Τμήμα Γεωγραφικών Επιστημών Β.Δ. Γιώργος Σεκκές MPS in Geographical Information Systems

Working with ArcGIS Pro Software. Step by Step Instructions for Exercise I Theme: Mapping "Pera Chorion" Village

Μια πρώτη ματιά με το ArcGIS Pro:

Οι ακόλουθες ασκήσεις παρέχουν μια αρχική επισκόπηση του ArcGIS Pro. Έχουν σχεδιαστεί για ολοκαίνουργιους χρήστες GIS καθώς και για χρήστες που είναι εξοικειωμένοι με άλλα προϊόντα χαρτογράφησης ESRI. Θα εισαχθείτε στη διεπαφή, θα ξεκινήσετε με την δημιουργία μιας δικη σας γεωβάση / geodatabase έτσι ώστε να χαρτογραφήσετε τους χάρτες σας, να εξερευνήσετε χάρτες και να ολοκληρώσετε ορισμένες συνήθεις εργασίες GIS. Στη συνέχεια, θα εργαστείτε με αυτά!

Αφού έχετε ήδη εγκαταστήσει το λογισμικό ArcGIS Pro στον Η/Υ σας, με βάση τις ακόλουθες οδηγίες μπορείτε να ξεκινήσετε !

Step by step instructions for answering Exercise 1: Mapping "Pera Chorion" Village.

Start a new Project:

Start ArcGIS Pro – Sign in. Enter your Username and password.

Very important Step: On the opening screen, Under New Blank Templates, select "Catalog." Name it and save it!

STEP 1: Create a folder connection. Connect your home directory into your contents pane tree view window:

1. In the Ribbon tab, click the Insert tab, and in the Project group, click the import Map button.

2. Import / connect your project with your home directory "C" drive that has the GIS data I have provided you, into your contents pane / left side tree view window. Expand the C drive and find the GIS data you connected to.

- ON THE RIBBON TABS CLICK ON ADD FOLDER AND FIND THE "C" drive WHERE YOUR GIS DATA ARE LOCATED
- AT THE CONTENTS PANE ON YOUR LEFT SIDE WINDOW, UNDER THE PROJECT VIEW, EXPAND THE "FOLDERS" folder and see that the C DRIVE HAS BEEN ADDED INTO YOUR tree-view.

Expand the C drive and find the GIS data you must work with it.

For better organization reasons: you should develop a new folder within your "C" drive and name it "ArcGIS Projects", in order to include all the data, you are going to work on, and you also should develop your Geodatabase file too.

STEP 2: Creating a Geodatabase. Convert shapefiles that represent various features into geodatabase feature classes.

When you have your ArcGIS Projects folder ready, right click on the new folder, select New and click on the file Geodatabase. Name the new Geodatabase.

Now you are ready to import your data inside your Geodatabase. In this case scenario, select the data one by one every time. This way your PC won't stop! Due to limited specifications your pc may have.

Name each one of the data with a name of your choice so you don't have to get confused later, which one is which.

Right click on the geodatabase and select IMPORT and click on feature class.

On the right side of your screen, a new window opens called "Geoprocessing". Browse and select the data you want to import. One data at a time as I have already said above.

Search and find the data you loaded and find the .shp called Coastline 5000 or Coastline 250000 select it and click ok.

Give it an output name such as "AKTOFPAMMH" and click RUN. You see a message that appears below, that the feature class to feature class has been completed. You can check also your geodatabase to see that AKTOFPAMMH been included.

Please note, if you are going to name a two words name, make sure you use the underscore to connect the two words.

Continue with the same process for the rest of your data. $E\Pi APXIE\Sigma$, $\Pi O\Lambda EI\Sigma$, $KOINOTHTE\Sigma$.

After the Geoprocessing process is done, you are ready to begin developing your map analysis.

STEP 3: START MAP ANALYSIS:

In order to start your map, at the ribbon select New Map, and a blank screen opens.

Now you must insert the data you have saved into your geoprocessing.

Click on Add data from the top of the ribbon / then click on data add data on the map and then find the geoprocessing file where all your data that you are going to be working, will be listed. Select them all and add them into your map.

Check and uncheck them to see your data, change their name if you want.

SAVE IT! under a project file .aprx contains multiple maps, geodatabases, folder connections, layer files, models, toolboxes and more. It is easily shareable container that holds everything you need for your GIS project.

Having your data and the map on your screen, let's answer the following questions.

Questions:

- 1. On the contents pane tree view, having the provinces and coastline active / checked, label the names for each province to appear within the boarders for each one.
- 2. On the contents pane, under the catalog tab, find the geodatabase you have created, and expand it. View your files you have saved. Change the names you want to appearing.
- 3. On the contents pane, uncheck the provinces and check the communities. Then answer the following:
 - a. Open the attribute data table.

- b. Sort descending / φθίνουσα ταξινόμηση the attribute data and write which village has the highest area.
- c. Sort ascending the data / αύξουσα ταξινόμηση the attribute data and write which village has the smaller area.
- d. Then clear the selected data.
- 4. On the Map tab, having the communities / villages checked, find and select the community / village called "Πέρα Χωριό" καθώς επίσης και το χωριό "Νήσου" and then label the name on it, by using the SQL technique.
 - Right click on villages/ properties/ definition query/ new definition query/under "Where" select Greek name/is
 equal to/ expand the drop down, scroll and find the above names of the villages/apply/OK.
- 5. Check also the districts data as well as the coastline.
 - Right click on the districts data, choose symbology/ the symbology window opens on the right side on the map's view/ under primary symbology select unique values/ on the field 1 select Greek names/ click on add all values/ label them/
- 6. Label them with a nice font.
- 7. Add a new basemap. Satellite view.
- 8. Add the map elements on the layout.
- 9. Export map into your home directory.
- 10. Your map's final output should look like the attaching image that it is in my web site.

Map's output: Click on the link!

http://www.gsekkes.com/B%20GRADE%20-

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