Some Facts about Global Climate Change That You Won't Read in the Popular Press

Temperatures have been cooling since 2002, even as carbon dioxide has continued to rise.

CO2 is not a pollutant, but a naturally occurring gas. Together with chlorophyll and sunlight, it is an essential ingredient in photosynthesis and is, accordingly, plant food.

Reconstruction of paleo-climatological CO2 concentrations demonstrates that carbon dioxide concentration today is near its lowest level since the Cambrian Era some 550 million years ago, when there was almost 20 times as much CO2 in the atmosphere as there is today without causing a "runaway greenhouse effect."

Temperature changes lead, not lag, CO2 changes on all time scales. The oceans may play a key role, emitting carbon dioxide when they warm as carbonated beverages lose fizz as they warm and absorbing it as they cool.

Indeed, greenhouse models show the warming should be greatest at mid to high atmosphere levels in the tropics. But balloon and satellite observations show cooling there. The greenhouse signature or DNA does not match reality, and the greenhouse models thus must greatly overstate the warming – and in a court of law would have to be acquitted of any role in global warming

The sun has both direct and indirect effects on our climate. Solar activity changes on cycles of 11 years and longer. When the sun is more active it is brighter and a little hotter. More important though are the indirect effects. Ultraviolet radiation increases much more than the brightness and causes increased ozone production, which generates heat in the high atmosphere that works its way down, affecting the weather. Also, an active sun diffuses cosmic rays, which play an important role in nucleation of low clouds, resulting in fewer clouds. In all these ways the sun warms the planet more when it is active. An active sun in the 1930s and again near the end of the last century helped produce the observed warming periods. The current solar cycle is the longest in over 100 years, an unmistakable sign of a cooling sun that historical patterns suggest will stay so for decades.

The multidecadal cycles in the ocean correlate extremely well with the solar cycles and global temperatures. These are 60 to 70 year cycles that relate to natural variations in the large-scale circulations. Warm oceans correlate with warm global temperatures. The Pacific started cooling in the late 1990s and it accelerated in the last year, and the Atlantic has cooled from its peak in 2004. This supports the observed global land temperature cooling, which is strongly correlated with ocean heat content. Newly deployed N.O.A.A. buoys confirm global ocean cooling.

Warmer ocean cycles are periods with diminished Arctic ice cover. When the oceans were warm in the 1930s to the 1950s, Arctic ice diminished and Greenland warmed. The recent ocean warming, especially in the 1980s to the early 2000s, is similar to what took place 70 years ago and the Arctic ice has reacted much the same way, with diminished summer ice extent.

Antarctic ice has been increasing and the extent last year was the greatest in the satellite monitoring era. We are running ahead of last year's record pace.

What will it take for the media to let go of their biases and begin doing their job, reporting the truth?

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