



Full wwPDB EM Validation Report ⓘ

Mar 6, 2026 – 10:03 PM UTC

EMDB ID : EMD-1053
Title : Untangling desmosomal knots with electron tomography.
Authors : He, W.; Cowin, P.; Stokes, D.L.
Deposited on : 2003-08-28
Resolution : 20.00 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 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

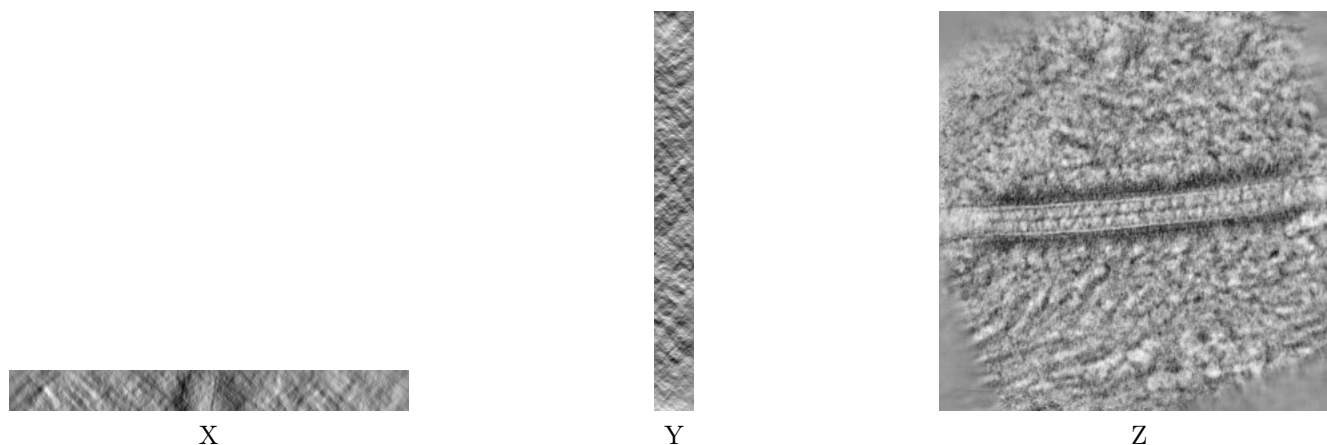
1 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	150	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	no CTF correction	Depositor
Microscope	FEI/PHILIPS CM200FEG	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	
Minimum defocus (nm)	0.3	Depositor
Maximum defocus (nm)	0.5	Depositor
Magnification	38000.0	Depositor
Image detector	GATAN MULTISCAN	Depositor
Maximum voxel value	3110.000	Depositor
Minimum voxel value	-3874.000	Depositor
Average voxel value	1396.460	Depositor
Voxel value standard deviation	414.104	Depositor
Recommended contour level	2020	Depositor
Tomogram size (\AA)	4766.72, 4766.72, 465.5	wwPDB
Tomogram dimensions	512, 512, 50	wwPDB
Tomogram angles ($^\circ$)	90, 90, 90	wwPDB
Grid spacing (\AA)	9.31, 9.31, 9.31	Depositor

2 Tomogram visualisation [i](#)

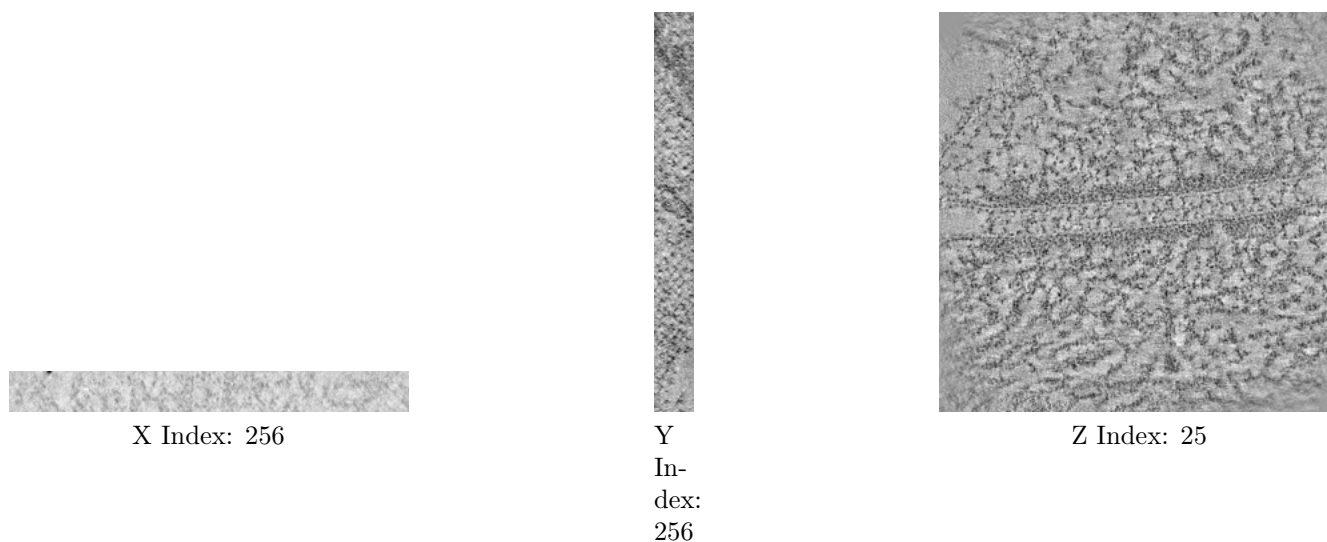
This section contains visualisations of the EMDB entry EMD-1053. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections [i](#)



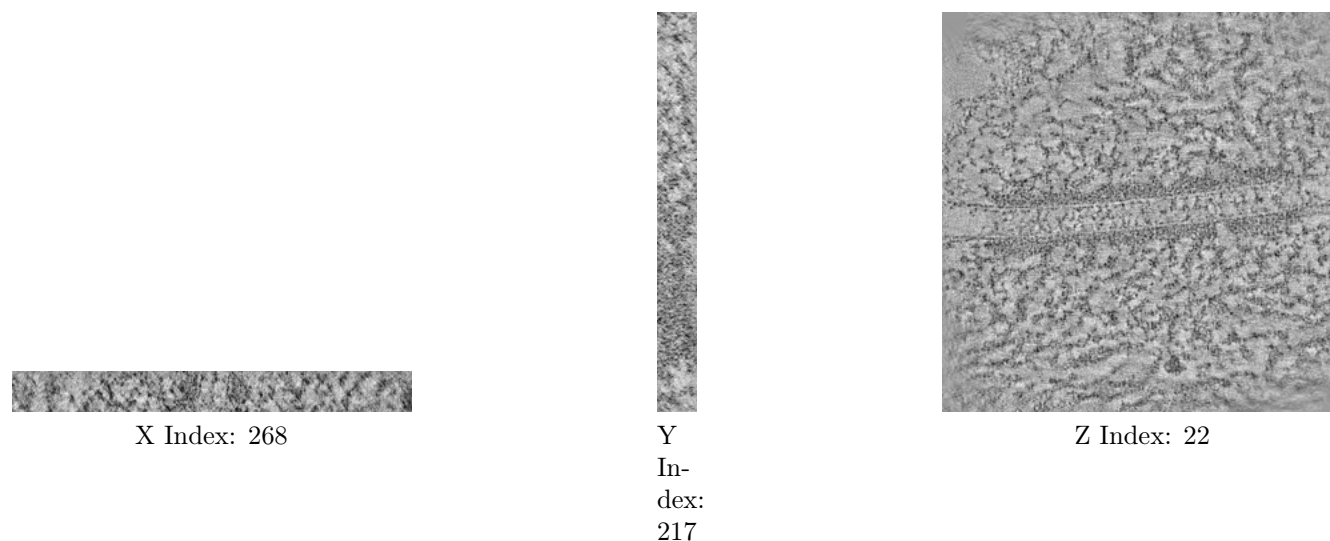
The images above show the tomogram projected in three orthogonal directions.

2.2 Central slices [i](#)



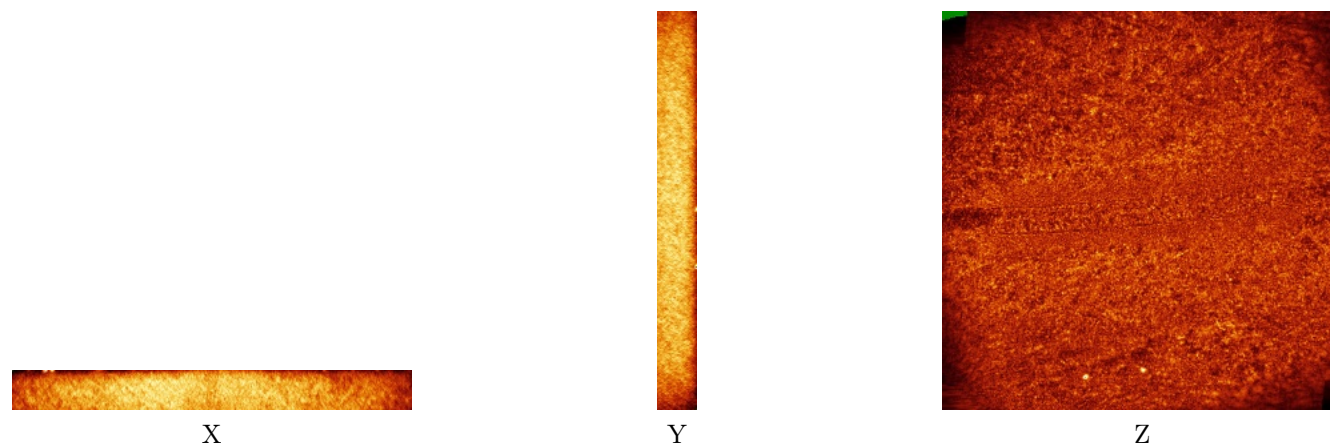
The images above show central slices of the tomogram in three orthogonal directions.

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.

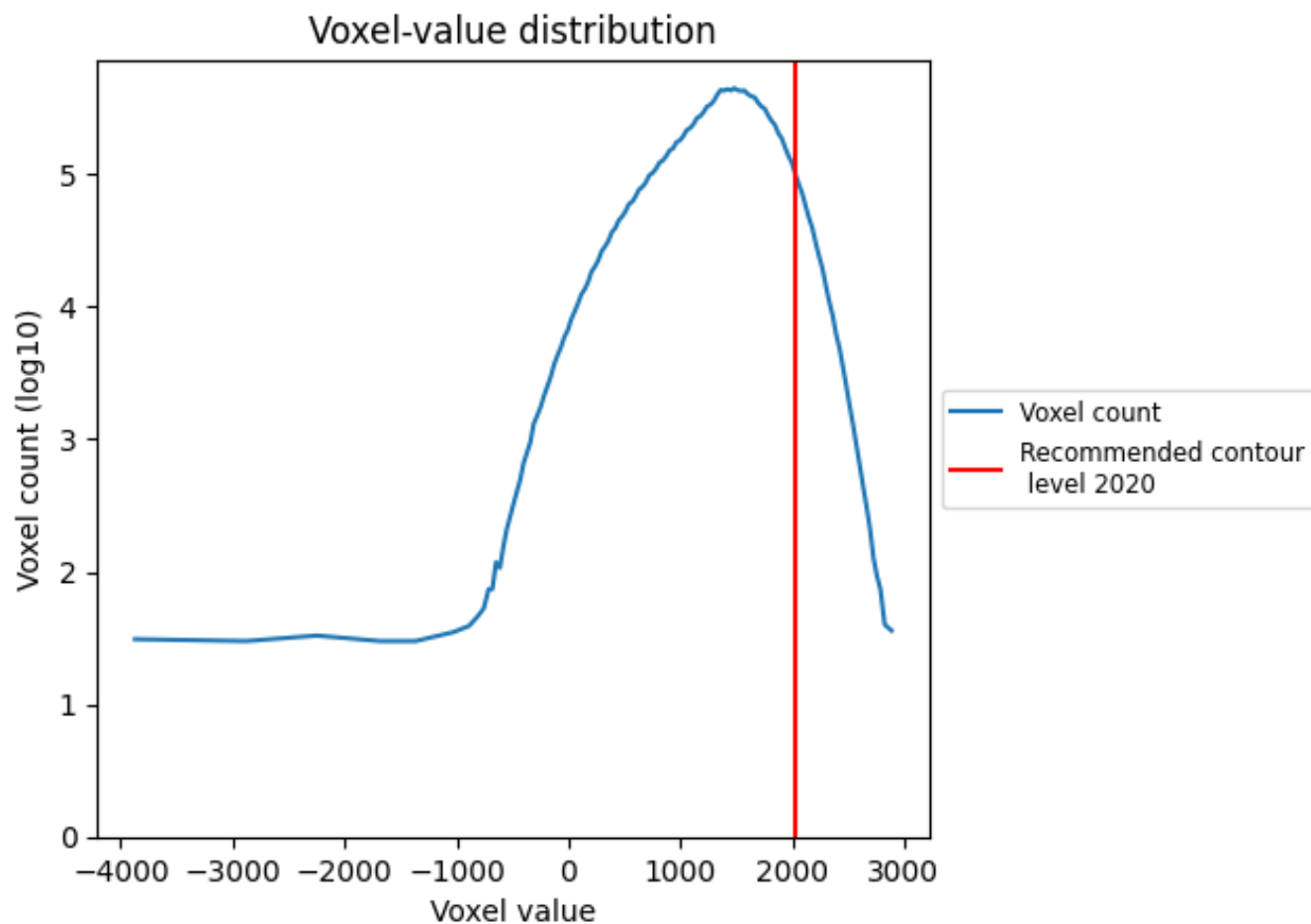
2.5 Mask visualisation [i](#)

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.