Global Change, GEOS 578
Fall 2010

Graduate assignment #1

In this assignment, we are looking for you to provide a concise and thoughtful essay that addresses the topic below. We have provided you with readings to start you off; your answer will probably require that you dig in and find more. For example, you will probably want to check out the sources for any statements made in a paper by going to the original reference so that you really understand it. References cited in this paper are good places to start, and you can also look in sources like Web of Science if you are looking for a particular topic. Be sure to cite your sources as you would in a scientific paper (as I have done in the question).

I am looking for answers of 4-5pp (double-spaced) in length; no more than 1600 words please. I'd like to receive them electronically.

**Question G1.** Understanding the temperature trends of the past century provides insight into the climate of the future, through allowing us to assess the sensitivity of climate to particular forcings or internal conditions (e.g. ENSO). Recent papers by Judith Lean and David Rind attempt to provide a view of the coming decades (Lean and Rind 2009) using information from the past century (Lean and Rind 2008). Describe their approach and its strengths and weaknesses. How might this approach be better or worse than using coupled climate models (e.g. Smith et al. 2007; Keenlyside et al. 2009)? How might the results from these different approaches be useful for policy/decision-making, and what would be their limitations?

References cited:


