Use Any Popular 3D Display Method

Stereo improves the accuracy of any kind of viewing and use of any geodata. We are all capable of interpreting 2D views of our geospatial materials. However, the lifetime experiences we are applying to these tasks were accumulated in a 3D world.

To fully exploit the benefits of stereo viewing you can add a low-cost stereo viewing device to your computer. All of the TNTgis products support all three of the 3D viewing technologies used in monitors, laptop screens, TVs, and projectors. None of these technologies are new, but their implementations in new products provide flicker-free, bright color stereo views. They now come with newly designed light-weight glasses that are even comfortable when worn over your prescription eyeglasses. If you object to wearing these glasses then choose the new glasses-free 3D technology.

Here are the stereoscopic 3D viewing technologies you can choose from. The table at the right shows that all of the TNTgis products support all three of these modern technologies for 2D

and stereo viewing. The table also indicates each products' annotation, sketching, geotoolbox, and edit capabilities available for drawing in stereo on the terrain surface.

(continued)

Stereo is Useable in Each TNTgis Product						
3D Display Method				**Drawing Tools**		
Active Glasses	Passive Glasses	Glasses- Free	Anaglyph Glasses	Annotate	Sketch	Edit
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)						

Active 3D: choose a laptop, monitor, TV, or projector that uses shuttered glasses. Samsung 27" 3D monitor shown.

Passive 3D: add a monitor, TV, or projector to any computer and use polarized glasses. LG 23" 3D monitor shown.

Glasses-free 3D: this powerful and unique Toshiba 15.6" laptop uses autostereoscopic 3D, eliminating the need for special glasses.


Anaglyph 3D: use any plastic anaglyph glasses and any available color monitor, TV, or projector.

Setting the Stereo Display Mode

TNTgis stereo views can be set to use the stereo mode suitable for your stereo viewing device. First choose Stereo Settings from the Options menu in the View window. Next press the Device Settings button in the Stereo Settings window to open the Stereo Device Settings window (see illustration to the right). Use the Stereo Mode menu to choose the stereo mode that matches your stereo viewing device, as outlined below. (Other functions of the Stereo Settings window are described in the TechGuide entitled *Stereo Viewing: Stereo Display Settings*.)

Press the Device Settings button on the Stereo Settings window to open the Stereo Device Settings window
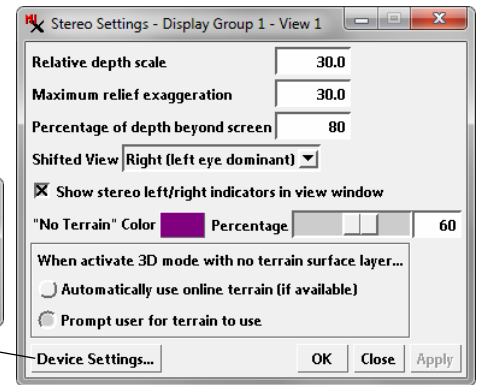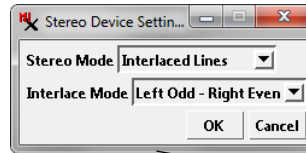
Active 3D Stereo

For an active stereo monitor or TV, choose OpenGL from the Stereo Mode menu. The OpenGL mode requires an NVIDIAQuadro graphics card with a Quad-Buffered OpenGL driver. The Stereo Device Settings window will not allow you to choose the OpenGL option unless a suitable graphics card is installed.

Passive 3D Stereo

Most passive 3D monitors and TVs display the left and right stereo frames on alternate lines on the screen. To set the proper stereo mode for the View, choose Interlaced Lines from the Stereo Mode menu. A second Interlace Mode menu sets how the left and right frames are mapped to odd and even-numbered view lines (Left Odd - Right Even or Left Even - Right Odd). If your interlaced stereo view appears with inverted terrain, choosing the opposite interlace mode restores the proper terrain rendering.

Glasses-Free 3D Stereo

The glasses-free autostereoscopic 3D viewing mode on the Toshiba laptop pictured on the reverse can be set to use either interleaved lines (rows) or side-by-side left-right frames. Configure your TNTgis view window to use Interlaced Lines if you choose the former option, or Split Window if you use the latter option.

Anaglyph 3D Stereo

Anyone can view a TNTgis display in stereo using plastic anaglyph glasses and any color monitor, TV, or projector. Choose Anaglyph from the Stereo Mode menu to enable anaglyph stereo rendering. The most common anaglyph glasses have a red filter on the left and a cyan filter on the right. The Anaglyph Colors menu on the Stereo Device Settings window lets you choose from other color configurations if needed to match your anaglyph glasses.