Remote Diagnostic Tool

Every standard web tileset created in TNTmips is automatically provided with a remote diagnostic tool to permit the designer of a tileset to check its integrity at any time. The standard HTML files produced with every web tileset created in TNTmips contain a link to this tool in the JavaScript library at microimages.com. The tool is activated by left-clicking on a hidden button in the upper left corner of the browser view. This button is hidden because the tool is of no interest to the end user viewing the tileset in Google Maps or Bing Maps. The tool enables you as the tileset designer to remotely inspect the properties of the tileset to help you investigate any problems that may have developed in its deployment to or use from a web site. For example, a zoom level may be missing or particular tiles may be missing or corrupted. The tool allows you to determine the current zoom level and the tile coordinates, map coordinates, and format of any individual tile, along with other information. MicroImages recommends that you retain the link to this inspection tool in the HTML you use to publish the tileset. TNTmips also provides a Validate Tileset process that can scan a complete tileset, report common problems, and repair them (see the Technical Guide entitled *Tilesets: Validate a Structure*).

Placing the cursor near the upper left corner of the browser view reveals the partly transparent button to activate the tileset diagnostic tool and shows a ToolTip indicating the current zoom level.
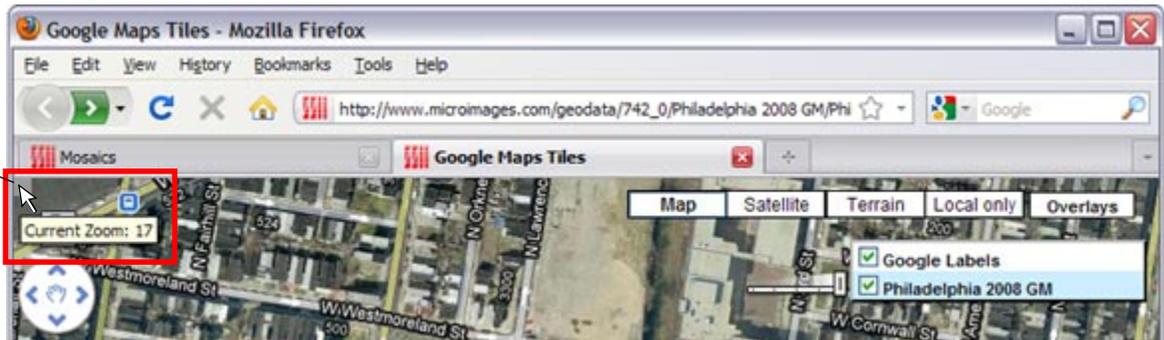
Left-clicking on the diagnostic tool's button opens a scrolled panel over the geobrowser view showing properties of the tilesets being viewed.

Properties of the View
Zoom level (z), tile row number (y), and tile column number (x) of the tile at the view center.

Map coordinates (latitude and longitude) of the view center.

Minimum and maximum latitude and longitude of the view area.

General Properties of the Tile Overlays

(The values in this example are for the custom Philadelphia orthoimage tileset with JPEG and PNG tiles [hosted by Micro-Images] and the Google Labels layer).

Entries for JPEG and PNG tile "layers" for the custom orthoimage tileset. Listed for each are the TNTmips version that created the layer (with version date), the date the layer was created, the range of available zoom levels, and the minimum and maximum latitude and longitude of the tiled data. Clicking on the Base URL web link opens a directory listing of the master directory containing the tile files.

Entry for Google Labels overlay.
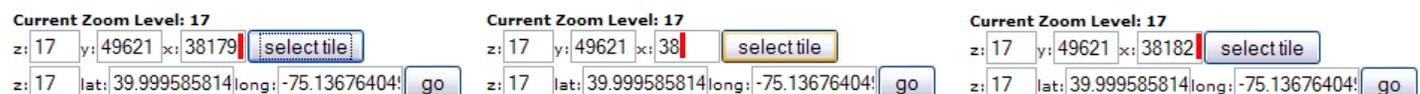
You can edit the values in the tile coordinate fields, then press the *select tile* button to the right to recenter the browser view at the new tile coordinates. (Left clicking in a boxed field places the cursor at the end of the number string, as indicated for illustration purposes by the red line in the "x" field above left; backspace to delete the desired numerals [center above], then retype the desired value [above right]). You can also recenter by editing the latitude or longitude coordinate and pressing the *go* button.

(over)
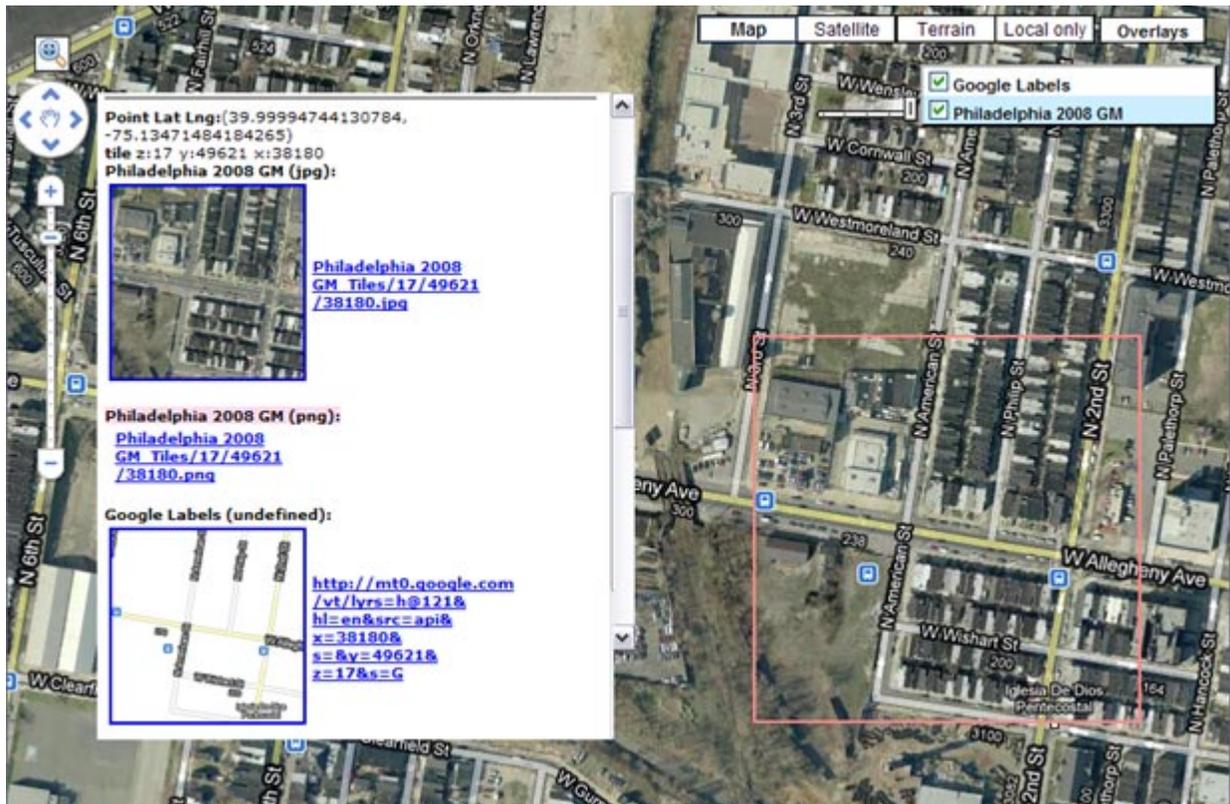
Left-clicking within the geobrowser view outlines the boundary of the tile(s) covering that location (red box above) and selects the overlay tiles at that position. The map and tile coordinates of the point you clicked are added to the diagnostic tool's scrolled list (at the top of the visible list in the illustration). Thumbnails of the overlay tiles at that position, their layer names, and their web addresses (URLs) are also added to the list. The layer names of missing tiles are highlighted in pink.

Each valid tileset shown in the view has only one tile at a particular location. The orthoimage tileset in this example was created with both JPEG and PNG tiles, so the tile at the specified location can be either a JPEG or PNG tile file. The diagnostic report shows a URL for both of these possible tile files. The actual tile at the position shown in the example is a JPEG file, so its thumbnail is shown in the list. The layer name for PNG tiles is highlighted as "missing", but this status does not indicate an error in the tileset. If no tile was returned by the orthoimage tileset at that location for either format, both layer names would be highlighted in pink as missing.