ENV 797 - Time Series Analysis for Energy and Environment Applications | Spring 2025

Assignment 1 - Due date 01/16/25

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Directions

Before making any edits to this file, please rename it such that it includes your first and last name (e.g., "LuanaLima_TSA_A01_Sp25.Rmd")

Once you have this renamed file open in RStudio, the first thing you will do is replace "author:" on line 3 with your name. Then you will start working through the assignment by **creating code and output** that answer each question. Be sure to use this assignment document. Your report should contain the answer to each question and any plots/tables you obtained (when applicable).

When you have completed the assignment, **Knit** the text and code into a single PDF file. Submit this pdf using Sakai.

Questions

Q1. What are your previous experiences with time series analysis, R, and Git?

Answer:

- **Time series analysis:** I don't have any experience of it.
- **R:** I often use R to do regression for empirical analysis of my finance research.
- **Git:** I don't have the experience of using Git, but I often simply download documents directly from Github.

Q2. (Only if you choose to use git) Provide a link below to your forked course repository in GitHub. Make sure you have pulled all recent changes from the course repository and that you have updated your course README file as instructed on the recorded video "Getting started with Git and Github".

Answer:

Q3. For this part we just want to see the path to your R project. No need to do anything. The output will be automatically generated once you knit you file.

Answer: This is my working directory:

```r
cat(strwrap(getwd(), width=100), sep="\n") #I modified it as the outputs can't automatic break lines
```

```
## E:/Onedrive_save/OneDrive - Duke University/DUKE/004- 2025 Spring/001- Time Series
## Analysis/TSA_Sp25/Assignments
```

Q4. Copy and paste the link to your forked repository on Github. It should looks like this: "https://github.com/lmmlima/TSA_Sp25"

Answer: This is my working directory: https://github.com/ZZCDuke/TSA_Sp25