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Global Temperature Report: July 2018

Global climate trend since Dec. 1 1978: +0.13 C per decade

July Temperatures (preliminary)

Global composite temp.: +0.32 C (+0.58 °F) above seasonal average

Northern Hemisphere.: +0.42 C (+0.76°F) above seasonal average

Southern Hemisphere.: +0.21 C (+0.38 °F) above seasonal average

Tropics.: +0.29 C (+0.52 °F) above seasonal average

June Temperatures (revised)

Global composite temp.: +0.21 C (+0.38 °F) above seasonal average

Northern Hemisphere.: +0.38 C (+0.68°F) above seasonal average

Southern Hemisphere.: +0.04 C (+0.07 °F) above seasonal average

Tropics.: +0.12 C (+0.22 °F) above seasonal average

Notes on data released August 1, 2018

The seasonally-adjusted global average temperature ticked up a bit to +0.32 °C (+0.58 °F) as the tropics and Southern Hemisphere rose to their warmest levels in the first 7 months of 2018. The tropical warming is in line with hints in the Pacific Ocean that an El Niño could be in our future during the coming northern hemisphere winter.

The coolest seasonally adjusted temperature was found in Northern Russia near the town of Volochanka at -2.58 °C (-4.64 °F) below average. The warmest spot was near Inari in

Northern Finland at +3.64 °C (+6.55 °F). After two months of below average temperatures, Australia recorded its warmest July (a winter month) of +1.37 °C (+2.47 °F) in the 40 years of satellite data. The conterminous U.S., on the other hand, was +0.50 °C (+0.90 °F) above average, well below the 2011 July peak of +1.07 °C (+1.93 °F). The polar regions as a whole were within a few tenths of average.

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. They are assisted by Dr. W. Daniel Braswell and Robert Junod in the generation of these products.

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.

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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