

June 15, 2009

Vol. 19, No. 1

For Additional Information:

Dr. John Christy, UAH, (256) 961-7763

john.christy@nsstc.uah.edu

Dr. Roy Spencer, UAH, (256) 961-7960

roy.spencer@nsstc.uah.edu

GLOBAL TEMPERATURE REPORT: MAY 2009

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

May Temperatures (Preliminary):

Global composite temp.: +0.04 C (about 0.07° Fahrenheit) above 20-year average for May.

Northern Hemisphere: +0.04 C (about 0.07° Fahrenheit) above 20-year average for May.

Southern Hemisphere: +0.04 C (about 0.07° Fahrenheit) above 20-year average for May.

April temperatures (revised):

Global Composite: +0.09 C above 20-year average

Northern Hemisphere: +0.12 C above 20-year average

Southern Hemisphere: +0.06 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 June 15, 2009:

Powered largely by an area south of Madagascar where temperatures were as much as 6.5 C (11.7 degrees Fahrenheit) warmer than seasonal norms, the Antarctic continent had its fifth warmest May in more than 30 years. Preliminary

data shows the average temperature over the Antarctic landmass was 2.03 C (3.65 degrees Fahrenheit) warmer than seasonal norms as the South Pole winter began.

Other warm Antarctic Mays included:

2002 +3.3 C
1984 +2.9 C
2007 +2.86 C
1983 +2.51 C
2009 +2.03 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

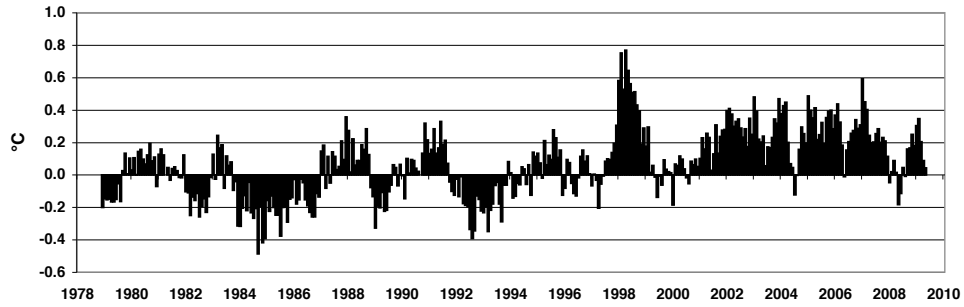
As part of an ongoing joint project between The University of Alabama in Huntsville, NOAA and NASA, Dr. John Christy, director of UAHuntsville's Earth System Science Center, and Dr. Roy Spencer, a principal research scientist in the ESSC, use data gathered by microwave sounding units on NOAA and NASA 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.

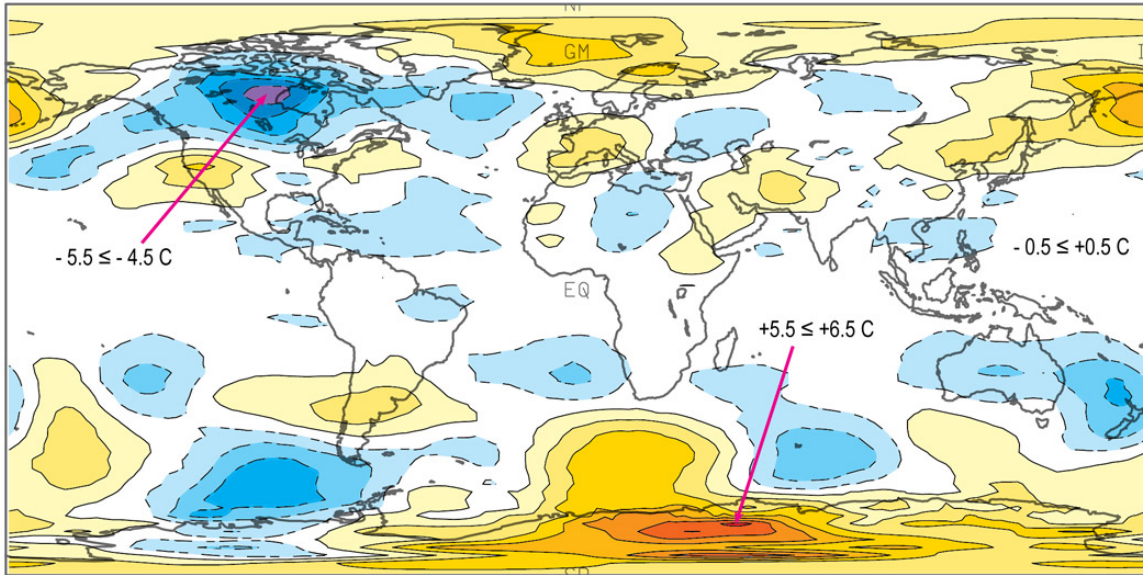
Once the monthly temperature data is collected and processed, it is placed in a "public" computer file for immediate access by atmospheric scientists in the U.S. and abroad.

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.

Global Lower Troposphere



MAY 2009
LAYER = LT LOWER TROPOSPHERE



ZERO CONTOUR OFF
CONTOUR FROM -10.500 TO 10.500 CONTOUR INTERVAL OF 1.0000 PT(3,3)= 1.0200

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.