

# 2015 Was Earth's Warmest Year on Record, NOAA Says

BY ELIZABETH CHUCK

<http://www.nbcnews.com/news/weather/2015-was-earth-s-warmest-year-record-noaa-says-n500406>

Last year was the warmest on record, the National Oceanic and Atmospheric Administration said Wednesday, breaking the previous record for warmth set in 2014.

With Earth's average land temperature 2.39 degrees Fahrenheit above the 20th century average, it was also "the largest margin by which the annual global temperature record has been broken," NOAA said in a news release. Ten months had record-high temperatures for their respective months during the year.

Temperatures across land and ocean surfaces were 1.62 degrees Fahrenheit above the 20th century average, exceeding the previous record by 0.29 degrees Fahrenheit.

The record warmth was "broadly spread around the world," the scientists said, including in Central America, the northern half of South America, and parts of Europe and Asia.

Not surprisingly, snow cover also shrunk last year: the average annual Northern Hemisphere snow cover extent during 2015 was 9.5 million square miles, the smallest amount since 2008.

NOAA has tracked Earth's temperature since 1880. The government agency said that in December 2015, the average temperature across global land and ocean surfaces was 2 degrees Fahrenheit above the 20th century average, the highest departure from average for December since record-keeping began.

For the continental United States, 2015 was the second warmest ever with a December that was the hottest and wettest on record. That led to a balmy Christmas Eve for many along the East Coast, who experienced temperatures in the 70s, and unusual [deadly winter floods](#) along the Mississippi River

El Niño, a weather cycle that occurs naturally approximately every seven years that involves a warming of the tropical Pacific Ocean, contributed to the warm 2015, as did heat waves in India and Pakistan and the California drought. But NASA said Wednesday the change in the planet's surface temperature can also be blamed on "increased carbon dioxide and other human-made emissions into the atmosphere."

"Most of the warming occurred in the past 35 years, with 15 of the 16 warmest years on record occurring since 2001. Last year was the first time the global average temperatures were 1 degree Celsius or more above the 1880-1899 average," [NASA](#) said in a news release.

The NOAA scientists pointed out that there's been a warming trend over the past two decades.

"Since 1997, which at the time was the warmest year on record, 16 of the subsequent 18 years have been warmer than that year," they said.

Climate change has been top of mind for President Obama and other leaders. Last month, world leaders in Paris agreed to a historic climate change deal that calls for all countries to take steps to reduce greenhouse gas emissions. The "[Paris agreement](#)" aims to keep the rise in global temperatures "well below" 2 degrees Celsius (3.6 degrees Fahrenheit) from pre-industrial times to the end of this century and "endeavor to limit" them even further.

News of a record warm year last year came as millions on the East Coast prepared themselves for a [major winter snowstorm](#) this weekend, which could dump 2 feet of snow in places.

Scientists predict 2016 will be at least as warm or warmer.