



Full wwPDB EM Validation Report ⓘ

Mar 17, 2026 – 08:58 PM UTC

EMDB ID : EMD-1001
Title : Real space refinement of acto-myosin structures from sectioned muscle.
Authors : Chen, L.F.; Blanc, E.; Chapman, M.S.; Taylor, K.A.
Deposited on : 2002-06-18
Resolution : 40.00 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 ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

EMDB validation analysis : 0.0.1.dev132
Validation Pipeline (wwPDB-VP) : 2.49

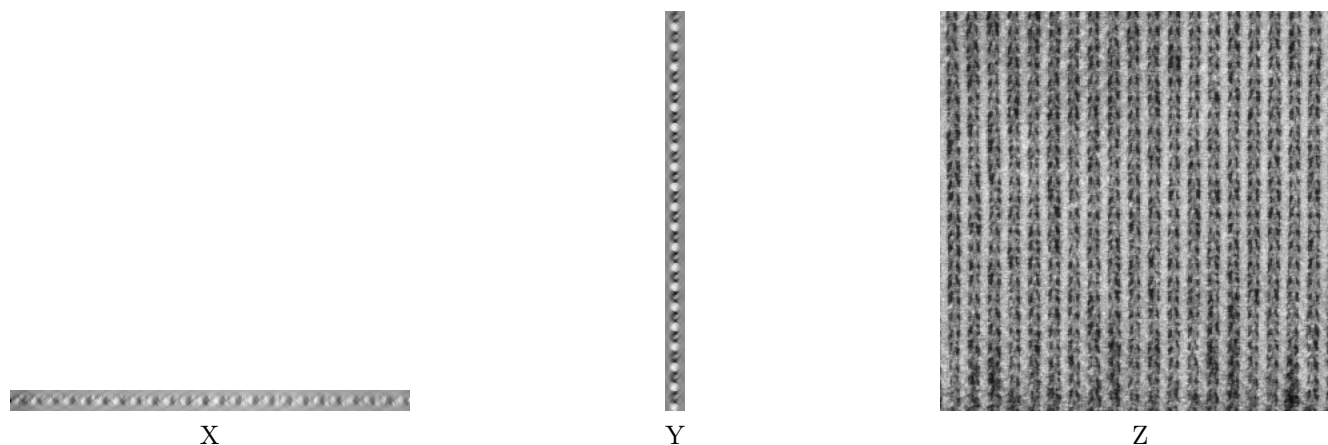
1 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	Not Provided	
Number of tilted images used	30	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	none	Depositor
Microscope	FEI/PHILIPS EM400	Depositor
Voltage (kV)	100	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	17000.0	Depositor
Image detector	Not provided	
Maximum voxel value	366.680	Depositor
Minimum voxel value	-417.992	Depositor
Average voxel value	1.860	Depositor
Voxel value standard deviation	47.792	Depositor
Recommended contour level	81.2	Depositor
Tomogram size (\AA)	9280, 9280, 464	wwPDB
Tomogram dimensions	600, 600, 30	wwPDB
Tomogram angles ($^\circ$)	90, 90, 90	wwPDB
Grid spacing (\AA)	15.4667, 15.4667, 15.4667	Depositor

2 Tomogram visualisation [i](#)

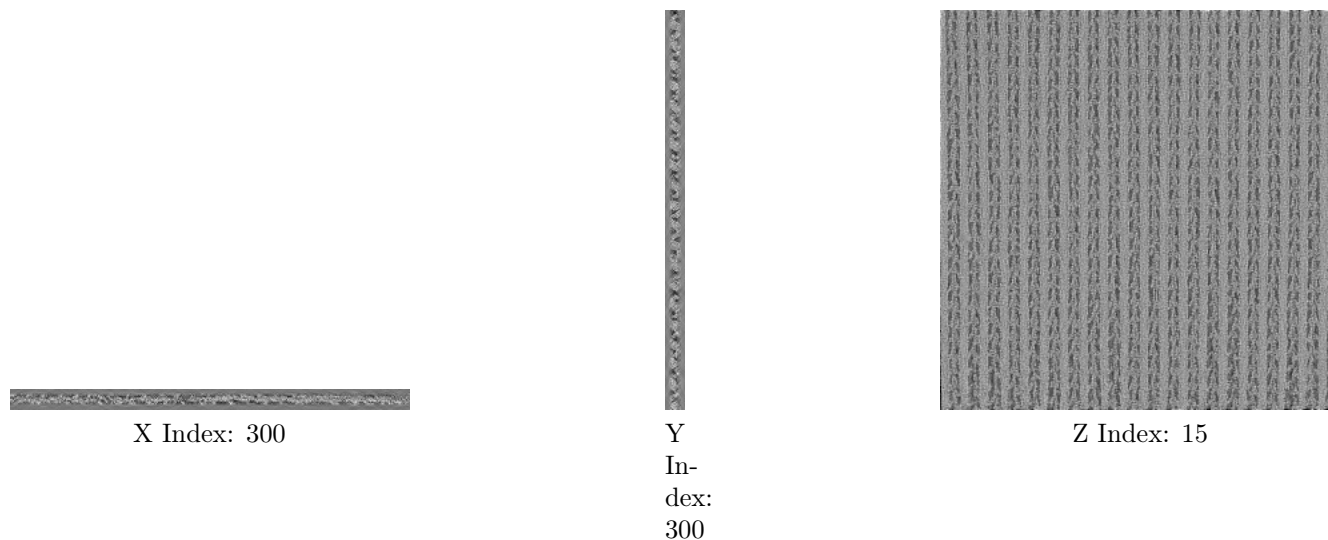
This section contains visualisations of the EMDB entry EMD-1001. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

2.1 Orthogonal projections [i](#)



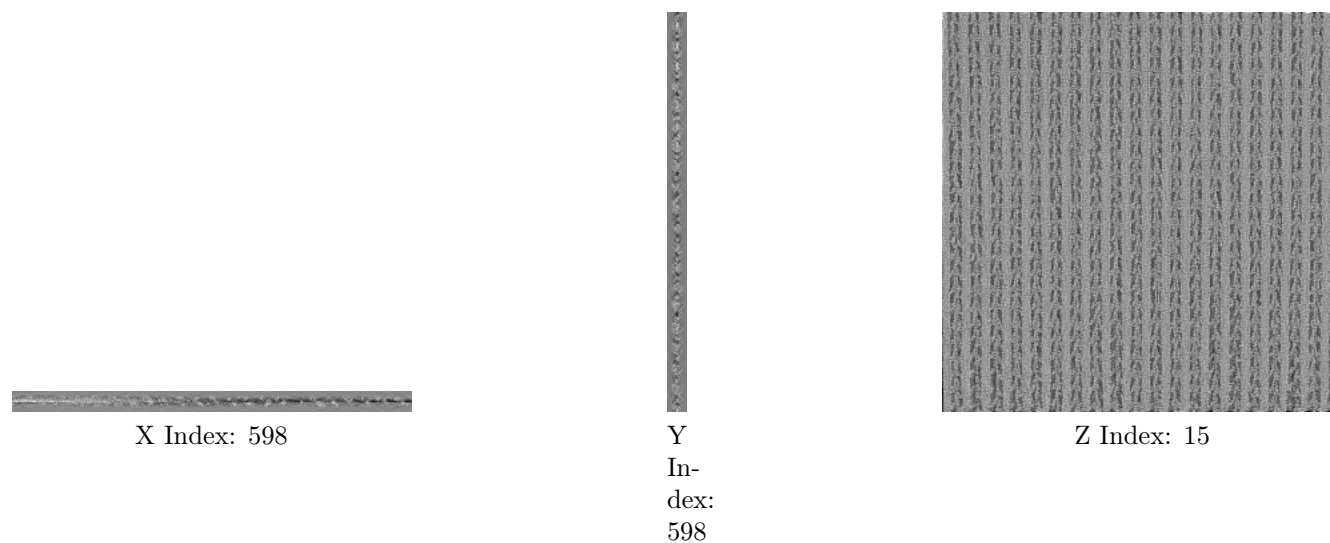
The images above show the tomogram projected in three orthogonal directions.

2.2 Central slices [i](#)



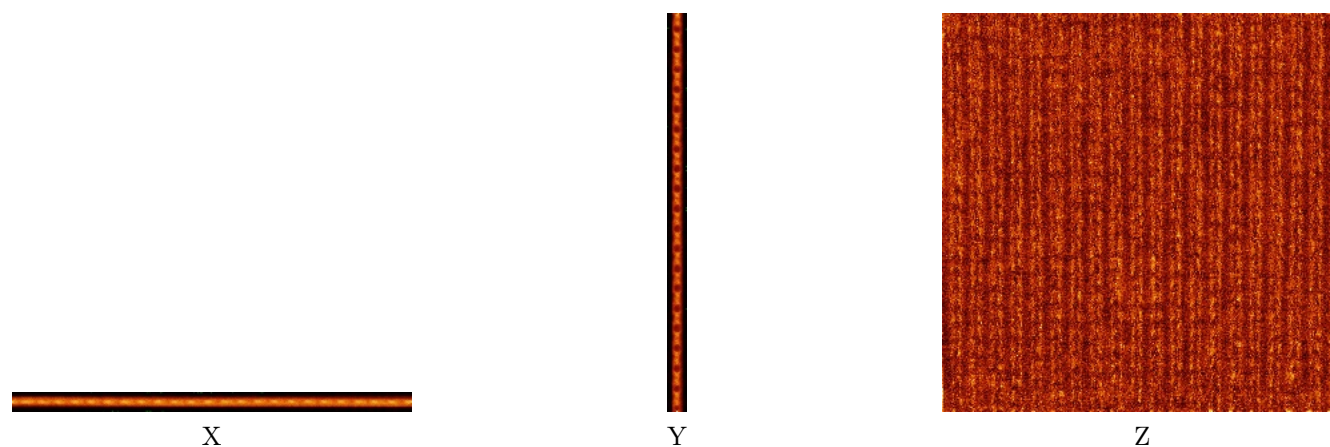
The images above show central slices of the tomogram in three orthogonal directions.

2.3 Largest variance slices [i](#)



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

2.4 Orthogonal standard-deviation projections (False-color) [i](#)



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

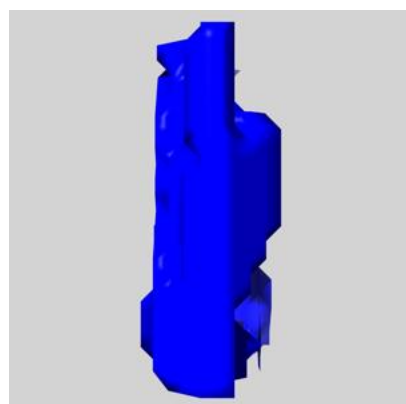
2.5 Mask visualisation [i](#)

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

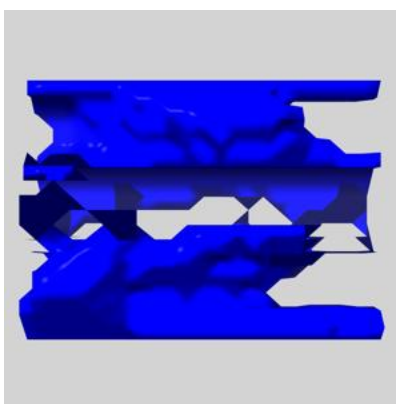
A mask typically either:

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

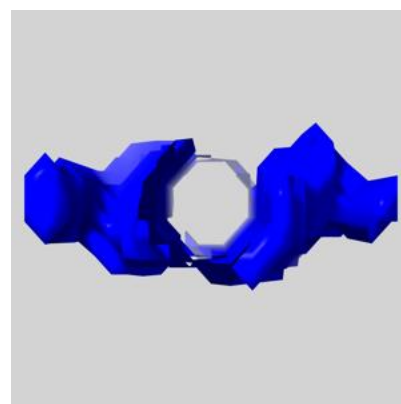
2.5.1 emd_1001_msk_25.map [i](#)



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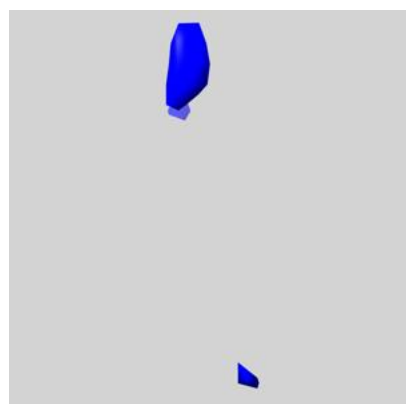


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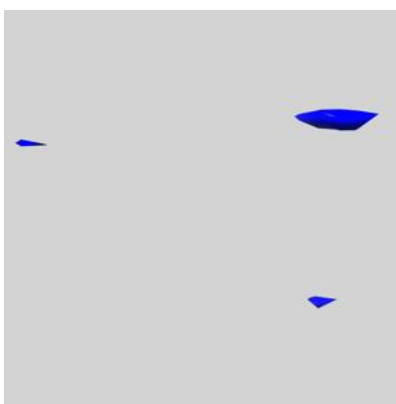


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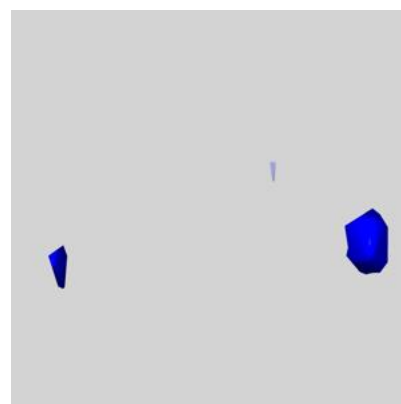
2.5.2 emd_1001_msk_24.map [i](#)



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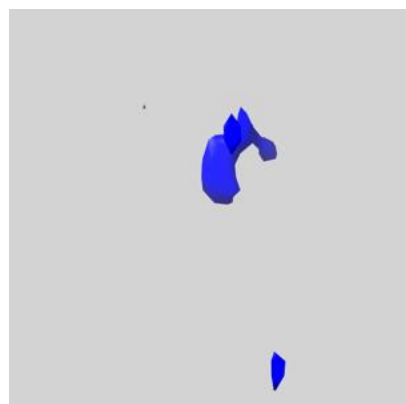


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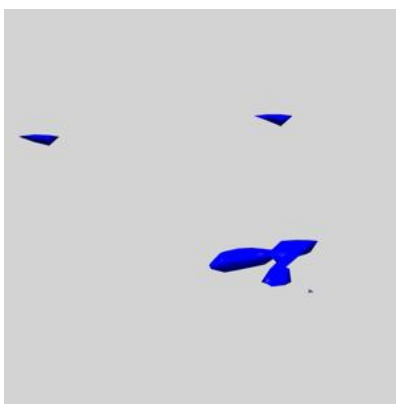


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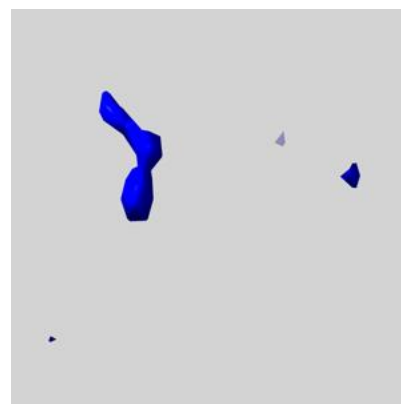
2.5.3 emd_1001_msk_23.map [i](#)



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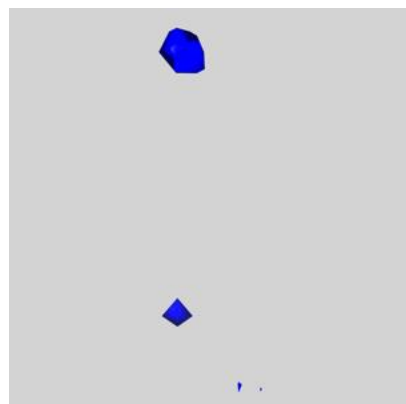


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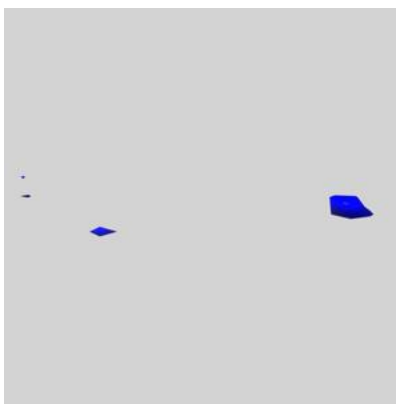


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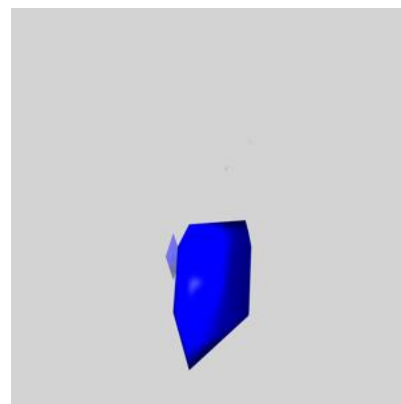
2.5.4 emd_1001_msk_22.map [i](#)



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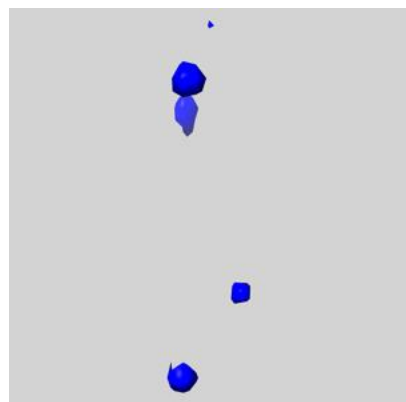


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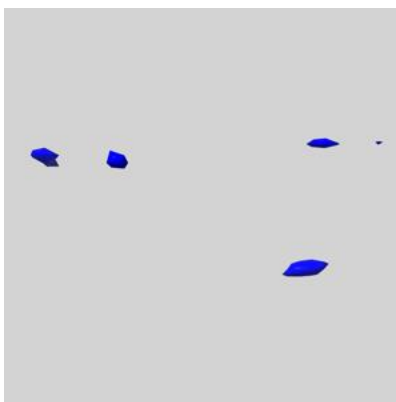


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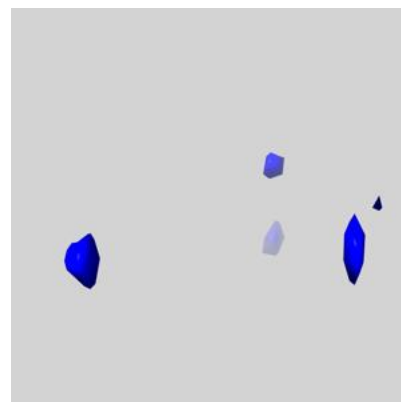
2.5.5 emd_1001_msk_21.map [i](#)



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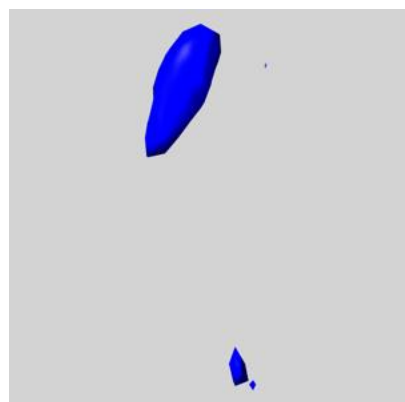


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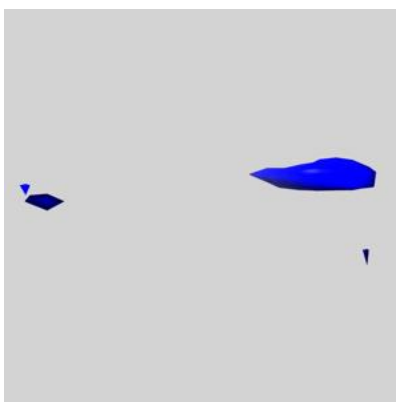


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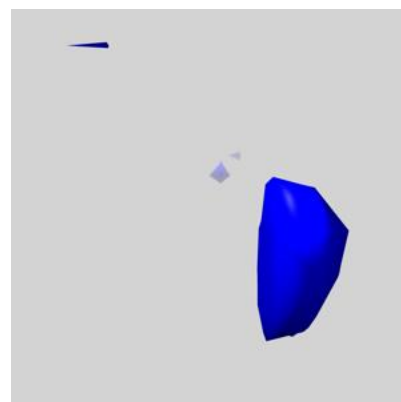
2.5.6 emd_1001_msk_20.map [i](#)



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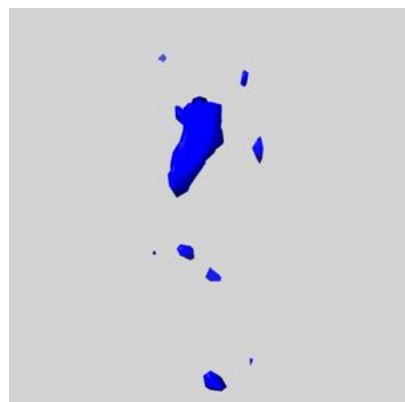


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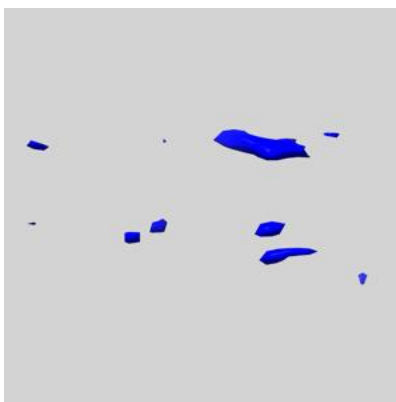


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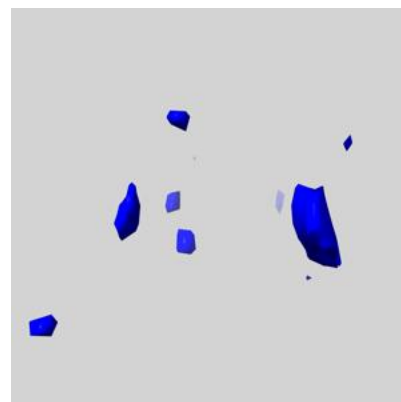
2.5.7 emd_1001_msk_19.map [i](#)



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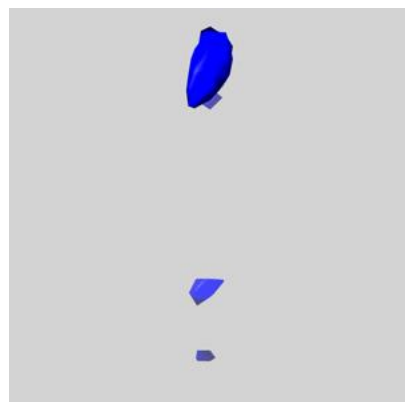


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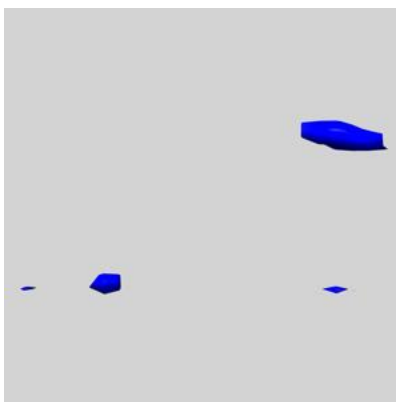


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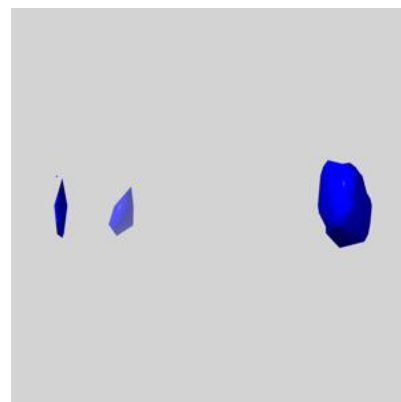
2.5.8 emd_1001_msk_18.map [i](#)



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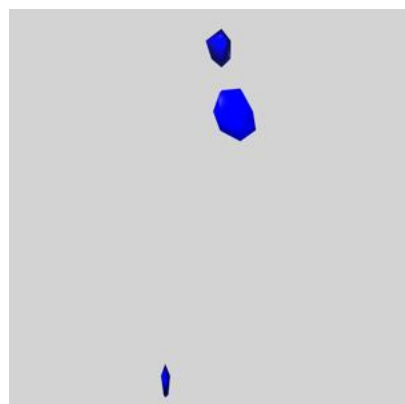


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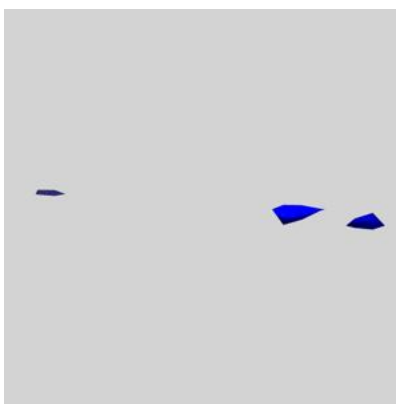


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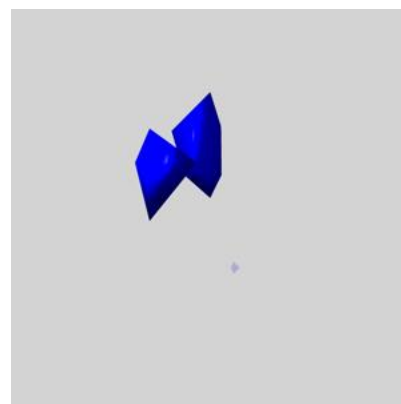
2.5.9 emd_1001_msk_17.map [i](#)



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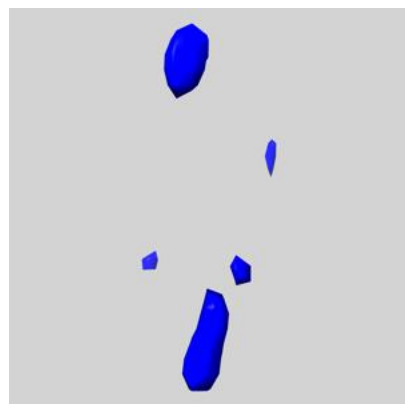


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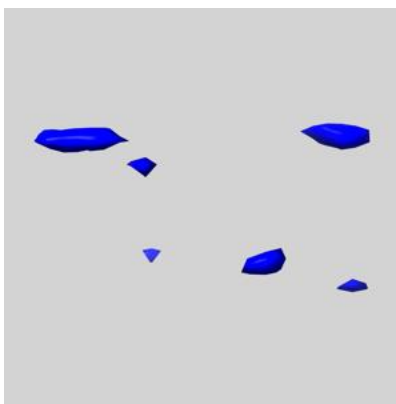


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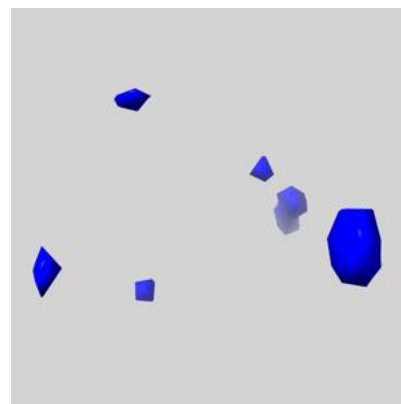
2.5.10 emd_1001_msk_16.map [i](#)



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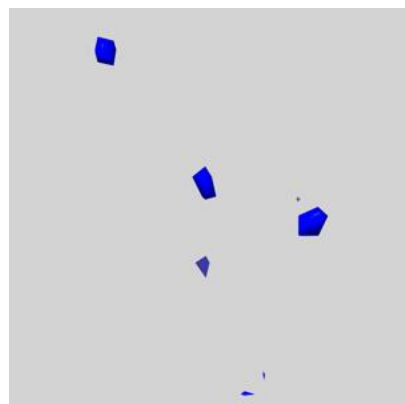


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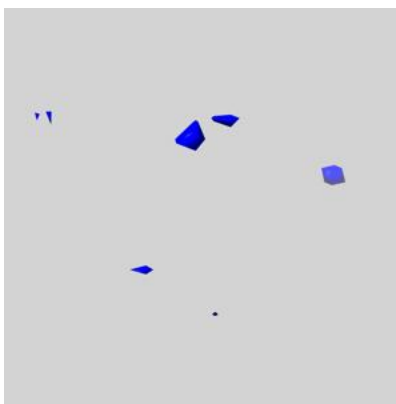


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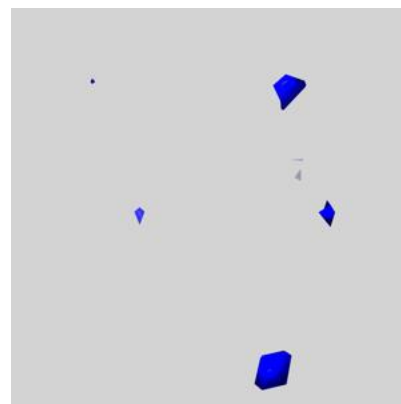
2.5.11 emd_1001_msk_15.map [i](#)



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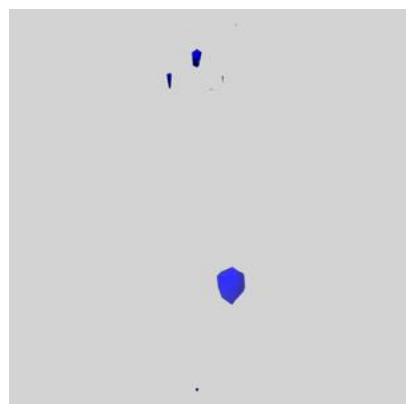


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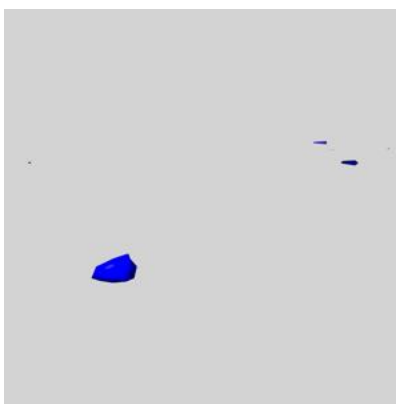


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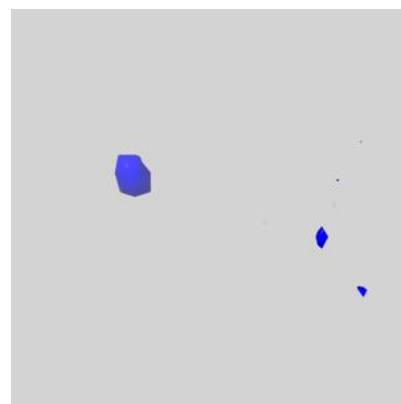
2.5.12 emd_1001_msk_14.map [i](#)



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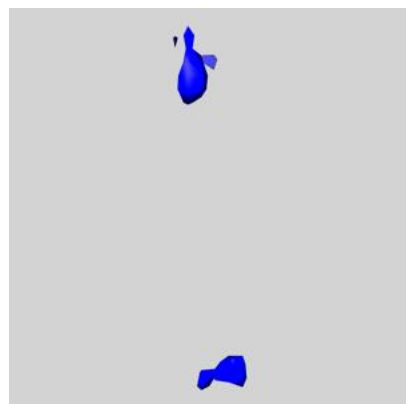


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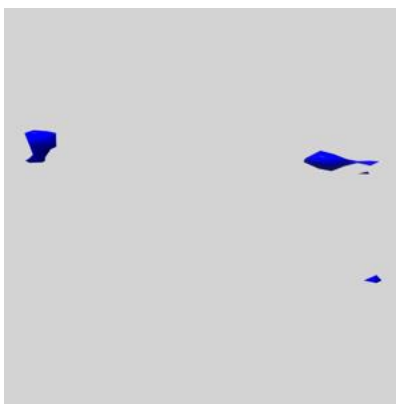


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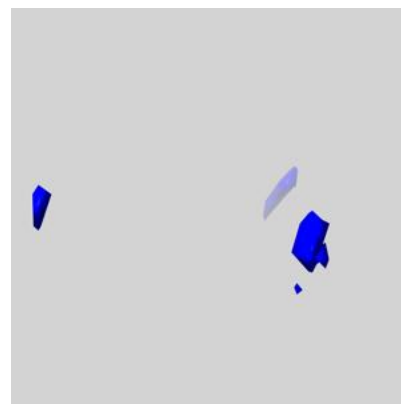
2.5.13 emd_1001_msk_13.map [i](#)



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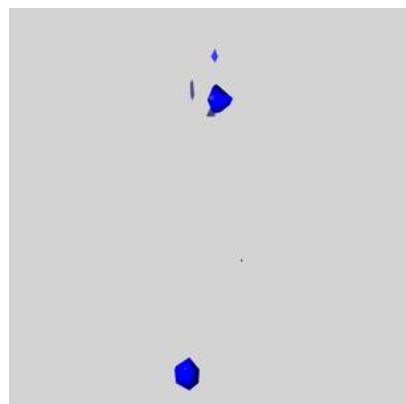


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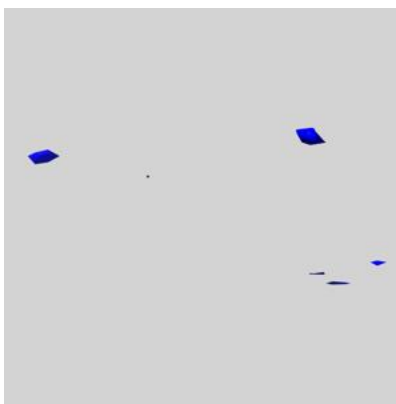


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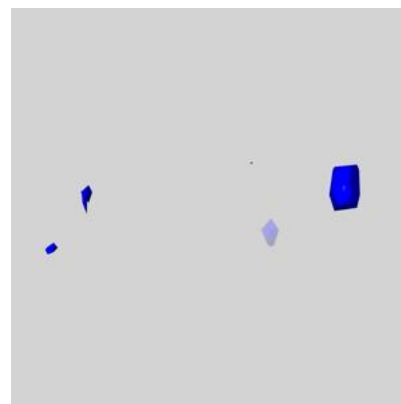
2.5.14 emd_1001_msk_12.map [i](#)



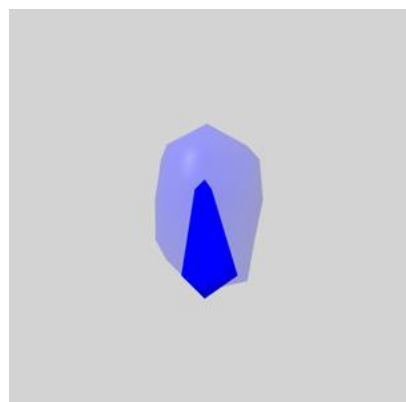
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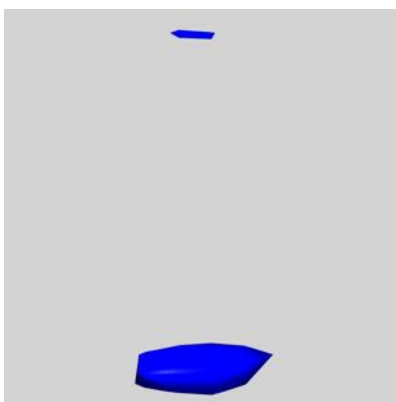
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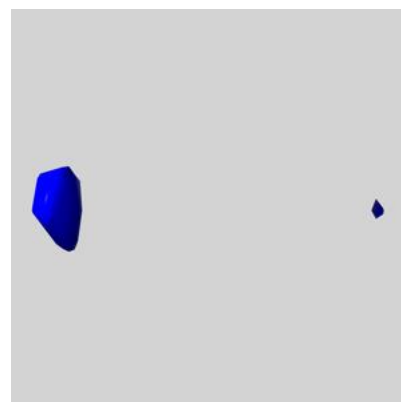
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2.5.15 emd_1001_msk_11.map [i](#)

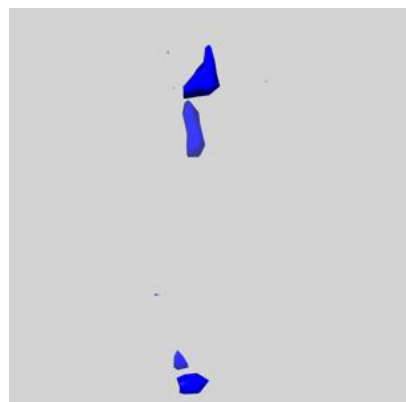
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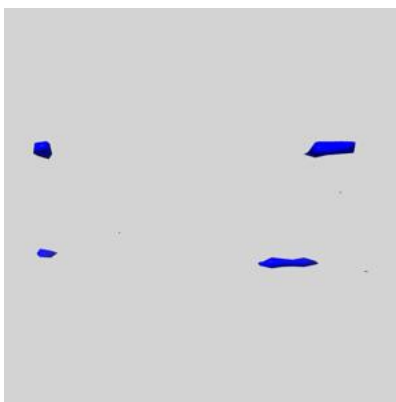
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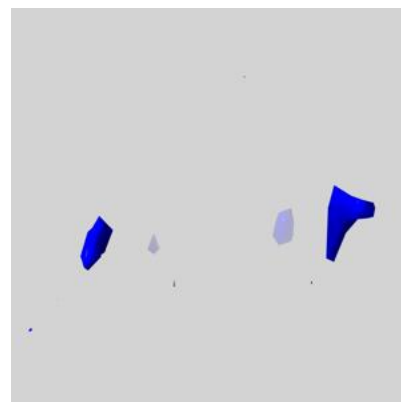
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2.5.16 emd_1001_msk_10.map [i](#)

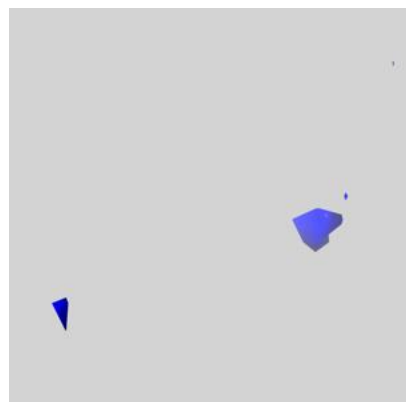
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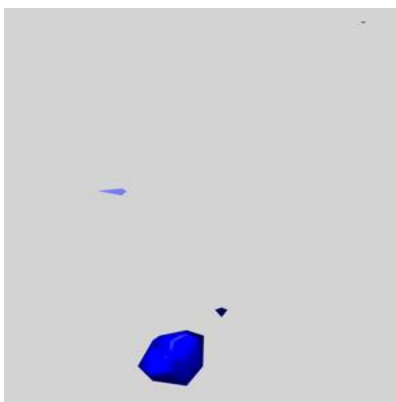
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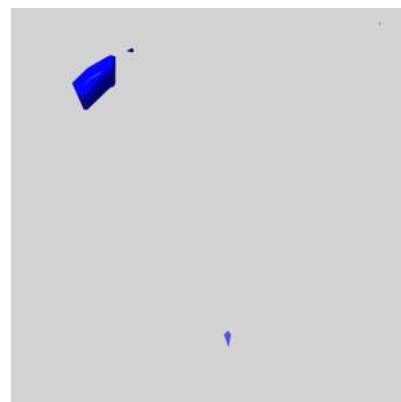
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2.5.17 emd_1001_msk_9.map [i](#)

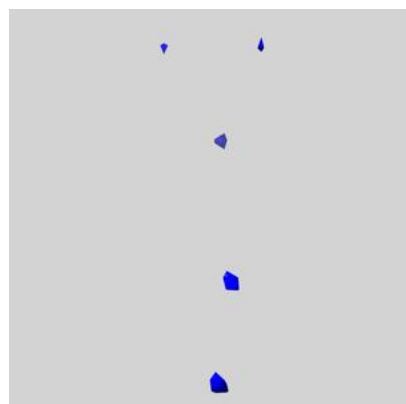
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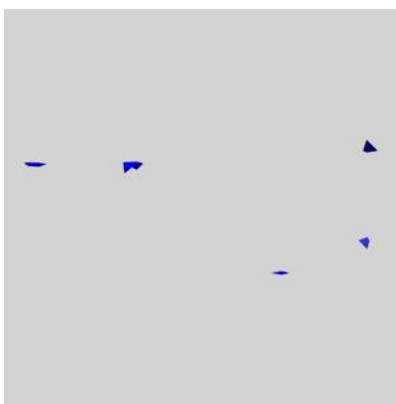
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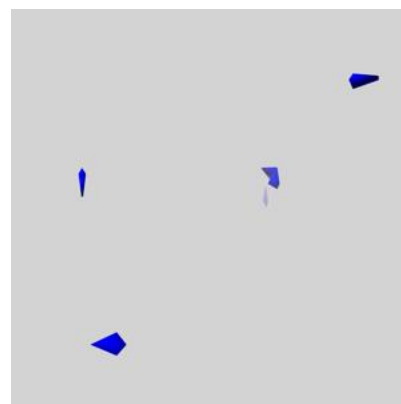
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2.5.18 emd_1001_msk_8.map [i](#)

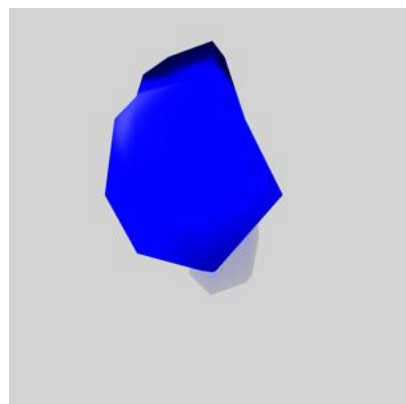
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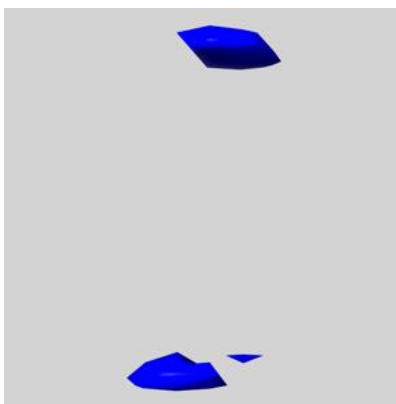
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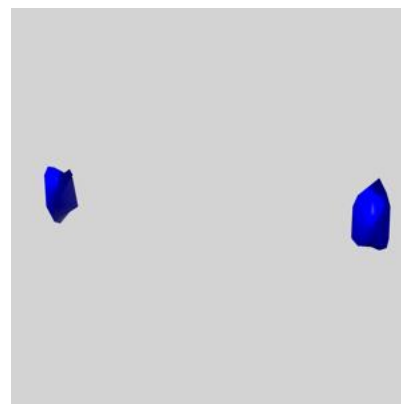
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2.5.19 emd_1001_msk_7.map [i](#)

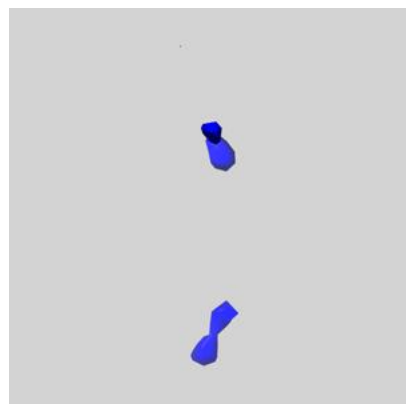
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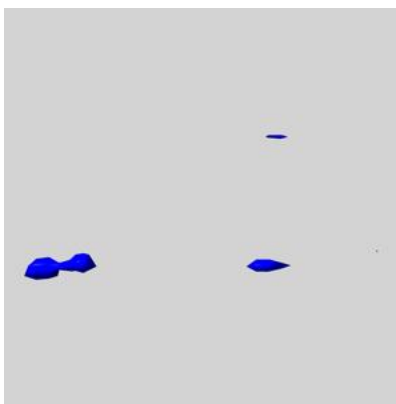
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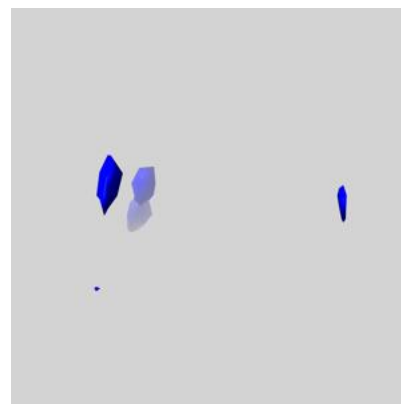
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2.5.20 emd_1001_msk_6.map [i](#)

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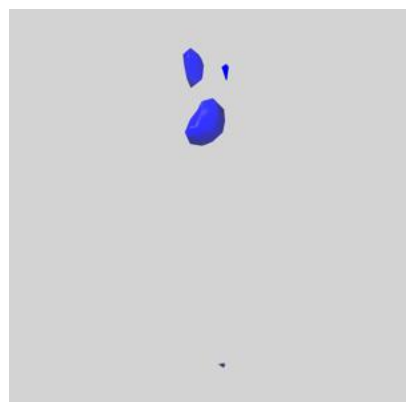


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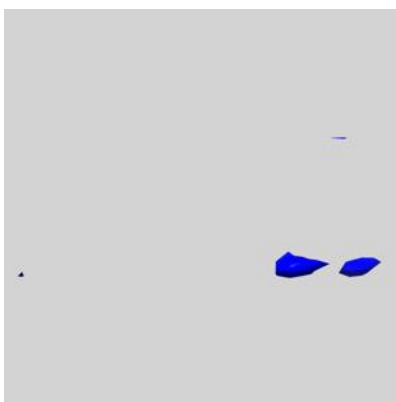


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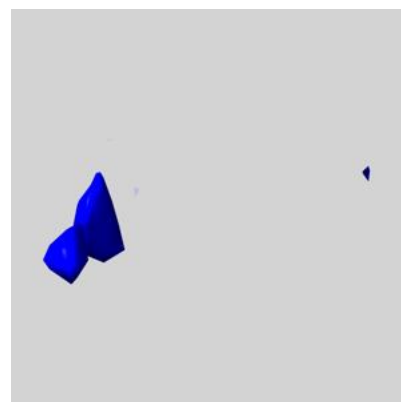
2.5.21 emd_1001_msk_5.map [i](#)



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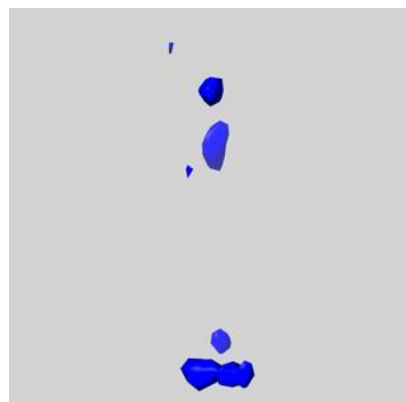


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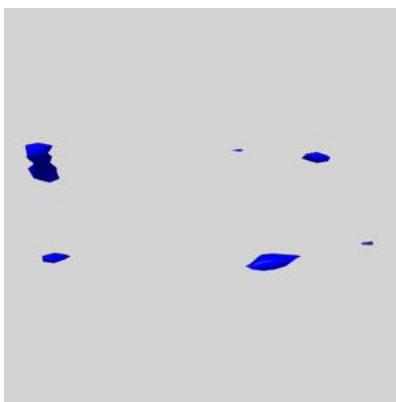


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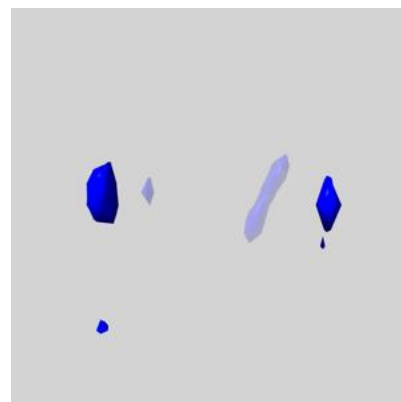
2.5.22 emd_1001_msk_4.map [i](#)



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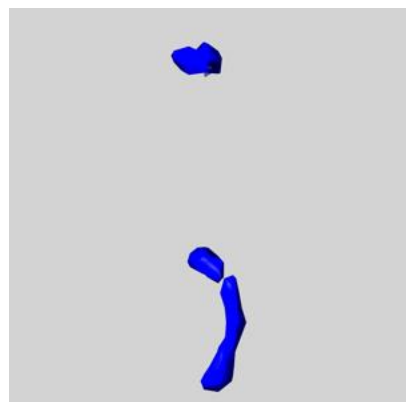


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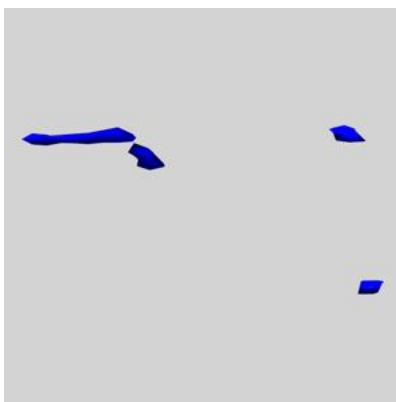


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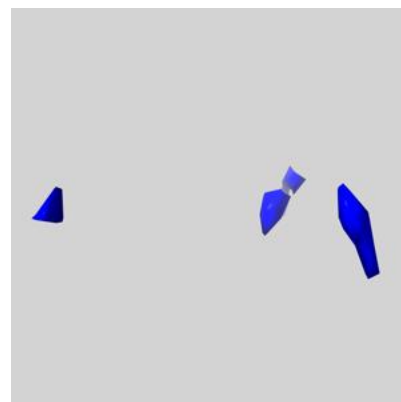
2.5.23 emd_1001_msk_3.map [i](#)



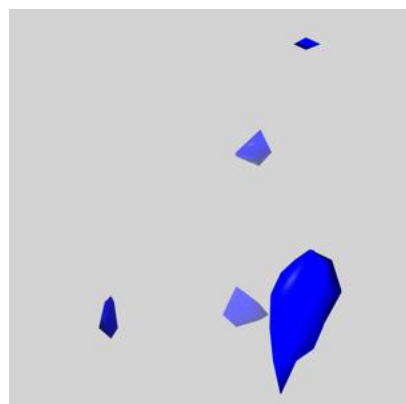
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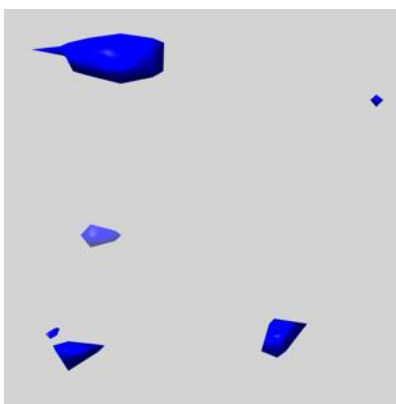
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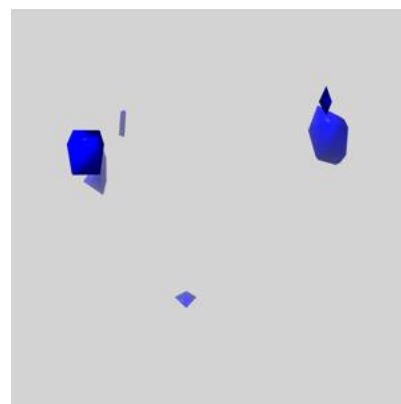
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2.5.24 emd_1001_msk_2.map [i](#)

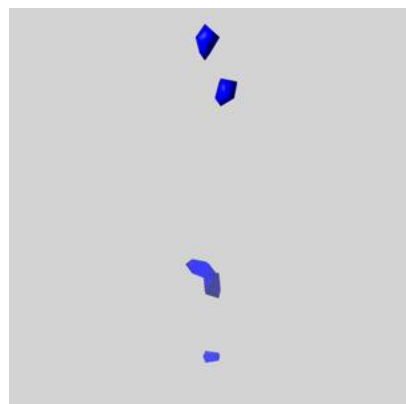
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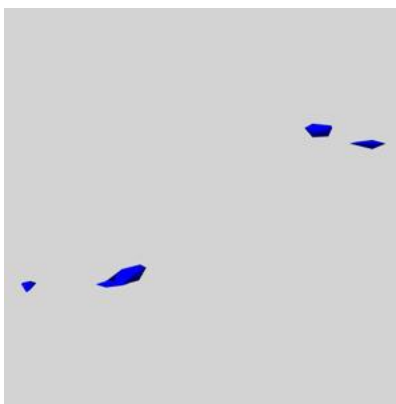
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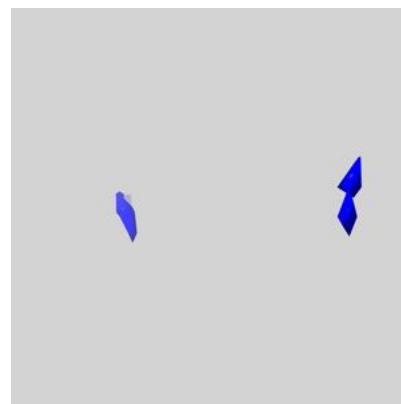
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2.5.25 emd_1001_msk_1.map [i](#)

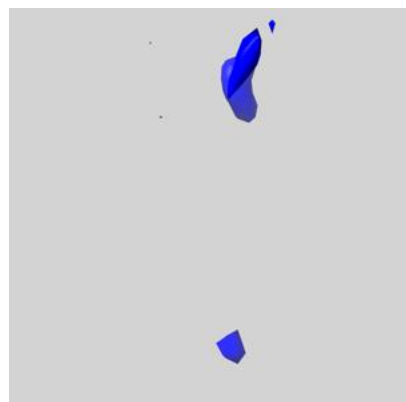
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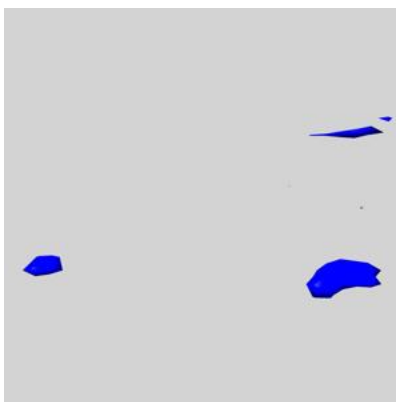
Y



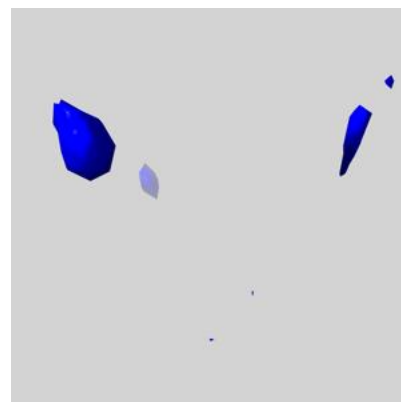
Z

2.5.26 emd_1001_msk_26.map [i](#)

X



Y

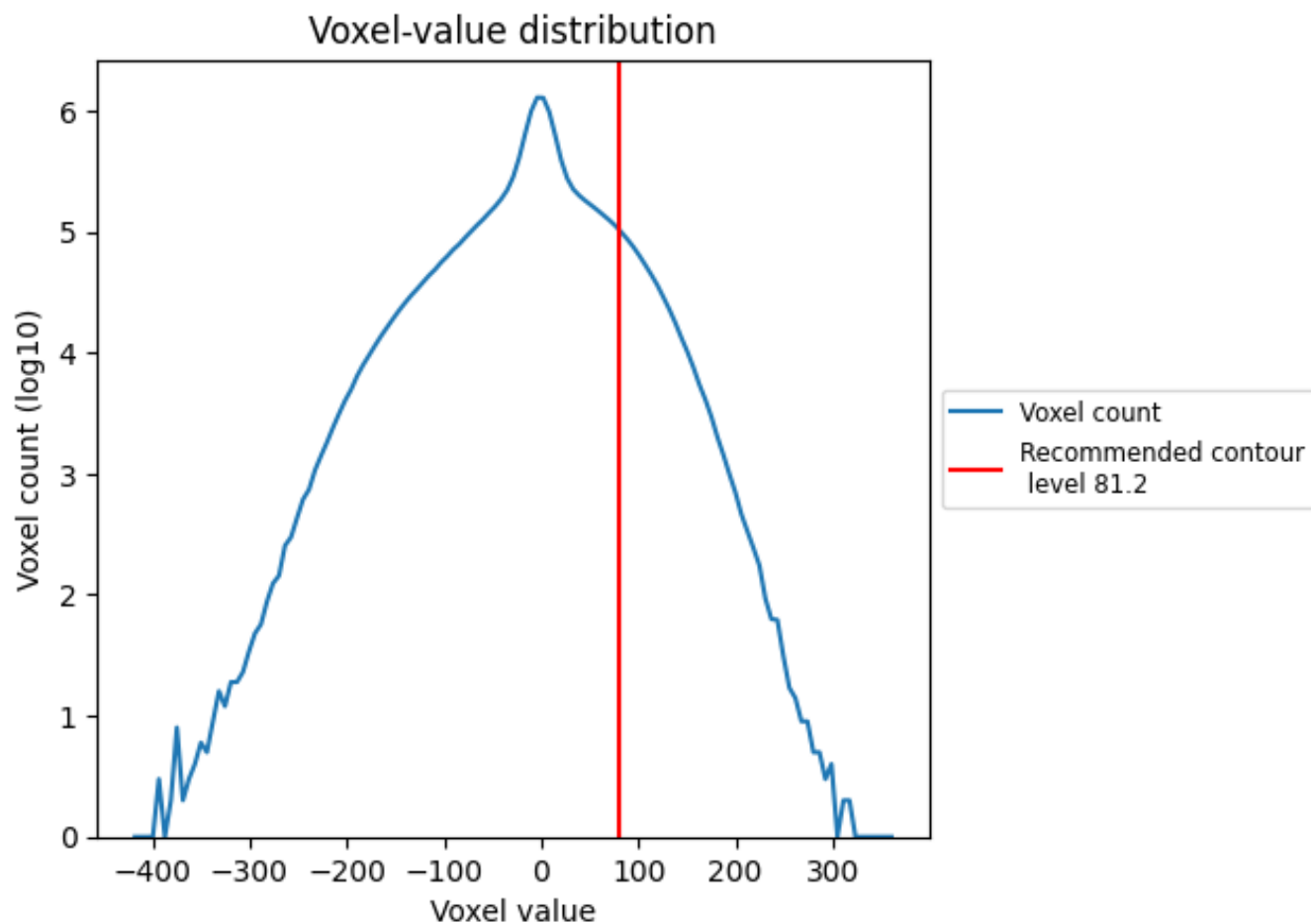


Z

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.