# Create Web Terrain Structures

Web terrain tilesets contain elevation data in a tiled form that provides local or internet access to actual elevation values for areas of unlimited size (see the Technical Guide entitled *Tilesets: Web Terrain Structures*). Web terrain tilesets can be used as terrain surface layers in TNTmips Pro and Basic and can form the basis of web applications that present relief-shaded or stereoscopic renderings in a web browser.

TNTmips Pro provides several processes for converting a DEM raster or rasters to a custom web terrain tileset. Use the Export Web Terrain Tileset process (Tileset / Terrain / Export) to choose one or more input DEM raster objects and convert each one to an independent web terrain tileset. Use the Mosaic to Terrain Tileset process (Tileset / Terrain / Mosaic) to convert a set of adjacent or overlapping DEM raster objects to a single seamless web terrain tileset.
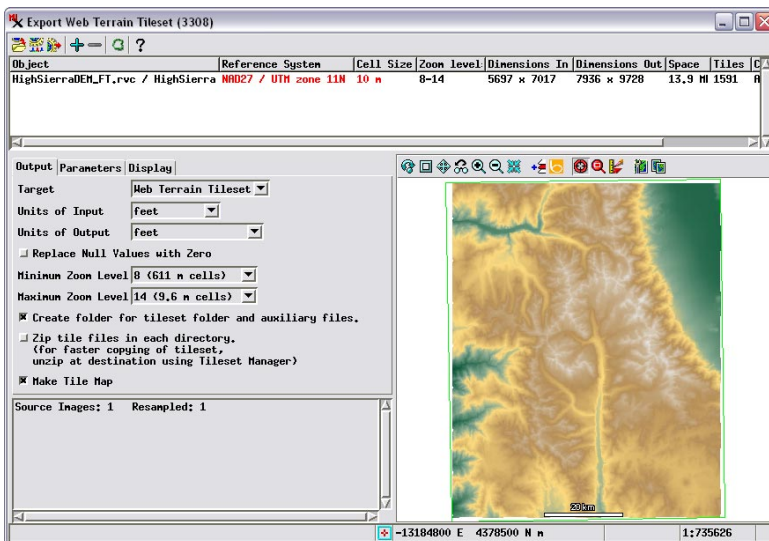
Export Web Terrain Tileset process window. Each input DEM raster is converted to a separate web terrain tileset.

Web Terrain Controls

The Export Web Terrain Tileset and Mosaic to Terrain Tileset process windows have a number of controls in common that are specific to web terrain tilesets. On the Output tabbed panels you can specify the elevation units for the input raster(s) and the output web terrain tileset using the Units of Input and Units of Output menus. If the elevation units have been set for the input raster (see the QuickGuide entitled *Terrain Layer Value Type and Units)*, the Units of Input menu is automatically set to that unit. When you choose a different elevation unit for the output, the elevation values are automatically rescaled to produce values in the desired unit. A toggle button also allows you to replace null values with zero values if desired.

Other Controls

The remaining controls on the Export Web Terrain Tileset window are identical to those on the Export Raster Tilesets

window (see the TechGuide entitled *Tilesets: Creating a Standard Web Structure*). Likewise, the remaining controls on the Mosaic to Terrain Tileset process are identical to those on the Mosaic to Image Tileset window (see the *Tilesets* TechGuides entitled *Mosaic to Google Maps Tile Overlay* and *Mosaic to Google Earth Super-Overlay*). Use the Minimum Zoom Level and Maximum Zoom Level menus on the Output tabbed panel to set the range of zoom levels for the tileset(s) you are creating. A menu on the Parameters tabbed panel sets the Resampling Method used to recompute elevation values during reprojection to the Spherical Web Mercator coordinate system used for web terrain tilesets, and another sets the Resampling/Reduction method used to compute the elevation values for the lower-resolution zoom levels.

Both the Export and Mosaic processes allow you to clip individual input rasters and/or to clip the entire set to a project boundary. In each case the clipping boundary is set using the outer boundary of a geometric object (region, vector, shape, or CAD) that you select (see the *Tilesets* TechGuides entitled *Clipping Input Images* and *Clipping to a Project Boundary*). You can use the Queue Jobs or Save Jobs icon buttons in either process to perform the tileset conversions using the TNTmips Job Processing System (see the Tech Guide entitled *System: TNTmips Job Processing System*). Each tileset conversion operation is automatically subdivided into a number of jobs that can run concurrently to take advantage of your computer's multiple processor cores and perform the total operation in much less time than as a single process.

TNTmips Pro also provides processes that allow you to merge and subset (extract) web terrain tilesets; see the TechGuide entitled *Tilesets: Merge and Subset Web Terrains*.
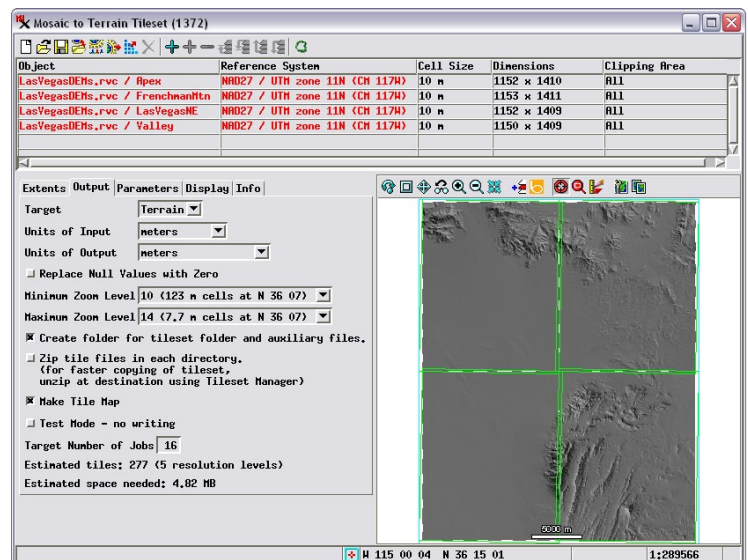
Mosaic to Web Terrain Tileset process window. A set of adjacent or overlapping DEM rasters is converted to a single web terrain tileset.