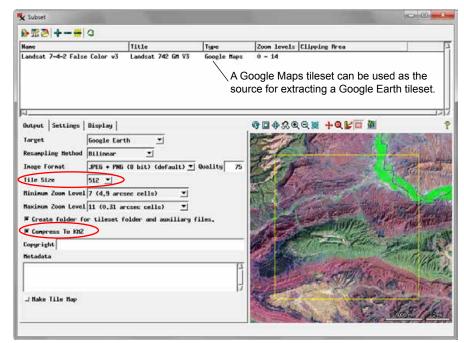


Subset Google Earth Tilesets for Android Tablets

The Tileset Subset process in TNTmips (Web GIS / Image / Subset) lets you extract subsets by area from standard web tilesets (Google Maps, Bing Maps, Google Earth, and NASA World Wind; see the Technical Guide entitled *Tilesets: Subset Structures*). You can easily extract small Google Earth tilesets that can be transferred to your Android tablet for display using the Google Earth Android app.

In testing with the Samsung Galaxy Note 10 tablet, MicroImages has found that the tablet version of Google Earth works best with an image tile size of 512 x 512 pixels. Although the desktop version of Google Earth functions well with a tile size of 1024 x 1024 pixels, this large tile size strains the memory resources of tablets, resulting in slow loading of the image overlay and time lags in navigating the Google Earth 3D environment. On the other hand, using smaller tiles (256 x 256 pixels) increases the number of tiles that need to be loaded for tilesets covering large areas, which also results in slow loading of the image overlay. Tilesets with the 512 tile size reduce the number of tiles required without causing memory-related delays.

In the Tileset Subset process you can choose the tile size to create in the subset, independent of the tile size of the input tileset. So you can use a tileset created for the desktop Google Earth application as the source to create Google Earth extracts



The Tileset Subset process in TNTmips allows you to extract an area from a source tileset, create a different tile size for the result, and even convert from one tileset structure to another. In this example a small Google Earth tileset is created from the global Landsat 7-4-2 False Color Google Maps tileset hosted at microimages.com. A Google Earth subset can also be packaged as a KMZ file.

for your tablet with the appropriate smaller tile size.

The Tileset Subset process also can convert from one tileset structure to another. For example, you can use a Google Maps tileset as the source and create a subset in the Google Earth structure. Thus you can use any of your Google Maps tilesets,

or any of the many Google Maps / Bing Maps tilesets hosted at microimages.com, as the source for creating Google Earth tilesets for use on your tablet. (When extracting from any on-line tileset, the size of the subset you produce is limited to a small area.)

When you create a Google Earth tileset subset, you can now also choose to package the entire tileset in a single compressed KMZ file. This option simplifies moving the tileset and transferring it to the tablet via data cable, SD/MicroSD card, cloud storage, or e-mail. This option works best for small tilesets (100 MB or less for tablet use). The decompression required when reading tiles from a large tileset packaged as a KMZ file can increase tile load times and reduce performance in the Google Earth Android app. See the TechGuide entitled *Tilesets: Create Google Earth Tilesets as KMZ* for more information.



Google Earth Android app displaying the custom Google Earth tileset extracted and converted from MicroImages' global 7-4-2 False Color Google Maps tileset.