

Hey, Nobel Prize Winners, Answer Me This

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15 March, 2008

As a climate scientist, I would like to see some answers to a few basic global warming science questions which I'm sure the U.N.'s Ministry of Global Warming Truth (also known as the Intergovernmental Panel on Climate Change, IPCC) can handle. After all, since they are 90% confident that recent global warming is manmade, they surely must have already addressed these issues:

1) Why are ALL of the 20+ IPCC climate models more sensitive in their total cloud feedback than published estimates of cloud feedbacks in the real climate system (Forster and Gregory, *J. Climate*, 2006)? If the answer is that "there are huge error bars on our observational estimates of feedback", then doesn't that mean that it is just as likely that the real climate system is very insensitive (making manmade global warming a non-problem) as it is to be as sensitive as the IPCC models claim it is?

2) And regarding those observational estimates of (somewhat) positive cloud feedbacks: How do you know that the cloud changes that have been observed during temperature changes really are "feedbacks"? In other words, how do you know that the temperature changes caused the cloud changes, rather than the other way around? This basic distinction between cause and effect is critical because such a misinterpretation will ALWAYS make the climate system look more sensitive than it really is (e.g., it is energetically impossible for more low clouds to cause a warming). Doesn't it seem like a coincidence that the ONE case where we know that there was a huge non-cloud forcing (the 1991 eruption of Mt. Pinatubo) resulted in a negative solar shortwave cloud feedback, whereas all other periods showed supposedly positive shortwave cloud "feedback"?

3) As a follow on to question #2, we all agree that there has been strong global-average warming since the 1970's. Well, how do you know this wasn't the result of a small, natural change in cloud cover? Doesn't it seem like (another) coincidence that the Pacific Decadal Oscillation (PDO) just happened to shift to a different mode in 1977, about the time that the warming started? (Please don't say that the greater warming over land versus ocean is consistent with manmade greenhouse gas forcing...because it is also consistent with ANY kind of change in the Earth's radiant energy budget, whether natural or manmade.)

The fact is, we DON'T know how much of recent warming is natural, simply because we don't have good enough global cloud observations back to the 1970's (and earlier) to measure any long-term changes in cloudiness to the required accuracy – 1% or less.

The same cause-versus-effect uncertainty is true of any other climate variable as well, for instance water vapor, our main greenhouse gas. A small change in precipitation

efficiency (the main process which ultimately limits the strength of the natural greenhouse effect) could cause a change in average water vapor content, which then would change the average temperature. In other words, increased water vapor doesn't have to only result from warming...warming can also result from increased water vapor.

The fact that we don't have a good enough understanding (or observations) of cloud changes, or precipitation efficiency changes, on decadal time scales to document such potential mechanisms seems like pretty weak justification for blaming all of our recent warming on mankind. And if you say, "well, the IPCC doesn't claim that ALL of the warming is manmade...", then tell me: About what percentage of the warming IS natural, and how did you come up with that quantitative estimate?

I fear that the sloppy science that too many climate researchers have lapsed into could, in the end, hurt our scientific discipline beyond repair. The very high level of certainty (90%) claimed by the IPCC for their manmade explanation for warming can not be justified based upon the scientific evidence, and is little more than an expression of their faith that they understand the causes of climate variability – which they clearly don't.

For those scientists who value their scientific reputations, I would advise that they distance themselves from politically-motivated claims of a "scientific consensus" on the causes of global warming -- before it is too late. Don't let five Norwegians on the Nobel Prize committee be the arbiters of what is good science.