Homework #6: Brainstorming term projects **Due: 5:00 PM 10/24/16**

Please read the following questions carefully and make sure to answer the problems completely. Upload your *pdf* file to Blackboard under Assignment #6. Make sure to include all group member names if working in a group. You can use the text editor of your choice to write up the homework solutions, but you must only submit a **pdf**. Your filename should be *GEOS397_HW6_Lastname.pdf*.

Background

Recall the statements about the term project from the syllabus. Using the tools and techniques covered in this class, your term project will involve processing and displaying a data set of your choice. You must give detailed descriptions of the data and steps involved in the processing. You will write a short report (max 5 pages written text) that contains relevant figures and tables showing results. Possibilities include problems related to your other courses or an extension of a problem from class. If you need help finding/choosing a project, please make an appointment to discuss possibilities with me. The final project will also involve a 10 to 15 minute oral presentation at the end of the semester. Final projects will be in groups of 2 or 3 for undergraduates. Graduate students will each give their own presentation and report, and the topic should be related to their graduate research.

Questions to consider when creating your term project

Answer each of the following questions in as much detail as possible. (*10 pts. each*)

1. Who is involved in your study? (list all group members)
2. In a general sense, what is the topic you plan to study?
3. Identify any key references or articles you will need to read in order to complete your study?
4. What type of data will you be modeling or analyzing? (e.g. time series, spatial maps)
5. What are the inputs and outputs of your code?
6. How will you know if your code is correct? (e.g. can you compare with existing results?)
7. What type of logic will your code use? (e.g. for loops, if,else statements, etc.)
8. How will you present the inputs and outputs? (e.g. 2D plots, histograms, etc.)
9. What is the significance of the output data? (e.g. how can it be analyzed or used)
10. Are there any parts to your project that you currently do not know how to accomplish or implement? Which parts will you need help from me, if any?