THE ROI MENU

The ROI menu is a pulldown of various functions that you can perform for regions of interest. The pull down menu is shown below with each of its selections described.

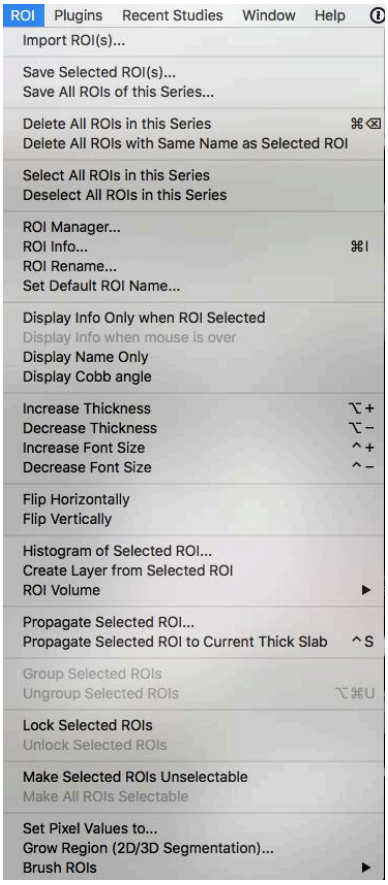

Figure 3.42

Import ROI(s). . .

Using this function you can import previously stored ROIs for this study.

Save Selected ROI(s). . .

This function enables you to save a currently created ROI in this slice to be saved in a file.

Save All ROIs of this Series. . .

Using this function enables you to save the entire series' ROIs that have been created.

Delete All ROIs in this Series

This option will remove all the existing ROIs in the entire series.

Delete All ROIs with Same Name as Selected ROI

Selecting this option enables you to remove all ROIs in this series that have the same name as the one selected.

Select/Deselect All ROIs in this Series

This option enables you to select or deselect all ROIs in the current series at the same time.

ROI manager. . .

This option displays a dialog box as shown below with a list of ROIs that can be edited.

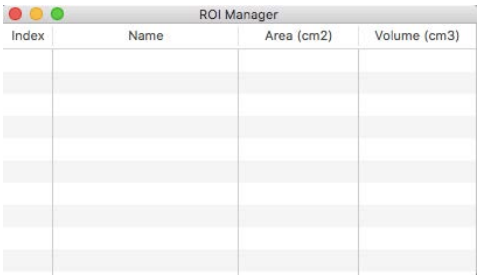

Figure 3.43

ROI info. . .

This selection displays a dialog box (as shown below) with information related to the selected ROI.

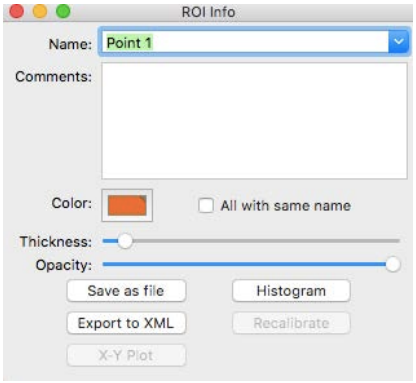

Figure 3.44

ROI Rename. . .

Selecting this option pops up the window shown below that enables you to rename a single or multiple ROIs.

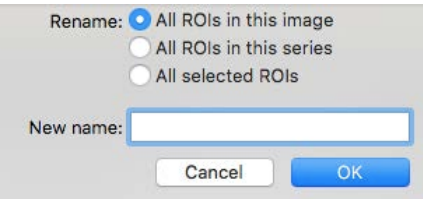

Figure 3.45

Set Default ROI Name. . .

This selection enables you to set a default name for all ROIs that are created in this study. The box below is how this name is entered

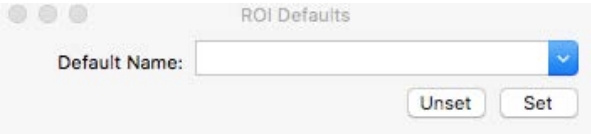

Figure 3.46

The following four options change the way ROI information is displayed. Each can be checked or unchecked.

Display Info Only when ROI Selected – When this is selected, it will display the label and ROI data that is available.

Display Info when mouse is over – When checked the ROI information will only be visible when the mouse hovers on the ROI.

Display Name Only – when this is checked, it will display the ROI name only.

Display Cobb Angle – when checked the Cobb Angle will be displayed.

The following four options let you edit the way the ROI information displays.

Increase Thickness – selecting this option increases the thickness of an ROI line. Selecting this repeatedly, continues to increase the thickness.

Decrease Thickness – selecting this option decreases the thickness of an ROI line. Selecting this repeatedly, continues to decrease the thickness.

Increase Font Size - Selecting this option enables you to increase the size of the ROI's descriptive text. Selecting this repeatedly, continues to increase the size of the font.

Decrease Font Size - Selecting this option enables you to decrease the size of the ROI's descriptive text. Selecting this repeatedly, continues to decrease the size of the font.

Flip Horizontally/Vertically

These options enable you to flip the currently selected ROI either horizontally (around the Y axis) or vertically (around the X axis).

Histogram of Selected ROI. . .

By selecting this option, you will see a display in a pop up window similar to the one below, of a histogram of pixel gray levels from the area within the selected ROI.

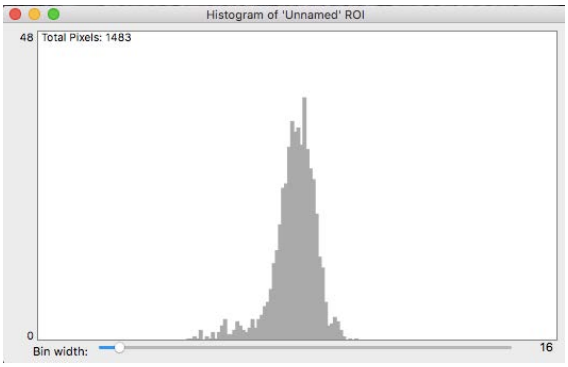

Figure 3.47

Create Layer from Selected ROI

Selecting this option captures the selected ROI into a graphic overlay bitmap.

ROI Volume

Making this selection pops up a submenu (shown below) with functions to manage the ROI volume.

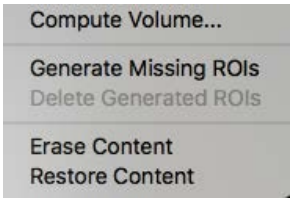

Figure 3.48

Compute Volume. . .

This computes the total volume of all ROIs with the same name as the currently selected ROI in order to computer volume. The result is then shown in a separate window displaying the 3D rendering.

Generate Missing ROIs

This option automatically interpolates ROIs in slices between ROIs of the same name. This helps with the computation of volume from multiple slice data.

Delete Generated ROIs

Use this option to undo the interpolation from the "Generate Missing ROIs" function.

Erase content

This option erases all pixels within an ROI (either 2D or volume).

Restore content

Use this option to undo the "Erase Content" option above to reset all the pixels back to their original (last stored) value.

Propagate Selected ROI. . .

Making this selection opens a pop-up submenu (shown below) that enables you to manage the propagation of ROIs onto other designated slices in the series – either the entire series of a designated number of slices. The resulting ROIs can be designated as independent or as aliases of the current ROI.

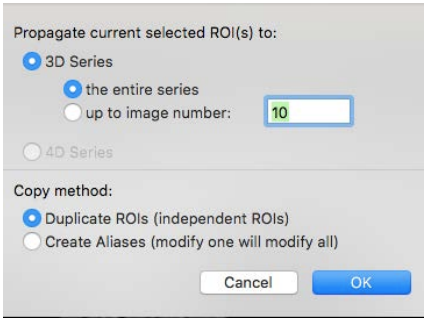

Figure 3.49

Propagate Selected ROI to current Thick Slab

This option enables the propagates of the selected ROI to all the slices in the current thickslab setting.

Group Selected ROIs

Making this selection connects all selected ROIs. Thus moving one will cause all of them to move simultaneously.

Ungroup Selected ROIs

This option disconnects a group of ROIs previously connected with the "Group Selected ROI option above.

Lock Selected ROIs

Making this selection locks the ROIs selected making them uneditable.

Unlock Selected ROIs

This selection undoes the ***Lock Selected ROIs*** selection above.

Make Selected/All ROIs Unselectable

Choosing this option sets selected or all ROIs to be unselectable.

Make All ROIs Selectable

This option undoes the action above from ***Make All ROIs Unselectable***.

Set Pixel Value to. . .

This option enables you to set the pixels values inside or outside of a specific ROI. When selected, the following submenu appears. Doing so will highlight the ROI to make it standout from the remainder of the image.

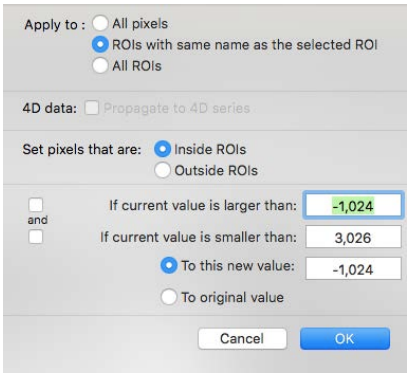

Figure 3.50

Grow Region (2D/3D Segmentation). . .

This selection enables an automatic segmentation tool based on a Region Growing algorithm that can be applied either in 2D or 3D mode. The submenu window shown, provides a way for you to change a range of pixel intensities that are used to set the Region Growing algorithm. The resulting ROI can be set to be either a polygon or an irregularly shaped brush mask.

Brush ROIs

This selection displays the following options:

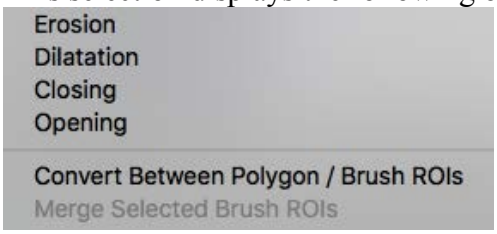

Figure 3.51

Enabling the application of morphological filters to an irregular brush ROI. You can select from amongst the four filters shown. Or you can choose between polygon and brush ROI or to merge selected brush ROIs into one single ROI.

THE PLUGINS MENU

The functionality of Horos is continually extended by members of the community to build functionality and enable it in Horos through a Plug In. The Plug In pull-down menu has a list of the Plug Ins that have specifically been added to your version of Horos.

The menu lists the plugins that you have loaded.

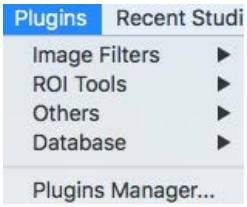

Figure 3.52

Once installed, plugin files can be found on your local disk in a folder that is located in the Application Support/Horos folder in the Library folder of your computer. A Horos tool allows you to update and retrieve new plugins from a central repository on the Horos web site. Currently plugins are divided into four categories listed as individual list items in the plugin menu:

• Image Filters • ROI Tools • Others • Database

Plugins Manager. . .

Making this selection opens a dialog box with a list of currently installed plugins similar to that shown below.

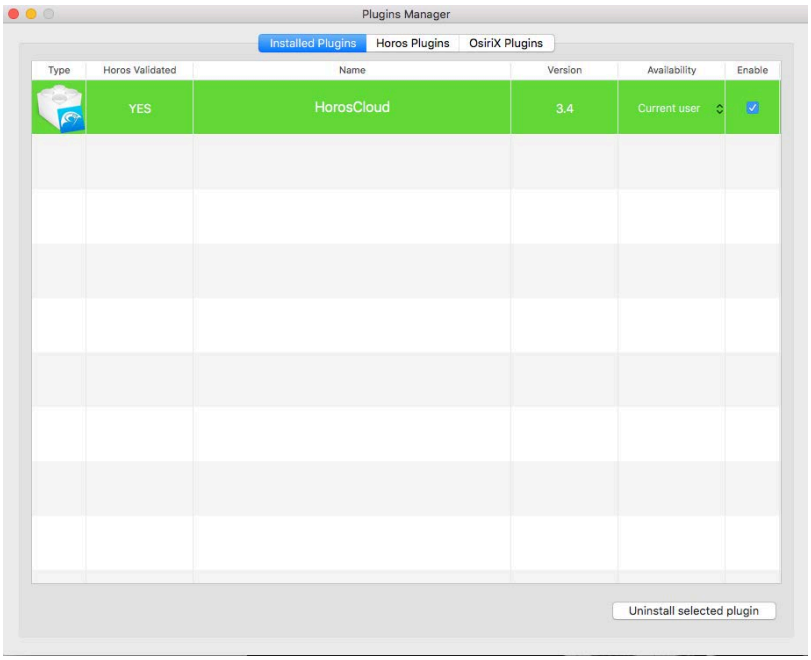

Figure 3.53

There are a set of plugins that have been installed displayed in the left tab: Installed Plugins. But there are additional plugins that are available in both Horos and Osirix that you may also find helpful. Check back often to see if there are new plugins that have been validated for your use with Horos.

RECENT STUDIES

Pulling down this menu will display a set of the last several studies you have viewed. This is a shortcut way to enable access to a recent study.

THE WINDOW MENU

The Window menu selection (shown below) is similar to most Apple Macintosh applications that enables you to manage the multiple windows of an application.

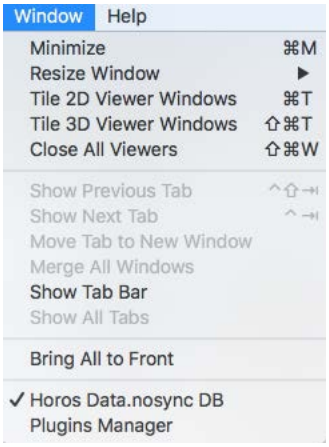

Figure 3.54

Minimize *– hides the current window and minimizes it into a thumbnail shown near the bottom of your screen in the dock.*

Resize Window *– this option reduces the size of the current window.*

Tile 2D Viewer Windows *- This option arranges all of the 2D windows that you have open into an orderly set.*

Tile 3D Viewer Windows *- This option arranges all of the 3D windows that you have open into an orderly set.*

Close All Viewers *– this closes all windows, except for the main database*

The Tab Functions

The middle 6 functions on this pull down menu are formatting for windows. They are self explanatory and will only change the way multiple windows are displayed. Tabs generally provide additional information about the study – either the file name or the database. Changing one or more of these just will not do anything detrimental to your studies but may provide you with more detailed information.

Bring All to Front *– this prioritizes all of your Horos windows in front of any other applications' windows that may be open.*

Horos Data.nosynch DB *– this is the indication of the database currently in use.*

Plugins Manager *– this will summon the Plugins Manager window.*

THE HELP MENU

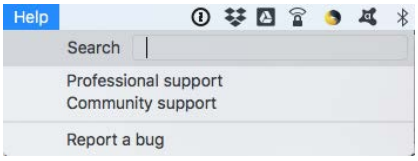

Figure 3.55

The Help pull-down menu provides links to various services.

Professional Support – enables you to connect with Purview to provide you with professional services personnel who, for a fee, can help you with your use of Horos**.**

Community Support – sends you to the Google Board for the Horos Project where you can find answers to common questions.

Report a bug – sends you to the Horosproject Github site where you can provide a description of a potential bug in the software that you have identified.