World warm last year, but not like record US heat

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WASHINGTON (AP) -- While the U.S. was smashing heat marks last year, the world as a whole barely slipped into the top 10 hottest years on record, two American science agencies said Tuesday.

The global average temperature for last year would have been a record 15 years ago, an indication that what used to be unusual heat is more commonplace.

Now it merely ranks 10th, something climate scientists shows man-made climate change in action.

Last year's average was 58 degrees Fahrenheit (14.5 degrees Celsius), the National Oceanic and Atmospheric Administration said. That's a full degree above the 20th century average of 57 F (13.9 C).

The hottest was 2010 when the average temperature was 58.2 degrees (14.6 degrees Celsius). NOAA records go back to 1880.

"We're playing in a new neighborhood as far as global temperatures go, compared to even the late 20th century and especially the mid-20th century," said Deke Arndt, head of monitoring for NOAA's National Climatic Data Center.

A weather pattern called La Nina - the flip side of El Nino - and mildness in Alaska, Canada, the United Kingdom and parts of Asia moderated the globe's average temperature. The Lower 48 states in the U.S. recorded its hottest year last year with an average of 55.3 F. (12.9 C)

"In global warming, you expect warming to manifest itself in different locations in any given year," said Andrew Weaver, a climate scientist at the University of Victoria in Canada. "This year it was America's turn to feel the brunt of global warming's growing fury."

NASA, which measures temperatures differently, ranks 2012 as ninth warmest. It put the temperature at 58.3 F (14.6 C). Both agencies announced the data Tuesday.

Some global warming skeptics have claimed the world hasn't warmed in the last 16 years, but each decade is warmer than the last. Even the first three years of this decade were warmer than the last, the two agencies said. Since 1963, NOAA said the global temperature has increased at a rate of 0.27 degrees Fahrenheit a decade (0.15 degrees Celsius).

Top NASA climate scientist James Hansen said in the past few years there has been

a temporary "apparent standstill in global temperatures" that is heavily due to more frequent cooling La Ninas. What's significant, he said, is that temperatures are rising decade by decade.

Hansen and other scientists said the planet is warming because the world is spewing ever rising amounts of greenhouse gases - mostly carbon dioxide. Those heat-trapping gases are from the burning of fossil fuels like coal, oil and gas.

The La Nina pattern, which generally cools the ocean globally, happens every few years and was in play for much of 2011 and the early part of 2012. Yet both years were the hottest La Nina years on record and that shows the underlying global warming at work, said climate scientist Stefan Rahmstorf of the Max Planck Institute in Germany.

The last time the world had a cooler than average year was 1976, according to NOAA. That means more than half the people on Earth haven't lived during a cooler than normal year for the globe.

Three groups keep track of global surface temperatures with records that go back more than a century: NOAA, NASA and the British meteorology office. The British records for 2012 aren't finished yet, but are hovering around ninth warmest on record, said monitoring chief David Parker.

NASA and NOAA calculations differ mostly in the polar areas, where there are far less measurements.

A fourth group out of the University of Alabama at Huntsville looks at temperatures measured by satellites and only goes back to 1979, but is preferred by climate skeptics. That measurement ranked 2012 as the ninth warmest on record and notes that 11 of the 12 hottest years in their dataset have occurred since 2001.

Online:

NOAA: http://www.ncdc.noaa.gov/sotc/global/2012/13 [1]

NASA: http://www.nasa.gov/topics/earth/features/2012-temps.html [2]

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