wwPDB X-ray Structure Validation Summary Report (i)

Aug 7, 2023 – 10:09 PM JST

PDB ID	:	8JWZ
Title	:	Crystal structure of A2AR-T4L in complex with AB928
Authors	:	Weng, Y.; Chen, Y.; Xu, Y.; Song, G.
Deposited on	:	2023-06-29
Resolution	:	2.37 Å(reported)

This is a wwPDB X-ray Structure Validation Summary 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 (i) 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 (i)) were used in the production of this report:

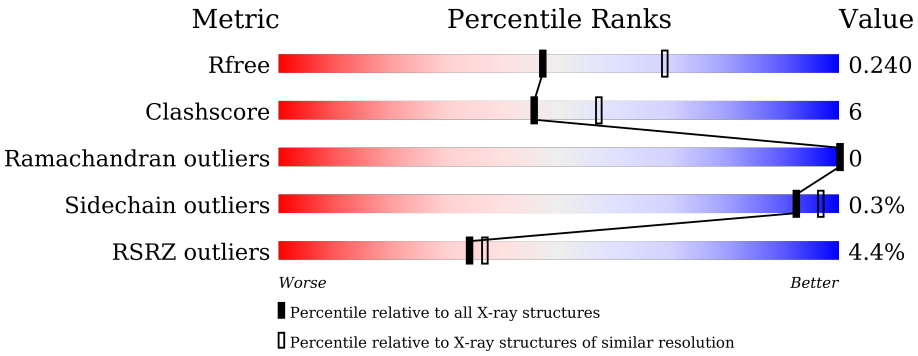
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.37 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	5509 (2.40-2.36)
Clashscore	141614	6082 (2.40-2.36)
Ramachandran outliers	138981	5973 (2.40-2.36)
Sidechain outliers	138945	5975 (2.40-2.36)
RSRZ outliers	127900	5397 (2.40-2.36)

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 <=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	481	4% 83% 10% 6%

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
2	OLA	A	519	-	-	-	X
7	CLR	A	524	X	-	-	-

2 Entry composition (i)

There are 8 unique types of molecules in this entry. The entry contains 4191 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.

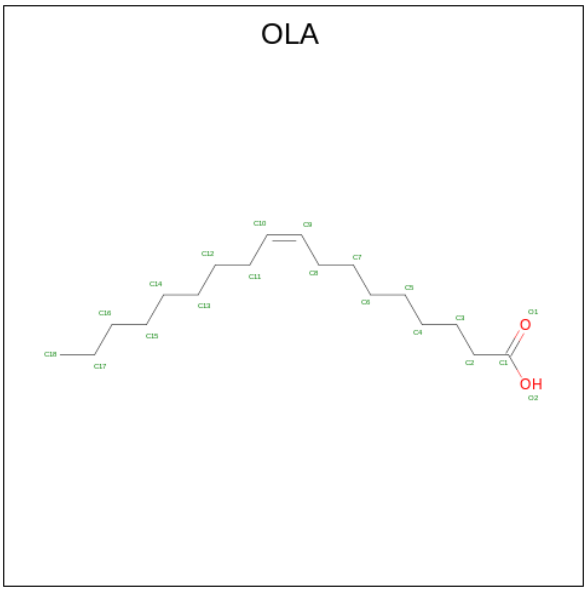
- Molecule 1 is a protein called Adenosine receptor A2a,Endolysin.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	450	Total	C	N	O	S	0	0	0
			3518	2287	603	604	24			

There are 21 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-7	ASP	-	expression tag	UNP P29274
A	-6	TYR	-	expression tag	UNP P29274
A	-5	LYS	-	expression tag	UNP P29274
A	-4	ASP	-	expression tag	UNP P29274
A	-3	ASP	-	expression tag	UNP P29274
A	-2	ASP	-	expression tag	UNP P29274
A	-1	ASP	-	expression tag	UNP P29274
A	0	GLY	-	expression tag	UNP P29274
A	1	ALA	-	expression tag	UNP P29274
A	261	THR	CYS	engineered mutation	UNP D9IEF7
A	304	ALA	CYS	engineered mutation	UNP D9IEF7
A	464	HIS	-	expression tag	UNP P29274
A	465	HIS	-	expression tag	UNP P29274
A	466	HIS	-	expression tag	UNP P29274
A	467	HIS	-	expression tag	UNP P29274
A	468	HIS	-	expression tag	UNP P29274
A	469	HIS	-	expression tag	UNP P29274
A	470	HIS	-	expression tag	UNP P29274
A	471	HIS	-	expression tag	UNP P29274
A	472	HIS	-	expression tag	UNP P29274
A	473	HIS	-	expression tag	UNP P29274

- Molecule 2 is OLEIC ACID (three-letter code: OLA) (formula: $C_{18}H_{34}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total C O 11 9 2	0	0
2	A	1	Total C O 15 13 2	0	0
2	A	1	Total C O 15 13 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 11 9 2	0	0
2	A	1	Total C O 15 13 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 14 12 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 15 13 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 20 18 2	0	0

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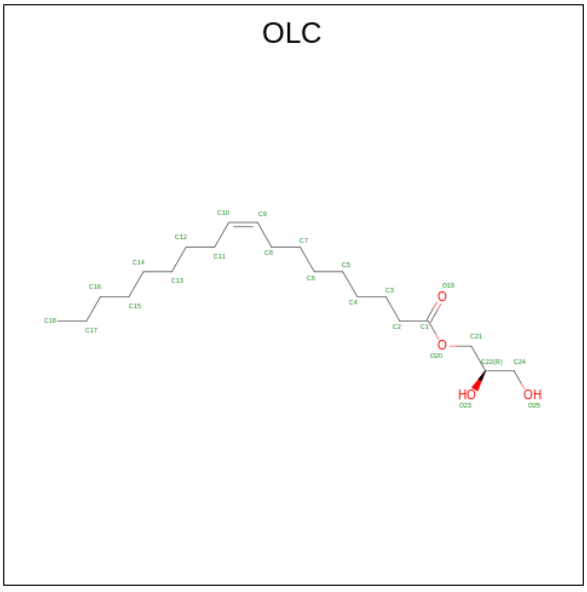
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 20 18 2	0	0
2	A	1	Total C O 14 12 2	0	0
2	A	1	Total C 13 13	0	0

- Molecule 3 is SODIUM ION (three-letter code: NA) (formula: Na).

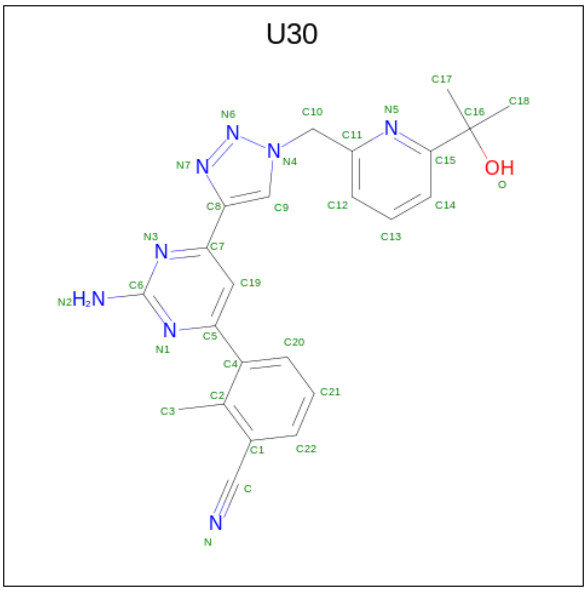
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total Na 1 1	0	0

- Molecule 4 is (2R)-2,3-dihydroxypropyl (9Z)-octadec-9-enoate (three-letter code: OLC) (formula: $C_{21}H_{40}O_4$).



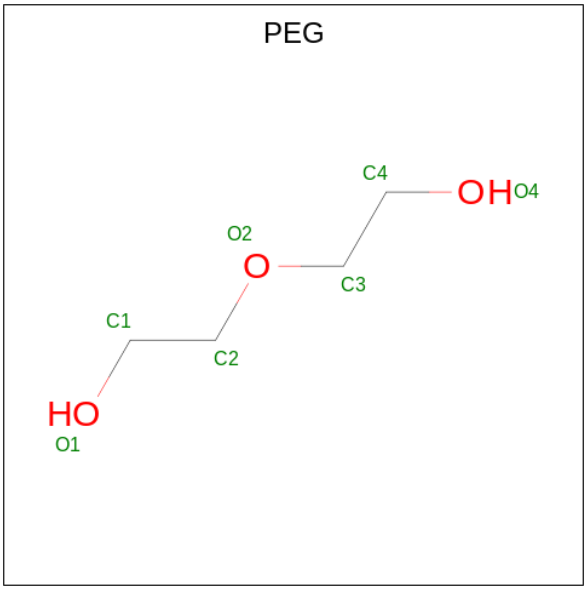
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O 25 21 4	0	0
4	A	1	Total C O 25 21 4	0	0

- Molecule 5 is 3-[2-azanyl-6-[1-[[6-(2-oxidanylpropan-2-yl)pyridin-2-yl]methyl]-1,2,3-triazol-4-yl]pyrimidin-4-yl]-2-methyl-benzenecarbonitrile (three-letter code: U30) (formula: $C_{23}H_{22}N_8O$) (labeled as "Ligand of Interest" by depositor).



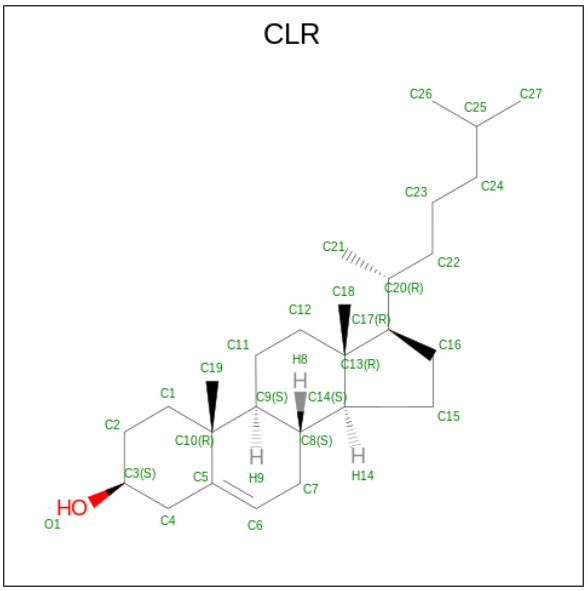
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
5	A	1	32	23	8	1	0	0

- Molecule 6 is DI(HYDROXYETHYL)ETHER (three-letter code: PEG) (formula: $C_4H_{10}O_3$).



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

- Molecule 7 is CHOLESTEROL (three-letter code: CLR) (formula: $C_{27}H_{46}O$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
7	A	1	Total C O 28 27 1	0	0

- Molecule 8 is water.

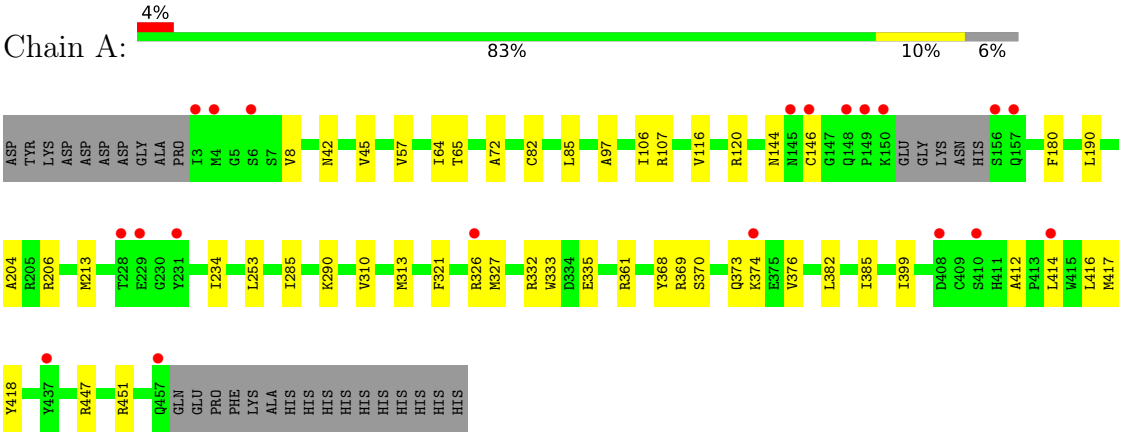
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
8	A	252	Total O 252 252	0	0

3 Residue-property plots (i)

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

- Molecule 1: Adenosine receptor A2a,Endolysin

Chain A:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	46.87Å 76.20Å 85.66Å 90.00° 101.63° 90.00°	Depositor
Resolution (Å)	20.00 – 2.37 20.00 – 2.37	Depositor EDS
% Data completeness (in resolution range)	99.9 (20.00-2.37) 99.9 (20.00-2.37)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.48 (at 2.38Å)	Xtriage
Refinement program	PHENIX 1.20.1_4487	Depositor
R, R_{free}	0.189 , 0.240 0.189 , 0.240	Depositor DCC
R_{free} test set	2001 reflections (8.32%)	wwPDB-VP
Wilson B-factor (Å^2)	28.2	Xtriage
Anisotropy	0.427	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.35 , 72.1	EDS
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.94	EDS
Total number of atoms	4191	wwPDB-VP
Average B, all atoms (Å^2)	35.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 7.56% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: OLC, U30, OLA, NA, CLR, PEG

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	0.24	0/3594	0.44	0/4887

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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	3518	0	3586	37	0
2	A	303	0	464	19	1
3	A	1	0	0	0	0
4	A	50	0	80	3	0
5	A	32	0	0	0	0
6	A	7	0	10	0	0
7	A	28	0	34	5	1
8	A	252	0	0	3	0
All	All	4191	0	4174	52	1

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 6.

The worst 5 of 52 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)
7:A:524:CLR:O1	7:A:524:CLR:C3	1.70	1.38
1:A:418:TYR:HB3	4:A:516:OLC:H4	1.71	0.72
1:A:313:MET:HE1	1:A:321:PHE:HE2	1.55	0.72
7:A:524:CLR:O1	7:A:524:CLR:C2	2.36	0.69
1:A:290:LYS:NZ	8:A:603:HOH:O	2.27	0.66

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:509:OLA:C18	7:A:524:CLR:C27[2_546]	1.49	0.71

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	446/481 (93%)	441 (99%)	5 (1%)	0	100 100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	372/404 (92%)	371 (100%)	1 (0%)	92 97

All (1) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	370	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	144	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 24 ligands modelled in this entry, 1 is monoatomic - leaving 23 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	$\#\|Z\| > 2$
2	OLA	A	518	-	19,19,19	0.78	1 (5%)	19,19,19	0.99	2 (10%)
2	OLA	A	501	-	10,10,19	0.63	0	10,10,19	1.19	2 (20%)
2	OLA	A	517	-	19,19,19	0.78	1 (5%)	19,19,19	0.95	0
2	OLA	A	505	-	19,19,19	0.79	1 (5%)	19,19,19	0.91	2 (10%)
6	PEG	A	523	-	6,6,6	0.10	0	5,5,5	0.11	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
2	OLA	A	519	-	13,13,19	0.95	1 (7%)	12,13,19	1.05	0
2	OLA	A	510	-	13,13,19	0.95	1 (7%)	12,13,19	1.11	1 (8%)
2	OLA	A	522	-	12,12,19	0.81	1 (8%)	11,11,19	0.58	0
2	OLA	A	502	-	14,14,19	0.90	1 (7%)	14,14,19	1.05	1 (7%)
2	OLA	A	514	-	19,19,19	0.78	1 (5%)	19,19,19	0.94	1 (5%)
2	OLA	A	509	-	19,19,19	0.78	1 (5%)	19,19,19	0.96	1 (5%)
4	OLC	A	516	-	24,24,24	0.81	2 (8%)	25,25,25	0.96	1 (4%)
7	CLR	A	524	-	31,31,31	10.03	24 (77%)	48,48,48	3.34	21 (43%)
2	OLA	A	511	-	19,19,19	0.78	1 (5%)	19,19,19	0.97	2 (10%)
4	OLC	A	521	-	24,24,24	0.80	2 (8%)	25,25,25	0.97	1 (4%)
2	OLA	A	513	-	19,19,19	0.79	1 (5%)	19,19,19	0.90	1 (5%)
2	OLA	A	506	-	10,10,19	0.62	0	10,10,19	1.19	2 (20%)
2	OLA	A	507	-	14,14,19	0.91	1 (7%)	14,14,19	1.04	1 (7%)
2	OLA	A	504	-	19,19,19	0.78	1 (5%)	19,19,19	1.05	2 (10%)
2	OLA	A	512	-	14,14,19	0.90	1 (7%)	14,14,19	1.00	0
2	OLA	A	503	-	14,14,19	0.90	1 (7%)	14,14,19	1.03	1 (7%)
2	OLA	A	515	-	19,19,19	0.78	1 (5%)	19,19,19	0.99	2 (10%)
5	U30	A	520	-	33,35,35	1.90	5 (15%)	40,51,51	2.53	11 (27%)

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
2	OLA	A	518	-	-	12/17/17/17	-
2	OLA	A	501	-	-	3/8/8/17	-
2	OLA	A	517	-	-	13/17/17/17	-
2	OLA	A	505	-	-	11/17/17/17	-
6	PEG	A	523	-	-	2/4/4/4	-
2	OLA	A	519	-	-	9/11/11/17	-
2	OLA	A	510	-	-	8/11/11/17	-
2	OLA	A	522	-	-	3/10/10/17	-
2	OLA	A	502	-	-	5/12/12/17	-
2	OLA	A	514	-	-	10/17/17/17	-
2	OLA	A	509	-	-	6/17/17/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	OLC	A	516	-	-	11/24/24/24	-
7	CLR	A	524	-	1/1/10/11	8/10/68/68	0/4/4/4
2	OLA	A	511	-	-	12/17/17/17	-
4	OLC	A	521	-	-	8/24/24/24	-
2	OLA	A	513	-	-	9/17/17/17	-
2	OLA	A	506	-	-	4/8/8/17	-
2	OLA	A	507	-	-	7/12/12/17	-
2	OLA	A	504	-	-	7/17/17/17	-
2	OLA	A	512	-	-	6/12/12/17	-
2	OLA	A	503	-	-	7/12/12/17	-
2	OLA	A	515	-	-	10/17/17/17	-
5	U30	A	520	-	-	4/18/20/20	0/4/4/4

The worst 5 of 49 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	A	524	CLR	C12-C13	-22.86	1.13	1.54
7	A	524	CLR	C1-C10	-22.32	1.11	1.54
7	A	524	CLR	C7-C6	-18.77	1.09	1.50
7	A	524	CLR	C13-C17	-17.68	1.21	1.55
7	A	524	CLR	C2-C3	-12.83	1.21	1.51

The worst 5 of 55 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	A	520	U30	C5-N1-C6	9.03	121.49	116.34
7	A	524	CLR	C19-C10-C1	-7.99	96.81	109.43
7	A	524	CLR	C1-C2-C3	7.89	120.59	110.47
7	A	524	CLR	C1-C10-C5	7.78	123.00	108.75
7	A	524	CLR	C19-C10-C5	-7.53	96.16	108.34

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
7	A	524	CLR	C8

5 of 175 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	A	520	U30	N3-C7-C8-C9
5	A	520	U30	C19-C7-C8-C9
7	A	524	CLR	C13-C17-C20-C21
7	A	524	CLR	C13-C17-C20-C22
2	A	517	OLA	C11-C10-C9-C8

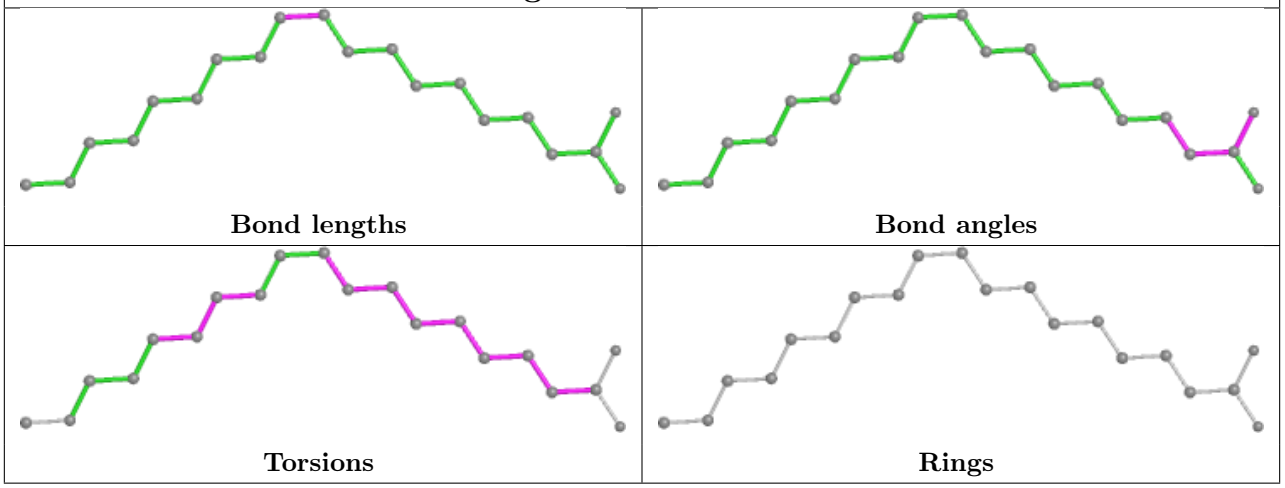
There are no ring outliers.

14 monomers are involved in 28 short contacts:

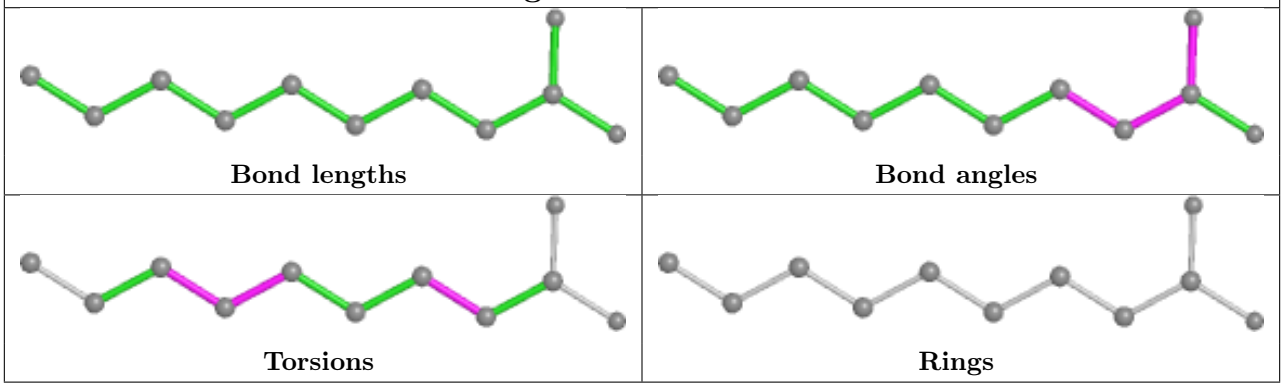
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	518	OLA	1	0
2	A	517	OLA	4	0
2	A	505	OLA	2	0
2	A	519	OLA	1	0
2	A	510	OLA	1	0
2	A	502	OLA	1	0
2	A	509	OLA	2	1
4	A	516	OLC	3	0
7	A	524	CLR	5	1
2	A	511	OLA	4	0
2	A	513	OLA	1	0
2	A	504	OLA	2	0
2	A	512	OLA	1	0
2	A	515	OLA	1	0

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 then 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.

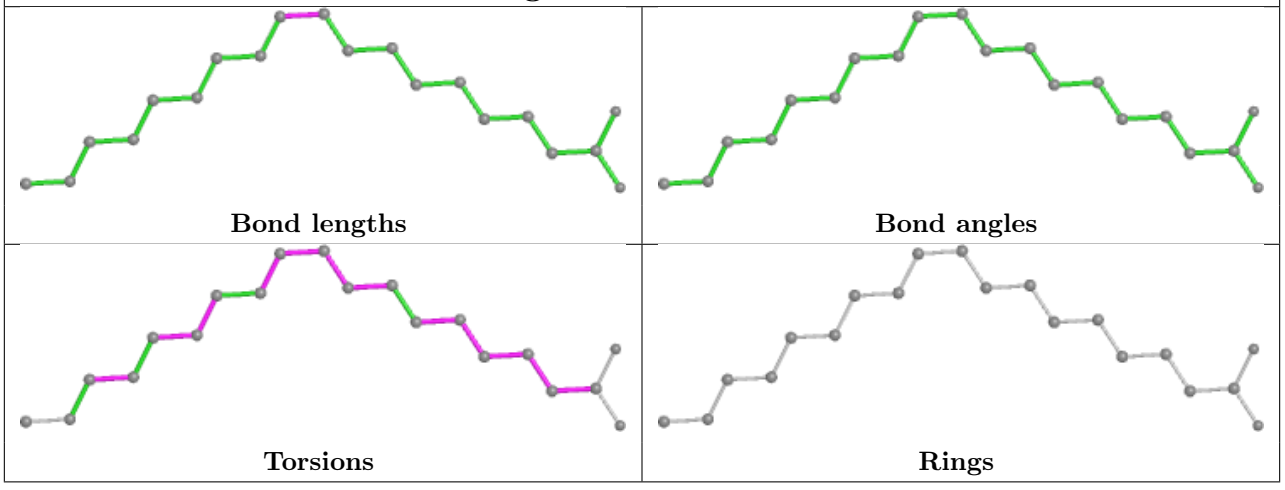
Ligand OLA A 518



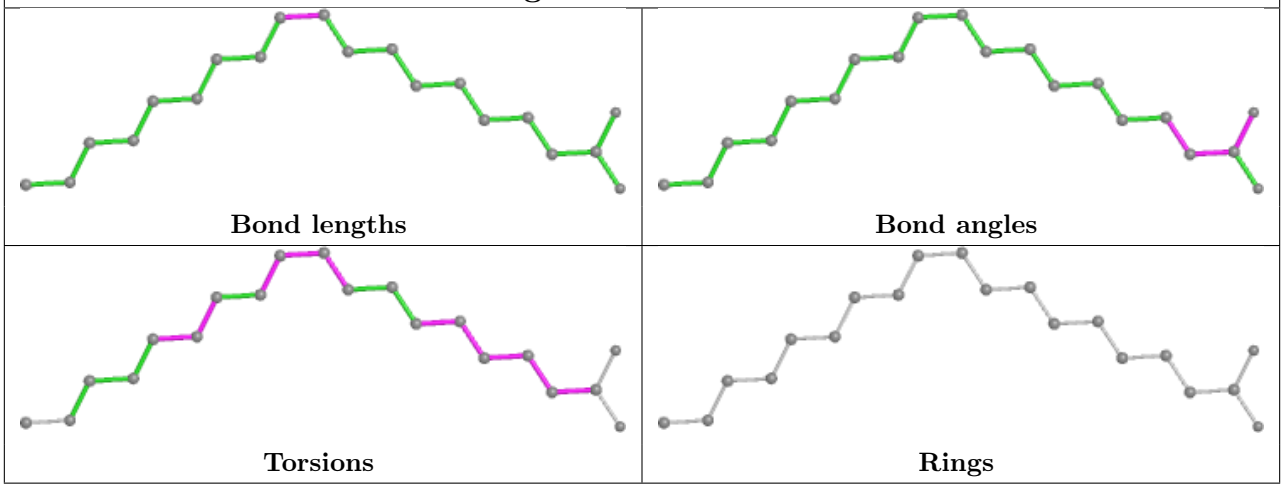
Ligand OLA A 501



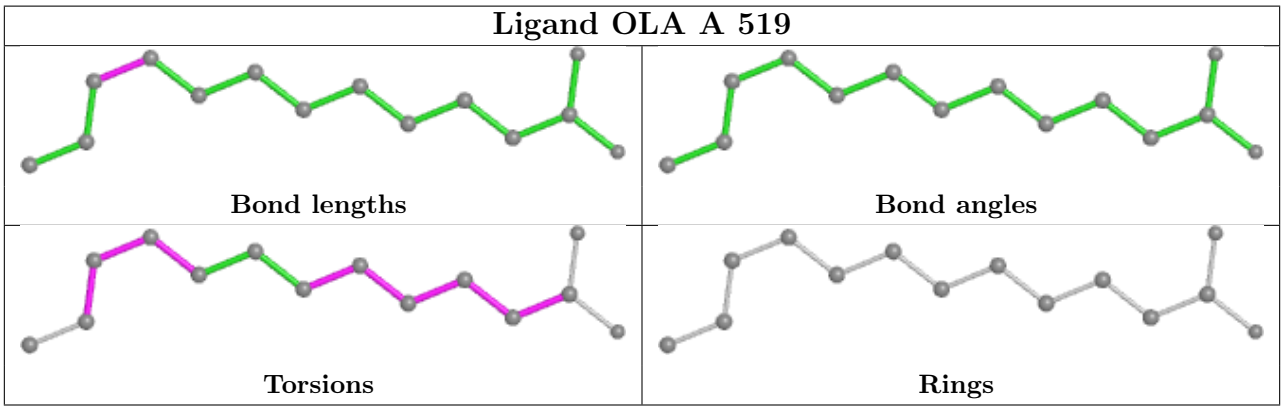
Ligand OLA A 517



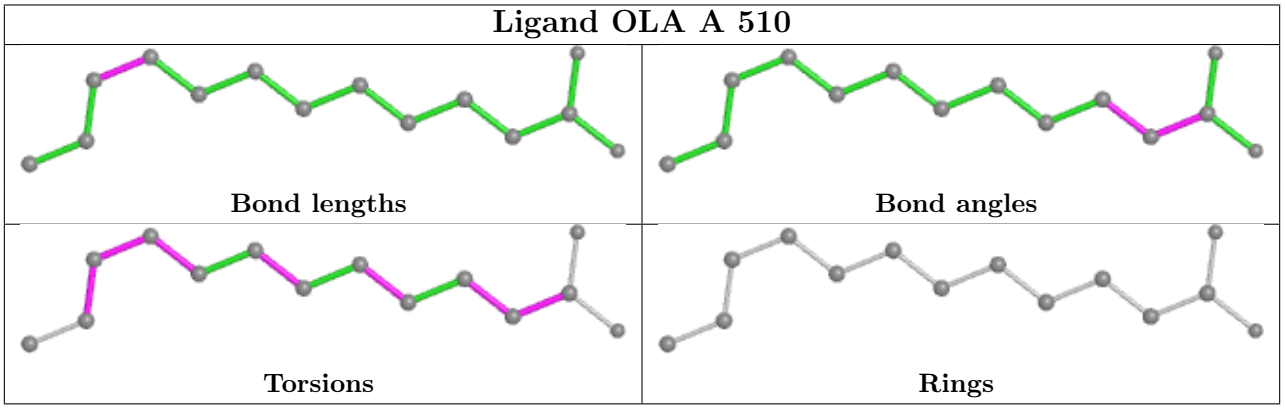
Ligand OLA A 505



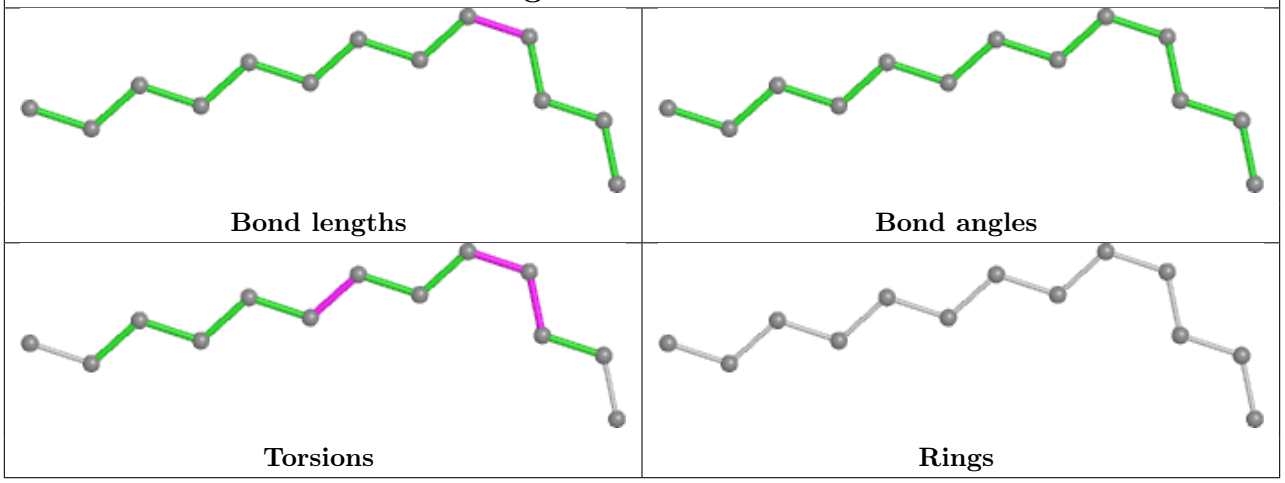
Ligand OLA A 519



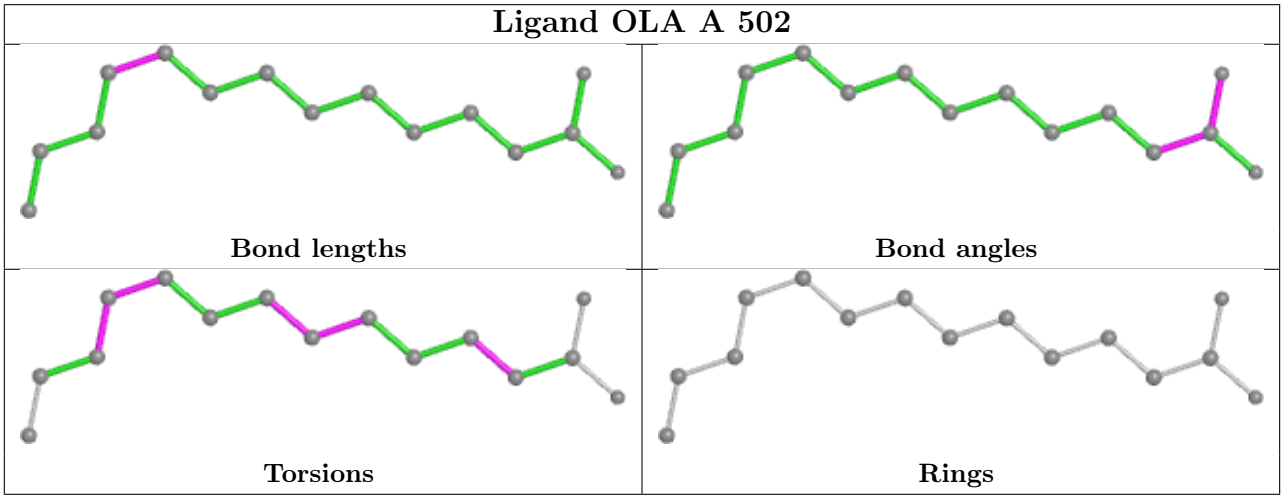
Ligand OLA A 510



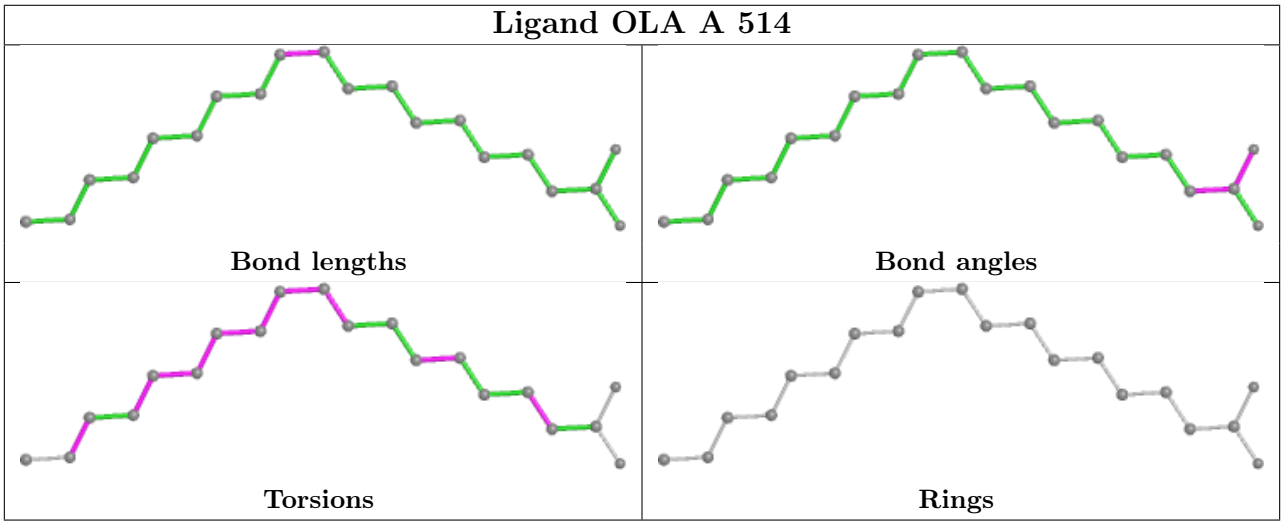
Ligand OLA A 522



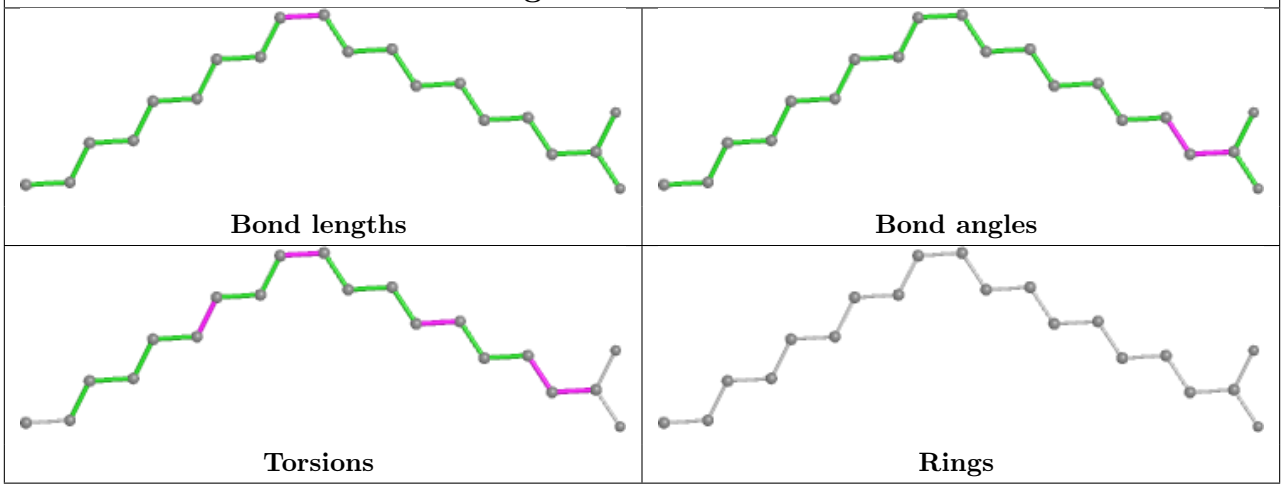
Ligand OLA A 502



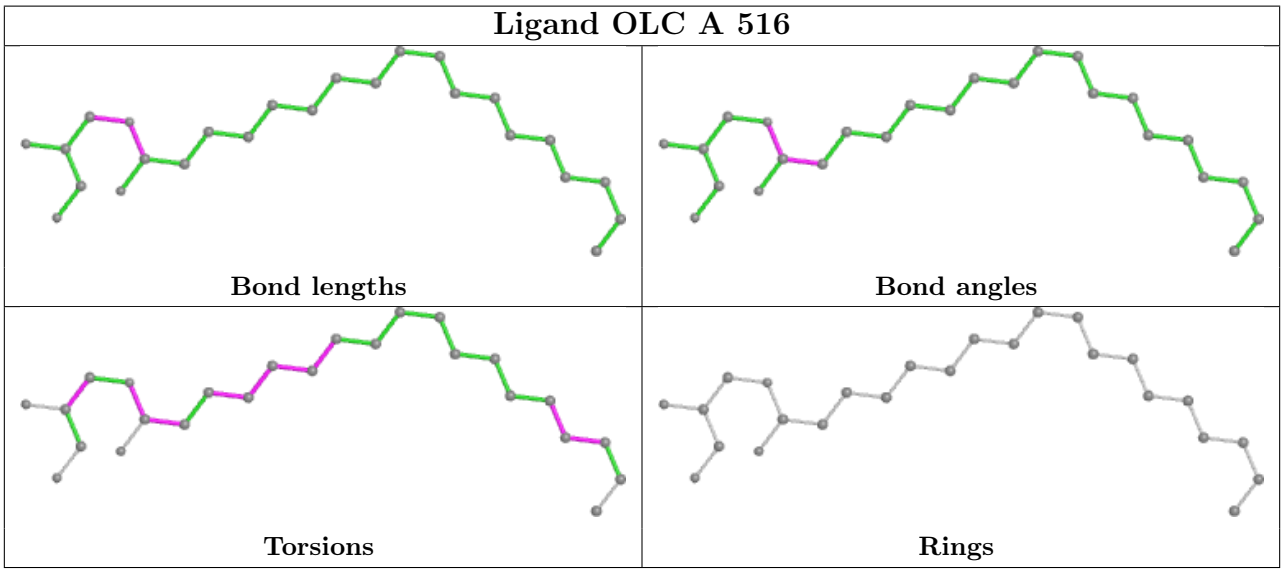
Ligand OLA A 514



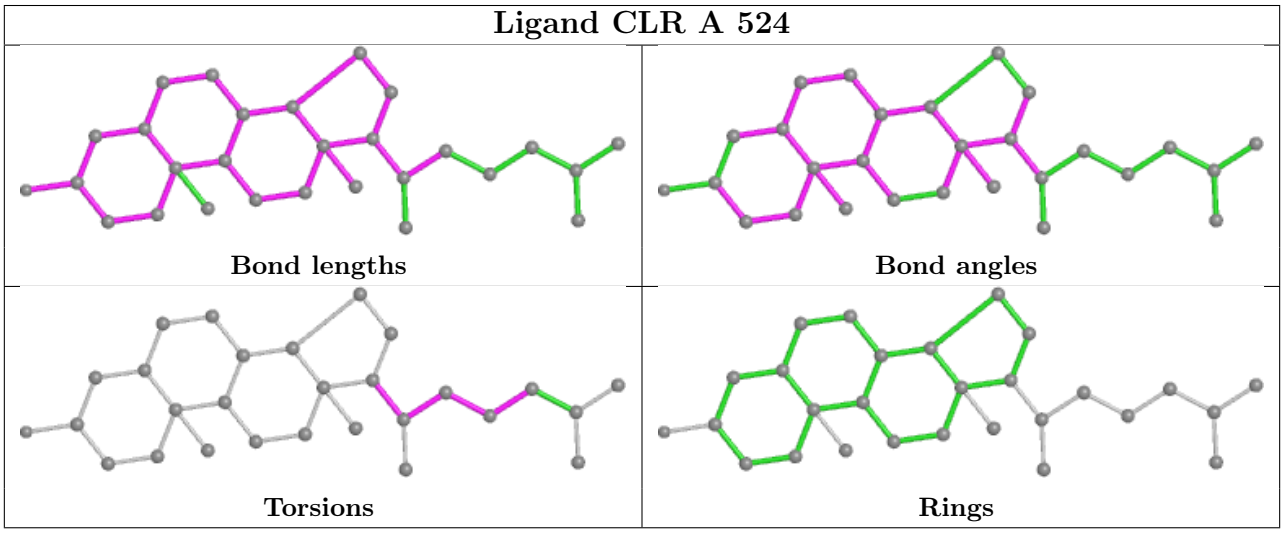
Ligand OLA A 509



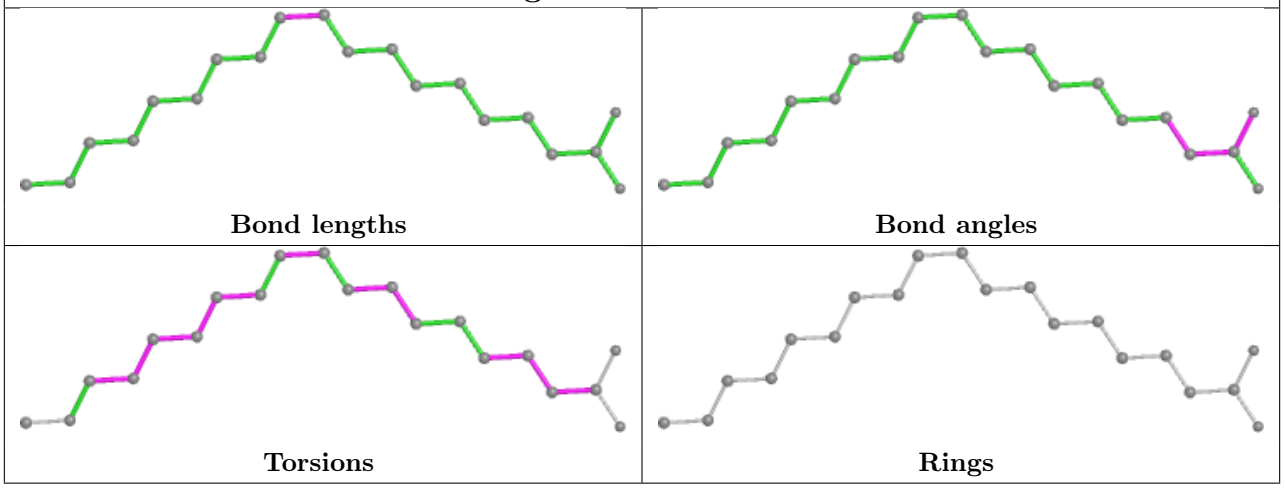
Ligand OLC A 516



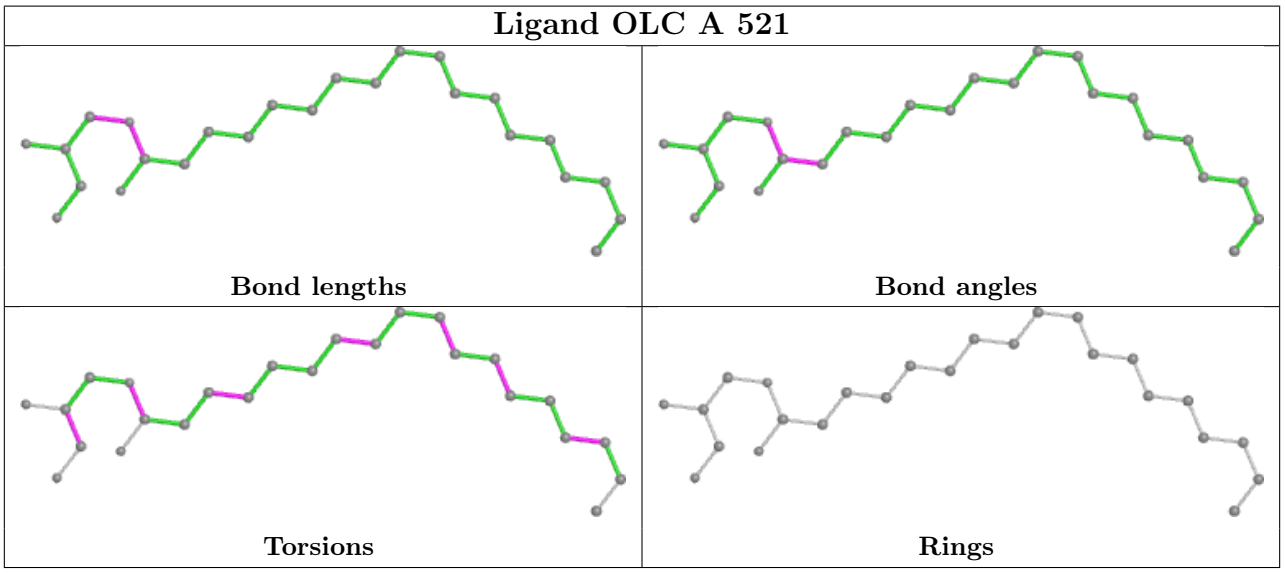
Ligand CLR A 524



Ligand OLA A 511



Ligand OLC A 521



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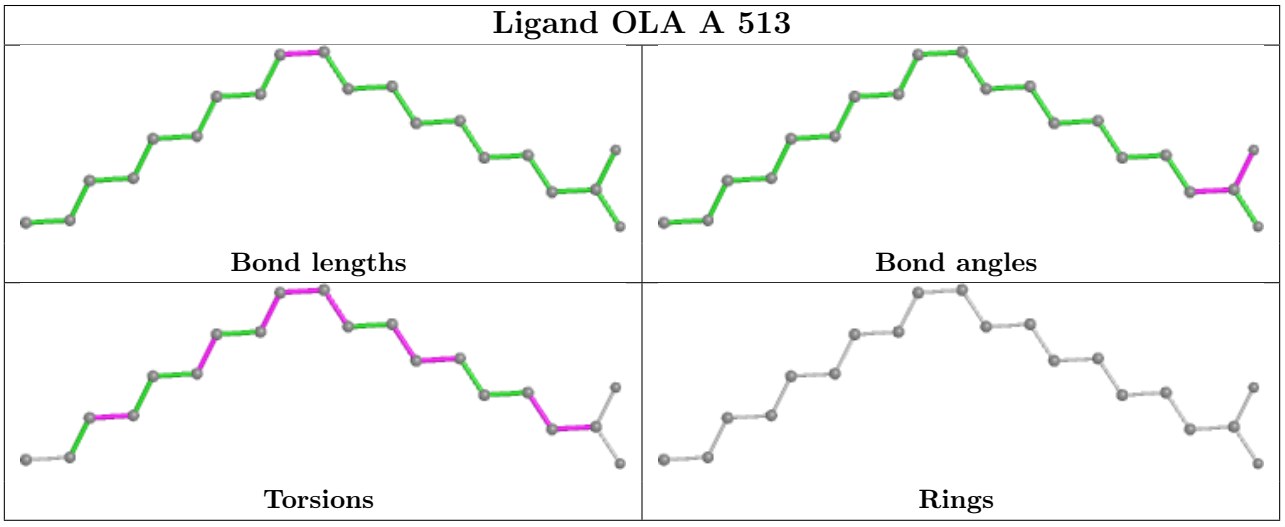
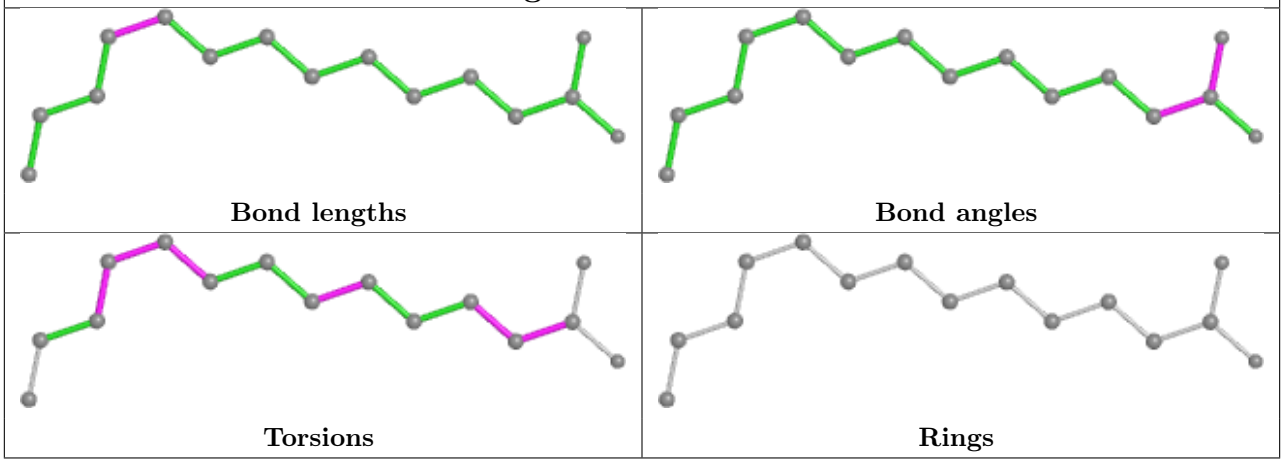
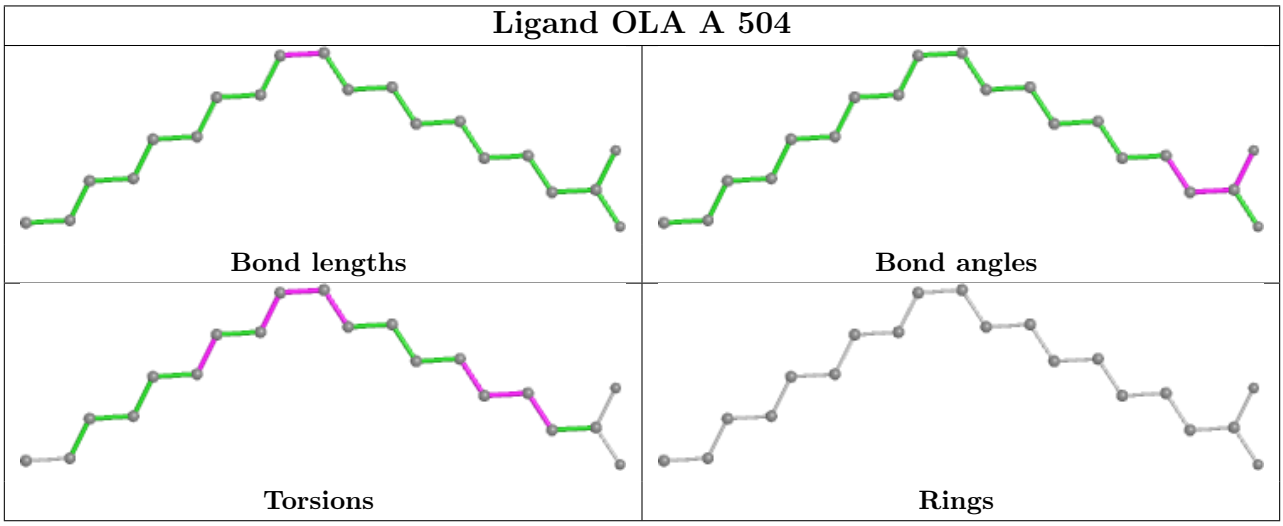


Ligand OLA A 506

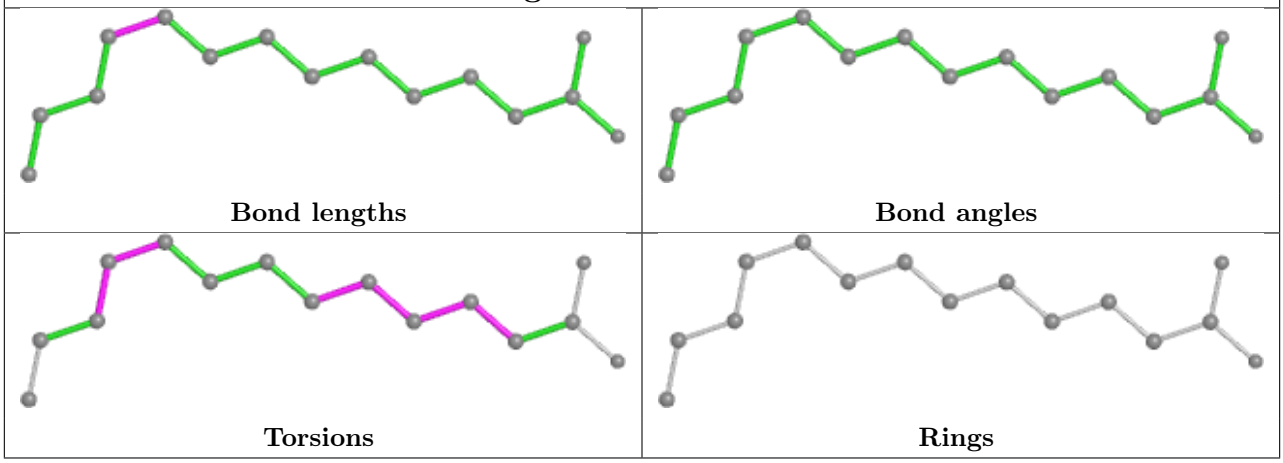
Ligand OLA A 507



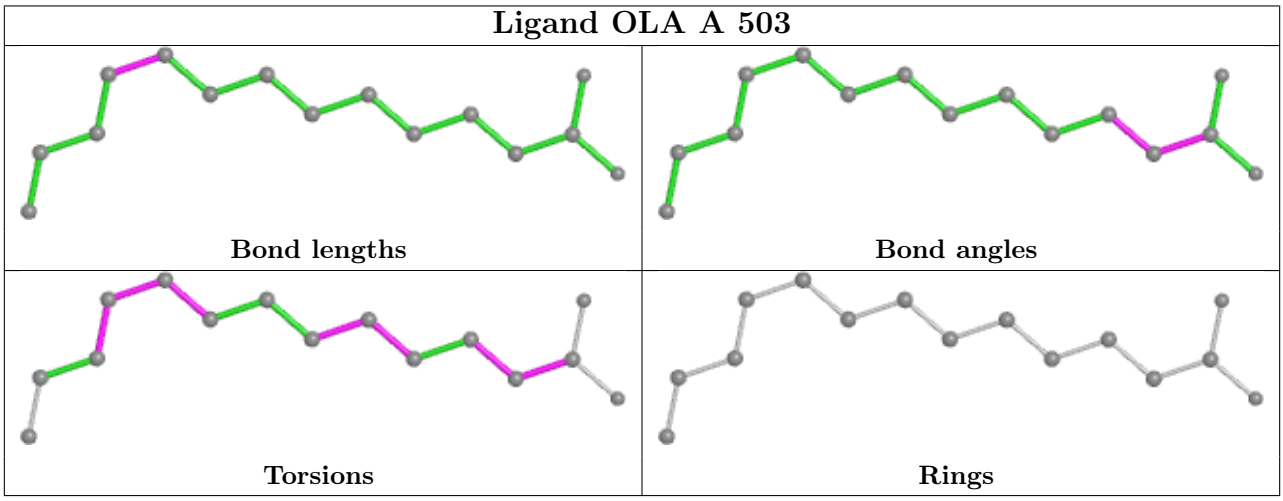
Ligand OLA A 504



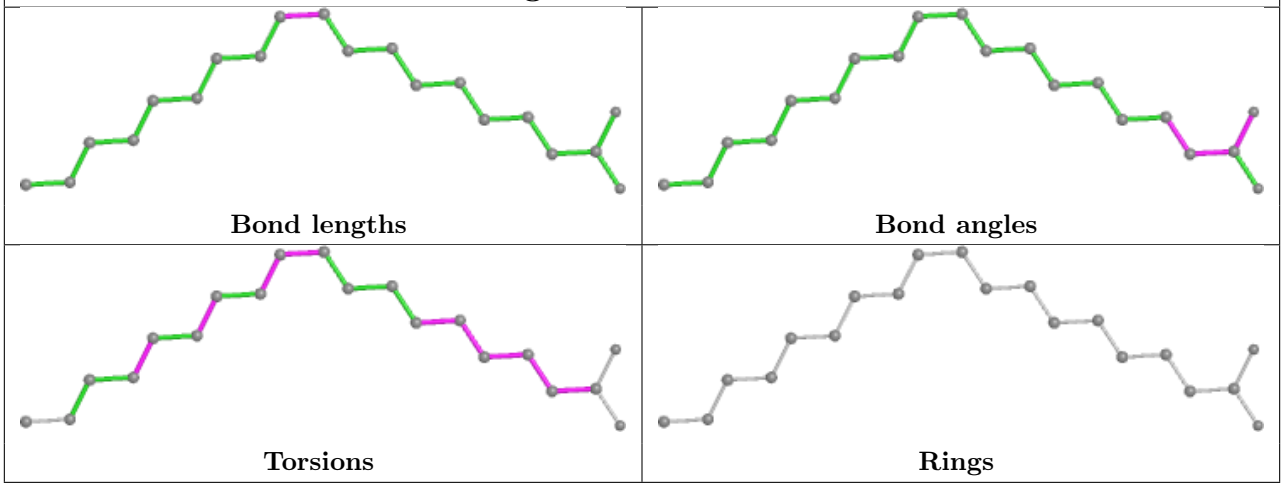
Ligand OLA A 512



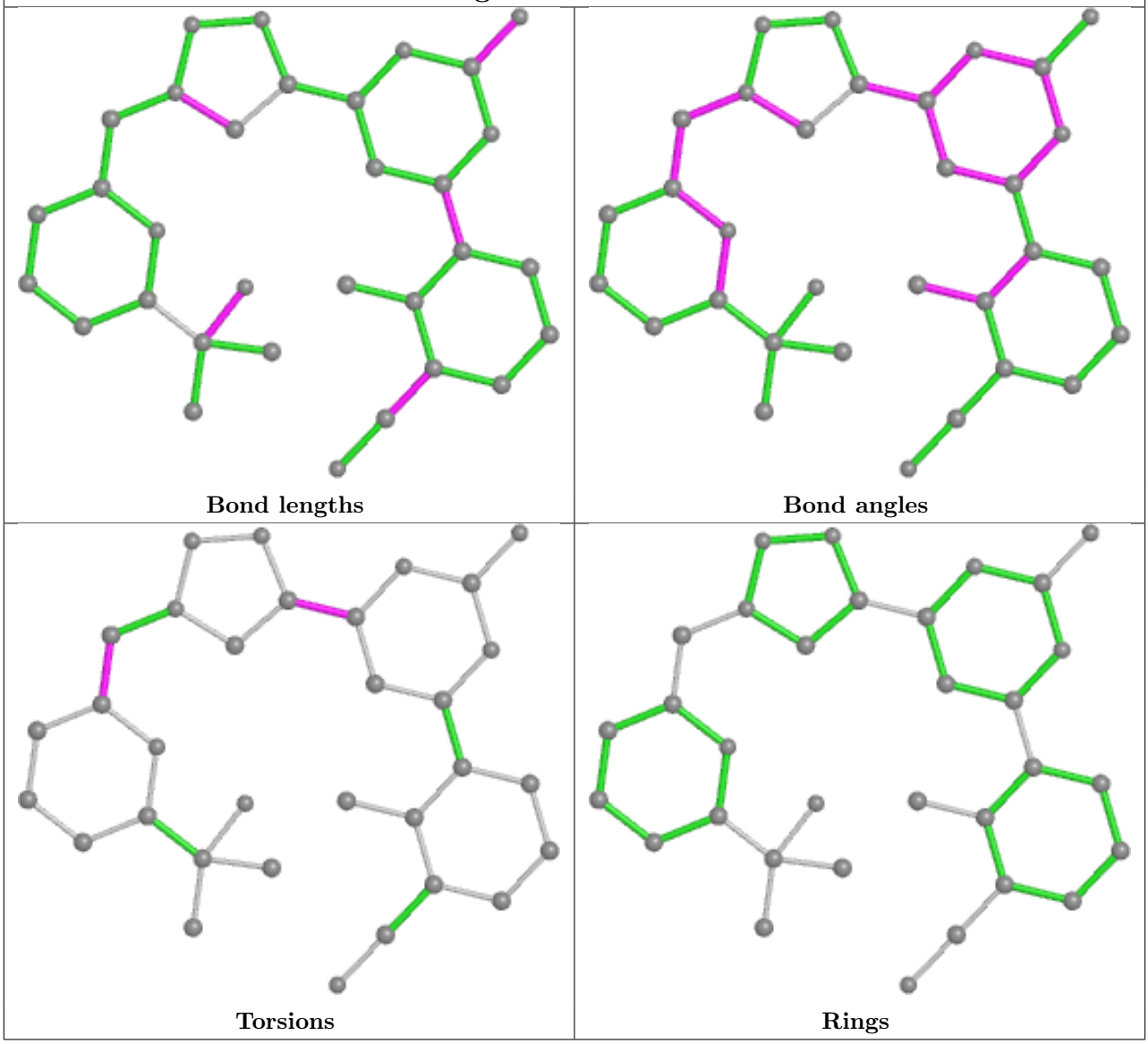
Ligand OLA A 503



Ligand OLA A 515



Ligand U30 A 520



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, 95^{th} 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	450/481 (93%)	-0.05	20 (4%) 34 37	17, 29, 54, 110	0

The worst 5 of 20 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	457	GLN	7.6
1	A	149	PRO	7.3
1	A	148	GLN	5.0
1	A	150	LYS	5.0
1	A	4	MET	4.5

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

There are no monosaccharides in this entry.

6.4 Ligands

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} 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
2	OLA	A	519	14/20	0.71	0.47	57,67,90,101	0
2	OLA	A	514	20/20	0.72	0.36	44,59,73,74	0

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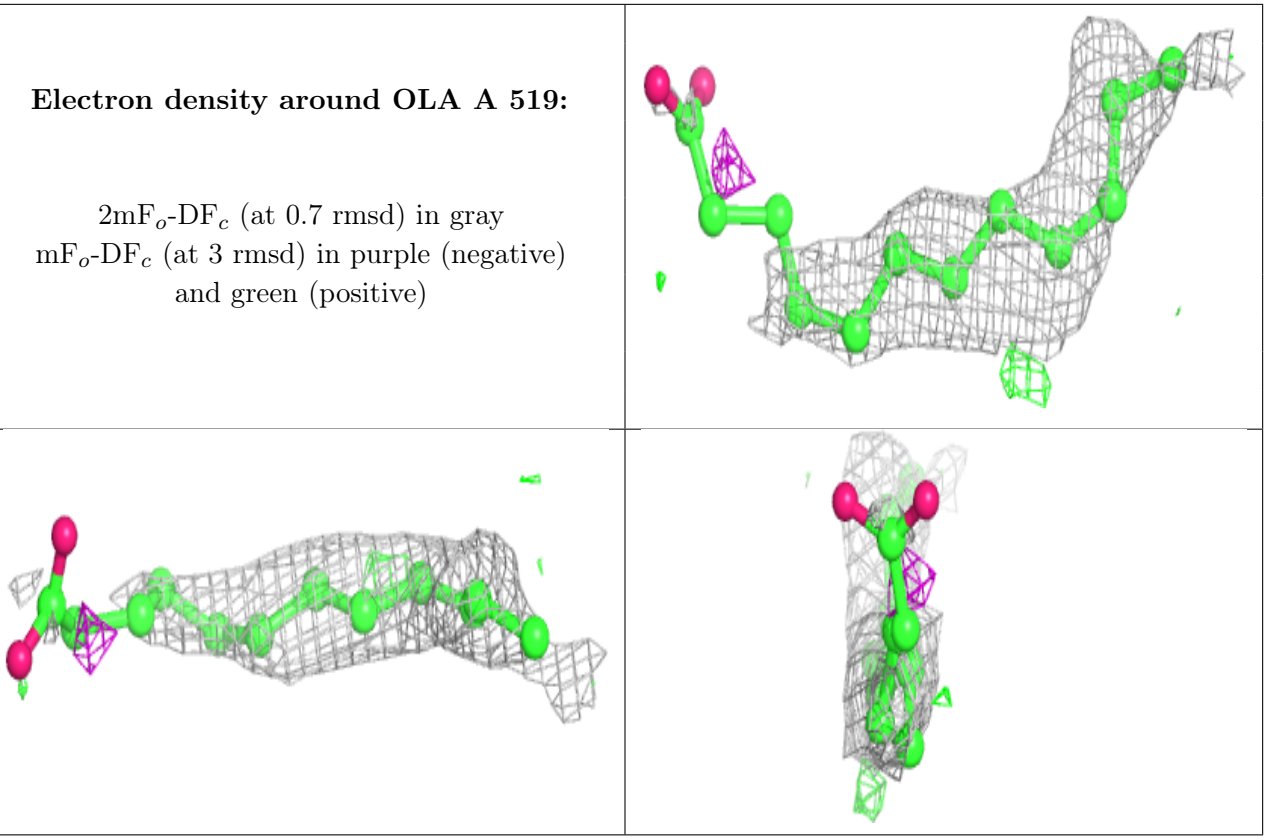
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	OLA	A	512	15/20	0.74	0.27	42,50,71,85	0
2	OLA	A	510	14/20	0.76	0.33	59,71,85,87	0
2	OLA	A	513	20/20	0.76	0.30	37,60,96,104	0
7	CLR	A	524	28/28	0.78	0.26	49,59,71,77	0
4	OLC	A	516	25/25	0.79	0.37	39,63,77,89	0
2	OLA	A	515	20/20	0.79	0.23	27,50,104,105	0
4	OLC	A	521	25/25	0.81	0.21	31,53,75,84	0
2	OLA	A	522	13/20	0.81	0.35	35,49,59,61	0
2	OLA	A	518	20/20	0.82	0.27	41,56,61,74	0
2	OLA	A	502	15/20	0.83	0.22	34,49,54,56	0
2	OLA	A	517	20/20	0.83	0.25	26,45,76,77	0
2	OLA	A	506	11/20	0.86	0.16	28,37,59,67	0
2	OLA	A	509	20/20	0.86	0.23	41,56,72,74	0
2	OLA	A	511	20/20	0.87	0.20	32,43,68,70	0
6	PEG	A	523	7/7	0.87	0.19	32,38,40,51	0
2	OLA	A	505	20/20	0.87	0.26	33,51,77,80	0
3	NA	A	508	1/1	0.88	0.48	57,57,57,57	0
2	OLA	A	503	15/20	0.89	0.18	32,39,62,64	0
2	OLA	A	504	20/20	0.90	0.15	21,41,58,58	0
2	OLA	A	507	15/20	0.92	0.17	40,44,52,61	0
2	OLA	A	501	11/20	0.94	0.17	35,45,55,63	0
5	U30	A	520	32/32	0.96	0.13	17,25,38,40	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.

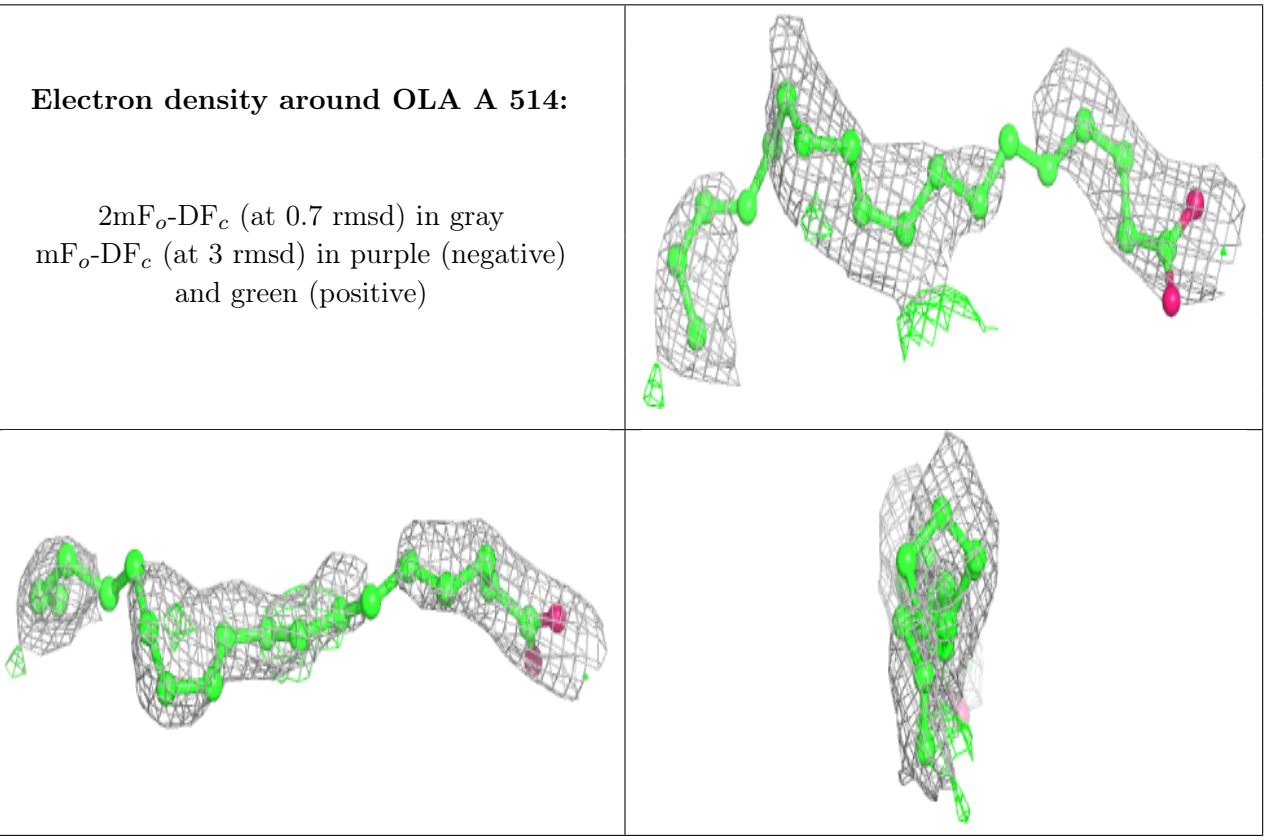
Electron density around OLA A 519:

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



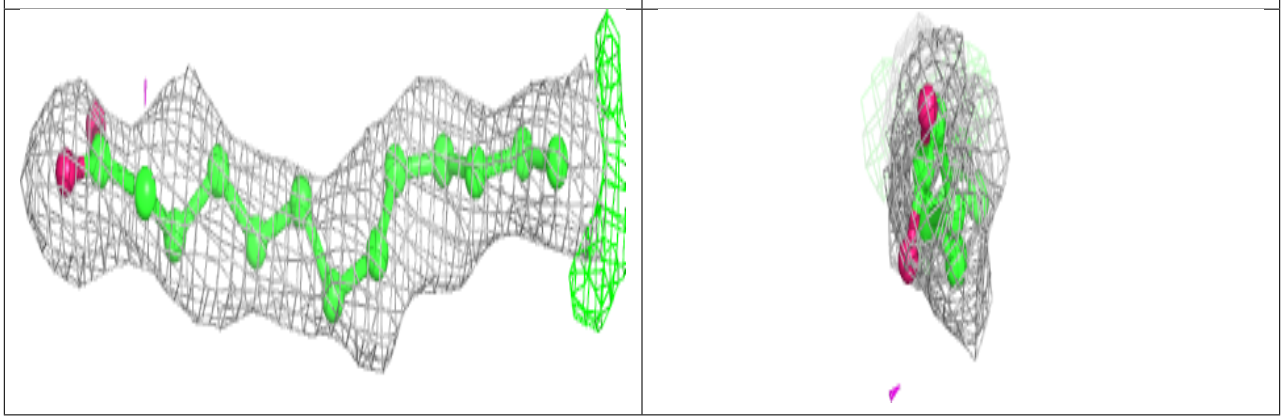
Electron density around OLA A 514:

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



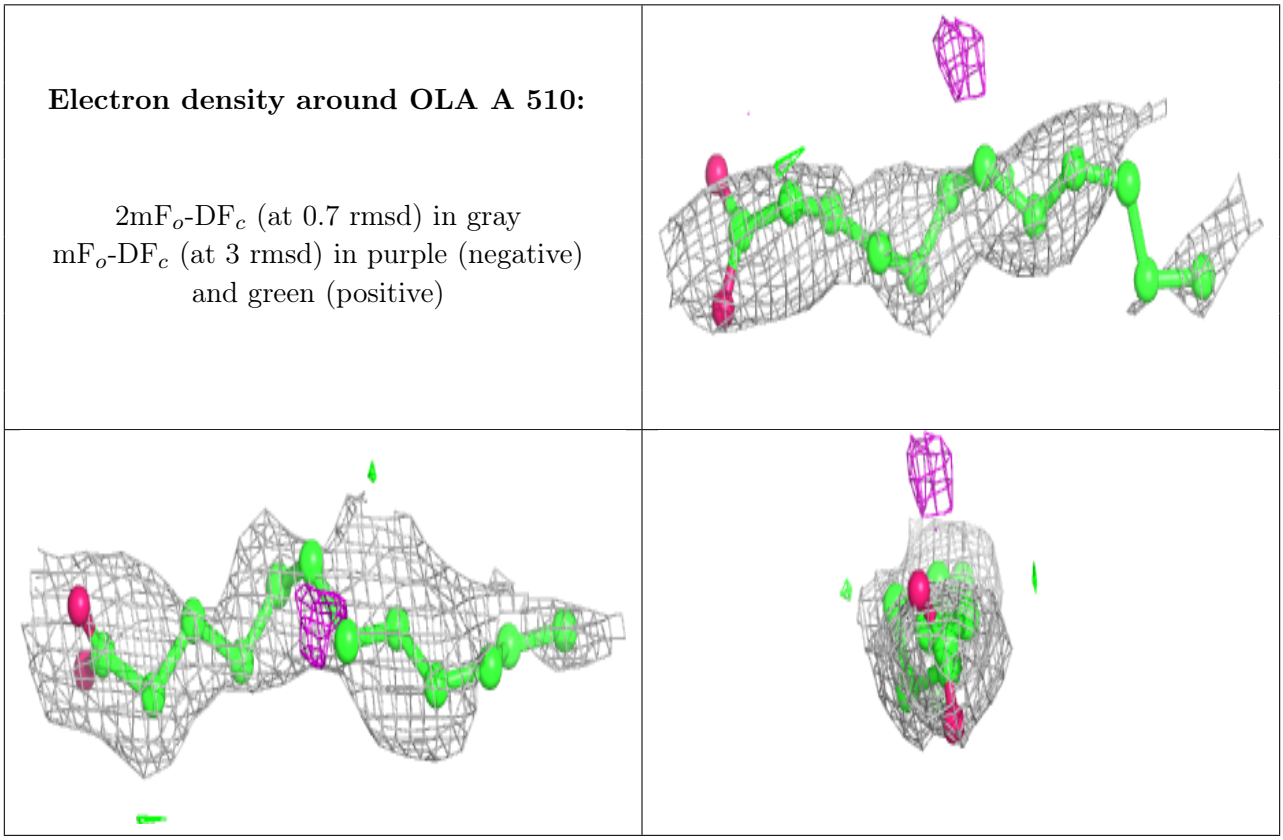
Electron density around OLA A 512:

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



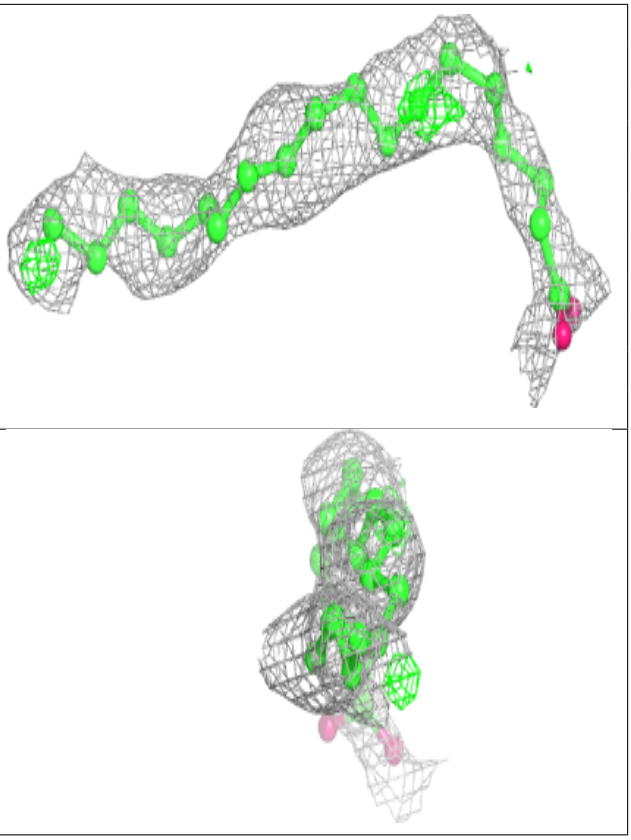
Electron density around OLA A 510:

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



Electron density around OLA A 513:

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



Electron density around CLR A 524:

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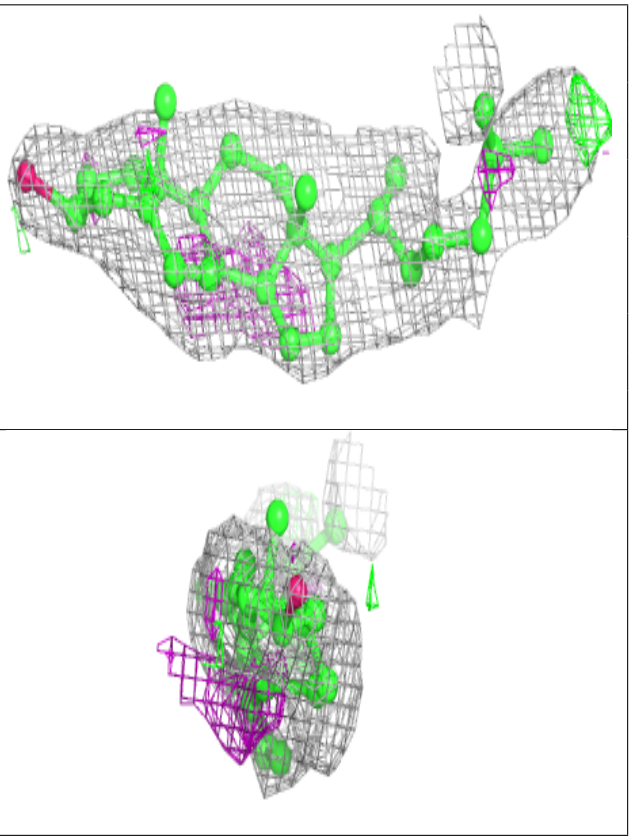
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around OLC A 516:

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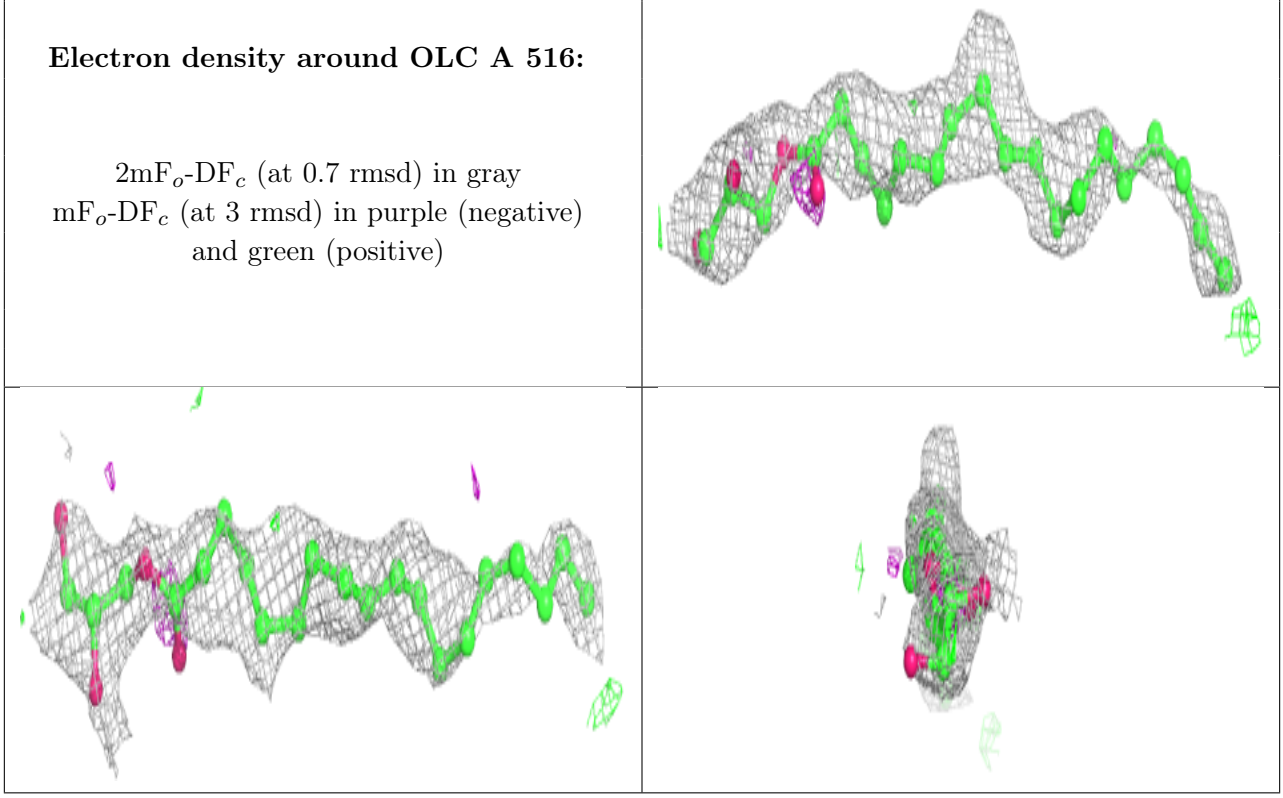
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around OLA A 515:

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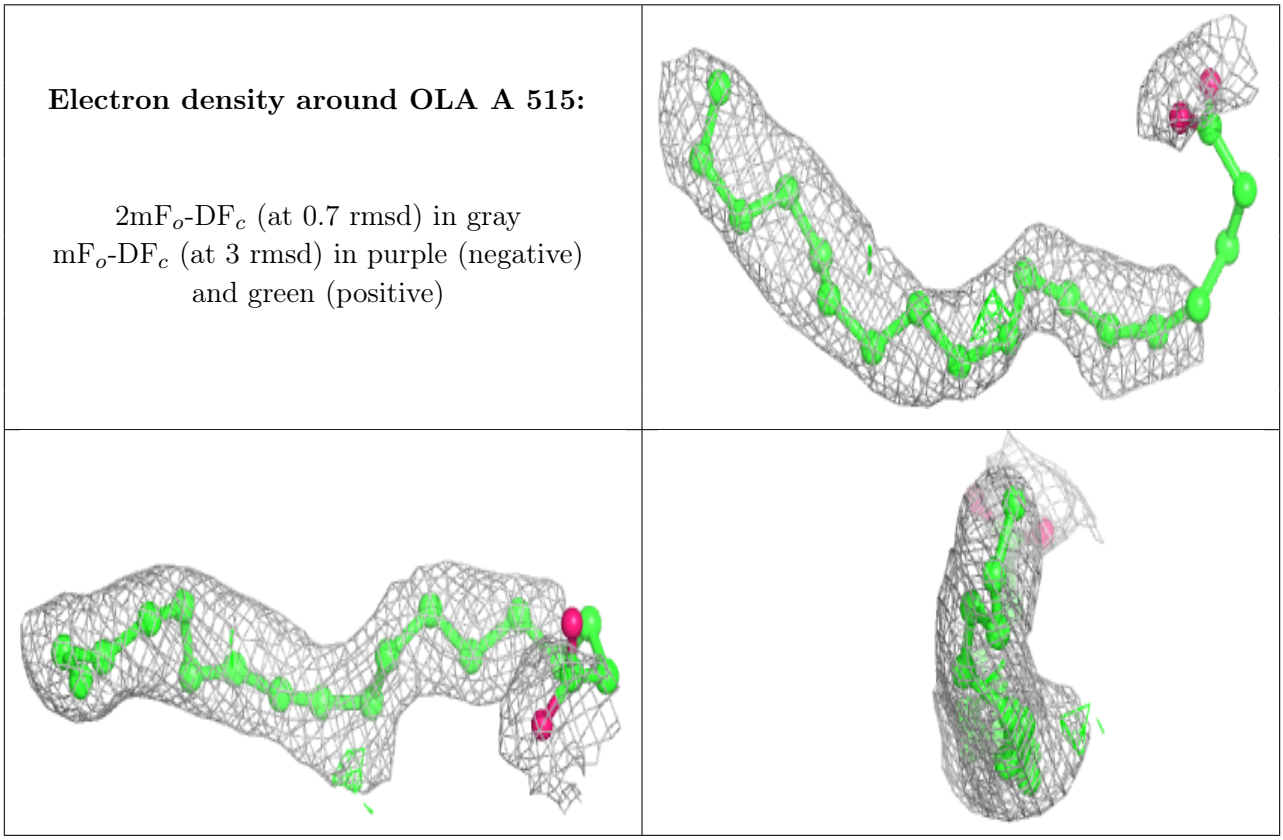
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around OLC A 521:

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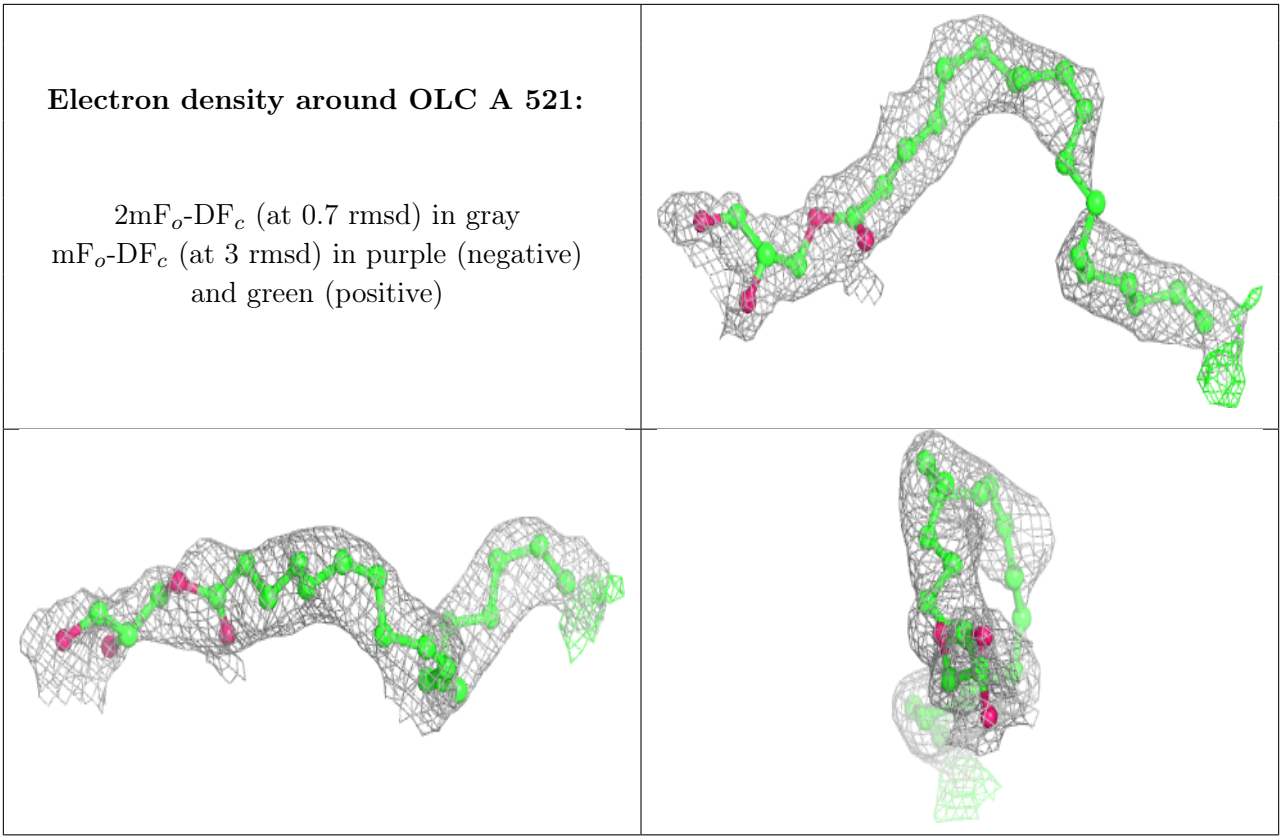
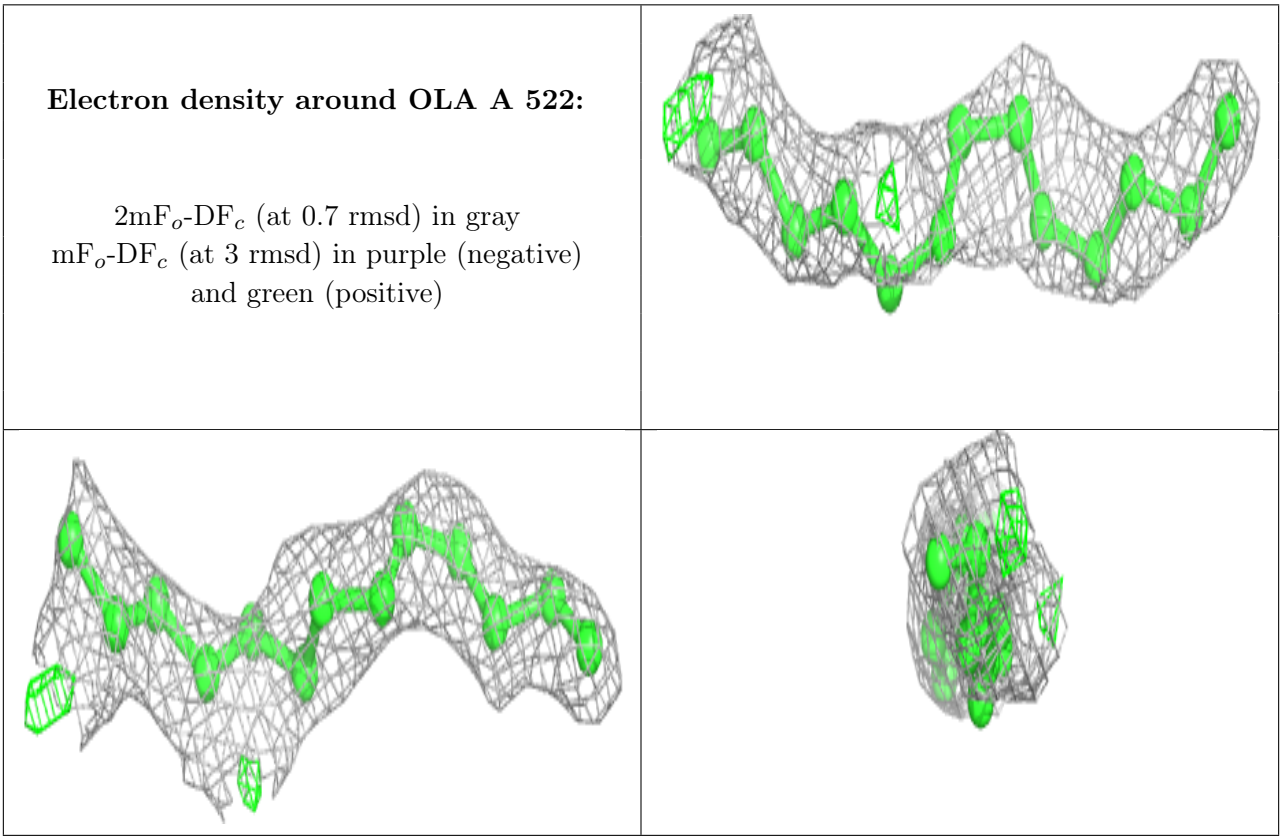
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around OLA A 522:

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



Electron density around OLA A 518:

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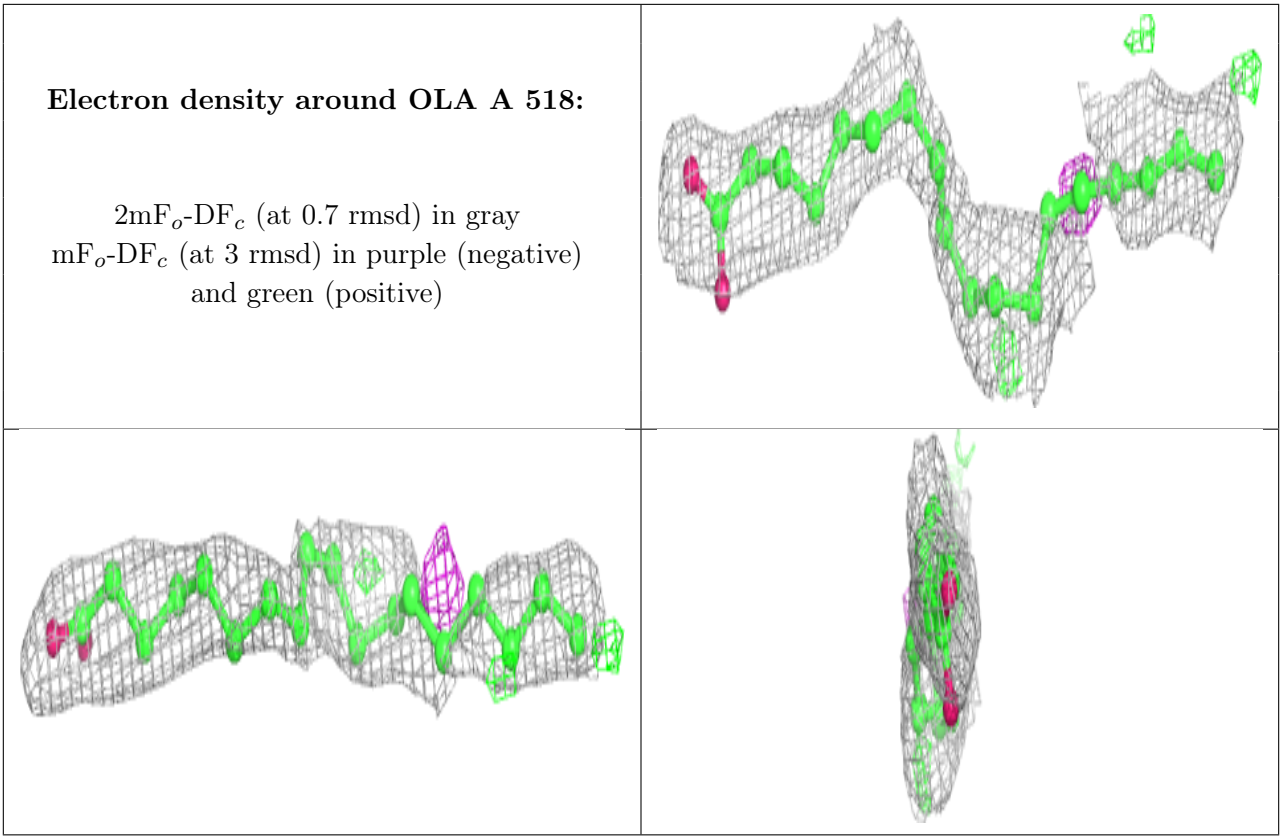
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around OLA A 502:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
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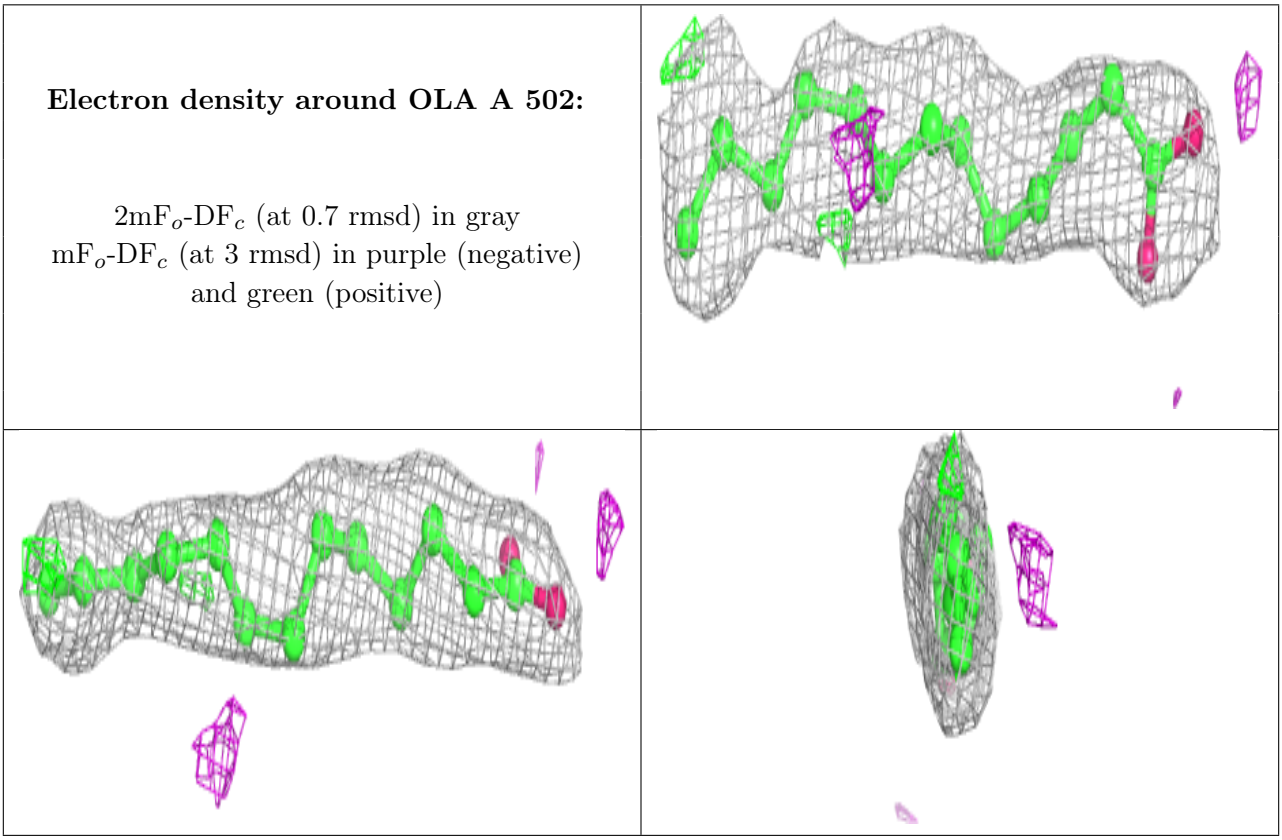

Electron density around OLA A 517:

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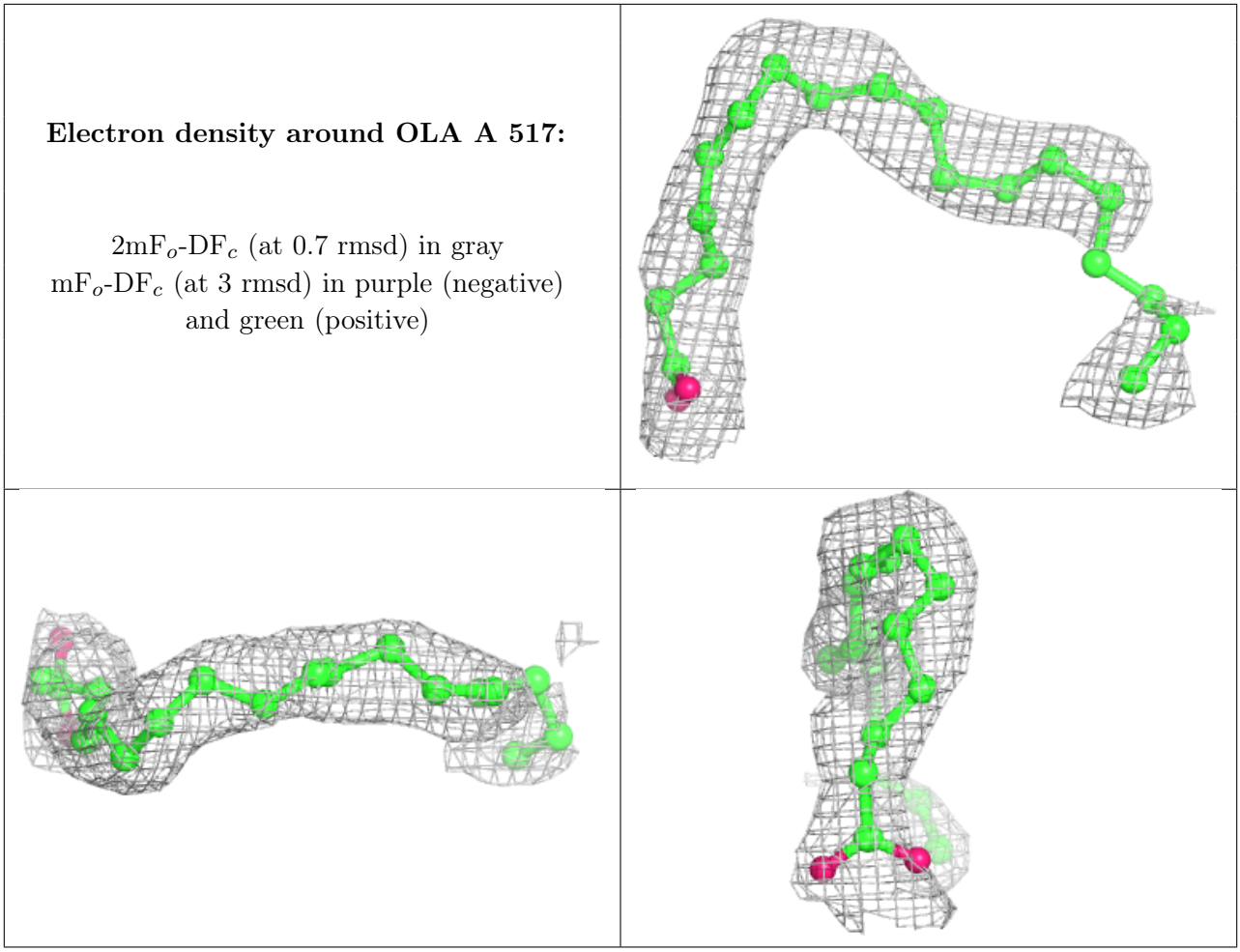
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around OLA A 506:

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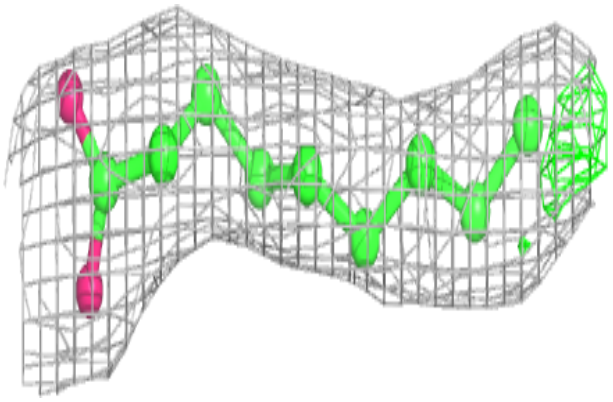

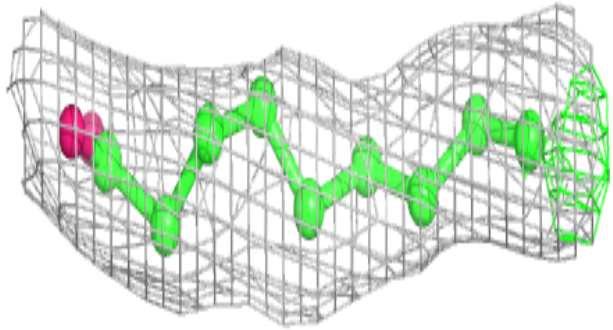

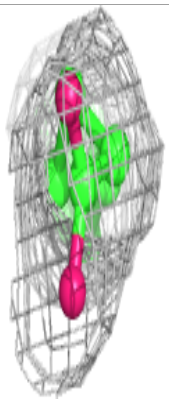

Electron density around OLA A 509:

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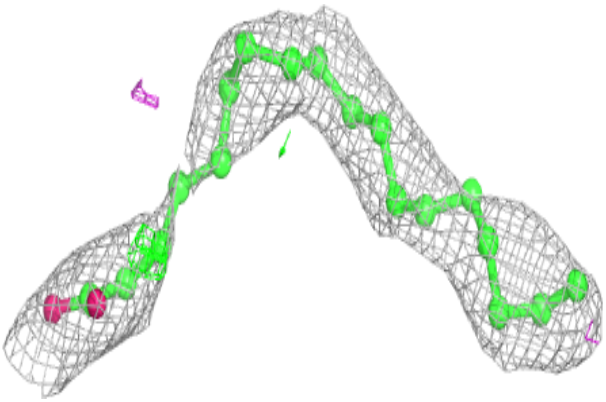
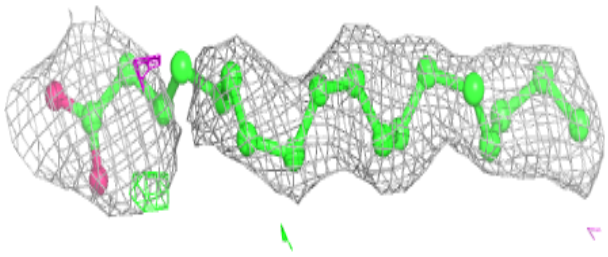
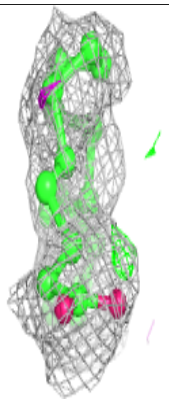
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

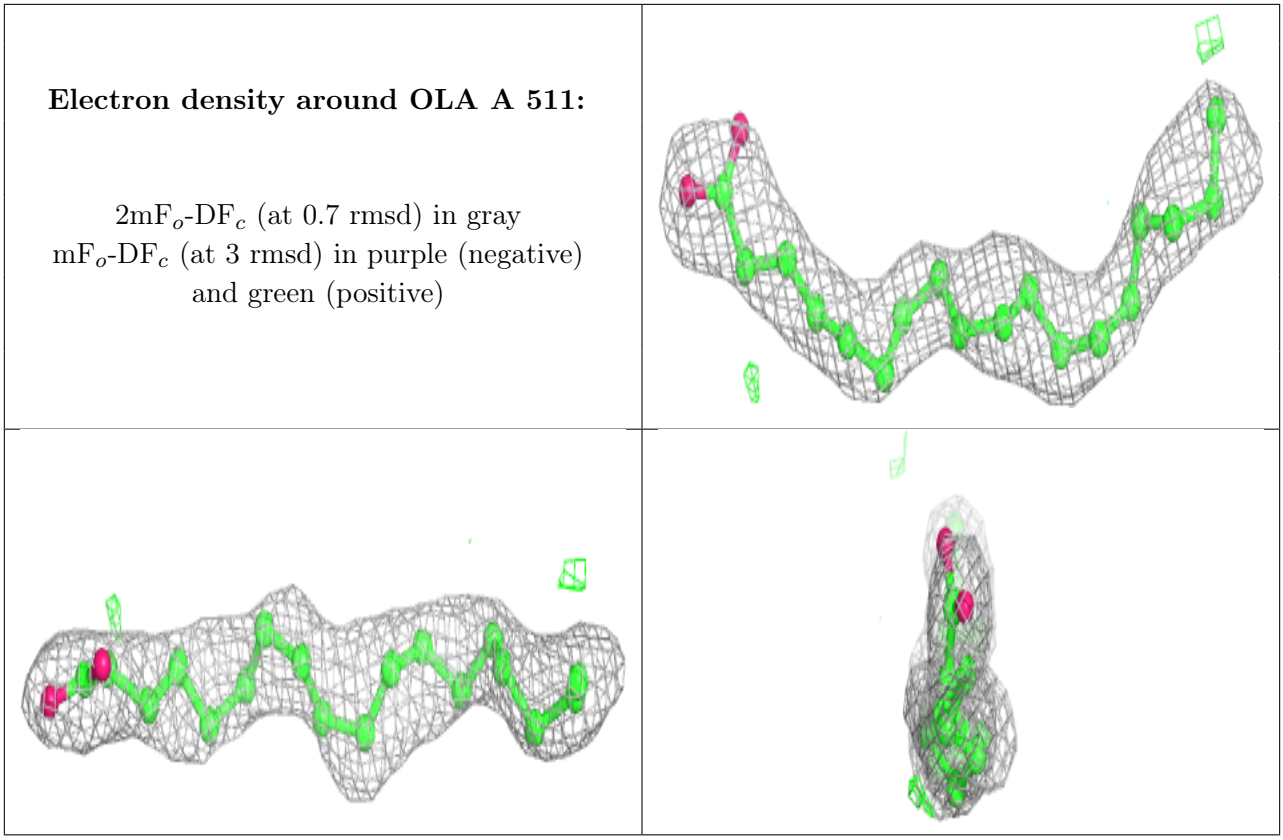






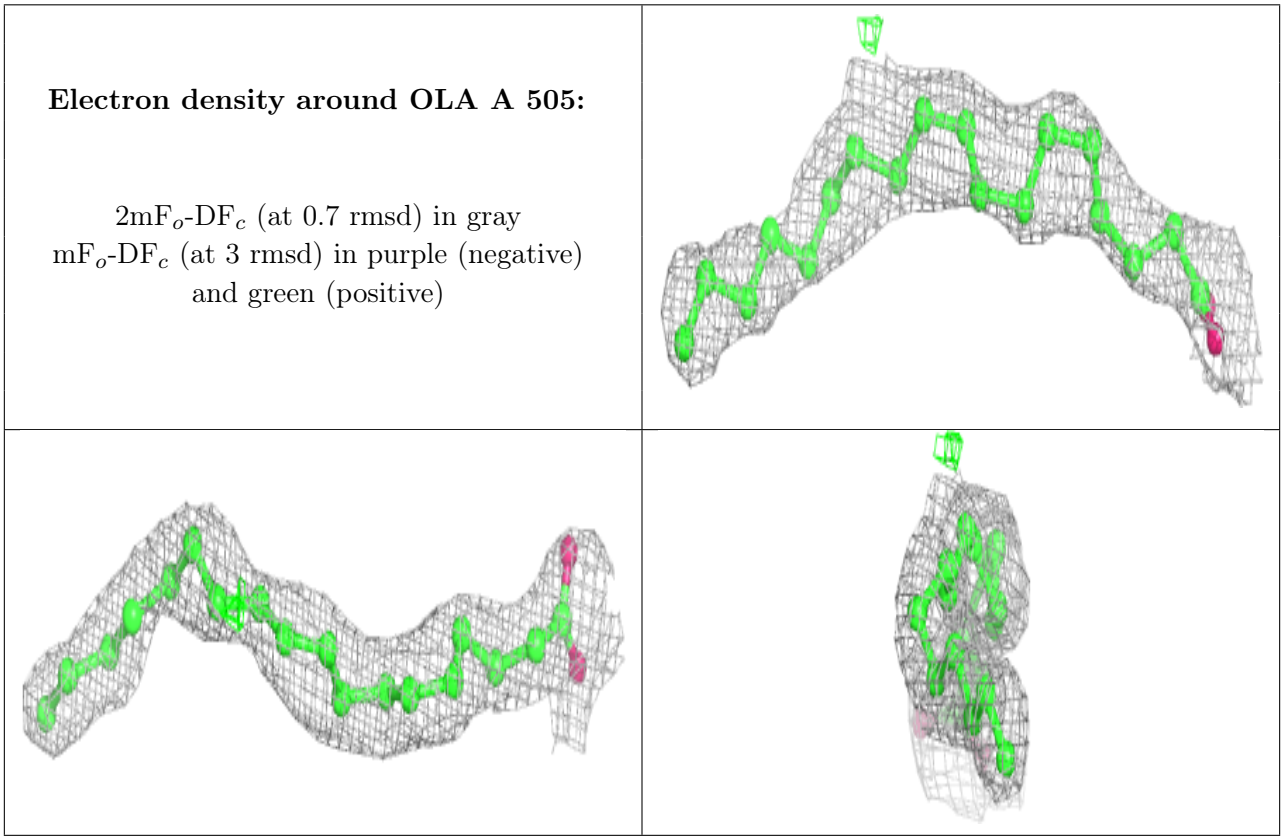
Electron density around OLA A 511:

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



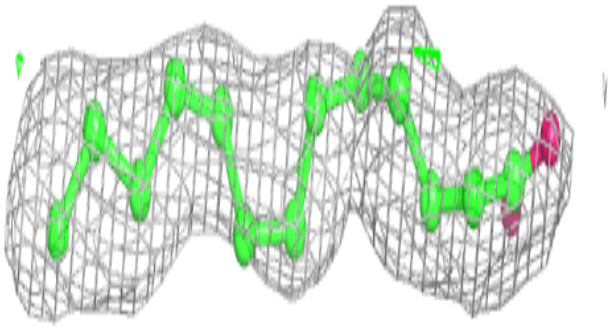
Electron density around OLA A 505:

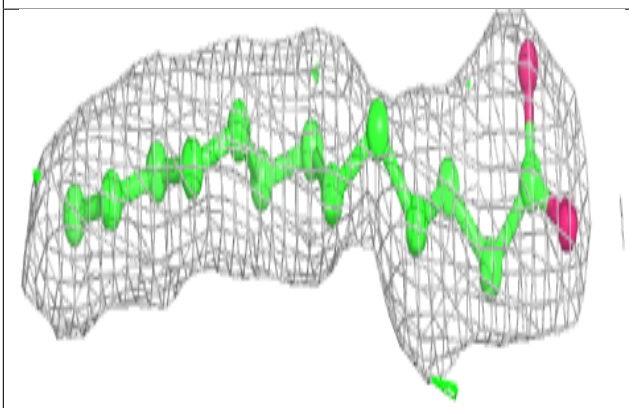
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

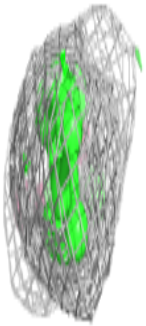


Electron density around OLA A 503:

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

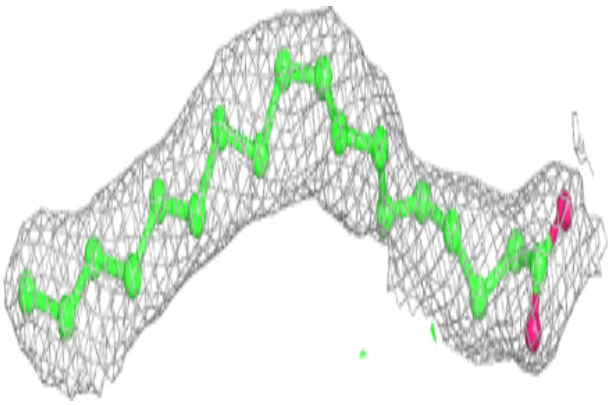


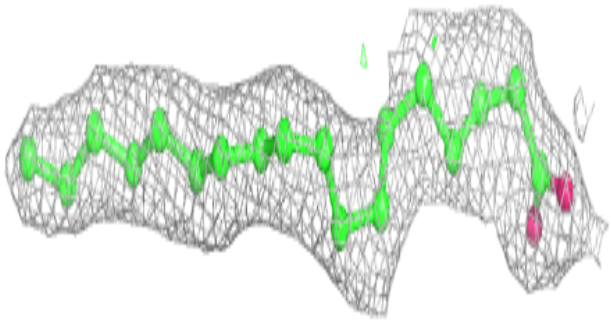


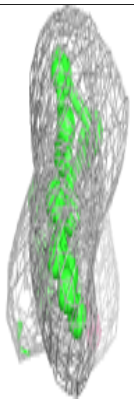


Electron density around OLA A 504:

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

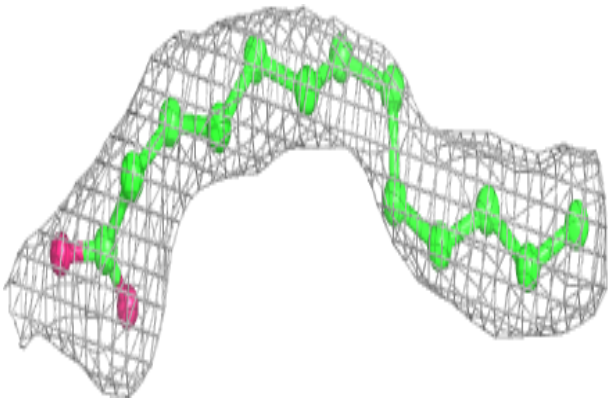


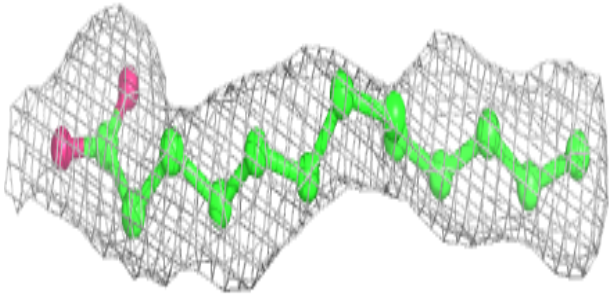


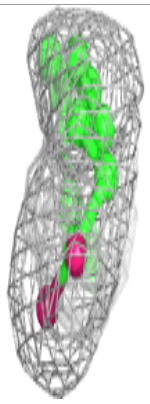


Electron density around OLA A 507:

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

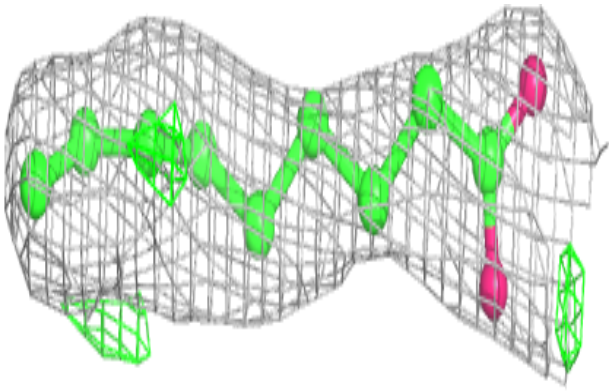


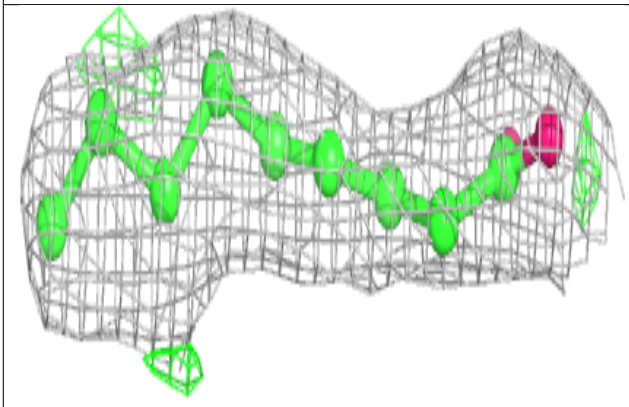


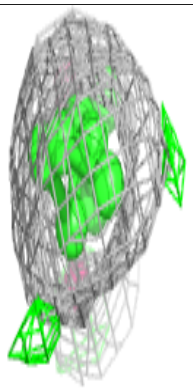


Electron density around OLA A 501:

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

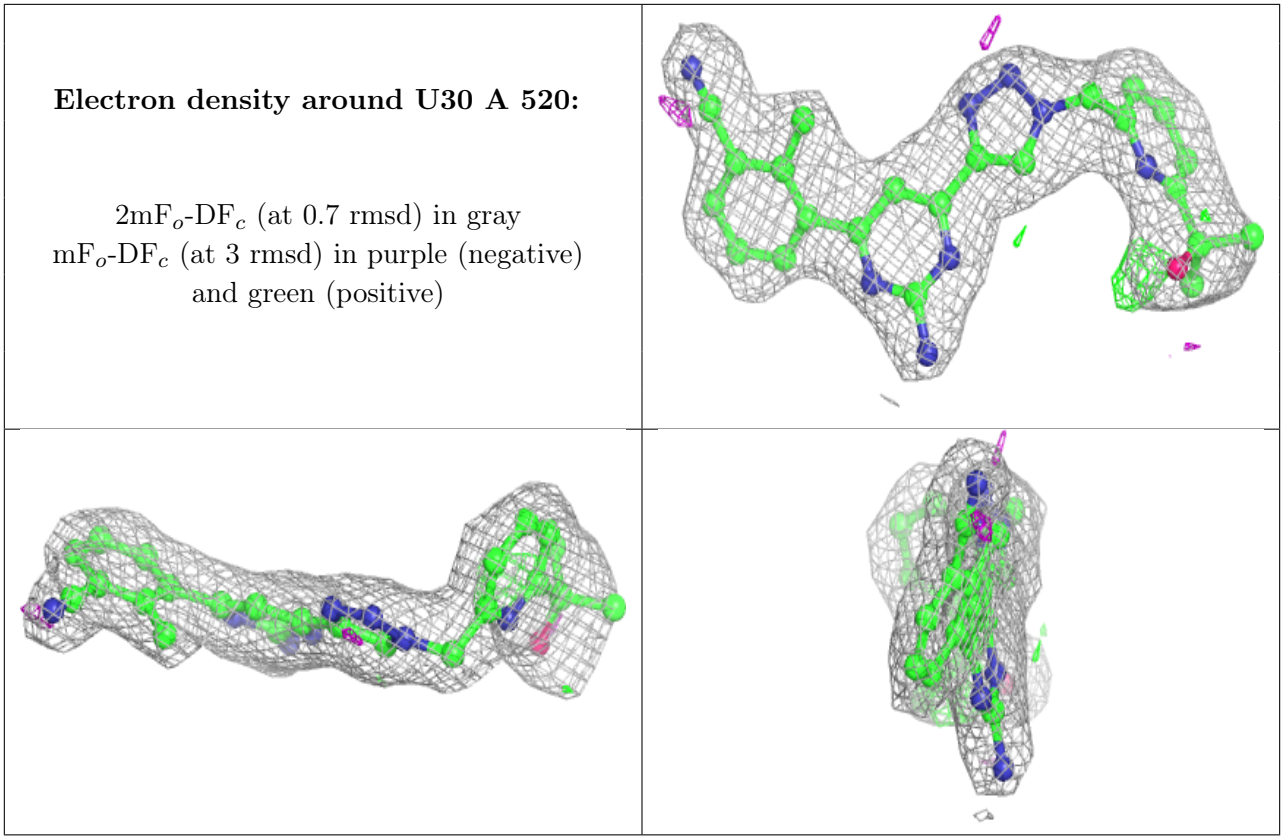






Electron density around U30 A 520:

$2mF_o$-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.