

## Record-setting 2010 highlights global warming trend, says UN weather agency



20 January 2011 – The year 2010 ranked as the warmest on record – together with 2005 and 1998 – according to the United Nations World Meteorological Organization (WMO), which added that last year also witnessed a large number of extreme weather events, including the heat wave in Russia and the devastating floods in Pakistan.

In 2010, the global average temperature was 0.53 degrees Celsius (0.95 degrees Fahrenheit) above the mean for the period from 1961 to 1990, the reference period for the Geneva-based WMO.

In addition, Arctic sea-ice cover in December 2010 was the lowest on record, with an average monthly extent of 12 million square kilometres, 1.35 million square kilometres below the 1979-2000 average for December.

"The 2010 data confirm the Earth's significant long-term warming trend," said WMO Secretary-General Michel Jarraud. "The 10 warmest years on record have all occurred since 1998."

WMO stated that 2010 was an "exceptionally warm" year over much of Africa and southern and western Asia, and in Greenland and Arctic Canada, with many parts of these regions having their hottest years on record. The month of December was exceptionally warm in eastern Canada and Greenland.

Meanwhile, it was "abnormally cold" through large parts of northern and western Europe, with monthly average temperatures as much as 10 degrees Celsius below normal at some locations in Norway and Sweden. Many places in Scandinavia had their coldest December on record.

December in Central England was the coldest since 1890, and it was colder than average in large parts of Russia and in the eastern United States.

Last year was also marked by a large number of extreme weather events, WMO noted, including the heat wave in Russia and the monsoonal floods that affected 20 million people in Pakistan.

The agency also highlighted a number of major weather events in late 2010 and early 2011, including the January floods that have affected more than 800,000 people in Sri Lanka, the flash floods that have resulted in over 700 deaths near the Brazilian city of Rio de Janeiro, and the severe flooding in eastern Australia which is expected to be the most costly natural disaster in that country's history.

The information presented by WMO is compiled with input from the agency's 189 member States, and is based on climate data from networks of land-based weather and climate stations, ships and buoys, as well as satellites.

News Tracker: past stories on this issue

2010 on track to being one of three warmest years on record, UN reports