## Active Learning Group Project – GGS416

Presentation in Class on November 2<sup>nd</sup>, 2022

Each year the seasons transition from Summer to Fall, as the daily temperature drops and hours of daily sunlight decrease. These environmental changes drive wonderful color displays, especially across the higher latitudes of North America.

Your task is to understand the science of the Fall transition, using empirical evidence gathered from satellite imagery. You are free to derive your own research question and scientific hypothesis, which you can then explore using empirical satellite imagery.

For at least one annual season, carry out the following:

- 1. Obtain a time series of Fall imagery for an Area of Interest (AoI).
- 2. Clip these images to your AoI.
- 3. Extract useful quantitative information from your plots to develop a time-series of data which helps you to understand how this transition takes place (e.g., length/duration, spatial extent etc.).
- 4. Present your results to the class.

Groups will consist of three members.

Your presentations should consist of:

- 1. A research question and scientific hypothesis
- 2. Method
- 3. Results
- 4. Discussion, critical review, and conclusions

The Mason honor code applies.

Presentations will be 6-8 minutes each and will take place in class on Wednesday November 2<sup>nd</sup>, 2022.