



GISS Nov 5



Combating disinformation: Why bother?



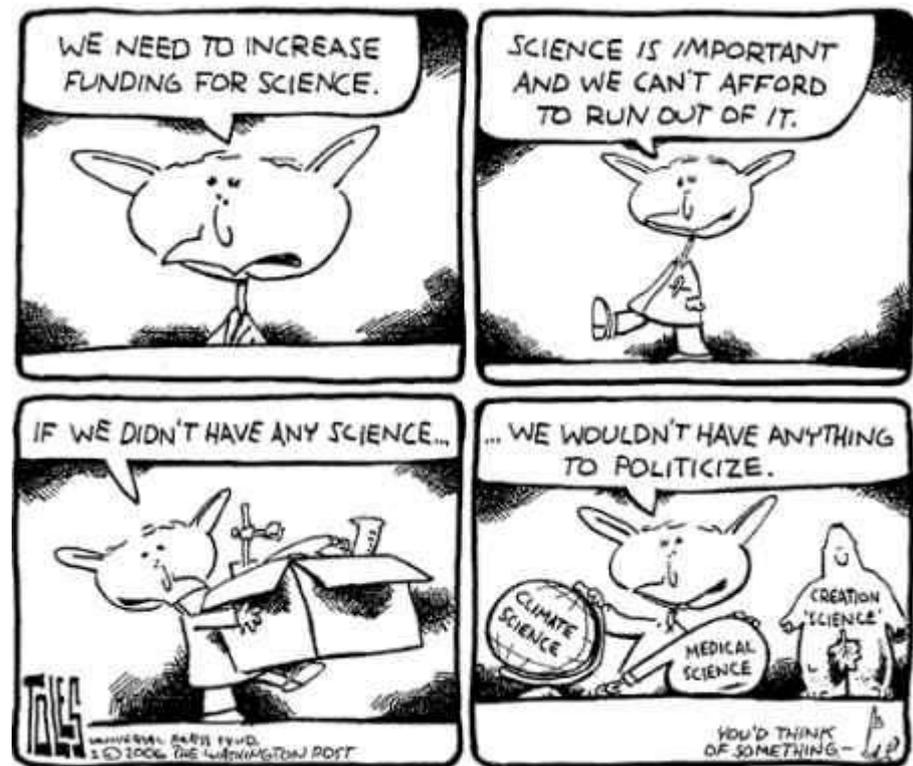
Gavin Schmidt
NASA GISS and Center for Climate
Systems Research, Columbia University
New York

Politicized Science

Science gets politicized when scientific results appear to impact vested political, ethical or moral interests

(It doesn't matter if they really do or not)

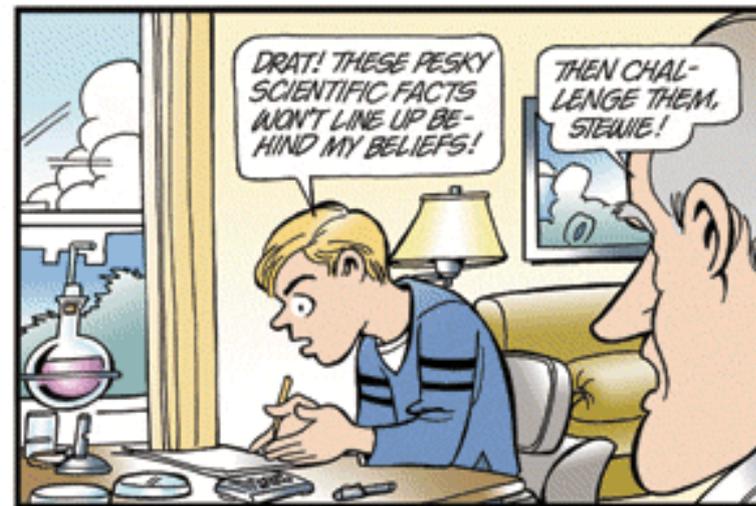
- *Global warming*
- *Evolutionary biology*
- *Forestry*
- *Embryonic stem cells*



'Scientitized' Politics

Politics get 'scientitized' when advocates appear to debate the science in order to avoid debating the values that underly their positions

- *Bacterial flagellum*
- *15th century tree rings*
- *Medieval English vineyards*



Generally has nothing to do with the real scientific debate.

Looks similar but does not follow the same rules.

'Science' is used to make a 'case', not find the truth.

- *Cherry-picking, strawmen, red herrings common*

Junk in the trunk

Mediocre and bad papers appear in the literature all the time:

- There is almost never a paper so bad that it can't get published somewhere!
- Most are (rightly) ignored; get no citations

Some however get a lot of attention:

- Douglass et al (2008)
- Schwatz (2007)
- de Laat and Maurelis (2004, 2006)
- McKittrick and Michaels (2006)
- Baliunas and Soon (2003)

Why? and what can (should?) be done?

What

Discuss over coffee:

Talk to journalists:

Blog:

Write an official comment:

Difficulty

easy,

not difficult,

straightforward

hard

Impact

very little impact

very little impact

some immediate impact

no immediate impact,

but long term importance?



12 December 2007

Tropical tropospheric trends

Filed under: [Instrumental Record](#) [Climate modelling](#) [Greenhouse gases](#) [Climate Science](#) — group @ 4:32 PM
[Edit This](#)

Once more unto the breach, dear friends, once more!

Some old-timers will remember a series of 'bombshell' papers back in 2004 which were going to "knock the stuffing out" of the consensus position on climate change science (see [here](#) for example). Needless to say, [nothing](#) of the sort [happened](#). The issue in two of those papers was whether satellite and radiosonde data were globally consistent with model simulations over the same time. Those papers claimed that they weren't, but they did so based on a great deal of over-confidence in observational data accuracy (see [here](#) or [here](#) for how that turned out) and an insufficient appreciation of the statistics of trends over short time periods.

VS.

Research Article

Consistency of modelled and observed temperature trends in the tropical troposphere

B. D. Santer^{1*}, P. W. Thorne², L. Haimberger³, K. E. Taylor¹, T. M. L. Wigley⁴, J. R. Lanzante⁵, S. Solomon⁶, M. Free⁷, P. J. Gleckler¹, P. D. Jones⁸, T. R. Karl⁹, S. A. Klein¹, C. Mears¹⁰, D. Nychka⁴, G. A. Schmidt¹¹, S. C. Sherwood¹², F. J. Wentz¹⁰

Online publication date: 5 Dec 2007

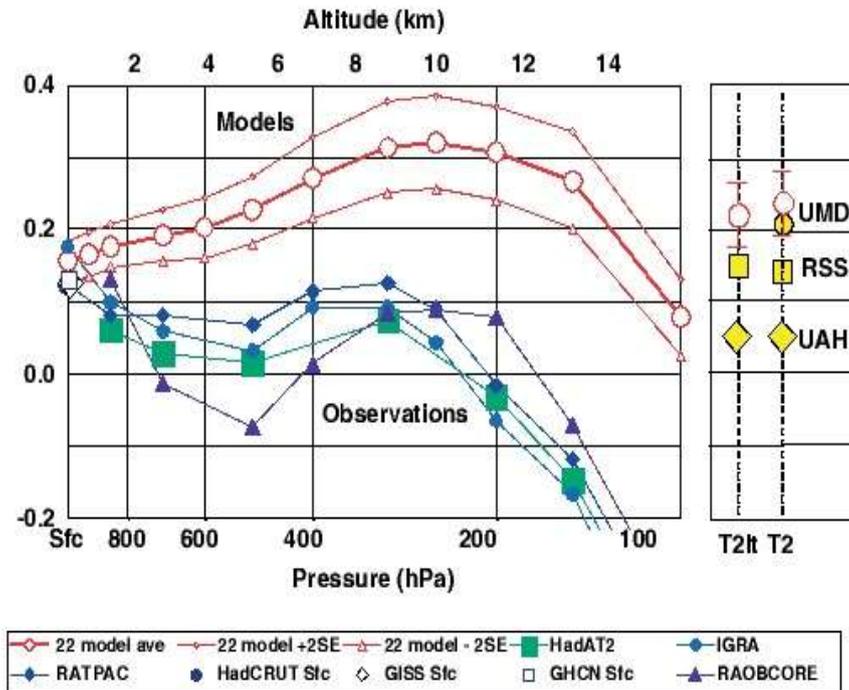
Press release: 6 Dec 2007

RC response: 12 Dec 2007

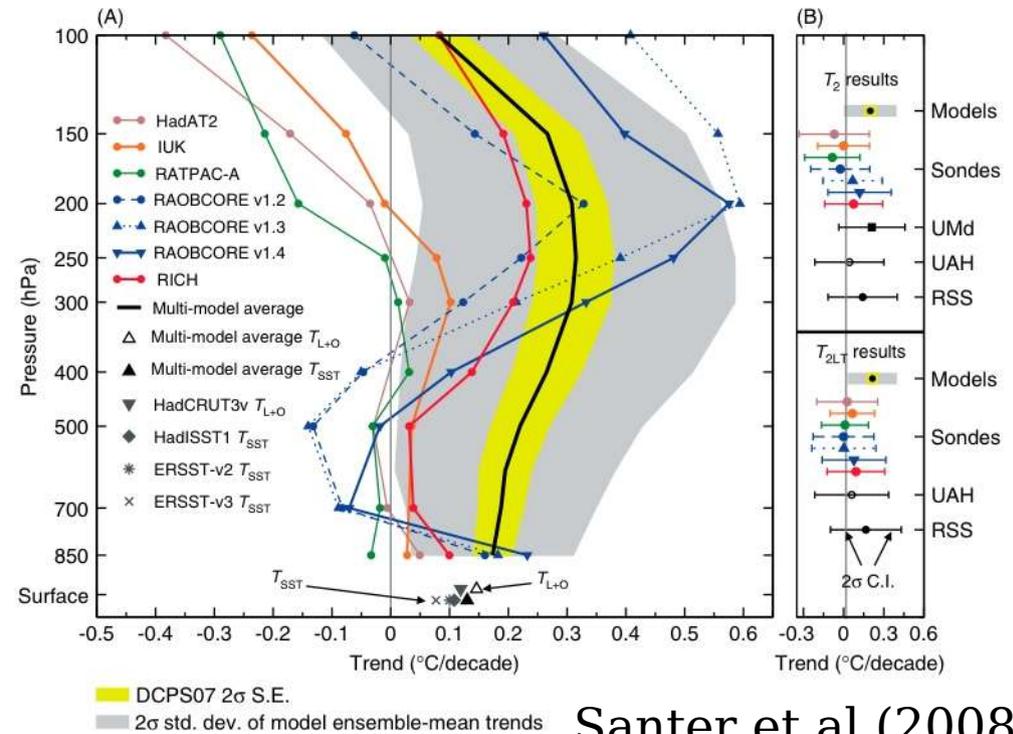
Submission of comment: 25 Mar 2008

Online publication: 10 October 2008

Douglass et al (2008)



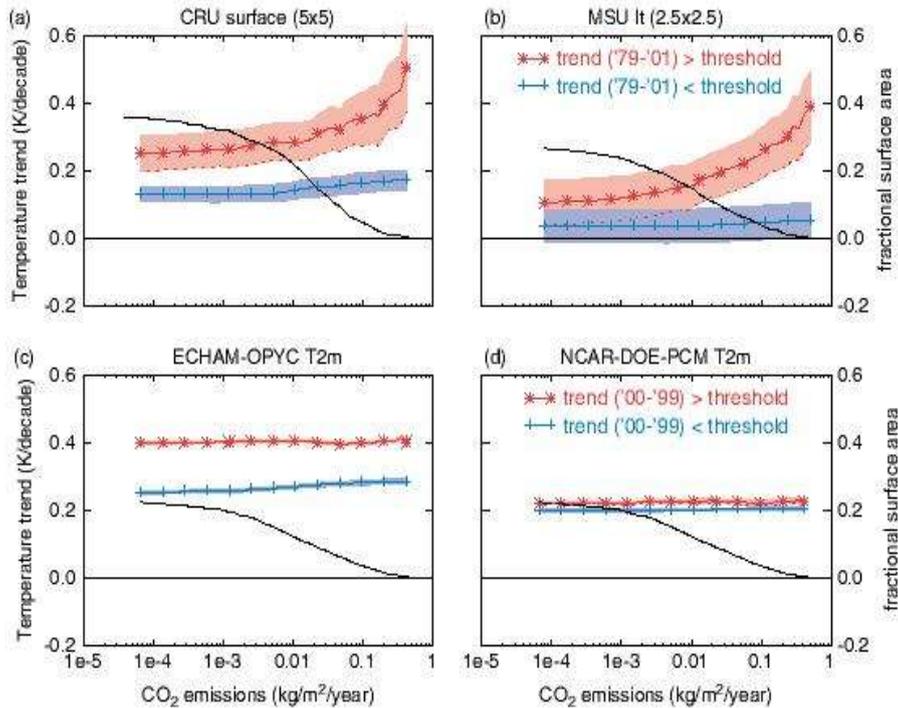
Original figure



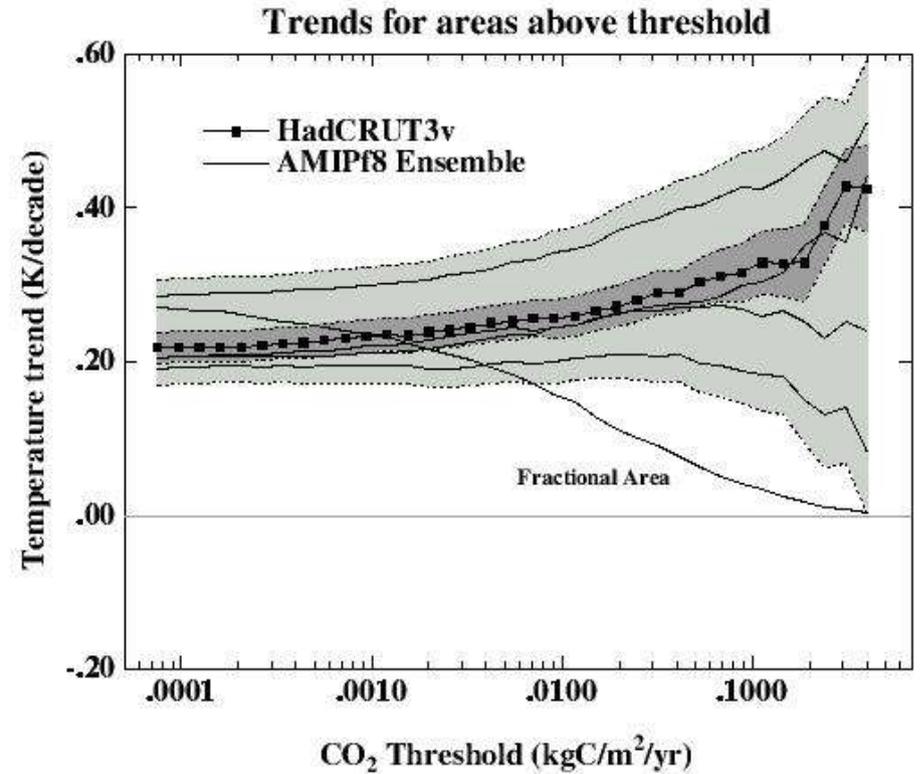
Santer et al (2008)

What it should have shown

de Laat & Maurellis (2006)



Original figure



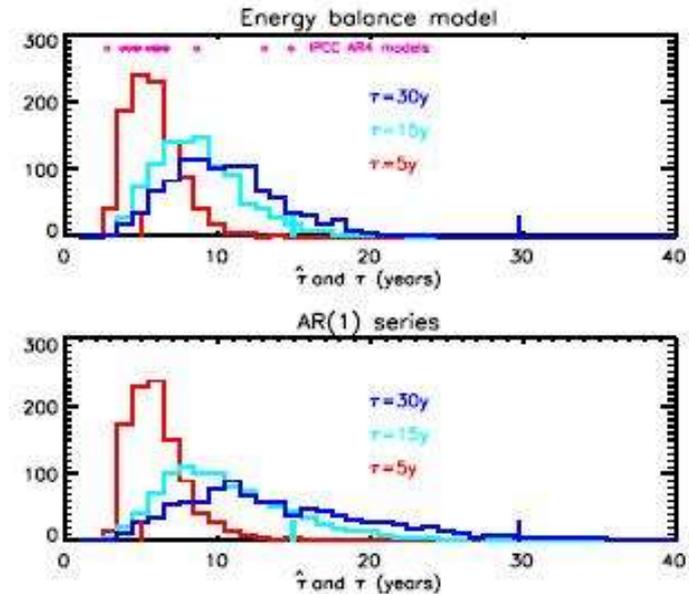
Schmidt (in press)

What it should have shown

Schwartz (2007)

HEAT CAPACITY, TIME CONSTANT, AND SENSITIVITY OF EARTH'S CLIMATE SYSTEM

Stephen E. Schwartz



Using assumption of 0-layer energy balance + AR1 noise to imply climate sensitivity $\sim 1.1^{\circ}\text{C}$

Turns out method doesn't work for GCMs, 0-layer energy balance models, or fit real world data (Foster et al, 2008)

Schwartz (2008) comes up with a new method to get $\sim 1.9^{\circ}\text{C}$ (which also doesn't for GCMs, 0-layer energy balance models, or fit real world data).... etc.

So what have I learned?

- Where there is a politicised push on bad science, there needs to be a fast response (if not, the damage is done)
- When this is in the mainstream literature, there needs to be a counterpoint in the literature (blog posts are not really citable)
- This can move the science forward (i.e. it is not just reactive)
- Some extra publications, a large sink of time, can be confrontational, but is a necessary 'community service'.
- I don't need to do it every time though!