



## wwPDB EM Validation Summary Report ⓘ

Mar 31, 2021 – 11:15 am BST

EMDB ID : EMD-4950  
Title : Electron cryotomogram of septal region from FIB milled *Anabaena* sp.  
PCC7120 gfp-fraD expressing filament  
Authors : Weiss, G.L.; Kieninger, A.; Maldener, I.; Forchhammer, K.; Pilhofer, M.  
Deposited on : 2019-05-09  
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](mailto: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.

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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

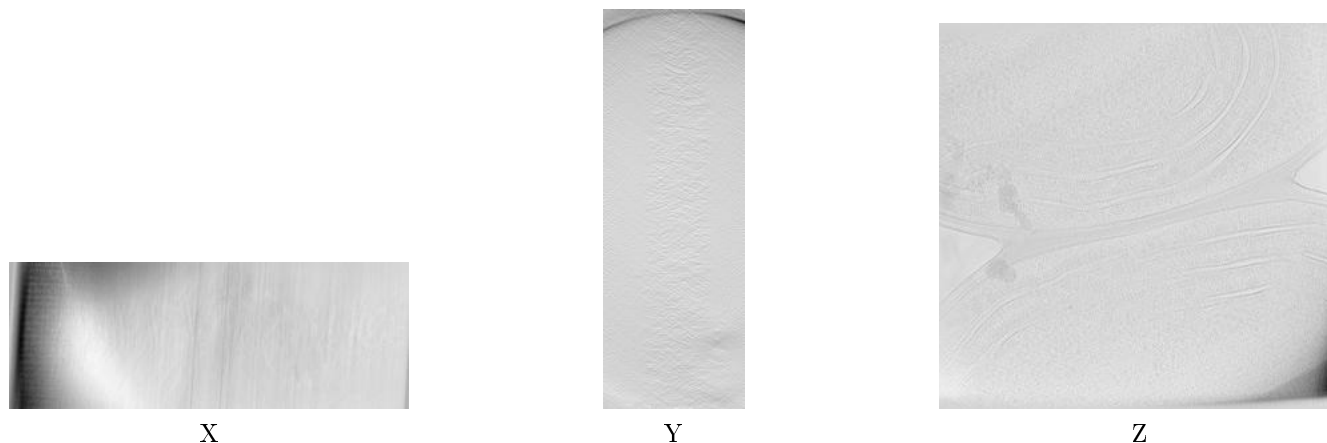
# 1 Experimental information

| Property                             | Value                        | Source    |
|--------------------------------------|------------------------------|-----------|
| EM reconstruction method             | TOMOGRAPHY                   | Depositor |
| Imposed symmetry                     | Not Provided                 |           |
| Number of tilted images used         | 61                           | Depositor |
| Resolution determination method      | Not provided                 |           |
| CTF correction method                | Not provided                 |           |
| Microscope                           | FEI TITAN KRIOS              | Depositor |
| Voltage (kV)                         | 300                          | Depositor |
| Electron dose ( $e^-/\text{\AA}^2$ ) | 2.3                          | Depositor |
| Minimum defocus (nm)                 | Not provided                 |           |
| Maximum defocus (nm)                 | Not provided                 |           |
| Magnification                        | Not provided                 |           |
| Image detector                       | GATAN K2 QUANTUM (4k x 4k)   | Depositor |
| Maximum voxel value                  | 127.000                      | Depositor |
| Minimum voxel value                  | -128.000                     | Depositor |
| Average voxel value                  | 10.253                       | Depositor |
| Voxel value standard deviation       | 20.450                       | Depositor |
| Recommended contour level            | Not applicable               |           |
| Tomogram size ( $\text{\AA}$ )       | 12969.601, 12537.28, 4566.38 | wwPDB     |
| Tomogram dimensions                  | 960, 928, 338                | wwPDB     |
| Tomogram angles ( $^\circ$ )         | 90.0, 90.0, 90.0             | wwPDB     |
| Grid spacing ( $\text{\AA}$ )        | 13.51, 13.51, 13.509999      | Depositor |

## 2 Tomogram visualisation [i](#)

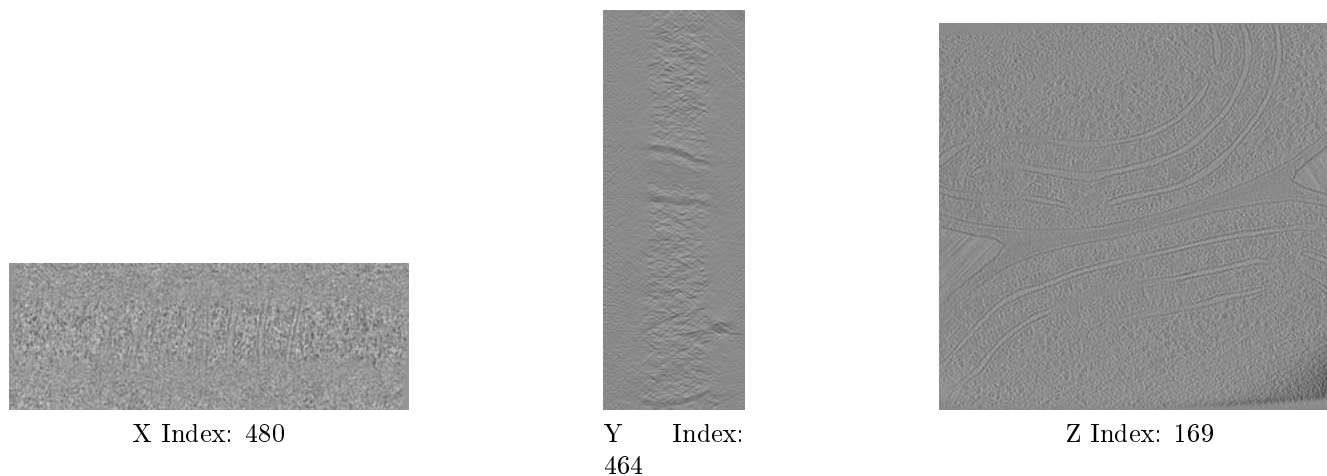
This section contains visualisations of the EMDB entry EMD-4950. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

### 2.1 Orthogonal projections [i](#)



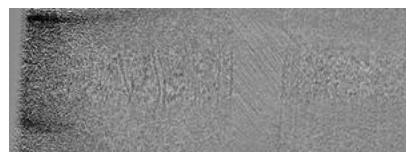
The images above show the tomogram projected in three orthogonal directions.

### 2.2 Central slices [i](#)



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

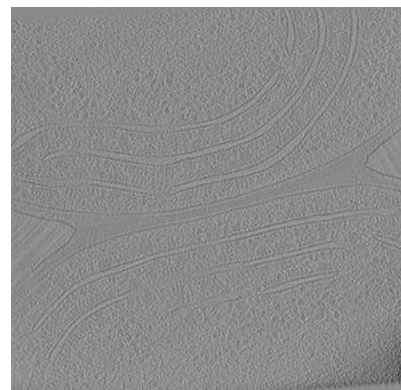
## 2.3 Largest variance slices [i](#)



X Index: 935



Y Index: 44



Z Index: 152

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

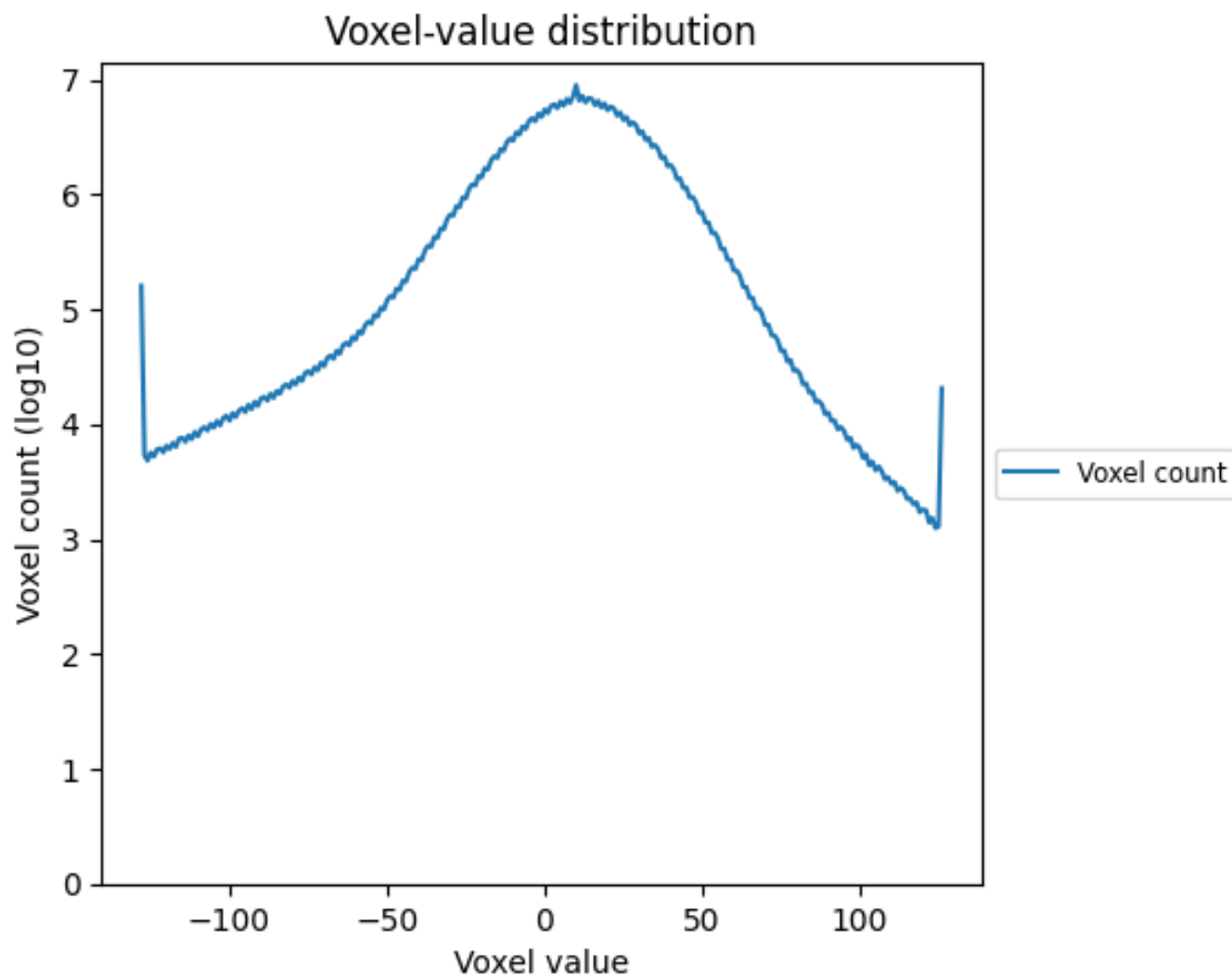
## 2.4 Mask visualisation [i](#)

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.