

## Feds: 'Meterological March madness' mostly random

April 2 2012, By SETH BORENSTEIN, AP Science Writer

(AP) -- Freak chance was mostly to blame for the record warm March weather that gripped two-thirds of the country, with man-made global warming providing only a tiny assist, a quick federal analysis shows.

For much of March, record temperatures hit as high as 35 degrees above normal and averaged about 18 degrees warmer than usual. The United States broke or tied at least 7,733 daily high temperature records in March, which is far more than the number of records broken in last summer's <a href="heat wave">heat wave</a> or in a blistering July 1995 heat wave, according to federal records.

The National Oceanic and Atmospheric Administration analyzed the causes and chances of what it nicknamed "meteorological March madness." Meteorologist Martin Hoerling said the main cause was a persistent warm wind sending toasty air north from the Gulf of Mexico. The study is not peer-reviewed and some outside scientists say it is short-sighted.

"Climate change was certainly a factor, but it was certainly a minor factor," Hoerling said.

He said the bigger issue was <u>wind patterns</u>. Low pressure in the <u>Pacific Northwest</u> and high pressure in New England created a perfect funnel, like the gutter lane in a bowling alley, for warm air in the <u>Gulf of Mexico</u> to head north. That air is about 15 to 20 degrees warmer than the air in the Midwest. From time to time that air heads north, but what is



unusual is that the wind pattern stayed that way for about two weeks.

""Why wouldn't we embrace it as a darn good outcome," Hoerling said.
"This was not the wicked wind of the east. This was the good wind of the south."

For example, Chicago had nine straight record hot days, eight of them over 80 degrees when usually that city doesn't hit 80 until late June.

Hoerling said it's hard at this early point to apportion blame for an event so massive and rare. This seems to be about a once-in-century type event. If this were a once in 40 years type heat wave, as initially predicted, it would be fair to say the chance of it happening is about five part randomness to one part manmade global warming.

"It is a freak event that appeared to have perhaps a freak ancestor, 1910," Hoerling said. In that year there was a similar heat wave.

Hoerling analyzed March temperatures and compared them to past decades and found that since 2001, March has been nearly 2 degrees warmer in much of the country than the 1960-1990 average. So he said that's about 10 percent of the added heat.

Hoerling said a lot of people have worried that if March was this hot, what would June be like. But the March weather has little relation to what comes in summer, Hoerling said. "This is not the new reality," he said.

Climate scientists said the world should expect more extreme weather - like the March heat wave - as the climate changes. But they also hesitate to attribute single weather events to global warming.

Penn State University climate scientist Michael Mann said the longer



term view is more important.

"This winter and spring we're breaking warmth records at more than 10 times the rate we'd expect naturally," Mann said in an email. "So while it is true that individual weather events represent the random rolls of the weather dice, human-caused climate change has loaded those dice. That's why we're seeing `sixes' come up far more often than we'd expect from chance alone."

**More information:** NOAA's analysis on March:

http://1.usa.gov/HanmNa

NOAA's list of high temperature records broken in March: <a href="http://l.usa.gov/H8WhUY">http://l.usa.gov/H8WhUY</a>

©2012 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Feds: 'Meterological March madness' mostly random (2012, April 2) retrieved 9 April 2024 from <a href="https://phys.org/news/2012-04-feds-meterological-madness-random.html">https://phys.org/news/2012-04-feds-meterological-madness-random.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.