

Report: Global warming didn't cause big US drought (Update)

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In this Aug. 16, 2012 file photo, drought-damaged corn is seen in a field near Nickerson, Neb. A new federal science report looking at last year's Midwestern drought says it was a freak of nature that wasn't caused by man-made global warming. The 50-page drought task force report written by dozens of scientists from five different federal agencies looked into why forecasters didn't see the more than \$12 billion drought coming. The researchers concluded that it was so unusual and unpredictable that it couldn't have been forecast. (AP Photo/Nati Harnik, File)

Last year's huge drought was a freak of nature that wasn't caused by man-made global warming, a new federal science study finds.

Scientists say the lack of moisture usually pushed up from the Gulf of Mexico was the main reason for the drought in the American heartland.

Thursday's report by dozens of scientists from five different federal agencies looked into why forecasters didn't see the drought coming. The researchers concluded that it was so unusual and unpredictable that it couldn't have been forecast.

"This is one of those events that comes along once every couple hundreds of years," said lead author Martin Hoerling, a research meteorologist at the National Oceanic and Atmospheric Administration. "Climate change was not a significant part, if any, of the event."

Researchers focused on six states—Wyoming, Kansas, Nebraska, Colorado, Missouri and Iowa—but the drought spread much farther and eventually included nearly two-thirds of the Lower 48 states. For the six states, the drought was the worst four-month period for lack of rainfall since records started being kept in 1895, Hoerling said.

He said the jet stream that draws moisture north from the Gulf was stuck unusually north in Canada.

Other scientists have linked recent changes in the jet stream to shrinking Arctic sea ice, but Hoerling and study co-author Richard Seager of Columbia University said those global warming connections are not valid.

Hoerling used computer simulations to see if he could replicate the drought using man-made global warming conditions. He couldn't. So that means it was a random event, he said.

Using similar methods, Hoerling has been able to attribute increasing droughts in the Mediterranean Sea region to climate change and found that greenhouse gases could be linked to a small portion of the 2011 Texas heat wave.

Another scientist though, blasted the report.

Kevin Trenberth, climate analysis chief at the National Center for Atmospheric Research, a federally funded university-run research center, said the report didn't take into account the lack of snowfall in the Rockies the previous winter and how that affected overall moisture in the air. Nor did the study look at the how global warming exacerbated the high pressure system that kept the jet stream north and the rainfall away, he said.

"This was natural variability exacerbated by global warming," Trenberth said in an email. "That is true of all such events from the Russian heat wave of 2010, to the drought and heat waves in Australia."

Hoerling noted that in the past 20 years, the world is seeing more La Ninas, the occasional cooling of the central Pacific Ocean that is the flip side of El Nino. Hoerling said that factor, not part of global warming but part of a natural cycle, increases the chances of such droughts.

Some regions should see more droughts as the world warms because of greenhouse gases from the burning of fossil fuels like coal, oil and gas, he said. But the six state area isn't expected to get an increase of droughts from global warming—unlike parts of the Southwest—Hoerling said.

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