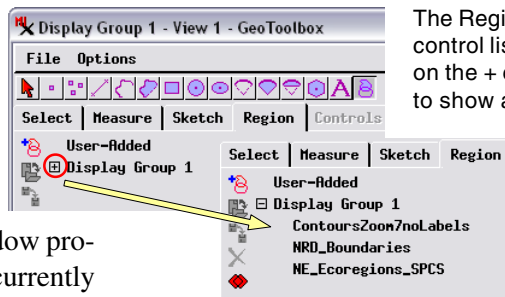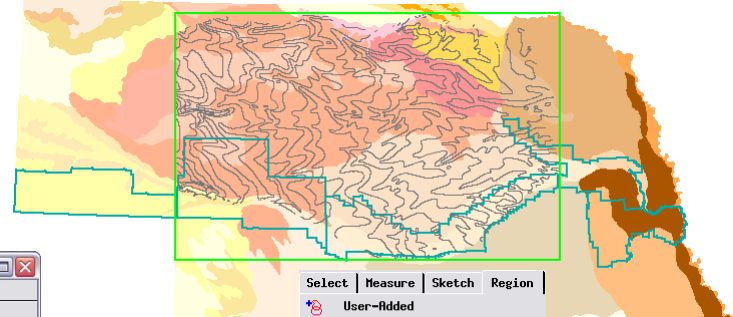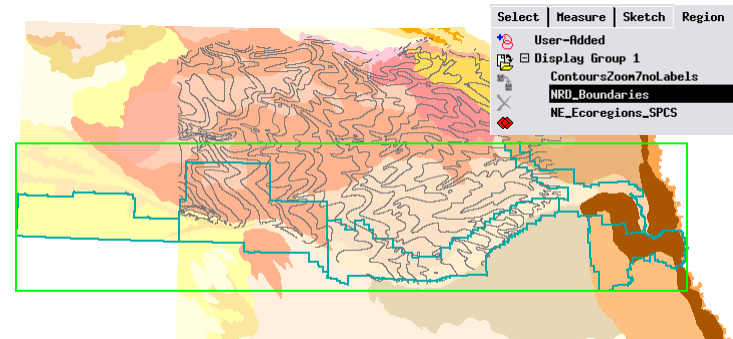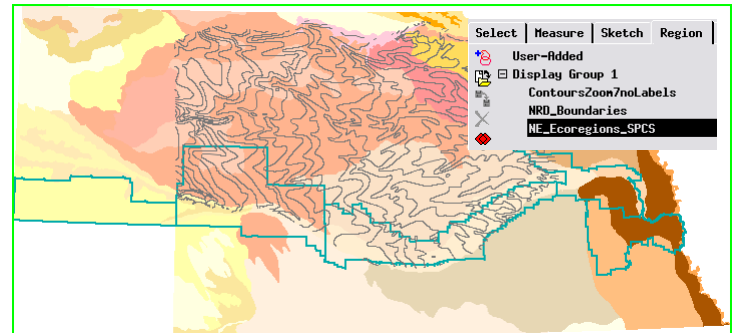# Regions from Group, Layer, and View Extents

The GeoToolbox that is available from any View window allows you to quickly create a region from the extents of any displayed group or layer. These regions can be used for measurements, combined, saved as elements in a sketch, or saved as region objects in Project Files for later use.

The Region tabbed panel in the GeoToolbox window provides a tree control that lists all groups and layers currently being displayed. The list entry for a group can be expanded to show its contained layers by left-clicking on the ⊞ control to the left of the group entry (see illustration at top right). Selecting a group or any of its layers in the Region list creates a region from the extents of the group or layer. The region boundary is shown in the view using the color and line width currently set for the primary graphic tool (see illustrations to the right). When a View is zoomed in to show less than the full extents of any of its layers, the Region list also includes an entry for the View, which you can select to create a region from the current View extents (see illustration below). The list may also include entries for marked and active elements for geometric layers, which you can also select to create regions (see the Technical Guide entitled *GeoToolbox: Use Active/Marked Elements for Measurement, Sketch, and Profile Generation*). Any regions that you have already created manually in the current display session are listed under the User-Added heading at the top of the Region list.

You can save any selected region in the list as a region object in a Project File by pressing the Save Region icon button. You can also add any selected region in the list to a sketch layer by opening the Sketch tabbed panel in the GeoToolbox and pressing the Add Sketch Element icon button. You can also create new regions from combinations of those in the list (see the TechGuide entitled *GeoToolbox: Combining Regions*).
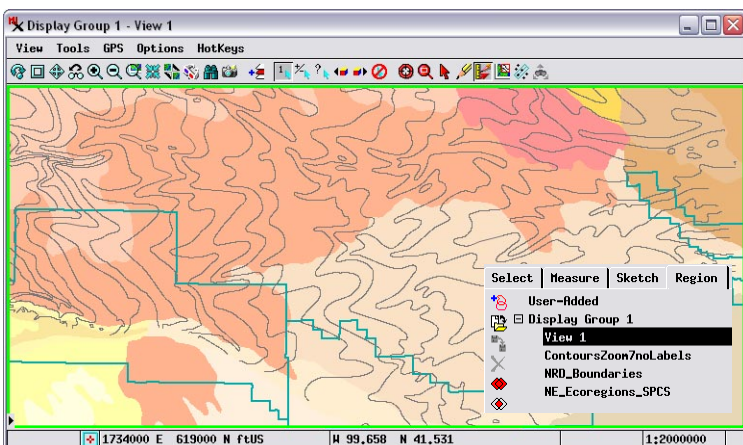
The Region tabbed panel provides a tree-control list of all groups and layers. Clicking on the + control for a group expands the list to show all of the layers in the group. Any layer can be selected in the list to create a temporary region outlining the layer's extents. (Any manually-created regions are shown under the "User-Added" heading at the top of the list.)

Above: Views of three vector layers. In each view one of the layers has been selected on the GeoToolbox Region panel to create a temporary region from the layer's extents (green box). Any of these temporary regions can be saved as a region object in a Project File using the Save Region icon button.

Left: When a View is zoomed to show less than the full extents of any layer, the Region list also includes an entry for the View. Selecting that entry in the list creates a temporary region from the extents of the View.