AOSC 470/600 CASE STUDY
DUE: 8 December 2016

This term project constitutes 20% of your final grade. Take it seriously and put in the effort.

The paper should be about 7-10 pages of text (not more than 2500 words, 12 point, double spaced).

The case study should use the following (or similar) format:
   I.   Introduction
   II. Methodology and/or description of data
   III. Synoptic Discussion
   IV. Conclusion
   V.   Citations and References
   VI. Figures including numbers and captions (do not embed into text, please place at the end of the document)

In addition to external references, you need to include the following:
   1. Self-generated graphic (python or other visualization software) from CFSR, NARR, or similar data
   2. Hand analysis
   3. Conceptual model

The case study will be graded on the following:
   • Introduction (10 points)
      ○ Introduce case (date, location, type of event)
      ○ Catch reader's attention, description of relevance and/or high impact aspect
      ○ Propose hypothesis to be discussed
   • Methodology / Data Description (5 points)
      ○ Describe data used, cite references
      ○ Can potentially be tied into analysis and synoptic discussion (if diagnosing QG omega, for example, the description of method can be tied into analysis section)
   • Synoptic Discussion (30 points)
      ○ Large scale picture of event
      ○ Analysis and insight beyond the obvious (description of **why**)
      ○ Tie in to material from class (quasi-geostrophy, potential vorticity, secondary circulation, frontogenesis, frontal circulations, etc.)
   • Conclusion (10 points)
      ○ Bring together previous discussions and/or very short summary
      ○ Highlight most important evidence that proves (true or false) hypothesis from introduction

- Figures (15 points)
  - Clarity
  - Support and *relevance* to discussion
  - Adequate captions
- Proper citations for material used from elsewhere (5 points)
- Overall presentation, grammar, flow, etc. (10 points)
- Oral Presentation for 600 students (15 points)
  - 470 students will be out of 85 points, but will lose points if they do not attend presentations