

2013 sixth hottest year, UN says (Update)

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A woman suns herself on Washington Square Park in New York City on July 16, 2013 as a heatwave descended on the city

Last year tied for the sixth hottest on record, confirming that Earth's climate system is in the grip of warming that will affect generations to come, the UN's weather agency said Wednesday.

"The global temperature for the year 2013 is consistent with the long-term warming trend," World Meteorological Organization (WMO) chief Michel Jarraud said in a statement.

Last year equalled 2007 as the sixth warmest year since reliable records began in 1850, with a global land and ocean surface temperature that was 0.5 degrees Celsius (0.9 degrees Fahrenheit) above the 1961-1990 average, the WMO said.

Temperatures in both years were also 0.03 C (0.05 F) above the average from 2001-2010, which in turn was an extremely hot decade, with 2005 and 2010 topping the warming charts.

Those two years saw temperatures about 0.55 C (1 F) above the long term average.

Thirteen of the 14 warmest years on record have occurred in the 21st century, said the agency.

Jarraud acknowledged that "the rate of warming is not uniform" in every country.

Last year, for instance, was the hottest year on record in Australia, while the United States measured record highs in 2012.

But, Jarraud stressed, "the underlying trend is undeniable".

"Given the record amounts of greenhouse gases in our atmosphere, global temperatures will continue to rise for generations to come," the WMO chief warned.



Spectators cool down in a fountain during the hot weather on day two of the 2014 Australian Open tennis tournament in Melbourne on January 14, 2014

"Our action, or inaction, to curb emissions of carbon dioxide and other heat-trapping gases will shape the state of our planet for our children, grandchildren and great-grandchildren."

Oceans bear the brunt

El Nino weather patterns, which warm surface temperatures, and their cooling La Nina counterparts are major drivers of natural variability in the climate.

But the WMO noted that neither condition occurred in 2013, which was warmer than both 2011 and 2012, which were cooled down by La Nina.

El Nino occurs every two to seven years and last ended in May 2010, while the last La Nina faded away in April 2012.

Neither is caused by climate change, but scientists say rising ocean temperatures caused by global warming may affect their intensity and frequency.

"More than 90 percent of the excess heat being caused by human activities is being absorbed by the ocean," the WMO said on Wednesday.

The agency released the temperature data in advance of its Statement on the Status of the Climate in 2013, which will be published in March.



A handout picture taken late on January 8, 2013 and provided by New South Wales Rural Fire Service (NSW Rural Fire Service) shows trees shows fire blazing in New South Wales during a summer heatwave

In November, the WMO reported that sea levels reached a record high in 2013, making low-lying coastal regions more vulnerable to extreme weather.

Arctic sea ice shrank to its sixth-smallest summer area, albeit recovering slightly from the unprecedented melt of 2012, the agency reported.

Researchers have long warned that the chances are swiftly diminishing of limiting the global temperature rise over the next century to 2 C (3.6 F) over pre-industrial levels, defined as before 1750.

But there is little agreement globally on how to slow down, let alone stem, emissions of the heat-trapping greenhouse gases widely blamed for much of the temperature increase.

The Intergovernmental Panel on Climate Change (IPCC), the UN's Nobel-winning group of scientists, says in the draft of an upcoming report that global emissions of greenhouse gases surged by an average 2.2 percent per year between 2000 and 2010.

This compared to 1.3 percent per year over the entire 30-year period between 1970 and 2000.

Some experts say that on current trends, warming by 2100 could be 4C (7.2 F) or higher, spelling drought, flood, storms and hunger for many millions.

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