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**Global Temperature Report: February 2017**

**Contiguous U.S. has warmest February in past 39**

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

**February temperatures (preliminary)**

Global composite temp.: +0.35 C (about 0.63 degrees Fahrenheit) above 30-year average for February.

Northern Hemisphere: +0.54 C (about 0.97 degrees Fahrenheit) above 30-year average for February.

Southern Hemisphere: +0.15 C (about 0.27 degrees Fahrenheit) above 30-year average for February.

Tropics: +0.05 C (about 0.09 degrees Fahrenheit) above 30-year average for February.

**January temperatures (revised):**

Global Composite: +0.30 C above 30-year average

Northern Hemisphere: +0.27 C above 30-year average

Southern Hemisphere: +0.33 C above 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 March 2, 2017:**

The 2015-16 El Niño Pacific Ocean warming event has faded into history, but the globe still saw its fourth warmest February in the satellite global temperature record, including the warmest February in that time for the contiguous 48 U.S. states, according to Dr. John Christy, director of the Earth System Science Center at The University of Alabama in Huntsville. The average temperature over the U.S. was 2.1 Celsius (about 3.78 degrees Fahrenheit) warmer than seasonal norms in February 2017.

**February anomalies**

U.S. 48 contiguous states

 1.  2017  +2.10 C

 2.  1991  +1.69 C

 3.  2003  +1.58 C

 4.  2001  +1.32 C

 5.  1998  +1.12 C

 6.  1997  +0.80 C

 7.  1985  +0.62 C

 8.  2007  +0.61 C

 9.  1994  +0.52 C

10. 2008  +0.46 C

Compared to seasonal norms, the warmest spot on the globe in February was over Warrensburg, Missouri, with an average temperature that was 4.06 C (about 7.31 degrees Fahrenheit) warmer than seasonal norms.

Compared to seasonal norms, the coolest average temperature on Earth in February was near the town of Penny in central British Columbia, Canada. February temperatures there averaged 2.51 C (about 4.52 degrees F) cooler than seasonal norms.

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/>

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.

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.

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