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Global Temperature Report: May 2017

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

May temperatures (preliminary)

Global composite temp.: +0.45 C (about 0.81 degrees Fahrenheit) above 30-year average for May.

Northern Hemisphere: +0.42 C (about 0.76 degrees Fahrenheit) above 30-year average for May.

Southern Hemisphere: +0.48 C (about 0.86 degrees Fahrenheit) above 30-year average for May.

Tropics: +0.41 C (about 0.74 degrees Fahrenheit) above 30-year average for May.

April temperatures (revised):

Global Composite: +0.27 C above 30-year average

Northern Hemisphere: +0.27 C above 30-year average

Southern Hemisphere: +0.26 C above 30-year average

Tropics: +0.21 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 1, 2017:

Global average temperatures rose steadily through May to levels similar to those seen last fall, when temperatures leveled off after the 2015-2016 El Niño Pacific Ocean warming event, according to Dr. John Christy, director of the Earth System Science Center at The University of Alabama in Huntsville.

Compared to seasonal norms, the coldest place on Earth in May was in the Komi Republic in northwestern Russia, near the town of Zimstan. Temperatures there averaged 3.47 C (about 6.25 degrees Fahrenheit) colder than seasonal norms.

Compared to seasonal norms, the warmest place on Earth in May was near the town of Cambridge Bay on the northwest passage in Nunavut Territory, Canada. Temperatures there averaged 3.47 C (about 6.25 degrees Fahrenheit) warmer than seasonal norms.

As part of an ongoing joint project between UAH, 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.. Temperatures in the tropics are essentially "normal" relative to the 30-year average.

The complete version 6 lower troposphere dataset is available here:

http://www.nsstc.uah.edu/data/msu/v6.0/tlt/uahncdc_lt_6.0.txt

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

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

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