TNTmips Newsletter — Compute RPC Orthorectification Model

July 2014

Try these new features in the Georeference process and Mosaic process in the TNTmips 2015 Development Version:

Georeference: Compute Rational Polynomial Model for Orthorectification

The Georeference process in TNTmips can use 3D control points to compute a rational polynomial model that can then be used in the Resample process to orthorectify the image bands. Use the Rational - Computed option from the Model menu to compute a rational polynomial model.

- · Correct imagery for both sensor distortion and relief displacement.
- · Accurate even in areas of high relief.
- Supports both aerial camera and satellite imagery.
- Save money; no need to buy more expensive ortho-corrected or ortho-ready imagery.
- Easily generate a large number of 3D control points from a reference image and elevation raster using the Auto-Register feature.
- Manually place 3D control points using the Default Z from Surface option to assign elevations.
- Residuals are automatically computed from the rational polynomial model.
- Optimally determines which rational polynomial coefficients to use for maximum accuracy while maintaining model stability.
- View the rational polynomial formula in the Georeference window.

Georeference Technical Guide: Compute Rational Polynomial Model for Orthorectification

Image Mosaic: Contrast Matching, RGB Separates, and Scale Adjustment

- Match contrast to any reference image (an input image or an image not being used in the mosaic).
- Contrast-match grayscale, RGB, and multi-band images.
- Apply previously-saved contrast or auto-contrast to input images during mosaic assembly.
- Apply contrast after mosaic assembly.
- A default linear contrast table is automatically created for the mosaic when contrast is applied.
- Mosaic RGB separates to either RGB composite or RGB separates.
- Interactively set user-defined extents in View using Output Extents rectangle tool.
- Apply scale and offset when different for various input rasters (such as DEMs in different elevation units).
- When the mosaic is run, the progress bar in the status field now shows a progress percentage.
- When mosaic to tileset the total number of tiles created is shown in the status field and in the log.