

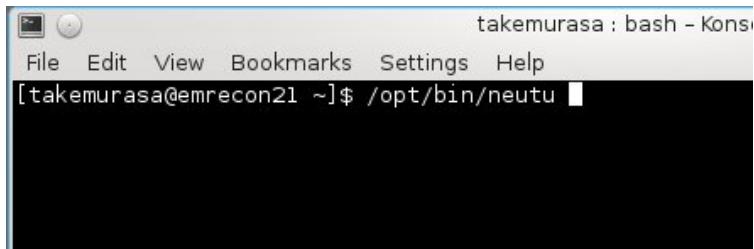
NeuTu Proofreading
Quick Start Guide for First-time Users

Satoko Takemura
Pat Rivlin

August 5, 2017

This guide is written for new users to simply start using the software, and includes recommended references to the more detailed NeuTu Proofreading Manual.

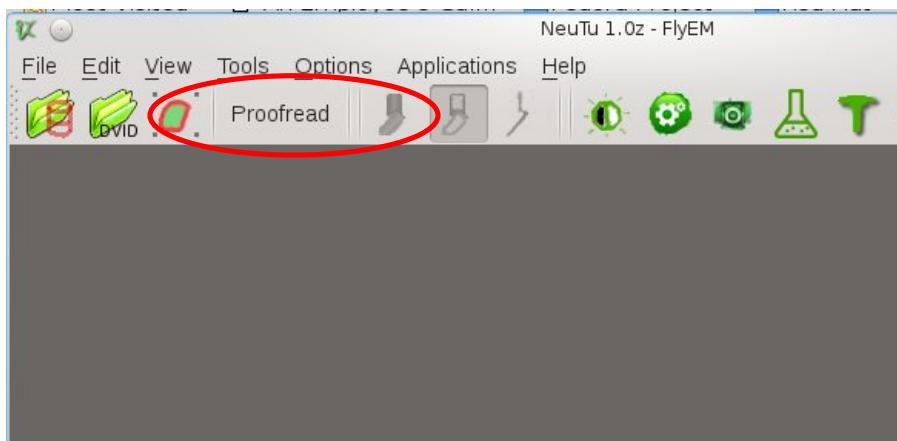
Launch the NeuTu application



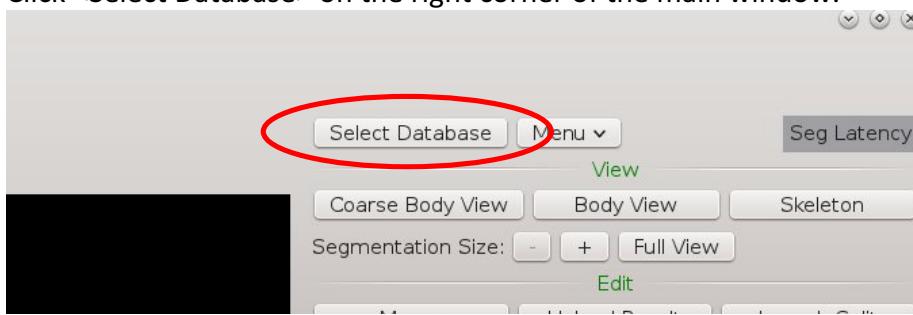
Type: /opt/bin/neutu.

Database Selection

Click <Proofread> to start.



Click <Select Database> on the right corner of the main window.



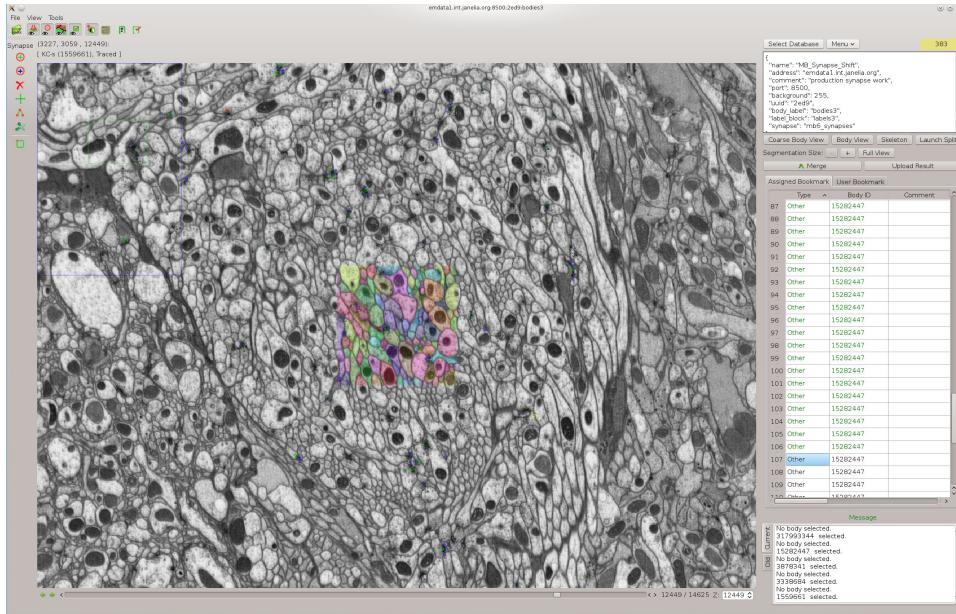
Users can select a database using the drop-down menu under Server, or enter the port number and UUID directly. For convenience, the UUID and other database info are also displayed.



Proofreading Window

See the section **Main Proofreading Window(pg. 4)** in the Neutu proofreading manual for more details.

2D viewer for grayscale & segmentation



Visualization & Proofreading Tool Panel

Main Proofreading Window consists of a 2D viewer and tool panel for proofreading and 3D visualization.

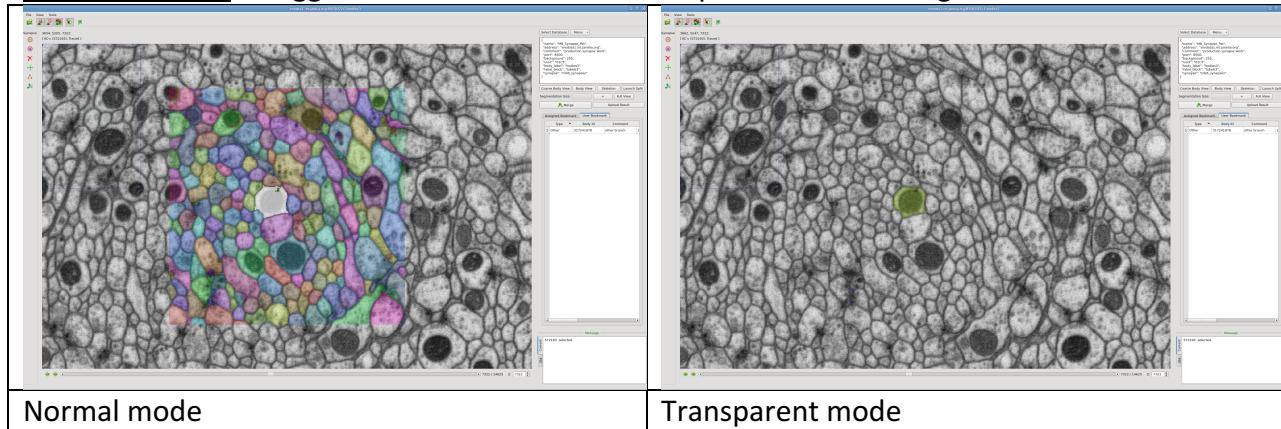
2D view

The user can zoom, pan and change planes with either the keyboard or mouse.

The user can click to select a ‘body’ in the segmentation.

Shortcut F key to toggle between the grayscale image and false-colored segmentation.

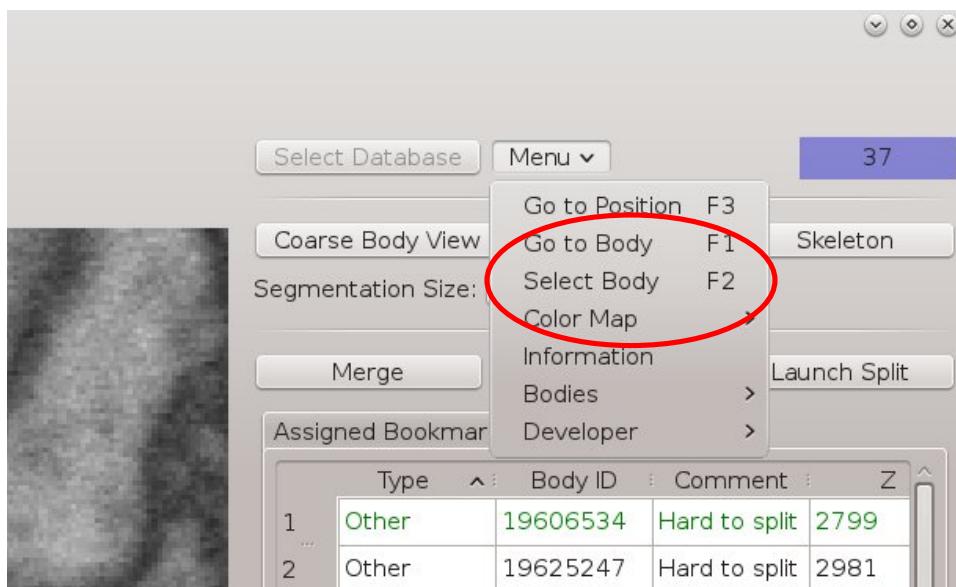
Shortcut H key to toggle between normal and transparent mode of segmentation.



Selecting a body

There are three ways to select a body.

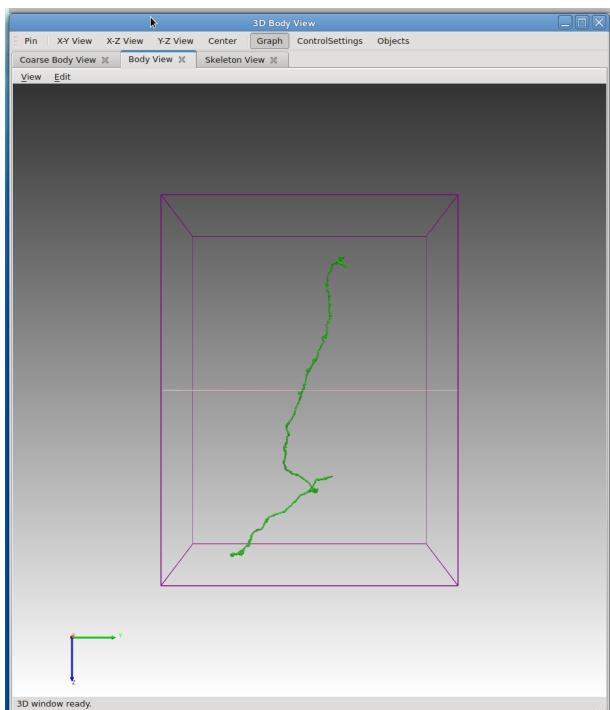
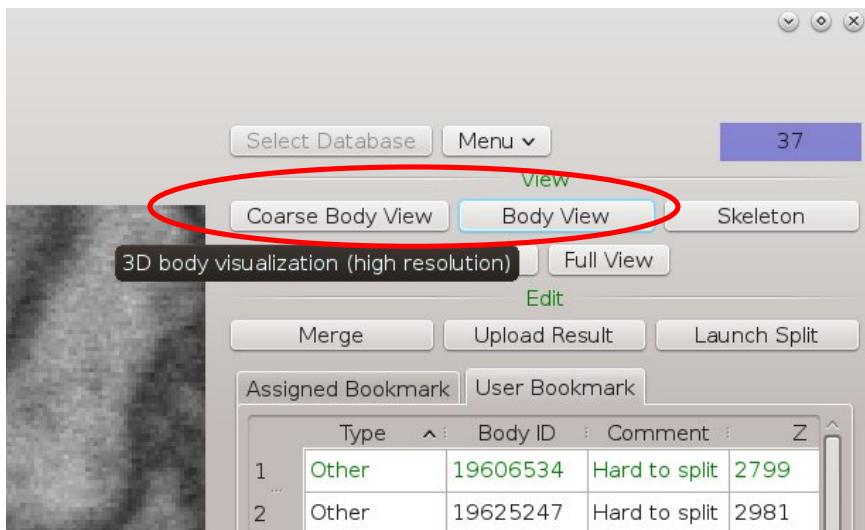
1. Click on 2D window.
2. ‘Go to body’ (Shortcut **F1**) from the menu, and input body ID. It deselects a previously selected body.
3. ‘Select body’ (Shortcut **F2**) from the menu, and input body ID. It adds up selected bodies.



3D Body View Window

See section on Main Proofreading Window- Visualization and Proofreading Tool Panel-2. 3D Body View Window (pg. 8) in the Neutu proofreading manual for more details.

The 3D Body View window opens whenever a body is selected for 3D visualization. Select one of 3D viewers in the Visualization and Proofreading panel: Coarse Body View (low resolution but faster), Body View (high resolution but slower). The skeleton mode is not used for general proofreading.



Keyboard and mouse are used to zoom, rotate and translate the image in the 3D window as follows:

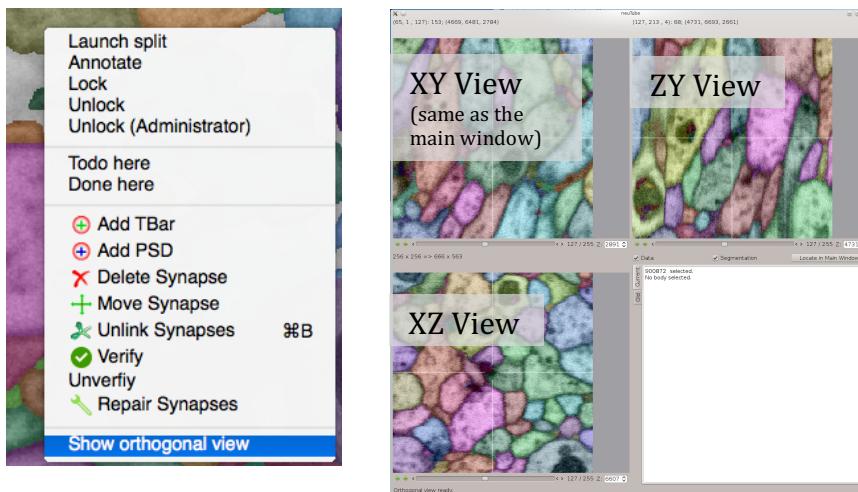
- Mouse wheel to zoom
- Left click + drag to rotate
- Shift + drag to translate up or down

Users can select any point on the body and go to that plane in the 2D window by hitting the shortcut z key.

Models of 3D visualization.

Orthogonal View

Orthogonal viewer shows the image from a different cut plane. To launch, right click on the 2D main window, and select 'show orthogonal view' from the menu.



To toggle the segmentation and annotations on the individual view, press **f** on each view. To toggle to the transparent mode, press **h**.

To toggle the segmentation and annotations together, press **d**.

The user also can zoom in/out and place annotations in this viewer.

Bookmarks

See section on [**Main Proofreading Window - Visualization and Proofreading Tool Panel -6. Bookmarks\(pg. 14\)**](#) in the Neutu proofreading manual for more details.

Assignment bookmarks

To import assignment bookmarks, click Bookmark button in the top left menu bar and select a bookmark file.

Assigned Bookmark			
	Type	Body ID	Comment
1	Other	8750539	
2	Other	2722266	
3	Other	1144658	
4	Other	14684355	
5	Other	4111018	

Double click a row in the list to jump to the location.

User bookmarks

To place a user bookmark, hit short-cut **g** key to go to the bookmarking mode, and click to place a bookmark. Edit by double click. Select and hit **Delete key** to remove bookmark.

Todo annotations and Todo list

See section on [***Todo annotations and Todo list \(pg. 19\)***](#) in the Neutu proofreading manual.

Main proofreading operations

1. Annotating synapses
2. Correcting false splits (Merge)
3. Correcting false merges (Split)

1. Synapse annotations

See section on [***Synapse annotations \(pg. 17\)***](#) in the Neutu proofreading manual.

2. Correcting False splits (Merge)

See section on [***Correcting False Splits \(pg. 22\)***](#) in the Neutu proofreading manual.

3. Correcting False merges (Split)

See section on [***Correcting False Merge – Basic instructions for merging bodies \(pg. 24\)***](#) in the Neutu proofreading manual.

*Always refer to [***Keyboard Shortcuts and Mouse Operations \(pg. 33\)***](#) in the Neutu proofreading manual.