MIT scientists baffled by global warming theory, contradicts scientific data Trendwatch

By Rick C. Hodgin Thursday, October 30 2008

Boston (MA) - Scientists at MIT have recorded a nearly simultaneous world-wide increase in methane levels. This is the first increase in ten years, and what baffles science is that this data contradicts theories stating man is the primary source of increase for this greenhouse gas. It takes about one full year for gases generated in the highly industrial northern hemisphere to cycle through and reach the southern hemisphere. However, since all worldwide levels rose simultaneously throughout the same year, it is now believed this may be part of a natural cycle in mother nature – and not the direct result of man's contributions.

Methane - powerful greenhouse gas

The two lead authors of a paper published in this week's Geophysical Review Letters, Matthew Rigby and Ronald Prinn, the TEPCO Professor of Atmospheric Chemistry in MIT's Department of Earth, Atmospheric and Planetary Science, state that as a result of the increase, several million tons of new methane is present in the atmosphere.

Methane accounts for roughly one-fifth of greenhouse gases in the atmosphere, though its effect is 25x greater than that of carbon dioxide. Its impact on global warming comes from the reflection of the sun's light back to the Earth (like a greenhouse). Methane is typically broken down in the atmosphere by the free radical hydroxyl (OH), a naturally occurring process. This atmospheric cleanser has been shown to adjust itself up and down periodically, and is believed to account for the lack of increases in methane levels in Earth's atmosphere over the past ten years despite notable simultaneous increases by man.

More study

Prinn has said, "The next step will be to study [these changes] using a very highresolution atmospheric circulation model and additional measurements from other networks. The key thing is to better determine the relative roles of increased methane emission versus [an increase] in the rate of removal. Apparently we have a mix of the two, but we want to know how much of each [is responsible for the overall increase]."

The primary concern now is that 2007 is long over. While the collected data from that time period reflects a simultaneous world-wide increase in emissions, observing atmospheric trends now is like observing the healthy horse running through the paddock a year after it overcame some mystery illness. Where does one even begin? And how relevant are any of the data findings at this late date?

Looking back over 2007 data as it was captured may prove as ineffective if the data does not support the high resolution details such a study requires.

One thing does seem very clear, however; science is only beginning to get a handle on the big picture of global warming. Findings like these tell us it's too early to know for sure if man's impact is affecting things at the political cry of "alarming rates." We may simply be going through another natural cycle of warmer and colder times - one that's been observed through a scientific analysis of the Earth to be naturally occuring for hundreds of thousands of years.

Project funding

Rigby and Prinn carried out this study with help from researchers at Commonwealth Scientific and Industrial Research Organization (CSIRO), Georgia Institute of Technology, University of Bristol and Scripps Institution of Oceanography. Methane gas measurements came from the Advanced Global Atmospheric Gases Experiment (AGAGE), which is supported by the National Aeronautics and Space Administration (NASA), and the Australian CSIRO network.