

Fall Meeting
Free Meeting / Free Food
Tuesday November 9, 2004

6 p.m.

Casa Alvarez Restaurant
3161 Walnut St.
Boulder, CO
(303) 546-0630

The fall meeting of the Colorado-Wyoming Chapter of the ASA will be held on **Tuesday, November 9, 2004** in the side room at Casa Alvarez from 6 to 8 pm. The scheduled speaker is Claudia Tebaldi, who recently testified in front of John McCain and a US Senate committee. Claudia wrote an abstract for her talk, which immediately follows this announcement.

The chapter will provide hors d'oeuvres and the meeting will be free. Beverages and other menu items are available for purchase. Claudia will begin speaking at 7pm, leaving the first hour of the meeting for socializing and networking.

Statistics (with upper-case "s") and climate change
Presented by Claudia Tebaldi

I will talk about a couple of projects that I worked on recently, in the area of climate change research.

The first project consists of a formal Bayesian analysis of climate change. The dataset consists of different temperature change projections, from different climate models run under the same future scenario, and the statistical model tries to make sense of diverging projections by formalizing two heuristic criteria of model validation. I won't go into great detail, since I want to use this example only in contrast to a second project that analyzed changes in heat wave characteristics under climate change conditions. Where the former study writes down a statistical model, formulating precise probabilistic assumptions, and uses Markov Chain Monte Carlo simulation to produce posterior distributions of climate change, the latter analysis it's really just about computing means and standard deviations and t-tests. However, while the paper describing the former study is going through a painful review process, the paper on heat waves was published in Science within a couple of months from its completion, and had a great impact, reverberating across the media, and reaching the US senate attention, with the consequence that I was invited to testify in front of a committee presided by John McCain. And of course, in that venue, it helped that the most complex statistical term I had to use was "significant".

So I guess the lesson learned is "keep it simple" if it makes sense to...