# Assignment 1: Reproducibility, Workflow, Version Control

Siying Chen

#### **OVERVIEW**

This exercise accompanies the lessons in Environmental Data Analytics (ENV872L) on reproducibility, workflow, and version control.

#### **Directions**

- 1. Change "Student Name" on line 3 (above) with your name.
- 2. Use the lesson as a guide. It contains code that can be modified to complete the assignment.
- 3. Work through the steps, **creating code and output** that fulfill each instruction.
- 4. Be sure to **answer the questions** in this assignment document. Space for your answers is provided in this document and is indicated by the ">" character. If you need a second paragraph be sure to start the first line with ">". You should notice that the answer is highlighted in green by RStudio.
- 5. When you have completed the assignment, **Knit** the text and code into a single PDF file. You will need to have the correct software installed to do this (see Software Installation Guide) Press the **Knit** button in the RStudio scripting panel. This will save the PDF output in your Assignments folder.
- 6. After Knitting, please submit the completed exercise (PDF file) to the dropbox in Sakai. Please add your last name into the file name (e.g., "Salk\_A01\_Reproducibility.pdf") prior to submission.

The completed exercise is due on Thursday, 17 January, 2018 before class begins.

## 1) Discussion Questions

#### Question

Why are reproducible practices becoming the norm in data analytics?

Answer:Because they can help the researcher to improve their work in the future by recreating the results. They can also help others to understand how the study achieve this result.

#### Question

What are your previous experiences with data analytics, R, and Git? Include both formal and informal training.

Answer: I took the statistics class that teaches R in the first semester, but I feel like I've forgotten a lot since then. I've also taken John's advanced GIS last semester, so we used GitHub, but not really Git itself.

#### Question

Are there any components of the course about which you feel confident?

Answer: I think I will feel confident about the spatial analysis part of this course.

### Question

Are there any components of the course about which you feel apprehensive?

Answer: I'm a little anxious about the statistics part of this course.

# 2) GitHub

## Your Repository

Provide a link below to your course repository in GitHub. Make sure you have pulled all recent changes from the course repository (https://github.com/KateriSalk/Environmental\_Data\_Analytics) and that you have updated your course README file.

 $Answer:\ https://github.com/Sylvia-C/Environmental\_Data\_Analytics$