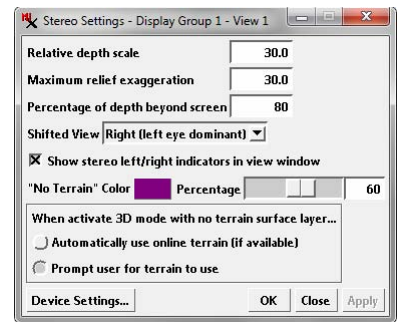


Stereo Display Settings

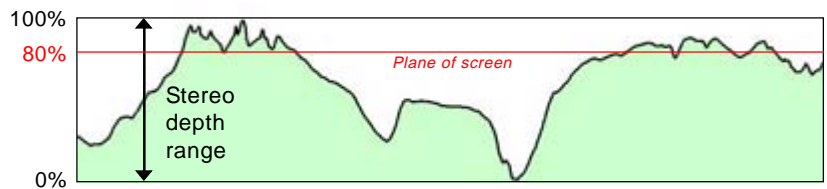
The geodata in any View window in TNTgis software can be rendered in stereo using a terrain layer (elevation raster or web terrain tileset) using the Stereo icon button on the View. In order to create the 3D stereo effect, separate renderings of the View's geodata are created for the viewer's left and right eye. These renderings are presented in the View in the form appropriate to your designated stereo method (see the Technical Guide entitled *Stereo Viewing: Use Any Popular 3D Display Method*). You can adjust the characteristics of the stereo rendering at any time using the Stereo Settings window, which you open from the View window's Options menu.



Open the Stereo Settings window from the Options menu on the View window.

Depth and Exaggeration

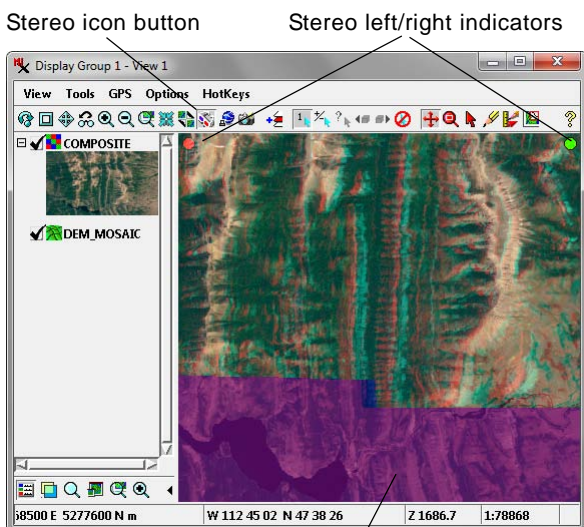
The *Relative depth scale* value in the Stereo Settings window sets the amount of 3D "depth" you perceive in the stereo view by adjusting the amount of left-right separation in the stereo model. Increase the value of this setting to increase the stereo depth and the amount of vertical exaggeration of the terrain. The *Maximum relief exaggeration* value overrides the previous setting if necessary to prevent the vertical exaggeration from exceeding the specified amount (where a value of 1 = no vertical exaggeration). The *Percentage of depth beyond screen* setting determines the perceived placement of the relief in the 3D stereo model relative to the plane of your computer screen, as shown in the illustration to the right.



Cartoon side view of terrain being viewed in stereo. The *Percentage of depth beyond screen* setting controls where the stereo model is placed relative to the plane of the computer screen (represented by the red line). The screen position above approximates the default setting, with 80% of the depth of the model behind the screen. Decreasing this value makes more of the stereo model appear to extend outward in front of the computer screen.

Terrain Settings

If the terrain layer you select to convert your 2D view to stereo does not contain elevation data for the full area of the geodata in the view, the area lacking terrain coverage is shown by a partially transparent *No Terrain* color (see illustration below). The Stereo Settings window provides controls that let you choose the No Terrain color and its transparency percentage. The radio buttons at the bottom of the Stereo Settings window set the program behavior when you activate stereo in a View that does not yet have a terrain surface layer selected. By default you are prompted to manually select the terrain data to use. Alternatively, you can choose to automatically use the MicroImages on-line terrain data layer that best matches the geographic extents of your view with the best terrain information detail. Using the latter option requires that you maintain an Internet connection while engaging in stereo viewing.



Partially transparent color overlay in "No Terrain" areas

Stereo Indicators

Small red and green dots are shown in the upper corners of every stereo view. The red dot should always be in the upper left corner and the green dot in the upper right. The positions of these dots confirm that the view is being presented in full-color stereo and is not inverted (i.e., up appears down and down appears up). If you do not want to see these indicators, you can shut them off in the Stereo Settings window.

Some stereo monitors can occasionally start up with the stereo inverted. This condition can not be detected and corrected automatically by software. If the stereo is inverted (i.e., red dot is shown on the right and green dot on the left) then you need to force the stereo monitor to invert the stereo view. For a passive stereo or glasses-free monitor press the Device Settings button on the Stereo Settings window and use the menu to change the stereo left/right assignments. For an active stereo monitor use the monitor's 3D controls to correct this condition.

Setting Eye Dominance

Almost everyone has a dominant eye. Approximately two-thirds have right eye dominance and one-third have left eye dominance. Your stereo viewing activity, especially accurate drawing, will be affected by your eye dominance. To optimize your use of stereo, use the Shifted View menu on the Stereo Settings window to select your eye dominance. It is easy to establish which of your eyes is dominant. See http://drawsketch.about.com/cs/howtoindex/ht/eye_dominance.htm for help.