

US cold snap was a freak of nature, quick analysis finds

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In this Jan. 7, 2018, file photo, fishing trawlers sit on the frozen harbor of Lake Montauk surrounded by thin sheets of ice in Montauk, N.Y. A quick study of the brutal American cold snap found that the Arctic blast really was a freak of nature. Climate change wasn't a factor but it is making such frigid weather spells much rarer. (AP Photo/Julie Jacobson, File)

Consider this cold comfort: A quick study of the brutal American cold snap found that the Arctic blast really wasn't global warming but a freak of nature.

Frigid weather like the two-week cold spell that began around Christmas is 15 times rarer than it was a century ago, according to a team of international scientists who does real-time analyses to see if extreme weather events are natural or more likely to happen because of climate change.

The cold snap that gripped the East Coast and Midwest region was a rarity that bucks the warming trend, said researcher Claudia Tebaldi of the National Center for Atmospheric Research and the private organization Climate Central.

The same team had connected several weather events last year to man-made global warming including Hurricane Harvey that battered the U.S. and Caribbean and the French floods.

"It was very definitely strange, especially now," said study co-author Gabriel Vecchi of Princeton University. A century ago "it wouldn't have been that strange. Things like this are becoming stranger."

The study by the World Weather Attribution analyzed weather records dating back to 1880 and found the cold weather that hit a swath of the U.S. from Maine to Minnesota tends to happen once every 250 years. In the early 1900s, it happened about once every 17 years. Climate change has made such cold spells less common and less intense, the group said.

That finding agrees with earlier studies, said University of Georgia meteorology professor Marshall Shepherd, who wasn't part of the study.

"I think the public frenzy over the recent cold snap illustrated that we are less acclimated to such events," he said in an email.

The study, based on observations and statistics, did not find evidence for a popular scientific theory that links melting Arctic sea ice to blasts of

cold air escaping the top of the world.

The theory, which is still debated by scientists but gaining credence among many, is based on pressure changes and other factors that cause the jet stream to plunge and weather systems to get stuck. But the latest analysis didn't find such evidence.

Three scientists whose studies have connected Arctic warming to changes in extreme events disagree.

Because such atmospheric pressure changes happen occasionally, quick studies that rely on averages miss extreme events like the recent cold spell, said James Overland of the National Oceanic and Atmospheric Administration who supports the theory.

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