

New Observations Show Carbon Emissions Don't Cause Global Warming

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11 December 2007

Current Summary of Crucial Evidence

Background

A paper I wrote that briefly describes the history of why we used to believe that carbon emissions caused global warming, and how we got to where we are now in the debate:

<http://mises.org/story/2571>

Ice Core Data Reverses — 2003

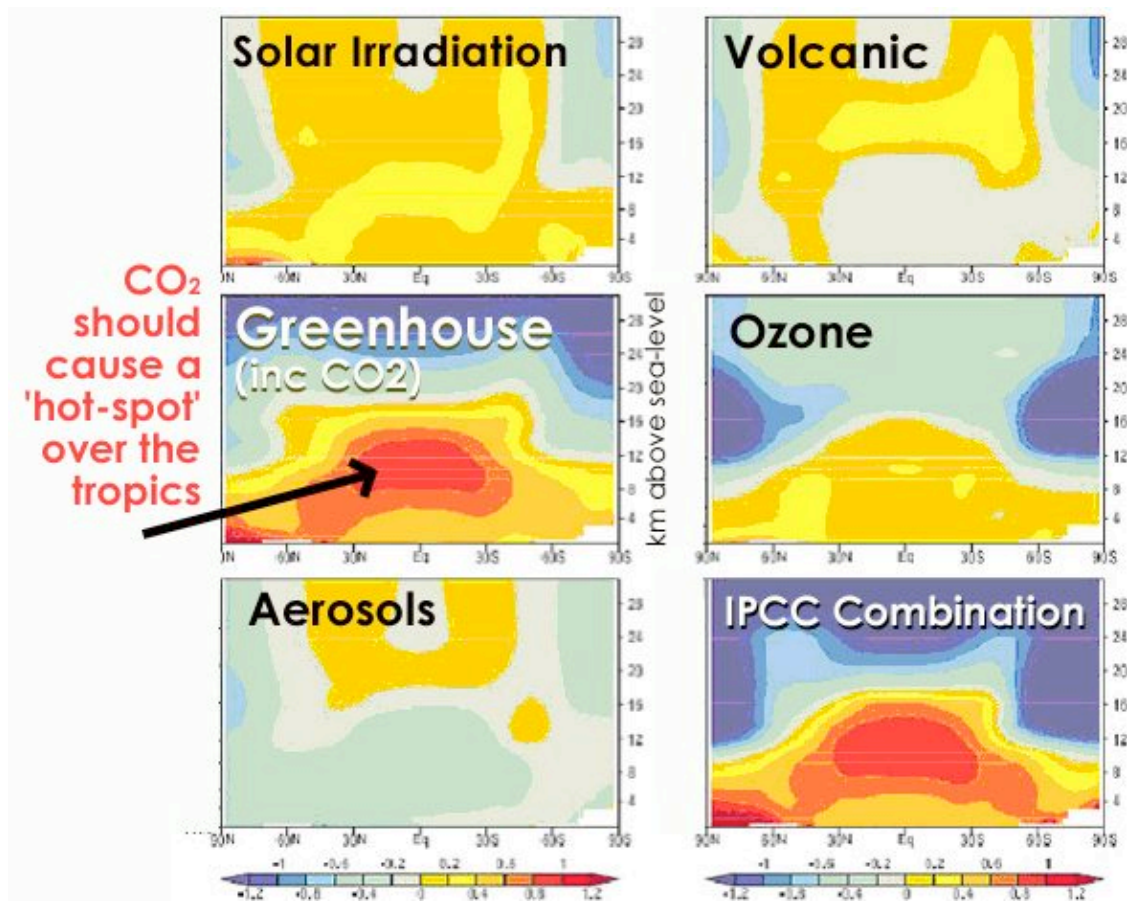
First crucial point, 2003. We've all seen Al Gore's movie. It was the early, low resolution ice core data first gathered from 1985 to 2000 that convinced the world that CO₂ was the culprit: CO₂ levels and temperature rose and fell in lockstep over the last half a million years, to the resolution of the old ice core data (data points over a thousand years apart). We *assumed* that CO₂ levels controlled the world's temperature.

After further research, in 2000 – 2003 new high resolution ice core results (data points only a few hundred years apart) allowed us to distinguish which came first—rising temperature or rising CO₂? We found that temperature changes *preceded* CO₂ changes by an average of 800 years. So temperature rises caused the CO₂ rises, and not the other way around as previously assumed. The world should have started back-peddalling away from blaming carbon emissions in 2003:

<http://www.noe21.org/dvd2/Global%20Warming%20FAQ%20-%20A0%20temperature.htm>

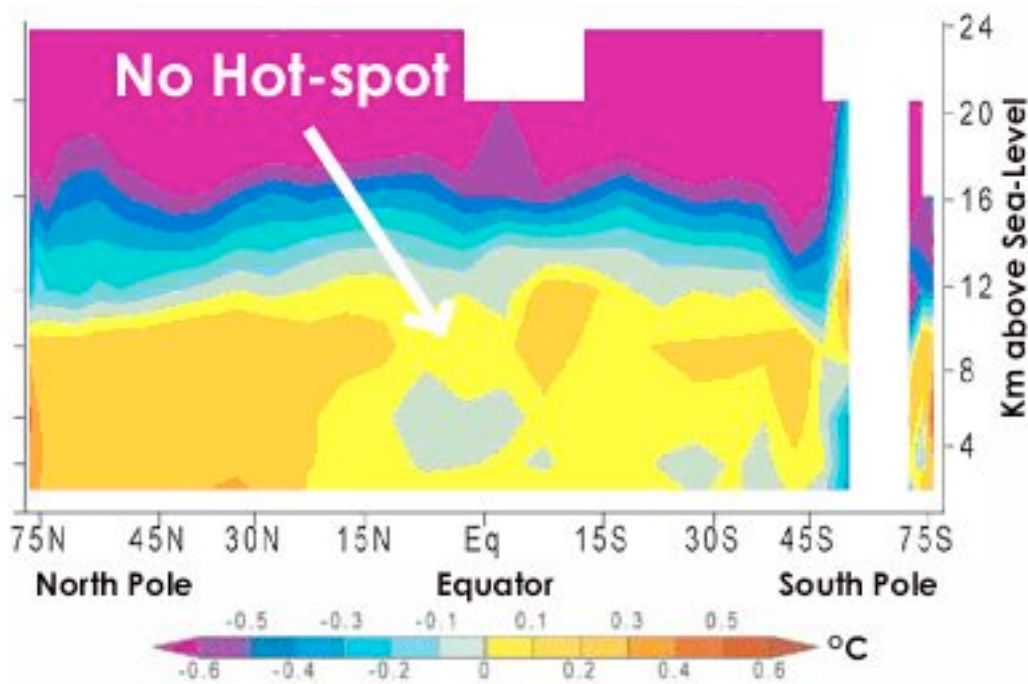
Greenhouse Signature Missing — 2007

Second crucial point, August 2007. Each possible cause of global warming causes the atmosphere to warm at different latitudes and altitudes — that is, each cause will produce a distinct pattern of hot spots in the atmosphere, or “signature”. The greenhouse signature is very distinct from the others: warming due to greenhouse would cause most warming in the tropics at about 10 km up in the atmosphere:



Greenhouse Signatures (IPCC AR 4, 2007, Appendix C)

As of August 2007, we've measured where the warming is occurring using satellites and radiosondes (weather balloons). The observed signature is nothing like the greenhouse signature — the distinct greenhouse signature is entirely missing:



Observed Warming (US CCSP 2006 p.116 fig. 5.7, confirmed by more measurements published in 2007)

There is no hotspot in the tropics at 10 km up, so now we know that greenhouse warming is not the (main) cause of global warming — so we know that carbon emissions are not the (main) cause of global warming.

Of course, these observations need to be repeated by other researchers before we can be completely sure, but they are made by top-notch researchers and reported in top-of-the-line peer-reviewed journals so at this stage they look solid. Recent radiosondes have confirmed the results so far.

This article from August 2007 is a hard read, but the results are new, it is the most accessible so far, and is much easier to understand than the raw scientific papers:

<http://scienceandpublicpolicy.org/images/stories/papers/monckton/whatgreenhouse/moncktongreenhousewarming.pdf>

Where the IPCC Models Went Wrong — 2007

So why did we go wrong? Another set of recent observations partly explains why the UN climate models got it so wrong.

Doubling atmospheric CO₂ from the pre-industrial level of 280ppm up to 560ppm (which is roughly where the IPCC says we will be in 2100) is calculated to raise the world's air temperature by 1.2C *in the absence of feedbacks such as convection,*

evaporation, and clouds. This is what you would get if the air was like in a flask in a laboratory. Everyone roughly agrees with that calculated result.

But the modellers *assumed* that increased warming would cause more rainfall, which would cause more clouds high up in the atmosphere — and since high clouds have a net warming effect, this would cause more warming and thus more rainfall, and so on. This is one of the main positive feedbacks that causes the UN climate models to predict a temperature rise due to a CO₂ doubling of 3.2C (their central estimate), of which we have already experienced 0.7C.

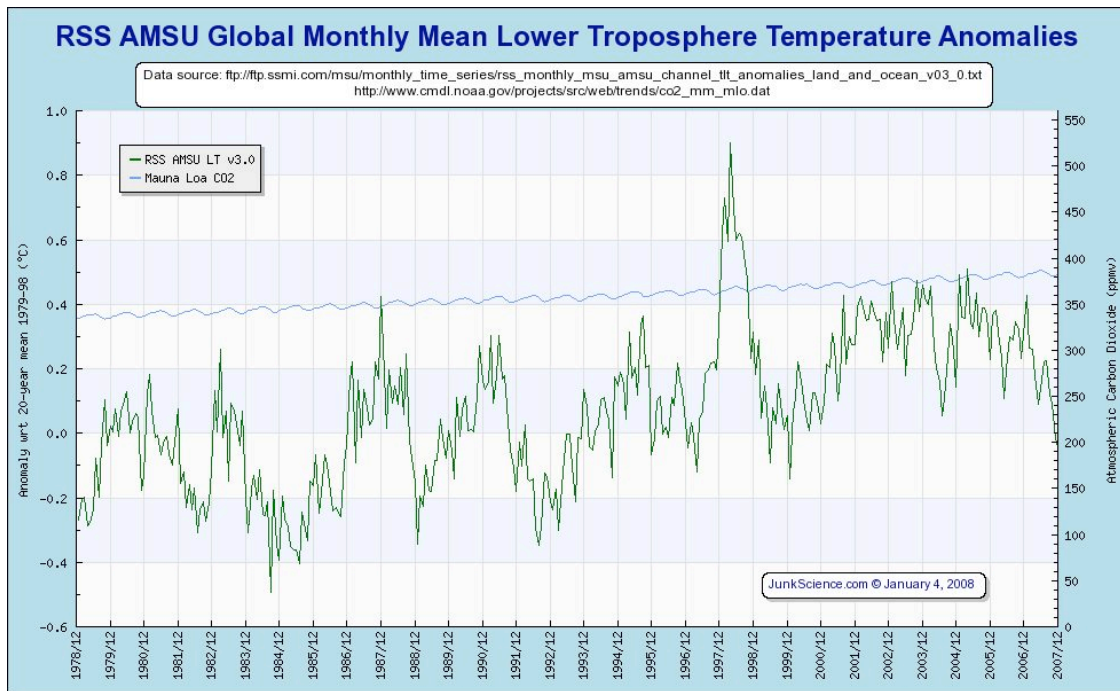
Roy Spencer is a top-class scientist who has spent a few years closely observing temperatures, clouds, and rainfall. In September 2007 he reported that in reality warming is associated with *fewer* high clouds. So the feedback due to high clouds is actually negative. Reversing this feedback in the IPCC models lowers their estimates of warming for a CO₂ doubling by about 1.5C.

As Spencer says with such understatement: "Global warming theory says warming will generally be accompanied by more rainfall. Everyone just assumed that more rainfall means more high altitude clouds. That would be your first guess and, since we didn't have any data to suggest otherwise ...". Science is about observational evidence trumping theoretical calculations, which is exactly what is happening here:

<http://www.uah.edu/News/newsread.php?newsID=875>

Warming Already Waning

The only temperature data we can trust are satellite measurements, and they only go back to 1979. (Ground-station data is corrupted by an unknown amount of urban heat island effect.) Satellite temperature data shows that there has been no warming in the southern hemisphere, and that the warming trend in the northern hemisphere has waned since 2001:



Global Satellite temperatures (1979 – late 2007, updated Jan 2008)

http://www.junkscience.com/MSU_Temps/RSSglobe.html

http://www.junkscience.com/MSU_Temps/RSSNHem.html

http://www.junkscience.com/MSU_Temps/RSSSHem.html

(Gratuitous advice for those whose jobs depend on the idea that carbon emissions cause global warming: Find another job to pay your mortgage and feed your kids!)

Three Stages of Knowledge and the IPCC

Our scientific understanding of global warming has gone through three stages:

1. 1985 – 2003. Old ice core data led us to strongly suspect that CO2 causes global warming.
2. 2003 – 2007. New ice core data eliminated previous reason for suspecting CO2. No evidence to suspect or exonerate CO2.
3. From Aug 2007: Know for sure that greenhouse is not causing global warming. CO2 no longer a suspect.

The IPCC 2007 Assessment Report (the latest and greatest from the IPCC) is based on all scientific literature up to mid 2006. The Bali Conference is the bureaucratic response to that report. Too bad that the data has changed since then!