



Full wwPDB EM Validation Report ⓘ

Nov 1, 2021 – 05:03 PM EDT

EMDB ID : EMD-25275
Title : Tertiary structure of an individual particle of self-folding RNA polymer (particle #038)
Deposited on : 2021-10-30
Resolution : 23.90 Å(reported)

This is a Full wwPDB EM Validation Report.

This report is produced by the wwPDB biocuration pipeline after annotation of the structure.

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 ⓘ symbol.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

EMDB validation analysis : 0.0.0.dev97
Validation Pipeline (wwPDB-VP) : 2.23.2

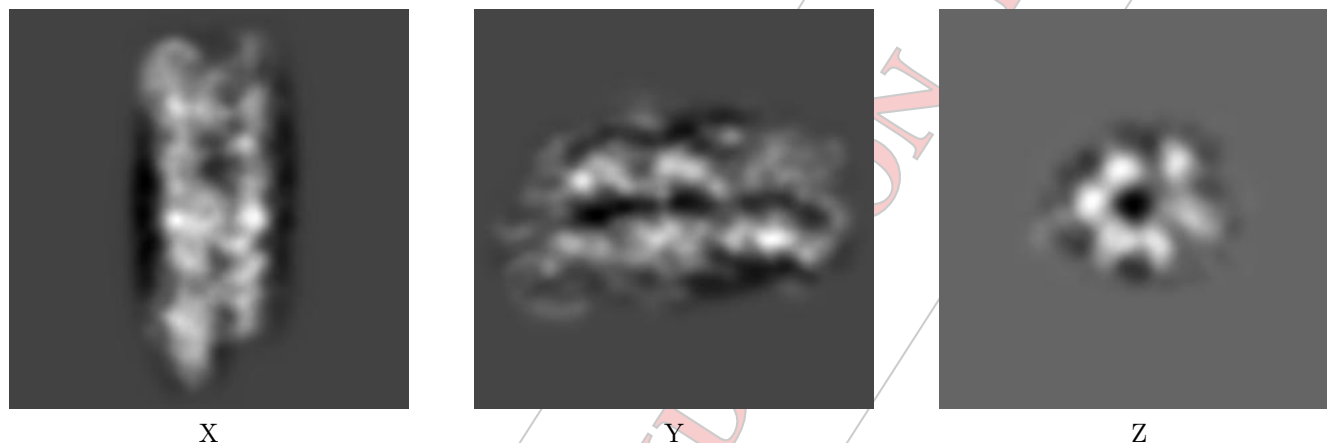
1 Experimental information

| Property | Value | Source |
|--------------------------------------|---|-----------|
| EM reconstruction method | TOMOGRAPHY | Depositor |
| Imposed symmetry | POINT, Not provided | |
| Number of tilted images used | 21 | Depositor |
| Resolution determination method | FSC 0.143 CUT-OFF | Depositor |
| CTF correction method | PHASE FLIPPING AND AMPLITUDE CORRECTION; The Contrast Transfer Function (CTF) was determined by Gctf and then corrected by TOMOCTF. | Depositor |
| Microscope | FEI TITAN KRIOS | Depositor |
| Voltage (kV) | 300 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 8 | Depositor |
| Minimum defocus (nm) | Not provided | |
| Maximum defocus (nm) | Not provided | |
| Magnification | 81000 | Depositor |
| Image detector | GATAN K3 BIOQUANTUM (6k x 4k) | Depositor |
| Maximum voxel value | 5.425 | Depositor |
| Minimum voxel value | -2.461 | Depositor |
| Average voxel value | 0.031 | Depositor |
| Voxel value standard deviation | 0.318 | Depositor |
| Recommended contour level | 1.0 | Depositor |
| Tomogram size (Å) | 240.64, 240.64, 240.64 | wwPDB |
| Tomogram dimensions | 128, 128, 128 | wwPDB |
| Tomogram angles (°) | 90.0, 90.0, 90.0 | wwPDB |
| Grid spacing (Å) | 1.88, 1.88, 1.88 | Depositor |

2 Tomogram visualisation [i](#)

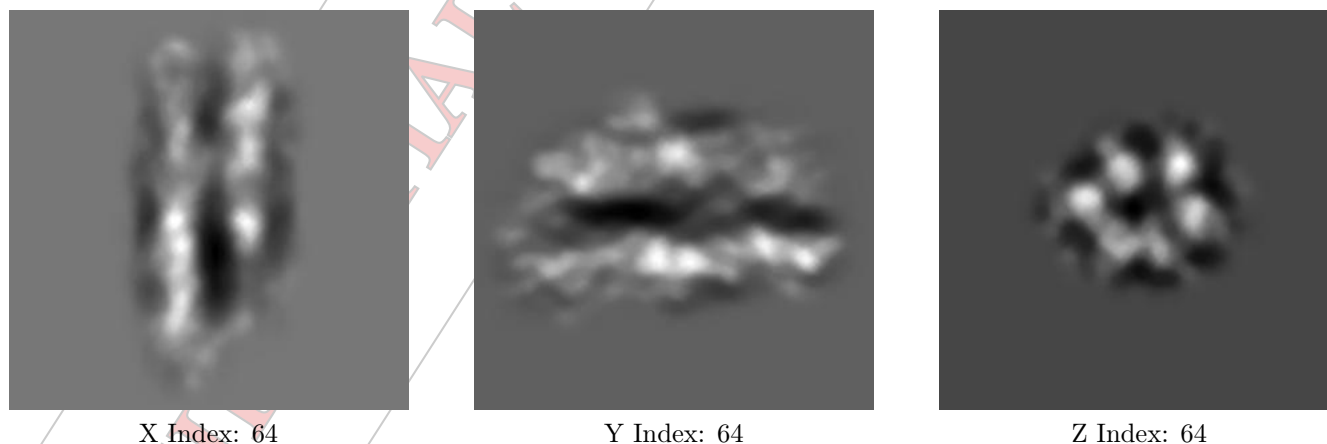
This section contains visualisations of the EMDB entry EMD-25275. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections [i](#)



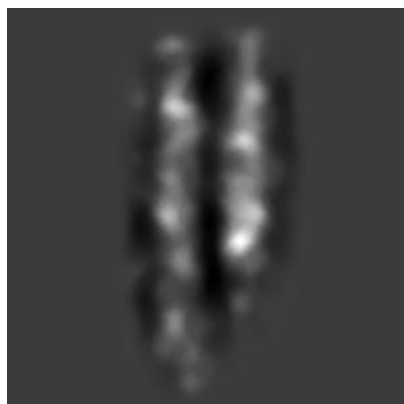
The images above show the tomogram projected in three orthogonal directions.

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: 59



Y Index: 77



Z Index: 60

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

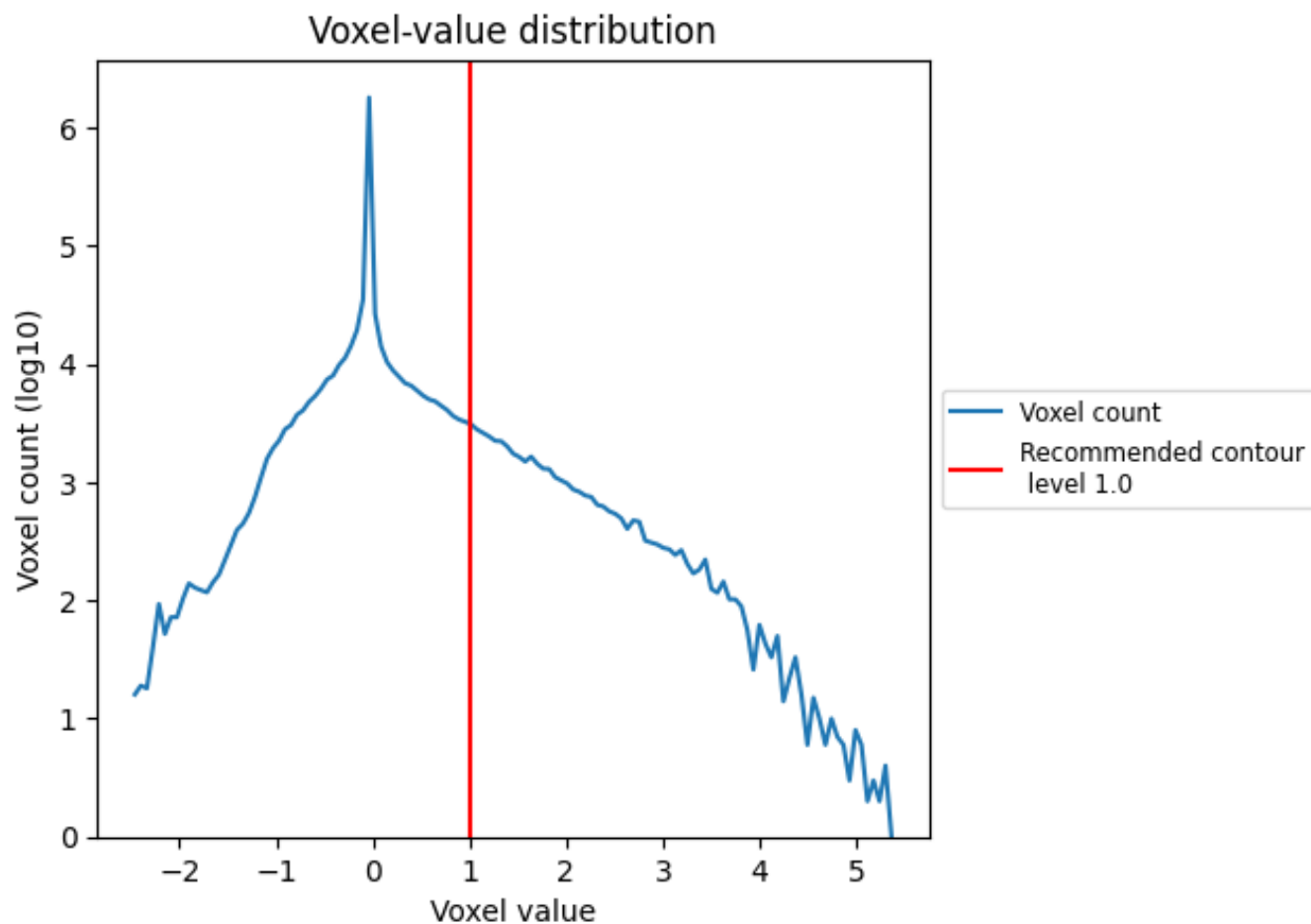
2.4 Mask visualisation [i](#)

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.