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Editor

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***Re: Two “climate change” articles in October 2011 issue***

Gentle Folks:

In elementary algebra—oh, so long ago—we learned how to make graphs with the independent variable on the horizontal axis and the dependent variable on the vertical axis. Later on, in science classes we learned the usefulness of the technique: the independent variable is the cause and the dependent variable is the effect. In the fields of health physics and pharmacy, the graphs are called dose-response curves, but everybody who has done experimental science has made similar plots.

The discussions about whether—and how much—increases of CO<sub>2</sub> concentration cause increases in temperature come down to such a cause-effect relationship. A reasonable approach would be to plot temperature rise (effect) on the vertical axis versus CO<sub>2</sub> forcing on the horizontal axis. The reason I say “would be” is that climate alarmists have never done it. A pharmaceutical company that approached the FDA for a license to manufacture and distribute a drug for which they failed to produce dose-response curves would be laughed out of the hearing room.

The Somerville/Hassol article talks of “communicating the science of climate change.” There is, of course, no *theory* of climate, because the all-important Navier-Stokes equations can’t even be solved for turbulence in a 4-inch pipe. The causal relationship of temperature rise to CO<sub>2</sub> concentration increase, could, however, be displayed in a simple graph using readily available data. Now *that* would be a way to communicate.

The Sherwood article is merely reasoning by analogy—giving some cases where good science was opposed by establishment opinion. Curiously, in the present case, he opines in favor of establishment opinion, dismissing opposition as “bogus counterarguments,” the same as was done to Copernicus and Galileo. In any case, reasoning by analogy is inherently illogical. Listing a million analogies would neither strengthen nor weaken the link between CO<sub>2</sub> and temperature.

We need not sit helplessly by, waiting to climate modelers to connect effect with cause. I call upon readers to make the requisite graph, using the forcing function  $5.35 \text{ Wm}^{-2} * \ln(C / C_0)$  from Table 6.2 of IPCC’s Third Assessment Report (<http://ipcc.ch/>), temperature data and CO<sub>2</sub> data from NASA/GISS at <http://data.giss.nasa.gov/gistemp/tabledata/GLB.Ts+dSST.txt> and <http://data.giss.nasa.gov/modelforce/ghgases/Fig1A.ext.txt> respectively. The results may cause you to issue a sigh of relief.

Best Regards,

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