WORLDWIDE wwPDB PROTEIN DATA BANK

Full wwPDB EM Validation Report ⓘ

Oct 1, 2024 – 10:26 AM JST

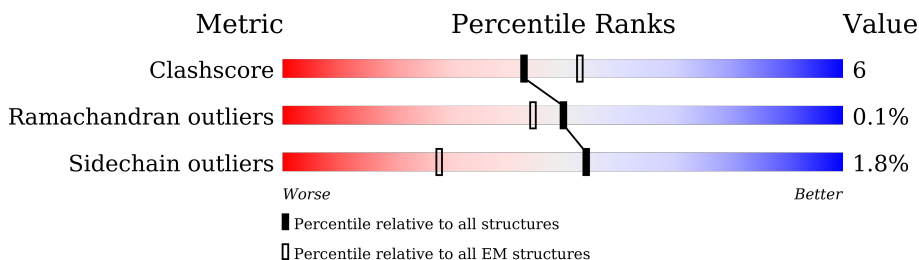|		
PDB ID	:	6ADL
EMDB ID	:	EMD-9607
Title	:	Anthrax Toxin Receptor 1-bound spent particles of Seneca Valley Virus in acidic conditions
Authors	:	Lou, Z.Y.; Cao, L.
Deposited on	:	2018-08-01
Resolution	:	3.08 Å(reported)

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 3.08 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	Percentile Ranks	Value
Clashscore		6
Ramachandran outliers		0.1%
Sidechain outliers		1.8%

Worse   *Better*

▮ Percentile relative to all structures
◻ Percentile relative to all EM structures

Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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 <=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	A	230	82% / 80% — 20%
2	C	238	83% / 82% — 14% ·
3	B	246	86% / 83% — 16% ·
4	R	185	89% / 84% — 16%

2 Entry composition ⓘ

There are 5 unique types of molecules in this entry. The entry contains 7076 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 VP1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	230	Total 1827	C 1186	N 313	O 324	S 4	0	0

- Molecule 2 is a protein called VP3.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	C	230	Total 1791	C 1158	N 284	O 338	S 11	0	0

- Molecule 3 is a protein called VP2.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	B	246	Total 1955	C 1247	N 328	O 372	S 8	0	0

- Molecule 4 is a protein called Anthrax toxin receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	R	185	Total 1502	C 957	N 256	O 283	S 6	0	0

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
R	36	SER	-	expression tag	UNP Q9H6X2
R	37	MET	-	expression tag	UNP Q9H6X2
R	177	ALA	CYS	engineered mutation	UNP Q9H6X2

- Molecule 5 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

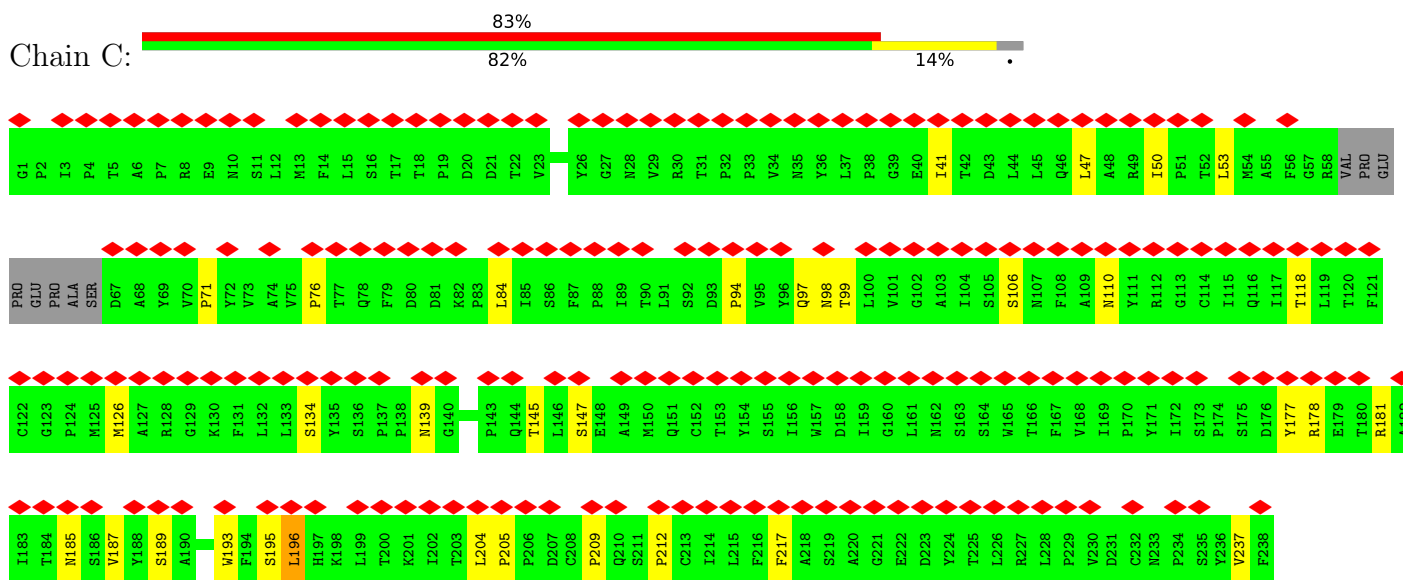| Mol	Chain	Residues	Atoms		AltConf
5	R	1	Total 1	Mg 1	0

3　Residue-property plots ⓘ

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and 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.
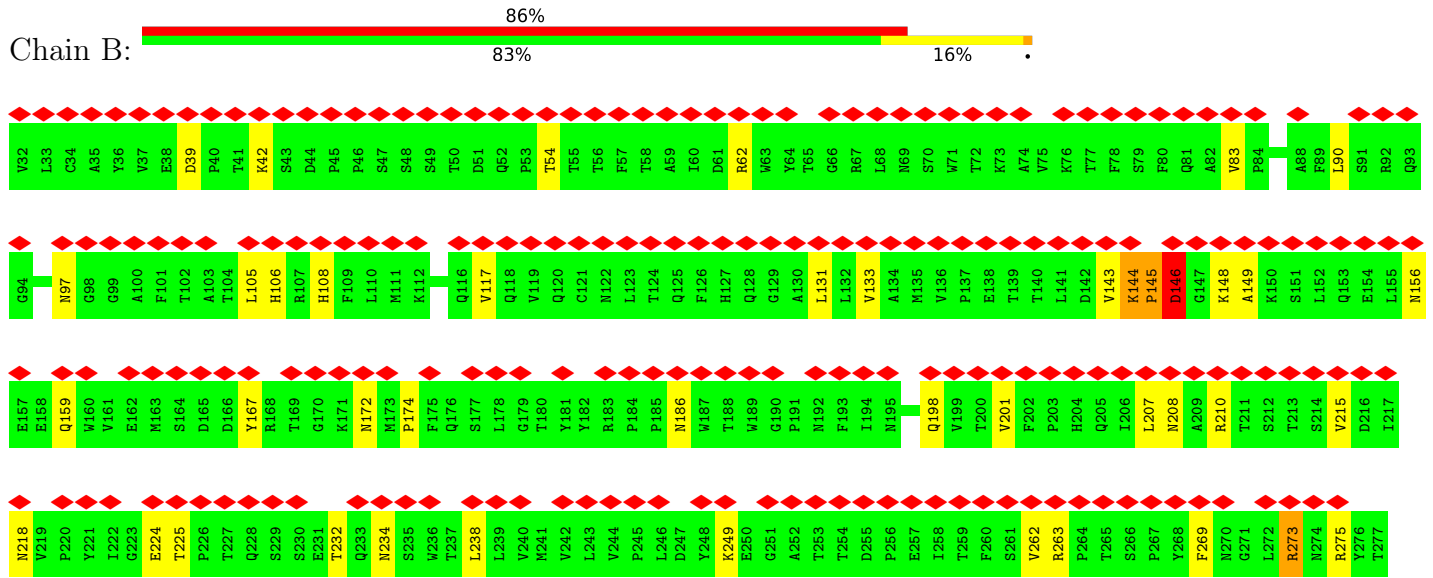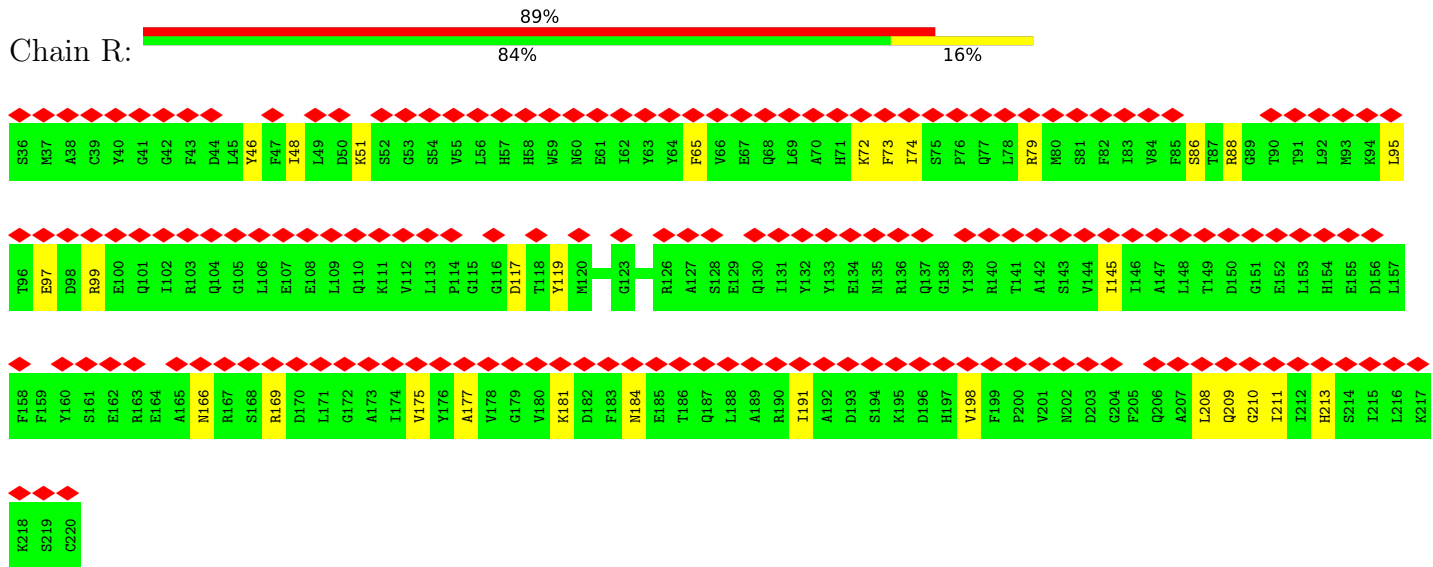
- Molecule 1: VP1

- Molecule 2: VP3

- Molecule 3: VP2

86%

Chain B:

83%

16%

V32 L33 C34 A35 Y36 V37 E38 D39 P40 T41 K42 S43 D44 P45 P46 S47 S48 S49 T50 D51 Q52 P53 T54 T55 T56 F57 T58 A59 I60 D61 R62 W63 Y64 T65 G66 R67 L68 N69 S70 W71 T72 K73 A74 V75 K76 T77 F78 S79 F80 Q81 A82 V83 P84 A88 F89 L90 S91 R92 Q93

G94 N97 G98 G99 A100 F101 T102 A103 T104 L105 H106 R107 H108 F109 L110 M111 K112 Q116 V117 Q118 V119 Q120 C121 N122 L123 T124 Q125 F126 H127 Q128 G129 A130 L131 L132 V133 A134 M135 V136 P137 E138 T139 T140 L141 D142 V143 K144 P145 D146 G147 K148 A149 K150 S151 L152 Q153 E154 L155 N156

E157 E158 Q159 W160 V161 E162 M163 S164 D165 D166 Y167 R168 T169 G170 K171 N172 M173 P174 F175 Q176 S177 L178 G179 T180 Y181 Y182 R183 P184 P185 N186 W187 T188 W189 G190 P191 N192 F193 I194 N195 Q198 V199 T200 V201 F202 P203 H204 Q205 I206 L207 N208 A209 R210 T211 S212 T213 S214 V215 D216 I217

N218 V219 P220 Y221 I222 G223 E224 T225 P226 T227 Q228 S229 S230 E231 T232 Q233 N234 S235 W236 T237 L238 L239 V240 M241 V242 L243 V244 P245 L246 D247 Y248 K249 E250 G251 A252 T253 T254 D255 P256 E257 I258 T259 F260 S261 V262 R263 P264 T265 S266 P267 V268 F269 N270 G271 L272 R273 N274 R275 Y276 T277

• Molecule 4: Anthrax toxin receptor 1

89%

Chain R:

84%

16%

S36 M37 A38 C39 Y40 G41 G42 F43 D44 L45 Y46 F47 I48 L49 D50 K51 S52 G53 S54 V55 L56 H57 H58 W59 N60 E61 I62 Y63 Y64 F65 V66 E67 Q68 L69 A70 H71 K72 F73 I74 S75 P76 Q77 L78 R79 M80 S81 F82 I83 V84 F85 S86 T87 R88 G89 T90 T91 L92 M93 K94 L95

T96 E97 D98 R99 E100 Q101 I102 R103 Q104 G105 L106 E107 E108 L109 Q110 K111 V112 L113 P114 G115 G116 D117 T118 Y119 M120 G123 R126 A127 S128 E129 Q130 I131 Y132 Y133 E134 N135 R136 Q137 G138 Y139 R140 T141 A142 S143 V144 I145 I146 A147 L148 T149 D150 G151 E152 L153 H154 E155 D156 L157

F158 F159 Y160 S161 E162 R163 E164 A165 N166 R167 S168 R169 D170 L171 G172 A173 I174 V175 Y176 A177 V178 G179 V180 K181 D182 F183 N184 E185 T186 Q187 L188 A189 R190 I191 A192 D193 S194 K195 D196 H197 V198 F199 P200 V201 N202 D203 G204 F205 Q206 A207 L208 Q209 G210 I211 I212 H213 S214 I215 L216 K217

K218 S219 C220

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	3171	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TECNAI ARCTICA	Depositor
Voltage (kV)	200	Depositor
Electron dose $(e^-/\text{Å}^2)$	1.63	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.084	Depositor
Minimum map value	-0.040	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.005	Depositor
Recommended contour level	0.02	Depositor
Map size (Å)	550.0, 550.0, 550.0	wwPDB
Map dimensions	550, 550, 550	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.0, 1.0, 1.0	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$|Z|$ >5	RMSZ	#$|Z|$ >5
1	A	0.39	0/1888	0.57	1/2575 (0.0%)
2	C	0.37	0/1847	0.60	1/2537 (0.0%)
3	B	0.39	1/2014 (0.0%)	0.60	1/2758 (0.0%)
4	R	0.30	0/1535	0.48	0/2068
All	All	0.37	1/7284 (0.0%)	0.57	3/9938 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	C	0	2
4	R	0	1
All	All	0	3

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	B	145	PRO	N-CD	5.11	1.55	1.47

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	C	196	LEU	CA-CB-CG	6.79	130.91	115.30
3	B	144	LYS	C-N-CD	5.80	140.59	128.40
1	A	42	LEU	CA-CB-CG	5.03	126.86	115.30

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	C	187	VAL	Peptide
2	C	189	SER	Peptide
4	R	181	LYS	Peptide

5.2　Too-close contacts　ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1827	0	1790	30	0
2	C	1791	0	1752	19	0
3	B	1955	0	1885	36	0
4	R	1502	0	1449	18	0
5	R	1	0	0	0	0
All	All	7076	0	6876	89	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 6.

All (89) 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)
3:B:145:PRO:HB3	3:B:172:ASN:CB	2.07	0.84
1:A:203:SER:HB2	3:B:148:LYS:HD3	1.62	0.82
3:B:145:PRO:HA	3:B:172:ASN:HB2	1.64	0.79
3:B:145:PRO:CA	3:B:172:ASN:HB2	2.21	0.70
3:B:145:PRO:HB3	3:B:172:ASN:HB2	1.74	0.68
3:B:144:LYS:O	3:B:146:ASP:N	2.25	0.67
3:B:145:PRO:CB	3:B:172:ASN:HB2	2.26	0.65
1:A:76:THR:HG22	1:A:78:ARG:H	1.62	0.65
2:C:76:PRO:HD2	2:C:84:LEU:HD11	1.80	0.64
3:B:145:PRO:CB	3:B:172:ASN:CB	2.76	0.63
3:B:145:PRO:HB3	3:B:172:ASN:HB3	1.82	0.61
3:B:83:VAL:HB	3:B:238:LEU:HB3	1.82	0.60
2:C:178:ARG:HB3	2:C:185:ASN:HD21	1.65	0.60
4:R:51:LYS:HG3	4:R:86:SER:HB3	1.85	0.59
1:A:255:ARG:H	2:C:98:ASN:HD21	1.51	0.57
3:B:39:ASP:HB3	3:B:42:LYS:HE2	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:99:THR:O	3:B:198:GLN:NE2	2.38	0.56
3:B:143:VAL:HG11	3:B:174:PRO:HG3	1.88	0.56
4:R:72:LYS:HE2	4:R:209:GLN:HG2	1.86	0.56
2:C:106:SER:O	2:C:181:ARG:NH2	2.39	0.56
4:R:166:ASN:OD1	4:R:169:ARG:NH2	2.38	0.55
3:B:156:ASN:OD1	3:B:159:GLN:NE2	2.40	0.55
1:A:129:SER:HA	1:A:235:VAL:HG23	1.89	0.55
2:C:204:LEU:HD11	2:C:212:PRO:HD3	1.89	0.54
3:B:106:HIS:O	3:B:273:ARG:NH1	2.38	0.54
4:R:169:ARG:NH1	4:R:191:ILE:O	2.41	0.54
2:C:134:SER:OG	2:C:195:SER:OG	2.27	0.53
2:C:145:THR:HG22	2:C:147:SER:H	1.74	0.53
1:A:36:LEU:HD11	1:A:113:LEU:HD13	1.91	0.53
4:R:48:ILE:HD12	4:R:145:ILE:HG23	1.90	0.53
3:B:145:PRO:O	3:B:146:ASP:OD1	2.27	0.53
1:A:194:ARG:NH1	1:A:251:MET:O	2.42	0.52
4:R:177:ALA:HB3	4:R:198:VAL:HG22	1.91	0.52
3:B:145:PRO:HB3	3:B:172:ASN:HD22	1.73	0.52
1:A:116:PHE:O	1:A:194:ARG:NH2	2.42	0.52
1:A:124:GLU:HB3	1:A:240:ARG:HB3	1.90	0.52
1:A:140:TRP:HE3	1:A:168:PRO:HD2	1.76	0.51
1:A:81:VAL:HG12	1:A:86:ALA:HB2	1.94	0.50
4:R:73:PHE:O	4:R:99:ARG:NH2	2.43	0.50
2:C:118:THR:HB	2:C:217:PHE:HB2	1.94	0.49
2:C:139:ASN:H	2:C:193:TRP:HZ3	1.60	0.48
1:A:88:ARG:NH1	4:R:117:ASP:OD2	2.44	0.48
1:A:116:PHE:HB3	2:C:41:ILE:HD12	1.94	0.48
1:A:202:SER:OG	1:A:203:SER:N	2.46	0.48
4:R:65:PHE:HZ	4:R:208:LEU:HD12	1.79	0.48
1:A:147:TYR:OH	1:A:162:HIS:ND1	2.46	0.47
1:A:123:LEU:HD11	1:A:239:ILE:HG23	1.97	0.47
2:C:209:PRO:HA	3:B:249:LYS:HE2	1.95	0.47
2:C:110:ASN:HB3	2:C:177:TYR:HB3	1.97	0.47
3:B:90:LEU:HD11	3:B:105:LEU:HD22	1.97	0.47
4:R:46:TYR:HE1	4:R:95:LEU:HD13	1.80	0.47
3:B:143:VAL:HG13	3:B:148:LYS:O	2.15	0.46
3:B:54:THR:HB	3:B:269:PHE:HB2	1.98	0.46
4:R:79:ARG:HG2	4:R:97:GLU:HB3	1.97	0.46
1:A:203:SER:HB2	3:B:148:LYS:CD	2.38	0.46
3:B:117:VAL:HG12	3:B:262:VAL:HG22	1.97	0.46
1:A:249:PRO:HB3	2:C:47:LEU:HD21	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:145:PRO:CB	3:B:172:ASN:HB3	2.42	0.45
1:A:191:LEU:HG	1:A:212:ALA:HB1	1.98	0.45
3:B:145:PRO:HD3	3:B:167:TYR:OH	2.17	0.45
4:R:97:GLU:O	4:R:99:ARG:NH1	2.50	0.45
1:A:167:THR:OG1	1:A:169:ARG:NH2	2.50	0.45
2:C:50:ILE:HG21	3:B:201:VAL:HA	1.99	0.45
3:B:131:LEU:HB2	3:B:207:LEU:HB3	1.98	0.45
4:R:74:ILE:HA	4:R:99:ARG:HE	1.83	0.44
4:R:210:GLY:HA2	4:R:213:HIS:HB3	1.98	0.44
2:C:126:MET:HB2	2:C:205:PRO:HG3	2.00	0.43
1:A:93:VAL:HG21	4:R:88:ARG:HG2	2.00	0.43
1:A:46:ILE:HG21	1:A:73:CYS:HB2	2.00	0.43
1:A:151:SER:HA	1:A:160:PRO:HA	2.01	0.43
2:C:94:PRO:HA	2:C:97:GLN:HG3	2.00	0.42
4:R:208:LEU:HA	4:R:211:ILE:HB	2.01	0.42
1:A:198:ALA:HB3	3:B:232:THR:HB	2.01	0.42
1:A:128:VAL:HG13	1:A:177:LYS:HE3	2.01	0.42
3:B:108:HIS:CG	3:B:269:PHE:HB3	2.55	0.42
3:B:186:ASN:HA	4:R:119:TYR:HE2	1.85	0.42
1:A:157:LEU:HD13	1:A:224:PRO:HG3	2.02	0.42
1:A:87:THR:HG22	1:A:208:LEU:HB2	2.02	0.41
2:C:53:LEU:HD22	2:C:71:PRO:HB2	2.01	0.41
3:B:144:LYS:C	3:B:146:ASP:N	2.73	0.41
3:B:145:PRO:HB3	3:B:172:ASN:ND2	2.36	0.41
3:B:224:GLU:HG3	3:B:225:THR:HG23	2.02	0.41
4:R:145:ILE:HB	4:R:175:VAL:HA	2.02	0.41
1:A:108:PHE:HE1	2:C:237:VAL:HG11	1.86	0.41
1:A:250:SER:OG	1:A:251:MET:N	2.53	0.41
3:B:133:VAL:HG11	3:B:215:VAL:HG21	2.02	0.41
3:B:148:LYS:HB2	3:B:149:ALA:H	1.54	0.41
1:A:203:SER:HA	3:B:148:LYS:HB3	2.03	0.40
1:A:44:ASN:HD22	1:A:45:VAL:H	1.70	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	A	228/230 (99%)	215 (94%)	13 (6%)	0	100	100
2	C	226/238 (95%)	207 (92%)	19 (8%)	0	100	100
3	B	244/246 (99%)	225 (92%)	18 (7%)	1 (0%)	30	60
4	R	183/185 (99%)	174 (95%)	9 (5%)	0	100	100
All	All	881/899 (98%)	821 (93%)	59 (7%)	1 (0%)	50	77

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	B	146	ASP

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	A	198/198 (100%)	196 (99%)	2 (1%)	73	85
2	C	204/211 (97%)	203 (100%)	1 (0%)	86	91
3	B	219/219 (100%)	209 (95%)	10 (5%)	23	50
4	R	160/160 (100%)	159 (99%)	1 (1%)	84	90
All	All	781/788 (99%)	767 (98%)	14 (2%)	54	74

All (14) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	41	ARG
1	A	44	ASN
2	C	196	LEU
3	B	62	ARG
3	B	97	ASN

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Mol	Chain	Res	Type
3	B	146	ASP
3	B	208	ASN
3	B	210	ARG
3	B	218	ASN
3	B	234	ASN
3	B	263	ARG
3	B	273	ARG
3	B	275	ARG
4	R	184	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (10) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	44	ASN
1	A	103	ASN
2	C	98	ASN
2	C	110	ASN
2	C	142	GLN
3	B	81	GLN
3	B	97	ASN
3	B	208	ASN
3	B	218	ASN
4	R	184	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 1 ligands modelled in this entry, 1 is monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Map visualisation ⓘ

This section contains visualisations of the EMDB entry EMD-9607. These allow visual inspection of the internal detail of the map and identification of artifacts.

No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections ⓘ

6.1.1 Primary map

| X | Y | Z |
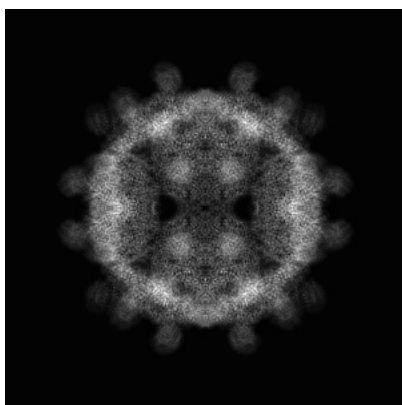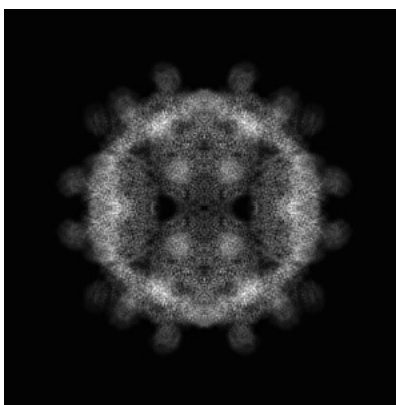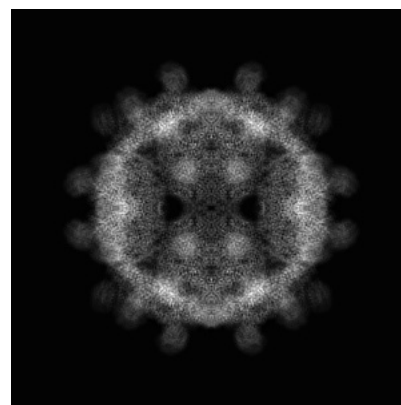
The images above show the map projected in three orthogonal directions.

6.2 Central slices ⓘ

6.2.1 Primary map

| X Index: 275 | Y Index: 275 | Z Index: 275 |

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

6.3 Largest variance slices ⓘ
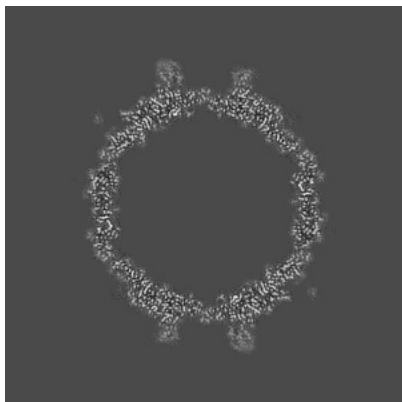
6.3.1 Primary map
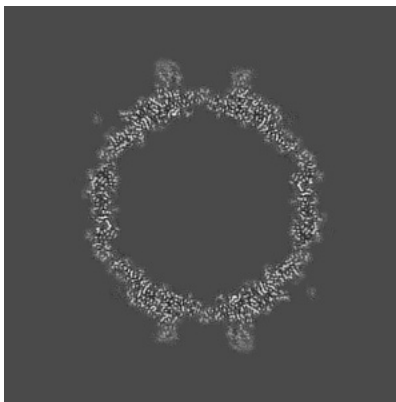
| X Index: 249 | Y Index: 249 | Z Index: 249 |
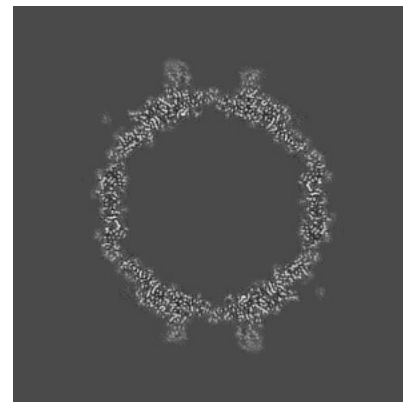
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) ⓘ

6.4.1 Primary map

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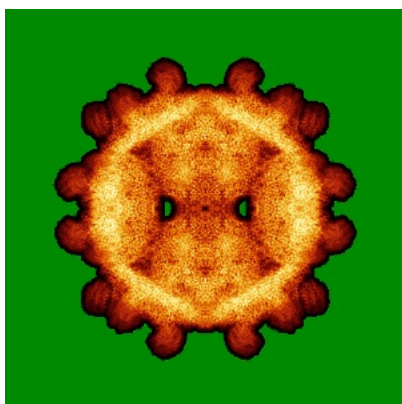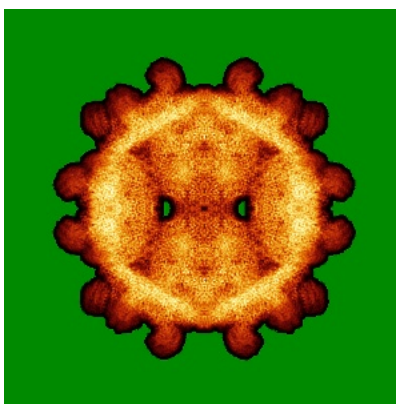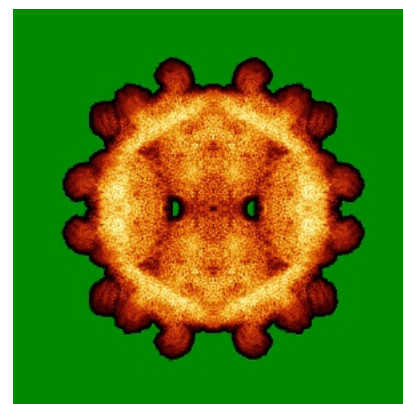
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5　Orthogonal surface views ⓘ

6.5.1　Primary map

X　　　　　　　　　　　　　　Y　　　　　　　　　　　　　　Z
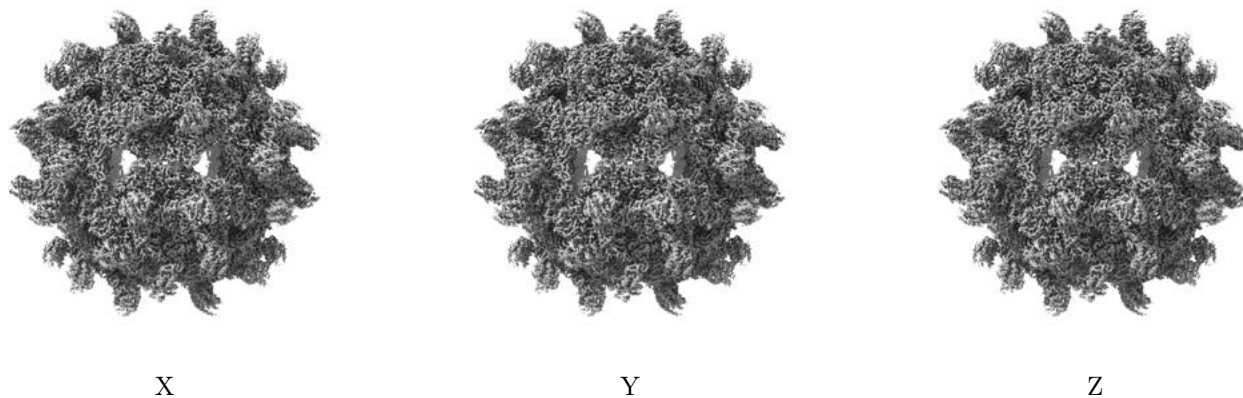
The images above show the 3D surface view of the map at the recommended contour level 0.02. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.6　Mask visualisation ⓘ

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

7 Map analysis ⓘ

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

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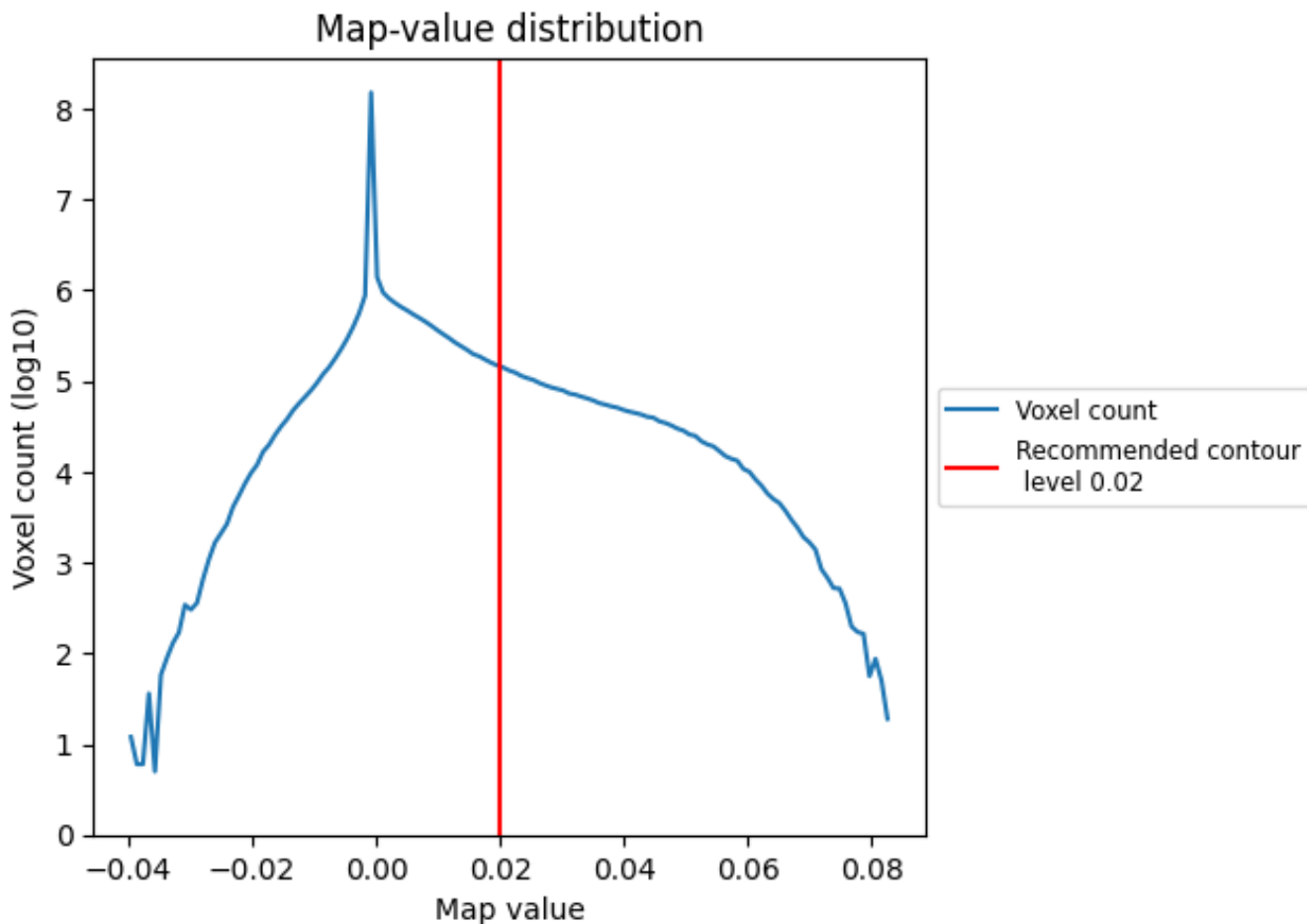
The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2   Volume estimate ⓘ
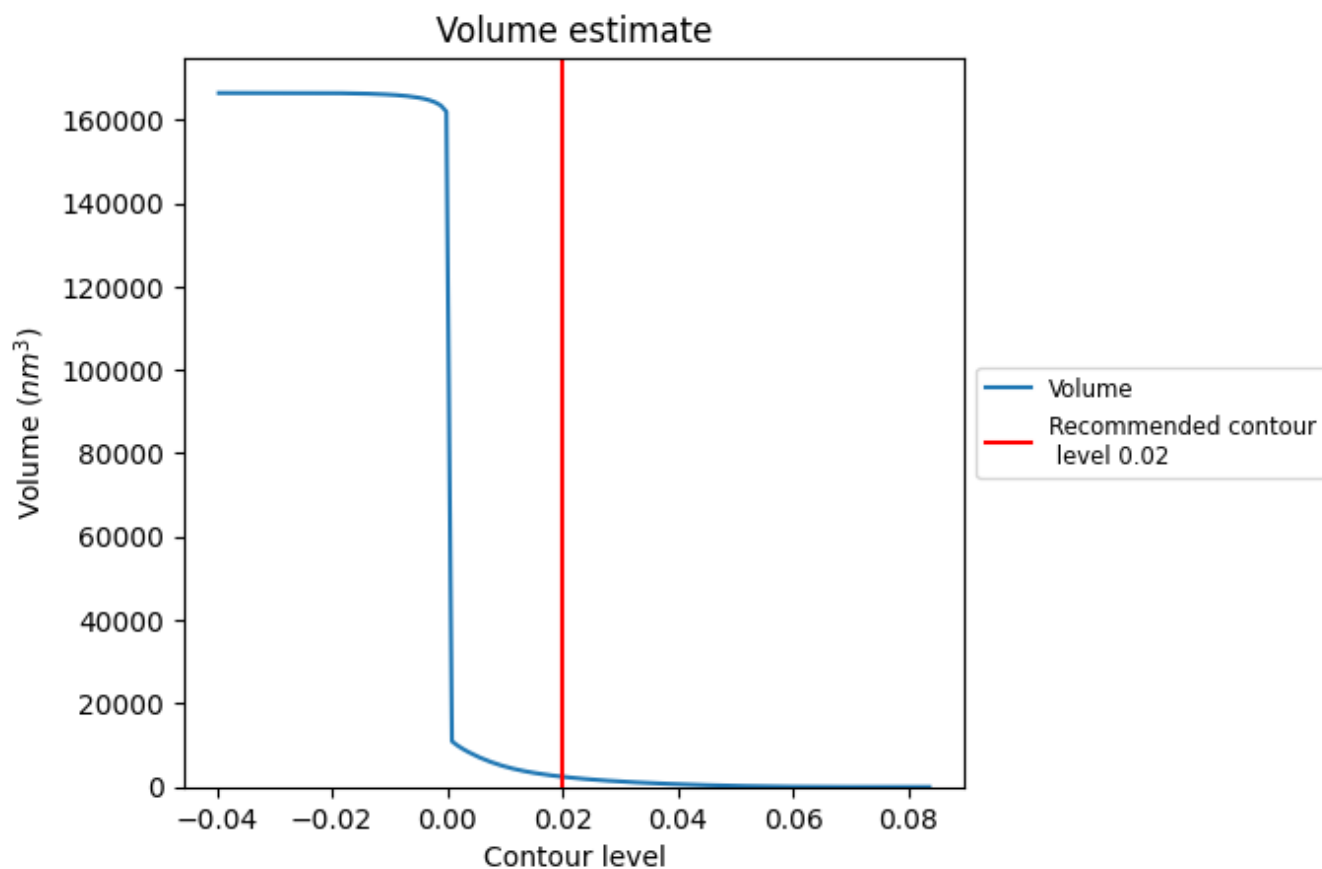
The volume at the recommended contour level is 2446 nm³; this corresponds to an approximate mass of 2209 kDa.

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 ⓘ
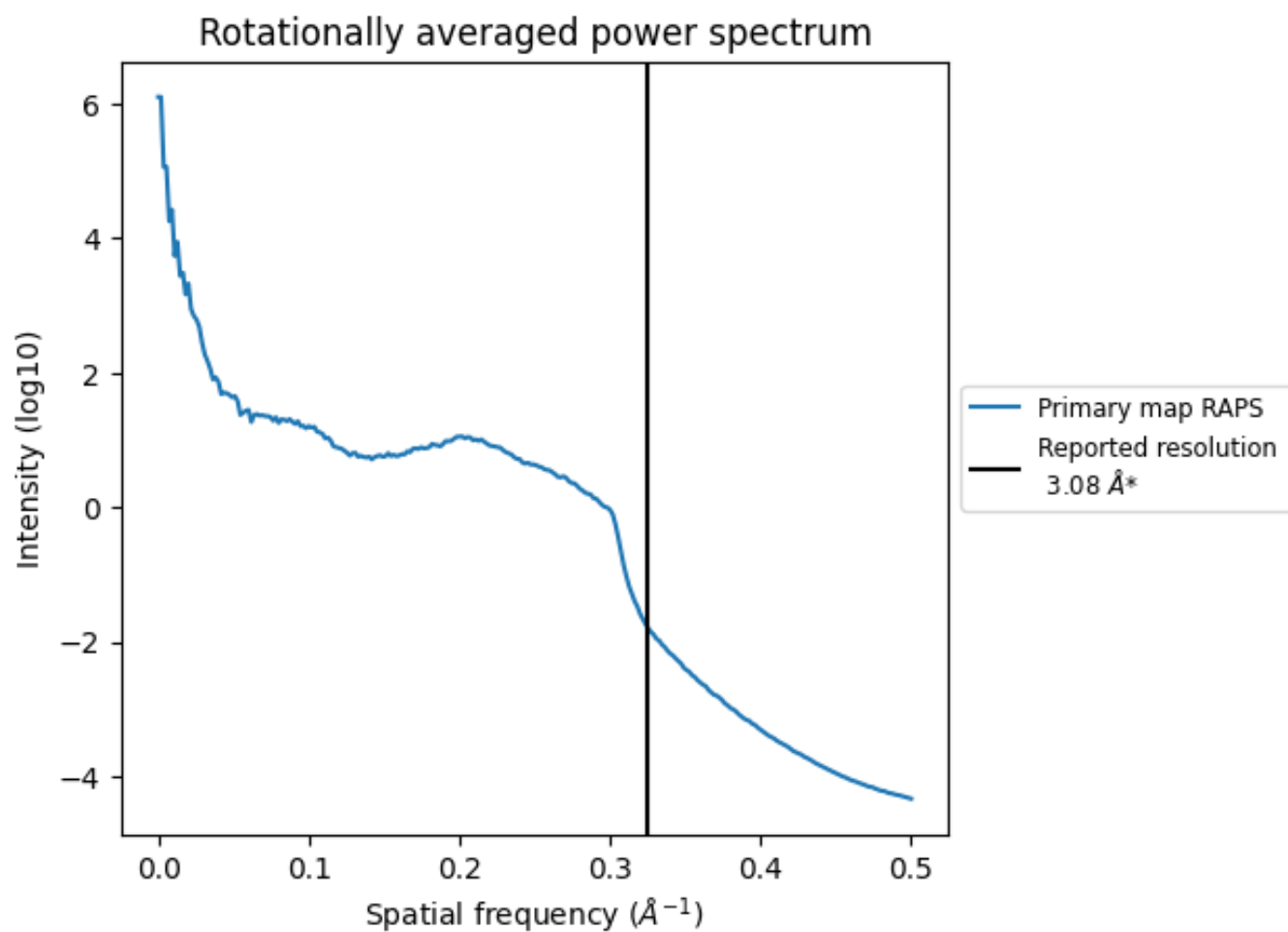
*Reported resolution corresponds to spatial frequency of 0.325 Å^{-1}

8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit ⓘ

This section contains information regarding the fit between EMDB map EMD-9607 and PDB model 6ADL. Per-residue inclusion information can be found in section 3 on page 4.

9.1 Map-model overlays

9.1.1 Map-model overlay ⓘ

| X | Y | Z |
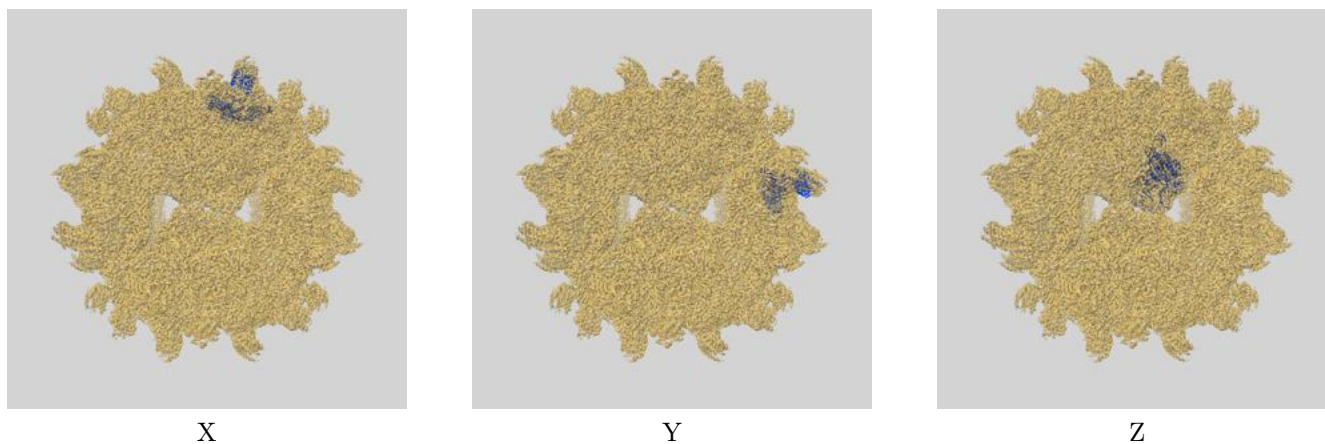
9.1.2 Map-model assembly overlay ⓘ

| X | Y | Z |
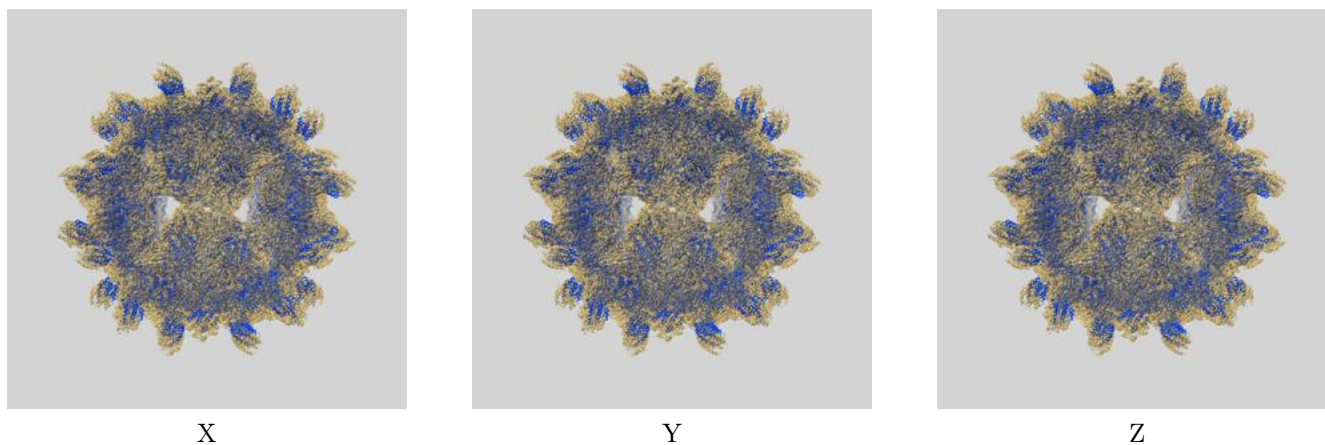
The images above show the 3D surface view of the map at the recommended contour level 0.02 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model ⓘ
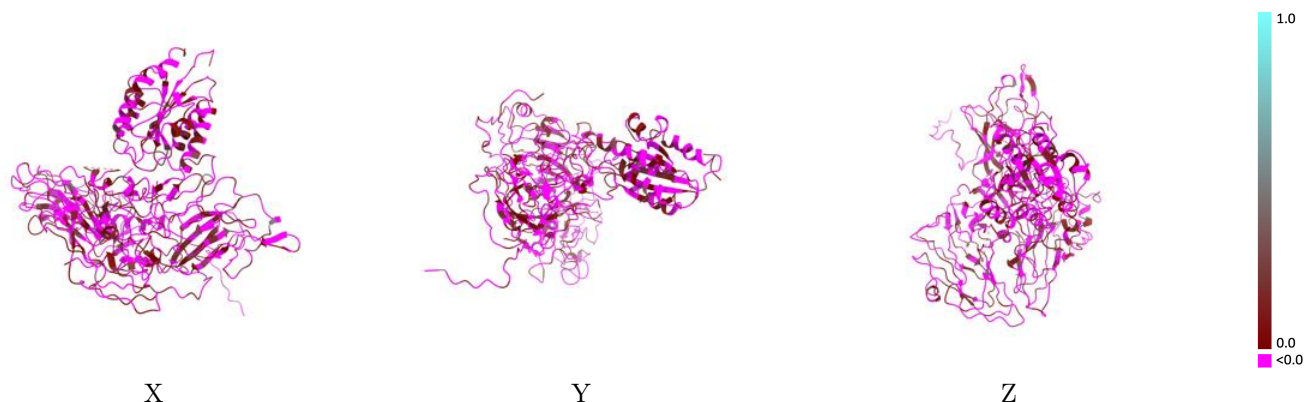
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 ⓘ
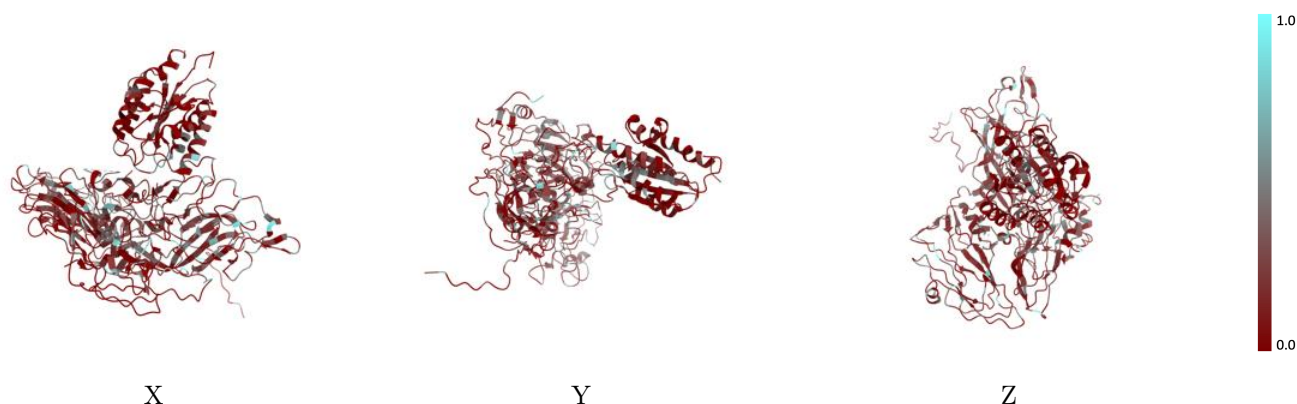
The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.02).

9.4　Atom inclusion　ⓘ
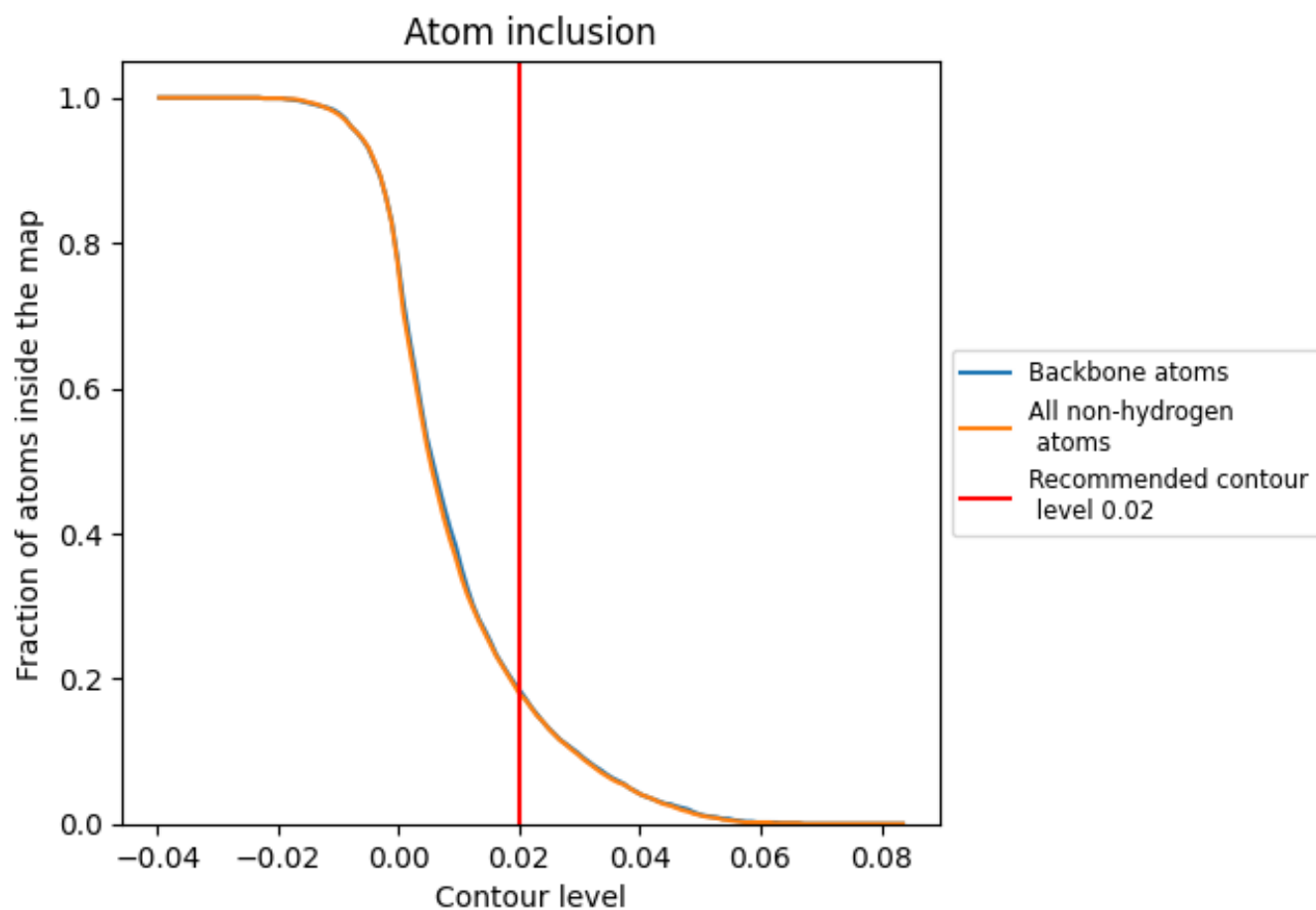
Atom inclusion

At the recommended contour level, 18% of all backbone atoms, 18% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.02) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.1800	-0.0250
A	0.2160	-0.0330
B	0.1890	-0.0180
C	0.1710	-0.0270
R	0.1360	-0.0200

1.0

0.0
<0.0