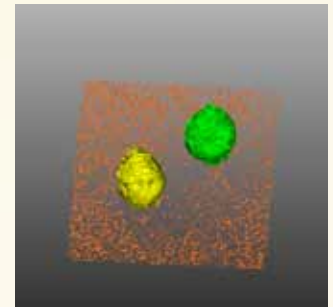
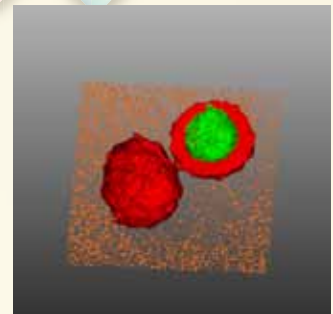
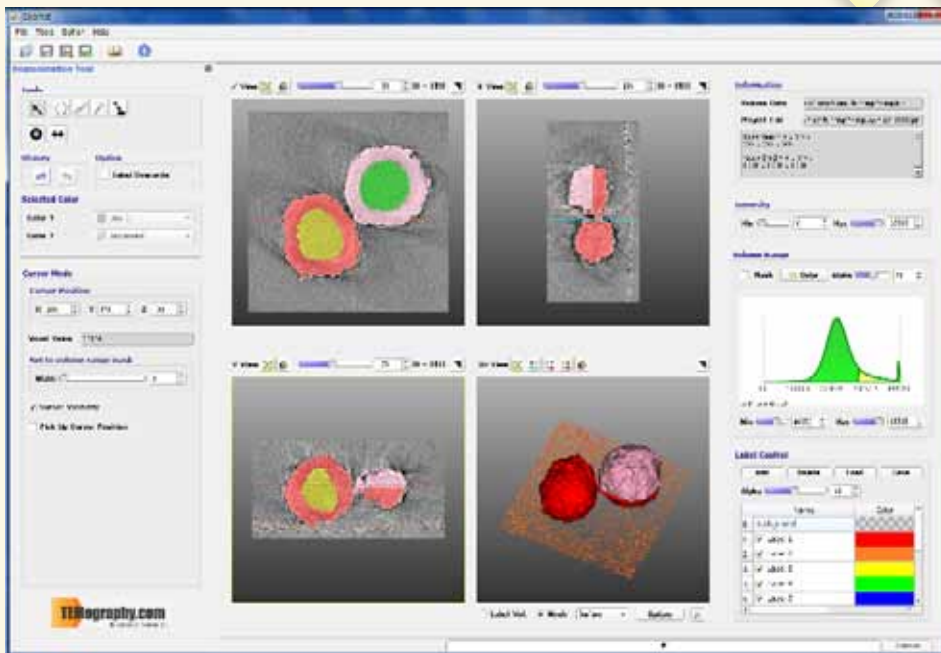


Colorist

Overview

Segmentation refers to a function that extracts arbitrary regions of interest (organization and structure) from Volume data acquired from electron beam tomography or a serial section SEM. It is an essential function for structural analysis. However, even when segmentation is performed using only threshold adjustment of the intensity information, since most Volume data does not contain sufficient intensity variation between regions of interest and surrounding areas, it is not possible to attain the desired results. Therefore, in the past, it was necessary to perform extraction based on a knowledge of the shape characteristics, which took considerable work even when special software was used. Colorist is a software application that was developed to resolve this problem. A well-thought-out user interface along with advanced automation tools allow for instinctive operation to quickly extract regions of interest.



Compatibility with Visualizer-Kai

Colorist has a function for exporting entire regions of interest as Volume data in addition to exporting the contour of the region as Mesh data similar to conventional segmentation software. Both types of data can be displayed using Visualizer-Kai, so it is possible to use the length-measuring function in Visualizer-Kai along with its esteemed movie creation function.

Difference with Visualizer-Kai

A segmentation function is included in the Visualizer - Kai TEMography Suite Visualization software, but it was developed for Volume segmentation, so it is not ideal when extracting multiple regions of interest. Colorist makes it possible to extract up to 255 independent regions of interest at one time, which allows for efficient segmentation work.

Features

- Mask function using Volume intensity

Using the intensity, it is possible to limit the region where labeling is performed. This allows color coding to be performed using the drawn Volume data. The region that can be color coded is visualized, which makes it easy to confirm the range that can be selected. This function can be used for various segmentation tools that will be mentioned later.

- Various segmentation tools

- Cursor Mode

This allows you to easily specify an arbitrary Slice position. You can also display the Voxel Value for a specified position.

- Polygon Mode

When you click on a Viewer, a point is made and a straight or curved line is drawn automatically. This allows you to select the region inside the lines.

- Brush Mode

Two types of brush styles are available. You can also change the brush size. This allows you to paint colors freely similar to a paint application.

- Magic Wand Mode

When you click on a slice, a connected region within the intensity range set in the Voxel Value is automatically selected. (Compatible with 2D and 3D)

- Morphing Mode

Different shapes are set at the starting position and end position for the Slice surface in the same direction. This allows you to select a region while changing the shape from the start position to the end position.

- Fill Hole Mode

This allows you to fill small holes with a specified color, or to delete small particles. (Compatible with 2D and 3D)

- Label Color Change Mode

This allows you to perform batch conversion of a specified label to another label. (Compatible with 2D and 3D)

- Measurement and export of Volume capacity, Slice area, and Mesh area

- SnapShot Function

- Input/Export Formats

Input :

Visualizer-Kai : Bin(Volume)

Volume : Mrc, Rec

Images : Tiff, Multi-Tiff, Bmp, Jpeg, Png

Export :

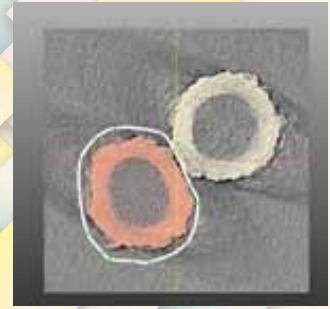
Visualizer-Kai : Bin (Volume/Mesh)

Volume : Mrc, Rec, Raw

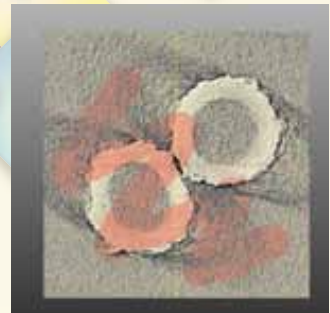
Images : Tiff, Multi-Tiff, Bmp, Jpeg, Png

Mesh Model : STL

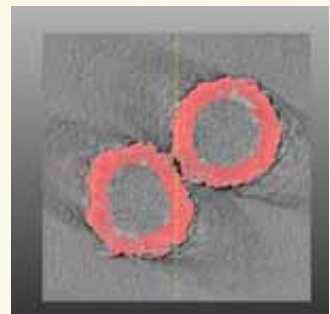
3D Scene : X3D, WebGL, VRML, OBJ



Polygon Mode



Brush Mode



Magic Wand Mode

System Configuration

OS : Windows 7, 8, and 8.1 (64 bit recommended)

Graphics : Products by NVIDIA recommended

Memory : At least 2 GB

Monitor : 1920×1200 recommended

Contact

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