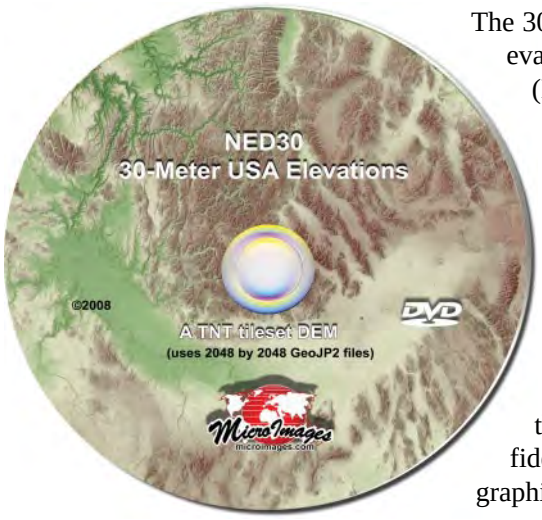
U.S. 30-Meter Elevation Data (NED30)

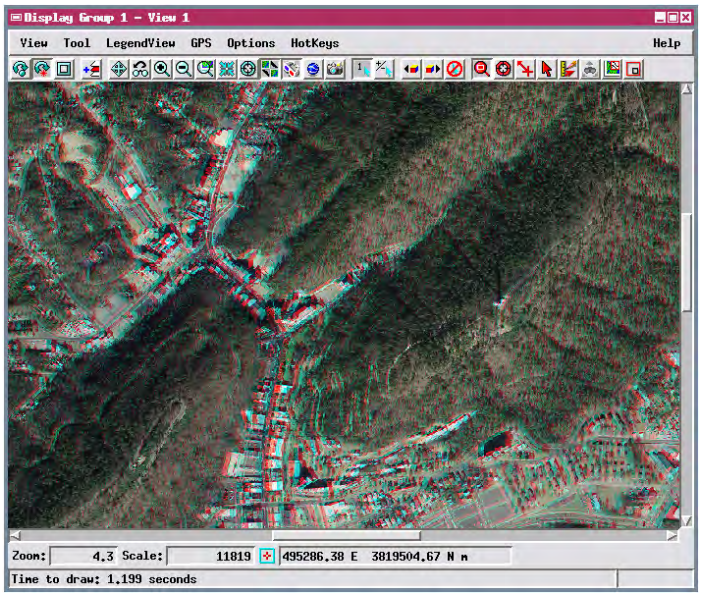


The 30-Meter USA Elevations DVD distributed by MicroImages provides seamless elevation data for the conterminous United States from the National Elevation Dataset (NED) with a cell-size of 1 arc-second (approximately 30 meters). The NED has been produced by the U.S. Geological Survey by merging the best quality elevation data available across the United States. MicroImages acquired the data in 1 degree by 3 degree blocks, converted the elevation values from floating-point meters to integer feet, mosaicked the blocks, and created a TNT hierarchical tileset. The TNT tileset raster is linked to a set of uniformly-sized GeoJP2 files stored in conveniently-sized subdirectories of a separate tileset directory. This tileset structure is optimized to allow very fast display of the entire dataset in the TNT products at any viewing scale. In addition, the small individual JP2 tile files (2048 by 2048 cells) can be used in any other software program that supports the JP2 format. Lossless JPEG2000 compression has been applied to preserve the fidelity of the original data while reducing file sizes. The NED30 tileset is in geographic (latitude-longitude) coordinates referenced to the NAD83 horizontal datum.

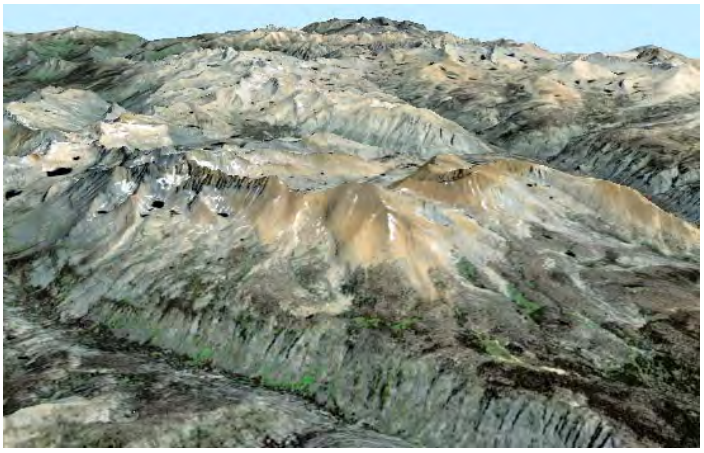
The DVD also includes samples of higher-resolution elevation data: 1/3 arc-second NED data (approximately 10-meter cell size) and LIDAR elevation data with 5-meter cell size, both for parts of northern Louisiana.

The elevation datasets provided on this DVD can be used in many ways in the TNT products:

- use as a terrain surface for stereo views of any georeferenced imagery or other geodata
- use as a terrain surface for 3D perspective views of imagery and other geodata
- use in the Topographic Properties process to derive slope, aspect, and curvature data and shaded relief images
- use in the Watershed process to delineate watershed boundaries, drainage networks, and their many associated attributes, along with other derived geomorphic/hydrologic characteristics
- use for Viewshed Analysis
- display with one of many standard color palettes (or design your own custom color palette) as backdrop for vector overlays
- overlay with partially-transparent shading raster to create a color shaded relief display
- extract portions of the raster data as needed for local projects



Anaglyph stereo display of color orthoimage (1-foot cell size) of Hot Springs, Arkansas using the sample NED 10-meter TNT tileset as the terrain layer.



3D Perspective view of mountainous terrain in the Sierra Nevada, California; pan-sharpened Landsat 7 scene (15-meter cell size) draped on terrain extract from the NED30 dataset.

Technical Specifications

Size: 3.78 GB
Compression: Lossless JPEG 2000
Format: TNT Tileset using 2048 x 2048-cell GeoJP2 files
Data Type: 16-bit signed integer
CRS: Geographic / North American Datum 1983 (NAD83)
Elevation Units: Feet
Extents: N 50° 00' 00", W 125° 00' 00" (Upper Left),
N 24° 31' 37", W 66° 41' 30" (Lower Right)
Number of Cells: 91,703 Lines x 209,910 Columns
Cell Size: 1 arc-second (nominally 30 m)