



## Subset from Remote Sources

The Subset Tileset process in TNTmips Pro (Tileset / Image / Subset) allows you to create subset tilesets of limited-size areas from standard web tilesets created in TNTmips (Google/Bing Maps, Google Earth, and NASA World Wind tilesets) that are publicly accessible on the Internet. For example, you can extract small tilesets from any of the standard web tilesets that are hosted at microimages com. The tileset subset has the same structure as the parent tileset but you can show

NOTE: You can make subset tilesets of any size from local tilesets; see the Technical Guide entitled *Tilesets: Subset Structures*.

microimages.com. The tileset subset has the same structure as the parent tileset, but you can choose the range of zoom levels to retain in the subset. The subset tileset is saved at the location you designate on your local or network hard drive along with the necessary auxiliary files that allow you to immediately view the tileset in TNTmips, in a web browser, or (for Google Earth tilesets) in Google Earth.



When you select an on-line web tileset as input for the Subset Tileset process, the Tileset Area tool is activated and is the only way to define the subset area. This tool lets you define a rectangular image area that is equivalent to 64 image tiles at the maximum specified zoom level. The on-screen size of the box you are permitted to draw automatically adjusts for different view zoom levels to enforce this limit. The transparent portions of partial tiles around the edges of the subset area do not count toward the area limit, so the maximum zoom level in the subset typically includes more than 64 tile files.

A custom Google/Bing Maps tileset that you have extracted can be viewed in a web browser even when your computer is not connected to the Internet. In your browser simply open the OpenLayers HTML file that is automatically created and saved with the extracted subset tileset (along with the associated OpenLayers JavaScript library). Likewise, a subsetted Google Earth tileset can be viewed offline in 3D in Google Earth, as Google Earth will automatically use its locally-cached terrain data for recently-viewed areas when not connected to Google servers (see illustrations below). Thus you can use your local extracts from MicroImages webhosted tilesets on a laptop or tablet computer in remote field settings where no Internet connection is available.

When you choose a remote tileset as input for the Subset Tileset process, you must define the subset area using the Tileset Area tool (see illustration to the left), which is activated automatically. This tool lets you define a subset area that is equivalent to 64 image tiles at the maximum specified zoom level. The size of the box you are permitted to draw in the view automatically adjusts to the current viewing scale to enforce this size limit. If you do not require the full resolution of the parent tileset, you can increase the ground area allowed for the subset by choosing a lower-numbered Maximum Zoom Level.



Google Earth views showing subset from the Oregon 2011 1-meter orthoimage tileset hosted at microimages.com (left) and native Google Earth imagery (right). This area is the site of on-going logging operations. The custom 2011 tileset subset is more recent than the Google Earth native imagery (note expanded clear-cut area at center of left illustration) and has better color and contrast. A custom tileset subset can be viewed in 3D in Google Earth even while not connected to the Internet. Google Earth will automatically use its locally-cached terrain and image data for recently-viewed areas when not connected to Google servers.