WORLDWIDE PDB PROTEIN DATA BANK

Full wwPDB EM Validation Report (i)

Jun 5, 2023 – 10:02 AM EDT

EMDB ID	:	EMD-29606
Title	:	CryoET of HIV-2 Immature Particles
Authors	:	Talledge, N.; Zhang, W.; Mansky, M.L.
Deposited on	:	2023-01-28
Resolution	:	9.10 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 (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

1   Experimental information ⓘ

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	13378	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/\text{Å}^2)$	1.1	Depositor
Minimum defocus (nm)	3.0	Depositor
Maximum defocus (nm)	5.0	Depositor
Magnification	105000.0	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum voxel value	0.016	Depositor
Minimum voxel value	-0.009	Depositor
Average voxel value	0.000	Depositor
Voxel value standard deviation	0.001	Depositor
Recommended contour level	Not applicable	
Tomogram size (Å)	337.92, 337.92, 337.92	wwPDB
Tomogram dimensions	256, 256, 256	wwPDB
Tomogram angles (°)	90.0, 90.0, 90.0	wwPDB
Grid spacing (Å)	1.32, 1.32, 1.32	Depositor

2   Tomogram visualisation ⓘ

This section contains visualisations of the EMDB entry EMD-29606. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

2.1   Orthogonal projections ⓘ

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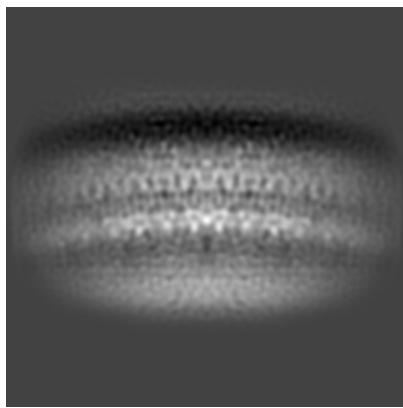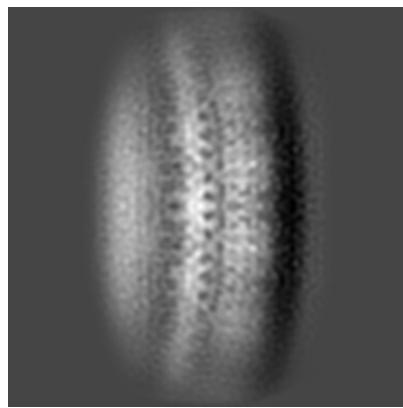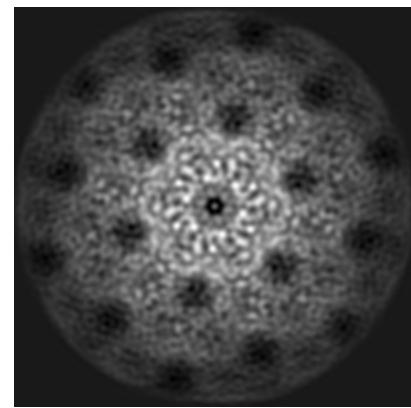
The images above show the tomogram projected in three orthogonal directions.

2.2   Central slices ⓘ
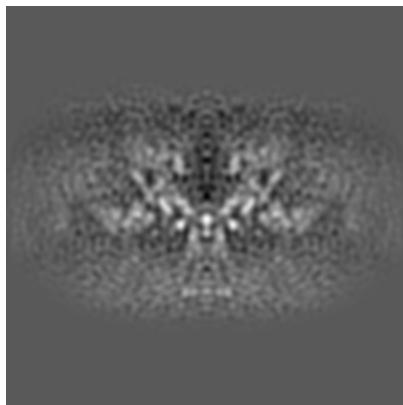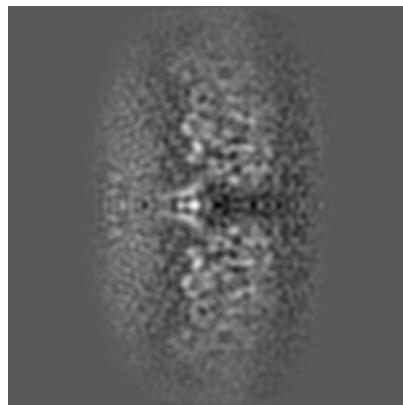
X Index: 128   Y Index: 128   Z Index: 128
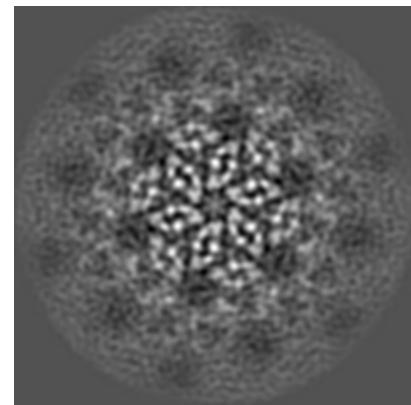
The images above show central slices of the tomogram in three orthogonal directions.

2.3 Largest variance slices ⓘ
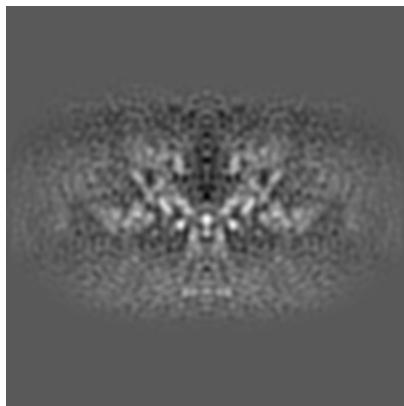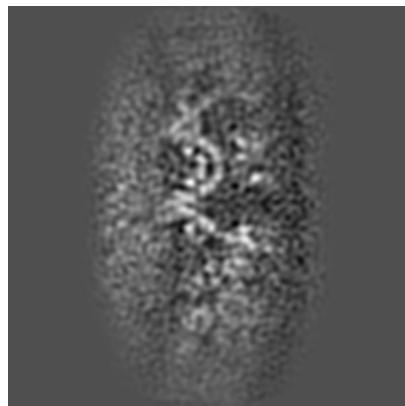

| X Index: 128 | Y Index: 135 | Z Index: 123 |
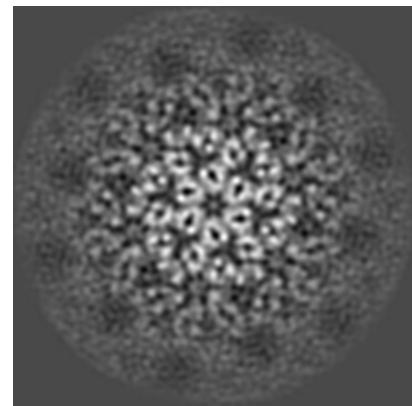
The images above show the largest variance slices of the tomogram in three orthogonal directions.

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

| X | Y | Z |
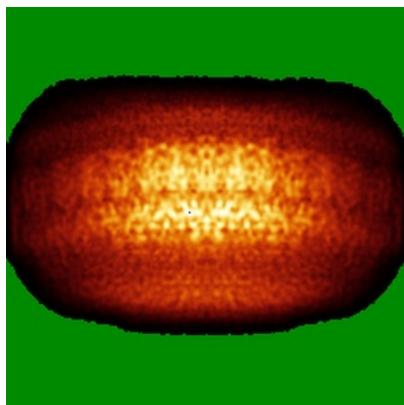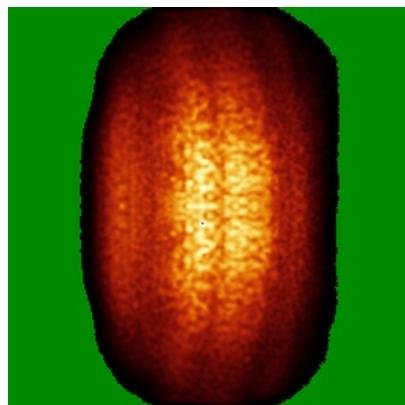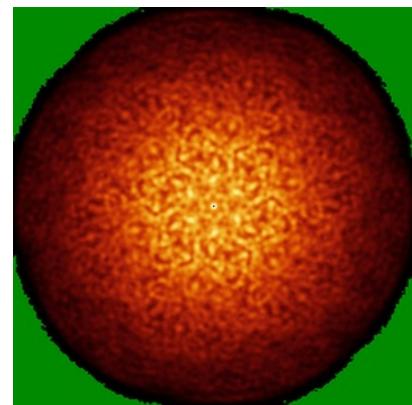
The images above show the tomogram projected in three orthogonal directions.

## 2.5 Mask visualisation ⓘ

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

A mask typically either:

- Encompasses the whole structure

- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

2.5.1 emd_29606_msk_1.map ⓘ
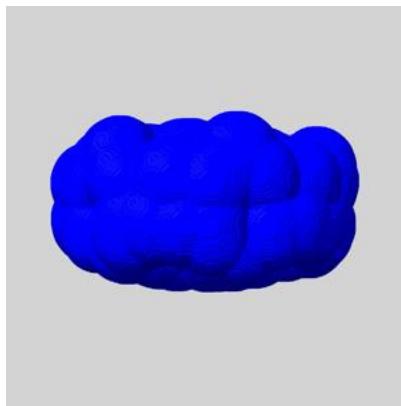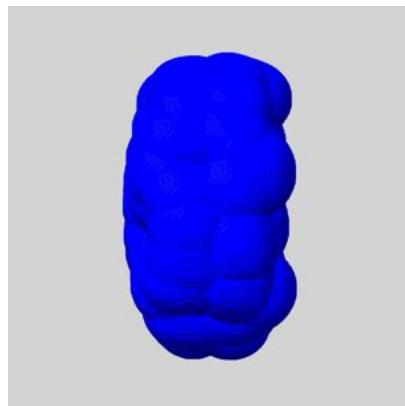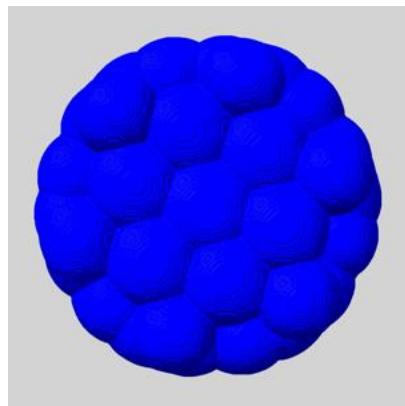
X   Y   Z

3 Tomogram analysis ⓘ

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

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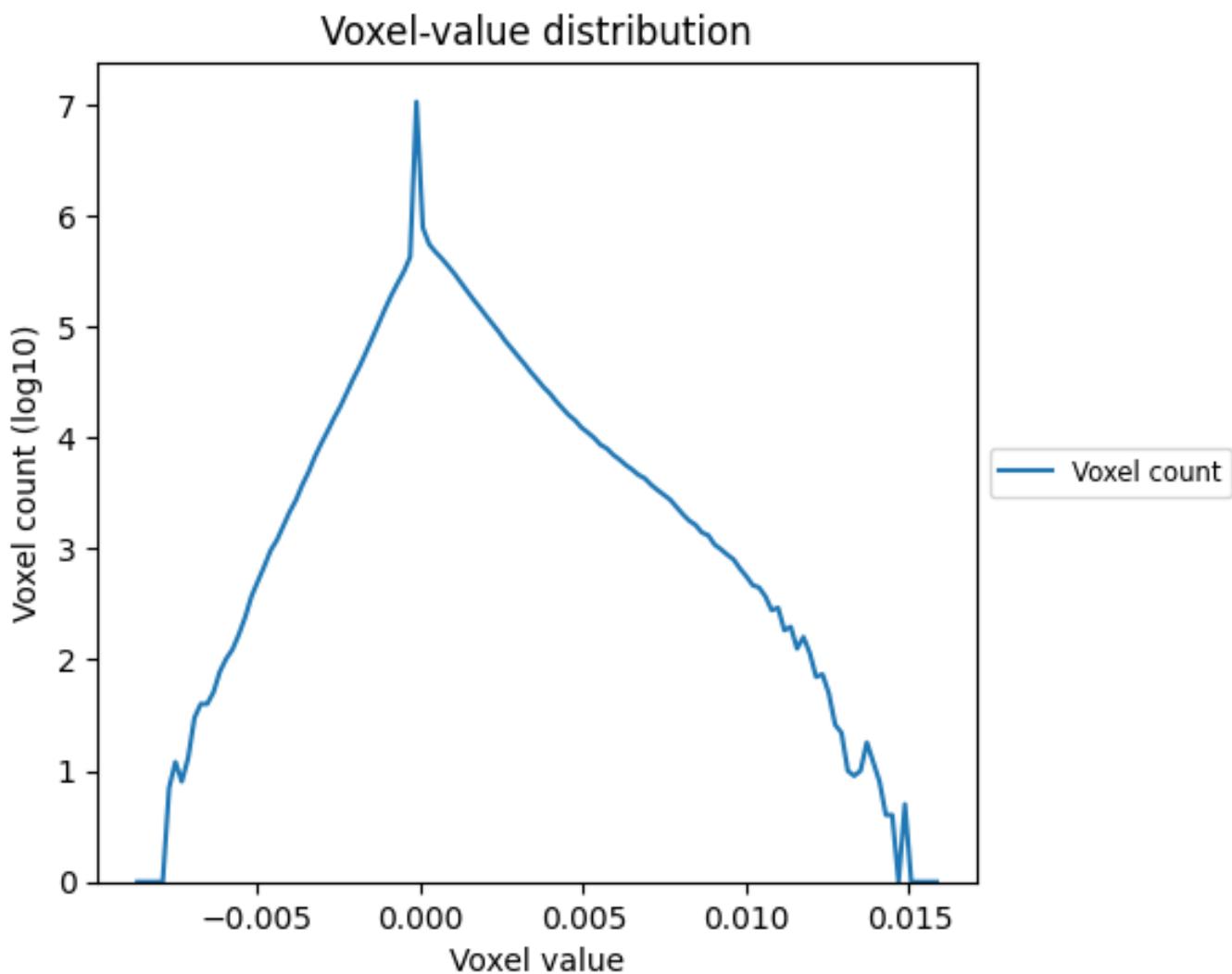
The voxel-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic.