<u>Spatial Display</u>

Render to Geospatial PDF

Render to in the TNT products means to convert the contents of your TNT map or layout into some other layout format. PDF, KML/KMZ, and SVG are all examples of layout formats that can be rendered by the TNT products. Converting from a hardcopy or display layout to other layout formats is more complex than simply exporting a single layer, and you get controls that vary with the destination layout format. When you render your current view, you can choose the rendering to represent only the area of the layers in the view or match the bounding extents of all the layers in the display, which can be very large.
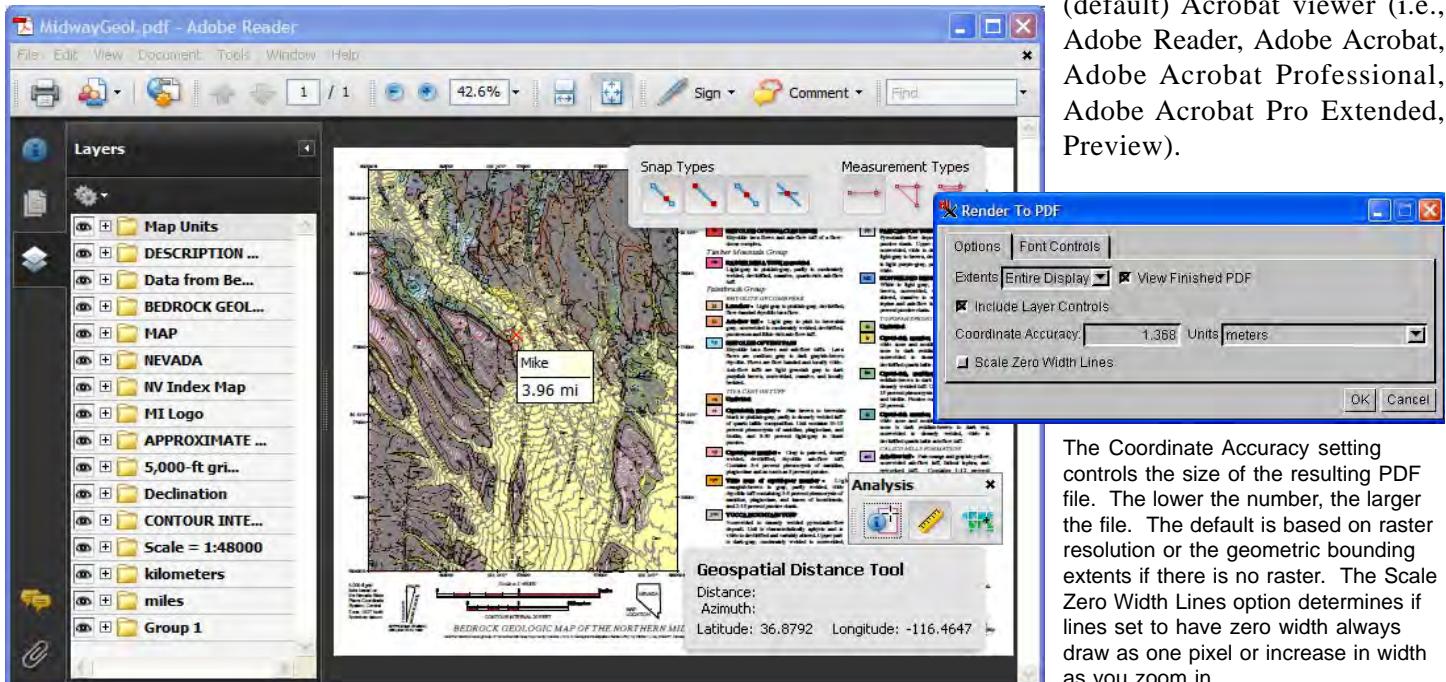
> Note: "Geospatial PDF" is the terminology Adobe uses to identify a PDF that has embedded georeference information. GeoPDF is the copyrighted name of another PDF georeference scheme created by TerraGo Technologies. Only a "geospatial PDF" can be created by the TNT *Render to PDF* process.

Geospatial PDF is an Adobe specification that georeferences the appropriate components in a layout. Map materials are being published on the Internet by USGS, NGA, and others in this extended PDF format. The Analysis Toolbar available with Adobe Reader 9.0 lets you make measurements and enter desired coordinate locations. In order to make measurements in Adobe Reader, the PDF document must pass through Adobe Acrobat 9 or higher and have Reader usage rights enabled (select *Advanced/Extend Features in Adobe Reader*, see the Quick Guide entitled *Measuring Geospatial PDFs with Reader*).

A complex layout can be rendered into a geospatial PDF. For example, a geologic map can have many complex layers, insets, legends, and fonts. The illustration shows that a standard geologic map prepared as a TNT layout for publishing as a paper map can be rendered to geospatial PDF. The TNT layers are rendered separately into the geospatial PDF so the marginalia, legends, and selected layers can be individually turned on and off when it is viewed in Adobe Reader if the *Include Layer Controls* option is on when the layout is rendered.

Viewing and using geospatial PDF files is free. Creating geospatial PDF files from your TNT product requires no additional software. The following are features of rendering to PDF with the TNT products:

- Render from complex TNT map layouts;
- Maintain individual layers in PDFs or geospatial PDFs;
- Render only area in view or area matching extents of all layers;
- Choose to link to system fonts, embed fonts, or render text; and
- Automatically launch result in your (default) Acrobat viewer (i.e., Adobe Reader, Adobe Acrobat, Adobe Acrobat Professional, Adobe Acrobat Pro Extended, Preview).

The Coordinate Accuracy setting controls the size of the resulting PDF file. The lower the number, the larger the file. The default is based on raster resolution or the geometric bounding extents if there is no raster. The Scale Zero Width Lines option determines if lines set to have zero width always draw as one pixel or increase in width as you zoom in.