

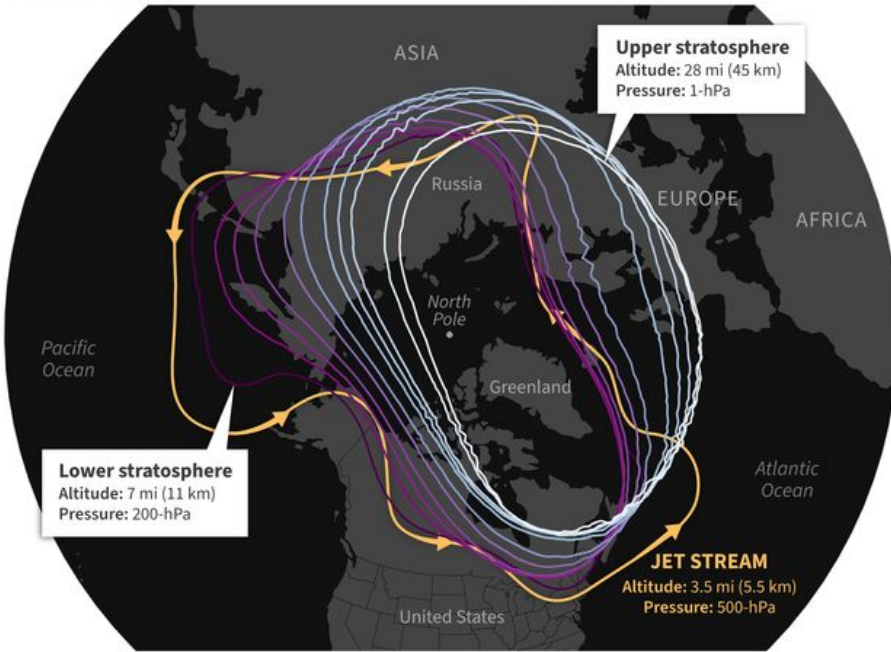


# January Arctic Outbreak

## January 19-21, 2025

**Event Overview:** An arctic outbreak brought frigid temperatures, gusty winds, and dangerous wind chills late January 2025, all without snow on the ground! A deep, cold air mass was able to overcome a lack of snow cover and combine with gusty northwest winds to produce dangerous wind chills between -15 and -35 degrees for three days straight. The coldest wind chills were reported the the night of January 20th through the morning of January 21st, with widespread wind chills between -30 and -35 degrees.

Polar vortex and jet stream are both stretched southward over U.S.



January 16, 2025

NOAA Climate.gov  
Data: GFS

[https://www.climate.gov/news-features/blogs/polar-vortex/another-blast-arctic-air-time-stretched-strong-polar-vortex.](https://www.climate.gov/news-features/blogs/polar-vortex/another-blast-arctic-air-time-stretched-strong-polar-vortex)

**Event Setup:** Warm air streamed into Alaska the week ahead of the outbreak, “shoving” Arctic air southward through Canada into the Great Lakes region. This powerful Arctic intrusion may have been made stronger and longer lasting due to a stretching of the stratospheric polar vortex toward into the central U.S. As low pressure developed in the southern U.S., the Arctic air mass finally exited southern Wisconsin and a warming trend began.

**Image from Climate.Gov (Left), adapted from original by Laura Ciasto:** “The forecasted structure of the tropospheric jet stream (yellow) and several levels of the stratospheric polar vortex from the lower stratosphere to the upper stratosphere in the NOAA GFS model for 17 January 2025 (initialized on 16 January 2025). The contours show how the stretched polar vortex corresponds to the southward shift of the jet stream over North America.”

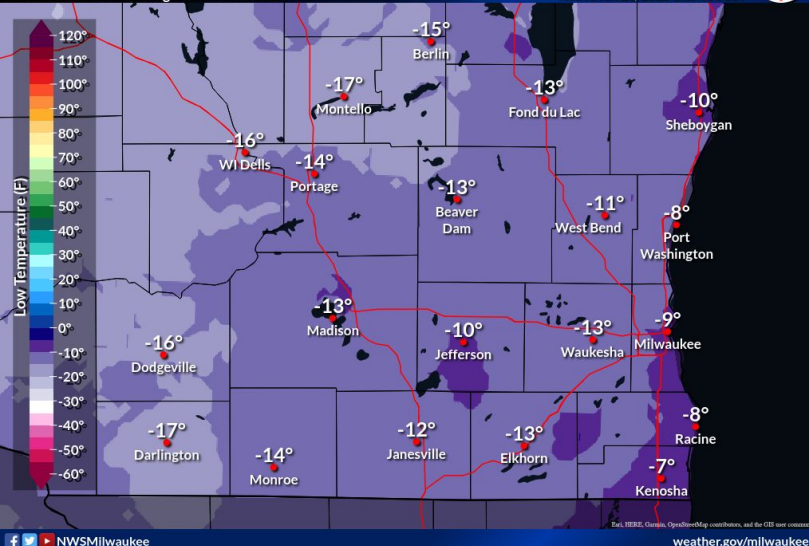
### Past 24 Hours Low Temps

Valid Mon 7:00AM through Tue 7:00AM CST

Weather Forecast Office

Milwaukee, WI

Issued Jan 21, 2025 3:07 PM CST



NWSMilwaukee

weather.gov/milwaukee

Overnight lows between 7 AM January 20 and 7 AM January 21, 2025, as reported by observers across southern Wisconsin.

### Lowest Windchill Reports (Morning of January 21):

Lodi	-38 F	0853 AM
Sun Prairie	-36 F	0830 AM
Waupun	-37 F	0815 AM
Fond Du Lac Airport	-34 F	0753 AM
Monroe	-38 F	0915 AM
Berlin	-34 F	0900 AM
Mineral Point	-36 F	0855 AM
Cold Spring	-31 F	0830 AM
Kenosha Airport	-26 F	0753 AM
3.6 SW Belmont (SCAN)	-38 F	0700 AM
Montello	-33 F	0925 AM
Milwaukee-Gen Mitchell Arpt	-30 F	0652 AM
Cedarburg	-32 F	0715 AM
Burlington	-27 F	0903 AM
Janesville / Rock Co Arpt	-34 F	0845 AM
Reedsburg-Airport	-38 F	0735 AM
Plymouth	-35 F	0830 AM
Elkhorn	-36 F	0805 AM
Kewaskum	-35 F	0910 AM
Waukesha Airport	-33 F	0845 AM