



Full wwPDB EM Validation Report ⓘ

Nov 15, 2021 – 10:01 AM EST

EMDB ID : EMD-24489
Title : The C1b projection within the ciliary central apparatus from the cryo-electron tomography and subtomographic average of isolated *Chlamydomonas* fap413 mutant axonemes
Authors : Cai, K.; Nicastro, D.
Deposited on : 2021-07-21
Resolution : 25.00 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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMTomogramValidationReportHelp>
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.dev97
Validation Pipeline (wwPDB-VP) : 2.23.2

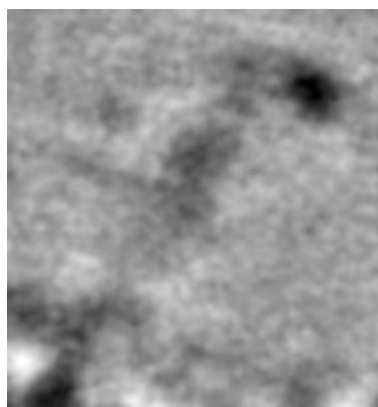
1 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	1401	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	1.5	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum voxel value	135.802	Depositor
Minimum voxel value	115.648	Depositor
Average voxel value	126.806	Depositor
Voxel value standard deviation	2.076	Depositor
Recommended contour level	Not applicable	
Tomogram size (\AA)	277.288, 270.986, 289.892	wwPDB
Tomogram dimensions	88, 86, 92	wwPDB
Tomogram angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Grid spacing (\AA)	3.151, 3.151, 3.151	Depositor

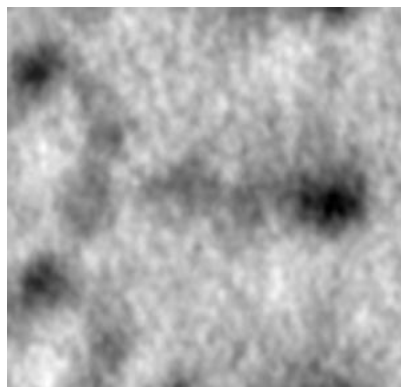
2 Tomogram visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-24489. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

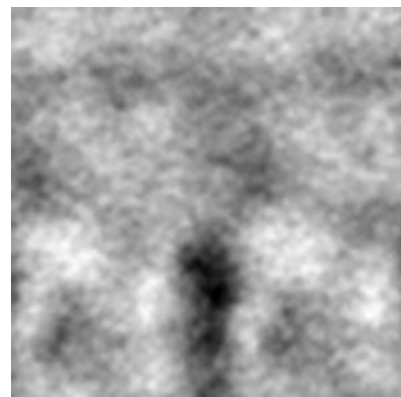
2.1 Orthogonal projections [i](#)



X



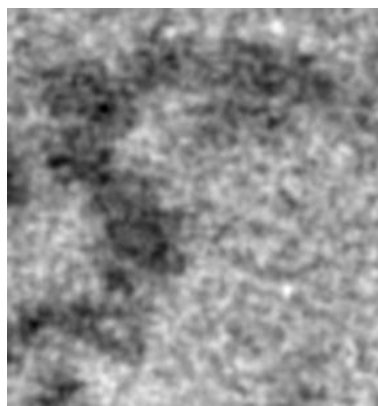
Y



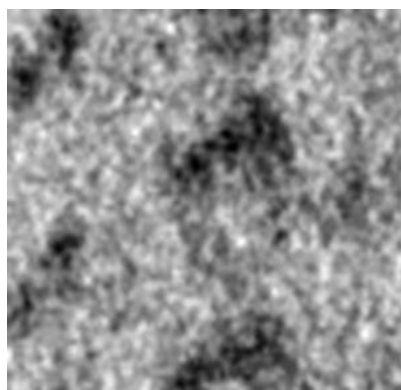
Z

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

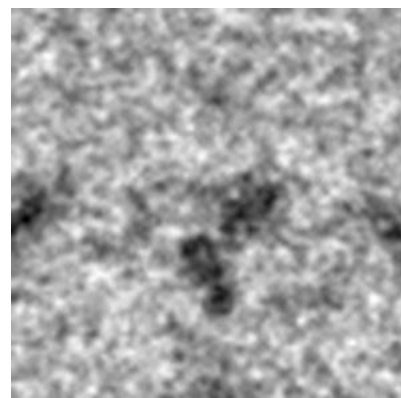
2.2 Central slices [i](#)



X Index: 44



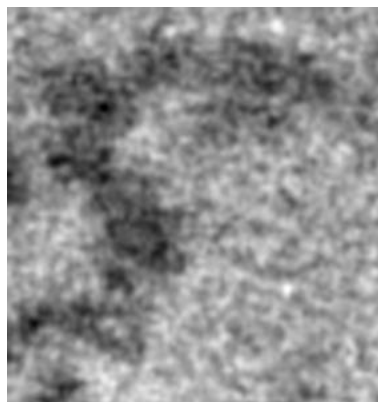
Y Index: 43



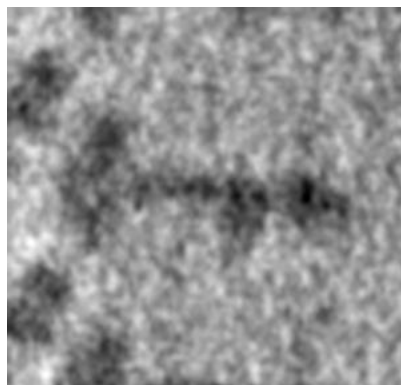
Z Index: 46

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

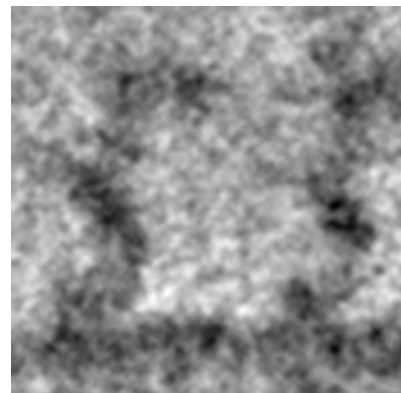
2.3 Largest variance slices [i](#)



X Index: 44



Y Index: 22



Z Index: 4

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

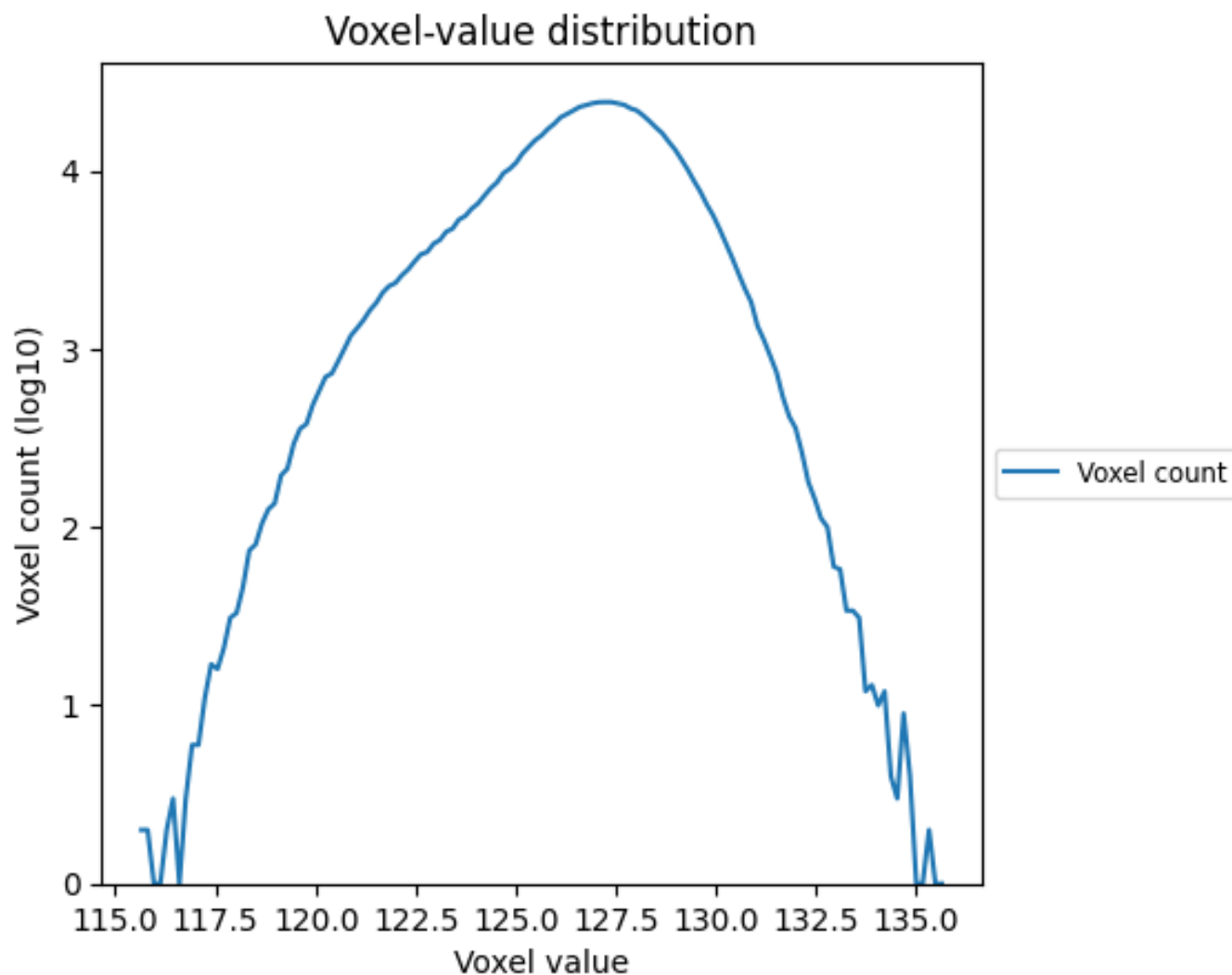
2.4 Mask visualisation [i](#)

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.