



## wwPDB EM Validation Summary Report ⓘ

Mar 31, 2021 – 09:55 am BST

EMDB ID : EMD-1519  
Title : Cryoelectron tomography of HIV-1 envelope spikes  
Authors : Zhu, P.; Winkler, H.; Chertova, E.; Taylor, K.A.; Roux, K.H.  
Deposited on : 2008-06-04  
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

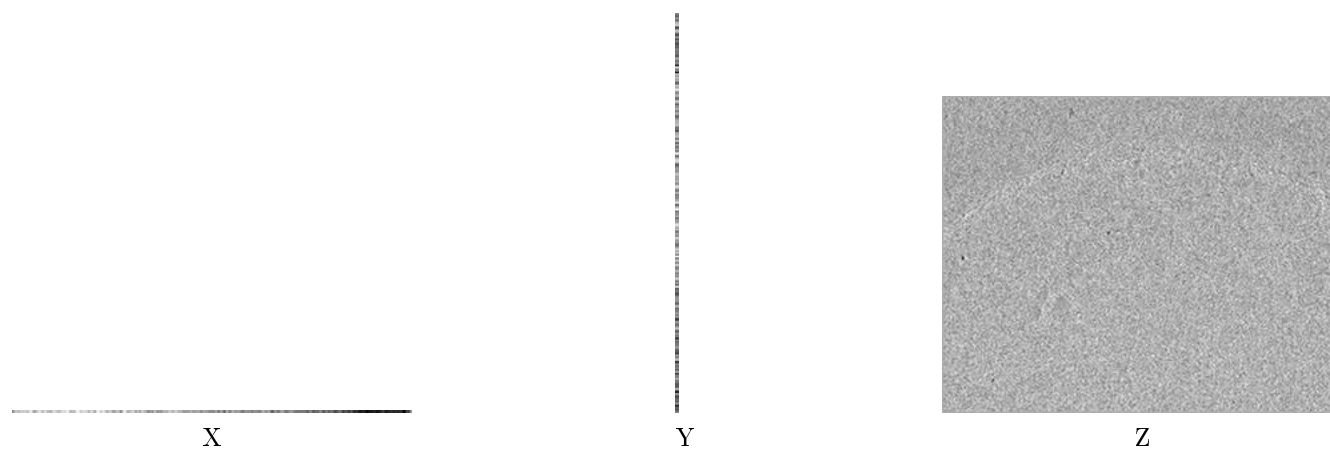
# 1 Experimental information

| Property                             | Value                       | Source    |
|--------------------------------------|-----------------------------|-----------|
| EM reconstruction method             | TOMOGRAPHY                  | Depositor |
| Imposed symmetry                     | Not Provided                |           |
| Number of tilted images used         | 64                          | Depositor |
| Resolution determination method      | Not provided                |           |
| CTF correction method                | Not provided                |           |
| Microscope                           | FEI/PHILIPS CM300FEG/T      | Depositor |
| Voltage (kV)                         | 300                         | Depositor |
| Electron dose ( $e^-/\text{\AA}^2$ ) | 1.5                         | Depositor |
| Minimum defocus (nm)                 | Not provided                |           |
| Maximum defocus (nm)                 | 4.0                         | Depositor |
| Magnification                        | 43200.0                     | Depositor |
| Image detector                       | TVIPS TEMCAM-F224 (2k x 2k) | Depositor |
| Maximum voxel value                  | 162.923                     | Depositor |
| Minimum voxel value                  | -353.086                    | Depositor |
| Average voxel value                  | 0.523                       | Depositor |
| Voxel value standard deviation       | 37.715                      | Depositor |
| Recommended contour level            | Not applicable              |           |
| Tomogram size (Å)                    | 1328.84, 1050.84, 5.56      | wwPDB     |
| Tomogram dimensions                  | 239, 189, 1                 | wwPDB     |
| Tomogram angles (°)                  | 90, 90, 90                  | wwPDB     |
| Grid spacing (Å)                     | 5.56, 5.56, 5.56            | Depositor |

## 2 Tomogram visualisation [i](#)

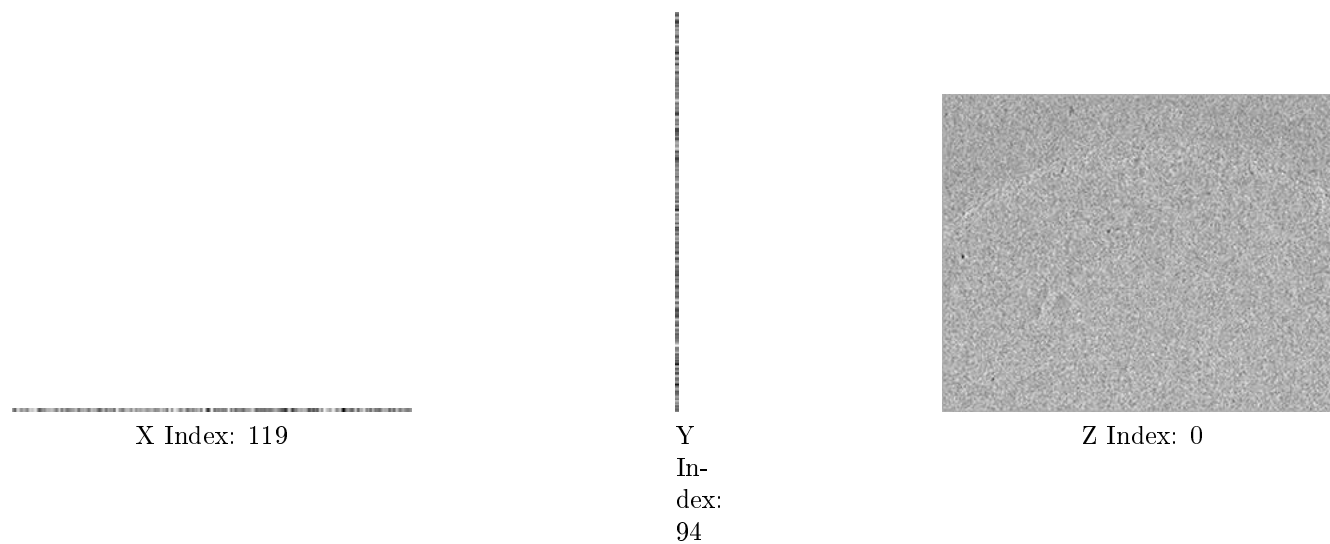
This section contains visualisations of the EMDB entry EMD-1519. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

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



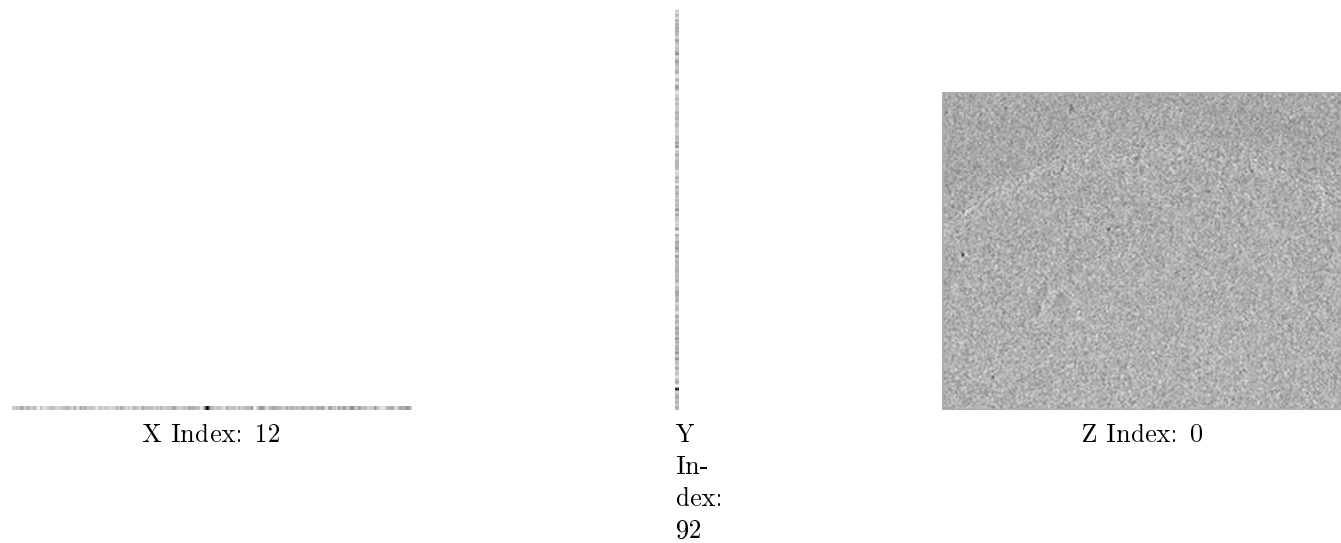
The images above show the tomogram projected in three orthogonal directions.

### 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.

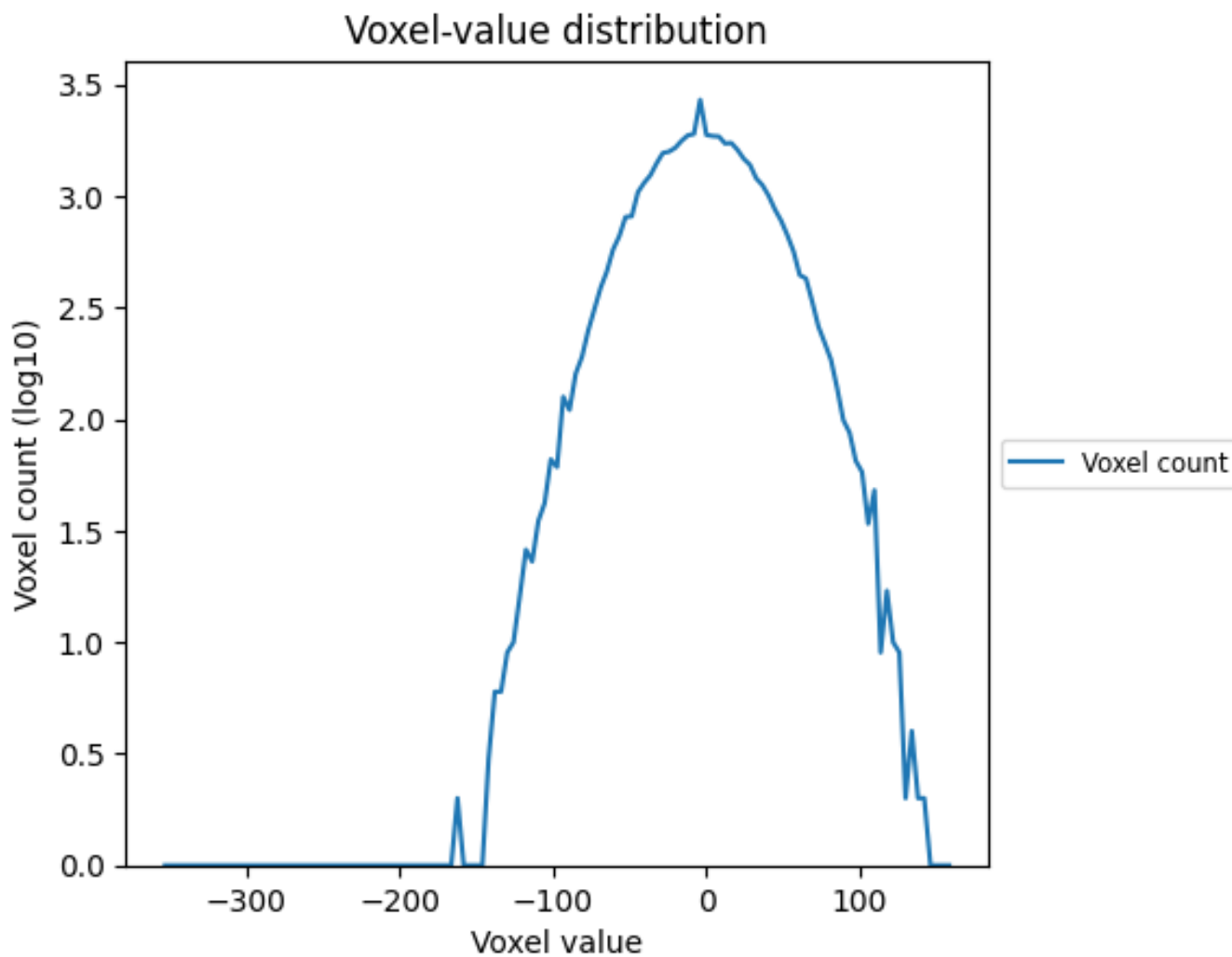
## 2.4 Mask visualisation [i](#)

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.