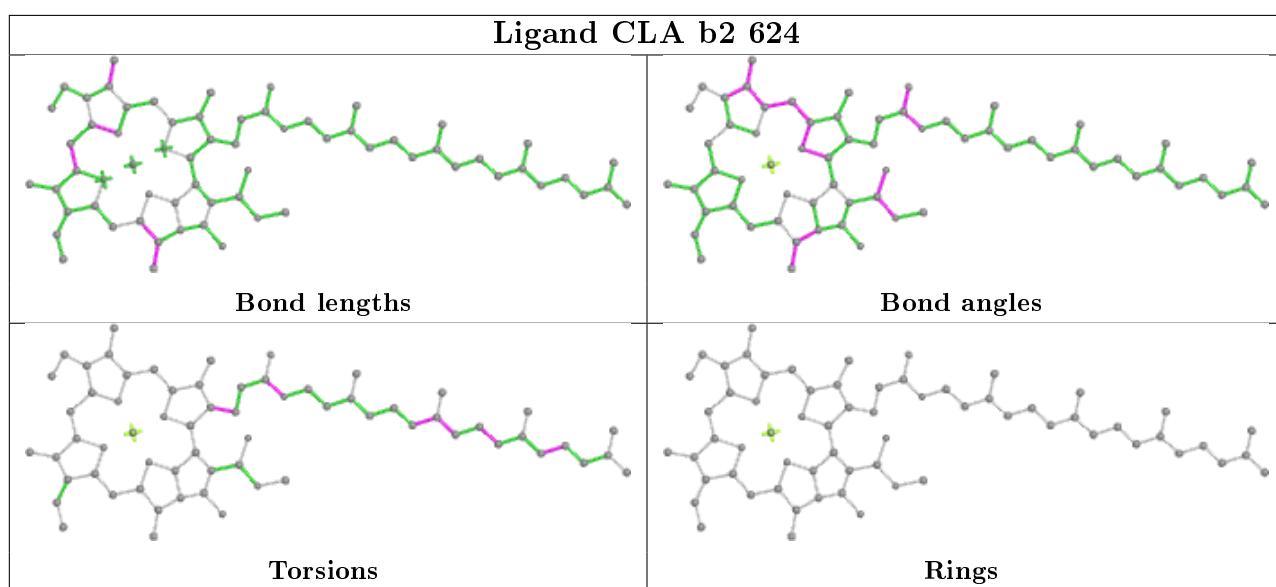
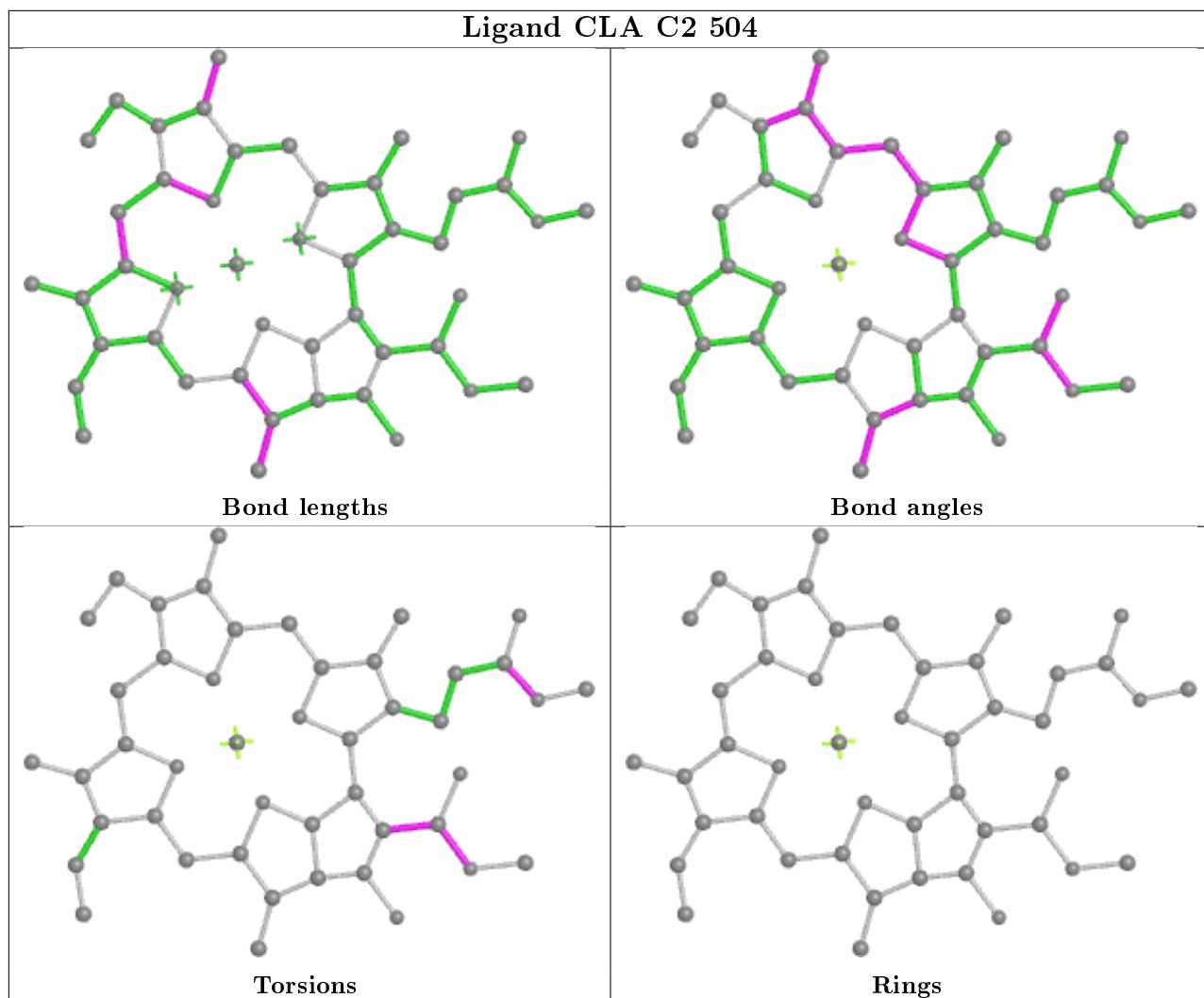


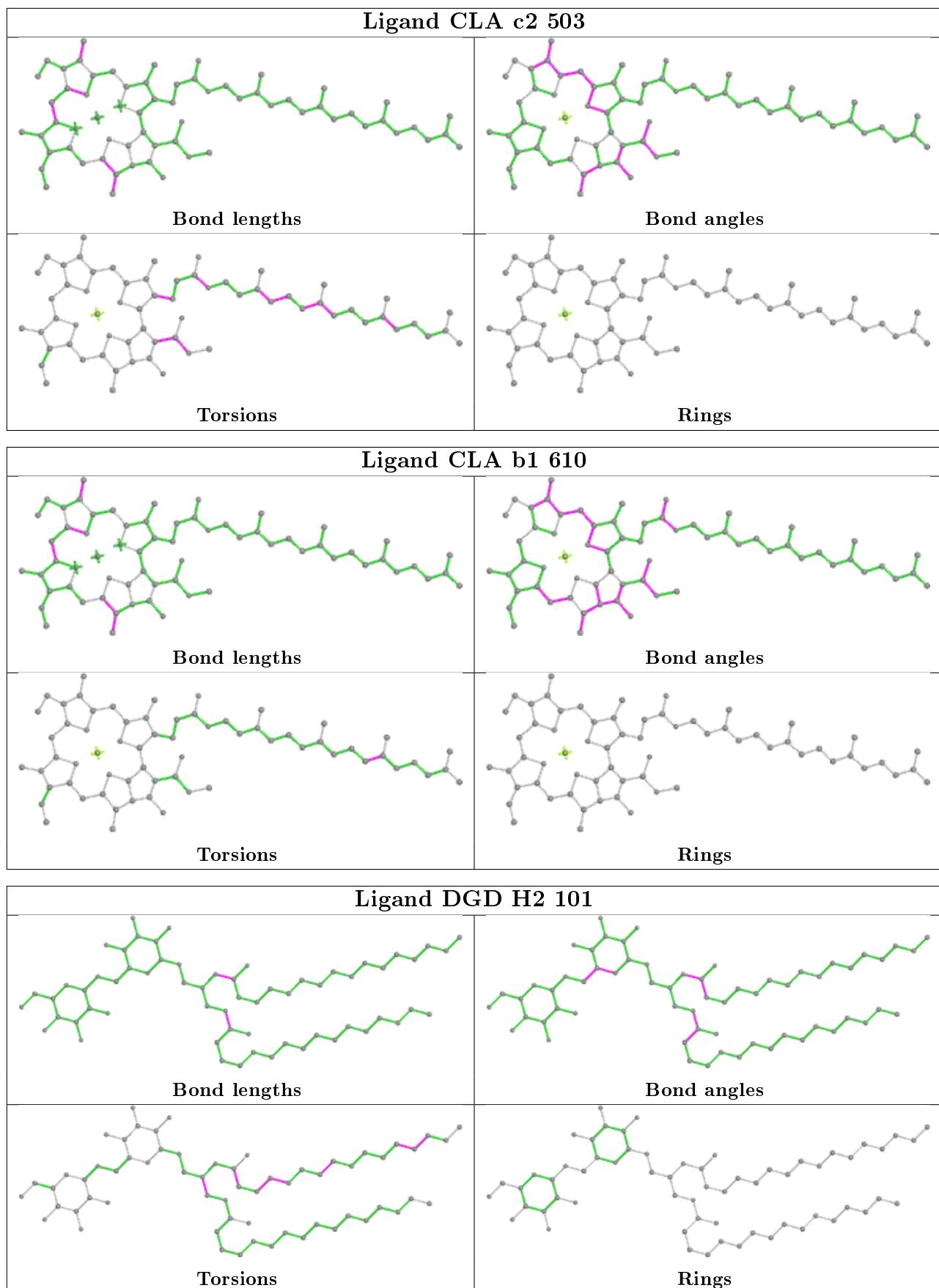


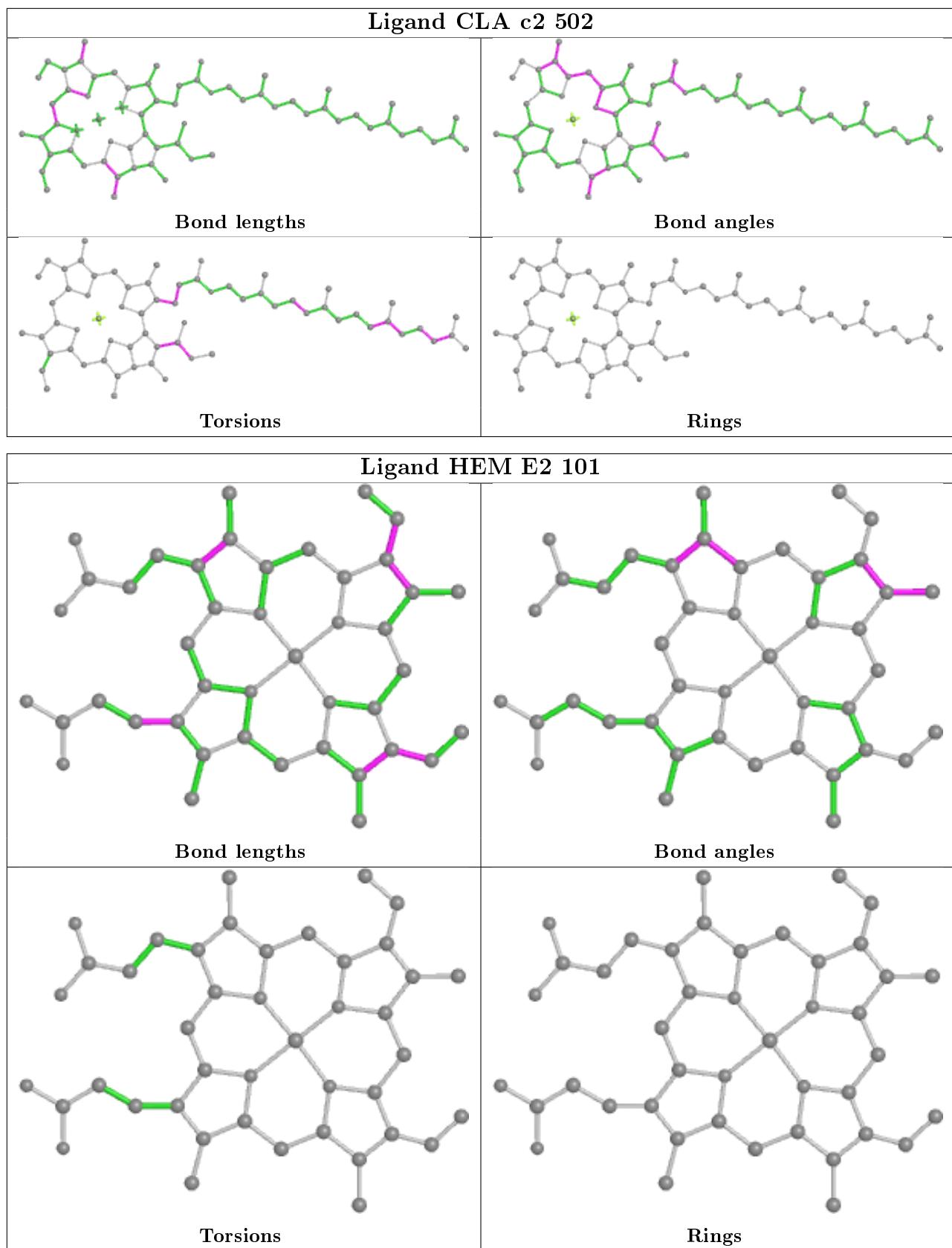


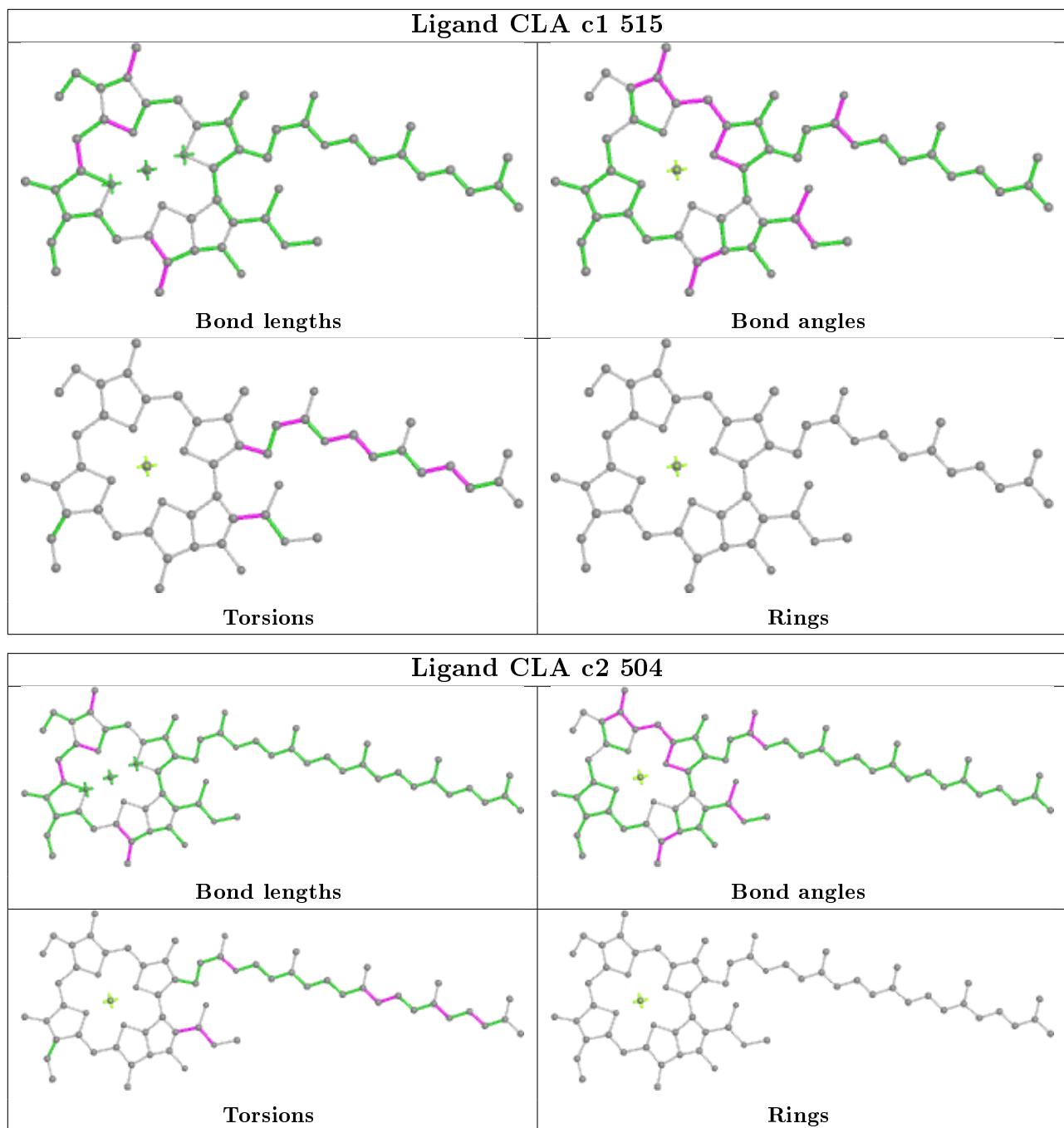


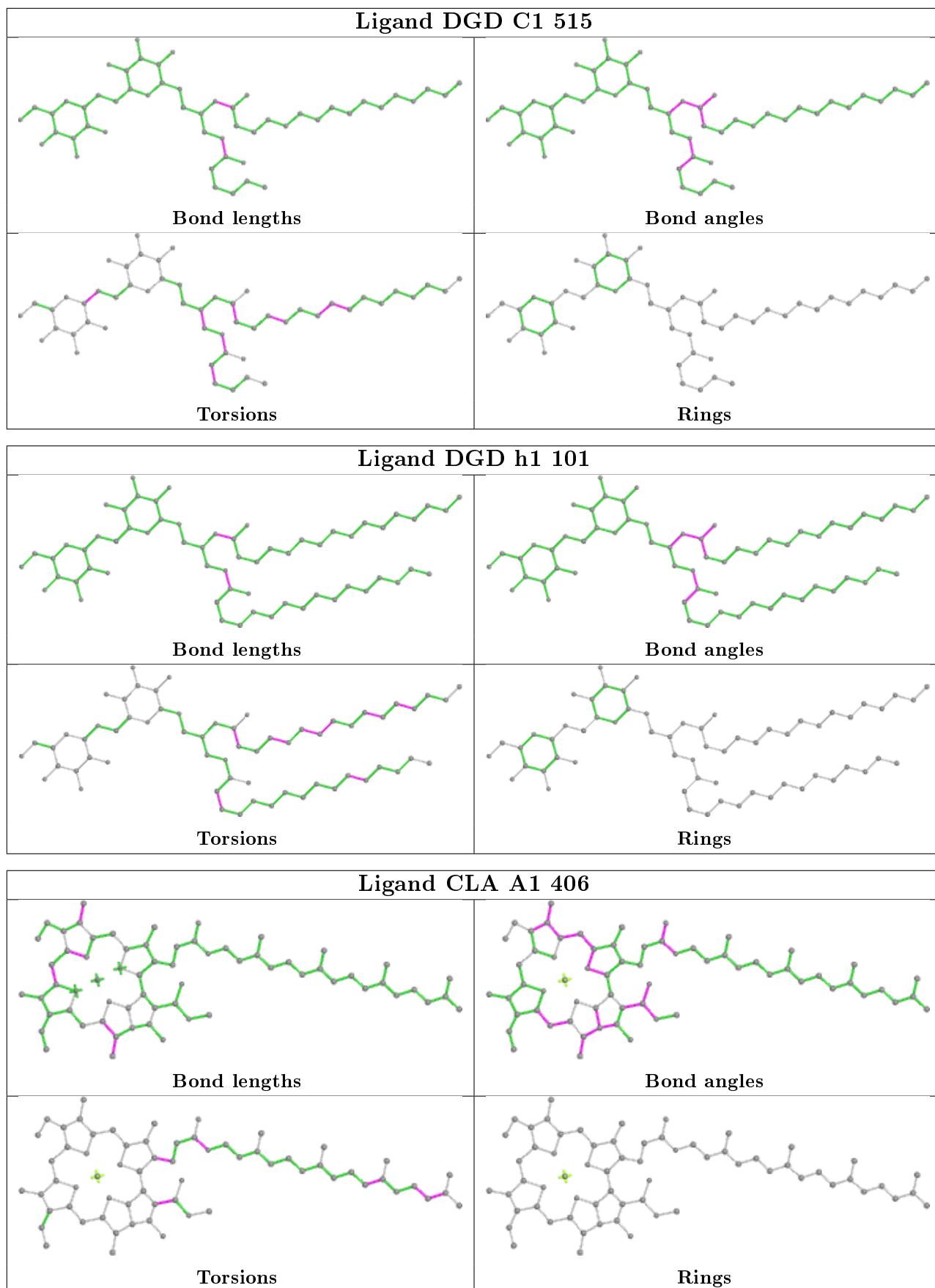


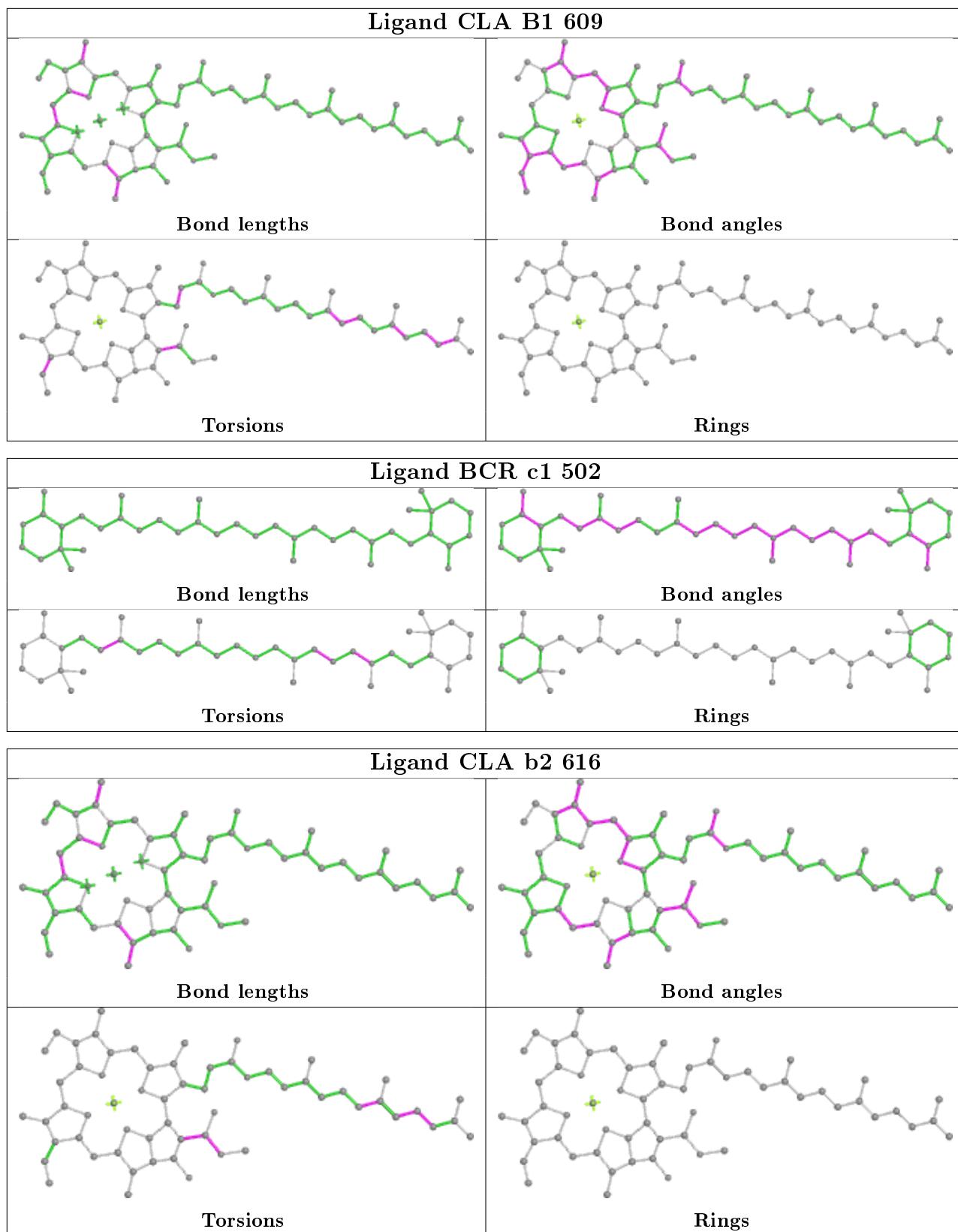


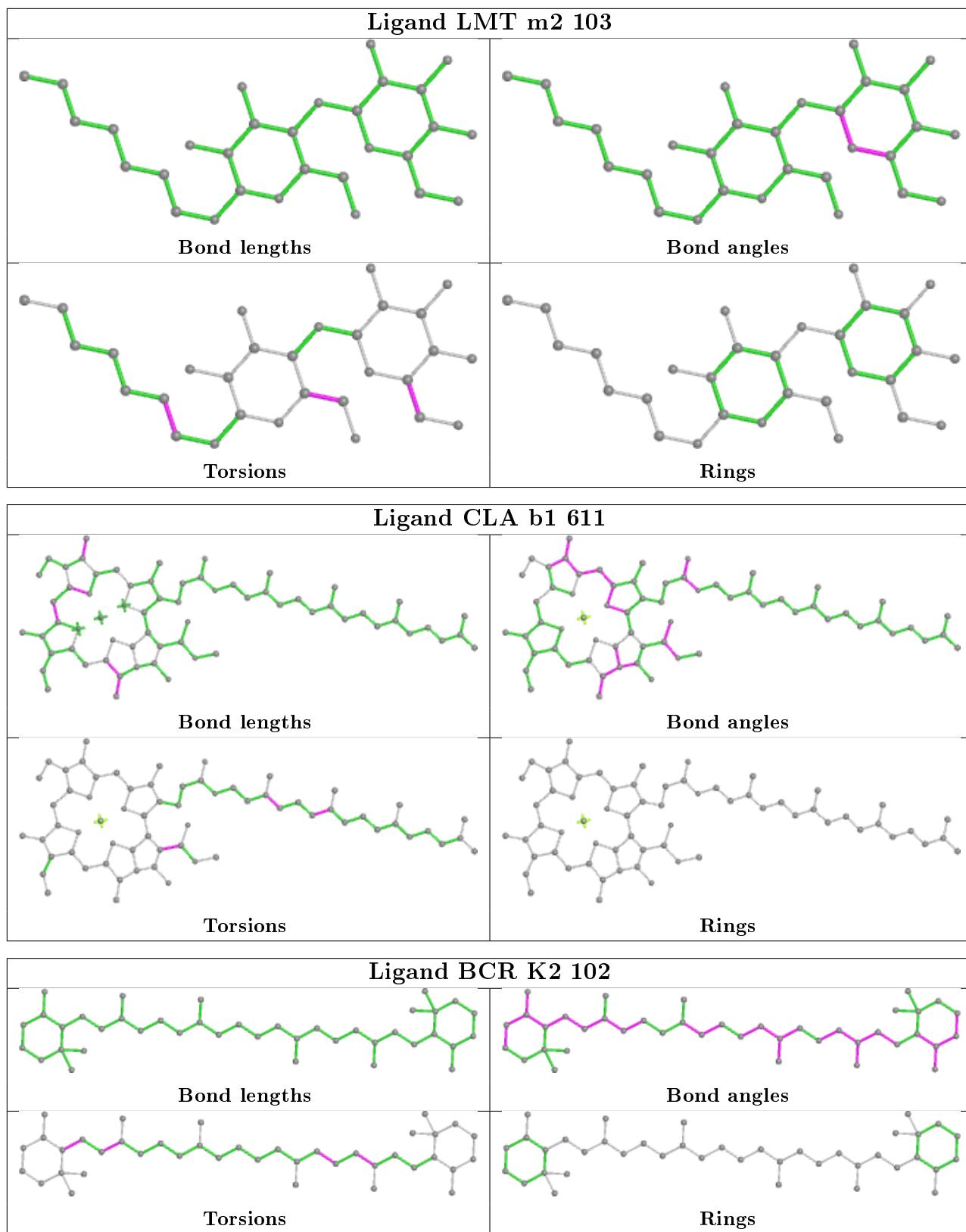


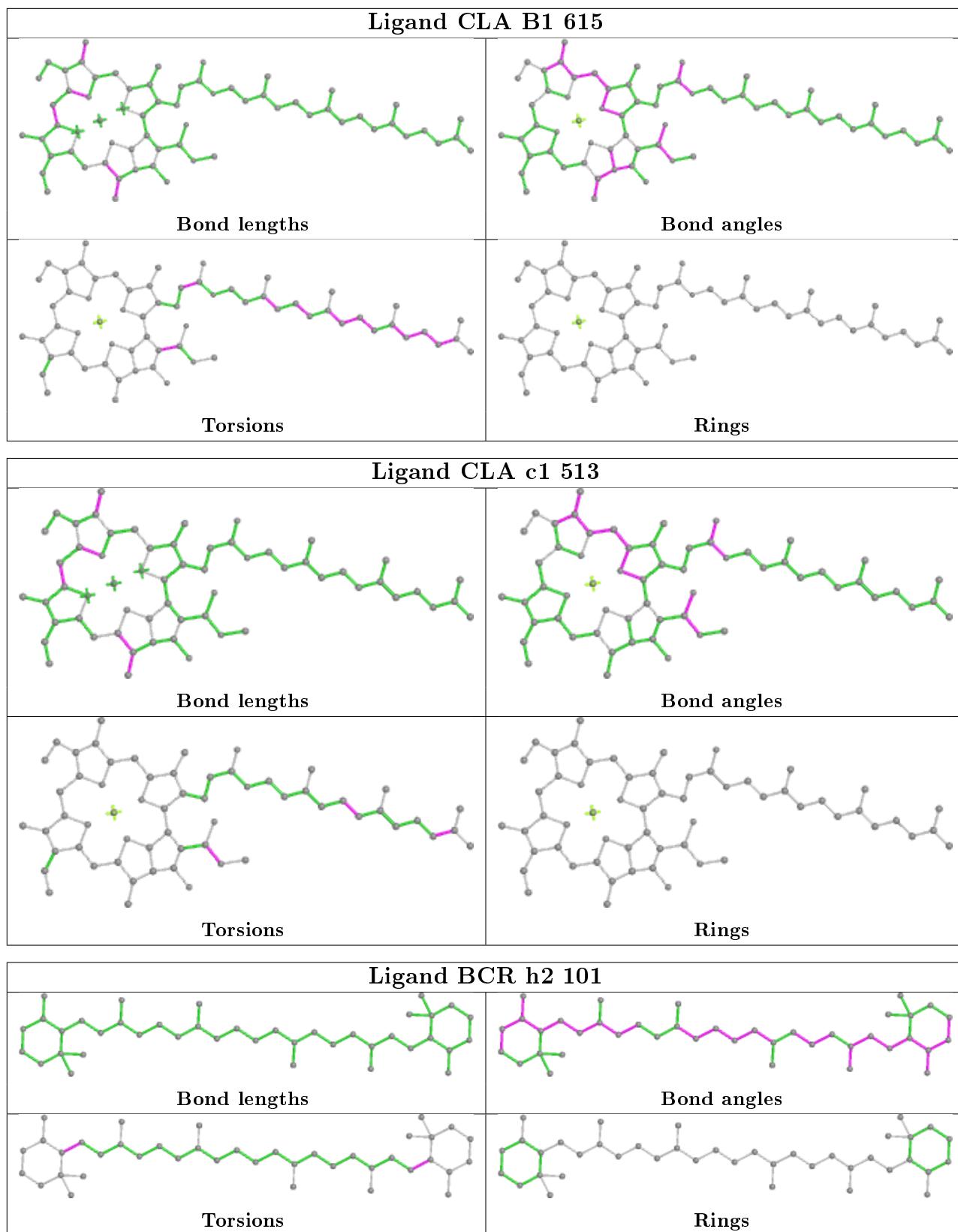


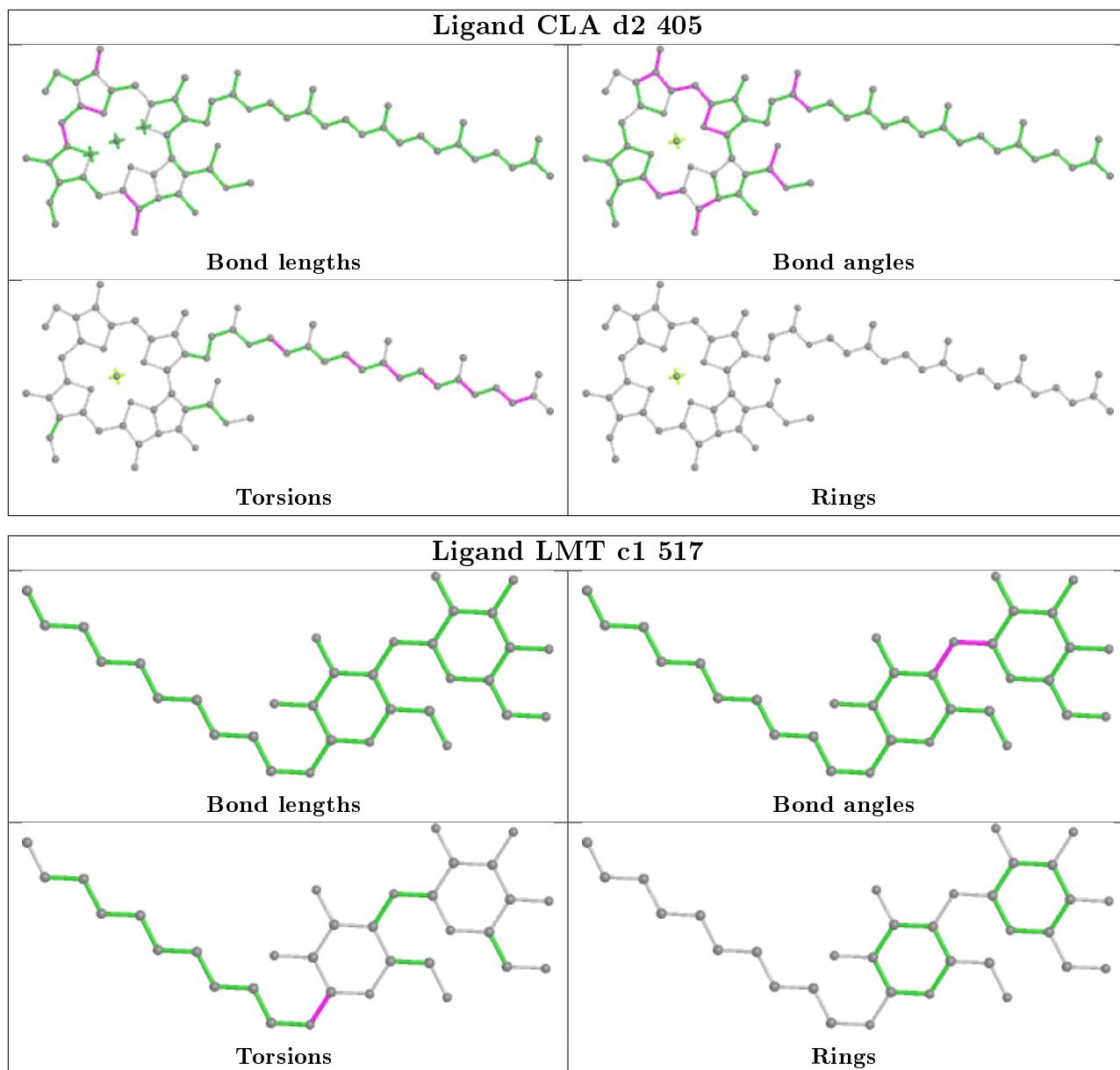


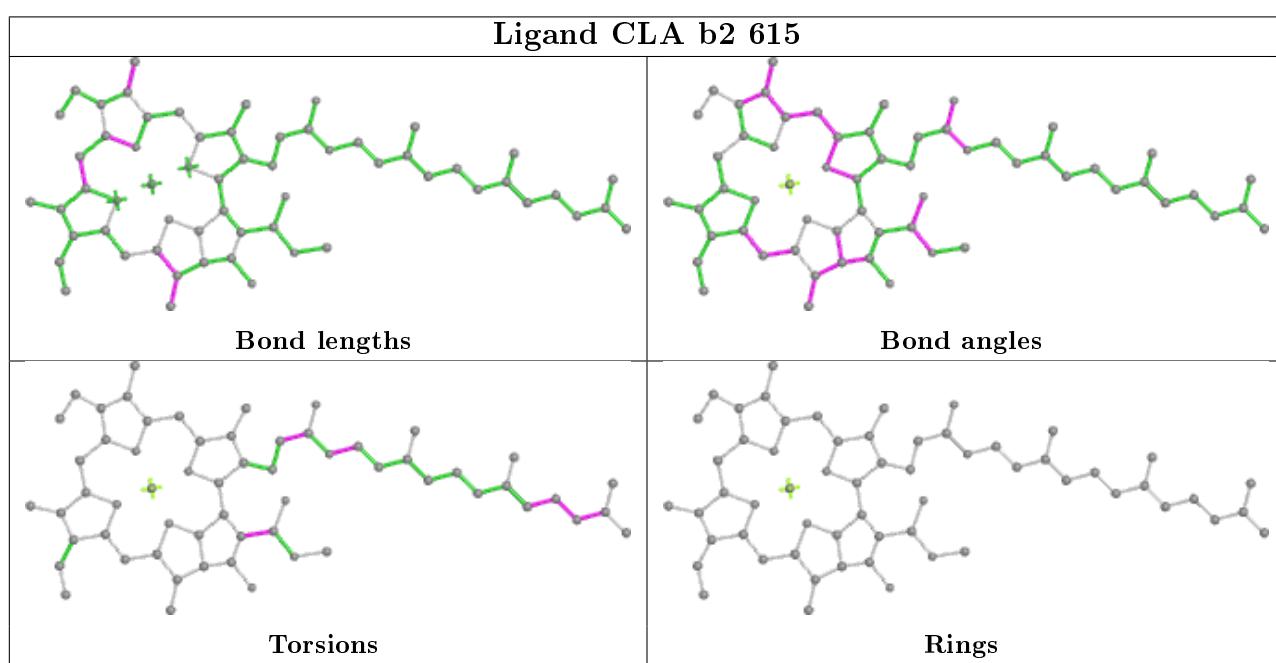
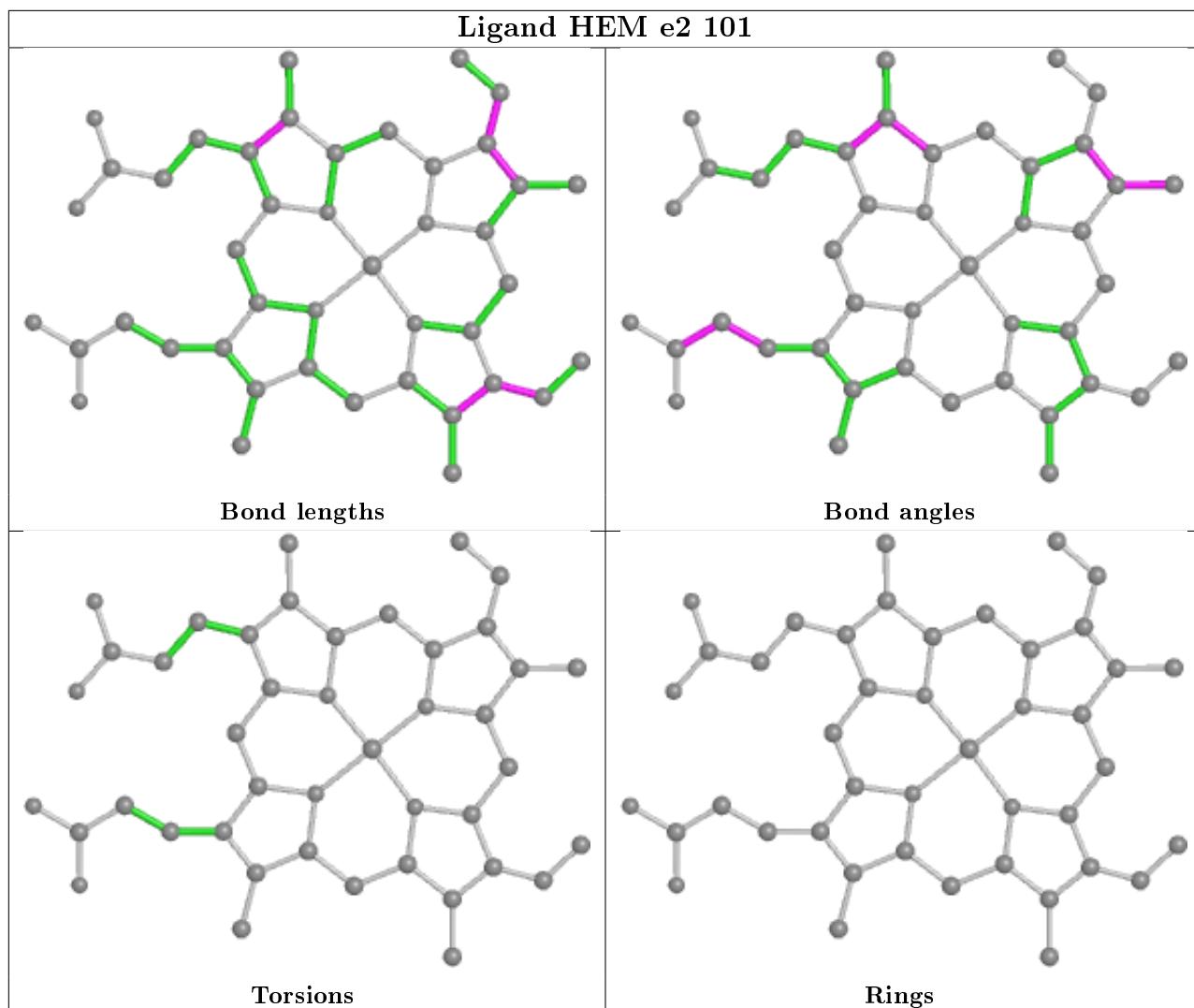


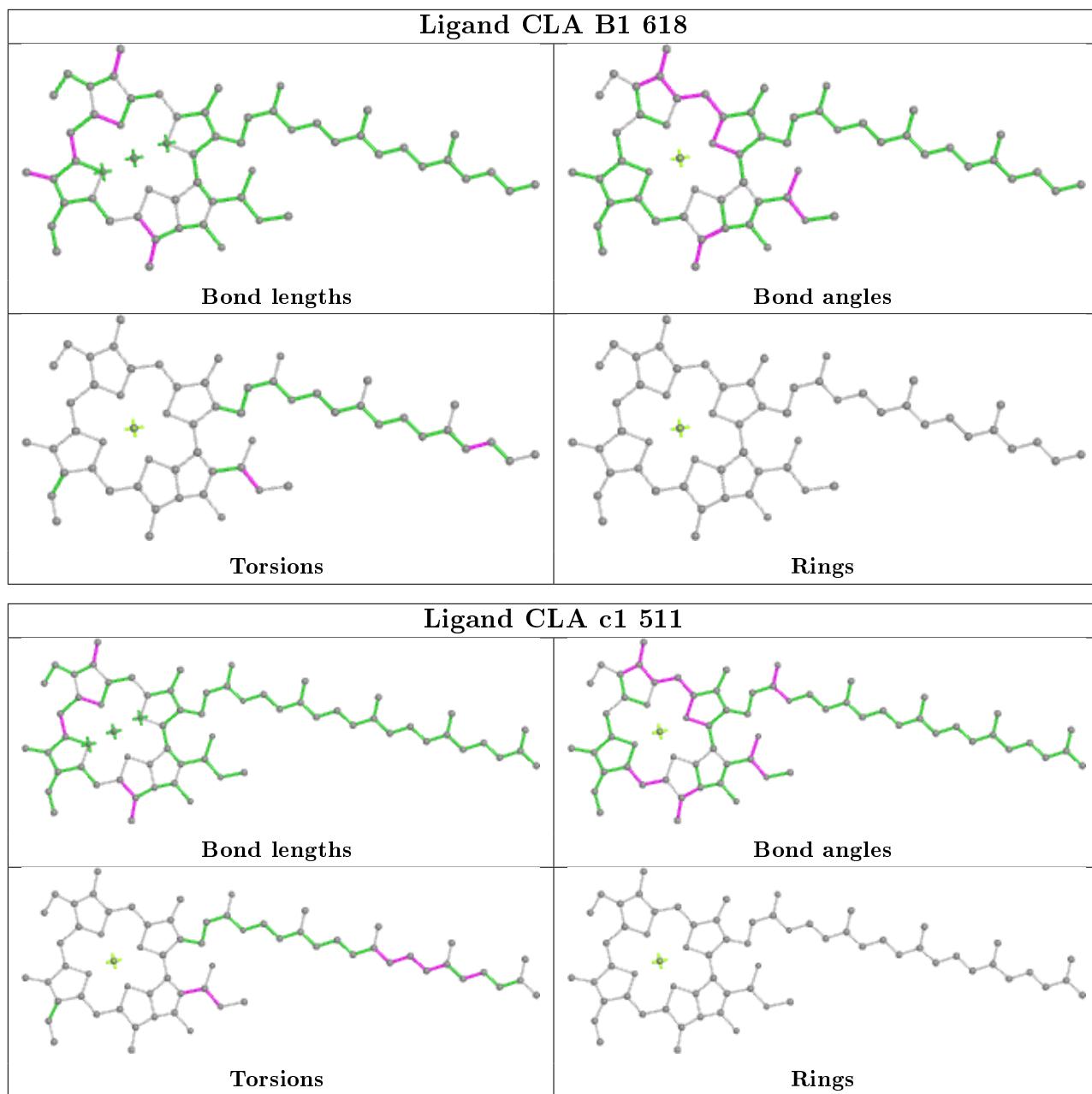


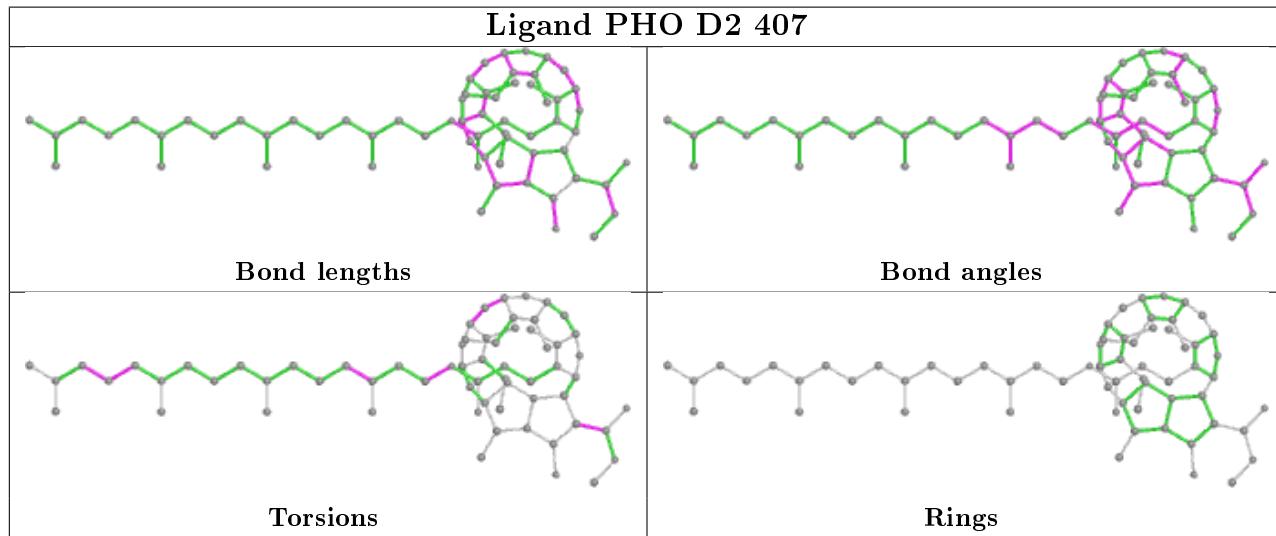
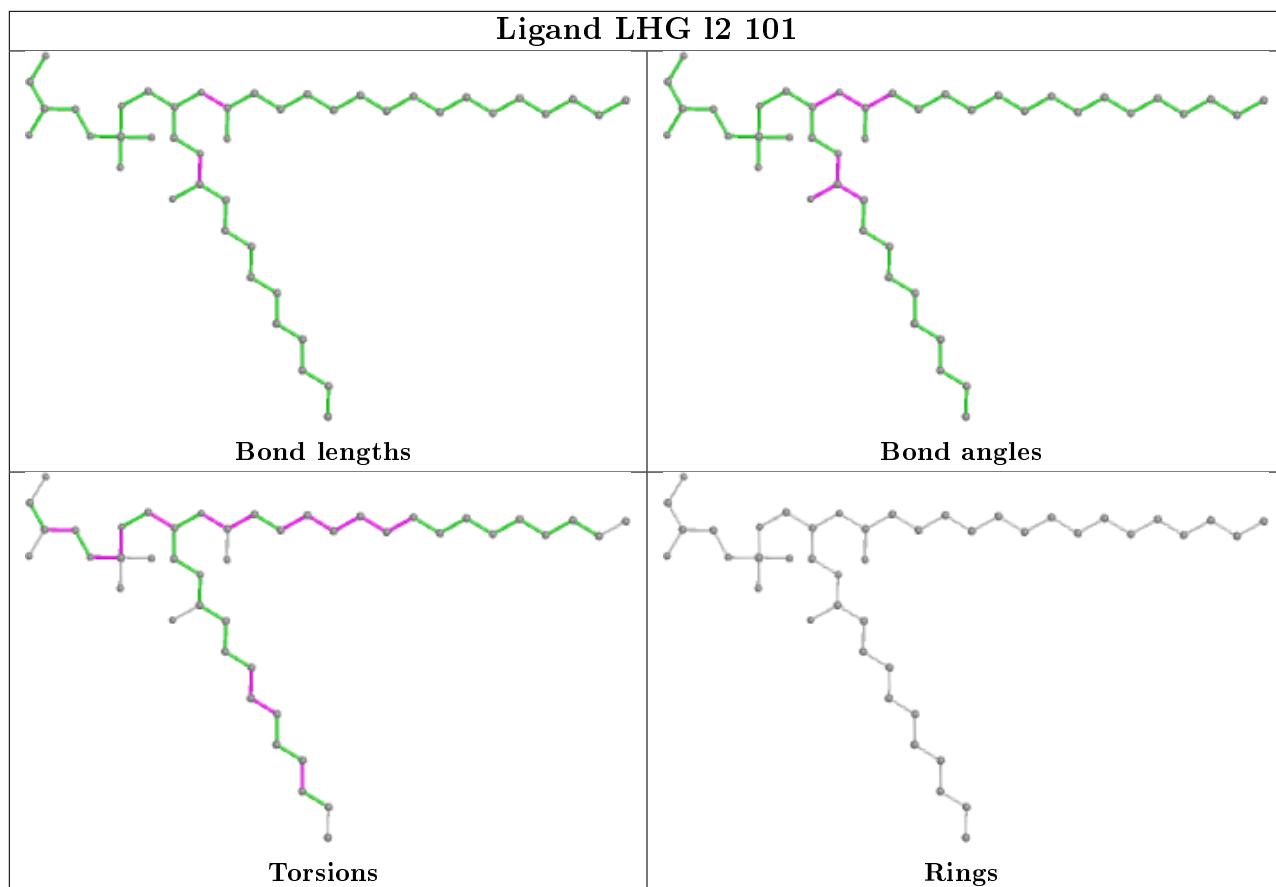


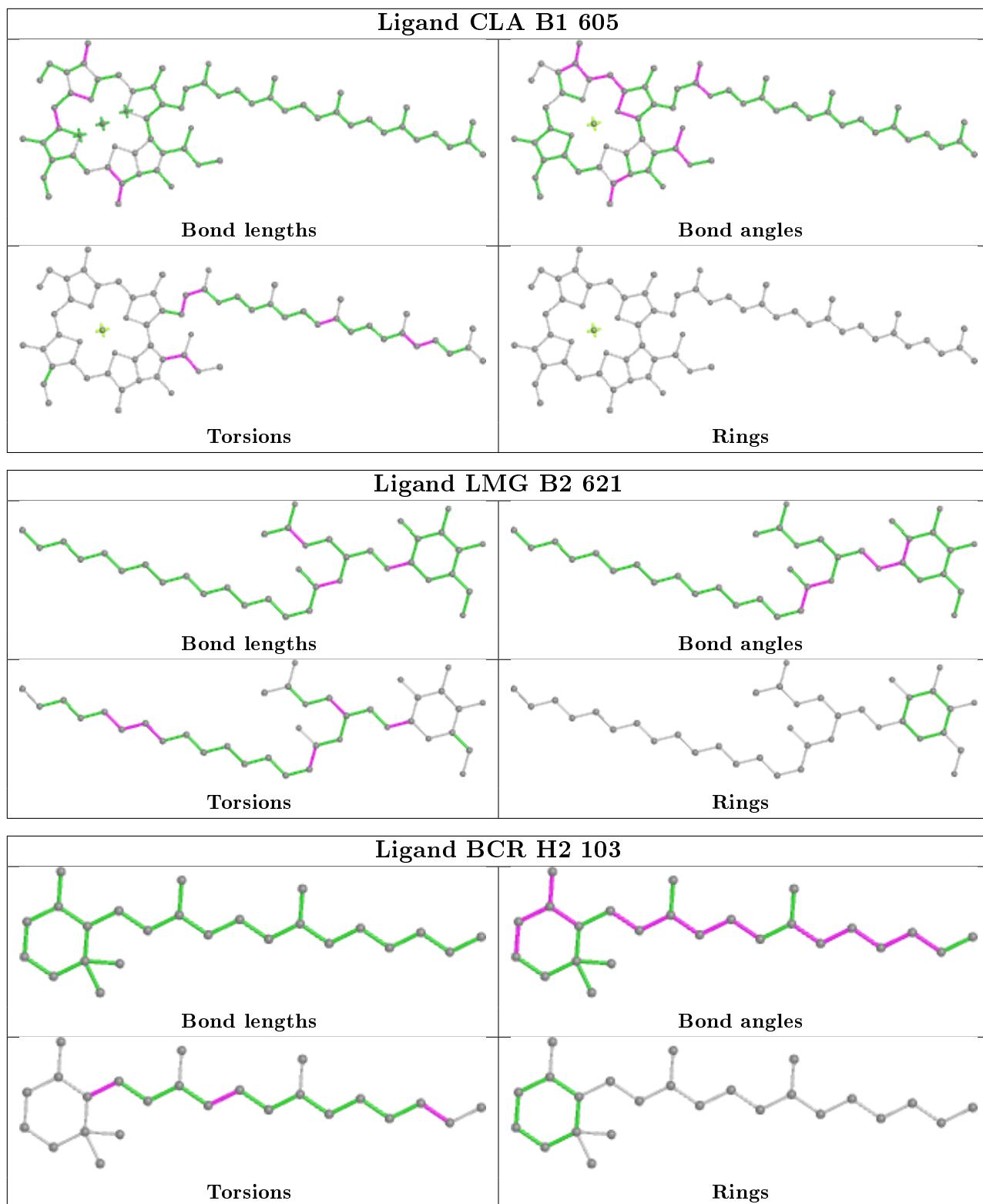


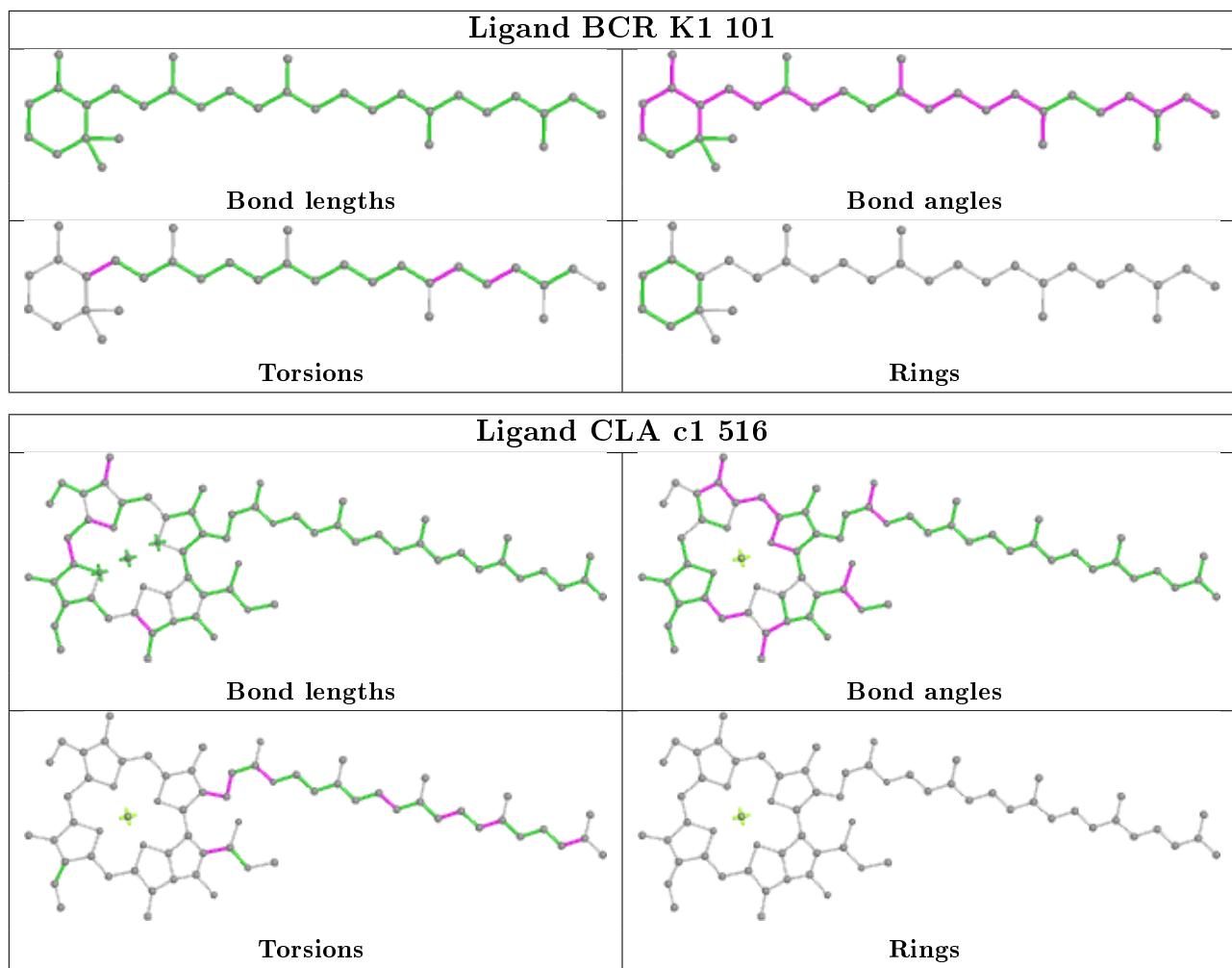


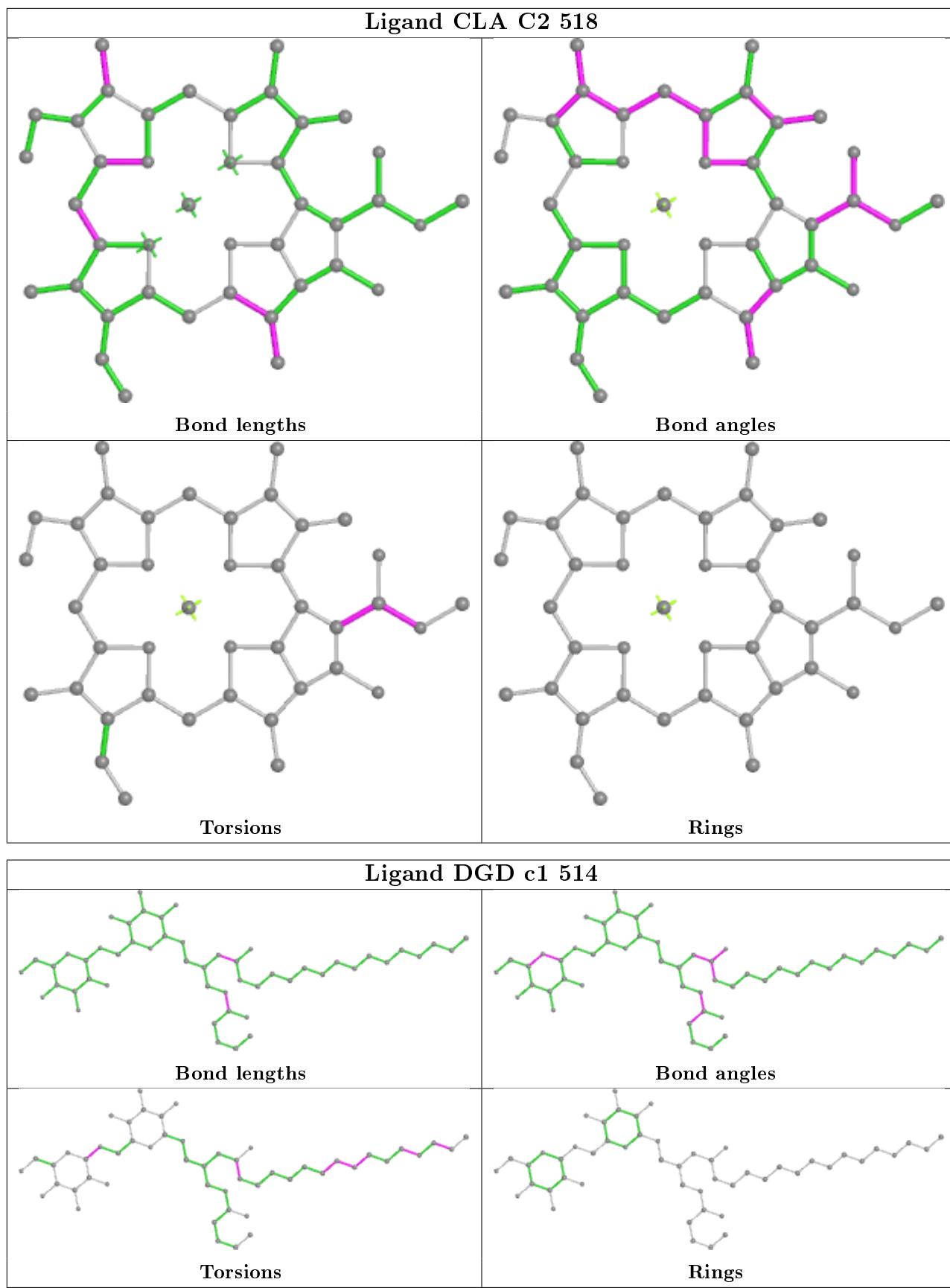


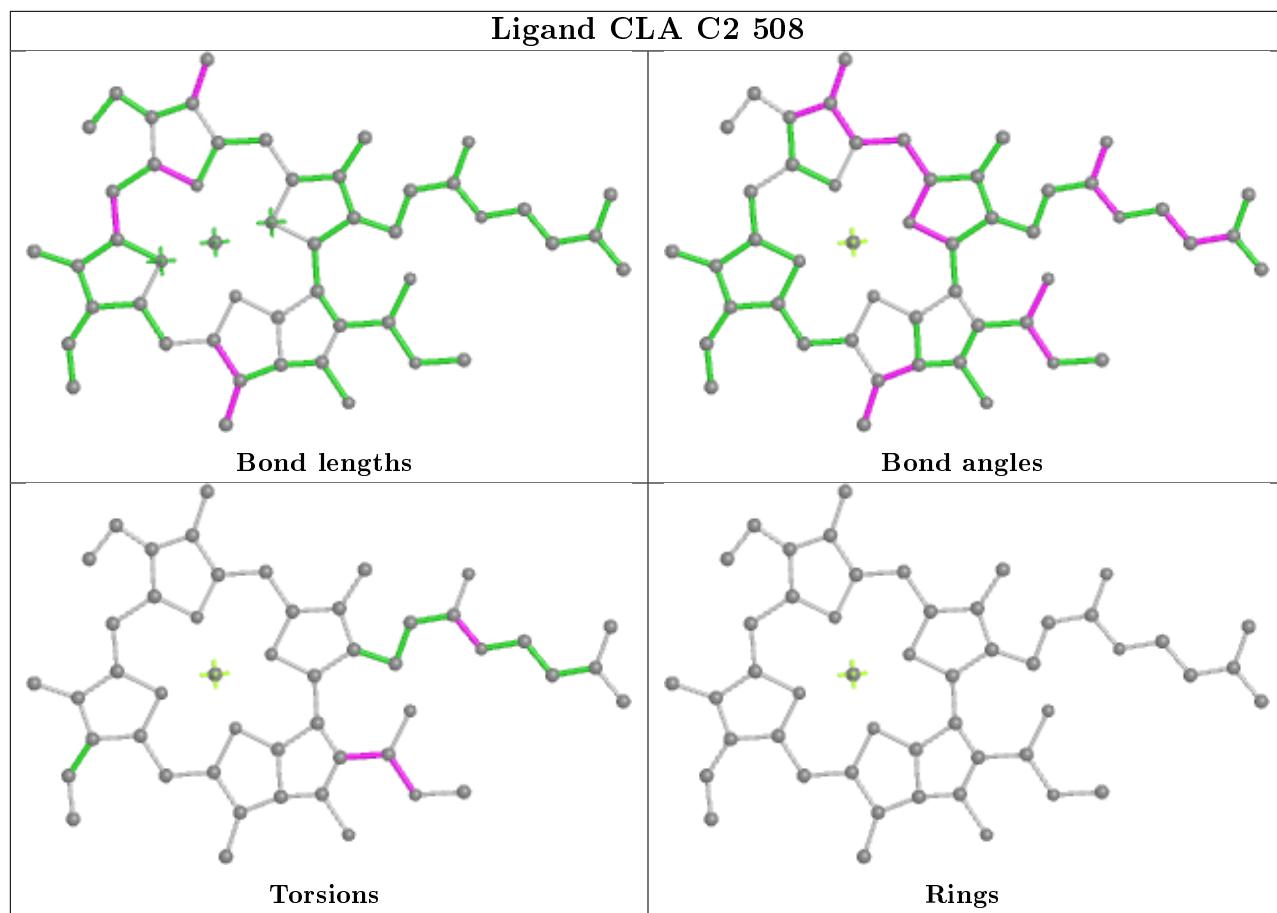


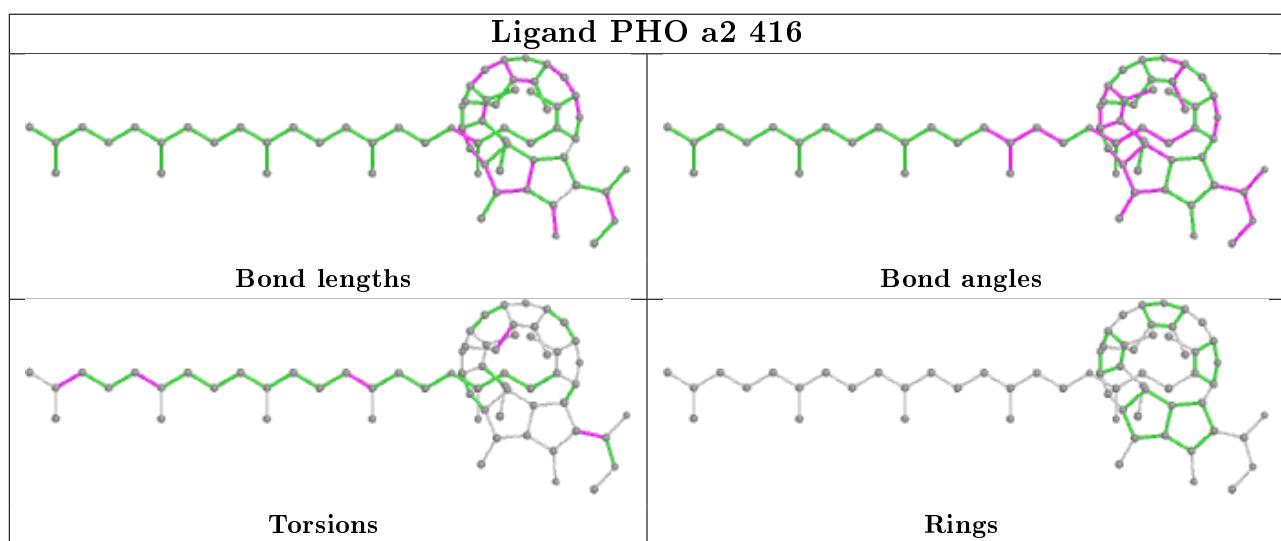
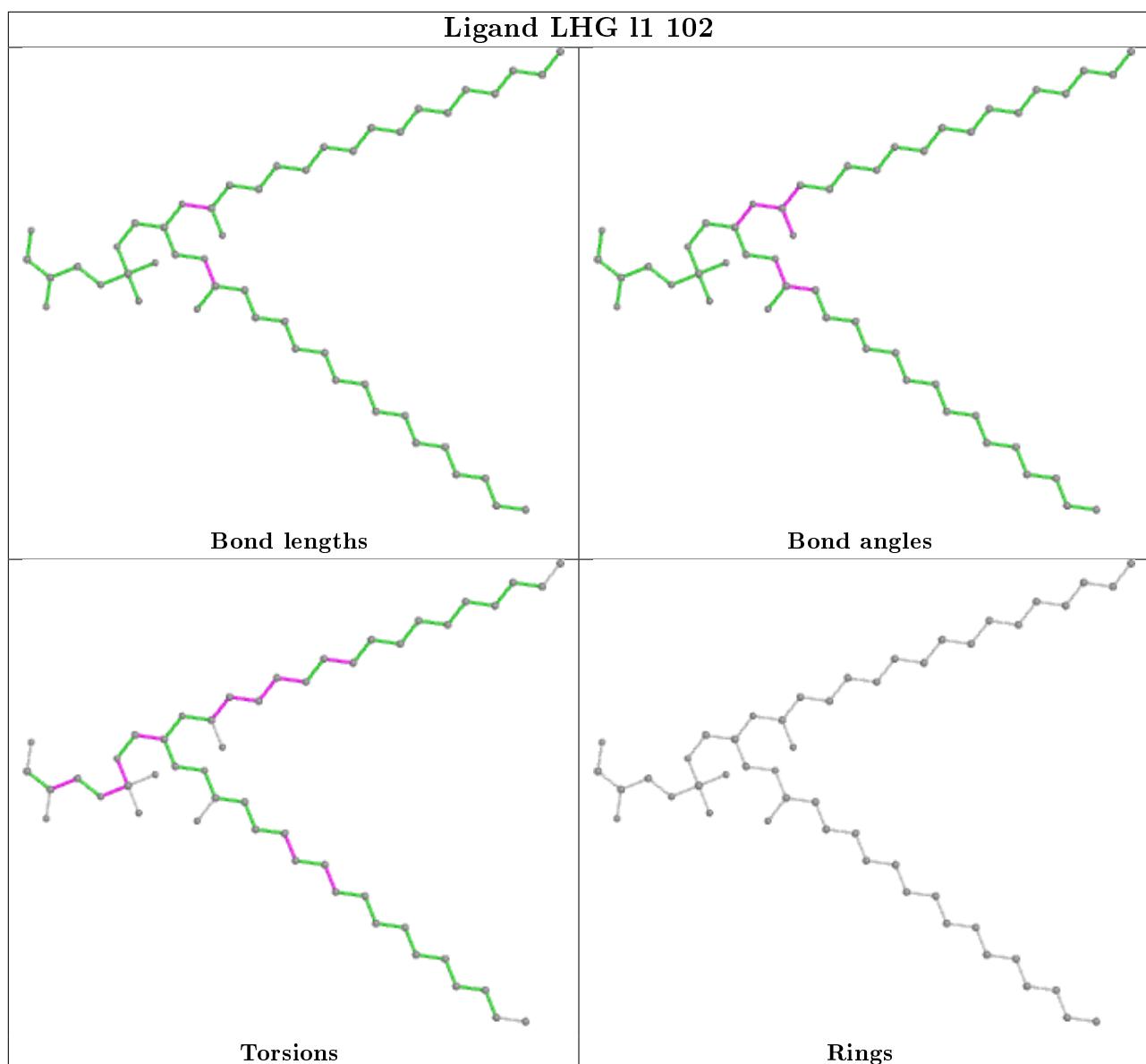


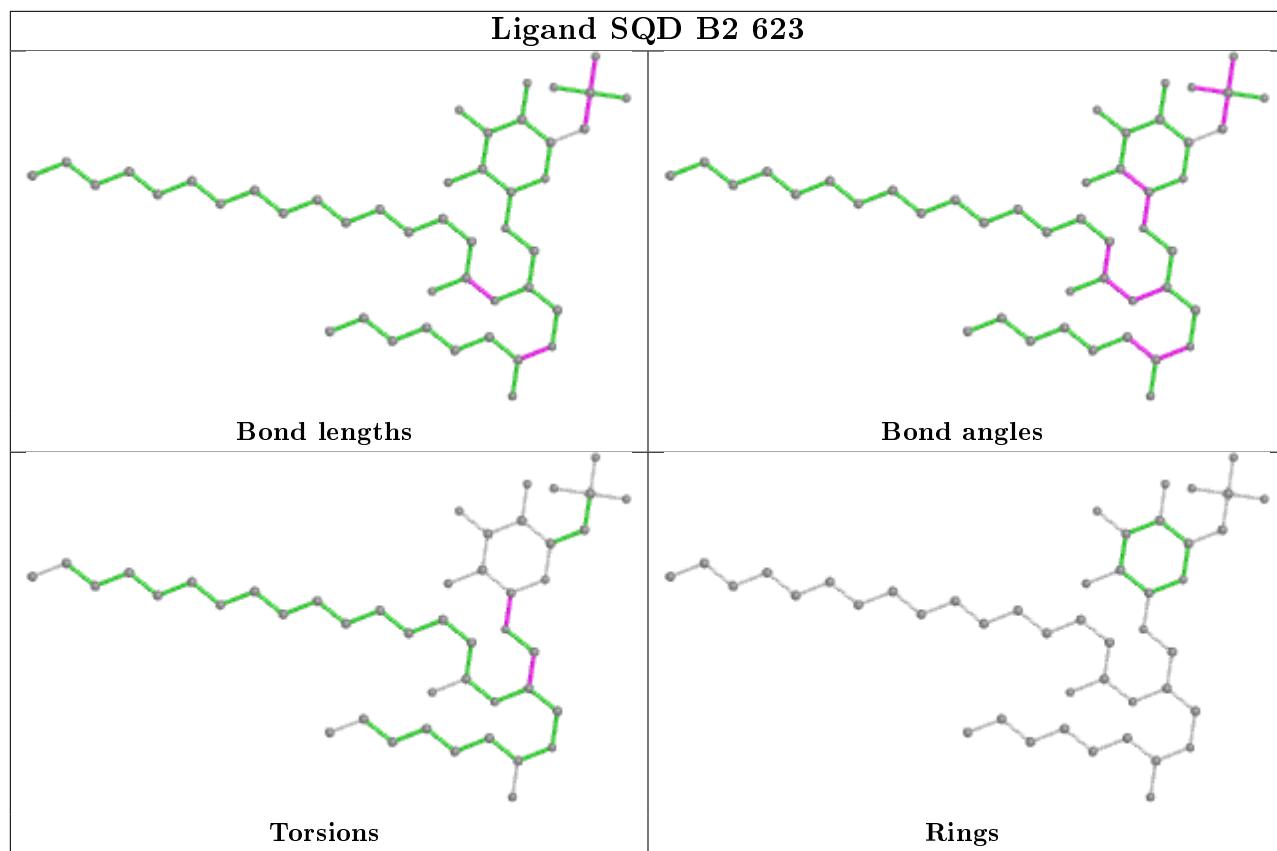


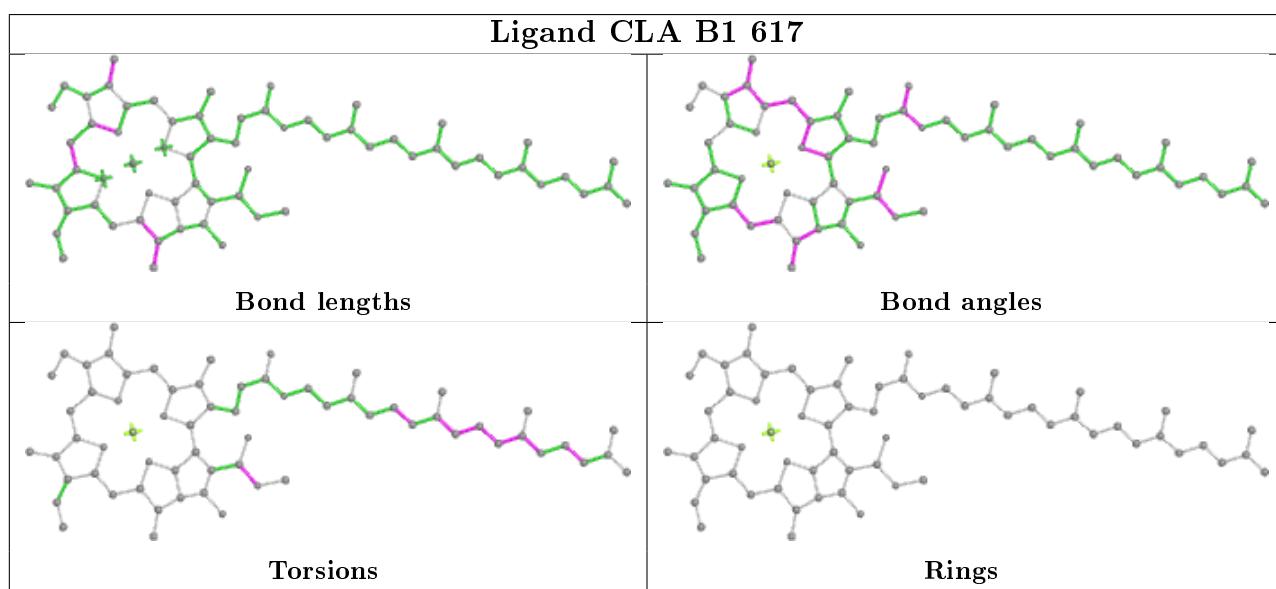
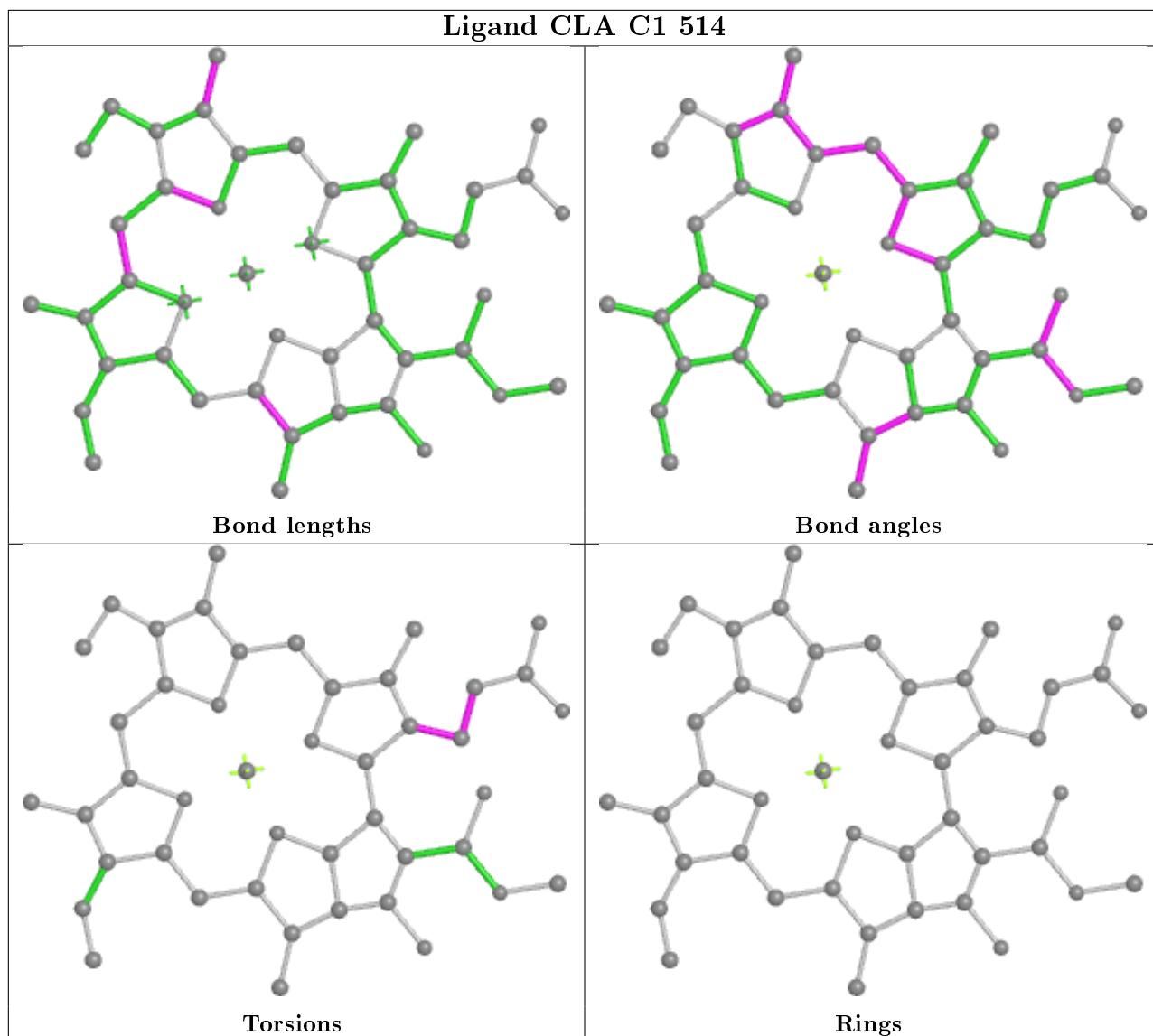


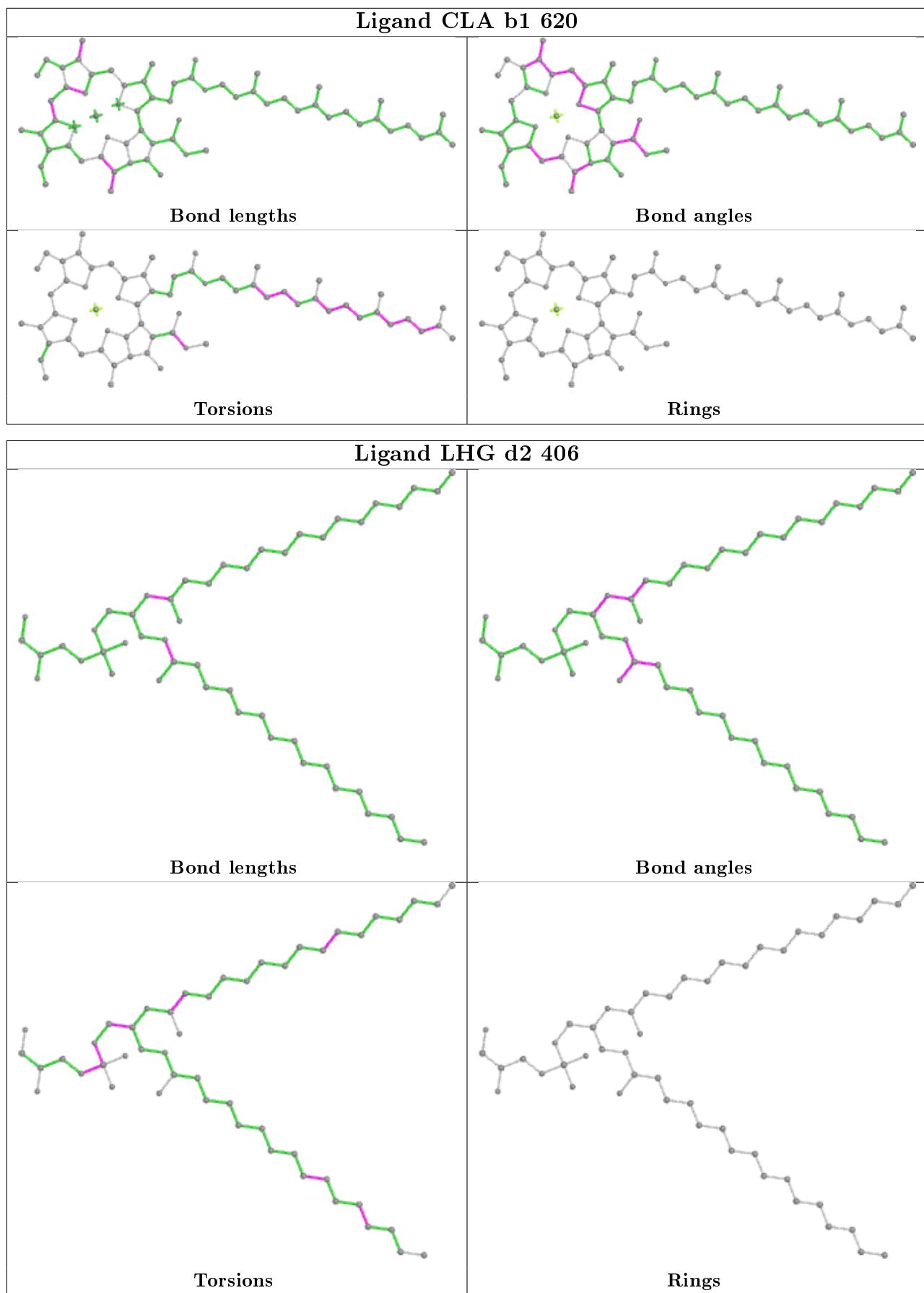


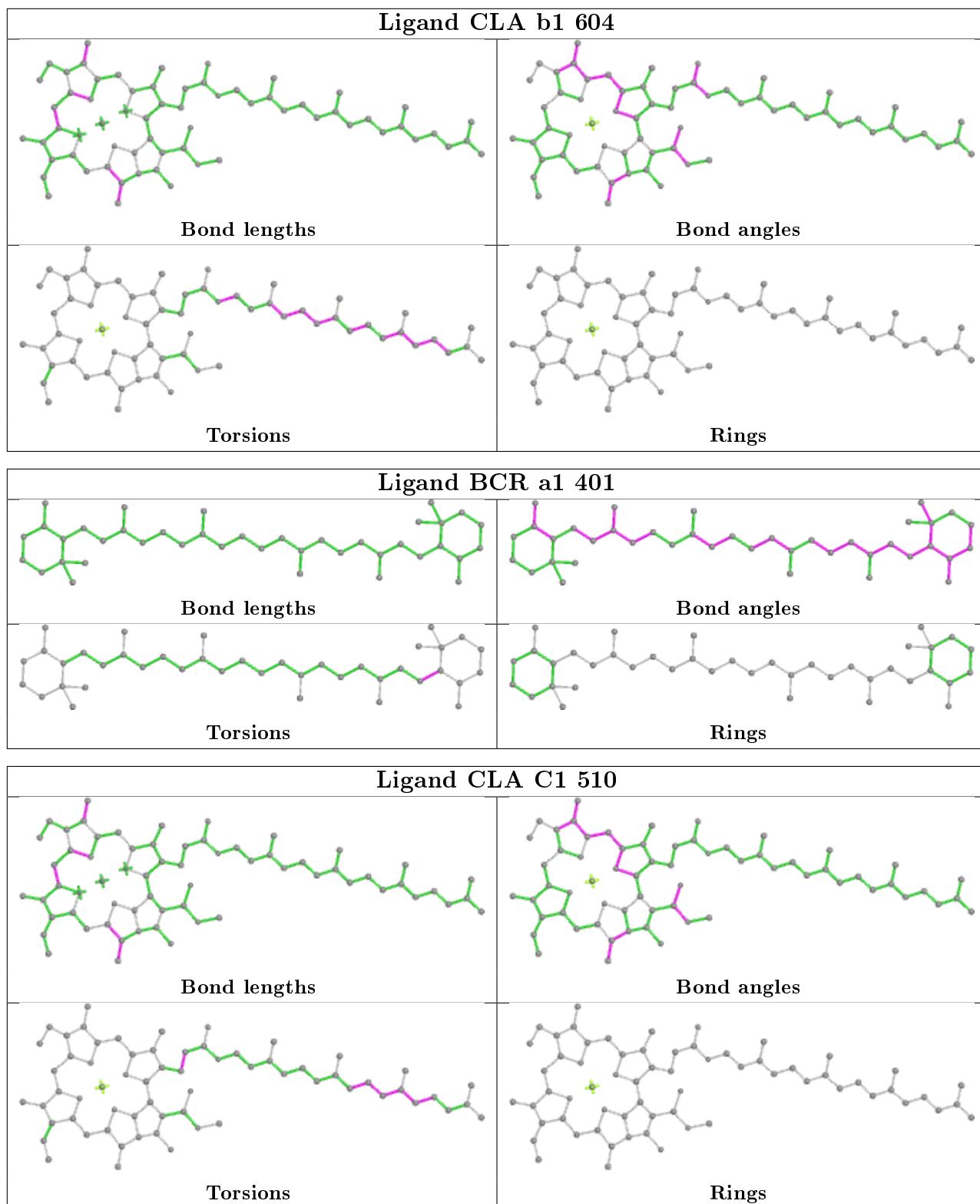


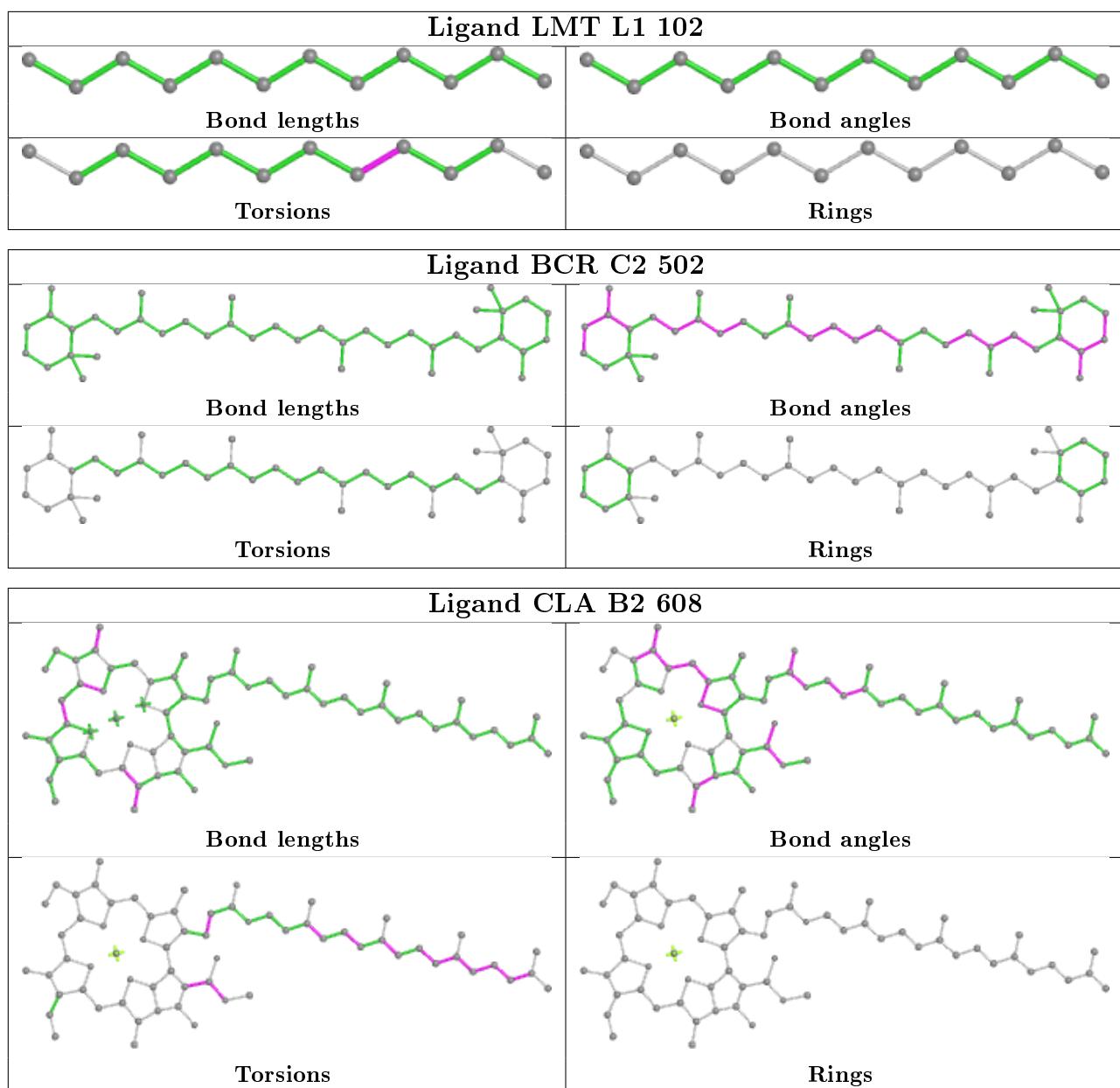


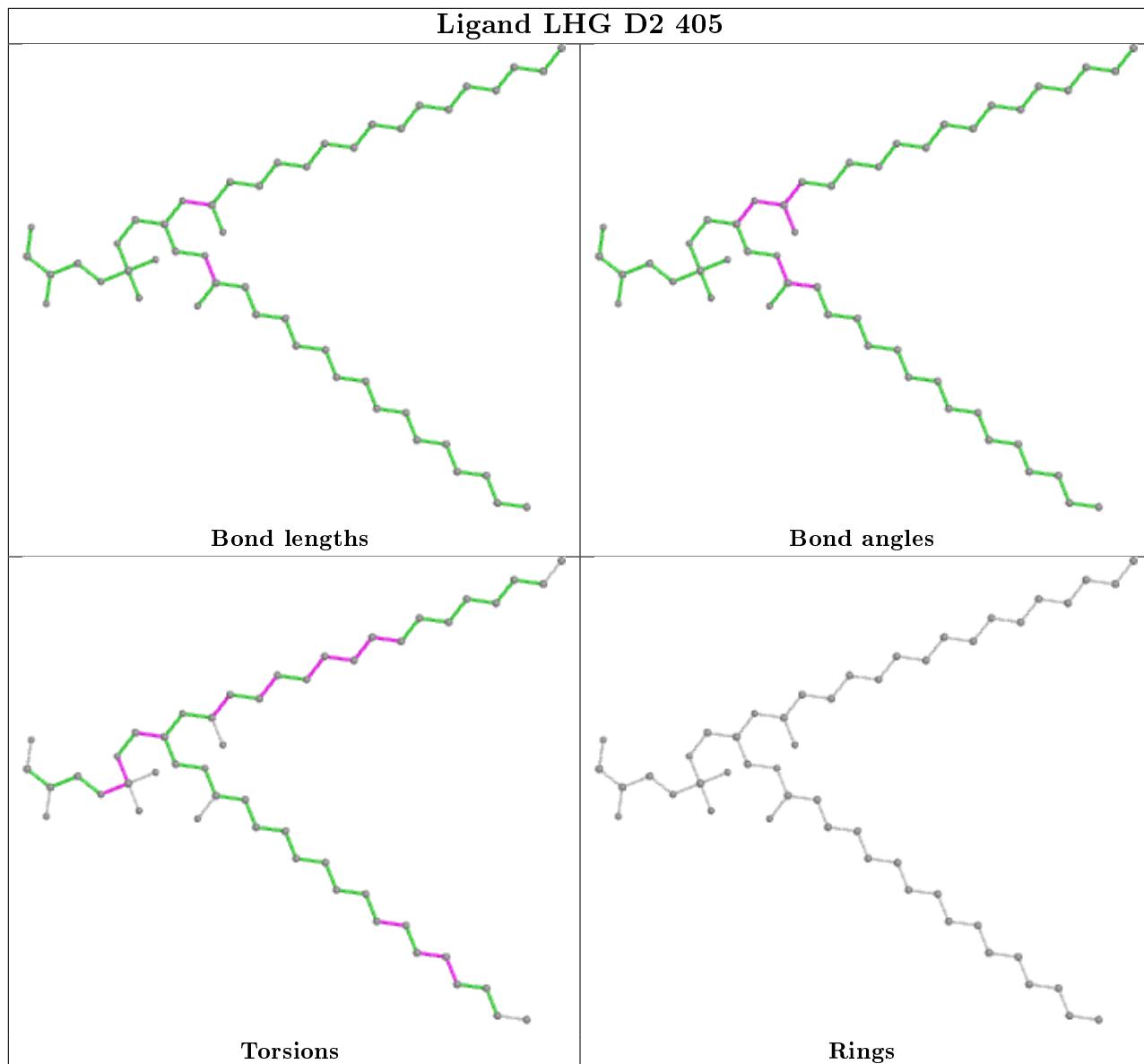
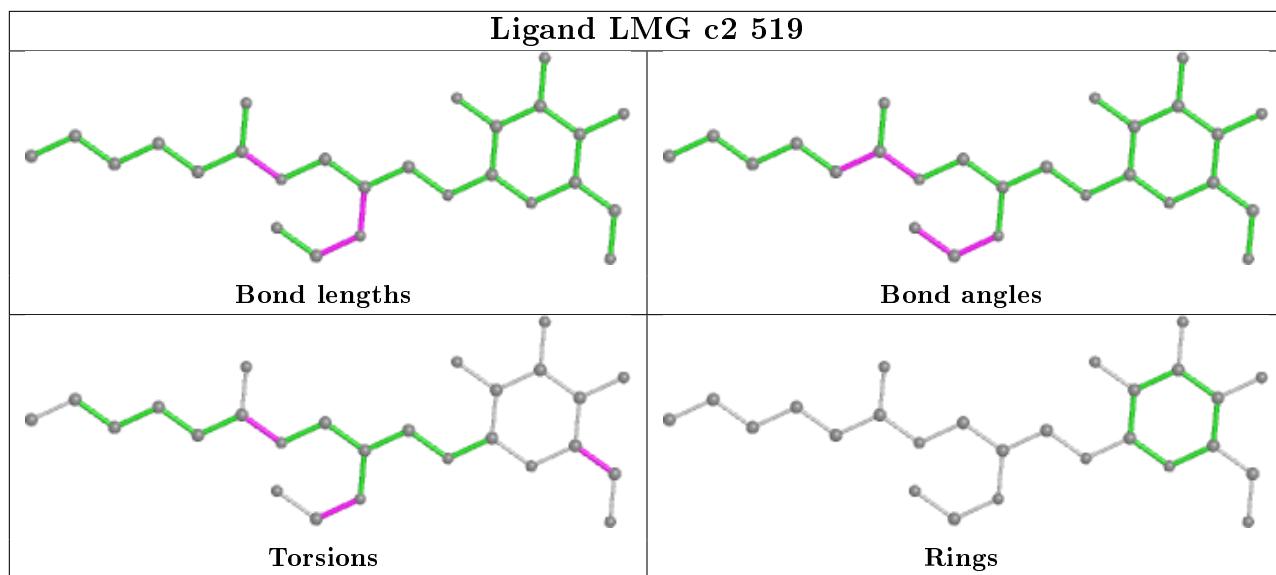


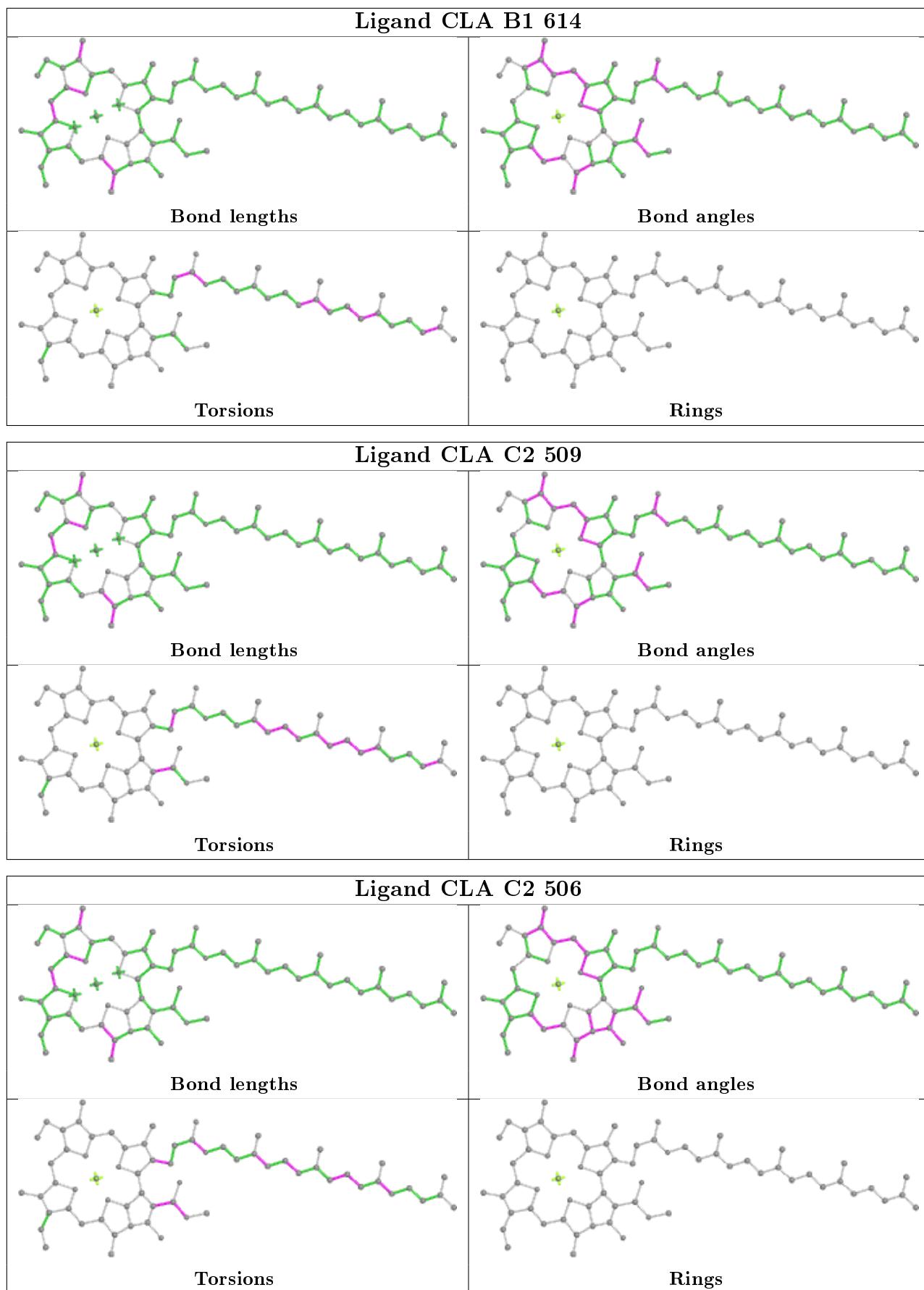


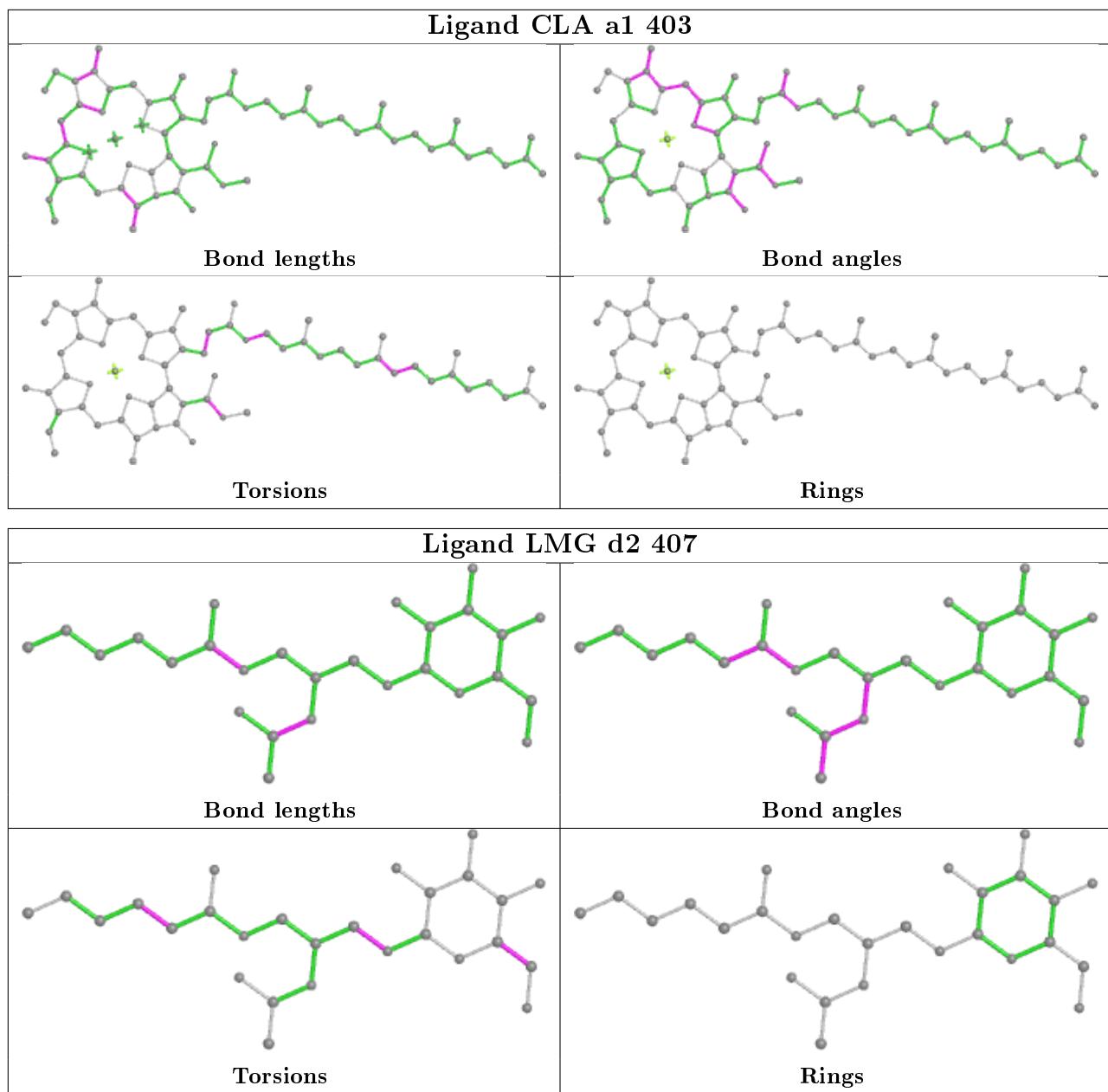


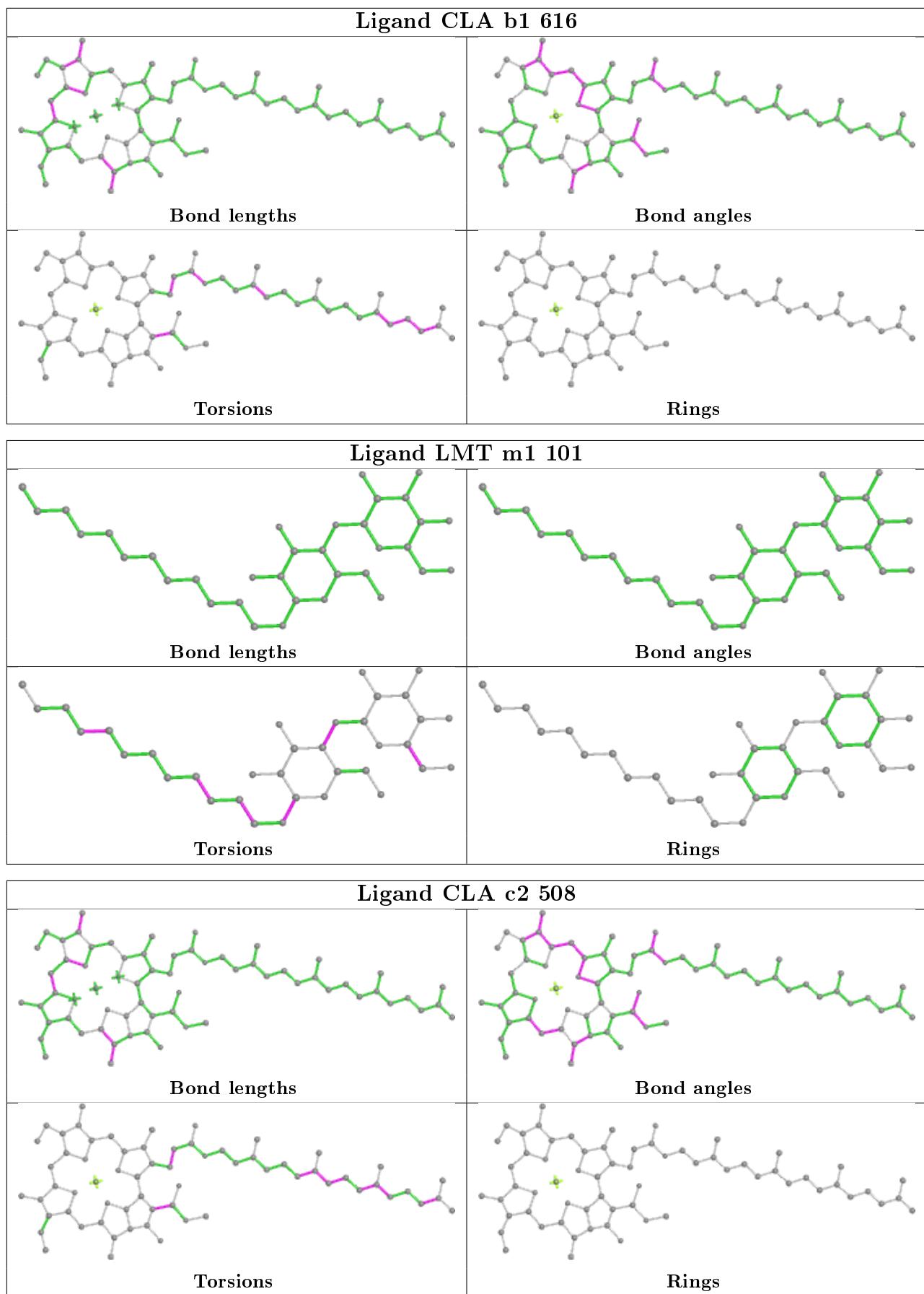


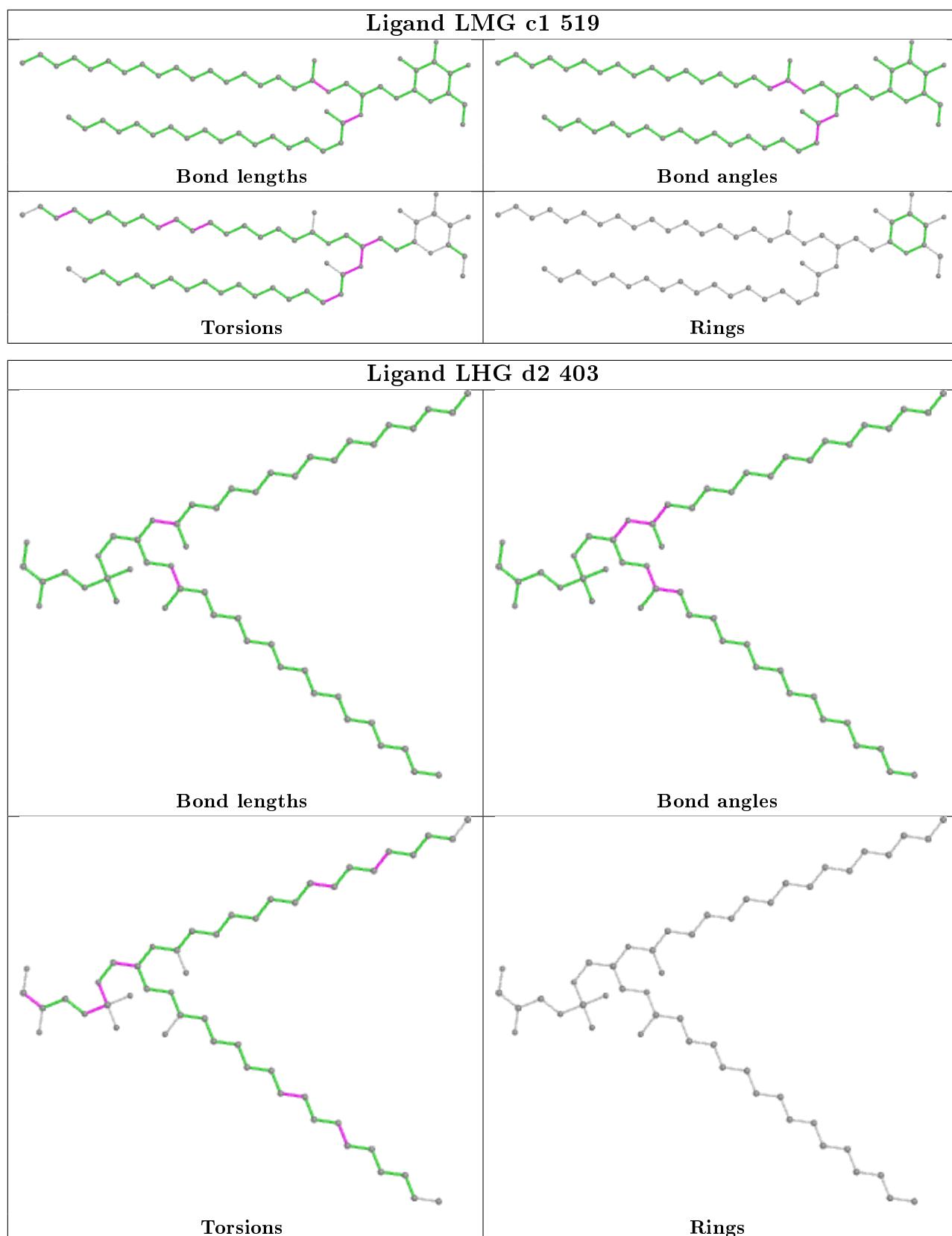


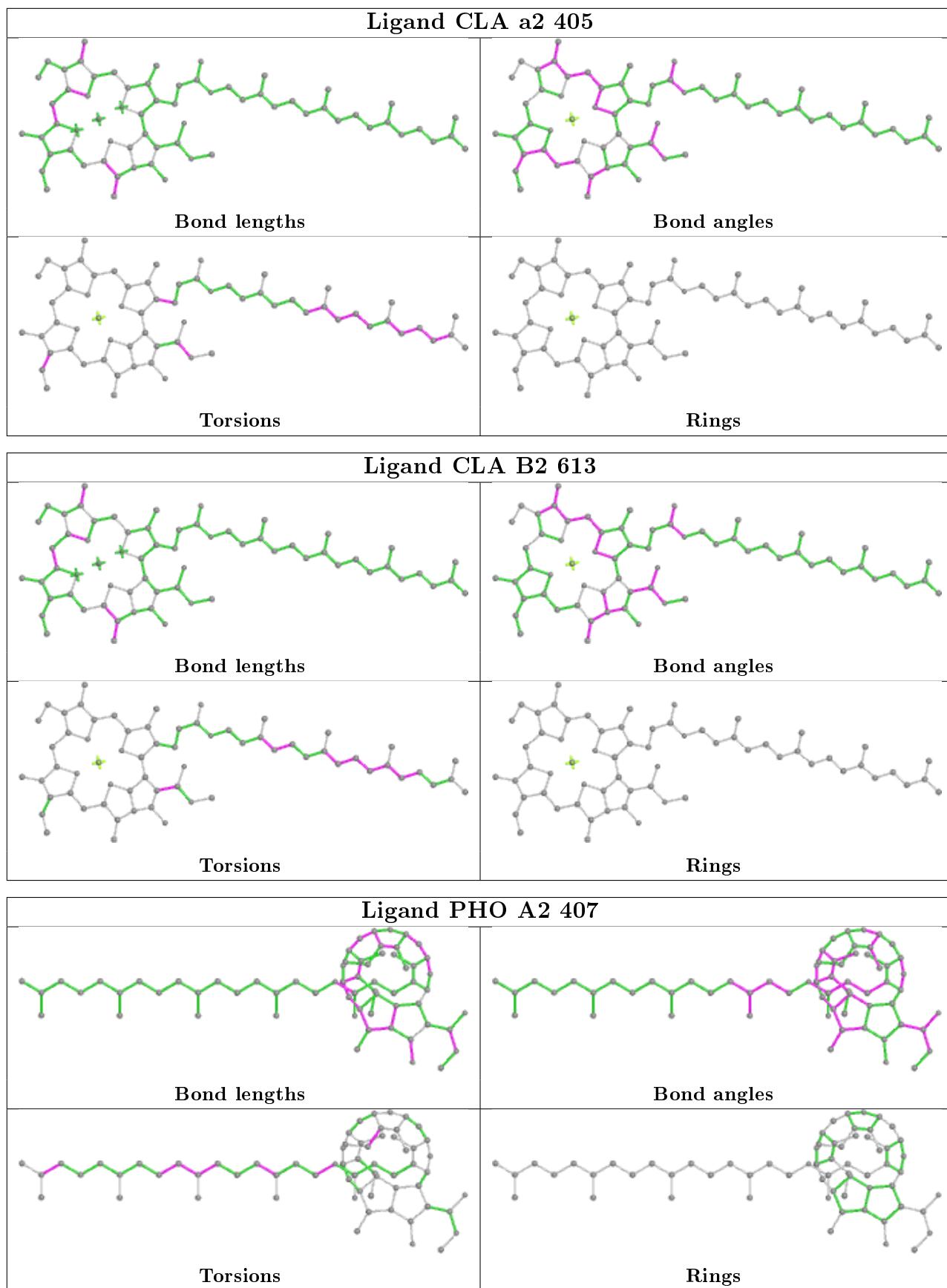


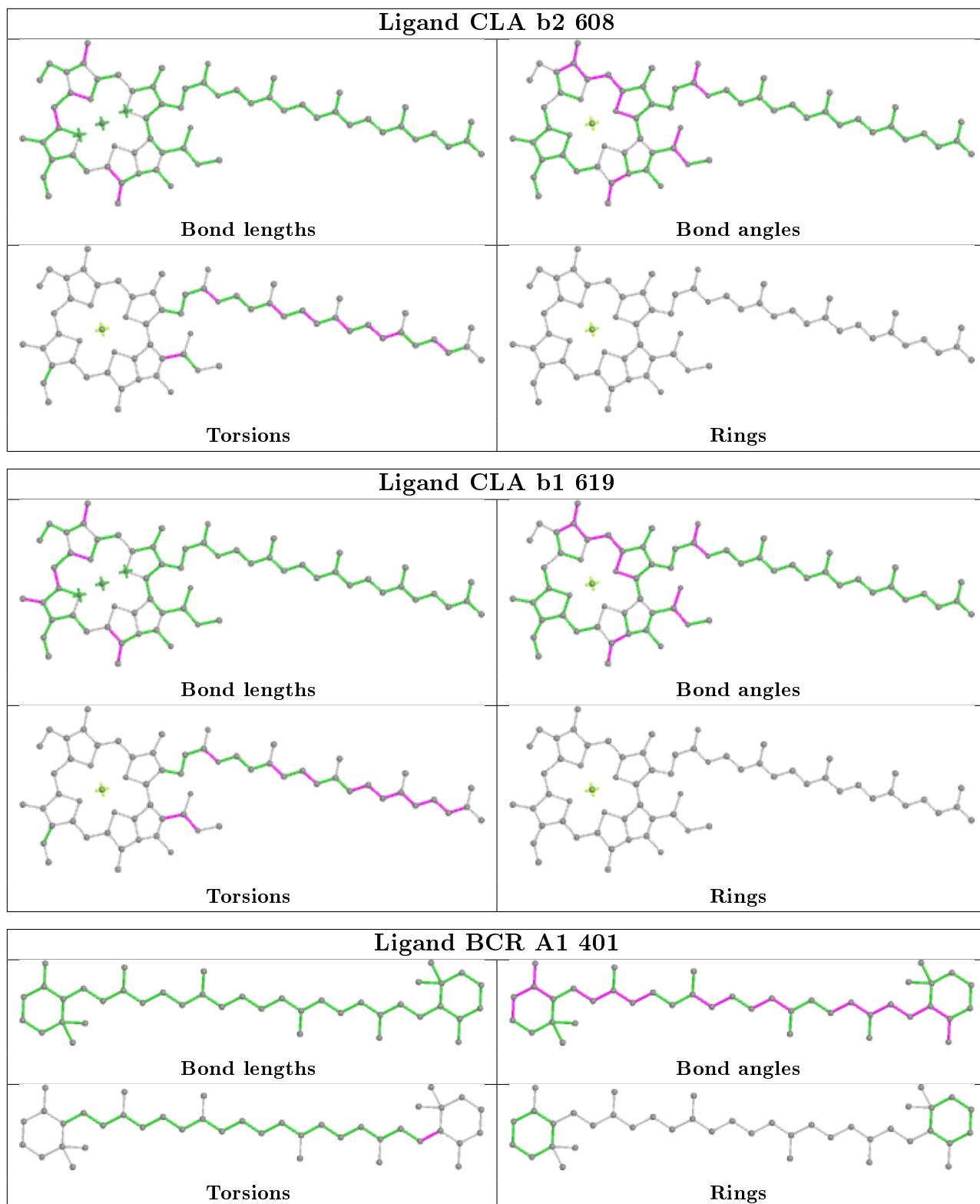


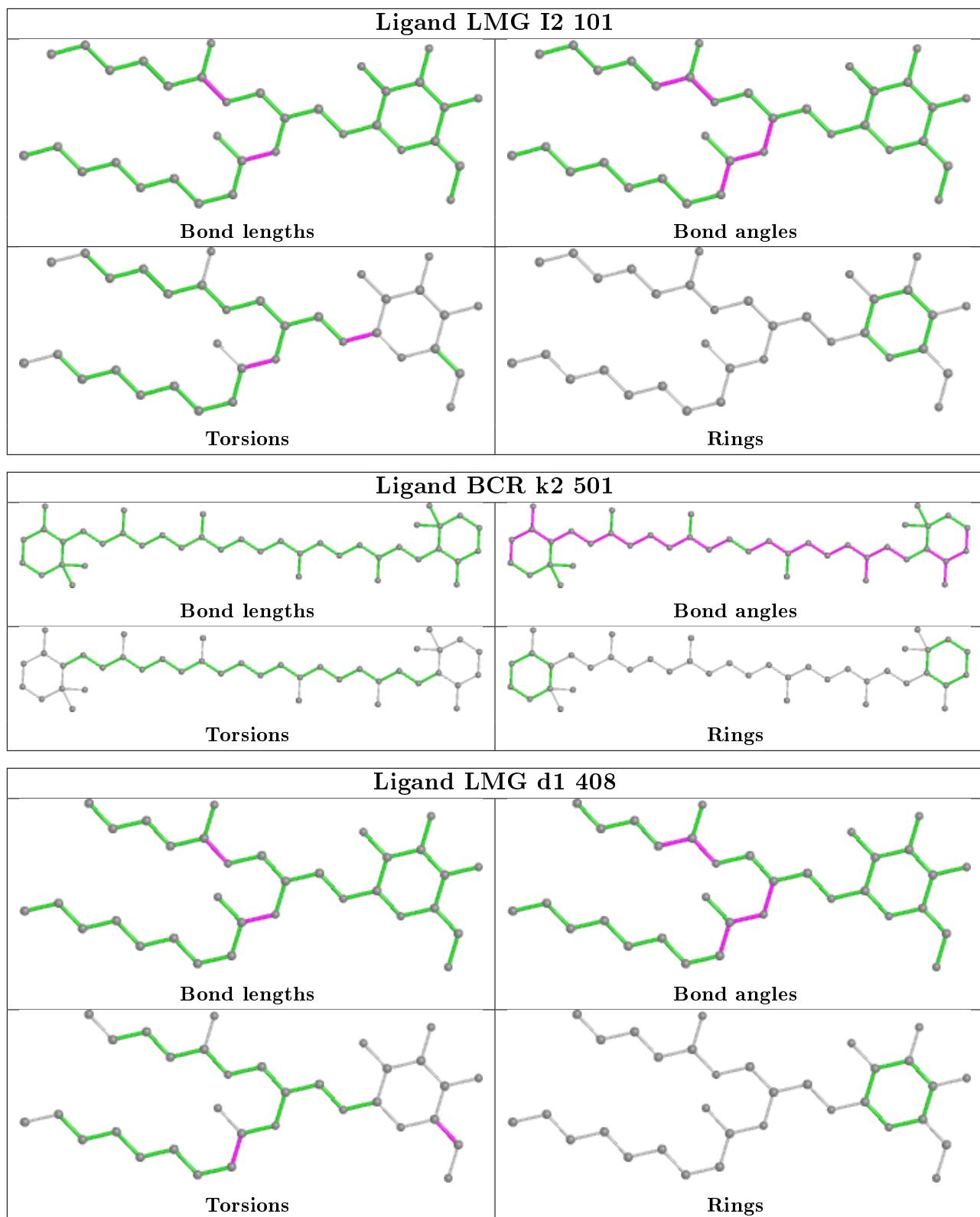


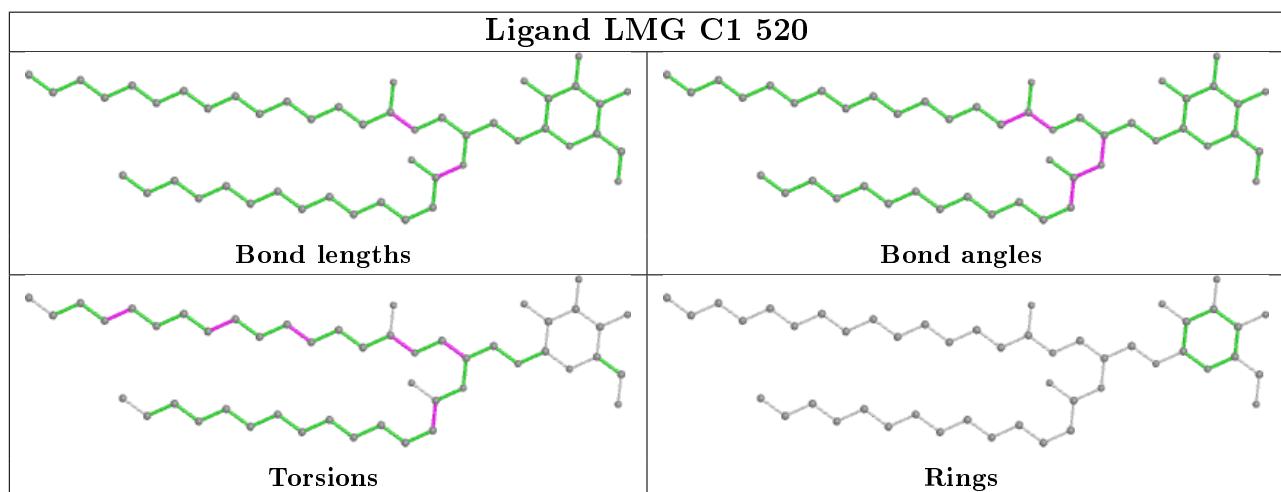
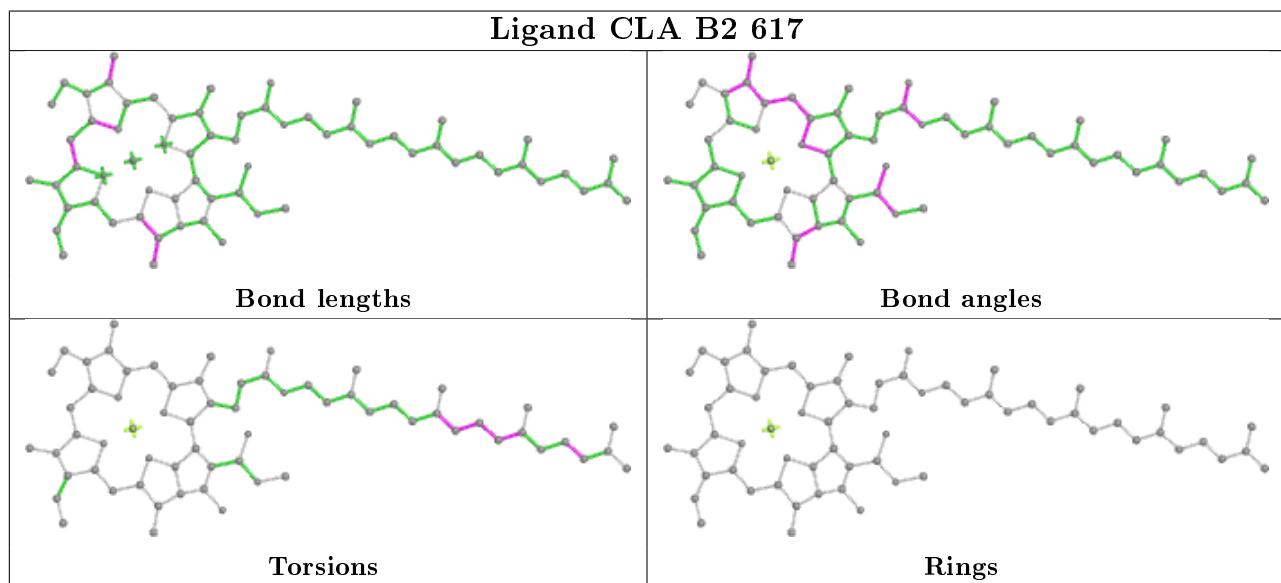
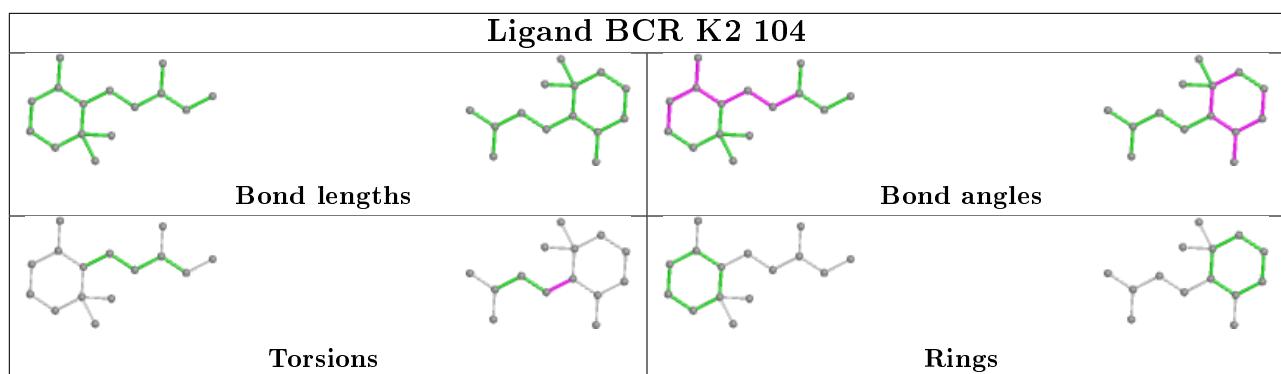


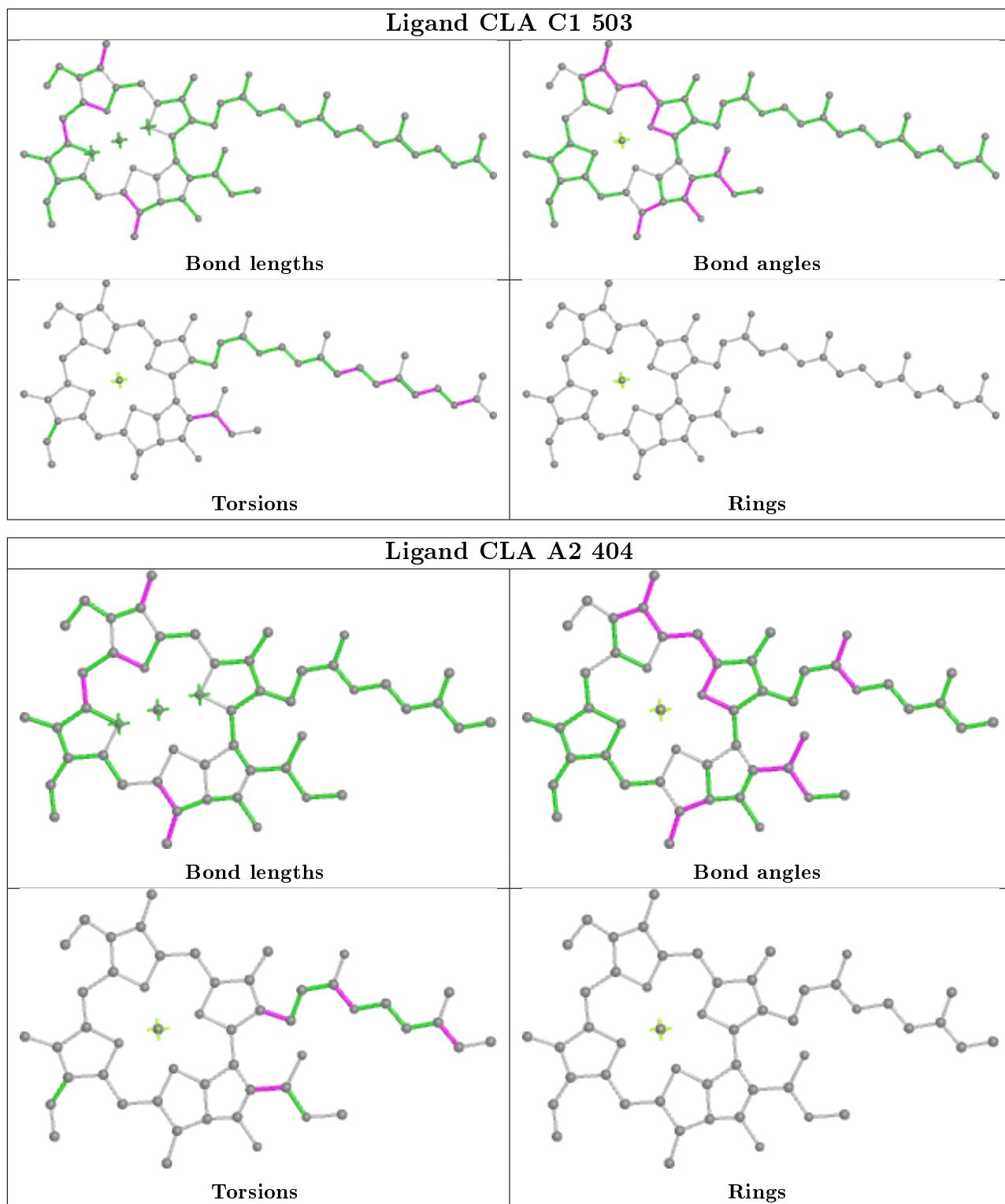


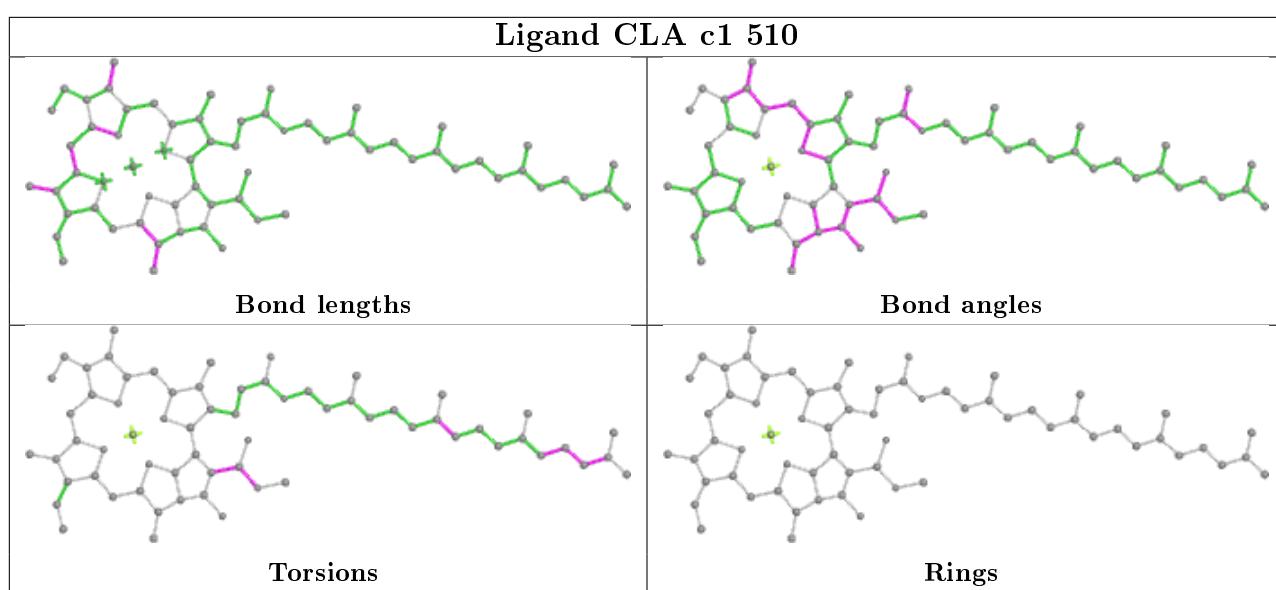
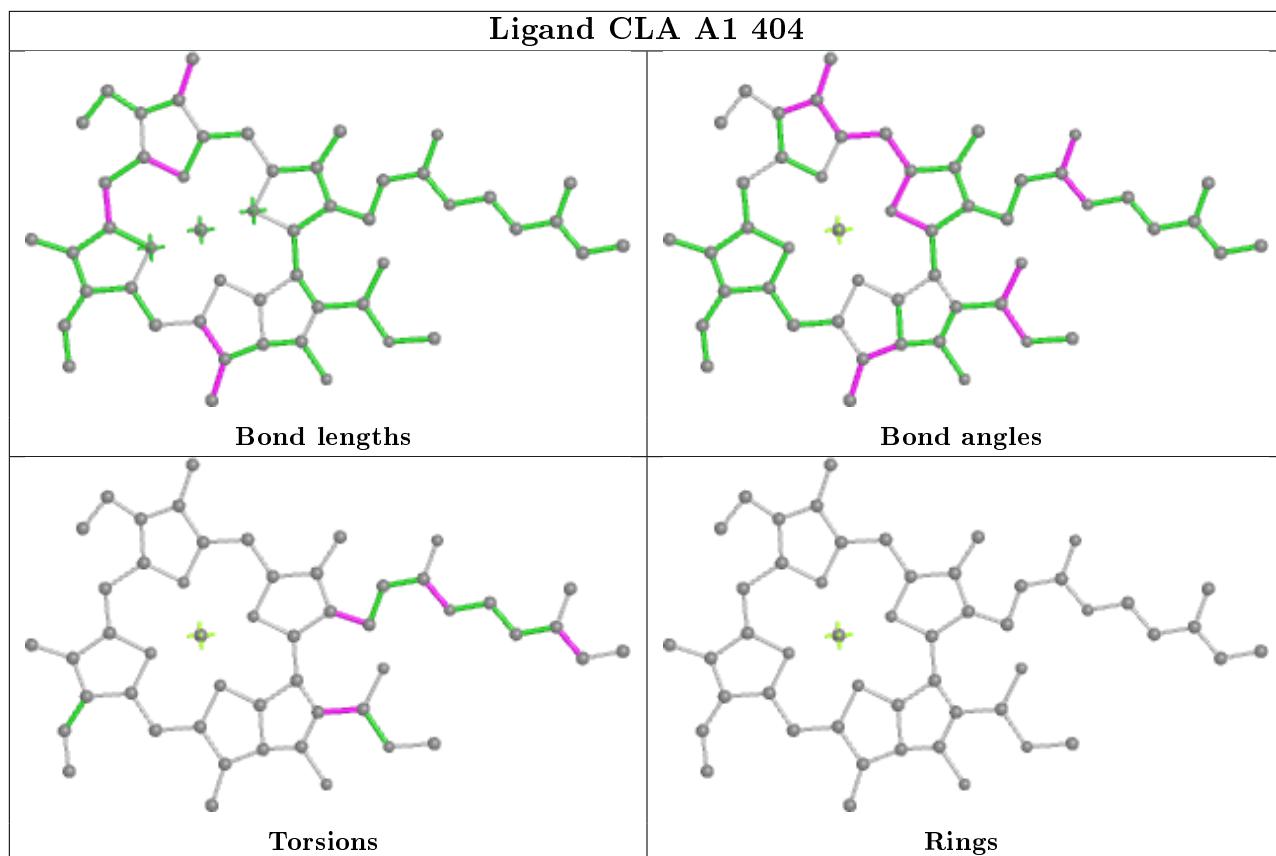


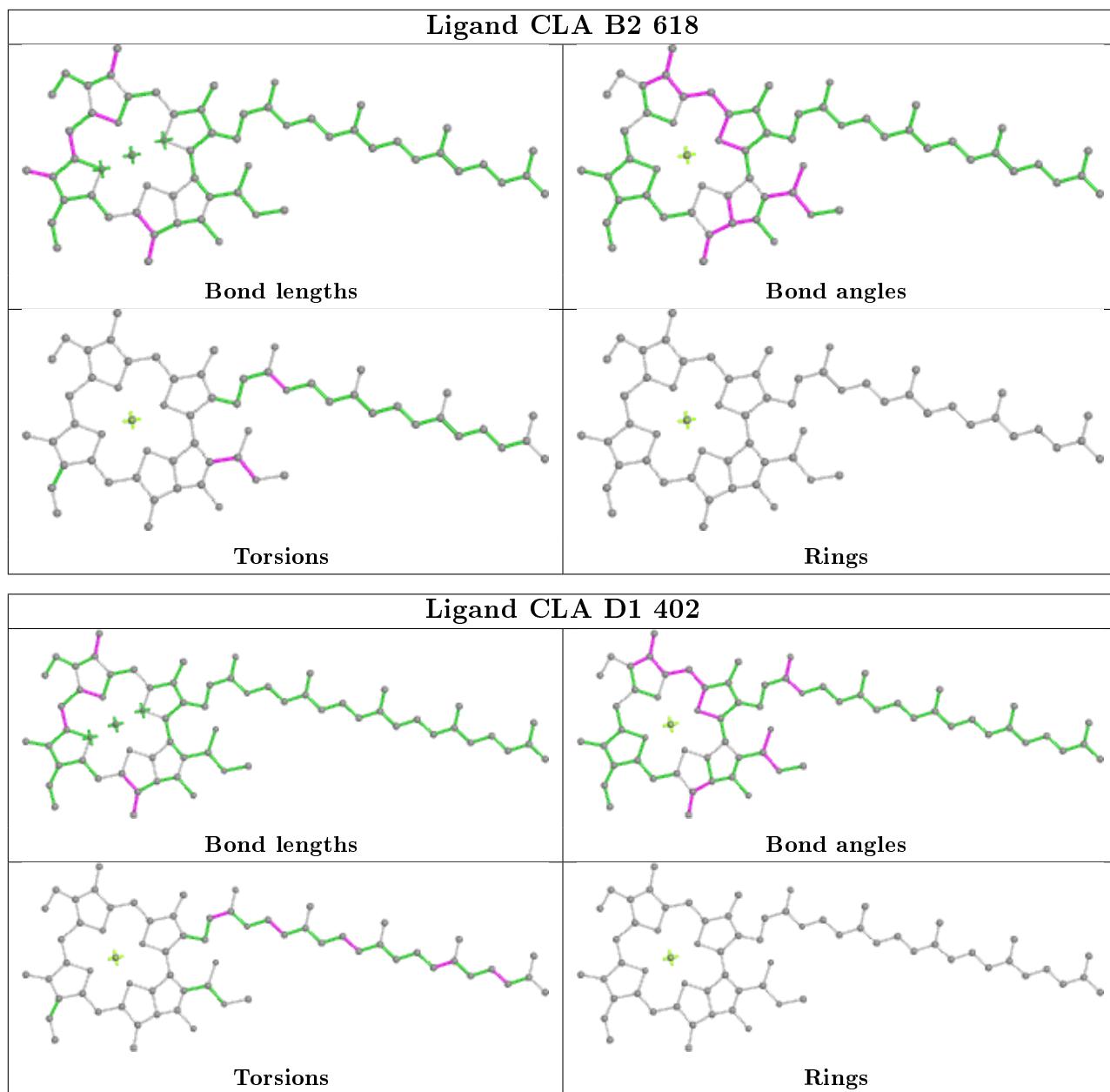


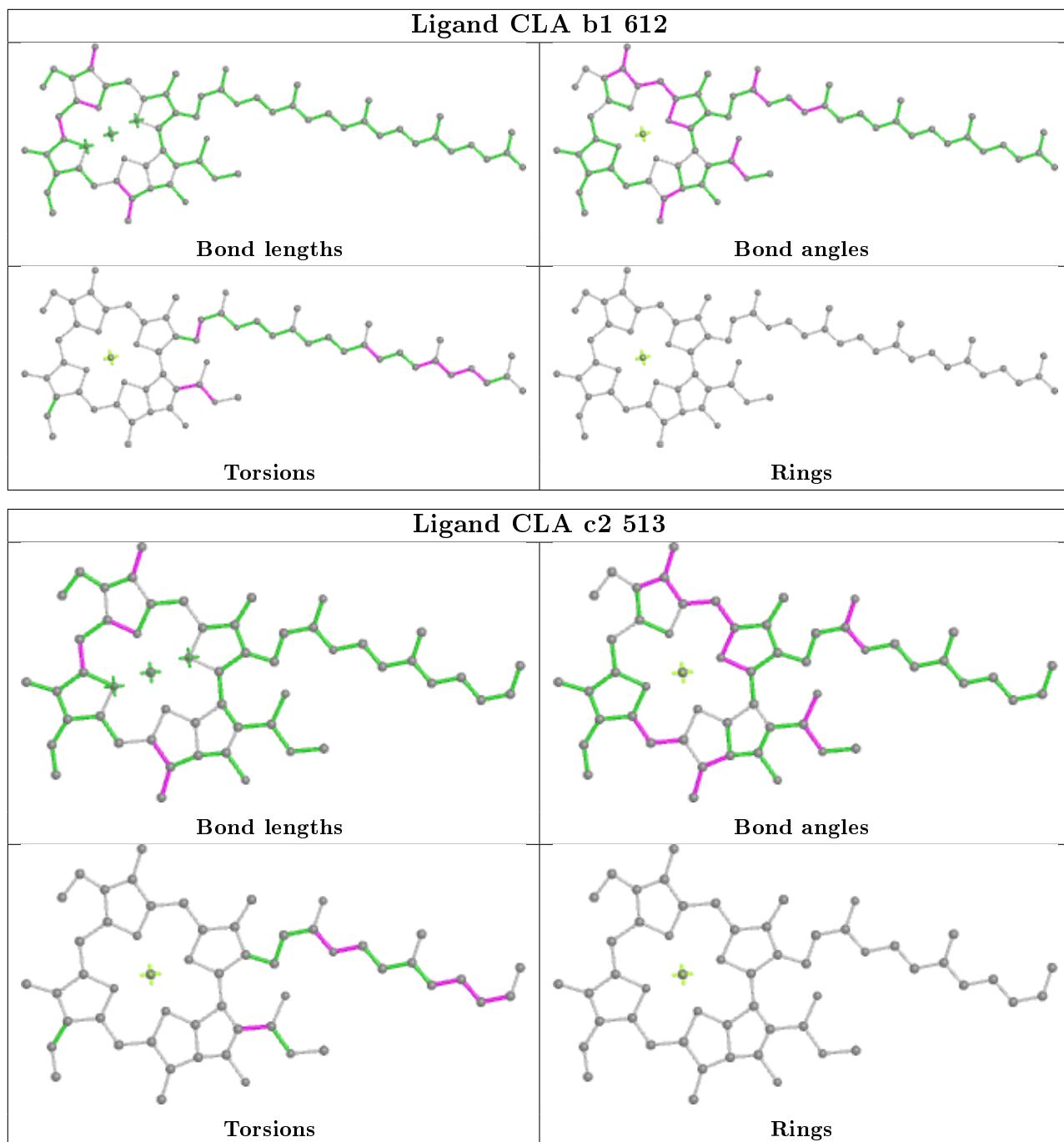


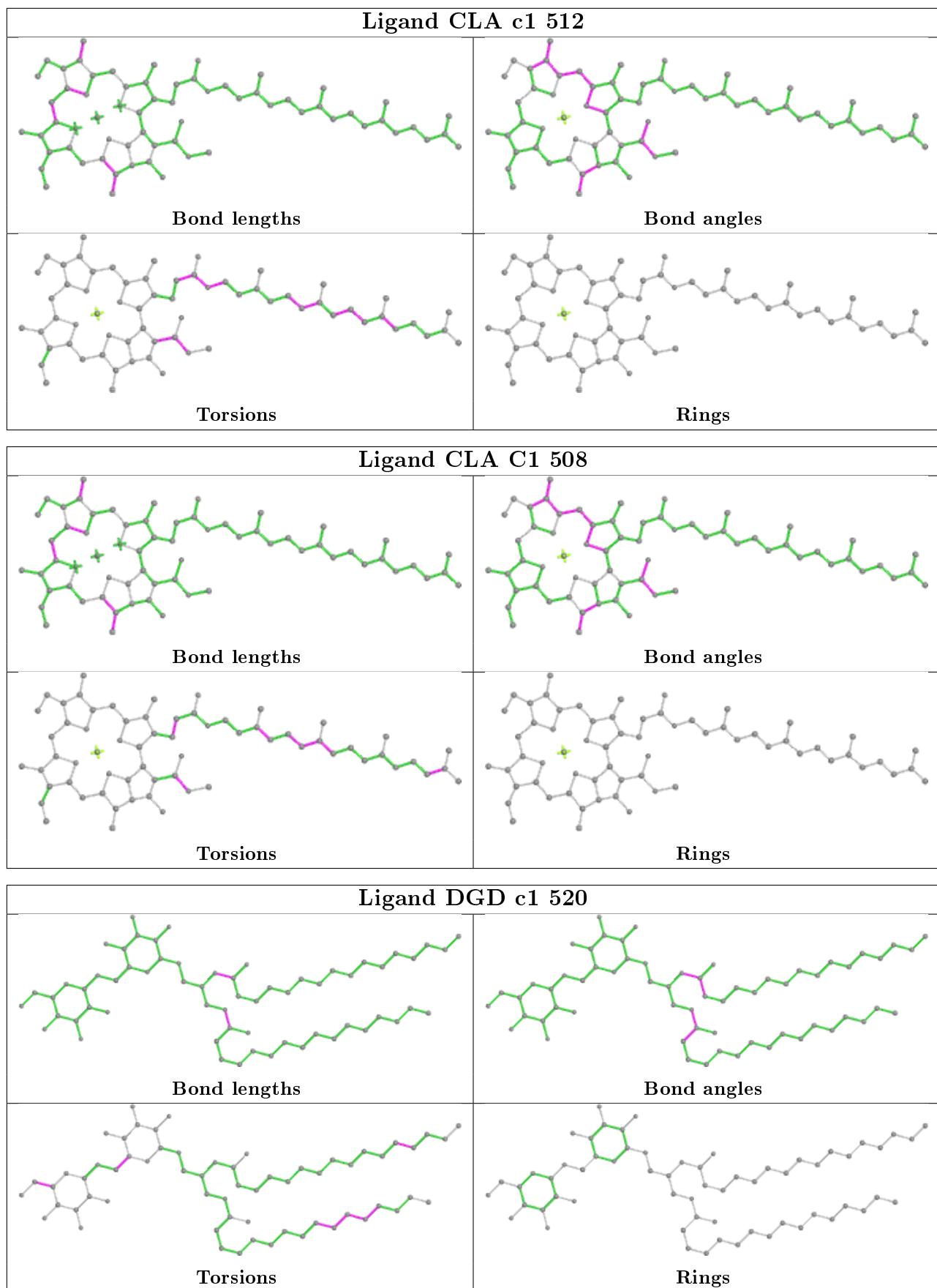


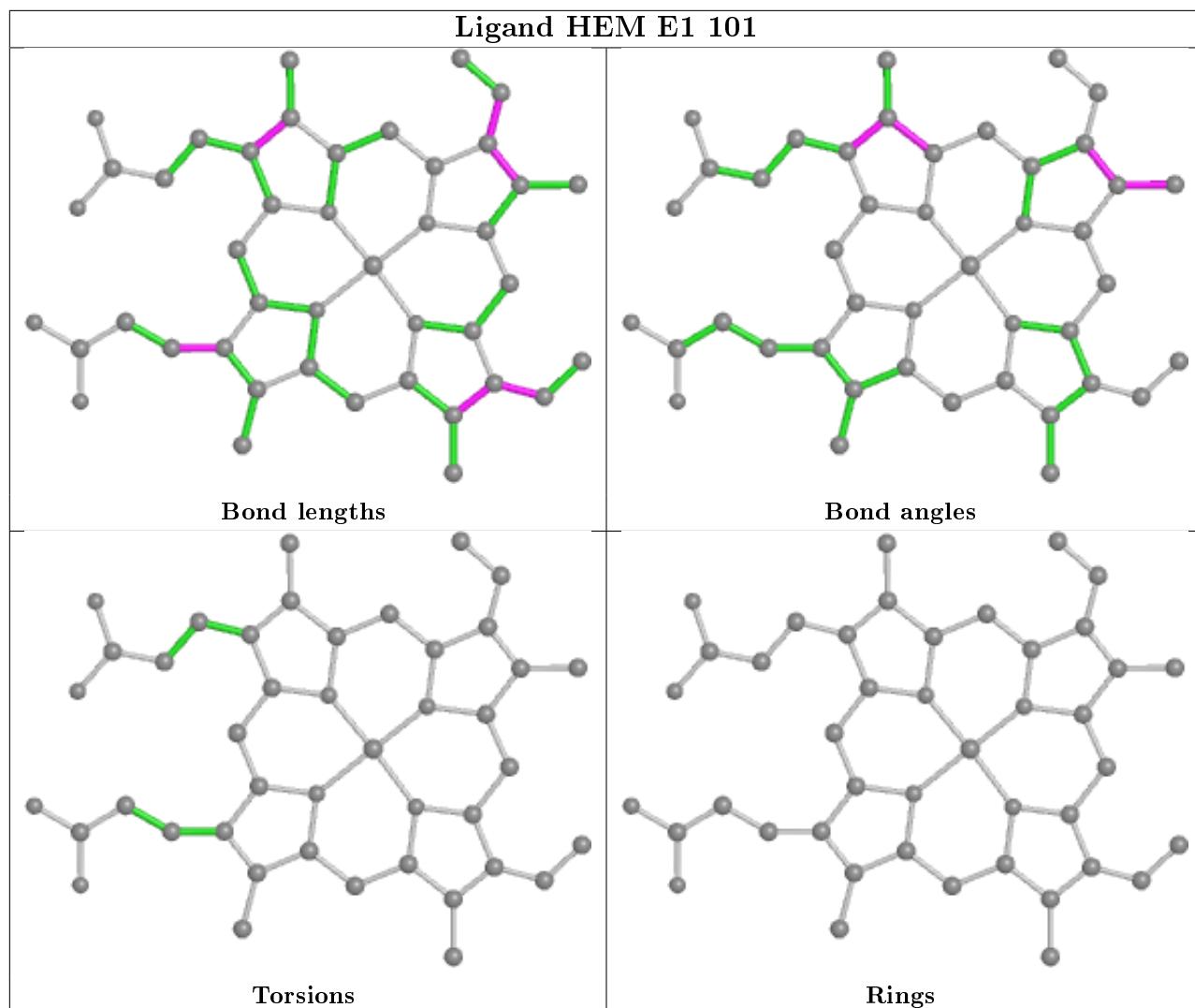


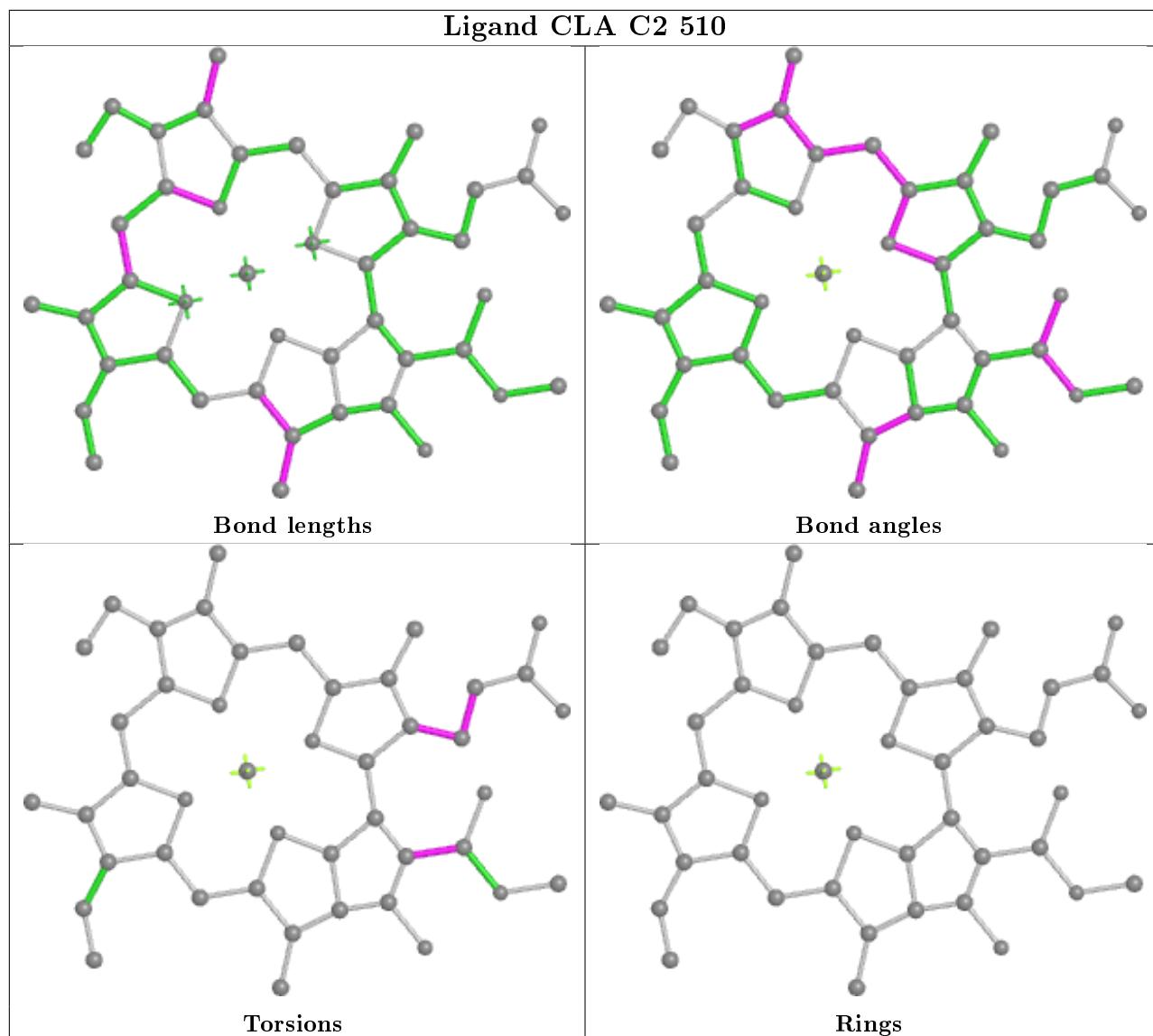


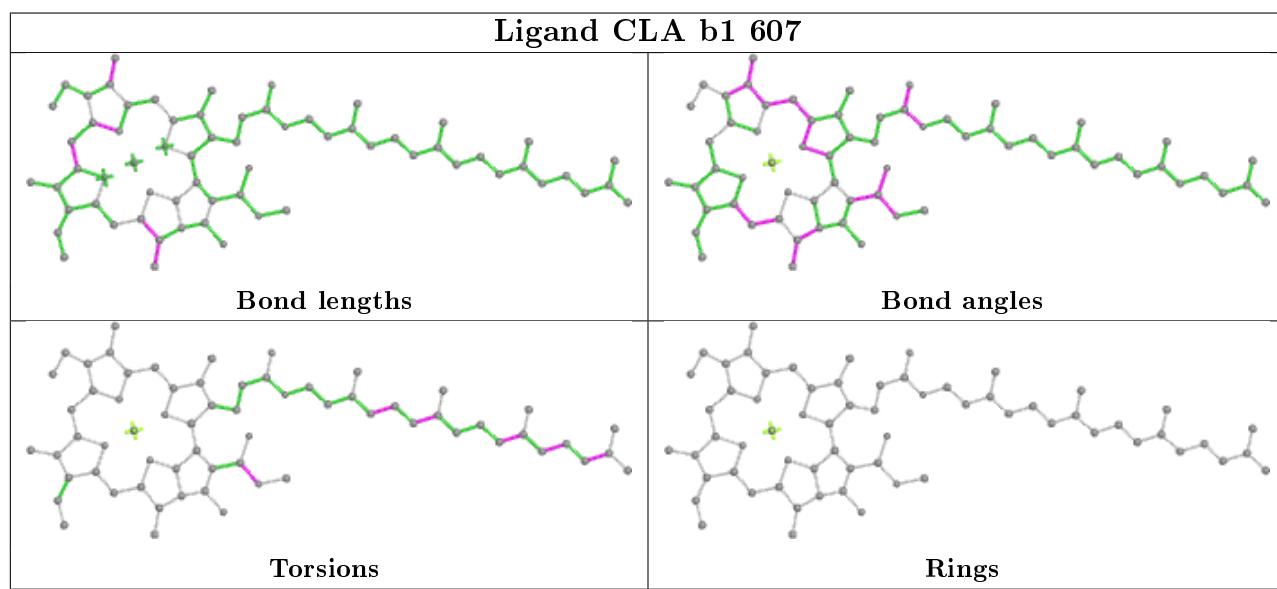
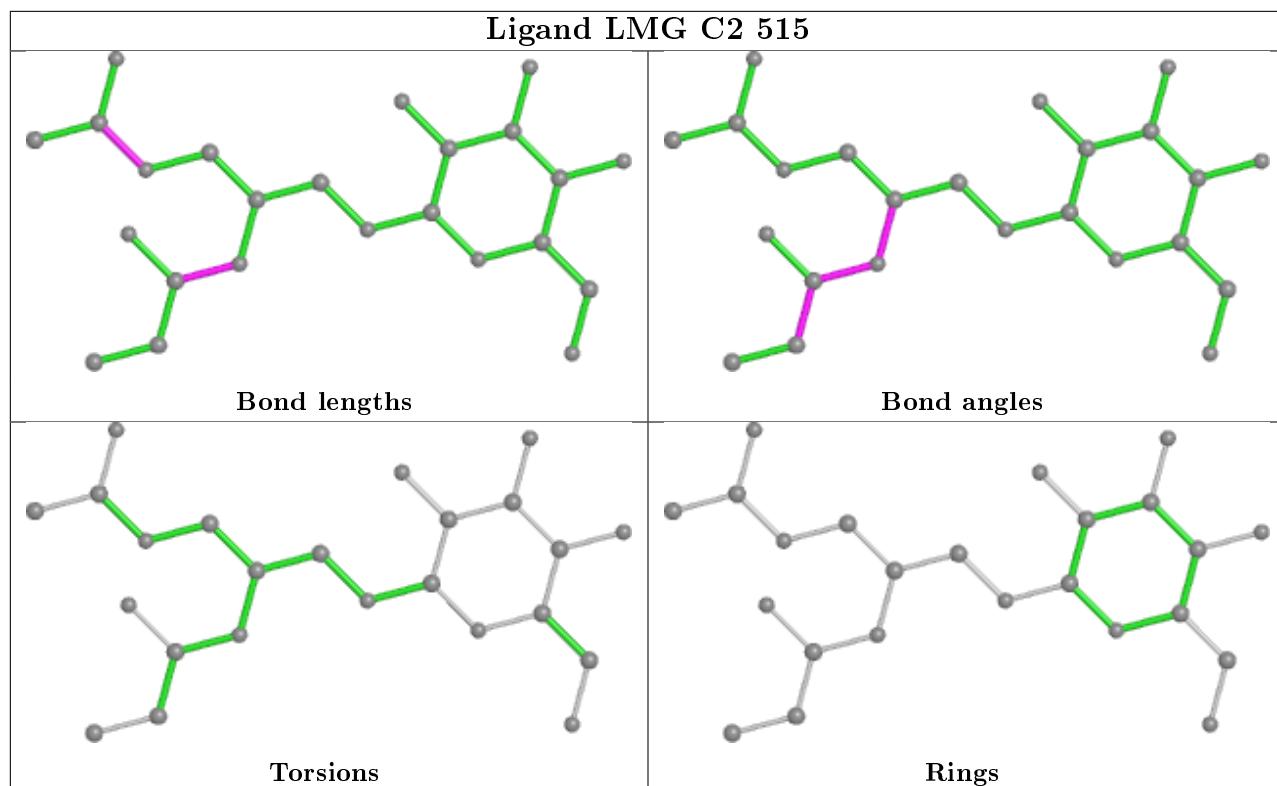


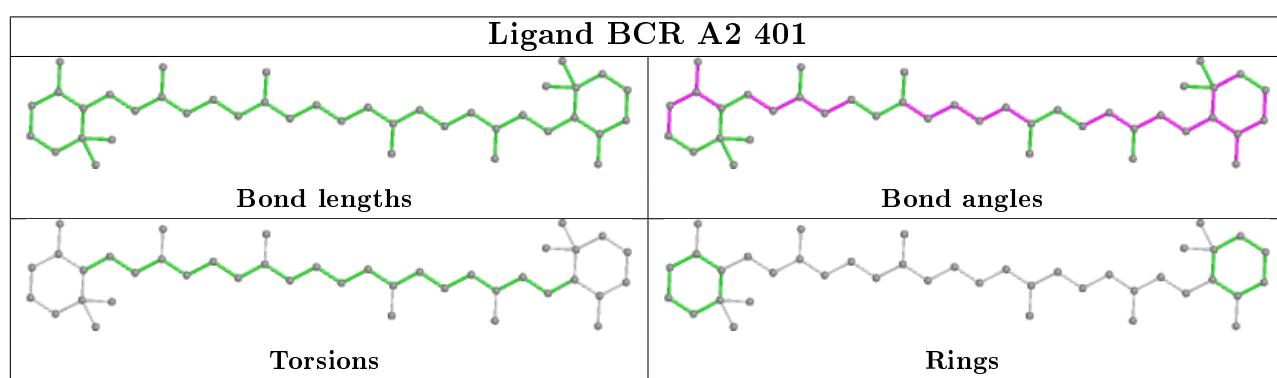
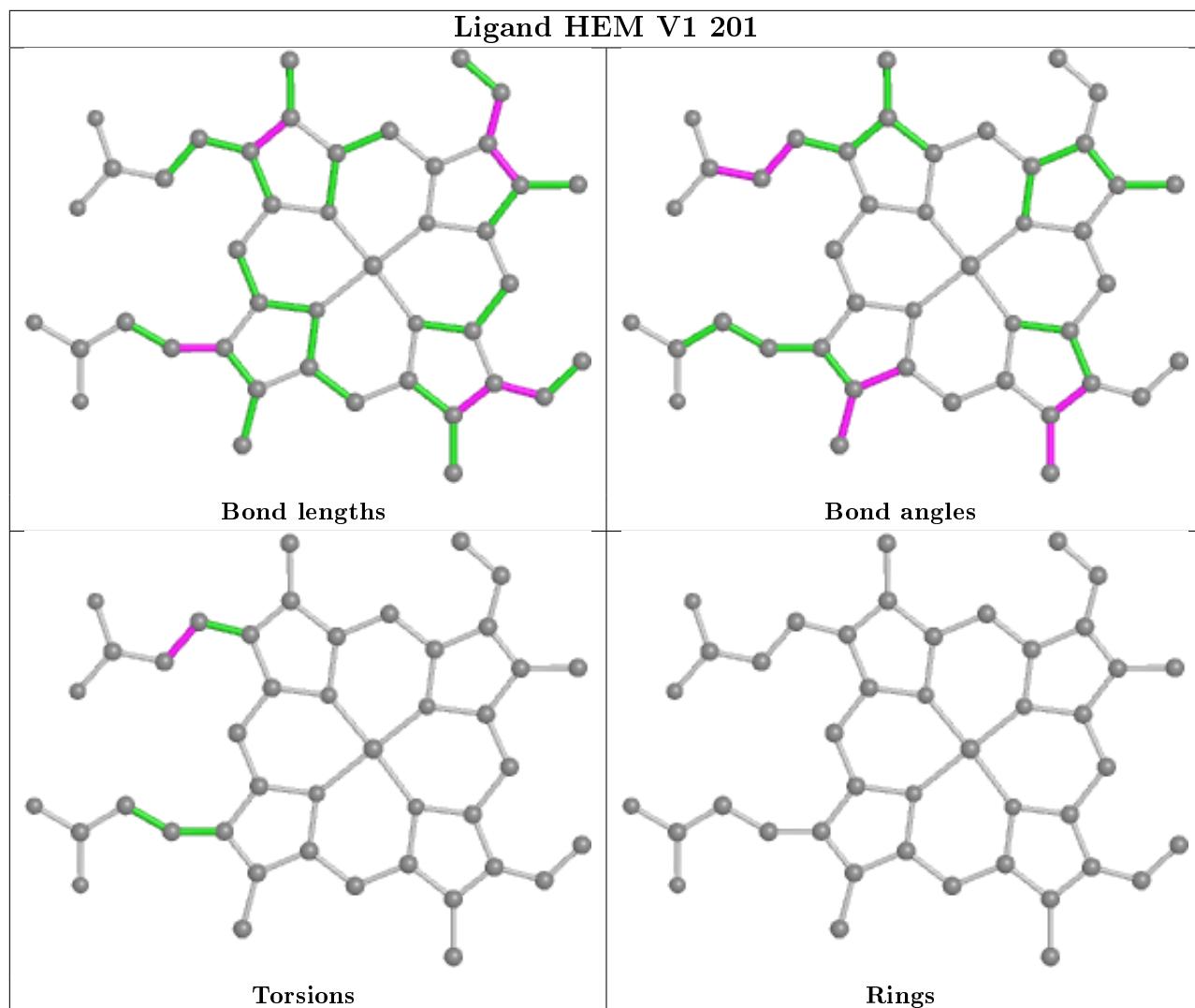


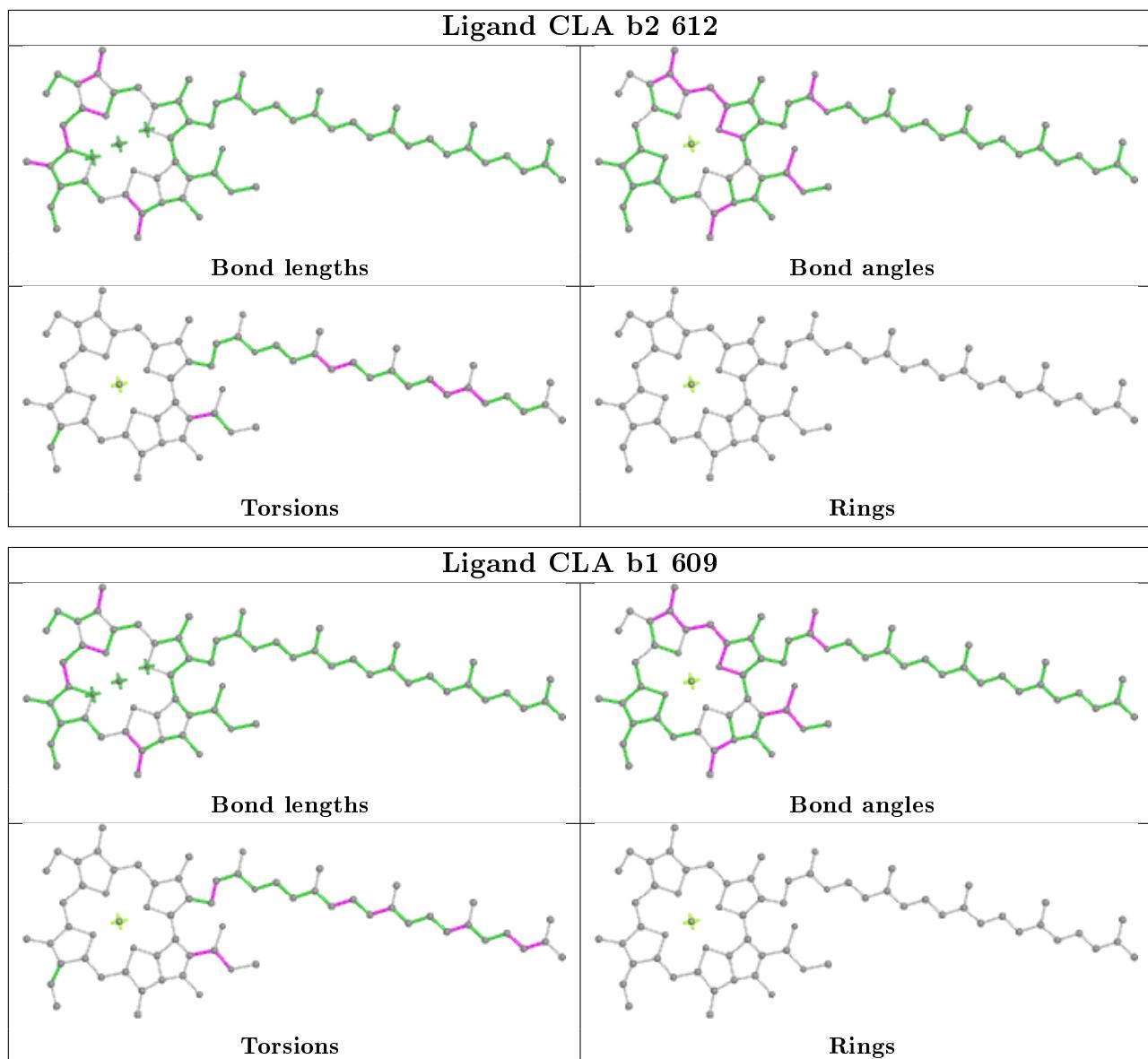


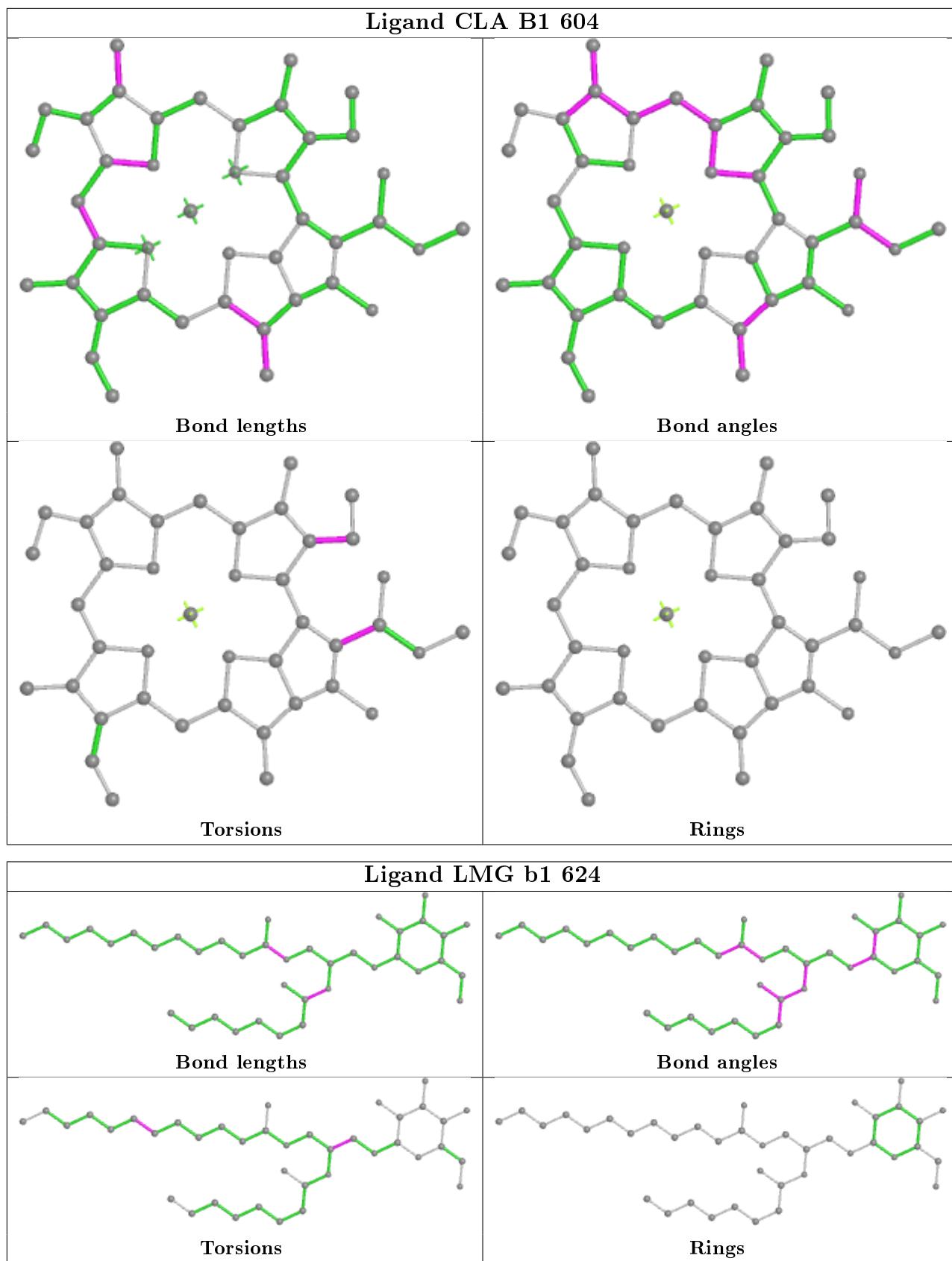


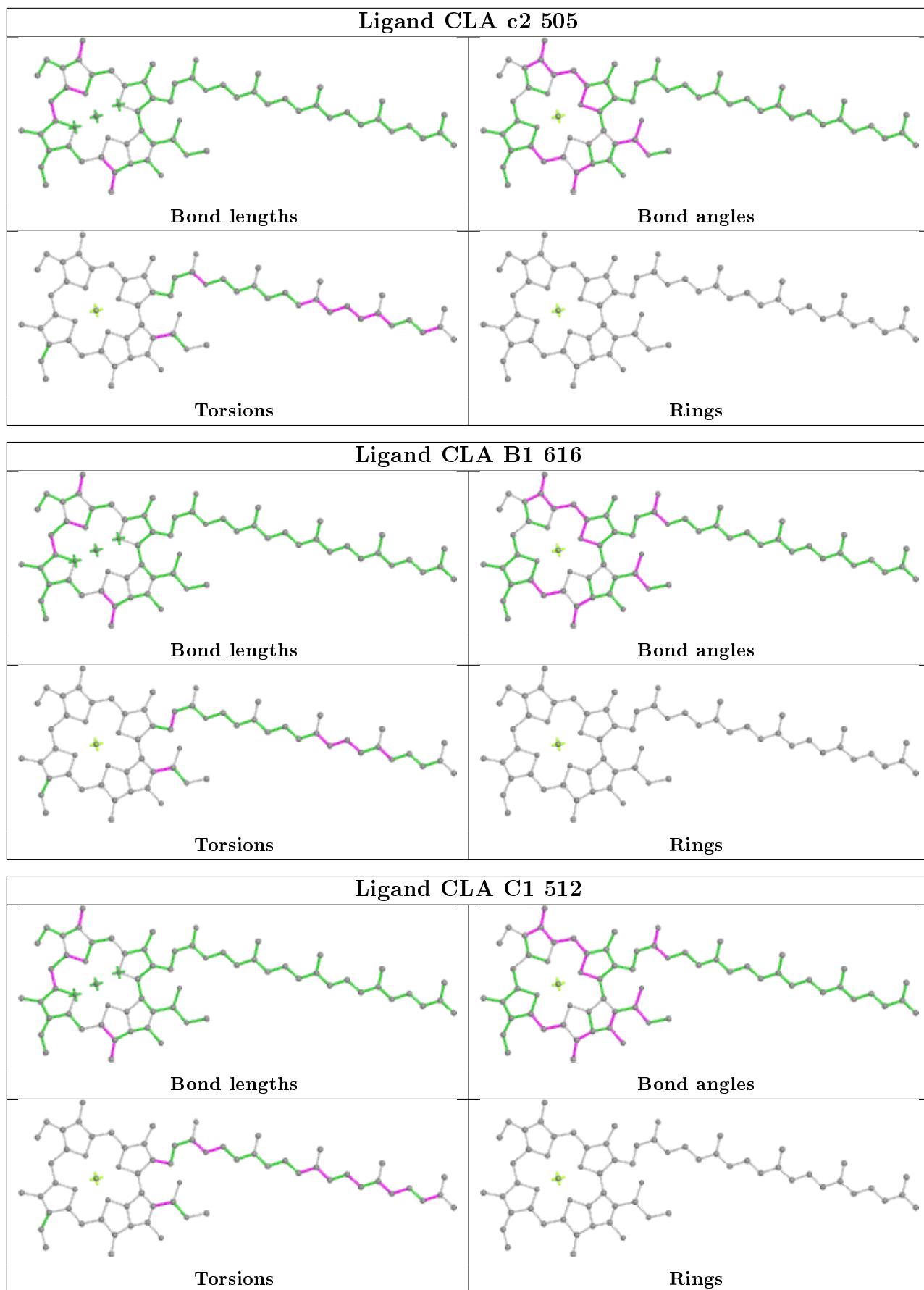


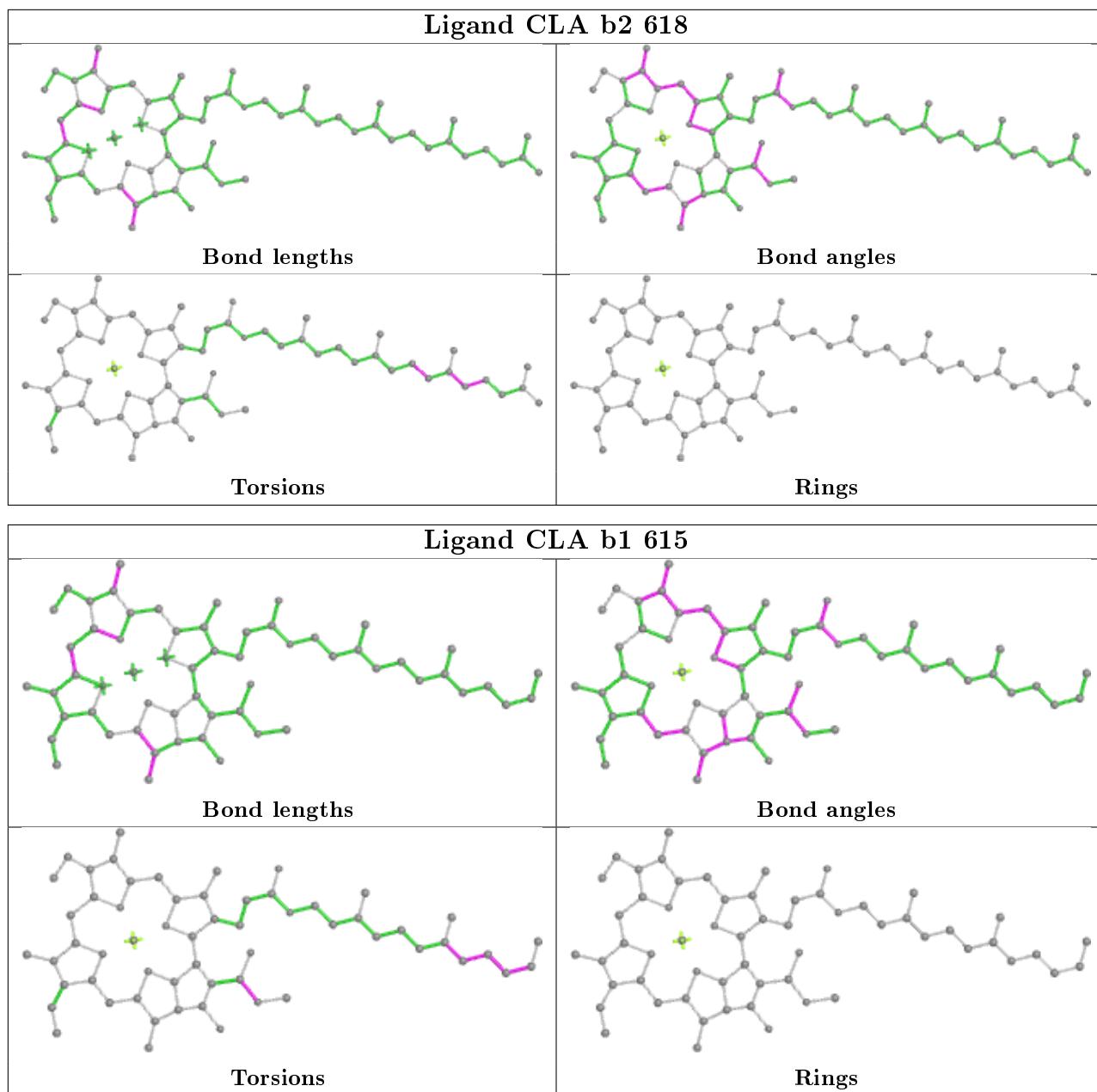


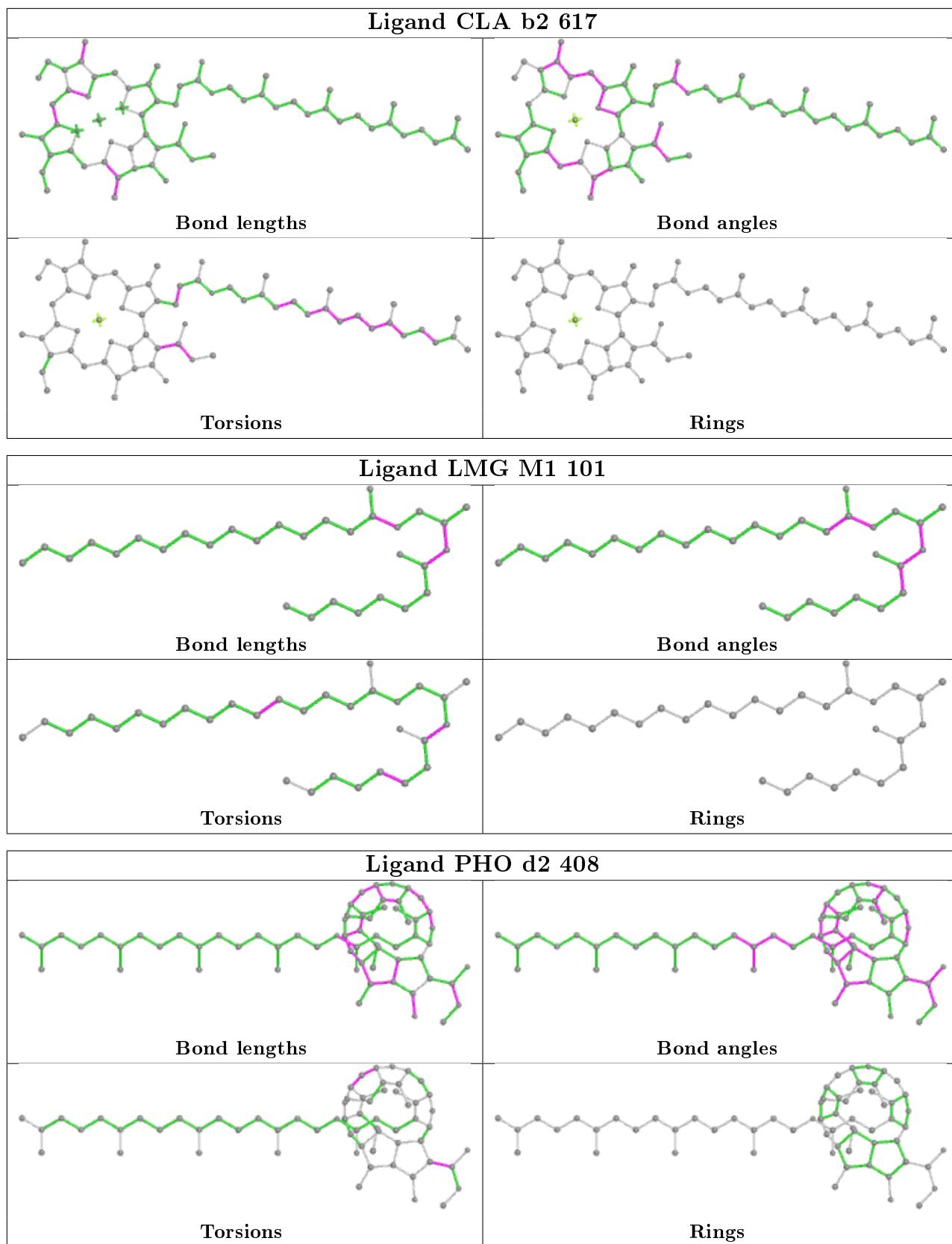


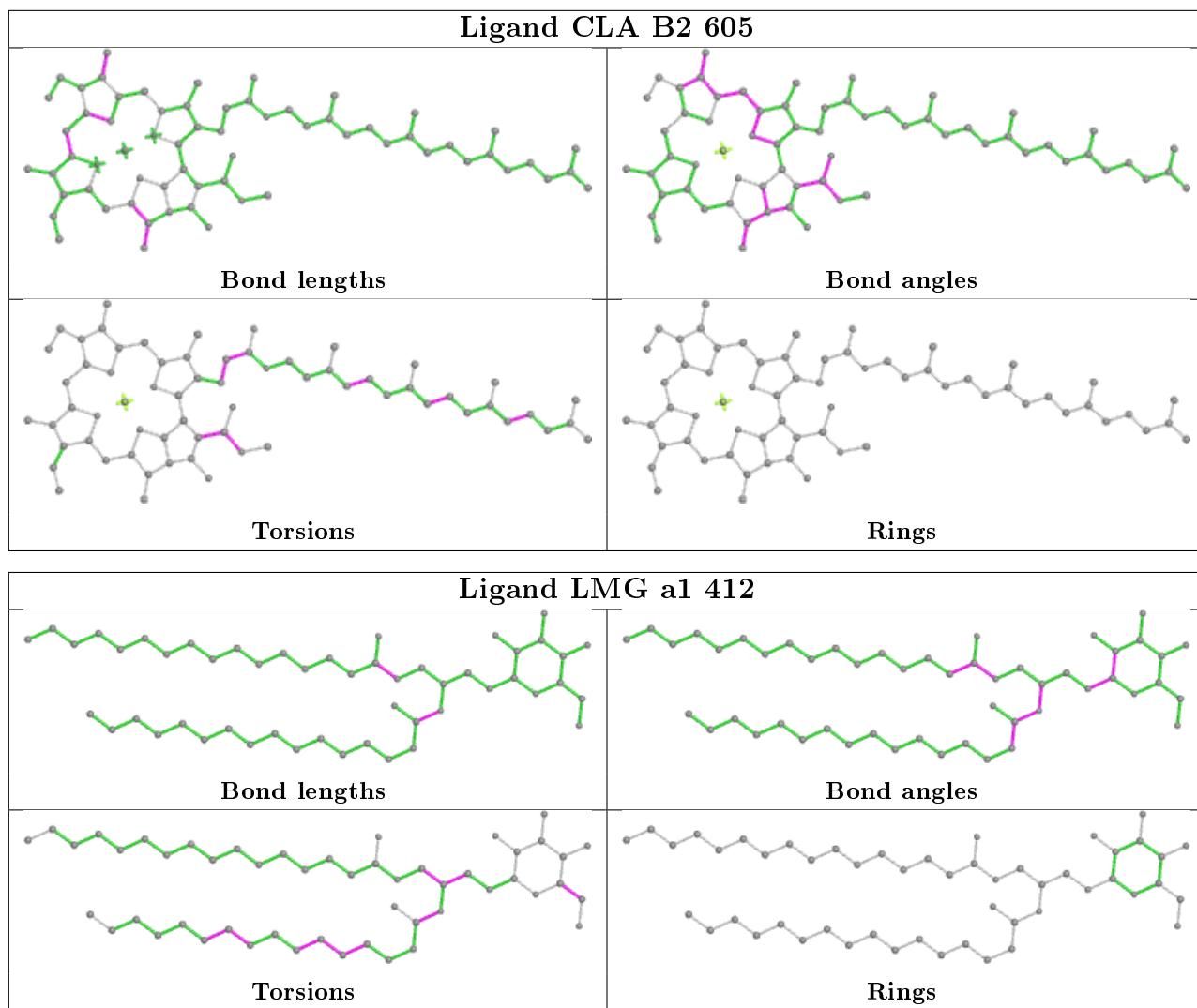


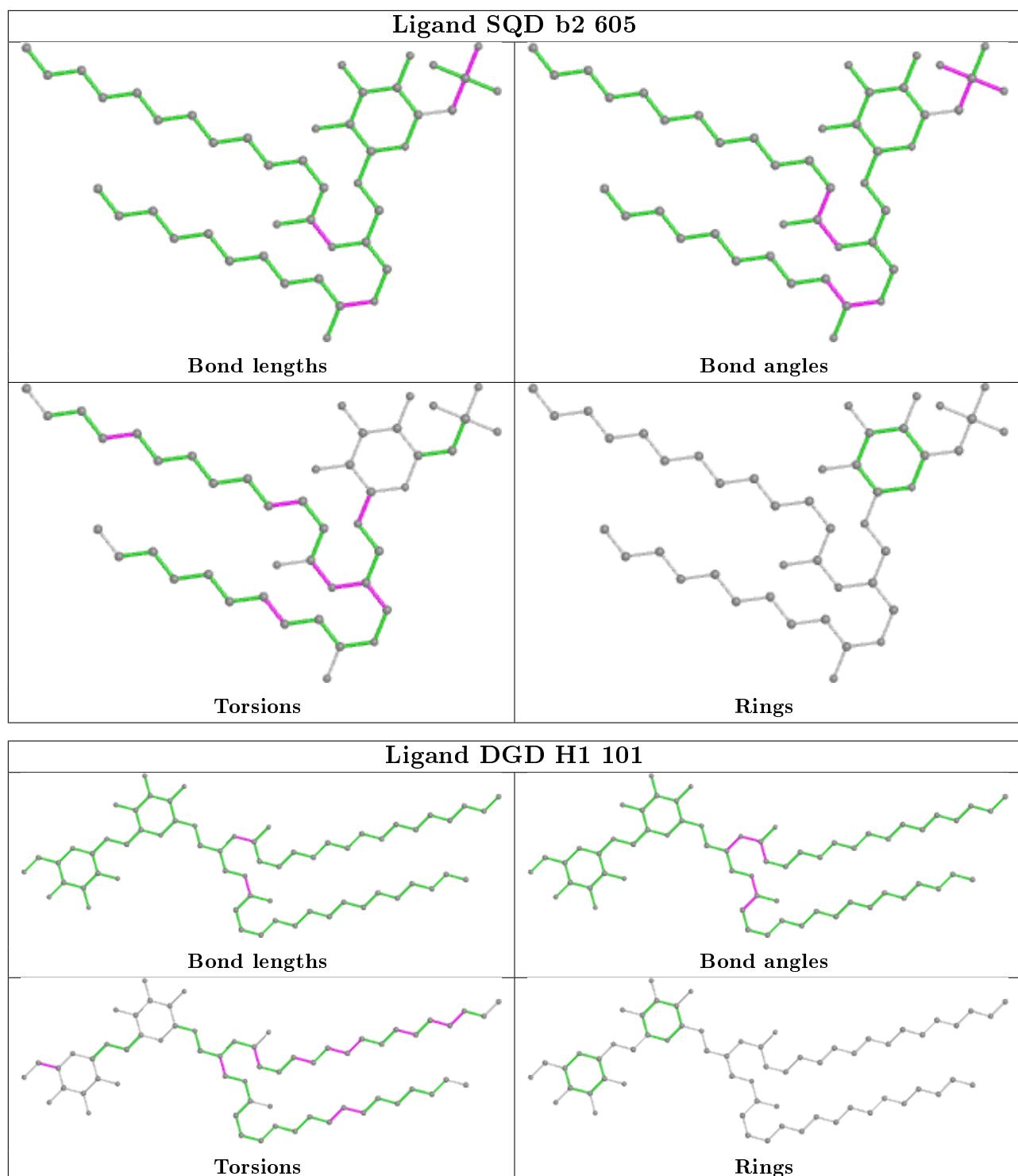


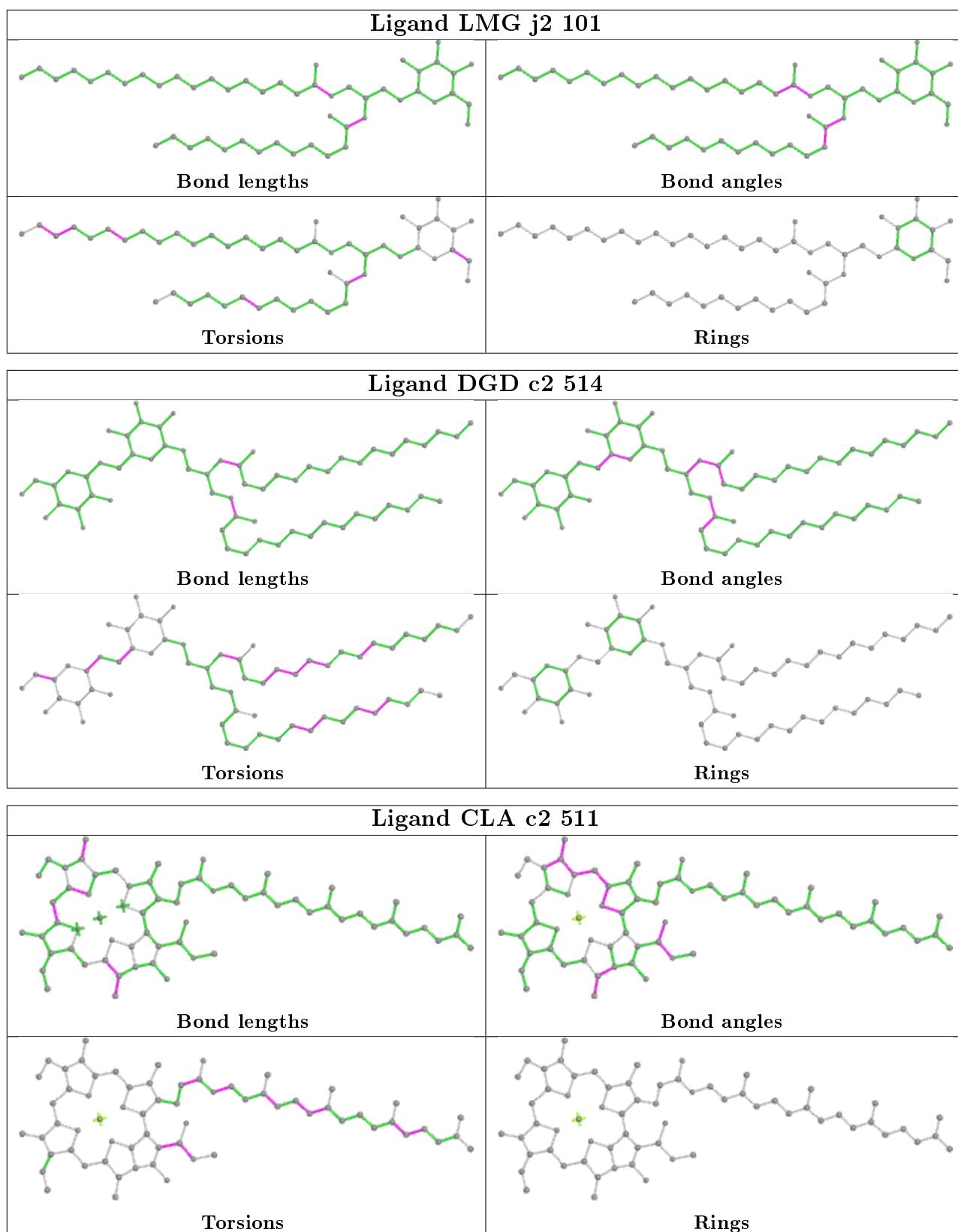


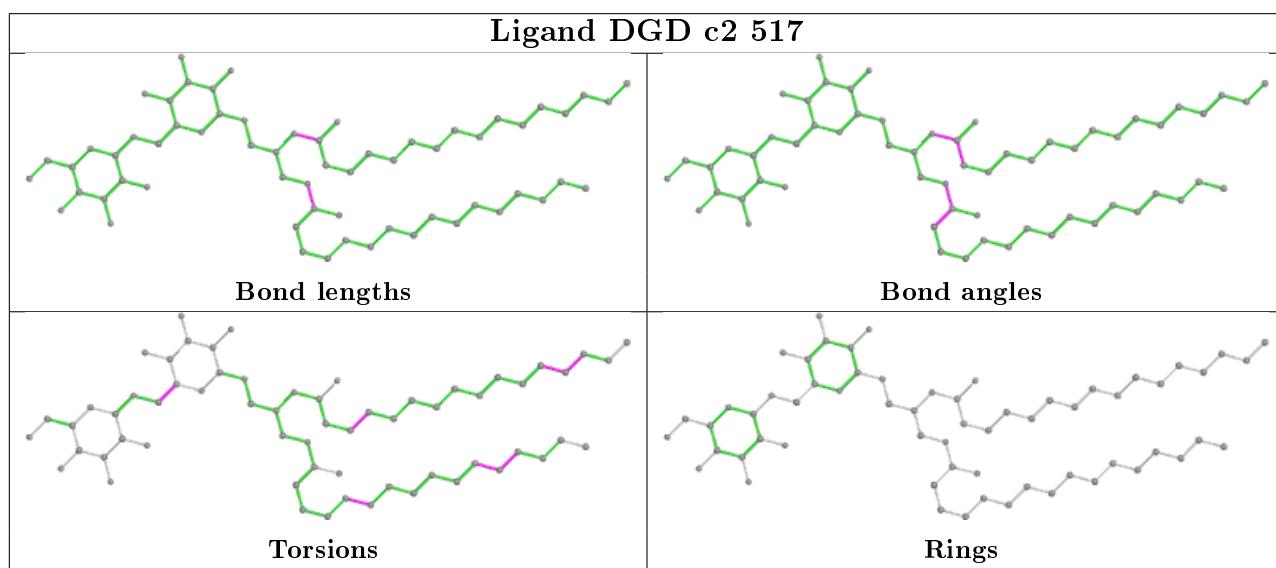
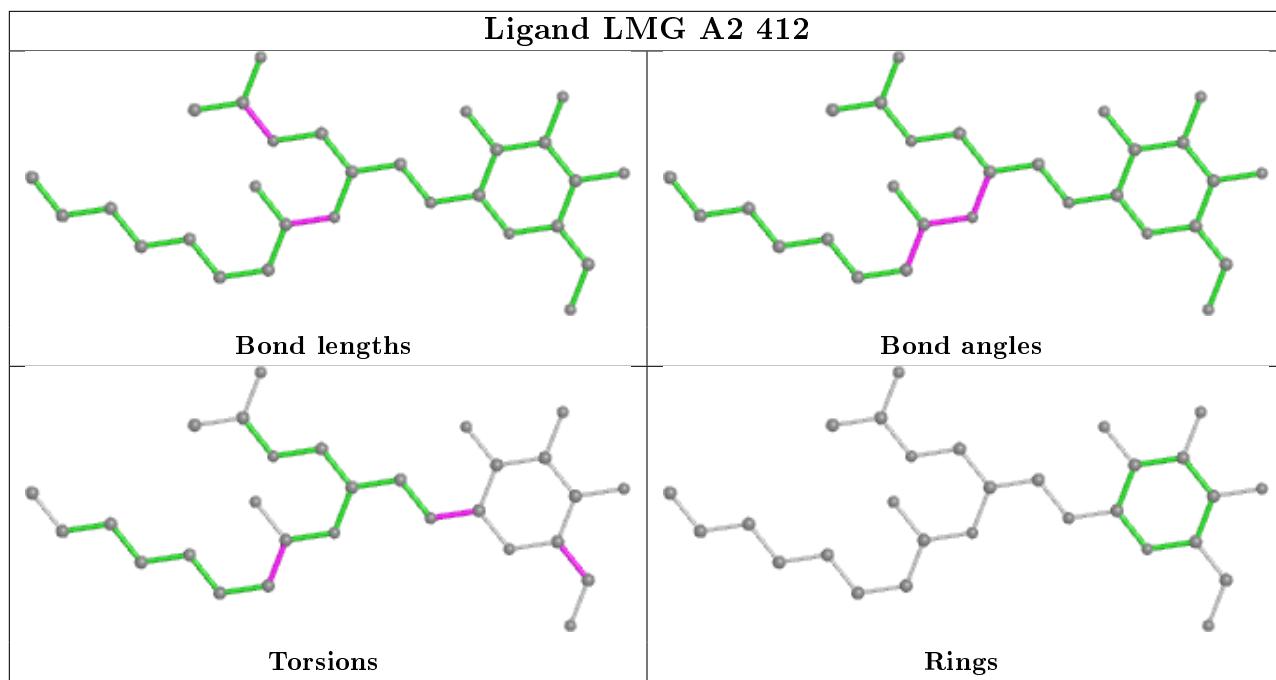


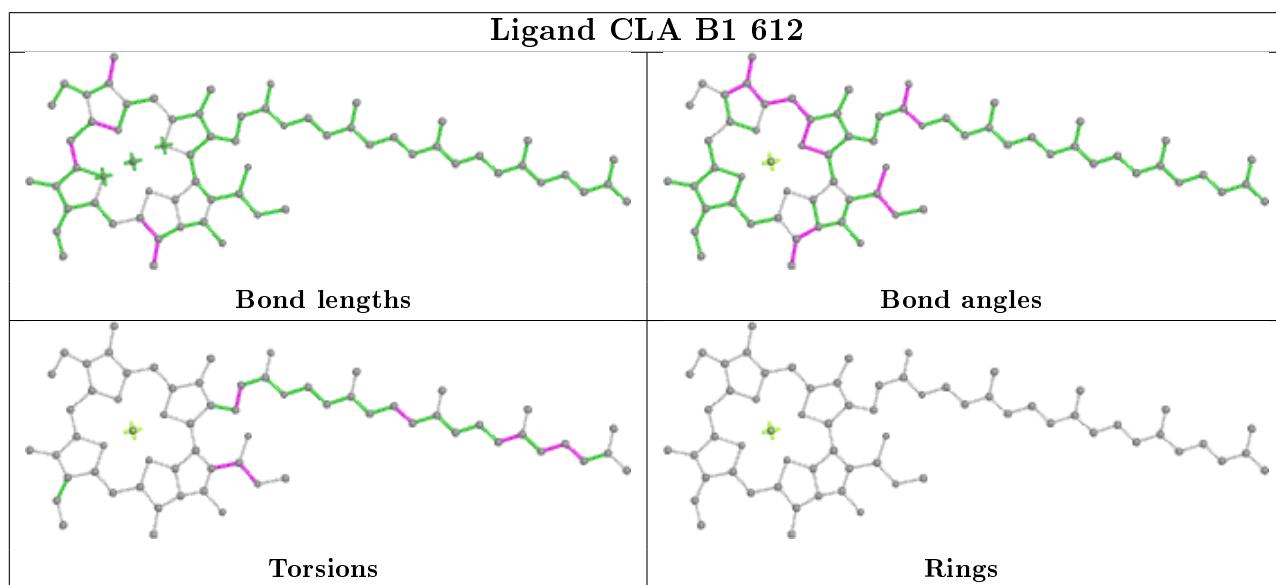
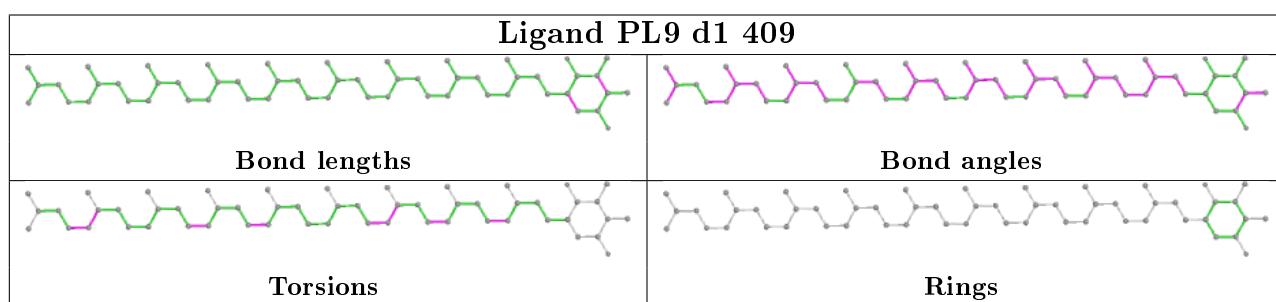
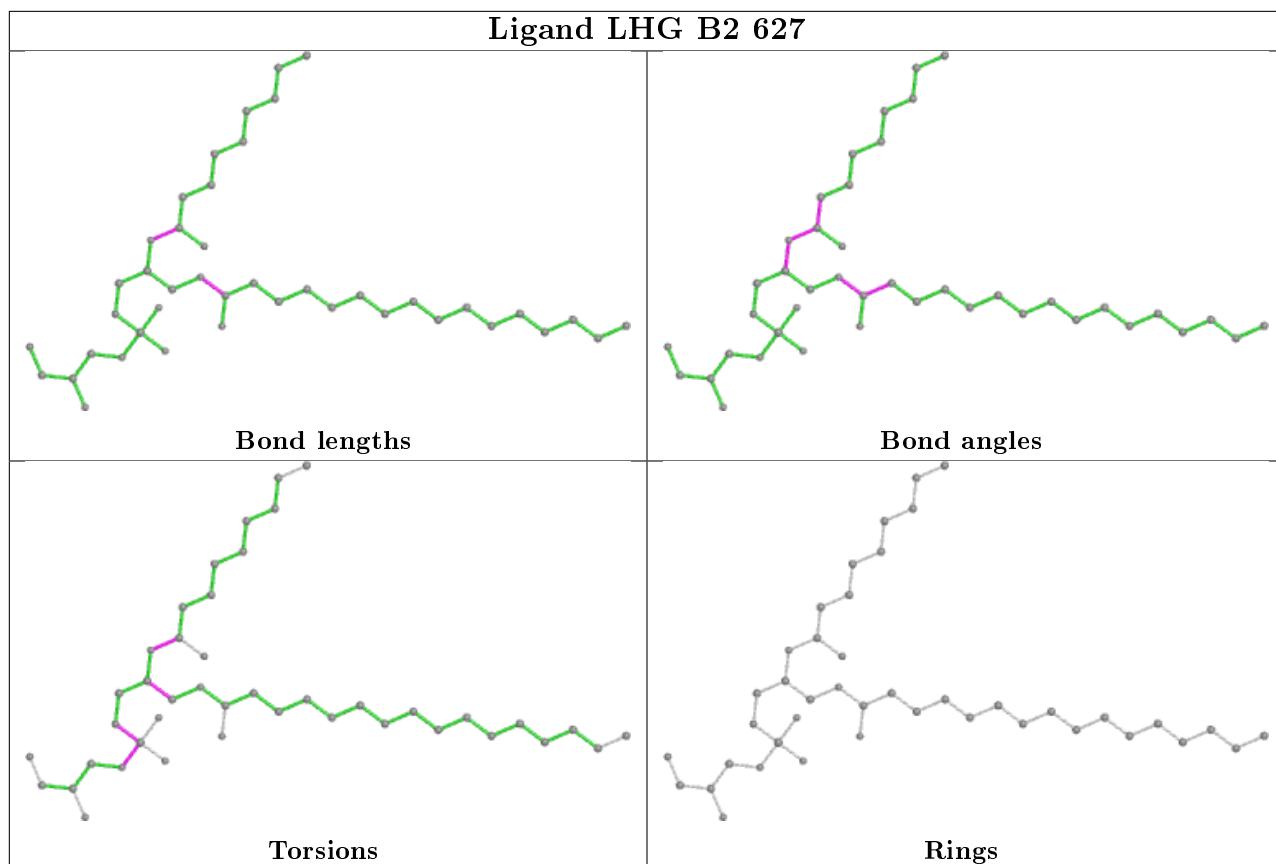


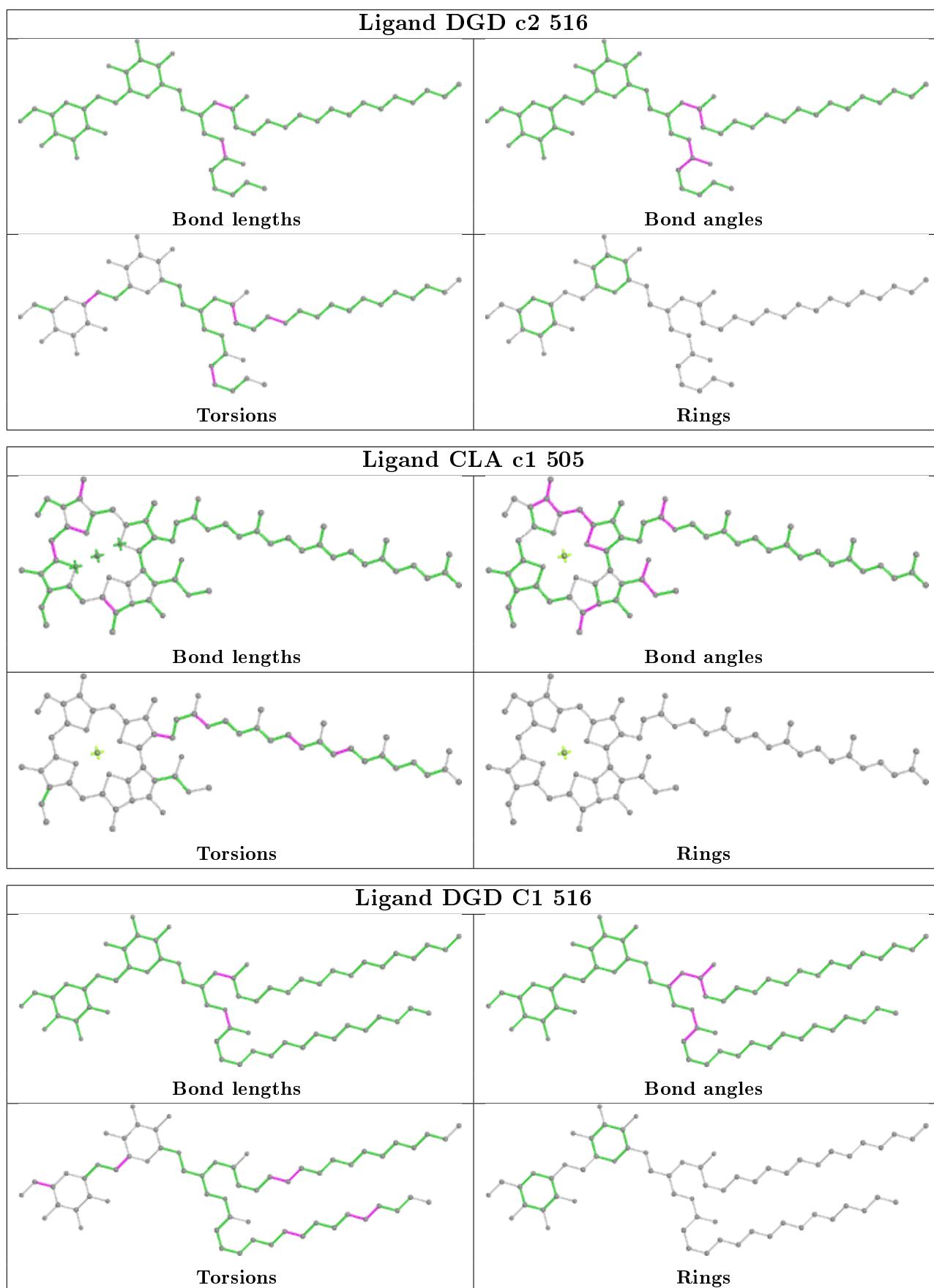


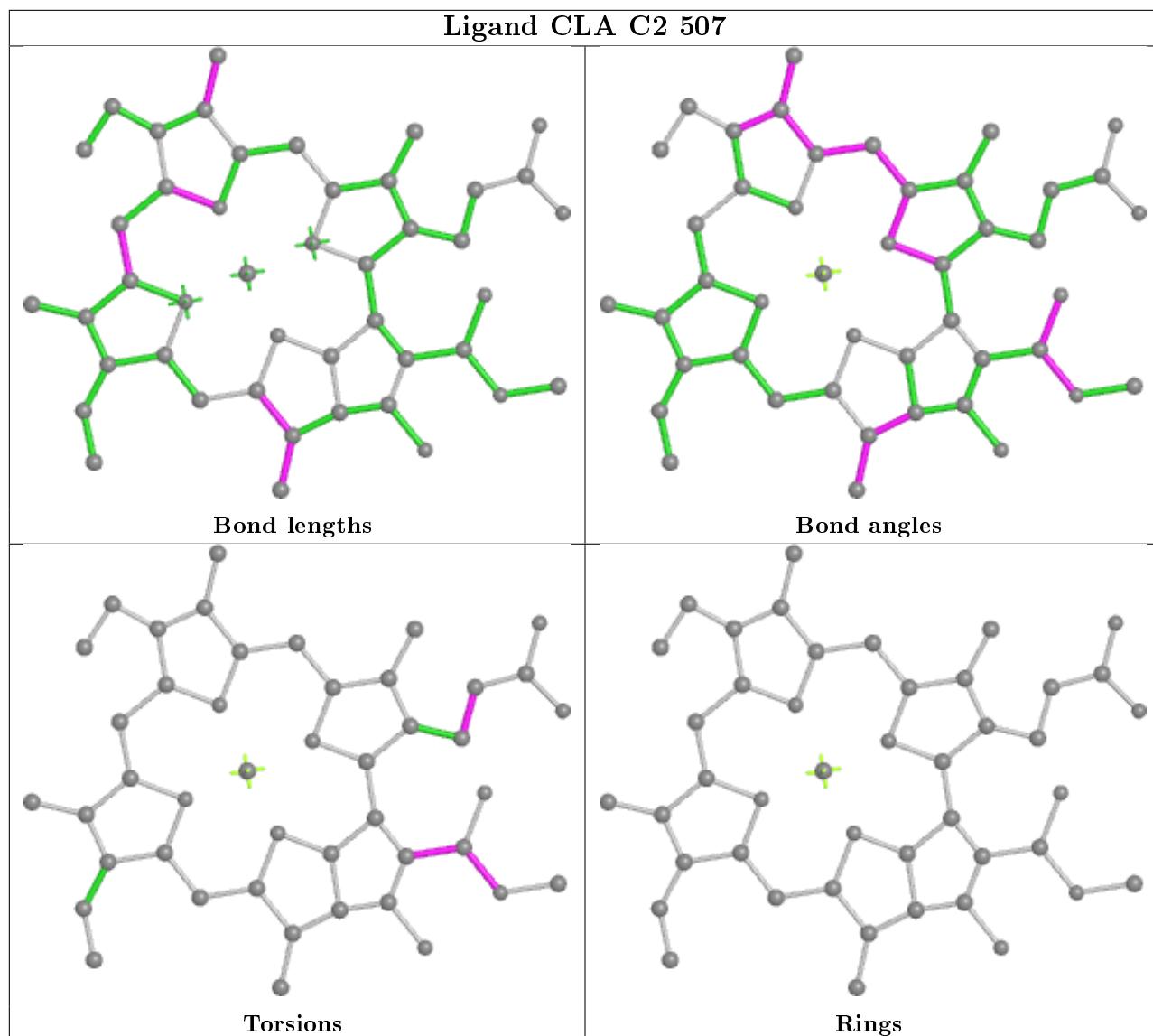


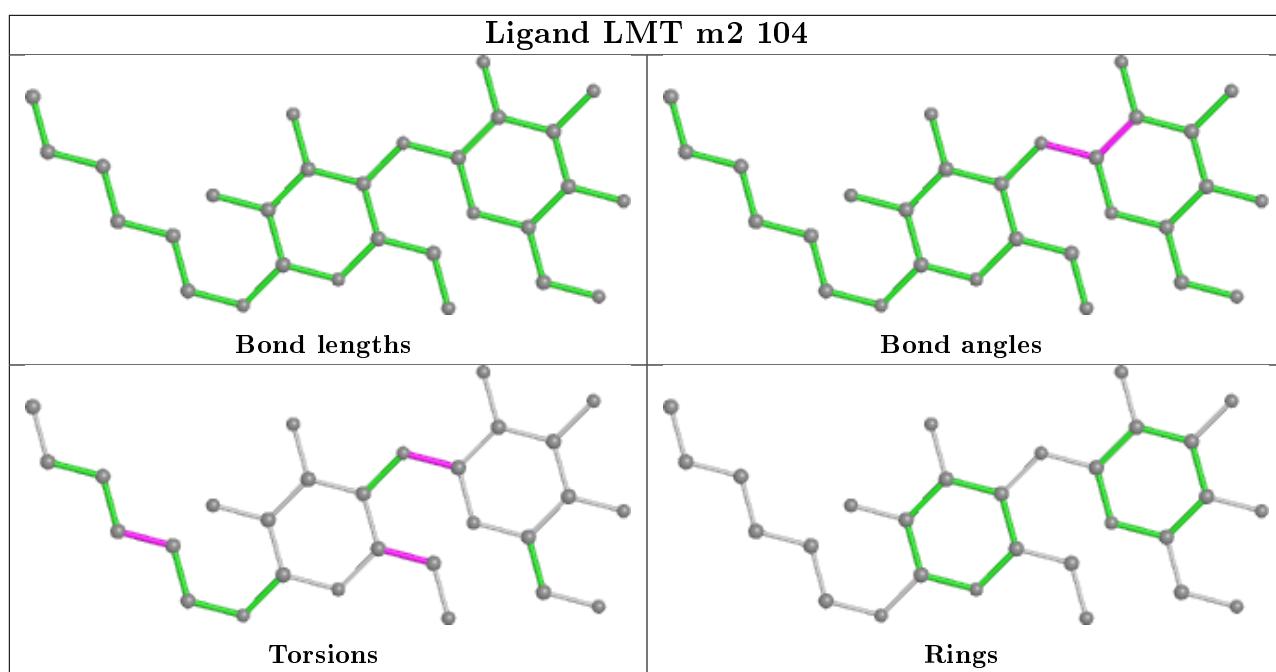
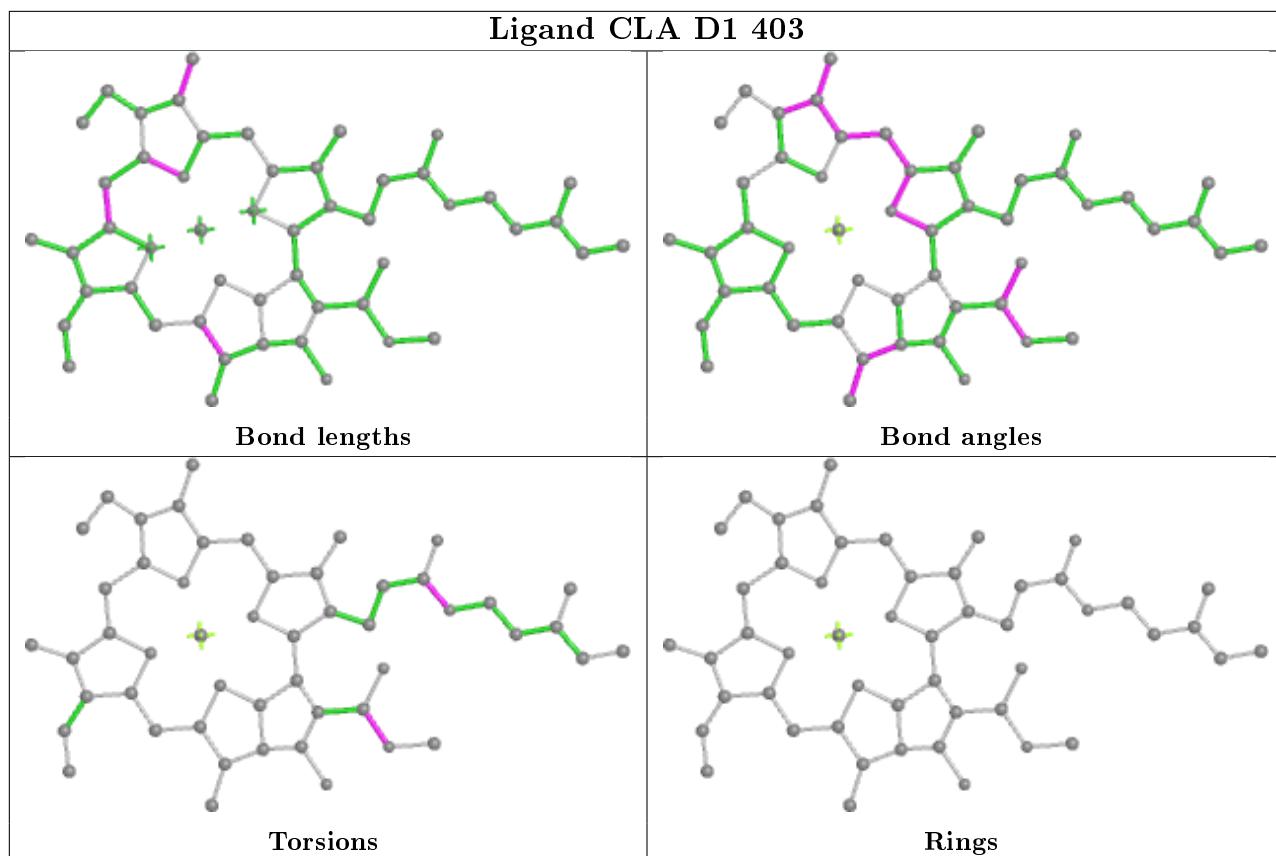


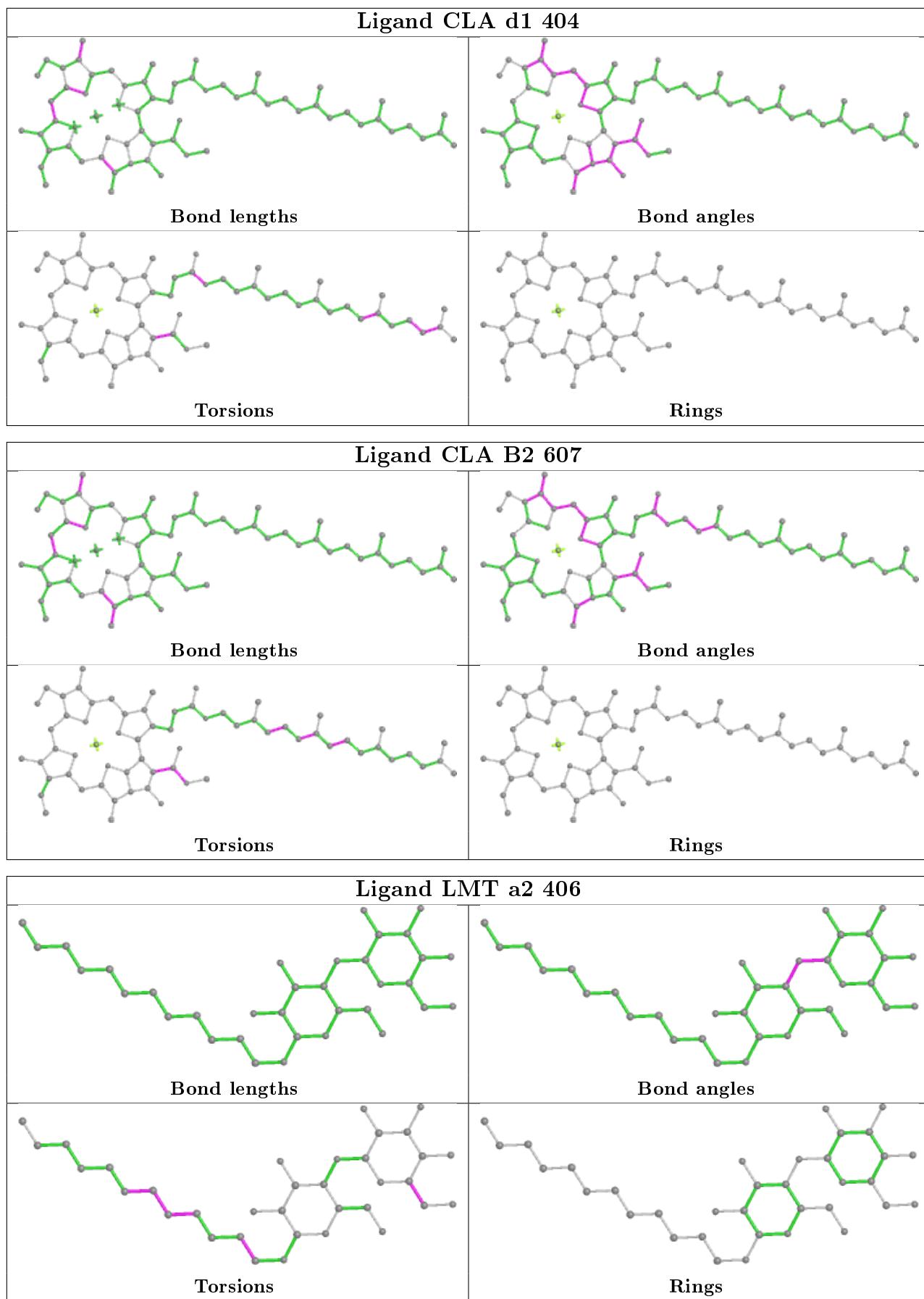


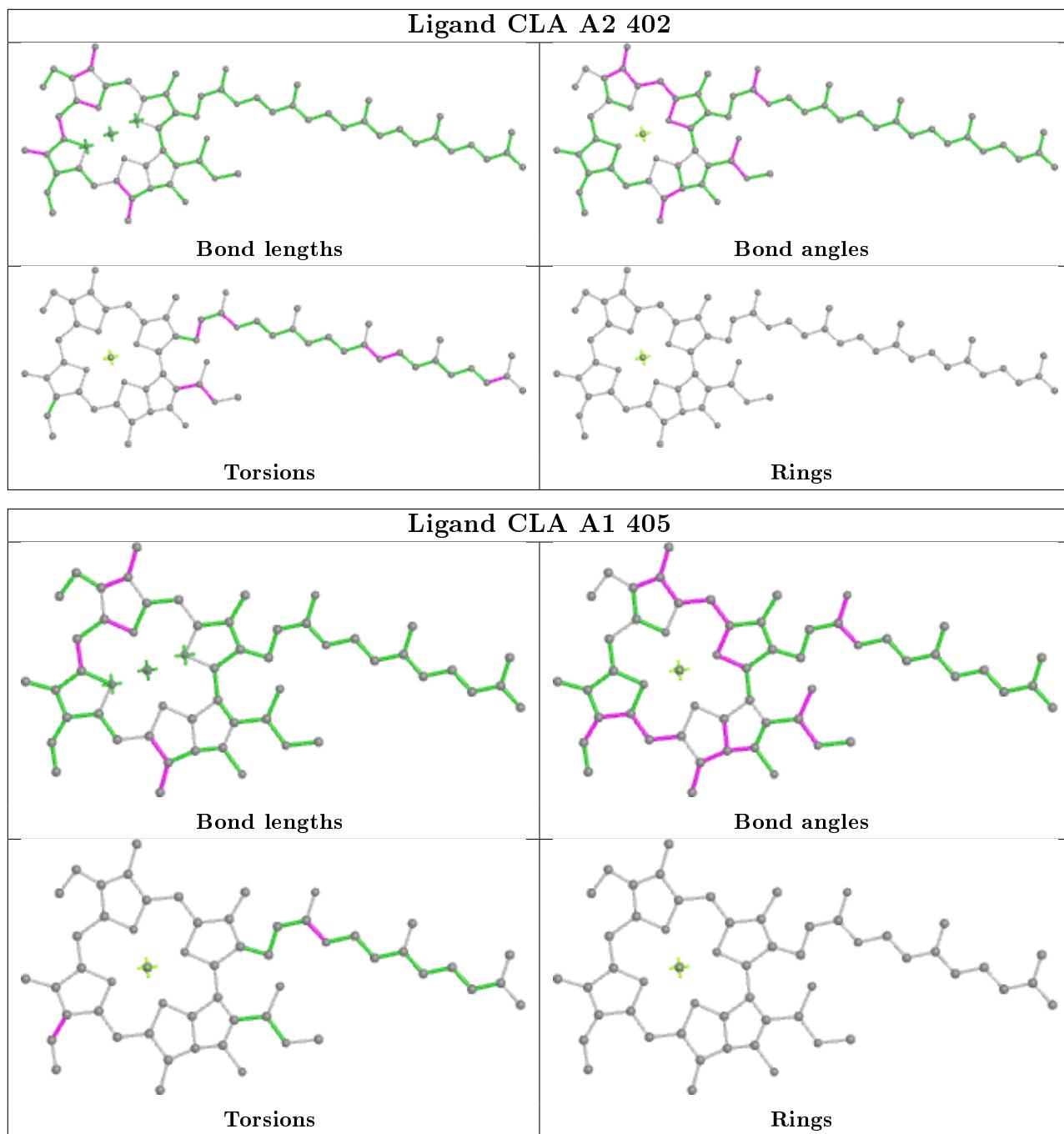


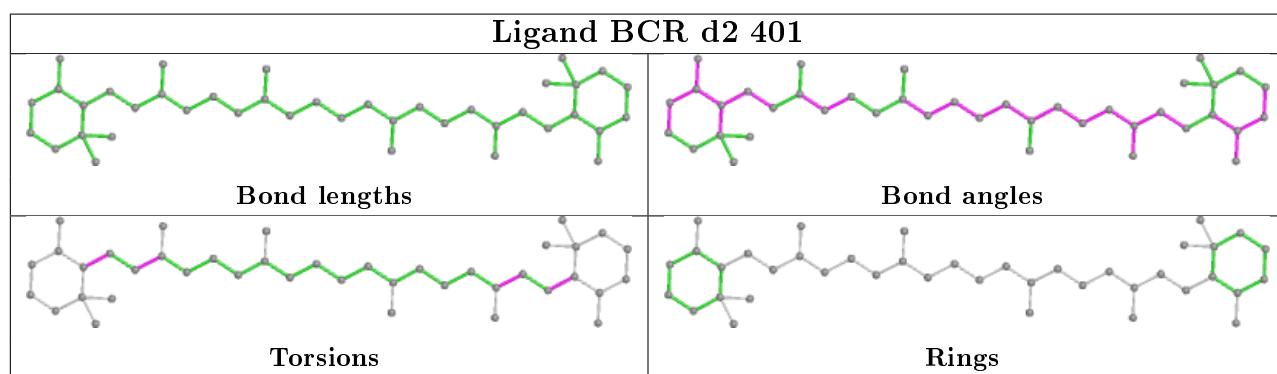
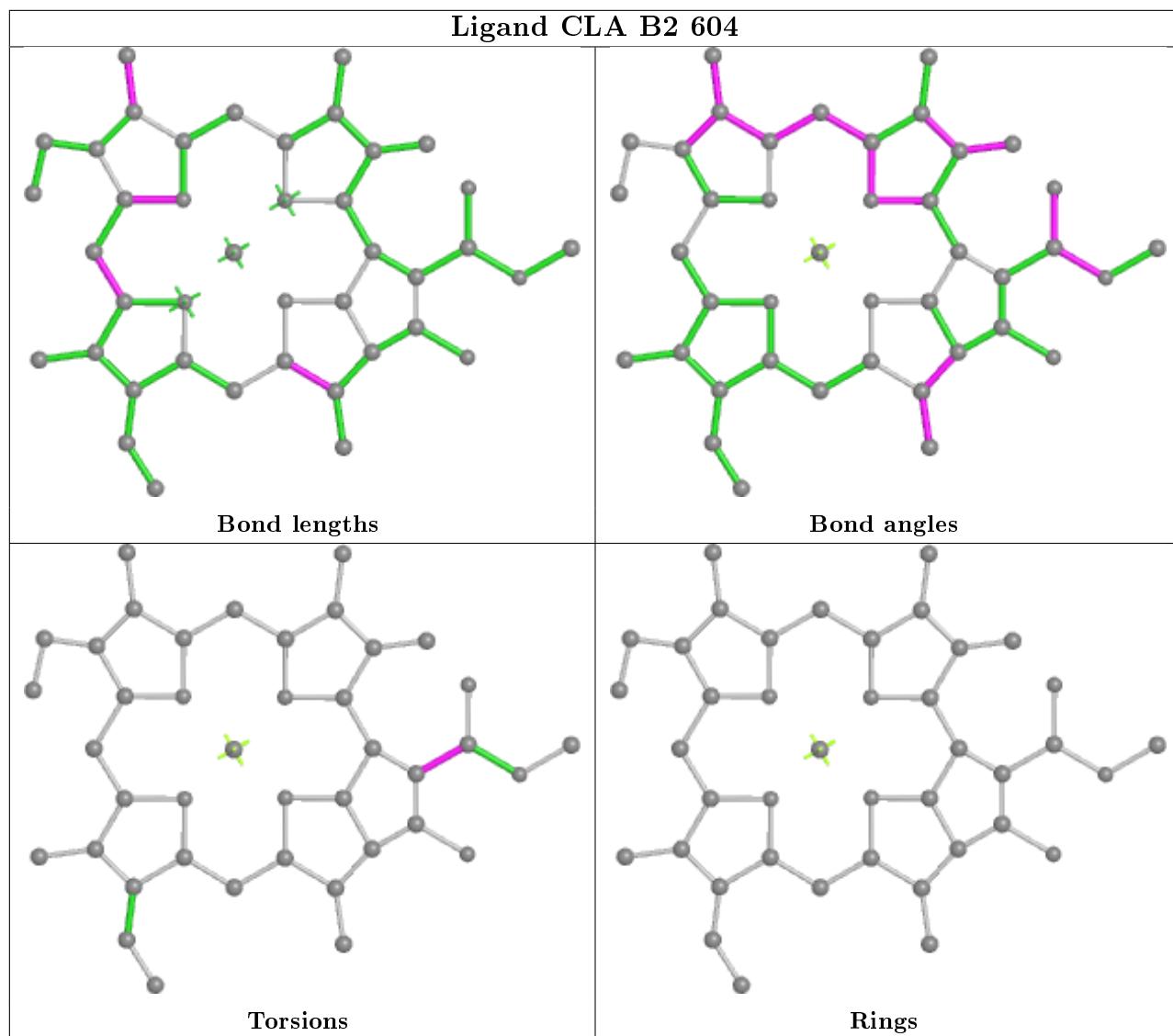


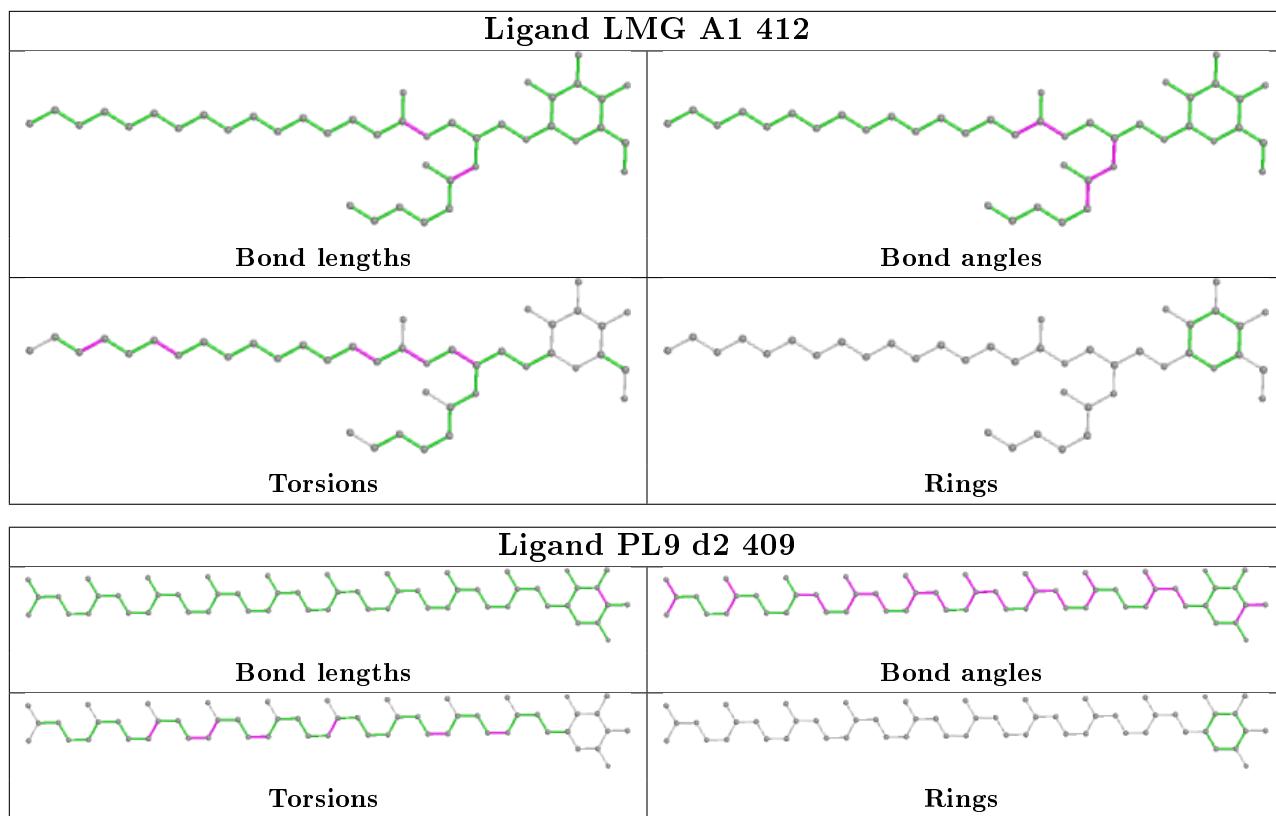


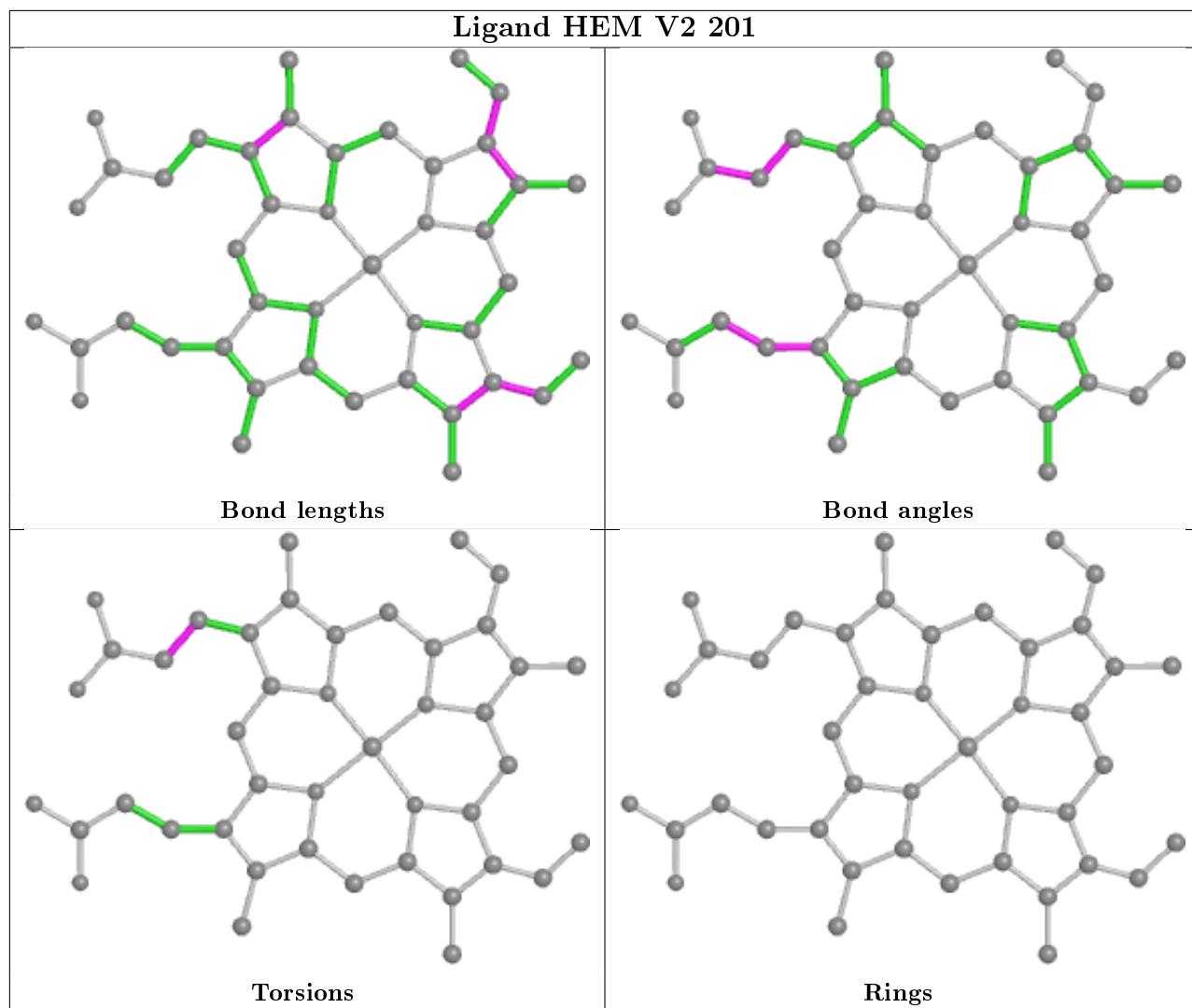


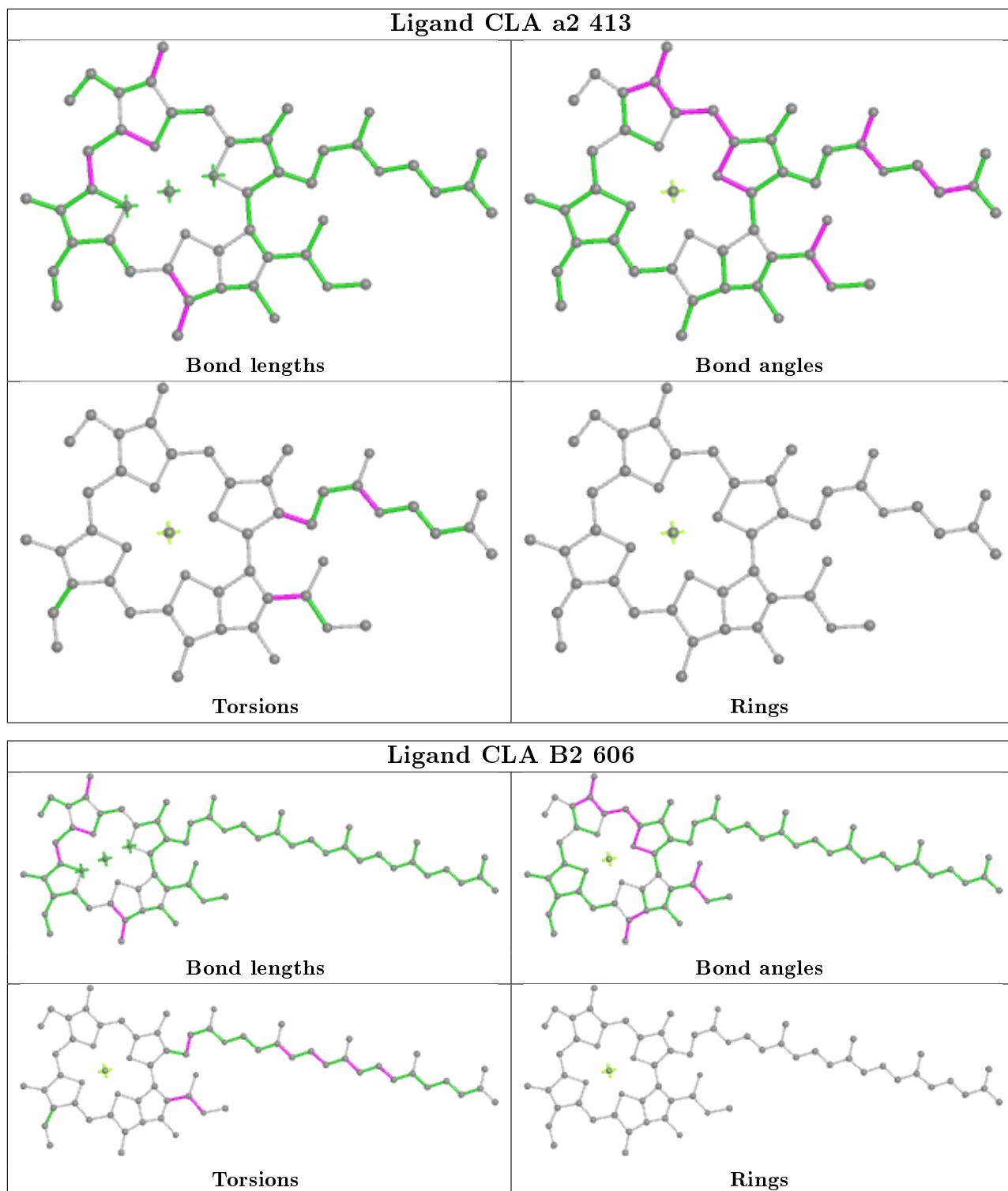


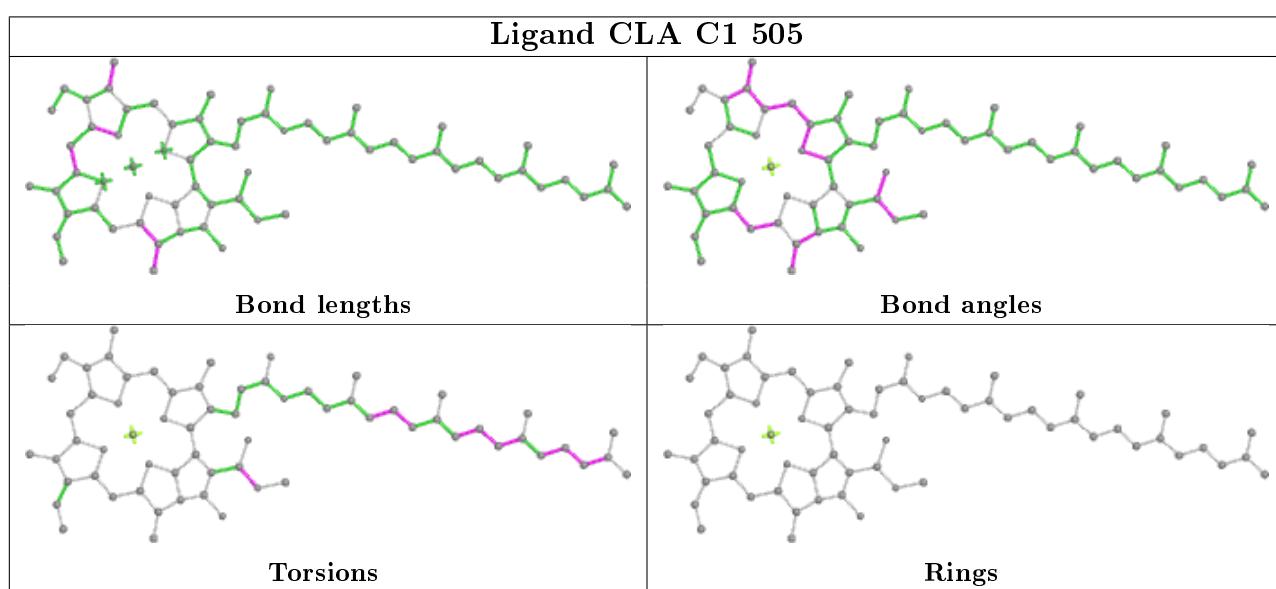
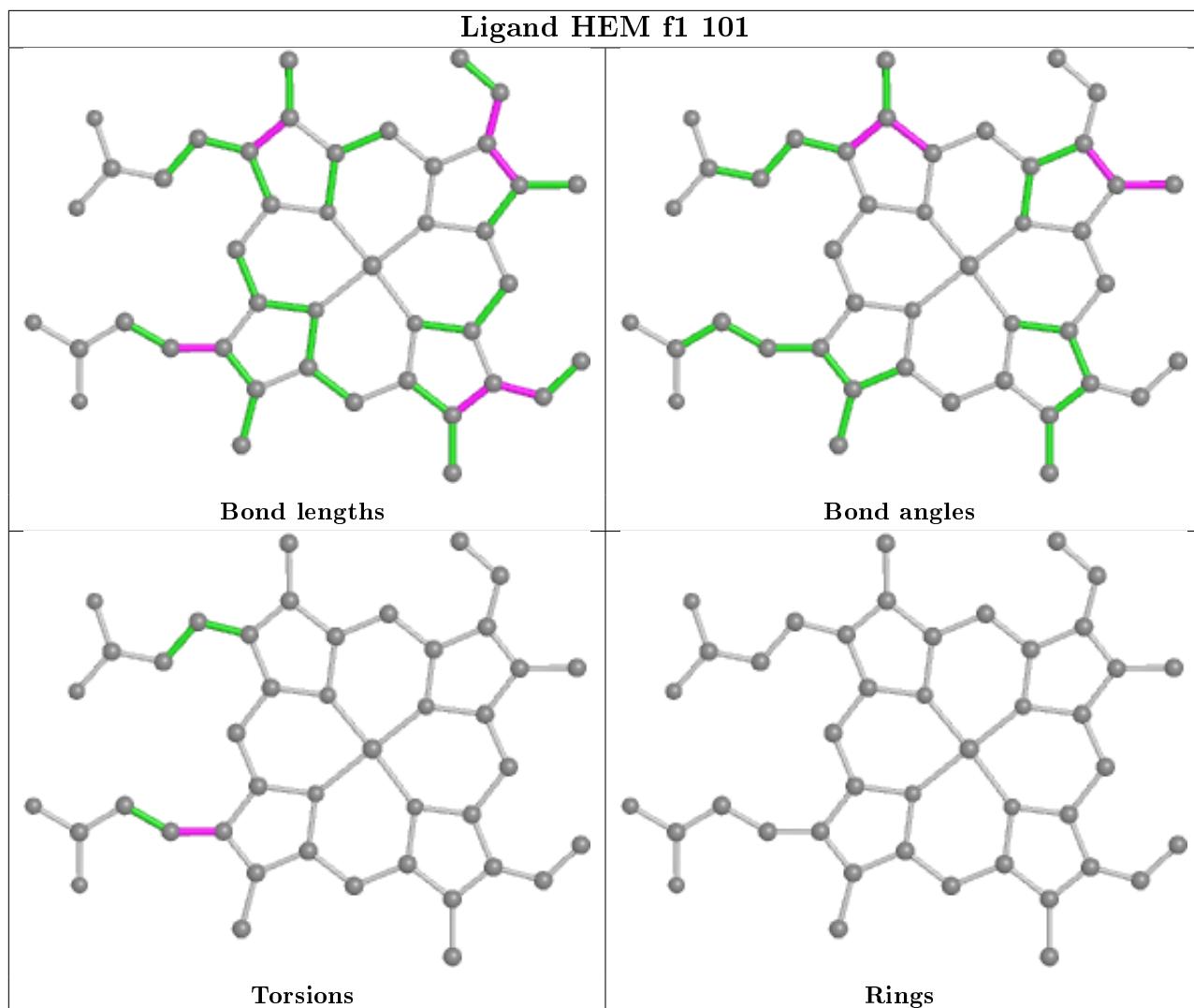


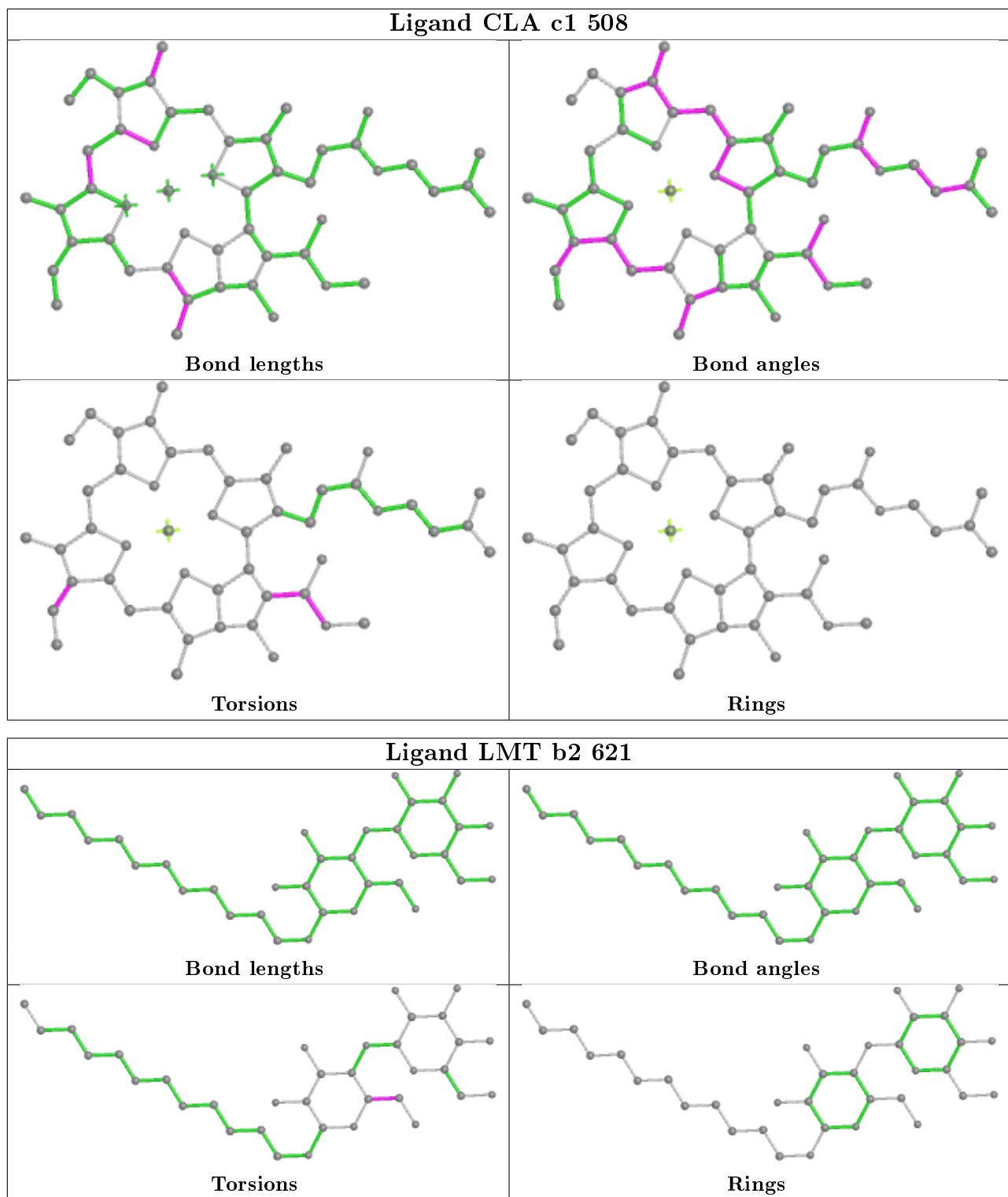


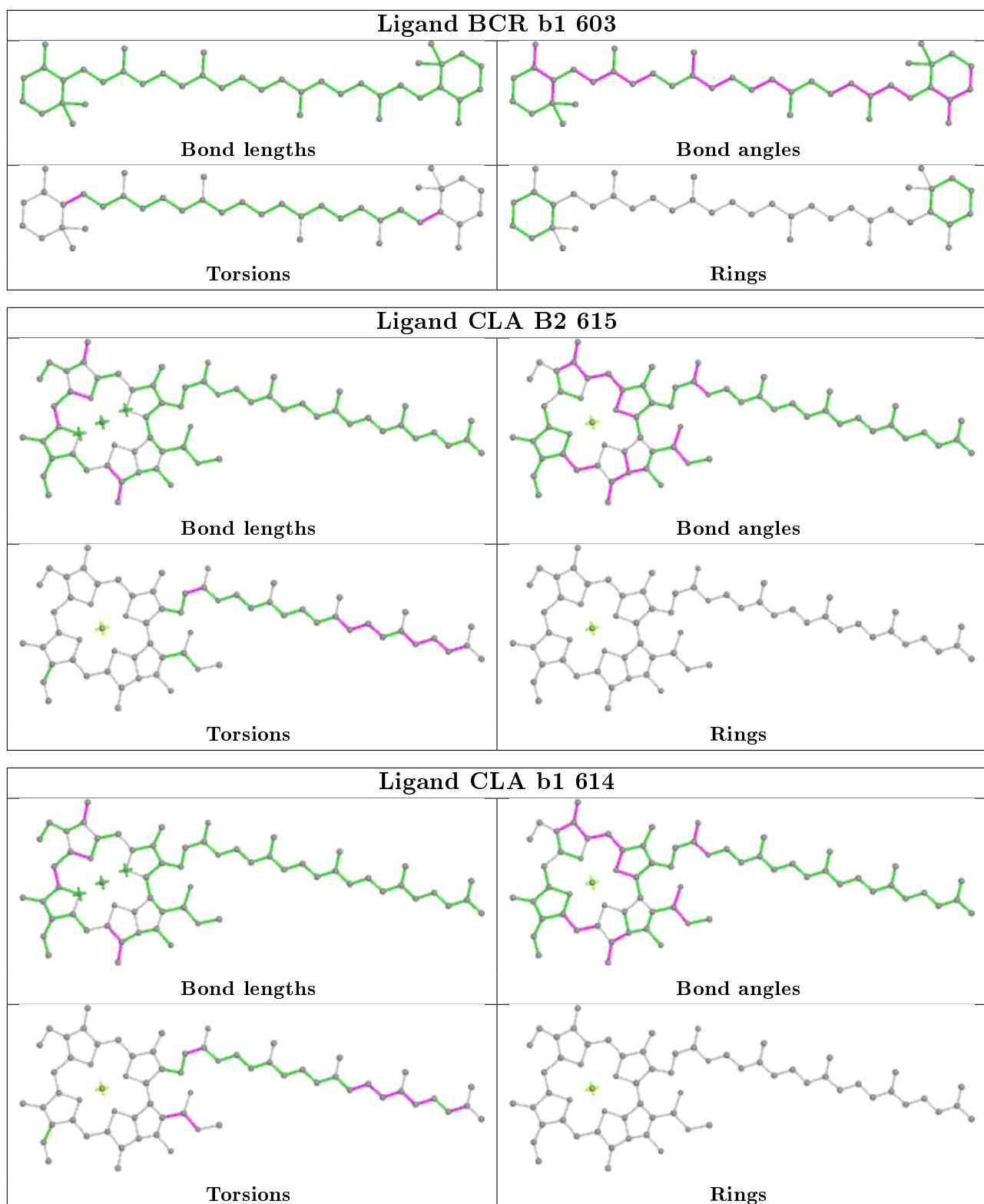


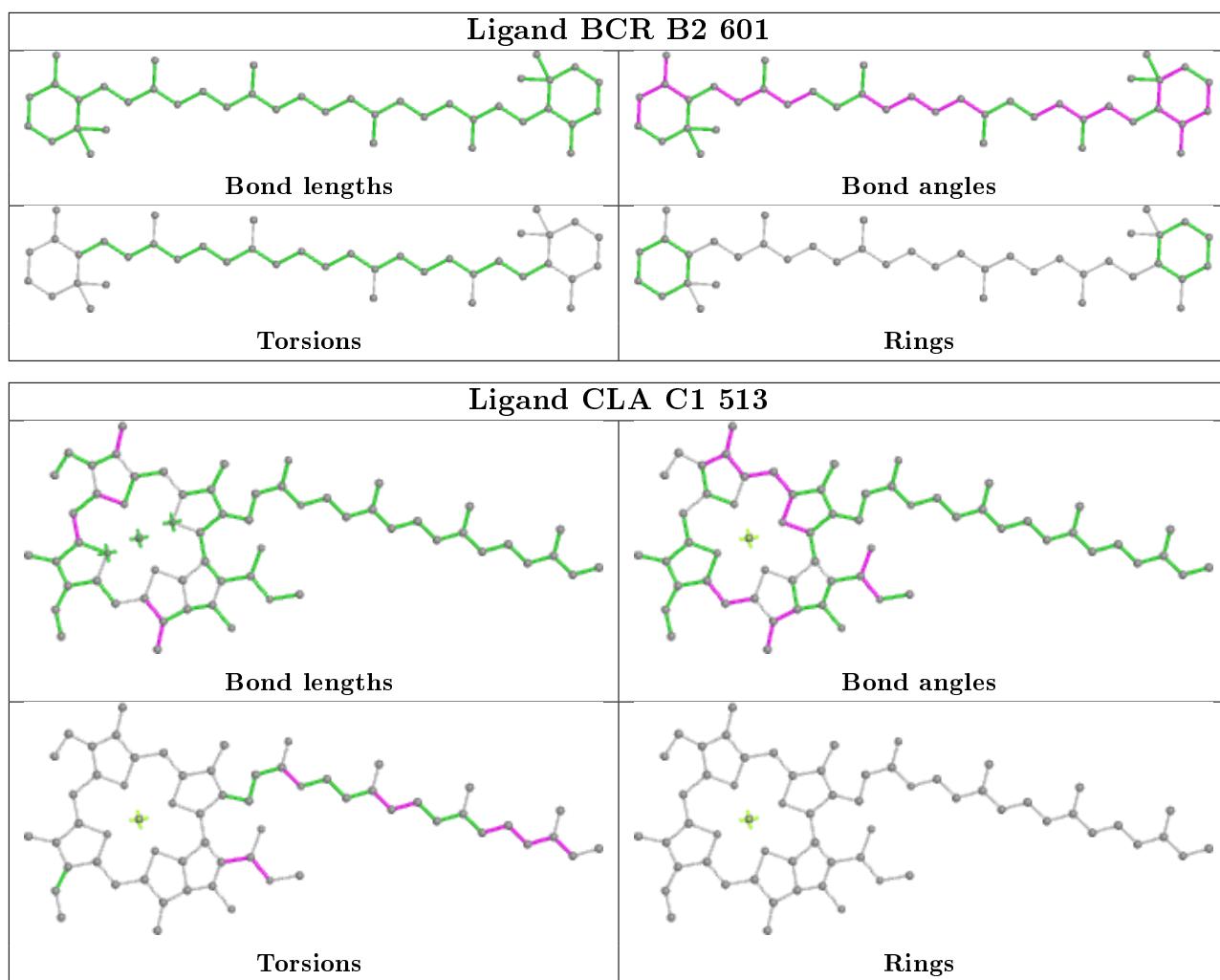












## 5.7 Other polymers [\(i\)](#)

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	A1	344/344 (100%)	0.11	12 (3%)	44	38	31, 48, 79, 104	0
1	A2	332/344 (96%)	0.50	25 (7%)	14	10	51, 75, 91, 112	0
1	a1	334/344 (97%)	0.01	12 (3%)	42	37	36, 48, 68, 105	0
1	a2	334/344 (97%)	0.05	16 (4%)	30	24	34, 50, 83, 107	0
2	B1	483/509 (94%)	0.30	33 (6%)	17	12	40, 63, 93, 108	0
2	B2	503/509 (98%)	0.51	54 (10%)	6	4	46, 65, 93, 112	0
2	b1	503/509 (98%)	0.23	29 (5%)	23	18	36, 53, 80, 99	0
2	b2	481/509 (94%)	0.46	40 (8%)	11	7	43, 70, 99, 115	0
3	C1	449/460 (97%)	0.15	26 (5%)	23	18	33, 59, 78, 93	0
3	C2	444/460 (96%)	0.99	78 (17%)	1	1	73, 97, 117, 128	0
3	c1	449/460 (97%)	0.29	25 (5%)	24	19	41, 62, 85, 101	0
3	c2	448/460 (97%)	0.42	29 (6%)	18	14	39, 70, 93, 110	0
4	D1	337/351 (96%)	0.39	21 (6%)	20	15	36, 56, 88, 94	0
4	D2	340/351 (96%)	0.62	33 (9%)	7	5	51, 69, 85, 96	0
4	d1	339/351 (96%)	0.11	7 (2%)	63	59	34, 45, 65, 94	0
4	d2	340/351 (96%)	0.27	17 (5%)	28	23	36, 56, 88, 118	0
5	E1	61/84 (72%)	1.62	24 (39%)	0	0	64, 87, 141, 158	0
5	E2	63/84 (75%)	2.54	31 (49%)	0	0	77, 98, 131, 144	0
5	e1	57/84 (67%)	1.05	13 (22%)	0	0	49, 65, 87, 91	0
5	e2	60/84 (71%)	1.89	22 (36%)	0	0	59, 80, 144, 159	0
6	F1	28/43 (65%)	0.33	2 (7%)	16	11	62, 75, 123, 131	0
6	F2	31/43 (72%)	1.54	8 (25%)	0	0	81, 92, 144, 146	0
6	f1	29/43 (67%)	0.30	3 (10%)	6	4	50, 60, 95, 108	0
6	f2	29/43 (67%)	0.94	7 (24%)	0	0	64, 73, 128, 149	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
7	H1	60/67 (89%)	0.52	9 (15%) 2 1	70, 84, 93, 101	0
7	H2	62/67 (92%)	0.75	10 (16%) 1 1	63, 75, 92, 124	0
7	h1	62/67 (92%)	0.31	3 (4%) 30 24	47, 67, 78, 84	0
7	h2	62/67 (92%)	1.14	13 (20%) 1 0	72, 87, 98, 122	0
8	I1	34/38 (89%)	0.07	2 (5%) 22 17	53, 61, 70, 71	0
8	I2	35/38 (92%)	0.51	2 (5%) 23 18	82, 93, 105, 109	0
8	i1	34/38 (89%)	0.05	1 (2%) 51 46	54, 61, 71, 76	0
8	i2	33/38 (86%)	0.19	2 (6%) 21 16	60, 67, 75, 77	0
9	J1	32/39 (82%)	0.22	3 (9%) 8 6	51, 65, 89, 105	0
9	J2	35/39 (89%)	1.29	9 (25%) 0 0	75, 87, 125, 136	0
9	j1	32/39 (82%)	0.27	5 (15%) 2 1	49, 63, 74, 81	0
9	j2	33/39 (84%)	0.11	1 (3%) 50 45	54, 70, 88, 110	0
10	K1	37/41 (90%)	0.70	3 (8%) 12 8	56, 66, 78, 79	0
10	K2	37/41 (90%)	1.04	9 (24%) 0 0	86, 96, 111, 117	0
10	k1	37/41 (90%)	0.78	6 (16%) 1 1	56, 67, 81, 81	0
10	k2	37/41 (90%)	1.28	9 (24%) 0 0	67, 76, 89, 92	0
11	L1	37/38 (97%)	0.00	3 (8%) 12 8	39, 43, 67, 77	0
11	L2	37/38 (97%)	-0.03	1 (2%) 54 49	49, 56, 61, 73	0
11	l1	37/38 (97%)	-0.07	1 (2%) 54 49	36, 43, 63, 73	0
11	l2	37/38 (97%)	0.16	0 100 100	43, 47, 73, 79	0
12	M1	40/108 (37%)	0.02	1 (2%) 57 52	32, 46, 62, 67	0
12	M2	40/108 (37%)	0.03	0 100 100	45, 54, 67, 69	0
12	m1	40/108 (37%)	-0.03	0 100 100	34, 44, 65, 67	0
12	m2	40/108 (37%)	0.25	4 (10%) 7 5	44, 51, 65, 71	0
13	O1	240/329 (72%)	0.57	35 (14%) 2 1	38, 61, 96, 107	0
13	O2	205/329 (62%)	1.54	53 (25%) 0 0	54, 91, 119, 151	0
13	o1	238/329 (72%)	0.72	36 (15%) 2 1	38, 76, 121, 145	0
13	o2	245/329 (74%)	0.68	38 (15%) 2 1	41, 64, 103, 127	0
14	T1	30/32 (93%)	-0.19	1 (3%) 46 41	37, 44, 60, 68	0
14	T2	30/32 (93%)	0.09	1 (3%) 46 41	54, 63, 76, 82	0
14	t1	30/32 (93%)	-0.02	3 (10%) 7 5	40, 46, 60, 76	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
14	t2	29/32 (90%)	-0.22	2 (6%) 16 12	38, 48, 68, 84	0
15	U1	93/155 (60%)	0.25	2 (2%) 62 57	44, 59, 75, 104	0
15	U2	90/155 (58%)	1.15	20 (22%) 0 0	74, 91, 104, 115	0
15	u1	93/155 (60%)	0.60	12 (12%) 3 2	53, 68, 88, 95	0
15	u2	93/155 (60%)	0.32	4 (4%) 35 30	44, 58, 71, 86	0
16	V1	129/155 (83%)	0.22	5 (3%) 39 34	47, 62, 87, 93	0
16	V2	129/155 (83%)	1.54	39 (30%) 0 0	75, 96, 114, 127	0
16	v1	129/155 (83%)	0.60	12 (9%) 8 6	47, 69, 108, 124	0
16	v2	129/155 (83%)	0.41	12 (9%) 8 6	47, 63, 90, 105	0
17	Y1	27/35 (77%)	0.09	3 (11%) 5 3	64, 74, 103, 118	0
17	Y2	25/35 (71%)	1.41	8 (32%) 0 0	96, 100, 107, 109	0
17	y1	27/35 (77%)	0.94	6 (22%) 0 0	64, 71, 105, 107	0
17	y2	27/35 (77%)	0.61	5 (18%) 1 1	72, 79, 92, 106	0
18	X1	29/40 (72%)	1.88	10 (34%) 0 0	98, 113, 130, 135	0
18	X2	31/40 (77%)	1.70	11 (35%) 0 0	83, 101, 115, 121	0
18	x1	36/40 (90%)	0.75	6 (16%) 1 1	61, 83, 96, 102	0
18	x2	32/40 (80%)	1.64	13 (40%) 0 0	83, 104, 122, 126	0
19	S1	25/46 (54%)	0.96	5 (20%) 1 0	73, 79, 85, 98	0
19	S2	30/46 (65%)	2.28	16 (53%) 0 0	98, 114, 120, 122	0
19	s1	40/46 (86%)	1.30	11 (27%) 0 0	54, 78, 94, 95	0
19	s2	46/46 (100%)	1.56	13 (28%) 0 0	75, 90, 106, 112	0
20	W1	21/25 (84%)	-0.34	1 (4%) 30 24	71, 79, 86, 90	0
20	W2	21/25 (84%)	-0.72	0 100 100	66, 76, 84, 89	0
20	w1	25/25 (100%)	0.27	4 (16%) 1 1	73, 79, 96, 101	0
20	w2	20/25 (80%)	-0.13	1 (5%) 28 23	91, 96, 103, 111	0
21	Q2	111/218 (50%)	1.91	55 (49%) 0 0	122, 132, 145, 151	0
21	q1	105/218 (48%)	1.94	45 (42%) 0 0	103, 125, 138, 144	0
22	Z2	59/62 (95%)	1.61	20 (33%) 0 0	108, 121, 134, 140	0
22	z2	59/62 (95%)	0.51	7 (11%) 4 3	83, 101, 116, 127	0
All	All	10516/12316 (85%)	0.53	1179 (11%) 5 3	31, 66, 113, 159	0

All (1179) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
5	e2	21	VAL	13.3
13	O2	194	SER	10.3
6	F2	15	ILE	9.3
9	J2	7	ARG	9.1
13	O2	195	GLY	8.6
7	h2	2	ALA	8.4
21	q1	172	ILE	8.3
18	X1	33	SER	8.2
5	E1	78	ASP	8.2
13	O2	193	THR	8.0
5	E2	80	THR	7.9
13	O2	15	LEU	7.8
5	e2	25	ILE	7.7
13	o1	22	VAL	7.7
3	C2	181	PHE	7.6
10	K2	15	TYR	7.3
5	E2	23	HIS	7.3
2	B1	86	SER	7.2
13	O2	14	GLY	7.1
19	s2	36	ALA	7.1
21	Q2	175	ALA	7.0
5	E2	58	GLU	6.9
5	E2	57	SER	6.9
13	O2	214	VAL	6.9
16	V2	78	ASN	6.9
22	z2	34	SER	6.9
3	C2	77	PRO	6.9
1	A1	10	SER	6.8
5	e2	22	ILE	6.8
5	e2	19	TYR	6.8
13	o2	195	GLY	6.7
3	C2	144	PHE	6.7
16	v1	15	ASN	6.7
3	C2	183	GLY	6.6
1	A1	227	THR	6.6
4	d2	228	ALA	6.6
13	O2	220	LEU	6.6
3	C2	182	ILE	6.6
15	U2	76	LYS	6.5
21	q1	149	LEU	6.4
2	B2	82	GLY	6.4
13	O2	211	ILE	6.4
5	e2	78	ASP	6.3

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Mol	Chain	Res	Type	RSRZ
19	S2	15	LEU	6.3
13	O2	23	VAL	6.3
5	E2	72	ALA	6.3
17	y1	41	THR	6.2
13	o1	220	LEU	6.2
21	Q2	156	VAL	6.2
6	f2	17	THR	6.1
13	o1	178(E)	VAL	6.1
13	o2	87	VAL	6.0
2	B1	352	HIS	6.0
19	S1	8	LEU	6.0
13	o1	133	ASP	6.0
2	b2	301	ALA	5.9
13	O1	220	LEU	5.9
19	s2	37	ALA	5.9
5	e1	23	HIS	5.9
18	x2	32	VAL	5.8
19	s1	29	ALA	5.8
9	J2	9	PRO	5.7
3	C2	392	ALA	5.7
21	q1	215	VAL	5.7
21	Q2	160	ALA	5.7
13	O2	191	GLN	5.6
3	C2	357	ARG	5.6
9	J2	40	LEU	5.6
2	B2	492	PHE	5.6
4	d1	14	TRP	5.5
3	c2	249	ILE	5.5
21	q1	141	ALA	5.5
5	E2	25	ILE	5.5
9	J1	9	PRO	5.5
13	o1	195	GLY	5.5
22	Z2	4	ILE	5.4
2	B2	413	ASP	5.4
7	h2	22	ALA	5.4
7	H2	4	LYS	5.4
1	A1	12	SER	5.4
18	X1	32	VAL	5.4
18	X2	12	TRP	5.4
3	C2	263	ALA	5.4
3	C2	184	GLY	5.3
3	C2	258	SER	5.3

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Mol	Chain	Res	Type	RSRZ
5	E2	76	LEU	5.3
2	B2	352	HIS	5.3
2	b1	86	SER	5.3
6	F2	33	PHE	5.3
21	q1	159	TYR	5.3
5	e2	23	HIS	5.3
21	q1	216	VAL	5.3
22	Z2	57	LEU	5.3
13	O2	209	ASN	5.3
5	E1	25	ILE	5.2
1	A2	12	SER	5.2
17	y1	18	VAL	5.2
3	C2	250	TRP	5.2
21	Q2	153	CYS	5.2
3	c2	200	THR	5.2
9	J2	6	GLY	5.2
5	E2	38	VAL	5.2
3	C2	207	ALA	5.2
5	E1	22	ILE	5.1
5	E2	22	ILE	5.1
16	V2	16	GLY	5.1
21	Q2	192	MET	5.1
5	E2	79	LEU	5.1
21	Q2	210	ASP	5.1
3	C2	146	PHE	5.1
6	f2	18	PHE	5.1
15	U2	86	PRO	5.0
5	E2	75	GLU	5.0
1	A2	228	THR	5.0
16	V2	15	ASN	5.0
13	O2	178(D)	ALA	5.0
4	D1	28	VAL	5.0
4	D2	97	ALA	5.0
22	z2	33	TRP	4.9
16	V2	85	SER	4.9
21	q1	168	GLU	4.9
3	C2	25	GLY	4.9
5	E1	70	PHE	4.9
3	c2	201	ASN	4.9
17	y2	16	TRP	4.9
19	S2	11	ALA	4.9
13	o2	220	LEU	4.9

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Mol	Chain	Res	Type	RSRZ
7	h2	23	PRO	4.9
3	C2	319	VAL	4.8
13	o1	90	ASN	4.8
3	C2	206	PRO	4.8
13	o1	178(D)	ALA	4.8
17	y1	16	TRP	4.8
2	B1	484	ALA	4.8
8	I2	2	PHE	4.8
17	Y2	18	VAL	4.8
3	c1	249	ILE	4.8
2	B2	339	ALA	4.8
21	q1	112	TYR	4.8
21	q1	144	LEU	4.8
4	D1	79	SER	4.8
21	Q2	214	SER	4.7
3	C2	254	THR	4.7
18	x1	26	THR	4.7
21	Q2	182	ARG	4.7
5	E1	59	ASN	4.7
13	O2	90	ASN	4.7
6	F2	17	THR	4.7
18	X1	30	ILE	4.7
3	c2	147	PHE	4.7
13	o2	178(E)	VAL	4.7
22	Z2	34	SER	4.7
2	b2	88	PRO	4.6
13	O2	2	VAL	4.6
18	X2	16	TRP	4.6
2	B2	126	PRO	4.6
21	Q2	165	THR	4.6
13	O2	200	ALA	4.6
15	U2	79	MET	4.6
3	C2	177	ILE	4.6
7	h2	25	TRP	4.6
7	h2	26	GLY	4.6
15	U2	84	ALA	4.6
4	D2	14	TRP	4.6
7	H1	25	TRP	4.6
1	a1	344	ALA	4.6
5	E1	41	GLY	4.5
13	o2	92	THR	4.5
17	y2	41	THR	4.5

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Mol	Chain	Res	Type	RSRZ
13	O1	23	VAL	4.5
16	V2	14	THR	4.5
13	O1	182	LEU	4.5
19	S2	29	ALA	4.5
19	s2	38	ALA	4.5
3	c1	144	PHE	4.5
5	E2	56	PHE	4.5
5	E1	19	TYR	4.5
17	Y2	16	TRP	4.5
6	F2	16	PHE	4.5
7	h2	24	GLY	4.5
21	Q2	159	TYR	4.5
16	V2	18	ILE	4.5
21	Q2	186	MET	4.5
10	k2	44	GLY	4.4
16	V2	94	SER	4.4
19	S2	7	ALA	4.4
21	q1	165	THR	4.4
21	q1	173	GLU	4.4
2	b2	77	GLY	4.4
2	b2	128	THR	4.4
19	s2	4	ALA	4.4
2	B2	295	GLY	4.4
10	K1	42	ALA	4.4
20	w1	1	ALA	4.4
16	V2	107	LEU	4.4
19	S1	9	LEU	4.4
4	D2	27	PHE	4.4
7	H1	22	ALA	4.4
7	H1	63	THR	4.4
5	e2	24	SER	4.4
3	C1	140	LEU	4.4
19	s2	8	LEU	4.4
16	v1	14	THR	4.4
3	c1	181	PHE	4.3
13	o2	90	ASN	4.3
16	V2	99	ASP	4.3
18	x1	32	VAL	4.3
17	Y2	17	GLN	4.3
3	C2	143	SER	4.3
19	S2	13	LEU	4.3
2	B2	301	ALA	4.3

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Mol	Chain	Res	Type	RSRZ
10	k2	45	PHE	4.3
3	c1	253	LEU	4.3
13	o2	93	TRP	4.3
3	c1	254	THR	4.3
5	E2	78	ASP	4.3
13	O1	5	LEU	4.3
3	c1	143	SER	4.2
10	k2	14	THR	4.2
18	x2	33	SER	4.2
3	C2	262	ARG	4.2
6	f2	21	LEU	4.2
13	O2	18	ARG	4.2
19	s1	33	ALA	4.2
21	q1	145	ALA	4.2
3	C2	325	GLY	4.2
13	O2	51	LEU	4.2
16	V2	19	LEU	4.2
13	O2	87	VAL	4.2
2	B1	339	ALA	4.2
21	q1	148	THR	4.2
17	Y2	19	ILE	4.2
5	e2	20	TRP	4.2
21	Q2	196	ASP	4.2
2	b2	376	ILE	4.2
1	a2	240	GLY	4.2
16	V2	132	GLY	4.2
15	U2	75	ILE	4.1
13	O2	41	VAL	4.1
1	a2	263	ALA	4.1
5	E2	43	ALA	4.1
5	E1	74	GLU	4.1
4	d2	27	PHE	4.1
16	V2	104	MET	4.1
3	c2	28	ILE	4.1
5	e2	58	GLU	4.1
7	h2	18	TYR	4.1
1	a2	11	THR	4.1
13	o2	207	THR	4.1
1	A2	262	TYR	4.1
9	j1	10	LEU	4.1
16	v2	107	LEU	4.1
13	O1	26	SER	4.1

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Mol	Chain	Res	Type	RSRZ
13	O2	237	GLY	4.1
16	v2	113	TYR	4.1
5	E2	77	ASP	4.1
21	q1	160	ALA	4.1
6	F1	20	TRP	4.0
22	Z2	45	ILE	4.0
21	Q2	194	ASP	4.0
4	D2	218	VAL	4.0
2	B2	406	LEU	4.0
15	u1	59	ASP	4.0
16	v1	18	ILE	4.0
9	J2	35	GLY	4.0
13	o1	132	ALA	4.0
2	b2	431	GLU	4.0
19	s1	8	LEU	4.0
19	S2	30	TRP	4.0
2	B1	85	VAL	4.0
19	s1	10	ALA	4.0
3	c2	194	GLY	3.9
15	U2	78	TYR	3.9
18	x2	31	TRP	3.9
6	F2	18	PHE	3.9
13	o1	89	GLU	3.9
8	i2	2	PHE	3.9
1	A1	13	LEU	3.9
2	B1	262	SER	3.9
3	c2	144	PHE	3.9
6	F2	34	PHE	3.9
13	O2	22	VAL	3.9
8	i2	1	MET	3.9
3	c2	191	PRO	3.9
16	V2	133	GLY	3.9
16	v2	16	GLY	3.9
14	T1	30	ALA	3.9
5	E1	24	SER	3.9
21	Q2	109	LEU	3.9
9	J2	11	TRP	3.9
21	q1	214	SER	3.9
22	Z2	35	LYS	3.9
15	U2	66	GLU	3.9
3	C2	185	ILE	3.9
1	A1	262	TYR	3.8

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Mol	Chain	Res	Type	RSRZ
13	O1	93	TRP	3.8
5	e2	27	ILE	3.8
10	k2	42	ALA	3.8
16	v2	15	ASN	3.8
15	U2	92	PHE	3.8
15	U2	85	LEU	3.8
16	V2	76	MET	3.8
16	V2	20	ASN	3.8
4	D1	27	PHE	3.8
1	a1	261	GLN	3.8
13	O2	-2	THR	3.8
4	d1	237	PRO	3.8
2	B2	379	ALA	3.8
4	d1	97	ALA	3.8
21	q1	147	GLY	3.8
22	Z2	58	ASN	3.8
7	H2	5	THR	3.8
7	h1	23	PRO	3.8
21	q1	140	SER	3.8
21	Q2	212	TRP	3.8
22	Z2	59	SER	3.8
17	y2	38	TYR	3.7
21	q1	114	ALA	3.7
13	o2	35	THR	3.7
21	q1	167	GLN	3.7
3	c2	471	PRO	3.7
3	c2	204	LEU	3.7
5	E2	45	ASP	3.7
14	t1	30	ALA	3.7
5	E2	59	ASN	3.7
1	A1	242	GLU	3.7
13	o2	84	GLU	3.7
19	S2	10	ALA	3.7
2	B1	408	ASN	3.7
3	C2	76	ILE	3.7
5	E1	18	ARG	3.7
3	C2	75	PHE	3.7
15	U2	15	GLU	3.7
22	Z2	3	ILE	3.7
3	C2	106	VAL	3.7
1	A2	136	ARG	3.7
3	C2	205	ASN	3.7

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Mol	Chain	Res	Type	RSRZ
5	e2	59	ASN	3.7
3	c2	145	SER	3.7
2	b2	161	LEU	3.6
13	o1	28	GLY	3.6
3	C2	372	SER	3.6
5	e2	56	PHE	3.6
22	Z2	55	GLY	3.6
2	b2	83	GLU	3.6
5	E2	44	TYR	3.6
13	O2	10	VAL	3.6
3	c2	254	THR	3.6
15	U2	87	PRO	3.6
5	E1	73	ARG	3.6
1	A2	336	ALA	3.6
14	T2	29	ILE	3.6
3	C2	204	LEU	3.6
4	d2	13	GLY	3.6
2	B1	224	ARG	3.6
2	b2	482	ILE	3.6
3	c2	203	THR	3.6
13	O2	21	GLU	3.6
13	O2	101	MET	3.6
18	x2	4	THR	3.6
2	b2	130	GLU	3.6
5	e2	30	LEU	3.6
21	Q2	195	GLN	3.6
2	B2	284	ILE	3.6
5	e1	27	ILE	3.6
7	H2	54	ILE	3.6
15	U2	48	LYS	3.6
16	V2	77	LYS	3.6
15	U2	55	TYR	3.6
2	b2	298	LEU	3.6
13	O2	85	LEU	3.6
2	B1	126	PRO	3.5
2	B1	436	ILE	3.5
18	x2	30	ILE	3.5
6	f1	45	ARG	3.5
21	q1	156	VAL	3.5
13	O2	207	THR	3.5
16	V2	96	ALA	3.5
16	V2	97	SER	3.5

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Mol	Chain	Res	Type	RSRZ
19	s1	30	TRP	3.5
2	b2	86	SER	3.5
17	y1	40	SER	3.5
7	H2	63	THR	3.5
21	Q2	149	LEU	3.5
5	E2	41	GLY	3.5
1	a1	11	THR	3.5
5	e1	32	ILE	3.5
5	E2	42	LEU	3.5
13	o2	5	LEU	3.5
13	O1	4	GLN	3.5
10	k1	12	PRO	3.5
5	E1	26	THR	3.5
5	E1	76	LEU	3.5
2	b2	156	PHE	3.4
21	Q2	199	GLU	3.4
19	s2	40	ALA	3.4
2	B1	128	THR	3.4
13	O2	223	THR	3.4
1	A1	260	PHE	3.4
13	o2	38	TYR	3.4
21	Q2	171	ASN	3.4
2	b1	352	HIS	3.4
3	c2	32	GLY	3.4
2	B2	273	TYR	3.4
4	D2	331	ALA	3.4
13	O2	88	ASN	3.4
13	O2	178(E)	VAL	3.4
2	b1	496	GLN	3.4
21	q1	192	MET	3.4
2	B2	416	THR	3.4
3	C1	200	THR	3.4
4	D2	92	LEU	3.4
21	q1	138	VAL	3.4
3	C2	384	ILE	3.4
21	Q2	167	GLN	3.4
5	E1	77	ASP	3.4
5	E2	19	TYR	3.4
5	e1	36	LEU	3.4
3	C2	137	PRO	3.4
17	Y2	39	LEU	3.4
21	Q2	168	GLU	3.4

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Mol	Chain	Res	Type	RSRZ
13	o1	202	ASN	3.4
2	b2	402	TYR	3.4
21	Q2	176	TYR	3.4
13	o2	208	SER	3.3
9	j1	11	TRP	3.3
4	D1	18	LEU	3.3
15	u2	62	LEU	3.3
16	V2	136	TYR	3.3
4	D1	57	SER	3.3
21	Q2	188	PHE	3.3
2	B1	481	GLY	3.3
3	C2	352	GLY	3.3
3	c1	109	TYR	3.3
21	q1	121	LYS	3.3
4	D2	64	ALA	3.3
13	O1	200	ALA	3.3
17	Y1	16	TRP	3.3
15	U1	62	LEU	3.3
2	b1	85	VAL	3.3
2	b2	186	GLY	3.3
13	O1	195	GLY	3.3
18	X2	17	ALA	3.3
2	B2	296	LEU	3.3
7	H2	3	LEU	3.3
19	s1	9	LEU	3.3
1	A1	249	VAL	3.3
4	D2	341	PHE	3.3
21	Q2	110	ASN	3.3
2	B2	378	ARG	3.3
6	f1	44	GLN	3.3
3	C1	148	GLY	3.3
18	X1	31	TRP	3.3
2	b1	504	LYS	3.3
3	C2	111	TYR	3.3
10	k1	15	TYR	3.3
13	O2	139	SER	3.3
17	y2	40	SER	3.3
2	b2	377	ILE	3.3
3	C2	95	LEU	3.3
9	J1	10	LEU	3.3
13	O2	206	PRO	3.3
5	e2	61	GLN	3.3

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Mol	Chain	Res	Type	RSRZ
1	A1	309	SER	3.2
21	Q2	204	ALA	3.2
5	e2	29	SER	3.2
21	Q2	117	ASN	3.2
13	o2	218	GLU	3.2
5	E2	32	ILE	3.2
16	V2	135	ILE	3.2
21	Q2	116	ILE	3.2
5	e1	45	ASP	3.2
22	z2	42	THR	3.2
5	E2	27	ILE	3.2
13	o2	0	GLN	3.2
13	o2	4	GLN	3.2
10	K2	36	ALA	3.2
19	s1	41	ALA	3.2
2	B2	375	GLY	3.2
13	O2	181	VAL	3.2
21	Q2	105	THR	3.2
16	V2	124	GLN	3.2
13	O2	210	GLU	3.2
13	o2	200	ALA	3.2
15	u1	84	ALA	3.2
4	D2	352	LEU	3.2
22	Z2	36	SER	3.2
13	o1	201	VAL	3.2
13	o1	187	ASP	3.2
21	Q2	126	ALA	3.2
18	x1	38	LEU	3.2
3	C2	378	ASN	3.2
13	O1	246	SER	3.2
16	V1	85	SER	3.2
16	V1	126	GLN	3.2
13	O1	1	ASP	3.2
18	x1	30	ILE	3.2
3	C2	80	PRO	3.2
2	B2	500	ASP	3.1
21	q1	155	LYS	3.1
2	b2	339	ALA	3.1
16	v2	98	SER	3.1
17	Y2	21	GLN	3.1
19	S2	26	LEU	3.1
3	c2	250	TRP	3.1

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Mol	Chain	Res	Type	RSRZ
2	b1	408	ASN	3.1
10	K2	42	ALA	3.1
16	v1	97	SER	3.1
3	C2	253	LEU	3.1
14	t2	29	ILE	3.1
19	s1	7	ALA	3.1
19	s2	41	ALA	3.1
13	O1	28	GLY	3.1
16	V2	21	ILE	3.1
19	S2	21	ALA	3.1
4	D1	95	PRO	3.1
15	u1	58	PRO	3.1
2	B2	129	LEU	3.1
2	b2	84	SER	3.1
21	Q2	198	ALA	3.1
16	V2	91	ILE	3.1
17	Y2	38	TYR	3.1
21	Q2	148	THR	3.1
19	s2	3	ALA	3.1
10	k1	29	PRO	3.1
16	V1	13	ASP	3.1
18	x1	36	ASP	3.1
18	X2	26	THR	3.1
19	s2	35	ALA	3.1
2	b2	126	PRO	3.1
5	E1	32	ILE	3.1
2	b1	375	GLY	3.0
3	C1	31	THR	3.0
5	e2	53	ASN	3.0
5	E2	60	ARG	3.0
15	U2	45	ALA	3.0
16	V2	25	GLN	3.0
16	V2	86	GLU	3.0
21	q1	190	ALA	3.0
16	V2	93	PRO	3.0
4	d2	226	GLY	3.0
15	U2	18(A)	TYR	3.0
4	D2	50	THR	3.0
13	o1	216	VAL	3.0
5	E1	58	GLU	3.0
13	O1	234	LEU	3.0
19	S2	9	LEU	3.0

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Mol	Chain	Res	Type	RSRZ
20	w2	5	ALA	3.0
4	D2	215	GLY	3.0
7	h1	26	GLY	3.0
1	A2	230	ASN	3.0
13	o1	131	ASN	3.0
19	s2	34	PHE	3.0
13	o2	201	VAL	3.0
2	B1	483	GLY	3.0
5	e2	32	ILE	3.0
16	V2	131	GLY	3.0
21	q1	217	GLY	3.0
1	a1	252	HIS	3.0
1	a1	337	HIS	3.0
4	D1	21	TRP	3.0
13	o1	245	PRO	3.0
10	k2	28	ILE	3.0
16	V2	100	ILE	3.0
1	A2	337	HIS	3.0
13	o2	50	PHE	3.0
1	a2	264	SER	3.0
7	H1	59	ASP	3.0
4	D2	327	ALA	3.0
7	h2	19	GLY	3.0
5	E2	61	GLN	3.0
5	e2	26	THR	3.0
2	B2	85	VAL	3.0
19	S2	18	VAL	3.0
21	q1	110	ASN	3.0
3	c2	146	PHE	3.0
4	D2	15	PHE	3.0
4	D1	66	SER	3.0
16	v1	80	THR	3.0
3	c1	207	ALA	3.0
19	s2	1	ALA	3.0
3	c1	137	PRO	3.0
21	Q2	132	LYS	2.9
18	X1	11	PHE	2.9
2	B2	502	THR	2.9
3	C2	78	GLU	2.9
11	l1	2	GLY	2.9
13	O1	91	GLY	2.9
16	v1	19	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
6	f2	20	TRP	2.9
13	o2	196	ARG	2.9
16	v2	105	ARG	2.9
21	q1	153	CYS	2.9
13	O1	90	ASN	2.9
1	a1	12	SER	2.9
1	a2	262	TYR	2.9
7	H2	55	LEU	2.9
10	k2	46	ARG	2.9
20	w1	6	VAL	2.9
13	O2	171	ALA	2.9
19	S1	32	ALA	2.9
22	Z2	30	ALA	2.9
6	f2	23	ILE	2.9
21	q1	120	LYS	2.9
2	B2	179	GLN	2.9
3	C2	82	TYR	2.9
2	B2	219	VAL	2.9
3	C2	368	PRO	2.9
19	S2	5	ALA	2.9
8	I2	6	ILE	2.9
22	Z2	40	ILE	2.9
2	b1	262	SER	2.9
21	Q2	158	SER	2.9
13	O1	244	LEU	2.9
13	O1	181	VAL	2.9
1	A2	99	ALA	2.9
3	C1	55	ALA	2.9
21	Q2	185	ASP	2.9
15	u1	61	ILE	2.9
3	C2	247	GLY	2.9
3	c2	184	GLY	2.9
13	O2	9	GLN	2.9
21	Q2	154	SER	2.9
2	b2	129	LEU	2.9
13	O2	39	LYS	2.9
1	A1	248	ILE	2.9
5	e1	22	ILE	2.9
13	o2	1	ASP	2.9
3	C2	189	TRP	2.9
2	B2	394	GLN	2.9
21	Q2	104	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
2	B2	350	GLU	2.9
10	K2	14	THR	2.9
3	C1	26	ARG	2.9
3	C2	150	ASP	2.9
16	V2	127	ALA	2.9
16	v2	99	ASP	2.9
21	q1	194	ASP	2.9
13	O1	0	GLN	2.8
4	D1	65	SER	2.8
3	C1	127	PHE	2.8
1	A2	316	THR	2.8
3	C2	473	ASP	2.8
22	Z2	11	ALA	2.8
1	a1	262	TYR	2.8
4	D1	14	TRP	2.8
16	v1	39	SER	2.8
4	D2	26	ARG	2.8
1	a2	228	THR	2.8
3	C2	141	GLU	2.8
3	C2	149	TYR	2.8
5	E2	20	TRP	2.8
13	o1	93	TRP	2.8
3	c2	26	ARG	2.8
13	O2	5	LEU	2.8
3	c1	465	PRO	2.8
3	C2	110	PRO	2.8
13	O1	25	SER	2.8
19	s2	39	PHE	2.8
4	D2	230	ASP	2.8
3	C2	373	ASN	2.8
5	e1	24	SER	2.8
3	C1	28	ILE	2.8
4	D1	15	PHE	2.8
15	u1	60	ASP	2.8
3	C2	382	ASN	2.8
10	K2	44	GLY	2.8
7	h2	21	VAL	2.8
13	o1	214	VAL	2.8
3	C1	199	ILE	2.8
2	B2	218	ASN	2.8
5	e1	33	ALA	2.8
1	A1	9	GLU	2.8

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Mol	Chain	Res	Type	RSRZ
3	C2	142	ASP	2.8
2	b1	492	PHE	2.8
13	O1	136	ILE	2.8
16	V2	51	ASN	2.8
16	V1	14	THR	2.8
16	V2	126	GLN	2.7
5	e2	77	ASP	2.7
3	c1	463	ASN	2.7
3	C2	362	ARG	2.7
5	e1	59	ASN	2.7
18	X1	15	ILE	2.7
1	a2	100	ALA	2.7
2	B1	252	VAL	2.7
10	k2	29	PRO	2.7
16	V2	38	SER	2.7
6	F1	34	PHE	2.7
17	y1	36	ILE	2.7
9	J1	32	SER	2.7
9	j2	9	PRO	2.7
2	B2	420	TYR	2.7
4	d2	227	GLU	2.7
11	L1	3	ILE	2.7
13	o1	194	SER	2.7
2	B1	295	GLY	2.7
10	K1	11	LEU	2.7
3	c1	114	THR	2.7
2	B2	293	SER	2.7
5	E1	69	ARG	2.7
3	C2	180	LEU	2.7
3	C2	435	PHE	2.7
13	o2	65	PHE	2.7
3	c1	82	TYR	2.7
4	D2	59	TYR	2.7
2	b1	164	PRO	2.7
3	c2	143	SER	2.7
4	d1	227	GLU	2.7
22	Z2	22	ALA	2.7
13	o1	234	LEU	2.7
1	A2	306	ILE	2.7
13	o2	63	ARG	2.7
22	z2	31	SER	2.7
7	h1	2	ALA	2.7

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Mol	Chain	Res	Type	RSRZ
13	o2	214	VAL	2.7
2	B1	285	GLU	2.7
3	C2	302	TYR	2.7
13	o1	210	GLU	2.7
13	O2	13	THR	2.7
2	b1	126	PRO	2.6
13	o1	165	ALA	2.6
3	c2	135	VAL	2.6
22	Z2	48	VAL	2.6
21	q1	117	ASN	2.6
2	B1	437	LEU	2.6
7	h2	55	LEU	2.6
13	o2	32	LEU	2.6
21	Q2	179	PHE	2.6
9	J2	39	SER	2.6
3	c1	57	ALA	2.6
13	O2	241	ALA	2.6
2	B1	288	VAL	2.6
2	B2	288	VAL	2.6
16	v1	20	ASN	2.6
18	x2	3	MET	2.6
2	B2	501	LYS	2.6
2	B2	168	ILE	2.6
4	d2	93	TRP	2.6
18	X1	16	TRP	2.6
4	d2	236	THR	2.6
13	O2	20	PRO	2.6
18	x2	5	PRO	2.6
3	C2	155	ASN	2.6
4	D1	78	VAL	2.6
15	U1	63	LYS	2.6
15	u1	69	GLU	2.6
16	v2	42	VAL	2.6
4	D2	54	PHE	2.6
2	b2	180	SER	2.6
3	C2	108	THR	2.6
4	D2	107	ILE	2.6
7	H2	8	GLY	2.6
13	O2	137	SER	2.6
18	X2	27	GLY	2.6
13	O2	192	GLU	2.6
16	V2	71	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
18	X2	32	VAL	2.6
18	X2	3	MET	2.6
3	C1	143	SER	2.6
18	x2	12	TRP	2.6
3	C1	191	PRO	2.6
13	O2	111	PRO	2.6
15	U2	29	ASN	2.6
6	F2	40	MET	2.6
21	q1	109	LEU	2.6
5	E1	56	PHE	2.6
2	B2	376	ILE	2.6
3	C2	36	TRP	2.6
5	e1	40	THR	2.6
2	B1	2	ALA	2.6
13	O1	22	VAL	2.6
21	Q2	138	VAL	2.6
3	c1	208	ILE	2.6
4	D2	332	GLN	2.6
21	q1	119	ALA	2.6
21	Q2	131	ALA	2.6
1	a2	243	GLU	2.6
3	c1	142	ASP	2.6
3	c2	472	LEU	2.6
13	O1	65	PHE	2.6
19	s1	34	PHE	2.6
18	X1	6	SER	2.6
3	C1	137	PRO	2.5
7	H1	23	PRO	2.5
12	m2	33	ASN	2.5
13	O1	202	ASN	2.5
13	o1	230	PRO	2.5
16	v2	20	ASN	2.5
21	Q2	170	GLN	2.5
6	f2	22	ALA	2.5
19	s2	25	ALA	2.5
10	K1	13	GLU	2.5
2	B2	490	VAL	2.5
4	D2	339	PHE	2.5
13	O2	120	PHE	2.5
2	B2	289	GLU	2.5
2	B2	491	GLU	2.5
3	c2	252	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
13	O2	136	ILE	2.5
18	X1	28	ALA	2.5
2	b2	375	GLY	2.5
13	O1	94	LYS	2.5
13	o2	194	SER	2.5
1	a2	242	GLU	2.5
2	b2	338	GLU	2.5
4	D2	217	THR	2.5
14	t2	27	PRO	2.5
21	q1	183	ILE	2.5
2	B2	434	ARG	2.5
13	o2	91	GLY	2.5
15	U2	56	GLY	2.5
17	y1	38	TYR	2.5
21	Q2	215	VAL	2.5
3	C1	73	SER	2.5
4	D2	66	SER	2.5
10	k1	18	PHE	2.5
16	v1	101	PHE	2.5
1	A2	111	PRO	2.5
2	B2	121	ASP	2.5
9	j1	9	PRO	2.5
13	o1	134	ASP	2.5
15	U2	65	PRO	2.5
7	h2	4	LYS	2.5
13	o1	87	VAL	2.5
3	c1	473	ASP	2.5
4	D1	60	THR	2.5
4	D1	107	ILE	2.5
2	B2	225	LEU	2.5
16	v2	19	LEU	2.5
15	u1	55	TYR	2.5
22	Z2	31	SER	2.5
2	b2	220	ARG	2.5
2	B1	435	THR	2.5
3	C1	60	ILE	2.5
13	o2	227	ALA	2.5
2	B1	347	GLN	2.5
7	H2	25	TRP	2.5
16	V2	32	LEU	2.5
5	e2	55	TYR	2.5
4	d2	15	PHE	2.5

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Mol	Chain	Res	Type	RSRZ
4	D1	77	ALA	2.5
17	Y1	17	GLN	2.5
4	D2	68	LEU	2.5
18	x2	16	TRP	2.5
21	q1	146	VAL	2.5
1	a2	246	TYR	2.5
6	f2	16	PHE	2.5
2	B2	191	ASN	2.5
2	B2	294	ASN	2.5
3	C2	333	GLY	2.4
5	E2	74	GLU	2.4
1	a1	343	LEU	2.4
1	A2	300	LEU	2.4
21	Q2	172	ILE	2.4
18	x1	33	SER	2.4
18	x2	19	VAL	2.4
15	u1	82	PHE	2.4
1	A2	266	ASN	2.4
3	c2	206	PRO	2.4
13	O1	245	PRO	2.4
15	u1	86	PRO	2.4
1	a1	336	ALA	2.4
3	C2	53	HIS	2.4
5	E2	26	THR	2.4
13	O2	138	THR	2.4
21	Q2	129	ALA	2.4
3	C1	253	LEU	2.4
9	J2	8	ILE	2.4
1	A2	205	VAL	2.4
4	D2	172	SER	2.4
16	V2	98	SER	2.4
3	C2	322	GLN	2.4
21	q1	176	TYR	2.4
13	o2	96	ILE	2.4
15	u2	67	LEU	2.4
1	A2	14	TRP	2.4
10	k2	13	GLU	2.4
3	C1	142	ASP	2.4
13	o2	66	VAL	2.4
21	Q2	216	VAL	2.4
22	Z2	51	VAL	2.4
13	o2	88	ASN	2.4

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Mol	Chain	Res	Type	RSRZ
1	A2	229	GLU	2.4
2	b2	296	LEU	2.4
3	C1	159	THR	2.4
3	c1	45	LEU	2.4
13	o1	193	THR	2.4
18	x2	26	THR	2.4
19	S2	8	LEU	2.4
3	C2	249	ILE	2.4
21	Q2	183	ILE	2.4
13	o1	49	GLN	2.4
2	b1	351	GLY	2.4
15	u2	78	TYR	2.4
5	E1	60	ARG	2.4
21	q1	143	ARG	2.4
13	o2	36	LYS	2.4
2	B1	255	THR	2.4
18	X2	23	LEU	2.4
19	S1	29	ALA	2.4
2	b1	376	ILE	2.4
3	C1	252	ILE	2.4
7	h2	43	ILE	2.4
2	b1	185	TRP	2.4
3	c1	62	PHE	2.4
3	c1	147	PHE	2.4
15	u2	21	GLY	2.4
13	o2	94	LYS	2.4
2	B2	298	LEU	2.4
4	D2	216	ALA	2.4
5	e2	33	ALA	2.4
10	k1	11	LEU	2.4
13	O1	142	LEU	2.4
15	u1	57	THR	2.4
20	w1	2	ALA	2.4
7	H2	24	GLY	2.4
3	C1	144	PHE	2.4
17	y2	42	ARG	2.4
2	B2	309	LEU	2.4
3	C2	145	SER	2.4
4	D2	65	SER	2.4
20	w1	5	ALA	2.4
3	C2	294	ASN	2.4
4	d2	26	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
13	O1	201	VAL	2.4
21	q1	170	GLN	2.3
22	z2	15	TYR	2.3
3	C1	467	LEU	2.3
13	o2	182	LEU	2.3
1	a2	236	GLY	2.3
5	E2	71	ASN	2.3
2	b1	369	ILE	2.3
3	c2	141	GLU	2.3
4	D2	96	GLU	2.3
1	a2	255	PHE	2.3
3	C1	181	PHE	2.3
13	o2	146	PHE	2.3
16	V2	134	LYS	2.3
2	b2	155	ALA	2.3
3	C1	59	LEU	2.3
4	D1	80	SER	2.3
13	O2	142	LEU	2.3
17	Y2	40	SER	2.3
2	b2	408	ASN	2.3
16	V2	34	ASN	2.3
10	k1	28	ILE	2.3
2	b2	162	PHE	2.3
2	B1	480	ALA	2.3
5	e2	39	SER	2.3
11	L1	4	ASN	2.3
21	q1	198	ALA	2.3
21	Q2	141	ALA	2.3
15	u1	83	VAL	2.3
4	D1	226	GLY	2.3
4	d1	226	GLY	2.3
4	D2	13	GLY	2.3
13	O1	45	LEU	2.3
7	H1	2	ALA	2.3
2	B2	349	LYS	2.3
18	x2	34	GLN	2.3
14	t1	29	ILE	2.3
10	k2	27	VAL	2.3
18	X2	19	VAL	2.3
2	b2	119	ASP	2.3
4	D2	25	ASP	2.3
13	O1	226	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
1	a2	12	SER	2.3
2	b2	69	LEU	2.3
13	O1	85	LEU	2.3
13	o1	45	LEU	2.3
16	v2	39	SER	2.3
1	A2	135	TYR	2.3
13	O1	227	ALA	2.3
13	o1	138	THR	2.3
2	B1	430	PHE	2.3
2	B1	431	GLU	2.3
2	b1	151	PHE	2.3
8	I1	2	PHE	2.3
21	Q2	123	ILE	2.3
4	D2	247	VAL	2.3
13	o1	66	VAL	2.3
4	d2	21	TRP	2.3
19	S1	30	TRP	2.3
1	A2	296	ASN	2.3
18	X2	20	LEU	2.3
10	K2	19	ALA	2.3
21	Q2	189	ALA	2.3
1	A2	143	ILE	2.3
1	A2	16	ARG	2.3
1	A2	312	ARG	2.3
2	b1	495	PHE	2.3
4	D2	233	ARG	2.3
2	B2	348	ASP	2.3
2	b2	82	GLY	2.3
22	z2	46	GLY	2.3
3	C2	387	TRP	2.3
22	Z2	44	SER	2.3
16	v1	104	MET	2.3
2	B2	172	TYR	2.3
2	B2	405	LYS	2.3
4	D2	73	PHE	2.3
21	q1	191	ARG	2.3
11	L1	2	GLY	2.2
3	C2	35	TRP	2.2
3	C2	81	LEU	2.2
4	D1	63	LEU	2.2
12	m2	36	MET	2.2
18	x2	17	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
20	W1	20	ALA	2.2
2	B1	405	LYS	2.2
3	C2	232	ASP	2.2
3	C2	321	ASP	2.2
13	o1	180	GLU	2.2
4	D1	267	LEU	2.2
13	o1	51	LEU	2.2
6	F2	45	ARG	2.2
14	t1	28	ARG	2.2
19	S2	14	ALA	2.2
2	b1	438	ASP	2.2
2	b2	426	PHE	2.2
4	d2	235	PHE	2.2
2	B2	498	VAL	2.2
16	V1	40	CYS	2.2
21	q1	116	ILE	2.2
5	E1	75	GLU	2.2
5	E2	24	SER	2.2
5	e1	30	LEU	2.2
3	C2	55	ALA	2.2
3	C2	452	ALA	2.2
19	s1	36	ALA	2.2
3	C2	331	THR	2.2
1	a1	260	PHE	2.2
2	b1	411	PHE	2.2
4	D1	341	PHE	2.2
2	b1	377	ILE	2.2
2	B1	423	LYS	2.2
19	S2	22	VAL	2.2
12	M1	33	ASN	2.2
1	a2	252	HIS	2.2
2	b2	378	ARG	2.2
3	C2	101	PRO	2.2
5	E1	30	LEU	2.2
5	E2	28	PRO	2.2
2	B2	302	TRP	2.2
3	C1	57	ALA	2.2
16	v1	13	ASP	2.2
1	a1	216	GLY	2.2
3	c1	212	TYR	2.2
1	A2	77	ILE	2.2
3	C2	208	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
9	J2	14	VAL	2.2
13	O2	238	VAL	2.2
3	c2	152	ARG	2.2
5	E1	57	SER	2.2
5	e1	42	LEU	2.2
16	V2	50	PRO	2.2
12	m2	39	ALA	2.2
7	H1	60	ILE	2.2
17	Y1	40	SER	2.2
22	z2	38	SER	2.2
2	B2	299	PRO	2.2
12	m2	38	GLU	2.2
2	b1	260	ALA	2.2
3	C2	356	MET	2.2
13	O1	-2	THR	2.2
10	K2	18	PHE	2.2
2	B1	284	ILE	2.2
10	K2	22	ILE	2.2
16	v2	38	SER	2.2
13	O2	11	LYS	2.2
13	O1	165	ALA	2.2
4	d2	238	THR	2.2
2	b1	174	LEU	2.1
11	L2	2	GLY	2.1
2	B2	224	ARG	2.1
7	H1	5	THR	2.1
5	e1	75	GLU	2.1
2	B1	402	TYR	2.1
3	c2	109	TYR	2.1
3	c2	208	ILE	2.1
13	O1	78	LEU	2.1
15	U2	54	PRO	2.1
21	Q2	113	ARG	2.1
3	C2	79	LYS	2.1
21	Q2	203	THR	2.1
6	f1	18	PHE	2.1
13	o2	130	ASN	2.1
22	Z2	17	PHE	2.1
13	O2	208	SER	2.1
1	a2	249	VAL	2.1
3	c1	471	PRO	2.1
5	E1	23	HIS	2.1

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Mol	Chain	Res	Type	RSRZ
21	q1	126	ALA	2.1
7	h2	27	THR	2.1
13	O1	138	THR	2.1
13	O2	77	THR	2.1
4	d1	98	GLN	2.1
22	Z2	28	SER	2.1
1	a1	16	ARG	2.1
2	b2	197	GLY	2.1
21	Q2	142	LEU	2.1
3	c1	77	PRO	2.1
2	B2	182	ALA	2.1
2	b2	260	ALA	2.1
5	E1	72	ALA	2.1
19	S2	12	ALA	2.1
4	d2	112	THR	2.1
4	d2	54	PHE	2.1
15	U2	23	ASP	2.1
2	b2	120	LEU	2.1
3	C2	227	VAL	2.1
7	H1	3	LEU	2.1
3	C2	465	PRO	2.1
13	o2	178(D)	ALA	2.1
2	b1	162	PHE	2.1
2	b2	297	SER	2.1
4	D2	169	PHE	2.1
16	V2	66	ARG	2.1
21	q1	182	ARG	2.1
4	d2	25	ASP	2.1
13	O2	144	GLY	2.1
3	c1	53	HIS	2.1
1	a2	235	TYR	2.1
2	B2	2	ALA	2.1
19	s1	40	ALA	2.1
1	A2	257	ARG	2.1
1	A2	305	SER	2.1
4	d1	56	SER	2.1
9	j1	32	SER	2.1
3	C1	473	ASP	2.1
10	K2	23	ASP	2.1
13	o1	50	PHE	2.1
2	b1	142	HIS	2.1
13	o1	244	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
2	b1	436	ILE	2.1
2	b2	436	ILE	2.1
21	Q2	174	LYS	2.1
2	B2	480	ALA	2.1
1	A2	303	ASN	2.1
3	C1	141	GLU	2.1
3	C2	335	THR	2.1
13	o1	192	GLU	2.1
2	B1	125	ASP	2.1
3	C2	318	LEU	2.0
3	c2	253	LEU	2.0
2	b1	498	VAL	2.0
8	I1	20	ILE	2.0
1	A1	266	ASN	2.0
21	Q2	107	GLU	2.0
4	d2	240	SER	2.0
13	o2	31	SER	2.0
18	X2	13	SER	2.0
2	B1	118	TRP	2.0
21	Q2	135	TRP	2.0
2	B2	174	LEU	2.0
3	c2	119	LEU	2.0
7	H2	23	PRO	2.0
4	d2	24	ARG	2.0
18	X1	29	ILE	2.0
2	b1	484	ALA	2.0
2	b2	87	ASN	2.0
3	c1	34	ALA	2.0
16	v1	116	ALA	2.0
2	b1	503	THR	2.0
13	o1	246	SER	2.0
2	B2	411	PHE	2.0
2	b2	139	PHE	2.0
2	B1	187	PRO	2.0
21	q1	152	VAL	2.0
21	q1	166	LYS	2.0
2	B1	351	GLY	2.0
4	D1	240	SER	2.0
2	b1	156	PHE	2.0
8	i1	2	PHE	2.0
15	u1	38	PHE	2.0
3	C1	472	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
9	j1	40	LEU	2.0
21	Q2	106	PRO	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
28	UNL	J2	101	10/-	0.43	0.86	71,82,86,88	0
28	UNL	c2	520	15/-	0.44	0.32	86,97,106,108	0
28	UNL	I2	103	14/-	0.54	0.38	62,93,102,104	0
33	LHG	a2	407	30/49	0.55	0.37	55,75,94,102	0
28	UNL	d2	410	13/-	0.55	0.59	74,92,108,111	0
23	BCR	K1	101	31/40	0.57	0.54	64,82,93,96	0
28	UNL	j1	101	17/-	0.59	0.46	60,69,71,77	0
33	LHG	b2	625	43/49	0.60	0.41	62,87,109,126	0
39	CA	o2	401	1/1	0.61	0.34	101,101,101,101	0
35	LMT	a2	406	35/35	0.61	0.36	43,80,92,94	0
28	UNL	I2	102	17/-	0.62	0.37	80,92,102,103	0
32	GOL	a1	406	6/6	0.63	0.29	68,75,86,90	0
28	UNL	a2	409	18/-	0.63	0.34	61,74,86,90	0
28	UNL	C2	517	18/-	0.64	0.45	74,83,87,89	0
35	LMT	c1	517	33/35	0.64	0.43	63,100,117,119	0
35	LMT	b2	621	35/35	0.65	0.35	69,110,123,123	0
23	BCR	K2	102	40/40	0.65	0.44	84,99,113,115	0
28	UNL	B2	626	15/-	0.65	0.36	79,83,92,95	0
28	UNL	X2	101	7/-	0.66	0.43	83,85,91,93	0
28	UNL	A2	409	10/-	0.67	0.39	72,82,85,87	0
28	UNL	A2	408	18/-	0.68	0.38	62,83,92,93	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å²)	Q<0.9
28	UNL	D1	410	6/-	0.68	0.49	59,62,66,66	0
32	GOL	C1	518	6/6	0.68	0.45	65,73,77,81	0
28	UNL	F2	403	16/-	0.68	0.19	51,76,86,89	0
28	UNL	d1	410	12/-	0.68	0.31	49,72,77,79	0
29	LMG	C2	515	24/55	0.70	0.60	82,97,104,105	0
28	UNL	t1	101	18/-	0.70	0.40	43,60,66,67	0
28	UNL	b1	626	13/-	0.70	0.29	53,64,83,86	0
28	UNL	k2	505	6/-	0.70	0.22	70,80,84,87	0
28	UNL	b1	623	11/-	0.70	0.41	59,74,83,84	0
29	LMG	d1	411	35/55	0.70	0.34	58,76,94,99	0
28	UNL	m2	102	18/-	0.70	0.38	46,65,79,79	0
28	UNL	C2	501	6/-	0.71	0.44	72,74,78,87	0
29	LMG	j2	101	50/55	0.72	0.41	60,78,97,107	0
28	UNL	B2	622	17/-	0.73	0.30	57,71,76,78	0
28	UNL	b2	607	12/-	0.73	0.36	64,75,80,87	0
23	BCR	K2	104	29/40	0.74	0.38	92,100,109,112	0
28	UNL	k2	504	9/-	0.74	0.35	66,74,80,88	0
29	LMG	I2	101	34/55	0.74	0.26	82,103,109,114	0
33	LHG	B2	627	42/49	0.74	0.32	67,88,120,132	0
35	LMT	m2	103	30/35	0.74	0.29	52,89,111,113	0
28	UNL	b1	629	15/-	0.74	0.29	46,59,71,83	0
28	UNL	B1	623	16/-	0.74	0.28	53,68,72,74	0
32	GOL	c2	518	6/6	0.75	0.35	50,55,59,64	0
35	LMT	m2	104	29/35	0.75	0.27	49,104,119,122	0
28	UNL	b1	627	16/-	0.76	0.27	42,56,75,77	0
23	BCR	h2	101	40/40	0.76	0.36	71,85,107,109	0
25	CLA	B1	604	42/65	0.77	0.31	83,98,107,113	0
23	BCR	c2	501	40/40	0.77	0.36	66,82,89,92	0
28	UNL	H2	102	5/-	0.77	0.56	72,81,84,85	0
28	UNL	x1	101	15/-	0.77	0.38	55,73,79,82	0
28	UNL	B2	625	18/-	0.77	0.35	37,56,68,68	0
28	UNL	k2	502	9/-	0.77	0.39	72,78,84,86	0
29	LMG	b2	622	39/55	0.78	0.30	47,60,85,90	0
23	BCR	C2	502	40/40	0.78	0.35	95,106,118,120	0
23	BCR	C1	521	40/40	0.78	0.29	59,68,80,84	0
23	BCR	c1	502	40/40	0.78	0.33	57,66,72,72	0
28	UNL	b1	630	17/-	0.78	0.42	48,57,74,75	0
25	CLA	D2	404	61/65	0.79	0.26	67,87,113,120	0
37	SQD	B2	623	45/54	0.79	0.34	58,79,89,96	0
29	LMG	F2	402	35/55	0.79	0.29	68,81,91,92	0
28	UNL	a2	401	18/-	0.79	0.30	46,56,70,86	0
24	CL	A2	410	1/1	0.80	0.18	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
23	BCR	j2	102	40/40	0.80	0.28	59,75,86,87	0
23	BCR	k1	101	40/40	0.80	0.43	56,70,82,85	0
35	LMT	b2	623	35/35	0.80	0.30	63,90,98,101	0
28	UNL	M2	101	11/-	0.80	0.30	59,68,73,74	0
35	LMT	l1	101	24/35	0.80	0.28	42,55,89,90	0
29	LMG	A1	412	41/55	0.80	0.24	50,75,96,100	0
23	BCR	z2	101	40/40	0.80	0.41	80,95,100,101	0
25	CLA	C2	510	45/65	0.80	0.34	107,116,121,126	0
28	UNL	k2	503	6/-	0.81	0.46	67,76,79,80	0
29	LMG	b1	621	38/55	0.81	0.24	52,63,76,82	0
25	CLA	C1	514	45/65	0.81	0.31	73,84,92,96	0
23	BCR	b2	603	40/40	0.81	0.26	60,74,102,104	0
35	LMT	m1	101	35/35	0.81	0.24	44,80,103,112	0
28	UNL	m1	102	6/-	0.81	0.33	54,55,63,66	0
33	LHG	A2	405	33/49	0.81	0.34	70,80,90,97	0
32	GOL	B1	620	6/6	0.81	0.32	63,75,81,82	0
29	LMG	a1	412	51/55	0.81	0.26	54,67,77,91	0
25	CLA	c1	516	65/65	0.81	0.32	66,82,104,109	0
28	UNL	a2	410	8/-	0.81	0.26	61,68,70,76	0
29	LMG	C1	520	48/55	0.82	0.26	59,69,78,86	0
35	LMT	i2	102	7/35	0.82	0.29	68,71,76,79	0
23	BCR	H2	103	24/40	0.82	0.30	65,76,82,85	0
37	SQD	b2	605	45/54	0.82	0.31	54,83,114,124	0
25	CLA	c2	513	54/65	0.82	0.29	75,94,102,105	0
33	LHG	d1	402	32/49	0.82	0.27	45,63,76,86	0
28	UNL	m2	101	18/-	0.82	0.34	44,57,79,85	0
29	LMG	B1	626	48/55	0.82	0.25	55,70,89,94	0
28	UNL	a2	411	11/-	0.82	0.31	51,55,65,67	0
23	BCR	F2	401	40/40	0.82	0.23	67,81,107,113	0
29	LMG	b1	624	39/55	0.83	0.36	58,73,84,87	0
29	LMG	a2	412	44/55	0.83	0.26	55,70,78,93	0
35	LMT	M1	103	24/35	0.83	0.21	42,68,97,101	0
25	CLA	d2	404	50/65	0.83	0.23	57,74,83,88	0
25	CLA	K2	101	55/65	0.83	0.28	86,98,104,109	0
28	UNL	B1	624	18/-	0.83	0.28	43,71,79,81	0
34	DGD	H2	101	62/66	0.83	0.26	51,74,83,85	0
28	UNL	b1	625	10/-	0.83	0.42	50,62,68,69	0
25	CLA	C2	508	50/65	0.83	0.32	87,103,112,115	0
25	CLA	C2	518	41/65	0.83	0.29	105,121,127,134	0
25	CLA	C1	513	61/65	0.84	0.28	49,68,74,78	0
25	CLA	C2	509	65/65	0.84	0.25	90,101,106,108	0
29	LMG	b1	631	40/55	0.84	0.23	29,52,85,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
25	CLA	C2	505	65/65	0.84	0.23	78,100,112,118	0
23	BCR	c1	501	40/40	0.84	0.24	56,66,79,82	0
29	LMG	A2	412	29/55	0.84	0.22	86,94,100,102	0
23	BCR	b1	602	40/40	0.84	0.25	35,57,65,73	0
32	GOL	b1	618	6/6	0.84	0.25	60,69,80,80	0
25	CLA	C1	512	65/65	0.85	0.25	63,82,102,121	0
23	BCR	D1	401	40/40	0.85	0.23	54,67,89,95	0
34	DGD	H1	101	62/66	0.85	0.24	50,71,84,89	0
39	CA	O1	401	1/1	0.85	0.07	82,82,82,82	0
25	CLA	C2	506	65/65	0.85	0.34	78,90,97,100	0
25	CLA	C2	503	65/65	0.85	0.28	94,104,112,116	0
23	BCR	k2	501	40/40	0.85	0.29	61,84,95,98	0
25	CLA	B1	611	62/65	0.85	0.25	58,78,87,89	0
29	LMG	B2	621	37/55	0.85	0.25	53,68,80,96	0
25	CLA	B1	618	58/65	0.85	0.25	53,64,80,86	0
23	BCR	C1	501	40/40	0.85	0.24	47,61,72,75	0
32	GOL	C2	514	6/6	0.85	0.22	87,93,100,101	0
28	UNL	W2	101	9/-	0.85	0.21	64,77,83,87	0
25	CLA	c2	515	46/65	0.85	0.27	81,100,104,109	0
25	CLA	C2	513	53/65	0.85	0.26	78,91,106,110	0
37	SQD	D1	409	35/54	0.85	0.36	61,75,92,97	0
23	BCR	J1	101	40/40	0.86	0.33	50,70,86,88	0
23	BCR	B1	602	40/40	0.86	0.21	49,62,74,78	0
23	BCR	B2	602	40/40	0.86	0.20	47,59,80,86	0
25	CLA	b1	604	65/65	0.86	0.26	52,78,110,115	0
23	BCR	H1	102	22/40	0.86	0.23	75,88,95,100	0
25	CLA	c1	515	55/65	0.86	0.24	69,82,90,94	0
28	UNL	d2	411	12/-	0.86	0.42	55,67,73,79	0
28	UNL	B2	624	8/-	0.86	0.24	46,51,54,55	0
29	LMG	c2	519	26/55	0.86	0.21	58,67,73,74	0
35	LMT	T1	101	12/35	0.86	0.28	46,51,54,56	0
25	CLA	c1	508	50/65	0.86	0.22	57,66,77,81	0
29	LMG	B2	620	40/55	0.87	0.26	62,74,97,98	0
25	CLA	D1	403	51/65	0.87	0.21	64,74,88,90	0
25	CLA	d1	406	65/65	0.87	0.23	44,58,94,99	0
25	CLA	b2	619	59/65	0.87	0.23	71,80,106,109	0
25	CLA	b2	610	65/65	0.87	0.21	60,82,90,92	0
25	CLA	c2	512	65/65	0.87	0.26	61,76,86,93	0
23	BCR	b2	602	40/40	0.87	0.21	51,70,78,82	0
23	BCR	d2	401	40/40	0.87	0.22	48,67,81,85	0
28	UNL	a1	409	11/-	0.87	0.23	43,51,60,63	0
35	LMT	C1	519	35/35	0.87	0.24	57,76,85,93	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å²)	Q<0.9
34	DGD	C2	512	33/66	0.87	0.20	63,77,83,93	0
25	CLA	b2	613	65/65	0.87	0.23	59,84,96,99	0
28	UNL	l1	103	12/-	0.87	0.35	35,47,53,55	0
32	GOL	i1	101	6/6	0.87	0.49	55,57,60,64	0
29	LMG	c1	519	55/55	0.87	0.26	47,70,84,91	0
29	LMG	B1	622	31/55	0.87	0.18	66,74,81,83	0
28	UNL	i2	101	14/-	0.87	0.21	62,66,73,75	0
25	CLA	b2	604	42/65	0.88	0.29	82,109,116,127	0
36	PL9	d2	409	55/55	0.88	0.28	33,44,56,57	0
28	UNL	B1	625	7/-	0.88	0.27	45,52,55,63	0
25	CLA	b2	618	65/65	0.88	0.25	68,82,90,92	0
28	UNL	b1	628	10/-	0.88	0.35	51,57,61,67	0
25	CLA	A2	403	61/65	0.88	0.26	80,89,98,102	0
33	LHG	D1	404	49/49	0.88	0.26	48,60,84,90	0
25	CLA	B2	611	65/65	0.88	0.21	51,73,81,86	0
34	DGD	h2	102	62/66	0.88	0.22	47,67,82,96	0
34	DGD	c2	516	52/66	0.88	0.20	37,63,71,75	0
25	CLA	C1	505	65/65	0.89	0.20	43,55,64,68	0
25	CLA	b1	609	65/65	0.89	0.21	42,58,84,104	0
28	UNL	A1	409	14/-	0.89	0.21	44,48,57,68	0
28	UNL	K2	103	5/-	0.89	0.40	79,83,88,90	0
29	LMG	M1	101	31/55	0.89	0.25	41,52,63,70	0
23	BCR	d1	405	40/40	0.89	0.18	38,51,94,99	0
25	CLA	D2	401	65/65	0.89	0.24	43,53,71,76	0
25	CLA	b1	619	65/65	0.89	0.21	48,62,81,85	0
34	DGD	C1	515	52/66	0.89	0.19	36,58,67,71	0
25	CLA	B2	618	60/65	0.89	0.23	59,65,80,85	0
29	LMG	A1	410	43/55	0.89	0.19	52,59,65,76	0
25	CLA	C2	516	46/65	0.89	0.17	70,92,97,100	0
25	CLA	C1	502	65/65	0.89	0.23	51,63,68,70	0
36	PL9	D2	408	55/55	0.89	0.26	43,59,64,74	0
25	CLA	c2	502	65/65	0.89	0.22	60,78,85,90	0
25	CLA	C2	507	45/65	0.89	0.23	73,93,102,113	0
24	CL	A1	402	1/1	0.89	0.15	39,39,39,39	0
25	CLA	C2	504	46/65	0.89	0.18	72,88,95,96	0
38	HEM	V2	201	43/43	0.89	0.25	83,98,102,107	0
25	CLA	c2	507	54/65	0.90	0.22	76,81,86,92	0
25	CLA	B2	604	41/65	0.90	0.33	68,79,92,97	0
25	CLA	C2	511	50/65	0.90	0.18	85,93,100,104	0
27	PHO	D2	407	64/64	0.90	0.21	58,68,81,83	0
25	CLA	c1	509	65/65	0.90	0.21	51,62,68,72	0
25	CLA	B1	617	65/65	0.90	0.24	59,67,74,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å²)	Q<0.9
37	SQD	D2	402	25/54	0.90	0.25	85,90,96,98	0
28	UNL	t1	102	9/-	0.90	0.26	45,57,68,69	0
38	HEM	e2	101	43/43	0.90	0.47	126,145,163,171	0
38	HEM	E1	101	43/43	0.90	0.43	108,134,152,155	0
25	CLA	B1	609	65/65	0.90	0.23	54,71,81,90	0
23	BCR	B2	603	40/40	0.90	0.25	46,59,76,81	0
25	CLA	B2	606	65/65	0.90	0.26	53,67,75,78	0
34	DGD	h1	101	62/66	0.90	0.19	37,48,59,65	0
23	BCR	b2	601	40/40	0.91	0.22	51,61,69,72	0
38	HEM	E2	101	43/43	0.91	0.35	116,132,146,152	0
25	CLA	B2	609	65/65	0.91	0.19	51,67,76,82	0
25	CLA	c2	508	65/65	0.91	0.22	68,78,84,88	0
25	CLA	b2	606	65/65	0.91	0.26	68,77,84,90	0
25	CLA	C1	511	65/65	0.91	0.23	45,56,62,68	0
25	CLA	C1	508	65/65	0.91	0.18	47,66,76,80	0
25	CLA	a1	404	60/65	0.91	0.19	49,57,82,89	0
25	CLA	b2	609	61/65	0.91	0.20	77,89,95,100	0
36	PL9	d1	409	55/55	0.91	0.24	28,41,50,61	0
25	CLA	C1	507	65/65	0.91	0.19	46,67,86,105	0
27	PHO	D1	407	63/64	0.91	0.20	40,56,63,67	0
29	LMG	d1	408	33/55	0.91	0.19	41,50,61,63	0
32	GOL	c1	521	6/6	0.91	0.20	54,56,60,65	0
34	DGD	c1	514	51/66	0.91	0.20	46,54,62,64	0
25	CLA	a2	405	65/65	0.91	0.20	51,60,81,87	0
25	CLA	c2	510	54/65	0.91	0.23	64,69,77,79	0
25	CLA	C1	506	65/65	0.91	0.21	49,62,70,73	0
23	BCR	A2	401	40/40	0.91	0.22	58,84,90,91	0
25	CLA	B2	614	65/65	0.91	0.23	46,58,66,68	0
25	CLA	B2	607	65/65	0.91	0.21	49,59,73,78	0
34	DGD	c1	520	62/66	0.91	0.22	36,59,73,87	0
25	CLA	c1	510	65/65	0.91	0.16	41,54,62,72	0
35	LMT	L1	102	12/35	0.91	0.21	35,45,59,62	0
25	CLA	c2	509	65/65	0.91	0.18	54,70,82,85	0
25	CLA	B2	605	65/65	0.91	0.18	63,71,77,82	0
35	LMT	M1	102	11/35	0.91	0.27	47,52,56,58	0
29	LMG	D1	406	35/55	0.91	0.22	50,57,71,74	0
25	CLA	c1	506	65/65	0.91	0.18	40,54,68,73	0
25	CLA	B1	606	65/65	0.91	0.25	60,71,77,82	0
25	CLA	B2	612	65/65	0.91	0.23	58,64,71,83	0
25	CLA	c1	503	65/65	0.91	0.22	55,66,71,75	0
25	CLA	c2	511	65/65	0.92	0.22	54,65,72,75	0
25	CLA	b2	617	65/65	0.92	0.19	47,58,65,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
25	CLA	c1	505	65/65	0.92	0.21	47,70,79,88	0
32	GOL	a2	415	6/6	0.92	0.46	47,55,59,63	0
34	DGD	c2	517	62/66	0.92	0.16	45,57,70,75	0
25	CLA	b2	612	65/65	0.92	0.17	39,54,64,70	0
23	BCR	B1	601	40/40	0.92	0.20	41,55,65,65	0
25	CLA	C1	509	65/65	0.92	0.20	48,59,71,80	0
25	CLA	A2	404	51/65	0.92	0.16	47,58,70,73	0
25	CLA	c1	513	60/65	0.92	0.19	49,59,71,72	0
25	CLA	b1	611	65/65	0.92	0.17	37,59,68,73	0
29	LMG	d2	407	27/55	0.92	0.17	49,60,64,70	0
33	LHG	B1	621	49/49	0.92	0.22	41,57,67,73	0
23	BCR	h1	102	40/40	0.92	0.21	53,60,67,69	0
33	LHG	L2	101	49/49	0.92	0.21	42,57,70,78	0
25	CLA	b2	611	65/65	0.92	0.29	66,72,80,83	0
25	CLA	B1	612	65/65	0.92	0.21	52,66,71,77	0
25	CLA	B1	607	60/65	0.92	0.20	45,56,68,72	0
25	CLA	c2	506	61/65	0.92	0.21	55,70,77,83	0
27	PHO	d2	408	64/64	0.92	0.19	45,56,62,64	0
34	DGD	C1	517	64/66	0.92	0.17	38,55,75,92	0
25	CLA	d2	405	65/65	0.92	0.20	34,44,61,77	0
27	PHO	A2	407	64/64	0.92	0.23	53,64,72,80	0
27	PHO	a2	416	64/64	0.92	0.20	35,46,53,62	0
25	CLA	c2	505	65/65	0.92	0.18	48,61,71,80	0
33	LHG	d2	403	49/49	0.92	0.22	42,59,69,73	0
25	CLA	B2	619	65/65	0.92	0.17	46,55,63,71	0
34	DGD	c1	518	62/66	0.93	0.19	41,61,69,79	0
25	CLA	b2	624	65/65	0.93	0.21	47,60,75,82	0
36	PL9	D1	408	55/55	0.93	0.25	28,42,52,63	0
25	CLA	C1	510	65/65	0.93	0.24	47,59,77,82	0
25	CLA	b1	616	65/65	0.93	0.19	39,46,57,69	0
23	BCR	a1	401	40/40	0.93	0.20	47,56,64,65	0
23	BCR	B1	603	40/40	0.93	0.17	45,56,78,85	0
25	CLA	c1	507	65/65	0.93	0.21	49,62,72,80	0
26	OEX	A2	406	10/10	0.93	0.10	68,84,93,94	0
25	CLA	c2	503	65/65	0.93	0.22	53,62,83,89	0
25	CLA	B2	615	65/65	0.93	0.16	44,56,73,86	0
33	LHG	D2	405	49/49	0.93	0.20	52,60,66,68	0
33	LHG	d2	406	49/49	0.93	0.20	36,50,59,66	0
25	CLA	c1	504	65/65	0.93	0.21	36,53,83,98	0
25	CLA	B1	619	65/65	0.93	0.20	32,50,57,73	0
25	CLA	C1	504	65/65	0.93	0.19	49,64,74,77	0
25	CLA	b2	608	65/65	0.93	0.20	65,77,85,86	0

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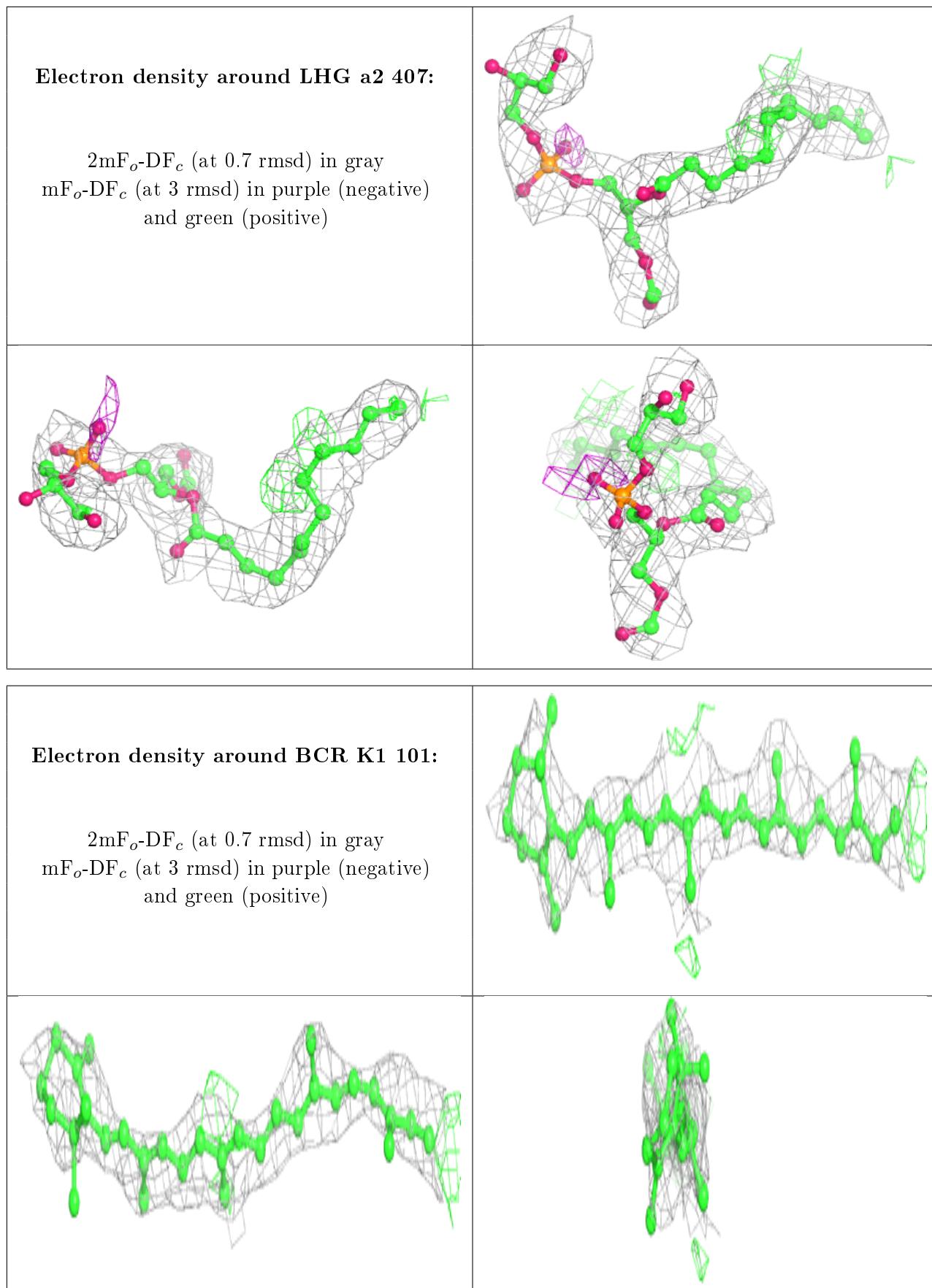
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å²)	Q<0.9
25	CLA	A2	402	65/65	0.93	0.20	47,57,69,77	0
34	DGD	c2	514	62/66	0.93	0.20	47,59,67,69	0
25	CLA	C1	503	60/65	0.93	0.21	38,53,67,73	0
33	LHG	D2	403	49/49	0.93	0.19	45,60,68,73	0
33	LHG	b1	622	49/49	0.93	0.22	36,49,57,69	0
25	CLA	B2	610	65/65	0.93	0.20	44,59,82,86	0
38	HEM	v1	201	43/43	0.93	0.24	60,66,72,75	0
34	DGD	C1	516	62/66	0.93	0.17	44,53,60,61	0
25	CLA	d1	401	65/65	0.93	0.19	30,36,44,47	0
25	CLA	d1	404	65/65	0.93	0.19	31,43,49,51	0
25	CLA	B1	605	65/65	0.93	0.21	60,75,87,88	0
25	CLA	D2	406	65/65	0.93	0.20	45,57,65,67	0
23	BCR	b1	603	40/40	0.93	0.18	40,58,69,77	0
33	LHG	a1	407	43/49	0.93	0.20	36,52,66,70	0
25	CLA	c2	504	65/65	0.93	0.21	46,78,92,100	0
25	CLA	A1	405	55/65	0.93	0.17	38,46,59,65	0
38	HEM	f1	101	43/43	0.93	0.38	62,82,124,136	0
25	CLA	B2	616	54/65	0.93	0.18	43,51,57,59	0
25	CLA	B2	617	65/65	0.94	0.20	52,63,70,74	0
23	BCR	a2	402	40/40	0.94	0.19	33,51,62,67	0
25	CLA	B1	610	65/65	0.94	0.19	46,58,73,76	0
38	HEM	v2	201	43/43	0.94	0.21	47,60,66,78	0
25	CLA	c1	512	65/65	0.94	0.24	36,50,57,60	0
25	CLA	c1	511	65/65	0.94	0.23	38,53,71,78	0
25	CLA	B1	616	65/65	0.94	0.17	39,49,58,66	0
23	BCR	B2	601	40/40	0.94	0.18	41,56,66,68	0
23	BCR	A1	401	40/40	0.94	0.17	36,48,54,58	0
25	CLA	A1	404	51/65	0.94	0.17	37,48,58,70	0
25	CLA	b1	606	65/65	0.94	0.23	44,53,61,63	0
25	CLA	D1	402	65/65	0.94	0.17	31,40,58,63	0
25	CLA	b1	620	65/65	0.94	0.18	31,43,56,60	0
25	CLA	b1	617	65/65	0.94	0.23	47,56,65,68	0
25	CLA	b2	620	65/65	0.94	0.21	42,56,63,72	0
27	PHO	d1	403	64/64	0.94	0.16	32,41,50,54	0
25	CLA	b2	616	60/65	0.94	0.20	51,64,82,82	0
25	CLA	a1	403	65/65	0.94	0.18	29,37,48,51	0
23	BCR	b1	601	40/40	0.94	0.18	36,47,56,57	0
25	CLA	b1	605	65/65	0.94	0.24	38,52,60,66	0
33	LHG	L1	101	41/49	0.94	0.16	30,46,61,85	0
25	CLA	b2	614	65/65	0.94	0.18	51,66,73,75	0
25	CLA	d2	402	65/65	0.94	0.18	24,37,48,52	0
25	CLA	B2	608	65/65	0.94	0.22	43,53,70,76	0

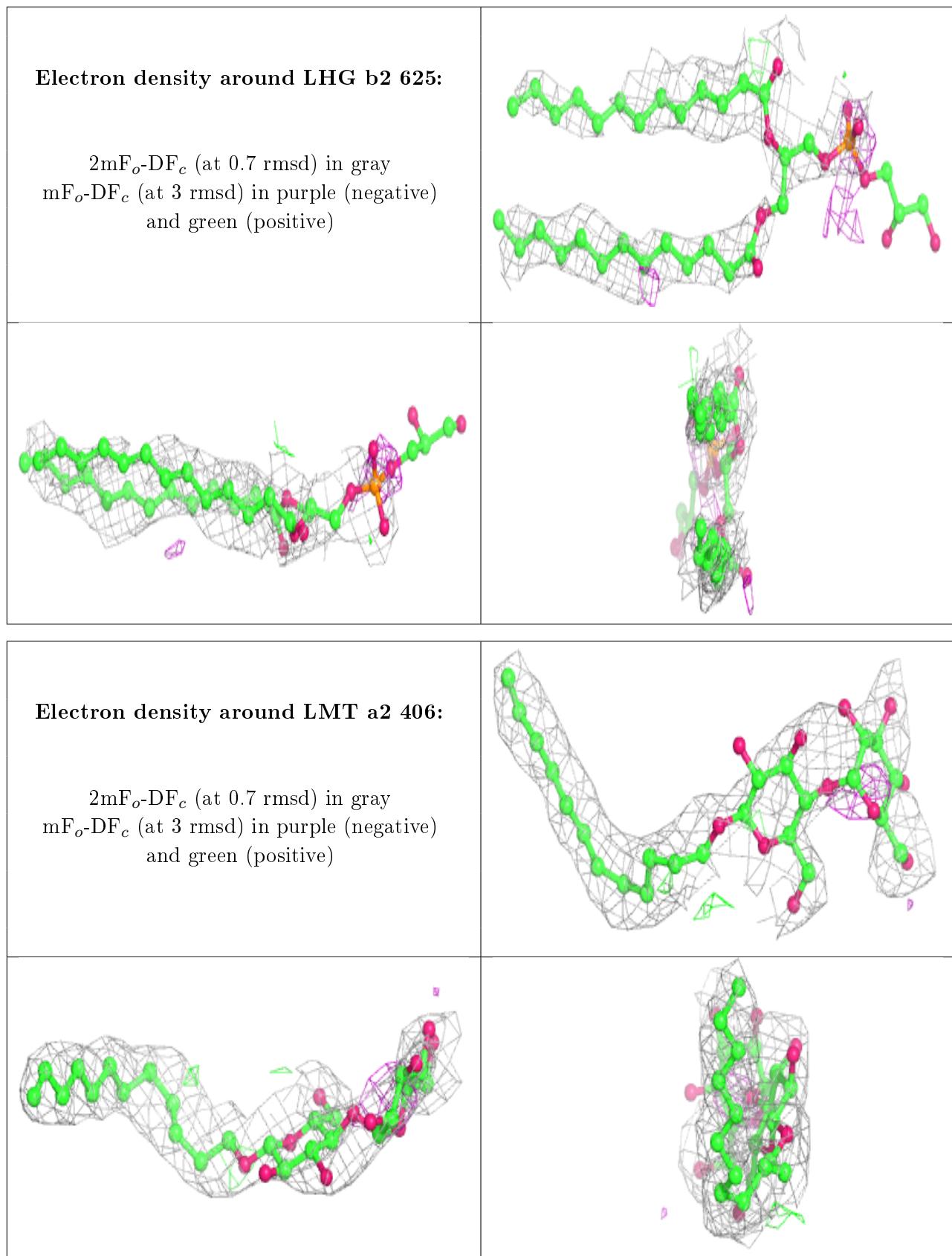
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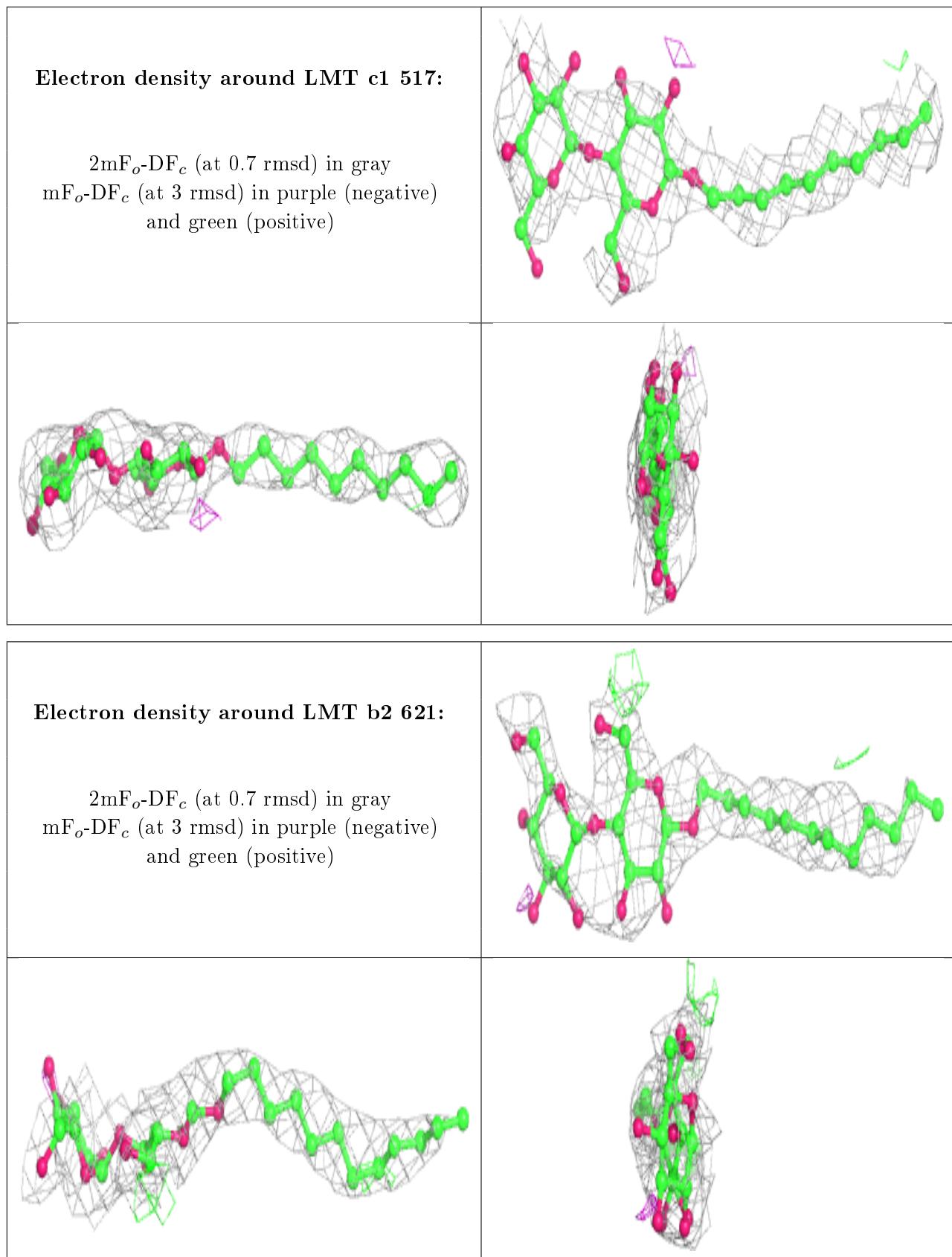
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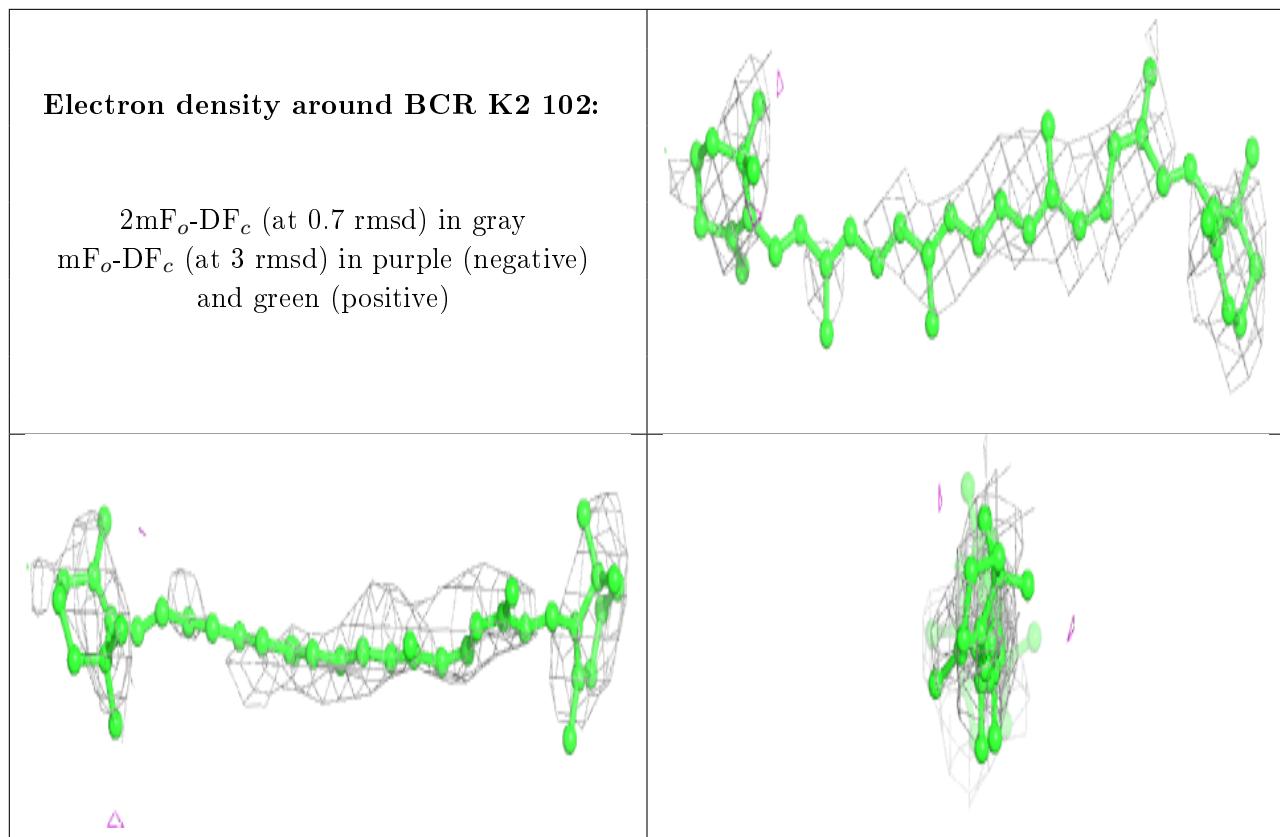
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
25	CLA	b1	613	65/65	0.94	0.17	36,44,54,68	0
25	CLA	b1	607	65/65	0.95	0.20	33,46,69,76	0
25	CLA	b1	610	65/65	0.95	0.16	37,47,56,63	0
25	CLA	a2	404	65/65	0.95	0.17	30,42,52,53	0
33	LHG	l2	101	44/49	0.95	0.16	36,53,66,72	0
27	PHO	a1	411	64/64	0.95	0.17	33,41,47,50	0
25	CLA	B1	615	65/65	0.95	0.18	35,47,73,80	0
25	CLA	b1	615	59/65	0.95	0.16	31,43,58,64	0
25	CLA	B2	613	65/65	0.95	0.16	41,52,68,70	0
25	CLA	a1	405	50/65	0.95	0.14	25,33,49,55	0
25	CLA	A1	406	65/65	0.95	0.19	28,37,46,55	0
38	HEM	V1	201	43/43	0.95	0.21	35,61,66,71	0
25	CLA	a2	413	50/65	0.95	0.14	33,46,57,66	0
25	CLA	b1	608	65/65	0.95	0.20	37,48,58,63	0
25	CLA	b1	614	65/65	0.95	0.20	35,45,54,56	0
25	CLA	b1	612	65/65	0.95	0.21	45,54,60,68	0
27	PHO	A1	408	64/64	0.95	0.18	30,42,50,56	0
33	LHG	D1	405	49/49	0.95	0.18	35,45,54,56	0
25	CLA	B1	614	65/65	0.95	0.19	43,55,62,67	0
25	CLA	B1	613	65/65	0.95	0.18	38,49,57,64	0
25	CLA	B1	608	65/65	0.95	0.18	46,58,71,81	0
24	CL	a1	402	1/1	0.95	0.09	49,49,49,49	0
33	LHG	d1	407	49/49	0.95	0.19	34,44,53,67	0
30	FE	A1	411	1/1	0.96	0.12	52,52,52,52	0
31	BCT	a1	413	4/4	0.96	0.38	43,48,48,50	0
26	OEX	A1	407	10/10	0.96	0.19	45,49,63,68	0
31	BCT	A1	413	4/4	0.96	0.27	54,60,62,63	0
25	CLA	b2	615	60/65	0.96	0.15	45,54,67,74	0
33	LHG	l1	102	49/49	0.96	0.18	25,43,67,75	0
25	CLA	A1	403	65/65	0.96	0.18	27,37,49,54	0
31	BCT	A2	413	4/4	0.97	0.27	65,69,71,72	0
26	OEX	a1	408	10/10	0.97	0.15	39,49,62,70	0
30	FE	a1	410	1/1	0.98	0.19	49,49,49,49	0
31	BCT	a2	417	4/4	0.98	0.27	59,65,67,73	0
24	CL	a2	403	1/1	0.98	0.06	37,37,37,37	0
26	OEX	a2	408	10/10	0.98	0.15	42,49,58,61	0
30	FE	a2	414	1/1	0.99	0.15	57,57,57,57	0
30	FE	A2	411	1/1	0.99	0.18	63,63,63,63	0

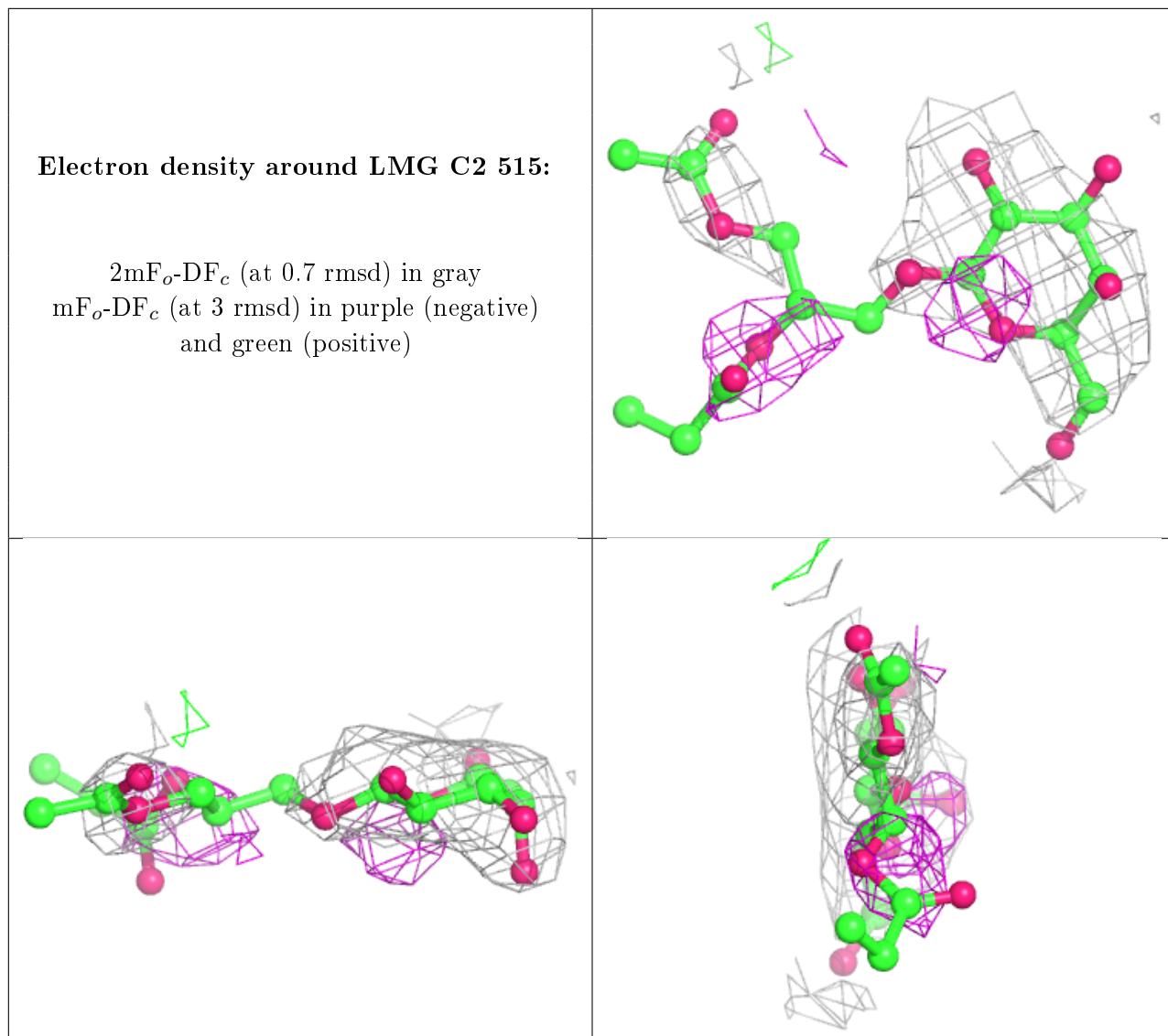
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

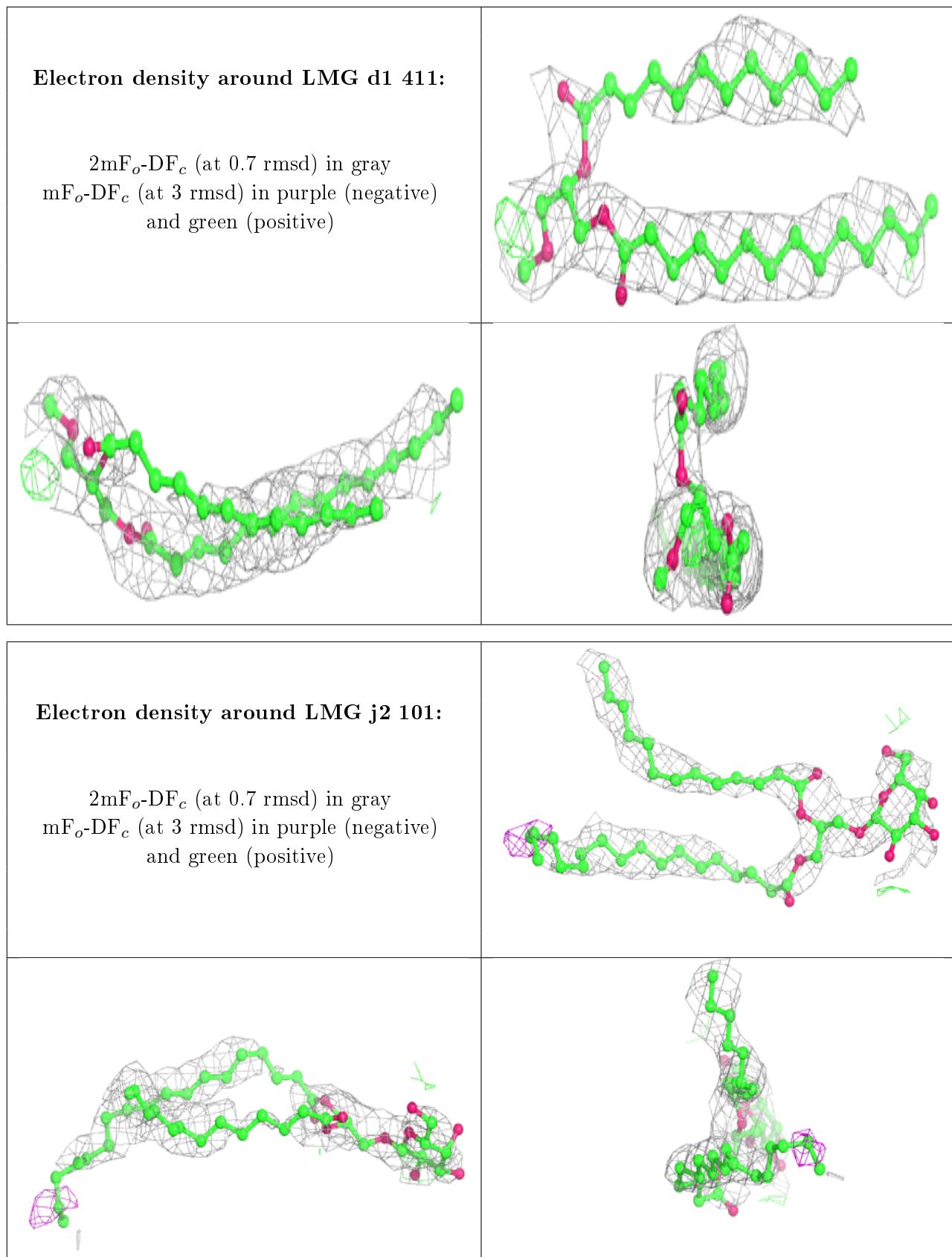


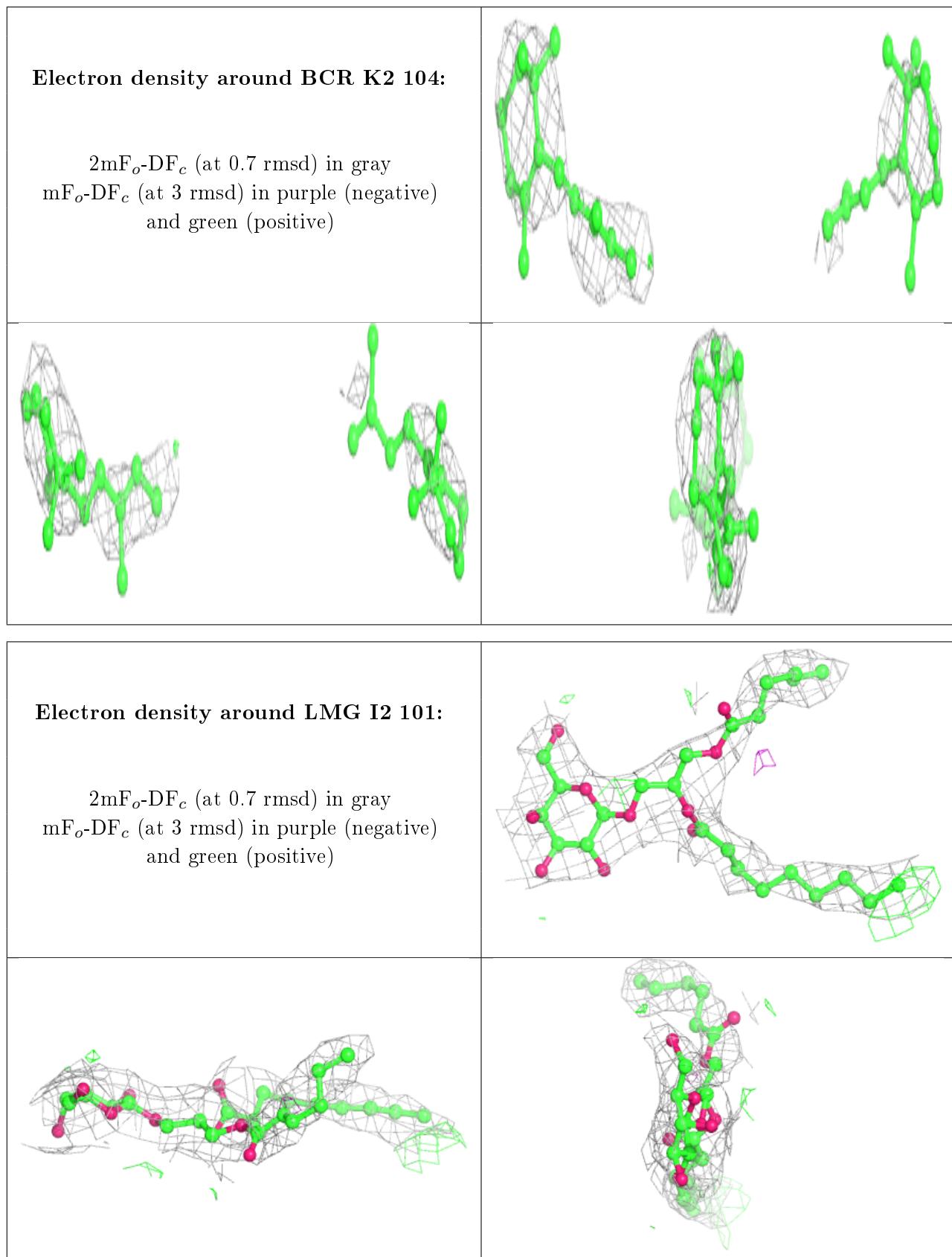


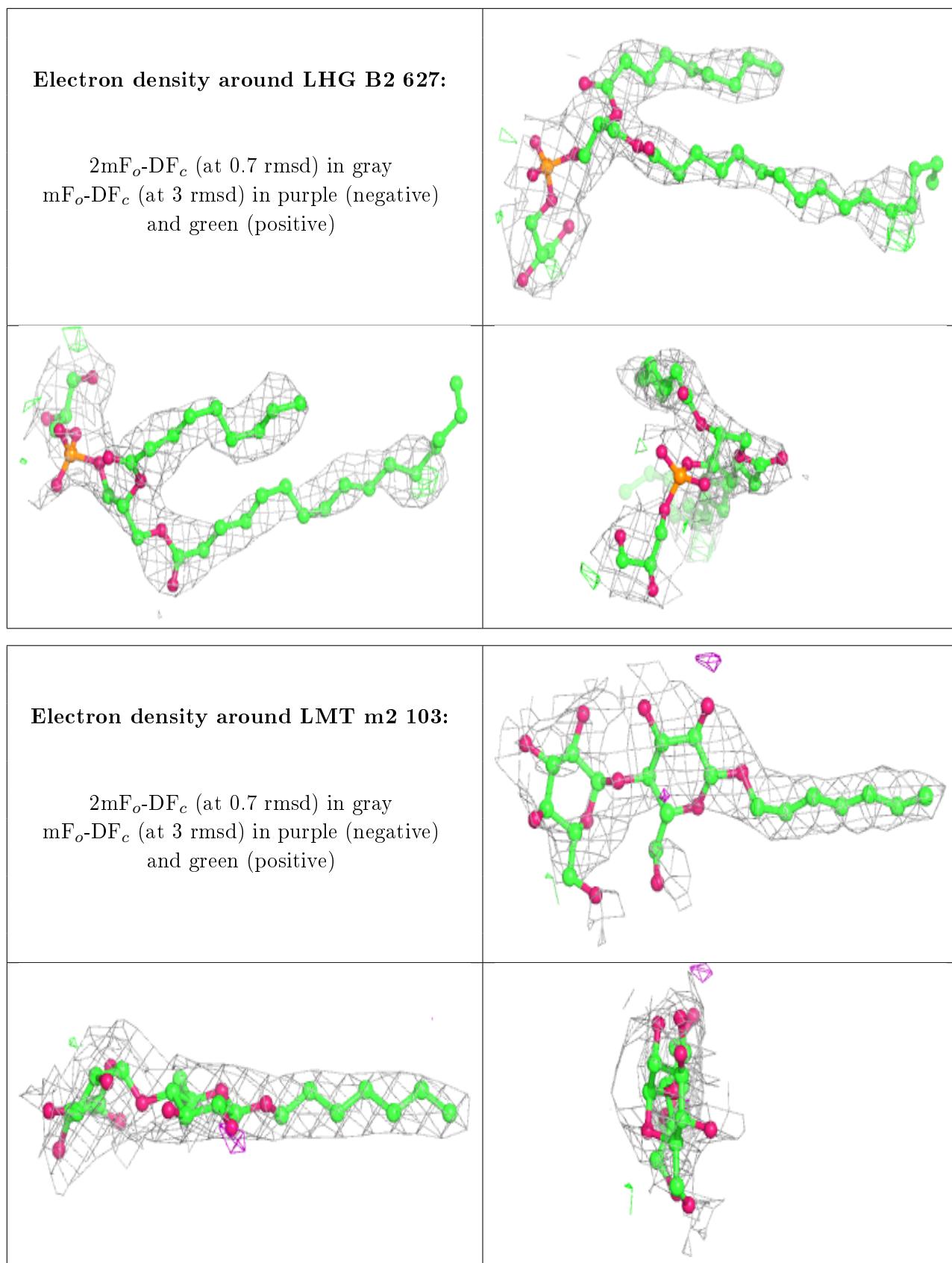


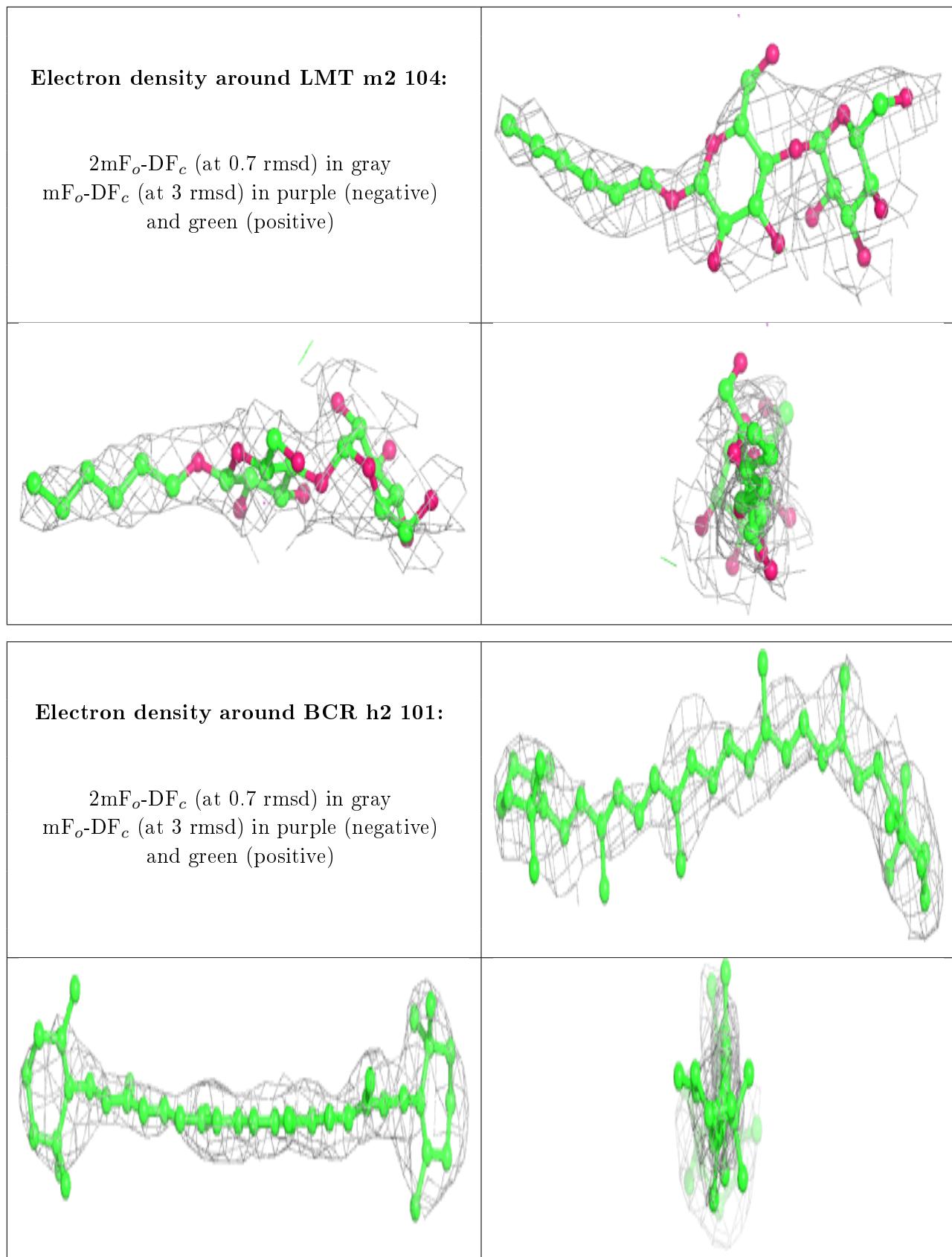


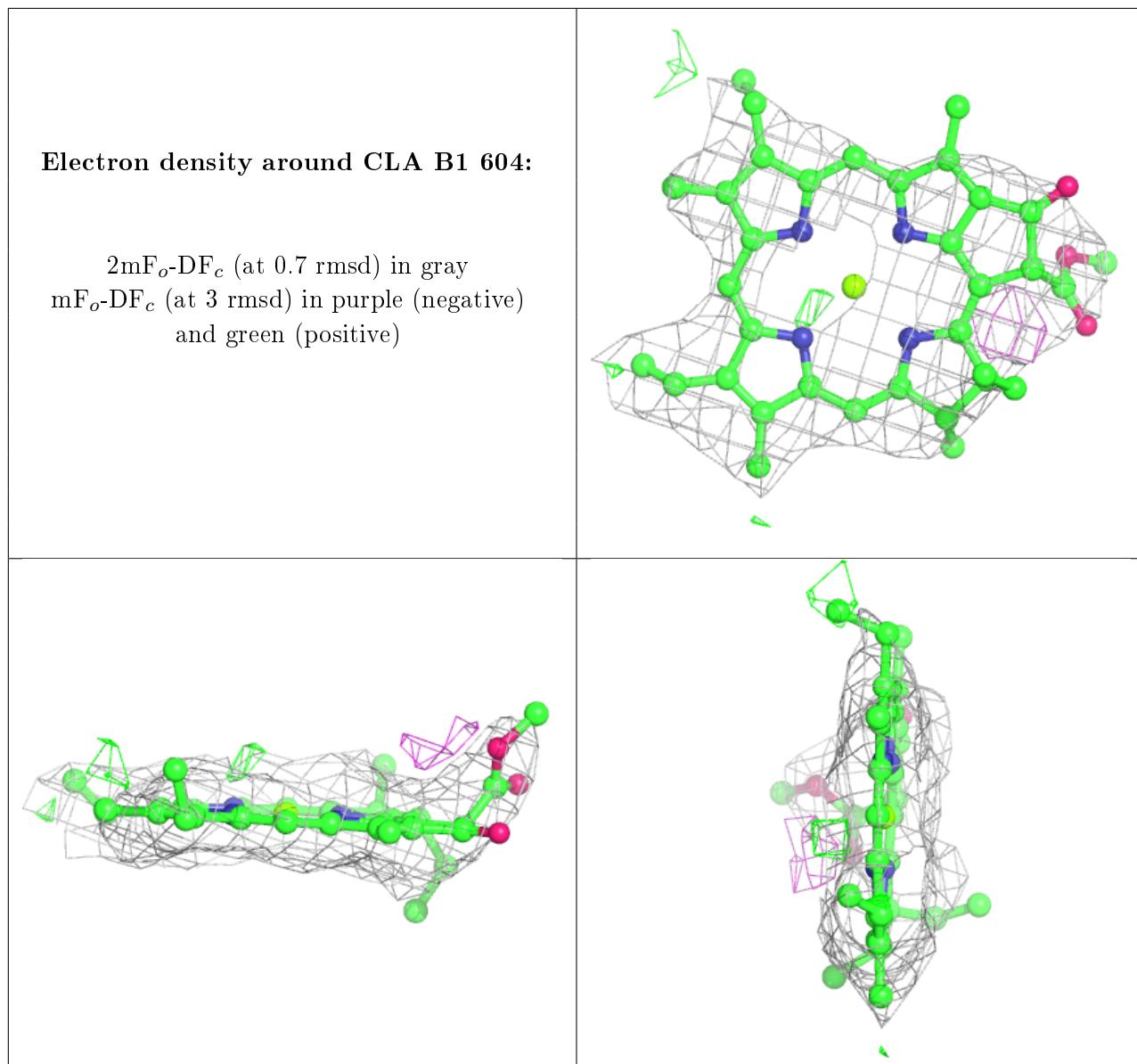


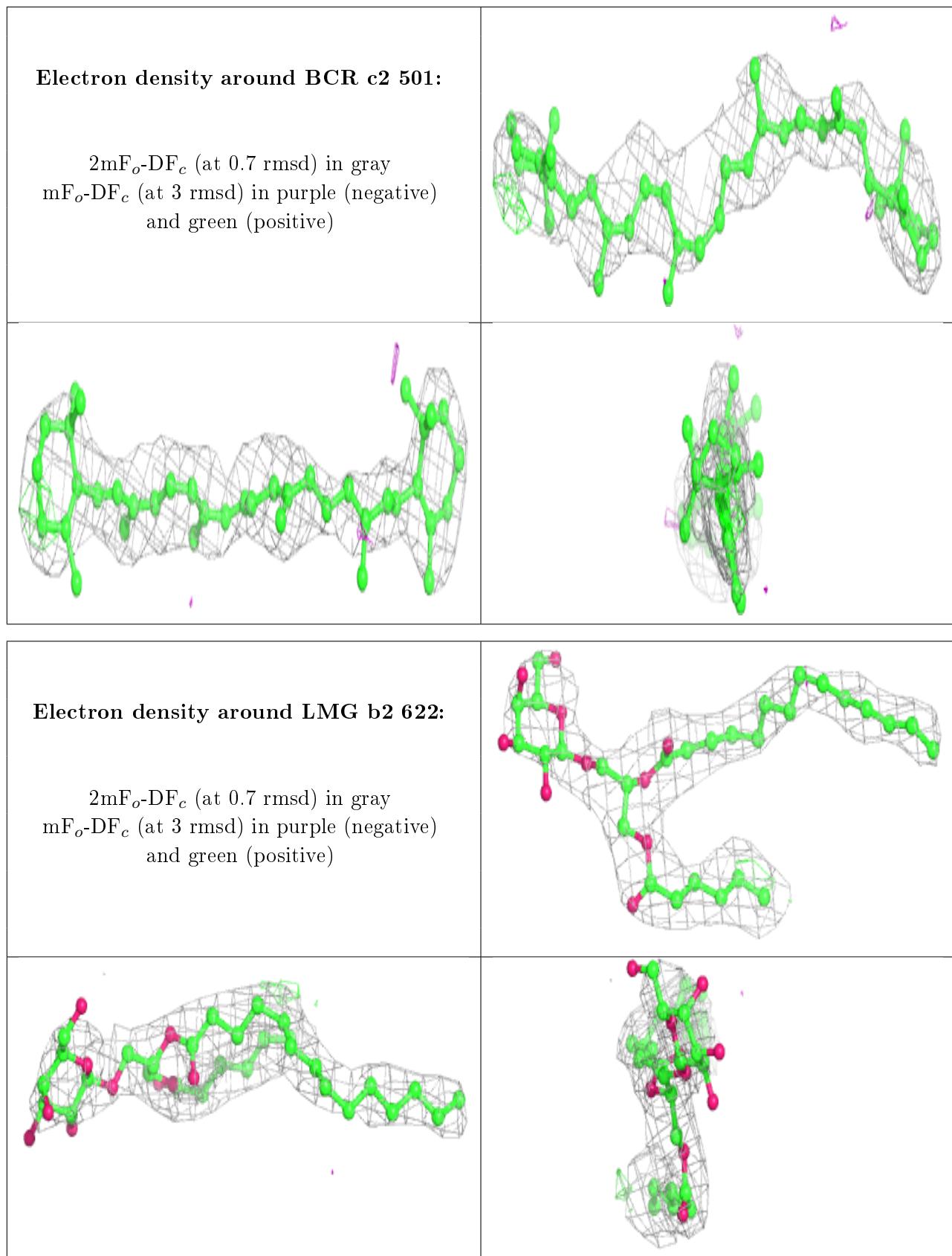


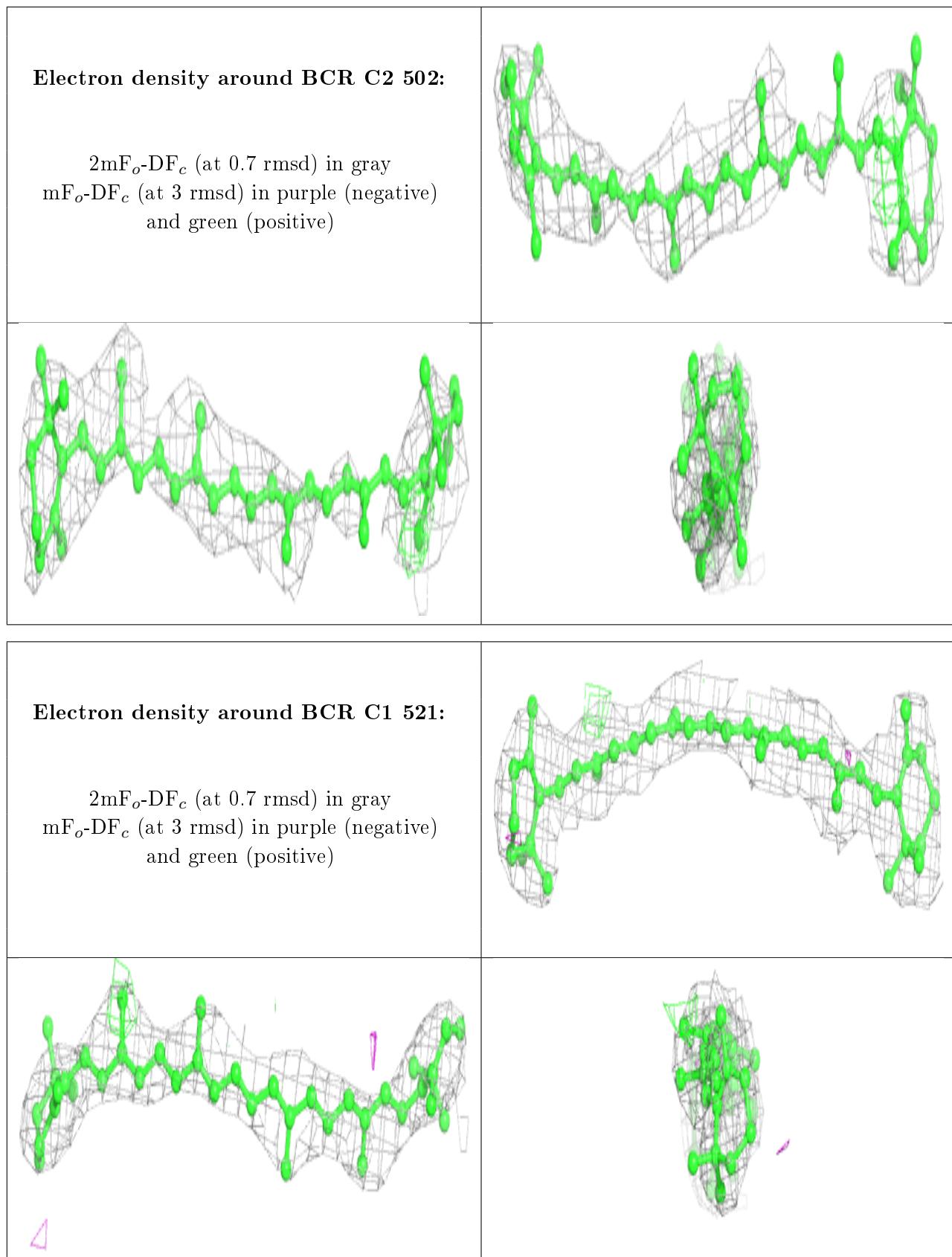


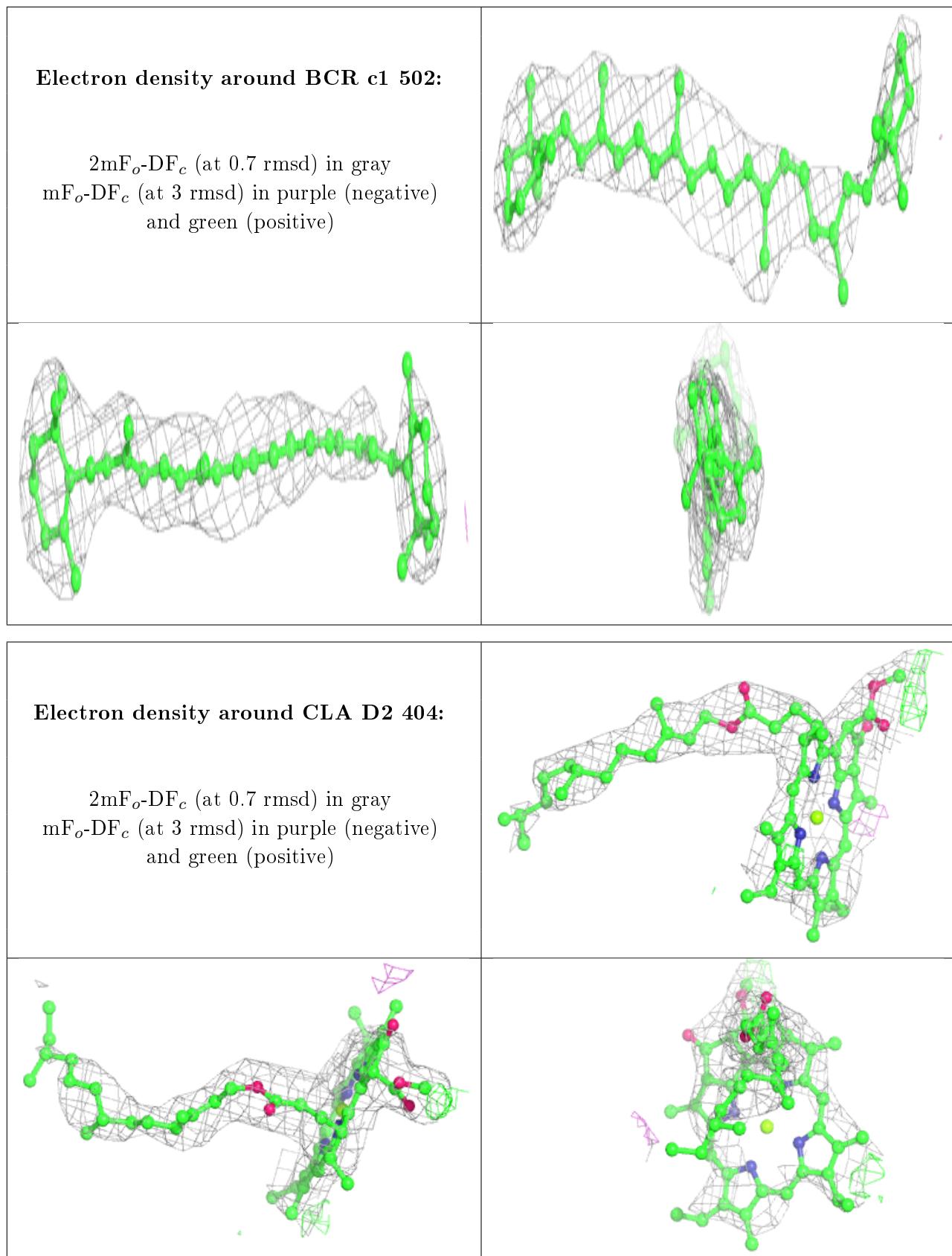


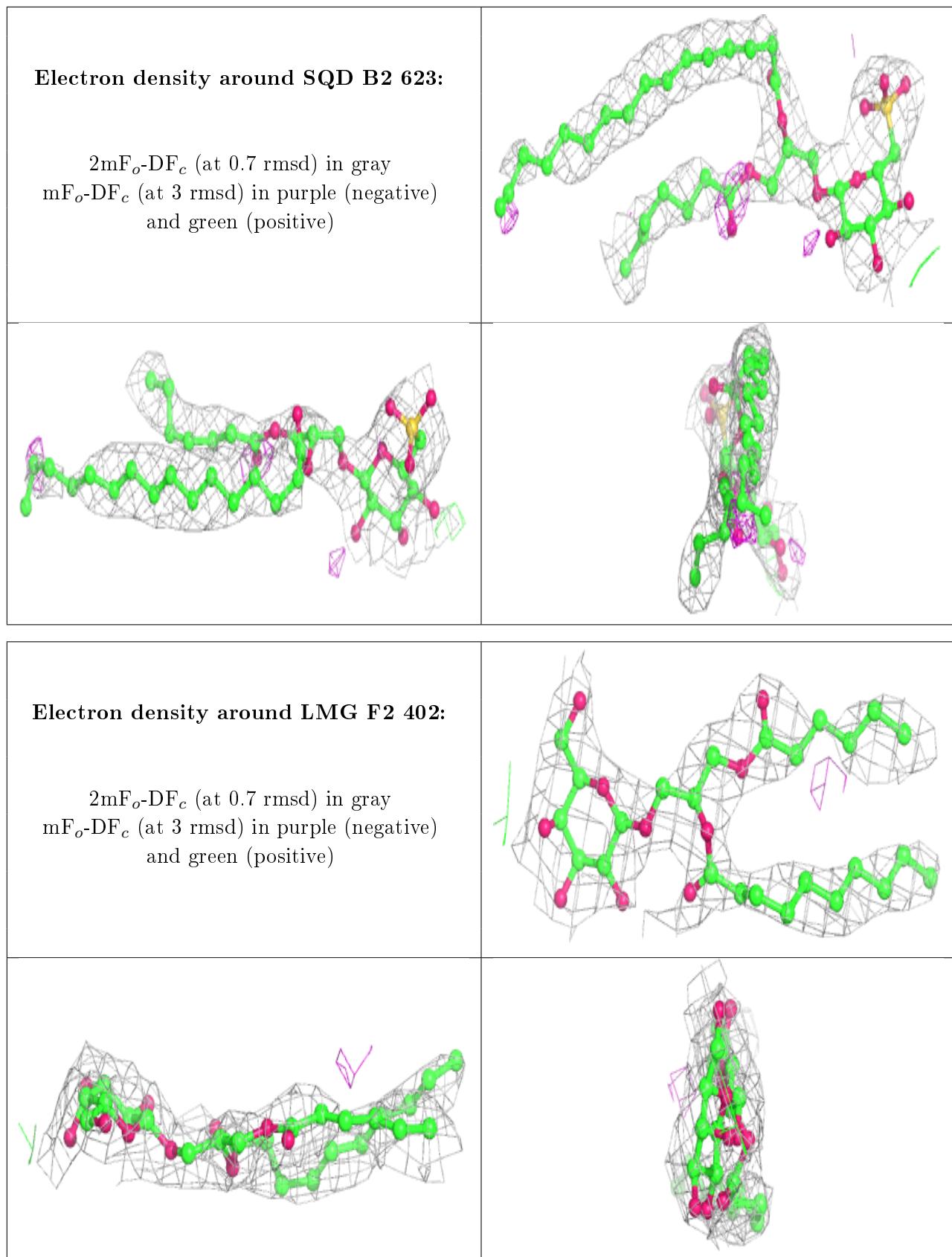


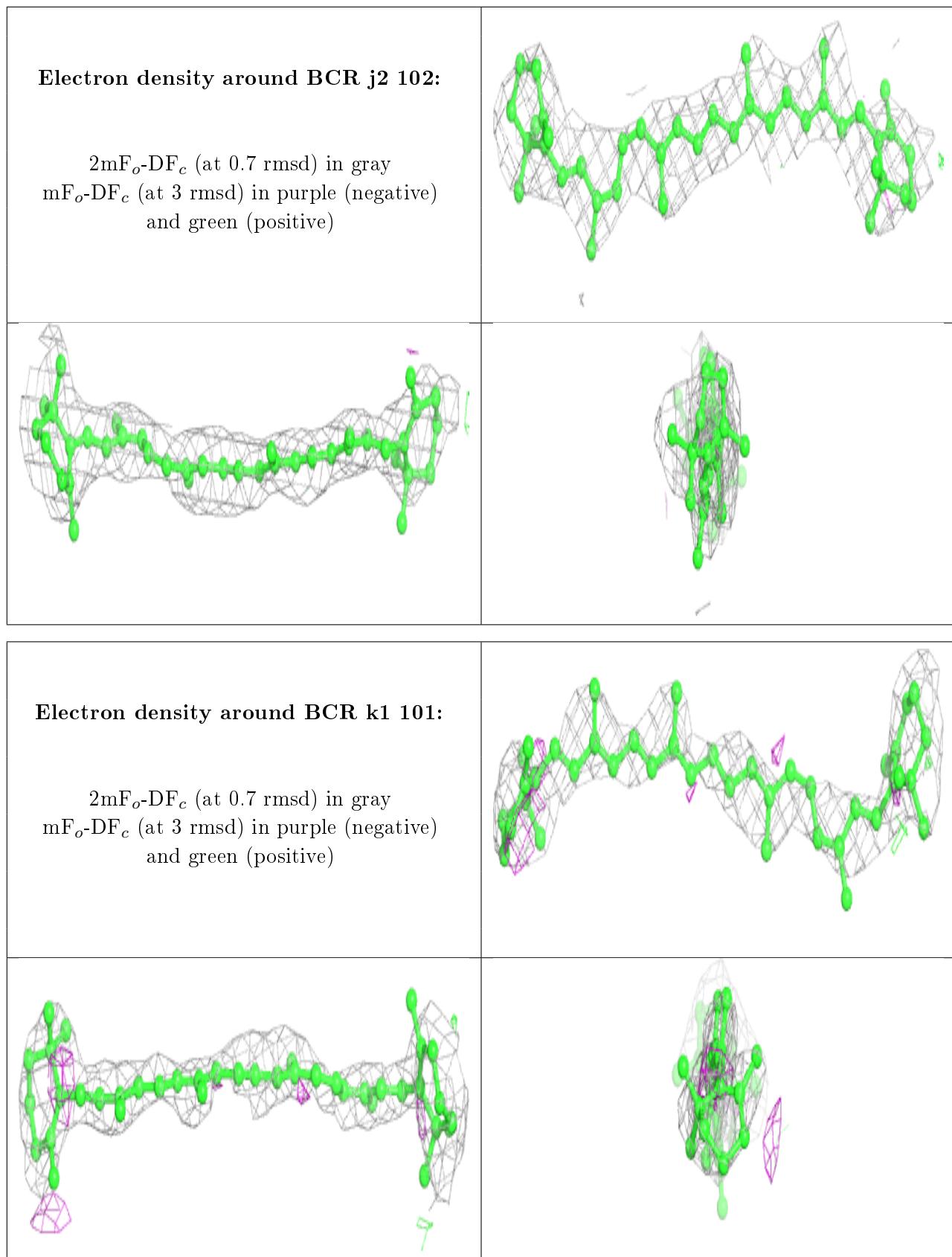


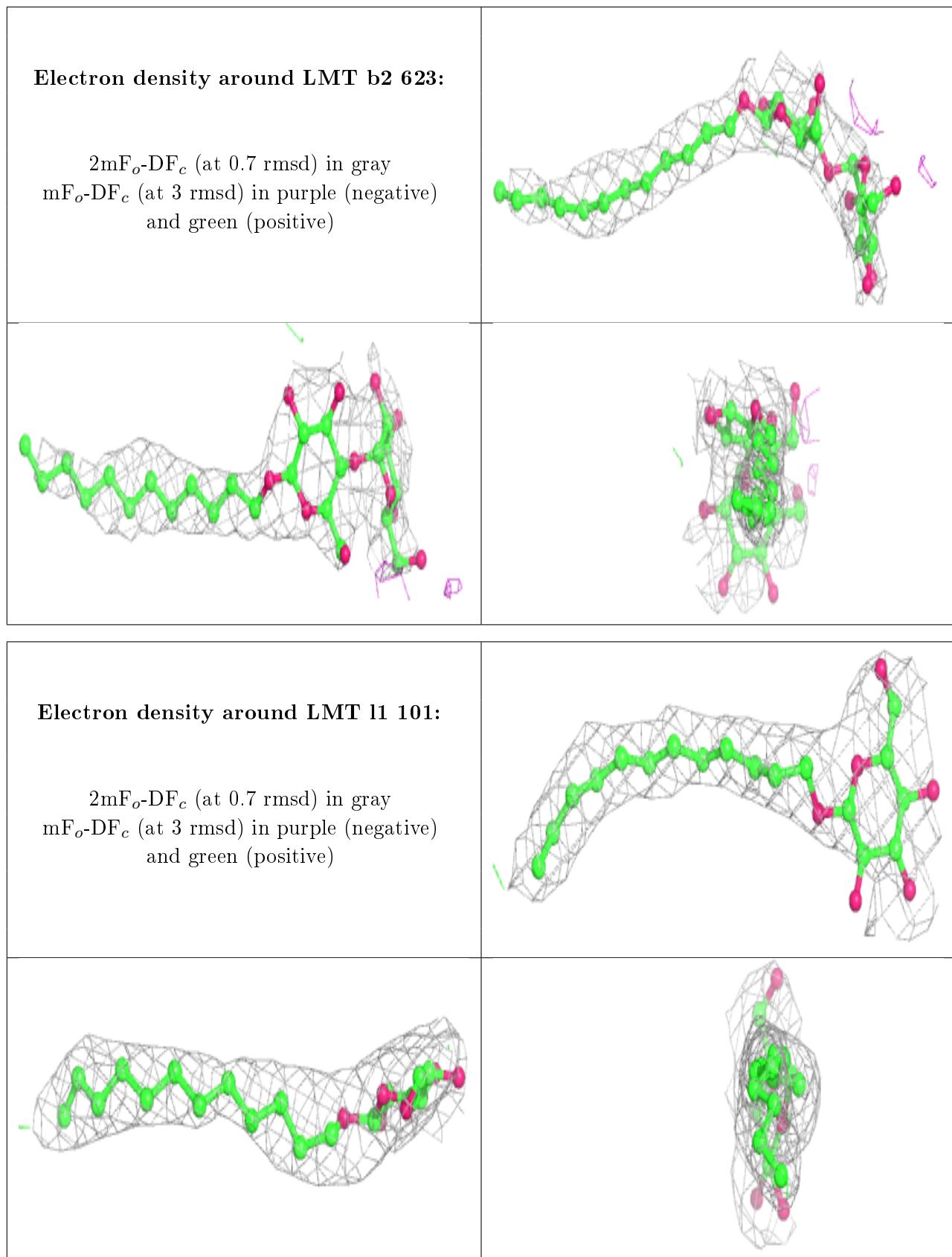


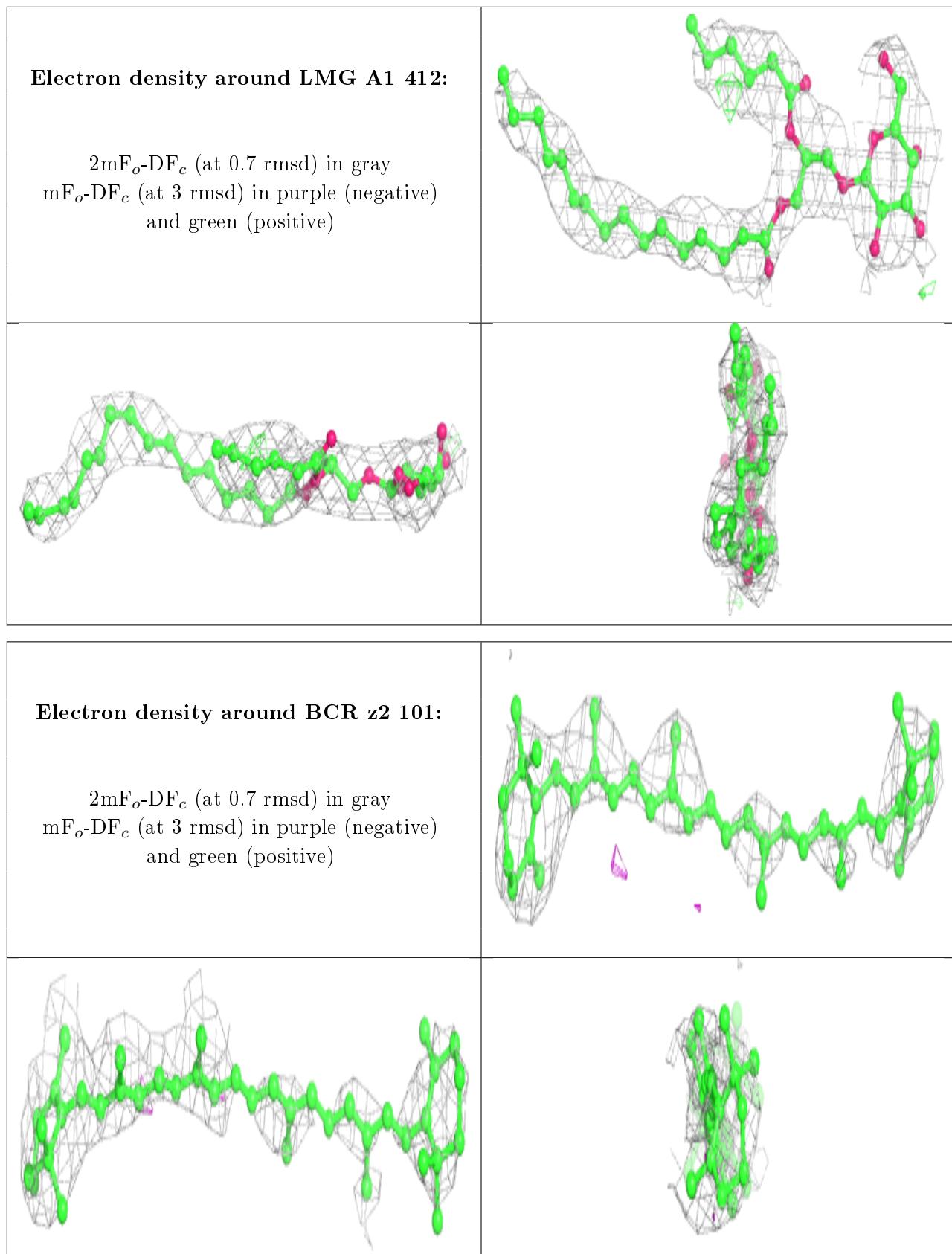


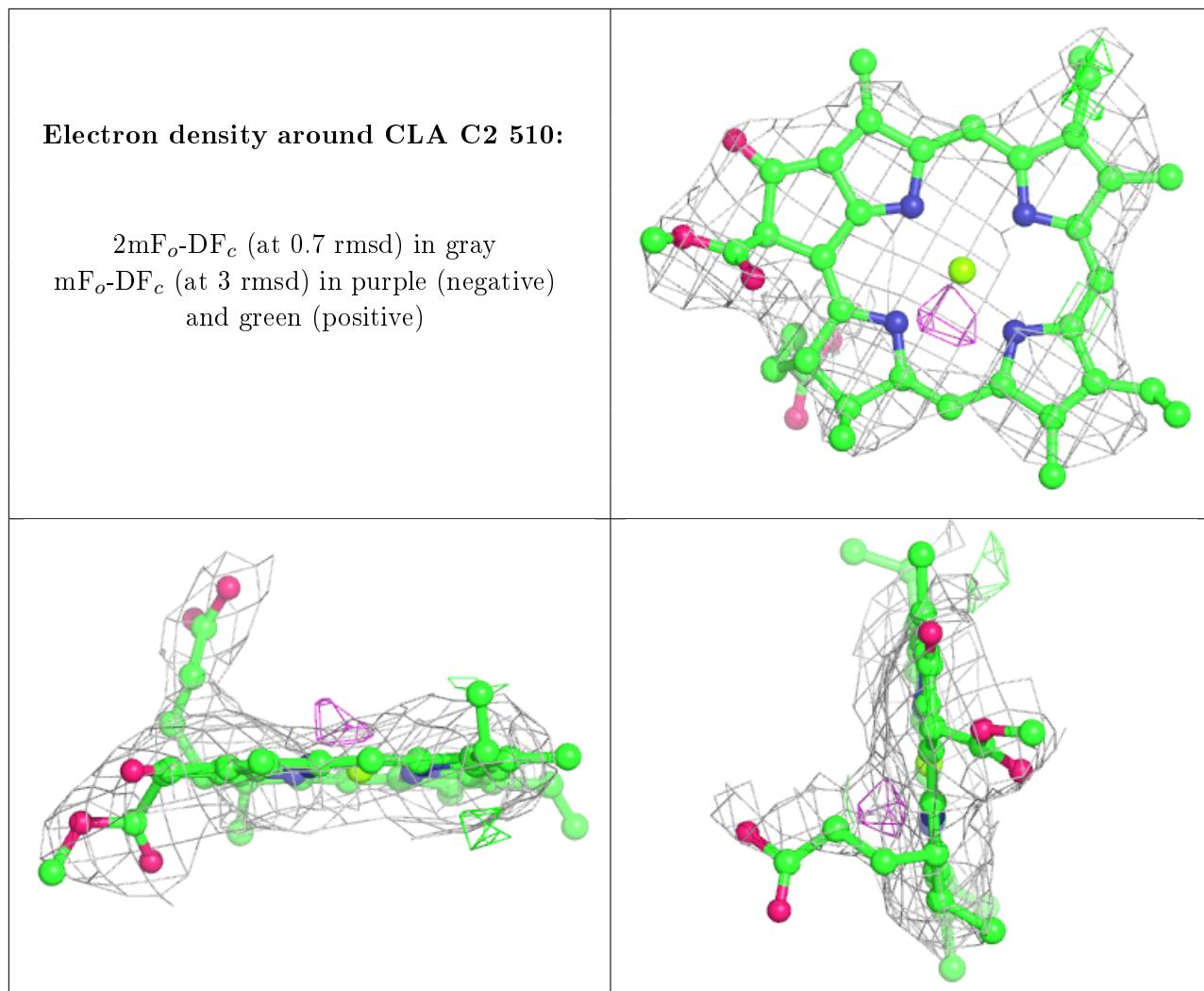


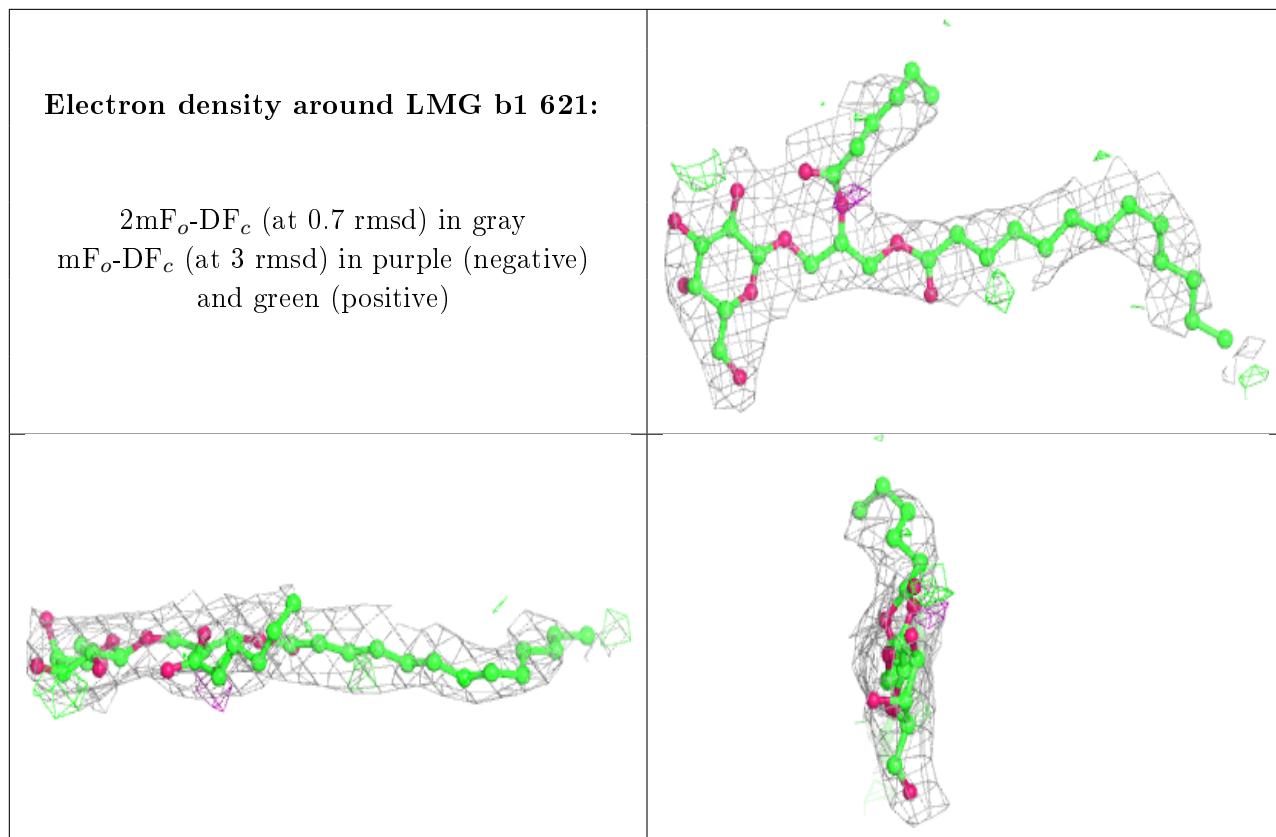


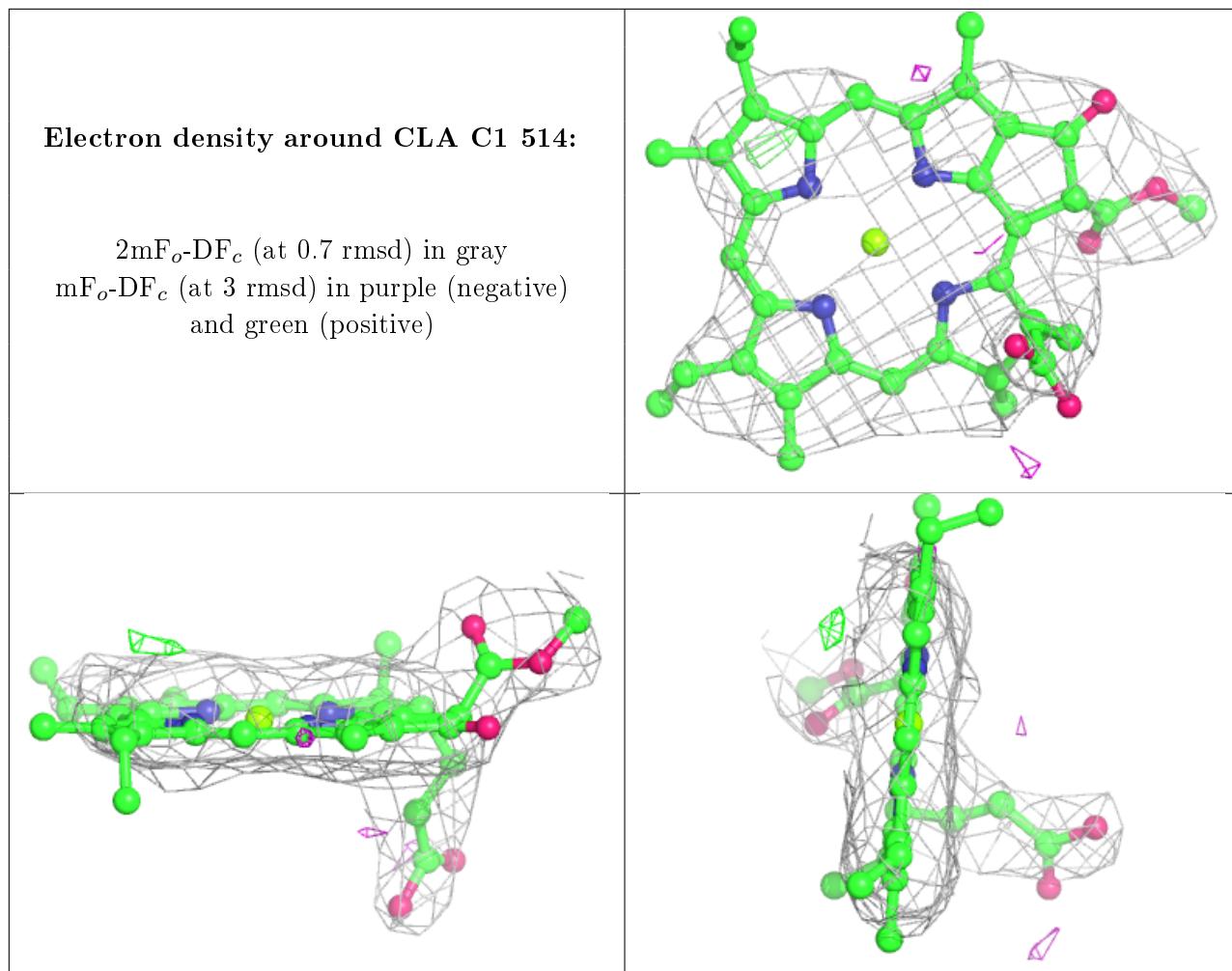


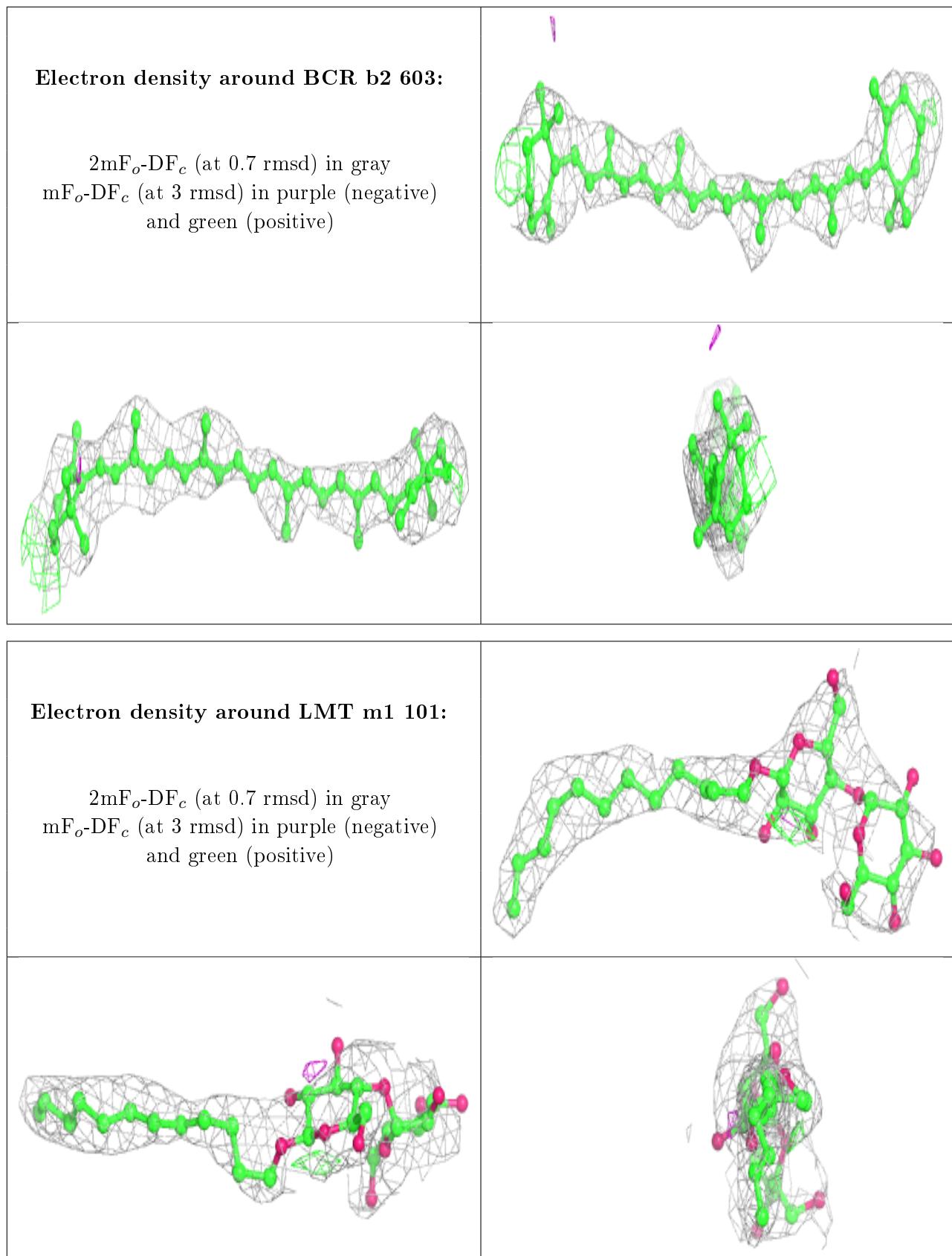


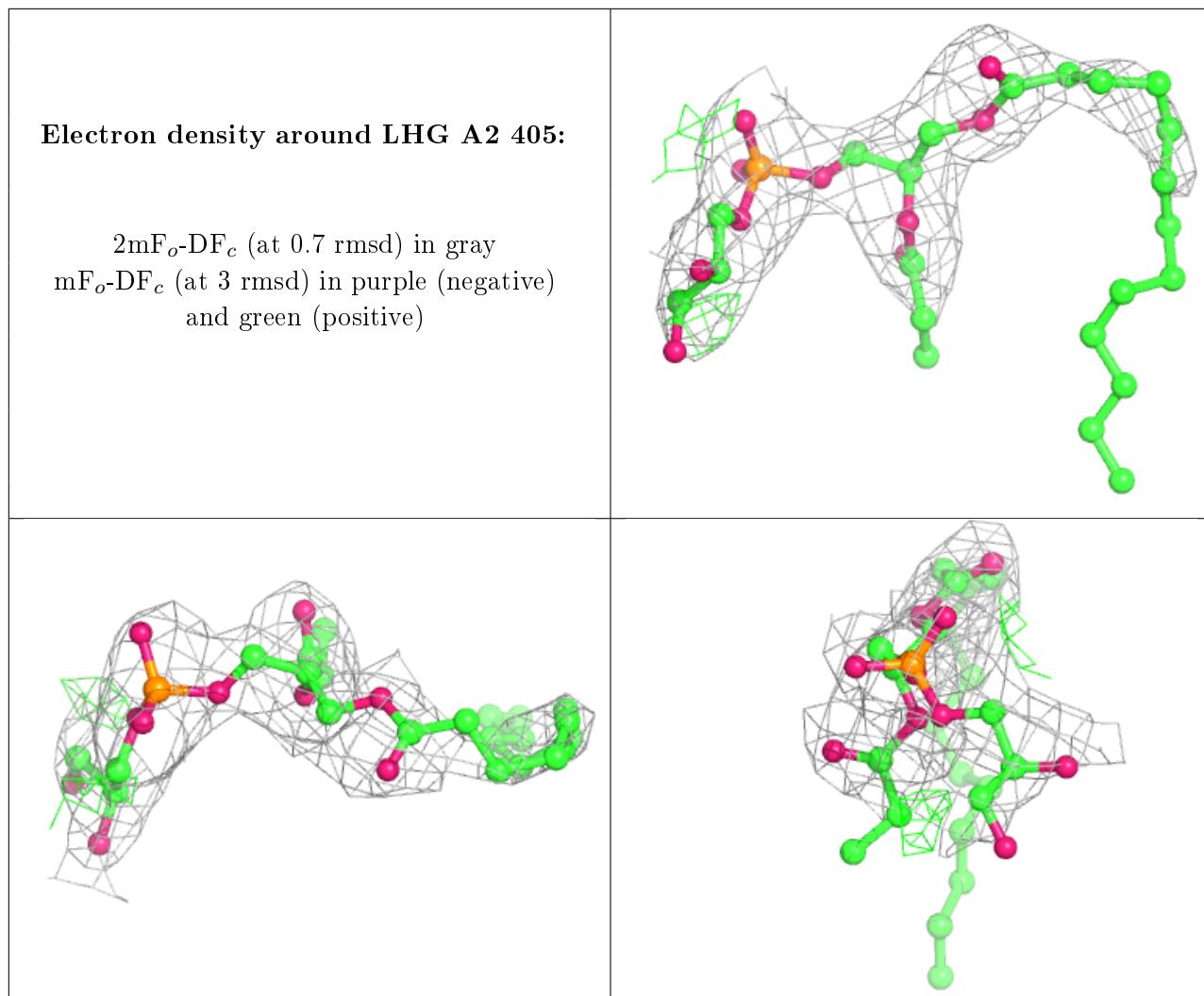


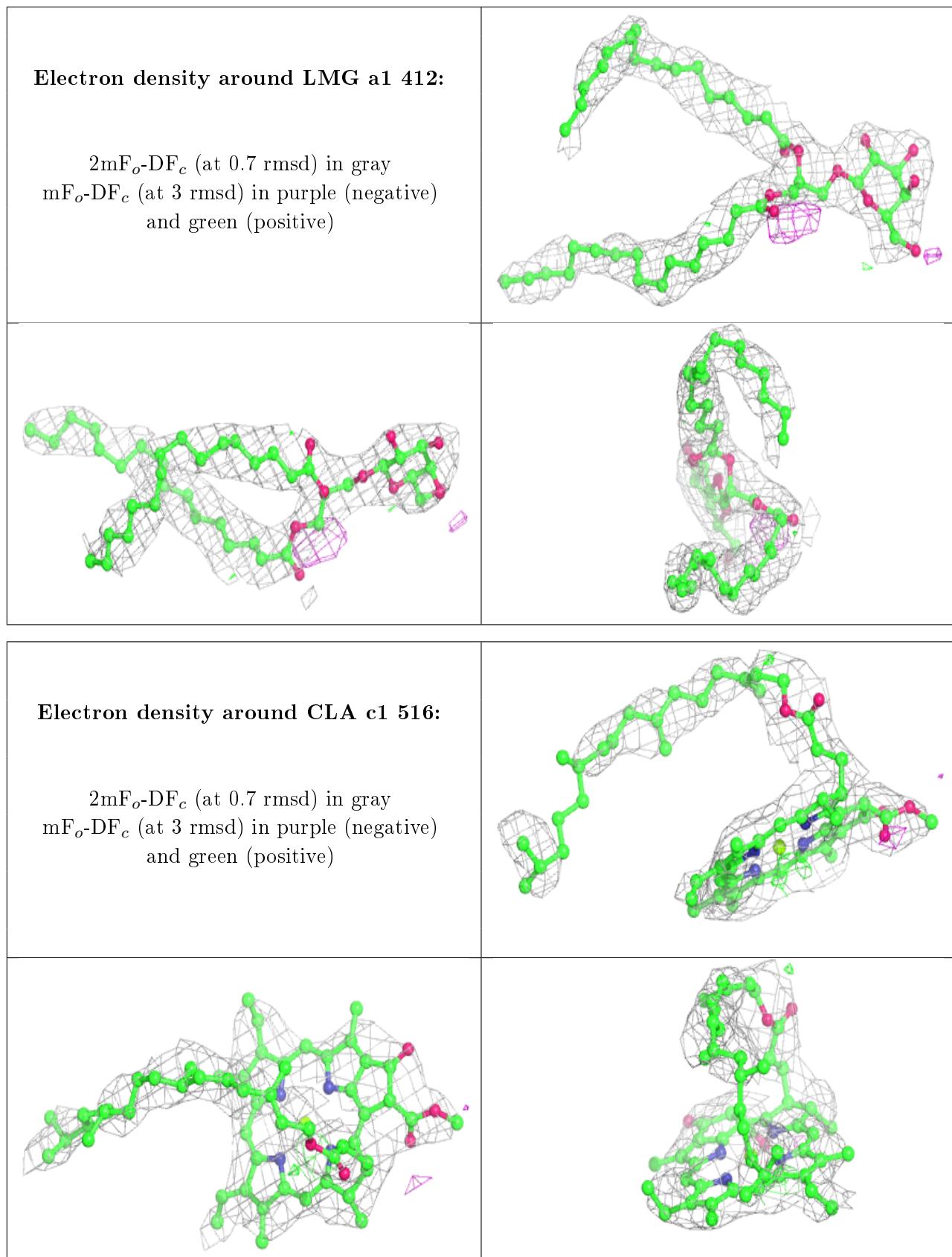


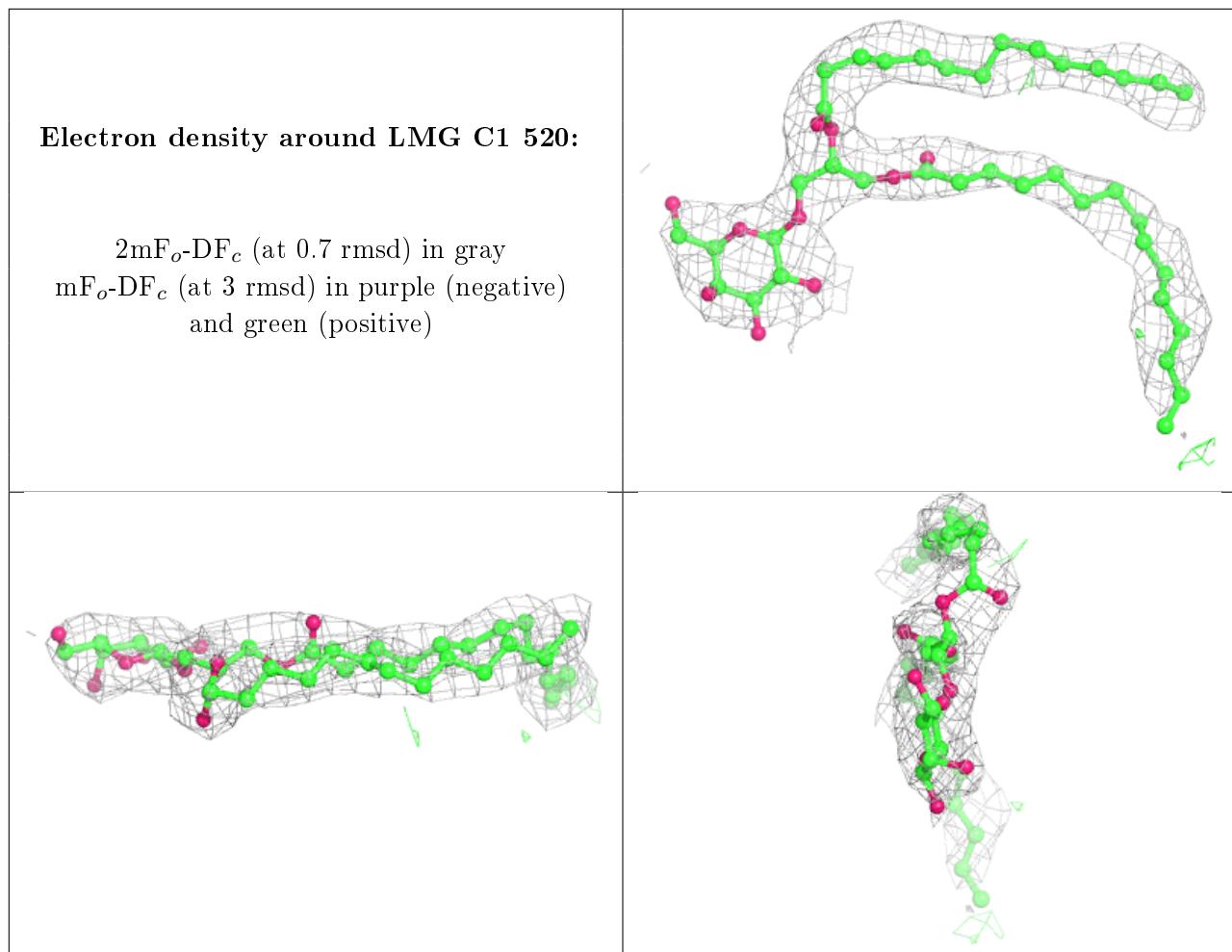


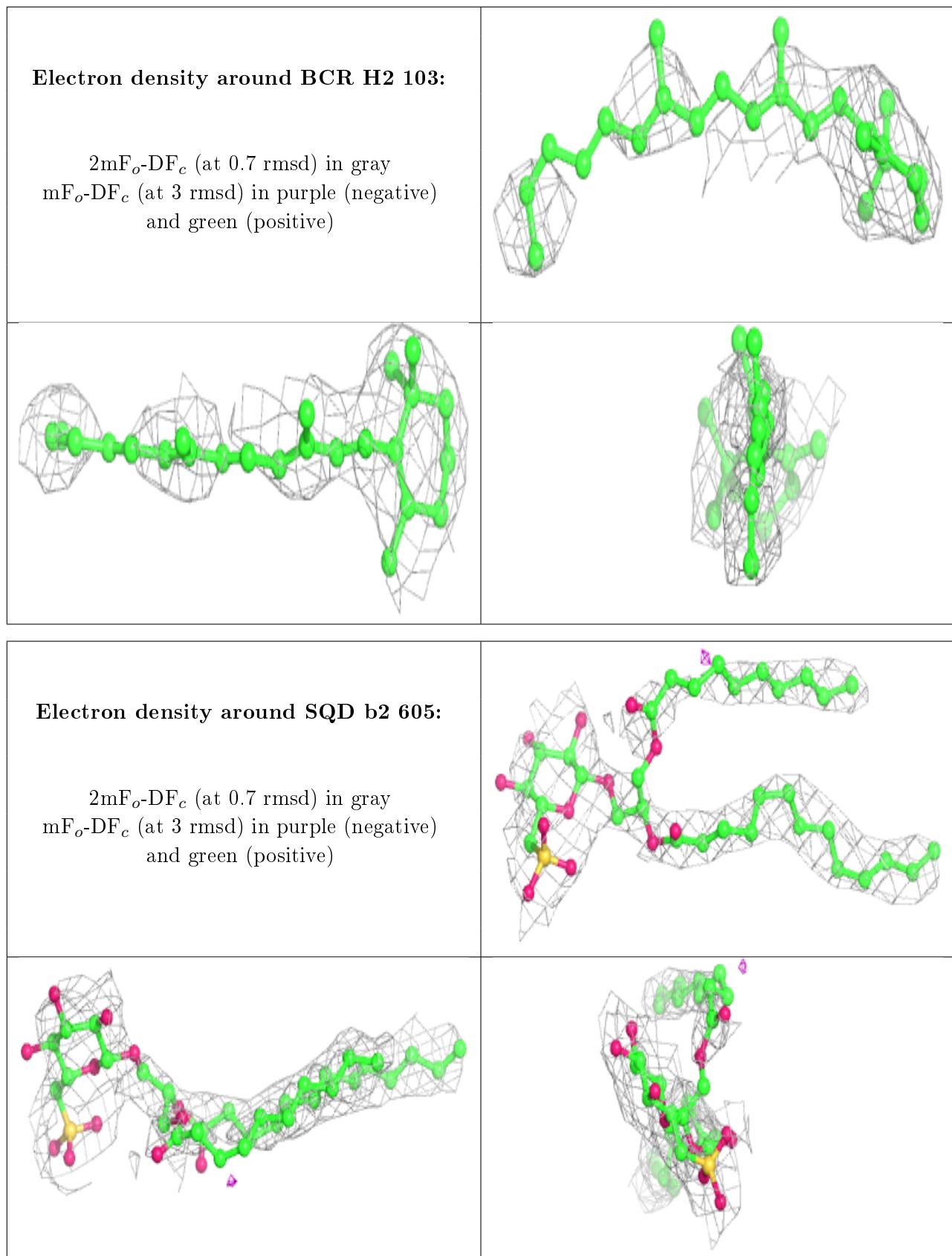


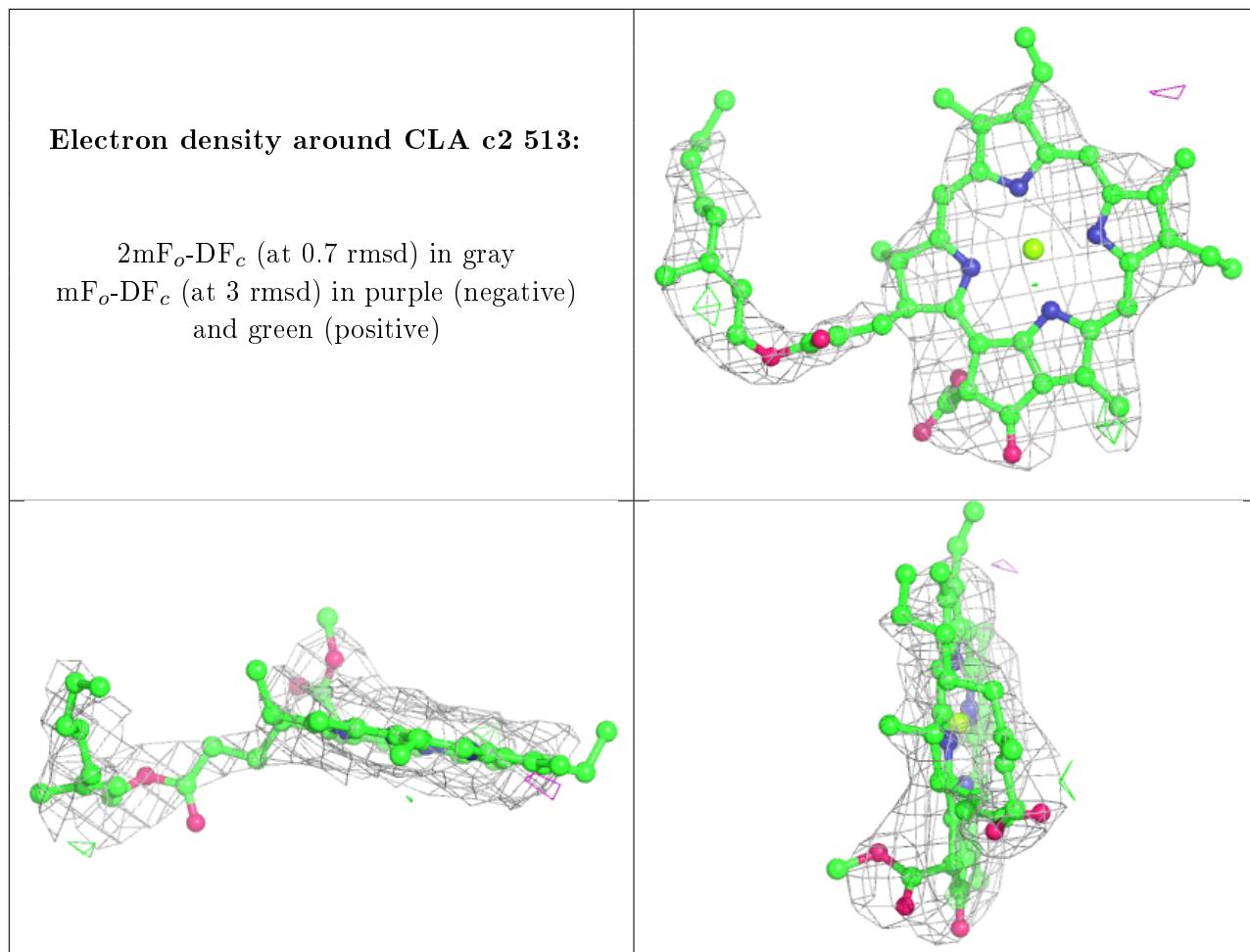


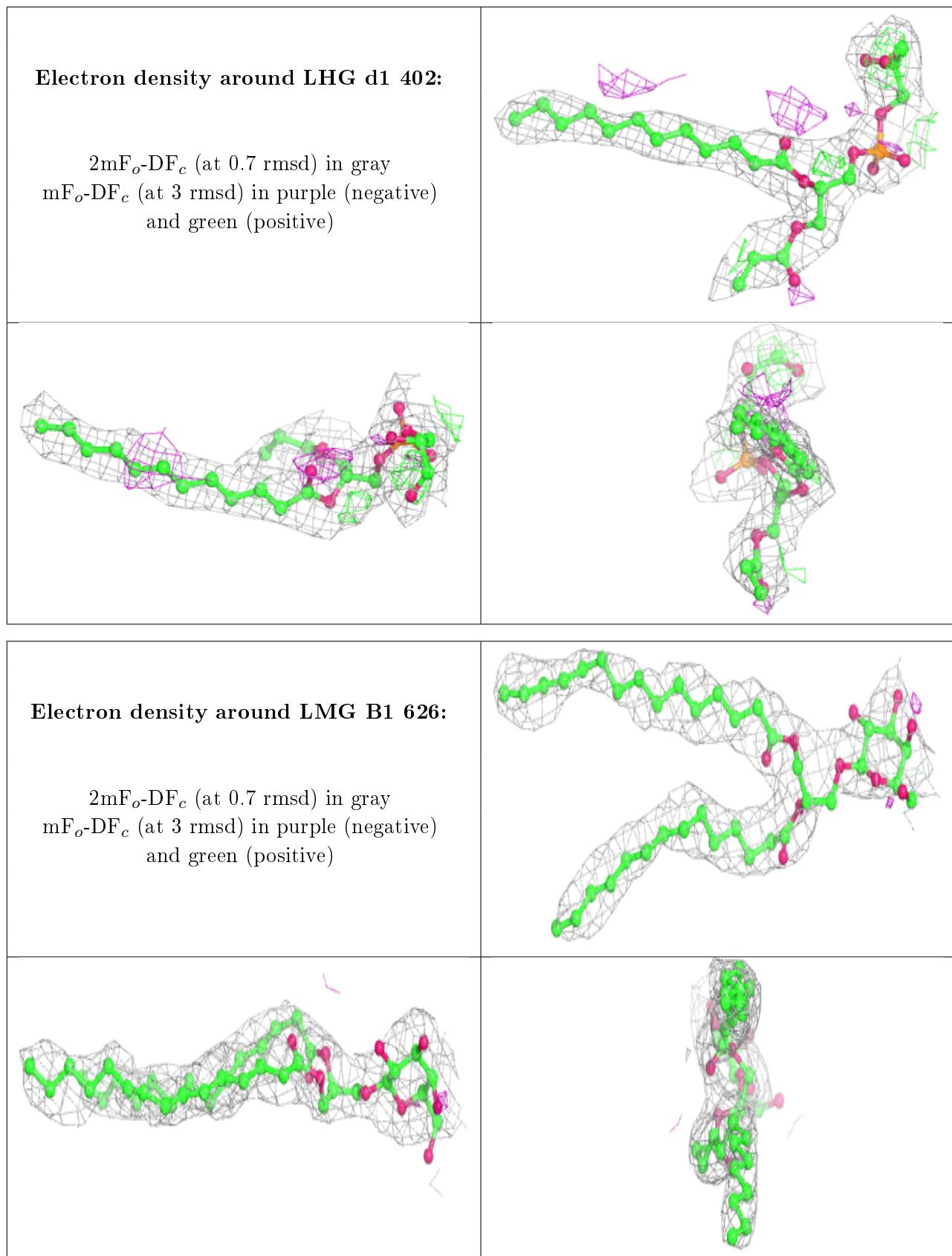


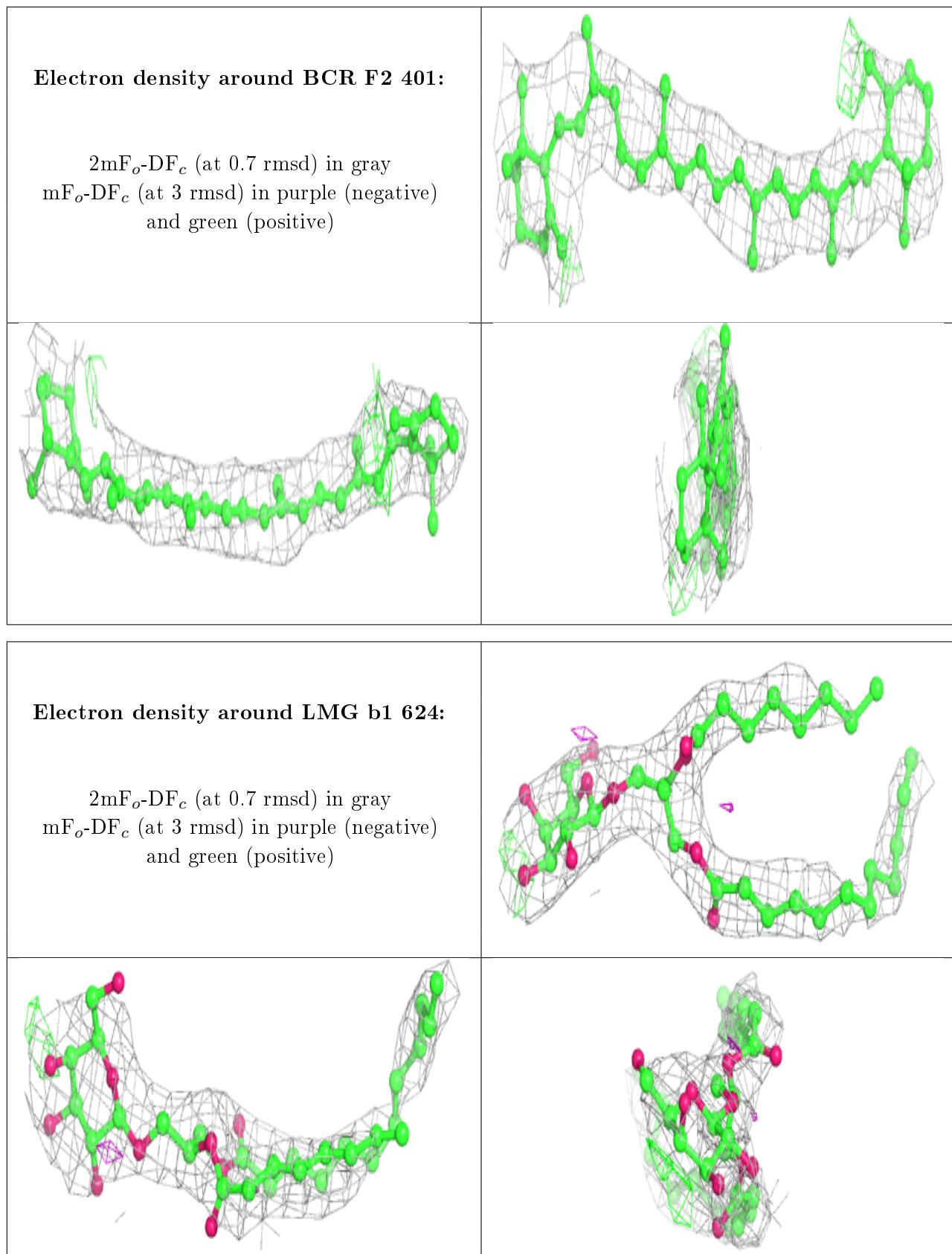


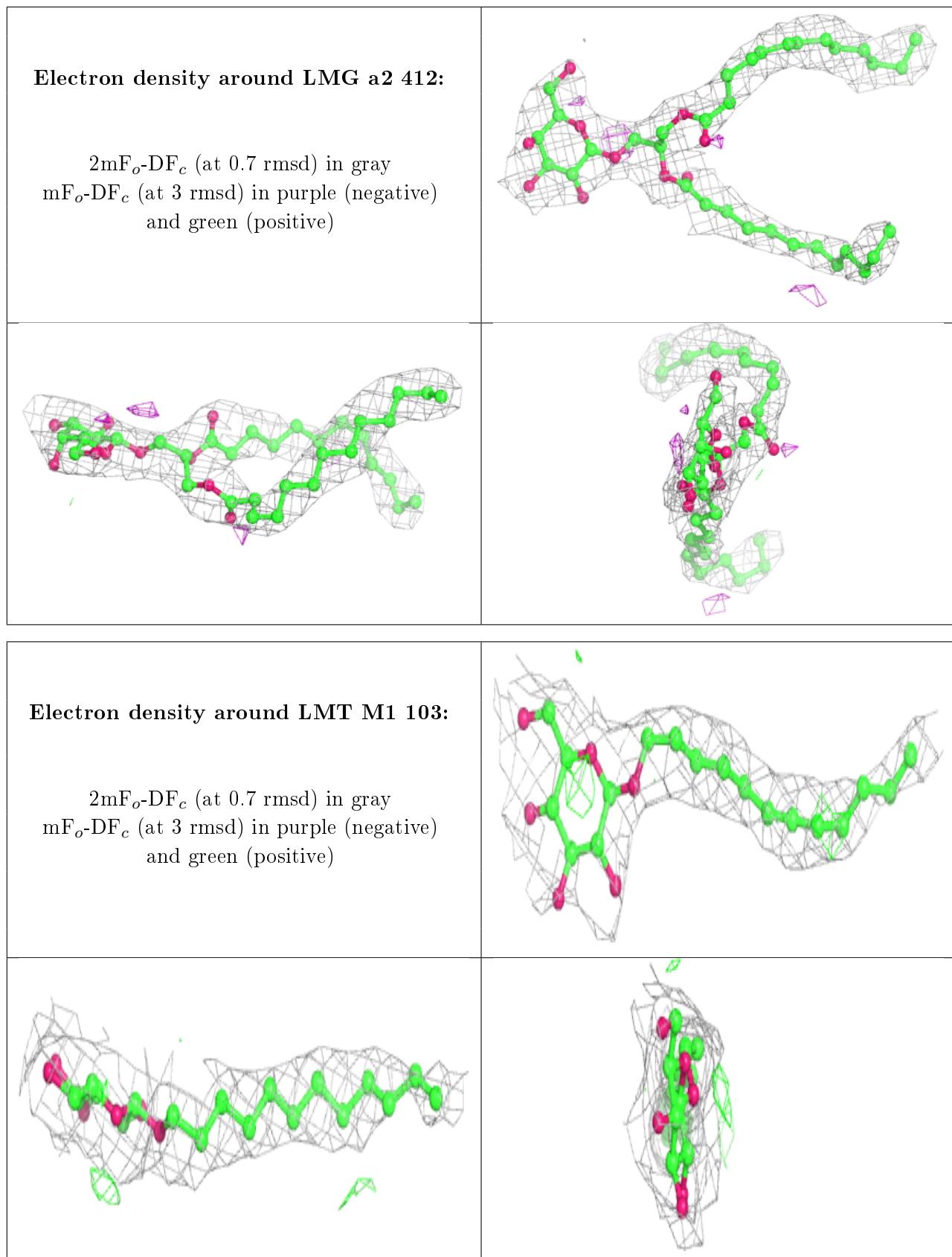


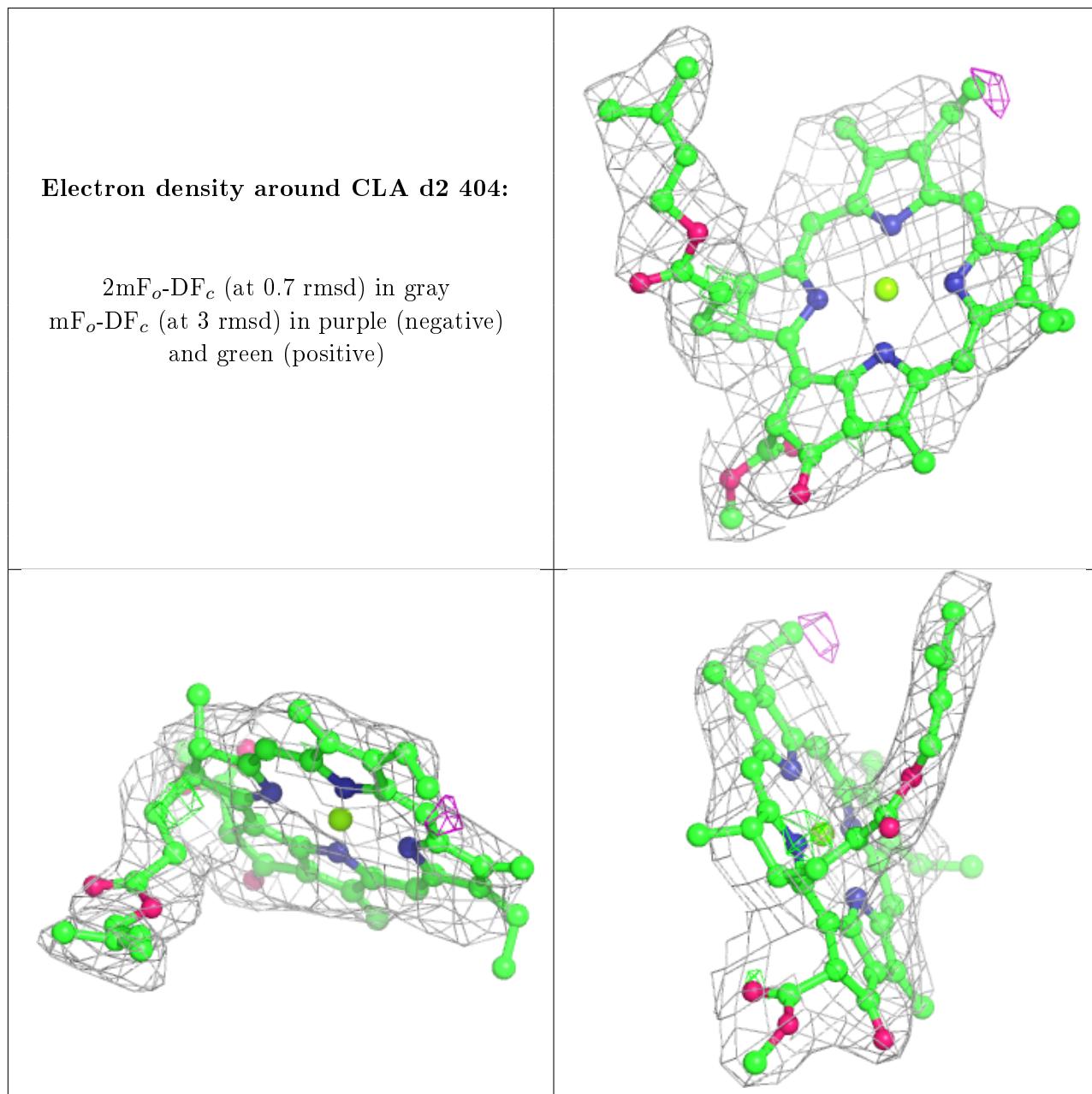


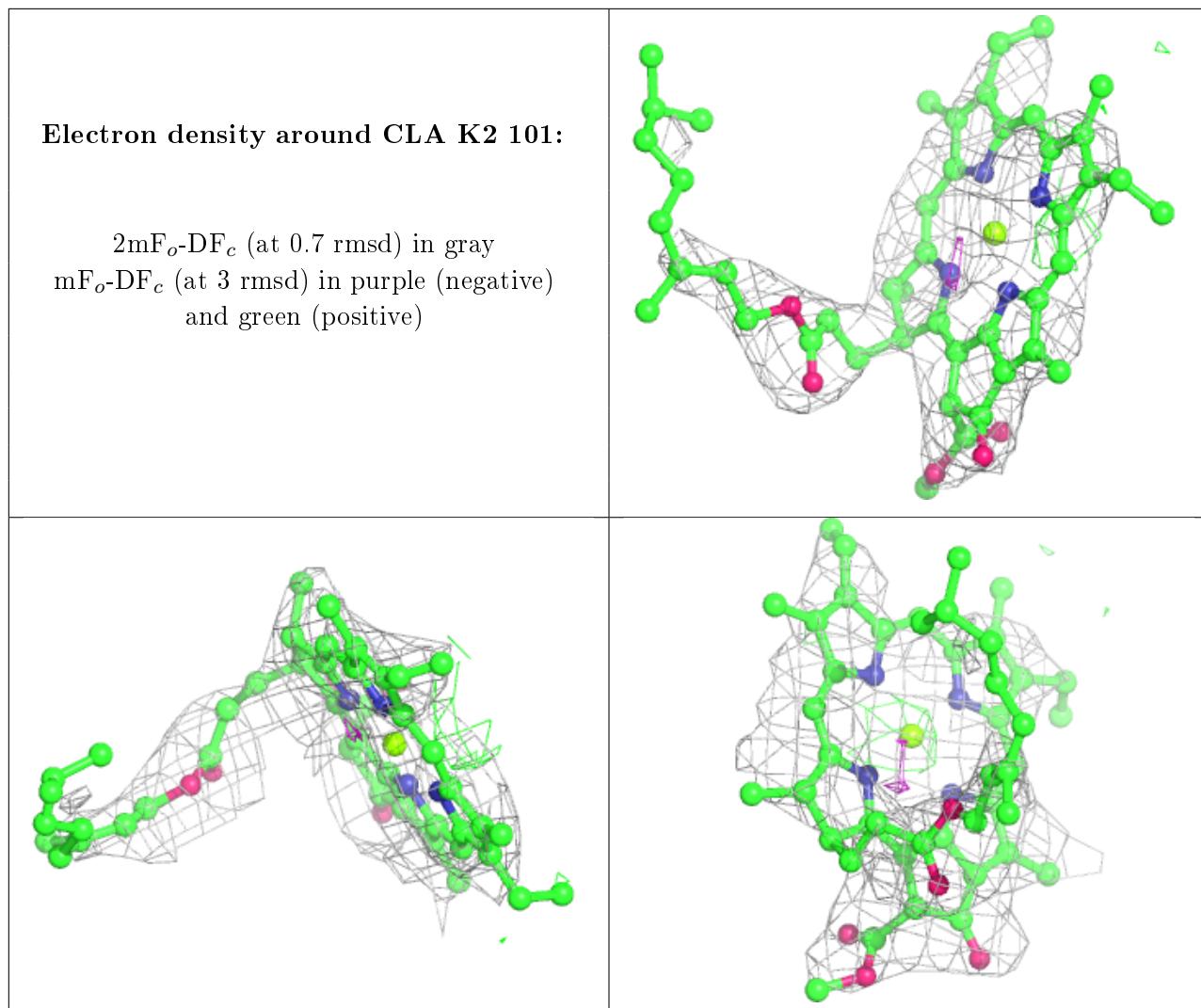


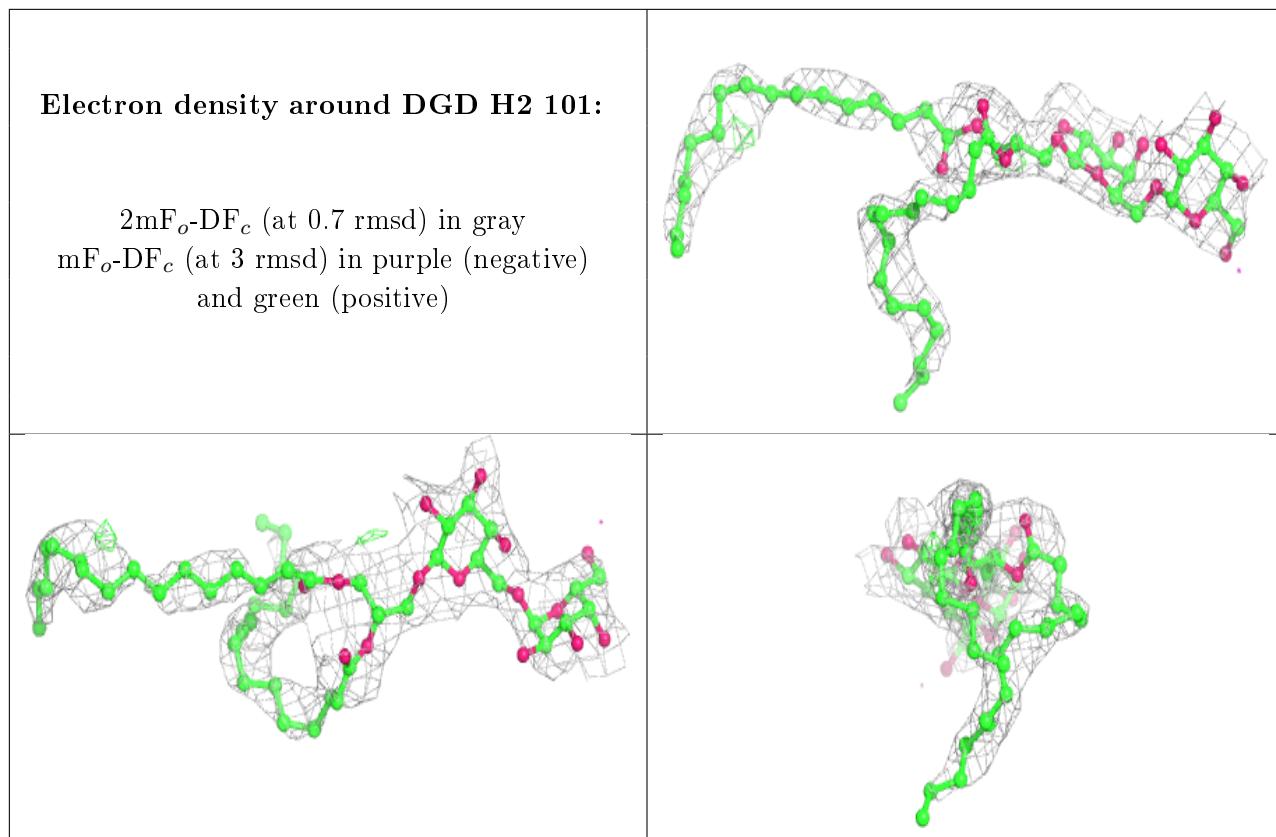


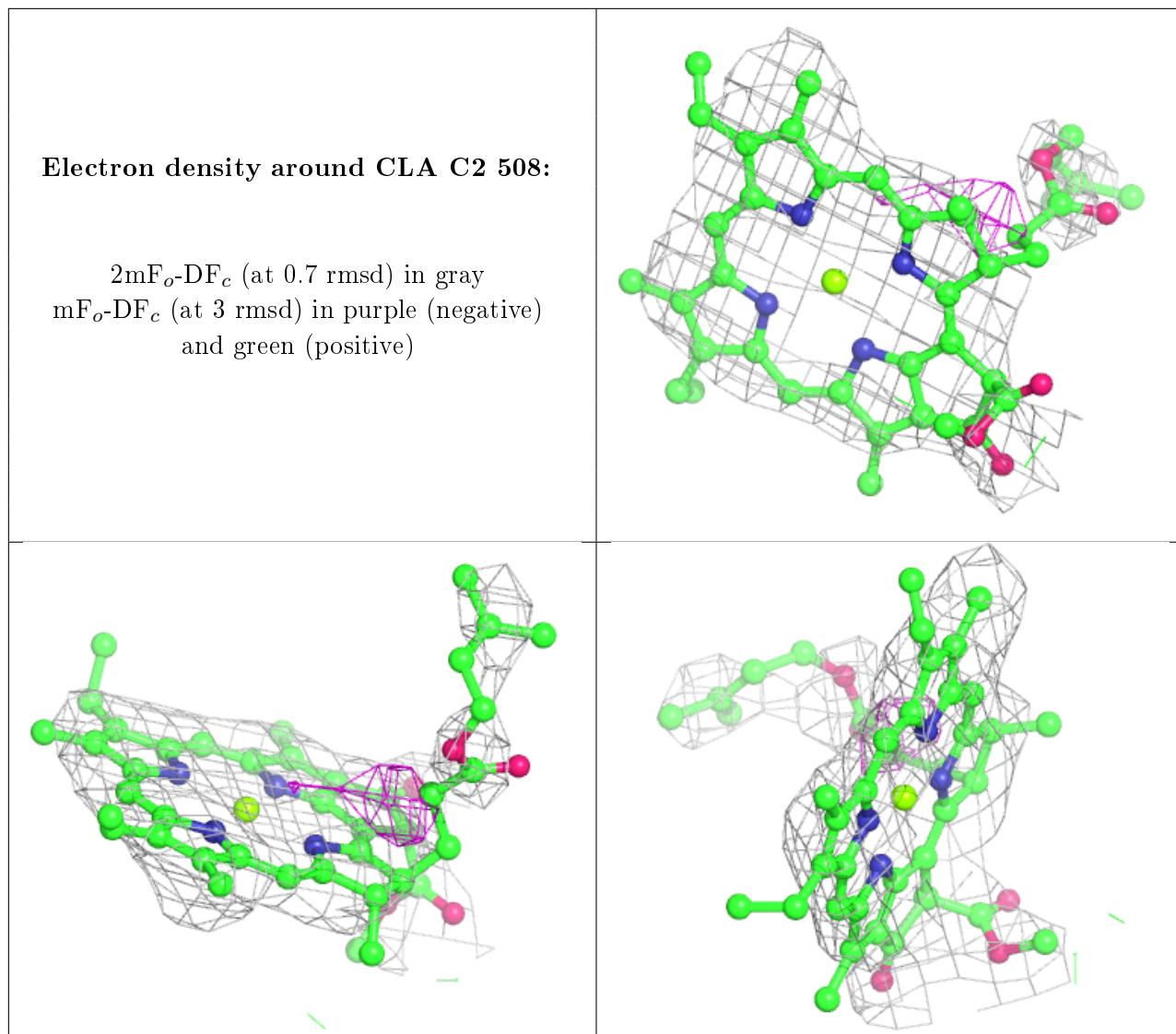


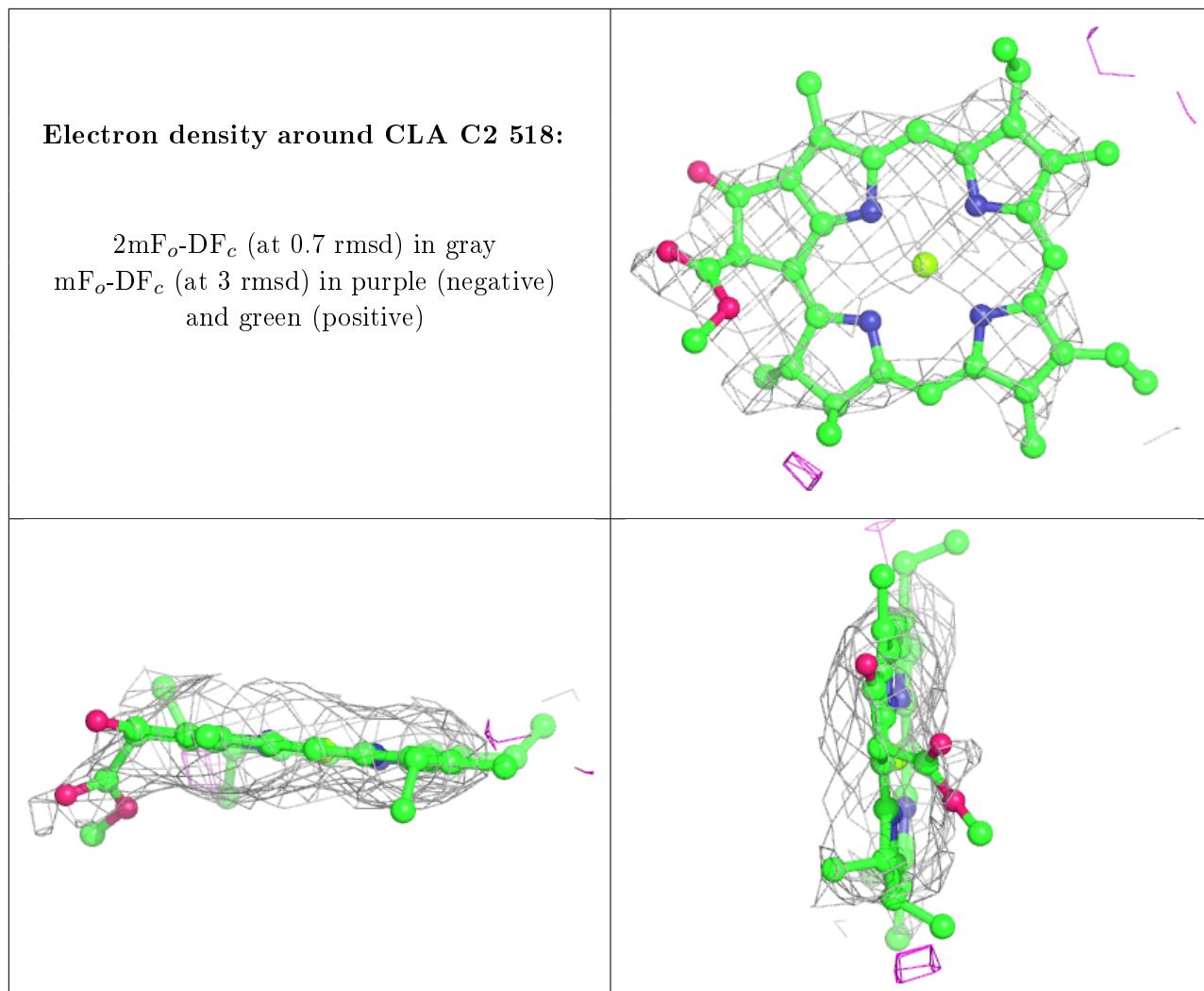


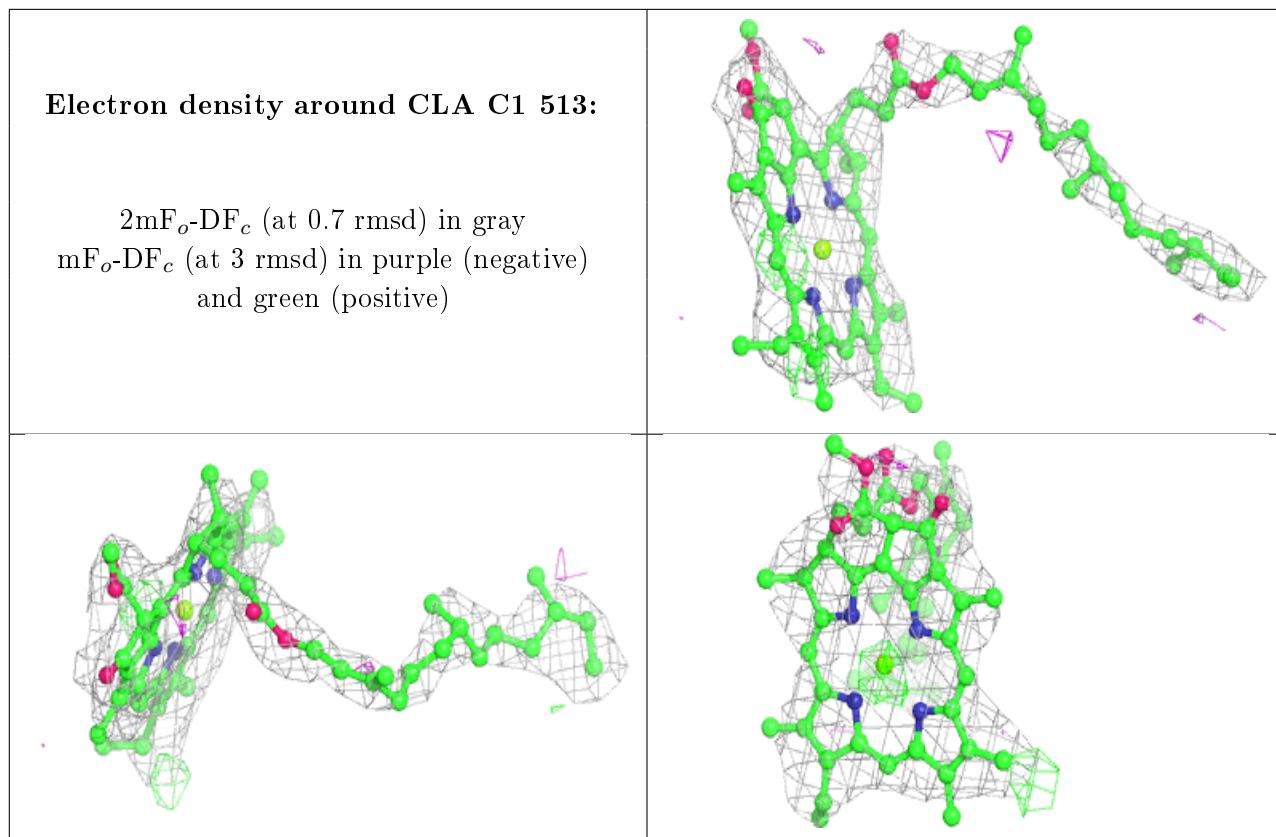


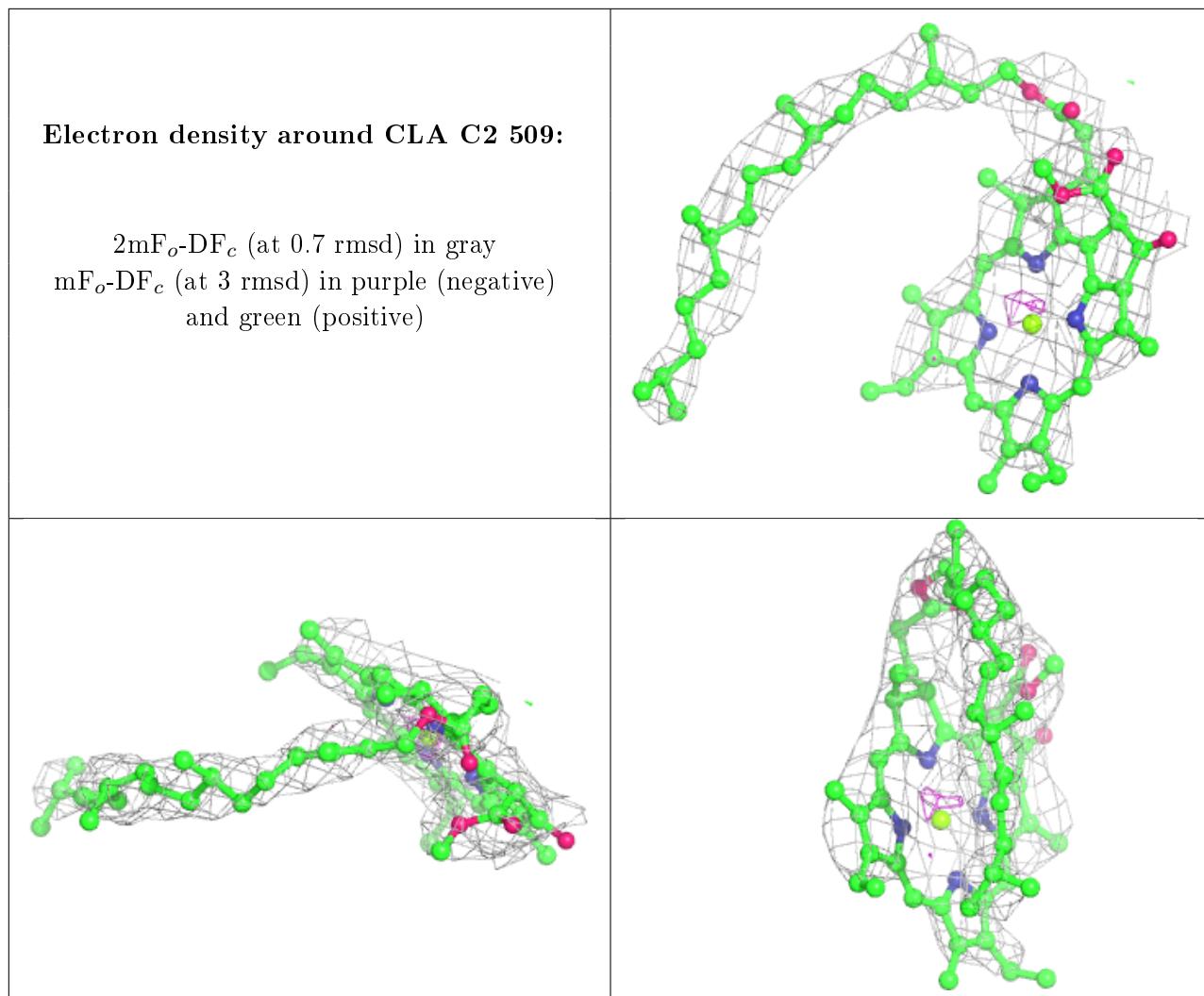


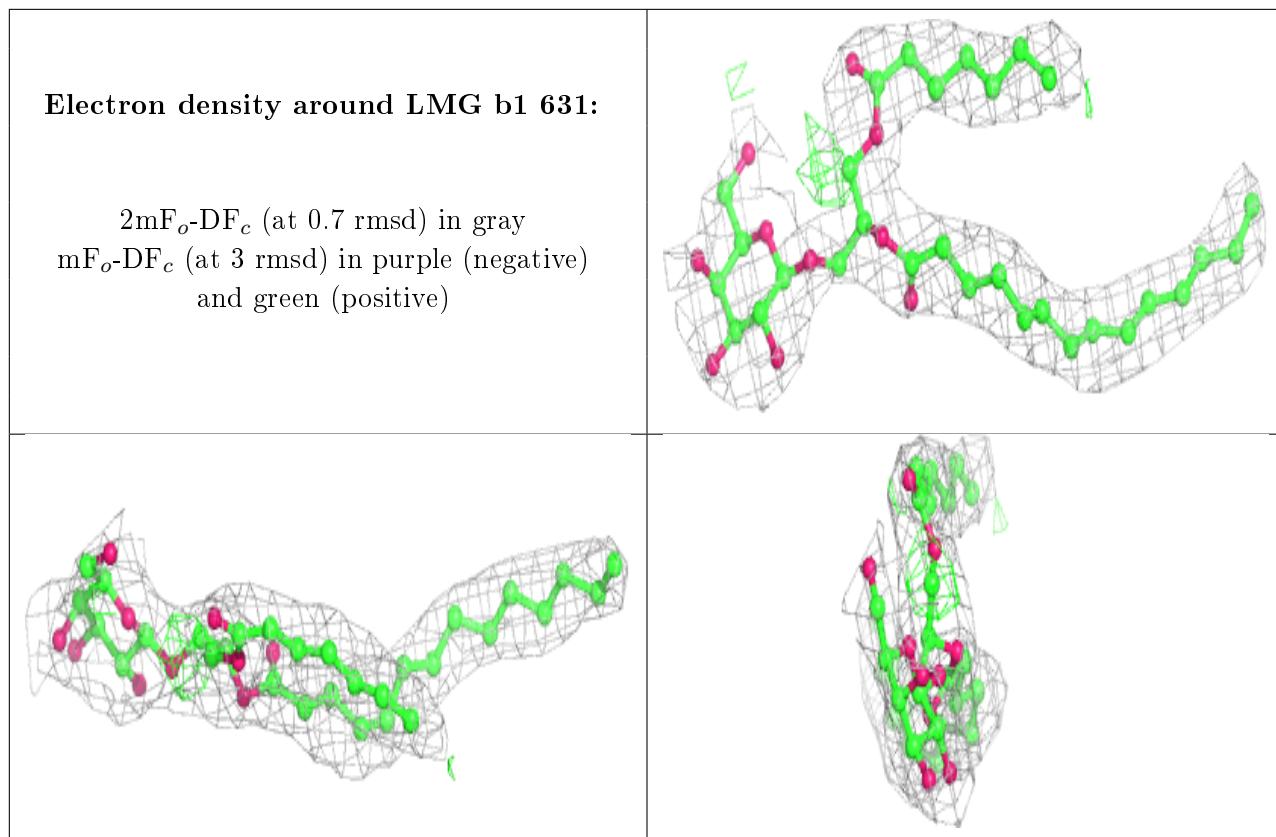


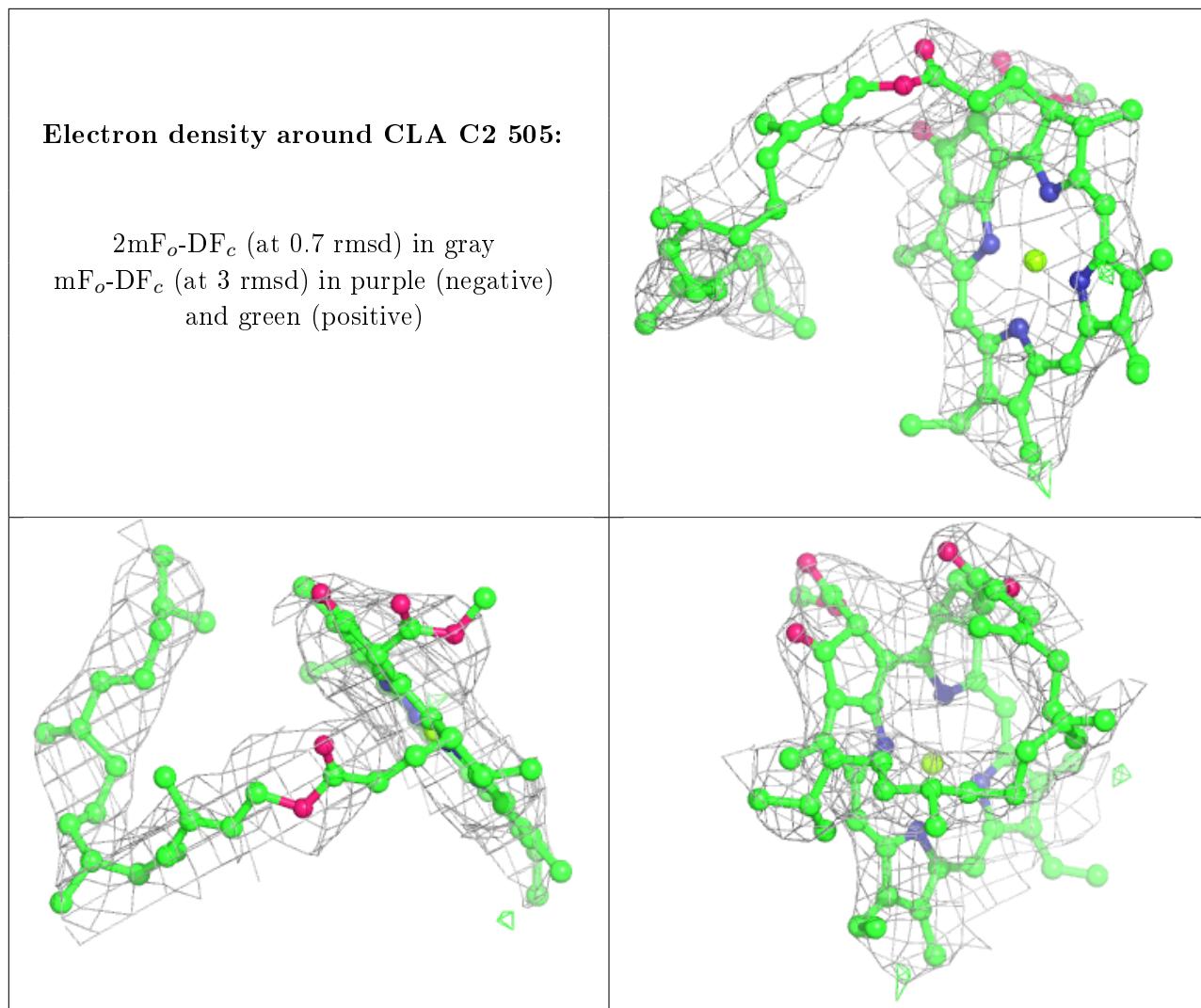


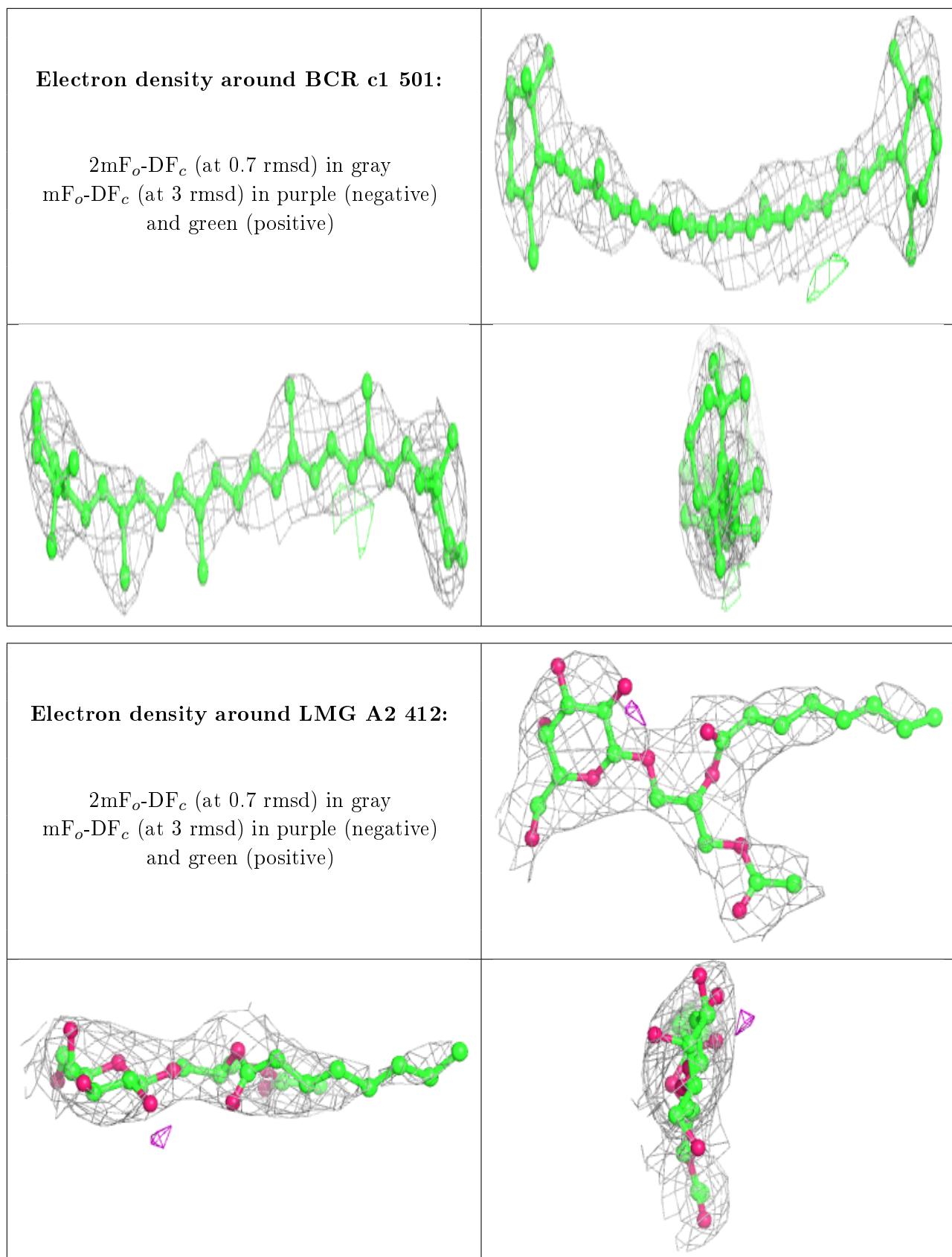


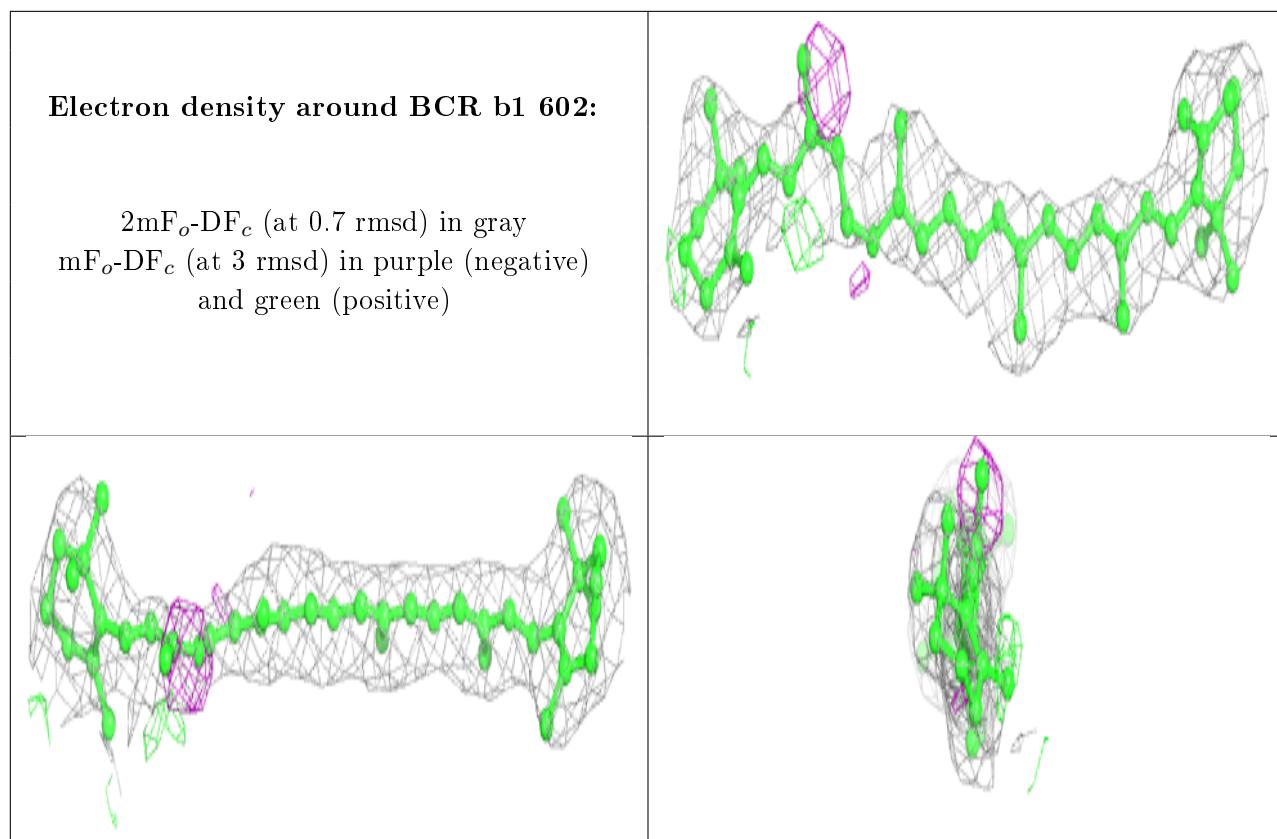


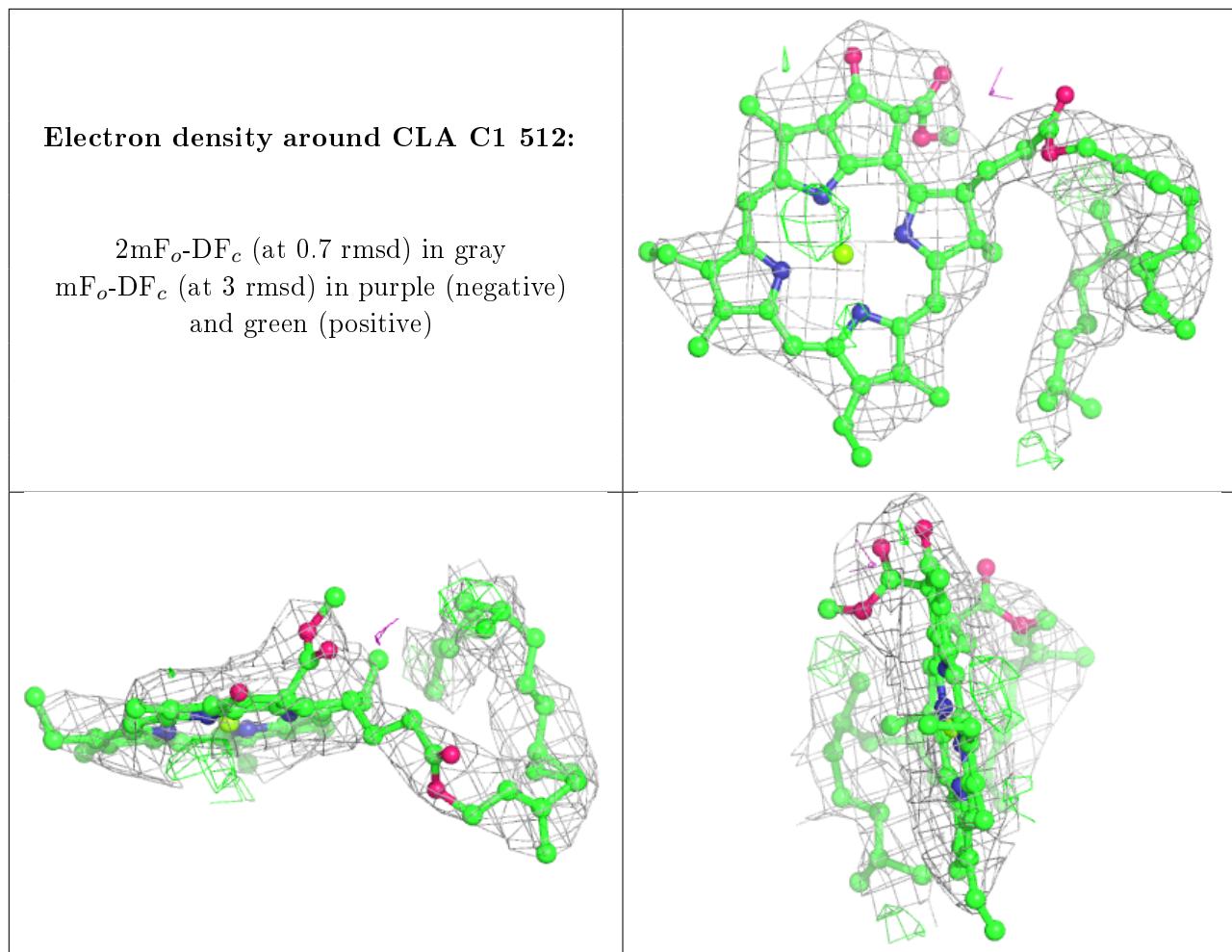


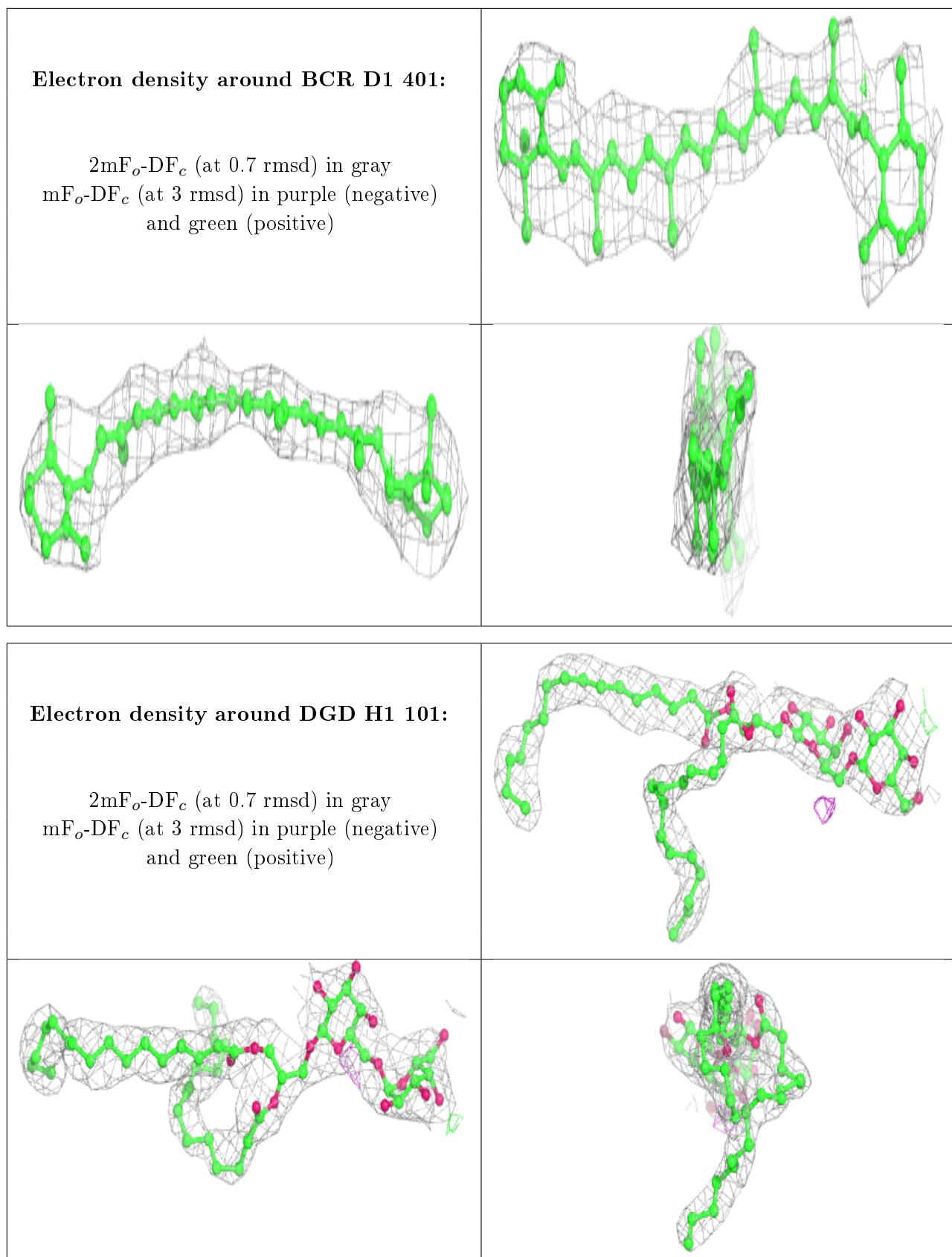


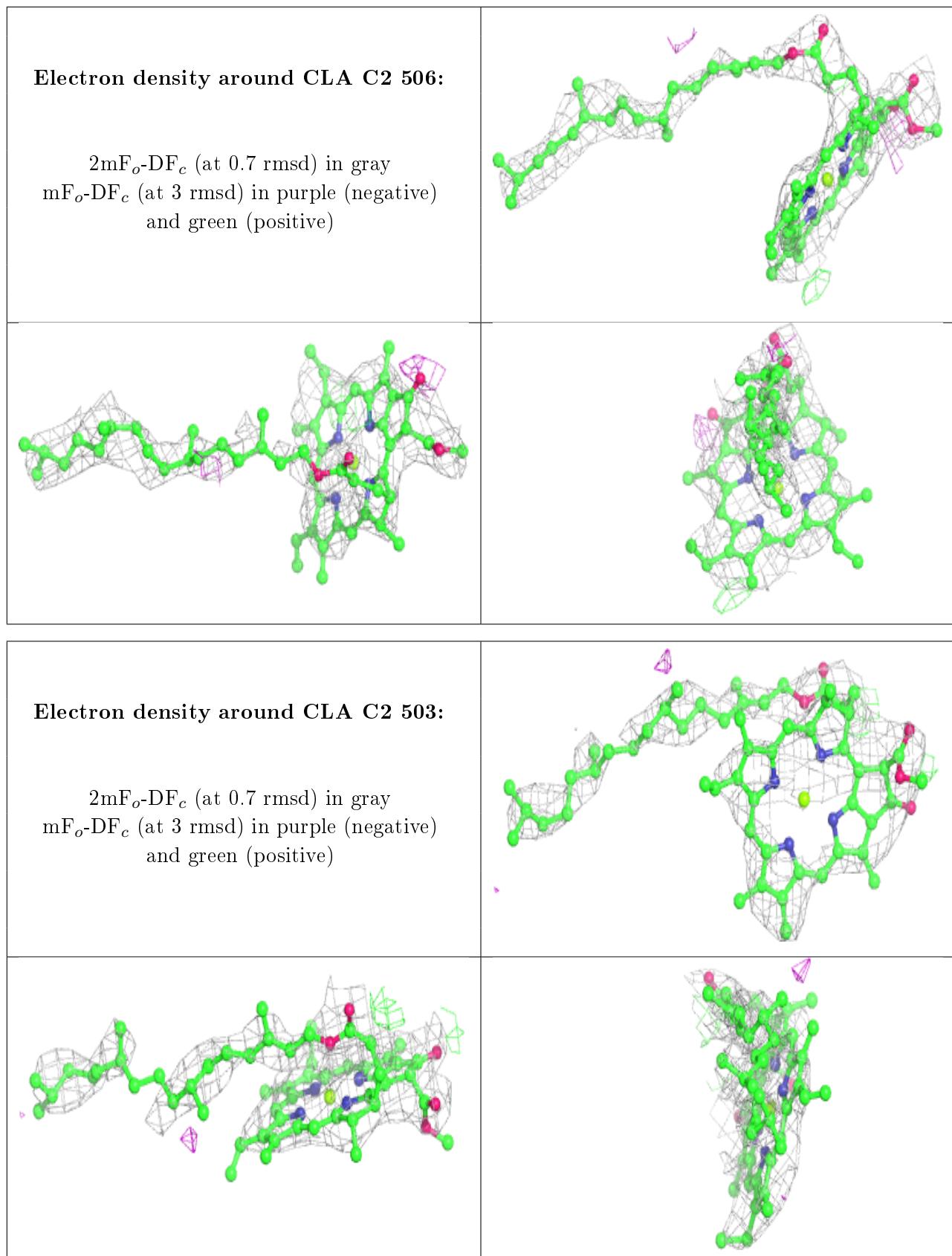


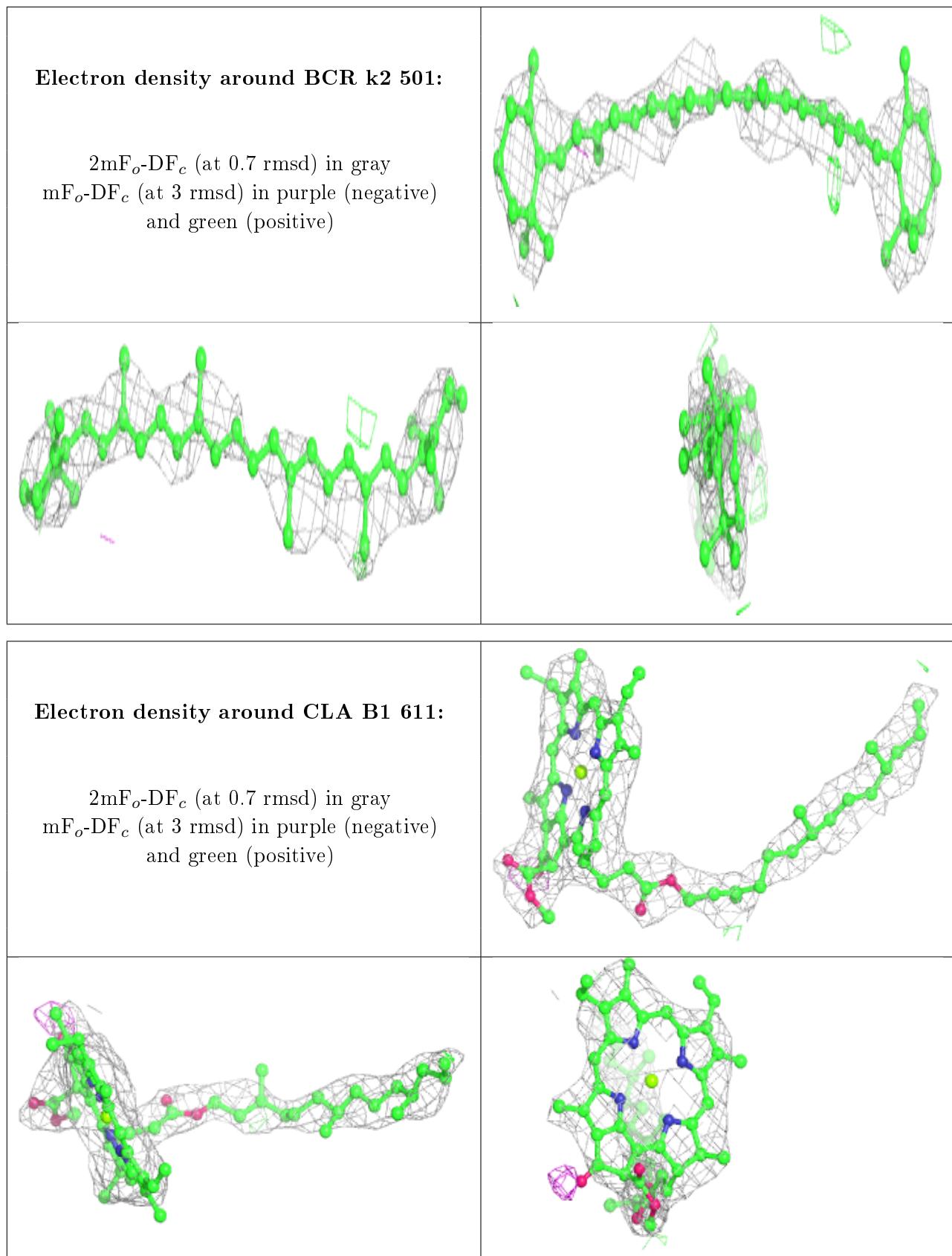


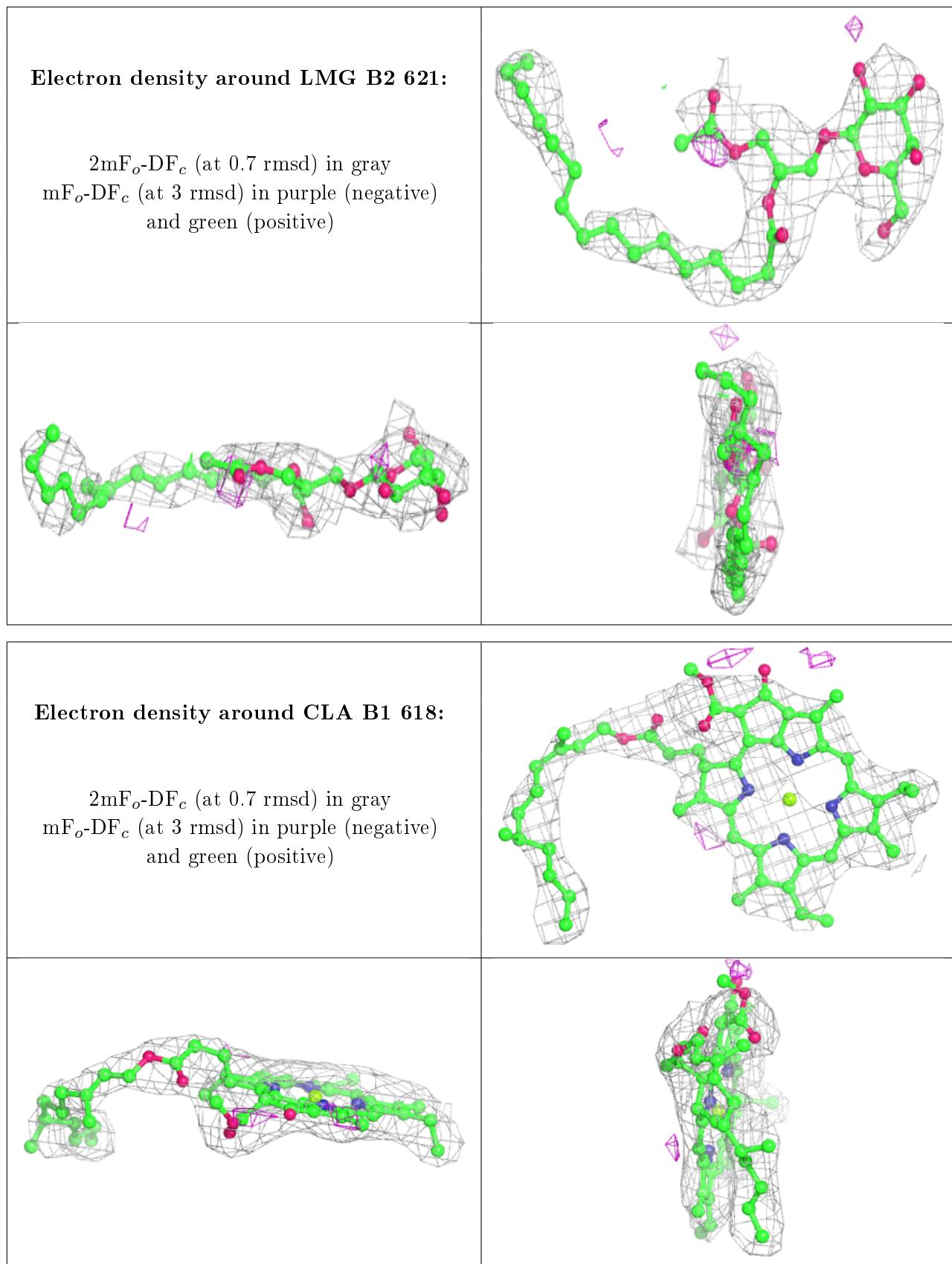


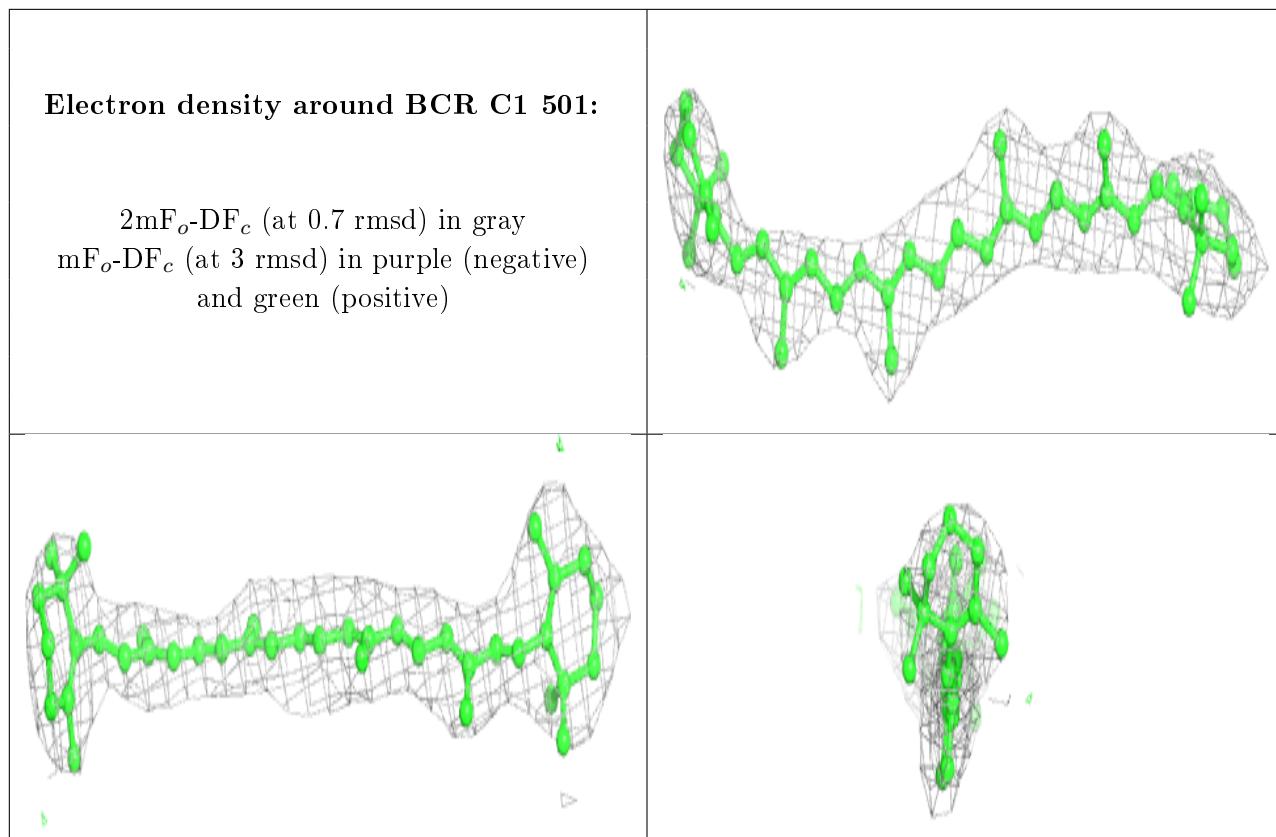


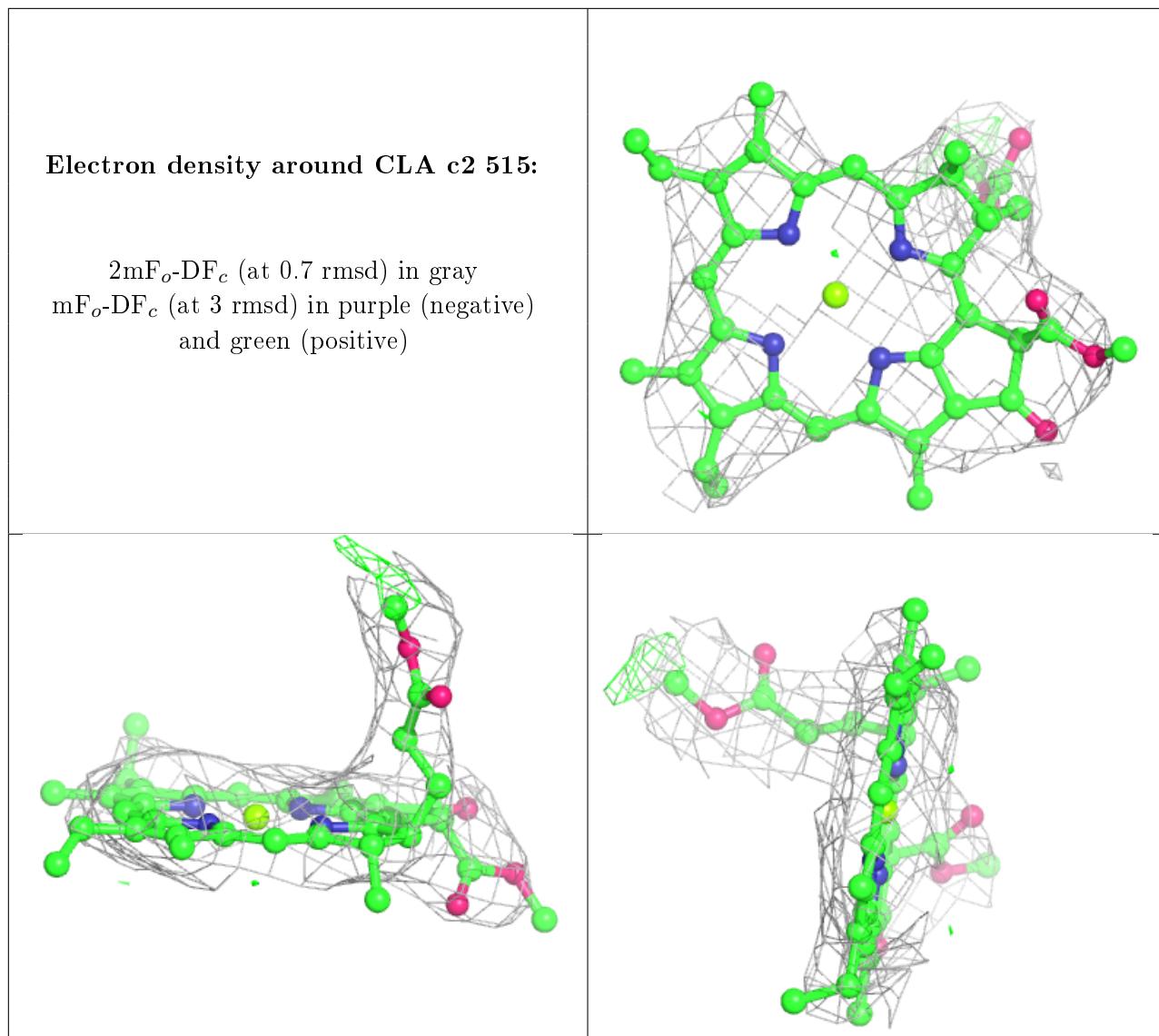


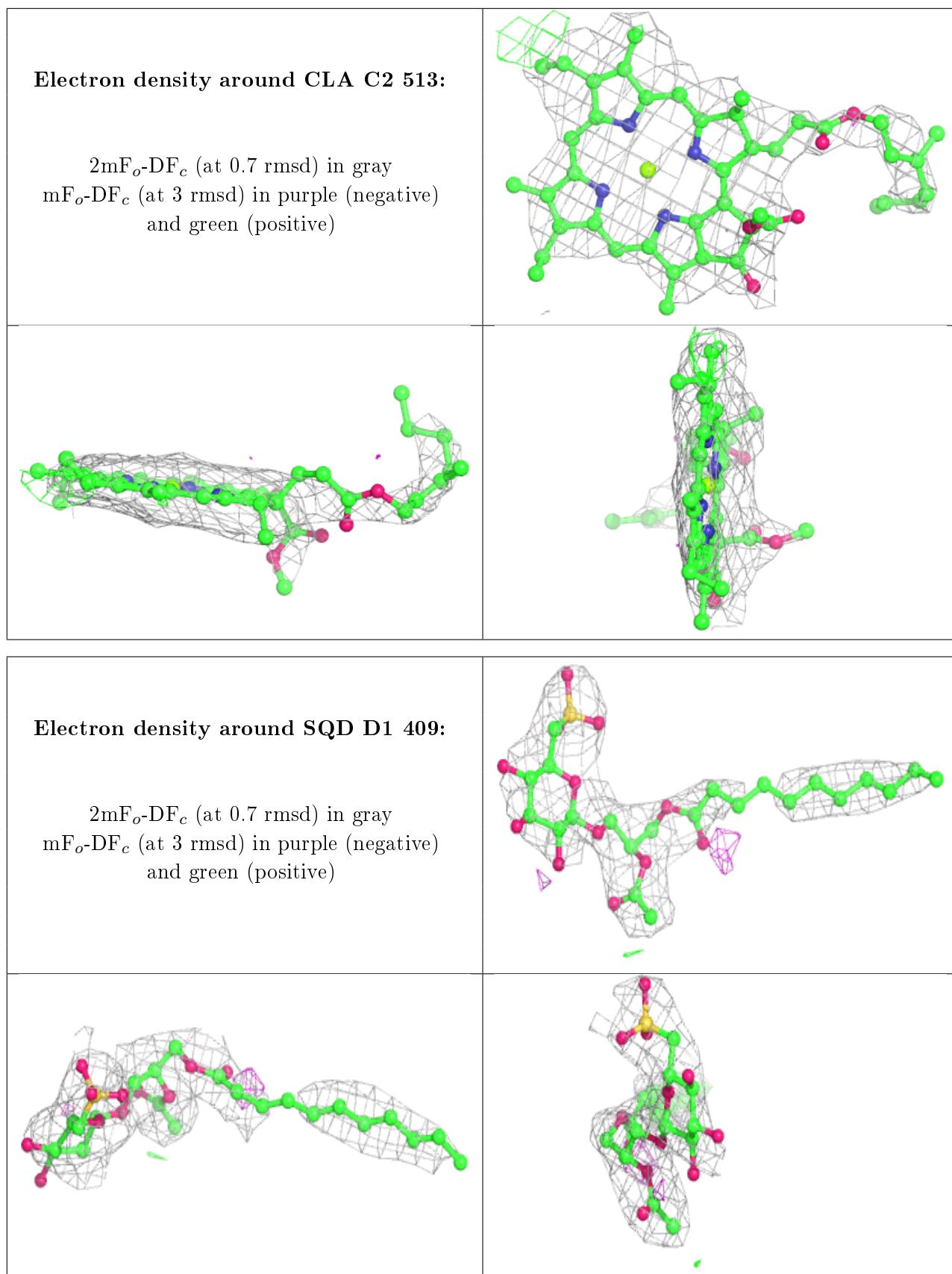


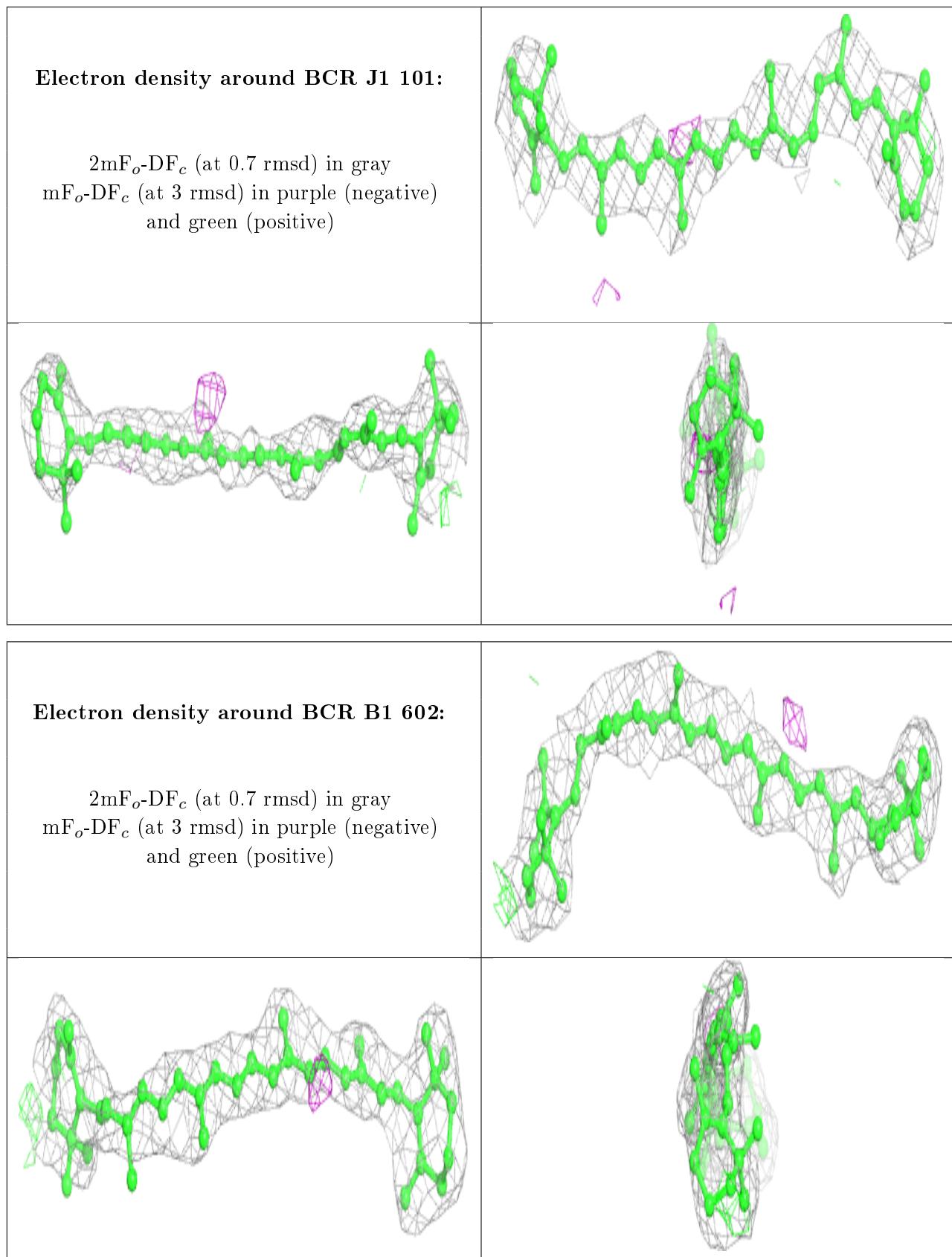


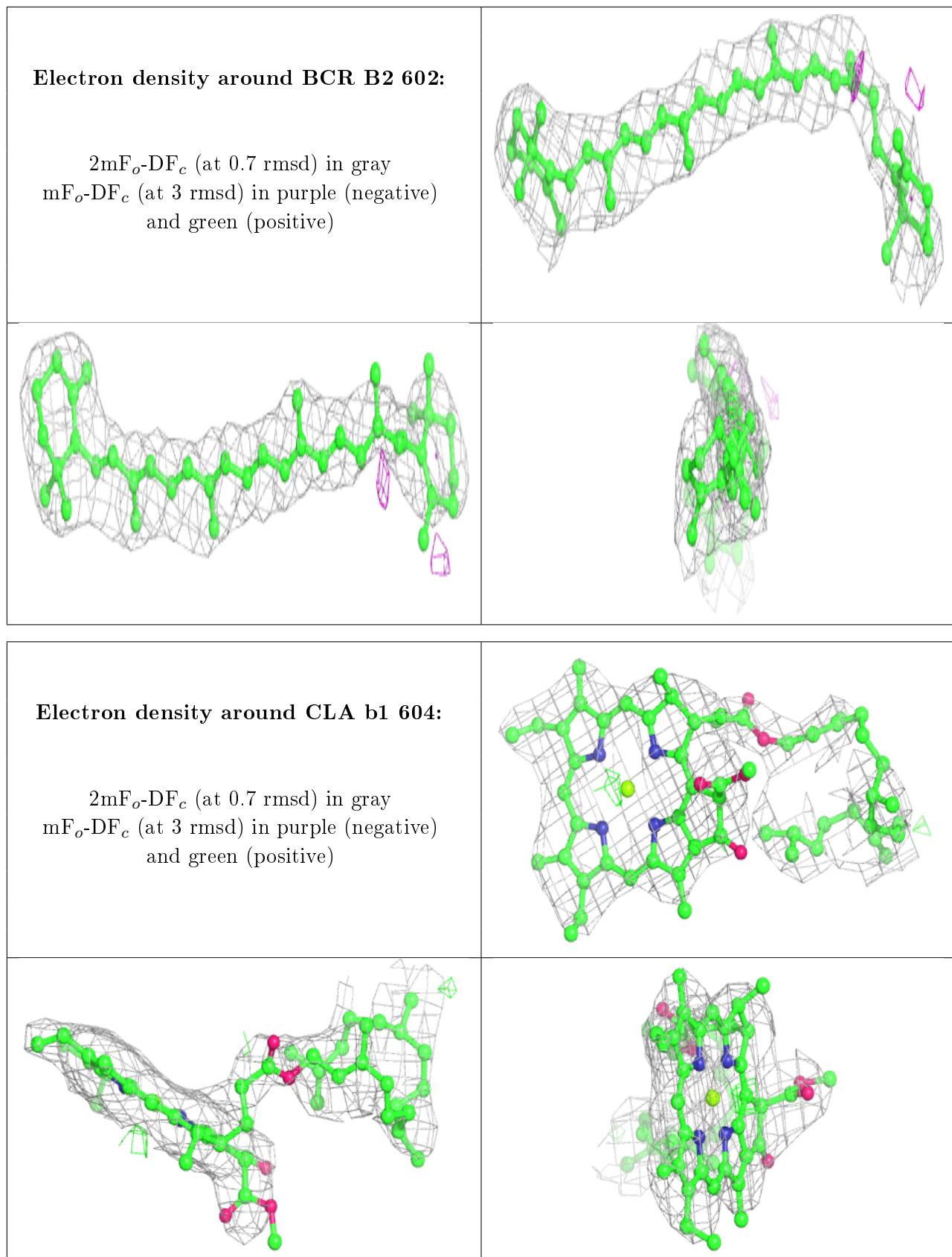


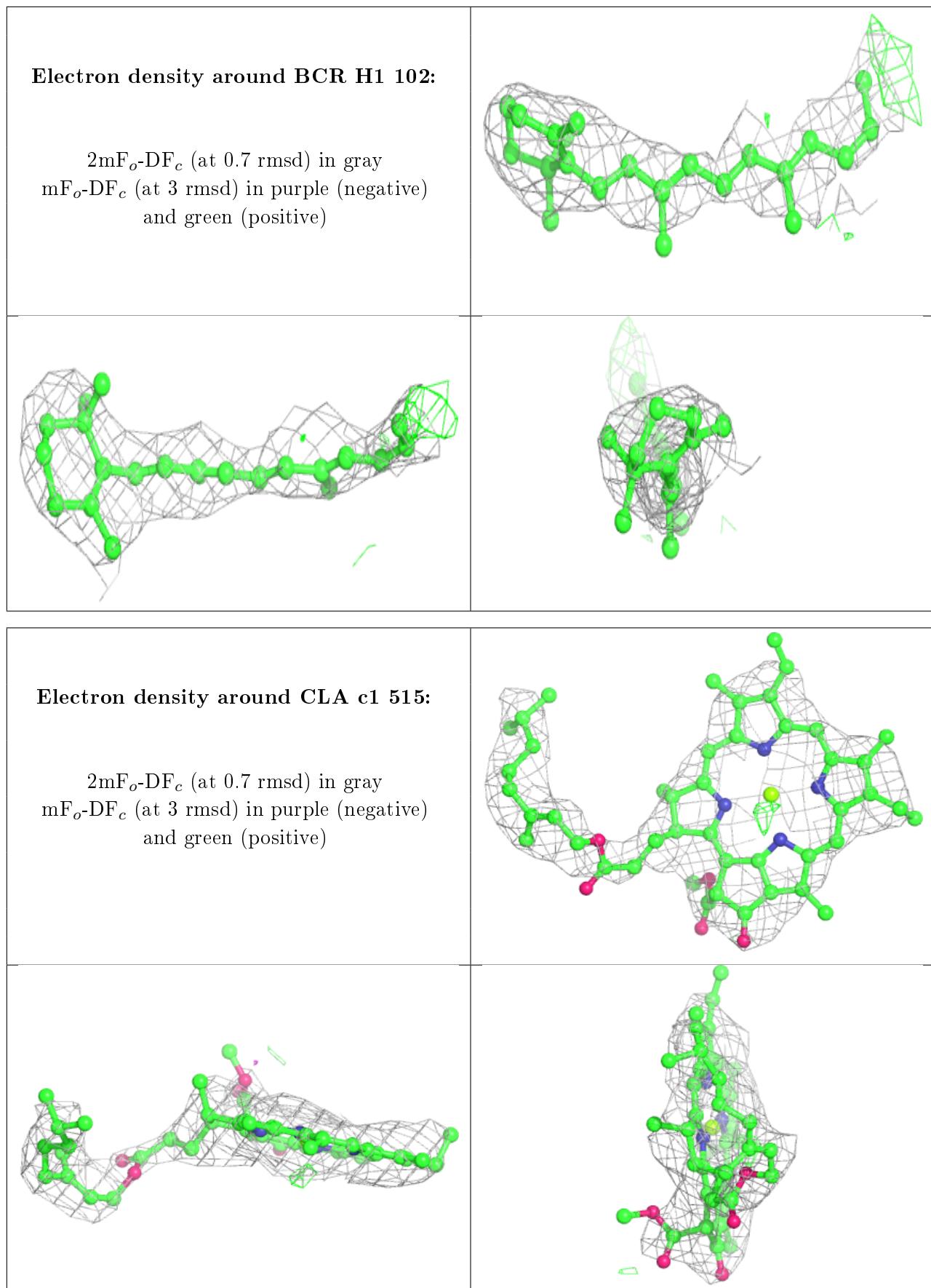


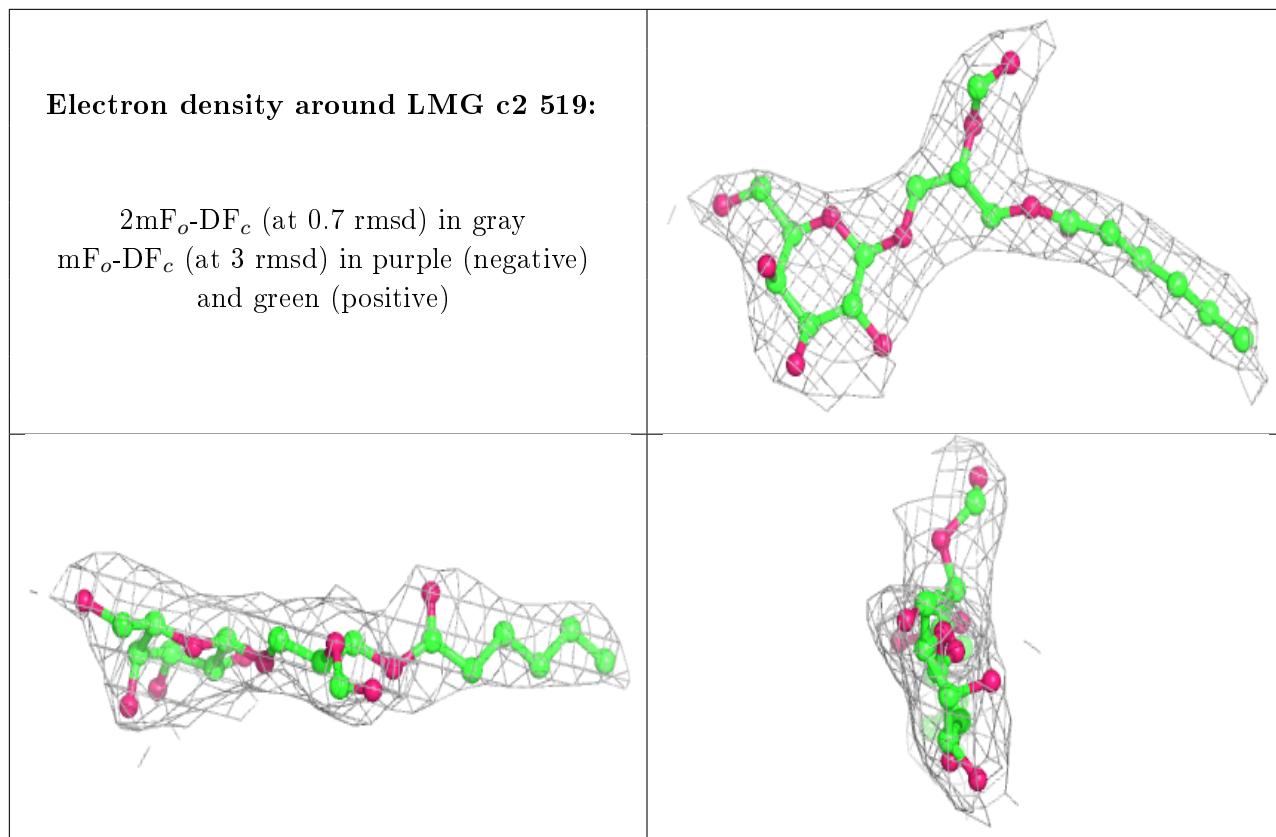


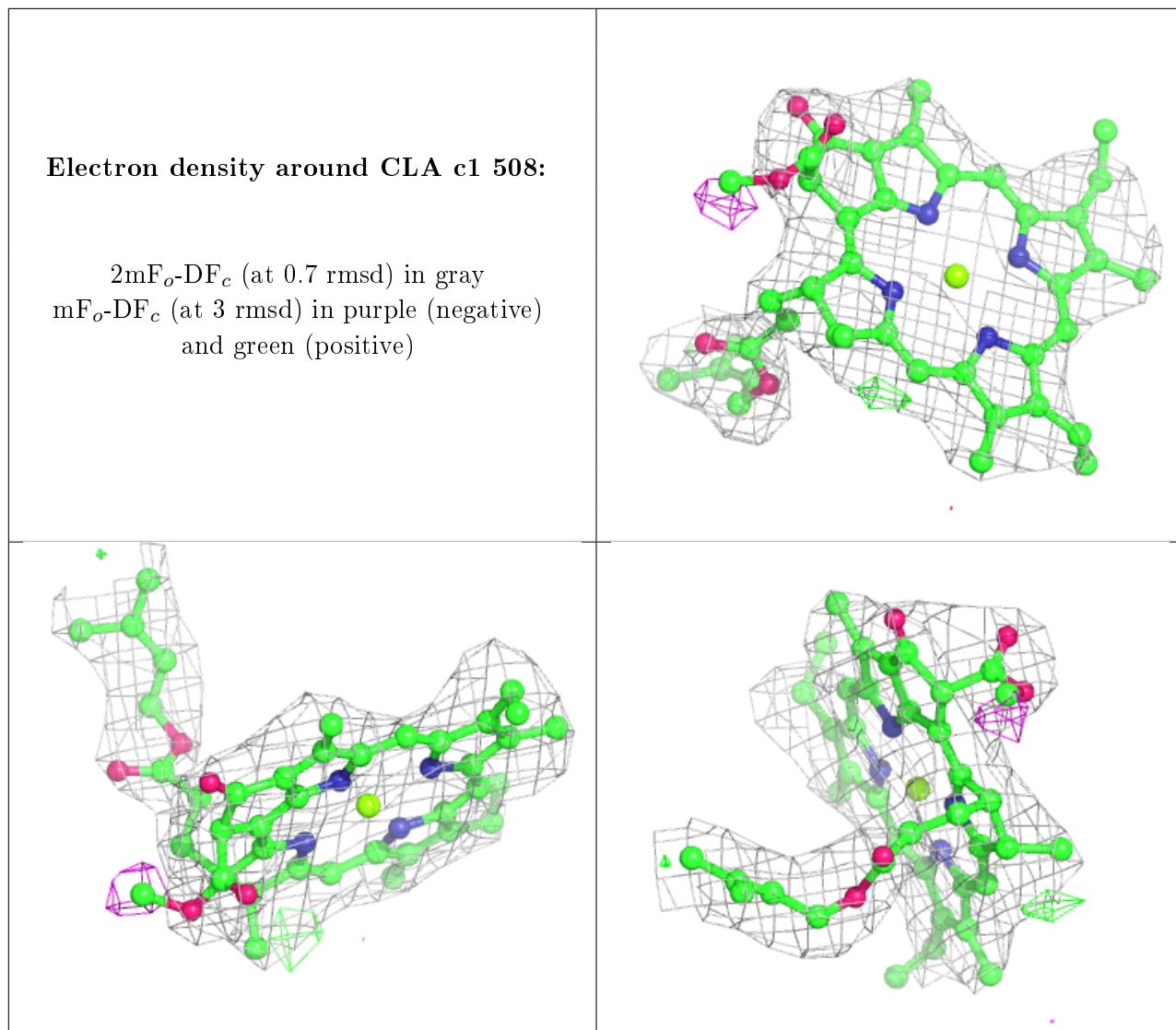


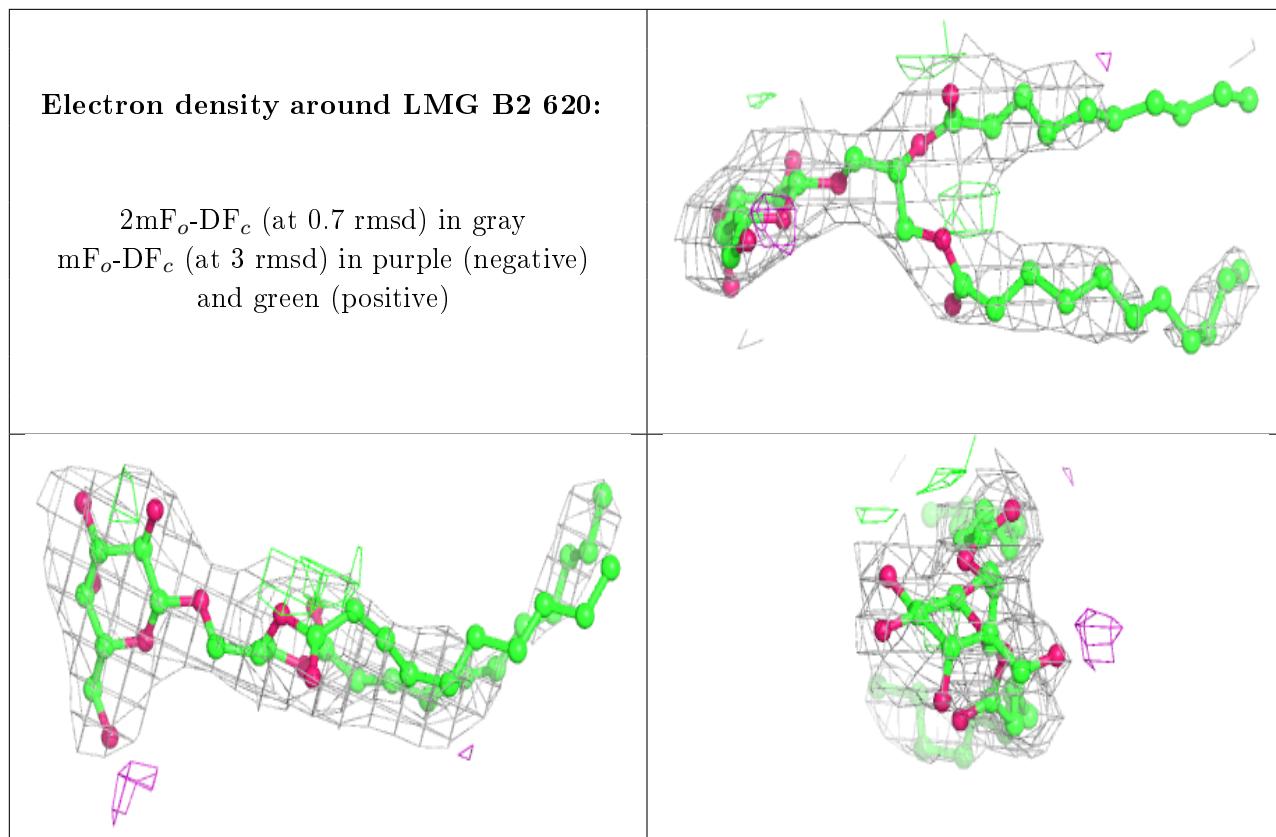


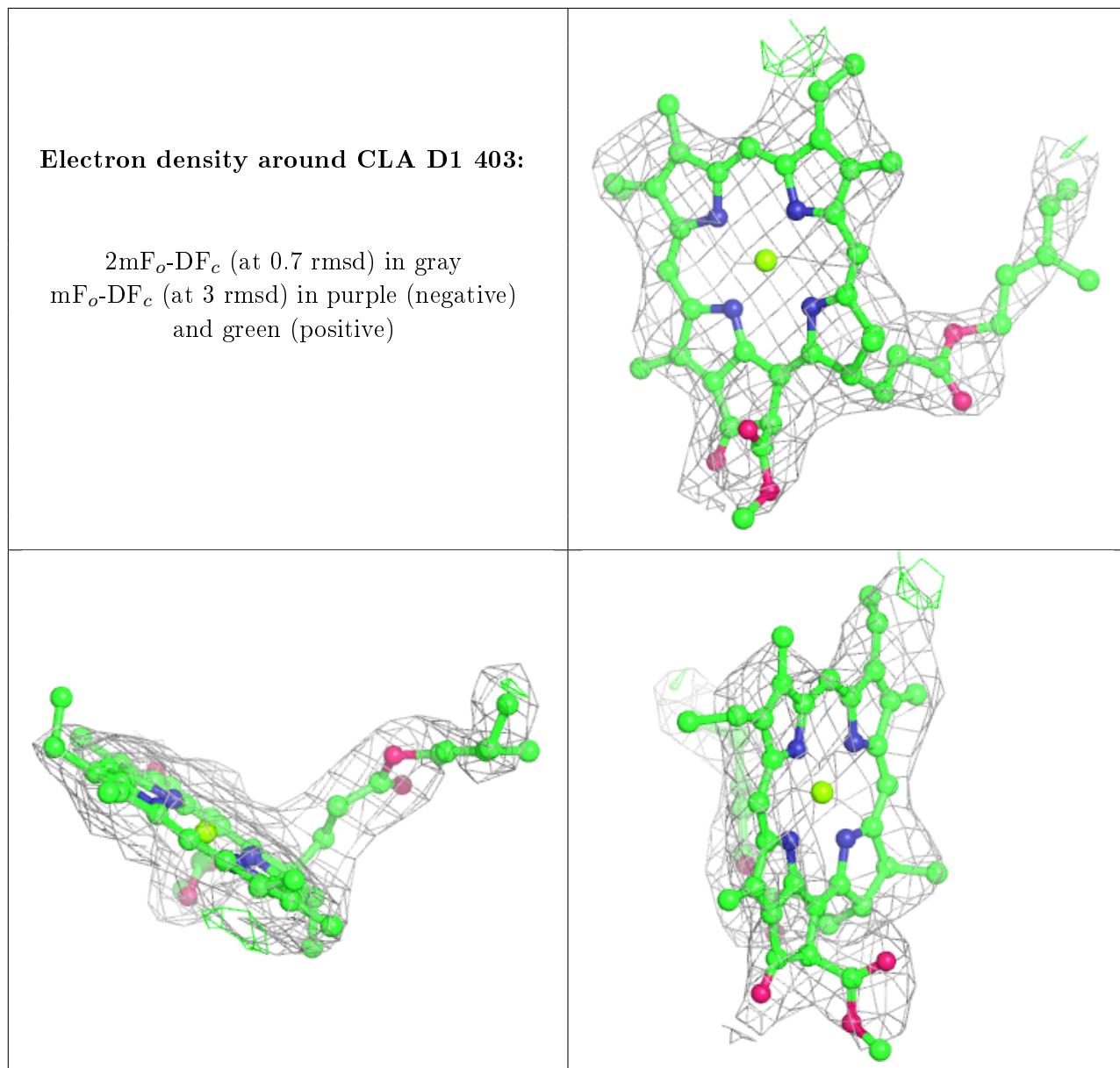


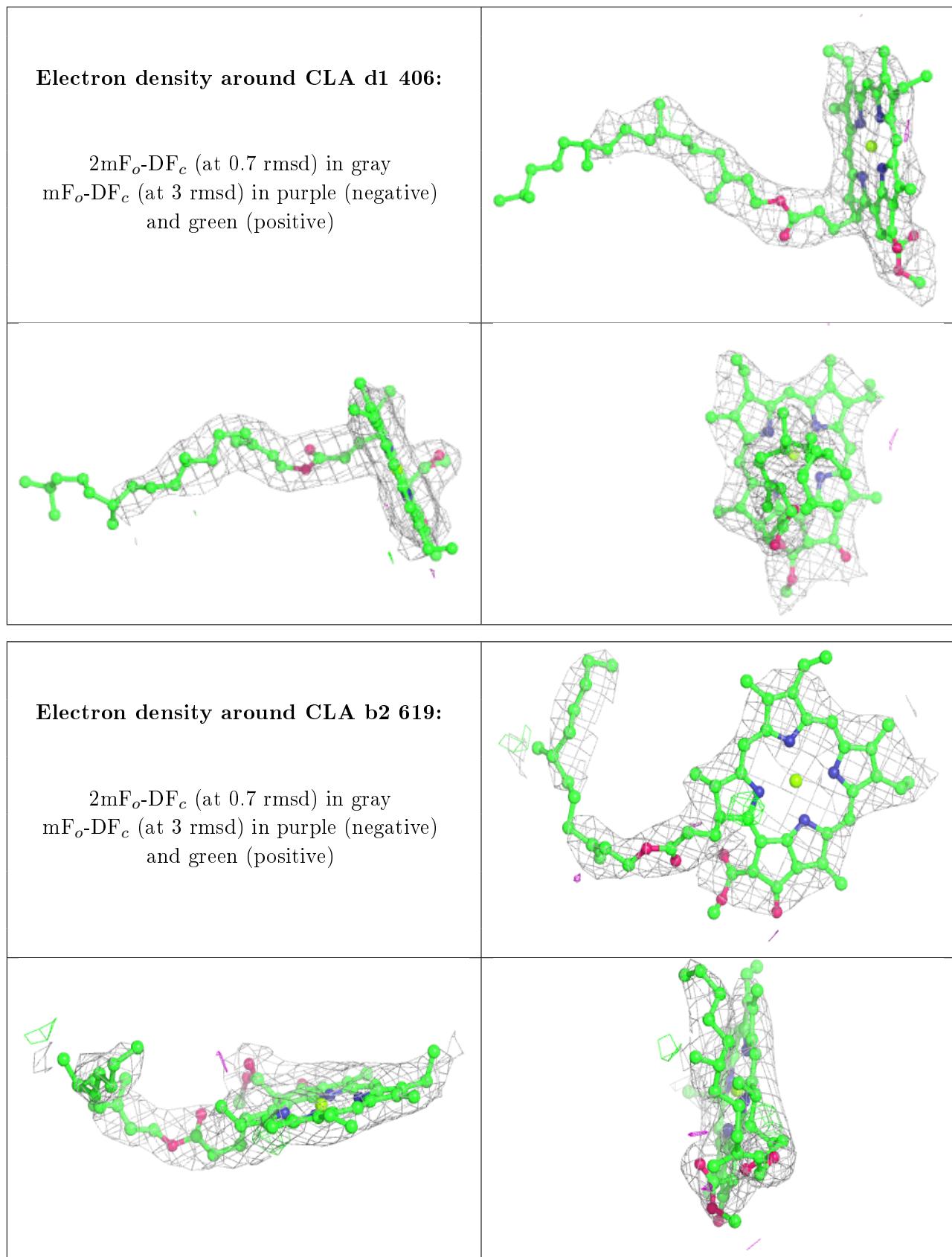


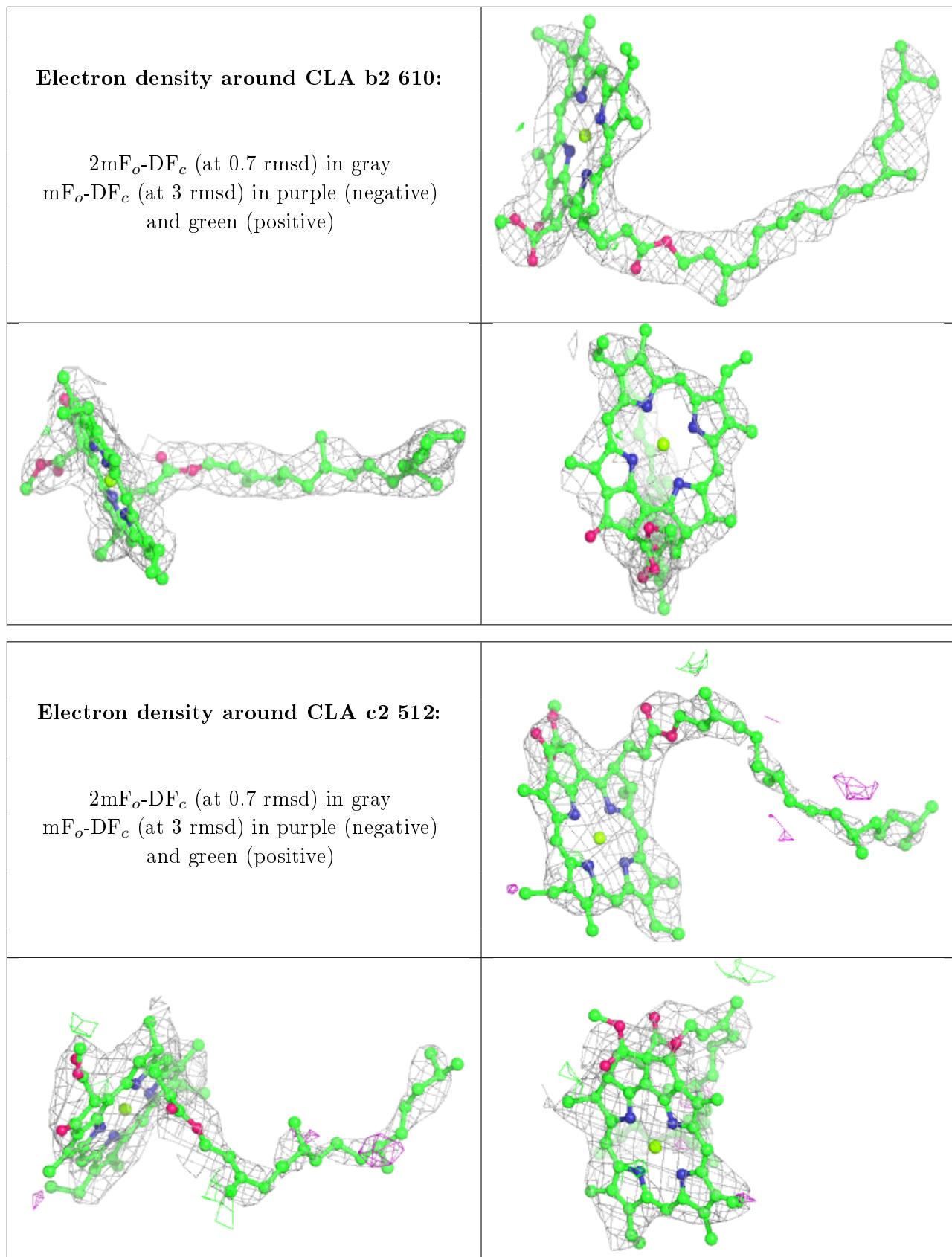


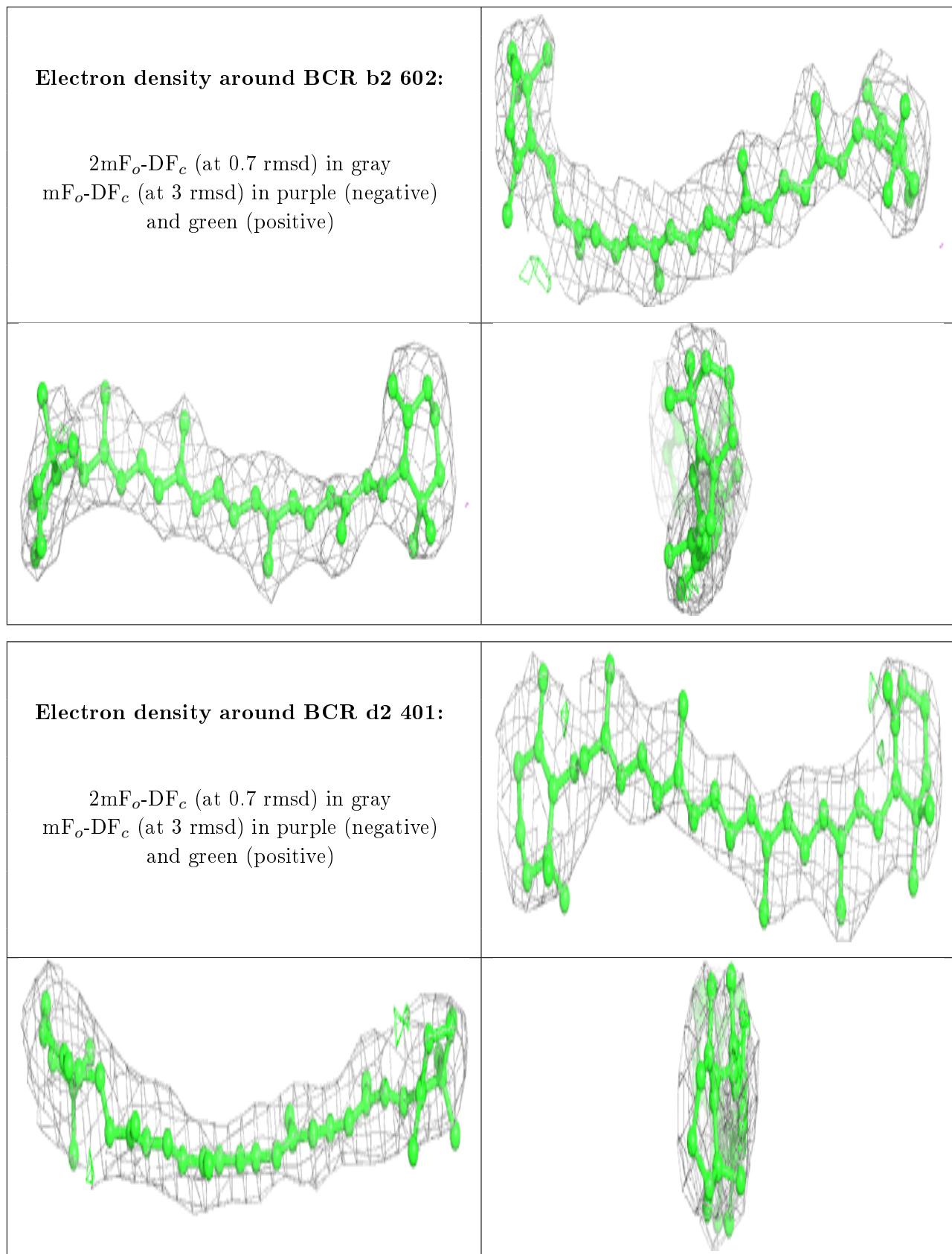


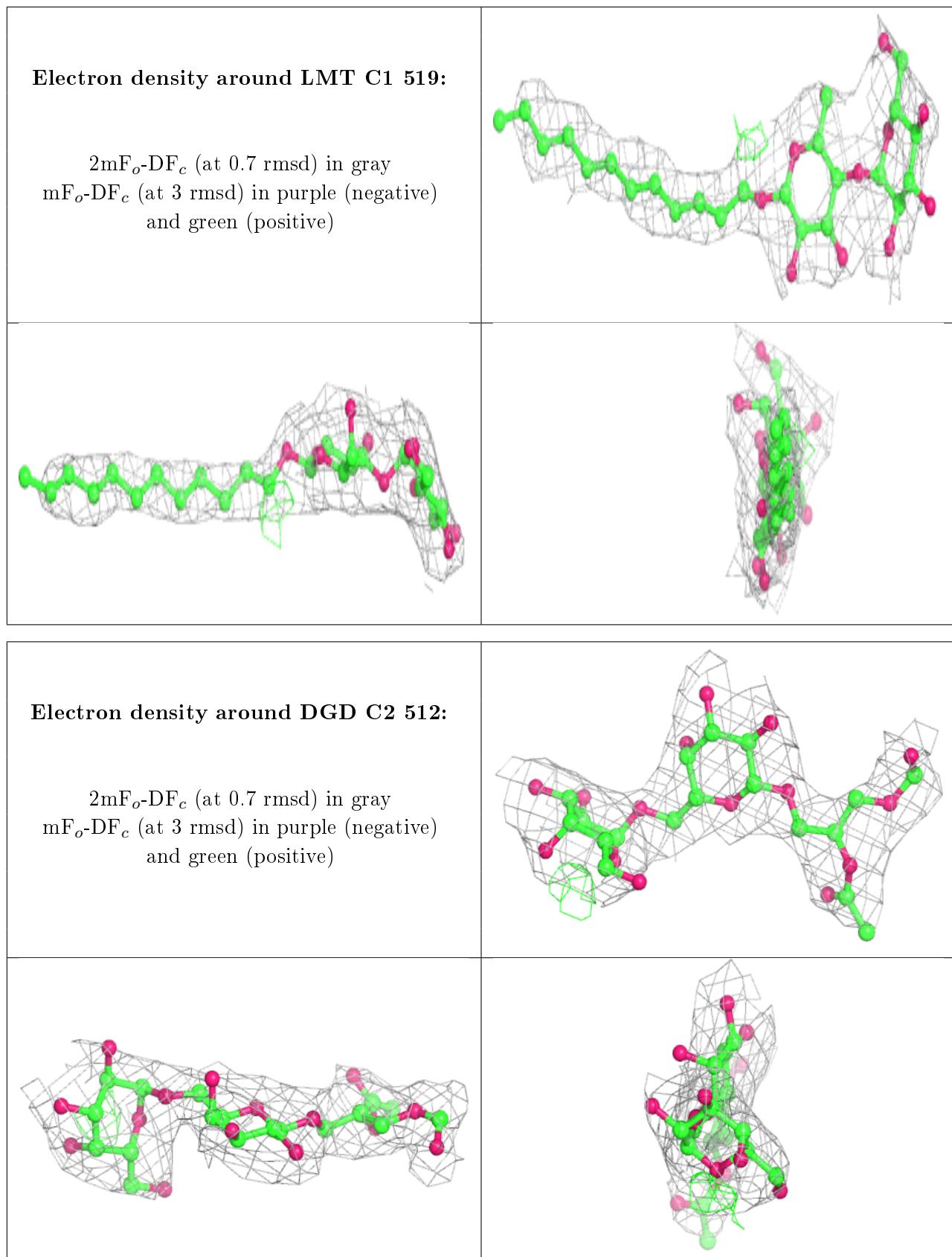


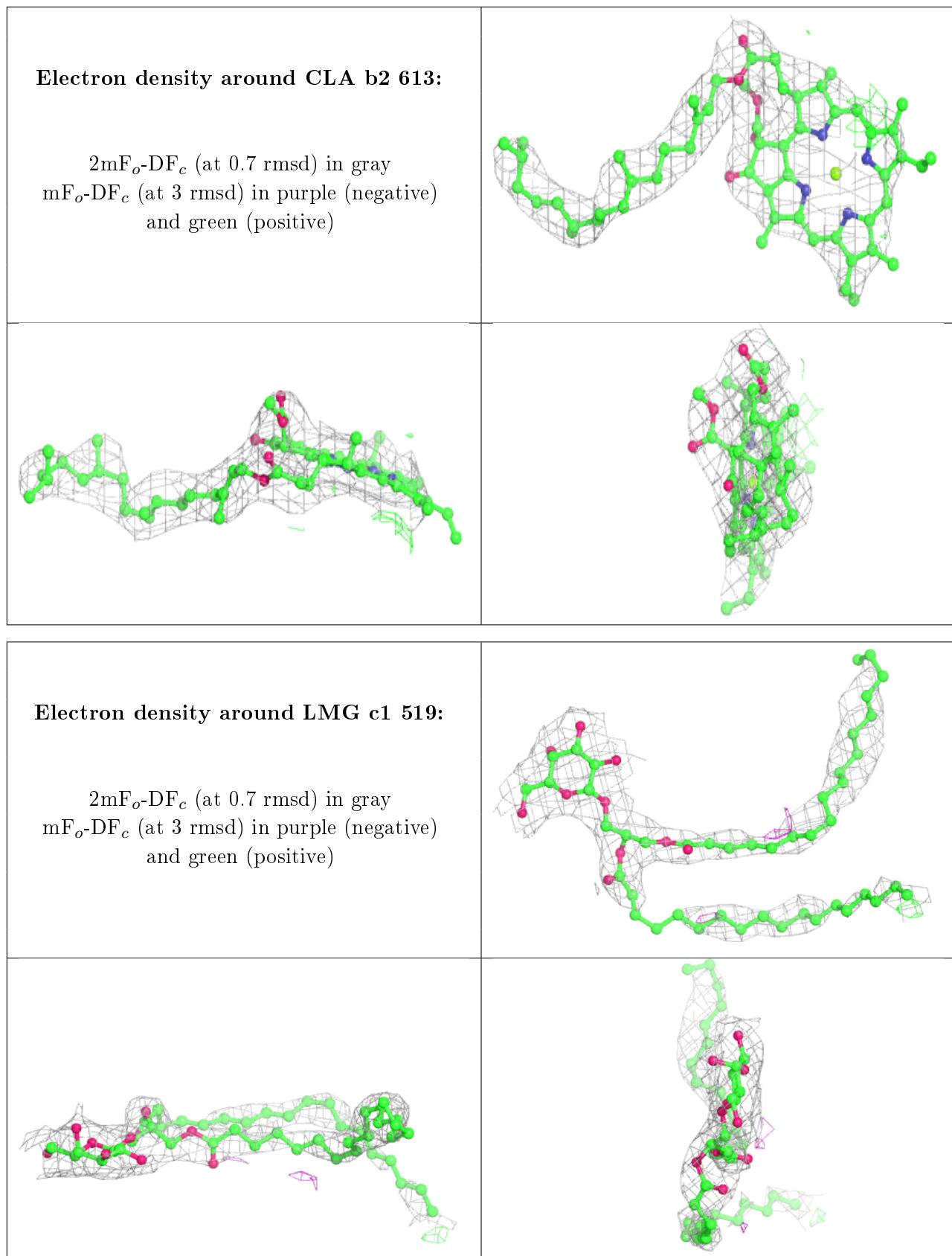


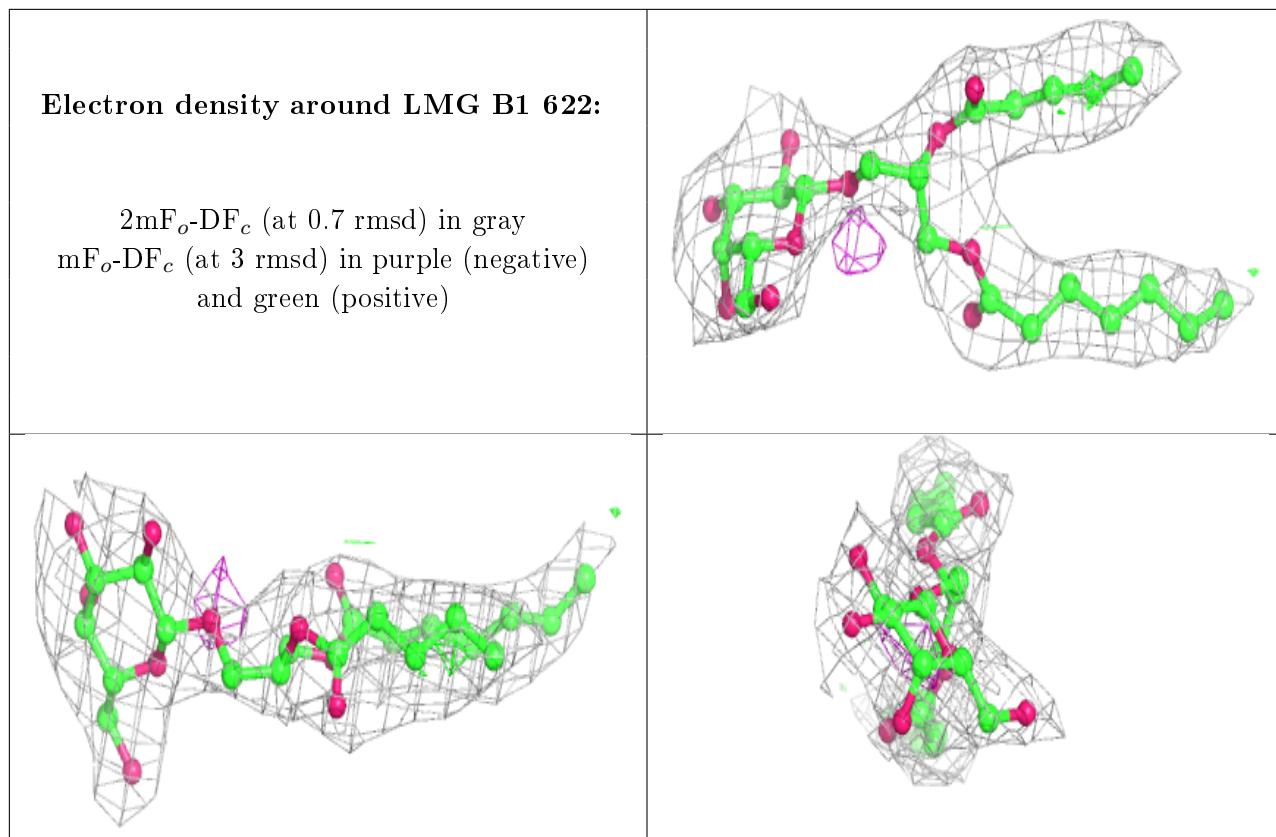


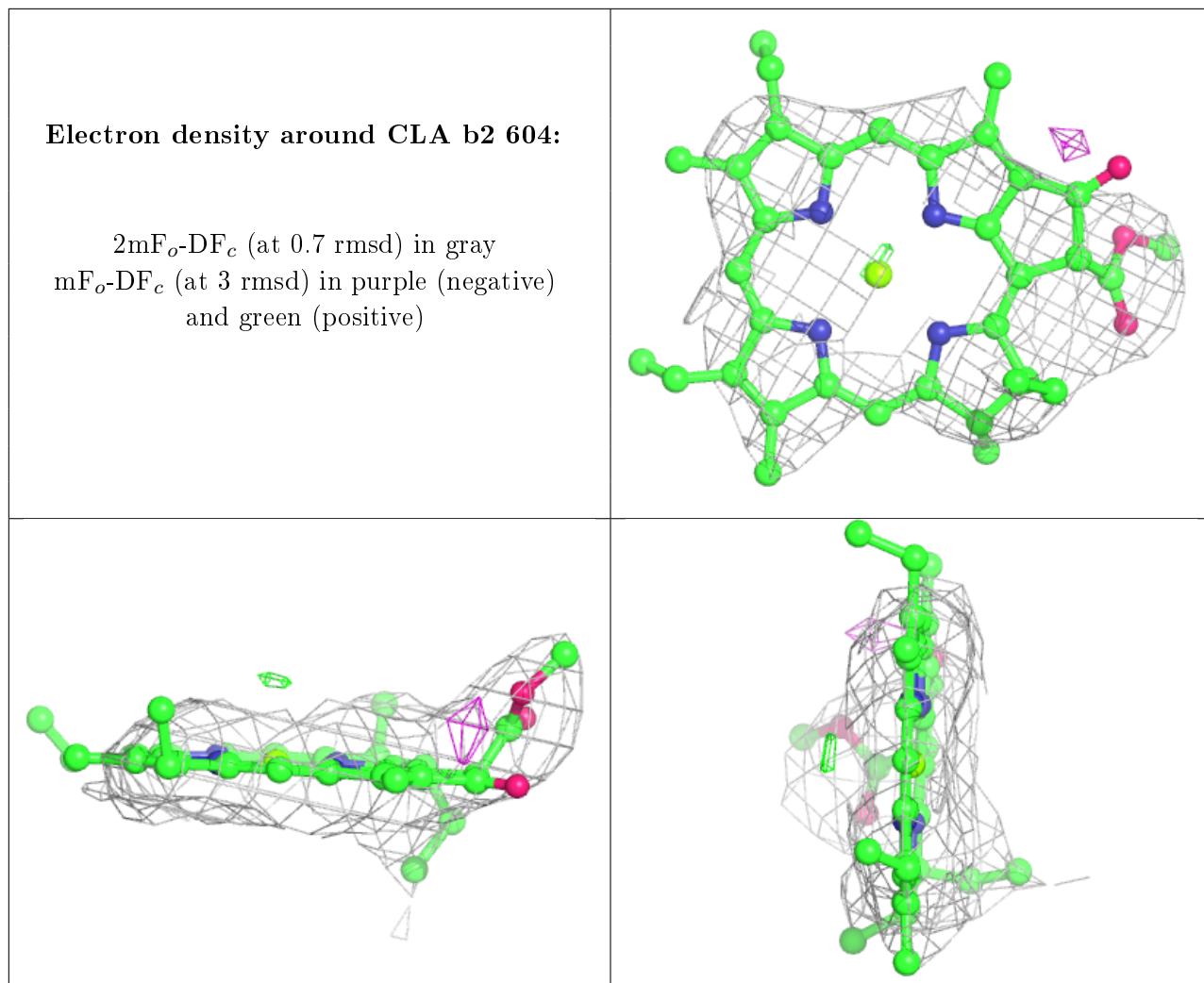


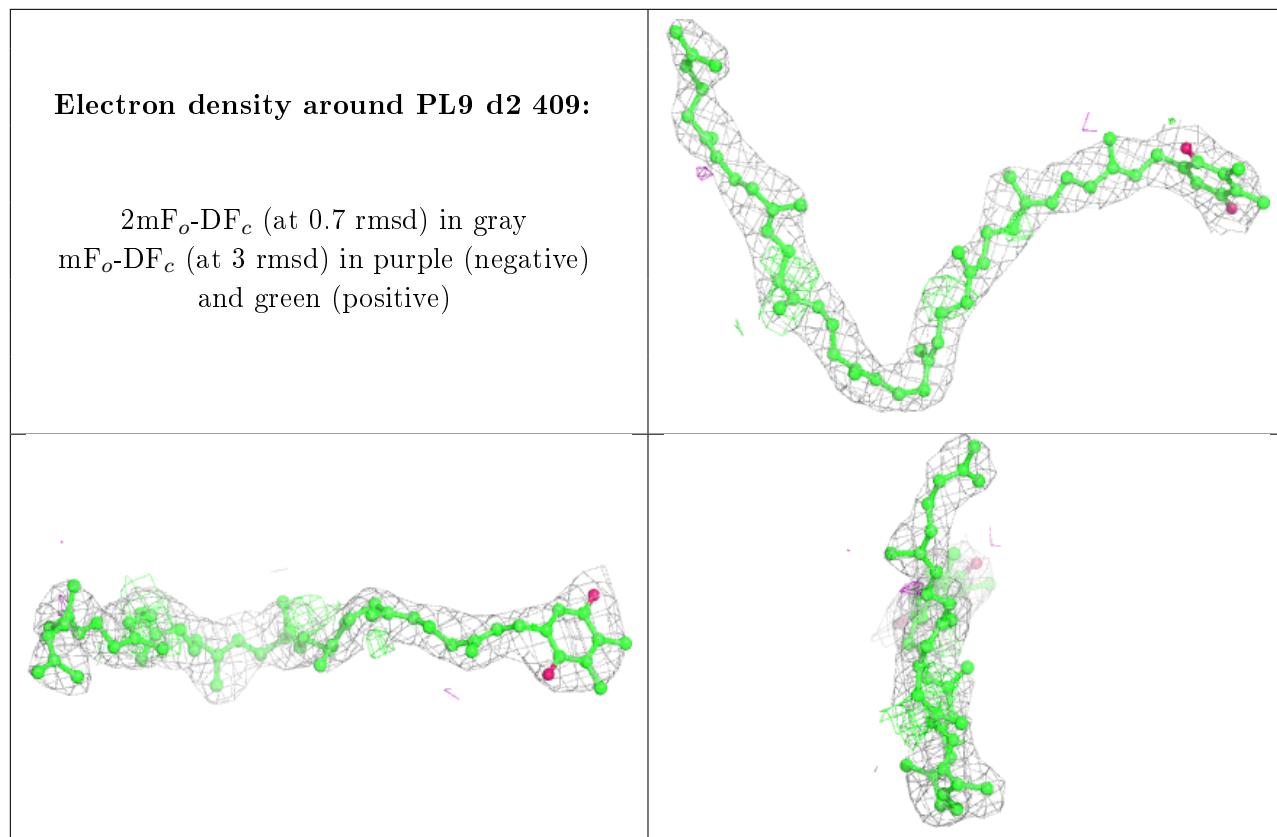


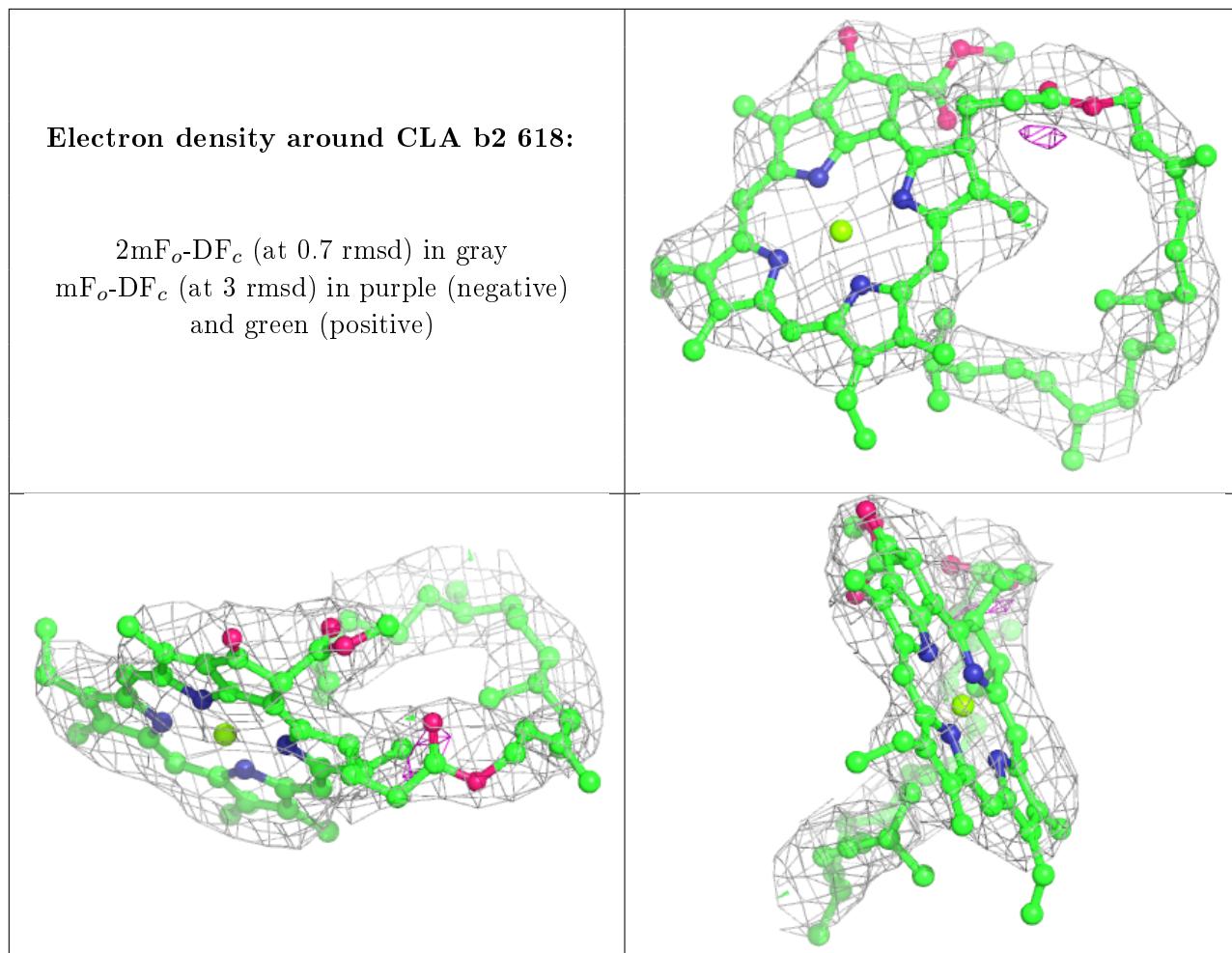


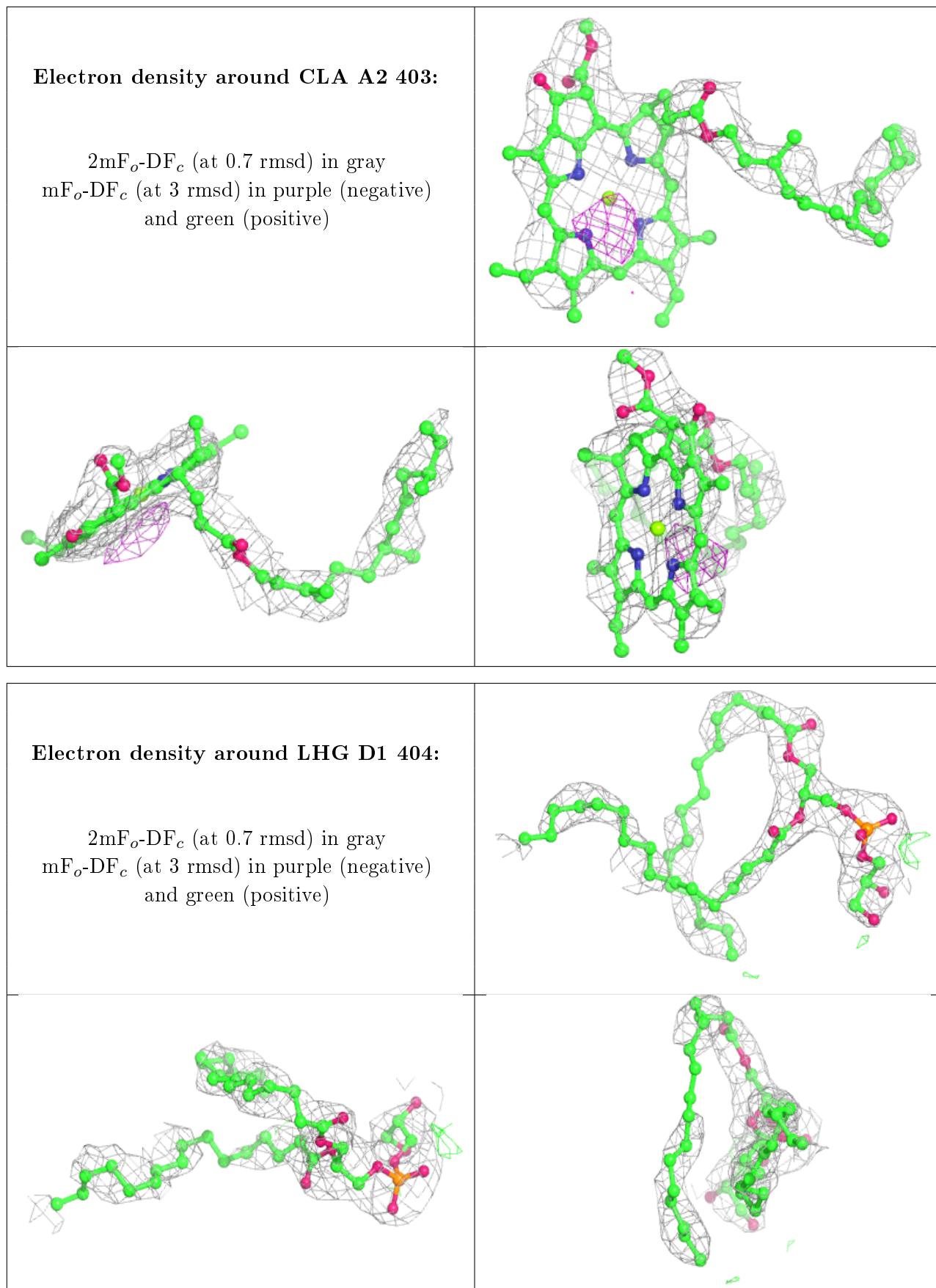


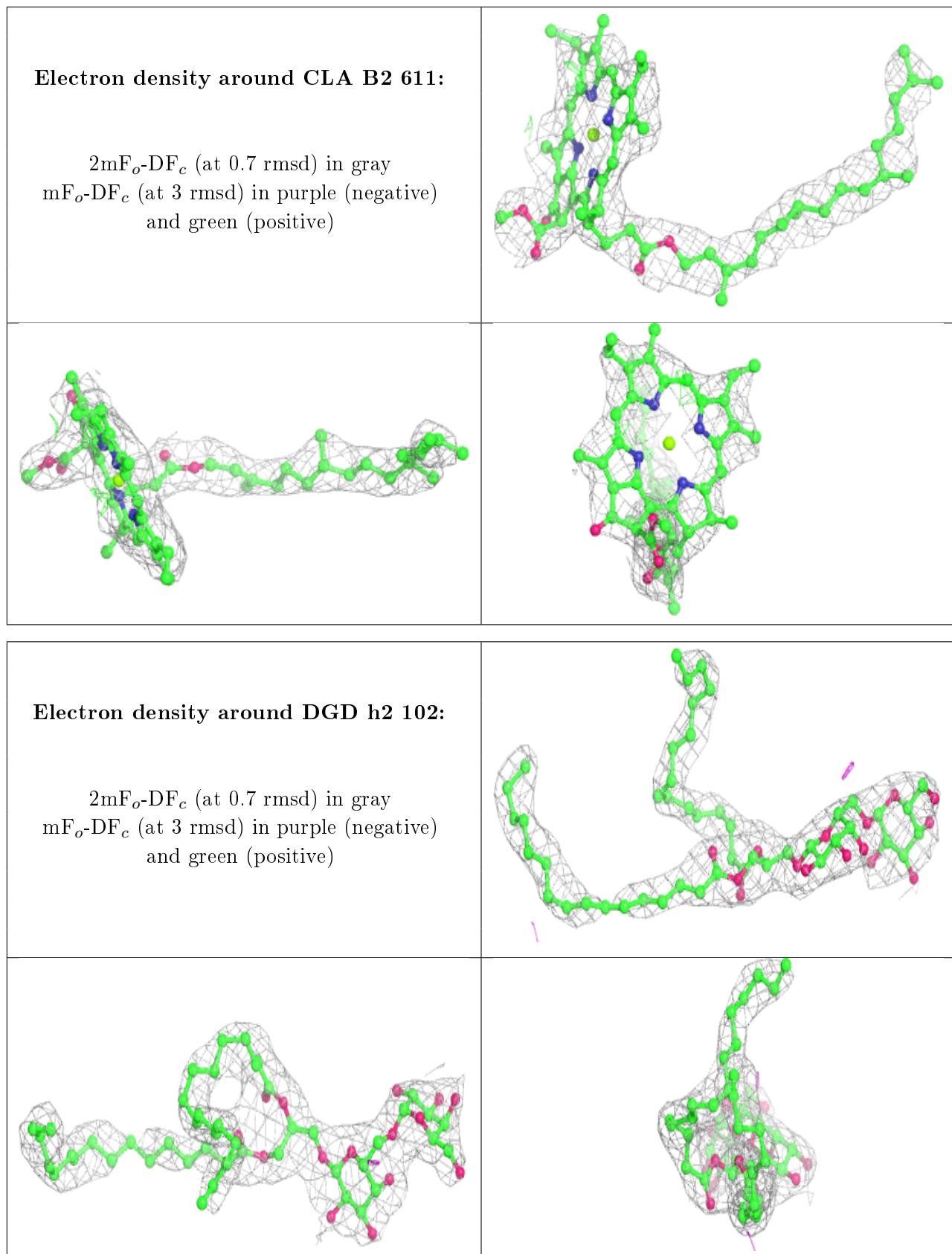


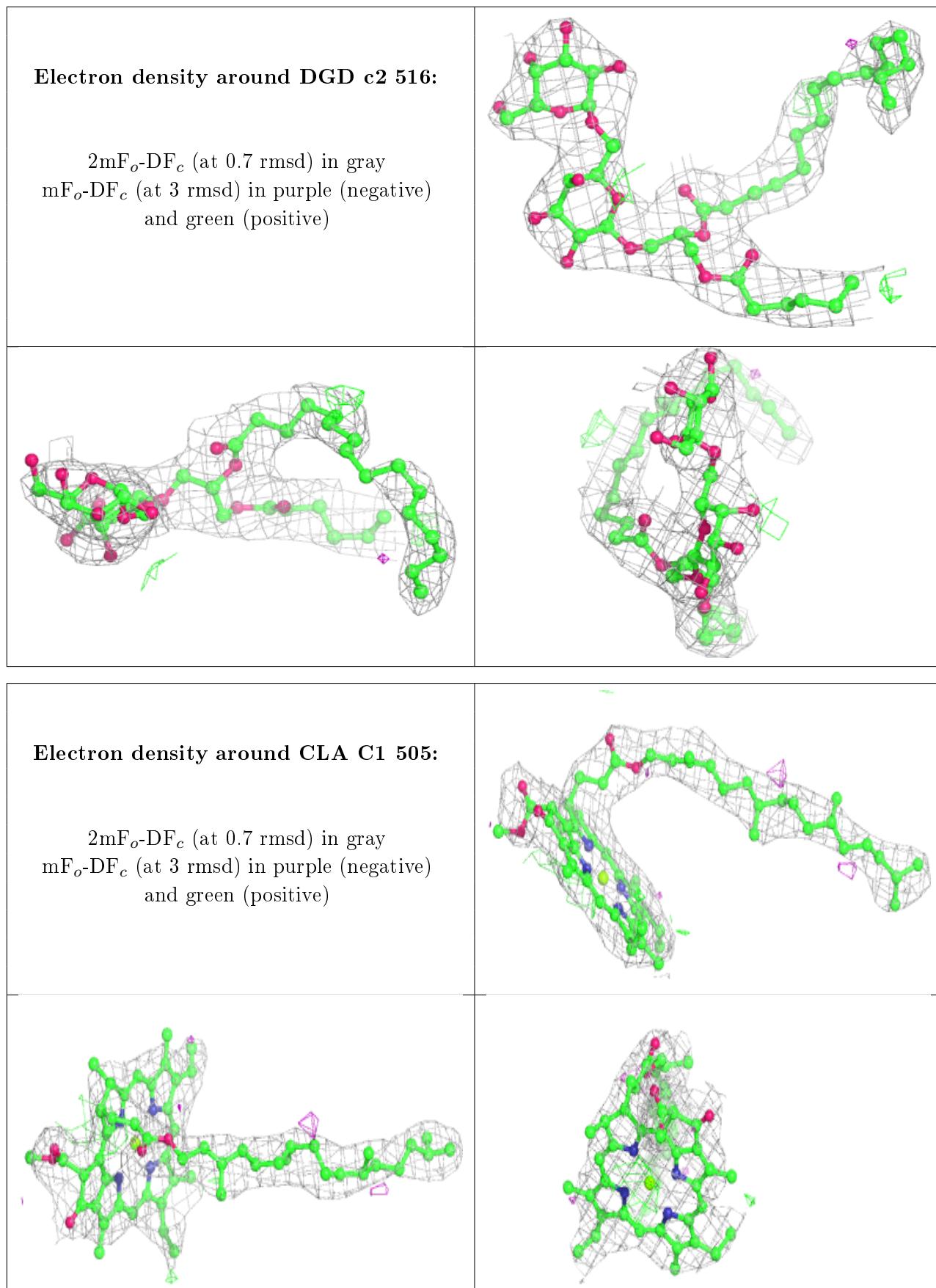


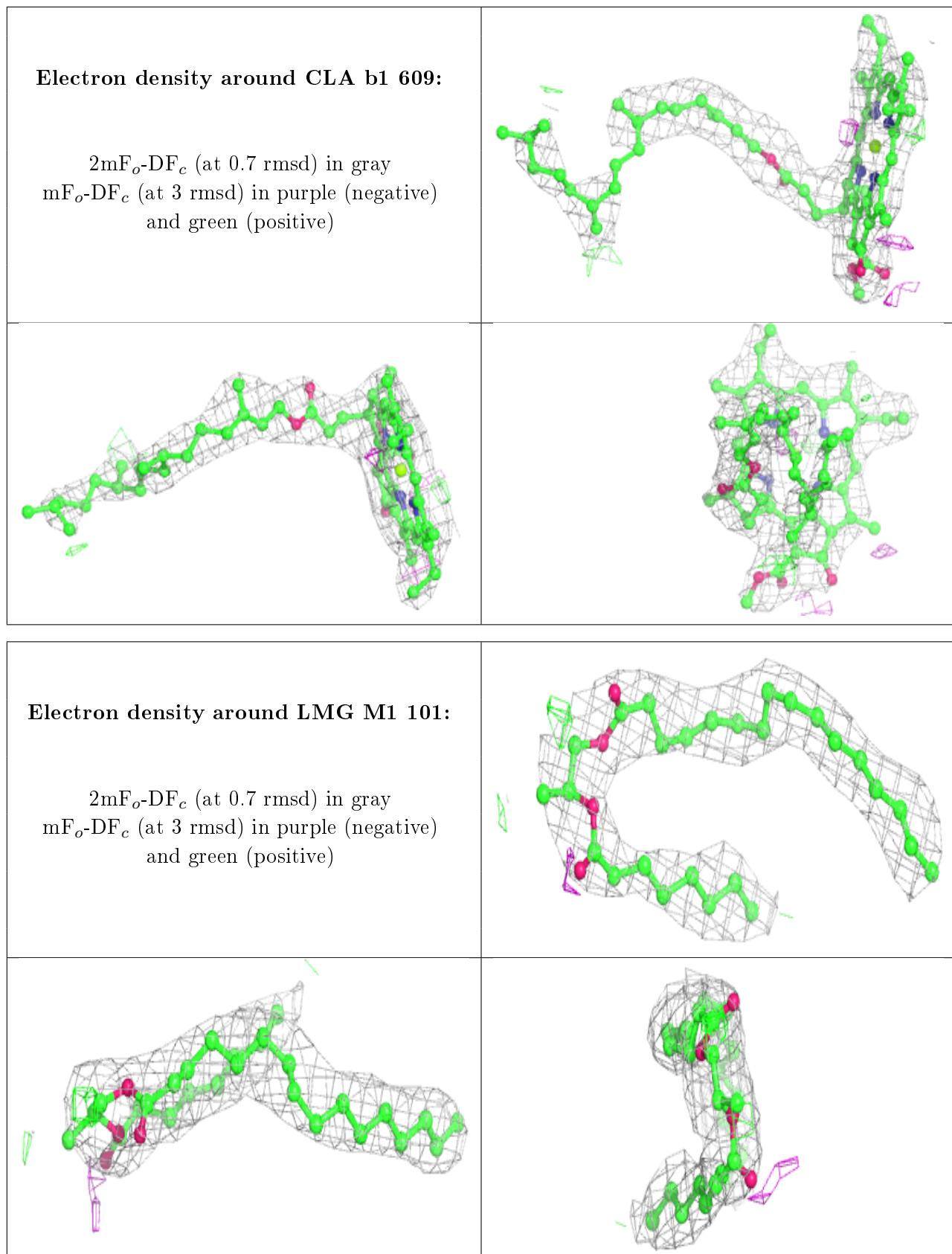


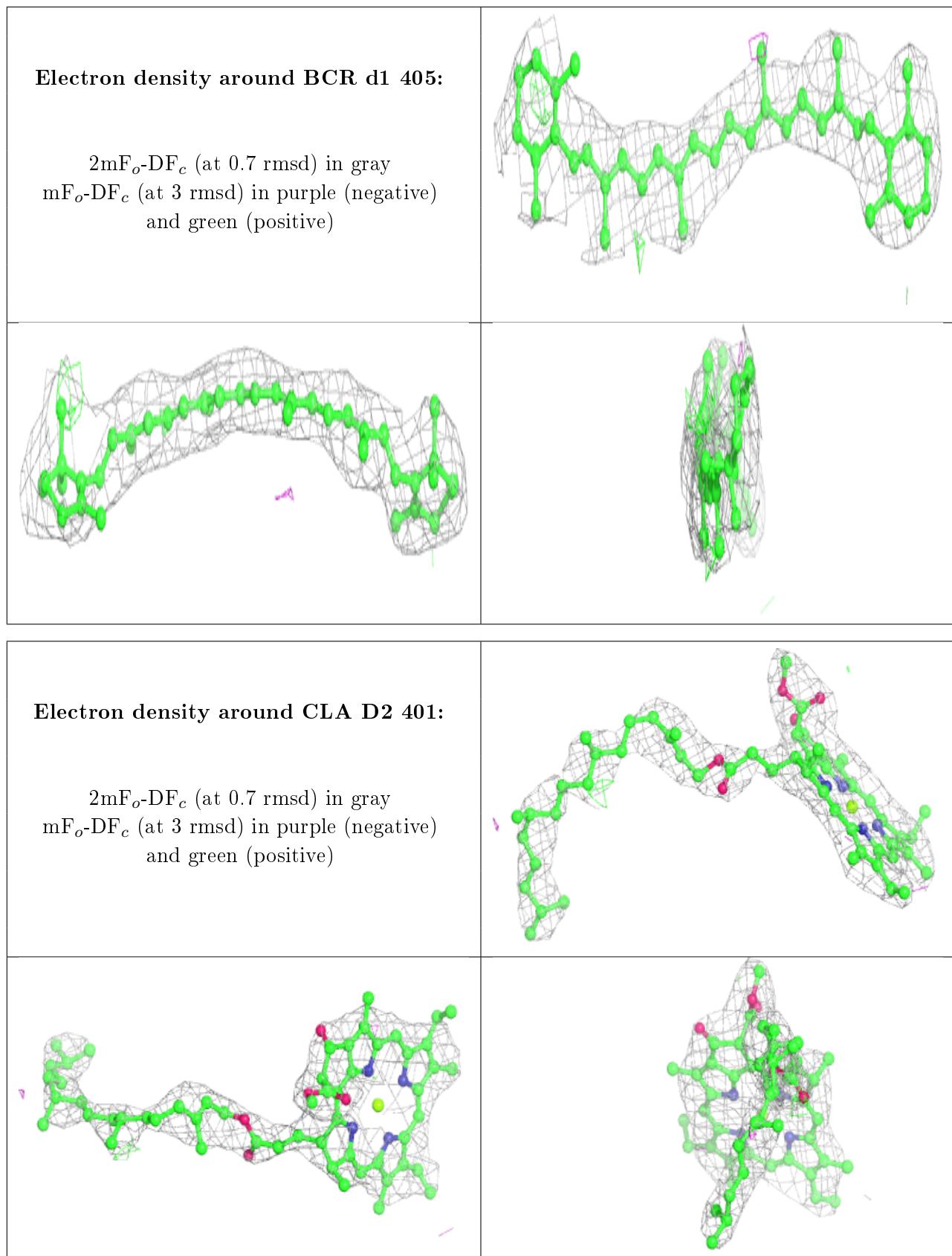


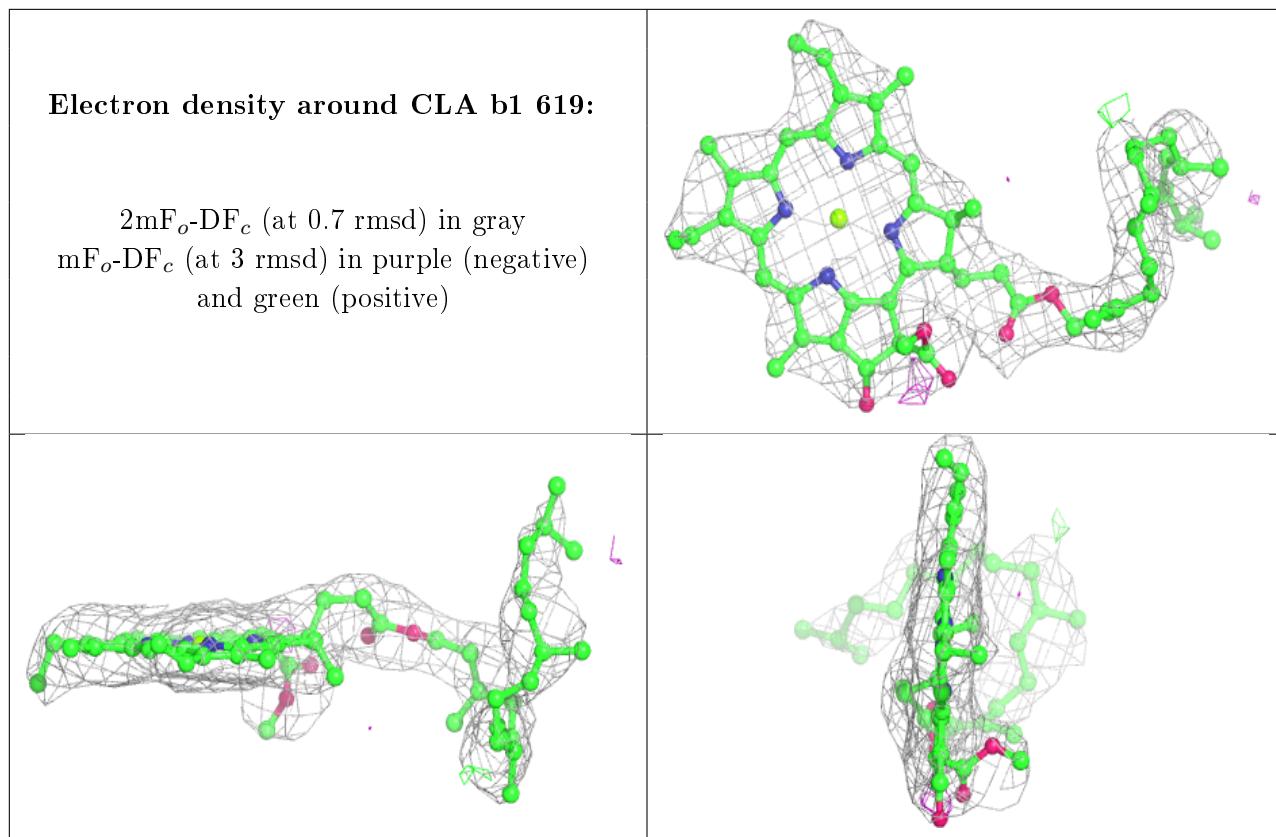


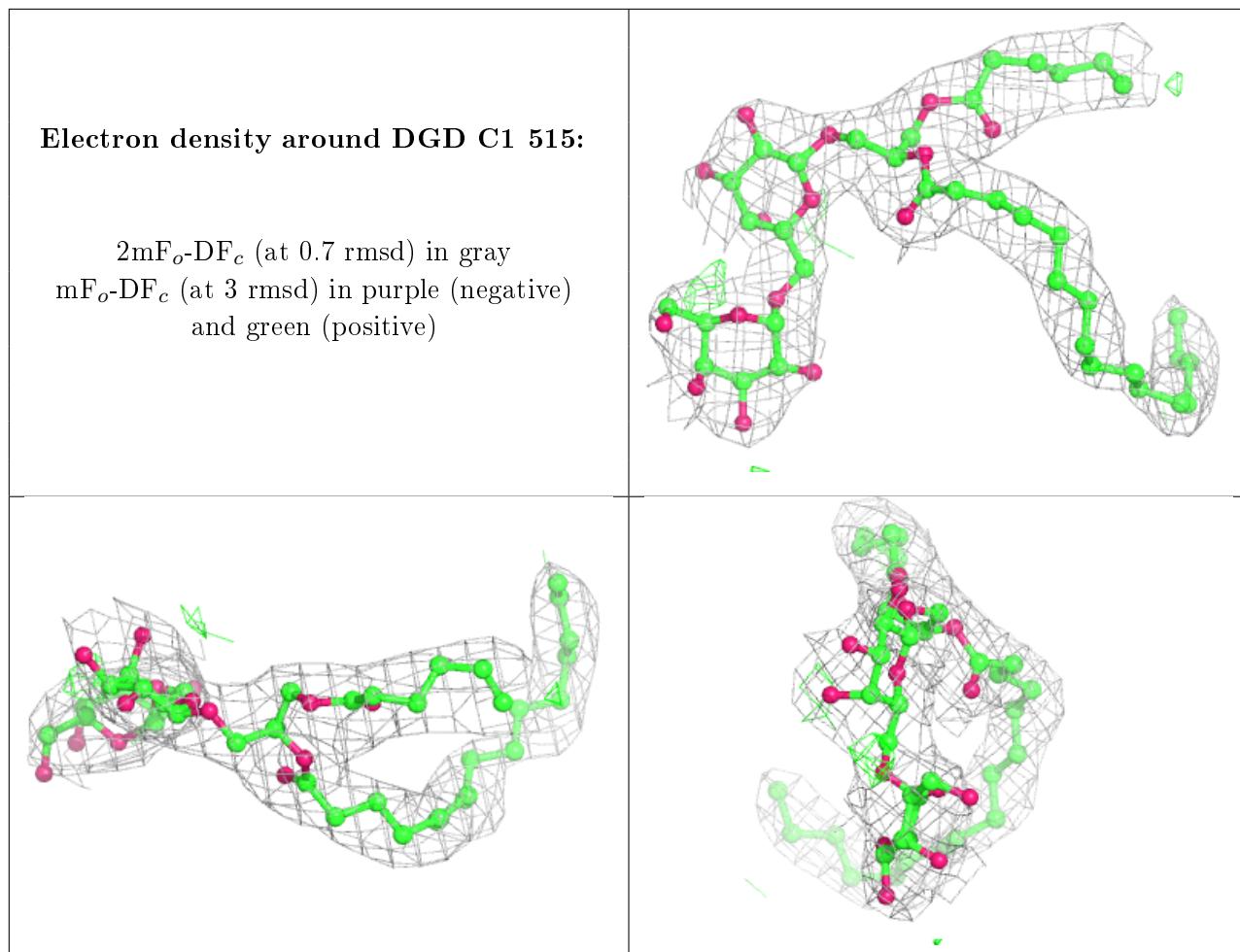


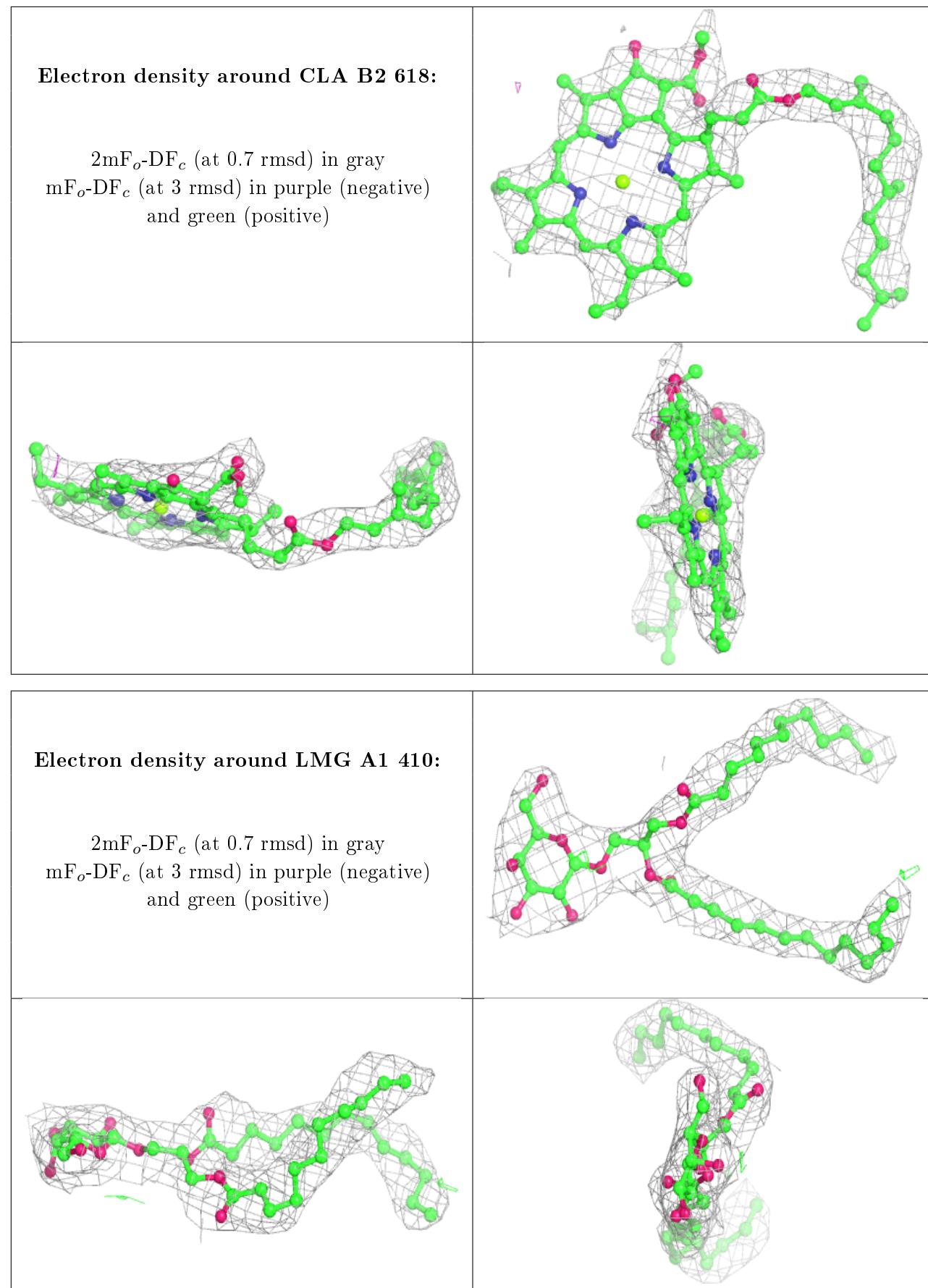


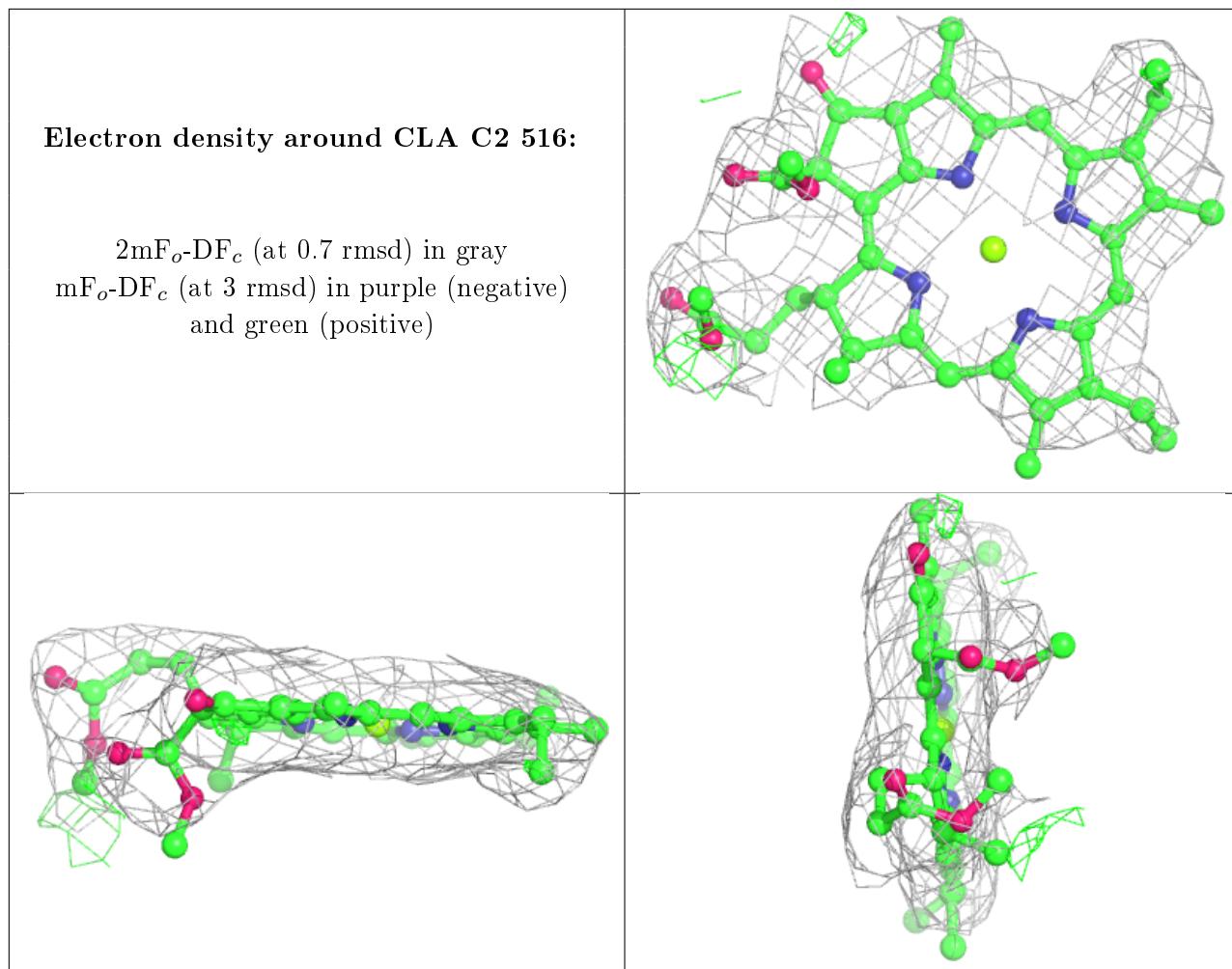


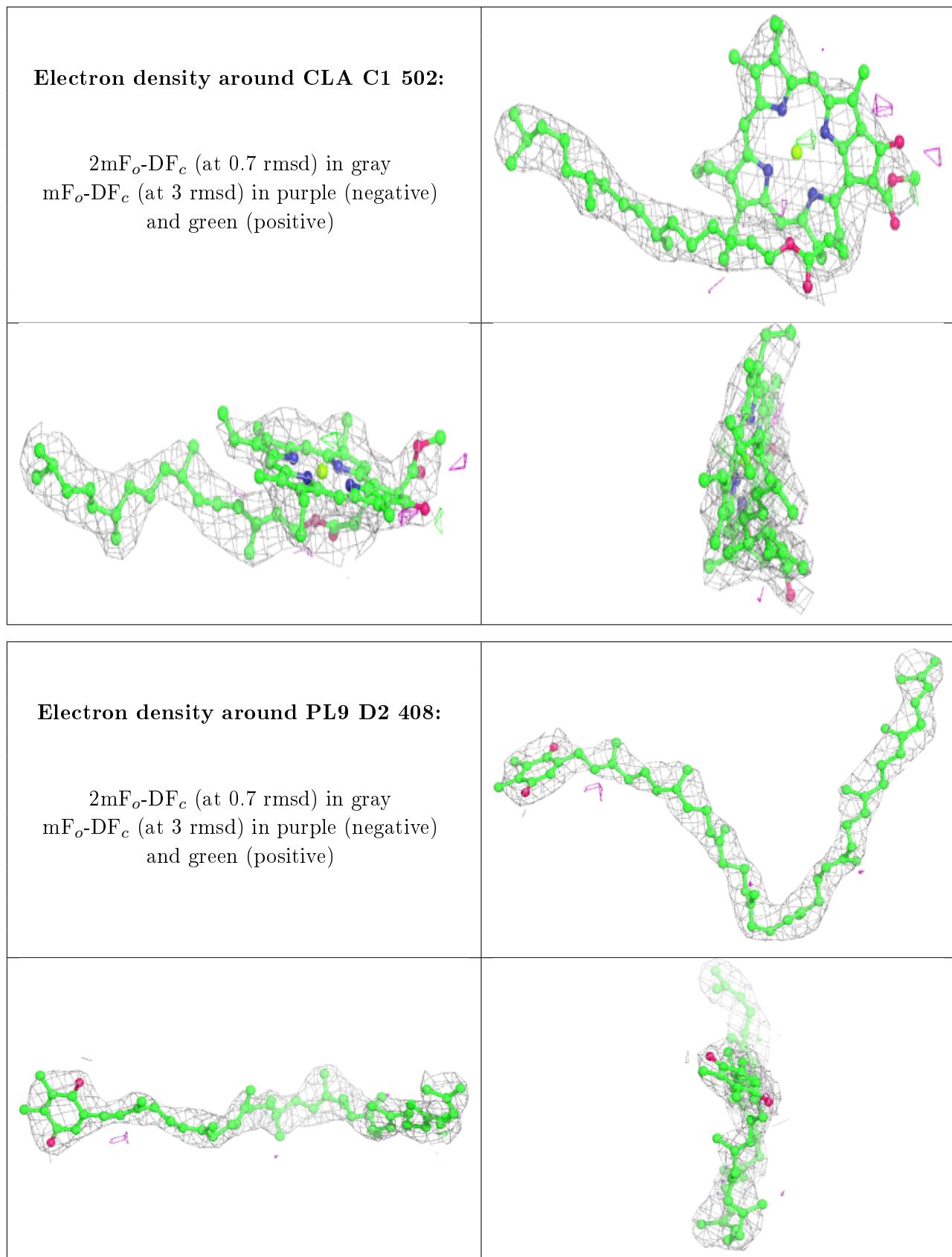


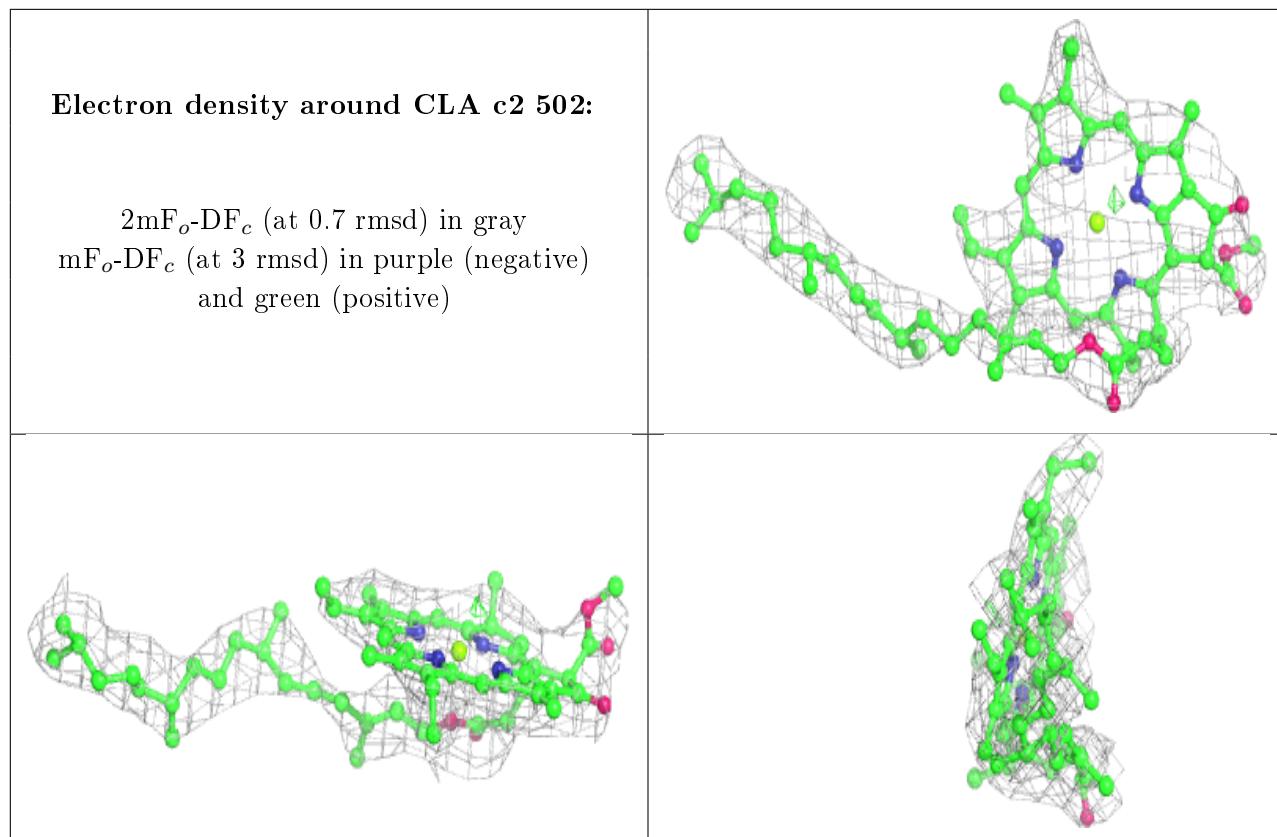


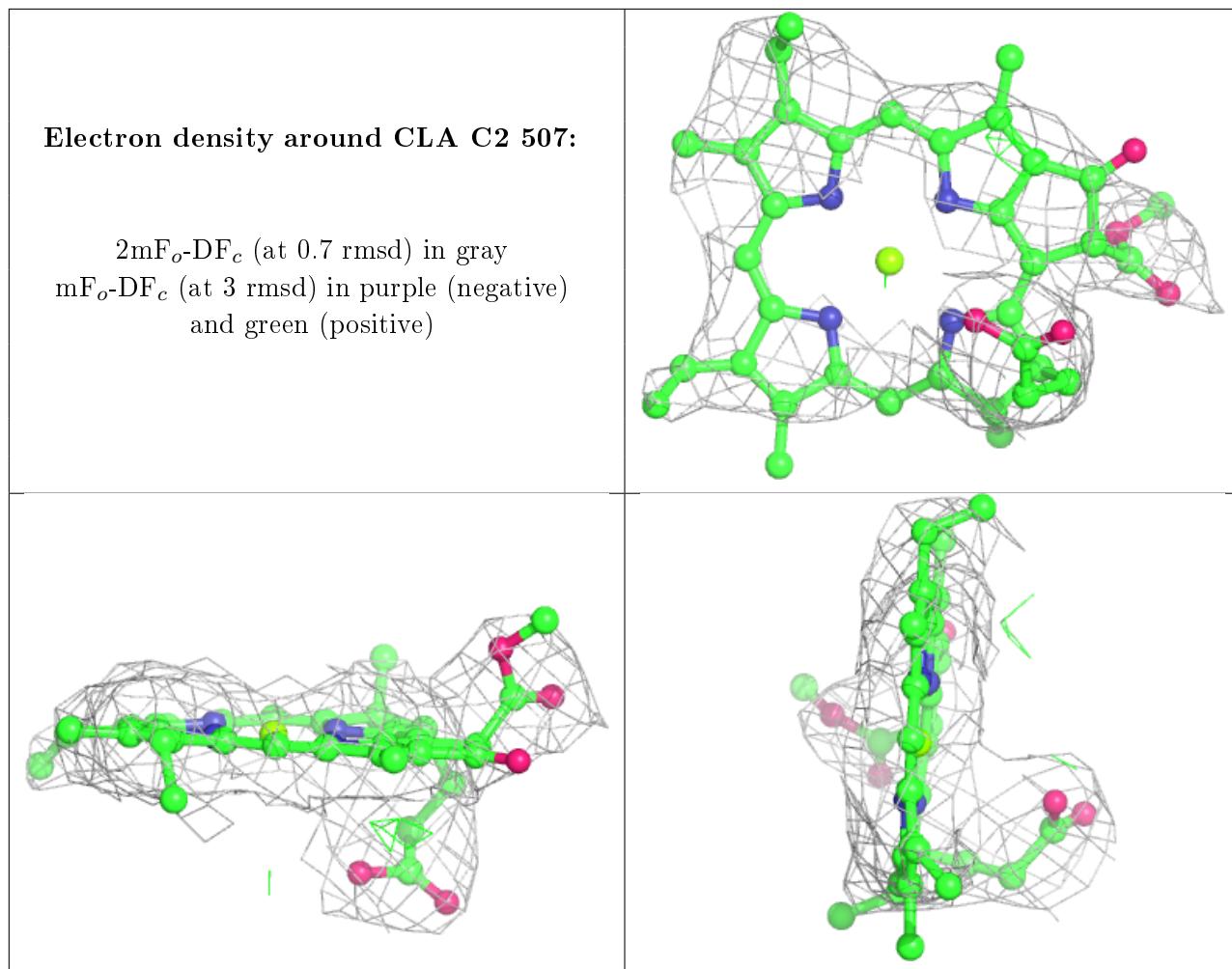


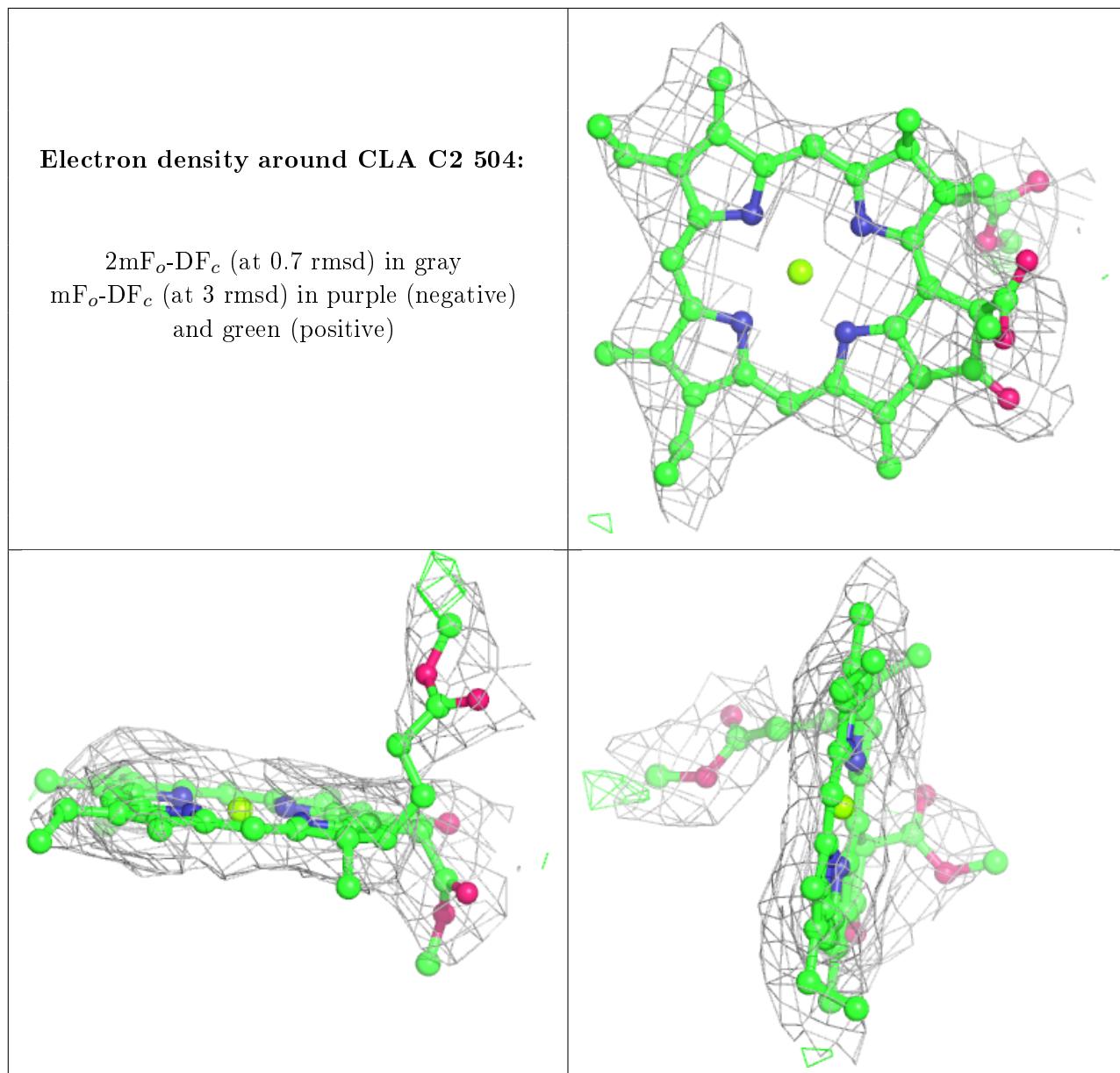


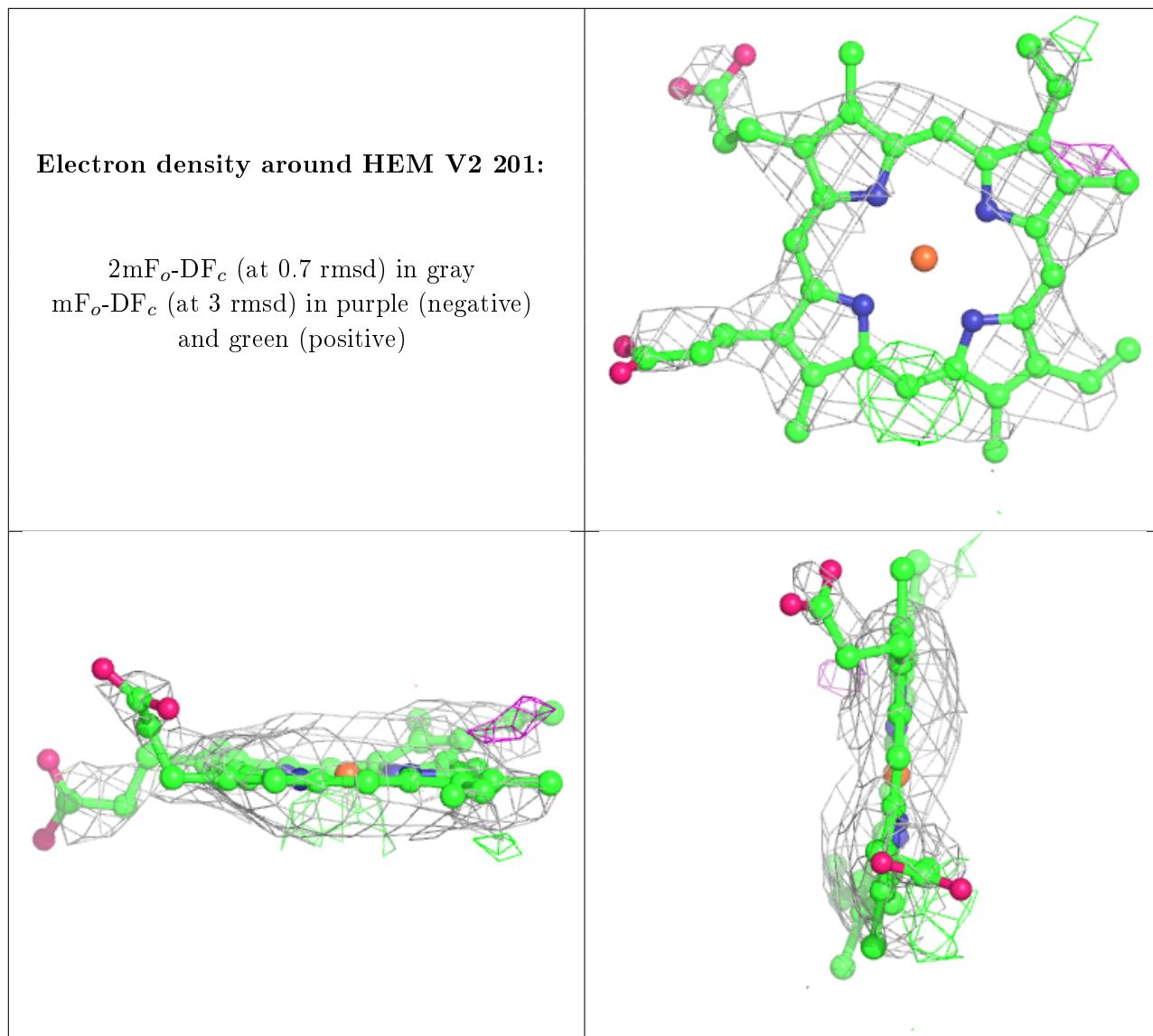


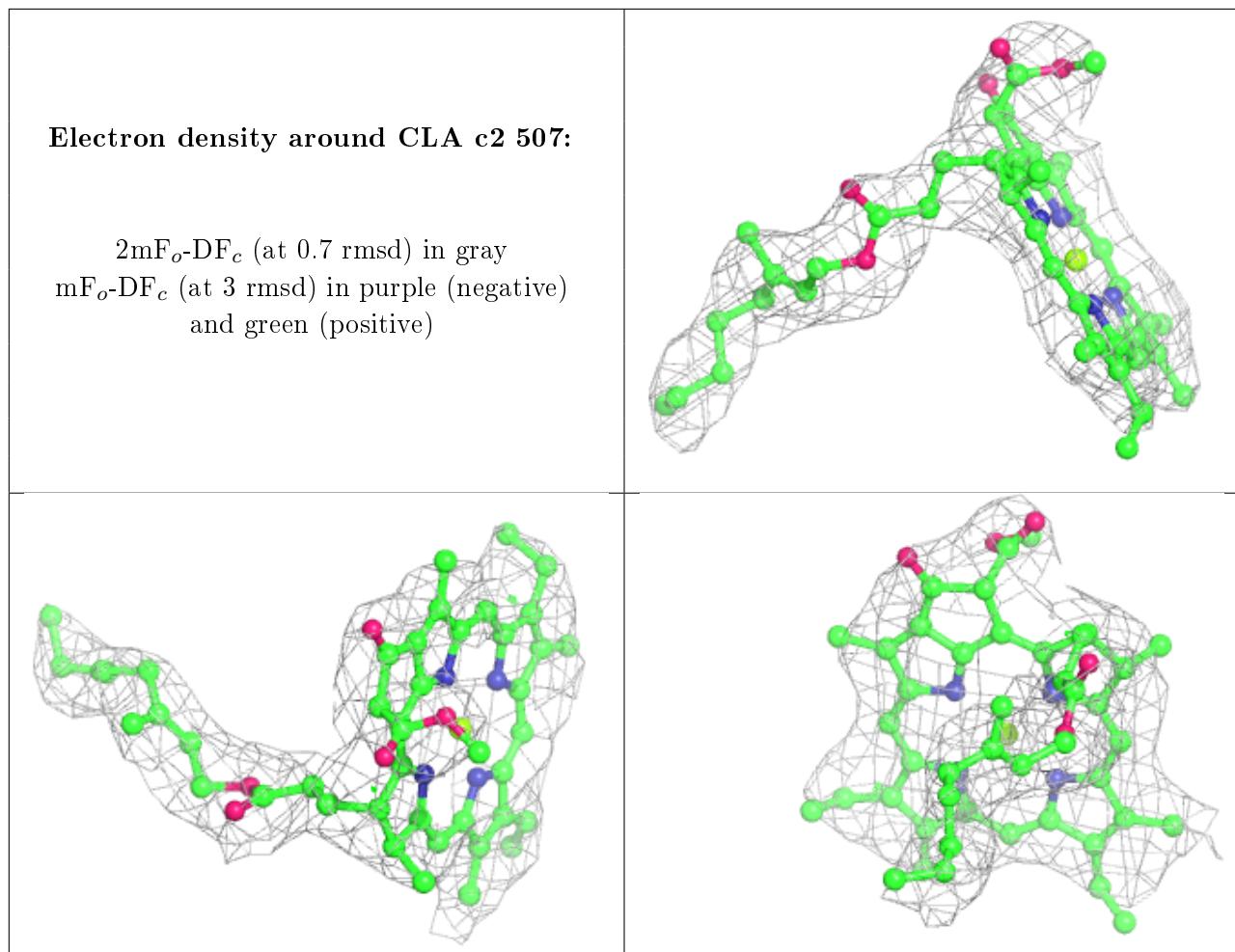


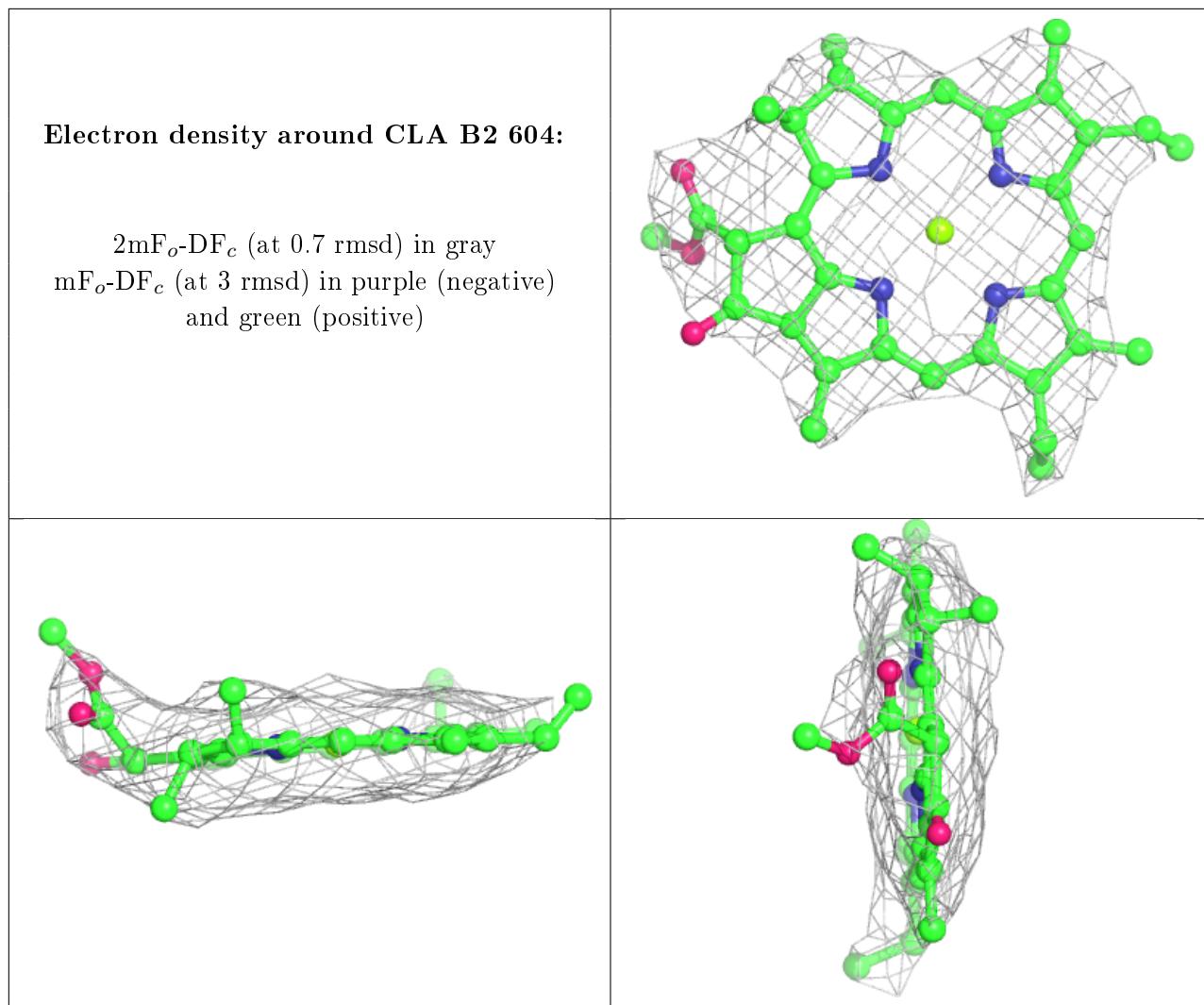


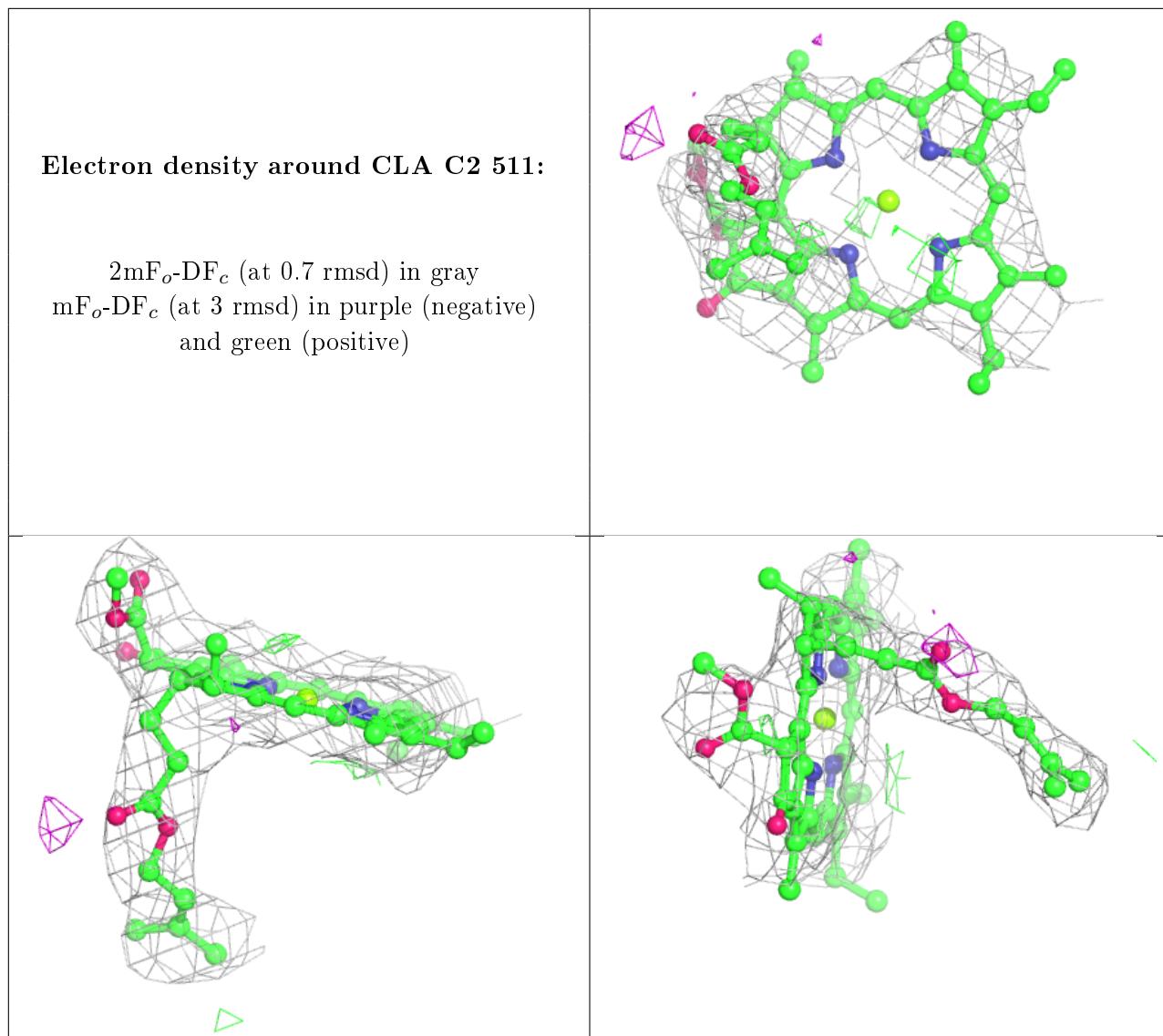


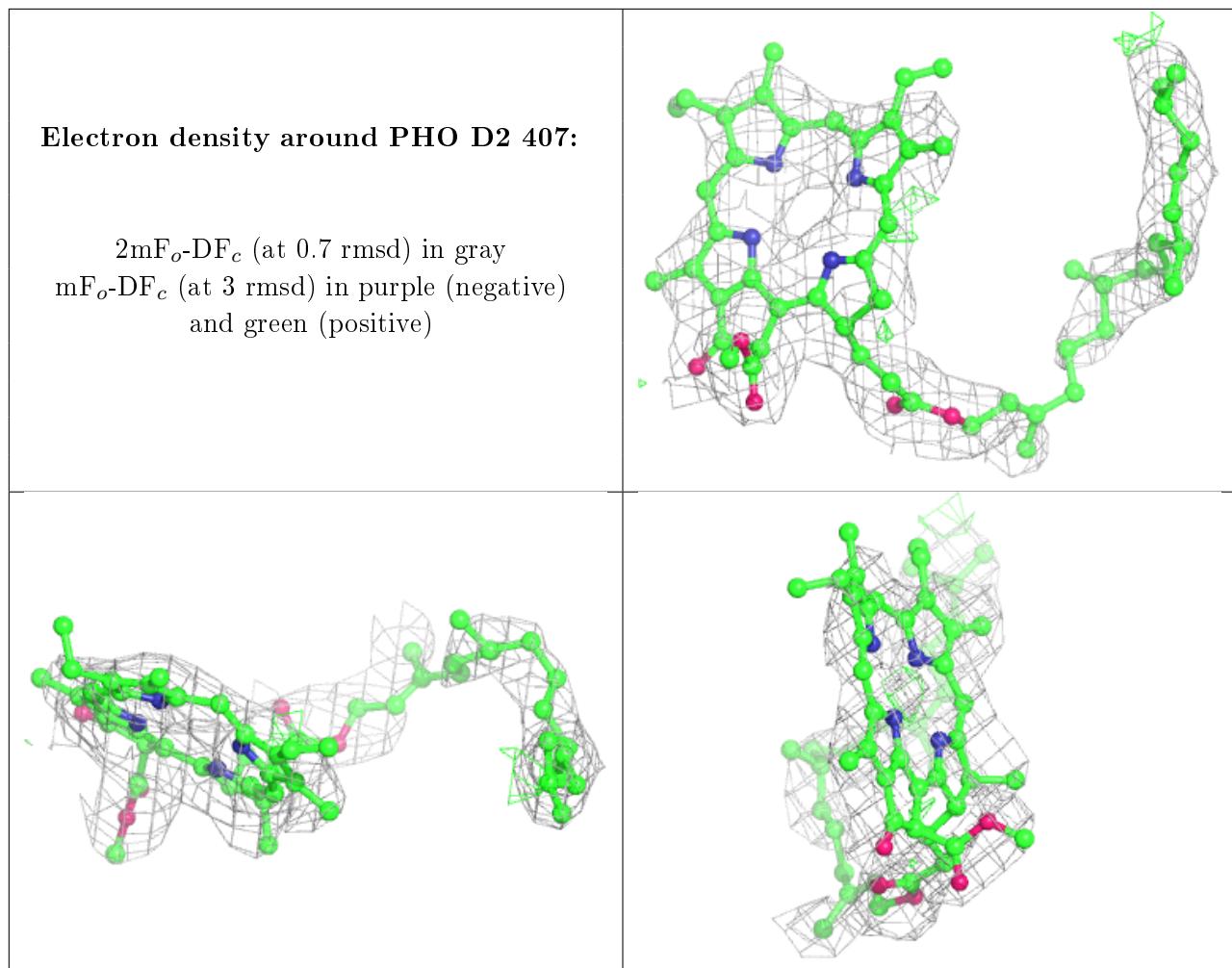


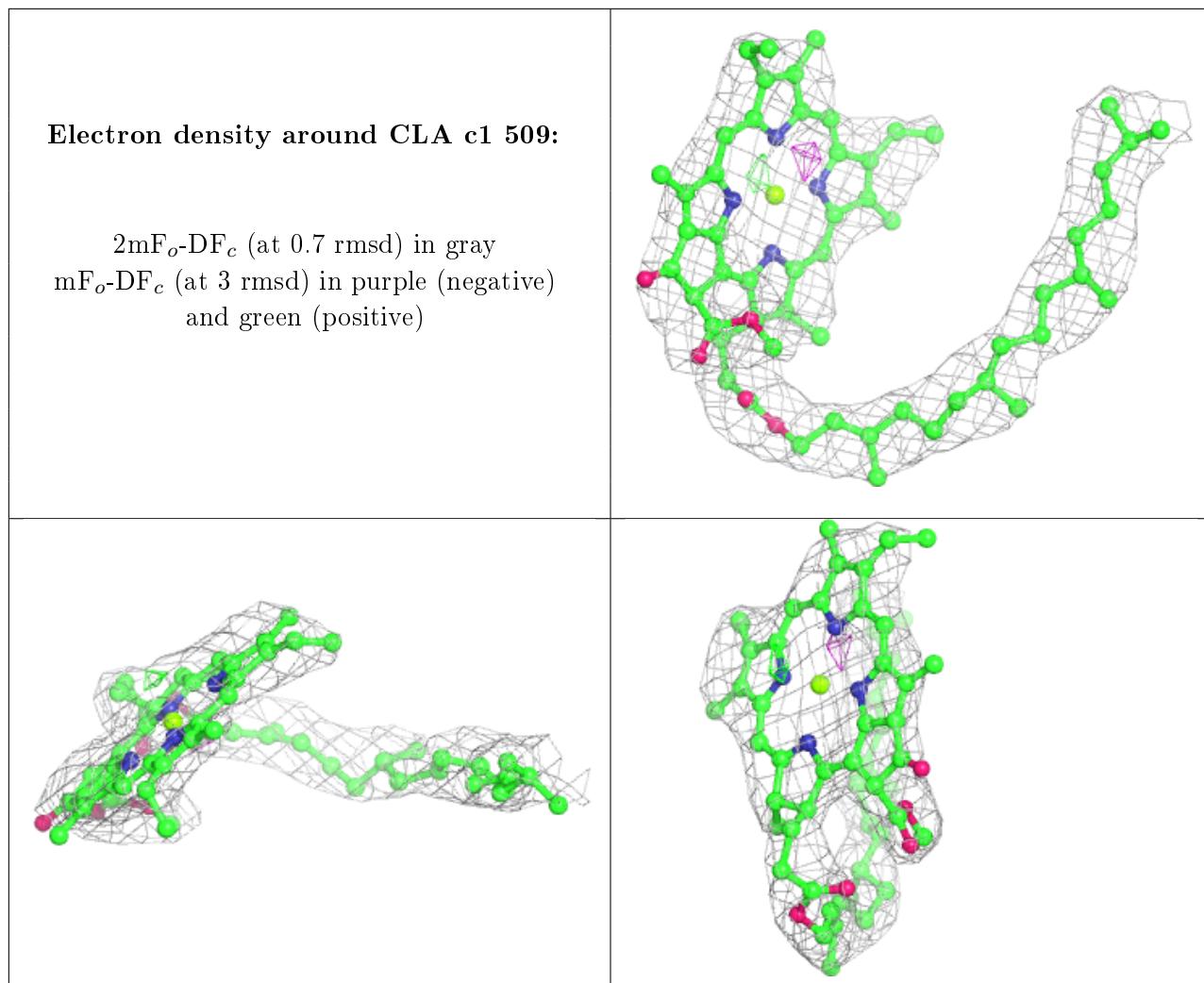


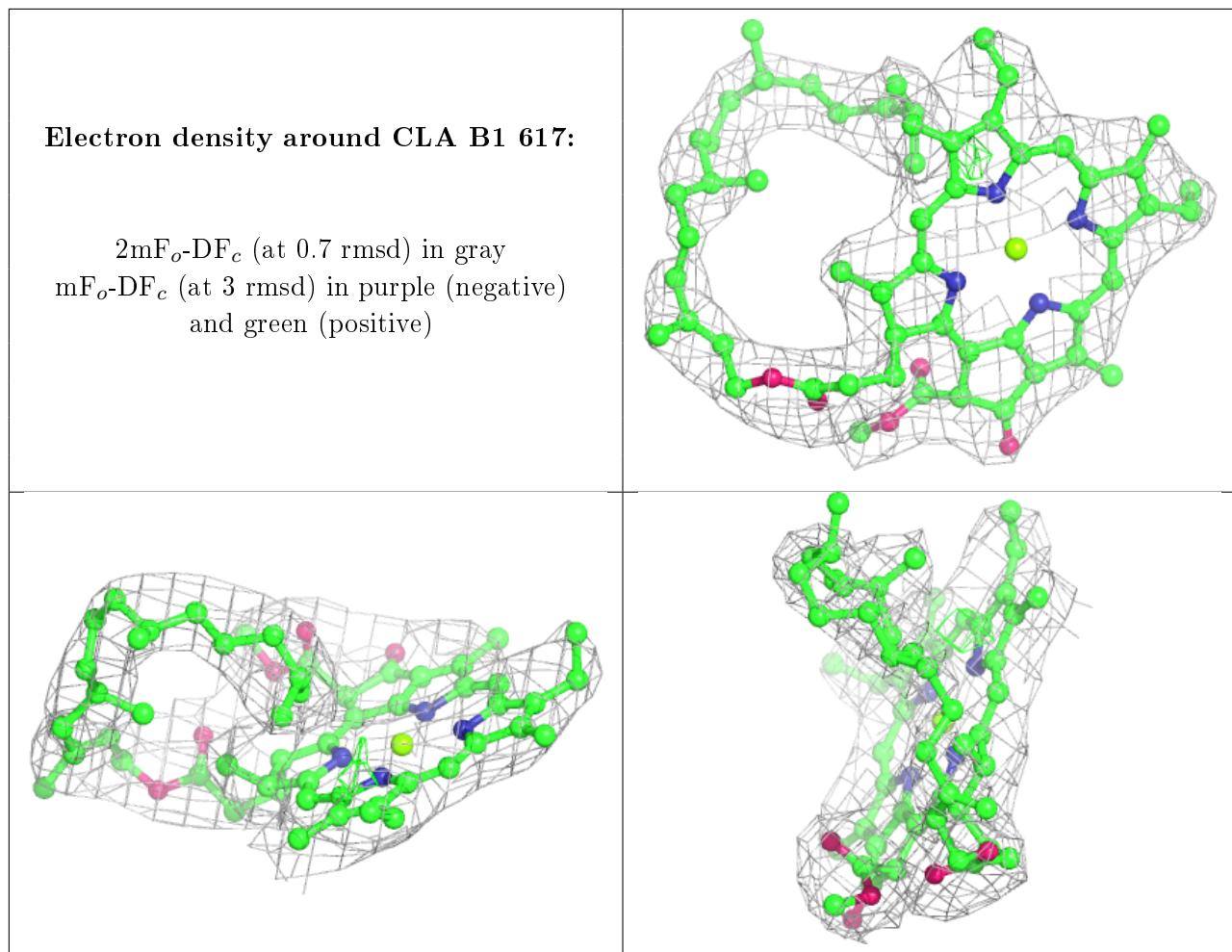


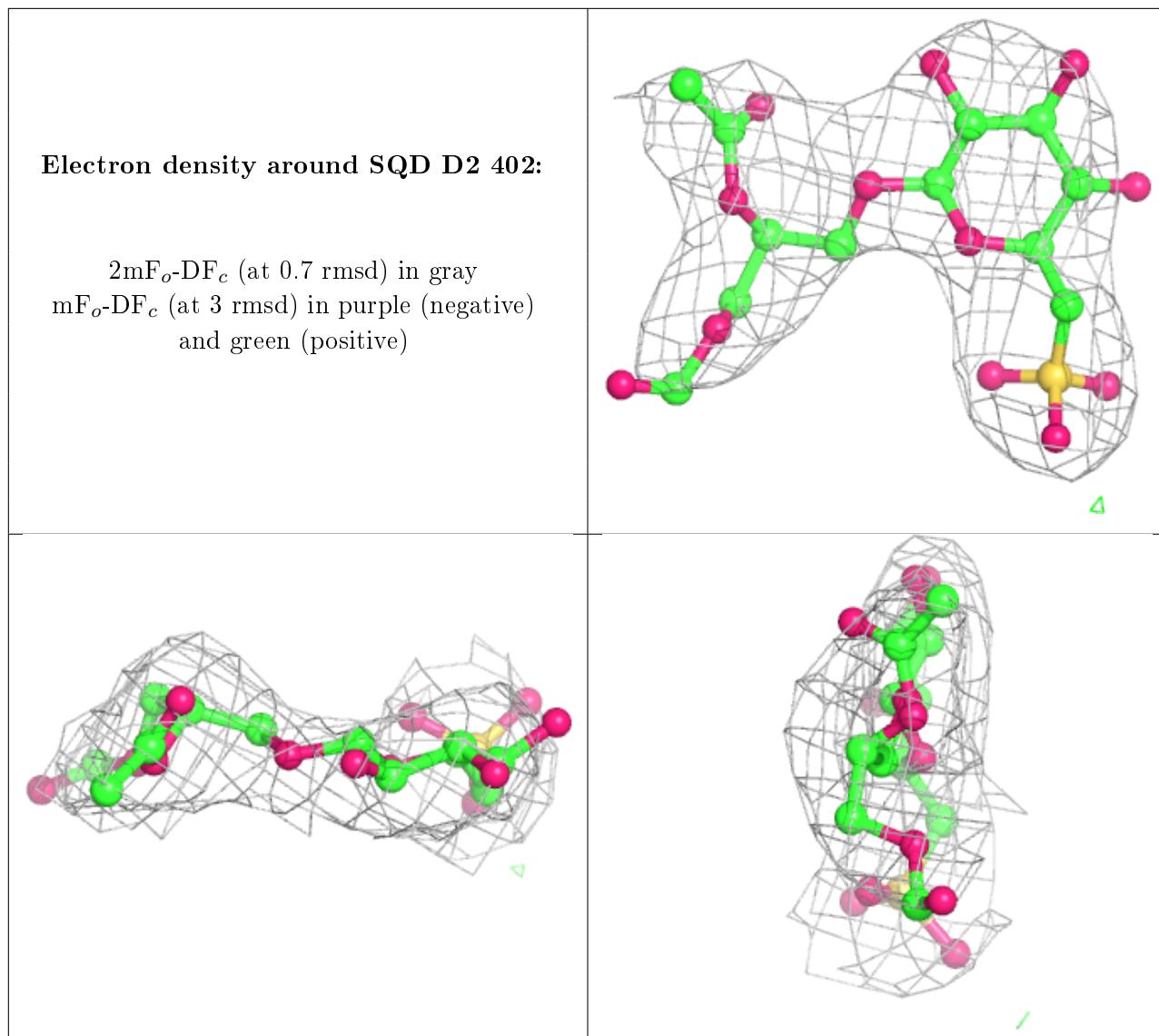


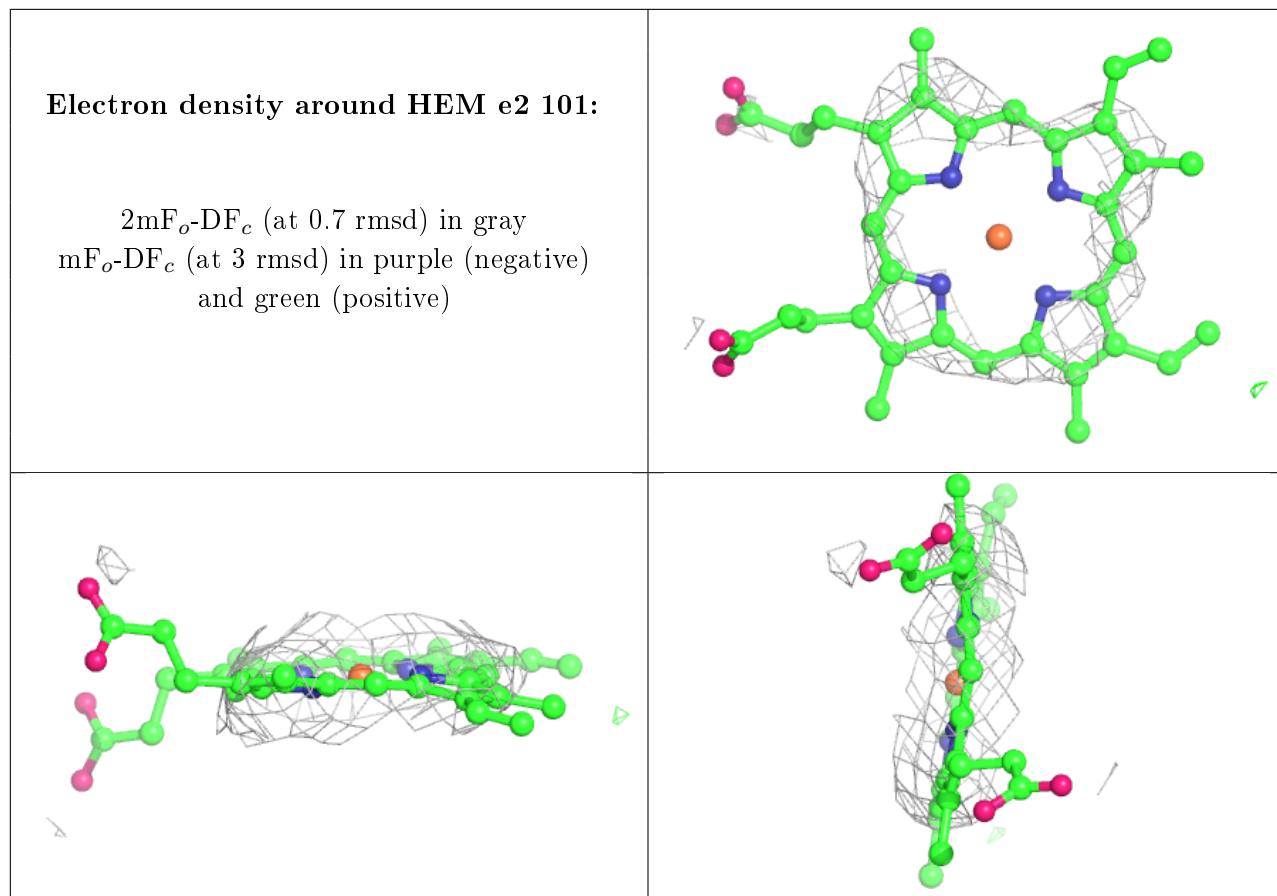


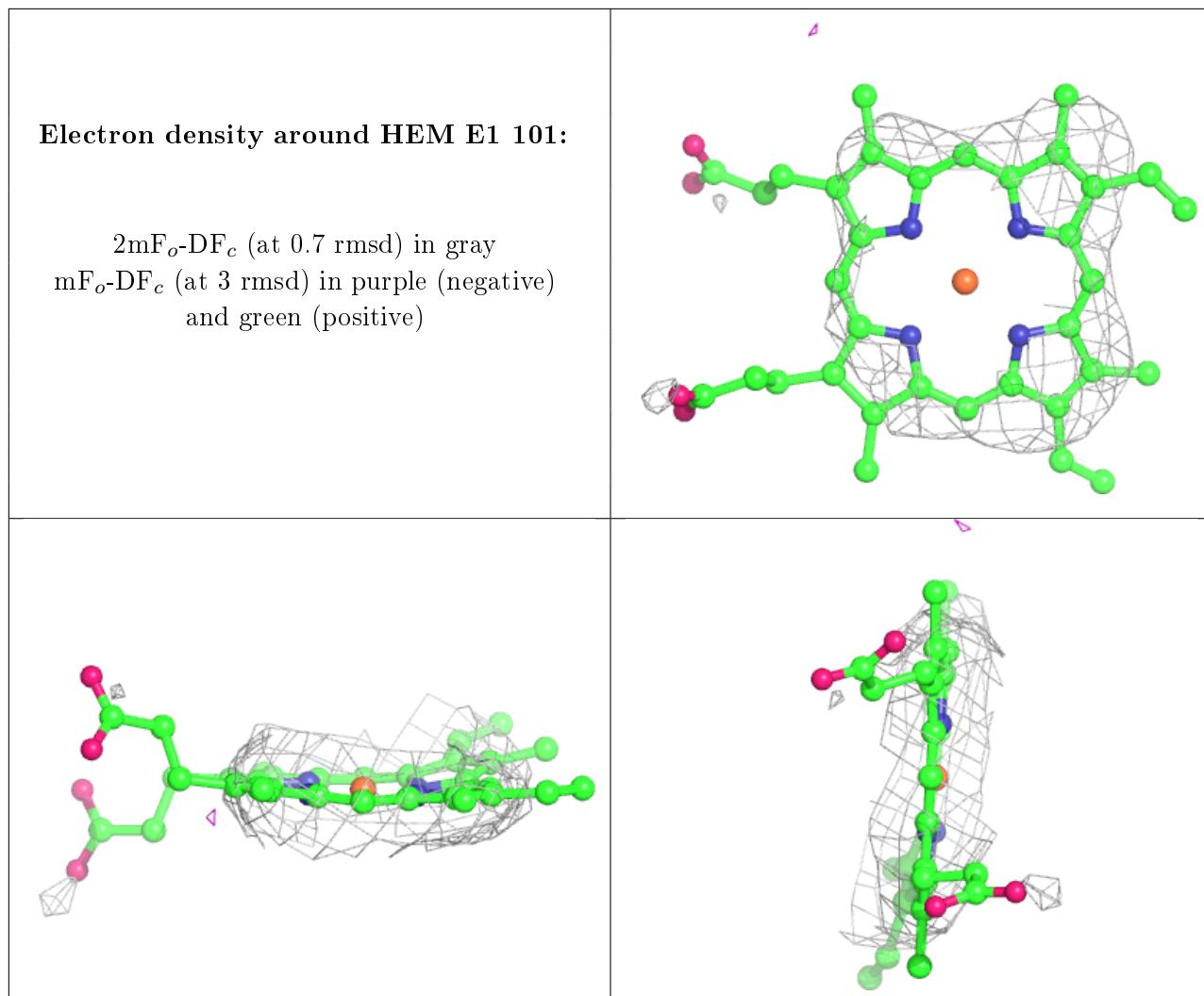


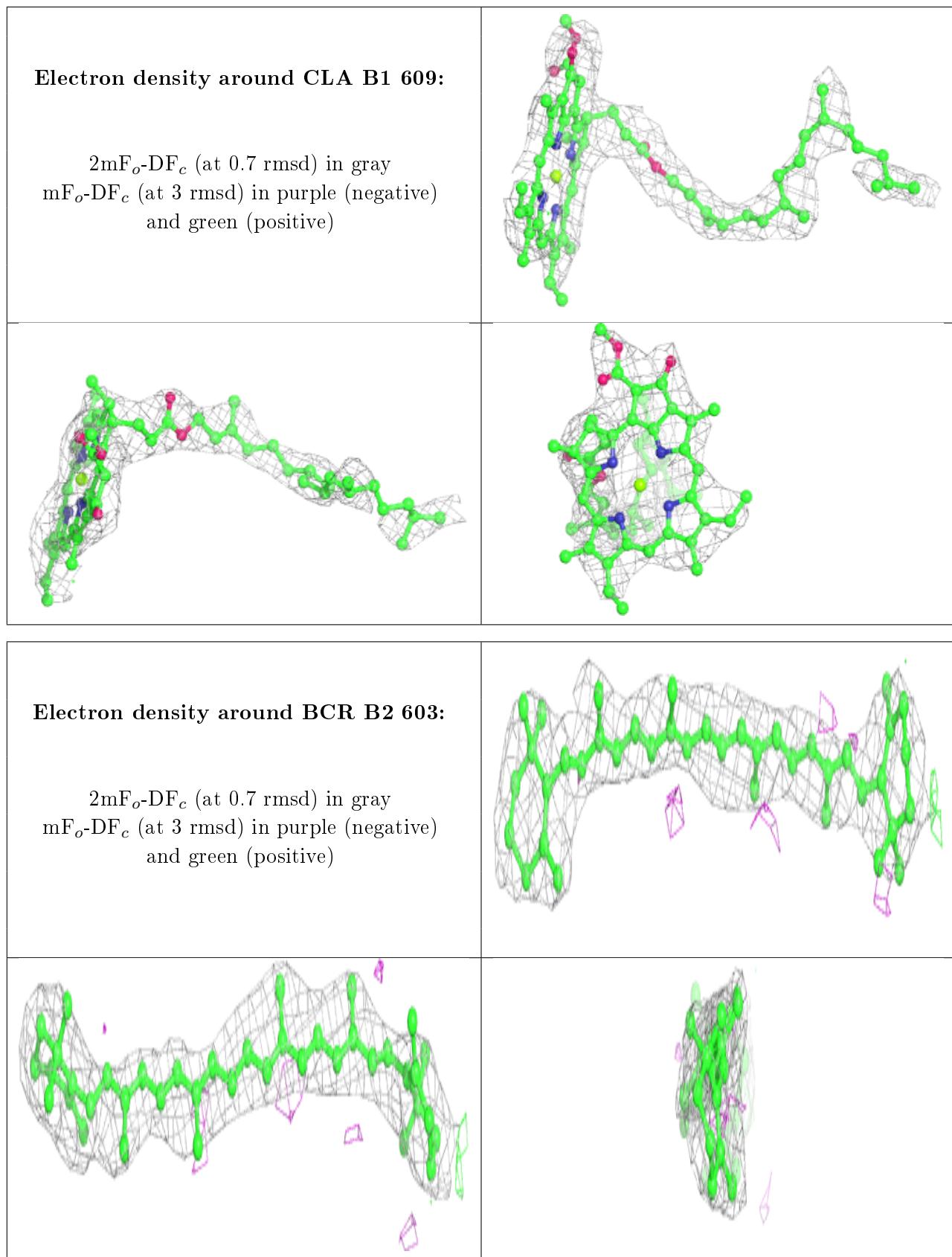


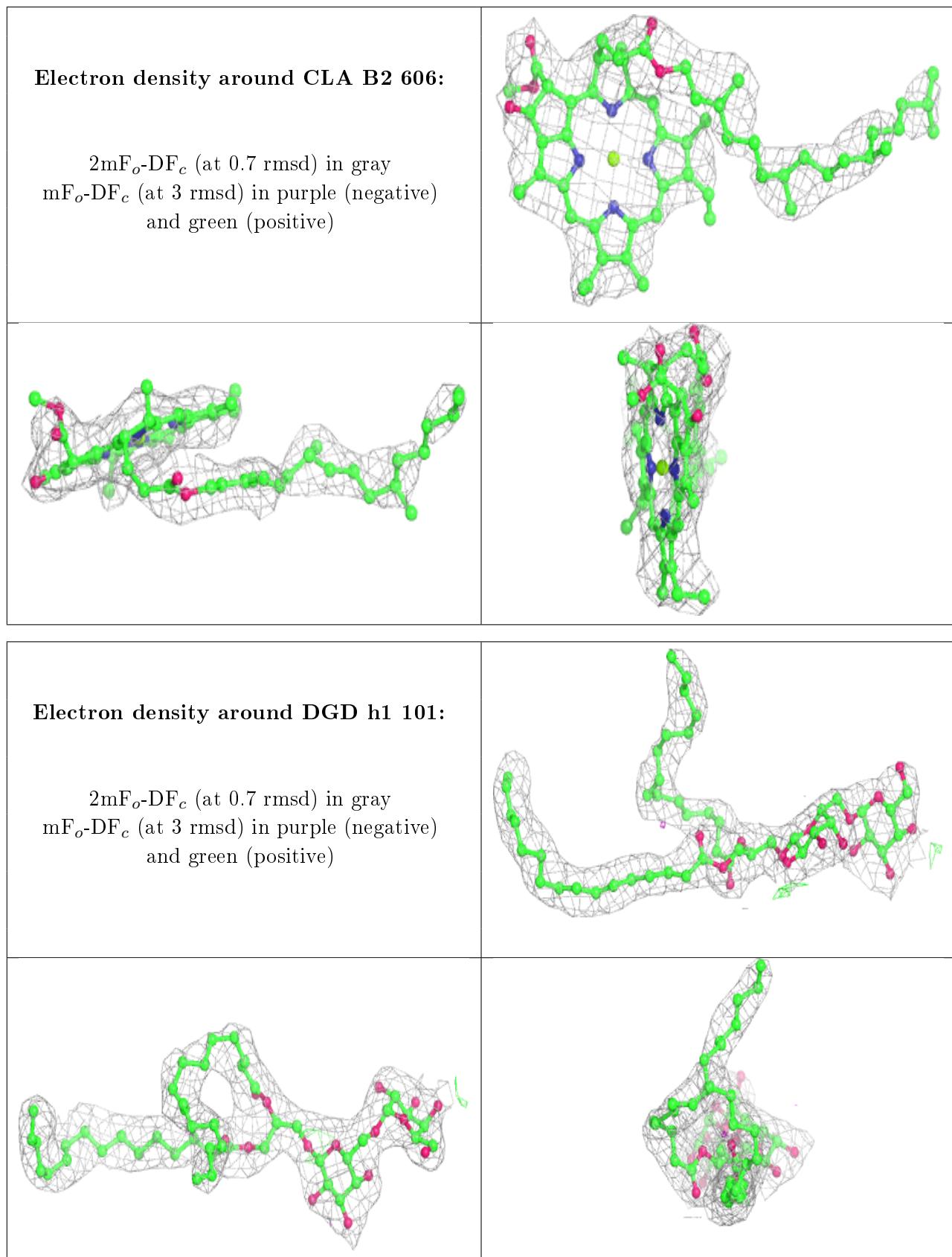


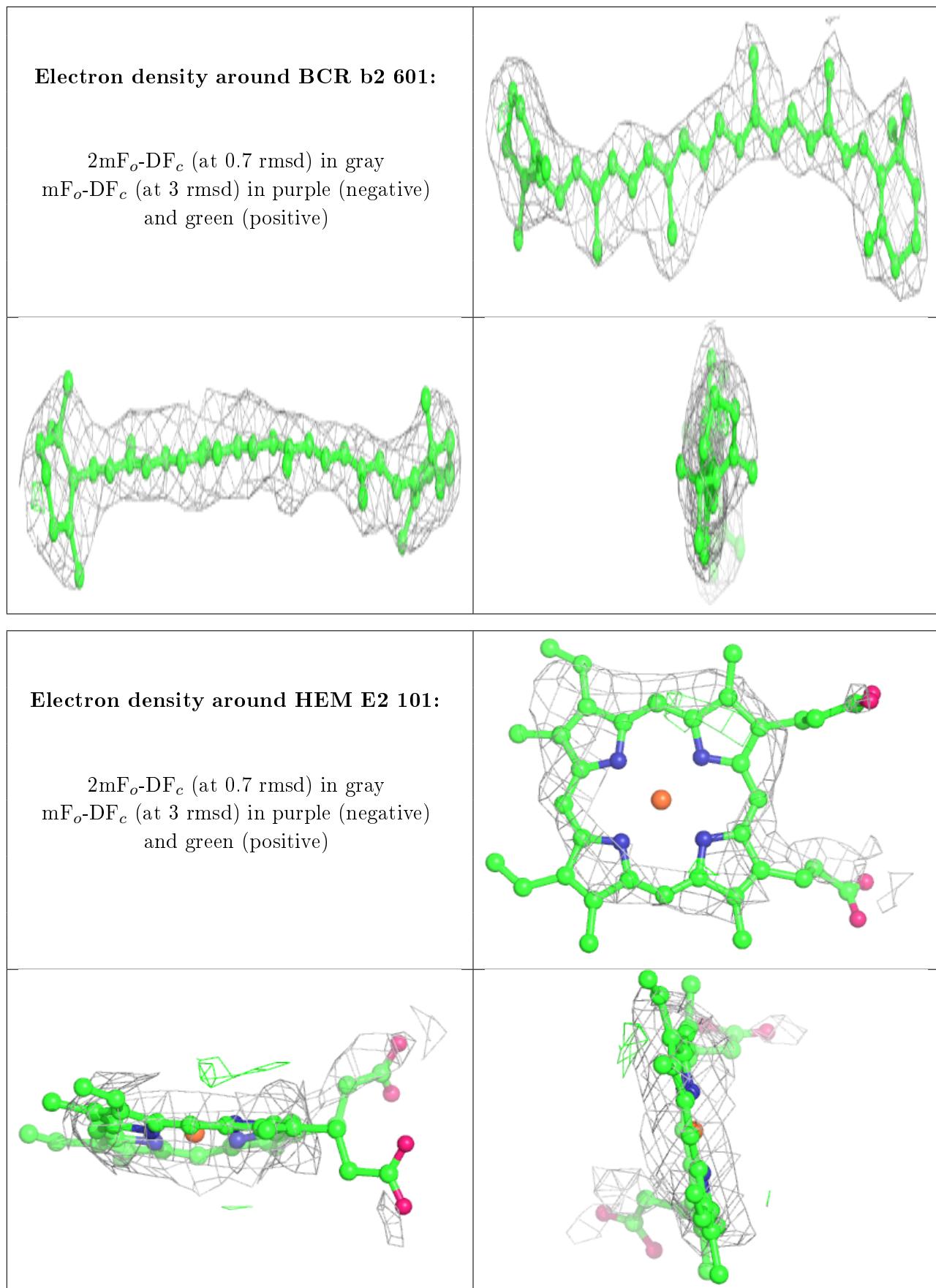


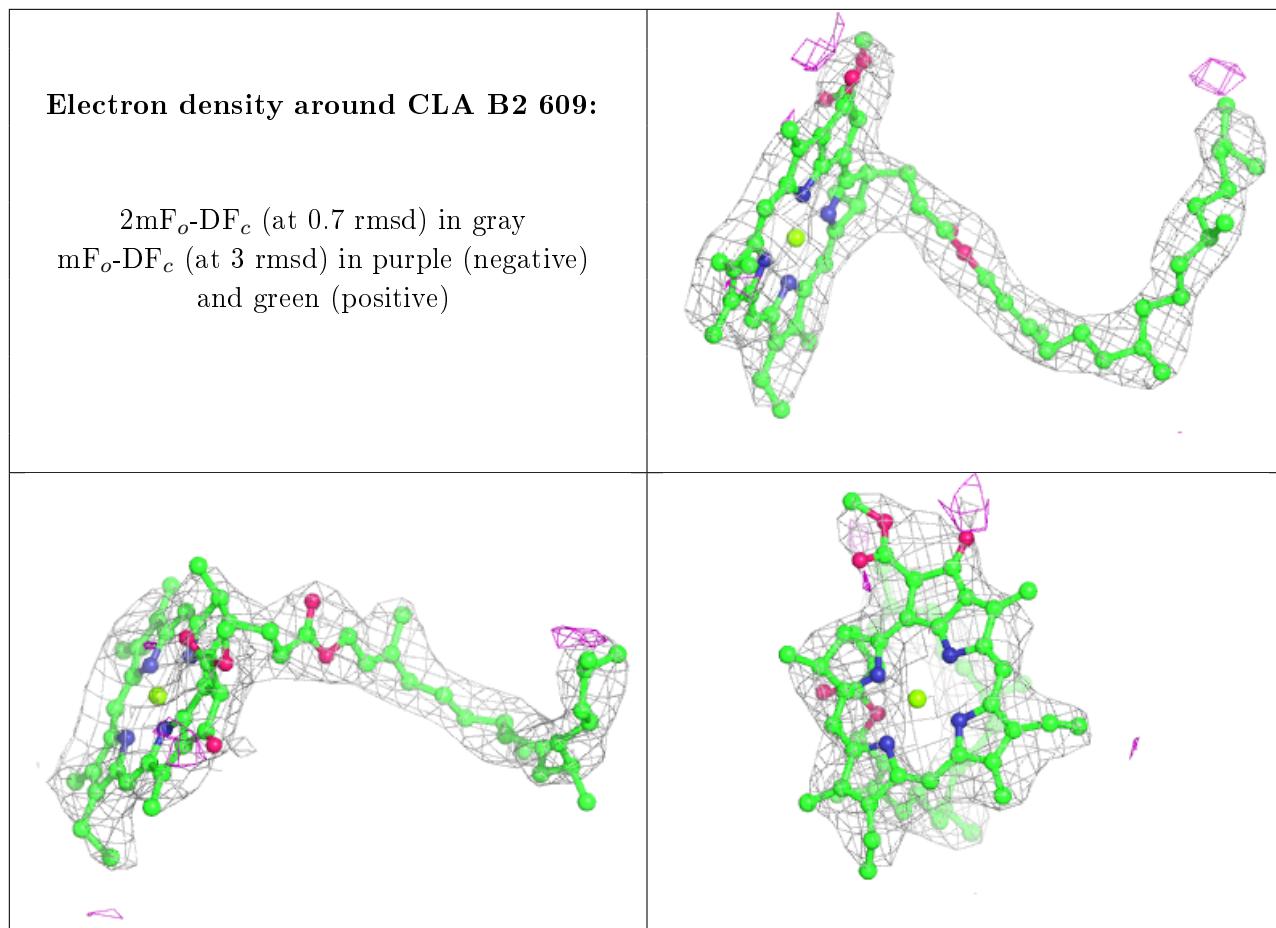


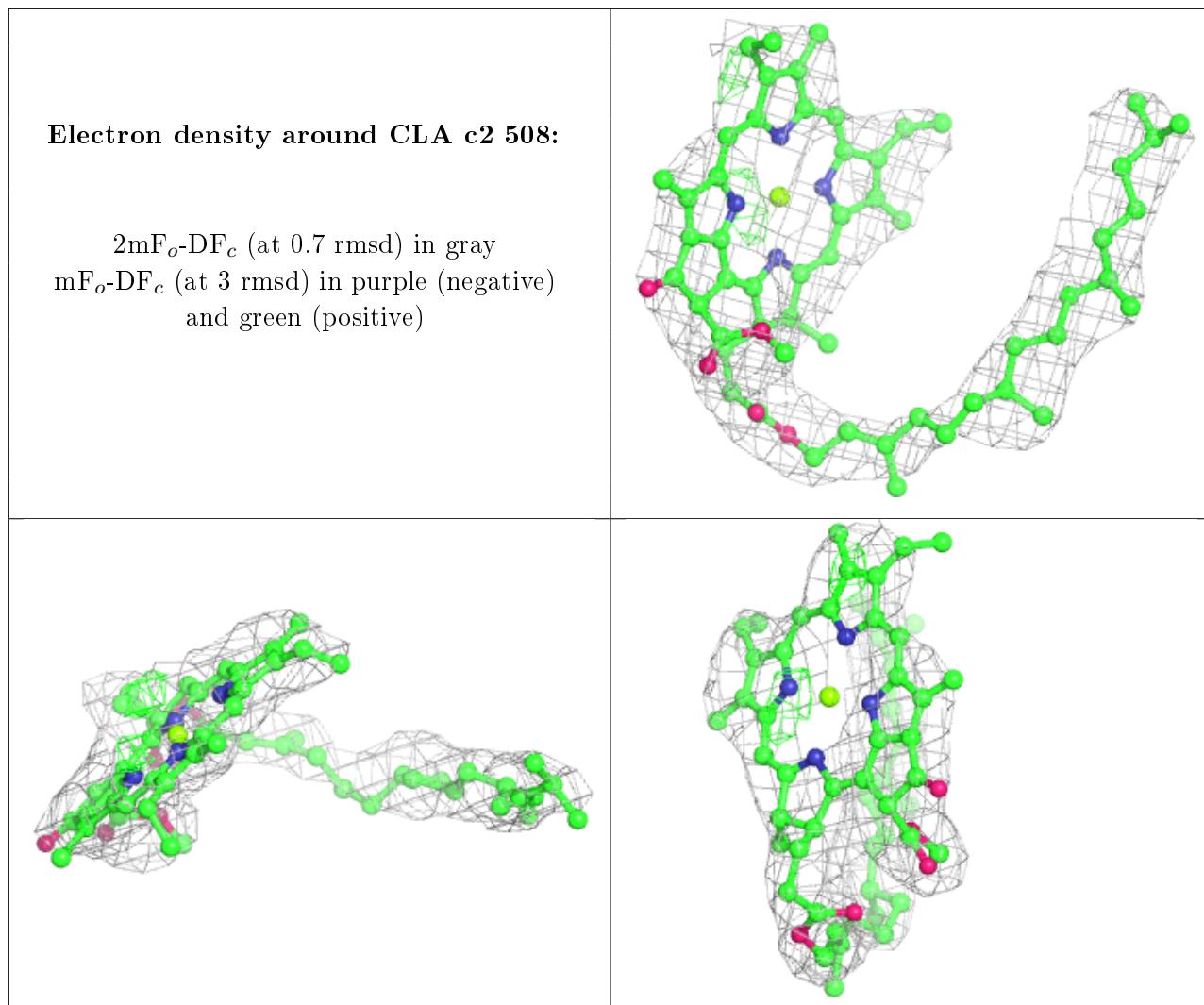


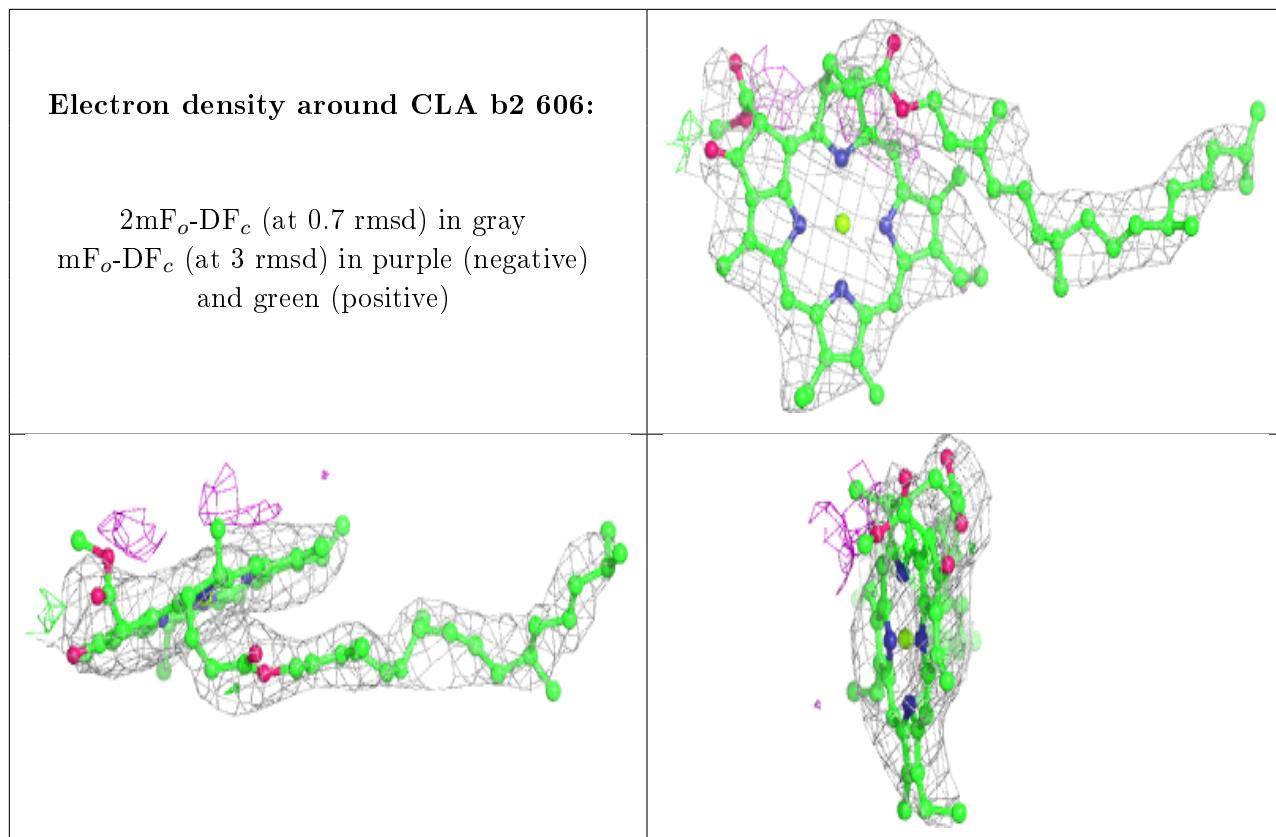


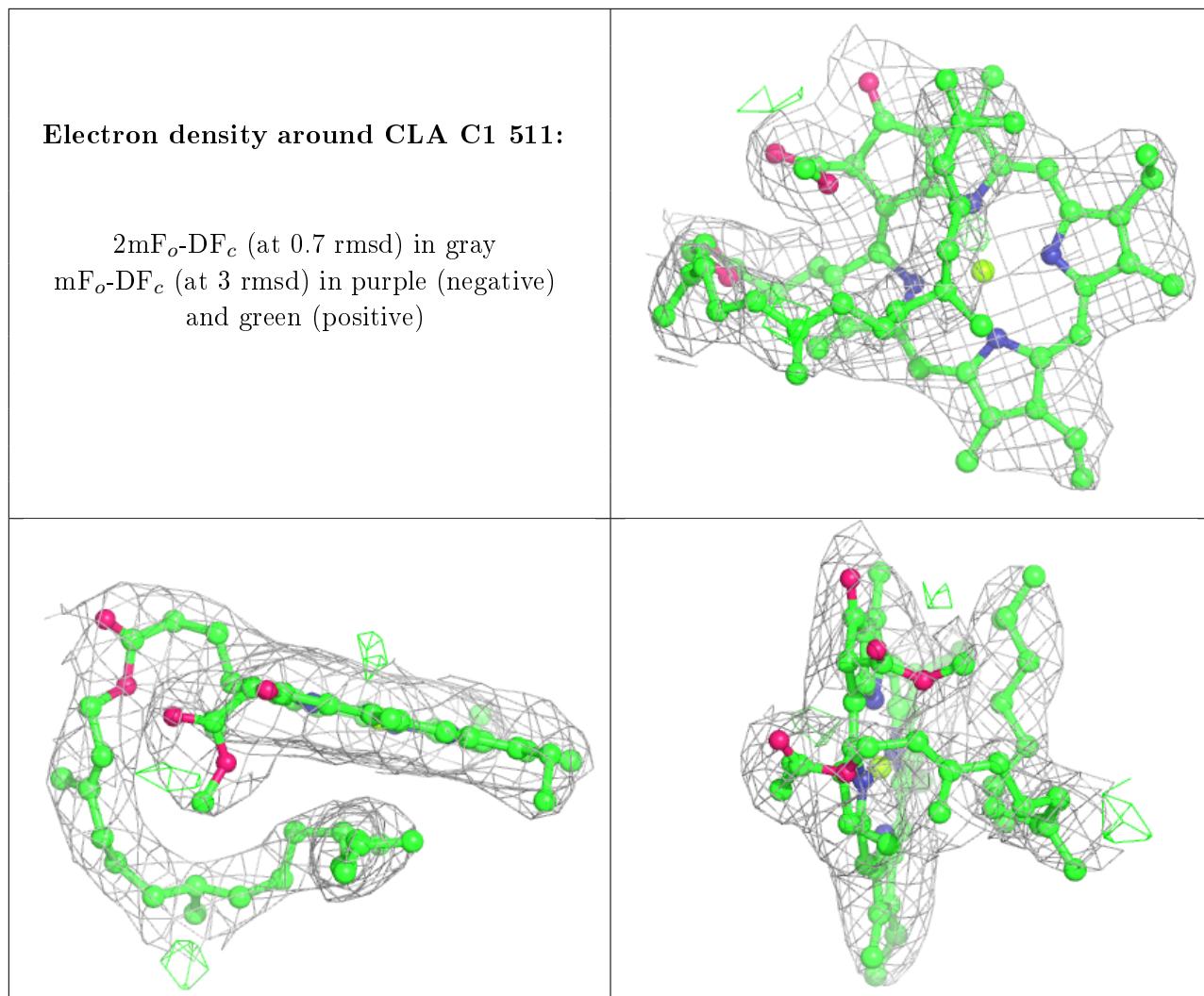


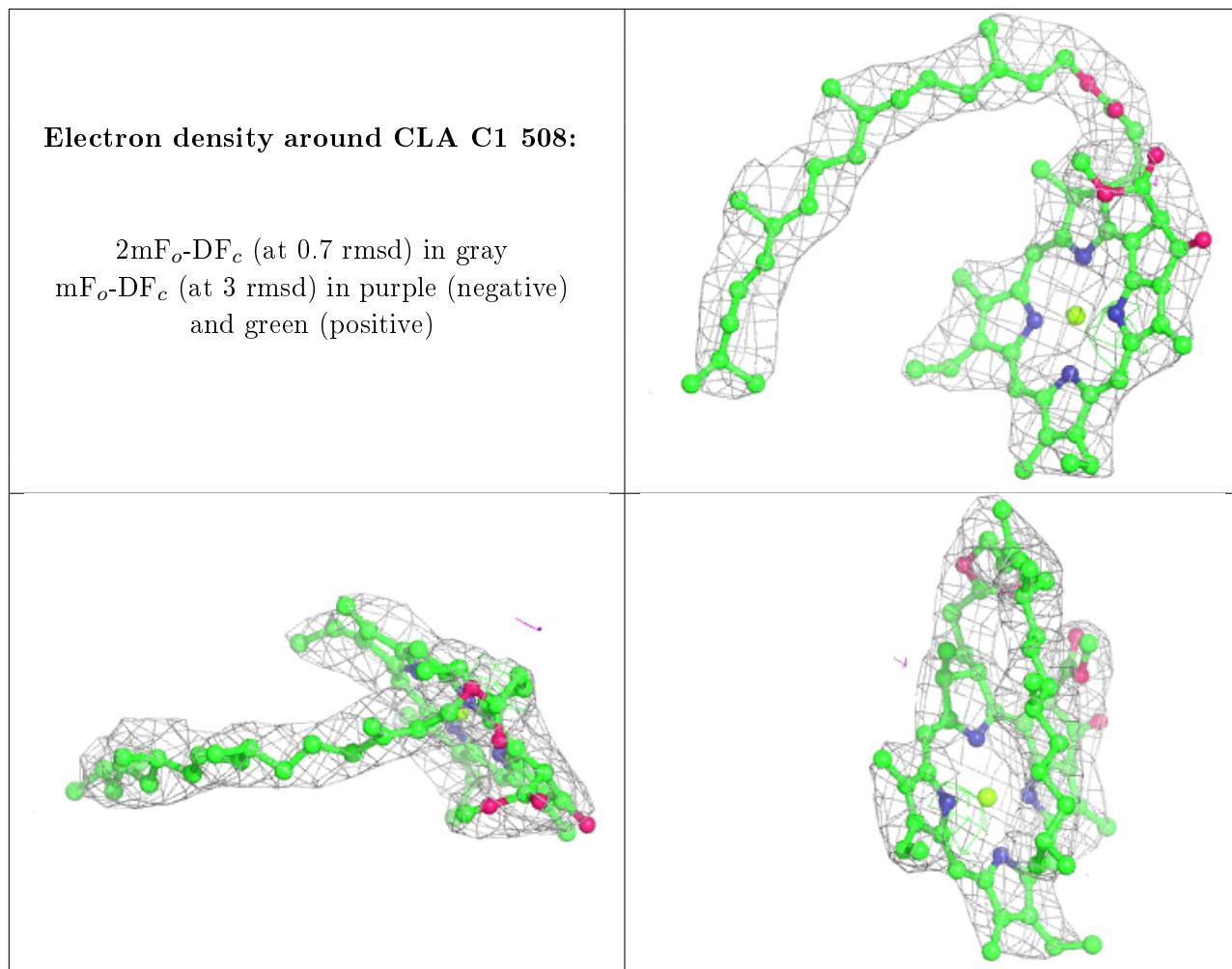


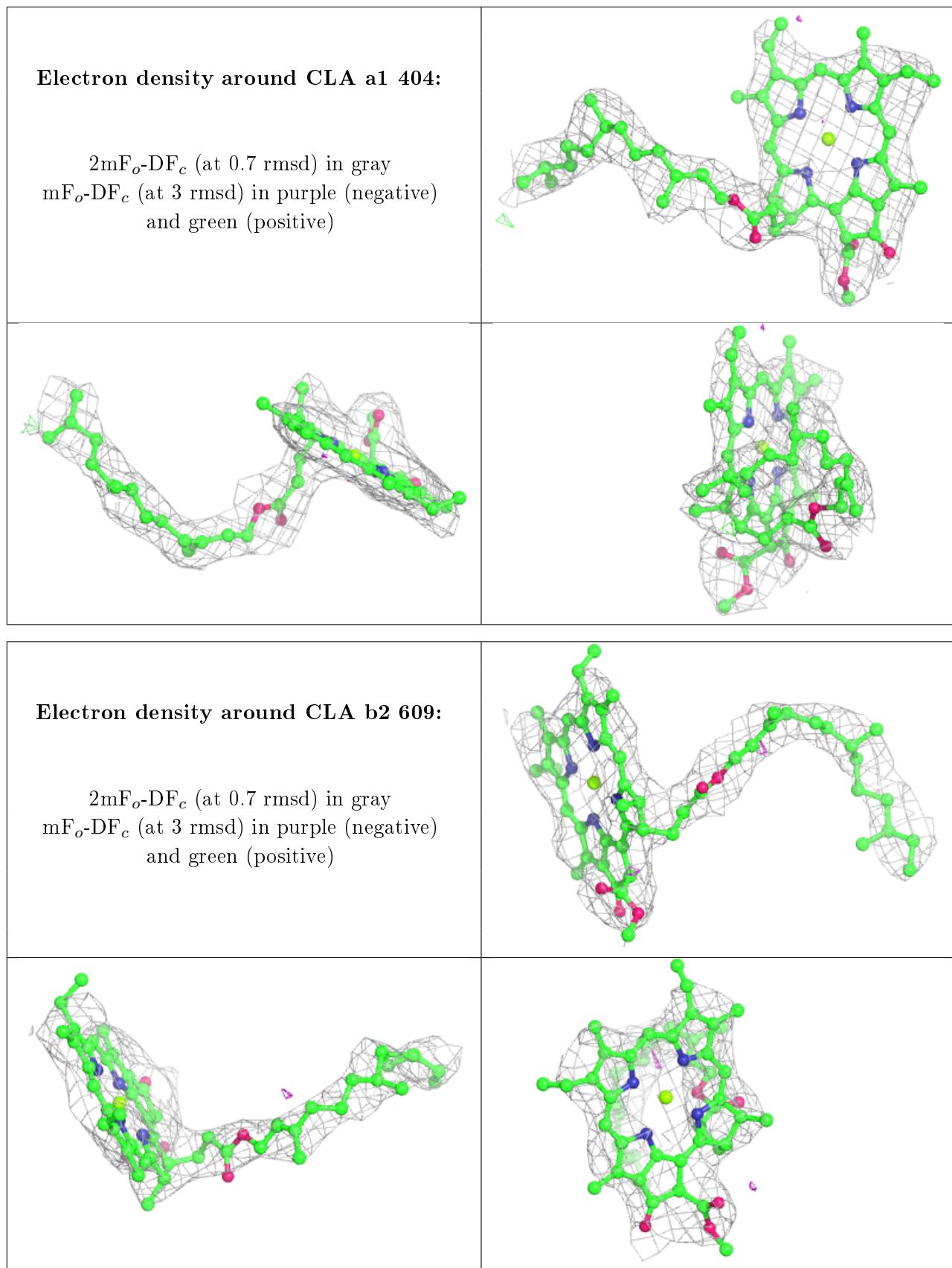


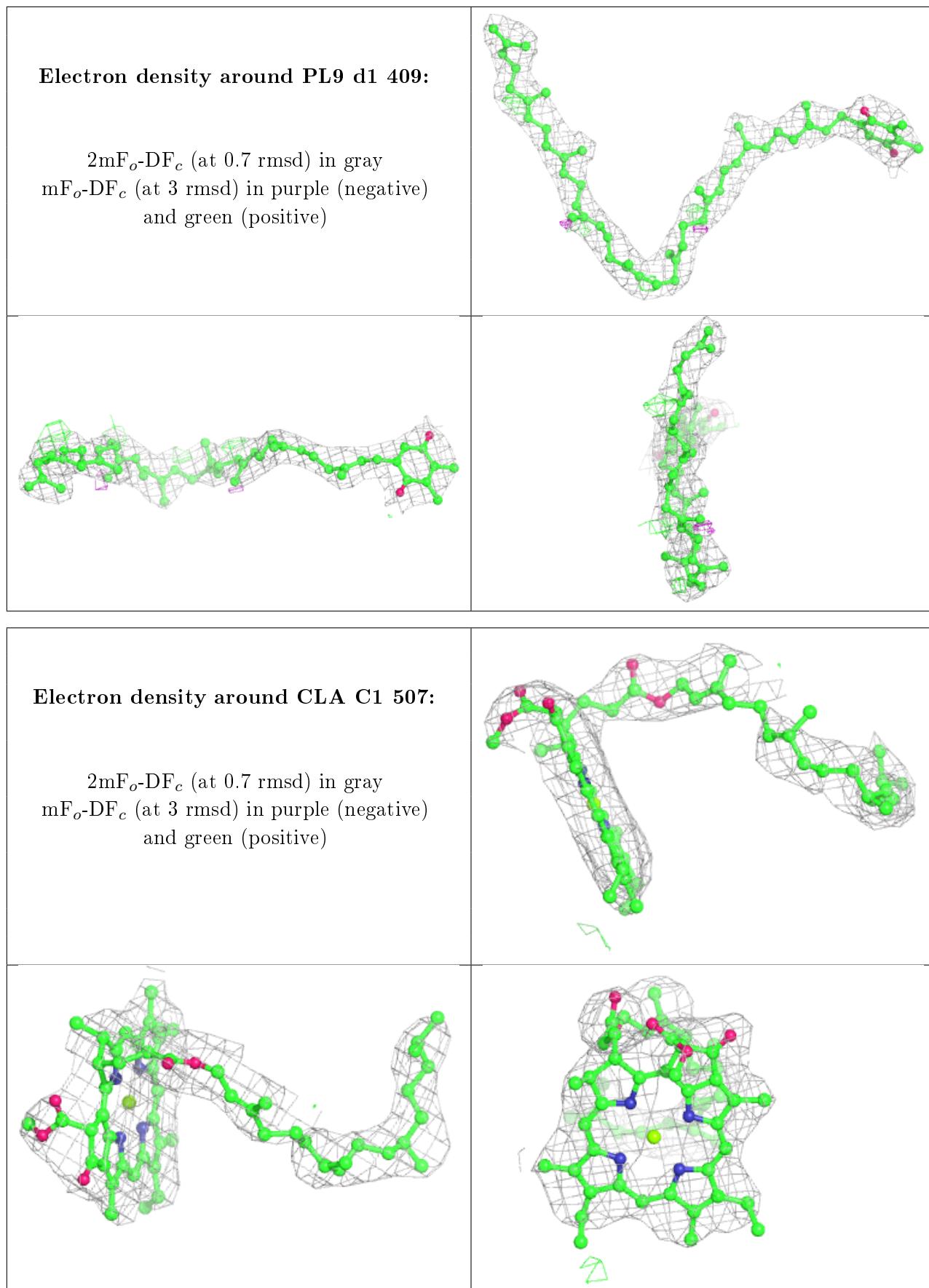


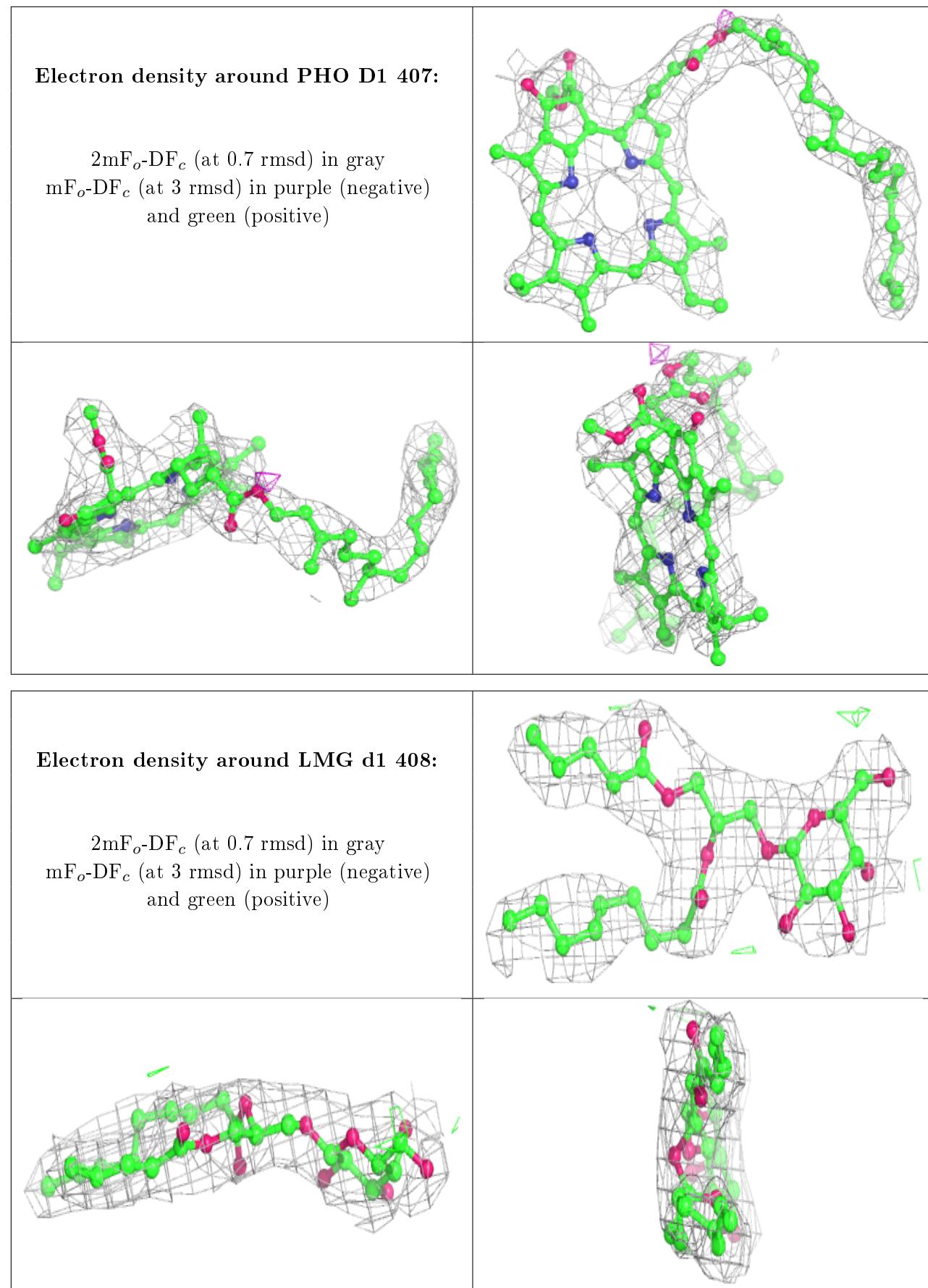


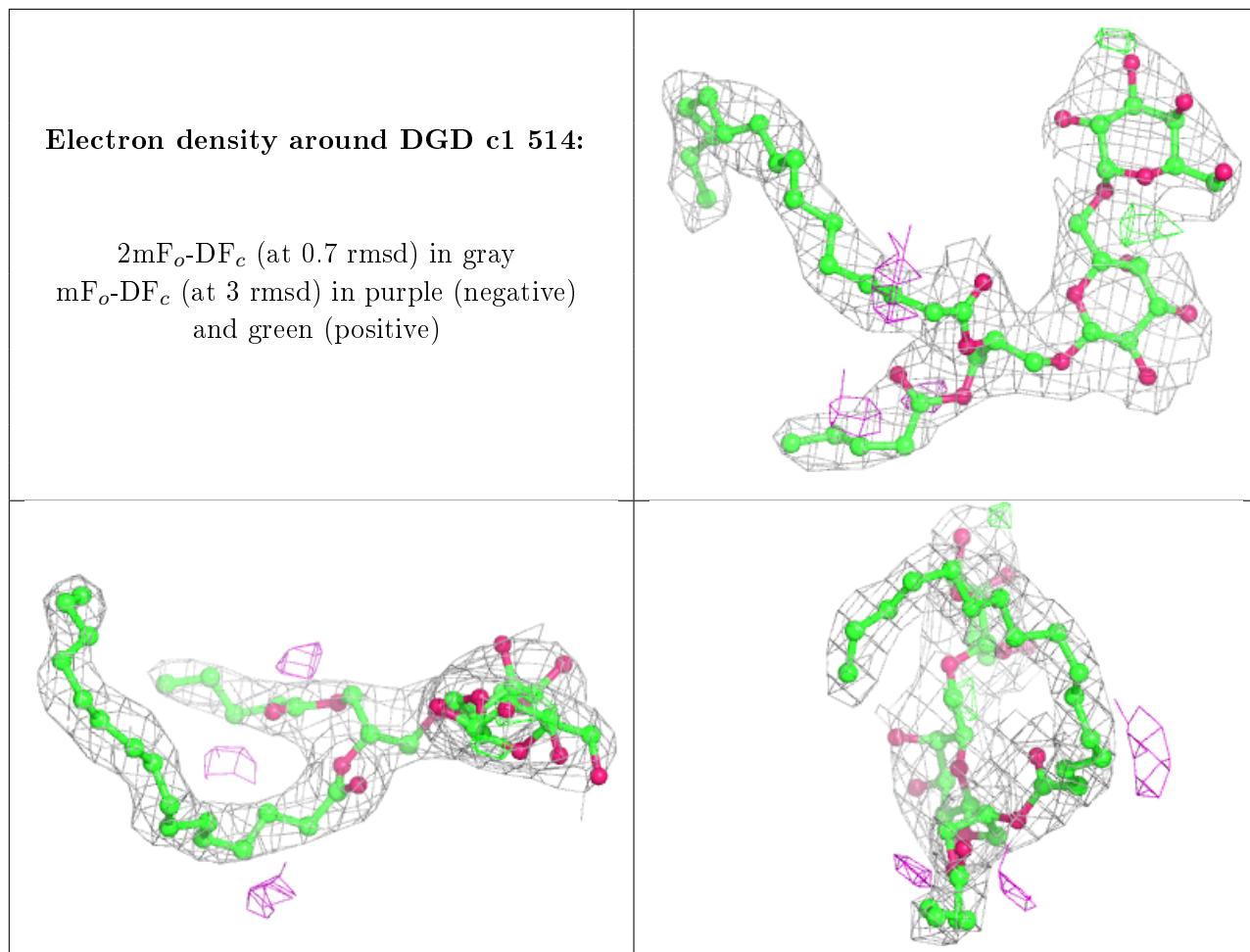


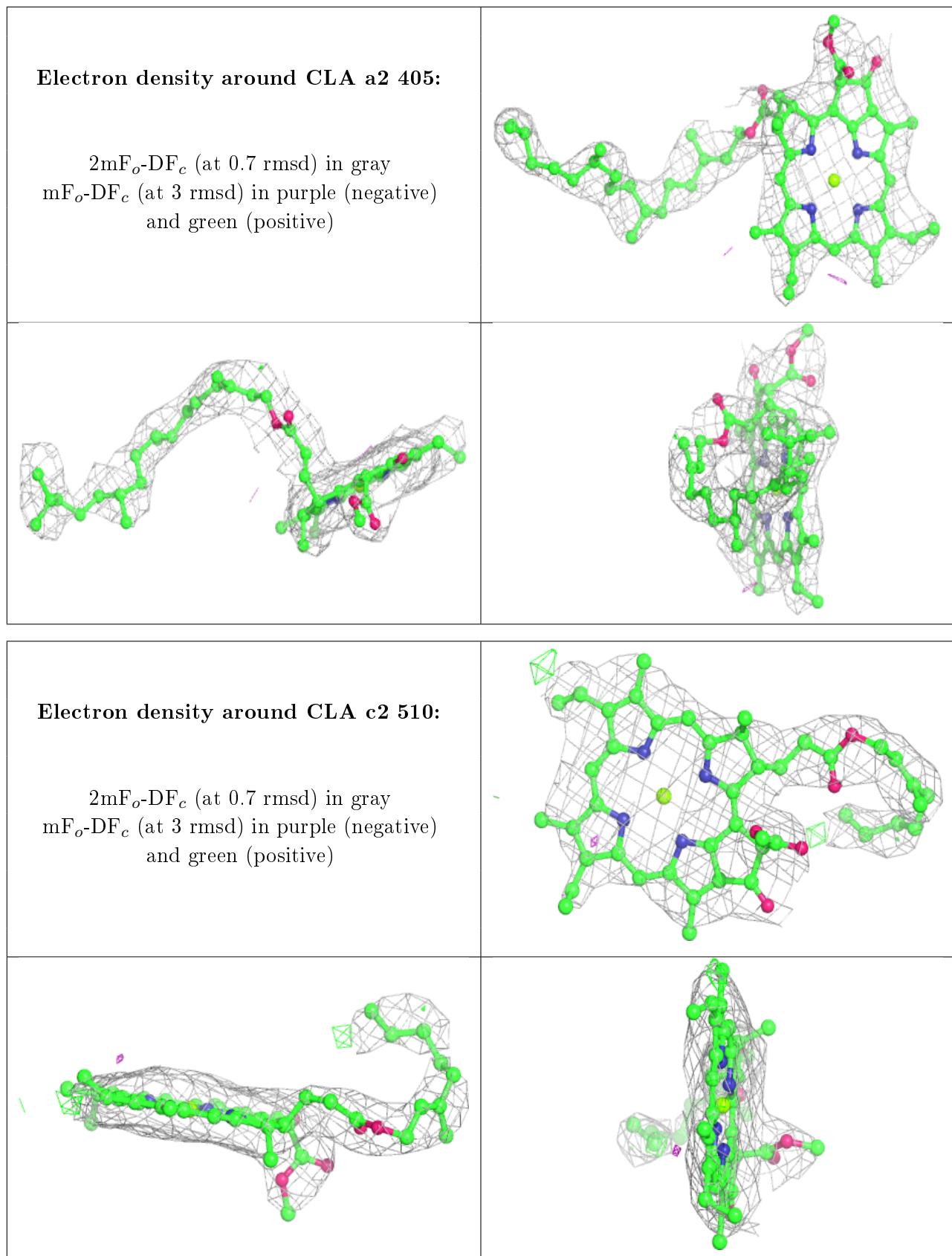


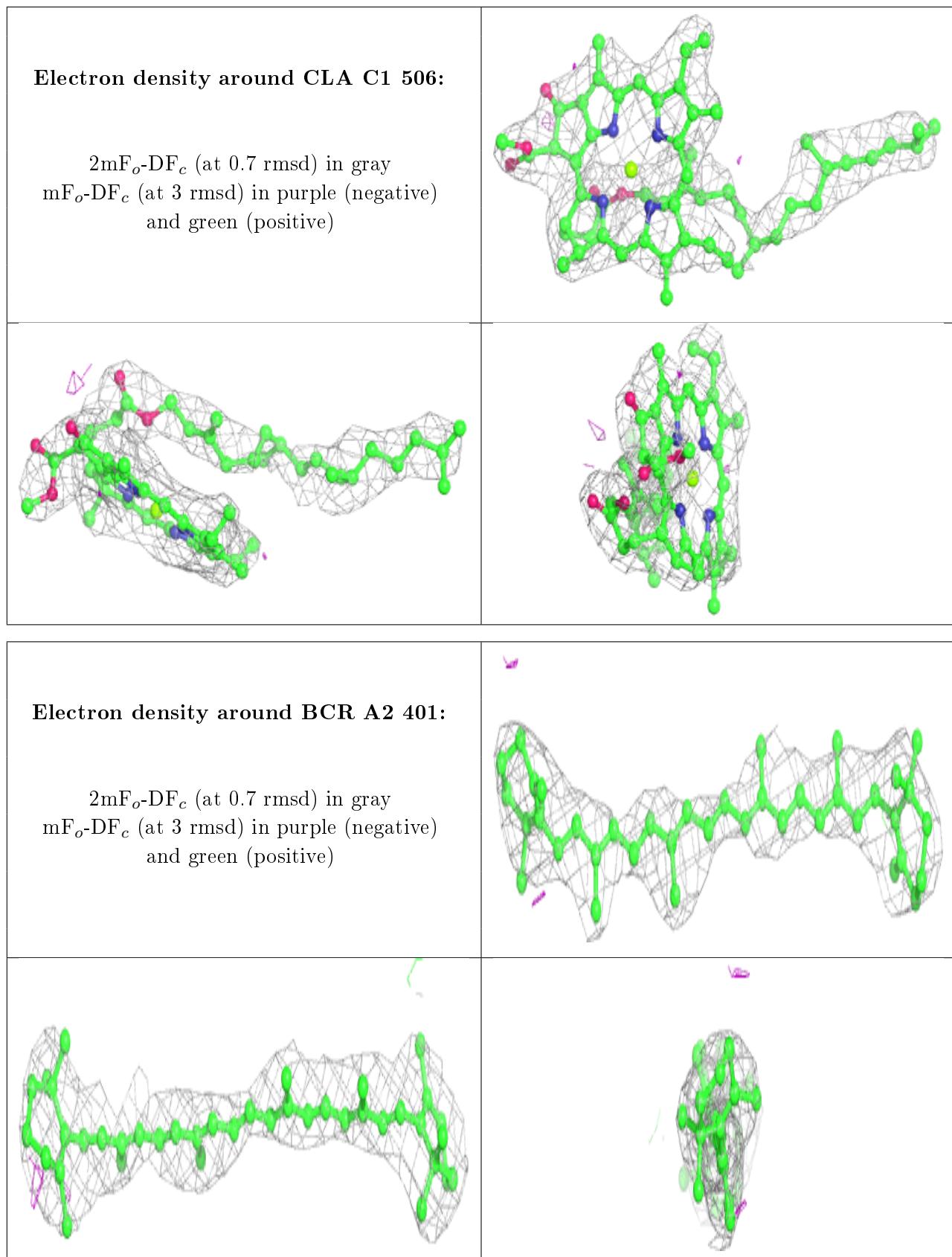


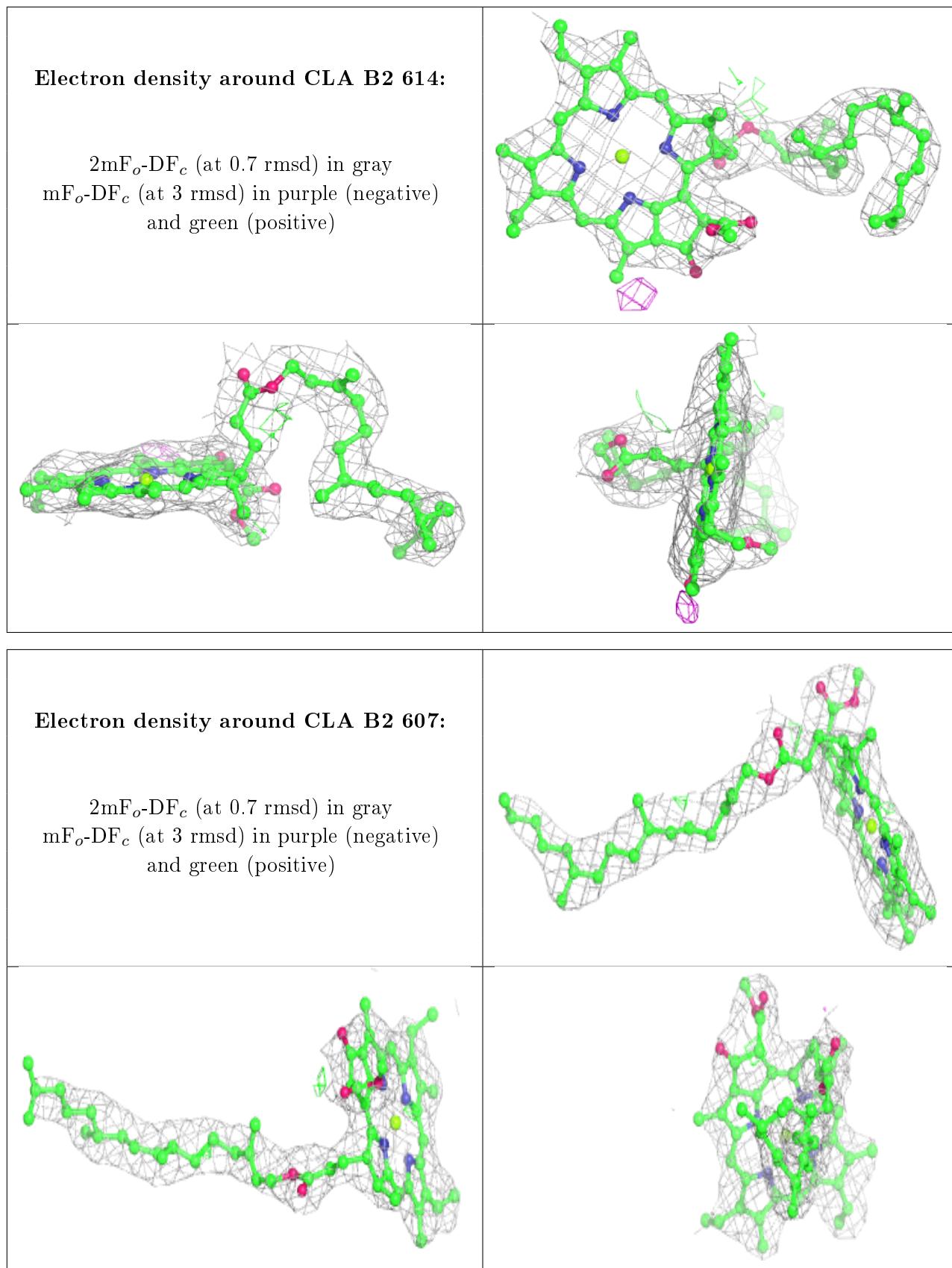


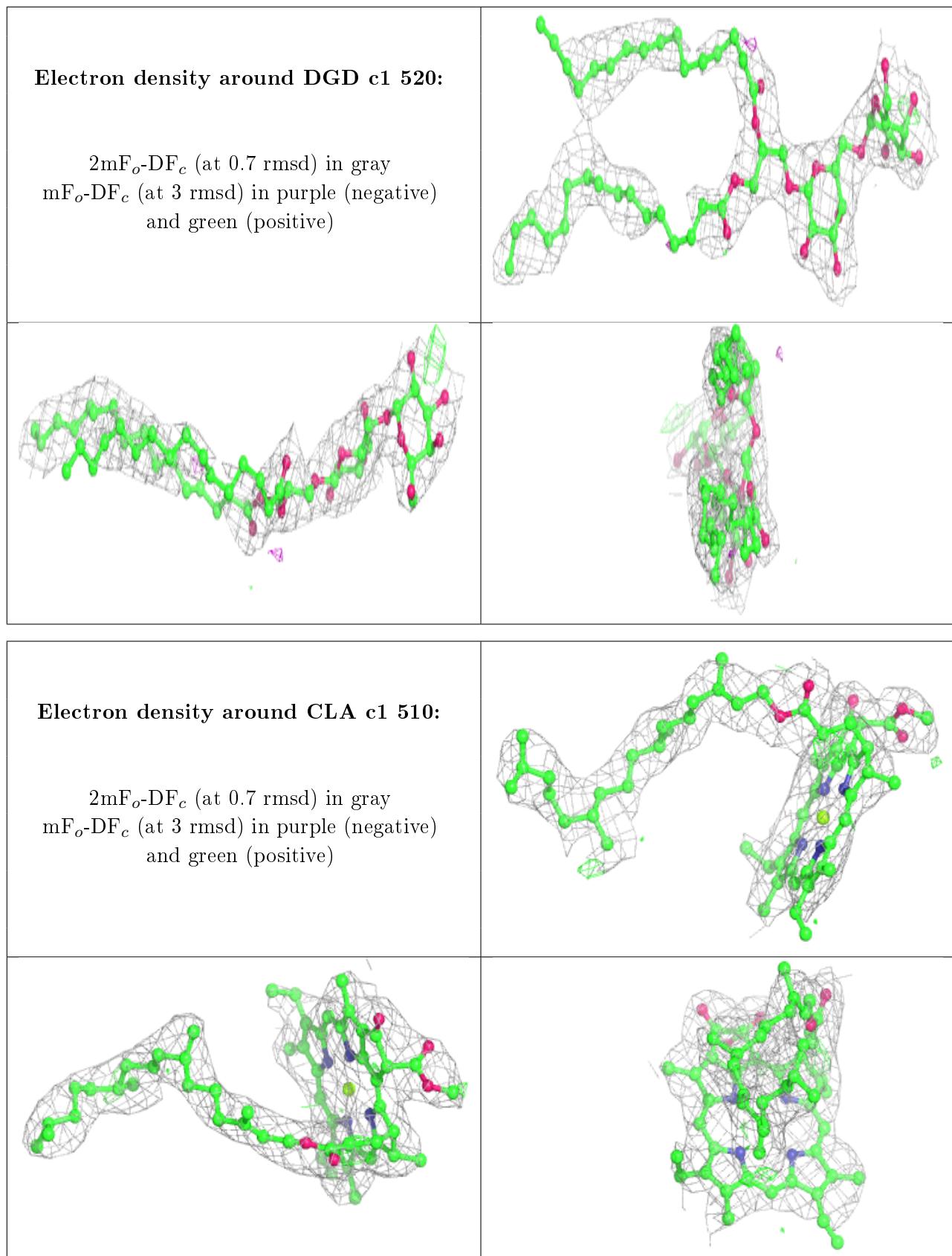


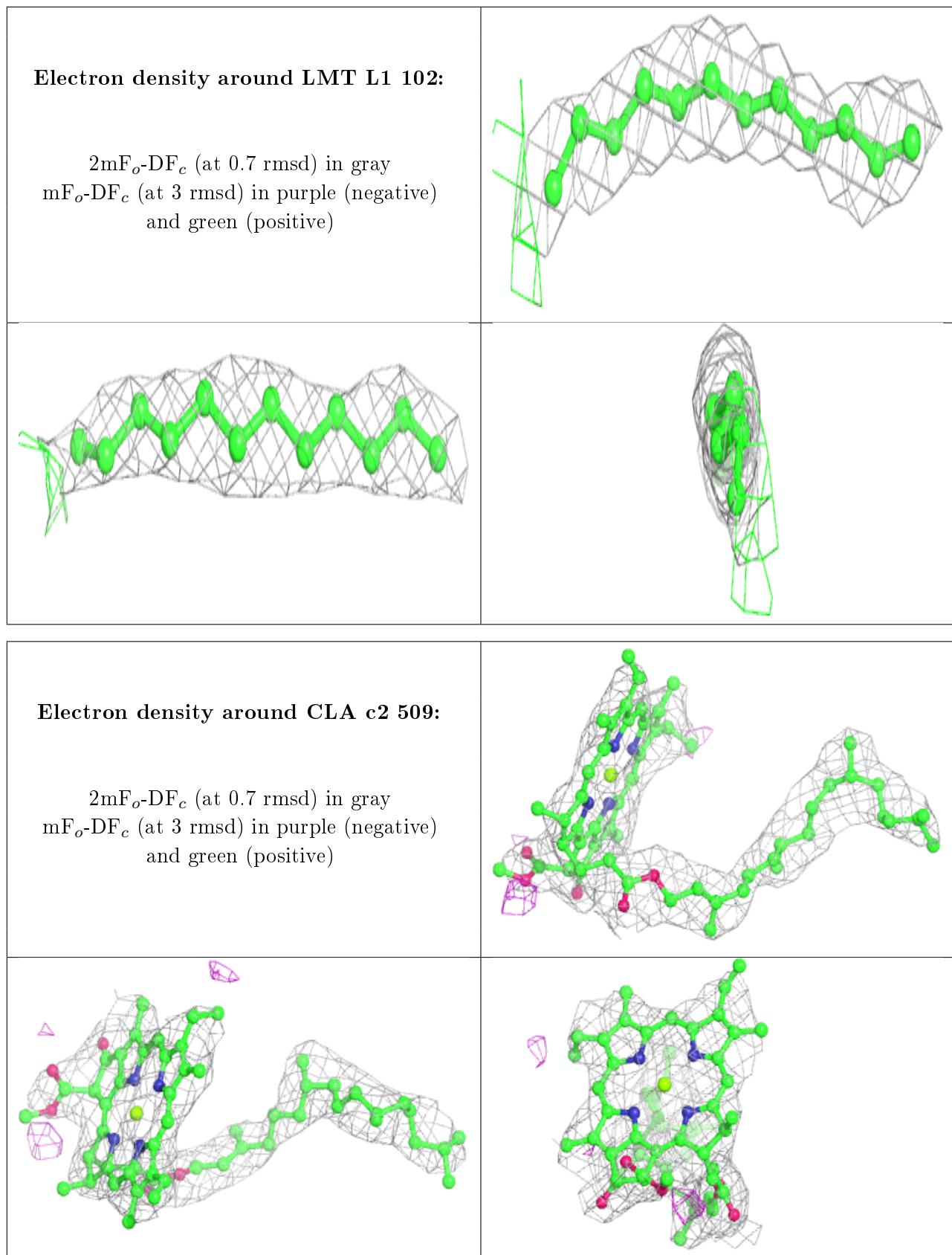


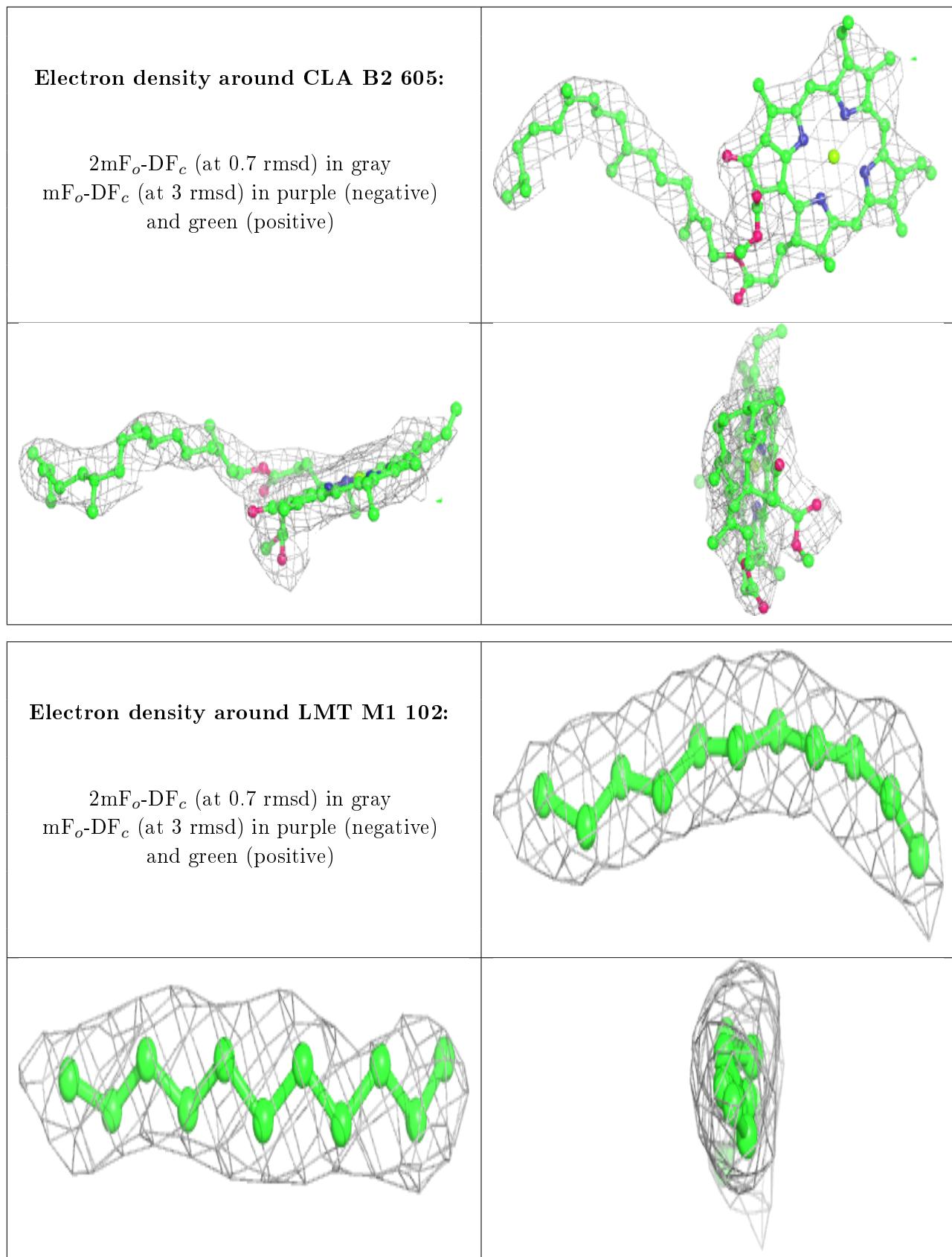


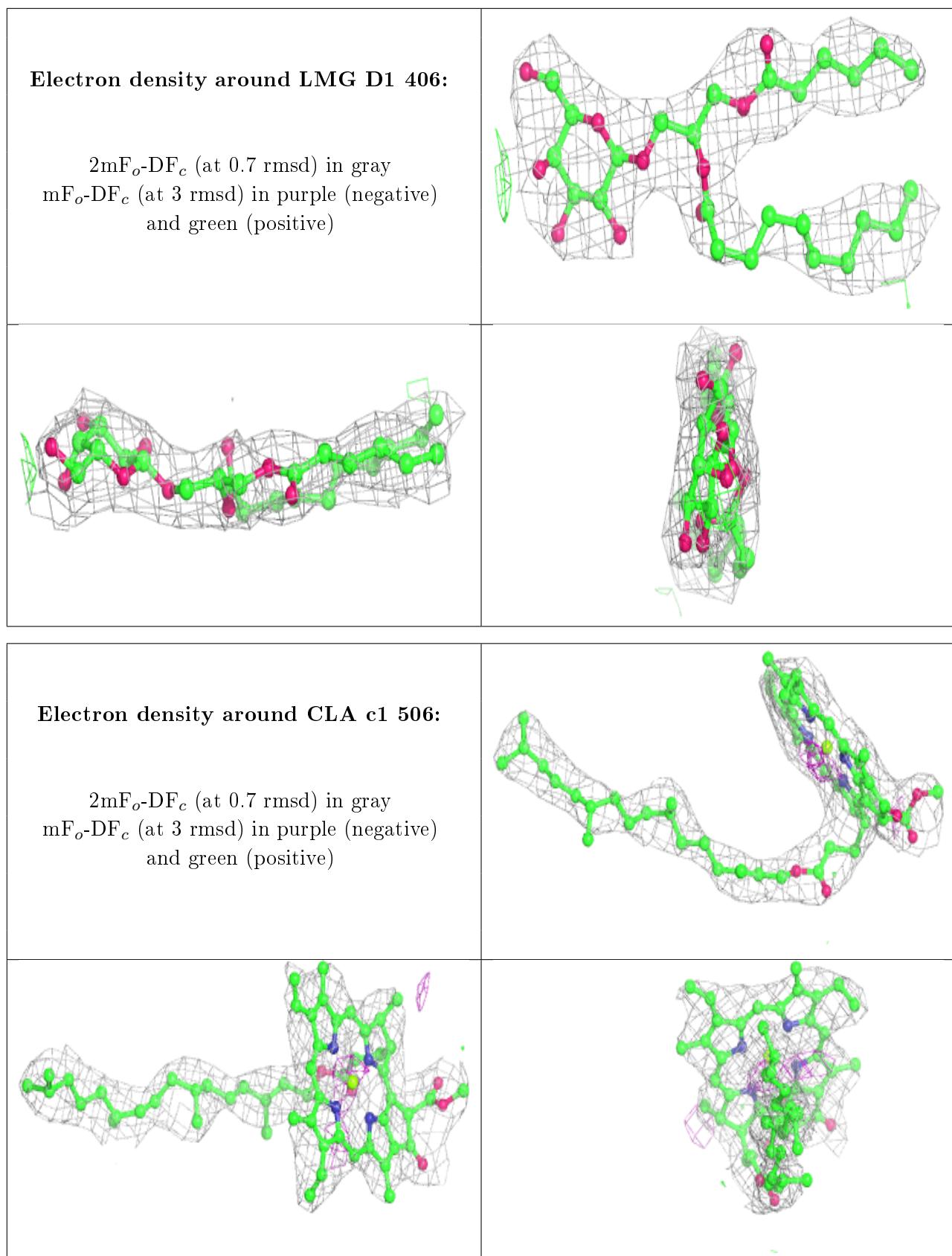


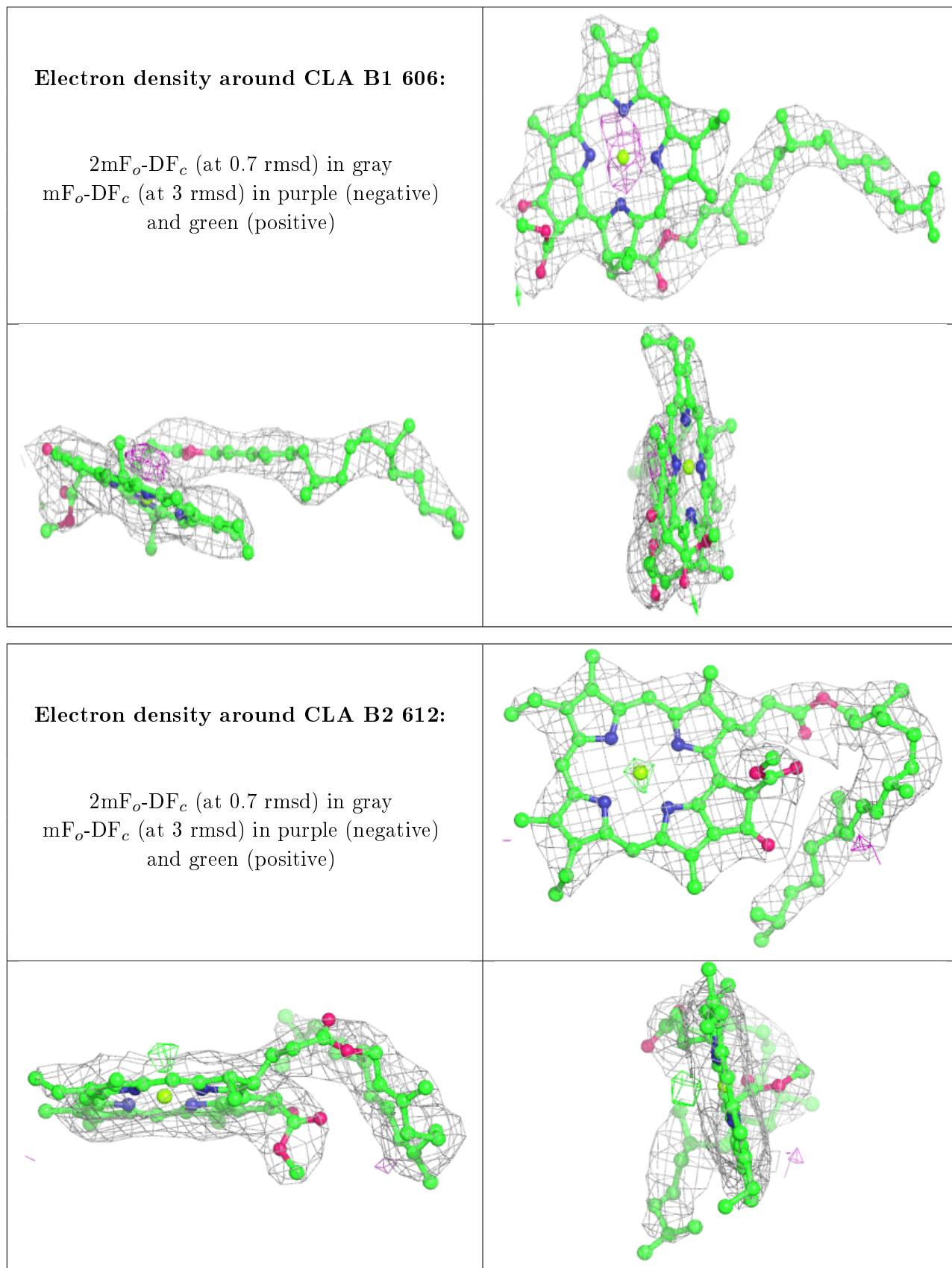


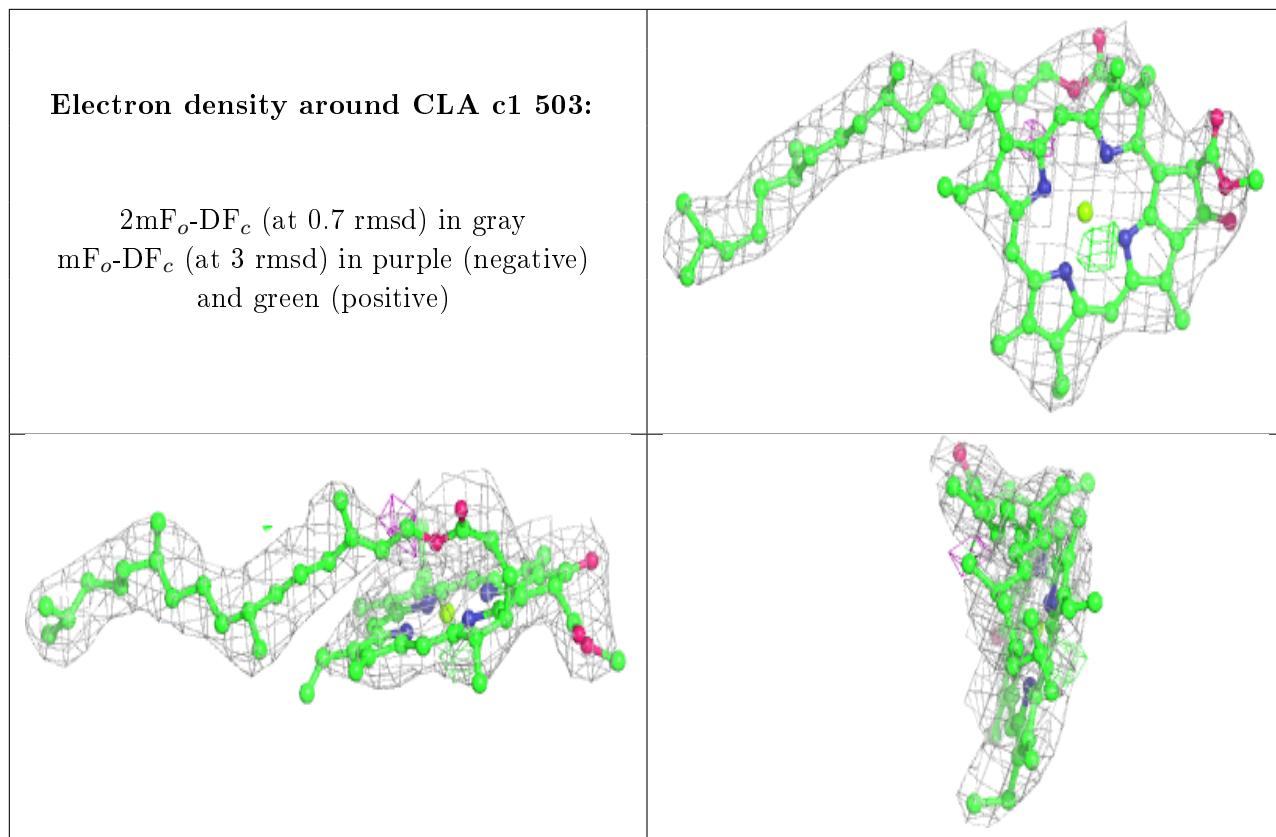


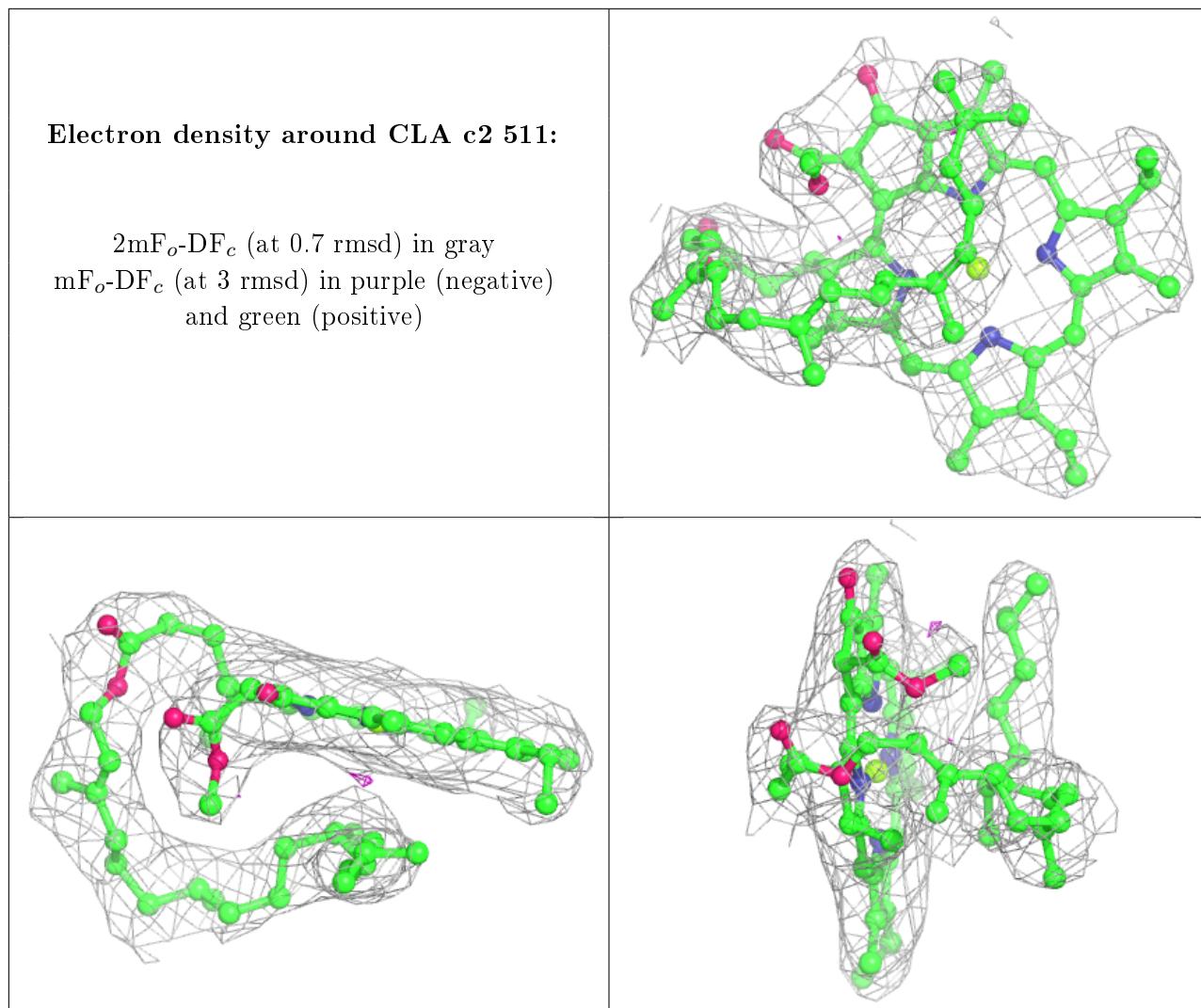


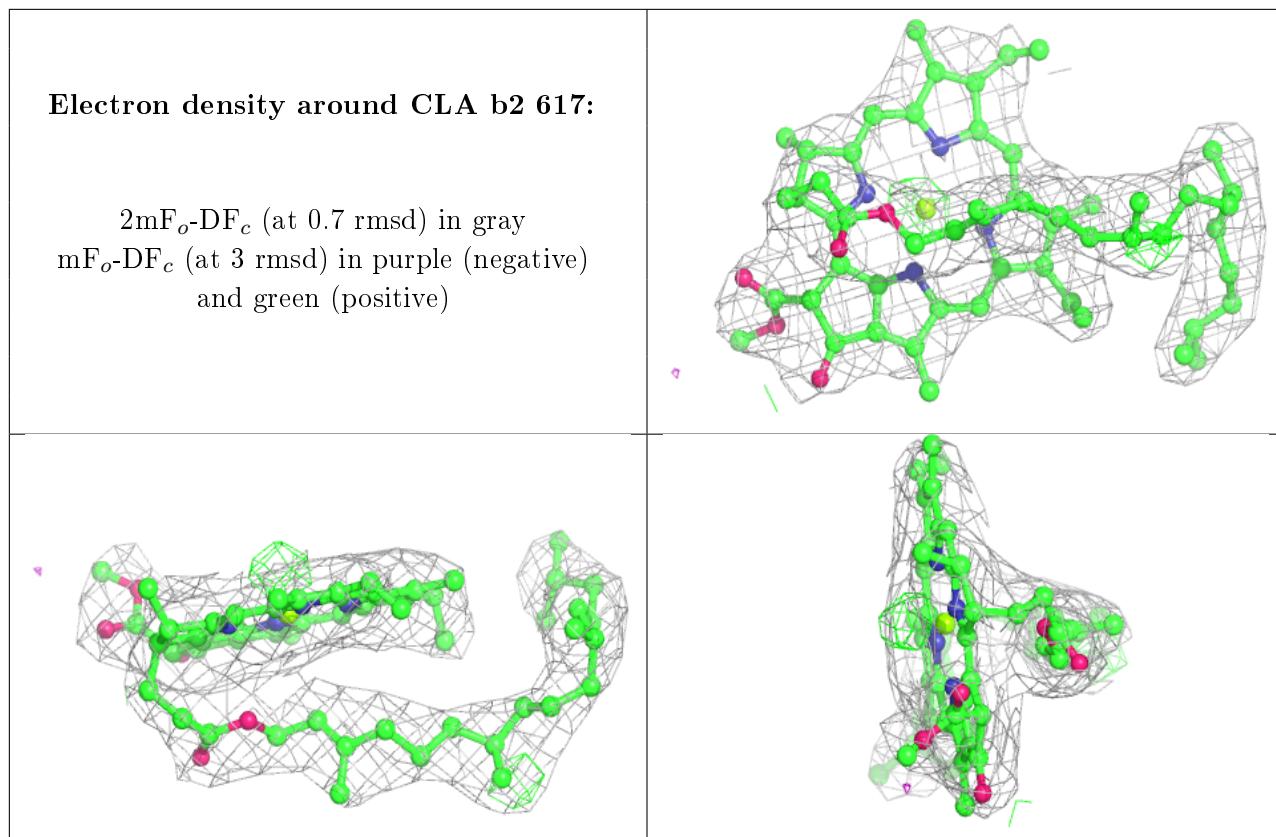


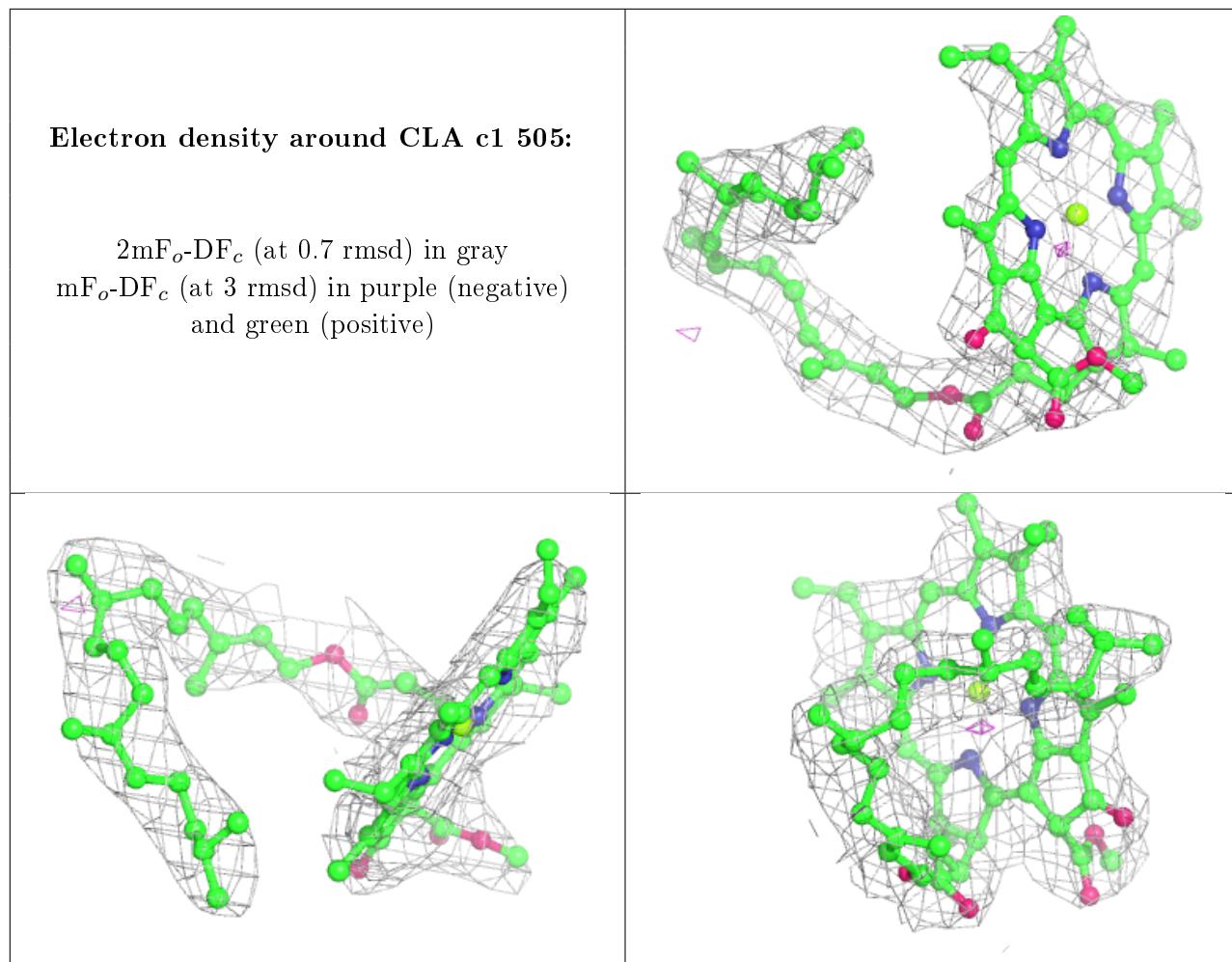


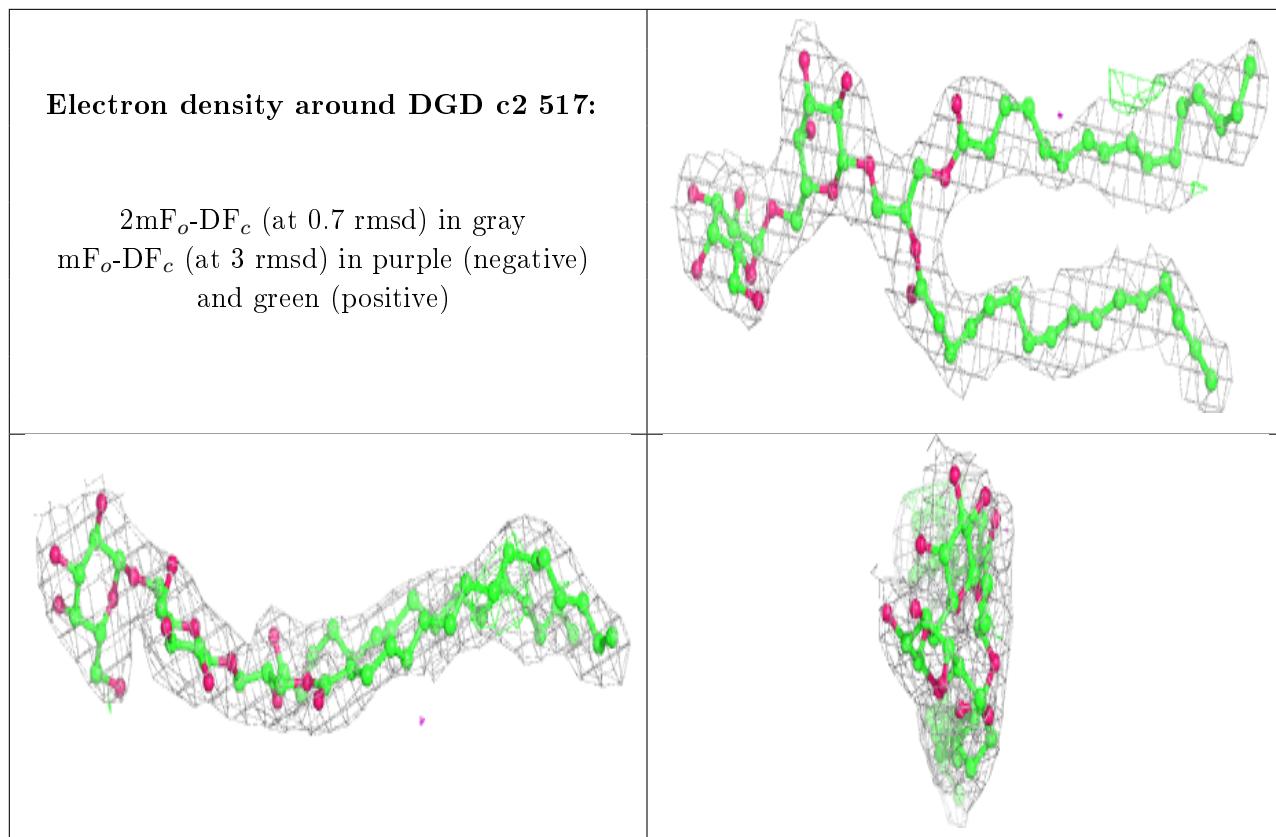


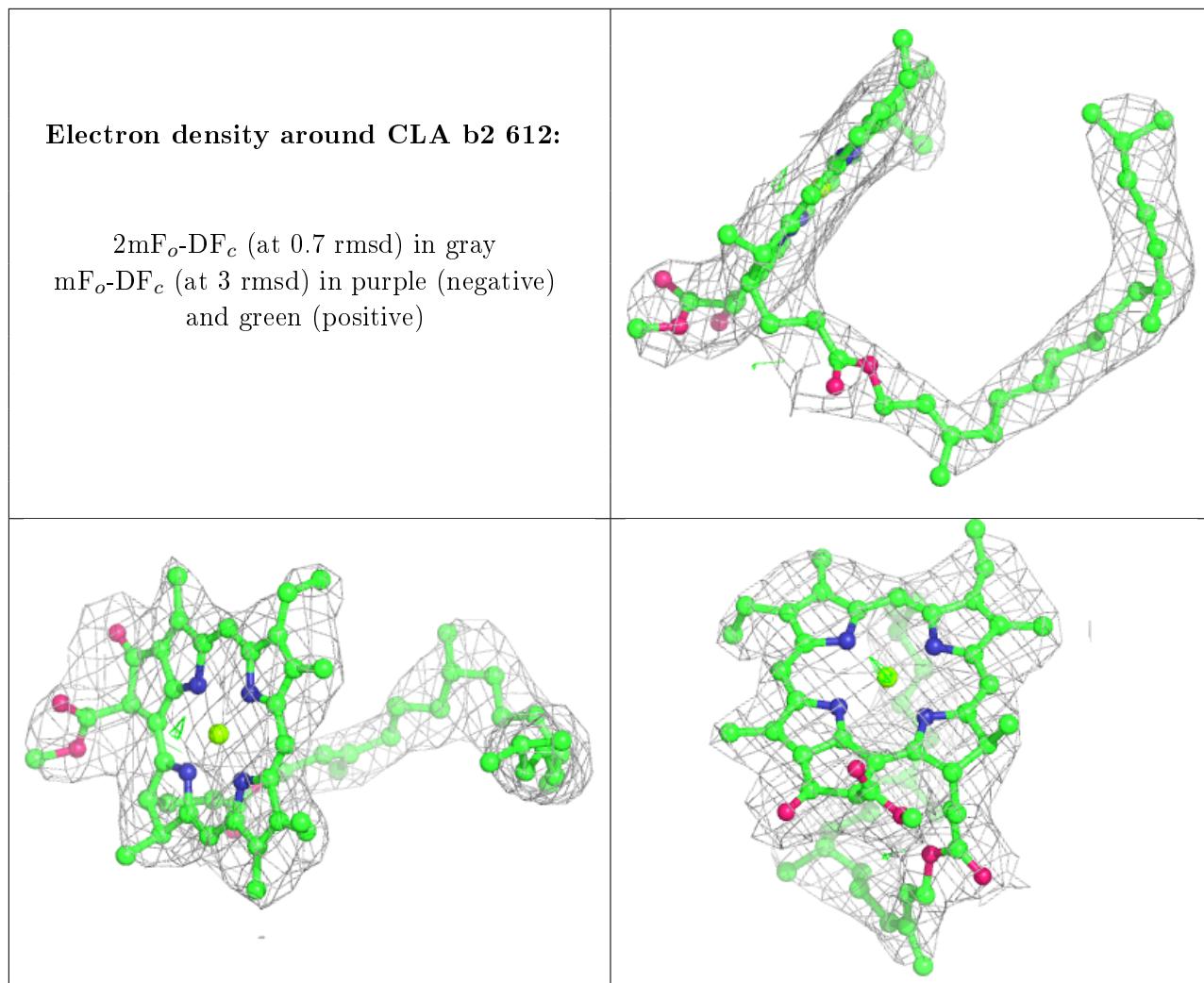


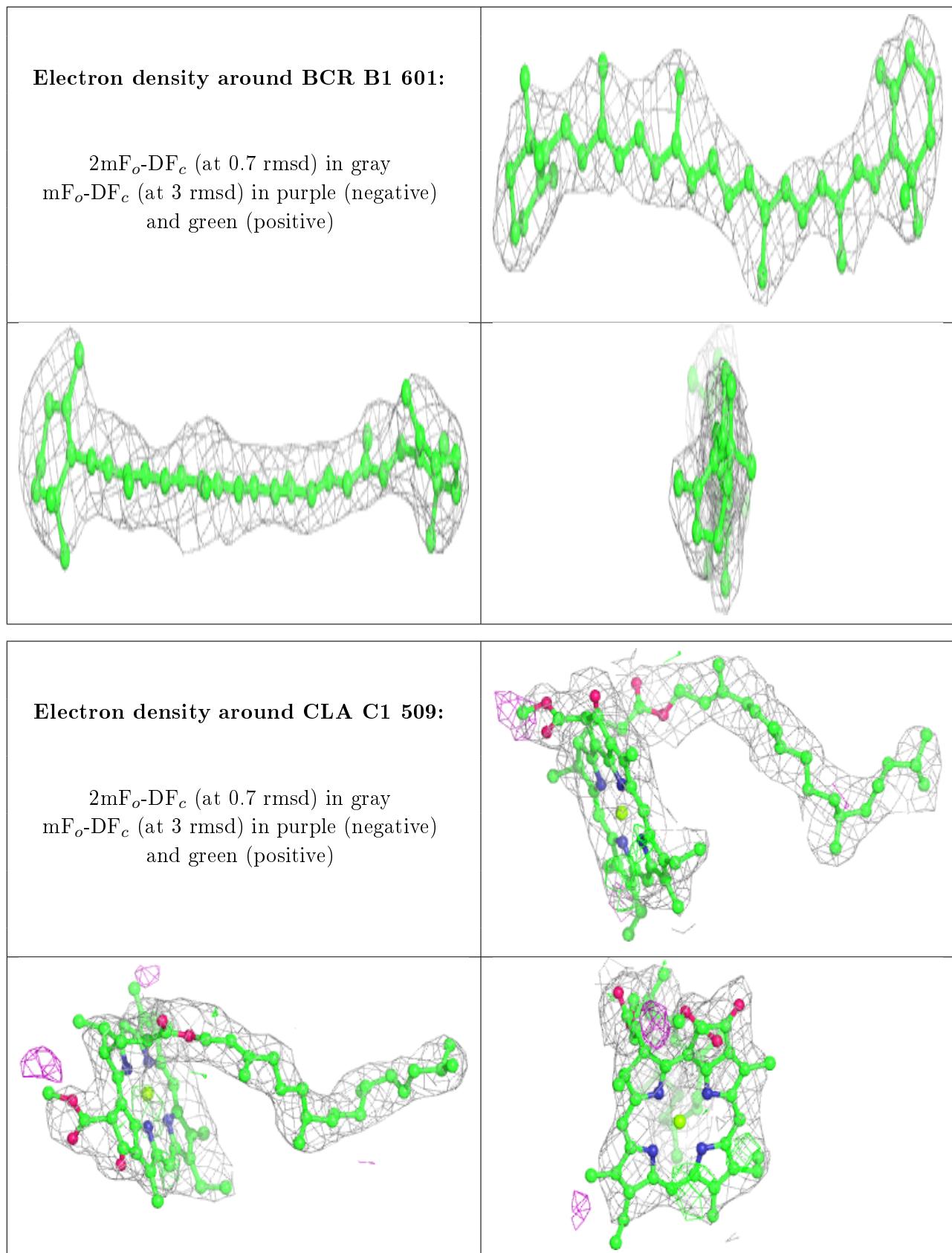


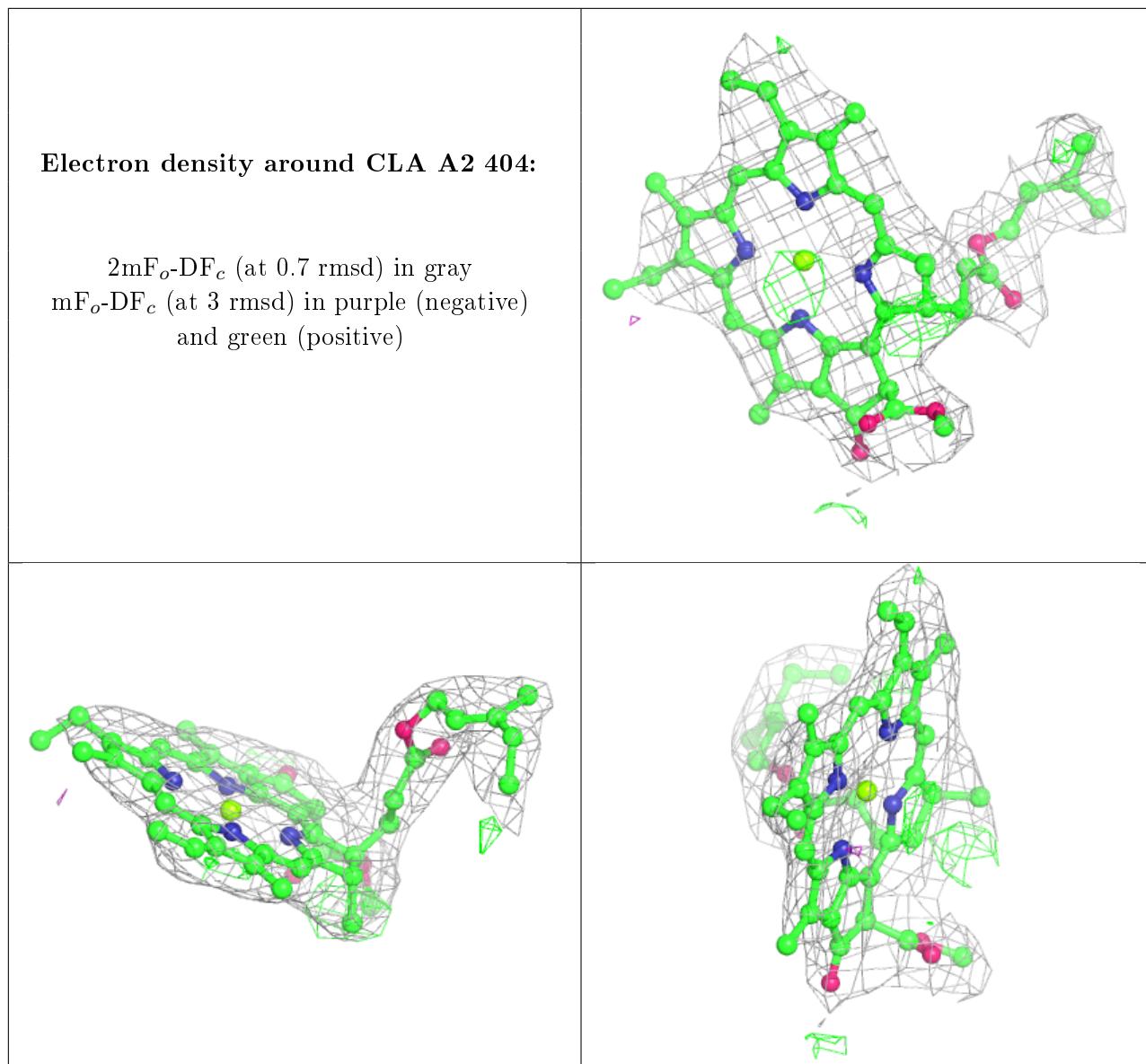


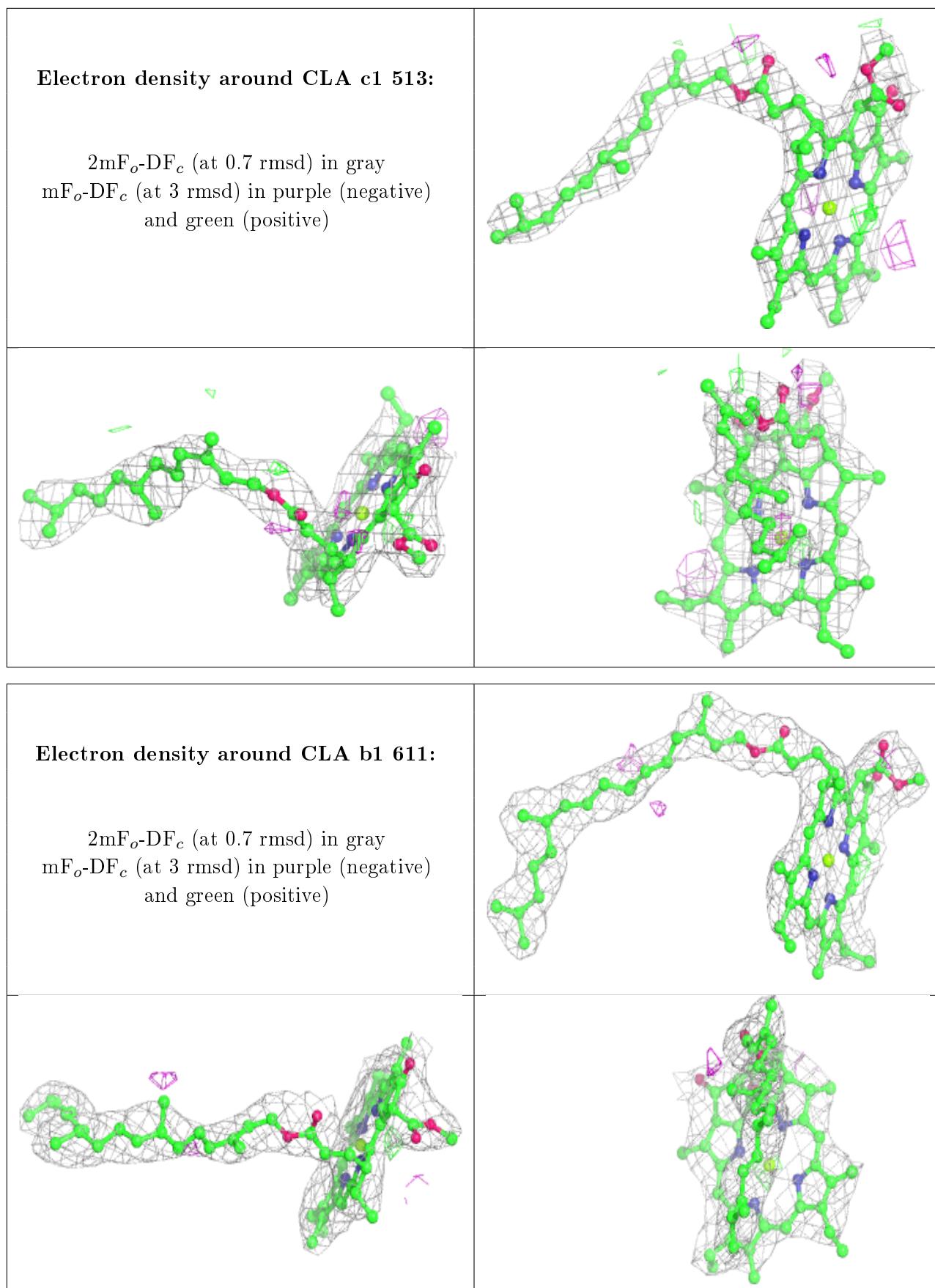


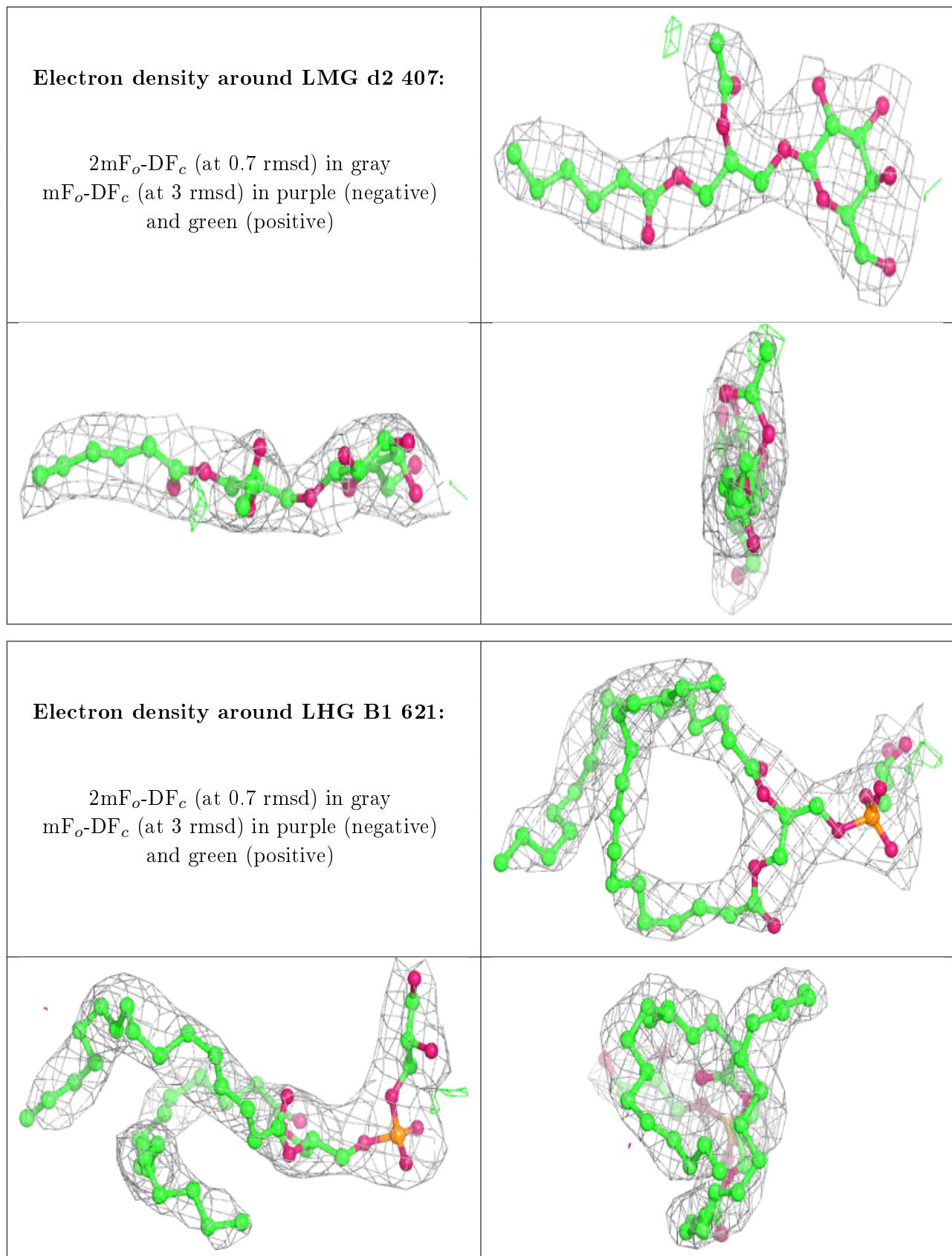


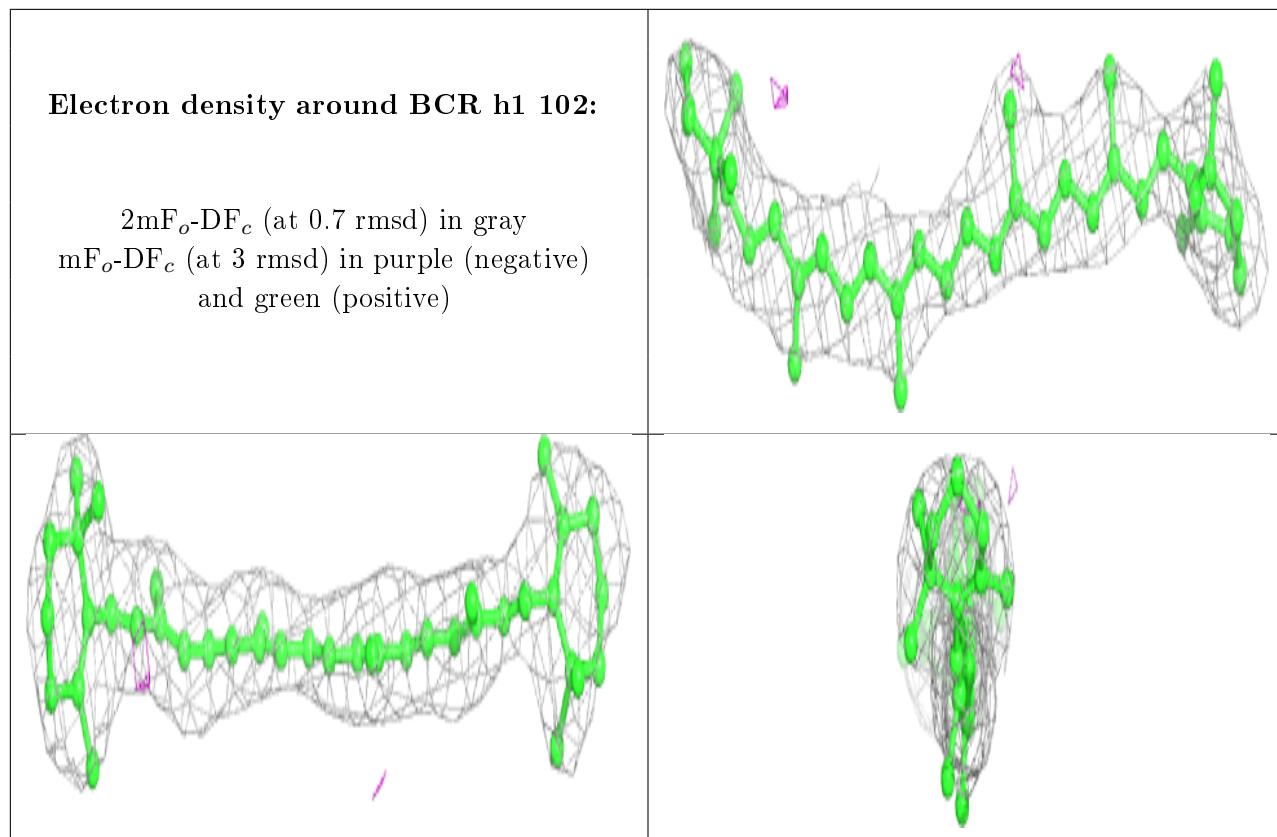


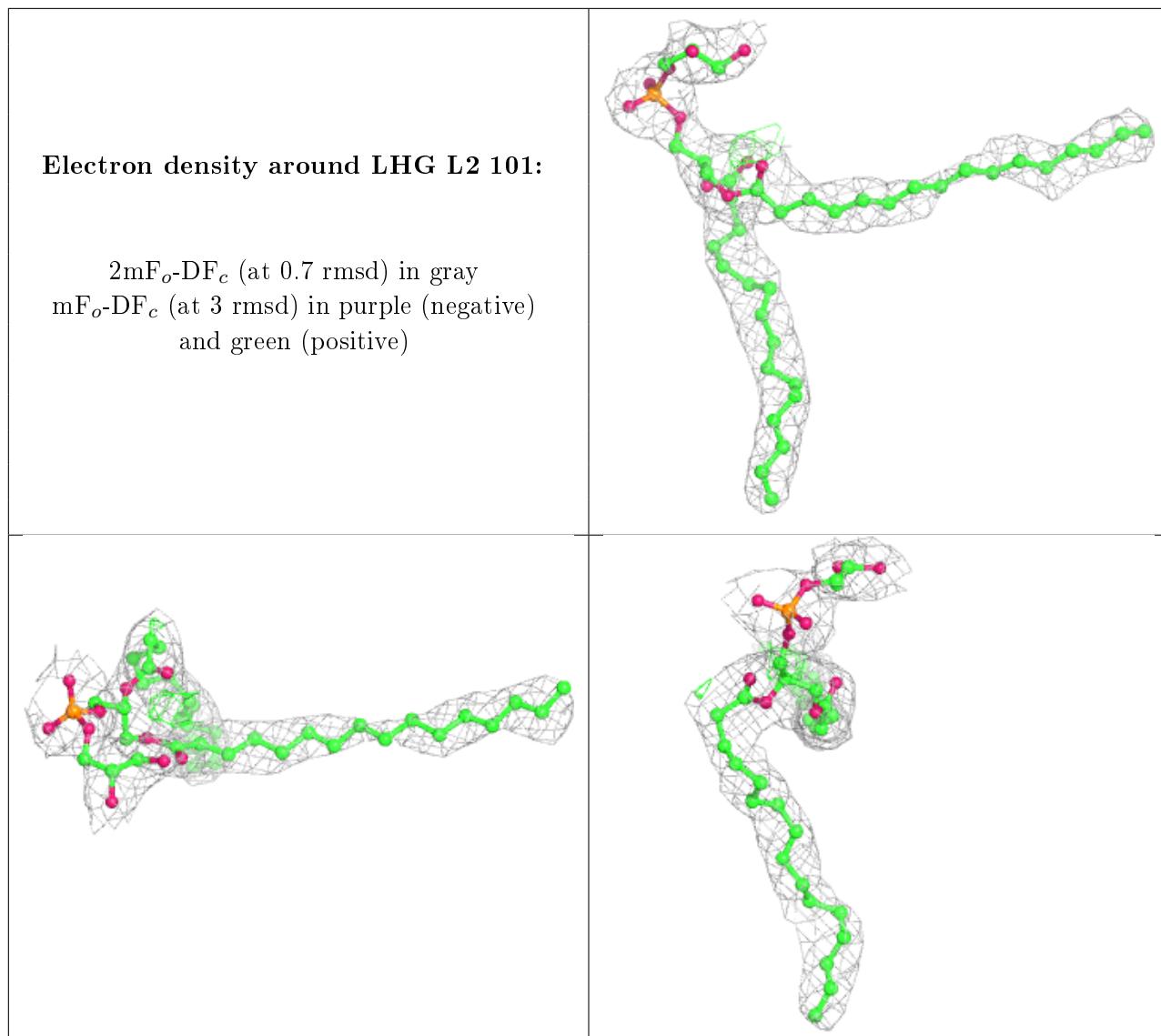


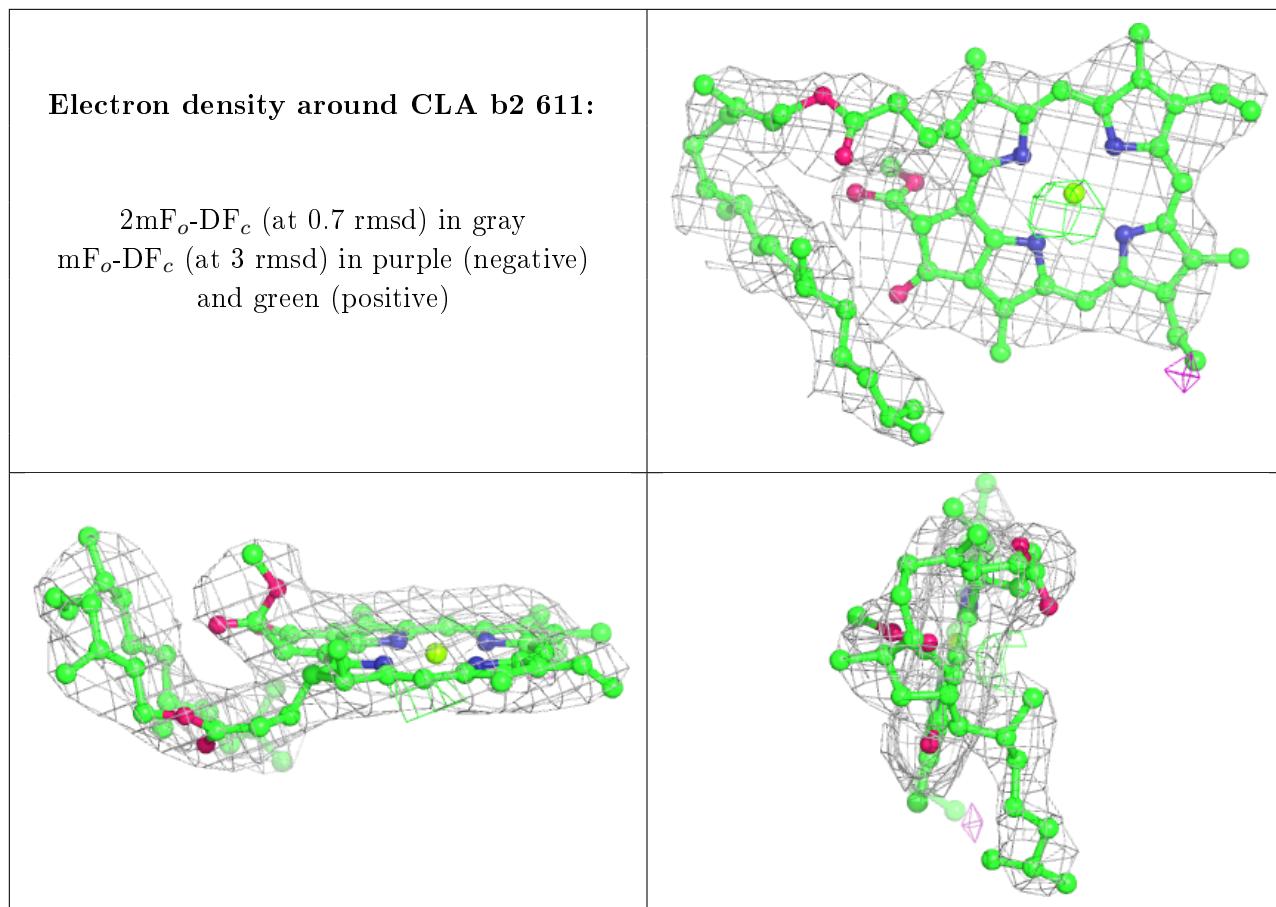


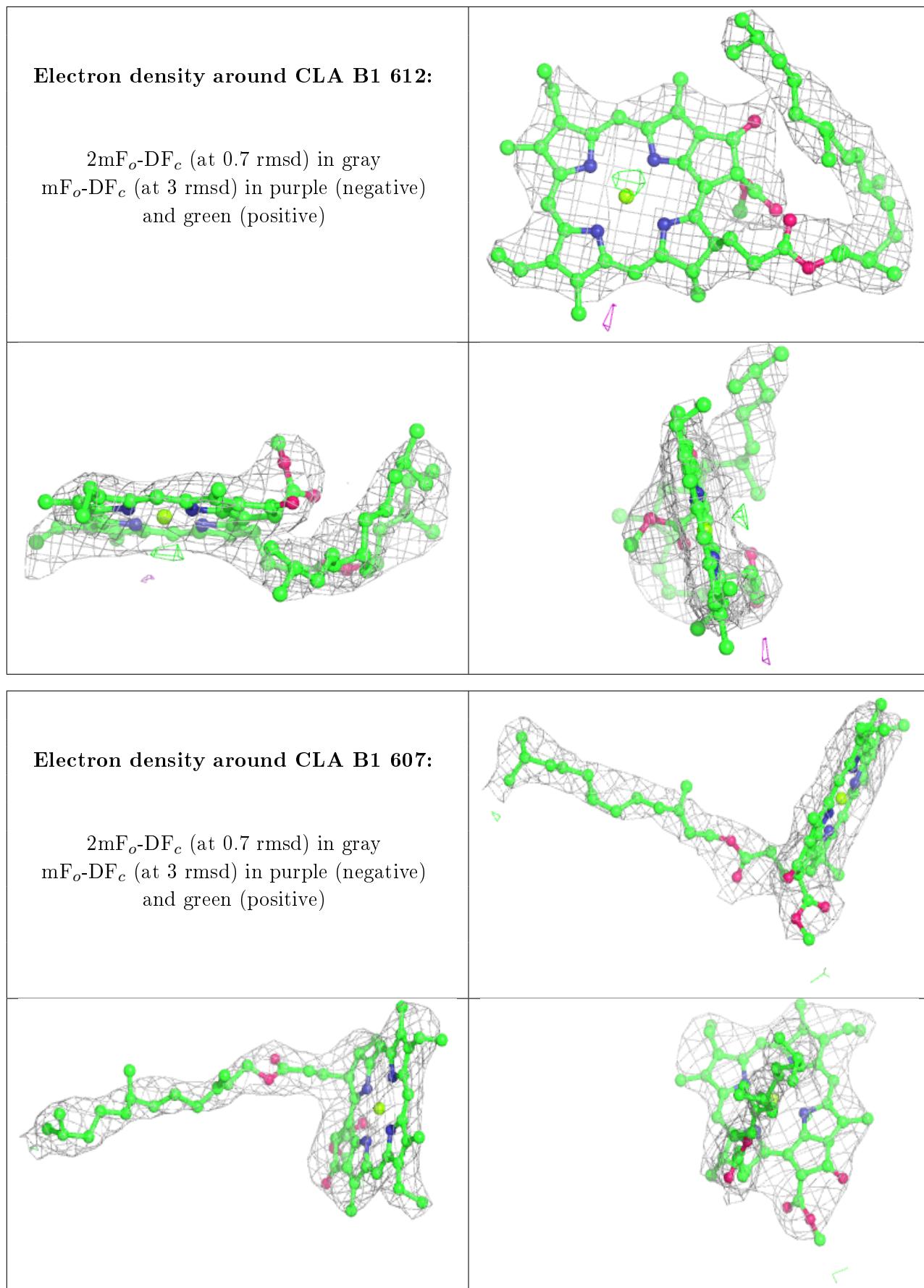


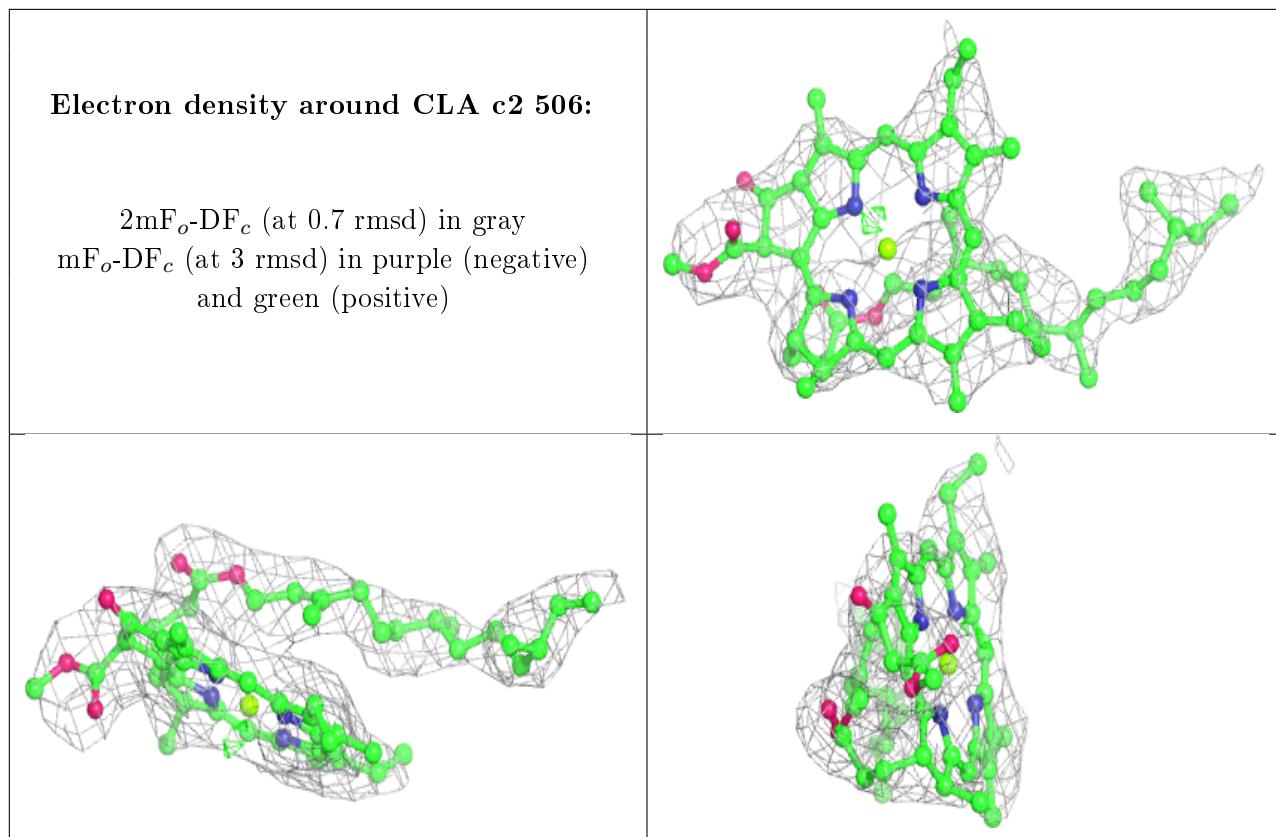


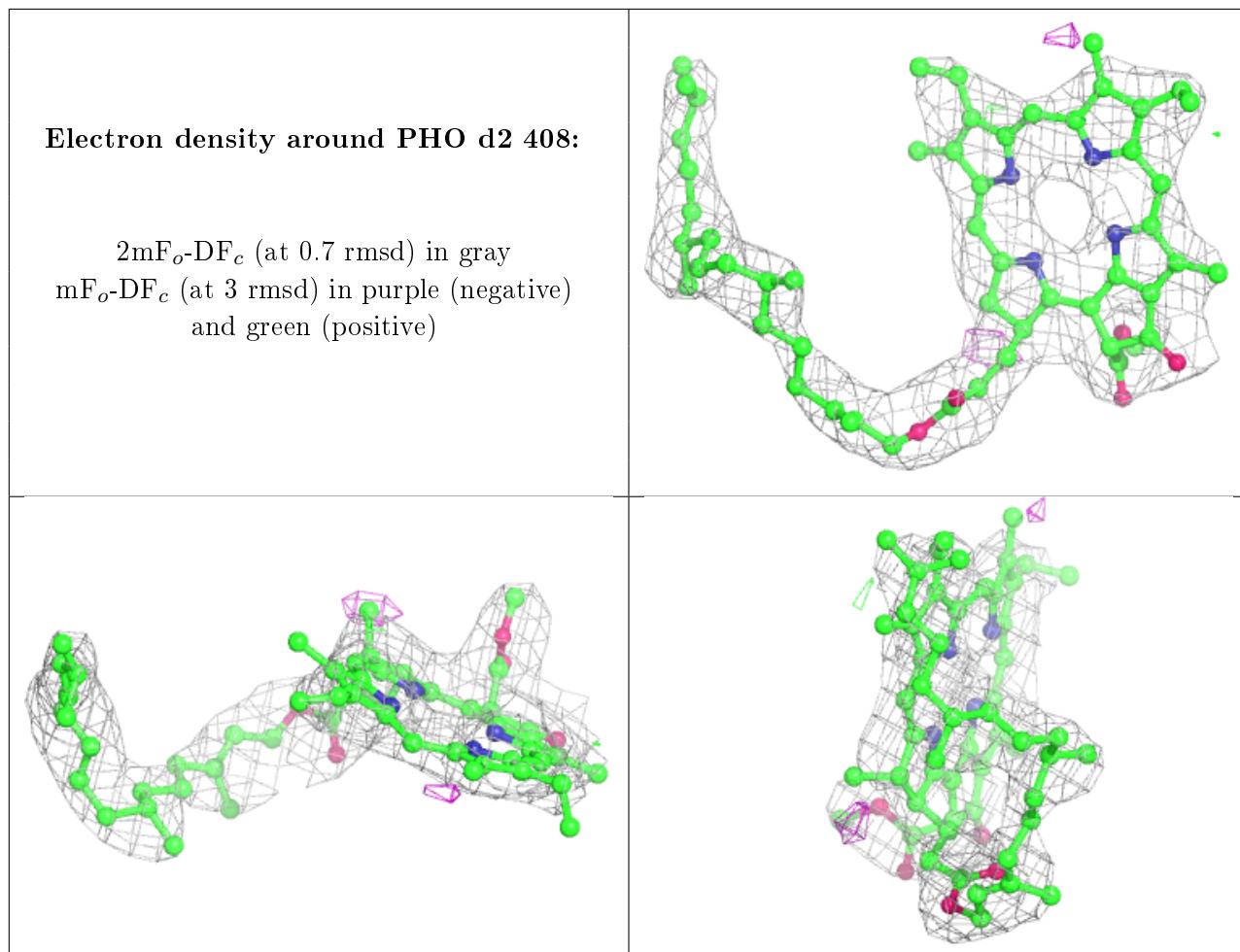


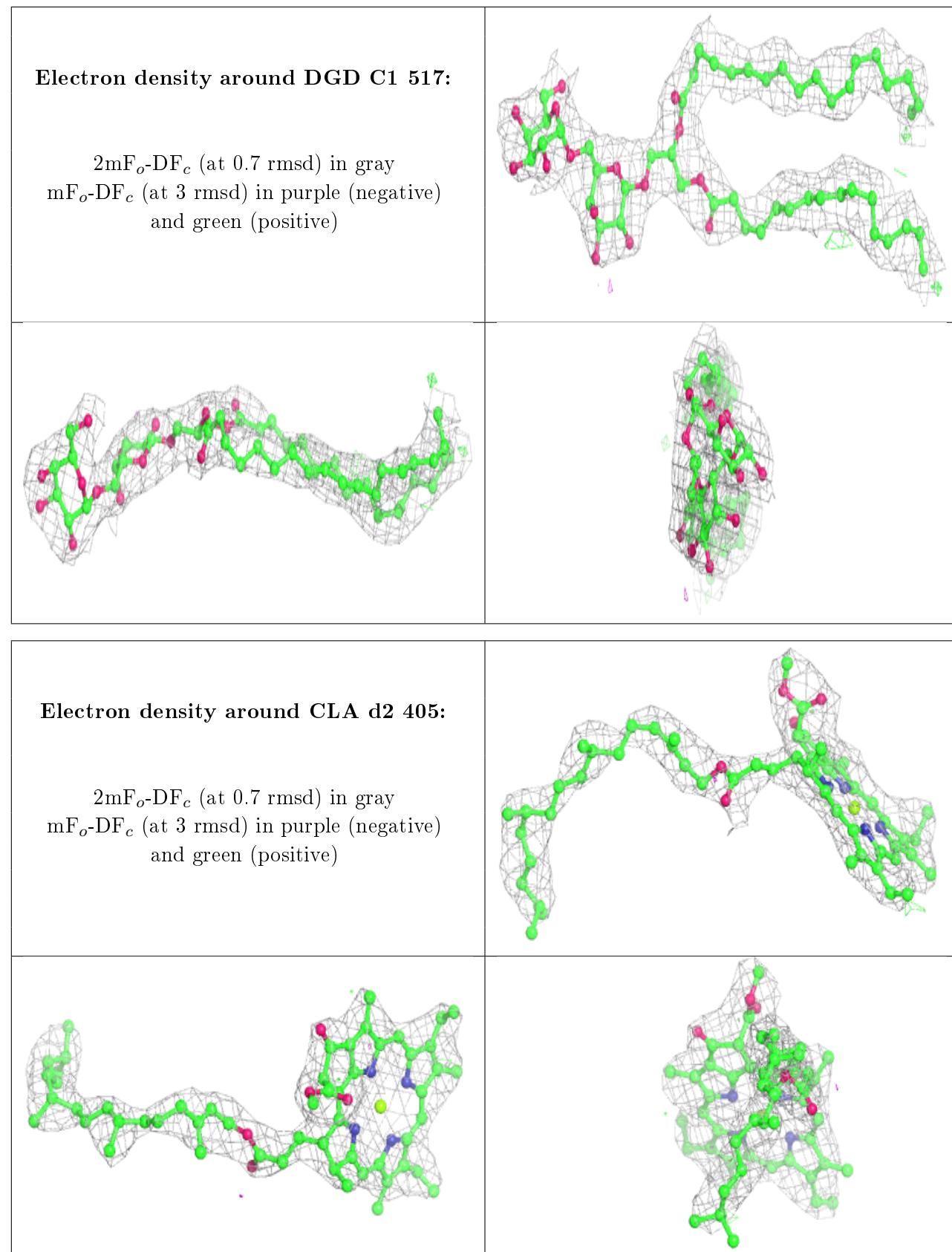


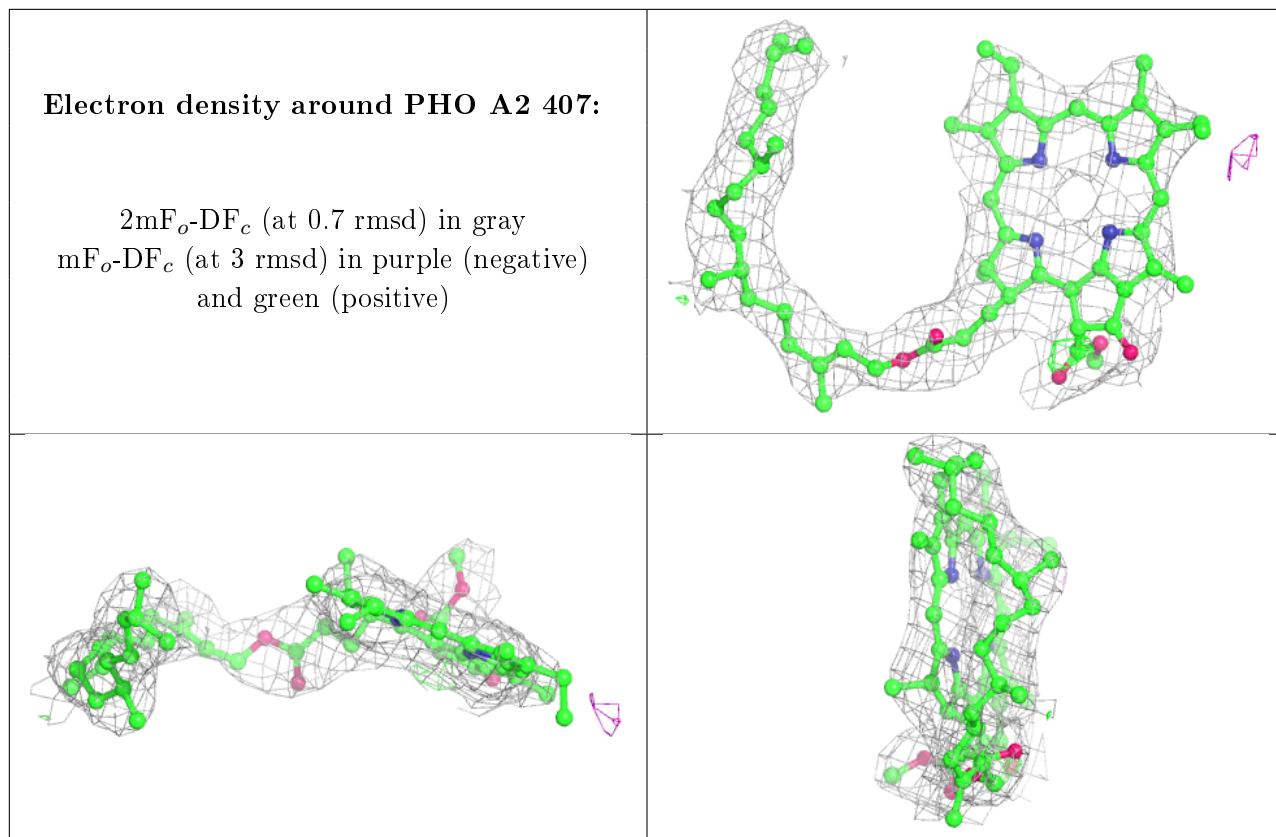


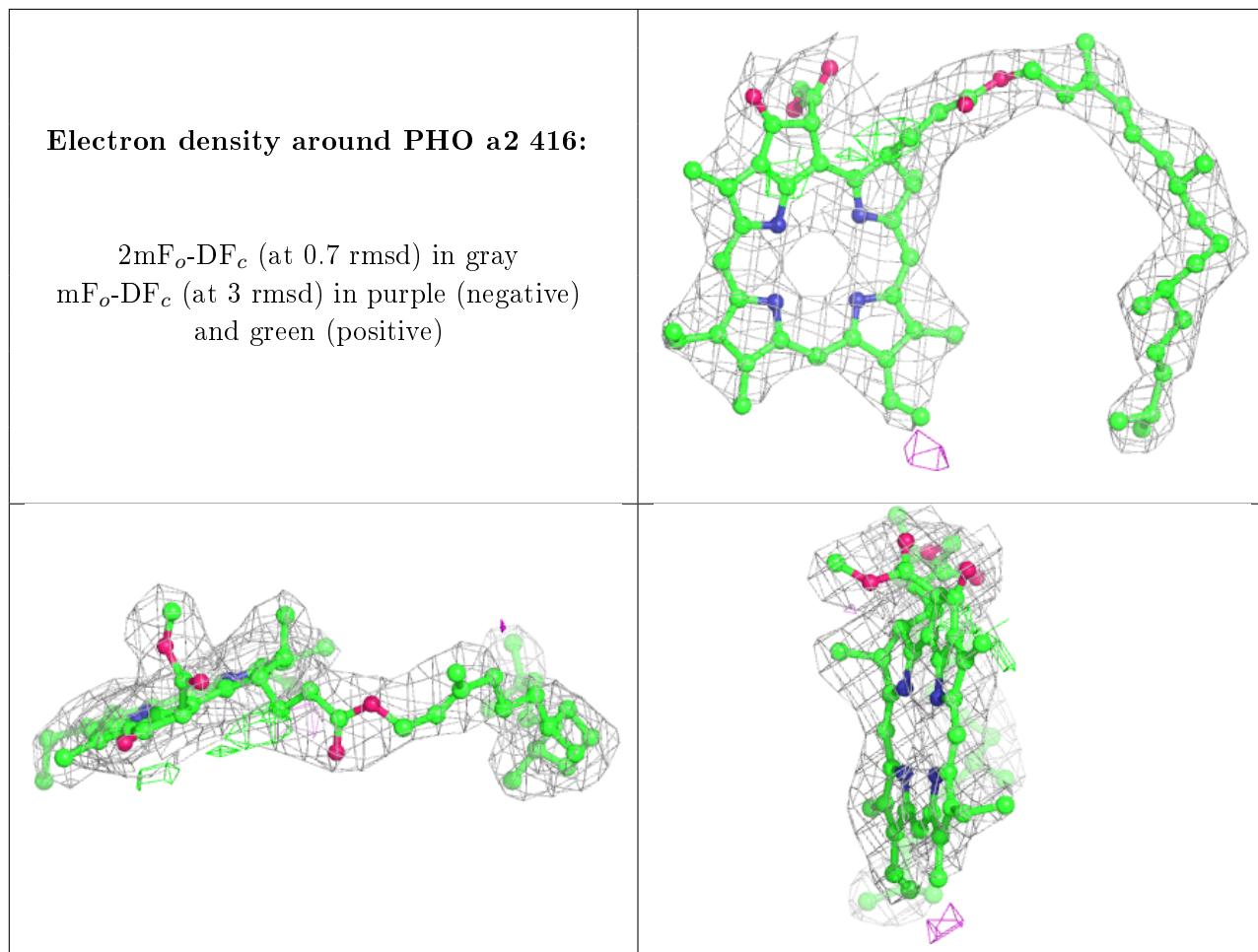


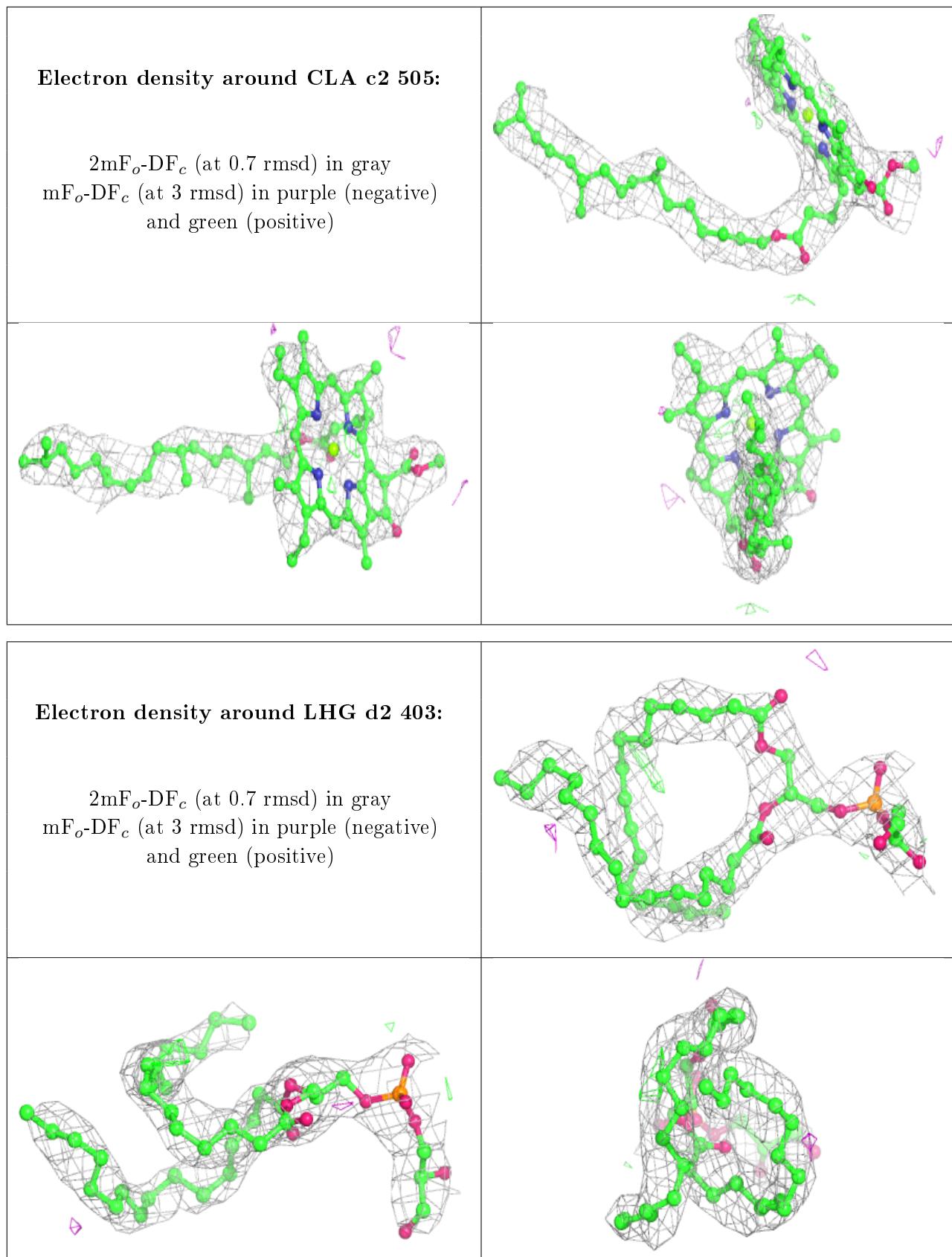


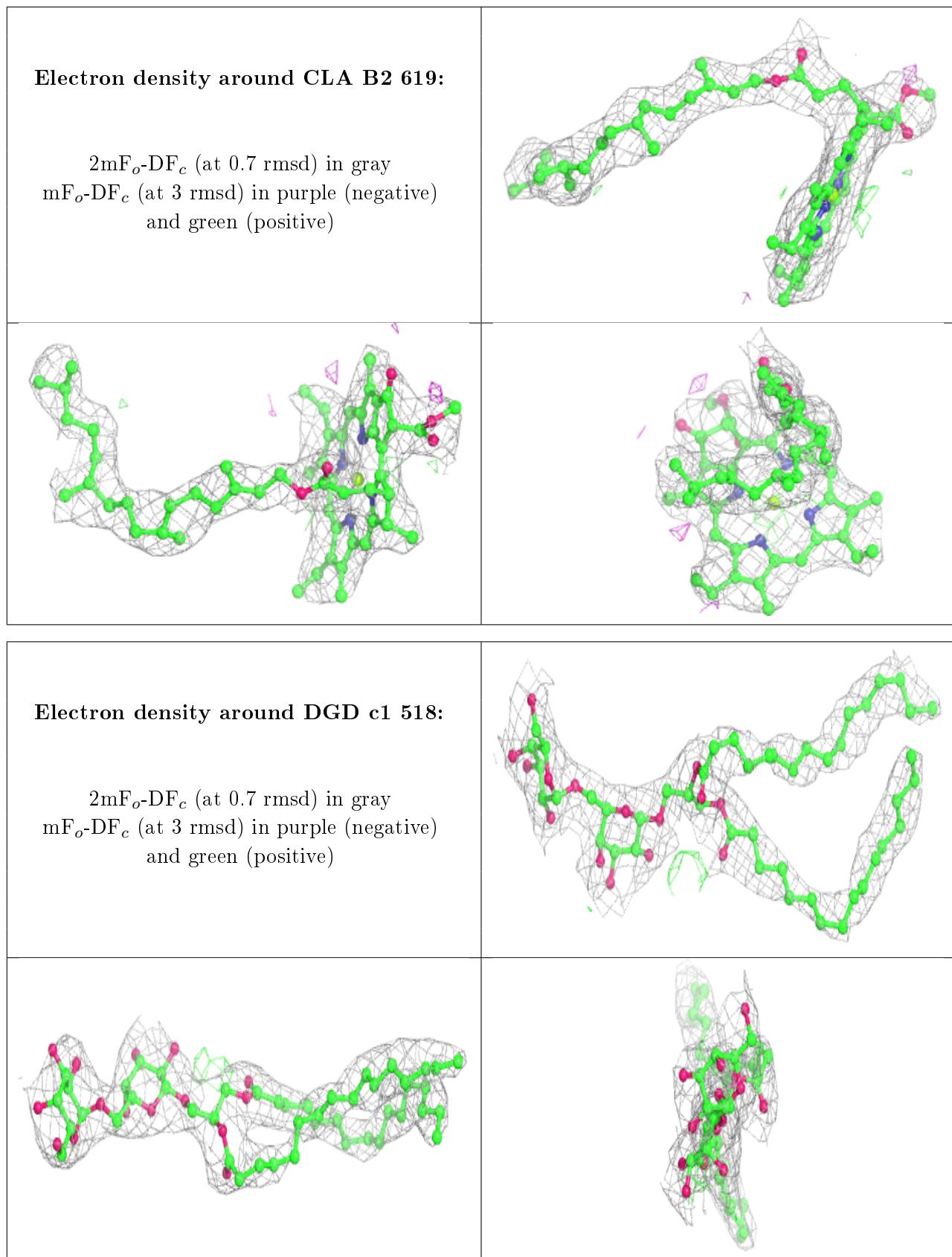


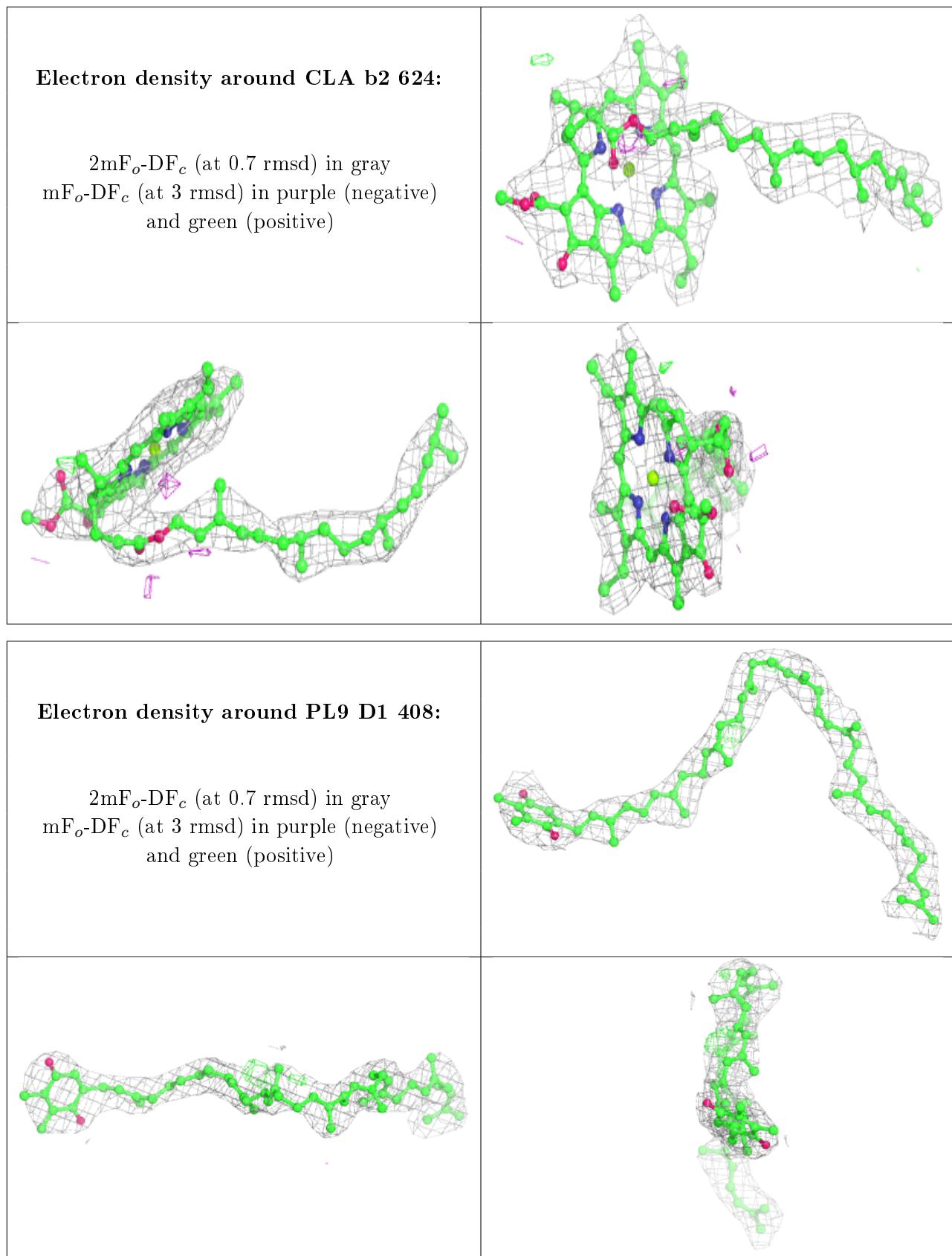


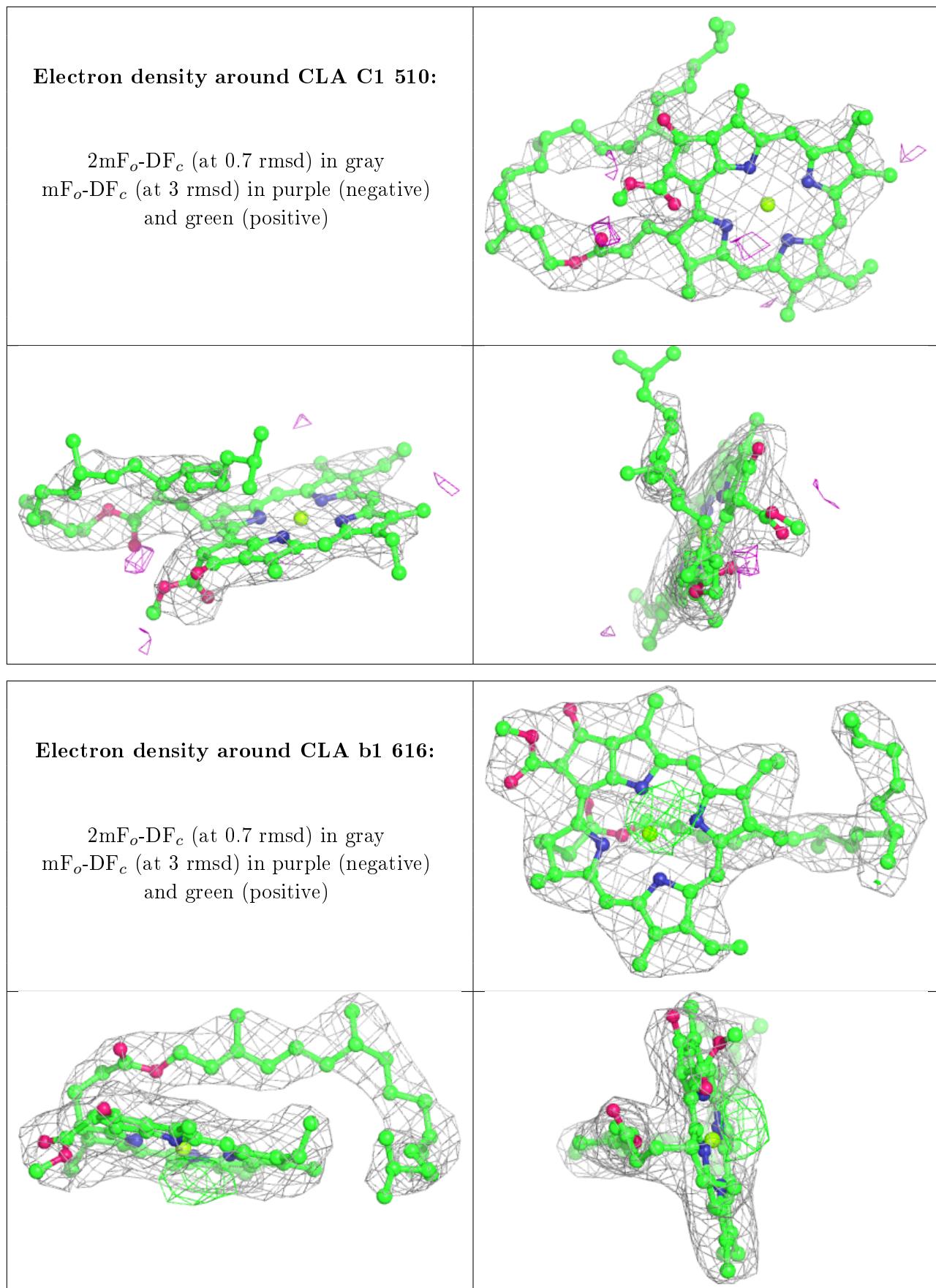


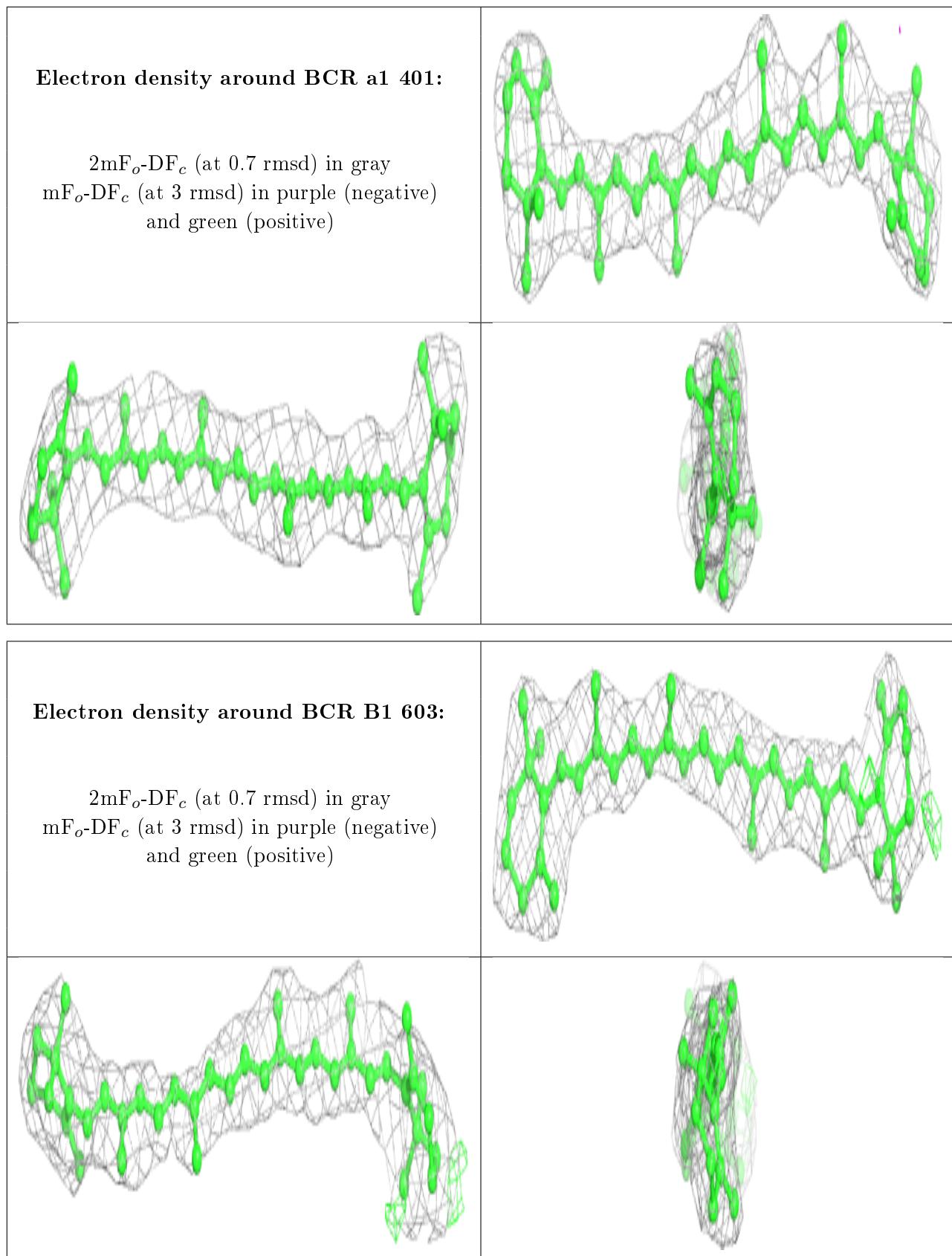


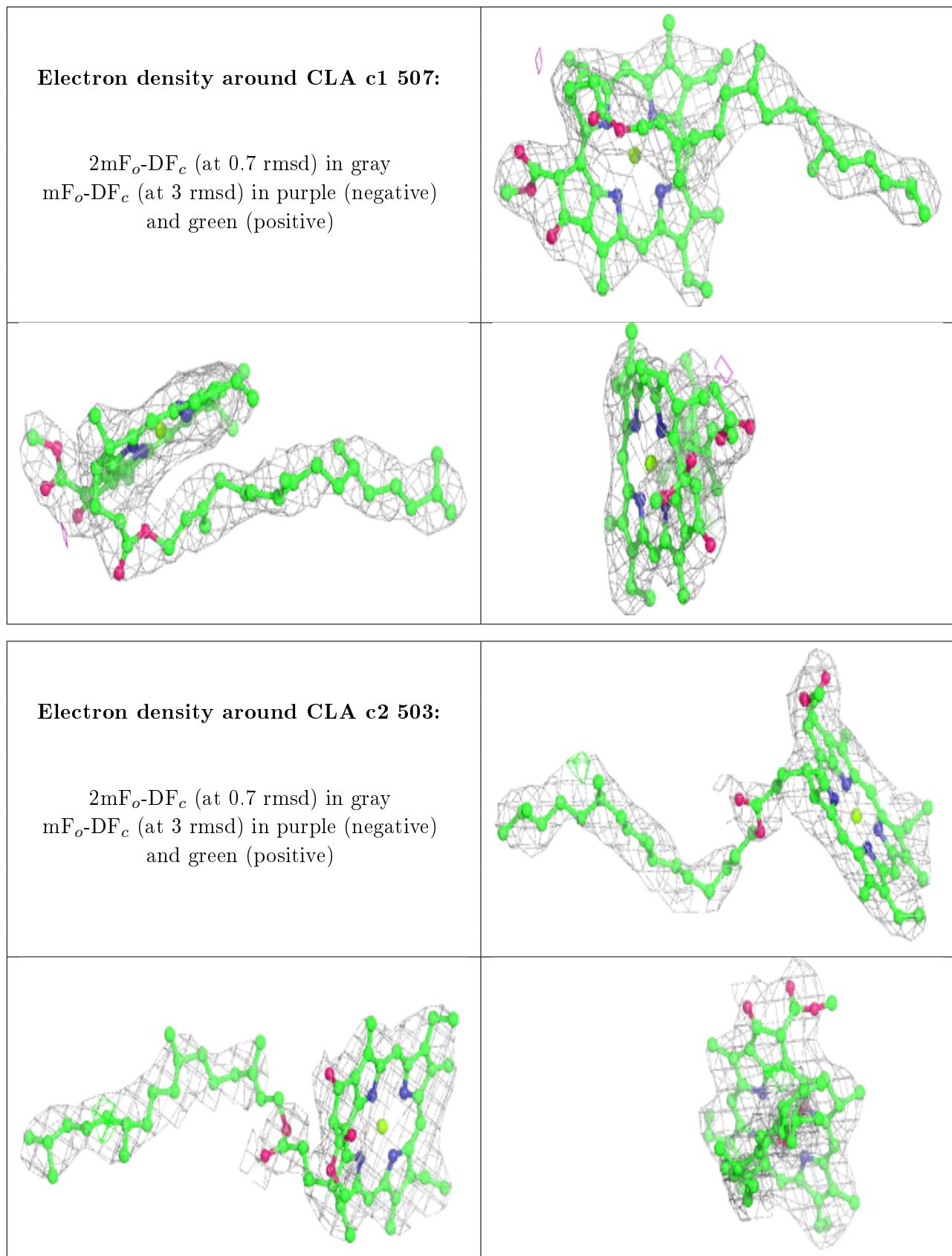


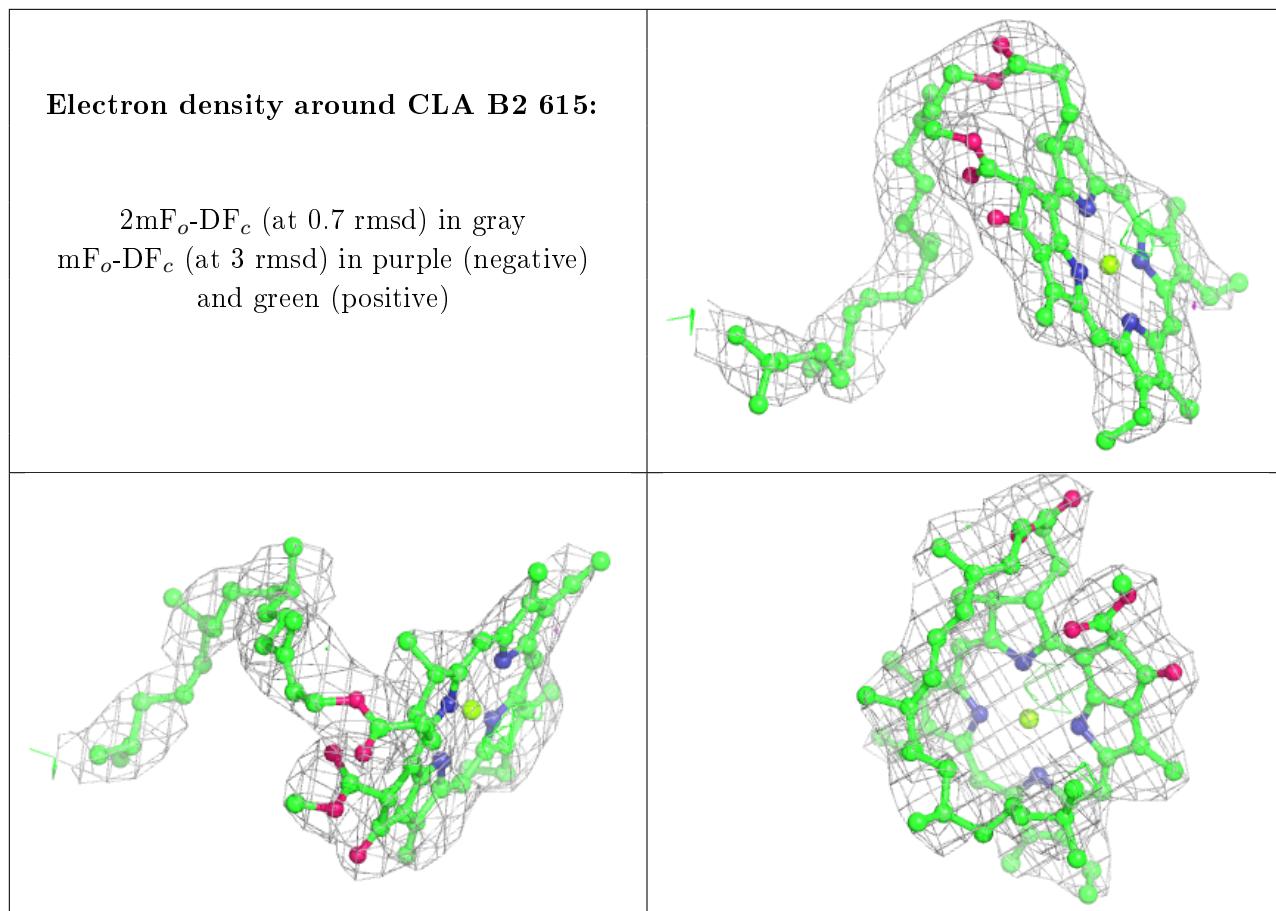


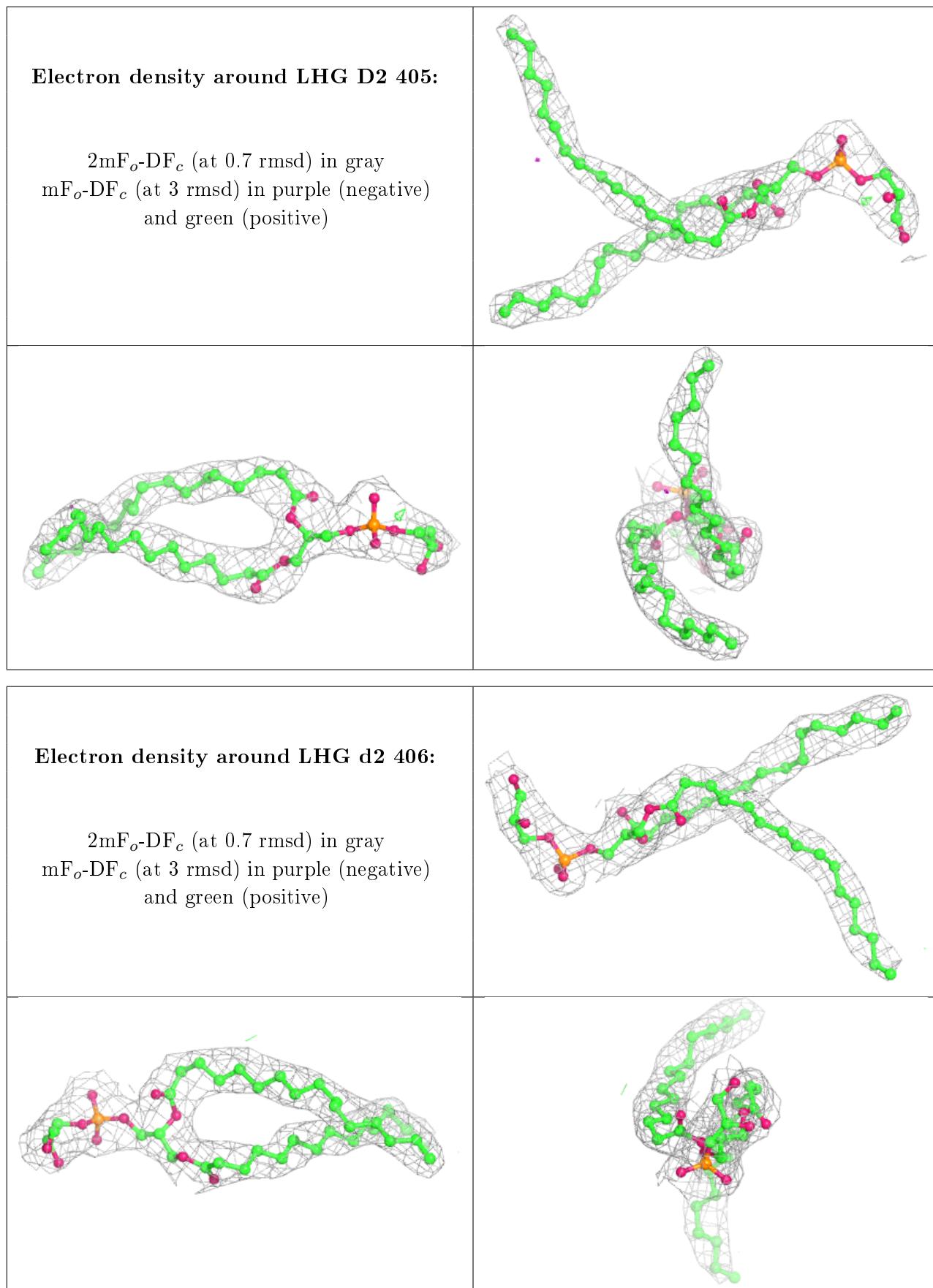


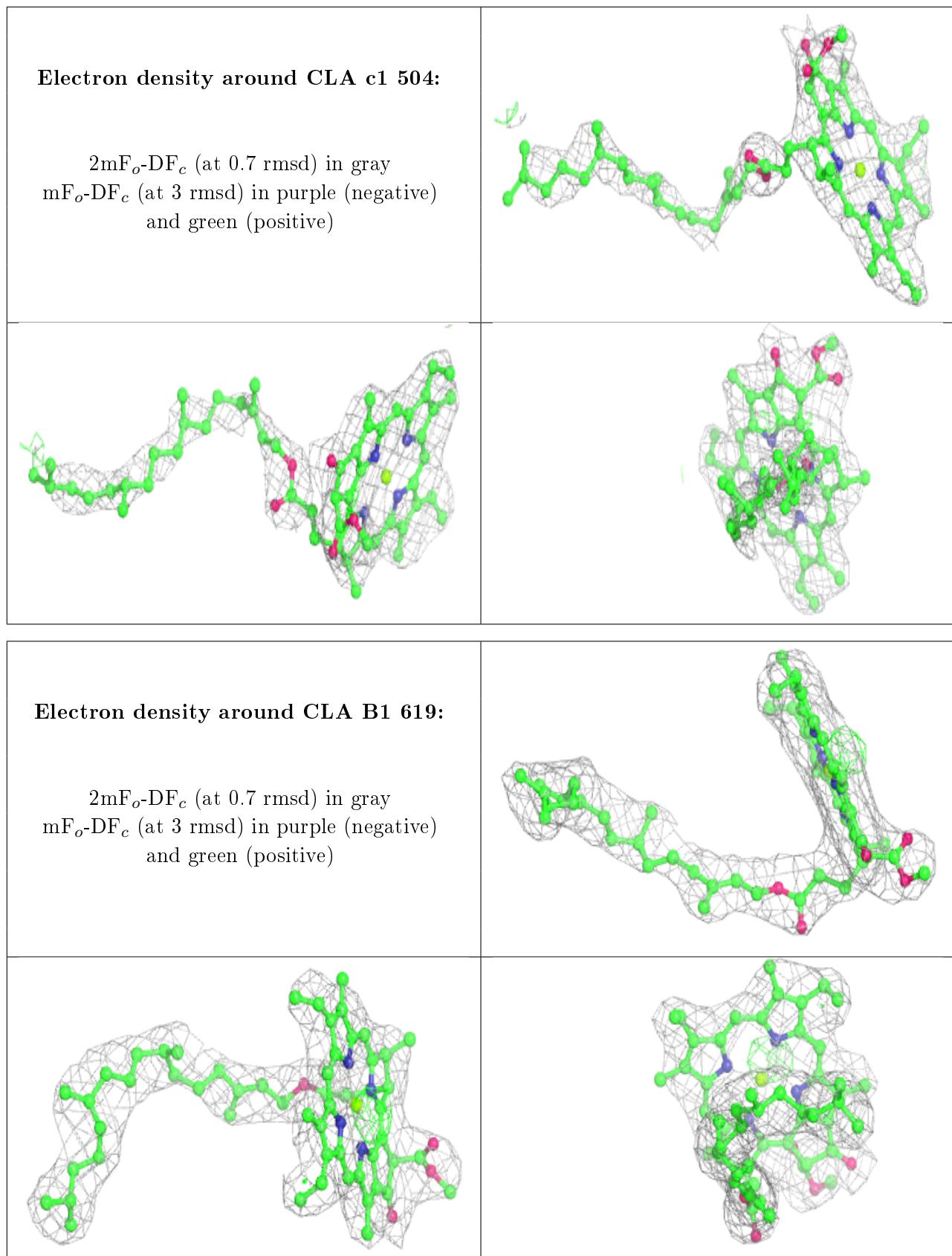


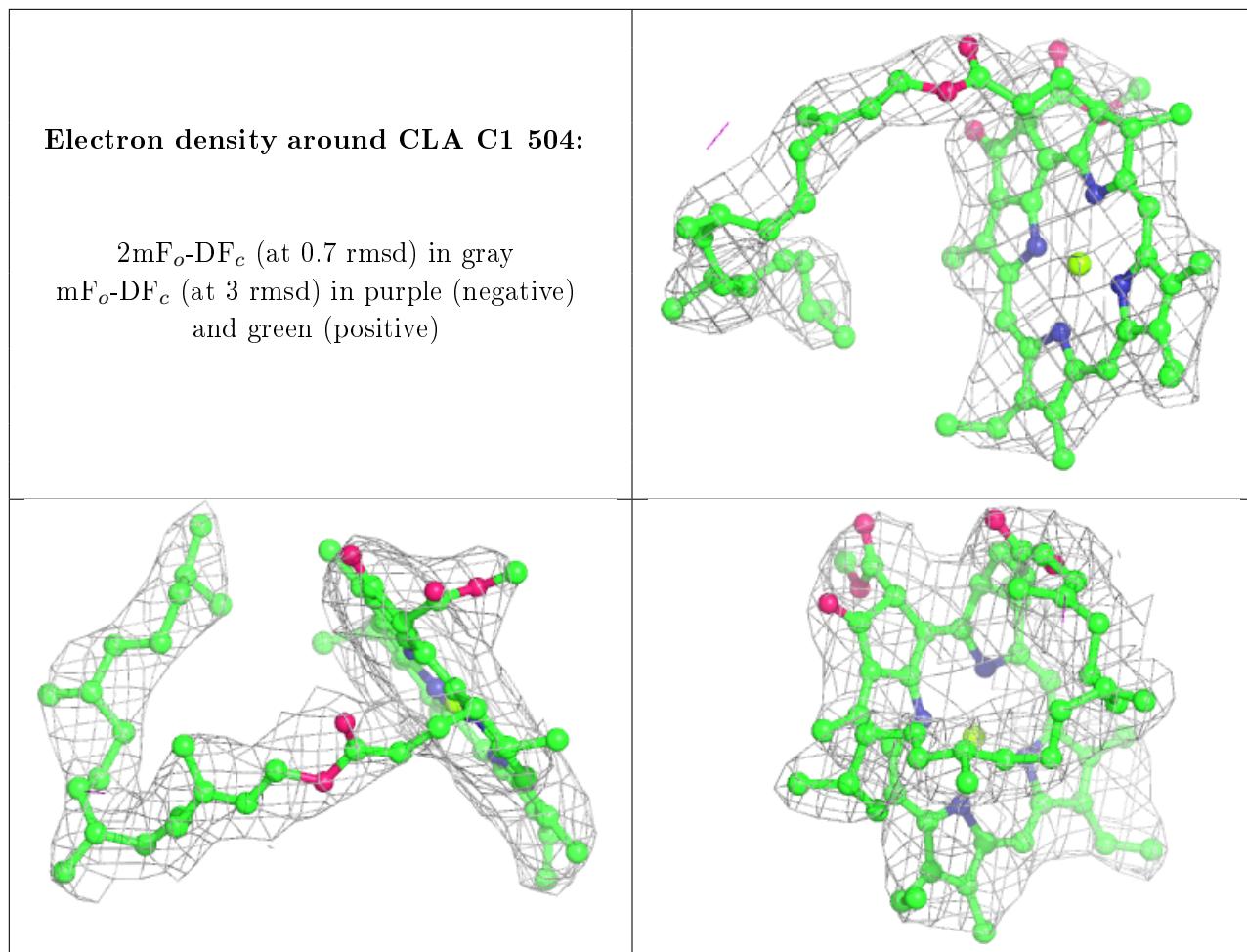


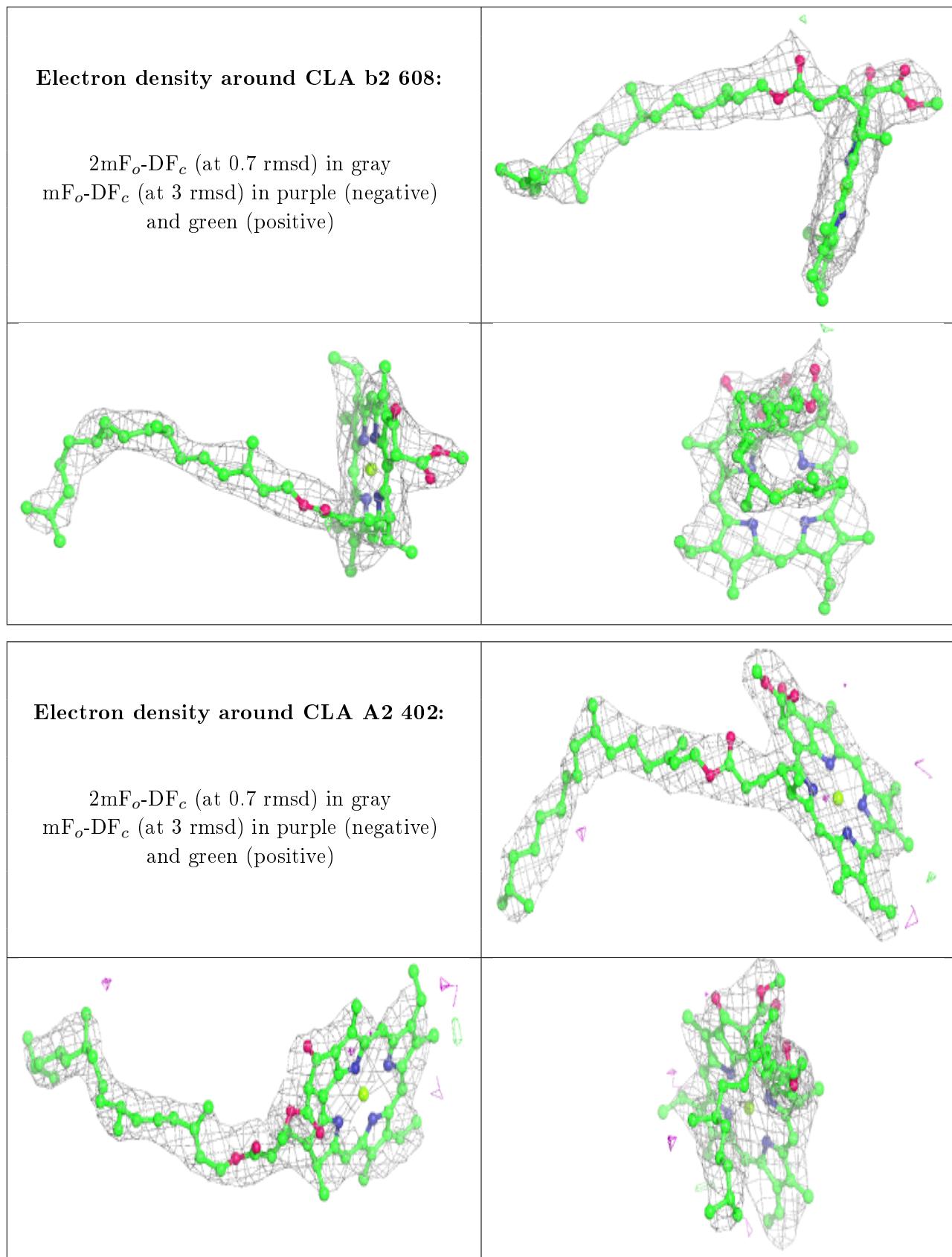


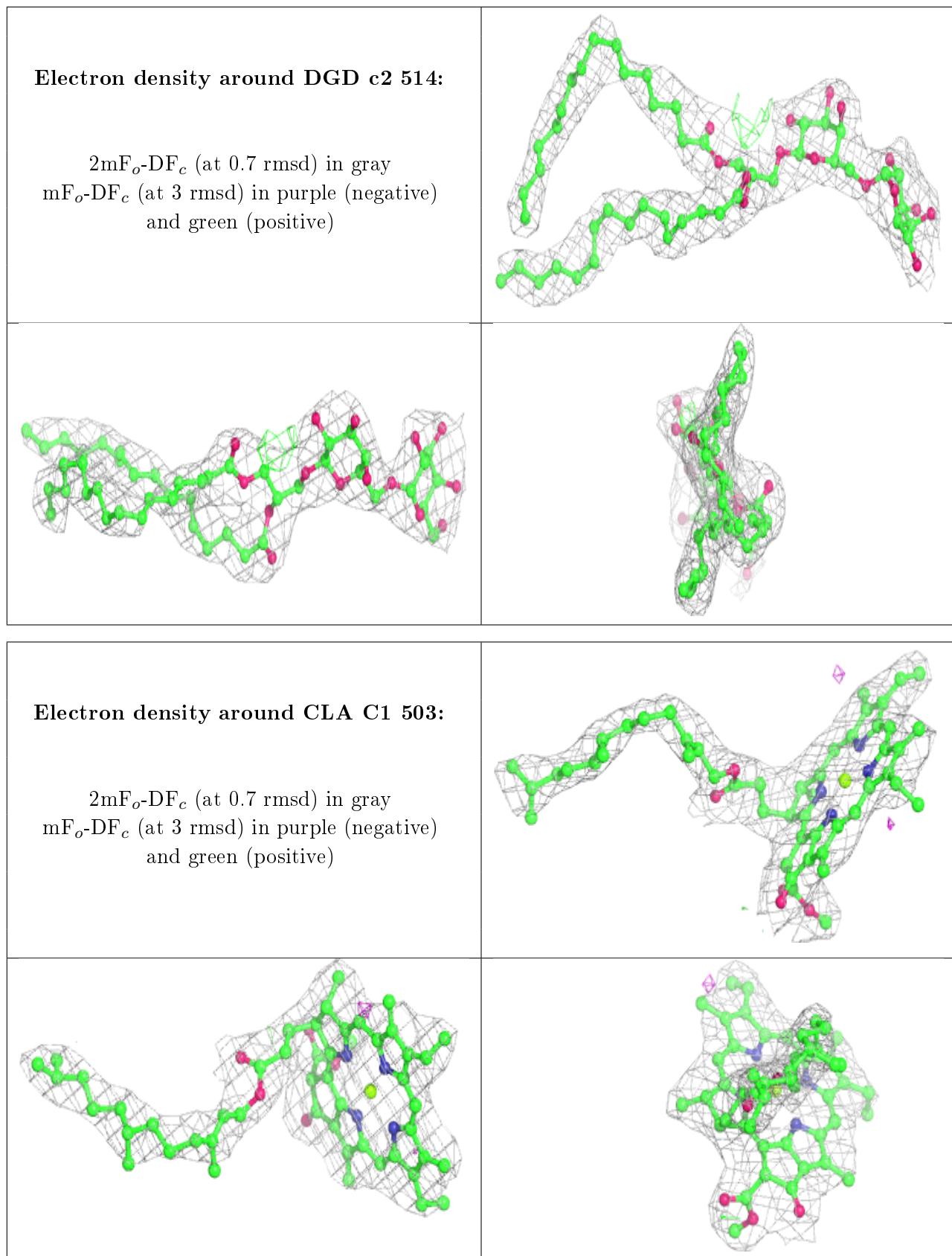


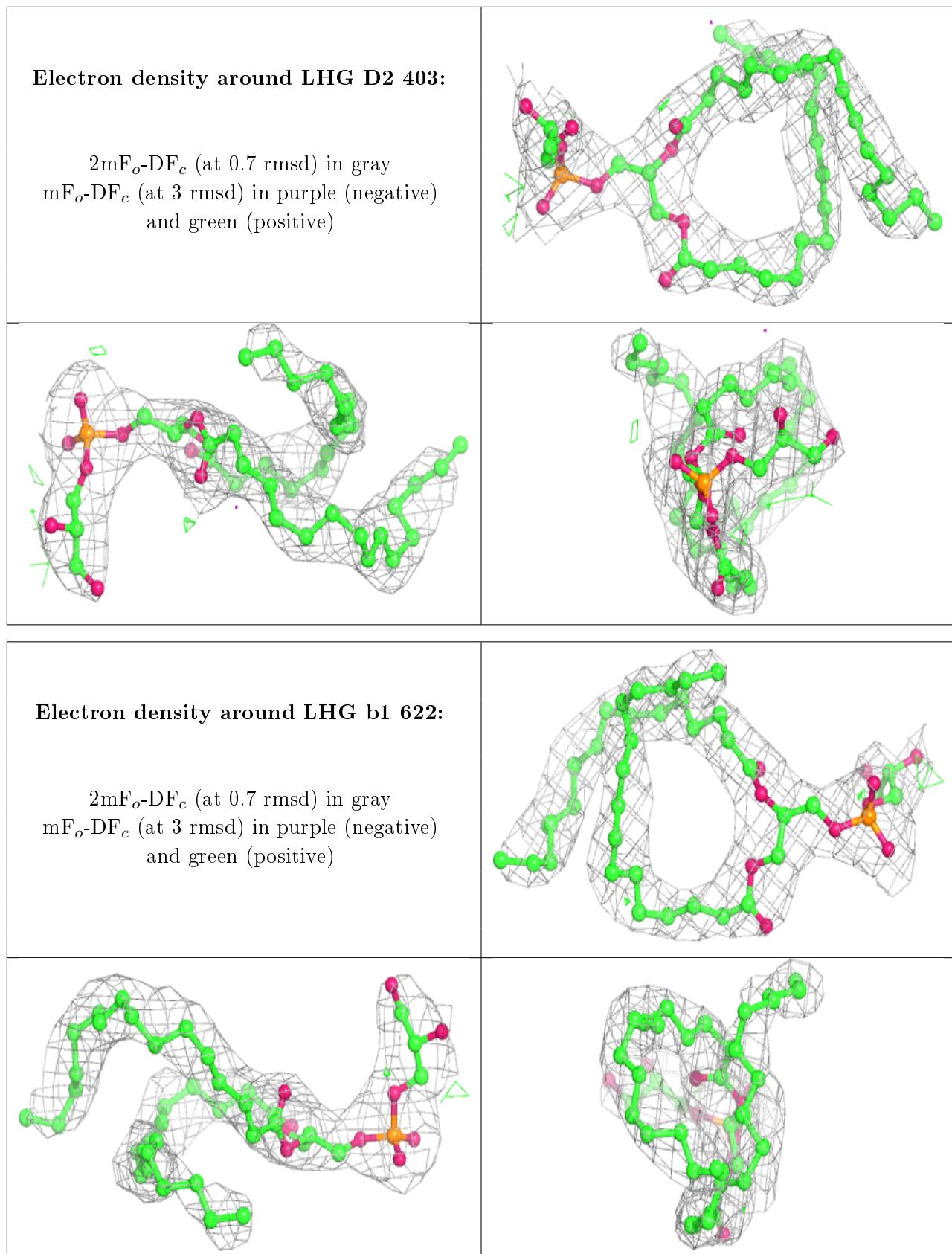


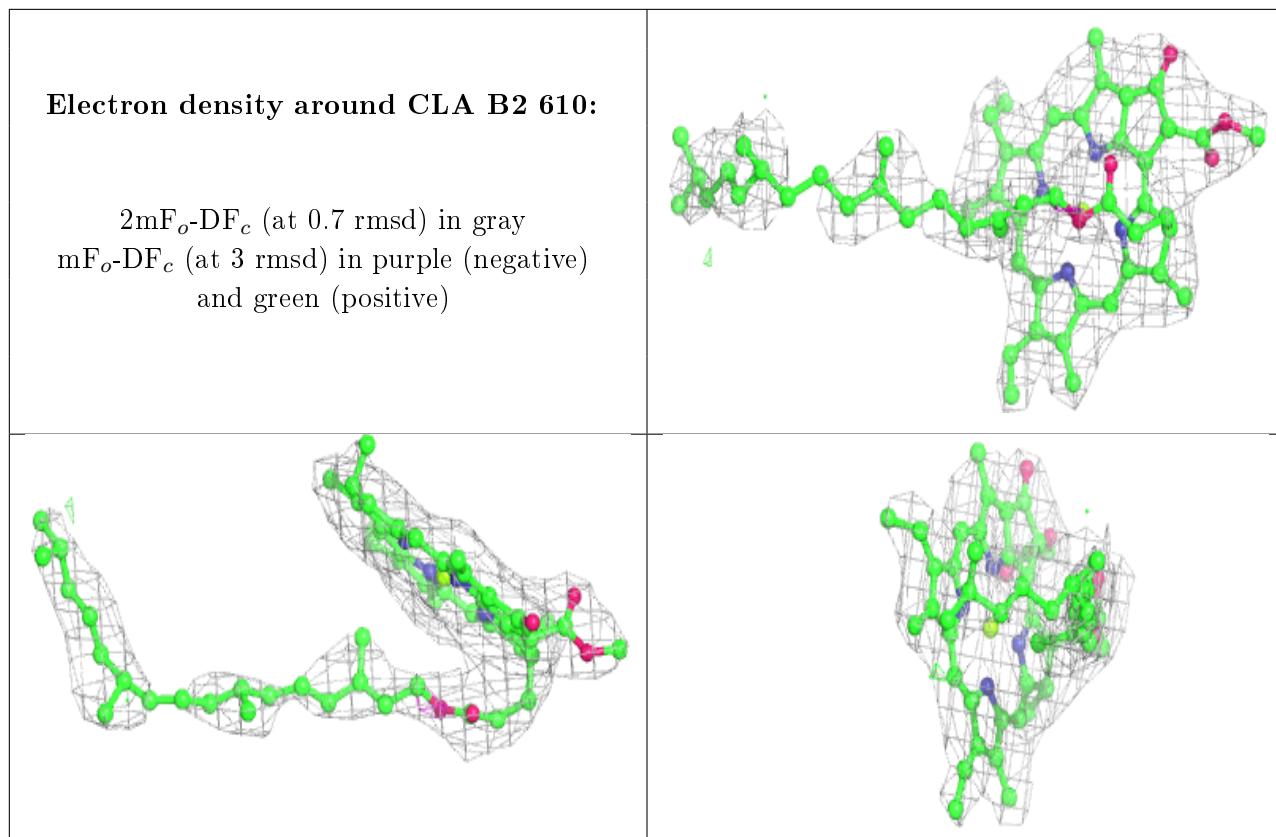


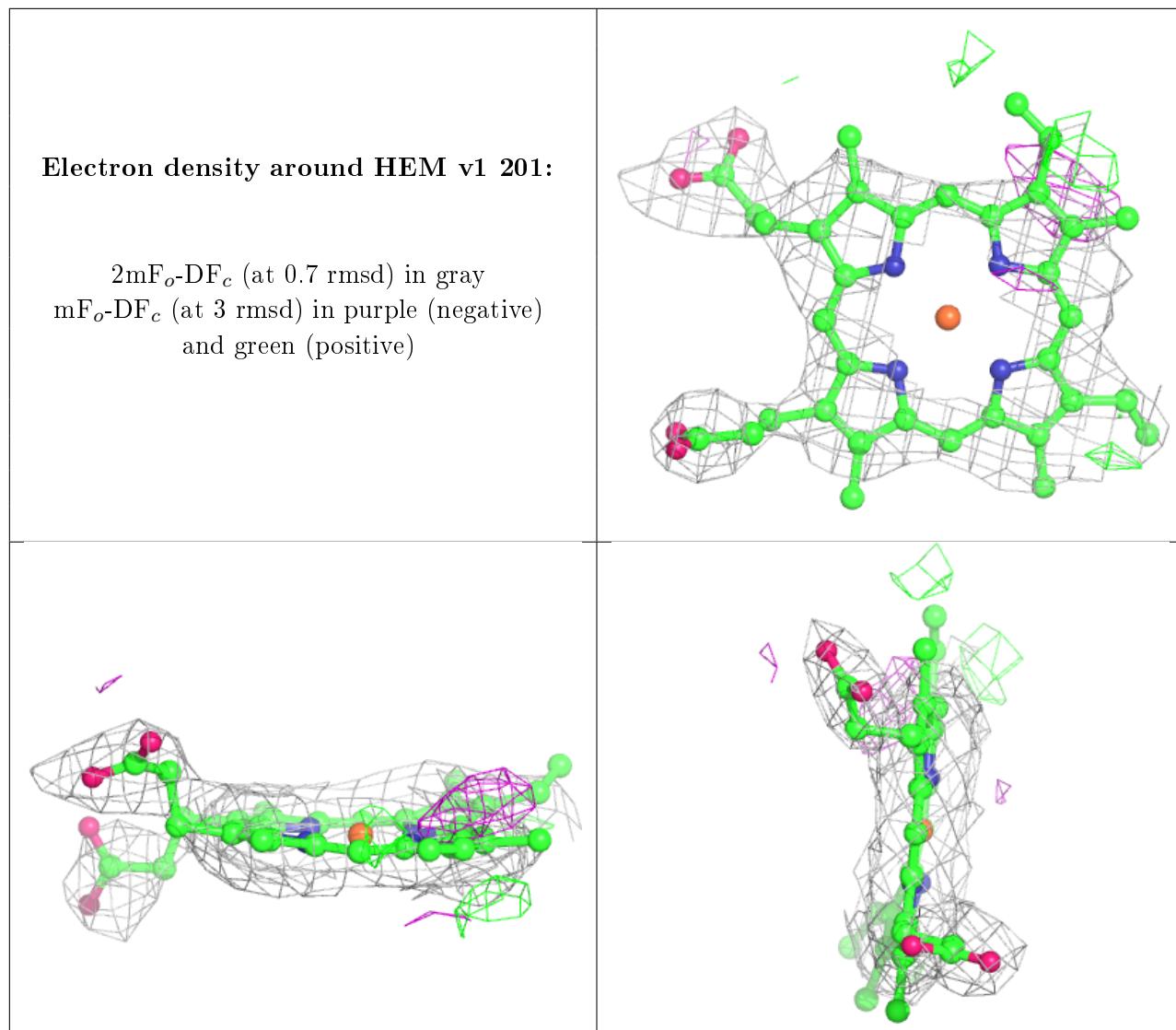


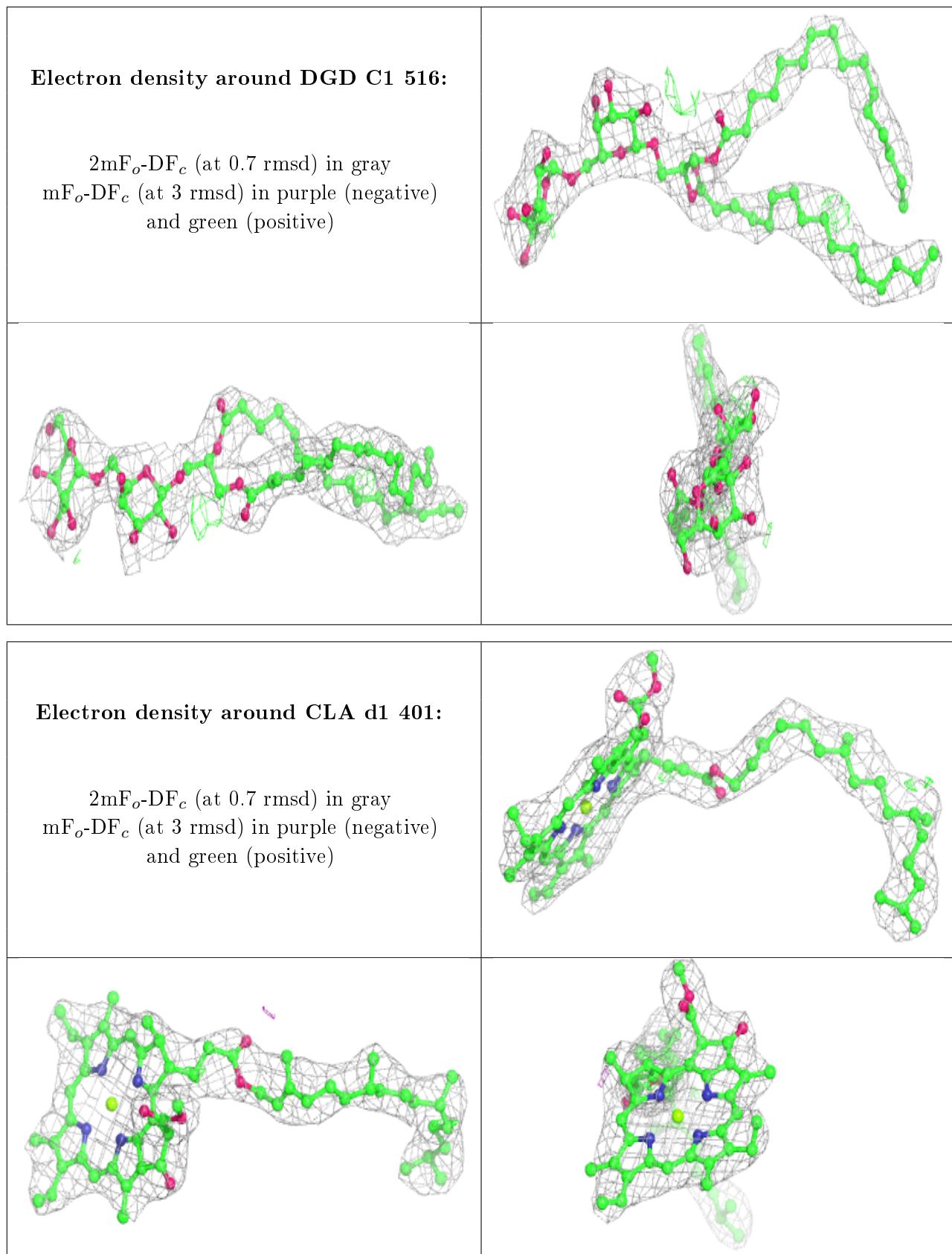


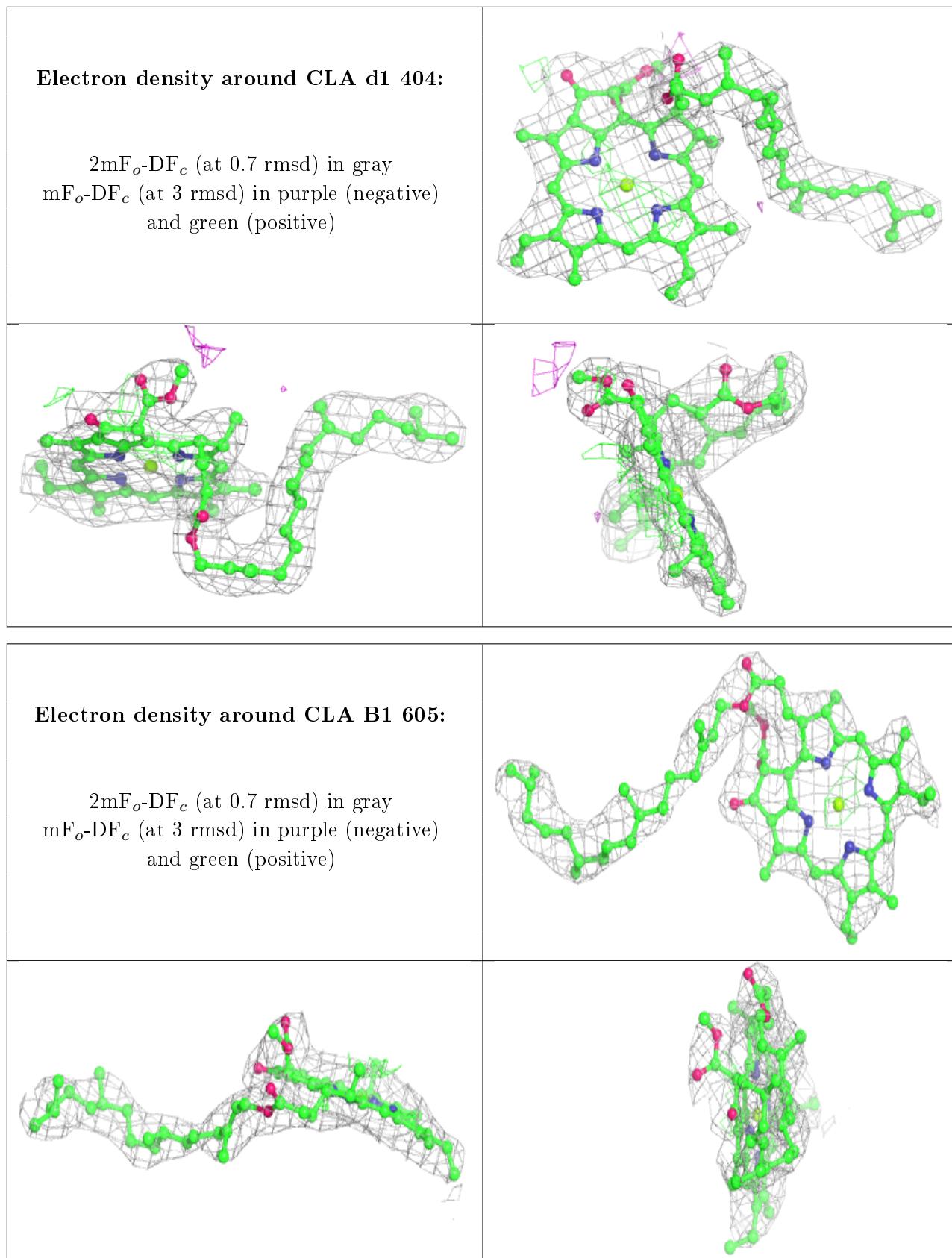


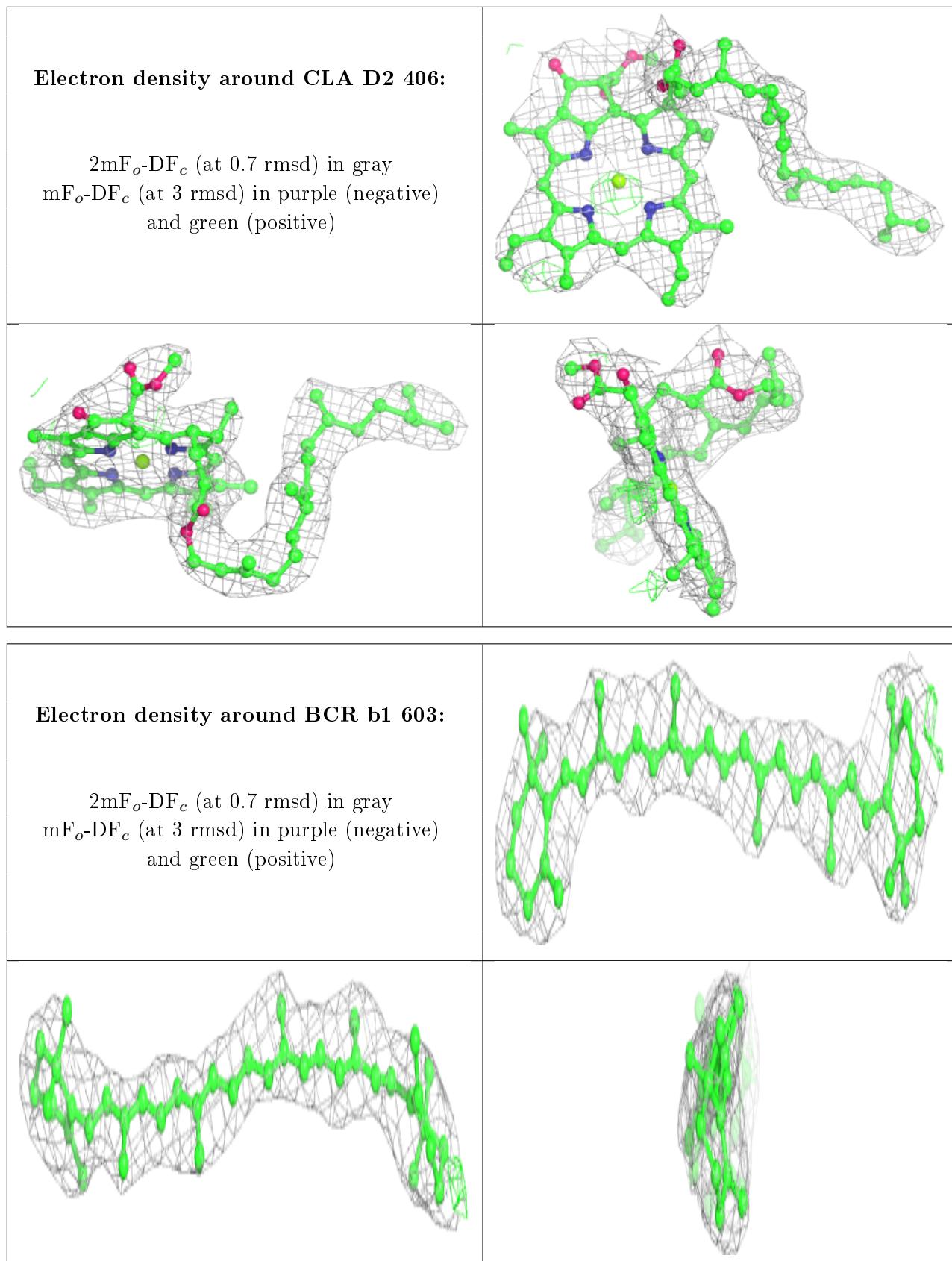


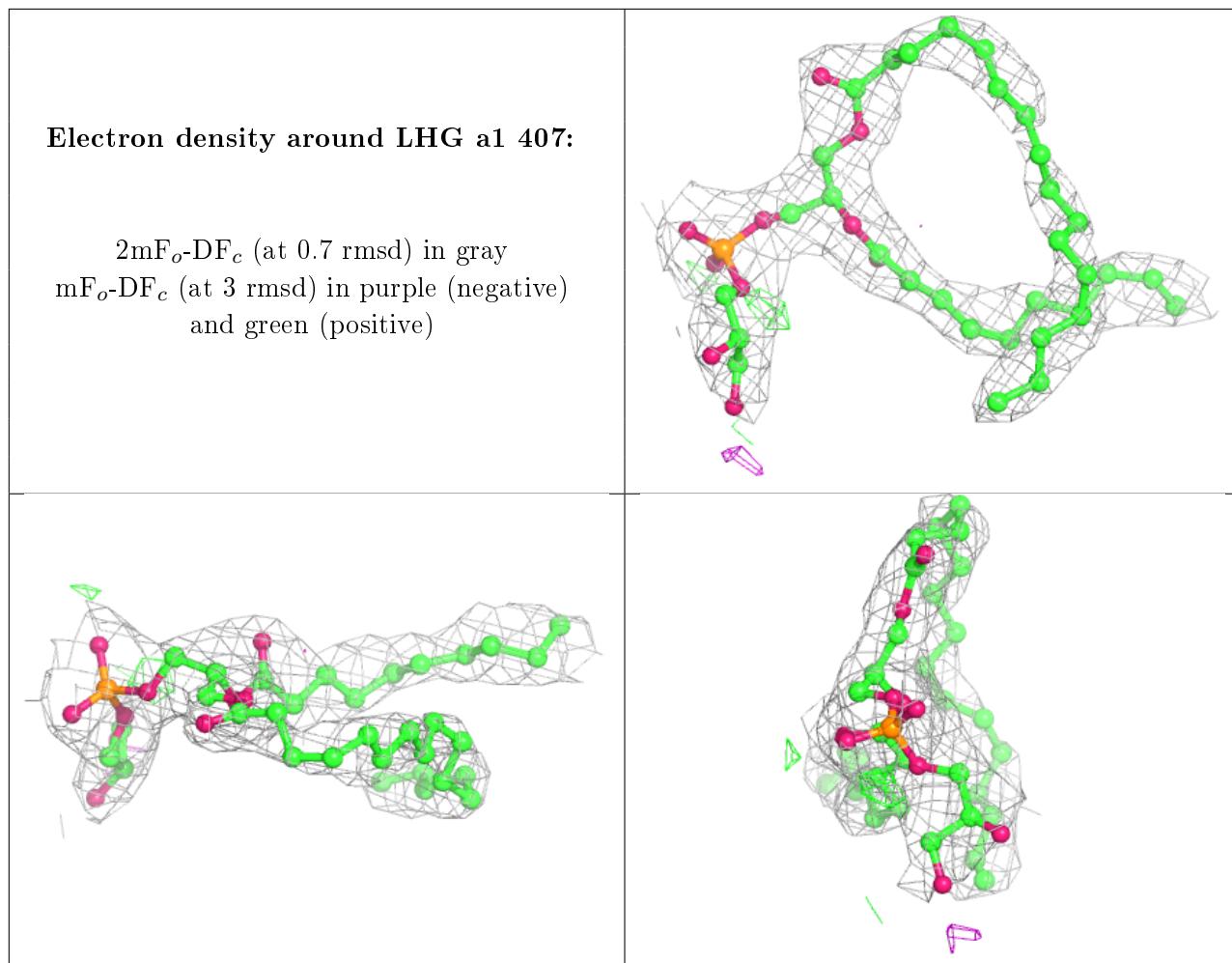


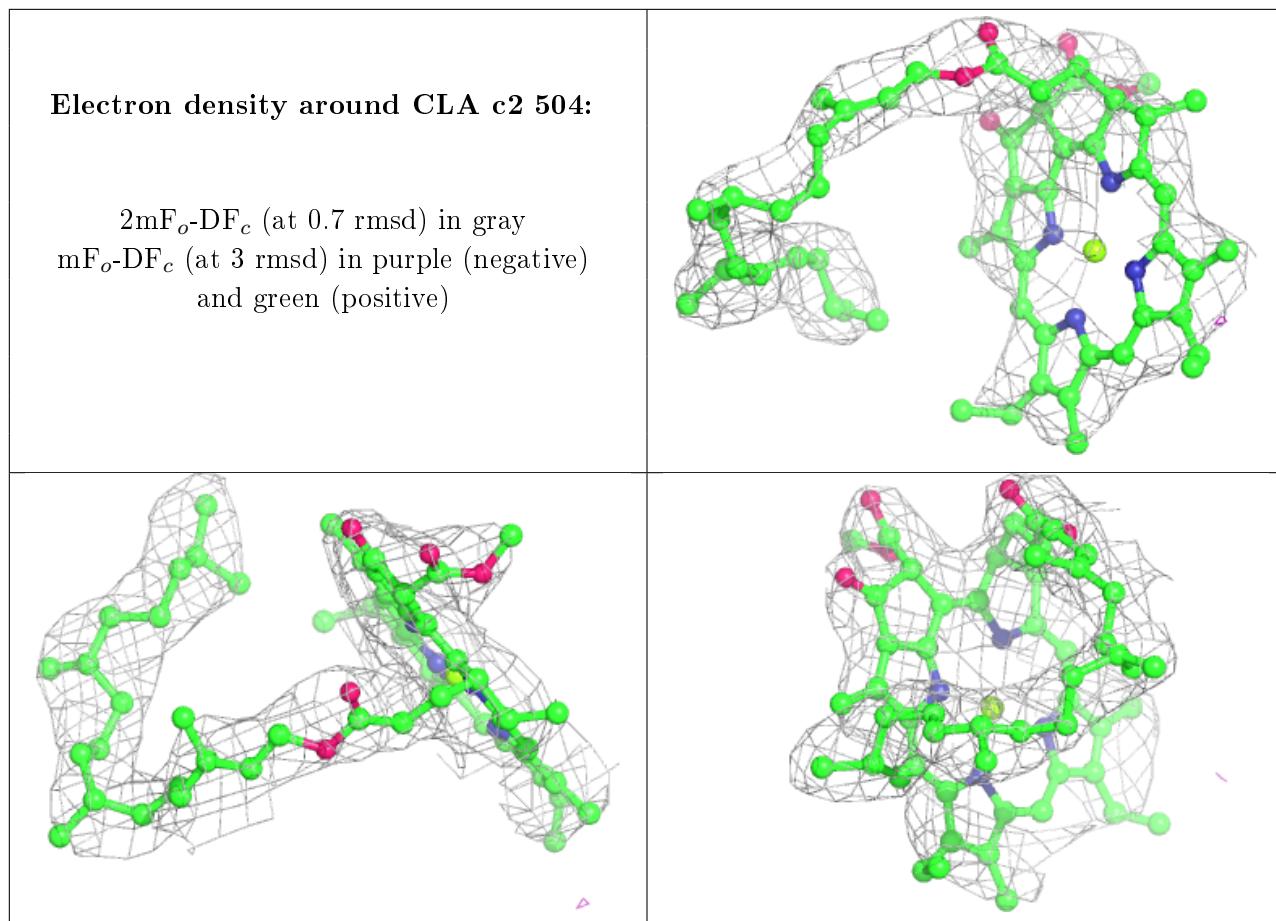


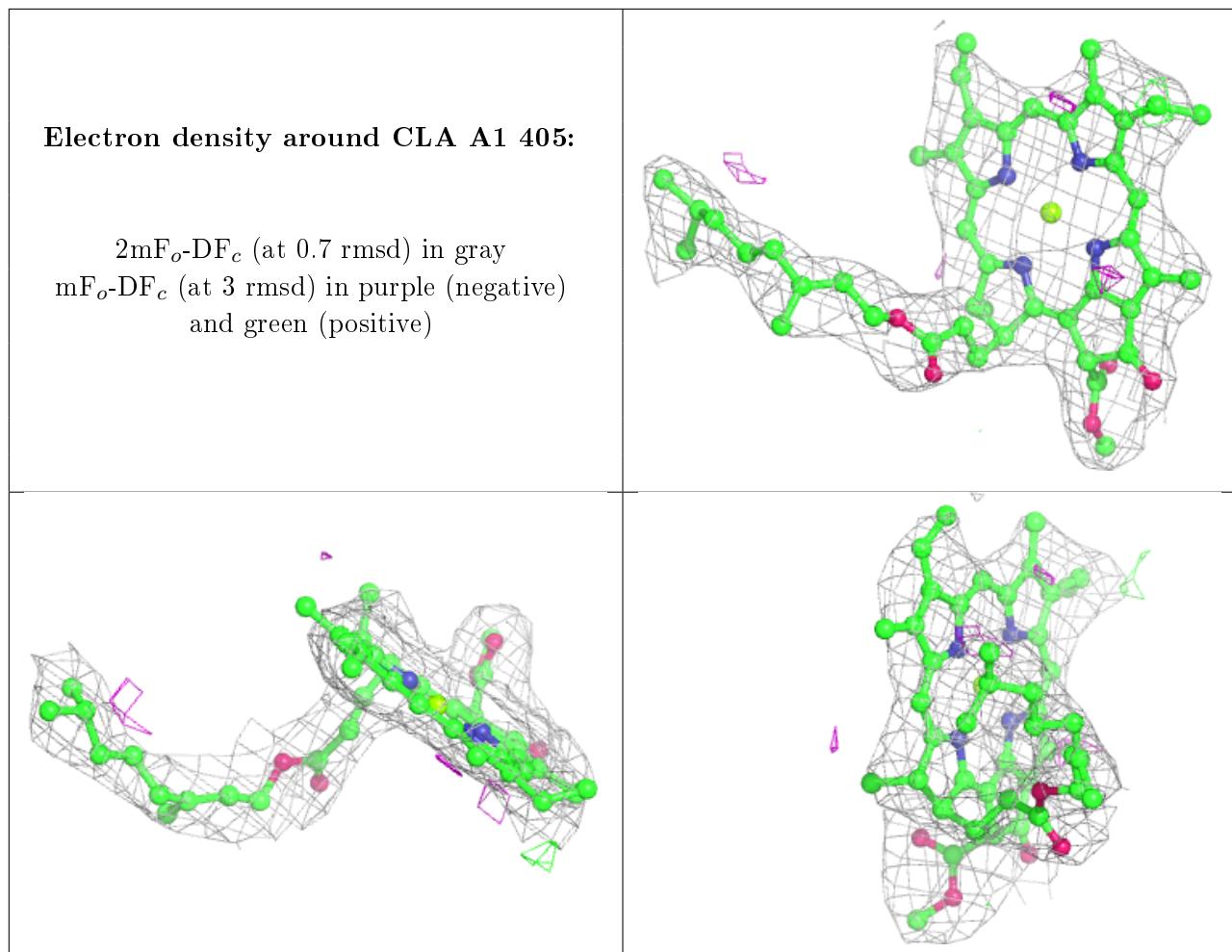


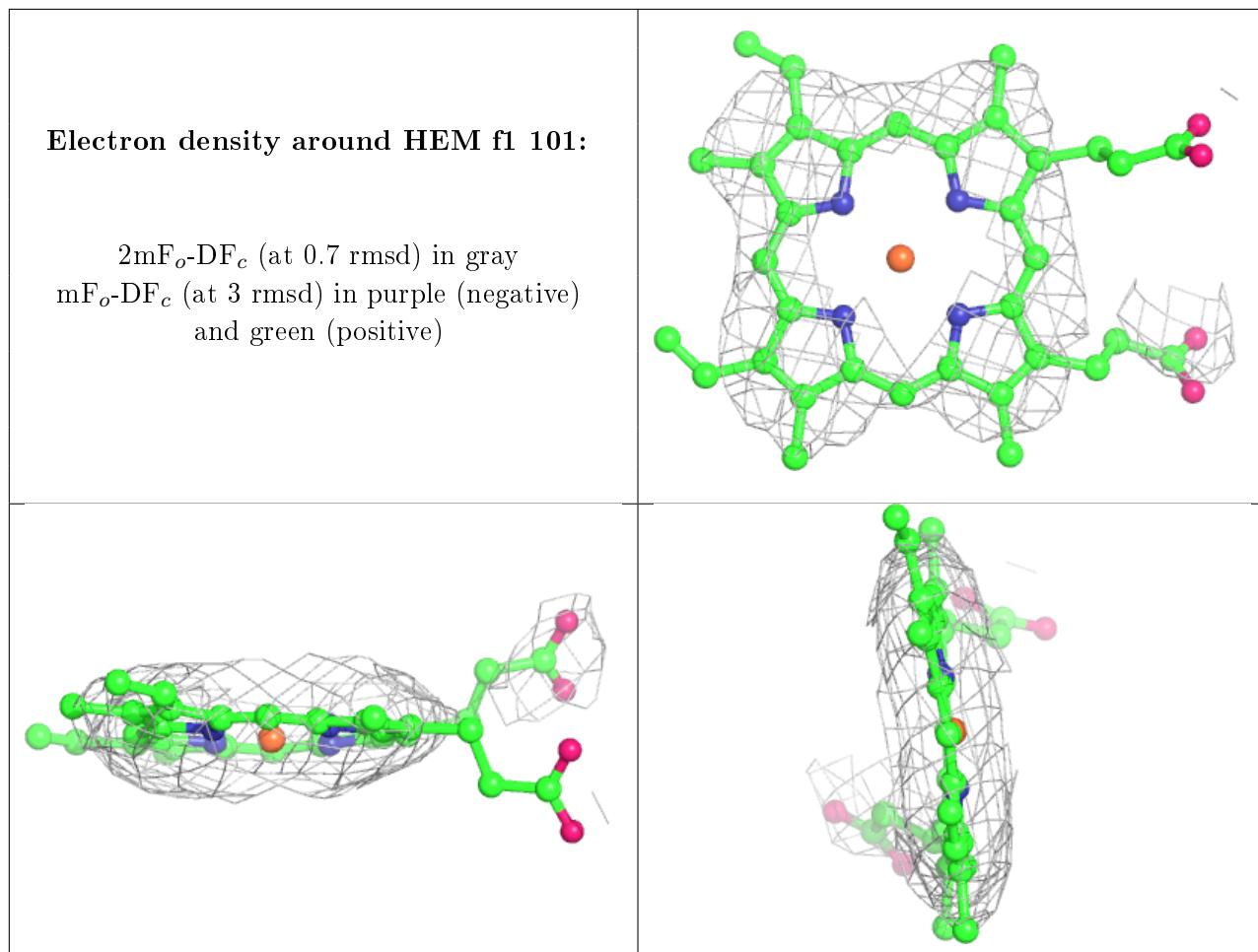


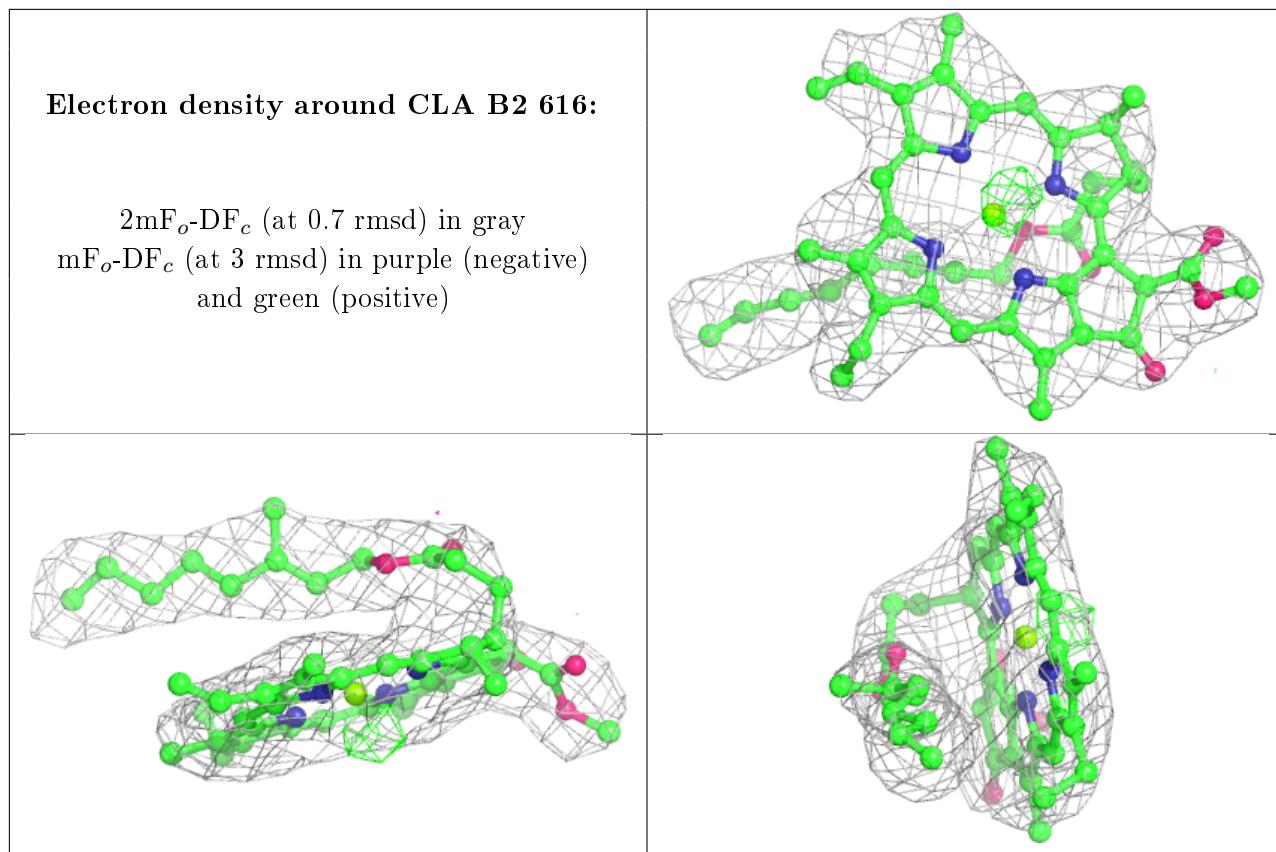


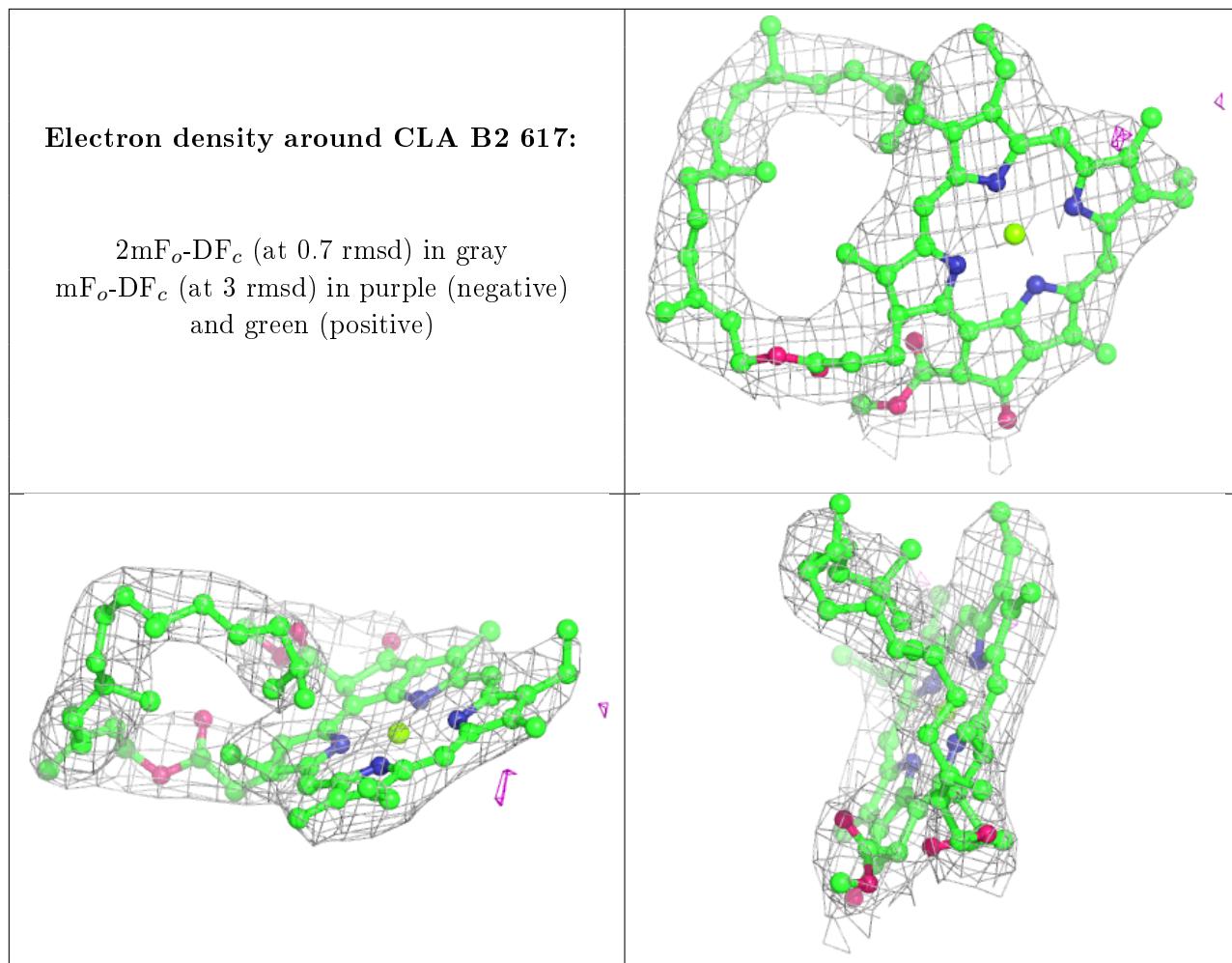


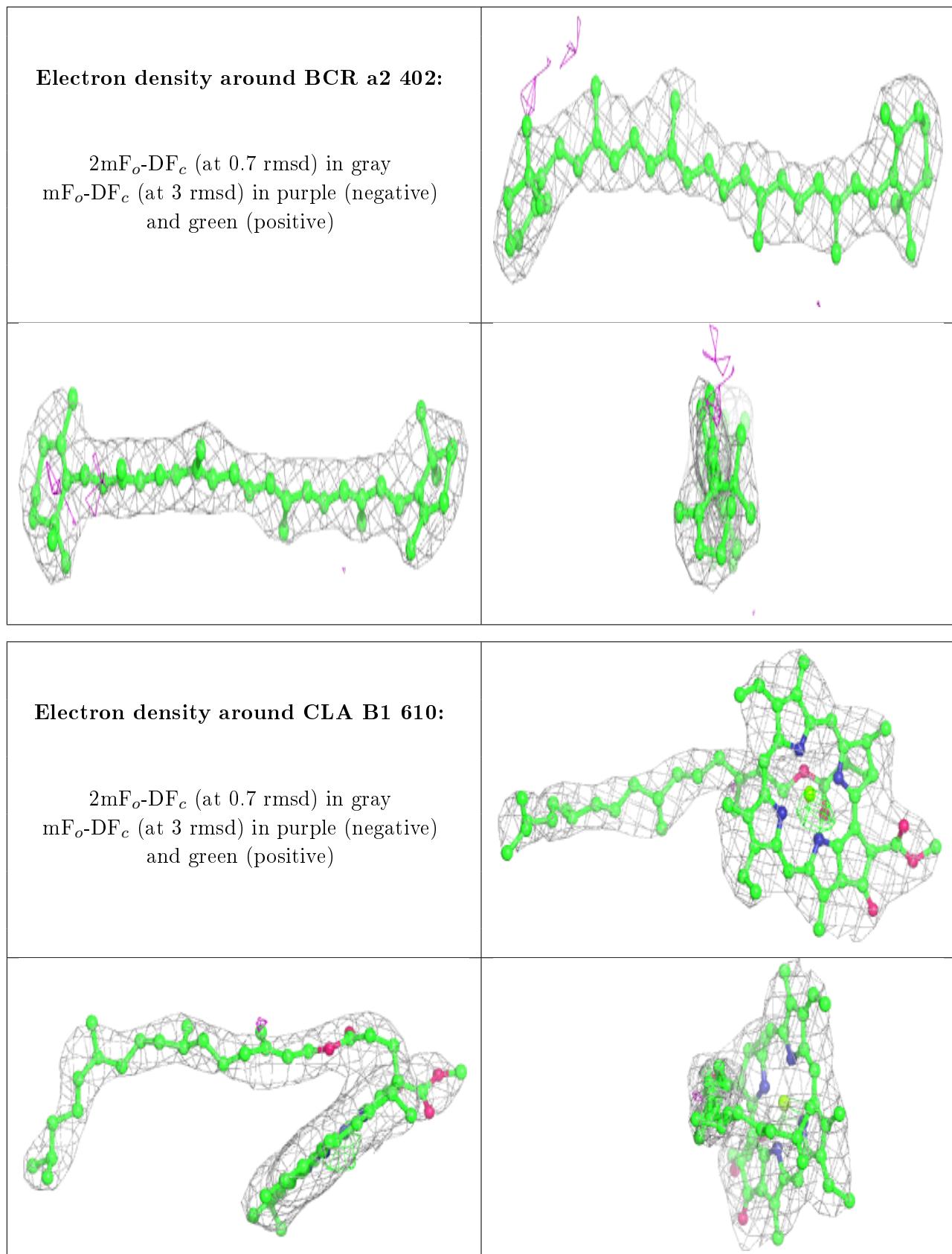


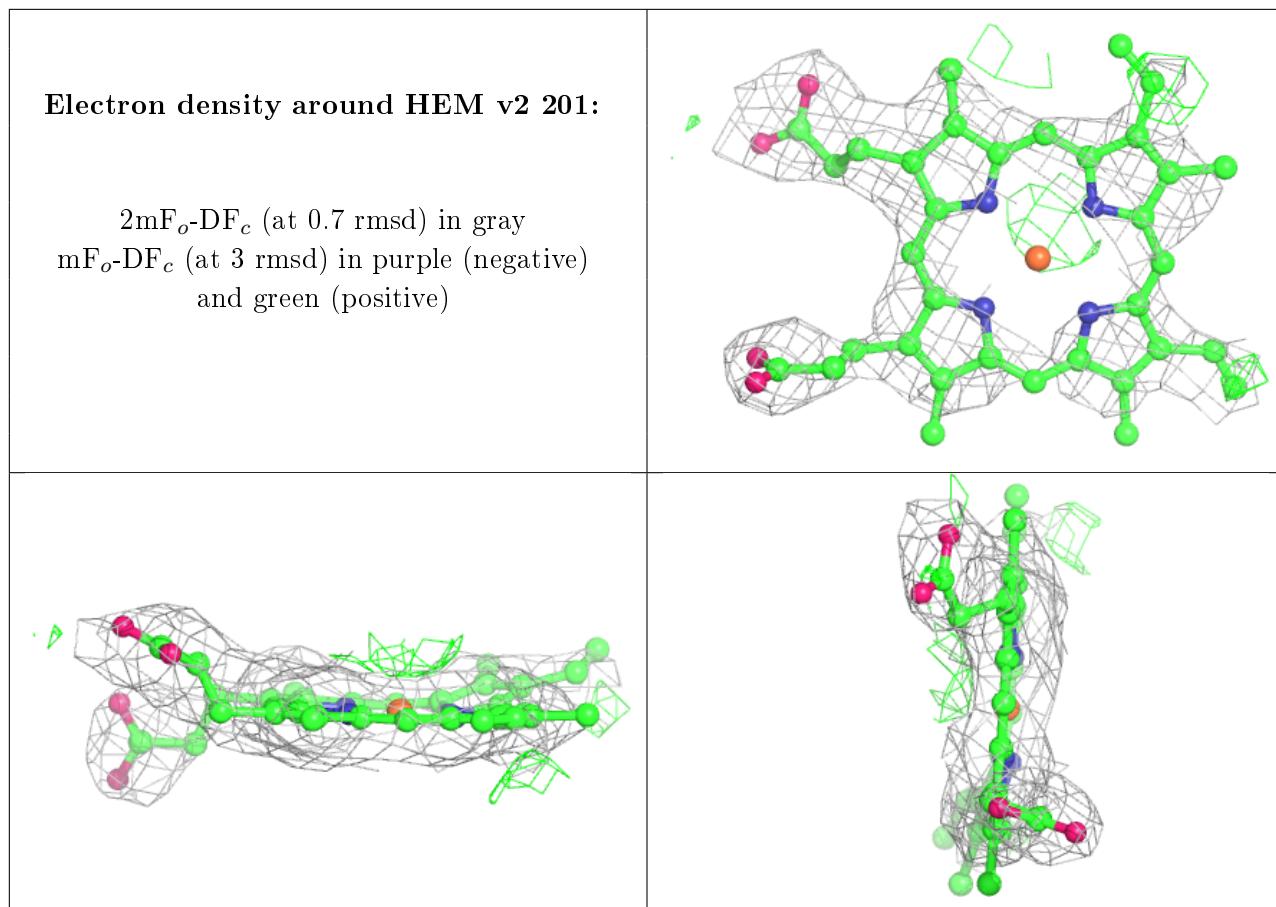


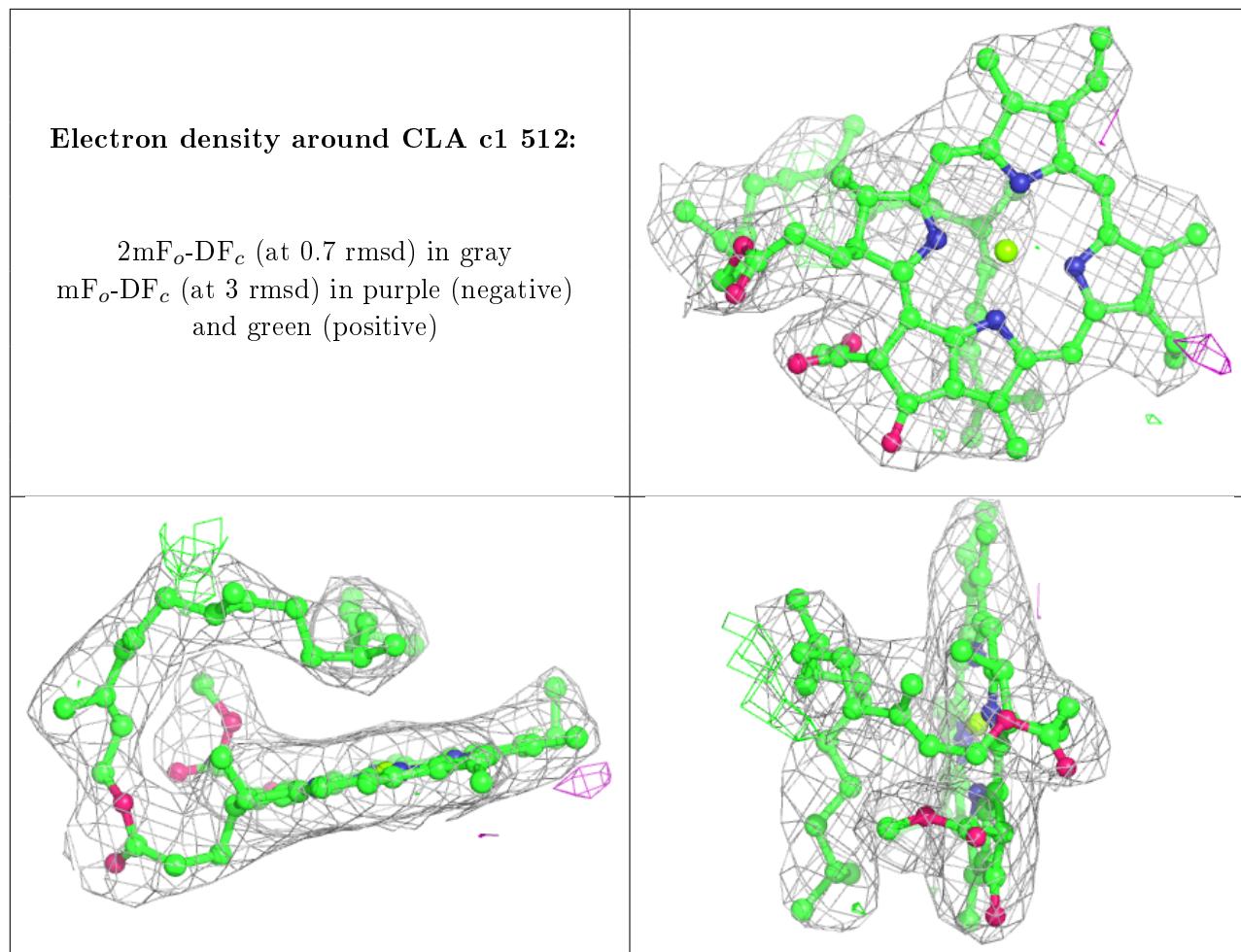


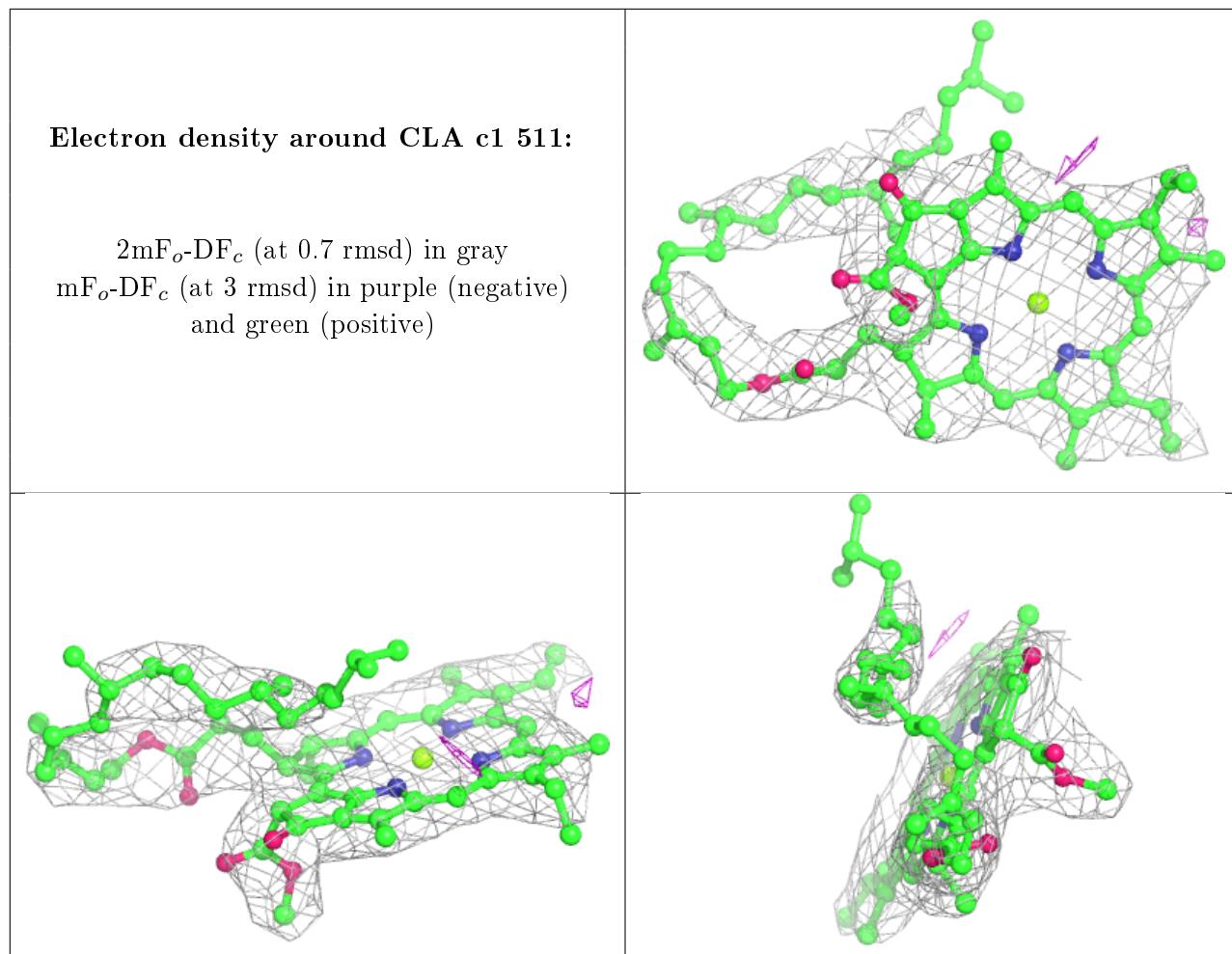


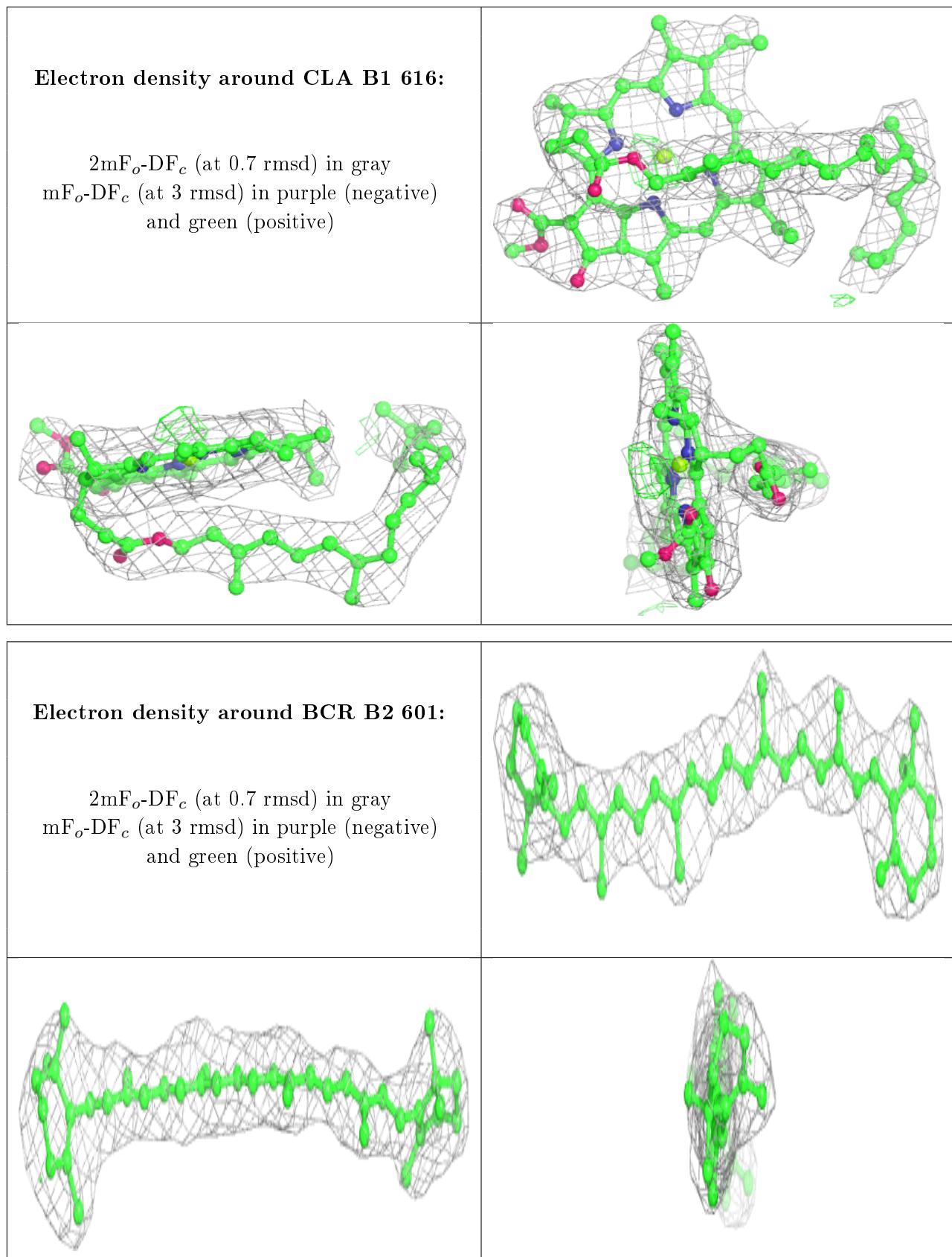


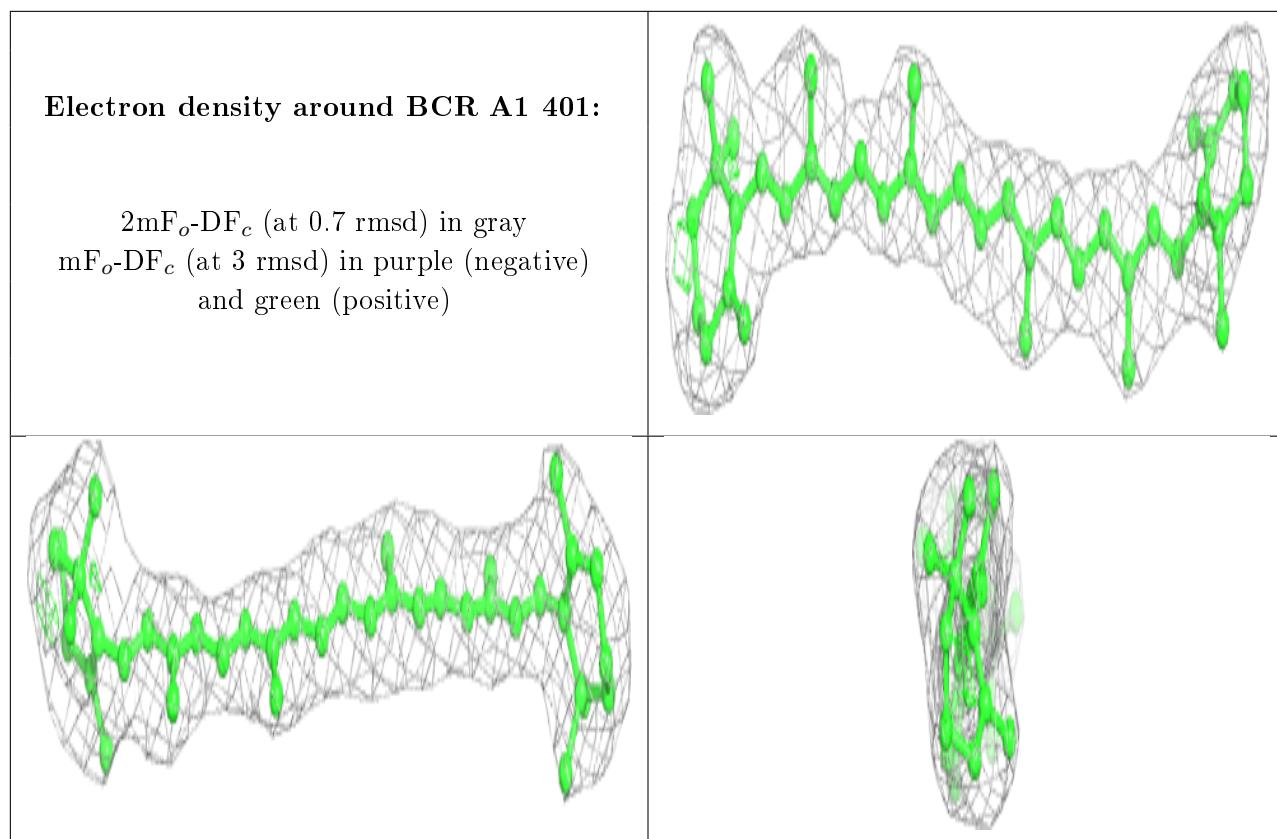


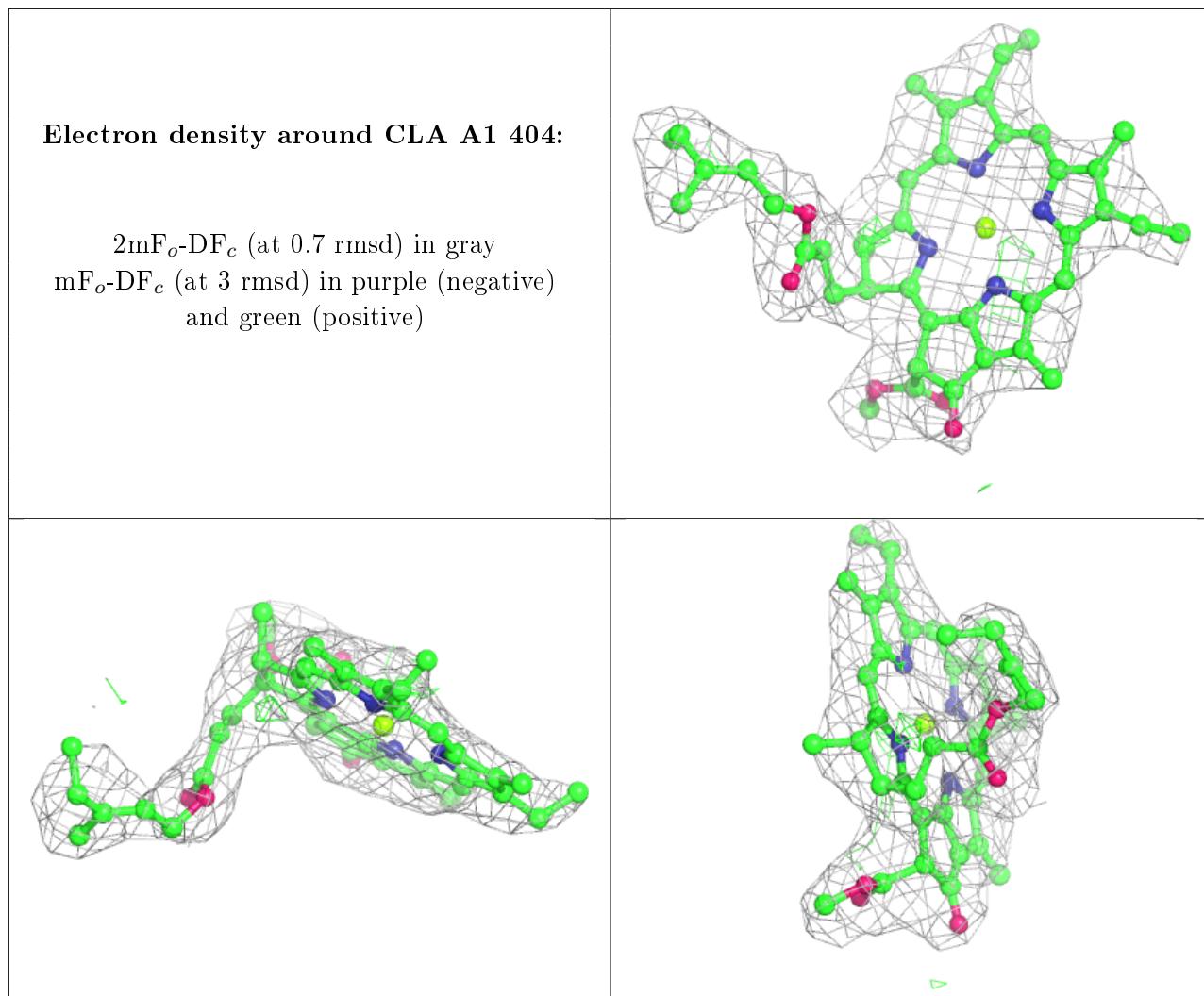


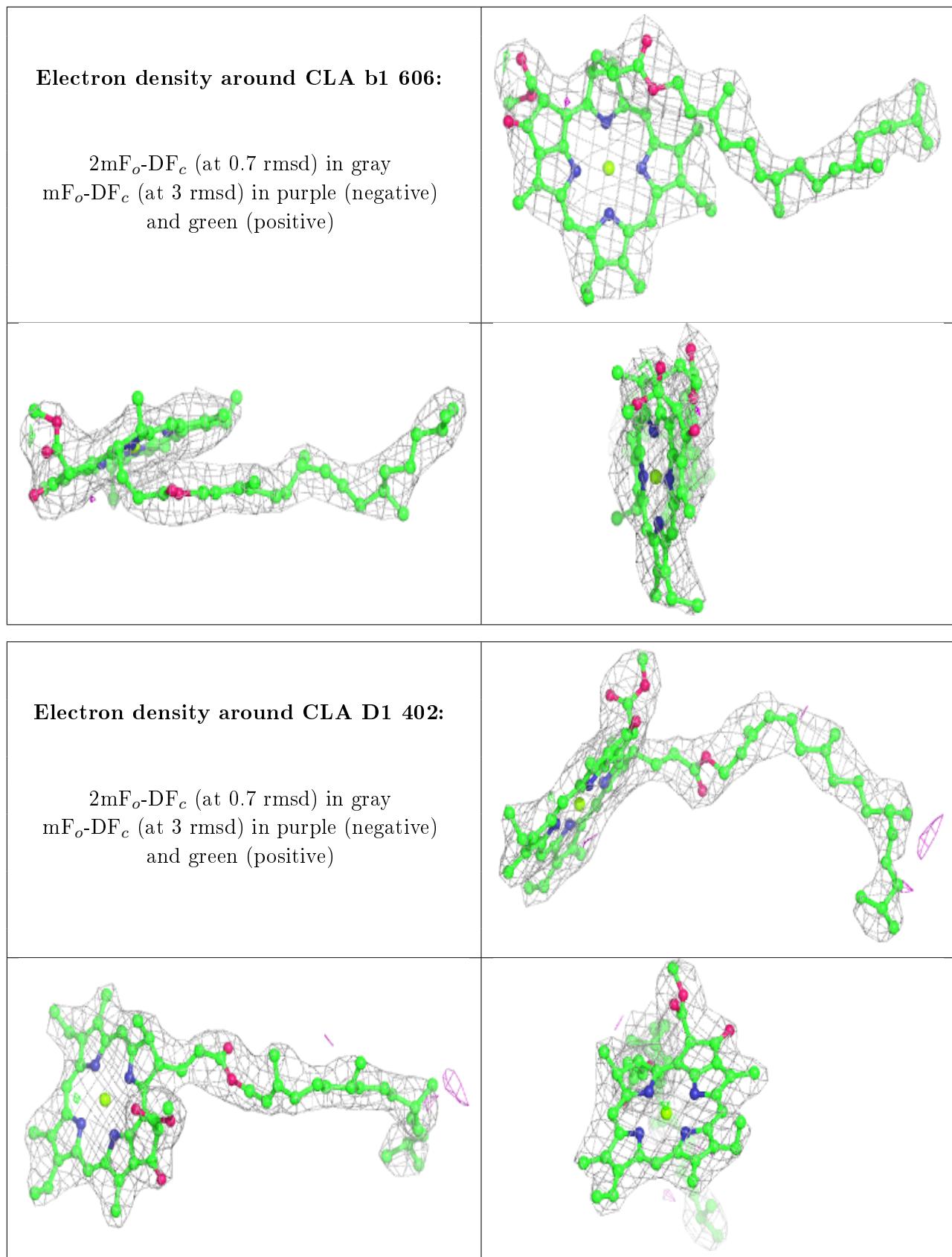


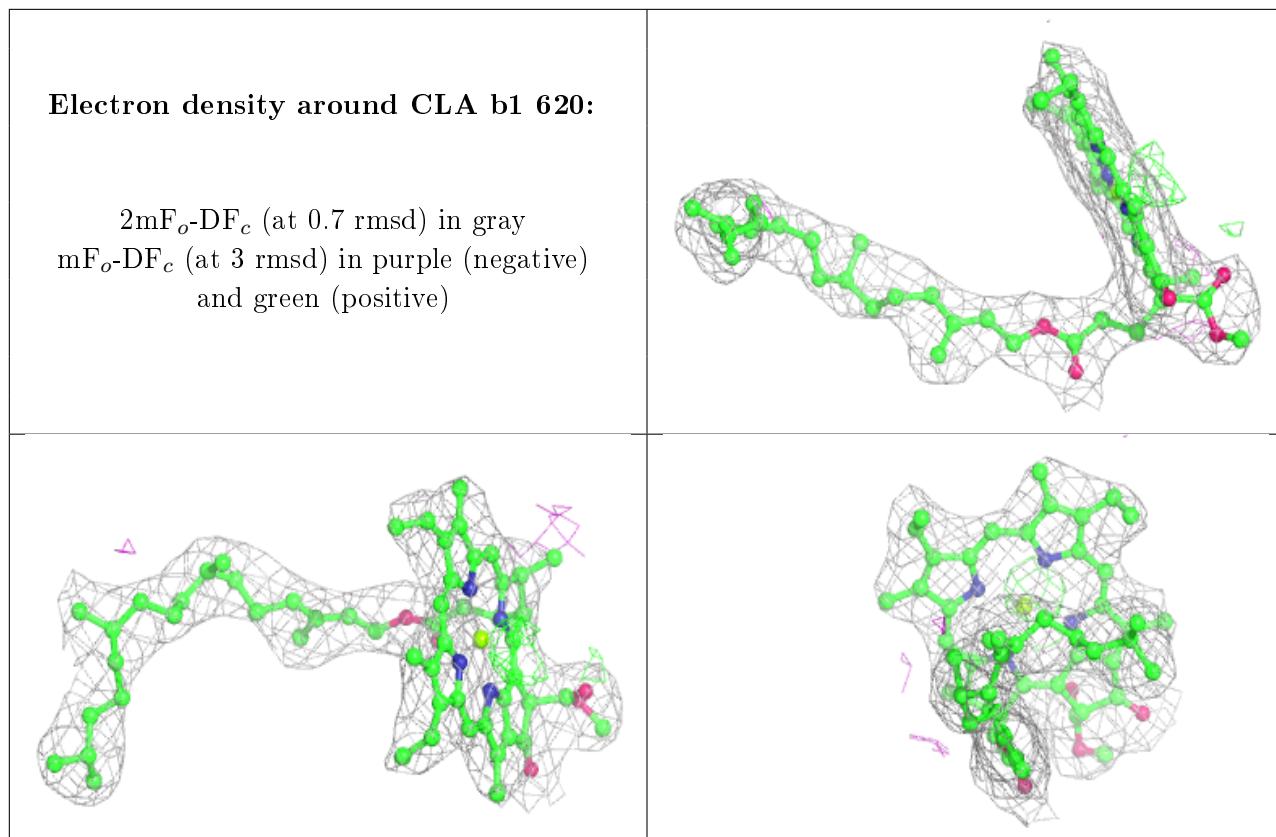


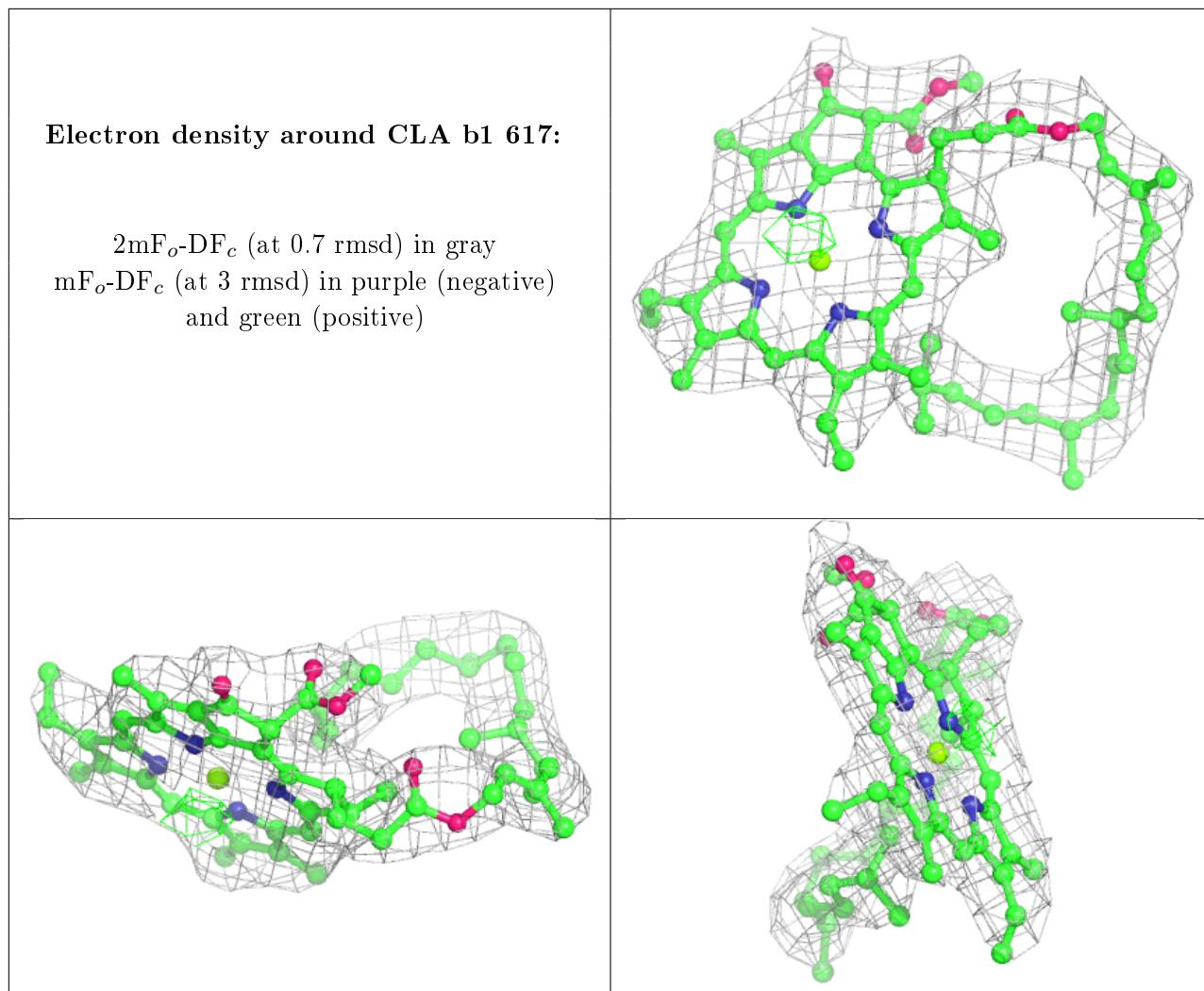


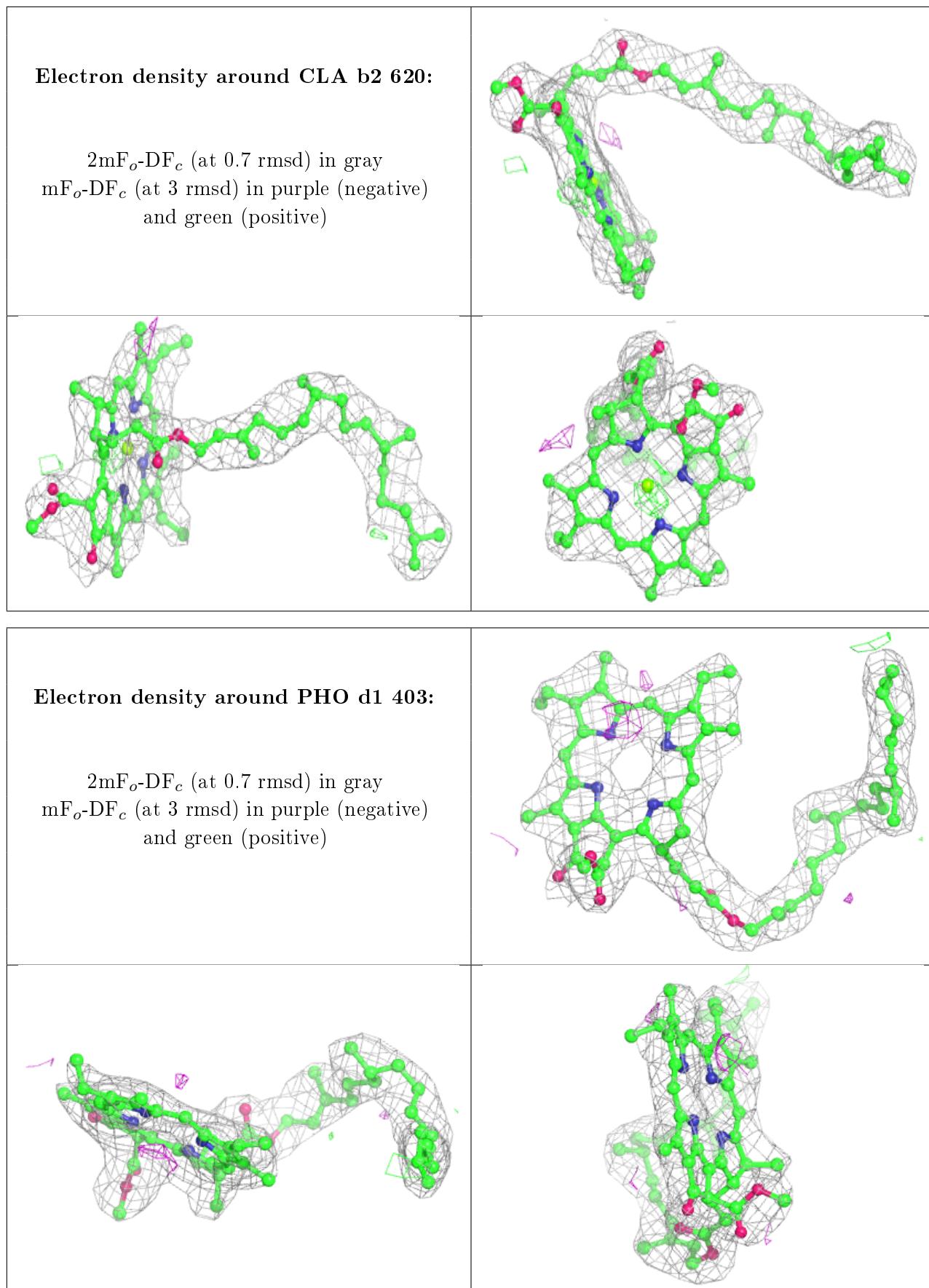


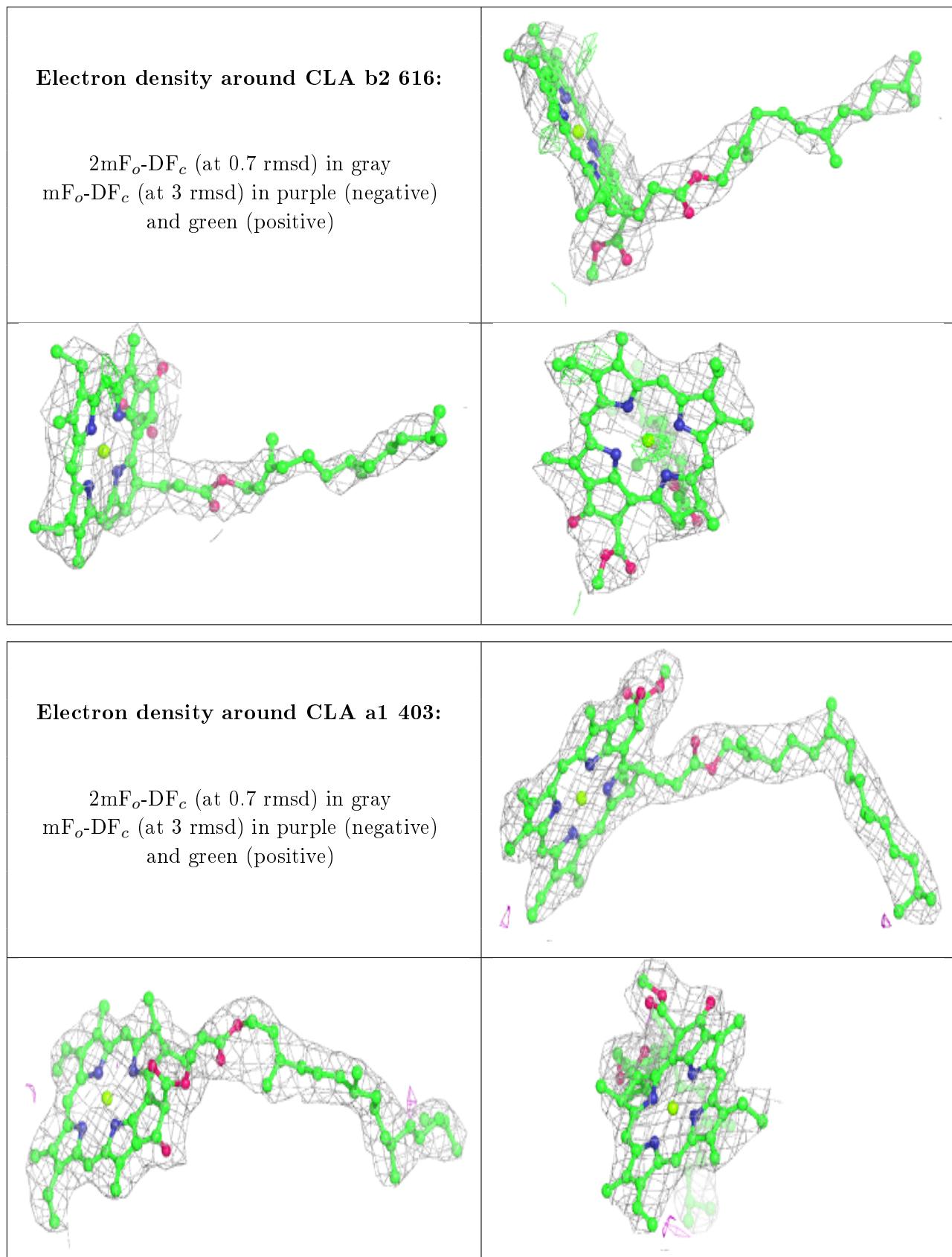


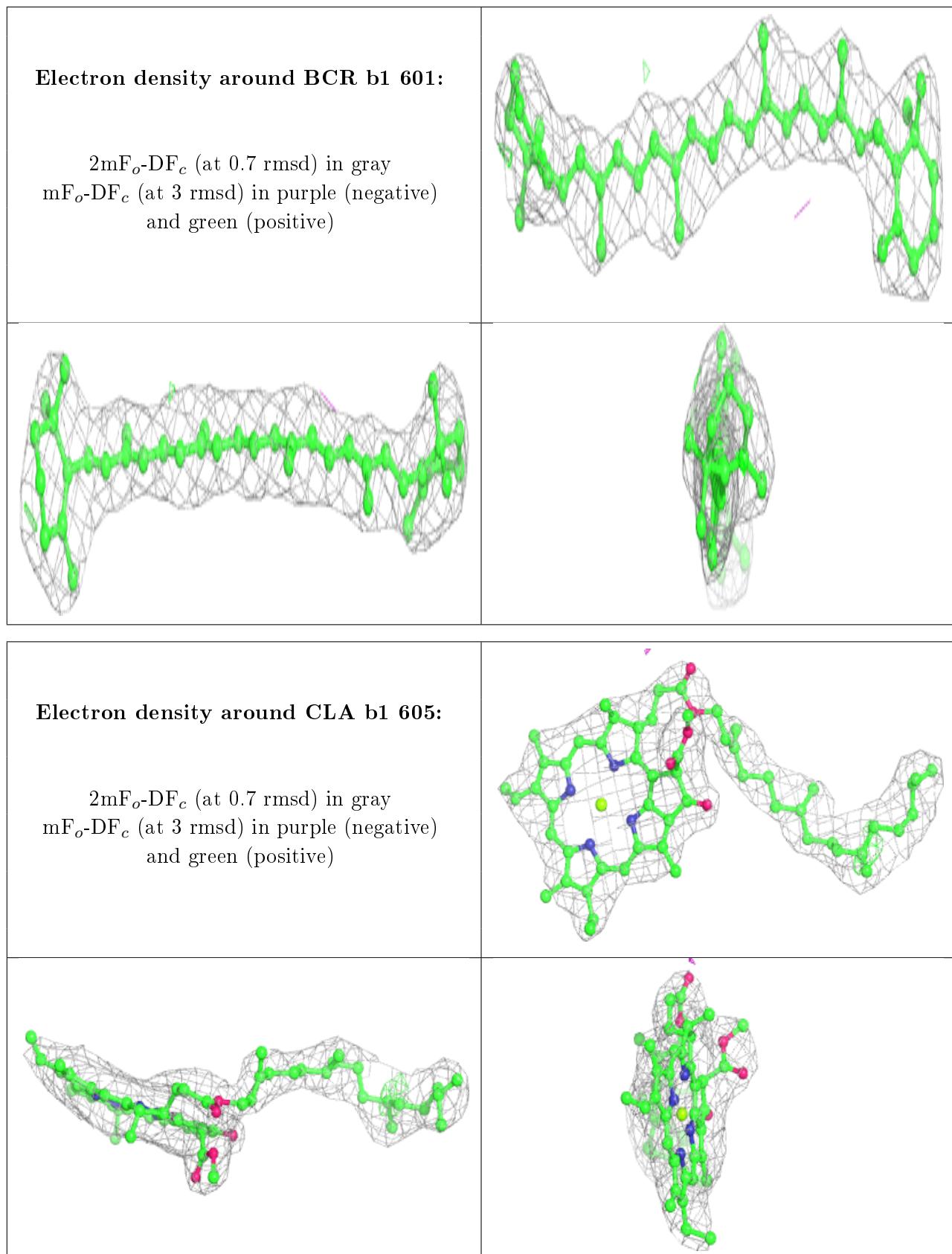


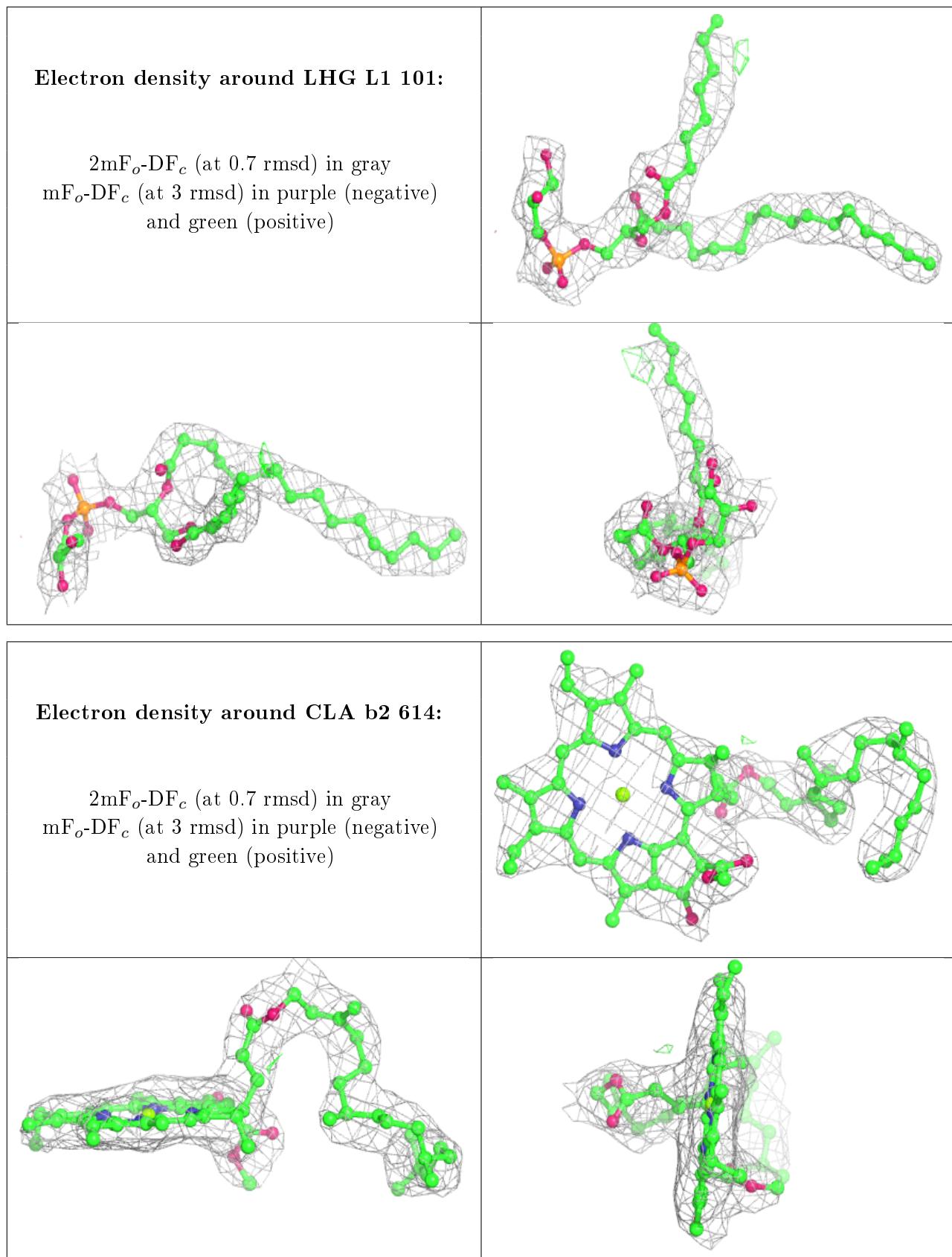


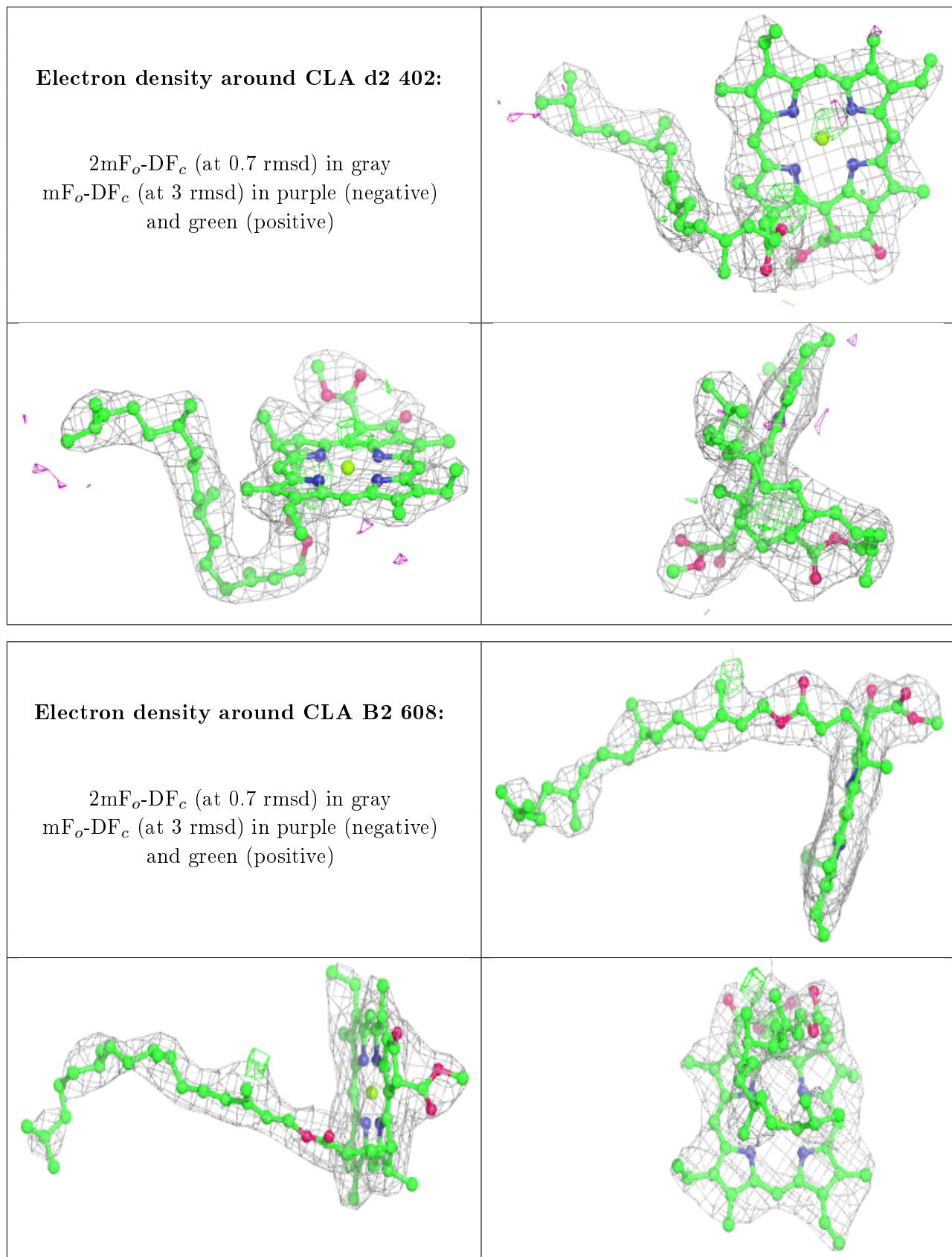


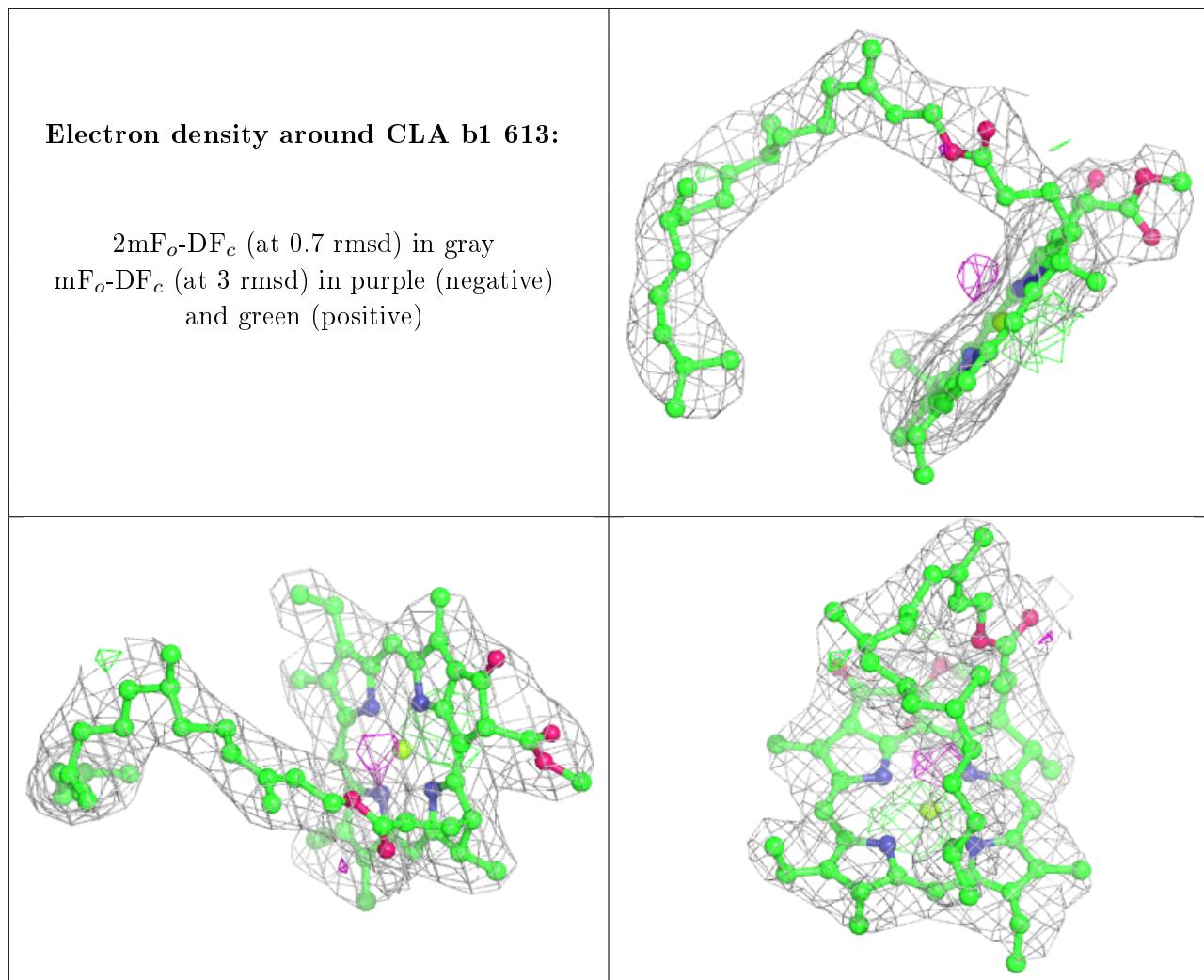


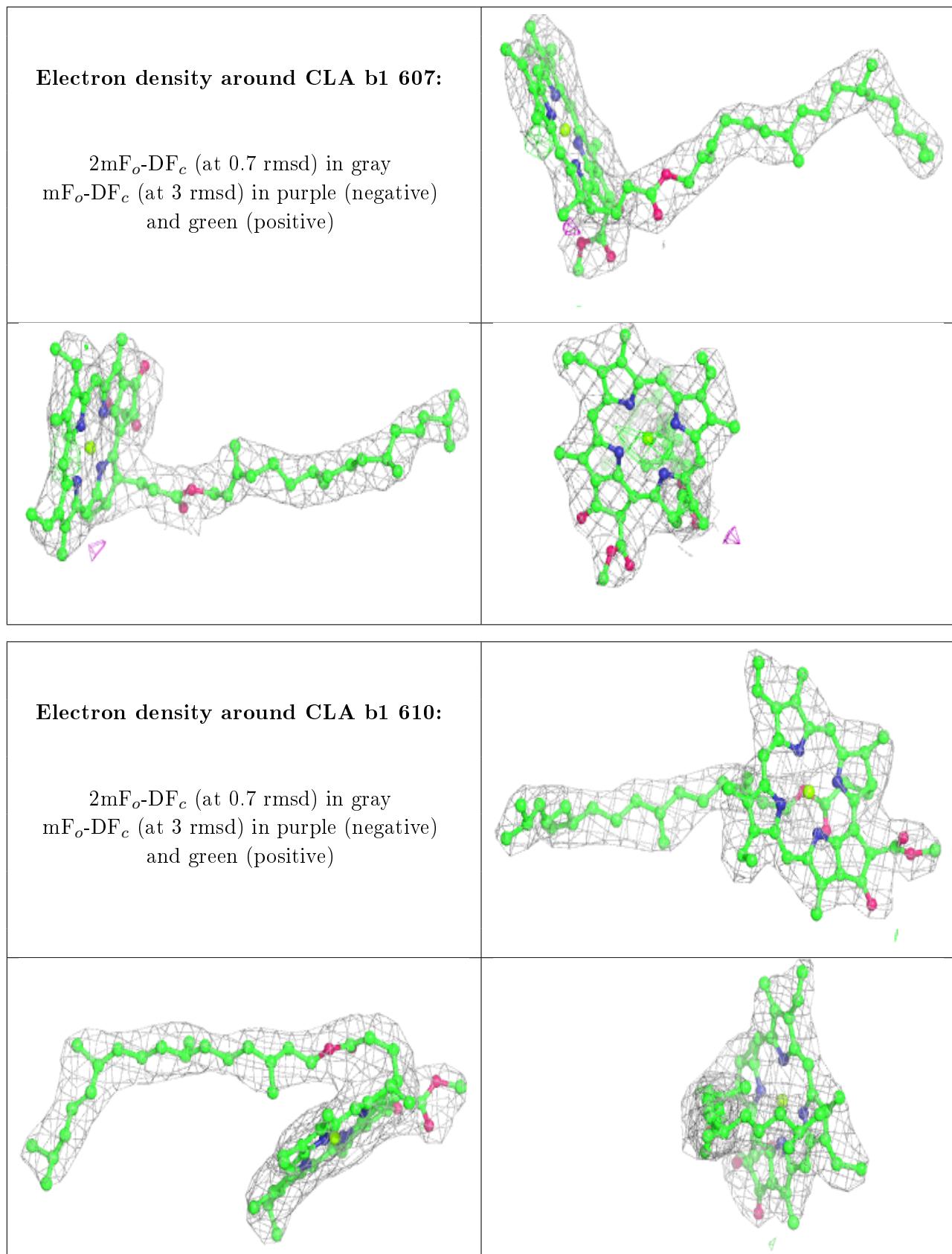


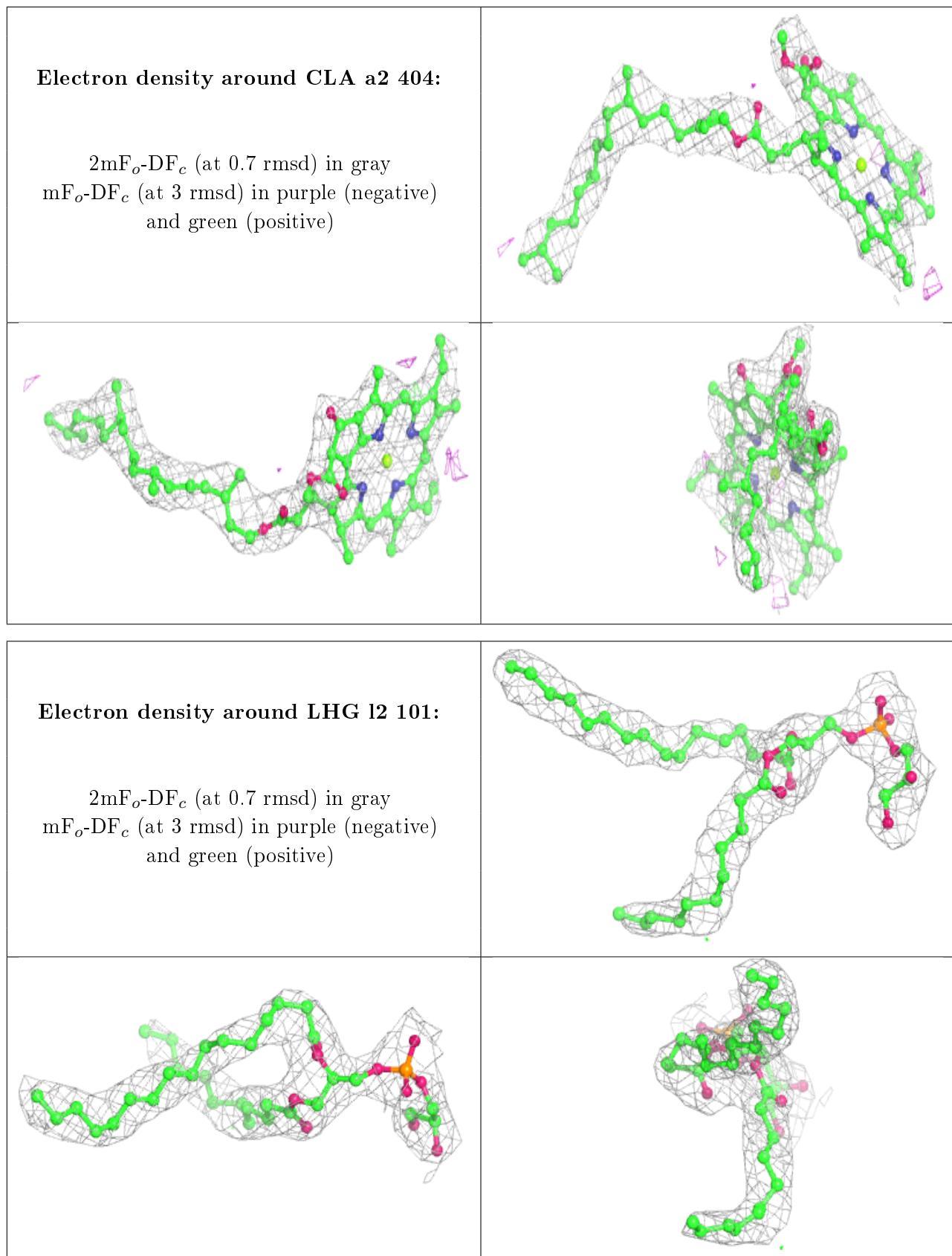


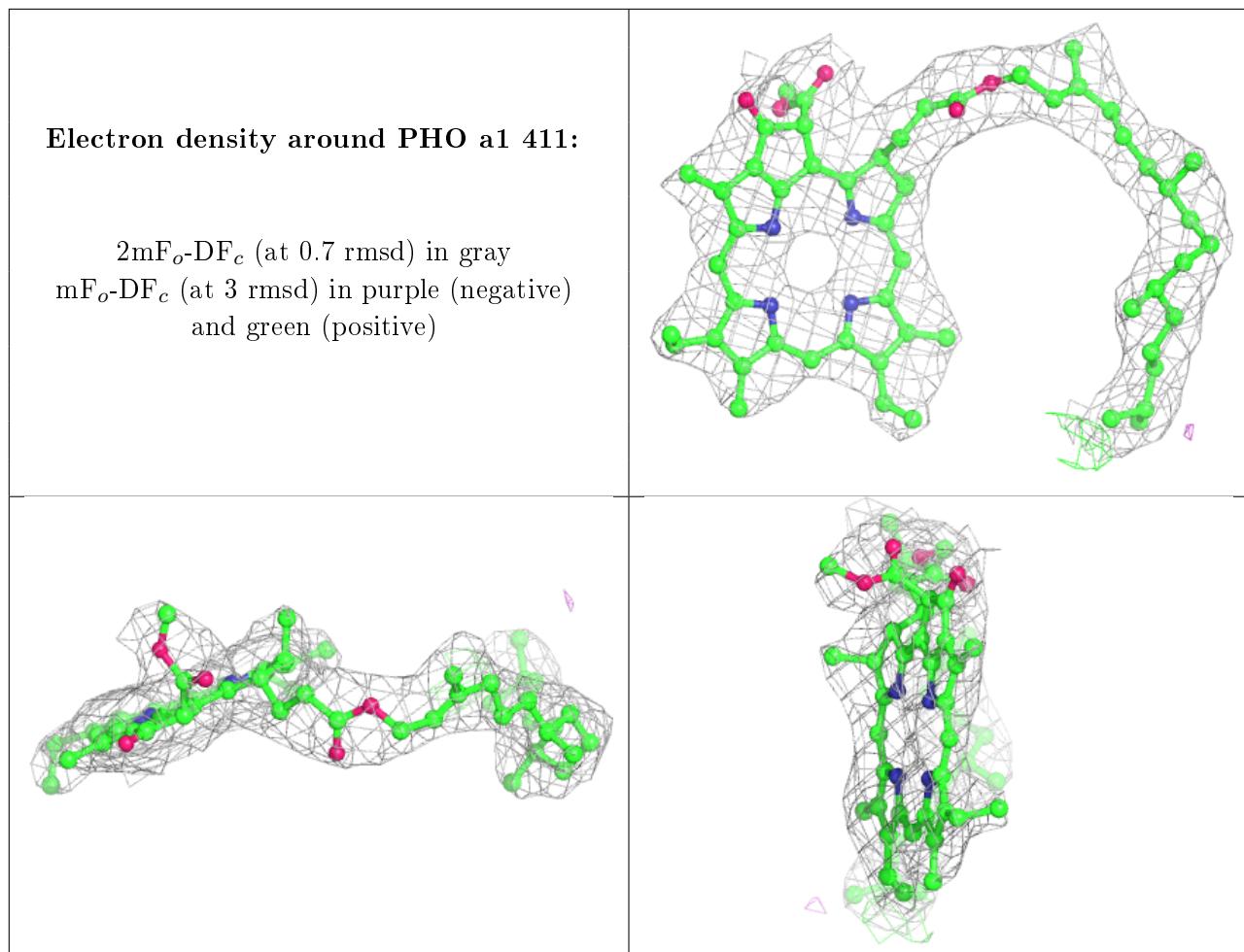


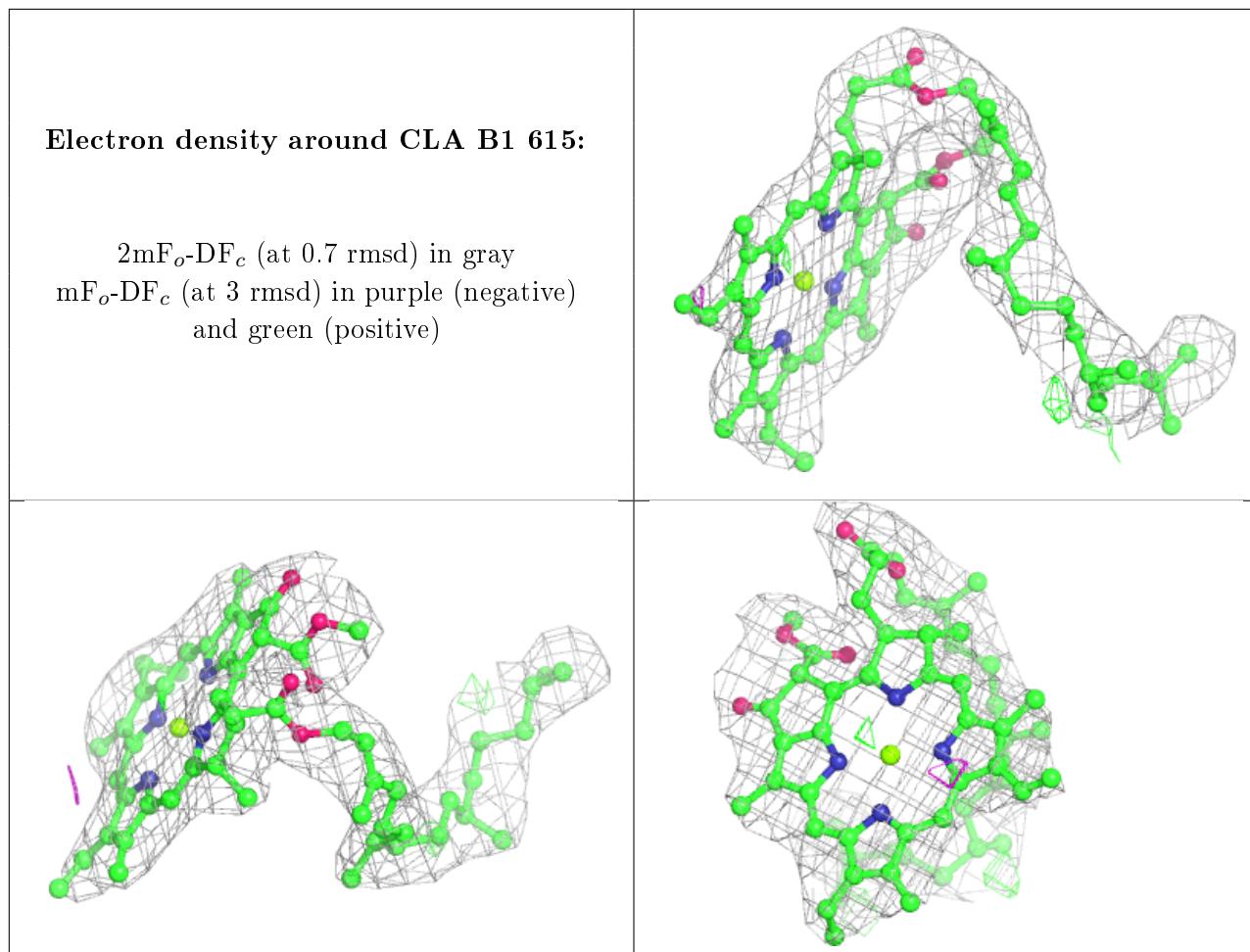


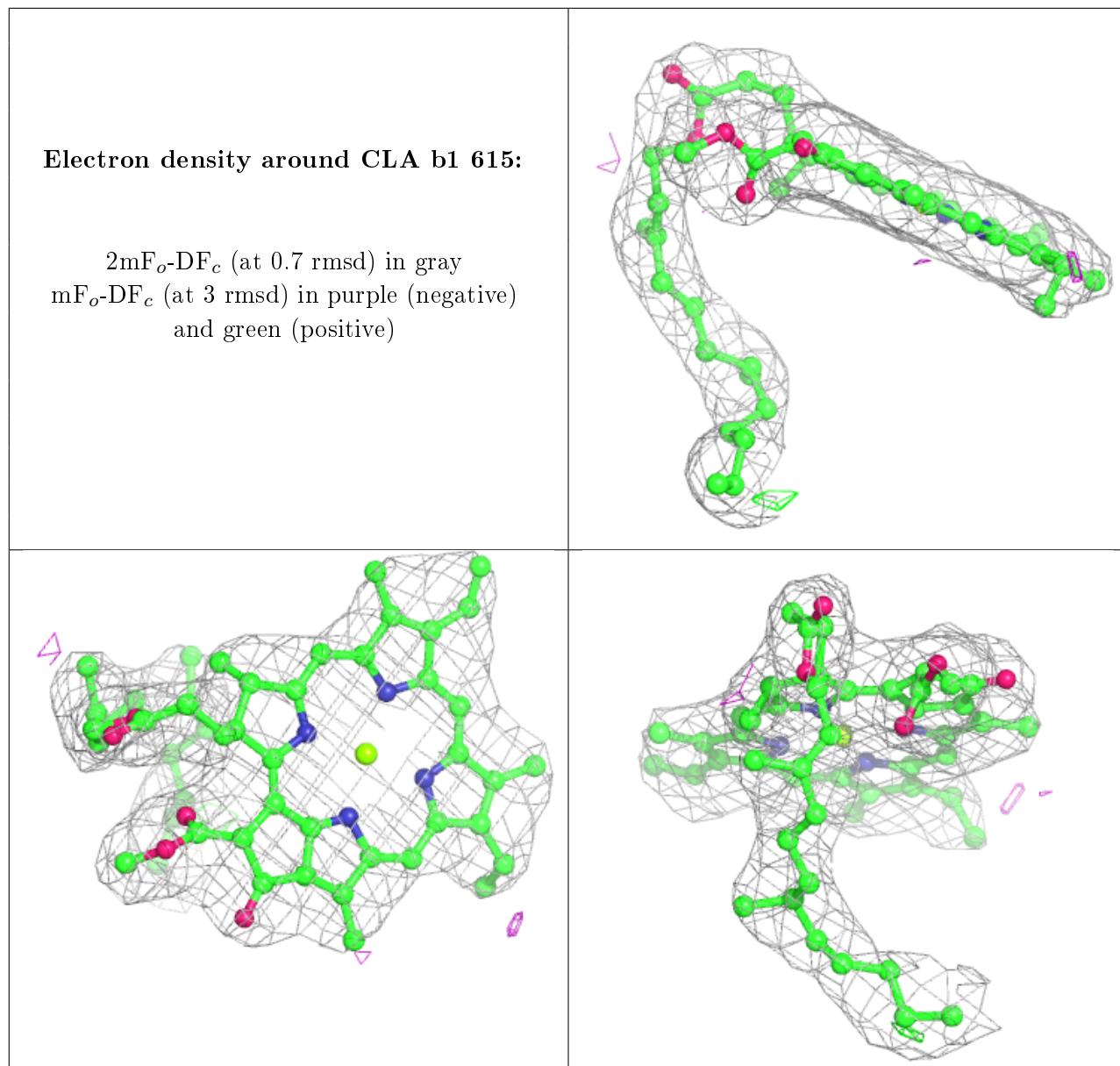


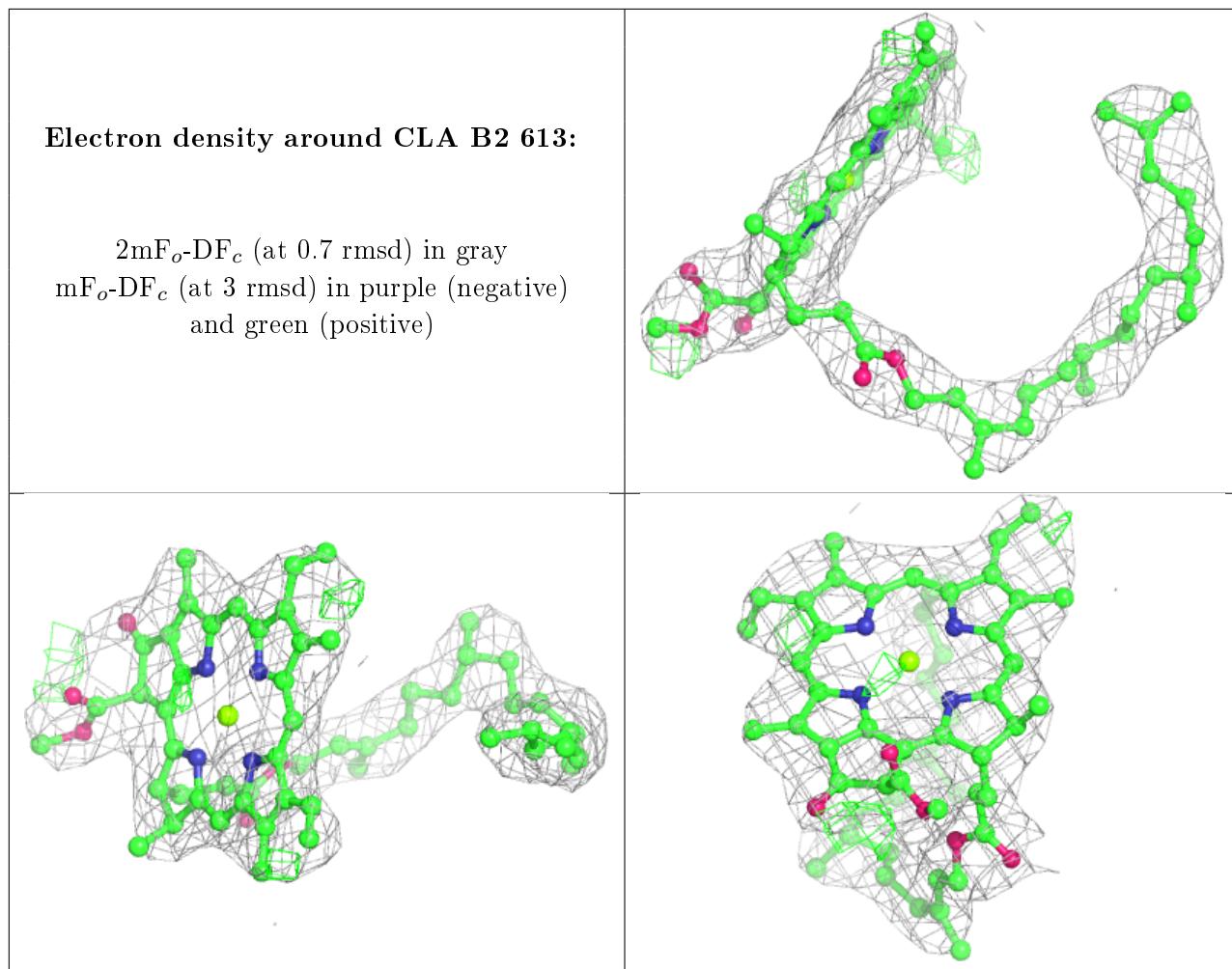


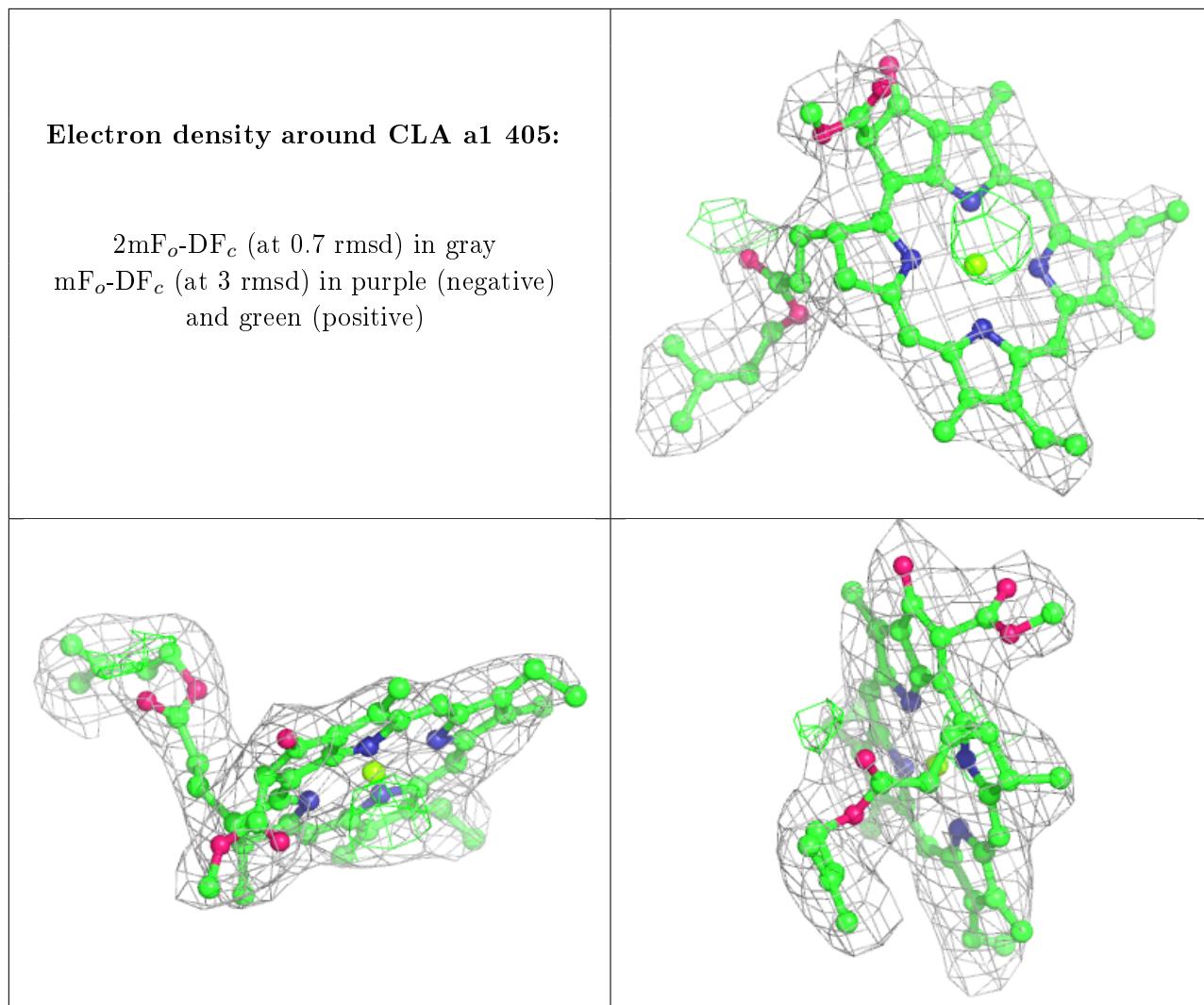


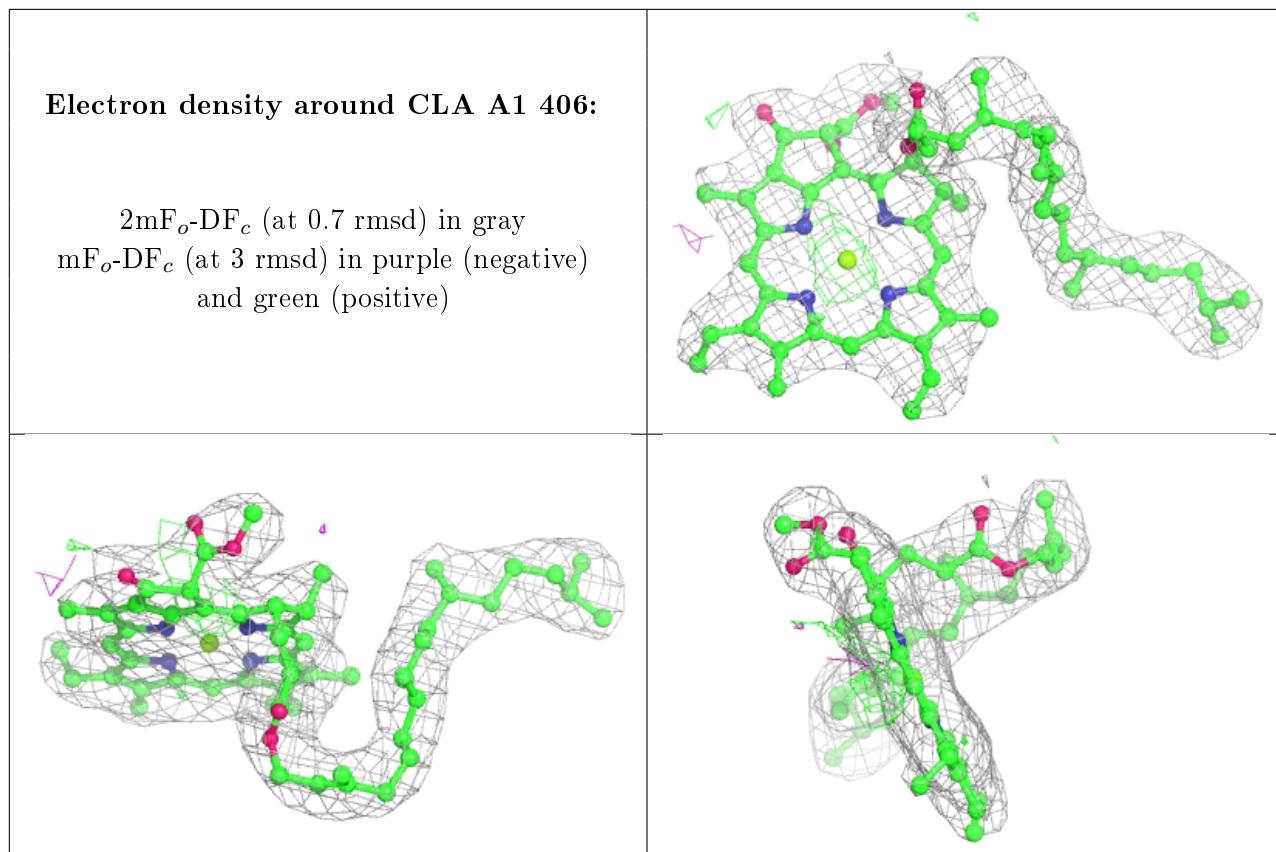


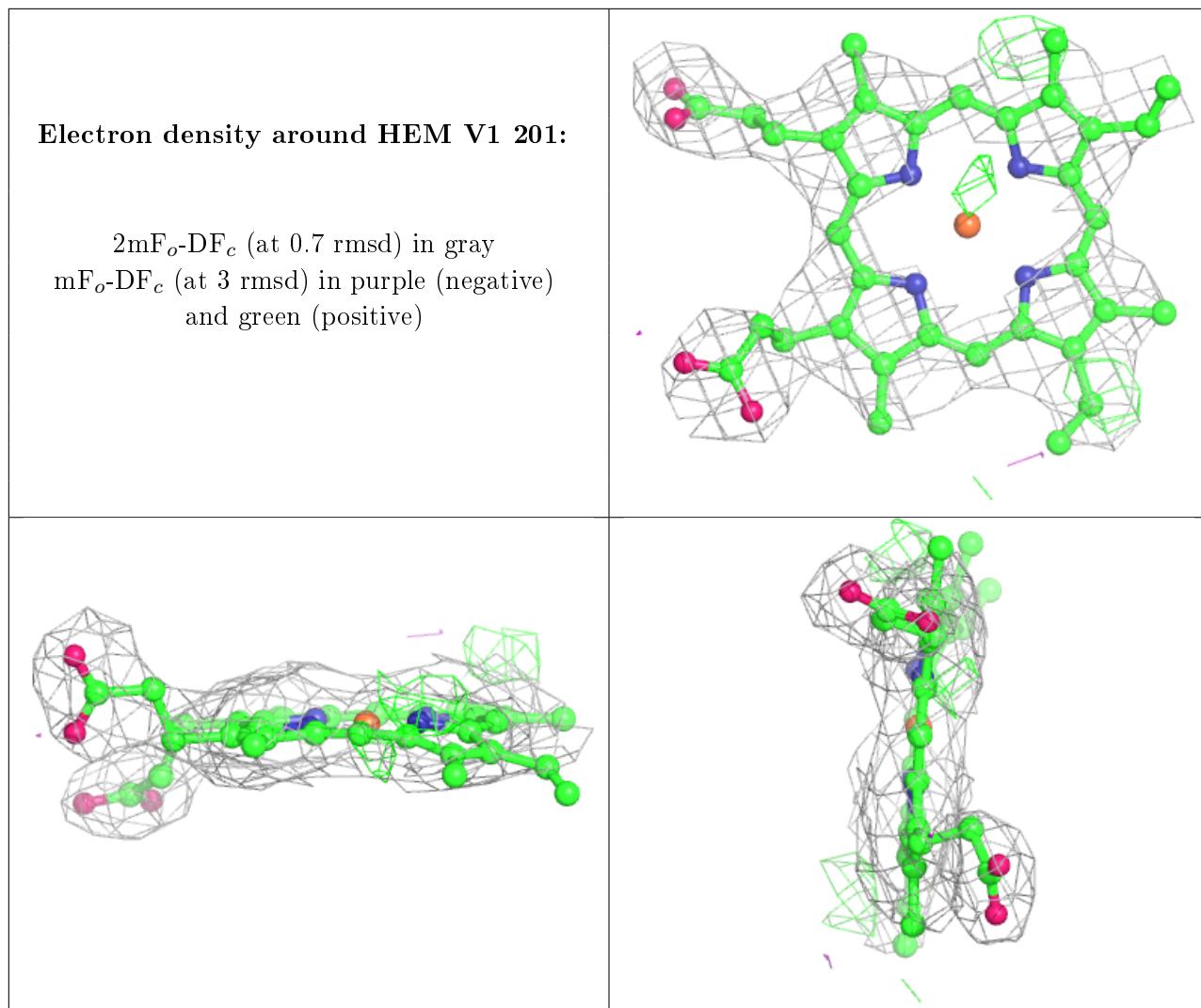


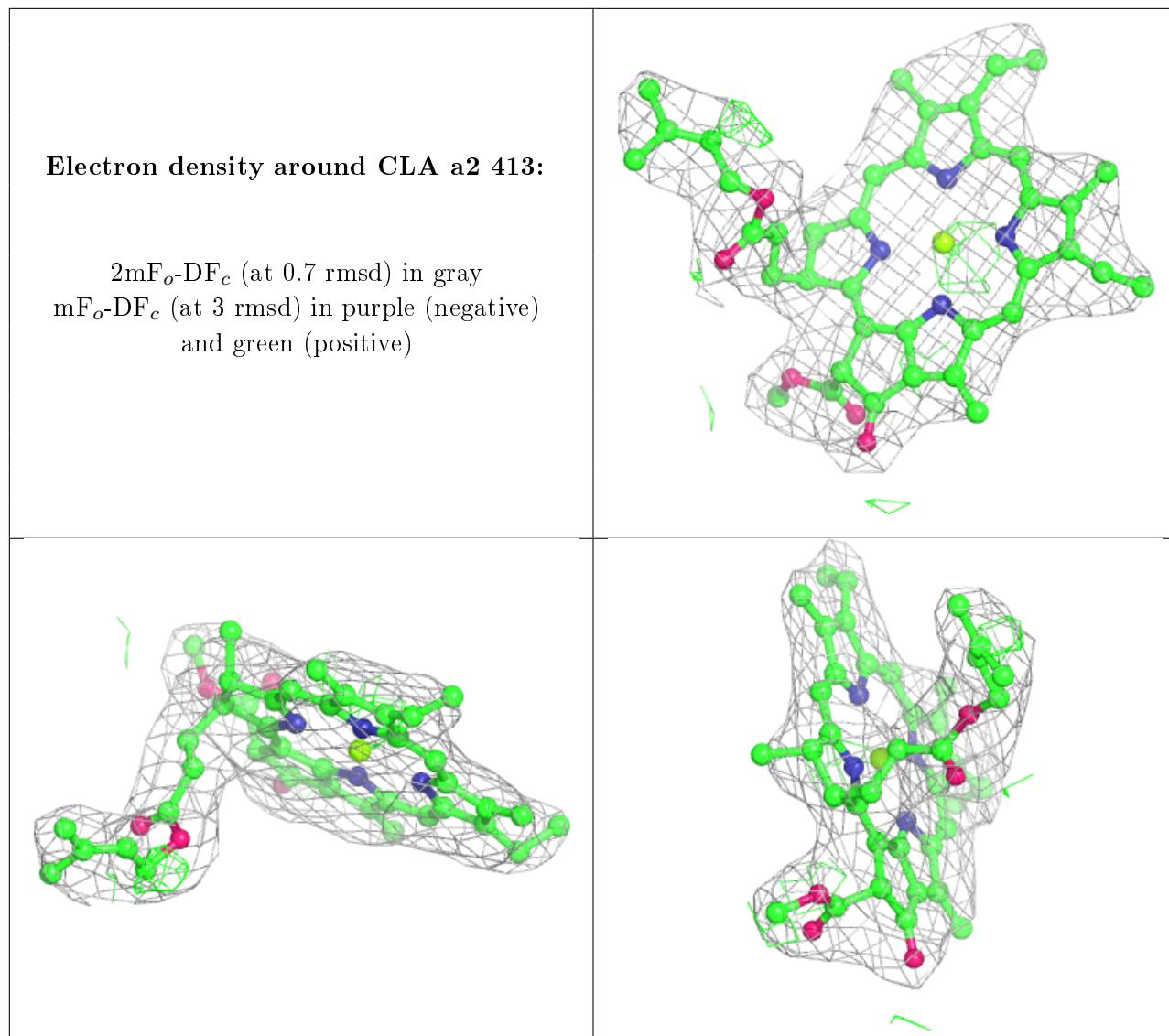


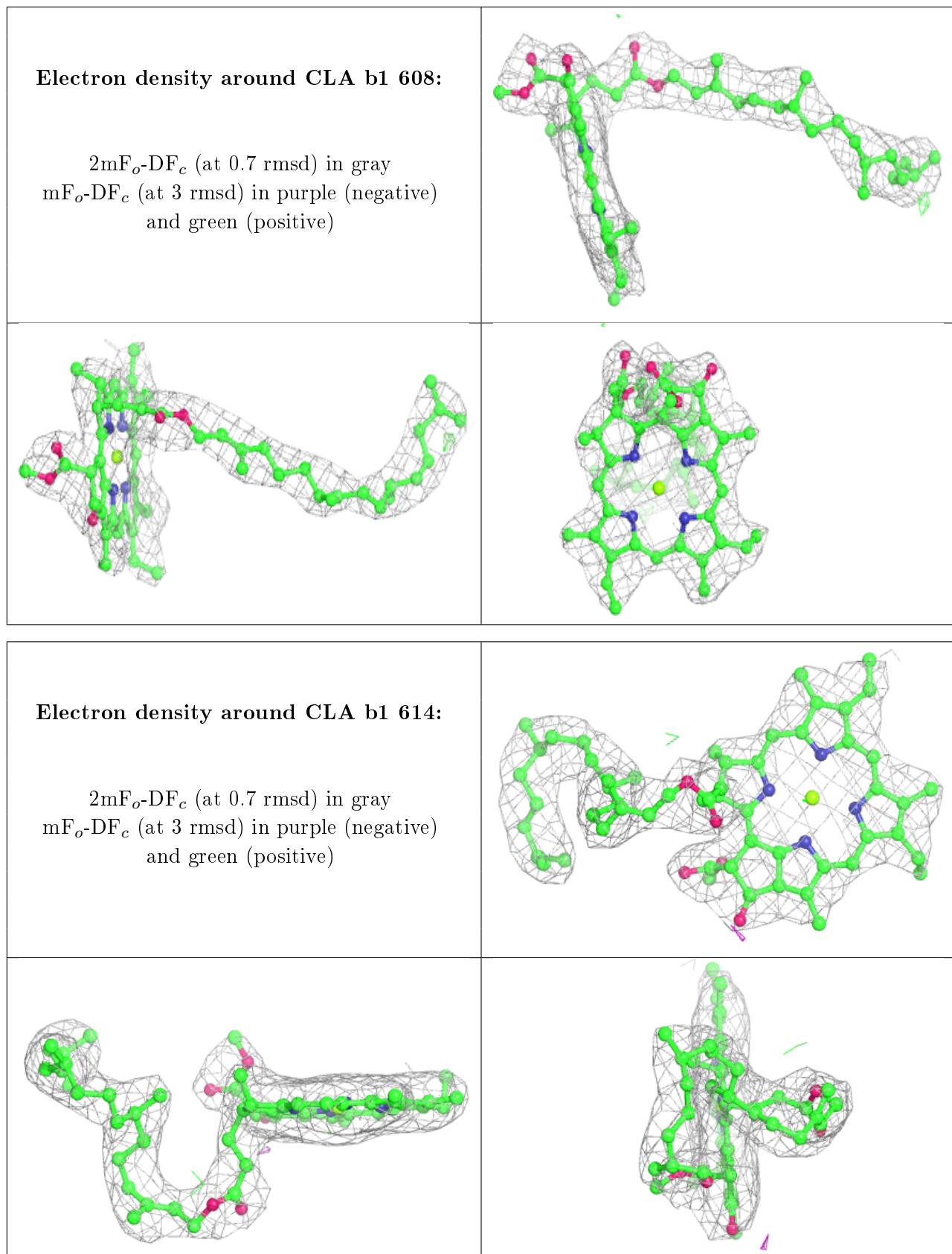


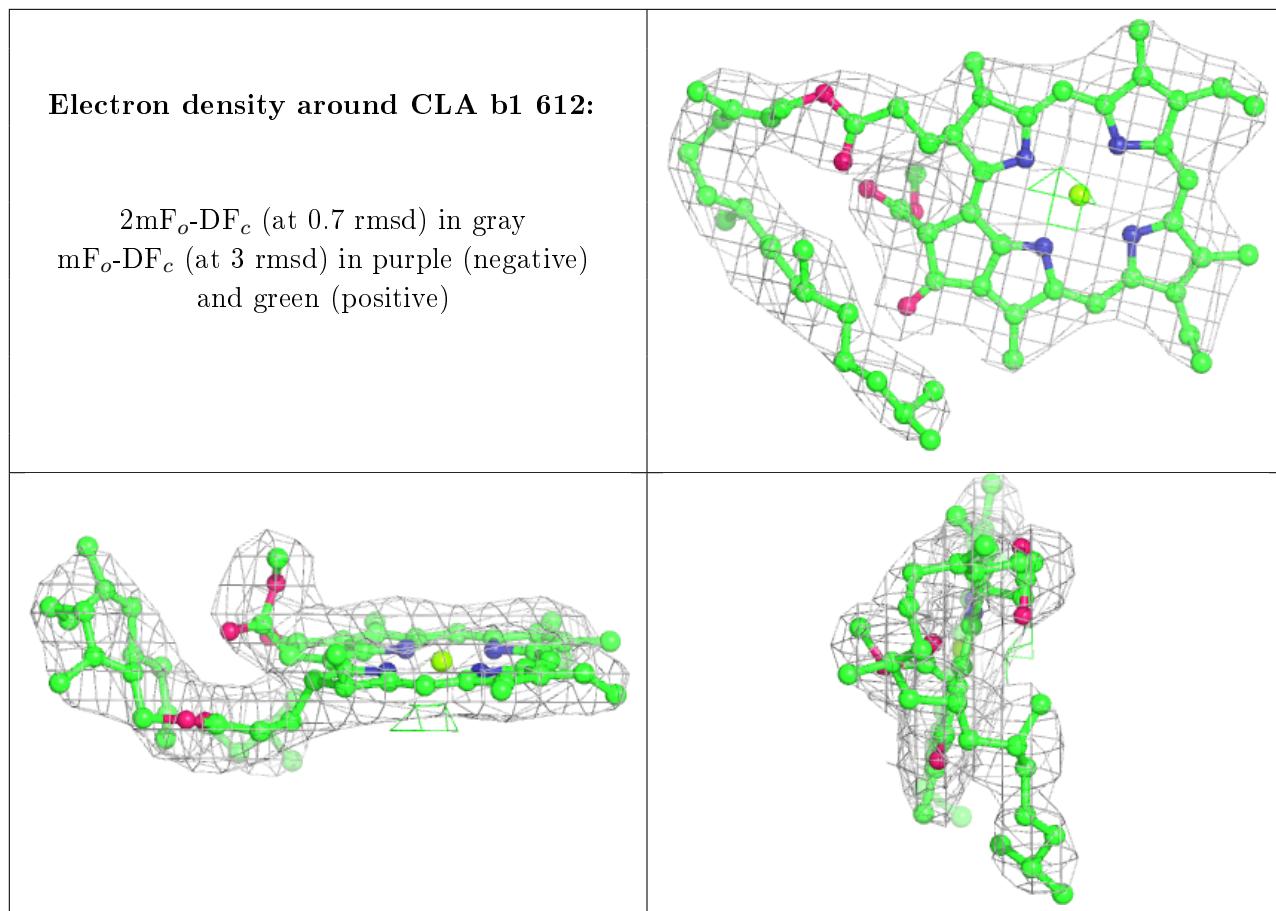


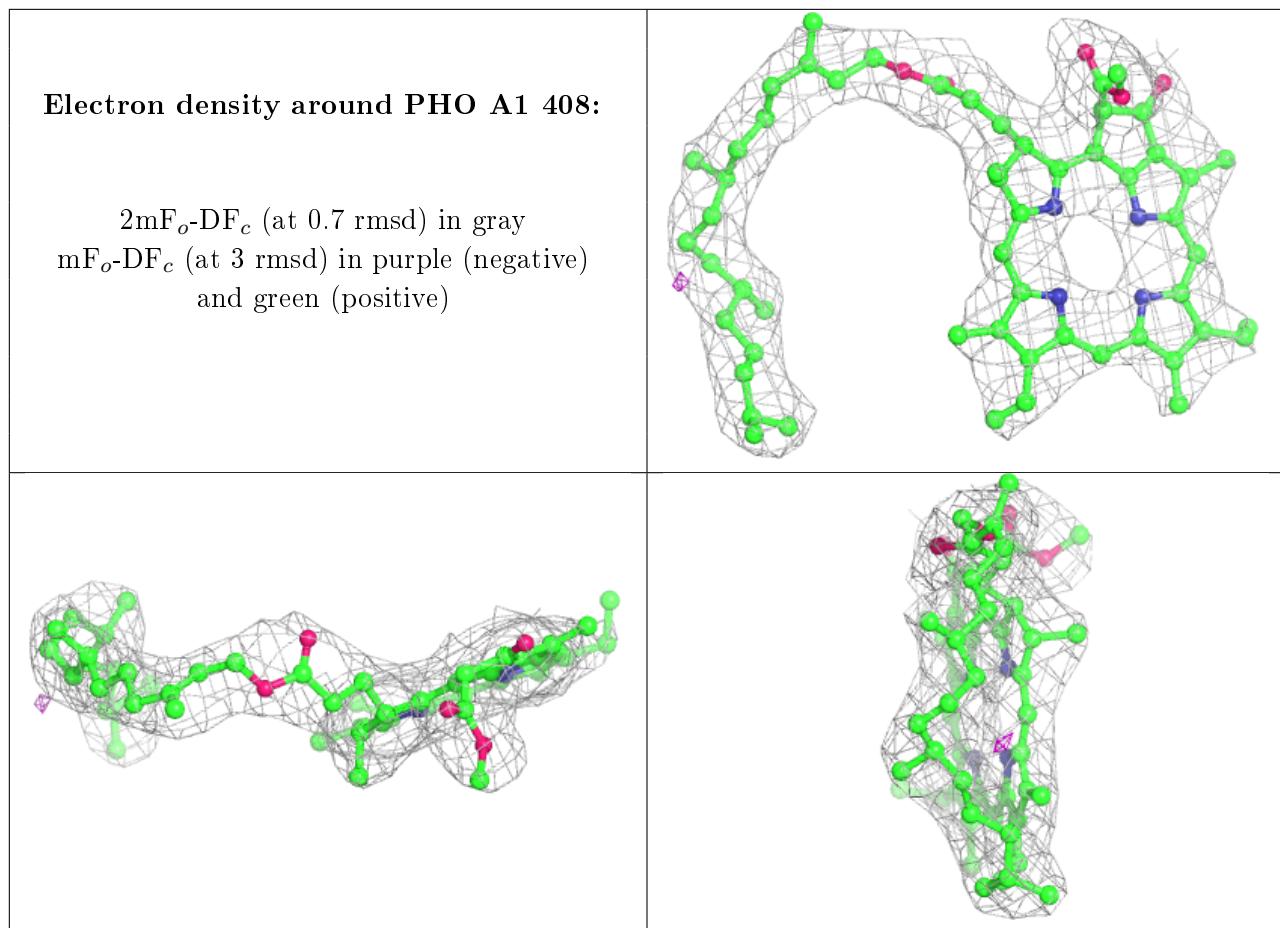


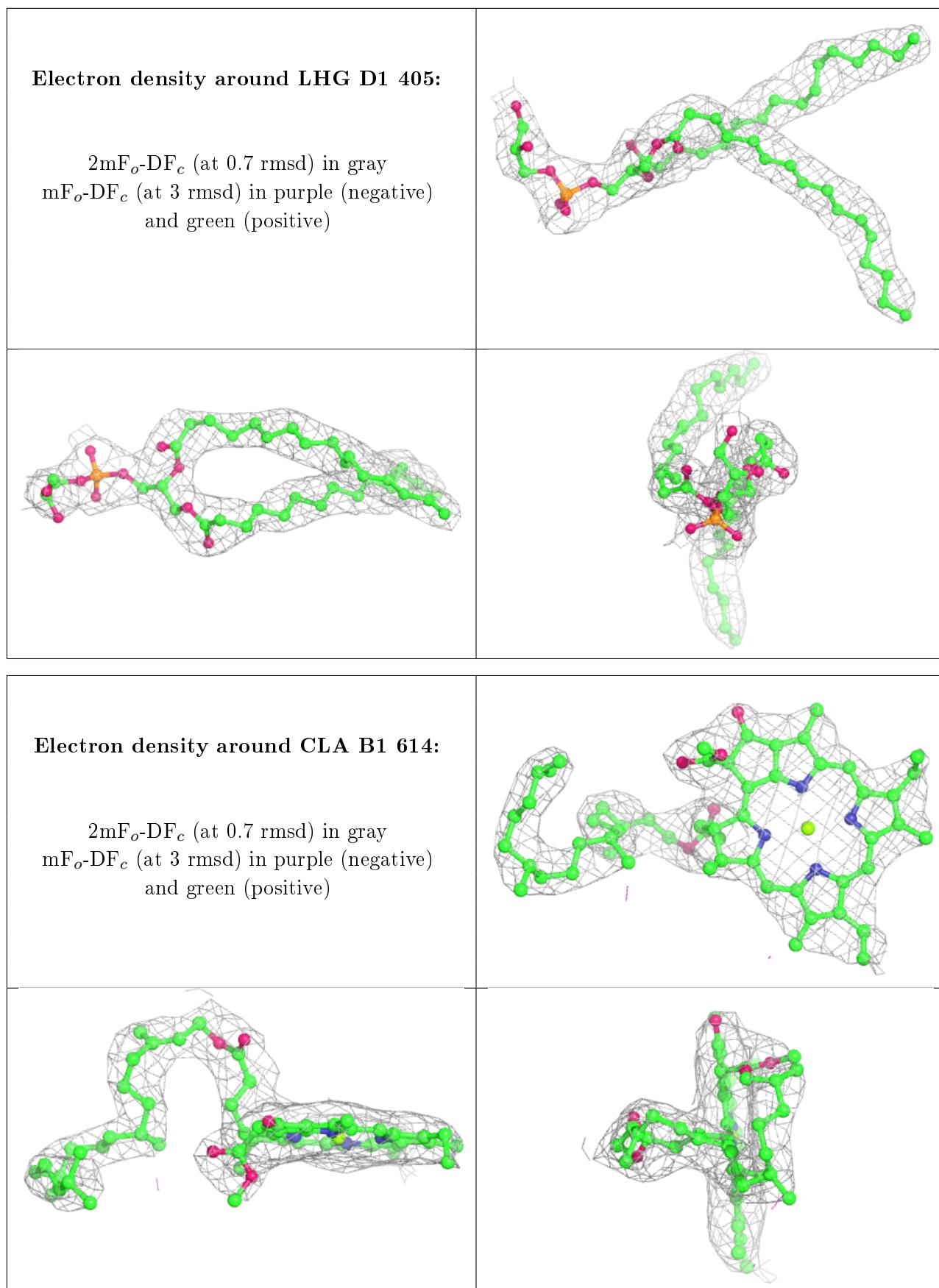


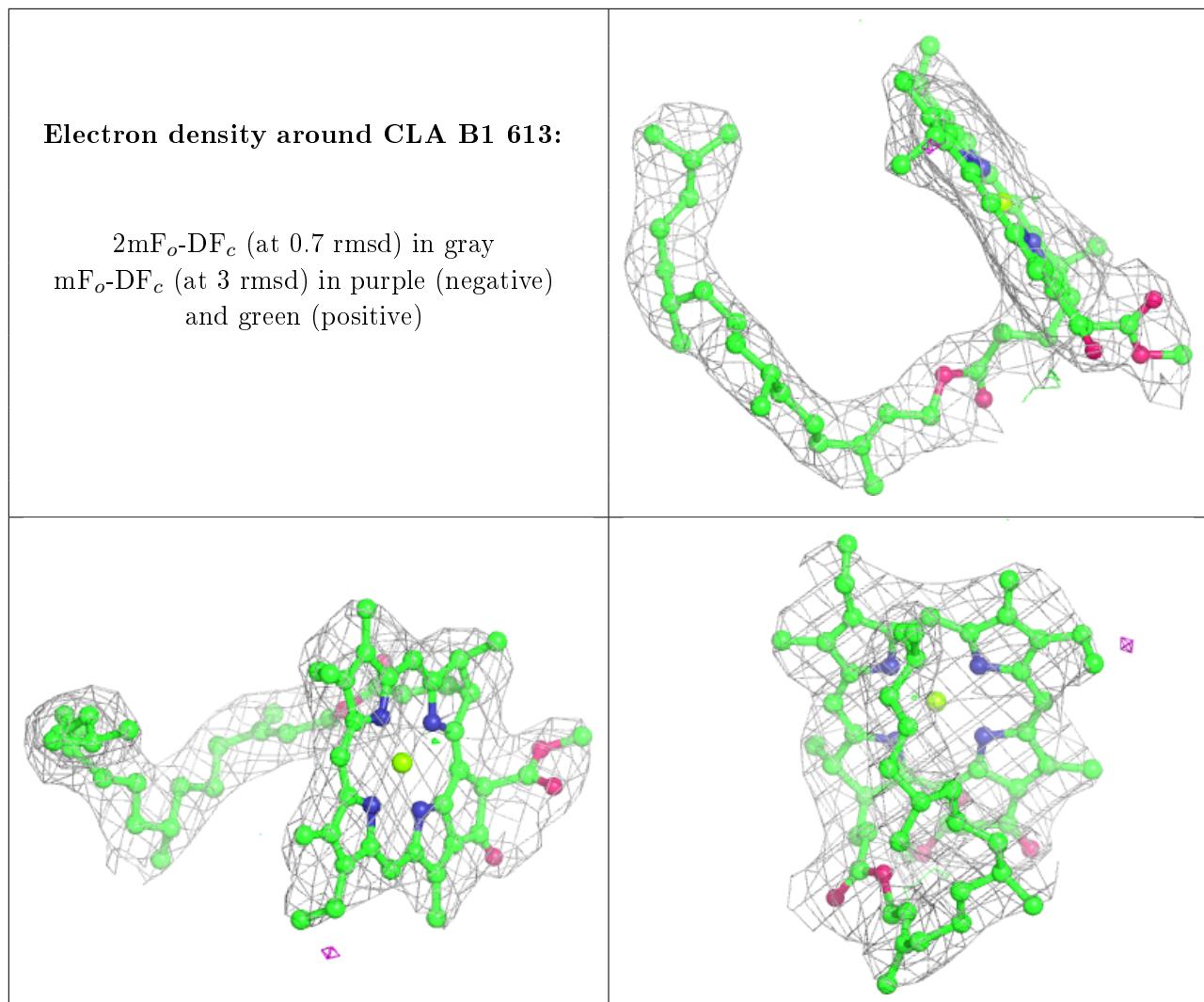


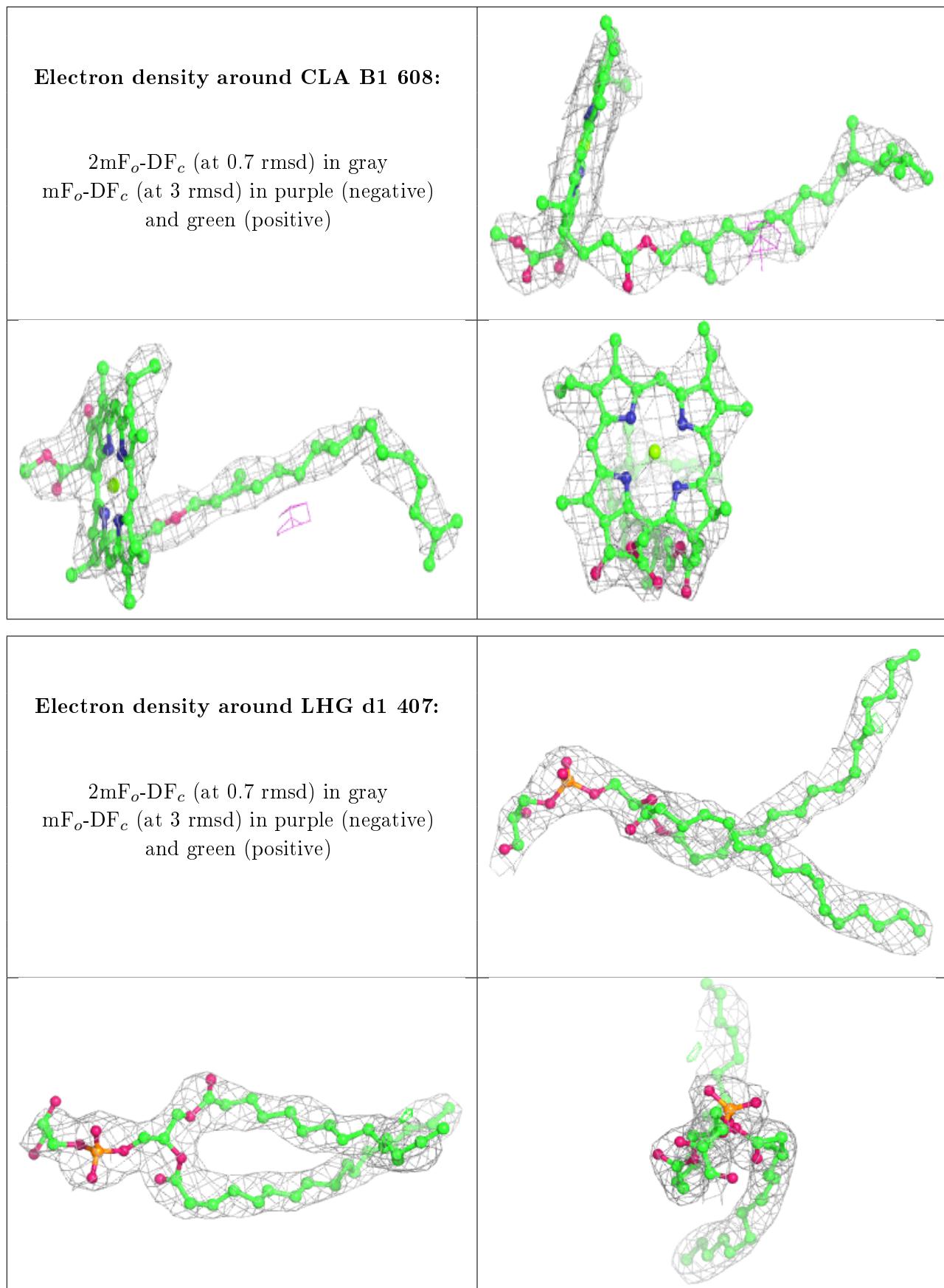


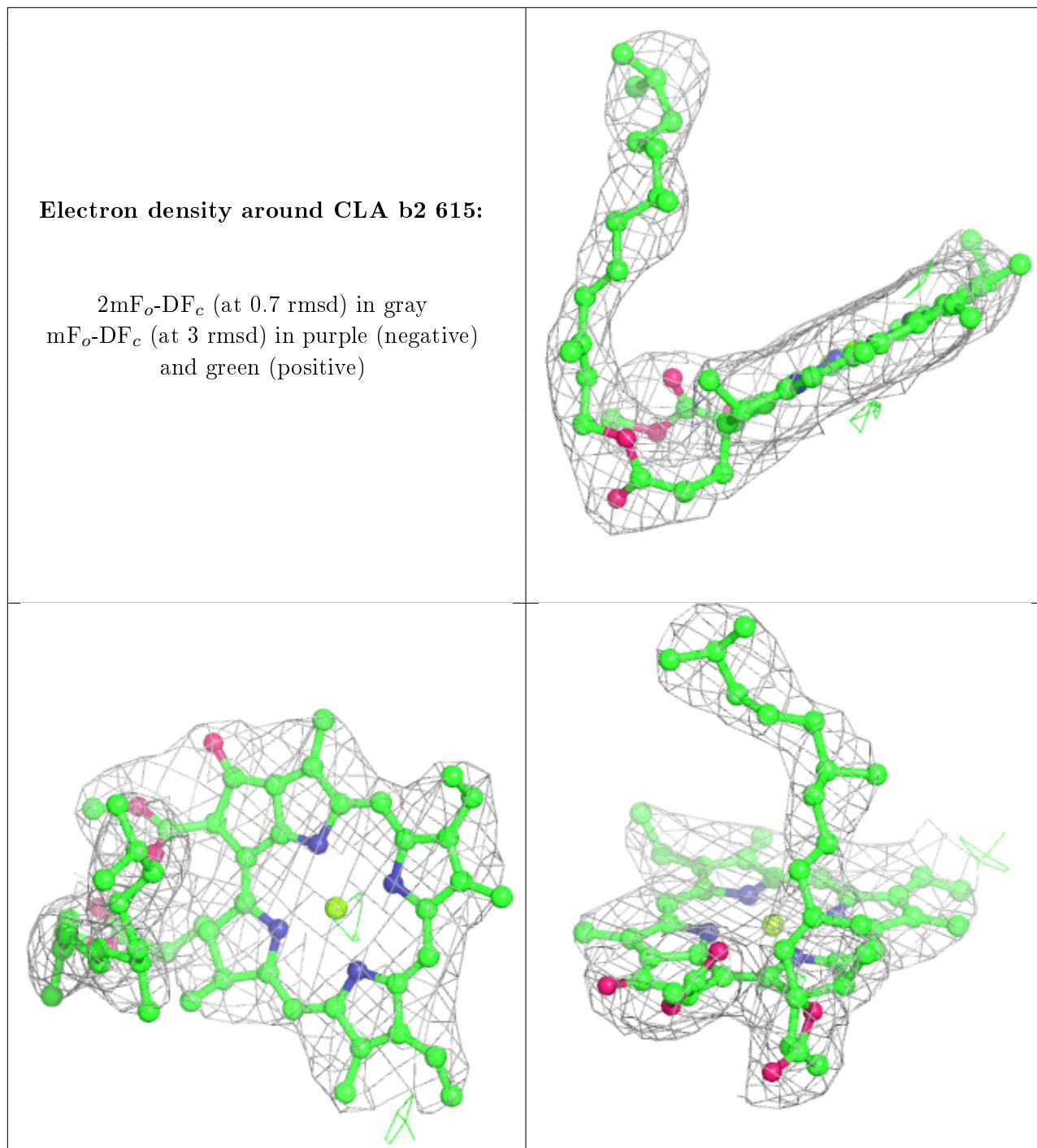


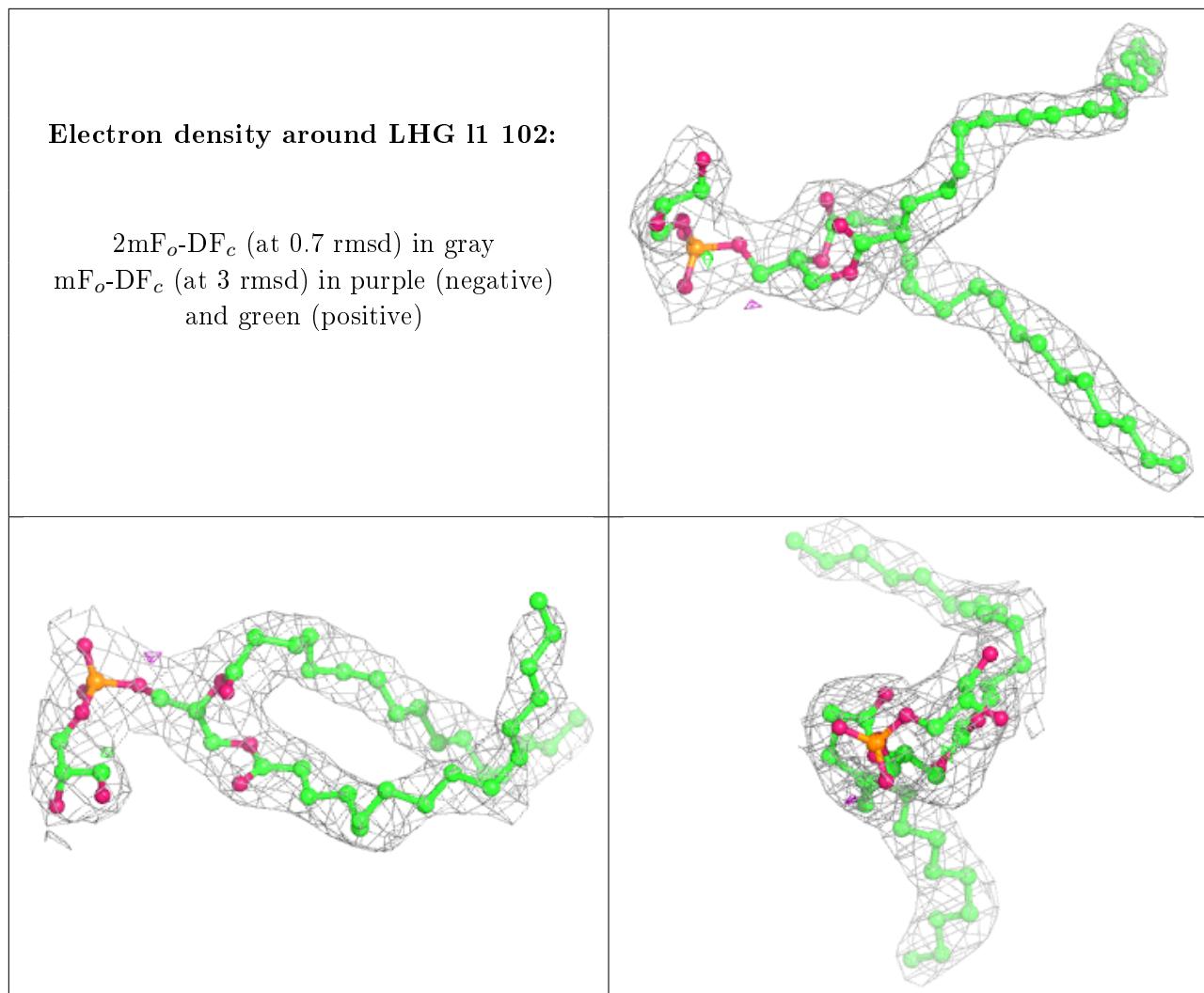


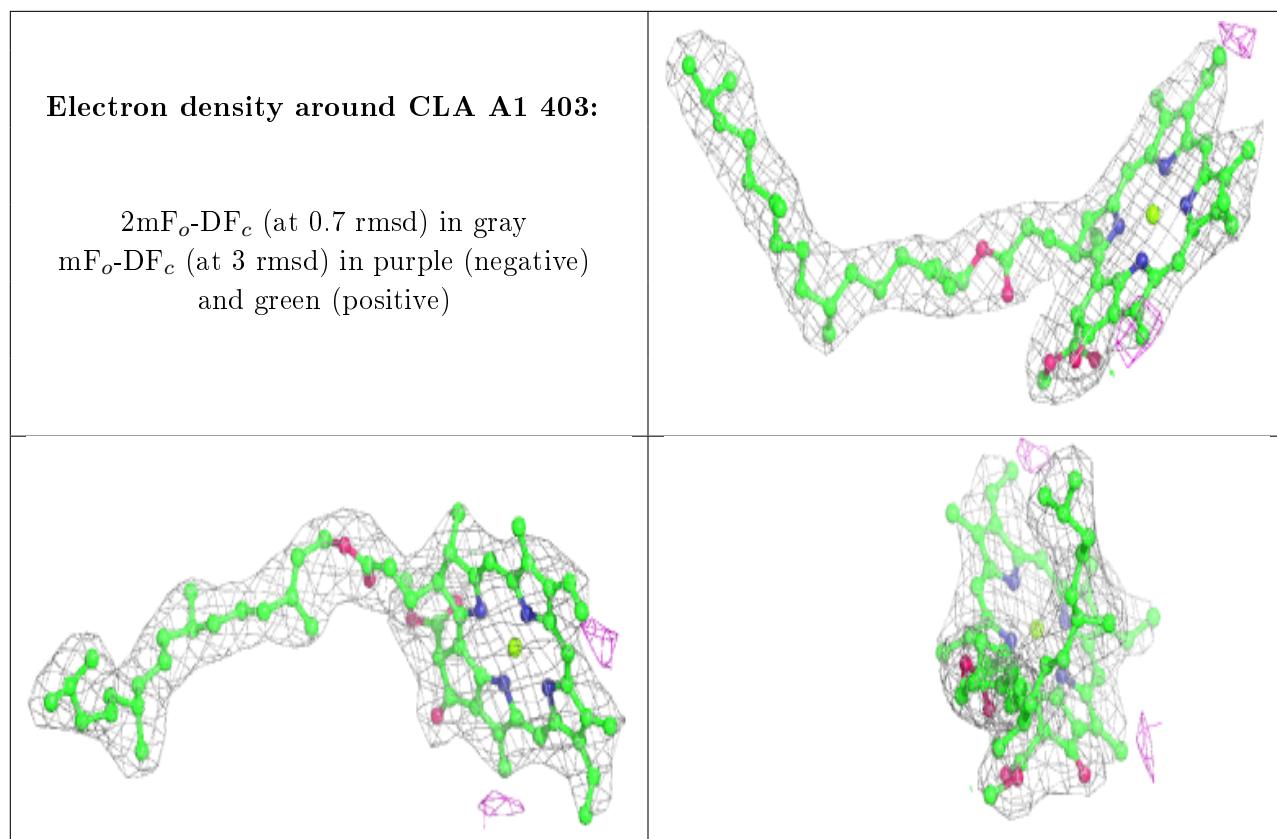












## 6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.