

System

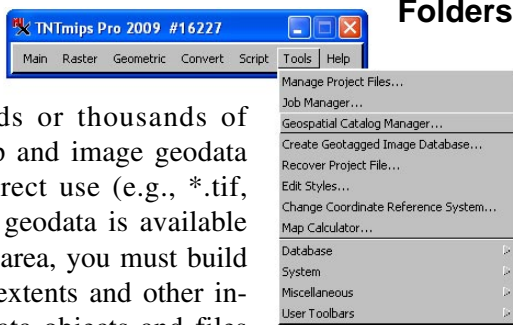
Making Geospatial Catalogs

TNTmips' geospatial catalog functions let you select data by its geographic location from your hundreds or thousands of Project Files and other map and image geodata file types supported for direct use (e.g., *.tif, *.jp2, *.shp). Before your geodata is available for selection by geographic area, you must build a catalog that contains the extents and other information about your geodata objects and files so that geodata that meets your geographic search criteria can be quickly identified.

You make and edit geospatial catalogs, or geocatalogs, using the Geospatial Catalogs window (choose Tools/Geospatial Catalog Manager from the TNTmips menu). The Catalog Manager searches all the local and network locations you designate and builds a database table of the properties of all the geodata layers in these locations available for use in your TNT product. The standard Select Objects dialog in TNT processes uses these catalogs to rapidly locate and select geodata objects just as when you use this same dialog to navigate through directories and select objects. Geocatalogs permit your selection of geodata layers depending on their location on Earth or text contained in the file/object name and/or description rather than their location on your computer or network. For more information on selecting objects from geocatalogs, see the Technical Guide entitled *System: Using Geospatial Catalogs*.

Select Geospatial Catalogs

Click on the *Select geospatial catalog* button at the top of the Geospatial Catalog window to edit or update an existing catalog or to create a new one. Click on the New File button near the top of the Select File window to create a new catalog. If you choose any existing catalog for editing or updating, the three lists in the Geospatial Catalog window will be filled in as they were when the catalog was last generated. Geocatalogs generated by TNTmips have a *.gsc extension.

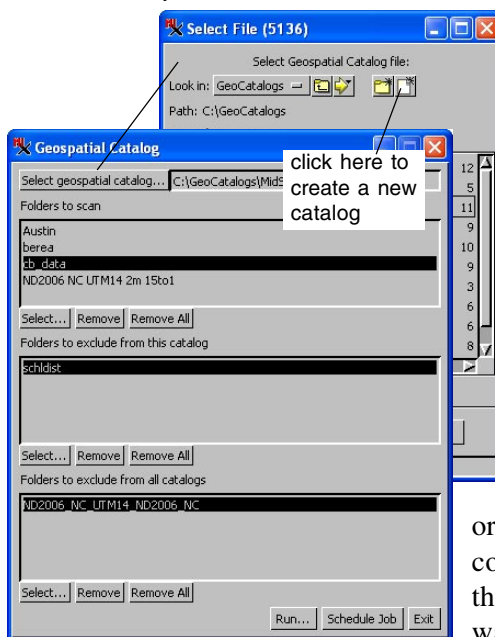


Folders to Scan

Click on the Select button for the *Folders to scan* list to choose the folders that contain the geodata you want to catalog. It is up to you to decide how you want your geodata cataloged. You may want all your geodata in one catalog or you may want to create different catalogs for different projects, different parts of the world, or for different categories of data (e.g., agricultural, wilderness, urban, geologic, classified, and so on). You can include the same data in more than one catalog if it makes sense for your organization's use of its geodata.

When you select a folder to scan for your geocatalog, all the files and subfolders within the selected folder are scanned. You can exclude specific subfolders by including them on one of the exclusion lists below. Similarly, you can include a subfolder of an excluded folder by selecting that specific subfolder here. The scanning procedure looks for recognized geodata file and object types and valid georeference information. When a recognized file or object type with valid georeference information is encountered in one of the selected folders, the file/object name and a number of other parameters are recorded in the *.gsc file.

The Remove button below the *Folders to scan* list deletes the highlighted folder from the list and the Remove All button deletes all entries in the list.



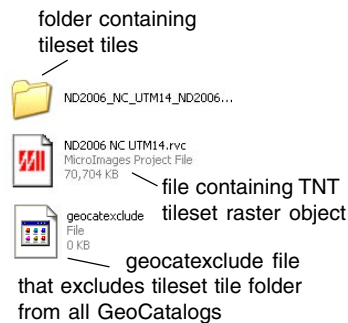
Folders to exclude from this catalog

Only files in the folder(s) you have selected for scanning are scanned for inclusion in the catalog. The folder you have selected for scanning, however, may contain folders with contents you do not want to include in the catalog you are generating. Only folders with contents you do not want to include in your catalog that are contained by folders selected for scanning should be selected here. For example, you may have a folder for a state or province that contains folders for all of its counties or districts, but for the purpose of the catalog you are going to generate, you only want the southwestern counties or provinces

or only those that contain a certain river. Select the unwanted subfolders for exclusion from this catalog by adding them to the *Folders to exclude from this catalog* list.

Folders to exclude from all catalogs

Folders on this list will be marked for exclusion from all catalogs by placing a file named *geocatexclude* in the folder with the data files. The presence of this empty file (*geocatexclude*) prevents the contents of the folder from being scanned for any geocatalog whether or not the folder is present in the *Folders to exclude from all catalogs* list for the current catalog. The *geocatexclude* file is created by the Geospatial Catalog Manager if a folder is selected for exclusion when the catalog is created or updated or you can create one manually and put it at the directory level that contains folders with contents you do not want to include in any of your catalogs.



An example of a folder you would want to exclude from all catalogs is the folder that contains all the GeoTIFF or GeoJP2 tiles for a TNT tileset (see the TechGuide entitled *Mosaic: Mosaic Directly to TNT Tileset* for more information). The TNT tileset raster object specifies the full extents of all the tiles and is outside the subfolder(s) that contain the georeferenced tile files. You only need to include this one tileset raster object in your catalog to be able to select the full extents of the tileset rather than including the hundreds or thousands of georeferenced files that comprise the complete tileset.

Not all tilesets are comprised of tiles with extents dictated only by the designated tile cell dimensions in the Mosaic or Create Tileset process. The Import process allows creation of multifile raster objects with each imported object treated as a tile. These tiles may represent map quadrangles or similar geographically-defined units that do not all have the same cell dimensions. The organization of multifile raster objects is similar to that of tilesets with a raster object that specifies the full extents of all the tiles located at the directory level above the folder(s) containing the georeferenced tile files. You may want to include all of these tiles in the cataloging process to have the individual map quadrangles that make up the multifile raster available for selection as well as the full multifile raster object. You need to assess whether including the individual tile files in the catalog will be of use or would make it difficult to locate any objects/files of interest without providing any benefits.

All other information included with a catalog (e.g., object type and format, folders to scan) is included in the *.gsc file, which is saved where you elected to save your catalog. You may have all your *.gsc files together in one folder or you may be keeping them in the same folder as the data represented by the catalog, or in some other location. The *geocatexclude* file that indicates a folder should be excluded from all geocatalogs, however, is placed by the Geospatial Catalog Manager or you in the folder to be excluded. The presence of this file tells the Geospatial Catalog Manager that the contents of the folder are to be excluded from all geocatalogs whether or not it has been selected on the *Folders to exclude from all catalogs* list for the current catalog. If you decide you want the contents of this folder to be included in newly made catalogs, you need to delete the *geocatexclude* file from the folder.

Updating Catalogs Manually

When you add new files and/or folders to a folder that has been previously catalogged, you can either update the existing catalog or create a new catalog so the new files are included. To update an existing catalog, click on the *Select geospatial catalog* button and select the catalog you want to update. The folders included and excluded the last time the catalog was generated are then listed in the Geospatial Catalog window. If the folders you want to scan for the updated geocatalog have not changed from those originally selected, simply click on the OK button. If you want to include or exclude additional folders, make these changes then click on the OK button. Files are not scanned again during a geocatalog update unless they have a modification date that is more recent than when the catalog was originally generated.

If you have replaced files in the selected folders with files of the same name that contain the same objects as when the catalog was initially created, you do not need to update the catalog to use these objects.

Automatic Catalog Update

All your geocatalogs can be automatically updated on any schedule you choose using TNT Job Processing in TNTmips DV2010. Install the development version of 2010 on any TNTmips 2009-enabled computer. Remember any user of TNTmips 2009 can install and run DV2010 for 30 days renewable until the official release of this version in early 2010. Job Processing in DV2010 provides for scheduled jobs to run at specified intervals. The DV2010 Geospatial Catalog Manager provides an option to create scheduled jobs to update your catalogs as frequently as you like (e.g., daily at night for all, hourly for selected project catalogs, and so on.)