



## Full wwPDB EM Validation Report ⓘ

Mar 8, 2026 – 11:00 AM UTC

EMDB ID : EMD-0809  
Title : Cryo-electron tomography of Candidatus Prometheoarchaeum syntrophicum strain MK-D1  
Authors : Imachi, H.; Nobu, M.K.; Nakahara, N.; Morono, Y.; Ogawara, M.; Takaki, Y.; Takano, Y.; Uematsu, K.; Ikuta, T.; Ito, M.; Matsui, Y.; Miyazaki, M.; Murata, K.; Saito, Y.; Sakai, S.; Song, C.; Tasumi, E.; Yamanaka, Y.; Yamaguchi, T.; Kamagata, Y.; Tamaki, H.; Takai, K.  
Deposited on : 2019-10-02  
Resolution : Not provided

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/EMTomogramValidationReportHelp>  
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>.

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

EMDB validation analysis : 0.0.1.dev132  
Validation Pipeline (wwPDB-VP) : 2.49

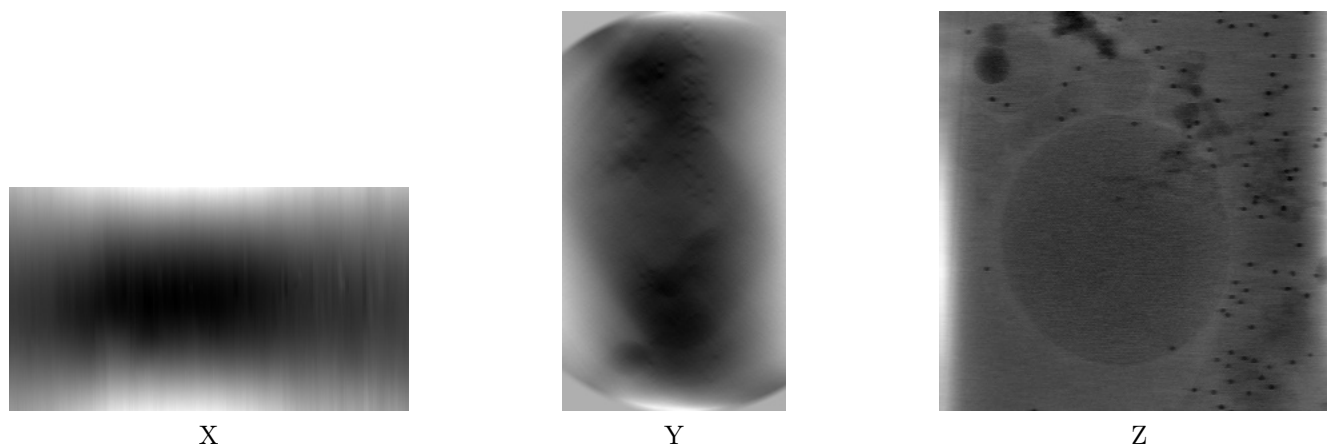
# 1 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	63	Depositor
Resolution determination method	Not provided	
CTF correction method	Not provided	
Microscope	JEOL 2200FS	Depositor
Voltage (kV)	200	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	1.5	Depositor
Minimum defocus (nm)	1.5783	Depositor
Maximum defocus (nm)	4.9672	Depositor
Magnification	16717.0	Depositor
Image detector	DIRECT ELECTRON DE-20 (5k x 3k)	Depositor
Maximum voxel value	127.000	Depositor
Minimum voxel value	-128.000	Depositor
Average voxel value	83.039	Depositor
Voxel value standard deviation	13.818	Depositor
Recommended contour level	Not applicable	
Tomogram size ( $\text{\AA}$ )	13175.999, 13175.999, 7356.5996	wwPDB
Tomogram dimensions	1200, 1200, 670	wwPDB
Tomogram angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Grid spacing ( $\text{\AA}$ )	10.98, 10.98, 10.98	Depositor

## 2 Tomogram visualisation [i](#)

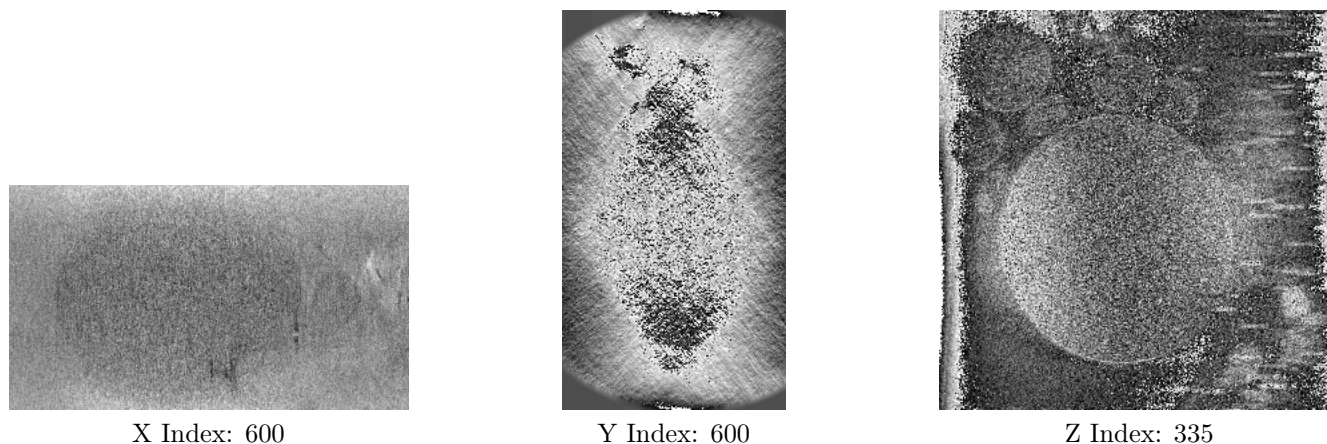
This section contains visualisations of the EMDB entry EMD-0809. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

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



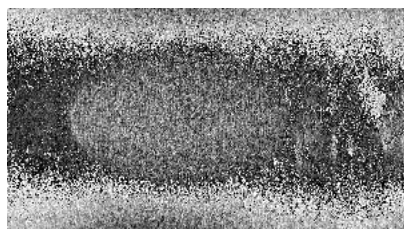
The images above show the tomogram projected in three orthogonal directions.

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

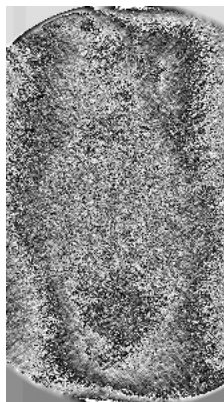


The images above show central slices of the tomogram in three orthogonal directions.

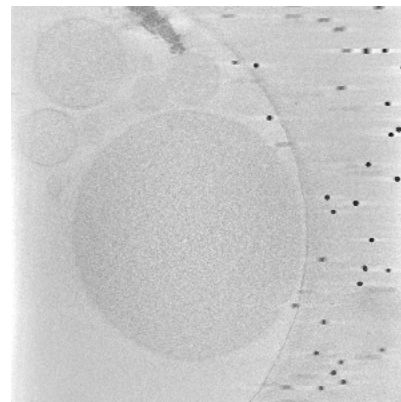
## 2.3 Largest variance slices [i](#)



X Index: 366



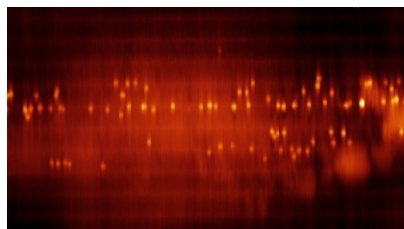
Y Index: 419



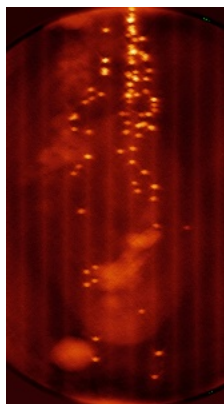
Z Index: 375

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

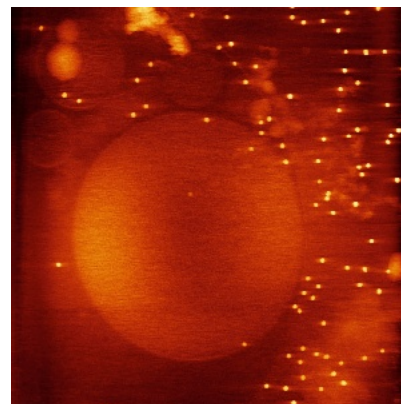
## 2.4 Orthogonal standard-deviation projections (False-color) [i](#)



X



Y



Z

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

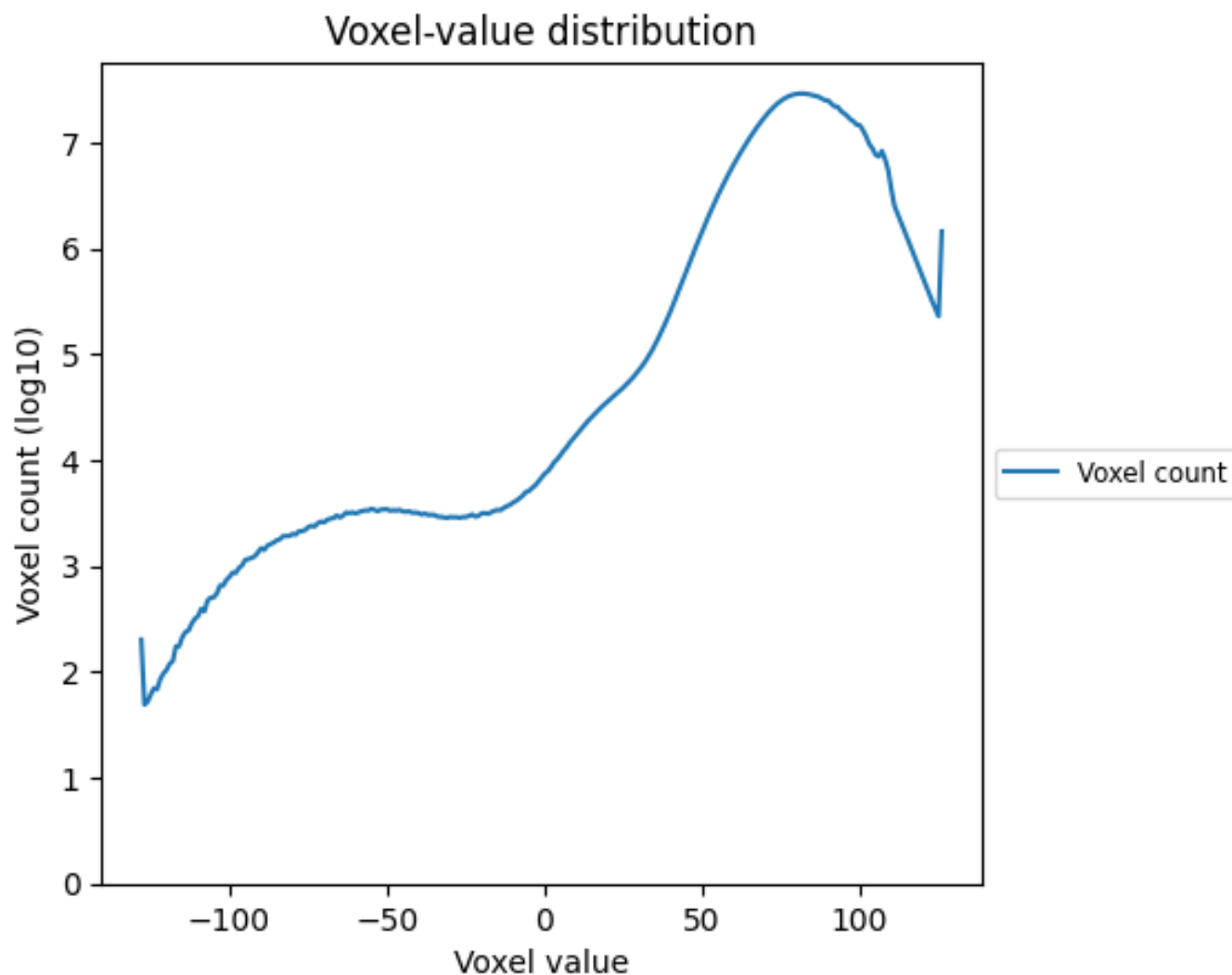
## 2.5 Mask visualisation [i](#)

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

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

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

#### 3.1 Voxel-value distribution [i](#)



The voxel-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic.