Full wwPDB X-ray Structure Validation Report ⓘ

May 22, 2024 – 01:08 PM EDT

PDB ID	:	8W1F
Title	:	Crystal Structure of DPS-like protein PA4880 from Pseudomonas aeruginosa (dodecamer, Mg bound)
Authors	:	Lovell, S.; Liu, L.; Seibold, S.; Battaile, K.P.; Rivera, M.
Deposited on	:	2024-02-15
Resolution	:	3.00 Å(reported)

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

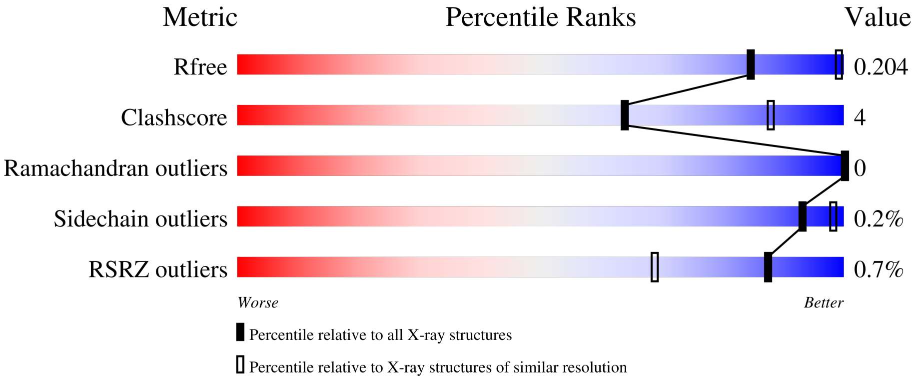
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36.2
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36.2

1 Overall quality at a glance ⓘ

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

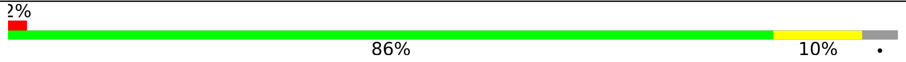
The reported resolution of this entry is 3.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	2092 (3.00-3.00)
Clashscore	141614	2416 (3.00-3.00)
Ramachandran outliers	138981	2333 (3.00-3.00)
Sidechain outliers	138945	2336 (3.00-3.00)
RSRZ outliers	127900	1990 (3.00-3.00)

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	177	
1	B	177	
1	C	177	
1	D	177	
1	E	177	

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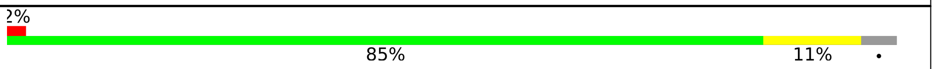
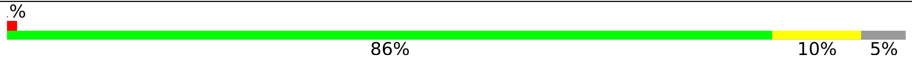
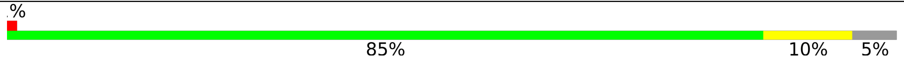
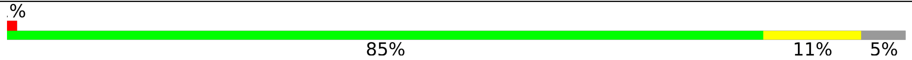
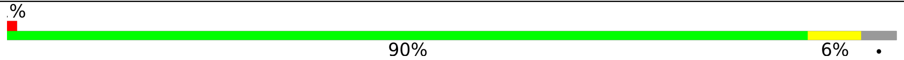
Mol	Chain	Length	Quality of chain
1	F	177	
1	G	177	
1	H	177	
1	I	177	
1	J	177	
1	K	177	
1	L	177	

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	MG	A	203	-	-	-	X
2	MG	E	204	-	-	-	X
2	MG	J	203	-	-	-	X
3	SO4	A	206	-	-	-	X
3	SO4	B	205	-	-	-	X
3	SO4	D	207	-	-	-	X
3	SO4	G	207	-	-	-	X
3	SO4	J	205	-	-	-	X
3	SO4	K	208	-	-	-	X
3	SO4	L	205	-	-	-	X
3	SO4	L	206	-	-	-	X

2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 16448 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 DPS-LIKE PROTEIN.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
1	A	168	Total C N O S 1339 828 237 268 6	0	0	0
1	B	170	Total C N O S 1352 836 240 270 6	0	0	0
1	C	168	Total C N O S 1338 827 237 268 6	0	0	0
1	D	170	Total C N O S 1344 830 238 270 6	0	0	0
1	E	170	Total C N O S 1352 836 240 270 6	0	0	0
1	F	170	Total C N O S 1352 835 240 271 6	0	0	0
1	G	169	Total C N O S 1347 833 239 269 6	0	0	0
1	H	169	Total C N O S 1343 830 238 269 6	0	0	0
1	I	169	Total C N O S 1345 832 238 269 6	0	0	0
1	J	169	Total C N O S 1343 829 238 270 6	0	0	0
1	K	170	Total C N O S 1348 832 239 271 6	0	0	0
1	L	169	Total C N O S 1341 829 237 269 6	0	0	0

- Molecule 2 is MAGNESIUM ION (three-letter code: MG) (formula: Mg) (labeled as "Ligand of Interest" by depositor).

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

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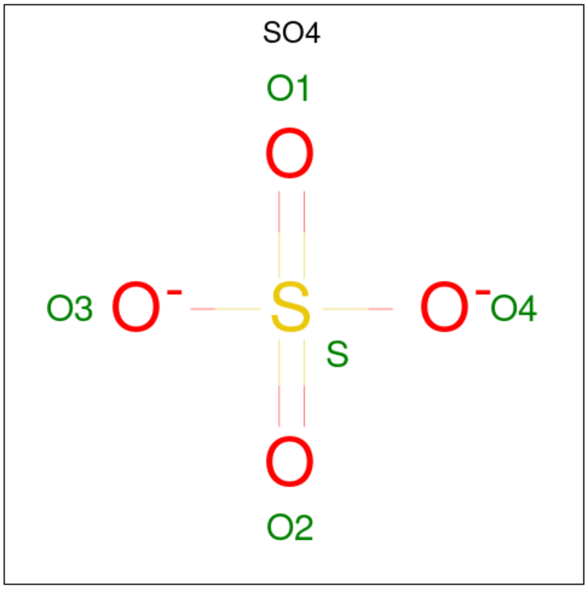
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	C	3	Total Mg 3 3	0	0
2	D	2	Total Mg 2 2	0	0
2	E	4	Total Mg 4 4	0	0
2	F	5	Total Mg 5 5	0	0
2	G	3	Total Mg 3 3	0	0
2	H	3	Total Mg 3 3	0	0
2	I	3	Total Mg 3 3	0	0
2	J	3	Total Mg 3 3	0	0
2	K	3	Total Mg 3 3	0	0
2	L	3	Total Mg 3 3	0	0

- Molecule 3 is SULFATE ION (three-letter code: SO4) (formula: O_4S) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total O S 5 4 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total O S 5 4 1	0	0
3	A	1	Total O S 5 4 1	0	0
3	B	1	Total O S 5 4 1	0	0
3	B	1	Total O S 5 4 1	0	0
3	B	1	Total O S 5 4 1	0	0
3	C	1	Total O S 5 4 1	0	0
3	C	1	Total O S 5 4 1	0	0
3	C	1	Total O S 5 4 1	0	0
3	C	1	Total O S 5 4 1	0	0
3	C	1	Total O S 5 4 1	0	0
3	D	1	Total O S 5 4 1	0	0
3	D	1	Total O S 5 4 1	0	0
3	D	1	Total O S 5 4 1	0	0
3	D	1	Total O S 5 4 1	0	0
3	D	1	Total O S 5 4 1	0	0
3	E	1	Total O S 5 4 1	0	0
3	E	1	Total O S 5 4 1	0	0
3	E	1	Total O S 5 4 1	0	0
3	F	1	Total O S 5 4 1	0	0
3	F	1	Total O S 5 4 1	0	0
3	F	1	Total O S 5 4 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	F	1	Total O S 5 4 1	0	0
3	F	1	Total O S 5 4 1	0	0
3	F	1	Total O S 5 4 1	0	0
3	G	1	Total O S 5 4 1	0	0
3	G	1	Total O S 5 4 1	0	0
3	G	1	Total O S 5 4 1	0	0
3	G	1	Total O S 5 4 1	0	0
3	H	1	Total O S 5 4 1	0	0
3	I	1	Total O S 5 4 1	0	0
3	I	1	Total O S 5 4 1	0	0
3	I	1	Total O S 5 4 1	0	0
3	J	1	Total O S 5 4 1	0	0
3	J	1	Total O S 5 4 1	0	0
3	J	1	Total O S 5 4 1	0	0
3	K	1	Total O S 5 4 1	0	0
3	K	1	Total O S 5 4 1	0	0
3	K	1	Total O S 5 4 1	0	0
3	K	1	Total O S 5 4 1	0	0
3	K	1	Total O S 5 4 1	0	0
3	L	1	Total O S 5 4 1	0	0
3	L	1	Total O S 5 4 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	L	1	Total O S 5 4 1	0	0

- Molecule 4 is FE (II) ION (three-letter code: FE2) (formula: Fe) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	2	Total Fe 2 2	0	0
4	B	2	Total Fe 2 2	0	0
4	C	2	Total Fe 2 2	0	0
4	D	2	Total Fe 2 2	0	0
4	E	2	Total Fe 2 2	0	0
4	F	2	Total Fe 2 2	0	0
4	G	2	Total Fe 2 2	0	0
4	H	2	Total Fe 2 2	0	0
4	I	2	Total Fe 2 2	0	0
4	J	2	Total Fe 2 2	0	0
4	K	2	Total Fe 2 2	0	0
4	L	2	Total Fe 2 2	0	0

- Molecule 5 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	1	Total O 1 1	0	0
5	B	2	Total O 2 2	0	0
5	C	3	Total O 3 3	0	0
5	D	4	Total O 4 4	0	0

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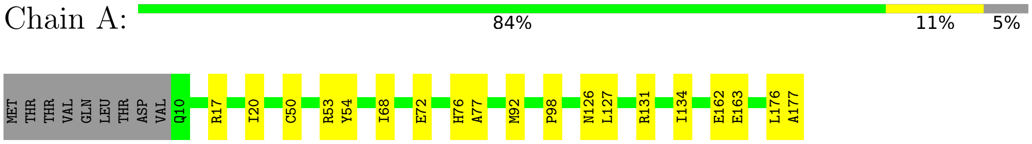
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	E	1	Total O 1 1	0	0
5	F	2	Total O 2 2	0	0
5	G	2	Total O 2 2	0	0
5	H	2	Total O 2 2	0	0
5	J	1	Total O 1 1	0	0
5	K	2	Total O 2 2	0	0
5	L	3	Total O 3 3	0	0

3 Residue-property plots ⓘ

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

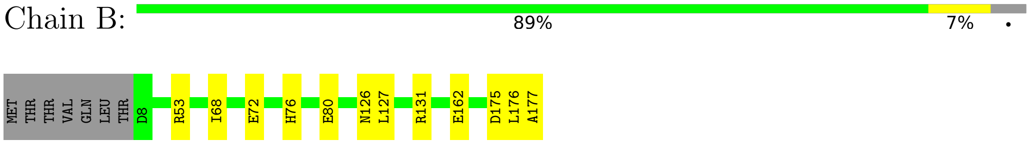
- Molecule 1: DPS-LIKE PROTEIN

Chain A:



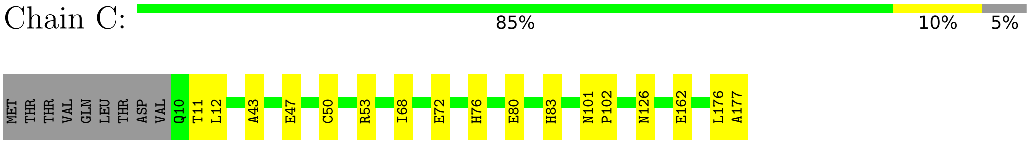
- Molecule 1: DPS-LIKE PROTEIN

Chain B:



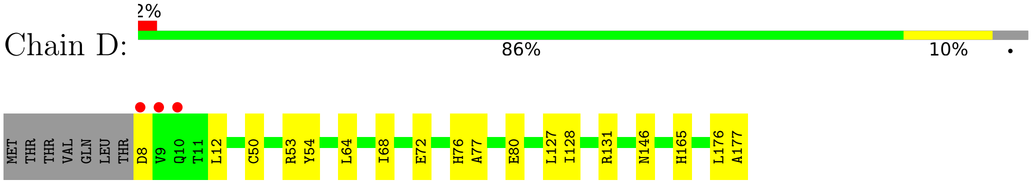
- Molecule 1: DPS-LIKE PROTEIN

Chain C:



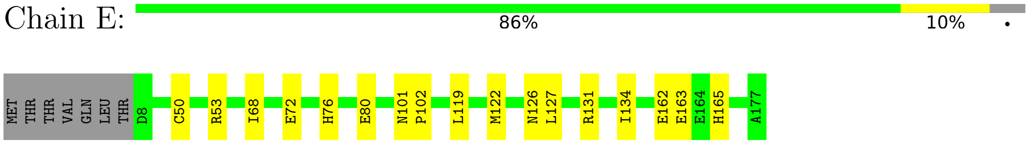
- Molecule 1: DPS-LIKE PROTEIN

Chain D:



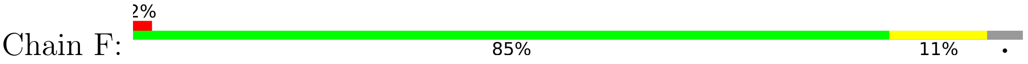
- Molecule 1: DPS-LIKE PROTEIN

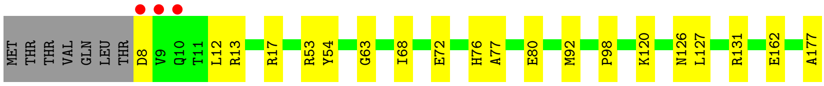
Chain E:



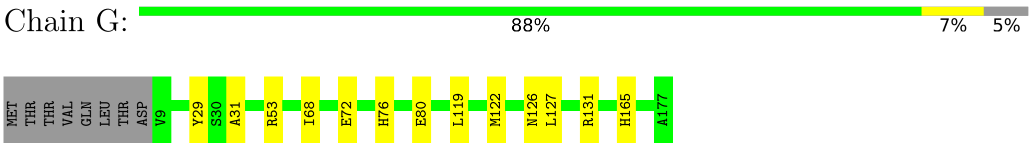
- Molecule 1: DPS-LIKE PROTEIN

Chain F:

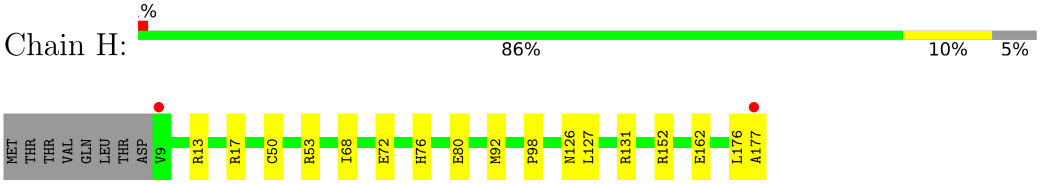




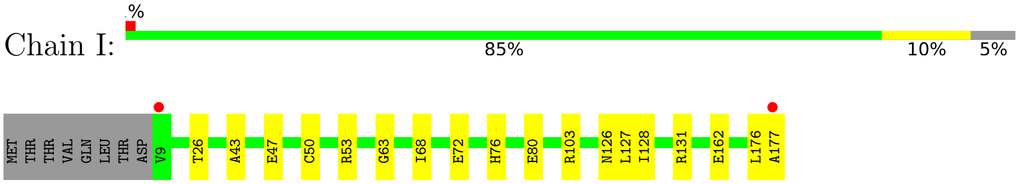
- Molecule 1: DPS-LIKE PROTEIN



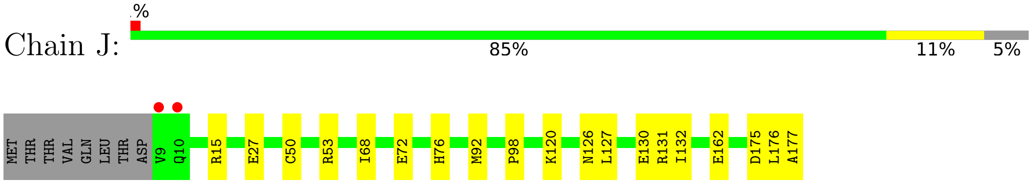
- Molecule 1: DPS-LIKE PROTEIN



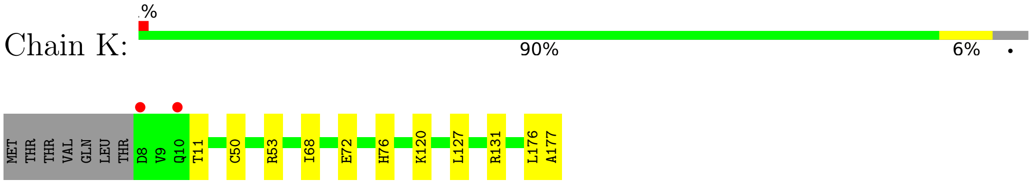
- Molecule 1: DPS-LIKE PROTEIN



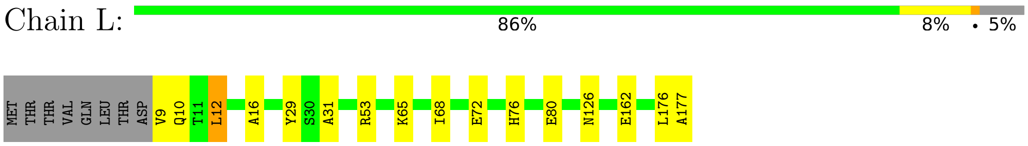
- Molecule 1: DPS-LIKE PROTEIN



- Molecule 1: DPS-LIKE PROTEIN



- Molecule 1: DPS-LIKE PROTEIN



4 Data and refinement statistics ⓘ

Property	**Value**	**Source**
Space group	P 43 21 2	Depositor
Cell constants a, b, c, α, β, γ	215.79Å 215.79Å 277.54Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	31.27 – 3.00 49.94 – 3.00	Depositor EDS
% Data completeness (in resolution range)	100.0 (31.27-3.00) 100.0 (49.94-3.00)	Depositor EDS
R_{merge}	0.20	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.04 (at 3.01Å)	Xtriage
Refinement program	PHENIX (1.21rc1_5156: ???)	Depositor
R, R_{free}	0.179 , 0.204 0.183 , 0.204	Depositor DCC
R_{free} test set	6583 reflections (5.04%)	wwPDB-VP
Wilson B-factor (Å^2)	72.0	Xtriage
Anisotropy	0.255	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.37 , 50.2	EDS
L-test for twinning[2]	$< \|L\| > = 0.51$, $< L^2 > = 0.34$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.95	EDS
Total number of atoms	16448	wwPDB-VP
Average B, all atoms (Å^2)	68.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.32% of the height of the origin peak. No significant pseudotranslation is detected.*

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[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: SO4, FE2, MG

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	0.50	0/1357	0.64	0/1830
1	B	0.45	0/1370	0.62	0/1847
1	C	0.43	0/1356	0.62	0/1829
1	D	0.43	0/1362	0.61	0/1839
1	E	0.45	0/1370	0.63	0/1847
1	F	0.47	0/1370	0.62	0/1848
1	G	0.44	0/1365	0.61	0/1840
1	H	0.44	0/1361	0.64	0/1836
1	I	0.44	0/1363	0.60	0/1839
1	J	0.44	0/1361	0.61	0/1837
1	K	0.45	0/1366	0.61	0/1844
1	L	0.43	0/1359	0.61	0/1835
All	All	0.45	0/16360	0.62	0/22071

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	1339	0	1288	13	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	B	1352	0	1301	11	0
1	C	1338	0	1286	14	0
1	D	1344	0	1279	14	0
1	E	1352	0	1301	14	0
1	F	1352	0	1296	14	0
1	G	1347	0	1299	8	0
1	H	1343	0	1288	15	0
1	I	1345	0	1295	14	0
1	J	1343	0	1283	17	0
1	K	1348	0	1285	8	0
1	L	1341	0	1284	14	0
2	A	3	0	0	0	0
2	B	2	0	0	0	0
2	C	3	0	0	0	0
2	D	2	0	0	0	0
2	E	4	0	0	0	0
2	F	5	0	0	0	0
2	G	3	0	0	0	0
2	H	3	0	0	0	0
2	I	3	0	0	0	0
2	J	3	0	0	0	0
2	K	3	0	0	0	0
2	L	3	0	0	0	0
3	A	15	0	0	0	0
3	B	15	0	0	0	0
3	C	25	0	0	1	0
3	D	25	0	0	0	0
3	E	15	0	0	0	0
3	F	30	0	0	0	0
3	G	20	0	0	0	0
3	H	5	0	0	0	0
3	I	15	0	0	0	0
3	J	15	0	0	0	0
3	K	25	0	0	0	0
3	L	15	0	0	0	0
4	A	2	0	0	0	0
4	B	2	0	0	0	0
4	C	2	0	0	0	0
4	D	2	0	0	0	0
4	E	2	0	0	0	0
4	F	2	0	0	0	0
4	G	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	H	2	0	0	0	0
4	I	2	0	0	0	0
4	J	2	0	0	0	0
4	K	2	0	0	0	0
4	L	2	0	0	0	0
5	A	1	0	0	0	0
5	B	2	0	0	0	0
5	C	3	0	0	0	0
5	D	4	0	0	1	0
5	E	1	0	0	0	0
5	F	2	0	0	0	0
5	G	2	0	0	0	0
5	H	2	0	0	0	0
5	J	1	0	0	0	0
5	K	2	0	0	0	0
5	L	3	0	0	0	0
All	All	16448	0	15485	135	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 (135) 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)
1:B:68:ILE:HD11	1:H:68:ILE:HD11	1.56	0.86
1:A:68:ILE:HD11	1:I:68:ILE:HD11	1.66	0.77
1:C:68:ILE:HD11	1:K:68:ILE:HD11	1.70	0.73
1:F:72:GLU:OE1	1:F:76:HIS:NE2	2.23	0.71
1:D:68:ILE:HD11	1:L:68:ILE:HD11	1.73	0.70
1:C:72:GLU:OE1	1:C:76:HIS:NE2	2.25	0.70
1:E:68:ILE:HD11	1:L:68:ILE:HD11	1.74	0.70
1:F:68:ILE:HD11	1:H:68:ILE:HD11	1.75	0.69
1:C:68:ILE:HD11	1:G:68:ILE:HD11	1.75	0.68
1:D:68:ILE:HD11	1:E:68:ILE:HD11	1.77	0.66
1:K:72:GLU:OE1	1:K:76:HIS:NE2	2.28	0.66
1:F:8:ASP:O	1:F:12:LEU:HD23	1.96	0.66
1:A:53:ARG:NH1	1:A:126:ASN:OD1	2.28	0.66
1:D:72:GLU:OE1	1:D:76:HIS:NE2	2.29	0.66
1:G:68:ILE:HD11	1:K:68:ILE:HD11	1.79	0.65
1:D:176:LEU:O	1:D:177:ALA:HB2	1.97	0.64
1:I:72:GLU:OE1	1:I:76:HIS:NE2	2.30	0.64

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Atom-1	**Atom-2**	**Interatomic distance (Å)**	**Clash overlap (Å)**
1:L:72:GLU:OE1	1:L:76:HIS:NE2	2.30	0.64
1:J:72:GLU:OE1	1:J:76:HIS:NE2	2.30	0.64
1:L:9:VAL:HG12	1:L:10:GLN:H	1.63	0.64
1:A:72:GLU:OE1	1:A:76:HIS:NE2	2.31	0.63
1:G:72:GLU:OE1	1:G:76:HIS:NE2	2.32	0.62
1:I:68:ILE:HD11	1:J:68:ILE:HD11	1.82	0.61
1:B:72:GLU:OE1	1:B:76:HIS:NE2	2.33	0.61
1:A:50:CYS:SG	1:A:53:ARG:NH2	2.74	0.60
1:E:80:GLU:OE2	1:E:165:HIS:CE1	2.53	0.60
1:K:176:LEU:O	1:K:177:ALA:HB2	2.01	0.60
1:C:47:GLU:OE1	1:C:83:HIS:HB2	2.03	0.59
1:D:8:ASP:O	1:D:12:LEU:HD13	2.03	0.59
1:B:68:ILE:HD11	1:H:68:ILE:CD1	2.33	0.58
1:L:176:LEU:O	1:L:177:ALA:HB2	2.03	0.58
1:A:176:LEU:O	1:A:177:ALA:HB2	2.04	0.57
1:H:176:LEU:O	1:H:177:ALA:HB2	2.04	0.57
1:L:176:LEU:O	1:L:177:ALA:CB	2.51	0.57
1:L:162:GLU:HA	1:L:162:GLU:OE1	2.05	0.57
1:D:176:LEU:O	1:D:177:ALA:CB	2.52	0.56
1:B:176:LEU:O	1:B:177:ALA:CB	2.53	0.56
1:A:162:GLU:OE1	1:A:162:GLU:HA	2.06	0.55
1:B:68:ILE:HD11	1:F:68:ILE:HD11	1.89	0.55
1:A:68:ILE:HD11	1:J:68:ILE:HD11	1.89	0.55
1:B:176:LEU:O	1:B:177:ALA:HB2	2.06	0.55
1:C:176:LEU:O	1:C:177:ALA:HB2	2.06	0.55
1:K:176:LEU:O	1:K:177:ALA:CB	2.55	0.54
1:I:50:CYS:SG	1:I:53:ARG:NH2	2.80	0.54
1:H:176:LEU:O	1:H:177:ALA:CB	2.56	0.54
1:J:176:LEU:O	1:J:177:ALA:HB2	2.07	0.54
1:L:53:ARG:NH1	1:L:126:ASN:OD1	2.39	0.54
1:E:50:CYS:SG	1:E:53:ARG:NH2	2.80	0.53
1:G:80:GLU:OE2	1:G:165:HIS:CE1	2.61	0.53
1:E:80:GLU:OE2	1:E:165:HIS:HE1	1.92	0.53
1:I:53:ARG:NH1	1:I:126:ASN:OD1	2.35	0.52
1:I:176:LEU:O	1:I:177:ALA:CB	2.57	0.52
1:E:162:GLU:HA	1:E:162:GLU:OE1	2.09	0.52
1:E:53:ARG:NH1	1:E:126:ASN:OD1	2.38	0.52
1:I:176:LEU:O	1:I:177:ALA:HB2	2.09	0.52
1:A:176:LEU:O	1:A:177:ALA:CB	2.57	0.52
1:B:53:ARG:NH1	1:B:126:ASN:OD1	2.41	0.52
1:J:176:LEU:O	1:J:177:ALA:CB	2.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:53:ARG:NH1	1:H:126:ASN:OD1	2.40	0.52
1:H:72:GLU:OE1	1:H:76:HIS:NE2	2.44	0.51
1:K:50:CYS:SG	1:K:53:ARG:NH2	2.84	0.51
1:J:120:LYS:HA	1:J:176:LEU:HD13	1.93	0.51
1:F:53:ARG:NH1	1:F:126:ASN:OD1	2.42	0.51
1:I:162:GLU:HA	1:I:162:GLU:OE1	2.10	0.51
1:C:176:LEU:O	1:C:177:ALA:CB	2.58	0.50
1:G:53:ARG:NH1	1:G:126:ASN:OD1	2.39	0.50
1:D:54:TYR:HB3	1:D:77:ALA:HB2	1.94	0.50
1:J:132:ILE:HG23	1:L:12:LEU:HD22	1.93	0.50
1:D:80:GLU:OE2	1:D:165:HIS:CE1	2.64	0.50
1:L:76:HIS:O	1:L:80:GLU:HG2	2.12	0.50
1:F:13:ARG:O	1:F:17:ARG:HG2	2.12	0.49
1:B:175:ASP:OD2	1:F:63:GLY:HA3	2.13	0.49
1:C:11:THR:HG23	1:C:12:LEU:HD22	1.95	0.49
1:D:128:ILE:CD1	1:H:17:ARG:HD2	2.43	0.49
1:C:47:GLU:OE1	1:C:83:HIS:CB	2.60	0.48
1:H:50:CYS:SG	1:H:53:ARG:NH2	2.85	0.48
1:C:50:CYS:SG	1:C:53:ARG:NH2	2.86	0.48
1:K:127:LEU:O	1:K:131:ARG:HG3	2.14	0.47
5:D:303:HOH:O	1:H:152:ARG:HD3	2.13	0.47
1:J:162:GLU:HA	1:J:162:GLU:OE1	2.14	0.47
1:G:127:LEU:O	1:G:131:ARG:HG3	2.15	0.47
1:C:162:GLU:HA	1:C:162:GLU:OE1	2.14	0.46
1:F:120:LYS:HD2	1:F:177:ALA:HB2	1.97	0.46
1:H:162:GLU:HA	1:H:162:GLU:OE1	2.16	0.46
1:L:9:VAL:HG12	1:L:10:GLN:N	2.29	0.46
1:D:76:HIS:O	1:D:80:GLU:HG2	2.16	0.46
1:F:162:GLU:HA	1:F:162:GLU:OE1	2.15	0.46
1:E:119:LEU:HA	1:E:122:MET:HE2	1.98	0.46
1:H:13:ARG:O	1:H:17:ARG:HG2	2.16	0.46
1:A:127:LEU:O	1:A:131:ARG:HG3	2.16	0.45
1:A:54:TYR:HB3	1:A:77:ALA:HB2	1.98	0.45
1:B:162:GLU:HA	1:B:162:GLU:OE1	2.16	0.45
1:D:50:CYS:SG	1:D:53:ARG:NH2	2.88	0.45
1:H:127:LEU:O	1:H:131:ARG:HG3	2.17	0.45
1:C:43:ALA:O	1:C:47:GLU:HG2	2.17	0.45
1:J:126:ASN:O	1:J:130:GLU:HG2	2.16	0.45
1:F:127:LEU:O	1:F:131:ARG:HG3	2.16	0.45
1:I:127:LEU:O	1:I:131:ARG:HG3	2.17	0.45
1:J:131:ARG:NH1	1:L:16:ALA:O	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:127:LEU:O	1:J:131:ARG:HG3	2.18	0.44
1:D:127:LEU:O	1:D:131:ARG:HG3	2.16	0.44
1:J:53:ARG:NH1	1:J:126:ASN:OD1	2.45	0.43
1:H:76:HIS:O	1:H:80:GLU:HG2	2.18	0.43
1:E:127:LEU:O	1:E:131:ARG:HG3	2.18	0.43
1:F:54:TYR:HB3	1:F:77:ALA:HB2	2.01	0.43
1:H:92:MET:SD	1:H:98:PRO:HD3	2.58	0.43
1:C:53:ARG:NH1	1:C:126:ASN:OD1	2.44	0.43
1:J:50:CYS:SG	1:J:53:ARG:NH2	2.91	0.43
1:D:64:LEU:HD13	1:L:65:LYS:HG2	2.01	0.42
1:A:20:ILE:HD13	1:A:20:ILE:HG21	1.86	0.42
1:B:76:HIS:O	1:B:80:GLU:HG2	2.18	0.42
1:A:92:MET:SD	1:A:98:PRO:HD3	2.59	0.42
1:B:127:LEU:O	1:B:131:ARG:HG3	2.20	0.42
1:C:76:HIS:O	1:C:80:GLU:HG2	2.20	0.42
1:E:131:ARG:NH2	1:I:26:THR:HA	2.34	0.42
1:E:101:ASN:OD1	1:E:102:PRO:HD2	2.19	0.42
3:C:204:SO4:O2	1:D:146:ASN:ND2	2.44	0.42
1:F:17:ARG:HD2	1:I:128:ILE:CD1	2.50	0.42
1:E:72:GLU:OE1	1:E:76:HIS:NE2	2.52	0.42
1:F:76:HIS:O	1:F:80:GLU:HG2	2.20	0.42
1:E:76:HIS:O	1:E:80:GLU:HG2	2.20	0.41
1:F:92:MET:SD	1:F:98:PRO:HD3	2.60	0.41
1:J:120:LYS:NZ	1:J:177:ALA:HB3	2.35	0.41
1:C:101:ASN:OD1	1:C:102:PRO:HD2	2.21	0.41
1:I:76:HIS:O	1:I:80:GLU:HG2	2.21	0.41
1:J:15:ARG:HE	1:J:27:GLU:HB3	1.84	0.41
1:G:29:TYR:CE2	1:G:31:ALA:HB3	2.56	0.41
1:I:63:GLY:HA3	1:J:175:ASP:OD2	2.21	0.41
1:K:120:LYS:HA	1:K:176:LEU:HD13	2.03	0.41
1:L:29:TYR:CE2	1:L:31:ALA:HB3	2.56	0.41
1:A:134:ILE:HD11	1:A:163:GLU:HA	2.02	0.41
1:G:119:LEU:HA	1:G:122:MET:HE2	2.03	0.41
1:I:43:ALA:O	1:I:47:GLU:HG2	2.22	0.40
1:E:134:ILE:HD11	1:E:163:GLU:HA	2.03	0.40
1:J:92:MET:SD	1:J:98:PRO:HD3	2.61	0.40

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	166/177 (94%)	164 (99%)	2 (1%)	0	100	100
1	B	168/177 (95%)	167 (99%)	1 (1%)	0	100	100
1	C	166/177 (94%)	165 (99%)	1 (1%)	0	100	100
1	D	168/177 (95%)	166 (99%)	2 (1%)	0	100	100
1	E	168/177 (95%)	166 (99%)	2 (1%)	0	100	100
1	F	168/177 (95%)	166 (99%)	2 (1%)	0	100	100
1	G	167/177 (94%)	165 (99%)	2 (1%)	0	100	100
1	H	167/177 (94%)	165 (99%)	2 (1%)	0	100	100
1	I	167/177 (94%)	166 (99%)	1 (1%)	0	100	100
1	J	167/177 (94%)	165 (99%)	2 (1%)	0	100	100
1	K	168/177 (95%)	166 (99%)	2 (1%)	0	100	100
1	L	167/177 (94%)	165 (99%)	2 (1%)	0	100	100
All	All	2007/2124 (94%)	1986 (99%)	21 (1%)	0	100	100

There are no Ramachandran outliers to report.

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	137/149 (92%)	136 (99%)	1 (1%)	84	94
1	B	138/149 (93%)	138 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	C	137/149 (92%)	137 (100%)	0	100	100
1	D	136/149 (91%)	136 (100%)	0	100	100
1	E	138/149 (93%)	138 (100%)	0	100	100
1	F	138/149 (93%)	138 (100%)	0	100	100
1	G	138/149 (93%)	138 (100%)	0	100	100
1	H	137/149 (92%)	137 (100%)	0	100	100
1	I	138/149 (93%)	137 (99%)	1 (1%)	84	94
1	J	137/149 (92%)	137 (100%)	0	100	100
1	K	137/149 (92%)	136 (99%)	1 (1%)	84	94
1	L	137/149 (92%)	136 (99%)	1 (1%)	84	94
All	All	1648/1788 (92%)	1644 (100%)	4 (0%)	93	98

All (4) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	17	ARG
1	I	103	ARG
1	K	11	THR
1	L	12	LEU

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

Mol	Chain	Res	Type
1	H	21	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 ⓘ

There are no monosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 105 ligands modelled in this entry, 61 are monoatomic - leaving 44 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	$\#\|Z\|>2$
3	SO4	B	204	-	4,4,4	0.75	0	6,6,6	0.43	0
3	SO4	D	204	-	4,4,4	0.74	0	6,6,6	0.21	0
3	SO4	K	206	-	4,4,4	0.69	0	6,6,6	0.24	0
3	SO4	B	205	-	4,4,4	0.78	0	6,6,6	0.32	0
3	SO4	F	208	-	4,4,4	0.76	0	6,6,6	0.35	0
3	SO4	J	206	-	4,4,4	0.72	0	6,6,6	0.18	0
3	SO4	K	205	-	4,4,4	0.79	0	6,6,6	0.21	0
3	SO4	K	207	-	4,4,4	0.68	0	6,6,6	0.31	0
3	SO4	F	206	-	4,4,4	0.77	0	6,6,6	0.25	0
3	SO4	C	207	-	4,4,4	0.81	0	6,6,6	0.24	0
3	SO4	G	204	-	4,4,4	0.72	0	6,6,6	0.22	0
3	SO4	D	207	-	4,4,4	0.75	0	6,6,6	0.28	0
3	SO4	A	204	-	4,4,4	0.75	0	6,6,6	0.29	0
3	SO4	J	205	-	4,4,4	0.74	0	6,6,6	0.32	0
3	SO4	K	204	-	4,4,4	0.71	0	6,6,6	0.19	0
3	SO4	C	204	-	4,4,4	0.72	0	6,6,6	0.16	0
3	SO4	D	206	-	4,4,4	0.71	0	6,6,6	0.24	0
3	SO4	H	204	-	4,4,4	0.74	0	6,6,6	0.24	0
3	SO4	J	204	-	4,4,4	0.85	0	6,6,6	0.27	0
3	SO4	L	206	-	4,4,4	0.80	0	6,6,6	0.20	0
3	SO4	C	205	-	4,4,4	0.75	0	6,6,6	0.24	0
3	SO4	E	206	-	4,4,4	0.84	0	6,6,6	0.22	0
3	SO4	A	206	-	4,4,4	0.79	0	6,6,6	0.39	0
3	SO4	L	204	-	4,4,4	0.68	0	6,6,6	0.29	0
3	SO4	I	205	-	4,4,4	0.67	0	6,6,6	0.29	0
3	SO4	F	207	-	4,4,4	0.72	0	6,6,6	0.31	0
3	SO4	I	204	-	4,4,4	0.72	0	6,6,6	0.28	0
3	SO4	D	203	-	4,4,4	0.81	0	6,6,6	0.30	0
3	SO4	K	208	-	4,4,4	0.77	0	6,6,6	0.20	0
3	SO4	F	210	-	4,4,4	0.72	0	6,6,6	0.26	0
3	SO4	F	211	-	4,4,4	0.82	0	6,6,6	0.26	0
3	SO4	G	205	-	4,4,4	0.73	0	6,6,6	0.28	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	#|Z| > 2	Counts	RMSZ	#|Z| > 2
3	SO4	A	205	-	4,4,4	0.88	0	6,6,6	0.36	0
3	SO4	F	209	-	4,4,4	0.70	0	6,6,6	0.20	0
3	SO4	G	207	-	4,4,4	0.80	0	6,6,6	0.32	0
3	SO4	E	207	-	4,4,4	0.81	0	6,6,6	0.16	0
3	SO4	G	206	-	4,4,4	0.81	0	6,6,6	0.19	0
3	SO4	I	206	-	4,4,4	0.75	0	6,6,6	0.34	0
3	SO4	C	208	-	4,4,4	0.80	0	6,6,6	0.38	0
3	SO4	B	203	-	4,4,4	0.74	0	6,6,6	0.19	0
3	SO4	C	206	-	4,4,4	0.75	0	6,6,6	0.33	0
3	SO4	D	205	-	4,4,4	0.78	0	6,6,6	0.39	0
3	SO4	E	205	-	4,4,4	0.64	0	6,6,6	0.41	0
3	SO4	L	205	-	4,4,4	0.73	0	6,6,6	0.31	0

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

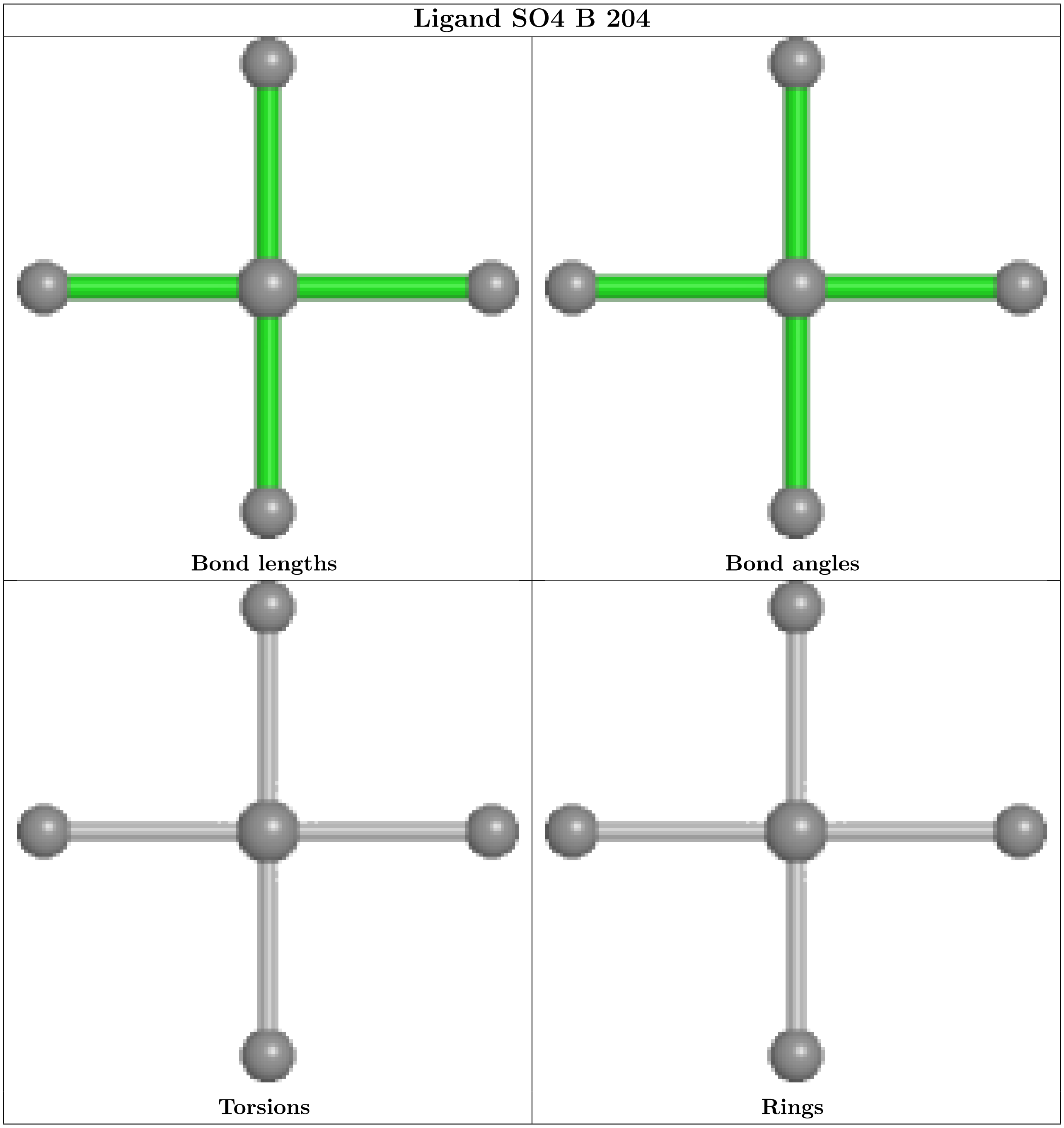
There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	C	204	SO4	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 SO4 B 204



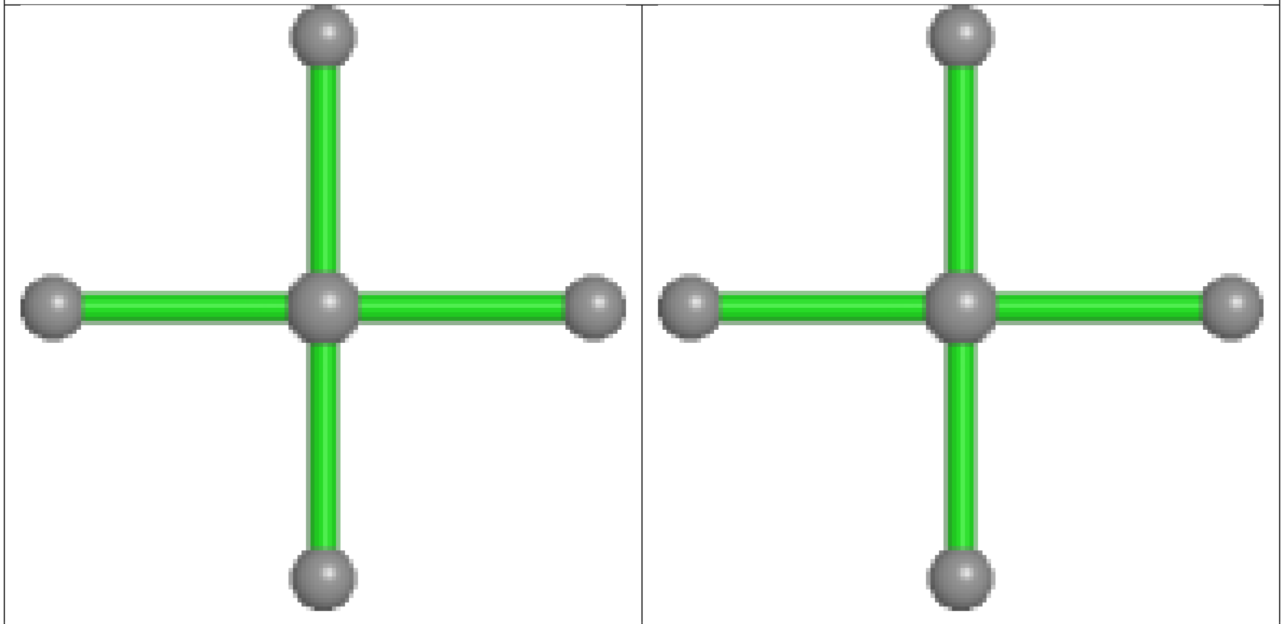
Bond lengths

Bond angles

Torsions

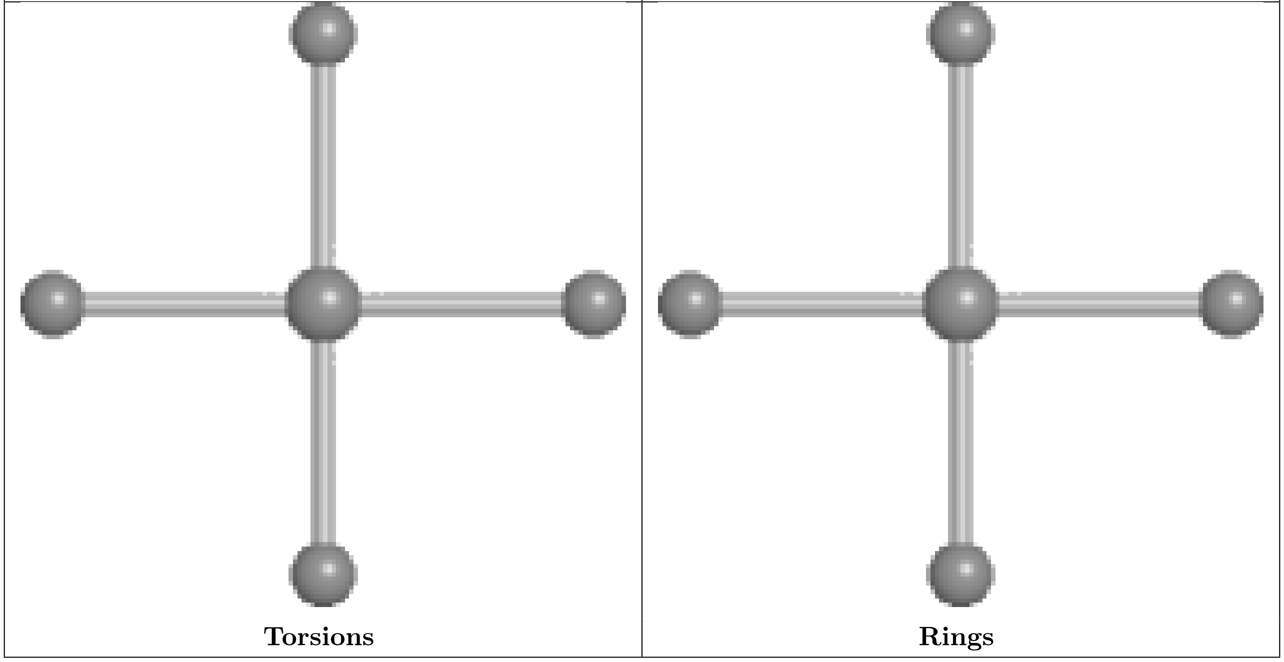
Rings

Ligand SO4 D 204



Bond lengths

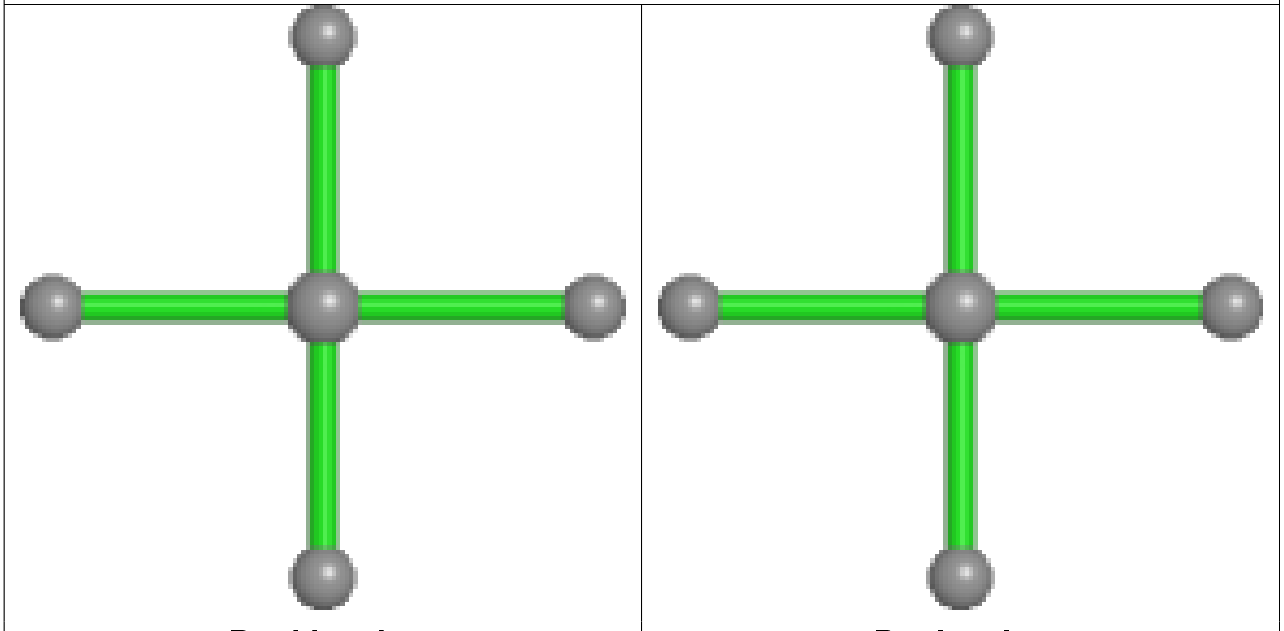
Bond angles



Torsions

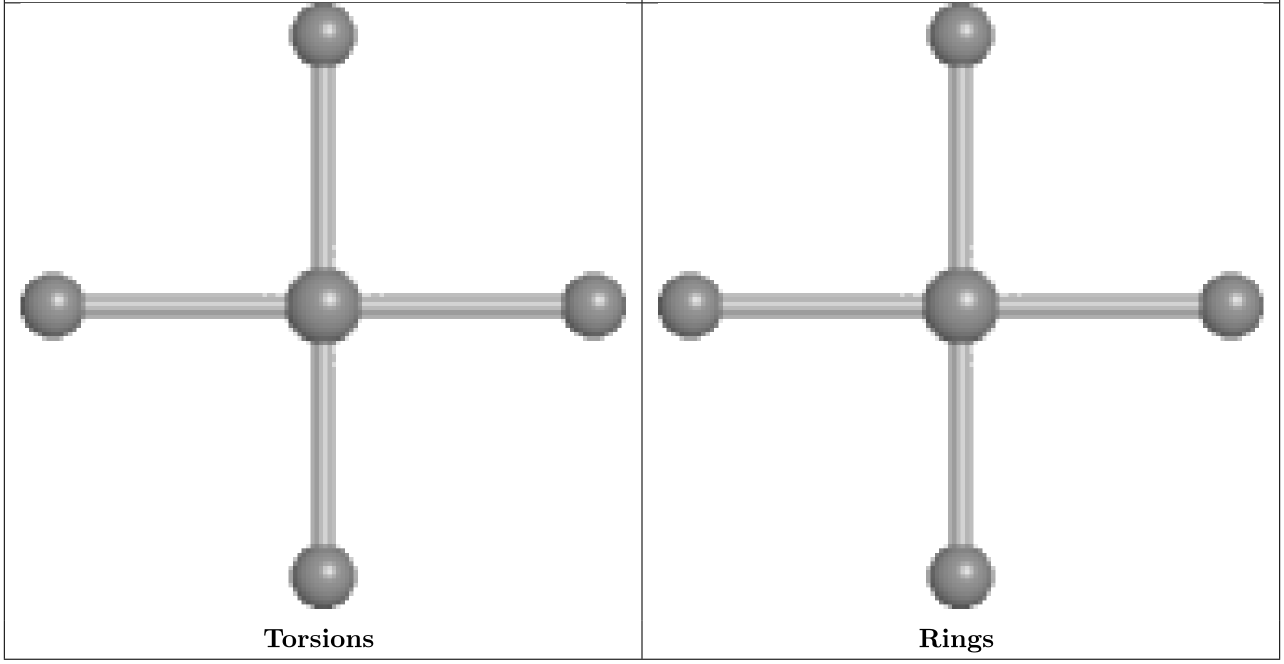
Rings

Ligand SO4 K 206



Bond lengths

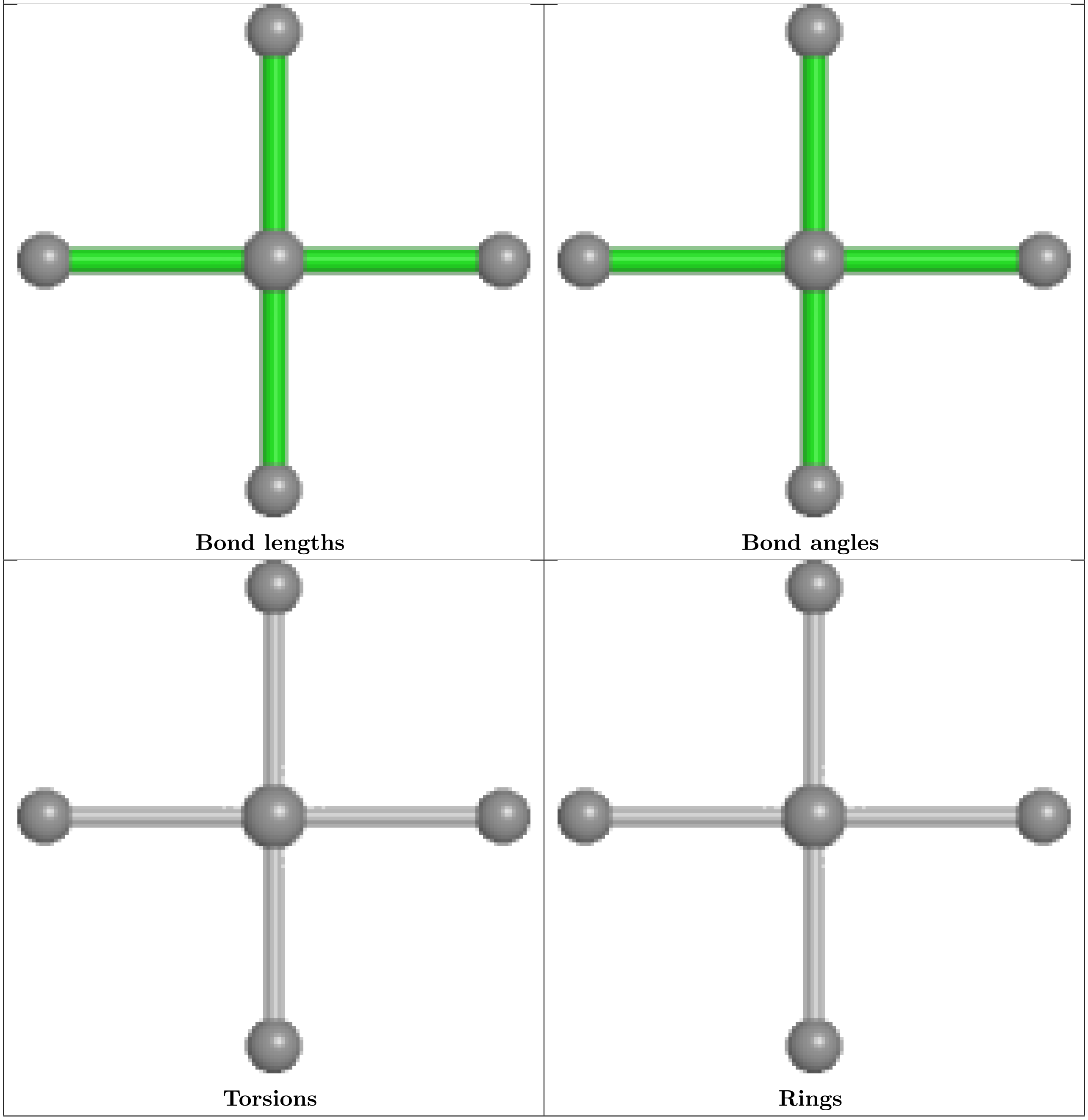
Bond angles



Torsions

Rings

Ligand SO4 B 205



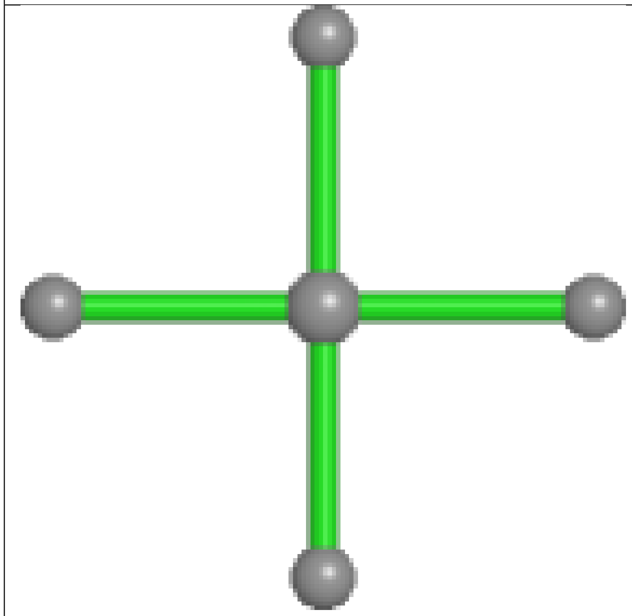
Bond lengths

Bond angles

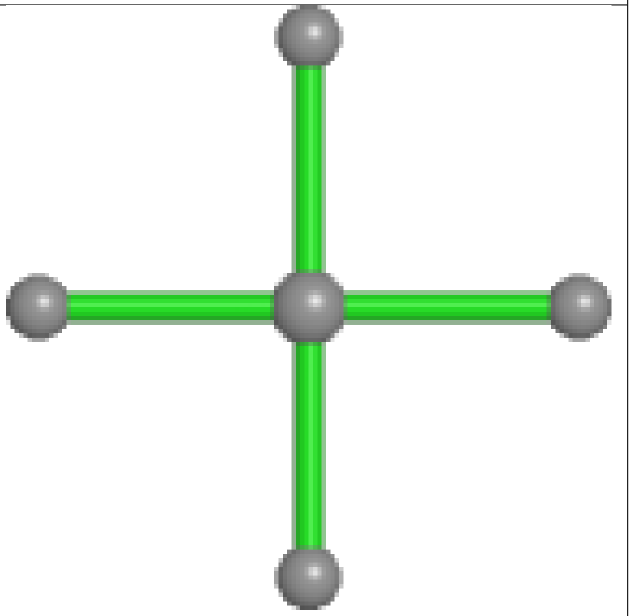
Torsions

Rings

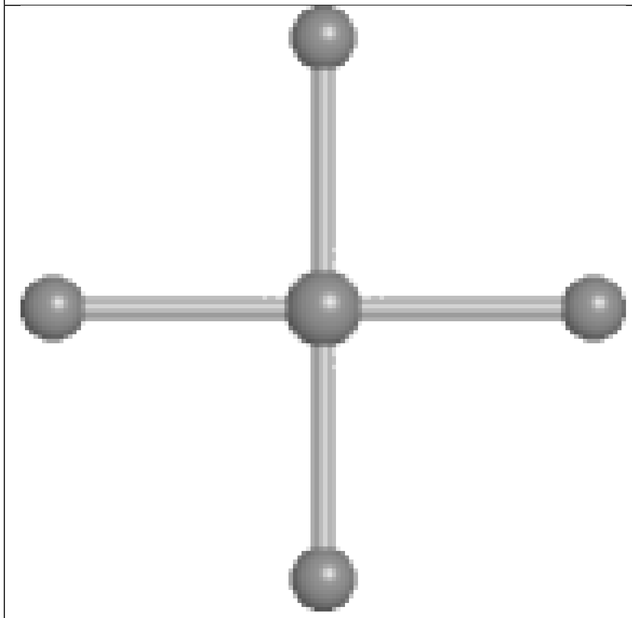
Ligand SO4 F 208



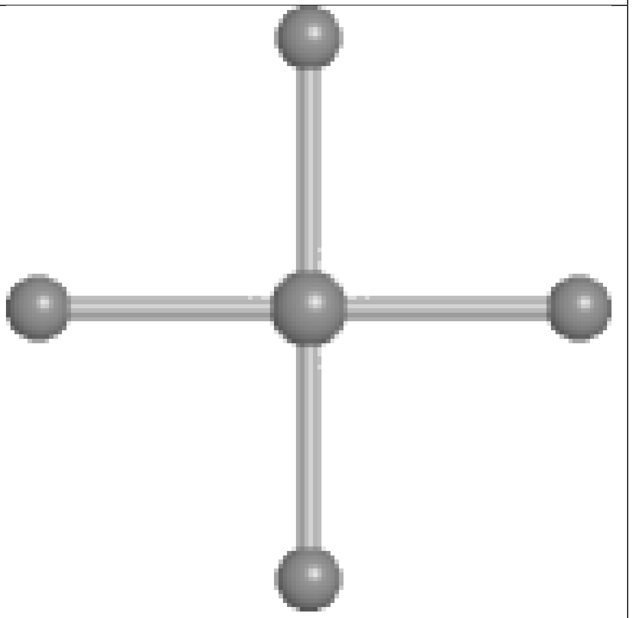
Bond lengths



Bond angles

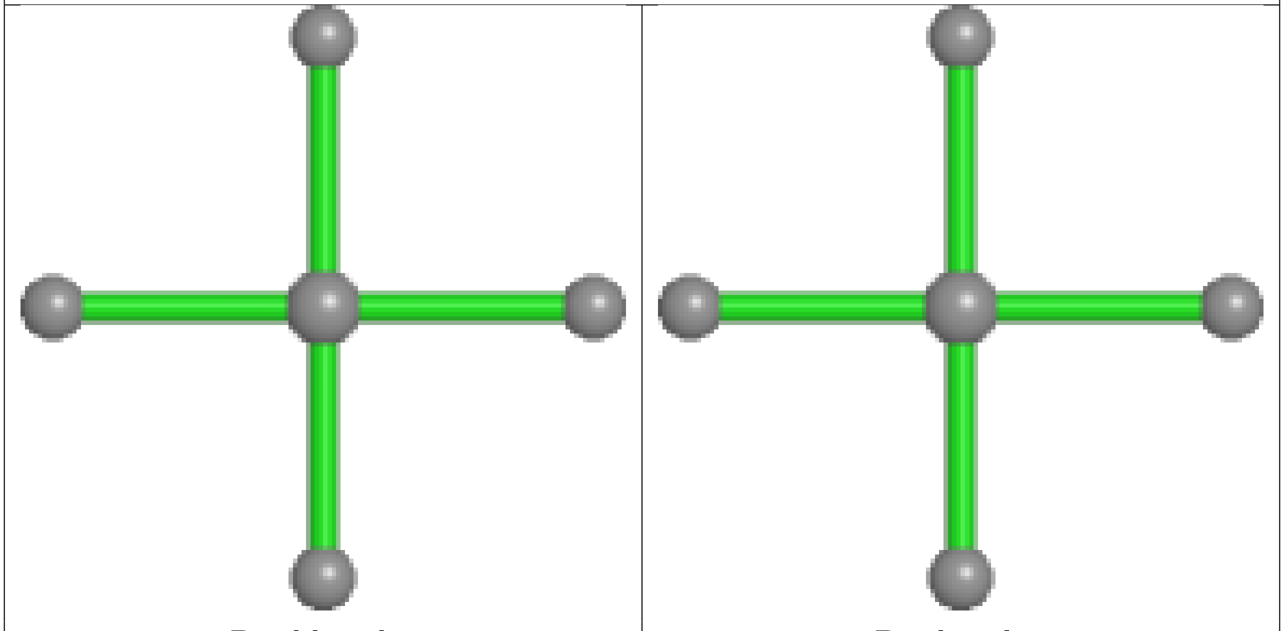


Torsions

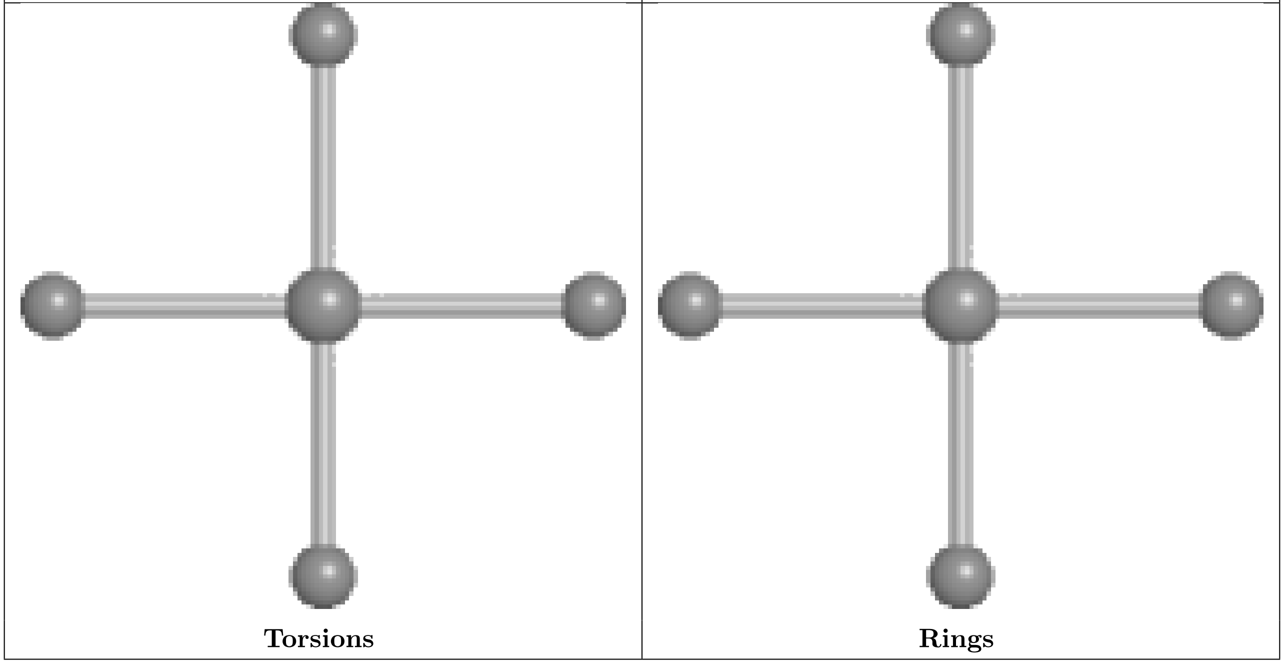


Rings

Ligand SO4 J 206

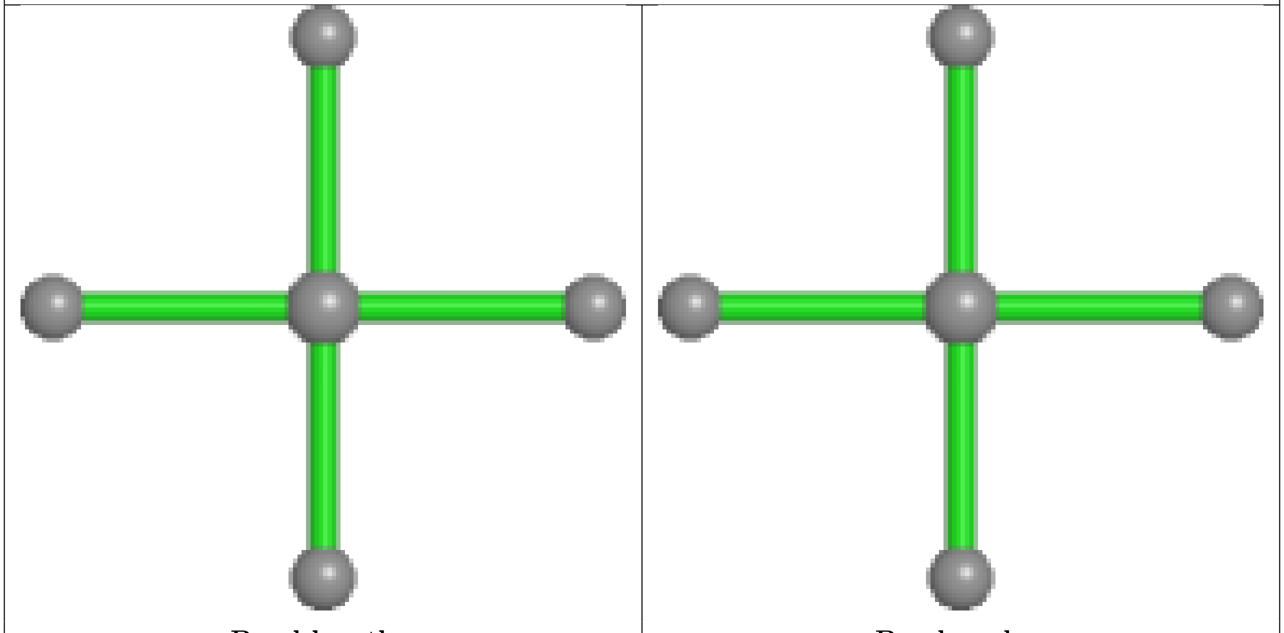


Bond lengths Bond angles



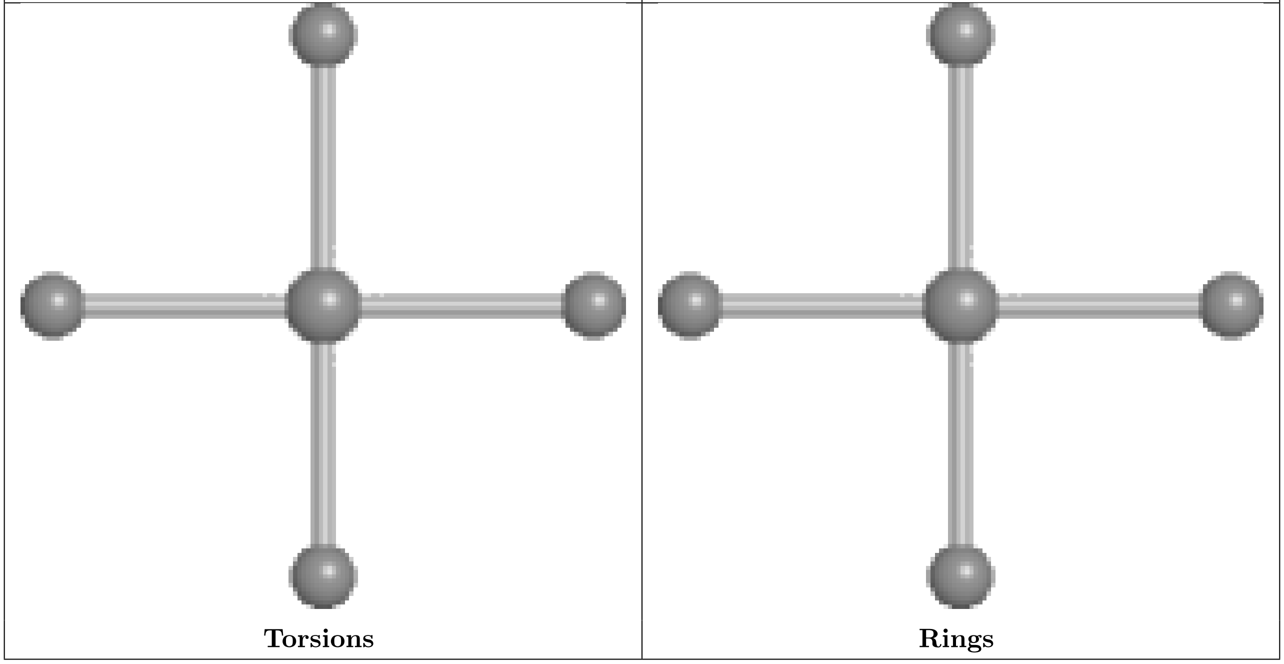
Torsions Rings

Ligand SO4 K 205



Bond lengths

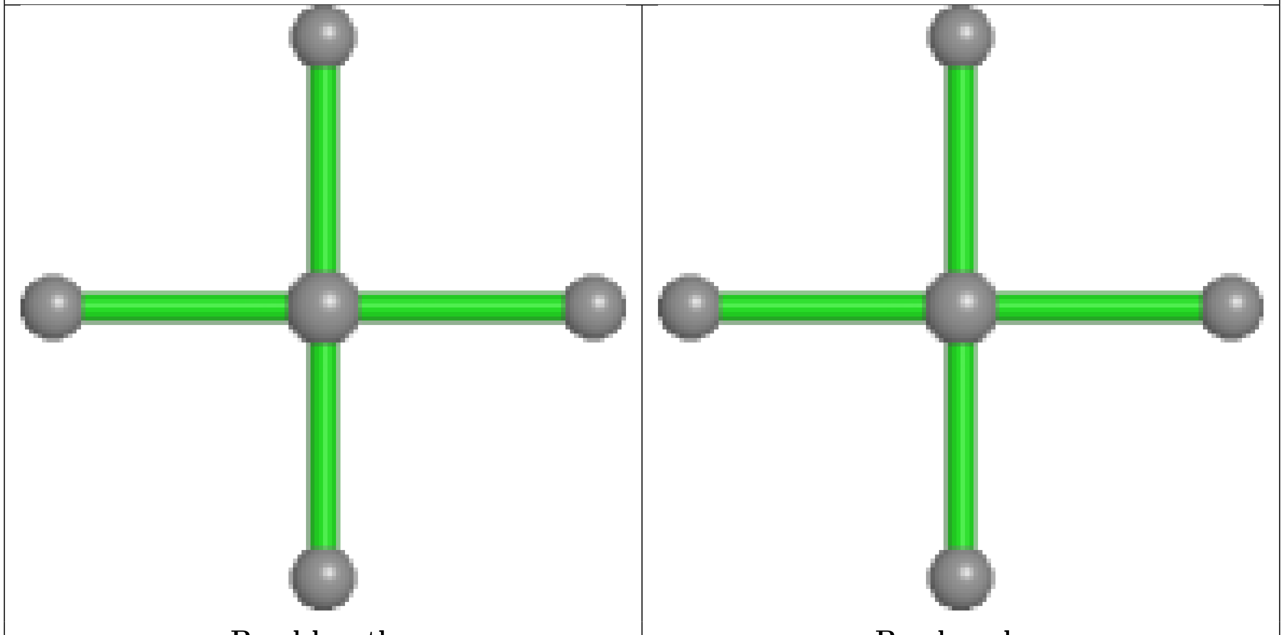
Bond angles



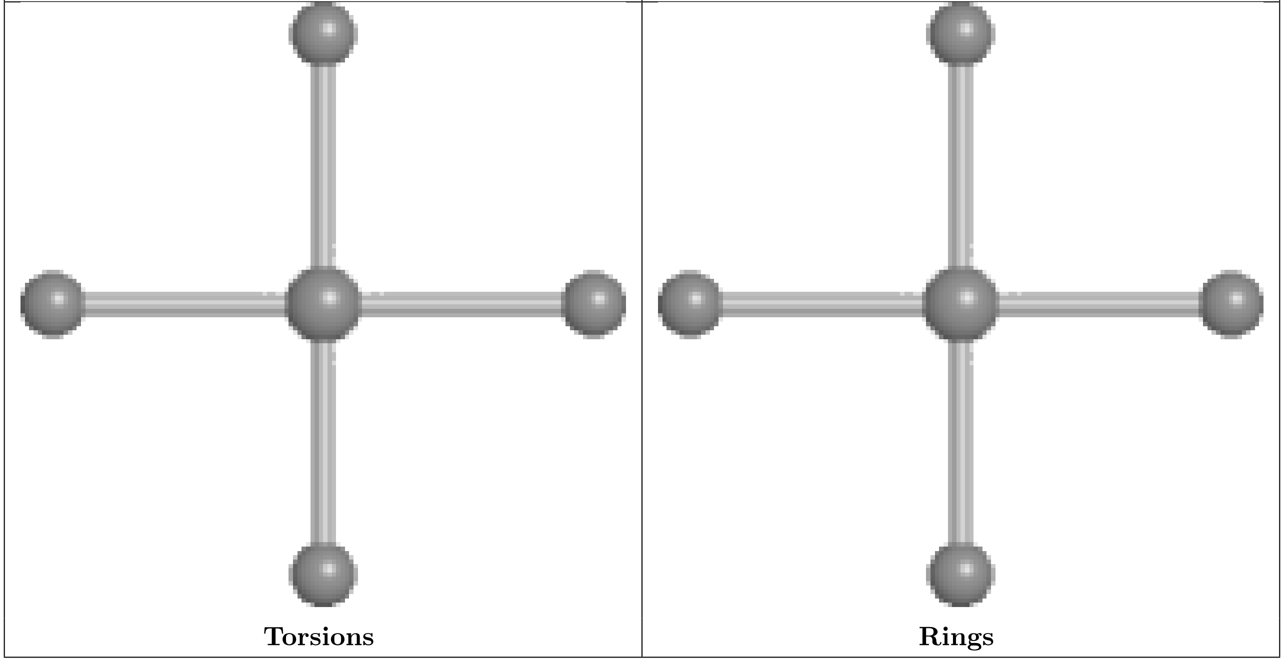
Torsions

Rings

Ligand SO4 K 207

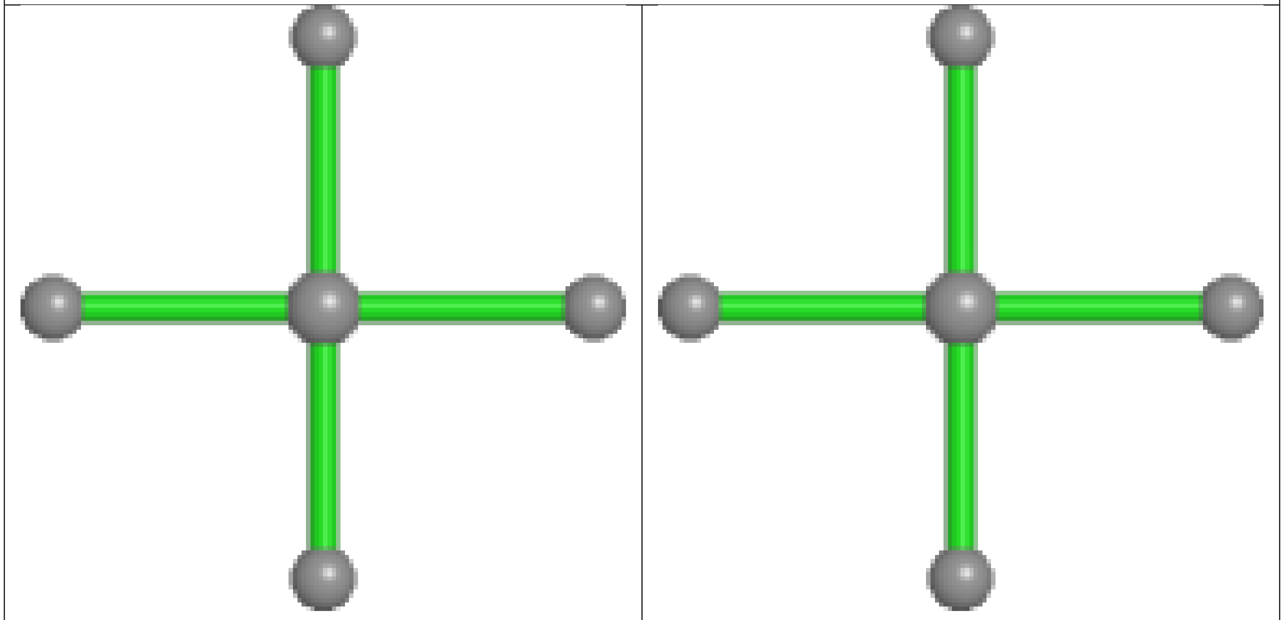


Bond lengths **Bond angles**



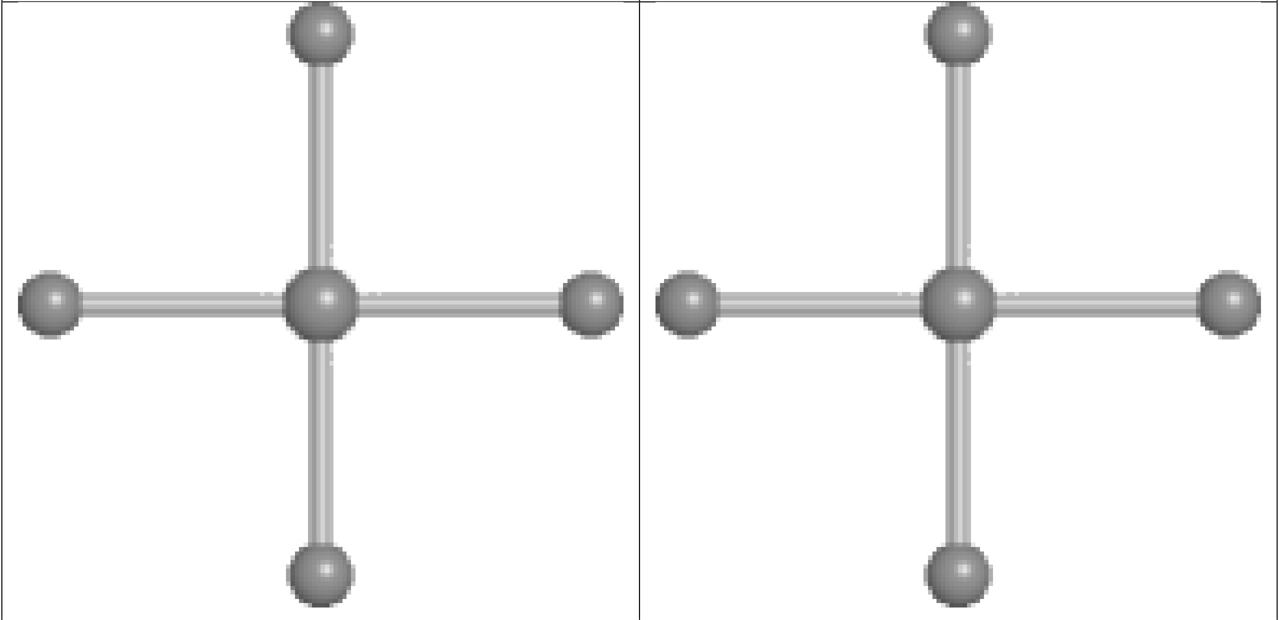
Torsions **Rings**

Ligand SO4 F 206



Bond lengths

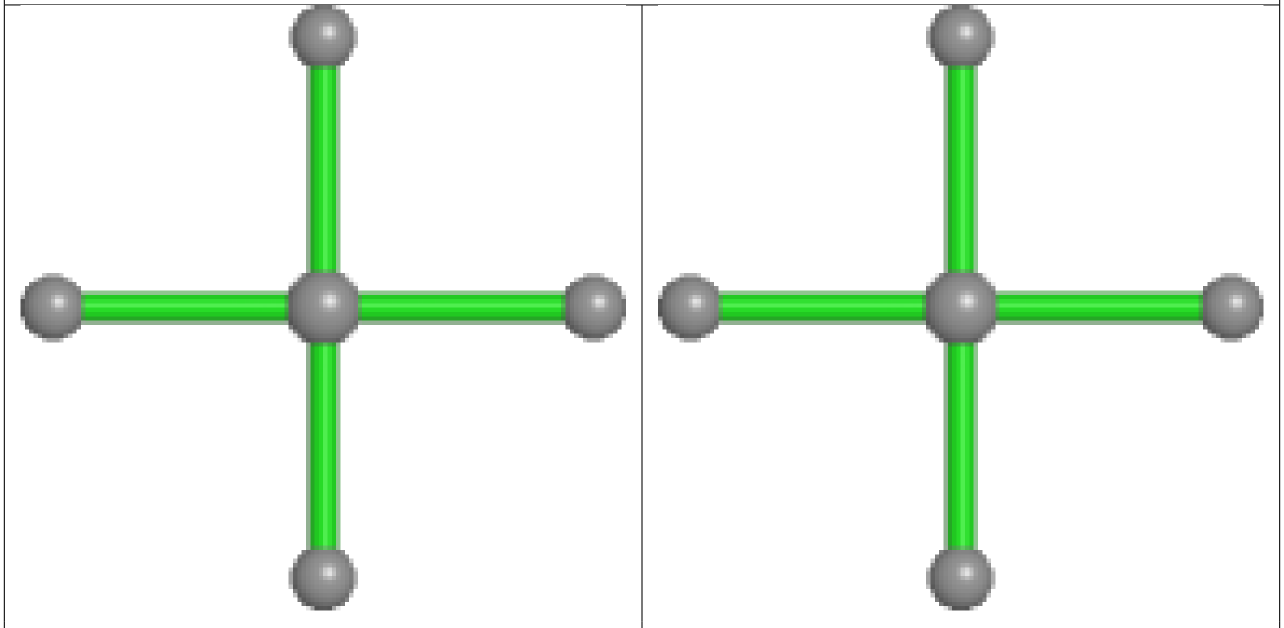
Bond angles



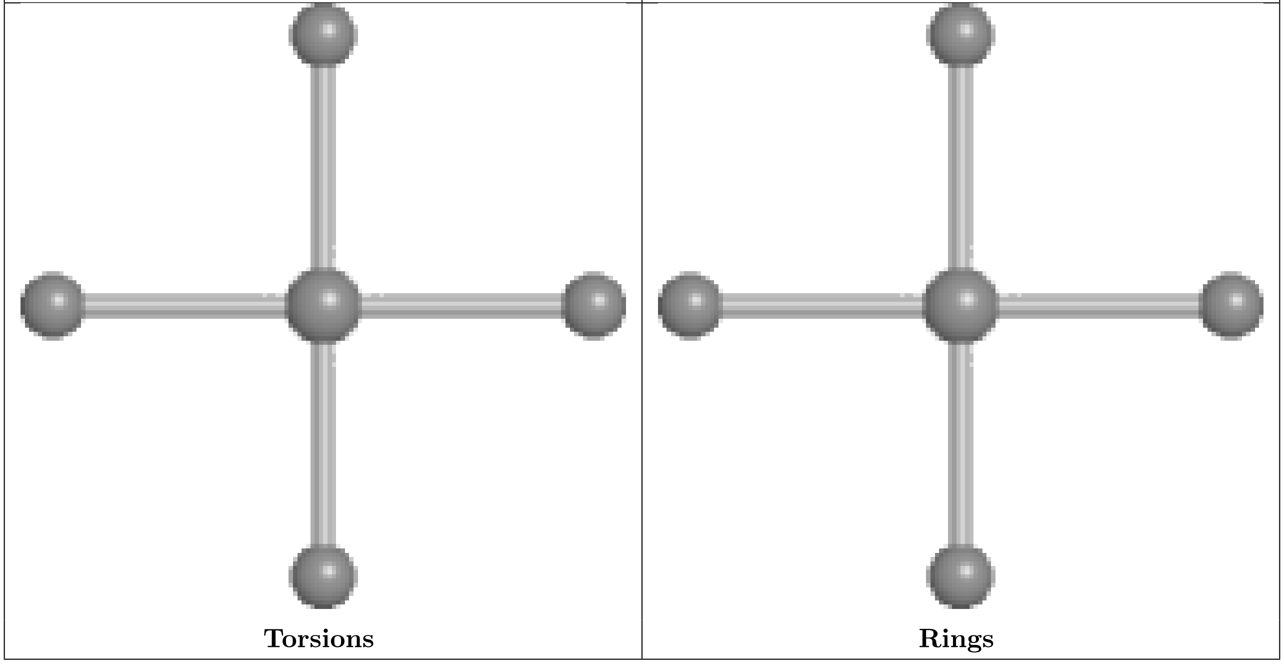
Torsions

Rings

Ligand SO4 C 207

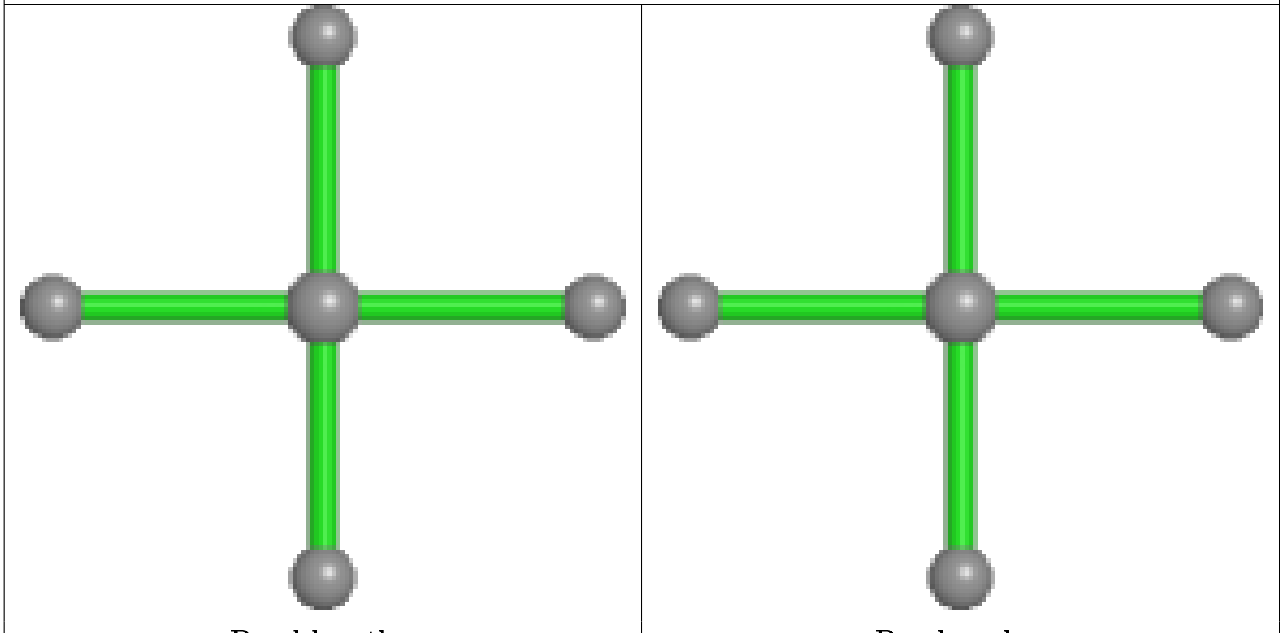


Bond lengths Bond angles

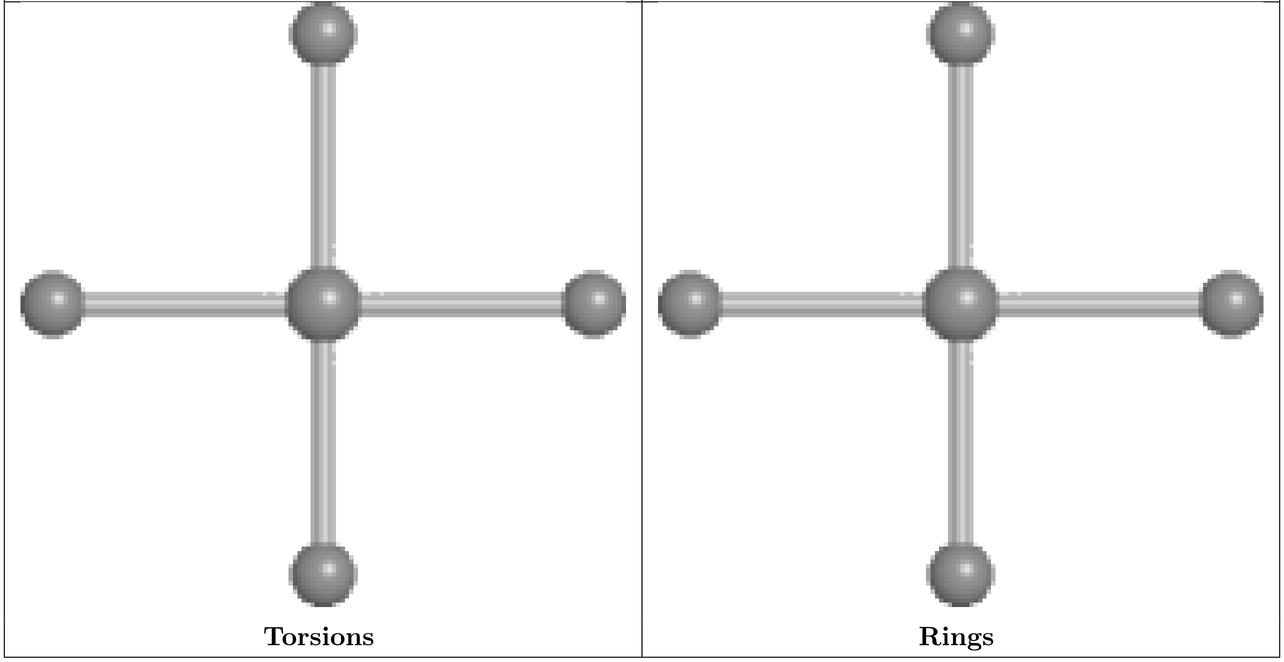


Torsions Rings

Ligand SO4 G 204

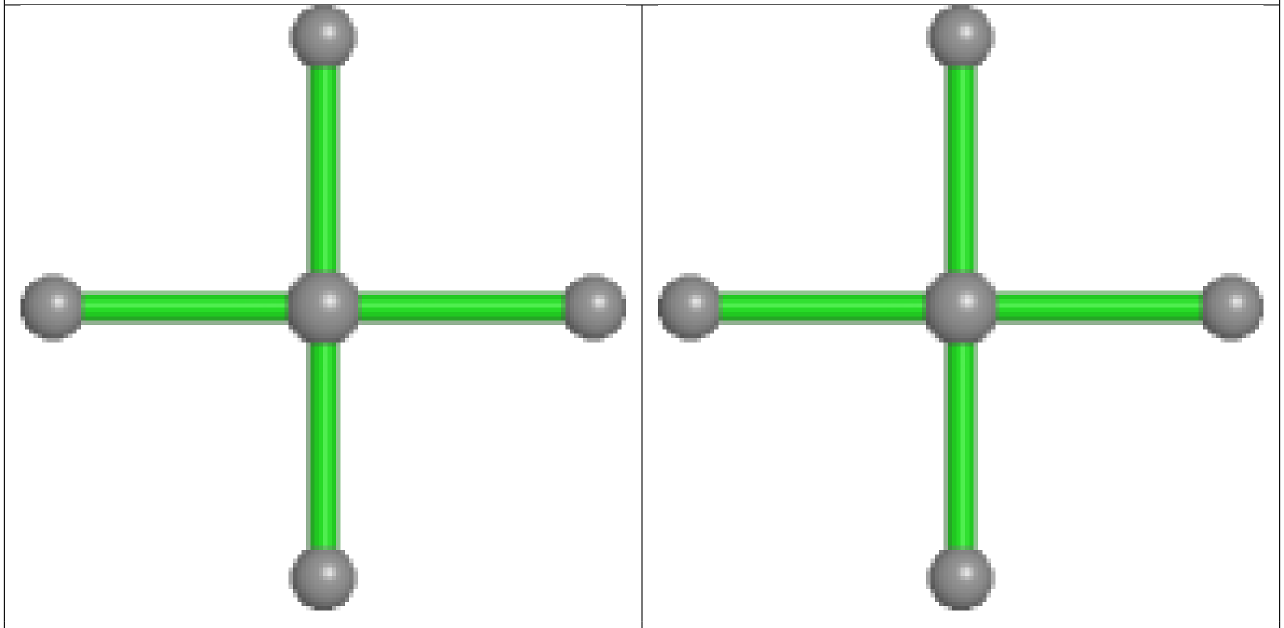


Bond lengths Bond angles



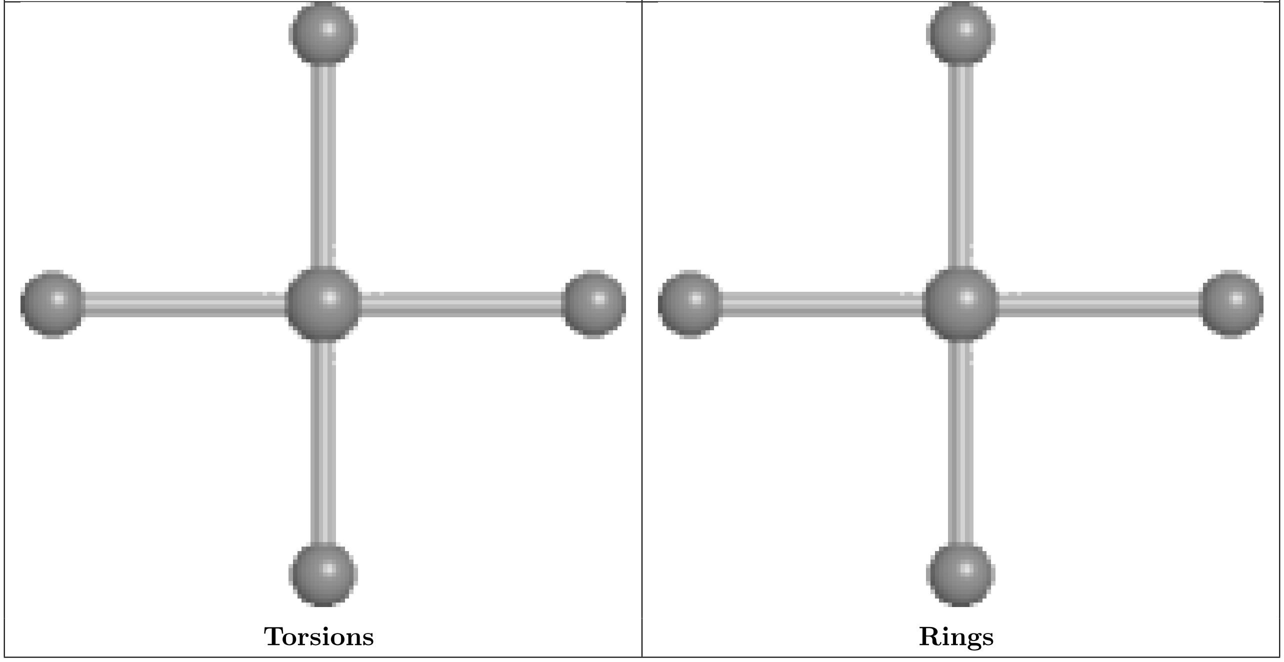
Torsions Rings

Ligand SO4 D 207



Bond lengths

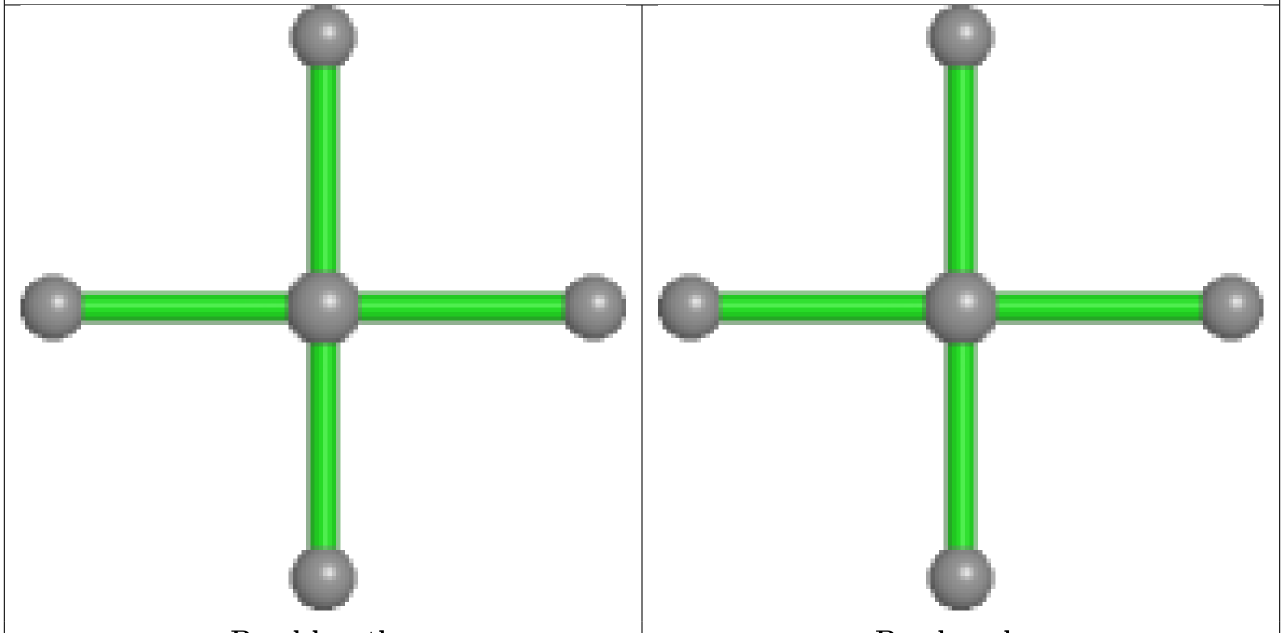
Bond angles



Torsions

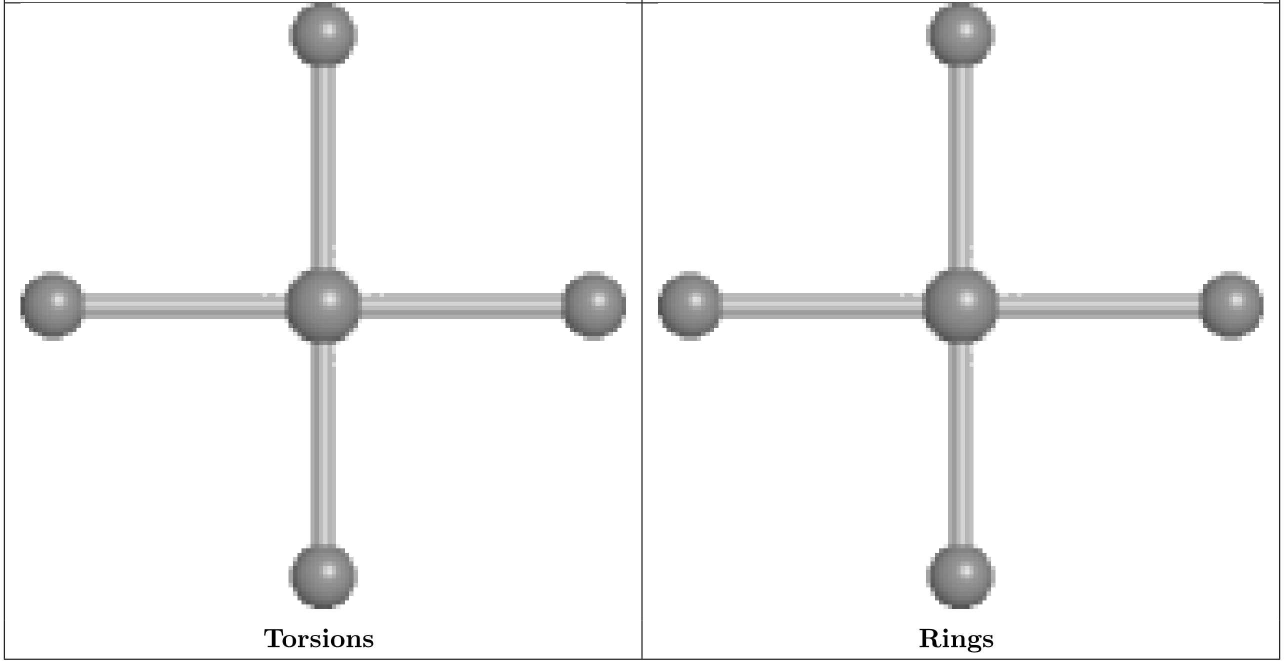
Rings

Ligand SO4 A 204



Bond lengths

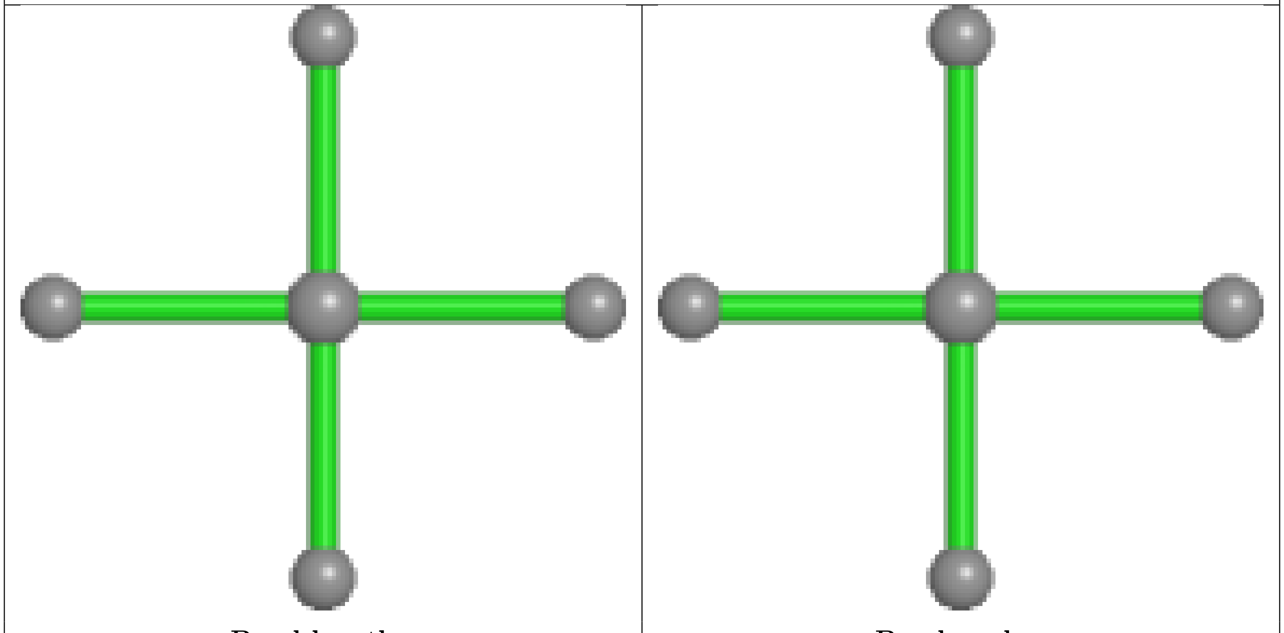
Bond angles



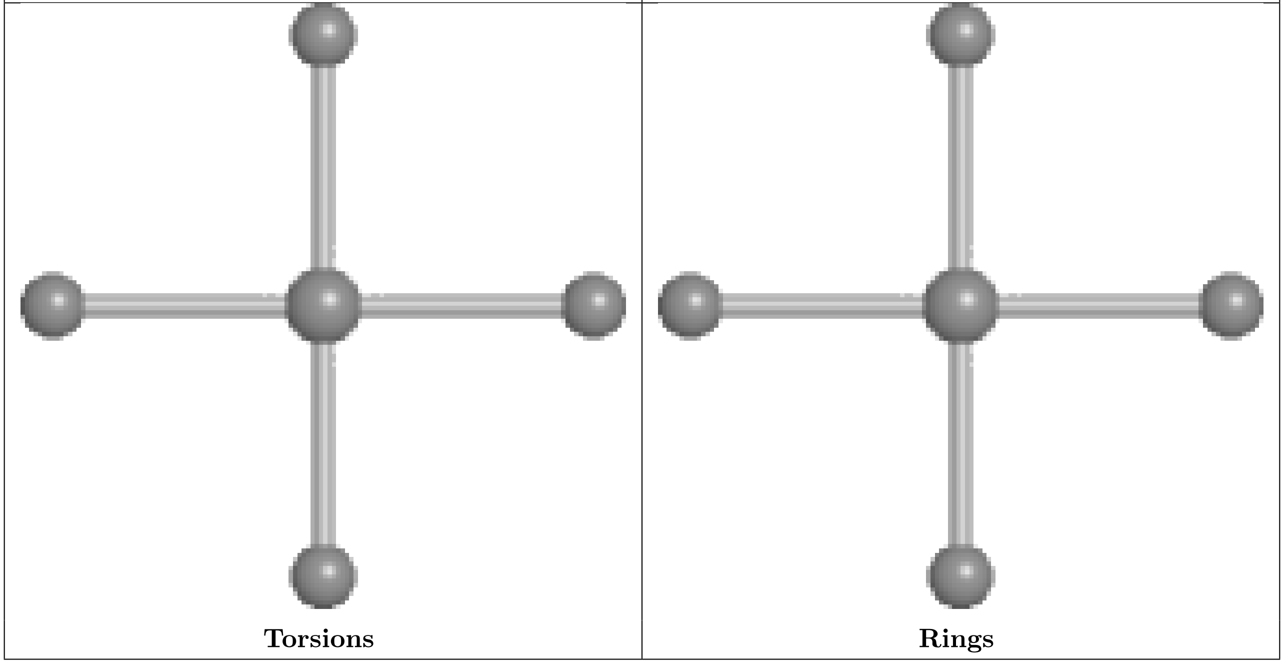
Torsions

Rings

Ligand SO4 J 205

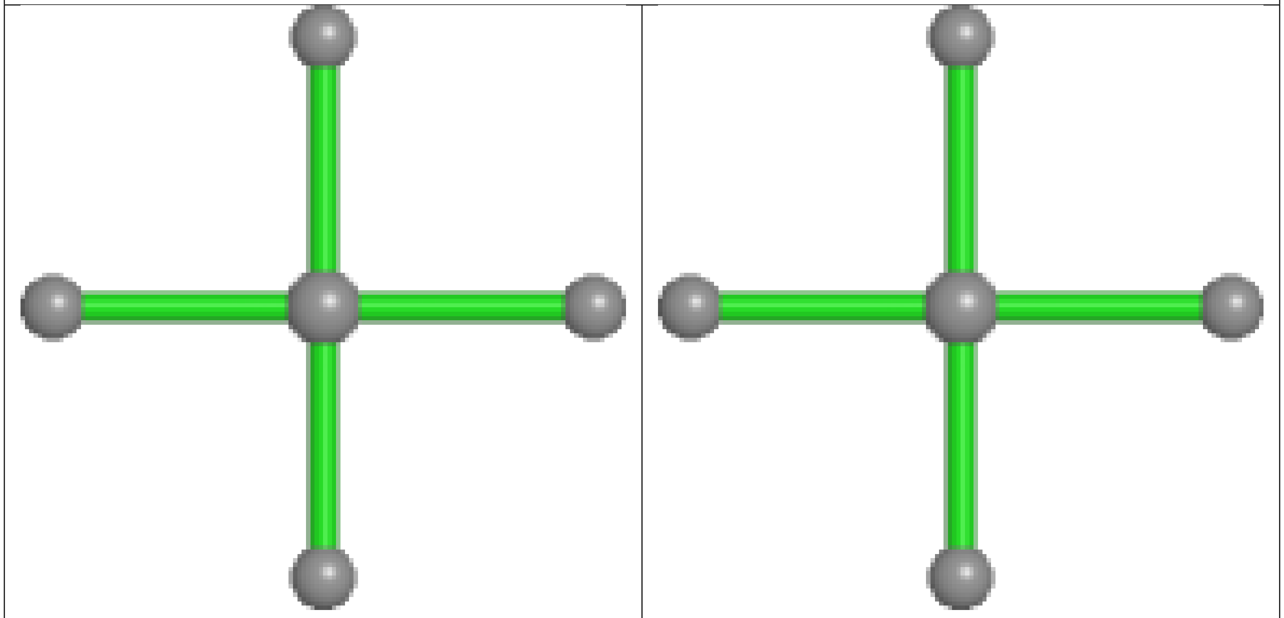


Bond lengths **Bond angles**



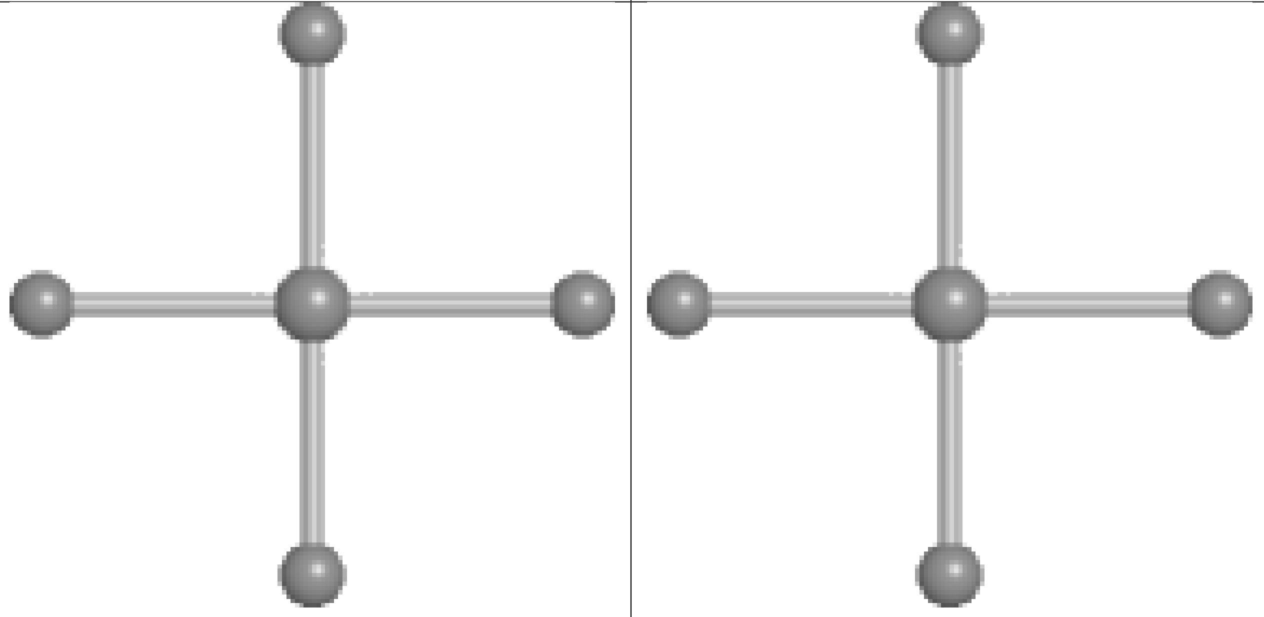
Torsions **Rings**

Ligand SO4 K 204



Bond lengths

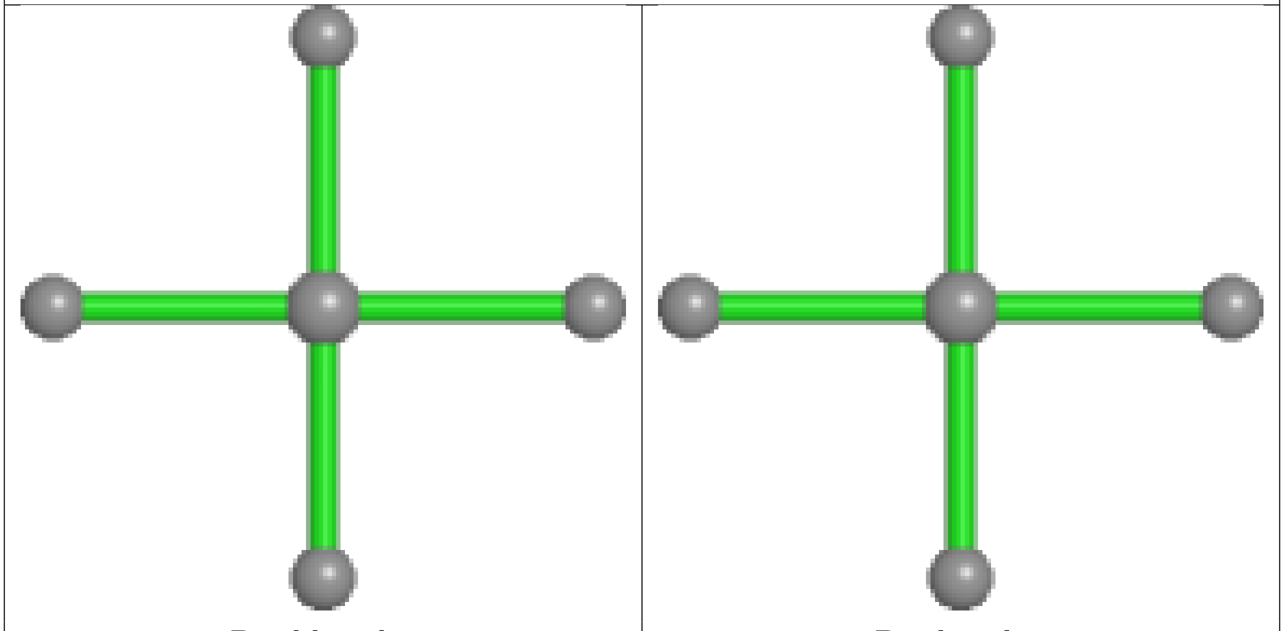
Bond angles



Torsions

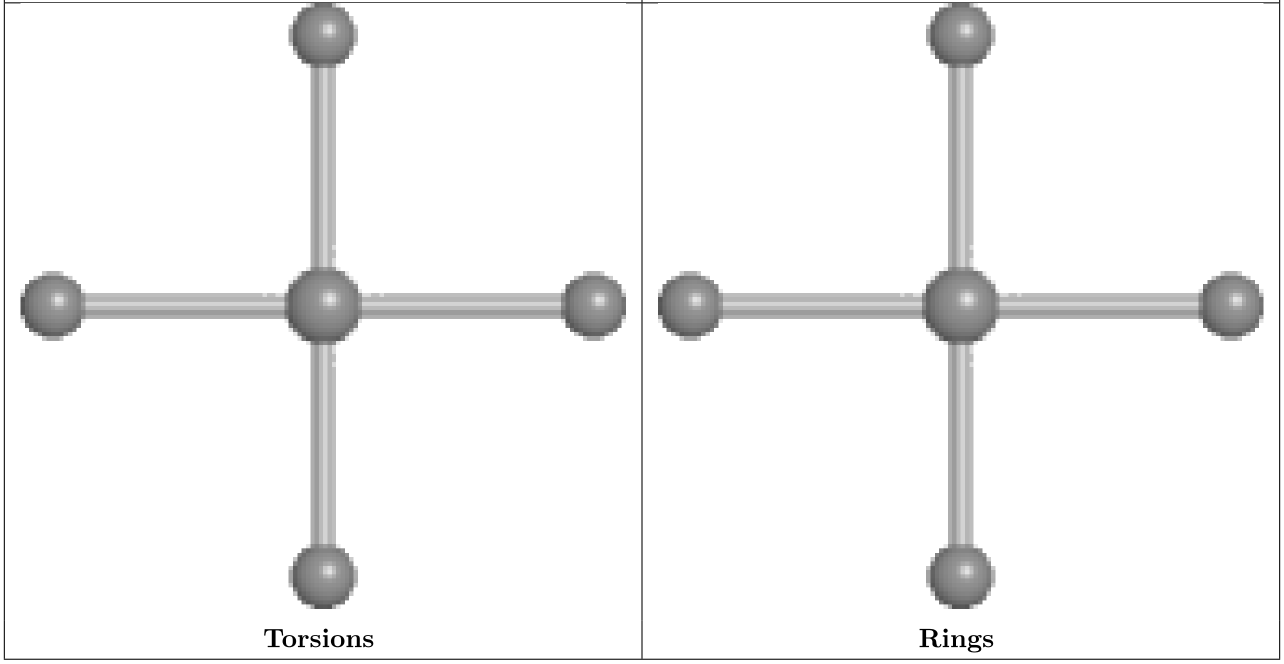
Rings

Ligand SO4 C 204



Bond lengths

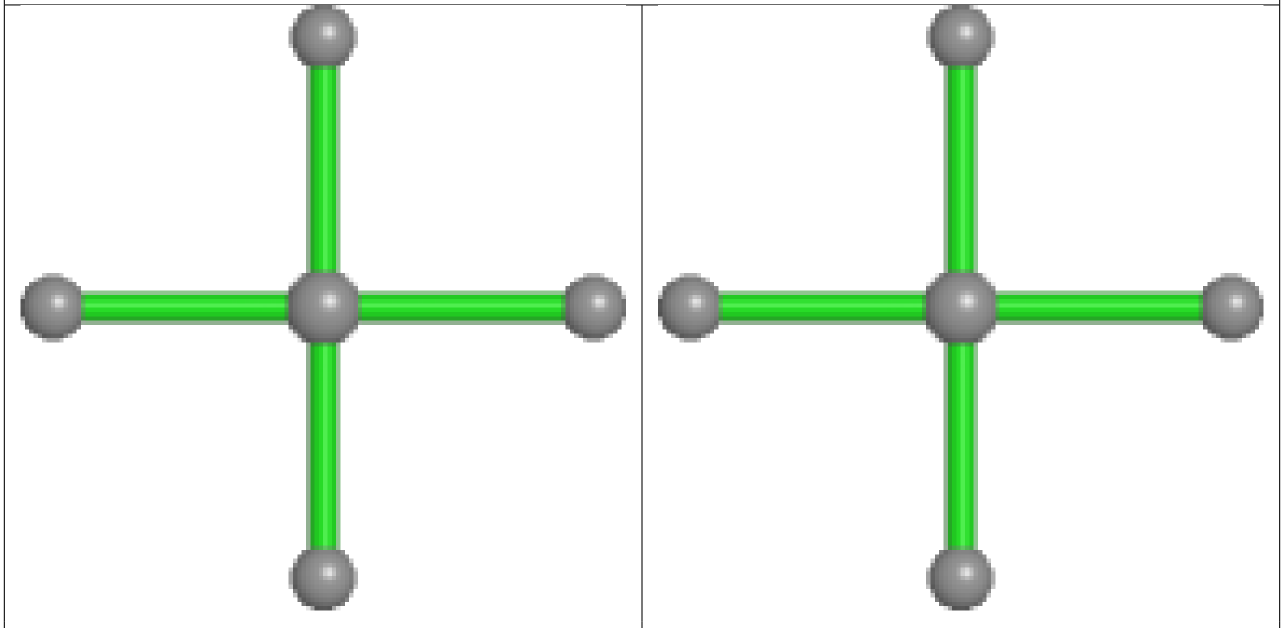
Bond angles



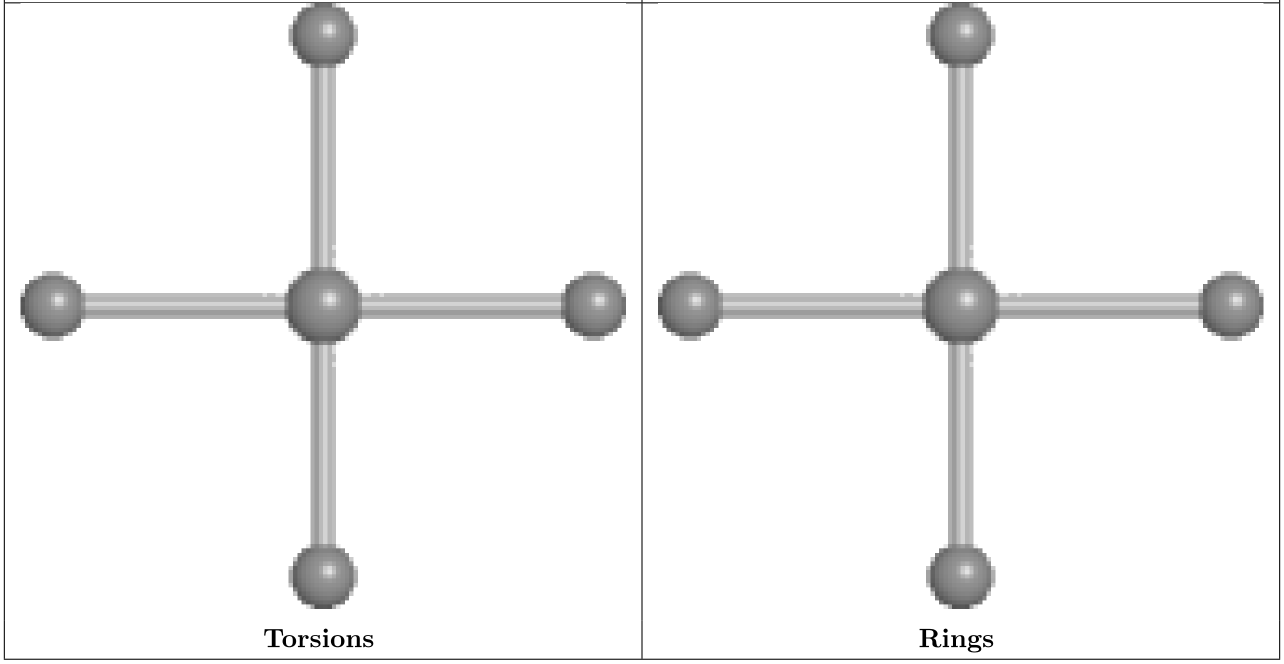
Torsions

Rings

Ligand SO4 D 206

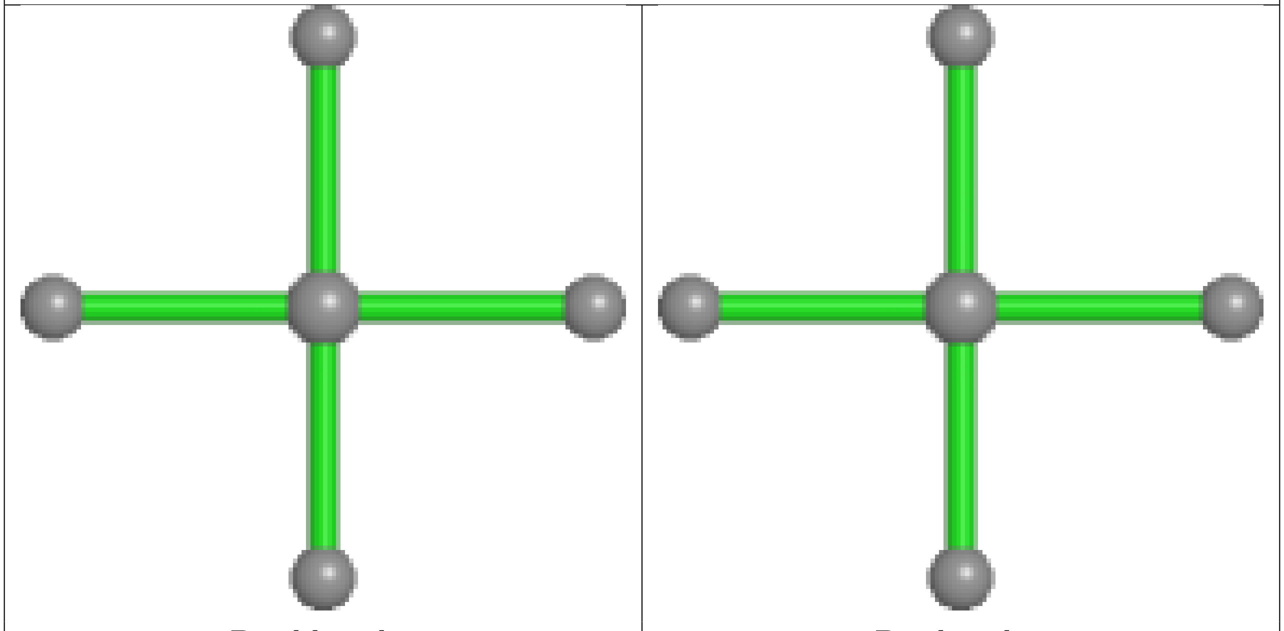


Bond lengths **Bond angles**



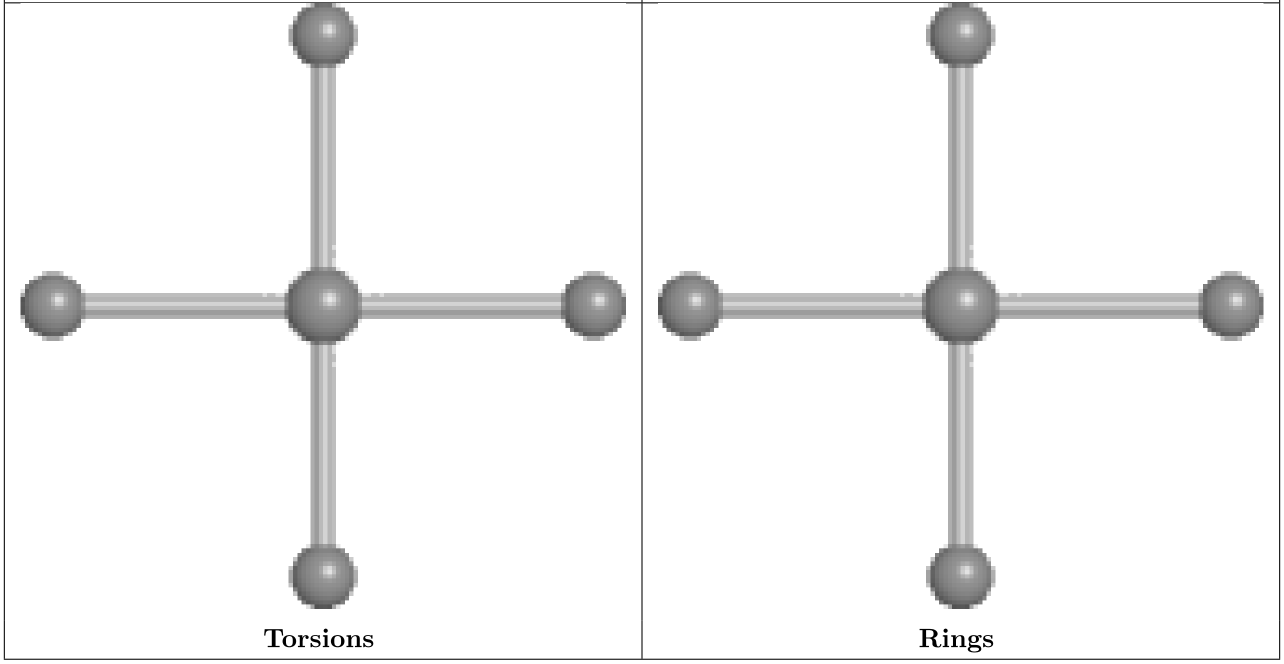
Torsions **Rings**

Ligand SO4 H 204



Bond lengths

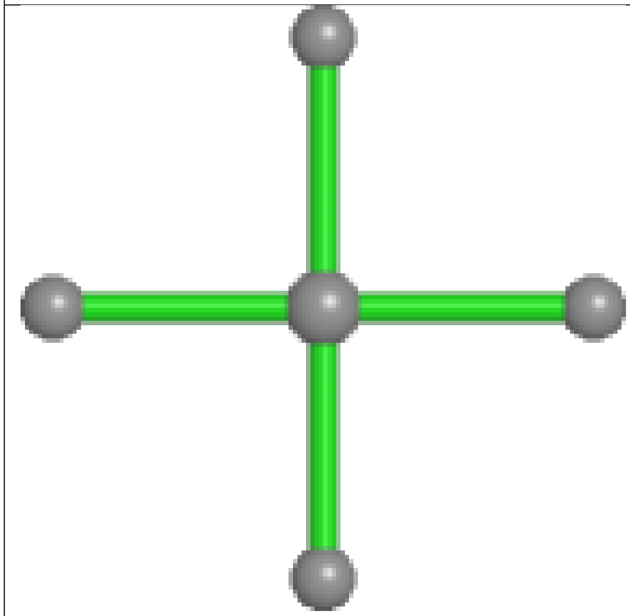
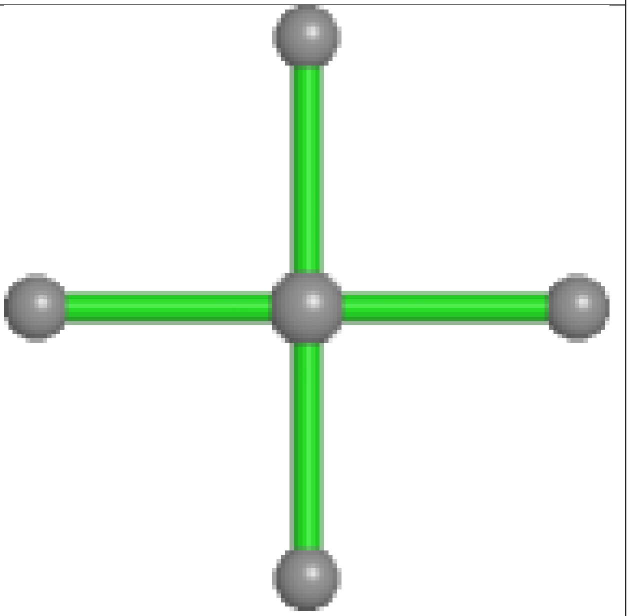
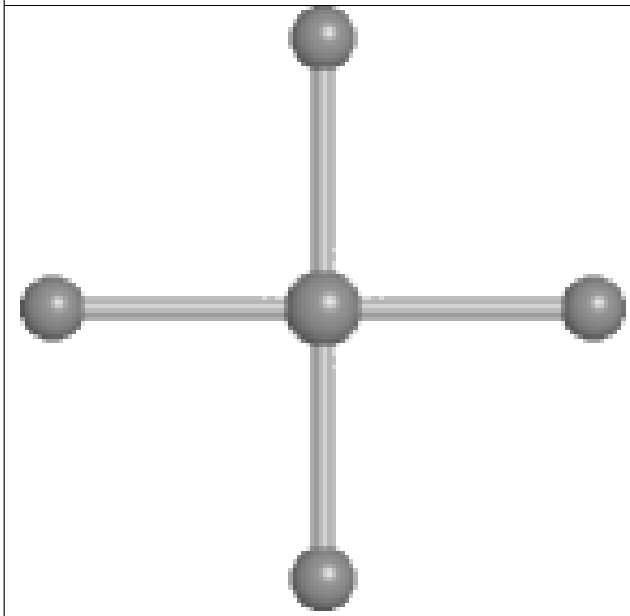
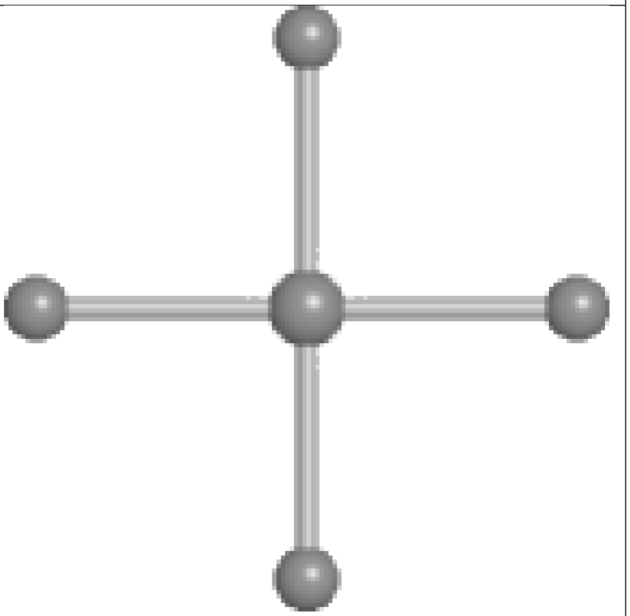
Bond angles



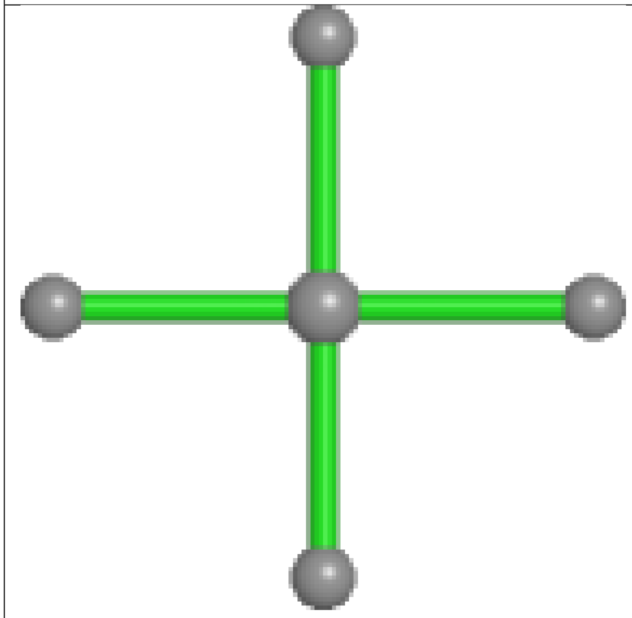
Torsions

Rings

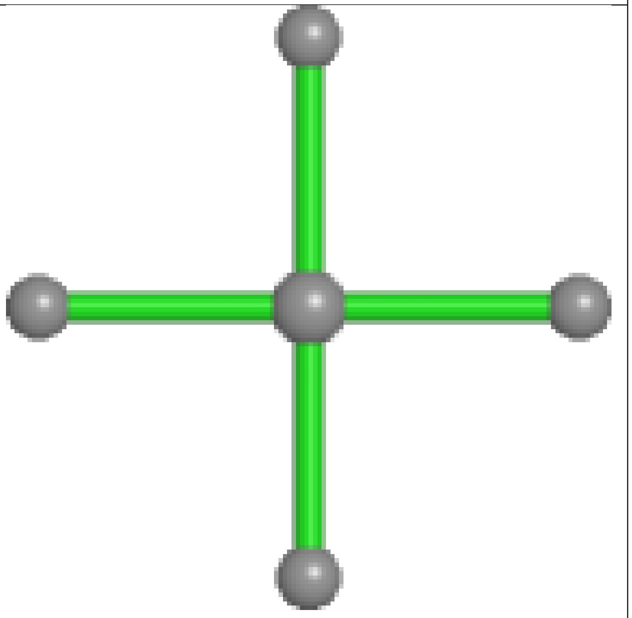
Ligand SO4 J 204

 **Bond lengths**	 **Bond angles**
 **Torsions**	 **Rings**

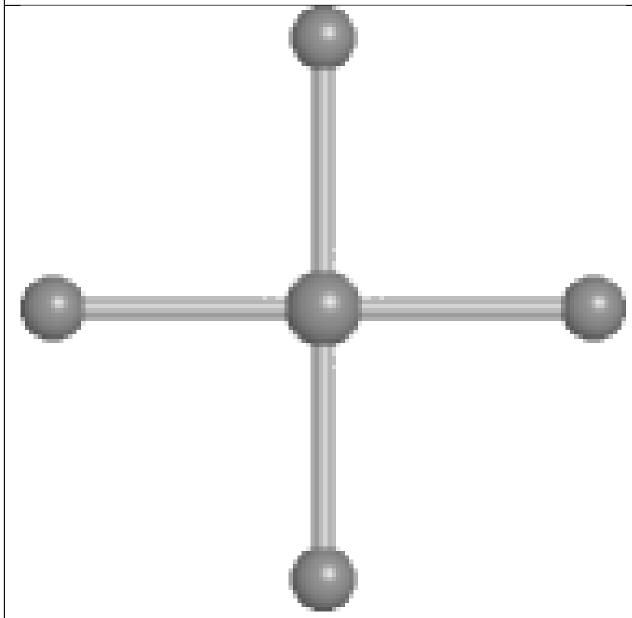
Ligand SO4 L 206



Bond lengths



Bond angles



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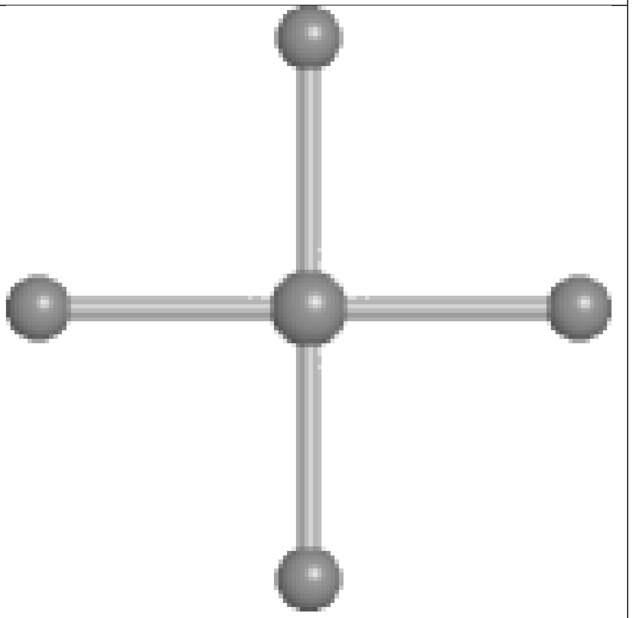
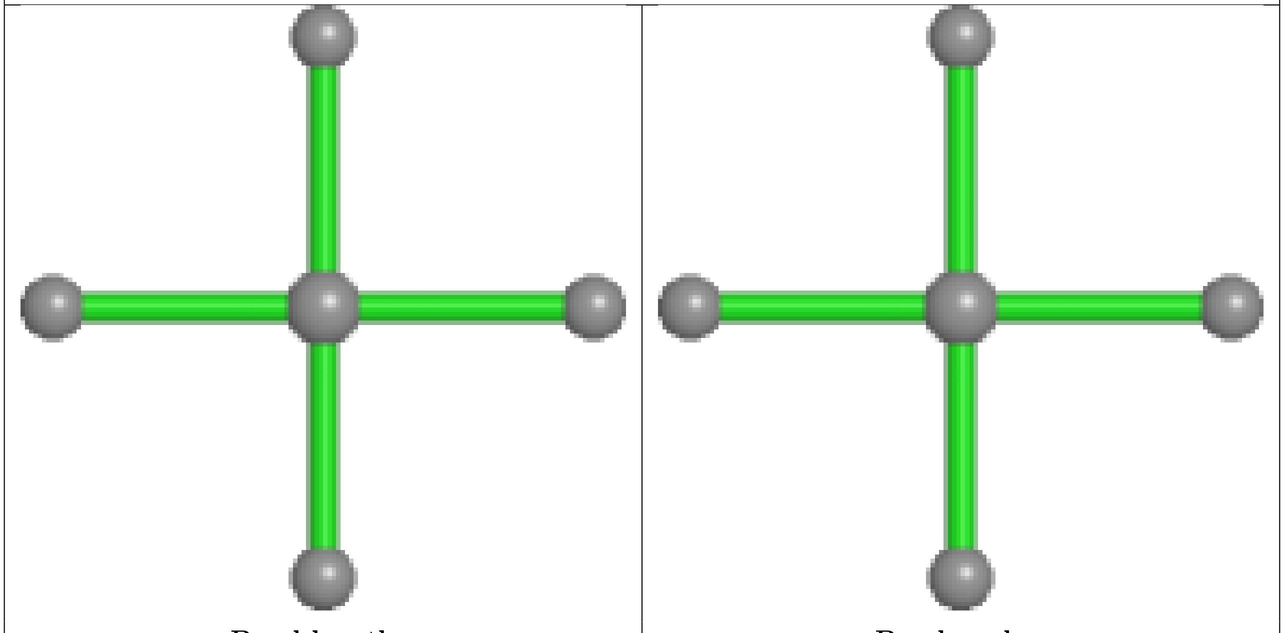


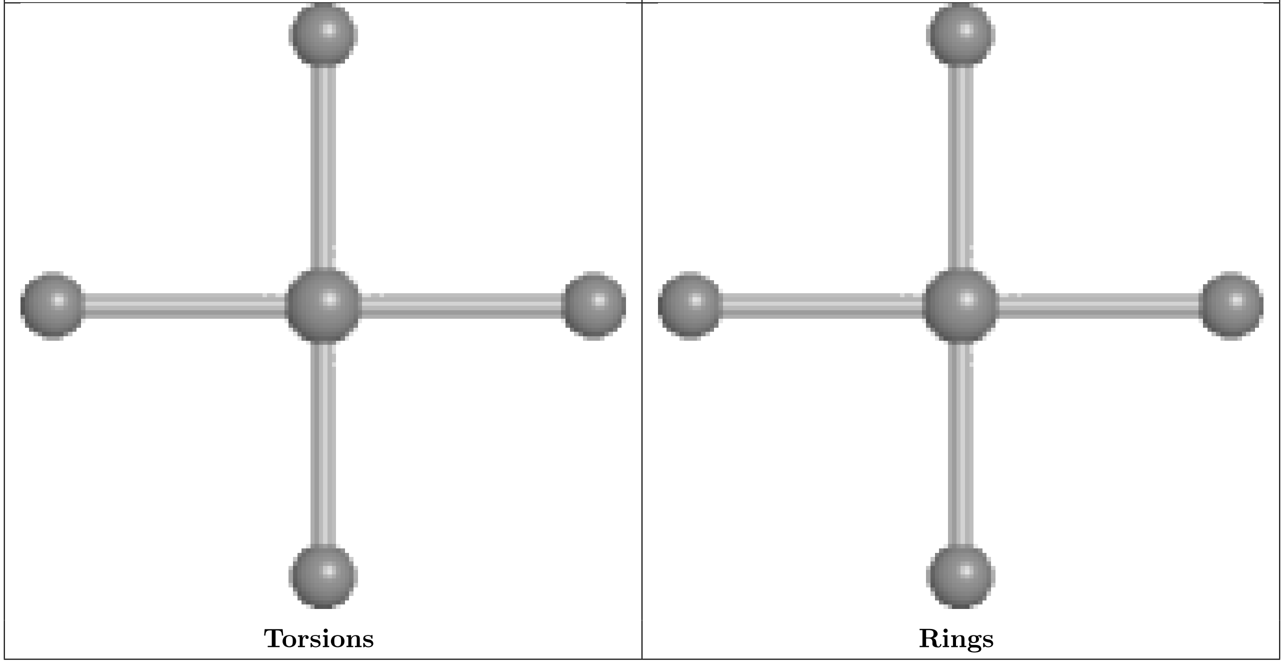
Rings

Ligand SO4 C 205



Bond lengths

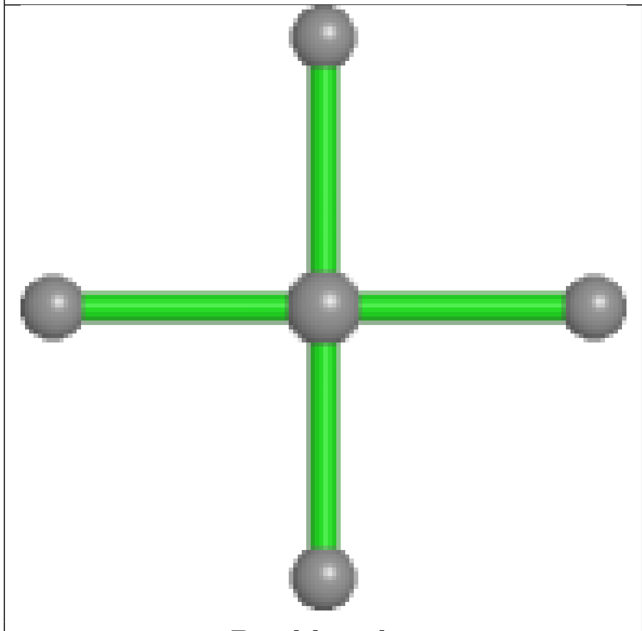
Bond angles



Torsions

Rings

Ligand SO4 E 206



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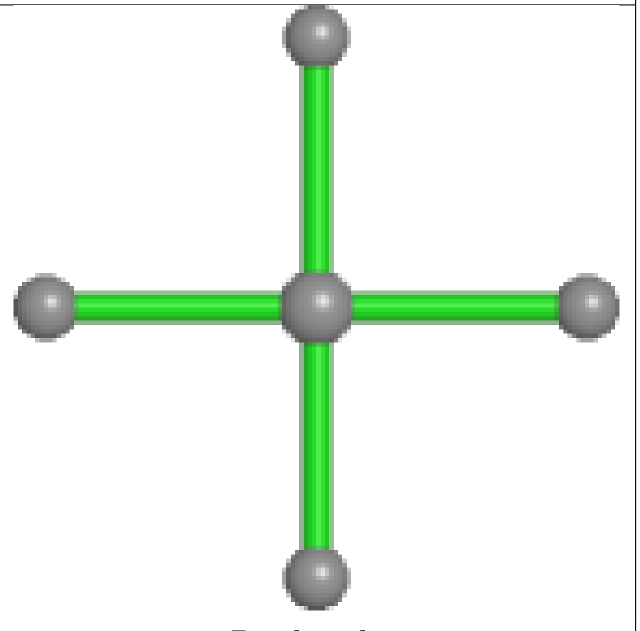
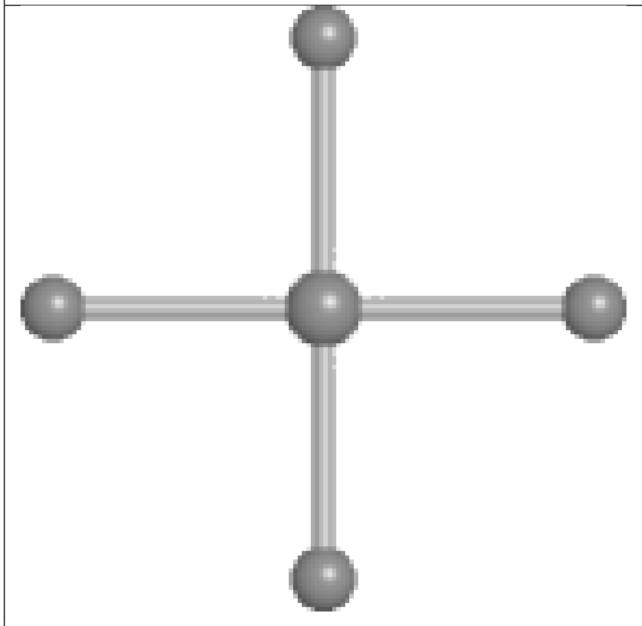


Bond angles



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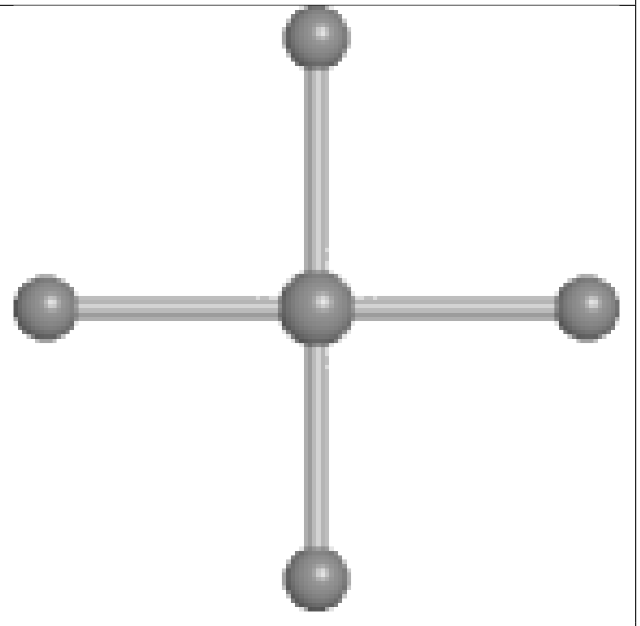
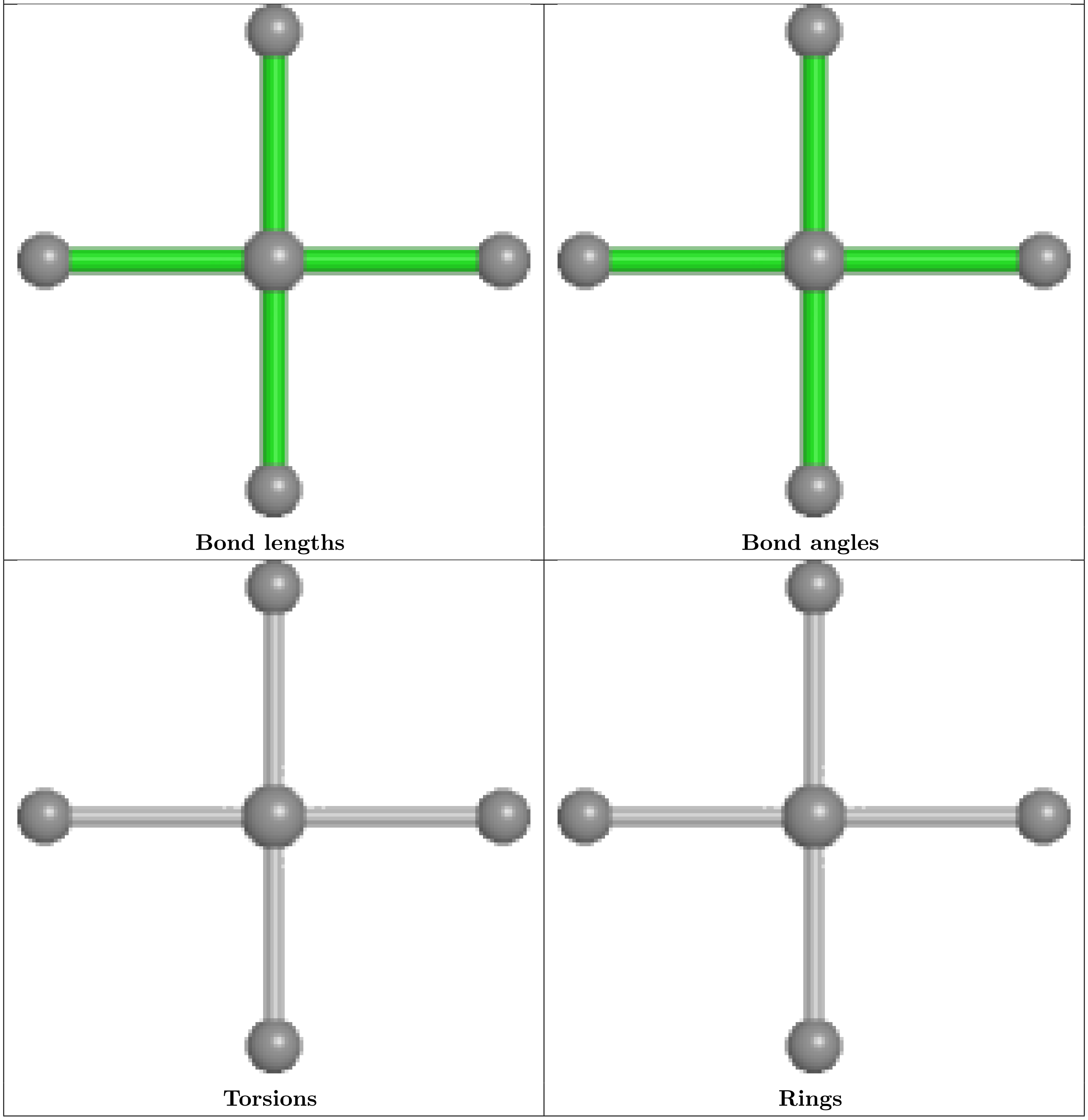


Rings

Ligand SO4 A 206



Bond lengths

Bond angles

Torsions

Rings

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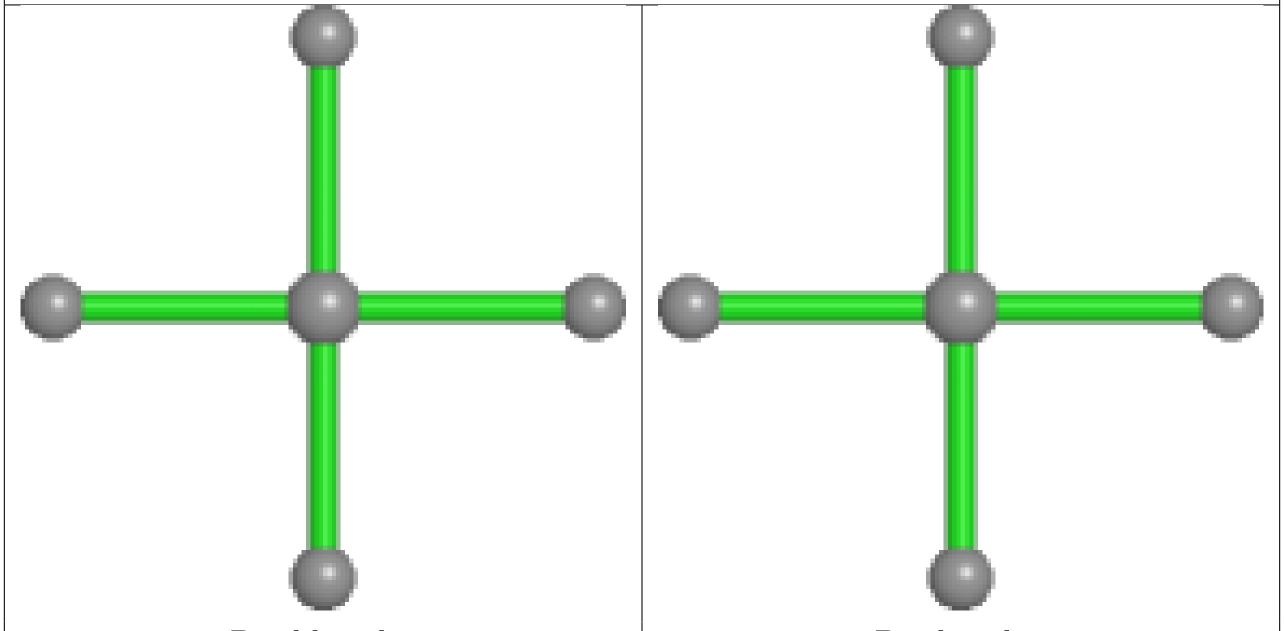
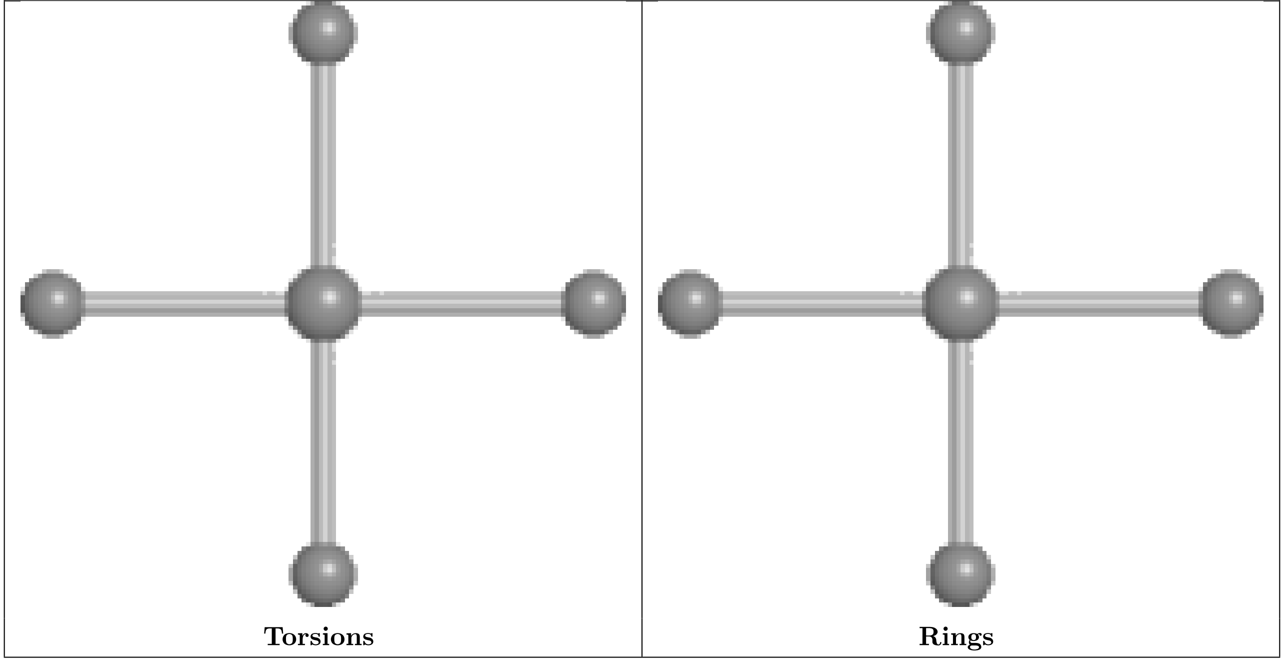
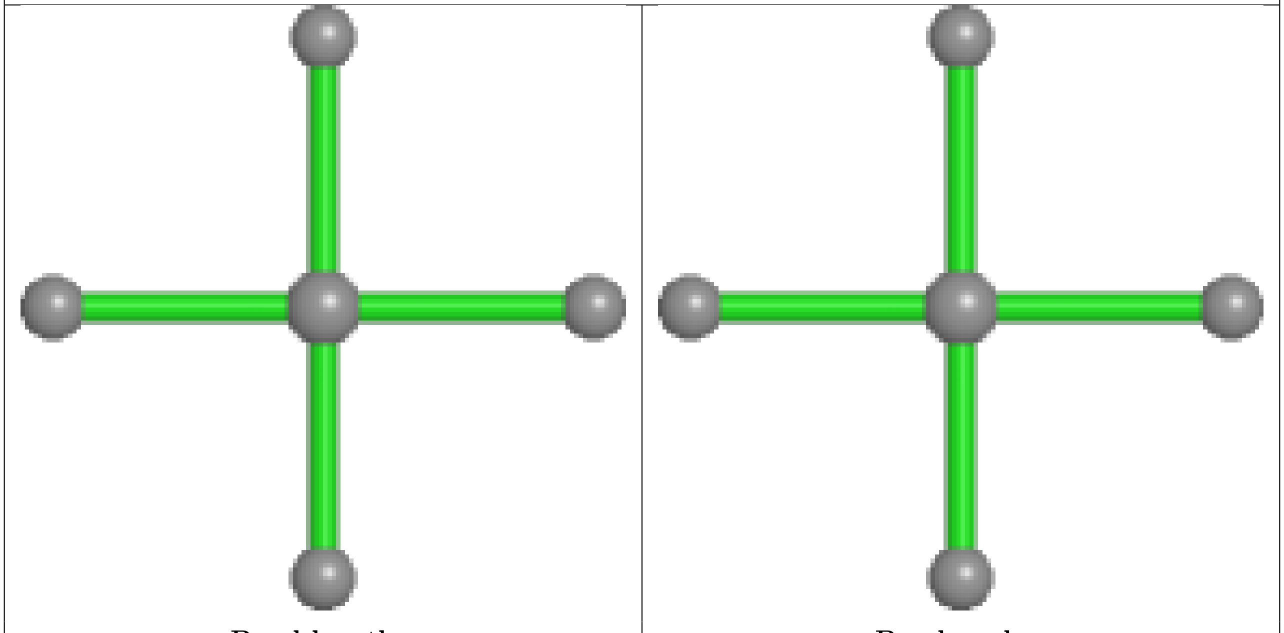


Bond lengths **Bond angles**



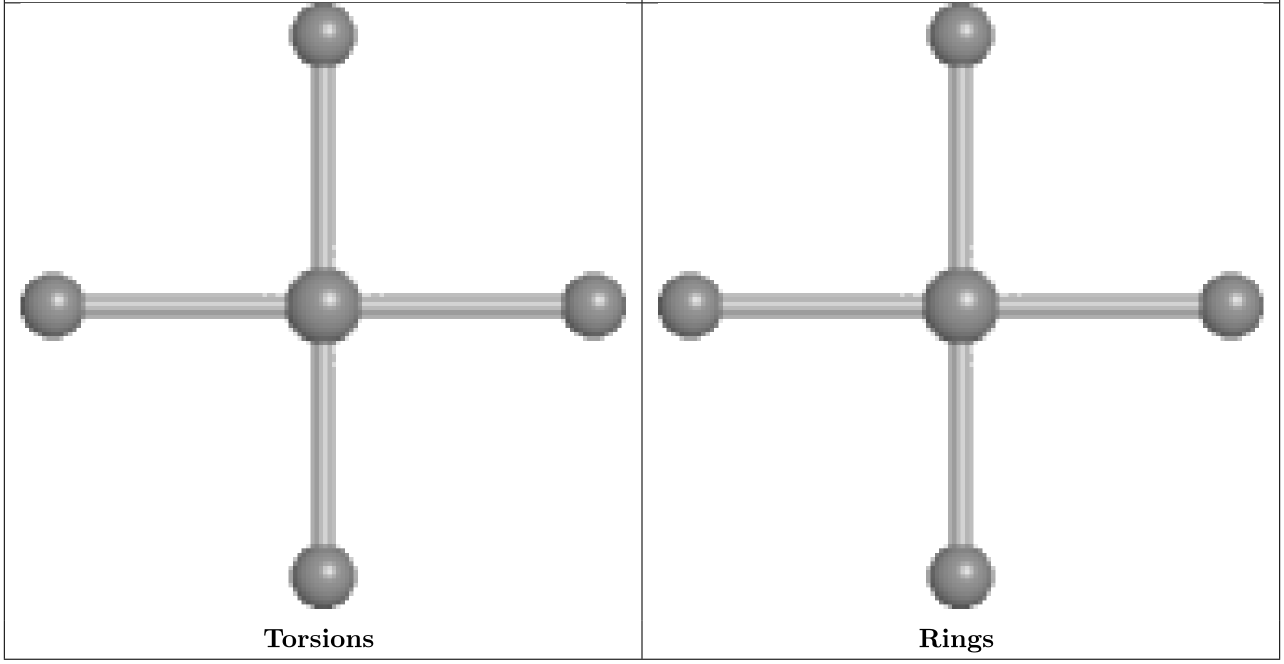
Torsions **Rings**

Ligand SO4 I 205



Bond lengths

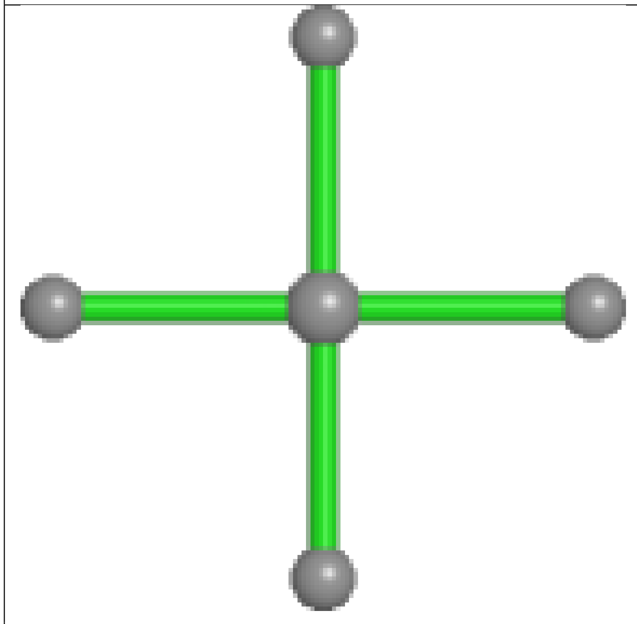
Bond angles



Torsions

Rings

Ligand SO4 F 207



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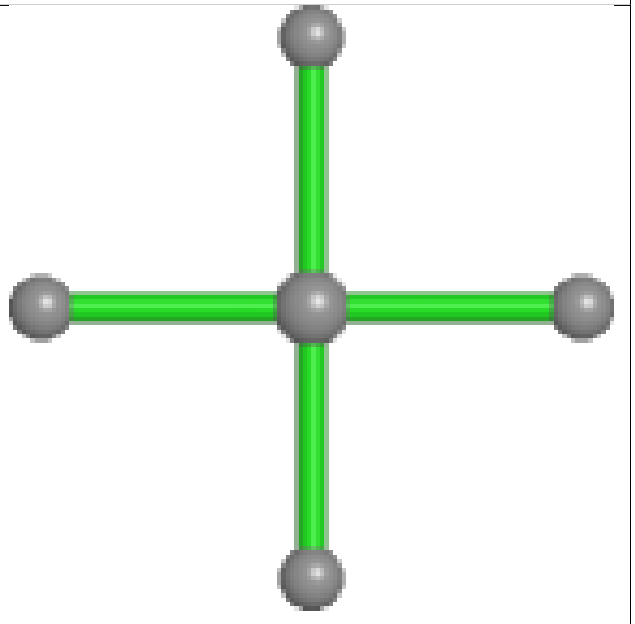
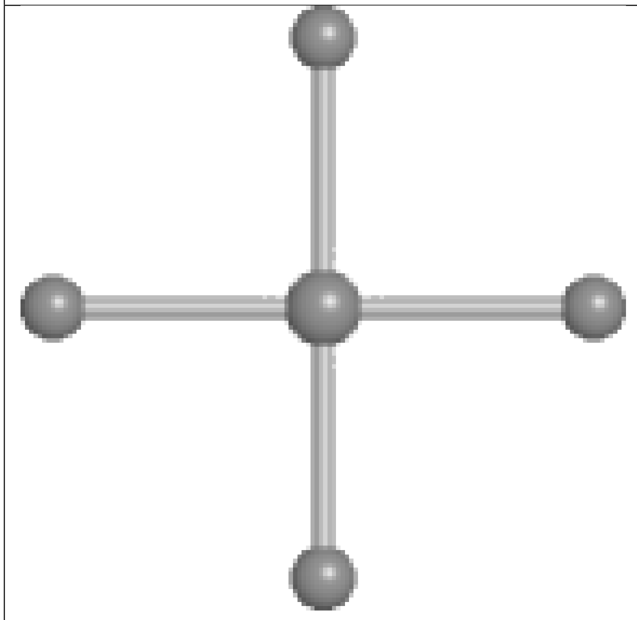


Bond angles



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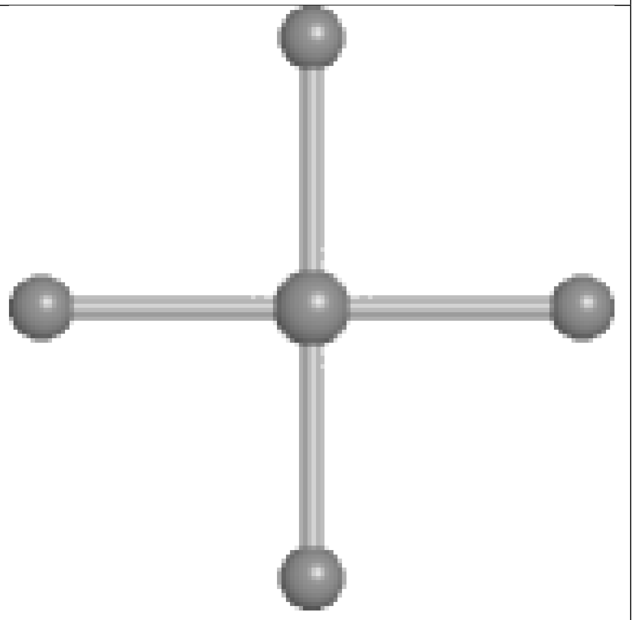
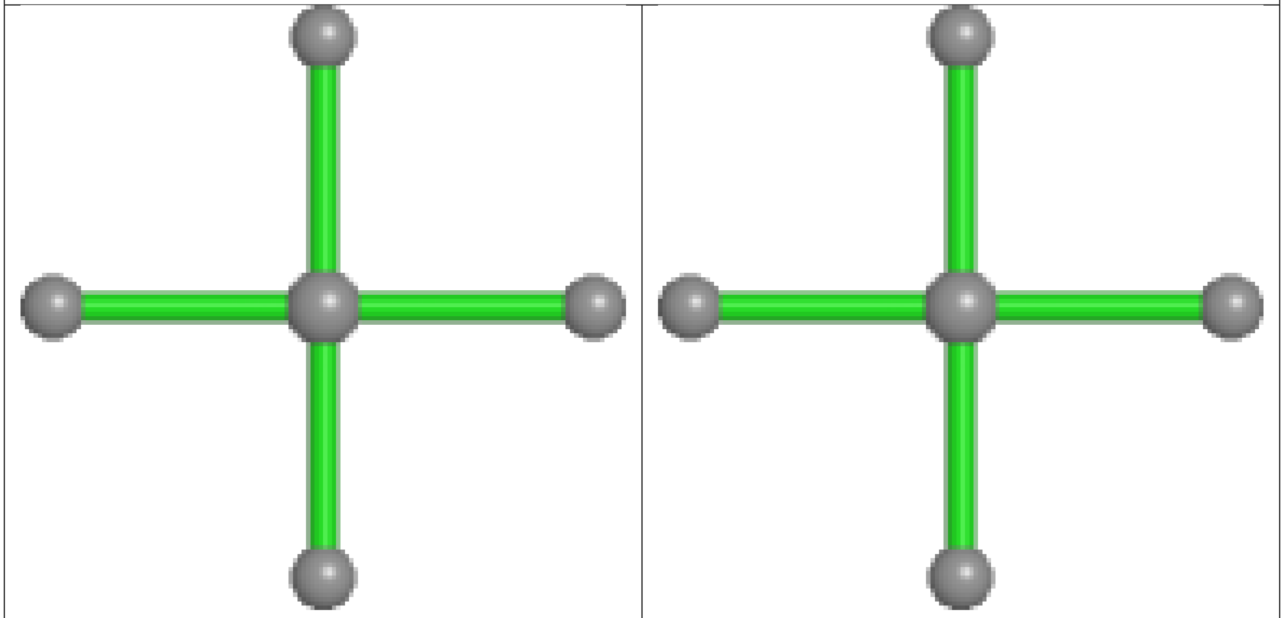


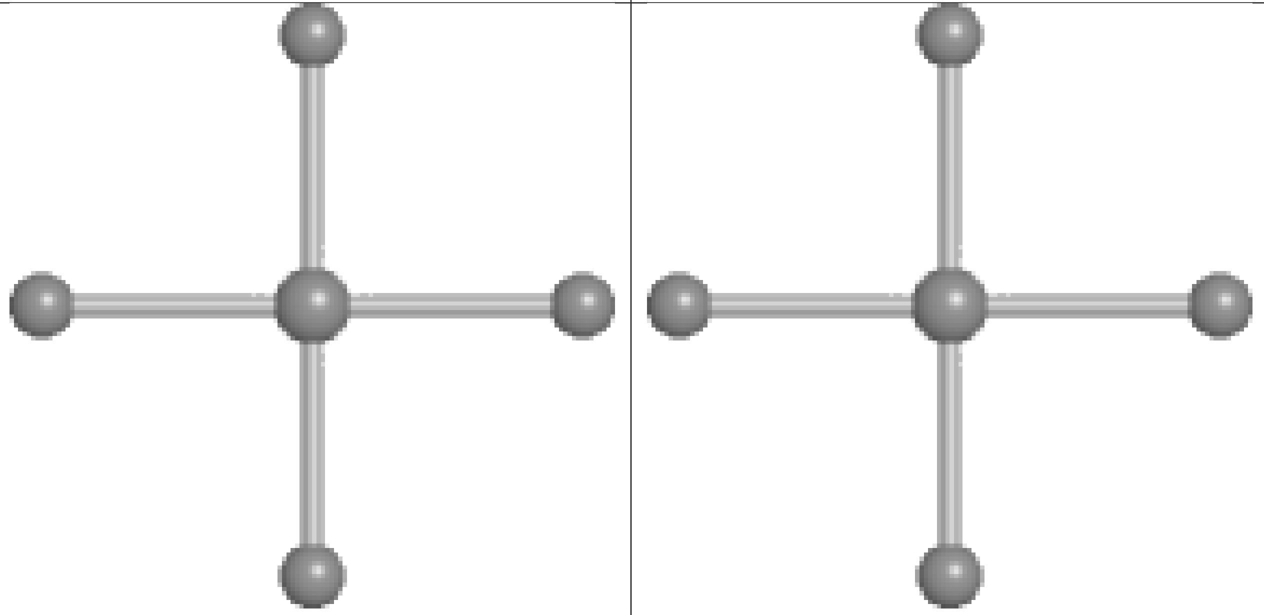
Rings

Ligand SO4 I 204



Bond lengths

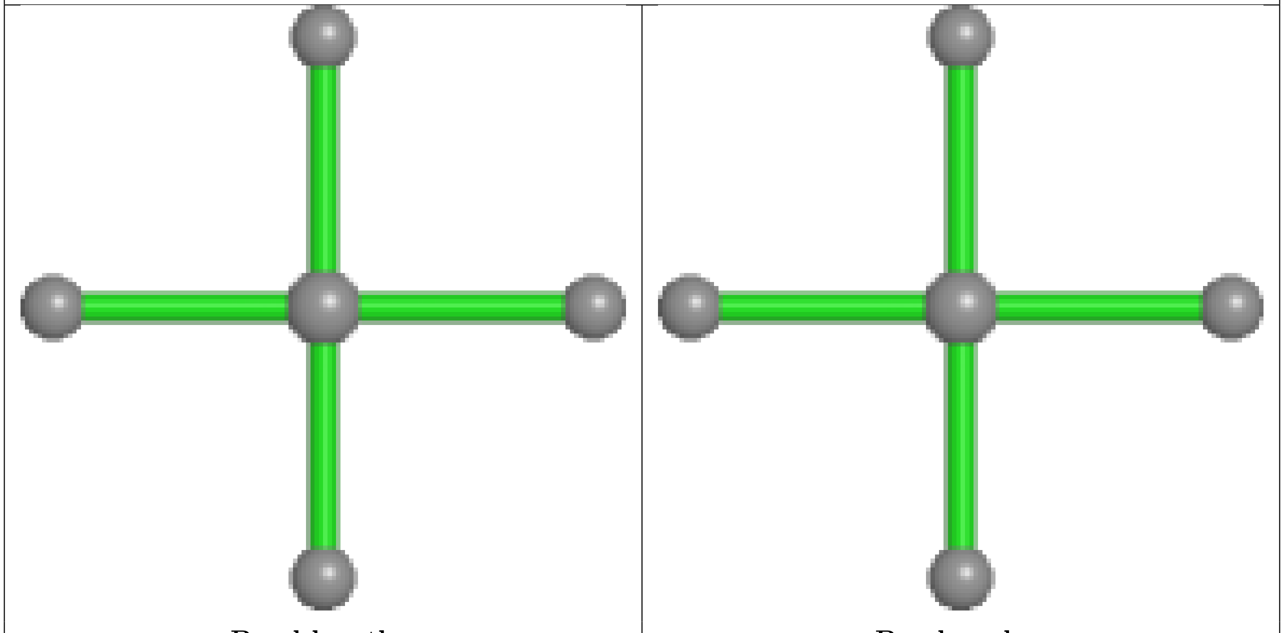
Bond angles



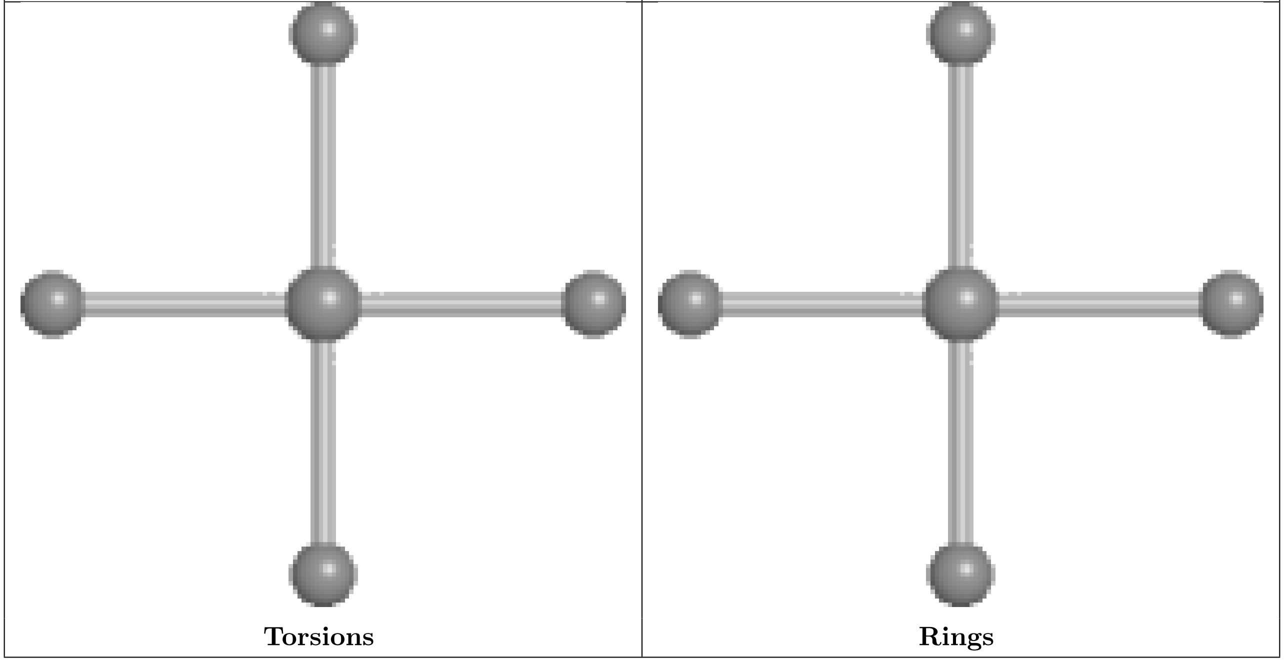
Torsions

Rings

Ligand SO4 D 203

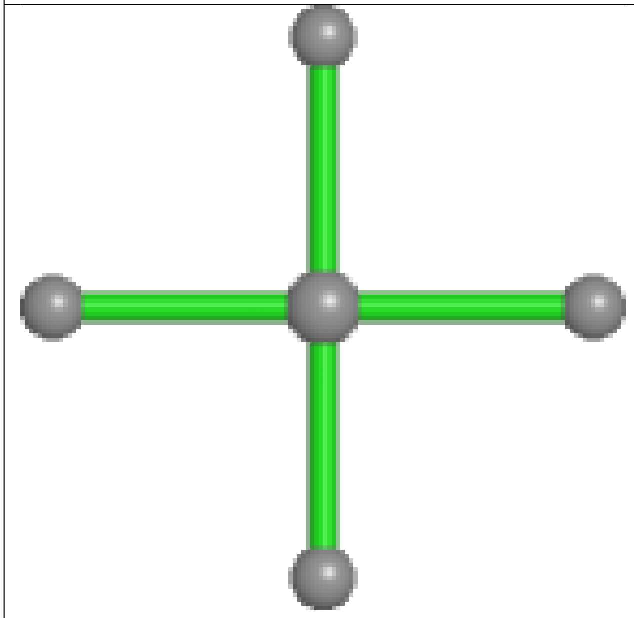


Bond lengths Bond angles



Torsions Rings

Ligand SO4 K 208



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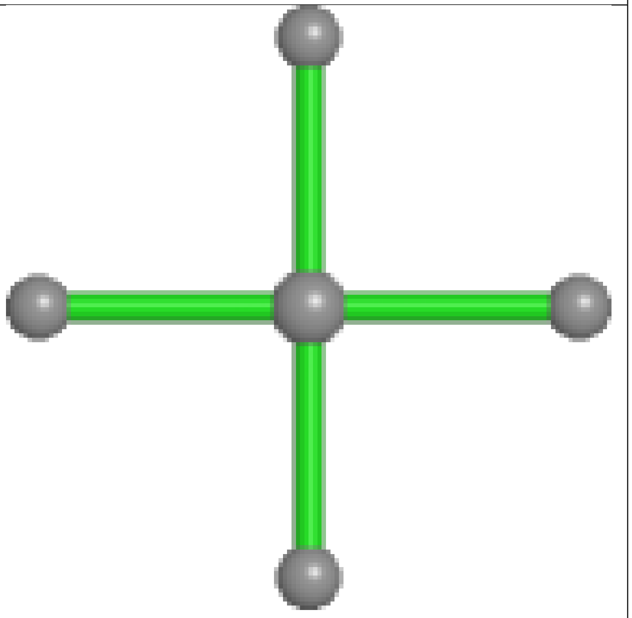
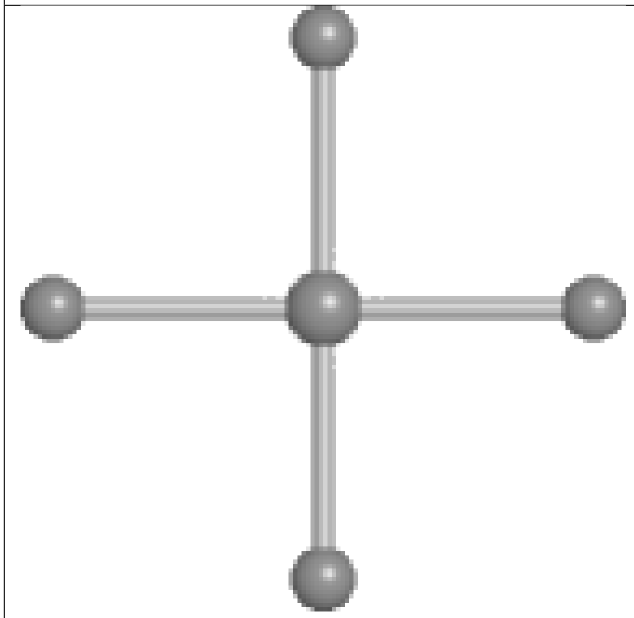
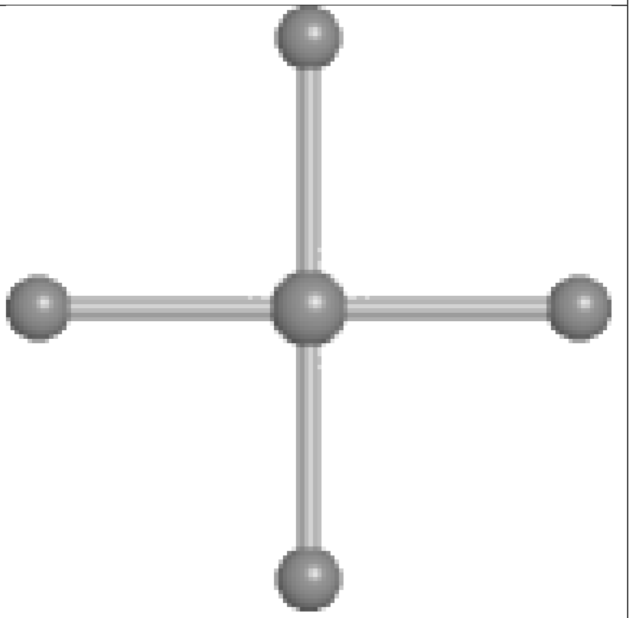


Bond angles

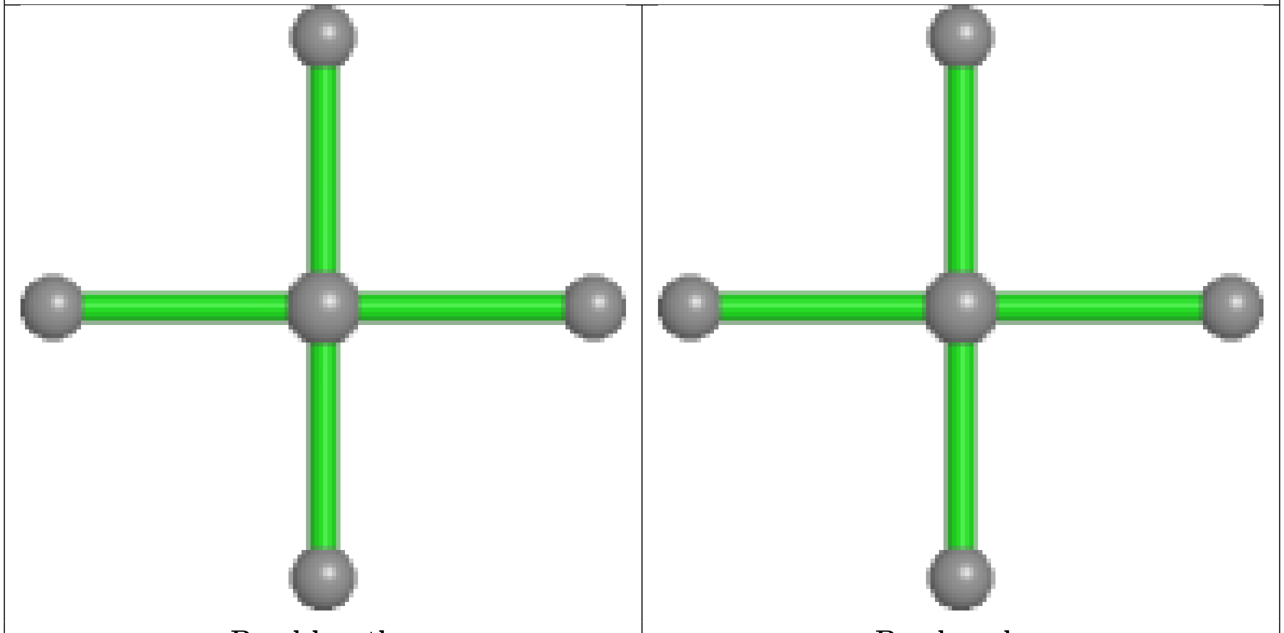


Torsions



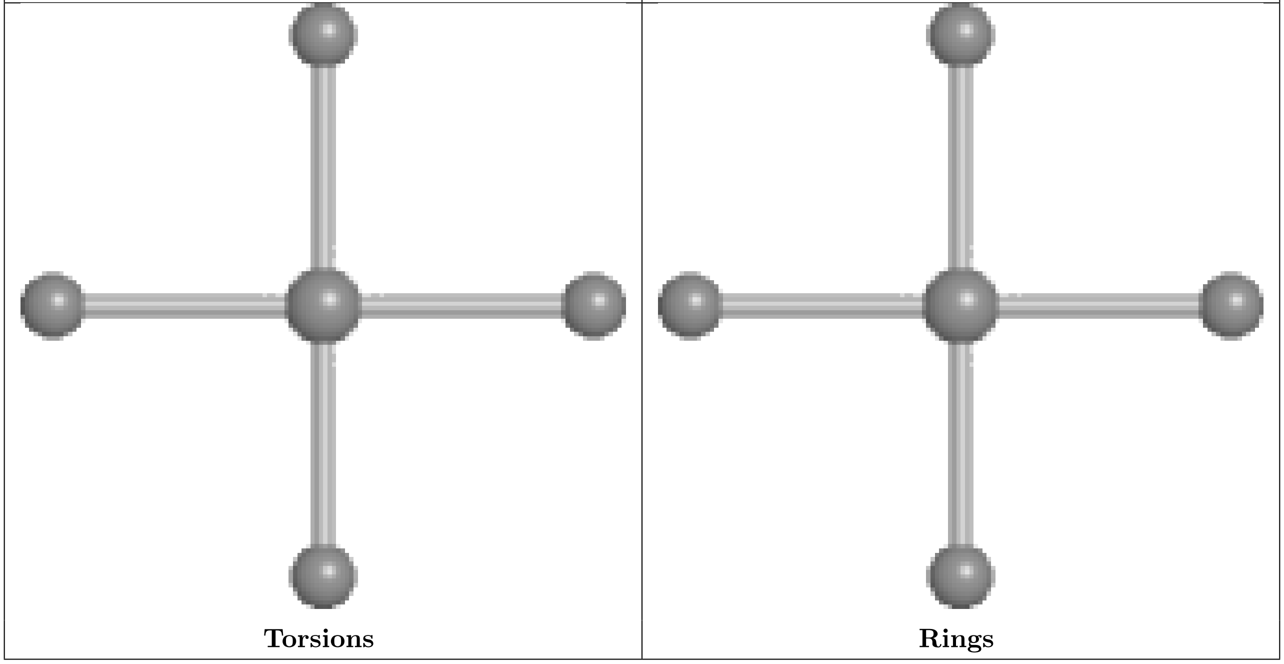
Rings

Ligand SO4 F 210



Bond lengths

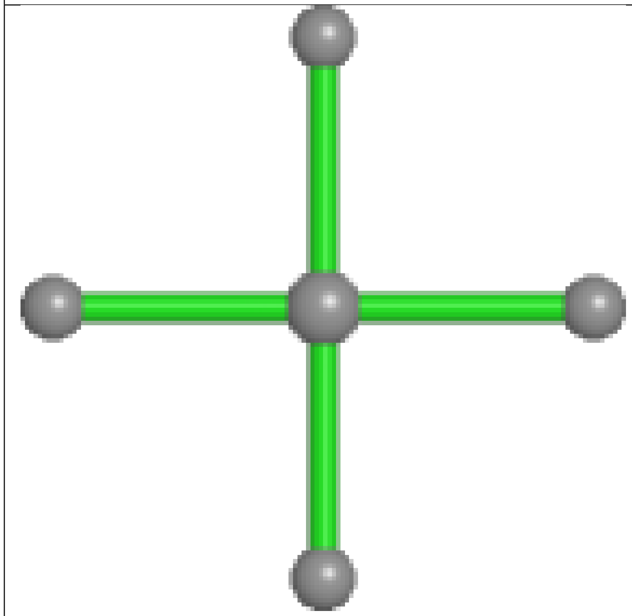
Bond angles



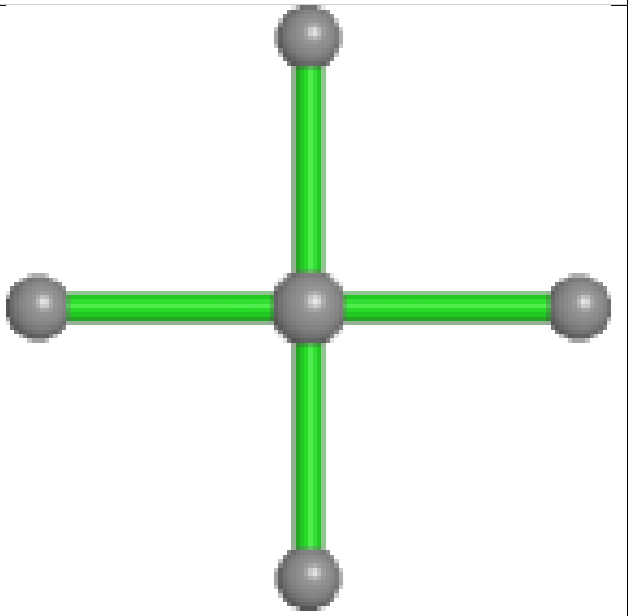
Torsions

Rings

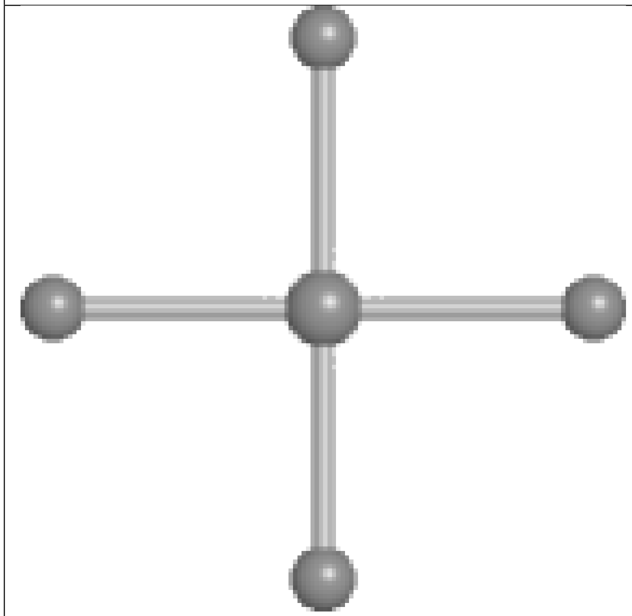
Ligand SO4 F 211



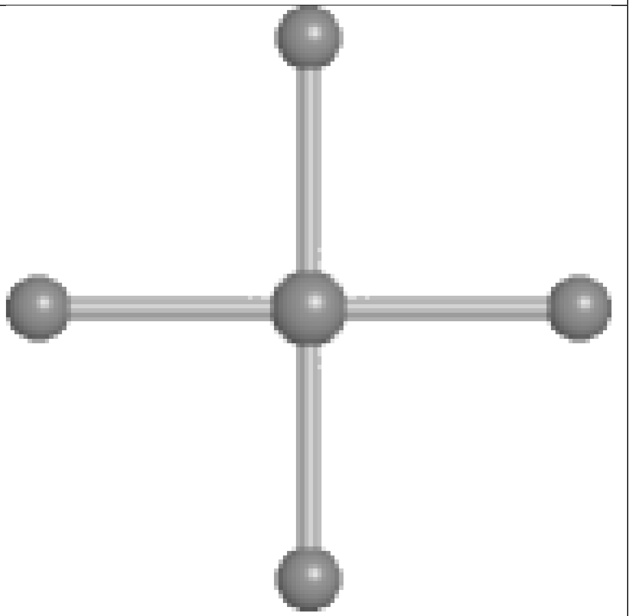
Bond lengths



Bond angles

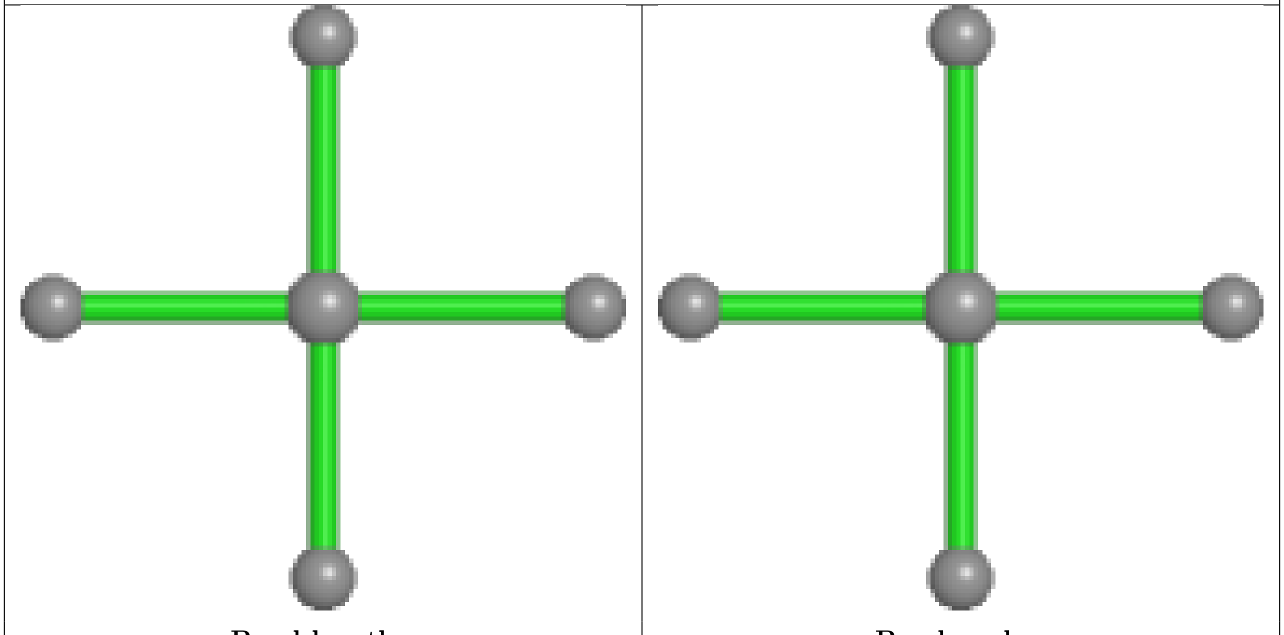


Torsions



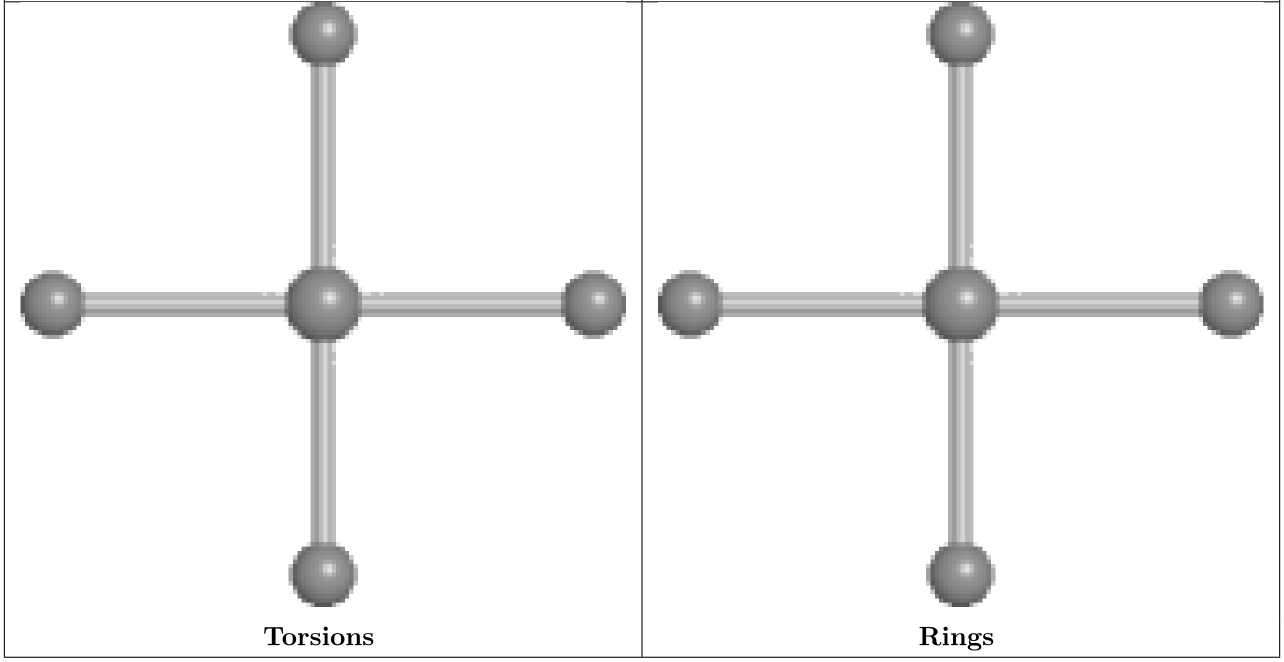
Rings

Ligand SO4 G 205



Bond lengths

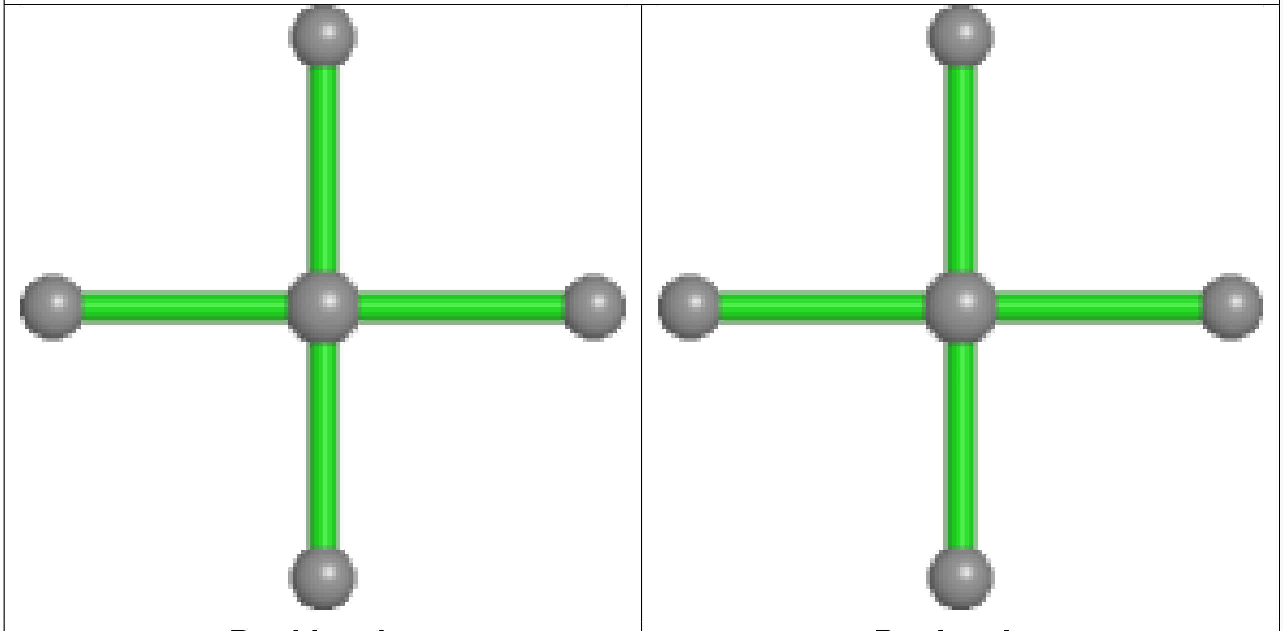
Bond angles



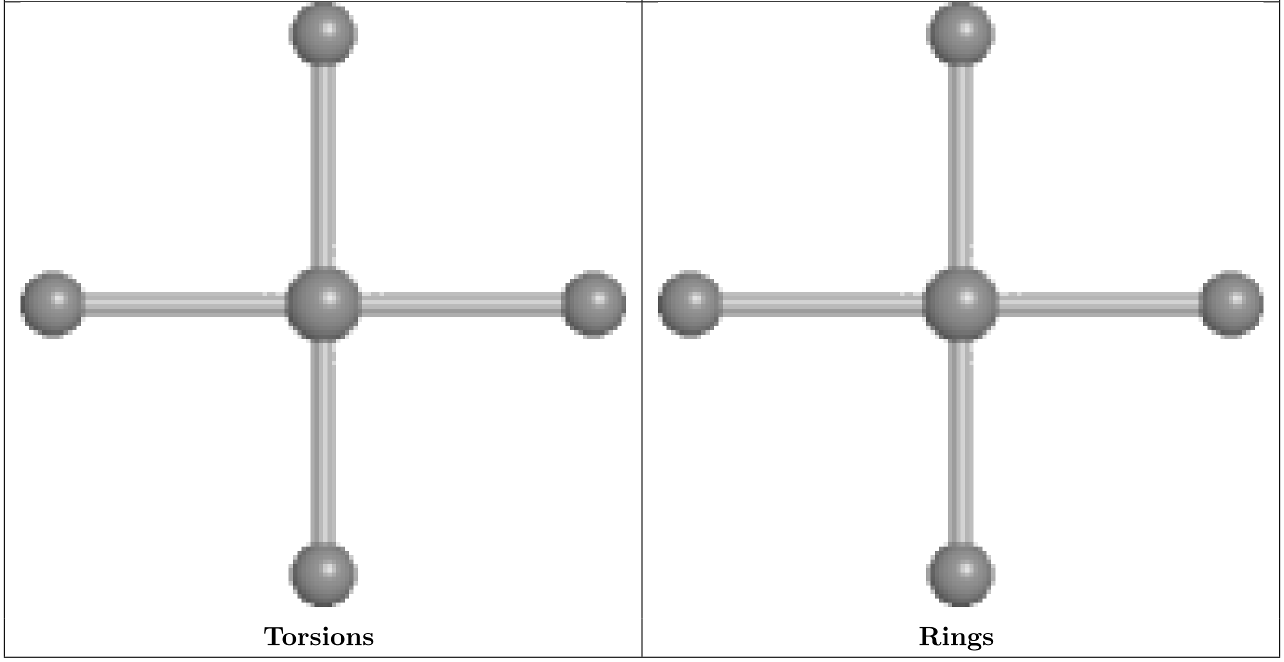
Torsions

Rings

Ligand SO4 A 205

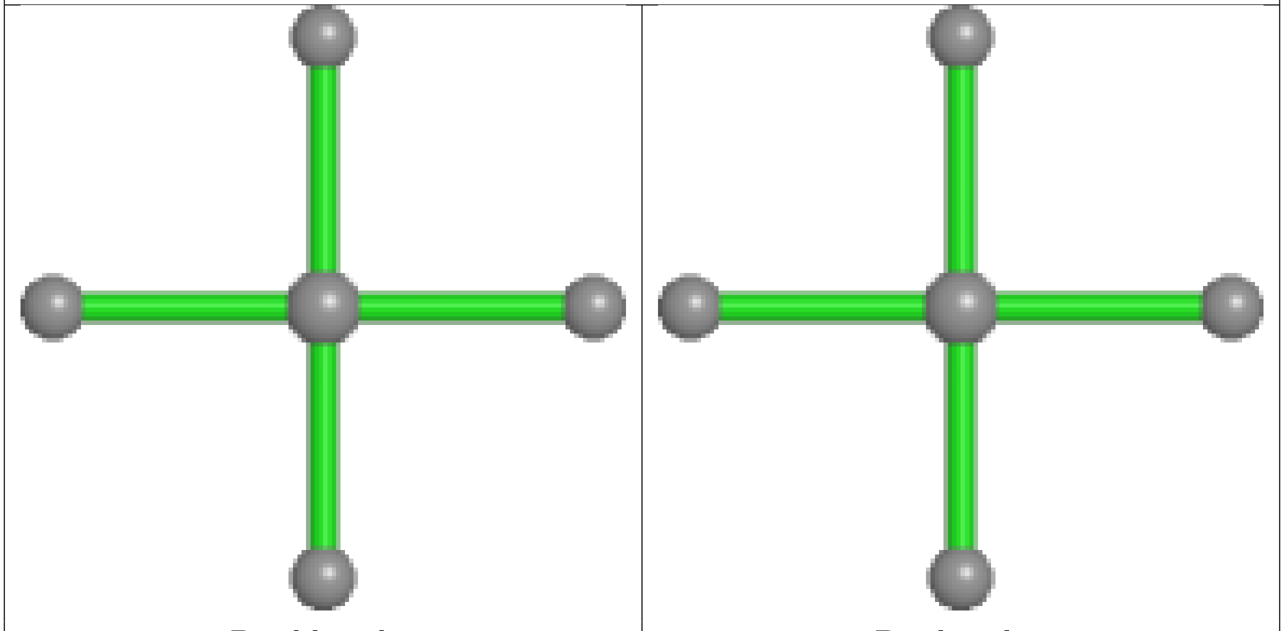


Bond lengths **Bond angles**



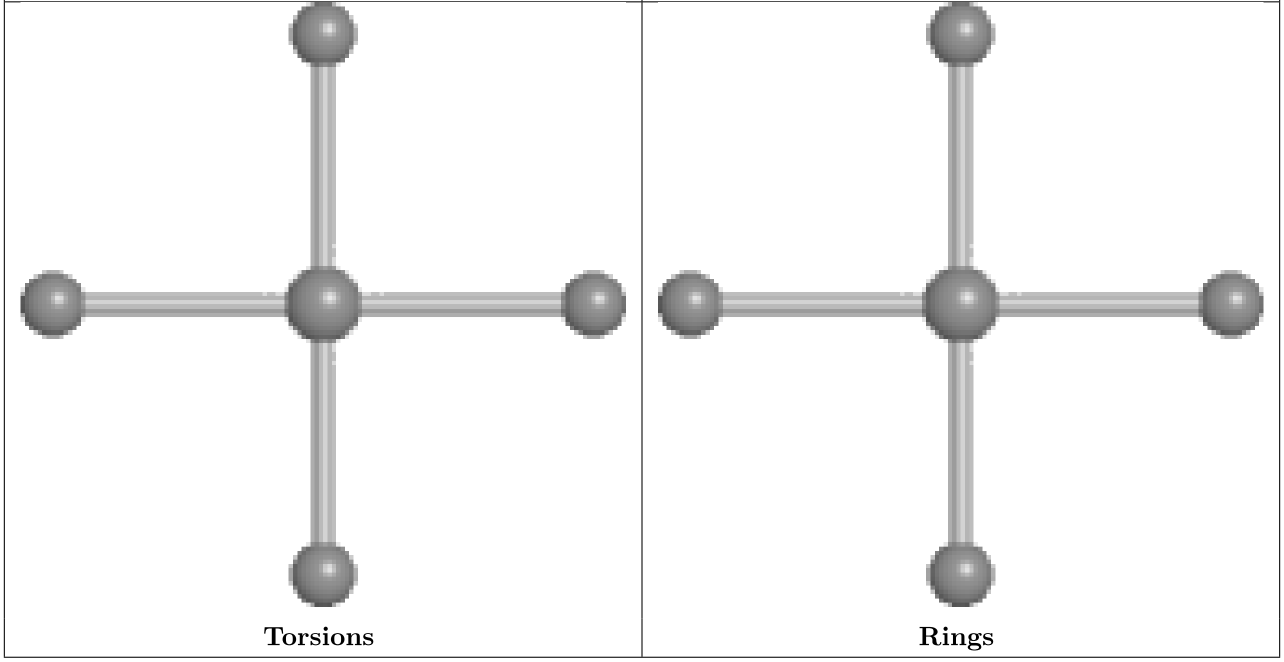
Torsions **Rings**

Ligand SO4 F 209



Bond lengths

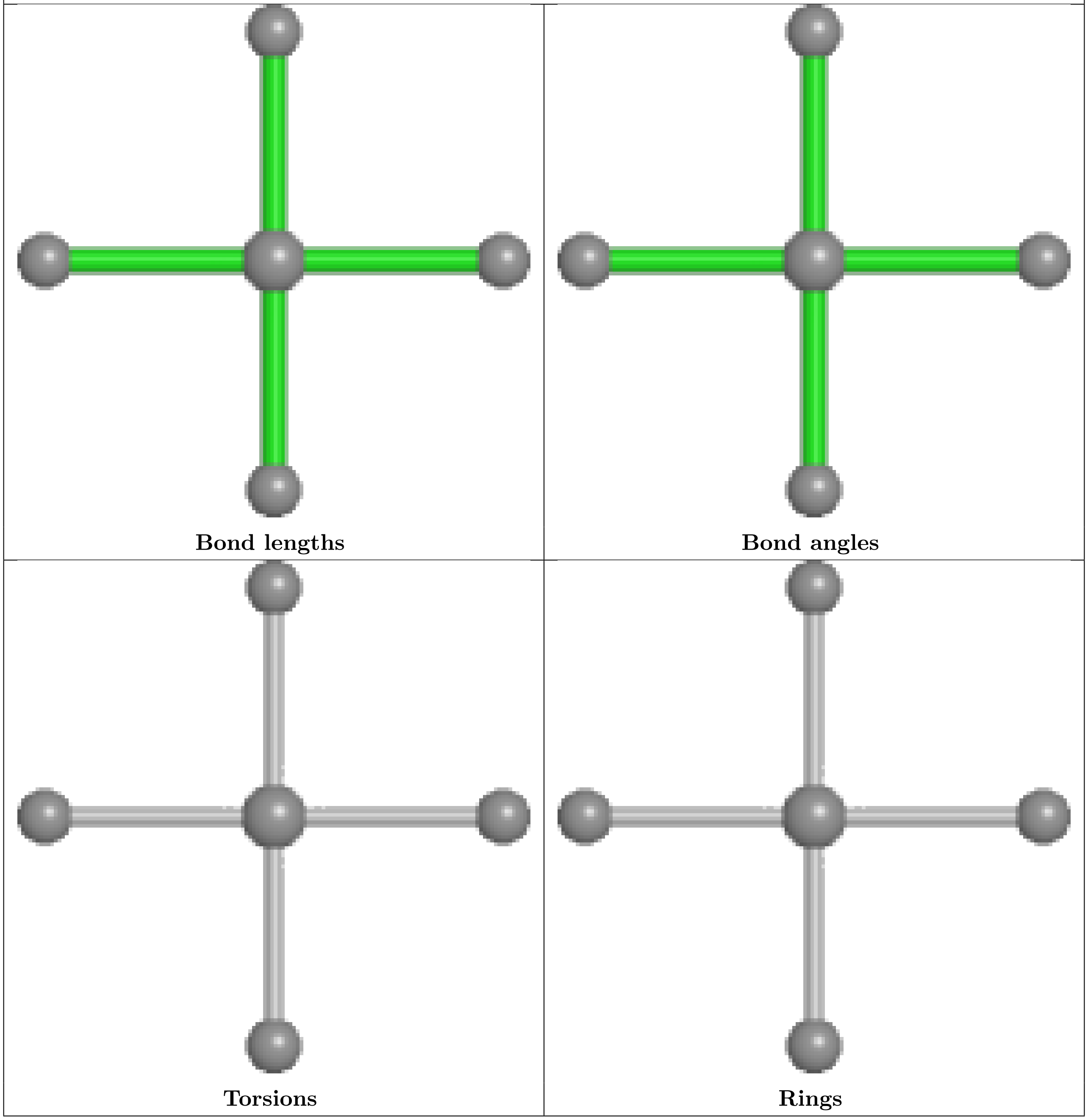
Bond angles



Torsions

Rings

Ligand SO4 G 207



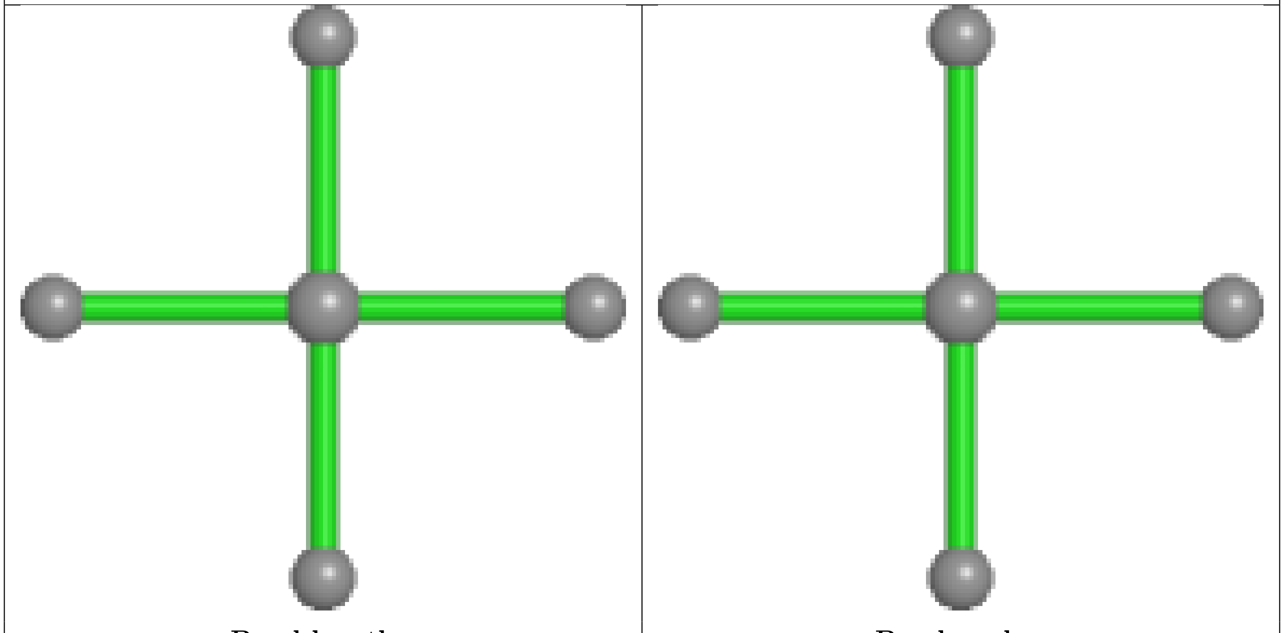
Bond lengths

Bond angles

Torsions

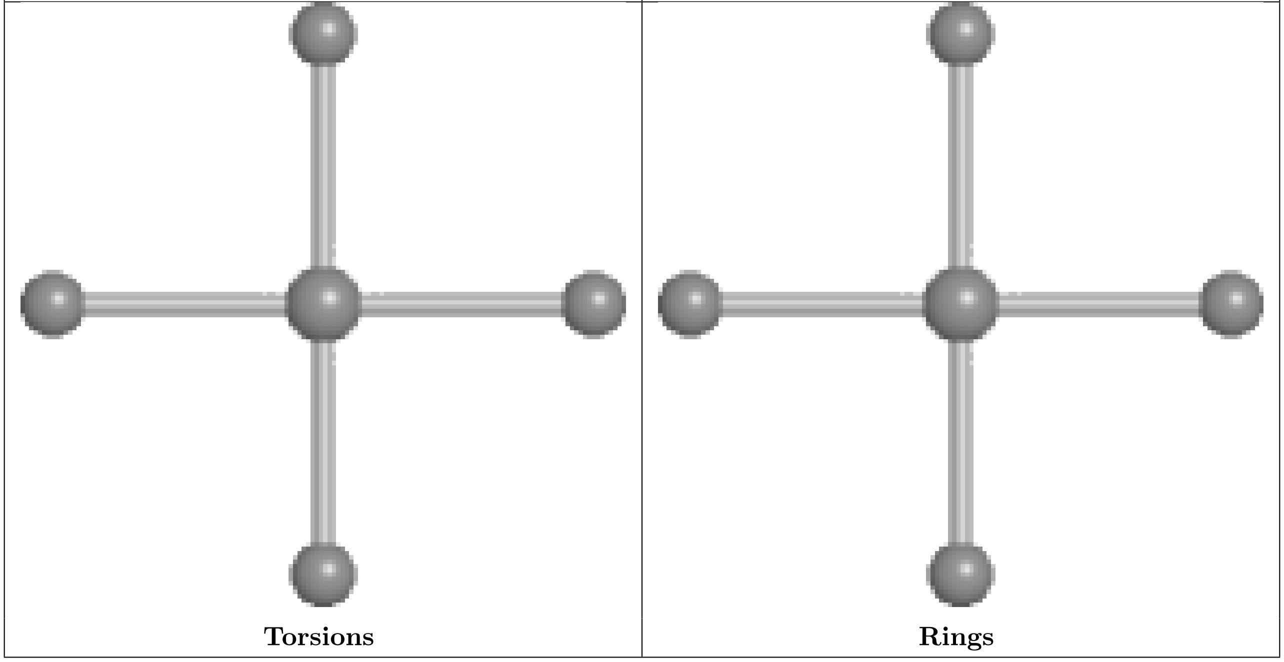
Rings

Ligand SO4 E 207



Bond lengths

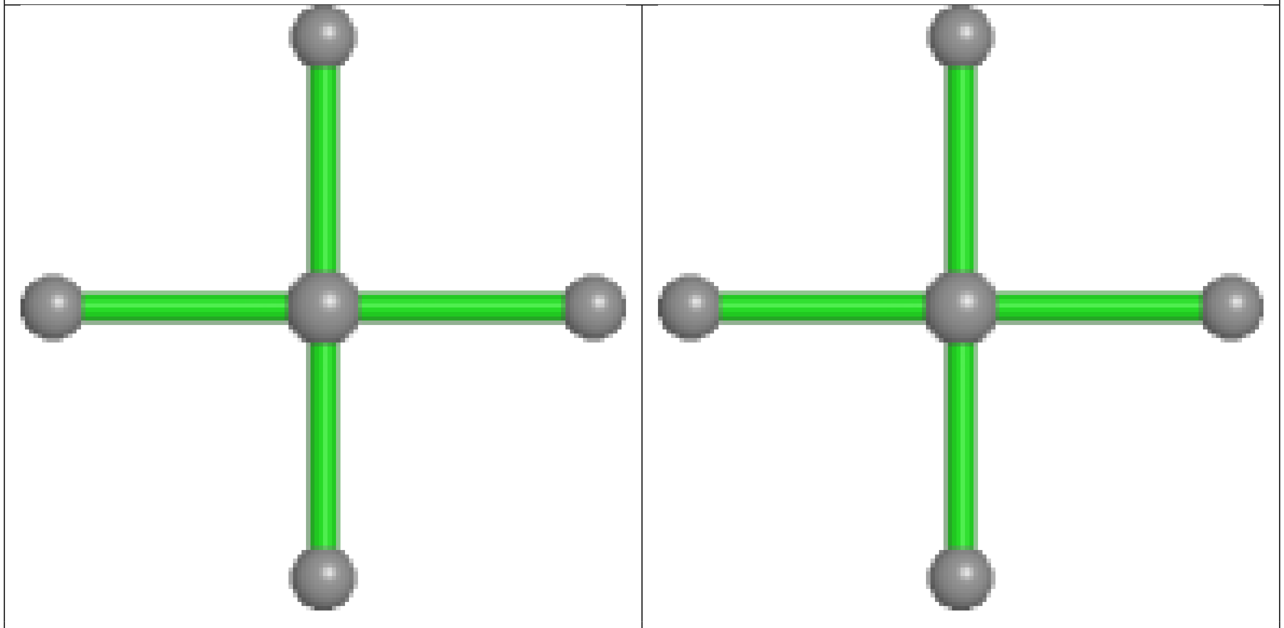
Bond angles



Torsions

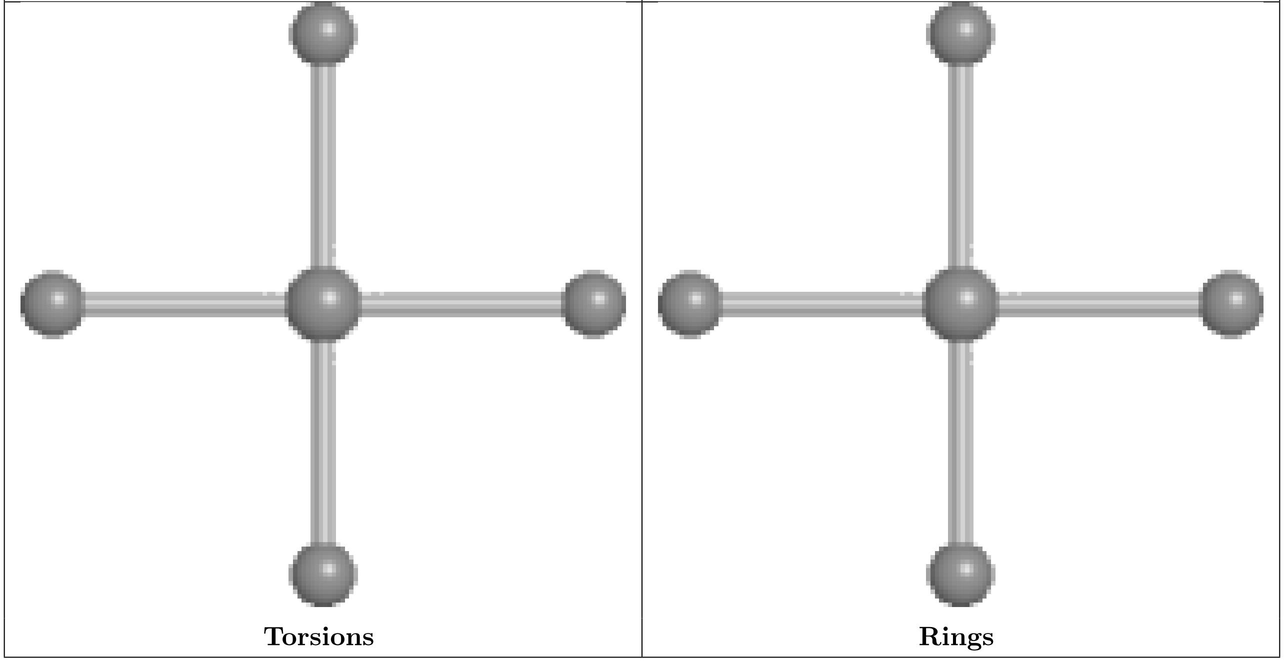
Rings

Ligand SO4 G 206



Bond lengths

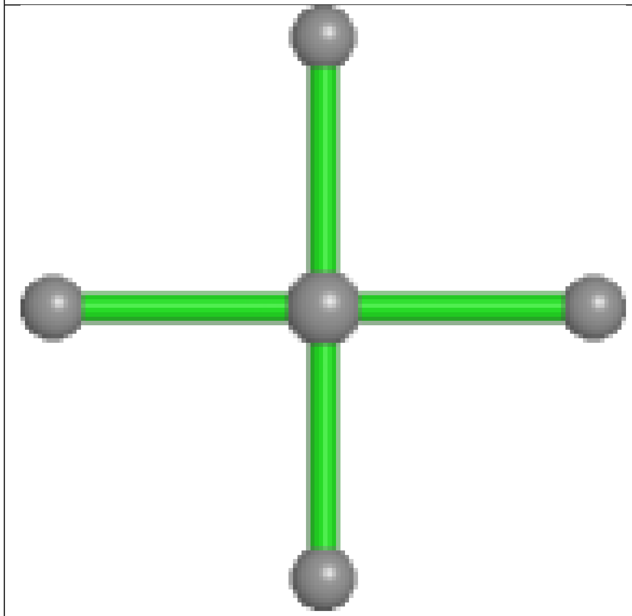
Bond angles



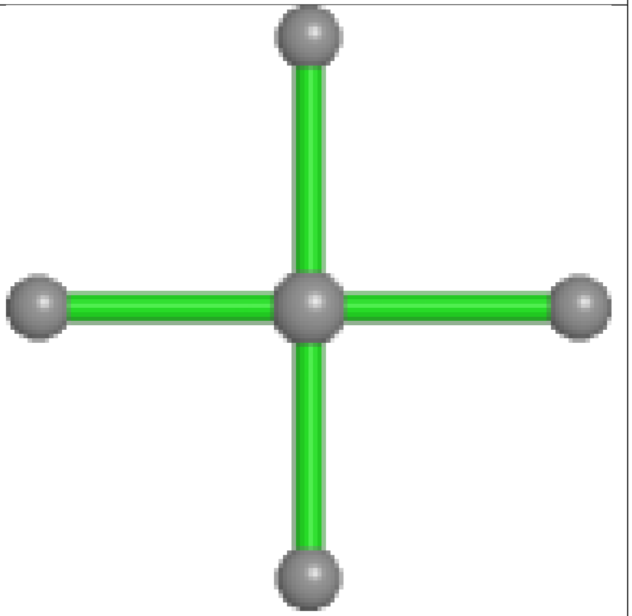
Torsions

Rings

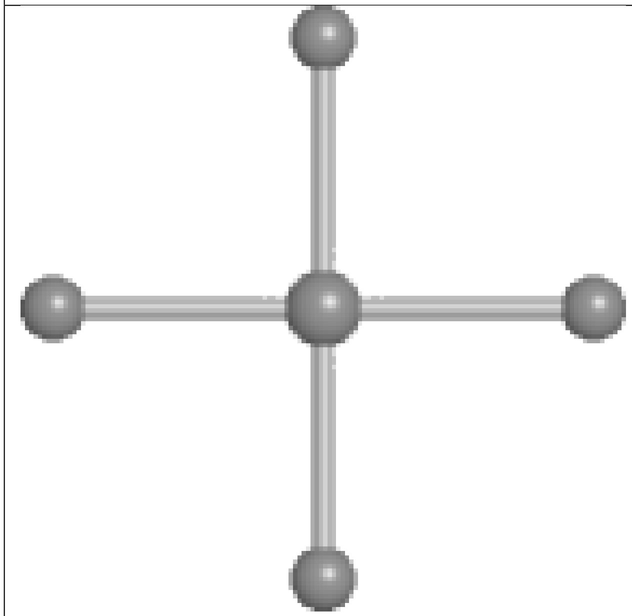
Ligand SO4 I 206



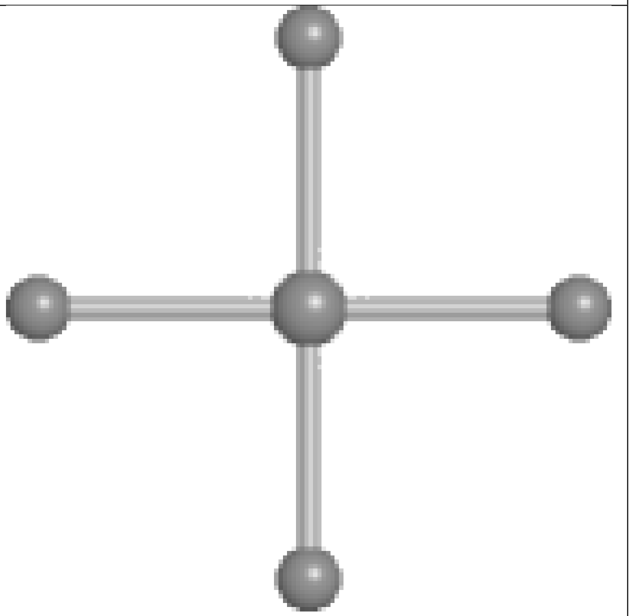
Bond lengths



Bond angles

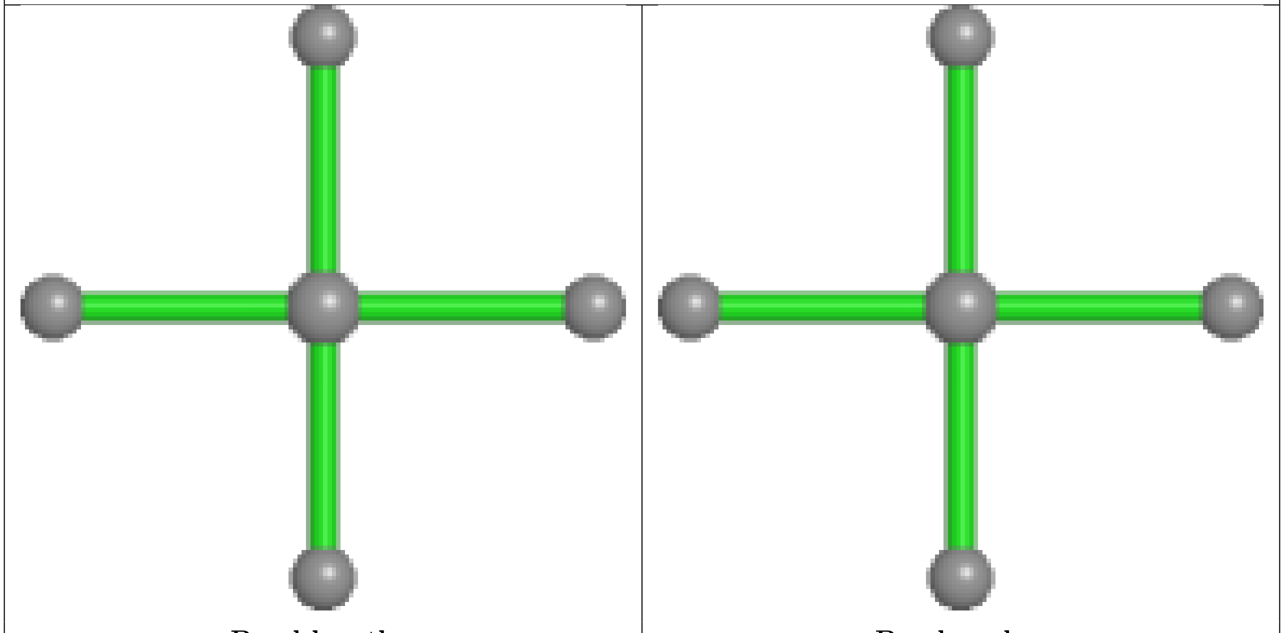


Torsions

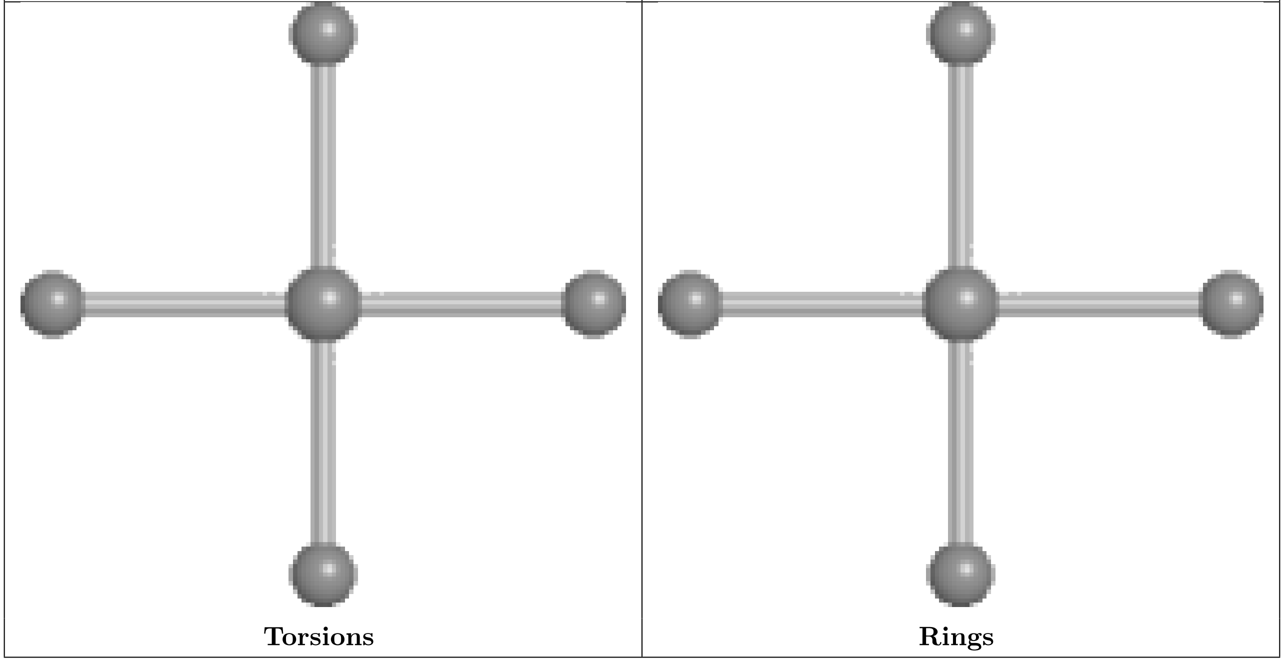


Rings

Ligand SO4 C 208

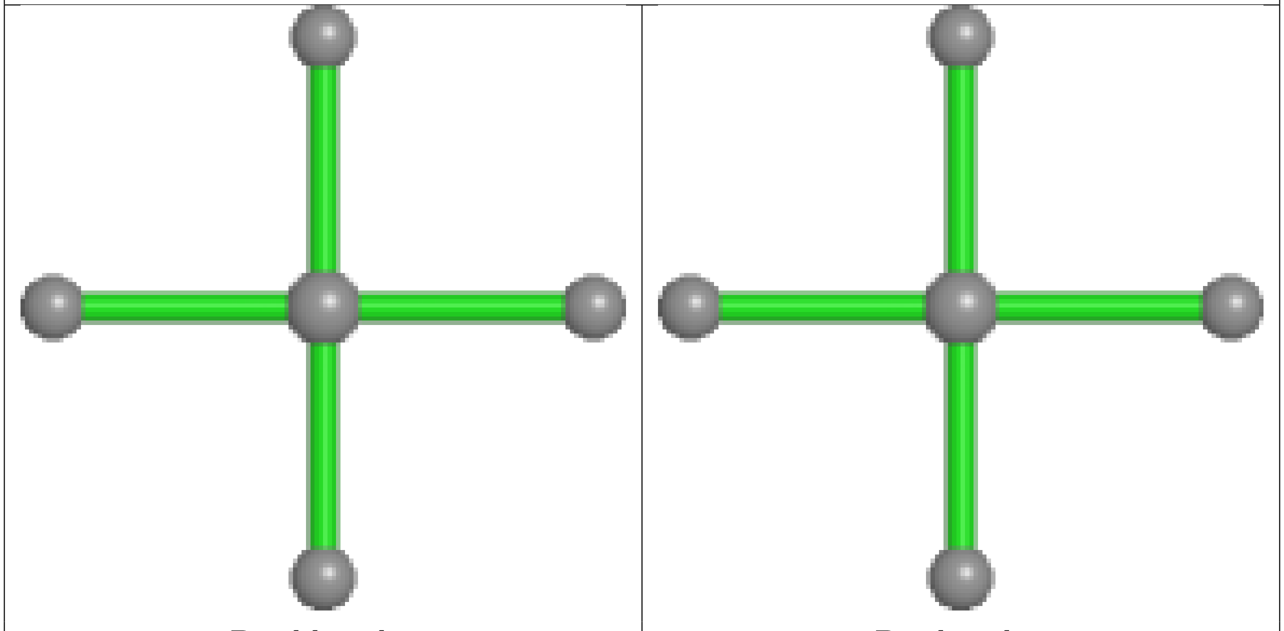


Bond lengths **Bond angles**



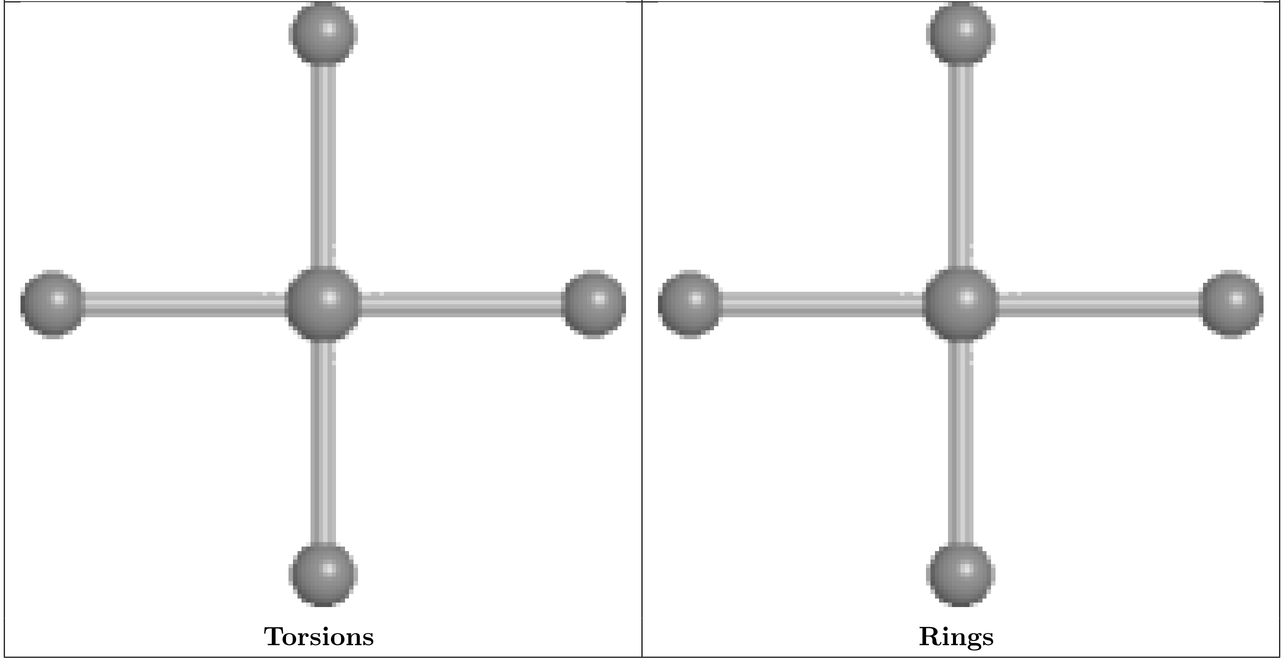
Torsions **Rings**

Ligand SO4 B 203



Bond lengths

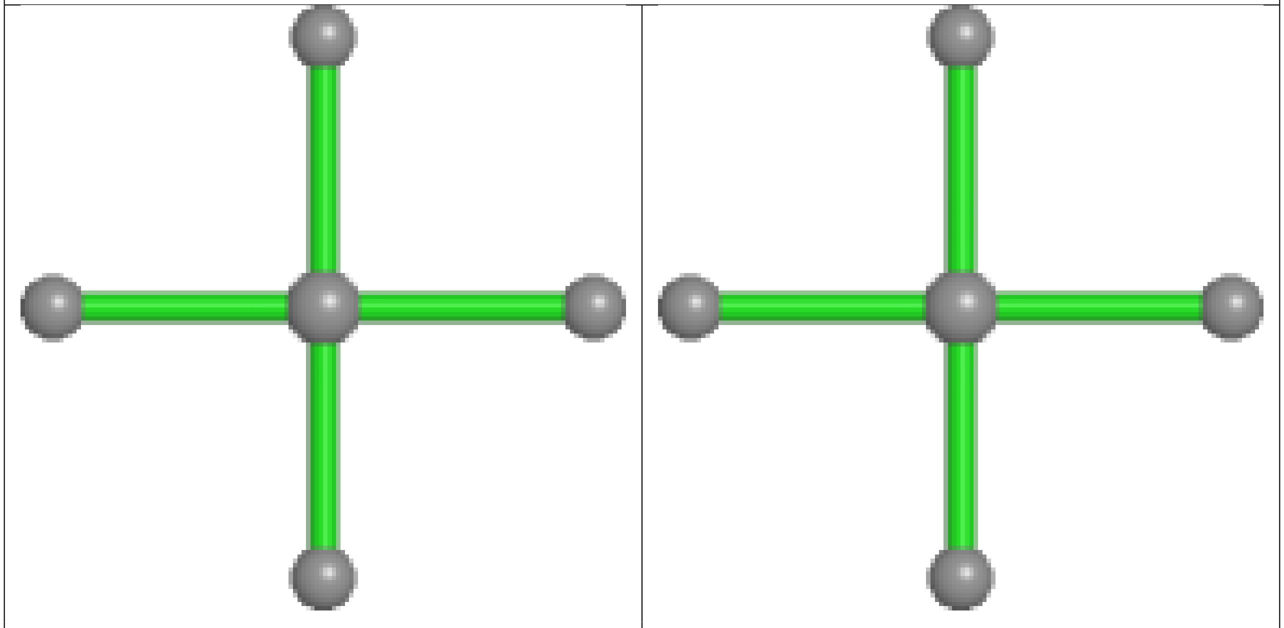
Bond angles



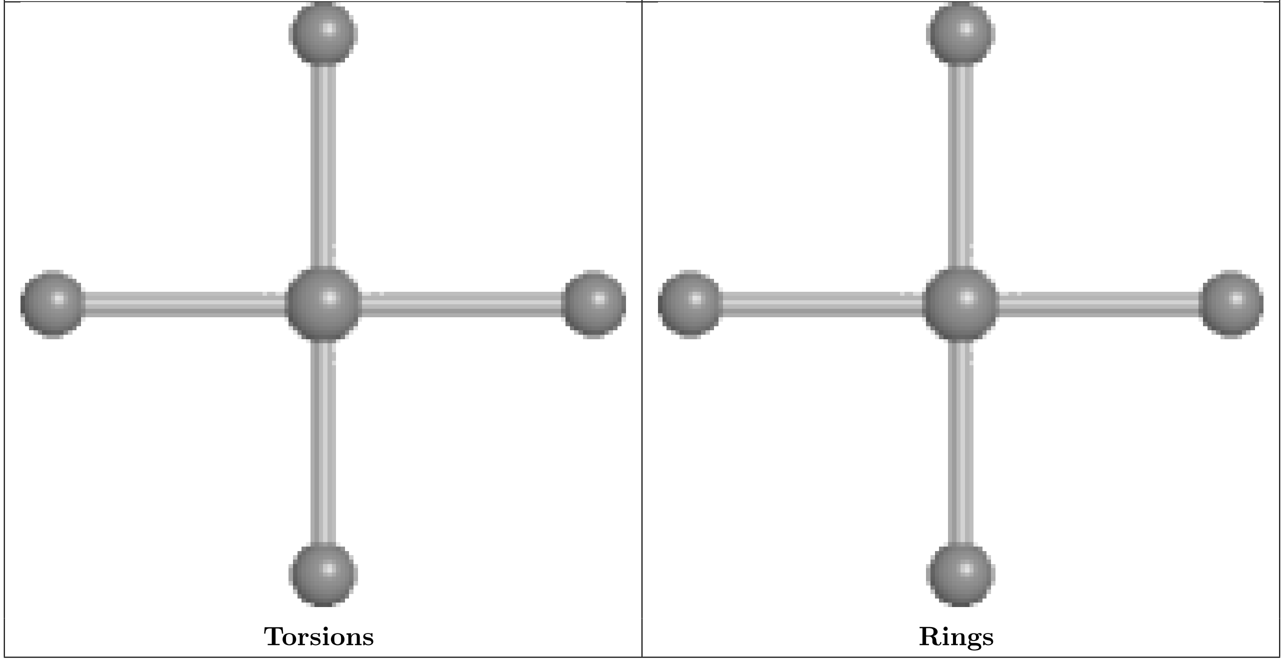
Torsions

Rings

Ligand SO4 C 206

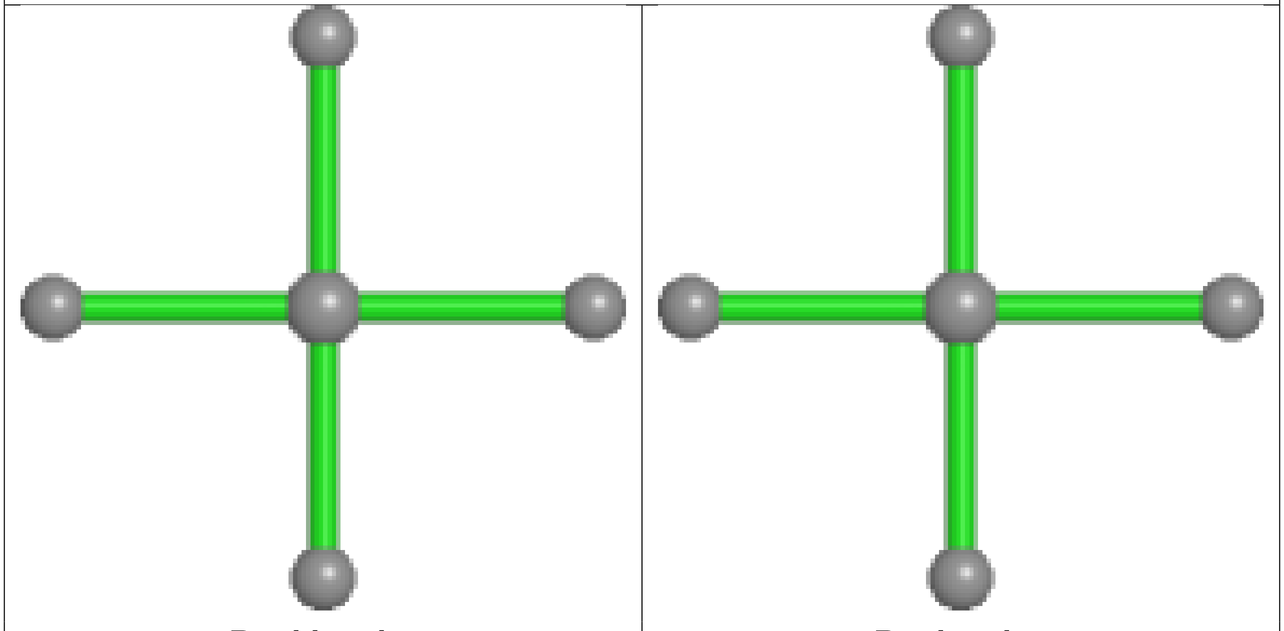


Bond lengths Bond angles

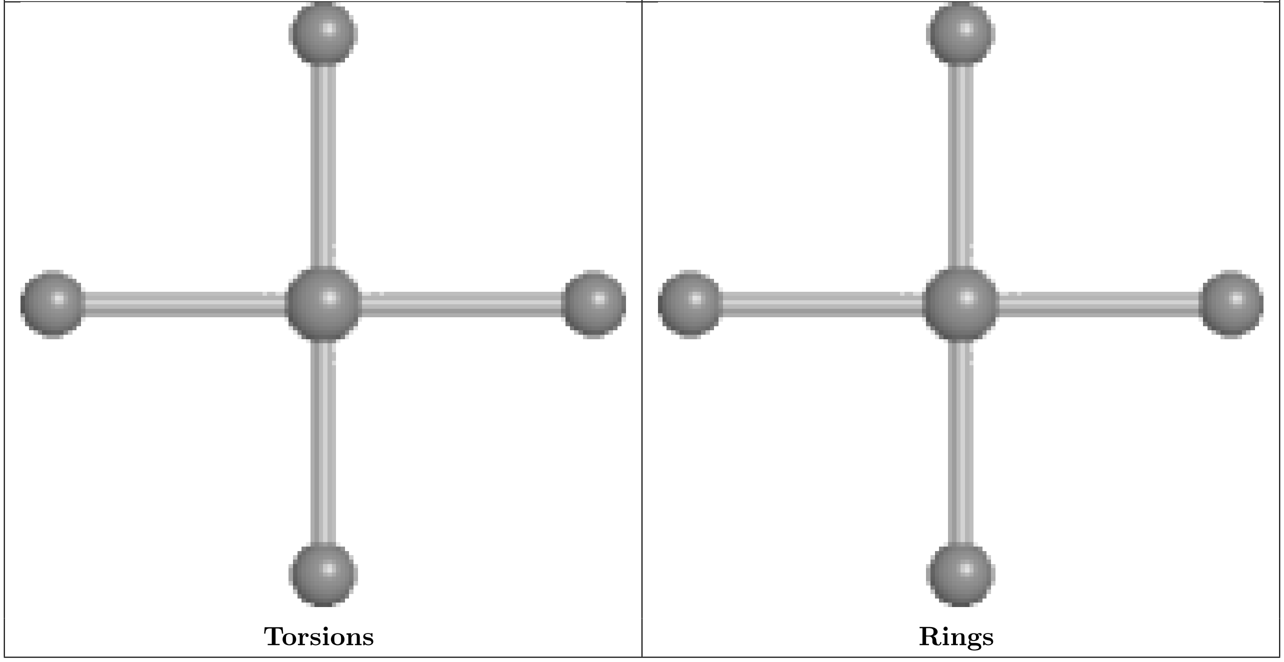


Torsions Rings

Ligand SO4 D 205

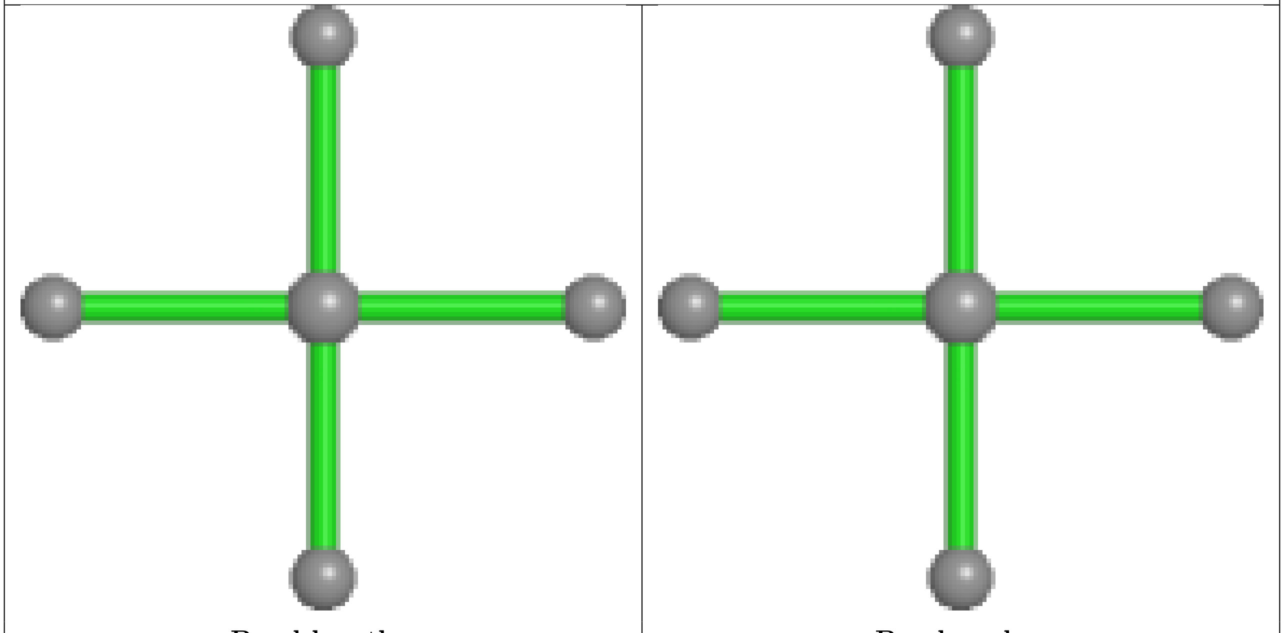


Bond lengths **Bond angles**



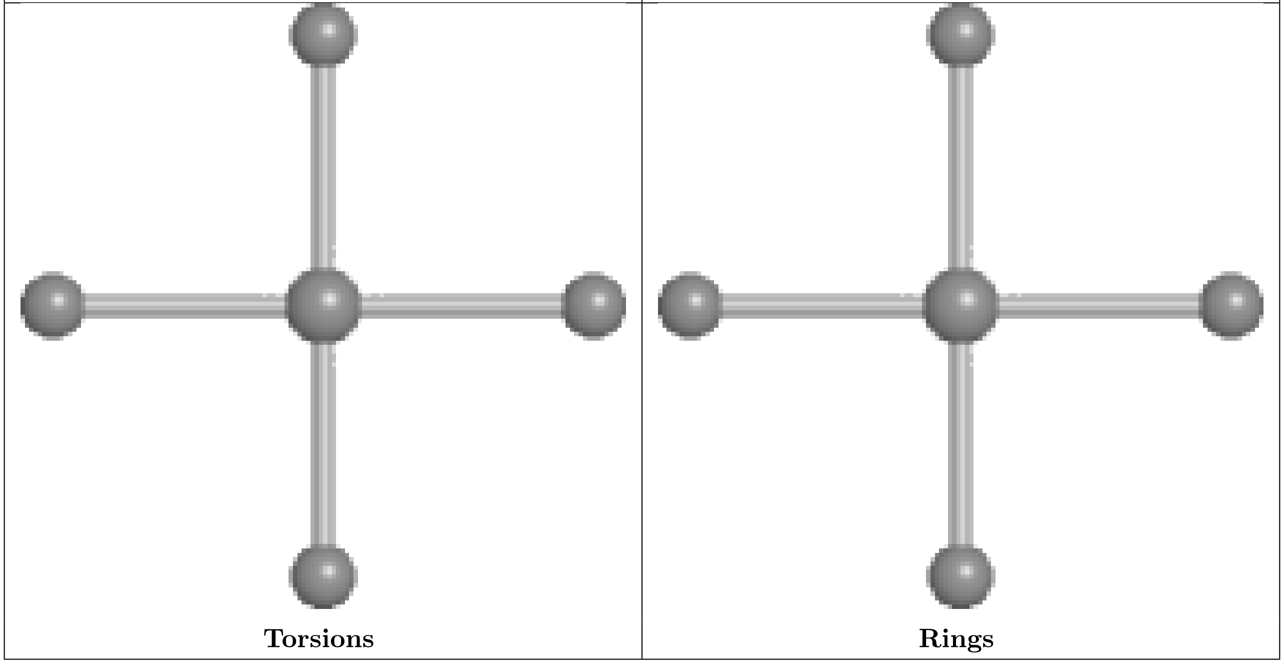
Torsions **Rings**

Ligand SO4 E 205



Bond lengths

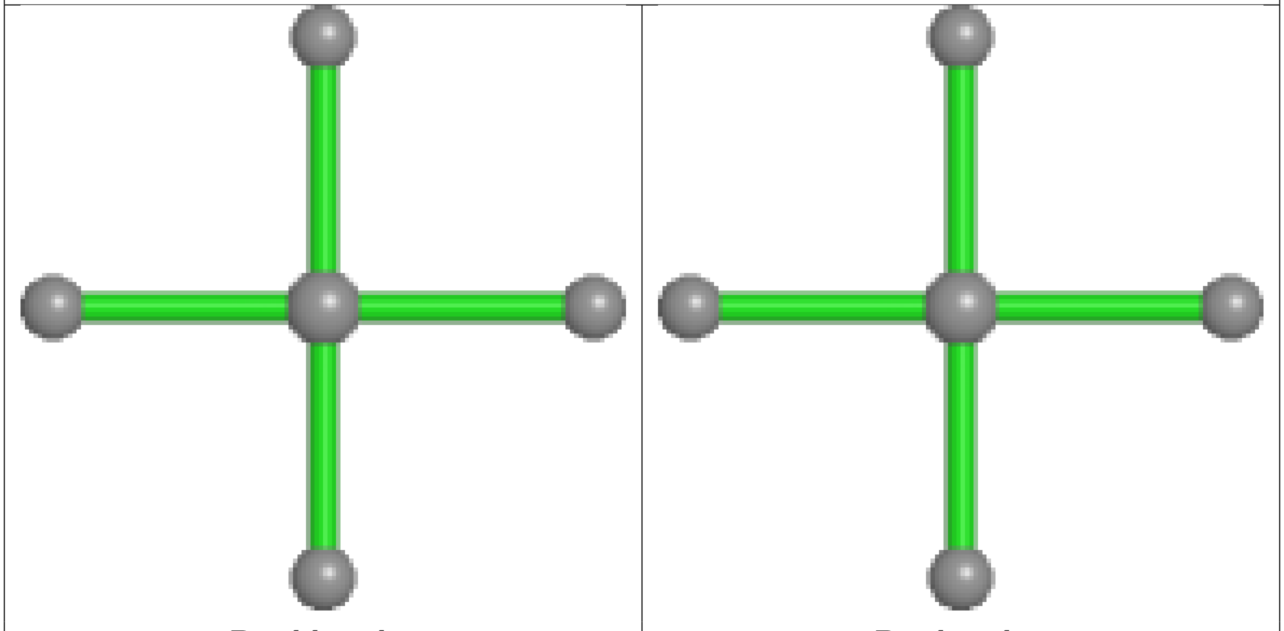
Bond angles



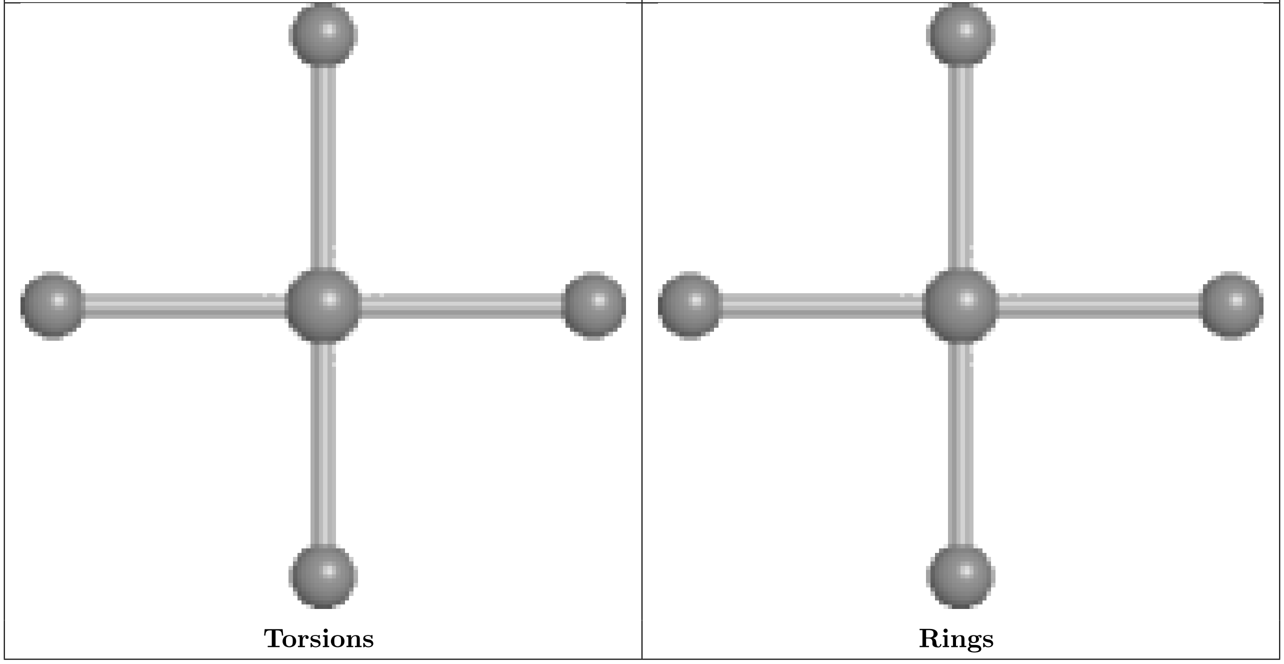
Torsions

Rings

Ligand SO4 L 205



Bond lengths **Bond angles**



Torsions **Rings**

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

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	168/177 (94%)	-0.43	0	100	100	53, 62, 89, 123	0
1	B	170/177 (96%)	-0.40	0	100	100	53, 61, 86, 127	0
1	C	168/177 (94%)	-0.40	0	100	100	53, 66, 93, 128	0
1	D	170/177 (96%)	-0.20	3 (1%)	68	40	56, 67, 94, 129	0
1	E	170/177 (96%)	-0.43	0	100	100	53, 62, 82, 112	0
1	F	170/177 (96%)	-0.48	3 (1%)	68	40	53, 63, 93, 125	0
1	G	169/177 (95%)	-0.38	0	100	100	55, 63, 93, 124	0
1	H	169/177 (95%)	-0.34	2 (1%)	79	54	53, 63, 94, 128	0
1	I	169/177 (95%)	-0.48	2 (1%)	79	54	54, 65, 85, 144	0
1	J	169/177 (95%)	-0.42	2 (1%)	79	54	55, 66, 98, 134	0
1	K	170/177 (96%)	-0.31	2 (1%)	79	54	55, 67, 96, 134	0
1	L	169/177 (95%)	-0.39	0	100	100	53, 67, 94, 135	0
All	All	2031/2124 (95%)	-0.39	14 (0%)	87	69	53, 65, 93, 144	0

All (14) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	J	9	VAL	4.6
1	D	10	GLN	3.8
1	F	8	ASP	3.6
1	K	8	ASP	3.5
1	D	8	ASP	3.1
1	K	10	GLN	2.5
1	I	177	ALA	2.5
1	I	9	VAL	2.4
1	D	9	VAL	2.3
1	F	10	GLN	2.3
1	H	177	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
1	J	10	GLN	2.2
1	H	9	VAL	2.1
1	F	9	VAL	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 ⓘ

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, 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	SO4	J	204	5/5	0.37	0.31	117,121,131,152	0
3	SO4	D	203	5/5	0.50	0.37	118,124,138,154	0
3	SO4	F	207	5/5	0.57	0.31	115,122,138,151	0
2	MG	I	203	1/1	0.57	0.22	82,82,82,82	0
2	MG	C	203	1/1	0.58	0.27	77,77,77,77	0
3	SO4	J	205	5/5	0.62	0.50	127,130,139,152	0
3	SO4	K	205	5/5	0.64	0.31	119,120,134,147	0
2	MG	K	203	1/1	0.67	0.24	78,78,78,78	0
2	MG	E	203	1/1	0.70	0.16	71,71,71,71	0
2	MG	A	203	1/1	0.71	0.49	67,67,67,67	0
3	SO4	D	207	5/5	0.72	0.48	102,105,125,134	0
2	MG	E	204	1/1	0.72	0.93	68,68,68,68	0
2	MG	L	203	1/1	0.72	0.19	69,69,69,69	0
3	SO4	A	206	5/5	0.72	0.41	86,96,122,123	0
2	MG	A	201	1/1	0.72	0.07	65,65,65,65	0
3	SO4	G	207	5/5	0.74	0.60	102,109,124,137	0
2	MG	G	203	1/1	0.75	0.30	77,77,77,77	0
3	SO4	B	205	5/5	0.76	0.65	93,98,138,138	0
3	SO4	K	208	5/5	0.76	0.67	111,112,147,147	0
3	SO4	L	206	5/5	0.76	0.41	97,103,125,137	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	SO4	I	206	5/5	0.77	0.40	102,104,123,137	0
3	SO4	C	208	5/5	0.77	0.40	92,98,125,131	0
4	FE2	E	208	1/1	0.77	0.11	74,74,74,74	0
3	SO4	L	205	5/5	0.78	0.50	113,117,125,137	0
3	SO4	A	204	5/5	0.79	0.34	115,126,135,146	0
2	MG	J	203	1/1	0.79	0.85	68,68,68,68	0
2	MG	F	205	1/1	0.81	0.13	73,73,73,73	0
2	MG	D	202	1/1	0.81	0.39	66,66,66,66	0
3	SO4	E	207	5/5	0.83	0.41	89,92,121,130	0
2	MG	H	203	1/1	0.83	0.70	68,68,68,68	0
3	SO4	F	211	5/5	0.83	0.39	85,94,115,124	0
3	SO4	L	204	5/5	0.85	0.34	107,111,127,131	0
3	SO4	F	210	5/5	0.85	0.27	96,98,114,114	0
2	MG	K	202	1/1	0.85	0.44	69,69,69,69	0
3	SO4	G	206	5/5	0.85	0.29	101,106,112,126	0
2	MG	J	202	1/1	0.86	0.20	72,72,72,72	0
2	MG	I	202	1/1	0.86	0.26	72,72,72,72	0
3	SO4	J	206	5/5	0.86	0.44	102,108,130,133	0
3	SO4	B	204	5/5	0.87	0.25	85,87,100,108	0
3	SO4	G	205	5/5	0.88	0.30	110,111,126,134	0
3	SO4	C	205	5/5	0.88	0.27	99,104,125,129	0
3	SO4	K	207	5/5	0.88	0.39	127,128,128,139	0
3	SO4	C	206	5/5	0.88	0.41	115,116,129,134	0
3	SO4	H	204	5/5	0.88	0.46	119,122,126,145	0
2	MG	A	202	1/1	0.88	0.26	60,60,60,60	0
2	MG	B	202	1/1	0.88	0.40	68,68,68,68	0
3	SO4	D	205	5/5	0.88	0.30	99,104,112,119	0
3	SO4	F	209	5/5	0.89	0.35	111,119,121,133	0
2	MG	K	201	1/1	0.89	0.12	65,65,65,65	0
3	SO4	E	206	5/5	0.89	0.26	93,102,122,129	0
2	MG	L	202	1/1	0.89	0.22	63,63,63,63	0
3	SO4	F	206	5/5	0.89	0.20	98,107,109,122	0
2	MG	F	202	1/1	0.89	0.19	59,59,59,59	0
3	SO4	C	207	5/5	0.90	0.20	94,97,110,120	0
3	SO4	K	206	5/5	0.90	0.37	101,101,116,120	0
4	FE2	K	210	1/1	0.90	0.09	75,75,75,75	0
2	MG	F	203	1/1	0.91	0.57	61,61,61,61	0
2	MG	G	201	1/1	0.91	0.08	60,60,60,60	0
3	SO4	K	204	5/5	0.91	0.21	102,110,113,125	0
3	SO4	D	204	5/5	0.91	0.34	94,99,117,122	0
2	MG	B	201	1/1	0.92	0.18	63,63,63,63	0
2	MG	F	201	1/1	0.92	0.08	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	SO4	E	205	5/5	0.92	0.27	97,99,103,106	0
3	SO4	A	205	5/5	0.92	0.16	69,87,100,114	0
2	MG	F	204	1/1	0.92	0.73	65,65,65,65	1
3	SO4	G	204	5/5	0.92	0.23	95,101,117,122	0
2	MG	H	201	1/1	0.93	0.14	59,59,59,59	0
2	MG	C	202	1/1	0.93	0.22	59,59,59,59	0
3	SO4	F	208	5/5	0.93	0.25	91,100,107,117	0
3	SO4	B	203	5/5	0.93	0.30	100,101,108,120	0
3	SO4	D	206	5/5	0.93	0.40	116,116,131,133	0
4	FE2	D	209	1/1	0.94	0.08	76,76,76,76	0
2	MG	E	202	1/1	0.94	0.20	65,65,65,65	0
4	FE2	G	209	1/1	0.94	0.08	72,72,72,72	0
3	SO4	I	204	5/5	0.94	0.27	91,95,106,108	0
4	FE2	C	209	1/1	0.95	0.11	77,77,77,77	0
2	MG	D	201	1/1	0.95	0.10	62,62,62,62	0
2	MG	H	202	1/1	0.95	0.21	58,58,58,58	0
3	SO4	C	204	5/5	0.95	0.36	107,107,111,121	0
3	SO4	I	205	5/5	0.95	0.21	88,103,106,112	0
4	FE2	L	208	1/1	0.95	0.11	76,76,76,76	0
2	MG	G	202	1/1	0.96	0.24	65,65,65,65	0
4	FE2	F	213	1/1	0.96	0.10	73,73,73,73	0
4	FE2	B	207	1/1	0.96	0.06	66,66,66,66	0
4	FE2	H	206	1/1	0.96	0.10	77,77,77,77	0
4	FE2	I	208	1/1	0.96	0.10	70,70,70,70	0
4	FE2	J	208	1/1	0.96	0.08	79,79,79,79	0
2	MG	C	201	1/1	0.96	0.12	64,64,64,64	0
2	MG	L	201	1/1	0.96	0.13	63,63,63,63	0
2	MG	E	201	1/1	0.97	0.10	59,59,59,59	0
2	MG	I	201	1/1	0.97	0.17	61,61,61,61	0
4	FE2	E	209	1/1	0.97	0.09	78,78,78,78	0
4	FE2	K	209	1/1	0.97	0.07	83,83,83,83	0
2	MG	J	201	1/1	0.97	0.07	63,63,63,63	0
4	FE2	D	208	1/1	0.97	0.07	82,82,82,82	0
4	FE2	J	207	1/1	0.98	0.09	83,83,83,83	0
4	FE2	A	208	1/1	0.98	0.04	68,68,68,68	0
4	FE2	H	205	1/1	0.98	0.07	82,82,82,82	0
4	FE2	A	207	1/1	0.98	0.06	76,76,76,76	0
4	FE2	L	207	1/1	0.98	0.08	80,80,80,80	0
4	FE2	G	208	1/1	0.98	0.08	77,77,77,77	0
4	FE2	I	207	1/1	0.99	0.11	79,79,79,79	0
4	FE2	F	212	1/1	0.99	0.09	71,71,71,71	0
4	FE2	B	206	1/1	0.99	0.08	71,71,71,71	0

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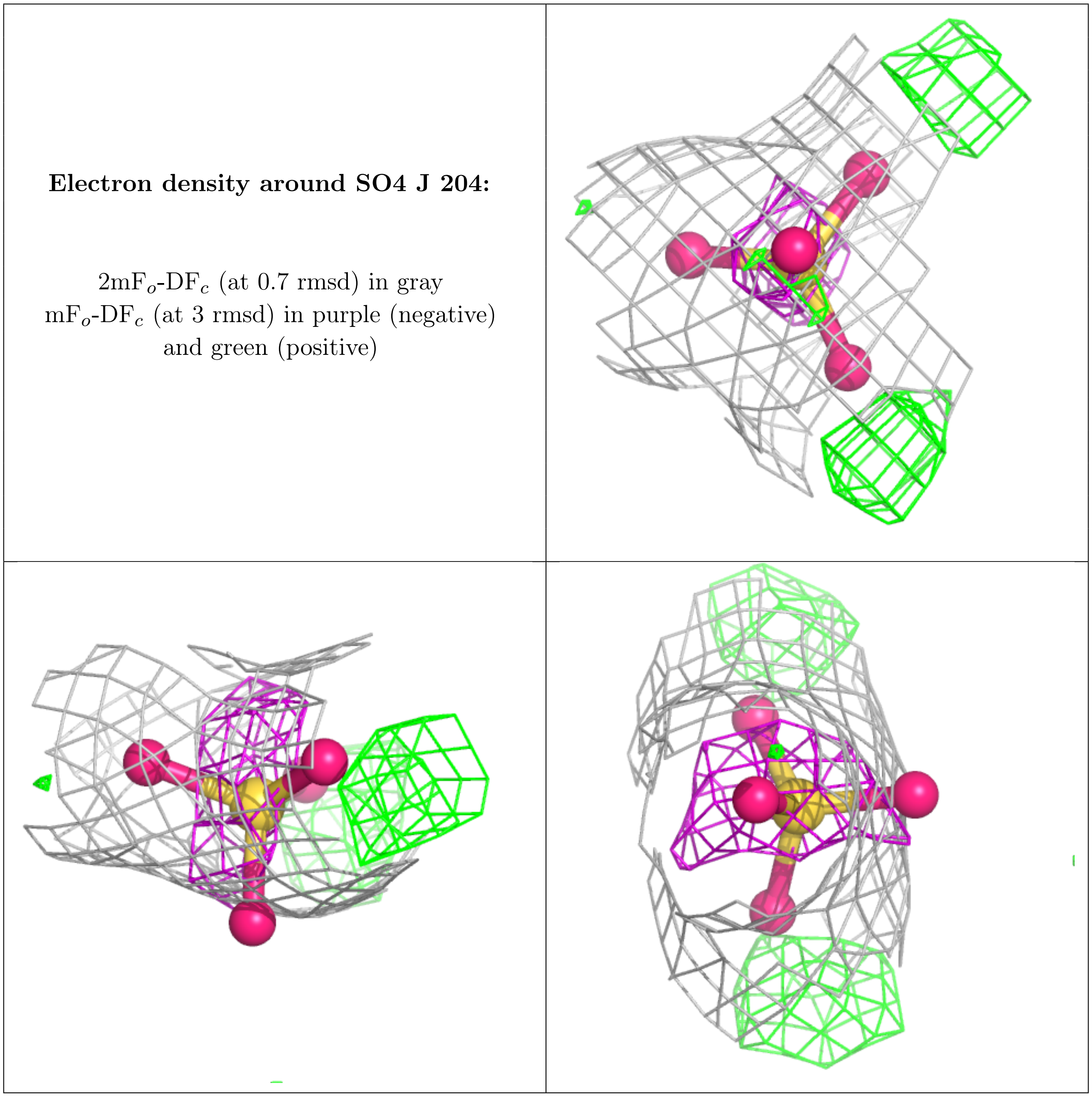
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
4	FE2	C	210	1/1	0.99	0.08	77,77,77,77	0

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.

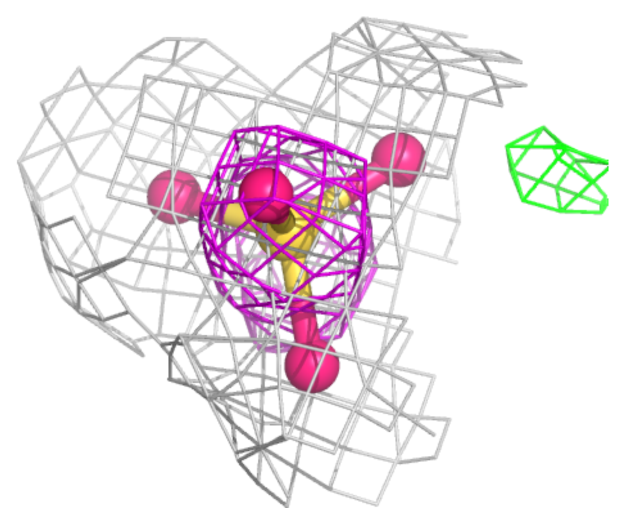


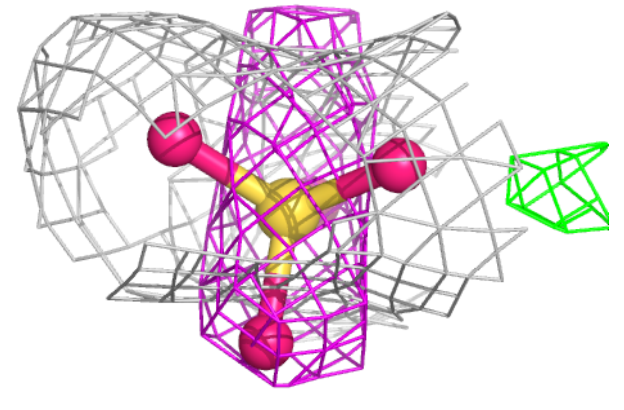
Electron density around SO4 J 204:

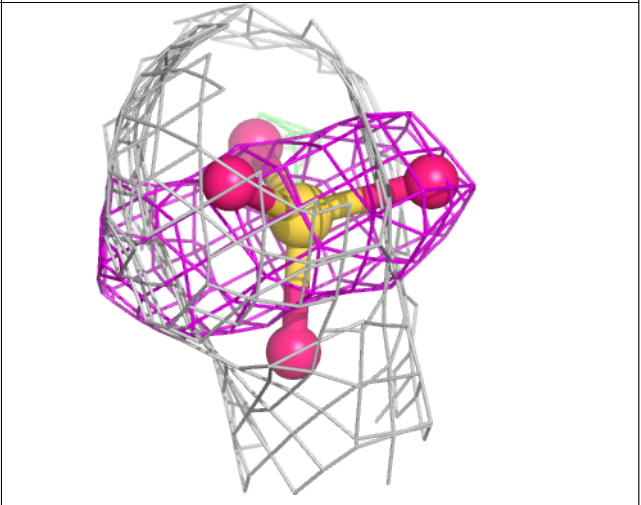
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around SO4 D 203:

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

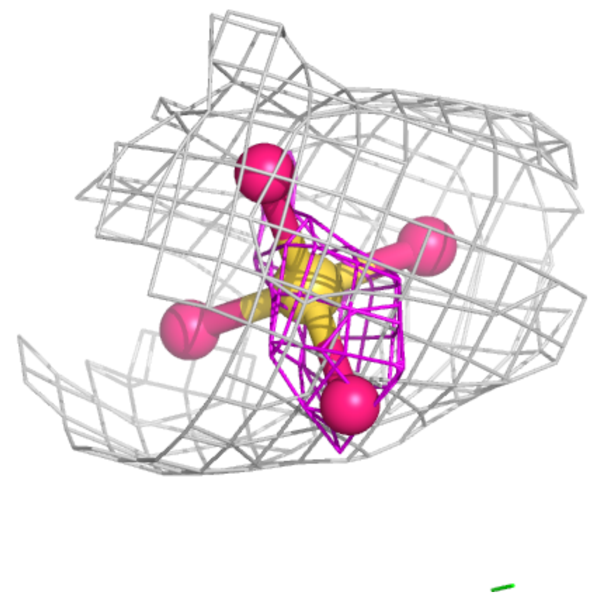


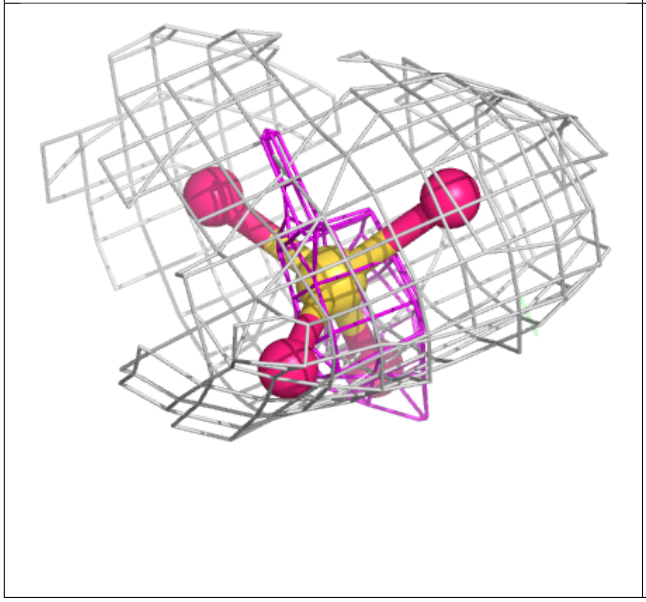


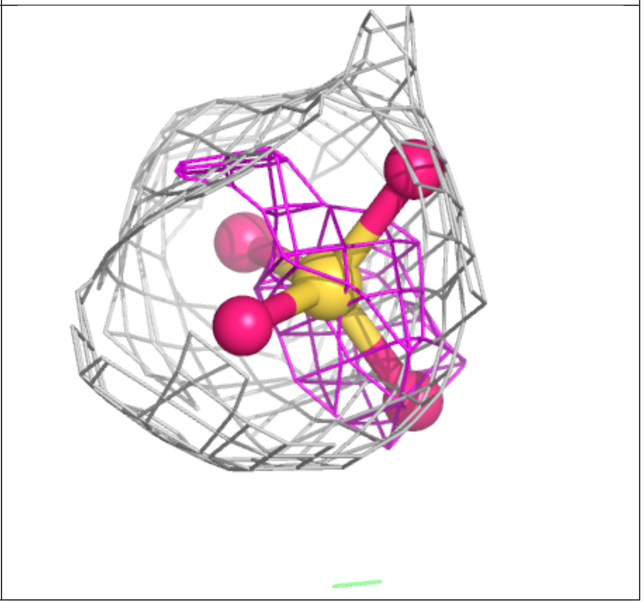


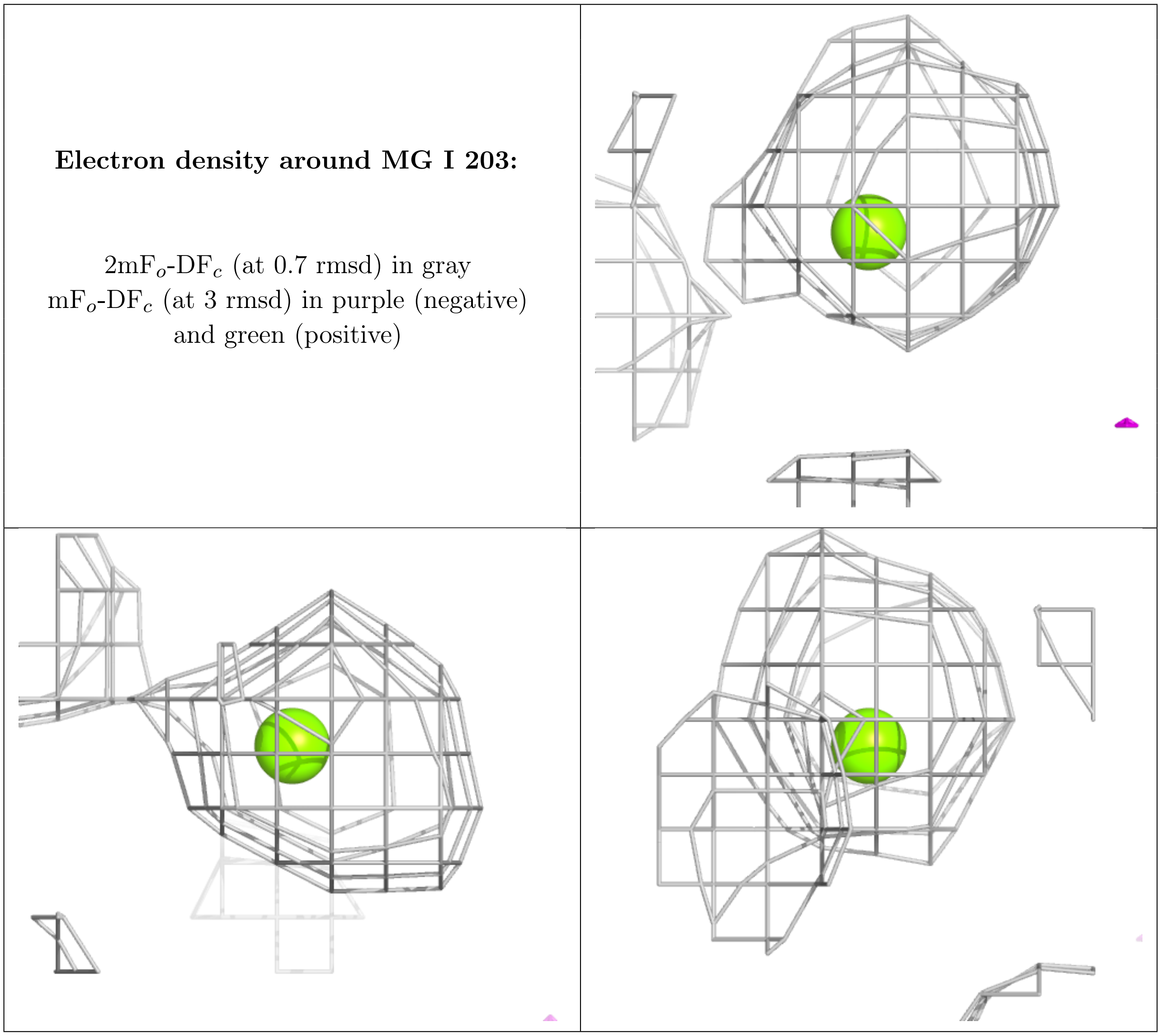
Electron density around SO4 F 207:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)







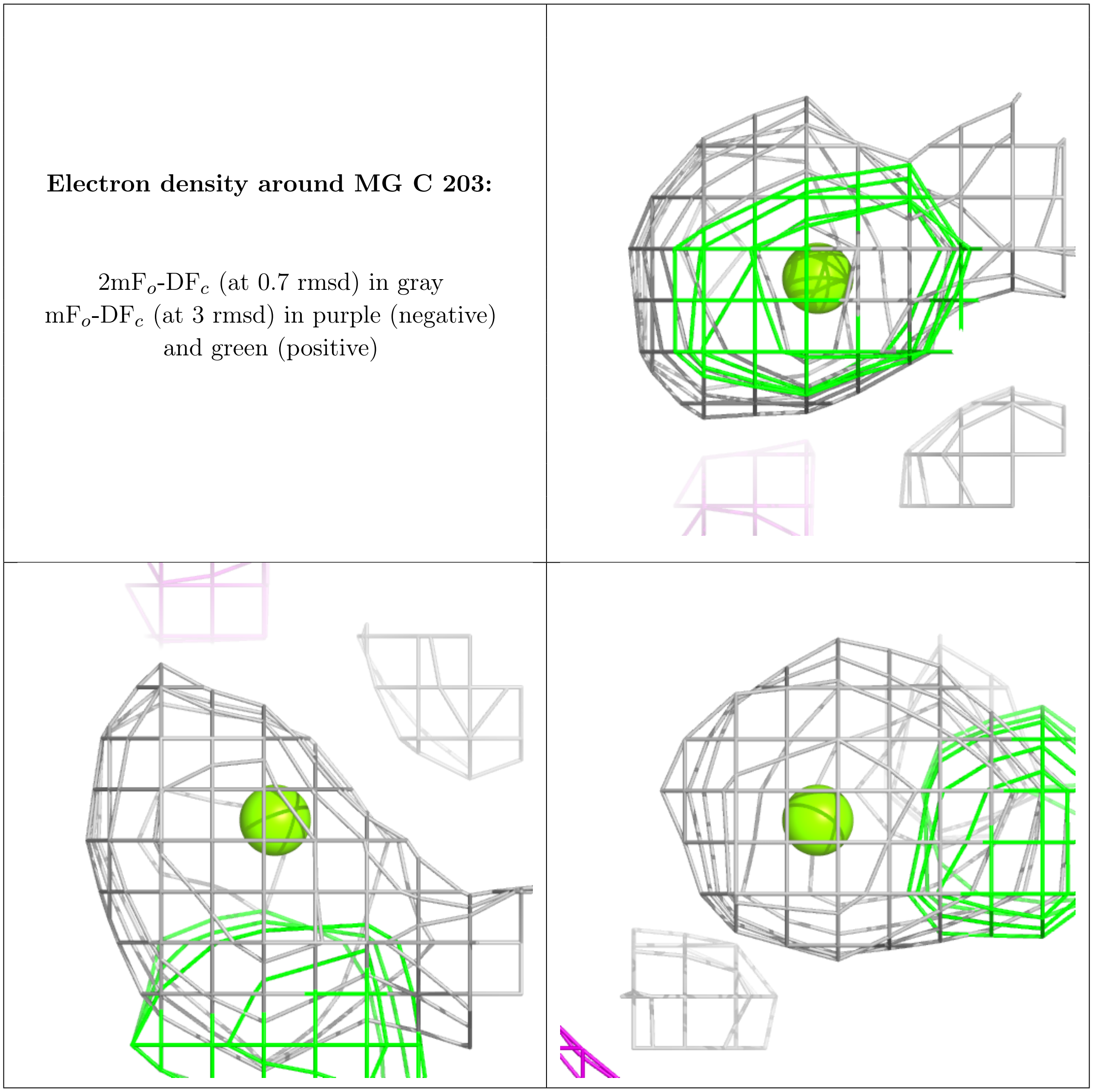


Electron density around MG I 203:

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

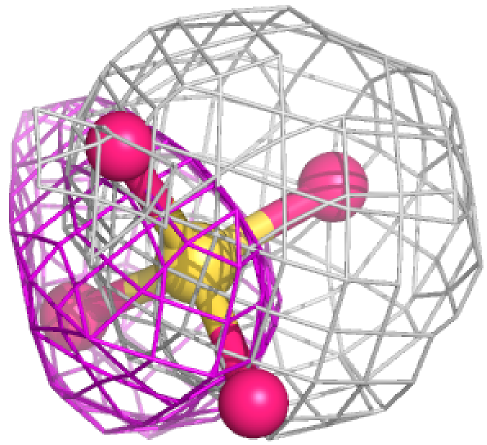
Electron density around MG C 203:

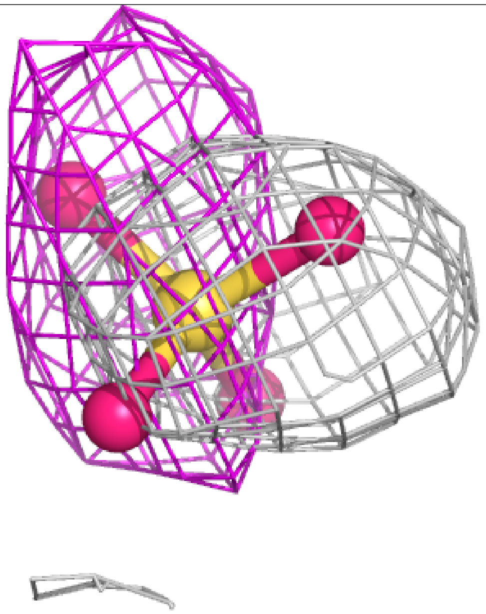
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

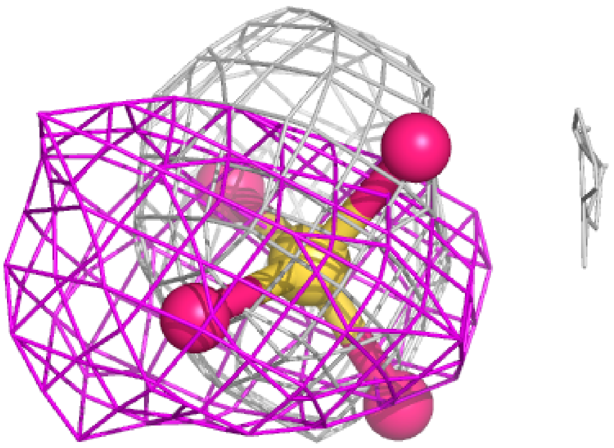


Electron density around SO4 J 205:

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

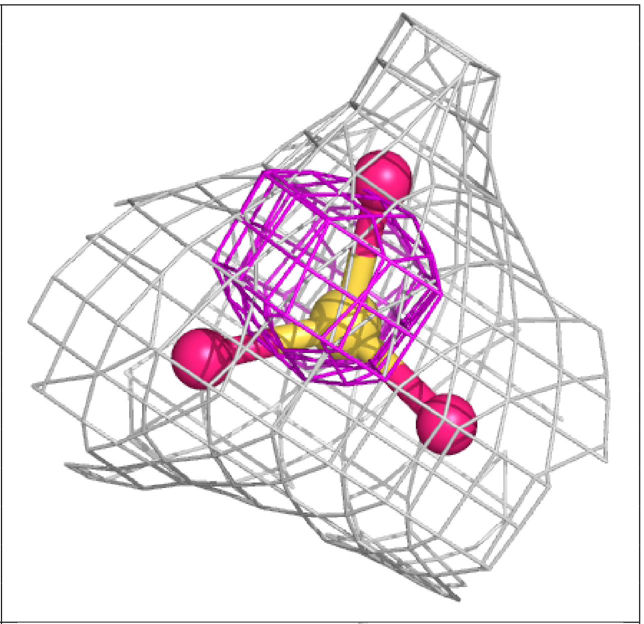


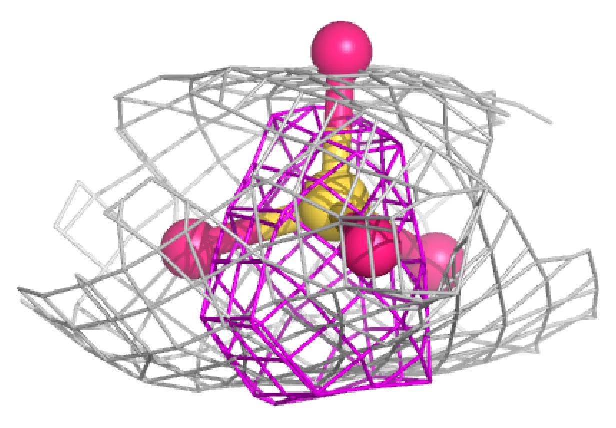


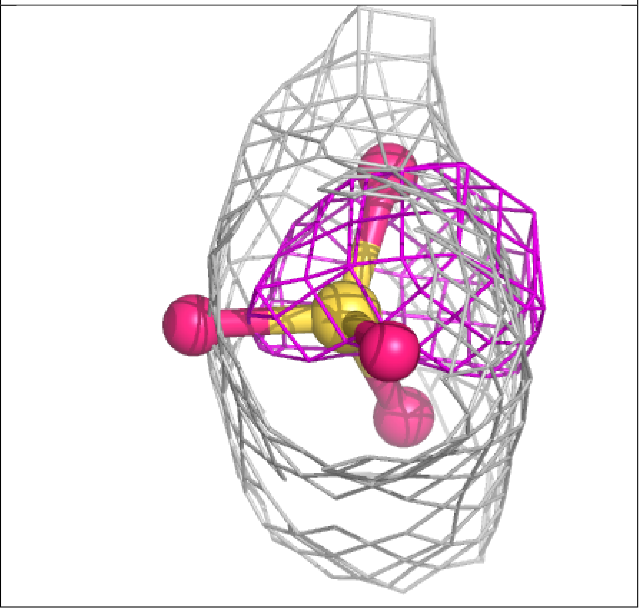


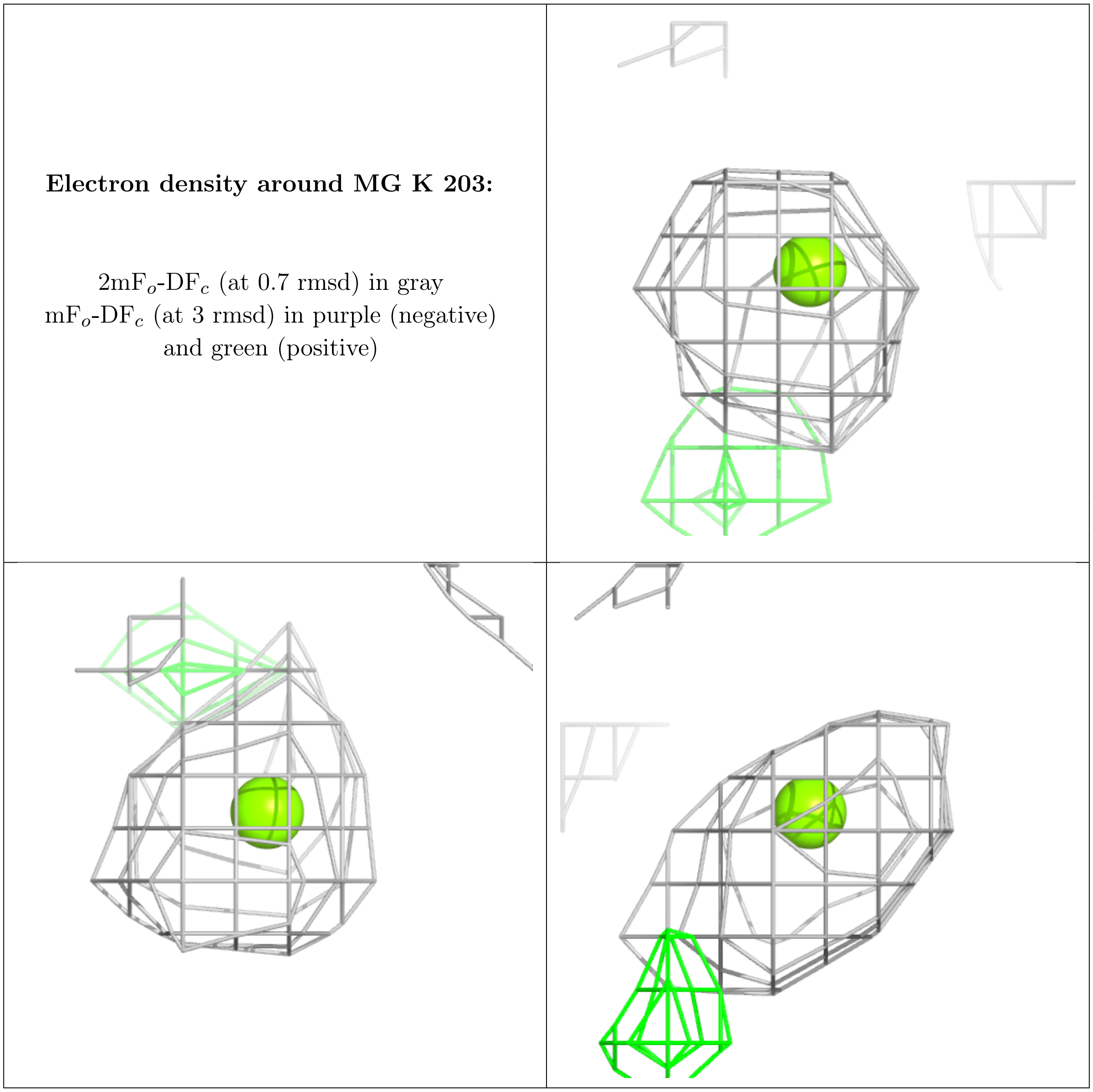
Electron density around SO4 K 205:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)







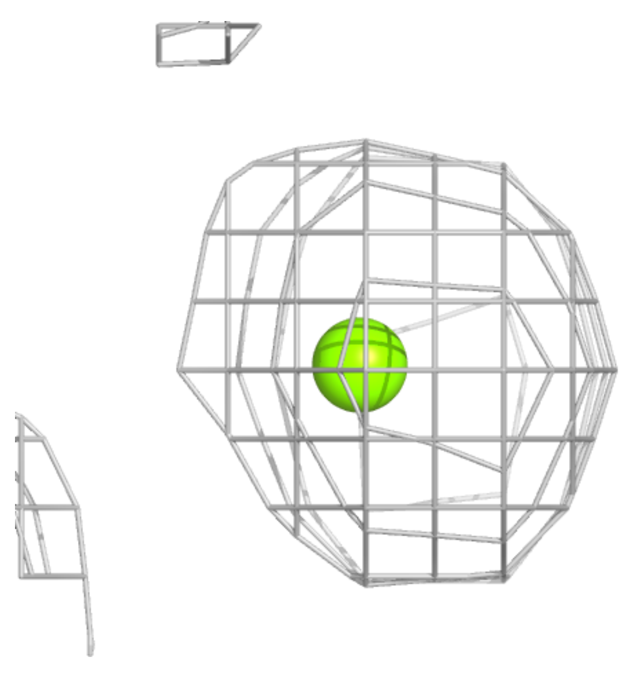


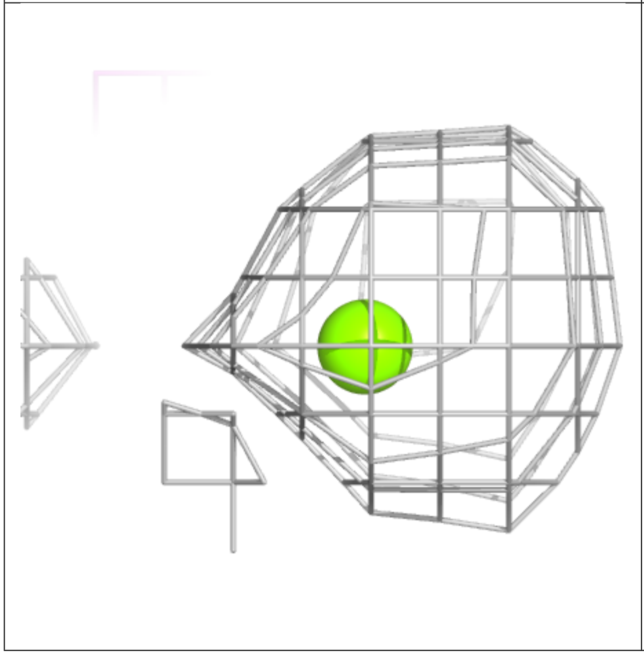
Electron density around MG K 203:

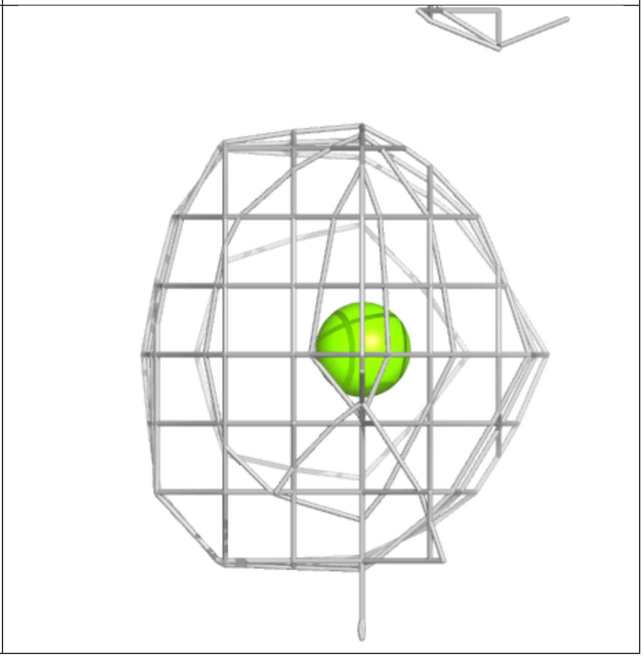
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around MG E 203:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

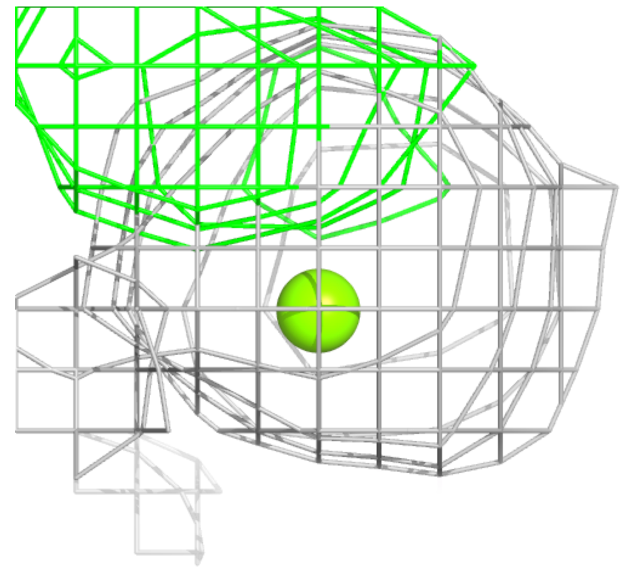


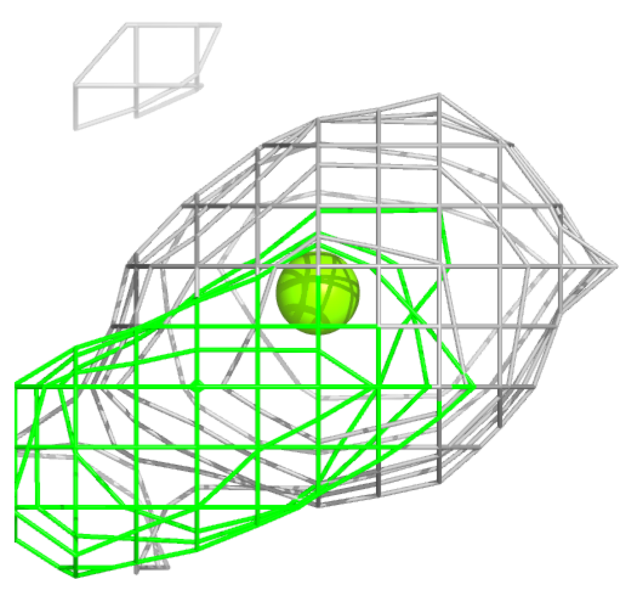


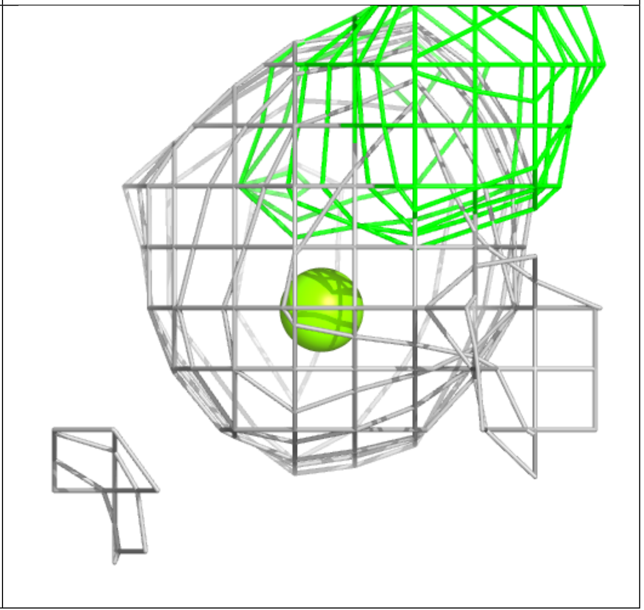


Electron density around MG A 203:

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

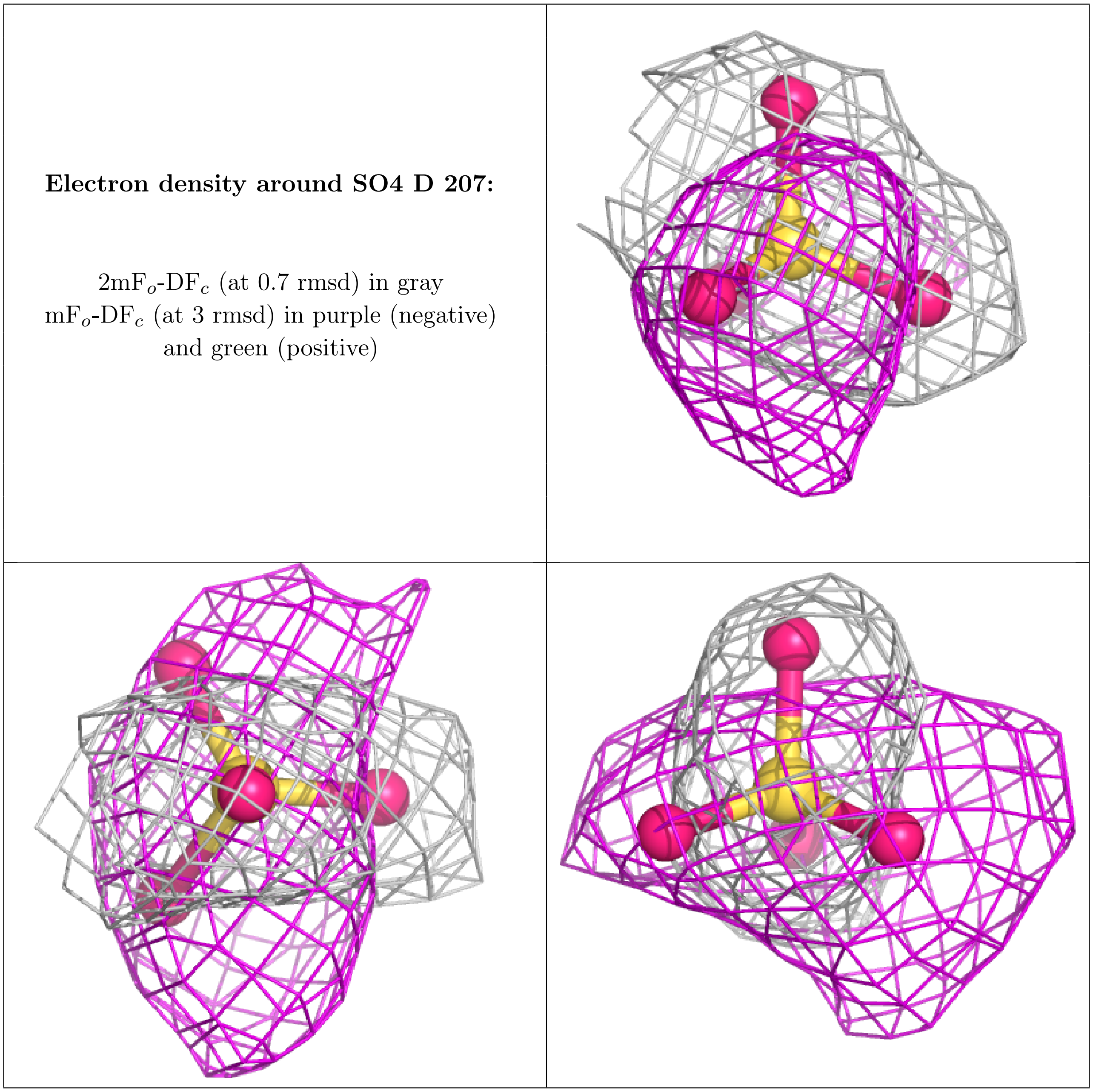






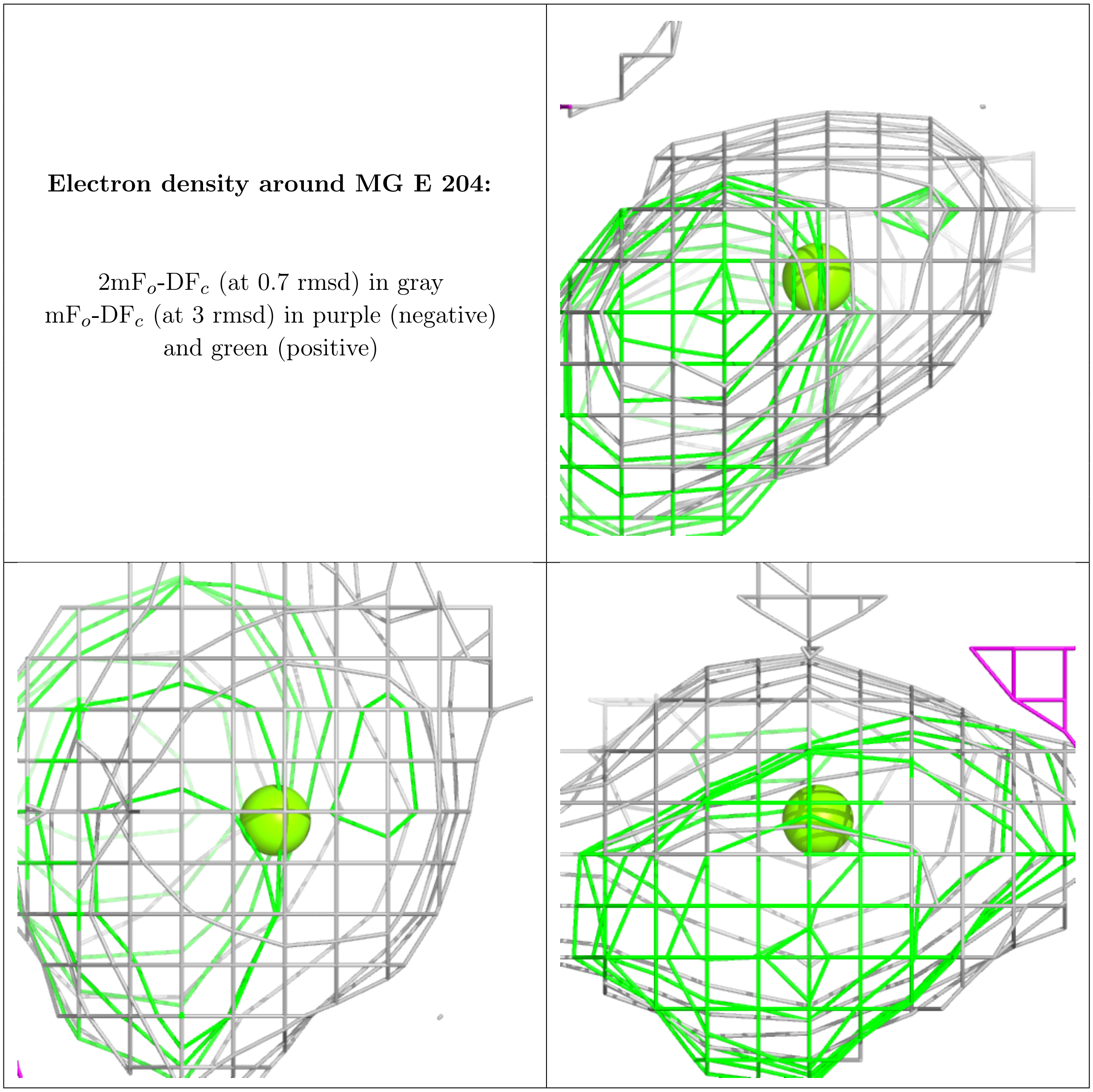
Electron density around SO4 D 207:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



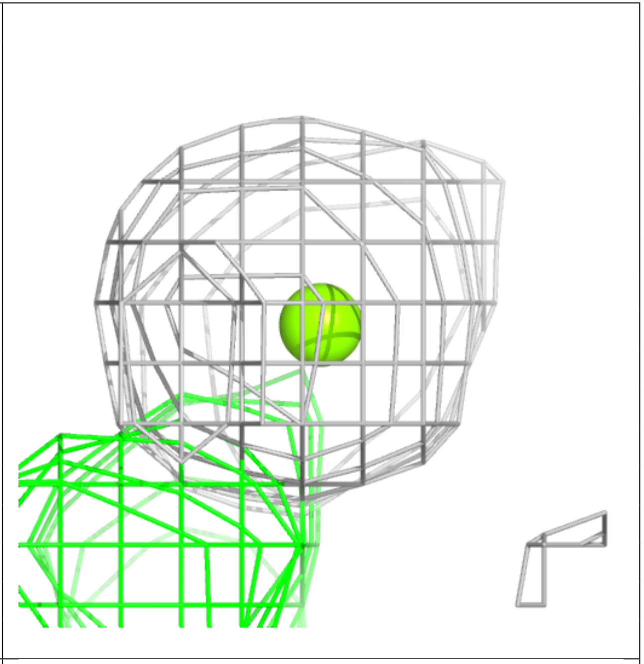
Electron density around MG E 204:

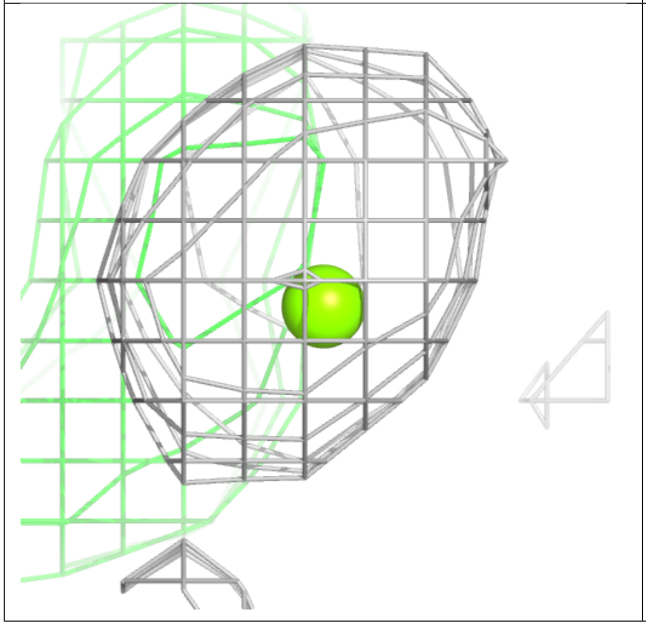
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

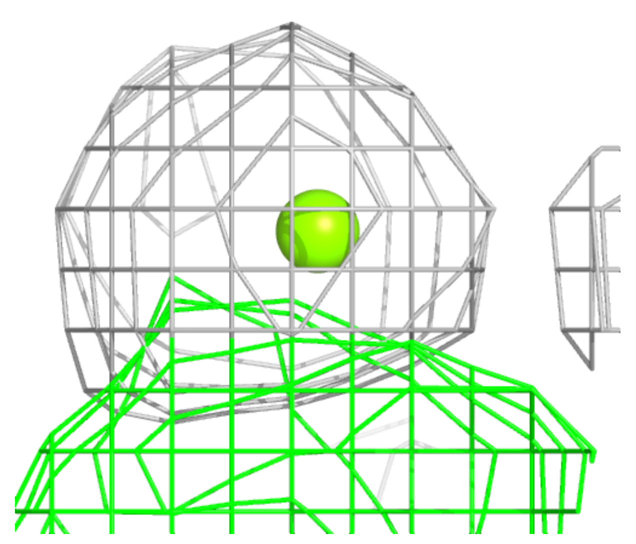


Electron density around MG L 203:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

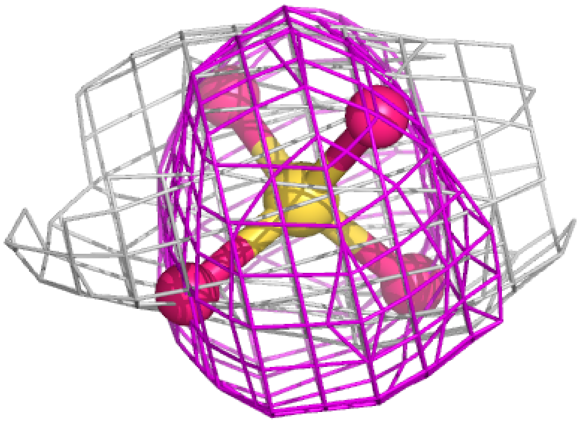


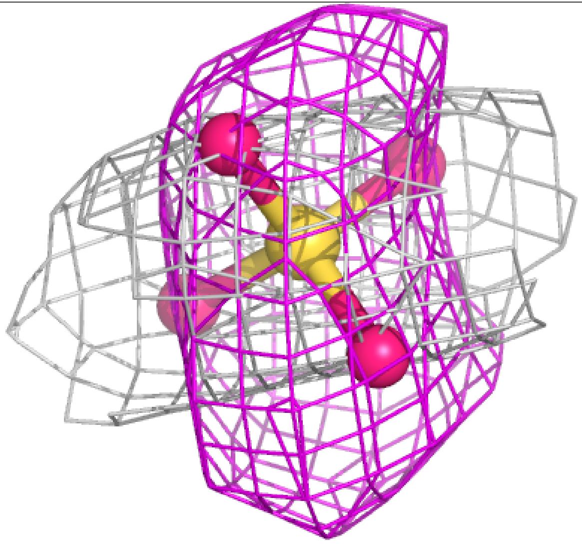


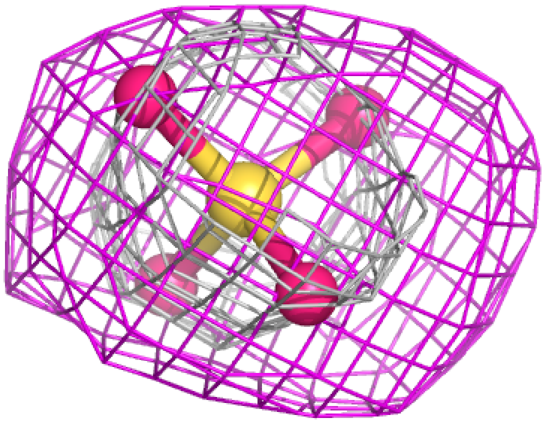


Electron density around SO4 A 206:

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

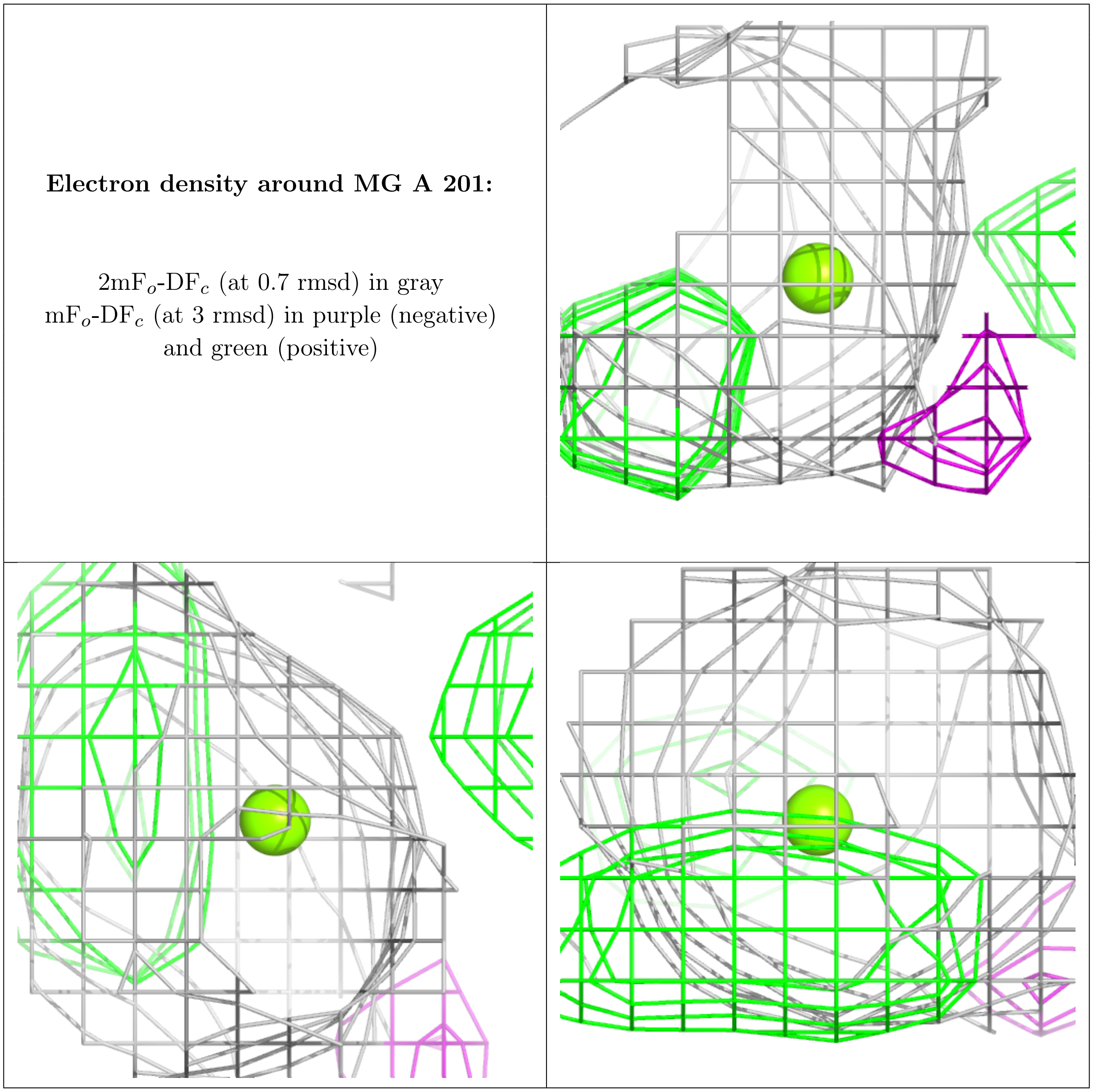






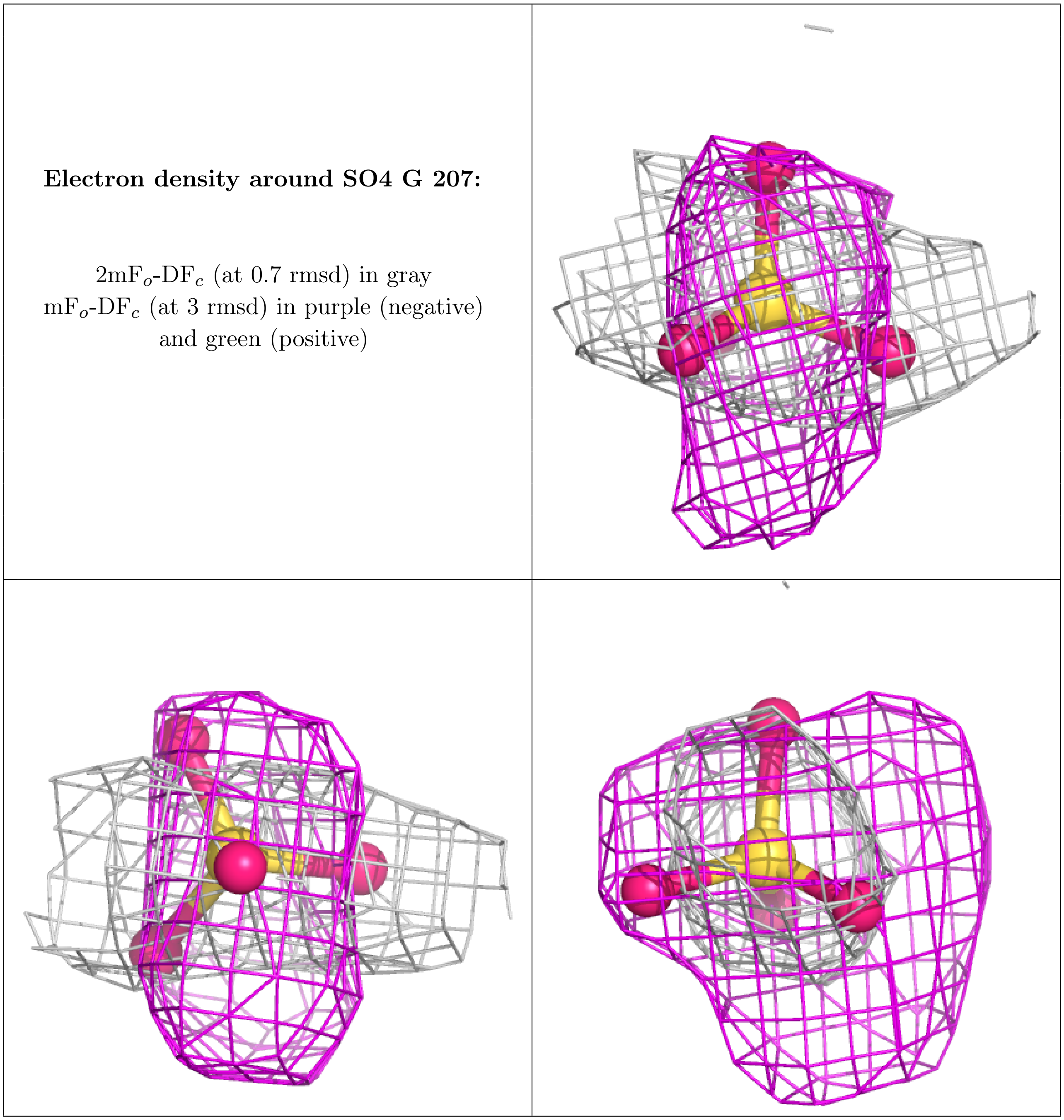
Electron density around MG A 201:

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

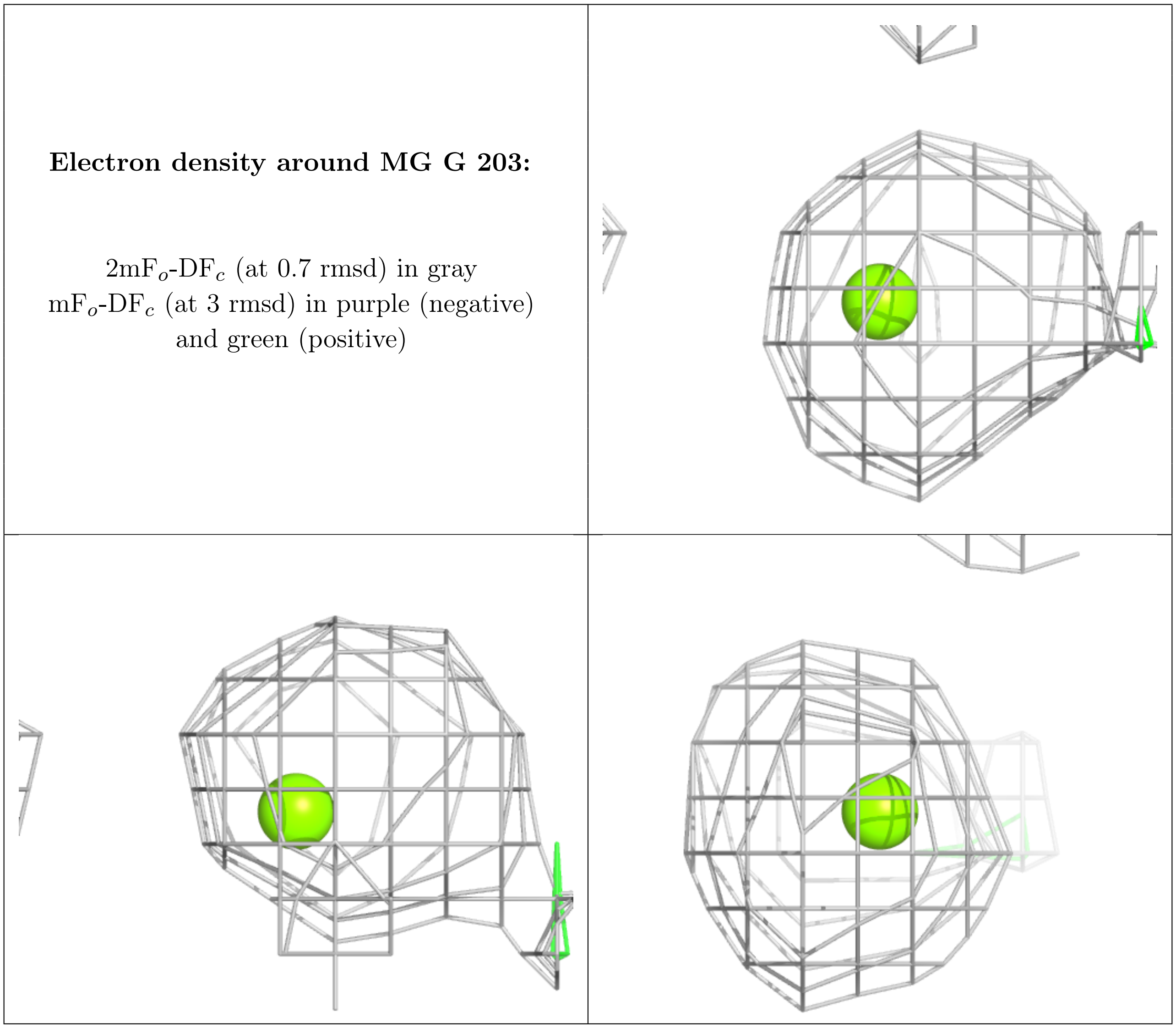


Electron density around SO4 G 207:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



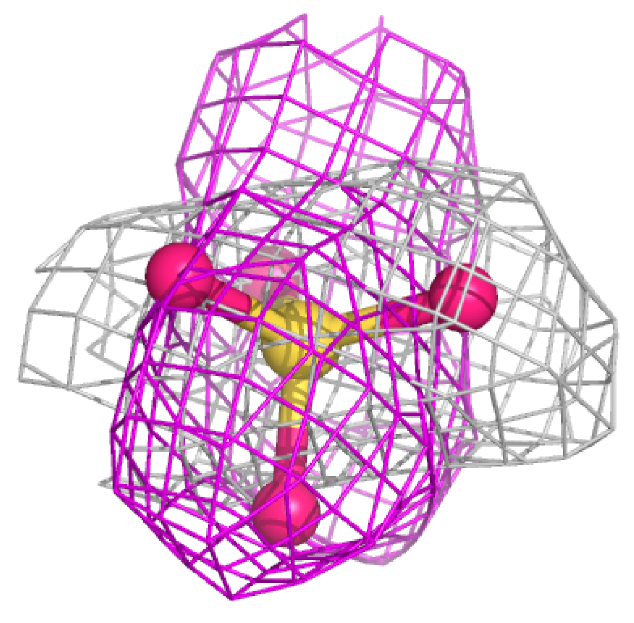
Electron density around MG G 203:

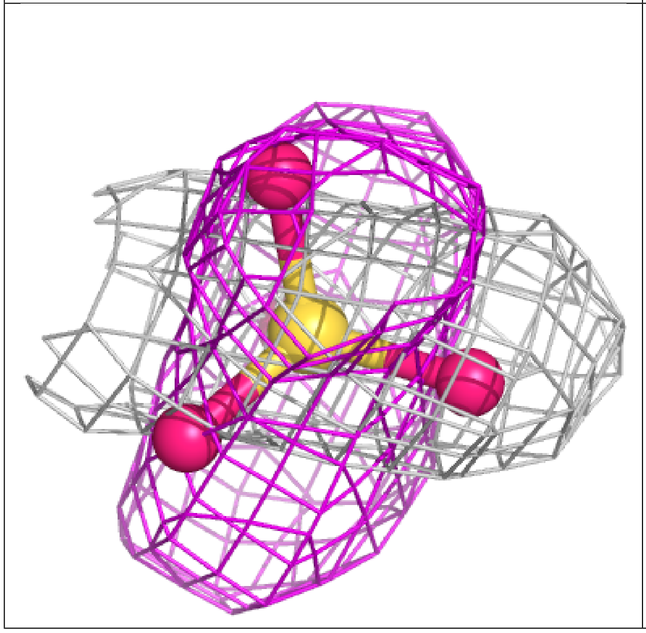


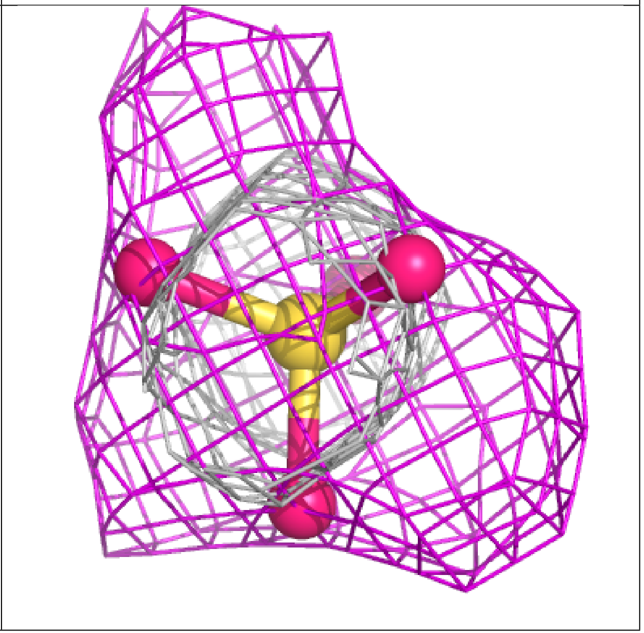
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around SO4 B 205:

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

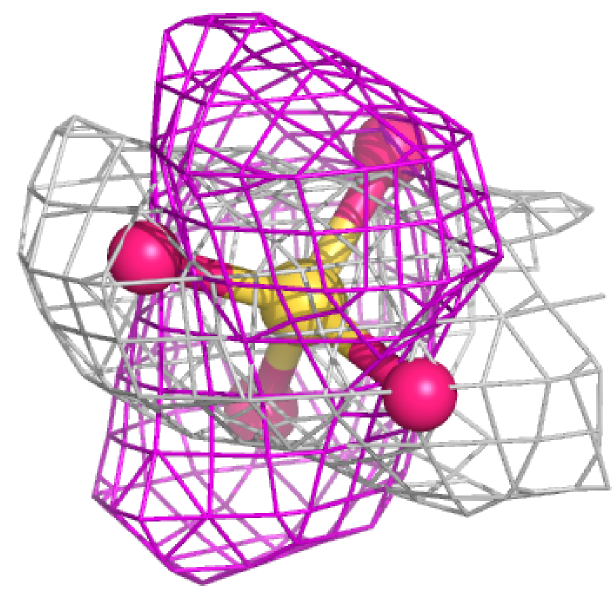


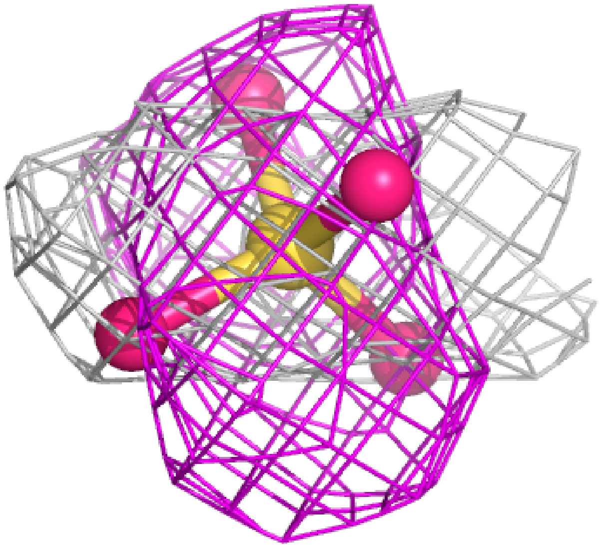


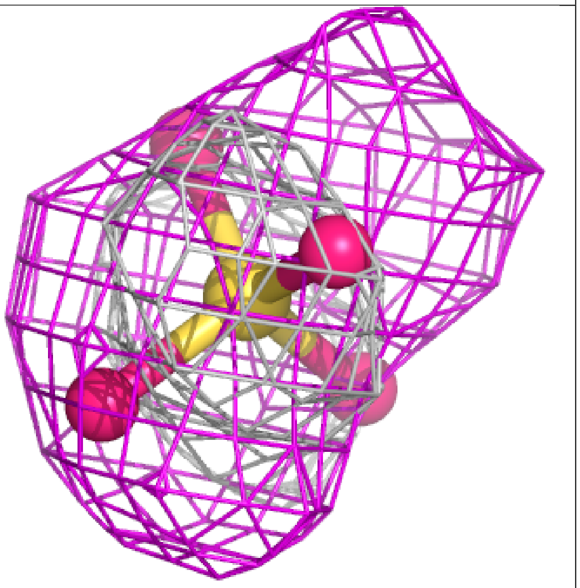


Electron density around SO4 K 208:

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

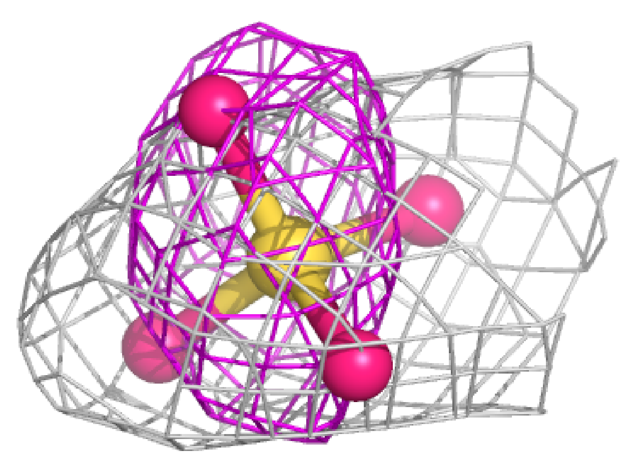


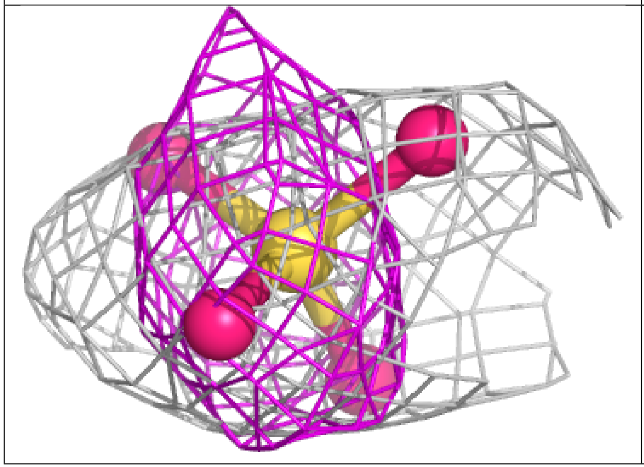


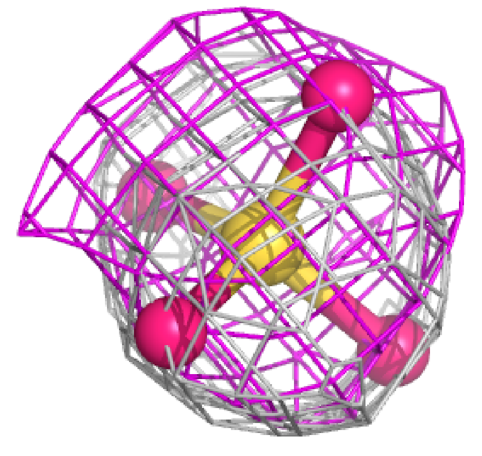


Electron density around SO4 L 206:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

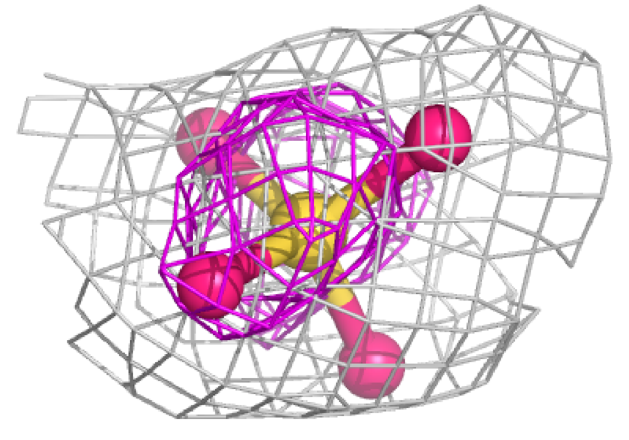


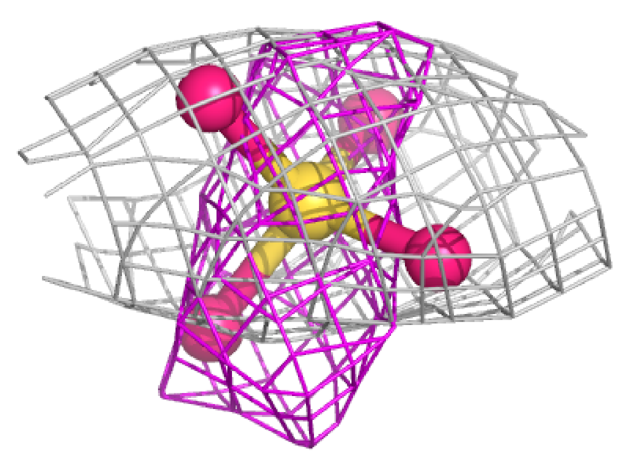


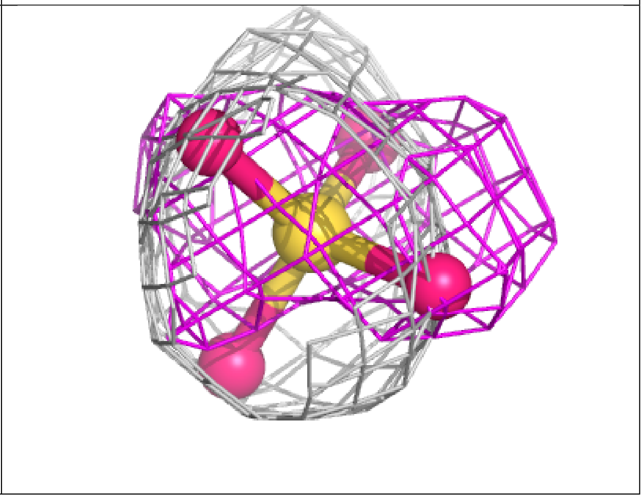


Electron density around SO4 I 206:

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

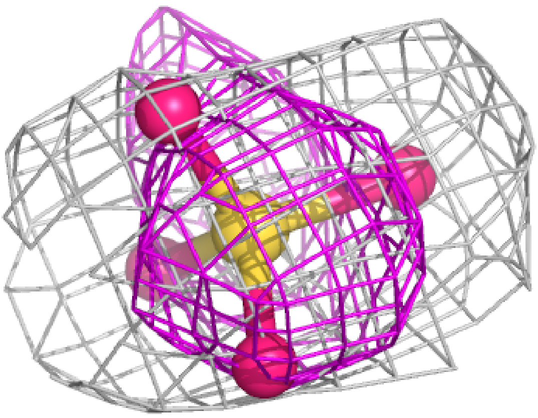


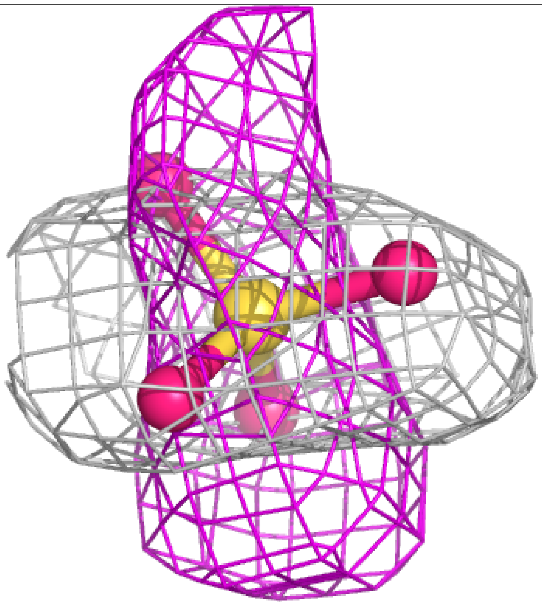


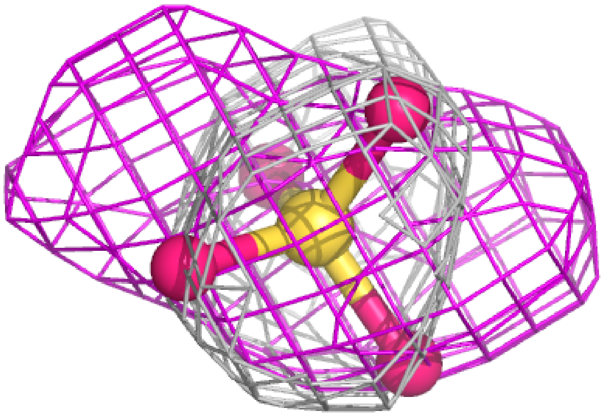


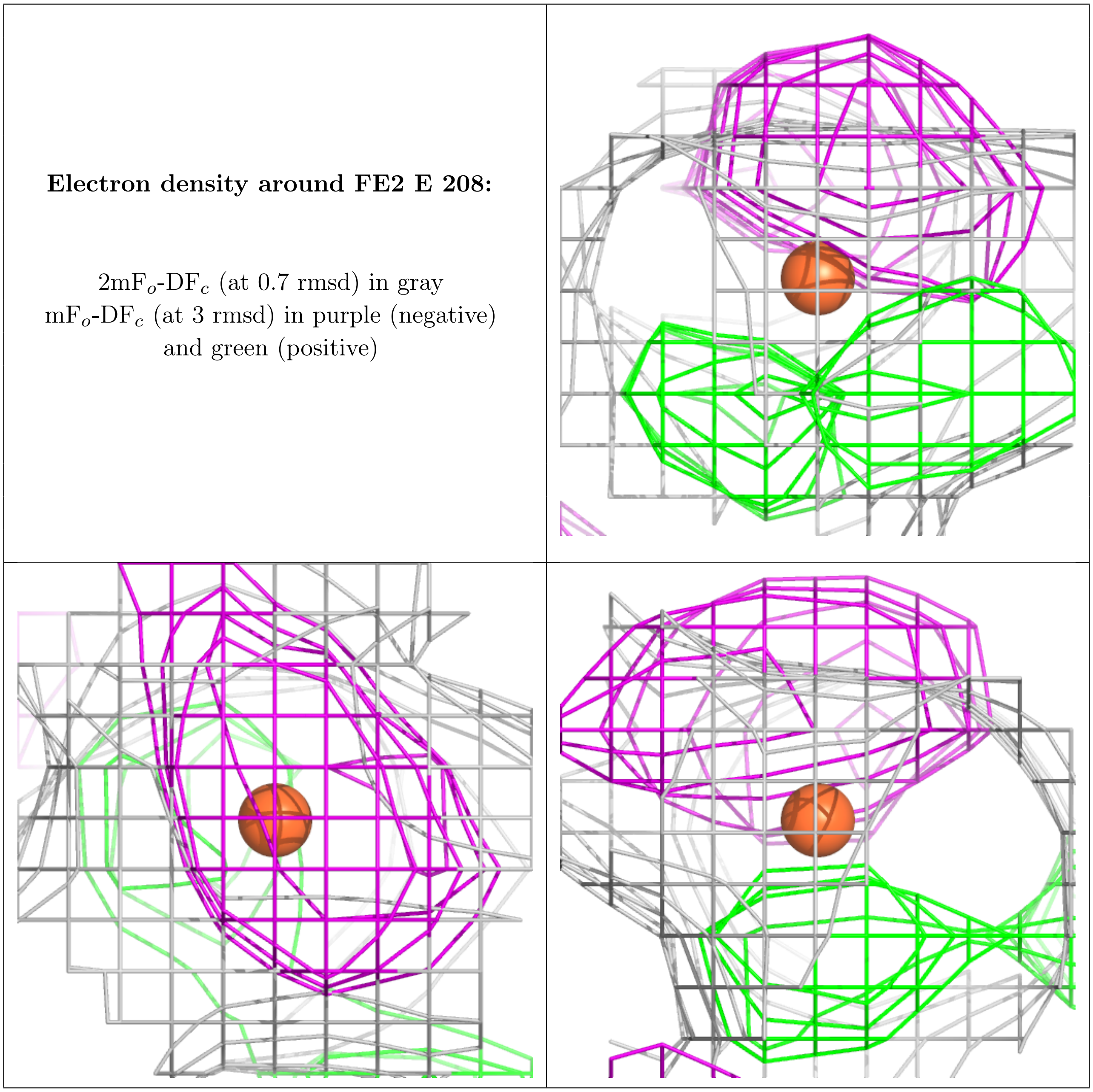
Electron density around SO4 C 208:

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



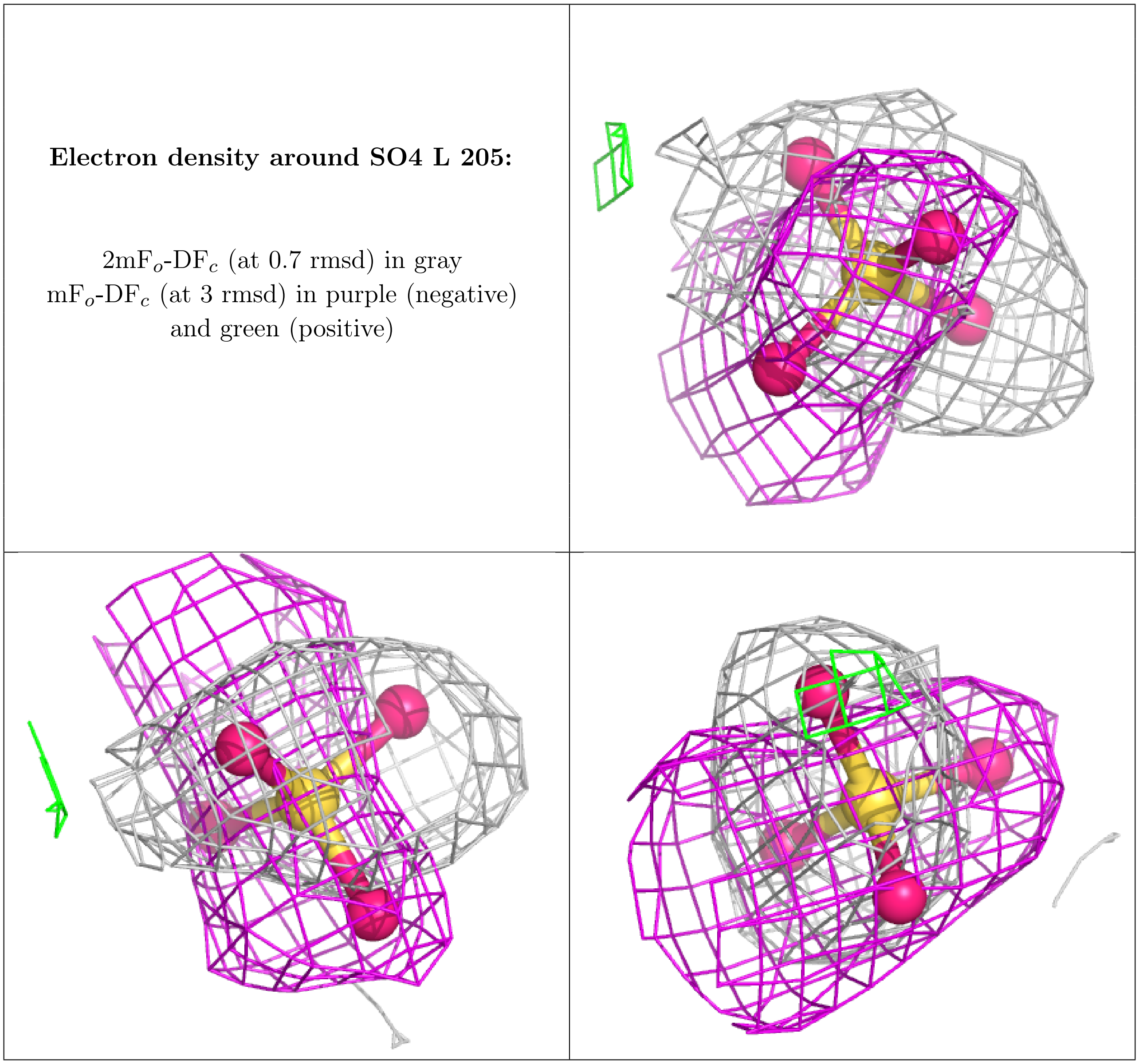






Electron density around FE2 E 208:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

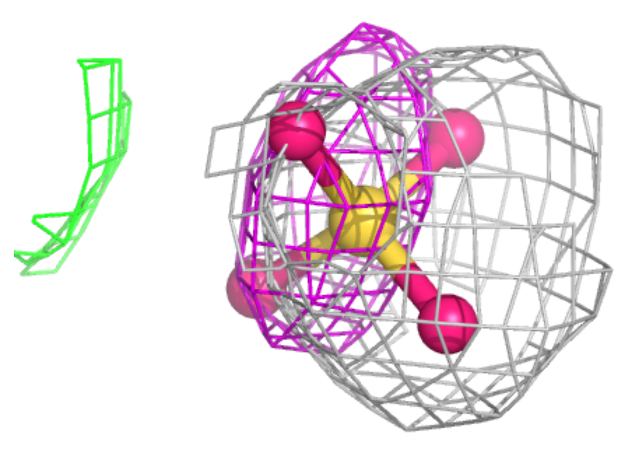


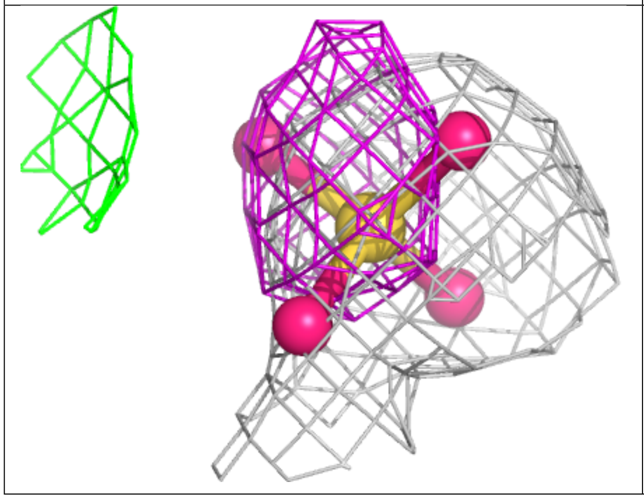
Electron density around SO4 L 205:

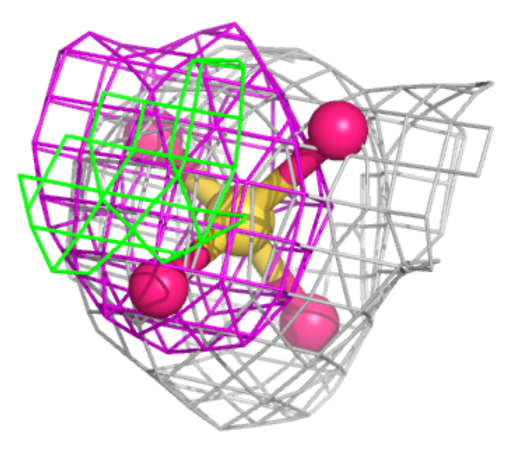
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around SO4 A 204:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

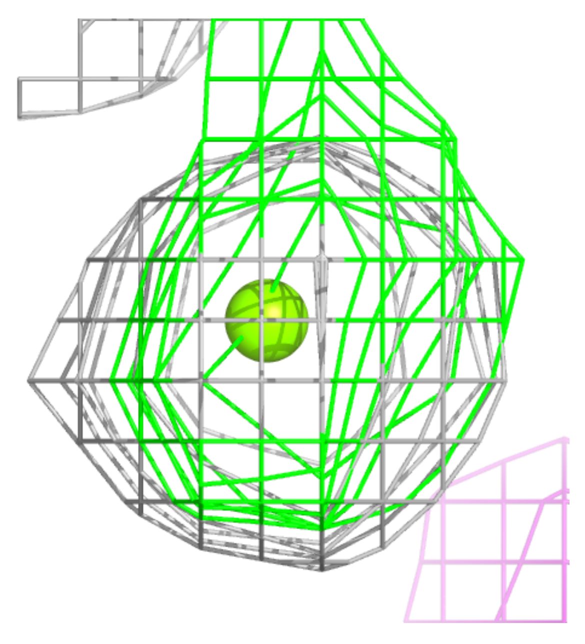


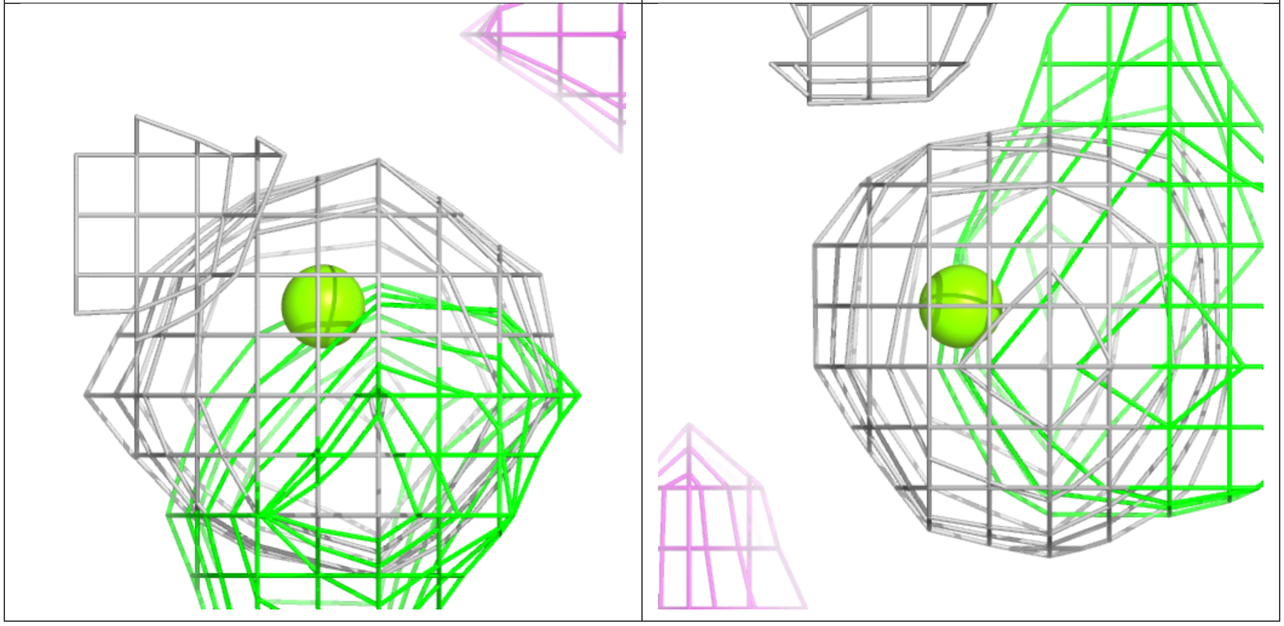




Electron density around MG J 203:

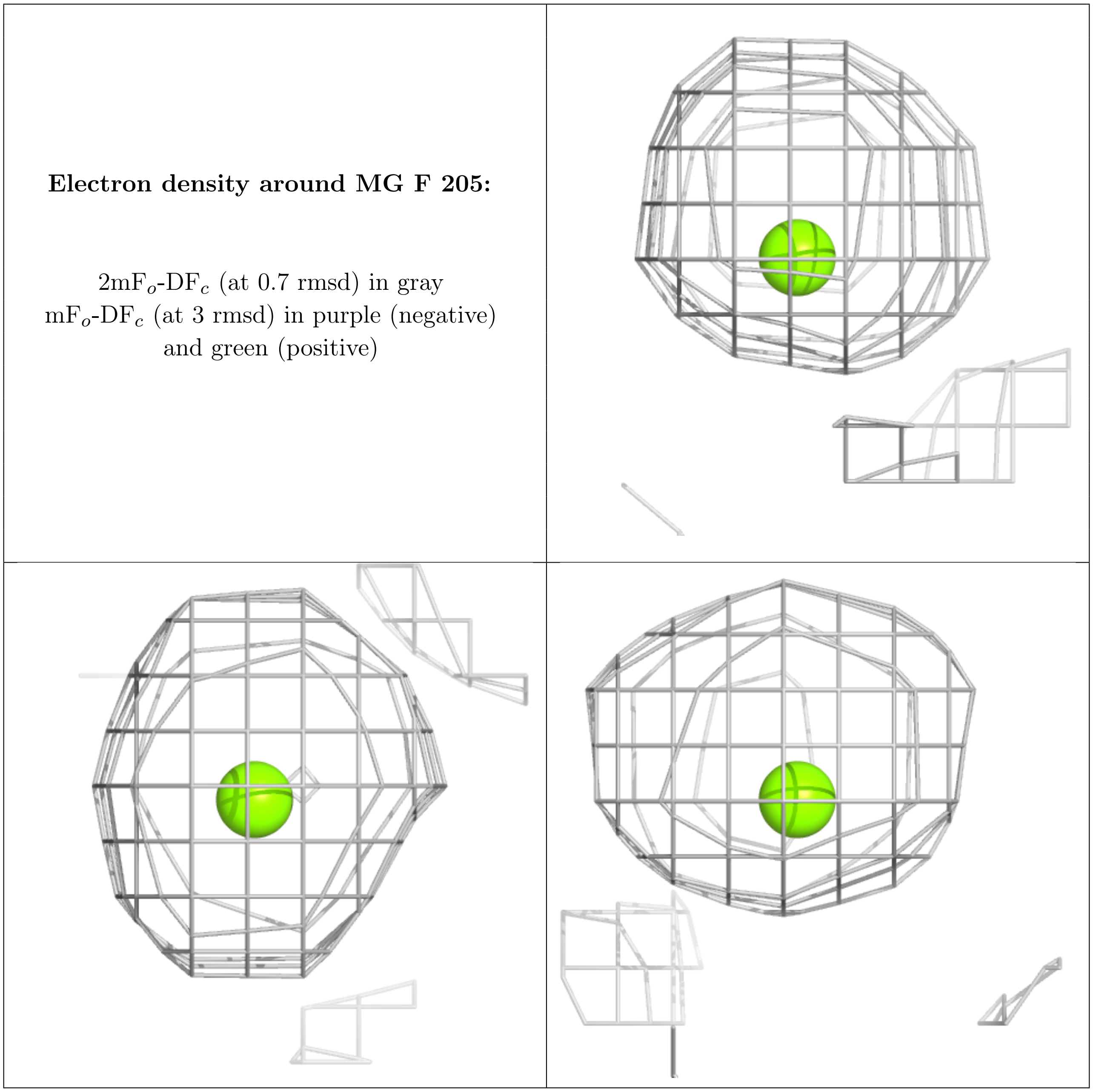
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





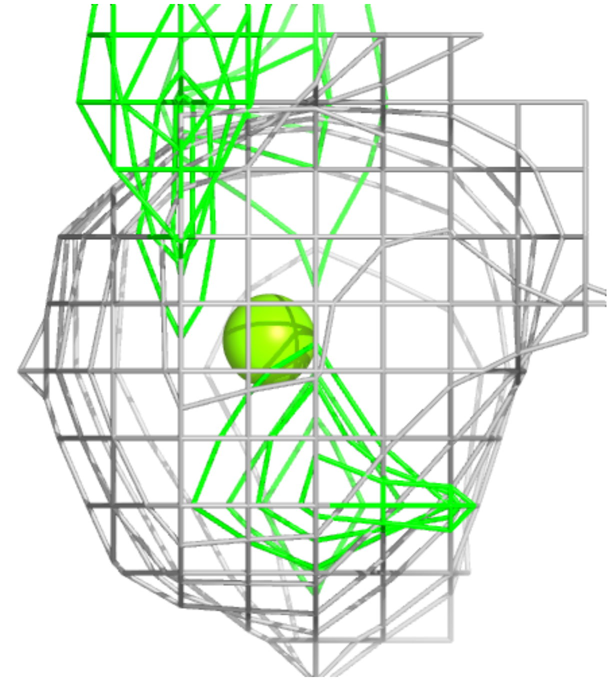
Electron density around MG F 205:

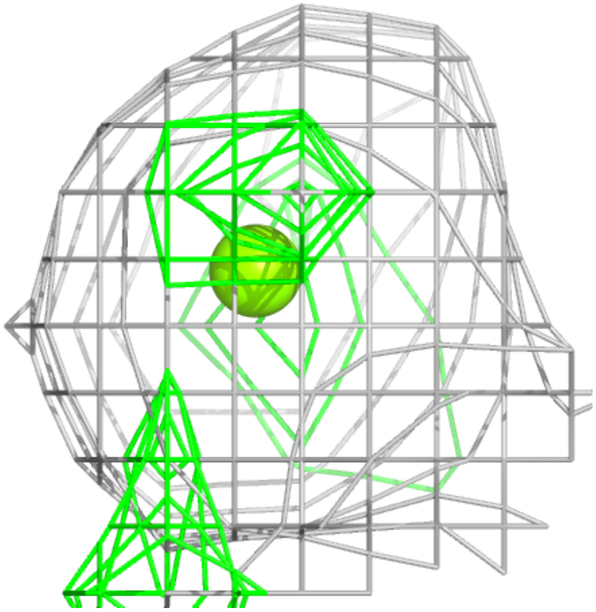
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

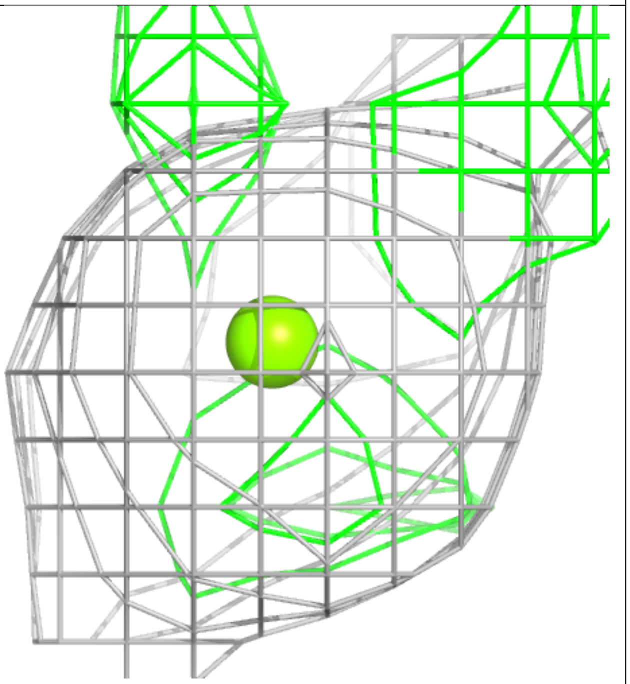


Electron density around MG D 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

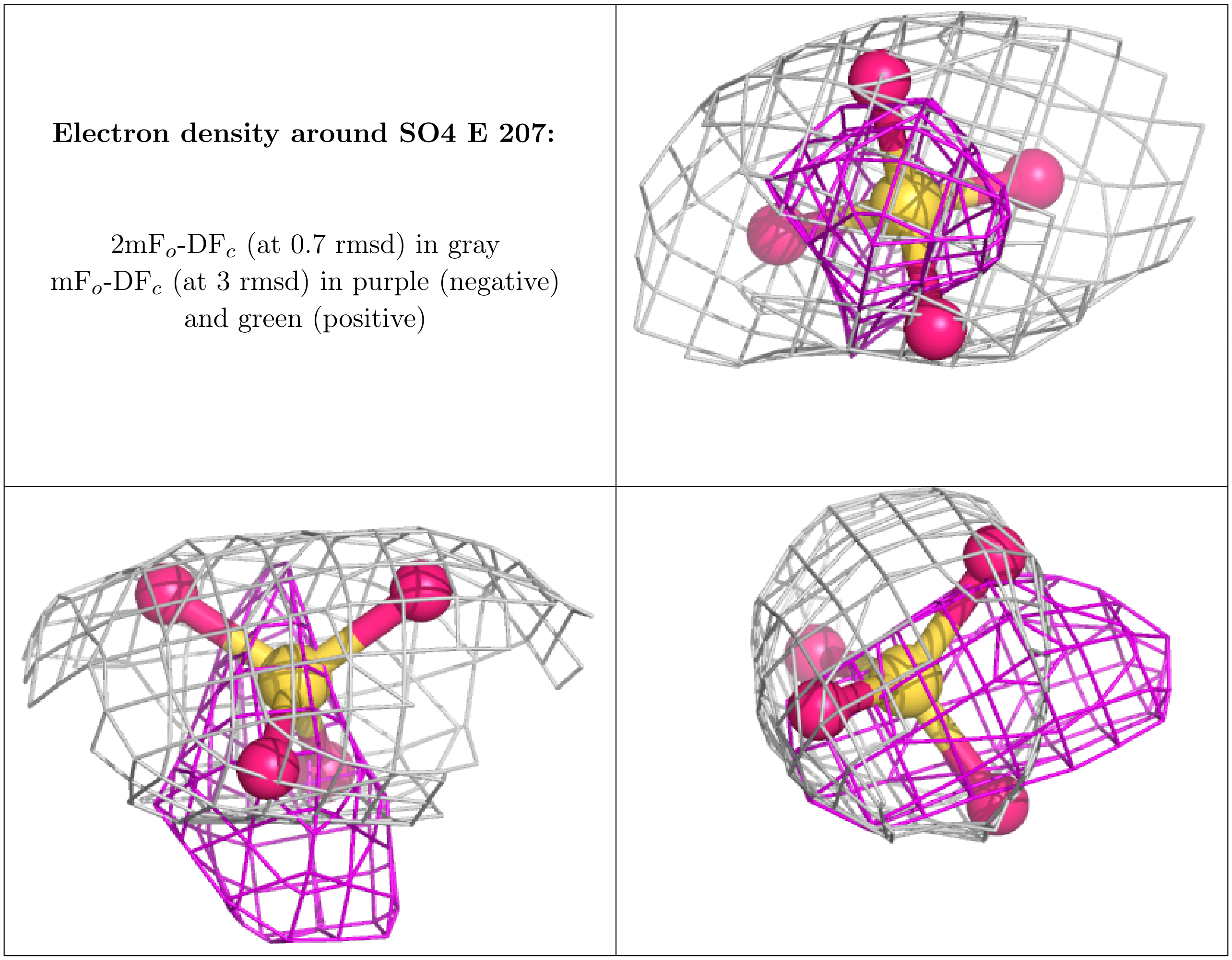






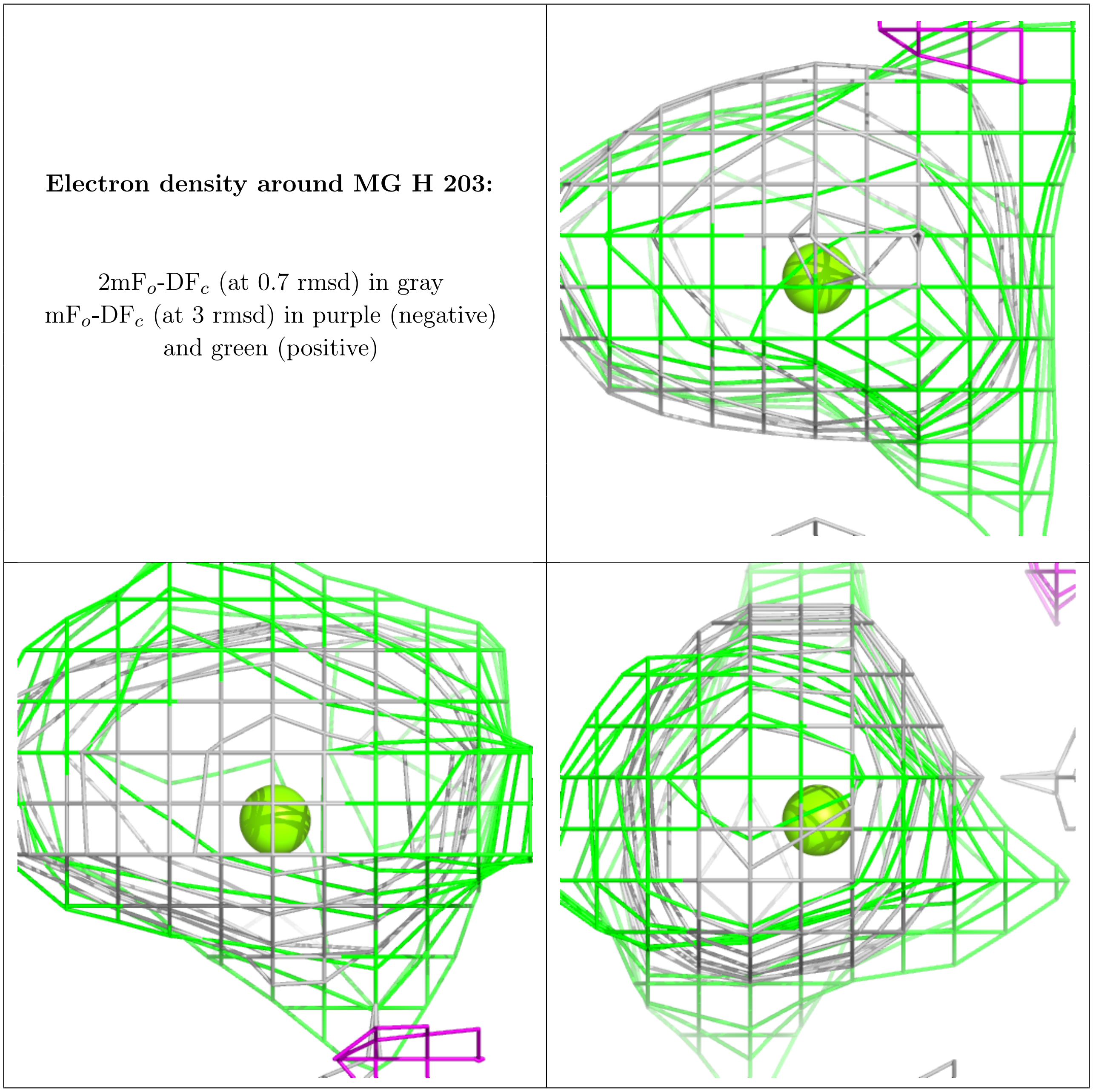
Electron density around SO4 E 207:

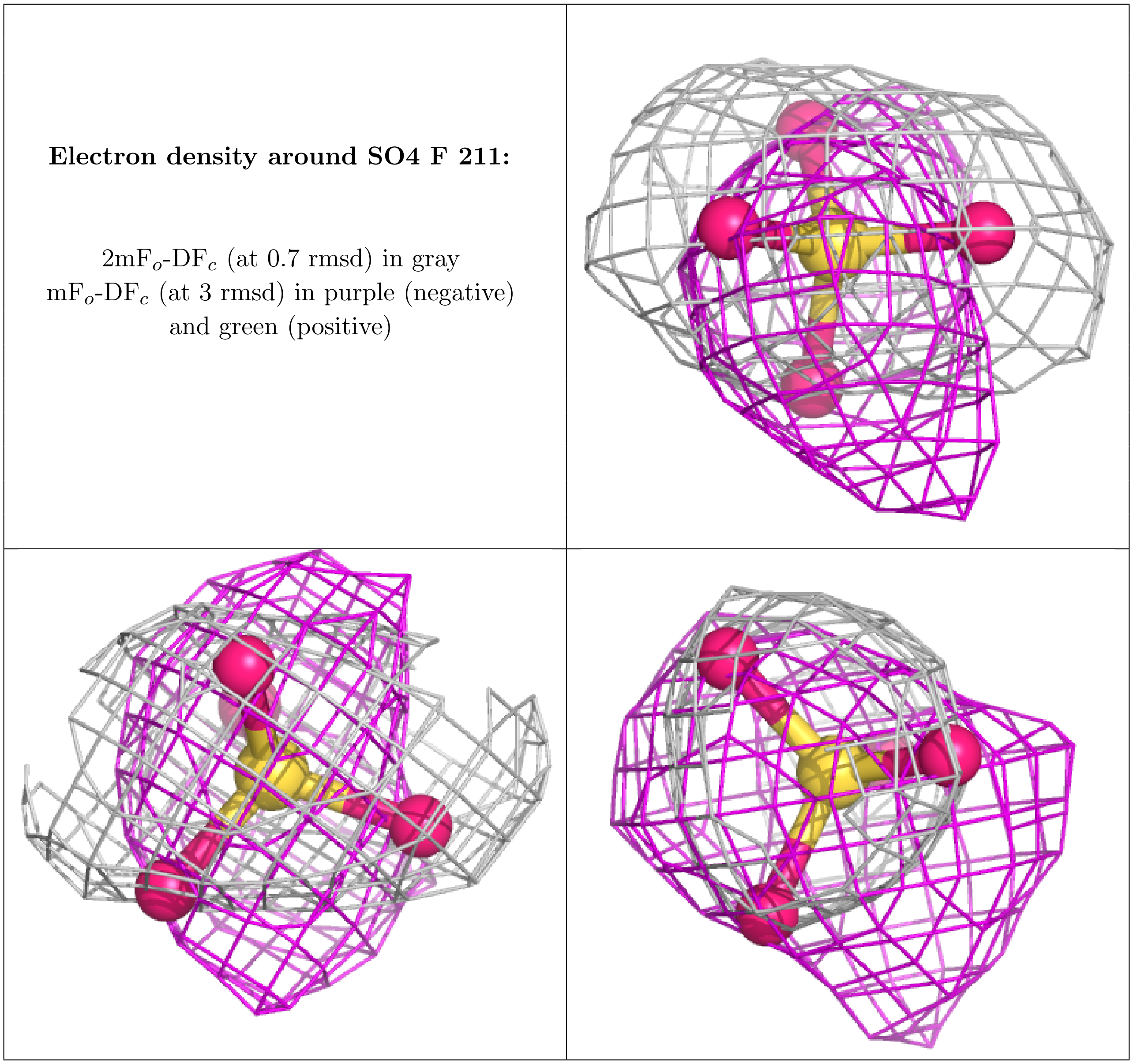
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around MG H 203:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



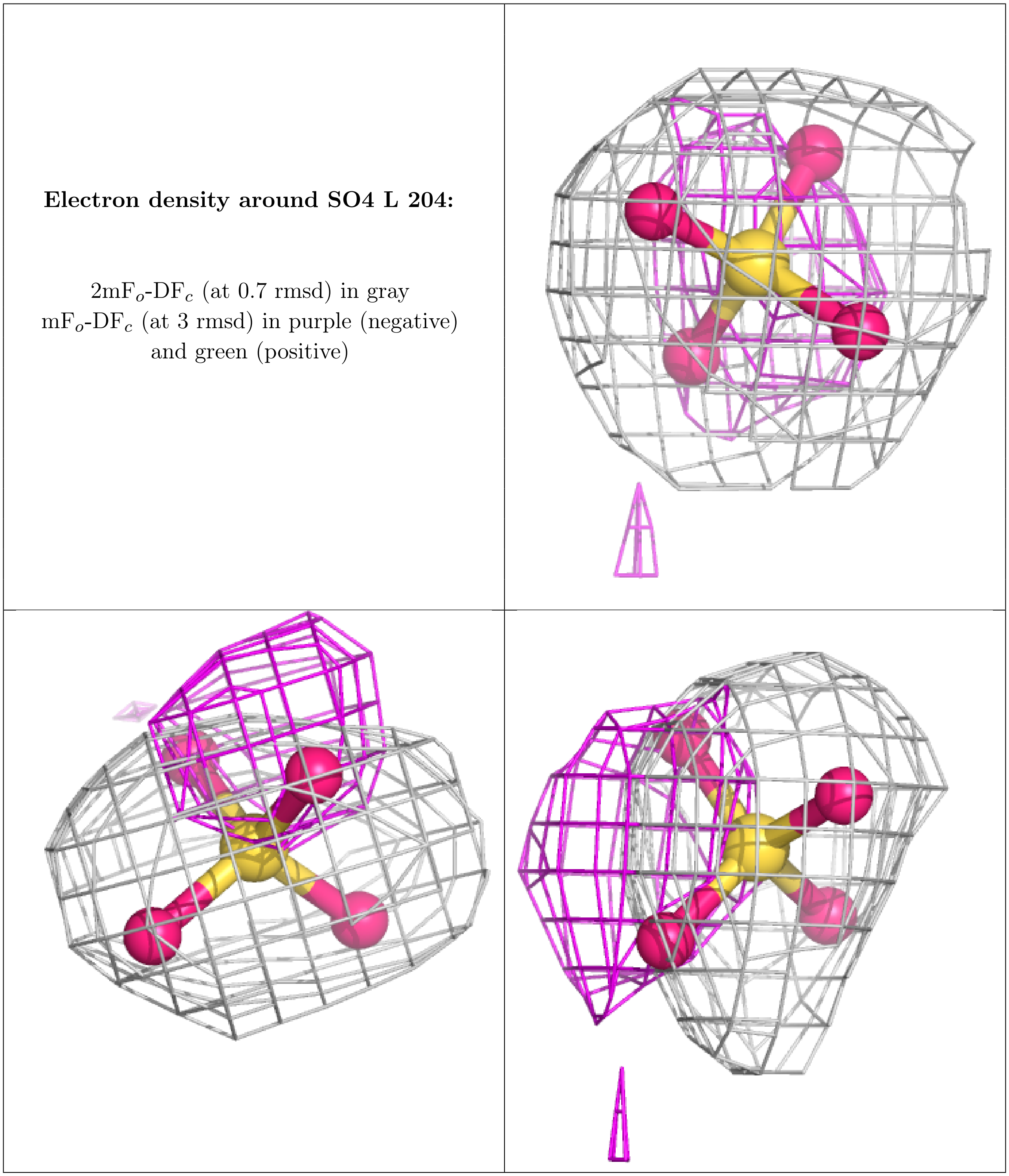


Electron density around SO4 F 211:

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

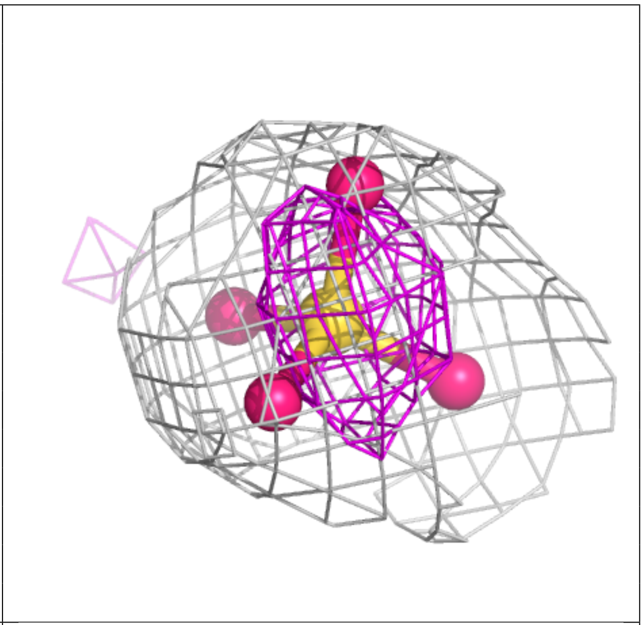
Electron density around SO4 L 204:

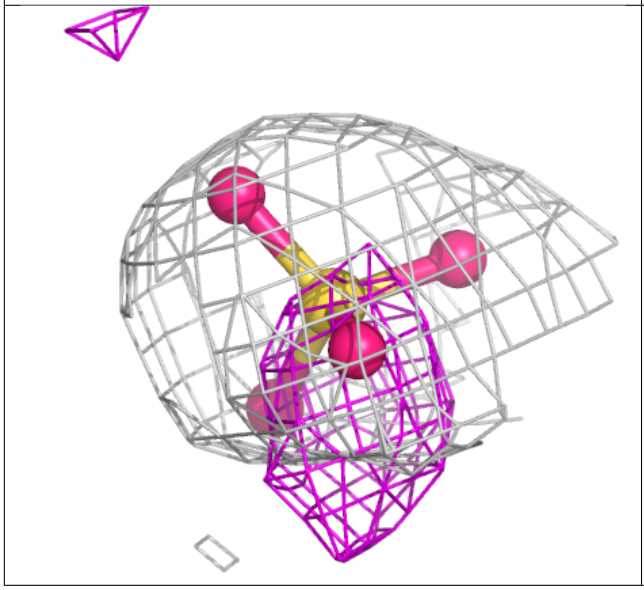
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

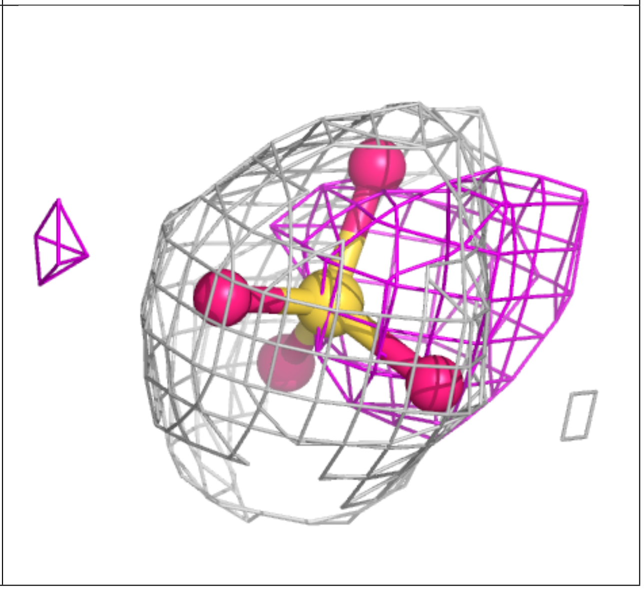


Electron density around SO4 F 210:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

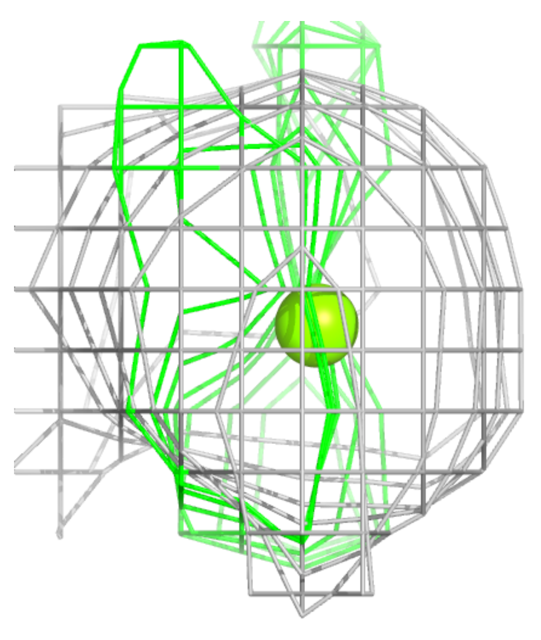


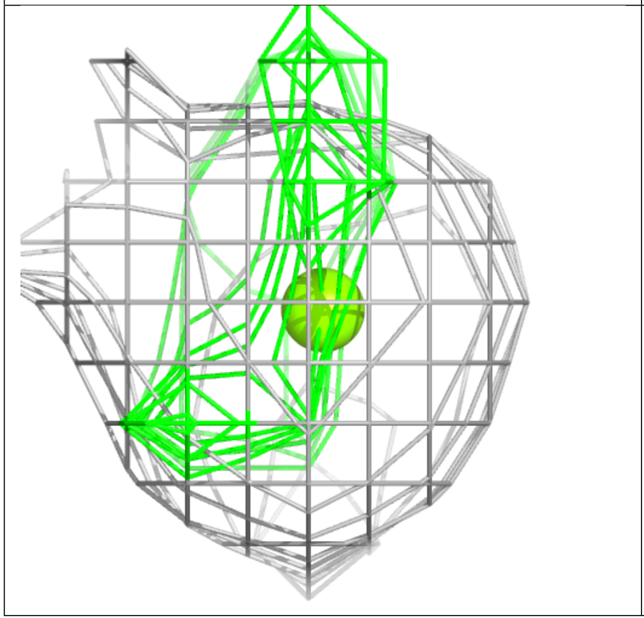


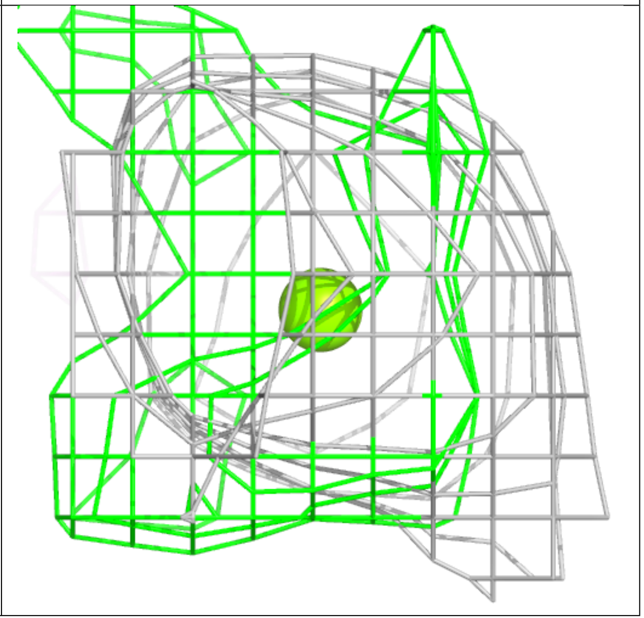


Electron density around MG K 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

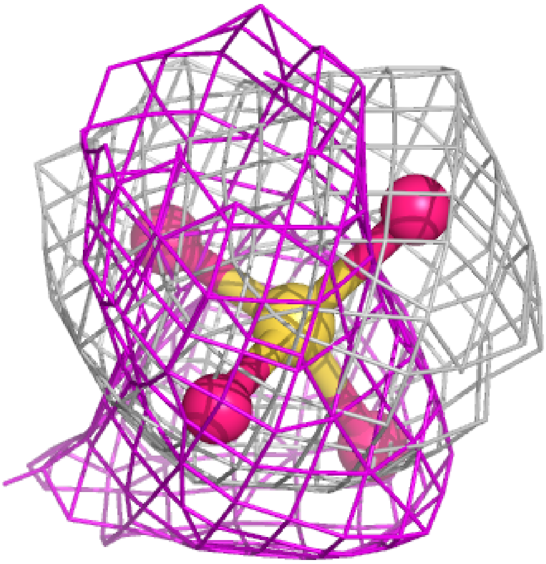


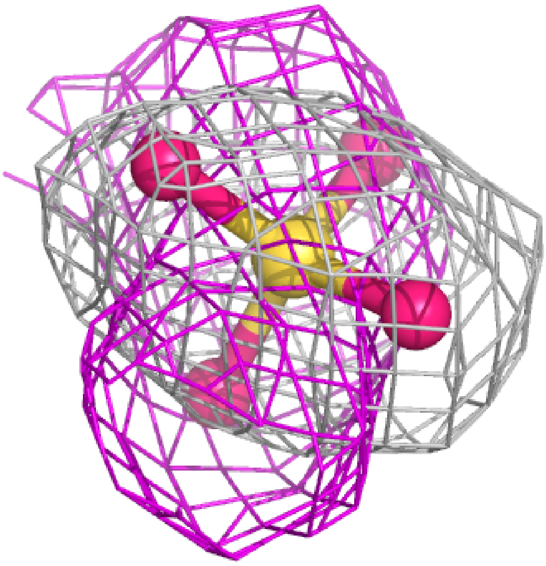


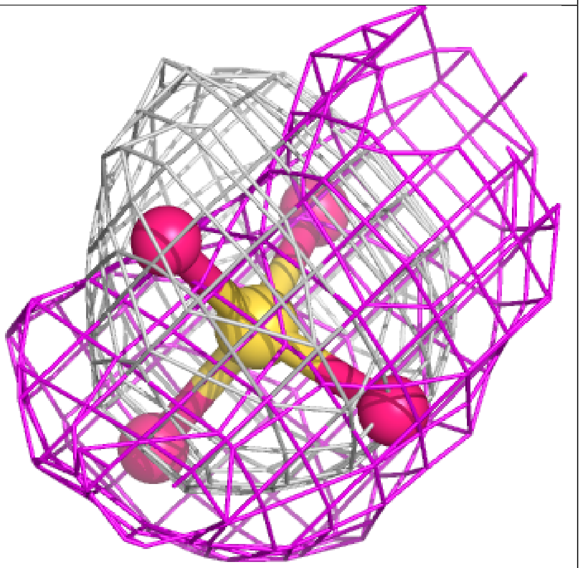


Electron density around SO4 G 206:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

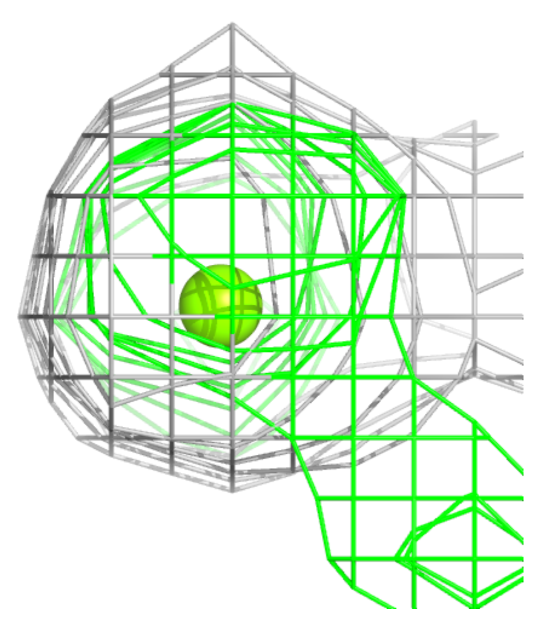


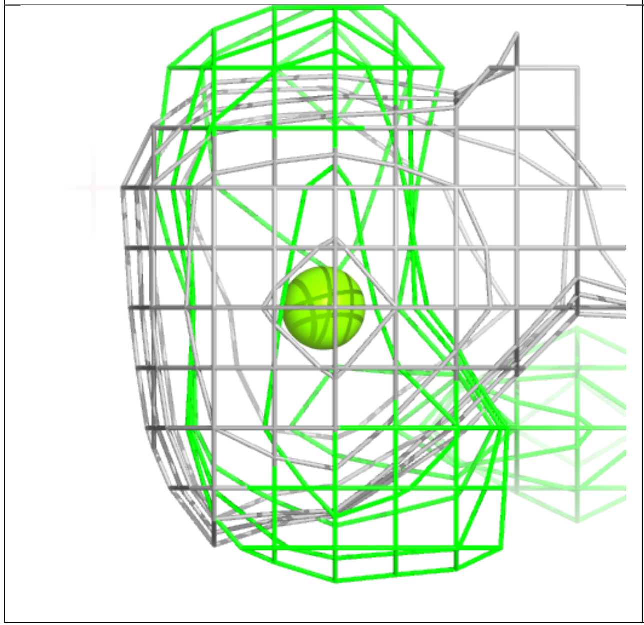


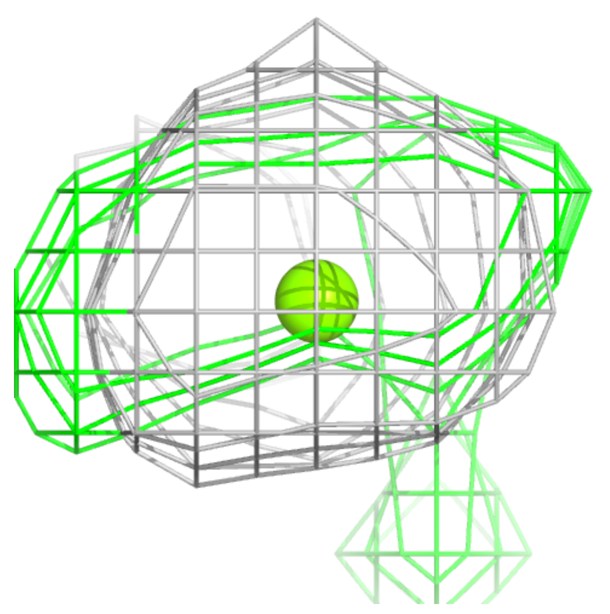


Electron density around MG J 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

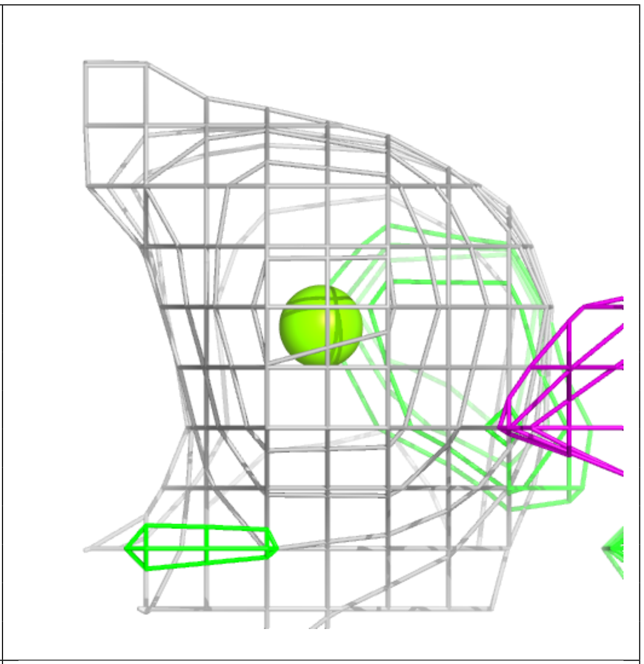


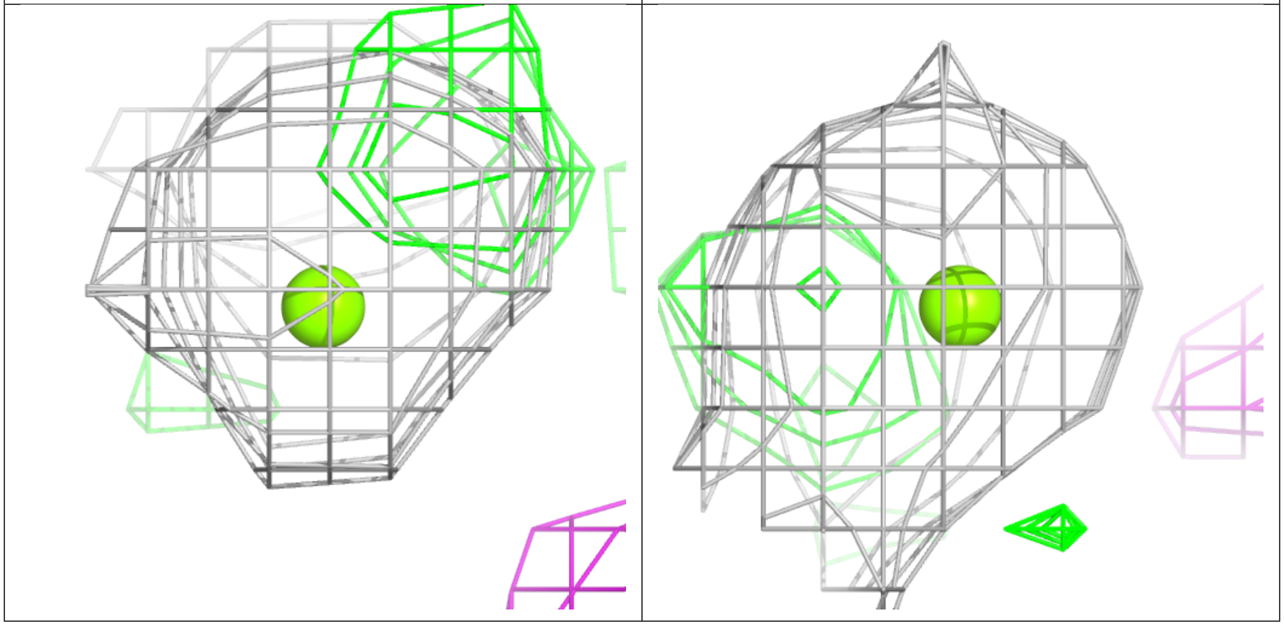




Electron density around MG I 202:

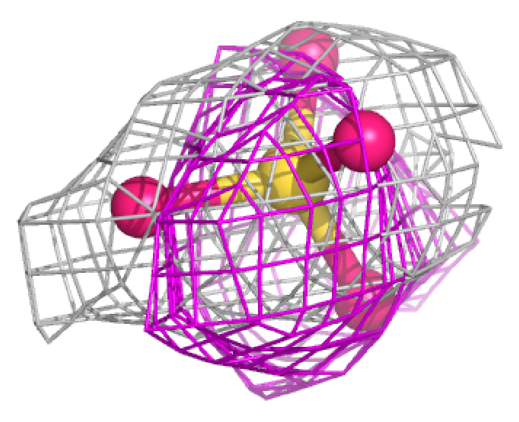
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

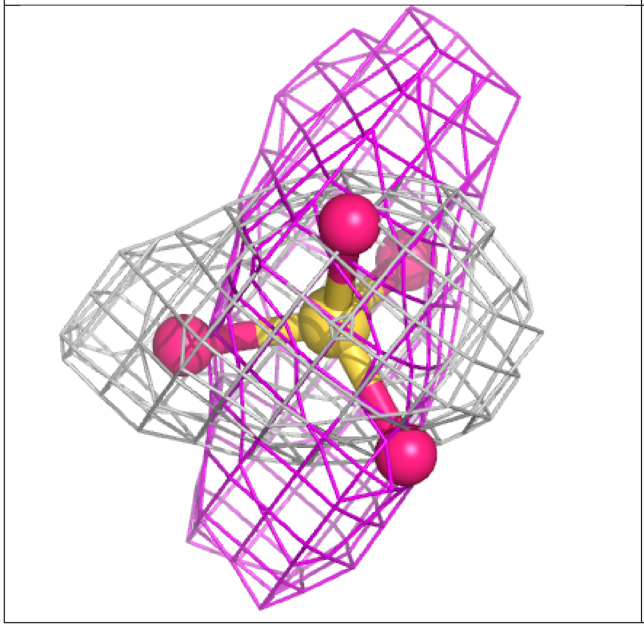


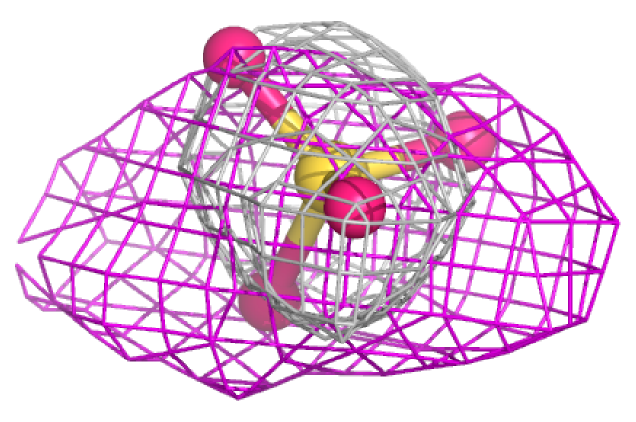


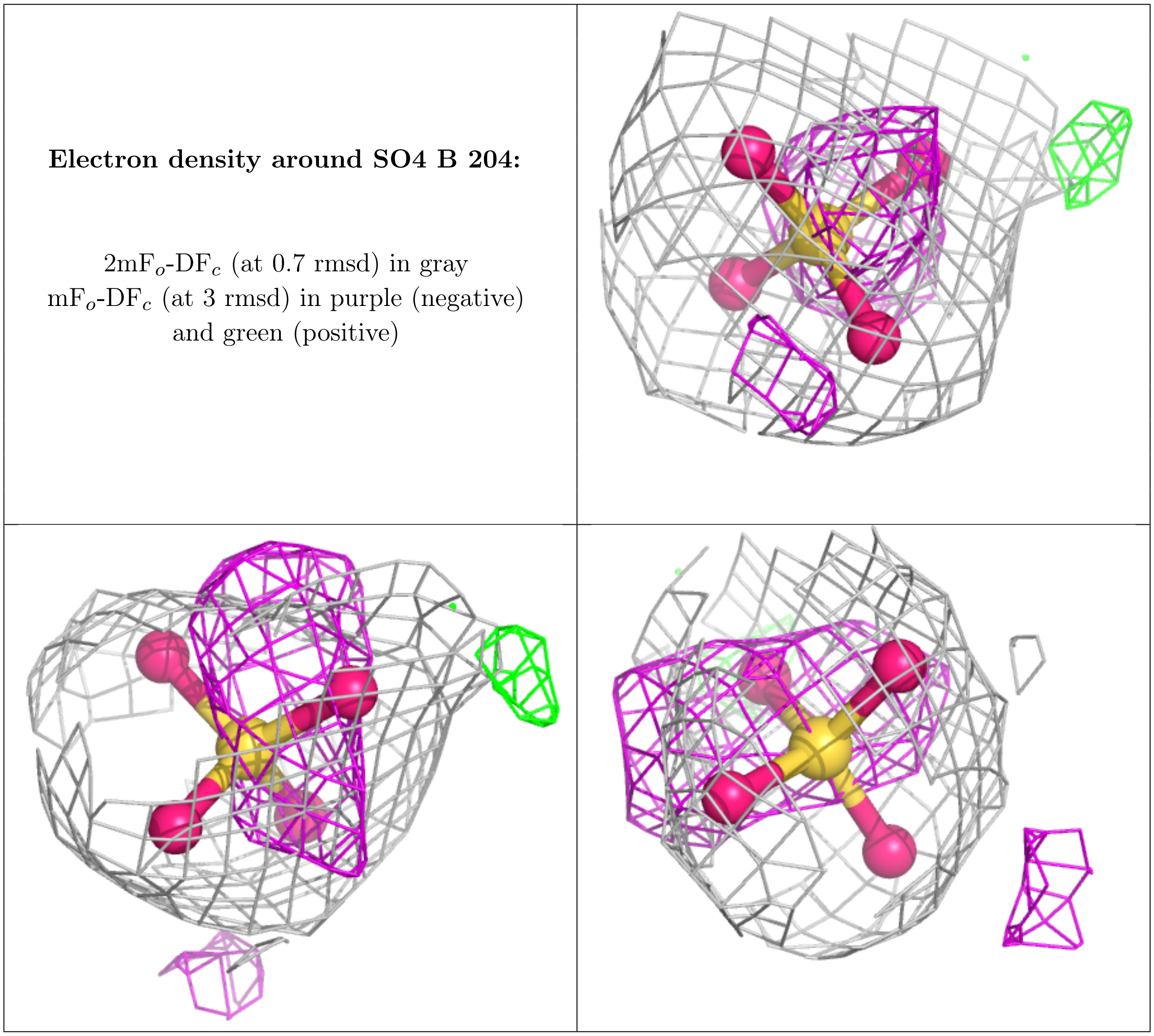
Electron density around SO4 J 206:

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



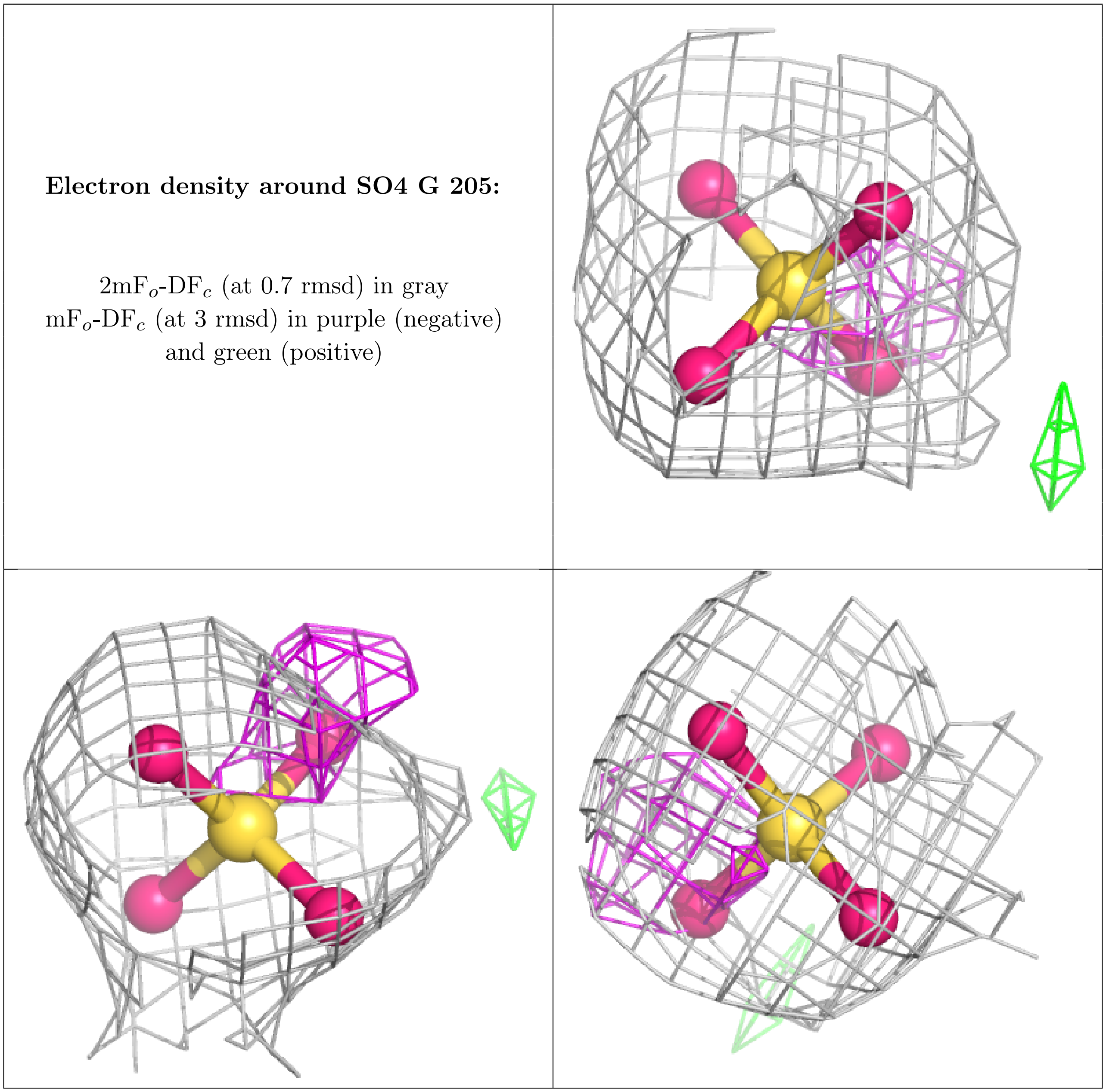






Electron density around SO4 B 204:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

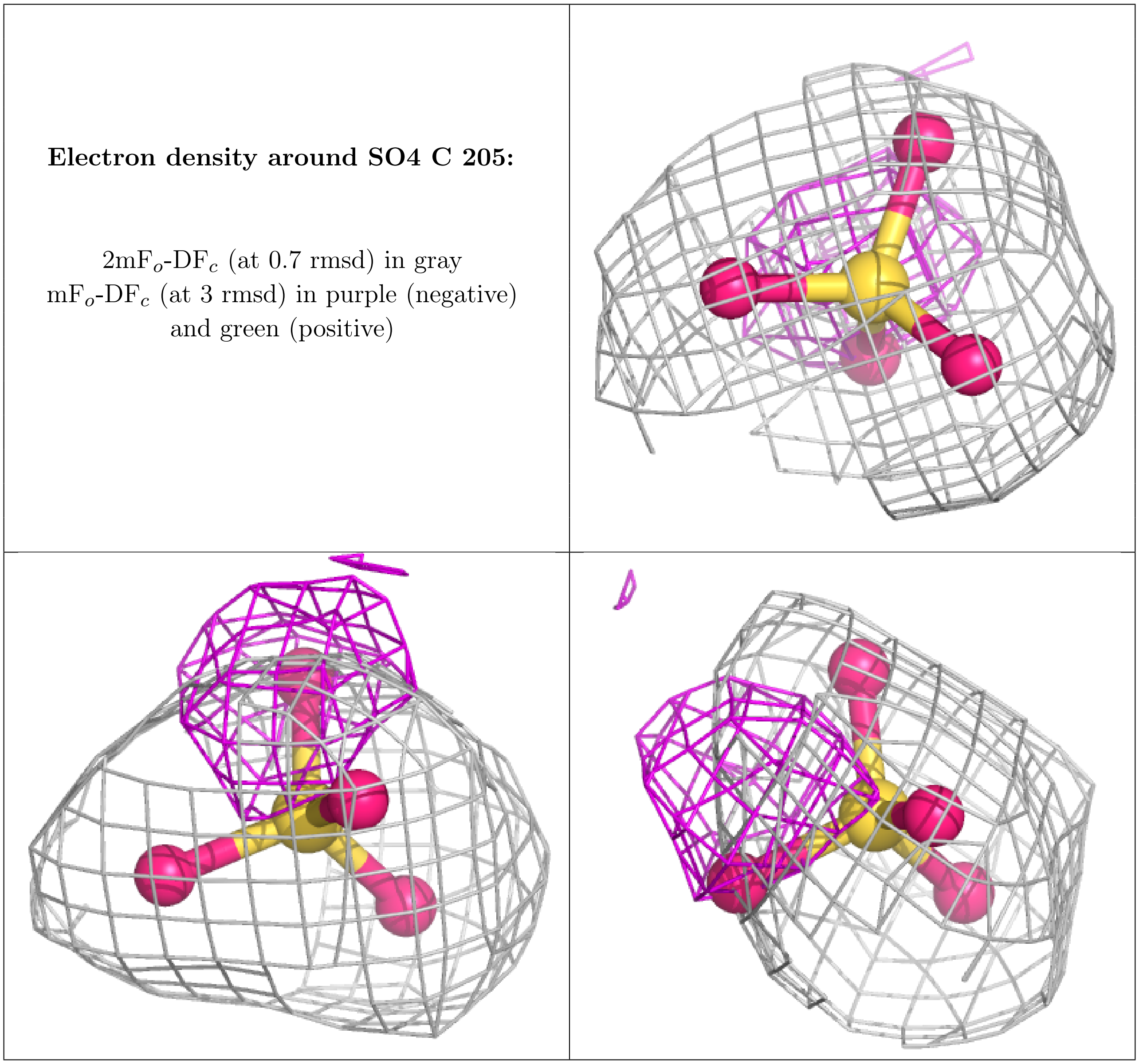


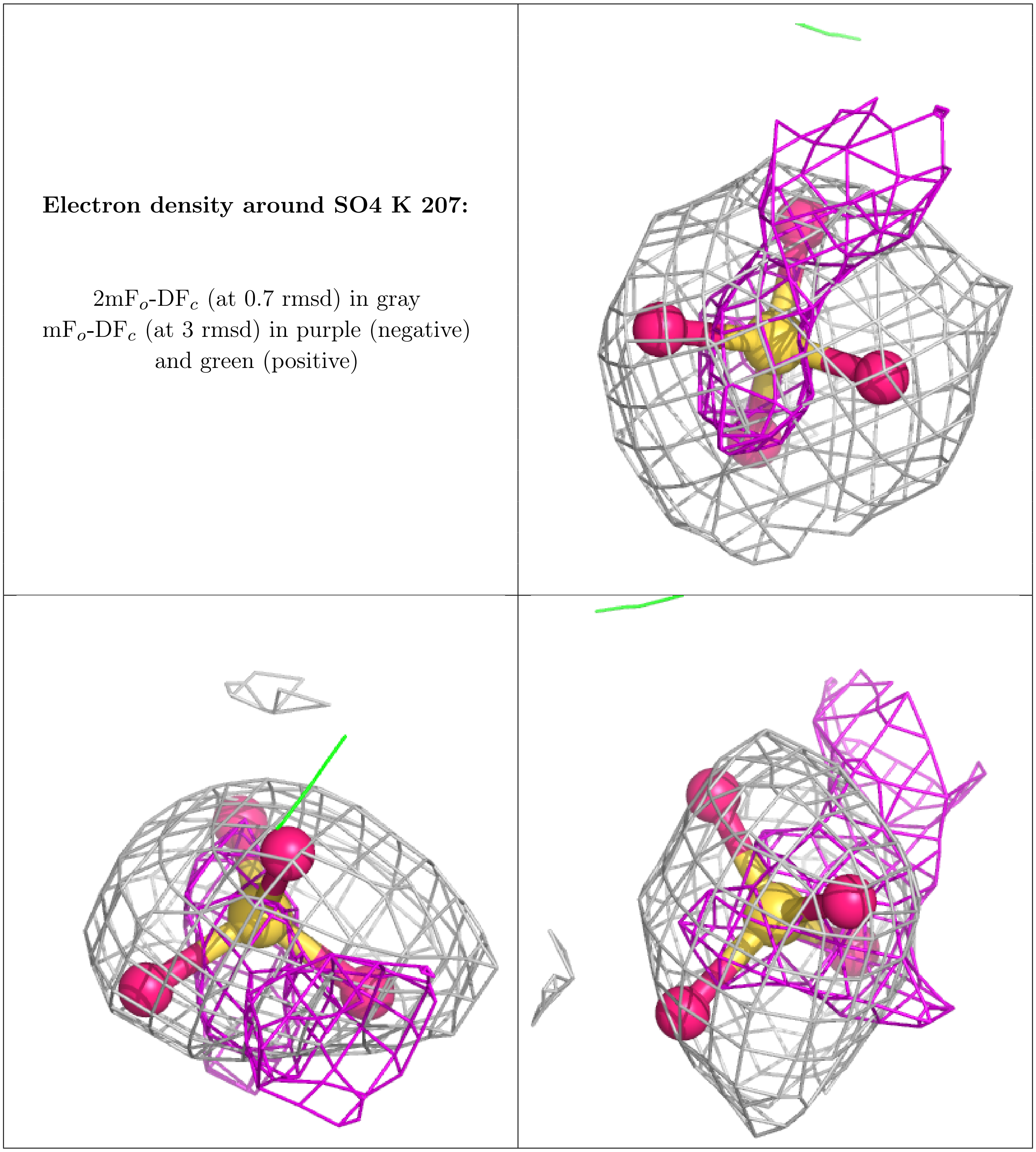
Electron density around SO4 G 205:

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 SO4 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)



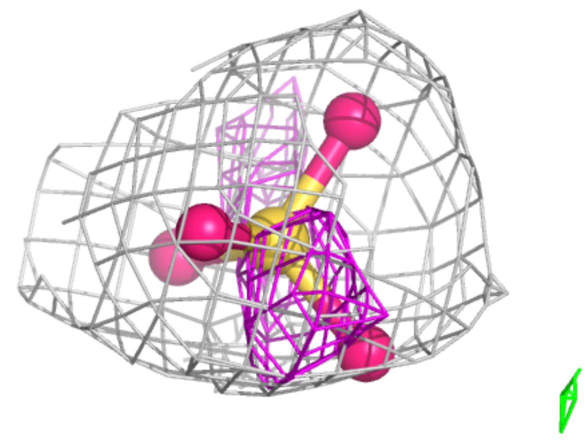


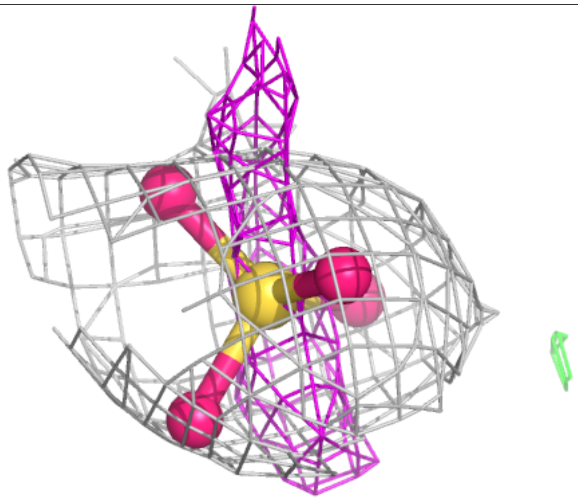
Electron density around SO4 K 207:

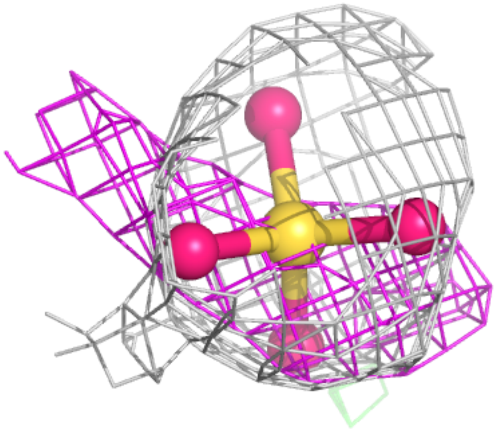
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around SO4 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)

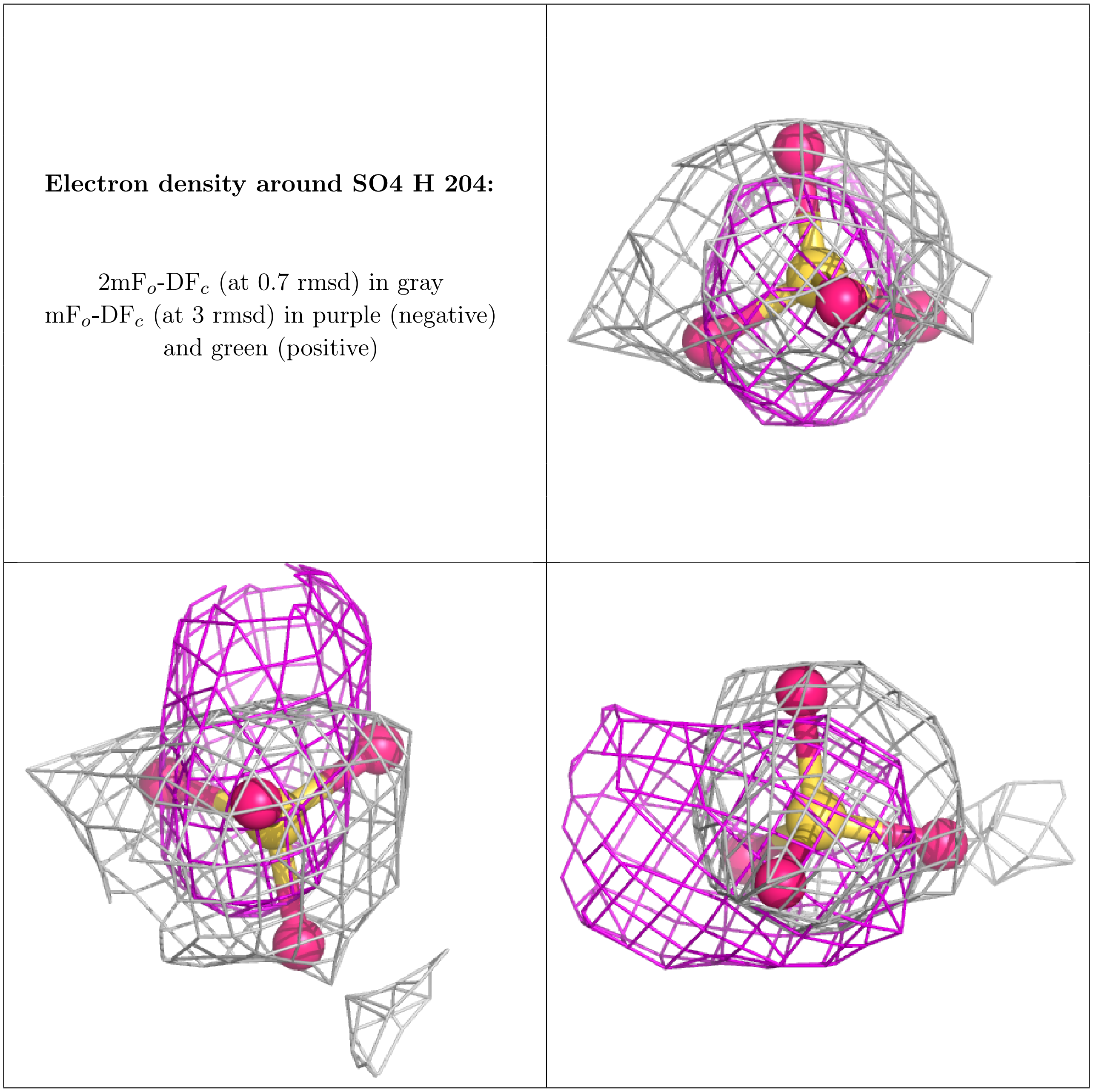


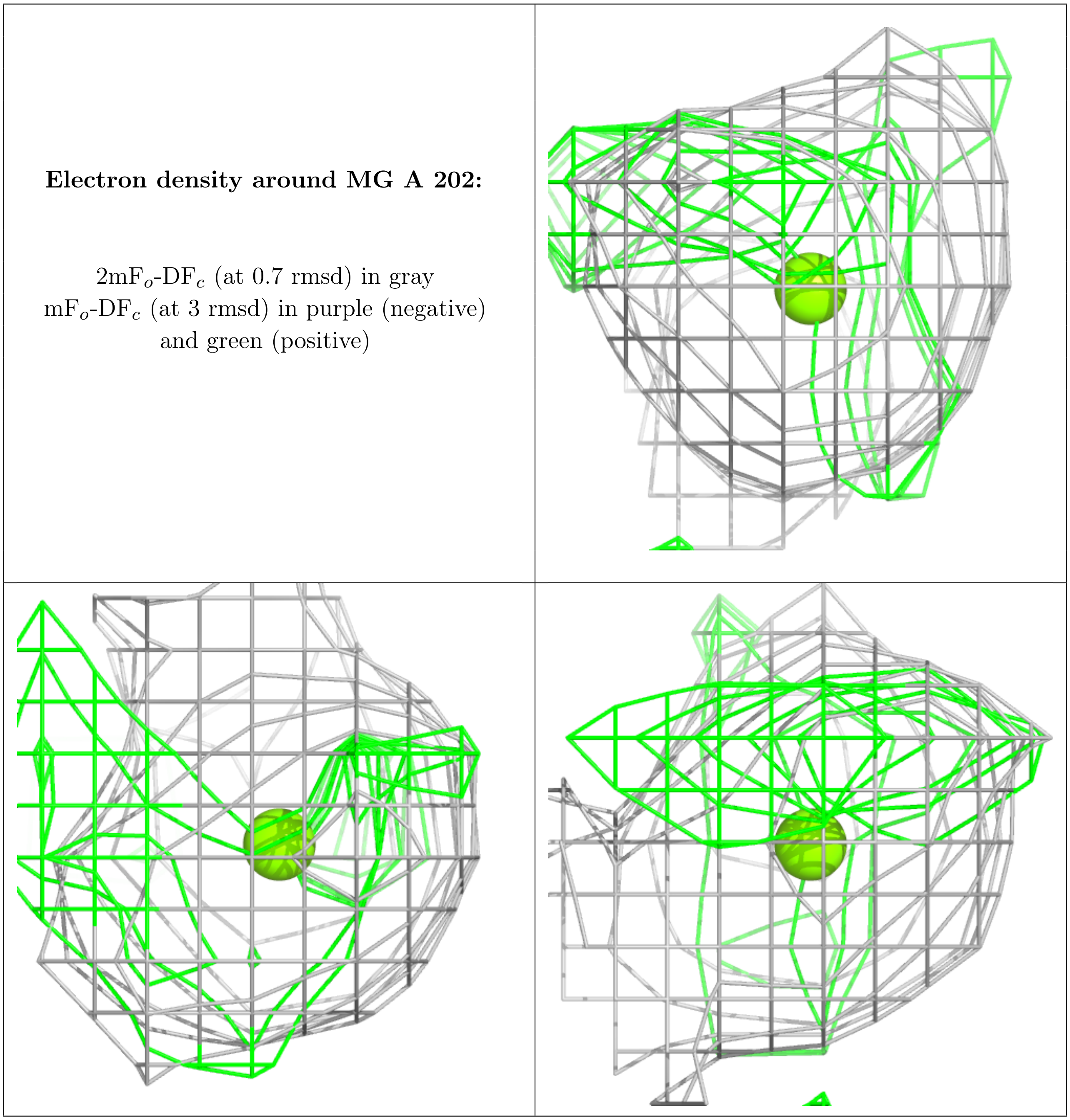




Electron density around SO4 H 204:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



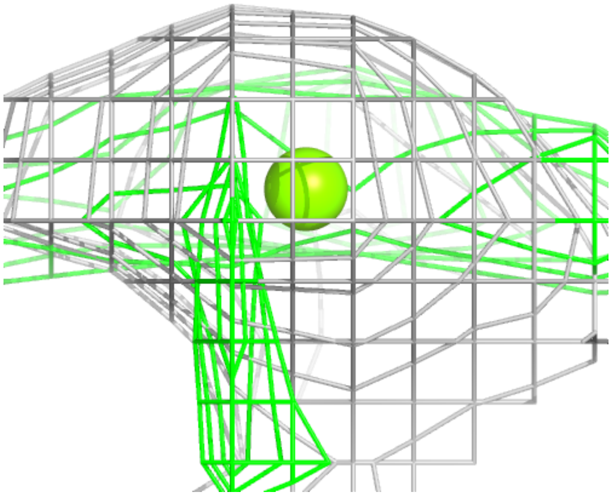


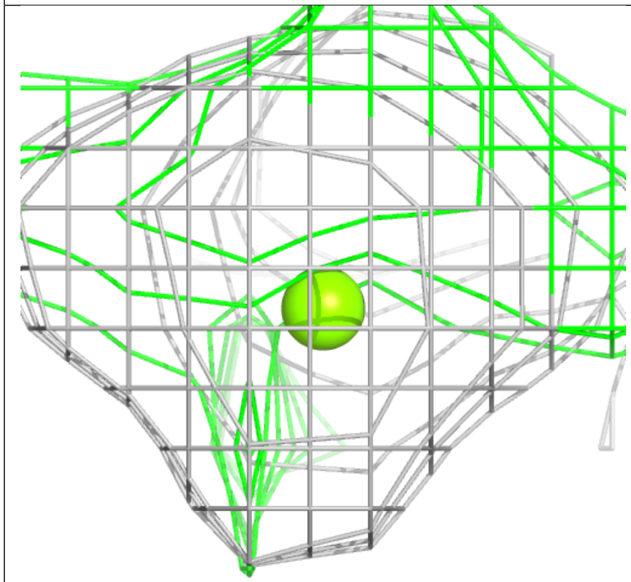
Electron density around MG A 202:

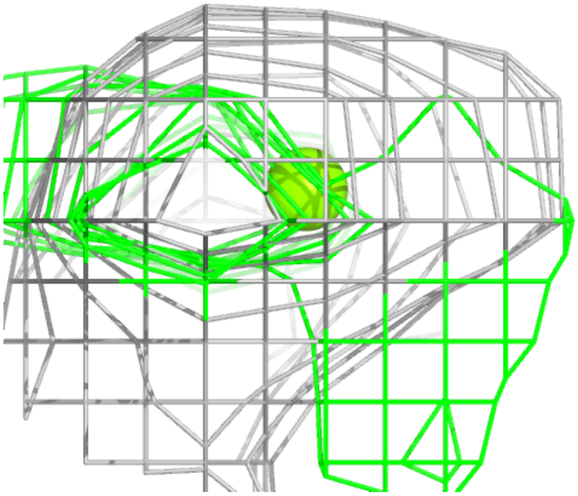
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around MG B 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

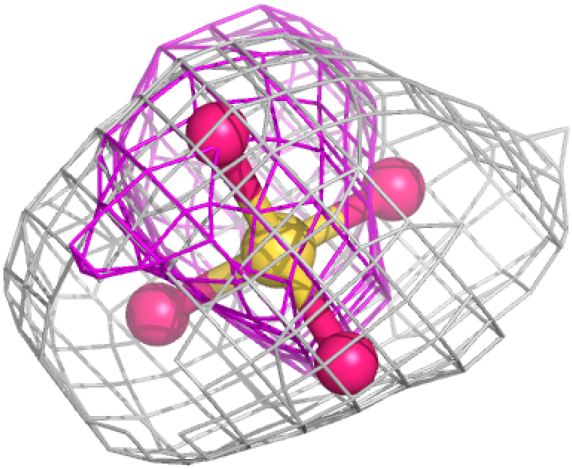


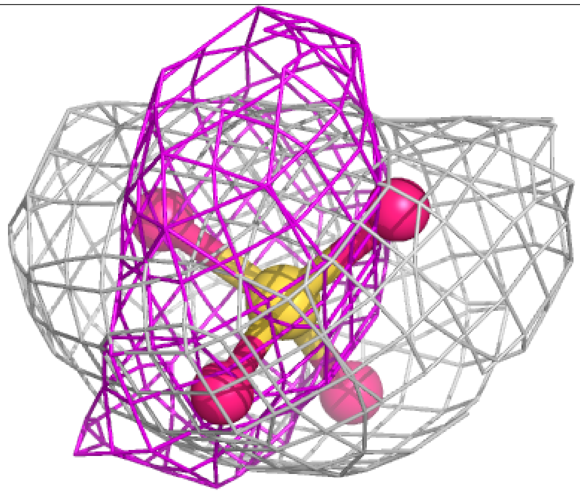


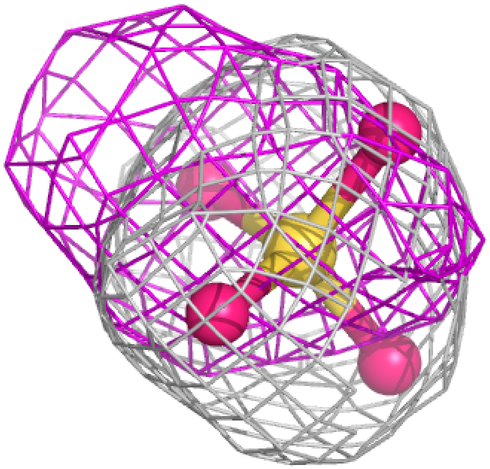


Electron density around SO4 D 205:

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

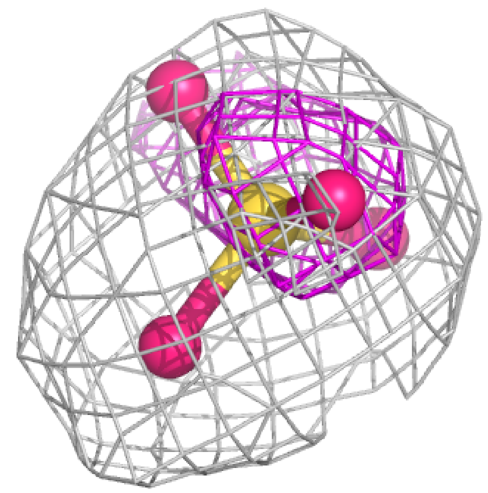


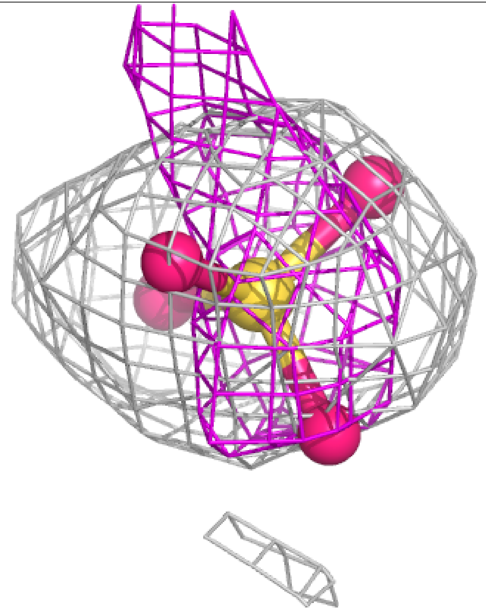


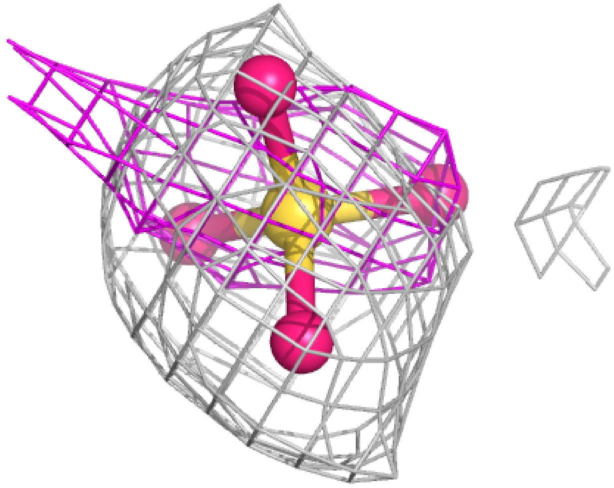


Electron density around SO4 F 209:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

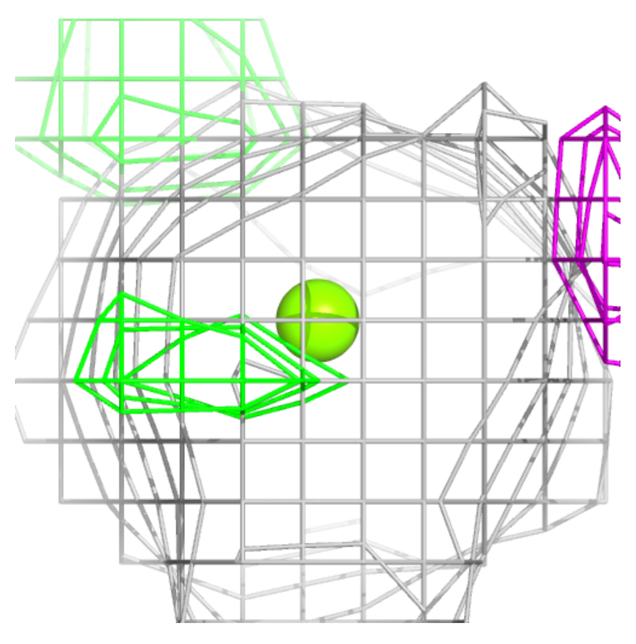


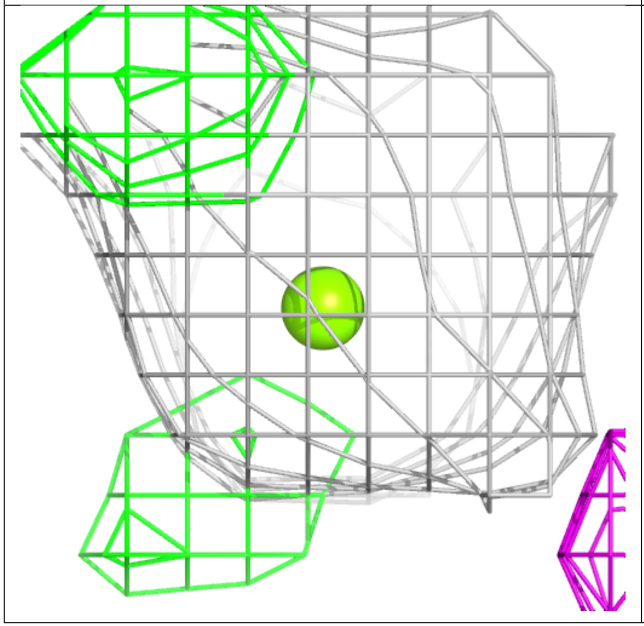


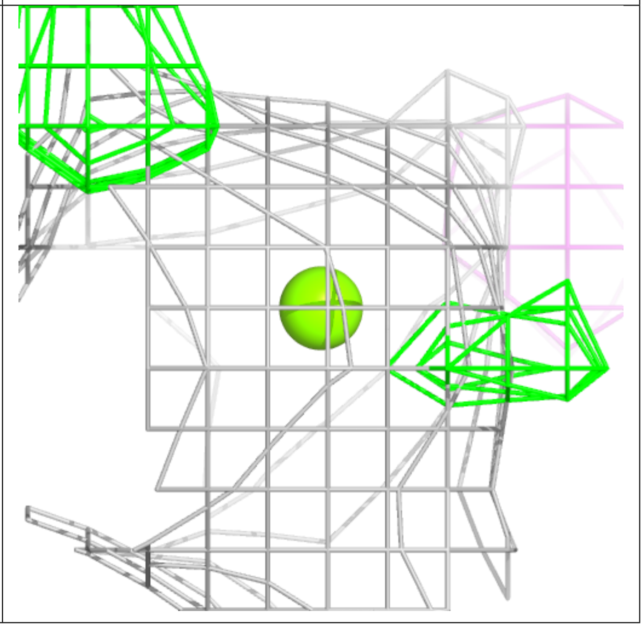


Electron density around MG K 201:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

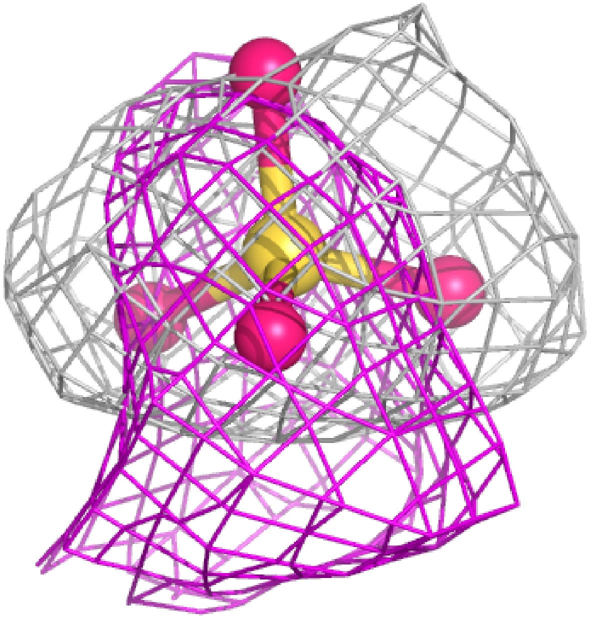


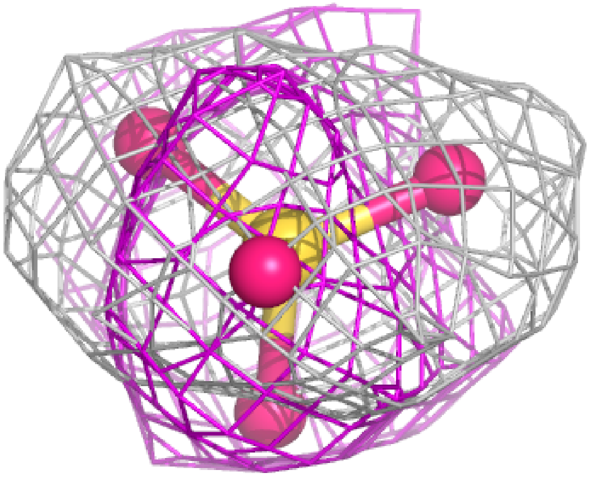


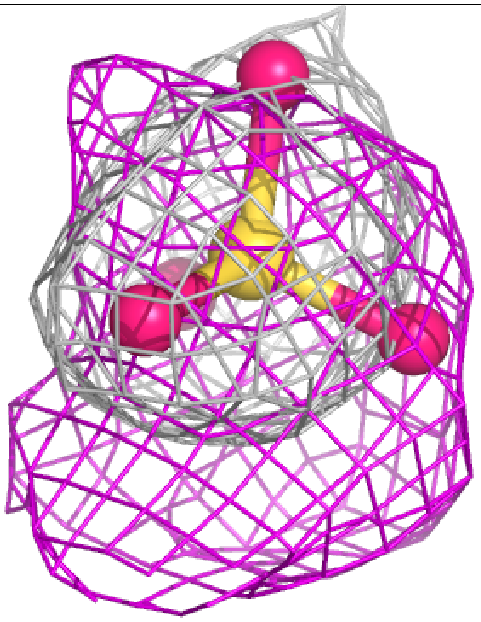


Electron density around SO4 E 206:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

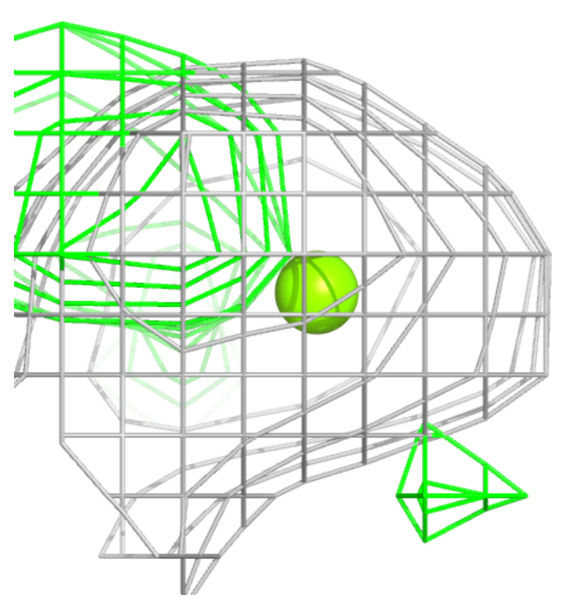


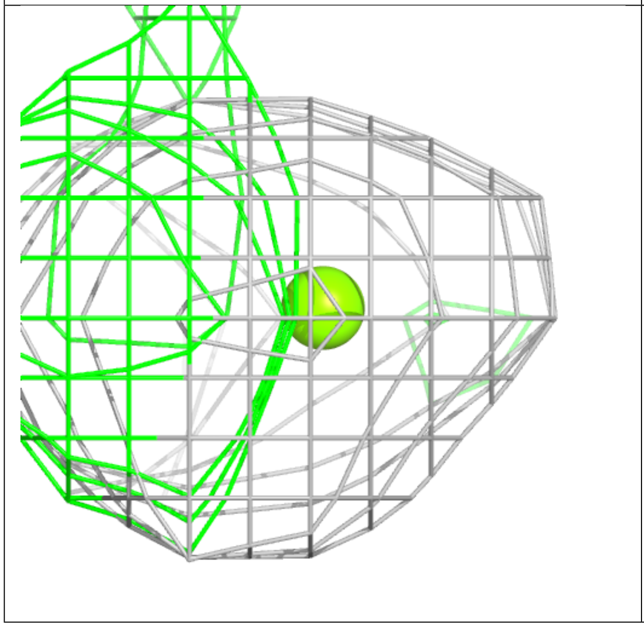


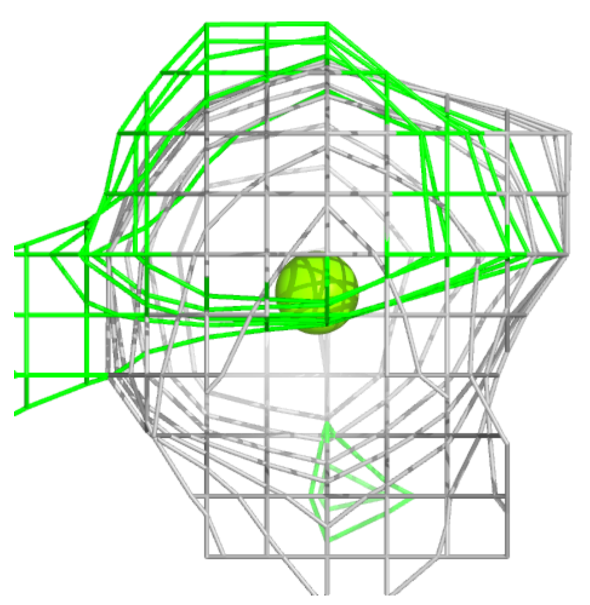


Electron density around MG L 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

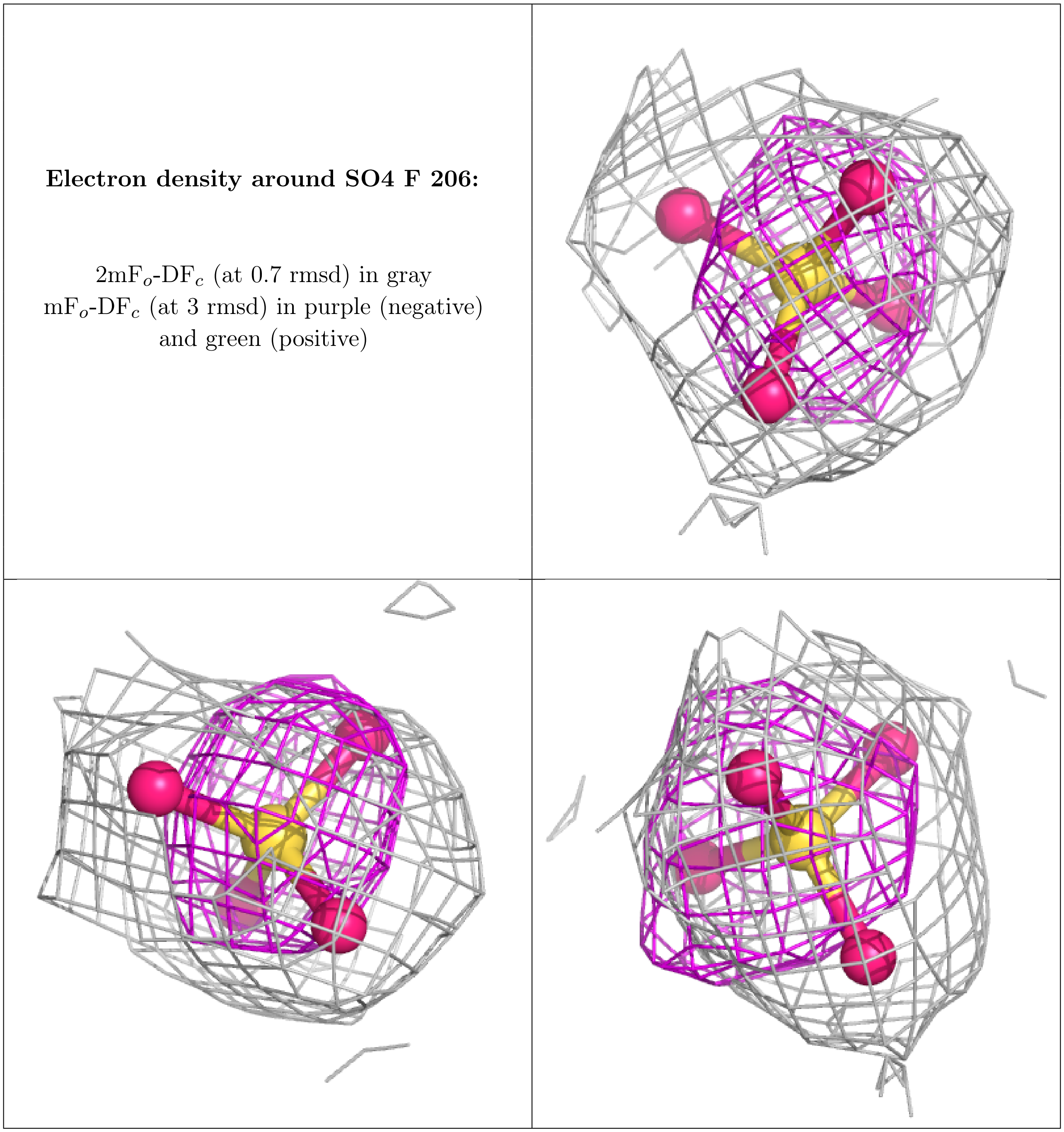






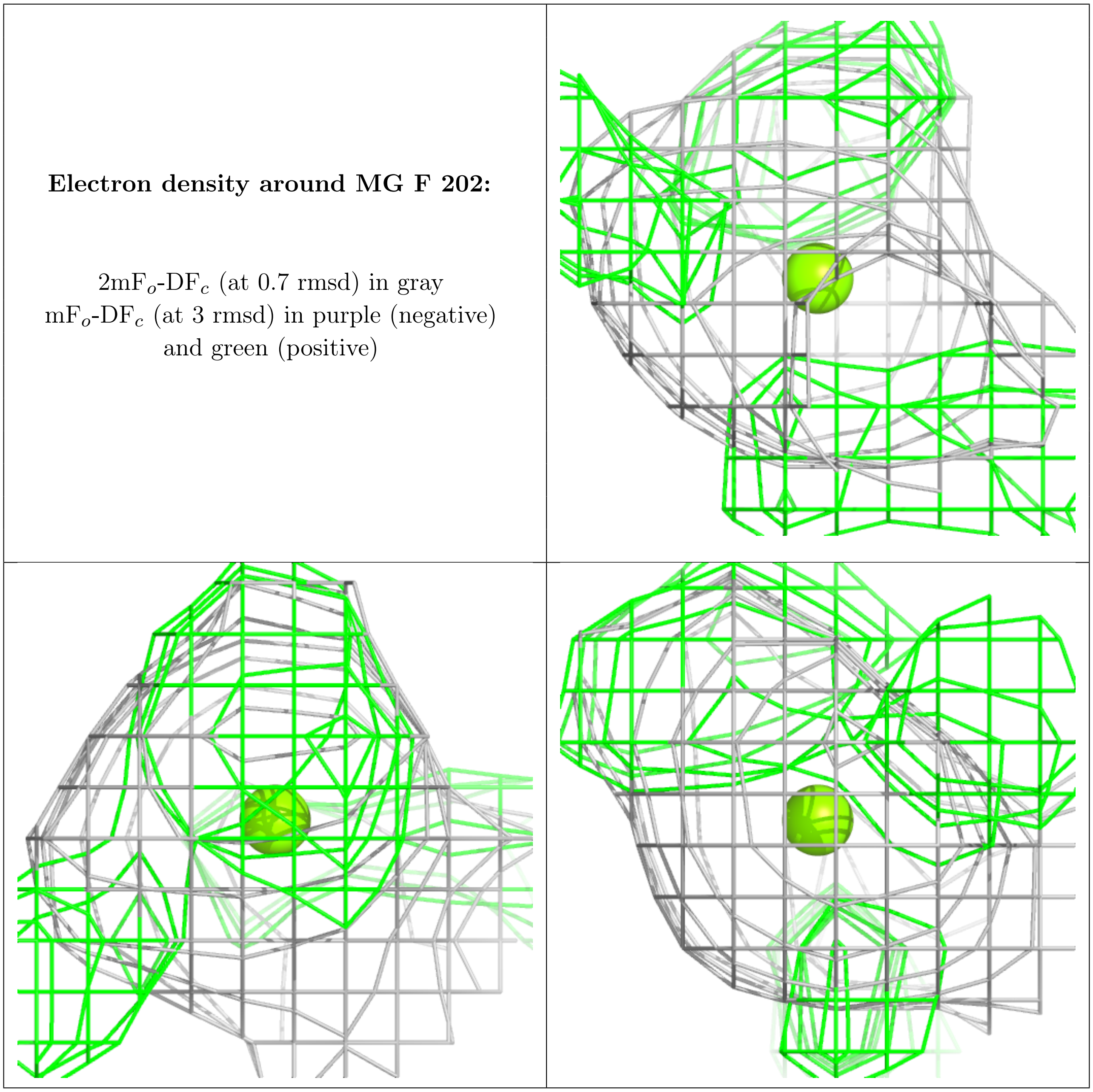
Electron density around SO4 F 206:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



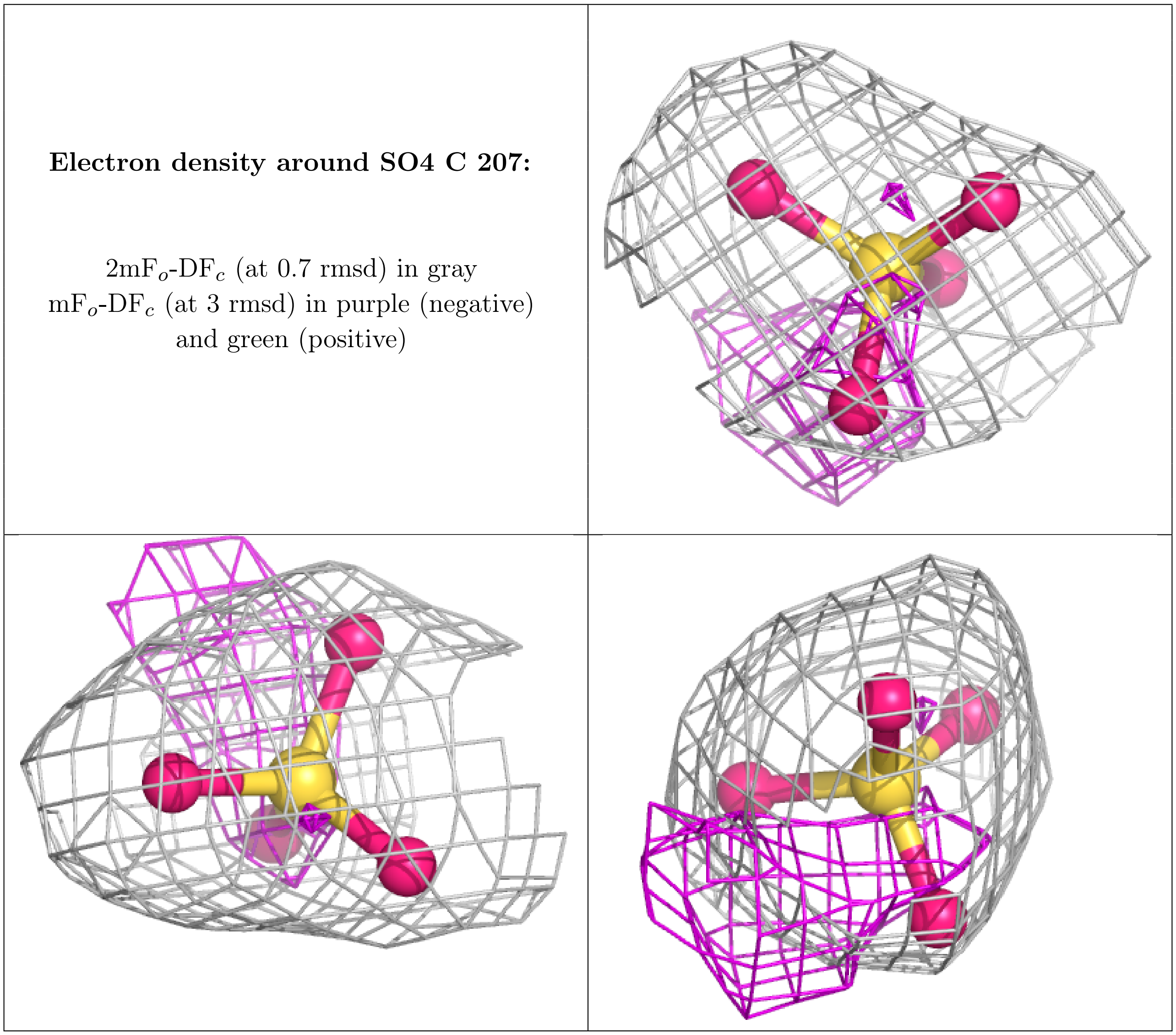
Electron density around MG F 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



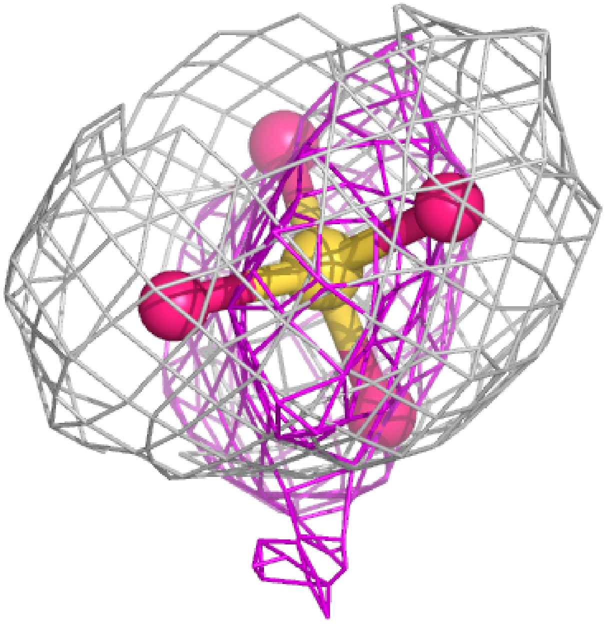
Electron density around SO4 C 207:

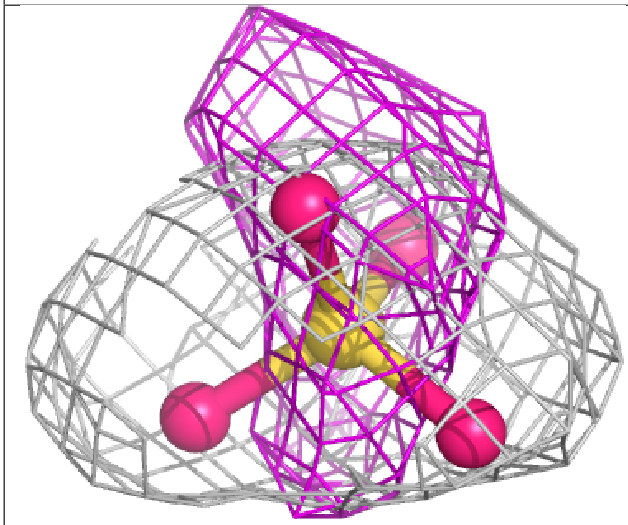
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

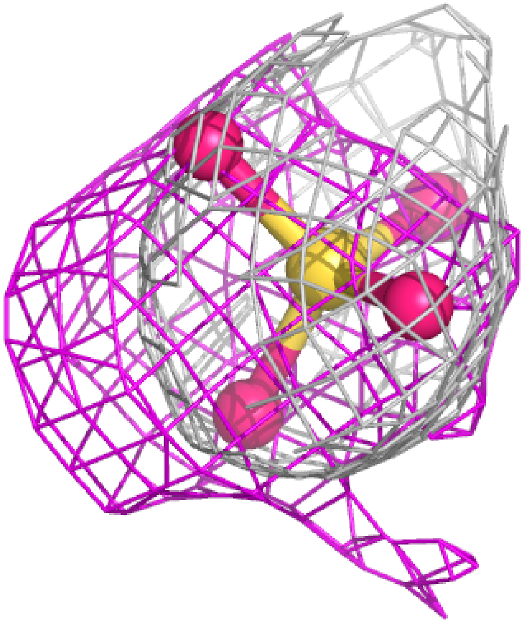


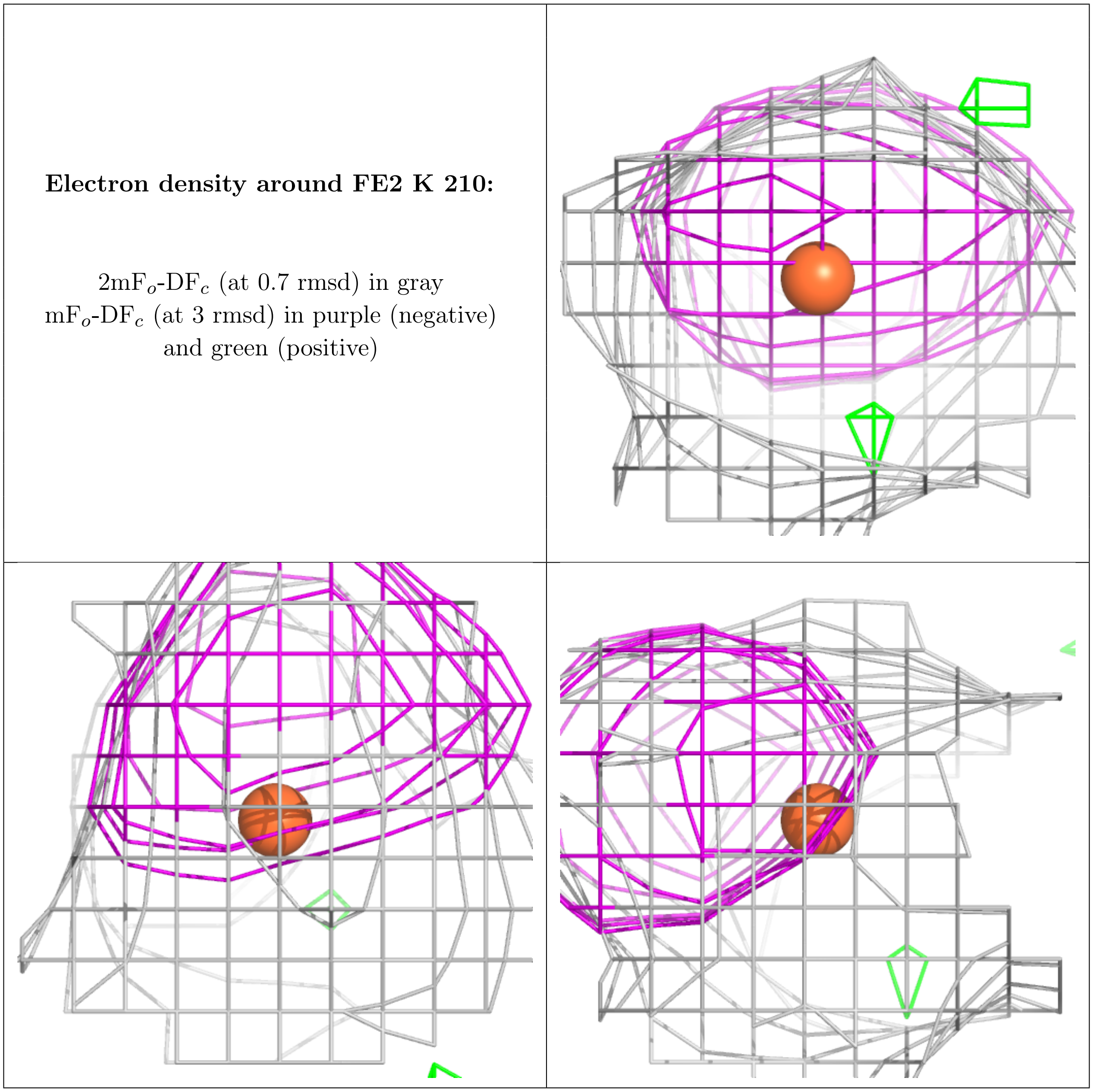
Electron density around SO4 K 206:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)







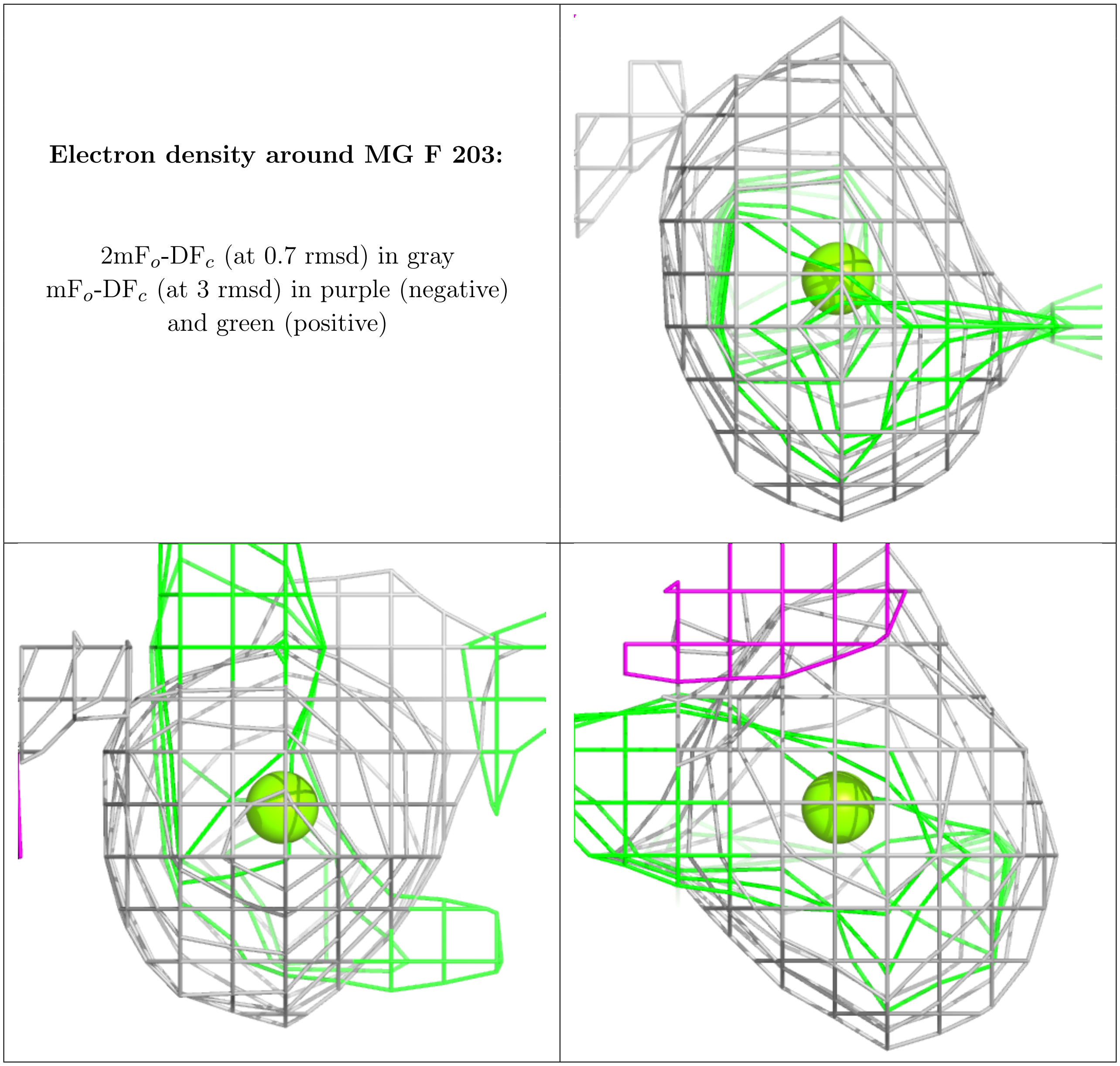


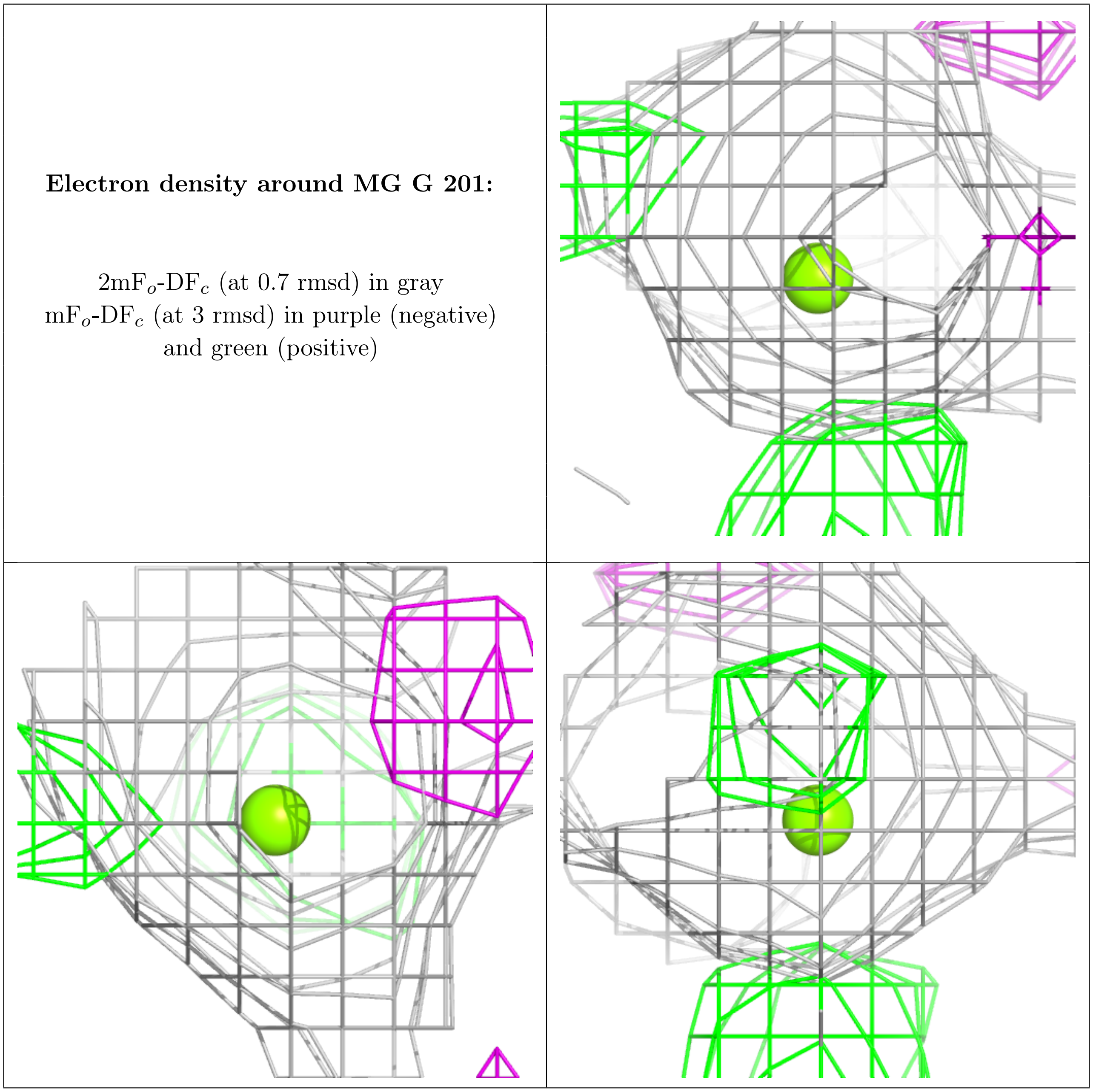
Electron density around FE2 K 210:

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 MG F 203:

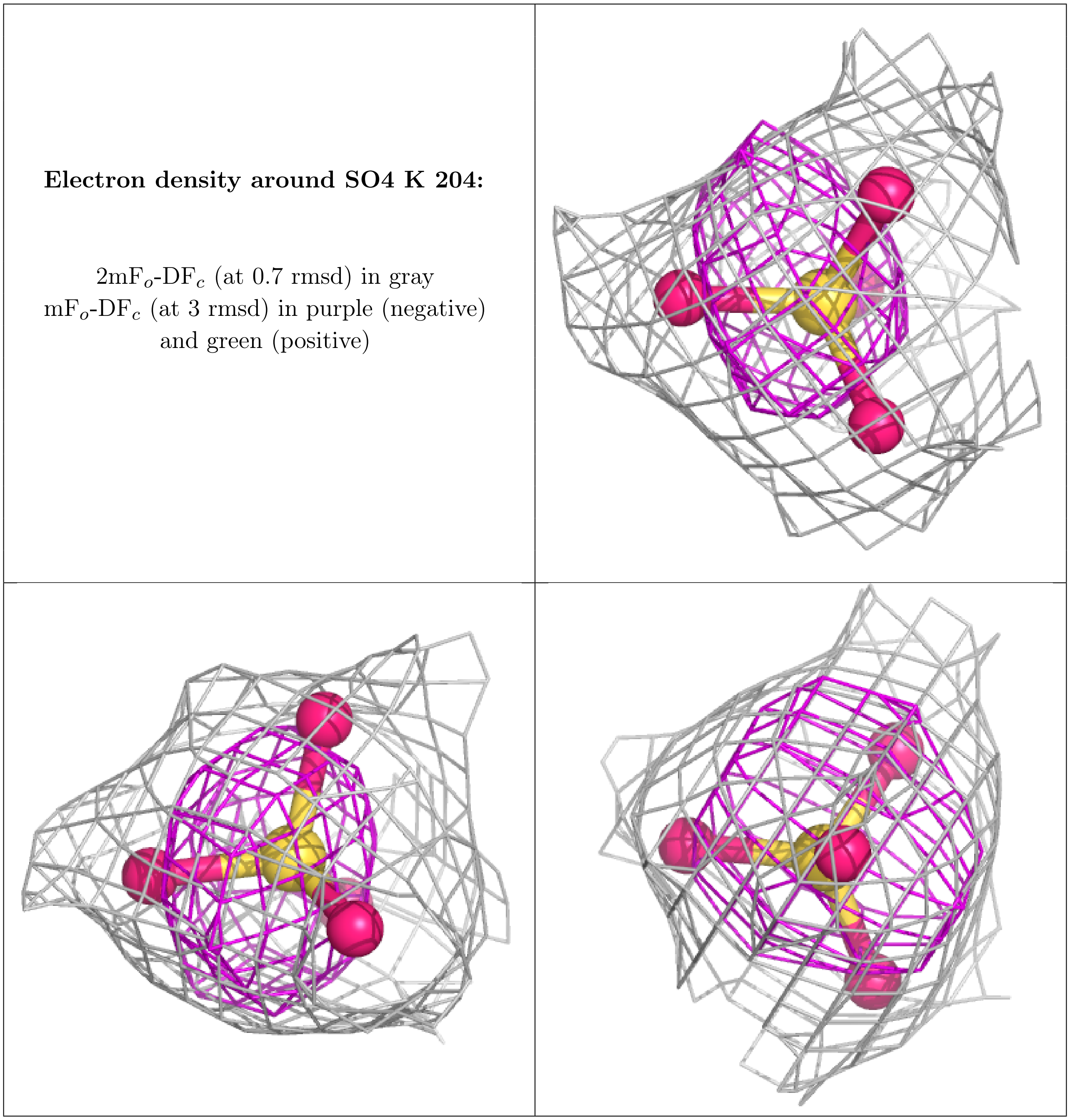
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)





Electron density around MG G 201:

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

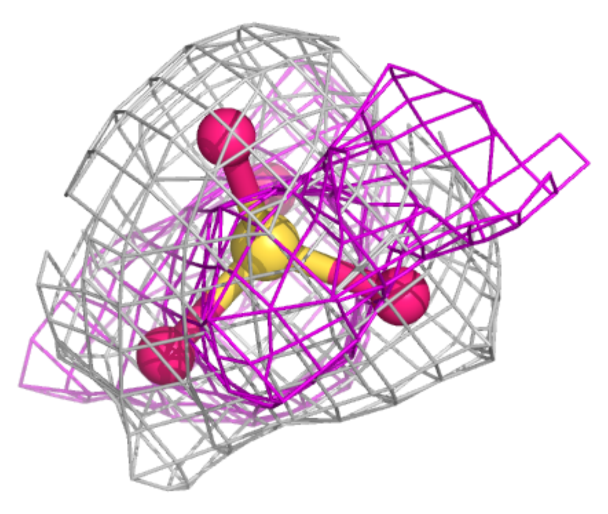


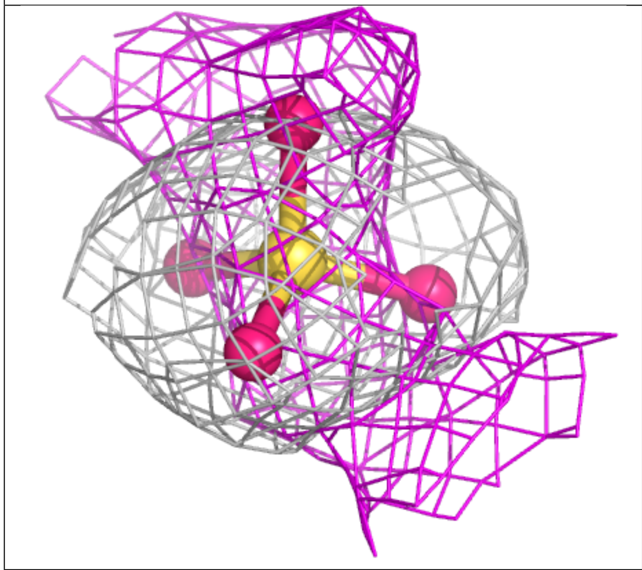
Electron density around SO4 K 204:

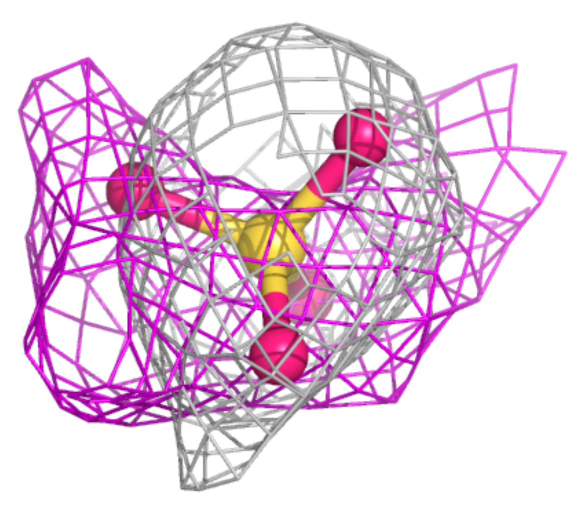
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

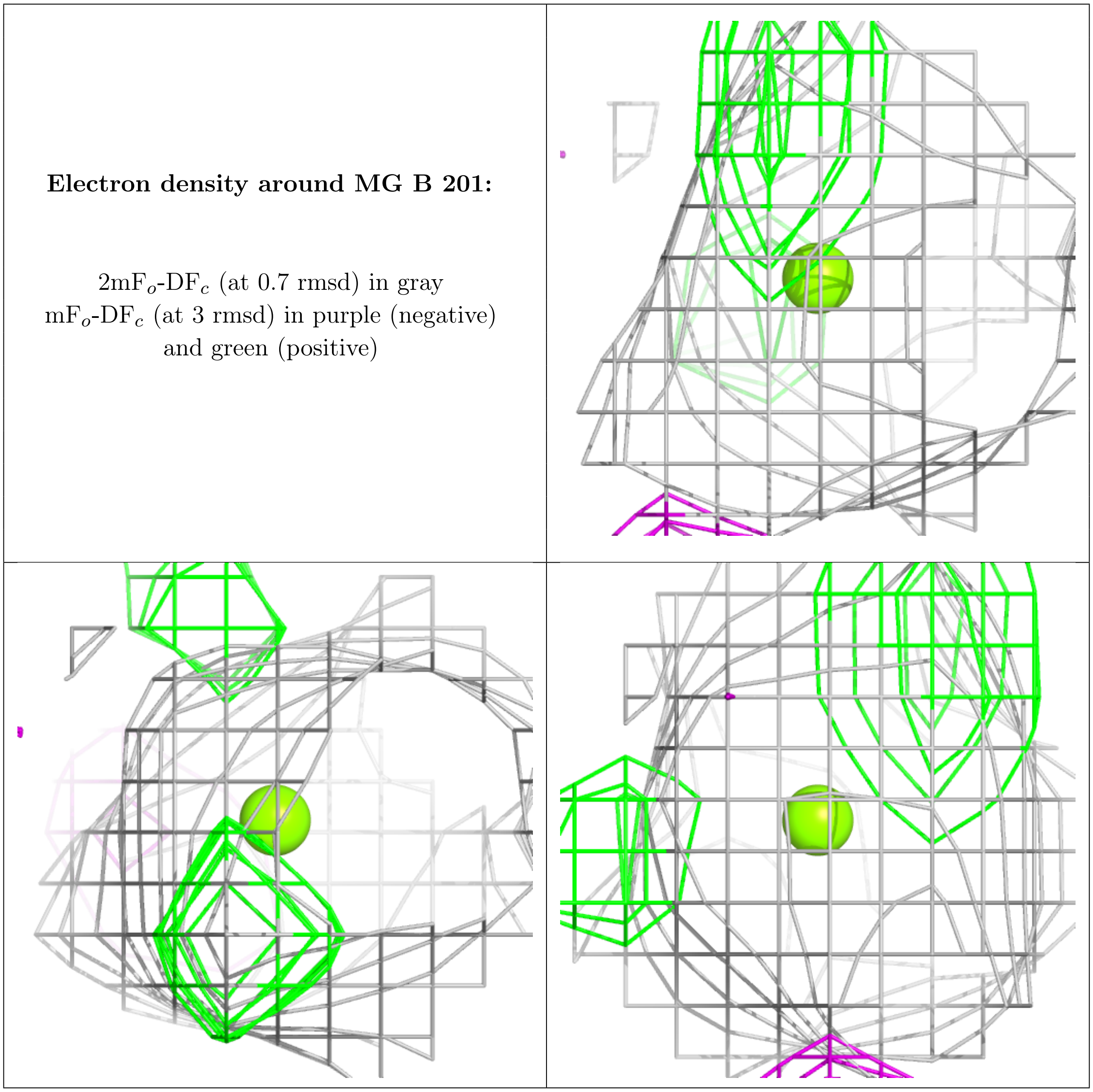
Electron density around SO4 D 204:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)







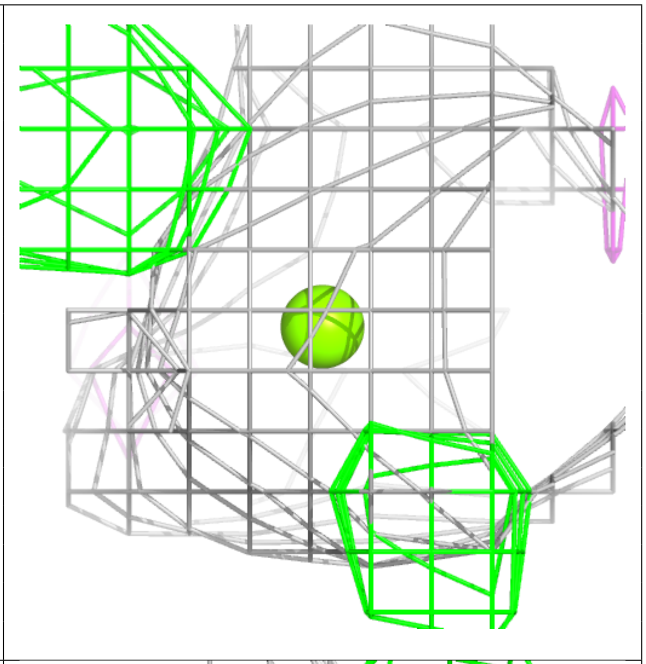


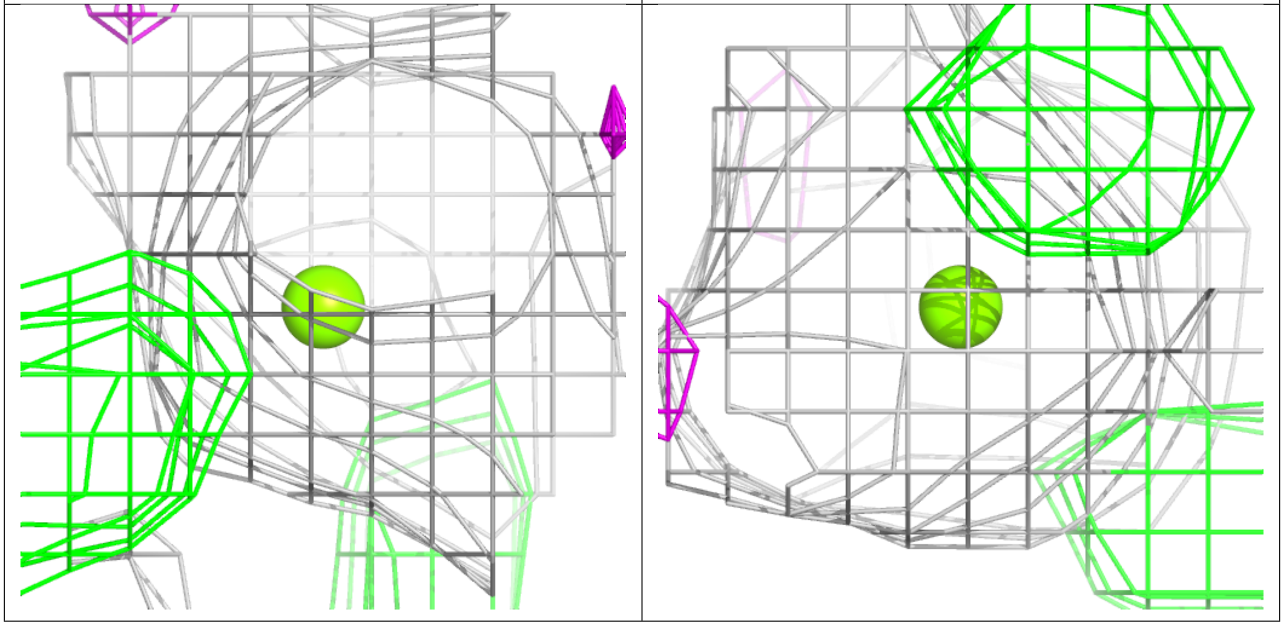
Electron density around MG B 201:

$2mF_o$-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 F 201:

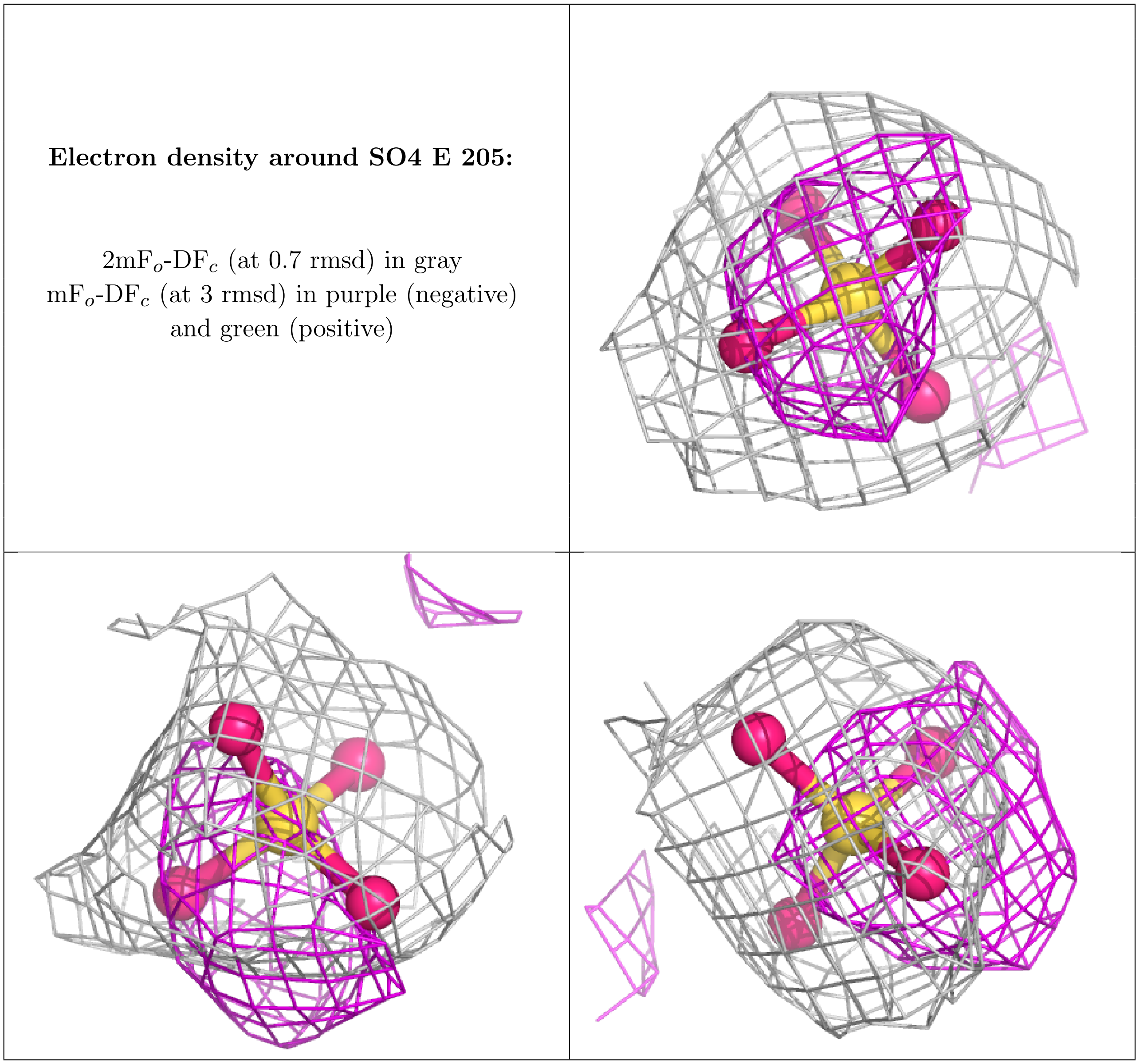
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)





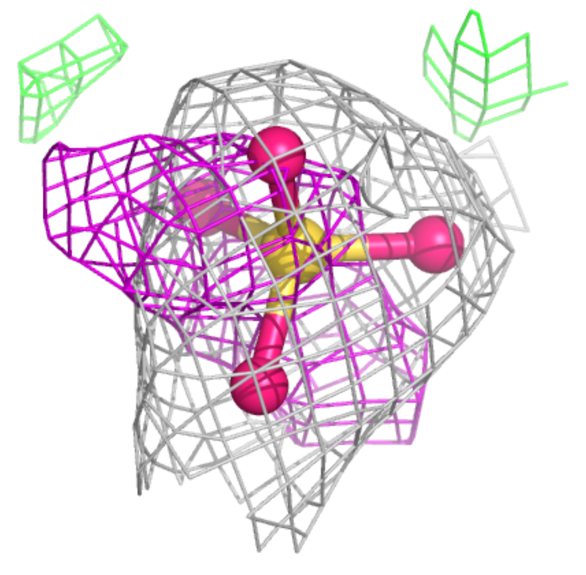
Electron density around SO4 E 205:

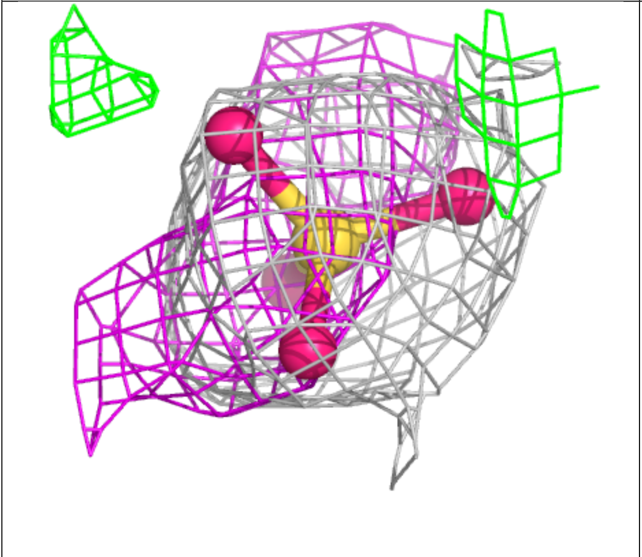
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

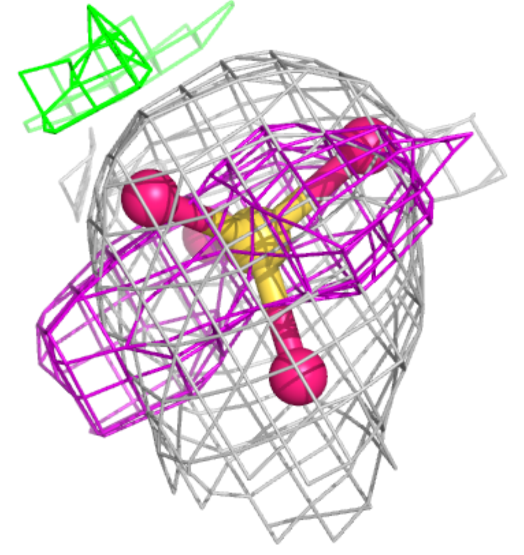


Electron density around SO4 A 205:

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 MG F 204:

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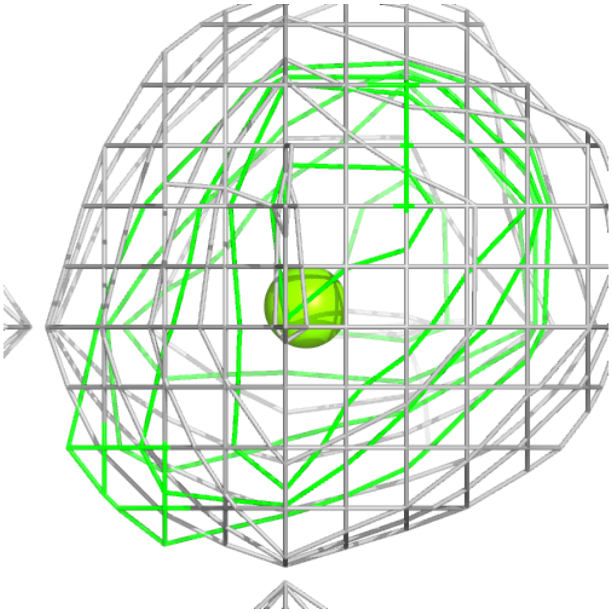
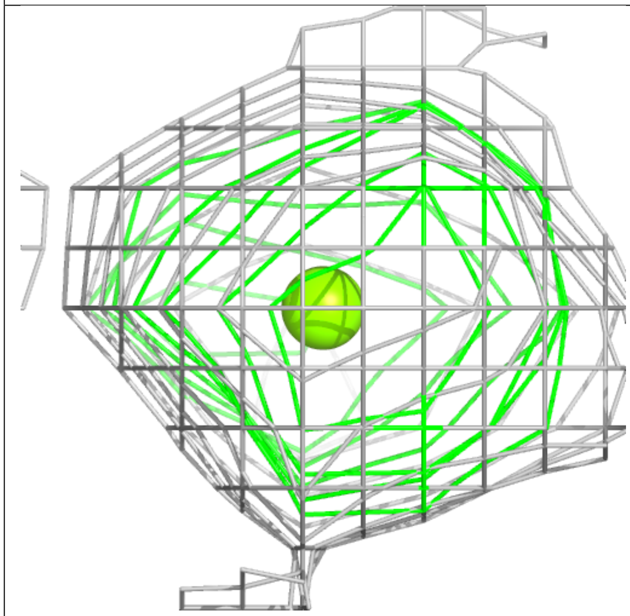
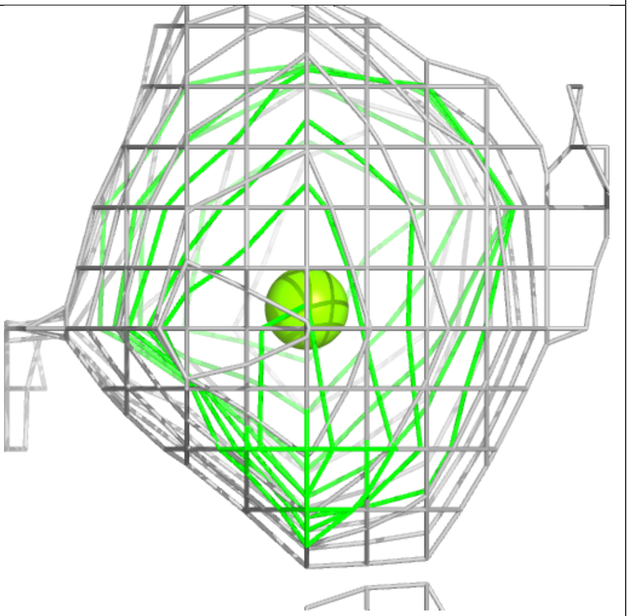
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

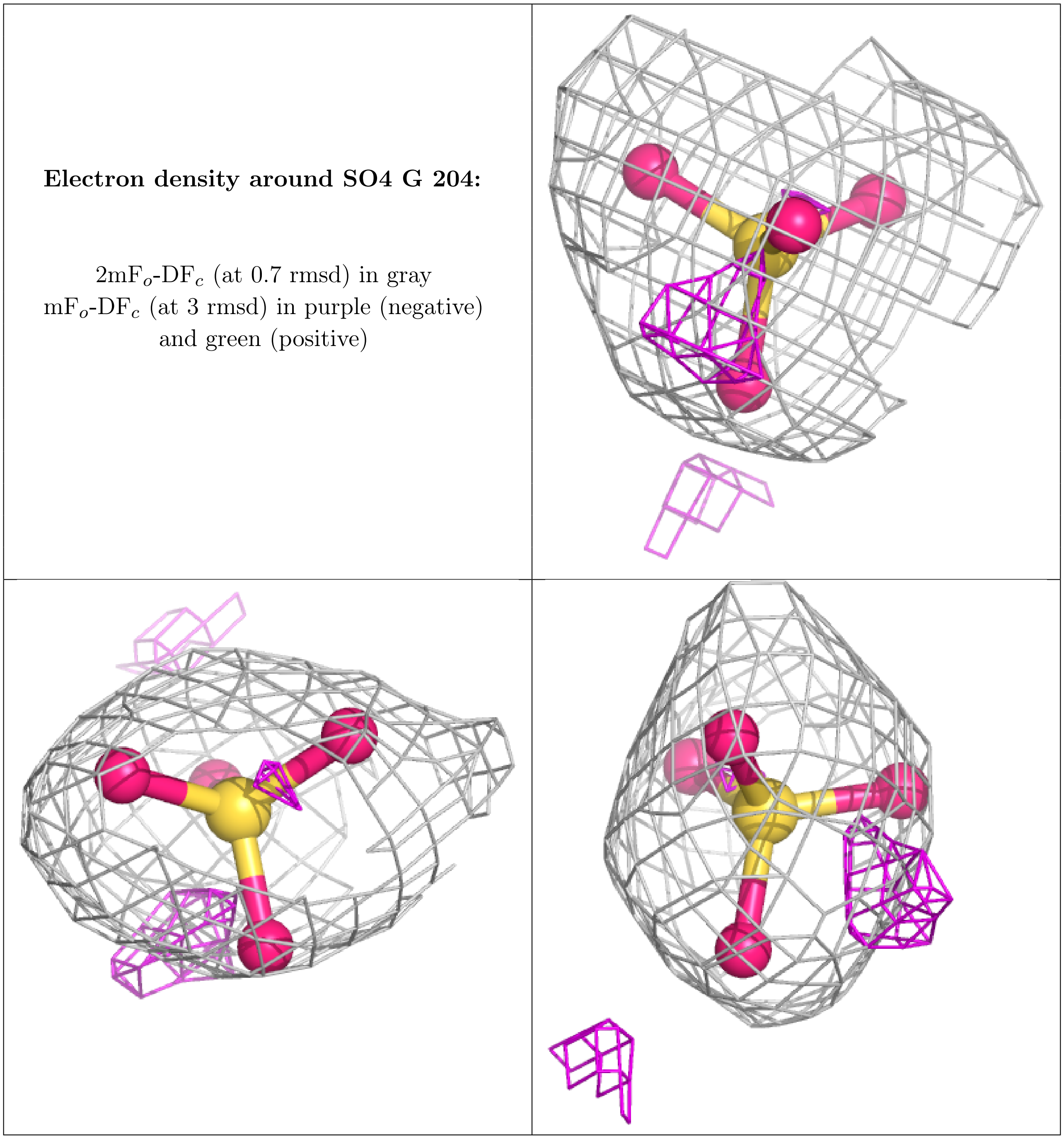






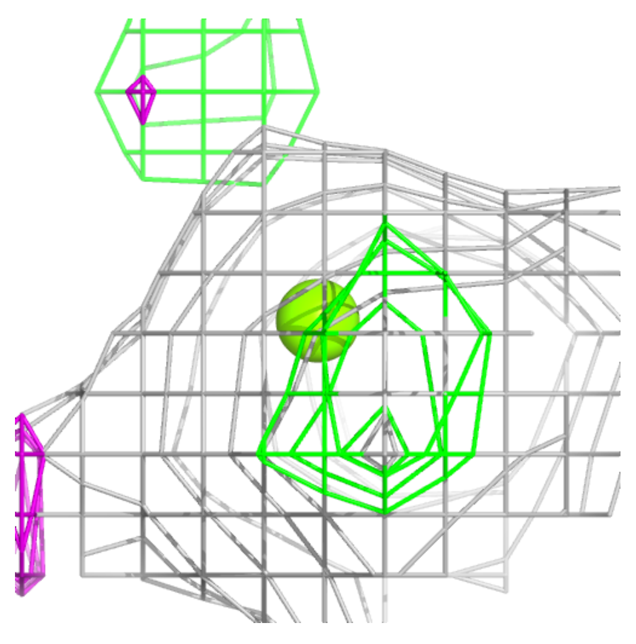
Electron density around SO4 G 204:

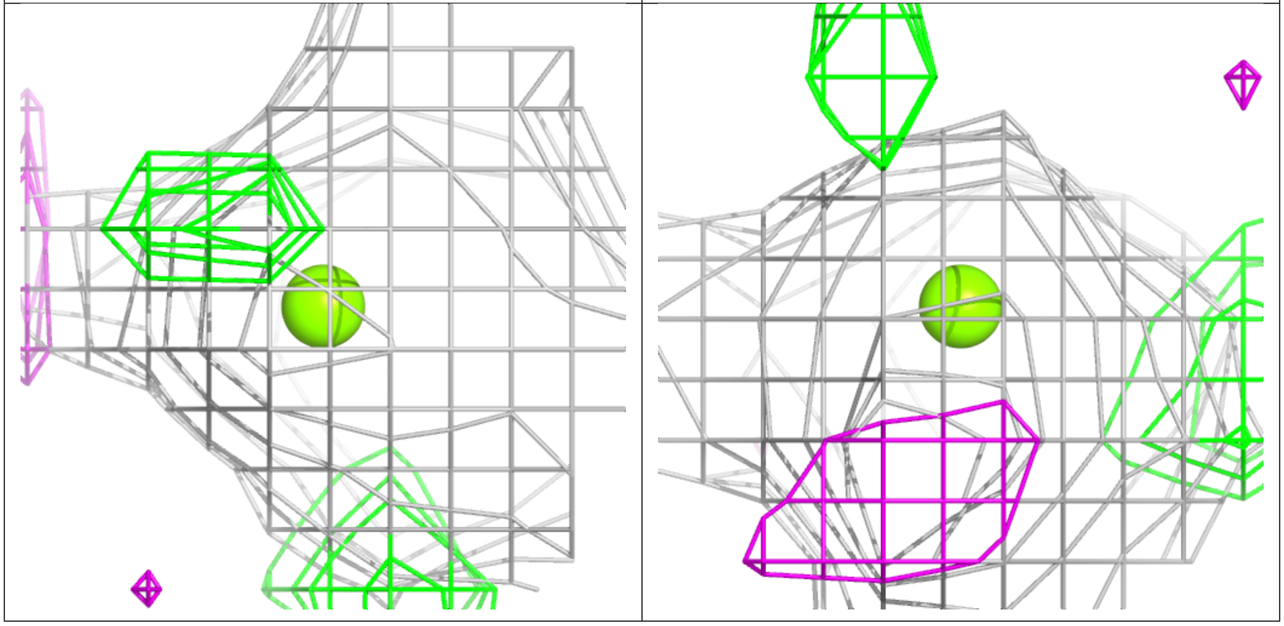
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around MG H 201:

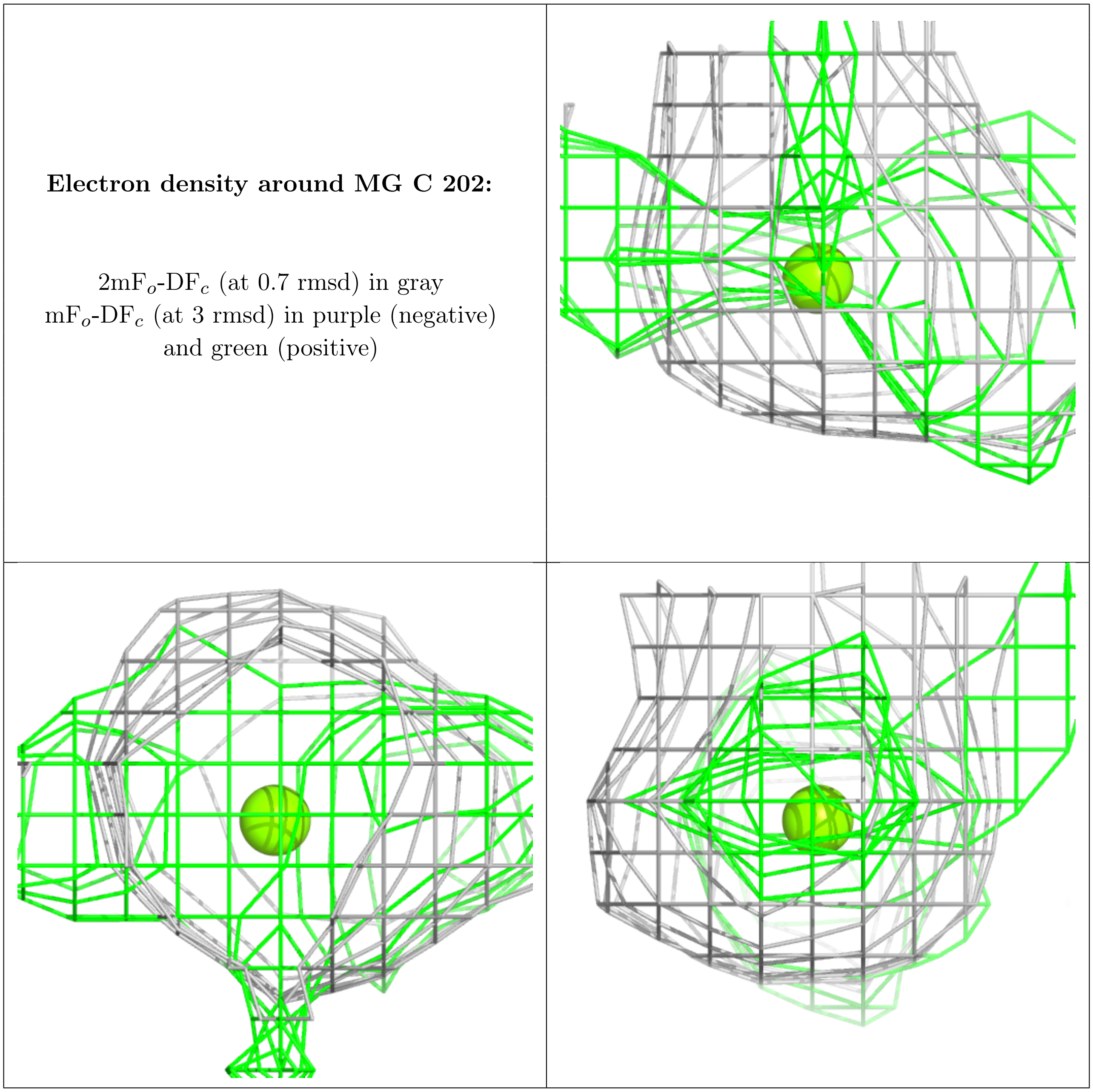
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





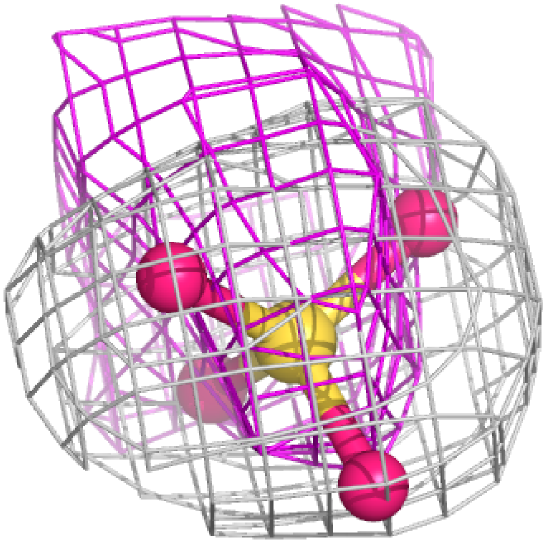
Electron density around MG C 202:

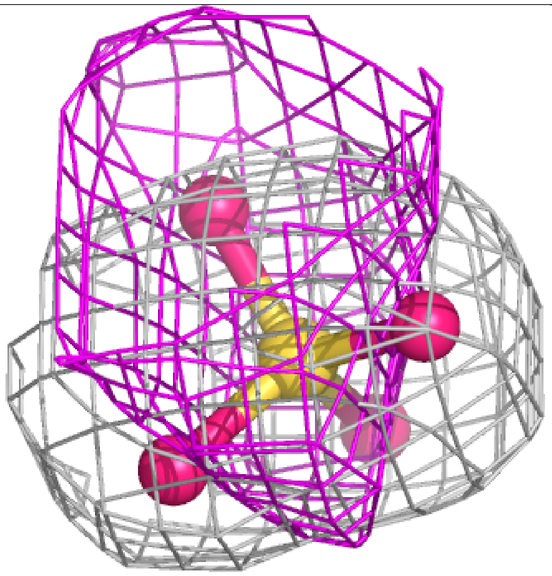
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

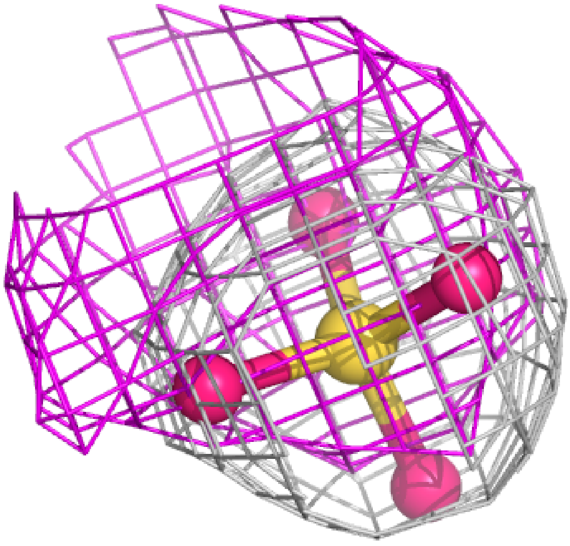


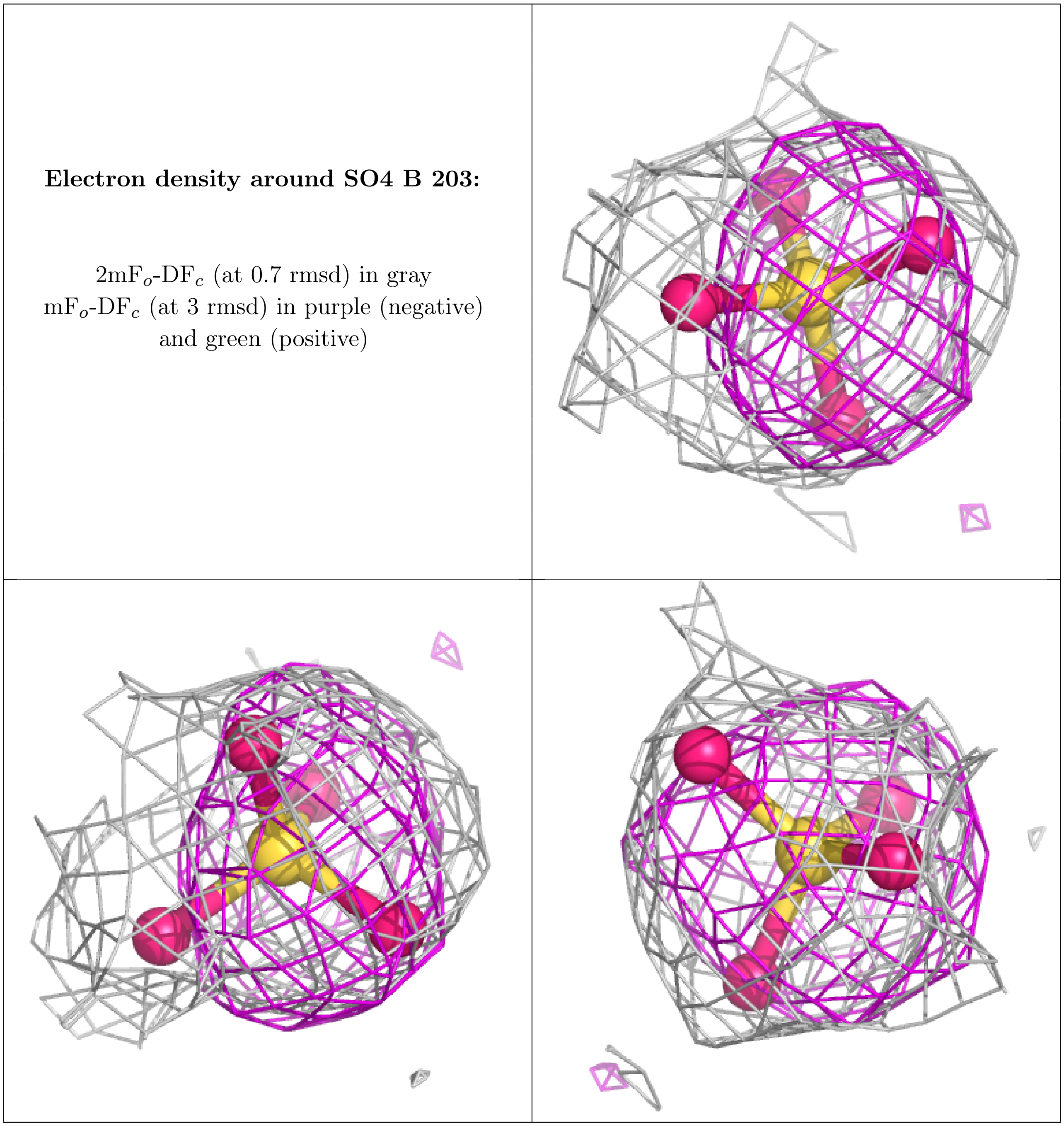
Electron density around SO4 F 208:

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







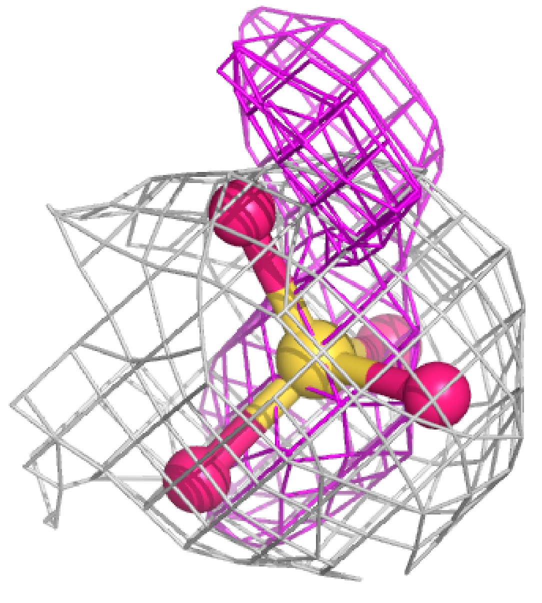


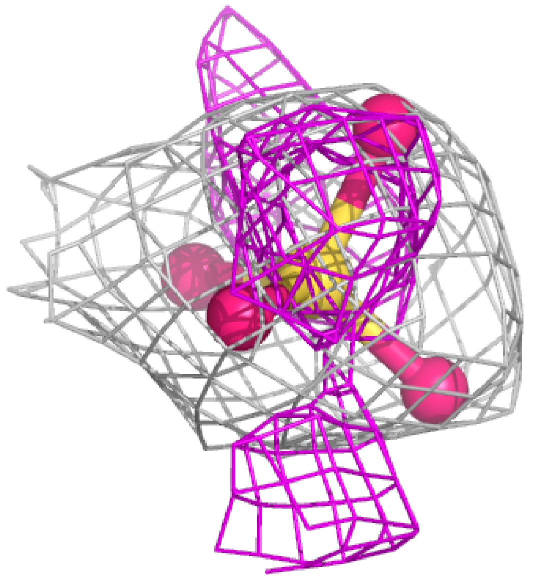
Electron density around SO4 B 203:

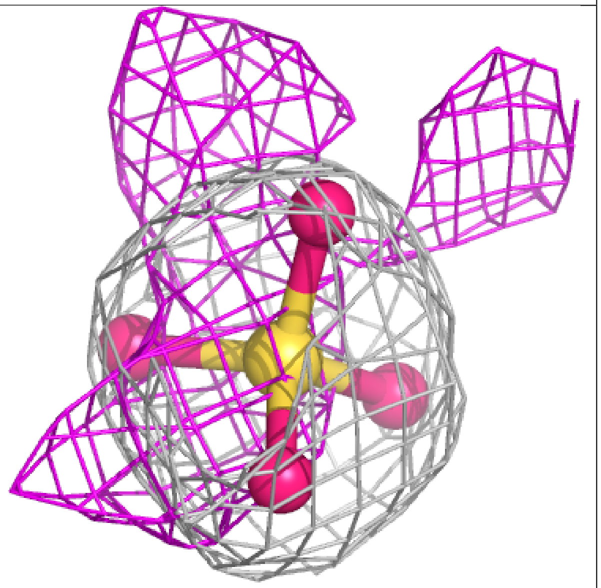
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around SO4 D 206:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

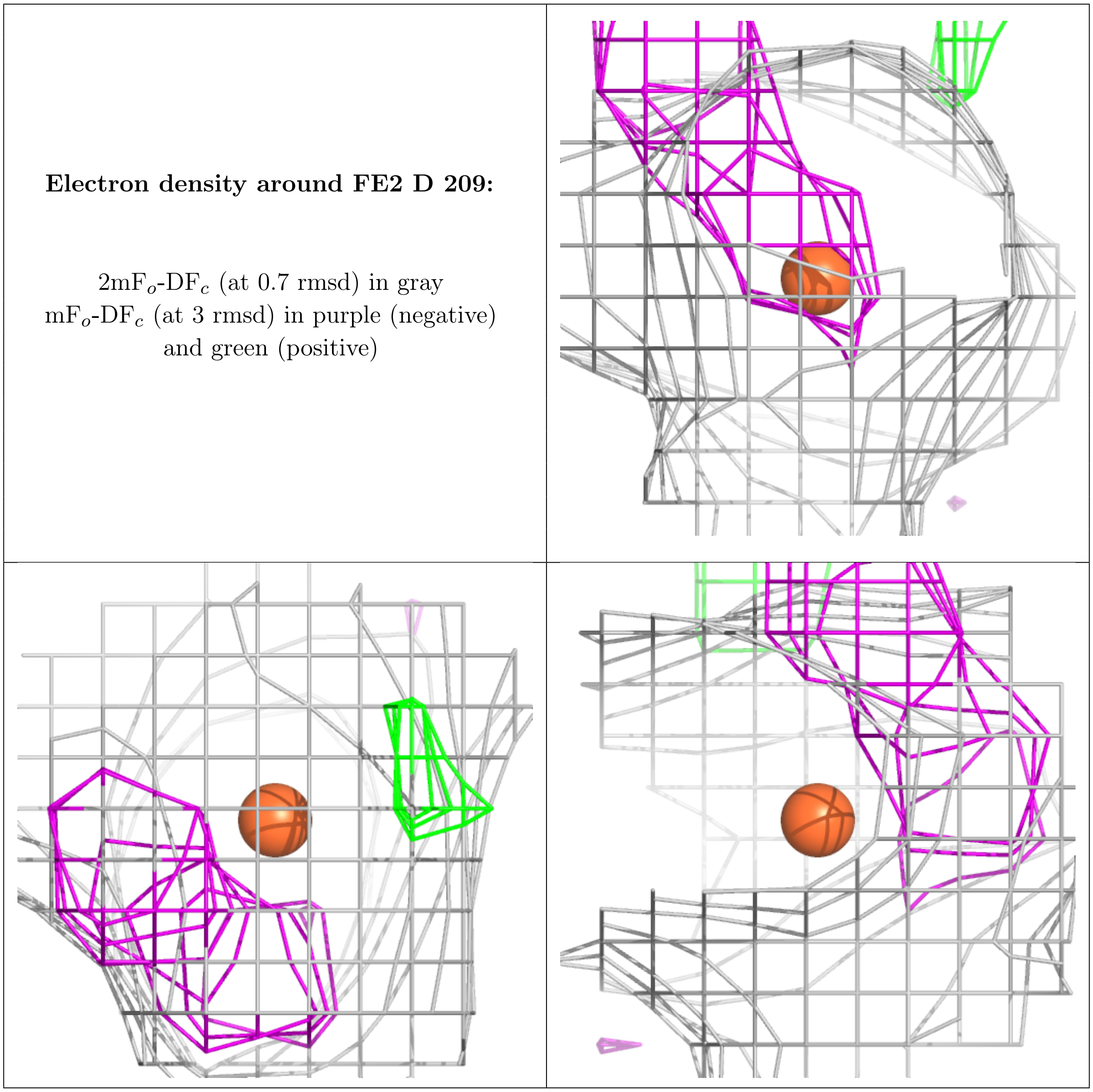






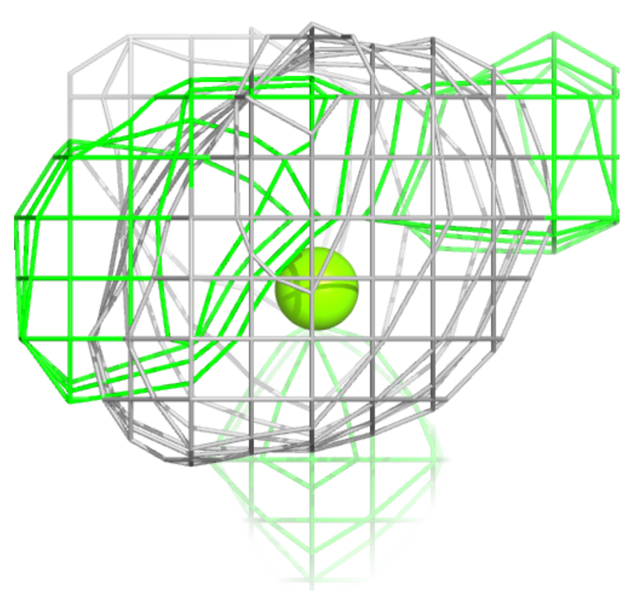
Electron density around FE2 D 209:

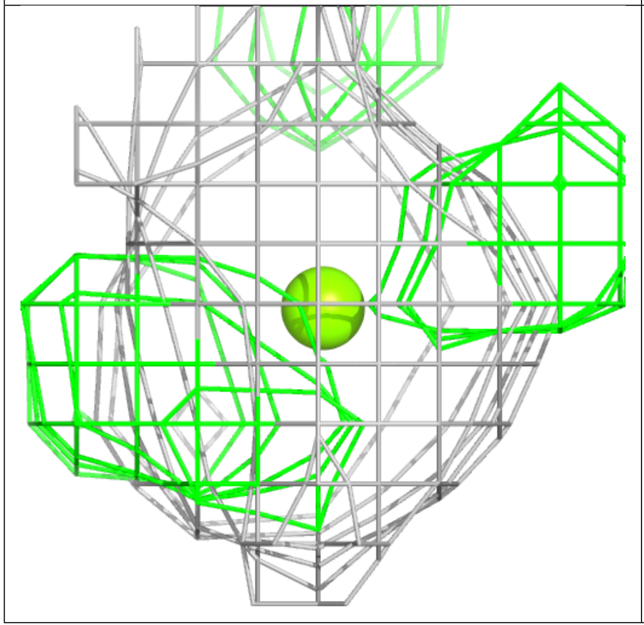
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

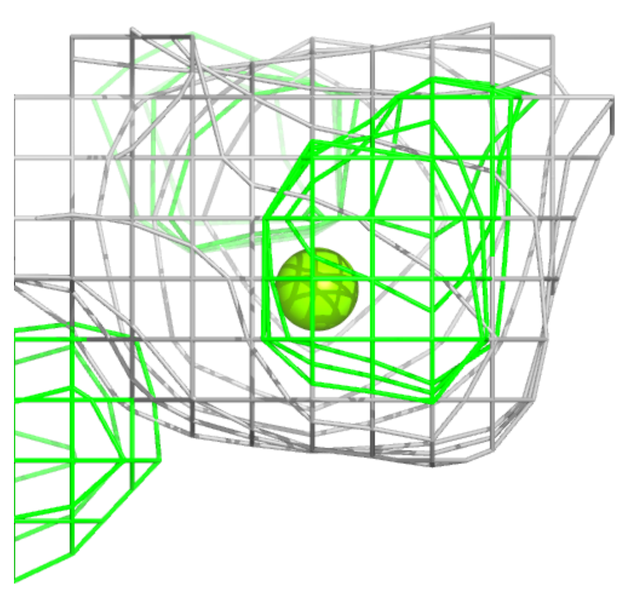


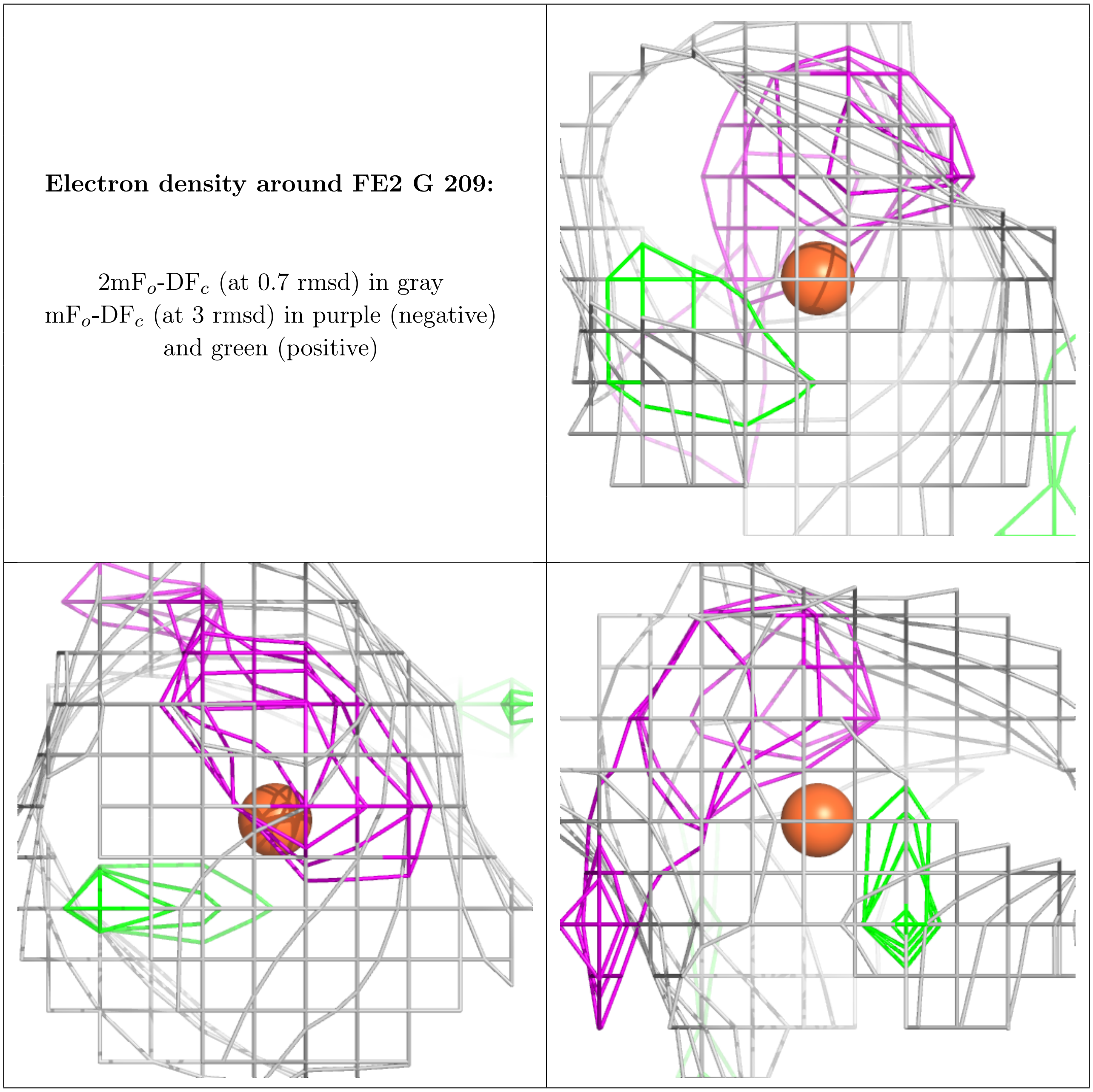
Electron density around MG E 202:

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







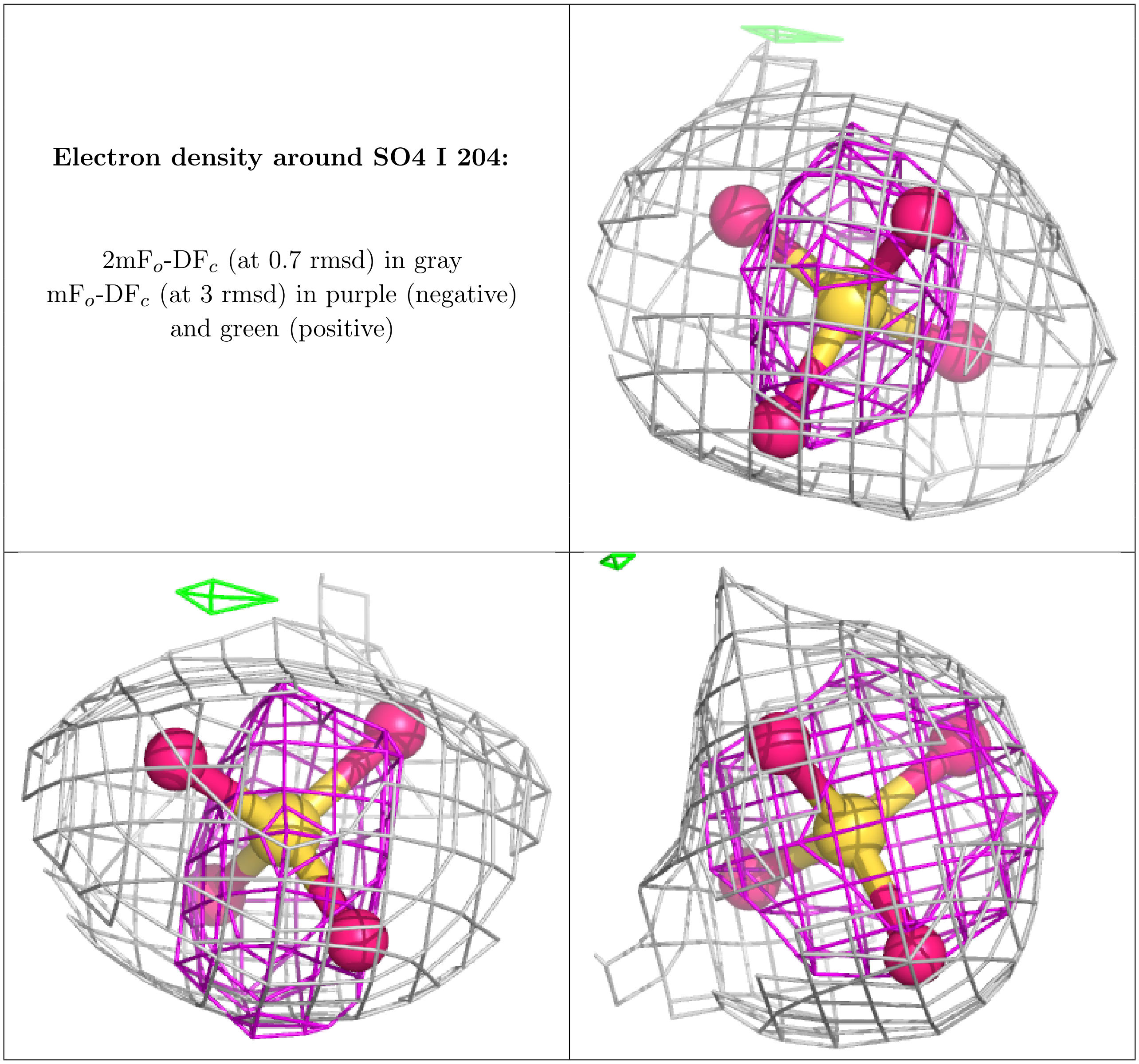


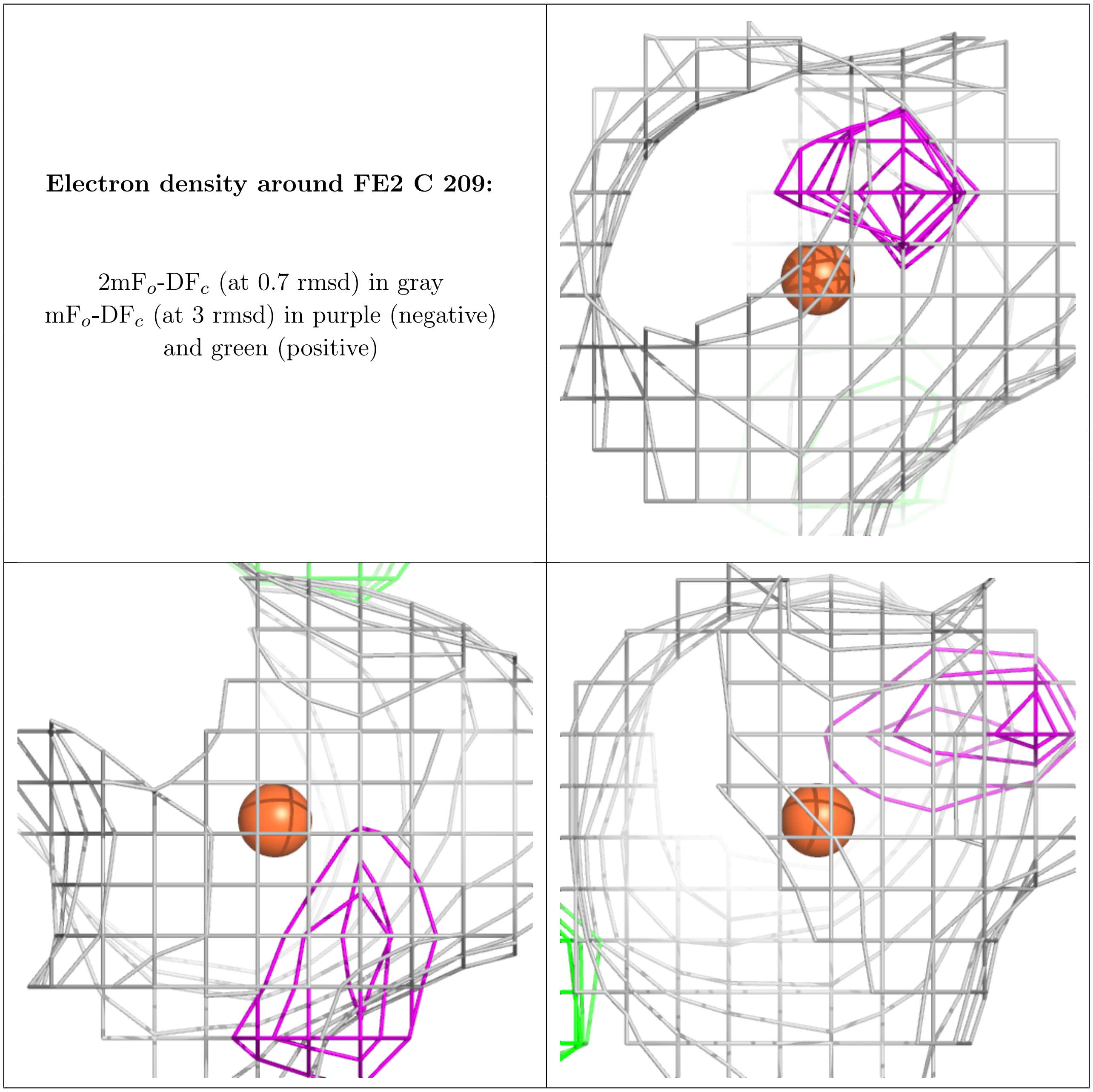
Electron density around FE2 G 209:

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 SO4 I 204:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



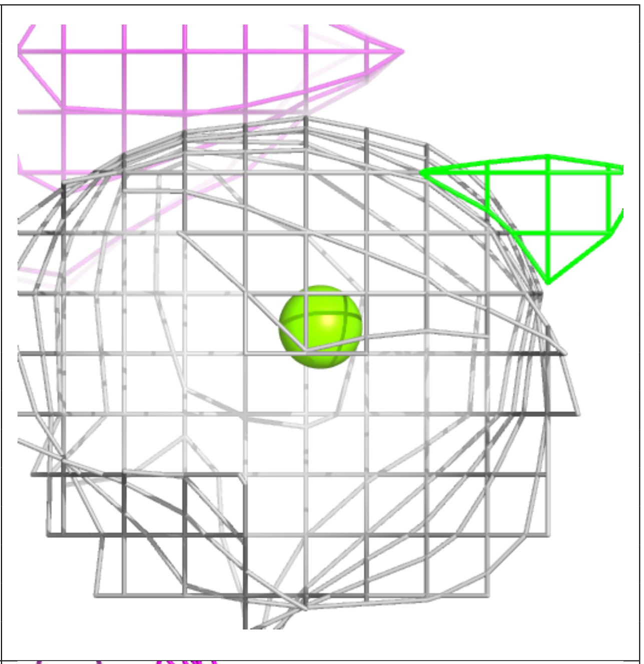


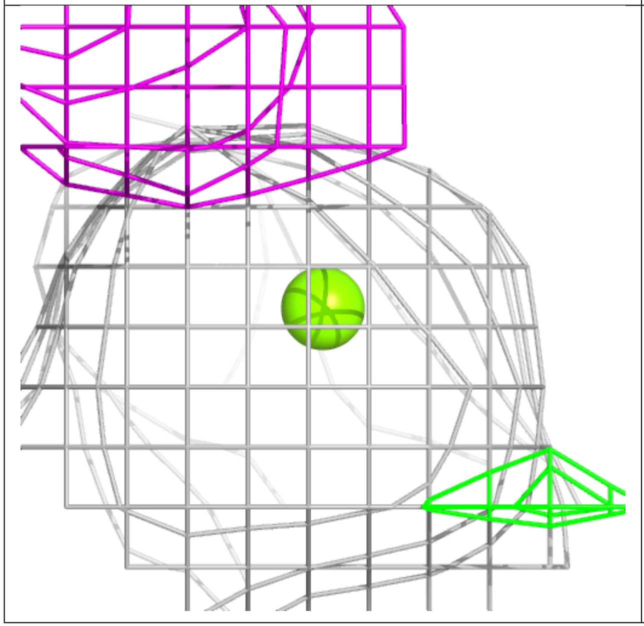
Electron density around FE2 C 209:

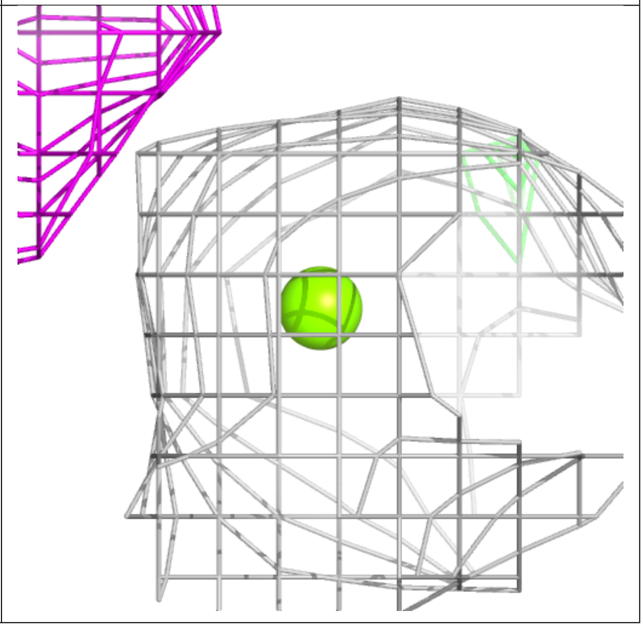
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

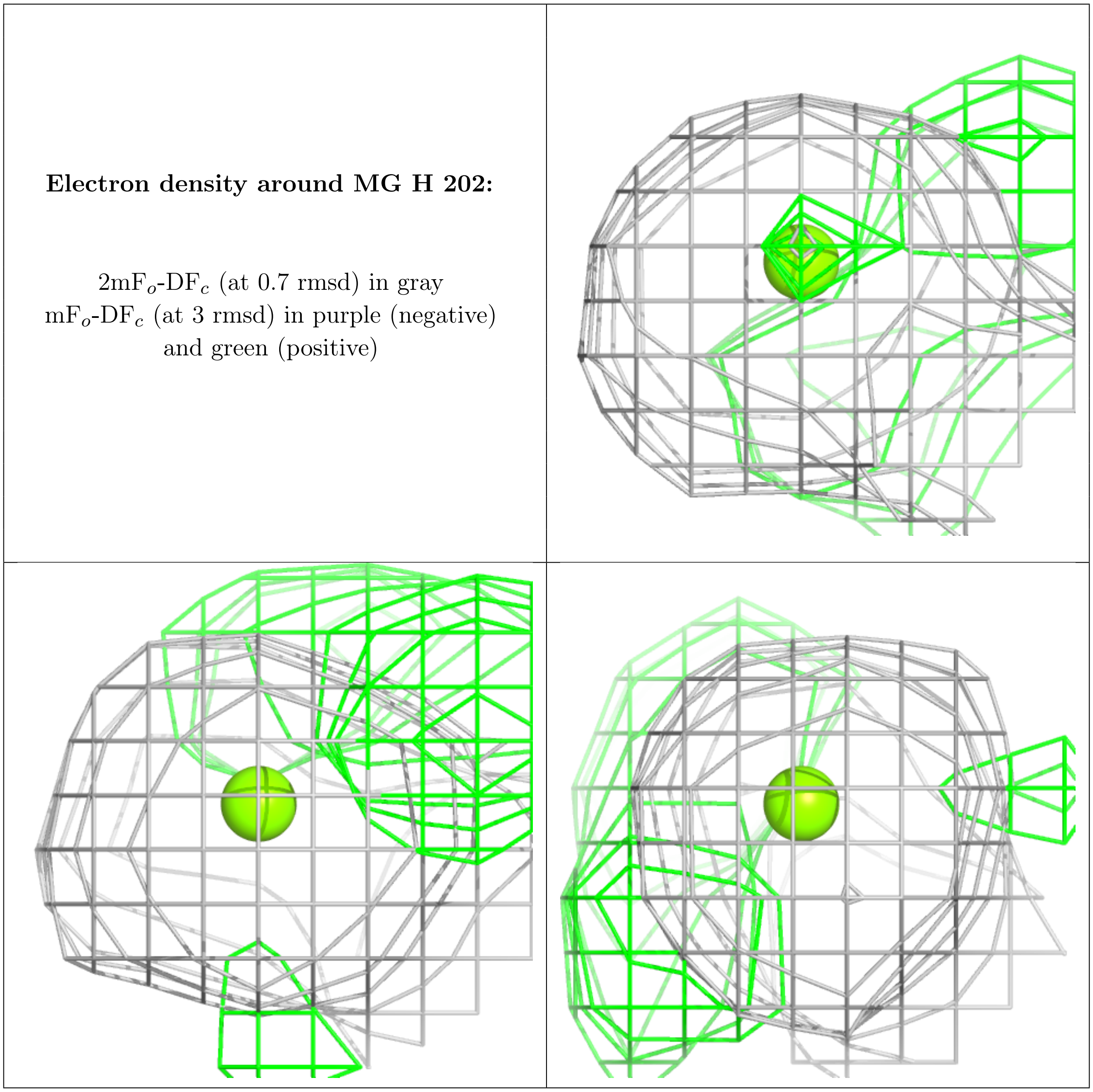
Electron density around MG D 201:

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







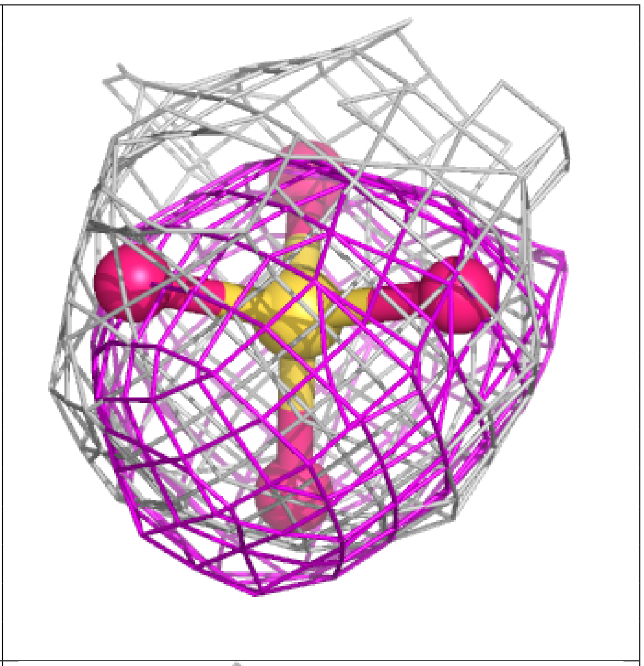


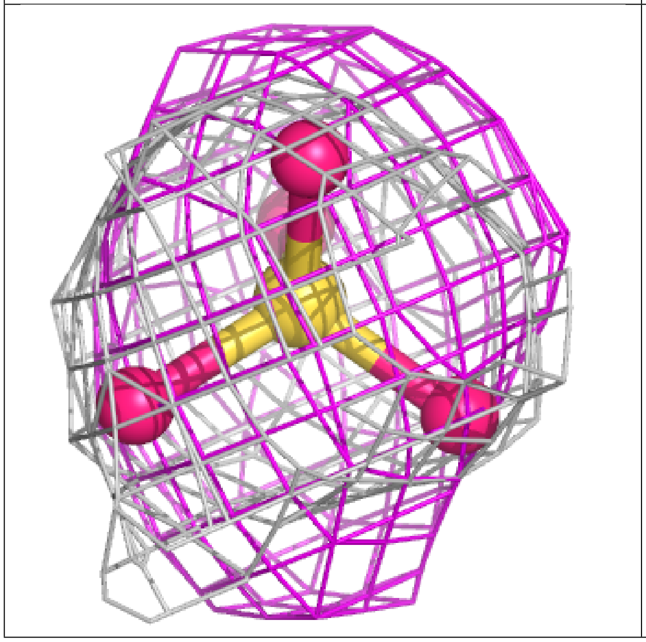
Electron density around MG H 202:

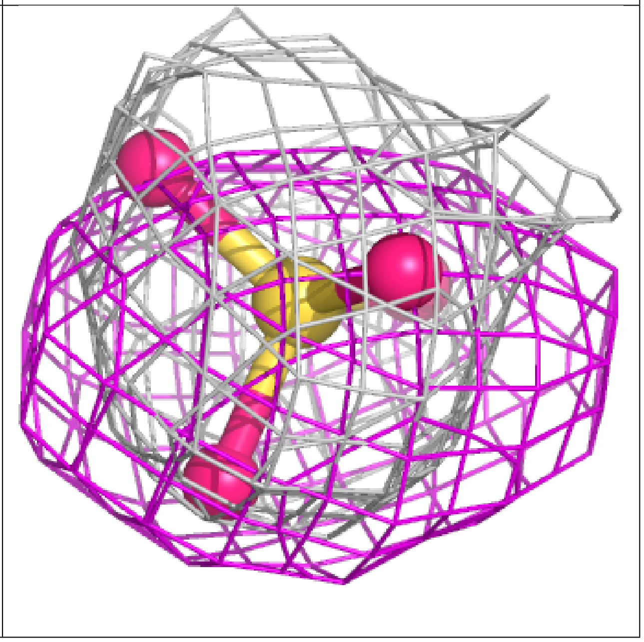
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around SO4 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)

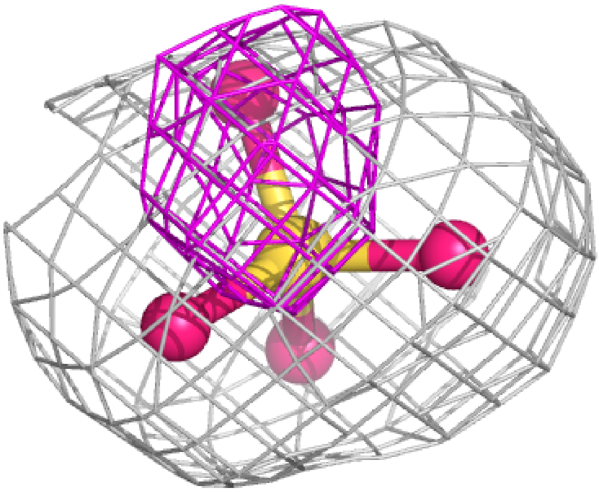


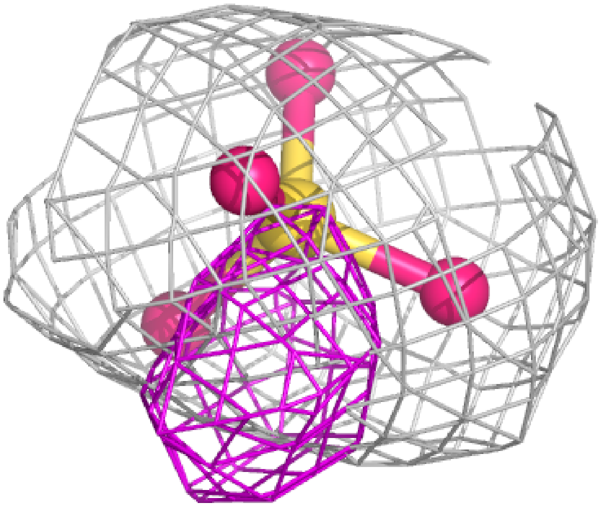


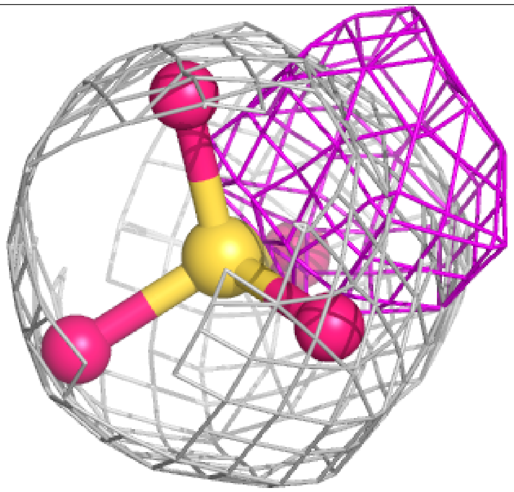


Electron density around SO4 I 205:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

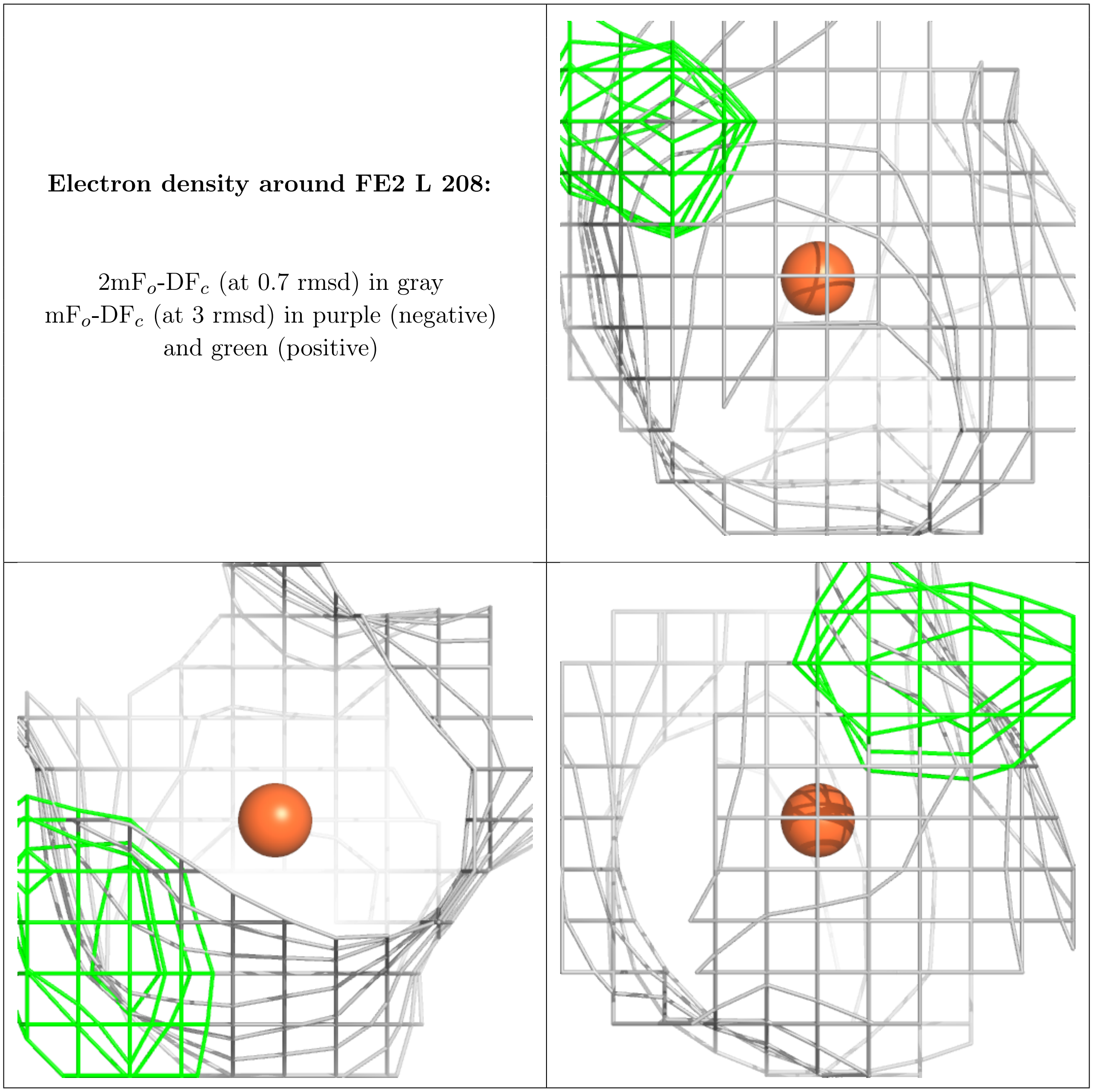




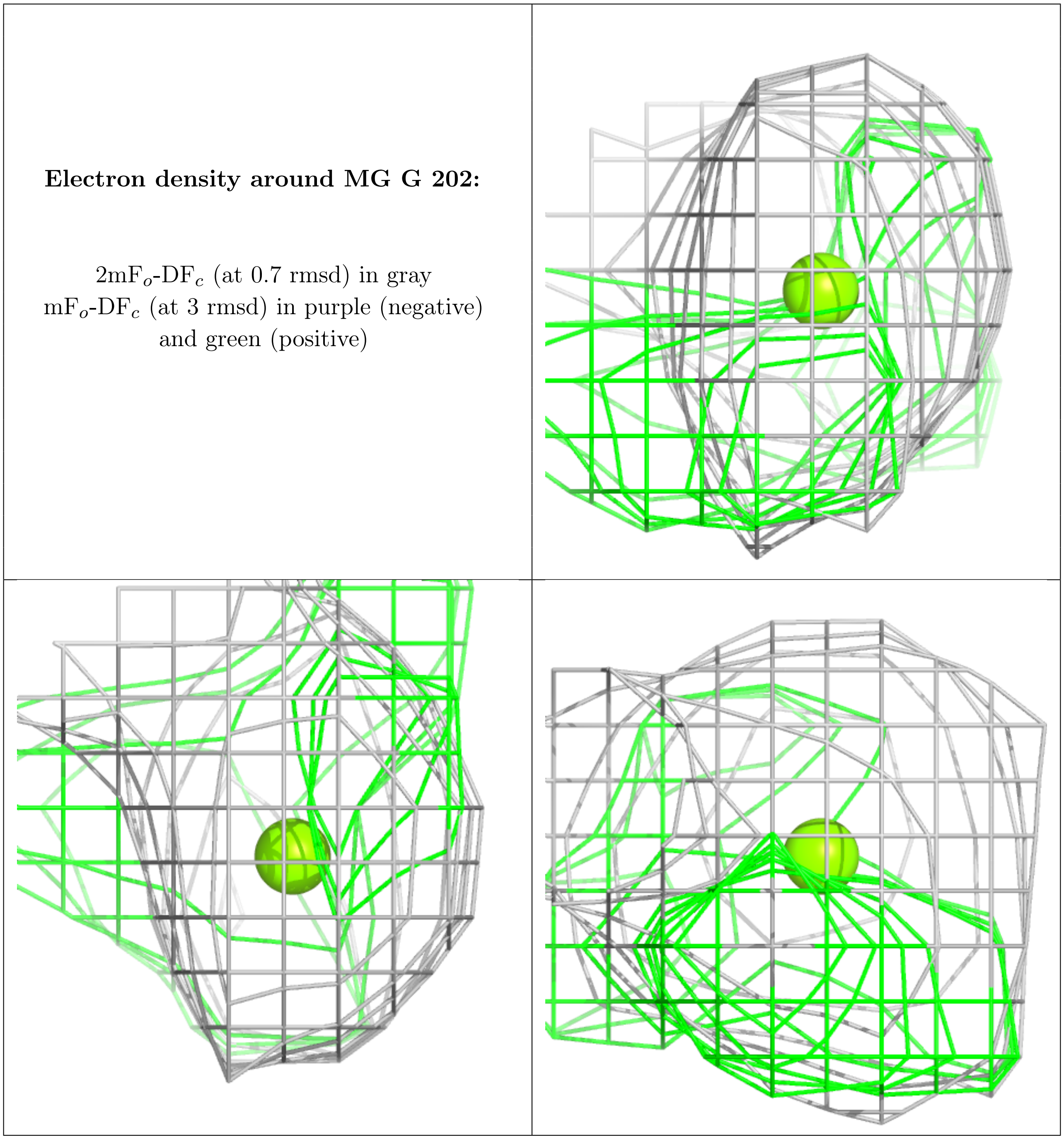


Electron density around FE2 L 208:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



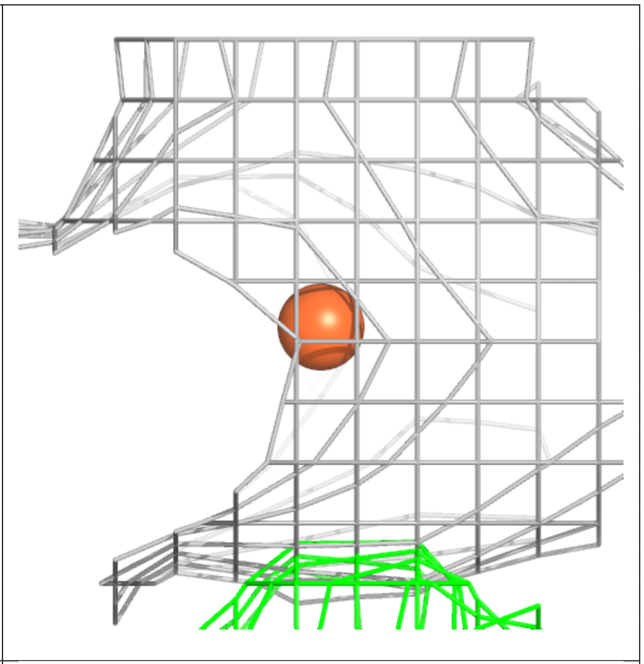
Electron density around MG G 202:

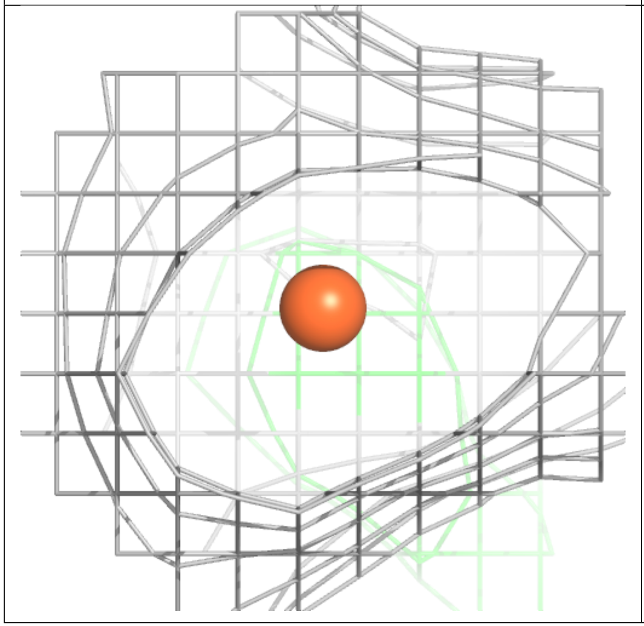


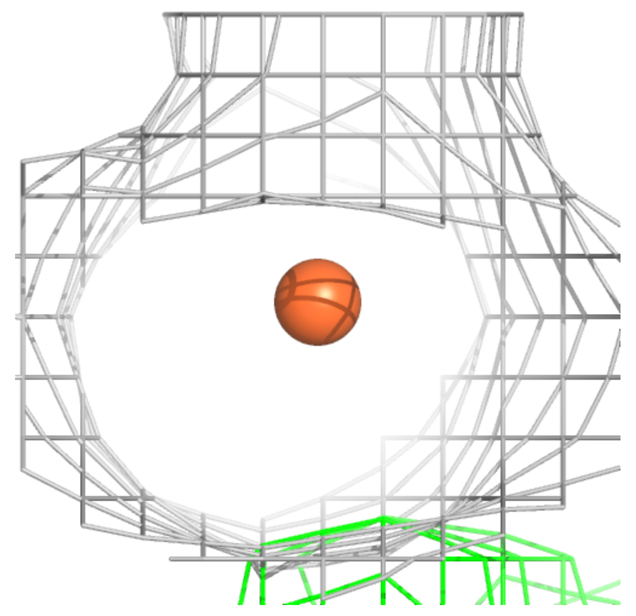
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

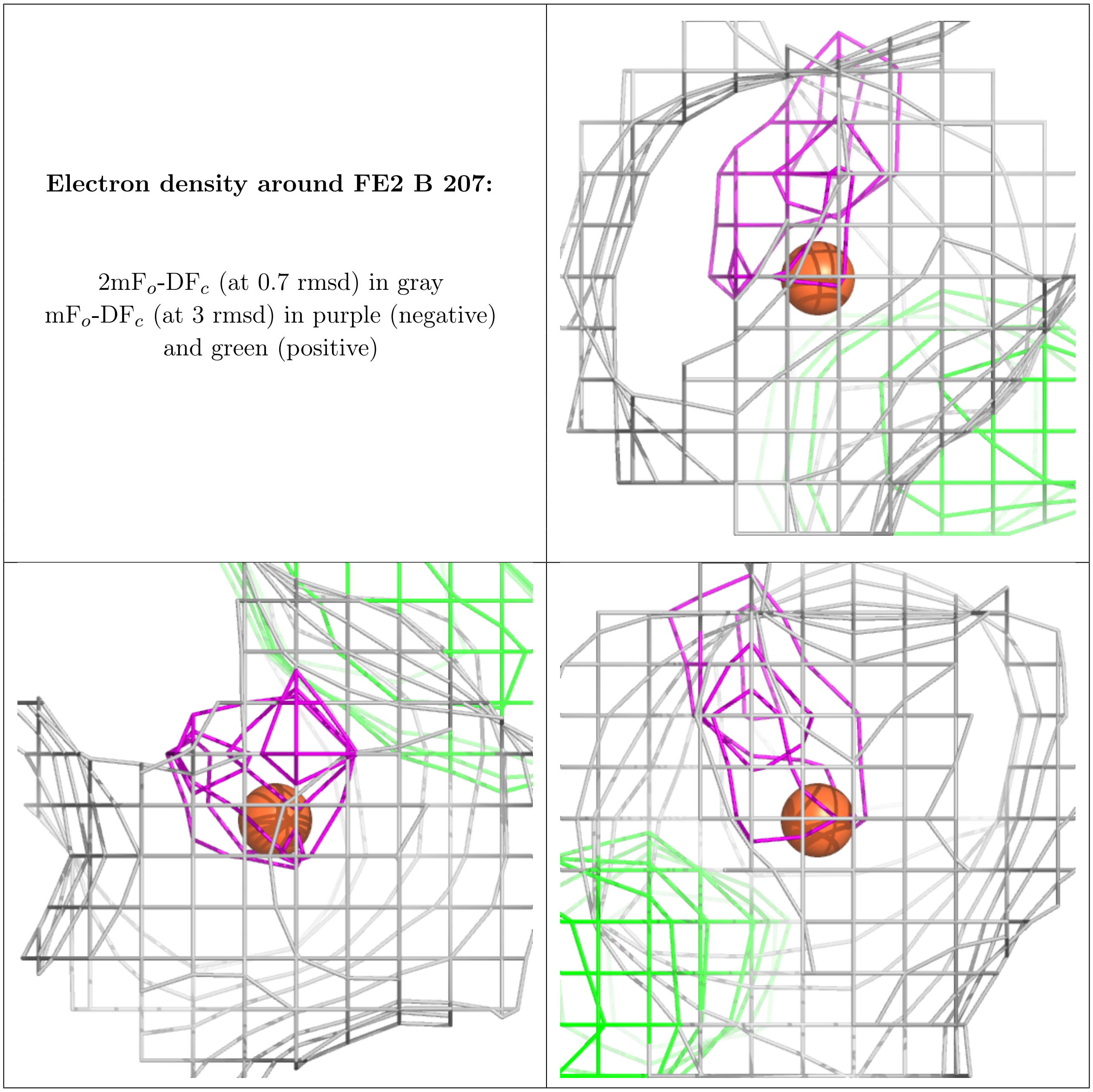
Electron density around FE2 F 213:

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







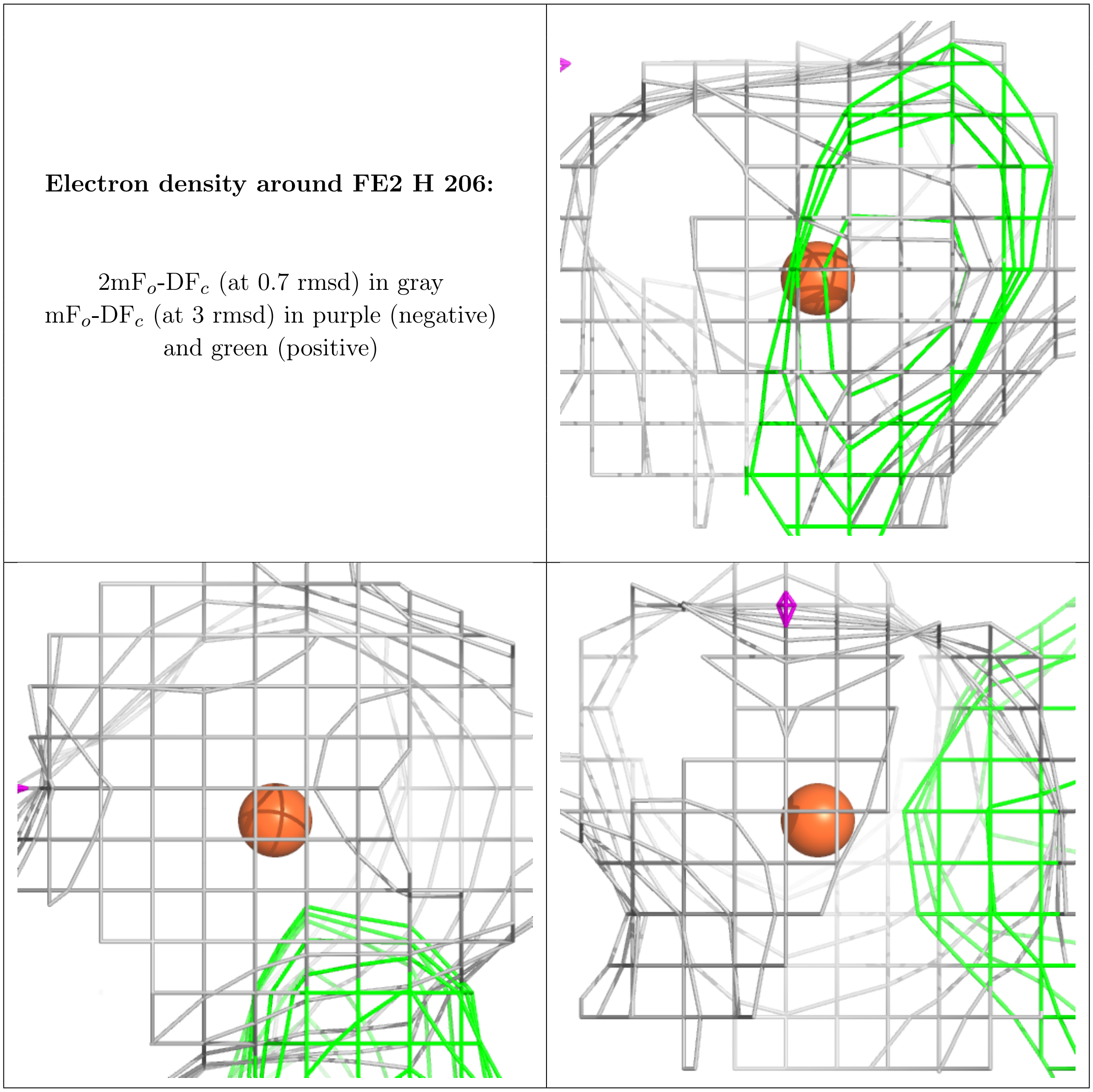


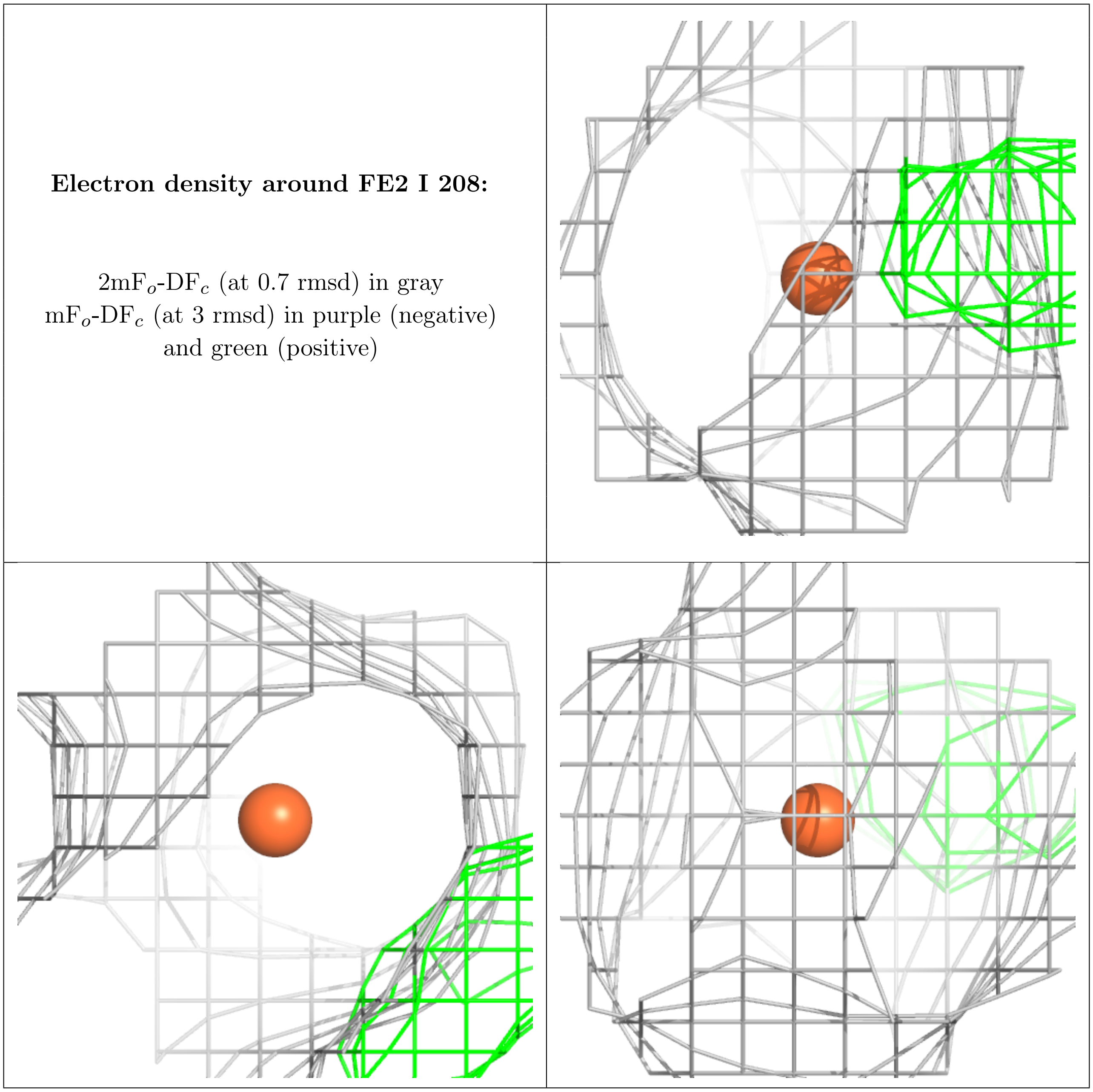
Electron density around FE2 B 207:

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

Electron density around FE2 H 206:

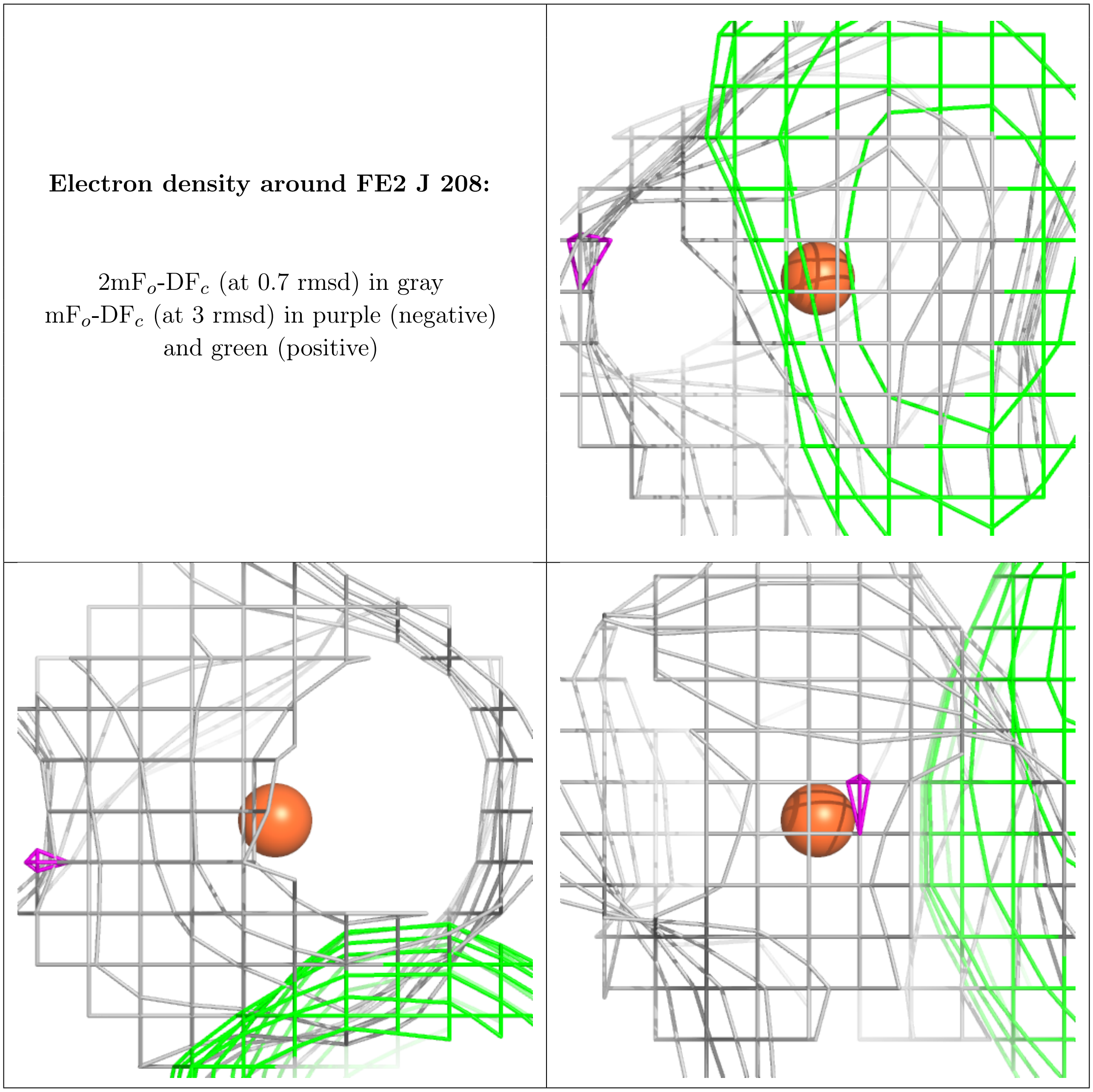
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





Electron density around FE2 I 208:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

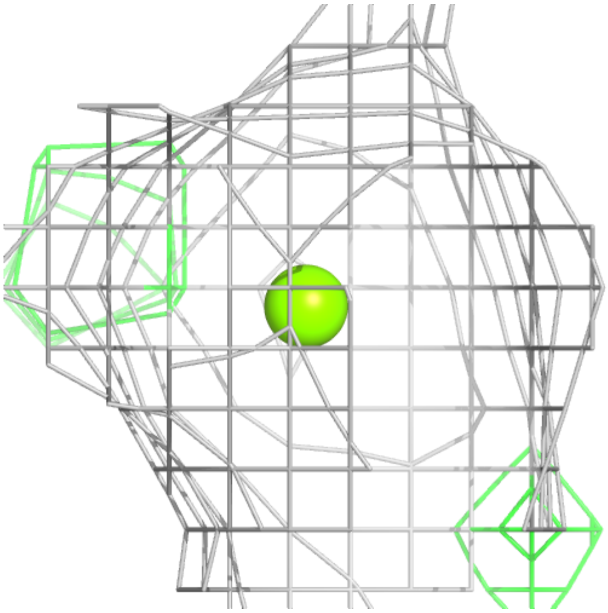


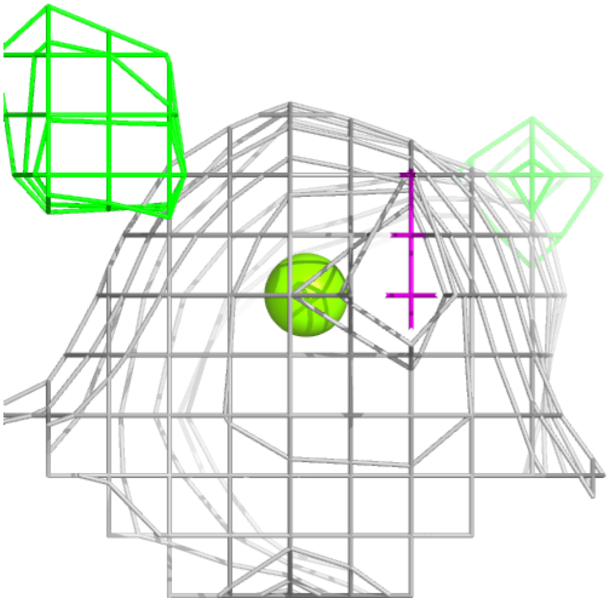
Electron density around FE2 J 208:

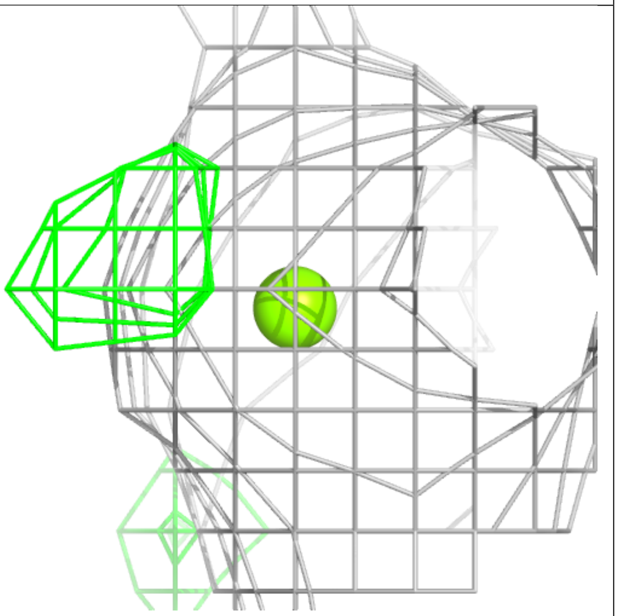
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

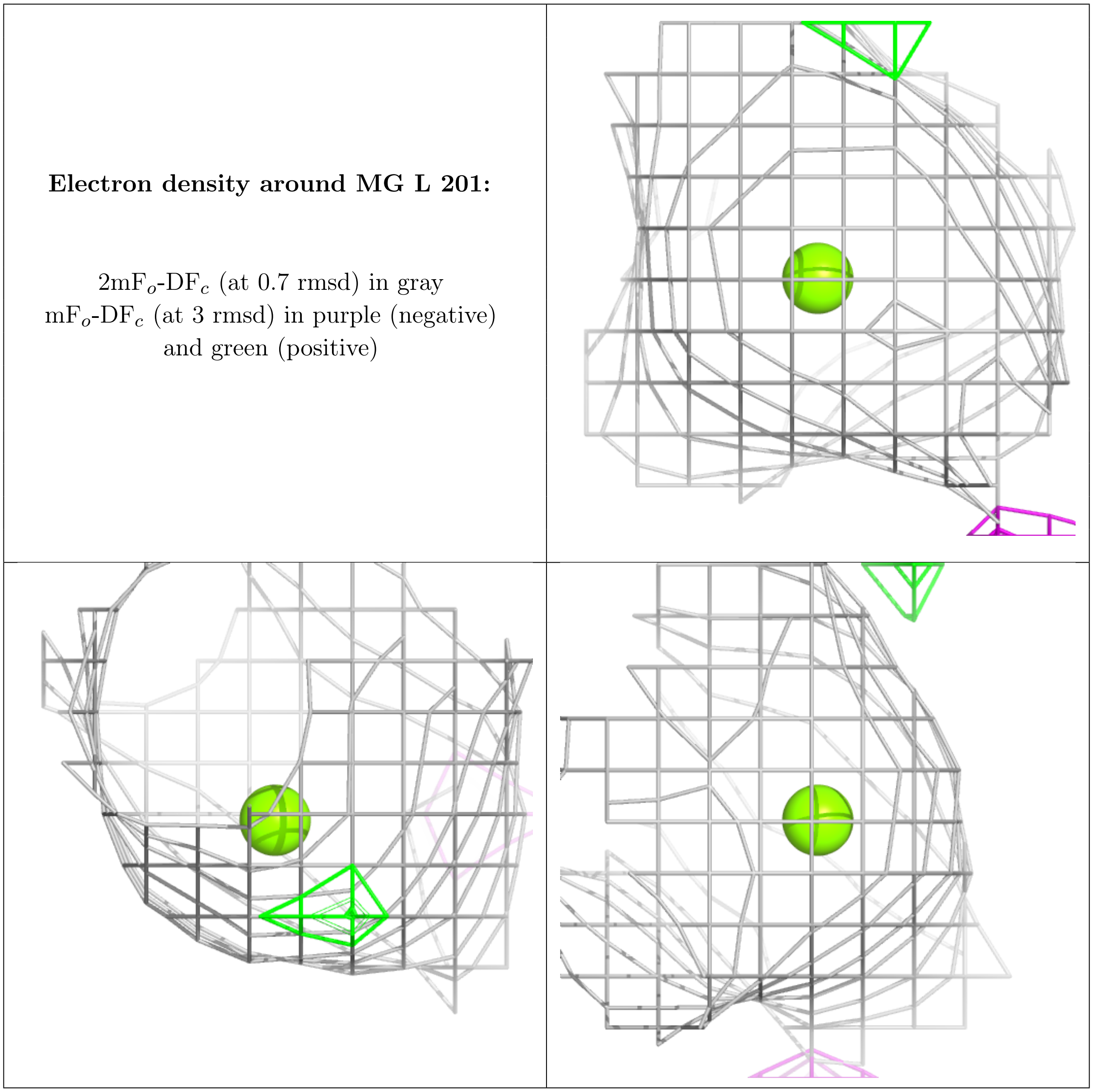
Electron density around MG C 201:

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







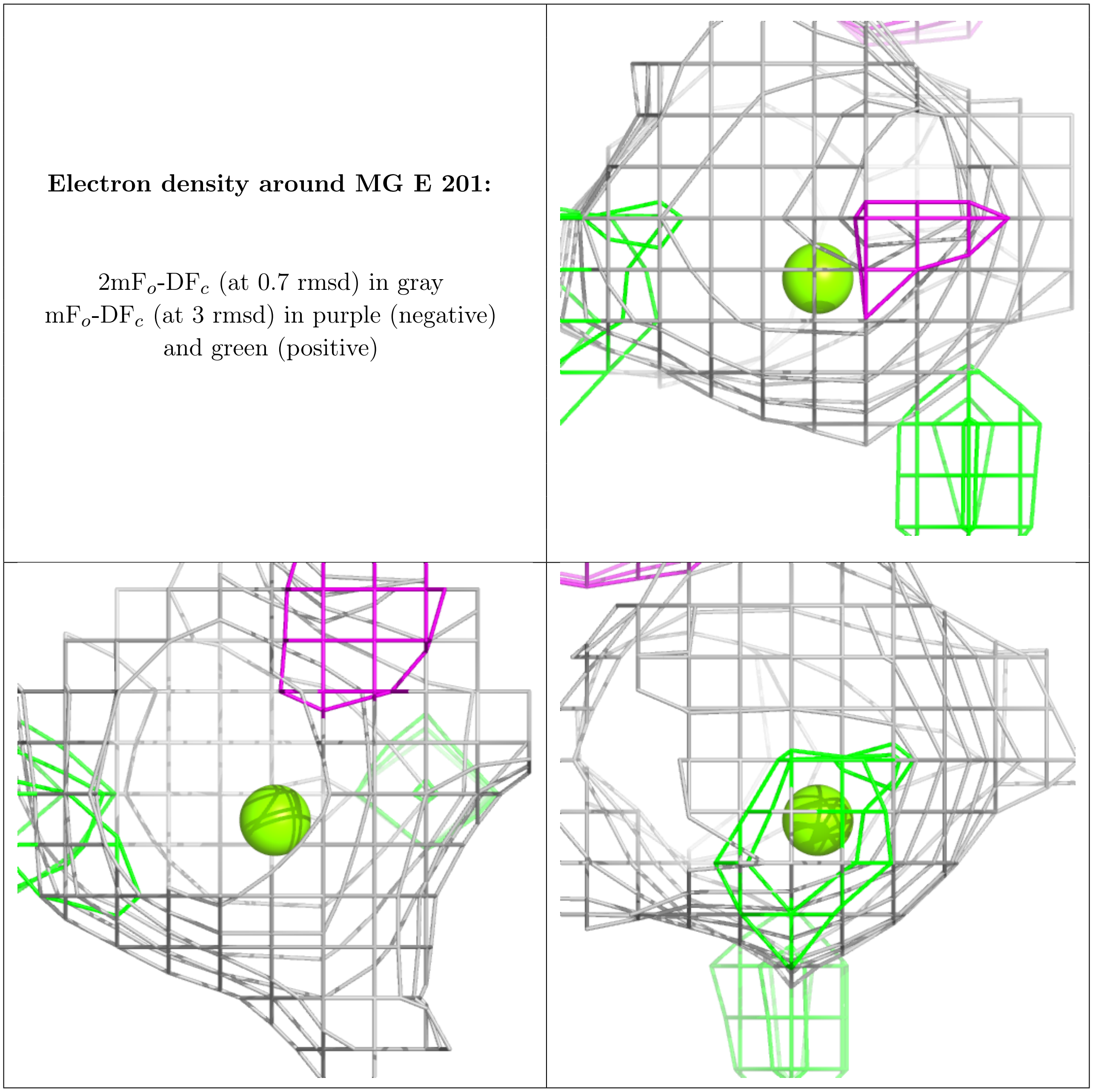


Electron density around MG L 201:

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

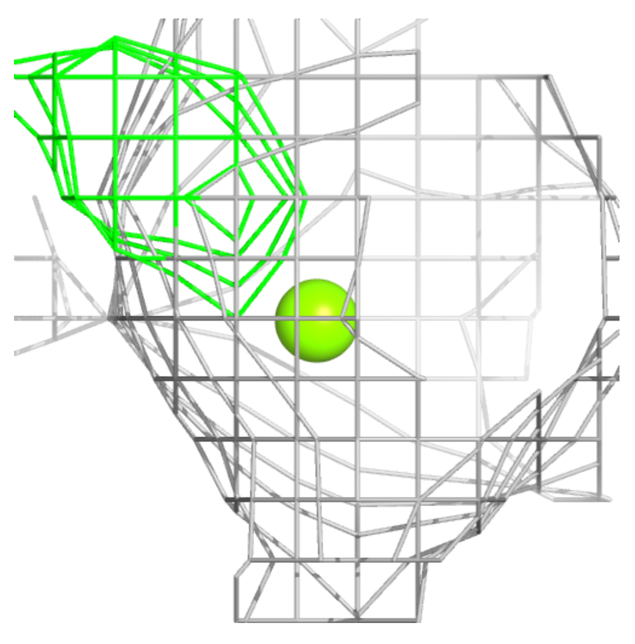
Electron density around MG E 201:

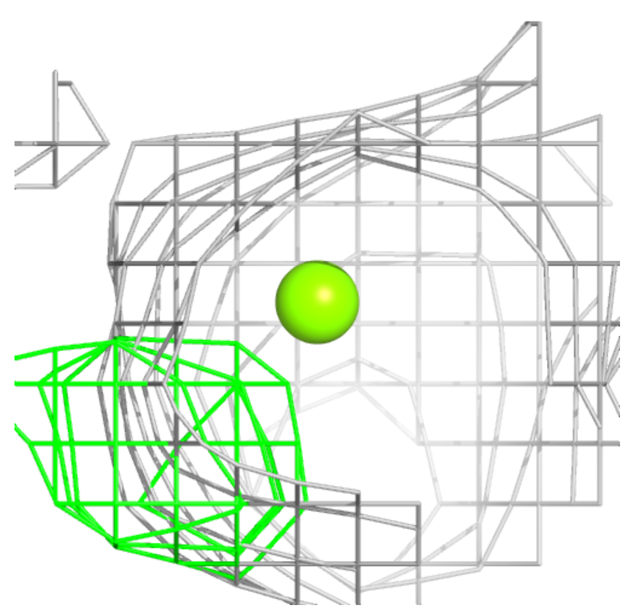
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

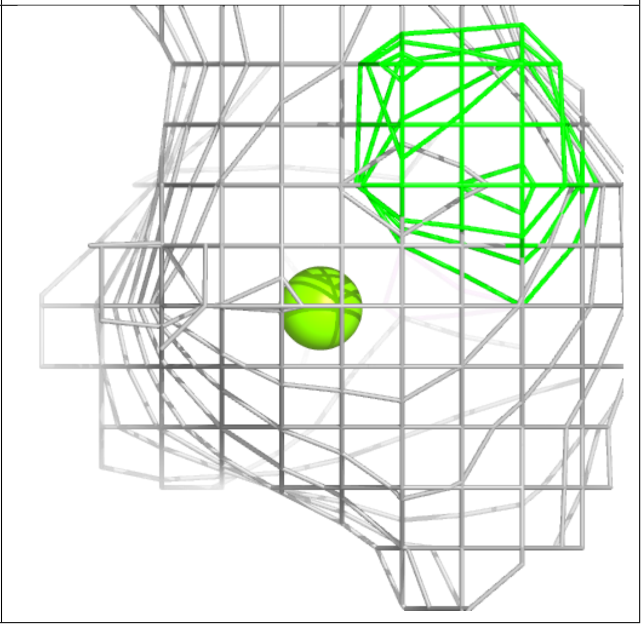


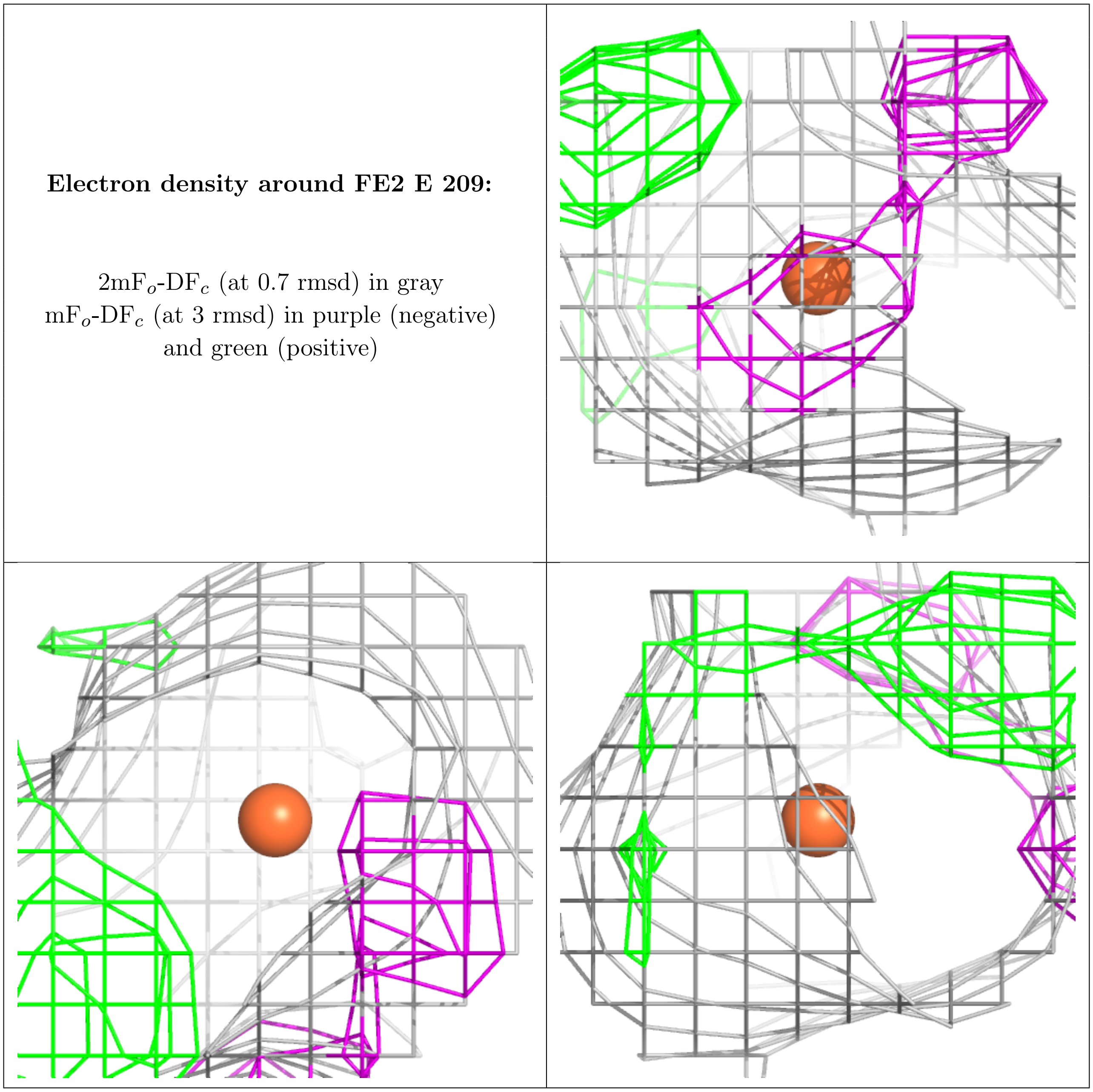
Electron density around MG I 201:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



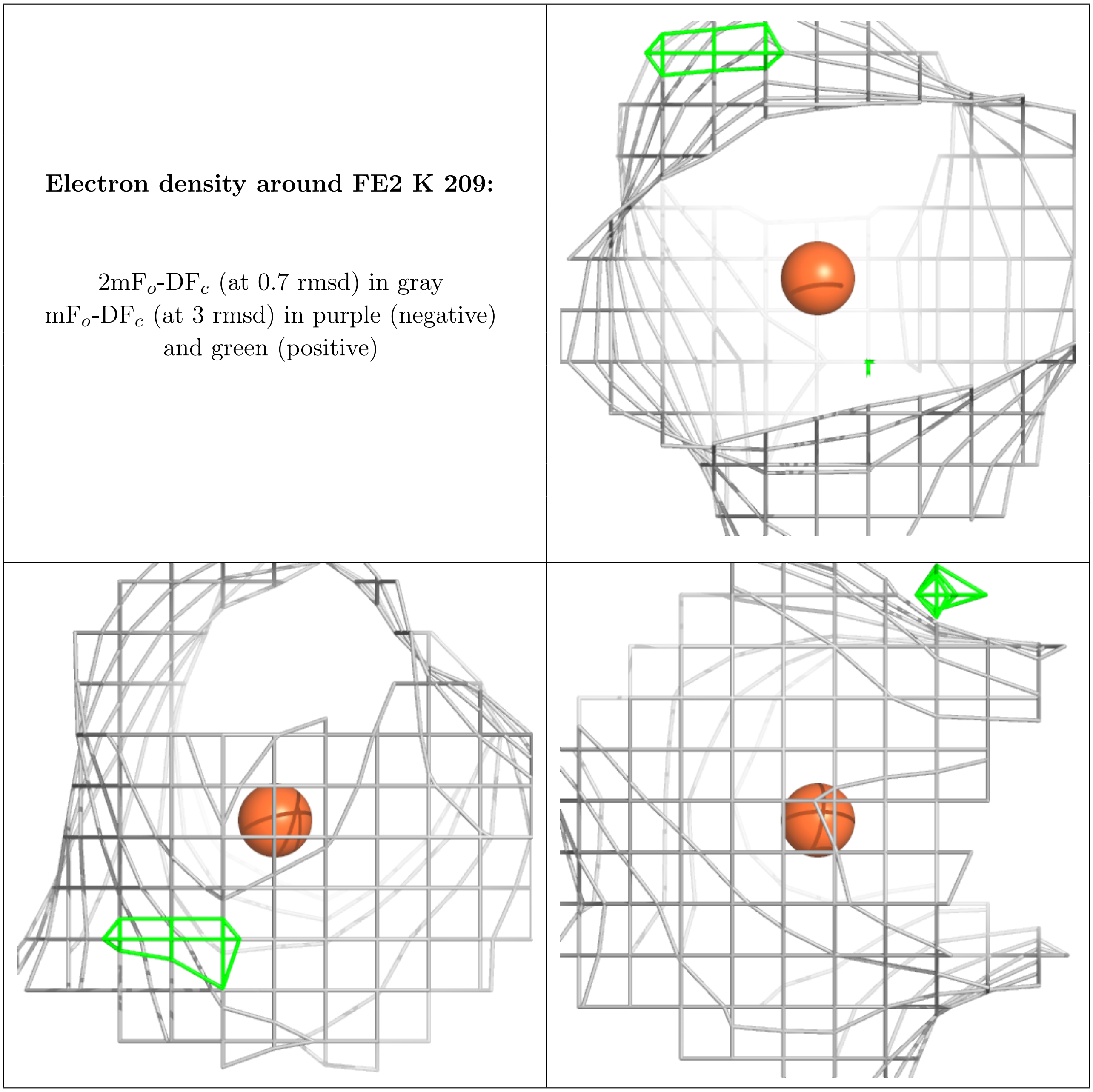






Electron density around FE2 E 209:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

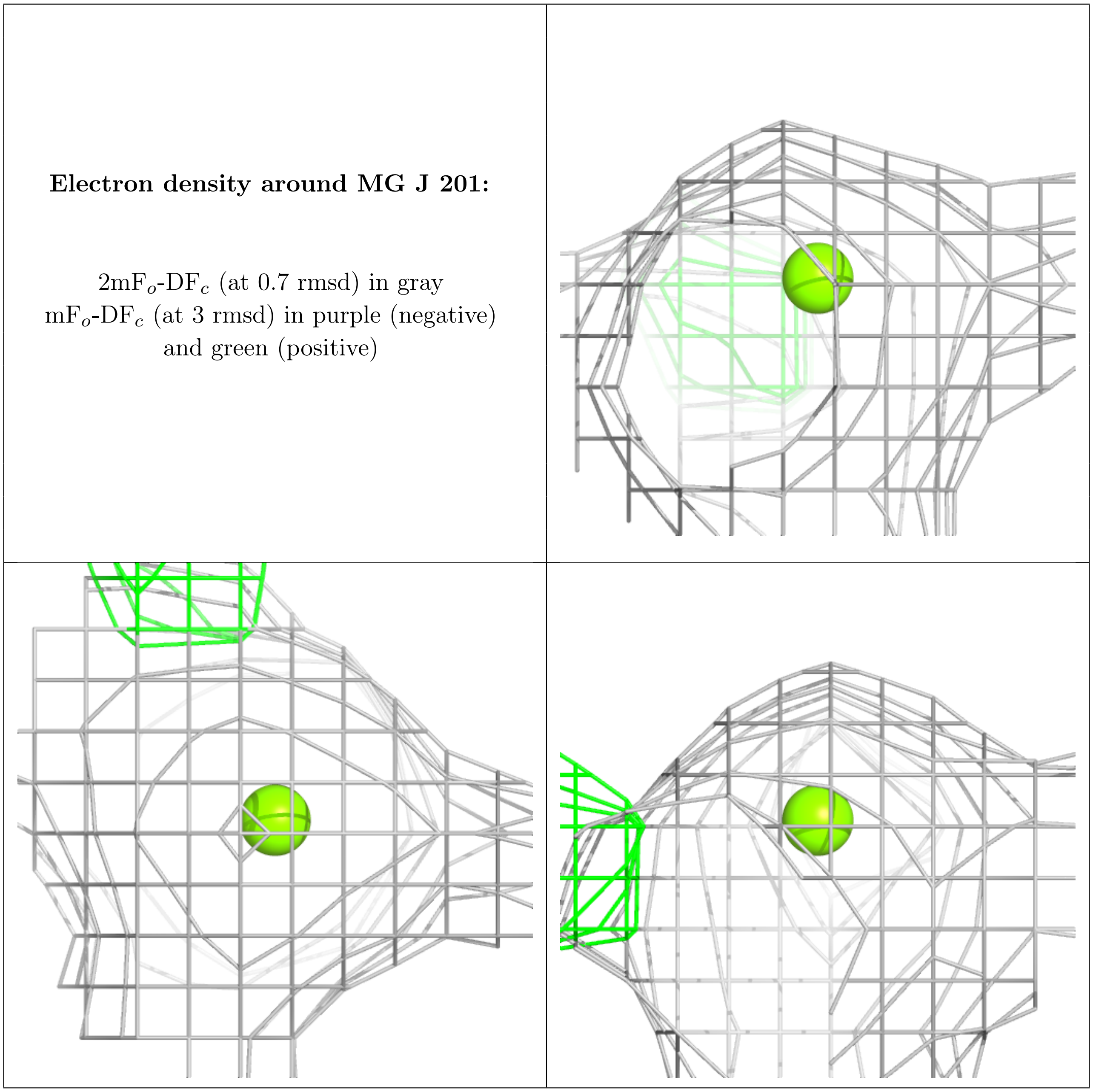


Electron density around FE2 K 209:

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

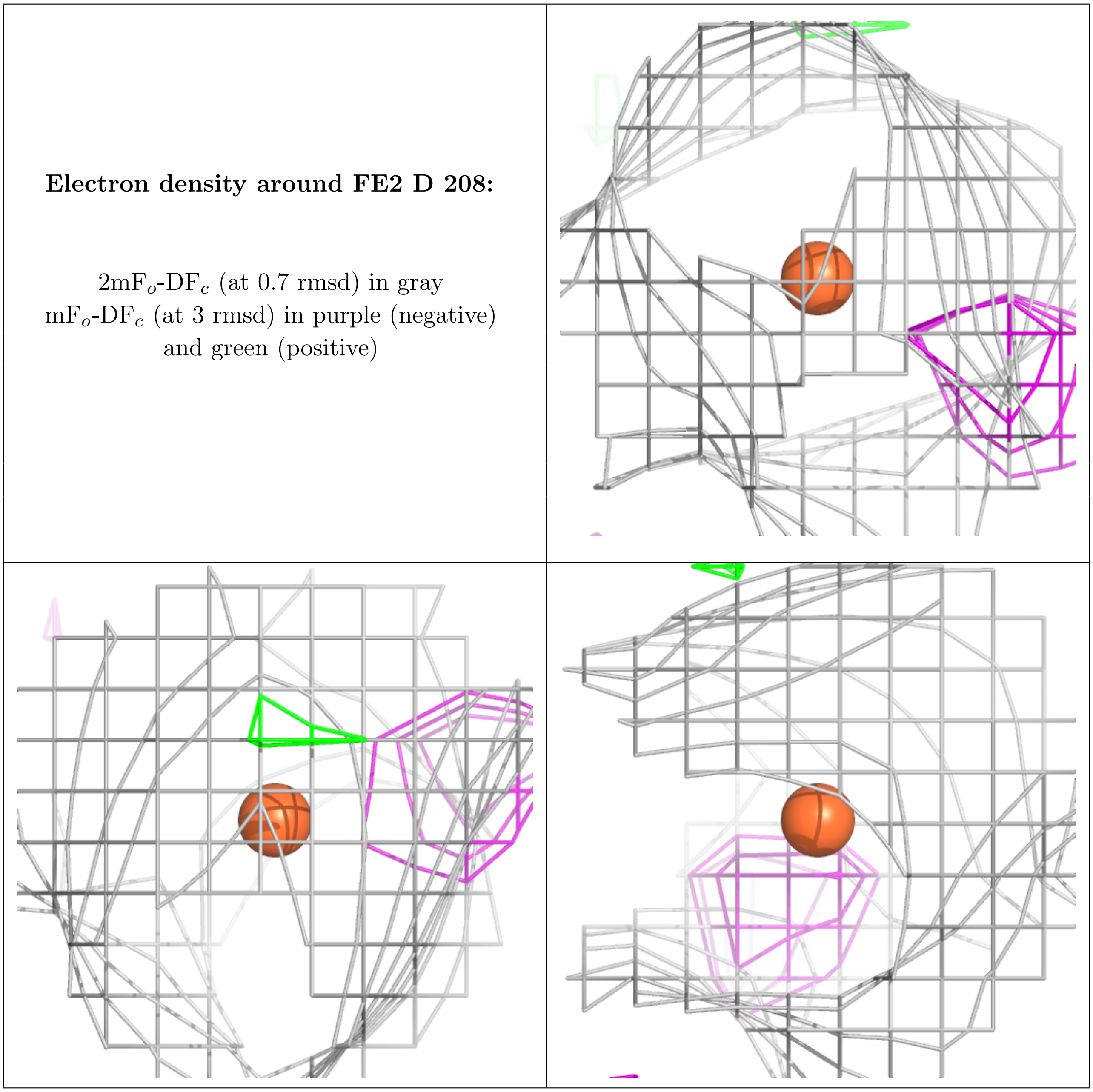
Electron density around MG J 201:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



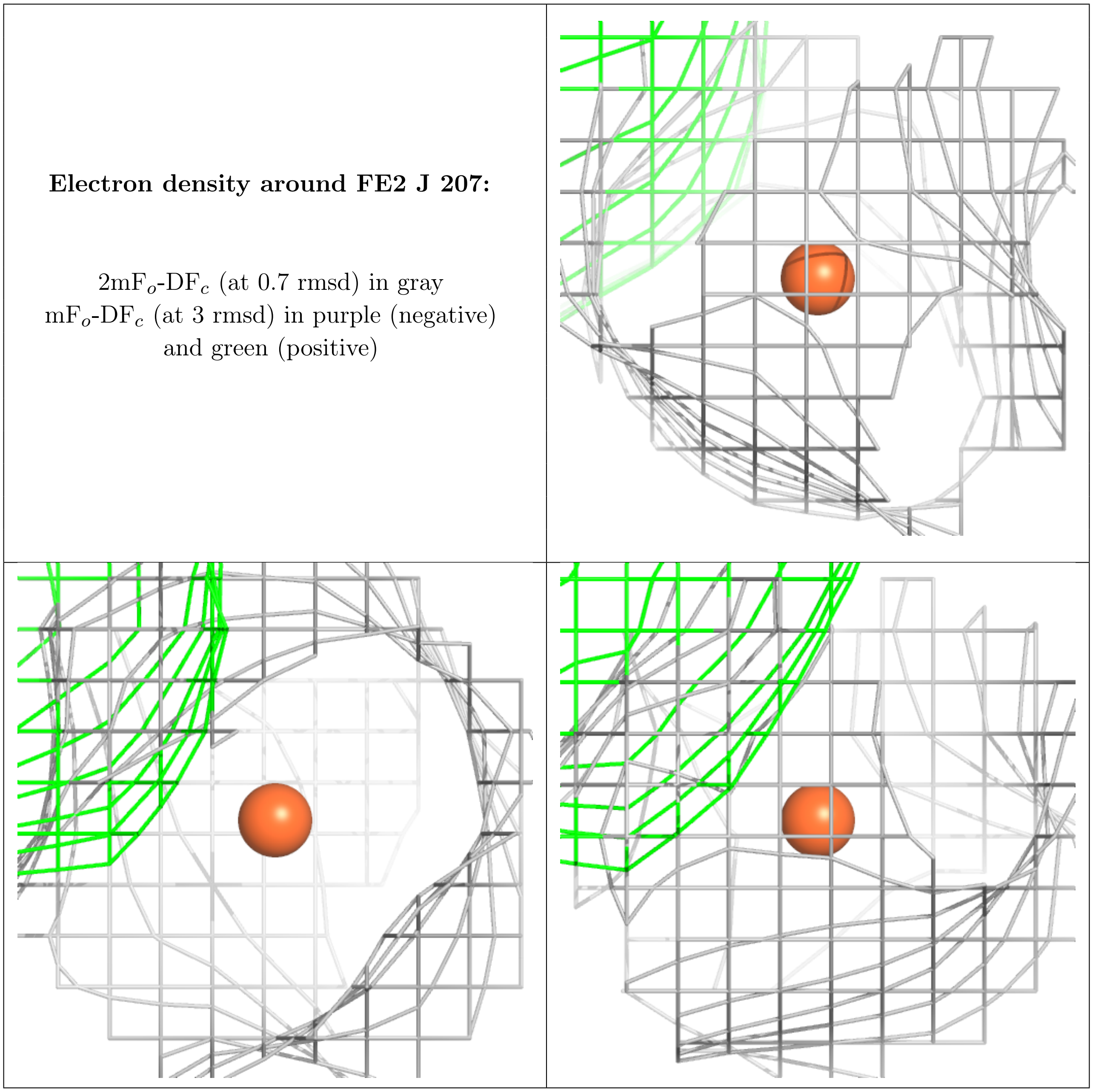
Electron density around FE2 D 208:

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



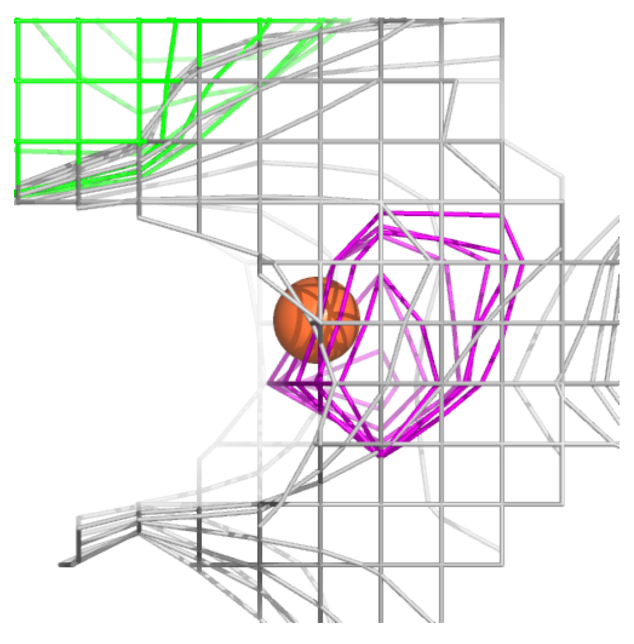
Electron density around FE2 J 207:

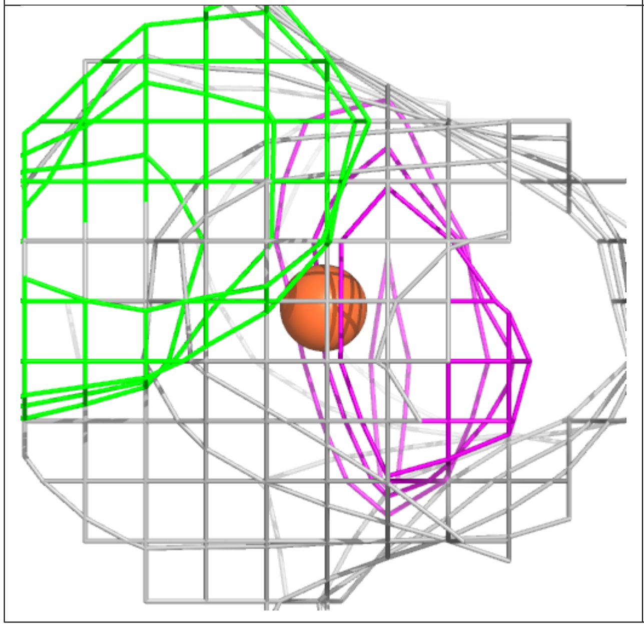
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

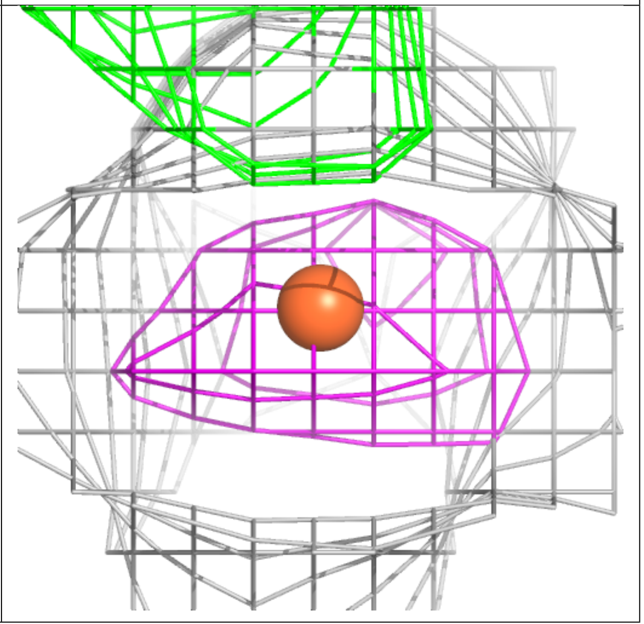


Electron density around FE2 A 208:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

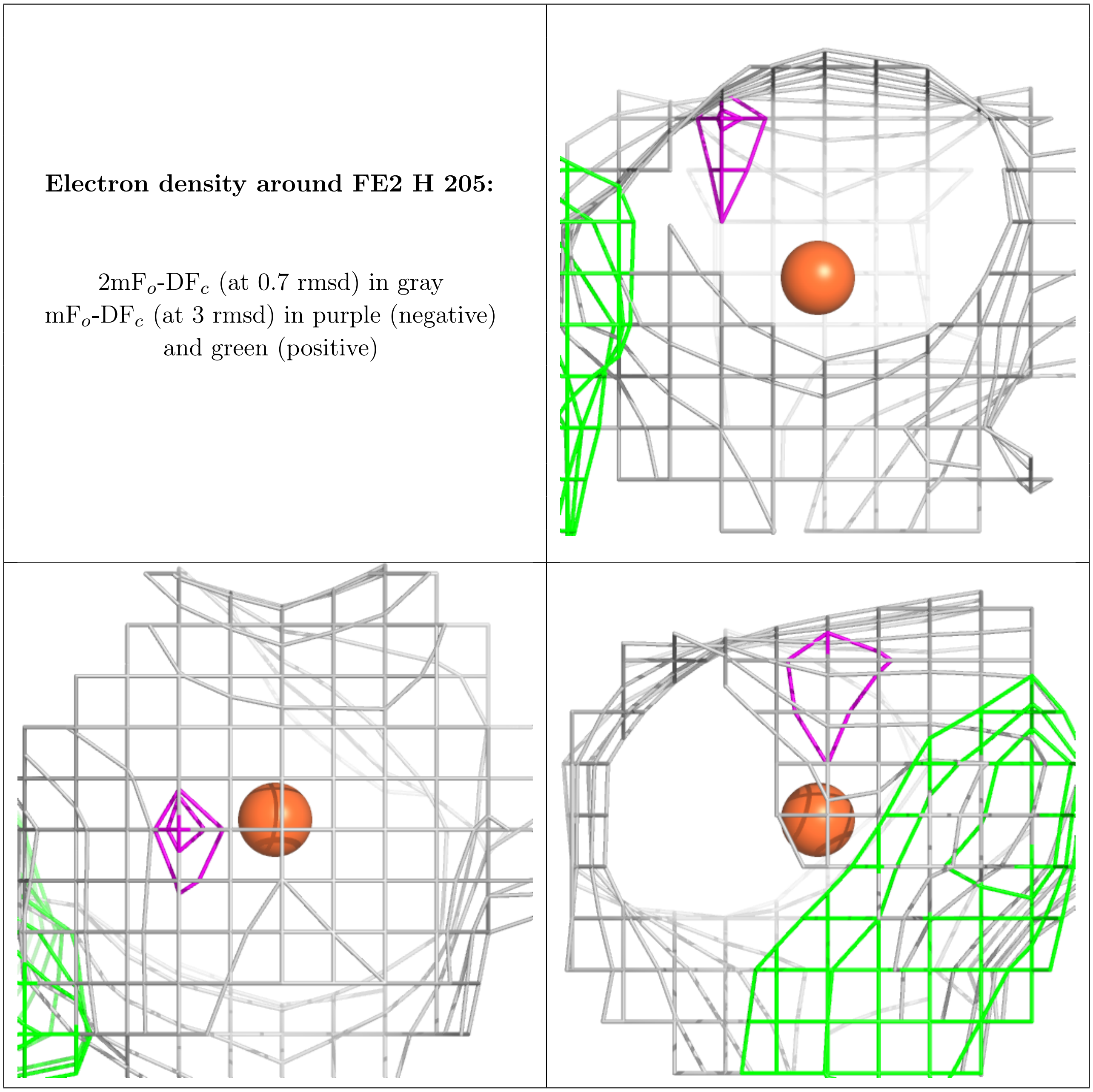






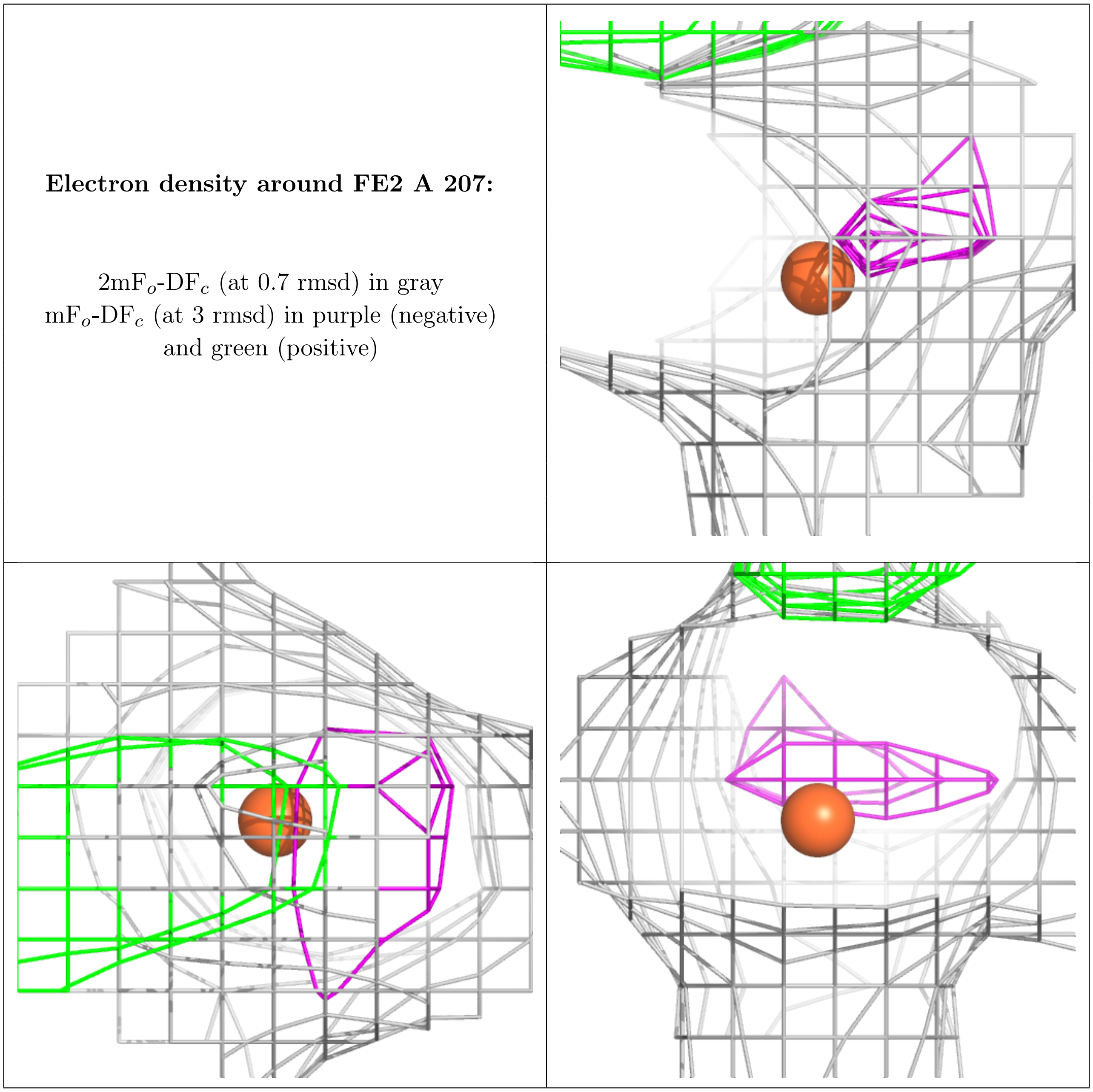
Electron density around FE2 H 205:

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



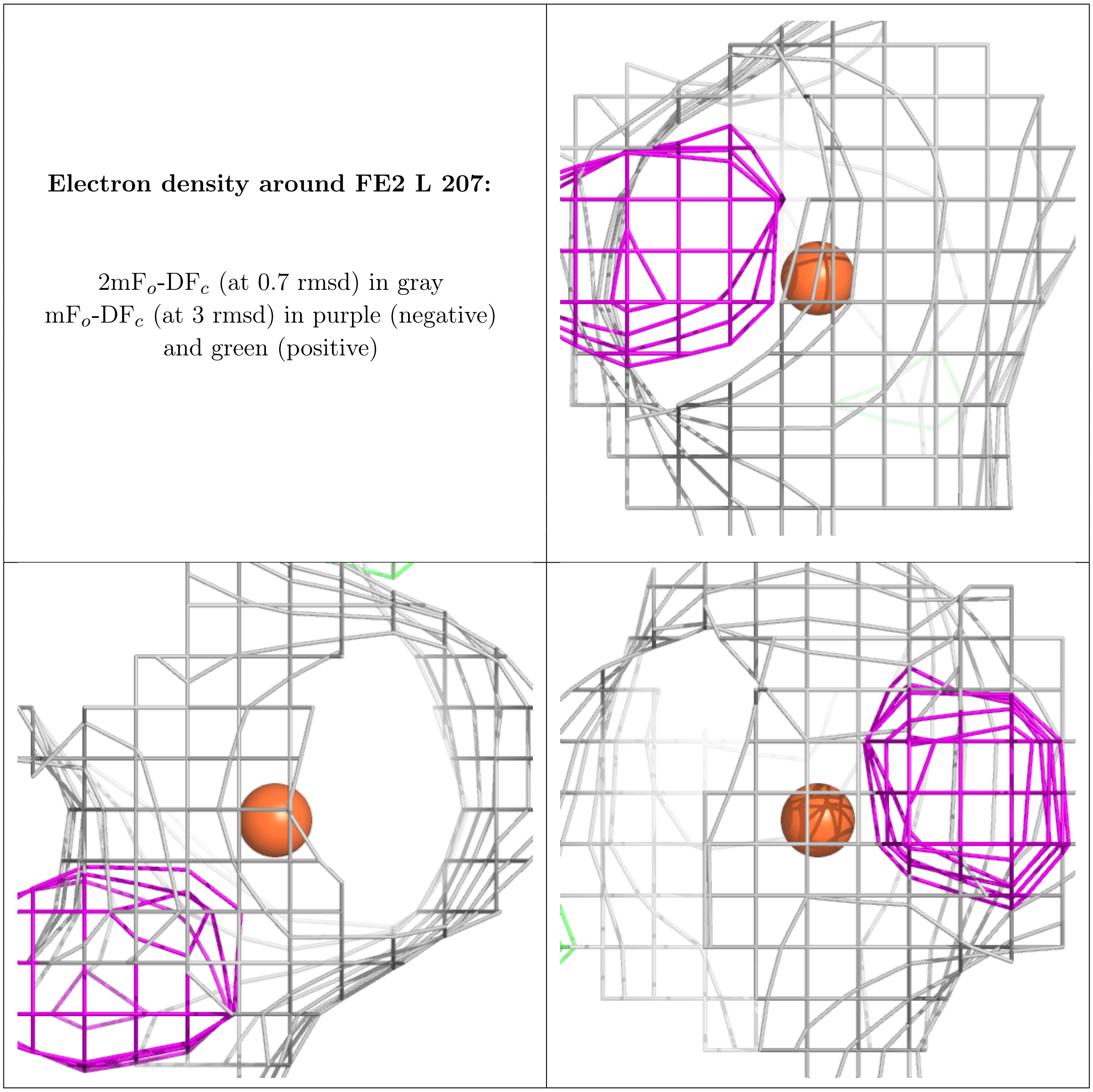
Electron density around FE2 A 207:

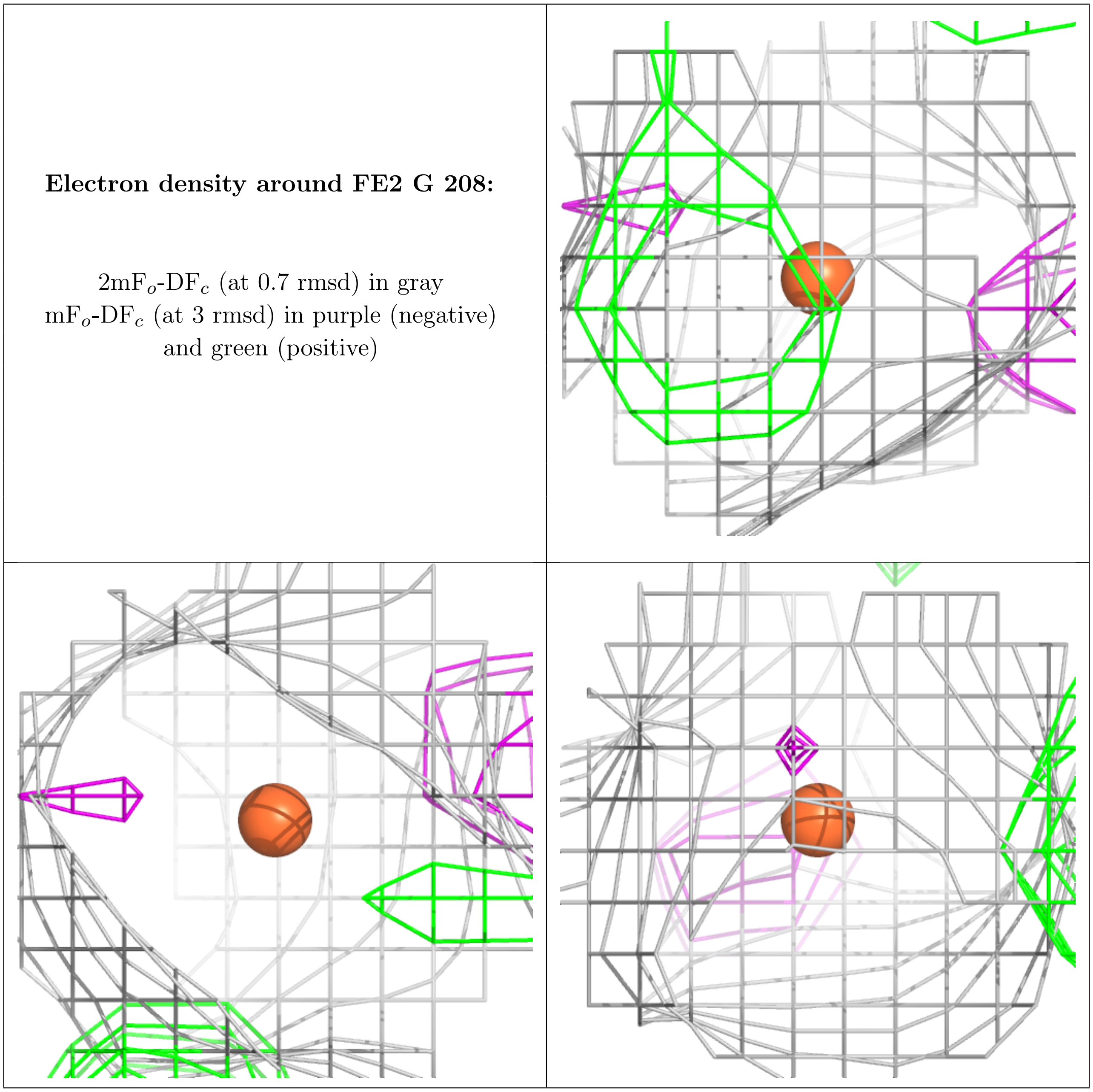
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around FE2 L 207:

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



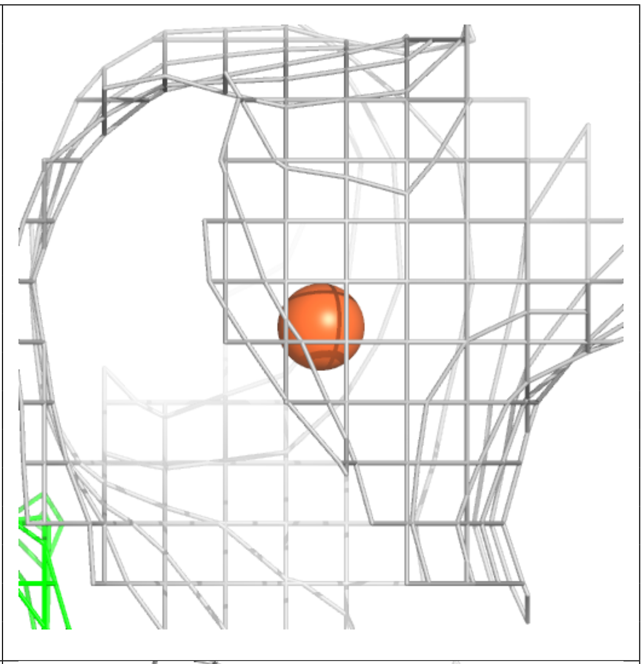


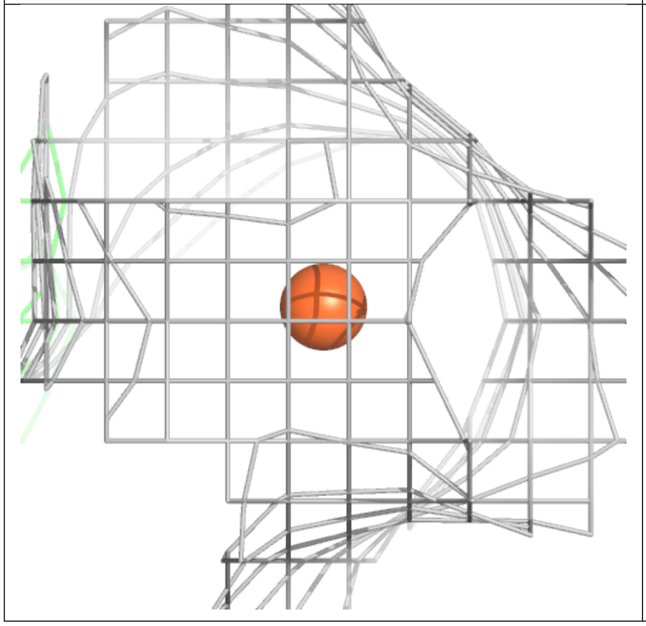
Electron density around FE2 G 208:

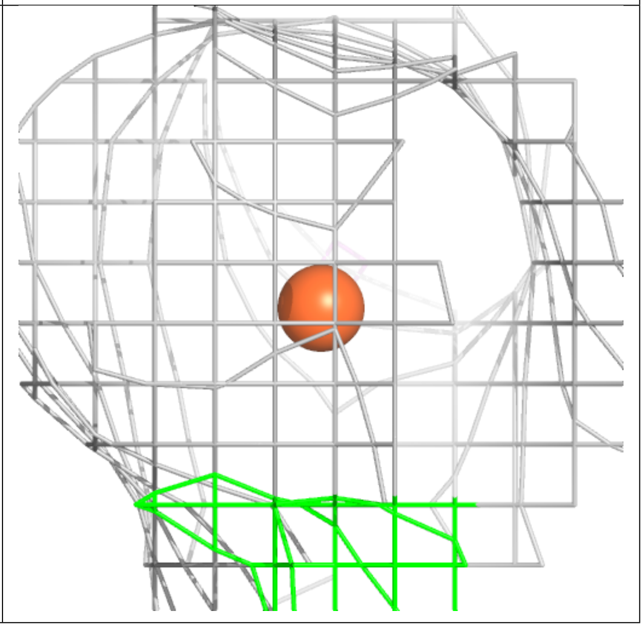
2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

Electron density around FE2 I 207:

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

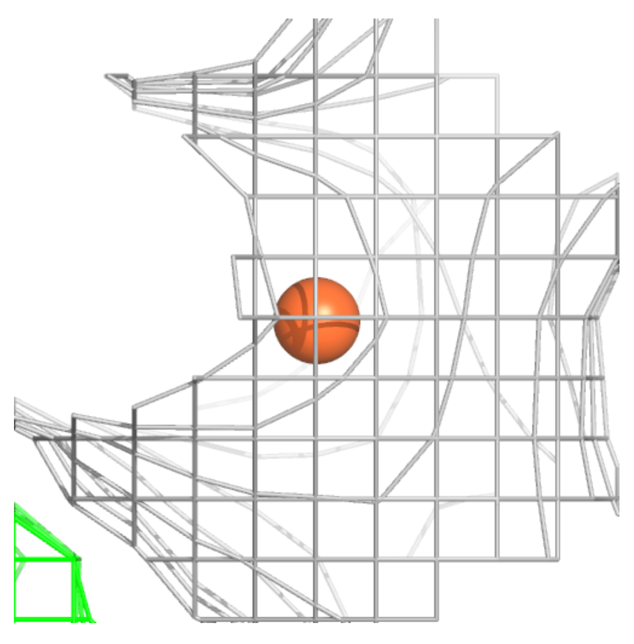


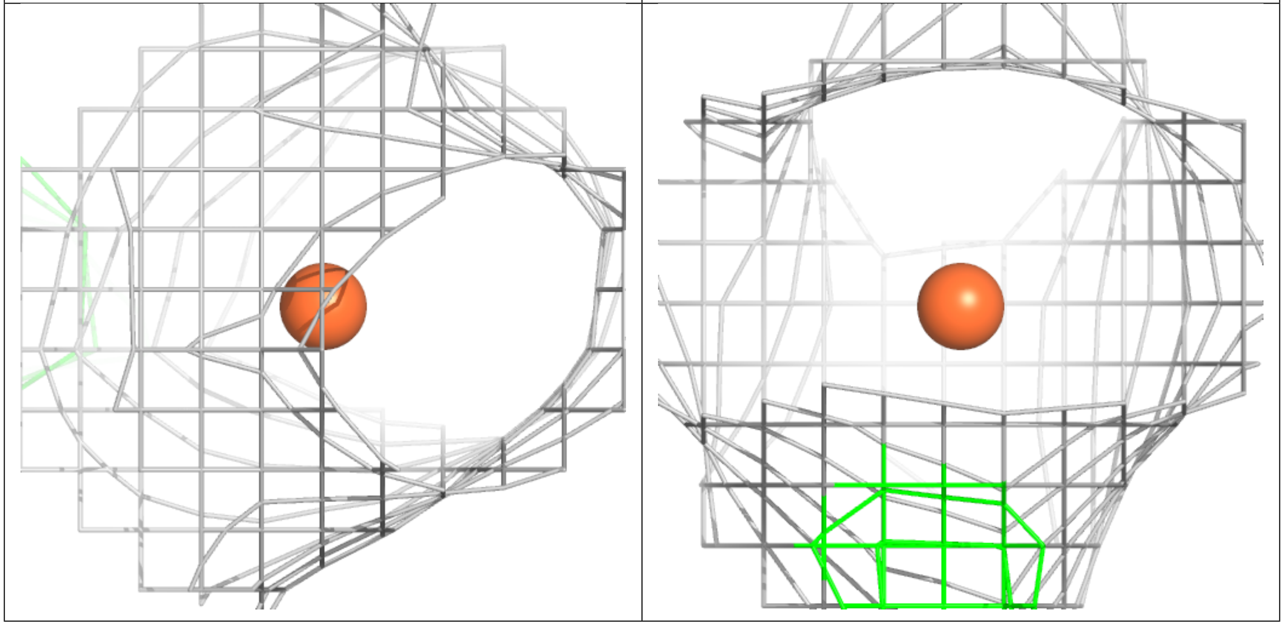


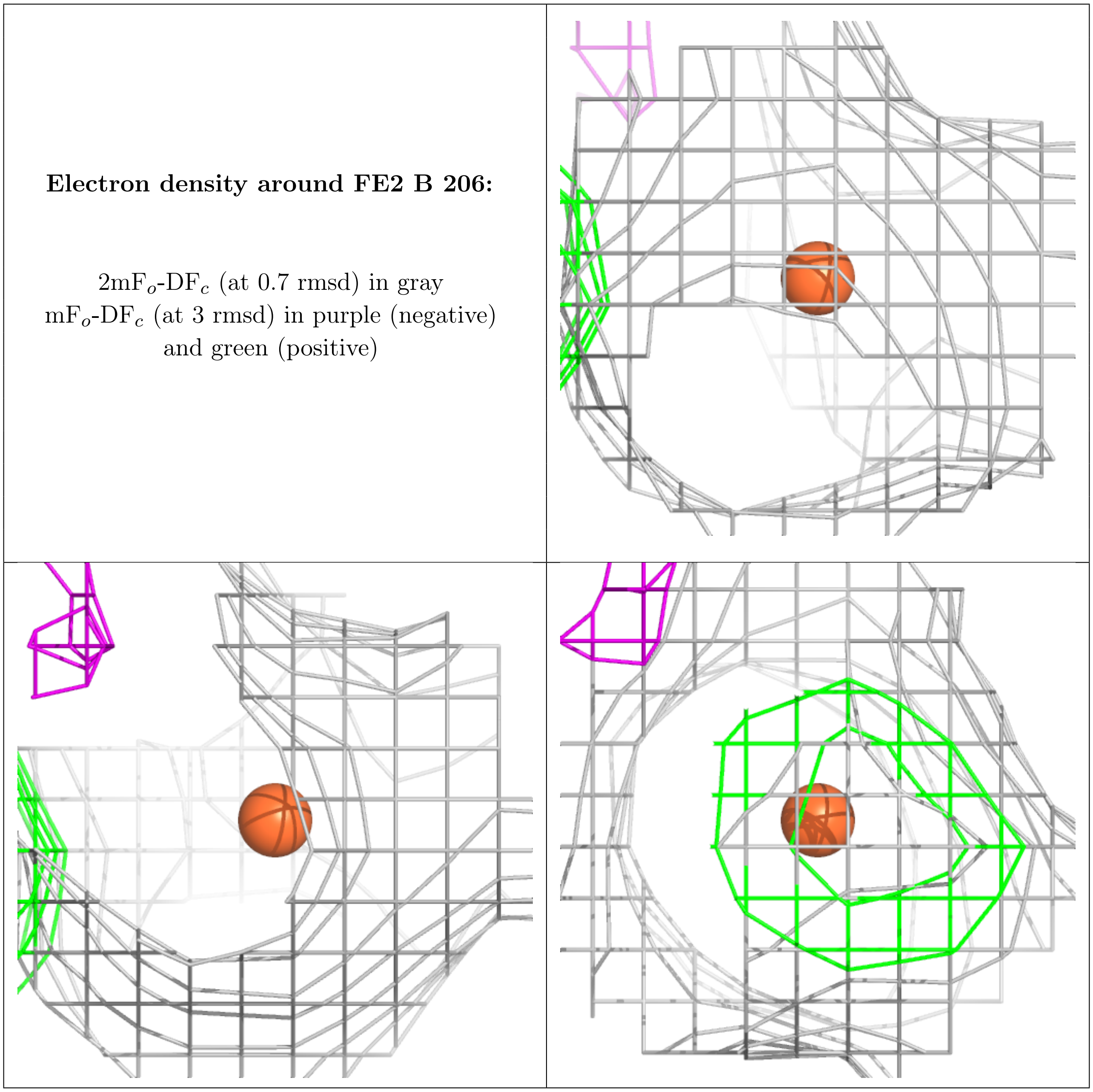


Electron density around FE2 F 212:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

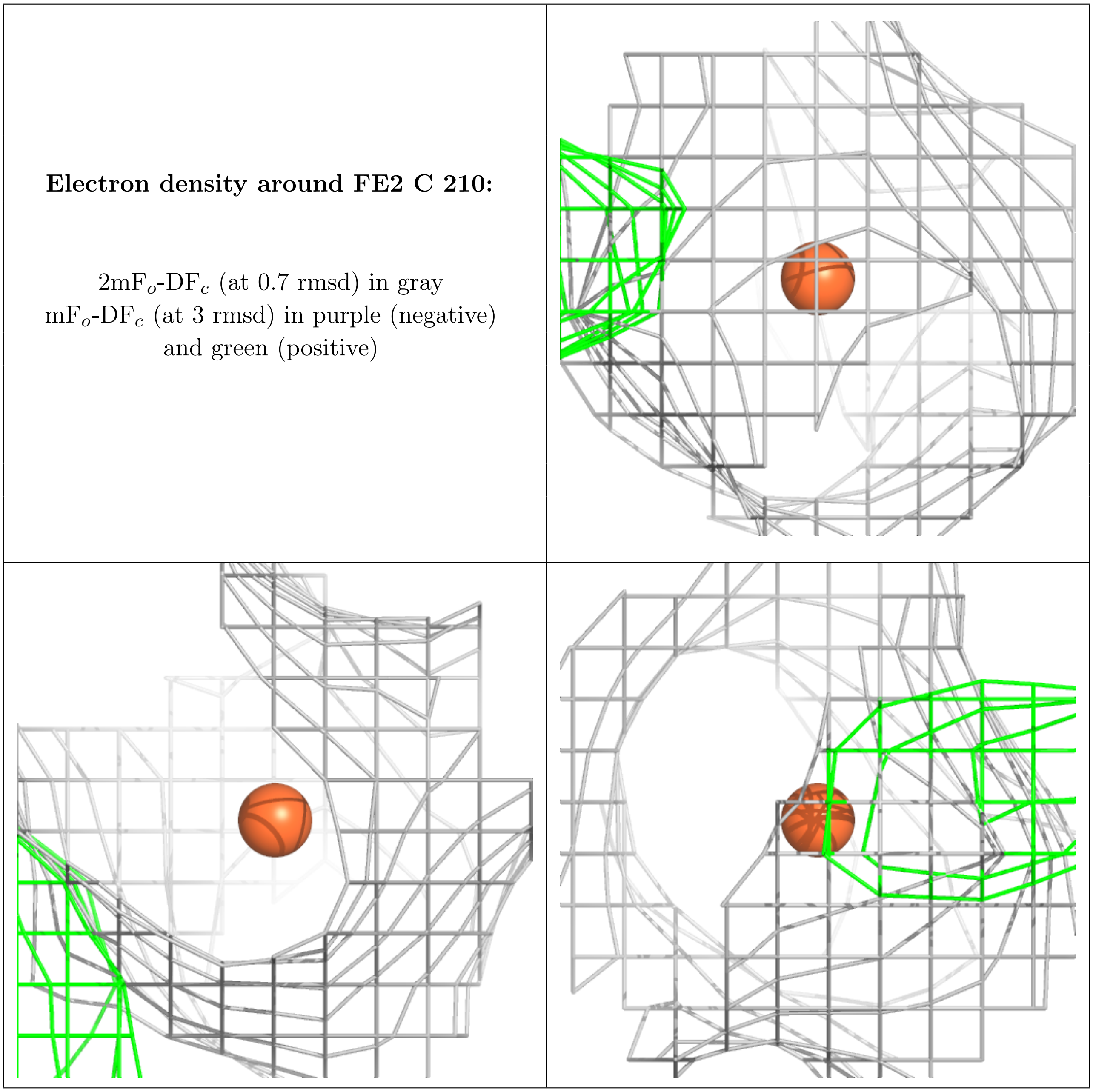






Electron density around FE2 B 206:

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 FE2 C 210:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

6.5 Other polymers ⓘ

There are no such residues in this entry.