

REMOTE ACCESS TO CLASS DATA SETS OUTSIDE THE LAB

The following notes are intended for those students who have access to the ARCMAP, JMPIN, and MATLAB software elsewhere, and want to access the class data sets from this location.

- (1) To access class data, open a web connection on your PC. All class data sets can be accessed on the web at:

<http://www.seas.upenn.edu/~ese502/lab-content>

The directories at this site are organized exactly as in the class directory in the Lab. So for example to access ARCMAP data sets for the Lymphoma problem in Assignment 1, follow the path:

Arcview → Projects → Lymphoma

- (2) You will need a space to download material. I will assume you have made such a file, that I will call **home**. [The procedure for accessing MATLAB data files (such as **lymphoma.mat** in the **matlab** directory) and JMPIN files (such as **LYMPHOMA.jmp** in the **jmpin** directory) are exactly the same. So we shall continue with the ARCMAP example.]

For **Assignment 1**, you will require the map document file, **Lymphoma.mxd**, and a number of data files. First download the following files to **home**:

lymph_data.*
W_NILE_BD.*
Mask.*

where “*” indicates that you should download **all** files starting with these names. For example, you will need the six files:

lymph_data.dbf	lymph_data.prj
lymph_data.shx	lymph_data.sbx
lymph_data.shp	lymph_data.sbn

Notice the all files starting with capital letters are at the top. So to find the files, **lymph_data.***, you will need to scroll down to the files starting with *lower case* letters. (This observation is particularly important in large directories like the MATLAB directory for the class.)

Next you will need to download a raster file, **pop**, and a layer file associated with it. First download the file, **pop.aux**, and the layer file, **pop_density.lyr**. Next observe that among the list of files in **Lymphoma** is a subdirectory named **pop**. This contains the files that make up a raster data base for **pop**. Since you can only download files, and not whole directory, you will need to construct a subdirectory **pop** (be *sure* to use this name) in **home**. Now open this directory in **Lymphoma** and download each of the files to your copy of the **pop** directory.

- (3) Now open ARCMAP, and open the file **Lymphoma.mxd** in **home**. You will observe that the Table of Contents appears, but there are no maps. Rather there will be a **red** (!) before the name of each layer. If you click on the first instance of (!) in the Table of Contents, which in this case is **lymph_data**, a “Set Data Source” window will open. Navigate to your **home** directory in this window and open the file **lymph_dat.shp** that you have saved (notice that only the shape file names appear, even though there are many **lymph_data.*** files). You should now see that the (!) has disappeared from *all* layers in the Table of Contents using files that you have stored in **home**.
- (4) Be sure to save this modification of **Lymphoma.mxd** that now points to the appropriate files in your own directory. [Note also that in any subsequent sessions you must use the *same* directory. So choose your directory carefully, so that you do not have to reset all paths again.]
- (5) ***One final note for Remote Users.*** You will need *all* of my MATLAB programs in order to be sure that they will run on your machine. [Most programs refer to other programs.] Since downloading all of these files is very tedious, I have made a **Winn.zip** file that contains all of my programs. I will be happy to send this to you as an attachment. Note that only program files are included, since data files tend to be large. So you will still need to download all **.mat** files. Also be sure that you have the Statistics Toolbox in your MATLAB software. My programs often refer to this Toolbox, and will not run otherwise. If you encounter any additional problems, such as error messages telling you that some variable or function cannot be found, please let me know right away. This usually means that I have forgotten to include some subprogram file.