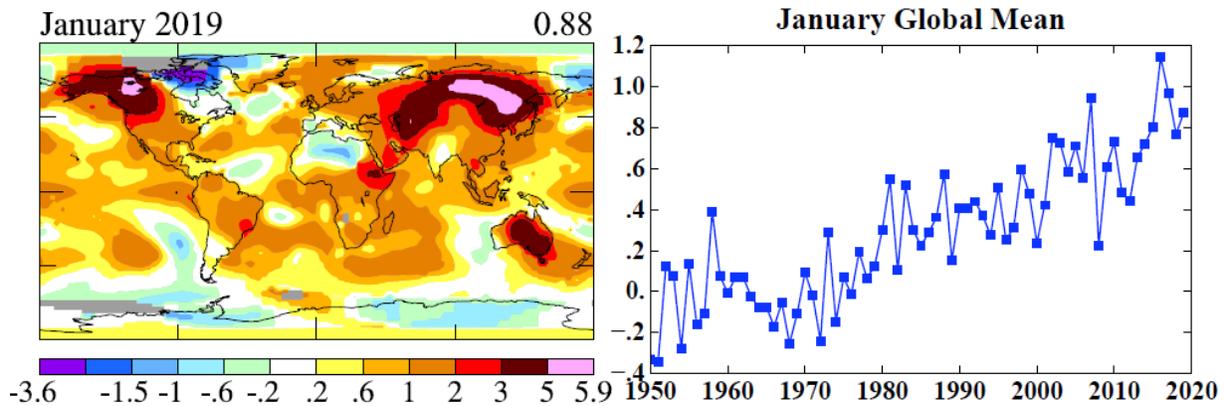


# January 2019 Global Temperature Update

Surface Temperature Relative to 1951-1980 Mean (°C)



Global temperature in January 2019 (at +0.88°C relative to 1951-1980 base period) was the fourth warmest January in the 140-year record since 1880. The warmest Januaries were 2016 (+1.15°C), 2017 (+0.97°C) and 2007 (+0.94°C).

Northeastern Canada was unusually cool (as much as 3.6°C below the 1951-1980 mean), but areas in Siberia and northwestern Canada were more than +5°C above normal, where ‘normal’ is defined as the 1951-1980 mean. Australia experienced a scorching summer, most of the country at least +3°C above normal. The global temperature pattern is typical of El Ninos (See maps on <http://www.columbia.edu/~mhs119/ElNino-LaNina/>), despite the current El Nino being very weak.

Almost the entire United States was warmer than normal, averaged over the month. Of course the monthly mean can hide extreme cold spells that cause people to wonder where “global warming” has gone, when it has not gone anywhere. Some recent cold weather may even be unusually cold, because of behavior of the Arctic vortex, as noted in prior temperature updates. Examples of cold weather are shown on the right in the figure below. The daily data are from NOAA <https://w2.weather.gov/climate/index.php?wfo=okx> and <https://w2.weather.gov/climate/index.php?wfo=mpx>.

## January 2019 U.S. Surface Temperature (°C)

