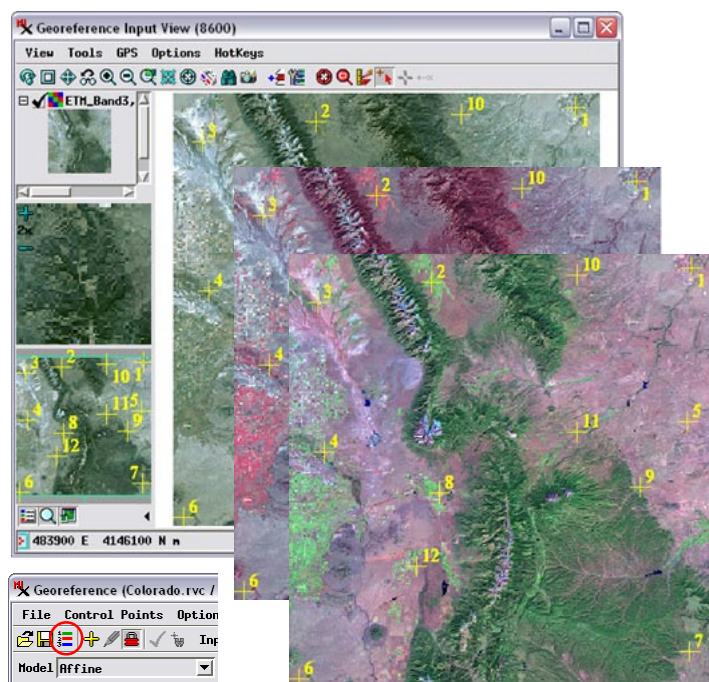
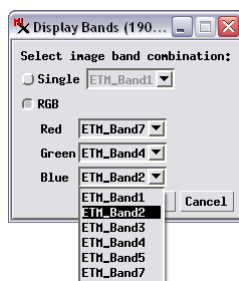


Multiband and Multiresolution Images

The Georeference process in TNTmips provides a convenient and flexible interface for georeferencing multiband images, including those that have bands or band sets with differing spatial resolutions. You can simultaneously georeference any set of bands of an image that have the same image dimensions, then simply transfer that georeference information to other bands in the image that have different spatial dimensions and resolution.

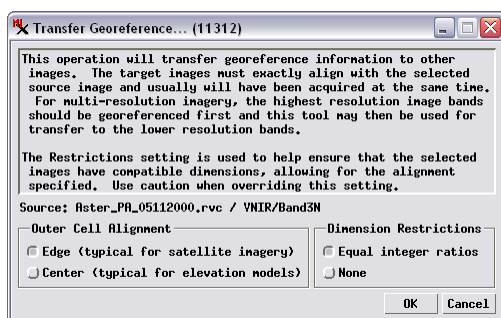
Display any Single Band or RGB Combination

You can select for simultaneous georeferencing any set of bands of an image that have the same numbers of lines and columns. After you select these bands, you are automatically prompted to choose any single band or any 3-band RGB combination of bands (if three or more bands were selected) to display in the Georeference Input view. You can change the band or band combination being viewed at any time using the Image Band Combination icon button on the Georeference window. When you save the georeference information, it is automatically saved to all of the selected image bands.



Transfer Georeference to Lower-resolution Bands

The Transfer Georeference procedure allows you to transfer georeference information between image bands of differing spatial resolution. Normally you should georeference the highest-resolution image band or bands first, then transfer to the lower-resolution bands. The source and target images must exactly align. In most cases the line dimensions and column dimensions in the source and target bands will also differ by the same ratio (e.g., a 2 to 1 reduction in dimensions). You can set an option to require such a fixed integer ratio as a filter for selecting the target bands.



When you choose the Transfer Georeference option from the Georeference window's File menu, you are prompted to choose a source image band for the georeference, then the band or bands to transfer the georeference to. The illustrations to the right show georeference transfers from ASTER visible/near-infrared bands to the corresponding short-wave infrared band set, and from a Landsat 7 panchromatic band to the multispectral thematic mapper bands.

When you select multiple bands of an image to georeference, the Display Bands window (above left) automatically appears so you can designate any single band or any three-band RGB combination to display in the Georeference Input view window. You can also change the visual reference image at any time by pressing the Image Band Combination icon button on the Georeference window.

The illustration above shows several RGB band combinations that might be used to emphasize differing features while georeferencing a Landsat 7 image: bands 3-2-1 (natural color, in Input view), 4-3-2 (color infrared, middle), and 7-4-2 ("infragreen", front).

