

## Global warming and the IPCC: questions to investigate

- 1. How are IPCC reports written?** Who is responsible for the content? When IPCC AR4 describes scientific consensus, what actual process does that represent? What exactly do the italicized certainty terms mean (for example, *likely* vs. *very likely*...)?  
  
Also: what do **critics** of the IPCC reports say about them, and how do supporters respond to those criticisms? (Note: not all the critics are climate skeptics.)
- 2. Basic physics of anthropogenic global warming**, including the major climate-system feedbacks. How exactly do CO<sub>2</sub> emissions lead to warming of the magnitude predicted?
- 3.** What are the **SRES emissions scenarios**, and what goes into them? Which now appear to be most plausible?
- 4.** What **physical, biological, or chemical feedbacks** in the climate system did IPCC AR4 future projections **omit**? What is the likely effect of these processes on future warming, relative to what IPCC AR4 projects?
- 5.** In the years following IPCC AR4, what **observed trends** have been stronger or weaker than predicted? What does each of these mean (if anything) for long-range projections?
- 6. In what areas is our societal response to climate change limited by scientific uncertainty**, and in what areas is scientific uncertainty beside the point?  
  
Here's a strategy for answering this: select examples of things at high/medium/low levels of certainty in the IPCC AR4 report. For each, what policy or societal responses are possible? What do *you* think the policy/societal response *should* be? Would your answer be different if the science were more certain?
- 7.** List some **skeptical questions** about climate change that either you actually have, or that you hear in the media/your family/the blogosphere. For each, what is the best climate-science response? Which skeptical questions does the climate-science community have the hardest time addressing? (I'm defining "skeptical" as criticism from outside the IPCC consensus, as opposed to the uncertainty acknowledged within it.)