

# Mosaic to Tiled TNT Raster

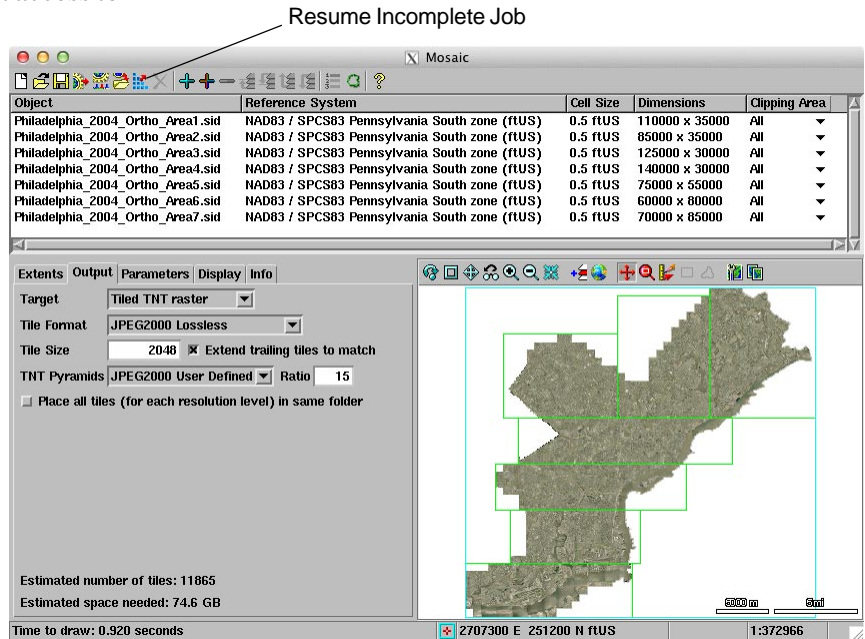
A Tiled TNT Raster is a multifile object in a predefined structure designed for very efficient viewing of large raster geodata sets. This TNT object consists of a linked set of uniformly-sized files in GeoJP2, PNG, or GeoTIFF format that are treated as a single seamless raster object in TNTmips processes. This tiled structure provides fast, efficient access to a very large image for visualization and processing, and the individual tiles are directly useable in other software programs.

The Mosaic process in TNTmips can mosaic any number of images of any size directly to a tiled TNT raster. Your mosaic can be grayscale, RGB composite color, or multiband. A color mosaic can use a mixture of RGB raster sets and color composites as input (see the Technical Guide entitled *Mosaic: Grayscale, Multiband, and Color* for more information). The input images can also include any linked external image file (GeoJP2, GeoTIFF, MrSID, ...) in addition to rasters in MicroImages Project Files. For a general introduction to the Mosaic process, see the TechGuide entitled *Mosaic Overview*.

To mosaic to a Tiled TNT raster, set the Target menu on the Output tabbed panel to *Tiled TNT raster*. If you are mosaicking multiband images, radiobuttons next to the Target menu let you choose to output either an RGB composite mosaic or a multiband mosaic. The RGB composite option creates the composite image using the three bands and color assignments you have previously selected for displaying the multiband images.

Use the Tile Format menu to choose the file format for the tile files, including compression options for GeoJP2 and GeoTIFF formats. The JPEG2000 User Defined option allows you to set a target compression ratio for lossy-compressed GeoJP2 tile files. Separate compression options can be set for the TNT pyramids that are stored with the tileset raster, since pyramids can be more highly compressed than the parent image without sacrificing viewing quality. Enter the desired size of the square tiles (in raster cells) in the Tile Size field. When using JEG2000 format, a tile size of 1024 or larger is recommended for efficient compression and to take advantage of the integrated pyramid

structure available with this format. The *Extend trailing tiles to match* toggle button is turned on by default to ensure that tiles around the periphery of the image area match the designated tile size rather than being set to various smaller sizes that minimally cover the image portion of each tile area.



Non-image areas of the tiled TNT raster are set as null in the null mask for the full-resolution raster and in the null masks for each pyramid level.

When you mosaic a very large number of images to a massive tiled TNT raster (such as 1-m orthoimages for an entire state), the operation may be time-consuming and thus may be vulnerable to interruptions such as power surges, outages, or system crashes. This may be especially true if you are mosaicking color images with different coordinate reference systems and/or cell sizes. Since the individual tile files are incrementally saved, an incomplete tiled mosaic operation that has been halted or interrupted can be resumed and completed. Simply restart the Mosaic process and press the Resume Incomplete Job icon button. You are prompted to select the mosaic job to resume. (A temporary file with the \*.mosaicjob file extension is automatically created in the same folder as the output Project File when you run a tiled mosaic and is automatically deleted if the process completes successfully. In order for the job file to be valid when you try to resume the operation, all input and output files must still exist in their original locations.) The process then creates the remaining tile files and completes the tiled TNT raster with correct links to all of the component tile files.