January headline:
January 2007 ties for the warmest January in 28 years, tying the El Niño year of 1998.


Global Temperature Report: January 2007

Fig. 1: Global variation from seasonal norms, in Celsius; Trend since Nov. 16, 1978: +0.14 C per decade
Global composite temp.: +0.53 C (about $0.95^{\circ}$ Fahrenheit) above 20-year average for January.
Northern Hemisphere: +0.63 C (about $1.13^{\circ}$ Fahrenheit) above 20-year average for January.
Southern Hemisphere: +0.44 C (about $0.79^{\circ}$ Fahrenheit) above 20-year average for January.
December temperatures (revised): Global Composite: +0.30 C above 20-year average
Northern Hemisphere: +0.49 C above 20-year average
Southern Hemisphere: +0.11 C above 20-year average (All temperature variations are based on a 20-year average (1979-1998) for the month reported.)

Notes on data released Feb. 12, 2007:

With a global average temperature that was 0.53 C ( $0.95^{\circ}$ Fahrenheit) warmer than seasonal norms, January 2007 tied January 1998 as the warmest January in the past 28 years, according to data released
today by Dr. John Christy, director of the Earth System Science Center at The University of Alabama in Huntsville (UAH).
"The anticipated warmth of the El Niño warming

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event in the tropical Pacific Ocean has now extended its influence into the tropical atmosphere," Christy said. "As a result, most of the tropics are now at least half a degree Celsius warmer than seasonal norms."

Compared to seasonal norms, the warmest spot on the globe in January was a small region northeast of Lake Baykal in Siberia, where temperatures were as much as $6.5 \mathrm{C}\left(11.7^{\circ} \mathrm{F}\right)$ warmer than usual for January.

Color maps of local temperature anomalies may soon be available on-line at:

> http://climate.uah.edu/

The processed temperature data is available online at: vortex.nsstc.uah.edu/data/msu/t2lt/tltglhmam_5.2

As part of an ongoing joint project between The University of Alabama in Huntsville (UAH) and NOAA, Christy and Dr. Roy Spencer, a principal
research scientist in the ESSC, use data gathered by microwave sounding units on NOAA satellites to get accurate temperature readings for almost all regions of the Earth.

This includes remote desert, ocean and rain forest areas for which 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 Spencer nor Christyreceives any research

 supportor 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 state and federal grants or contracts.$$
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& \text { LOWER TROPOSPHERE }
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Broken lines outline areas cooler than seasonal norms; solid lines outline areas warmer than seasonal norms. Each contour represents one degree Celsius, starting at -0.5 and +0.5 degrees $C$.

