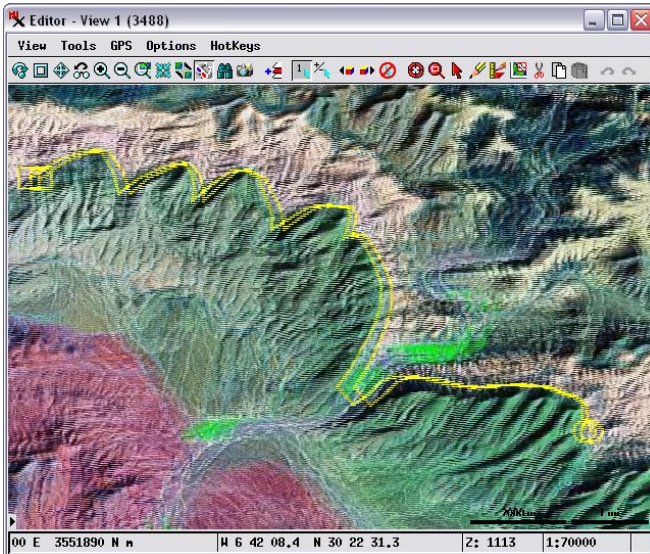


Drawing Tools Follow Terrain

All of the TNT products support drawing in stereo on monitors or TVs that use 3D shutter glasses, polarized glasses, or new glasses-free stereo technology, as well as on any 2D monitor or TV using anaglyph glasses. The table at right shows the stereo viewing and drawing capabilities of each of the TNT products. High-quality full-color stereo views of geodata provides faster and more accurate tracing of natural or man-made terrain-related features. Some examples include geologic contacts, soil boundaries, landslides, fire scars, timber stands, and others.

Stereo Tool Support in Each TNT Product				
	Annotate	Sketch	GeoToolbox	Editing
TNTmips	✓	✓	✓	✓
TNTedit	✓	✓	✓	✓
TNTview	✓	✓	✓	✓
TNTmips Basic	✓	✓	✓	✓
(low-cost product restricted to web-based geodata and terrain or local geodata and terrain within its size limitations)				
TNTmips Free	✓	✓	✓	✓
(free product restricted to local geodata and terrain within its size limitations)				

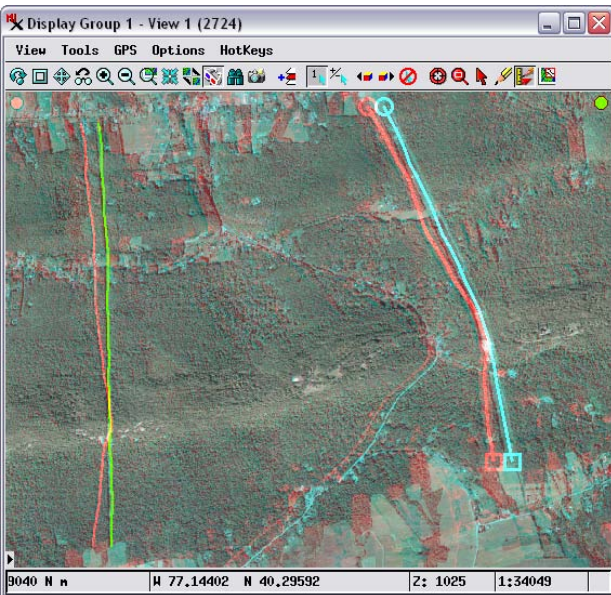


Editor View in line-interleaved mode on a passive stereo monitor using polarized glasses. A contact between geologic rock units is being mapped (yellow line) in 3D over a false-color Landsat 7-4-2 image. The terrain used to create the stereo is MicroImages' on-line ASTER 30m Global web terrain tileset.

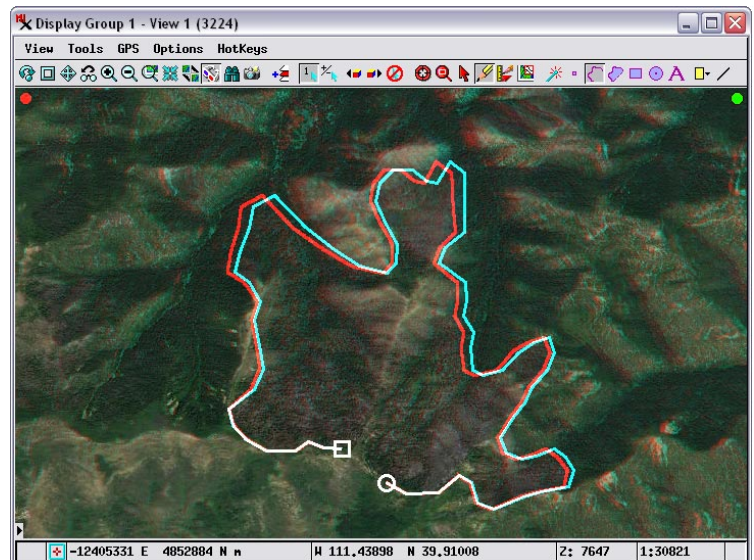
The stereo view you use with the TNT drawing and editing tools can include your own local image, tileset, scanned

map, terrain, and geometric layers in any combination. You can also use on-line image or map tilesets published by MicroImages or others, and even include WMS layers. The 2D to stereo conversion can use your local high-resolution DEM or MicroImages' free DEMs or on-line web terrain tilesets.

When any TNT view is toggled from 2D to stereo, all of the drawing, tracing, and editing tools automatically operate on the stereo surface. When you use the Annotate tools or the GeoToolbox sketch tools in TNT view windows, elements in the resulting sketch (CAD) object are assigned 2D (x, y) coordinates, but the stereo View automatically drapes the tool and elements on the terrain surface. Other processes in TNTmips can be used to convert the result to 3D coordinates if needed. When you use TNT's advanced geodata editor in stereo to create a new topological vector or CAD object or shapefile, the new object is set up by default with 3D coordinates with Z values automatically assigned from the terrain. If you choose to edit in a stereo view an existing vector or CAD object or shapefile with 2D coordinates, you are prompted to choose whether to convert the object to use 3D coordinates.



Display View window in anaglyph stereo with electric power line routes being traced using the Line tool in the GeoToolbox. The active tool and saved lines are shown in stereo and conform to the terrain surface. The image is MicroImages' on-line 2008 natural-color orthoimage tileset of Pennsylvania, rendered in stereo using MicroImages' on-line NED 10m USA web terrain tileset.



Display View in anaglyph stereo with a recent wildfire burn area being outlined using the Polygon tool in the TNT Annotate tool set. The image is MicroImages' on-line natural-color orthoimage tileset of Utah with 1-meter resolution, rendered in stereo using MicroImages' on-line NED 10m USA web terrain tileset.