



Full wwPDB EM Validation Report ⓘ

Apr 15, 2026 – 12:32 AM UTC

PDB ID : 9UFD / pdb_00009ufd
EMDB ID : EMD-64105
Title : Cryo-EM structure of BA12-bound alpha-synuclein fibril polymorph 6A6B
Authors : Zhang, S.Q.; Liu, C.; Li, D.
Deposited on : 2025-04-10
Resolution : 2.70 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

A user guide is available at

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

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:

EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

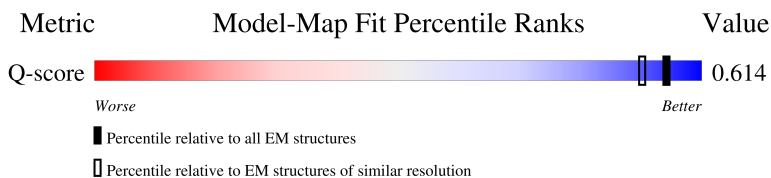
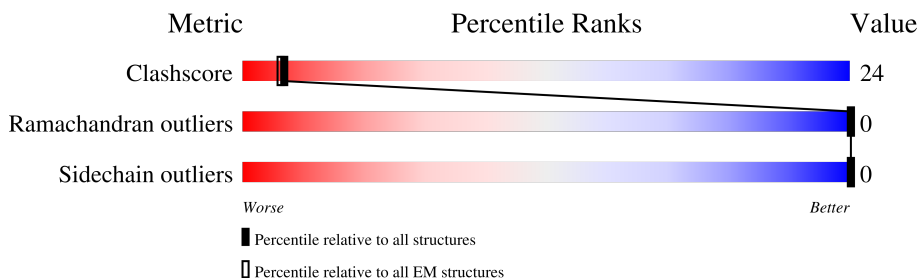
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 2.70 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)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	10327 (2.20 - 3.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	E	140	 36% 9% 55%
1	F	140	 36% 9% 55%
1	G	140	 36% 9% 55%
1	H	140	 36% 9% 55%

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Mol	Chain	Length	Quality of chain
1	I	140	 36% 9% 55%
1	J	140	 36% 9% 55%
1	K	140	 36% 9% 55%
1	L	140	 37% 8% 55%
1	M	140	 36% 9% 55%
1	N	140	 37% 8% 55%
1	O	140	 36% 9% 55%
1	P	140	 37% 8% 55%

2 Entry composition

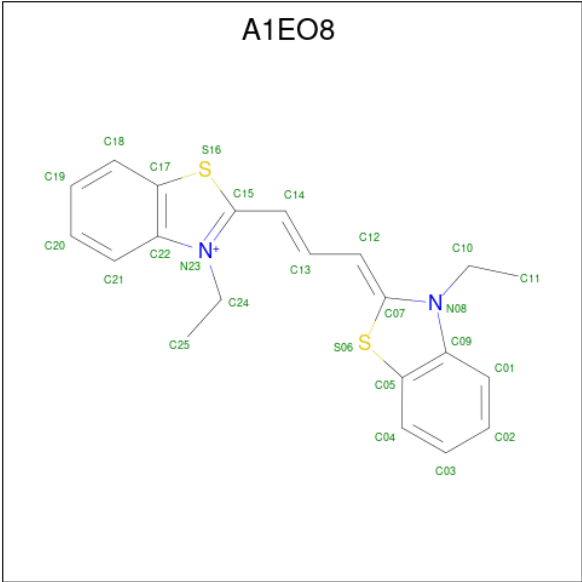
There are 2 unique types of molecules in this entry. The entry contains 6156 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 Alpha-synuclein.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	E	63	Total	C	N	O	0	0
			438	274	76	88		
1	F	63	Total	C	N	O	0	0
			438	274	76	88		
1	G	63	Total	C	N	O	0	0
			438	274	76	88		
1	H	63	Total	C	N	O	0	0
			438	274	76	88		
1	I	63	Total	C	N	O	0	0
			438	274	76	88		
1	J	63	Total	C	N	O	0	0
			438	274	76	88		
1	K	63	Total	C	N	O	0	0
			438	274	76	88		
1	L	63	Total	C	N	O	0	0
			438	274	76	88		
1	M	63	Total	C	N	O	0	0
			438	274	76	88		
1	N	63	Total	C	N	O	0	0
			438	274	76	88		
1	O	63	Total	C	N	O	0	0
			438	274	76	88		
1	P	63	Total	C	N	O	0	0
			438	274	76	88		

- Molecule 2 is (2 {Z})-3-ethyl-2-[({E})-3-(3-ethyl-1,3-benzothiazol-3-ium-2-yl)prop-2-enyl idene]-1,3-benzothiazole (CCD ID: A1EO8) (formula: C₂₁H₂₁N₂S₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
2	F	1	Total	C	N	S	0
			25	21	2	2	
2	F	1	Total	C	N	S	0
			25	21	2	2	
2	F	1	Total	C	N	S	0
			25	21	2	2	
2	G	1	Total	C	N	S	0
			25	21	2	2	
2	G	1	Total	C	N	S	0
			25	21	2	2	
2	G	1	Total	C	N	S	0
			25	21	2	2	
2	H	1	Total	C	N	S	0
			25	21	2	2	
2	H	1	Total	C	N	S	0
			25	21	2	2	
2	H	1	Total	C	N	S	0
			25	21	2	2	
2	I	1	Total	C	N	S	0
			25	21	2	2	
2	I	1	Total	C	N	S	0
			25	21	2	2	
2	I	1	Total	C	N	S	0
			25	21	2	2	
2	I	1	Total	C	N	S	0
			25	21	2	2	
2	J	1	Total	C	N	S	0
			25	21	2	2	

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Mol	Chain	Residues	Atoms				AltConf
2	J	1	Total 25	C 21	N 2	S 2	0
2	J	1	Total 25	C 21	N 2	S 2	0
2	J	1	Total 25	C 21	N 2	S 2	0
2	J	1	Total 25	C 21	N 2	S 2	0
2	L	1	Total 25	C 21	N 2	S 2	0
2	L	1	Total 25	C 21	N 2	S 2	0
2	L	1	Total 25	C 21	N 2	S 2	0
2	M	1	Total 25	C 21	N 2	S 2	0
2	M	1	Total 25	C 21	N 2	S 2	0
2	M	1	Total 25	C 21	N 2	S 2	0
2	N	1	Total 25	C 21	N 2	S 2	0
2	N	1	Total 25	C 21	N 2	S 2	0
2	N	1	Total 25	C 21	N 2	S 2	0
2	O	1	Total 25	C 21	N 2	S 2	0
2	O	1	Total 25	C 21	N 2	S 2	0
2	O	1	Total 25	C 21	N 2	S 2	0
2	O	1	Total 25	C 21	N 2	S 2	0
2	P	1	Total 25	C 21	N 2	S 2	0
2	P	1	Total 25	C 21	N 2	S 2	0
2	P	1	Total 25	C 21	N 2	S 2	0
2	P	1	Total 25	C 21	N 2	S 2	0

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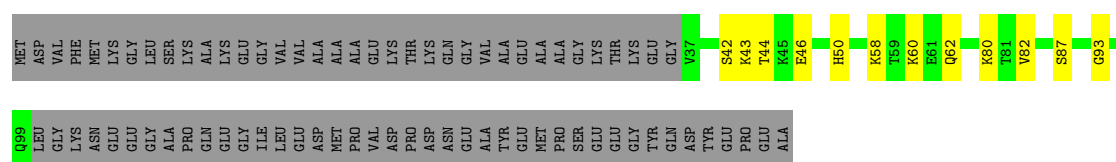
Mol	Chain	Residues	Atoms				AltConf
2	P	1	Total	C	N	S	0
			25	21	2	2	

3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

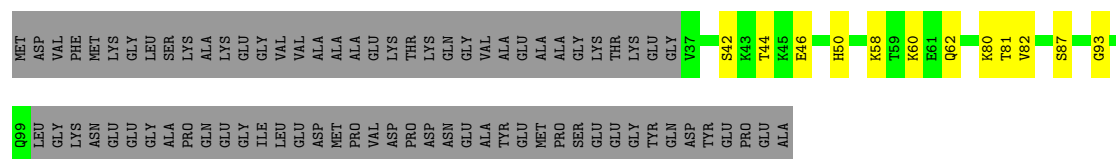
- Molecule 1: Alpha-synuclein

Chain E: 



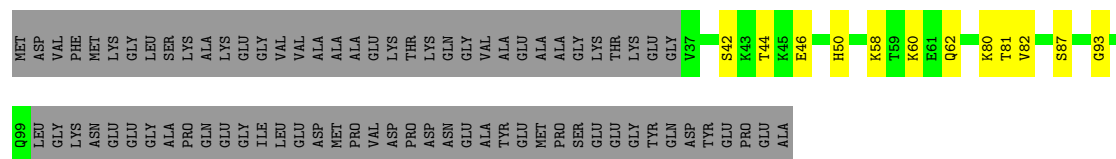
- Molecule 1: Alpha-synuclein

Chain F: 



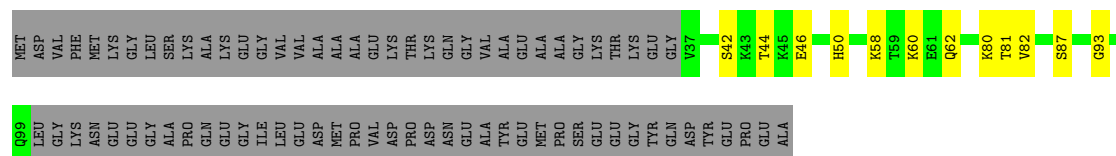
- Molecule 1: Alpha-synuclein

Chain G: 



- Molecule 1: Alpha-synuclein

Chain H: 



Chain I:

Residue	Category
MET	Grey
ASP	Grey
VAL	Grey
PHE	Grey
MET	Grey
LYS	Grey
GLY	Grey
LEU	Grey
SER	Grey
PRO	Grey
LYS	Grey
ALA	Grey
LYS	Grey
GLU	Grey
ILE	Grey
GLY	Grey
VAL	Grey
VAL	Grey
ALA	Grey
ALA	Grey
PRO	Grey
VAL	Grey
ASP	Grey
LYS	Grey
THR	Grey
LYS	Grey
GLN	Grey
GLY	Grey
VAL	Grey
ALA	Grey
GLU	Grey
ALA	Grey
ALA	Grey
GLY	Grey
LYS	Grey
THR	Grey
GLY	Grey
LYS	Grey
GLY	Grey
ASP	Green
Y37	Green
TYR	Yellow
S42	Yellow
K43	Yellow
T44	Yellow
K45	Yellow
E46	Yellow
H50	Yellow
K58	Yellow
T59	Yellow
K60	Yellow
E61	Yellow
D62	Yellow
K80	Yellow
T81	Yellow
V82	Yellow
S87	Yellow
G93	Yellow

Chain J:

[illegible]

Chain L:

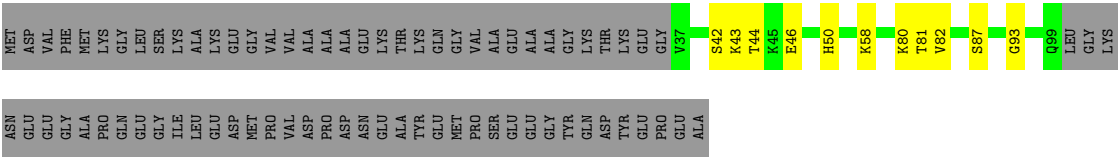
Position	Residue	Category
1	MET	Other
2	ASP	Other
3	VAL	Other
4	PHE	Other
5	MET	Other
6	LYS	Other
7	GLY	Other
8	LEU	Other
9	SER	Other
10	LYS	Other
11	ALA	Other
12	LYS	Other
13	GLU	Other
14	GLY	Other
15	VAL	Other
16	VAL	Other
17	ALA	Other
18	ALA	Other
19	ALA	Other
20	GLU	Other
21	LYS	Other
22	THR	Other
23	LYS	Other
24	GLN	Other
25	GLY	Other
26	VAL	Other
27	ALA	Other
28	GLU	Other
29	ALA	Other
30	ALA	Other
31	GLY	Other
32	THR	Other
33	LYS	Other
34	GLU	Other
35	GLY	Other
36	V37	Other
37	S42	CDR3
38	K43	CDR3
39	T44	CDR3
40	K45	CDR3
41	E46	CDR3
42	H50	CDR3
43	K58	CDR3
44	K80	CDR3
45	T81	CDR3
46	V82	CDR3
47	S87	CDR3
48	G93	CDR3
49	V99	CDR3
50	LEU	Other
51	GLY	Other
52	LYS	Other

Chain M:

36% 9% 55%

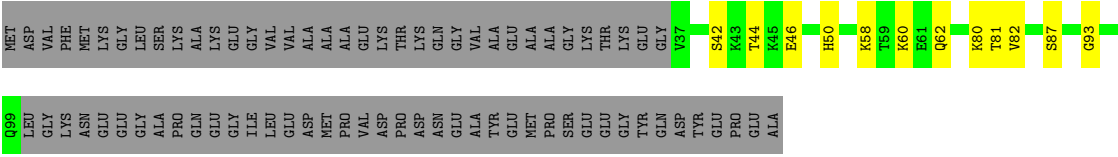
Chain M	Chain N
MET	Q99
ASP	LEU
VAL	GLY
PHE	LYS
MET	ASN
LYS	GLU
GLY	GLU
LEU	GLY
ALA	ALA
SER	PRO
LYS	GLN
ALA	GLU
LYS	GLY
GLU	ILE
GLY	LEU
VAL	GLU
VAL	GLU
ALA	ASP
ALA	MET
ALA	PRO
ALA	VAL
GLU	ASP
GLU	LYS
THR	ASP
LYS	ASN
GLN	GLU
GLY	GLU
VAL	TYR
ALA	GLU
GLU	MET
ALA	PRO
ALA	SER
GLY	GLU
LYS	GLU
THR	GLY
LYS	GLY
GLY	TYR
GLY	GLN
ASP	ASP
TYR	TYR
GLU	GLU
S42	PRO
K43	GLU
T44	GLU
K45	ALA
E46	
H50	
K58	
T59	
K60	
E61	
D62	
K80	
T81	
W82	
S87	
G93	

Chain N: 37% 8% 55%



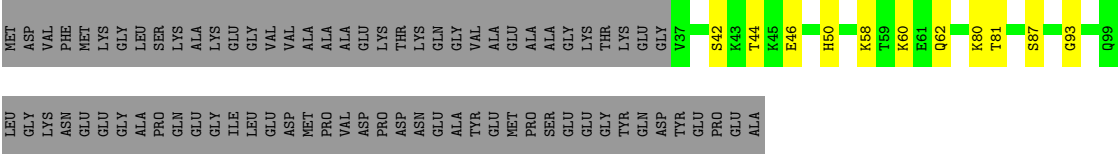
• Molecule 1: Alpha-synuclein

Chain O: 36% 9% 55%



• Molecule 1: Alpha-synuclein

Chain P: 37% 8% 55%



4 Experimental information

Property	Value	Source
EM reconstruction method	HELICAL	Depositor
Imposed symmetry	HELICAL, twist=179.59°, rise=2.41 Å, axial sym=C1	Depositor
Number of segments used	266817	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	NONE	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{Å}^2$)	55	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.062	Depositor
Minimum map value	-0.042	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.01	Depositor
Map size (Å)	298.8, 298.8, 298.8	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.83, 0.83, 0.83	Depositor

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: A1EO8

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	E	0.43	0/440	0.40	0/595
1	F	0.43	0/440	0.40	0/595
1	G	0.43	0/440	0.40	0/595
1	H	0.43	0/440	0.40	0/595
1	I	0.44	0/440	0.40	0/595
1	J	0.43	0/440	0.40	0/595
1	K	0.44	0/440	0.40	0/595
1	L	0.43	0/440	0.40	0/595
1	M	0.43	0/440	0.40	0/595
1	N	0.43	0/440	0.40	0/595
1	O	0.43	0/440	0.40	0/595
1	P	0.43	0/440	0.40	0/595
All	All	0.43	0/5280	0.40	0/7140

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 [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	E	438	0	459	13	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	F	438	0	459	18	0
1	G	438	0	459	20	0
1	H	438	0	459	19	0
1	I	438	0	459	18	0
1	J	438	0	459	11	0
1	K	438	0	459	13	0
1	L	438	0	459	18	0
1	M	438	0	459	20	0
1	N	438	0	459	17	0
1	O	438	0	459	17	0
1	P	438	0	459	10	0
2	F	75	0	0	13	0
2	G	75	0	0	15	0
2	H	75	0	0	15	0
2	I	100	0	0	22	0
2	J	125	0	0	25	0
2	L	75	0	0	13	0
2	M	75	0	0	16	0
2	N	75	0	0	16	0
2	O	100	0	0	23	0
2	P	125	0	0	25	0
All	All	6156	0	5508	285	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 24.

All (285) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:205:A1EO8:C22	2:P:205:A1EO8:N23	1.70	1.47
2:J:202:A1EO8:C22	2:J:202:A1EO8:N23	1.70	1.46
2:I:202:A1EO8:C22	2:I:202:A1EO8:N23	1.70	1.45
2:I:204:A1EO8:C22	2:I:204:A1EO8:N23	1.70	1.45
2:P:204:A1EO8:C22	2:P:204:A1EO8:N23	1.70	1.43
2:H:202:A1EO8:C22	2:H:202:A1EO8:N23	1.70	1.43
2:J:201:A1EO8:C22	2:J:201:A1EO8:N23	1.70	1.43
2:G:203:A1EO8:C22	2:G:203:A1EO8:N23	1.70	1.42
2:G:202:A1EO8:C22	2:G:202:A1EO8:N23	1.70	1.41
2:I:201:A1EO8:C22	2:I:201:A1EO8:N23	1.70	1.41
2:P:202:A1EO8:C22	2:P:202:A1EO8:N23	1.70	1.41
2:H:203:A1EO8:C22	2:H:203:A1EO8:N23	1.70	1.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:201:A1EO8:C22	2:H:201:A1EO8:N23	1.70	1.40
2:F:202:A1EO8:C22	2:F:202:A1EO8:N23	1.70	1.40
2:O:202:A1EO8:N23	2:O:202:A1EO8:C22	1.70	1.40
2:I:203:A1EO8:N23	2:I:203:A1EO8:C22	1.69	1.39
2:G:201:A1EO8:C22	2:G:201:A1EO8:N23	1.70	1.38
2:N:202:A1EO8:C22	2:N:202:A1EO8:N23	1.70	1.38
2:J:203:A1EO8:C22	2:J:203:A1EO8:N23	1.70	1.38
2:F:203:A1EO8:C22	2:F:203:A1EO8:N23	1.70	1.37
2:F:201:A1EO8:C22	2:F:201:A1EO8:N23	1.70	1.36
2:O:204:A1EO8:C22	2:O:204:A1EO8:N23	1.70	1.36
2:J:205:A1EO8:C22	2:J:205:A1EO8:N23	1.69	1.36
2:M:202:A1EO8:C22	2:M:202:A1EO8:N23	1.70	1.36
2:P:201:A1EO8:N23	2:P:201:A1EO8:C22	1.70	1.35
2:L:202:A1EO8:C22	2:L:202:A1EO8:N23	1.70	1.34
2:O:201:A1EO8:C22	2:O:201:A1EO8:N23	1.70	1.33
2:N:203:A1EO8:N23	2:N:203:A1EO8:C22	1.69	1.33
2:L:203:A1EO8:C22	2:L:203:A1EO8:N23	1.70	1.32
2:M:203:A1EO8:C22	2:M:203:A1EO8:N23	1.70	1.31
2:N:201:A1EO8:C22	2:N:201:A1EO8:N23	1.70	1.31
2:O:203:A1EO8:C22	2:O:203:A1EO8:N23	1.70	1.31
2:J:204:A1EO8:C22	2:J:204:A1EO8:N23	1.70	1.30
2:L:201:A1EO8:C22	2:L:201:A1EO8:N23	1.70	1.30
2:P:203:A1EO8:C22	2:P:203:A1EO8:N23	1.70	1.30
2:M:201:A1EO8:C22	2:M:201:A1EO8:N23	1.70	1.30
2:F:202:A1EO8:C11	2:F:202:A1EO8:C12	2.36	1.03
2:G:202:A1EO8:C12	2:G:202:A1EO8:C11	2.36	1.03
2:H:202:A1EO8:C11	2:H:202:A1EO8:C12	2.36	1.03
2:I:203:A1EO8:C11	2:I:203:A1EO8:C12	2.36	1.03
2:J:203:A1EO8:C11	2:J:203:A1EO8:C12	2.36	1.03
2:J:205:A1EO8:C11	2:J:205:A1EO8:C12	2.36	1.03
2:P:205:A1EO8:C11	2:P:205:A1EO8:C12	2.36	1.03
2:H:203:A1EO8:C12	2:H:203:A1EO8:C11	2.36	1.03
2:P:203:A1EO8:C11	2:P:203:A1EO8:C12	2.36	1.03
2:I:202:A1EO8:C12	2:I:202:A1EO8:C11	2.36	1.03
2:L:202:A1EO8:C11	2:L:202:A1EO8:C12	2.36	1.03
2:O:203:A1EO8:C11	2:O:203:A1EO8:C12	2.36	1.03
2:G:203:A1EO8:C11	2:G:203:A1EO8:C12	2.36	1.03
2:F:203:A1EO8:C11	2:F:203:A1EO8:C12	2.36	1.02
2:I:201:A1EO8:C11	2:I:201:A1EO8:C12	2.36	1.02
2:L:201:A1EO8:C11	2:L:201:A1EO8:C12	2.36	1.02
2:M:201:A1EO8:C12	2:M:201:A1EO8:C11	2.36	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:M:202:A1EO8:C11	2:M:202:A1EO8:C12	2.36	1.02
2:N:203:A1EO8:C11	2:N:203:A1EO8:C12	2.36	1.02
2:O:201:A1EO8:C12	2:O:201:A1EO8:C11	2.36	1.02
2:J:202:A1EO8:C11	2:J:202:A1EO8:C12	2.36	1.02
2:M:203:A1EO8:C12	2:M:203:A1EO8:C11	2.36	1.02
2:N:201:A1EO8:C11	2:N:201:A1EO8:C12	2.36	1.02
2:H:201:A1EO8:C12	2:H:201:A1EO8:C11	2.36	1.02
2:P:201:A1EO8:C11	2:P:201:A1EO8:C12	2.36	1.02
2:G:201:A1EO8:C11	2:G:201:A1EO8:C12	2.36	1.02
2:N:202:A1EO8:C12	2:N:202:A1EO8:C11	2.36	1.02
2:O:204:A1EO8:C11	2:O:204:A1EO8:C12	2.36	1.02
2:F:201:A1EO8:C11	2:F:201:A1EO8:C12	2.36	1.02
2:J:204:A1EO8:C11	2:J:204:A1EO8:C12	2.36	1.02
2:L:203:A1EO8:C11	2:L:203:A1EO8:C12	2.36	1.02
2:O:202:A1EO8:C11	2:O:202:A1EO8:C12	2.36	1.01
2:I:204:A1EO8:C11	2:I:204:A1EO8:C12	2.36	1.01
2:J:201:A1EO8:C11	2:J:201:A1EO8:C12	2.36	1.00
2:P:202:A1EO8:C11	2:P:202:A1EO8:C12	2.36	1.00
2:P:204:A1EO8:C11	2:P:204:A1EO8:C12	2.36	1.00
2:L:202:A1EO8:C25	2:L:202:A1EO8:C14	2.66	0.74
2:M:202:A1EO8:C14	2:M:202:A1EO8:C25	2.66	0.74
2:N:202:A1EO8:C25	2:N:202:A1EO8:C14	2.66	0.74
2:G:203:A1EO8:C14	2:G:203:A1EO8:C25	2.66	0.74
2:H:203:A1EO8:C25	2:H:203:A1EO8:C14	2.66	0.74
2:F:203:A1EO8:C25	2:F:203:A1EO8:C14	2.66	0.74
2:I:203:A1EO8:C25	2:I:203:A1EO8:C14	2.66	0.74
2:G:201:A1EO8:C14	2:G:201:A1EO8:C25	2.66	0.74
2:H:201:A1EO8:C25	2:H:201:A1EO8:C14	2.66	0.74
2:J:203:A1EO8:C25	2:J:203:A1EO8:C14	2.66	0.74
2:O:202:A1EO8:C25	2:O:202:A1EO8:C14	2.66	0.74
2:F:201:A1EO8:C25	2:F:201:A1EO8:C14	2.66	0.73
2:I:201:A1EO8:C25	2:I:201:A1EO8:C14	2.66	0.73
2:J:201:A1EO8:C25	2:J:201:A1EO8:C14	2.66	0.73
2:P:202:A1EO8:C25	2:P:202:A1EO8:C14	2.66	0.73
2:I:204:A1EO8:C25	2:I:204:A1EO8:C14	2.66	0.73
2:J:205:A1EO8:C14	2:J:205:A1EO8:C25	2.66	0.73
2:L:203:A1EO8:C14	2:L:203:A1EO8:C25	2.66	0.73
2:N:203:A1EO8:C25	2:N:203:A1EO8:C14	2.66	0.73
2:P:204:A1EO8:C14	2:P:204:A1EO8:C25	2.66	0.73
2:M:203:A1EO8:C25	2:M:203:A1EO8:C14	2.66	0.73
2:O:203:A1EO8:C25	2:O:203:A1EO8:C14	2.66	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:201:A1EO8:C25	2:L:201:A1EO8:C14	2.66	0.73
2:O:204:A1EO8:C25	2:O:204:A1EO8:C14	2.66	0.73
2:J:204:A1EO8:C25	2:J:204:A1EO8:C14	2.66	0.73
2:G:202:A1EO8:C25	2:G:202:A1EO8:C14	2.66	0.73
2:H:202:A1EO8:C14	2:H:202:A1EO8:C25	2.66	0.73
2:P:201:A1EO8:C25	2:P:201:A1EO8:C14	2.66	0.73
2:P:203:A1EO8:C25	2:P:203:A1EO8:C14	2.66	0.73
2:I:202:A1EO8:C25	2:I:202:A1EO8:C14	2.66	0.72
2:M:201:A1EO8:C25	2:M:201:A1EO8:C14	2.66	0.72
2:J:202:A1EO8:C25	2:J:202:A1EO8:C14	2.66	0.72
2:F:202:A1EO8:C25	2:F:202:A1EO8:C14	2.66	0.72
2:O:201:A1EO8:C25	2:O:201:A1EO8:C14	2.66	0.72
2:P:205:A1EO8:C25	2:P:205:A1EO8:C14	2.66	0.72
2:N:201:A1EO8:C25	2:N:201:A1EO8:C14	2.66	0.72
1:J:42:SER:O	1:J:44:THR:N	2.32	0.63
1:I:42:SER:O	1:I:44:THR:N	2.32	0.62
1:P:42:SER:O	1:P:44:THR:N	2.32	0.62
1:O:42:SER:O	1:O:44:THR:N	2.32	0.62
1:H:42:SER:O	1:H:44:THR:N	2.32	0.62
1:N:42:SER:O	1:N:44:THR:N	2.32	0.62
1:G:42:SER:O	1:G:44:THR:N	2.32	0.62
1:M:42:SER:O	1:M:44:THR:N	2.32	0.61
1:F:42:SER:O	1:F:44:THR:N	2.32	0.61
1:L:42:SER:O	1:L:44:THR:N	2.32	0.61
1:E:42:SER:O	1:E:44:THR:N	2.32	0.61
1:K:42:SER:O	1:K:44:THR:N	2.32	0.61
1:H:46:GLU:OE1	1:H:80:LYS:NZ	2.37	0.58
1:J:46:GLU:OE1	1:J:80:LYS:NZ	2.37	0.58
1:E:46:GLU:OE1	1:E:80:LYS:NZ	2.37	0.58
1:F:46:GLU:OE1	1:F:80:LYS:NZ	2.37	0.58
1:G:46:GLU:OE1	1:G:80:LYS:NZ	2.37	0.58
1:I:46:GLU:OE1	1:I:80:LYS:NZ	2.37	0.58
1:P:46:GLU:OE1	1:P:80:LYS:NZ	2.37	0.55
1:O:46:GLU:OE1	1:O:80:LYS:NZ	2.37	0.55
1:I:80:LYS:NZ	1:J:46:GLU:OE2	2.40	0.54
1:O:80:LYS:NZ	1:P:46:GLU:OE2	2.40	0.54
1:N:46:GLU:OE1	1:N:80:LYS:NZ	2.37	0.54
1:M:46:GLU:OE1	1:M:80:LYS:NZ	2.37	0.54
1:L:46:GLU:OE1	1:L:80:LYS:NZ	2.37	0.54
1:M:80:LYS:NZ	1:N:46:GLU:OE2	2.40	0.54
1:L:80:LYS:NZ	1:M:46:GLU:OE2	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:80:LYS:NZ	1:H:46:GLU:OE2	2.40	0.54
1:K:46:GLU:OE1	1:K:80:LYS:NZ	2.37	0.54
1:F:80:LYS:NZ	1:G:46:GLU:OE2	2.40	0.53
1:H:80:LYS:NZ	1:I:46:GLU:OE2	2.41	0.53
1:O:93:GLY:O	1:P:93:GLY:HA3	2.09	0.53
1:L:93:GLY:O	1:M:93:GLY:HA3	2.09	0.53
1:N:80:LYS:NZ	1:O:46:GLU:OE2	2.41	0.53
1:K:82:VAL:HG13	2:M:201:A1EO8:C03	2.39	0.53
1:K:82:VAL:CG1	2:M:201:A1EO8:C03	2.87	0.53
1:E:82:VAL:HG13	2:G:201:A1EO8:C03	2.39	0.53
1:E:82:VAL:CG1	2:G:201:A1EO8:C03	2.87	0.53
1:O:42:SER:O	1:O:44:THR:HG23	2.09	0.53
1:P:42:SER:O	1:P:44:THR:HG23	2.09	0.53
1:E:42:SER:O	1:E:44:THR:HG23	2.09	0.53
1:M:93:GLY:O	1:N:93:GLY:HA3	2.09	0.53
1:N:42:SER:O	1:N:44:THR:HG23	2.09	0.53
1:F:42:SER:O	1:F:44:THR:HG23	2.09	0.52
1:I:82:VAL:HG13	2:I:204:A1EO8:C03	2.39	0.52
1:J:42:SER:O	1:J:44:THR:HG23	2.09	0.52
1:G:42:SER:O	1:G:44:THR:HG23	2.09	0.52
1:H:42:SER:O	1:H:44:THR:HG23	2.09	0.52
1:I:42:SER:O	1:I:44:THR:HG23	2.09	0.52
1:M:42:SER:O	1:M:44:THR:HG23	2.09	0.52
1:F:93:GLY:O	1:G:93:GLY:HA3	2.08	0.52
1:K:93:GLY:O	1:L:93:GLY:HA3	2.10	0.52
1:K:80:LYS:NZ	1:L:46:GLU:OE2	2.42	0.52
1:H:82:VAL:HG13	2:J:201:A1EO8:C03	2.39	0.52
1:H:82:VAL:CG1	2:J:201:A1EO8:C03	2.88	0.52
1:L:42:SER:O	1:L:44:THR:HG23	2.09	0.52
1:I:93:GLY:O	1:J:93:GLY:HA3	2.08	0.52
1:N:93:GLY:O	1:O:93:GLY:HA3	2.10	0.52
1:N:82:VAL:CG1	2:P:201:A1EO8:C03	2.88	0.52
1:E:80:LYS:NZ	1:F:46:GLU:OE2	2.42	0.52
1:K:42:SER:O	1:K:44:THR:HG23	2.09	0.52
1:G:58:LYS:O	1:H:58:LYS:HA	2.10	0.52
1:O:82:VAL:HG13	2:O:204:A1EO8:C03	2.39	0.51
1:F:58:LYS:O	1:G:58:LYS:HA	2.10	0.51
1:G:82:VAL:HG13	2:I:201:A1EO8:C03	2.40	0.51
1:F:82:VAL:HG13	2:H:201:A1EO8:C03	2.40	0.51
1:G:93:GLY:O	1:H:93:GLY:HA3	2.09	0.51
1:I:82:VAL:CG1	2:I:204:A1EO8:C03	2.88	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:82:VAL:HG13	2:O:201:A1EO8:C03	2.40	0.51
1:N:82:VAL:HG13	2:P:201:A1EO8:C03	2.40	0.51
1:E:93:GLY:O	1:F:93:GLY:HA3	2.10	0.51
1:I:58:LYS:O	1:J:58:LYS:HA	2.10	0.51
1:G:82:VAL:CG1	2:I:201:A1EO8:C03	2.89	0.51
1:L:82:VAL:HG13	2:N:201:A1EO8:C03	2.40	0.51
1:M:58:LYS:O	1:N:58:LYS:HA	2.10	0.51
1:L:58:LYS:O	1:M:58:LYS:HA	2.10	0.51
1:M:82:VAL:CG1	2:O:201:A1EO8:C03	2.89	0.51
1:O:82:VAL:CG1	2:O:204:A1EO8:C03	2.88	0.51
1:E:58:LYS:O	1:F:58:LYS:HA	2.11	0.51
1:F:82:VAL:CG1	2:H:201:A1EO8:C03	2.89	0.50
1:O:58:LYS:O	1:P:58:LYS:HA	2.10	0.50
1:H:58:LYS:O	1:I:58:LYS:HA	2.11	0.50
1:H:93:GLY:O	1:I:93:GLY:HA3	2.10	0.50
1:K:58:LYS:O	1:L:58:LYS:HA	2.11	0.50
1:L:82:VAL:CG1	2:N:201:A1EO8:C03	2.89	0.50
2:J:205:A1EO8:C22	2:J:205:A1EO8:C24	2.82	0.50
1:N:58:LYS:O	1:O:58:LYS:HA	2.11	0.50
2:F:202:A1EO8:C22	2:F:202:A1EO8:C24	2.82	0.49
2:J:201:A1EO8:C22	2:J:201:A1EO8:C24	2.82	0.49
2:J:203:A1EO8:C22	2:J:203:A1EO8:C24	2.82	0.49
1:M:50:HIS:HA	1:N:50:HIS:O	2.13	0.48
1:L:50:HIS:HA	1:M:50:HIS:O	2.14	0.48
2:G:202:A1EO8:C22	2:G:202:A1EO8:C24	2.82	0.48
2:I:204:A1EO8:C22	2:I:204:A1EO8:C24	2.82	0.48
2:I:203:A1EO8:C22	2:I:203:A1EO8:C24	2.81	0.48
1:G:50:HIS:HA	1:H:50:HIS:O	2.13	0.48
2:M:203:A1EO8:C22	2:M:203:A1EO8:C24	2.81	0.48
1:O:50:HIS:HA	1:P:50:HIS:O	2.14	0.48
1:F:50:HIS:HA	1:G:50:HIS:O	2.13	0.47
1:I:50:HIS:HA	1:J:50:HIS:O	2.14	0.47
1:N:50:HIS:HA	1:O:50:HIS:O	2.15	0.47
2:H:202:A1EO8:C22	2:H:202:A1EO8:C24	2.82	0.47
2:H:203:A1EO8:C22	2:H:203:A1EO8:C24	2.82	0.47
2:L:203:A1EO8:C22	2:L:203:A1EO8:C24	2.81	0.46
2:L:201:A1EO8:C22	2:L:201:A1EO8:C24	2.82	0.46
1:H:50:HIS:HA	1:I:50:HIS:O	2.15	0.46
1:O:82:VAL:CG1	2:O:204:A1EO8:C04	2.94	0.46
1:E:82:VAL:CG1	2:G:201:A1EO8:C04	2.94	0.46
2:G:203:A1EO8:C22	2:G:203:A1EO8:C24	2.82	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:82:VAL:CG1	2:I:204:A1EO8:C04	2.94	0.46
2:I:202:A1EO8:C22	2:I:202:A1EO8:C24	2.82	0.46
1:H:82:VAL:CG1	2:J:201:A1EO8:C04	2.94	0.46
1:K:82:VAL:CG1	2:M:201:A1EO8:C04	2.94	0.46
2:P:205:A1EO8:C22	2:P:205:A1EO8:C24	2.81	0.46
2:L:202:A1EO8:C22	2:L:202:A1EO8:C24	2.82	0.46
1:N:82:VAL:CG1	2:P:201:A1EO8:C04	2.94	0.46
1:K:50:HIS:HA	1:L:50:HIS:O	2.16	0.45
2:M:201:A1EO8:C22	2:M:201:A1EO8:C24	2.82	0.45
1:M:82:VAL:CG1	2:O:201:A1EO8:C04	2.94	0.45
2:P:203:A1EO8:C22	2:P:203:A1EO8:C24	2.82	0.45
2:F:203:A1EO8:C22	2:F:203:A1EO8:C24	2.81	0.45
1:G:82:VAL:CG1	2:I:201:A1EO8:C04	2.94	0.45
1:L:82:VAL:CG1	2:N:201:A1EO8:C04	2.95	0.45
2:J:202:A1EO8:C22	2:J:202:A1EO8:C24	2.82	0.45
1:E:50:HIS:HA	1:F:50:HIS:O	2.16	0.44
1:F:82:VAL:CG1	2:H:201:A1EO8:C04	2.95	0.44
2:O:203:A1EO8:C22	2:O:203:A1EO8:C24	2.82	0.44
2:M:202:A1EO8:C22	2:M:202:A1EO8:C24	2.82	0.44
2:N:201:A1EO8:C22	2:N:201:A1EO8:C24	2.82	0.44
2:N:202:A1EO8:C22	2:N:202:A1EO8:C24	2.82	0.44
1:J:42:SER:OG	1:J:43:LYS:N	2.51	0.43
2:N:203:A1EO8:C22	2:N:203:A1EO8:C24	2.82	0.43
2:J:204:A1EO8:C22	2:J:204:A1EO8:C24	2.82	0.43
2:O:202:A1EO8:C22	2:O:202:A1EO8:C24	2.81	0.43
1:L:81:THR:HG22	1:M:81:THR:OG1	2.18	0.43
2:O:201:A1EO8:C22	2:O:201:A1EO8:C24	2.82	0.43
1:I:81:THR:HG22	1:J:81:THR:OG1	2.19	0.43
1:F:81:THR:HG22	1:G:81:THR:OG1	2.18	0.43
2:P:202:A1EO8:C22	2:P:202:A1EO8:C24	2.82	0.42
1:E:42:SER:OG	1:E:43:LYS:N	2.51	0.42
1:K:42:SER:OG	1:K:43:LYS:N	2.51	0.42
1:L:42:SER:OG	1:L:43:LYS:N	2.51	0.42
1:G:81:THR:HG22	1:H:81:THR:OG1	2.19	0.42
1:O:81:THR:HG22	1:P:81:THR:OG1	2.19	0.42
1:M:81:THR:HG22	1:N:81:THR:OG1	2.19	0.42
1:M:42:SER:OG	1:M:43:LYS:N	2.51	0.42
2:P:201:A1EO8:C22	2:P:201:A1EO8:C24	2.82	0.42
2:P:204:A1EO8:C22	2:P:204:A1EO8:C24	2.82	0.42
2:F:201:A1EO8:C22	2:F:201:A1EO8:C24	2.82	0.41
1:F:87:SER:HB2	2:G:202:A1EO8:C18	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:87:SER:HB2	2:H:202:A1EO8:C18	2.51	0.41
1:H:87:SER:HB2	2:I:202:A1EO8:C18	2.51	0.41
1:I:87:SER:HB2	2:J:202:A1EO8:C18	2.51	0.41
1:K:60:LYS:NZ	1:K:62:GLN:OE1	2.51	0.41
1:O:87:SER:HB2	2:P:202:A1EO8:C18	2.51	0.41
1:N:87:SER:HB2	2:O:202:A1EO8:C18	2.51	0.41
1:P:87:SER:HB2	2:P:204:A1EO8:C18	2.51	0.41
1:E:87:SER:HB2	2:F:202:A1EO8:C18	2.51	0.41
1:J:87:SER:HB2	2:J:204:A1EO8:C18	2.51	0.41
1:M:87:SER:HB2	2:N:202:A1EO8:C18	2.51	0.41
1:F:46:GLU:HB2	1:G:46:GLU:HG2	2.03	0.41
1:G:60:LYS:NZ	1:G:62:GLN:OE1	2.51	0.41
1:H:60:LYS:NZ	1:H:62:GLN:OE1	2.51	0.41
1:L:87:SER:HB2	2:M:202:A1EO8:C18	2.51	0.41
1:M:60:LYS:NZ	1:M:62:GLN:OE1	2.51	0.41
1:E:60:LYS:NZ	1:E:62:GLN:OE1	2.51	0.41
1:F:60:LYS:NZ	1:F:62:GLN:OE1	2.51	0.41
1:I:60:LYS:NZ	1:I:62:GLN:OE1	2.51	0.41
1:J:60:LYS:NZ	1:J:62:GLN:OE1	2.51	0.41
1:K:87:SER:HB2	2:L:202:A1EO8:C18	2.51	0.40
1:P:60:LYS:NZ	1:P:62:GLN:OE1	2.51	0.40
2:O:204:A1EO8:C22	2:O:204:A1EO8:C24	2.82	0.40
1:L:46:GLU:HB2	1:M:46:GLU:HG2	2.03	0.40
1:O:60:LYS:NZ	1:O:62:GLN:OE1	2.51	0.40
1:G:46:GLU:HB2	1:H:46:GLU:HG2	2.03	0.40
1:H:81:THR:HG22	1:I:81:THR:OG1	2.21	0.40
1:N:42:SER:OG	1:N:43:LYS:N	2.51	0.40

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 PDB entries followed by that with respect to all EM entries.

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	E	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	F	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	G	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	H	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	I	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	J	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	K	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	L	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	M	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	N	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	O	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
1	P	61/140 (44%)	54 (88%)	7 (12%)	0	100	100
All	All	732/1680 (44%)	648 (88%)	84 (12%)	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 PDB entries followed by that with respect to all EM entries.

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	E	45/103 (44%)	45 (100%)	0	100	100
1	F	45/103 (44%)	45 (100%)	0	100	100
1	G	45/103 (44%)	45 (100%)	0	100	100
1	H	45/103 (44%)	45 (100%)	0	100	100
1	I	45/103 (44%)	45 (100%)	0	100	100
1	J	45/103 (44%)	45 (100%)	0	100	100
1	K	45/103 (44%)	45 (100%)	0	100	100
1	L	45/103 (44%)	45 (100%)	0	100	100
1	M	45/103 (44%)	45 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	N	45/103 (44%)	45 (100%)	0	100	100
1	O	45/103 (44%)	45 (100%)	0	100	100
1	P	45/103 (44%)	45 (100%)	0	100	100
All	All	540/1236 (44%)	540 (100%)	0	100	100

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
1	E	65	ASN
1	F	65	ASN
1	G	65	ASN
1	H	65	ASN
1	I	65	ASN
1	J	65	ASN
1	K	65	ASN
1	L	65	ASN
1	M	65	ASN
1	N	65	ASN
1	O	65	ASN
1	P	65	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

36 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
2	A1EO8	H	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	J	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	G	203	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	P	204	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	H	203	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	O	204	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	G	202	-	28,28,28	4.43	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	L	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	J	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	O	203	-	28,28,28	4.41	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	P	203	-	28,28,28	4.41	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	M	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	J	204	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	13 (33%)
2	A1EO8	N	201	-	28,28,28	4.43	13 (46%)	39,39,39	3.94	12 (30%)
2	A1EO8	L	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.92	12 (30%)
2	A1EO8	F	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	N	203	-	28,28,28	4.41	12 (42%)	39,39,39	3.92	12 (30%)
2	A1EO8	H	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	F	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	J	203	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	N	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	F	203	-	28,28,28	4.41	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	I	202	-	28,28,28	4.43	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	I	203	-	28,28,28	4.41	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	O	201	-	28,28,28	4.43	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	P	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	P	205	-	28,28,28	4.41	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	M	203	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)
2	A1EO8	J	205	-	28,28,28	4.41	13 (46%)	39,39,39	3.93	12 (30%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	A1EO8	P	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	L	203	-	28,28,28	4.41	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	M	202	-	28,28,28	4.43	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	O	202	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	I	204	-	28,28,28	4.43	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	G	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.93	12 (30%)
2	A1EO8	I	201	-	28,28,28	4.42	12 (42%)	39,39,39	3.94	12 (30%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	A1EO8	H	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	J	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	G	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	P	204	-	-	4/10/10/10	0/4/4/4
2	A1EO8	H	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	O	204	-	-	4/10/10/10	0/4/4/4
2	A1EO8	G	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	L	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	J	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	O	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	P	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	M	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	J	204	-	-	4/10/10/10	0/4/4/4
2	A1EO8	N	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	L	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	F	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	N	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	H	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	F	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	J	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	N	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	F	203	-	-	4/10/10/10	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	A1EO8	I	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	I	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	O	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	P	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	P	205	-	-	4/10/10/10	0/4/4/4
2	A1EO8	M	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	J	205	-	-	4/10/10/10	0/4/4/4
2	A1EO8	P	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	L	203	-	-	4/10/10/10	0/4/4/4
2	A1EO8	M	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	O	202	-	-	4/10/10/10	0/4/4/4
2	A1EO8	I	204	-	-	4/10/10/10	0/4/4/4
2	A1EO8	G	201	-	-	4/10/10/10	0/4/4/4
2	A1EO8	I	201	-	-	4/10/10/10	0/4/4/4

All (434) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	201	A1EO8	C22-N23	14.62	1.70	1.41
2	G	201	A1EO8	C22-N23	14.60	1.70	1.41
2	N	201	A1EO8	C22-N23	14.60	1.70	1.41
2	H	201	A1EO8	C22-N23	14.60	1.70	1.41
2	O	201	A1EO8	C22-N23	14.60	1.70	1.41
2	F	201	A1EO8	C22-N23	14.59	1.70	1.41
2	I	204	A1EO8	C22-N23	14.59	1.70	1.41
2	M	201	A1EO8	C22-N23	14.59	1.70	1.41
2	L	201	A1EO8	C22-N23	14.59	1.70	1.41
2	P	201	A1EO8	C22-N23	14.58	1.70	1.41
2	I	202	A1EO8	C22-N23	14.57	1.70	1.41
2	O	204	A1EO8	C22-N23	14.57	1.70	1.41
2	P	204	A1EO8	C22-N23	14.56	1.70	1.41
2	F	202	A1EO8	C22-N23	14.56	1.70	1.41
2	G	202	A1EO8	C22-N23	14.56	1.70	1.41
2	L	202	A1EO8	C22-N23	14.56	1.70	1.41
2	N	202	A1EO8	C22-N23	14.55	1.70	1.41
2	H	202	A1EO8	C22-N23	14.55	1.70	1.41
2	G	203	A1EO8	C22-N23	14.55	1.70	1.41
2	I	201	A1EO8	C22-N23	14.54	1.70	1.41
2	M	203	A1EO8	C22-N23	14.54	1.70	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	M	202	A1EO8	C22-N23	14.54	1.70	1.41
2	H	203	A1EO8	C22-N23	14.54	1.70	1.41
2	J	202	A1EO8	C22-N23	14.54	1.70	1.41
2	J	203	A1EO8	C22-N23	14.53	1.70	1.41
2	P	202	A1EO8	C22-N23	14.52	1.70	1.41
2	J	204	A1EO8	C22-N23	14.52	1.70	1.41
2	P	205	A1EO8	C22-N23	14.51	1.70	1.41
2	O	202	A1EO8	C22-N23	14.51	1.70	1.41
2	L	203	A1EO8	C22-N23	14.51	1.70	1.41
2	F	203	A1EO8	C22-N23	14.51	1.70	1.41
2	O	203	A1EO8	C22-N23	14.51	1.70	1.41
2	P	203	A1EO8	C22-N23	14.51	1.70	1.41
2	J	205	A1EO8	C22-N23	14.50	1.69	1.41
2	I	203	A1EO8	C22-N23	14.50	1.69	1.41
2	N	203	A1EO8	C22-N23	14.49	1.69	1.41
2	O	201	A1EO8	C15-N23	8.57	1.52	1.35
2	J	204	A1EO8	C15-N23	8.56	1.52	1.35
2	I	201	A1EO8	C15-N23	8.54	1.52	1.35
2	M	202	A1EO8	C15-N23	8.54	1.52	1.35
2	M	203	A1EO8	C15-N23	8.54	1.52	1.35
2	H	203	A1EO8	C15-N23	8.53	1.52	1.35
2	O	202	A1EO8	C15-N23	8.53	1.52	1.35
2	O	204	A1EO8	C15-N23	8.53	1.52	1.35
2	H	201	A1EO8	C15-N23	8.52	1.52	1.35
2	F	201	A1EO8	C15-N23	8.52	1.52	1.35
2	L	201	A1EO8	C15-N23	8.52	1.52	1.35
2	I	202	A1EO8	C15-N23	8.52	1.52	1.35
2	G	202	A1EO8	C15-N23	8.52	1.52	1.35
2	L	203	A1EO8	C15-N23	8.52	1.52	1.35
2	I	204	A1EO8	C15-N23	8.51	1.52	1.35
2	N	203	A1EO8	C15-N23	8.51	1.52	1.35
2	G	203	A1EO8	C15-N23	8.51	1.52	1.35
2	I	203	A1EO8	C15-N23	8.51	1.52	1.35
2	P	202	A1EO8	C15-N23	8.51	1.52	1.35
2	N	201	A1EO8	C15-N23	8.51	1.52	1.35
2	F	202	A1EO8	C15-N23	8.50	1.52	1.35
2	J	202	A1EO8	C15-N23	8.50	1.52	1.35
2	J	201	A1EO8	C15-N23	8.50	1.52	1.35
2	G	201	A1EO8	C15-N23	8.50	1.52	1.35
2	J	203	A1EO8	C15-N23	8.50	1.52	1.35
2	M	201	A1EO8	C15-N23	8.50	1.52	1.35
2	P	204	A1EO8	C15-N23	8.50	1.52	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	P	203	A1EO8	C15-N23	8.49	1.52	1.35
2	N	202	A1EO8	C15-N23	8.49	1.52	1.35
2	L	202	A1EO8	C15-N23	8.49	1.52	1.35
2	P	201	A1EO8	C15-N23	8.49	1.52	1.35
2	O	203	A1EO8	C15-N23	8.49	1.52	1.35
2	F	203	A1EO8	C15-N23	8.48	1.52	1.35
2	P	205	A1EO8	C15-N23	8.48	1.52	1.35
2	H	202	A1EO8	C15-N23	8.47	1.52	1.35
2	J	205	A1EO8	C15-N23	8.47	1.52	1.35
2	J	204	A1EO8	C13-C14	7.00	1.52	1.34
2	N	202	A1EO8	C13-C14	6.98	1.52	1.34
2	G	202	A1EO8	C13-C14	6.98	1.52	1.34
2	F	202	A1EO8	C13-C14	6.97	1.52	1.34
2	J	202	A1EO8	C13-C14	6.97	1.52	1.34
2	I	202	A1EO8	C13-C14	6.96	1.52	1.34
2	P	204	A1EO8	C13-C14	6.96	1.52	1.34
2	J	205	A1EO8	C13-C14	6.96	1.52	1.34
2	H	202	A1EO8	C13-C14	6.96	1.52	1.34
2	O	203	A1EO8	C13-C14	6.95	1.52	1.34
2	M	202	A1EO8	C13-C14	6.95	1.52	1.34
2	N	203	A1EO8	C13-C14	6.94	1.52	1.34
2	N	201	A1EO8	C13-C14	6.94	1.52	1.34
2	P	201	A1EO8	C13-C14	6.94	1.52	1.34
2	G	201	A1EO8	C13-C14	6.94	1.52	1.34
2	J	201	A1EO8	C13-C14	6.94	1.52	1.34
2	M	203	A1EO8	C13-C14	6.94	1.52	1.34
2	P	202	A1EO8	C13-C14	6.94	1.52	1.34
2	H	203	A1EO8	C13-C14	6.94	1.52	1.34
2	L	202	A1EO8	C13-C14	6.94	1.52	1.34
2	O	202	A1EO8	C13-C14	6.94	1.52	1.34
2	I	203	A1EO8	C13-C14	6.93	1.52	1.34
2	P	205	A1EO8	C13-C14	6.93	1.52	1.34
2	F	203	A1EO8	C13-C14	6.93	1.52	1.34
2	I	204	A1EO8	C13-C14	6.93	1.52	1.34
2	O	201	A1EO8	C13-C14	6.93	1.52	1.34
2	L	203	A1EO8	C13-C14	6.93	1.52	1.34
2	J	203	A1EO8	C13-C14	6.92	1.52	1.34
2	L	201	A1EO8	C13-C14	6.92	1.52	1.34
2	P	203	A1EO8	C13-C14	6.92	1.52	1.34
2	M	201	A1EO8	C13-C14	6.92	1.52	1.34
2	O	204	A1EO8	C13-C14	6.91	1.52	1.34
2	I	201	A1EO8	C13-C14	6.91	1.52	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	203	A1EO8	C13-C14	6.91	1.52	1.34
2	H	201	A1EO8	C13-C14	6.91	1.52	1.34
2	F	201	A1EO8	C13-C14	6.91	1.52	1.34
2	I	201	A1EO8	C15-S16	-6.39	1.62	1.73
2	P	201	A1EO8	C15-S16	-6.39	1.62	1.73
2	G	201	A1EO8	C15-S16	-6.38	1.62	1.73
2	O	204	A1EO8	C15-S16	-6.37	1.62	1.73
2	H	201	A1EO8	C15-S16	-6.37	1.62	1.73
2	M	201	A1EO8	C15-S16	-6.36	1.62	1.73
2	L	201	A1EO8	C15-S16	-6.36	1.62	1.73
2	M	203	A1EO8	C15-S16	-6.36	1.62	1.73
2	J	202	A1EO8	C15-S16	-6.36	1.62	1.73
2	P	203	A1EO8	C15-S16	-6.36	1.62	1.73
2	I	204	A1EO8	C15-S16	-6.36	1.62	1.73
2	O	202	A1EO8	C15-S16	-6.36	1.62	1.73
2	N	201	A1EO8	C15-S16	-6.36	1.62	1.73
2	G	202	A1EO8	C15-S16	-6.35	1.62	1.73
2	J	203	A1EO8	C15-S16	-6.35	1.62	1.73
2	L	203	A1EO8	C15-S16	-6.35	1.62	1.73
2	N	202	A1EO8	C15-S16	-6.35	1.62	1.73
2	I	202	A1EO8	C15-S16	-6.35	1.62	1.73
2	I	203	A1EO8	C15-S16	-6.34	1.62	1.73
2	F	201	A1EO8	C15-S16	-6.34	1.62	1.73
2	M	202	A1EO8	C15-S16	-6.34	1.62	1.73
2	G	203	A1EO8	C15-S16	-6.34	1.62	1.73
2	H	202	A1EO8	C15-S16	-6.33	1.62	1.73
2	O	201	A1EO8	C15-S16	-6.32	1.62	1.73
2	J	204	A1EO8	C15-S16	-6.32	1.62	1.73
2	P	202	A1EO8	C15-S16	-6.32	1.62	1.73
2	F	203	A1EO8	C15-S16	-6.32	1.62	1.73
2	J	201	A1EO8	C15-S16	-6.32	1.62	1.73
2	F	202	A1EO8	C15-S16	-6.32	1.62	1.73
2	J	205	A1EO8	C15-S16	-6.31	1.62	1.73
2	O	203	A1EO8	C15-S16	-6.31	1.62	1.73
2	N	203	A1EO8	C15-S16	-6.31	1.62	1.73
2	H	203	A1EO8	C15-S16	-6.30	1.62	1.73
2	P	205	A1EO8	C15-S16	-6.29	1.62	1.73
2	L	202	A1EO8	C15-S16	-6.29	1.62	1.73
2	P	204	A1EO8	C15-S16	-6.29	1.62	1.73
2	J	202	A1EO8	C22-C17	5.97	1.49	1.40
2	M	202	A1EO8	C22-C17	5.97	1.49	1.40
2	N	202	A1EO8	C22-C17	5.97	1.49	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	P	202	A1EO8	C22-C17	5.96	1.49	1.40
2	O	202	A1EO8	C22-C17	5.96	1.49	1.40
2	L	203	A1EO8	C22-C17	5.96	1.49	1.40
2	G	203	A1EO8	C22-C17	5.94	1.49	1.40
2	I	202	A1EO8	C22-C17	5.94	1.49	1.40
2	L	202	A1EO8	C22-C17	5.94	1.49	1.40
2	G	202	A1EO8	C22-C17	5.93	1.49	1.40
2	F	202	A1EO8	C22-C17	5.93	1.49	1.40
2	J	203	A1EO8	C22-C17	5.93	1.49	1.40
2	O	203	A1EO8	C22-C17	5.93	1.49	1.40
2	J	204	A1EO8	C22-C17	5.92	1.49	1.40
2	O	202	A1EO8	C12-C07	5.92	1.53	1.39
2	L	202	A1EO8	C12-C07	5.92	1.53	1.39
2	N	201	A1EO8	C22-C17	5.92	1.49	1.40
2	I	202	A1EO8	C12-C07	5.92	1.53	1.39
2	J	205	A1EO8	C22-C17	5.92	1.49	1.40
2	P	204	A1EO8	C22-C17	5.91	1.49	1.40
2	M	203	A1EO8	C22-C17	5.91	1.49	1.40
2	F	202	A1EO8	C12-C07	5.90	1.53	1.39
2	H	202	A1EO8	C22-C17	5.90	1.49	1.40
2	M	202	A1EO8	C12-C07	5.90	1.53	1.39
2	P	205	A1EO8	C22-C17	5.90	1.49	1.40
2	O	204	A1EO8	C22-C17	5.90	1.49	1.40
2	J	204	A1EO8	C12-C07	5.89	1.53	1.39
2	N	202	A1EO8	C12-C07	5.89	1.53	1.39
2	M	201	A1EO8	C22-C17	5.89	1.49	1.40
2	G	202	A1EO8	C12-C07	5.89	1.53	1.39
2	F	203	A1EO8	C22-C17	5.89	1.49	1.40
2	N	203	A1EO8	C12-C07	5.89	1.53	1.39
2	N	203	A1EO8	C22-C17	5.89	1.49	1.40
2	J	202	A1EO8	C12-C07	5.89	1.53	1.39
2	F	201	A1EO8	C22-C17	5.88	1.49	1.40
2	P	204	A1EO8	C12-C07	5.88	1.53	1.39
2	H	203	A1EO8	C22-C17	5.88	1.49	1.40
2	P	202	A1EO8	C12-C07	5.88	1.53	1.39
2	F	201	A1EO8	C12-C07	5.87	1.53	1.39
2	I	204	A1EO8	C12-C07	5.87	1.53	1.39
2	N	201	A1EO8	C12-C07	5.87	1.53	1.39
2	I	204	A1EO8	C22-C17	5.87	1.49	1.40
2	P	203	A1EO8	C22-C17	5.86	1.49	1.40
2	J	201	A1EO8	C12-C07	5.86	1.53	1.39
2	P	203	A1EO8	C12-C07	5.86	1.53	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	202	A1EO8	C12-C07	5.86	1.53	1.39
2	G	201	A1EO8	C12-C07	5.86	1.53	1.39
2	I	201	A1EO8	C22-C17	5.86	1.49	1.40
2	I	203	A1EO8	C22-C17	5.86	1.49	1.40
2	L	201	A1EO8	C22-C17	5.86	1.49	1.40
2	M	201	A1EO8	C12-C07	5.86	1.53	1.39
2	G	203	A1EO8	C12-C07	5.85	1.53	1.39
2	O	201	A1EO8	C22-C17	5.85	1.49	1.40
2	I	201	A1EO8	C12-C07	5.85	1.53	1.39
2	O	204	A1EO8	C12-C07	5.85	1.53	1.39
2	M	203	A1EO8	C12-C07	5.85	1.53	1.39
2	J	203	A1EO8	C12-C07	5.85	1.53	1.39
2	H	201	A1EO8	C22-C17	5.85	1.49	1.40
2	H	203	A1EO8	C12-C07	5.84	1.53	1.39
2	J	201	A1EO8	C22-C17	5.84	1.49	1.40
2	L	201	A1EO8	C12-C07	5.84	1.53	1.39
2	I	203	A1EO8	C12-C07	5.84	1.53	1.39
2	G	201	A1EO8	C22-C17	5.84	1.49	1.40
2	O	201	A1EO8	C12-C07	5.84	1.53	1.39
2	F	203	A1EO8	C12-C07	5.84	1.53	1.39
2	P	205	A1EO8	C12-C07	5.84	1.53	1.39
2	L	203	A1EO8	C12-C07	5.84	1.53	1.39
2	P	201	A1EO8	C12-C07	5.83	1.53	1.39
2	J	205	A1EO8	C12-C07	5.83	1.53	1.39
2	P	201	A1EO8	C22-C17	5.83	1.49	1.40
2	O	203	A1EO8	C12-C07	5.82	1.53	1.39
2	H	201	A1EO8	C12-C07	5.82	1.52	1.39
2	O	201	A1EO8	C17-S16	-4.87	1.64	1.74
2	O	204	A1EO8	C17-S16	-4.87	1.64	1.74
2	O	202	A1EO8	C17-S16	-4.86	1.64	1.74
2	I	204	A1EO8	C17-S16	-4.85	1.64	1.74
2	P	204	A1EO8	C17-S16	-4.85	1.64	1.74
2	I	201	A1EO8	C17-S16	-4.85	1.64	1.74
2	N	203	A1EO8	C17-S16	-4.85	1.64	1.74
2	G	202	A1EO8	C17-S16	-4.84	1.64	1.74
2	M	201	A1EO8	C17-S16	-4.84	1.64	1.74
2	L	202	A1EO8	C17-S16	-4.83	1.64	1.74
2	L	201	A1EO8	C17-S16	-4.83	1.64	1.74
2	F	202	A1EO8	C17-S16	-4.83	1.64	1.74
2	N	201	A1EO8	C17-S16	-4.83	1.64	1.74
2	H	201	A1EO8	C17-S16	-4.83	1.64	1.74
2	J	202	A1EO8	C17-S16	-4.83	1.64	1.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	203	A1EO8	C17-S16	-4.83	1.64	1.74
2	M	203	A1EO8	C17-S16	-4.83	1.64	1.74
2	J	204	A1EO8	C17-S16	-4.82	1.64	1.74
2	M	202	A1EO8	C17-S16	-4.82	1.64	1.74
2	O	203	A1EO8	C17-S16	-4.82	1.64	1.74
2	G	201	A1EO8	C17-S16	-4.82	1.64	1.74
2	J	201	A1EO8	C17-S16	-4.82	1.64	1.74
2	I	202	A1EO8	C17-S16	-4.82	1.64	1.74
2	P	203	A1EO8	C17-S16	-4.82	1.64	1.74
2	P	202	A1EO8	C17-S16	-4.82	1.64	1.74
2	P	201	A1EO8	C17-S16	-4.81	1.64	1.74
2	I	203	A1EO8	C17-S16	-4.81	1.64	1.74
2	H	203	A1EO8	C17-S16	-4.81	1.64	1.74
2	F	201	A1EO8	C17-S16	-4.81	1.64	1.74
2	N	202	A1EO8	C17-S16	-4.81	1.64	1.74
2	F	203	A1EO8	C17-S16	-4.81	1.64	1.74
2	J	205	A1EO8	C17-S16	-4.81	1.64	1.74
2	P	205	A1EO8	C17-S16	-4.80	1.64	1.74
2	H	202	A1EO8	C17-S16	-4.79	1.64	1.74
2	G	203	A1EO8	C17-S16	-4.79	1.64	1.74
2	L	203	A1EO8	C17-S16	-4.77	1.64	1.74
2	F	202	A1EO8	C14-C15	-4.60	1.31	1.42
2	I	202	A1EO8	C14-C15	-4.59	1.31	1.42
2	J	204	A1EO8	C14-C15	-4.59	1.31	1.42
2	G	203	A1EO8	C14-C15	-4.59	1.31	1.42
2	P	204	A1EO8	C14-C15	-4.59	1.31	1.42
2	I	204	A1EO8	C14-C15	-4.58	1.31	1.42
2	N	202	A1EO8	C14-C15	-4.57	1.31	1.42
2	G	202	A1EO8	C14-C15	-4.57	1.31	1.42
2	L	201	A1EO8	C14-C15	-4.57	1.31	1.42
2	L	202	A1EO8	C14-C15	-4.57	1.31	1.42
2	J	201	A1EO8	C14-C15	-4.57	1.31	1.42
2	F	201	A1EO8	C14-C15	-4.57	1.31	1.42
2	O	201	A1EO8	C14-C15	-4.57	1.31	1.42
2	O	203	A1EO8	C14-C15	-4.56	1.31	1.42
2	J	205	A1EO8	C14-C15	-4.56	1.31	1.42
2	P	202	A1EO8	C14-C15	-4.56	1.31	1.42
2	N	201	A1EO8	C14-C15	-4.56	1.31	1.42
2	M	203	A1EO8	C14-C15	-4.55	1.31	1.42
2	P	205	A1EO8	C14-C15	-4.55	1.31	1.42
2	M	202	A1EO8	C14-C15	-4.55	1.31	1.42
2	H	202	A1EO8	C14-C15	-4.55	1.31	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	203	A1EO8	C14-C15	-4.55	1.31	1.42
2	G	201	A1EO8	C14-C15	-4.55	1.31	1.42
2	O	202	A1EO8	C14-C15	-4.55	1.31	1.42
2	H	203	A1EO8	C14-C15	-4.54	1.31	1.42
2	J	202	A1EO8	C14-C15	-4.54	1.31	1.42
2	N	203	A1EO8	C14-C15	-4.54	1.31	1.42
2	O	204	A1EO8	C14-C15	-4.54	1.31	1.42
2	M	201	A1EO8	C14-C15	-4.54	1.31	1.42
2	L	203	A1EO8	C14-C15	-4.54	1.31	1.42
2	P	203	A1EO8	C14-C15	-4.54	1.31	1.42
2	H	201	A1EO8	C14-C15	-4.53	1.31	1.42
2	I	203	A1EO8	C14-C15	-4.53	1.31	1.42
2	J	203	A1EO8	C14-C15	-4.52	1.31	1.42
2	P	201	A1EO8	C14-C15	-4.52	1.31	1.42
2	I	201	A1EO8	C14-C15	-4.52	1.31	1.42
2	P	202	A1EO8	C07-N08	-3.93	1.31	1.36
2	N	202	A1EO8	C07-N08	-3.91	1.31	1.36
2	M	202	A1EO8	C07-N08	-3.91	1.31	1.36
2	P	201	A1EO8	C07-N08	-3.90	1.31	1.36
2	I	204	A1EO8	C07-N08	-3.90	1.31	1.36
2	H	202	A1EO8	C07-N08	-3.89	1.31	1.36
2	P	203	A1EO8	C07-N08	-3.89	1.31	1.36
2	G	202	A1EO8	C07-N08	-3.89	1.31	1.36
2	J	205	A1EO8	C07-N08	-3.88	1.31	1.36
2	I	202	A1EO8	C07-N08	-3.88	1.31	1.36
2	L	202	A1EO8	C07-N08	-3.87	1.31	1.36
2	N	201	A1EO8	C07-N08	-3.87	1.31	1.36
2	J	201	A1EO8	C07-N08	-3.87	1.31	1.36
2	F	202	A1EO8	C07-N08	-3.87	1.31	1.36
2	I	201	A1EO8	C07-N08	-3.87	1.31	1.36
2	N	203	A1EO8	C07-N08	-3.87	1.31	1.36
2	H	201	A1EO8	C07-N08	-3.86	1.31	1.36
2	J	203	A1EO8	C07-N08	-3.86	1.31	1.36
2	I	203	A1EO8	C07-N08	-3.86	1.31	1.36
2	O	202	A1EO8	C07-N08	-3.86	1.31	1.36
2	O	203	A1EO8	C07-N08	-3.86	1.31	1.36
2	J	204	A1EO8	C07-N08	-3.85	1.31	1.36
2	M	201	A1EO8	C07-N08	-3.85	1.31	1.36
2	P	204	A1EO8	C07-N08	-3.85	1.31	1.36
2	J	202	A1EO8	C07-N08	-3.85	1.31	1.36
2	O	201	A1EO8	C07-N08	-3.85	1.31	1.36
2	F	203	A1EO8	C07-N08	-3.84	1.31	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	201	A1EO8	C07-N08	-3.84	1.31	1.36
2	F	201	A1EO8	C07-N08	-3.83	1.31	1.36
2	P	205	A1EO8	C07-N08	-3.83	1.31	1.36
2	G	203	A1EO8	C07-N08	-3.82	1.31	1.36
2	L	201	A1EO8	C07-N08	-3.82	1.31	1.36
2	M	203	A1EO8	C07-N08	-3.81	1.31	1.36
2	L	203	A1EO8	C07-N08	-3.80	1.31	1.36
2	H	203	A1EO8	C07-N08	-3.80	1.31	1.36
2	O	204	A1EO8	C07-N08	-3.79	1.31	1.36
2	F	202	A1EO8	C13-C12	-3.59	1.32	1.43
2	G	201	A1EO8	C13-C12	-3.59	1.32	1.43
2	N	202	A1EO8	C13-C12	-3.58	1.32	1.43
2	P	204	A1EO8	C13-C12	-3.58	1.32	1.43
2	M	202	A1EO8	C13-C12	-3.57	1.32	1.43
2	L	202	A1EO8	C13-C12	-3.56	1.32	1.43
2	J	205	A1EO8	C13-C12	-3.56	1.32	1.43
2	N	203	A1EO8	C13-C12	-3.56	1.32	1.43
2	J	204	A1EO8	C13-C12	-3.56	1.32	1.43
2	J	203	A1EO8	C13-C12	-3.56	1.32	1.43
2	H	201	A1EO8	C13-C12	-3.56	1.32	1.43
2	I	201	A1EO8	C13-C12	-3.55	1.32	1.43
2	I	203	A1EO8	C13-C12	-3.55	1.32	1.43
2	O	202	A1EO8	C13-C12	-3.55	1.32	1.43
2	N	201	A1EO8	C13-C12	-3.55	1.32	1.43
2	G	203	A1EO8	C13-C12	-3.55	1.32	1.43
2	H	203	A1EO8	C13-C12	-3.55	1.32	1.43
2	I	202	A1EO8	C13-C12	-3.55	1.32	1.43
2	J	201	A1EO8	C13-C12	-3.55	1.32	1.43
2	O	204	A1EO8	C13-C12	-3.54	1.32	1.43
2	L	203	A1EO8	C13-C12	-3.54	1.32	1.43
2	F	201	A1EO8	C13-C12	-3.54	1.32	1.43
2	J	202	A1EO8	C13-C12	-3.54	1.32	1.43
2	P	205	A1EO8	C13-C12	-3.54	1.32	1.43
2	I	204	A1EO8	C13-C12	-3.54	1.32	1.43
2	H	202	A1EO8	C13-C12	-3.54	1.32	1.43
2	L	201	A1EO8	C13-C12	-3.54	1.32	1.43
2	O	201	A1EO8	C13-C12	-3.54	1.32	1.43
2	F	203	A1EO8	C13-C12	-3.53	1.32	1.43
2	G	202	A1EO8	C13-C12	-3.53	1.32	1.43
2	P	202	A1EO8	C13-C12	-3.53	1.32	1.43
2	P	201	A1EO8	C13-C12	-3.53	1.32	1.43
2	P	203	A1EO8	C13-C12	-3.53	1.32	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	M	201	A1EO8	C13-C12	-3.53	1.32	1.43
2	O	203	A1EO8	C13-C12	-3.53	1.32	1.43
2	M	203	A1EO8	C13-C12	-3.53	1.32	1.43
2	P	205	A1EO8	C19-C20	3.13	1.45	1.38
2	F	203	A1EO8	C19-C20	3.12	1.45	1.38
2	M	203	A1EO8	C19-C20	3.12	1.45	1.38
2	J	203	A1EO8	C19-C20	3.11	1.45	1.38
2	I	203	A1EO8	C19-C20	3.11	1.45	1.38
2	L	203	A1EO8	C19-C20	3.10	1.45	1.38
2	O	203	A1EO8	C19-C20	3.10	1.45	1.38
2	J	205	A1EO8	C19-C20	3.09	1.45	1.38
2	P	203	A1EO8	C19-C20	3.09	1.45	1.38
2	H	203	A1EO8	C19-C20	3.09	1.45	1.38
2	N	203	A1EO8	C19-C20	3.08	1.45	1.38
2	G	203	A1EO8	C19-C20	3.08	1.45	1.38
2	M	202	A1EO8	C19-C20	3.08	1.45	1.38
2	J	202	A1EO8	C19-C20	3.08	1.45	1.38
2	I	202	A1EO8	C19-C20	3.07	1.45	1.38
2	O	202	A1EO8	C19-C20	3.07	1.45	1.38
2	P	204	A1EO8	C19-C20	3.07	1.45	1.38
2	H	202	A1EO8	C19-C20	3.07	1.45	1.38
2	G	201	A1EO8	C19-C20	3.07	1.45	1.38
2	I	204	A1EO8	C19-C20	3.07	1.45	1.38
2	P	201	A1EO8	C19-C20	3.07	1.45	1.38
2	F	201	A1EO8	C19-C20	3.06	1.45	1.38
2	O	201	A1EO8	C19-C20	3.06	1.45	1.38
2	J	204	A1EO8	C19-C20	3.05	1.45	1.38
2	P	202	A1EO8	C19-C20	3.05	1.44	1.38
2	M	201	A1EO8	C19-C20	3.05	1.44	1.38
2	N	201	A1EO8	C19-C20	3.05	1.44	1.38
2	J	201	A1EO8	C19-C20	3.04	1.44	1.38
2	N	202	A1EO8	C19-C20	3.04	1.44	1.38
2	O	204	A1EO8	C19-C20	3.04	1.44	1.38
2	F	202	A1EO8	C19-C20	3.04	1.44	1.38
2	H	201	A1EO8	C19-C20	3.04	1.44	1.38
2	L	202	A1EO8	C19-C20	3.04	1.44	1.38
2	G	202	A1EO8	C19-C20	3.04	1.44	1.38
2	L	201	A1EO8	C19-C20	3.02	1.44	1.38
2	I	201	A1EO8	C19-C20	3.02	1.44	1.38
2	O	204	A1EO8	C09-N08	-2.10	1.35	1.39
2	L	201	A1EO8	C09-N08	-2.10	1.35	1.39
2	H	201	A1EO8	C09-N08	-2.09	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	O	202	A1EO8	C09-N08	-2.09	1.35	1.39
2	F	201	A1EO8	C09-N08	-2.09	1.35	1.39
2	M	203	A1EO8	C09-N08	-2.08	1.35	1.39
2	I	202	A1EO8	C09-N08	-2.08	1.35	1.39
2	M	201	A1EO8	C09-N08	-2.08	1.35	1.39
2	N	202	A1EO8	C09-N08	-2.08	1.35	1.39
2	F	202	A1EO8	C09-N08	-2.07	1.35	1.39
2	H	202	A1EO8	C09-N08	-2.07	1.35	1.39
2	N	201	A1EO8	C09-N08	-2.07	1.35	1.39
2	O	201	A1EO8	C09-N08	-2.07	1.35	1.39
2	J	202	A1EO8	C09-N08	-2.07	1.35	1.39
2	I	201	A1EO8	C09-N08	-2.07	1.35	1.39
2	P	204	A1EO8	C09-N08	-2.07	1.35	1.39
2	J	204	A1EO8	C09-N08	-2.06	1.35	1.39
2	G	202	A1EO8	C09-N08	-2.06	1.35	1.39
2	M	202	A1EO8	C09-N08	-2.06	1.35	1.39
2	P	202	A1EO8	C09-N08	-2.06	1.35	1.39
2	P	205	A1EO8	C09-N08	-2.05	1.35	1.39
2	I	204	A1EO8	C09-N08	-2.05	1.35	1.39
2	L	202	A1EO8	C09-N08	-2.05	1.35	1.39
2	H	203	A1EO8	C09-N08	-2.05	1.35	1.39
2	G	201	A1EO8	C09-N08	-2.05	1.35	1.39
2	J	205	A1EO8	C09-N08	-2.04	1.35	1.39
2	J	205	A1EO8	C01-C09	2.04	1.42	1.39
2	I	203	A1EO8	C09-N08	-2.04	1.35	1.39
2	P	201	A1EO8	C09-N08	-2.04	1.35	1.39
2	O	203	A1EO8	C09-N08	-2.04	1.35	1.39
2	G	203	A1EO8	C09-N08	-2.04	1.35	1.39
2	J	201	A1EO8	C09-N08	-2.03	1.35	1.39
2	F	203	A1EO8	C09-N08	-2.03	1.35	1.39
2	P	203	A1EO8	C09-N08	-2.03	1.35	1.39
2	J	203	A1EO8	C09-N08	-2.02	1.36	1.39
2	N	203	A1EO8	C09-N08	-2.02	1.36	1.39
2	N	201	A1EO8	C01-C09	2.02	1.42	1.39
2	L	203	A1EO8	C09-N08	-2.01	1.36	1.39

All (433) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	I	202	A1EO8	C17-S16-C15	18.56	107.94	90.92
2	J	202	A1EO8	C17-S16-C15	18.52	107.89	90.92
2	J	204	A1EO8	C17-S16-C15	18.51	107.89	90.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	202	A1EO8	C17-S16-C15	18.50	107.88	90.92
2	M	202	A1EO8	C17-S16-C15	18.49	107.87	90.92
2	G	202	A1EO8	C17-S16-C15	18.49	107.87	90.92
2	P	204	A1EO8	C17-S16-C15	18.49	107.87	90.92
2	L	201	A1EO8	C17-S16-C15	18.49	107.87	90.92
2	O	201	A1EO8	C17-S16-C15	18.49	107.87	90.92
2	F	202	A1EO8	C17-S16-C15	18.48	107.86	90.92
2	O	202	A1EO8	C17-S16-C15	18.48	107.86	90.92
2	P	202	A1EO8	C17-S16-C15	18.48	107.86	90.92
2	O	204	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	F	201	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	H	202	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	N	201	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	M	203	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	L	202	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	G	203	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	J	201	A1EO8	C17-S16-C15	18.46	107.84	90.92
2	I	201	A1EO8	C17-S16-C15	18.45	107.83	90.92
2	F	203	A1EO8	C17-S16-C15	18.45	107.83	90.92
2	J	203	A1EO8	C17-S16-C15	18.44	107.83	90.92
2	P	203	A1EO8	C17-S16-C15	18.44	107.83	90.92
2	L	203	A1EO8	C17-S16-C15	18.44	107.82	90.92
2	M	201	A1EO8	C17-S16-C15	18.43	107.82	90.92
2	G	201	A1EO8	C17-S16-C15	18.43	107.81	90.92
2	I	204	A1EO8	C17-S16-C15	18.42	107.81	90.92
2	O	203	A1EO8	C17-S16-C15	18.42	107.81	90.92
2	H	203	A1EO8	C17-S16-C15	18.42	107.81	90.92
2	P	201	A1EO8	C17-S16-C15	18.42	107.81	90.92
2	J	205	A1EO8	C17-S16-C15	18.42	107.80	90.92
2	H	201	A1EO8	C17-S16-C15	18.42	107.80	90.92
2	P	205	A1EO8	C17-S16-C15	18.41	107.80	90.92
2	I	203	A1EO8	C17-S16-C15	18.41	107.79	90.92
2	N	203	A1EO8	C17-S16-C15	18.40	107.78	90.92
2	O	201	A1EO8	C22-N23-C15	-7.97	107.97	114.25
2	H	201	A1EO8	C22-N23-C15	-7.96	107.98	114.25
2	O	204	A1EO8	C22-N23-C15	-7.95	107.98	114.25
2	I	201	A1EO8	C22-N23-C15	-7.95	107.99	114.25
2	J	201	A1EO8	C22-N23-C15	-7.94	107.99	114.25
2	M	203	A1EO8	C22-N23-C15	-7.93	108.00	114.25
2	P	201	A1EO8	C22-N23-C15	-7.93	108.00	114.25
2	L	201	A1EO8	C22-N23-C15	-7.93	108.00	114.25
2	F	201	A1EO8	C22-N23-C15	-7.92	108.01	114.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	M	201	A1EO8	C22-N23-C15	-7.92	108.01	114.25
2	G	201	A1EO8	C22-N23-C15	-7.92	108.01	114.25
2	I	204	A1EO8	C22-N23-C15	-7.92	108.01	114.25
2	J	203	A1EO8	C22-N23-C15	-7.92	108.01	114.25
2	I	203	A1EO8	C22-N23-C15	-7.91	108.01	114.25
2	N	201	A1EO8	C22-N23-C15	-7.88	108.03	114.25
2	P	203	A1EO8	C22-N23-C15	-7.88	108.04	114.25
2	H	203	A1EO8	C22-N23-C15	-7.88	108.04	114.25
2	L	203	A1EO8	C22-N23-C15	-7.86	108.05	114.25
2	N	203	A1EO8	C22-N23-C15	-7.86	108.05	114.25
2	G	203	A1EO8	C22-N23-C15	-7.84	108.07	114.25
2	P	205	A1EO8	C22-N23-C15	-7.83	108.08	114.25
2	J	205	A1EO8	C22-N23-C15	-7.83	108.08	114.25
2	M	202	A1EO8	C22-N23-C15	-7.82	108.08	114.25
2	F	203	A1EO8	C22-N23-C15	-7.81	108.09	114.25
2	J	202	A1EO8	C22-N23-C15	-7.81	108.09	114.25
2	O	203	A1EO8	C22-N23-C15	-7.80	108.10	114.25
2	I	202	A1EO8	C22-N23-C15	-7.79	108.11	114.25
2	G	202	A1EO8	C22-N23-C15	-7.79	108.11	114.25
2	O	202	A1EO8	C22-N23-C15	-7.79	108.11	114.25
2	J	204	A1EO8	C22-N23-C15	-7.78	108.11	114.25
2	H	202	A1EO8	C22-N23-C15	-7.77	108.12	114.25
2	P	204	A1EO8	C22-N23-C15	-7.76	108.13	114.25
2	F	202	A1EO8	C22-N23-C15	-7.75	108.14	114.25
2	N	202	A1EO8	C22-N23-C15	-7.75	108.14	114.25
2	L	202	A1EO8	C22-N23-C15	-7.74	108.15	114.25
2	P	202	A1EO8	C22-N23-C15	-7.73	108.15	114.25
2	L	202	A1EO8	C17-C22-N23	-5.51	108.33	112.08
2	F	202	A1EO8	C17-C22-N23	-5.50	108.34	112.08
2	G	202	A1EO8	C17-C22-N23	-5.50	108.34	112.08
2	O	202	A1EO8	C17-C22-N23	-5.49	108.35	112.08
2	P	202	A1EO8	C17-C22-N23	-5.48	108.35	112.08
2	N	202	A1EO8	C17-C22-N23	-5.48	108.35	112.08
2	P	204	A1EO8	C17-C22-N23	-5.48	108.35	112.08
2	N	201	A1EO8	C17-C22-N23	-5.45	108.38	112.08
2	H	202	A1EO8	C17-C22-N23	-5.44	108.38	112.08
2	I	204	A1EO8	C17-C22-N23	-5.44	108.38	112.08
2	G	201	A1EO8	C17-C22-N23	-5.43	108.39	112.08
2	I	202	A1EO8	C17-C22-N23	-5.42	108.39	112.08
2	J	202	A1EO8	C17-C22-N23	-5.42	108.39	112.08
2	M	202	A1EO8	C17-C22-N23	-5.42	108.39	112.08
2	M	201	A1EO8	C17-C22-N23	-5.42	108.39	112.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	O	203	A1EO8	C17-C22-N23	-5.41	108.40	112.08
2	J	204	A1EO8	C17-C22-N23	-5.41	108.40	112.08
2	H	201	A1EO8	C17-C22-N23	-5.39	108.41	112.08
2	G	203	A1EO8	C17-C22-N23	-5.39	108.42	112.08
2	H	201	A1EO8	S06-C07-N08	-5.38	106.20	110.89
2	P	201	A1EO8	C17-C22-N23	-5.38	108.42	112.08
2	O	204	A1EO8	C17-C22-N23	-5.38	108.42	112.08
2	I	201	A1EO8	S06-C07-N08	-5.38	106.20	110.89
2	J	203	A1EO8	S06-C07-N08	-5.37	106.21	110.89
2	F	203	A1EO8	C17-C22-N23	-5.37	108.43	112.08
2	J	205	A1EO8	C17-C22-N23	-5.36	108.43	112.08
2	H	203	A1EO8	S06-C07-N08	-5.36	106.22	110.89
2	P	205	A1EO8	C17-C22-N23	-5.36	108.43	112.08
2	N	203	A1EO8	C17-C22-N23	-5.36	108.44	112.08
2	I	203	A1EO8	S06-C07-N08	-5.35	106.22	110.89
2	L	201	A1EO8	S06-C07-N08	-5.35	106.22	110.89
2	F	201	A1EO8	C17-C22-N23	-5.35	108.44	112.08
2	H	203	A1EO8	C17-C22-N23	-5.35	108.44	112.08
2	I	201	A1EO8	C17-C22-N23	-5.35	108.44	112.08
2	L	201	A1EO8	C17-C22-N23	-5.35	108.44	112.08
2	J	201	A1EO8	C17-C22-N23	-5.34	108.45	112.08
2	L	203	A1EO8	C17-C22-N23	-5.34	108.45	112.08
2	M	203	A1EO8	S06-C07-N08	-5.33	106.24	110.89
2	F	203	A1EO8	S06-C07-N08	-5.33	106.24	110.89
2	J	203	A1EO8	C17-C22-N23	-5.33	108.45	112.08
2	M	201	A1EO8	S06-C07-N08	-5.33	106.24	110.89
2	J	205	A1EO8	S06-C07-N08	-5.33	106.25	110.89
2	O	201	A1EO8	C17-C22-N23	-5.33	108.45	112.08
2	O	201	A1EO8	S06-C07-N08	-5.33	106.25	110.89
2	O	203	A1EO8	S06-C07-N08	-5.33	106.25	110.89
2	M	203	A1EO8	C17-C22-N23	-5.33	108.46	112.08
2	P	201	A1EO8	S06-C07-N08	-5.33	106.25	110.89
2	P	203	A1EO8	C17-C22-N23	-5.32	108.46	112.08
2	O	204	A1EO8	S06-C07-N08	-5.32	106.25	110.89
2	G	201	A1EO8	S06-C07-N08	-5.32	106.25	110.89
2	G	203	A1EO8	S06-C07-N08	-5.32	106.25	110.89
2	F	201	A1EO8	S06-C07-N08	-5.32	106.25	110.89
2	P	205	A1EO8	S06-C07-N08	-5.30	106.27	110.89
2	L	203	A1EO8	S06-C07-N08	-5.30	106.27	110.89
2	I	203	A1EO8	C17-C22-N23	-5.30	108.47	112.08
2	N	201	A1EO8	S06-C07-N08	-5.29	106.28	110.89
2	J	201	A1EO8	S06-C07-N08	-5.29	106.28	110.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	I	204	A1EO8	S06-C07-N08	-5.29	106.28	110.89
2	P	203	A1EO8	S06-C07-N08	-5.29	106.28	110.89
2	H	202	A1EO8	S06-C07-N08	-5.28	106.29	110.89
2	J	204	A1EO8	S06-C07-N08	-5.25	106.31	110.89
2	N	203	A1EO8	S06-C07-N08	-5.24	106.32	110.89
2	G	202	A1EO8	S06-C07-N08	-5.24	106.33	110.89
2	N	202	A1EO8	S06-C07-N08	-5.24	106.33	110.89
2	M	202	A1EO8	S06-C07-N08	-5.23	106.33	110.89
2	F	202	A1EO8	S06-C07-N08	-5.22	106.34	110.89
2	J	202	A1EO8	S06-C07-N08	-5.22	106.34	110.89
2	P	204	A1EO8	S06-C07-N08	-5.21	106.35	110.89
2	O	202	A1EO8	S06-C07-N08	-5.21	106.35	110.89
2	P	202	A1EO8	S06-C07-N08	-5.21	106.35	110.89
2	L	202	A1EO8	S06-C07-N08	-5.20	106.36	110.89
2	I	202	A1EO8	S06-C07-N08	-5.19	106.36	110.89
2	M	203	A1EO8	C05-S06-C07	5.07	95.29	91.26
2	L	201	A1EO8	C05-S06-C07	5.06	95.29	91.26
2	J	203	A1EO8	C05-S06-C07	5.06	95.29	91.26
2	G	201	A1EO8	C05-S06-C07	5.05	95.27	91.26
2	H	203	A1EO8	C05-S06-C07	5.04	95.27	91.26
2	O	204	A1EO8	C05-S06-C07	5.04	95.27	91.26
2	F	203	A1EO8	C05-S06-C07	5.04	95.27	91.26
2	I	204	A1EO8	C05-S06-C07	5.04	95.27	91.26
2	P	205	A1EO8	C05-S06-C07	5.03	95.26	91.26
2	I	201	A1EO8	C05-S06-C07	5.03	95.26	91.26
2	P	201	A1EO8	C05-S06-C07	5.03	95.26	91.26
2	I	203	A1EO8	C05-S06-C07	5.03	95.26	91.26
2	H	201	A1EO8	C05-S06-C07	5.03	95.26	91.26
2	J	201	A1EO8	C05-S06-C07	5.02	95.26	91.26
2	M	201	A1EO8	C05-S06-C07	5.02	95.25	91.26
2	F	201	A1EO8	C05-S06-C07	5.02	95.25	91.26
2	J	205	A1EO8	C05-S06-C07	5.02	95.25	91.26
2	O	203	A1EO8	C05-S06-C07	5.02	95.25	91.26
2	G	203	A1EO8	C05-S06-C07	5.01	95.25	91.26
2	L	203	A1EO8	C05-S06-C07	5.01	95.24	91.26
2	P	203	A1EO8	C05-S06-C07	5.00	95.24	91.26
2	N	201	A1EO8	C05-S06-C07	5.00	95.24	91.26
2	O	201	A1EO8	C05-S06-C07	5.00	95.23	91.26
2	J	204	A1EO8	C05-S06-C07	5.00	95.23	91.26
2	N	202	A1EO8	C05-S06-C07	4.98	95.22	91.26
2	P	204	A1EO8	C05-S06-C07	4.97	95.22	91.26
2	F	202	A1EO8	C05-S06-C07	4.97	95.21	91.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	O	202	A1EO8	C05-S06-C07	4.97	95.21	91.26
2	G	202	A1EO8	C05-S06-C07	4.97	95.21	91.26
2	J	202	A1EO8	C05-S06-C07	4.97	95.21	91.26
2	N	203	A1EO8	C05-S06-C07	4.97	95.21	91.26
2	H	202	A1EO8	C05-S06-C07	4.95	95.20	91.26
2	L	202	A1EO8	C05-S06-C07	4.95	95.20	91.26
2	N	202	A1EO8	C09-C05-S06	-4.95	104.65	110.89
2	I	204	A1EO8	C09-C05-S06	-4.95	104.65	110.89
2	P	202	A1EO8	C05-S06-C07	4.94	95.19	91.26
2	N	201	A1EO8	C09-C05-S06	-4.94	104.66	110.89
2	P	202	A1EO8	C09-C05-S06	-4.94	104.66	110.89
2	P	204	A1EO8	C09-C05-S06	-4.94	104.66	110.89
2	P	205	A1EO8	C09-C05-S06	-4.93	104.67	110.89
2	M	201	A1EO8	C09-C05-S06	-4.93	104.67	110.89
2	H	201	A1EO8	C09-C05-S06	-4.93	104.67	110.89
2	O	204	A1EO8	C09-C05-S06	-4.93	104.67	110.89
2	M	202	A1EO8	C05-S06-C07	4.93	95.18	91.26
2	O	202	A1EO8	C09-C05-S06	-4.93	104.67	110.89
2	F	202	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	G	201	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	L	201	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	P	201	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	F	201	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	J	201	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	M	203	A1EO8	C09-C05-S06	-4.92	104.68	110.89
2	O	203	A1EO8	C09-C05-S06	-4.91	104.69	110.89
2	J	202	A1EO8	C09-C05-S06	-4.91	104.69	110.89
2	J	204	A1EO8	C09-C05-S06	-4.91	104.69	110.89
2	L	202	A1EO8	C09-C05-S06	-4.91	104.69	110.89
2	G	202	A1EO8	C09-C05-S06	-4.91	104.70	110.89
2	I	201	A1EO8	C09-C05-S06	-4.91	104.70	110.89
2	J	205	A1EO8	C09-C05-S06	-4.91	104.70	110.89
2	I	202	A1EO8	C05-S06-C07	4.91	95.16	91.26
2	J	203	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	H	202	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	O	201	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	G	203	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	F	203	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	M	202	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	I	203	A1EO8	C09-C05-S06	-4.90	104.71	110.89
2	I	202	A1EO8	C09-C05-S06	-4.89	104.72	110.89
2	P	203	A1EO8	C09-C05-S06	-4.88	104.73	110.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	203	A1EO8	C09-C05-S06	-4.88	104.73	110.89
2	L	203	A1EO8	C09-C05-S06	-4.87	104.75	110.89
2	N	203	A1EO8	C09-C05-S06	-4.86	104.75	110.89
2	J	203	A1EO8	C09-N08-C07	3.97	117.88	114.64
2	H	201	A1EO8	C09-N08-C07	3.97	117.88	114.64
2	I	201	A1EO8	C09-N08-C07	3.96	117.87	114.64
2	H	202	A1EO8	C09-N08-C07	3.95	117.86	114.64
2	I	203	A1EO8	C09-N08-C07	3.95	117.86	114.64
2	J	205	A1EO8	C09-N08-C07	3.95	117.86	114.64
2	M	203	A1EO8	C09-N08-C07	3.94	117.85	114.64
2	L	201	A1EO8	C09-N08-C07	3.93	117.85	114.64
2	N	202	A1EO8	C09-N08-C07	3.93	117.85	114.64
2	F	203	A1EO8	C09-N08-C07	3.93	117.84	114.64
2	G	203	A1EO8	C09-N08-C07	3.93	117.84	114.64
2	H	203	A1EO8	C09-N08-C07	3.93	117.84	114.64
2	G	201	A1EO8	C09-N08-C07	3.93	117.84	114.64
2	O	201	A1EO8	C09-N08-C07	3.92	117.84	114.64
2	M	202	A1EO8	C09-N08-C07	3.92	117.83	114.64
2	M	201	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	J	204	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	O	203	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	P	201	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	P	202	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	F	201	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	J	201	A1EO8	C09-N08-C07	3.91	117.83	114.64
2	F	202	A1EO8	C09-N08-C07	3.90	117.82	114.64
2	I	204	A1EO8	C09-N08-C07	3.90	117.82	114.64
2	O	204	A1EO8	C09-N08-C07	3.89	117.81	114.64
2	P	203	A1EO8	C09-N08-C07	3.89	117.81	114.64
2	P	205	A1EO8	C09-N08-C07	3.89	117.81	114.64
2	G	202	A1EO8	C09-N08-C07	3.88	117.81	114.64
2	P	204	A1EO8	C09-N08-C07	3.87	117.80	114.64
2	N	203	A1EO8	C09-N08-C07	3.87	117.80	114.64
2	J	202	A1EO8	C09-N08-C07	3.86	117.79	114.64
2	I	202	A1EO8	C09-N08-C07	3.86	117.78	114.64
2	O	202	A1EO8	C09-N08-C07	3.86	117.78	114.64
2	L	203	A1EO8	C09-N08-C07	3.85	117.78	114.64
2	N	201	A1EO8	C09-N08-C07	3.85	117.78	114.64
2	L	202	A1EO8	C09-N08-C07	3.84	117.77	114.64
2	J	204	A1EO8	S16-C15-N23	-3.66	107.60	111.51
2	P	204	A1EO8	S16-C15-N23	-3.65	107.61	111.51
2	I	202	A1EO8	S16-C15-N23	-3.64	107.62	111.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	202	A1EO8	S16-C15-N23	-3.63	107.63	111.51
2	P	202	A1EO8	S16-C15-N23	-3.63	107.63	111.51
2	L	202	A1EO8	S16-C15-N23	-3.62	107.64	111.51
2	N	202	A1EO8	S16-C15-N23	-3.61	107.65	111.51
2	G	202	A1EO8	S16-C15-N23	-3.61	107.65	111.51
2	O	202	A1EO8	S16-C15-N23	-3.61	107.65	111.51
2	H	202	A1EO8	S16-C15-N23	-3.60	107.66	111.51
2	J	202	A1EO8	S16-C15-N23	-3.60	107.67	111.51
2	M	202	A1EO8	S16-C15-N23	-3.60	107.67	111.51
2	F	203	A1EO8	S16-C15-N23	-3.59	107.67	111.51
2	O	201	A1EO8	S16-C15-N23	-3.57	107.69	111.51
2	O	203	A1EO8	S16-C15-N23	-3.57	107.69	111.51
2	H	203	A1EO8	S16-C15-N23	-3.57	107.70	111.51
2	N	203	A1EO8	S16-C15-N23	-3.56	107.70	111.51
2	P	205	A1EO8	S16-C15-N23	-3.56	107.70	111.51
2	L	201	A1EO8	S16-C15-N23	-3.56	107.70	111.51
2	J	205	A1EO8	S16-C15-N23	-3.56	107.70	111.51
2	G	203	A1EO8	S16-C15-N23	-3.56	107.70	111.51
2	P	203	A1EO8	S16-C15-N23	-3.56	107.71	111.51
2	F	201	A1EO8	S16-C15-N23	-3.55	107.72	111.51
2	J	201	A1EO8	S16-C15-N23	-3.55	107.72	111.51
2	N	201	A1EO8	S16-C15-N23	-3.54	107.72	111.51
2	I	201	A1EO8	S16-C15-N23	-3.54	107.72	111.51
2	M	203	A1EO8	S16-C15-N23	-3.54	107.73	111.51
2	I	203	A1EO8	S16-C15-N23	-3.53	107.73	111.51
2	L	203	A1EO8	S16-C15-N23	-3.53	107.73	111.51
2	I	204	A1EO8	S16-C15-N23	-3.53	107.73	111.51
2	O	204	A1EO8	S16-C15-N23	-3.53	107.73	111.51
2	G	201	A1EO8	S16-C15-N23	-3.52	107.74	111.51
2	J	203	A1EO8	S16-C15-N23	-3.52	107.75	111.51
2	M	201	A1EO8	S16-C15-N23	-3.52	107.75	111.51
2	P	201	A1EO8	S16-C15-N23	-3.52	107.75	111.51
2	H	201	A1EO8	S16-C15-N23	-3.51	107.75	111.51
2	M	203	A1EO8	C04-C05-S06	3.39	135.36	127.36
2	J	205	A1EO8	C04-C05-S06	3.39	135.35	127.36
2	O	203	A1EO8	C04-C05-S06	3.38	135.33	127.36
2	P	205	A1EO8	C04-C05-S06	3.38	135.33	127.36
2	L	203	A1EO8	C04-C05-S06	3.38	135.32	127.36
2	P	203	A1EO8	C04-C05-S06	3.37	135.32	127.36
2	G	203	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	J	203	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	N	203	A1EO8	C04-C05-S06	3.37	135.31	127.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	203	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	F	202	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	F	203	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	P	204	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	N	202	A1EO8	C04-C05-S06	3.37	135.31	127.36
2	O	204	A1EO8	C04-C05-S06	3.37	135.30	127.36
2	G	201	A1EO8	C04-C05-S06	3.37	135.30	127.36
2	I	203	A1EO8	C04-C05-S06	3.37	135.30	127.36
2	J	204	A1EO8	C04-C05-S06	3.37	135.30	127.36
2	O	202	A1EO8	C04-C05-S06	3.36	135.29	127.36
2	L	201	A1EO8	C04-C05-S06	3.36	135.29	127.36
2	I	204	A1EO8	C04-C05-S06	3.36	135.29	127.36
2	J	201	A1EO8	C04-C05-S06	3.36	135.28	127.36
2	P	202	A1EO8	C04-C05-S06	3.36	135.28	127.36
2	I	202	A1EO8	C04-C05-S06	3.36	135.27	127.36
2	N	201	A1EO8	C04-C05-S06	3.35	135.27	127.36
2	P	201	A1EO8	C04-C05-S06	3.35	135.27	127.36
2	F	201	A1EO8	C04-C05-S06	3.35	135.27	127.36
2	J	202	A1EO8	C04-C05-S06	3.35	135.26	127.36
2	M	201	A1EO8	C04-C05-S06	3.35	135.26	127.36
2	G	202	A1EO8	C04-C05-S06	3.35	135.26	127.36
2	O	201	A1EO8	C04-C05-S06	3.35	135.25	127.36
2	M	202	A1EO8	C04-C05-S06	3.35	135.25	127.36
2	L	202	A1EO8	C04-C05-S06	3.35	135.25	127.36
2	H	202	A1EO8	C04-C05-S06	3.34	135.24	127.36
2	I	201	A1EO8	C04-C05-S06	3.34	135.24	127.36
2	H	201	A1EO8	C04-C05-S06	3.34	135.23	127.36
2	N	201	A1EO8	C05-C09-N08	3.33	116.05	112.29
2	H	201	A1EO8	C05-C09-N08	3.29	116.00	112.29
2	M	201	A1EO8	C05-C09-N08	3.29	116.00	112.29
2	O	204	A1EO8	C05-C09-N08	3.28	115.99	112.29
2	P	205	A1EO8	C05-C09-N08	3.28	115.99	112.29
2	F	201	A1EO8	C05-C09-N08	3.28	115.99	112.29
2	P	201	A1EO8	C05-C09-N08	3.27	115.98	112.29
2	I	204	A1EO8	C05-C09-N08	3.27	115.98	112.29
2	L	202	A1EO8	C05-C09-N08	3.27	115.98	112.29
2	O	202	A1EO8	C05-C09-N08	3.27	115.98	112.29
2	P	204	A1EO8	C05-C09-N08	3.27	115.98	112.29
2	O	203	A1EO8	C05-C09-N08	3.27	115.98	112.29
2	O	201	A1EO8	C05-C09-N08	3.26	115.97	112.29
2	I	202	A1EO8	C05-C09-N08	3.26	115.97	112.29
2	J	202	A1EO8	C05-C09-N08	3.26	115.97	112.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	I	201	A1EO8	C05-C09-N08	3.26	115.97	112.29
2	P	202	A1EO8	C05-C09-N08	3.25	115.96	112.29
2	L	201	A1EO8	C05-C09-N08	3.25	115.96	112.29
2	G	202	A1EO8	C05-C09-N08	3.25	115.96	112.29
2	N	202	A1EO8	C05-C09-N08	3.25	115.96	112.29
2	G	201	A1EO8	C05-C09-N08	3.25	115.95	112.29
2	J	201	A1EO8	C05-C09-N08	3.25	115.95	112.29
2	L	203	A1EO8	C05-C09-N08	3.25	115.95	112.29
2	F	202	A1EO8	C05-C09-N08	3.24	115.95	112.29
2	I	203	A1EO8	C05-C09-N08	3.24	115.95	112.29
2	J	205	A1EO8	C05-C09-N08	3.24	115.95	112.29
2	G	203	A1EO8	C05-C09-N08	3.24	115.94	112.29
2	H	202	A1EO8	C05-C09-N08	3.24	115.94	112.29
2	M	202	A1EO8	C05-C09-N08	3.24	115.94	112.29
2	H	203	A1EO8	C05-C09-N08	3.23	115.94	112.29
2	M	203	A1EO8	C05-C09-N08	3.23	115.94	112.29
2	F	203	A1EO8	C05-C09-N08	3.23	115.93	112.29
2	P	203	A1EO8	C05-C09-N08	3.23	115.93	112.29
2	J	204	A1EO8	C05-C09-N08	3.22	115.93	112.29
2	J	203	A1EO8	C05-C09-N08	3.22	115.92	112.29
2	N	203	A1EO8	C05-C09-N08	3.22	115.92	112.29
2	O	203	A1EO8	C01-C09-N08	-3.08	124.03	130.42
2	H	203	A1EO8	C01-C09-N08	-3.07	124.03	130.42
2	L	203	A1EO8	C01-C09-N08	-3.07	124.03	130.42
2	G	203	A1EO8	C01-C09-N08	-3.07	124.03	130.42
2	P	205	A1EO8	C01-C09-N08	-3.07	124.04	130.42
2	P	203	A1EO8	C01-C09-N08	-3.07	124.05	130.42
2	N	203	A1EO8	C01-C09-N08	-3.06	124.05	130.42
2	I	203	A1EO8	C01-C09-N08	-3.06	124.06	130.42
2	O	201	A1EO8	C01-C09-N08	-3.06	124.06	130.42
2	F	203	A1EO8	C01-C09-N08	-3.06	124.06	130.42
2	J	205	A1EO8	C01-C09-N08	-3.06	124.07	130.42
2	O	202	A1EO8	C01-C09-N08	-3.06	124.07	130.42
2	I	202	A1EO8	C01-C09-N08	-3.05	124.07	130.42
2	J	203	A1EO8	C01-C09-N08	-3.05	124.07	130.42
2	N	201	A1EO8	C01-C09-N08	-3.05	124.08	130.42
2	M	201	A1EO8	C01-C09-N08	-3.05	124.08	130.42
2	L	202	A1EO8	C01-C09-N08	-3.04	124.09	130.42
2	J	202	A1EO8	C01-C09-N08	-3.04	124.09	130.42
2	F	201	A1EO8	C01-C09-N08	-3.04	124.09	130.42
2	O	204	A1EO8	C01-C09-N08	-3.04	124.09	130.42
2	P	201	A1EO8	C01-C09-N08	-3.04	124.09	130.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	M	203	A1EO8	C01-C09-N08	-3.04	124.10	130.42
2	L	201	A1EO8	C01-C09-N08	-3.04	124.11	130.42
2	P	204	A1EO8	C01-C09-N08	-3.03	124.12	130.42
2	M	202	A1EO8	C01-C09-N08	-3.03	124.12	130.42
2	J	201	A1EO8	C01-C09-N08	-3.03	124.12	130.42
2	I	201	A1EO8	C01-C09-N08	-3.03	124.13	130.42
2	G	202	A1EO8	C01-C09-N08	-3.03	124.13	130.42
2	P	202	A1EO8	C01-C09-N08	-3.03	124.13	130.42
2	H	202	A1EO8	C01-C09-N08	-3.02	124.13	130.42
2	I	204	A1EO8	C01-C09-N08	-3.02	124.14	130.42
2	F	202	A1EO8	C01-C09-N08	-3.02	124.14	130.42
2	G	201	A1EO8	C01-C09-N08	-3.02	124.14	130.42
2	H	201	A1EO8	C01-C09-N08	-3.02	124.14	130.42
2	J	204	A1EO8	C01-C09-N08	-3.02	124.14	130.42
2	N	202	A1EO8	C01-C09-N08	-3.02	124.15	130.42
2	I	202	A1EO8	C22-C17-S16	-2.19	107.90	110.20
2	J	202	A1EO8	C22-C17-S16	-2.18	107.90	110.20
2	L	203	A1EO8	C22-C17-S16	-2.18	107.91	110.20
2	J	203	A1EO8	C22-C17-S16	-2.17	107.92	110.20
2	P	203	A1EO8	C22-C17-S16	-2.16	107.92	110.20
2	J	205	A1EO8	C22-C17-S16	-2.16	107.93	110.20
2	G	203	A1EO8	C22-C17-S16	-2.16	107.93	110.20
2	F	203	A1EO8	C22-C17-S16	-2.16	107.93	110.20
2	M	203	A1EO8	C22-C17-S16	-2.16	107.93	110.20
2	N	202	A1EO8	C22-C17-S16	-2.15	107.93	110.20
2	M	202	A1EO8	C22-C17-S16	-2.15	107.94	110.20
2	L	201	A1EO8	C22-C17-S16	-2.15	107.94	110.20
2	I	203	A1EO8	C22-C17-S16	-2.15	107.94	110.20
2	F	201	A1EO8	C22-C17-S16	-2.15	107.94	110.20
2	H	202	A1EO8	C22-C17-S16	-2.15	107.94	110.20
2	J	204	A1EO8	C22-C17-S16	-2.14	107.94	110.20
2	P	205	A1EO8	C22-C17-S16	-2.14	107.94	110.20
2	J	201	A1EO8	C22-C17-S16	-2.13	107.96	110.20
2	P	202	A1EO8	C22-C17-S16	-2.13	107.96	110.20
2	O	203	A1EO8	C22-C17-S16	-2.13	107.96	110.20
2	H	203	A1EO8	C22-C17-S16	-2.12	107.97	110.20
2	I	201	A1EO8	C22-C17-S16	-2.12	107.97	110.20
2	O	204	A1EO8	C22-C17-S16	-2.12	107.97	110.20
2	P	201	A1EO8	C22-C17-S16	-2.12	107.97	110.20
2	O	201	A1EO8	C22-C17-S16	-2.12	107.97	110.20
2	N	201	A1EO8	C22-C17-S16	-2.11	107.98	110.20
2	N	203	A1EO8	C22-C17-S16	-2.11	107.98	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	G	202	A1EO8	C22-C17-S16	-2.11	107.98	110.20
2	M	201	A1EO8	C22-C17-S16	-2.11	107.98	110.20
2	P	204	A1EO8	C22-C17-S16	-2.11	107.98	110.20
2	F	202	A1EO8	C22-C17-S16	-2.11	107.98	110.20
2	O	202	A1EO8	C22-C17-S16	-2.11	107.98	110.20
2	L	202	A1EO8	C22-C17-S16	-2.10	108.00	110.20
2	H	201	A1EO8	C22-C17-S16	-2.09	108.00	110.20
2	G	201	A1EO8	C22-C17-S16	-2.09	108.00	110.20
2	I	204	A1EO8	C22-C17-S16	-2.07	108.02	110.20
2	J	204	A1EO8	C14-C15-S16	2.01	126.03	123.36

There are no chirality outliers.

All (144) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	F	201	A1EO8	C11-C10-N08-C07
2	F	201	A1EO8	C11-C10-N08-C09
2	F	201	A1EO8	C25-C24-N23-C15
2	F	202	A1EO8	C11-C10-N08-C07
2	F	202	A1EO8	C11-C10-N08-C09
2	F	202	A1EO8	C25-C24-N23-C15
2	F	203	A1EO8	C11-C10-N08-C07
2	F	203	A1EO8	C11-C10-N08-C09
2	F	203	A1EO8	C25-C24-N23-C15
2	G	201	A1EO8	C11-C10-N08-C07
2	G	201	A1EO8	C11-C10-N08-C09
2	G	201	A1EO8	C25-C24-N23-C15
2	G	202	A1EO8	C11-C10-N08-C07
2	G	202	A1EO8	C11-C10-N08-C09
2	G	202	A1EO8	C25-C24-N23-C15
2	G	203	A1EO8	C11-C10-N08-C07
2	G	203	A1EO8	C11-C10-N08-C09
2	G	203	A1EO8	C25-C24-N23-C15
2	H	201	A1EO8	C11-C10-N08-C07
2	H	201	A1EO8	C11-C10-N08-C09
2	H	201	A1EO8	C25-C24-N23-C15
2	H	202	A1EO8	C11-C10-N08-C07
2	H	202	A1EO8	C11-C10-N08-C09
2	H	202	A1EO8	C25-C24-N23-C15
2	H	203	A1EO8	C11-C10-N08-C07
2	H	203	A1EO8	C11-C10-N08-C09
2	H	203	A1EO8	C25-C24-N23-C15

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Mol	Chain	Res	Type	Atoms
2	I	201	A1EO8	C11-C10-N08-C07
2	I	201	A1EO8	C11-C10-N08-C09
2	I	201	A1EO8	C25-C24-N23-C15
2	I	202	A1EO8	C11-C10-N08-C07
2	I	202	A1EO8	C11-C10-N08-C09
2	I	202	A1EO8	C25-C24-N23-C15
2	I	203	A1EO8	C11-C10-N08-C07
2	I	203	A1EO8	C11-C10-N08-C09
2	I	203	A1EO8	C25-C24-N23-C15
2	I	204	A1EO8	C11-C10-N08-C07
2	I	204	A1EO8	C11-C10-N08-C09
2	I	204	A1EO8	C25-C24-N23-C15
2	J	201	A1EO8	C11-C10-N08-C07
2	J	201	A1EO8	C11-C10-N08-C09
2	J	201	A1EO8	C25-C24-N23-C15
2	J	202	A1EO8	C11-C10-N08-C07
2	J	202	A1EO8	C11-C10-N08-C09
2	J	202	A1EO8	C25-C24-N23-C15
2	J	203	A1EO8	C11-C10-N08-C07
2	J	203	A1EO8	C11-C10-N08-C09
2	J	203	A1EO8	C25-C24-N23-C15
2	J	204	A1EO8	C11-C10-N08-C07
2	J	204	A1EO8	C11-C10-N08-C09
2	J	204	A1EO8	C25-C24-N23-C15
2	J	205	A1EO8	C11-C10-N08-C07
2	J	205	A1EO8	C11-C10-N08-C09
2	J	205	A1EO8	C25-C24-N23-C15
2	L	201	A1EO8	C11-C10-N08-C07
2	L	201	A1EO8	C11-C10-N08-C09
2	L	201	A1EO8	C25-C24-N23-C15
2	L	202	A1EO8	C11-C10-N08-C07
2	L	202	A1EO8	C11-C10-N08-C09
2	L	202	A1EO8	C25-C24-N23-C15
2	L	203	A1EO8	C11-C10-N08-C07
2	L	203	A1EO8	C11-C10-N08-C09
2	L	203	A1EO8	C25-C24-N23-C15
2	M	201	A1EO8	C11-C10-N08-C07
2	M	201	A1EO8	C11-C10-N08-C09
2	M	201	A1EO8	C25-C24-N23-C15
2	M	202	A1EO8	C11-C10-N08-C07
2	M	202	A1EO8	C11-C10-N08-C09
2	M	202	A1EO8	C25-C24-N23-C15

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Mol	Chain	Res	Type	Atoms
2	M	203	A1EO8	C11-C10-N08-C07
2	M	203	A1EO8	C11-C10-N08-C09
2	M	203	A1EO8	C25-C24-N23-C15
2	N	201	A1EO8	C11-C10-N08-C07
2	N	201	A1EO8	C11-C10-N08-C09
2	N	201	A1EO8	C25-C24-N23-C15
2	N	202	A1EO8	C11-C10-N08-C07
2	N	202	A1EO8	C11-C10-N08-C09
2	N	202	A1EO8	C25-C24-N23-C15
2	N	203	A1EO8	C11-C10-N08-C07
2	N	203	A1EO8	C11-C10-N08-C09
2	N	203	A1EO8	C25-C24-N23-C15
2	O	201	A1EO8	C11-C10-N08-C07
2	O	201	A1EO8	C11-C10-N08-C09
2	O	201	A1EO8	C25-C24-N23-C15
2	O	202	A1EO8	C11-C10-N08-C07
2	O	202	A1EO8	C11-C10-N08-C09
2	O	202	A1EO8	C25-C24-N23-C15
2	O	203	A1EO8	C11-C10-N08-C07
2	O	203	A1EO8	C11-C10-N08-C09
2	O	203	A1EO8	C25-C24-N23-C15
2	O	204	A1EO8	C11-C10-N08-C07
2	O	204	A1EO8	C11-C10-N08-C09
2	O	204	A1EO8	C25-C24-N23-C15
2	P	201	A1EO8	C11-C10-N08-C07
2	P	201	A1EO8	C11-C10-N08-C09
2	P	201	A1EO8	C25-C24-N23-C15
2	P	202	A1EO8	C11-C10-N08-C07
2	P	202	A1EO8	C11-C10-N08-C09
2	P	202	A1EO8	C25-C24-N23-C15
2	P	203	A1EO8	C11-C10-N08-C07
2	P	203	A1EO8	C11-C10-N08-C09
2	P	203	A1EO8	C25-C24-N23-C15
2	P	204	A1EO8	C11-C10-N08-C07
2	P	204	A1EO8	C11-C10-N08-C09
2	P	204	A1EO8	C25-C24-N23-C15
2	P	205	A1EO8	C11-C10-N08-C07
2	P	205	A1EO8	C11-C10-N08-C09
2	P	205	A1EO8	C25-C24-N23-C15
2	F	201	A1EO8	C25-C24-N23-C22
2	F	202	A1EO8	C25-C24-N23-C22
2	F	203	A1EO8	C25-C24-N23-C22

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Mol	Chain	Res	Type	Atoms
2	G	201	A1EO8	C25-C24-N23-C22
2	G	202	A1EO8	C25-C24-N23-C22
2	G	203	A1EO8	C25-C24-N23-C22
2	H	201	A1EO8	C25-C24-N23-C22
2	H	202	A1EO8	C25-C24-N23-C22
2	H	203	A1EO8	C25-C24-N23-C22
2	I	201	A1EO8	C25-C24-N23-C22
2	I	202	A1EO8	C25-C24-N23-C22
2	I	203	A1EO8	C25-C24-N23-C22
2	I	204	A1EO8	C25-C24-N23-C22
2	J	201	A1EO8	C25-C24-N23-C22
2	J	202	A1EO8	C25-C24-N23-C22
2	J	203	A1EO8	C25-C24-N23-C22
2	J	204	A1EO8	C25-C24-N23-C22
2	J	205	A1EO8	C25-C24-N23-C22
2	L	201	A1EO8	C25-C24-N23-C22
2	L	202	A1EO8	C25-C24-N23-C22
2	L	203	A1EO8	C25-C24-N23-C22
2	M	201	A1EO8	C25-C24-N23-C22
2	M	202	A1EO8	C25-C24-N23-C22
2	M	203	A1EO8	C25-C24-N23-C22
2	N	201	A1EO8	C25-C24-N23-C22
2	N	202	A1EO8	C25-C24-N23-C22
2	N	203	A1EO8	C25-C24-N23-C22
2	O	201	A1EO8	C25-C24-N23-C22
2	O	202	A1EO8	C25-C24-N23-C22
2	O	203	A1EO8	C25-C24-N23-C22
2	O	204	A1EO8	C25-C24-N23-C22
2	P	201	A1EO8	C25-C24-N23-C22
2	P	202	A1EO8	C25-C24-N23-C22
2	P	203	A1EO8	C25-C24-N23-C22
2	P	204	A1EO8	C25-C24-N23-C22
2	P	205	A1EO8	C25-C24-N23-C22

There are no ring outliers.

36 monomers are involved in 183 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	H	202	A1EO8	5	0
2	J	202	A1EO8	5	0
2	G	203	A1EO8	4	0
2	P	204	A1EO8	5	0

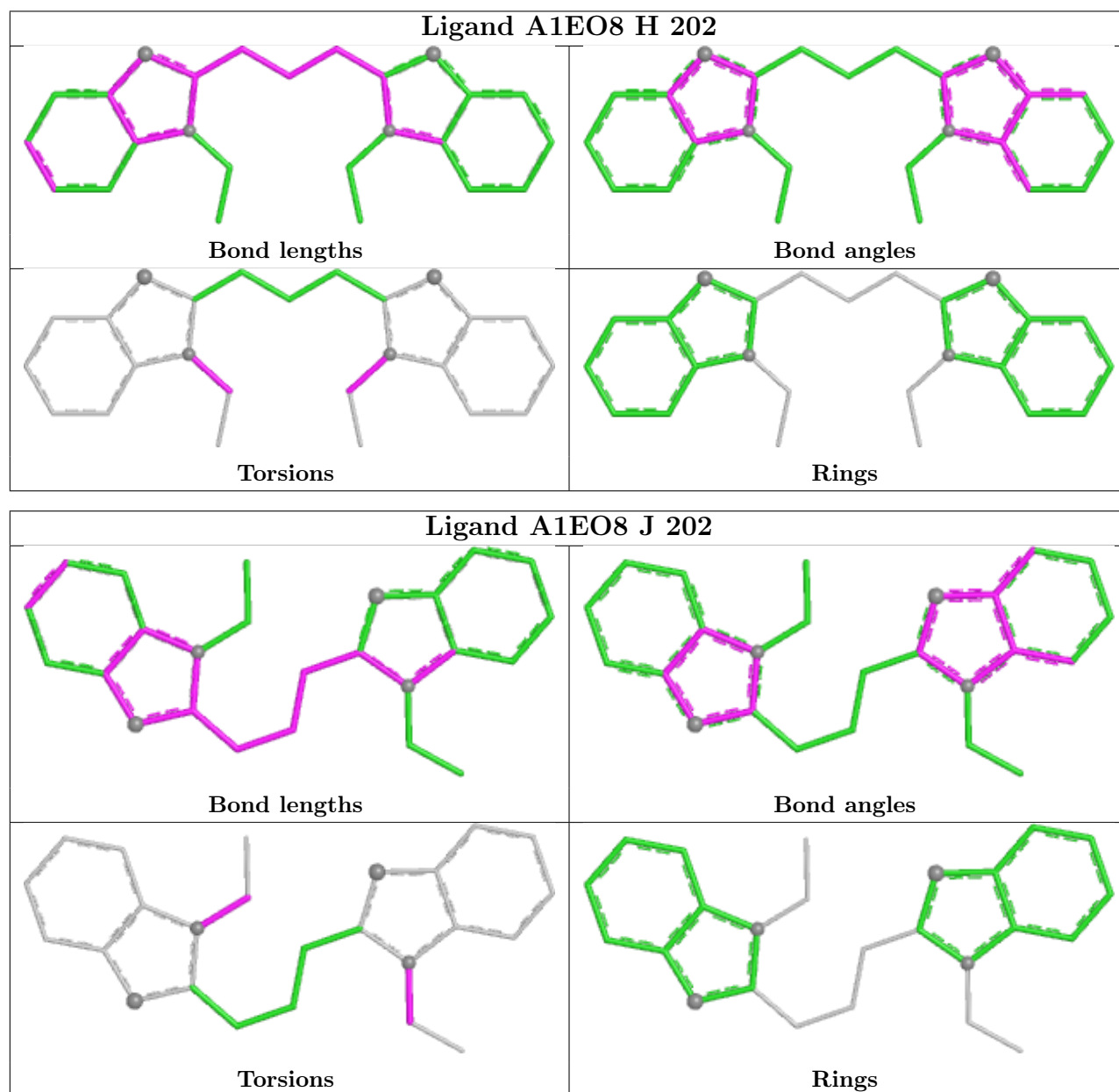
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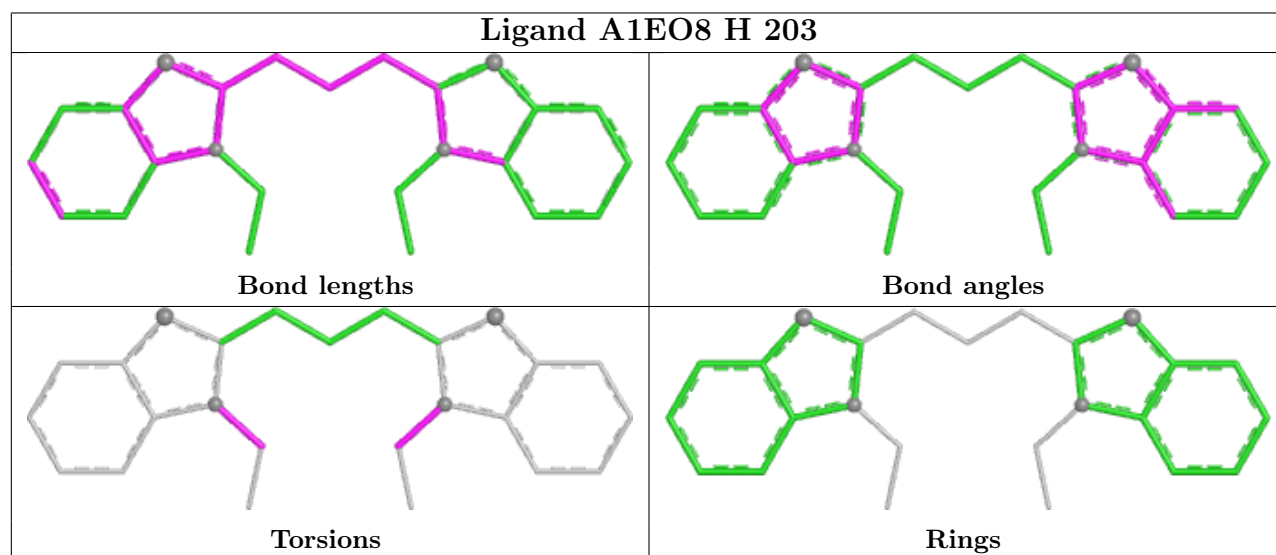
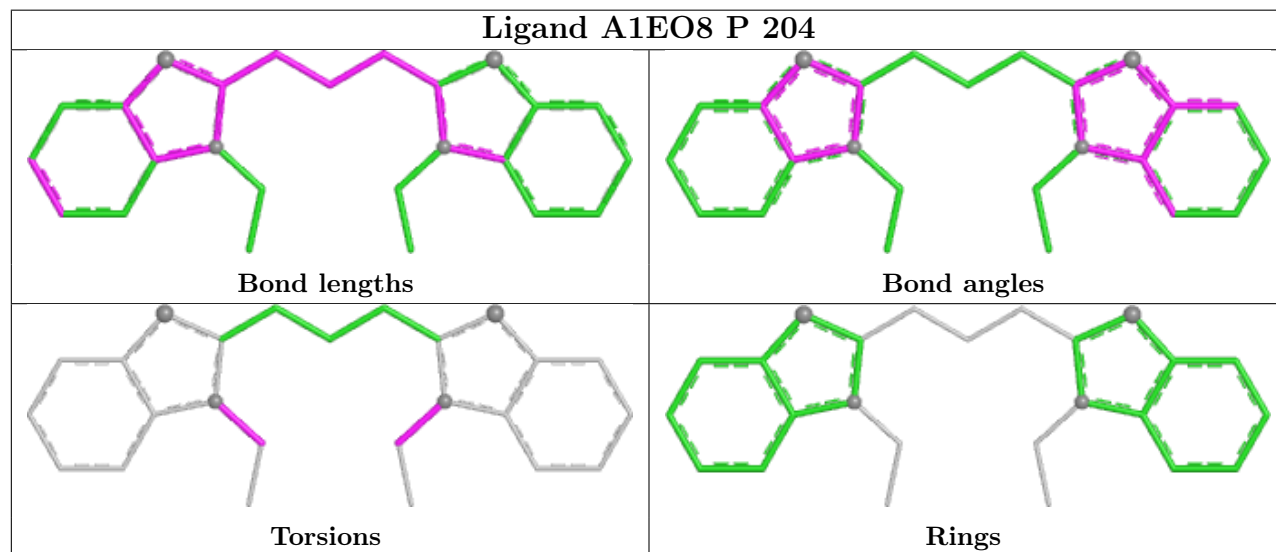
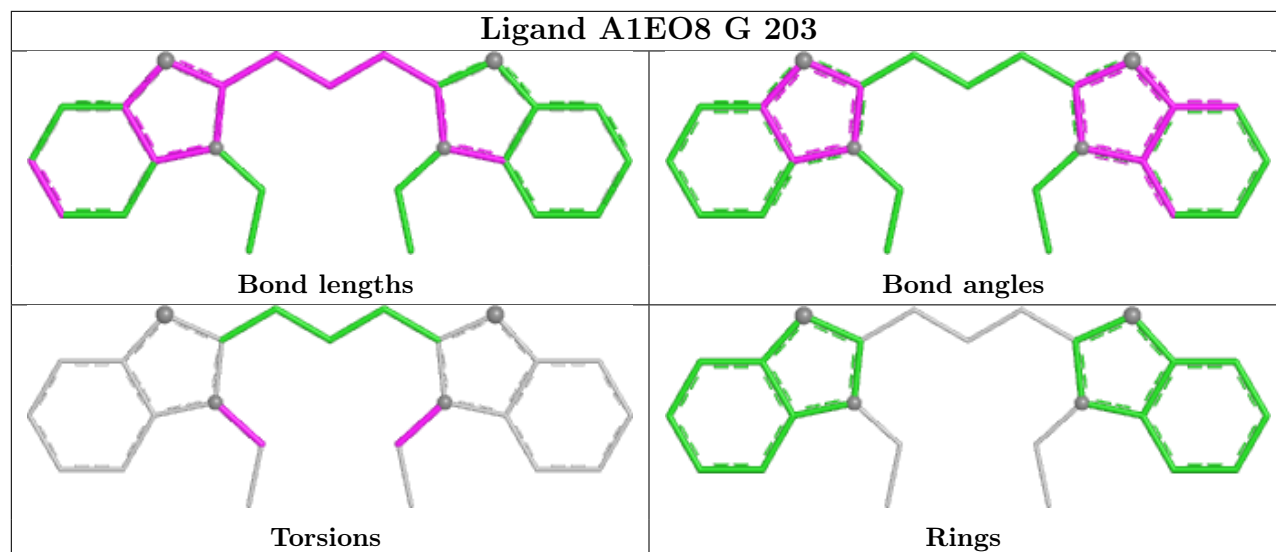
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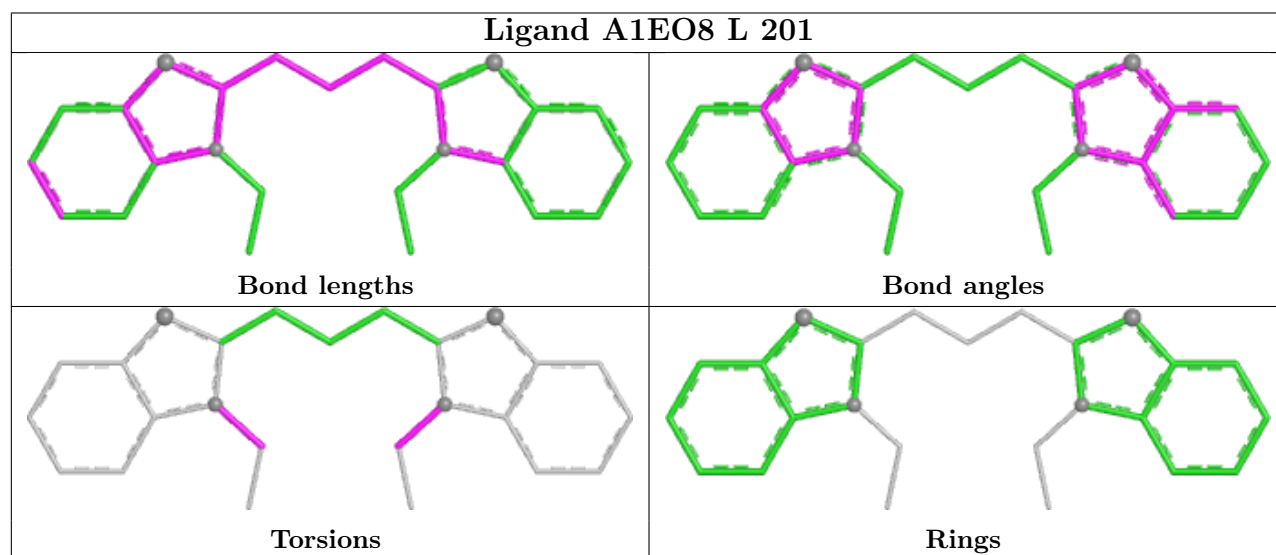
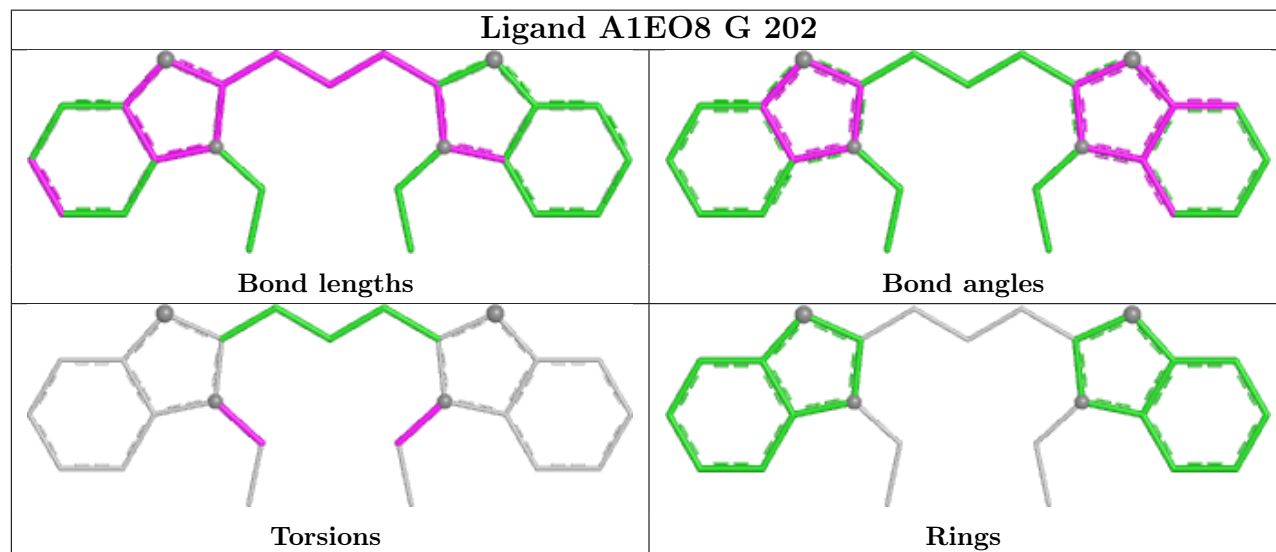
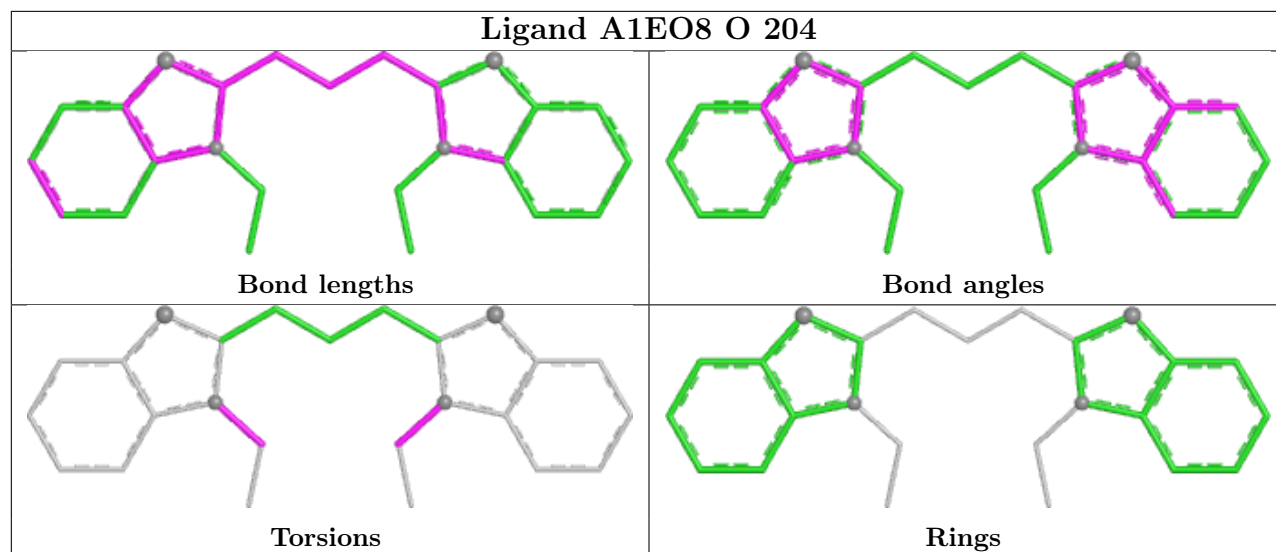
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	H	203	A1EO8	4	0
2	O	204	A1EO8	7	0
2	G	202	A1EO8	5	0
2	L	201	A1EO8	4	0
2	J	201	A1EO8	7	0
2	O	203	A1EO8	4	0
2	P	203	A1EO8	4	0
2	M	201	A1EO8	7	0
2	J	204	A1EO8	5	0
2	N	201	A1EO8	7	0
2	L	202	A1EO8	5	0
2	F	201	A1EO8	4	0
2	N	203	A1EO8	4	0
2	H	201	A1EO8	6	0
2	F	202	A1EO8	5	0
2	J	203	A1EO8	4	0
2	N	202	A1EO8	5	0
2	F	203	A1EO8	4	0
2	I	202	A1EO8	5	0
2	I	203	A1EO8	4	0
2	O	201	A1EO8	7	0
2	P	201	A1EO8	7	0
2	P	205	A1EO8	4	0
2	M	203	A1EO8	4	0
2	J	205	A1EO8	4	0
2	P	202	A1EO8	5	0
2	L	203	A1EO8	4	0
2	M	202	A1EO8	5	0
2	O	202	A1EO8	5	0
2	I	204	A1EO8	7	0
2	G	201	A1EO8	6	0
2	I	201	A1EO8	6	0

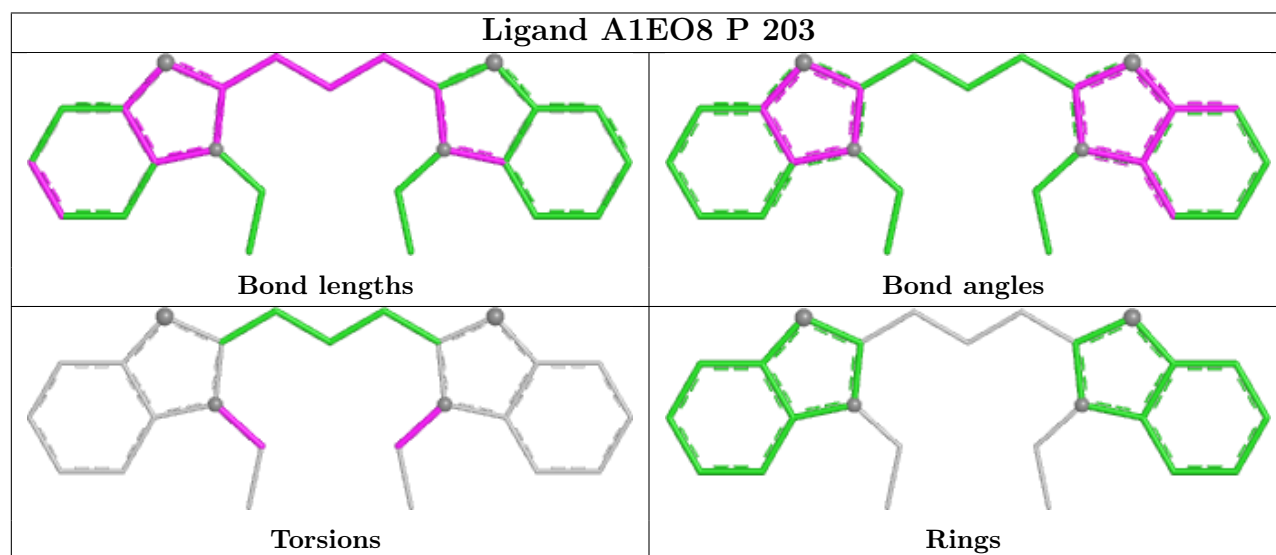
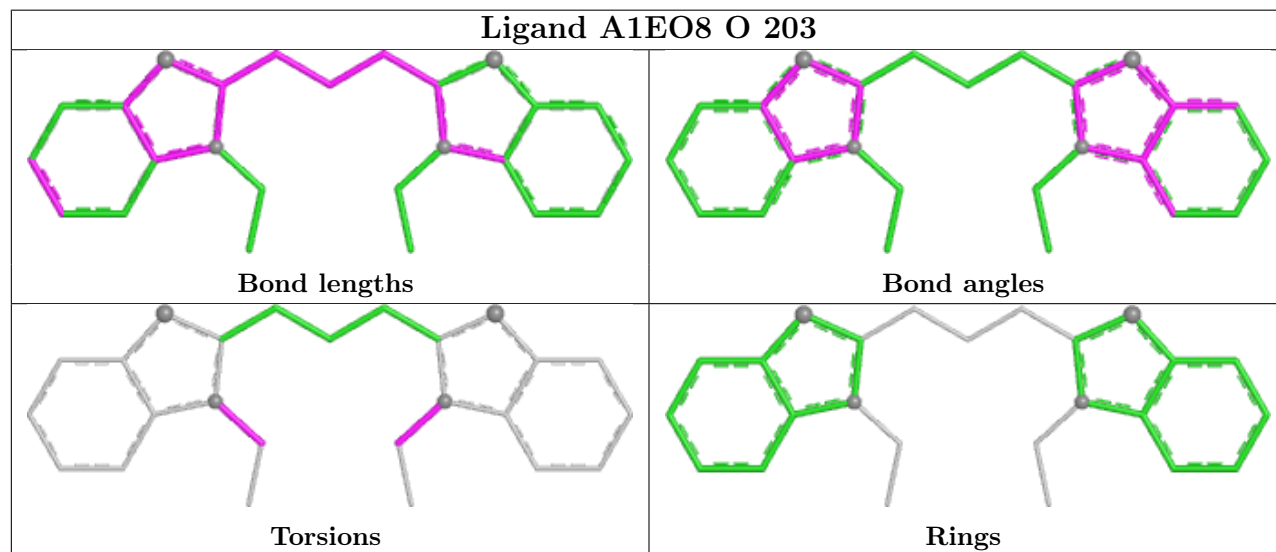
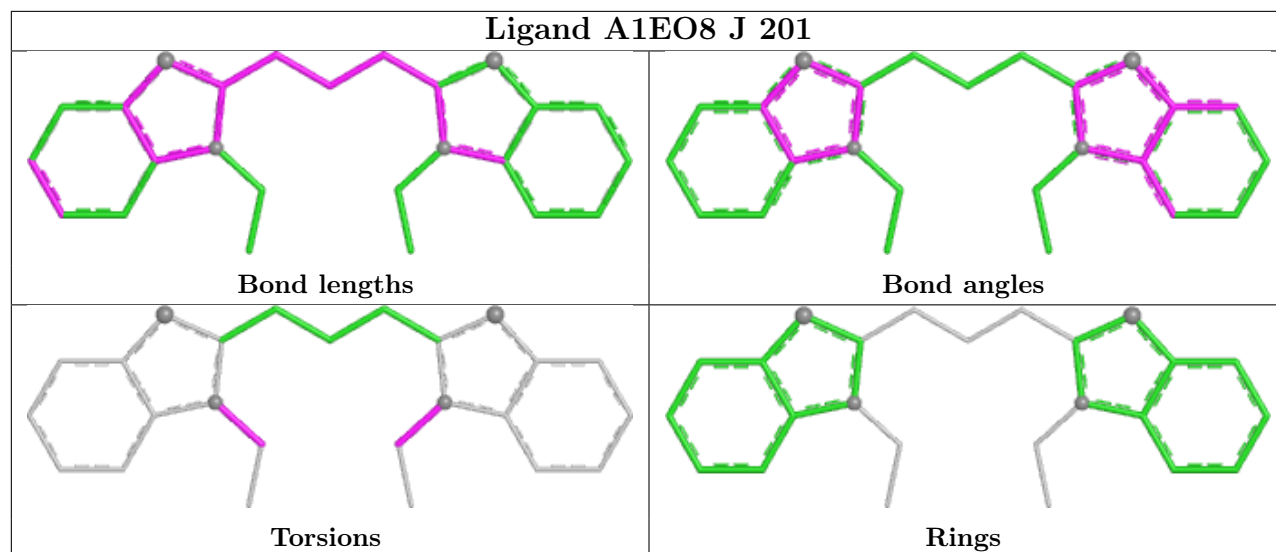
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier.

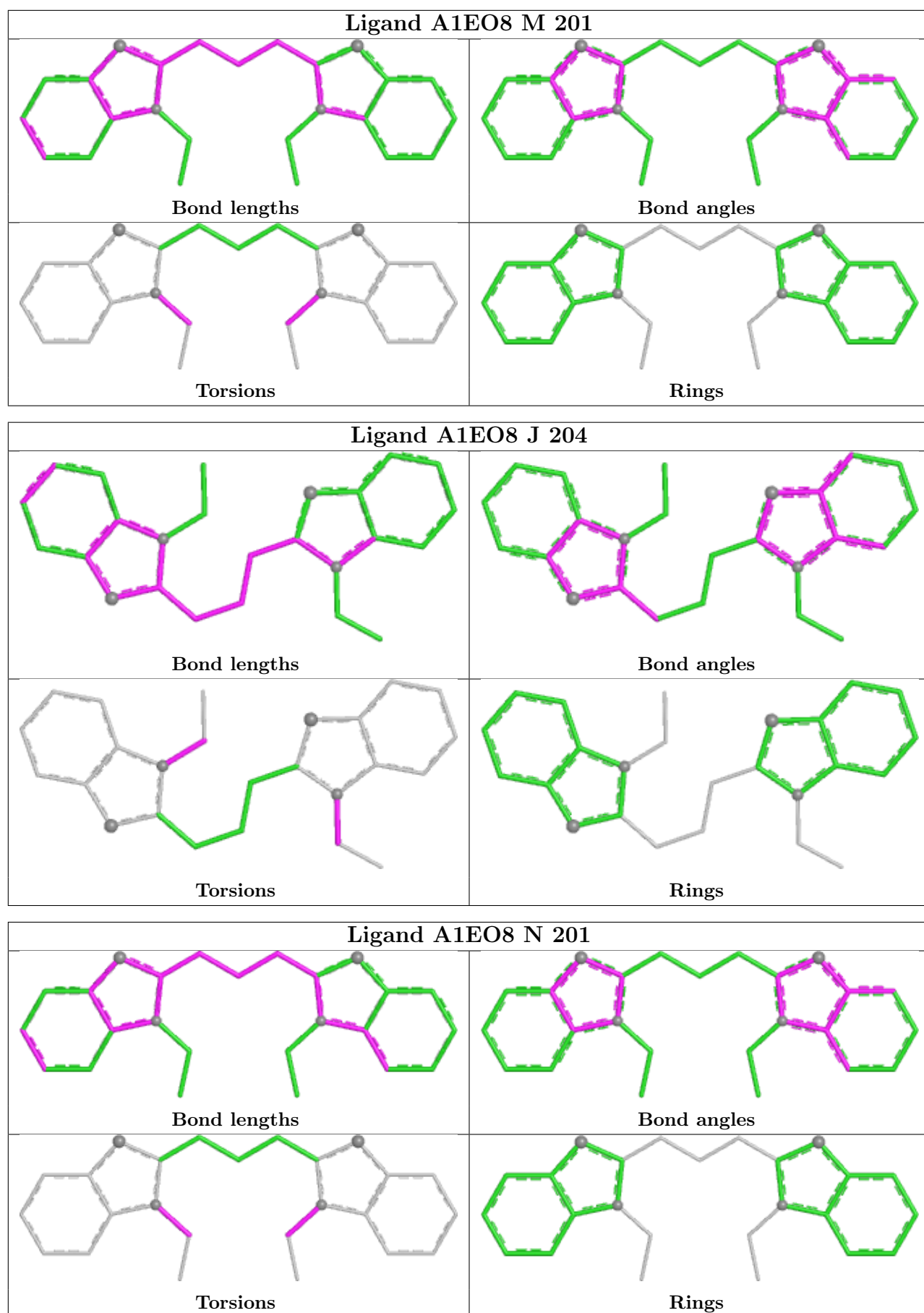
The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

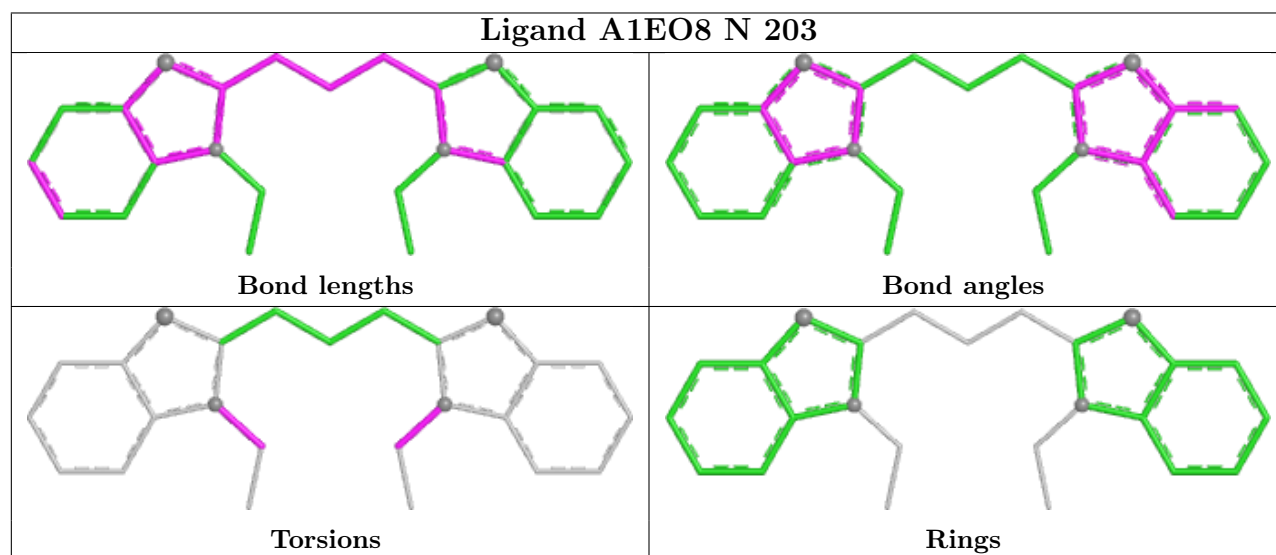
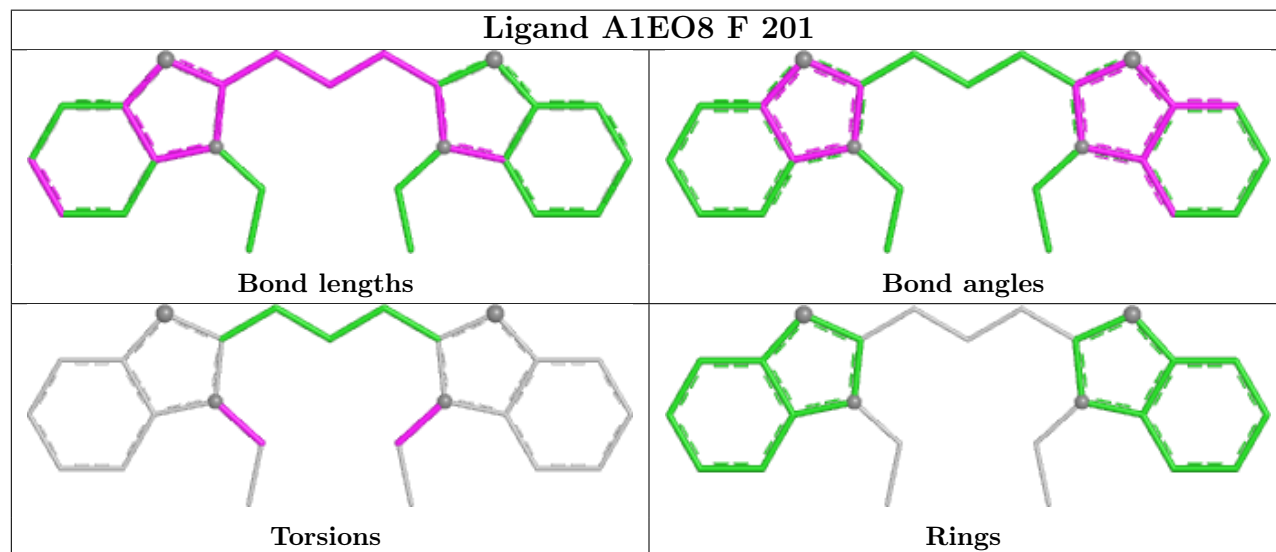
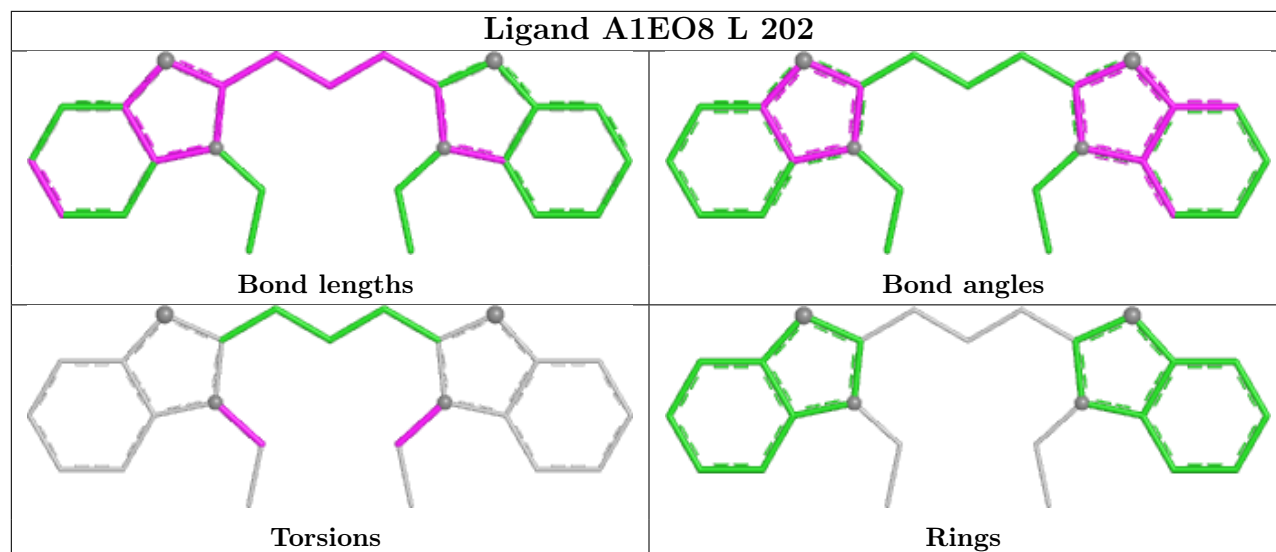


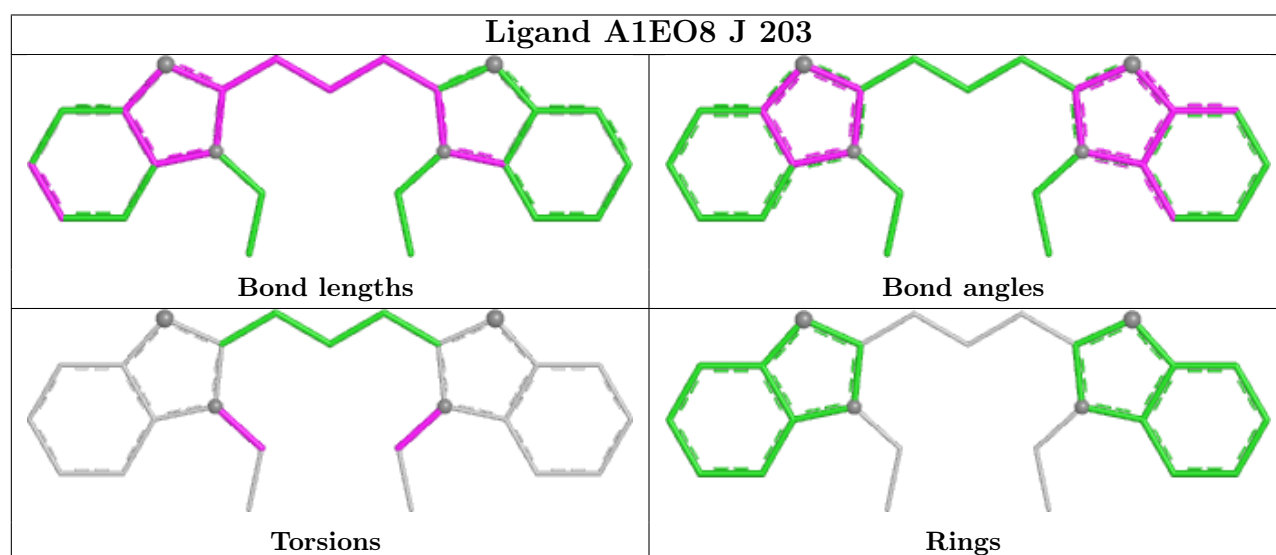
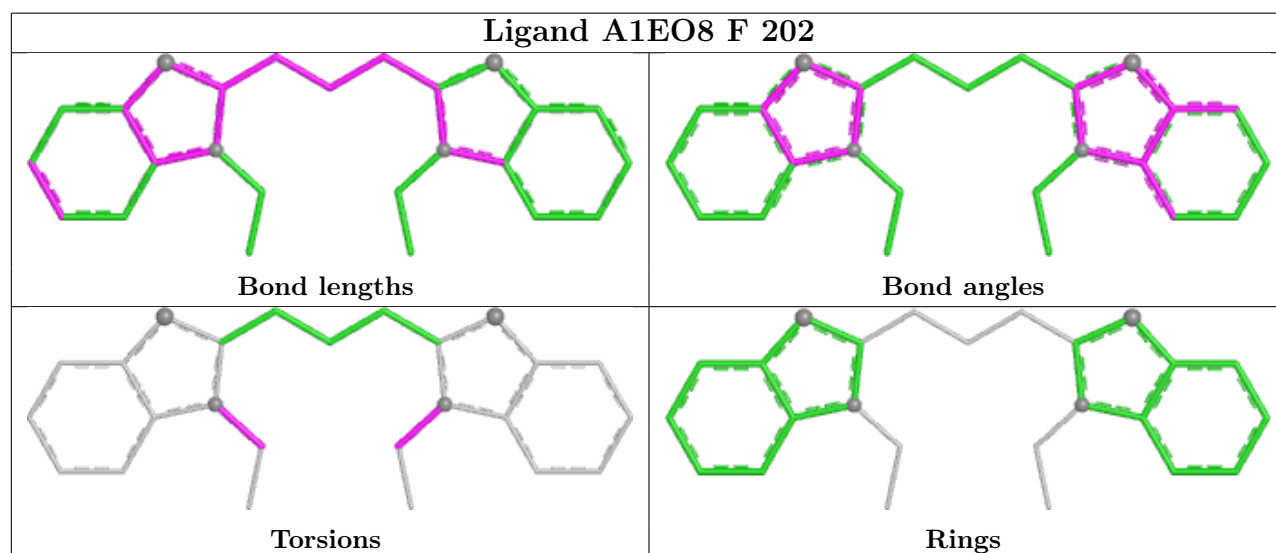
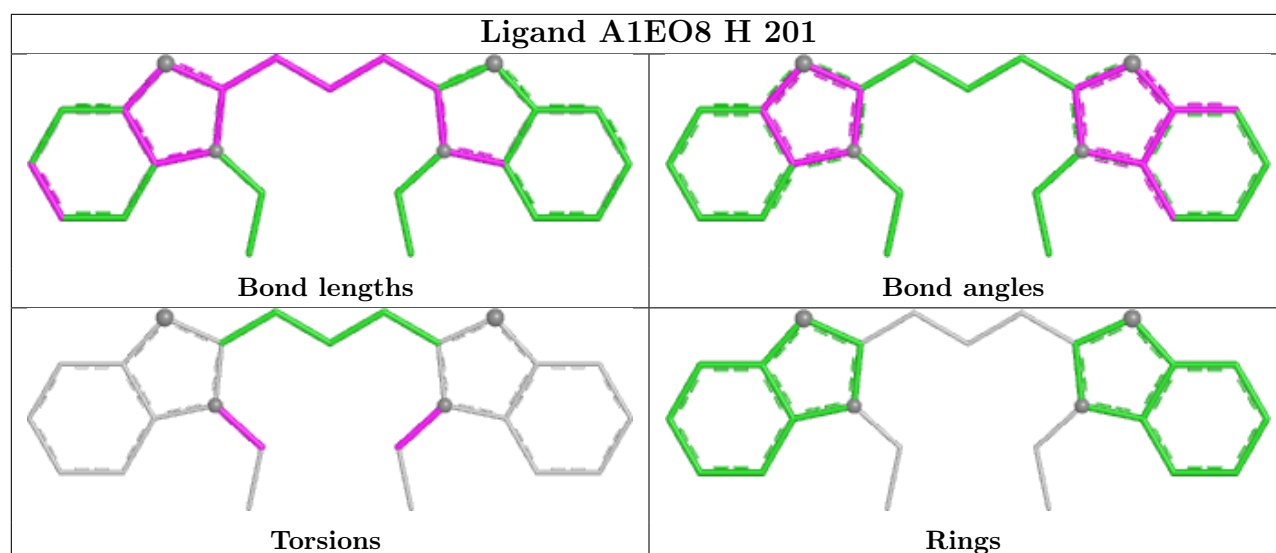


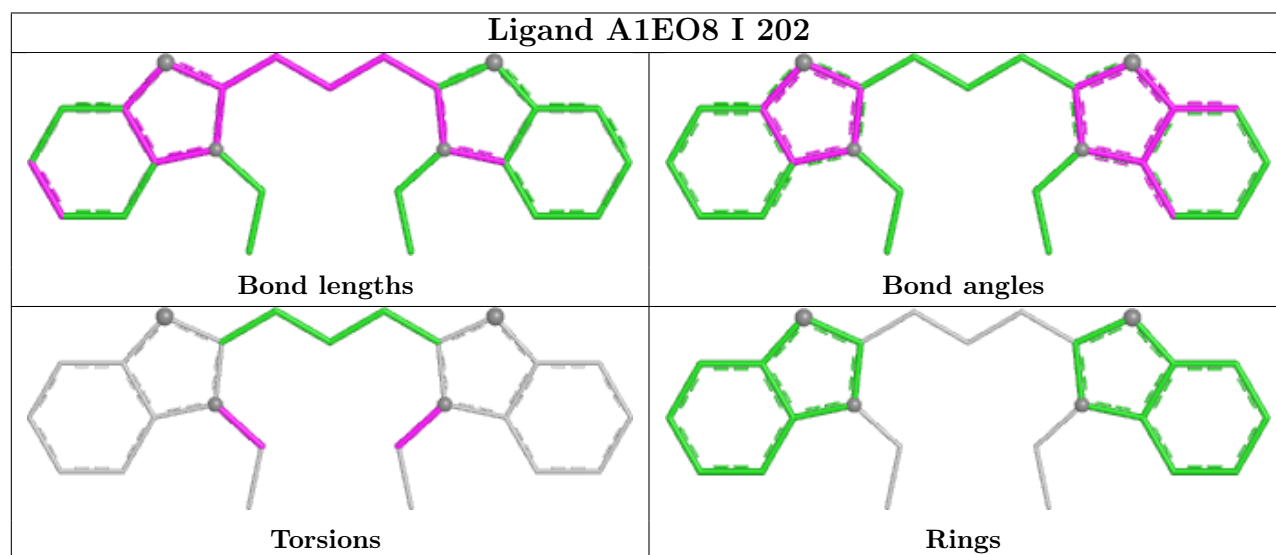
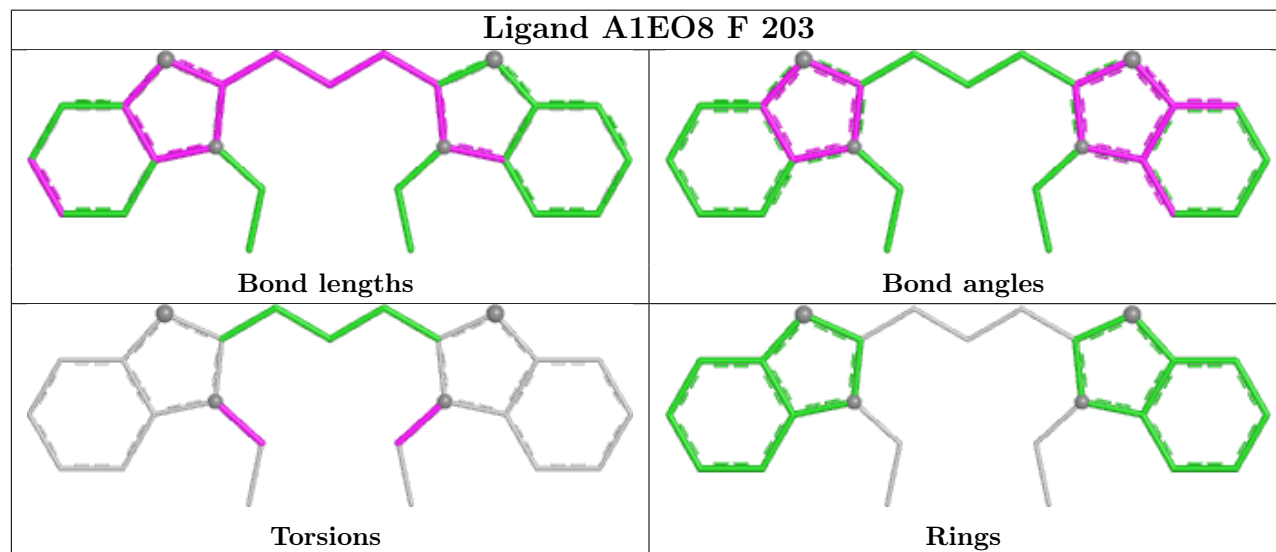
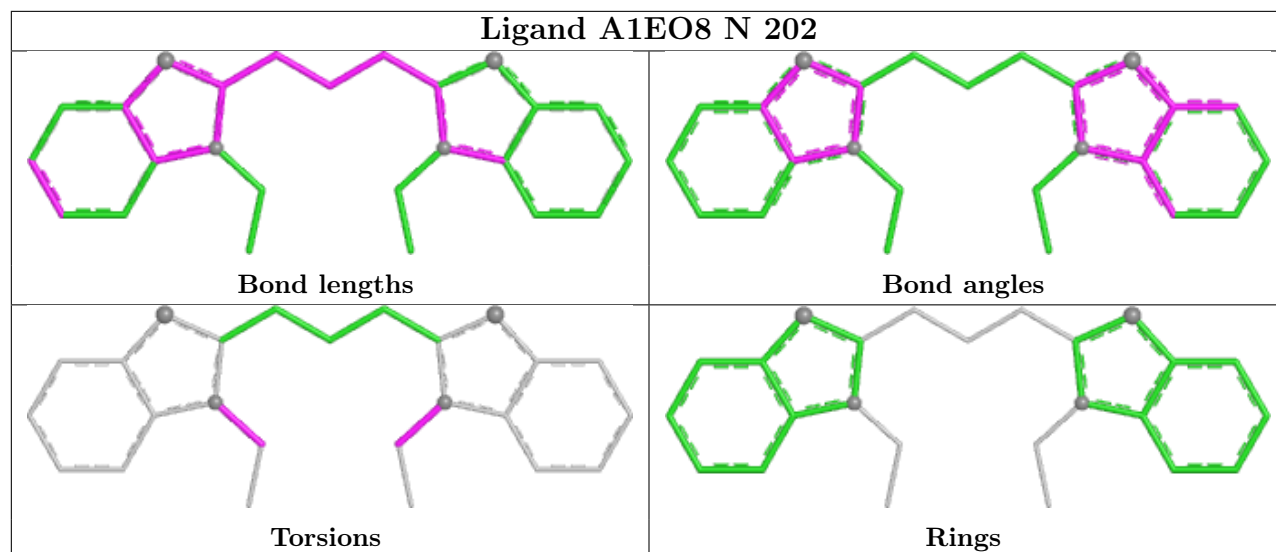


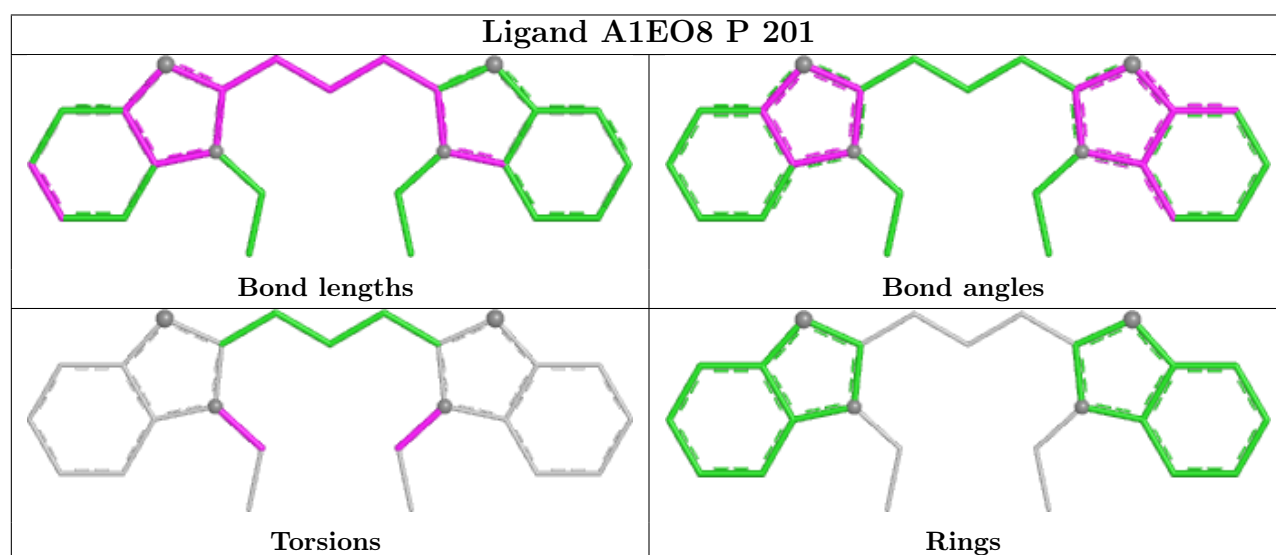
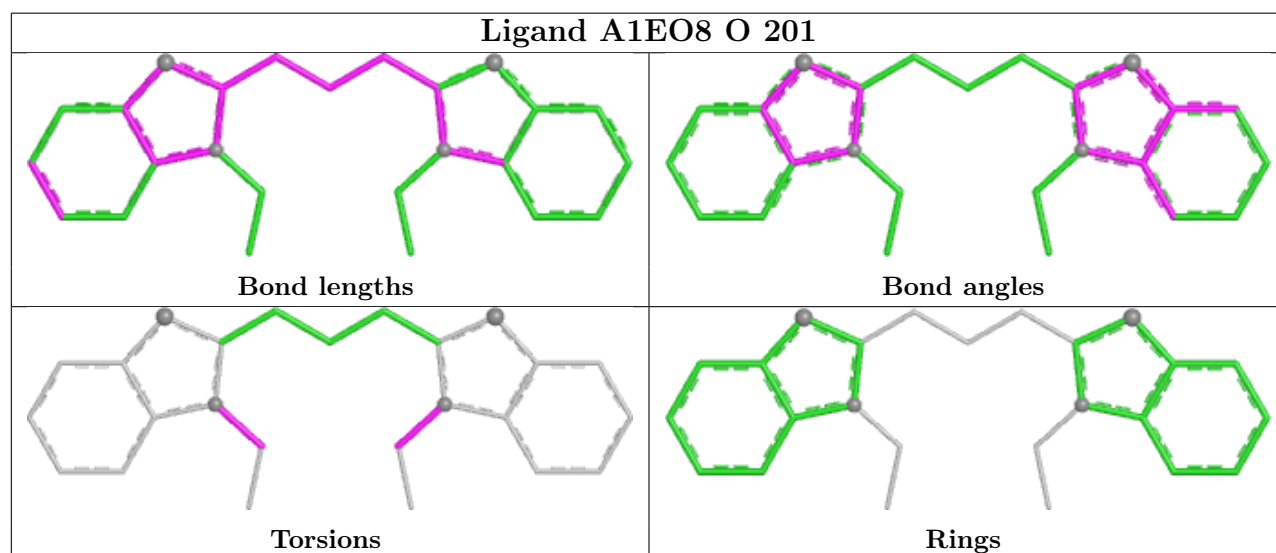
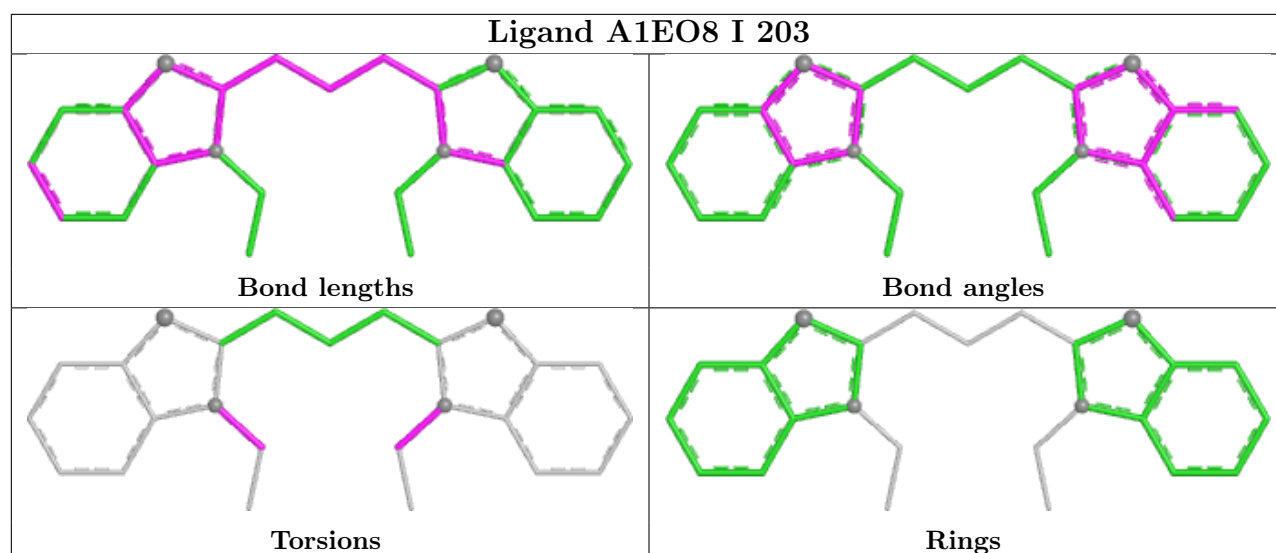


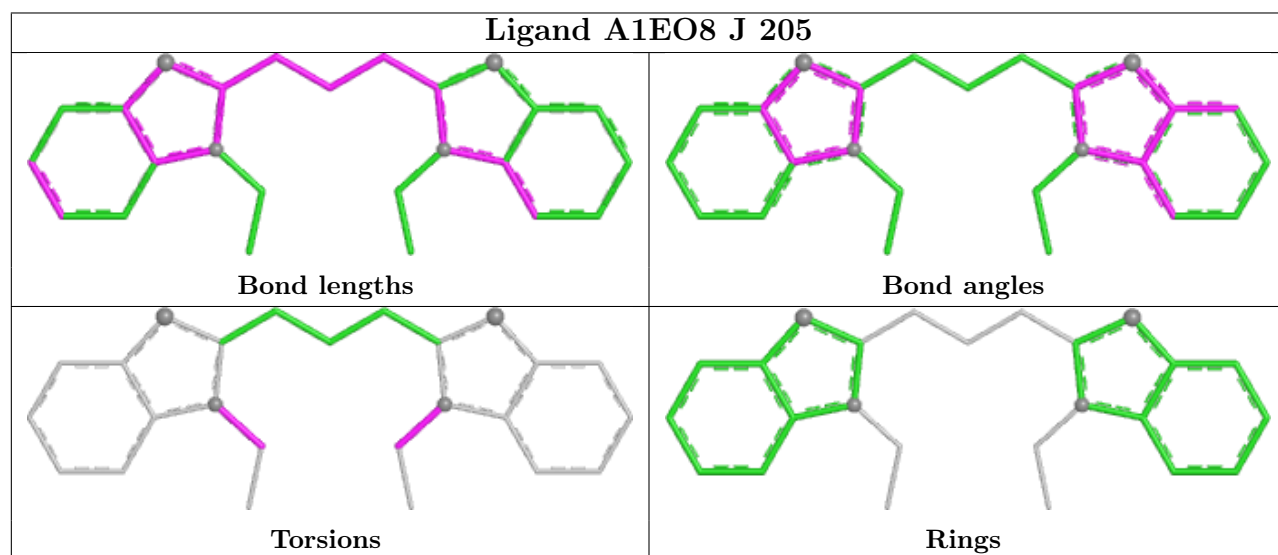
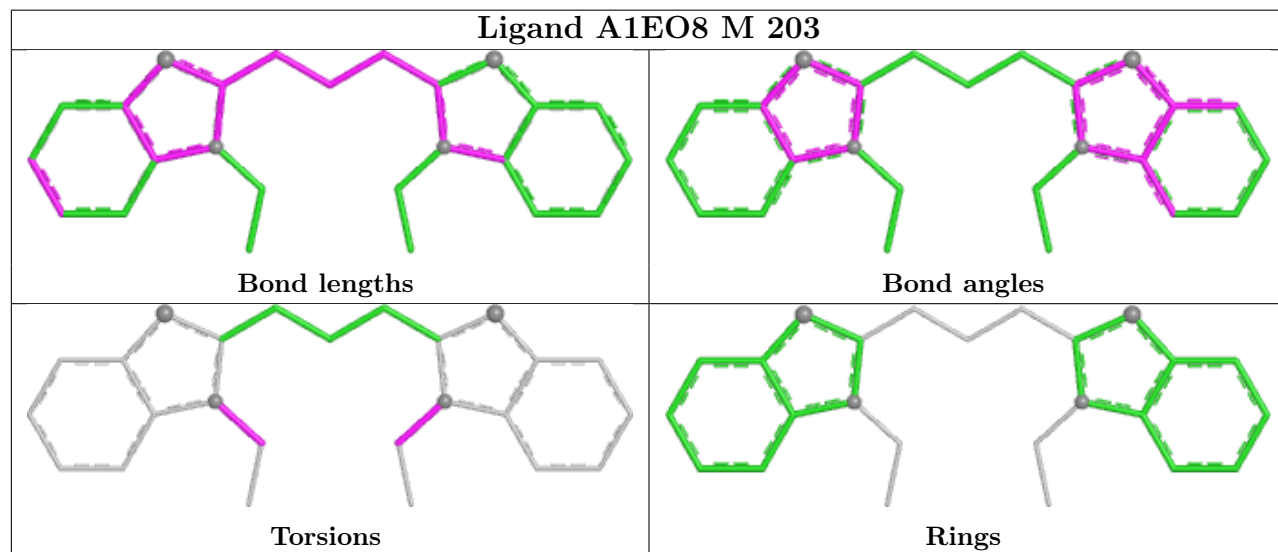
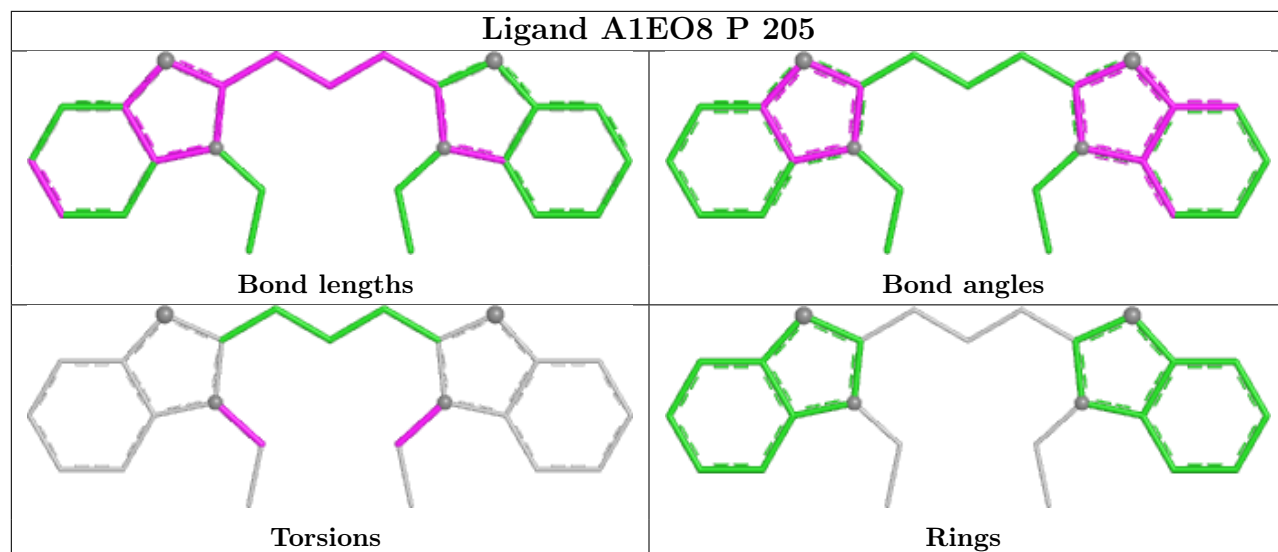


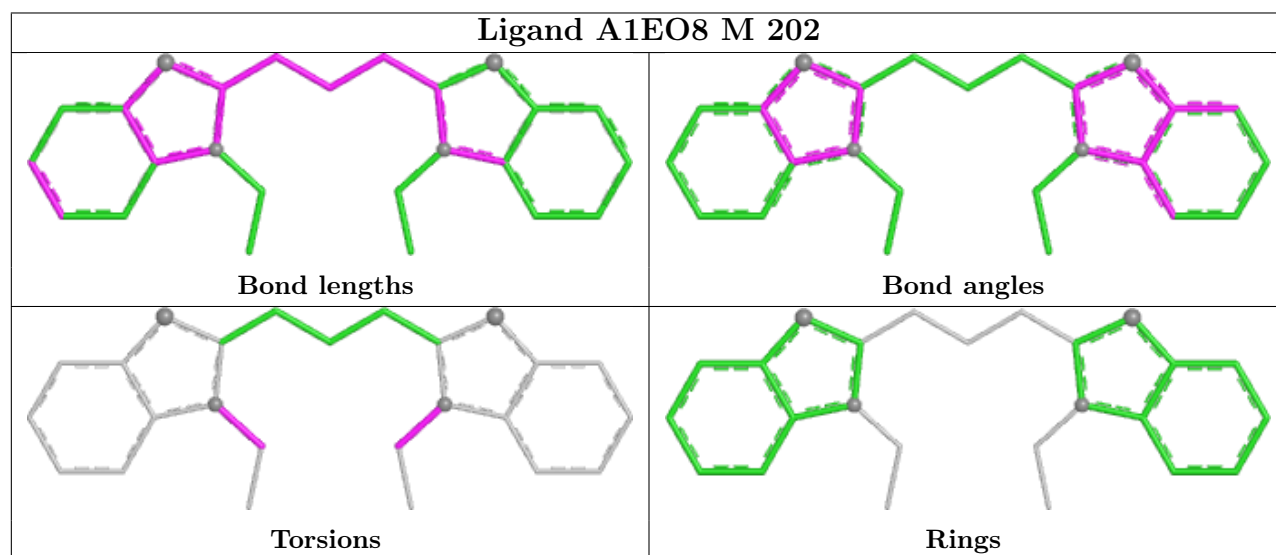
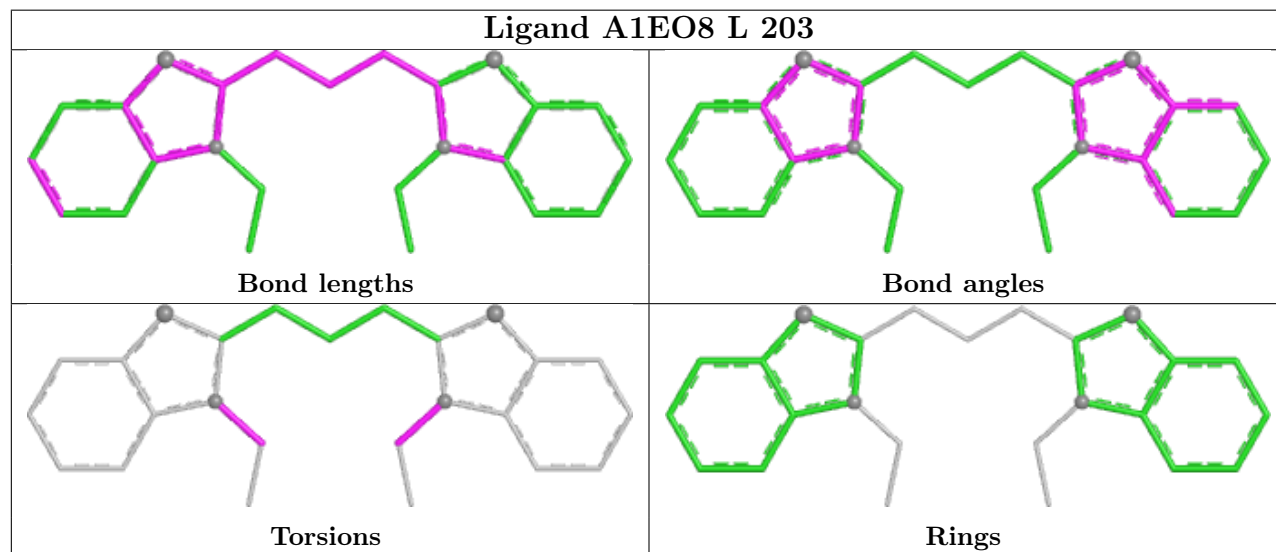
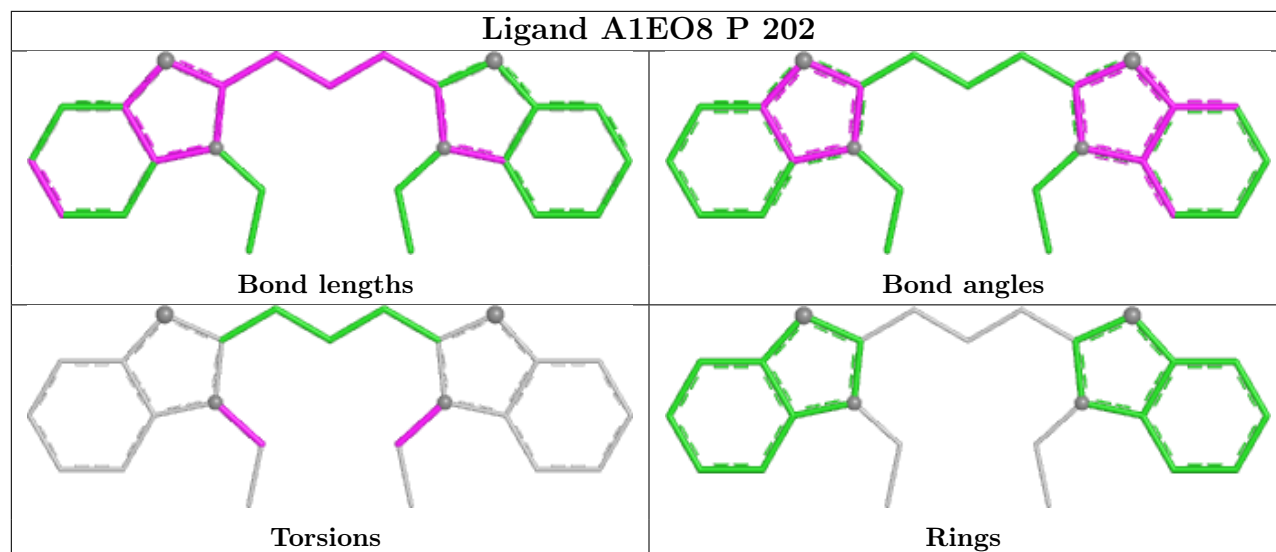


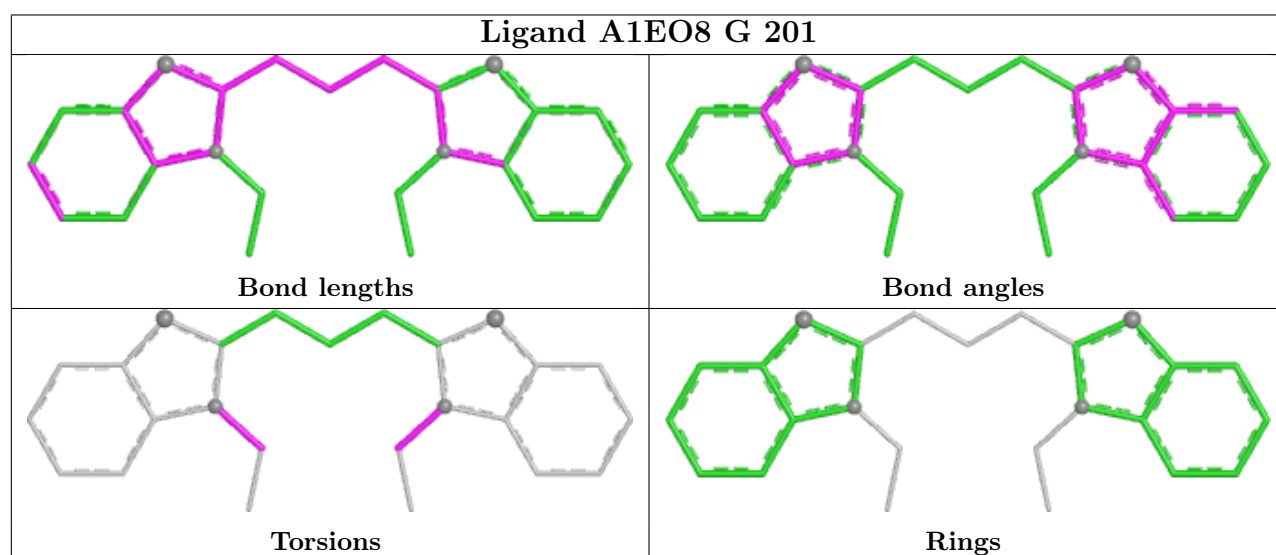
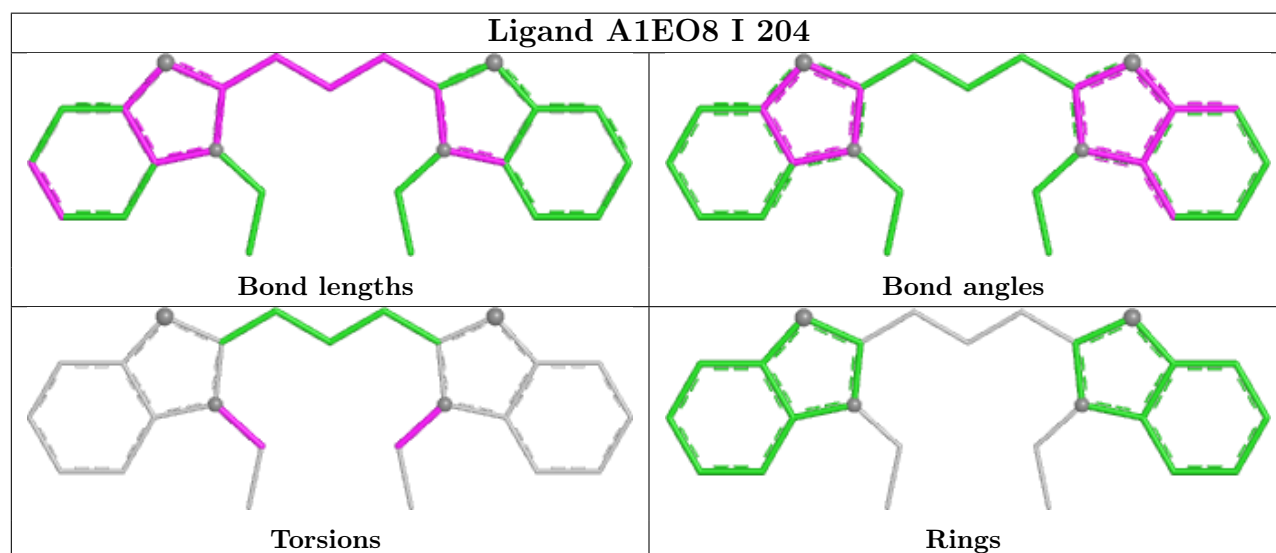
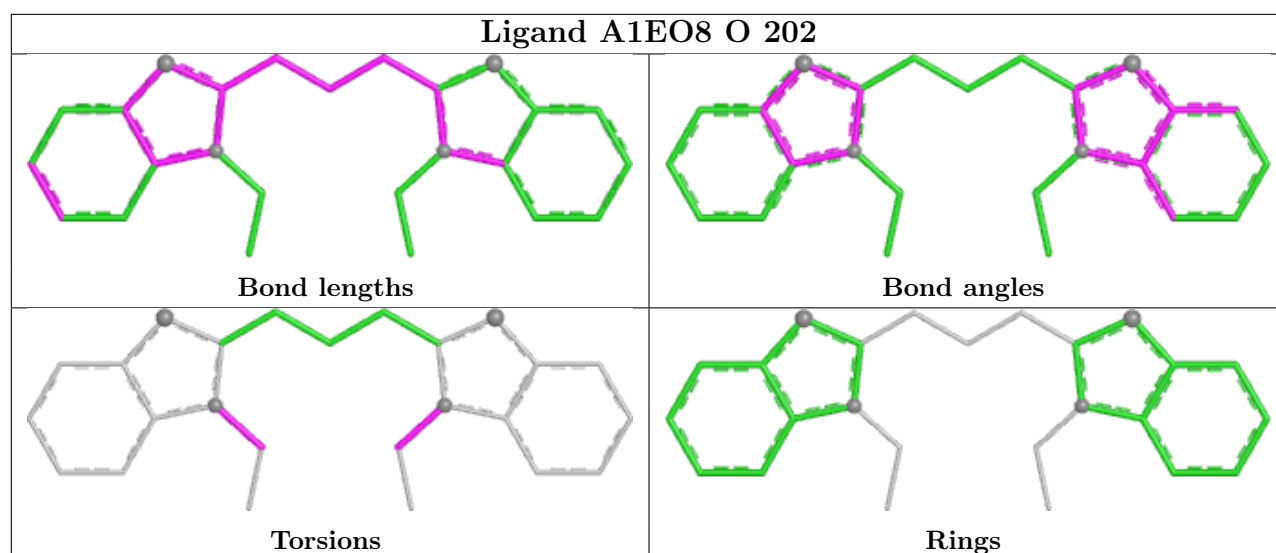


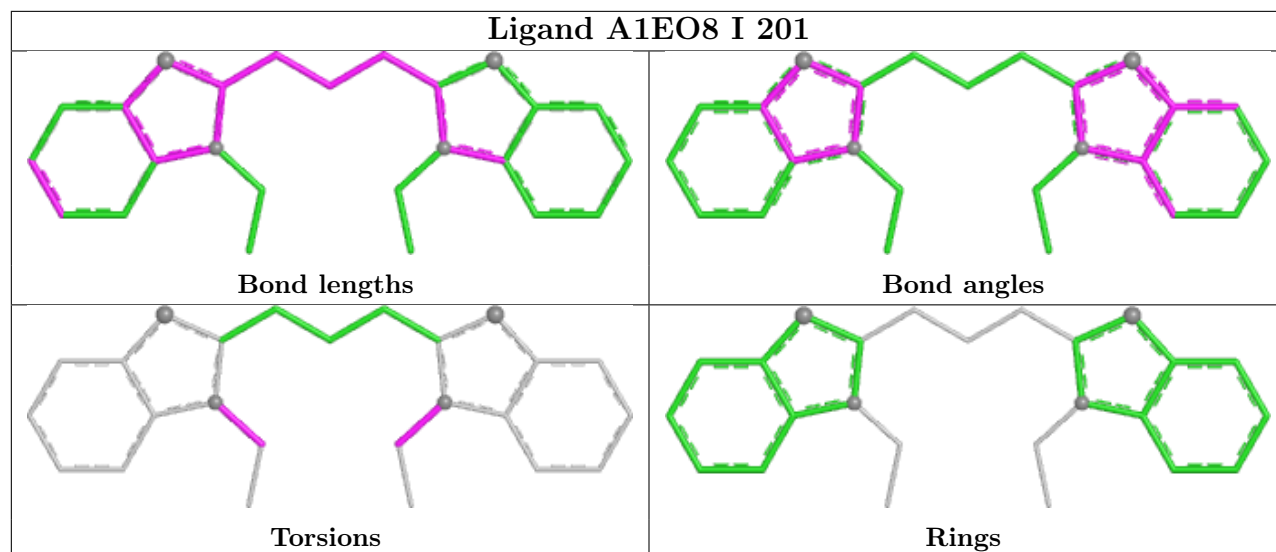












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

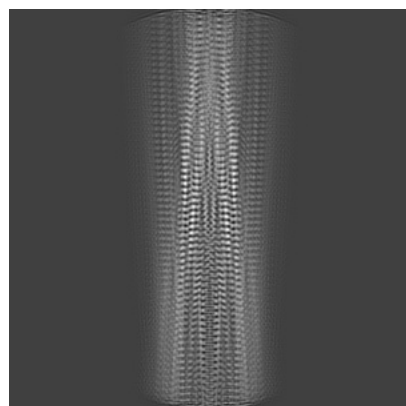
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-64105. These allow visual inspection of the internal detail of the map and identification of artifacts.

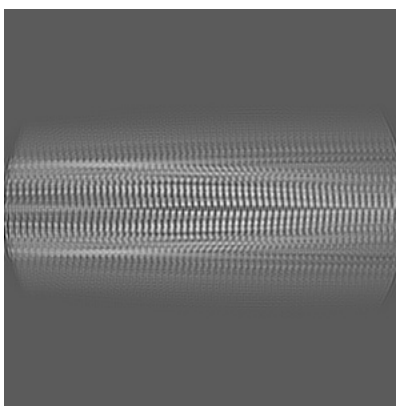
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

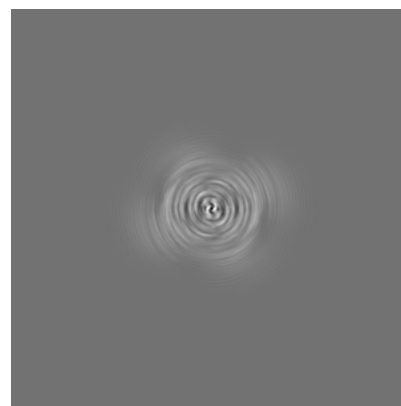
6.1.1 Primary map



X

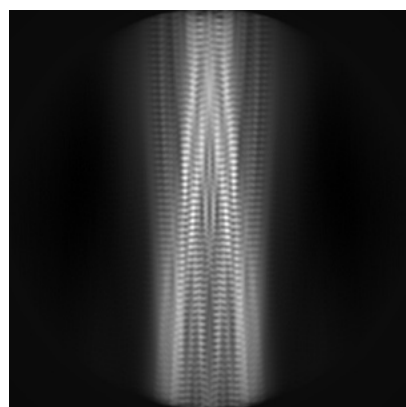


Y

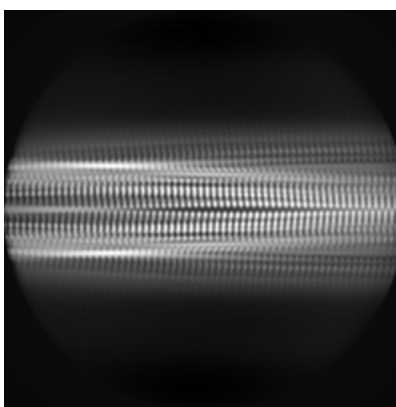


Z

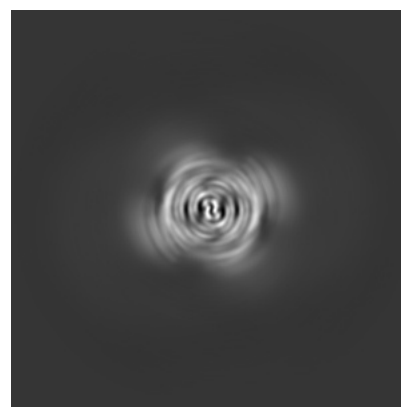
6.1.2 Raw map



X



Y

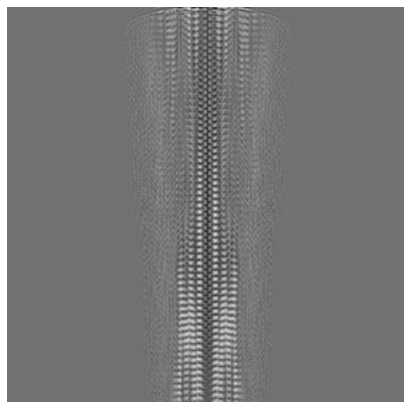


Z

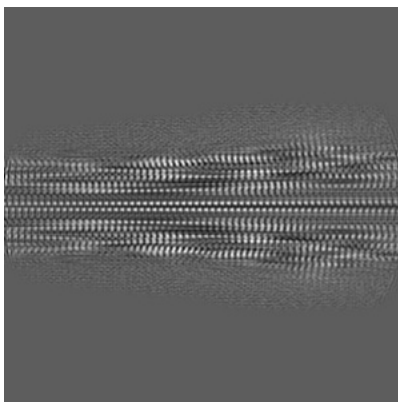
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

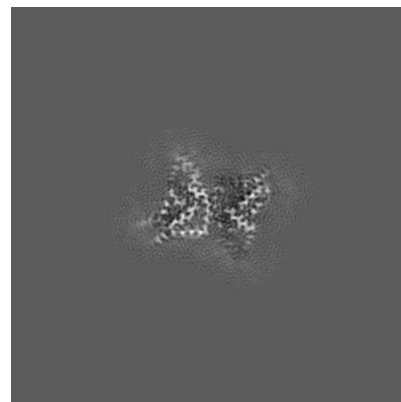
6.2.1 Primary map



X Index: 180

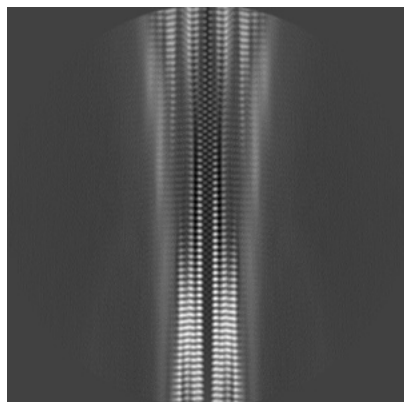


Y Index: 180

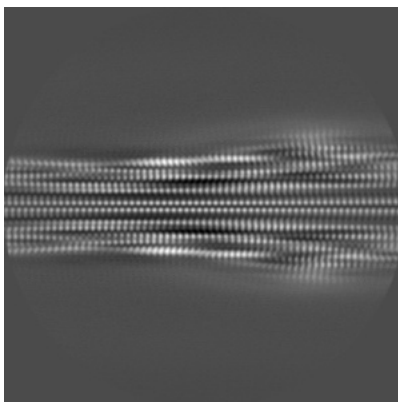


Z Index: 180

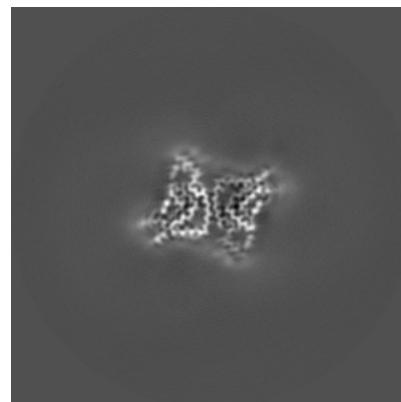
6.2.2 Raw map



X Index: 180



Y Index: 180

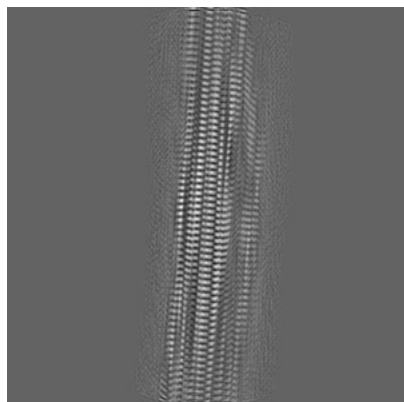


Z Index: 180

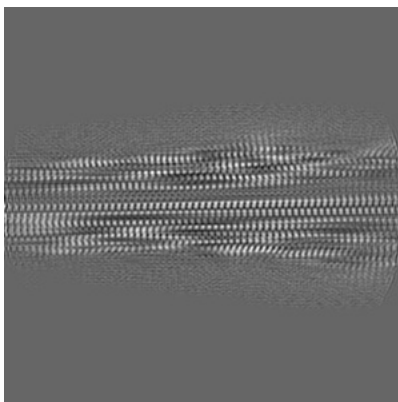
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

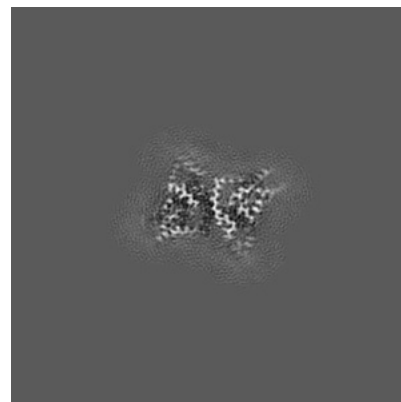
6.3.1 Primary map



X Index: 154

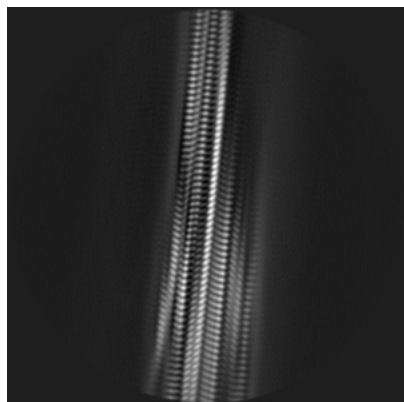


Y Index: 187

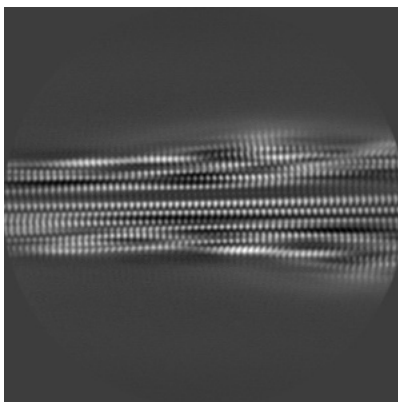


Z Index: 178

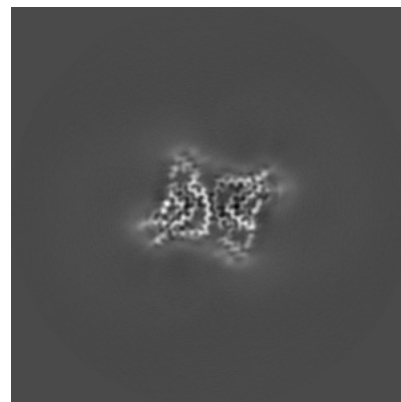
6.3.2 Raw map



X Index: 141



Y Index: 187

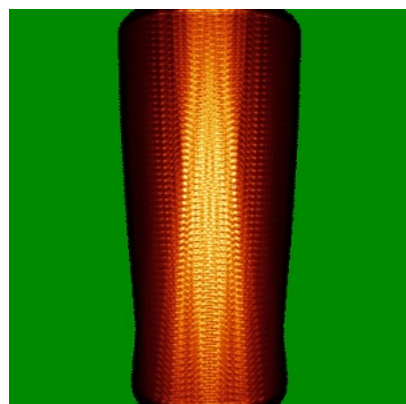


Z Index: 175

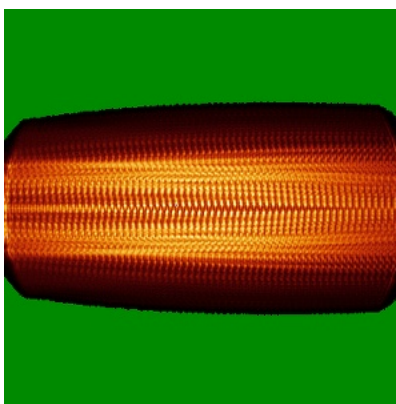
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

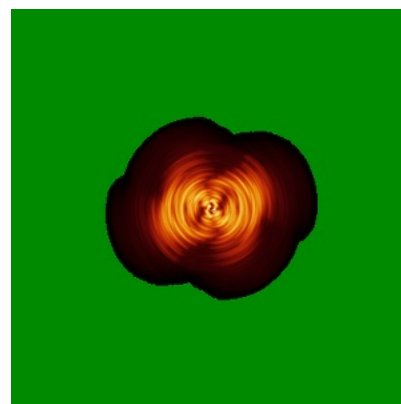
6.4.1 Primary map



X

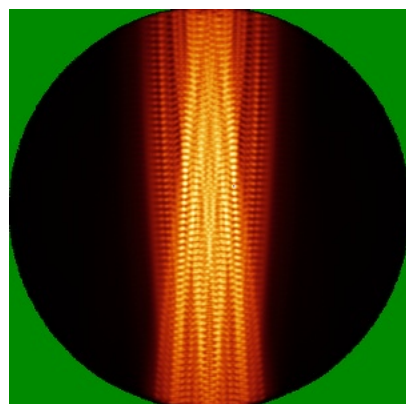


Y

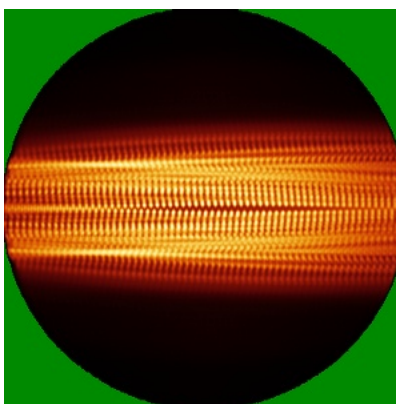


Z

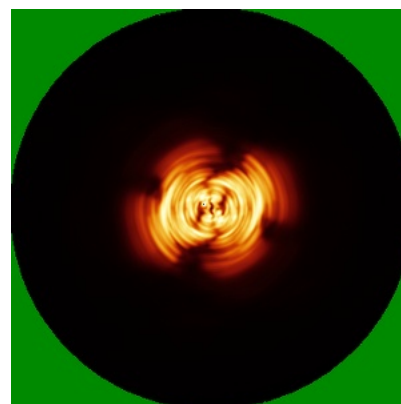
6.4.2 Raw map



X



Y

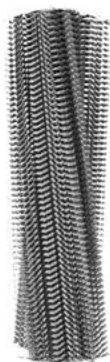


Z

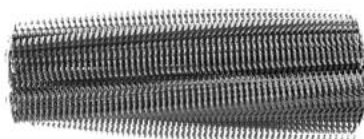
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



X



Y



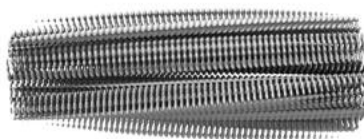
Z

The images above show the 3D surface view of the map at the recommended contour level 0.01. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X



Y



Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

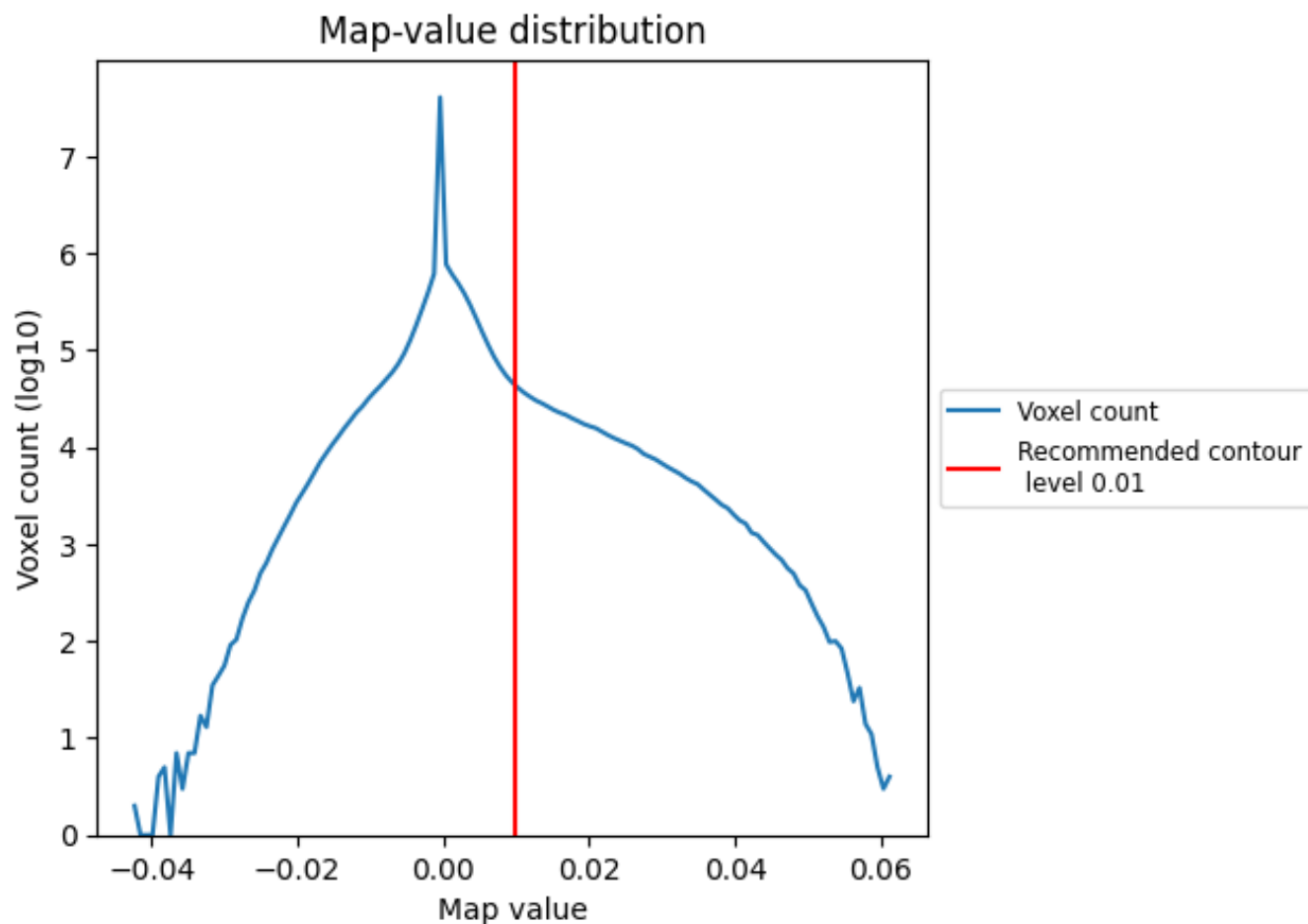
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

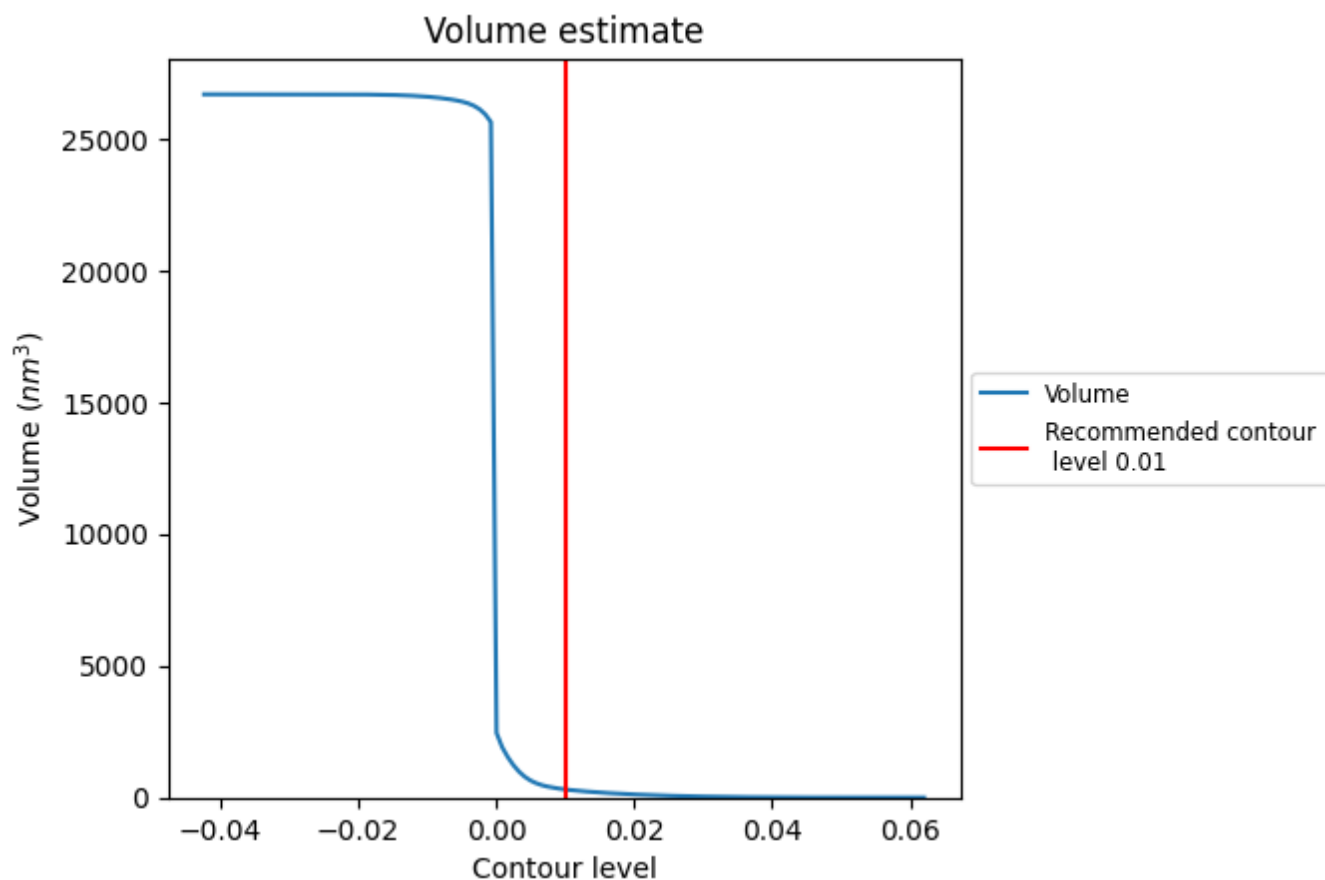
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

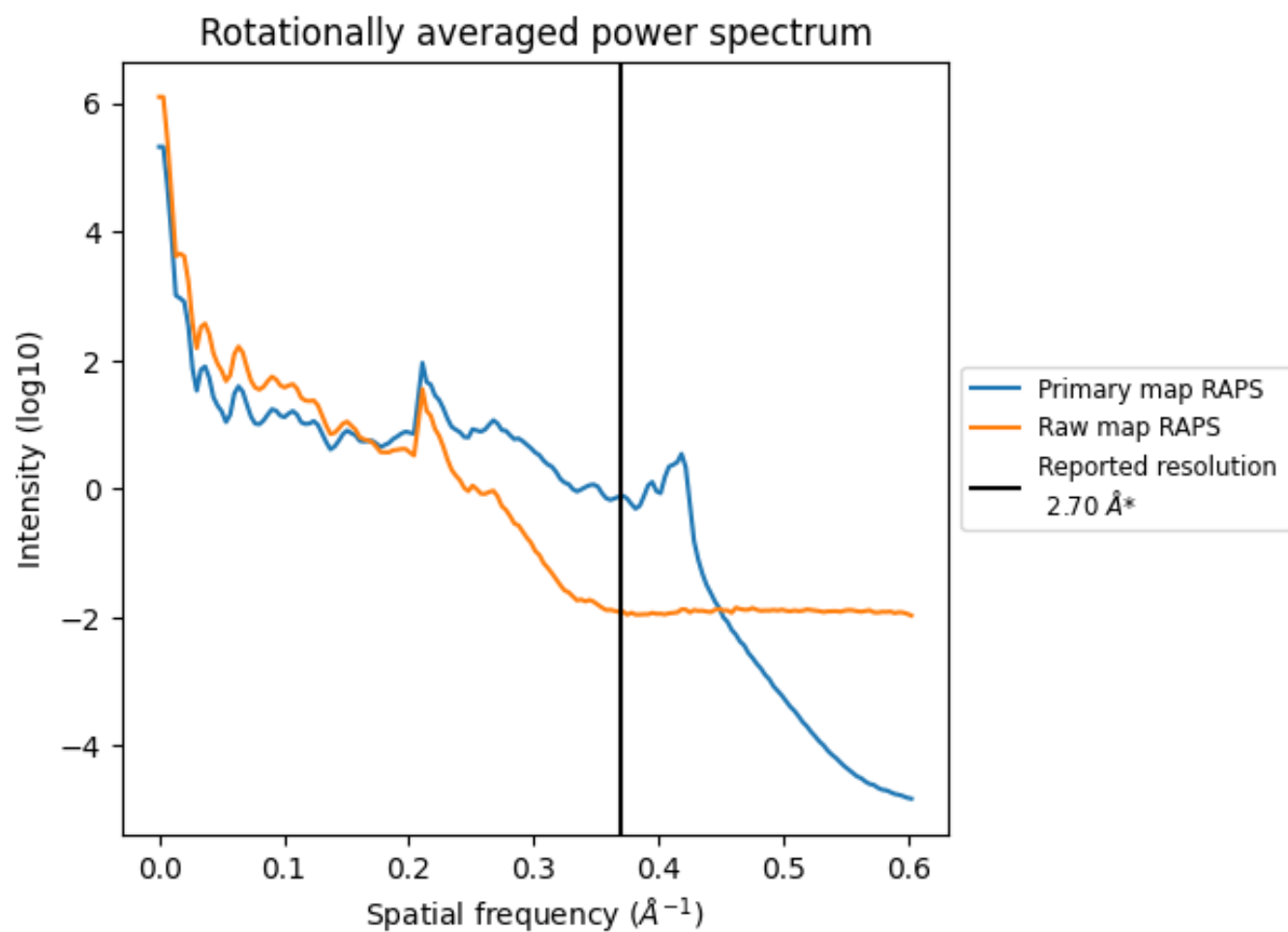
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 309 nm³; this corresponds to an approximate mass of 279 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ

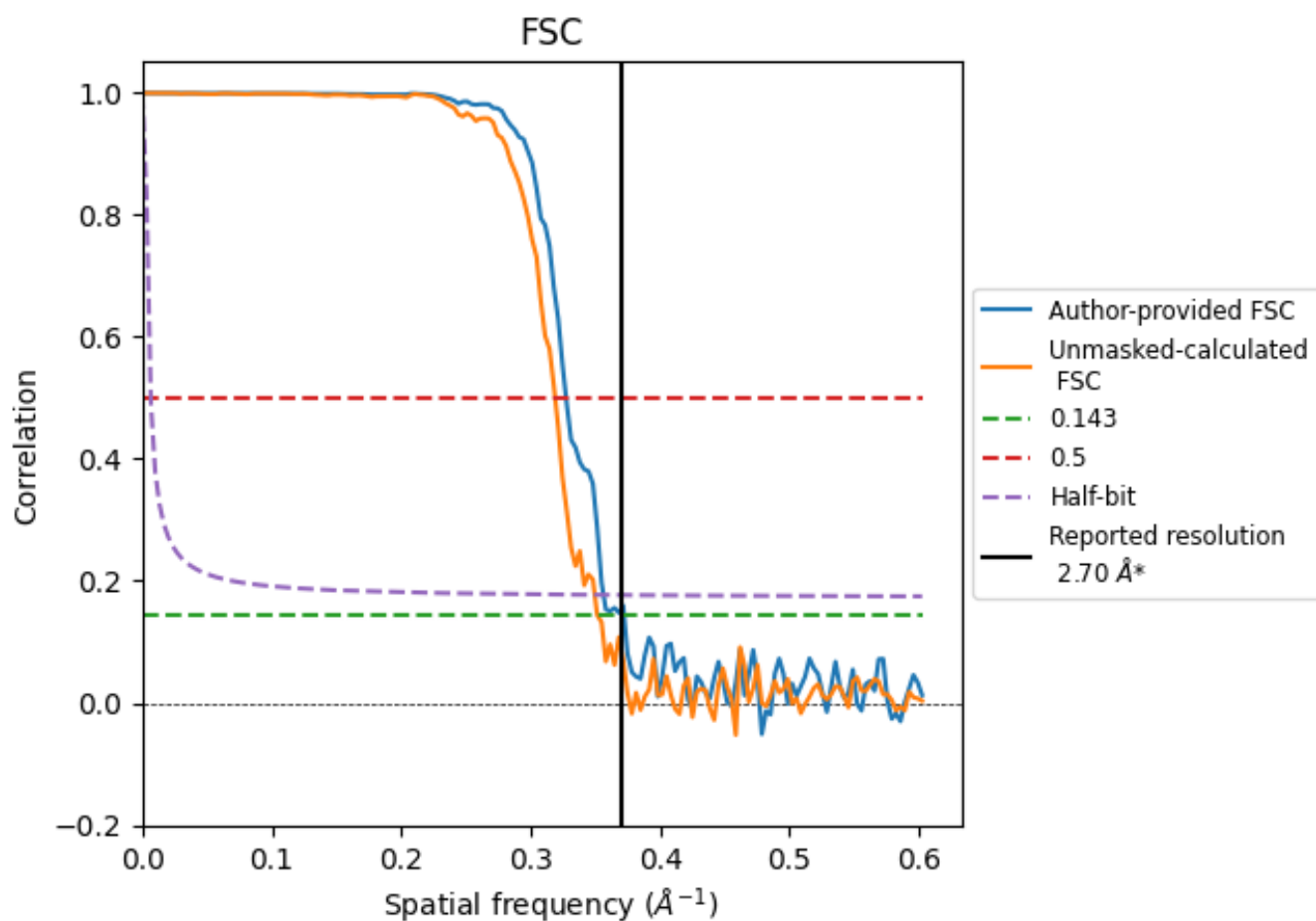


*Reported resolution corresponds to spatial frequency of 0.370 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.370 $\text{\AA}^{-1}$

8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.70	-	-
Author-provided FSC curve	2.69	3.05	2.81
Unmasked-calculated*	2.84	3.13	2.86

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-64105 and PDB model 9UFD. Per-residue inclusion information can be found in section [3](#) on page [8](#).

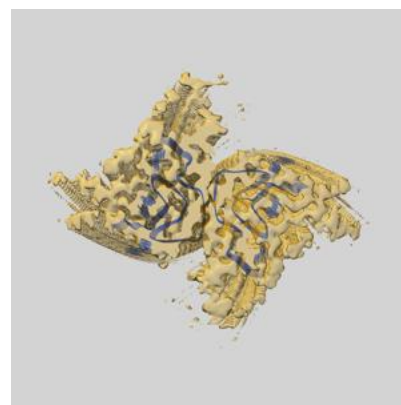
9.1 Map-model overlay [i](#)



X



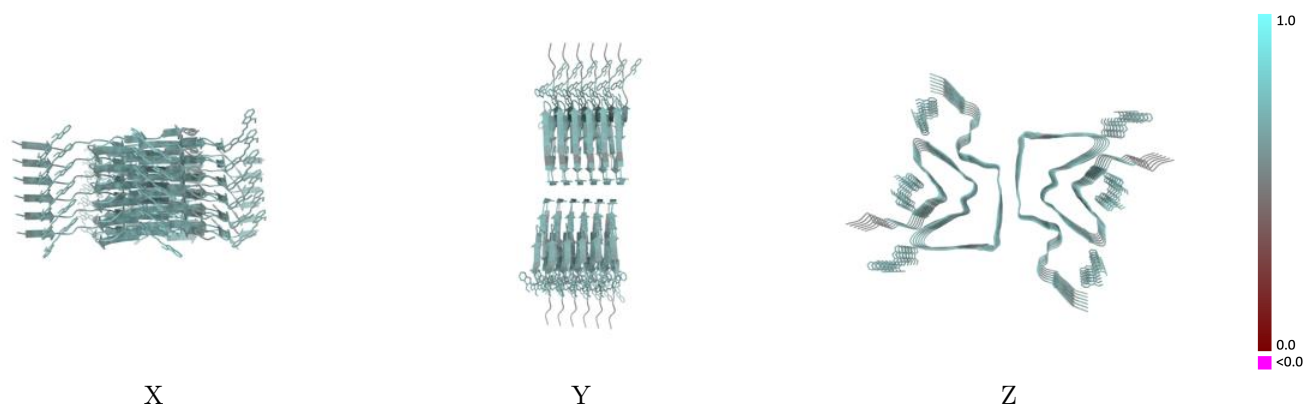
Y



Z

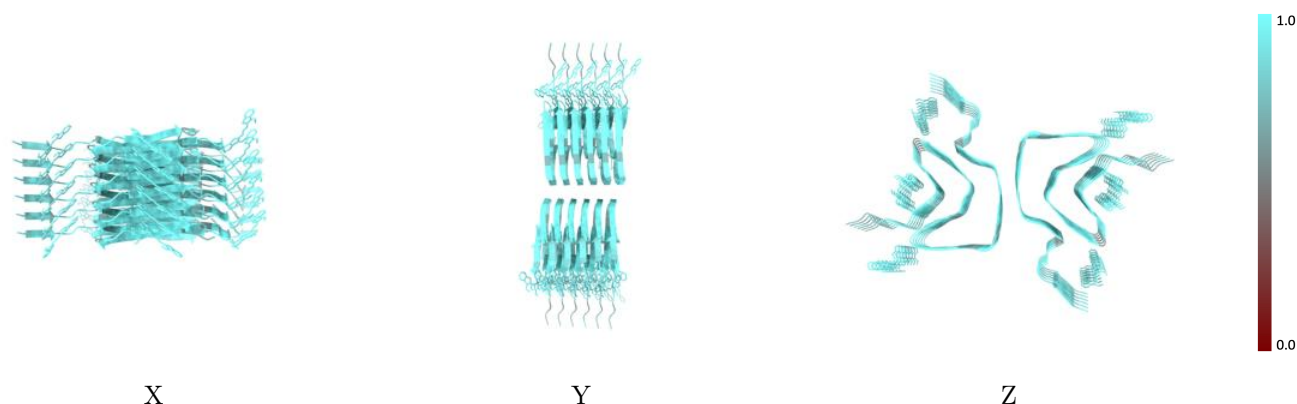
The images above show the 3D surface view of the map at the recommended contour level 0.01 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



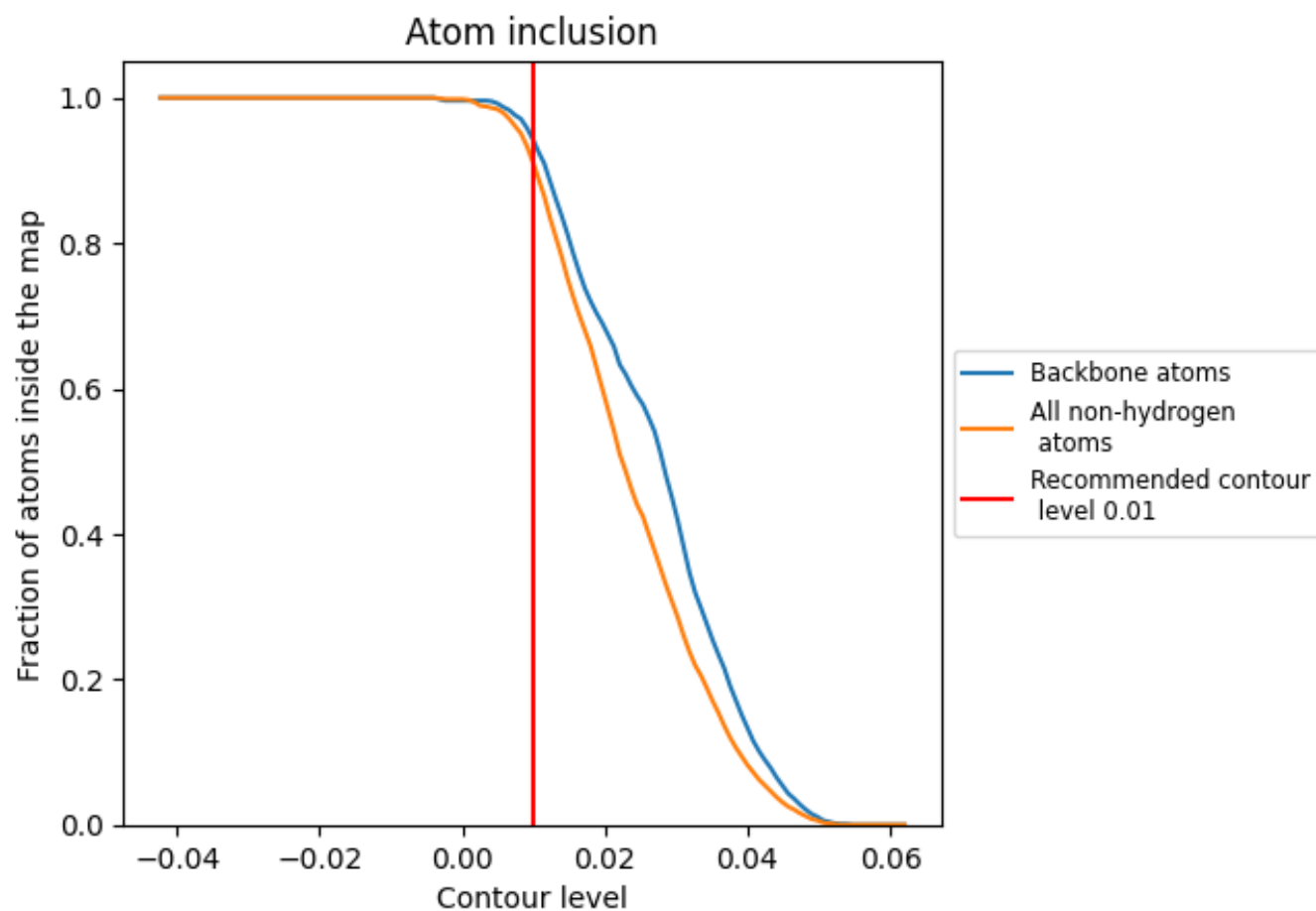
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.01).

9.4 Atom inclusion [i](#)



At the recommended contour level, 94% of all backbone atoms, 91% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.01) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9090	0.6140
E	0.9130	0.6090
F	0.9020	0.6130
G	0.9080	0.6140
H	0.9020	0.6130
I	0.9090	0.6140
J	0.9160	0.6160
K	0.9060	0.6110
L	0.9120	0.6150
M	0.9100	0.6160
N	0.9060	0.6160
O	0.9070	0.6160
P	0.9110	0.6170

