



## wwPDB EM Validation Summary Report ⓘ

Mar 31, 2021 – 10:40 am BST

EMDB ID : EMD-3441  
Title : Subtomogram average of the mitochondrial ATP synthase dimer from the ciliate *Paramecium tetraurelia*  
Authors : Muehleip, A.W.; Kuehlbrandt, W.; Davies, K.M.  
Deposited on : 2016-06-17  
Resolution : 26.00 Å(reported)

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

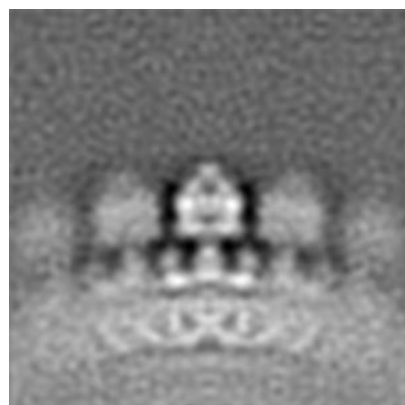
# 1 Experimental information ⓘ

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	60	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	each projection, strip-based approach	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	100	Depositor
Minimum defocus (nm)	2.5	Depositor
Maximum defocus (nm)	4.0	Depositor
Magnification	64000.0	Depositor
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum voxel value	161.085	Depositor
Minimum voxel value	134.865	Depositor
Average voxel value	146.917	Depositor
Voxel value standard deviation	1.126	Depositor
Recommended contour level	151.0	Depositor
Tomogram size ( $\text{\AA}$ )	624.4, 624.4, 624.4	wwPDB
Tomogram dimensions	140, 140, 140	wwPDB
Tomogram angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Grid spacing ( $\text{\AA}$ )	4.46, 4.46, 4.46	Depositor

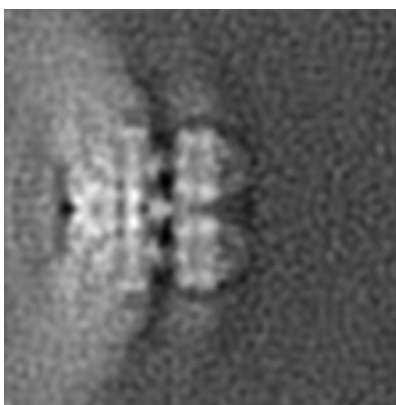
## 2 Tomogram visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3441. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

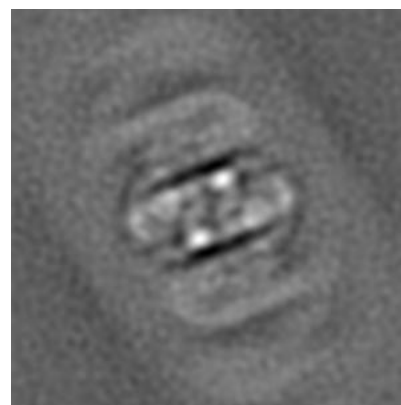
### 2.1 Orthogonal projections [i](#)



X



Y



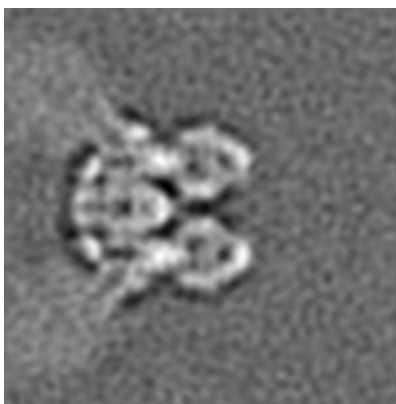
Z

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

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



X Index: 70



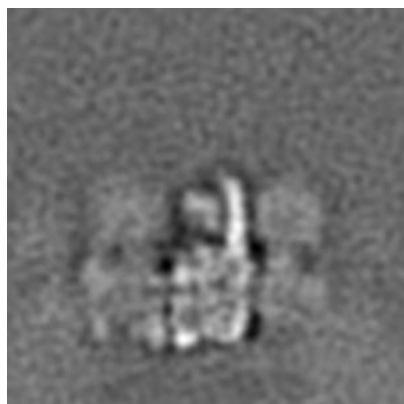
Y Index: 70



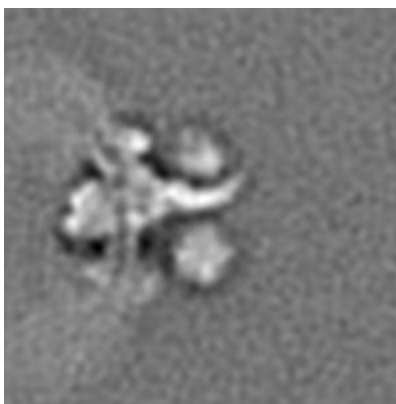
Z Index: 70

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

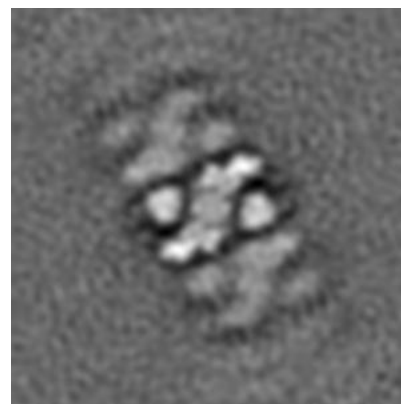
## 2.3 Largest variance slices [i](#)



X Index: 74



Y Index: 79



Z Index: 52

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

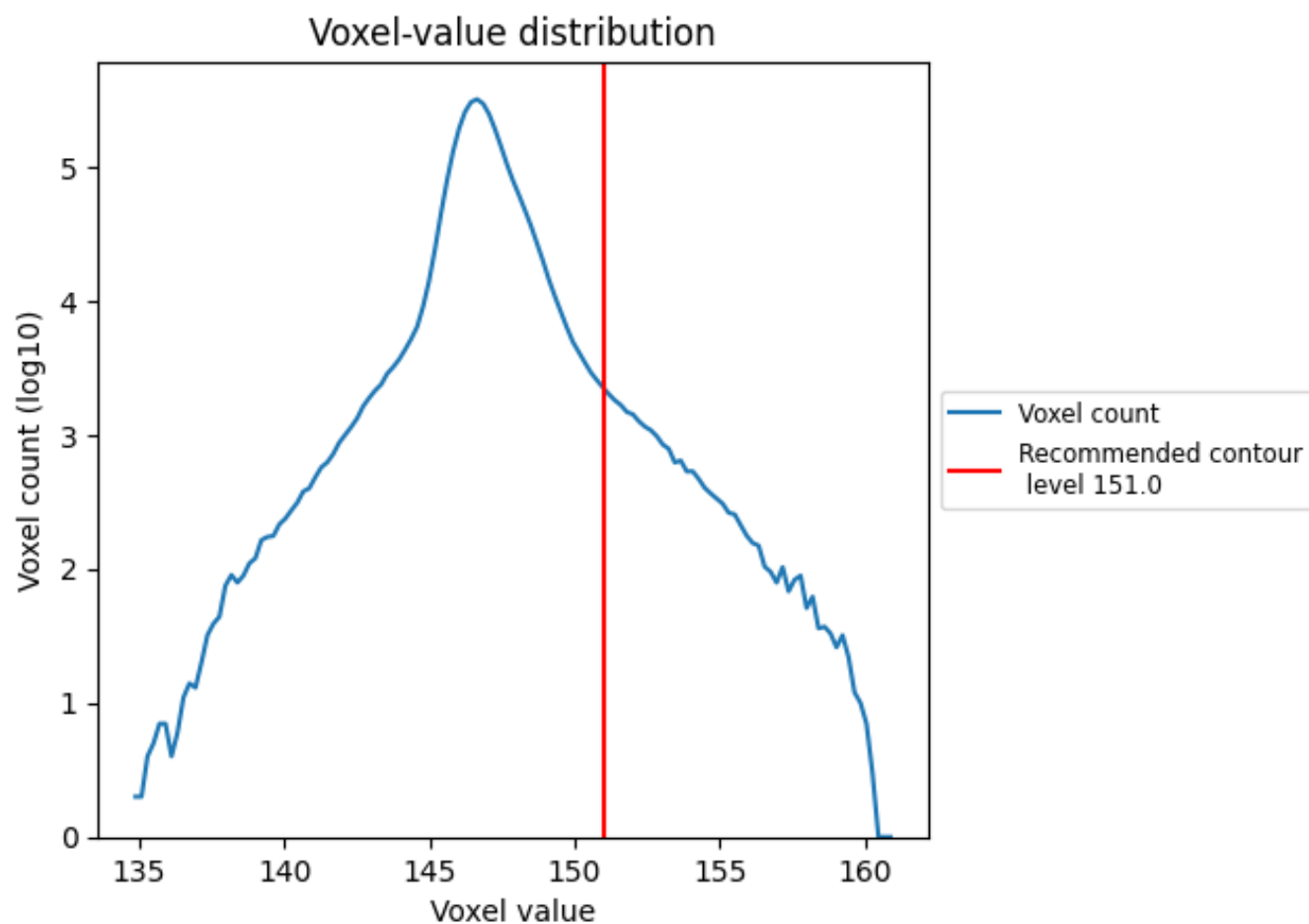
## 2.4 Mask visualisation [i](#)

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.