Class Project
EAS 6312: Geodynamics
Fall 2013

Paper due: November 22\textsuperscript{nd} (beginning of class)
Reviews due: December 2\textsuperscript{nd} (beginning of class)
Presentations: December 2\textsuperscript{nd} - 6\textsuperscript{th} (be on time!)

Goal: To aid in developing your abilities to perform research and communicate as scientists and professionals.

Research:
For your class project, you will review and present on a topic of your choosing in Geodynamics using relevant research and review articles from peer-reviewed scientific literature (not National Geographic or Scientific American, but journals like Journal of Geophysical Research, Earth and Planetary Science Letters, Science, Nature, etc...). You should read and synthesize no less than four papers on the subject. In your report, be sure to include:

1. Abstract (a brief summary of your body of work);
2. Introduction: Clear and concise introduction setting up the purpose/motivation for the research, earlier theories that are now being tested, and geologic background, if appropriate;
3. Review of research methods used
4. Discussion of results, including your own hypotheses, if applicable.
5. Conclusions and ideas for future studies

You can earn a possible 10% extra credit on the project grade if you:
1. Outline a new approach to addressing an unresolved problem;
2. Solve a problem; (if so, why not submit it!)
3. Perform unique and applicable numerical calculations to determine parameter sensitivities and/or feasibility of measurement;
4. Perform an appropriate laboratory or analog experiment.

Presentation (All):
Research will be presented in a 15 minute AGU-style talk; a 12 minute presentation with 3 minutes of questions by scientific peers (others in class and instructor). Presentations should be well organized, giving sufficient background information for the class to understand. Stick to 1-slide per minute of presentation, or about 12 in all—it's surprising how fast time flies. The presentations should be computer-based, and will be performed in room L1116 (our classroom).

Paper and Reviews (6312 only):
Your final project will be written up in journal form with length, figures and referencing in a format suitable for submission to Geophysical Research Letters (GRL). Note that papers should be double-spaced, which allows ample room for reviewer (other student) comments. For guidelines on document preparations for GRL submissions go to http://publications.agu.org/author-resource-center/author-guide/grl/. Be certain to reference all necessary material and not to plagiarize others’ work. Be certain that every statement, unless quoted, is in your own words.

Evaluation:
4312: Quality of presentation (80%), and participation during others’ presentation (20%)
6312: Quality of paper (40%), presentation (30%), review (20%), participation (10%)