

## **ATM 400 – Writing and Presentation Tips Modified from Srock (2004)**

1. Start with an outline for your paper. It will help you structure your thought process so you can lay out a valid and logical argument. I would like you to use traditional AMS format:
  - Introduction – Provide motivation for the topic that you chose and provide an overview of previous literature on the subject. Finish by stating what the purpose of your paper is.
  - Data and Methodology – Discuss how you researched your topic and what datasets you used
  - Results – This is where you present your figures and research, and then write about the significance of each image (i.e., highlight the important findings)
  - Discussion and Conclusions – Provide a brief synopsis of your results and provide the reader with a couple of main points to take from your study. It is important to compare your results with the previous literature on the subject.
2. Be concise! Grand and flowery language isn't really a benefit in scientific writing. Say what you need to say to prove your case, but don't go overboard. The content is what matters, not the length.
3. Figures should be readable and have captions. Although AMS journals have their figures in the middle of the text, append them to the end of the text. Discuss every figure you use in the text, and show only a few key times and/or levels. Also, discuss the figures in the order you number them (don't talk about Fig. 5 before Fig. 3). Make sure you reference the source of the figure in the captions.
4. Write your abstract last! Your abstract should only be one paragraph that briefly describes your phenomenon, what you did, and a few main results.
5. Re-read your paper, spell-check, grammar-check, and all that stuff. Proper sentence structure, capitalization, format, spelling, and grammar all count.
6. Use references, and reference your references! Make sure you cite everything properly (use AMS format here as well). If you use an image you didn't create, you need to give credit to the original creator.
7. Use AMS format for dates and times (see a journal article for examples), and use standard SI units whenever possible (i.e., hPa instead of mb).
8. Do more than regurgitate what others have said. Combine some of their conclusions to make further hypotheses, show how some research contradicts other research and resolve the issue, or apply their findings to another case. The intent of a research paper isn't restating what one author has already presented.