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Global Temperature Report: May 2012

Global climate trend since Nov. 16, 1978: +0.14 C per decade

May temperatures (preliminary)

Global composite temp.: +0.29 C (about 0.52 degrees Fahrenheit) above 30-year average for May.

Northern Hemisphere: +0.44 C (about 0.79 degrees Fahrenheit) above 30-year average for May.

Southern Hemisphere: +0.14 C (about 0.25 degrees Fahrenheit) above 30-year average for May.

Tropics: +0.03 C (about 0.05 degrees Fahrenheit) above 30year average for May.

April temperatures (revised):

Global Composite: +0.30 C above 30-year average

Northern Hemisphere: +0.41 C above 30-year average

Southern Hemisphere: +0.19 C above 30-year average

Tropics: -0.12 C below 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, 2012:

Compared to global seasonal norms, May 2012 was the fourth warmest in the 34-year satellite record, according to Dr. John Christy, a professor of atmospheric science and director of the Earth System Science Center at The University of Alabama in Huntsville. It was the third warmest May in the Northern Hemisphere, and tied as the warmest May over NH land masses, with an average temperature that was 0.68 C (about 1.22 degrees F) warmer than normal for the month. It was 0.95 C (about 1.71 degrees F) warmer than normal over the contiguous 48 states, which made it the fourth warmest May there since 1979.

Compared to seasonal norms, the "warmest" place on Earth in May was along the eastern coast of Russian near the Sea of Okhotsk. Temperatures there averaged as much as 4.29 C (about 7.72 degrees F) warmer than seasonal norms. The coolest spot was in the Gulf of Alaska west of Juneau, where temperatures for the month averaged 2.38 C (about 4.28 degrees F) cooler than May norms.

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

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

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 UAHuntsville, NOAA and NASA, John Christy, a professor of atmospheric science and director of the Earth System Science Center (ESSC) at The University of Alabama in Huntsville, 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 state grants or contracts.