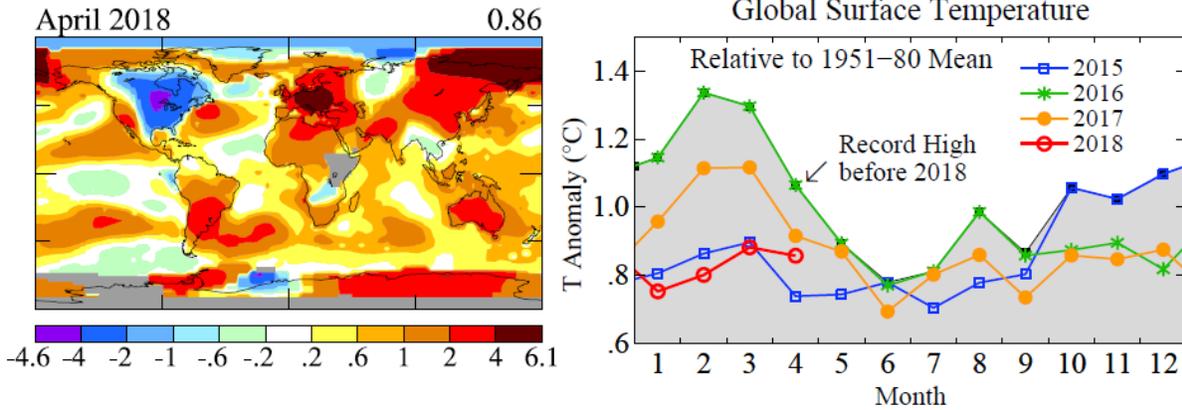


April 2018 Global Temperature Update



Two-thirds of North America was very cold in April (left side of figure above), but globally April 2018, at 0.86°C relative to the 1951-1980 base period, was the third warmest April since reliable measurements began in 1880. The warmest ApriIs were in 2016 (+1.07) and 2017 (+0.92°C)!

The right side of the figure above compares monthly temperatures in the years 2015-2018.

Post-El Nino cooling has probably bottomed out, given that equatorial Pacific Ocean temperatures have begun to rise. We conclude that global warming, with short-term variability excluded, has reached the level +1.1°C relative to pre-industrial temperature, as shown in the figure below.

Note that base period 1880-1920, used for the figure below, provides our best estimate of pre-industrial temperature, as discussed in our *Young People's Burden* paper (*Earth System Dyn.*, **8**, 1-40, 2017).

Also note that the reason we employ base period 1951-1980 in the figure above is the absence of earlier data for Antarctica, much of the Southern Ocean, and parts of Africa and South America. There are enough data points to define a global mean temperature, but not to define a global map.

