

May 3, 2016

Vol. 26, No. 1

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: April 2016

April was 4th warmest month in satellite record

Global climate trend since Nov. 16, 1978: +0.12 C per decade

April temperatures (preliminary)

Global composite temp.: +0.72 C (about 1.30 degrees Fahrenheit) above 30-year average for April.

Northern Hemisphere: +0.85 C (about 1.53 degrees Fahrenheit) above 30-year average for April.

Southern Hemisphere: +0.58 C (about 1.04 degrees Fahrenheit) above 30-year average for April.

Tropics: +.94 C (about 1.69 degrees Fahrenheit) above 30-year average for April.

March temperatures (revised):

Global Composite: +0.73 C above 30-year average

Northern Hemisphere: +0.94 C above 30-year average

Southern Hemisphere: +0.52 C above 30-year average

Tropics: +1.09 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 May 2, 2016:

April 2016 was the fourth warmest month in the satellite temperature record, but only the second warmest April (just behind April 1998 at +0.73 C, although the difference is within the error range of +/- 0.1 C), when compared to seasonal norms, according to Dr. John Christy, director of the Earth System Science Center at The University of Alabama in Huntsville. April and March 2016 anomalies were similar, with some hint that the El Niño Pacific Ocean warming event's warming of the atmosphere might have passed its peak.

The ten warmest months in the satellite record (compared to seasonal norms) are now all from either the 1998 El Niño or the ongoing 2016 El Niño.

Compared to seasonal norms, the warmest average temperature anomaly on Earth in April remained over central Greenland. The warmest anomaly was over south central

Greenland in March. April temperatures over central Greenland averaged 5.42 C (about 9.76 degrees F) warmer than seasonal norms. Compared to seasonal norms, the coolest average temperature on Earth in April was over west central Quebec, outside the town of Sakami, where the average April 2016 temperature was 3.62 C (about 6.52 degrees F) cooler than normal for April.

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

http://vortex.nsstc.uah.edu/data/msu/v6.0beta/tlt/uahncdc_tlt_6.0beta5.txt

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 are collected and processed, they are 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.

-- 30 --