



RGB Channel Manipulation

The RGB Channel Manipulation tool allows data to be converted to or from 24-bit color data.

If the input is a 24-bit color file, the following options are available:

Table 6.4: Conversions from 24-bit Options

Option	Description
Grayscale Formula	Converts the RGB values to an 8-bit grayscale image using the following formula: $\text{gray_voxel} = \text{red_voxel} \cdot 0.3 + \text{green_voxel} \cdot 0.59 + \text{blue_voxel} \cdot 0.11$
Dithering	Converts the RGB values to 8-bit with a colormap. The number of color cells used is specified by the Number Of Colors value.
Data w/Colormap	Converts the RGB values to data with a colormap using the colors in the input data
Extract Red Channel	Specifies that only the 8-bit red channel is used
Extract Green Channel	Specifies that only the 8-bit green channel is used
Extract Blue Channel	Specifies that only the 8-bit blue channel is used



Data can also be converted to a 24-bit color image using the following options.

Table 6.5: Conversions to 24-bit Options

Option	Description
Data w/Colormap	Converts a data set with a colormap loaded into a 24-bit color image
Object Colored	Uses a data set and an object map to make a 24-bit data set where all the voxels have been colored using colors and definitions in the object map
Combine Channel(s)	Combines the red, green and blue channels into a 24-bit color image