# Enhance Color Composite Images

You may acquire satellite or aerial images as 24-bit color composites (for example, natural color or color infrared images) in which each image cell stores three values, one for each of the three color bands represented. When you display a 24-bit composite image in any TNTgis view, you can adjust the contrast and brightness of the image by choosing an automatic contrast method, or you can design and save your own custom contrast settings for each color component.
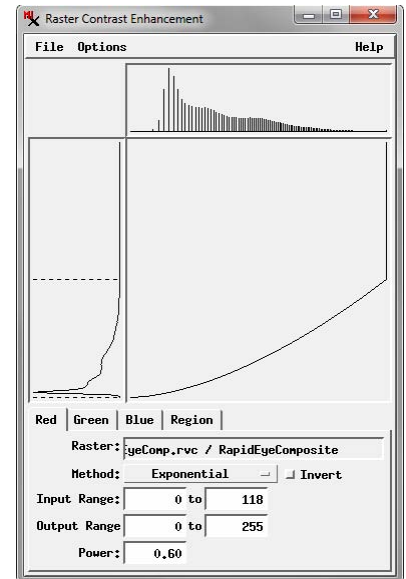
The Contrast Enhancement window for a 24-bit composite image (opened from the layer's right mouse button menu in the Display Manager) is the same as for an RGB raster layer that utilizes three individual image bands. Individual tabbed panels are provided for the Red, Green, and Blue display components so you can independently adjust their brightness and contrast using histograms that are automatically computed and saved with the composite. You can choose from several contrast methods and save one or more sets of contrast tables with the composite raster.

The Raster Layer Controls window for a 24-bit composite raster provides contrast menus on the Object tabbed panel that let you pick an auto contrast method or a saved contrast table to use for each color channel. These contrast options are available for 24-bit raster objects stored in a TNTgis Project File and for any other supported 24-bit image format, including TIFF, JPEG, JP2, MrSID, and others.
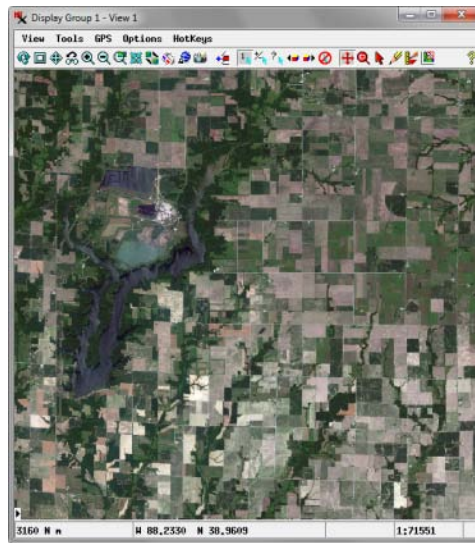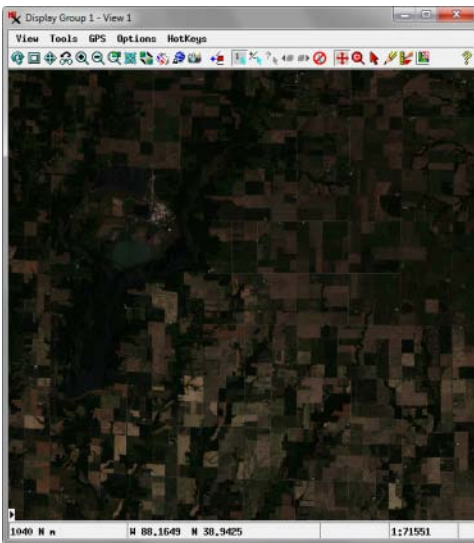

Portion of a RapidEye satellite image of an agricultural area with 5 m cell size. Left, natural-color 24-bit composite raster object created from raw, uncontrasted image bands. Composite is very dark and has very poor contrast. Right, same composite raster object displayed with custom exponential contrast tables designed and saved in the TNTmips Display process.

The Contrast Enhancement window for a color-composite raster object provides tabbed panels so you can independently adjust the brightness and contrast of the Red, Green, and Blue display components.
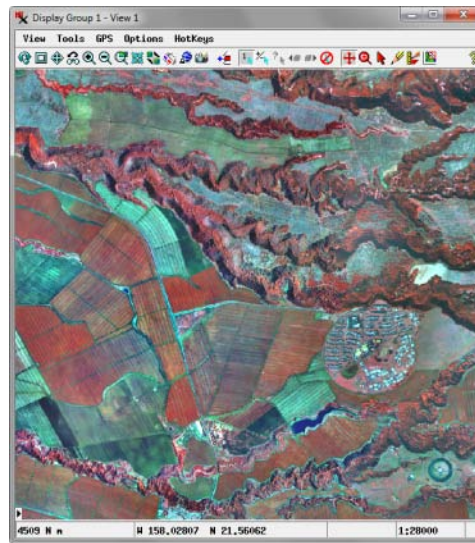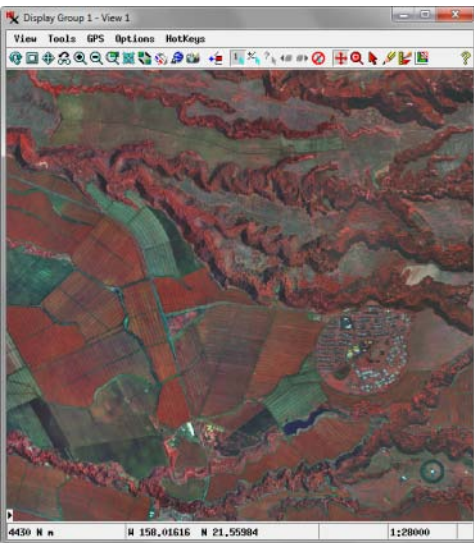
Portion of a 1 m color-infrared orthoimage of a rural area on the island of Oahu, USA. Left, raw 24-bit color-composite image as received, with poor contrast. Right, same composite raster object displayed with custom linear contrast tables designed and saved in TNTmips Display process.
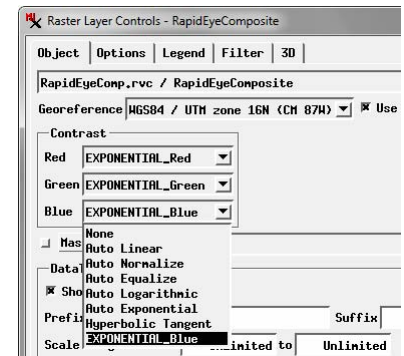
The Raster Layer Controls window allows you to choose an automatic contrast enhancement method or a saved contrast table for each color component of a color composite raster object being displayed.