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Global Temperature Report: February 2009

Global climate trend since Nov. 16, 1978: +0.13 C per decade

February temperatures (preliminary):

Global composite temp.: +0.35 C (about 0.63 degrees Fahrenheit) above 20-year average for January.

Northern Hemisphere: +0.68 C (about 1.22 degrees Fahrenheit) above 20-year average for January.

Southern Hemisphere: +0.02 C (about 0.04 degrees Fahrenheit) above 20-year average for January.

January temperatures (revised):

Global Composite: +0.30 C above 20-year average

Northern Hemisphere: +0.44 C above 20-year average

Southern Hemisphere: +0.17 C above 20-year average

(All temperature variations are based on a 20-year average (1979-1998) for the month reported.)

Notes on data released March 11, 2009:

Large areas of much warmer than normal temperatures over Western Greenland, China and the Northern Pacific Ocean pushed the Northern Hemisphere's

average temperature in February to the fifth highest level seen in the 30+ year satellite-based temperature record, according to Dr. John Christy, director of the Earth System Science Center (ESSC) at The University of Alabama in Huntsville.

The warmest Northern Hemisphere February on record was in 1998, during a major El Nino Pacific Ocean warming event. The average temperature north of the equator that month was 0.86 C (about 1.55 degrees Fahrenheit) warmer than seasonal norms. Other Februaries when the Northern Hemisphere was warm
were in 2007 (+0.75 C), 2006 (+0.74 C), and 2004 (+0.73 C).

Color maps of local temperature anomalies may soon be available on-line at:

http://climate.uah.edu/

The processed temperature data is available on-line at:

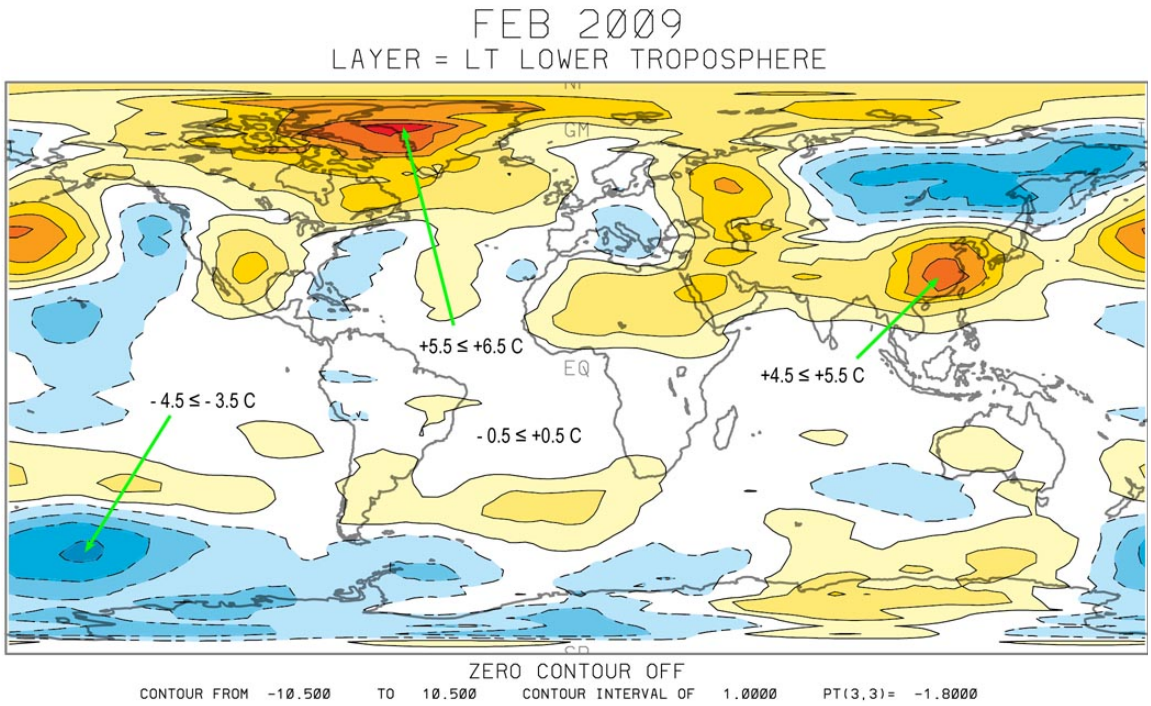
vortex.nsstc.uah.edu/data/msu/t2lt/uahncdc.lt

As part of an ongoing joint project between The University of Alabama in Huntsville, NOAA and NASA, Dr. John Christy and Dr. Roy Spencer, a principal research scientist in the ESSC, use data gathered by microwave sounding units on NOAA and NASA satellites to get accurate temperature readings for almost all regions of the Earth.

This includes remote desert, ocean and rain forest areas for which reliable climate data are not otherwise available.

The satellite-based instruments measure the temperature of the atmosphere from the surface up to an altitude of about eight kilometers above sea level. Once the monthly temperature data is collected and processed, it is placed in a "public" computer file for immediate access by atmospheric scientists in the U.S. and abroad.

Neither Spencer nor Christy receives any research support or funding from oil, coal or industrial companies or organizations, or from any private or special interest groups. All of their climate research funding comes from state and federal grants or contracts.



Broken lines outline areas that were cooler than seasonal norms; solid lines outline areas that were warmer than seasonal norms. Each contour represents one degree Celsius, starting at -0.5 and +0.5 degrees C.

Global Lower Troposphere