

How to open the 3DEM series “VYLNH_20181017.ser”

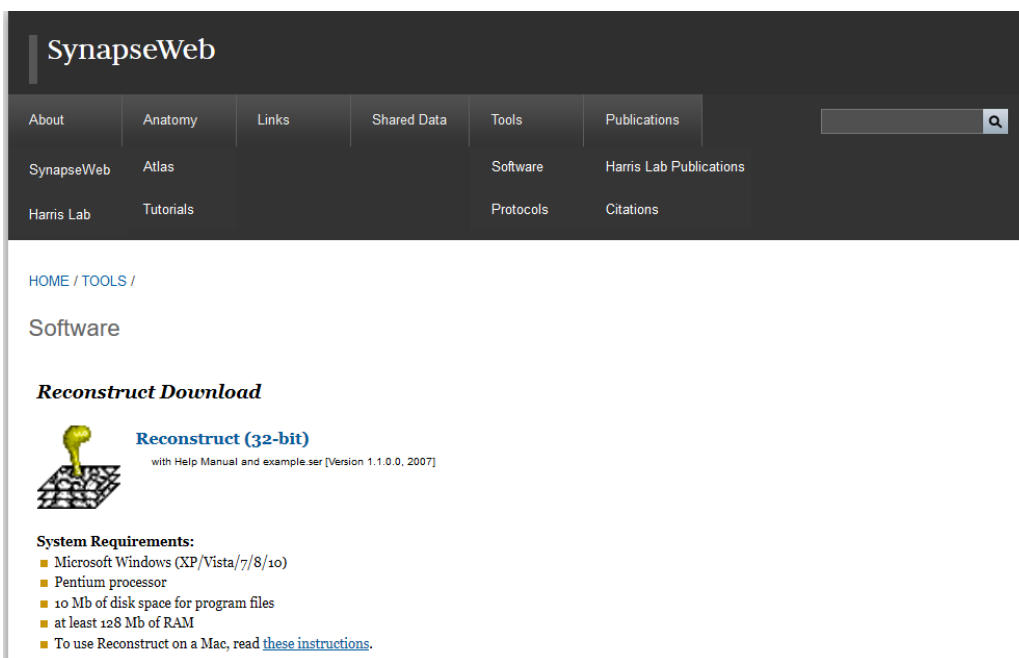
About this series:

This series consists of 72 serial tSEM images acquired from the hippocampal area CA1 (stratum radiatum) from an acute slice prepared from a mouse injected with rAAV to express Chr2-GFP and mAPEX2. How this data set was prepared is described in the manuscript entitled: “Ultrastructure of light-activated axons following optogenetic stimulation to produce L-LTP”.

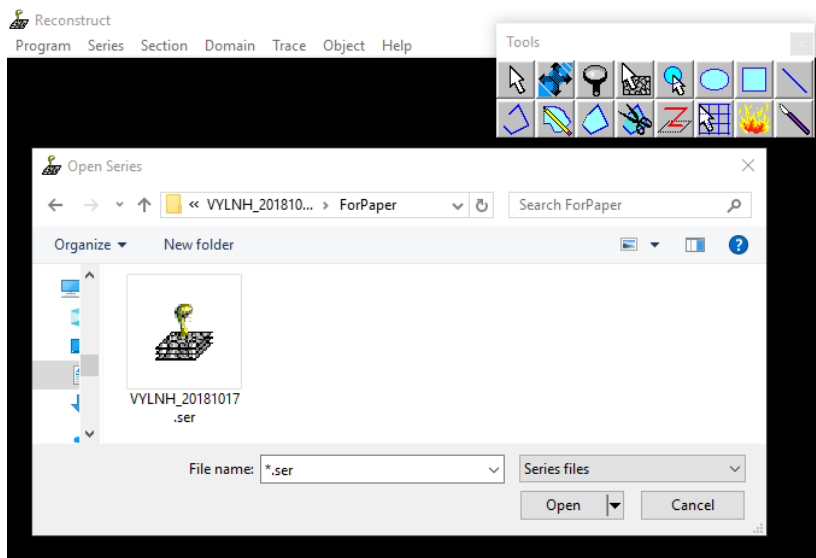
In addition to the serial tSEM images, the series consists of 2 other image files (calibration grid and gold particles), trace files for each section (“VYLNH_20181017.integar”), and the Reconstruct series file “VYLNH_20181017.ser”.

How to open the series using Reconstruct:

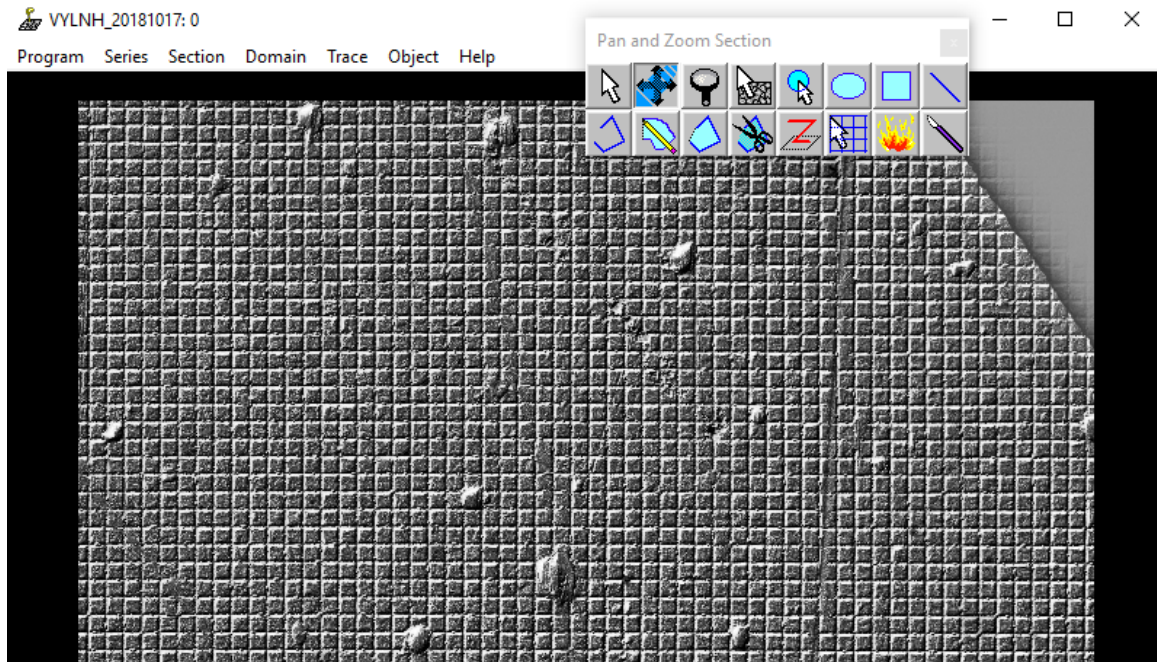
1. Download and unzip the file “VYLNH_20181017.zip” on a Windows computer. Keep all files within a single folder.
2. Go to <http://synapseweb.clm.utexas.edu/software-0>. Download and install Reconstruct.




3. Launch Reconstruct. Go to Series > Open to open “VYLNH_20181017.ser”.



4. You should see something like this:



5. Use mouse wheel or “PgUp” and “PgDn” keys to scroll through serial EM images.

6. Use “Pan and Zoom Section” tool  to navigate within an image.
- Hold left mouse button and move the mouse to pan.
 - Hold right mouse button and move the mouse toward/away from you to zoom in and out, respectively.

7. Quantitative data can be accessed in objects list (Object > List objects...).