
Created with FIDO version 1.5.5 – the screen shots may not match exactly with other versions. Shaded font indicates specific instructions for you to follow. FIDO keywords are in bold font.

The objective of this exercise is to show some of FIDO’s more advanced features, including filters, circular retrievals, output in Google maps, and saving reports for use in future FIDO sessions.

1. If you do not have a session open already, start the FIDO application – From the FIA Data and tools page (http://www.fia.fs.fed.us/tools-data/), click on the FIDO button (Forest Inventory Data Online) to go to the FIDO Welcome Page (http://apps.fs.fed.us/fido/). Click on Custom Retrievals, and then on the Begin Creating Custom Reports>> button to start the custom FIDO session.

2. From the Retrieval Templates/Reports list, select Carbon, Aboveground ,Live trees>=1” diameter. Select By Species group and Diameter class for the layout. Review the template information and click on Use as Template.
3. FIDO skips over the **Set Summary Attribute** and **Select Filter Options** menus to the **Define Region of Interest** menu (because the summary attribute has already been selected in the first step, and filters are optional). To further refine the scope of the report, click on the **Select Filter Options menu bar**.

![Image of FIDO software interface](image1)

a. The **Filter Options** menu allows you to limit the report to a subset of data. There are 3 main categories of filters – **Plot attributes**, **Land (condition) attributes** and **Tree attributes**. Plot filters allow filtering by elevation and distance to improved roads. Land filters allow filtering by overall conditions, such as forest type or stand-size. Tree filters allow filtering by individual tree attributes, such as specific species or diameter ranges.

![Image of filter options](image2)
b. View the list of filters available for Land attributes by clicking on the arrow next to **Land (condition) attributes**. Expand the categories to see the list of options available. Filter the report to only include **private ownership**.

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]

   ![Filter options screenshot]
d. **Click Continue >>** to advance FIDO to the next step.

4. The Region of Interest will be a circular area that you define on the Google Map display.

   a. **Click on the Display map** to view a map of the U.S. Minimize the Wizard to get a better view of the map. **Click on the Circular boundary radio button, and check the box next to Center in decimal degrees:** Enter 44.0 for lat and -92.0 for lon and a radius of 100 miles. You also need to check the box to the right of Circular boundary and click on the map itself to see your circular boundary on the map.
b. The boundary can be easily moved by selecting it (cross arrows appear) and dragging it to your preferred location. Also, the boundary radius can be changed using the horizontal arrows. Move the boundary and increase the radius size.

c. You can further manipulate the area by entering exact coordinates in the lat/lon boxes and the size in the left hand column.

d. Although you have defined the boundary, you still must select the areas within the circle that you want to include in your report. Select Minnesota and Wisconsin from the state list in the left hand column. Only those areas in the shaded circular area will be included in the report. Therefore, in the example below, only those areas in Minnesota and Wisconsin that are within the circle will be included (the purplish shaded area). If you want the entire circle included in the report, you must select all the relevant states or counties.
5. Select 2012 for the survey year for both states. Click on Continue >> to produce the report.
6. Click on the **Submit** button to run the report.
   
a. When the report is ready for display, check **Customize report title...** under **General options**, and customize the title. Click on **Display**.

b. The report includes two separate tables for the individual states (remember that the reports are only based on the areas selected within the circular retrieval). The summary table summarizes the column totals for each state.
7. View report in Google Map Output.

   a. Select the Map display option.

   b. The Report display area provides 2 choices for the land basis – either Forest land or Timberland. Optional selections are provided under Mapping options. Select Quantile breaks and adjust the breakdowns. Select the Filter row(s) and select Spruce and balsam fir to limit the map display to that species group.
c. Click on display to view the map. The map displays the carbon estimations by county (but note that partial county estimations are colored in for the whole county). Click on a county to get the county name, code and estimate.

8. Save the Report.

a. Since you have worked so hard on this report, you may want to save it for future use. Saved reports can be further manipulated to include other filters, different regions, or other surveys.

b. Saving a report is a two-step process. First you save it to the active FIDO session (the report will then be available for use in the current session, but would be lost if you ended the FIDO program without completing the second step). The second step is to save the report in a configuration file that is stored on your PC and can be uploaded to a later FIDO session (more reports may be added to that same configuration file).
c. To save the report in the active session. **Click on the Save Active Retrieval menu bar.**

![Save Active Retrieval menu bar]

- The template information appears. Here you may choose to edit the report name, title, description, and author (go ahead, do it). **When you click on the Save Template button, the report will be stored in the User-defined reports category on the Start New Retrieval menu.**

![Template information]

![FIDO Wizard]
e. You have completed the first step in saving a report. To see what you have done, click on the **Start New Retrieval** button to go back to the first menu.

![Start New Retrieval Button](image)

f. Look in the **User-defined reports** category to view your saved report.
g. However, at this point, if you close your browser, or otherwise close the current FIDO session, your saved template will disappear into the internet ether. For step 2, go back to the Save Active Retrieval menu and click on the Save Custom FIDO button.

![Image](image1.png)

h. The following box appears.

![Image](image2.png)

i. Click on Save. The default filename is download.xacfg. Browse to the directory of your choice, and change the filename to something that makes sense to you. Click on Save.
j. A message box may appear stating that the download is complete. Click on Close.

9. Reload a saved configuration file.

   a. To use the file again on another FIDO session, browse for the file and upload it to FIDO. To simulate a new session, use the Restart option to close your current FIDO session (if you open a new browser and open FIDO, it will return to your current active session). Click on Restart, click OK for the warning.

   b. Click on the Browse button, find the file, and then click on the Add Custom FIDO file button. Your report appears in the list of templates that can be used as is, modified, or removed.
c. Find your file and click on open.

d. The file address will appear in the Add Custom File box. Then click on **Add Custom FIDO file**.

e. Lo and behold! – Your saved template is now available for selection.