wwPDB X-ray Structure Validation Summary Report (i)

Dec 11, 2025 – 07:16 PM JST

PDB ID	:	9LKK / pdb_00009lkk
Title	:	Crystal structure of C1ql1-gC1q hexamer
Authors	:	Liao, L.; Niu, F.; Wei, Z.
Deposited on	:	2025-01-16
Resolution	:	2.22 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (1)) were used in the production of this report:

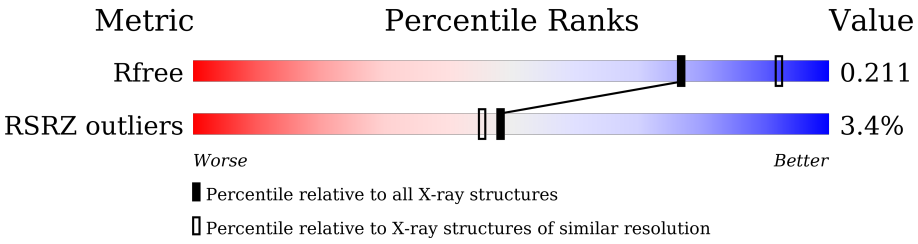
MolProbity	:	FAILED
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.47

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.22 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}	164625	7167 (2.24-2.20)
RSRZ outliers	164620	7166 (2.24-2.20)

MolProbity failed to run properly - the sequence quality summary graphics cannot be shown.

2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 9706 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 C1q-related factor.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	130	Total	C	N	O	S	0	6	0
			1022	646	171	201	4			
1	B	131	Total	C	N	O	S	0	4	0
			1029	650	172	203	4			
1	C	131	Total	C	N	O	S	0	7	0
			1040	657	176	203	4			
1	D	132	Total	C	N	O	S	0	0	0
			1016	643	170	199	4			
1	E	132	Total	C	N	O	S	0	0	0
			1014	641	170	199	4			
1	F	133	Total	C	N	O	S	0	2	0
			1034	654	175	201	4			
1	G	128	Total	C	N	O	S	0	1	0
			991	630	166	191	4			
1	H	126	Total	C	N	O	S	0	1	0
			977	622	161	190	4			
1	I	127	Total	C	N	O	S	0	3	0
			996	633	165	194	4			

There are 54 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	119	GLY	-	expression tag	UNP O88992
A	120	PRO	-	expression tag	UNP O88992
A	121	GLY	-	expression tag	UNP O88992
A	122	SER	-	expression tag	UNP O88992
A	123	GLU	-	expression tag	UNP O88992
A	124	PHE	-	expression tag	UNP O88992
B	119	GLY	-	expression tag	UNP O88992
B	120	PRO	-	expression tag	UNP O88992
B	121	GLY	-	expression tag	UNP O88992
B	122	SER	-	expression tag	UNP O88992
B	123	GLU	-	expression tag	UNP O88992

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Chain	Residue	Modelled	Actual	Comment	Reference
B	124	PHE	-	expression tag	UNP O88992
C	119	GLY	-	expression tag	UNP O88992
C	120	PRO	-	expression tag	UNP O88992
C	121	GLY	-	expression tag	UNP O88992
C	122	SER	-	expression tag	UNP O88992
C	123	GLU	-	expression tag	UNP O88992
C	124	PHE	-	expression tag	UNP O88992
D	119	GLY	-	expression tag	UNP O88992
D	120	PRO	-	expression tag	UNP O88992
D	121	GLY	-	expression tag	UNP O88992
D	122	SER	-	expression tag	UNP O88992
D	123	GLU	-	expression tag	UNP O88992
D	124	PHE	-	expression tag	UNP O88992
E	119	GLY	-	expression tag	UNP O88992
E	120	PRO	-	expression tag	UNP O88992
E	121	GLY	-	expression tag	UNP O88992
E	122	SER	-	expression tag	UNP O88992
E	123	GLU	-	expression tag	UNP O88992
E	124	PHE	-	expression tag	UNP O88992
F	119	GLY	-	expression tag	UNP O88992
F	120	PRO	-	expression tag	UNP O88992
F	121	GLY	-	expression tag	UNP O88992
F	122	SER	-	expression tag	UNP O88992
F	123	GLU	-	expression tag	UNP O88992
F	124	PHE	-	expression tag	UNP O88992
G	119	GLY	-	expression tag	UNP O88992
G	120	PRO	-	expression tag	UNP O88992
G	121	GLY	-	expression tag	UNP O88992
G	122	SER	-	expression tag	UNP O88992
G	123	GLU	-	expression tag	UNP O88992
G	124	PHE	-	expression tag	UNP O88992
H	119	GLY	-	expression tag	UNP O88992
H	120	PRO	-	expression tag	UNP O88992
H	121	GLY	-	expression tag	UNP O88992
H	122	SER	-	expression tag	UNP O88992
H	123	GLU	-	expression tag	UNP O88992
H	124	PHE	-	expression tag	UNP O88992
I	119	GLY	-	expression tag	UNP O88992
I	120	PRO	-	expression tag	UNP O88992
I	121	GLY	-	expression tag	UNP O88992
I	122	SER	-	expression tag	UNP O88992
I	123	GLU	-	expression tag	UNP O88992

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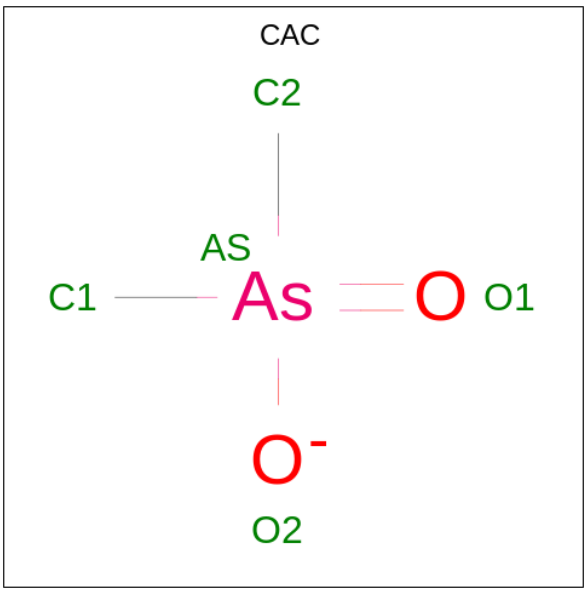
Chain	Residue	Modelled	Actual	Comment	Reference
I	124	PHE	-	expression tag	UNP O88992

- Molecule 2 is CALCIUM ION (CCD ID: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

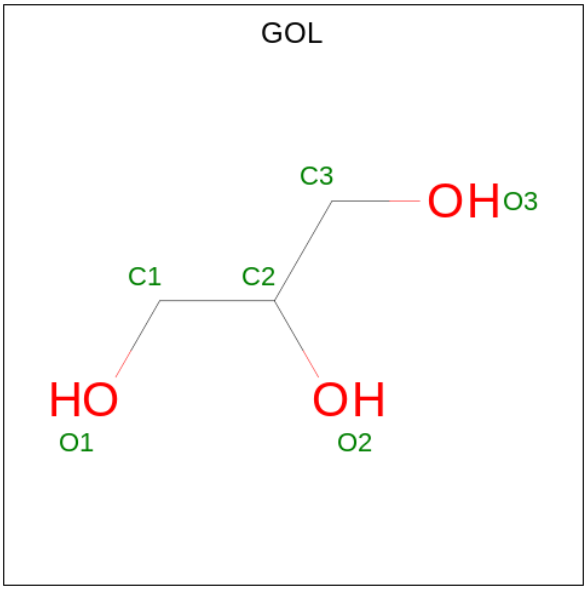
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	5	Total Ca 5 5	0	0
2	B	4	Total Ca 4 4	0	0
2	C	4	Total Ca 4 4	0	0
2	D	5	Total Ca 5 5	0	0
2	E	1	Total Ca 1 1	0	0
2	F	1	Total Ca 1 1	0	0
2	G	1	Total Ca 1 1	0	0
2	H	1	Total Ca 1 1	0	0
2	I	1	Total Ca 1 1	0	0

- Molecule 3 is CACODYLATE ION (CCD ID: CAC) (formula: $C_2H_6AsO_2$).



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

- Molecule 4 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	B	1	Total C O 6 3 3	0	0
4	C	1	Total C O 6 3 3	0	0
4	D	1	Total C O 6 3 3	0	0
4	D	1	Total C O 6 3 3	0	0
4	E	1	Total C O 6 3 3	0	0
4	E	1	Total C O 6 3 3	0	0
4	E	1	Total C O 6 3 3	0	0
4	F	1	Total C O 6 3 3	0	0

- Molecule 5 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	C	1	Total Cl 1 1	0	0
5	F	1	Total Cl 1 1	0	0
5	G	1	Total Cl 1 1	0	0
5	I	1	Total Cl 1 1	0	0

- Molecule 6 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	77	Total O 77 77	0	0
6	B	54	Total O 54 54	0	0
6	C	61	Total O 61 61	0	0
6	D	68	Total O 68 68	0	0
6	E	61	Total O 61 61	0	0
6	F	73	Total O 73 73	0	0
6	G	32	Total O 32 32	0	0
6	H	32	Total O 32 32	0	0
6	I	39	Total O 39 39	0	0

MolProbity failed to run properly - this section is therefore empty.

3 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	110.37Å 110.63Å 114.92Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	57.46 – 2.22 57.46 – 2.22	Depositor EDS
% Data completeness (in resolution range)	100.0 (57.46-2.22) 100.0 (57.46-2.22)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.23 (at 2.22Å)	Xtriage
Refinement program	PHENIX (1.18.2_3874: ???)	Depositor
R, R_{free}	0.172 , 0.210 0.173 , 0.211	Depositor DCC
R_{free} test set	3340 reflections (4.76%)	wwPDB-VP
Wilson B-factor (Å^2)	37.9	Xtriage
Anisotropy	0.061	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.37 , 42.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	0.010 for -h,l,k 0.007 for -l,-k,-h 0.013 for k,h,-l 0.017 for k,l,h 0.017 for l,h,k	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	9706	wwPDB-VP
Average B, all atoms (Å^2)	41.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.68% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

4 Model quality

4.1 Standard geometry

MolProbity failed to run properly - this section is therefore empty.

4.2 Too-close contacts

MolProbity failed to run properly - this section is therefore empty.

4.3 Torsion angles

4.3.1 Protein backbone

MolProbity failed to run properly - this section is therefore empty.

4.3.2 Protein sidechains

MolProbity failed to run properly - this section is therefore empty.

4.3.3 RNA

MolProbity failed to run properly - this section is therefore empty.

4.4 Non-standard residues in protein, DNA, RNA chains

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

4.5 Carbohydrates

There are no oligosaccharides in this entry.

4.6 Ligand geometry

Of 38 ligands modelled in this entry, 27 are monoatomic - leaving 11 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	$\#\|Z\| > 2$
4	GOL	C	507	-	5,5,5	0.86	0	5,5,5	0.97	0
4	GOL	D	507	-	5,5,5	1.11	0	5,5,5	1.08	0
3	CAC	A	406	-	0,4,4	-	-	0,6,6	-	-
4	GOL	E	404	-	5,5,5	0.76	0	5,5,5	1.03	0
4	GOL	D	506	-	5,5,5	0.97	0	5,5,5	0.95	0
4	GOL	B	506	-	5,5,5	0.69	0	5,5,5	0.99	0
3	CAC	C	506	-	0,4,4	-	-	0,6,6	-	-
3	CAC	B	505	-	0,4,4	-	-	0,6,6	-	-
4	GOL	E	401	-	5,5,5	1.25	0	5,5,5	0.79	0
4	GOL	E	403	-	5,5,5	1.17	0	5,5,5	0.75	0
4	GOL	F	503	-	5,5,5	0.88	0	5,5,5	1.00	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	GOL	C	507	-	-	3/4/4/4	-
4	GOL	D	507	-	-	0/4/4/4	-
4	GOL	E	404	-	-	0/4/4/4	-
4	GOL	D	506	-	-	1/4/4/4	-
4	GOL	B	506	-	-	2/4/4/4	-
4	GOL	E	401	-	-	2/4/4/4	-
4	GOL	E	403	-	-	1/4/4/4	-
4	GOL	F	503	-	-	0/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

5 of 9 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	B	506	GOL	C1-C2-C3-O3
4	E	401	GOL	C1-C2-C3-O3
4	E	401	GOL	O2-C2-C3-O3
4	C	507	GOL	C1-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
4	C	507	GOL	O2-C2-C3-O3

There are no ring outliers.

No monomer is involved in short contacts.

4.7 Other polymers (i)

There are no such residues in this entry.

4.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

5 Fit of model and data

5.1 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	130/140 (92%)	-0.23	6 (4%)	38	35	22, 34, 52, 67	8 (6%)
1	B	131/140 (93%)	-0.15	7 (5%)	33	30	23, 35, 58, 72	4 (3%)
1	C	131/140 (93%)	-0.46	4 (3%)	51	49	20, 33, 44, 70	8 (6%)
1	D	132/140 (94%)	-0.50	0	100	100	26, 36, 48, 72	0
1	E	132/140 (94%)	-0.48	0	100	100	26, 35, 48, 68	0
1	F	133/140 (95%)	-0.47	2 (1%)	71	69	24, 35, 47, 84	2 (1%)
1	G	128/140 (91%)	0.38	6 (4%)	37	35	18, 51, 66, 78	2 (1%)
1	H	126/140 (90%)	0.49	5 (3%)	43	40	37, 51, 68, 72	1 (0%)
1	I	127/140 (90%)	0.42	10 (7%)	20	18	20, 49, 70, 78	3 (2%)
All	All	1170/1260 (92%)	-0.12	40 (3%)	48	45	18, 38, 63, 84	28 (2%)

The worst 5 of 40 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	H	188[A]	THR	6.1
1	B	210[A]	ASP	5.5
1	I	187[A]	GLY	4.5
1	A	210[A]	ASP	4.2
1	I	209	ALA	3.9

5.2 Non-standard residues in protein, DNA, RNA chains

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

5.3 Carbohydrates

There are no oligosaccharides in this entry.

5.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	CA	H	301	1/1	0.68	0.20	102,102,102,102	0
2	CA	D	504	1/1	0.72	0.16	88,88,88,88	0
4	GOL	E	404	6/6	0.77	0.14	54,56,61,65	0
3	CAC	A	406	5/5	0.79	0.26	31,40,45,65	5
2	CA	D	505	1/1	0.80	0.13	95,95,95,95	0
4	GOL	E	403	6/6	0.83	0.14	48,56,58,59	0
4	GOL	D	507	6/6	0.84	0.14	47,50,54,65	0
4	GOL	F	503	6/6	0.84	0.12	53,58,62,62	0
3	CAC	C	506	5/5	0.86	0.21	33,38,40,60	5
4	GOL	E	401	6/6	0.87	0.14	44,57,58,65	0
3	CAC	B	505	5/5	0.87	0.23	32,37,47,66	5
4	GOL	D	506	6/6	0.88	0.13	48,54,59,61	0
2	CA	B	504	1/1	0.89	0.12	88,88,88,88	0
2	CA	A	405	1/1	0.91	0.10	89,89,89,89	0
4	GOL	B	506	6/6	0.91	0.11	49,51,55,56	0
2	CA	F	501	1/1	0.92	0.11	78,78,78,78	0
2	CA	B	502	1/1	0.93	0.10	67,67,67,67	0
2	CA	C	504	1/1	0.94	0.07	77,77,77,77	0
2	CA	A	404	1/1	0.94	0.08	66,66,66,66	0
2	CA	C	501	1/1	0.94	0.06	61,61,61,61	0
2	CA	E	402	1/1	0.94	0.11	69,69,69,69	0
5	CL	F	502	1/1	0.94	0.12	58,58,58,58	0
5	CL	G	302	1/1	0.94	0.10	55,55,55,55	0
5	CL	I	302	1/1	0.94	0.13	60,60,60,60	0
4	GOL	C	507	6/6	0.95	0.09	44,50,52,52	0
2	CA	C	503	1/1	0.96	0.10	62,62,62,62	0
2	CA	B	503	1/1	0.96	0.07	57,57,57,57	0
5	CL	C	505	1/1	0.96	0.07	62,62,62,62	0
2	CA	G	301	1/1	0.98	0.10	60,60,60,60	0
2	CA	B	501	1/1	0.98	0.04	36,36,36,36	0
2	CA	I	301	1/1	0.98	0.11	62,62,62,62	0
2	CA	A	402	1/1	0.99	0.02	37,37,37,37	0
2	CA	A	401	1/1	0.99	0.03	32,32,32,32	0
2	CA	C	502	1/1	0.99	0.03	33,33,33,33	0
2	CA	D	502	1/1	1.00	0.01	33,33,33,33	0
2	CA	D	503	1/1	1.00	0.05	48,48,48,48	0
2	CA	A	403	1/1	1.00	0.02	33,33,33,33	0

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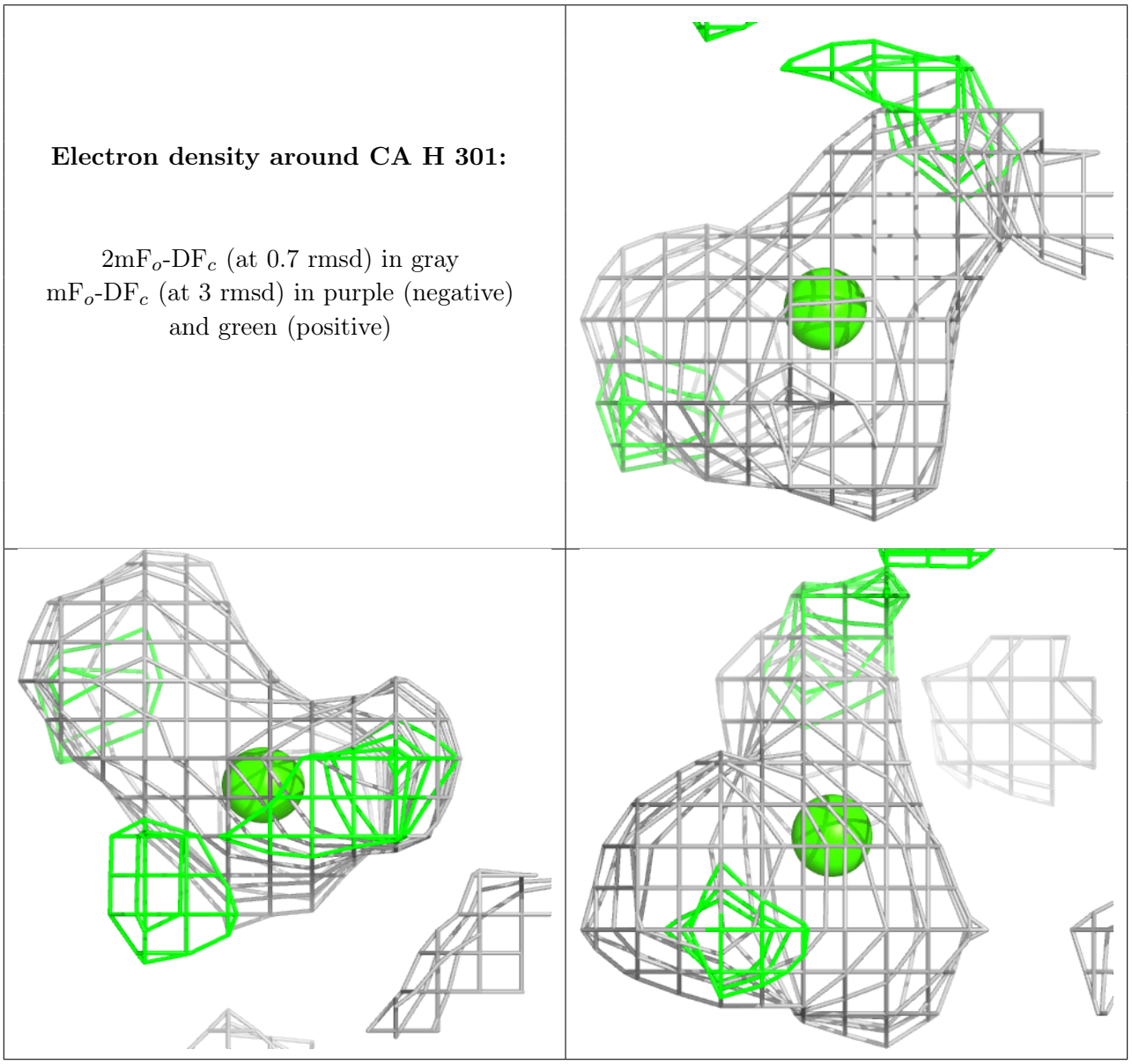
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	CA	D	501	1/1	1.00	0.01	35,35,35,35	0

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.

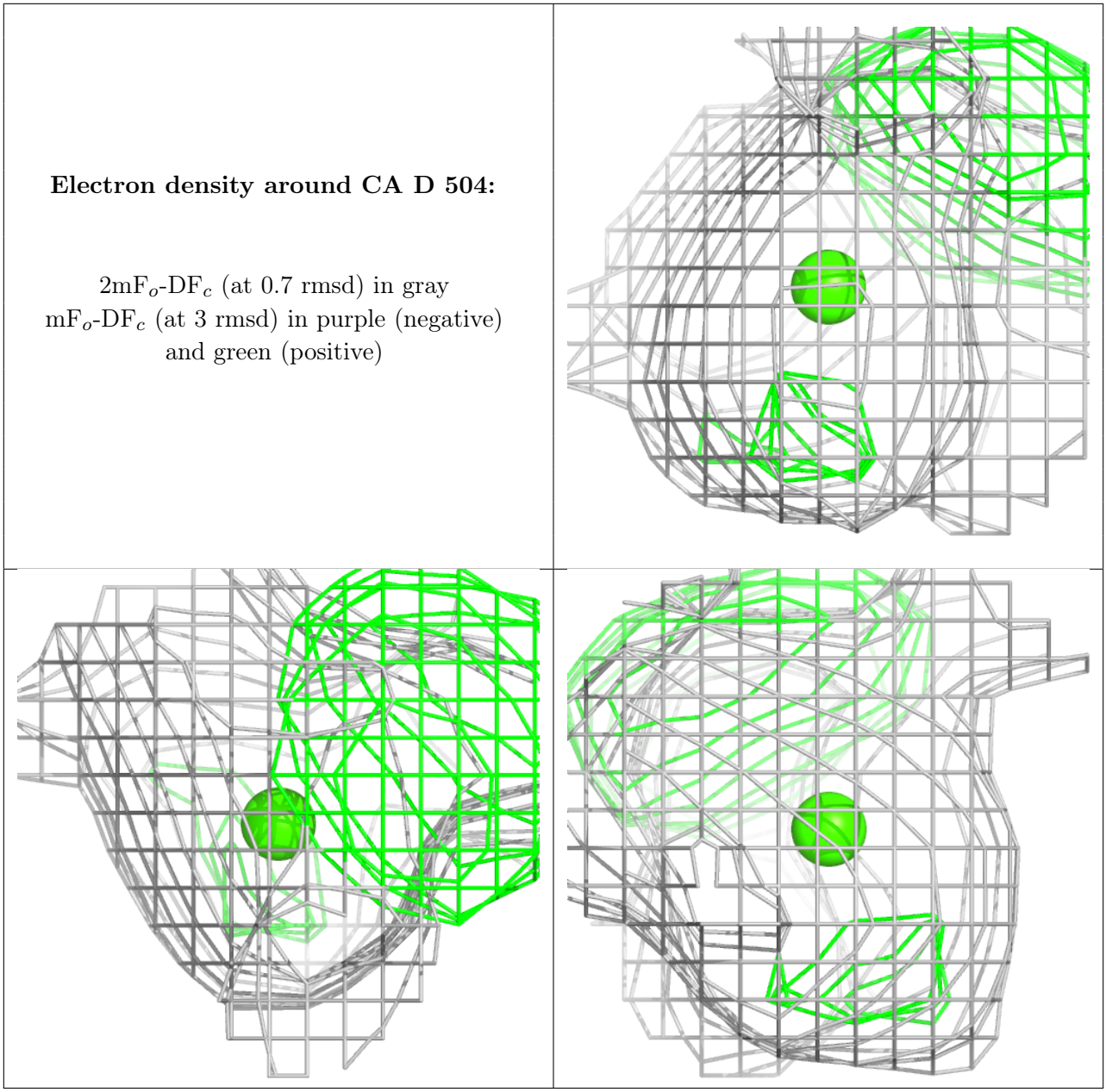
Electron density around CA H 301:

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



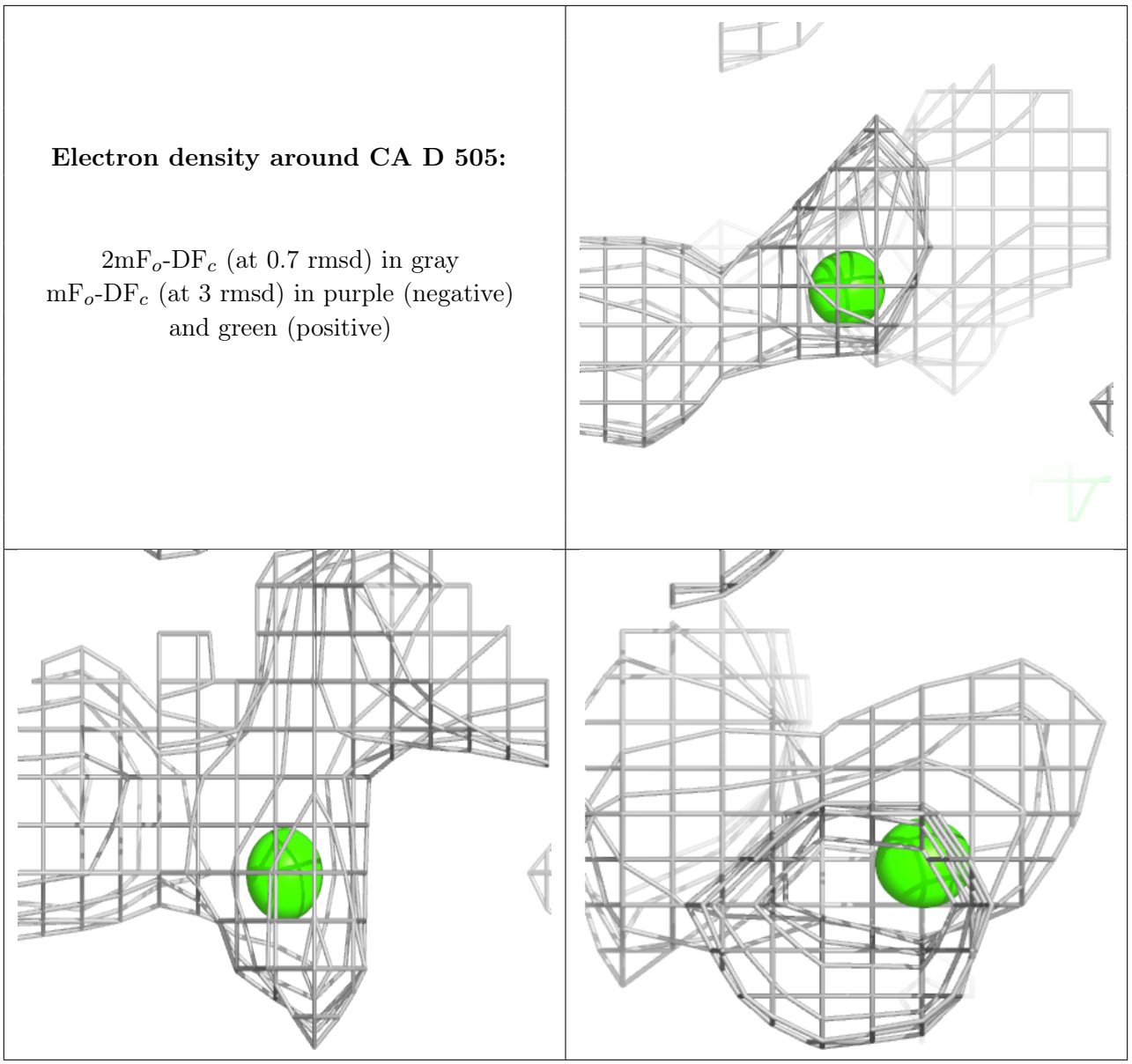
Electron density around CA D 504:

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



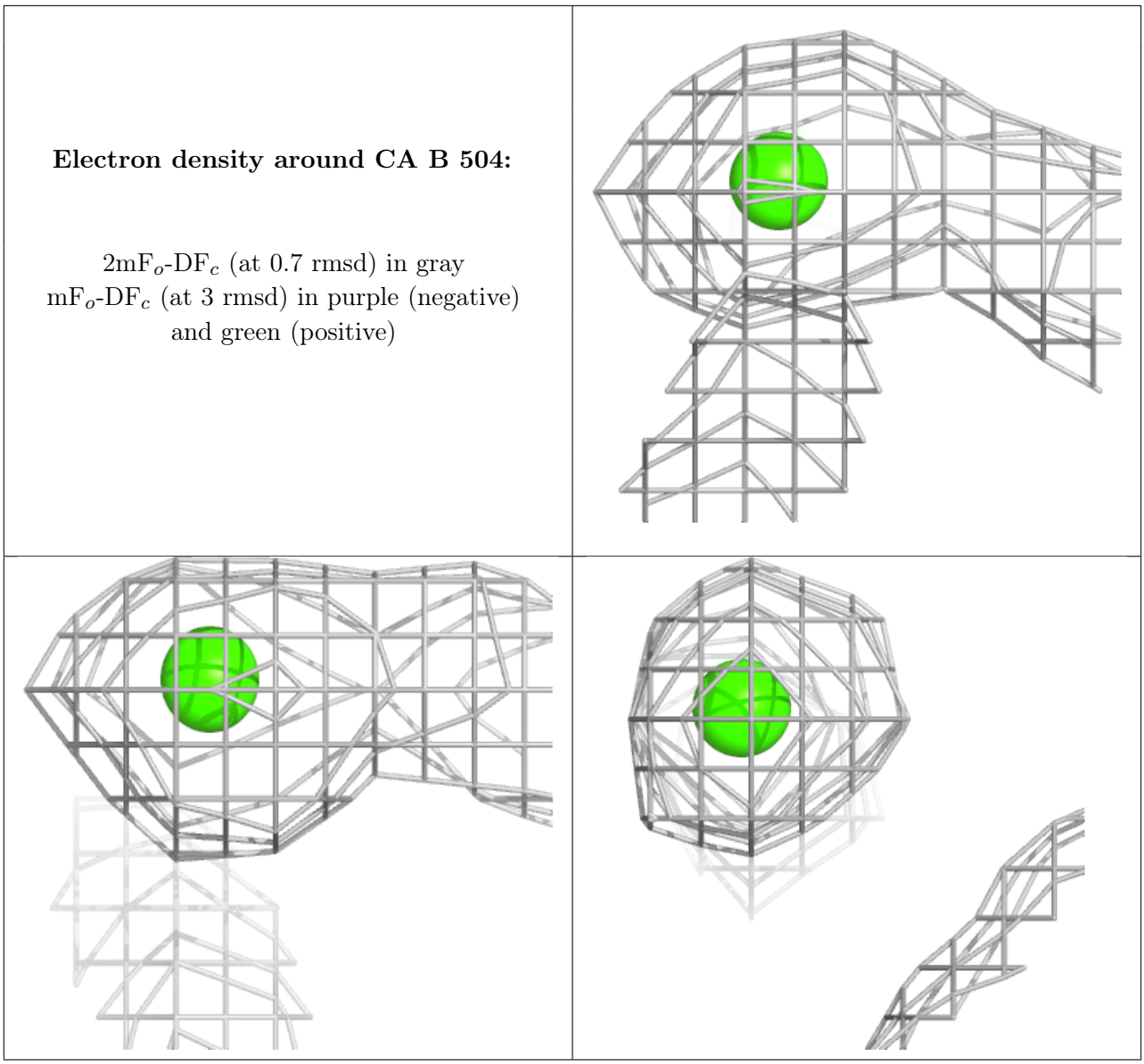
Electron density around CA D 505:

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



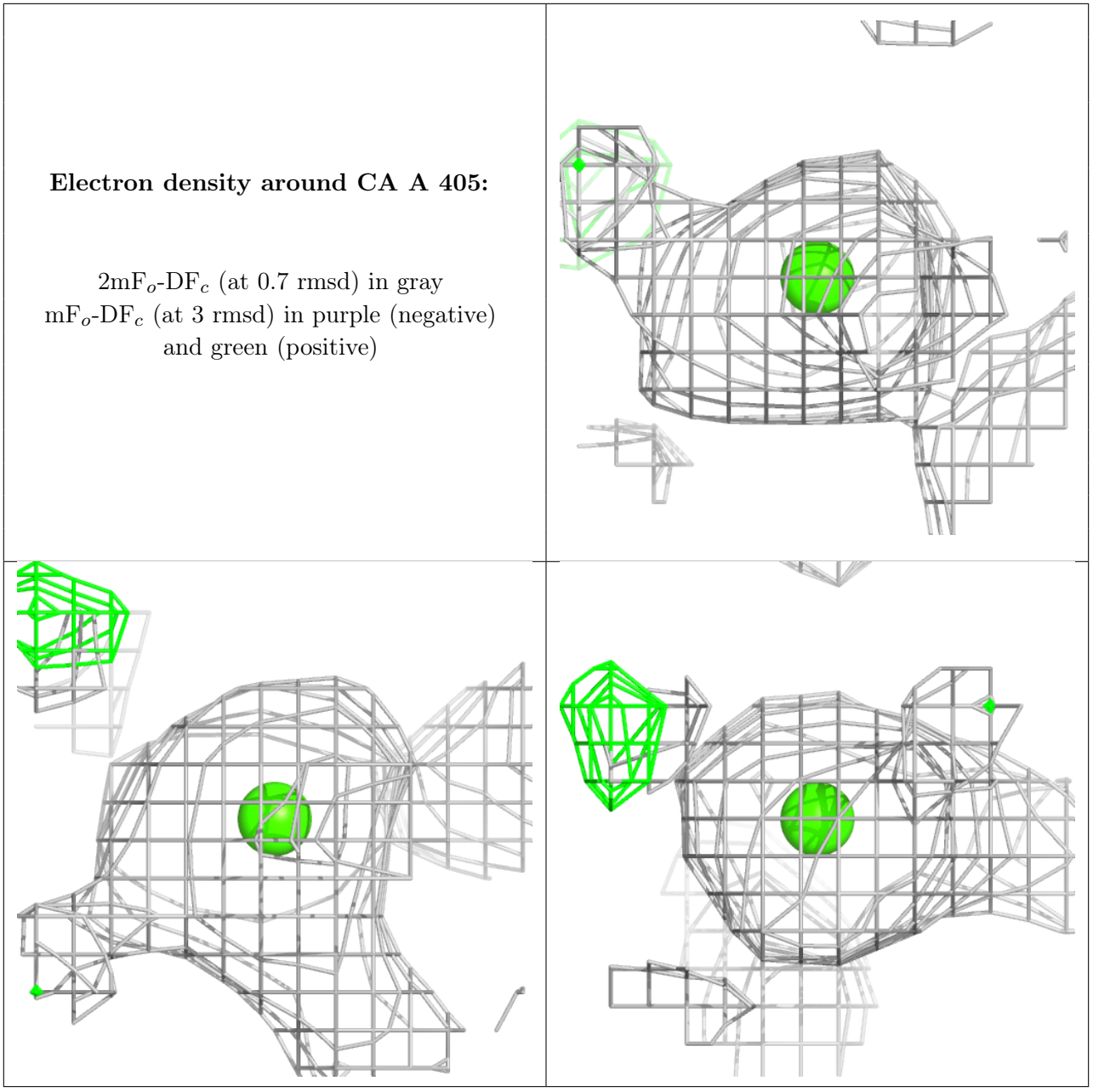
Electron density around CA B 504:

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



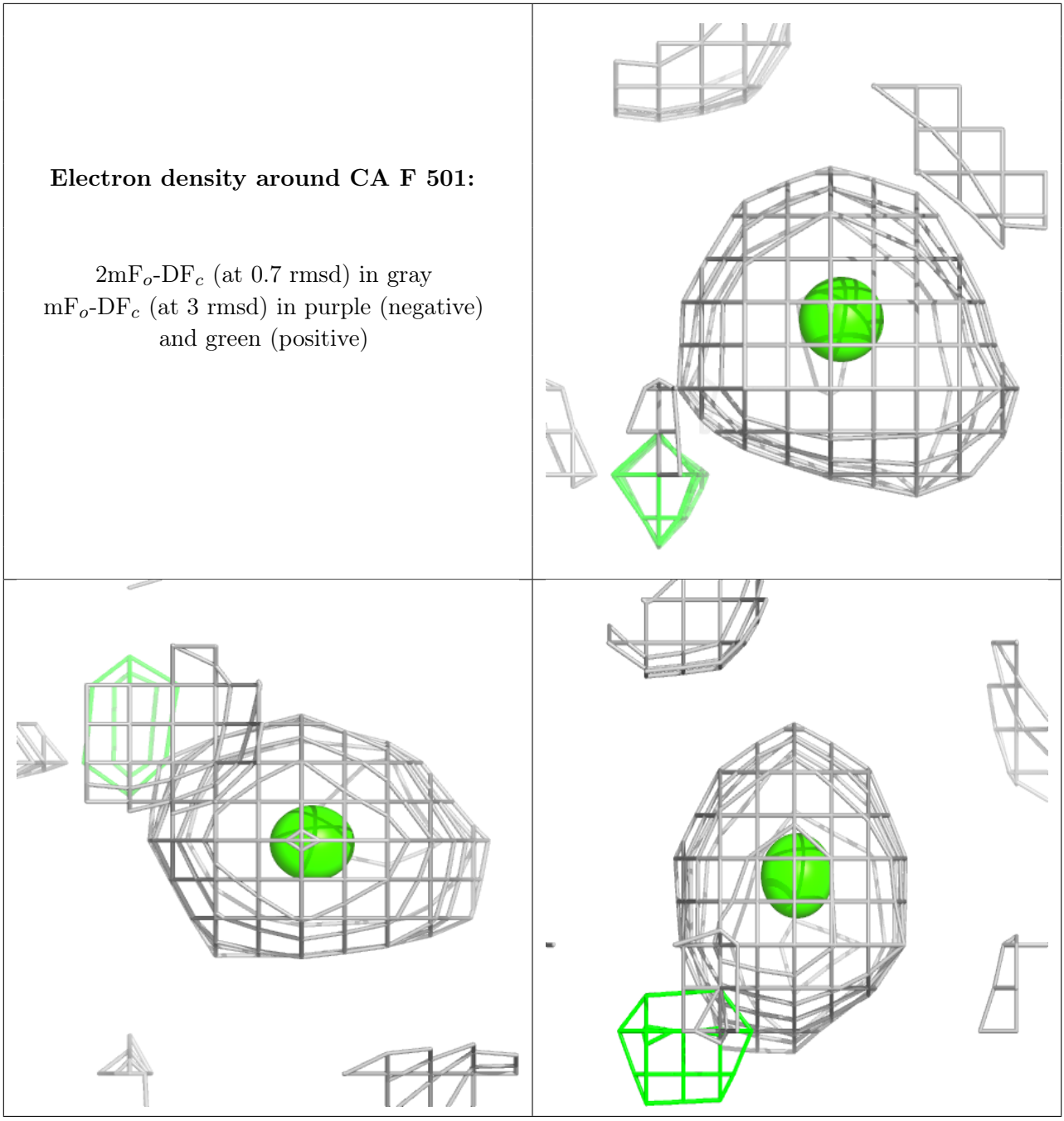
Electron density around CA A 405:

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



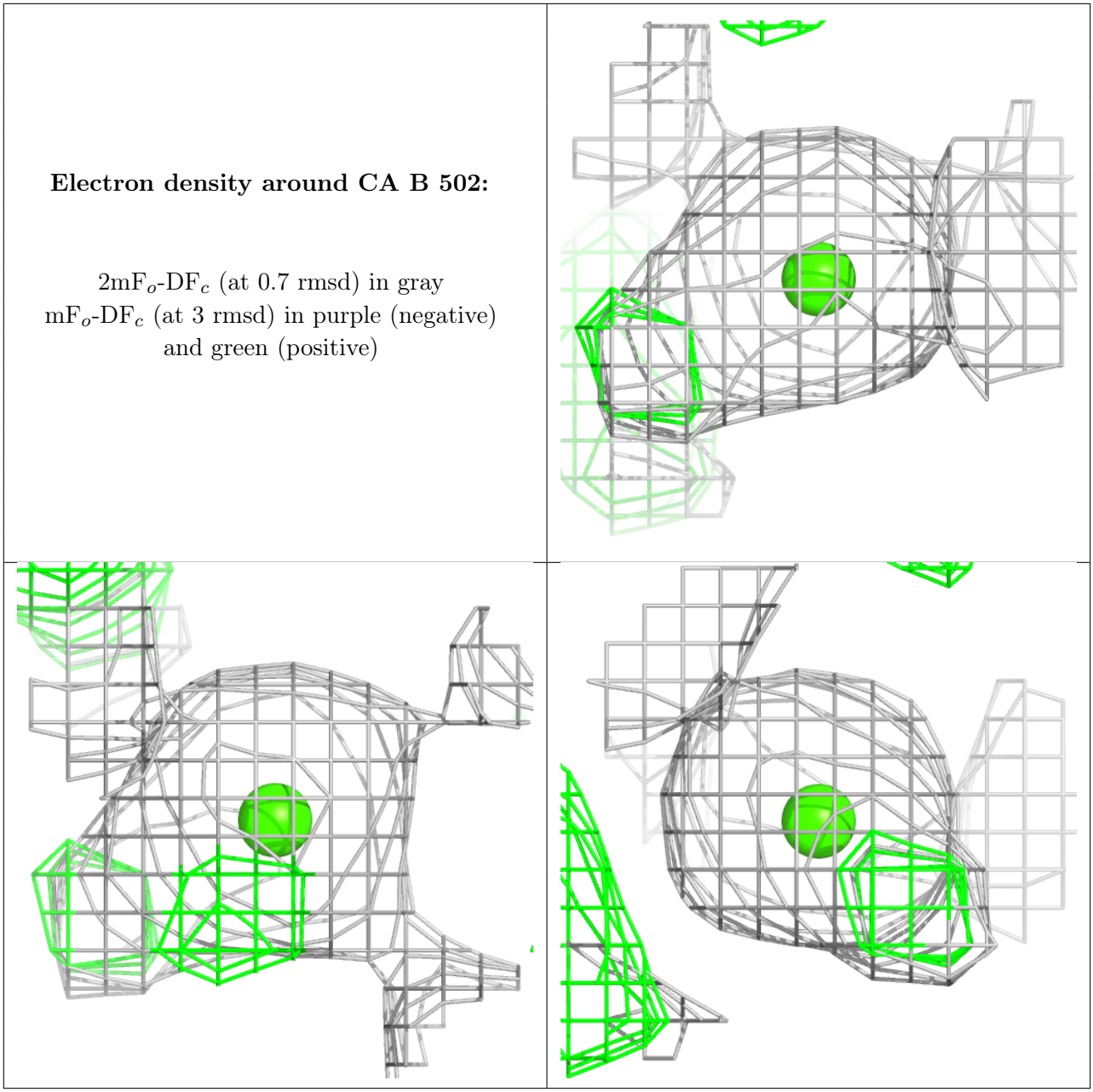
Electron density around CA F 501:

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



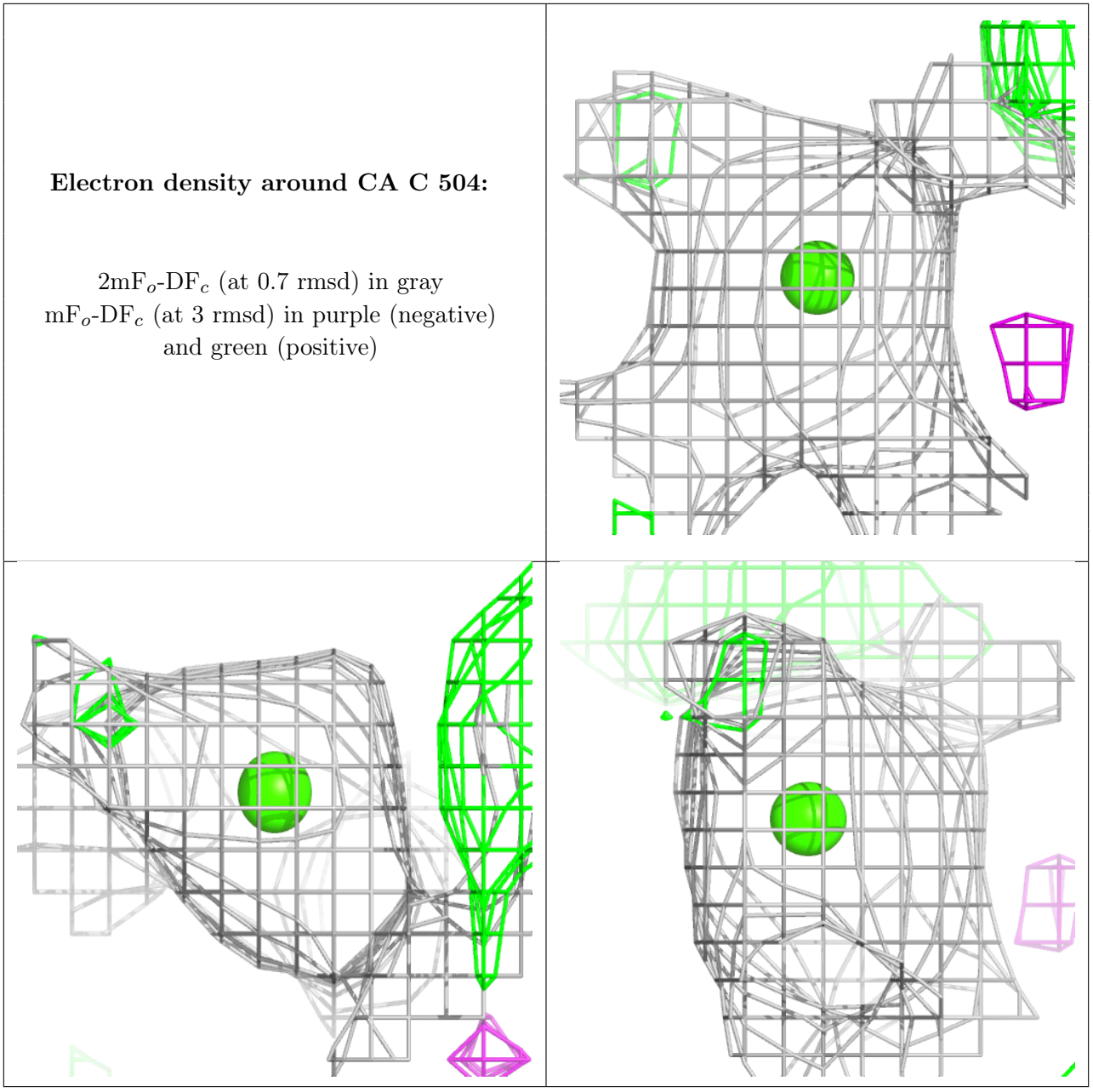
Electron density around CA B 502:

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



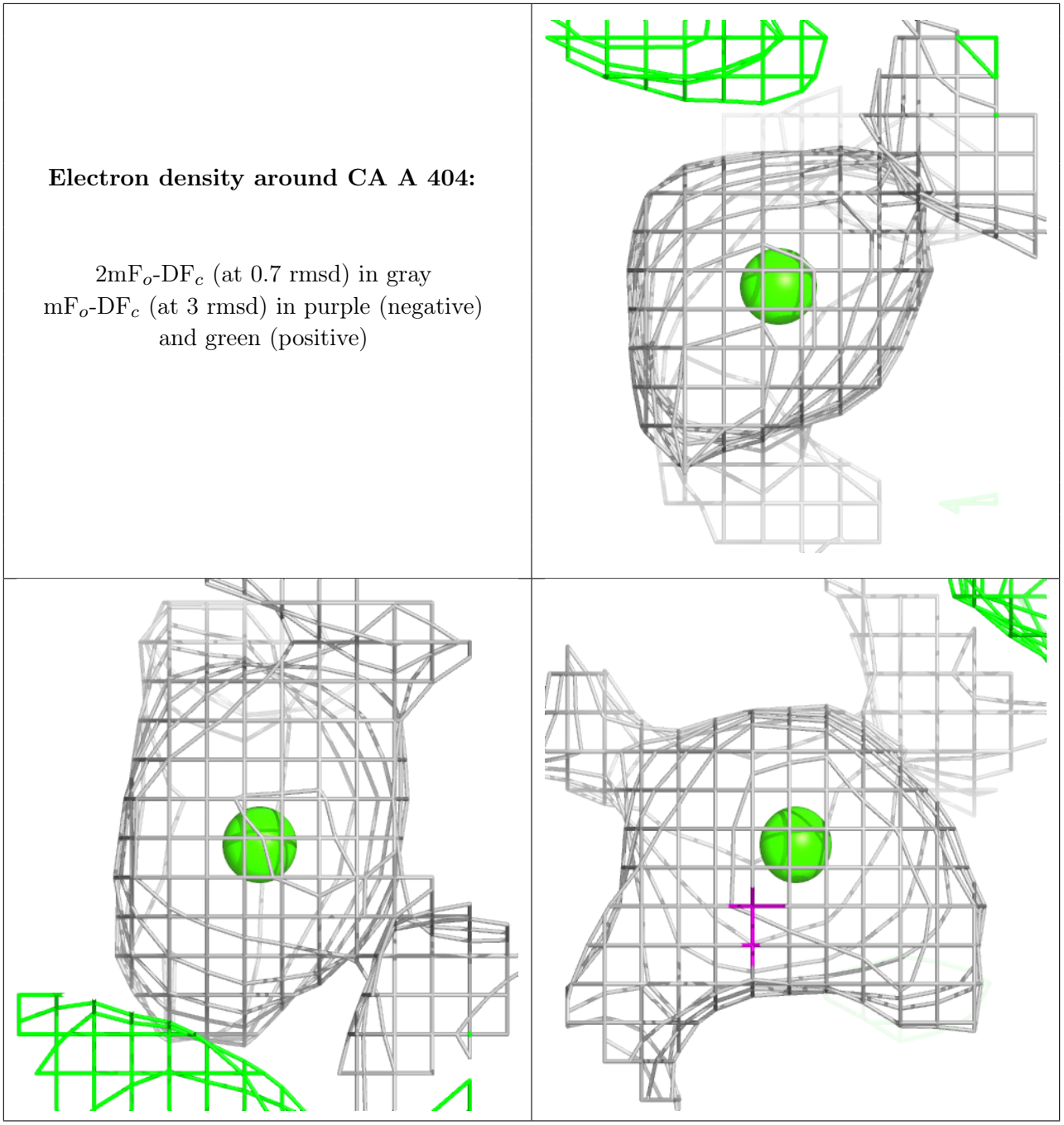
Electron density around CA C 504:

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



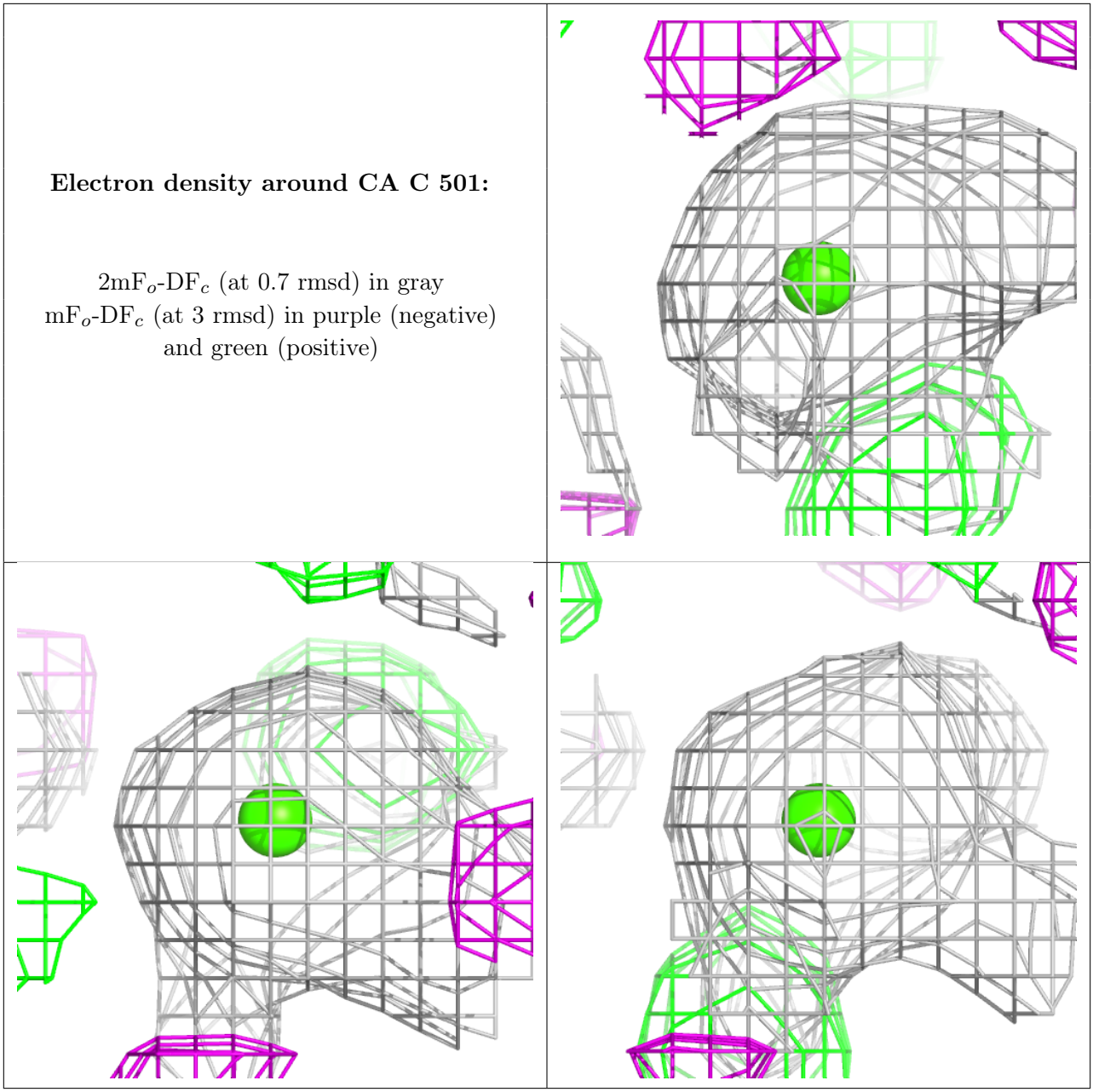
Electron density around CA A 404:

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



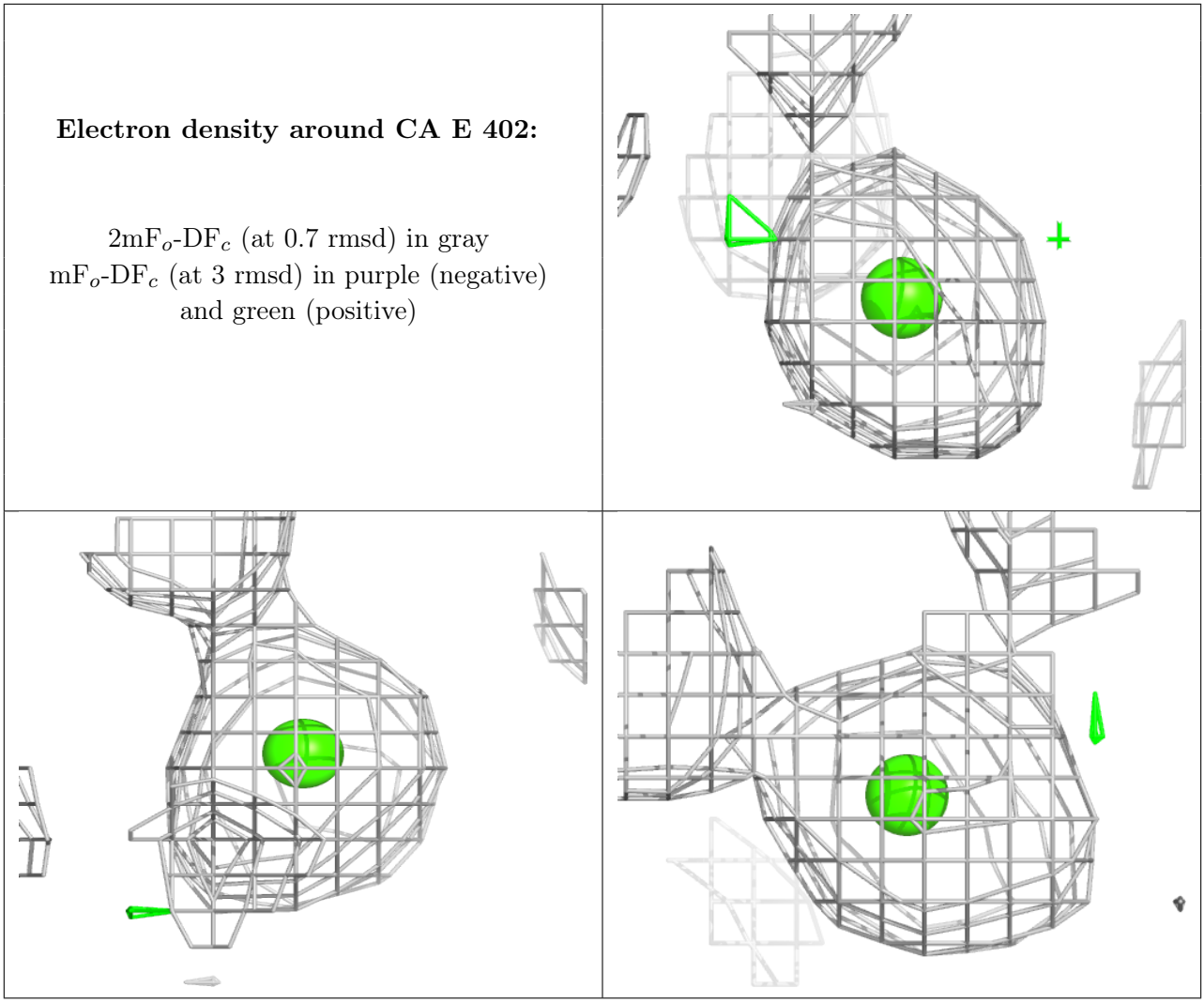
Electron density around CA C 501:

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



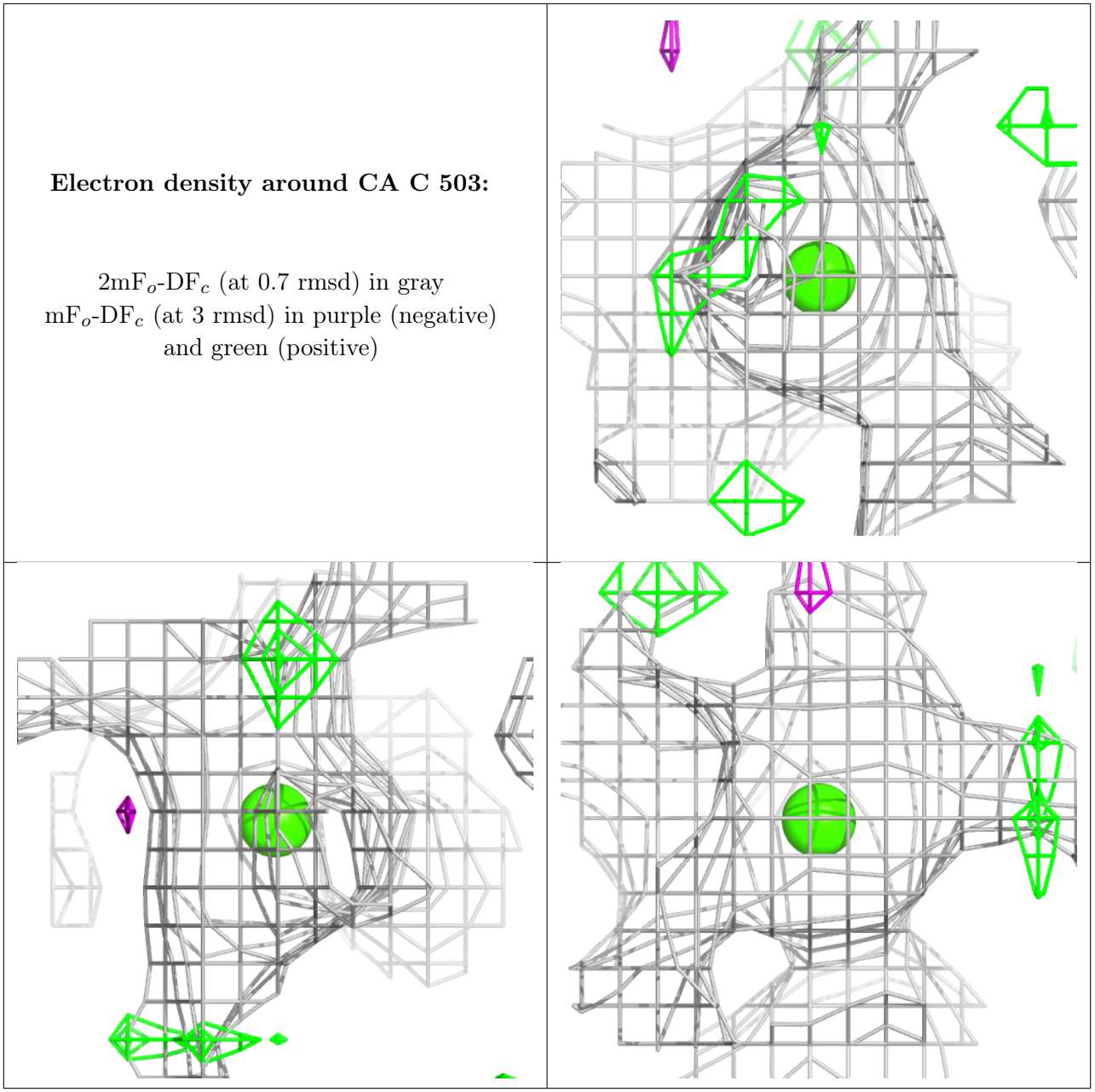
Electron density around CA E 402:

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



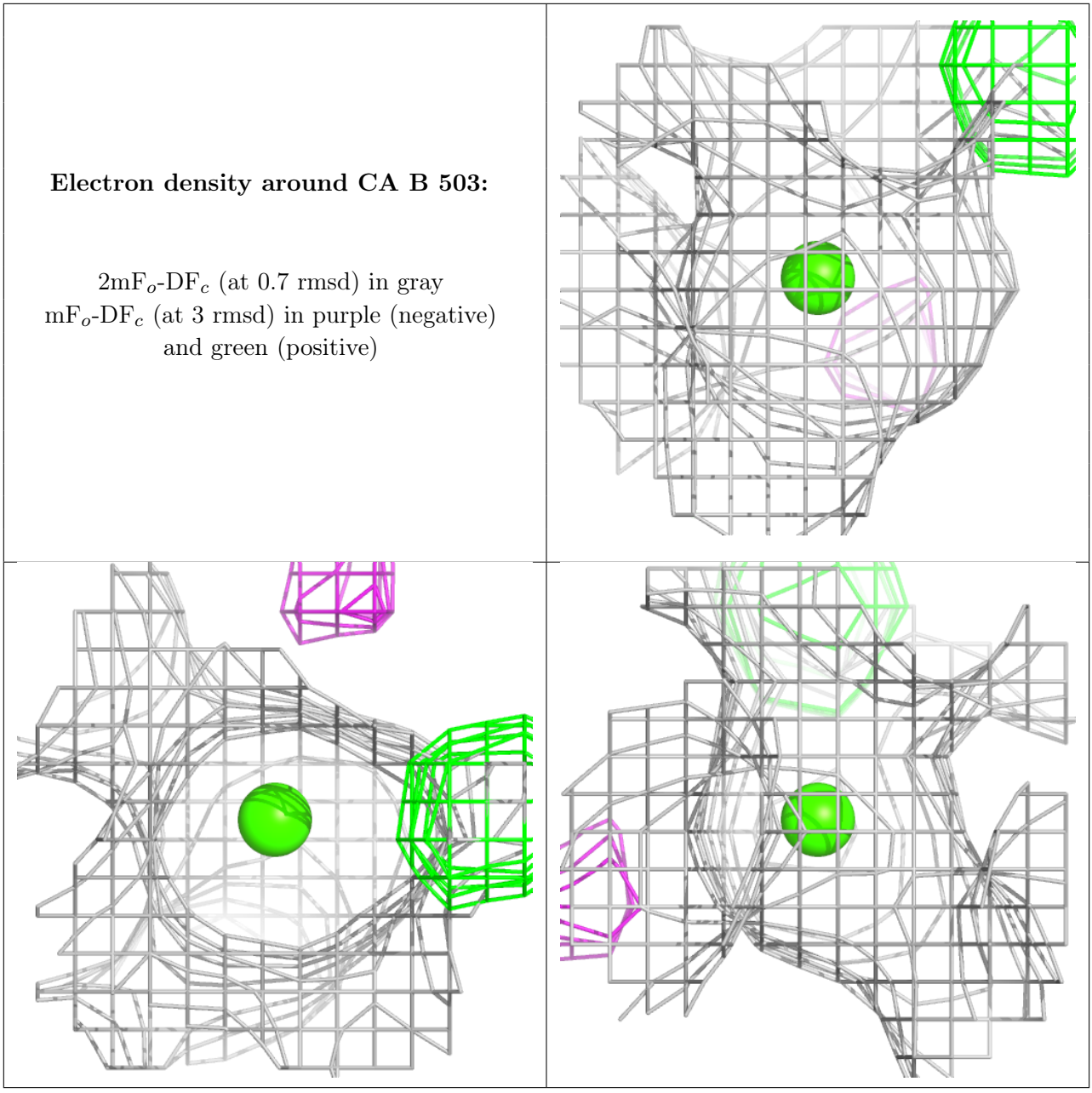
Electron density around CA C 503:

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



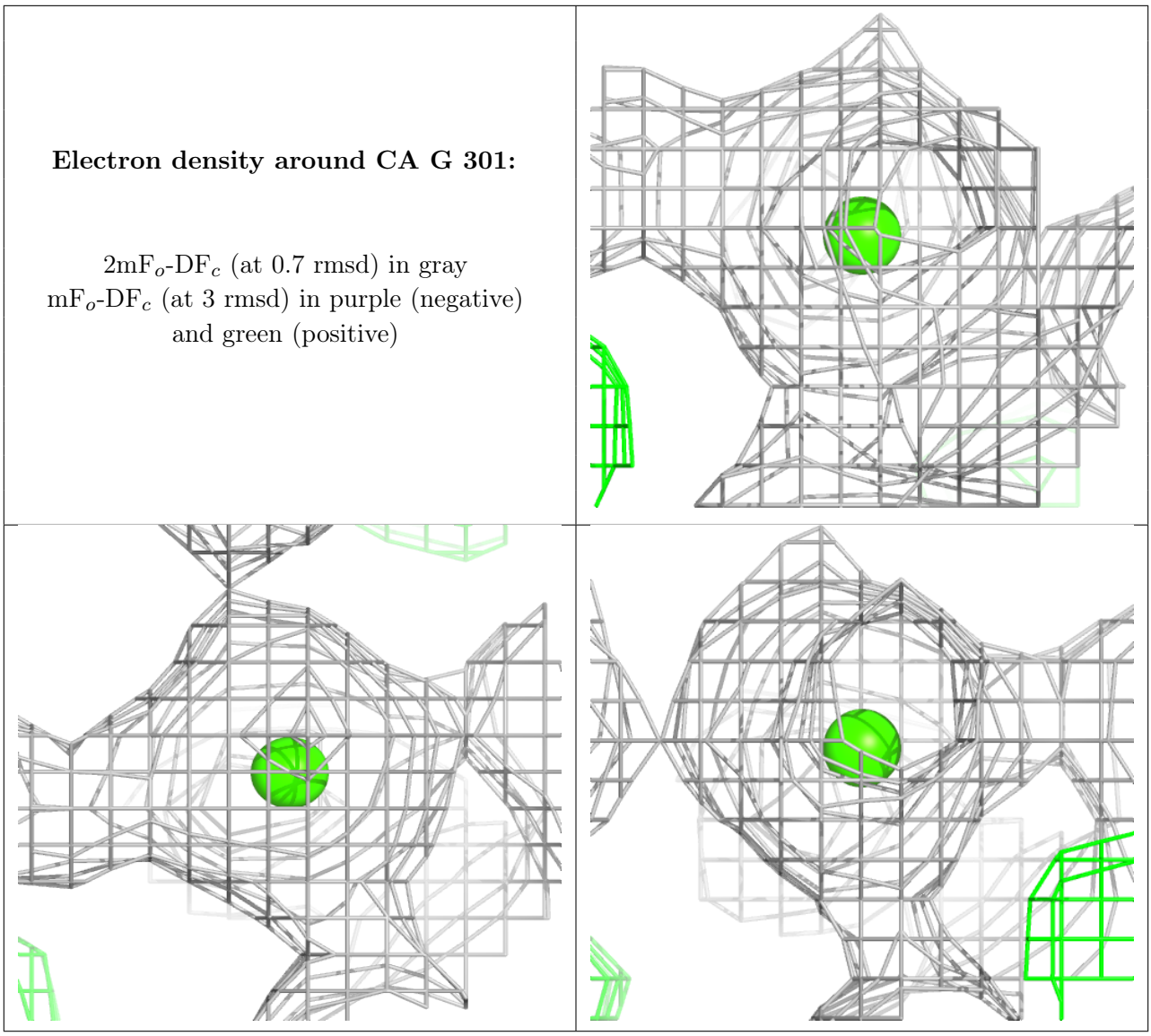
Electron density around CA B 503:

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



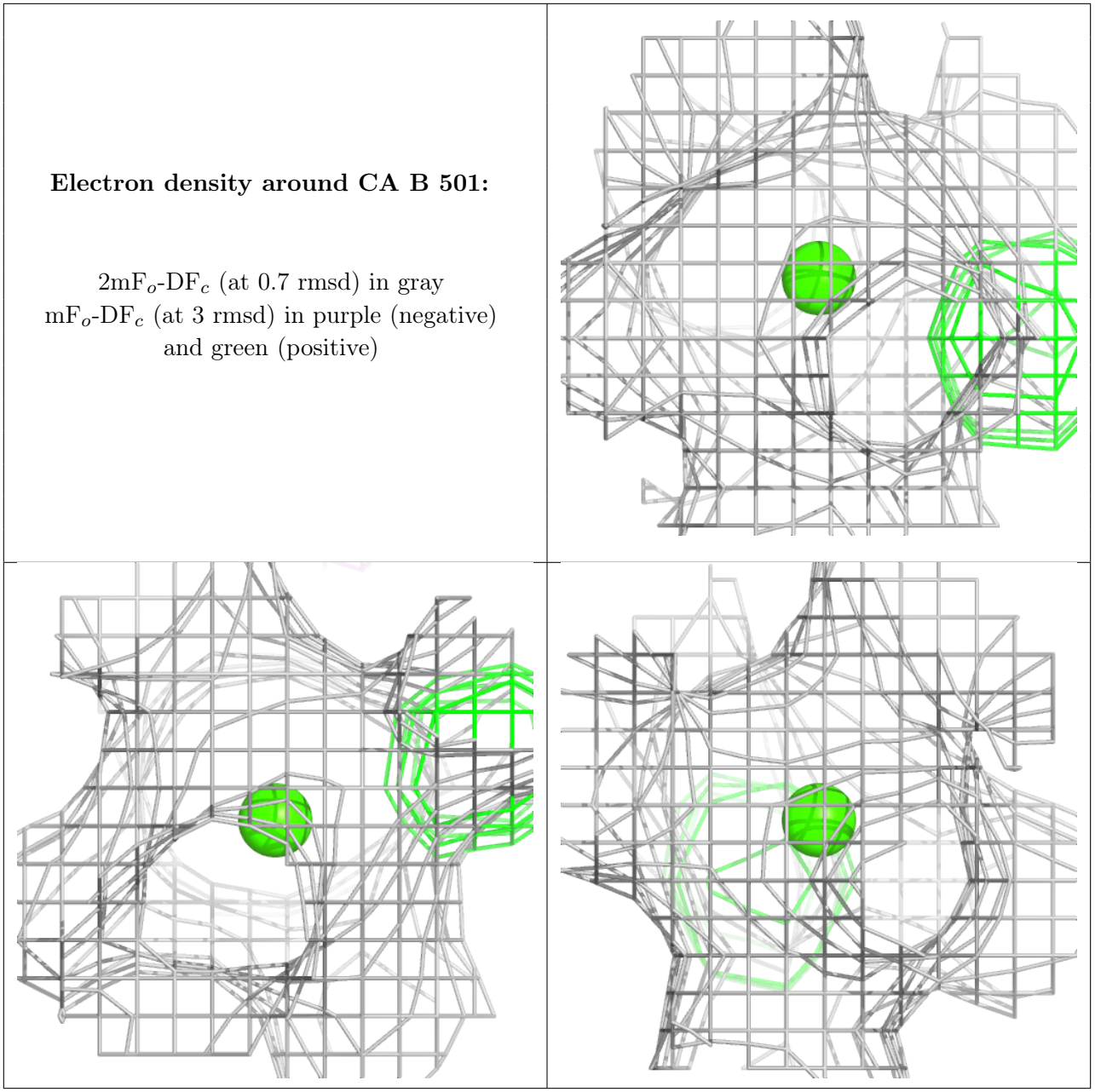
Electron density around CA G 301:

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



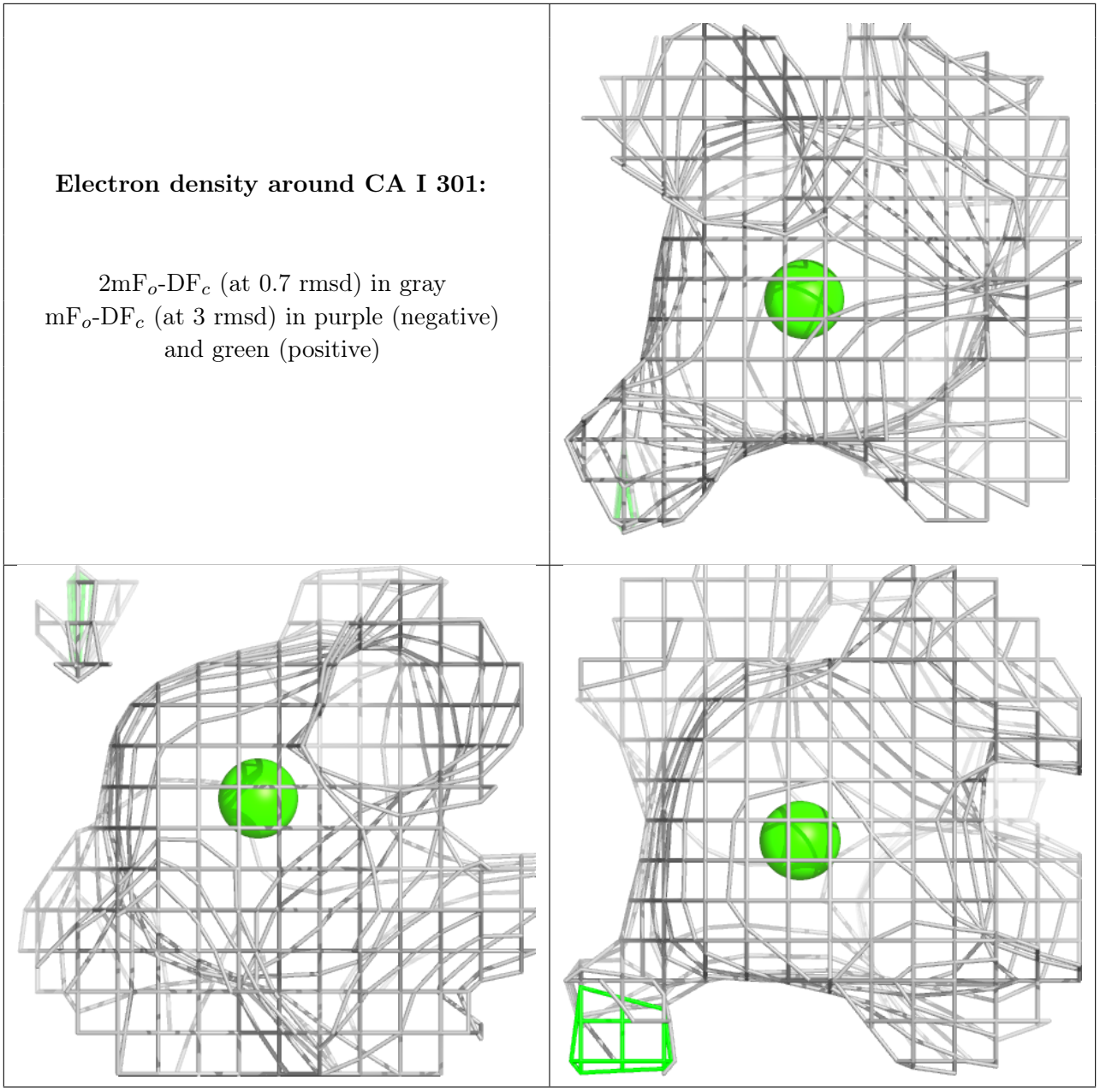
Electron density around CA B 501:

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



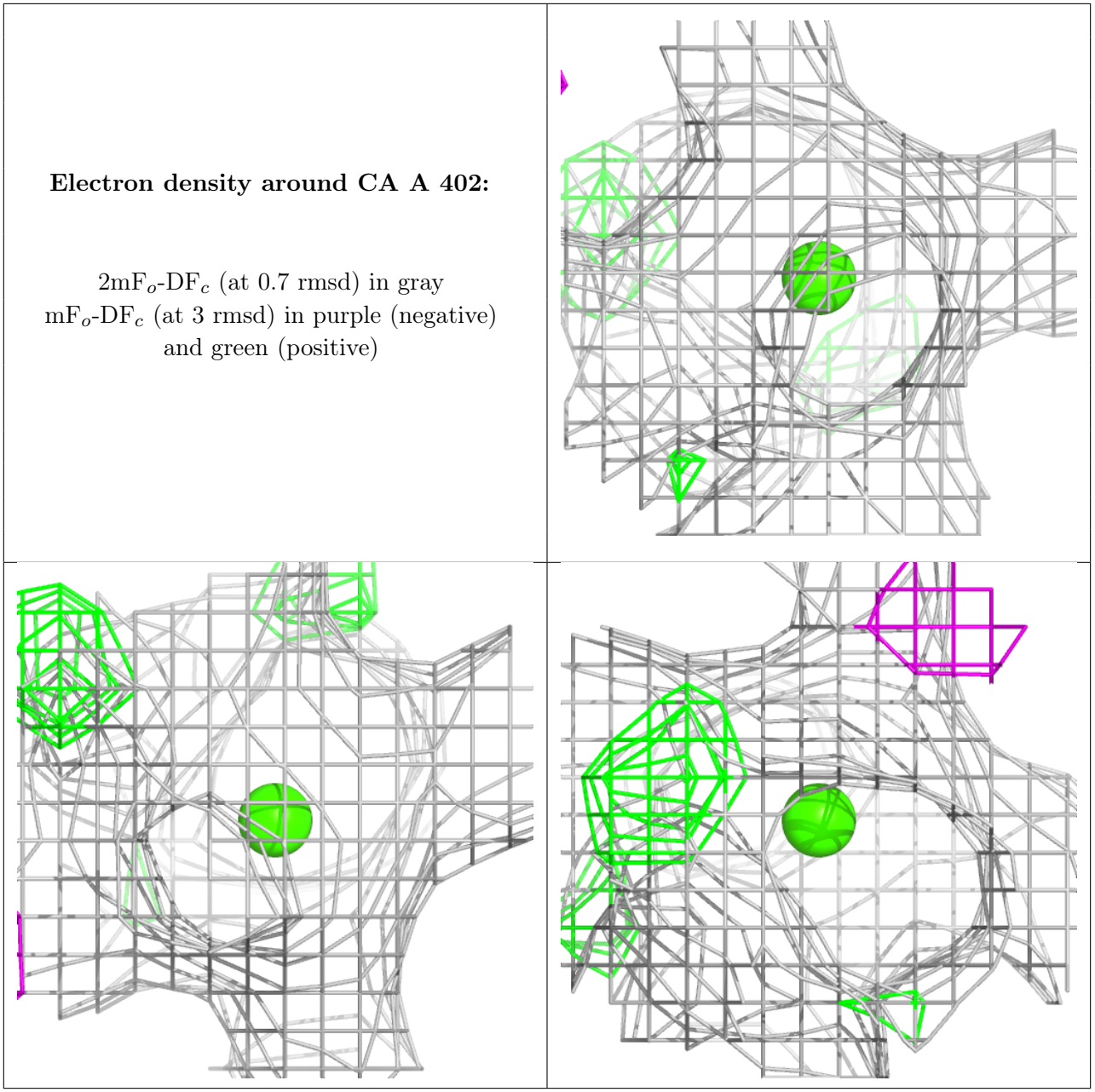
Electron density around CA I 301:

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



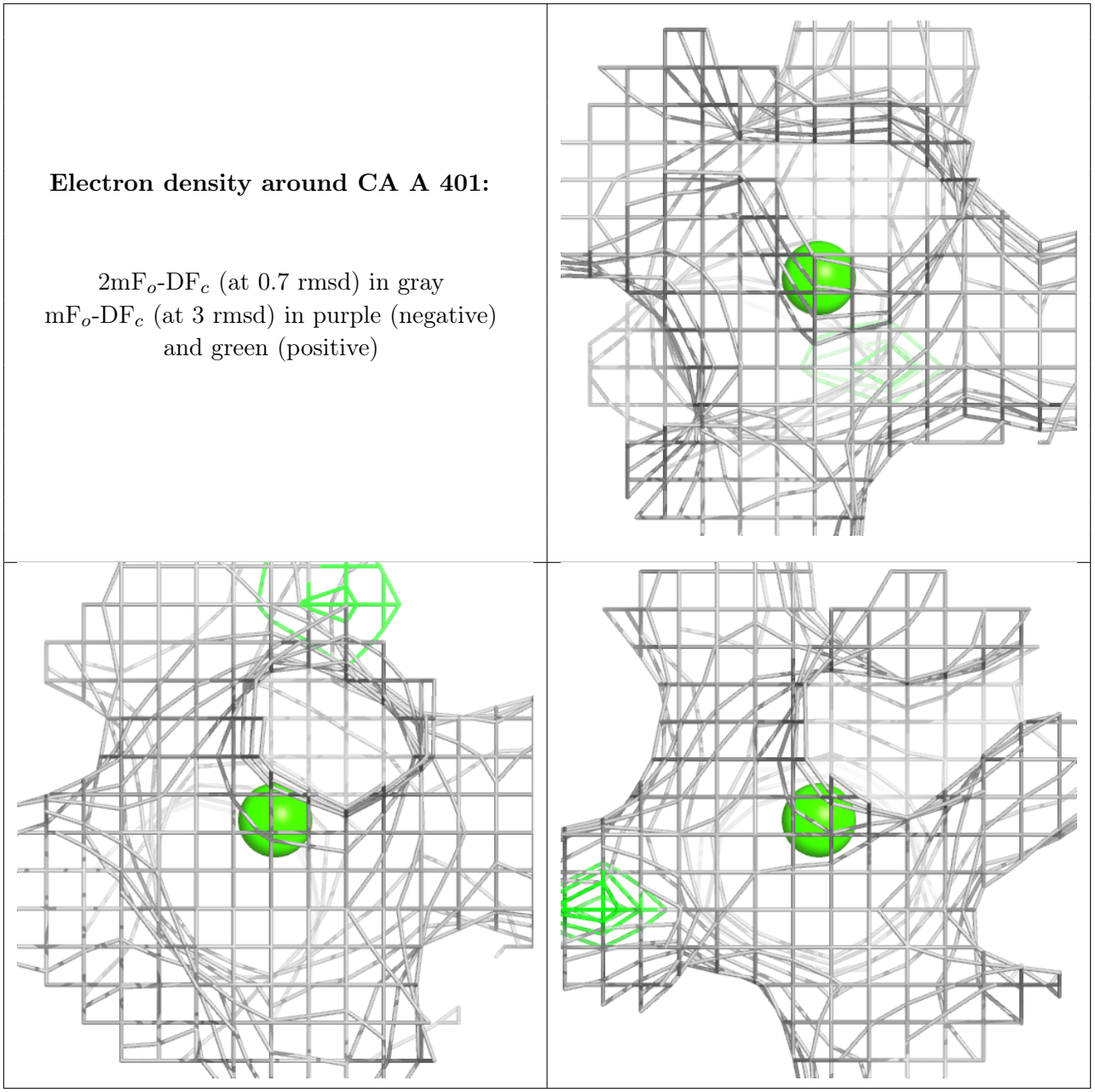
Electron density around CA A 402:

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



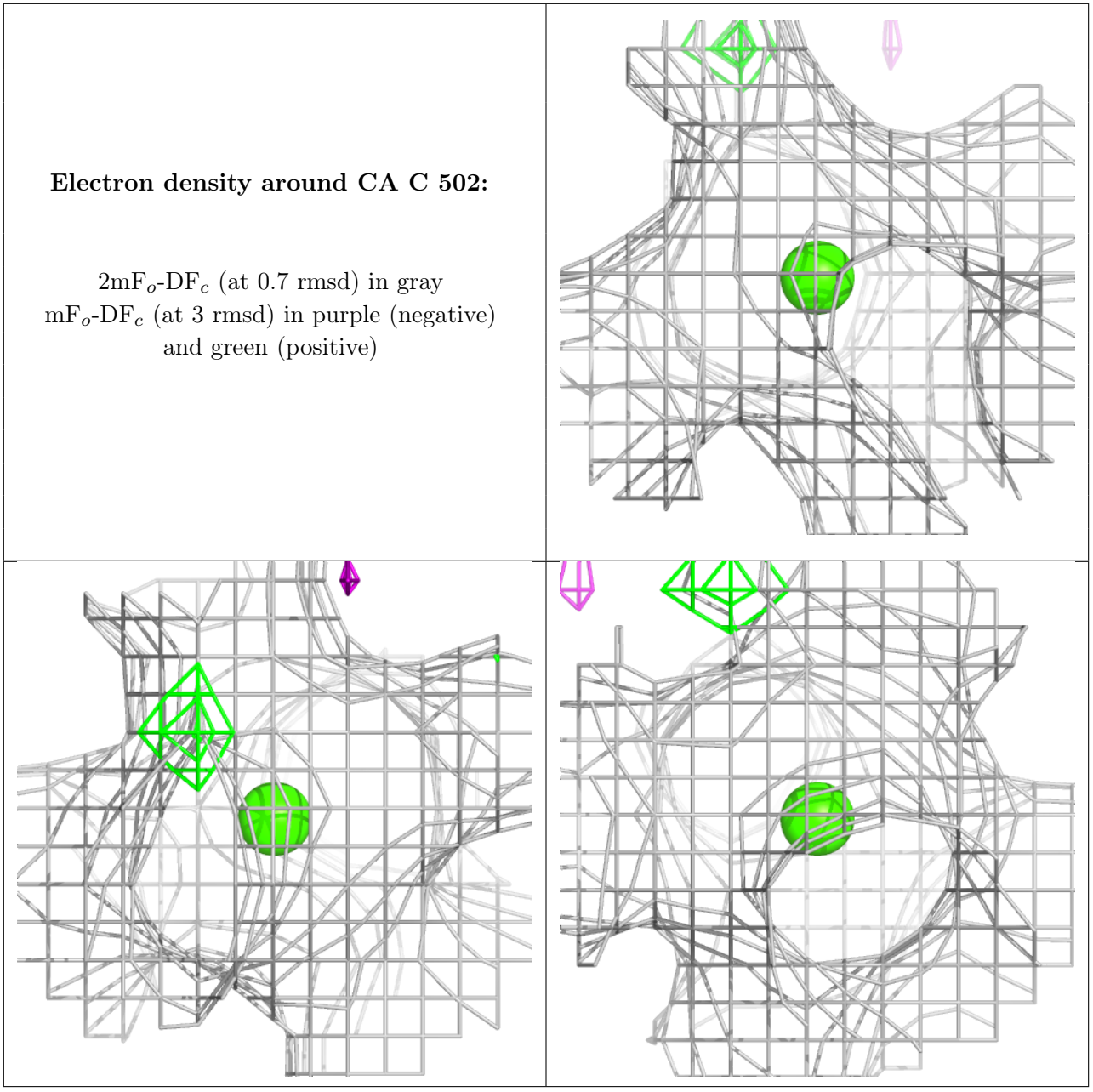
Electron density around CA A 401:

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



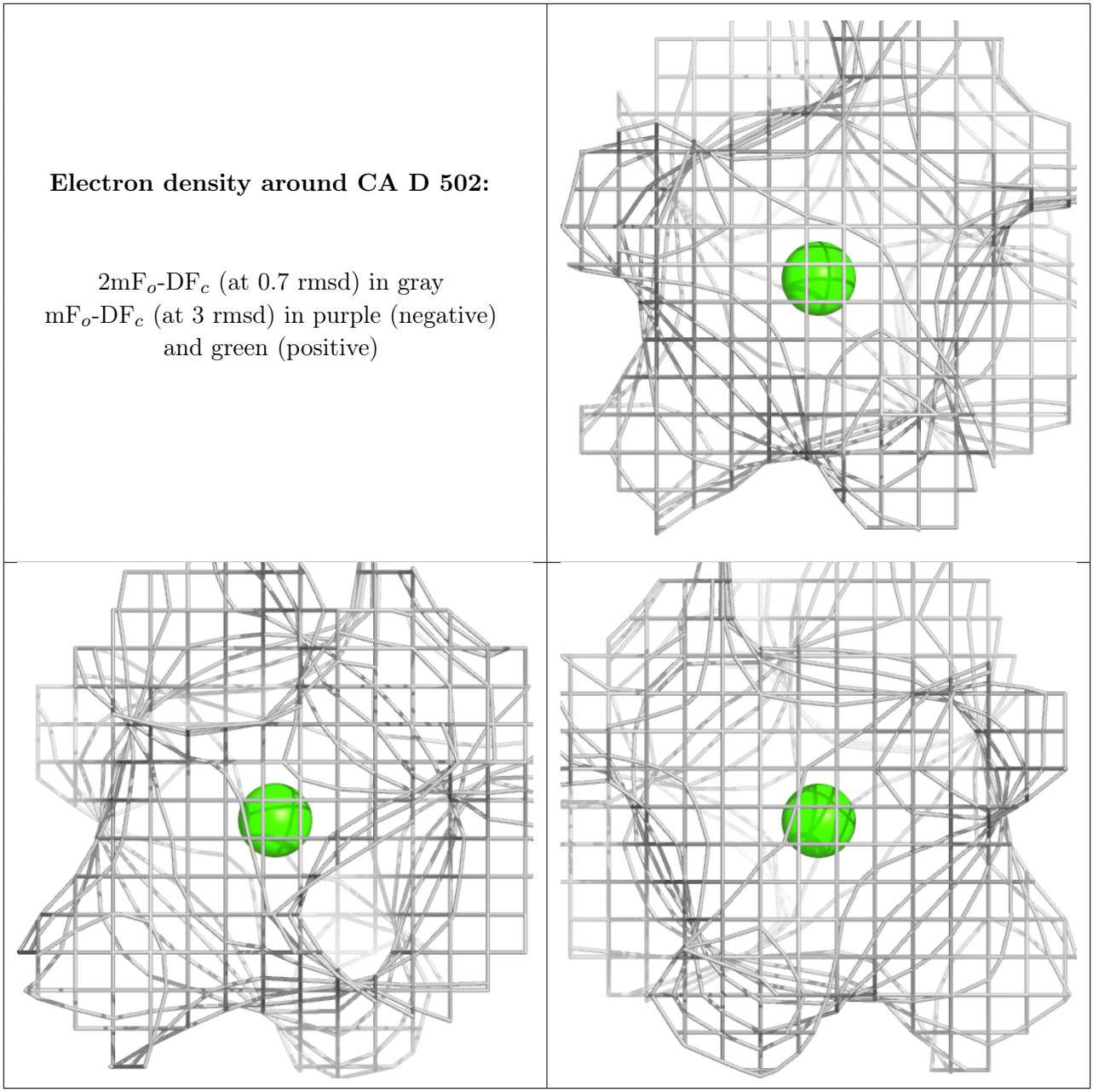
Electron density around CA C 502:

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



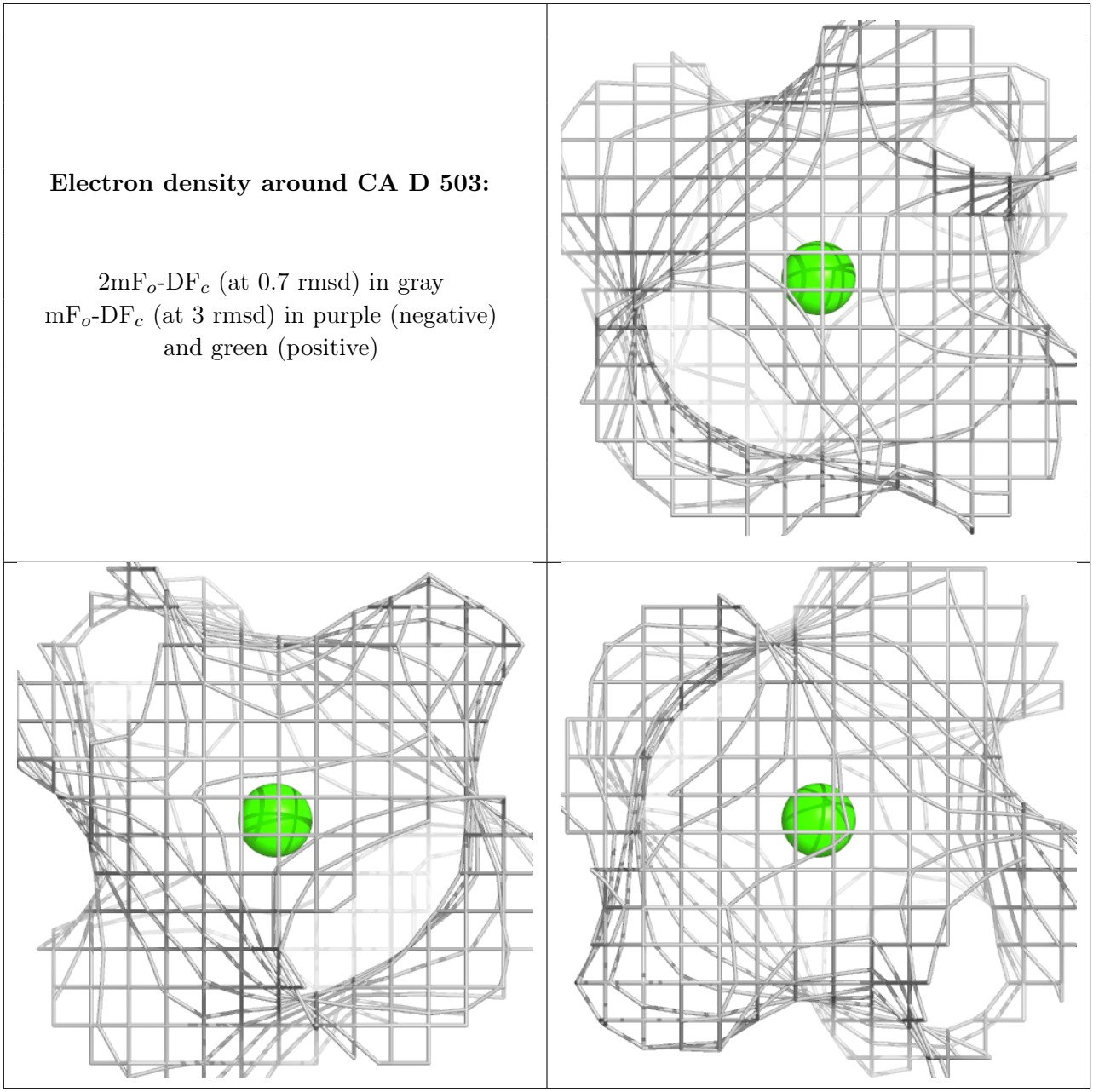
Electron density around CA D 502:

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



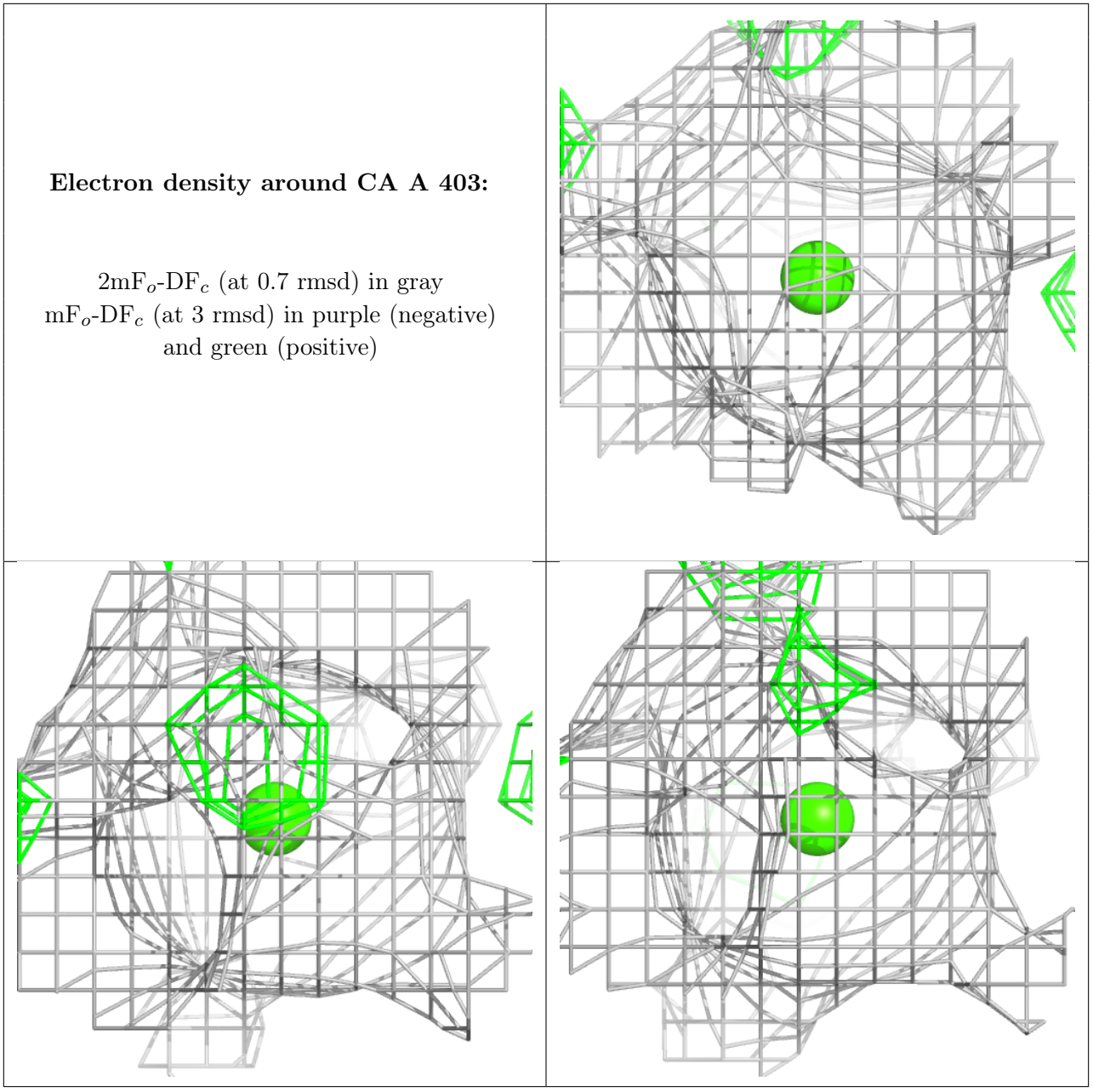
Electron density around CA D 503:

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



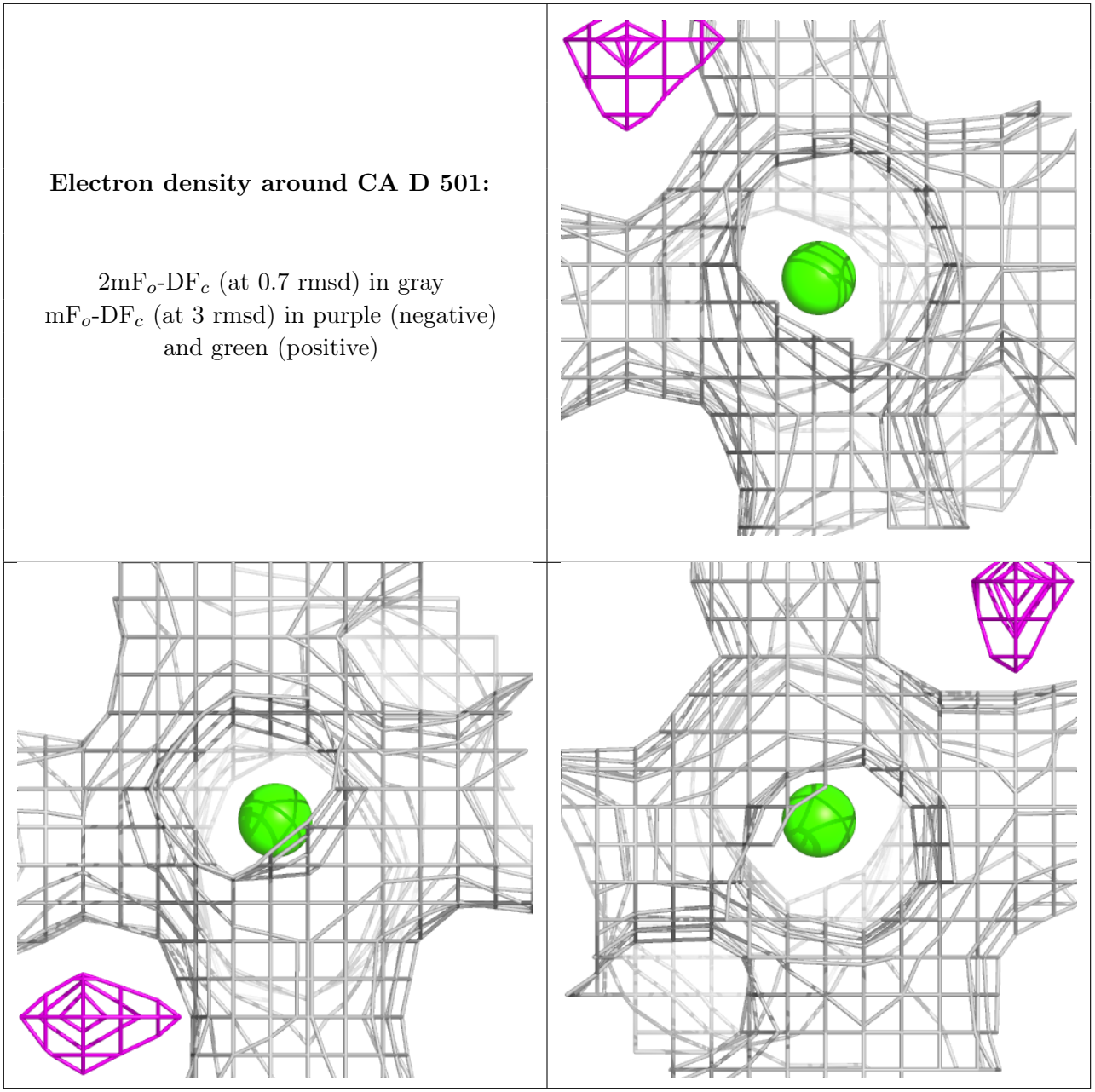
Electron density around CA A 403:

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



Electron density around CA D 501:

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



5.5 Other polymers

There are no such residues in this entry.