

Meet Geodesy – Map Extension Activity

Objectives:

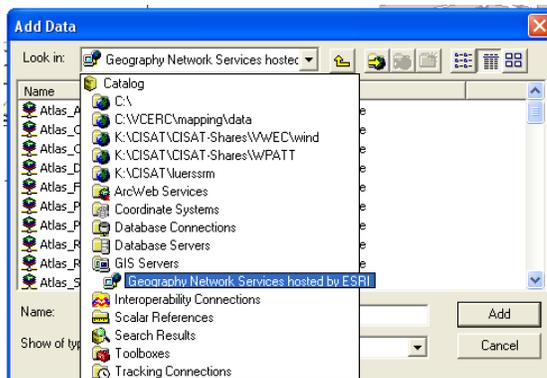
- Report latitude and longitude position of cities on world map
- Become familiar with GIS tools, terms, etc

- 1) Open ARC Map

Adding Data



- 2) Click on the Add Data Tool at the top of the screen
- 3) Click on the down arrow next to the box at the top of the window
- 4) Select GIS Servers and then Geography Network Services hosted by ESRI



- 5) Select the Atlas_Cities data file
- 6) This will add the data layer to your GIS. You will notice the map on the main screen and the name of the data layer on the layer list to the left.

Turning ON and OFF Layers

- 7) Uncheck the box next to the file name on the layer list to “turn off” the layer – it will disappear from the main screen
- 8) Make sure your data layer is turned ON.

Navigating the GIS

- 9) On your toolbar you have tools to Zoom In and Zoom Out and Pan



as well as to show you the entire extent of the all the data in your GIS.



- 10) You can also right click on the file name on the list to the left and select Zoom To Layer to see the entire extent of that specific data layer.

Data Collection

- 11) You can see the data associated with a data point using the Identify Tool . Click the tool and then click any point on your map. You will see all the data associated with that location.
- 12) Using the tools discussed above record the location of the cities in the table below (You will want to Zoom In to each).

City	Latitude	Longitude	County	Population in 1998
Seattle, WA				
Washington, DC				
Honolulu, HI				
Denver, CO				
Your Home Town:				

- 13) The Go To XY Tool  allows you to input a latitude and longitude coordinate and then when you hit the  button in the Go To XY window, it will put it on your map and label the point with the coordinates.

Using this tool, locate the following cities on your map (you will need to use a book or the internet to find the coordinates - <http://www.infoplease.com/ipa/A0001769.html> is a good source).

City	Latitude	Longitude
Montreal, Canada		
Cairo, Egypt		
Oslo, Norway		
Tokyo, Japan		
Santiago, Chile		

14) Using the Measure Tool , find the distance between your home town and Cairo,

Egypt. Report the distance in Kilometers and in Miles (Use the  menu to change the units).

_____ Kilometers

_____ Miles