

Federal forecasters predict warm, wet US winter but less snow because of El Nino, climate change

October 19 2023, by Seth Borenstein



A passenger disembarks from a ferry arriving from Peaks Island, Feb. 4, 2023, in Portland, Maine. United States winter looks likely to be a bit low on snow and extreme cold outbreaks, with federal forecasters predicting the North to get warmer than normal and the South wetter and stormier, officials at the National Oceanic and Atmospheric Administration said Thursday, Oct. 19, 2023, in releasing their winter outlook. Credit: AP Photo/Robert F. Bukaty, File



The upcoming United States winter looks likely to be a bit low on snow and extreme cold outbreaks, with federal forecasters predicting the North to get warmer than normal and the South wetter and stormier.

A <u>strong El Niño</u> heavily moderates and changes the storm tracks of what America is likely to face from December to February, with an added warming boost from <u>climate change</u> and record hot oceans, officials at the National Oceanic and Atmospheric Administration said Thursday in releasing their <u>winter outlook</u>.

The forecast warmth will likely turn some storms that would have dumped <u>snow</u> into rain in the nation's northern tier, but there's also "some hope for snow lovers," with one or two possible whopping Nor'easters for the East Coast, said Jon Gottschalk, operations branch chief of NOAA's Climate Prediction Center. Parts of the East Coast, particularly the Mid-Atlantic, may get more snow than normal because of that, he said.

Most of the country is predicted to be warmer than normal with that warmth stretching north from Tennessee, Missouri, Nebraska and Nevada, along with nearly all of California. The rest of the nation is forecast to be near normal or have equal chances for warm, cold or normal. NOAA doesn't predict any part of the U.S. to be cooler than normal this winter.

"The greatest odds for warmer than average conditions are in Alaska, the Pacific Northwest and northern New England," Gottschalk said.





A man walks in the rain along a street in Austin, Texas, Nov. 11, 2022. United States winter looks likely to be a bit low on snow and extreme cold outbreaks, with federal forecasters predicting the North to get warmer than normal and the South wetter and stormier, officials at the National Oceanic and Atmospheric Administration said Thursday, Oct. 19, 2023, in releasing their winter outlook. Credit: Jay Janner/Austin American-Statesman via AP, File

A similarly large southern swath of the country is predicted to be wetter. The forecast of added moisture stretches from Massachusetts down the East Coast along most of the South below Tennessee, and extending west through Texas, Kansas, Colorado, Utah, Nevada and most of California, but excluding good chunks of New Mexico and Arizona.

The Great Lakes region and the furthest northern parts of the nation



stretching from Lake Erie to eastern Washington are forecast to be drier than normal.

All this is because of El Niño, which is a natural periodic warming of parts of the Pacific that changes <u>weather patterns</u> worldwide and generally heats up <u>global temperatures</u>, Gottschalk and other NOAA scientists said. El Niño has its strongest effects, especially in the United States, during the winter. That's when it sends the jet stream, which moves storm fronts, on an unusual path that is dominated by warmer and wetter Pacific air plunging south.

That means more rain in the South and extra storminess in the late winter, Gottschalk said. El Niño often means "unusual severe weather across the state of Florida because of a strong subtropical jet stream," he said.

Those changes in the jet stream often can bring a storm along the East Coast with moisture from the Caribbean and Gulf of Mexico "to get very juiced up" and fall as heavy snow in big eastern cities, Gottschalk said. That depends on timing of temperatures and other conditions, so it's not likely to happen more than a couple times. But if the timing is right, "these storms can really explode off the East Coast," he said.





Travis Grout uses his cross country snow skis to get around the West Front of the Capitol in Washington, Feb. 6, 2010. Federal forecasters are predicting on Thursday, Oct. 19, 2023, less snow in general for the United States winter, but they said big snow events are possible like Washington's paralyzing Snowmageddon storm that dumped more than 2 feet on the capital region during an El Nino. Credit: AP Photo/Alex Brandon, File

He pointed to Washington's paralyzing 2010 Snowmageddon storm that <u>dumped more than 2 feet</u> on the capital region during an El Niño.

Normally the South gets not just wetter but cooler during an El Niño, but Gottschalk said the <u>warmer ocean temperatures</u> and record hot summer temperatures led forecasters to ditch a cooler outlook.



NOAA scientists said <u>climate change</u> is an added factor to their forecast, especially with winter being a season where the world sees some of the most warming above old normals from the burning of coal, oil and natural gas. Winter in the Lower 48 <u>has warmed on average 1.6 degrees Fahrenheit</u> (0.9 degrees Celsius) in the past 40 years, according to NOAA data.

Meteorologists outside NOAA see the winter playing out somewhat similarly.

Judah Cohen, a winter storm expert for Atmospheric Environmental Research, a commercial firm outside of Boston, has become prominent because of his successful forecasts based on fall Siberian snow cover and study of the infamous polar vortex. The Siberian snow cover, El Niño and other factors "indicate an overall mild winter," he told The Associated Press.





A man walks in the snow-covered street in Boston, Saturday, Jan. 29, 2022. Federal forecasts say United States winter looks likely to be a bit low on snow and extreme cold outbreaks, but a few big snow events are still possible, officials at the National Oceanic and Atmospheric Administration said Thursday, Oct. 19, 2023, in releasing their winter outlook. Credit: AP Photo/Michael Dwyer, File

When Siberia has less fall snow, the polar vortex, a mass of cold air centered at the top of the globe, tends to stay strong and keeps the frigid Arctic air penned up near the pole, Cohen said. When there's more snow, the polar vortex is weaker and the frigid air escapes to the United States.

People on the East Coast should be prepared for "weather whiplash" with not much snow in general except for one or two real gangbusters, especially in the Mid-Atlantic, Cohen said.



The private firm AccuWeather <u>forecasts below average snowfall</u> in Boston, New York City, Pittsburgh, Buffalo, Chicago and Minneapolis, with near average in Kansas City, Salt Lake City and Philadelphia and more than normal in Denver.

AccuWeather predicts less warmth than NOAA, with pockets of southern California, New Mexico, Arizona, Texas, Oklahoma, Arkansas, Mississippi, Alabama and Tennessee cooler than normal.

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