



Full wwPDB EM Validation Report ⓘ

Mar 31, 2021 – 10:07 am BST

EMDB ID : EMD-1906
Title : Tomographic reconstruction of unstained, frozen-hydrated thylakoid membranes from spinach chloroplasts.
Authors : Ford, R.C.; Holzenburg, A.
Deposited on : 2011-06-08
Resolution : 45.00 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.dev75
Validation Pipeline (wwPDB-VP) : 2.18

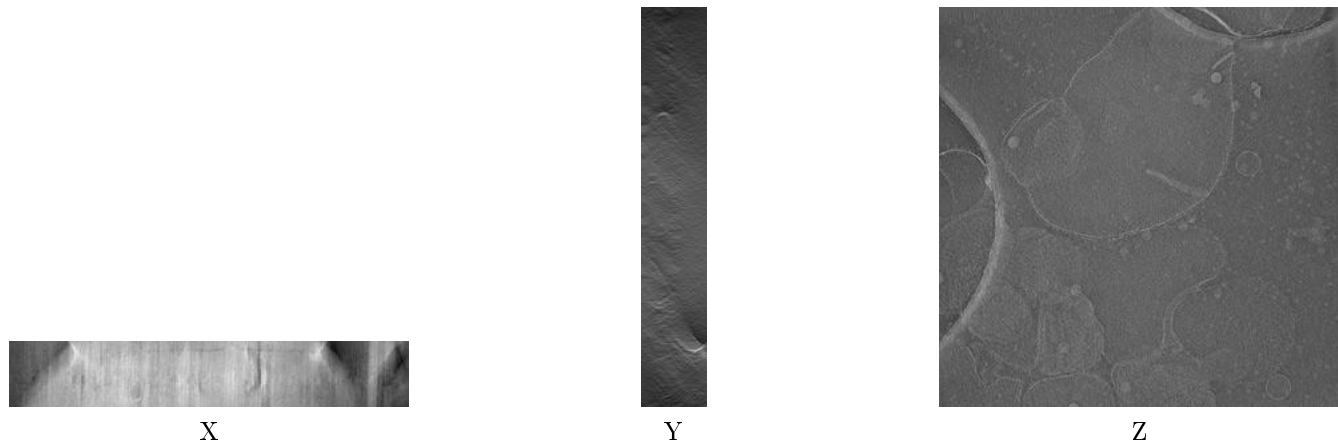
1 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	57	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	none	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	45	Depositor
Minimum defocus (nm)	8.0	Depositor
Maximum defocus (nm)	8.0	Depositor
Magnification	33998.0	Depositor
Image detector	Not provided	
Maximum voxel value	255.000	Depositor
Minimum voxel value	0.000	Depositor
Average voxel value	125.453	Depositor
Voxel value standard deviation	16.862	Depositor
Recommended contour level	150.0	Depositor
Tomogram size (\AA)	17441.6, 17441.6, 2833.6	wwPDB
Tomogram dimensions	991, 991, 161	wwPDB
Tomogram angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Grid spacing (\AA)	17.6, 17.6, 17.6	Depositor

2 Tomogram visualisation [i](#)

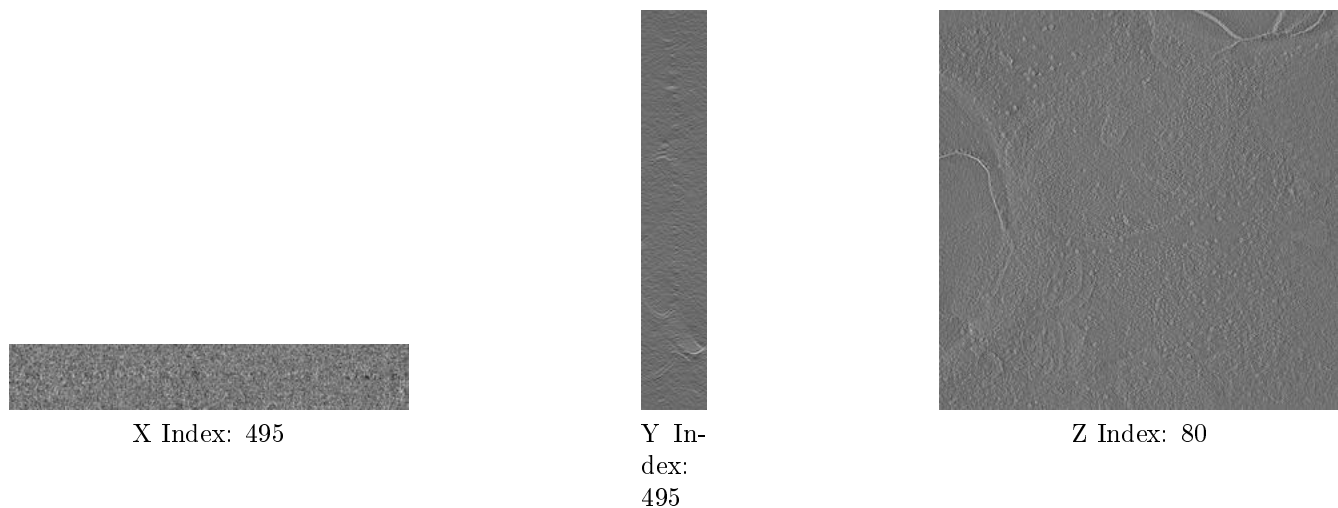
This section contains visualisations of the EMDB entry EMD-1906. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections [i](#)



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

2.2 Central slices [i](#)

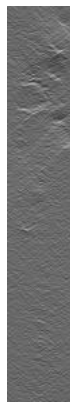
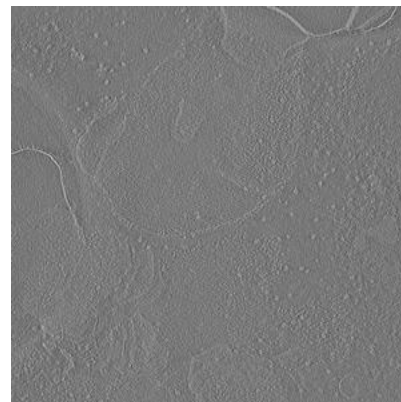


The images above show central slices of the tomogram in three orthogonal directions.

2.3 Largest variance slices [i](#)



X Index: 140

Y Index:
923

Z Index: 76

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

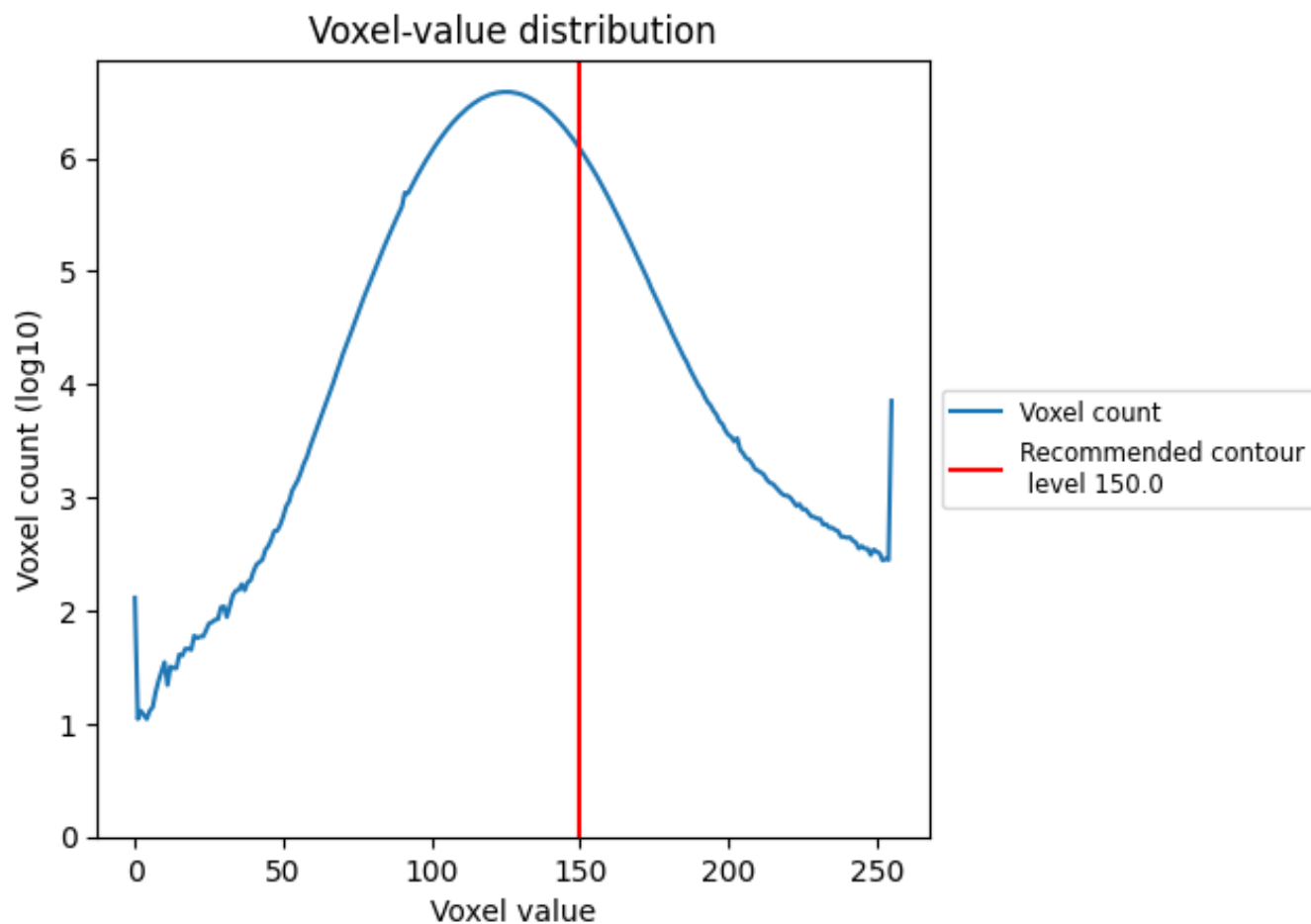
2.4 Mask visualisation [i](#)

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.