

Display Rendering Types

Volume Compositing

Volume Compositing (also known as Volumetric Compositing) integrates the gradient-shaded value of all voxels along the ray path. The contribution of each gradient-shaded voxel value is weighted by color and opacity values. The color and opacity information for each intensity is specified using an Alpha map created via the Tissue Map window.

- **Tissue Map:** When the Volume Compositing render option is selected, the Tissue Map option is automatically displayed above the Type option. A default tissue map loaded is loaded and used to render the image data. Tissue Map Right Click options are as follows:

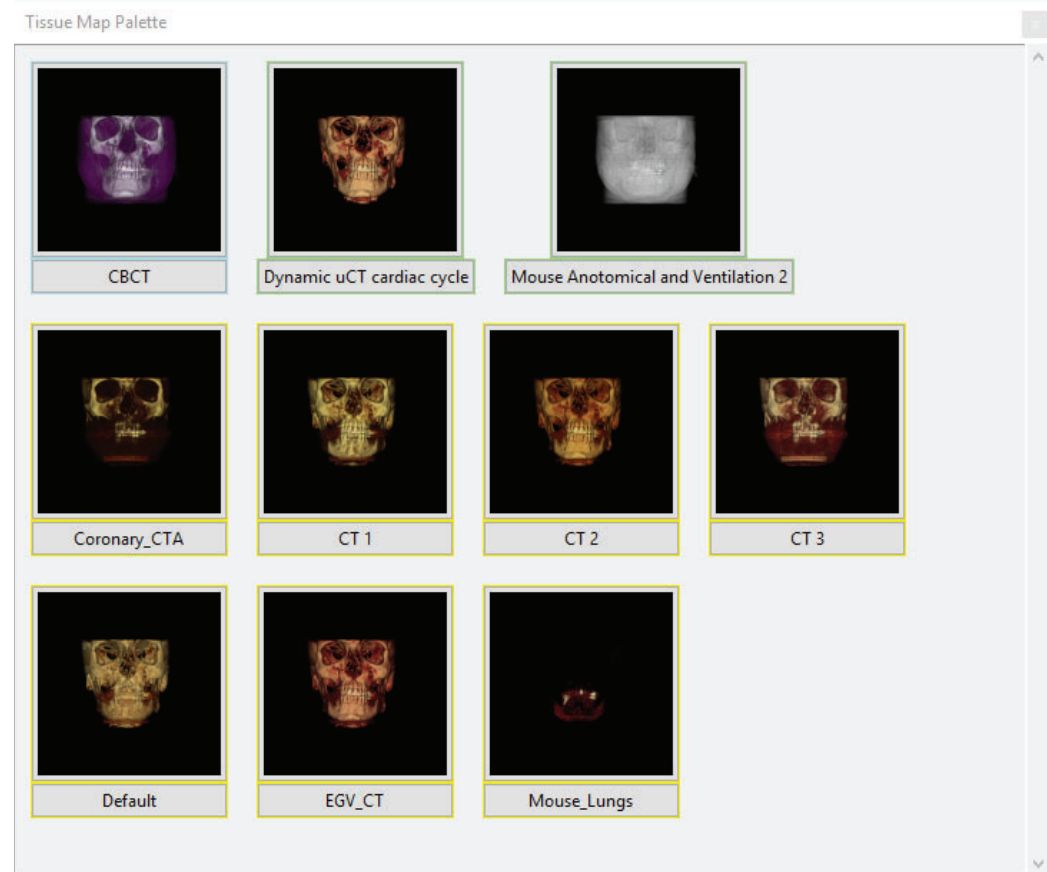


Display Rendering Types

Volume Compositing (continued)

Right Click Options

- Data Tissue Maps: Allows users to select any tissue maps previously created and saved for this data type.
- User Tissue Maps: Allows users to select any tissue maps they may have previously created and saved.
- System Tissue Maps: Allows users to select any system tissue maps created, saved and shared by other users. Also allows access to the tissue maps distributed with the program.
- Palette: Opens the Tissue Map Palette. This window provides a preview of the current data with all available Data, User, and System Tissue Maps. Double click on any of the preview icons to apply that tissue map to the image data.
- Browse: Allows users to browse the system for tissue maps.





Display Rendering Types

Volume Compositing (continued)

Right Click Options (continued)

- Edit: Opens the Tissue Map tool. Double-clicking on the Tissue Map text will also open this tool.

The Tissue Map tool - provides an interface to allow users to create or edit tissue maps by choosing color and opacity (alpha) values for tissue maps. The tool consists of: 1) The parameters area, 2) the colorbar, 3) the parameter display, 4) the tissue list, and 5) the image map.



Display Rendering Types

Volume Compositing (continued)

The Tissue Map tool (continued)

(1) The Parameters Area: The parameters area allows users to assign color and opacity values to ranges of voxels based on intensity.

- To set a range of voxels for the tissue map use the Start/End and Min/Max controls.
- To assign a color to each parameter use the color assignment drop-down menu or click on the color selector next to the drop-down menu.
- To adjust the selected tissue opacity level use the opacity drop-down menu.

(2) The Colorbar: Displays the tissue maps color bar.

(3) The Parameter Display: Displays an interactive graphical representation of the tissue map parameters over a plot of the image histogram.

(4) The Tissue List: Displays the current tissues within the tissue map. • To add a tissue, click the '+' key. To remove a tissue, select a tissue and then click the '-' key.

(5) The Image Map: The image map area previews the tissue map parameters on the current 2D image.

