

La Nina helping direct winter storm to Midwest

February 2 2011, By RANDOLPH E. SCHMID , AP Science Writer



A pedestrian walks along the shore line of Lake Michigan Wednesday, Feb. 2, 2011 in Chicago. A winter blizzard of historic proportions wobbled an otherwise snow-tough Chicago, stranding hundreds of drivers for up to 12 hours overnight on the city's showcase lakeshore thoroughfare and giving many city schoolchildren their first ever snow day. (AP Photo/Kiichiro Sato)

(AP) -- Millions of Americans raised on tales of great storms past now have one of their own to talk about - and something to blame: La Nina.

"Mother Nature has decided to show us what winter is like again," said Mike Halpert, deputy director of the federal Climate Prediction Center.

Following a series of unusually mild winters, 'the last couple of winters have been more like what winter should be,' Halpert said Wednesday.

The blizzard of 2011 "will be long remembered" because the snow and very strong winds created whiteout conditions in a wide swath of the country, including heavily populated cities, Louis Uccellini, director of the government's National Centers for Environmental Prediction.

Uccellini, a long-time winter storm expert, said it was following a classic pattern - from the Midwest to the Northeast and redeveloping off the coast.

The monster storm was leaving heavy snow and thick ice from Oklahoma and Missouri to the Great Lakes states and eastward. Chicago recorded one of its highest single-storm snow totals.

So can we blame climate change?

No, says Uccellini, "you can't relate [climate change](#) to individual storm systems. Clearly, there have been similar storms in previous decades. As intense as this storm is, it's equivalent to other major storms that they've seen in past decades."

But the La Nina (la NEEN-ya) condition currently affecting the tropical [Pacific Ocean](#) does share some of the blame. And it might be contributing to the floods and storm battering Australia.

La Nina is a periodic cooling of the surface temperatures of the tropical Pacific Ocean, the opposite of the better-known [El Nino](#) (el NEEN-yo) warming. Both can have significant impacts on weather around the world by changing the movement of winds and high and low pressure systems.

"We are linking the storm tracks to the La Nina pattern which dominates the flow coming off the Pacific," Uccellini explained in a telephone interview. "This follows the pattern we would expect through the Ohio Valley and with heavy precipitation to the Great Lakes."

"The [storm](#) is going where we would expect it, according to La Nina," added Halpert.

The blizzard is following a traditional pattern, unlike several previous storms this winter that moved up the East Coast, hammering the East and South.

Contributing to the snowy season, the North Atlantic Oscillation has shifted into a negative phase, leaving La Nina in full control, Uccellini said.

The North Atlantic Oscillation is a shift in high and low pressure systems. In its positive phase it can force storms to the north, but when it relaxes, as currently, the U.S. East Coast tends to see more cold air and snow.

Its related Arctic Oscillation has also pushed cold weather farther south in the United States than had been expected, explained Halpert.

At the same time, half a world away, Australia is currently facing a major cyclone, and that follows serious flooding in parts of that country.

While one can't say the American blizzard and the Australian cyclone are directly connected, both are affected by La Nina. [La Nina](#) affects wet it gets in Indonesia and Australia, noted Uccellini.

For the record, the long-term winter forecast issued Oct. 21 by the National Weather Service included:

- Northern Plains: Colder and wetter than average, probably with increased storminess and flooding.
- Southern Plains, Gulf Coast States and Southeast: Warmer and drier

than average, worsening drought conditions in these areas.

- Ohio and Tennessee Valleys: Warmer and wetter than average, probably with increased storminess and flooding.
- Northeast and Mid-Atlantic: Equal chances for above, near or below normal temperatures and precipitation. ... If enough cold air and moisture are in place, areas north of the Ohio Valley and into the Northeast could see above average snow.

More information: NOAA: <http://www.noaa.gov>

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