

SOC 4650/5650: Lab-07

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Directions

Please complete all steps below. Your final deliverables should be uploaded to your GitHub assignment repository by 4:20pm on Tuesday, March 7th, 2017. This lab uses data from the MOHydro and MetroWx directories in CourseData.

Creating a Geodatabase

1. In ArcCatalog, create a new geodatabase in the MetroWx directory under SOC5650/Data/CourseData.
2. Import the five shapefiles from the MetroWx directory into your new geodatabase.
3. Create a shapefile from the new Tornados feature class in your new geodatabase. Save it to MetroWx as METRO_WX_TornadosCopy.
4. Update your meta dictionary file to reflect the new geodatabase contents and new shapefile.
5. Upload a screen shot of your new geodatabase opened in ArcCatalog along with a copy of your updated meta dictionary to your assignments repository.

More Editing of the Dam Data

7. Using Atom, construct a well-formatted do-file using the headFull snippet. Be sure to edit the appropriate lines in the template that detail the name and purpose of the file.
8. Your do-file should *successfully* accomplish the following tasks.
It should include narrative text that explain what the command accomplished.
 - (a) Import the raw data into Stata.

- (b) Create a copy of the `damht` variable and recode it so that dams that are ten feet or under receive a value of "1", dams from eleven to nineteen feet receive a value of "2", dams from twenty to twenty-nine feet receive a value of "3", and dams that are thirty feet or larger receive a value of "4".
 - (c) Create a string variable named `taboCreek` that is filled with "false" values.
 - (d) Replace the values in `taboCreek` with "true" if the words `TABO CREEK` appear in the `offname` variable.
 - (e) Create an empty numeric variable named `shortDam`.
 - (f) Replace the values in `shortDam` with "0" if the dam height is less than twenty feet.
 - (g) Replace the values in `shortDam` with "1" if the dam height is greater than twenty feet but less than or equal to the maximum value.¹
 - (h) Create a string variable named `boone` that is filled with empty values.
 - (i) Replace the values in `boone` with "no" values if the county variable is not equal to `B00NE`.
 - (j) Replace the values in `boone` with "yes" values if the county is equal to `B00NE`.
9. Execute the do-file and debug any errors until the code executes without issue.

¹ *Hint:* Use the descriptive statistics command from earlier in the semester to identify the maximum value

Tidy Markdown

- 10. In Atom, install the `tidy-markdown` and `linter-markdown` packages. Use File ▸ Preferences ▸ Install to accomplish this.
- 11. Go to File ▸ Preferences ▸ Packages and open the Settings for the `tidy-markdown` package. Un-check the Run On Save option.
- 12. Open your markdown formatted output file and then go to View ▸ Toggle Command Palette. Search for the Tidy Markdown: Run command and execute it.
- 13. Highlight the **complete** contents of each code block and use the combination of the Shift and Tab keys to de-indent your code blocks.

14. Use the linter-markdown indicators in the bottom toolbar to identify any issues with your markdown syntax and correct them as needed.
15. Spell check your document (you may have to go to Packages ▸ Spell Check ▸ Toggle).
16. Save your changes.
17. Upload your do-file, log-file, and markdown formatted output file to your assignments repository.