

The 2022/2023 snow season across the US

NWS Climate Services Seminar

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Distinguished Professor, Department of Geography

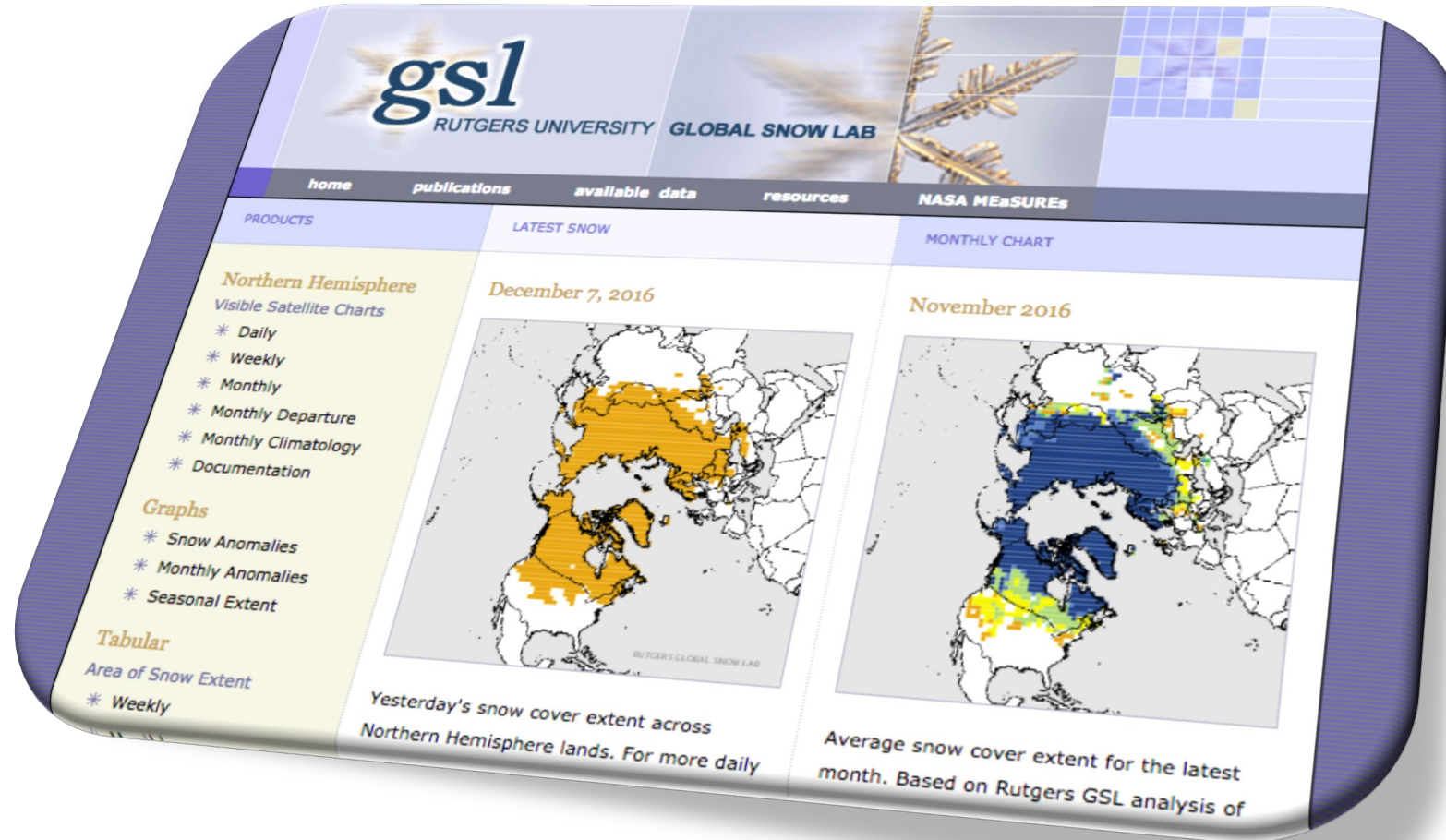
New Jersey State Climatologist

Rutgers University

August 8, 2023

Rutgers Global Snow Lab

snowcover.org



Why is snow so important to understand?

- It is a water reservoir
- It can influence weather and climate
- It can be dangerous
- It is important for wildlife
- It is fun to play in!

Did it snow because it is cold
or
is it cold because it snowed?

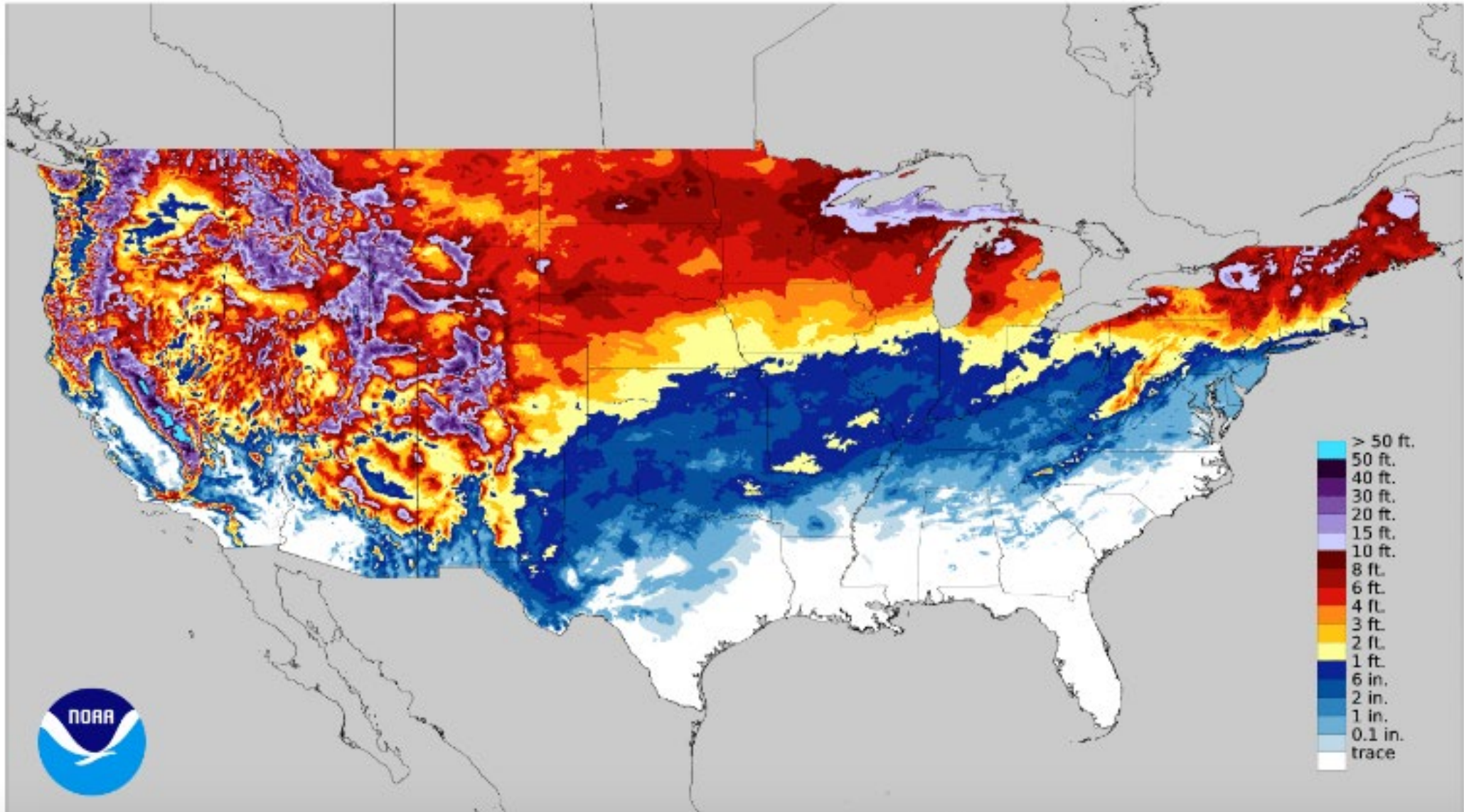
Did it snow because it is cold
or
is it cold because it snowed?

YES



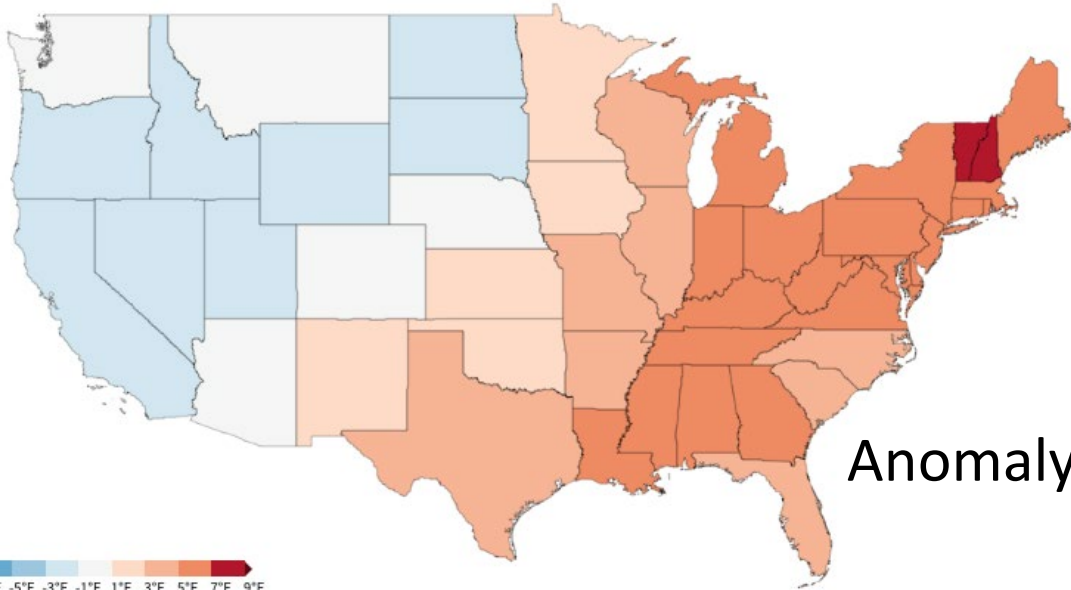
Snowfall

Seasonal Snowfall Accumulation: October 1, 2022 – June 30, 2023



Statewide Average Temperature Anomaly

December 2022 - March 2023



Anomaly



Contiguous U.S. (Hover over a State)

Temp: 36.34°F

Rank: 30th Warmest

Anomaly: 1.79°F

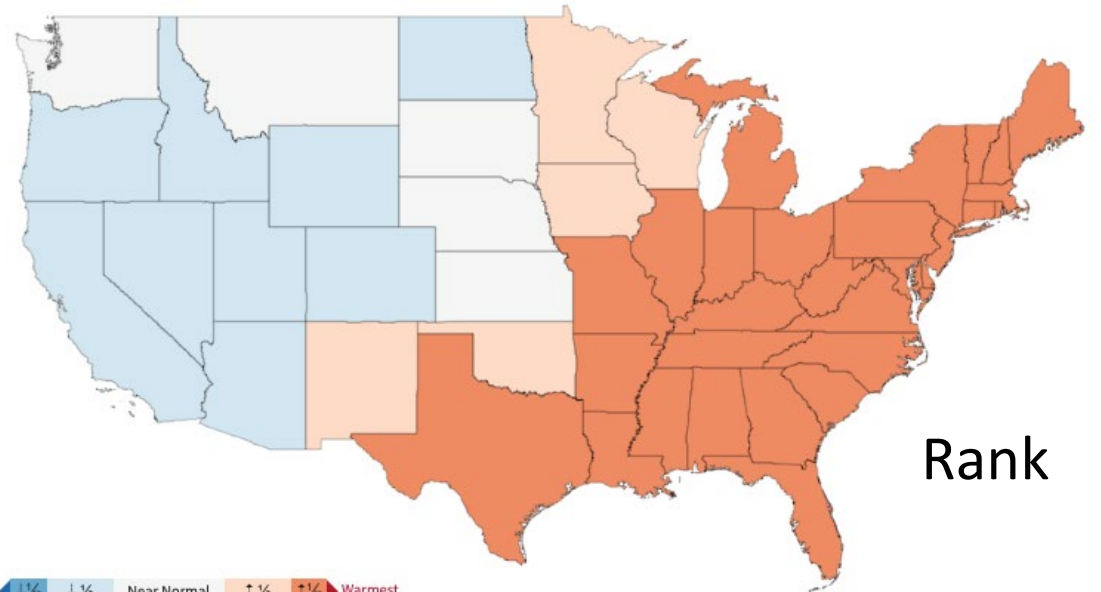
Mean: 34.55°F



Winter Temperature: December 2022 – February 2023

Statewide Average Temperature Rank (129 years)

December 2022 - March 2023



Rank



Contiguous U.S. (Hover over a State)

Temp: 36.34°F

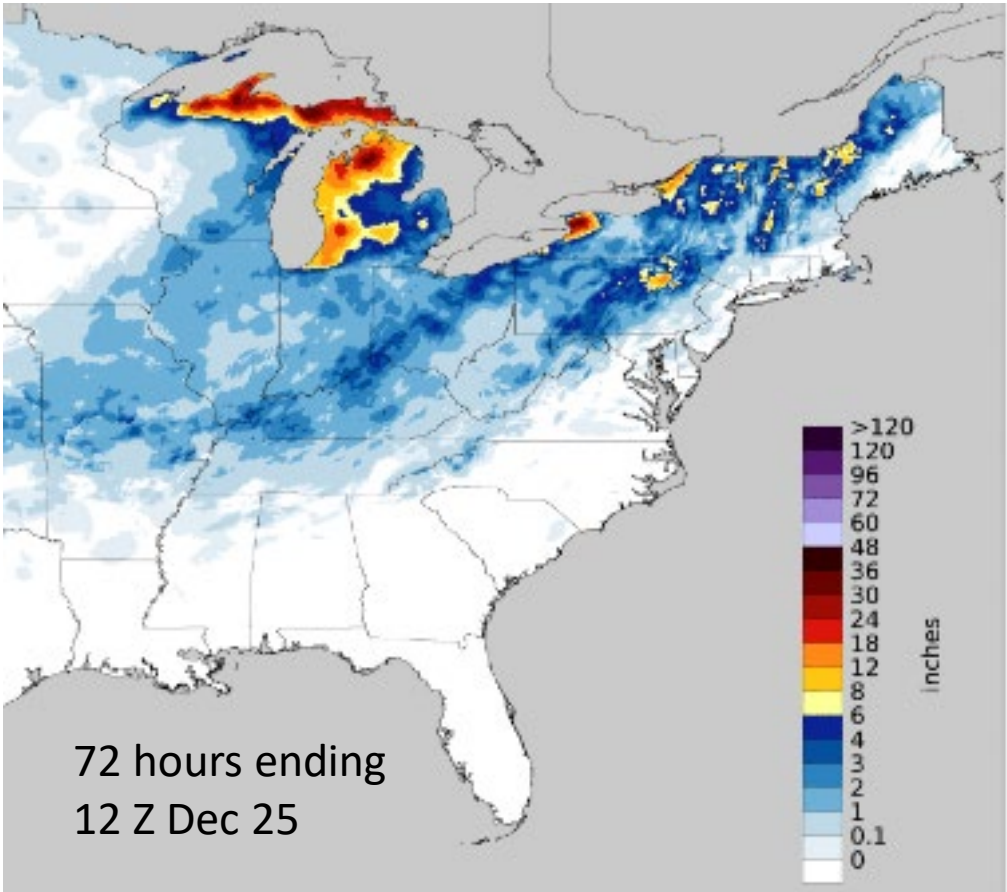
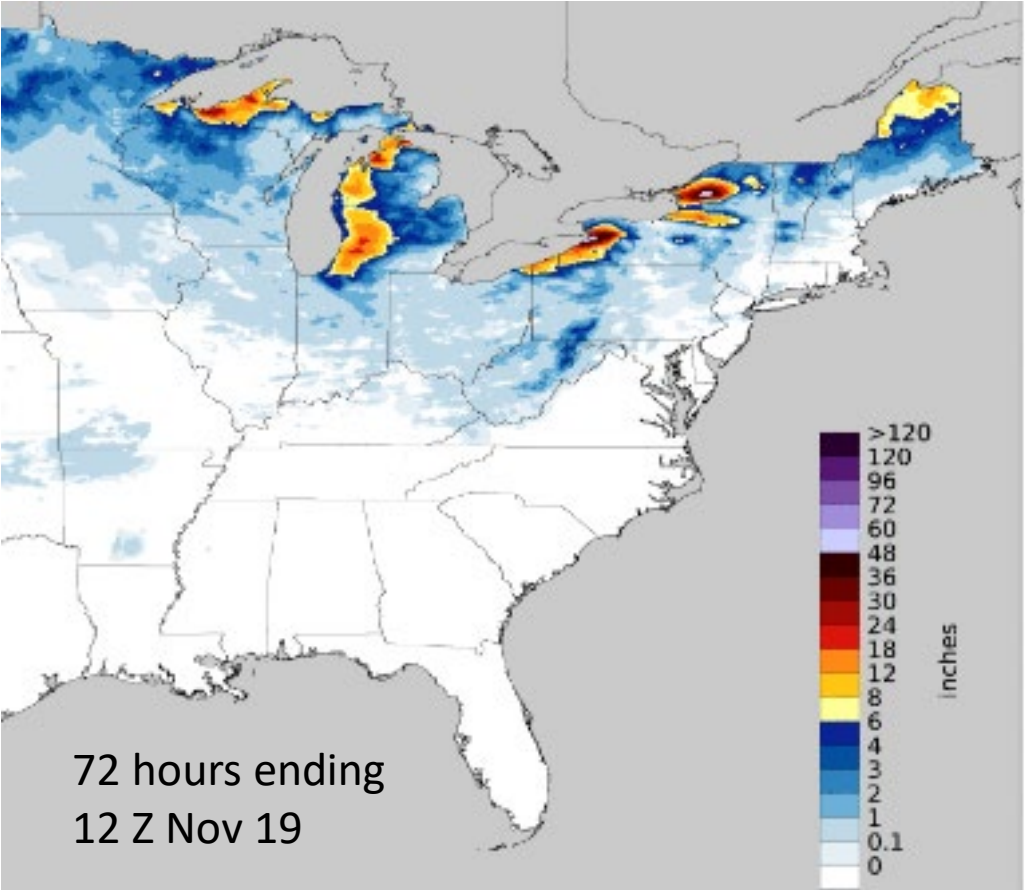
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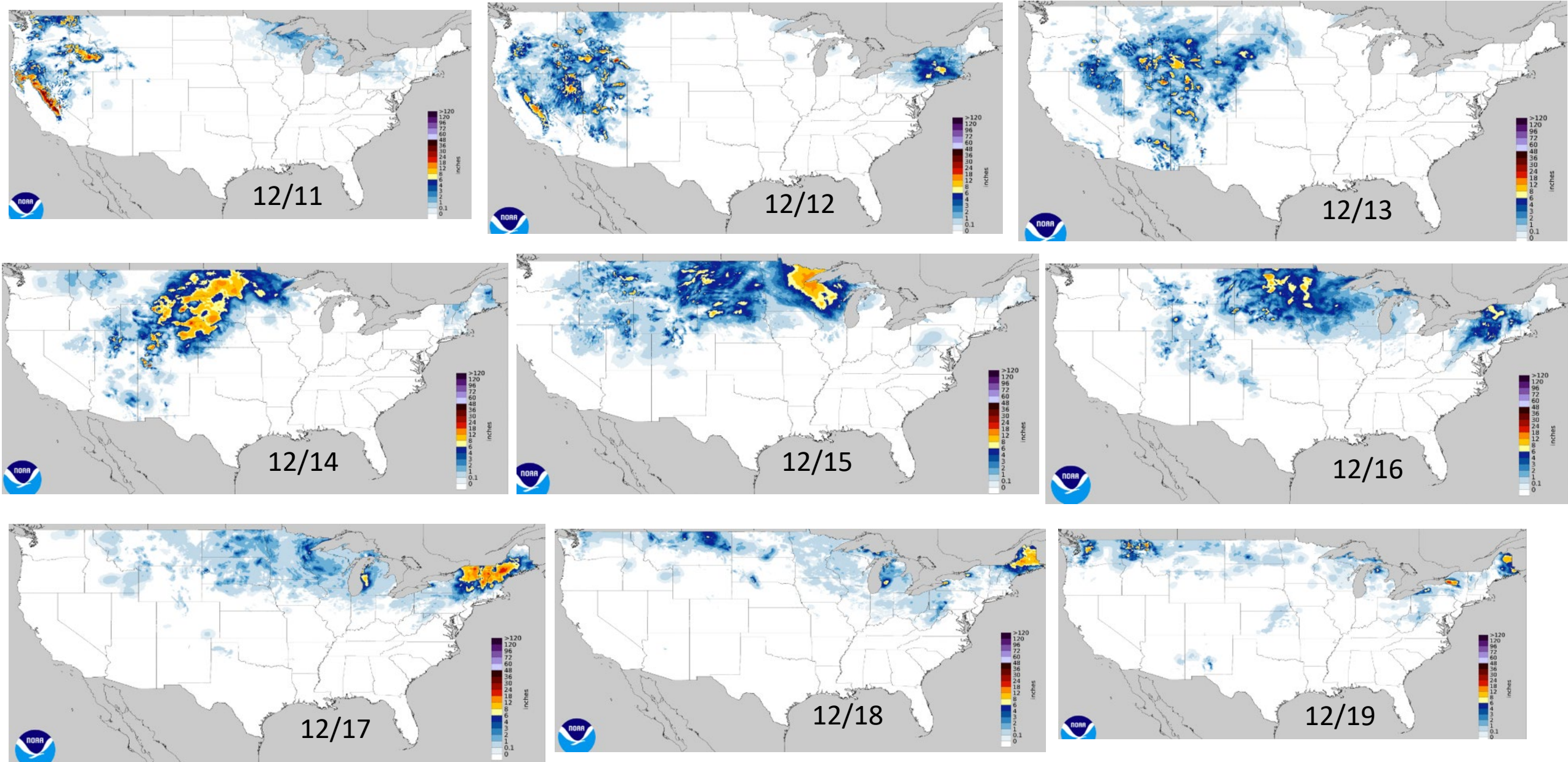
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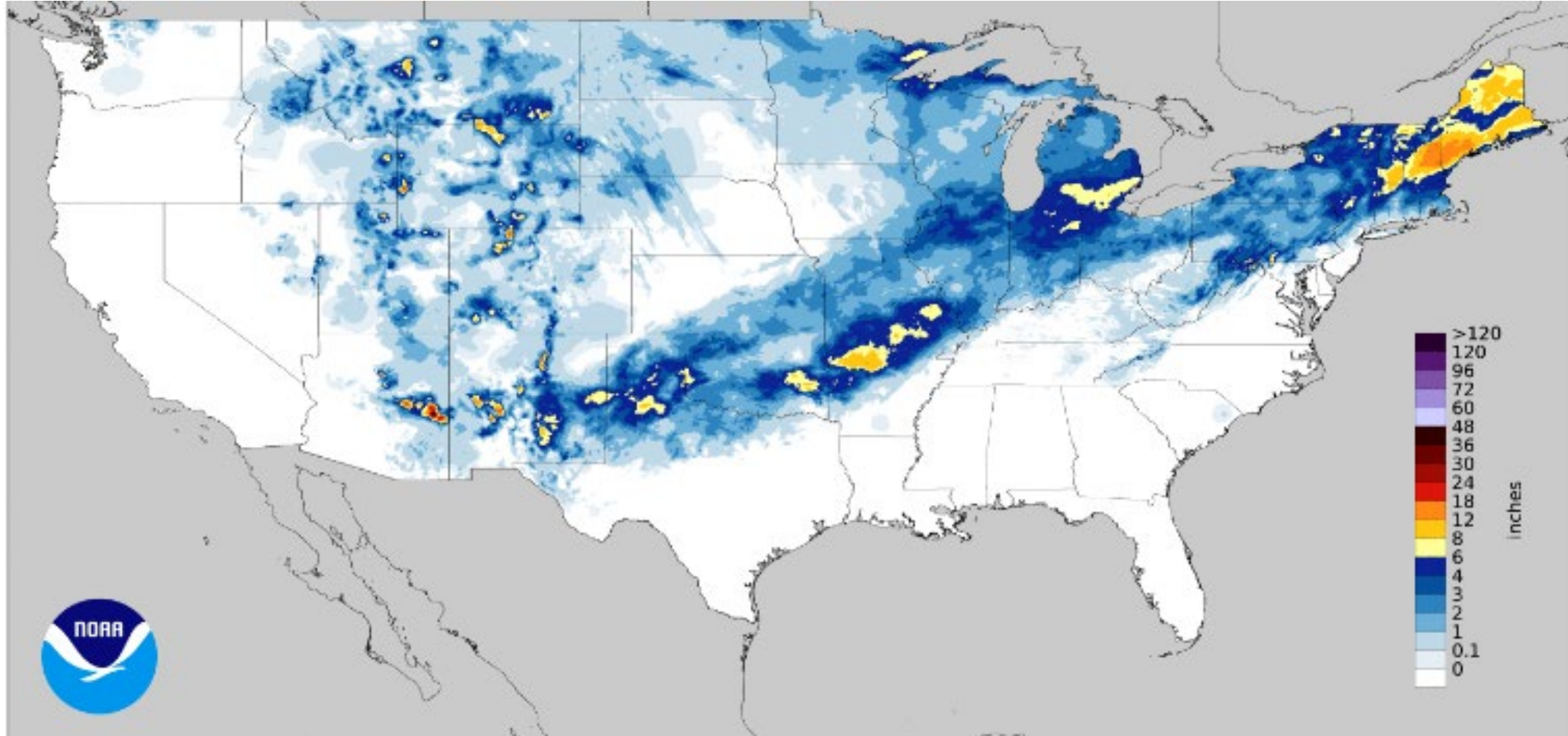
November & December Lake-effect Snow Blitzes



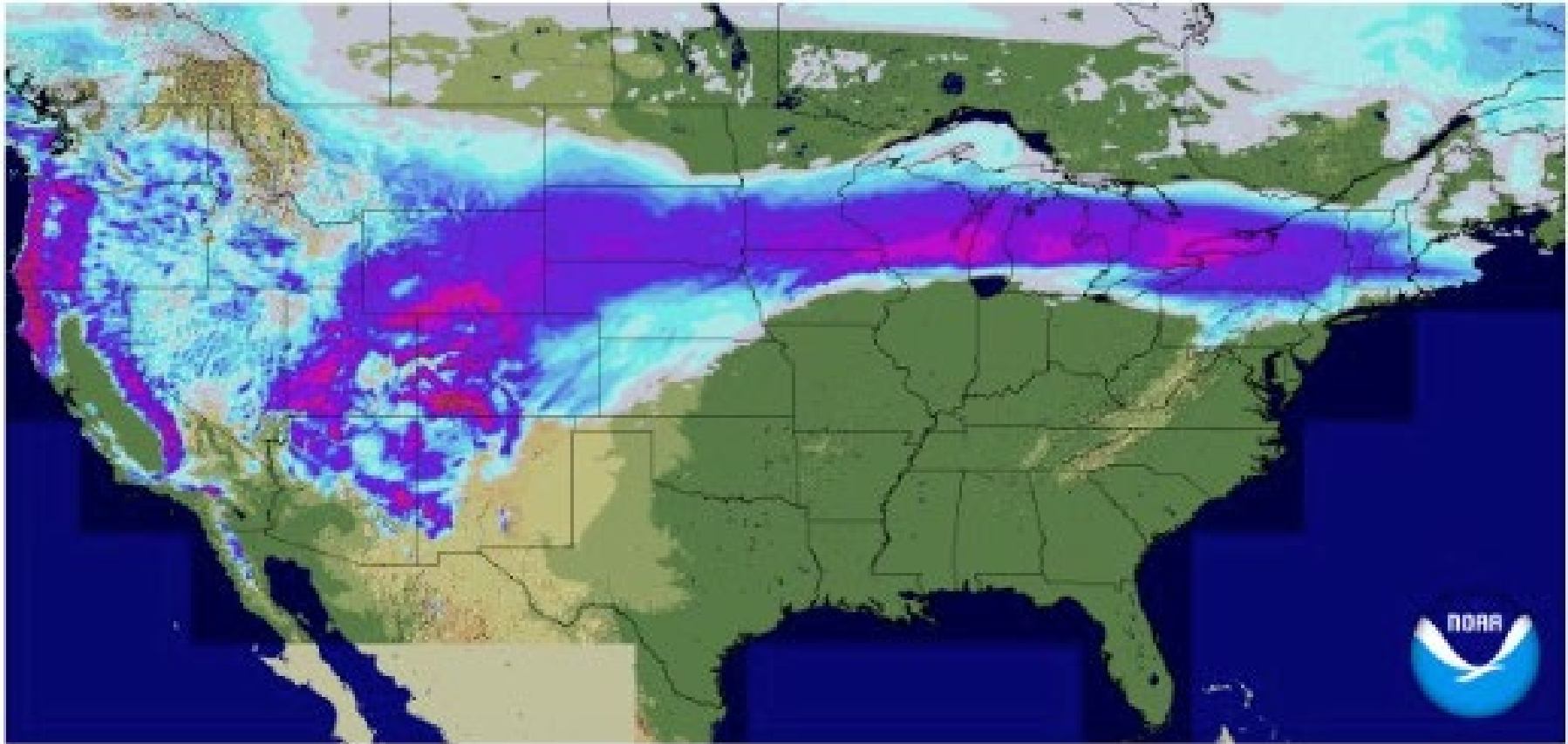
Typical 2022/23 Storm "Trek": 11 December (12Z) to 19 December (12Z) 2022



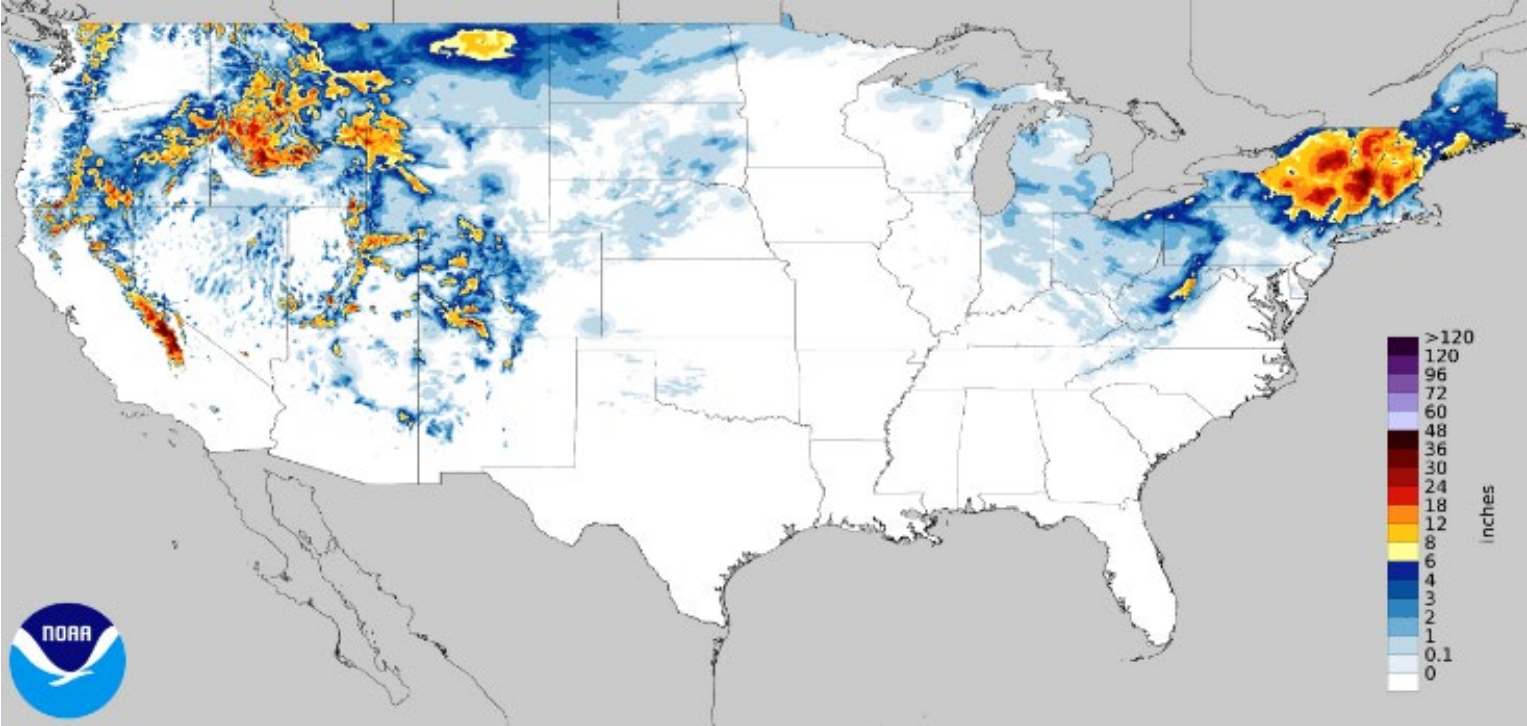
A Rare Southern(ish) 2022/23 Track: 72-hour snowfall as of 12Z on 26 January



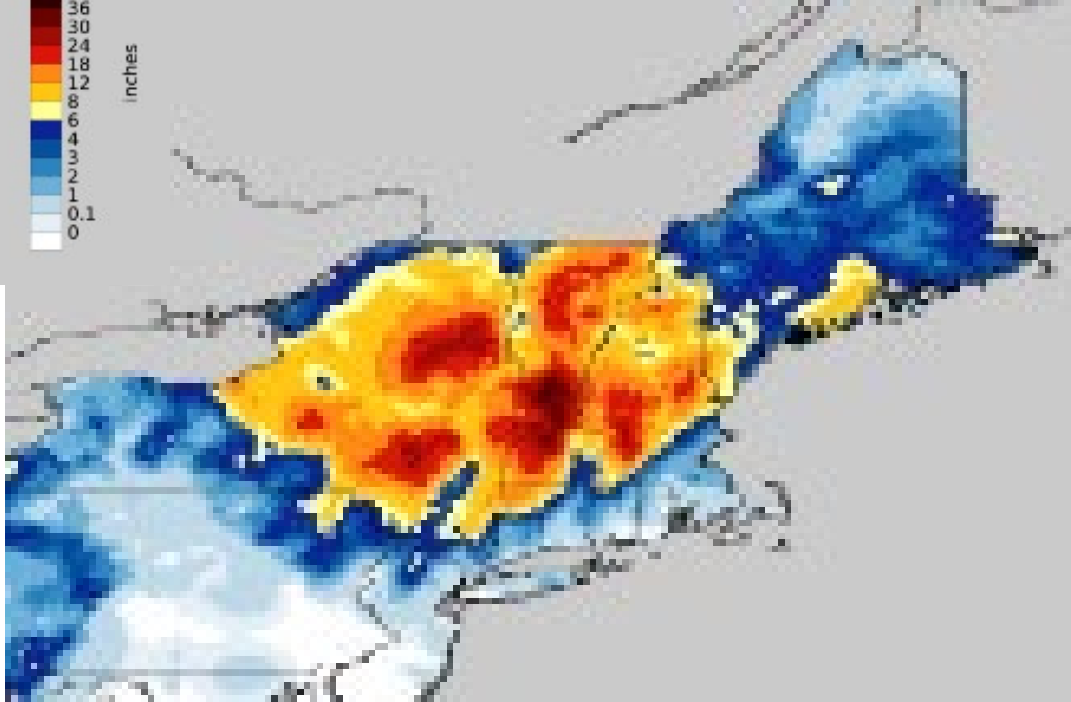
Fast Mover: 24-hour snow precipitation ending 6Z on 23 February



Bookends: Snowfall for the 72 hours ending 12Z on 16 March



Season's biggest hit in the Northeast

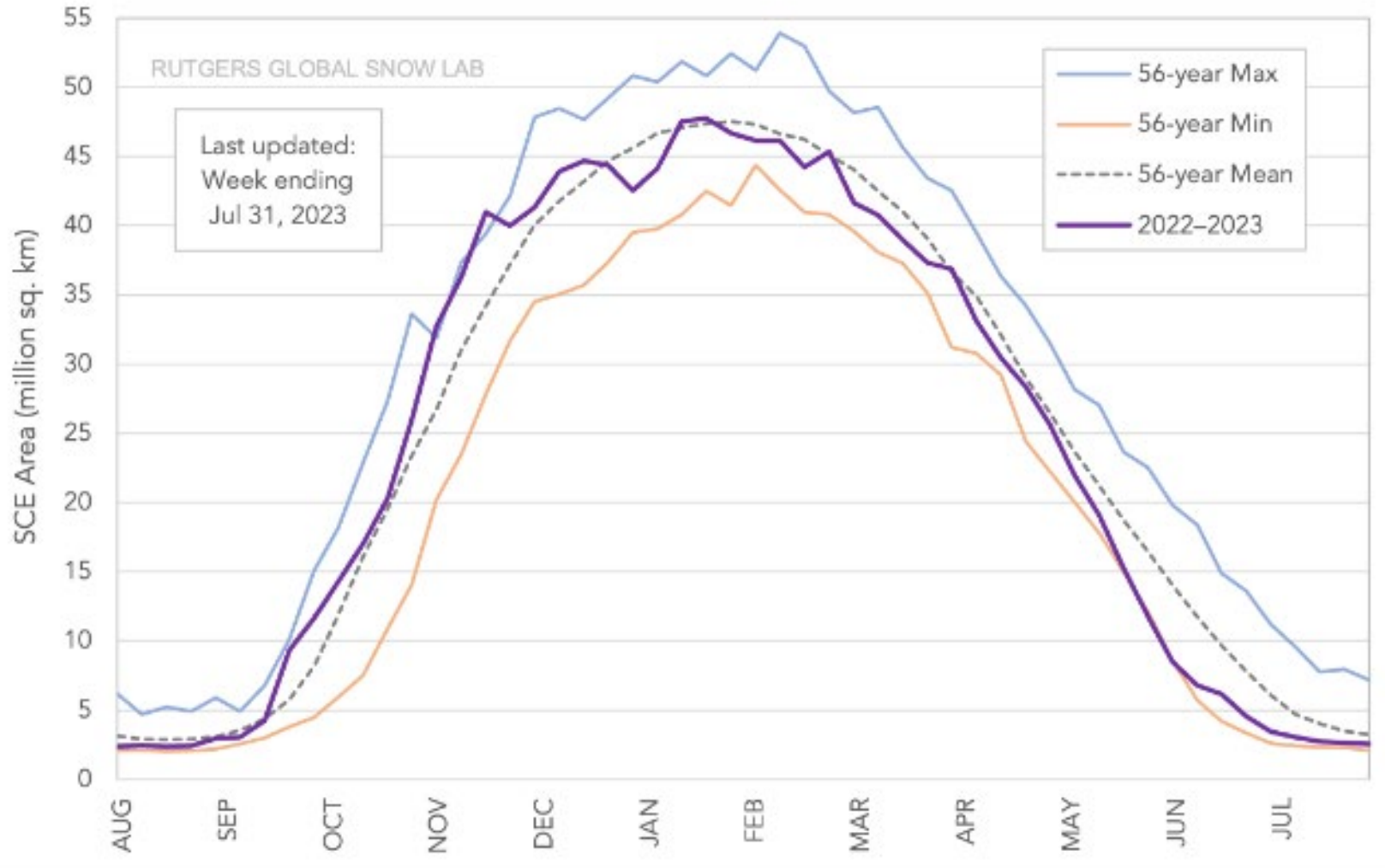




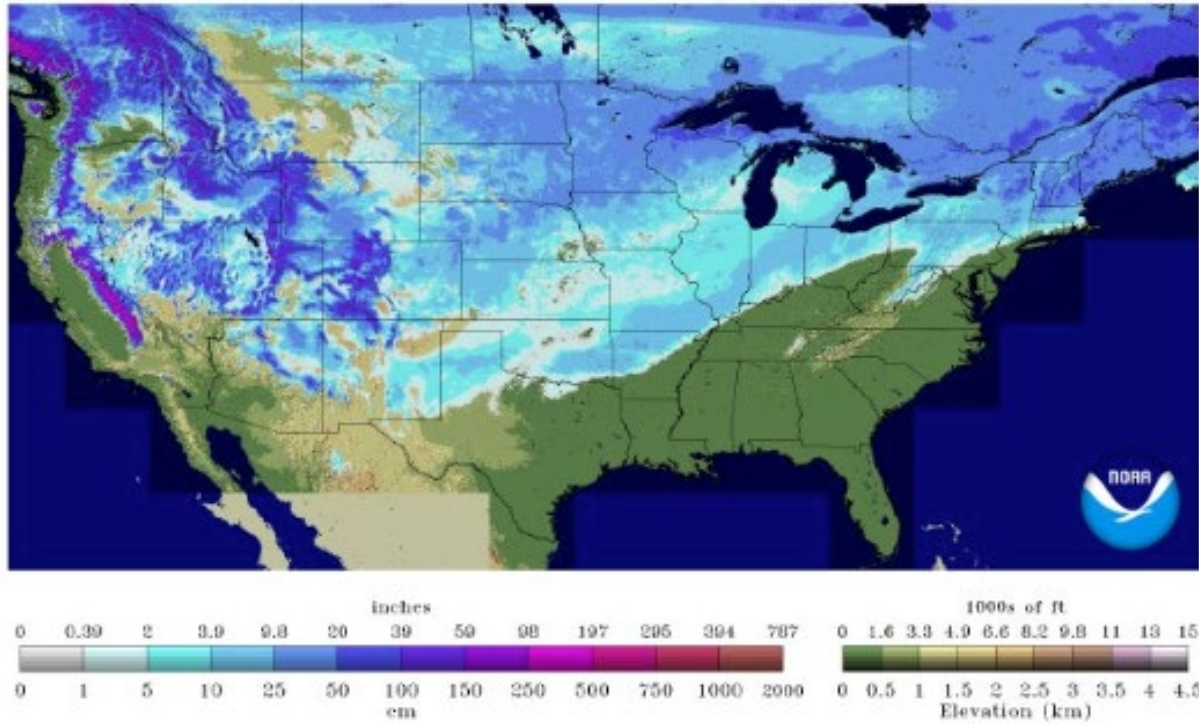
Snow Cover

Keeping an eye on seasonal snow cover extent

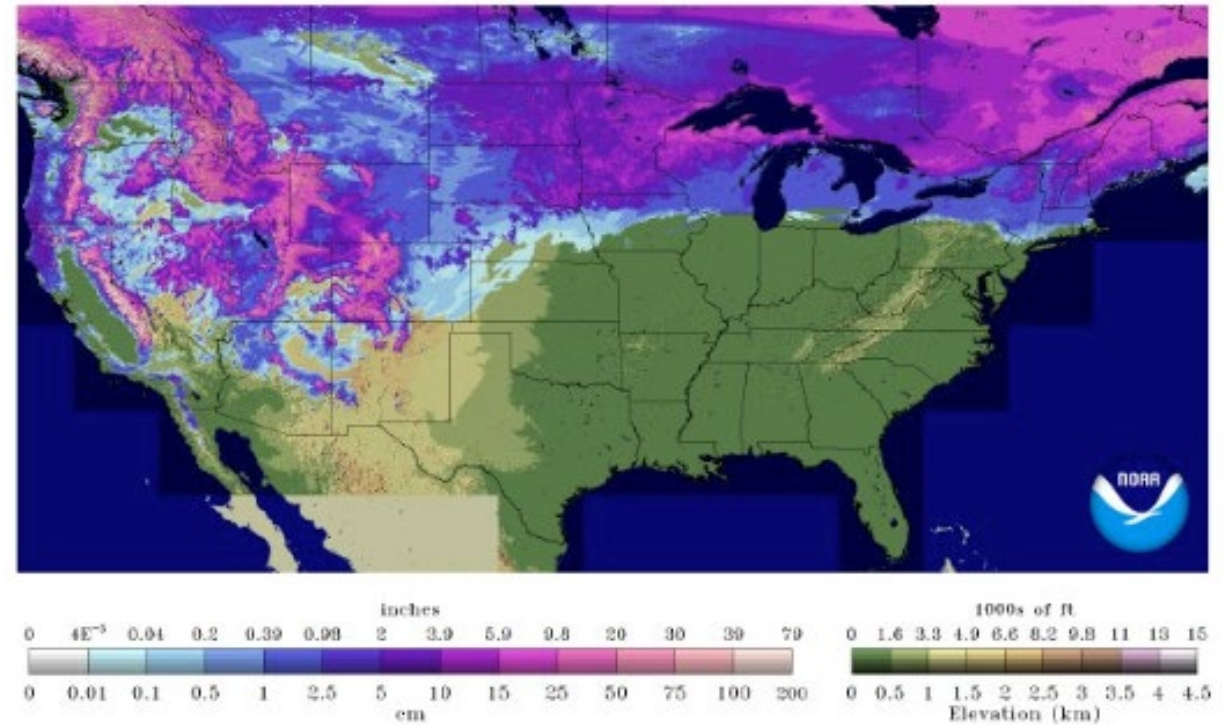
NOAA/Rutgers Weekly NH Snow Cover Extent CDR
Snow Years 1967–2022 vs. 2023



Nationwide Seasonal Maxesor close...

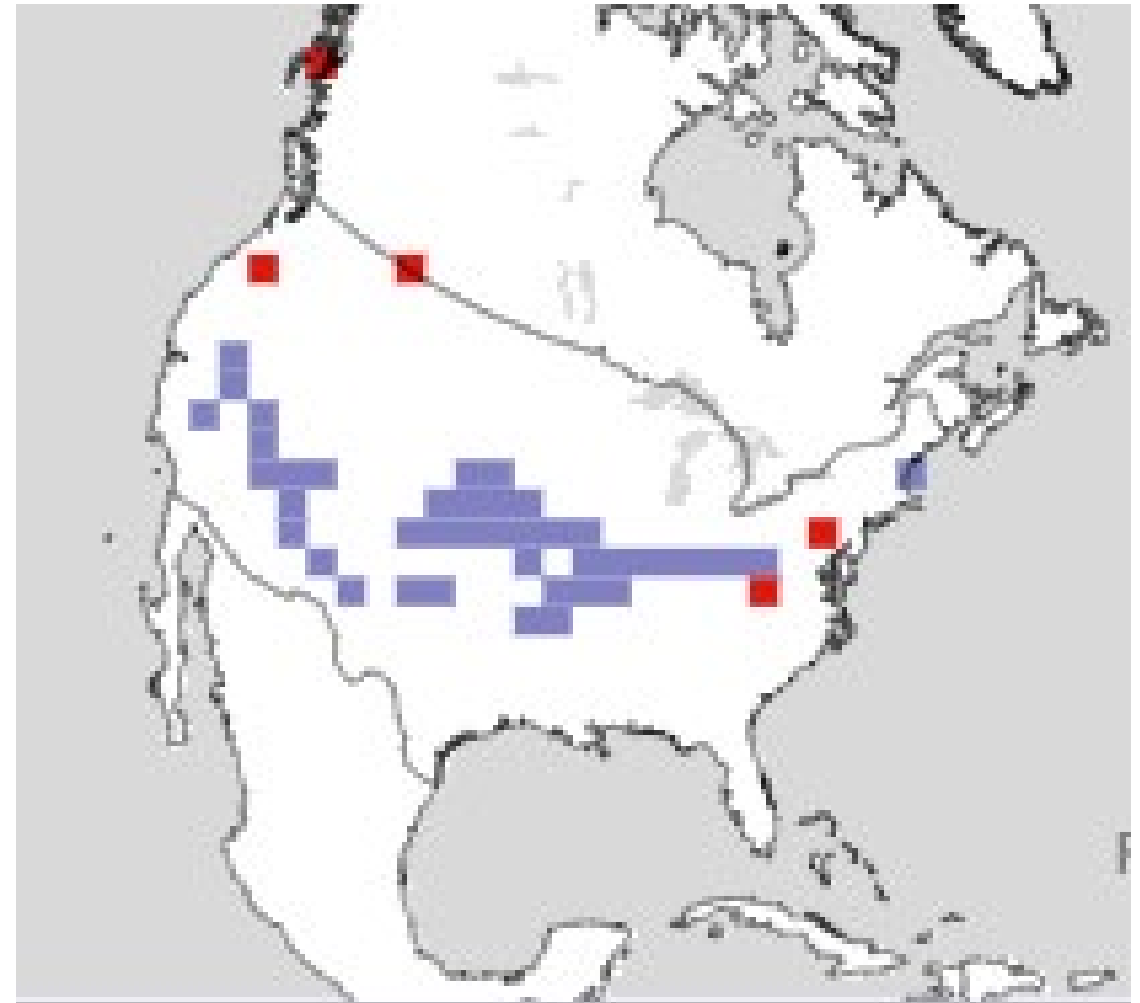
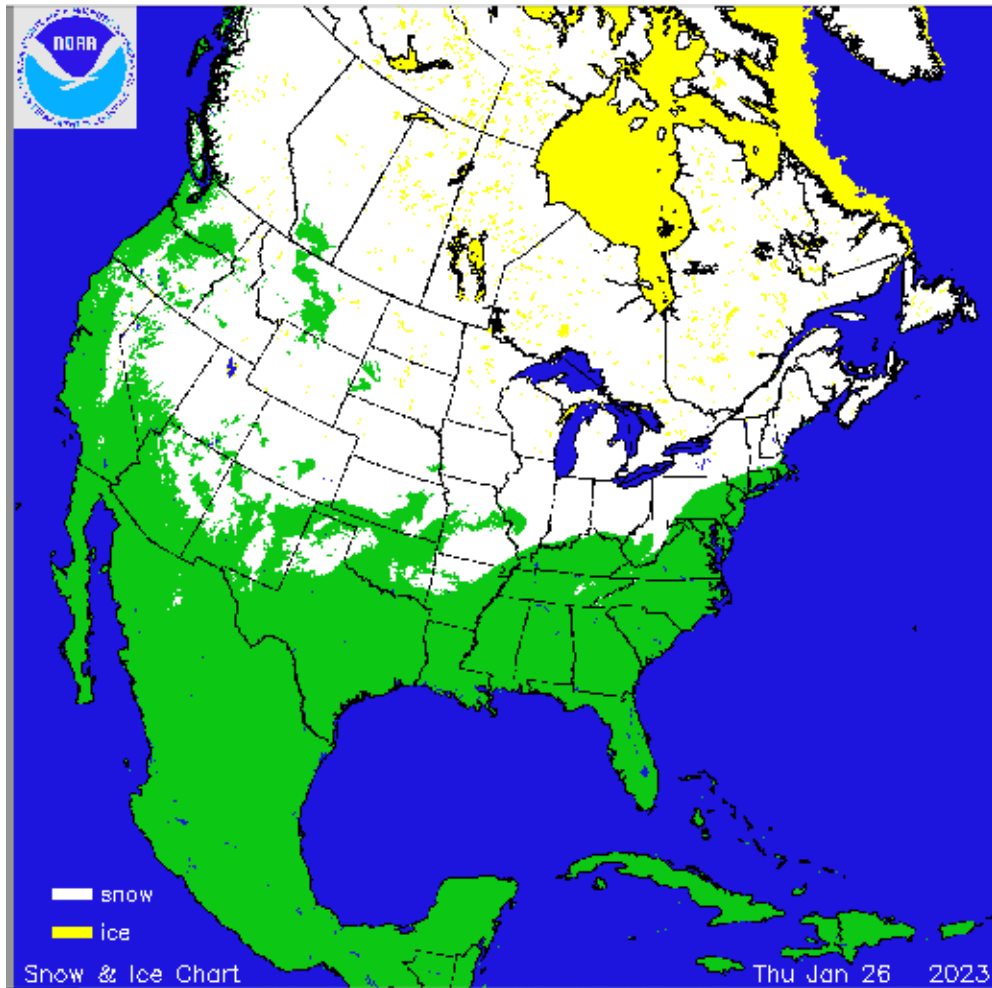


Snow depth: 26 January
60% lower 48 coverage



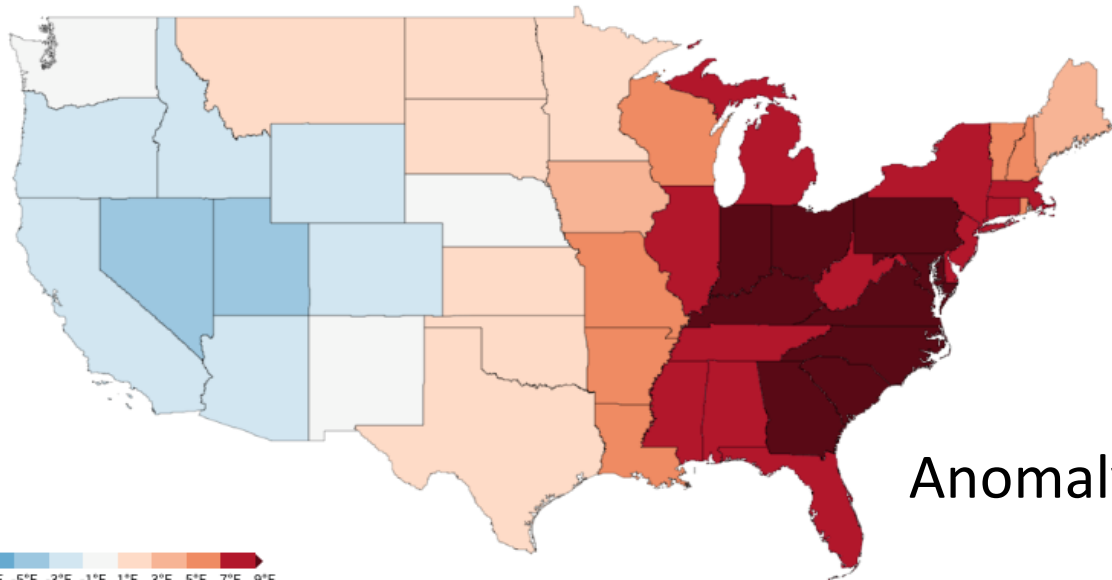
Snow water equivalent: 24 February

26 January IMS snow coverage and Rutgers departures

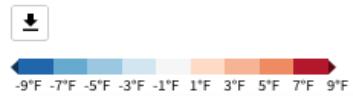


Statewide Average Temperature Anomaly

February 2023



Anomaly



Contiguous U.S. (Hover over a State)

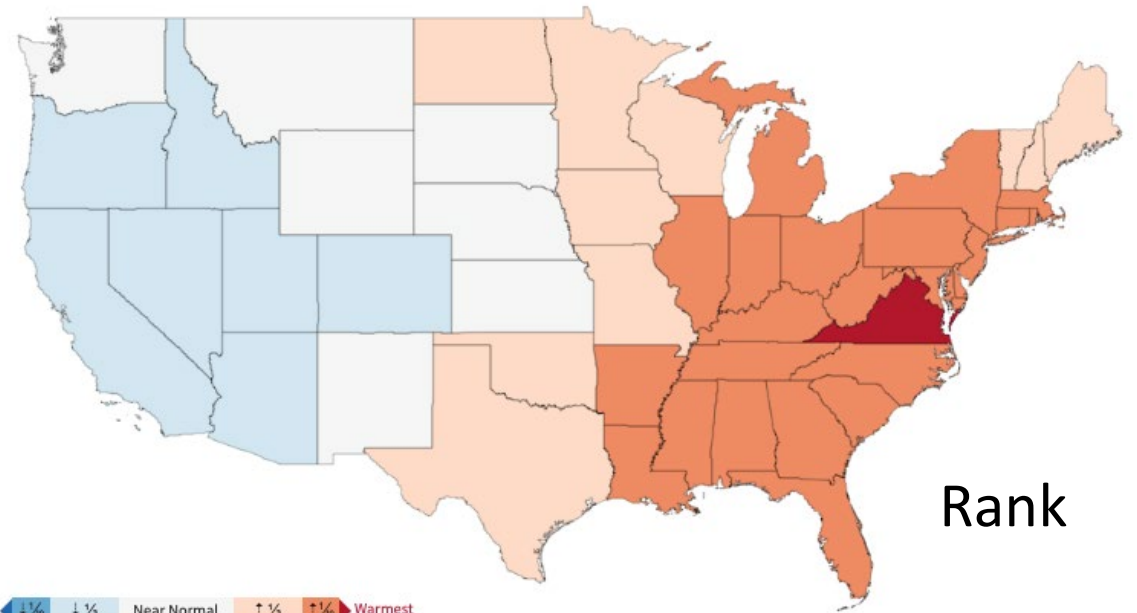
Temp: 36.46°F Rank: 28th Warmest Anomaly: 2.64°F Mean: 33.82°F



Temperature: February 2023

Statewide Average Temperature Rank (129 years)

February 2023



Rank

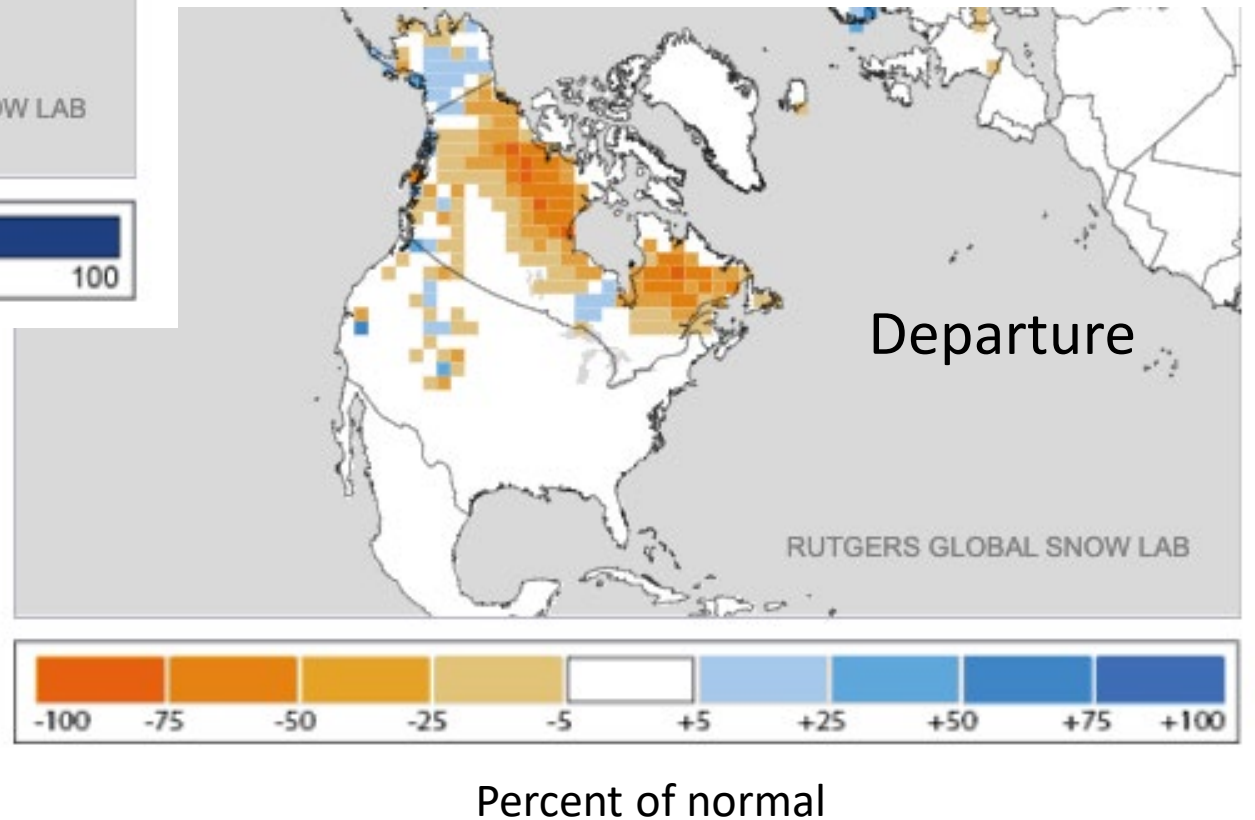
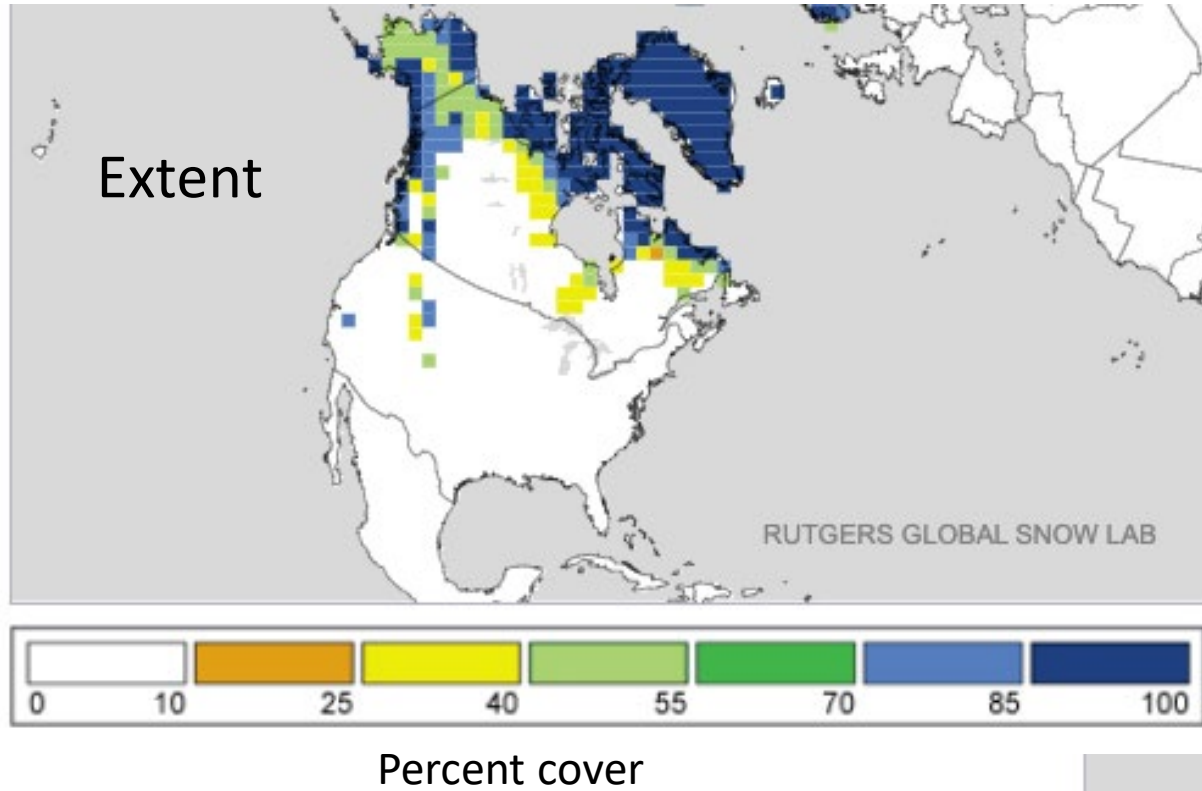


Contiguous U.S. (Hover over a State)

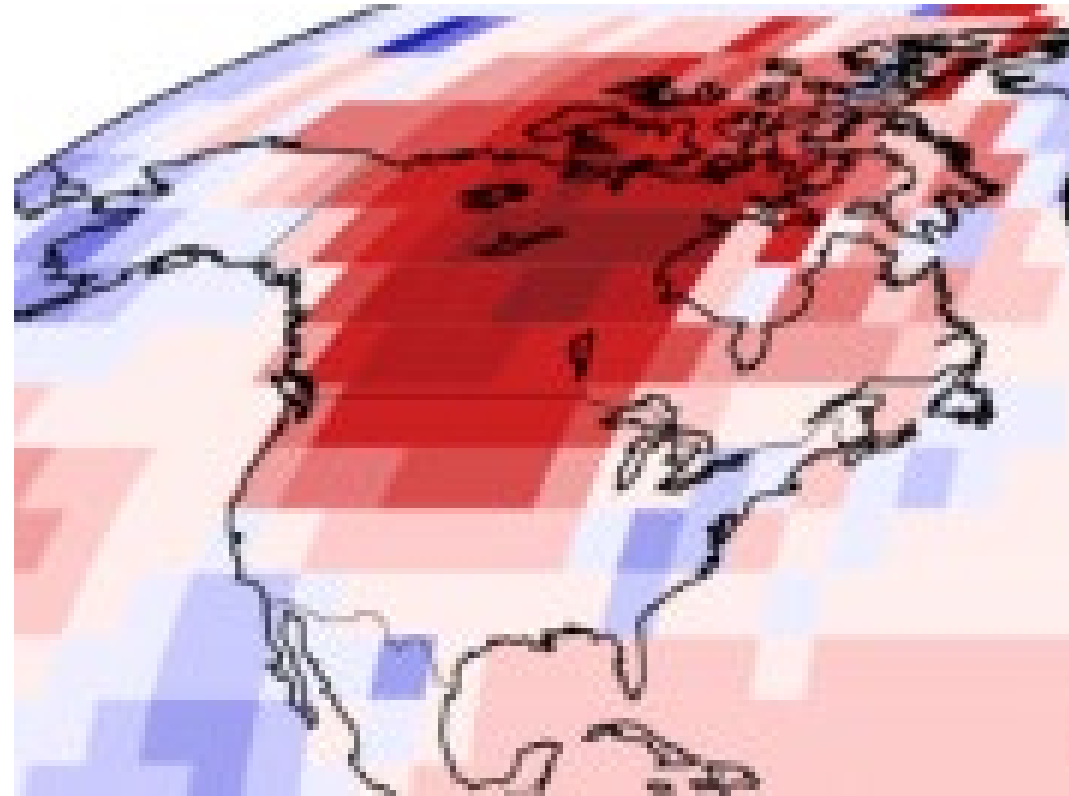
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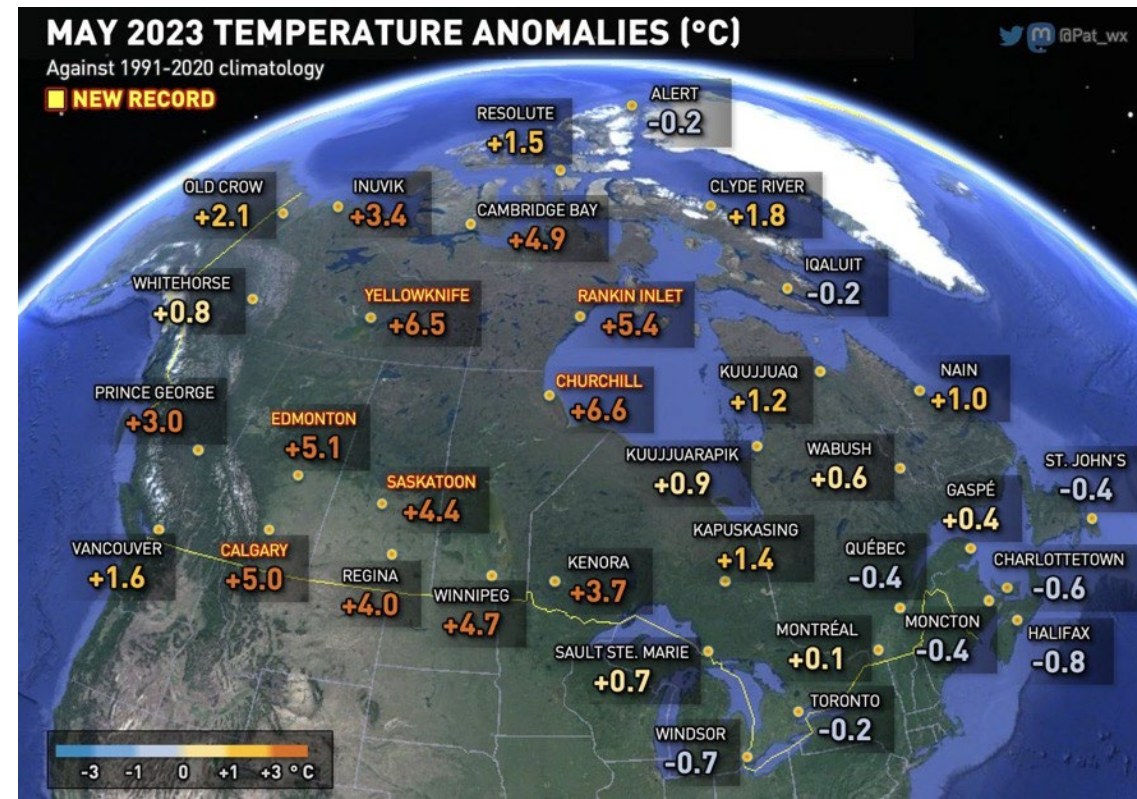
North America Snow Cover Extent and Departure: May 2023



Temperature Departure from Average: May 2023



Coincidence?





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NATIONAL PREPAREDNESS LEVEL

June 9 2023

NATIONAL FIRE SITUATION REPORT

222 Out of Control

86 Being Held

114 Under Control

ACTIVE FIRES MAP

Consequences

Canadian wildfire situation:
9 June 2023

Paterson, NJ: 7 June 2023 (early afternoon)



Thanks

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