



## wwPDB EM Validation Summary Report ⓘ

Mar 31, 2021 – 11:11 am BST

EMDB ID : EMD-4696  
Title : Volta phase plate in situ tomogram of an enteroaggregative Escherichia coli cell displaying a type six secretion system apparatus.  
Authors : Szwedziak, P.; Pilhofer, M.  
Deposited on : 2019-03-13  
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

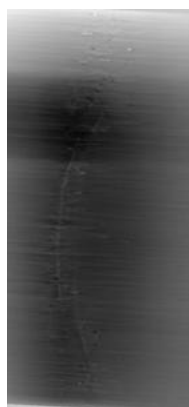
# 1 Experimental information ⓘ

| Property                             | Value                      | Source    |
|--------------------------------------|----------------------------|-----------|
| EM reconstruction method             | TOMOGRAPHY                 | Depositor |
| Imposed symmetry                     | Not Provided               |           |
| Number of tilted images used         | 121                        | Depositor |
| Resolution determination method      | Not provided               |           |
| CTF correction method                | Not provided               |           |
| Microscope                           | FEI TITAN KRIOS            | Depositor |
| Voltage (kV)                         | 300                        | Depositor |
| Electron dose ( $e^-/\text{\AA}^2$ ) | 1.25                       | Depositor |
| Minimum defocus (nm)                 | Not provided               |           |
| Maximum defocus (nm)                 | Not provided               |           |
| Magnification                        | Not provided               |           |
| Image detector                       | GATAN K2 SUMMIT (4k x 4k)  | Depositor |
| Maximum voxel value                  | 4141.000                   | Depositor |
| Minimum voxel value                  | -6297.000                  | Depositor |
| Average voxel value                  | 81.901                     | Depositor |
| Voxel value standard deviation       | 162.683                    | Depositor |
| Recommended contour level            | Not applicable             |           |
| Tomogram size (Å)                    | 20803.2, 9209.75, 20109.76 | wwPDB     |
| Tomogram dimensions                  | 960, 425, 928              | wwPDB     |
| Tomogram angles (°)                  | 90.0, 90.0, 90.0           | wwPDB     |
| Grid spacing (Å)                     | 21.67, 21.67, 21.67        | Depositor |

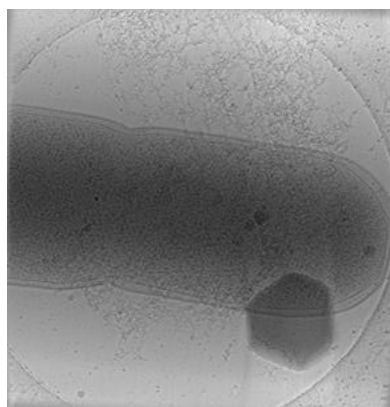
## 2 Tomogram visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-4696. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

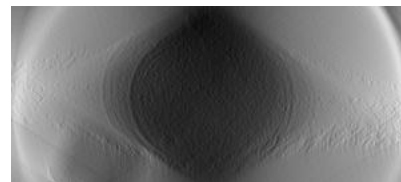
### 2.1 Orthogonal projections [i](#)



X



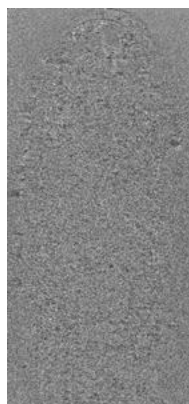
Y



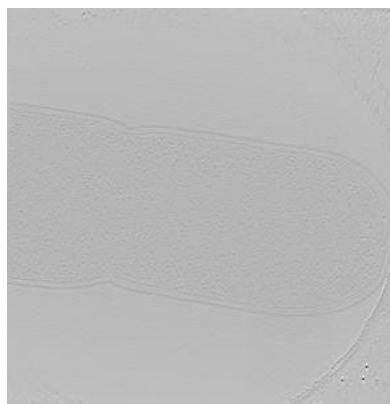
Z

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

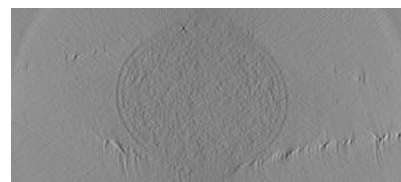
### 2.2 Central slices [i](#)



X Index: 480



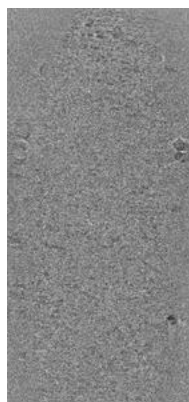
Y Index: 212



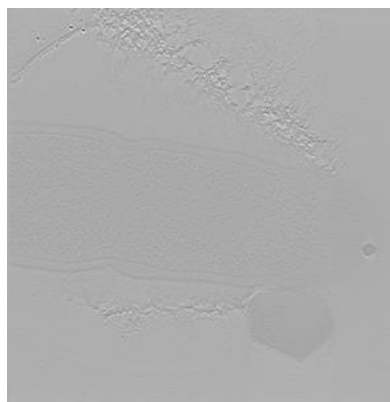
Z Index: 464

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

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



X Index: 445



Y Index: 103



Z Index: 665

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

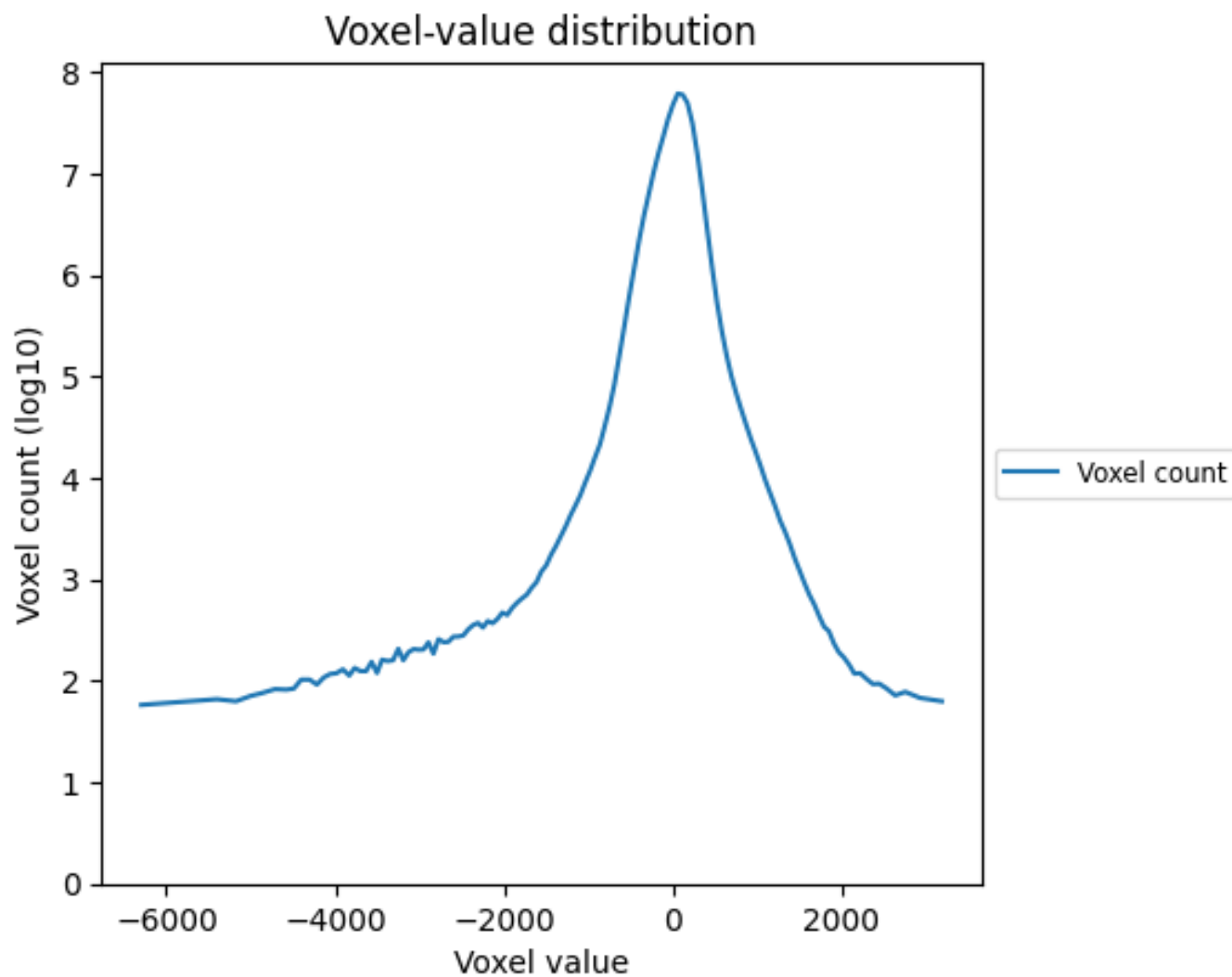
## 2.4 Mask visualisation [i](#)

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.