

Assignment: Georeferencing Practice

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Module Licensing Information

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Reviewed by

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Problem formulation:

Let's suppose that you have a scanned map/plan for Hadley, MA. It can be a planner's drawing or a scanned version of paper map. You would like to incorporate the data layer with your existing spatial data. As you know, the process of adding spatial reference to a scanned map is called georeferencing. Your goal is to a) georeference the topo image and b) to create a map containing two layers: topo map and land use layer.

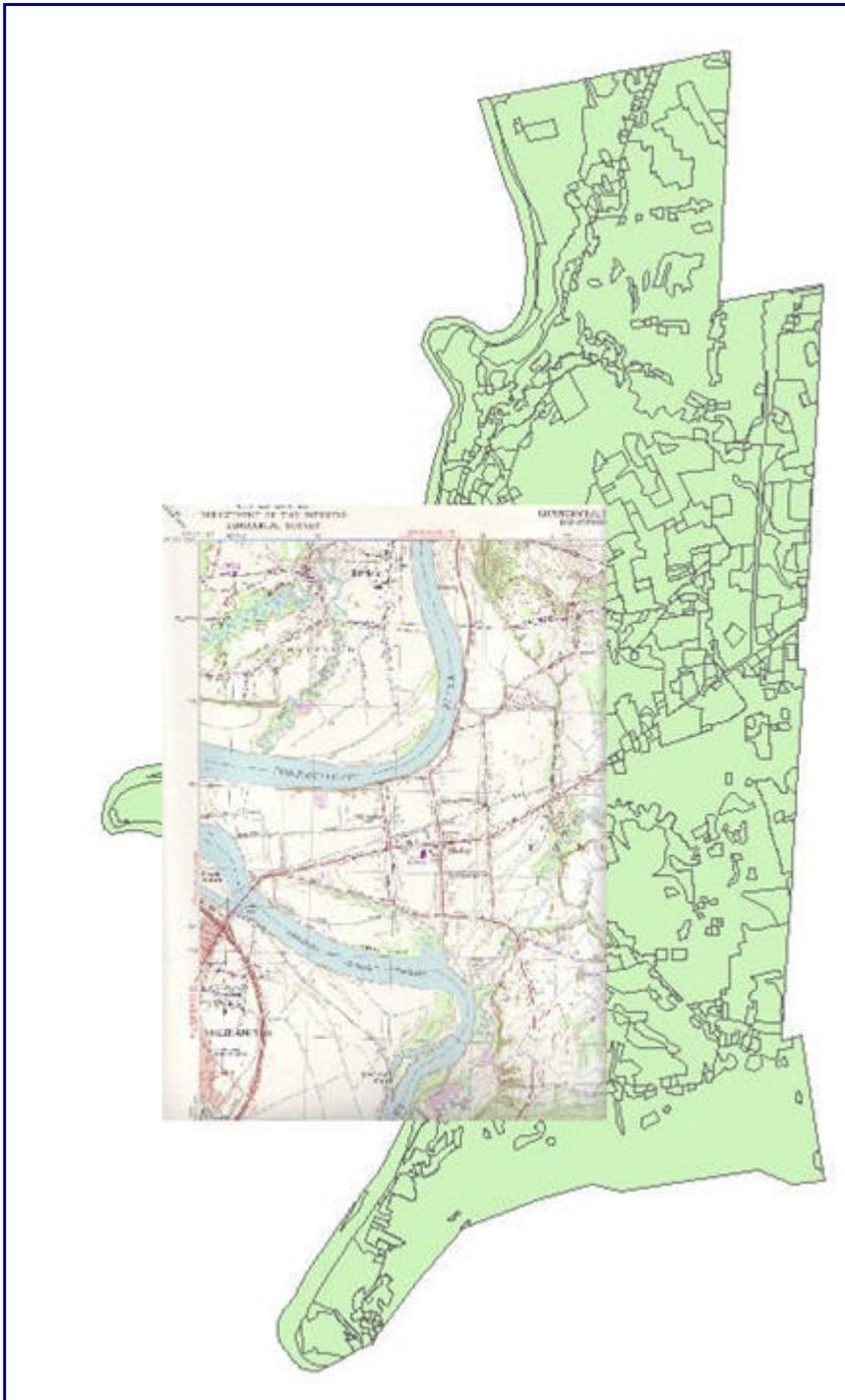


Figure 1: Example of snapshot of final product

Lab settings:

Please copy the data set for the lab to your working directory:
Download the data set from

1. http://linuxlab.sbs.umass.edu/beginning-fossgis-umass/datasets/lab_georef/GeorefLabHadley.zip
[5Mb]
2. Extract the data archive to your working directory
3. You will have the following files

- a. ImgHadley.tif (a scanned topo map w/o spatial reference)
- b. Lus117_Project.* (files for a vector layer with land use data)

General guidelines:

- 1. Make sure that Georeferencing Plugin is available
- 2. Georeference the image imgHadley.tif
 - a. Define four control points and write down their

coordinates in the table below:

Point ID	X(East)	Y(North)
1		
2		
3		
4		

- b. Start the Georeferencing Plugin and register four control points
- c. Due to a bug in georeferencing plugin you need to correct X value in the world file:

the correct value for X is 695191

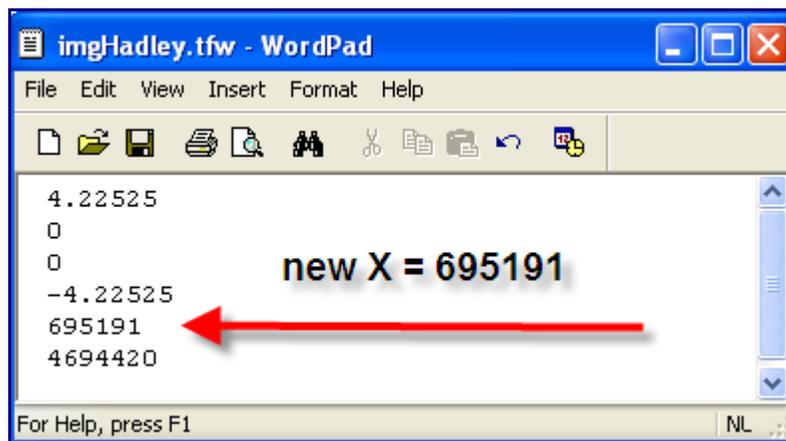


Figure 2: Correcting the georeferencing file

- 3. Add the georeferenced image/topo map to QGIS project
- 4. Add a vector land use layer (Lus117_Project.shp) from your home directory
- 5. Rename the layers in the TOC as "Topo Map" and "Land Use".
- 6. Save the project
- 7. Export your results as a JPEG image (naming it yourname_georef.jpg)