



wwPDB EM Validation Summary Report ⓘ

Mar 8, 2026 – 10:59 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 wwPDB EM Validation Summary Report for a publicly released PDB entry.

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

A user guide is available at

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

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

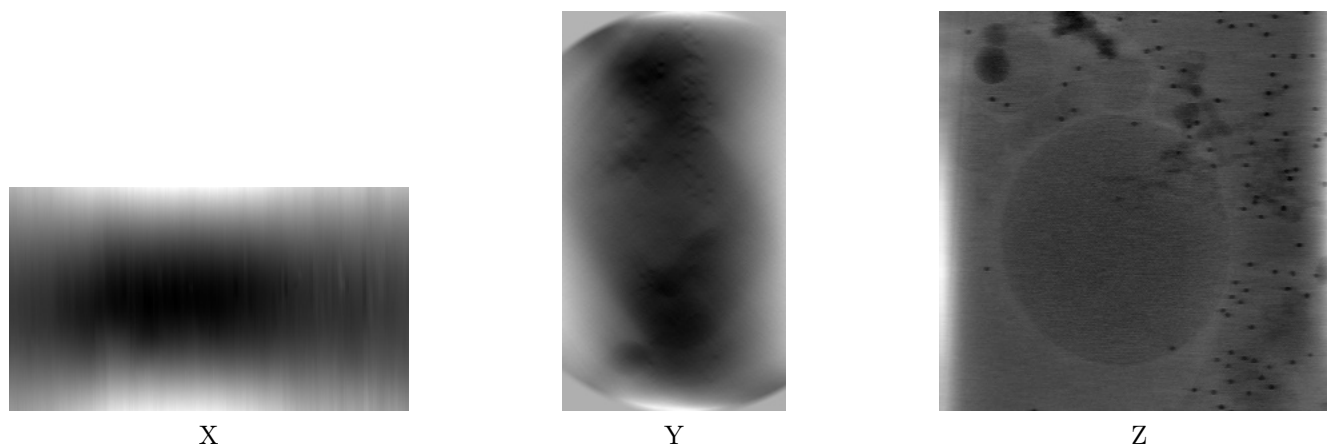
1 Experimental information

| 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 (\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 (\AA) | 10.98, 10.98, 10.98 | Depositor |

2 Tomogram visualisation [i](#)

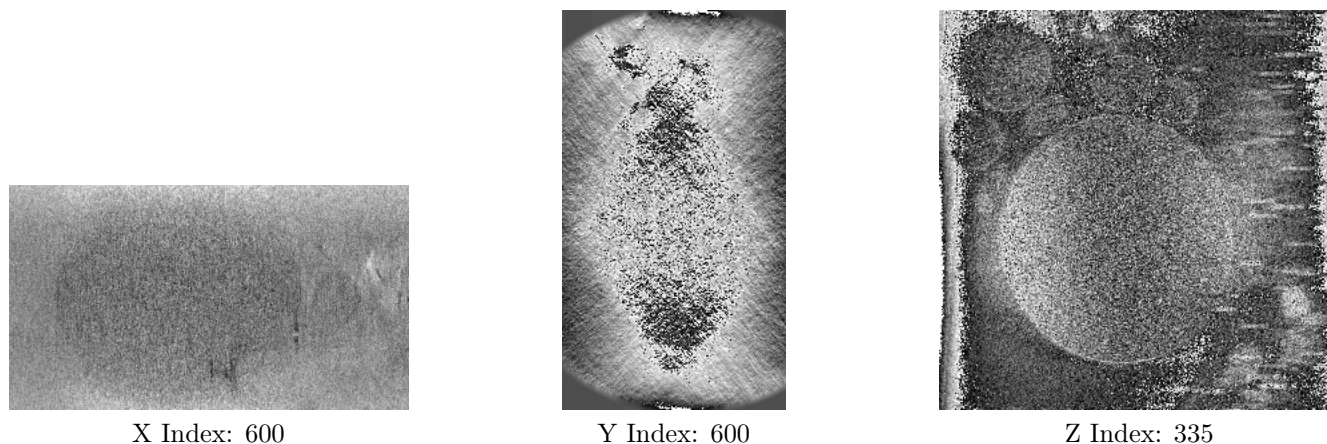
This section contains visualisations of the EMDB entry EMD-0809. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections [i](#)



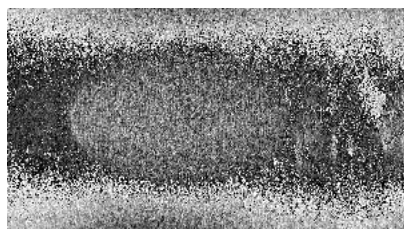
The images above show the tomogram projected in three orthogonal directions.

2.2 Central slices [i](#)

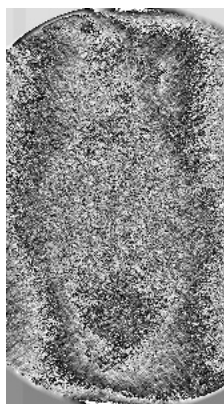


The images above show central slices of the tomogram in three orthogonal directions.

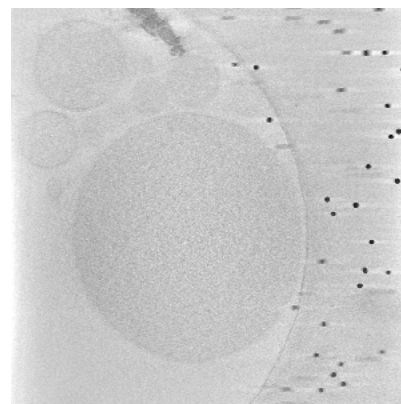
2.3 Largest variance slices [i](#)



X Index: 366



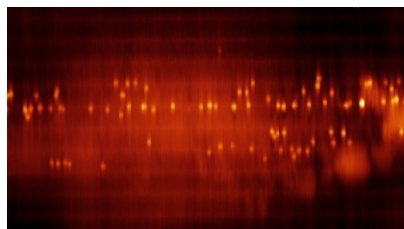
Y Index: 419



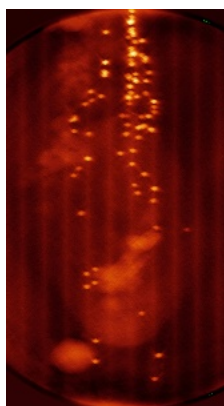
Z Index: 375

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

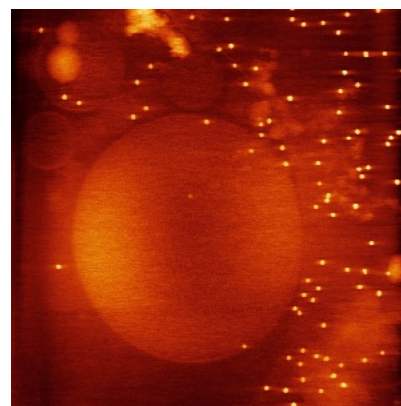
2.4 Orthogonal standard-deviation projections (False-color) [i](#)



X



Y



Z

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

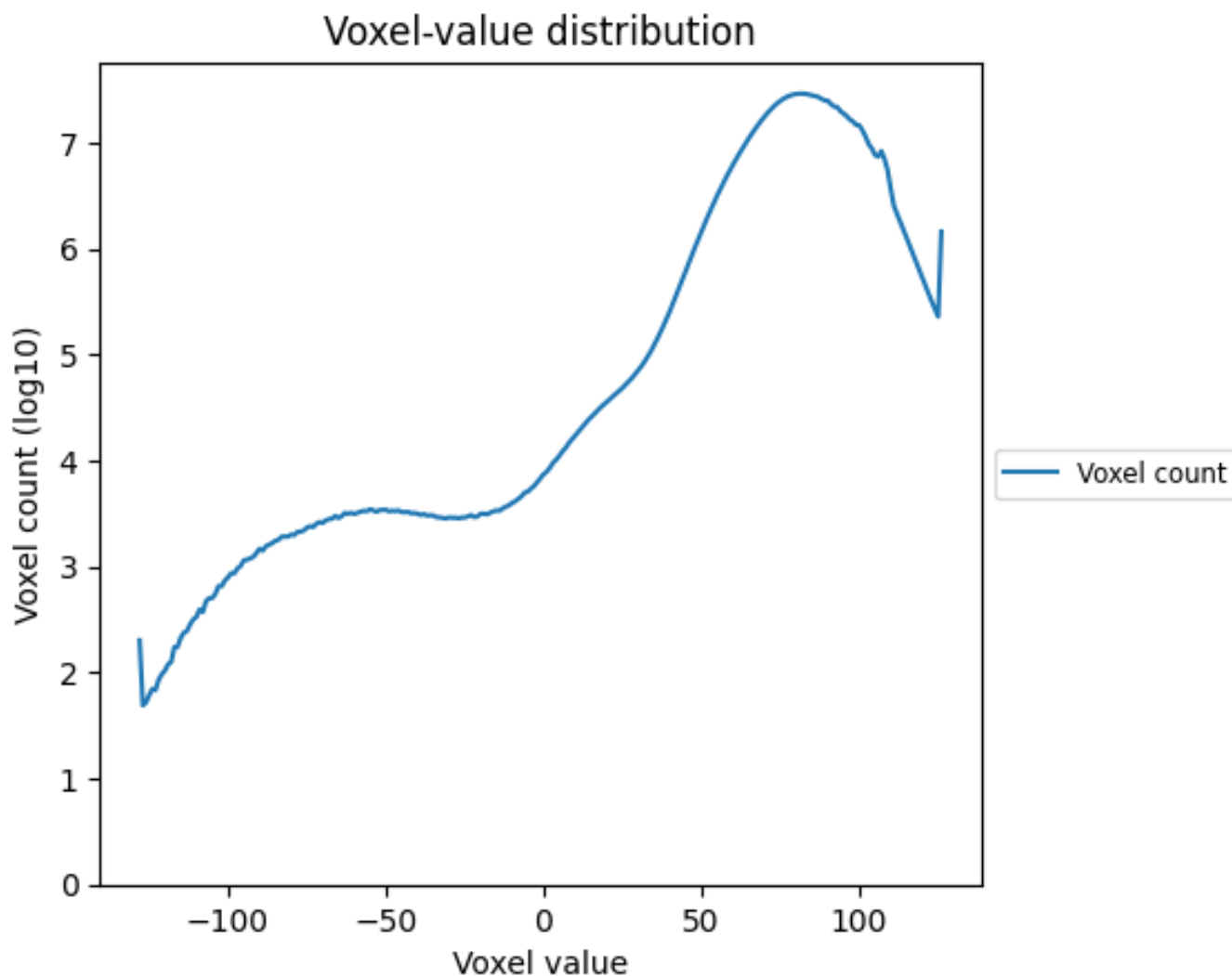
2.5 Mask visualisation [i](#)

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.