



wwPDB EM Validation Summary Report ⓘ

Feb 20, 2024 – 05:11 PM JST

EMDB ID : EMD-37284
Title : Cellular components at rat primary beta-cell periphery under basal condition
Authors : Li, W.; Li, A.; Yu, B.; Zhang, X.; Liu, X.; White, K.; Stevens, R.; Baumeister, W.; Sali, A.; Jasnin, M.; Sun, L.
Deposited on : 2023-08-26
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.dev70
Validation Pipeline (wwPDB-VP) : 2.36

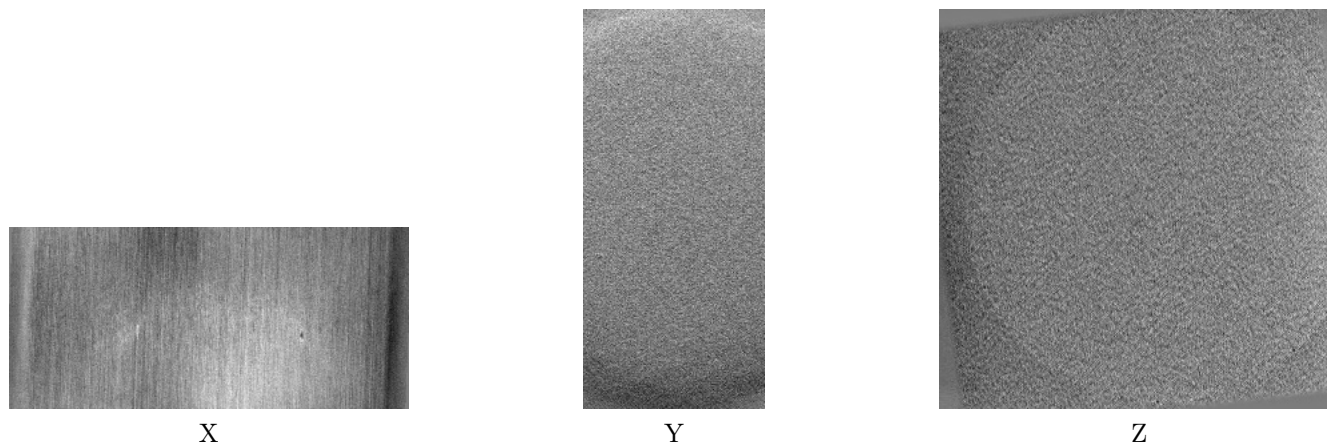
1 Experimental information

| Property | Value | Source |
|--------------------------------------|---------------------------------|-----------|
| EM reconstruction method | TOMOGRAPHY | Depositor |
| Imposed symmetry | Not Provided | |
| Number of tilted images used | 59 | Depositor |
| Resolution determination method | Not provided | |
| CTF correction method | Not provided | |
| Microscope | FEI TITAN | Depositor |
| Voltage (kV) | 300 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 2.0 | Depositor |
| Minimum defocus (nm) | 3.0 | Depositor |
| Maximum defocus (nm) | 5.0 | Depositor |
| Magnification | Not provided | |
| Image detector | FEI FALCON IV (4k x 4k) | Depositor |
| Maximum voxel value | 2.289 | Depositor |
| Minimum voxel value | -2.136 | Depositor |
| Average voxel value | 0.000 | Depositor |
| Voxel value standard deviation | 0.161 | Depositor |
| Recommended contour level | Not applicable | |
| Tomogram size (\AA) | 12402.688, 12402.688, 5619.9683 | wwPDB |
| Tomogram dimensions | 1024, 1024, 464 | wwPDB |
| Tomogram angles ($^\circ$) | 90.0, 90.0, 90.0 | wwPDB |
| Grid spacing (\AA) | 12.112, 12.112, 12.112 | Depositor |

2 Tomogram visualisation [i](#)

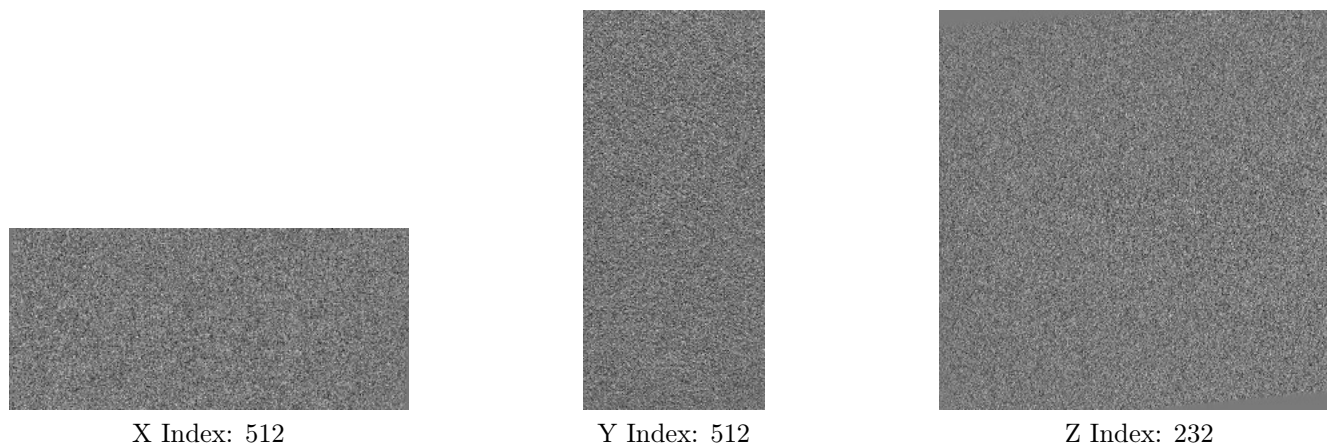
This section contains visualisations of the EMDB entry EMD-37284. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections [i](#)



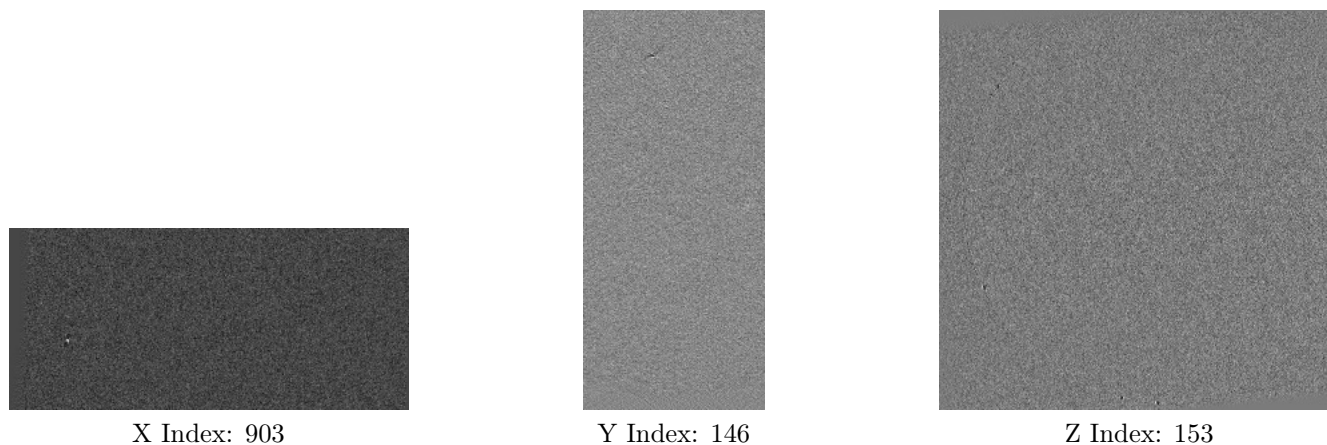
The images above show the tomogram projected in three orthogonal directions.

2.2 Central slices [i](#)



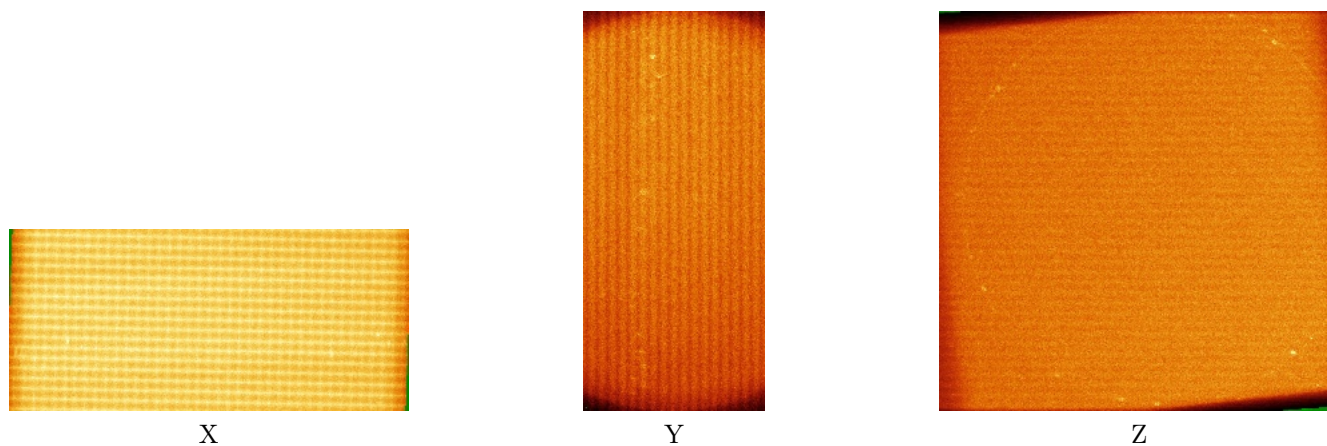
The images above show central slices of the tomogram in three orthogonal directions.

2.3 Largest variance slices [i](#)



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

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



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

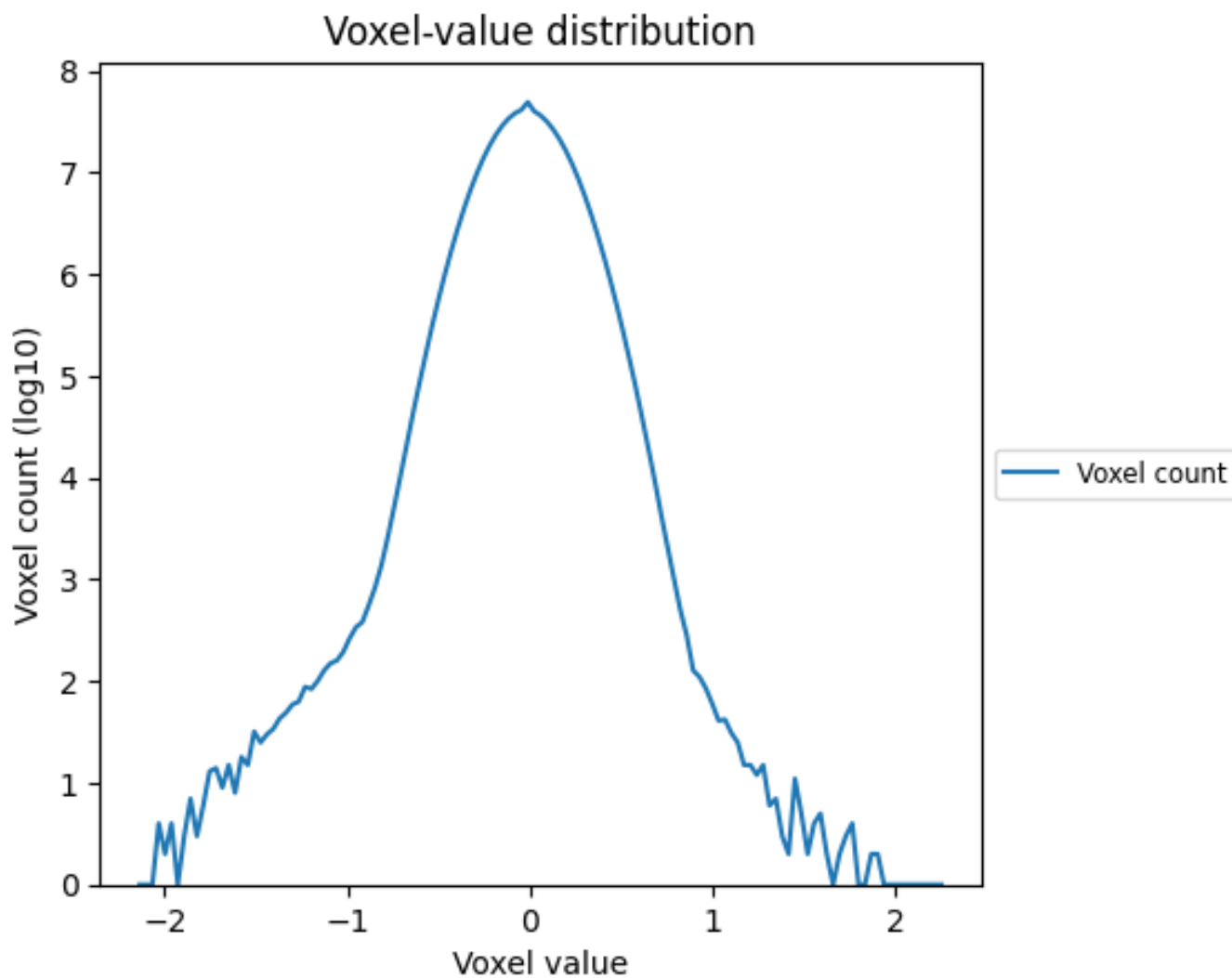
2.5 Mask visualisation [i](#)

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.