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For Additional Information: Dr. John Christy, (256) 961-7763 john.christy@nsstc.uah.edu Dr. Roy Spencer, (256) 961-7960 roy.spencer@nsstc.uah.edu

## Global Temperature Report: May 2015

## Third warmest May in satellite record

Global climate trend since Nov. 16, 1978: +0.11 C per decade

May temperatures (preliminary)

Global composite temp.: +0.27 C (about 0.49 degrees Fahrenheit) above 30year average for May.

Northern Hemisphere: +0.33 C (about 0.59 degrees Fahrenheit) above 30-year average for May.

Southern Hemisphere: +0.21 C (about 0.38 degrees Fahrenheit) above 30-year average for May.

Tropics: +0.27 C (about 0.49 degrees Fahrenheit) above 30-year average for May.

April temperatures (revised):

Global Composite: +0.07 C above 30-year average

Northern Hemisphere: +0.15 C above 30-year average

Southern Hemisphere: -0.03 C below 30-year average

Tropics: +0.07 C above 30-year average

(All temperature anomalies are based on a 30-year average (1981-2010) for the month reported.)

## Notes on data released June 4, 2015:

May 2015 had the third highest global average May temperature in the 38-year global satellite temperature record, said Dr. John Christy, director of the Earth System Science Center at The University of Alabama in Huntsville. Temperatures across the globe warmed in May, with the third warmest May in the northern hemisphere, fourth warmest in the tropics, and seventh warmest May in the southern hemisphere.

Global average anomalies: May 1998 +0.64 C 2010 +0.44 C 2015 +0.27 C 2002 +0.26 C 2014 +0.25 C

Compared to seasonal norms, the warmest average temperature anomaly on Earth in May was on the southwestern edge of the Kara Sea, north of central Russia near the town of Amderma. The May temperature there averaged 4.77 C (about 8.59 degrees F) warmer than seasonal norms. Compared to seasonal norms, the coolest average temperature on Earth in May was in East Antarctica near Davis Station, where the average May 2015 temperature was 3.31 C (about 5.96 degrees F) cooler than normal.

The complete version 6 beta lower troposphere dataset is available here:

http://vortex.nsstc.uah.edu/data/msu/v6.0beta/tlt/uahncdc\_lt\_6.0beta2

Archived color maps of local temperature anomalies are available on-line at:

http://nsstc.uah.edu/climate/

As part of an ongoing joint project between UAHuntsville, NOAA and NASA, Christy and Dr. Roy Spencer, an ESSC principal scientist, use data gathered by advanced 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 where 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 Christy nor Spencer 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 federal and

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