# Mosaic

# **Mosaic Selected Areas**

The Auto Mosaic process in TNTmips (Raster/Auto Mosaic) allows you to use all or a selected portion of each input raster object (or set of component rasters) to form the output TNT or Google tileset or TNT raster object. You can choose a previously-created object (region, vector, shape, or coincident binary raster mask) to define the processing area to be used from each input raster. If you choose a vector or shape object that includes more than one polygon/shape, the outline of the union of these polygons (i.e., the outer boundary excluding islands) is used to define the processing area. You can choose objects to define processing areas for all input rasters or only for selected input rasters. You can also use standard GeoToolbox drawing tools to manually draw polygons for any areas in the Mosaic window's view and save them as region objects to use to define processing areas, as shown on the reverse.



The raster on the left in this mosaic layout has a selected area defined by a binary raster object, which is automatically applied as a mask to make the maskedout (deselected) areas transparent in the Mosaic window's view pane. The full rectangular extents of the input raster continue to be outlined in color. The input raster on the right in this mosaic layout has a processing area defined by a shape object (displayed in the illustration above right) made up of several shapes (polygons) outlining map quadrangles; only the outer boundary of this set of shapes is used to define the selected area. When you define the selected area using a shape, vector, or region object, the extents outline of that input raster is modified automatically to show only the processing area you have defined (outline shown in yellow in this illustration for clarity).

# **Choose Processing Area for a Single Input**

- Processing Areas icon button

X Mosaic (524)				
				Felected Area
Object Refr Choose Processing Areas	Cell Size	Dimensions	Selected Area	
ortho_1-1_1m_j_ri001_2008_1.jp2 / NAC Automatic Processing Areas	1 m	16382 x 21833	All	
ortho_1-1_1m_j_ri003_2008_1.jp2 / NAE Reset Processing Areas	1 m	42856 x 28509	All	
ortho_1-1_1m_j_ri005_2008_1.jp2 / NAD83 / UTM zone 19N (LM 69W)	1 m	32264 x 29029	All	- All
ortho_1-1_1m_j_ri007_2008_1.jp2 / NAD83 / UTM zone 19N (CM 69W)	1 m	42964 x 43480	All	Lnoose

To choose the object defining the processing area for a particular input raster, left-click on the raster's entry in the input list in the Mosaic window to highlight it and press the Processing Areas icon button (circled in red in the above illustration) and select *Choose Processing Areas* from the dropdown menu. Alternatively you can right-click on the Selected Area field for that raster's list entry (whether the

raster is highlighted in the list or not) and select *Choose* from the popup menu, as illustrated above right. The standard Select Object dialog then appears to allow you to choose a region, vector, shape, or coincident binary raster object to define the processing area for that particular input raster.

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## **Choose Processing Areas for Multiple Inputs**

	X Mosaic (524)					
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1	Object	Refe Choose Processing Areas	Cell Size	Dimensions	Selected Area	All Chaose Processing Areas
I	ortho_1-1_1m_j_ri001_2008_1.jp2 /	NAC Automatic Processing Areas	1 m	16382 x 21833	All	All Automatic Duranasian August
l	ortho_1-1_1m_j_ri003_2008_1.jp2 /	NAC Reset Processing Areas	1 m	42856 x 28509	All	All a second conduct Processing Areas
1	ortho_1-1_1m_j_ri005_2008_1.jp2 /	NADES / UTM ZONE 19N (LM 69W)	1 m	32264 x 29029	All	All Reset Processing Areas
l	ortho_1-1_1m_j_ri007_2008_1.jp2 /	NAD83 / UTM zone 19N (CM 69W)	1 m	42964 x 43480	All	

You can also choose objects to define processing areas for multiple input rasters in one operation. Press the <ctrl> key while left-clicking on the desired input rasters in the input list to highlight multiple entries, then press the Processing Areas icon button and select *Choose Processing Areas* from the dropdown menu. (You can access the same menu by right-clicking on the Selected Area column heading as

shown above right.) A Select Object dialog then appears to allow you to select a processing area object for each highlighted input raster. If no input rasters are highlighted when you press the Processing Areas icon button, you are prompted to select a processing area object for each of the input rasters.

### Automatically Add Processing Areas

Kosaic (524)					
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Object	Reft Choose Processing Areas	Cell Size	Dimensions	Selected Area	
ortho_1-1_1m_j_ri001_2008_1.jp	p2 / NAC Automatic Processing Areas	1 m	16382 x 21833	All	Selected Area
ortho_1-1_1m_j_ri003_2008_1.jp	p2 / NAC Reset Processing Areas	1 m	42856 x 28509	All	ortho_1-1_1m_j_ri001_2008_1.shp
ortho_1-1_1m_j_ri005_2008_1.jp	p2 / NAD83 / UTM zone 19N (LM 69W)	1 m	32264 x 29029	All	ortho_1-1_1m_j_ri003_2008_1.shp
ortho_1-1_1m_j_ri007_2008_1.jp	p2 / NAD83 / UTM zone 19N (CM 69W)	1 m	42964 x 43480	All	ortho_1-1_1m_j_ri005_2008_1.shp
		-			ortho_1-1_1m_j_ri007_2008_1.shp

An automatic procedure for adding processing areas is available when the input images you are mosaicking are files in image formats supported for direct use in TNTmips (JP2/GeoJP2, TIFF/GeoTIFF, MrSID, among others) and the processing area for each image is defined by a shape file with the same filename as the image file. Press the Processing Areas icon button

or right-click on the Selected Area column head and choose Automatic Processing Areas from the menu. The selection procedure looks for the matching shapefile in the same directory as its associated image; if it is not found, you are prompted for a directory to search.

### **Removing Processing Areas**

To remove the processing area and thus revert to using the full extent of an input raster, right-click on the Selected Area field for that

Selected Area					
ortho_1-1_1m i rinn1	_2008_1.shp				
ortho_ Selected Area	_2008_1.shp				
ortho_ All	_2008_1.shp				
ortho_ Choose	_2008_1.shp				

raster's list entry and choose All from the popup menu.

To remove or clear processing areas for all input rasters, press the Processing Areas icon button or right-click on the Selected Area column

-	
Ī	Selected Area
1	ortho_1-1_1m <sup>\</sup> Choose Processing Areas
	ortho_1-1_1m_j Automatic Processing Areas
Ī	ortho_1-1_1m_i Reset Processing Areas
Ī	ortho_1-1_1m_j_ri007_2008_1.shp

heading and choose *Reset Processing Areas* from the popup menu.

### Using the GeoToolbox to Draw and Save Regions to Define Processing Areas





To manually define a processing area for an input raster, press the GeoToolbox icon button at the top of the Mosaic window's view (circled in red in the illustration to the left). You can use the drawing tools in the standard GeoToolbox dialog to draw the desired area, create a temporary region from it, and save the region to a Project File. You can then

use the procedures described above to choose that saved region object to define the processing area for an input raster. Use of the GeoToolbox to define regions is described in the Tutorial booklet entitled *Interactive Region Analysis*.