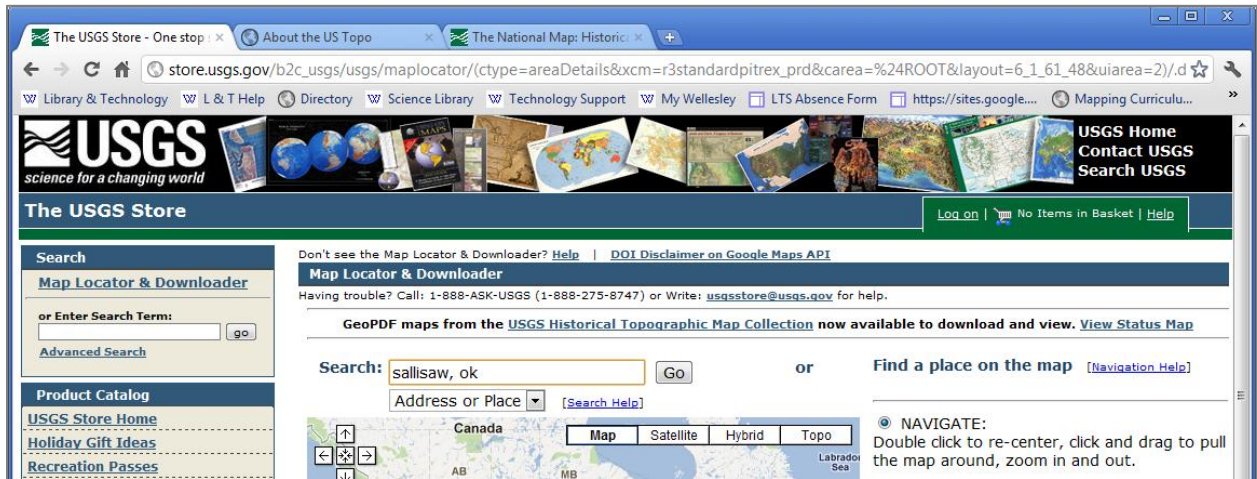


Downloading & Printing USGS Topographic Maps

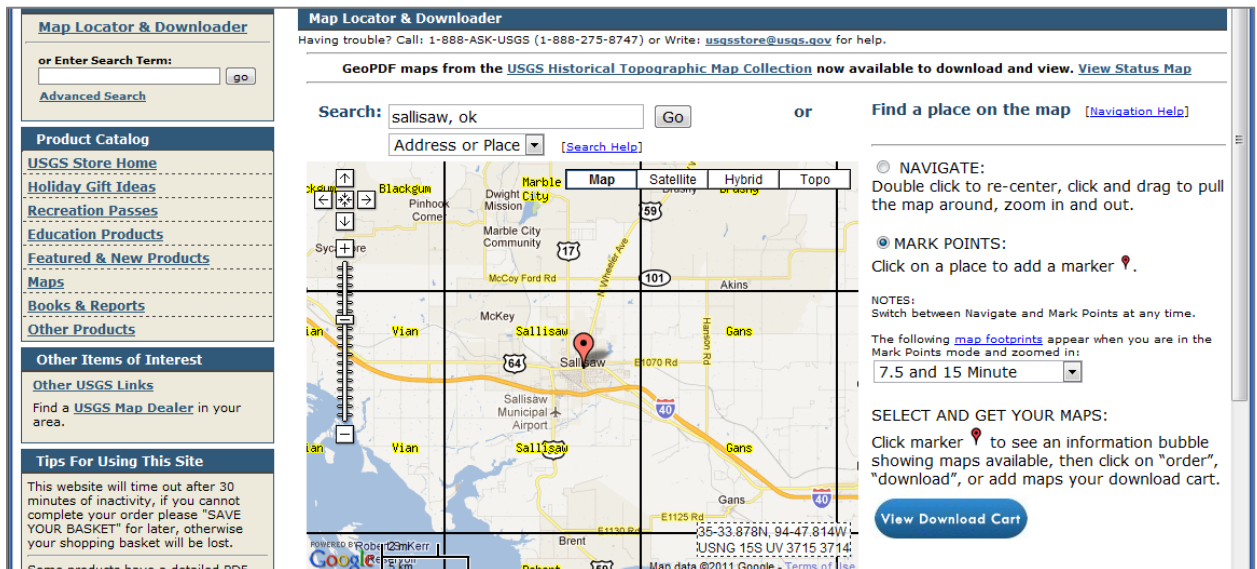
Wellesley College
Revised November 2011

Download current USGS topographic maps via the USGS Map Store

1. Open a web browser (Chrome, Firefox, Safari, etc) and go to the USGS Map Locator website:
<http://tinyurl.com/maplocator>
2. Search for the place you are interested in. You can search by address or place name or by the name of the topographic quadrangle if you know it.

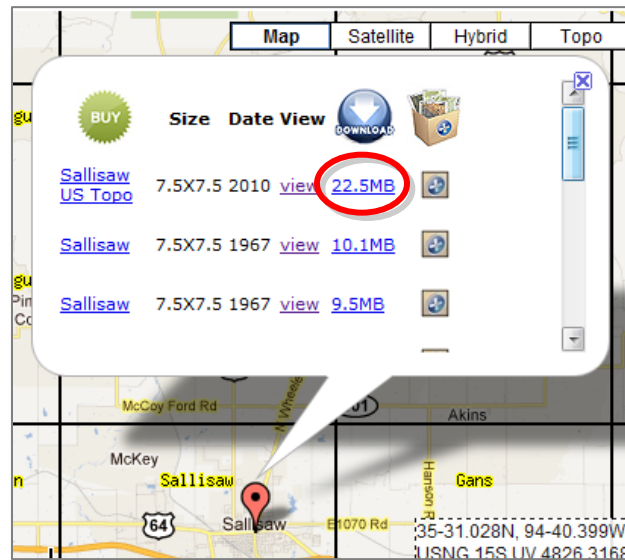



3. The map outlines will show up on the screen as black lines, and a red marker will appear at the place you searched for. The names of the USGS topographic quadrangles are shown in yellow. In this example, I searched for Sallisaw, OK, and now I see that it is located in the Sallisaw quad.

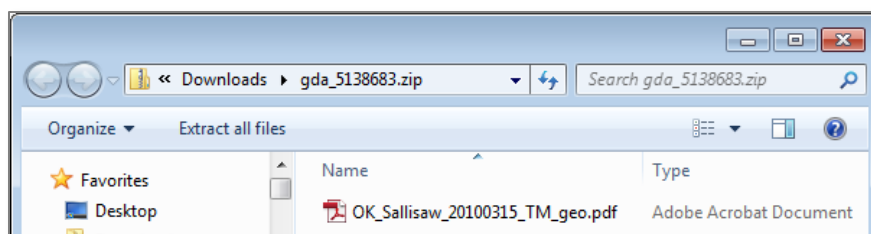


4. If the marker is in the *incorrect* place, click the **Clear Markers** button at the bottom of the map. Then click on the correct place in the map, and a red marker will appear.
 - a. Tip: If you need to zoom or pan elsewhere (nearby) in the map, click the **NAVIGATE** radio button on the right-hand side of the screen. When you are ready to select a location, click on the **MARK POINTS** radio button.

5. To view the available maps for the selected quadrangle, click on the **red marker**. Look for the map you want in the pop-up window. To decide which map to choose, consider (1) whether the map is USGS Topo or 'Digital Map Beta', (2) the year of publication, and (3) the scale.
 - a. *US Topo* maps are traditional topographic maps with contour lines. '*Digital Map Beta*' maps are a preliminary format that does not contain contour lines.¹ If only Digital Map Beta format is available for your area of interest, choose a map with a different scale (7.5x15) or a different year (see instructions below for downloading historic USGS topo maps).
 - b. The scale is indicated by the size: 7.5x7.5 maps are usually 1:24000 and 7.5x15 maps are usually 1:25000.
6. If you only need this single quadrangle, click on the **download link** next to the map you want. A zipped file (.zip) will automatically begin downloading. (If you are asked if you want to save or open the file, click **Save**.) These maps are large, so it may take a few minutes.



- a. Tip: If you would like to download multiple quadrangles for a larger area (for example, the Sallisaw, Gans, and Vian quads), click on the **plus sign**  to add the map to your cart. Close the pop-up window, and then click on the map to add markers to the other quads you want to download. Add each map to your cart using the plus sign in the pop-up windows. When you are ready to download the maps, click on the blue **View Download Cart** button in the bottom right-hand side of the website and follow the instructions to download the maps.
7. When the download is complete, double-click to open the zip file. Inside it you will see a pdf file, which is the topo map. Copy the pdf file to your computer or a flash drive. Now you are ready to print the map.



¹ The Digital Map Beta format is gradually being replaced by regular US Topo maps—to see the status, go here <http://nationalmap.gov/ustopo/about.html>

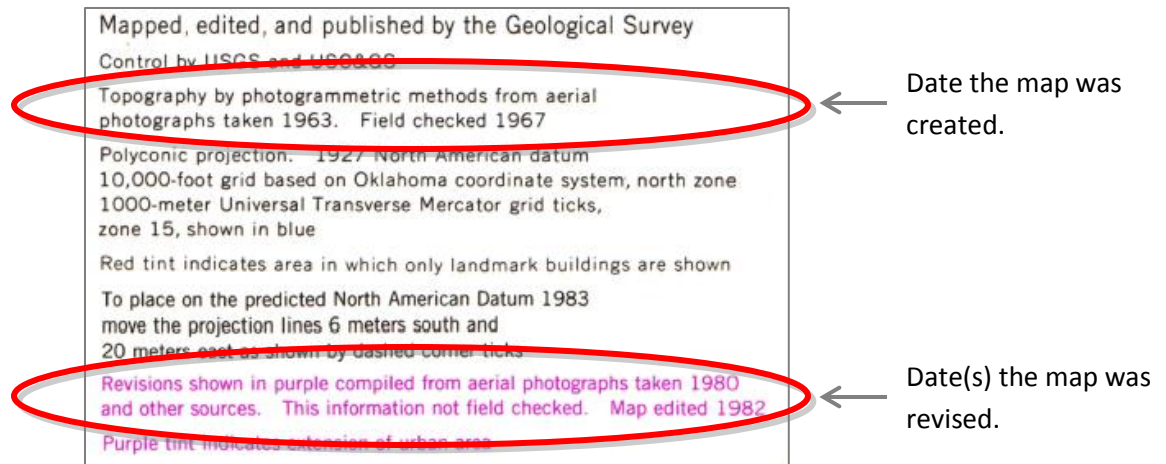
Download historic USGS topo maps via the Historical Topographic Map Collection

1. Open a web browser and go to the USGS Historical Topographic Map Collection website:
<http://tinyurl.com/historiclocator>
2. You can search by state name, map scale, map name, or a combination of the three. To determine the map name, you can use the USGS Map Locator (see instructions above). Click **Search** to find maps.

- a. Note: Not all states are available yet (MA is scheduled for spring 2012). To check availability, see <http://nationalmap.gov/historical/status/index.html>
3. The next screen will show you available maps for the area. The historical database contains maps from the late 1800s through the 1990s. If no results are displayed, make sure that you typed the map name correctly and check that historical maps are available for the state.

Map Name	Primary State	Map Scale	Date On Map	Imprint Year	Link to Metadata	Download GeoPDF
SALLISAW	OK	125000	1900			
SALLISAW	OK	125000	1911	1932		
SALLISAW	OK	125000	1911	1951		
SALLISAW	OK	125000	1911			
SALLISAW	OK	24000	1967	1968		
SALLISAW	OK	24000	1967	1979		
Sallisaw	OK	24000	1967	1983		

4. To download a map, click on the **Download GeoPDF** icon. A zipped file (.zip) will automatically begin downloading. . (If you are asked if you want to save or open the file, click **Save**.) When the download is complete, double-click to open the zip file. Inside it you will see a pdf file, which is the topo map. Copy the pdf file to your computer or a flash drive. Now you are ready to print the map.
 - a. *Tip:* Two date fields are shown – Date on Map (the year the map was created) and Imprint Year (the year the map was printed). If these years are different by more than a year or two, the map was either reprinted as-is at a later date or it was revised based on aerial photos or a field visit later on. For example, the results for Sallisaw, OK, show a map that was created in 1911 and reprinted as-is in 1932 and 1951; the results also include a map that was created in 1967 and then photo-revised in 1979 and 1983. To determine whether a map with different creation and print dates was revised or just reprinted, you will have to download the map(s) and look at the information in the bottom left corner of the map:




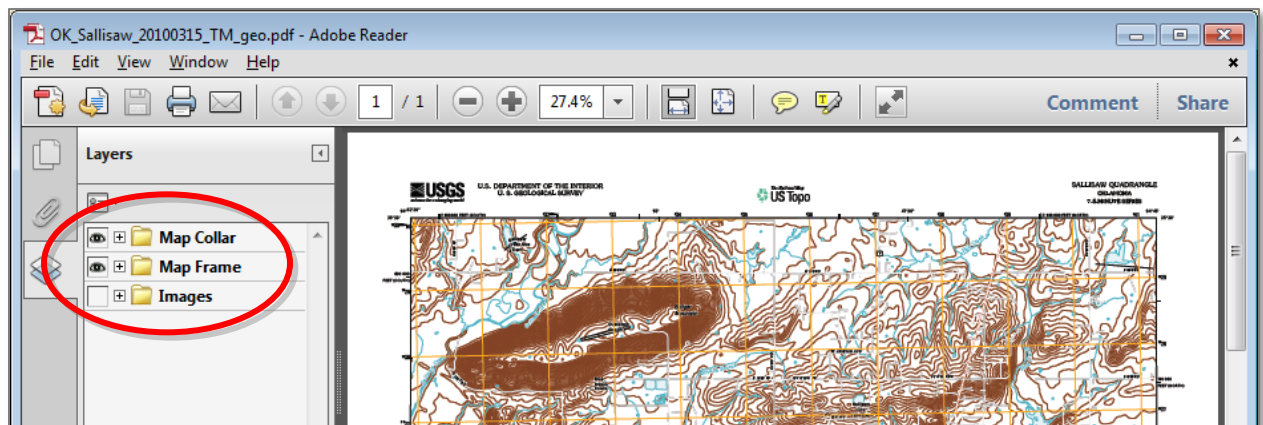
Print USGS topographic maps on the plotter at CLAPP LIBRARY

See the next section for how to print at the Science Library.

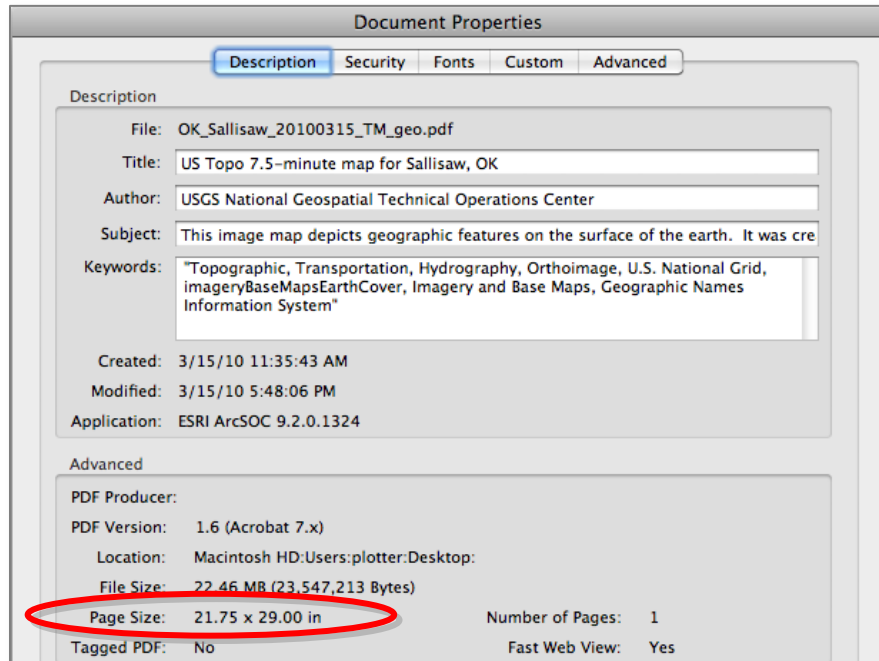
1. Visit the Knapp Center in Clapp Library to use the plotter. Library hours can be found on the website: <http://web.wellesley.edu/web/Dept/LT>
2. Open your map pdf file in **Adobe Reader** or **Adobe Acrobat Pro**.
3. When you open the pdf you will be asked if you would like to download the GeoPDF plug-in. Click **No**. The plug-in allows you to see coordinates, measure area/length, import/export geospatial data, and use GPS tracking, but *it is not necessary for printing the maps*.



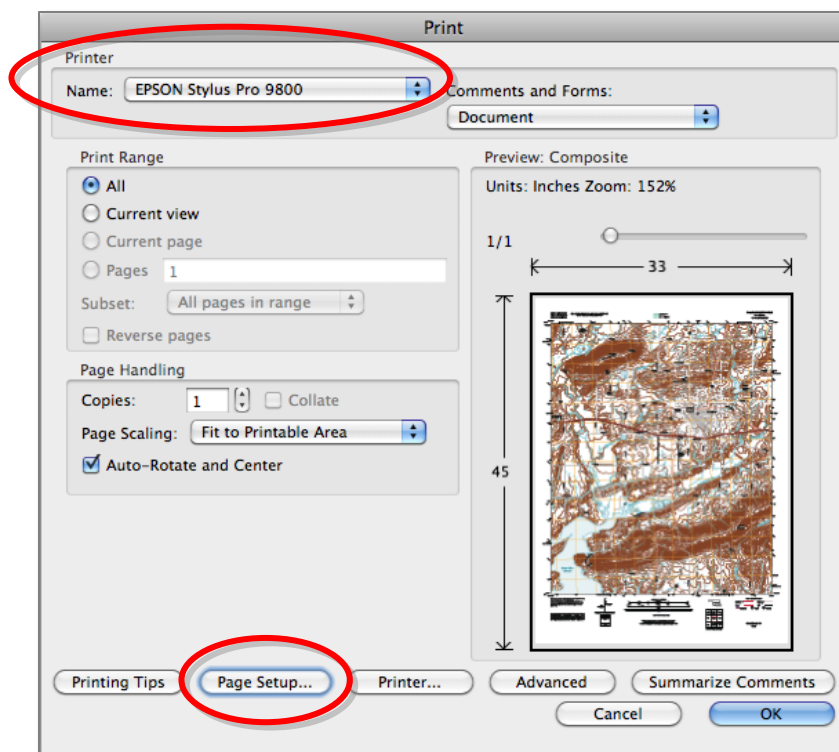
4. The pdf format of USGS maps allows you to turn layers on and off using the **Layers** panel. If you do not want to print the satellite imagery, click on the eye  next to **Images** to turn off the satellite image.
 - a. Tip: If you do not see the Layers panel, go to the **View** menu and select **Show/Hide | Navigation Panes | Layers** (or in Acrobat Pro: View | Navigation Panels | Layers).



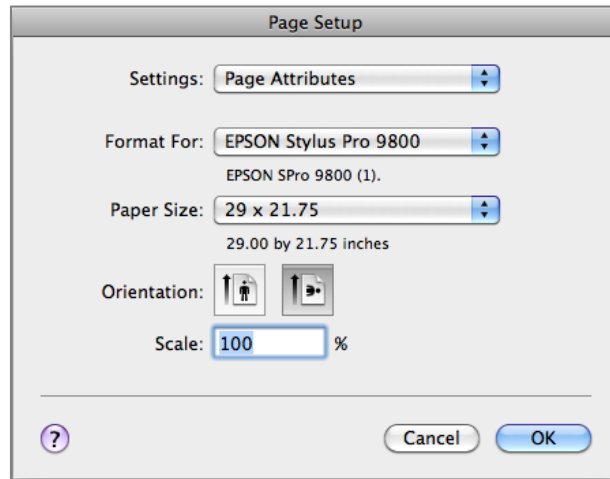
5. Now you are ready to print. There are instructions for printing at the plotter stations; you can follow the instructions for **Adobe Photoshop** or follow the next few steps, which outline the same information.
6. First, check the size of the map. From the **File** menu, select **Properties**. In the Description tab of the Document Properties window, make note of the **Page Size** in the **Advanced** section. Note that one edge of the map must be less than 36 inches to fit on the plotter paper. Click OK to close the window.



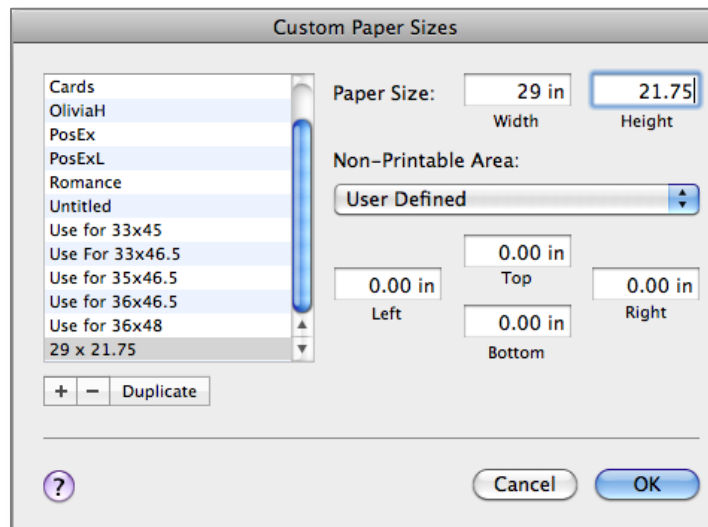
7. Make sure that the paper you want is loaded in the plotter. If you will be writing on the map and/or taking it into the field, we suggest printing it on the lightweight **SiHL CAD paper** (\$2.50/linear foot).
8. Next, set the paper size: Go to **File | Print**. In the Print window, make sure that the printer is set to EPSON Stylus Pro and then click the **Page Setup** button.



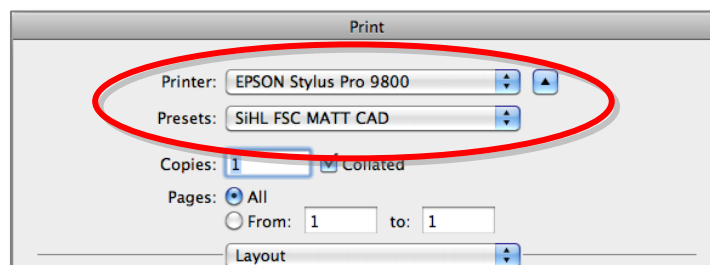
9. In the Page Setup window, make sure that the **Settings** field is set to **Page Attributes** and the **Format For** field is set to **EPSON Stylus Pro 9800**. Then click on the pull-down menu next to **Paper Size** and choose **Manage Custom Size** from the bottom of the list.



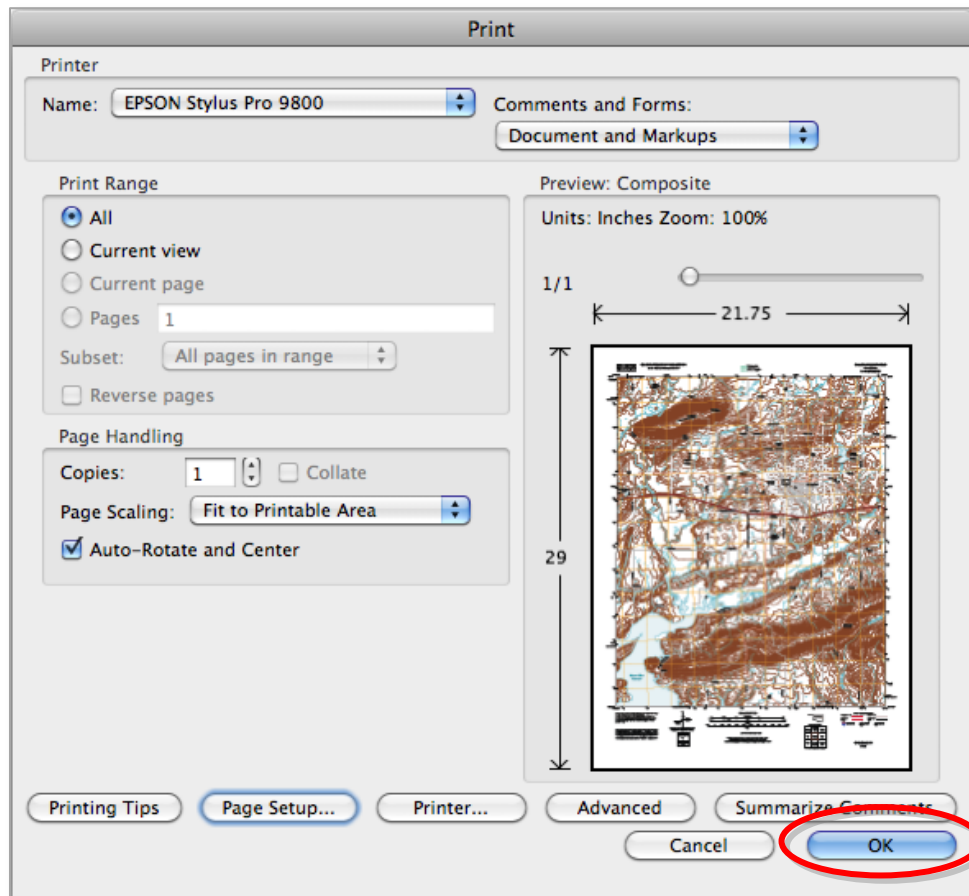
10. In the Custom Paper Sizes window, click the **+** button to add a new paper size.
- Untitled** will be added to the list. Double-click on it to change the name.
 - Next to **Paper Size**, type in the map's width and height. Click OK to save the settings and return to the Page Setup window.



11. Choose your new paper size from the **Paper Size** list in the Page Setup window. Click **OK** to close the Page Setup window and to return to the Print window.
12. In the Print window, click on the **Printer** button. In the Printer window, choose the correct paper type from the **Presets** drop-down menu. Click **Print** to save the settings.



13. Click **OK** in the Print window to begin printing.




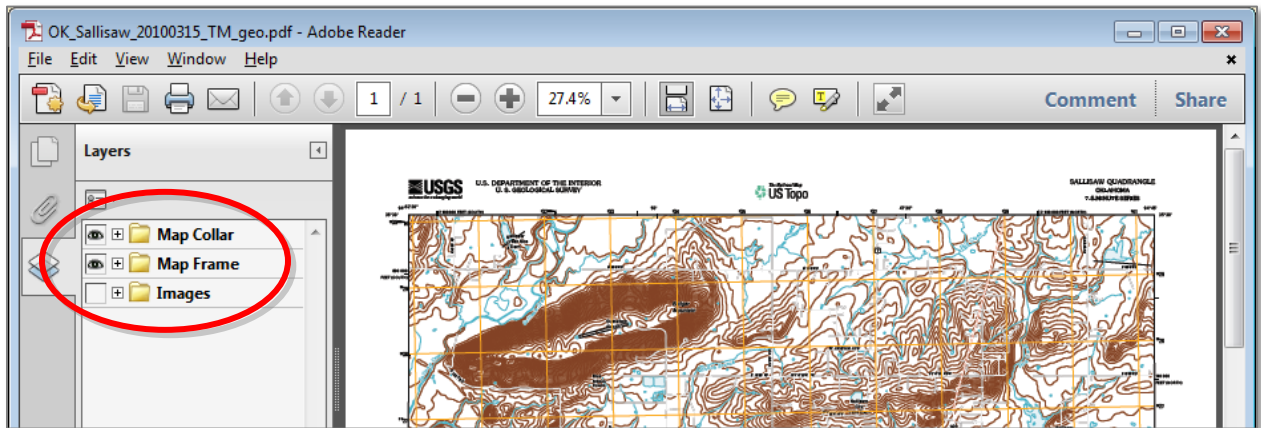
For instructions on printing just a portion of the map or printing the map on a regular printer (8.5x11 paper), see the USGS instructions: <http://tinyurl.com/usgsprinting>

Print USGS topographic maps on the plotter at SCIENCE LIBRARY

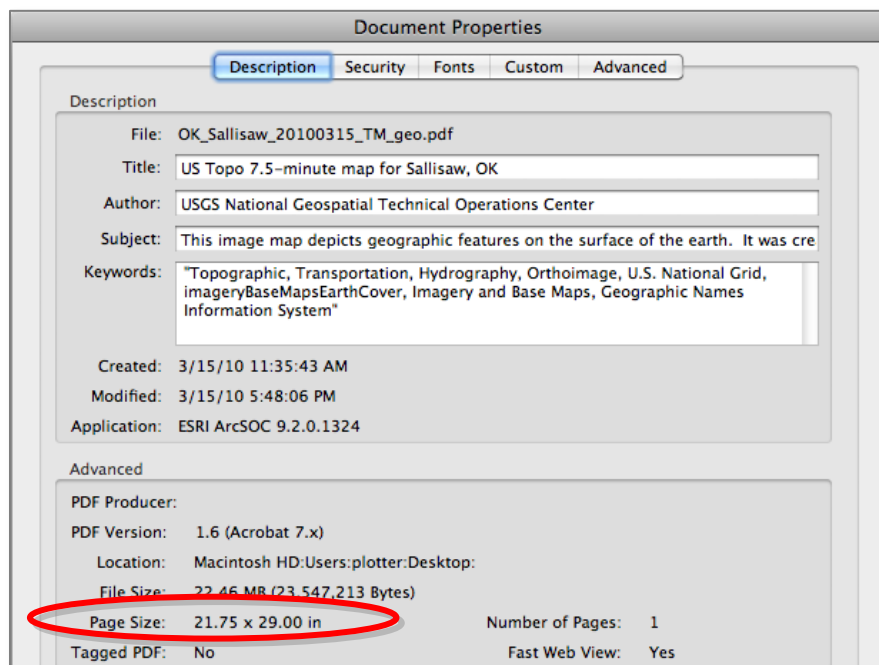
1. Visit the Science Center Library to use the plotter. Library hours can be found on the website: <http://web.wellesley.edu/web/Dept/LT>
2. Open your map pdf file in **Adobe Reader** or **Adobe Acrobat Pro**.
3. When you open the pdf you will be asked if you would like to download the GeoPDF plug-in. Click **No**. The plug-in allows you to see coordinates, measure area/length, import/export geospatial data, and use GPS tracking, but *it is not necessary for printing the maps*.



4. The pdf format of USGS maps allows you to turn layers on and off using the **Layers** panel. If you do not want to print the satellite imagery, click on the eye  next to **Images** to turn off the satellite image.
 - a. Tip: If you do not see the Layers panel, go to the **View** menu and select **Show/Hide | Navigation Panes | Layers** (or in Acrobat Pro: View | Navigation Panels | Layers).

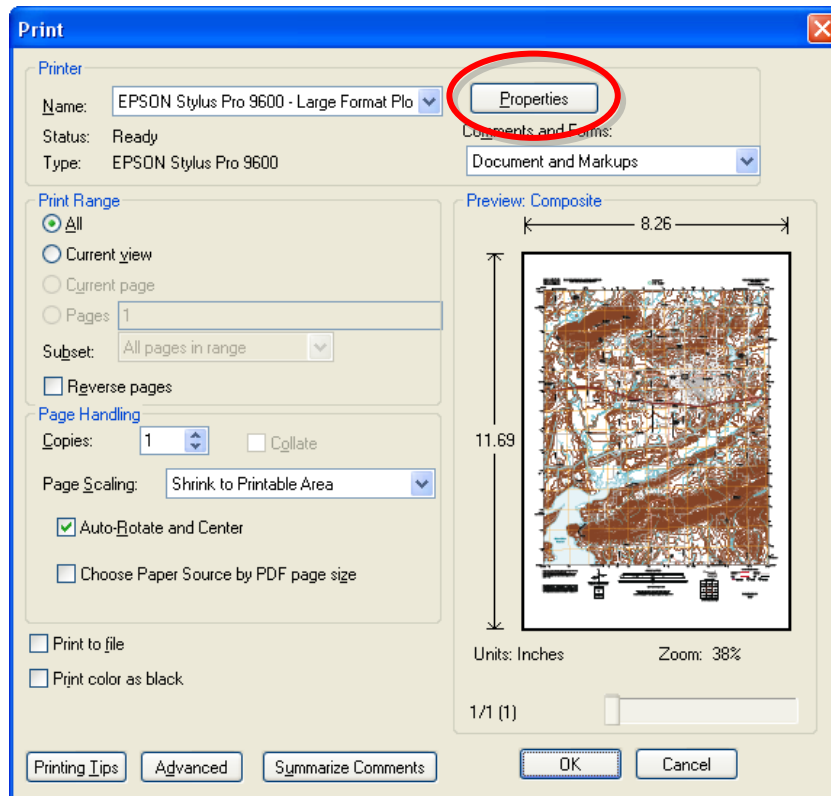


5. Now you are ready to print. There are instructions for printing at the plotter stations; you can follow the instructions for **Adobe Photoshop** or follow the next few steps, which outline the same information.
6. First, check the size of the map. From the **File** menu, select **Properties**. In the Description tab of the Document Properties window, make note of the **Page Size** in the **Advanced** section. Note that one edge of the map must be less than 36 inches to fit on the plotter paper. Click OK to close the window.

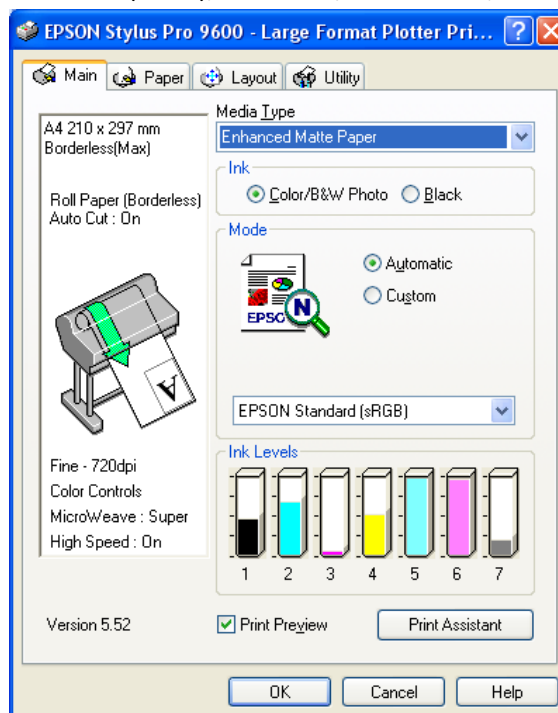


7. Make sure that the paper you want is loaded in the plotter. If you will be writing on the map and/or taking it into the field, we suggest printing it on the lightweight **SiHL CAD paper** (\$2.50/linear foot).

8. Next, set the paper size: Go to **File | Print**. In the Print window, make sure that the printer is set to EPSON Stylus Pro. Then click the **Properties** button.

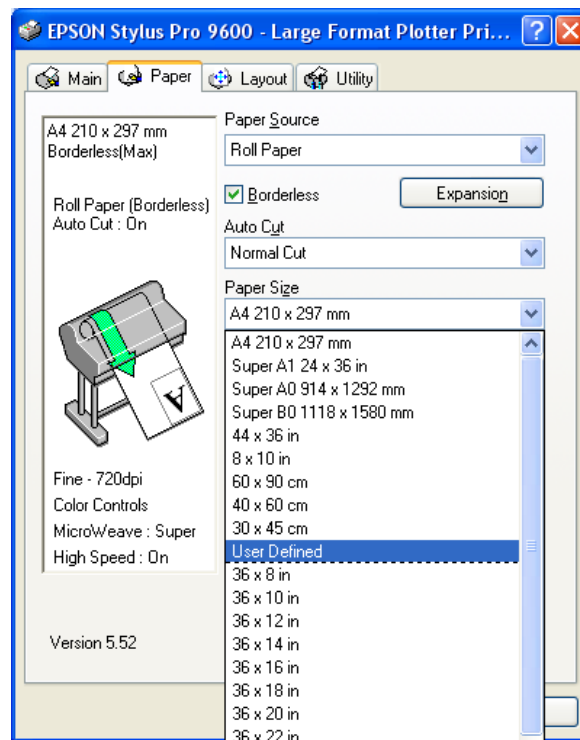


9. In the **Main** tab of the Properties window, use the pull-down menu under **Media Type** to choose the correct paper type (**Enhanced Matte** for **SiHL CAD paper**, Premium Glossy Photo Paper (250) for Glossy paper, or Premium Luster Photo Paper (260) for Luster paper). Leave all the other defaults: Mode=Automatic and Epson Standard (sRGB); Ink=Color/B&W Photo; Print Preview=checked.

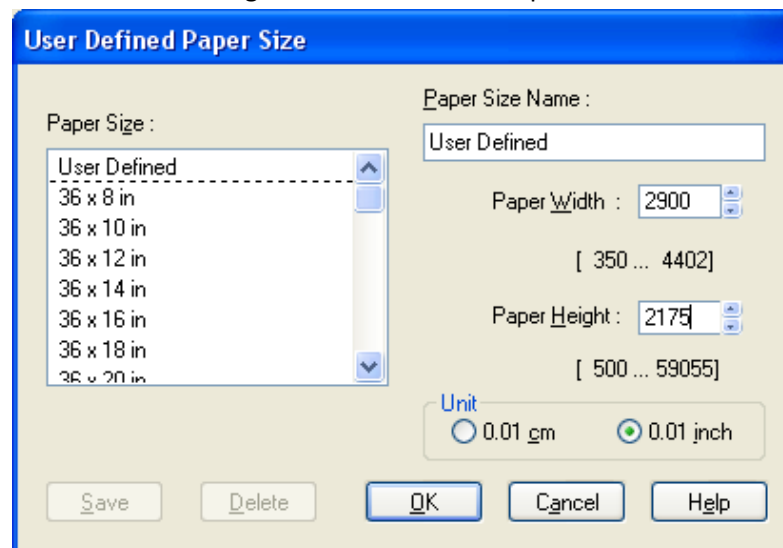


10. In the **Paper** tab of the Properties window, make sure that the **Paper Source** is set to **Roll Paper**, **Borderless** is checked, and **Auto Cut** is set to **Normal Cut**. Then click on the pull-down menu next to

Paper Size and choose a paper size closest to your map size, remembering that the largest dimension will always be 36 inches. If you do not see an appropriate paper size, choose **User Defined** from the bottom of the list.



- In the User Defined Paper Sizes window, type in the dimensions of the map under **Paper Width** and **Height**. Note that values in inches should be **multiplied by 100** as the units are 0.01 inch (e.g., 29"x21" = 2900x2175). Click OK to save the settings and return to the Properties window.



- Click OK to close the Properties window and return to the Print window. Click OK in the Print window to begin printing.

For instructions on printing just a portion of the map or printing the map on a regular printer (8.5x11 paper), see the USGS instructions: <http://tinyurl.com/usgsprinting>