

THE GLOBAL WARMING TEST


○ Question 10:

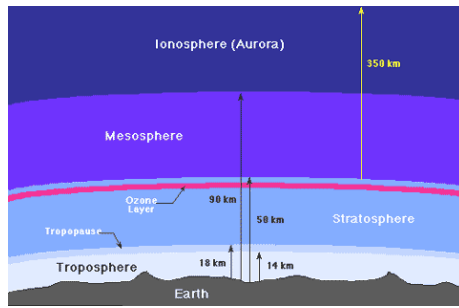
Which temperature measuring method most accurately measures global warming?

- a) ground-based thermometers
- b) orbiting weather satellites
- c) weather balloons

Sorry... that is incorrect.

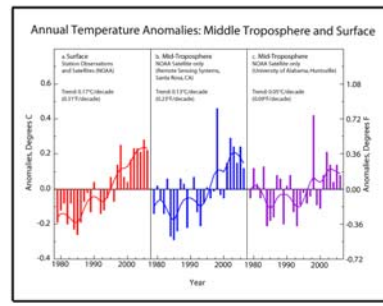
The real signature of greenhouse warming is not surface temperature but temperature in the **middle of the troposphere**, about 5 kilometers up. If global warming is occurring from an increasing **greenhouse effect** due to CO₂ additions by humans the temperature of the middle troposphere should be warming *faster* than Earth's surface (2,3). In fact the opposite has been happening-- which suggests either the surface thermometers are wrong or natural factors, such as changes in **solar activity**, may be responsible for the slight rise in surface temperatures (approximately 1/2° C) that appears to have occurred over the past century.

Interestingly, in the 5 years leading up to 2007 the temperature of the **mid troposphere** has actually **decreased** slightly and surface temperatures have **ceased warming**  -- even as CO₂ concentrations have continued to increase (4). This should not be happening if CO₂ increases to the atmosphere are the primary driver of global warming.



Atmosphere

[View a close-up image.](#)
[Image courtesy of NASA](#)




Surface -vs- Satellite
Temps

[View a close-up image.](#)
[Image courtesy of NOAA \(4\)](#)



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References

- (1) [Satellite Measurements of Atmospheric Temperature Change: New Results from Old Satellites](#); presentation by Carl A. Mears and Frank J. Wentz, *Remote Sensing Systems*, November 2005. 
- (2) [Climate Change Science](#); Compiled by Ken Gregory, Calgary, Alberta, Canada, November 11, 2007. 
- (3) [Climate experts debate in NYC, March 2007](#)-- specifically, testimony by Dr. Richard S. Lindzen, Massachusetts Institute of Technology. 
- (4) [Tropospheric and Stratospheric Temperature Record from Satellite Measurements](#), The National Climatic Data Center, NOAA Satellite Information Service, April 27, 2003 update. 