Inspecting Raster Cells

If you need to closely examine a displayed raster layer in order to check individual cell values over an area, the Display process in TNTgis provides you with several methods. You can enable options in the Raster Layer Controls window to directly view cell boundaries and values in the View window when you zoom in, or use the Examine Raster tool.

**View Cell Boundaries and Values when Zoom In**

Toggle buttons are provided in the Raster Layer Controls window on the Options tabbed panel to Show lines between cells when zoom and Show value labels when zoom (see illustration above). When you enable both of these options, cell boundary lines and value labels appear automatically when you zoom in far enough (see illustrations to the right). The boundary lines appear when both cell dimensions are larger than 16 pixels on screen. Labels appear when both cell dimensions are larger than 32 pixels on screen and the labels will fit inside the cell. When you display a 24-bit color-composite raster or an RGB or other multi-raster layer, values are shown for each color component, so you may need to zoom in farther to activate the label display for these layers than for a raster layer with a single value per cell. When the layer contains a floating-point raster, a field is also provided on the Options panel to let you set the number of decimal places to show in the value labels.

**Examine Raster Tool**

You can turn on the Examine Raster tool by pressing the Examine Raster icon button on the View window toolbar or by choosing Examine Cell Values from the layer’s right mouse-button menu in the Display Manager or View sidebar. The Examine Raster tool provides a point tool graphic that you can place and drag in the View to indicate the center of the area you wish to examine. The Raster Inspection window that opens with the tool includes a scrolling panel that shows a 2D array of values centered on the position you indicated with the tool (see illustration below); this cell value is outlined by a box in the array. The range of cell positions currently shown in the array is indicated in the Rows and Columns fields in the Range box, and the position of the indicated cell is shown by the Row and Column fields in the Cell box. Editing any of these numeric fields automatically pans the value array and changes the position of the tool in the View.

You can edit the value of the active cell by turning on the Edit Raster toggle button and changing the value in the Value field. The Search fields allow you to search for a particular cell value or range of values. Enter the value(s) in the Search fields, then press the Previous or Next buttons to step through the set of matching cells (values highlighted in red in the array).

The Options menu on the Raster Inspection window lets you change the font used for the values in the array and to set the number of decimal places to show for floating-point values. The Raster menu lets you open a different raster object to inspect and to save the currently visible array of values to a text file.

Enter a value or values in the Search fields, then press the Previous or Next buttons to step through the set of matching cells.