



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 12, 2026 – 01:18 PM UTC

PDB ID : 9LME / pdb_00009lme
Title : Checkpoint regulator protein in complex with a nanobody
Authors : Chen, W.M.; Sahili, A.; Yew, W.N.; Lescar, J.
Deposited on : 2025-01-18
Resolution : 2.40 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

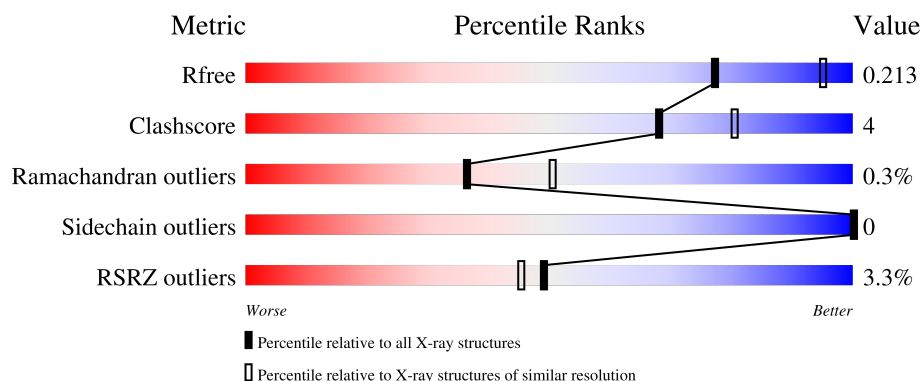
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.40 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.



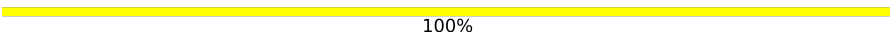
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	4912 (2.40-2.40)
Clashscore	190562	5391 (2.40-2.40)
Ramachandran outliers	187476	5320 (2.40-2.40)
Sidechain outliers	187428	5321 (2.40-2.40)
RSRZ outliers	180081	4916 (2.40-2.40)

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

Mol	Chain	Length	Quality of chain
1	A	225	2% 88% 9% .
1	B	225	4% 93% . .
2	C	141	3% 76% 7% 17%
2	F	141	4% 79% . 17%
3	D	4	25% 25% 50%

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Mol	Chain	Length	Quality of chain
4	E	3	 33% 67%
5	G	3	 100%
5	H	3	 67% 33%

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
10	MG	C	203	-	-	-	X
6	EDO	C	205	-	-	X	-
8	PEG	F	201	-	-	X	-

2 Entry composition

There are 13 unique types of molecules in this entry. The entry contains 6205 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 CD276 antigen.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	219	Total	C	N	O	S	0	1	0
			1667	1046	282	332	7			
1	B	219	Total	C	N	O	S	0	0	0
			1663	1044	281	331	7			

There are 26 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	16	HIS	-	expression tag	UNP Q5ZPR3
A	17	HIS	-	expression tag	UNP Q5ZPR3
A	18	HIS	-	expression tag	UNP Q5ZPR3
A	19	HIS	-	expression tag	UNP Q5ZPR3
A	20	HIS	-	expression tag	UNP Q5ZPR3
A	21	HIS	-	expression tag	UNP Q5ZPR3
A	22	GLU	-	expression tag	UNP Q5ZPR3
A	23	ASN	-	expression tag	UNP Q5ZPR3
A	24	LEU	-	expression tag	UNP Q5ZPR3
A	25	TYR	-	expression tag	UNP Q5ZPR3
A	26	PHE	-	expression tag	UNP Q5ZPR3
A	27	GLN	-	expression tag	UNP Q5ZPR3
A	28	GLY	-	expression tag	UNP Q5ZPR3
B	16	HIS	-	expression tag	UNP Q5ZPR3
B	17	HIS	-	expression tag	UNP Q5ZPR3
B	18	HIS	-	expression tag	UNP Q5ZPR3
B	19	HIS	-	expression tag	UNP Q5ZPR3
B	20	HIS	-	expression tag	UNP Q5ZPR3
B	21	HIS	-	expression tag	UNP Q5ZPR3
B	22	GLU	-	expression tag	UNP Q5ZPR3
B	23	ASN	-	expression tag	UNP Q5ZPR3
B	24	LEU	-	expression tag	UNP Q5ZPR3
B	25	TYR	-	expression tag	UNP Q5ZPR3
B	26	PHE	-	expression tag	UNP Q5ZPR3
B	27	GLN	-	expression tag	UNP Q5ZPR3

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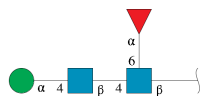
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Chain	Residue	Modelled	Actual	Comment	Reference
B	28	GLY	-	expression tag	UNP Q5ZPR3

- Molecule 2 is a protein called T3CL11.

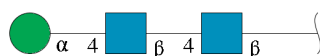
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	C	117	Total	C	N	O	S	0	0	0
			863	538	153	168	4			
2	F	117	Total	C	N	O	S	0	0	0
			863	538	153	168	4			

- Molecule 3 is an oligosaccharide called alpha-D-mannopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-6)]2-acetamido-2-deoxy-beta-D-glucopyranose.



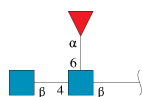
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
3	D	4	Total	C	N	O	0	0	0
			49	28	2	19			

- Molecule 4 is an oligosaccharide called alpha-D-mannopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose.



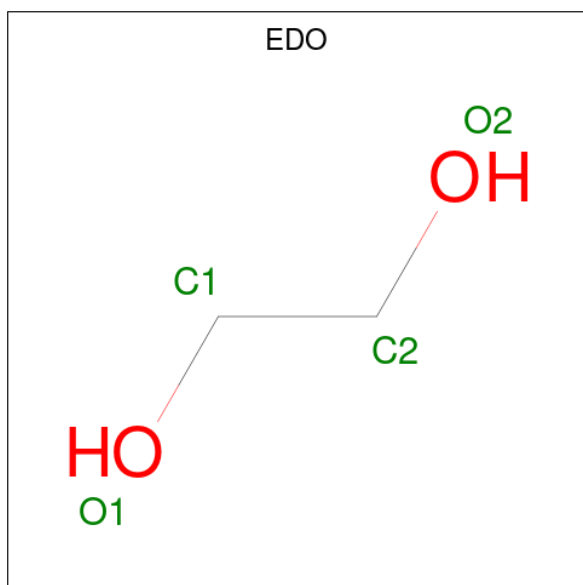
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
4	E	3	Total	C	N	O	0	0	0
			39	22	2	15			

- Molecule 5 is an oligosaccharide called 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-6)]2-acetamido-2-deoxy-beta-D-glucopyranose.



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	G	3	Total	C	N	O	0	0	0
			38	22	2	14			
5	H	3	Total	C	N	O	0	0	0
			37	22	2	13			

- Molecule 6 is 1,2-ETHANEDIOL (CCD ID: EDO) (formula: C₂H₆O₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	A	1	Total	C	O	0	0
			4	2	2		
6	A	1	Total	C	O	0	0
			4	2	2		
6	A	1	Total	C	O	0	0
			4	2	2		
6	A	1	Total	C	O	0	0
			4	2	2		
6	A	1	Total	C	O	0	0
			4	2	2		
6	A	1	Total	C	O	0	0
			4	2	2		
6	A	1	Total	C	O	0	0
			4	2	2		

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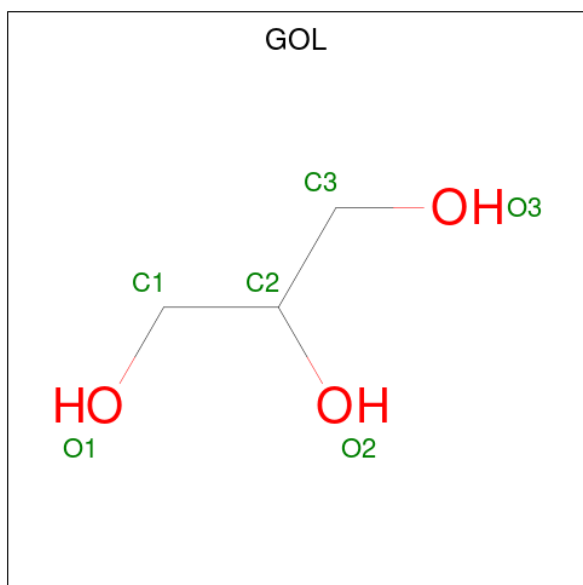
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	A	1	Total 4	C 2	O 2	0	0
6	A	1	Total 4	C 2	O 2	0	0
6	A	1	Total 4	C 2	O 2	0	0
6	A	1	Total 4	C 2	O 2	0	0
6	A	1	Total 4	C 2	O 2	0	0
6	B	1	Total 4	C 2	O 2	0	0
6	B	1	Total 4	C 2	O 2	0	0
6	B	1	Total 4	C 2	O 2	0	0
6	B	1	Total 4	C 2	O 2	0	0
6	B	1	Total 4	C 2	O 2	0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

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	B	1	Total	C	O	0	0
			4	2	2		
6	C	1	Total	C	O	0	0
			4	2	2		
6	C	1	Total	C	O	0	0
			4	2	2		
6	C	1	Total	C	O	0	0
			4	2	2		
6	F	1	Total	C	O	0	0
			4	2	2		
6	F	1	Total	C	O	0	0
			4	2	2		
6	F	1	Total	C	O	0	0
			4	2	2		
6	F	1	Total	C	O	0	0
			4	2	2		

- Molecule 7 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$) (labeled as "Ligand of Interest" by depositor).



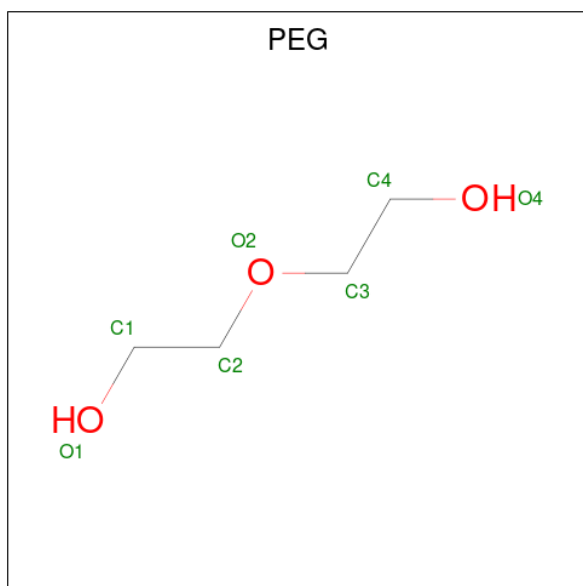
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
7	A	1	Total	C	O	0	0
			6	3	3		
7	A	1	Total	C	O	0	0
			6	3	3		

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

- Molecule 8 is DI(HYDROXYETHYL)ETHER (CCD ID: PEG) (formula: C₄H₁₀O₃) (labeled as "Ligand of Interest" by depositor).



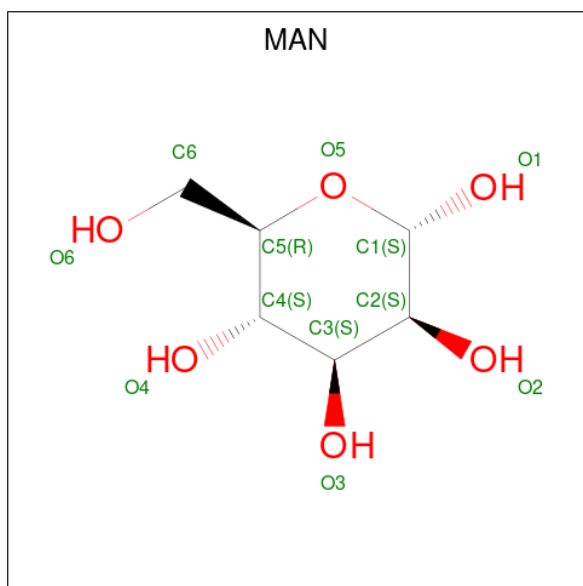
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
8	A	1	Total	C	O	0	0
			7	4	3		
8	A	1	Total	C	O	0	0
			7	4	3		
8	A	1	Total	C	O	0	0
			7	4	3		
8	A	1	Total	C	O	0	0
			7	4	3		
8	A	1	Total	C	O	0	0
			7	4	3		
8	A	1	Total	C	O	0	0
			7	4	3		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
8	A	1	Total	C	O	0	0
			7	4	3		
8	B	1	Total	C	O	0	0
			7	4	3		
8	F	1	Total	C	O	0	0
			7	4	3		
8	F	1	Total	C	O	0	0
			7	4	3		

- Molecule 9 is alpha-D-mannopyranose (CCD ID: MAN) (formula: C₆H₁₂O₆) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
9	A	1	Total	C	O	0	0
			12	6	6		

- Molecule 10 is MAGNESIUM ION (CCD ID: MG) (formula: Mg) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
10	A	8	Total	Mg	0	0
			8	8		
10	B	6	Total	Mg	0	0
			6	6		
10	C	3	Total	Mg	0	0
			3	3		

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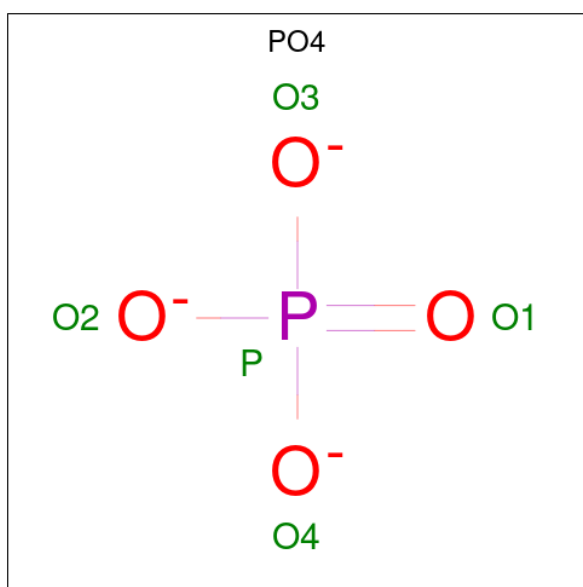
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
10	F	2	Total	Mg	0	0
			2	2		

- Molecule 11 is CALCIUM ION (CCD ID: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
11	A	2	Total	Ca	0	0
			2	2		
11	B	3	Total	Ca	0	0
			3	3		

- Molecule 12 is PHOSPHATE ION (CCD ID: PO4) (formula: O₄P) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
12	B	1	Total	O	P	0	0
			5	4	1		

- Molecule 13 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
13	A	251	Total	O	0	0
			251	251		
13	B	258	Total	O	0	0
			258	258		

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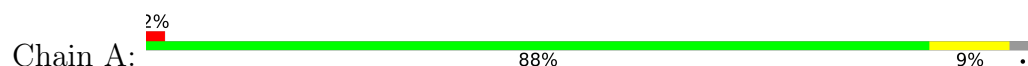
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
13	C	84	Total	O	0	0
			84	84		
13	F	83	Total	O	0	0
			83	83		

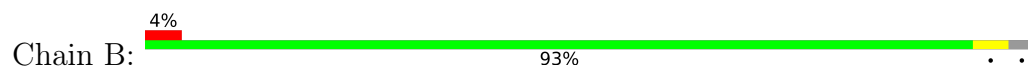
3 Residue-property plots [i](#)

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

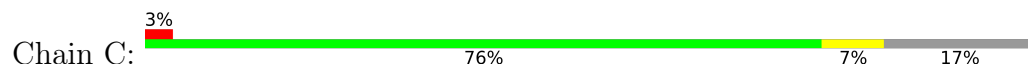
- Molecule 1: CD276 antigen



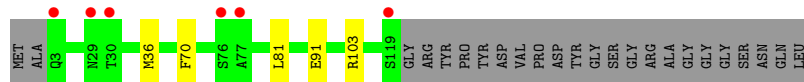
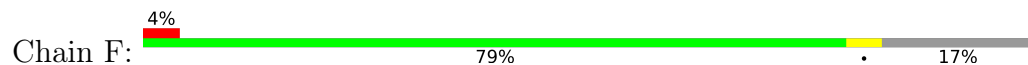
- Molecule 1: CD276 antigen



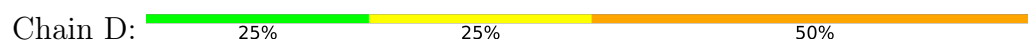
- Molecule 2: T3CL11



- Molecule 2: T3CL11



- Molecule 3: alpha-D-mannopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-6)]2-acetamido-2-deoxy-beta-D-glucopyranose

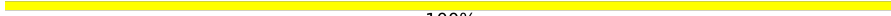


- Molecule 4: alpha-D-mannopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose

Chain E:  33% 67%

MAG1
MAG2
MAN3

- Molecule 5: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-6)]2-acetamido-2-deoxy-beta-D-glucopyranose

Chain G:  100%

MAG1
MAG2
FUC3

- Molecule 5: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-6)]2-acetamido-2-deoxy-beta-D-glucopyranose

Chain H:  67% 33%

MAG1
MAG2
FUC3

4 Data and refinement statistics

Property	Value	Source
Space group	I 41 2 2	Depositor
Cell constants a, b, c, α , β , γ	219.85Å 219.85Å 147.89Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.16 – 2.40 49.16 – 2.40	Depositor EDS
% Data completeness (in resolution range)	99.9 (49.16-2.40) 99.9 (49.16-2.40)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.64 (at 2.39Å)	Xtriage
Refinement program	BUSTER 2.10.3 (18-SEP-2020)	Depositor
R, R_{free}	0.178 , 0.210 0.185 , 0.213	Depositor DCC
R_{free} test set	3501 reflections (4.99%)	wwPDB-VP
Wilson B-factor (Å ²)	49.9	Xtriage
Anisotropy	0.212	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 58.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	6205	wwPDB-VP
Average B, all atoms (Å ²)	56.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.92% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: EDO, GOL, CA, PEG, MG, MAN, FUC, NAG, PO4

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.70	1/1704 (0.1%)	0.98	4/2328 (0.2%)
1	B	0.72	0/1698	0.97	4/2320 (0.2%)
2	C	0.72	0/878	1.03	3/1187 (0.3%)
2	F	0.70	0/878	1.01	1/1187 (0.1%)
All	All	0.71	1/5158 (0.0%)	0.99	12/7022 (0.2%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	147	MET	SD-CE	-5.41	1.66	1.79

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	127	ARG	N-CA-C	-6.20	104.44	112.68
1	A	127	ARG	N-CA-C	-6.19	104.45	112.68
2	C	68	PHE	CA-CB-CG	6.00	119.80	113.80
2	F	70	PHE	CA-CB-CG	5.92	119.72	113.80
2	C	95	TYR	CA-C-N	5.86	130.46	122.19
2	C	95	TYR	C-N-CA	5.86	130.46	122.19
1	B	63	LEU	N-CA-C	5.76	118.61	109.96
1	A	63	LEU	N-CA-C	5.29	117.90	109.96
1	A	168	TYR	CA-C-N	5.14	129.43	122.19
1	A	168	TYR	C-N-CA	5.14	129.43	122.19
1	B	168	TYR	CA-C-N	5.01	129.30	122.34
1	B	168	TYR	C-N-CA	5.01	129.30	122.34

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1667	0	1607	16	0
1	B	1663	0	1603	8	0
2	C	863	0	852	6	0
2	F	863	0	849	6	0
3	D	49	0	43	1	0
4	E	39	0	34	0	0
5	G	38	0	34	0	0
5	H	37	0	32	3	0
6	A	56	0	84	5	0
6	B	68	0	102	2	0
6	C	12	0	18	4	0
6	F	20	0	30	1	0
7	A	18	0	24	2	0
7	B	12	0	16	0	0
7	F	6	0	8	0	0
8	A	56	0	79	5	0
8	B	7	0	10	1	0
8	F	14	0	20	4	0
9	A	12	0	11	3	0
10	A	8	0	0	0	0
10	B	6	0	0	0	0
10	C	3	0	0	0	0
10	F	2	0	0	0	0
11	A	2	0	0	0	0
11	B	3	0	0	0	0
12	B	5	0	0	0	0
13	A	251	0	0	1	0
13	B	258	0	0	0	0
13	C	84	0	0	0	0
13	F	83	0	0	0	0
All	All	6205	0	5456	40	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 4.

All (40) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:103:ARG:HE	8:F:201:PEG:H11	1.20	1.02
1:B:169:GLN:HE22	1:B:197:ASN:ND2	1.58	0.98
2:C:60:TYR:HB2	6:C:205:EDO:H12	1.47	0.96
9:A:315:MAN:H1	5:H:2:NAG:HN2	1.32	0.93
1:B:169:GLN:HE22	1:B:197:ASN:HD21	1.16	0.92
1:A:226:VAL:HA	6:A:330:EDO:H22	1.63	0.80
2:C:60:TYR:HB2	6:C:205:EDO:C1	2.11	0.80
1:B:231:ALA:HA	6:B:316:EDO:H12	1.67	0.77
2:F:103:ARG:NE	8:F:201:PEG:H11	2.00	0.72
9:A:315:MAN:H1	5:H:2:NAG:N2	2.05	0.70
9:A:315:MAN:C1	5:H:2:NAG:HN2	2.04	0.68
2:C:64:VAL:HB	6:C:205:EDO:H11	1.76	0.67
1:B:74:GLN:HB2	6:C:205:EDO:H21	1.78	0.66
1:A:117:GLU:HB3	6:A:332:EDO:H12	1.79	0.65
1:A:142:TYR:HB2	7:A:311:GOL:H12	1.80	0.63
2:F:103:ARG:HE	8:F:201:PEG:C1	2.03	0.62
2:F:91:GLU:HA	6:F:208:EDO:H11	1.84	0.60
1:A:169:GLN:HE22	1:A:197:ASN:ND2	2.01	0.58
2:C:83:MET:HE1	2:C:113:VAL:HG21	1.84	0.57
1:B:169:GLN:NE2	1:B:197:ASN:HD21	1.96	0.55
1:B:132:ALA:HA	6:B:318:EDO:H21	1.89	0.55
1:A:198:GLU:CD	1:A:198:GLU:H	2.13	0.55
1:A:169:GLN:HE22	1:A:197:ASN:HD21	1.55	0.54
1:A:61:ALA:O	8:A:314:PEG:H32	2.10	0.51
1:B:169:GLN:NE2	1:B:197:ASN:ND2	2.43	0.51
1:A:212:LEU:HD22	8:A:307:PEG:H31	1.94	0.48
1:A:26:PHE:CE2	6:A:324:EDO:H11	2.49	0.47
1:A:215:ASN:C	8:A:307:PEG:H41	2.40	0.46
1:A:102:GLN:HG2	13:A:406:HOH:O	2.16	0.46
3:D:1:NAG:H4	3:D:2:NAG:H2	1.80	0.46
1:A:81:GLU:HA	8:A:314:PEG:H31	1.97	0.46
1:A:229:GLN:OE1	7:A:311:GOL:O3	2.30	0.45
1:B:81:GLU:H	8:B:304:PEG:H21	1.82	0.44
2:F:103:ARG:HH21	8:F:201:PEG:H22	1.82	0.44
1:A:26:PHE:CZ	6:A:324:EDO:H11	2.54	0.43
1:A:216:GLY:HA3	8:A:307:PEG:H22	2.01	0.42
2:C:34:MET:HB3	2:C:79:LEU:HD22	2.00	0.42
2:F:36:MET:HB3	2:F:81:LEU:HD22	2.01	0.42
1:A:51:SER:HB2	6:A:326:EDO:H11	2.01	0.41
2:C:27:ASN:HA	2:C:77:ASN:HD21	1.85	0.41

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	218/225 (97%)	216 (99%)	1 (0%)	1 (0%)	24	37
1	B	217/225 (96%)	213 (98%)	3 (1%)	1 (0%)	24	37
2	C	115/141 (82%)	114 (99%)	1 (1%)	0	100	100
2	F	115/141 (82%)	114 (99%)	1 (1%)	0	100	100
All	All	665/732 (91%)	657 (99%)	6 (1%)	2 (0%)	36	50

All (2) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	126	ILE
1	B	126	ILE

5.3.2 Protein sidechains

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	186/191 (97%)	186 (100%)	0	100	100
1	B	185/191 (97%)	185 (100%)	0	100	100
2	C	91/107 (85%)	91 (100%)	0	100	100
2	F	91/107 (85%)	91 (100%)	0	100	100
All	All	553/596 (93%)	553 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (10) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	85	GLN
1	A	169	GLN
1	B	85	GLN
1	B	102	GLN
1	B	197	ASN
2	C	77	ASN
2	C	112	GLN
2	F	3	GLN
2	F	79	ASN
2	F	114	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates ⓘ

13 monosaccharides are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
3	NAG	D	1	1,3	14,14,15	0.31	0	17,19,21	1.02	1 (5%)
3	NAG	D	2	3	14,14,15	0.42	0	17,19,21	1.41	3 (17%)
3	MAN	D	3	3	11,11,12	0.48	0	15,15,17	1.07	1 (6%)
3	FUC	D	4	3	10,10,11	0.33	0	14,14,16	0.66	0
4	NAG	E	1	1,4	14,14,15	0.31	0	17,19,21	0.55	0
4	NAG	E	2	4	14,14,15	0.32	0	17,19,21	0.86	1 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
4	MAN	E	3	4	11,11,12	0.60	0	15,15,17	1.08	2 (13%)
5	NAG	G	1	1,5	14,14,15	0.31	0	17,19,21	0.90	1 (5%)
5	NAG	G	2	5	14,14,15	0.41	0	17,19,21	1.66	1 (5%)
5	FUC	G	3	5	10,10,11	0.72	0	14,14,16	1.34	2 (14%)
5	NAG	H	1	1,5	14,14,15	0.32	0	17,19,21	0.76	1 (5%)
5	NAG	H	2	5	13,13,15	0.50	0	12,17,21	1.23	2 (16%)
5	FUC	H	3	5	10,10,11	0.76	0	14,14,16	1.34	2 (14%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAG	D	1	1,3	-	0/6/23/26	0/1/1/1
3	NAG	D	2	3	-	1/6/23/26	0/1/1/1
3	MAN	D	3	3	-	0/2/19/22	0/1/1/1
3	FUC	D	4	3	-	-	0/1/1/1
4	NAG	E	1	1,4	-	0/6/23/26	0/1/1/1
4	NAG	E	2	4	-	0/6/23/26	0/1/1/1
4	MAN	E	3	4	-	0/2/19/22	0/1/1/1
5	NAG	G	1	1,5	-	0/6/23/26	0/1/1/1
5	NAG	G	2	5	-	2/6/23/26	0/1/1/1
5	FUC	G	3	5	-	-	0/1/1/1
5	NAG	H	1	1,5	-	0/6/23/26	0/1/1/1
5	NAG	H	2	5	-	2/6/19/26	0/1/1/1
5	FUC	H	3	5	-	-	0/1/1/1

There are no bond length outliers.

All (17) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	G	2	NAG	C1-O5-C5	6.00	120.23	112.19
3	D	2	NAG	C1-O5-C5	3.81	117.30	112.19
3	D	3	MAN	C1-O5-C5	3.44	116.80	112.19
3	D	1	NAG	O4-C4-C3	-3.17	102.91	110.38
5	G	3	FUC	C1-O5-C5	2.83	119.64	112.97
5	H	2	NAG	O5-C1-C2	2.78	115.58	111.29
5	G	3	FUC	C1-C2-C3	2.73	113.62	109.64
3	D	2	NAG	C1-C2-N2	-2.69	106.19	110.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	G	1	NAG	C1-O5-C5	2.58	115.65	112.19
3	D	2	NAG	O5-C1-C2	2.54	115.22	111.29
5	H	2	NAG	C4-C5-C6	2.51	117.14	112.50
4	E	3	MAN	C1-C2-C3	2.50	113.29	109.64
4	E	3	MAN	C1-O5-C5	2.49	115.52	112.19
4	E	2	NAG	O5-C1-C2	-2.48	107.46	111.29
5	H	3	FUC	C1-C2-C3	2.46	113.23	109.64
5	H	3	FUC	C1-O5-C5	2.45	118.75	112.97
5	H	1	NAG	O4-C4-C5	-2.22	103.86	109.32

There are no chirality outliers.

All (5) torsion outliers are listed below:

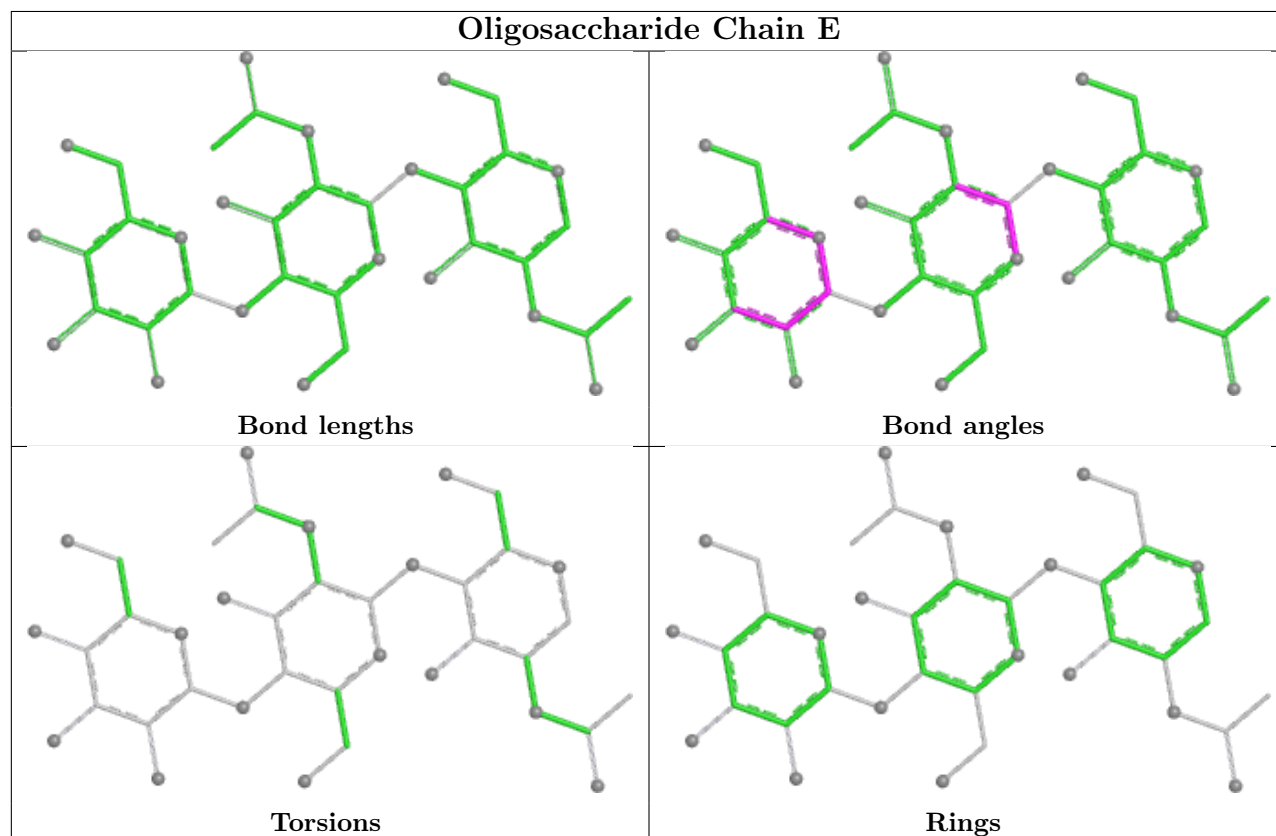
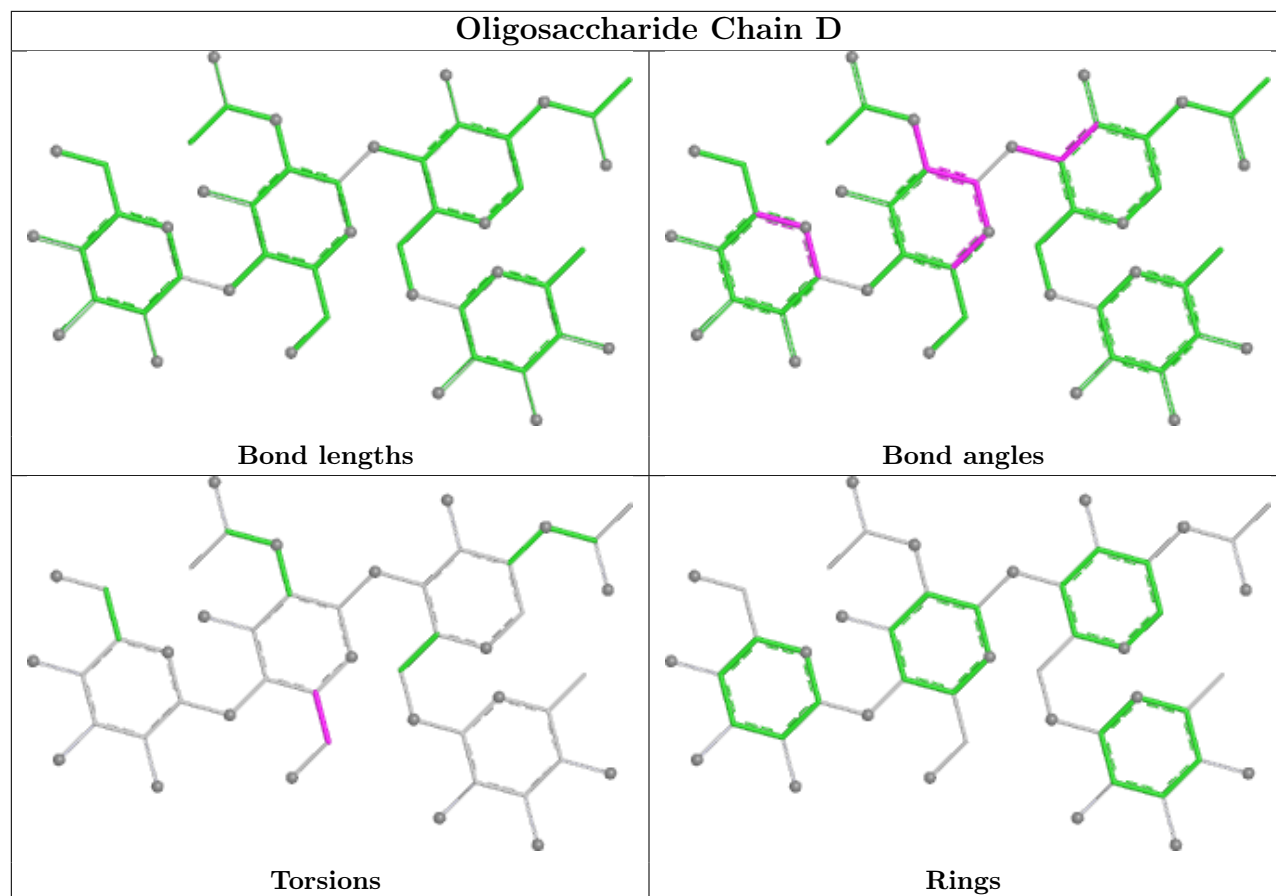
Mol	Chain	Res	Type	Atoms
5	H	2	NAG	C4-C5-C6-O6
5	G	2	NAG	C8-C7-N2-C2
5	H	2	NAG	O5-C5-C6-O6
5	G	2	NAG	O7-C7-N2-C2
3	D	2	NAG	C4-C5-C6-O6

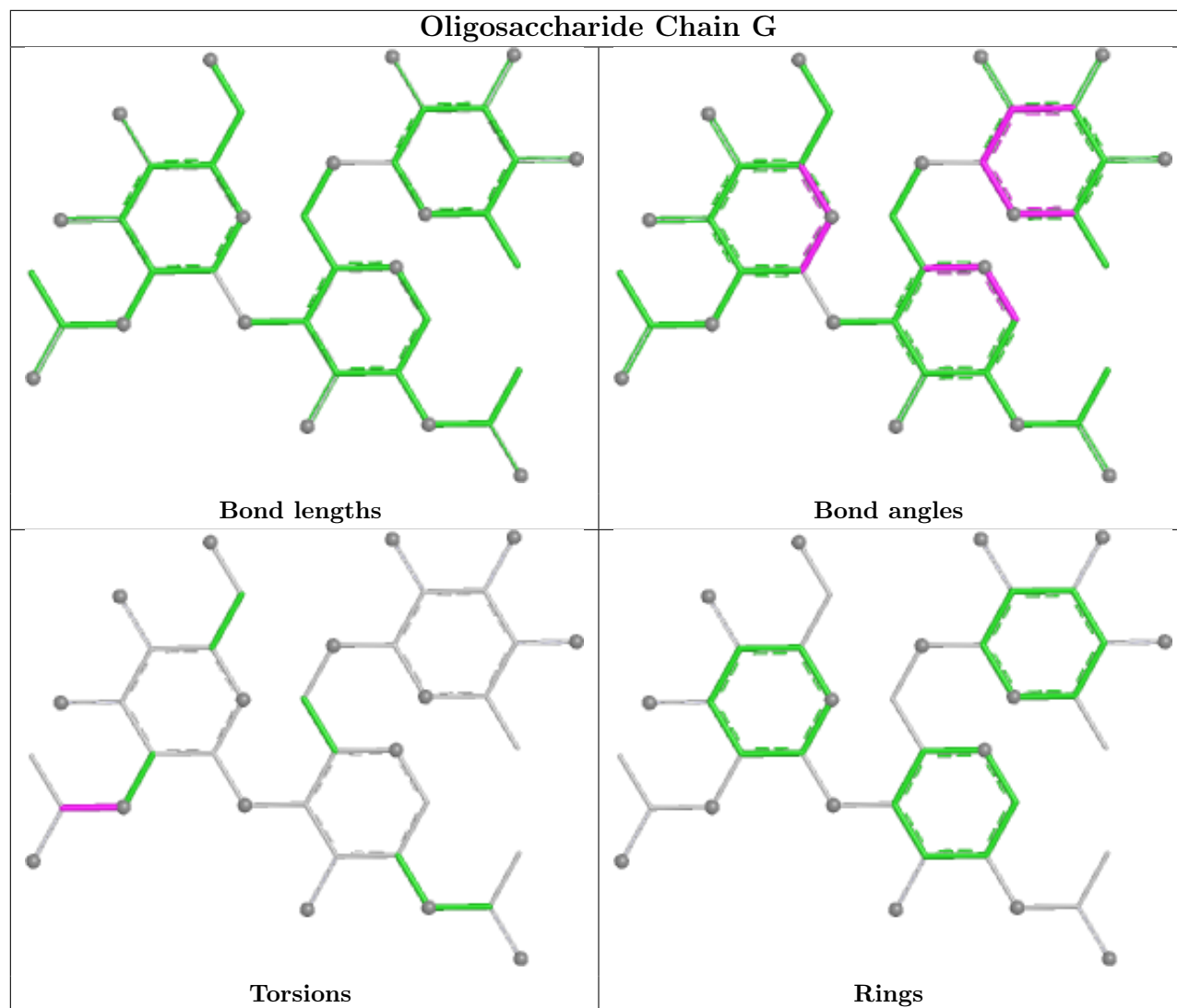
There are no ring outliers.

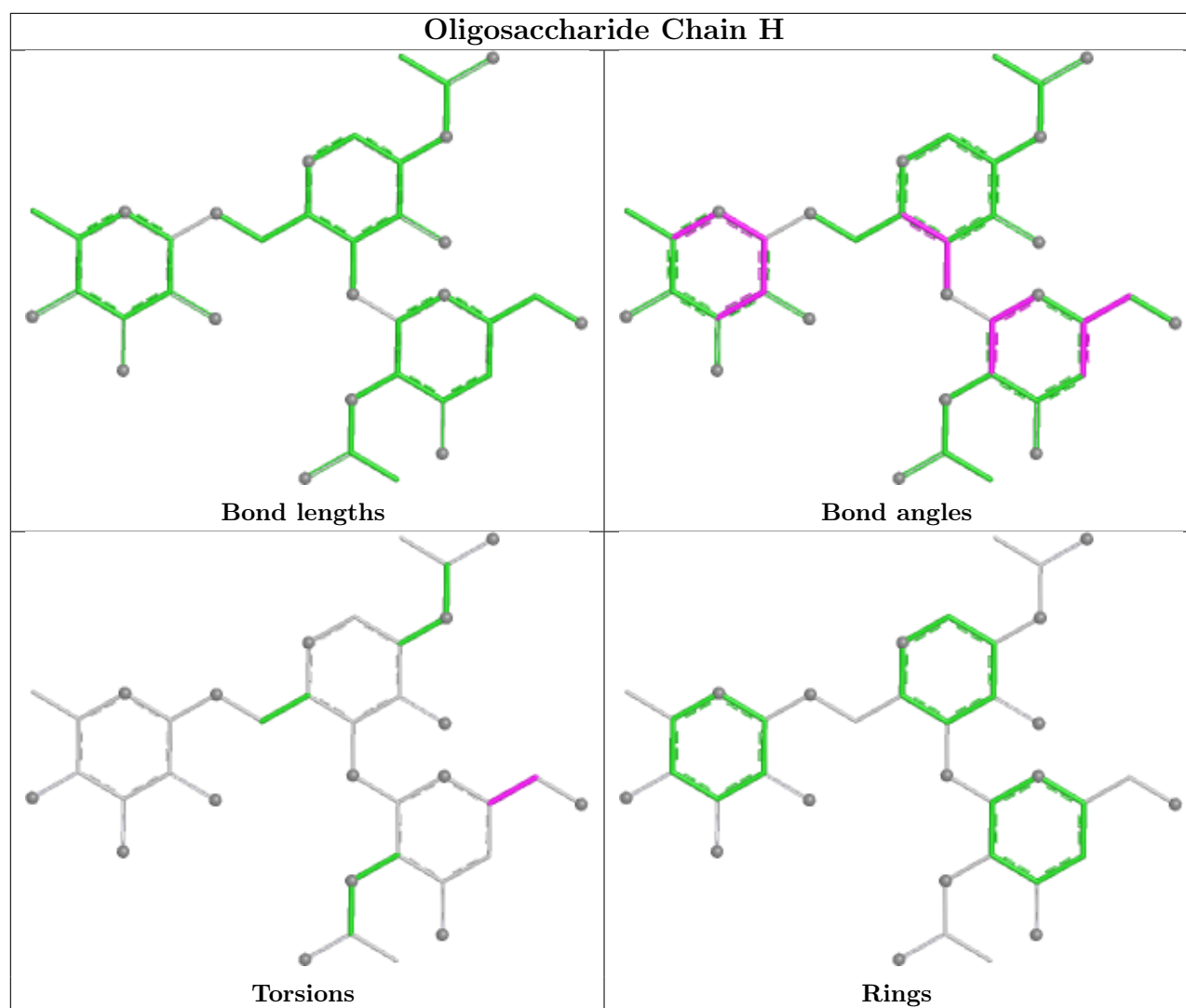
3 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	D	2	NAG	1	0
5	H	2	NAG	3	0
3	D	1	NAG	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for oligosaccharide.







5.6 Ligand geometry [i](#)

Of 82 ligands modelled in this entry, 24 are monoatomic - leaving 58 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	$\# Z > 2$
6	EDO	B	312	-	3,3,3	0.51	0	2,2,2	0.33	0
6	EDO	A	324	-	3,3,3	0.44	0	2,2,2	0.29	0
6	EDO	B	319	-	3,3,3	0.58	0	2,2,2	0.23	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
6	EDO	B	316	-	3,3,3	0.56	0	2,2,2	0.31	0
6	EDO	C	204	-	3,3,3	0.54	0	2,2,2	0.25	0
6	EDO	B	325	-	3,3,3	0.64	0	2,2,2	0.24	0
6	EDO	C	206	-	3,3,3	0.55	0	2,2,2	0.33	0
6	EDO	B	317	-	3,3,3	0.59	0	2,2,2	0.36	0
6	EDO	F	209	-	3,3,3	0.57	0	2,2,2	0.33	0
6	EDO	A	304	-	3,3,3	0.67	0	2,2,2	0.04	0
6	EDO	A	330	-	3,3,3	0.56	0	2,2,2	0.24	0
8	PEG	A	306	-	6,6,6	0.13	0	5,5,5	0.07	0
8	PEG	A	307	-	6,6,6	0.18	0	5,5,5	0.19	0
6	EDO	B	320	-	3,3,3	0.58	0	2,2,2	0.19	0
8	PEG	A	308	-	6,6,6	0.22	0	5,5,5	0.10	0
6	EDO	B	313	-	3,3,3	0.58	0	2,2,2	0.26	0
7	GOL	A	311	-	5,5,5	0.10	0	5,5,5	0.27	0
6	EDO	B	322	-	3,3,3	0.55	0	2,2,2	0.21	0
8	PEG	A	314	-	6,6,6	0.15	0	5,5,5	0.08	0
8	PEG	A	309	-	6,6,6	0.25	0	5,5,5	0.14	0
6	EDO	B	321	-	3,3,3	0.58	0	2,2,2	0.17	0
8	PEG	A	310	-	6,6,6	0.14	0	5,5,5	0.09	0
6	EDO	B	314	-	3,3,3	0.58	0	2,2,2	0.31	0
8	PEG	A	312	-	6,6,6	0.29	0	5,5,5	0.19	0
8	PEG	F	201	-	6,6,6	0.29	0	5,5,5	0.14	0
6	EDO	A	328	-	3,3,3	0.63	0	2,2,2	0.25	0
12	PO4	B	327	10	4,4,4	1.86	2 (50%)	6,6,6	0.74	0
7	GOL	B	303	-	5,5,5	0.12	0	5,5,5	0.26	0
6	EDO	F	202	-	3,3,3	0.83	0	2,2,2	0.09	0
6	EDO	B	324	-	3,3,3	0.56	0	2,2,2	0.33	0
6	EDO	F	208	-	3,3,3	0.49	0	2,2,2	0.30	0
6	EDO	A	302	-	3,3,3	0.56	0	2,2,2	1.43	0
9	MAN	A	315	-	12,12,12	0.81	0	17,17,17	1.10	2 (11%)
6	EDO	A	301	-	3,3,3	0.48	0	2,2,2	0.32	0
6	EDO	B	326	-	3,3,3	0.55	0	2,2,2	0.27	0
6	EDO	C	205	-	3,3,3	0.37	0	2,2,2	0.39	0
6	EDO	A	331	-	3,3,3	0.50	0	2,2,2	0.35	0
6	EDO	A	329	-	3,3,3	0.53	0	2,2,2	0.33	0
6	EDO	A	333	-	3,3,3	0.56	0	2,2,2	0.19	0
6	EDO	A	327	-	3,3,3	0.53	0	2,2,2	0.38	0
6	EDO	B	311	-	3,3,3	0.42	0	2,2,2	0.45	0
7	GOL	A	303	-	5,5,5	0.11	0	5,5,5	0.58	0
7	GOL	F	204	-	5,5,5	0.12	0	5,5,5	0.26	0
6	EDO	F	210	-	3,3,3	0.52	0	2,2,2	0.34	0
6	EDO	A	325	-	3,3,3	0.57	0	2,2,2	0.30	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
6	EDO	A	332	-	3,3,3	0.53	0	2,2,2	0.25	0
8	PEG	F	205	-	6,6,6	0.16	0	5,5,5	0.10	0
7	GOL	A	305	10	5,5,5	0.14	0	5,5,5	0.27	0
6	EDO	A	326	-	3,3,3	0.52	0	2,2,2	0.32	0
7	GOL	B	302	-	5,5,5	0.05	0	5,5,5	0.61	0
6	EDO	A	334	-	3,3,3	0.49	0	2,2,2	0.34	0
8	PEG	A	313	-	6,6,6	0.71	0	5,5,5	0.36	0
6	EDO	B	315	-	3,3,3	0.68	0	2,2,2	0.05	0
6	EDO	B	323	-	3,3,3	0.63	0	2,2,2	0.10	0
6	EDO	B	301	-	3,3,3	0.51	0	2,2,2	0.39	0
8	PEG	B	304	-	6,6,6	0.21	0	5,5,5	0.34	0
6	EDO	B	318	-	3,3,3	0.58	0	2,2,2	0.29	0
6	EDO	F	203	-	3,3,3	0.55	0	2,2,2	0.28	0

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
6	EDO	B	312	-	-	0/1/1/1	-
6	EDO	A	324	-	-	0/1/1/1	-
6	EDO	B	319	-	-	0/1/1/1	-
6	EDO	B	316	-	-	1/1/1/1	-
6	EDO	C	204	-	-	0/1/1/1	-
6	EDO	B	325	-	-	0/1/1/1	-
6	EDO	C	206	-	-	0/1/1/1	-
6	EDO	B	317	-	-	0/1/1/1	-
6	EDO	F	209	-	-	1/1/1/1	-
6	EDO	A	304	-	-	0/1/1/1	-
6	EDO	A	330	-	-	0/1/1/1	-
8	PEG	A	306	-	-	1/4/4/4	-
8	PEG	A	307	-	-	2/4/4/4	-
6	EDO	B	320	-	-	0/1/1/1	-
8	PEG	A	308	-	-	2/4/4/4	-
6	EDO	B	313	-	-	0/1/1/1	-
7	GOL	A	311	-	-	0/4/4/4	-
6	EDO	B	322	-	-	0/1/1/1	-
8	PEG	A	314	-	-	1/4/4/4	-
8	PEG	A	309	-	-	2/4/4/4	-
6	EDO	B	321	-	-	1/1/1/1	-
8	PEG	A	310	-	-	1/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
6	EDO	B	314	-	-	1/1/1/1	-
8	PEG	A	312	-	-	2/4/4/4	-
8	PEG	F	201	-	-	2/4/4/4	-
6	EDO	A	328	-	-	0/1/1/1	-
7	GOL	B	303	-	-	0/4/4/4	-
6	EDO	F	202	-	-	1/1/1/1	-
6	EDO	B	324	-	-	0/1/1/1	-
6	EDO	F	208	-	-	0/1/1/1	-
6	EDO	A	302	-	-	1/1/1/1	-
9	MAN	A	315	-	-	0/2/22/22	0/1/1/1
6	EDO	A	301	-	-	0/1/1/1	-
6	EDO	B	326	-	-	0/1/1/1	-
6	EDO	C	205	-	-	1/1/1/1	-
6	EDO	A	331	-	-	0/1/1/1	-
6	EDO	A	329	-	-	0/1/1/1	-
6	EDO	A	333	-	-	0/1/1/1	-
6	EDO	A	327	-	-	0/1/1/1	-
6	EDO	B	311	-	-	1/1/1/1	-
7	GOL	A	303	-	-	2/4/4/4	-
7	GOL	F	204	-	-	2/4/4/4	-
6	EDO	F	210	-	-	0/1/1/1	-
6	EDO	A	325	-	-	0/1/1/1	-
6	EDO	A	332	-	-	1/1/1/1	-
8	PEG	F	205	-	-	1/4/4/4	-
7	GOL	A	305	10	-	2/4/4/4	-
6	EDO	A	326	-	-	0/1/1/1	-
7	GOL	B	302	-	-	1/4/4/4	-
6	EDO	A	334	-	-	1/1/1/1	-
8	PEG	A	313	-	-	1/4/4/4	-
6	EDO	B	315	-	-	0/1/1/1	-
6	EDO	B	323	-	-	1/1/1/1	-
6	EDO	B	301	-	-	1/1/1/1	-
8	PEG	B	304	-	-	3/4/4/4	-
6	EDO	B	318	-	-	0/1/1/1	-
6	EDO	F	203	-	-	0/1/1/1	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	B	327	PO4	P-O3	2.02	1.60	1.54
12	B	327	PO4	P-O4	2.02	1.60	1.54

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	A	315	MAN	C1-O5-C5	2.96	119.38	113.65
9	A	315	MAN	O5-C5-C4	2.03	113.35	109.70

There are no chirality outliers.

All (37) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
7	A	305	GOL	O1-C1-C2-C3
7	F	204	GOL	C1-C2-C3-O3
8	F	201	PEG	O1-C1-C2-O2
7	A	305	GOL	O1-C1-C2-O2
7	F	204	GOL	O2-C2-C3-O3
8	A	307	PEG	O2-C3-C4-O4
8	A	309	PEG	O1-C1-C2-O2
8	A	312	PEG	O1-C1-C2-O2
6	A	302	EDO	O1-C1-C2-O2
6	A	332	EDO	O1-C1-C2-O2
6	B	316	EDO	O1-C1-C2-O2
6	F	202	EDO	O1-C1-C2-O2
6	F	209	EDO	O1-C1-C2-O2
8	A	306	PEG	O1-C1-C2-O2
8	A	309	PEG	O2-C3-C4-O4
7	A	303	GOL	O2-C2-C3-O3
8	A	312	PEG	C1-C2-O2-C3
8	A	310	PEG	C1-C2-O2-C3
8	F	205	PEG	C1-C2-O2-C3
8	A	314	PEG	O1-C1-C2-O2
6	B	314	EDO	O1-C1-C2-O2
6	C	205	EDO	O1-C1-C2-O2
8	A	308	PEG	C1-C2-O2-C3
6	A	334	EDO	O1-C1-C2-O2
6	B	323	EDO	O1-C1-C2-O2
8	A	313	PEG	O2-C3-C4-O4
8	F	201	PEG	C4-C3-O2-C2
7	A	303	GOL	O1-C1-C2-O2
7	B	302	GOL	O1-C1-C2-O2
6	B	301	EDO	O1-C1-C2-O2
6	B	311	EDO	O1-C1-C2-O2
6	B	321	EDO	O1-C1-C2-O2
8	A	307	PEG	C4-C3-O2-C2
8	B	304	PEG	C1-C2-O2-C3

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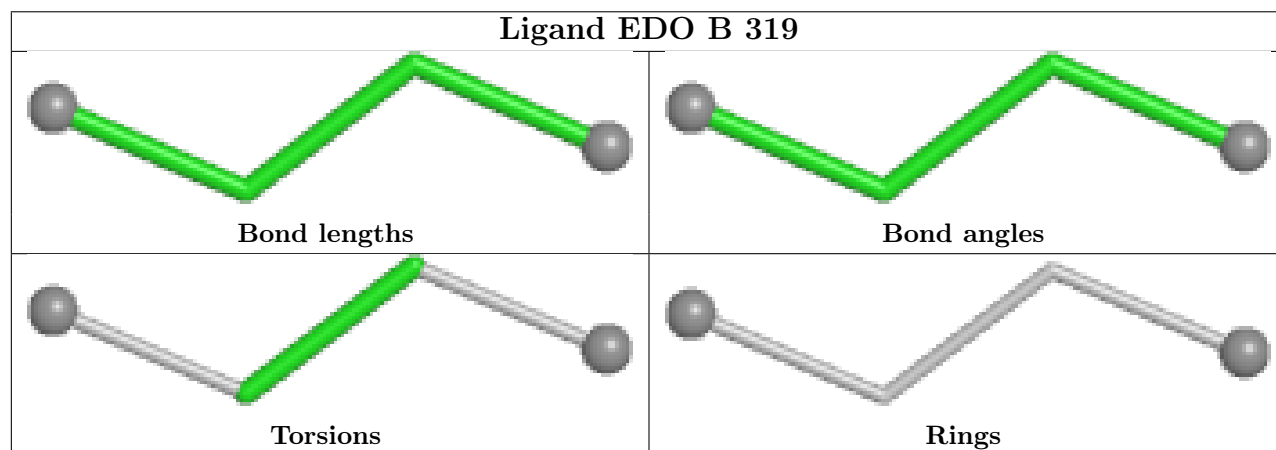
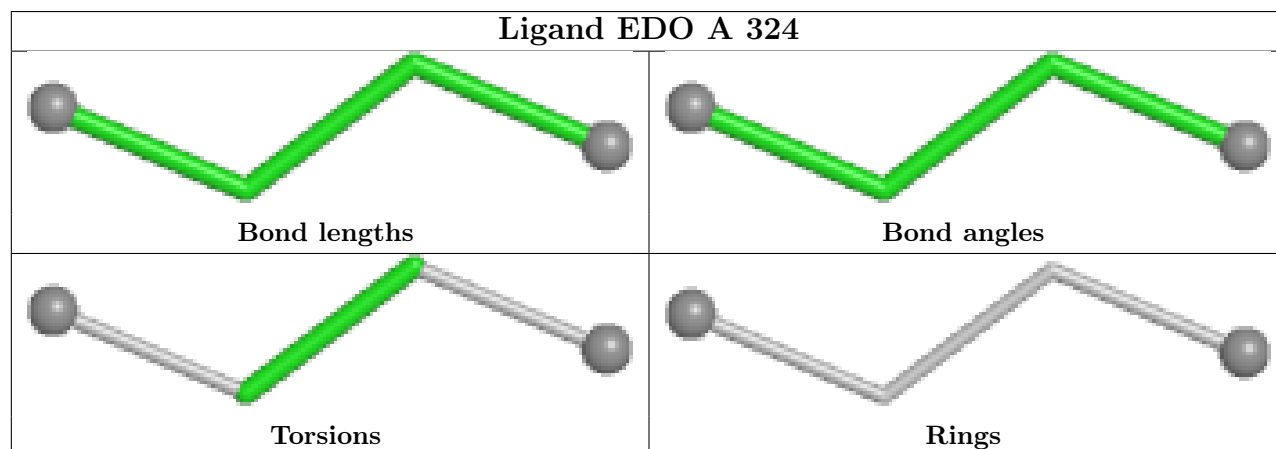
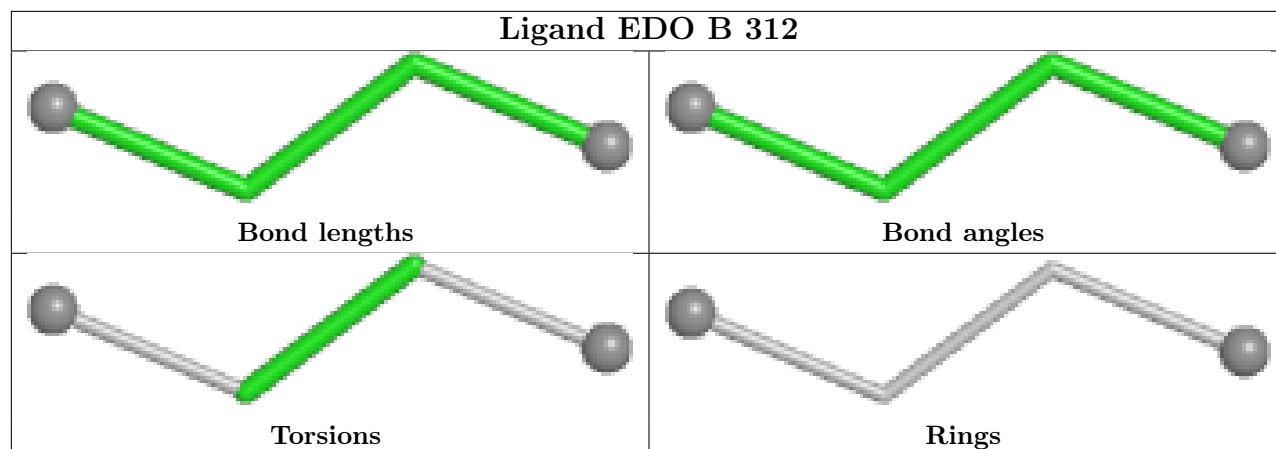
Mol	Chain	Res	Type	Atoms
8	A	308	PEG	O1-C1-C2-O2
8	B	304	PEG	O1-C1-C2-O2
8	B	304	PEG	O2-C3-C4-O4

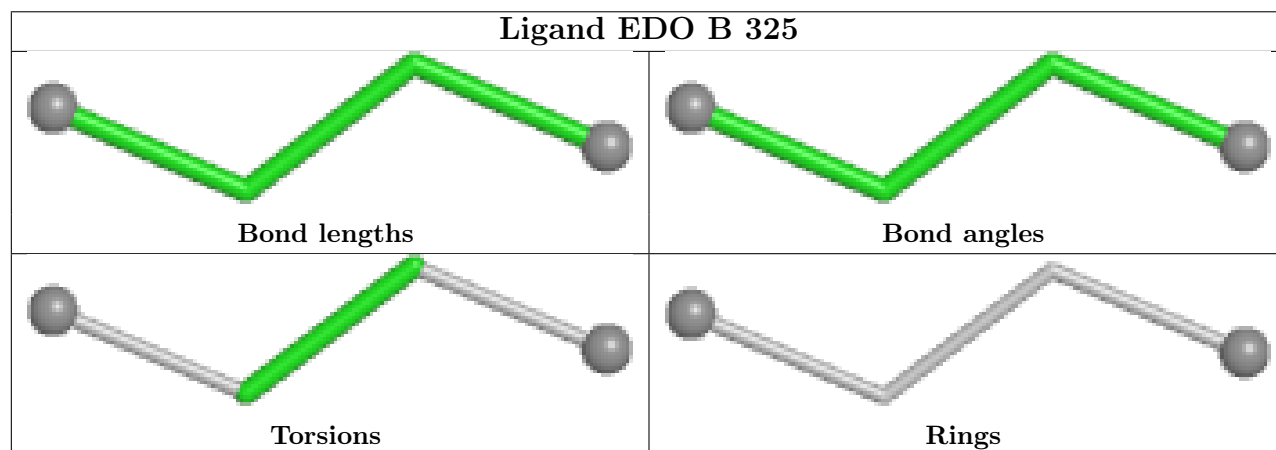
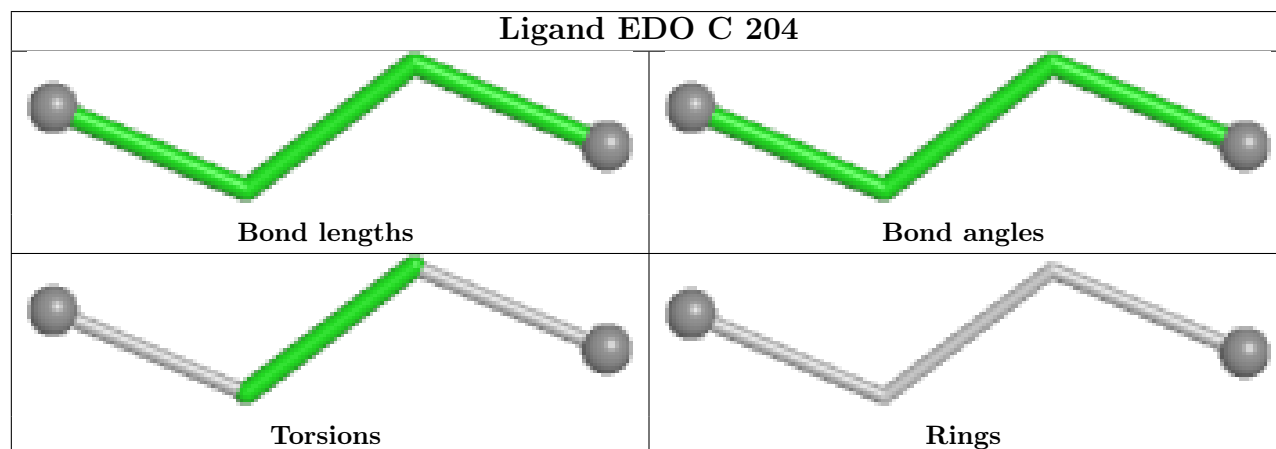
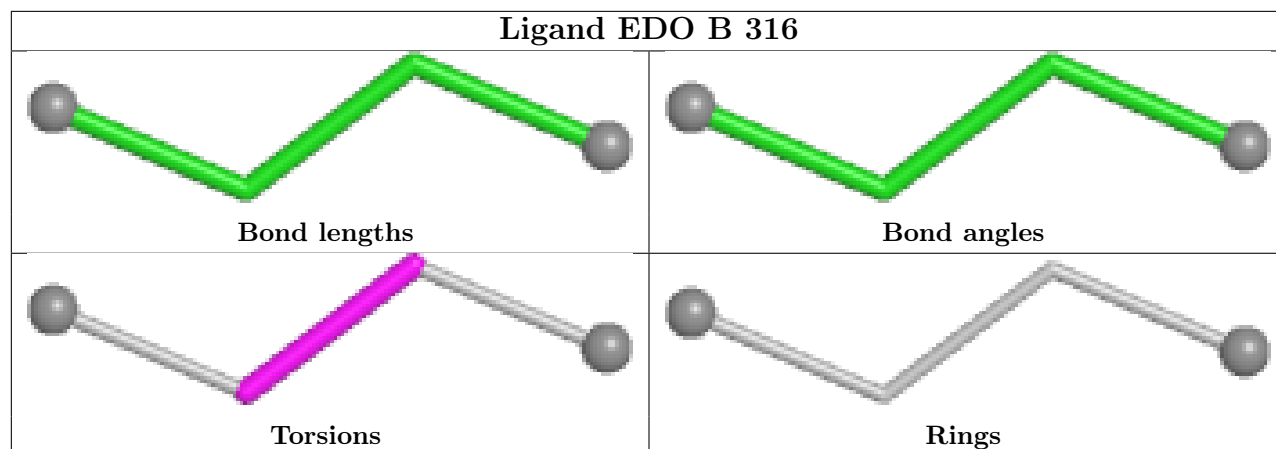
There are no ring outliers.

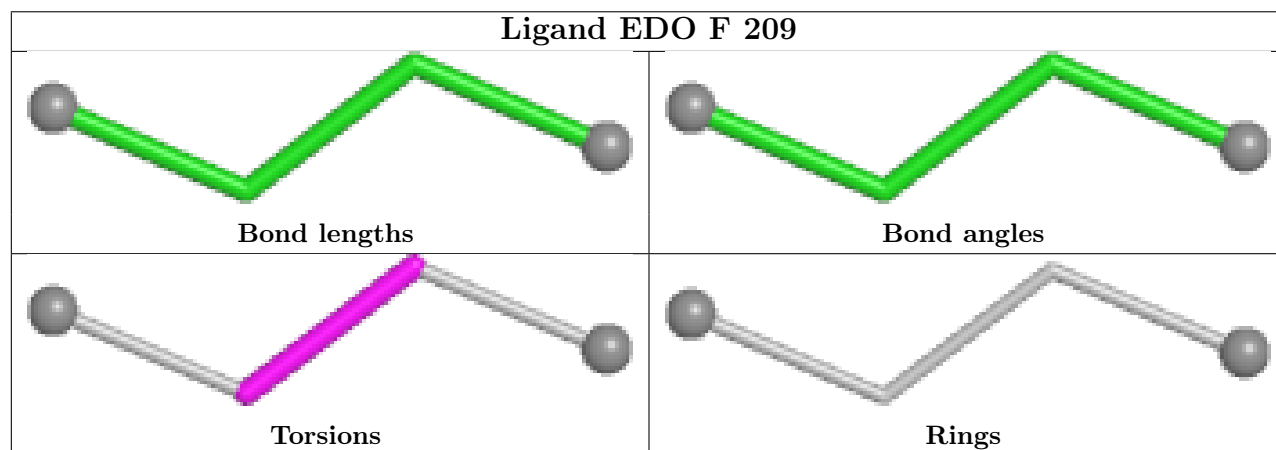
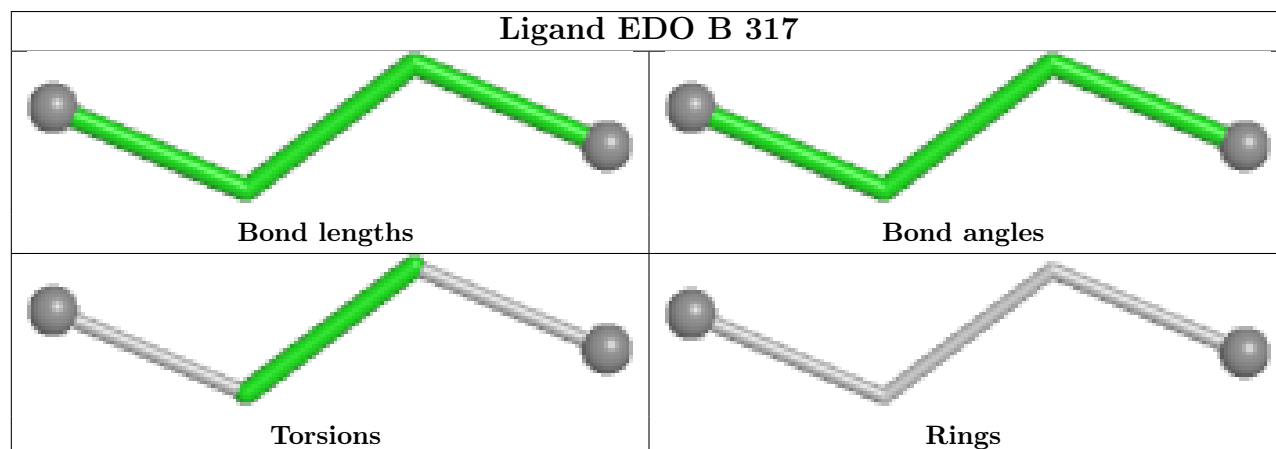
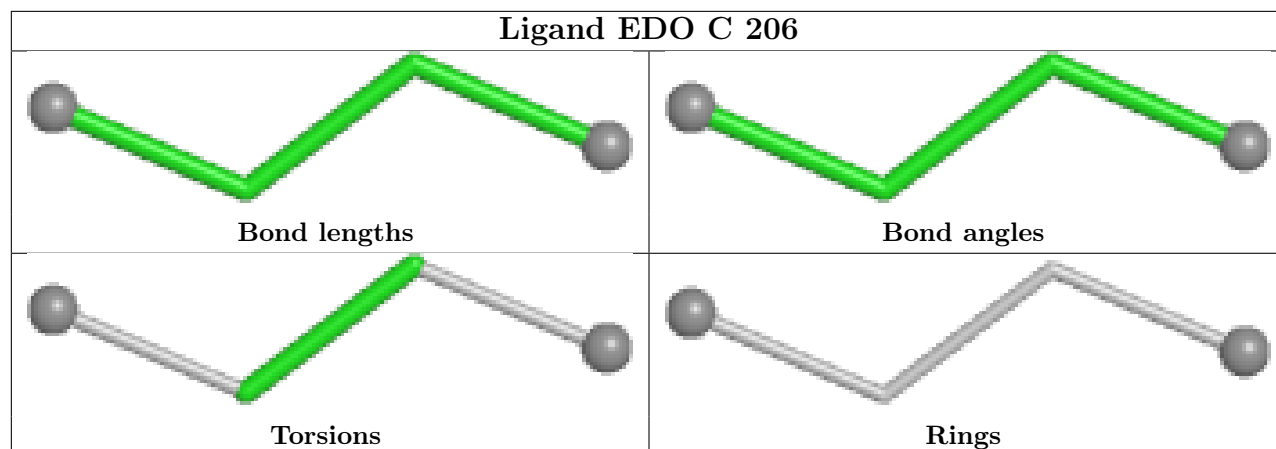
14 monomers are involved in 27 short contacts:

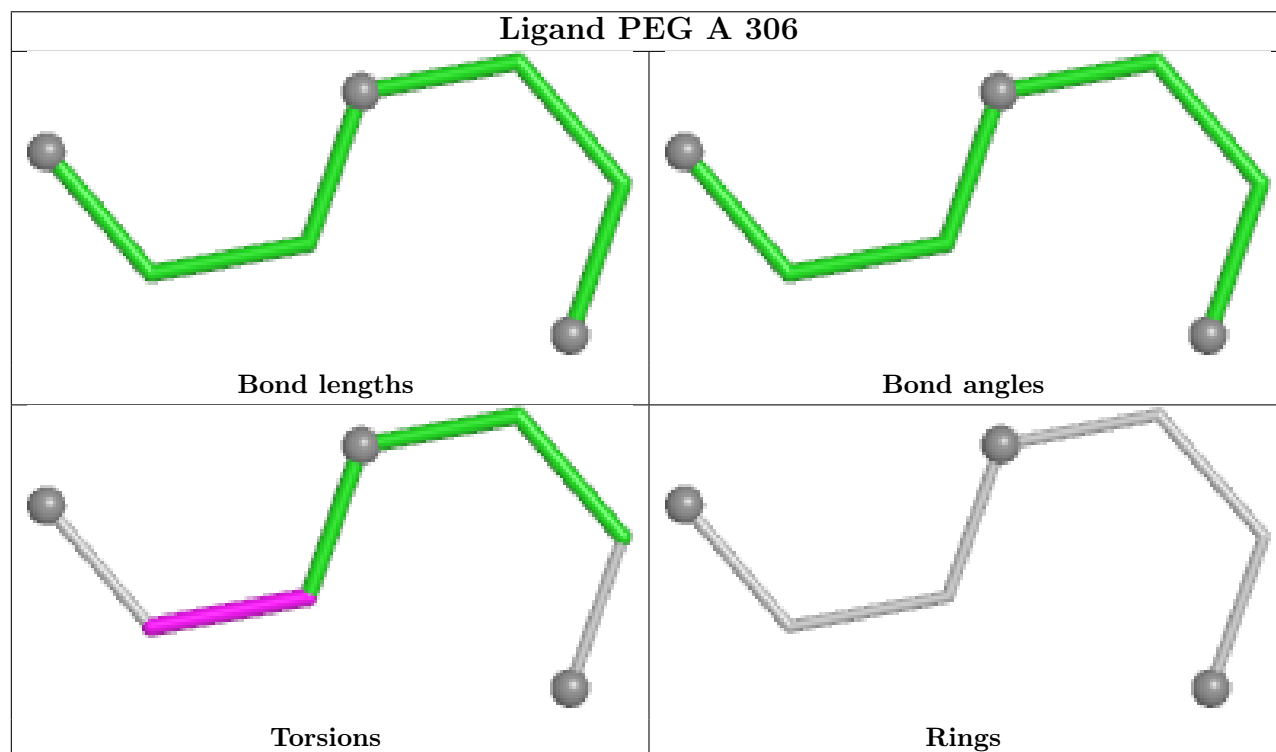
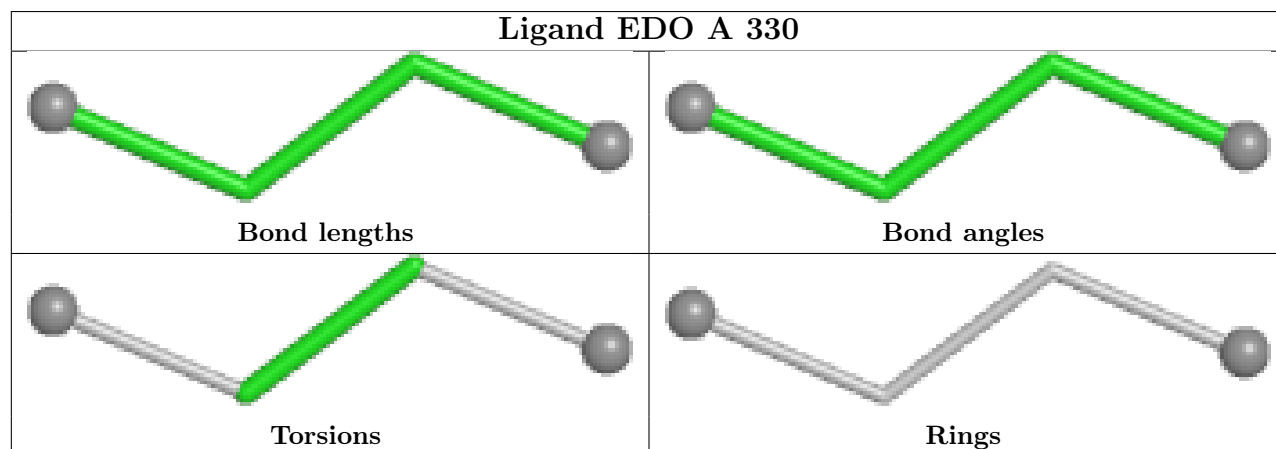
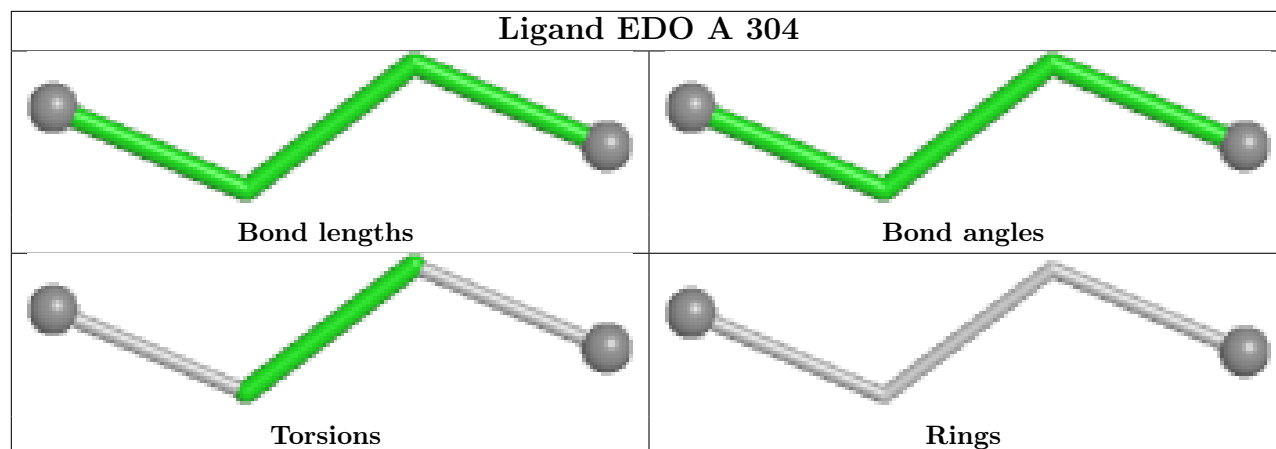
Mol	Chain	Res	Type	Clashes	Symm-Clashes
6	A	324	EDO	2	0
6	B	316	EDO	1	0
6	A	330	EDO	1	0
8	A	307	PEG	3	0
7	A	311	GOL	2	0
8	A	314	PEG	2	0
8	F	201	PEG	4	0
6	F	208	EDO	1	0
9	A	315	MAN	3	0
6	C	205	EDO	4	0
6	A	332	EDO	1	0
6	A	326	EDO	1	0
8	B	304	PEG	1	0
6	B	318	EDO	1	0

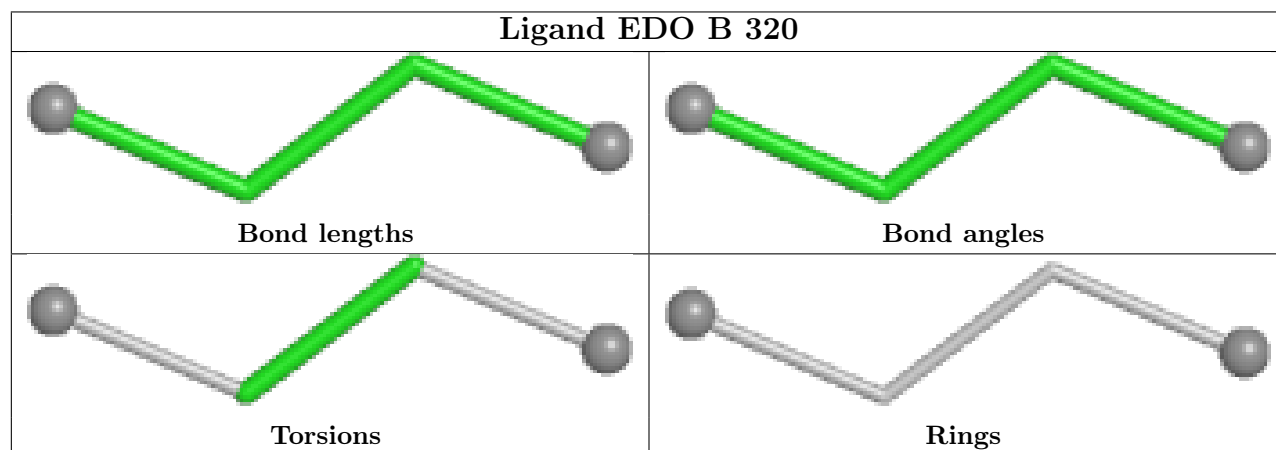
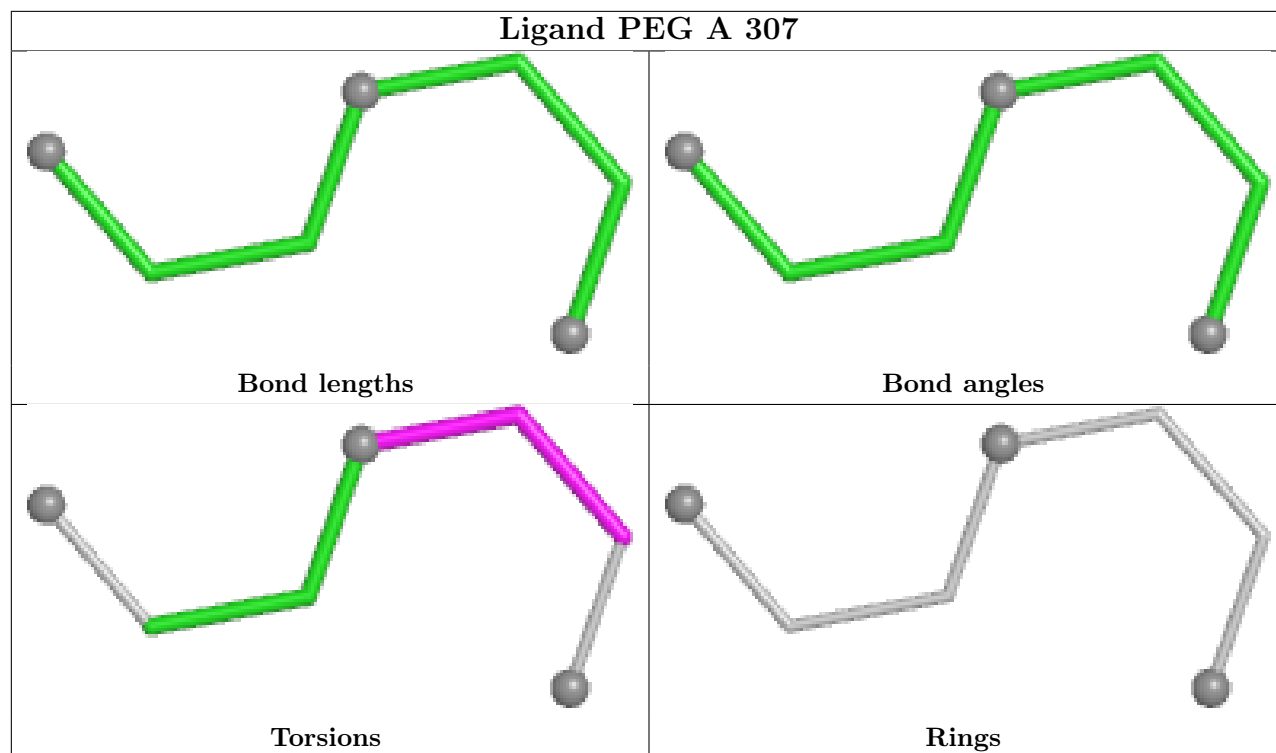
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

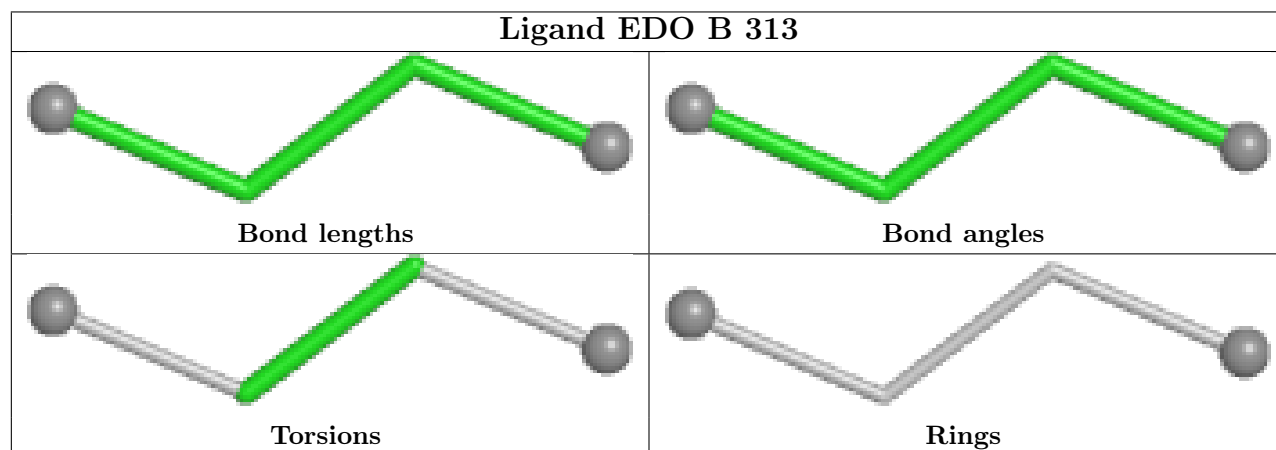
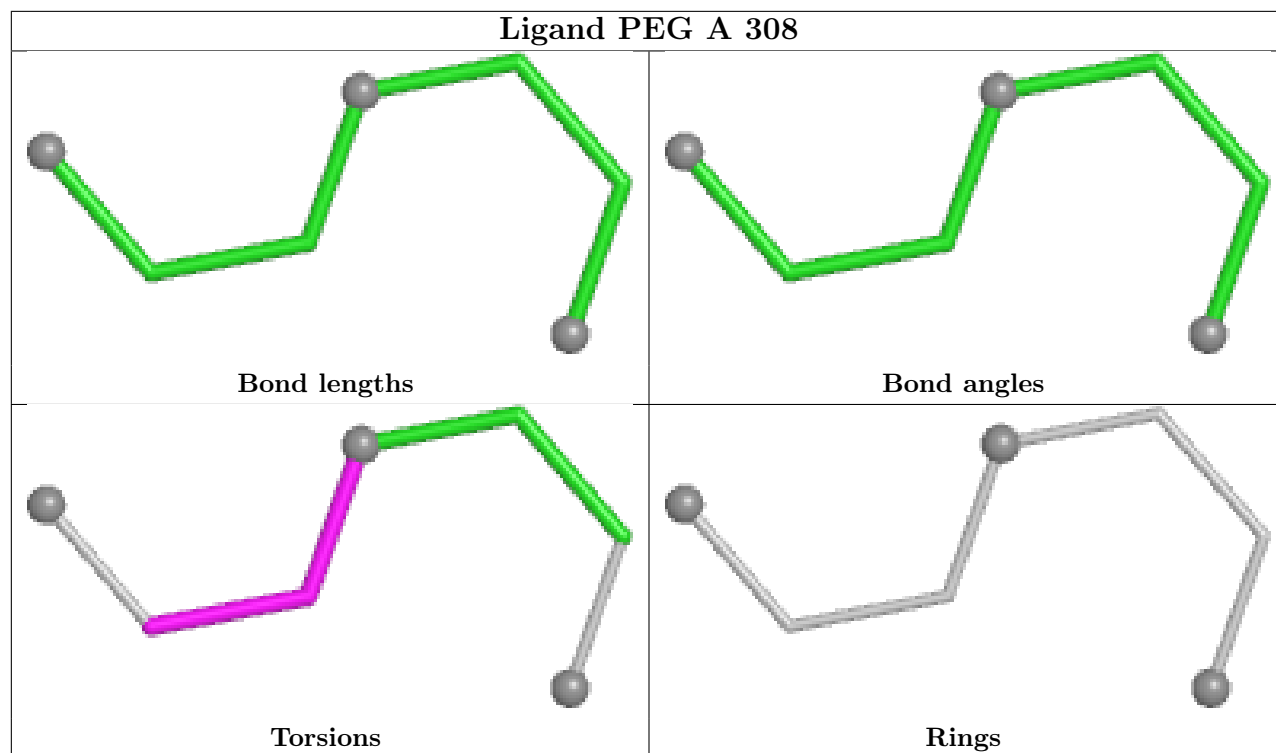


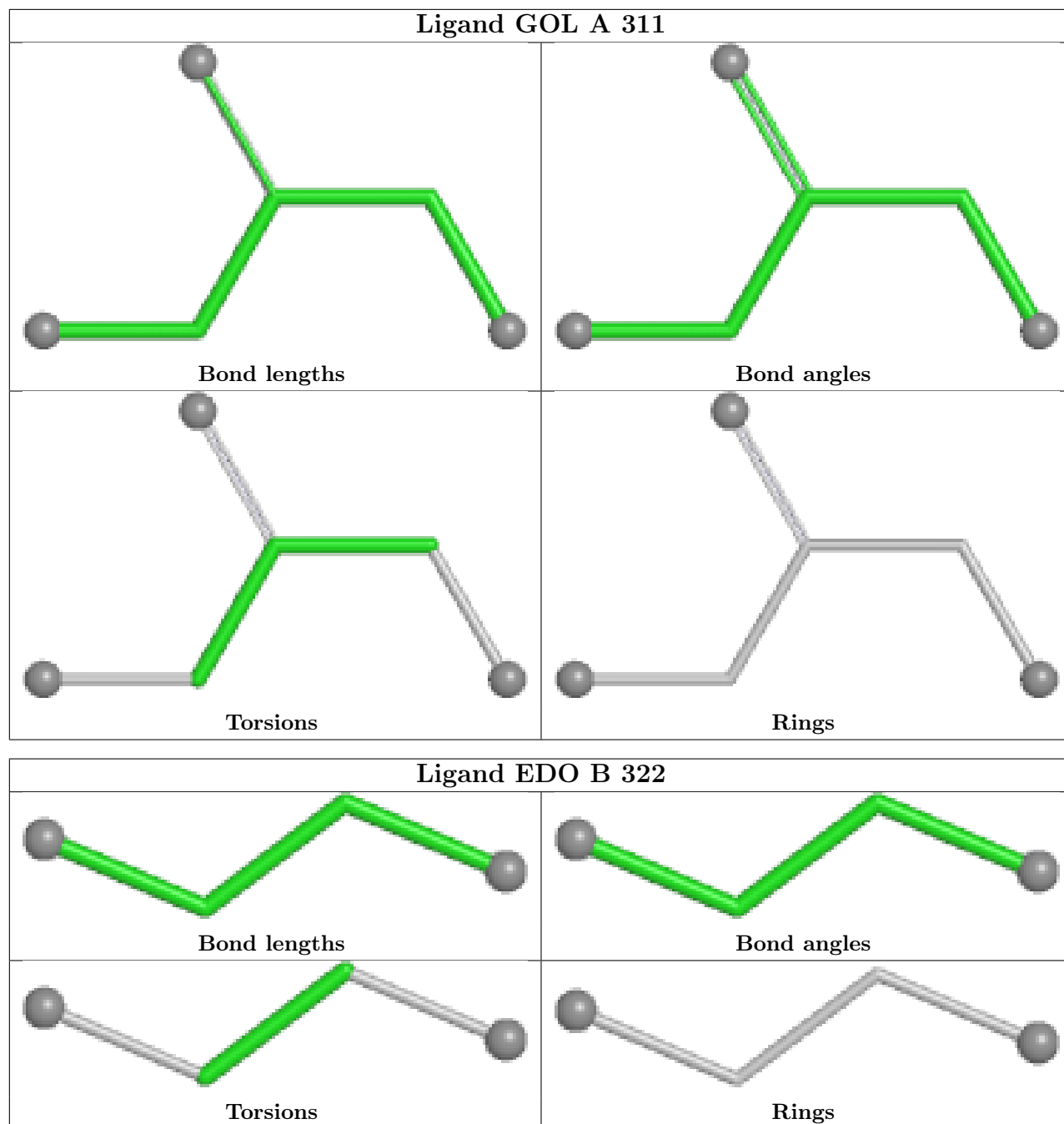


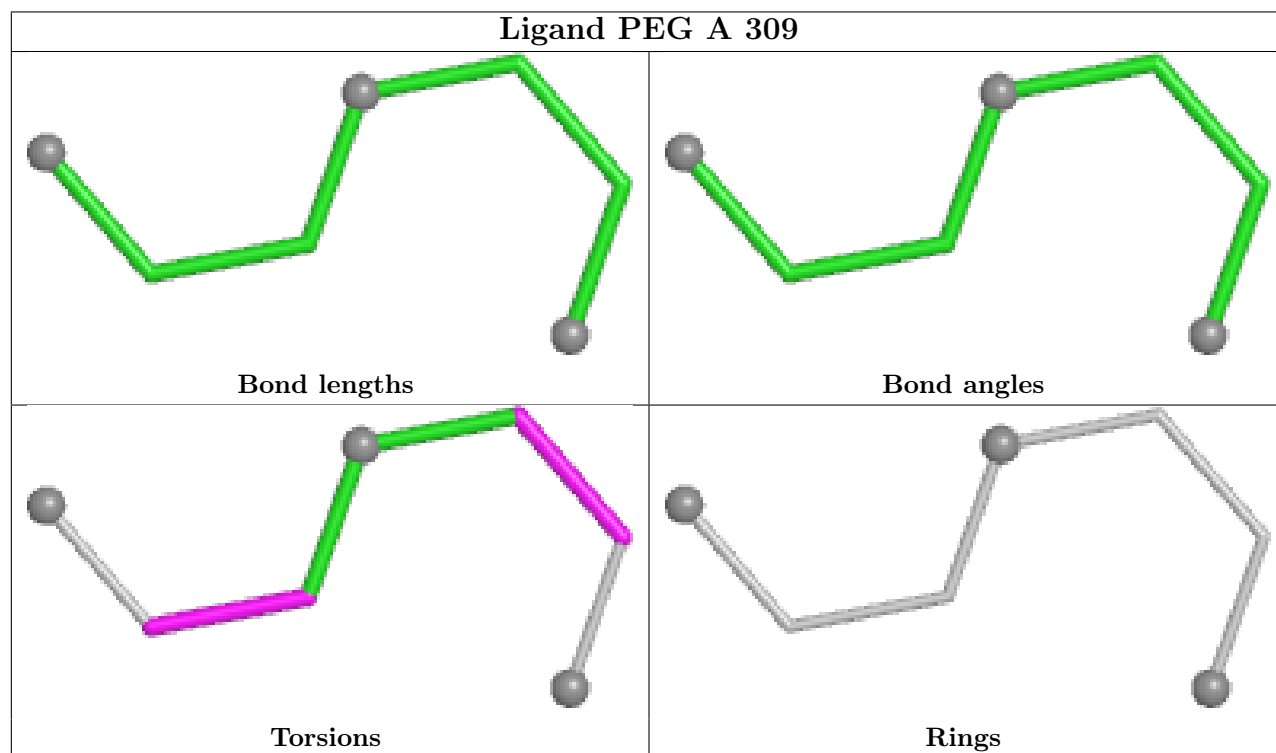
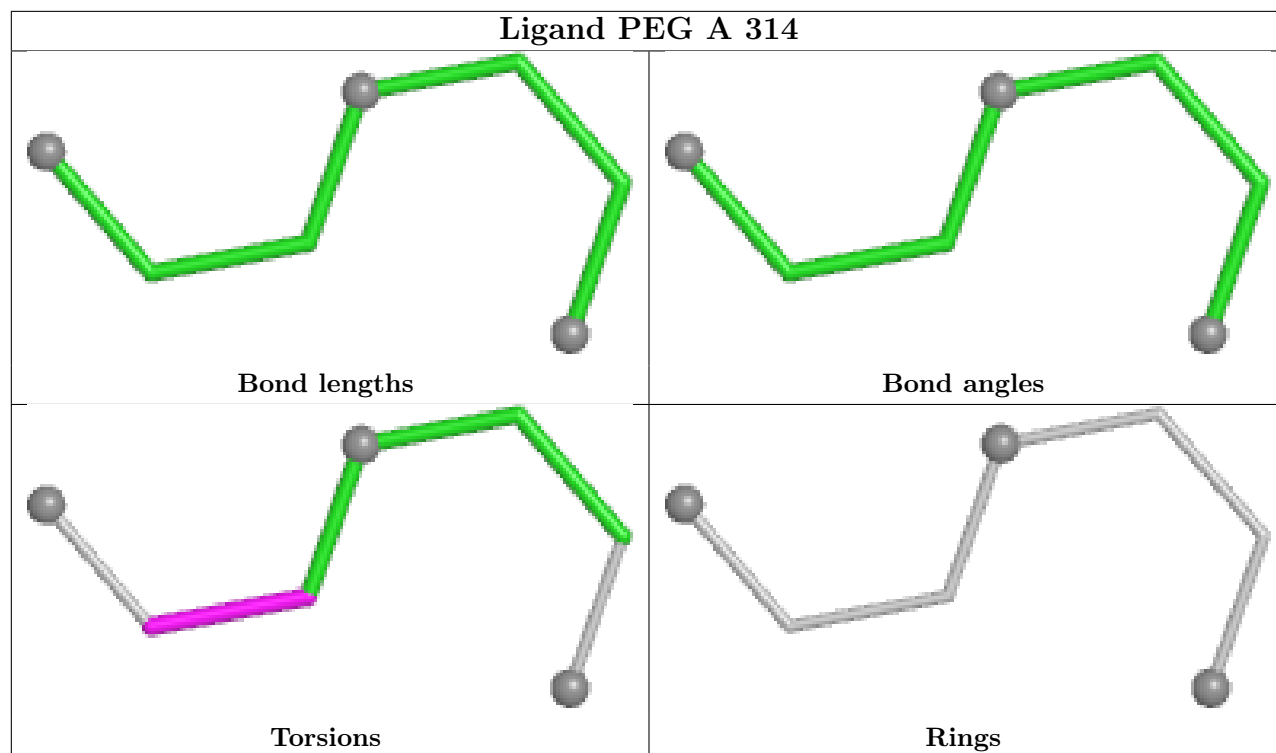


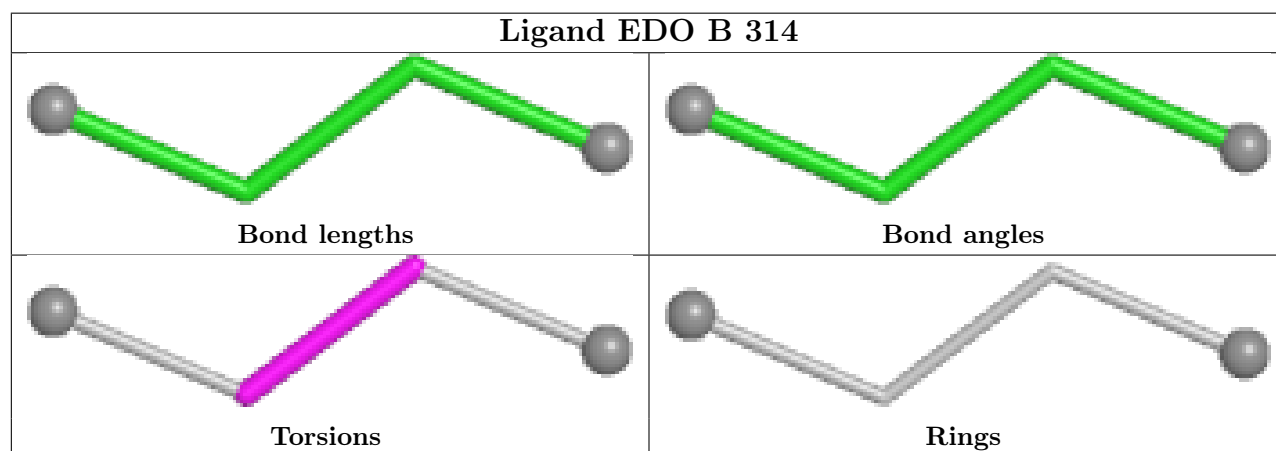
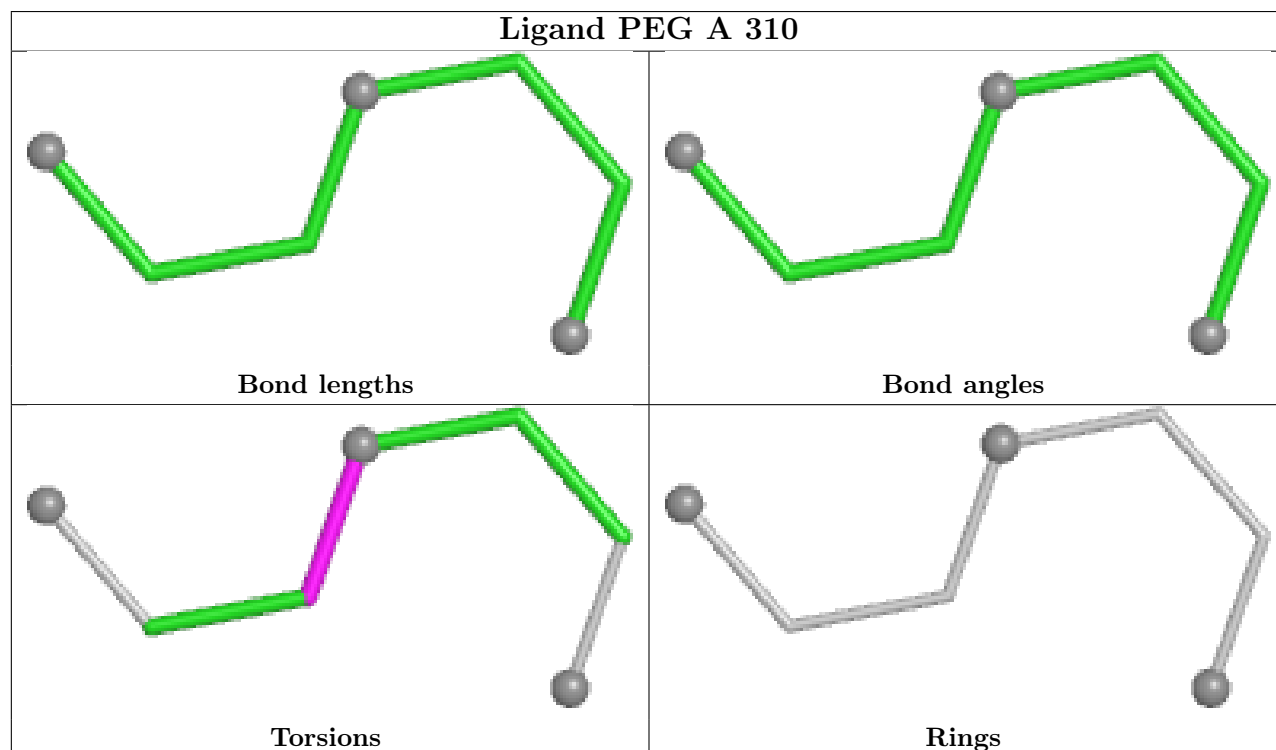
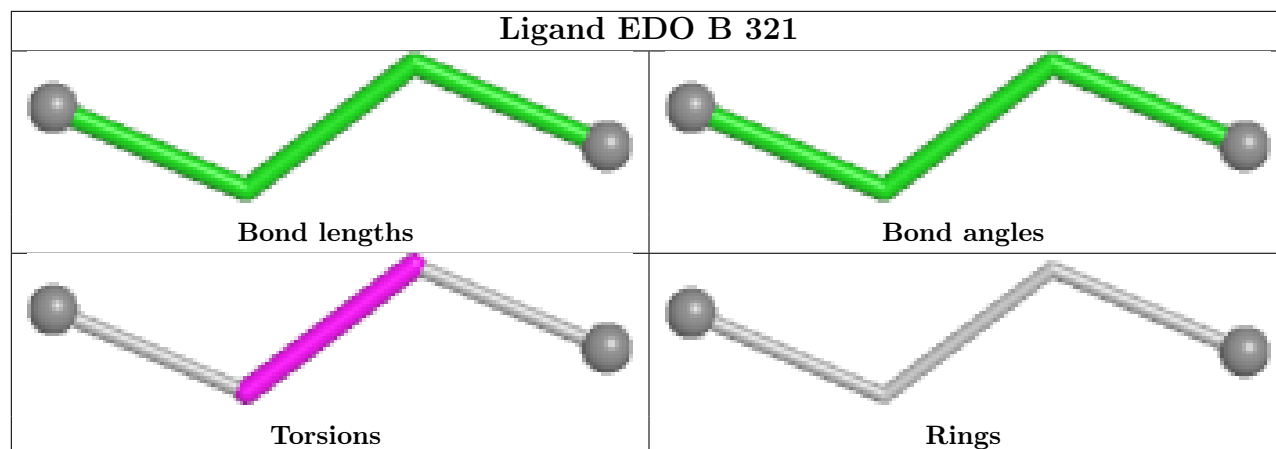


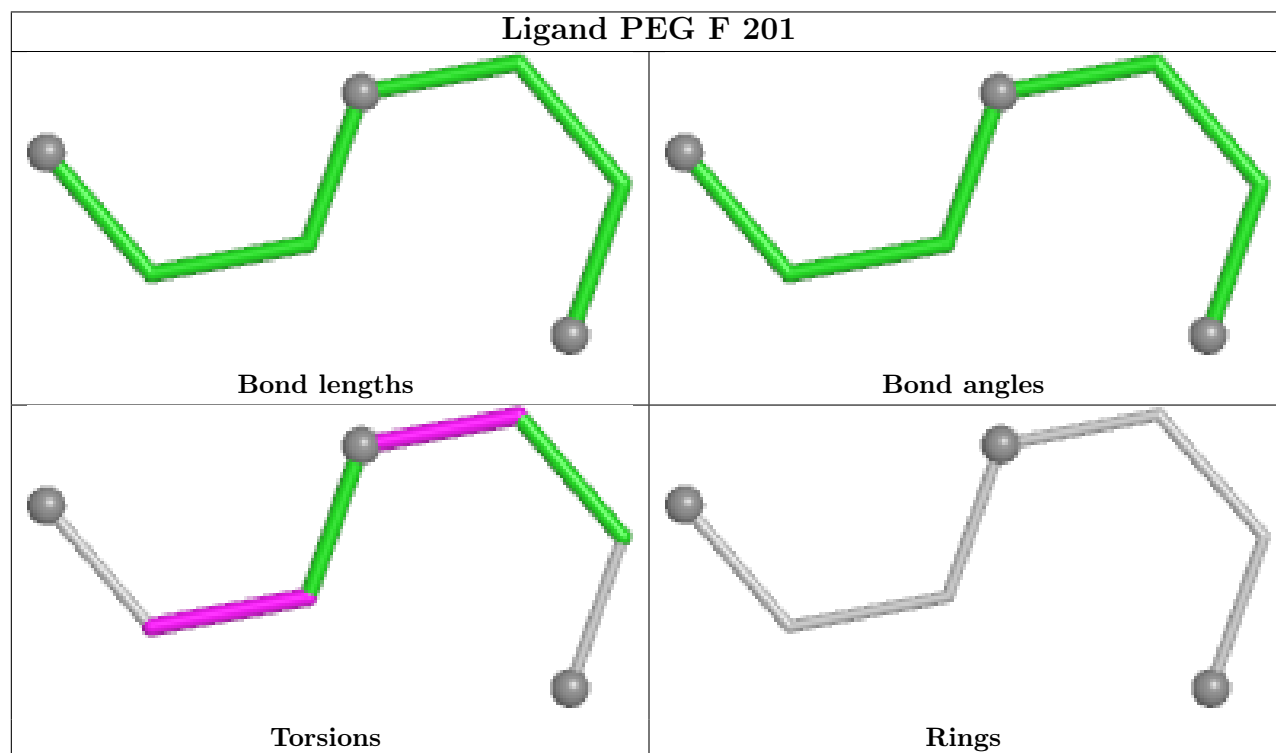
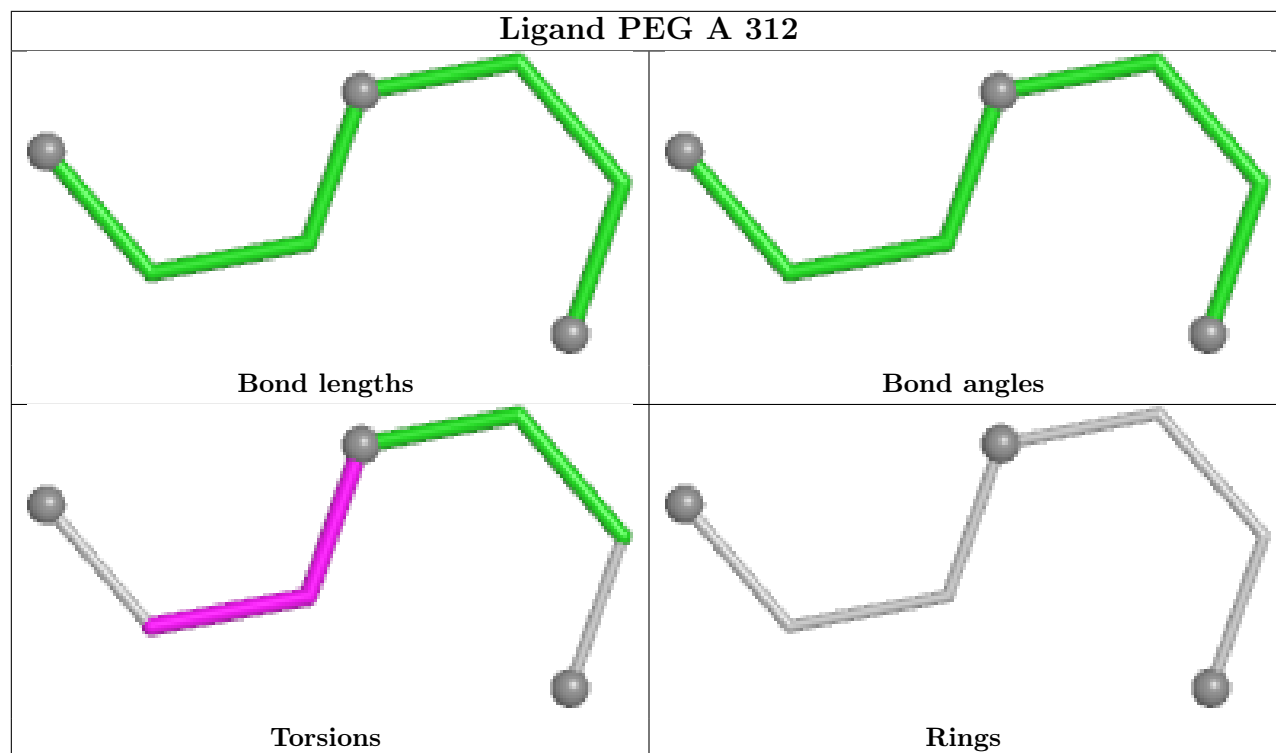


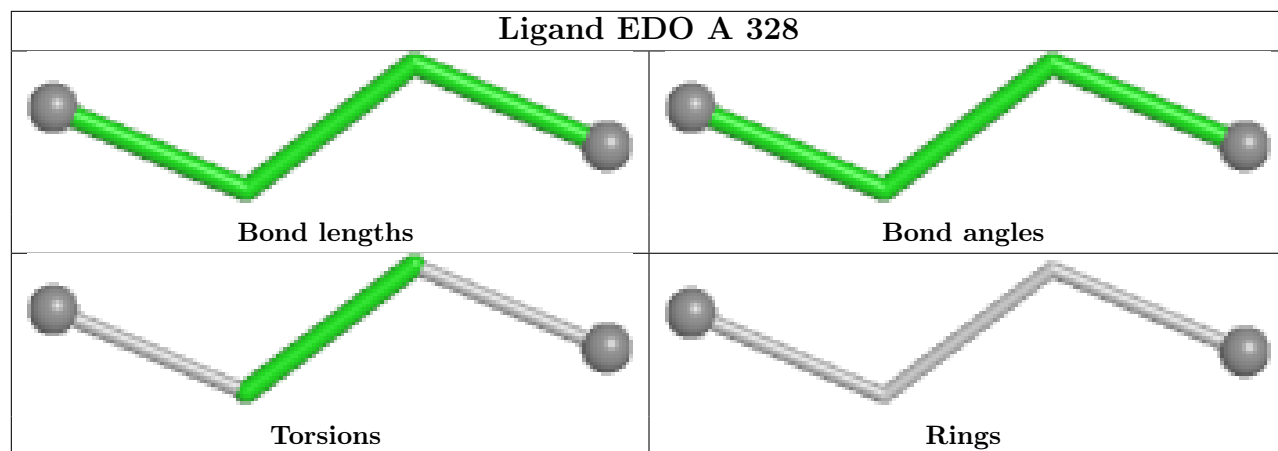


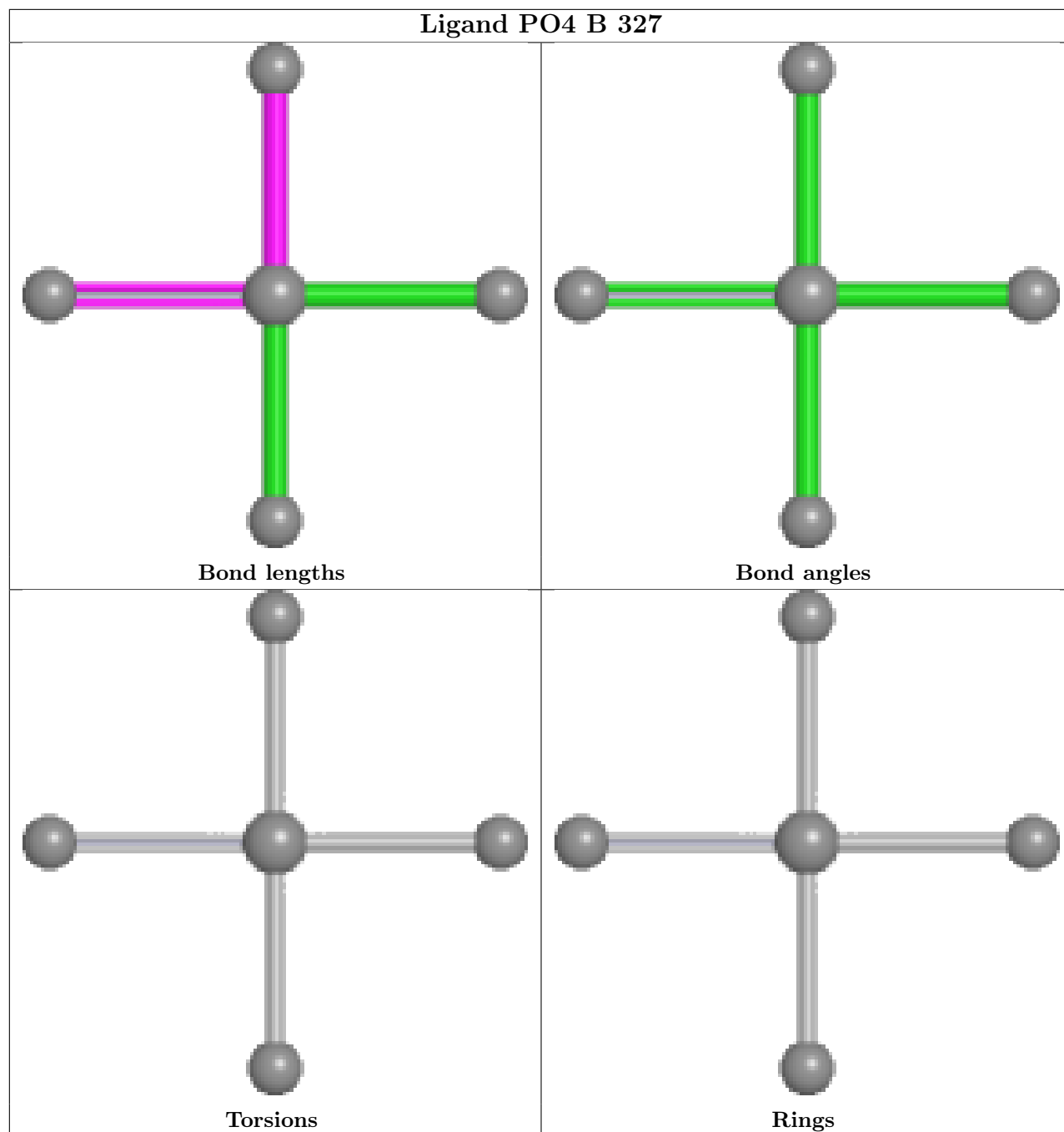


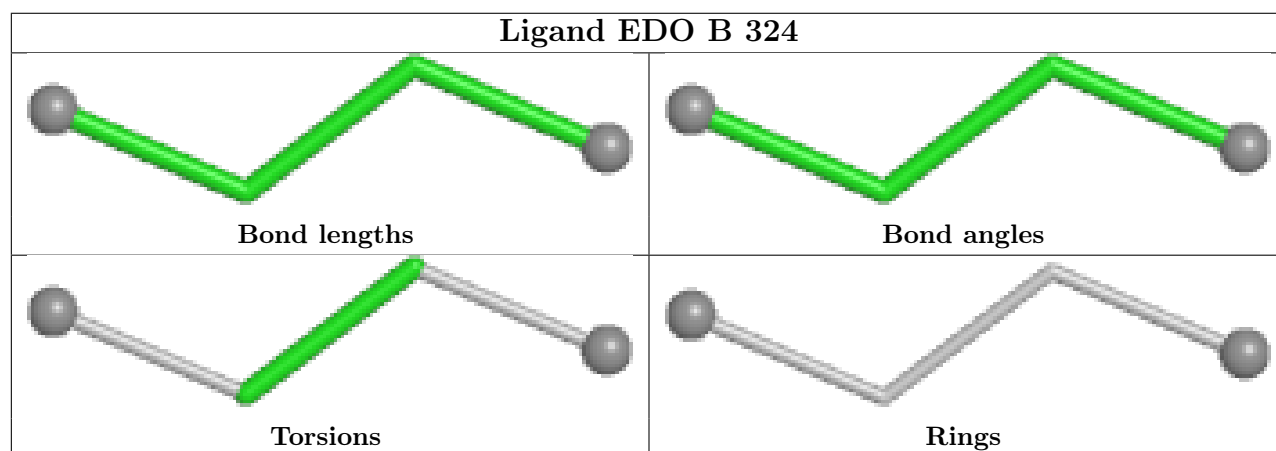
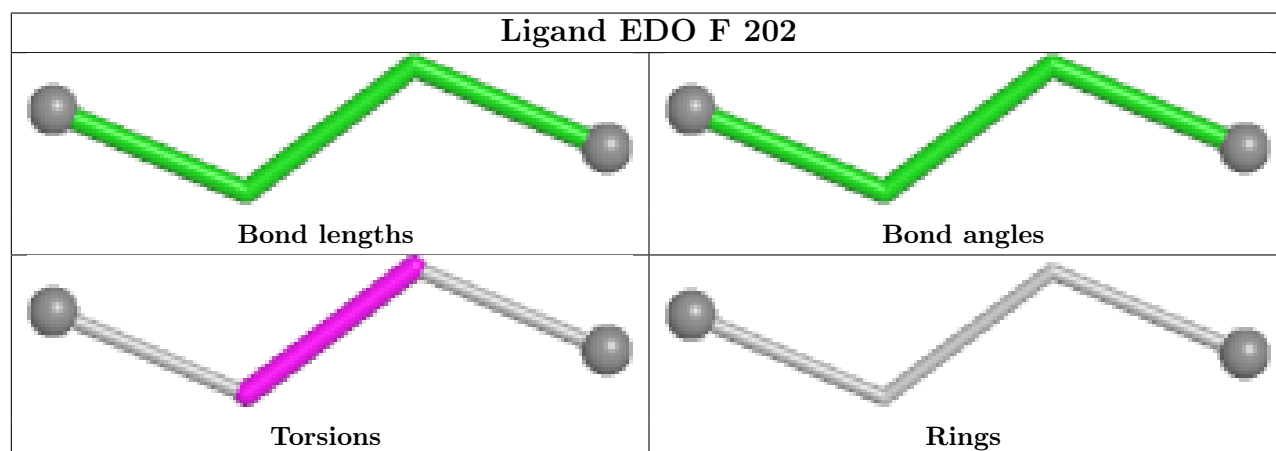
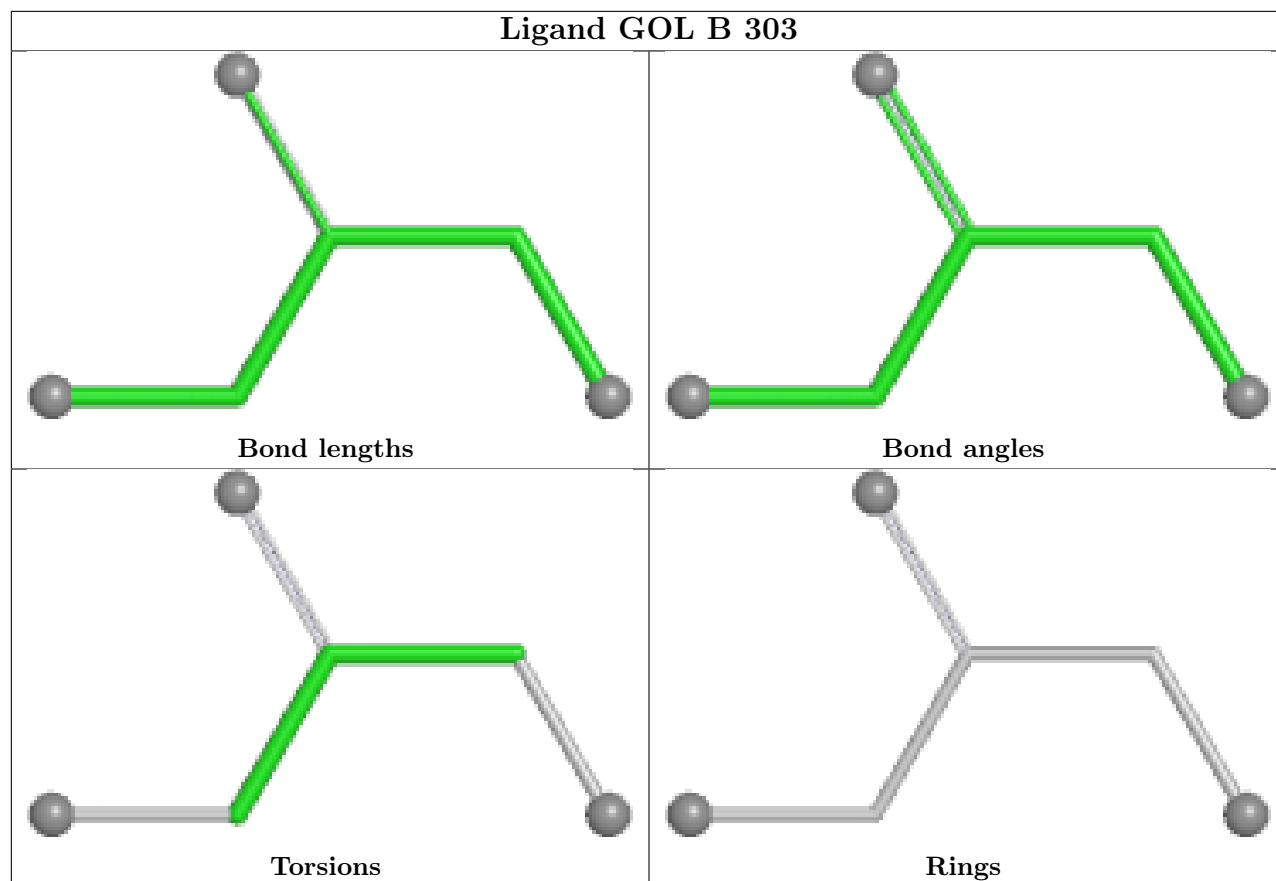


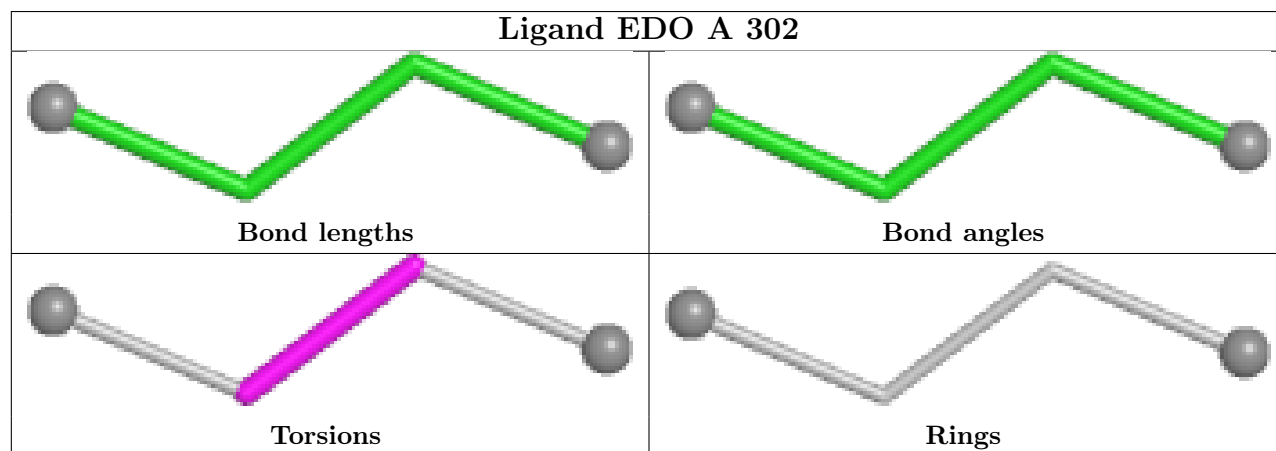
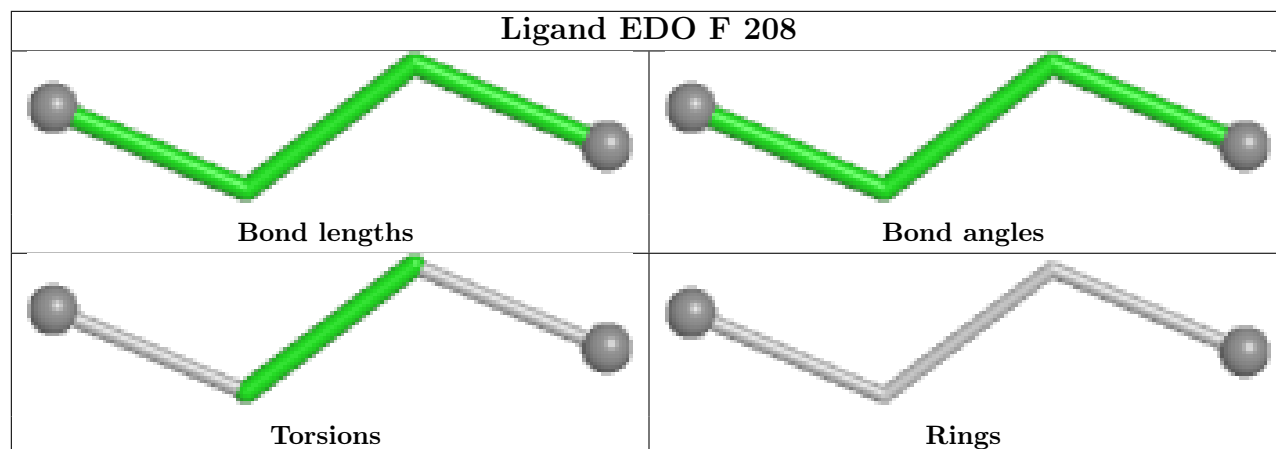




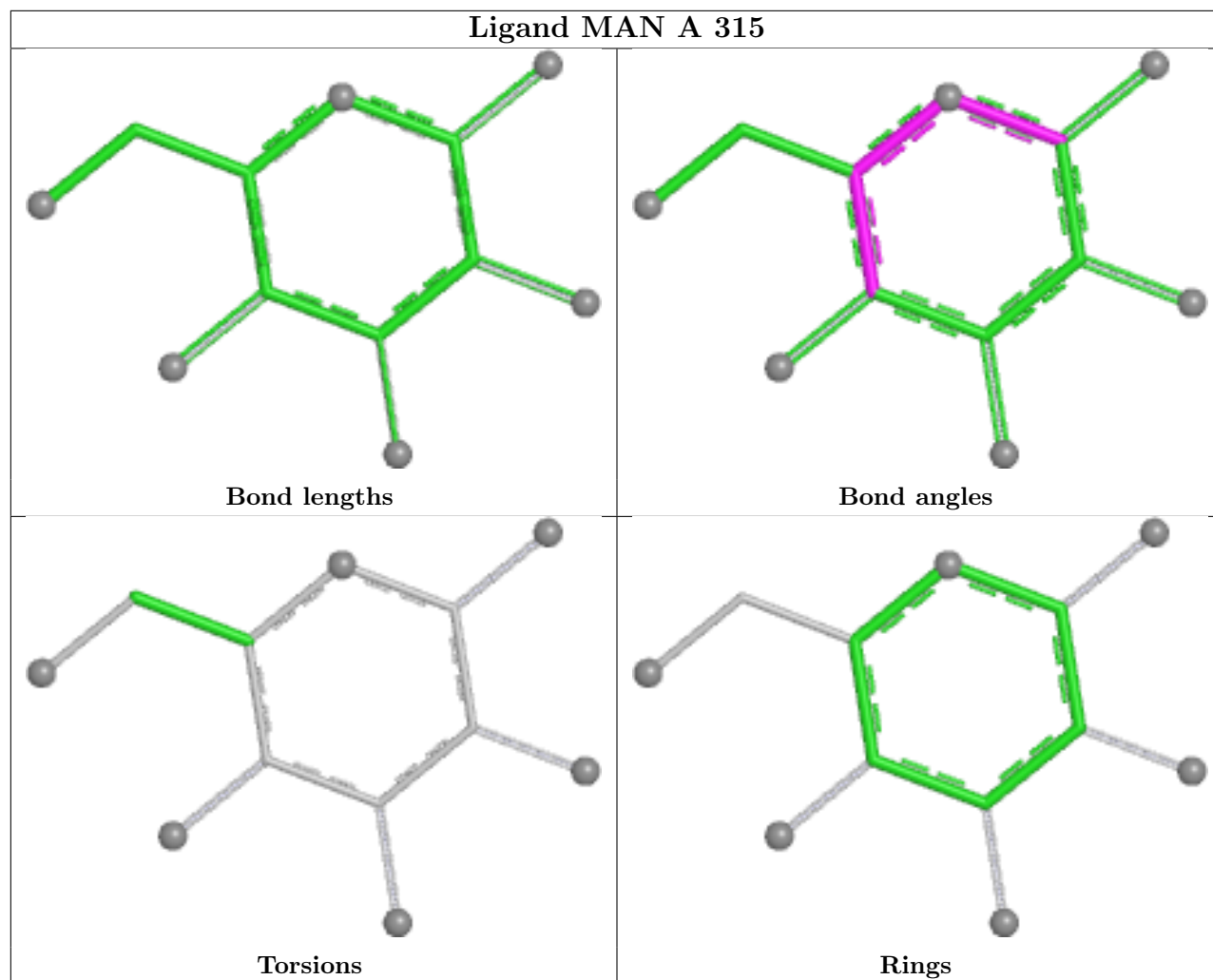




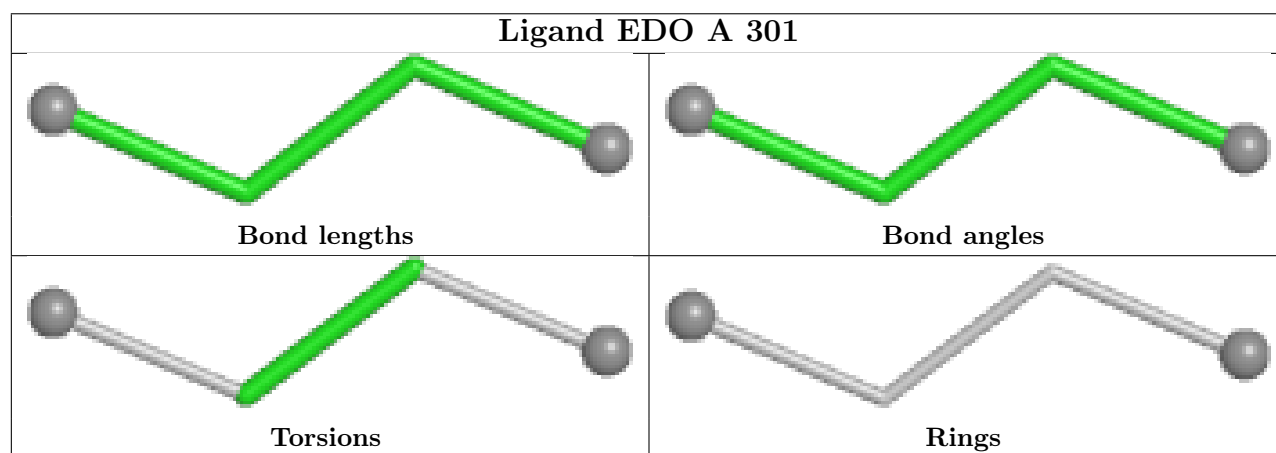


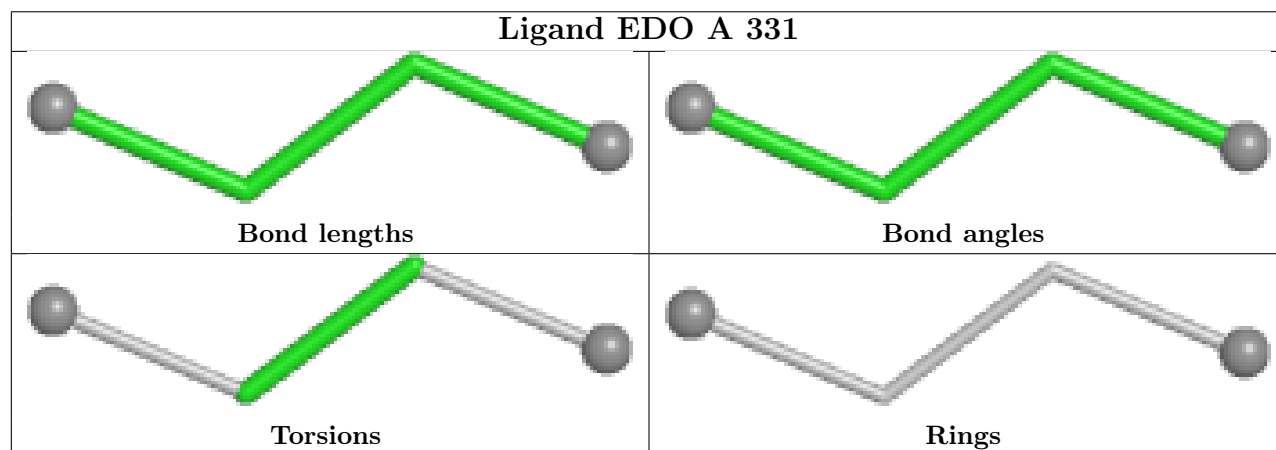
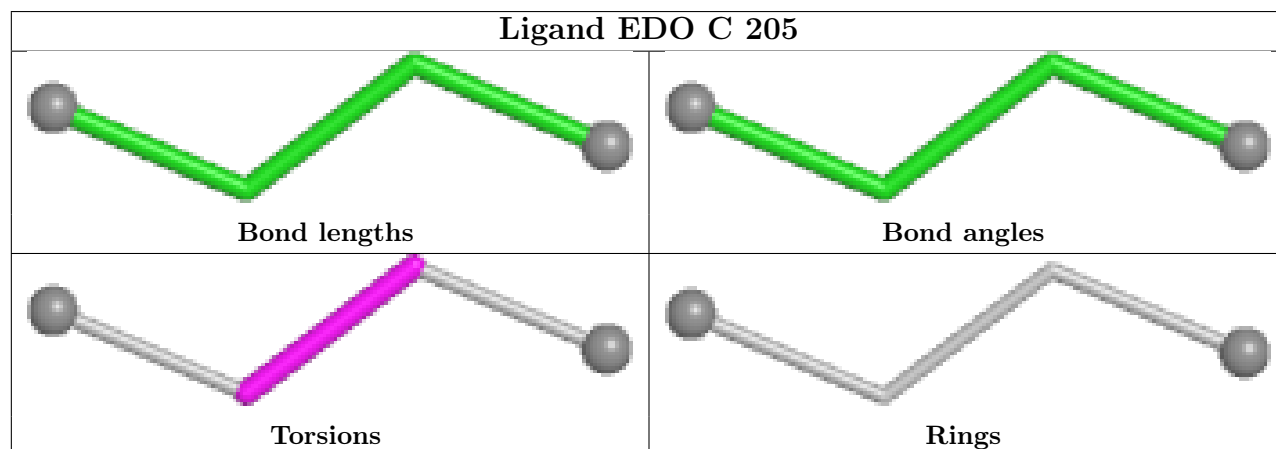
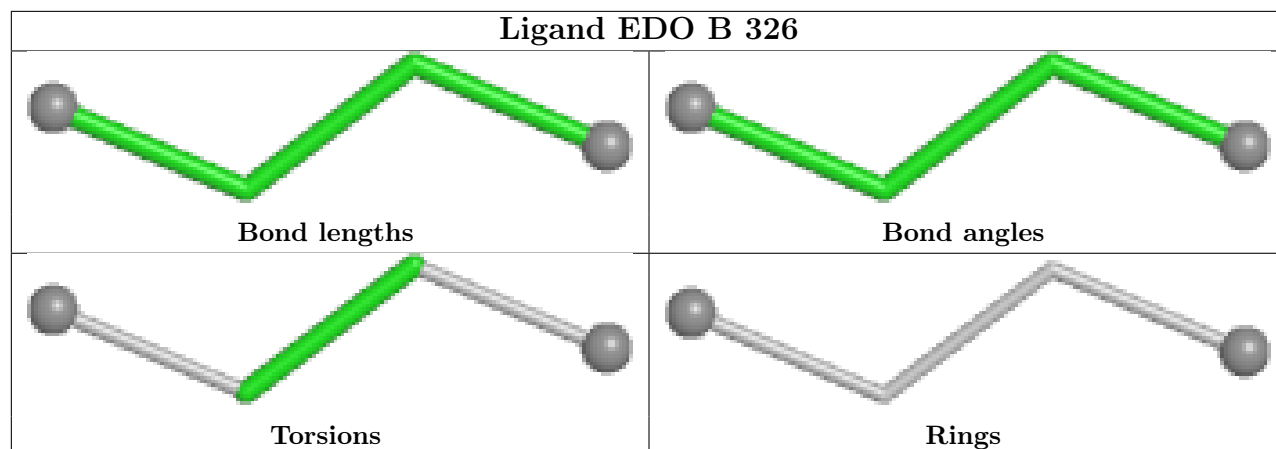


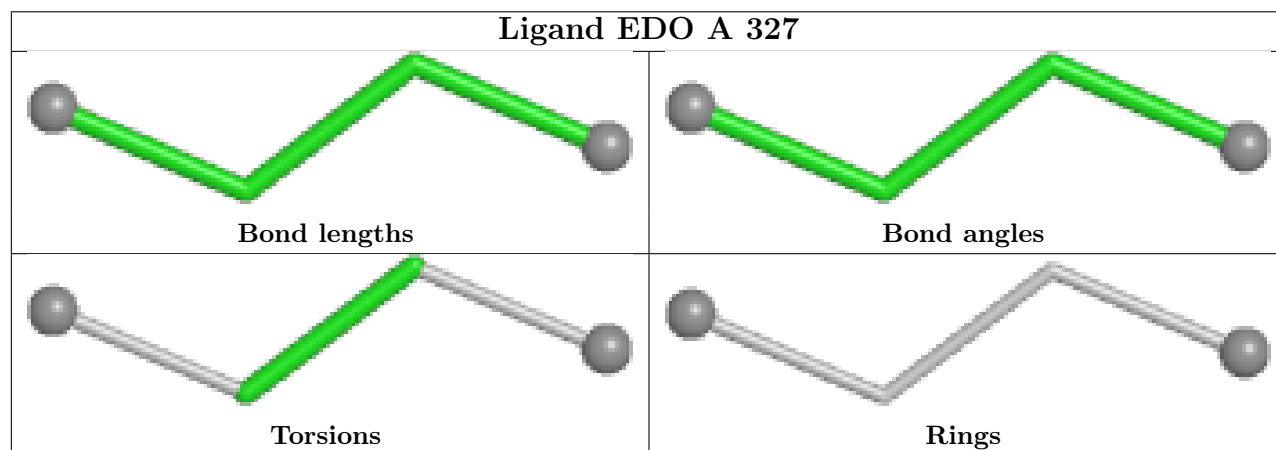
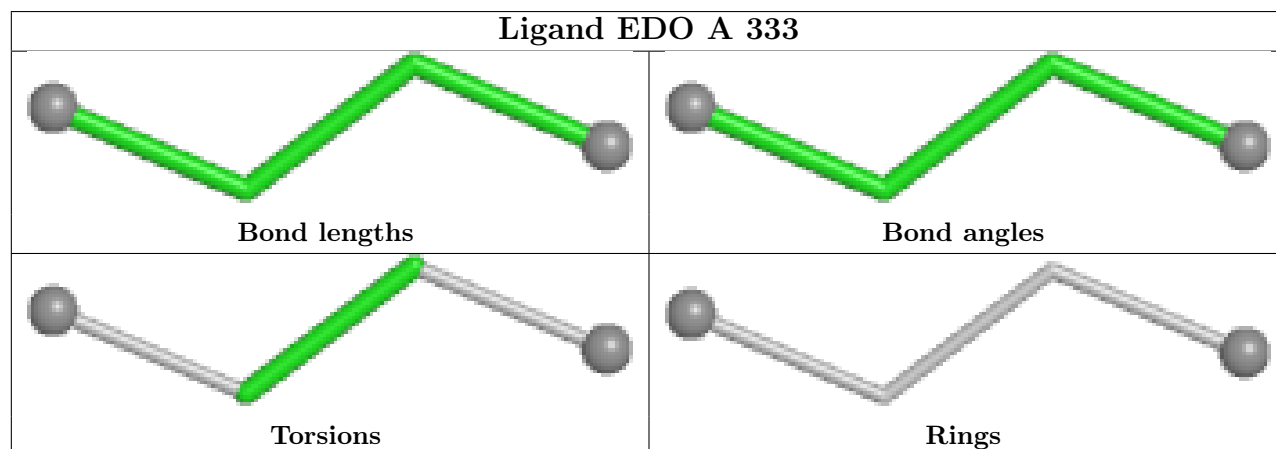
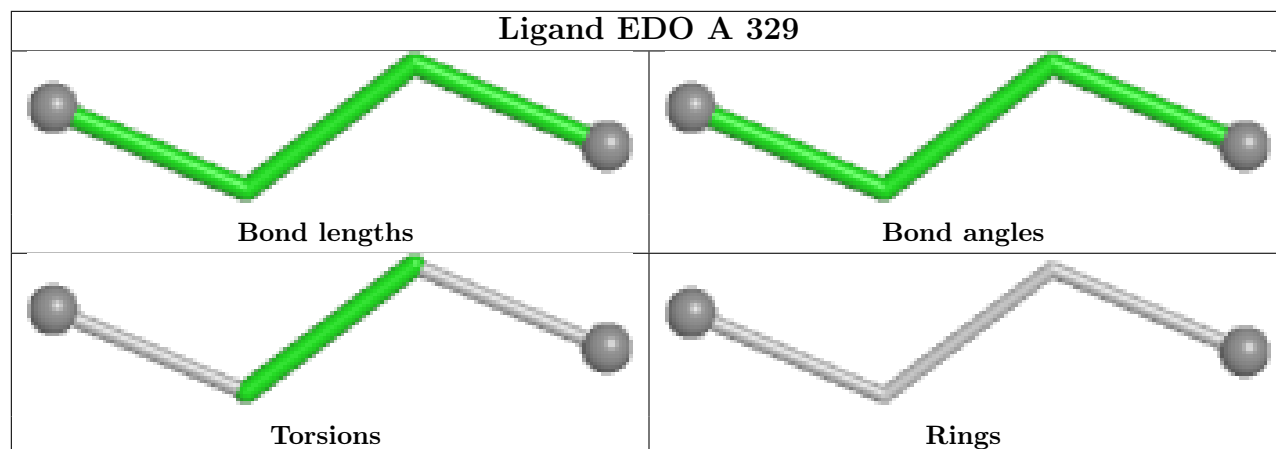
Ligand MAN A 315

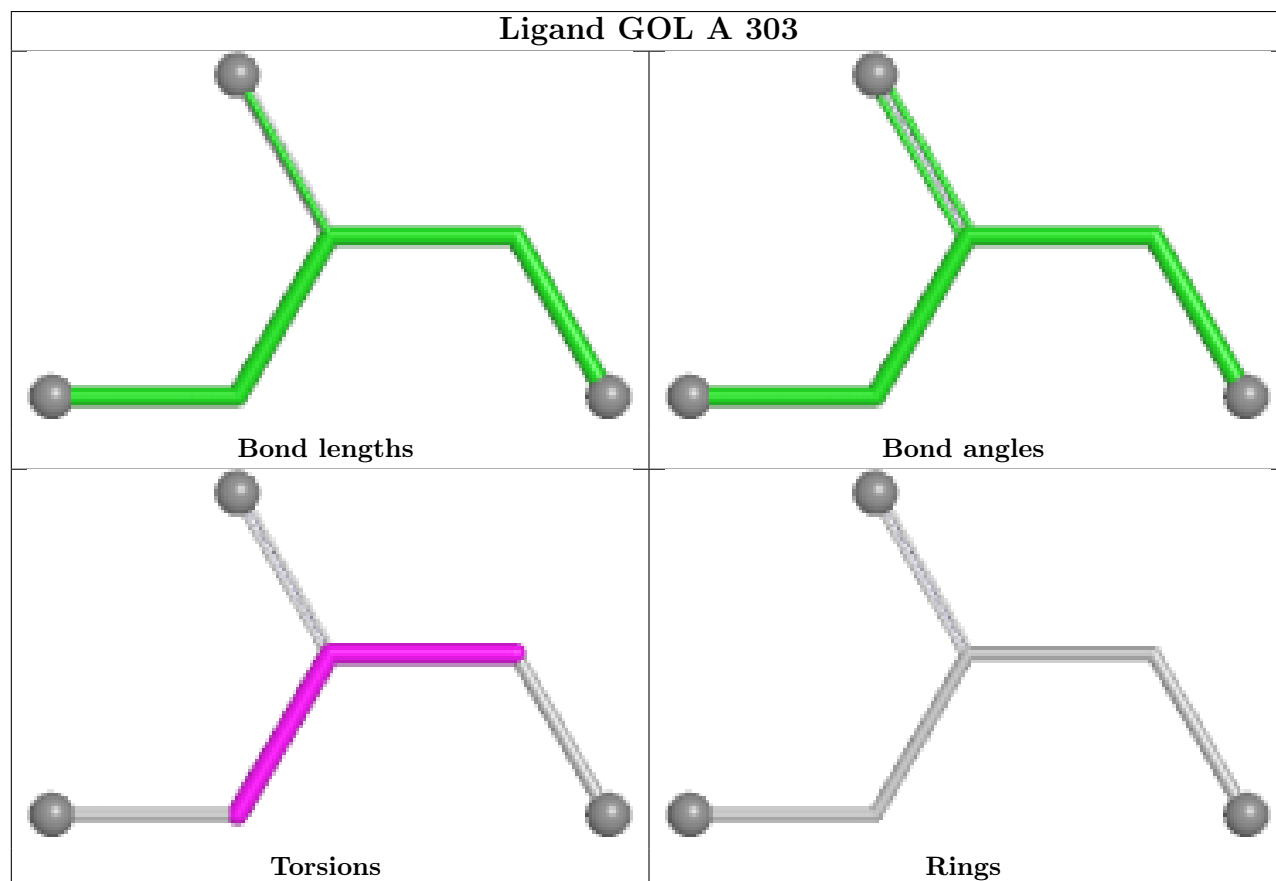
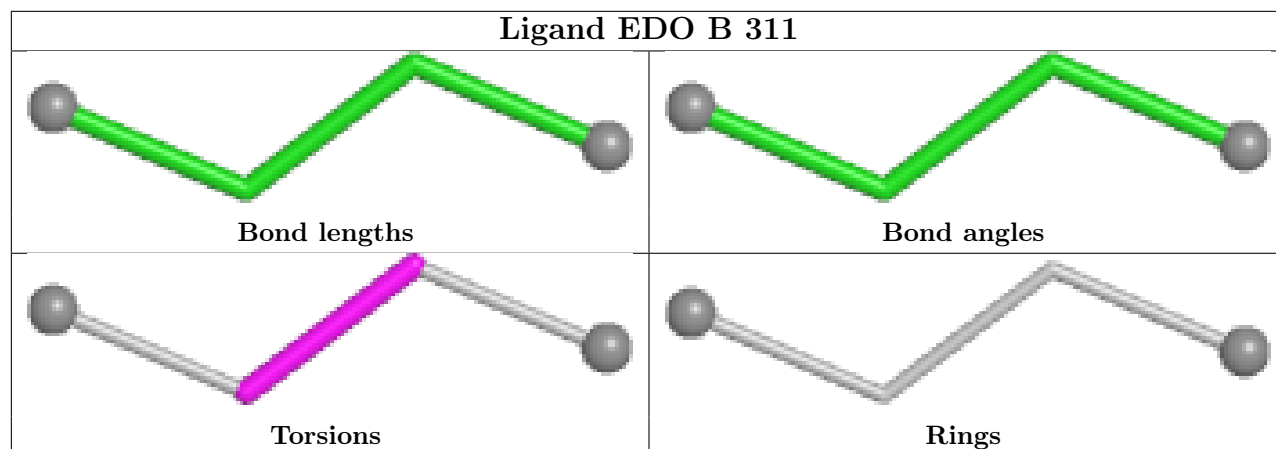


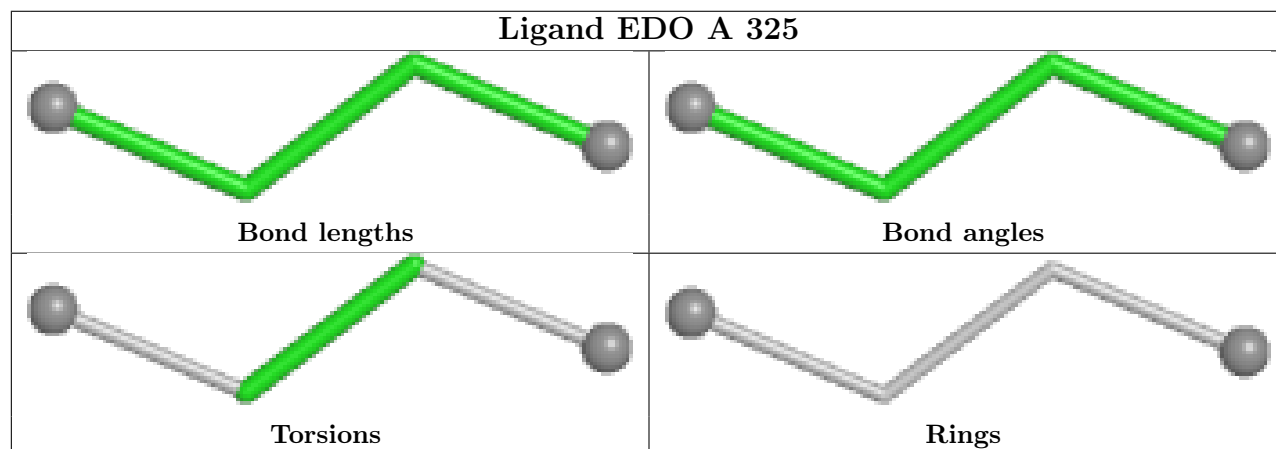
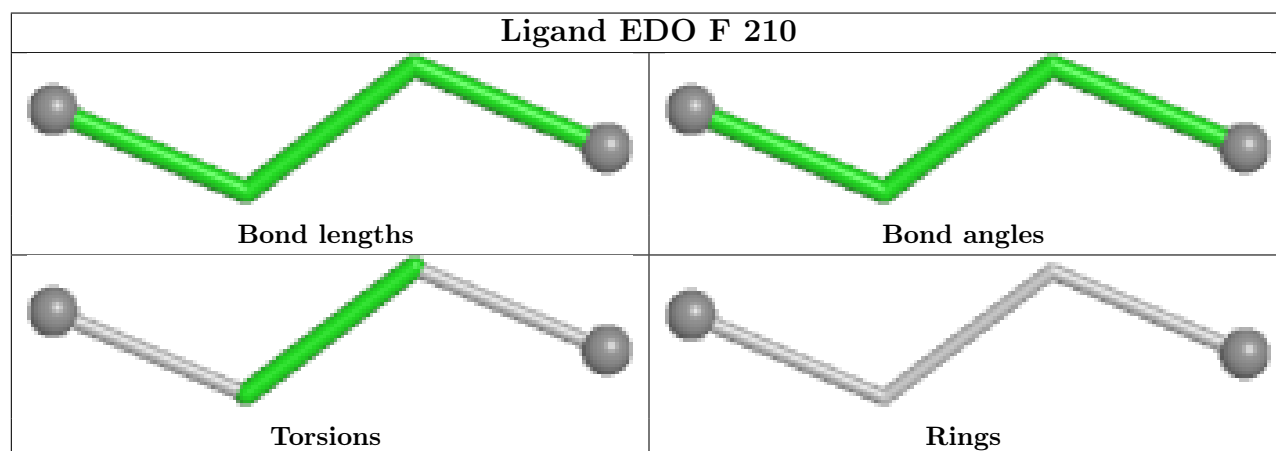
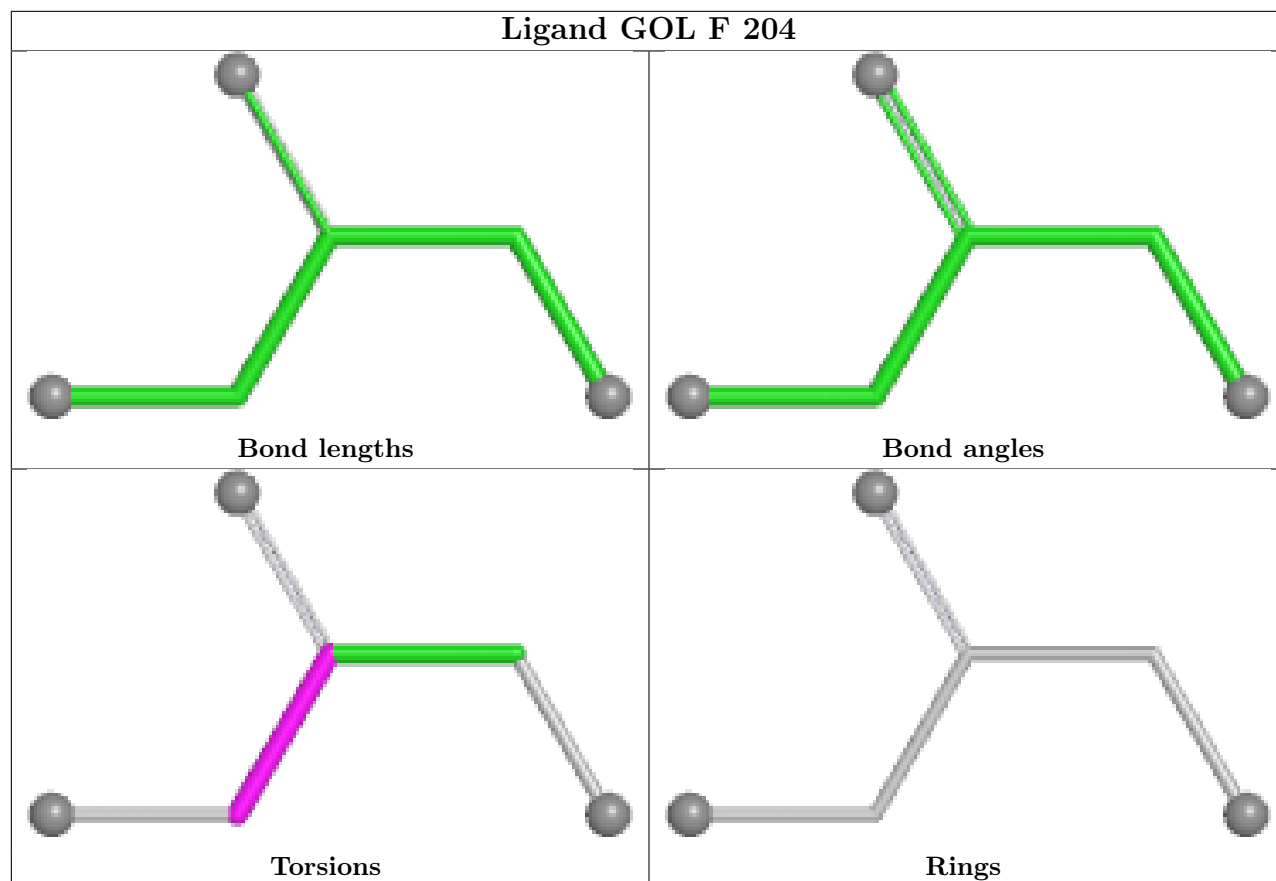
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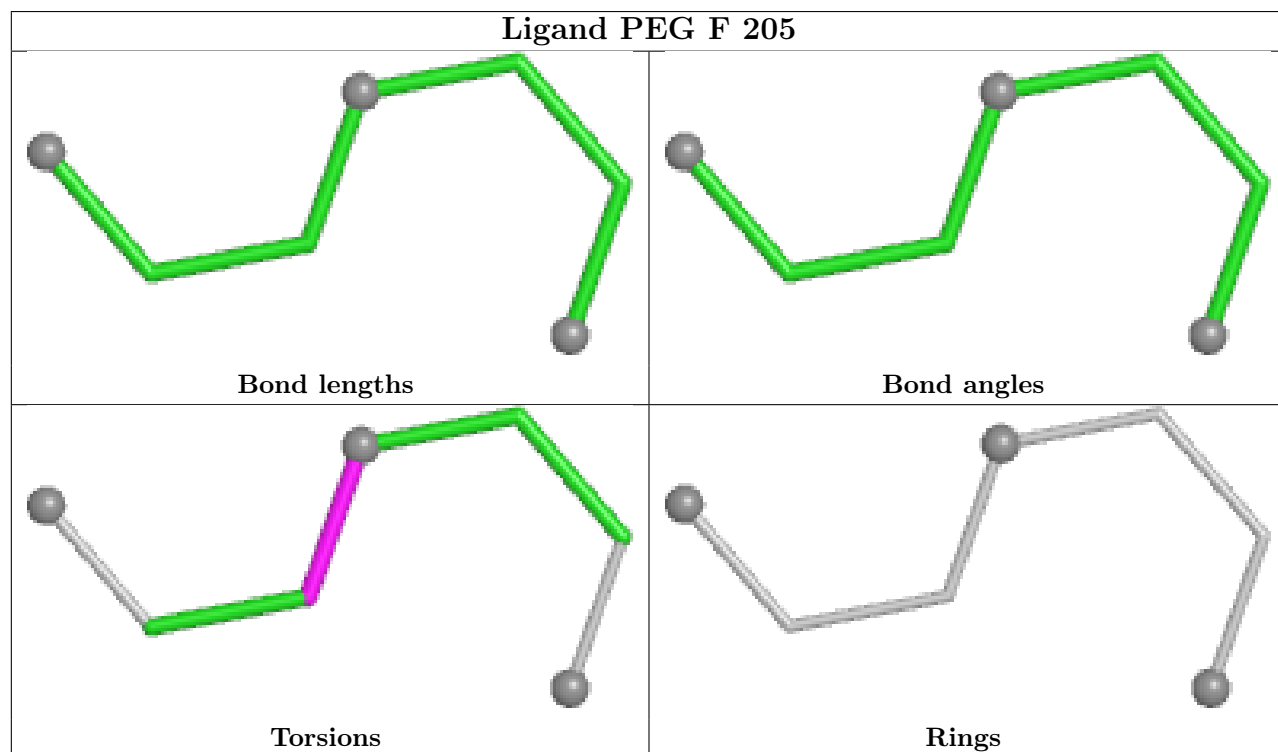
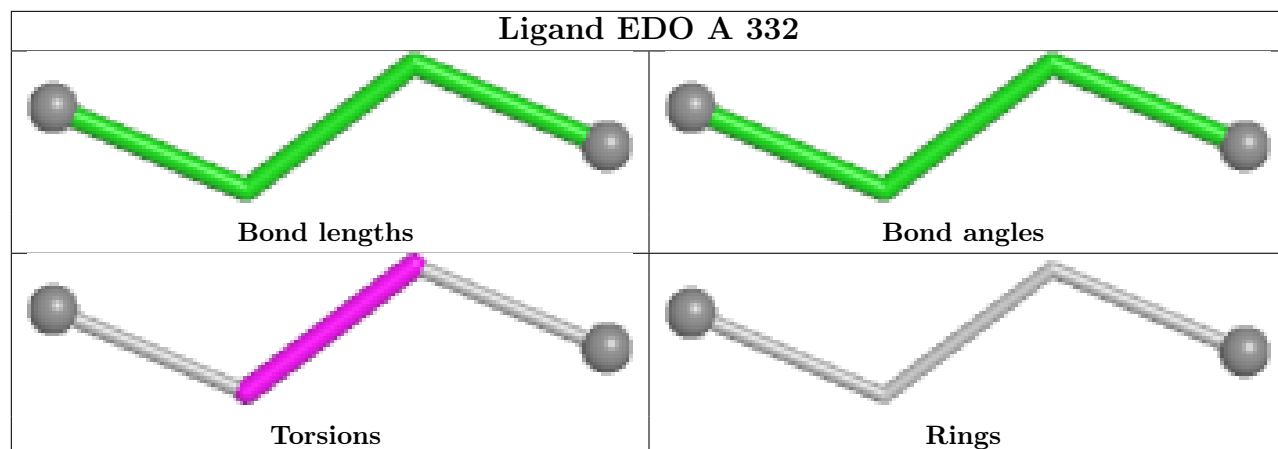


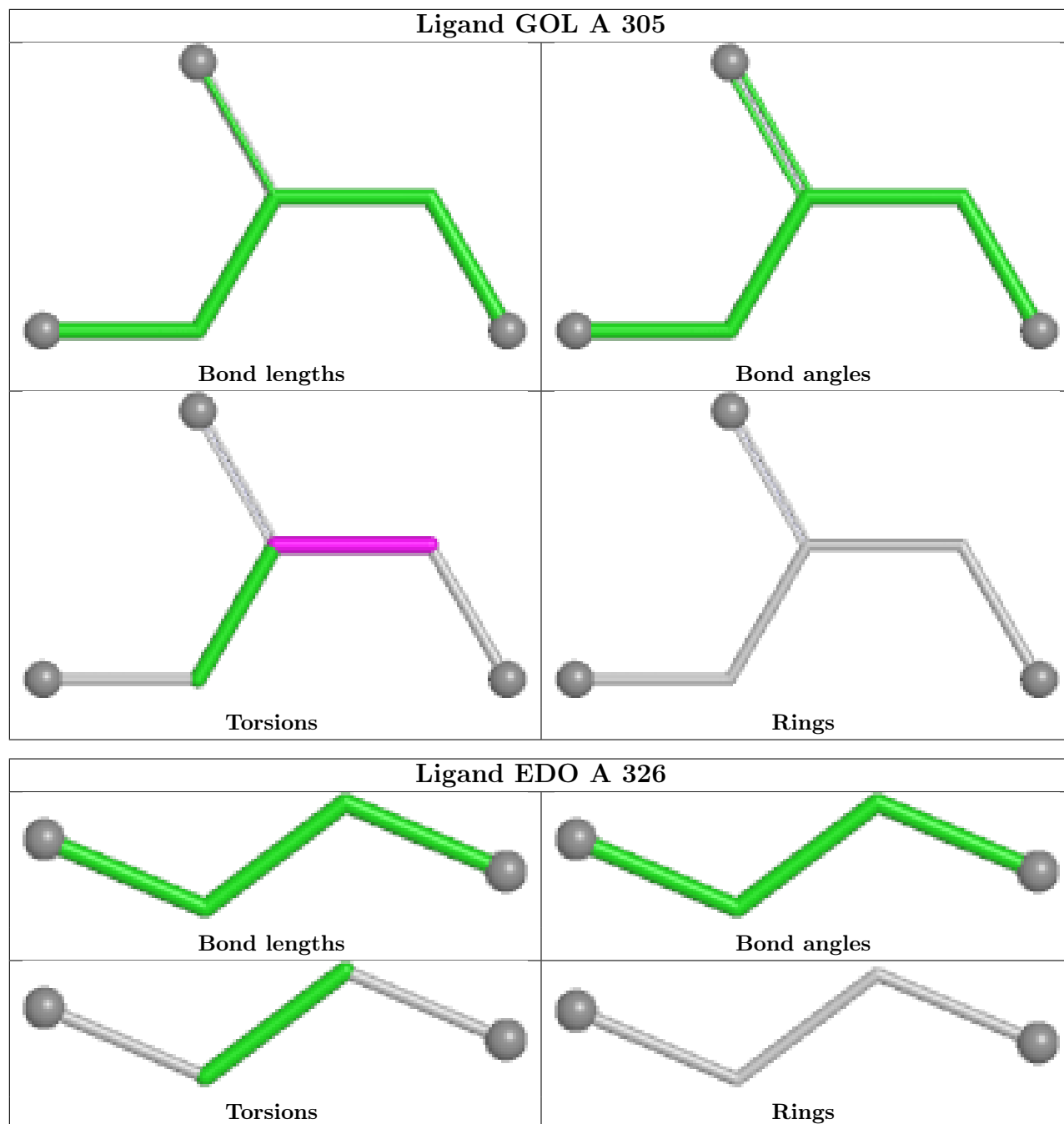


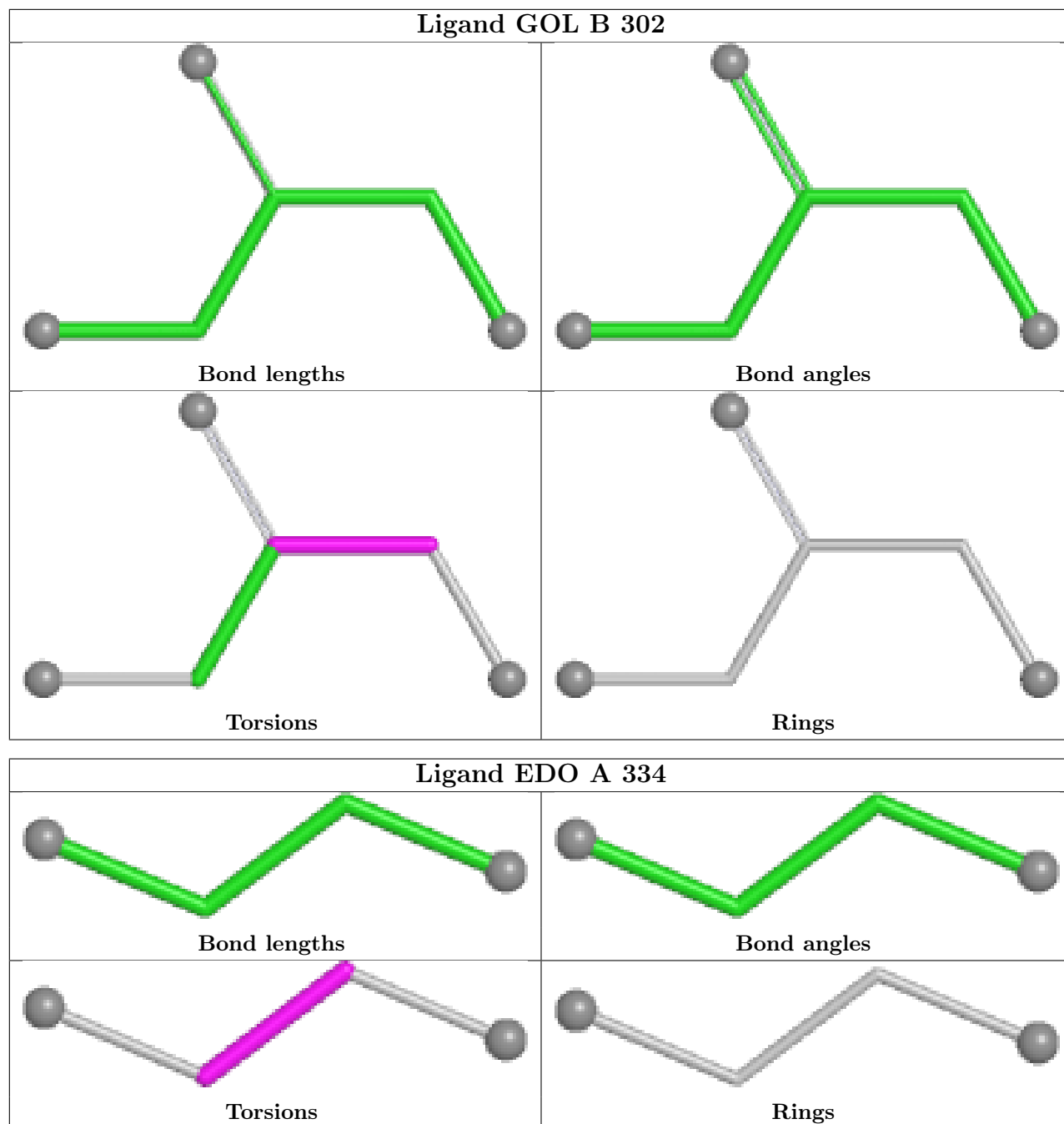


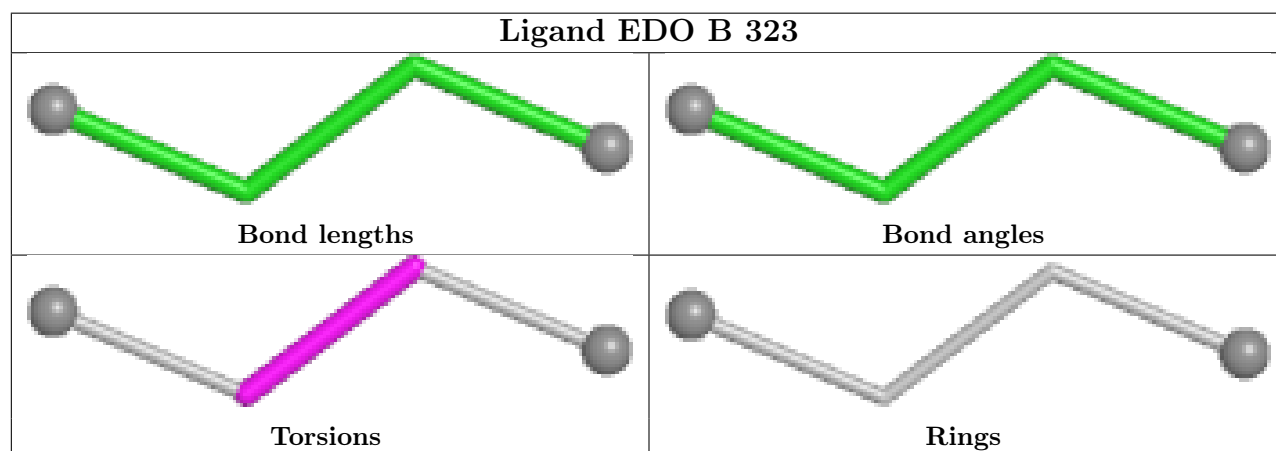
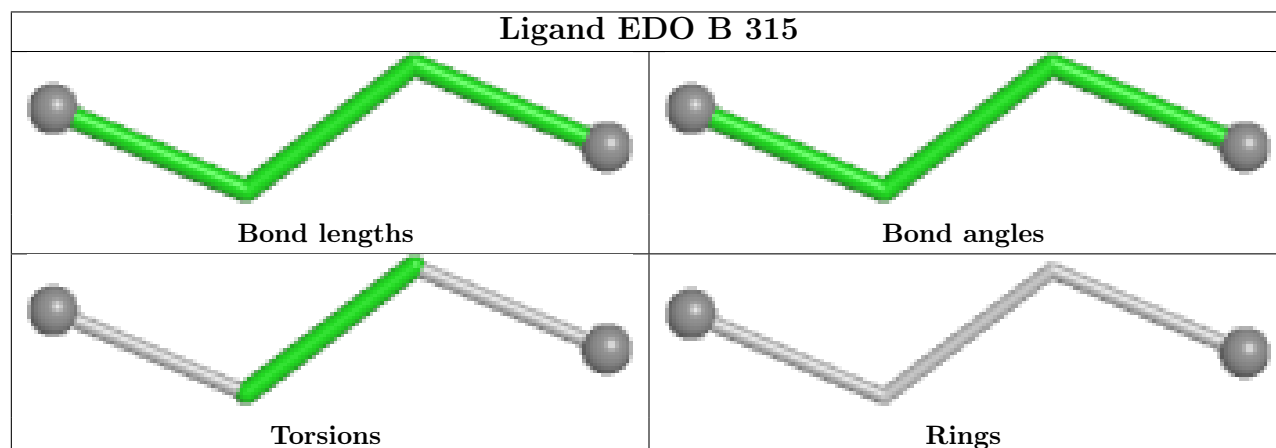
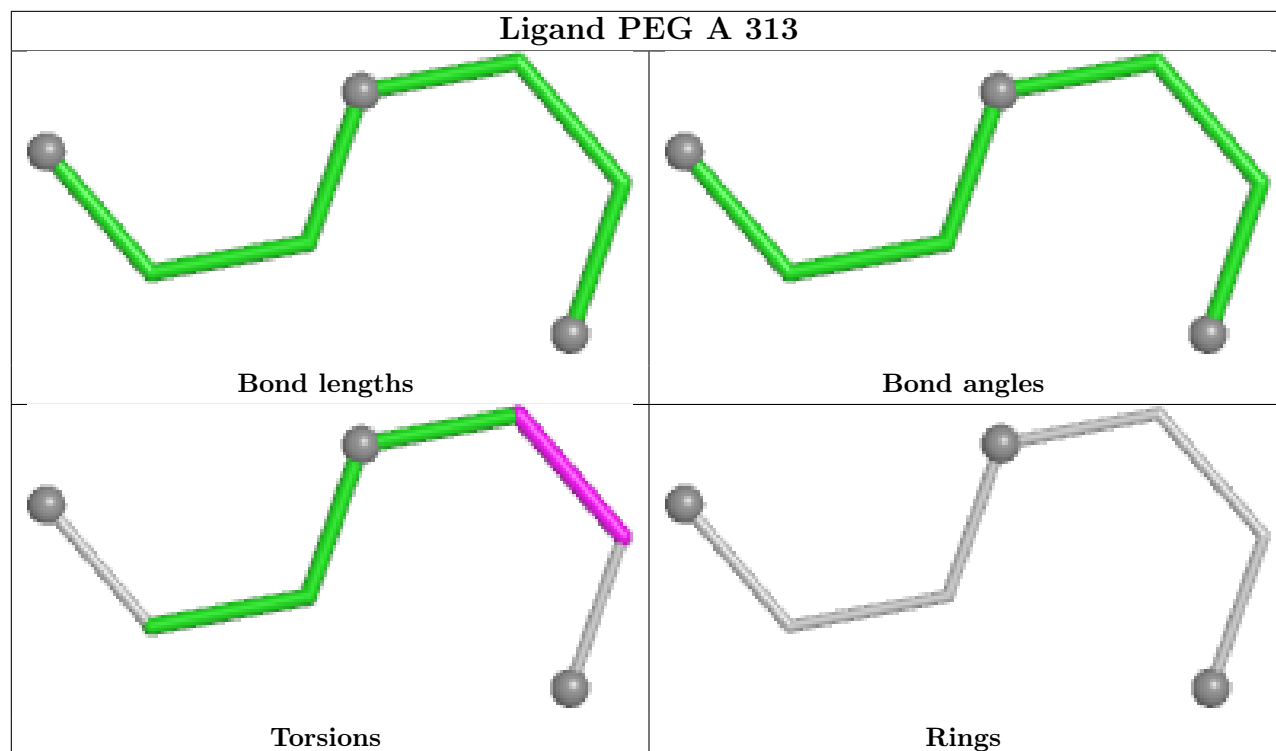


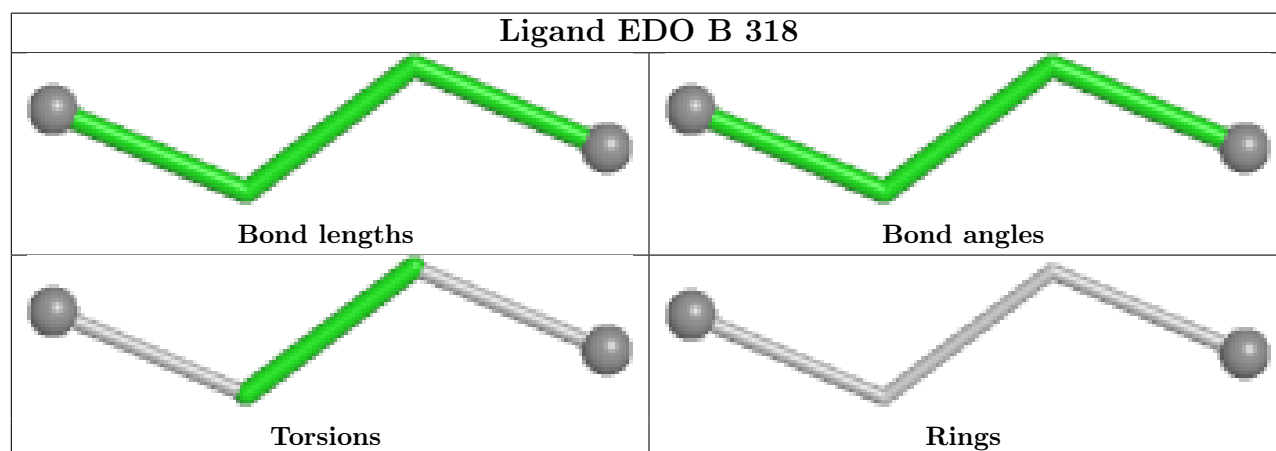
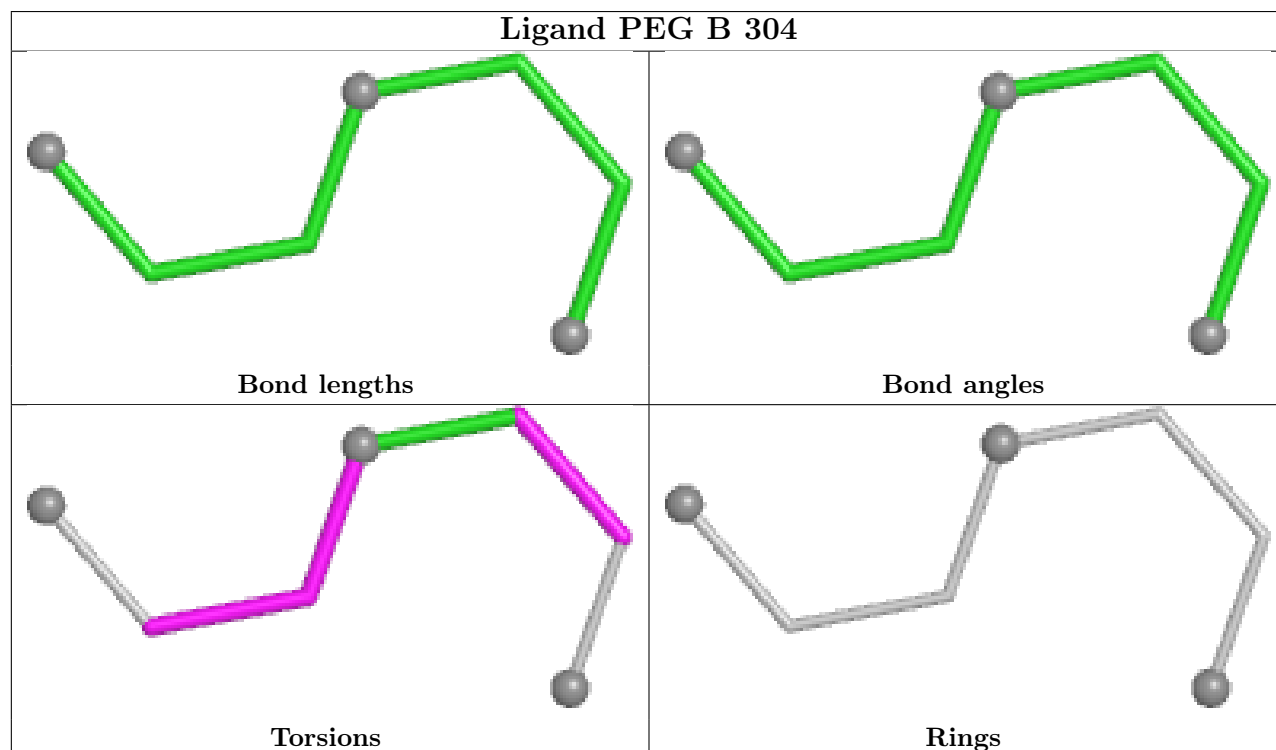
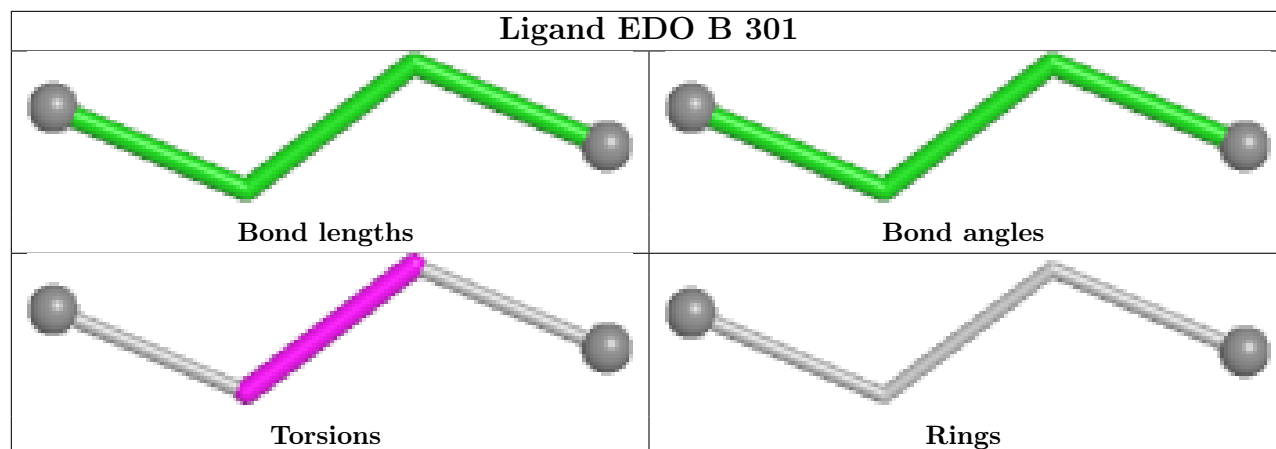


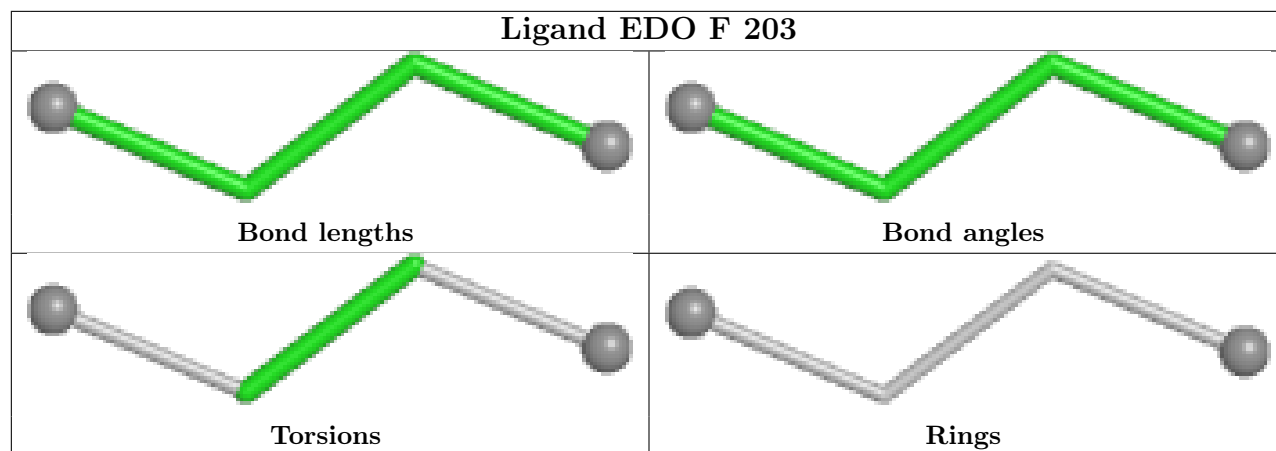












5.7 Other polymers [i](#)

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

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	219/225 (97%)	-0.26	4 (1%) 67 63	28, 46, 69, 85	1 (0%)
1	B	219/225 (97%)	-0.21	8 (3%) 45 41	33, 47, 71, 93	0
2	C	117/141 (82%)	0.04	4 (3%) 48 44	39, 59, 86, 95	0
2	F	117/141 (82%)	-0.02	6 (5%) 33 30	38, 56, 85, 94	0
All	All	672/732 (91%)	-0.15	22 (3%) 49 45	28, 50, 79, 95	1 (0%)

All (22) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	25	TYR	3.8
2	C	117	SER	3.7
1	A	240	GLN	3.5
2	F	119	SER	3.3
1	B	215	ASN	3.2
2	F	30	THR	3.1
2	C	1	GLN	3.1
1	B	152	ASN	3.0
1	B	240	GLN	3.0
2	F	3	GLN	2.9
1	A	71	ASP	2.7
1	B	198	GLU	2.6
1	A	32	GLN	2.6
2	F	77	ALA	2.5
2	F	29	ASN	2.4
2	C	27	ASN	2.3
1	A	57	GLY	2.3
1	B	71	ASP	2.3
2	C	28	THR	2.2
1	B	199	GLN	2.2
2	F	76	SER	2.2
1	B	102	GLN	2.1

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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

6.3 Carbohydrates ⓘ

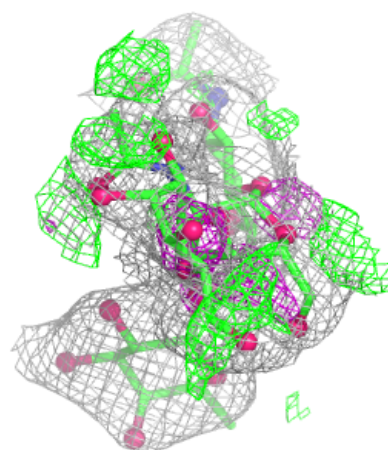
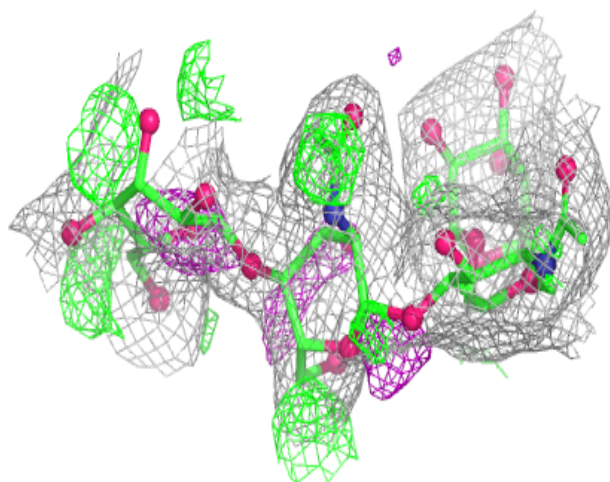
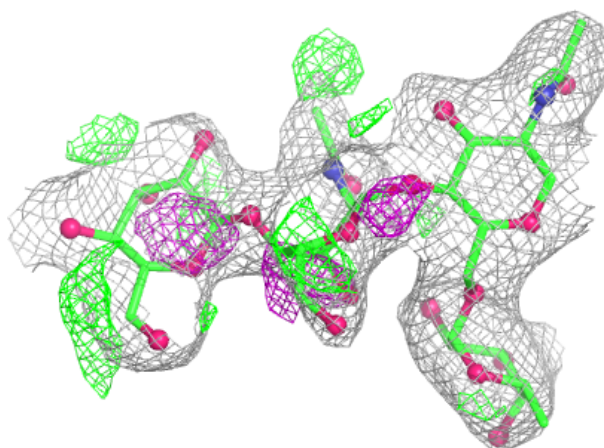
In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
3	NAG	D	1	14/15	-	-	66,69,74,80	0
3	NAG	D	2	14/15	-	-	85,89,90,93	0
3	MAN	D	3	11/12	-	-	96,97,98,98	0
3	FUC	D	4	10/11	-	-	74,75,75,76	0
4	MAN	E	3	11/12	0.48	0.20	97,98,99,99	0
5	NAG	H	2	13/15	0.67	0.22	92,94,95,96	0
5	FUC	H	3	10/11	0.69	0.28	92,93,94,94	0
5	NAG	G	2	14/15	0.71	0.22	76,80,81,81	0
4	NAG	E	2	14/15	0.74	0.21	86,89,92,94	0
5	FUC	G	3	10/11	0.86	0.18	69,71,72,73	0
5	NAG	H	1	14/15	0.93	0.14	77,80,88,89	0
4	NAG	E	1	14/15	0.95	0.11	78,79,82,85	0
5	NAG	G	1	14/15	0.96	0.10	57,60,67,71	0

The following is a graphical depiction of the model fit to experimental electron density for oligosaccharide. Each fit is shown from different orientation to approximate a three-dimensional view.

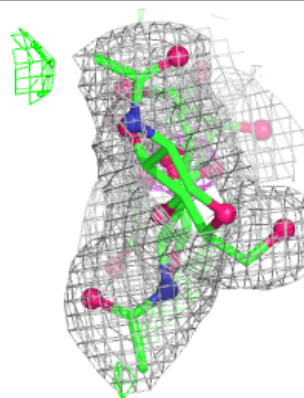
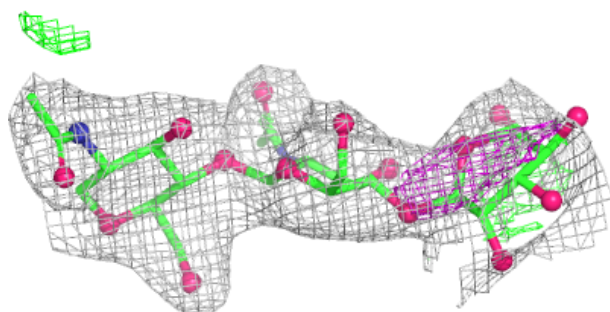
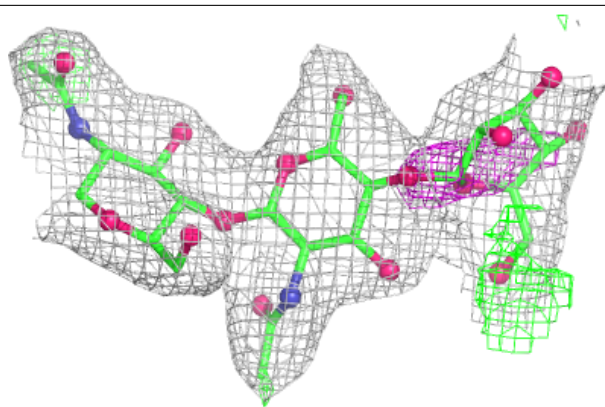
Electron density around Chain D:

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

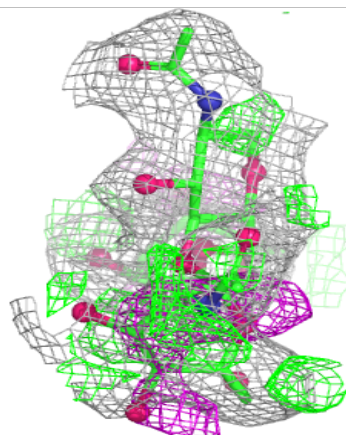
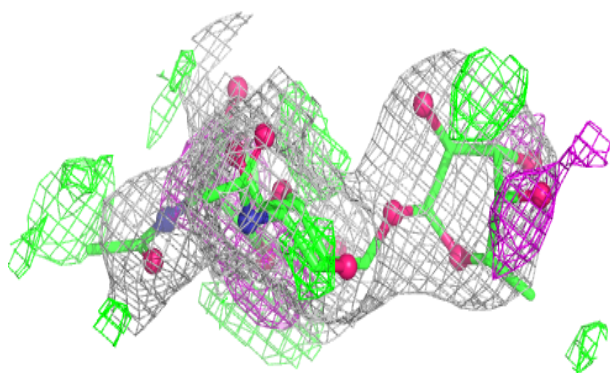
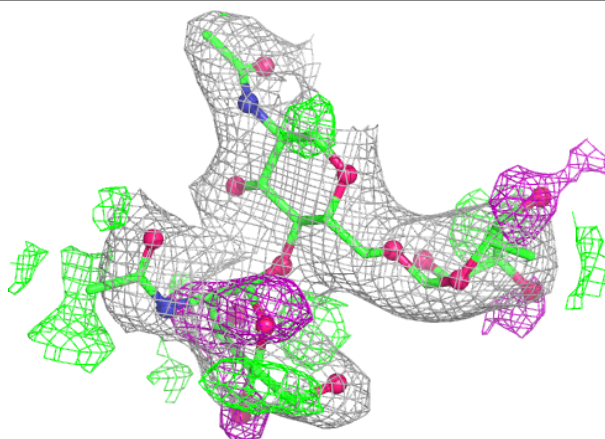


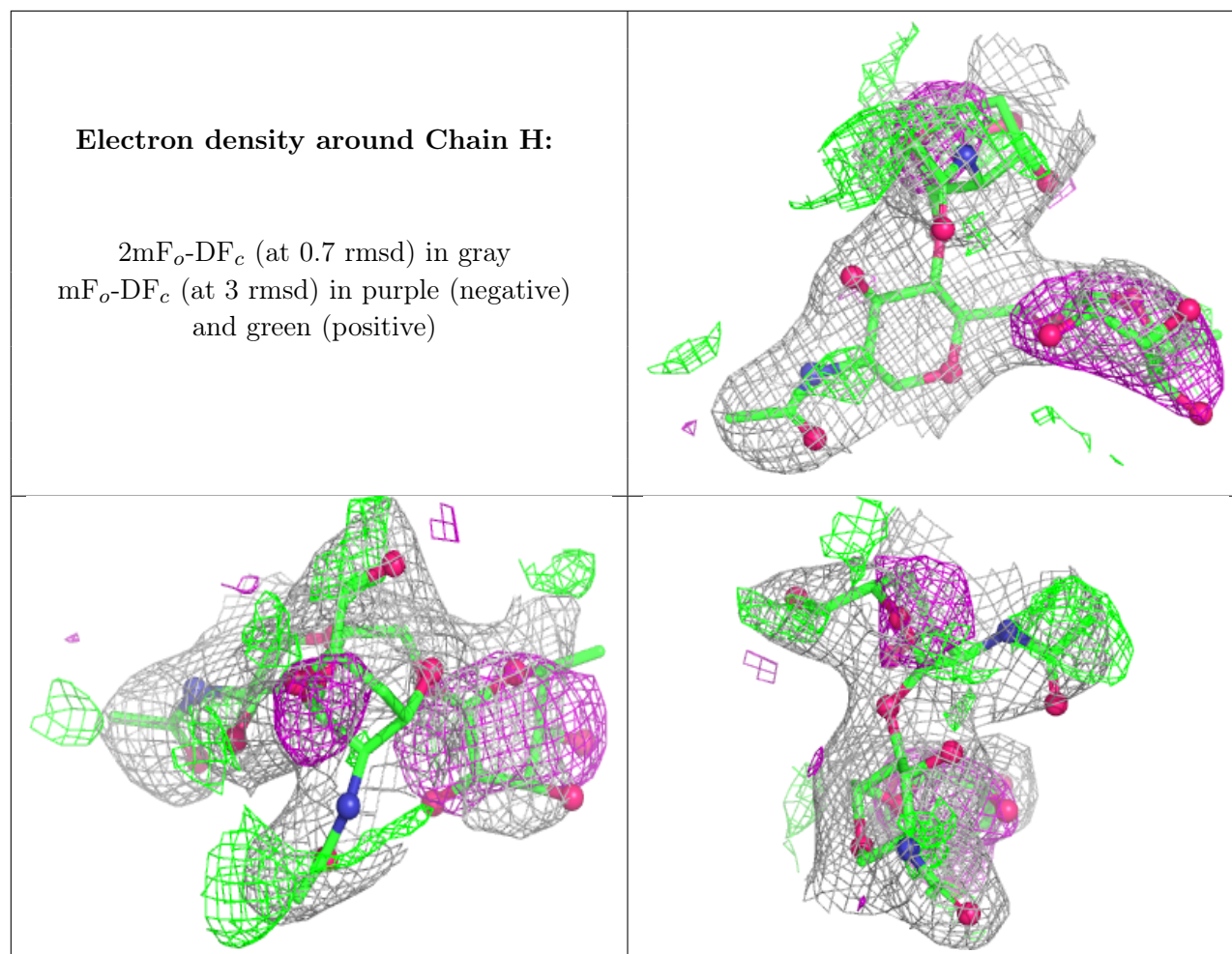
Electron density around Chain E:

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

**Electron density around Chain G:**

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





6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
9	MAN	A	315	12/12	0.50	0.19	99,103,103,103	0
10	MG	C	203	1/1	0.66	0.41	109,109,109,109	0
8	PEG	A	313	7/7	0.69	0.32	40,46,50,50	0
6	EDO	C	206	4/4	0.72	0.35	120,120,120,120	0
6	EDO	B	321	4/4	0.74	0.36	86,86,87,87	0
6	EDO	A	330	4/4	0.75	0.33	99,99,99,99	0
6	EDO	A	325	4/4	0.76	0.28	100,100,100,100	0
8	PEG	B	304	7/7	0.76	0.33	104,104,105,105	0
6	EDO	A	328	4/4	0.77	0.26	88,88,88,88	0
8	PEG	A	308	7/7	0.78	0.28	79,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
8	PEG	A	309	7/7	0.78	0.27	84,84,85,85	0
6	EDO	B	314	4/4	0.79	0.26	79,79,80,80	0
6	EDO	C	204	4/4	0.81	0.27	87,87,87,88	0
6	EDO	F	202	4/4	0.81	0.27	67,68,68,68	0
8	PEG	A	307	7/7	0.81	0.21	85,85,86,86	0
8	PEG	F	205	7/7	0.82	0.33	106,107,109,109	0
7	GOL	B	303	6/6	0.82	0.26	81,82,82,82	0
10	MG	A	321	1/1	0.82	0.40	108,108,108,108	0
10	MG	B	310	1/1	0.82	0.32	84,84,84,84	0
6	EDO	F	210	4/4	0.82	0.27	86,86,86,86	0
8	PEG	A	312	7/7	0.83	0.26	80,81,81,81	0
8	PEG	A	310	7/7	0.84	0.25	85,85,86,86	0
10	MG	B	308	1/1	0.84	0.29	73,73,73,73	0
6	EDO	B	301	4/4	0.85	0.24	76,76,77,77	0
6	EDO	B	322	4/4	0.85	0.22	87,88,88,88	0
6	EDO	B	319	4/4	0.86	0.27	81,81,81,81	0
10	MG	A	320	1/1	0.86	0.31	87,87,87,87	0
6	EDO	F	203	4/4	0.86	0.31	98,98,99,99	0
6	EDO	B	320	4/4	0.86	0.22	94,94,94,94	0
8	PEG	F	201	7/7	0.86	0.21	65,67,67,68	0
6	EDO	A	302	4/4	0.86	0.21	53,53,54,55	0
6	EDO	B	315	4/4	0.87	0.27	76,76,76,77	0
6	EDO	B	316	4/4	0.87	0.25	67,67,68,68	0
7	GOL	A	305	6/6	0.87	0.17	68,71,71,71	0
6	EDO	B	323	4/4	0.87	0.23	97,97,97,97	0
8	PEG	A	306	7/7	0.87	0.30	111,111,111,111	0
6	EDO	B	313	4/4	0.88	0.24	88,88,88,88	0
6	EDO	B	317	4/4	0.88	0.26	79,79,80,80	0
7	GOL	A	311	6/6	0.89	0.37	66,66,67,68	0
6	EDO	A	327	4/4	0.89	0.21	81,81,81,81	0
6	EDO	A	331	4/4	0.89	0.23	84,84,84,84	0
6	EDO	F	209	4/4	0.89	0.24	65,65,65,65	0
6	EDO	A	332	4/4	0.89	0.21	82,82,82,82	0
6	EDO	A	304	4/4	0.89	0.21	70,71,71,71	0
6	EDO	B	318	4/4	0.90	0.18	79,79,79,79	0
6	EDO	A	301	4/4	0.90	0.16	58,59,59,60	0
7	GOL	F	204	6/6	0.90	0.16	61,62,64,64	0
6	EDO	B	325	4/4	0.90	0.22	91,91,91,91	0
8	PEG	A	314	7/7	0.90	0.20	81,82,83,83	0
10	MG	B	309	1/1	0.90	0.28	74,74,74,74	0
6	EDO	A	333	4/4	0.90	0.20	83,84,84,84	0
6	EDO	A	334	4/4	0.90	0.20	101,102,102,102	0

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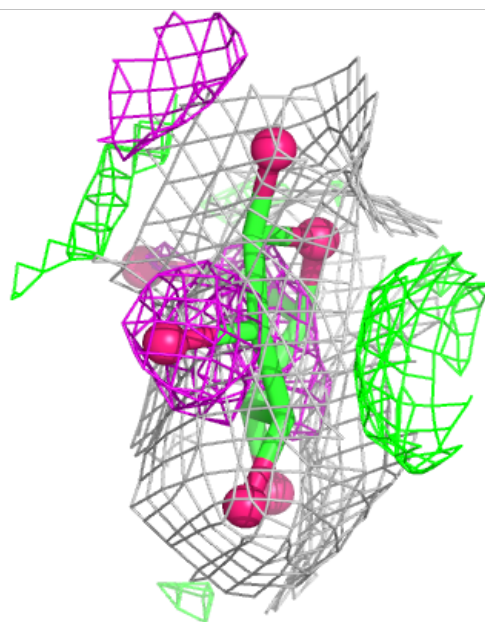
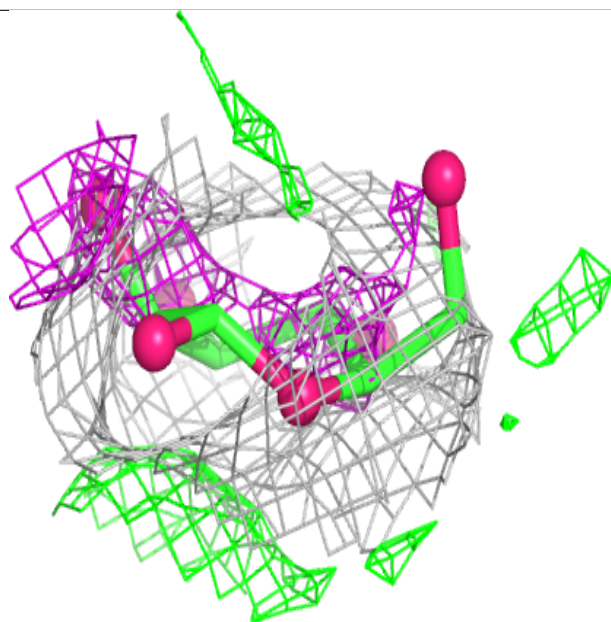
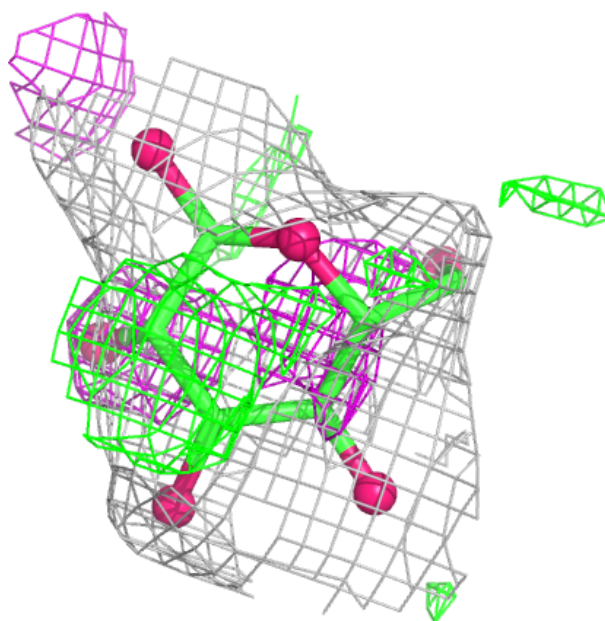
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
10	MG	F	207	1/1	0.90	0.15	63,63,63,63	0
11	CA	A	336	1/1	0.90	0.16	89,89,89,89	0
6	EDO	C	205	4/4	0.91	0.35	56,56,56,56	0
6	EDO	B	326	4/4	0.91	0.20	73,74,74,74	0
10	MG	A	323	1/1	0.91	0.14	73,73,73,73	0
10	MG	B	307	1/1	0.91	0.30	75,75,75,75	0
6	EDO	F	208	4/4	0.91	0.18	65,66,66,66	0
6	EDO	A	329	4/4	0.92	0.17	74,74,75,75	0
11	CA	B	328	1/1	0.92	0.17	73,73,73,73	0
6	EDO	A	326	4/4	0.93	0.18	83,83,83,83	0
6	EDO	B	312	4/4	0.93	0.18	59,59,60,60	0
11	CA	B	329	1/1	0.93	0.26	96,96,96,96	0
6	EDO	B	324	4/4	0.94	0.18	89,89,89,89	0
6	EDO	A	324	4/4	0.94	0.30	51,52,52,52	0
6	EDO	B	311	4/4	0.94	0.16	62,62,62,62	0
10	MG	A	319	1/1	0.94	0.19	63,63,63,63	0
10	MG	A	322	1/1	0.95	0.19	64,64,64,64	0
12	PO4	B	327	5/5	0.95	0.13	68,69,69,69	0
10	MG	F	206	1/1	0.96	0.11	71,71,71,71	0
11	CA	B	330	1/1	0.96	0.09	71,71,71,71	0
10	MG	B	305	1/1	0.96	0.28	56,56,56,56	0
10	MG	C	201	1/1	0.97	0.15	51,51,51,51	0
10	MG	C	202	1/1	0.97	0.13	50,50,50,50	0
11	CA	A	335	1/1	0.97	0.07	77,77,77,77	0
10	MG	A	316	1/1	0.97	0.17	55,55,55,55	0
7	GOL	B	302	6/6	0.98	0.05	35,35,35,36	0
10	MG	A	318	1/1	0.98	0.09	61,61,61,61	0
10	MG	B	306	1/1	0.98	0.06	51,51,51,51	0
10	MG	A	317	1/1	0.99	0.06	61,61,61,61	0
7	GOL	A	303	6/6	0.99	0.06	37,37,38,38	0

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

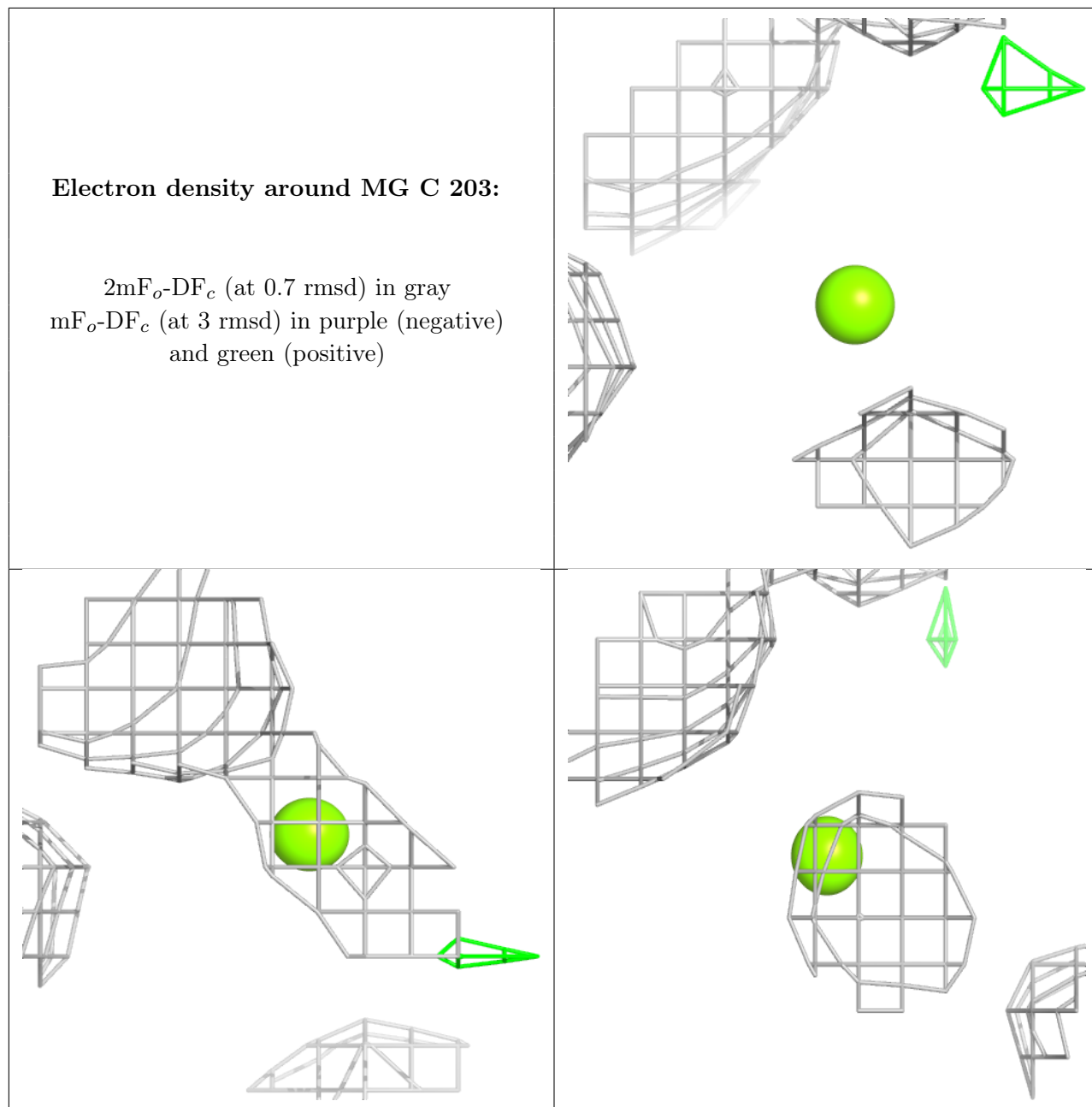
Electron density around MAN A 315:

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



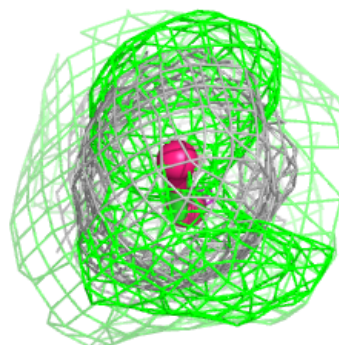
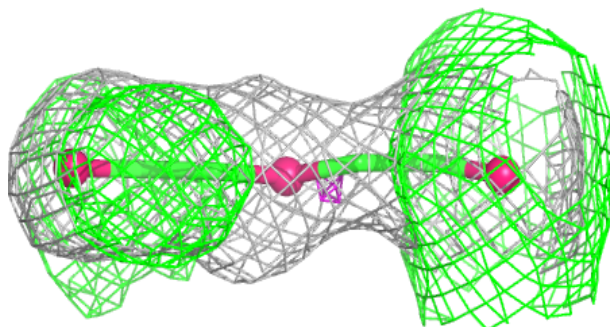
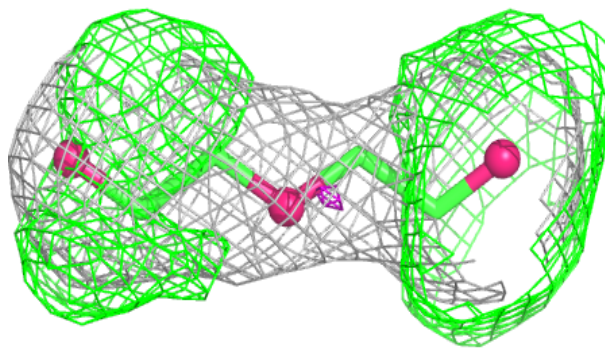
Electron density around MG C 203:

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



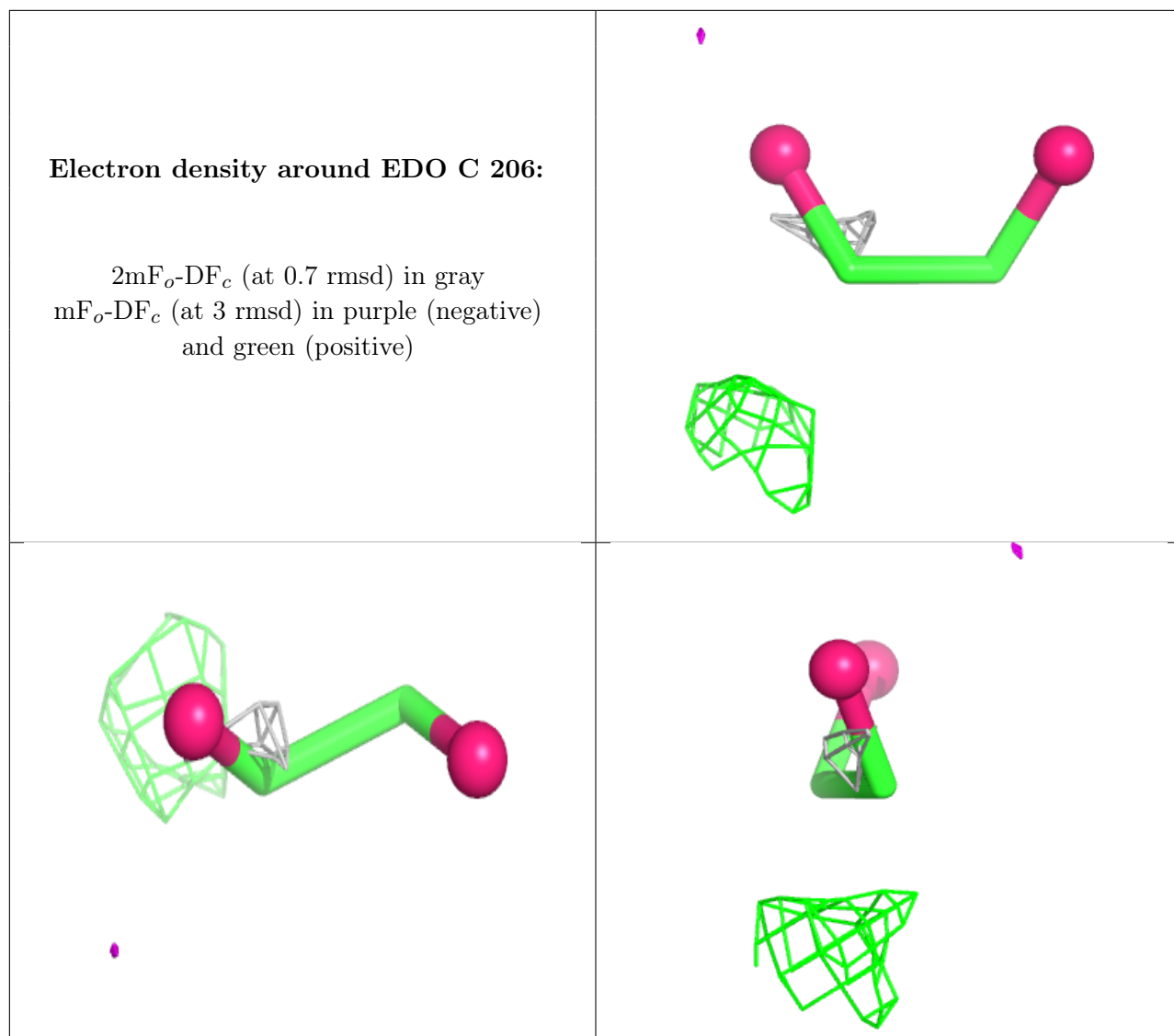
Electron density around PEG A 313:

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



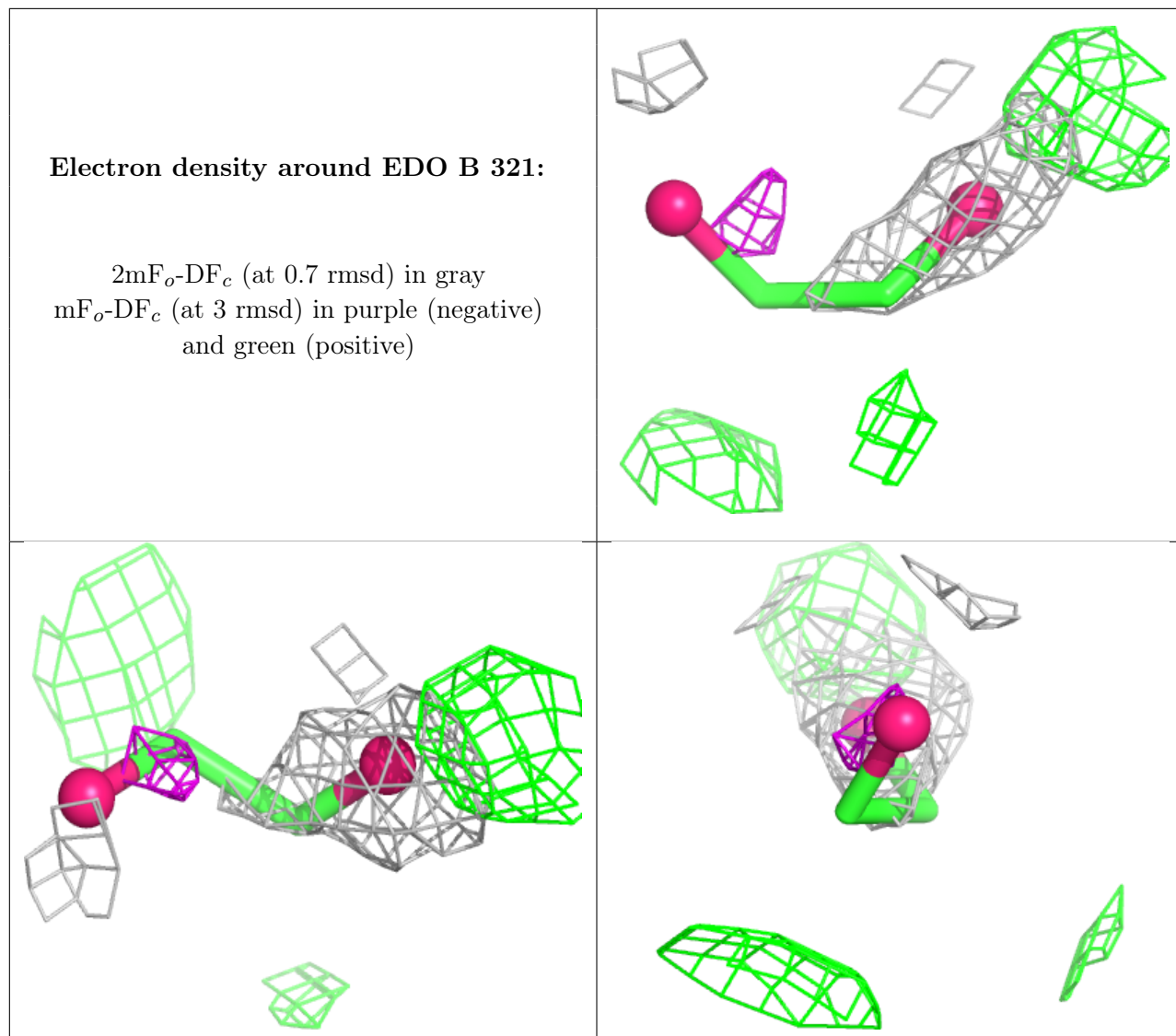
Electron density around EDO C 206:

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



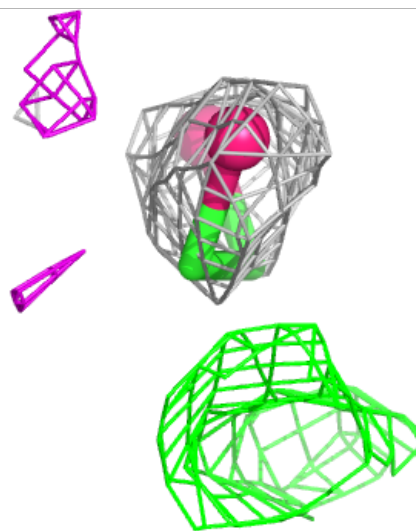
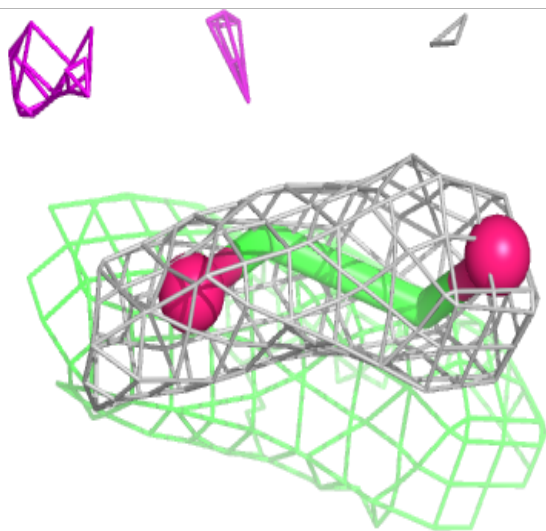
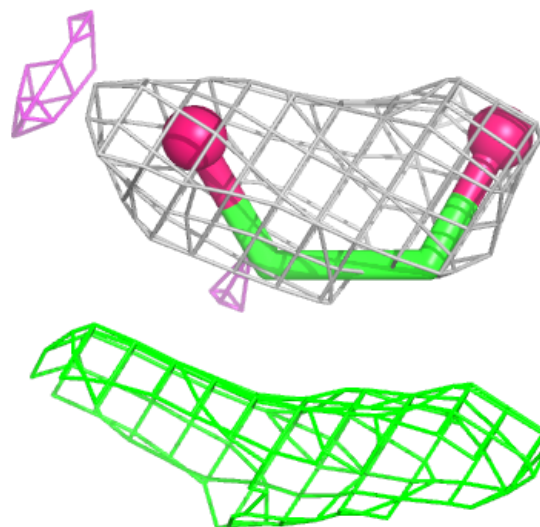
Electron density around EDO B 321:

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



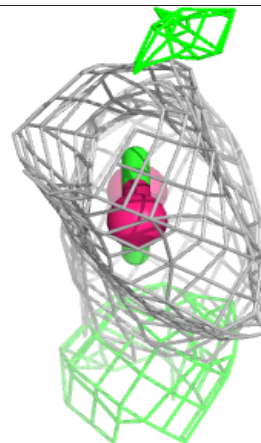
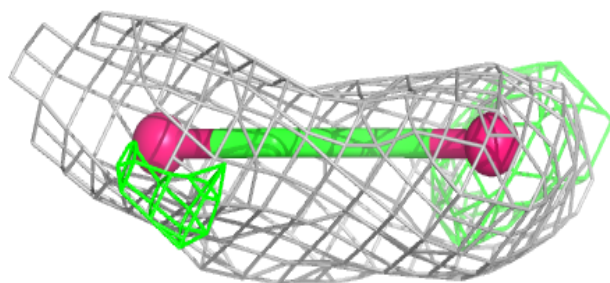
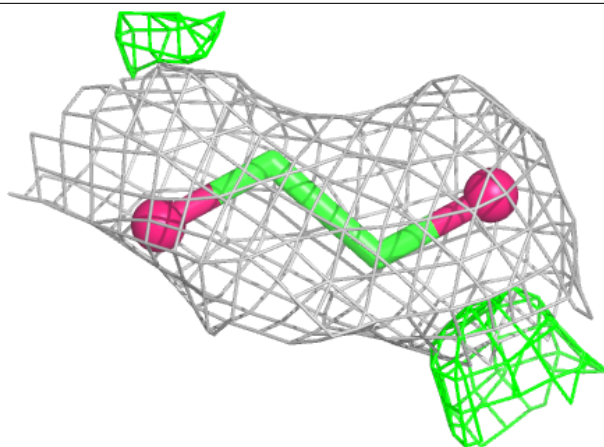
Electron density around EDO A 330:

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

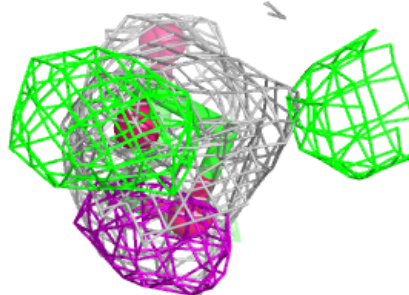
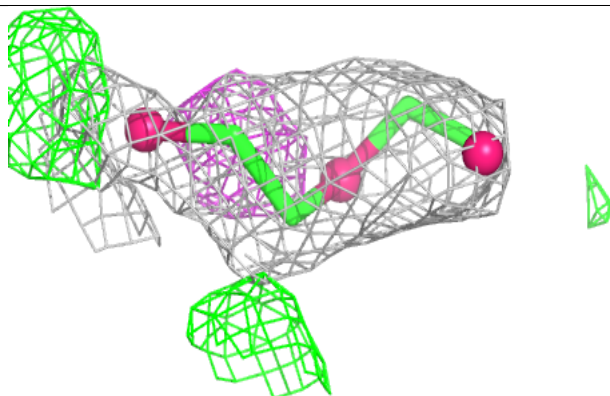
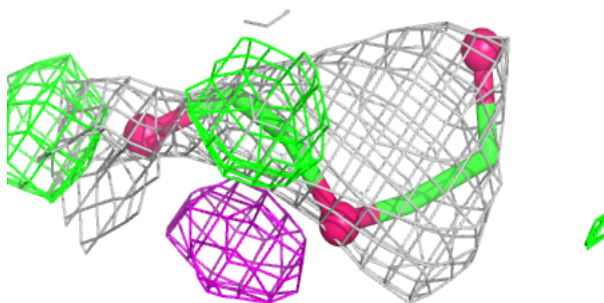


Electron density around EDO A 325:

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

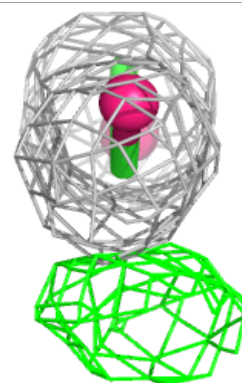
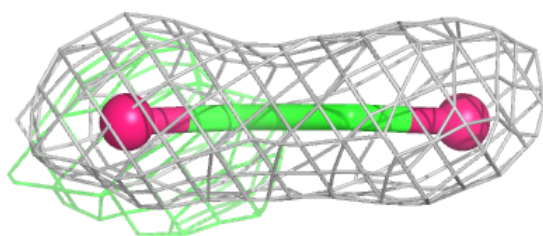
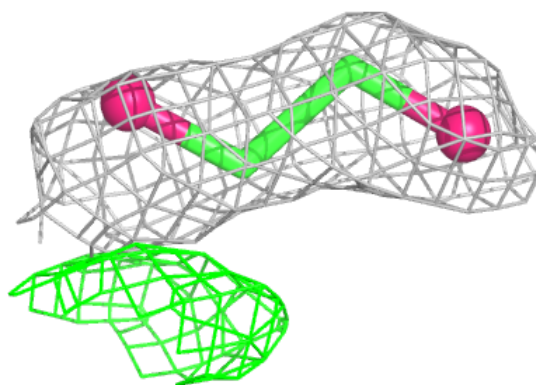
**Electron density around PEG B 304:**

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

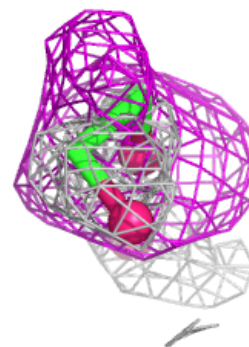
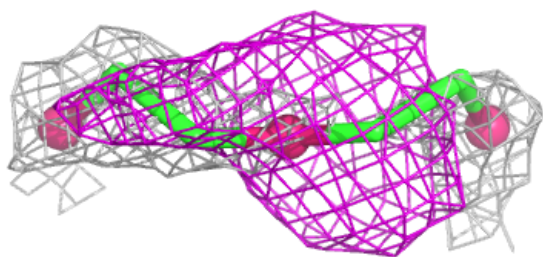
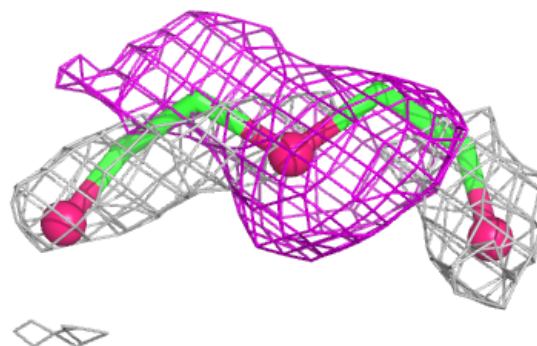


Electron density around EDO A 328:

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

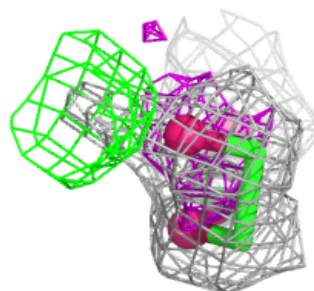
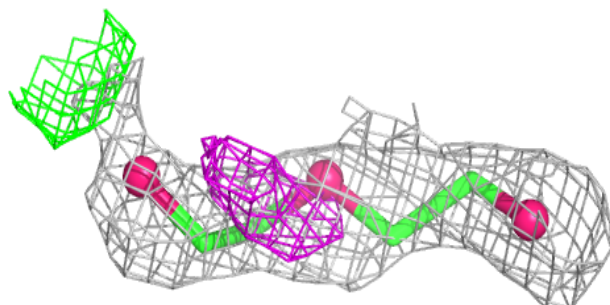
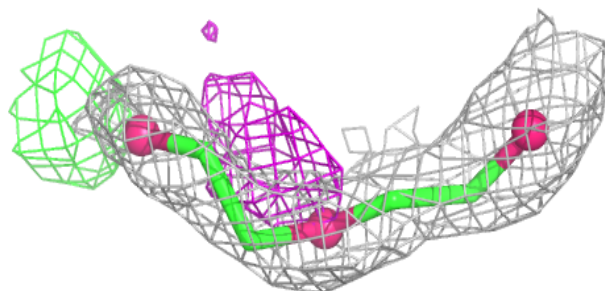
**Electron density around PEG A 308:**

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

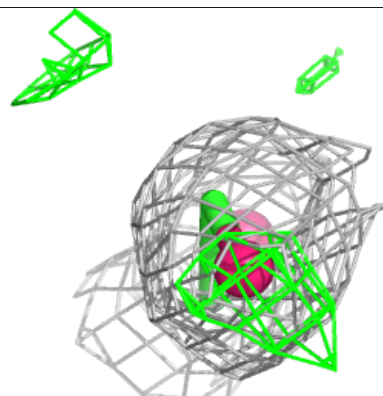
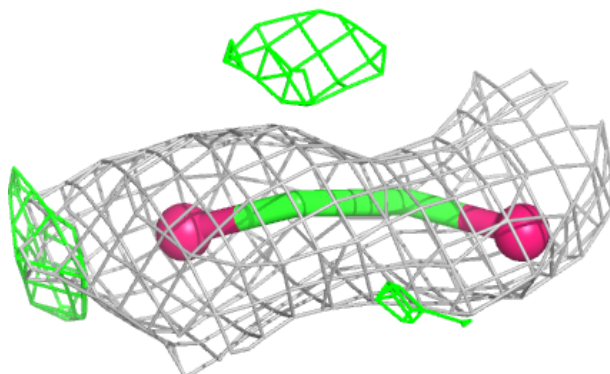
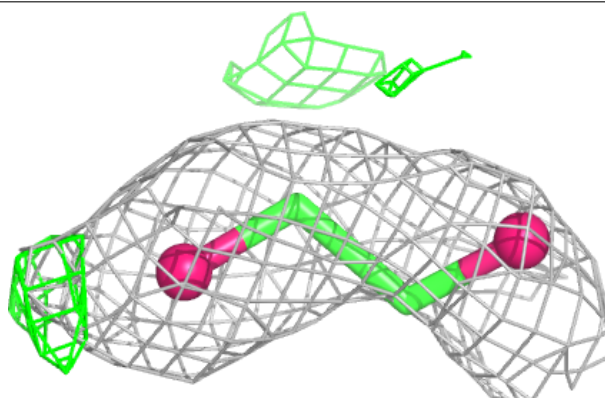


Electron density around PEG A 309:

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

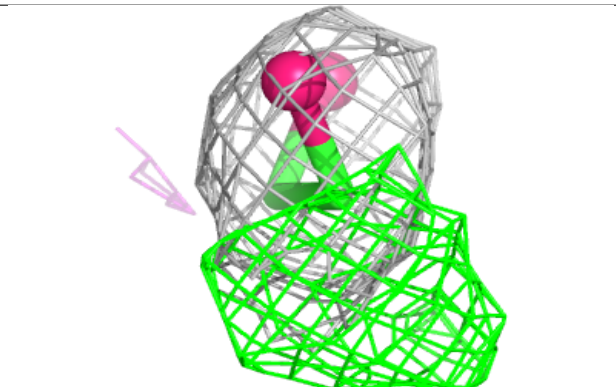
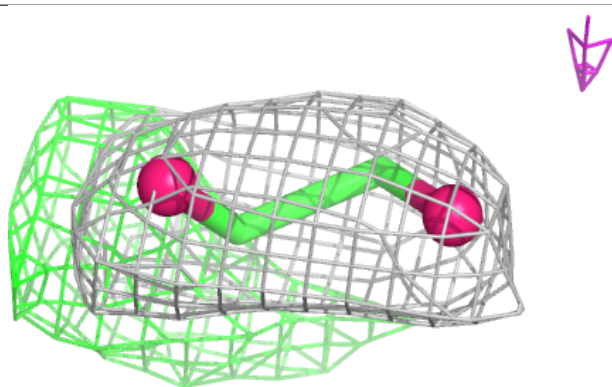
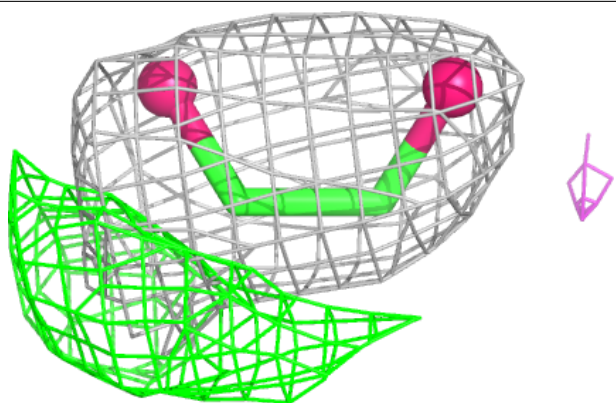
**Electron density around EDO B 314:**

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

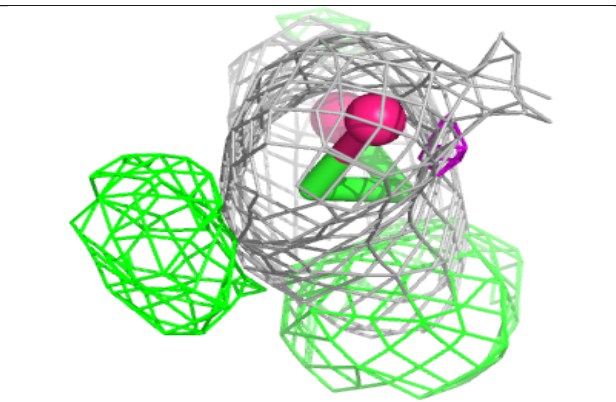
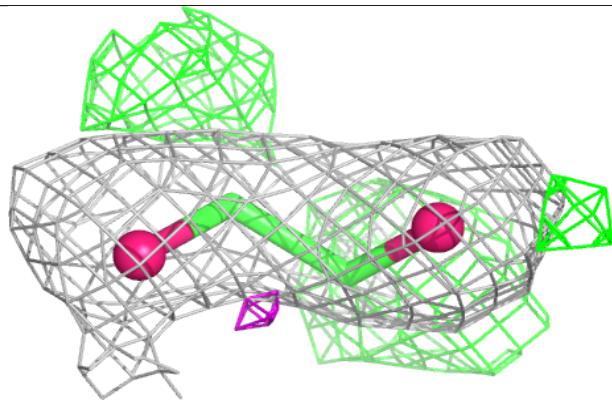
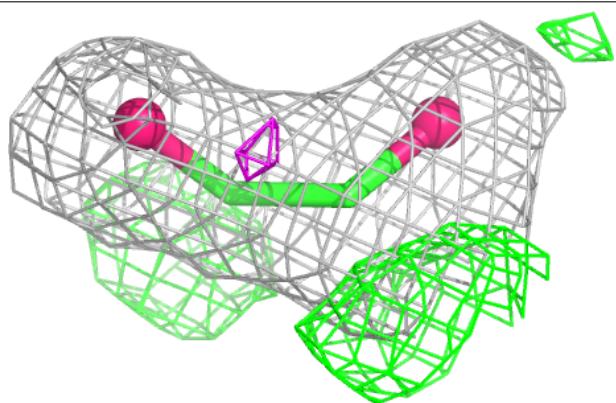


Electron density around EDO C 204:

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

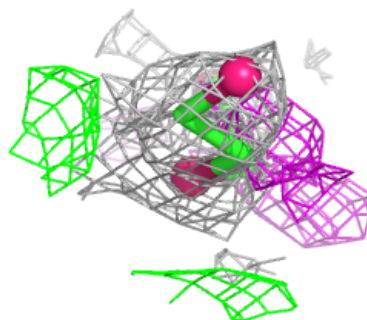
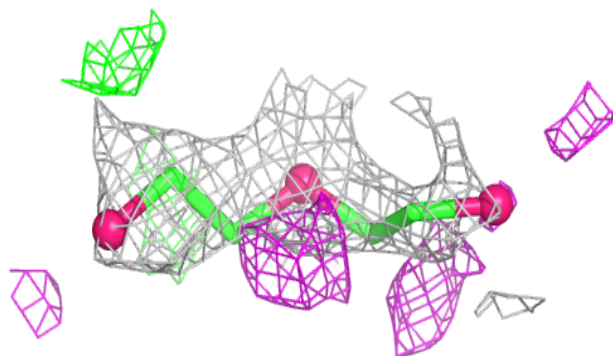
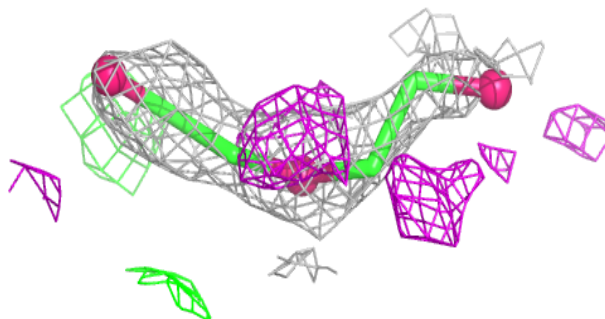
**Electron density around EDO F 202:**

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

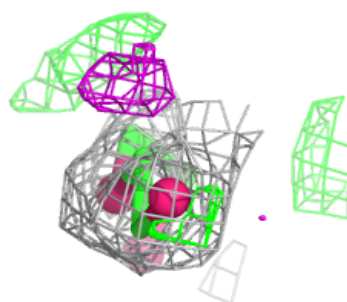
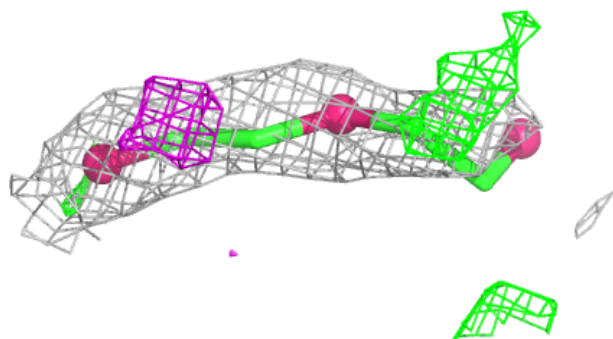
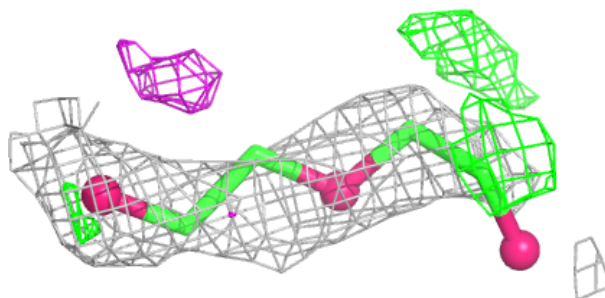


Electron density around PEG A 307:

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

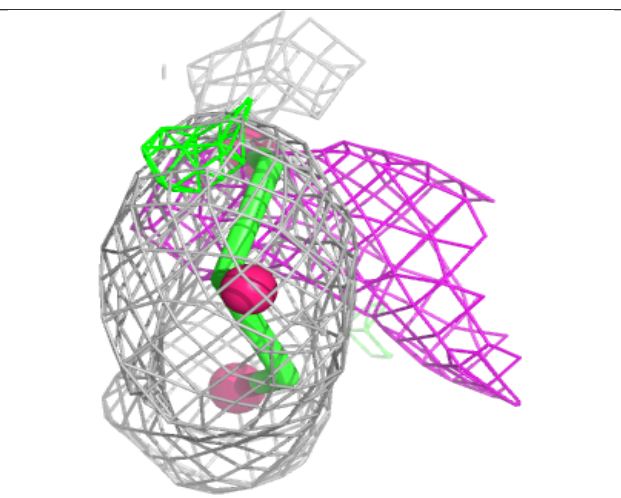
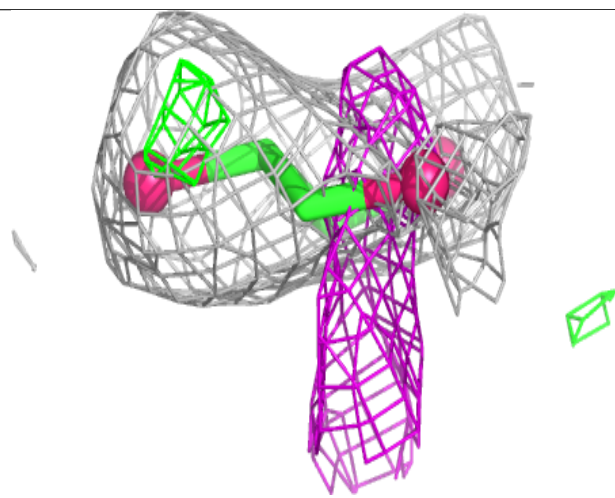
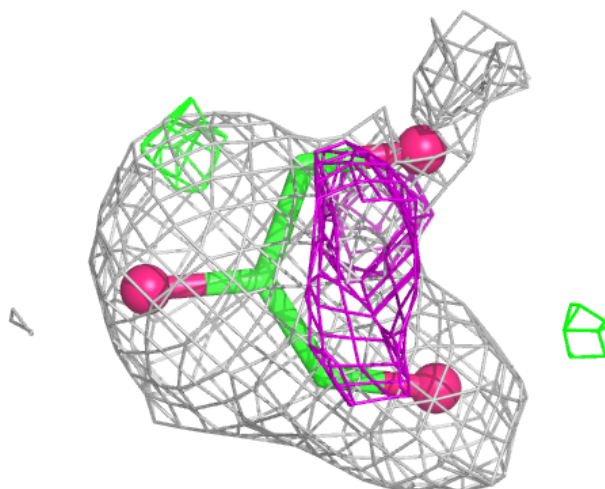
**Electron density around PEG F 205:**

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



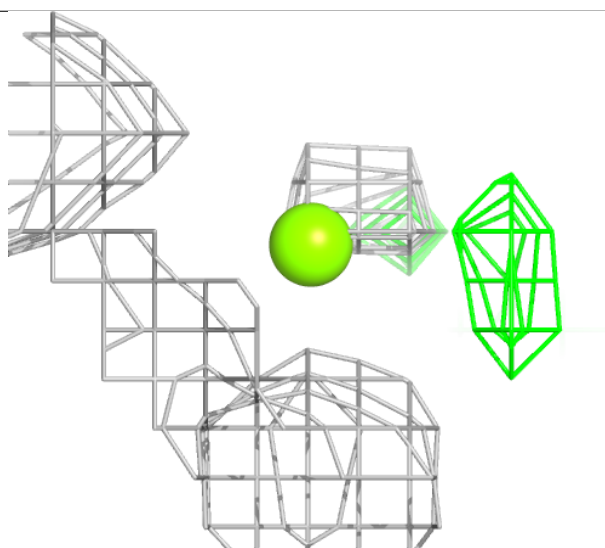
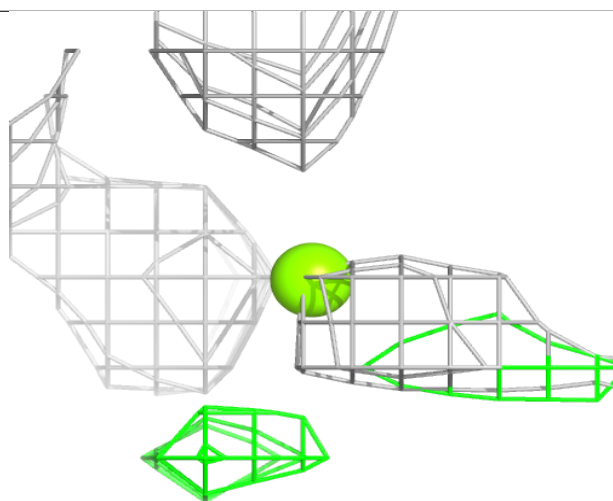
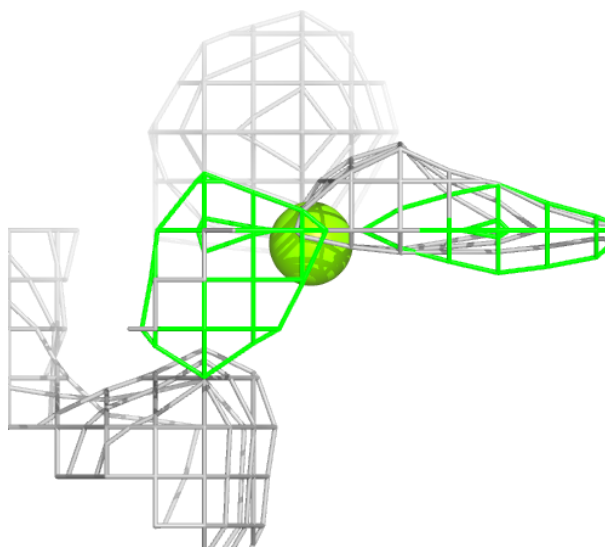
Electron density around GOL B 303:

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



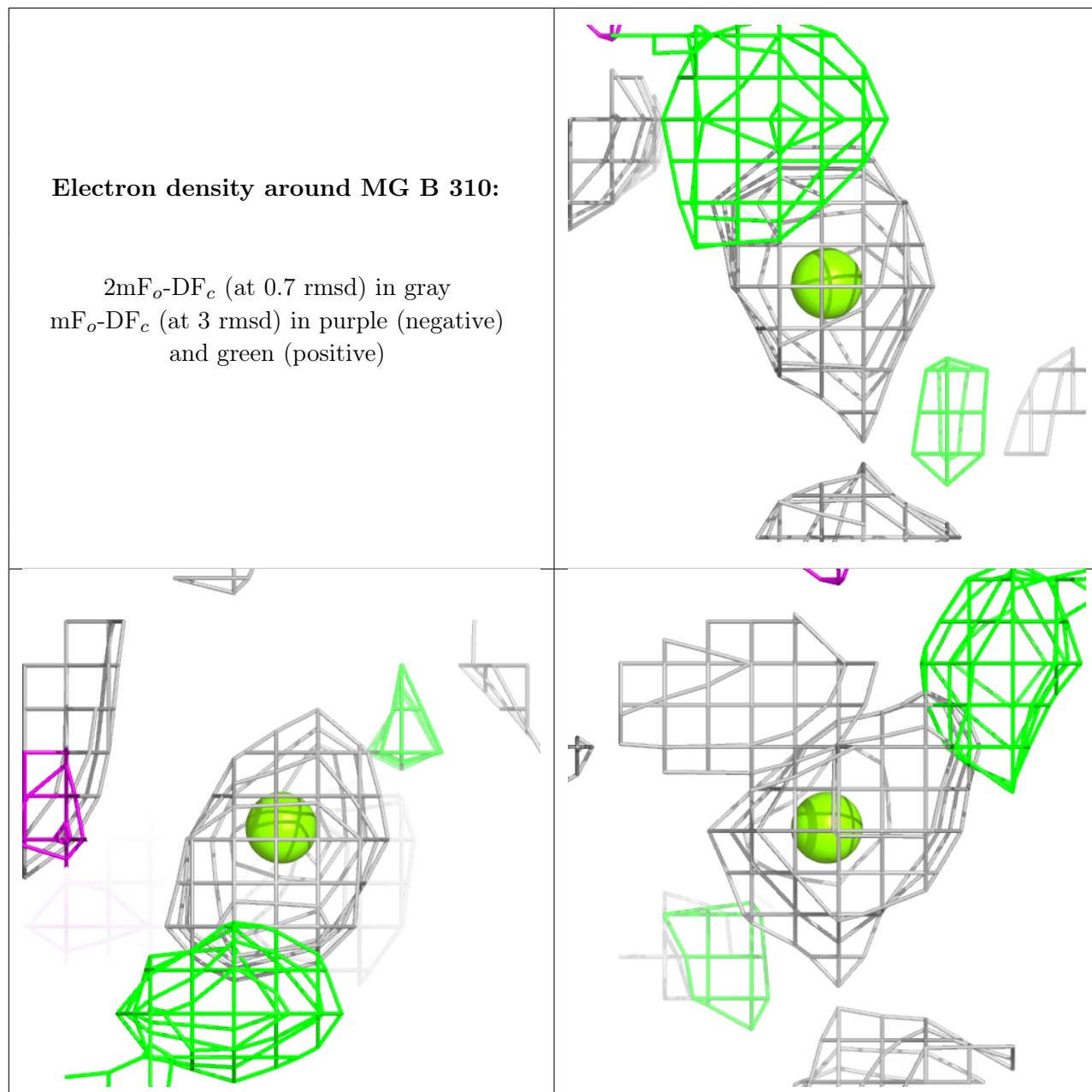
Electron density around MG A 321:

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



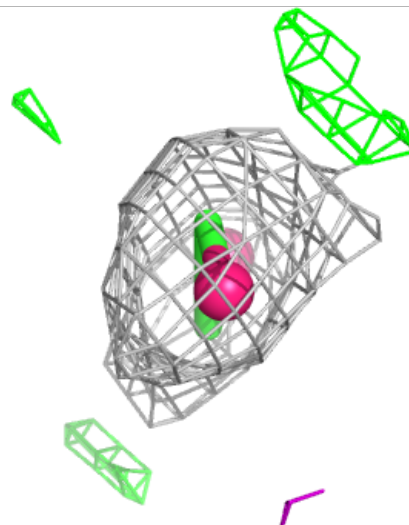
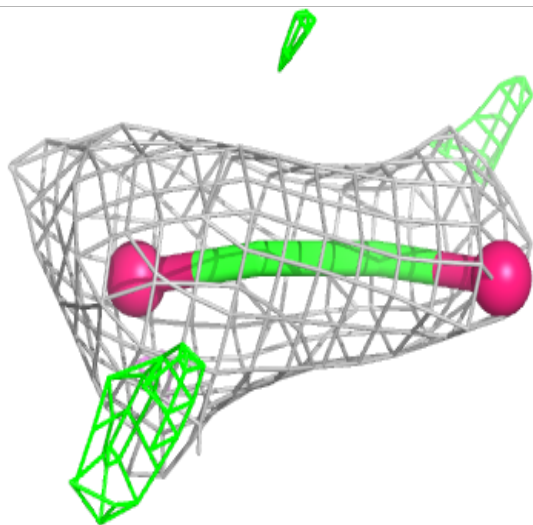
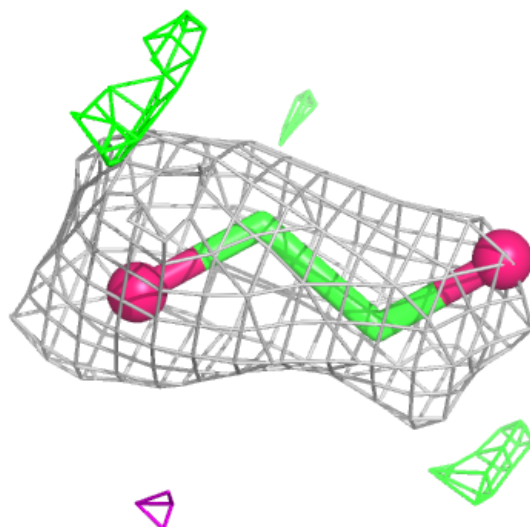
Electron density around MG B 310:

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



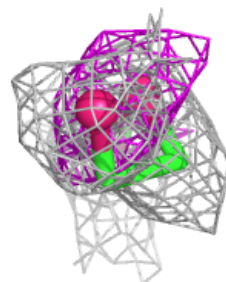
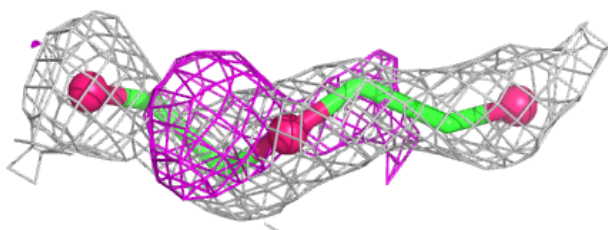
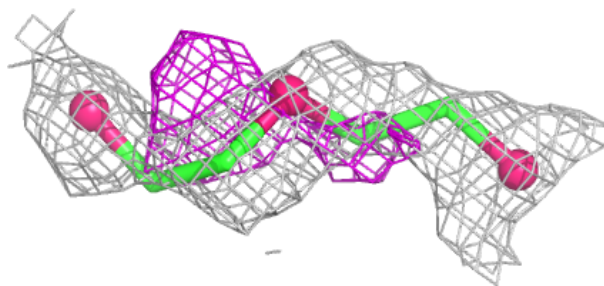
Electron density around EDO F 210:

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

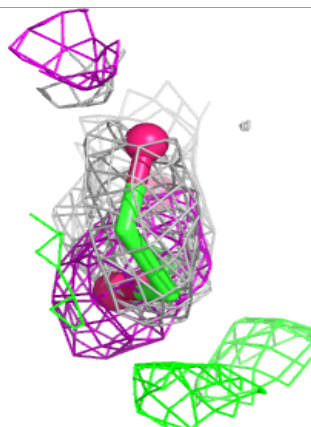
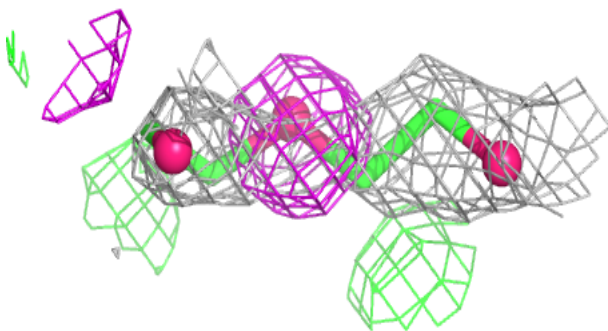
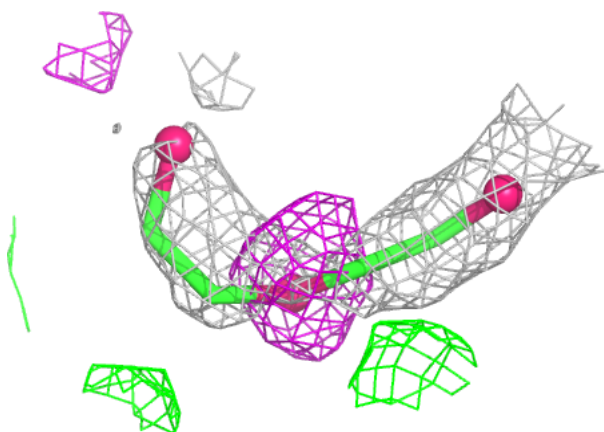


Electron density around PEG A 312:

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

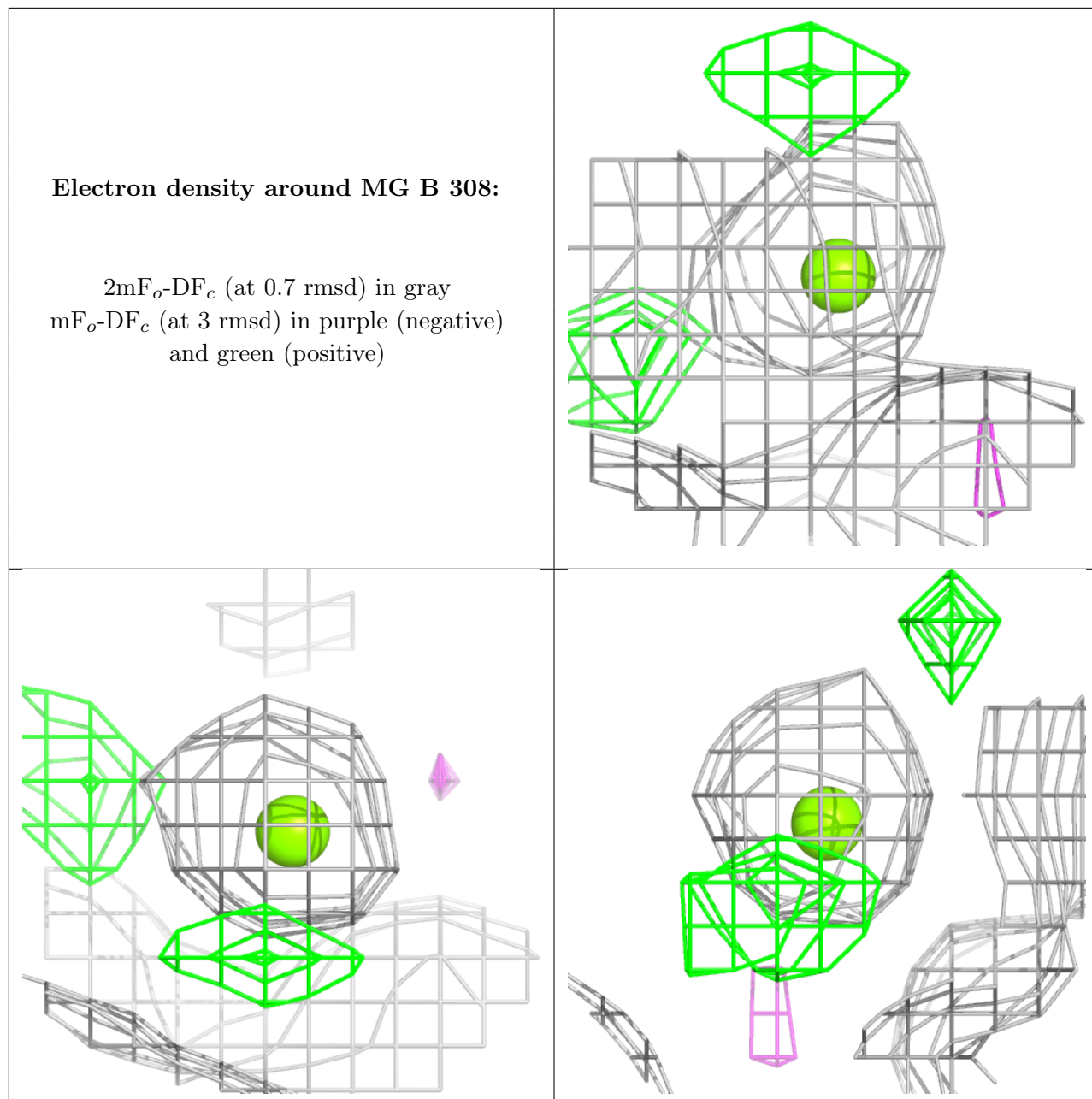
**Electron density around PEG A 310:**

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



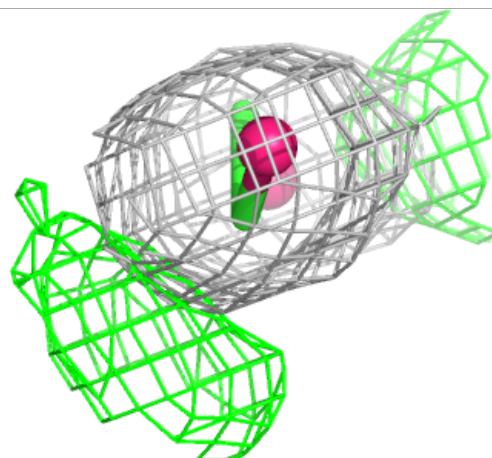
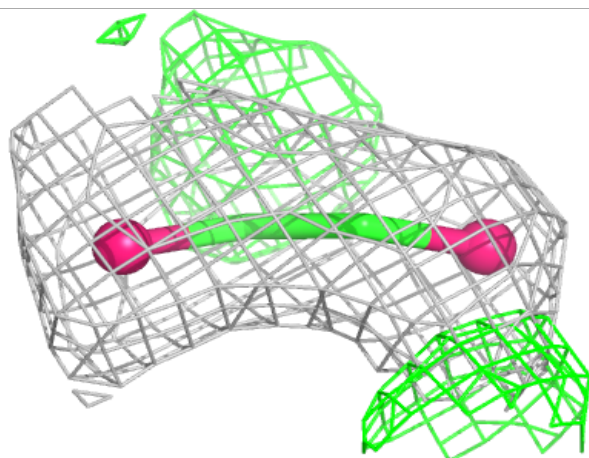
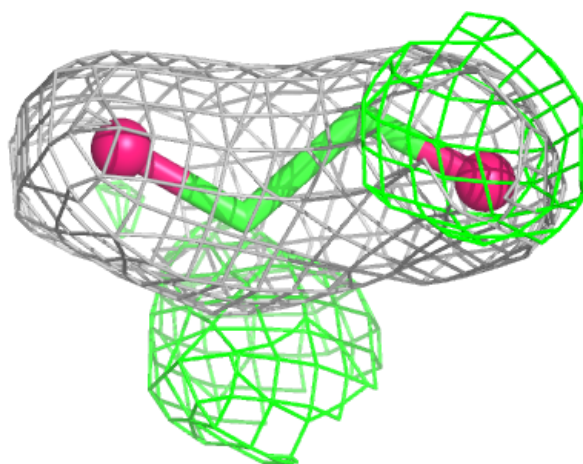
Electron density around MG B 308:

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



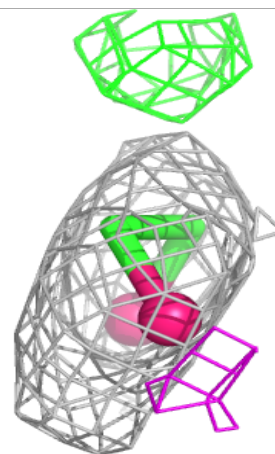
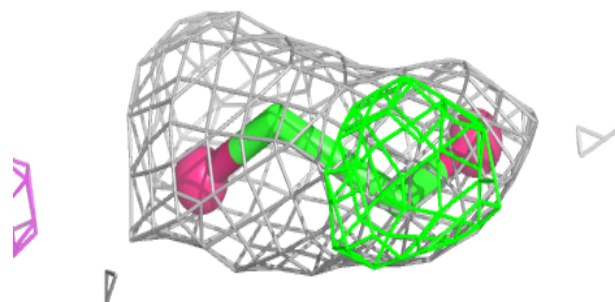
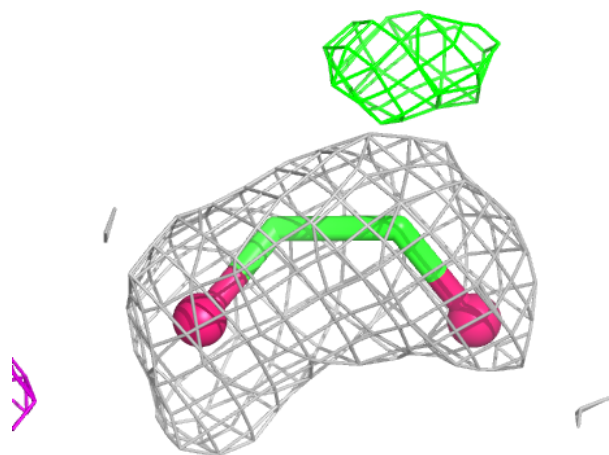
Electron density around EDO B 301:

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



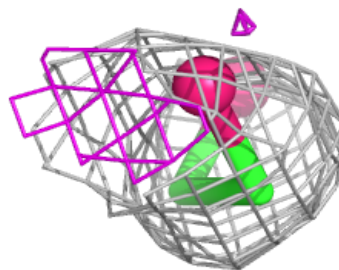
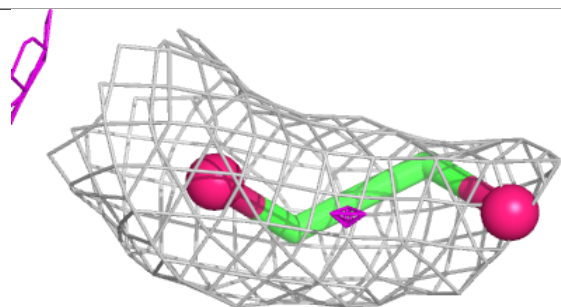
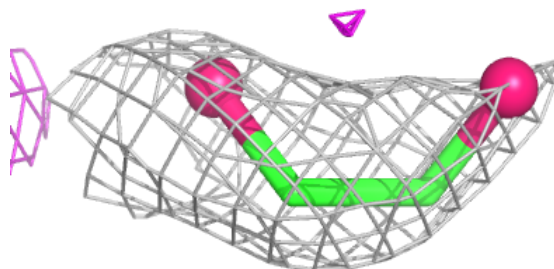
Electron density around EDO B 322:

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



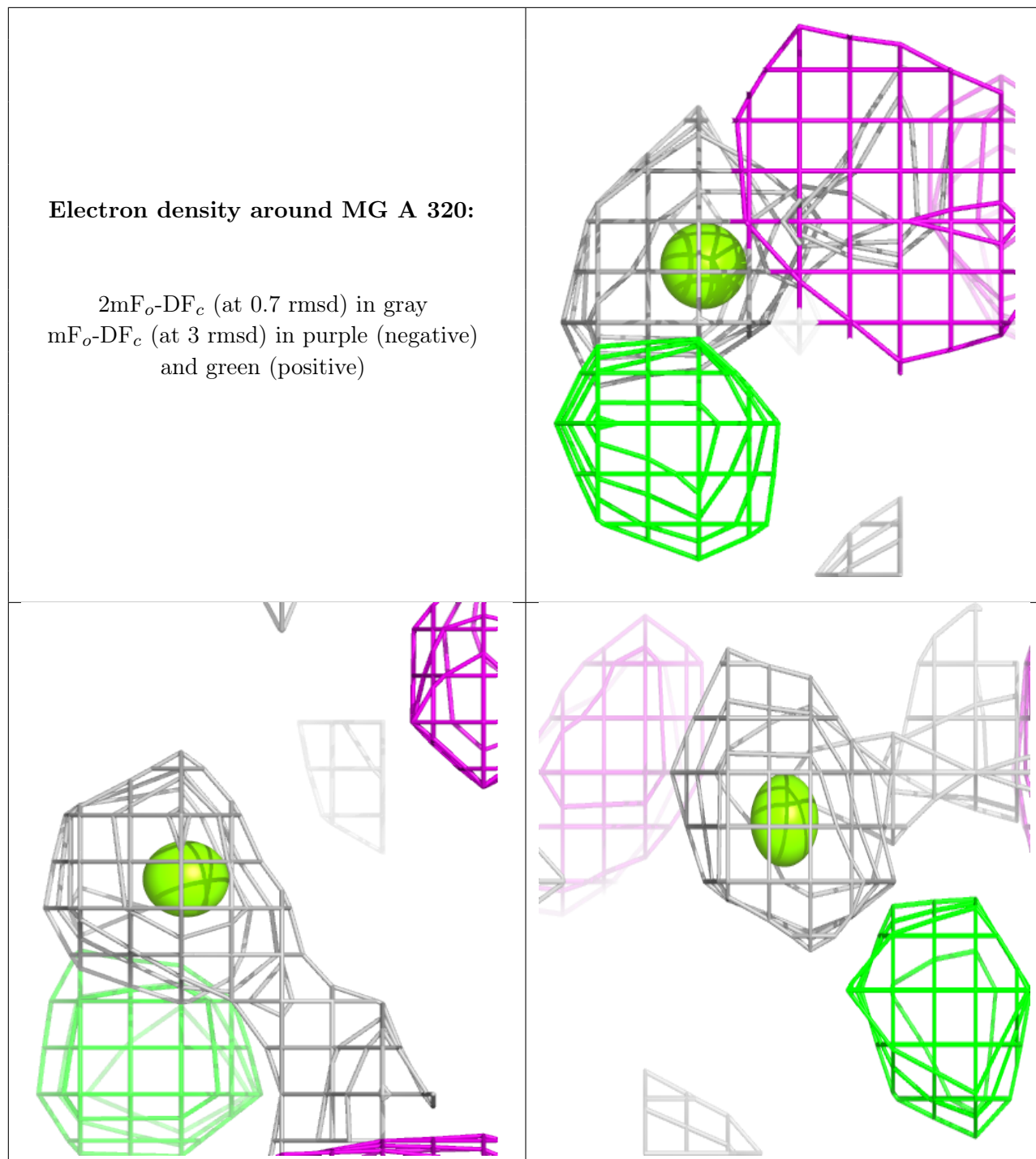
Electron density around EDO B 319:

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



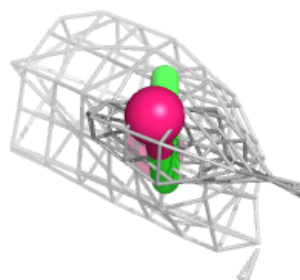
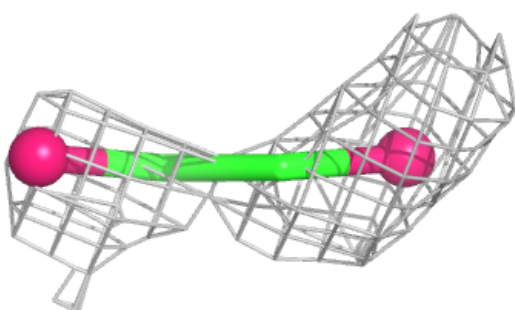
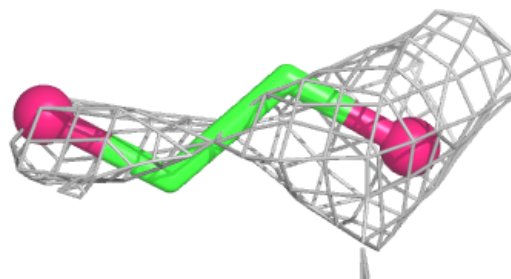
Electron density around MG A 320:

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

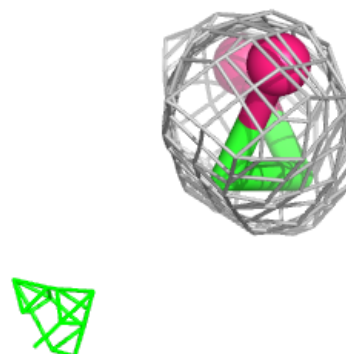
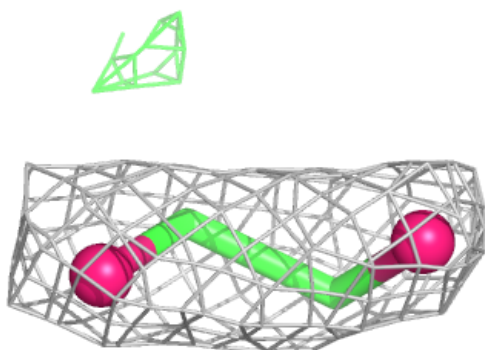
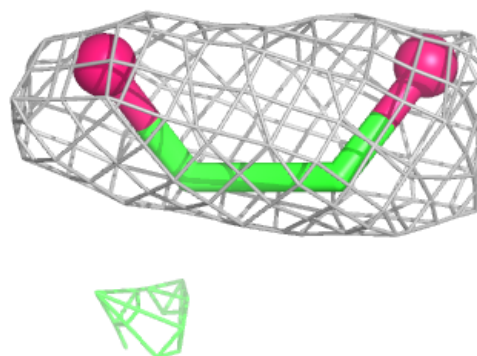


Electron density around EDO F 203:

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

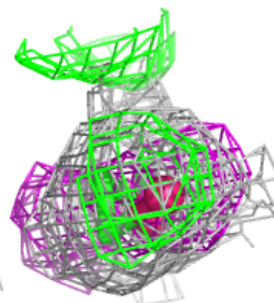
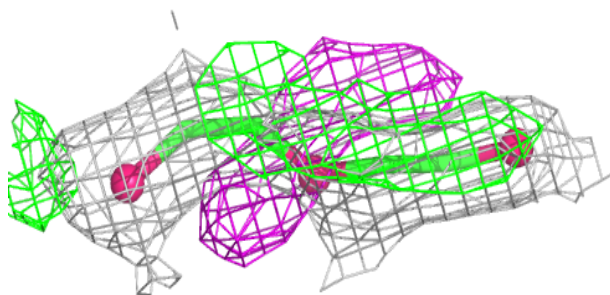
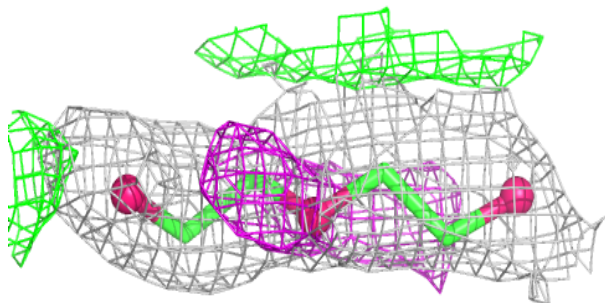
**Electron density around EDO B 320:**

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

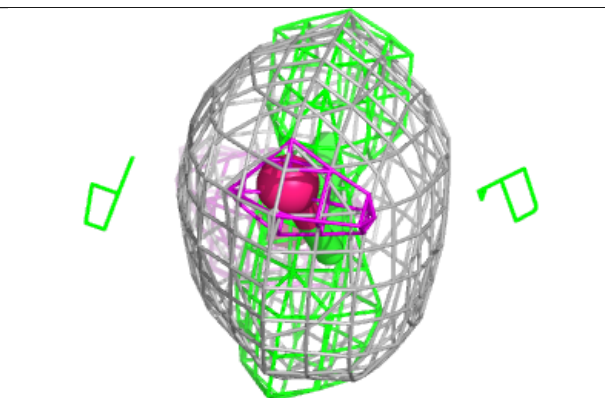
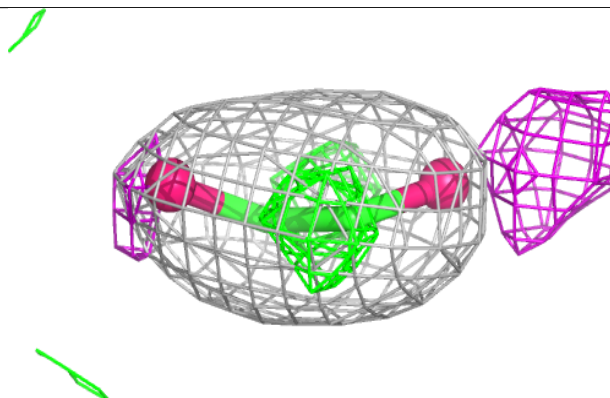
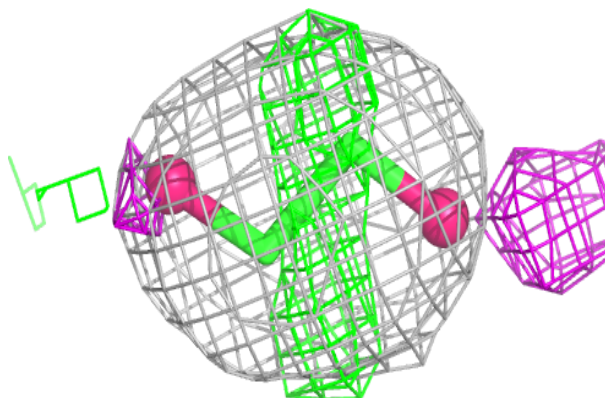


Electron density around PEG F 201:

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

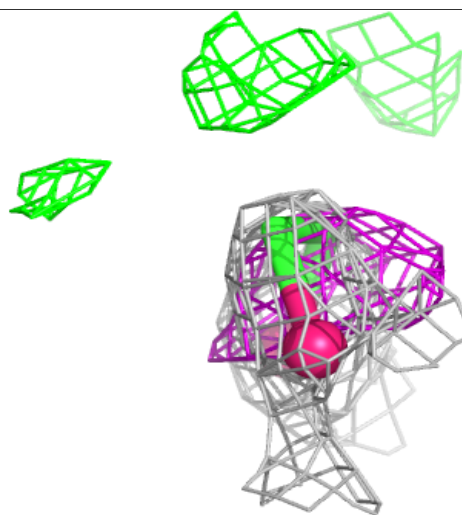
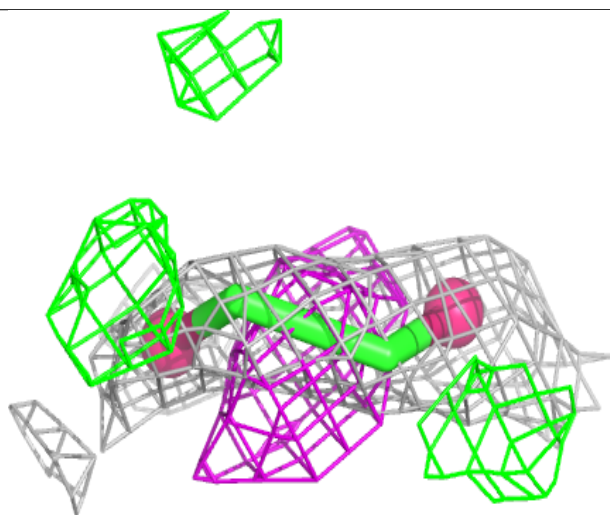
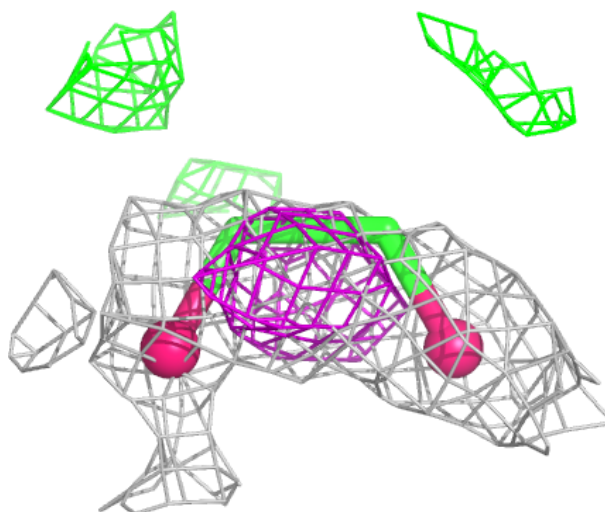
**Electron density around EDO A 302:**

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



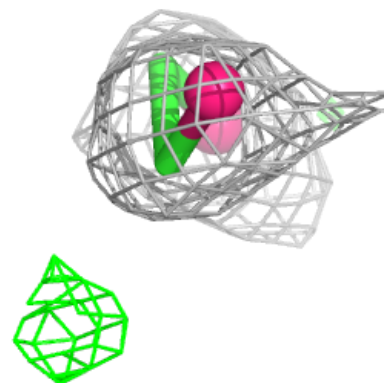
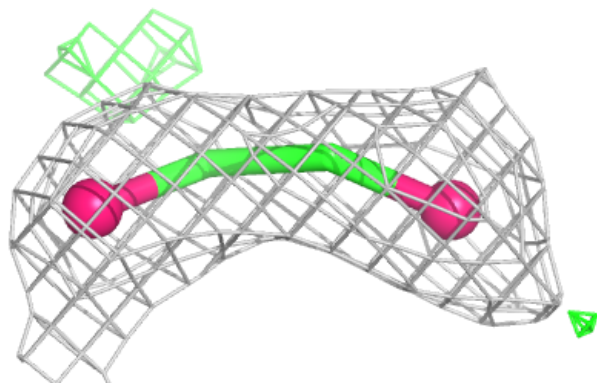
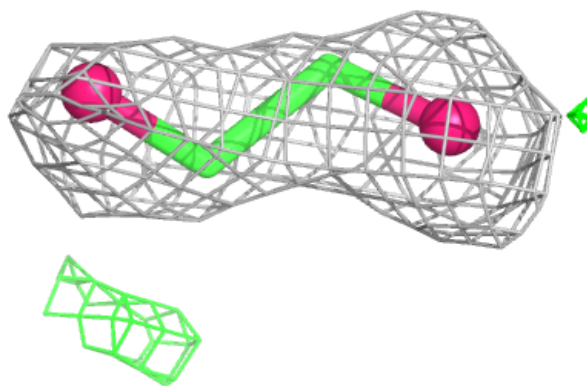
Electron density around EDO B 315:

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

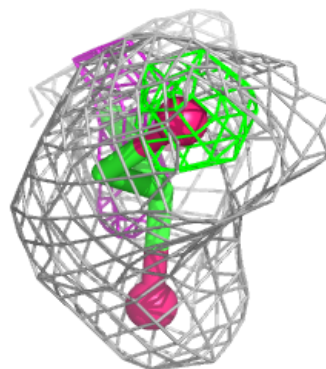
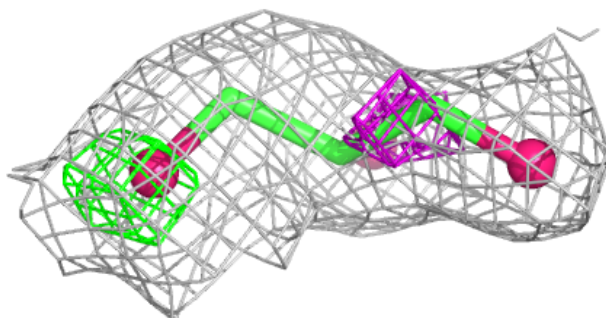
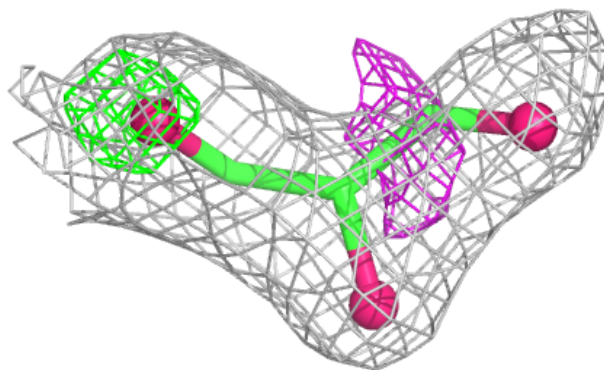


Electron density around EDO B 316:

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

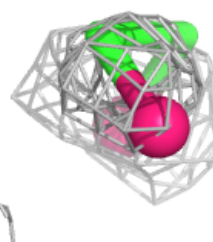
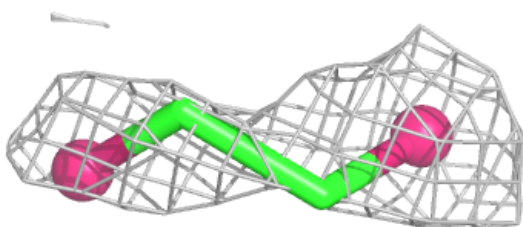
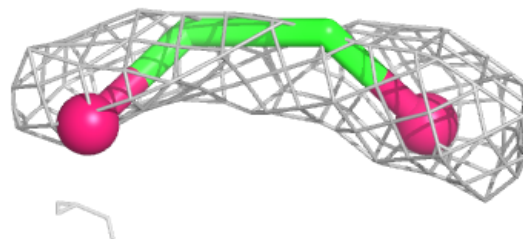
**Electron density around GOL A 305:**

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

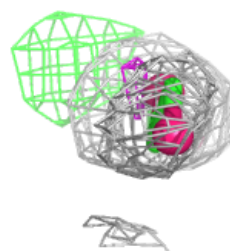
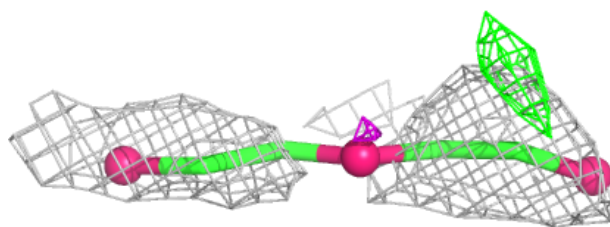
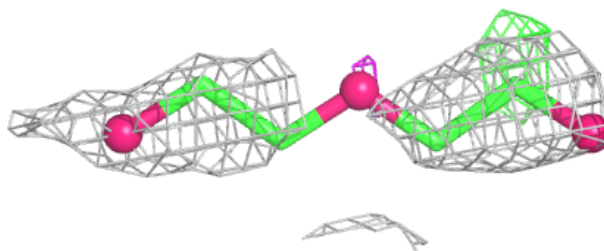


Electron density around EDO B 323:

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

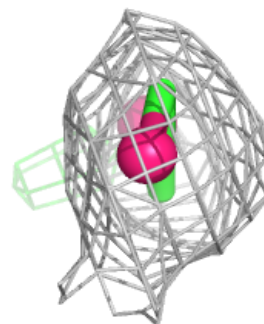
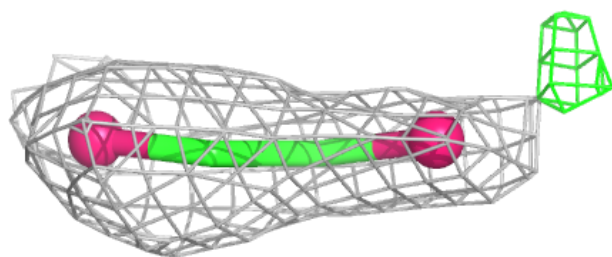
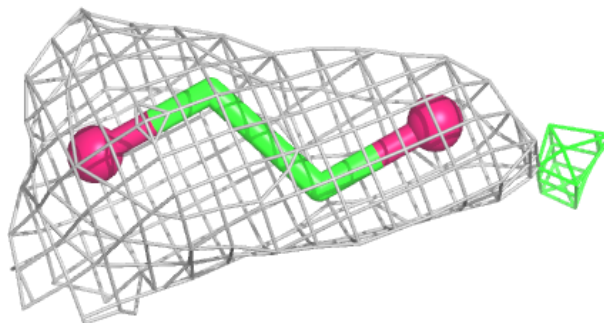
**Electron density around PEG A 306:**

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

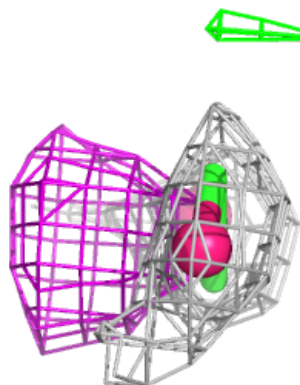
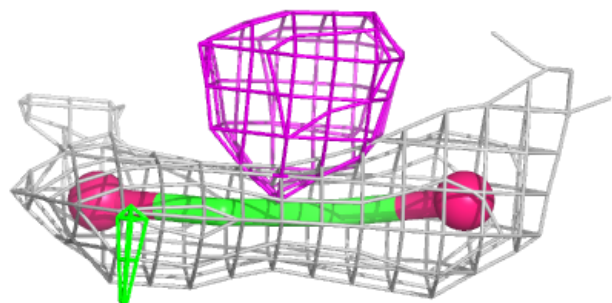
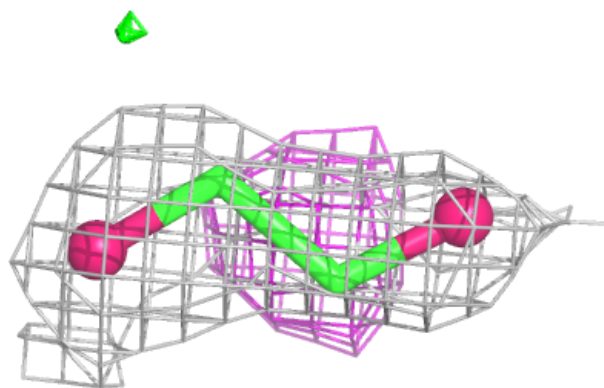


Electron density around EDO B 313:

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

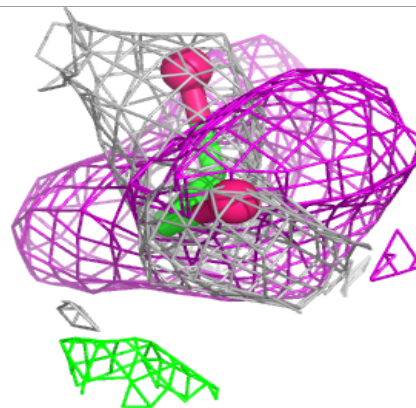
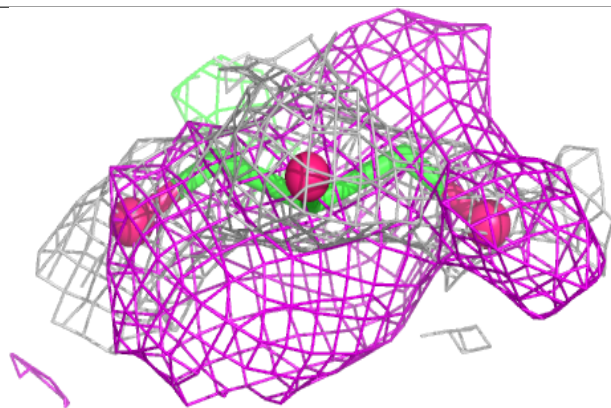
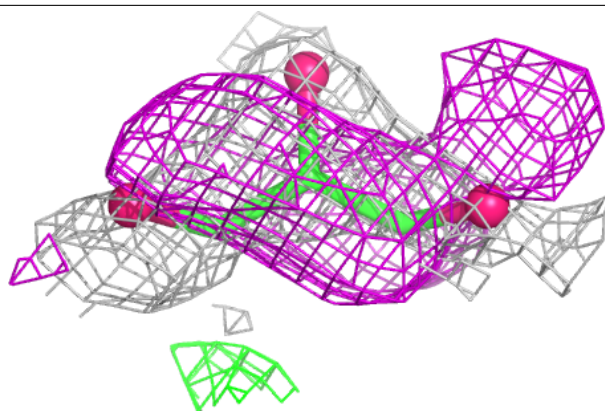
**Electron density around EDO B 317:**

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



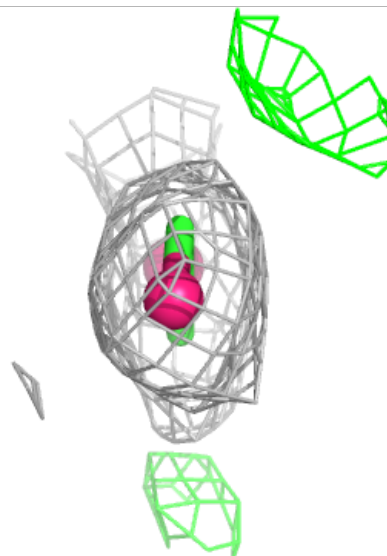
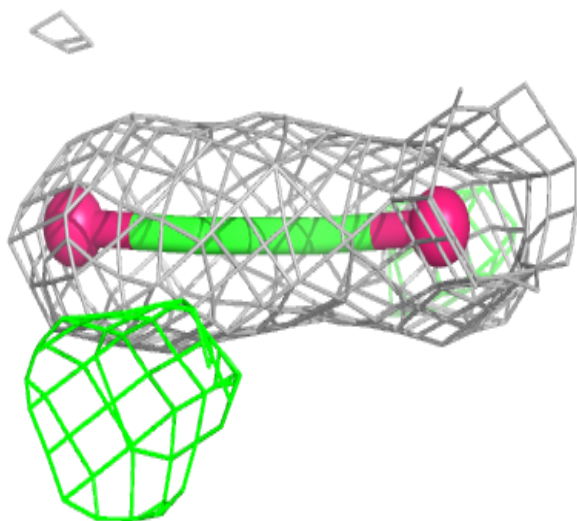
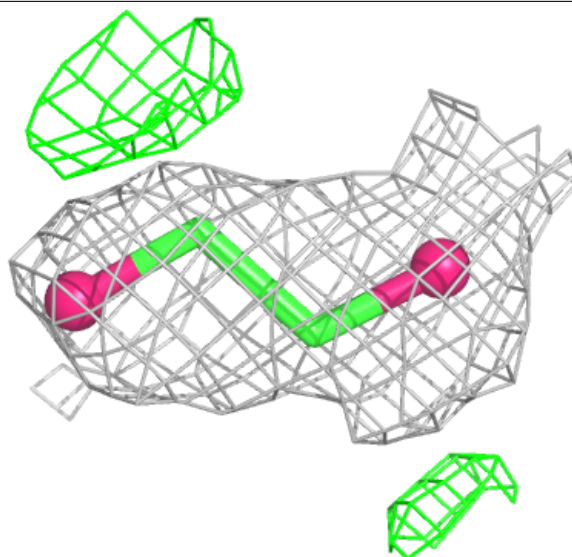
Electron density around GOL A 311:

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



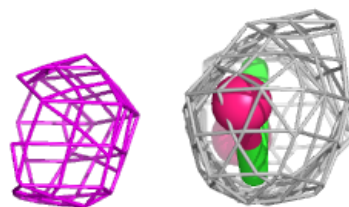
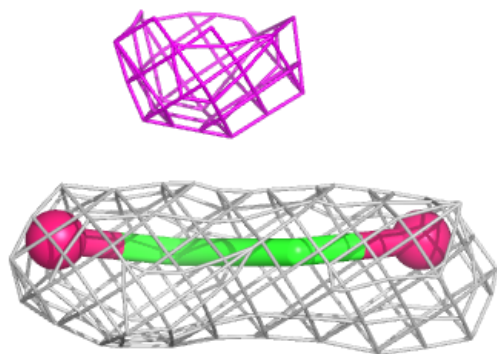
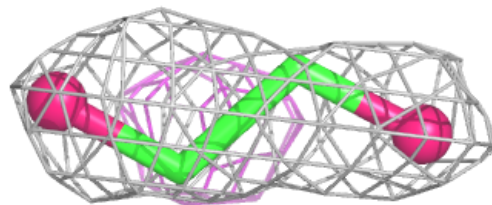
Electron density around EDO A 327:

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



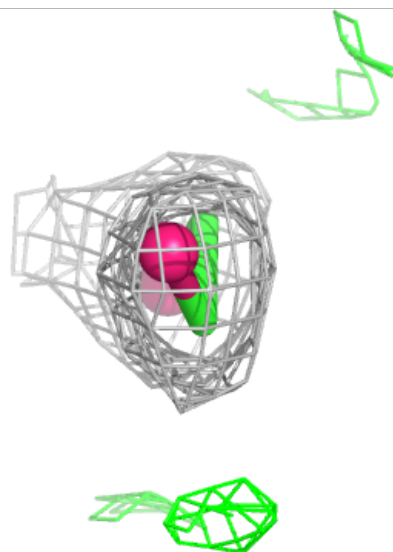
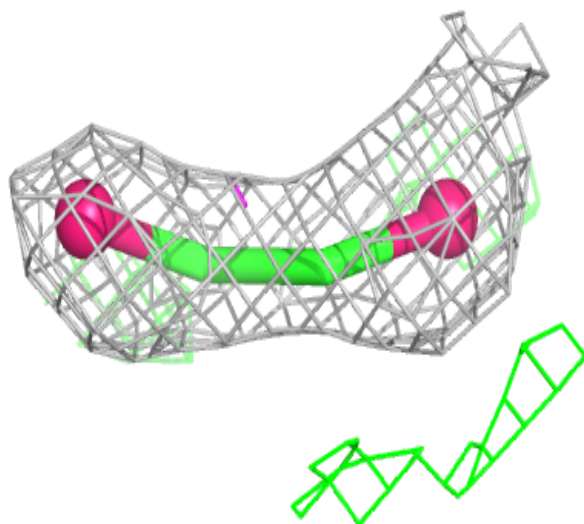
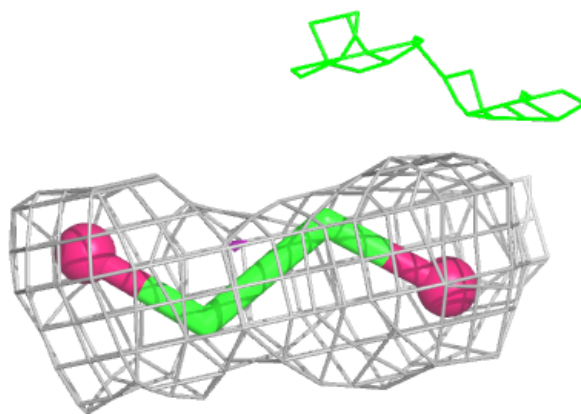
Electron density around EDO A 331:

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



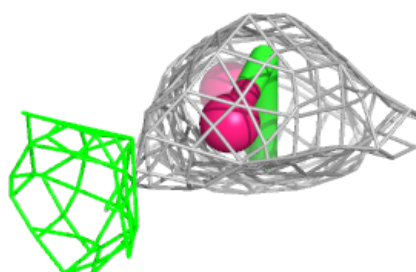
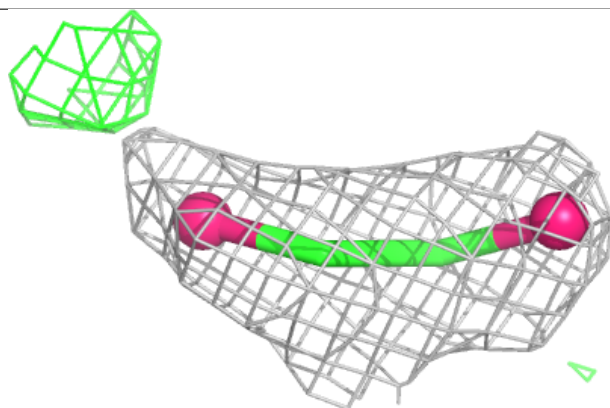
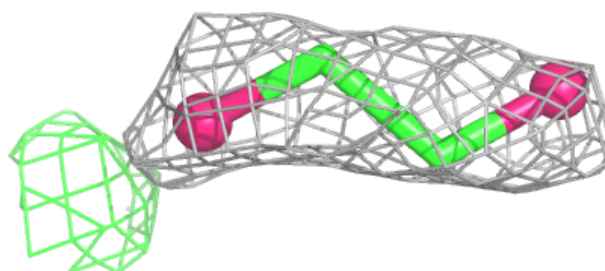
Electron density around EDO F 209:

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

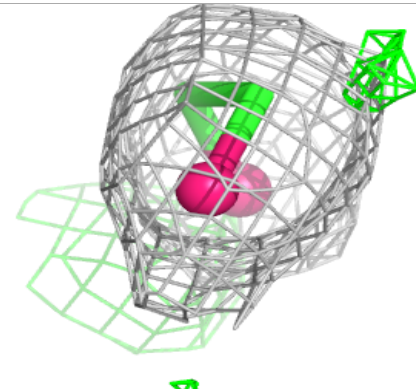
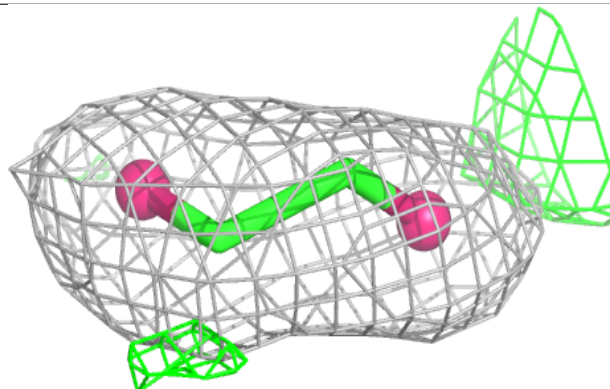
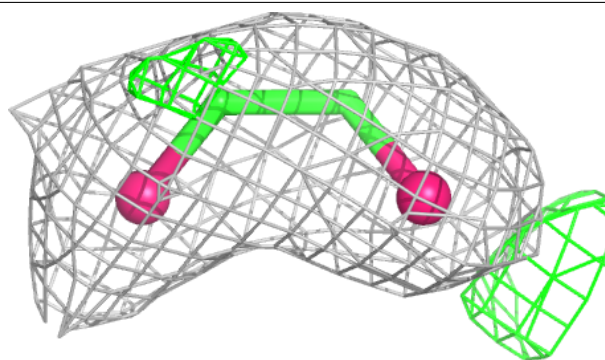


Electron density around EDO A 332:

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

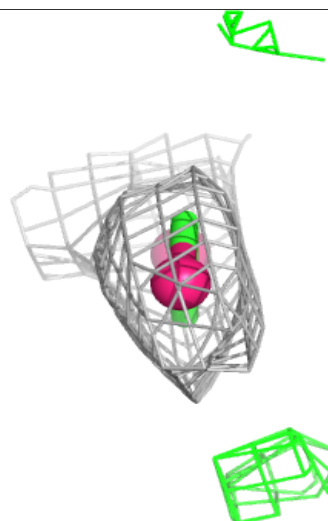
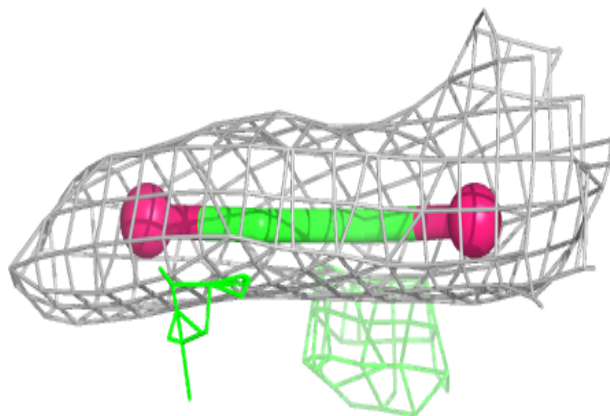
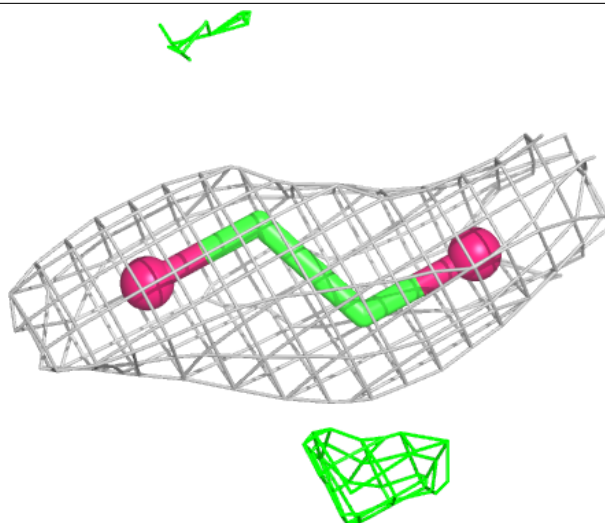
**Electron density around EDO A 304:**

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



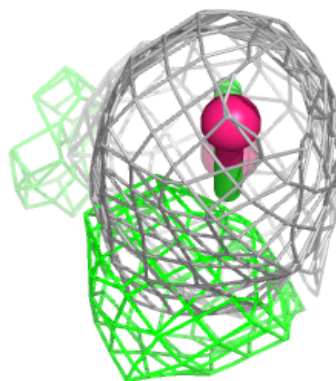
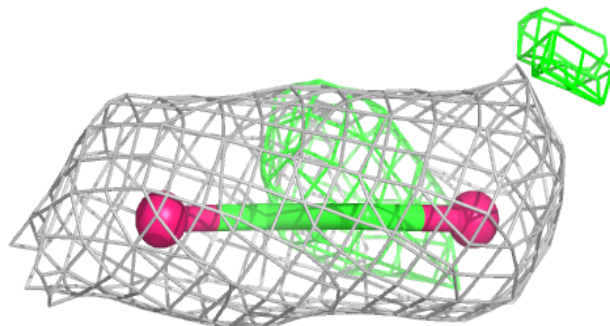
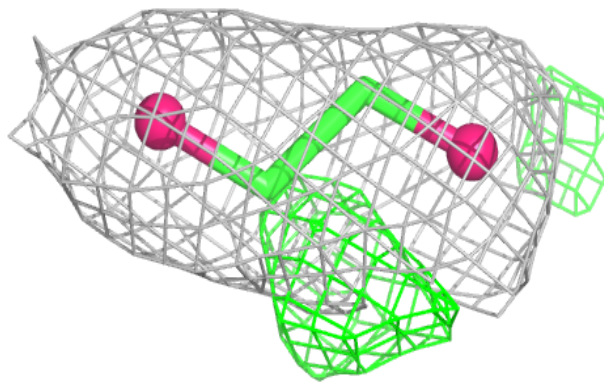
Electron density around EDO B 318:

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



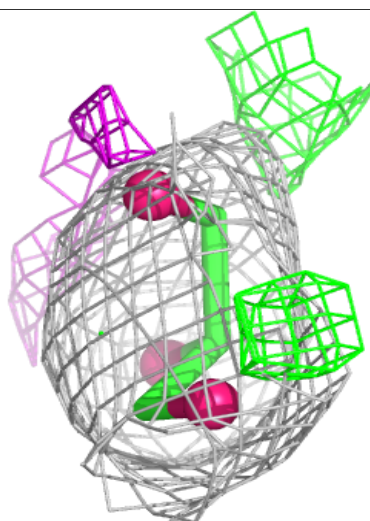
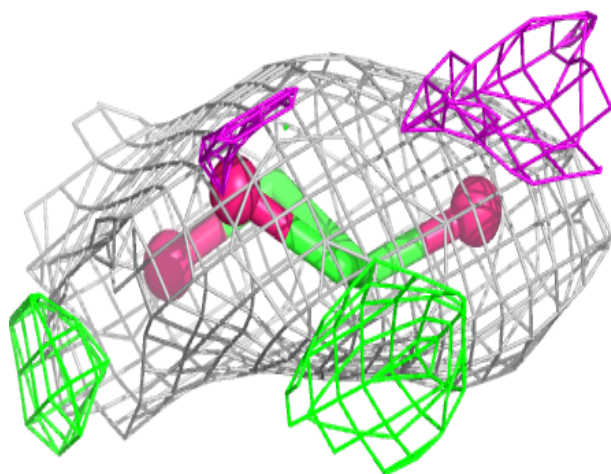
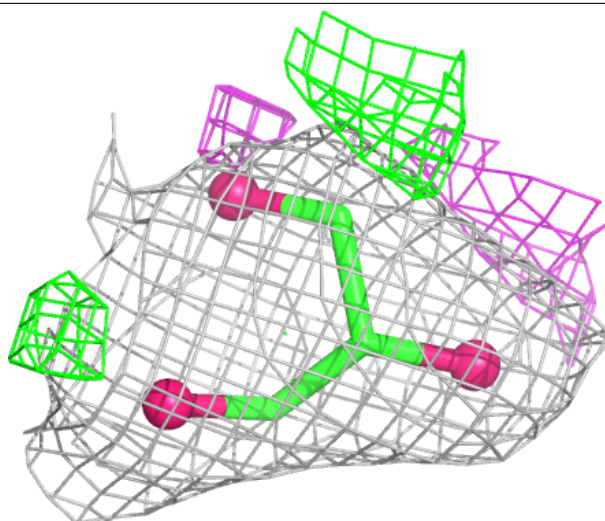
Electron density around EDO A 301:

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



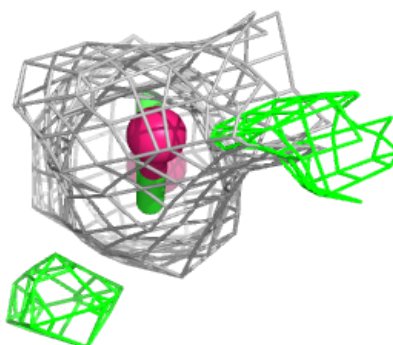
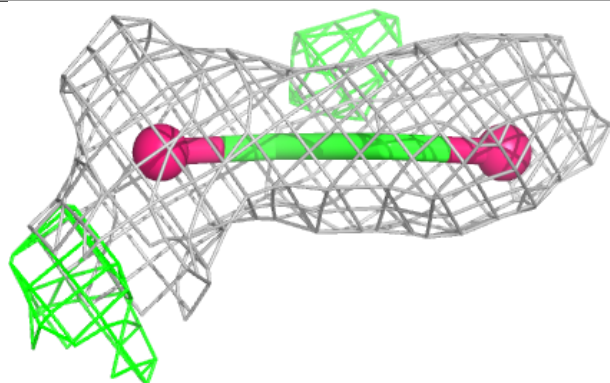
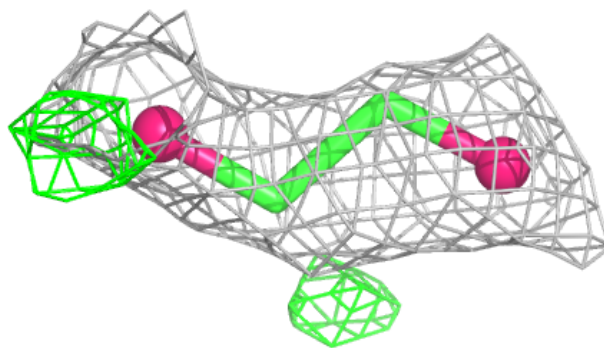
Electron density around GOL F 204:

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

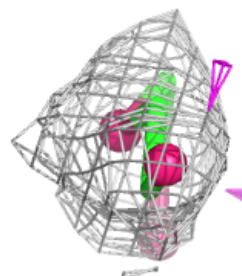
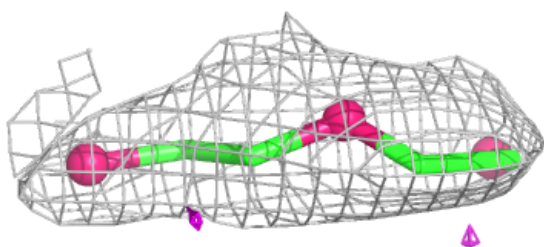
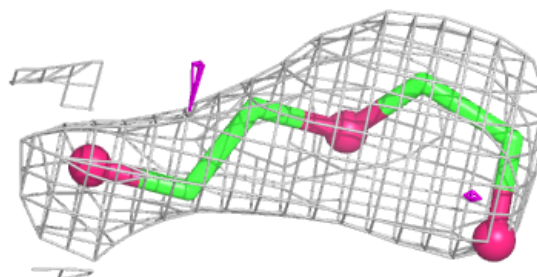


Electron density around EDO B 325:

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

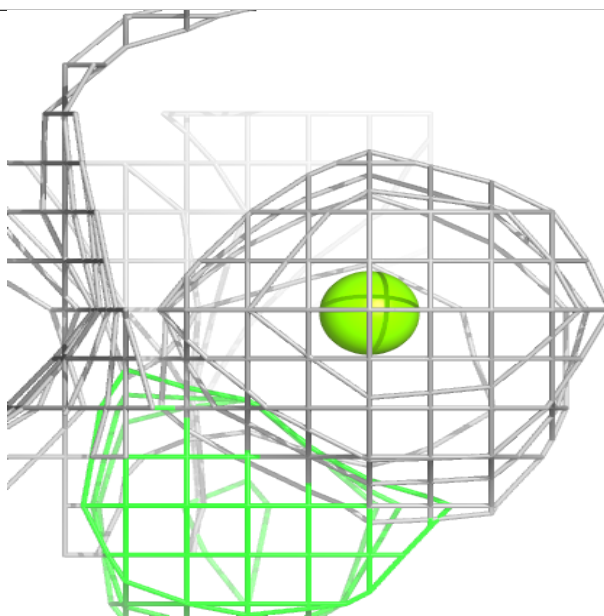
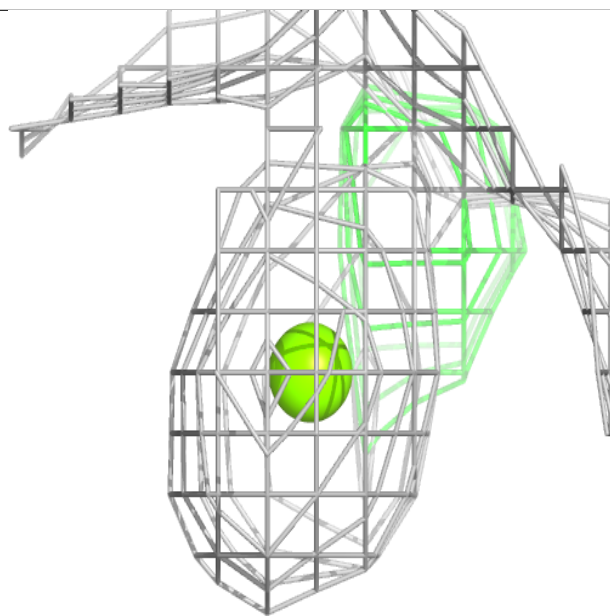
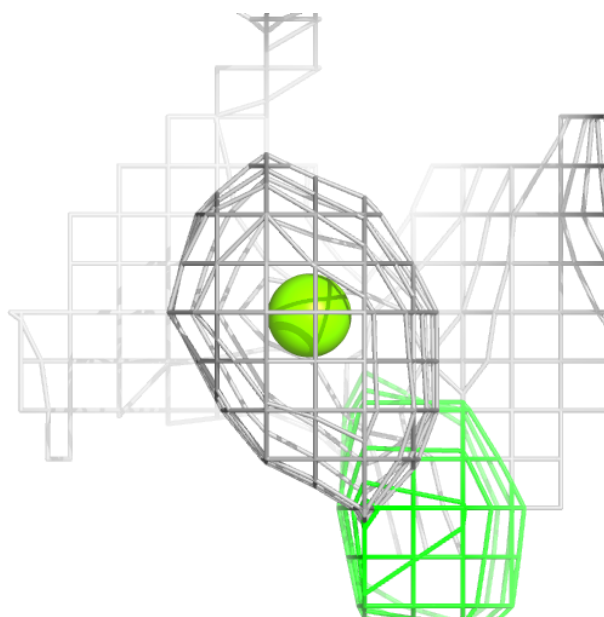
**Electron density around PEG A 314:**

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



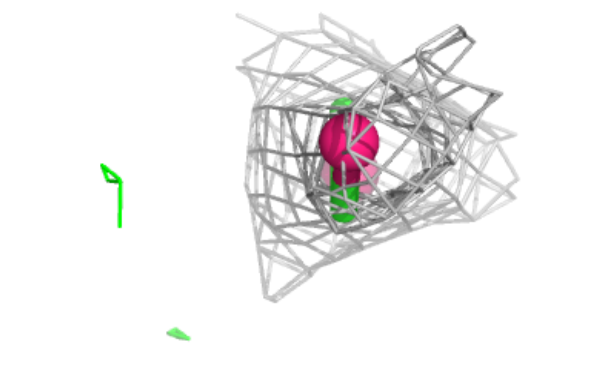
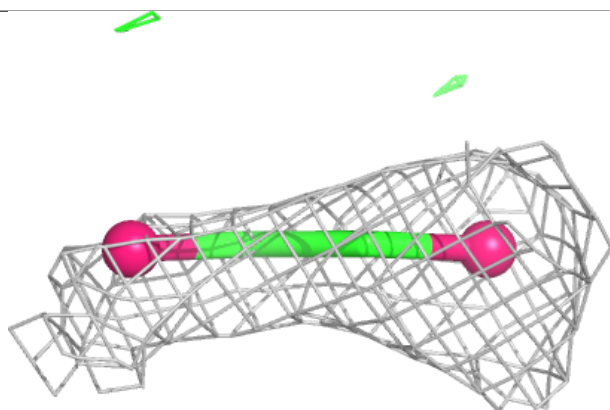
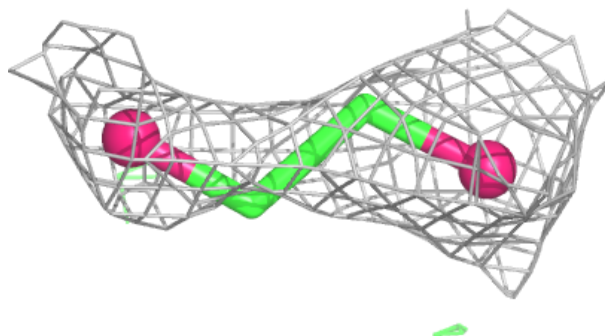
Electron density around MG B 309:

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

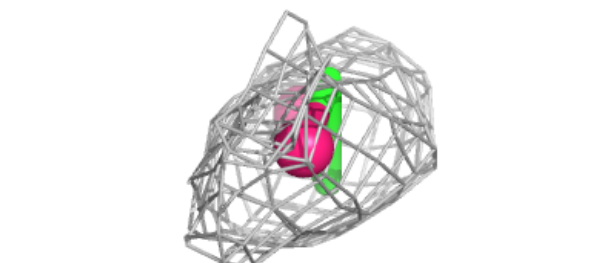
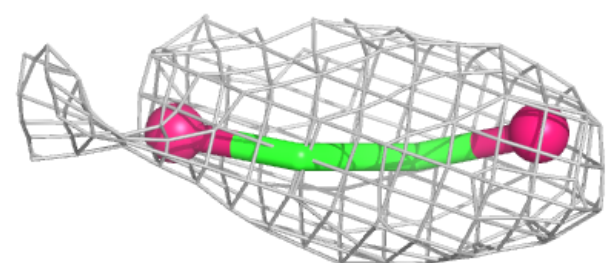
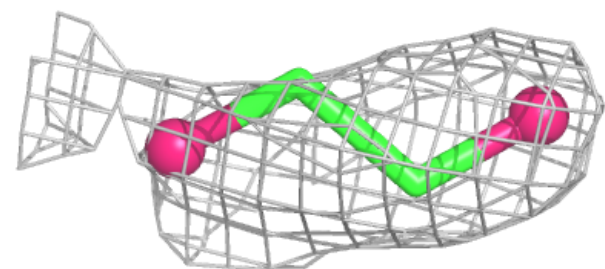


Electron density around EDO A 333:

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

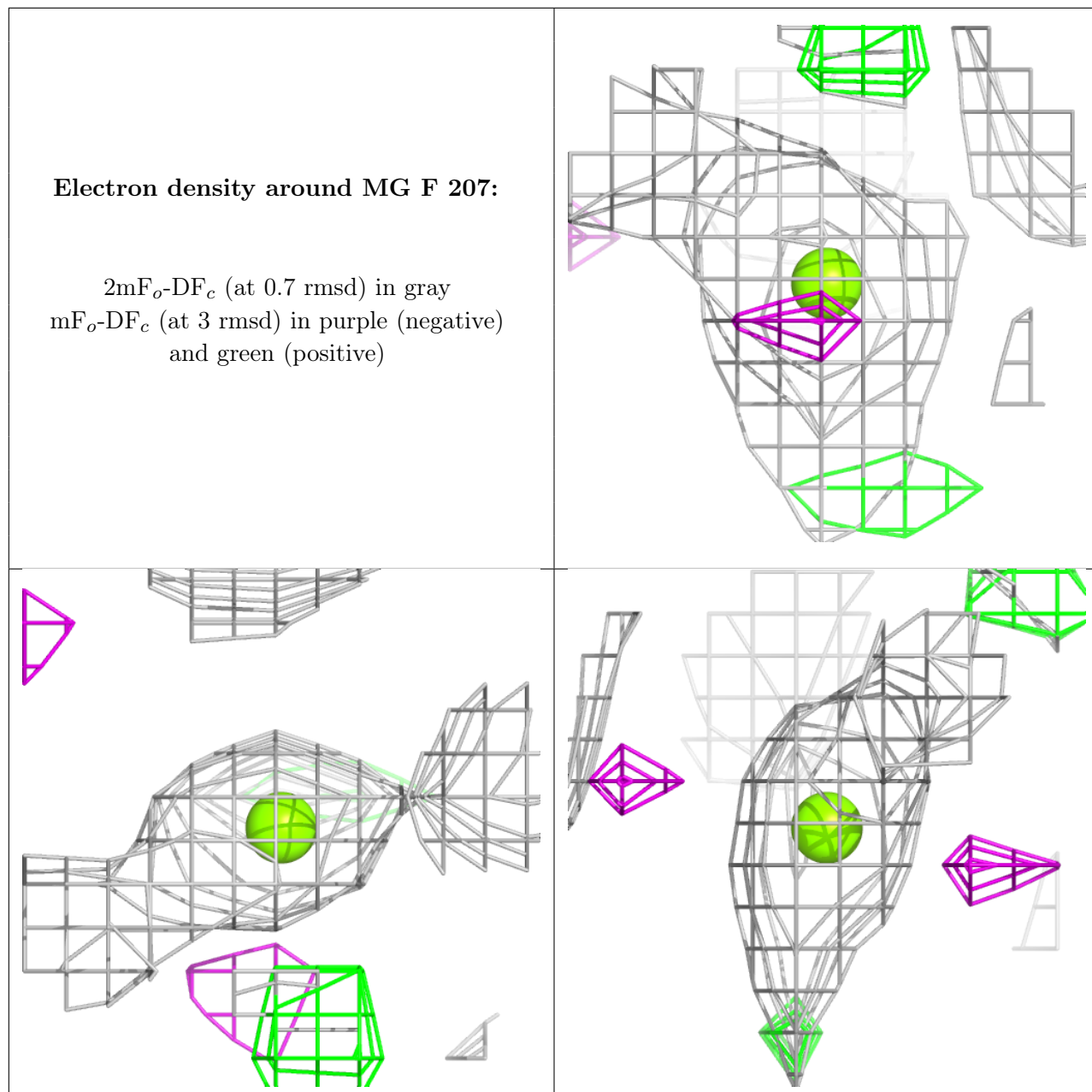
**Electron density around EDO A 334:**

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



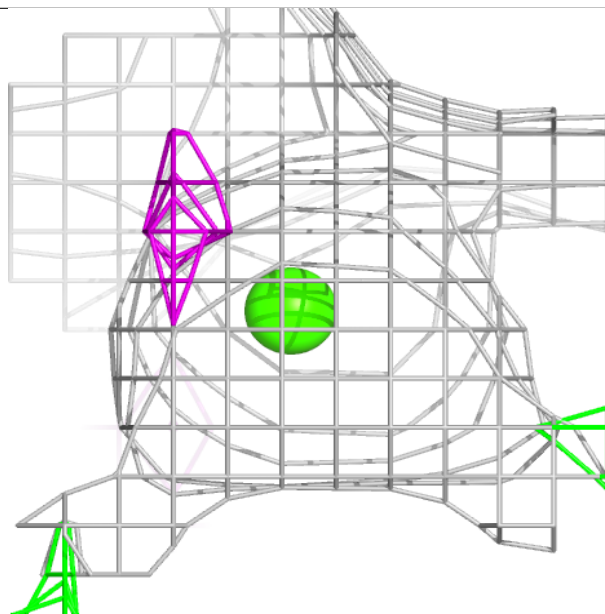
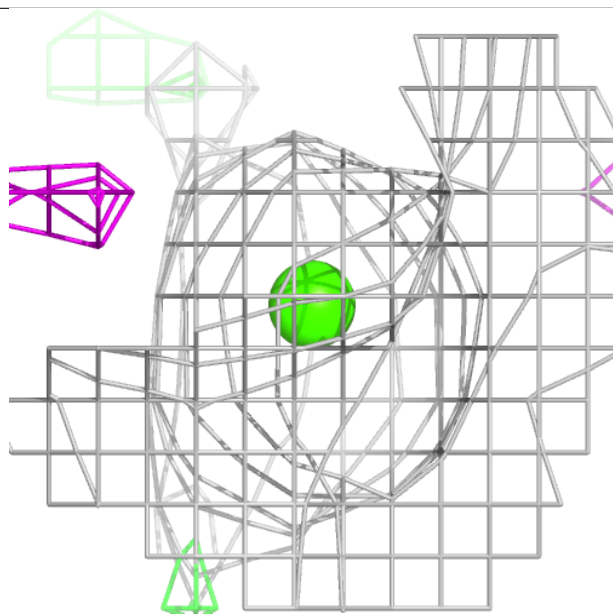
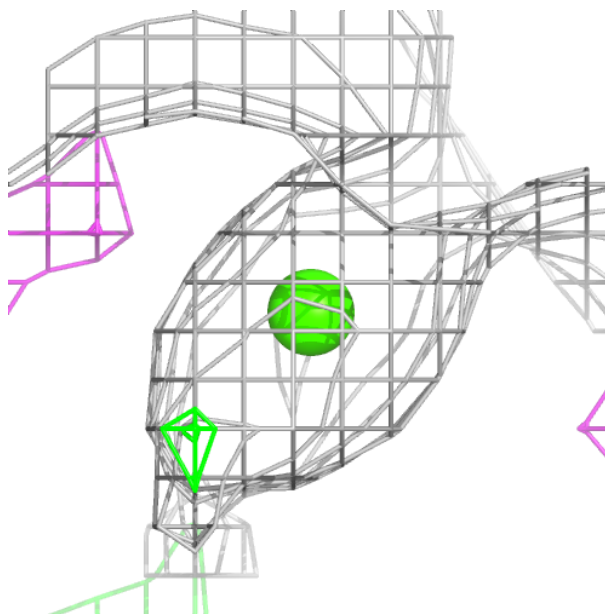
Electron density around MG F 207:

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



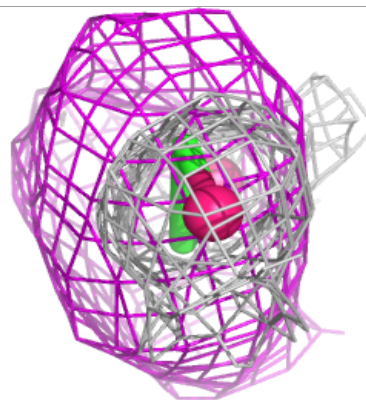
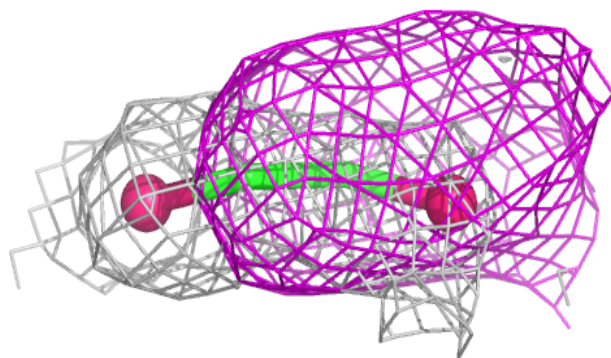
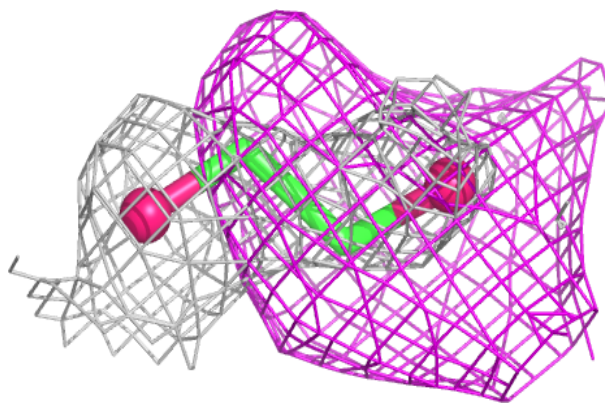
Electron density around CA A 336:

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

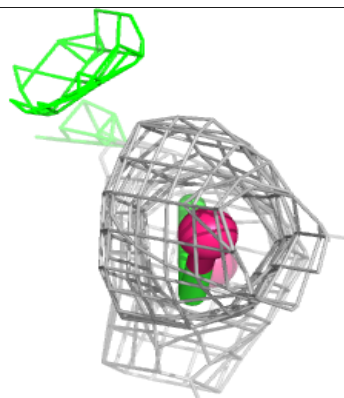
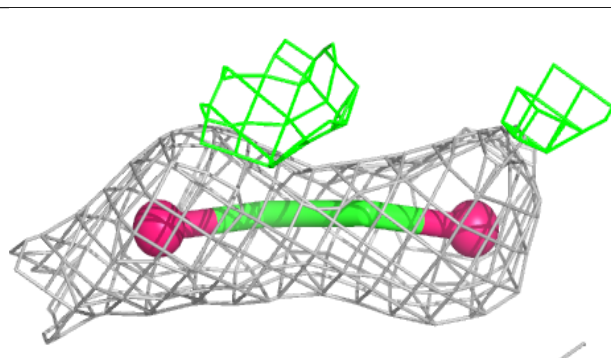
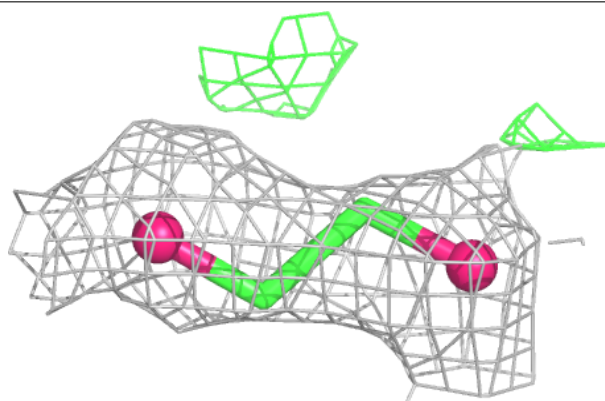


Electron density around EDO C 205:

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

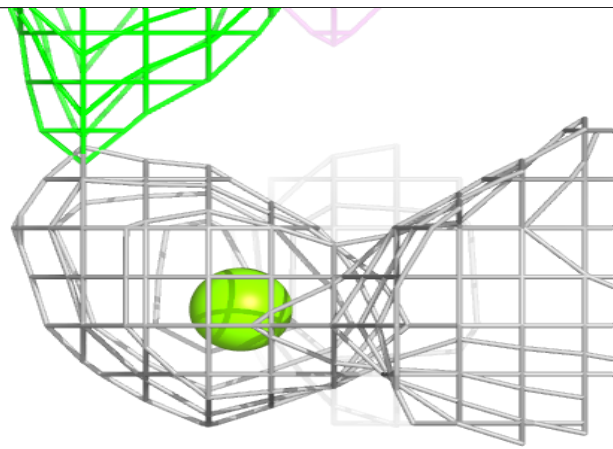
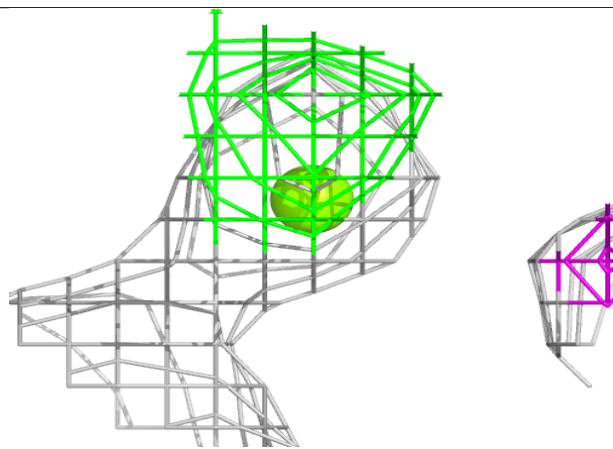
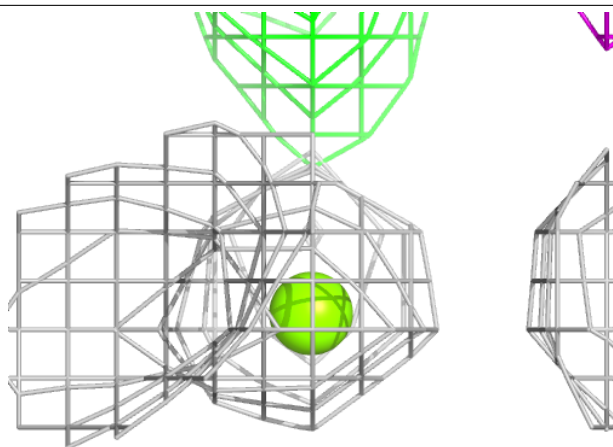
**Electron density around EDO B 326:**

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



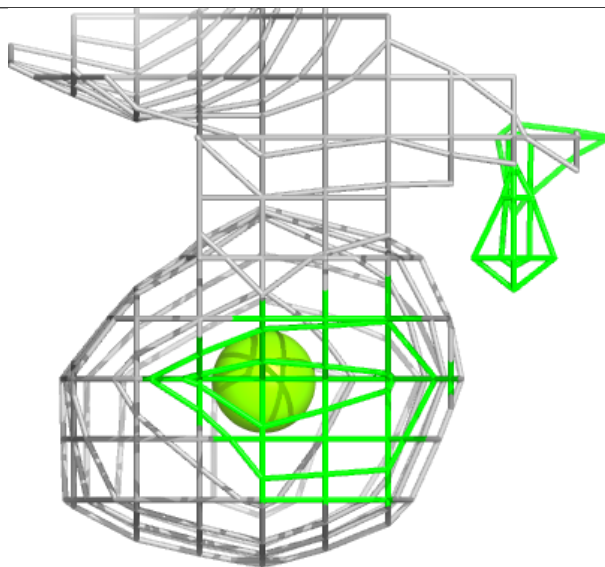
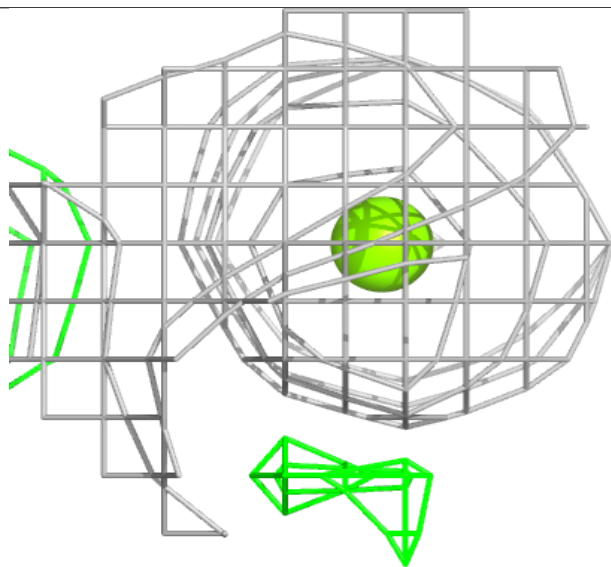
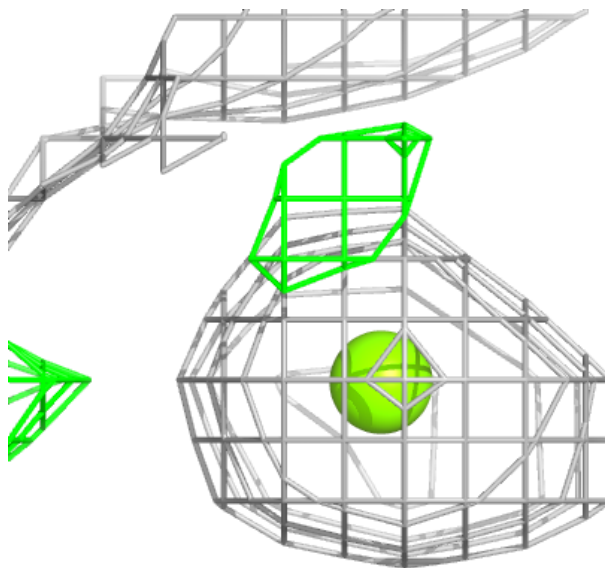
Electron density around MG A 323:

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



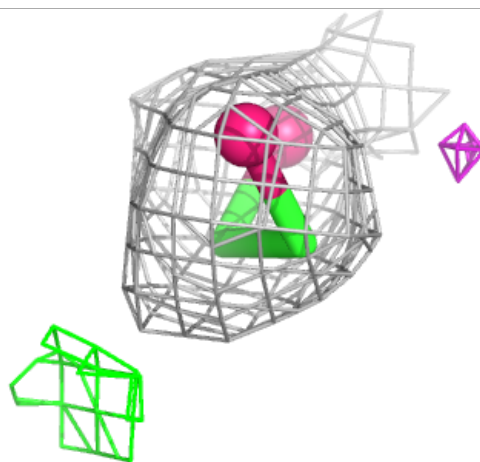
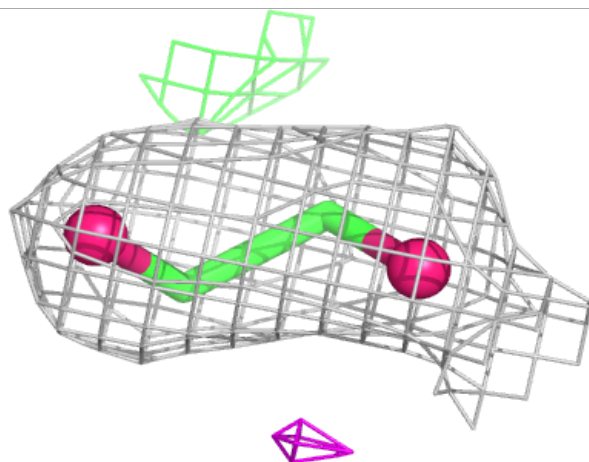
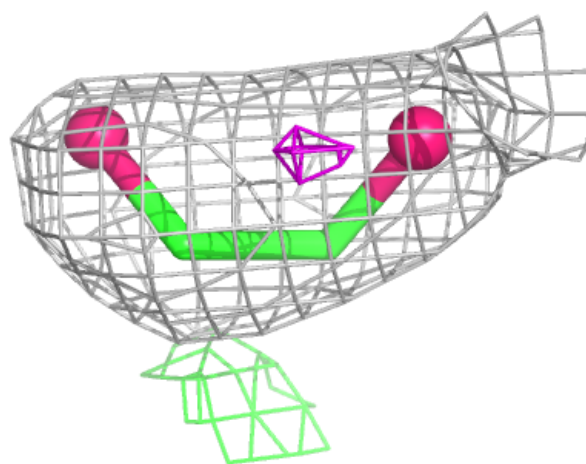
Electron density around MG B 307:

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



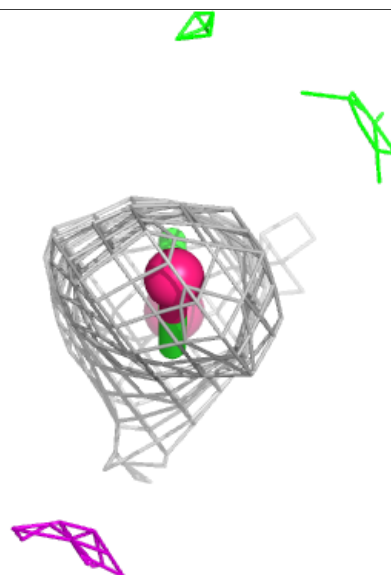
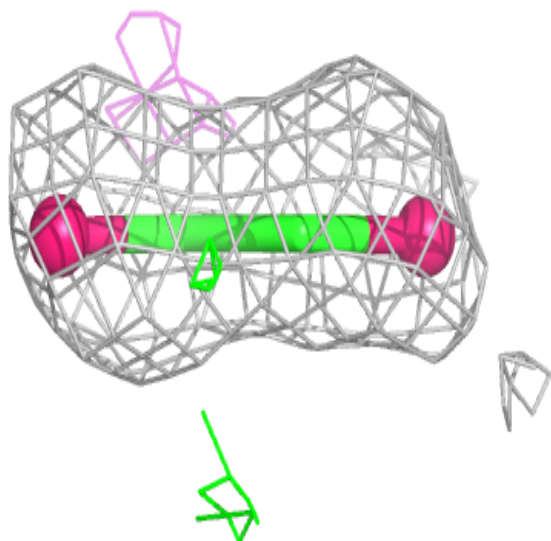
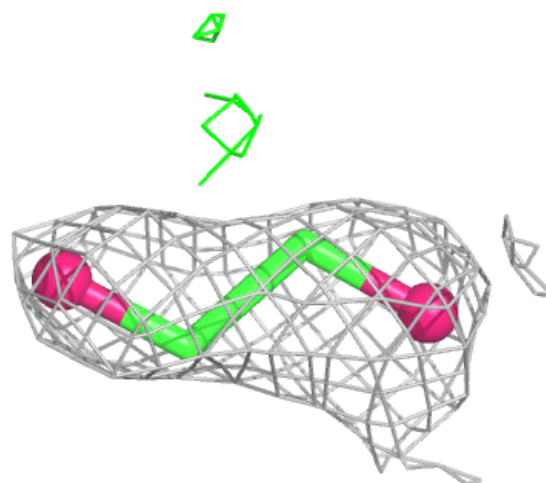
Electron density around EDO F 208:

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



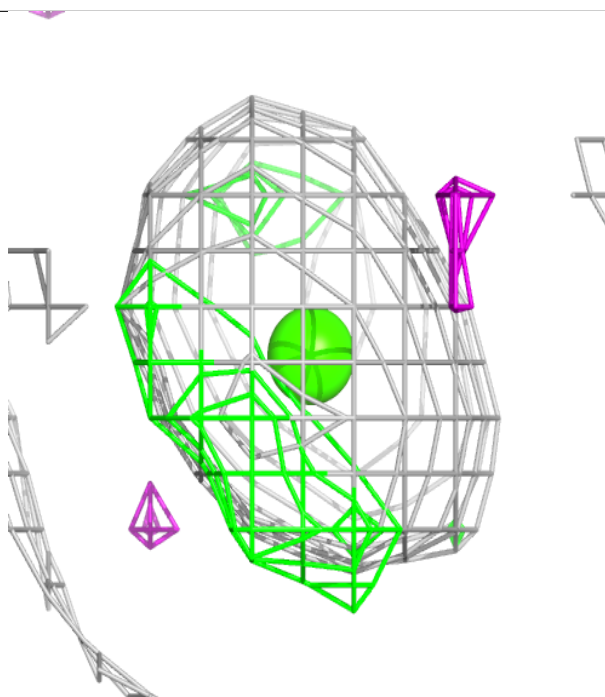
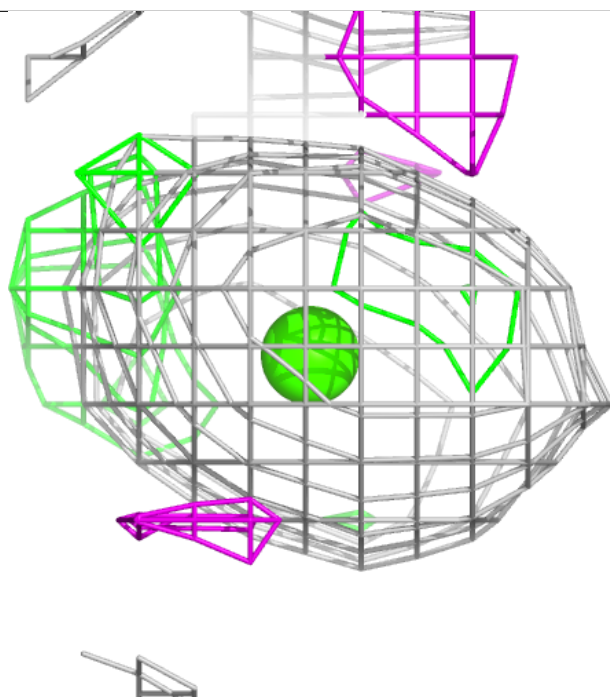
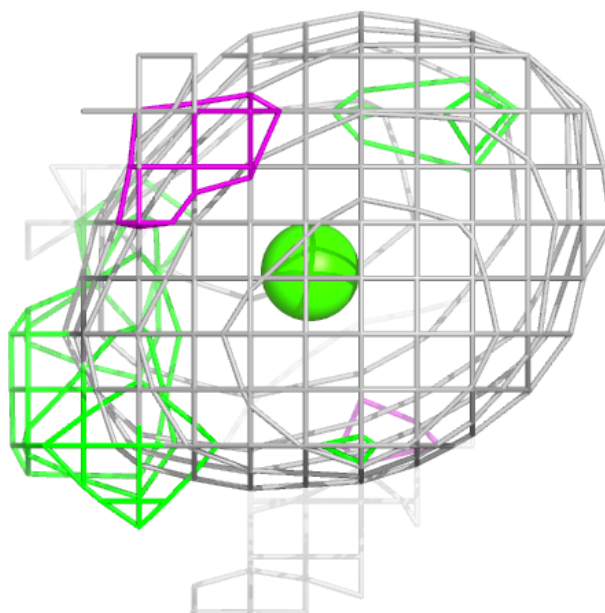
Electron density around EDO A 329:

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



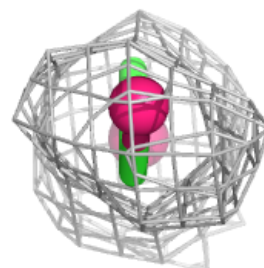
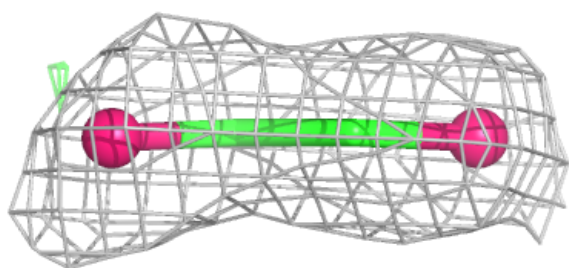
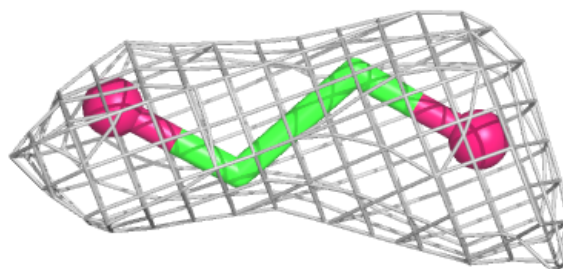
Electron density around CA B 328:

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



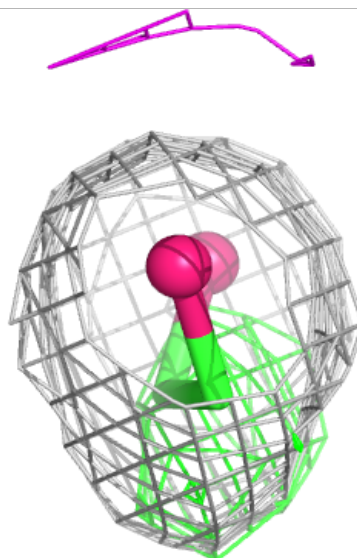
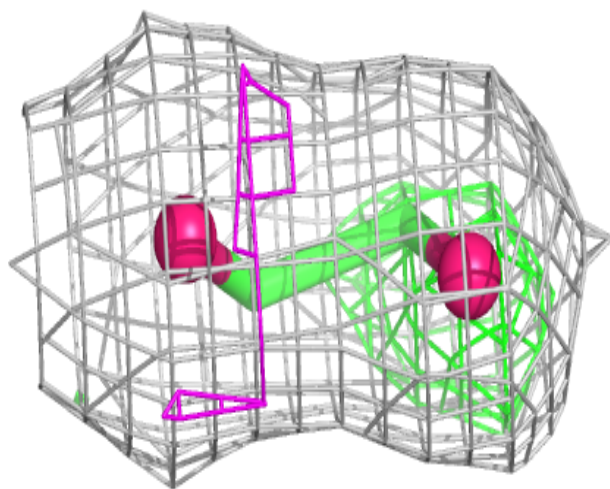
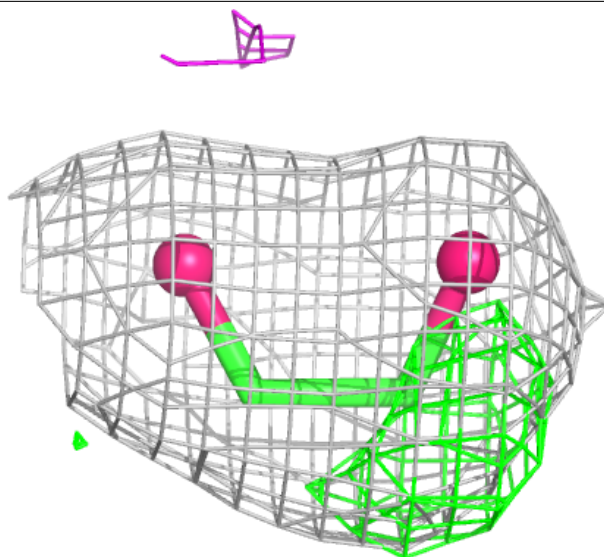
Electron density around EDO A 326:

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



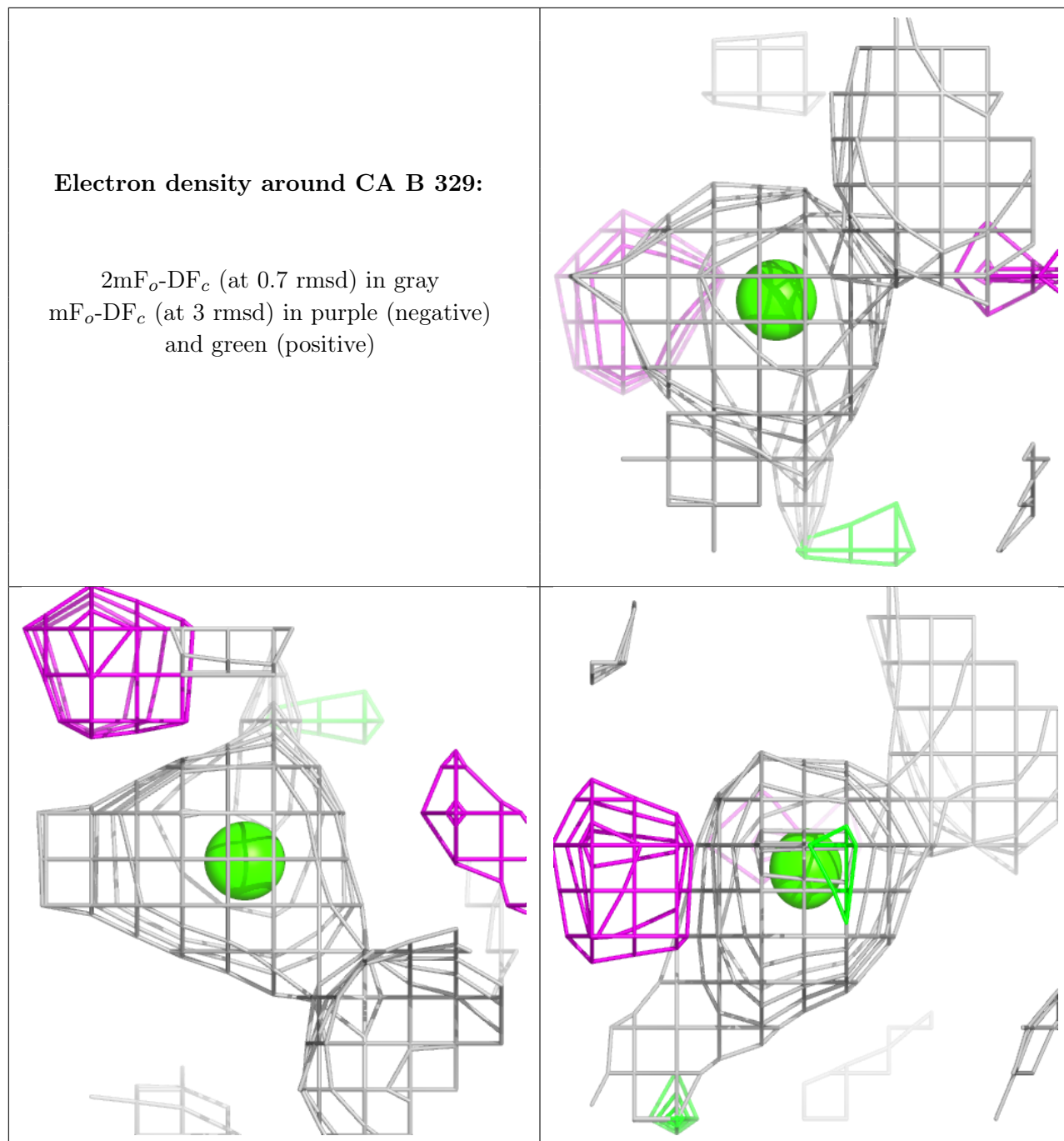
Electron density around EDO B 312:

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



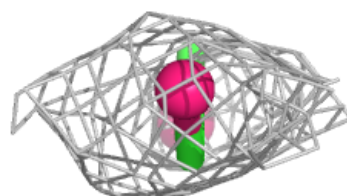
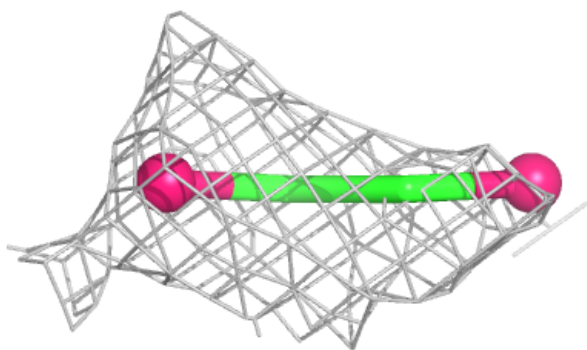
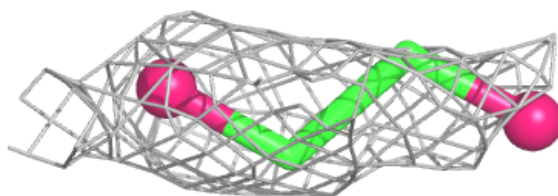
Electron density around CA B 329:

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

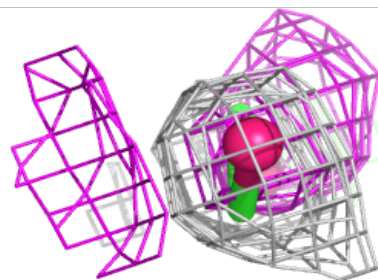
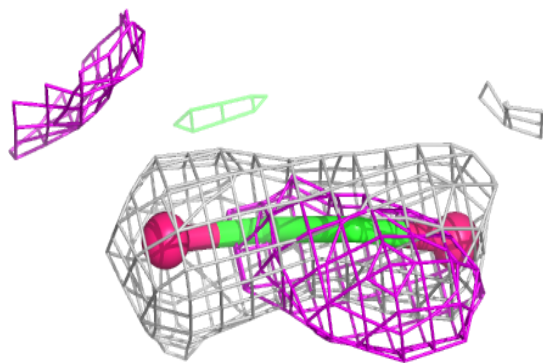
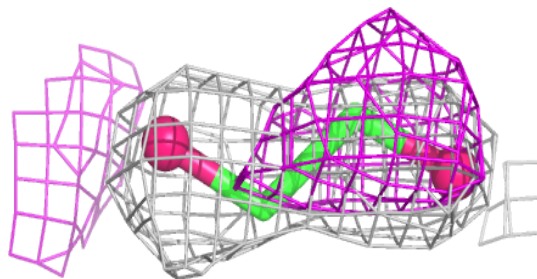


Electron density around EDO B 324:

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

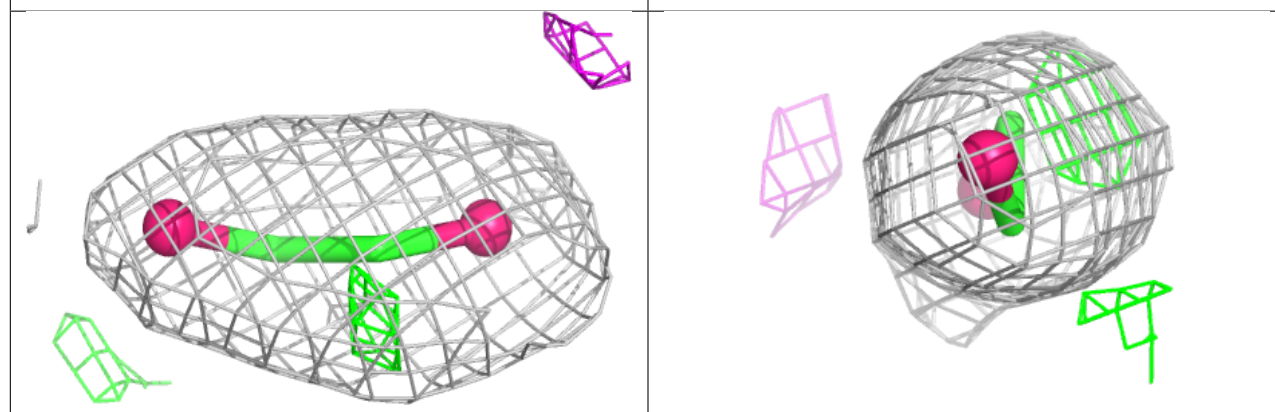
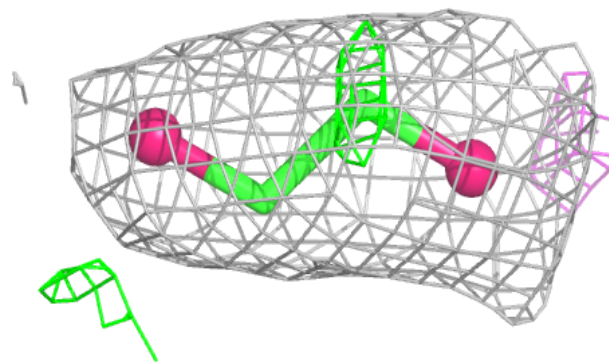
**Electron density around EDO A 324:**

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



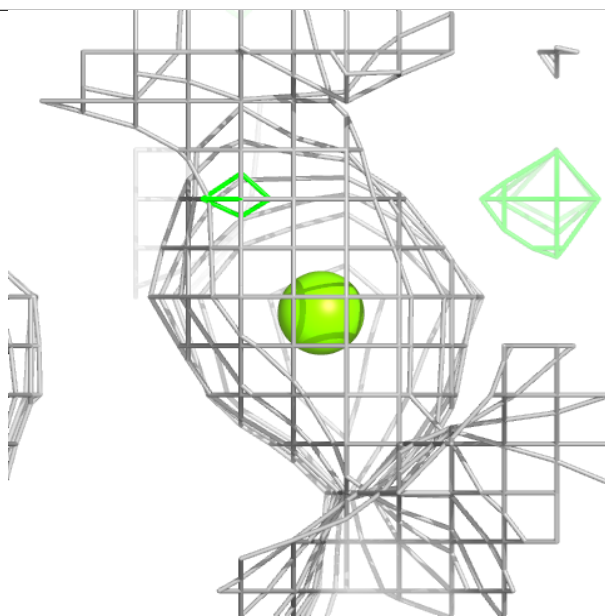
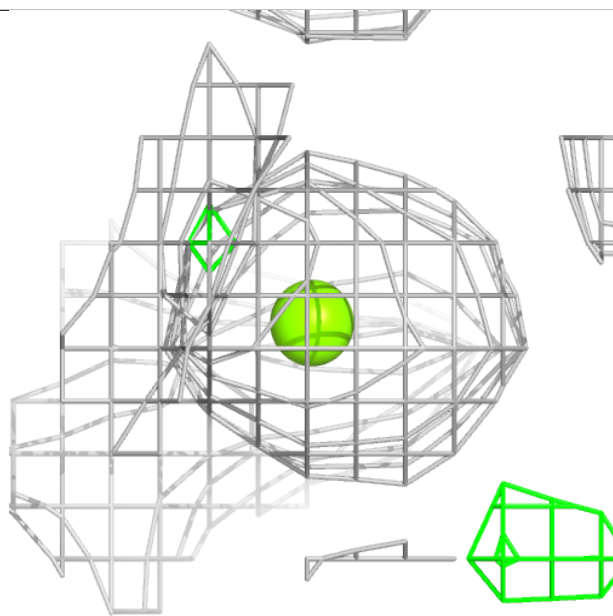
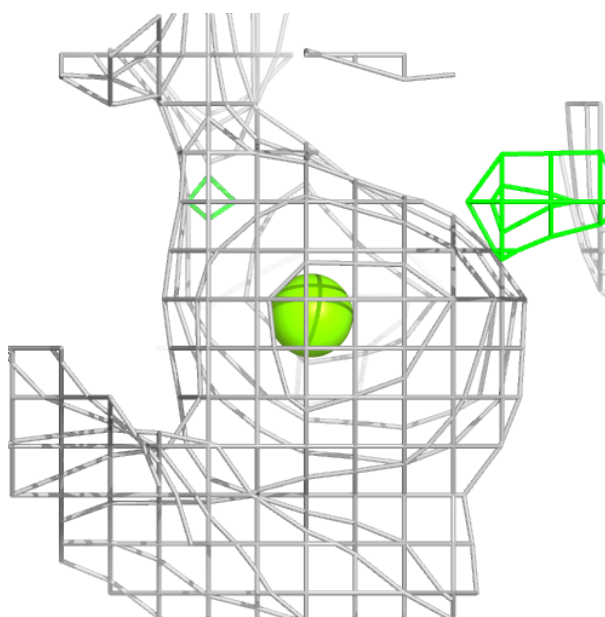
Electron density around EDO B 311:

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



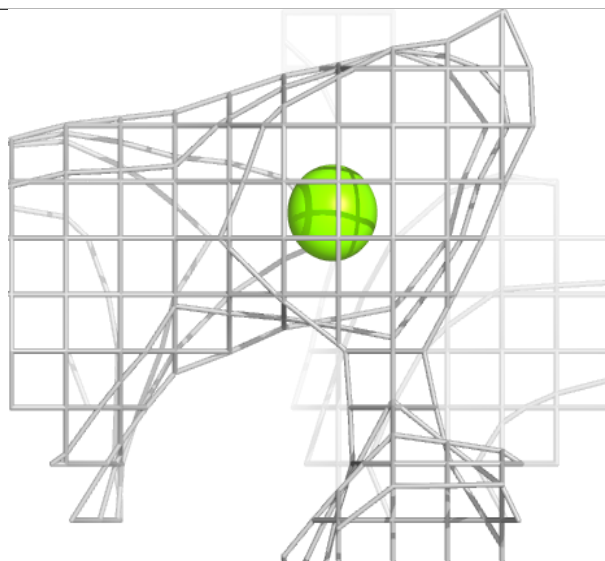
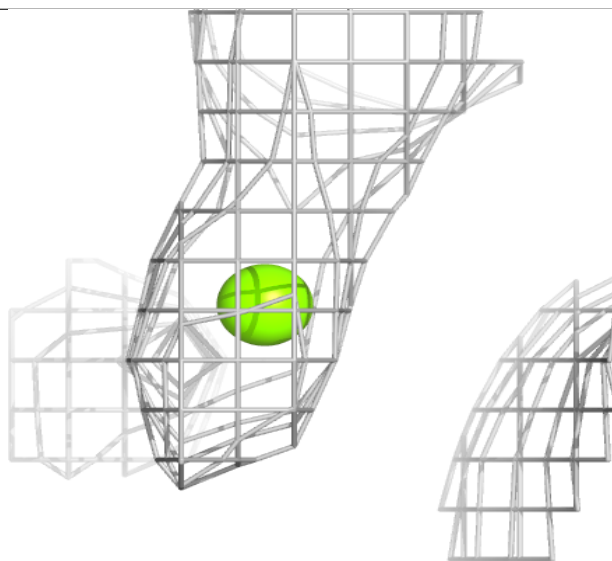
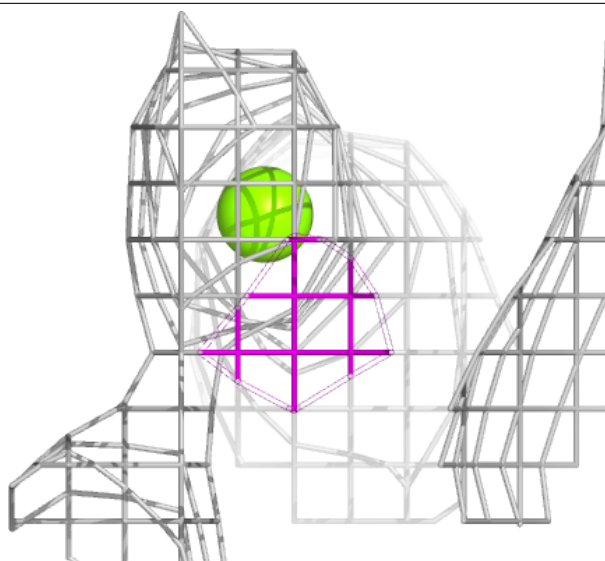
Electron density around MG A 319:

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



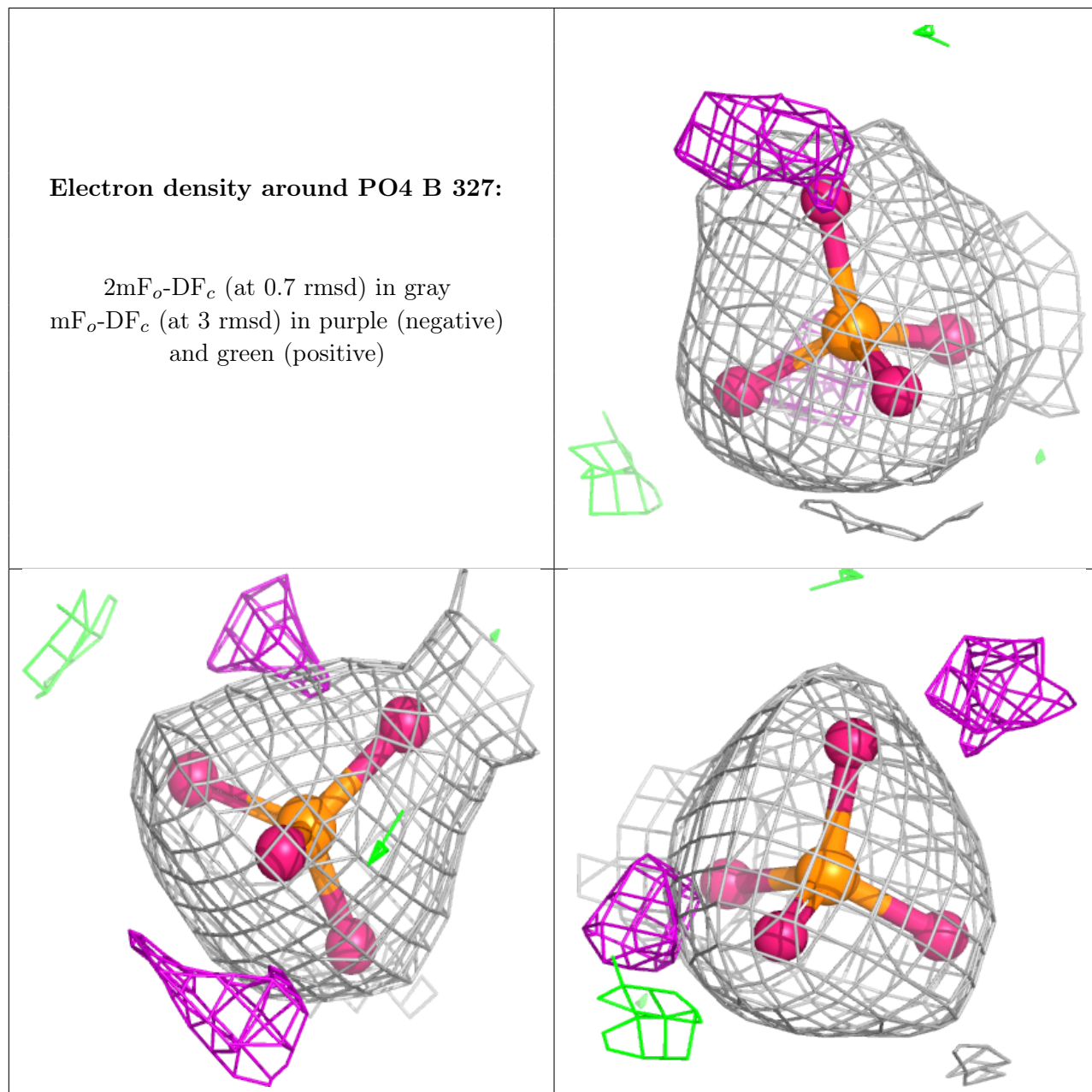
Electron density around MG A 322:

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



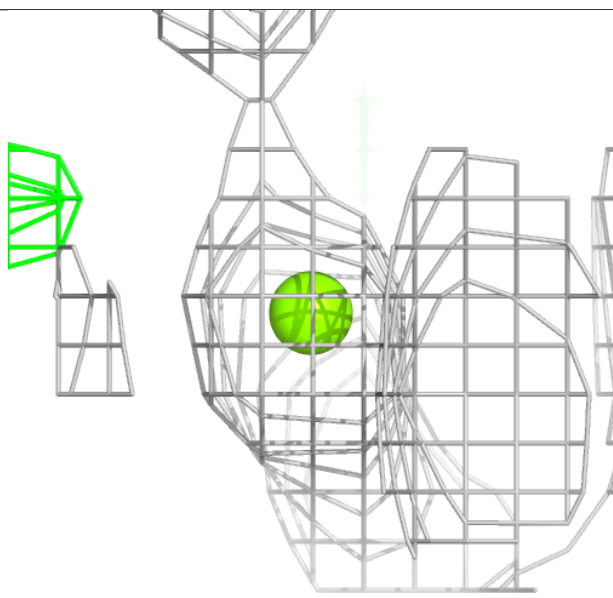
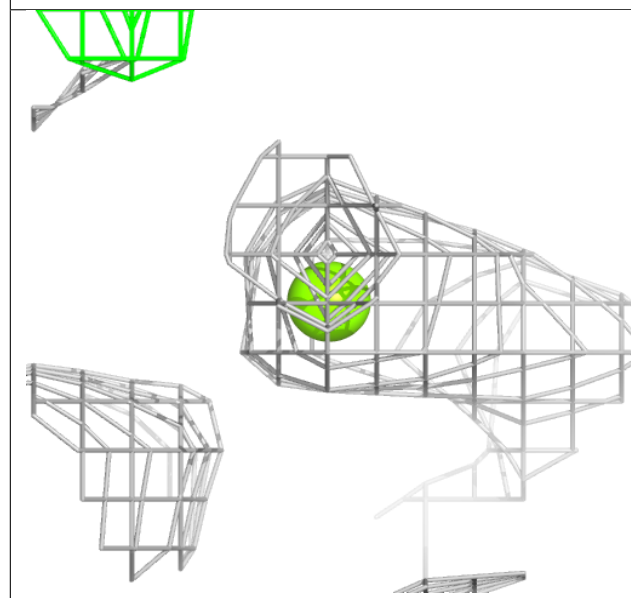
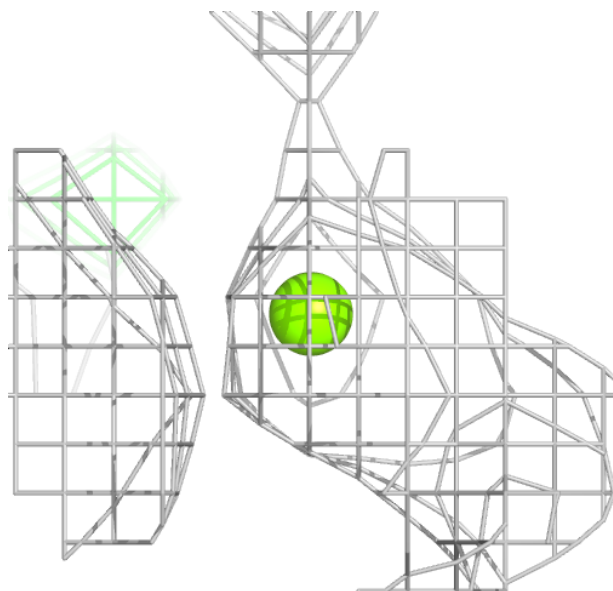
Electron density around PO4 B 327:

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



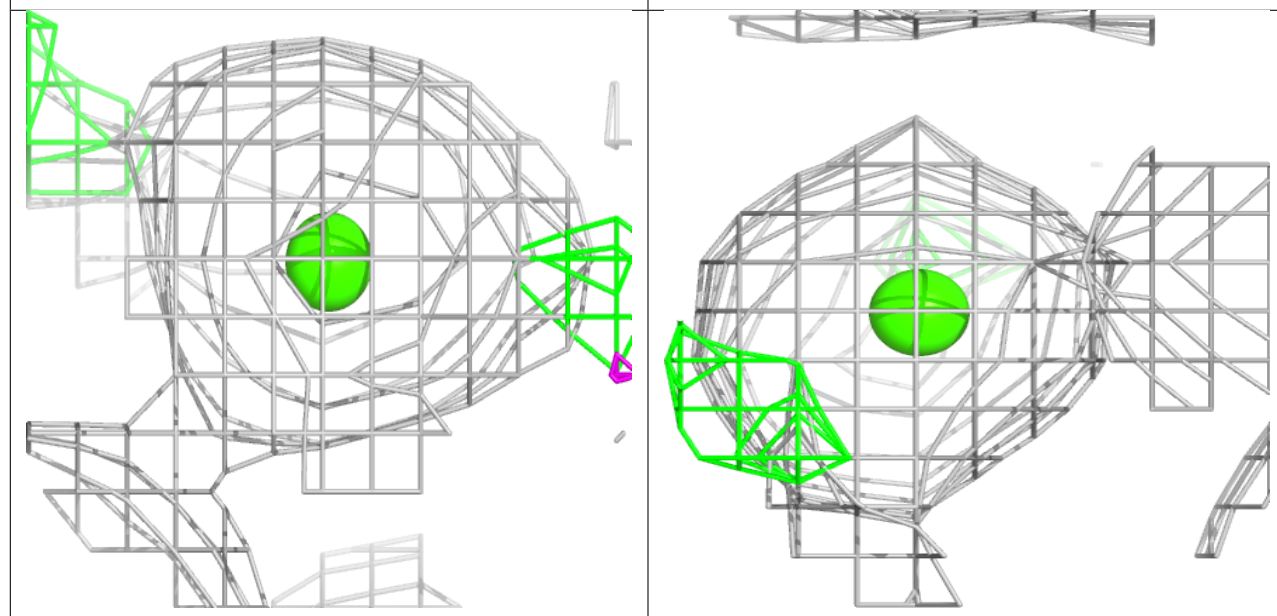
Electron density around MG F 206:

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



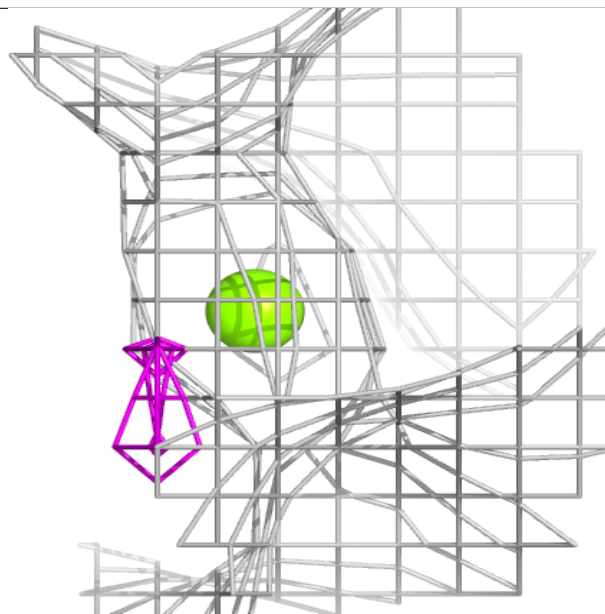
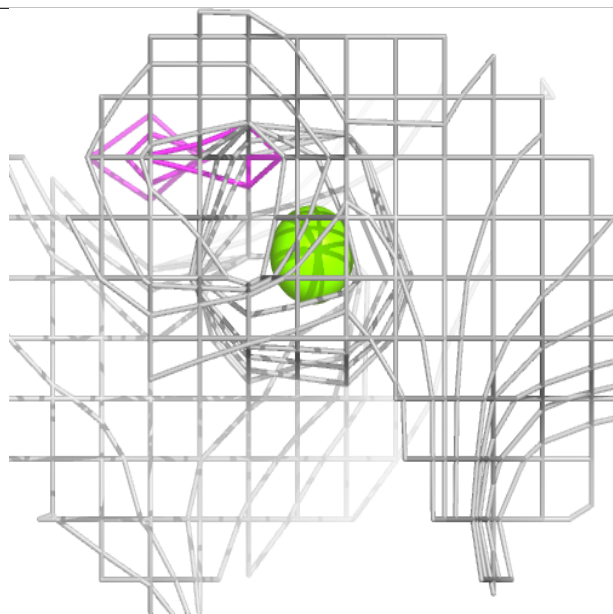
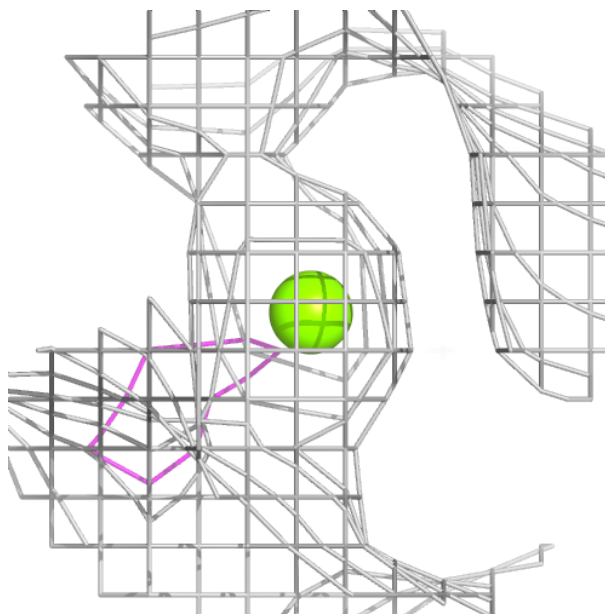
Electron density around CA B 330:

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



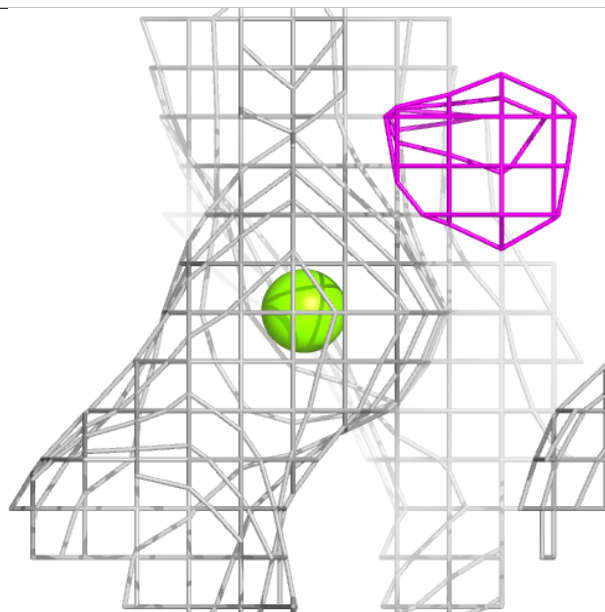
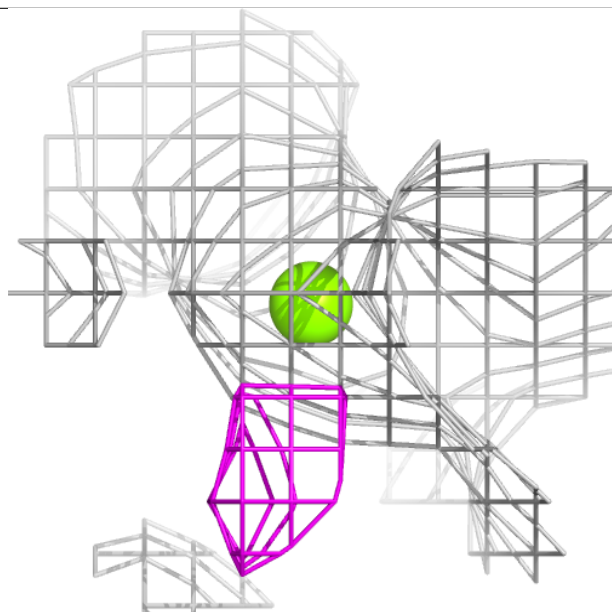
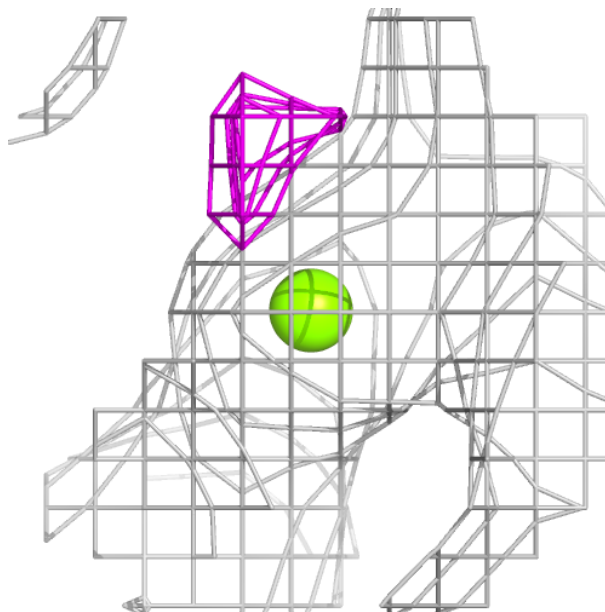
Electron density around MG B 305:

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



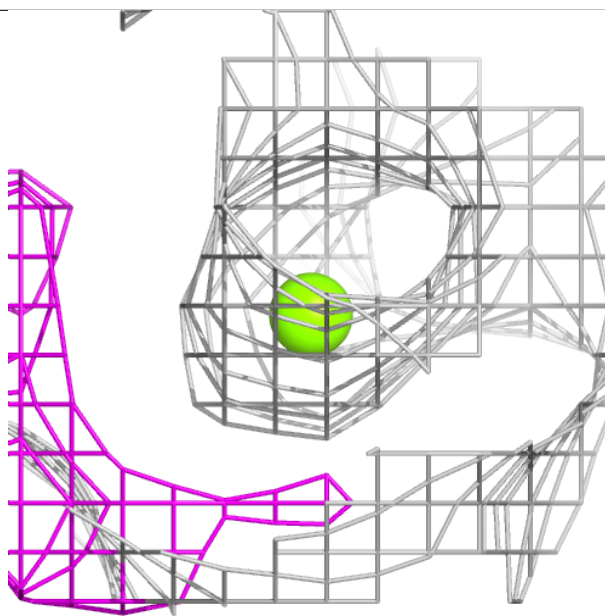
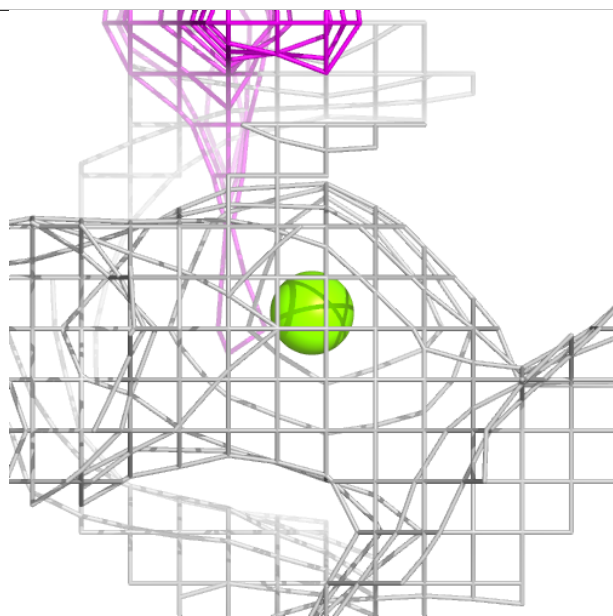
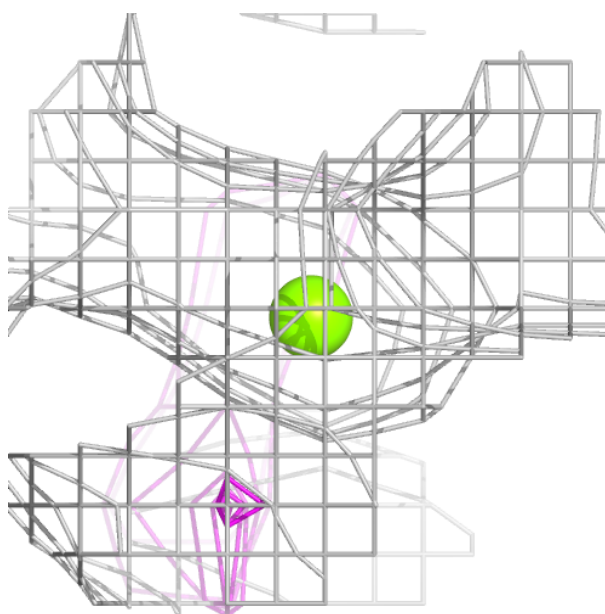
Electron density around MG C 201:

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



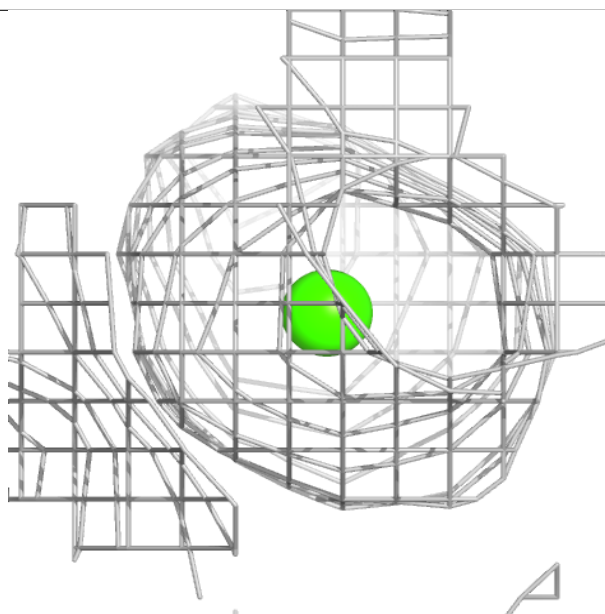
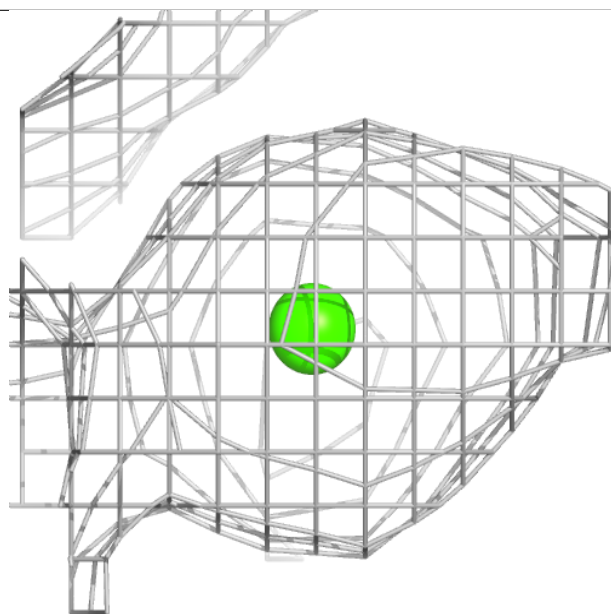
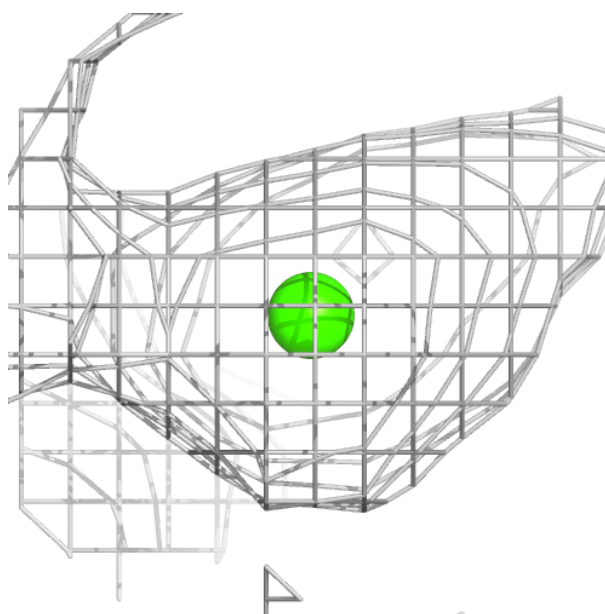
Electron density around MG C 202:

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



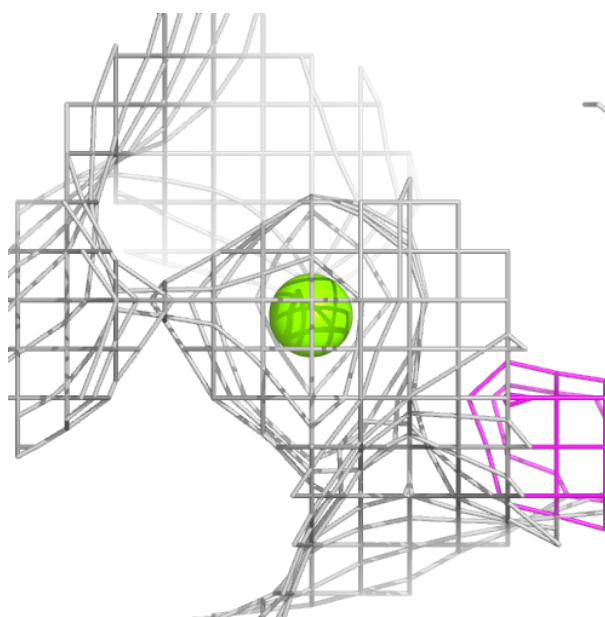
Electron density around CA A 335:

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



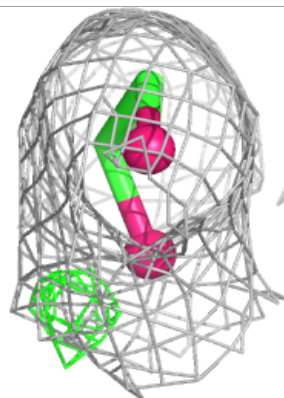
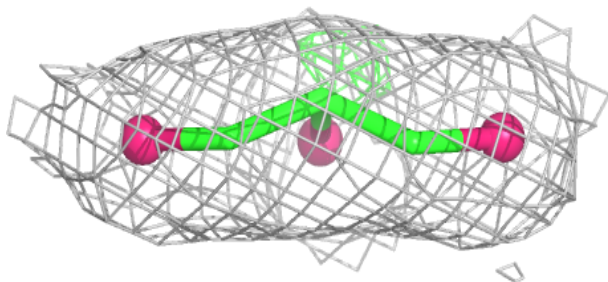
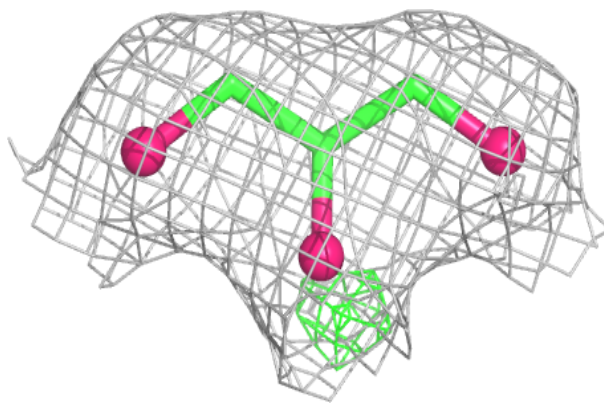
Electron density around MG A 316:

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



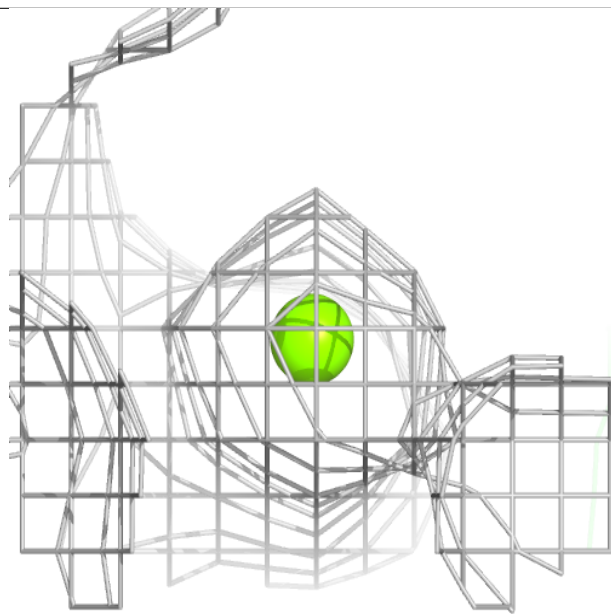
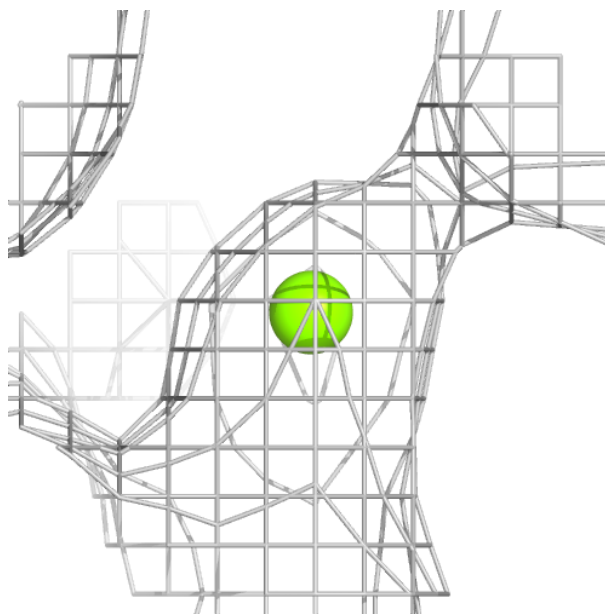
Electron density around GOL B 302:

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



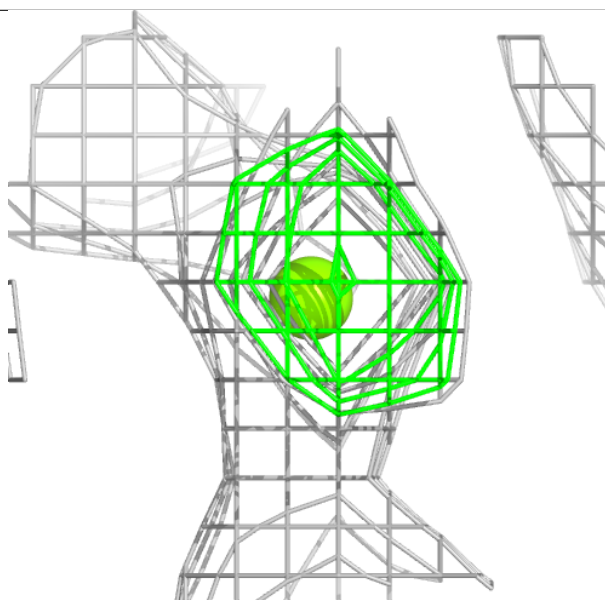
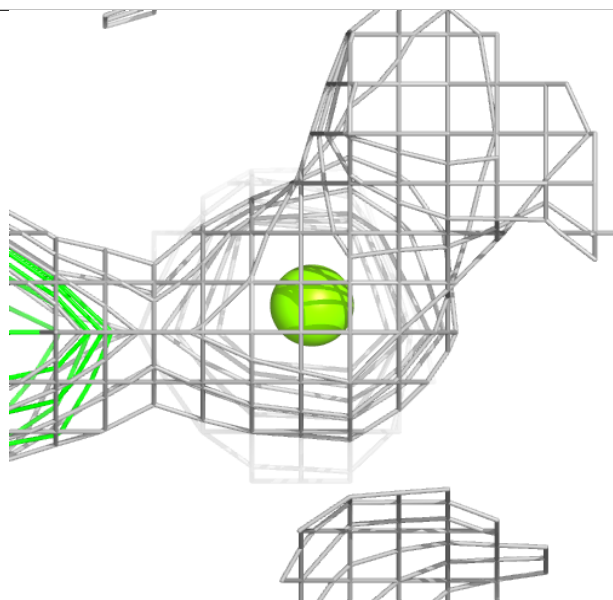
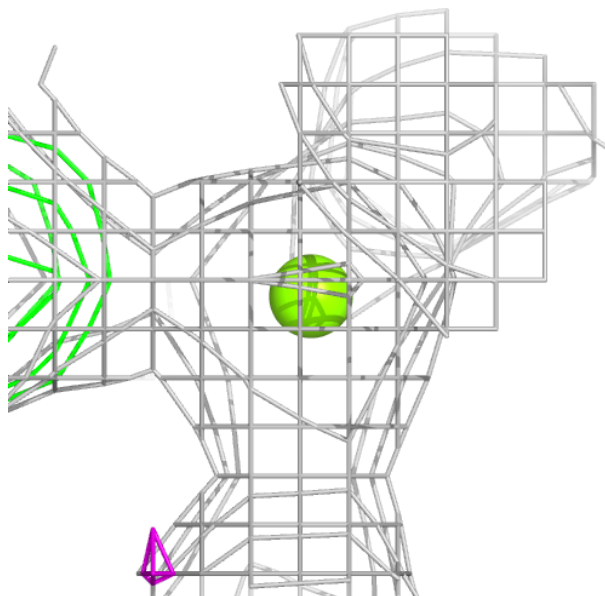
Electron density around MG A 318:

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



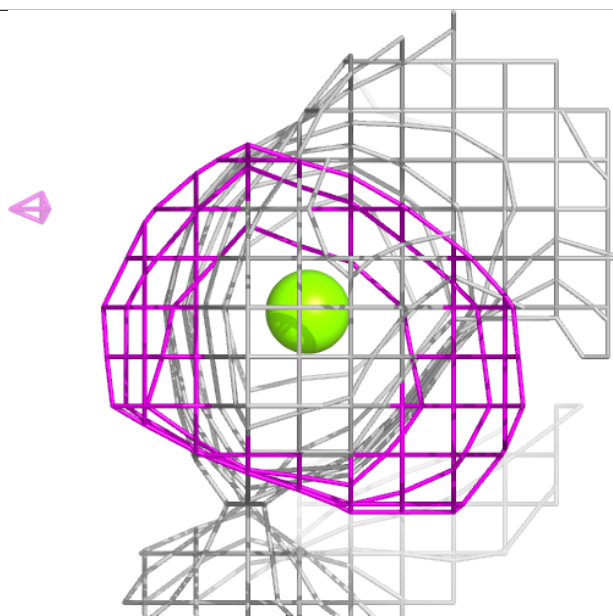
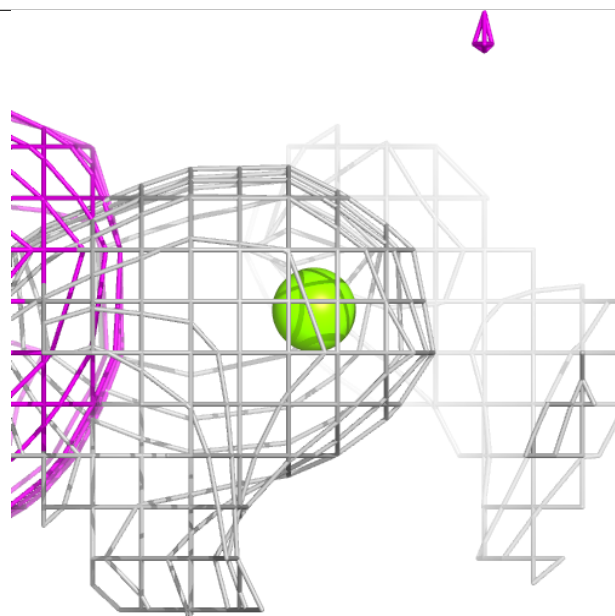
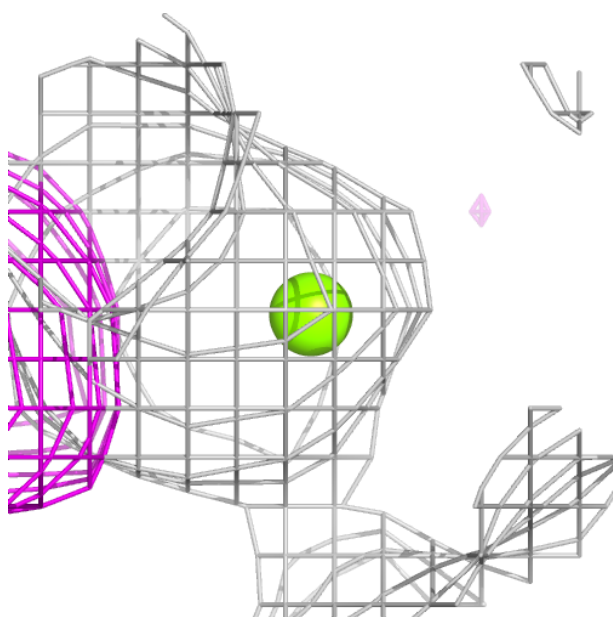
Electron density around MG B 306:

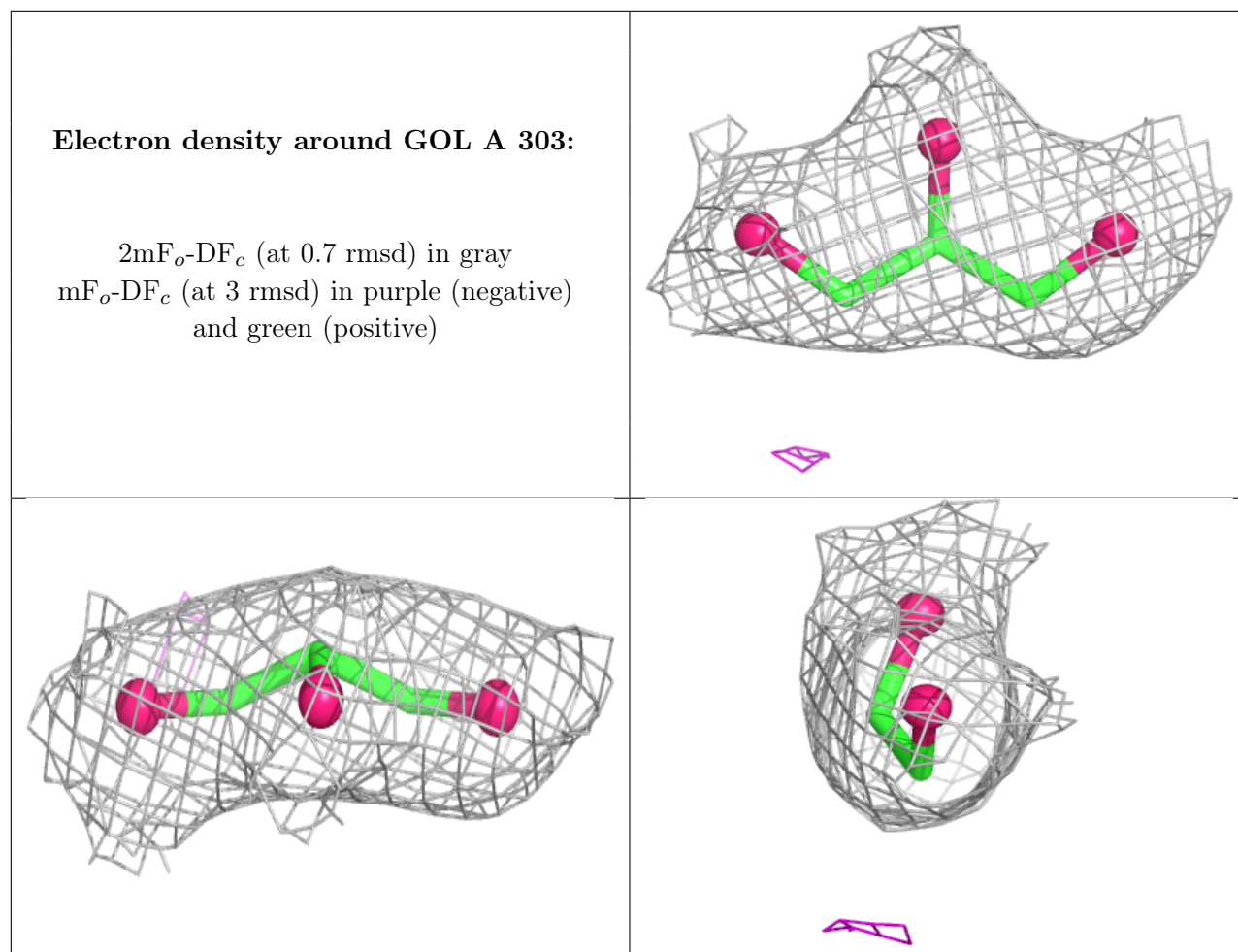
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around MG A 317:

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





6.5 Other polymers [i](#)

There are no such residues in this entry.