

CALTOPO MAPS -- QUICK START GUIDE

June 2022


CalTopo was originally developed for search and rescue organizations and has a wealth of features, a very few of which are listed here. These instructions illustrate one way to create a free PDF file for printing. CalTopo has an excellent user guide [? Help] in top menu bar and an app for Android or IOS.

Go to CalTopo.com. You can create maps without registering, but registering allows you to save maps online, share them, and sync maps to your device. To register, click [Sign Up] and select login through Google, Apple, Facebook, Microsoft, or Yahoo. On future visits, click on [Log In]. Your email address will display in top menu bar at right after login. Click [Your Data] to see your saved maps.

Creating a Map with Map Layers:

The home page displays a map of the USA with three menus: basic commands and search box across the top, **Map Objects** on left and **Map Layers** on right.

In the top menu bar, enter your destination in the search box and click. Default display is MapBuilder Topo layer with updated trails, trail mileage, and names of some peaks. WTS requires more details for learning navigation: the specifications are:

- Most maps are **Scanned Topos** base layer plus **MapBuilder Overlay** to display updated trails and roads on a USGS map, feature names, peak elevations, benchmarks, section lines and numbers, vegetation shading, USGS symbols, and some public property boundaries.
- Snow location maps are **Scanned Topos** base layer, +Stack Base Layer, **Forest Service**, FSTopo 2013 (white) @100%, plus **MapBuilder Overlay** and **Slope Angle Shading**, Fixed (30 to 60 degrees).
- Drag view to desired location with hand pointer and zoom with the plus-minus icon  at top left of map as desired.

Options: In the right-hand menu, try different Map Overlays (on either creation or printing page).

- **Shaded Relief** (select under Scanned Topos, +Stack Base Layer) emphasizes terrain.
- **Slope Angle Shading** can assist in planning routes as well as avalanche awareness.
- **Public Lands** overlay shows areas we may not have permission to enter.
- **Fire Activity** is very useful to display when trip planning.

Customizing a Map: in left-hand menu. Use [+Add] dropdown list

Map Objects:

Marker can mark and label features. Click Marker to display a red dot in center of map and a dialog box at lower right. Drag the dot to the desired spot, enter label in dialog box, select marker style and color, and click OK. To edit, select the pencil icon by marker label at left or left click on the marker on the map to display dialog box. Right click to see coordinates and other fabulous options.

Custom Layers:

Viewshed Analysis displays line of sight visibility and estimates radio effectiveness from a selected point. Click to display a red circle in center of map and a dialog box at lower right. Drag the circle to the desired spot, name the layer if desired, enter Eye Altitude of 1 or 2 meters, select color, and click OK.

Saving a Map:

- A dialog box appears after you use these features to enter map name and select online share options.
- To save map details on your device, click [Export] in left-hand menu. GeoJSON format preserves Marker and Layer styles and colors. GPX format converts all markers to black dots and may not save custom layers.

Creating a PDF:

- Click on printer icon in the column adjacent to left-hand menu to go to CalTopo Printing page. Select [**Geospatial PDF**] in the dropdown menu. (It is difficult to achieve an accurate scale with a JPG Image.) Key settings in menu at left are:
 - **Scale:** set at 1:24,000 to match USGS maps.
 - **Title:** enter map name.
 - **Grid Lines:** check Lat/Lng in Degrees to add latitude and longitude notations to printed map.
 - **Orientation:** select Portrait or Landscape.
- Adjust the zoom level of the map and use hand pointer to drag map to desired view.
- **Print Area:** Hover over corner or center dot of red area to get pointing finger, drag as desired.
 - Start with the destination centered, then adjust to display possible bearing targets, notable features, and/or access roads and trailhead.
- Click on [**Generate PDF**] to open a new page and display your pdf.
 - Click on download icon to save your map file as “document.pdf”; rename as desired.
- **Nomenclature for WTS maps:**
 - Sitename-Instr-Your name (if desired).pdf, e.g., White Ranch-Instr-Arlt.pdf.
 - Corresponding students’ maps are: Sitename.pdf.
 - Session designation (S19, etc.) will further distinguish various versions.

Printing a PDF of Map

- Use Adobe Acrobat Reader for accurate mile and kilometer scales; select **Actual size** in the print dialog box.
- Premium color copy paper, 24-28 lb. 98-100 brightness, produces crisp map details at ~\$20 per pack of 500 (4¢ each).

Note:

- Home page and printing page displays are not WYSIWYG. Review your pdf page to be sure all desired features are included.
- Vegetation shading color varies by map quadrangle, from sickly yellow (Mount Vernon, NCAR) to vibrant green (Clear Creek Park, Staunton State Park).
 - Zoom out to display from Boulder to Douglas County to see the variation.