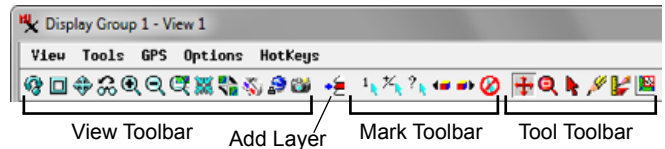# View Window Toolbar

The toolbar on each View window in TNTmips provides icon buttons that let you control the content of the View (View toolbar), to mark geometric elements in the View (Mark toolbar), and to activate graphic tools that you can use in the View (Tool toolbar). An Add Layer icon button allows you to add any type of geospatial data layer directly from the View window. The function of each button is indicated by a ToolTip when you place the mouse pointer over the button. The default installation of TNTmips provides a selection of the most frequently-used icon buttons. You can add buttons for other actions (or remove buttons) using the Customize Hidden Features window (Options / Customize; see the Technical Guide entitled *Spatial Display: Customize the View Window*).

Add Layer. Opens a menu with entries for selecting specific types of spatial objects to add to the View and a Quick-Add option that allows selection of a mixture of spatial object types.

View Toolbar

Refresh. Redraws the View canvas. By default the View is automatically refreshed after any change, so it is seldom necessary to refresh manually. You can change this behavior on the View panel of the Options window (Options / View Options in the Display Manager).

Stop. Cancels the redraw in progress. The View canvas is partially updated to the point at which stopped.

Full. Zooms the View canvas to show the maximum extents of all the layers in the display.

Previous. Returns the View to the zoom and position just prior to the previous redraw. Press repeatedly to step back through a series of zoom/position changes.

Zoom In. Zooms the View in by a factor of 2 while maintaining the View center position. Press the "+" key to zoom in 2X centered at the cursor position.

Zoom Out. Zooms the View out by a factor of 2. The View center position is maintained unless the pre-zoom center is close to the edge of the group extents. Press the "-" key to zoom out 2X centered at the cursor position.

Zoom to Active Layer. Zooms so that the extents of the active layer fill at least one dimension of the View canvas.

Zoom to Active Group. [Layouts only.] Zooms so that the full extents of the active group fill at least one dimension of the View canvas.

Zoom to Maximum Detail. Zooms a View with one or more raster or terrain layers so that one screen pixel corresponds to one cell in the currently active layer. If the active layer is not a raster or terrain, then the highest-detail raster layer that has the *Preferred for 1X zoom* toggle turned on (on the Options tabbed panel of the Raster Layer Controls window) is used. If none is set as preferred then the raster or terrain layer with the highest detail is used. The button has no effect if the view contains only geometric layers.

GeoLock. Synchronizes the View with other View windows that have GeoLock turned on. Views can be synchronized by scale, extent, or both; to change the setting, choose Options / GeoLock on the View window. See the TechGuide entitled *GeoLock TNT Views*.

Stereo. When a terrain layer is present, turns on stereoscopic 3D rendering for the terrain and/or any drape layers using the current Stereo Settings (Options / Stereo Settings). See the TechGuides entitled *View Geodata in Stereo in 2D Views* and *Stereo Display Settings* for details.

Synchronize External GeoViewer. Opens a menu with choice of Google Maps, Bing Maps, or Google Earth. The first two options open your default browser with the selected GeoViewer zoomed to the area of the current View. The third option opens the desktop Google Earth application (if installed) zoomed to the current View area. Changes in zoom level and/or position in the TNT View are mirrored in Google Earth as they are made. See the TechGuide entitled *Synchronize External GeoViewer*.

Quick Snapshot. Saves a snapshot of the current View canvas to the location and in the format you have specified in the Snapshot Settings (Options / Quick Snapshot Settings from the View window or Options / View Options from the Display Manager using the Snapshot tabbed panel). If you have not yet established snapshot settings, you are prompted for a location and format the first time you use this feature. See the TechGuide entitled *Quick Snapshot of View Contents*.

Mark Toolbar

The next four icon buttons (Mark Exclusive, Toggle Marked, Mark Additional, and Unmark) set the behavior of the Select tool that is used to mark geometric elements in the View. Mark Exclusive and Toggle Marked are provided by default.

Mark Exclusive. The Select tool marks the geometric element at the cursor location and unmarks any previously-selected element of the same type. (This mode allows only one element of each type to be marked at a time.) Elements of more than one type (e.g., line and polygon) at the location may be marked as determined by the current settings for each type.

Toggle Marked. The Select tool toggles the status of the element at the cursor location: it marks the element if unmarked or unmarks the element if marked. Does not affect the marking status of other elements, and thus allows manual marking of any number of elements.

Mark Additional. The Select tool marks the geometric element at the cursor location if unmarked but does not change the status of any other marked elements. Selecting an already-marked element does not change its marking status.

Unmark. The Select tool unmarks the geometric element at the cursor location if it is marked.

Mark by Query. Opens the Query Builder dialog, which provides an interactive interface for designing and applying a database query using one or more attributes to mark elements in the View. See the TechGuide entitled *Spatial Display: Interactive Query Builder*.

The Previous Marked and Next Marked buttons are used to step through a set of two or more marked elements, setting a different element in the marked set as *active* (identified by a different highlight color) with each step. A zoomed-in View automatically pans to the location of the new active element.

Previous Marked. Makes the previous element in the marked set the active element.

Next Marked. Makes the next element in the marked set the active element.

Unmark All. Unmarks any marked elements, restoring them to their assigned drawing styles.

Tools Toolbar

View Position. Left-click and drag to pan a zoomed-in View. The View contents are moved in the direction you drag. Zoom in/out using the mouse scroll wheel. See the TechGuide entitled *Pan and Zoom with the View Position Tool*.

Zoom. The Zoom tool has multiple modes of operation. Left-click in the View to zoom in by 2X at that location; right-click to zoom out by 2X. Left-click and drag to draw a box to define the new area for the zoomed-in View. The View zooms to the boxed area immediately unless the *Use right mouse button to perform zoom or pan* toggle is turned on in the View panel of the Options window (Options / View Options from the Display Manager); in that mode the box can be repositioned and/or resized before you right-click to zoom. The dimensions of the zoom box are proportional to the view canvas dimensions unless you turn on the Differential Zooming toggle item on the View window's Options menu.

Select. Left-click in a View of a geometric object (vector, shape, CAD, or TIN) to mark or unmark the element at that location. The marking behavior is set by turning on the Mark Exclusive, Toggle Marked, Mark Additional, or Unmark button as described above.

Annotate. The Annotate tool provides quick access to basic sketching tools. When this tool is active, additional icon buttons appear on the right side of the Tools toolbar, allowing you to draw points, lines, polygons, rectangles, circles, and text, with control of colors, line weight, and font style. See the TechGuide entitled *Annotate Tool* for more information.

GeoToolbox. Opens the GeoToolbox, which provides a comprehensive set of tools for sketching, measuring, marking elements, and generating regions. See the Tutorial booklet *Sketching and Measuring* for more information.

View-in-View. In a display group with multiple layers, layers on top may completely hide the layers below. With this tool you draw an elastic box to define an area for comparison of different layers. The top layer in the View is automatically turned off inside the box, while the remainder of the view uses the original layer visibility settings. To reverse this relationship, press the Swap Inside / Outside icon button on the toolbar or right-click in the View. Right-click on the Show / Hide checkbox for a layer in the Display Manager or in the View sidebar legend to open a menu that allows you to set the visibility of that layer in the View-in-View box. For more information see the TechGuide entitled *View-in-View Tool*.

Examine Raster. Place the point marker in the View to examine raw raster cell values for the surrounding area from the active raster layer. Cell values are shown in the associated Raster Inspection window (see the TechGuide entitled *Inspecting Raster Cells*).

Point Profile. [Non-layout Views only.] Creates a vertical profile of 3D points (in a LIDAR, vector, or shape layer) within the designated rectangular area. The profile is shown in the Point Profile window. The dashed line extending out from the center of the box in the View indicates the direction of the profile view and provides a handle for rotating the profile. Drag the default profile box to reposition it, drag the corners or edges to resize it, or used the dashed end lines to rotate it around either end of the profile. For more information see the TechGuide entitled *LIDAR: Point Profile Tool*.

Adjust Viewpoint. [Non-layout Views only.] Activate a graphic for setting the viewing geometry in an associated 3D Perspective View window. For more information see the Tutorial booklet entitled *3D Perspective Visualization*.

Placement. [Layouts only.] Interactively position groups in a page layout by dragging them while maintaining all established group attachments (to the page or to other groups). Group extents are indicated by wireframe boxes. Right-click in the View to open a menu and choose Wireframe to show only the boxes or Solid (filled boxes) for faster rendering while adjusting. See the TechGuide entitled *Placement Tool for Map Layouts* for more information.

HyperIndex Navigator. [Layouts only.] Left-click on HyperIndex links that have been embedded in a layout. These links can open other layouts, files such as PDF or Excel, or open a web link in a browser.

HyperIndex Linker. [Layouts only.] Create HyperIndex links in a layout. See the Tutorial booklet entitled *Constructing an Electronic Atlas* for more information.