Full wwPDB EM Validation Report (i)

Mar 31, 2021 – 10:30 am BST

EMDB ID	:	EMD-2951
Title	:	Three Dimensional Dynamics and Fluctuations of DNA-Nanogold Dimers by Individual-Particle Electron Tomography
Authors	:	Zhang, L.; Smith, J.M.; Tong, H.M.; Zhang, X.; Lei, D.S.; Lu, Z.Y.; Alivisatos, P.; Ren, G.
Deposited on	:	2015-03-25
Resolution	:	15.70 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 following versions of software and data (see references (i)) were used in the production of this report:

EMDB validation analysis	:	0.0.0.dev75
Validation Pipeline (wwPDB-VP)	:	2.18

1　Experimental information (i)

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	81	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	TOMOCTF	Depositor
Microscope	ZEISS LIBRA120PLUS	Depositor
Voltage (kV)	120	Depositor
Electron dose $(e^-/Å^2)$	1000	Depositor
Minimum defocus (nm)	0.2	Depositor
Maximum defocus (nm)	0.5	Depositor
Magnification	125000.0	Depositor
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum voxel value	1.742	Depositor
Minimum voxel value	-1.388	Depositor
Average voxel value	-0.001	Depositor
Voxel value standard deviation	0.071	Depositor
Recommended contour level	0.309	Depositor
Tomogram size (Å)	481.28, 481.28, 481.28	wwPDB
Tomogram dimensions	256, 256, 256	wwPDB
Tomogram angles (°)	90.0, 90.0, 90.0	wwPDB
Grid spacing (Å)	1.88, 1.88, 1.88	Depositor

2   Tomogram visualisation ⓘ

This section contains visualisations of the EMDB entry EMD-2951. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.
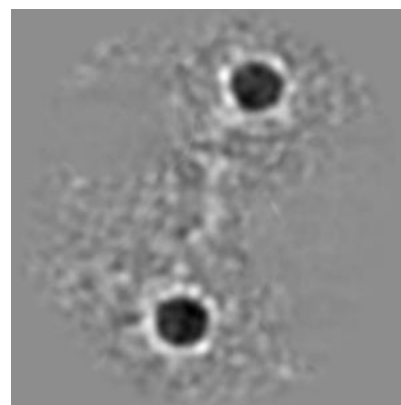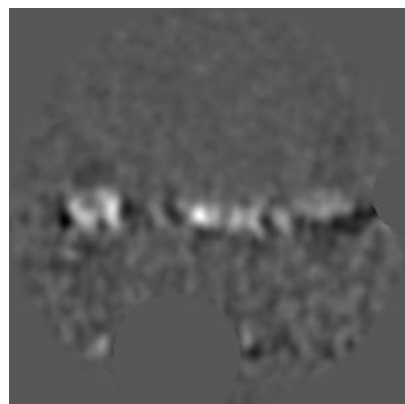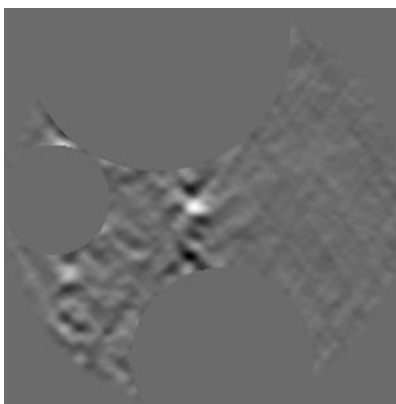
2.1   Orthogonal projections ⓘ
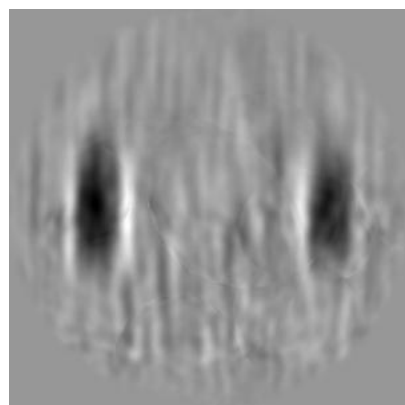
X   Y   Z

The images above show the tomogram projected in three orthogonal directions.
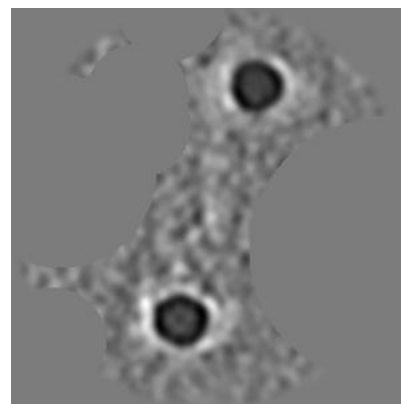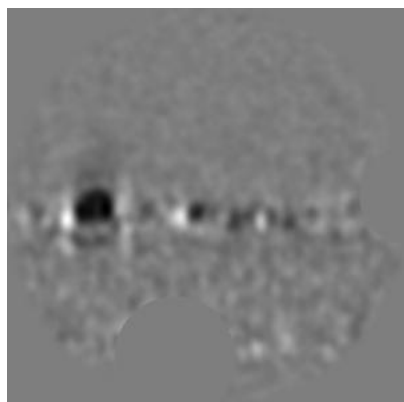
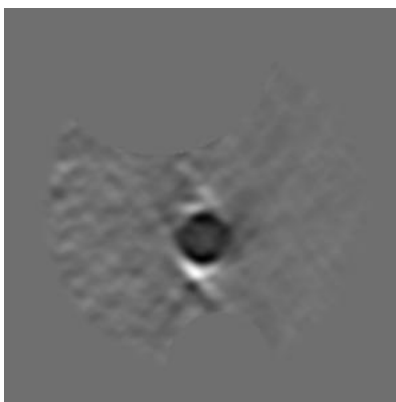## 2.2   Central slices ⓘ

X Index: 128   Y Index: 128   Z Index: 128

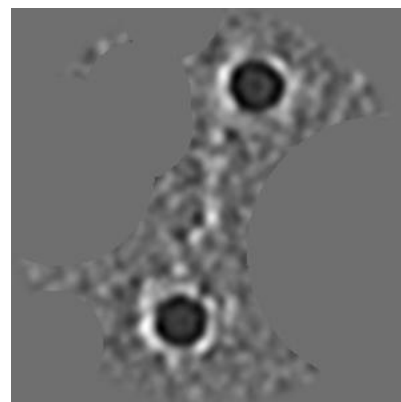The images above show central slices of the tomogram in three orthogonal directions.

2.3 Largest variance slices (i)

X Index: 119 Y Index: 52 Z Index: 123

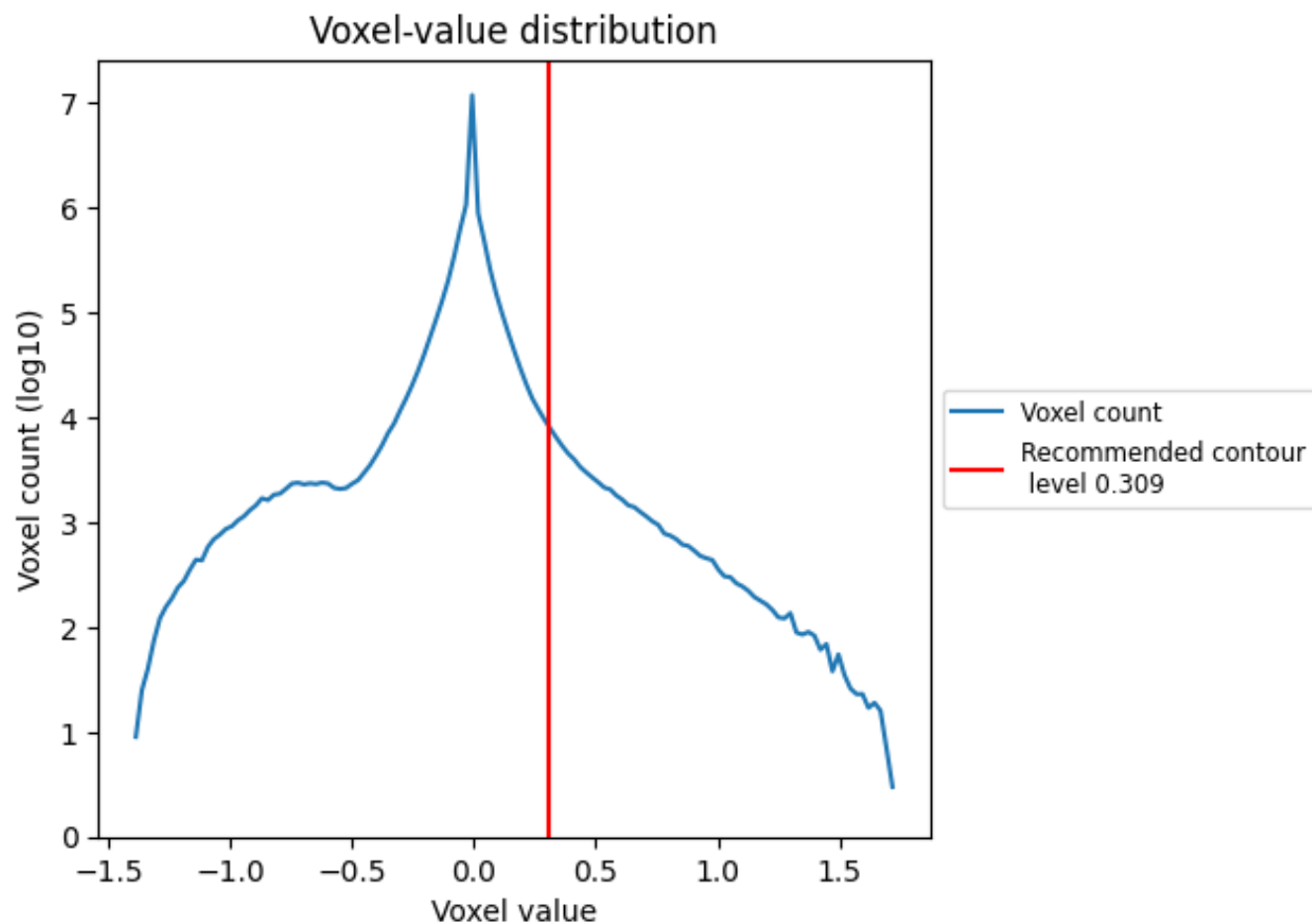The images above show the largest variance slices of the tomogram in three orthogonal directions.

2.4 Mask visualisation (i)

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

3　Tomogram analysis ⓘ

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.