

NeuroTracker3D Demo Guide

1. Download and Install the latest version of Fiji, or download and unzip the version of Fiji that comes with this version of NeuroTracker3D.
2. Ensure the following plugins are properly installed:
 - a. TransformJ
 - b. 3D Image Suite
 - c. Diffraction PSF 3D
 - d. DeconvolutionLab2
3. Open Fiji
4. Run Macro Tool: Plugins → New → MacroTool
5. In Macro Tool, open all macros contained in the “Macros” folder of NeuroTracker3D, except FilteringFunction.ijm
6. Run Filtering.ijm and examine results to see if Median or Gaussian (or any other filtering technique) is best for your dataset
7. Run NeuroTracker3D.ijm, select your input and output folders and follow the instructions
8. OPTIONAL: Run PSFFigures.ijm to generate summary figures for the generated PSF
9. OPTIONAL: Run SNR.ijm to determine SNR values for any of the deconvoluted (but not segmented stacks) generated by NeuroTracker3D.
10. Run each section of the MATLAB script:
‘NeuroTracker3D_SegmentationAndDeconvolution_Analysis.m’