

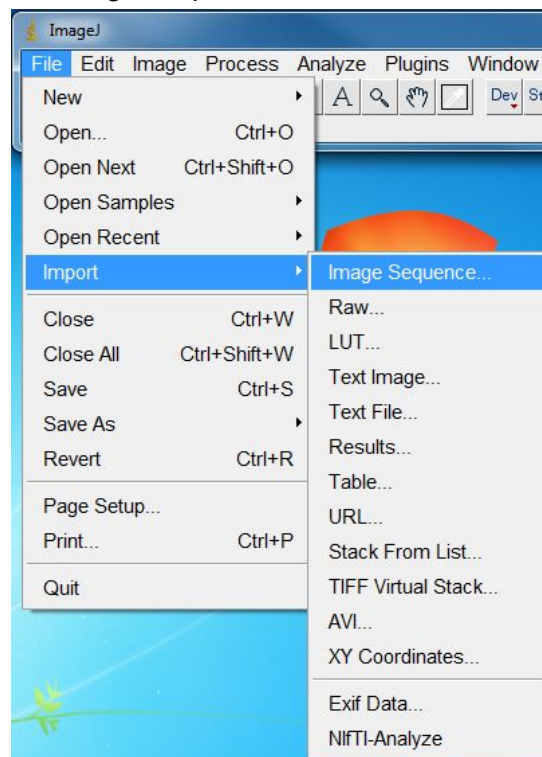
# Edited Imagej Volume Viewer Plugin and Macro to Automate Rotations and Add Noise User Manual:

## A. One Time Setup

- a. Note: Java 8 required, otherwise it the Volume\_Viewer jar file will need to be recompiled.
- b. Install ImageJ.
- c. Copy Volume\_Viewer.jar into {Install location}/plugins/3D.
- d. Copy volume\_viewer\_automater.ijm into {Install location}/macros.

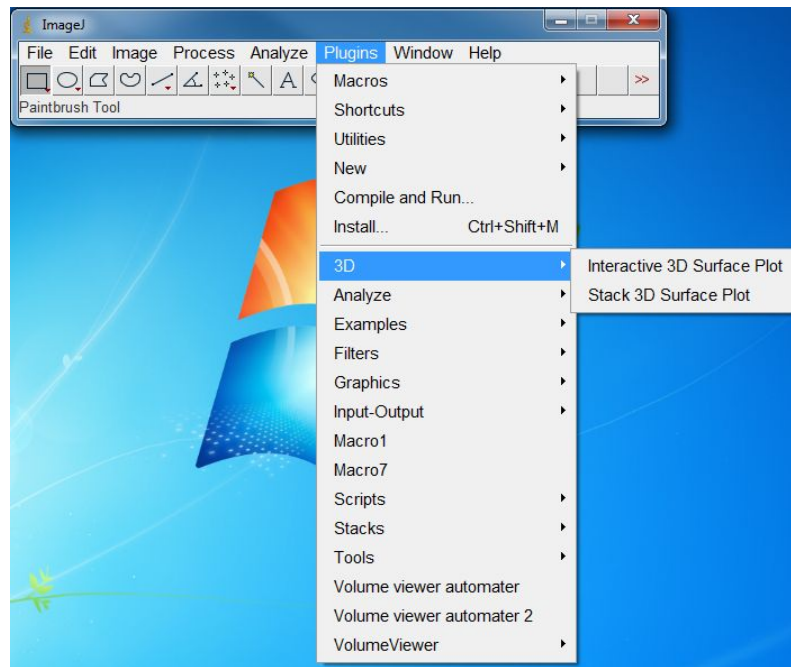
## B. Run Volume Viewer For Display

- a. Open ImageJ
- b. Go to file->Import->Image Sequence

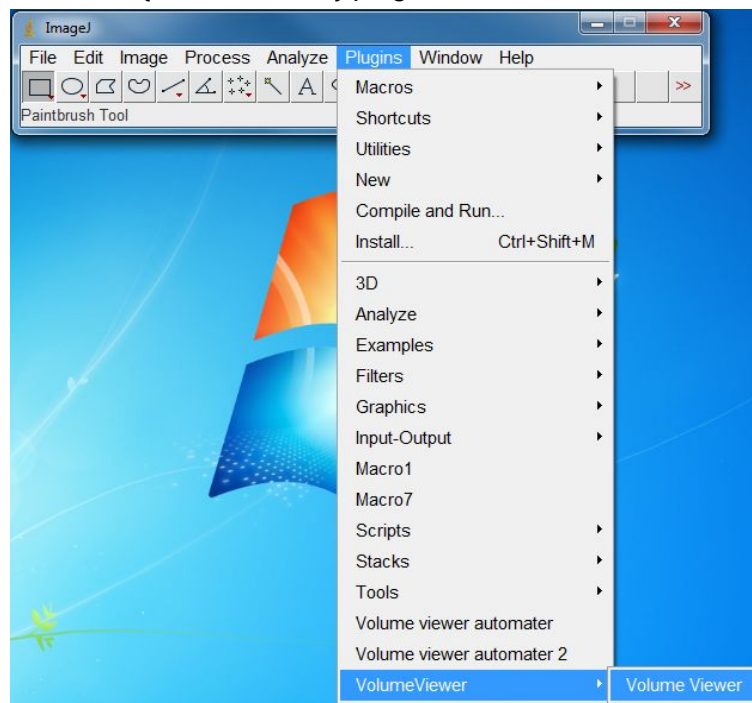


- c. A window will pop up. Select a folder with images to load.

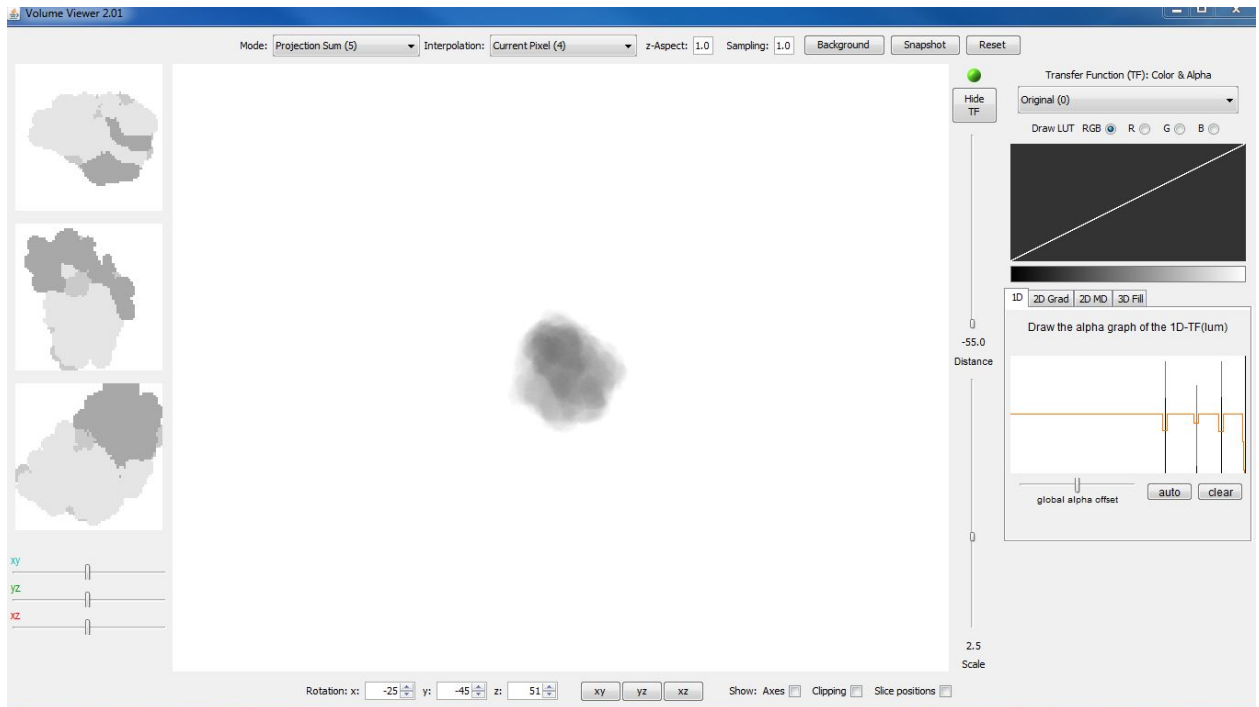
- d. Look in {install location}/plugins/3D for Volume Viewer:



- e. Otherwise look in {install location}/plugins/VolumeViewer for Volume Viewer:



## f. Open Volume Viewer

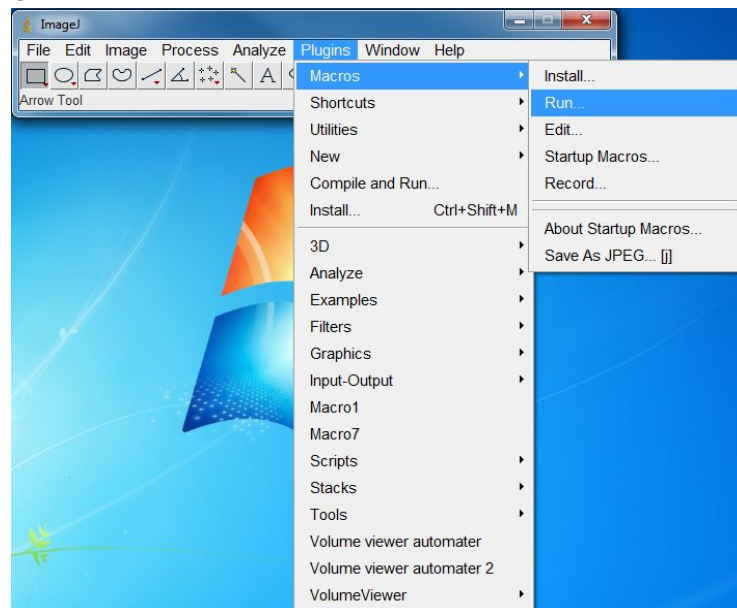


Use Projection Sum (5) as Mode and Current Pixel as Interpolation

For more on Volume Viewer goto: <http://rsb.info.nih.gov/ij/plugins/volume-viewer.html>

## C. Run Volume Viewer Macro

- Open ImageJ
- Goto Plugins->macros->Run...



- c. A window will pop up. Goto {install location}/macros/, select volume\_viewer\_automater.ijm, and click open.
- d. A window will pop up. Select the folder with the image stack to be rendered.
- e. A window will pop up. Select the folder where you would like the rendered images to be stored.
- f. Once the macro is done, the progress bar in ImageJ will disappear. The images will be found in the folder you chose for the rendered images to be stored. There will be 3 subfolders:
  - i. gsn\_0 for 0% gaussian noise,
  - ii. gsn\_25 for 25% gaussian noise
  - iii. gsn\_50 for 50% gaussian noise.

Each subfolder will contain 2 subfolders:

- 1. plain for no salt and pepper
- 2. sandp for salt and pepper

Each file will be named: Plot\_degreeX\_degreeZ.png

The current configuration generates 144 images in each folder or 864 images.

For more on macros: <http://rsb.info.nih.gov/ij/developer/macro/macros.html>

For more on ImageJ: <https://imagej.nih.gov/>