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## **Global Temperature Report: June 2017**

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

### **June temperatures (preliminary)**

Global composite temp.: +0.21 C (about 0.38 degrees Fahrenheit) above 30-year average for June.

Northern Hemisphere: +0.32 C (about 0.58 degrees Fahrenheit) above 30-year average for June.

Southern Hemisphere: +0.09 C (about 0.16 degrees Fahrenheit) above 30-year average for June.

Tropics: +0.39 C (about 0.70 degrees Fahrenheit) above 30-year average for June.

### **May temperatures (revised):**

Global Composite: +0.44 C above 30-year average

Northern Hemisphere: +0.39 C above 30-year average

Southern Hemisphere: +0.49 C above 30-year average

Tropics: +0.41 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 July 5, 2017:**

Cooling in the Southern Hemisphere led to an average global temperature drop of about two tenths of a degree Celsius in June, according to Dr. John Christy, director of the Earth System Science Center at The University of Alabama in Huntsville. The global average of 0.21 C warmer than seasonal norms was the coolest value since July 2015 and the start of the 2015-16 El Niño Pacific Ocean warming event.

Compared to seasonal norms, the coldest place on Earth in June was in the eastern Antarctic near Dome C. Temperatures there averaged 4.43 C (about 7.97 degrees Fahrenheit) colder than seasonal norms.

Compared to seasonal norms, the warmest place on Earth in June was near the town of Inarigda in central Russia. Temperatures there averaged 3.07 C (about 5.53 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](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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