



wwPDB X-ray Structure Validation Summary Report ⓘ

Sep 9, 2026 – 02:25 am BST

PDB ID : 9SLB / pdb_00009slb
Title : Zuzalysin active bi-pentamer
Authors : Rodriguez-Banqueri, A.; Eckhard, U.; Potempa, J.; Gomis Ruth, F.X.
Deposited on : 2025-09-03
Resolution : 3.00 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 ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4-5-2 with Phenix2.0
Mogul : 1.8.4, CSD as541be (2020)
Xtriage (Phenix) : 2.0
EDS : 3.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4 : 9.0.015 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.50

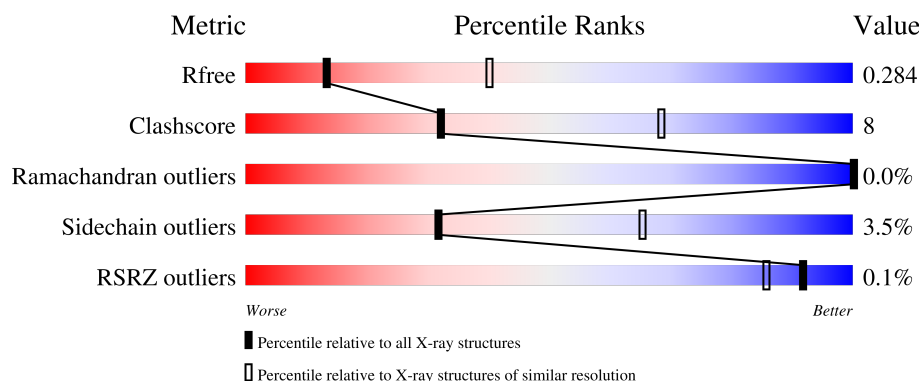
1 Overall quality at a glance

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}	180053	2672 (3.00-3.00)
Clashscore	190562	2977 (3.00-3.00)
Ramachandran outliers	187476	2877 (3.00-3.00)
Sidechain outliers	187428	2880 (3.00-3.00)
RSRZ outliers	180081	2671 (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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	828	
1	B	828	
1	C	828	
1	D	828	
1	E	828	

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Mol	Chain	Length	Quality of chain
1	F	828	73%18%6%
1	G	828	75%17%6%
1	H	828	69%21%6%
1	I	828	70%21%7%
1	J	828	71%21%6%

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 63321 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 Zinc-dependent metalloprotease.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	778	Total	C	N	O	S	0	0	0
			6281	4005	1080	1167	29			
1	B	772	Total	C	N	O	S	0	0	0
			6228	3969	1074	1156	29			
1	C	774	Total	C	N	O	S	0	0	0
			6246	3982	1076	1159	29			
1	D	773	Total	C	N	O	S	0	0	0
			6235	3973	1075	1158	29			
1	E	779	Total	C	N	O	S	0	0	0
			6290	4011	1082	1168	29			
1	F	776	Total	C	N	O	S	0	0	0
			6266	3997	1078	1162	29			
1	G	776	Total	C	N	O	S	0	0	0
			6266	3997	1078	1162	29			
1	H	775	Total	C	N	O	S	0	0	0
			6258	3991	1077	1161	29			
1	I	772	Total	C	N	O	S	0	0	0
			6224	3964	1074	1157	29			
1	J	775	Total	C	N	O	S	0	0	0
			6259	3993	1077	1160	29			

There are 190 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-13	MET	-	initiating methionine	UNP A0AAF0BD41
A	-12	HIS	-	expression tag	UNP A0AAF0BD41
A	-11	HIS	-	expression tag	UNP A0AAF0BD41
A	-10	HIS	-	expression tag	UNP A0AAF0BD41
A	-9	HIS	-	expression tag	UNP A0AAF0BD41
A	-8	HIS	-	expression tag	UNP A0AAF0BD41
A	-7	HIS	-	expression tag	UNP A0AAF0BD41
A	-6	GLU	-	expression tag	UNP A0AAF0BD41
A	-5	ASN	-	expression tag	UNP A0AAF0BD41

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-4	LEU	-	expression tag	UNP A0AAF0BD41
A	-3	TYR	-	expression tag	UNP A0AAF0BD41
A	-2	PHE	-	expression tag	UNP A0AAF0BD41
A	-1	GLN	-	expression tag	UNP A0AAF0BD41
A	197	MET	VAL	conflict	UNP A0AAF0BD41
A	298	PRO	LEU	conflict	UNP A0AAF0BD41
A	306	VAL	ILE	conflict	UNP A0AAF0BD41
A	751	HIS	TYR	conflict	UNP A0AAF0BD41
A	774	HIS	TYR	conflict	UNP A0AAF0BD41
A	805	ALA	SER	conflict	UNP A0AAF0BD41
B	-13	MET	-	initiating methionine	UNP A0AAF0BD41
B	-12	HIS	-	expression tag	UNP A0AAF0BD41
B	-11	HIS	-	expression tag	UNP A0AAF0BD41
B	-10	HIS	-	expression tag	UNP A0AAF0BD41
B	-9	HIS	-	expression tag	UNP A0AAF0BD41
B	-8	HIS	-	expression tag	UNP A0AAF0BD41
B	-7	HIS	-	expression tag	UNP A0AAF0BD41
B	-6	GLU	-	expression tag	UNP A0AAF0BD41
B	-5	ASN	-	expression tag	UNP A0AAF0BD41
B	-4	LEU	-	expression tag	UNP A0AAF0BD41
B	-3	TYR	-	expression tag	UNP A0AAF0BD41
B	-2	PHE	-	expression tag	UNP A0AAF0BD41
B	-1	GLN	-	expression tag	UNP A0AAF0BD41
B	197	MET	VAL	conflict	UNP A0AAF0BD41
B	298	PRO	LEU	conflict	UNP A0AAF0BD41
B	306	VAL	ILE	conflict	UNP A0AAF0BD41
B	751	HIS	TYR	conflict	UNP A0AAF0BD41
B	774	HIS	TYR	conflict	UNP A0AAF0BD41
B	805	ALA	SER	conflict	UNP A0AAF0BD41
C	-13	MET	-	initiating methionine	UNP A0AAF0BD41
C	-12	HIS	-	expression tag	UNP A0AAF0BD41
C	-11	HIS	-	expression tag	UNP A0AAF0BD41
C	-10	HIS	-	expression tag	UNP A0AAF0BD41
C	-9	HIS	-	expression tag	UNP A0AAF0BD41
C	-8	HIS	-	expression tag	UNP A0AAF0BD41
C	-7	HIS	-	expression tag	UNP A0AAF0BD41
C	-6	GLU	-	expression tag	UNP A0AAF0BD41
C	-5	ASN	-	expression tag	UNP A0AAF0BD41
C	-4	LEU	-	expression tag	UNP A0AAF0BD41
C	-3	TYR	-	expression tag	UNP A0AAF0BD41
C	-2	PHE	-	expression tag	UNP A0AAF0BD41
C	-1	GLN	-	expression tag	UNP A0AAF0BD41

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Chain	Residue	Modelled	Actual	Comment	Reference
C	197	MET	VAL	conflict	UNP A0AAF0BD41
C	298	PRO	LEU	conflict	UNP A0AAF0BD41
C	306	VAL	ILE	conflict	UNP A0AAF0BD41
C	751	HIS	TYR	conflict	UNP A0AAF0BD41
C	774	HIS	TYR	conflict	UNP A0AAF0BD41
C	805	ALA	SER	conflict	UNP A0AAF0BD41
D	-13	MET	-	initiating methionine	UNP A0AAF0BD41
D	-12	HIS	-	expression tag	UNP A0AAF0BD41
D	-11	HIS	-	expression tag	UNP A0AAF0BD41
D	-10	HIS	-	expression tag	UNP A0AAF0BD41
D	-9	HIS	-	expression tag	UNP A0AAF0BD41
D	-8	HIS	-	expression tag	UNP A0AAF0BD41
D	-7	HIS	-	expression tag	UNP A0AAF0BD41
D	-6	GLU	-	expression tag	UNP A0AAF0BD41
D	-5	ASN	-	expression tag	UNP A0AAF0BD41
D	-4	LEU	-	expression tag	UNP A0AAF0BD41
D	-3	TYR	-	expression tag	UNP A0AAF0BD41
D	-2	PHE	-	expression tag	UNP A0AAF0BD41
D	-1	GLN	-	expression tag	UNP A0AAF0BD41
D	197	MET	VAL	conflict	UNP A0AAF0BD41
D	298	PRO	LEU	conflict	UNP A0AAF0BD41
D	306	VAL	ILE	conflict	UNP A0AAF0BD41
D	751	HIS	TYR	conflict	UNP A0AAF0BD41
D	774	HIS	TYR	conflict	UNP A0AAF0BD41
D	805	ALA	SER	conflict	UNP A0AAF0BD41
E	-13	MET	-	initiating methionine	UNP A0AAF0BD41
E	-12	HIS	-	expression tag	UNP A0AAF0BD41
E	-11	HIS	-	expression tag	UNP A0AAF0BD41
E	-10	HIS	-	expression tag	UNP A0AAF0BD41
E	-9	HIS	-	expression tag	UNP A0AAF0BD41
E	-8	HIS	-	expression tag	UNP A0AAF0BD41
E	-7	HIS	-	expression tag	UNP A0AAF0BD41
E	-6	GLU	-	expression tag	UNP A0AAF0BD41
E	-5	ASN	-	expression tag	UNP A0AAF0BD41
E	-4	LEU	-	expression tag	UNP A0AAF0BD41
E	-3	TYR	-	expression tag	UNP A0AAF0BD41
E	-2	PHE	-	expression tag	UNP A0AAF0BD41
E	-1	GLN	-	expression tag	UNP A0AAF0BD41
E	197	MET	VAL	conflict	UNP A0AAF0BD41
E	298	PRO	LEU	conflict	UNP A0AAF0BD41
E	306	VAL	ILE	conflict	UNP A0AAF0BD41
E	751	HIS	TYR	conflict	UNP A0AAF0BD41

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Chain	Residue	Modelled	Actual	Comment	Reference
E	774	HIS	TYR	conflict	UNP A0AAF0BD41
E	805	ALA	SER	conflict	UNP A0AAF0BD41
F	-13	MET	-	initiating methionine	UNP A0AAF0BD41
F	-12	HIS	-	expression tag	UNP A0AAF0BD41
F	-11	HIS	-	expression tag	UNP A0AAF0BD41
F	-10	HIS	-	expression tag	UNP A0AAF0BD41
F	-9	HIS	-	expression tag	UNP A0AAF0BD41
F	-8	HIS	-	expression tag	UNP A0AAF0BD41
F	-7	HIS	-	expression tag	UNP A0AAF0BD41
F	-6	GLU	-	expression tag	UNP A0AAF0BD41
F	-5	ASN	-	expression tag	UNP A0AAF0BD41
F	-4	LEU	-	expression tag	UNP A0AAF0BD41
F	-3	TYR	-	expression tag	UNP A0AAF0BD41
F	-2	PHE	-	expression tag	UNP A0AAF0BD41
F	-1	GLN	-	expression tag	UNP A0AAF0BD41
F	197	MET	VAL	conflict	UNP A0AAF0BD41
F	298	PRO	LEU	conflict	UNP A0AAF0BD41
F	306	VAL	ILE	conflict	UNP A0AAF0BD41
F	751	HIS	TYR	conflict	UNP A0AAF0BD41
F	774	HIS	TYR	conflict	UNP A0AAF0BD41
F	805	ALA	SER	conflict	UNP A0AAF0BD41
G	-13	MET	-	initiating methionine	UNP A0AAF0BD41
G	-12	HIS	-	expression tag	UNP A0AAF0BD41
G	-11	HIS	-	expression tag	UNP A0AAF0BD41
G	-10	HIS	-	expression tag	UNP A0AAF0BD41
G	-9	HIS	-	expression tag	UNP A0AAF0BD41
G	-8	HIS	-	expression tag	UNP A0AAF0BD41
G	-7	HIS	-	expression tag	UNP A0AAF0BD41
G	-6	GLU	-	expression tag	UNP A0AAF0BD41
G	-5	ASN	-	expression tag	UNP A0AAF0BD41
G	-4	LEU	-	expression tag	UNP A0AAF0BD41
G	-3	TYR	-	expression tag	UNP A0AAF0BD41
G	-2	PHE	-	expression tag	UNP A0AAF0BD41
G	-1	GLN	-	expression tag	UNP A0AAF0BD41
G	197	MET	VAL	conflict	UNP A0AAF0BD41
G	298	PRO	LEU	conflict	UNP A0AAF0BD41
G	306	VAL	ILE	conflict	UNP A0AAF0BD41
G	751	HIS	TYR	conflict	UNP A0AAF0BD41
G	774	HIS	TYR	conflict	UNP A0AAF0BD41
G	805	ALA	SER	conflict	UNP A0AAF0BD41
H	-13	MET	-	initiating methionine	UNP A0AAF0BD41
H	-12	HIS	-	expression tag	UNP A0AAF0BD41

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Chain	Residue	Modelled	Actual	Comment	Reference
H	-11	HIS	-	expression tag	UNP A0AAF0BD41
H	-10	HIS	-	expression tag	UNP A0AAF0BD41
H	-9	HIS	-	expression tag	UNP A0AAF0BD41
H	-8	HIS	-	expression tag	UNP A0AAF0BD41
H	-7	HIS	-	expression tag	UNP A0AAF0BD41
H	-6	GLU	-	expression tag	UNP A0AAF0BD41
H	-5	ASN	-	expression tag	UNP A0AAF0BD41
H	-4	LEU	-	expression tag	UNP A0AAF0BD41
H	-3	TYR	-	expression tag	UNP A0AAF0BD41
H	-2	PHE	-	expression tag	UNP A0AAF0BD41
H	-1	GLN	-	expression tag	UNP A0AAF0BD41
H	197	MET	VAL	conflict	UNP A0AAF0BD41
H	298	PRO	LEU	conflict	UNP A0AAF0BD41
H	306	VAL	ILE	conflict	UNP A0AAF0BD41
H	751	HIS	TYR	conflict	UNP A0AAF0BD41
H	774	HIS	TYR	conflict	UNP A0AAF0BD41
H	805	ALA	SER	conflict	UNP A0AAF0BD41
I	-13	MET	-	initiating methionine	UNP A0AAF0BD41
I	-12	HIS	-	expression tag	UNP A0AAF0BD41
I	-11	HIS	-	expression tag	UNP A0AAF0BD41
I	-10	HIS	-	expression tag	UNP A0AAF0BD41
I	-9	HIS	-	expression tag	UNP A0AAF0BD41
I	-8	HIS	-	expression tag	UNP A0AAF0BD41
I	-7	HIS	-	expression tag	UNP A0AAF0BD41
I	-6	GLU	-	expression tag	UNP A0AAF0BD41
I	-5	ASN	-	expression tag	UNP A0AAF0BD41
I	-4	LEU	-	expression tag	UNP A0AAF0BD41
I	-3	TYR	-	expression tag	UNP A0AAF0BD41
I	-2	PHE	-	expression tag	UNP A0AAF0BD41
I	-1	GLN	-	expression tag	UNP A0AAF0BD41
I	197	MET	VAL	conflict	UNP A0AAF0BD41
I	298	PRO	LEU	conflict	UNP A0AAF0BD41
I	306	VAL	ILE	conflict	UNP A0AAF0BD41
I	751	HIS	TYR	conflict	UNP A0AAF0BD41
I	774	HIS	TYR	conflict	UNP A0AAF0BD41
I	805	ALA	SER	conflict	UNP A0AAF0BD41
J	-13	MET	-	initiating methionine	UNP A0AAF0BD41
J	-12	HIS	-	expression tag	UNP A0AAF0BD41
J	-11	HIS	-	expression tag	UNP A0AAF0BD41
J	-10	HIS	-	expression tag	UNP A0AAF0BD41
J	-9	HIS	-	expression tag	UNP A0AAF0BD41
J	-8	HIS	-	expression tag	UNP A0AAF0BD41

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Chain	Residue	Modelled	Actual	Comment	Reference
J	-7	HIS	-	expression tag	UNP A0AAF0BD41
J	-6	GLU	-	expression tag	UNP A0AAF0BD41
J	-5	ASN	-	expression tag	UNP A0AAF0BD41
J	-4	LEU	-	expression tag	UNP A0AAF0BD41
J	-3	TYR	-	expression tag	UNP A0AAF0BD41
J	-2	PHE	-	expression tag	UNP A0AAF0BD41
J	-1	GLN	-	expression tag	UNP A0AAF0BD41
J	197	MET	VAL	conflict	UNP A0AAF0BD41
J	298	PRO	LEU	conflict	UNP A0AAF0BD41
J	306	VAL	ILE	conflict	UNP A0AAF0BD41
J	751	HIS	TYR	conflict	UNP A0AAF0BD41
J	774	HIS	TYR	conflict	UNP A0AAF0BD41
J	805	ALA	SER	conflict	UNP A0AAF0BD41

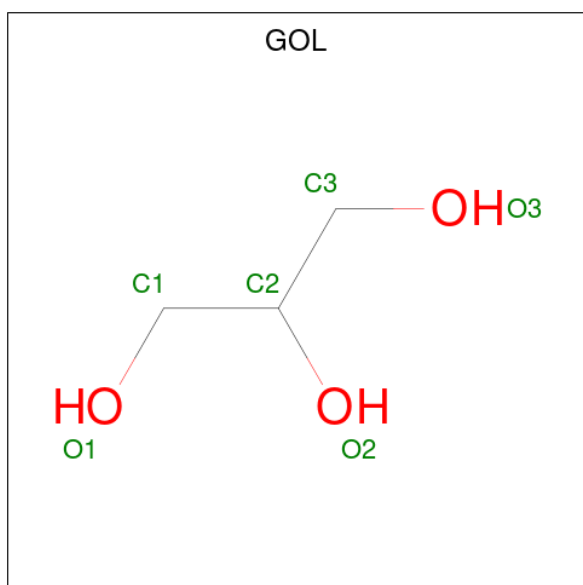
- Molecule 2 is CALCIUM ION (CCD ID: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Ca 1 1	0	0
2	B	1	Total Ca 1 1	0	0
2	C	1	Total Ca 1 1	0	0
2	D	1	Total Ca 1 1	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
2	J	1	Total Ca 1 1	0	0

- Molecule 3 is ZINC ION (CCD ID: ZN) (formula: Zn) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total Zn 1 1	0	0
3	B	1	Total Zn 1 1	0	0
3	C	1	Total Zn 1 1	0	0
3	D	1	Total Zn 1 1	0	0
3	E	1	Total Zn 1 1	0	0
3	F	1	Total Zn 1 1	0	0
3	G	1	Total Zn 1 1	0	0
3	H	1	Total Zn 1 1	0	0
3	I	1	Total Zn 1 1	0	0
3	J	1	Total Zn 1 1	0	0

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



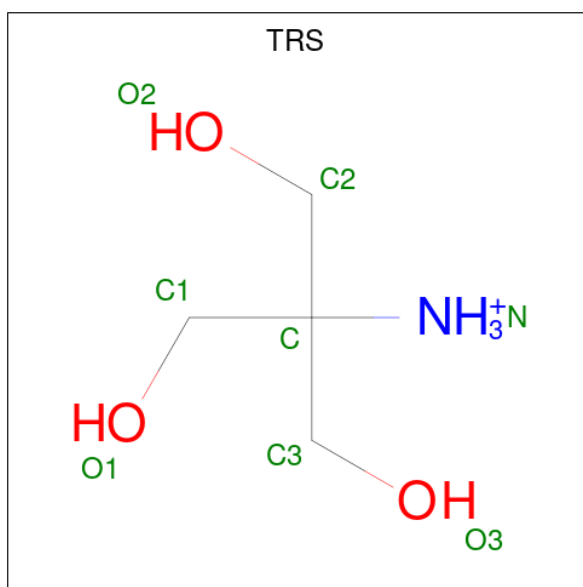
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O 6 3 3	0	0
4	A	1	Total C O 6 3 3	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	A	1	Total	C	O	0	0
			6	3	3		
4	B	1	Total	C	O	0	0
			6	3	3		
4	C	1	Total	C	O	0	0
			6	3	3		
4	C	1	Total	C	O	0	0
			6	3	3		
4	C	1	Total	C	O	0	0
			6	3	3		
4	D	1	Total	C	O	0	0
			6	3	3		
4	D	1	Total	C	O	0	0
			6	3	3		
4	E	1	Total	C	O	0	0
			6	3	3		
4	E	1	Total	C	O	0	0
			6	3	3		
4	E	1	Total	C	O	0	0
			6	3	3		
4	E	1	Total	C	O	0	0
			6	3	3		
4	F	1	Total	C	O	0	0
			6	3	3		
4	F	1	Total	C	O	0	0
			6	3	3		
4	F	1	Total	C	O	0	0
			6	3	3		
4	G	1	Total	C	O	0	0
			6	3	3		
4	G	1	Total	C	O	0	0
			6	3	3		
4	H	1	Total	C	O	0	0
			6	3	3		
4	I	1	Total	C	O	0	0
			6	3	3		
4	J	1	Total	C	O	0	0
			6	3	3		

- Molecule 5 is 2-AMINO-2-HYDROXYMETHYL-PROPANE-1,3-DIOL (CCD ID: TRS) (formula: $C_4H_{12}NO_3$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
5	B	1	Total	C	N	O	0	0
			8	4	1	3		

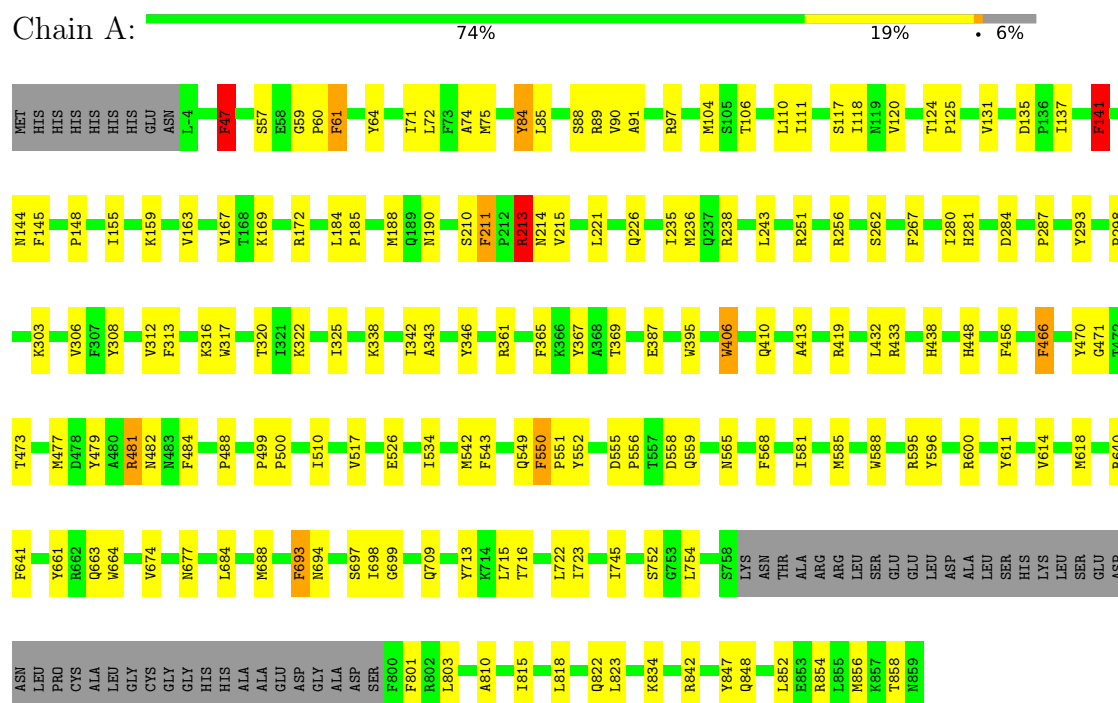
- Molecule 6 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	92	Total	O	0	0
			92	92		
6	B	99	Total	O	0	0
			99	99		
6	C	57	Total	O	0	0
			57	57		
6	D	69	Total	O	0	0
			69	69		
6	E	92	Total	O	0	0
			92	92		
6	F	59	Total	O	0	0
			59	59		
6	G	38	Total	O	0	0
			38	38		
6	H	23	Total	O	0	0
			23	23		
6	I	36	Total	O	0	0
			36	36		
6	J	49	Total	O	0	0
			49	49		

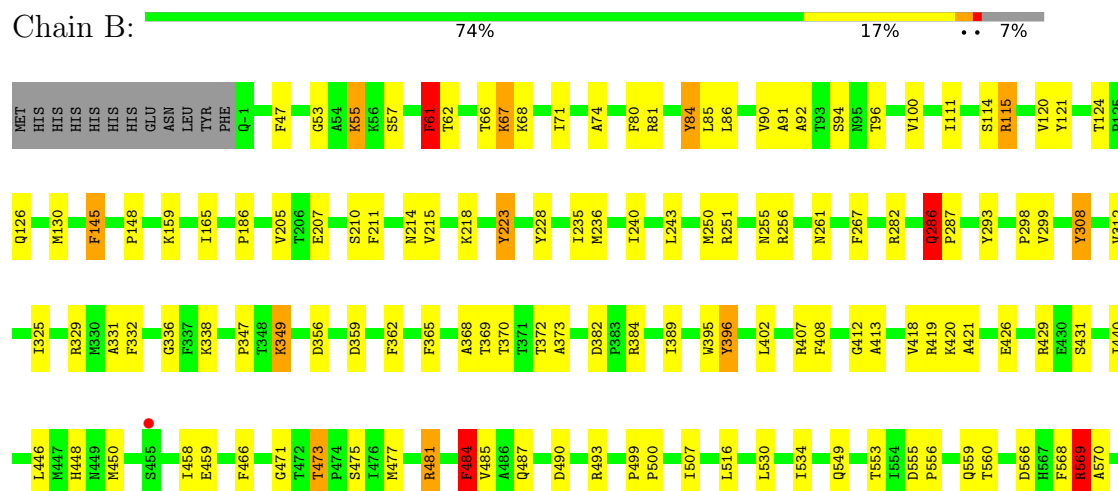
3 Residue-property plots

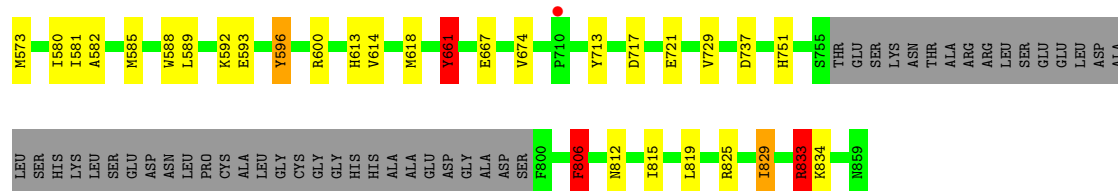
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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: Zinc-dependent metalloprotease



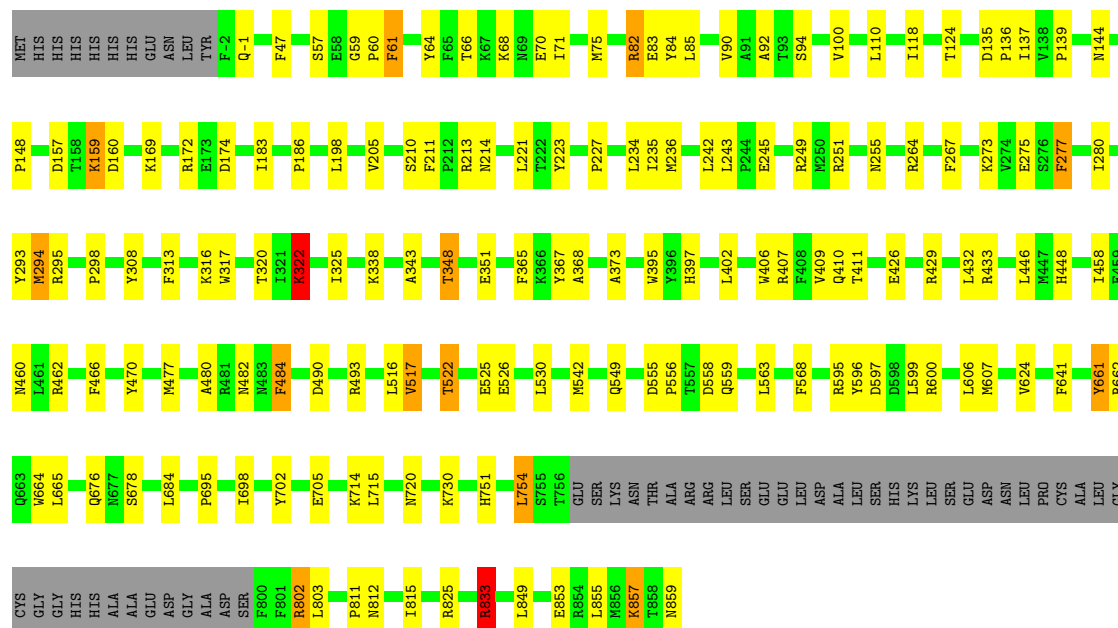
• Molecule 1: Zinc-dependent metalloprotease





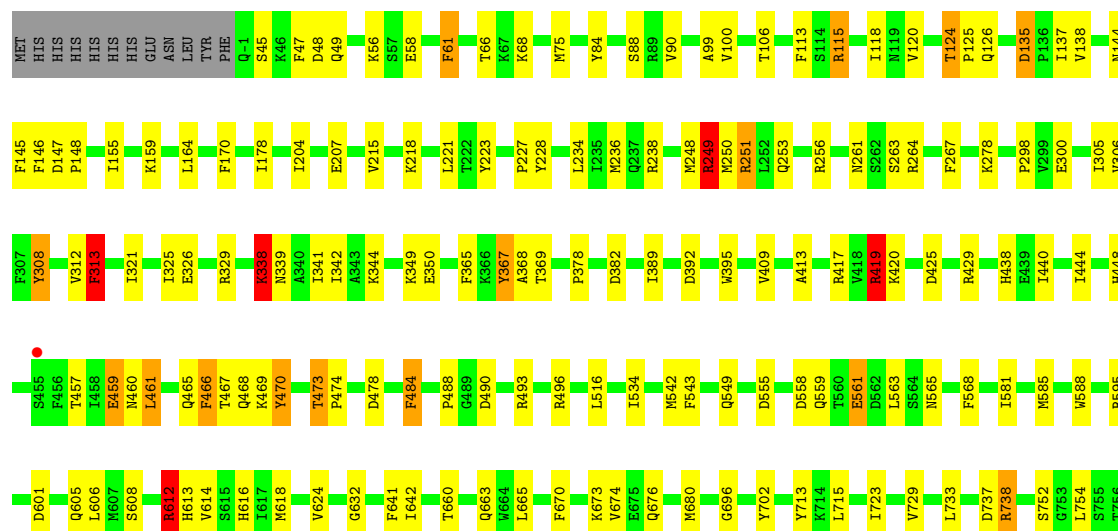
• Molecule 1: Zinc-dependent metalloprotease

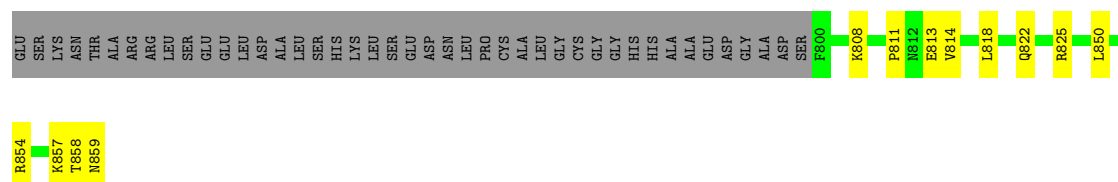
Chain C: 75% 17% 7%



• Molecule 1: Zinc-dependent metalloprotease

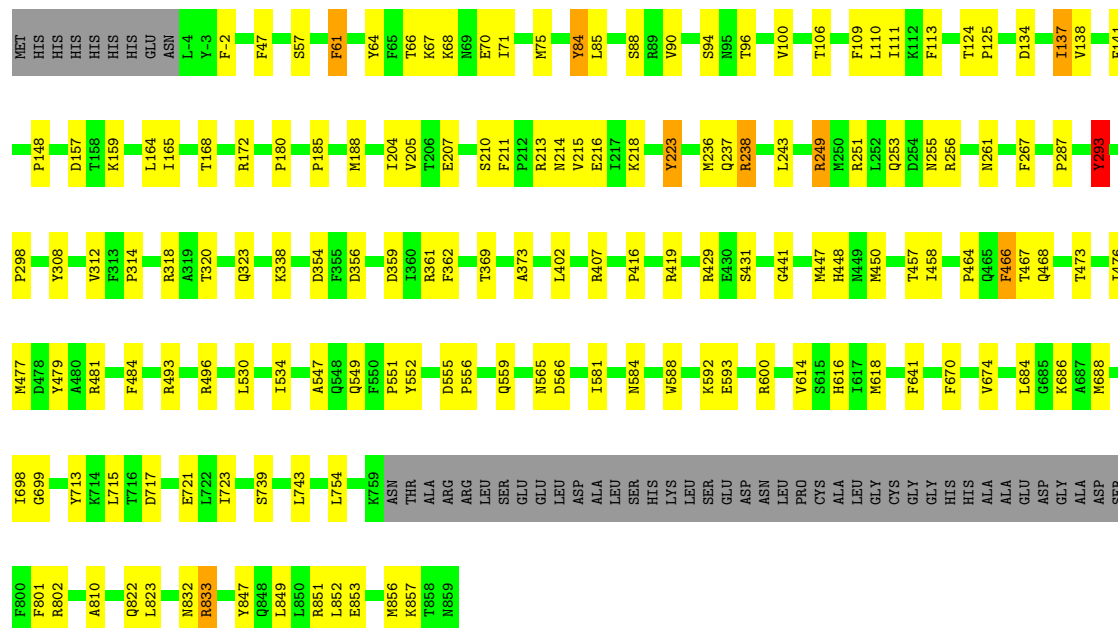
Chain D: 72% 19% 7%





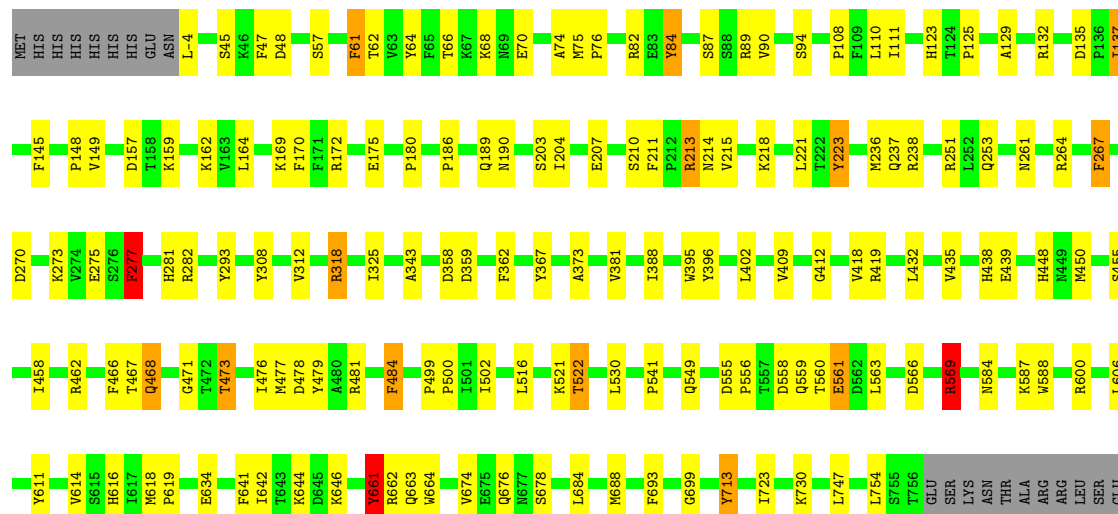
- Molecule 1: Zinc-dependent metalloprotease

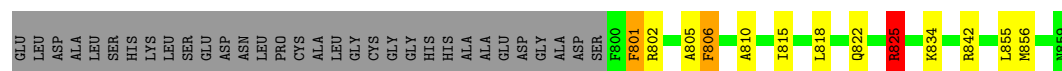
Chain E: 76% 17% 6%



- Molecule 1: Zinc-dependent metalloprotease

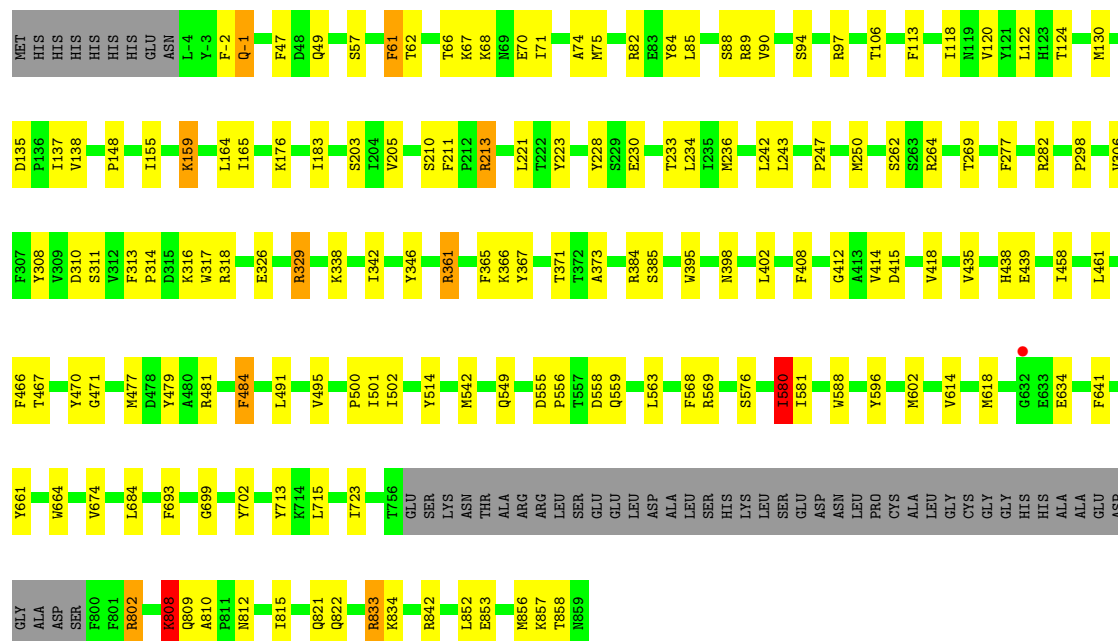
Chain F: 73% 18% 6%





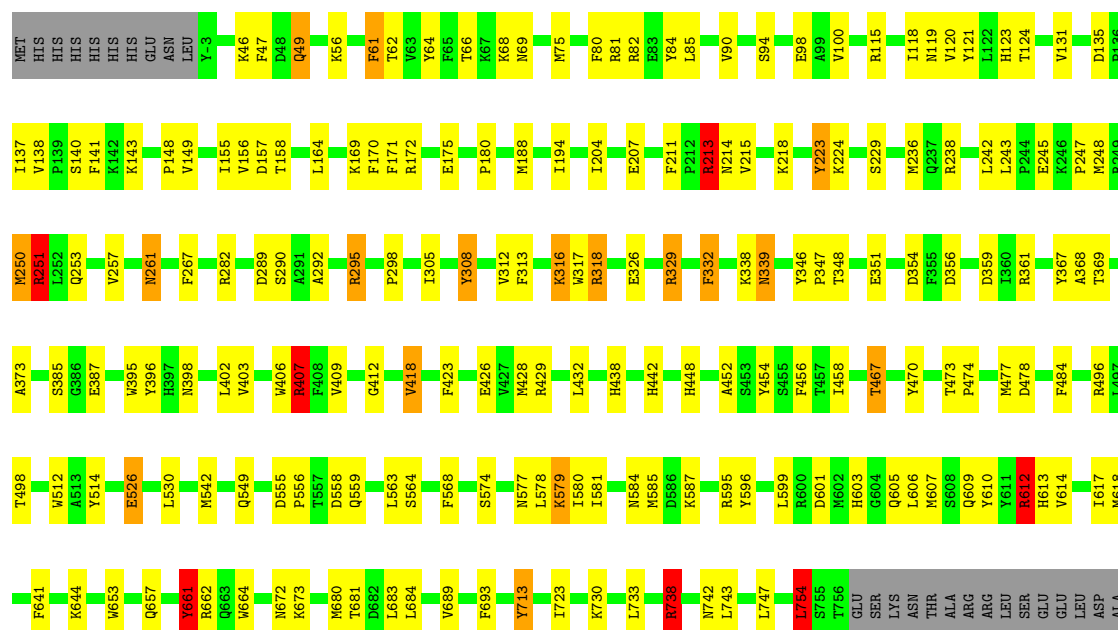
• Molecule 1: Zinc-dependent metalloprotease

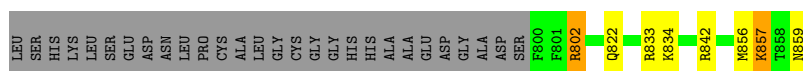
Chain G: 75% 17% 6%



• Molecule 1: Zinc-dependent metalloprotease

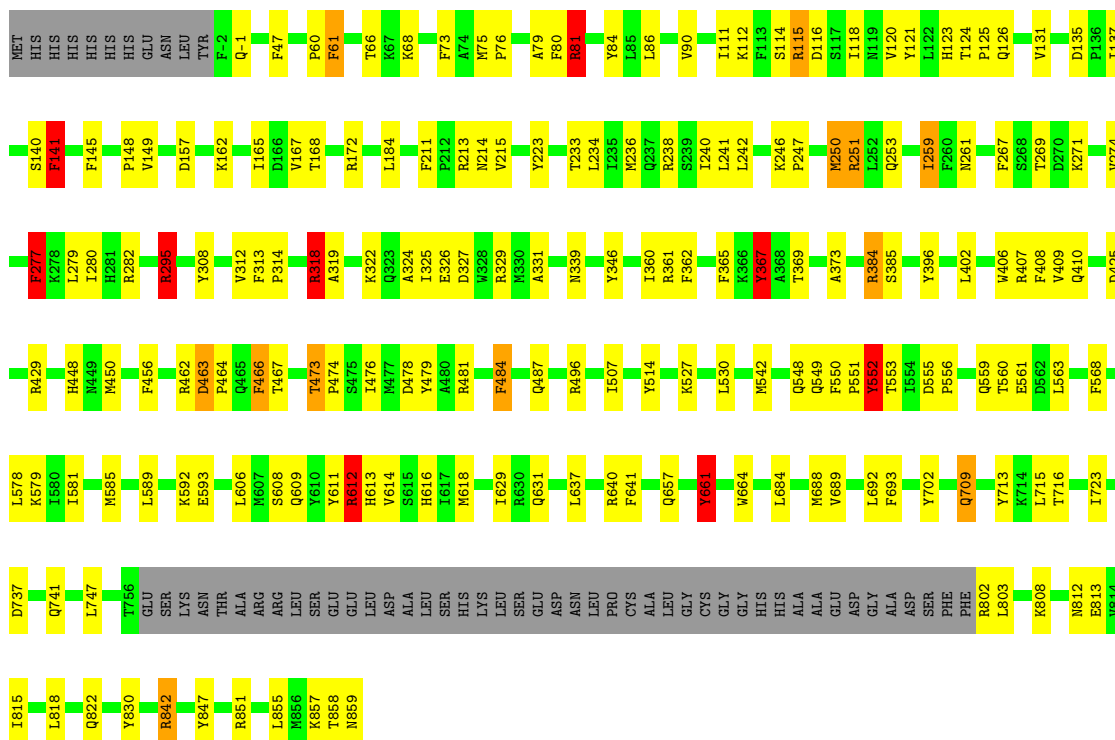
Chain H: 69% 21% 6%





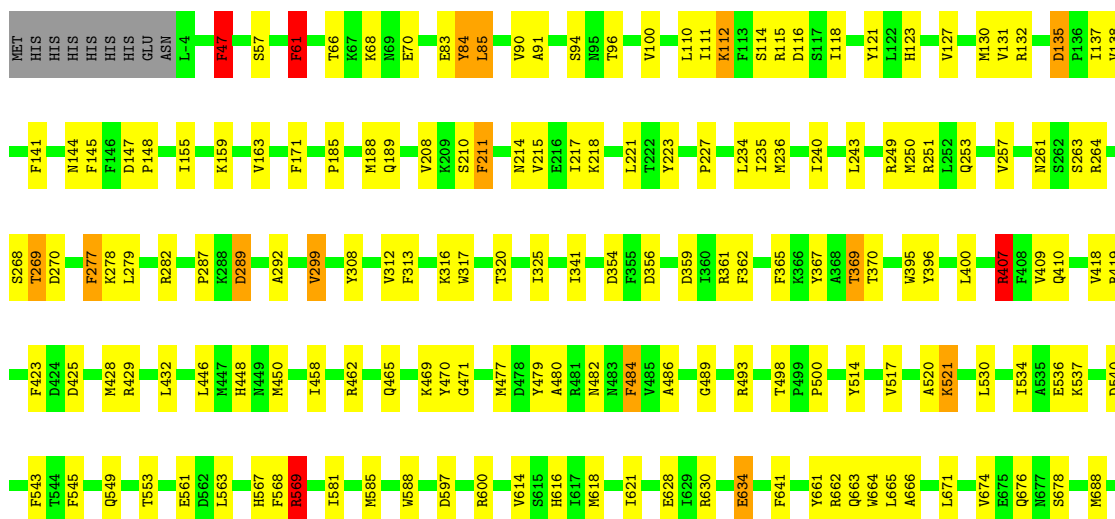
• Molecule 1: Zinc-dependent metalloprotease

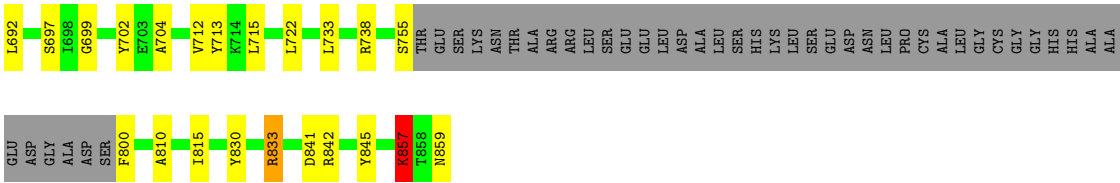
Chain I: 70% 21% 7%



• Molecule 1: Zinc-dependent metalloprotease

Chain J: 71% 21% 6%





4 Data and refinement statistics

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α , β , γ	129.80Å 129.40Å 188.50Å 98.20° 104.70° 115.10°	Depositor
Resolution (Å)	84.16 – 3.00 84.16 – 3.00	Depositor EDS
% Data completeness (in resolution range)	97.4 (84.16-3.00) 96.5 (84.16-3.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.27 (at 3.01Å)	Xtriage
Refinement program	PHENIX 2.0rc1_5617	Depositor
R, R_{free}	0.257 , 0.296 0.257 , 0.284	Depositor DCC
R_{free} test set	998 reflections (0.48%)	wwPDB-VP
Wilson B-factor (Å ²)	78.0	Xtriage
Anisotropy	0.177	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.35 , 93.8	EDS
L-test for twinning ²	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	0.158 for k,h,-h-k-l	Xtriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	63321	wwPDB-VP
Average B, all atoms (Å ²)	101.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.08% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: TRS, GOL, CA, ZN

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	0.46	0/6432	0.84	13/8708 (0.1%)
1	B	0.47	0/6377	0.87	15/8633 (0.2%)
1	C	0.46	1/6396 (0.0%)	0.84	6/8659 (0.1%)
1	D	0.51	4/6384 (0.1%)	0.91	21/8643 (0.2%)
1	E	0.48	1/6441 (0.0%)	0.83	10/8719 (0.1%)
1	F	0.48	2/6417 (0.0%)	0.87	22/8688 (0.3%)
1	G	0.45	4/6417 (0.1%)	0.82	12/8688 (0.1%)
1	H	0.51	3/6409 (0.0%)	0.93	24/8677 (0.3%)
1	I	0.55	3/6372 (0.0%)	0.93	17/8627 (0.2%)
1	J	0.48	2/6410 (0.0%)	0.91	17/8678 (0.2%)
All	All	0.49	20/64055 (0.0%)	0.88	157/86720 (0.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	3
1	B	0	5
1	C	0	5
1	D	0	6
1	E	0	3
1	F	0	8
1	G	0	4
1	H	0	7
1	I	0	10
1	J	0	3
All	All	0	54

The worst 5 of 20 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	329	ARG	CZ-NH1	9.46	1.46	1.32
1	E	138	VAL	CA-CB	9.31	1.60	1.53
1	I	259	ILE	CG1-CD1	9.20	1.87	1.51
1	J	138	VAL	CA-CB	7.63	1.59	1.53
1	F	825	ARG	CZ-NH1	7.34	1.43	1.32

The worst 5 of 157 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	521	LYS	CB-CG-CD	-14.71	77.46	111.30
1	G	329	ARG	CG-CD-NE	-12.87	83.69	112.00
1	H	857	LYS	CD-CE-NZ	-11.66	74.58	111.90
1	F	825	ARG	CA-CB-CG	-10.99	92.13	114.10
1	E	249	ARG	CG-CD-NE	-10.35	89.23	112.00

There are no chirality outliers.

5 of 54 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	213	ARG	Sidechain
1	A	238	ARG	Sidechain
1	A	481	ARG	Sidechain
1	B	115	ARG	Sidechain
1	B	569	ARG	Sidechain

5.2 Too-close contacts [i](#)

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	6281	0	6216	96	0
1	B	6228	0	6169	94	0
1	C	6246	0	6185	93	0
1	D	6235	0	6176	106	0
1	E	6290	0	6229	93	0
1	F	6266	0	6205	100	0
1	G	6266	0	6205	85	0
1	H	6258	0	6194	140	0
1	I	6224	0	6167	129	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	J	6259	0	6198	119	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
2	C	1	0	0	0	0
2	D	1	0	0	0	0
2	E	1	0	0	0	0
2	F	1	0	0	0	0
2	G	1	0	0	0	0
2	H	1	0	0	0	0
2	I	1	0	0	0	0
2	J	1	0	0	0	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
3	E	1	0	0	0	0
3	F	1	0	0	0	0
3	G	1	0	0	0	0
3	H	1	0	0	0	0
3	I	1	0	0	0	0
3	J	1	0	0	0	0
4	A	18	0	22	0	0
4	B	6	0	6	0	0
4	C	18	0	22	0	0
4	D	12	0	14	0	0
4	E	24	0	30	0	0
4	F	18	0	22	1	0
4	G	12	0	14	0	0
4	H	6	0	6	0	0
4	I	6	0	6	0	0
4	J	6	0	6	0	0
5	B	8	0	12	0	0
6	A	92	0	0	0	0
6	B	99	0	0	0	0
6	C	57	0	0	0	0
6	D	69	0	0	0	0
6	E	92	0	0	0	0
6	F	59	0	0	0	0
6	G	38	0	0	0	0
6	H	23	0	0	0	0
6	I	36	0	0	0	0
6	J	49	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	63321	0	62104	995	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 8.

The worst 5 of 995 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:I:259:ILE:CD1	1:I:259:ILE:CG1	1.87	1.48
1:J:407:ARG:HH12	1:J:498:THR:HG22	1.34	0.91
1:C:66:THR:HG22	1:C:68:LYS:H	1.37	0.90
1:B:829:ILE:HG22	1:B:833:ARG:HD2	1.55	0.88
1:H:733:LEU:HB2	1:H:738:ARG:HH21	1.40	0.87

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	774/828 (94%)	765 (99%)	9 (1%)	0	100	100
1	B	768/828 (93%)	757 (99%)	11 (1%)	0	100	100
1	C	770/828 (93%)	757 (98%)	13 (2%)	0	100	100
1	D	769/828 (93%)	755 (98%)	14 (2%)	0	100	100
1	E	775/828 (94%)	763 (98%)	12 (2%)	0	100	100
1	F	772/828 (93%)	757 (98%)	14 (2%)	1 (0%)	48	80
1	G	772/828 (93%)	762 (99%)	10 (1%)	0	100	100
1	H	771/828 (93%)	757 (98%)	14 (2%)	0	100	100
1	I	768/828 (93%)	758 (99%)	10 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	J	771/828 (93%)	759 (98%)	12 (2%)	0	100	100
All	All	7710/8280 (93%)	7590 (98%)	119 (2%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	F	806	PHE

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	682/722 (94%)	662 (97%)	20 (3%)	37	70
1	B	676/722 (94%)	651 (96%)	25 (4%)	30	64
1	C	678/722 (94%)	656 (97%)	22 (3%)	34	67
1	D	677/722 (94%)	651 (96%)	26 (4%)	29	63
1	E	683/722 (95%)	667 (98%)	16 (2%)	44	74
1	F	680/722 (94%)	657 (97%)	23 (3%)	32	66
1	G	680/722 (94%)	659 (97%)	21 (3%)	35	68
1	H	679/722 (94%)	647 (95%)	32 (5%)	23	58
1	I	676/722 (94%)	649 (96%)	27 (4%)	28	62
1	J	679/722 (94%)	651 (96%)	28 (4%)	27	61
All	All	6790/7220 (94%)	6550 (96%)	240 (4%)	32	65

5 of 240 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	F	277	PHE
1	J	268	SER
1	G	568	PHE
1	J	211	PHE
1	J	634	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 29 such sidechains are listed below:

Mol	Chain	Res	Type
1	G	339	ASN
1	J	751	HIS
1	H	397	HIS
1	J	261	ASN
1	G	706	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 42 ligands modelled in this entry, 20 are monoatomic - leaving 22 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	905	-	5,5,5	0.35	0	5,5,5	0.46	0
4	GOL	C	903	3	5,5,5	0.51	0	5,5,5	0.83	0
4	GOL	G	903	3	5,5,5	0.35	0	5,5,5	0.68	0
4	GOL	C	904	-	5,5,5	0.32	0	5,5,5	0.42	0
4	GOL	D	903	3	5,5,5	0.32	0	5,5,5	0.49	0
4	GOL	A	905	-	5,5,5	0.26	0	5,5,5	0.37	0
4	GOL	A	903	3	5,5,5	0.45	0	5,5,5	0.58	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	TRS	B	904	-	7,7,7	0.37	0	9,9,9	0.58	0
4	GOL	E	906	-	5,5,5	0.35	0	5,5,5	0.41	0
4	GOL	F	903	3	5,5,5	0.41	0	5,5,5	0.72	0
4	GOL	F	905	-	5,5,5	0.40	0	5,5,5	0.41	0
4	GOL	D	904	-	5,5,5	0.35	0	5,5,5	0.27	0
4	GOL	E	905	-	5,5,5	0.25	0	5,5,5	0.53	0
4	GOL	B	903	3	5,5,5	0.36	0	5,5,5	0.84	0
4	GOL	E	903	3	5,5,5	0.47	0	5,5,5	0.66	0
4	GOL	I	903	3	5,5,5	0.33	0	5,5,5	0.67	0
4	GOL	H	903	3	5,5,5	0.52	0	5,5,5	0.86	0
4	GOL	F	904	-	5,5,5	0.27	0	5,5,5	0.40	0
4	GOL	G	904	-	5,5,5	0.28	0	5,5,5	0.84	0
4	GOL	E	904	-	5,5,5	0.26	0	5,5,5	0.40	0
4	GOL	J	903	3	5,5,5	0.39	0	5,5,5	0.75	0
4	GOL	A	904	-	5,5,5	0.26	0	5,5,5	0.64	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	905	-	-	0/4/4/4	-
4	GOL	C	903	3	-	0/4/4/4	-
4	GOL	G	903	3	-	0/4/4/4	-
4	GOL	C	904	-	-	2/4/4/4	-
4	GOL	D	903	3	-	0/4/4/4	-
4	GOL	A	905	-	-	1/4/4/4	-
4	GOL	A	903	3	-	0/4/4/4	-
5	TRS	B	904	-	-	6/9/9/9	-
4	GOL	E	906	-	-	0/4/4/4	-
4	GOL	F	903	3	-	0/4/4/4	-
4	GOL	F	905	-	-	0/4/4/4	-
4	GOL	D	904	-	-	1/4/4/4	-
4	GOL	E	905	-	-	0/4/4/4	-
4	GOL	B	903	3	-	0/4/4/4	-
4	GOL	E	903	3	-	0/4/4/4	-
4	GOL	I	903	3	-	0/4/4/4	-
4	GOL	H	903	3	-	0/4/4/4	-
4	GOL	F	904	-	-	0/4/4/4	-
4	GOL	G	904	-	-	3/4/4/4	-
4	GOL	E	904	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	GOL	J	903	3	-	0/4/4/4	-
4	GOL	A	904	-	-	0/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

5 of 15 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	E	904	GOL	C1-C2-C3-O3
5	B	904	TRS	N-C-C2-O2
5	B	904	TRS	C1-C-C3-O3
5	B	904	TRS	C2-C-C3-O3
5	B	904	TRS	N-C-C3-O3

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	F	905	GOL	1	0

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data [i](#)

6.1 Protein, DNA and RNA chains [i](#)

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	778/828 (93%)	-1.20	0 100 100	48, 75, 110, 160	0
1	B	772/828 (93%)	-0.97	2 (0%) 90 79	52, 89, 118, 227	0
1	C	774/828 (93%)	-1.08	0 100 100	57, 103, 137, 199	0
1	D	773/828 (93%)	-1.07	1 (0%) 92 86	61, 103, 143, 184	0
1	E	779/828 (94%)	-1.16	0 100 100	57, 81, 118, 187	0
1	F	776/828 (93%)	-1.09	0 100 100	55, 96, 134, 178	0
1	G	776/828 (93%)	-1.11	1 (0%) 92 86	66, 100, 138, 187	0
1	H	775/828 (93%)	-0.88	0 100 100	76, 122, 169, 230	0
1	I	772/828 (93%)	-0.62	0 100 100	74, 119, 155, 206	0
1	J	775/828 (93%)	-0.98	0 100 100	60, 110, 155, 200	0
All	All	7750/8280 (93%)	-1.02	4 (0%) 92 86	48, 99, 146, 230	0

All (4) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	455	SER	2.4
1	B	710	PRO	2.3
1	G	632	GLY	2.2
1	B	455	SER	2.1

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

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

6.3 Carbohydrates [i](#)

There are no oligosaccharides 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
4	GOL	F	904	6/6	0.91	0.07	85,90,91,93	0
4	GOL	C	905	6/6	0.93	0.07	71,78,81,82	0
4	GOL	F	905	6/6	0.93	0.08	74,76,79,81	0
4	GOL	C	904	6/6	0.94	0.06	66,74,79,80	0
4	GOL	D	904	6/6	0.95	0.07	75,81,81,85	0
4	GOL	E	906	6/6	0.95	0.07	78,80,83,85	0
4	GOL	C	903	6/6	0.96	0.07	99,103,106,111	0
4	GOL	G	904	6/6	0.96	0.06	68,70,81,84	0
4	GOL	J	903	6/6	0.96	0.07	96,100,102,106	0
5	TRS	B	904	8/8	0.96	0.05	64,71,73,73	0
4	GOL	A	905	6/6	0.97	0.07	66,77,83,87	0
4	GOL	A	903	6/6	0.98	0.08	78,80,85,86	0
4	GOL	B	903	6/6	0.98	0.06	77,80,84,87	0
4	GOL	D	903	6/6	0.98	0.05	96,105,105,107	0
4	GOL	G	903	6/6	0.98	0.05	96,96,97,100	0
4	GOL	A	904	6/6	0.98	0.04	72,80,81,87	0
4	GOL	H	903	6/6	0.98	0.06	107,112,114,117	0
4	GOL	I	903	6/6	0.98	0.05	108,109,114,114	0
4	GOL	E	903	6/6	0.98	0.08	74,78,81,83	0
4	GOL	E	905	6/6	0.98	0.07	67,69,71,77	0
4	GOL	F	903	6/6	0.99	0.07	84,85,87,94	0
2	CA	B	901	1/1	0.99	0.04	89,89,89,89	0
4	GOL	E	904	6/6	0.99	0.04	67,78,84,85	0
2	CA	E	901	1/1	1.00	0.04	76,76,76,76	0
2	CA	F	901	1/1	1.00	0.01	88,88,88,88	0
2	CA	G	901	1/1	1.00	0.01	89,89,89,89	0
2	CA	H	901	1/1	1.00	0.04	117,117,117,117	0
2	CA	I	901	1/1	1.00	0.02	112,112,112,112	0
2	CA	J	901	1/1	1.00	0.02	132,132,132,132	0
3	ZN	A	902	1/1	1.00	0.03	88,88,88,88	0
3	ZN	B	902	1/1	1.00	0.02	92,92,92,92	0
3	ZN	C	902	1/1	1.00	0.02	115,115,115,115	0
3	ZN	D	902	1/1	1.00	0.01	98,98,98,98	0
3	ZN	E	902	1/1	1.00	0.02	81,81,81,81	0
3	ZN	F	902	1/1	1.00	0.02	81,81,81,81	0
3	ZN	G	902	1/1	1.00	0.01	94,94,94,94	0
3	ZN	H	902	1/1	1.00	0.02	115,115,115,115	0

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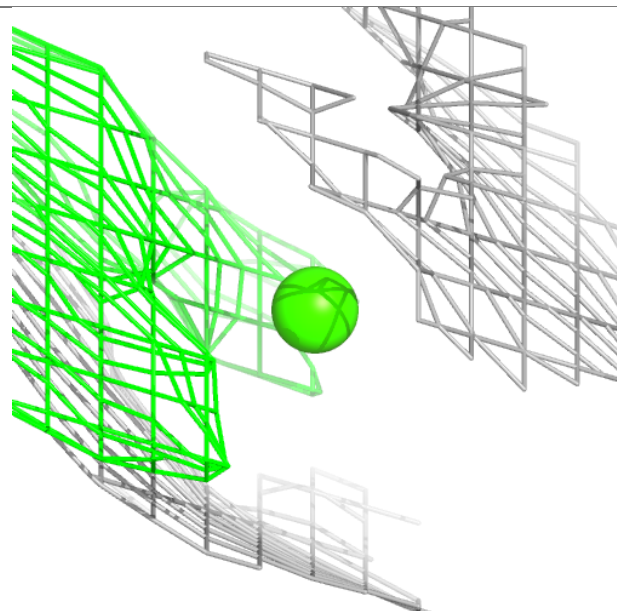
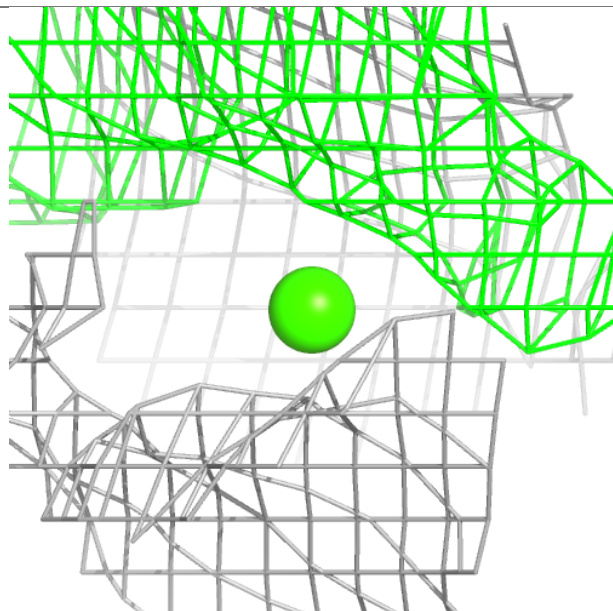
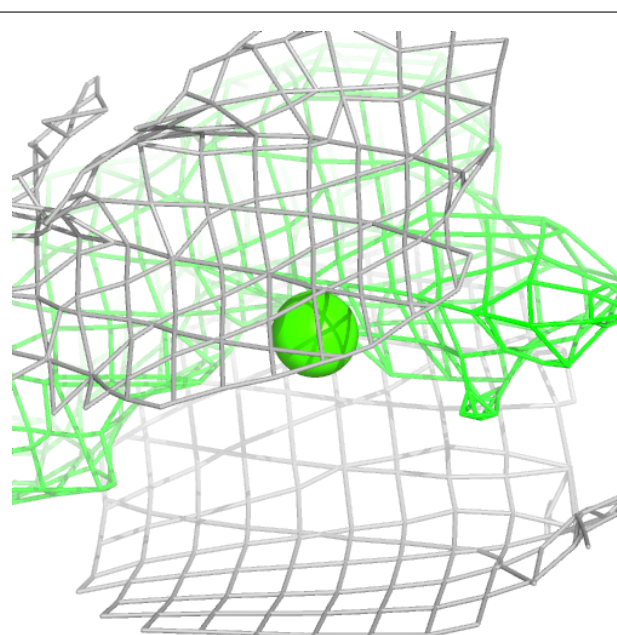
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	ZN	I	902	1/1	1.00	0.02	108,108,108,108	0
3	ZN	J	902	1/1	1.00	0.02	102,102,102,102	0
2	CA	A	901	1/1	1.00	0.01	79,79,79,79	0
2	CA	C	901	1/1	1.00	0.02	112,112,112,112	0
2	CA	D	901	1/1	1.00	0.02	106,106,106,106	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.

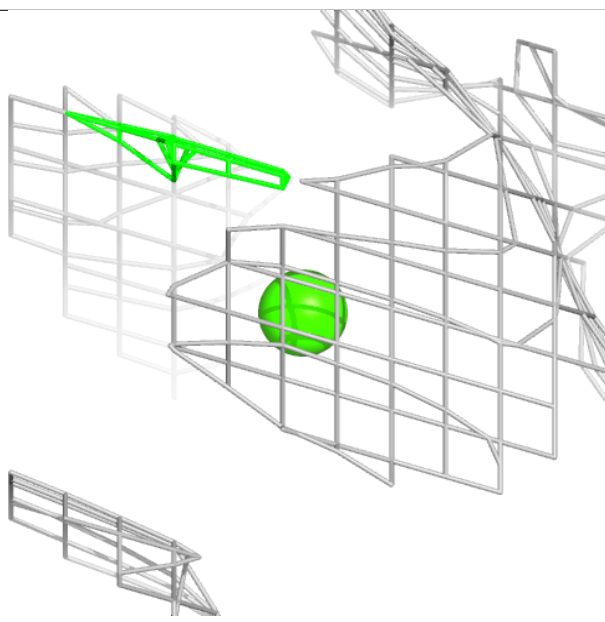
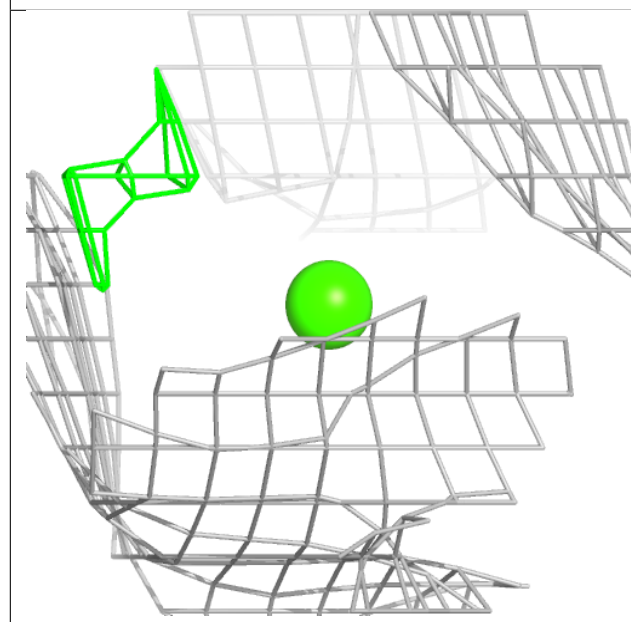
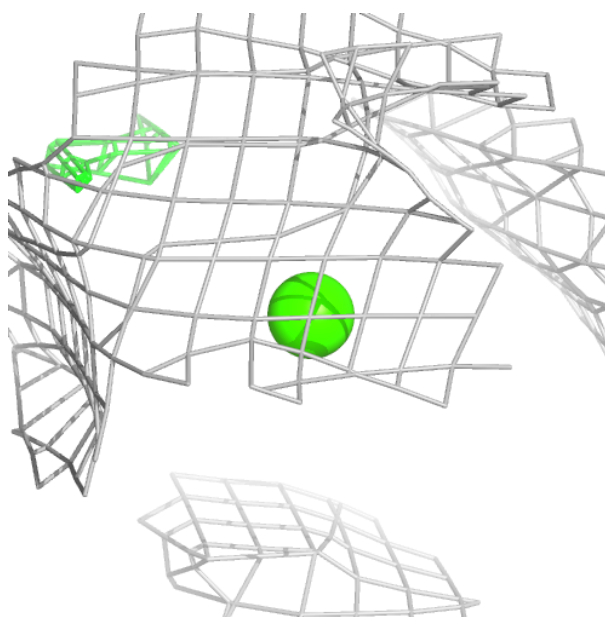
Electron density around CA B 901:

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



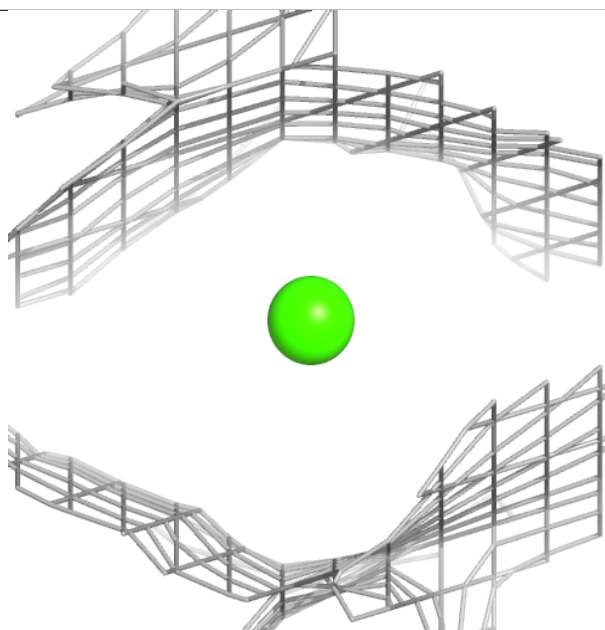
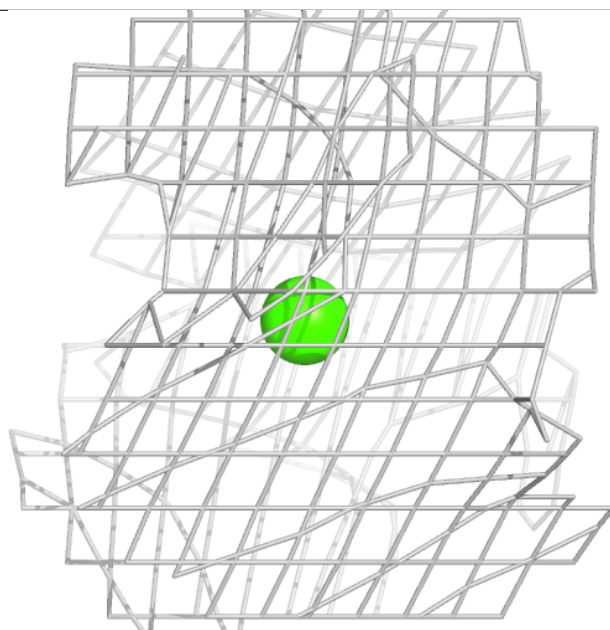
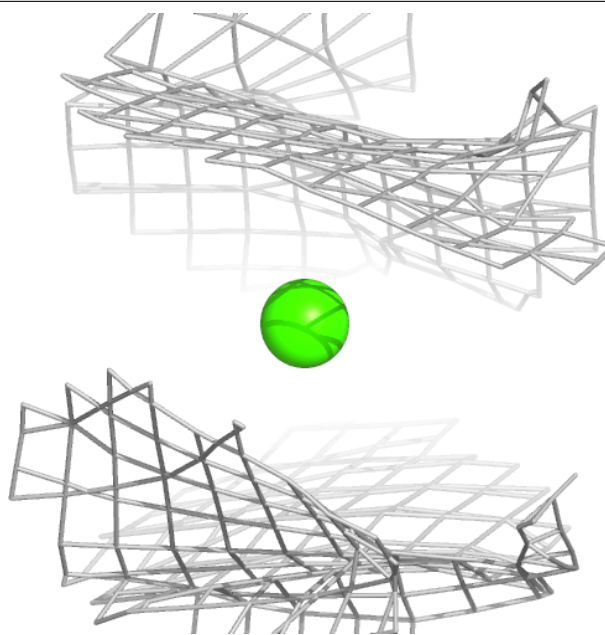
Electron density around CA E 901:

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and green (positive)



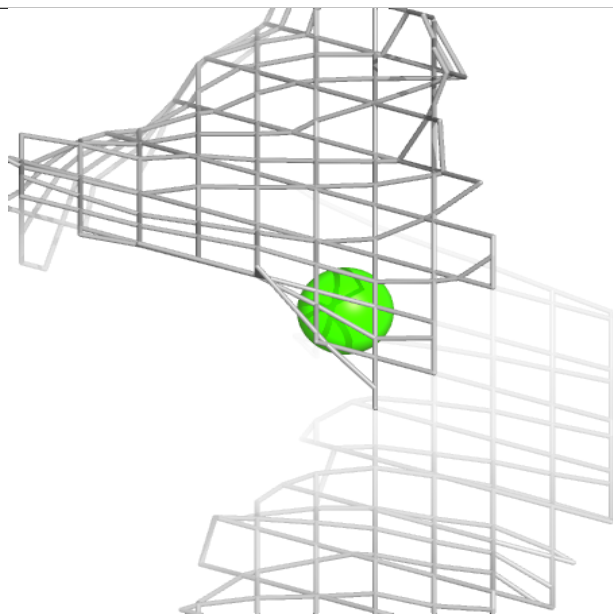
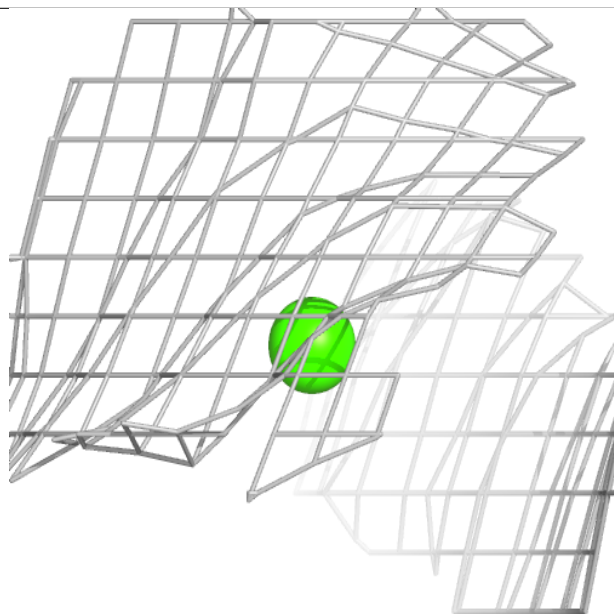
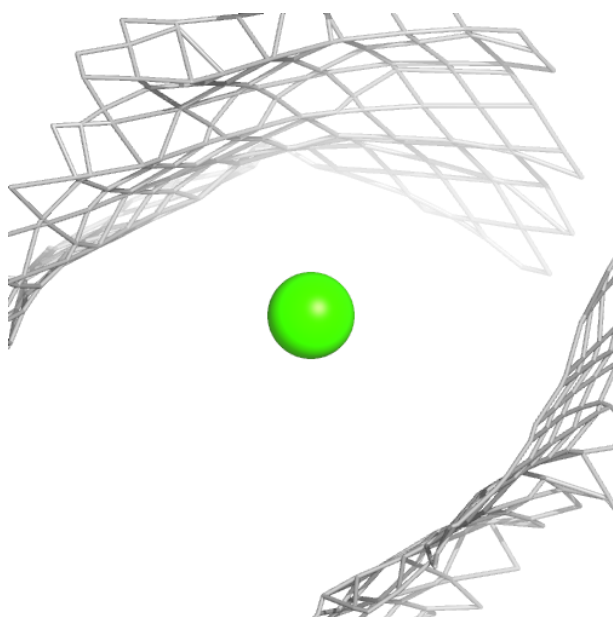
Electron density around CA F 901:

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and green (positive)



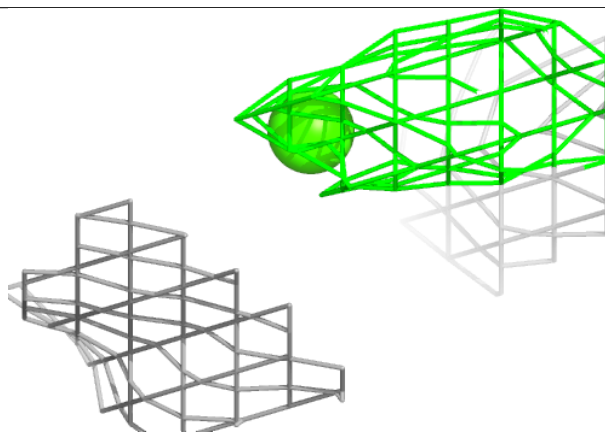
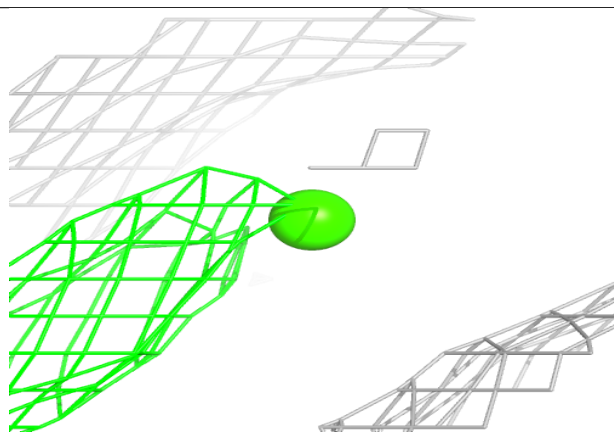
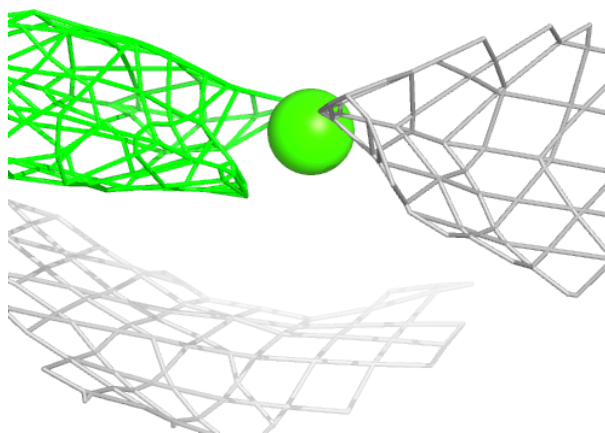
Electron density around CA G 901:

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and green (positive)



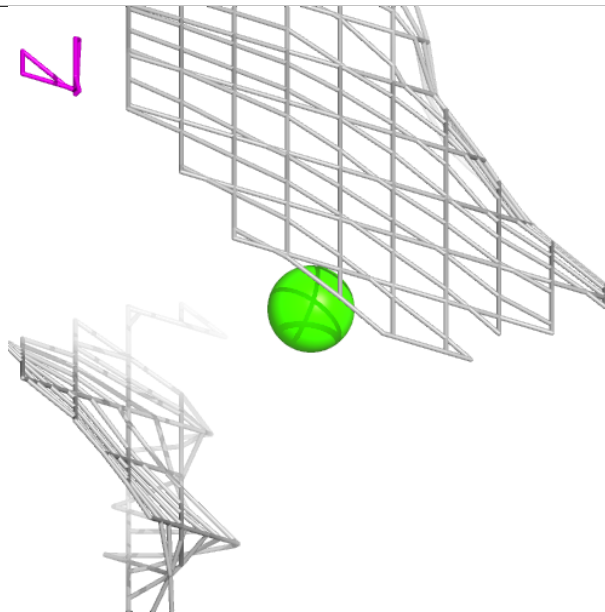
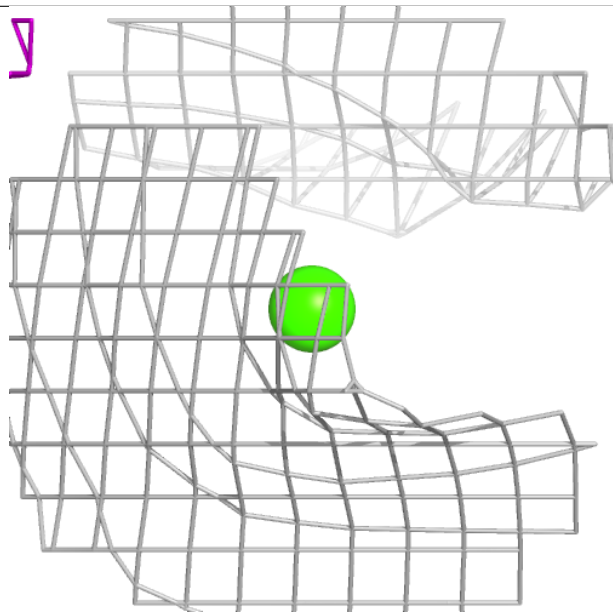
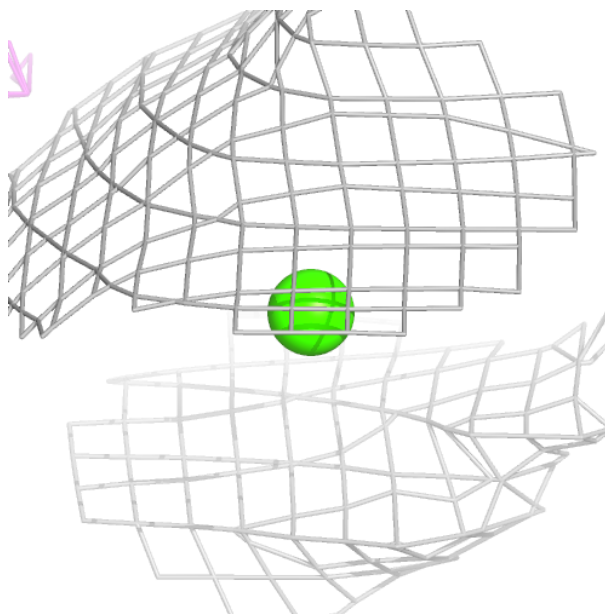
Electron density around CA H 901:

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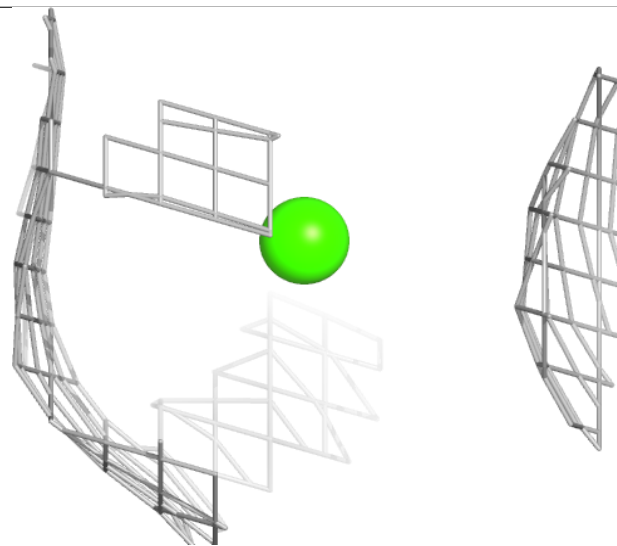
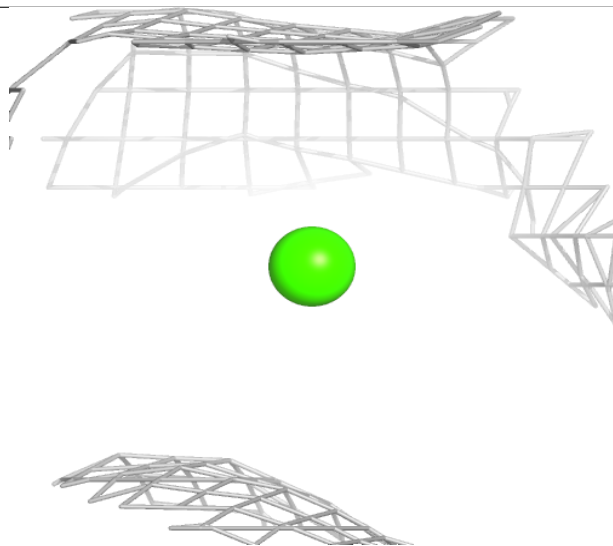
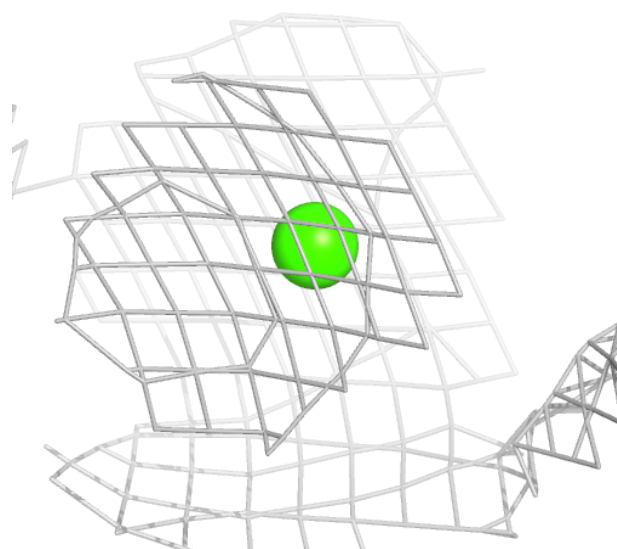
Electron density around CA I 901:

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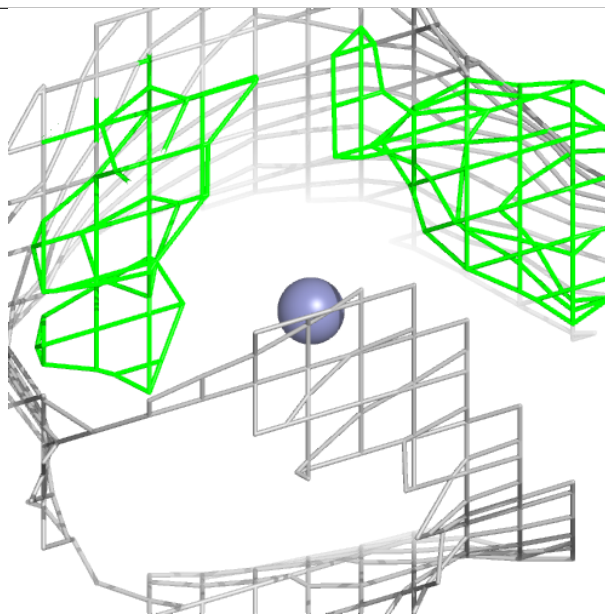
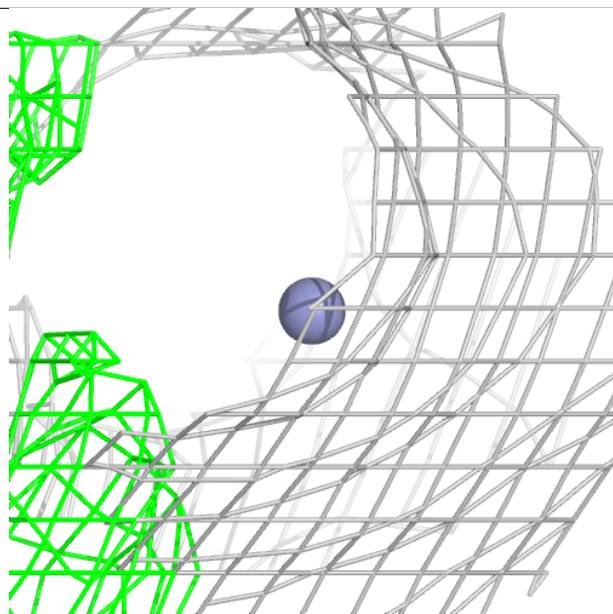
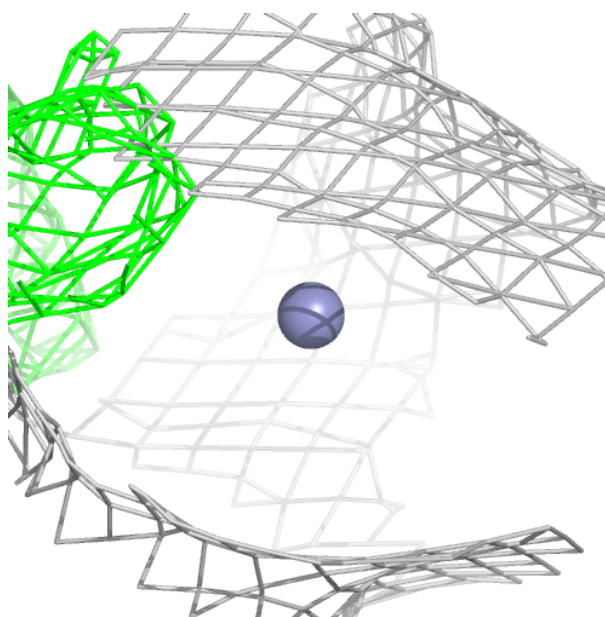
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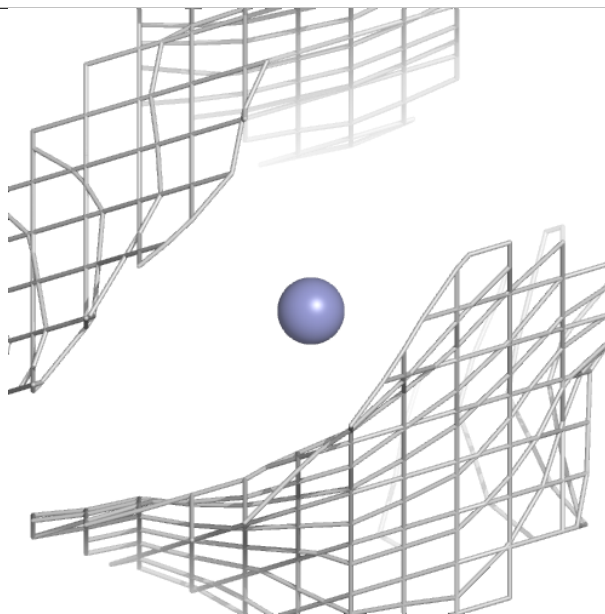
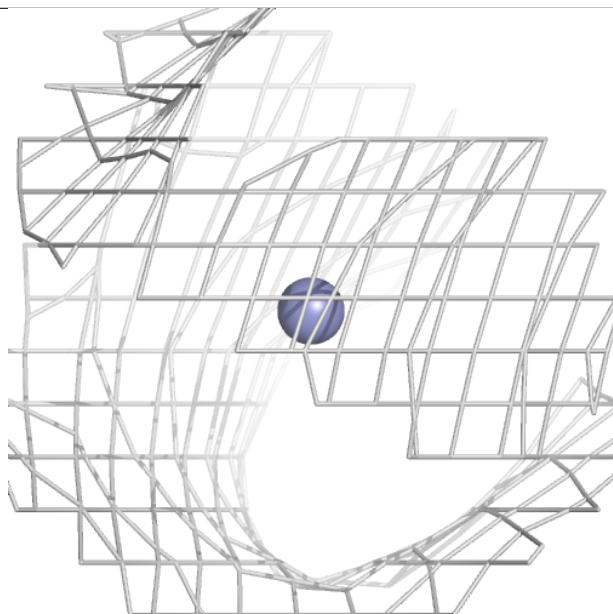
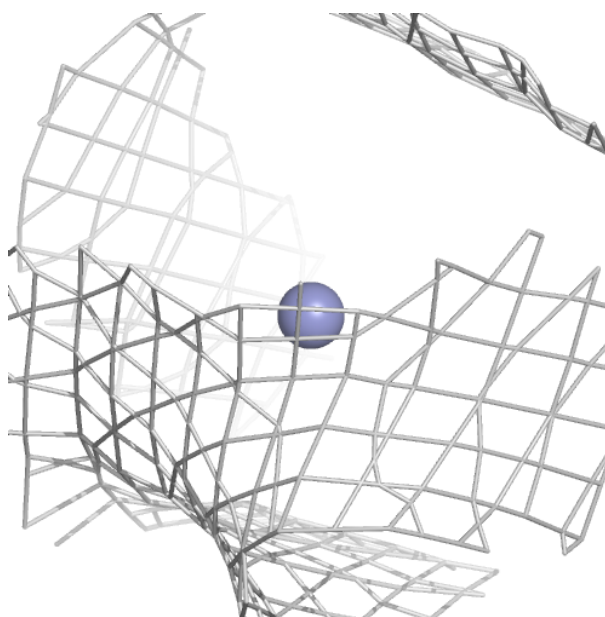
Electron density around ZN A 902:

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and green (positive)



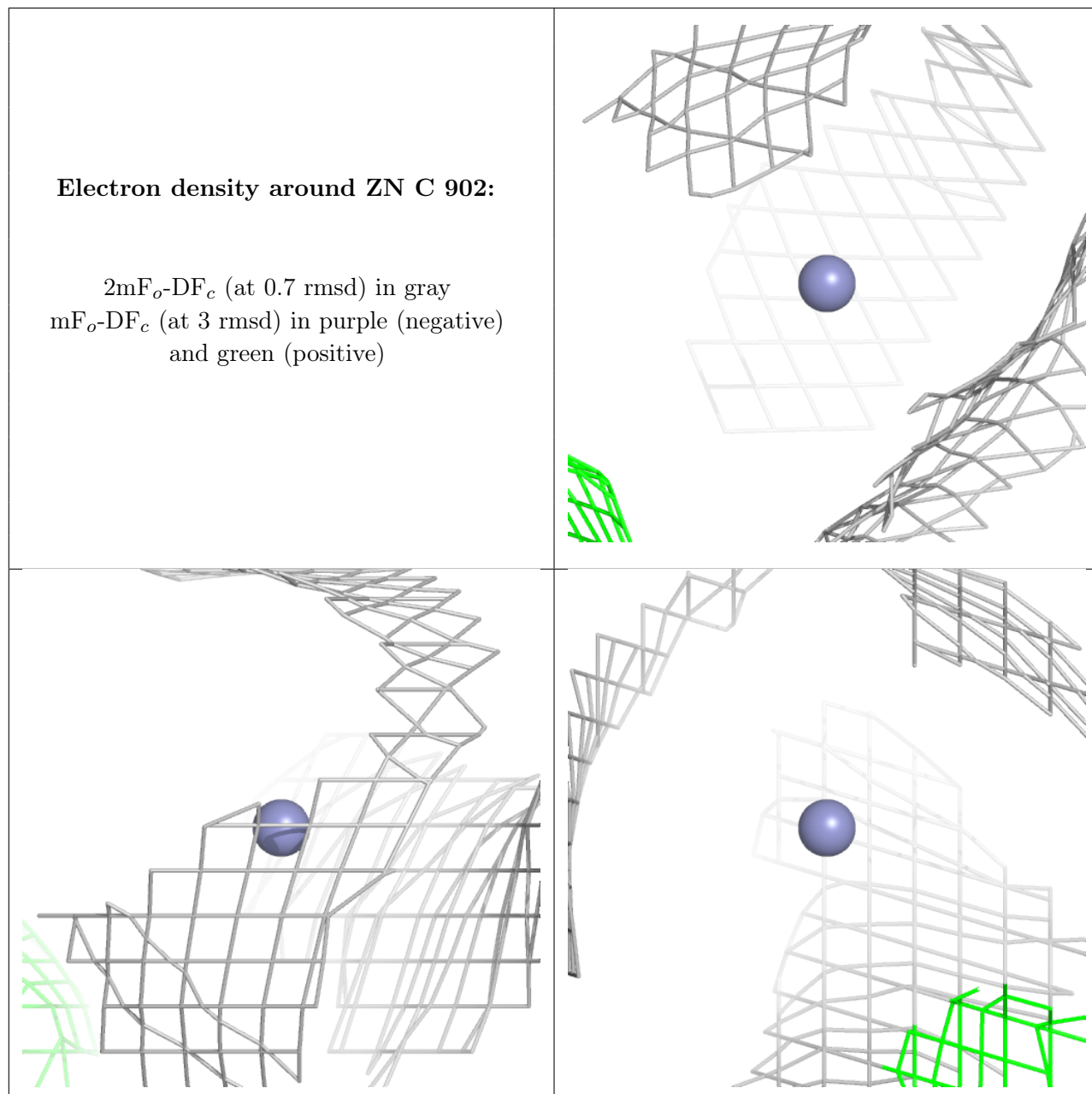
Electron density around ZN B 902:

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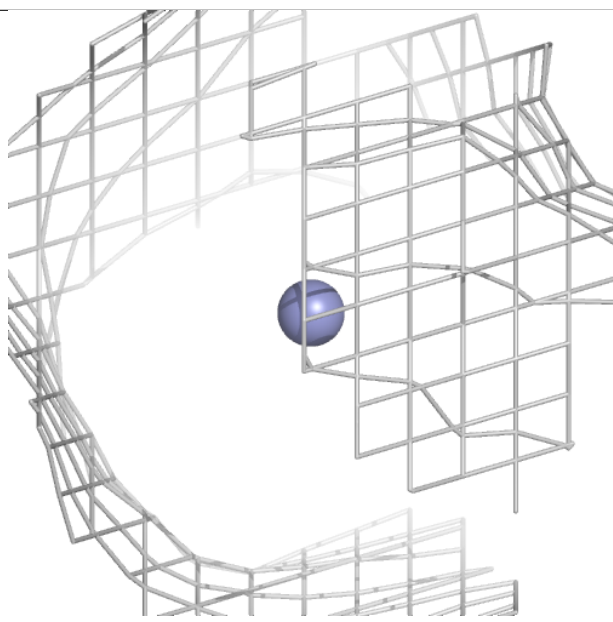
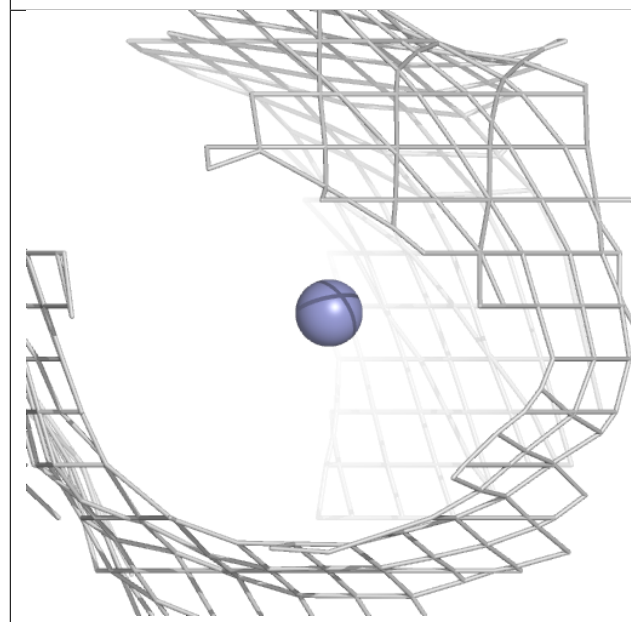
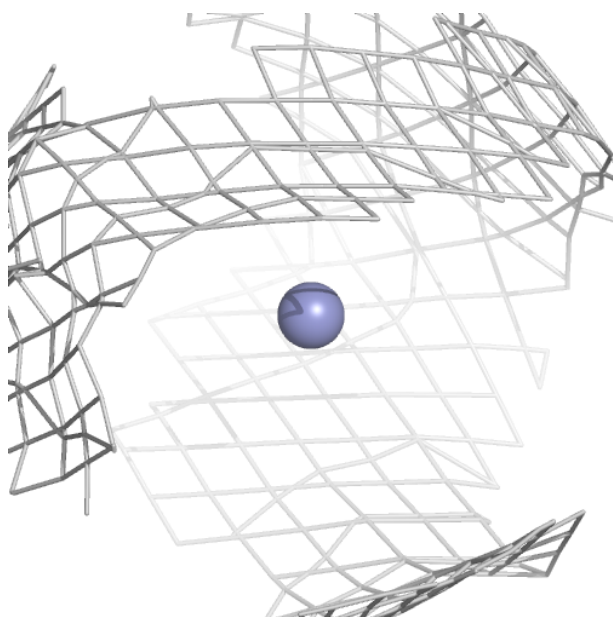
Electron density around ZN C 902:

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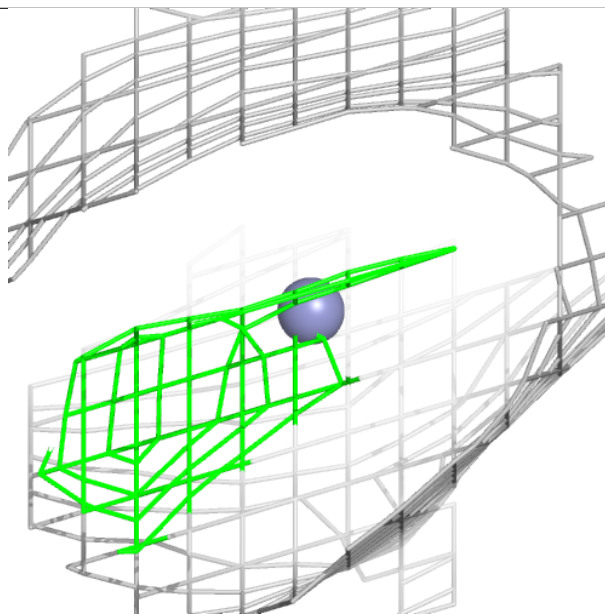
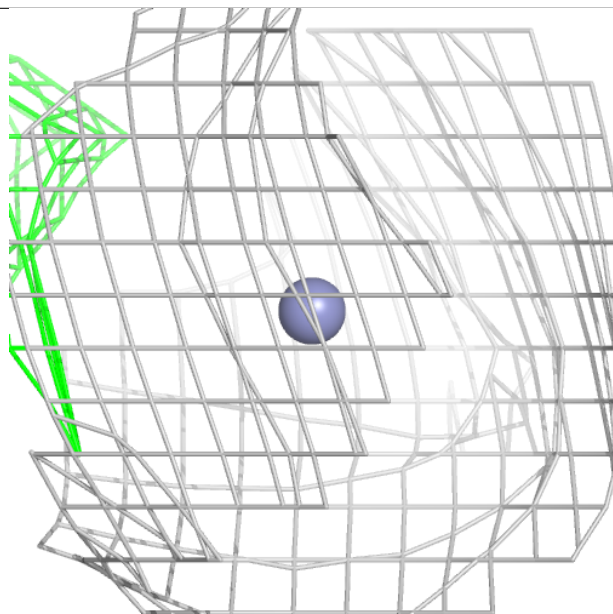
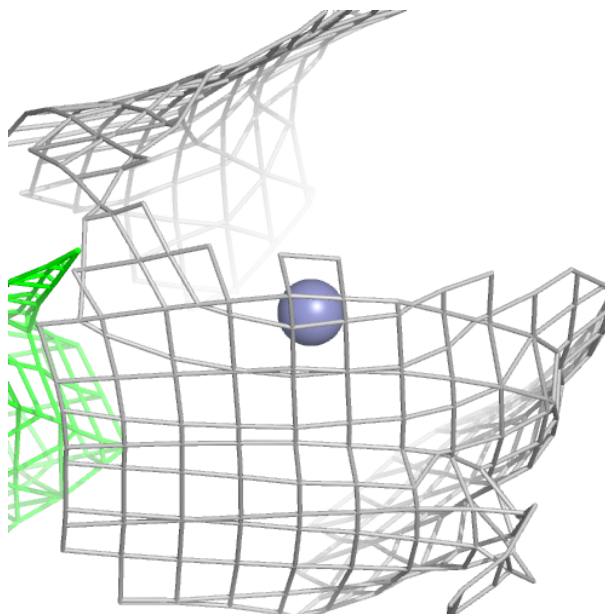
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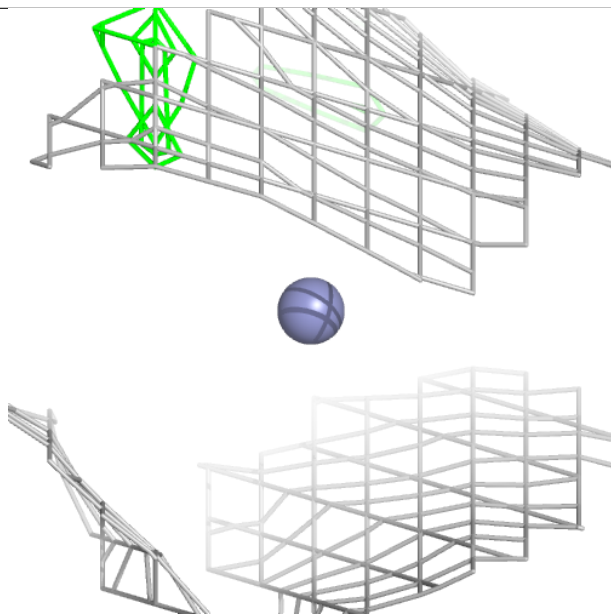
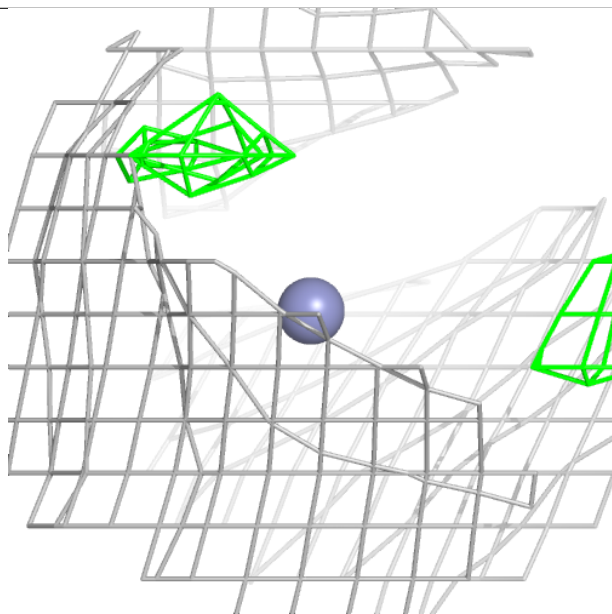
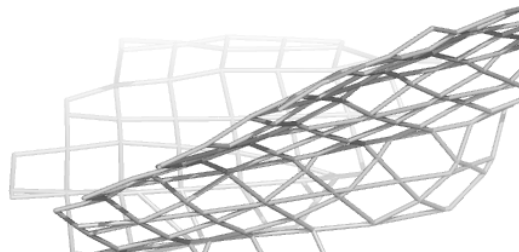
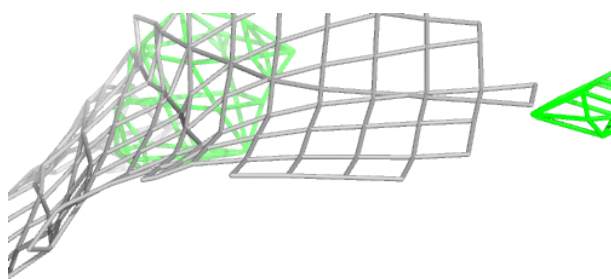
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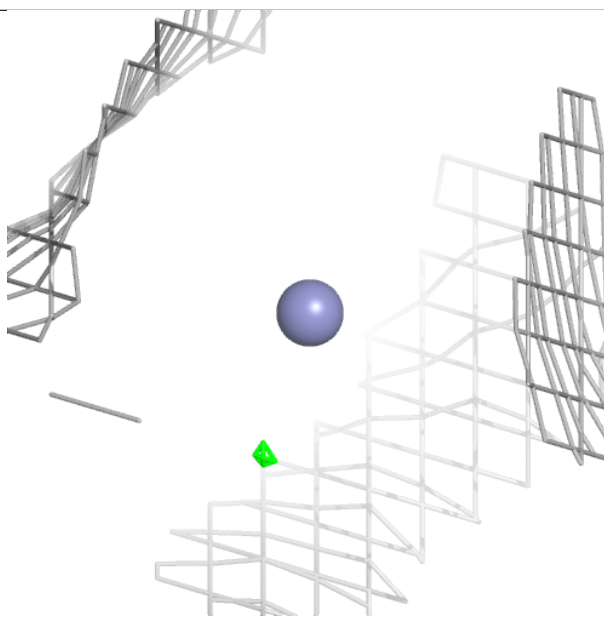
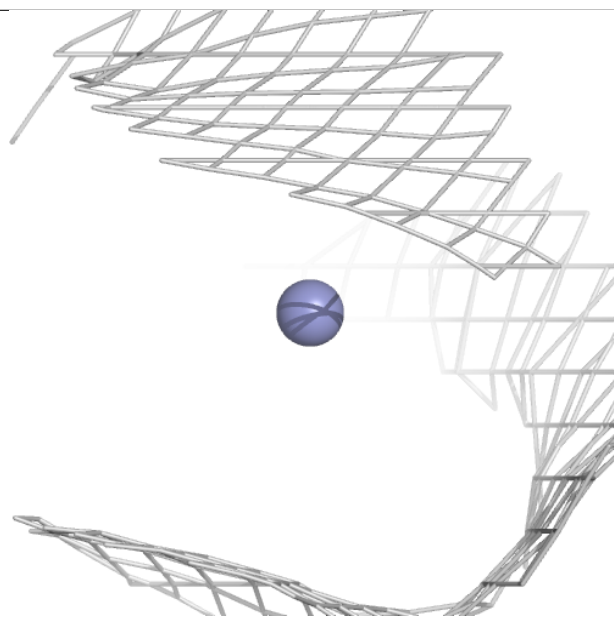
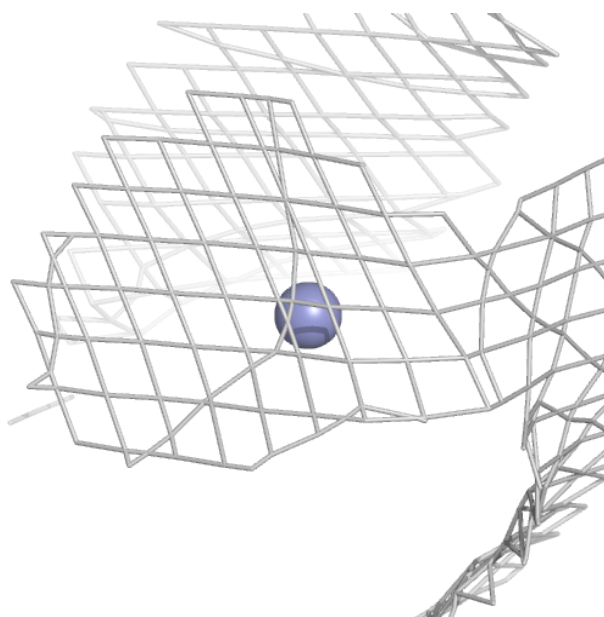
Electron density around ZN F 902:

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and green (positive)



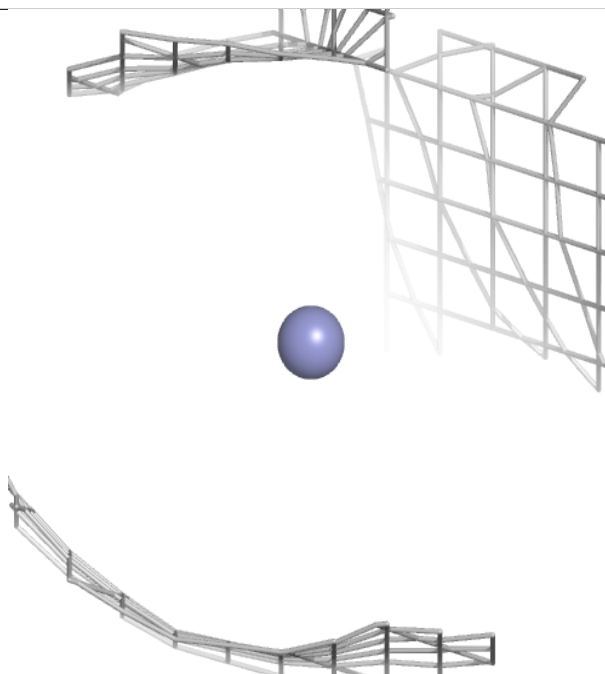
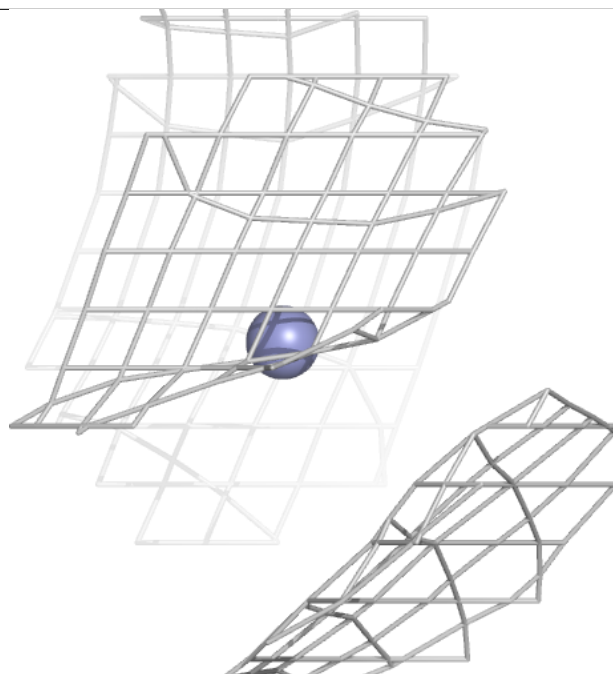
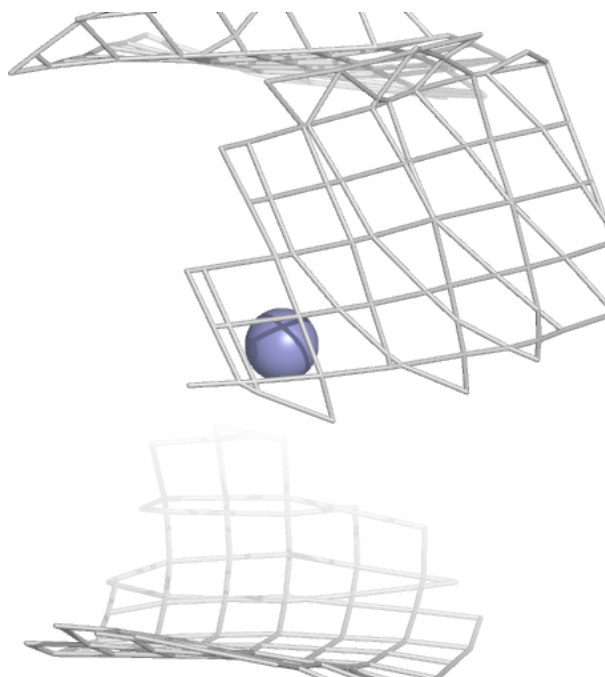
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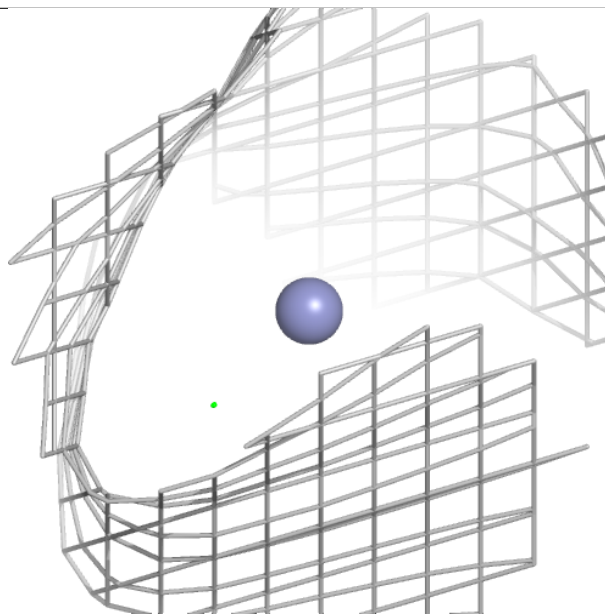
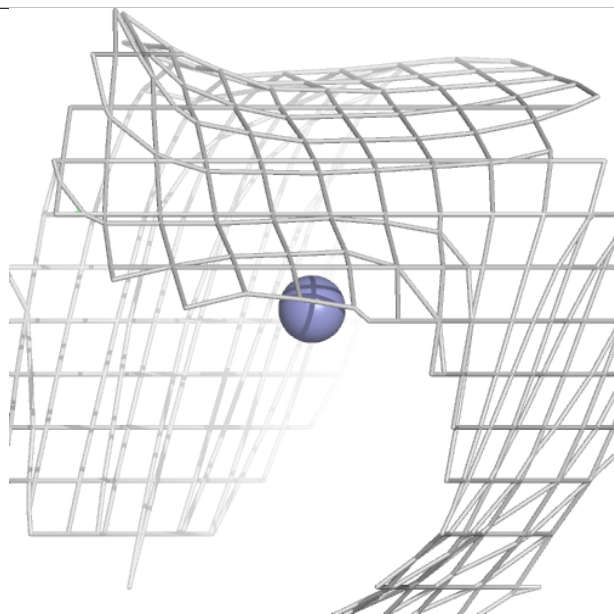
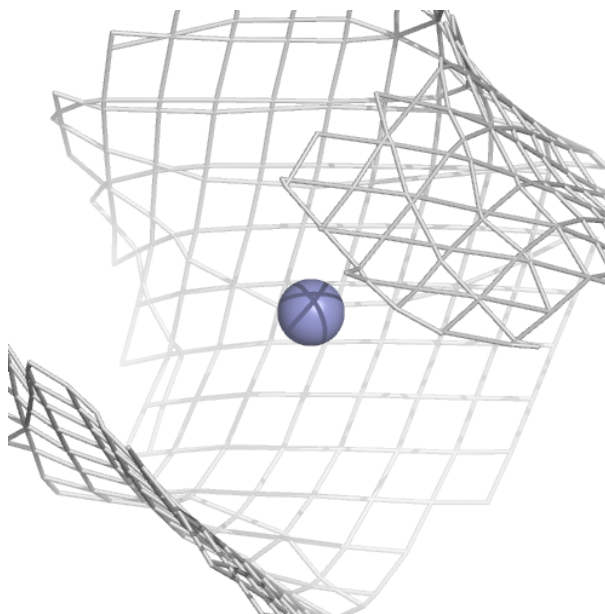
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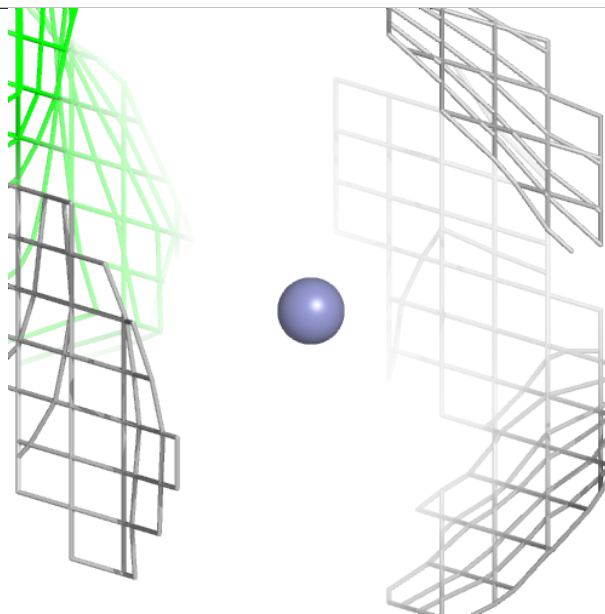
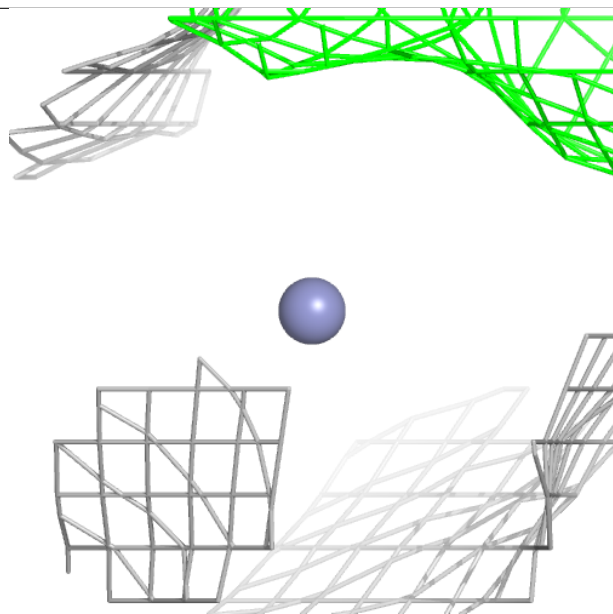
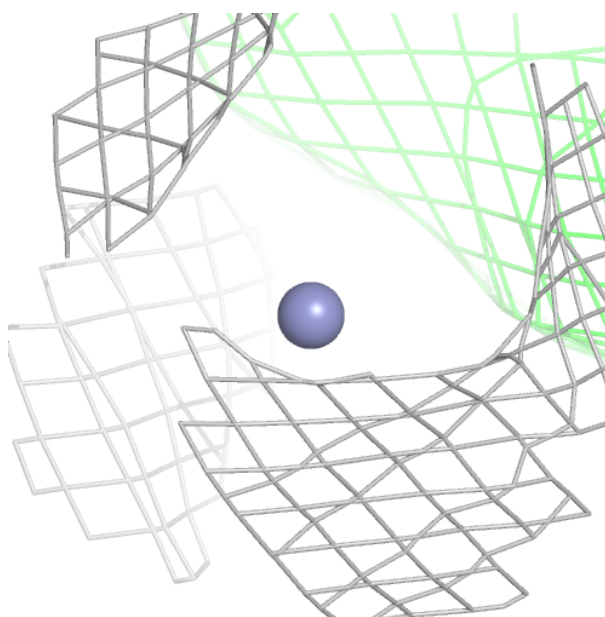
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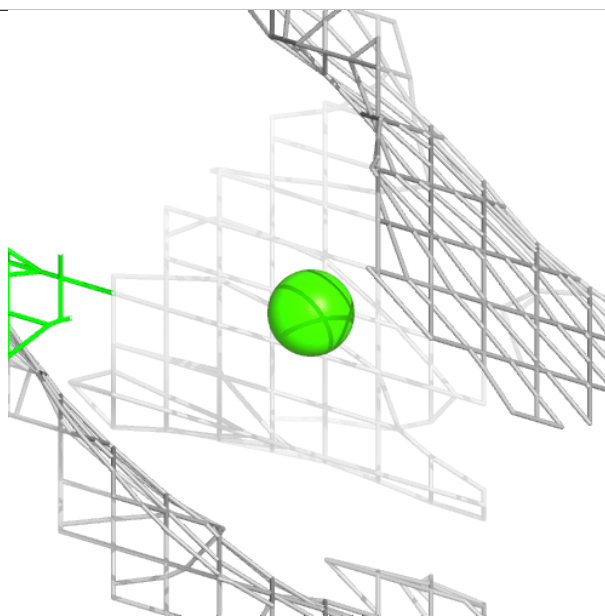
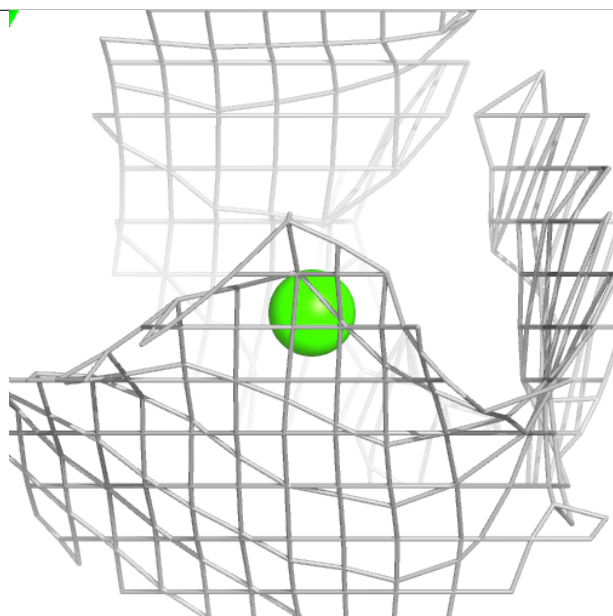
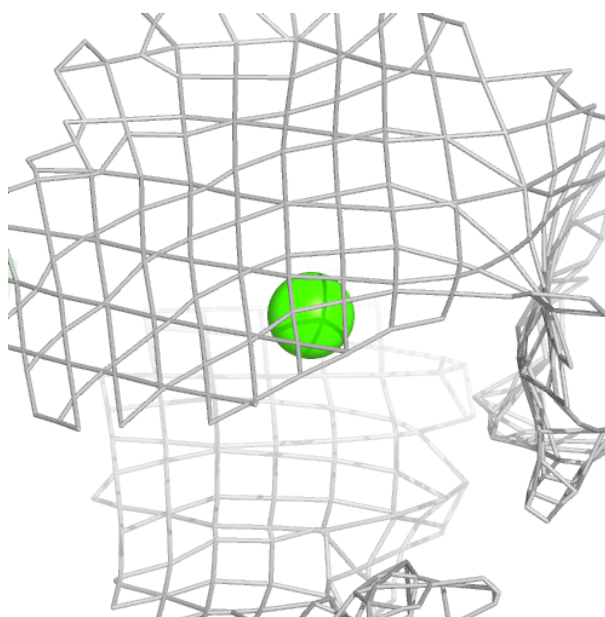
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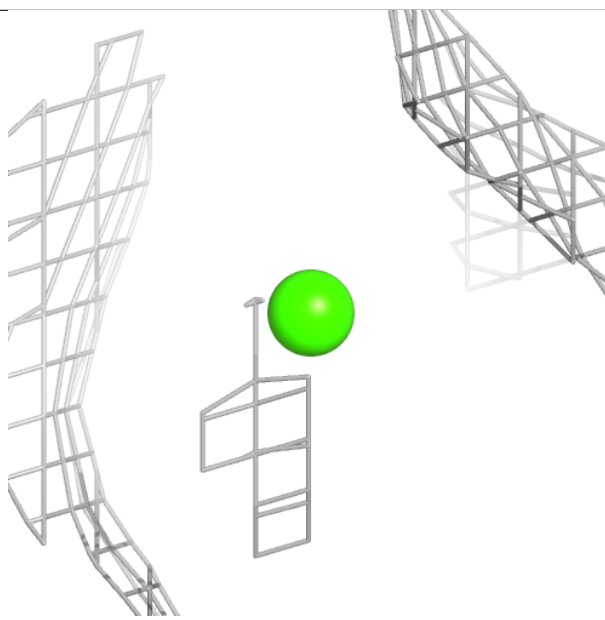
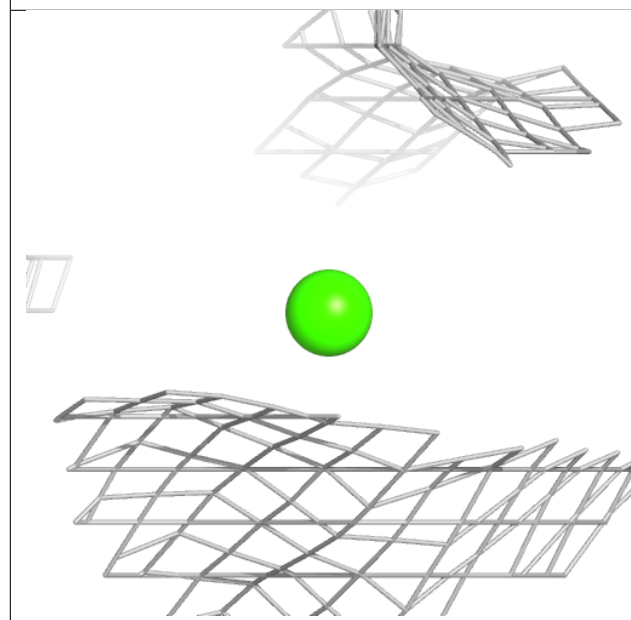
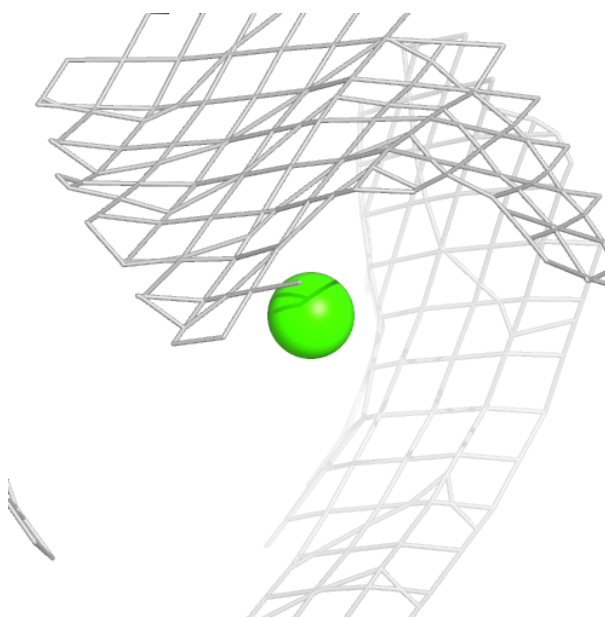
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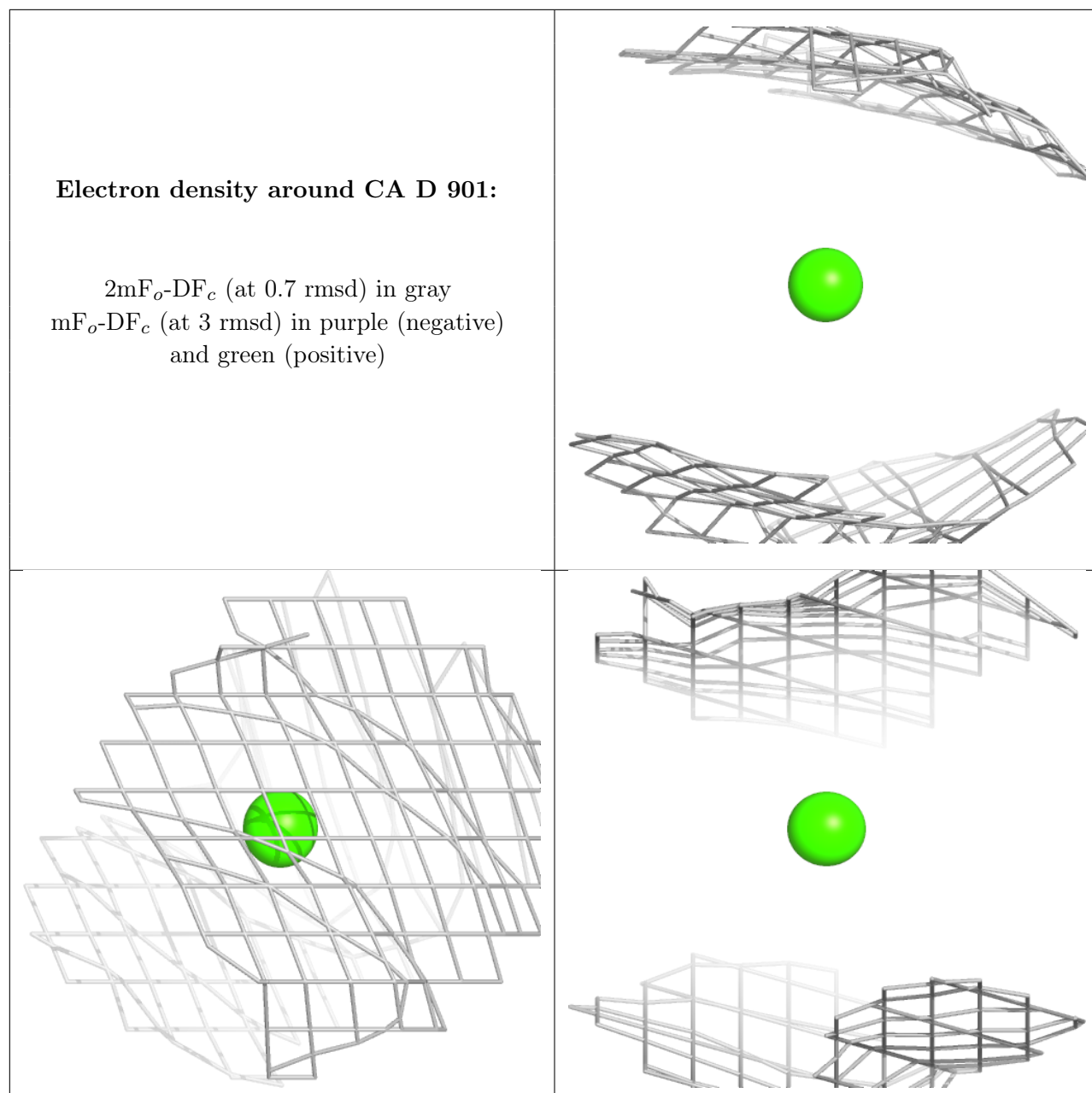
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and green (positive)



Electron density around CA C 901:

$2mF_o-DF_c$ (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.