



## Full wwPDB EM Validation Report ⓘ

Mar 31, 2021 – 10:29 am BST

EMDB ID : EMD-2235  
Title : Electron cryo-microscopy of a head-tailed virus infecting extremely halophilic archaea  
Authors : Pietila, M.K.; Laurinmaki, P.; Russell, D.A.; Ko, C.C.; Jacobs-Sera, D.; Butcher, S.J.; Bamford, D.H.; Hendrix, R.W.  
Deposited on : 2012-11-20  
Resolution : 9.80 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](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

---

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

EMDB validation analysis : 0.0.0.dev75  
Validation Pipeline (wwPDB-VP) : 2.18

# 1 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	Not Provided	
Number of particles used	4930	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	Not provided	
Minimum defocus (nm)	0.7	Depositor
Maximum defocus (nm)	2.9	Depositor
Magnification	62000.0	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	2508.000	Depositor
Minimum map value	-2266.000	Depositor
Average map value	-916.080	Depositor
Map value standard deviation	309.610	Depositor
Recommended contour level	-700.0	Depositor
Map size (Å)	1019.26, 1019.26, 1019.26	wwPDB
Map dimensions	451, 451, 451	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.26, 2.26, 2.26	Depositor

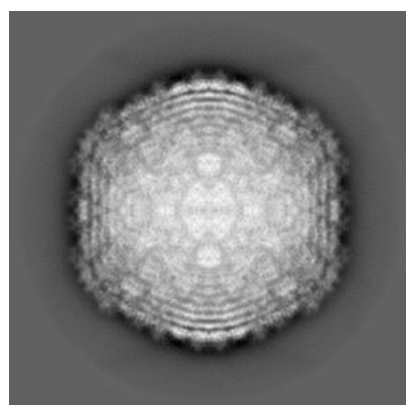
## 2 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2235. These allow visual inspection of the internal detail of the map and identification of artifacts.

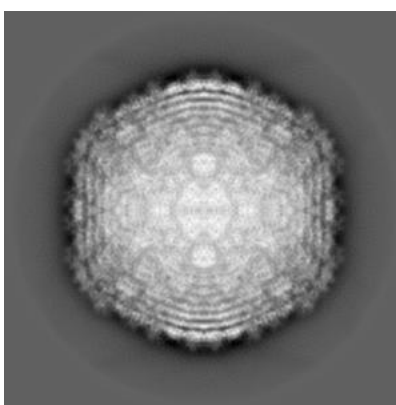
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 2.1 Orthogonal projections [i](#)

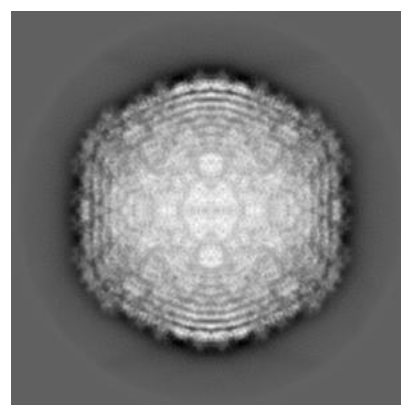
#### 2.1.1 Primary map



X



Y

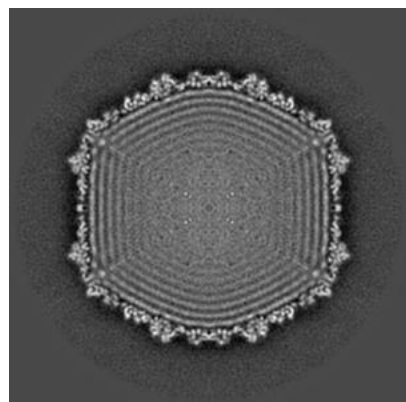


Z

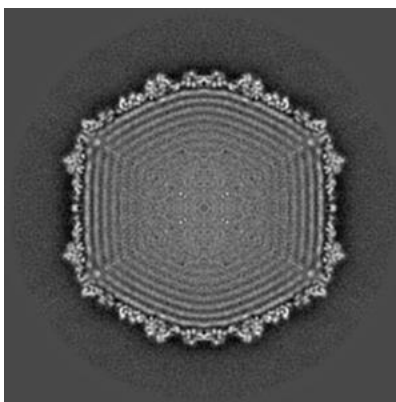
The images above show the map projected in three orthogonal directions.

### 2.2 Central slices [i](#)

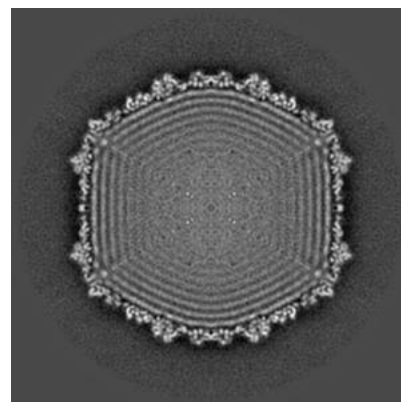
#### 2.2.1 Primary map



X Index: 225



Y Index: 225

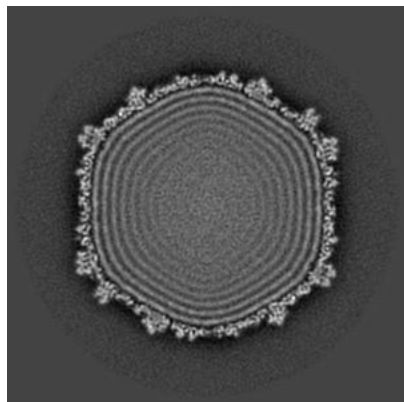


Z Index: 225

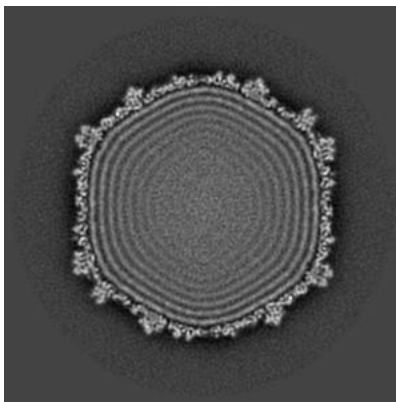
The images above show central slices of the map in three orthogonal directions.

## 2.3 Largest variance slices [i](#)

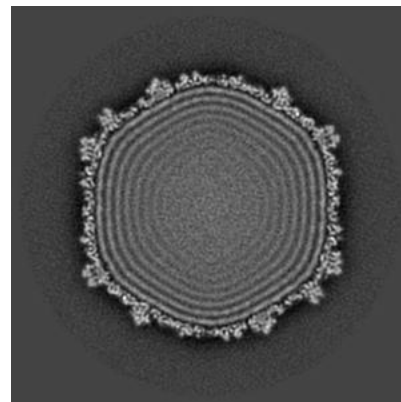
### 2.3.1 Primary map



X Index: 260



Y Index: 260



Z Index: 190

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

## 2.4 Orthogonal surface views [i](#)

### 2.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level - 700.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

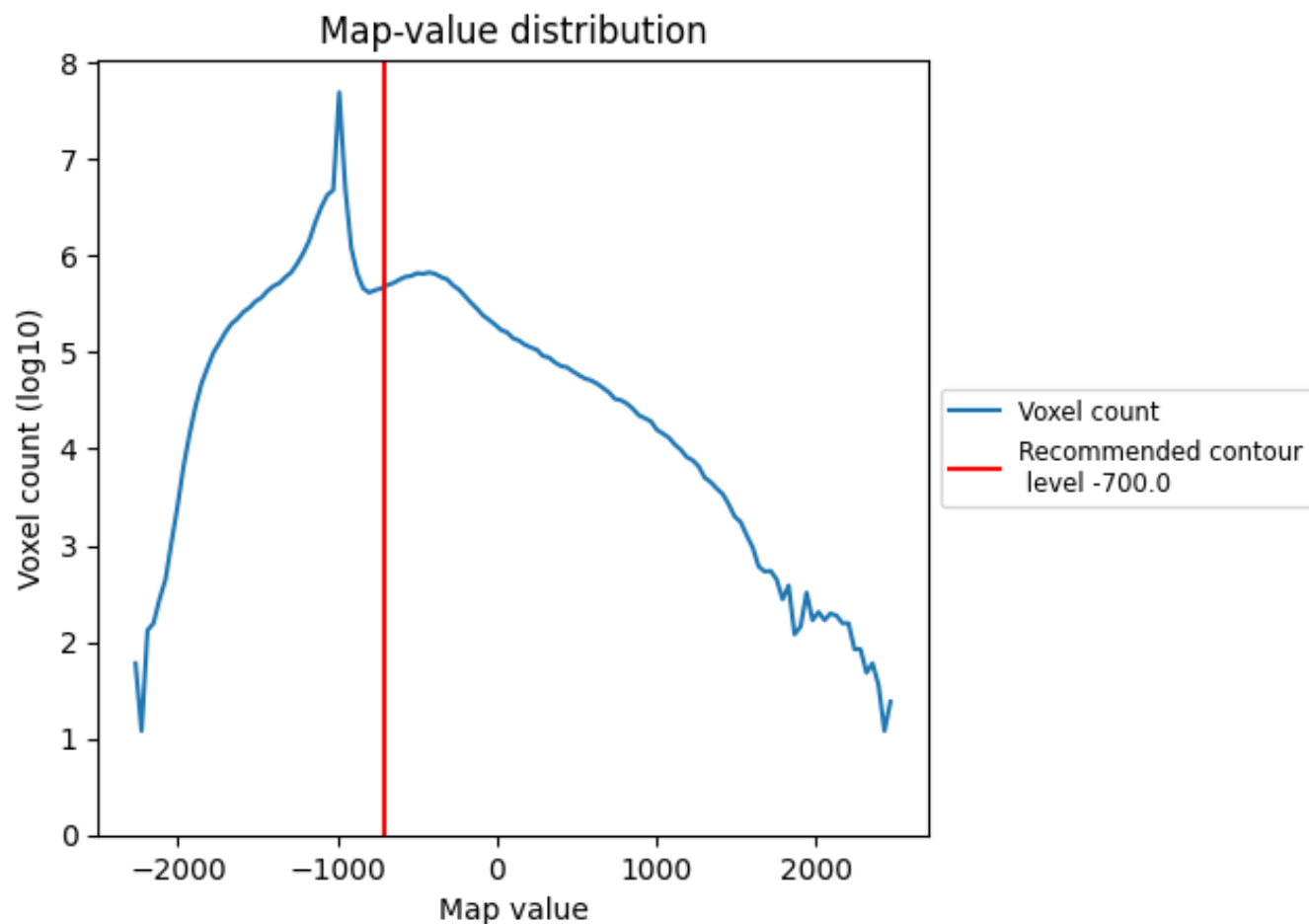
## 2.5 Mask visualisation

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

### 3 Map analysis [i](#)

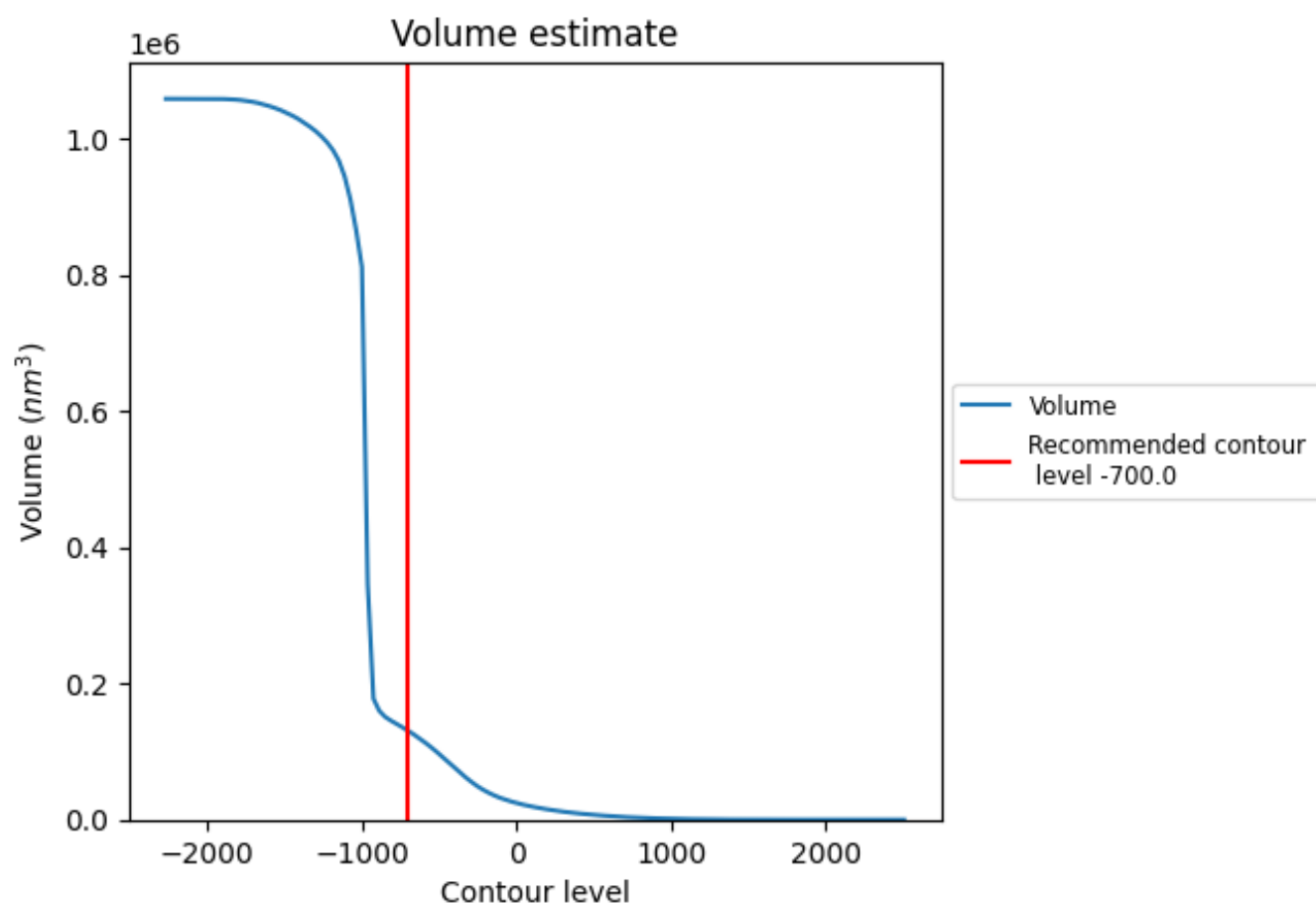
This section contains the results of statistical analysis of the map.

#### 3.1 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.

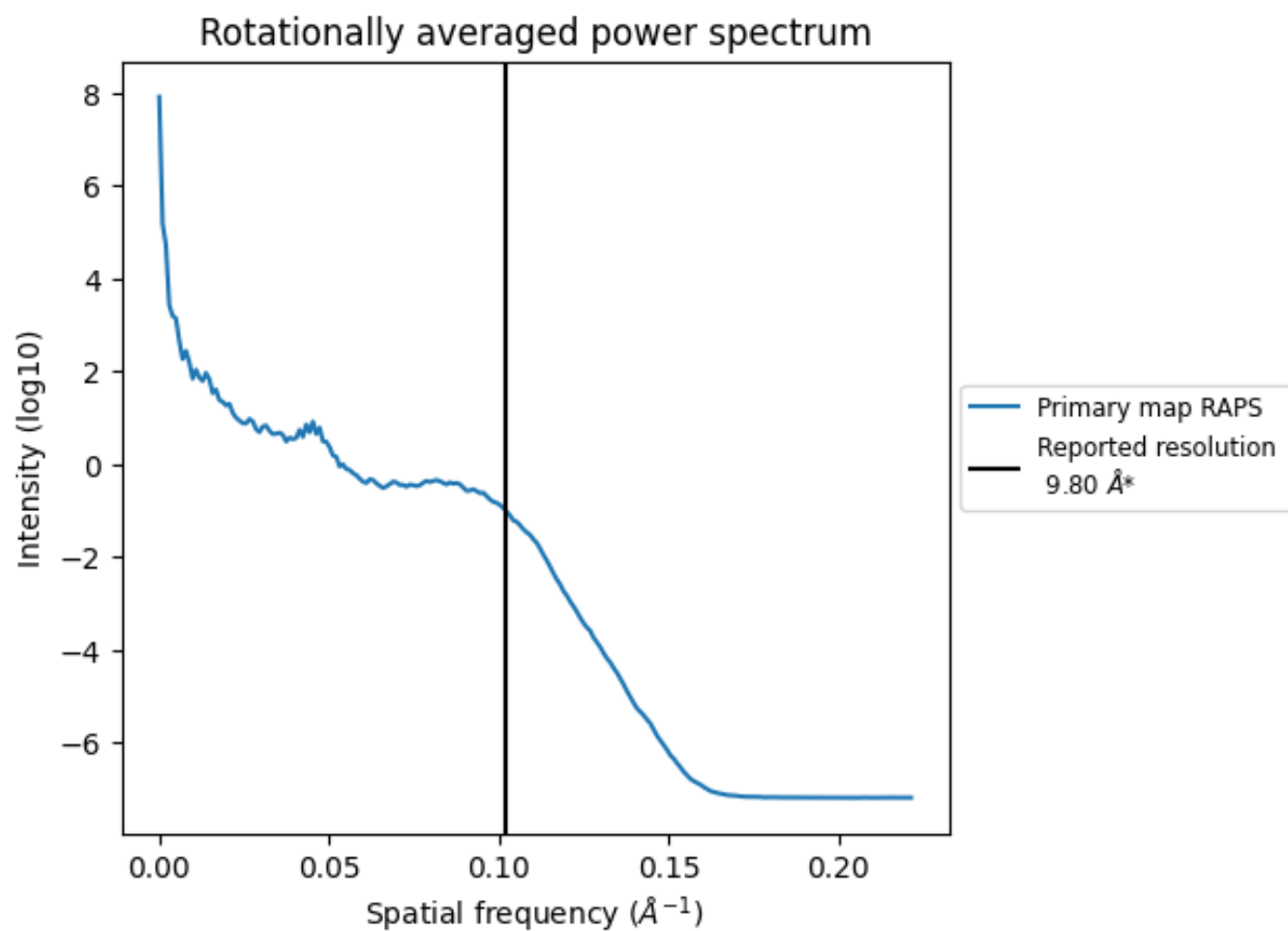
### 3.2 Volume estimate [i](#)



The volume at the recommended contour level is 130726 nm<sup>3</sup>; this corresponds to an approximate mass of 118088 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.

### 3.3 Rotationally averaged power spectrum ⓘ



\*Reported resolution corresponds to spatial frequency of 0.102 Å<sup>-1</sup>



## 4 Fourier-Shell correlation ⓘ

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