

**AOSC 470/600 CASE STUDY**  
**DUE: FRIDAY 8 December 2017, 4 PM**

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