Full wwPDB EM Validation Report

Nov 10, 2026 – 03:58 pm GMT

EMDB ID	:	EMD-100378
Title	:	Cryo-electron tomogram of Chroococcidiopsis thermalis PCC 7203 in far-red light
Authors	:	van Dorst, S.; Wietrzynski, W.; Engel, B.D.
Deposited on	:	2026-10-20
Resolution	:	Not provided

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 (i) 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 (1)) were used in the production of this report:

EMDB validation analysis	:	0.0.1.dev133
Validation Pipeline (wwPDB-VP)	:	2.51

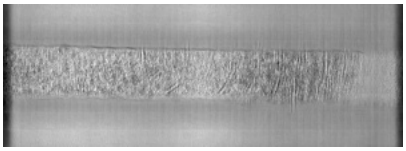
1 Experimental information (i)

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	57	Depositor
Resolution determination method	Not provided	
CTF correction method	Not provided	
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	120.0	Depositor
Minimum defocus (nm)	2.5	Depositor
Maximum defocus (nm)	5.0	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum voxel value	2.451	Depositor
Minimum voxel value	-2.517	Depositor
Average voxel value	-0.008	Depositor
Voxel value standard deviation	0.221	Depositor
Recommended contour level	Not applicable	
Tomogram size (Å)	10987.02, 15465.6, 5498.88	wwPDB
Tomogram dimensions	1023, 1440, 512	wwPDB
Tomogram angles (°)	90.0, 90.0, 90.0	wwPDB
Grid spacing (Å)	10.74, 10.74, 10.74	Depositor

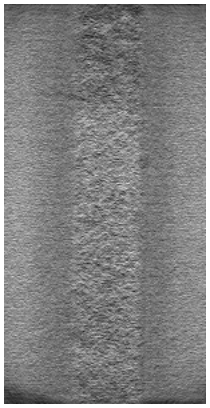
2 Tomogram visualisation

This section contains visualisations of the EMDB entry EMD-100378. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

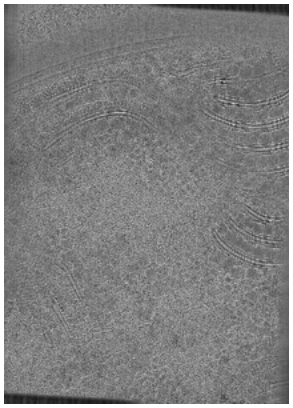
2.1 Orthogonal projections



X



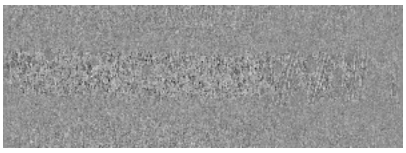
Y



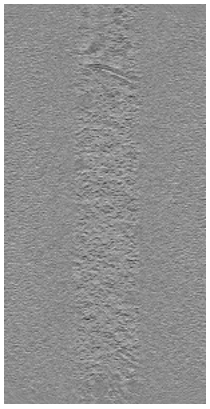
Z

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

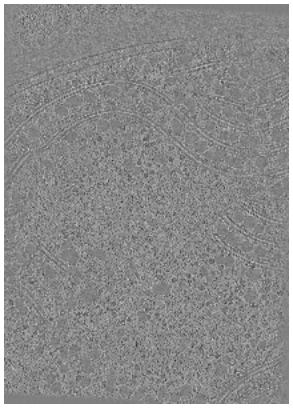
2.2 Central slices



X Index: 511



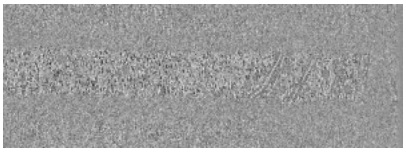
Y Index: 720



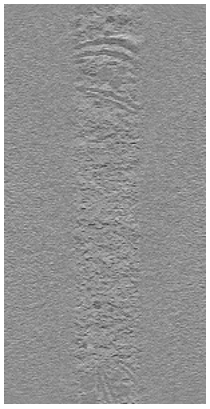
Z Index: 256

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

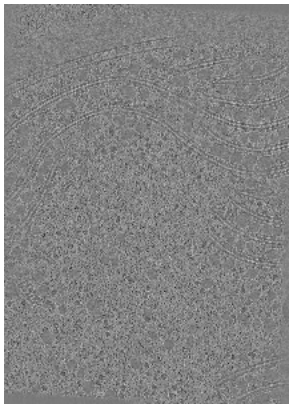
2.3 Largest variance slices (i)



X Index: 594



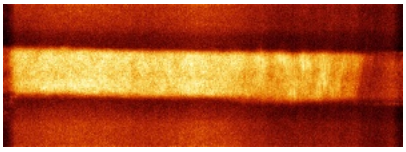
Y Index: 679



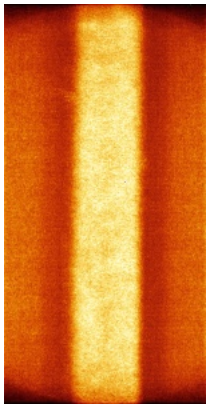
Z Index: 307

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

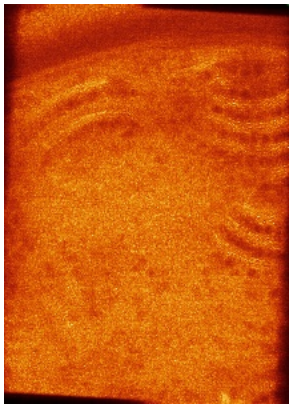
2.4 Orthogonal standard-deviation projections (False-color) (i)



X



Y



Z

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

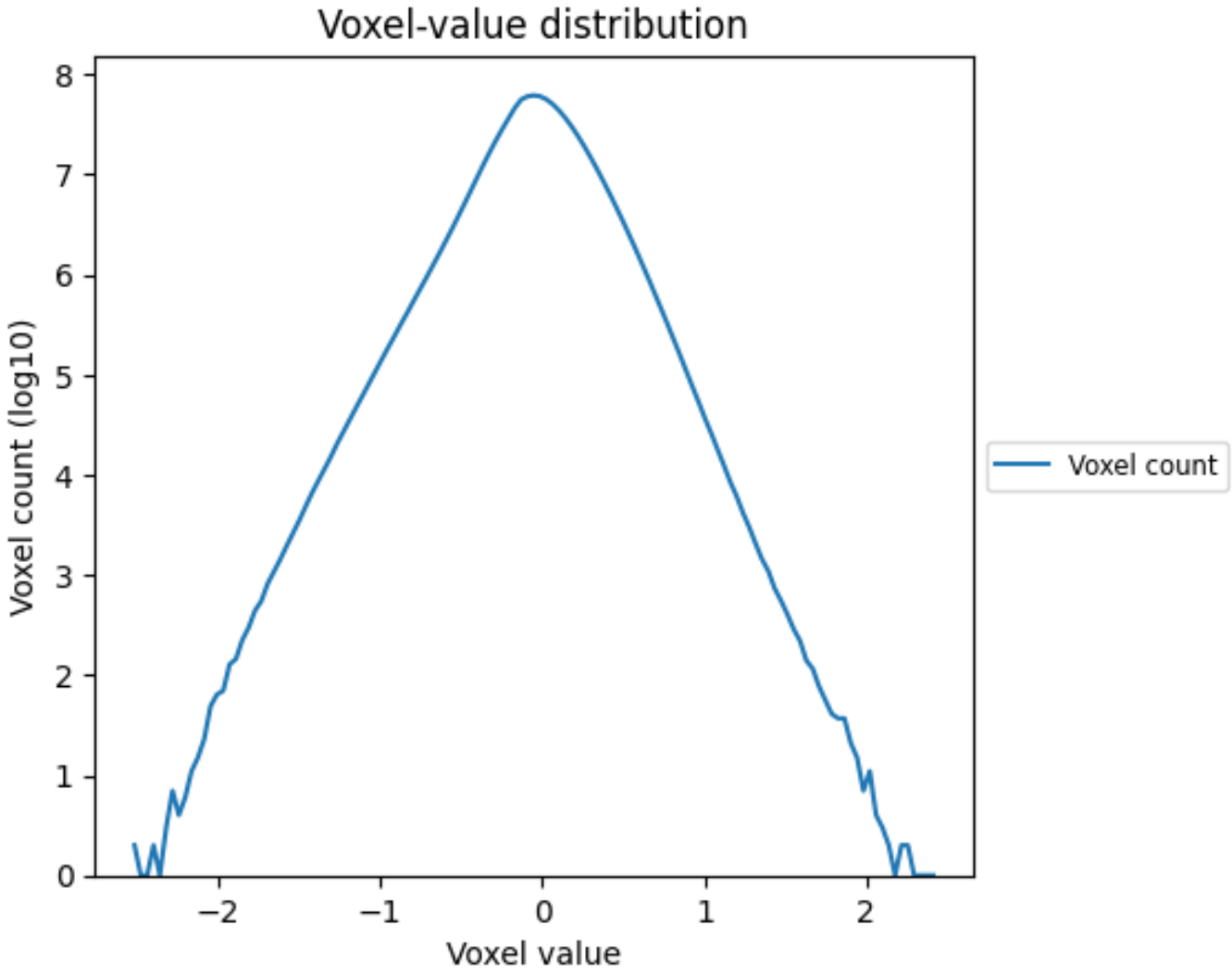
2.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

3 Tomogram analysis

This section contains the results of statistical analysis of the tomogram.

3.1 Voxel-value distribution



The voxel-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic.