

Chinese Scientists Predict Imminent Global Cooling

CO2 Science: <http://www.co2science.org/scripts/CO2ScienceB2C/articles/V10/N3/C1.jsp>

Reference

Zhen-Shan, L. and Xian, S. 2007. Multi-scale analysis of global temperature changes and trend of a drop in temperature in the next 20 years. *Meteorology and Atmospheric Physics* **95**: 115-121.

What was done

The authors say they used a novel multi-timescale analysis method known as Empirical Mode Decomposition (EMD) to "diagnose the variation of the annual mean temperature data of the globe, Northern Hemisphere and China from 1881 to 2002."

What was learned

First of all, Zhen-Shan and Xian report finding that the temperature histories they studied "can be completely decomposed into four timescale quasi-periodic oscillations including an ENSO-like mode, a 6-8-year signal, a 20-year signal and a 60-year signal, as well as a trend." This latter *residual*, which they determined could account for no more than 40% of the global temperature variation, was attributed by them to the historical increase in the atmosphere's CO₂ concentration; but it is clear that some unknown portion of it could well be due to other factors. In addition, they report that "temperature variation in China precedes that [of] the globe and Northern Hemisphere," thereby providing "a denotation for global climate changes." Consequently, by projecting the four oscillatory modes of temperature change they identified into the future, together with the residual temperature trend, they came to the conclusion that "global climate will be cooling down in the next 20 years."

What it means

In light of their findings and what those findings imply, the Chinese researchers say that "although the CO₂ greenhouse effect on global climate change is unsuspecting, *it could have been excessively exaggerated* [our italics]." Consequently, they conclude that "it is high time to reconsider the trend of global climate change."

This warning is especially appropriate in light of Zhen-Shan and Xian's demonstration of CO₂'s less-than-dominant role in the global warming of the last hundred and twenty years (which may itself be inflated), plus their conclusion that if the atmosphere's CO₂ content were to be suddenly stabilized, "the CO₂ greenhouse effect will be deficient in counterchecking the natural cooling of global climate in the following 20 years."

Reviewed 17 January 2007