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Global Temperature Report: June 2010

First six months of 2010  
second warmest on record

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

June temperatures (preliminary)

Global composite temp.: +0.44 C (about 0.79 degrees Fahrenheit)  
above  
20-year average for June.

Northern Hemisphere: +0.55 C (about 0.99 degrees Fahrenheit) above  
20-year  
average for June.

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

Tropics: +0.48 C (about 0.86 degrees Fahrenheit) above 20-year  
average for  
June.

May temperatures (revised):

Global Composite: +0.53 C above 20-year average

Northern Hemisphere: +0.78 C above 20-year average

Southern Hemisphere: +0.29 C above 20-year average

Tropics: +71 C above 20-year average

(All temperature anomalies are based on a 20-year average (1979-1998) for the month reported.)

Notes on data released July 7, 2010:

Global average temperatures through the first six months of 2010 continue to not set records, according to Dr. John Christy, professor of atmospheric science and director of the Earth System Science Center at The University of Alabama in Huntsville. June 2010 was the second warmest June in the 32-year satellite temperature record and the first six months of 2010 were also the second warmest on record.

Compared to seasonal norms, temperatures in the tropics and the Northern Hemisphere continued to fall from May through June as the El Nino Pacific Ocean warming event fades and indications of a La Nina Pacific Ocean cooling event increase.

The warmest Junes on record were June 1998 at 0.56 C warmer than seasonal norms, June 2010 at +0.44 and June 2002 at +0.36.

We are introducing a new map of monthly temperature anomalies this month. The new map more accurately represents the relative sizes of both map features and areas of warming or cooling. Color maps of local temperature anomalies may soon be available on-line on the new site at:

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

The processed temperature data is available on-line at:

[vortex.nsstc.uah.edu/data/msu/t2lt/uahncdc.lt](http://vortex.nsstc.uah.edu/data/msu/t2lt/uahncdc.lt)

As part of an ongoing joint project between UAHuntsville, NOAA and NASA, Christy and Dr. Roy Spencer, a principal research scientist in the ESSC, 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.