

TNTmips Newsletter — 2015 New Feature Highlights

November 2014

TNTmips 2015 will be released 14 January 2015 with many exciting new features. You can try these new features right now in the 2015 Development Version. You can order your upgrade to TNTmips 2015 now at a lower pre-release price. After 14 January 2015 your price to upgrade will increase 20%, so submit your order now. Here are just a few of the new features in TNTmips 2015.

[Full list of TNTmips 2015 New Features](#)

[Technical Guides for TNTmips 2015](#)

General

Run TNT products in Mac OS X 10.10 Yosemite.

In File/Object Selection windows, typing text auto-scrolls the list to the first matching item.

The Schedule window in the Job Manager has been redesigned with more intuitive controls.

The Schedule window provides the option to perform a job once at a particular date and time in addition to repeat scheduling.

The Script Reference for SML functions and classes has been redesigned to present parameters and details more clearly and concisely.

Spatial Display

Display three-component image layers (RGB, HIS, ...) using rasters with different cell size, row/column dimensions, and spatial extents.

New multi-band image layer allows selection of more than three image bands and RGB display of the layer using your choice of any three of the bands.

Use the Add Objects icon button to select any number of image bands for display, with choice of adding as separate layers, as an RGB layer, or as a multi-band layer.

Optionally display vector line/polygon vertex locations with choice of symbol.

The GeoFormula Layer Controls window has been redesigned for easier use with icon buttons for script actions.

In the GeoToolbox the Region panel allows saving a region as a vector object.

Render to PDF provides the option to not render layers that are currently hidden.

Georeferencing and Orthorectification

Compute a Rational Polynomial (RPC) model for image orthorectification from 3D control points.

Use the Auto-Register operation to place 3D control points for the RPC model. Z values are assigned automatically for the 3D control points from a selected DEM when the Default Z from Surface option is set.

Buffer Zone Generation

The Buffer Zone window has been redesigned to show all process parameters on one panel.

Buffer polygons, lines, points, or nodes (new).

New polygon buffer options: Expand, Shrink, Outer Ring (Expand - Original), Inner Ring (Original - Shrink), and Border (Outer Ring + Inner Ring).

Create buffers as vector, CAD, or region.

Options to merge overlapping buffer polygons (all or by attribute).

Option to assign buffer distance by attribute.

Spatial Statistics Processes Redesigned and Improved

Geometric Element Statistics by Polygon (formerly Polygon Properties).

Image Statistics by Geometric Element (formerly Geometric Raster Properties).

Surface Properties by Geometric Element.

Image Statistics by Category Raster.

Polygon Shape Properties.

Mosaic

Match contrast to any input image or to a separate reference image.

Contrast-match grayscale, RGB, and multi-band images.

Apply previously-saved contrast or auto-contrast to input images during mosaic assembly or apply contrast to the assembled mosaic.

Mosaic RGB separates to either RGB composite or RGB separates.

Image Spatial Filtering

The Spatial Filter control window has been updated with easier-to-use controls and resizable display of filter kernels.

All filters allow variable blending of source and filter result to create the output image.

Select from predefined filter window sizes (up to 21 x 21) or set a custom size.

New Gaussian smoothing filter and a new family of Gray Level Co-occurrence Matrix texture filters (Contrast, Dissimilarity, Homogeneity, Entropy, and others).

Vegetation Indices Added to Raster Calculation

Operations are reorganized into four groups: Algebraic, Logical, General Indices, and Broadband Vegetation Indices.

The Broadband Vegetation Indices group provides 14 common indices, including NDVI, ARVI (Atmospherically Resistant Vegetation Index), EVI (Enhanced Vegetation Index), SAVI (Soil Adjusted Vegetation Index), and MSAVI2 (Modified Soil Adjusted Vegetation Index).

Editor and Database Operations

Line/polygon tool: new option to extend a line by distance and bearing in manual mode.

Snap operation: new preview option to step through the gaps with choice to snap or skip.

Snap operation: an arc-wedge graphic shows and allows control of snap distance/snap-back angle.

A line being edited is allowed to cross another line and can be snapped to another element.

The Table Properties window has been redesigned for easier use, showing all table and field properties on one panel.

Create "Computed Numeric" fields (formerly "Computed field") and "Computed Text" fields (formerly "String Expression" field) by first defining Numeric or Text field type, then setting as Computed.

Create auto-increment numeric fields.