The final project for ESE5023 (Fall 2021)

1. Goals

The final project of ESE5023 is designed to be a capstone of the course. It is intended to be an original data analysis using real data (preferred from your research group), treating the problem in-depth, and presenting your results in a formal manner.

The topic should not be part of the student's research in the past. If you have problems in finding suitable topics, please contact the instructor before Dec. 01.

2. Requirements

a. Due to the large enrollment, students will be working in groups (2 students each group) in the final project.
b. A science (or data-science) question should be clearly articulated, and then addressed using tools covered in this class.
c. Excellence in data analyzing with Python or FORTRAN.
d. Excellence in data visualization with Python or FORTRAN.
e. The project contains two parts – a presentation and a report.

3. Presentation

There will be two presentation sessions: Dec. 29 and Dec. 31. Each group will give a 10-minute presentation to the class, to be followed by a 3-minute discussion.

4. Report

The primary product of the final project is a written report with a clear style. Please email your report to the instructor (zhul3@sustech.edu.cn) by Jan. 10, 2022, with the subject [ESE5023 2021 final report *XXXX* and *YYYY*], where *XXXX* and *YYYY* is the student ID.

In your report, we are looking for:
a. A full bibliography and citations to data sources.
b. Data sets used in the project (even if the data set is downloadable, the data set itself is required). Formats may be NetCDF, hdf, flat ascii, or csv.
c. Python/FORTRAN scripts and the environment file. The instructor and TAs should be able to reproduce your results by running the scripts.