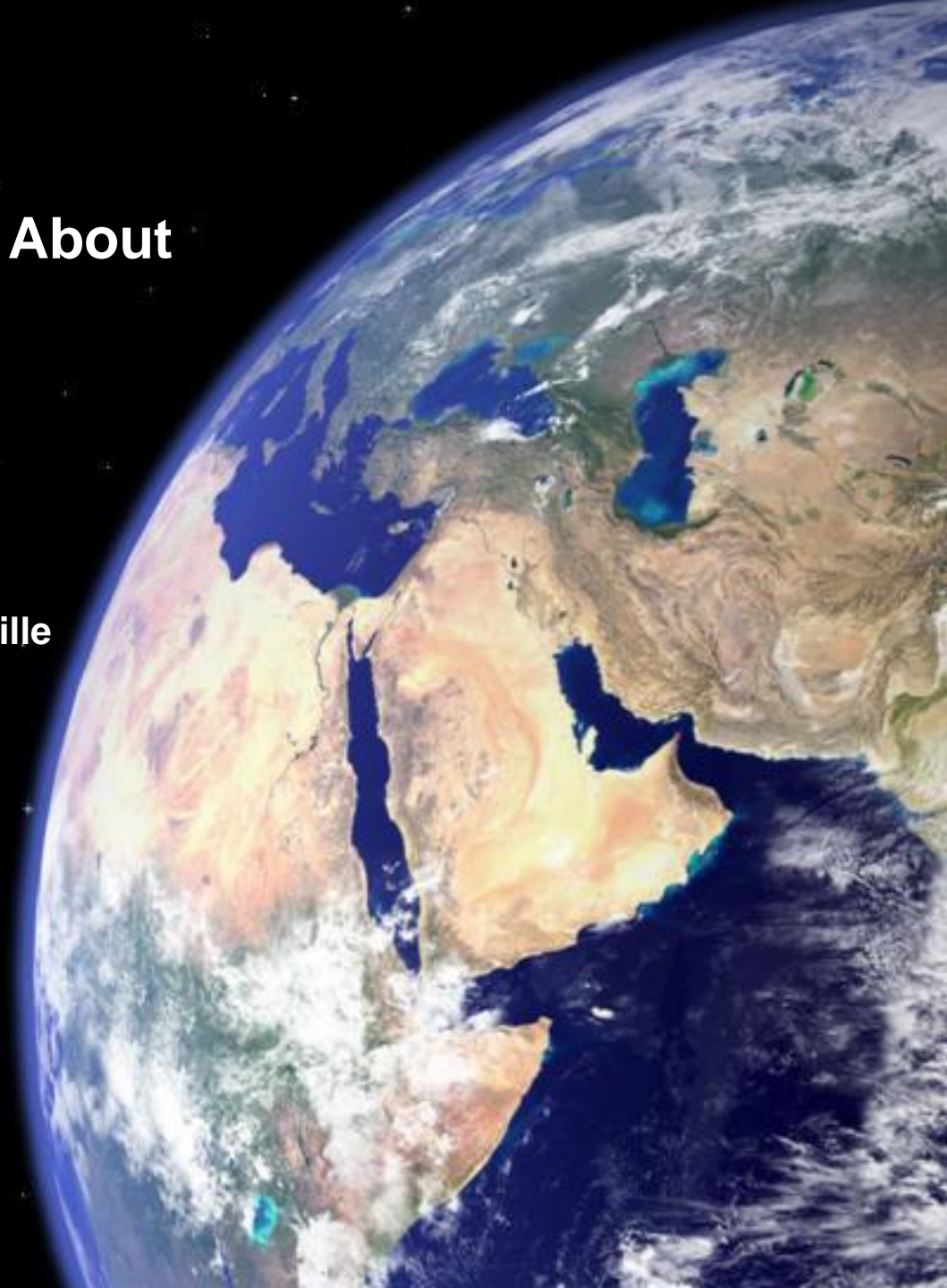


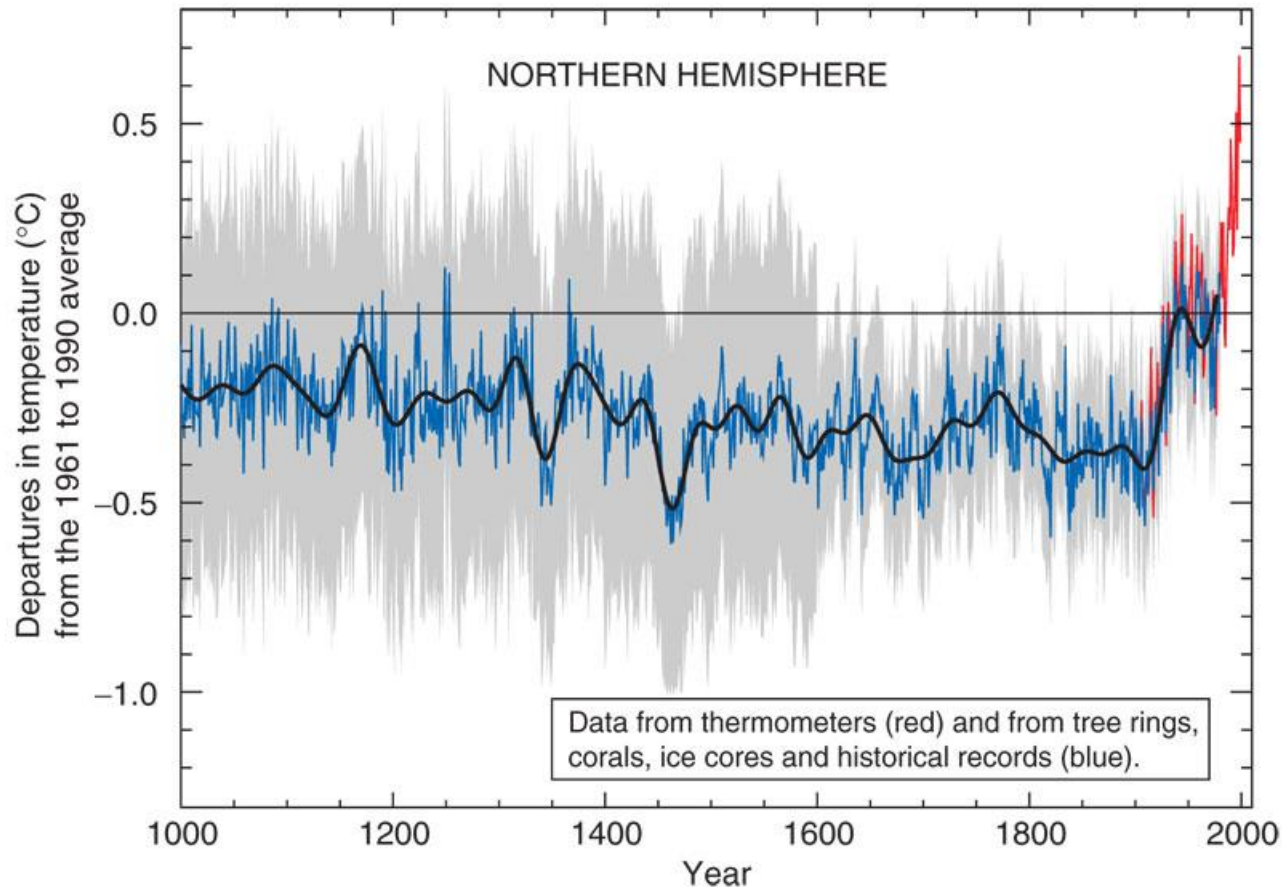
# **What Do We Really Know About Global Warming?**

**Dr. Roy W. Spencer  
Principal Research Scientist  
The University of Alabama in Huntsville  
9 July 2014**



# Defining terms – what do I mean by “global warming”?

...I don't mean Mann-made global warming, which is an example of statistical over-manipulation....



...and I don't mean Man-made local warming (which still exists in the thermometer data)....





**Global Warming:**  
**The recent probable increase in global  
average surface temperature on  
multi-decadal time scales**

What do we really know about it?

**ALMOST NOTHING.**

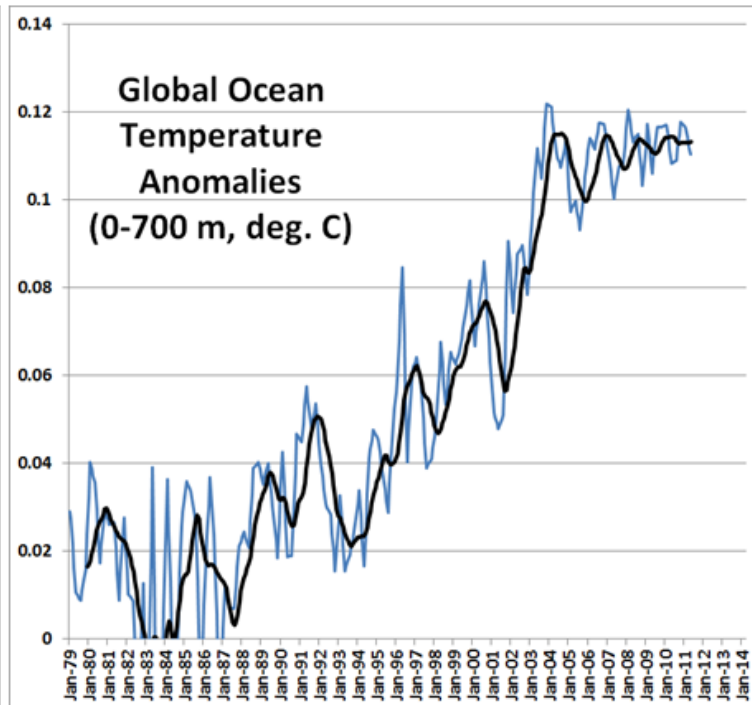
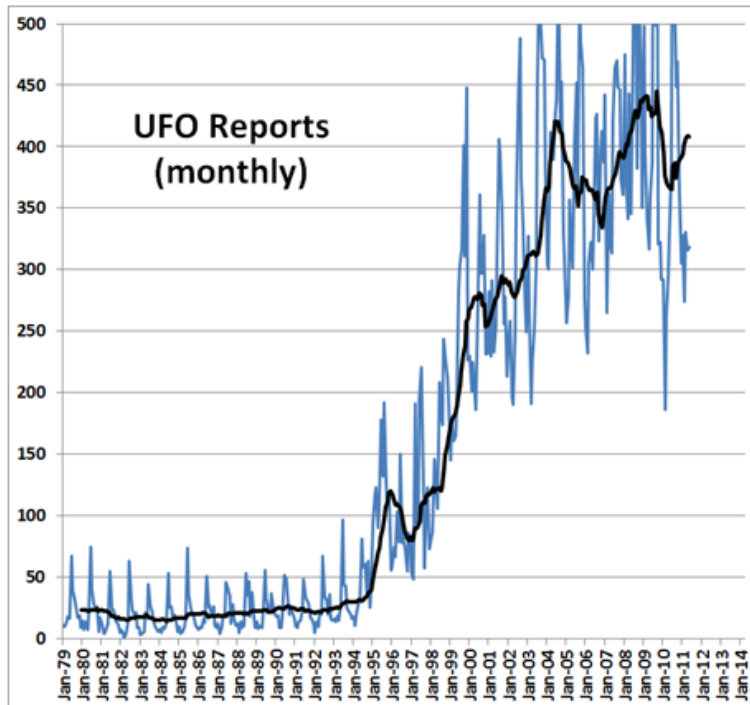
**We don't know...**

- **How strong it is**
- **What it's caused by**
- **Whether it makes severe weather worse**
- **When it started**
- **When it will end**
- **Whether it's “good” or “bad”**

# We Do Know....

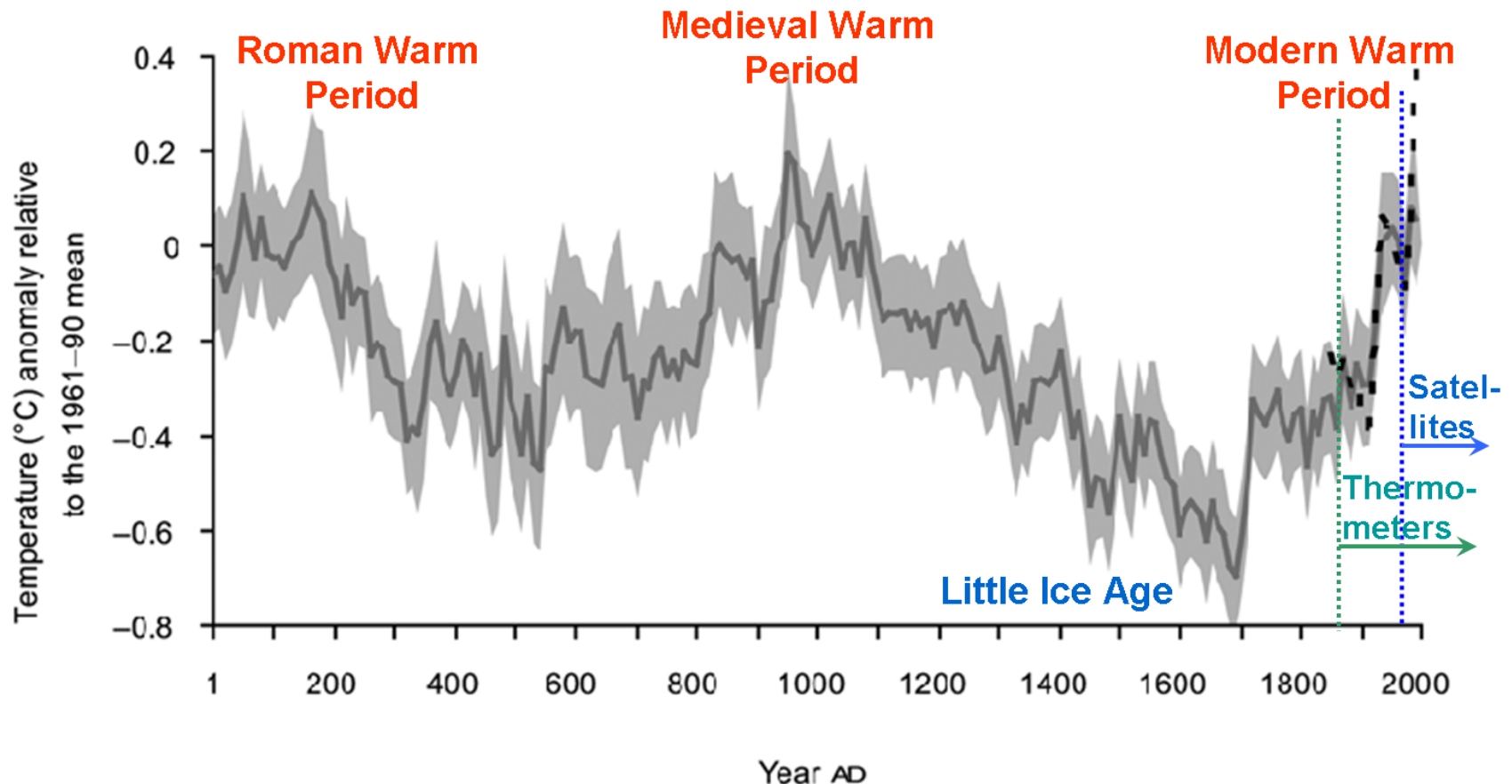
- It *might* be caused by some combination of human activities and Mother Nature.

“might be”?....(ha ha)...



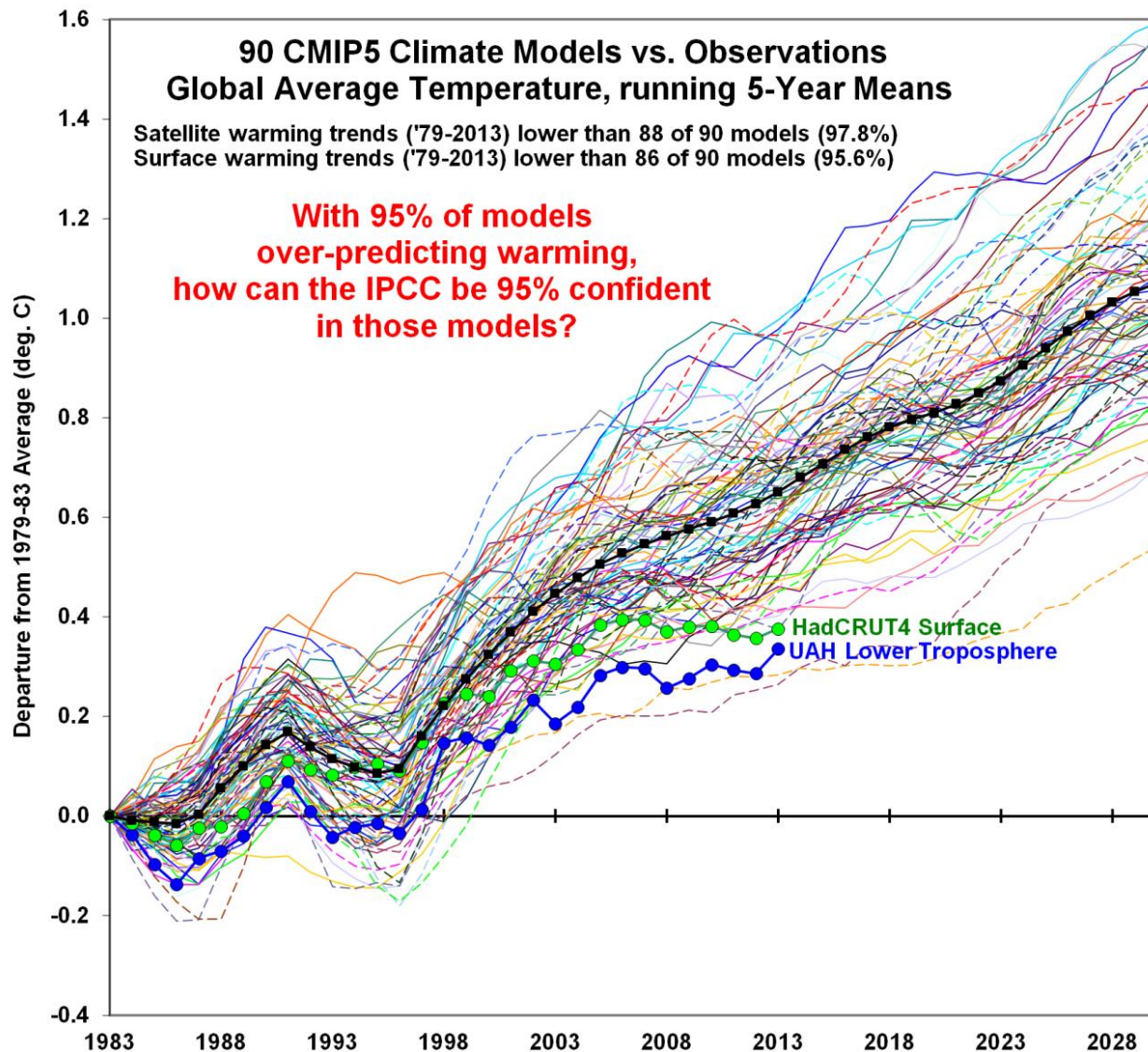
# Nearly Every Century Might Experience Global Warming or Cooling

Temperature Reconstruction\* for N. Hemisphere, 1 - 2000 AD  
Shows Modern Warm Period Not Exceptional



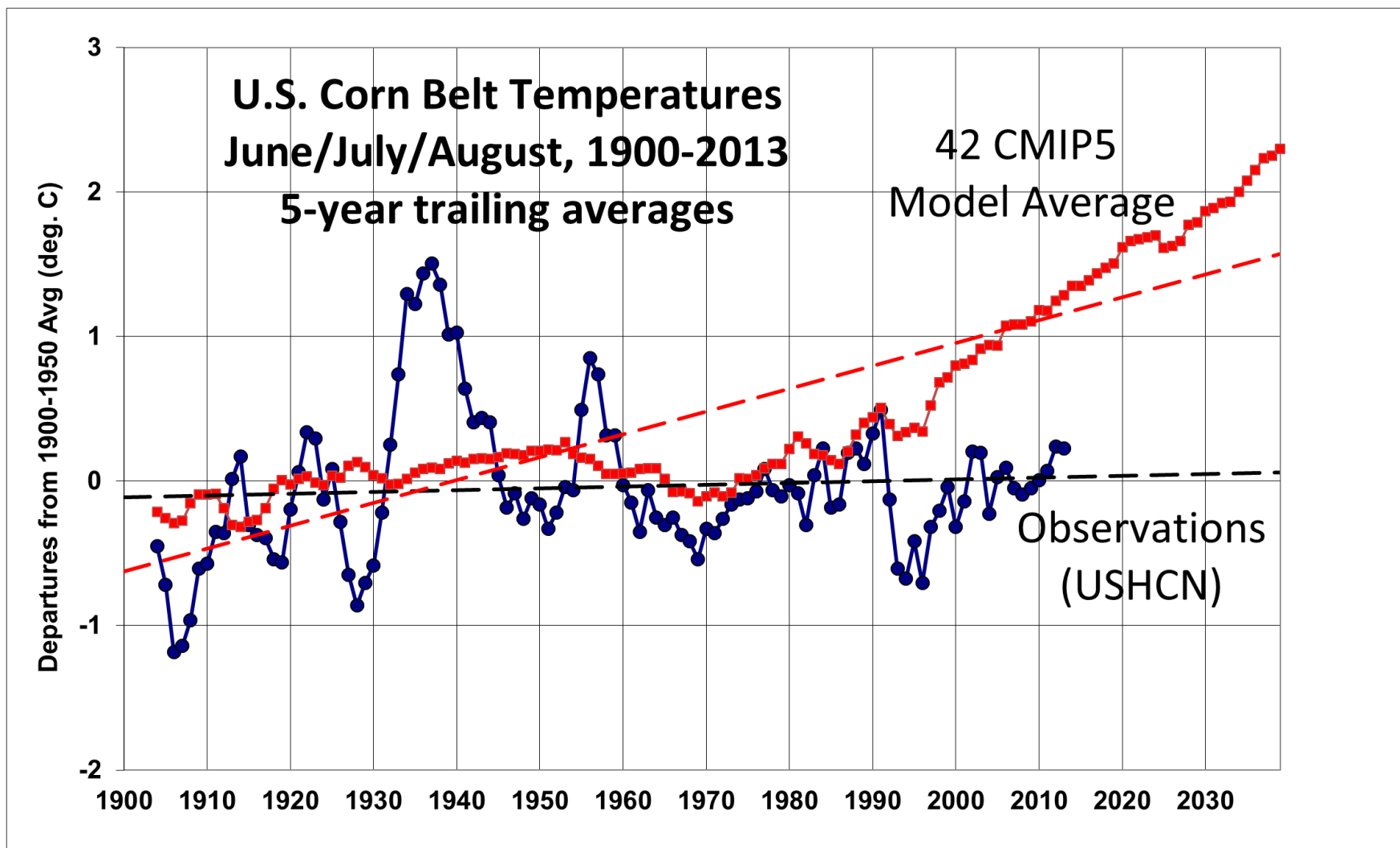
\*Ljungqvist, F.C. 2010. A new reconstruction of temperature variability in the extra-tropical Northern Hemisphere during the last two millennia. *Geografiska Annaler: Physical Geography*, Vol. 92 A(3), pp. 339-351, September 2010. DOI: 10.1111/j.1468-0459.2010.00399.x

# We know that IPCC *hindcasts* of warming have largely failed, both for GLOBAL AVERAGE conditions...

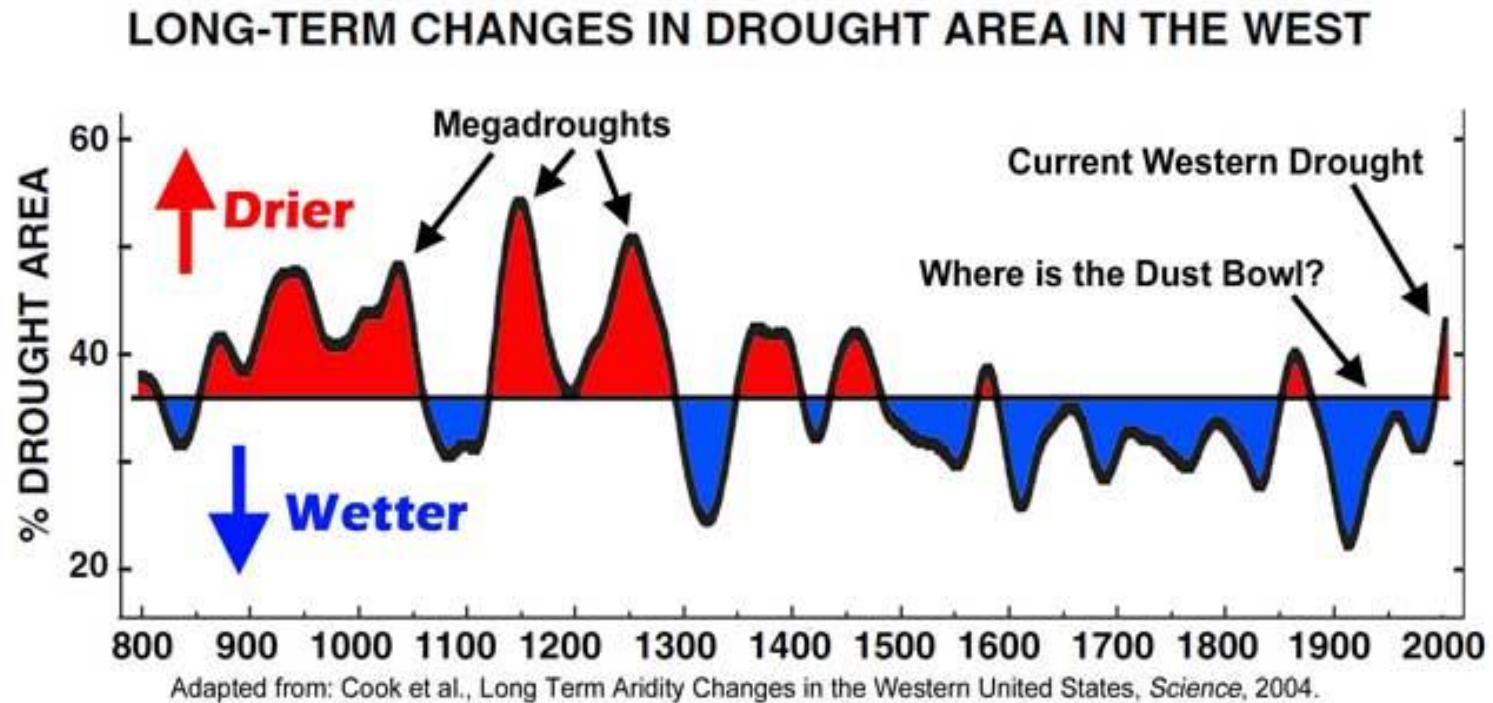




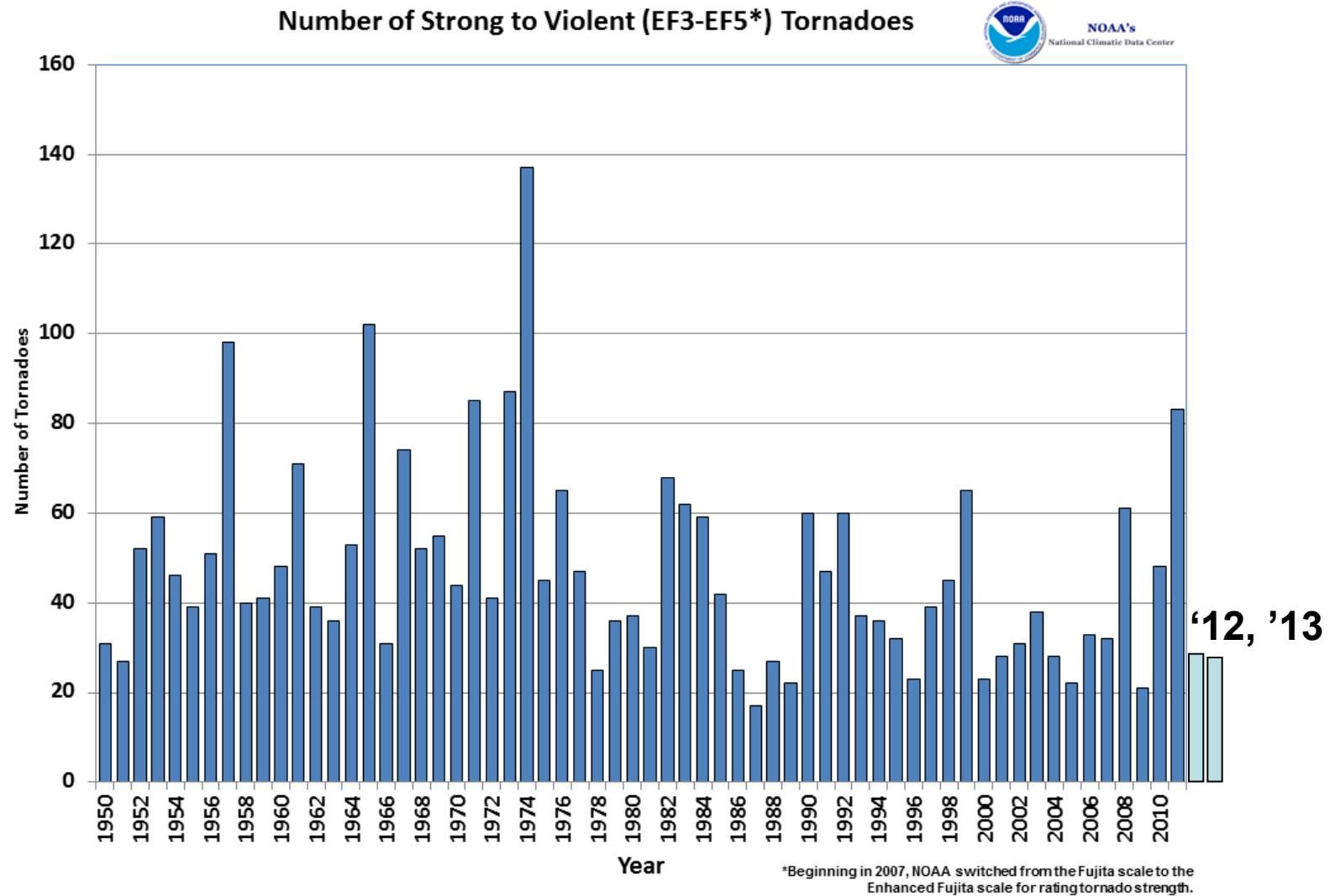
## ...and REGIONAL conditions.



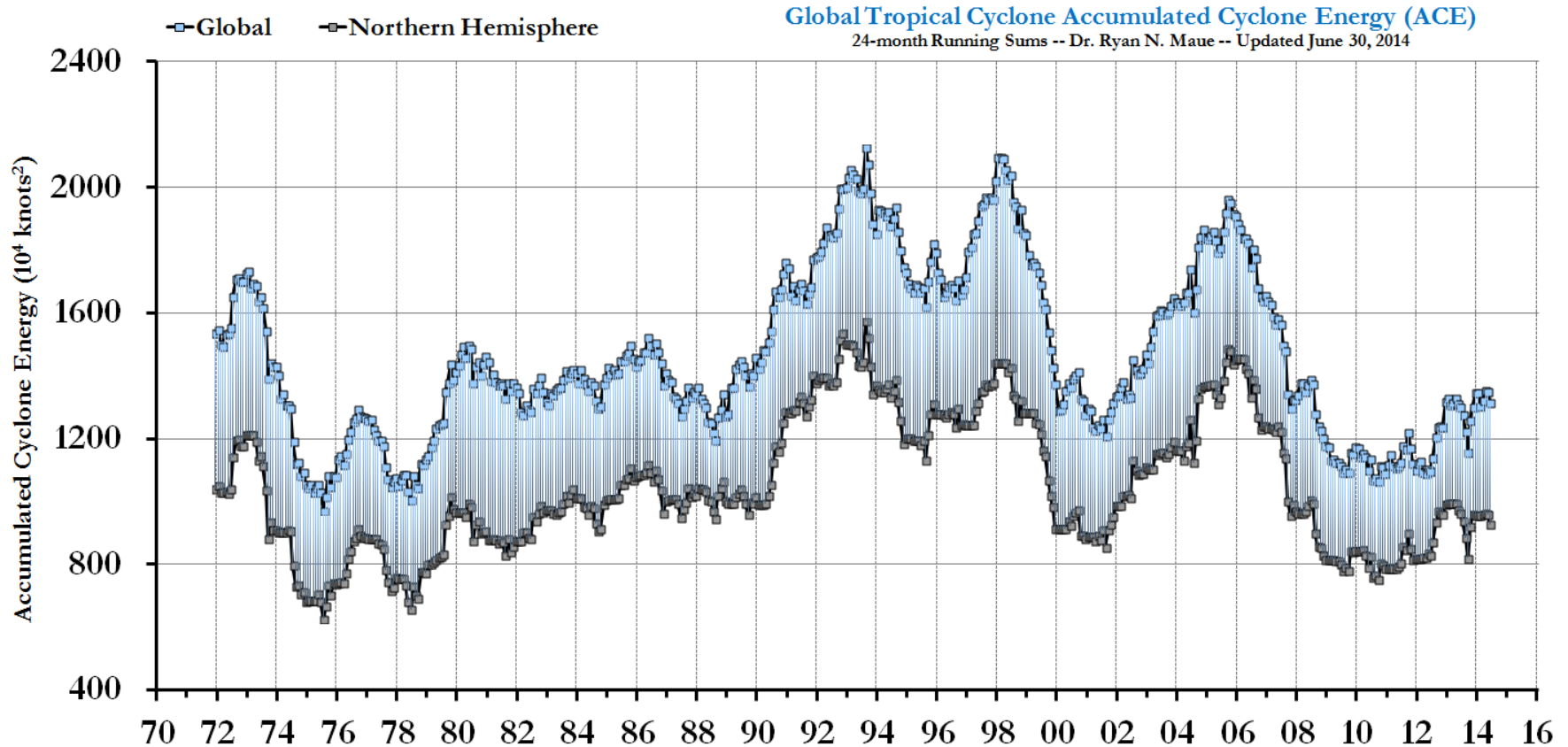
**We don't know whether it is causing  
worse drought conditions  
(probably not)**



# We don't know whether it's causing worse tornadoes (apparently not)



# We don't know whether it's causing more tropical cyclone activity (apparently not)

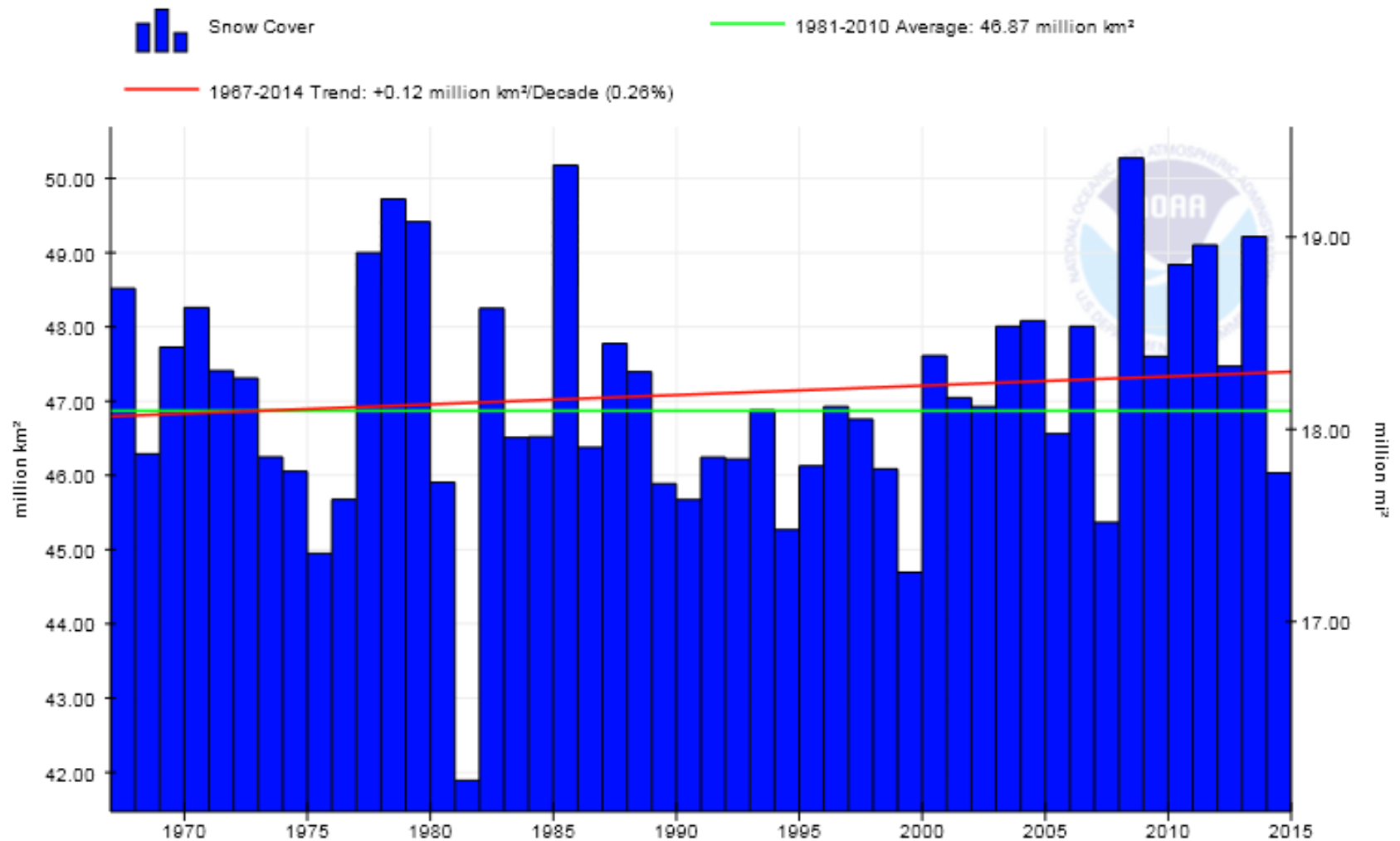


Ryan Maue (WeatherBELL Analytics)



# We don't know if it's causing less snow cover (apparently not)

January Northern Hemisphere Snow Cover Extent (1967-2014)

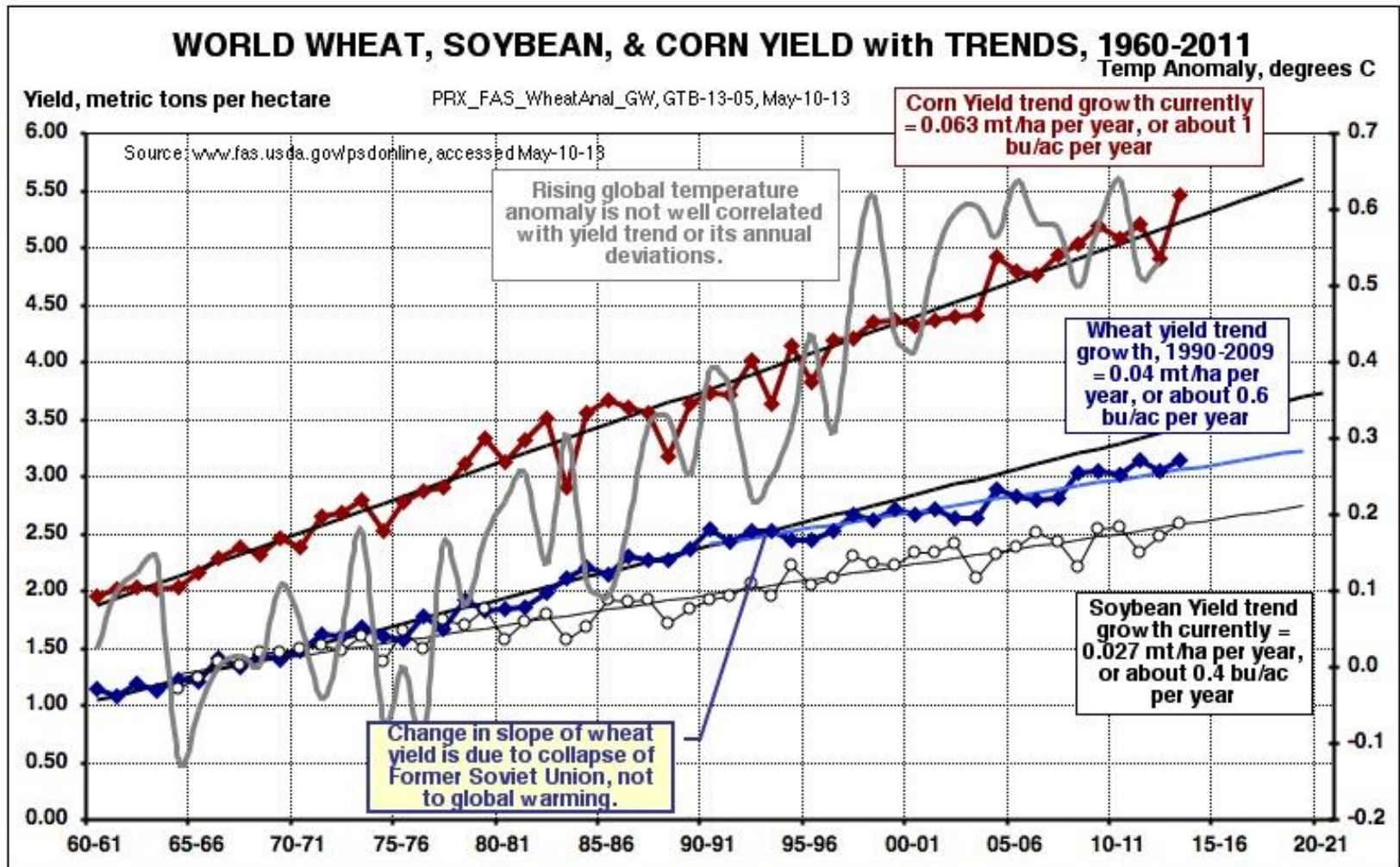


**We don't know if it's causing worse snowstorms  
(probably not)**



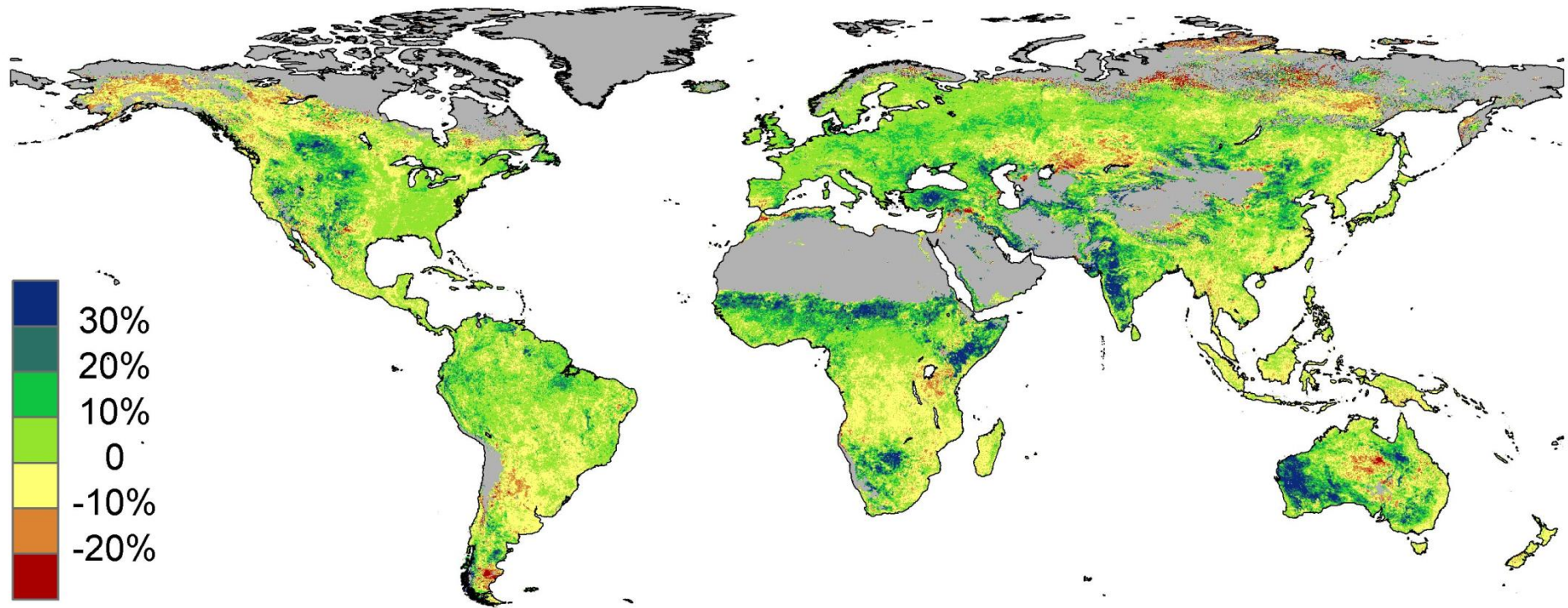
**Dec. 1947 snowstorm dumped 2 feet of snow on NYC.**

# We DO know that global grain yields are increasing, despite warming...



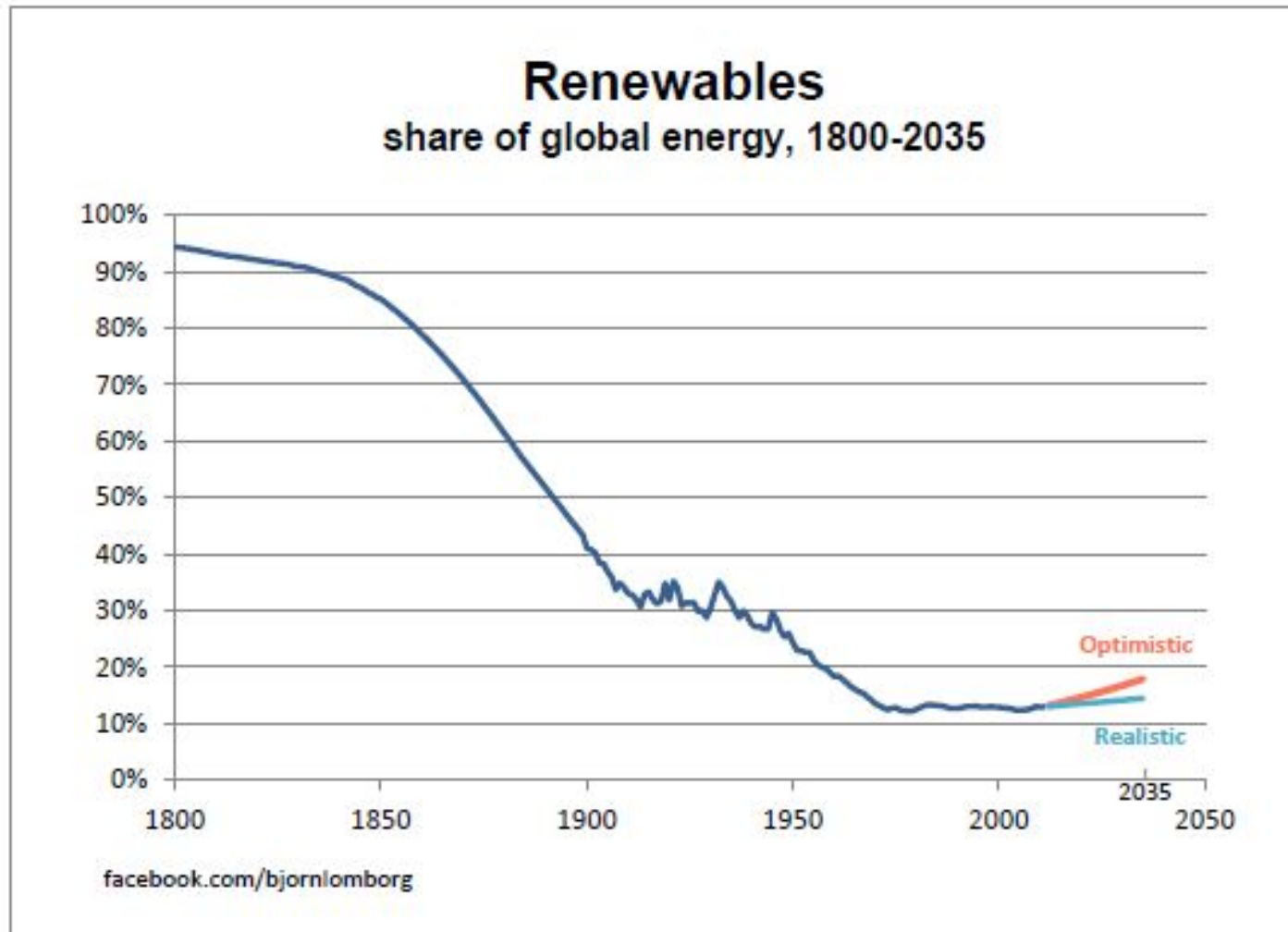


...and that “global greening” has been occurring  
in recent decades...

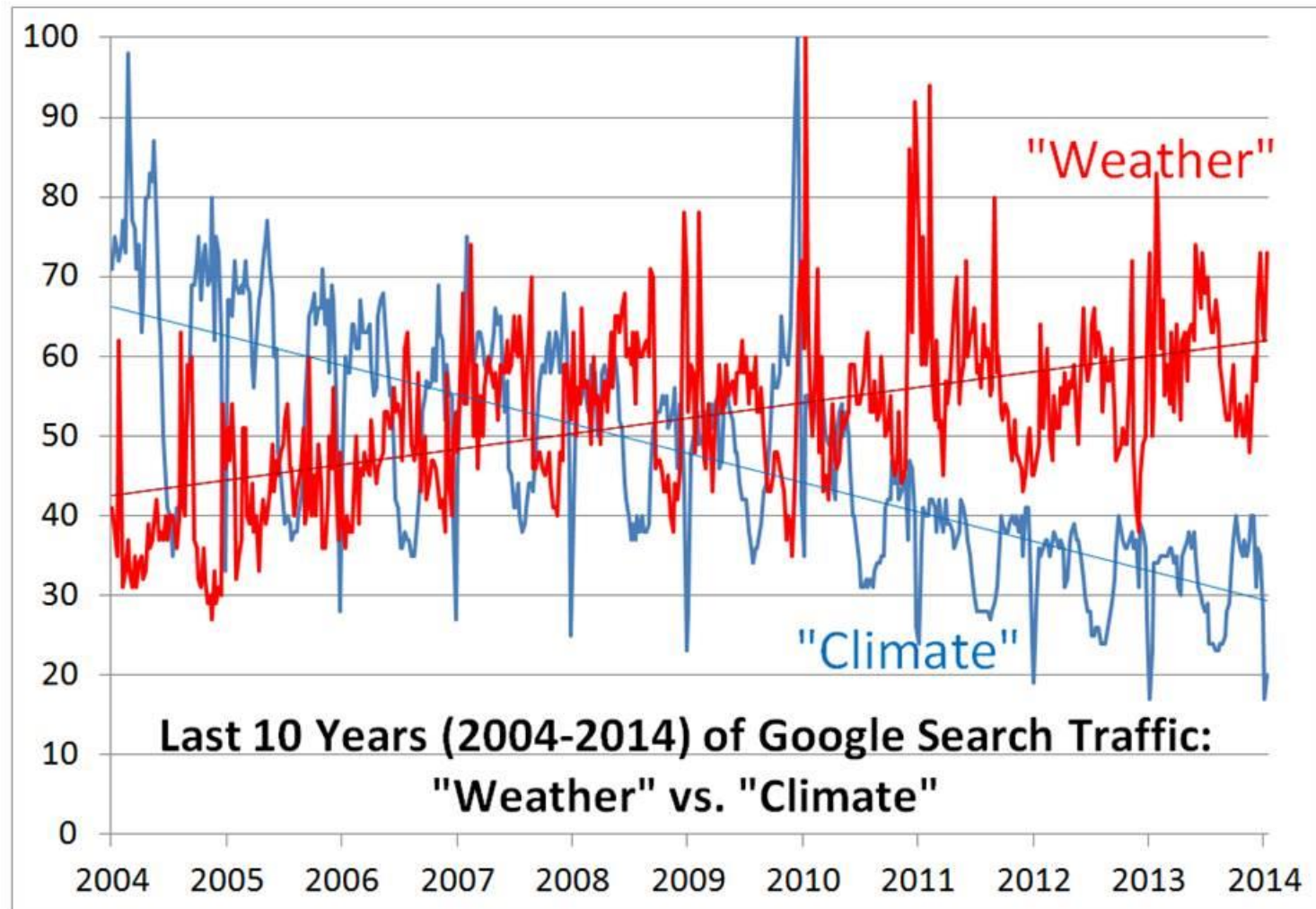




**We DO know that, even IF we are at fault, there's nothing much we can do about it anyway (without stopping most economic activity)**



# We even know that the public is losing interest in climate change hysteria



Finally, we DO know that the alleged cause of warming, carbon dioxide, is necessary for life on Earth....

**AND that nature gobbles up  $\frac{1}{2}$  of what we produce, no matter how much we produce....**

So, given all of this evidence...why aren't scientists advocating producing **MORE carbon dioxide?**

**(dramatic pause...)**

**Because the driving  
force behind the  
global warming debate  
isn't science.**

**~ The End ~**