



wwPDB EM Validation Summary Report ⓘ

Sep 4, 2023 – 04:28 PM JST

EMDB ID : EMD-34664
Title : Cryo-EM structure of the Mycobacterium tuberculosis cytochrome bcc:aa3 supercomplex and a novel inhibitor targeting subunit cytochrome cI
Authors : Mathiyazakan, V.; Gruber, G.
Deposited on : 2022-11-02
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.dev50
Validation Pipeline (wwPDB-VP) : 2.35

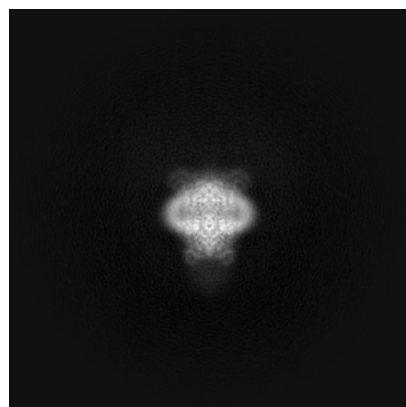
1 Experimental information

| Property | Value | Source |
|--------------------------------------|---------------------------|-----------|
| EM reconstruction method | TOMOGRAPHY | Depositor |
| Imposed symmetry | Not Provided | |
| Number of tilted images used | 100 | Depositor |
| Resolution determination method | Not provided | |
| CTF correction method | Not provided | |
| Microscope | FEI TITAN KRIOS | Depositor |
| Voltage (kV) | 300 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 40.0 | Depositor |
| Minimum defocus (nm) | 1.0 | Depositor |
| Maximum defocus (nm) | 2.0 | Depositor |
| Magnification | Not provided | |
| Image detector | GATAN K2 SUMMIT (4k x 4k) | Depositor |
| Maximum voxel value | 1.927 | Depositor |
| Minimum voxel value | -0.639 | Depositor |
| Average voxel value | 0.002 | Depositor |
| Voxel value standard deviation | 0.034 | Depositor |
| Recommended contour level | Not applicable | |
| Tomogram size (\AA) | 530.0, 530.0, 530.0 | wwPDB |
| Tomogram dimensions | 500, 500, 500 | wwPDB |
| Tomogram angles ($^\circ$) | 90.0, 90.0, 90.0 | wwPDB |
| Grid spacing (\AA) | 1.06, 1.06, 1.06 | Depositor |

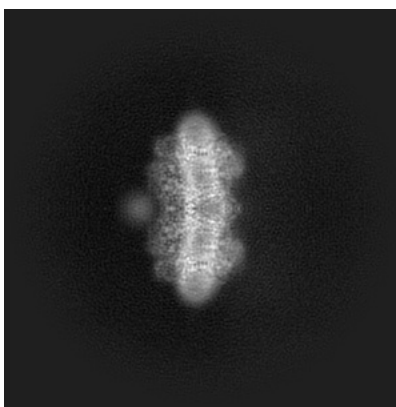
2 Tomogram visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-34664. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

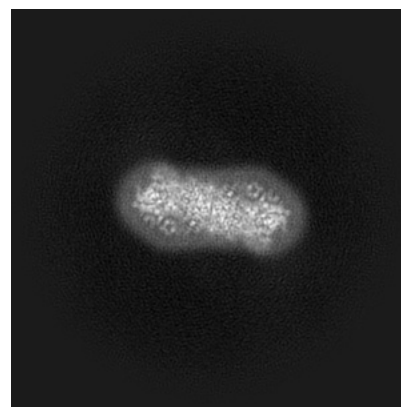
2.1 Orthogonal projections [i](#)



X



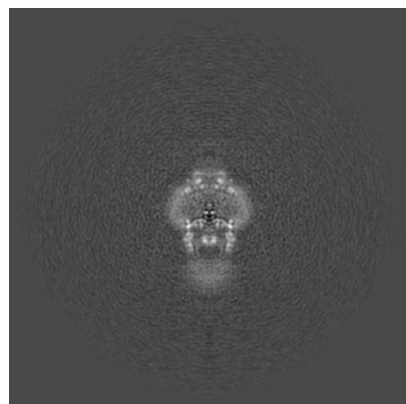
Y



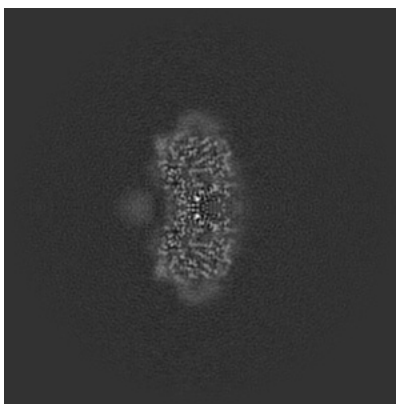
Z

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

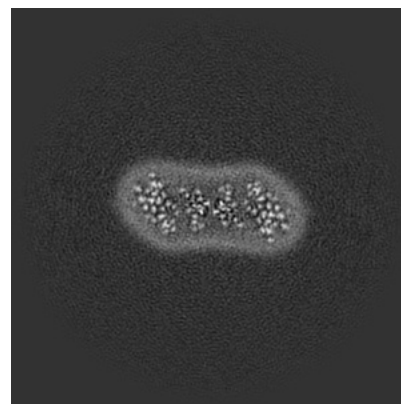
2.2 Central slices [i](#)



X Index: 250



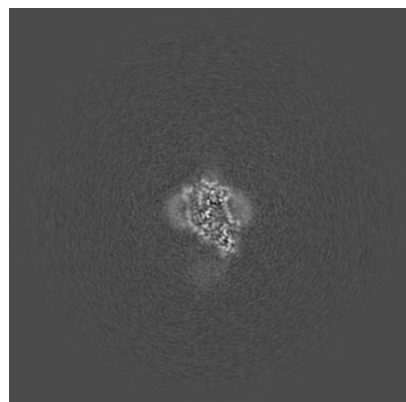
Y Index: 250



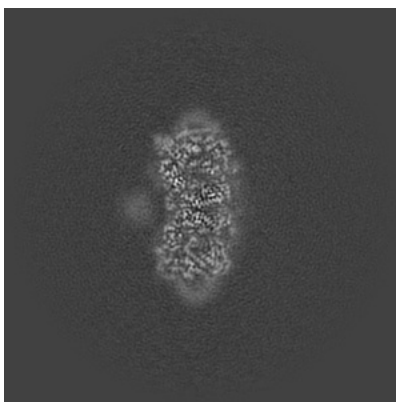
Z Index: 250

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

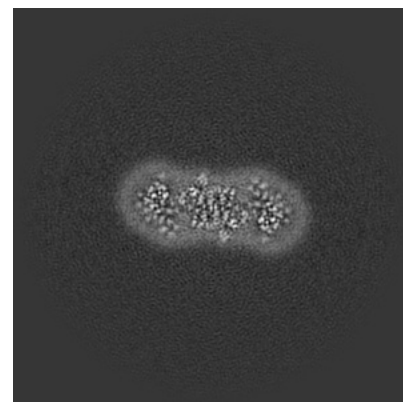
2.3 Largest variance slices [i](#)



X Index: 232



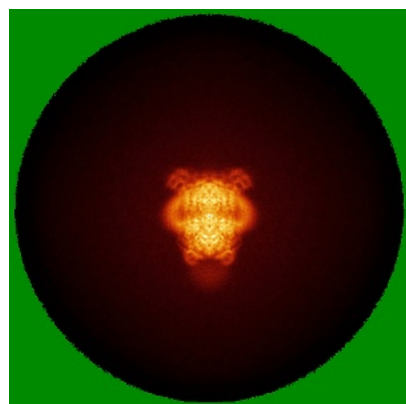
Y Index: 247



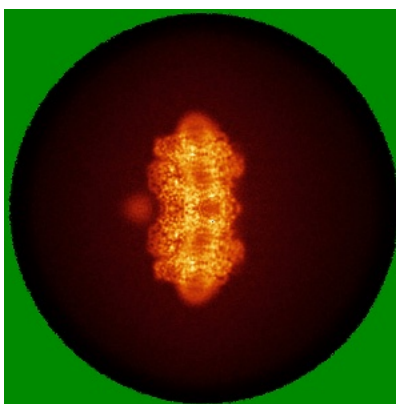
Z Index: 230

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

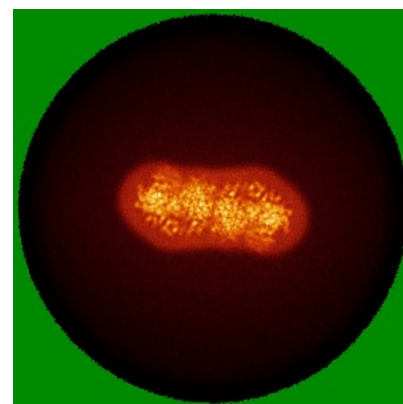
2.4 Orthogonal standard-deviation projections (False-color) [i](#)



X



Y



Z

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

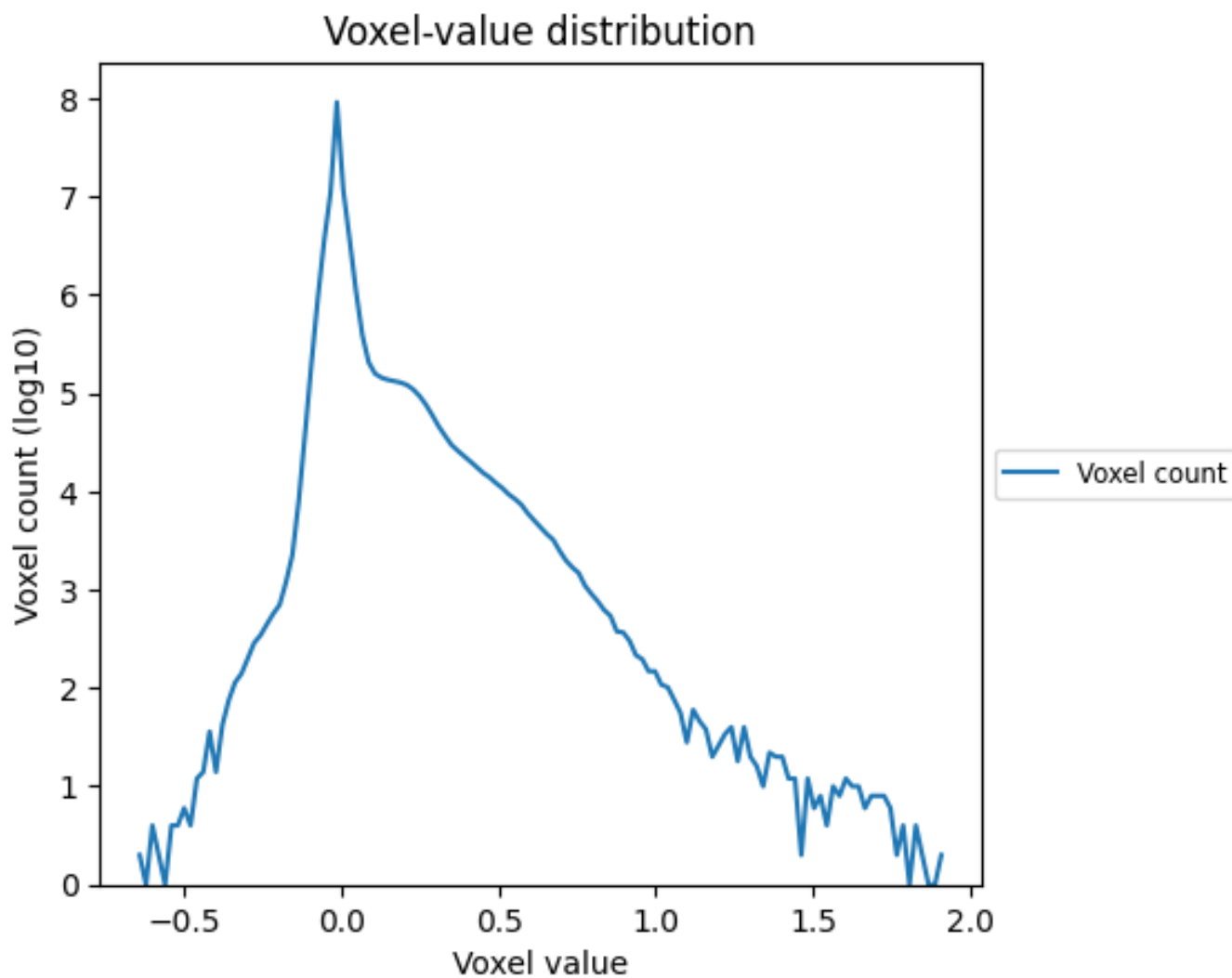
2.5 Mask visualisation [i](#)

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.