

11/12/10 – Judith Curry (Climate Surprises, Catastrophes, and Fat Tails)

1. Preliminaries went well. Calendars had begun distribution, bake sale went well, and we announced there were no meetings to be held in December. Paul Sirvatka reminded everyone about the Dec. 3rd storm chasing meeting.
2. Speaker: Judith Curry. She graduated from NIU and is the Chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology.
3. Two sides of the debate: Anthropogenic climate change, going down slippery slope. 3-6 degree Fahrenheit rise by 2100 from GHG.
4. Problem: Uncertainty Monster – confusion and ambiguity in certain scientific areas. IPCC – probability is trying to be narrowed down, however uncertainty still exists.
5. Catastrophe vs. surprise
 - A. Abrupt climate change occurs faster than the apparent underlying driving forces.
 - B. Concerns on humanity.
 - (1) Major hurricanes
 - (2) Floods
 - (3) Heat Waves
 - (4) Droughts
 - C. Climate policy
 - (1) Dilemma – Fundamentally reshape our common future or produce losses that may become worse than the problem itself.
 - D. Precautionary Principle
 - (1) UNFCCC is trying to reach a goal of stabilizing greenhouse gases.
6. What is “dangerous” climate change? With uncertainties, the target is emissions.
 - A. It may be inadequate to prevent climate change.
 - B. Overkill, incurring unnecessary costs.
7. Optimal decision making (more research = less uncertainty) A political consensus must be reached.
8. Uncertainty Monster coping strategies (meaningful action)
 - A. Monster Hiding
 - B. Monster exorcism
 - C. Monster adaptation
 - D. Monster detection
 - E. Monster assimilation
9. “Future climate depends on future GHG emissions.” Models try to assess uncertainty.
10. Plausible worst case scenario.
11. Possibility distribution
 - A. Possibility theory
 - B. Possibility Distribution.
12. Robust Decision Making—Define Robust
13. A tamed uncertainty monster
14. “What can we learn from Climategate?”
 - A. “Our core scientific research values became compromised in the war against the skeptics.”

15. Climate skepticism (2007-2010)

- A. The climate auditors were the biggest skeptics and helped the blogosphere into bringing in Climategate.

16. Concerns that motivated the FOIA requests regarding surface temperature record.

17. Strategies for engaging skeptics:

- A. Retreat to the ivory tower.
- B. Circle the wagons/point guns outward.
- C. Take the high ground