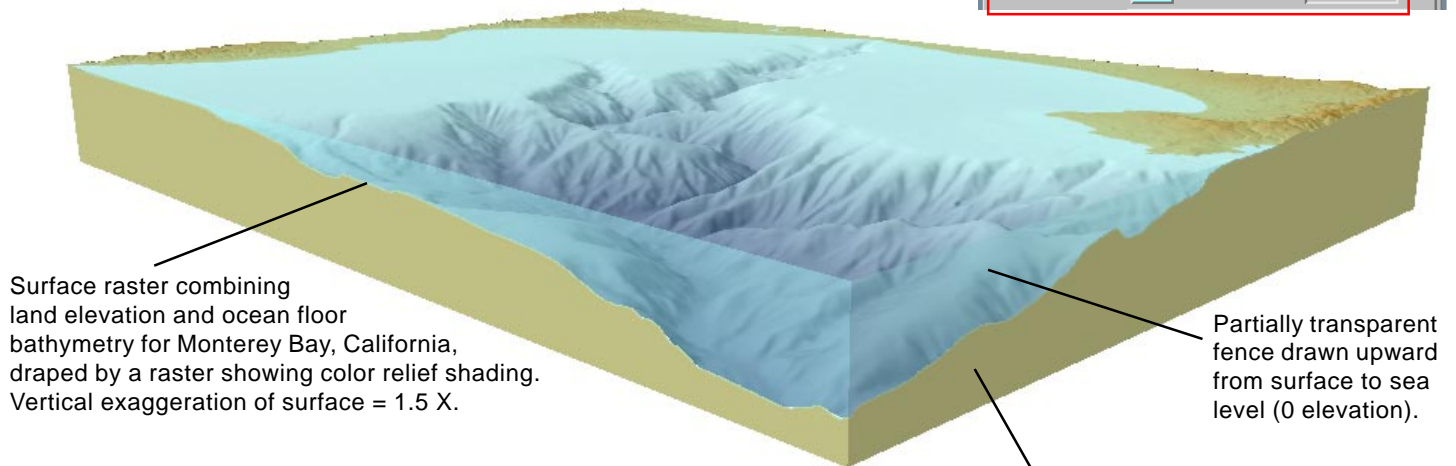
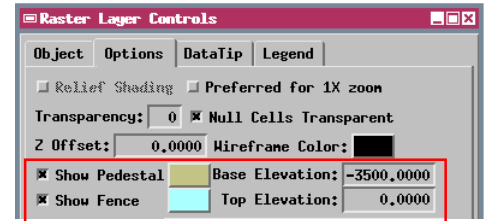


Pedestal and Fence in 3D Views

3D Views in the TNT products allow you to add special graphical elements to 3D groups to enhance the perspective effect. You can add a colored pedestal and/or fence to any raster drape layer in a 3D group. These vertical, curtain-like elements are drawn along the boundaries of the raster layer (excluding cells designated as completely transparent by a null value or mask). A pedestal is drawn vertically downward from the terrain surface to the designated base elevation; a fence is drawn vertically upward from the terrain surface to the designated top elevation. Colors for pedestal and fence, along with base and top elevations, are set on the Options panel of the Raster Layer Controls window for the selected

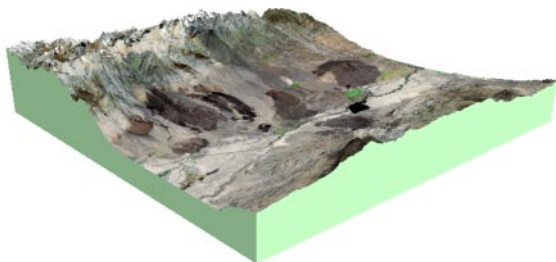
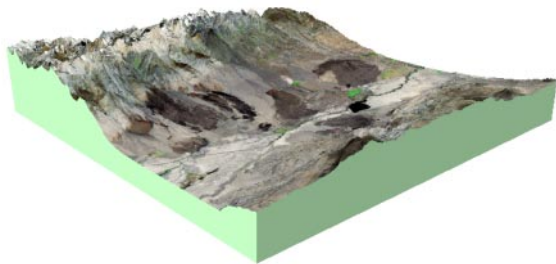
layer. A partial transparency value can also be set for either element to create special visual effects. The pedestal and fence are automatically shaded in the 3D View, with the illumination direction set via a Sun Azimuth Angle control in the 3D Viewpoint Controls dialog (opened from the 3D View window). Pedestal/fence rendering is implemented for all of the available 3D surface rendering modes.



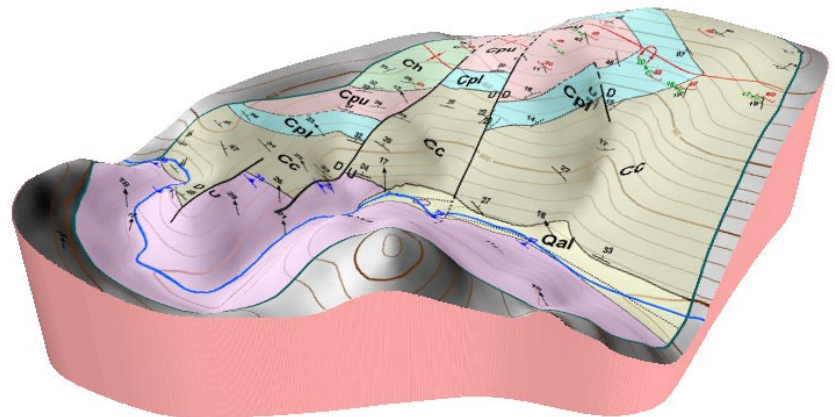
Surface raster combining land elevation and ocean floor bathymetry for Monterey Bay, California, draped by a raster showing color relief shading. Vertical exaggeration of surface = 1.5 X.

Partially transparent fence drawn upward from surface to sea level (0 elevation).

Opaque pedestal rendered downward from surface to elevation of -3500 meters (3500 meters below sea level). Fence and pedestal settings for the raster drape in this group are shown in the Raster Layer Controls illustration above.



Two 3D views of a group with the same pedestal illuminated from different directions. The 3D Viewpoint Controls window (opened from the 3D View window) provides a slider control to vary the sun azimuth angle. The illumination is automatically adjusted so that the brightest part of the pedestal shows the full intensity of the pedestal color you selected.



A fence or pedestal is drawn along the boundaries of the designated raster layer, excluding cells that are specified to be completely transparent. Transparent raster cells might be designated by a null raster value (with null cell transparency turned on) or by a value of 0 in a binary mask being used with the raster layer. If no cells in the raster layer are transparent, then the fence or pedestal follows the outer boundary of the raster object. In the above illustration, a raster layer showing a rendering of a shaded-relief geologic map is displayed with a mask, creating a curving boundary for the pedestal.