

Weather and Climate in the Tug Hill Region and Beyond

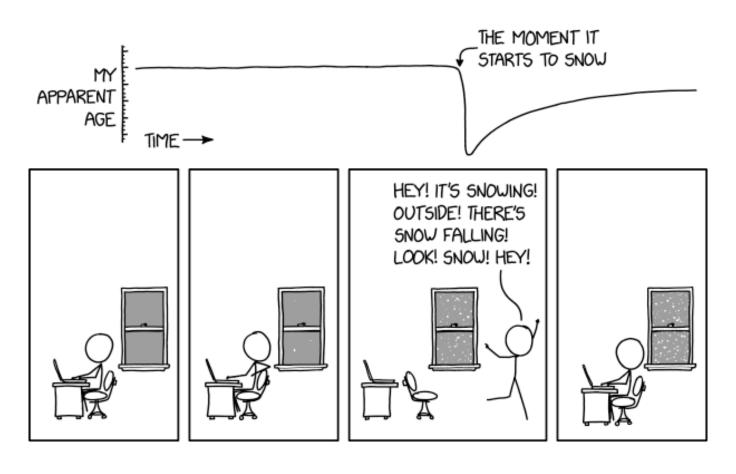
Natalie Umphlett, Ph.D.

Northeast Regional Climate Center, Cornell University

Snow Place Like Tug Hill Workshop Series Glenfield, NY | November 6, 2025

Disclaimer - Milk and Bread Alert!

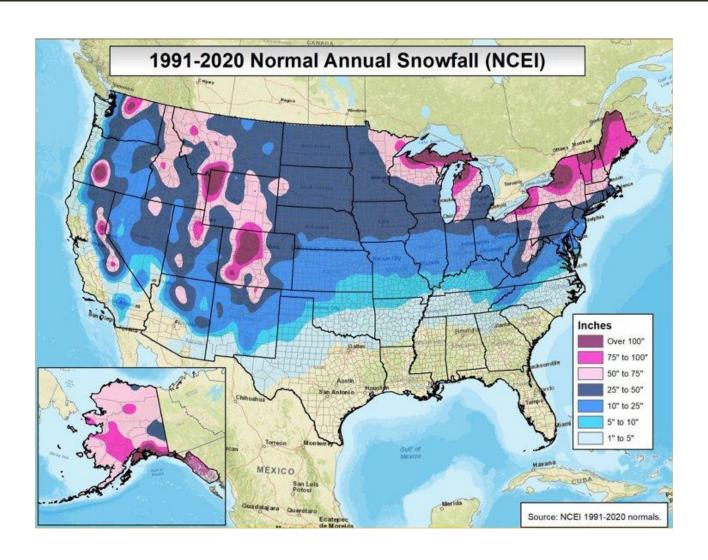




https://xkcd.com/2866/

Winter Wonderland





Source: UNL Lincoln Weather and Climate

Winter Wonderland

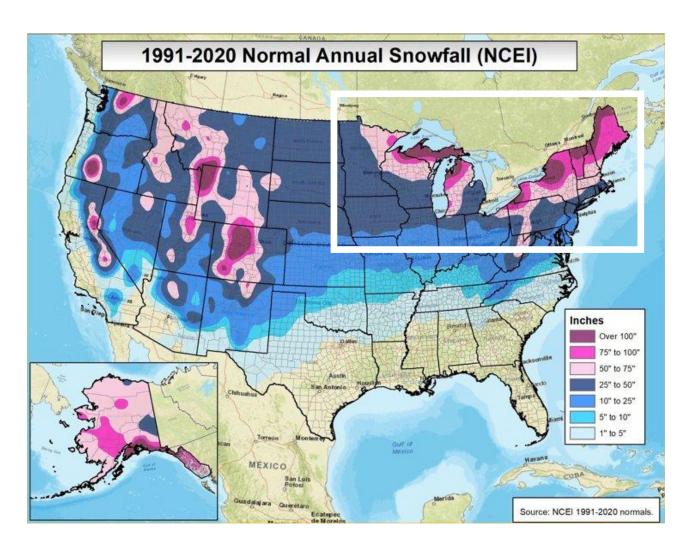


Streamflow

Transportation

Timber Operations

Recreation and Tourism



Culture

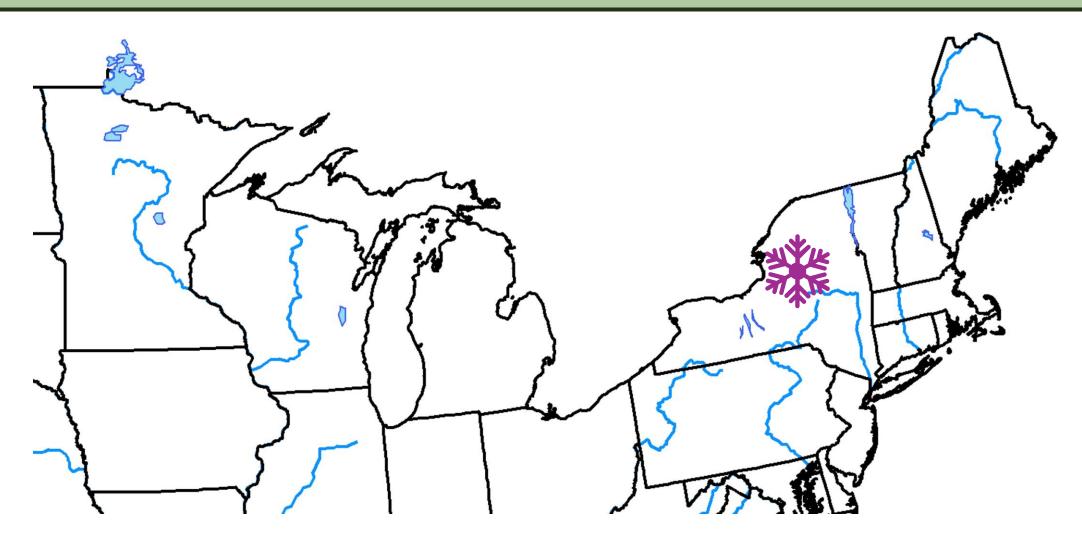
Plants

Soil Moisture Recharge

Wildlife

Source: UNL Lincoln Weather and Climate









Source: Interlochen Public Radio Warmer Temperatures Affect Snow Totals Around Great Lakes

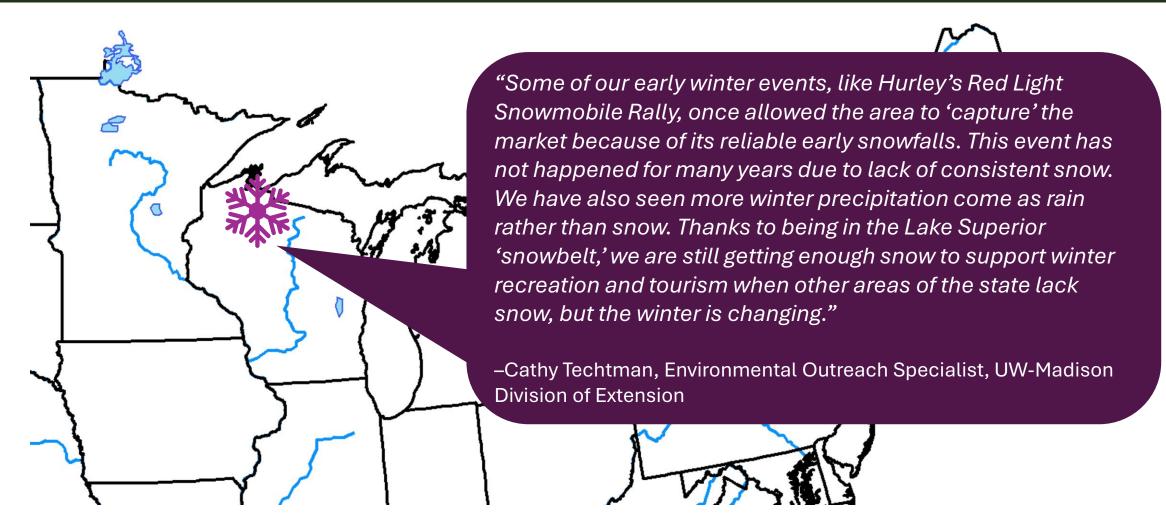




Source: Condition Monitoring Observer Reports (CMOR)

CMOR User Bratt Ski Hill





Source: 2021 Assessment Report: Wisconsin's Changing Climate Impacts and Solutions for a Warmer Climate

Bottom Line Up Front

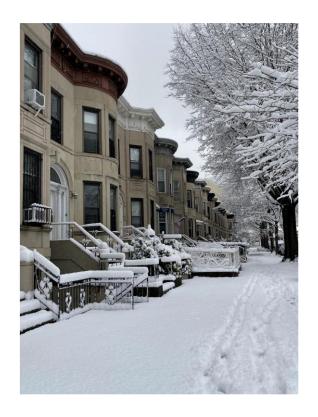


Snow is complicated!

But, let's take a look at a few examples for comparison.

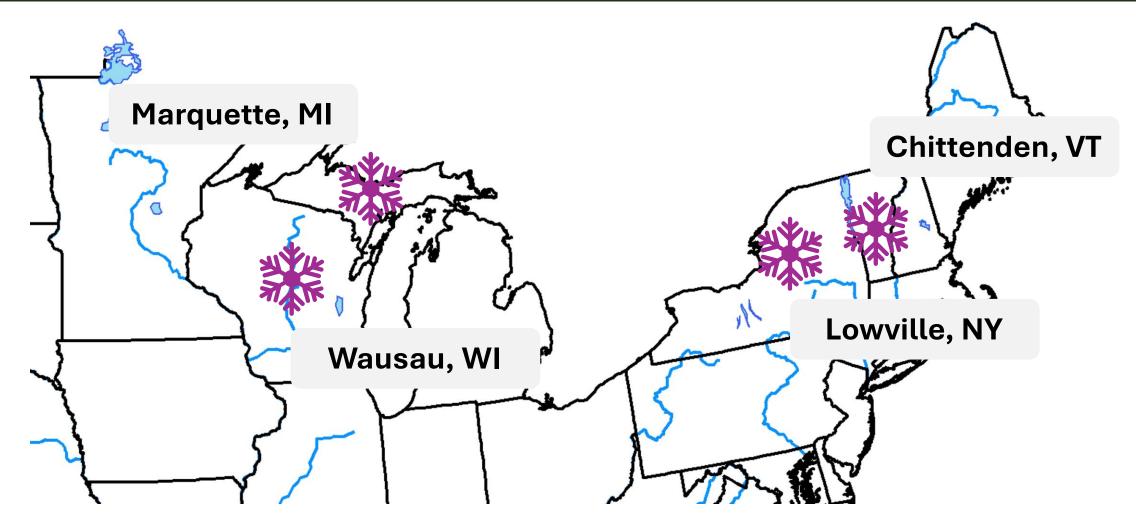






Comparison Locations

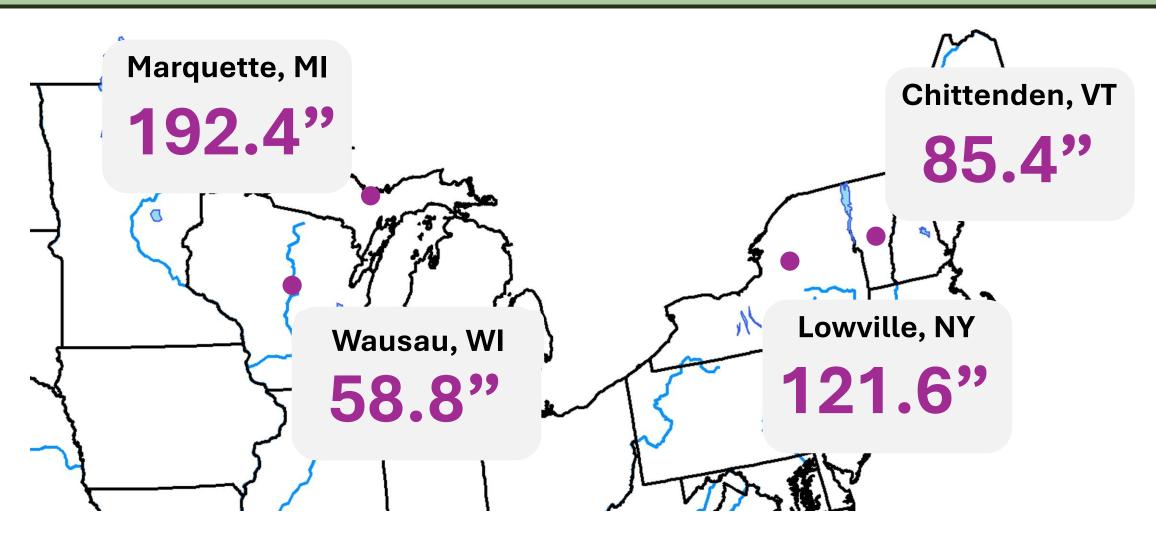




Marquette WFO, MI, Wausau, WI, Lowville, NY, and Chittenden, VT; 1974-2024 Data retrieved from the Applied Climate Information System

Seasonal Snowfall Comparison

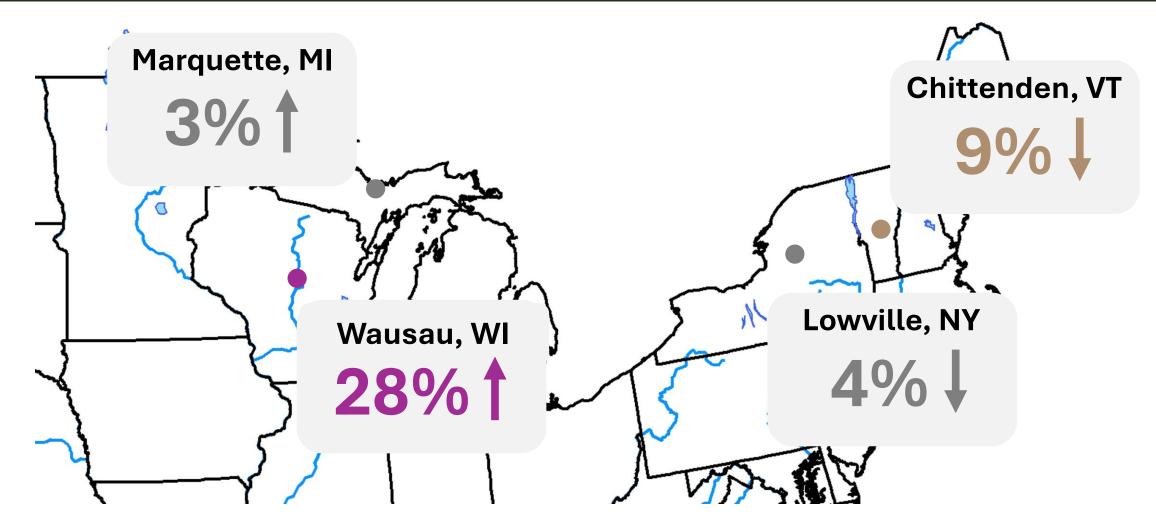




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Seasonal Snowfall Trends

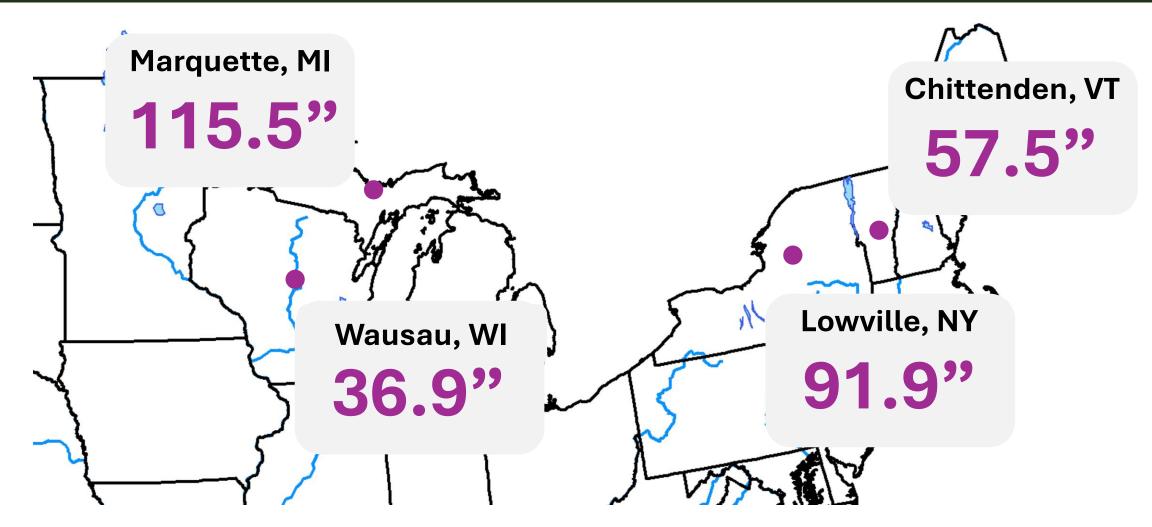




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Winter (DJF) Snowfall Comparison

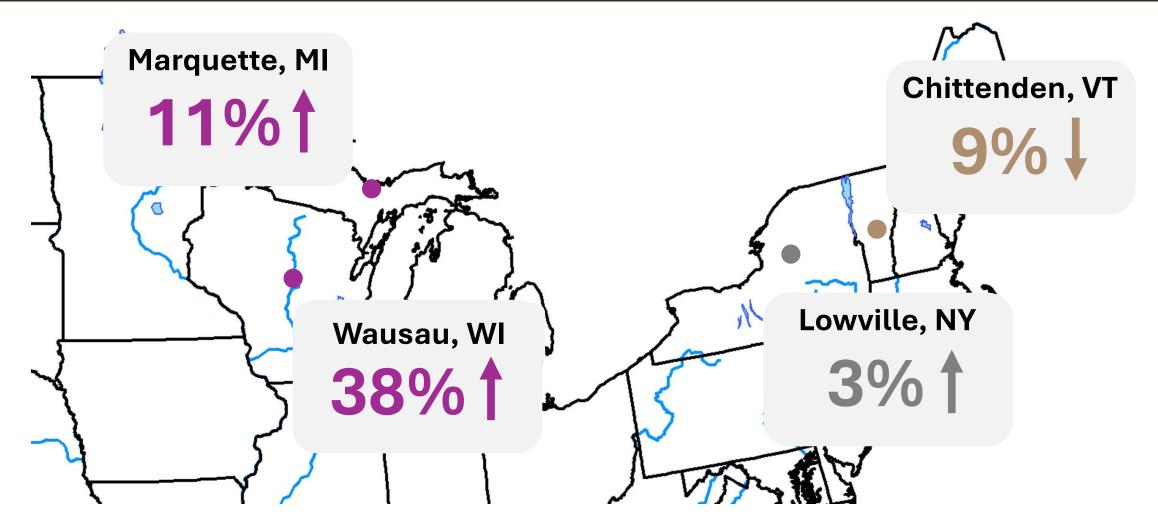




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Winter (DJF) Snowfall Trends

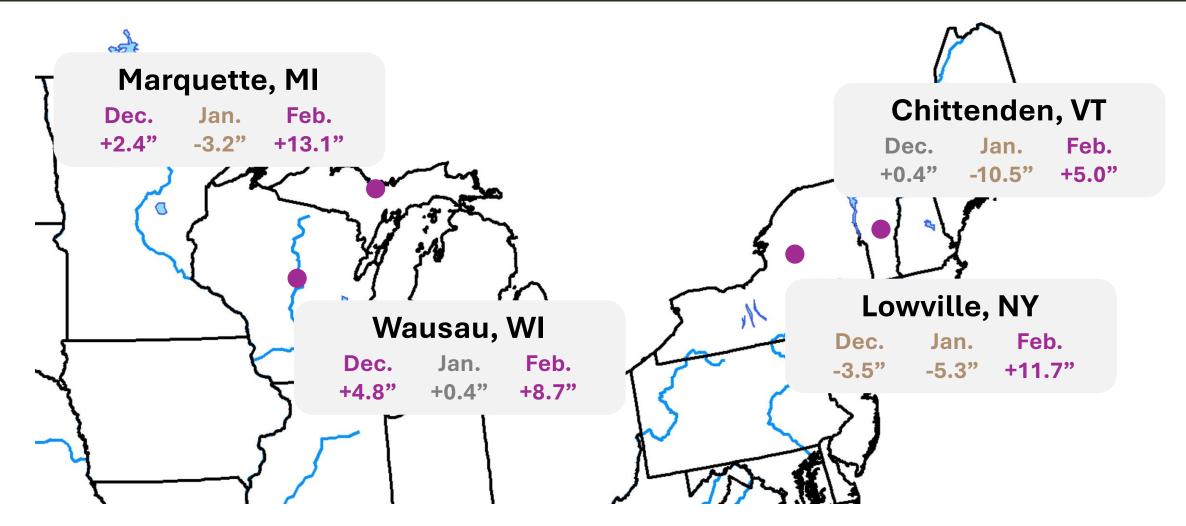




Marquette WFO, MI, Wausau, WI, Lowville, NY, and Chittenden, VT; 1974-2024 Data retrieved from the Applied Climate Information System

Trends Vary By Month





Marquette WFO, MI, Wausau, WI, Lowville, NY, and Chittenden, VT; 1974-2024 Data retrieved from the Applied Climate Information System

To Pique Your Interest



Number of Days Snow Depth >= 12 - Dec through Feb - LOWVILLE, NY

Use navigation tools above and below chart to change displayed range

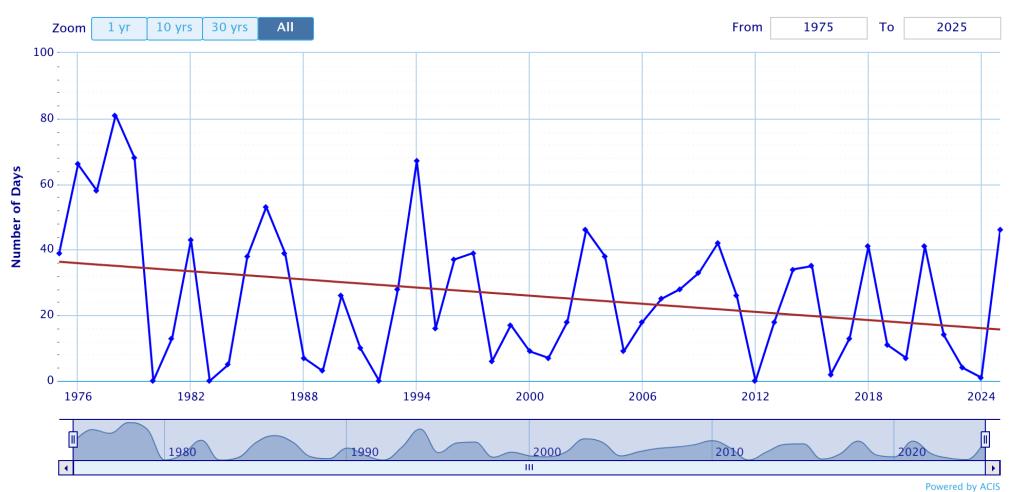


To Pique Your Interest



Number of Days Snow Depth >= 12 - Dec through Feb - LOWVILLE, NY

Use navigation tools above and below chart to change displayed range



The more I dug...



...the more I wanted to keep digging! (into the data)



Question to consider:

What types of snow data are most important to you?

- Date of first/last "big" snow?
- Timing of first snow and soil freeze up?
- Number of days with snow depth above a certain amount?
- Persistence of snowpack?

Do you shovel or scoop the snow?!