

2010

Top Ten National Weather/Climate Events

The following table lists the top ten U.S. weather/climate events of 2010. These events are listed according to their overall rank, as voted on by a panel of weather/climate experts. The voters considered factors such as the scope and unusualness of the event, its immediate human and economic impact, and whether it is emblematic of climate trends or variability.

Rank	Event	When Occurred	National Event Description
1	Consecutive Winter Blizzards/ Extreme Snow Season	Winter / February	Winter 2009-10 brought seasonal and storm-total snow records to much of the eastern United States. These were typified by the popularly-named "Snowmageddon" and "Snowpocalypse" events of February.
2	Nashville & Central Tennessee flooding	May 1-5	A stagnant storm system brought 13.53 inches of rain to Nashville May 1-2. By May 2, Nashville had already recorded its wettest May and fifth wettest month on record. Several rivers reached record stages, causing about \$1 billion in damage to the area.
3-tie	Hot Summer in the Eastern U.S.	April - September	Warmest summer (June-August) on record for the Southeast U.S. and 10 states. Warmest April-September for 19 states and Southeast, Northeast and Central climate regions. The summer also saw records for energy demand index and the footprint of extreme warm temperatures.
3-tie	Midwest Super Storm	October 26-27	This intense storm system brought heavy rain, hurricane-force winds and tornadoes from the Great Lakes to the Gulf of Mexico. Maximum wave heights exceeded 20 feet on Lakes Superior and Michigan. Wisconsin reported its lowest sea-level pressure in state history.
5	Hawaiian Drought	Throughout 2010	Quite possibly/probably the Drought of Record in modern Hawaiian history. Easily the most significant Hawaiian episode of the U.S. Drought Monitor era (2000-). Nearly one-third of the state in D3+ for most of the year.
6	No hurricanes made U.S. landfall despite active Atlantic	June - November	Despite 19 named Atlantic storms in 2010 (tied for 2nd-most storms during the satellite era), only Bonnie made U.S. landfall (July 23, Miami, as a minimal tropical storm). Hermine existed as a tropical storm over Texas, and made landfall in Mexico.
7	Near Eradication of U.S. Drought	January - September, peaking in July	Never in the ten-year history of the U.S. Drought Monitor did drought conditions cover less than 10% of the U.S. Drought contracted to about 6.6% in January, near the end of winter and again in mid-summer. The mid-summer minimum represents the smallest drought footprint during the history of the USDM.
8	Vivian, SD Hailstone	July 23	This enormous hailstone set national records for diameter (8.0 inches) and weight (1lb. 15 oz). It was preserved for posterity by the National Center for Atmospheric Research. Another stone found Sept. 15 in Wichita, Kan., would have set the national record for diameter if not for the Vivian stone.
9	New England Flooding	February - April	New England had a wet February and a profoundly wet March, when several states had their wettest March on record. This culminated in several historic flood events lasting into April.
10	Minnesota as tornado leader	Calendar year	Minnesota's 104 tornadoes not only shattered its annual record, but easily led the nation for tornadoes reported (and confirmed) in 2010. In the 60 years prior, Minnesota had finished in the top five just four times, peaking with fourth-most.

For more information go to:
www.ncdc.noaa.gov/special-reports/national-top-ten-2010.html



NOAA's National Climatic Data Center
 Asheville, North Carolina

Please turn over this page to read about the top 10
 global weather/climate events for 2010

Protecting the past... Revealing the future

Top Ten Global Weather/Climate Events

The following table lists the top ten global weather/climate events of 2010. These events are listed according to their overall rank, as voted on by a panel of weather/climate experts. The voters considered factors such as the scope and unusualness of the event, its immediate human and economic impact, and whether it is emblematic of climate trends or variability.

Selected 2010 Climate Anomalies and Events Map

Rank	Event	When Occurred	Global Event Description
1	Russian - European - Asian Heat Waves	Summer	A severe summer spawned drought, wildfires and crop failures across western Russia, where more than 15,000 people died. All-time high temperatures occurred in many cities and nations in the region. China faced locust swarms during July.
2	2010 as [near] warmest year on record	Calendar year	According to NOAA, the globally-averaged temperature for 2010 will finish among the two warmest, and likely the warmest, on record. Three months in 2010 were the warmest on record for that month.
3	Pakistani Flooding	Late July into August	Rainfall related to the Asian Monsoon was displaced unusually westward, and more than a foot of rain fell across a large area of the Upper Indus Valley. Subsequent flooding down the Indus River killed 1,600 people and displaced millions.
4	El Niño to La Niña Transition	Mid-to-Late Boreal Spring	ENSO, the most prominent and far-reaching patterns of climate variability, saw a huge swing in mid-2010. Only 1973, 1983 and 1998 have seen larger within-year swings.
5	Negative Arctic Oscillation	Early 2010	The AO Index, which is strongly correlated with wintertime cold air outbreaks, reached -4.27 for February, the largest negative anomaly since records began in 1950. Major cold air outbreaks occurred throughout the Northern Hemisphere.
6	Brazilian Drought	Ongoing	A severe drought parching northern Brazil shrunk the Rio Negro, one of the Amazon River's most important tributaries, to its lowest level since records began in 1902 at its confluence with the Amazon. The Amazon's depth there fell more than 12 feet below its average.
7-tie	Historically Inactive NE Pacific Hurricane Season	May 15 - Nov 30	The Northeast Pacific Hurricane Season was one of the least active on record, produced the fewest named storms and hurricanes of the modern era, and had the earliest cessation of tropical activity (Sep 23) on record.
7-tie	Historic N. Hemispheric Snow Retreat	January through June	Despite December 2009 having the second-largest snow cover extent of the satellite record (mid-1960s), the melt season was ferocious, contributing to spring floods in the Northern U.S. and Canada. Following the early and pronounced snow melt, the North American, Eurasian and Hemispheric snow cover was the smallest on record for May and June 2010.
9	Minimum Sea Ice Extent	mid-September	The 2010 sea ice minimum of 4.9 million sq km was the third smallest on record. The last four years (2007-2010) are the four smallest on record. The Northwest Passage and the Northern Sea Route were simultaneously ice-free in September, a first in modern history.
10	China Drought	First Half of 2010	A persistent drought centered in the Yunan Province was touted as perhaps the worst in this region in more than 100 years. Major crop losses and lack of drinking water created severe problems for local residents.

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