User Guide

OnDemand Topo

For known resolved and unresolved issues, please visit topoBuilder and click on the Help tab located on the left side of the application. For other technical questions, please contact The National Map Help Desk (tnm_help@usgs.gov).

This guide contains the following sections:

U.S. Department of the Interior
U.S. Geological Survey

Basic Use of Map PDF Files

Introduction

1. topoBuilder produces maps in a [PDF](#) format with geospatial information. These geospatial PDFs have added features that enhance their use for navigation and geospatial analysis. This section is intended as a quick guide to opening and using geospatial PDFs.

2. This section is written primarily for Microsoft® operating systems. Examples are fromWindows 10, though other Windows versions and Mac OS® will be similar. See note below regarding other operating systems.

3. For more details, see the [map guide](#) for the related US Topo product, specifically the sections on "Geospatial Functions", "Notes on Coordinate Presentation" and "Non- Windows, Non-Geospatial, and Other Uses".

## Opening a Map PDF File Using a Web Browser, Acrobat Reader or Acrobat Pro

1. Locate the map file using File Explorer.

2. Right click the file, click 'Open With' and choose how to want to open the map. Specific choices will depend on the system configuration.
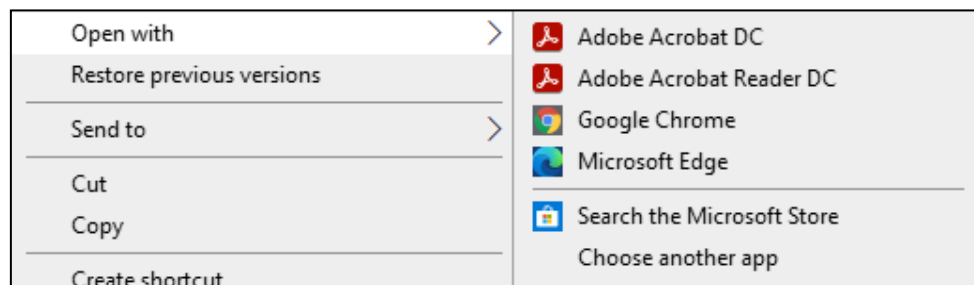

   a. By default, the map PDF file will often open in a web browser. Users can also choose the web browser from the list presented. The map will display properly but the advanced features described below will not be available.

   b. Many computers include the free Adobe Acrobat Reader. If not installed (click [here](#) to download and install it). Reader has access to most features described below. Choose 'Adobe Acrobat Reader DC'.

   c. Adobe Acrobat Standard or Pro have enhanced authoring tools. If installed (available [here](#)) choose 'Adobe Acrobat DC.

Basic Map Use with Acrobat Reader, Acrobat Standard and Acrobat Pro

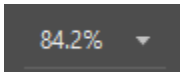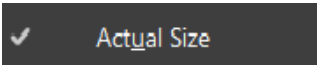Note: if the PDF file opens with a yellow warning message across the top ofthe screen, click 'Enable All Features
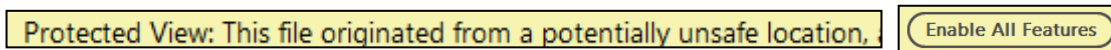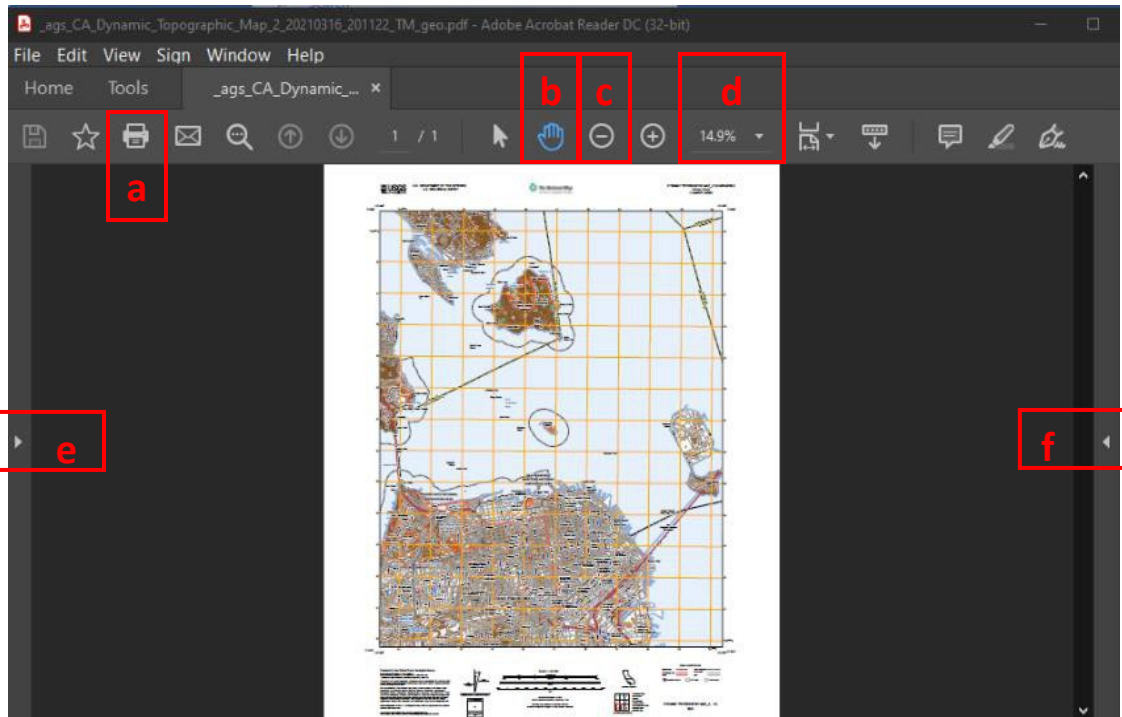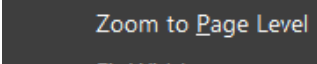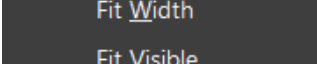
1. Commonly used tools and other interface elements.

   a) Print button: Press to see options for printing.

   b) Pan button: Click and drag to pan around the map.

   c) Zoom In / Zoom Out Buttons.

   d) Scale Menu.

   e) Click the arrow on the left side of the screen to show the Navigation Pane

   f) Click the arrow on the right side of the screen to show the Tools Pane

2. Setting the scale of the viewer.

   a. Click the Zoom In or Zoom Out Buttons.

   b. Click the Scale Menu and select a scale level or select an option at the bottom of the list:

      i. Actual Size: changes the scale to 100%.

      ii. Zoom to Page Level: changes the scale to fit the entire map into the Acrobat window.

      iii. Fit Width changes the scale to fit just the width of the map into the Acrobat window.

3. Using the Navigation Pane

   a. Click the arrow on the left side of the screen to show the Navigation Pane

   b. The Navigation Pane will open. Different versions of Adobe Acrobat may show different options, but these two buttons should always be visible:
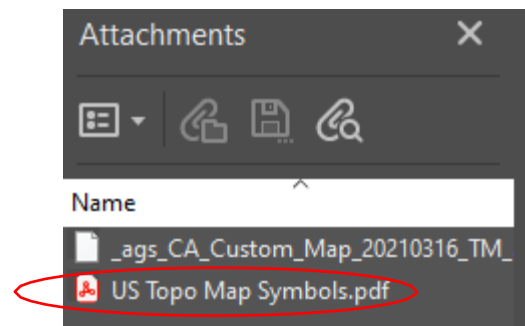
      i. Attachments.

      ii. Layers.

   c. Attachments

      i. Click the Attachments button to open a window showing documents attached to the map PDF file.

      ii. Double-click "OnDemand Topo Map Symbols.pdf" to open a visual guide to map symbols in a new tab.

      iii. An XML file with detailed metadata for the map is also attached.

   d. Layers

      i. Click the Layers button to open a list of map layers.

   ii. See Section VIII: About Map Layers for detailed information about map layers and how to use them.
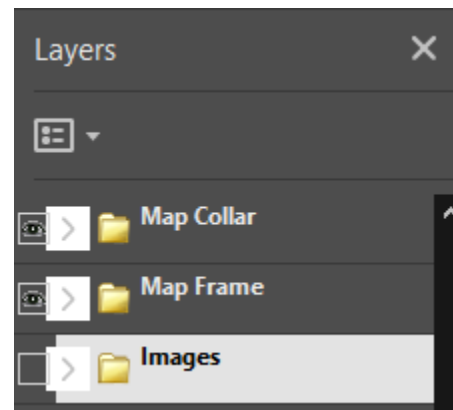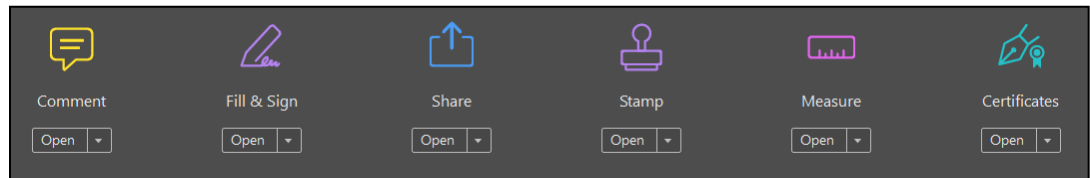
4. Geospatial Tools

    a. The Geospatial Tools allow users to measure distances and areas within the map, and to determine coordinates for navigation.
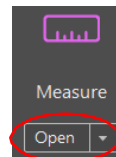
    b. Showing the Geospatial Tools.
        i. Click the arrow on the right side of the screen to show the Tools Pane.
        ii. The Tool Pane will open. Different versions of Adobe Acrobat may show different options, but the More Tools button should always be visible
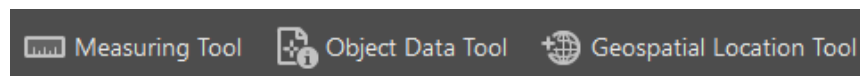   iii. Click the More Tools button.
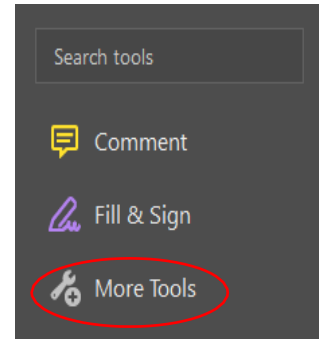
        iv. Depending on system settings, users will see a list of available tools, like the list below.

        v. Find the Measure tool and click 'Open'

   vi. A list of Geospatial tools should appear at the top of the screen:

            1. The Measuring Tool

            2. The Geospatial Location Tool

    c. Using the Measuring Tool.

        i. The Measuring Tool allows users to measure distances and areas in the map in a variety of scaled units (miles, kilometers etc.).

        ii. Click the Measuring Tool button.

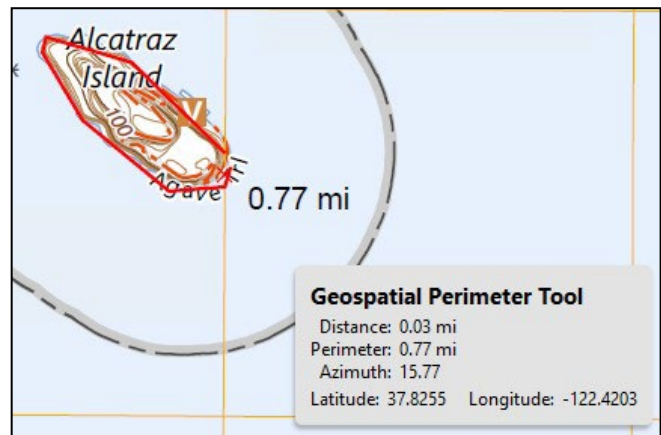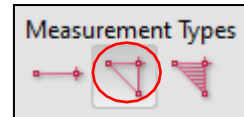   iii. By default, the tool will measure distance in a straight line, the Distance Tool.

            1. Left click within the map to start a measurement line.

            2. Distance is shown in the lower right corner.

            3. Left click again to stop measuring.

Geospatial Distance Tool
Distance: 0.38 mi
Azimuth: -16.58
Latitude: 37.7999   Longitude: -122.3632
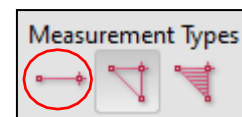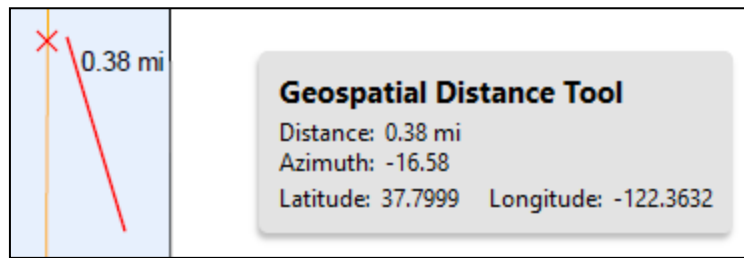
iv. To measure distance along multiple legs (for example, along a trail orshoreline) or to calculate the perimeter of a feature, use the Perimeter Tool.

1. Click the Perimeter Tool button within the Measurement Types window in the upper right corner of the map.

2. Left click within the map to start a line or leg of the measurement.

3. Left click once to add a point and continue measuring. Add as many points as needed.

4. Length is shown in the lower right corner.

5. Double left click to stop measuring.

Geospatial Perimeter Tool
Distance: 0.03 mi
Perimeter: 0.77 mi
Azimuth: 15.77
Latitude: 37.8255   Longitude: -122.4203

v. To measure the area of a feature, use the Area Tool.

    1. Click the Area Tool button within the Measurement Types window in theupper right corner of the map.
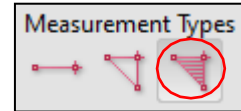
    2. Left click within the map to start drawing a shape.

    3. Left click once to add a point and continue drawing the shape.Add as many points as needed.

    4. Note: do not overlap when drawing the shape.

    5. The last point of the shape MUST be placed at the first point. Move the cursor over the first point until a little circle appears below and to the left of the cursor arrow.

    6. Double left click this point to stop drawing and 'close' or finish the shape. If an error message is received, repeat the step above.

    7. The shape's area is shown in the lower right corner and in a box that open after the polygon is completed.

    8. Note: Cancel drawing the shape by right clicking the map and choosing 'Cancel Measurement' from the top of themenu.
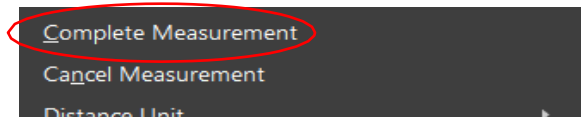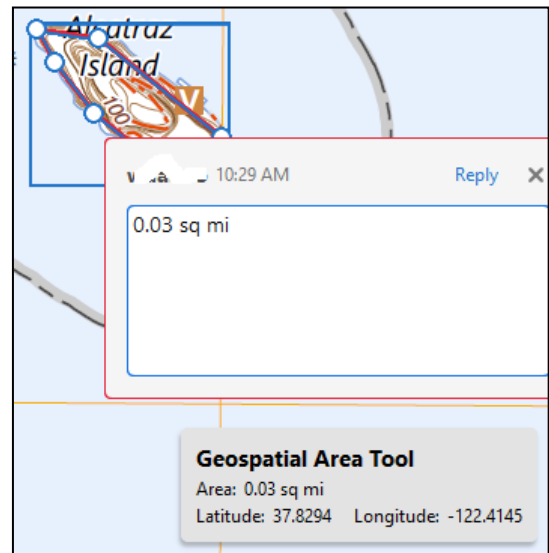
vi. To change distance or area units, right click the map.
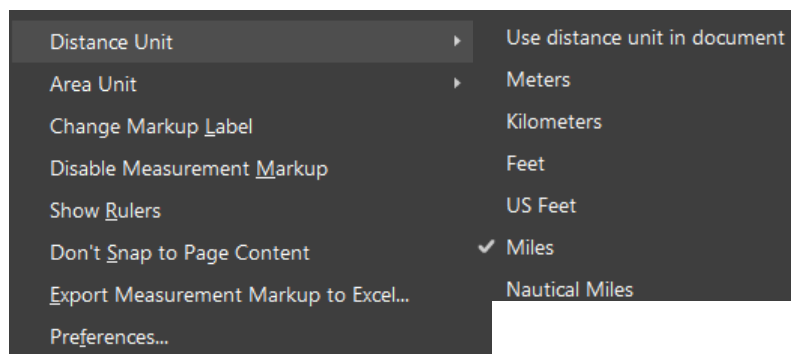
    1. Click the Distance Unit or Area Unit menus.

    2. Make a selection from the list of available units.

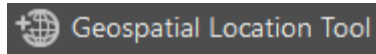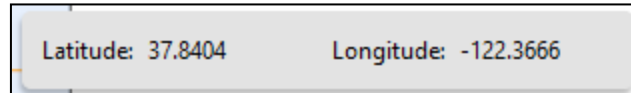d. Using the Geospatial Location Tool

    i. The Geospatial Location Tool allows users to see latitude-longitudecoordinates for map locations.
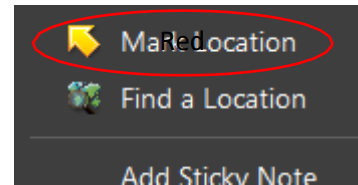
    ii. Click the Geospatial Location Tool button.

    iii. Move the cursor over the map.

    iv. Coordinates are shown in the lower right corner.

Latitude: 37.8404   Longitude: -122.3666

    v. To copy the coordinates for use in a different application,

        1. Right click the point ofinterest.

        2. Choose 'Mark Location' from the list.

Mark Location
Find a Location
Add Sticky Note

        3. A marker will appear on the map.

        4. Click the marker to open a popup window with the coordinates, which can be copied and pasted into a differentapplication.

wdando 11:18 AM   Reply ✕

Lat: 37.88645 Long: -122.43723

Add a reply...

uff Poir
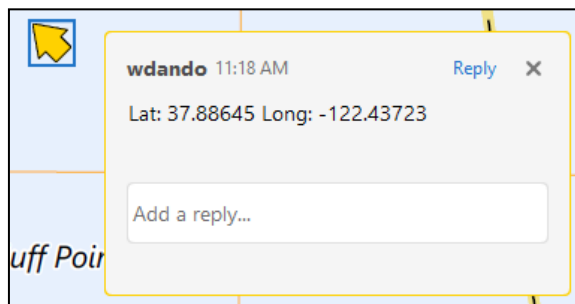
        5. Note: Adobe Acrobat Pro users can also copy coordinates directly from the map by right clicking on the map at the desired point and choosing 'Copy Coordinates to Clipboard'.

Copy Coordinates to Clipboard
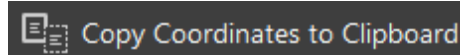
About Map Layers in PDF Files

1. Description of layer settings.

    a. Options menu.

    b. Empty visibility box: layer group IS NOT currently visible in the map.

    c. Visibility box with eye: layer group IS currently visible in the map.

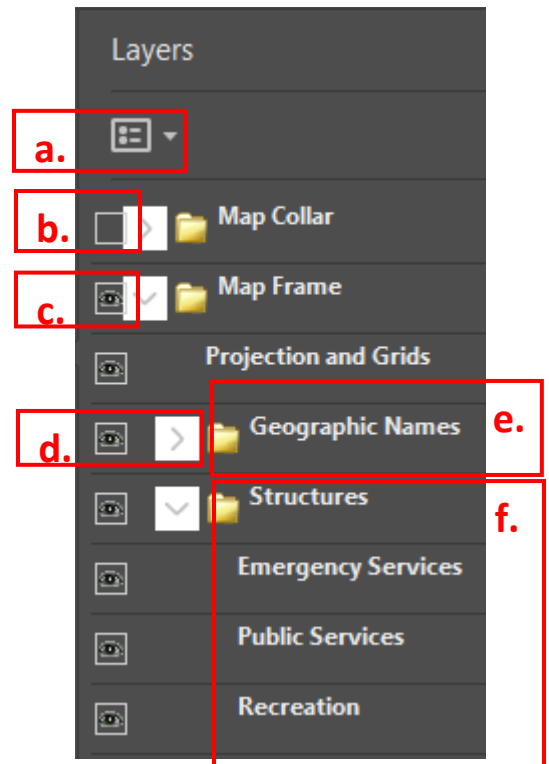   d. Arrow box (click to expand or collapse groups of layers).

    e. Collapsed group (individual layers not visible).

    f. Expanded group (individual layers or subgroups visible).
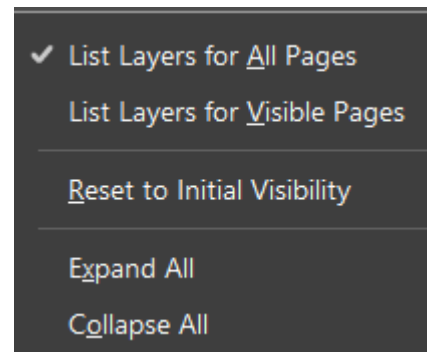

2. How to expand or collapse a single layer group at atime.

    a. Click the right arrow box to expand that group.

    b. Click the down arrow box to collapse that group.

3. How to expand or collapse all layer groups at once.

    a. Click the Options menu at the top of the Layer list.

    b. Click 'Expand All'.

    c. Click 'Collapse All' to restore the layer list to the default view.

4. How to make layers visible on the map.

   a. Click empty box to make a layer visible on the map. ☐

   b. Click creepy eye to turn layer off. 👁

   c. Note: layer visibility can be controlled for the group or the individual layer. If layer visible is changed and nothing changes in the map, make sure the group containing that layer is also set to visible.

   d. Restoring default settings.

      a. Changes will not save with the map. If the PDF is closed and reopened, the PDF layers will reset to the original settings.

      b. As an alternative, open the Options Menu at the top of the Layers list.

   c. Click 'Reset to Initial Visibility' to immediate restore the originalsettings.
      Reset to Initial Visibility

5. Description of top-level layer groups

   a. The Map Collar layer group includes everything outside the main map frame, including the map title, logos, notes, and the locator maps at the bottom of the page.

   b. The Map Frame layer group includes the main map frame and all its individual layers. See below for more details.

   c. The Images layer group includes aerial photography (orthophotography) of the map area, if available.

6. Description of selected Map Frame layer groups.

   a. The Projections and Grids layer contains the coordinate grid drawn by default over the map and the coordinate references along the map frame.

   b. The Geographic Names layer group contains labels for Natural Features like rocks and islands, and Populated Places such as towns and cities.

   c. The Structures layer group contains layers for point features like schools, city halls, campgrounds, and hospitals.

   d. The Transportation layer group contains layers for airports, roads, railroads, trails, and ferries.

   e. The PLSS layer contains the grid and labels for the Public Land Survey System, where available.

   f. The Hydrography layer group contains layers for rivers, lakes, and other water features.

10
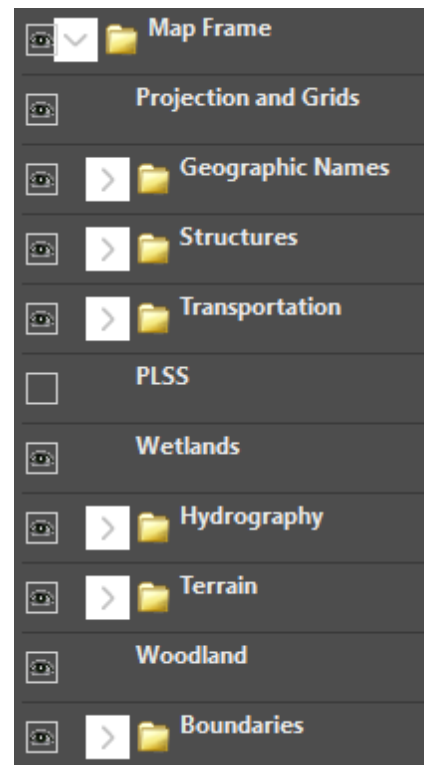
g. The Terrain layer group contains layers for elevation contours and shaded relief.

h. The Boundaries layer group contains layers for civil boundaries such as states and territories and federal lands such as National Cemeteries and National Monuments

i. Notes:

   a) If a layer has no features within a map, that layer will not appear in the Layer list. For example, if a map has no Airports visible, then there will be no Airports layer in the list.

   b) If the user edits layers for the map in the topoBuilder application and excludes certain layers, those layers will not be in the Layer list. Maps with edited layers have a "USER DEFINED CONTENT" note at the bottom of the page.

7. Examples of different layer settings

Default Settings

Terrain Off

Terrain and Transportation Off

Contours Off, Shaded Relief On

Terrain Off, Images On

Terrain, Transportation and Woodland Off