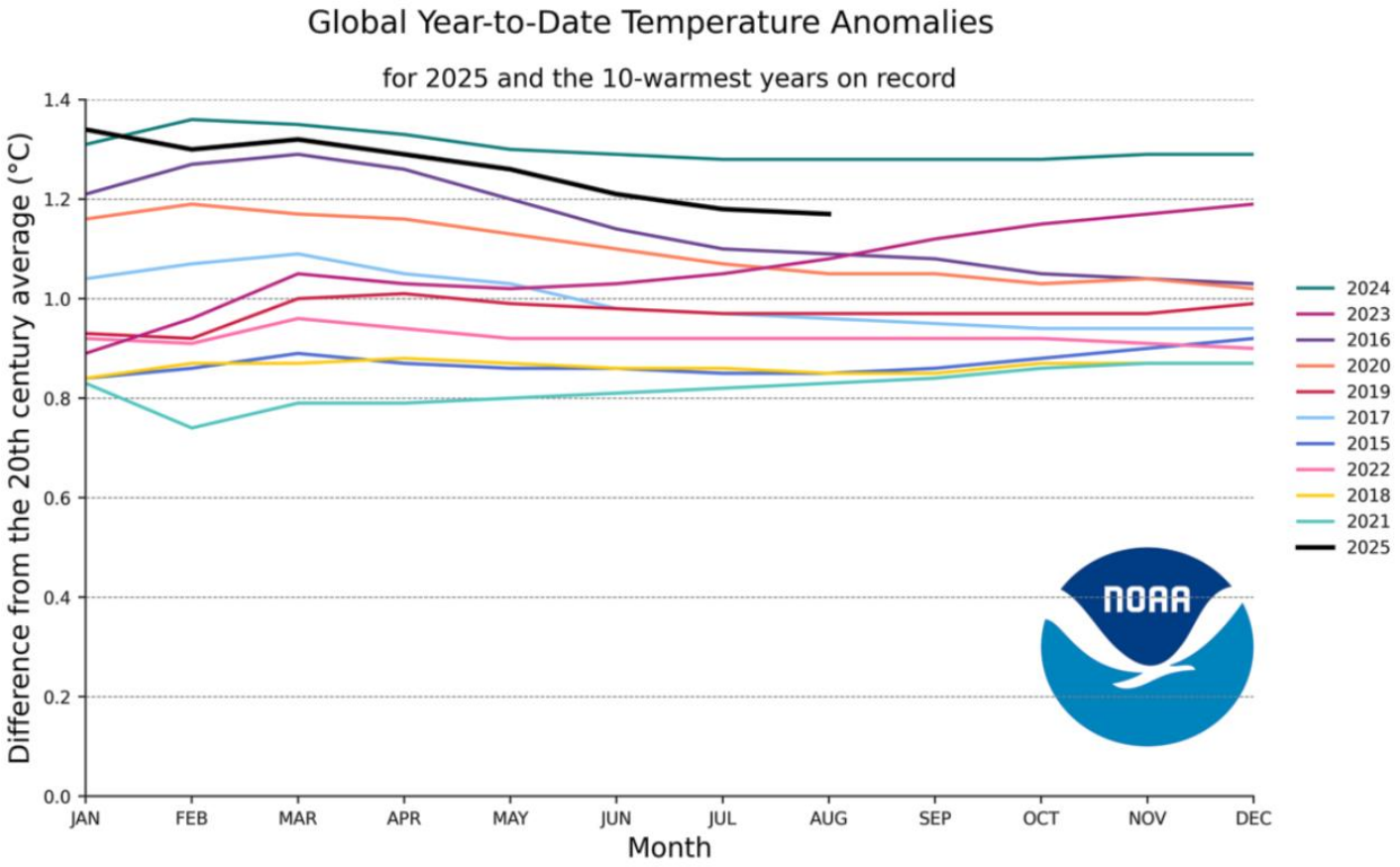
Winter Outlook: Temperature Swings, Precipitation Gaps, Ice Storm Threats, International Pattern Concerns

*"The 10 warmest years in the 143-year record have all occurred **since 2015**. The 2024 January–December 2024 global surface temperature ranked warmest in the 175-year record at 1.29°C (2.32°F) above the 20th century average" (NOAA).*



Chief Meteorologist Ms. Sunny Wescott
Critical Infrastructure and Emergency Response Operations

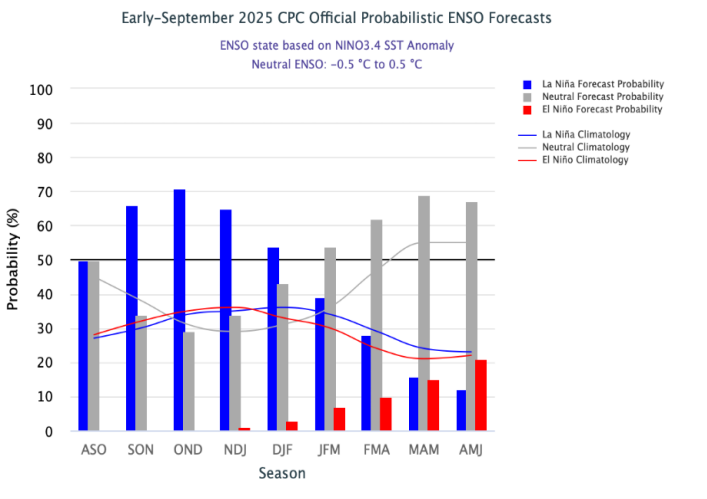
ENSO Index Dips into a Weak La Niña

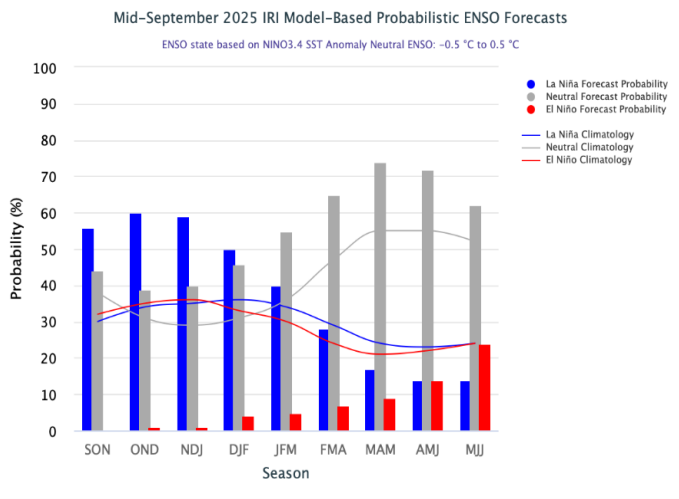
La Niña conditions emerged in September 2025, and the North American Multi-Model Ensemble favors La Niña to continue through winter.

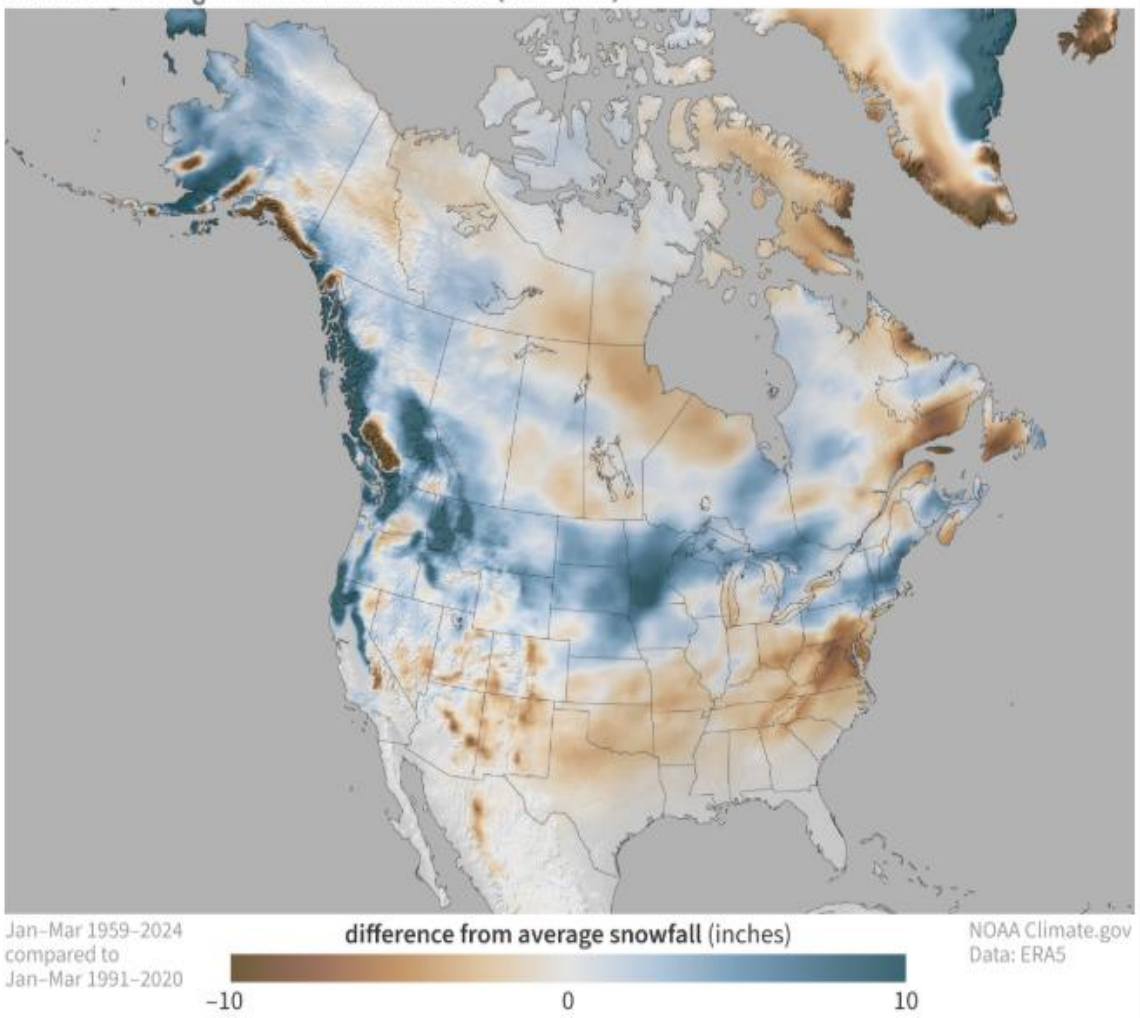
- Currently, La Niña is expected to remain weak. A weak La Niña would be less likely to result in conventional winter impacts, though predictable signals could still influence the forecast guidance.
- La Niña conditions are present and favored to persist through December 2025 - February 2026, with a transition to ENSO-neutral likely in January-March 2026 (55% chance).
- El Niño and La Niña events tend to develop during the period April-June, and they tend to reach their maximum strength during October – February.

Drought in the southwest is expected to worsen, further threatening water supplies for the Southern Colorado River Basin and subsequently impacting hydroelectric generation at the Hoover Dam and threatening significant sediment shifts.

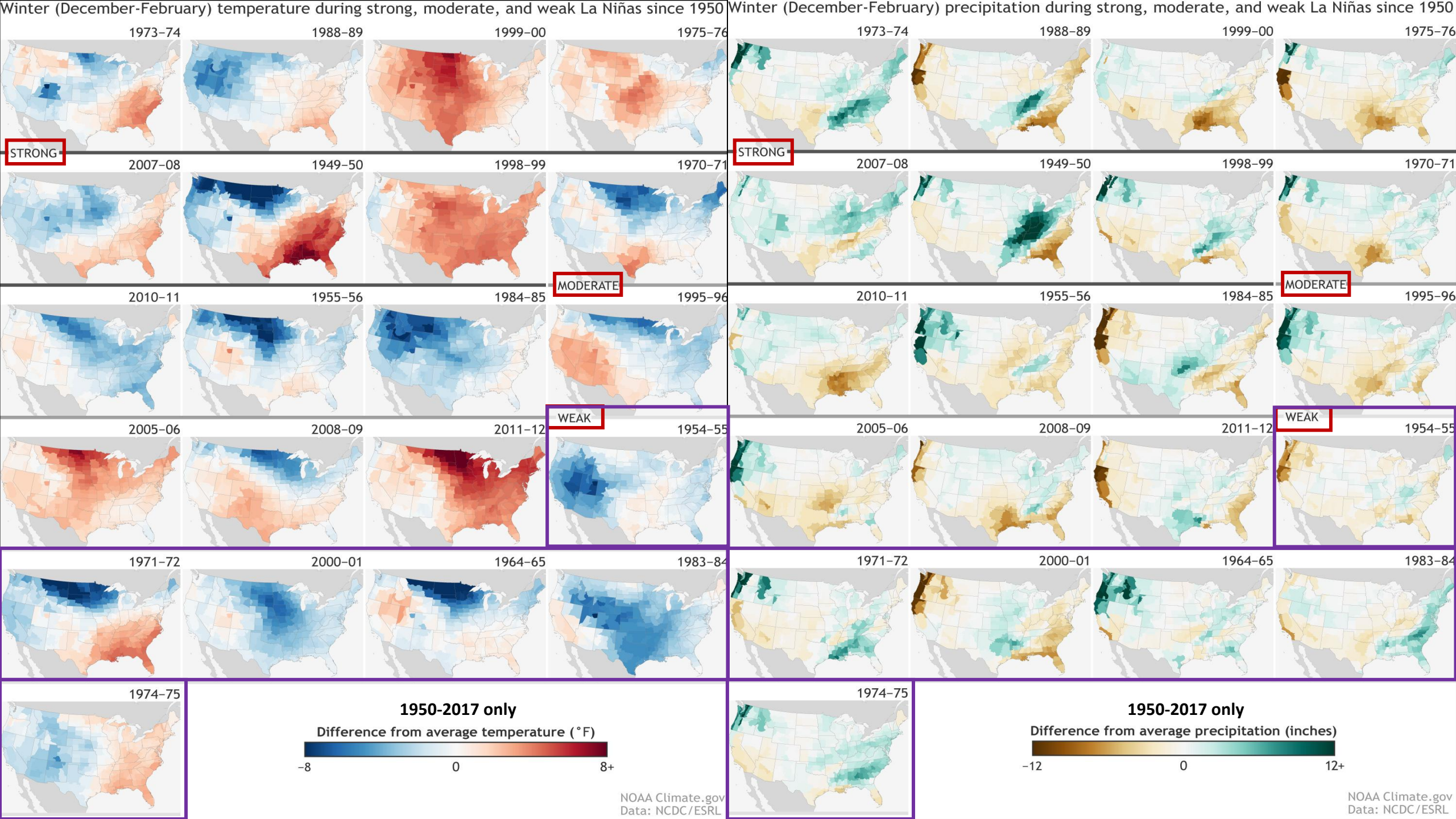
- Ice dams are likely to be a greater issue for smaller water ways or those suffering from drought due to this year's expected temperature swings.







The 2024-25 La Niña is likely to be weak. Even during weak La Niña events, increases in snowfall have been recorded in some parts of the region. This map shows January–March snowfall during all 22 La Niña winters from 1959 to 2024 compared to the average for all January–March periods from 1991 to 2020. The long-term trend in snowfall over this period has been removed, meaning the maps better show the influence of La Niña on its own. NOAA Climate.gov map, based on ERA5 reanalysis data and analysis by Michelle L'Heureux.


Winter (December-February) temperature during strong, moderate, and weak La Niñas since 1950
1973–74
1988–89
1999–00
1975–76
STRONG
2007–08
1949–50
1998–99
1970–71
MODERATE
2010–11
1955–56
1984–85
1995–96
WEAK
2005–06
2008–09
2011–12
1954–55
1971–72
2000–01
1964–65
1983–84
1974–75
1950-2017 only
Difference from average temperature (°F)
−8
0
8+
NOAA Climate.gov
Data: NCDC/ESRL
Winter (December-February) precipitation during strong, moderate, and weak La Niñas since 1950
1973–74
1988–89
1999–00
1975–76
STRONG
2007–08
1949–50
1998–99
1970–71
MODERATE
2010–11
1955–56
1984–85
1995–96
WEAK
2005–06
2008–09
2011–12
1954–55
1971–72
2000–01
1964–65
1983–84
1974–75
1950-2017 only
Difference from average precipitation (inches)
−12
0
12+
NOAA Climate.gov
Data: NCDC/ESRL

La Niña and the Winter Outlook for US – Shifts in Trends

Since the early 1990s, La Niña (weak, moderate, & strong) impacts on local winter temperatures have changed. We are seeing more frequent warm La Niña winters (5 out of the 6 warmest third of winters during La Niña have occurred since 1990), but these winters have also become more variable too. From 1949-1990 (12 events), 6 were among the coldest third, 5 were near-normal, & 1 was among the warmest third. Since 1991 (13 events), 5 were among the warmest third, 5 were among the coldest third, & 3 were near-normal.

- From 1949 through 2001, weak La Niña's (sea surface temperatures in the ENSO 3.4 region of -0.5 to -0.9°C) were either among the coldest third (4 events) or near normal (3 events). Since then, 3 events were among the warmest third, 1 event was near normal, and 1 event was among the coldest third.

Since the early 1990s, La Niña (weak, moderate, & strong) impacts on local winter precipitation have changed. We have been seeing more wetter La Niña winters and fewer drier La Niña winters. From 1949-1990 (12 total), 6 were among the driest third, 3 were among wettest third, & 3 were near normal. Since 1991 (13 events), 6 were among the wettest third, 4 were near normal, & 3 were among the driest third.

According to the forecast, the North Central states (Colorado, Iowa, Kansas, Missouri, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming), along with the Great Lakes region, could experience a classic winter wonderland with very cold and snowy conditions.

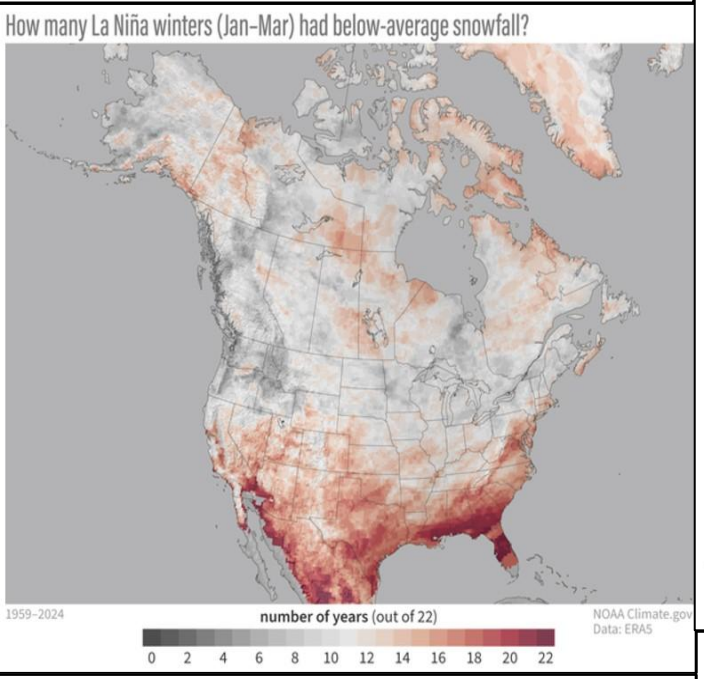
That said, New England, along with the Northern Plains, is expected to bear the brunt of the season's coldest temperatures.

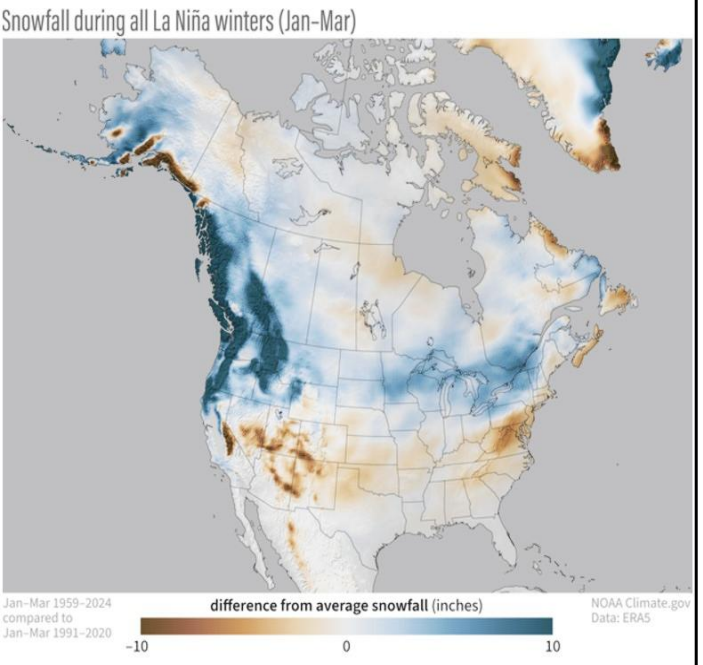
The Pacific Northwest mountains are also expected to get impressive snowfall totals, while winter in the Southeast will see average temperatures with many wet periods. A wet winter is also predicted in the Southwest with near-average temperatures.

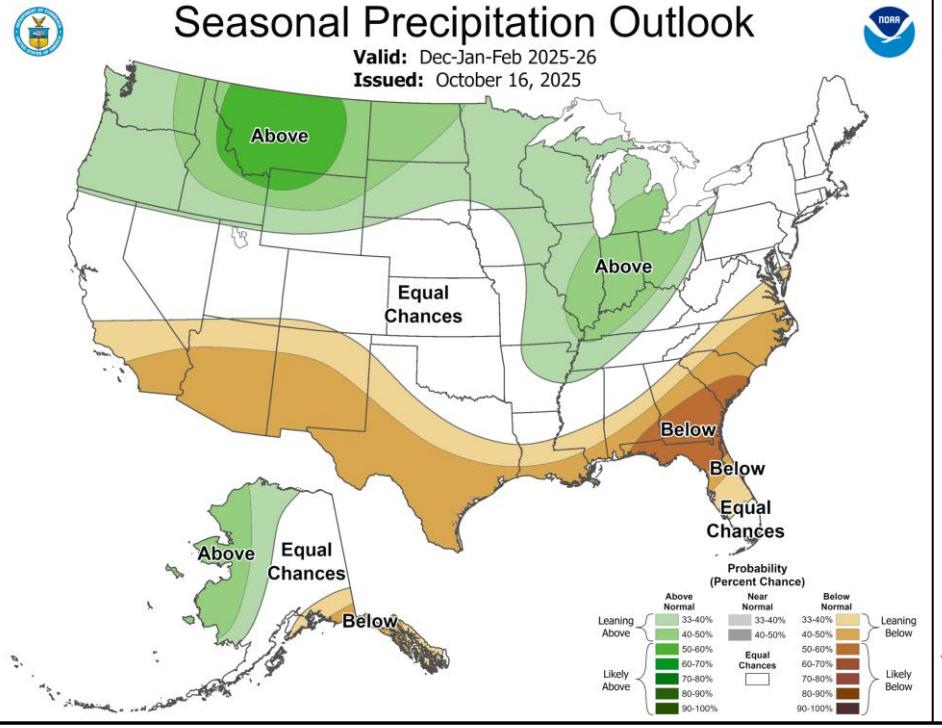
Texas and the Southern Plains (which includes western Kansas, Oklahoma, and portions of Nebraska and New Mexico) are predicted to have a wetter-than-average winter with periodic cold snaps.

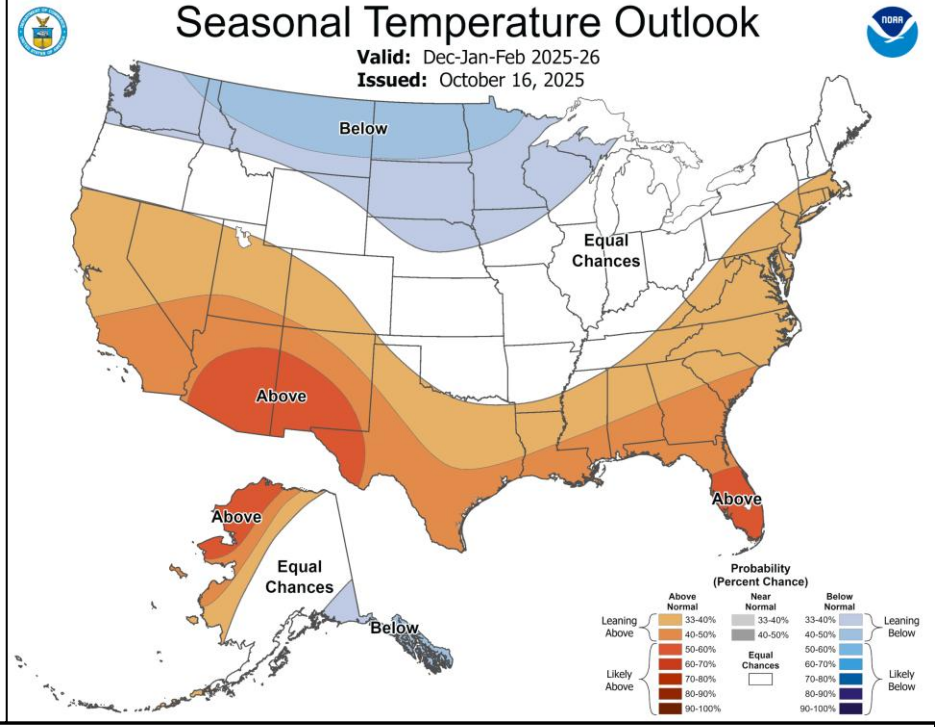
While snow will be limited, the region is expected to face several cold rain events and occasional freezing precipitation, particularly in the northern areas.

NOAA Season Outlook









Precipitation deficits over the past few weeks has led to the development of well-below-average soil moisture and a flash drought from the Mid-Mississippi Valley into the Ohio River Valley.

- With drier-than-normal conditions potentially persisting in these areas into October, this pushes the odds towards warmer than normal conditions across the eastern US in October.
- A weak La Niña winter can result in greater sub-seasonal variability, usually significant cold air plunges followed by thaws, and some basins missing their seasonal precipitation such as the Ohio River Valley and the Southern Rockies whereas the Cascades to New England latitude and northward would see above-average snowfall in waves.

When a snowpack melts too fast, it can cause destructive floods, landslides, and debris flows.

- This rapid runoff can also lead to a drier summer environment, increasing the risk of wildfires, and can negatively impact long-term water supplies as streams and reservoirs don't have a sustained flow throughout the summer.

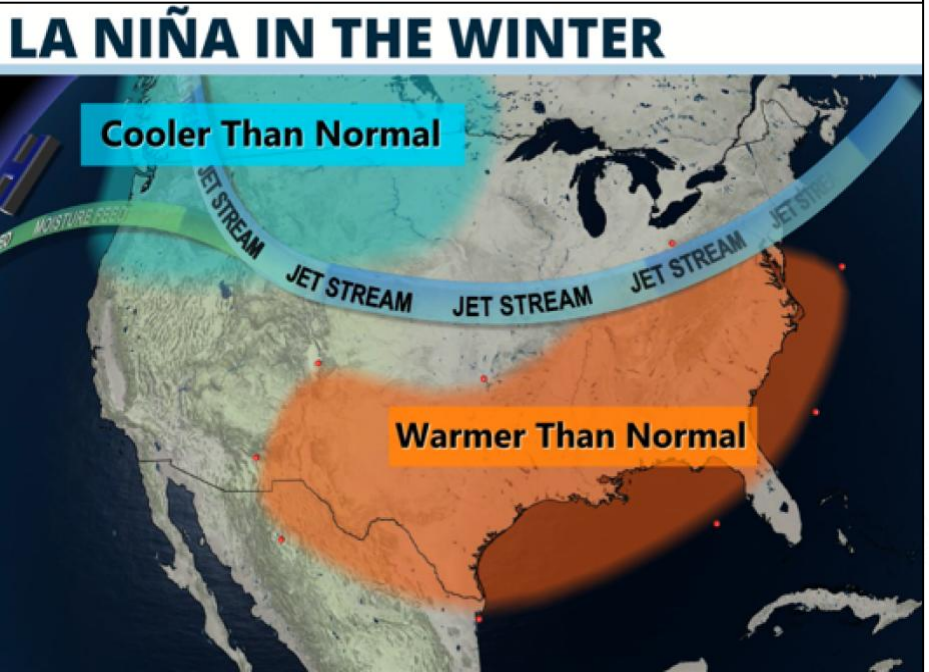
Winter Snowfall Outlooks

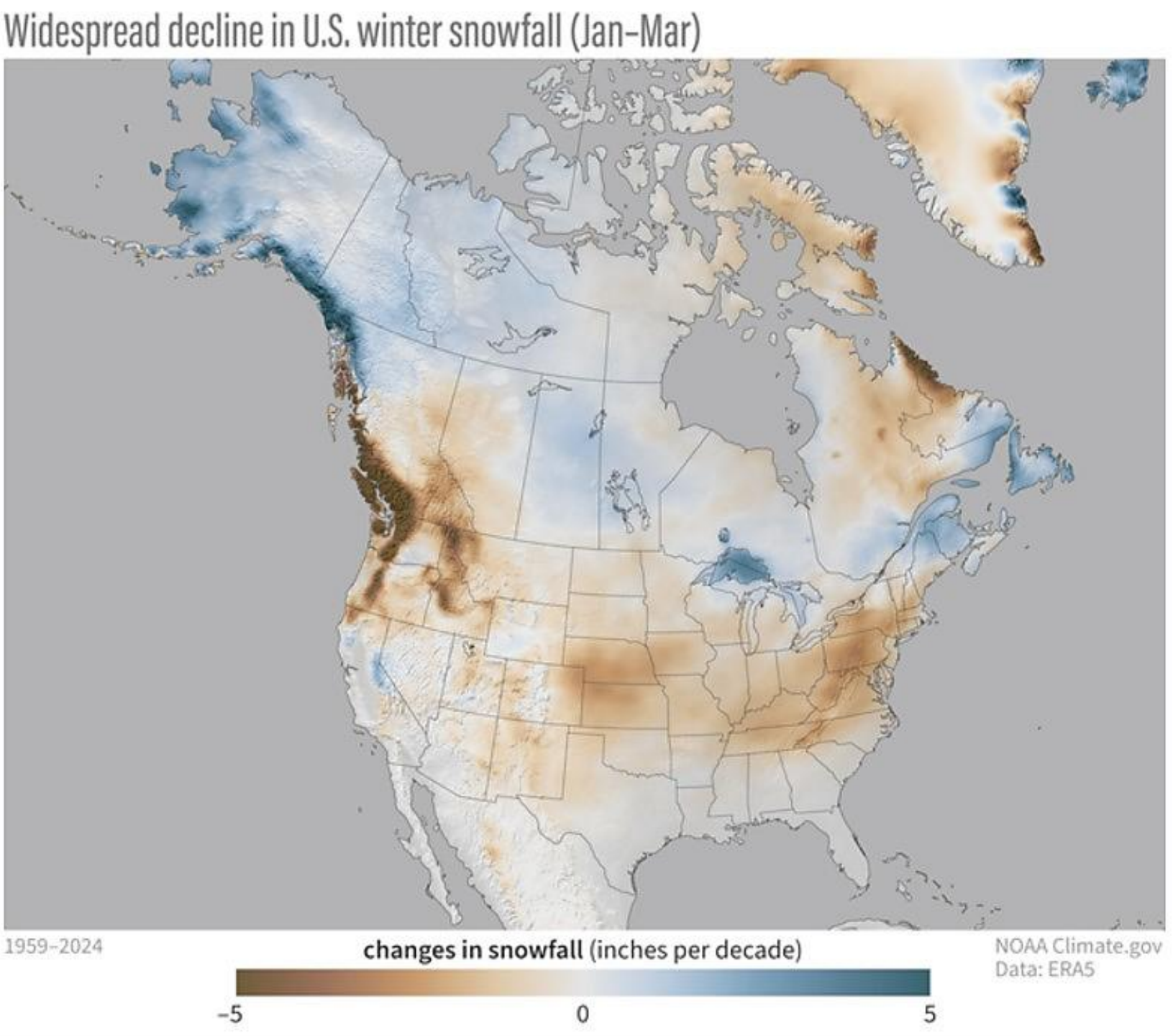
Across many regions, winter is the fastest-warming season.

- La Niña tends to favor snowfall across the northwestern US, where states like Washington, Oregon, and Idaho have, seen higher-than-average snowfall during these years.
- The opposite is true for Southern California, Arizona, and New Mexico.

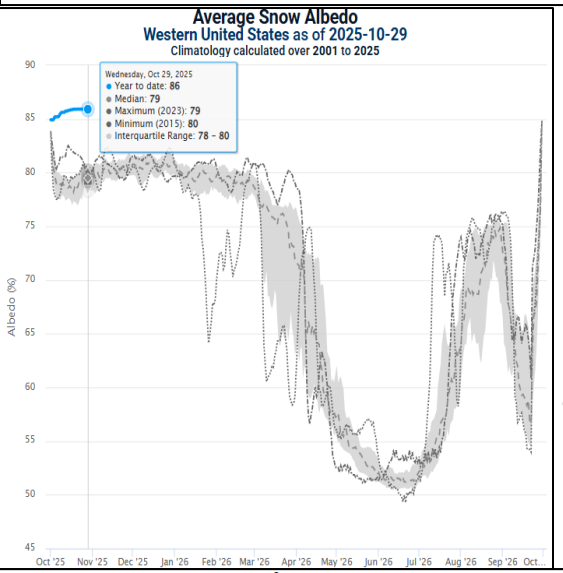
The 2009 Ice Storm was during a La Nina Winter as was the winter of 2021-2022.

Nor'easter season runs from October to April with an average of 10-11 events per year (1940 to 2025). Small Nor'easters can range up to 30-40 events.

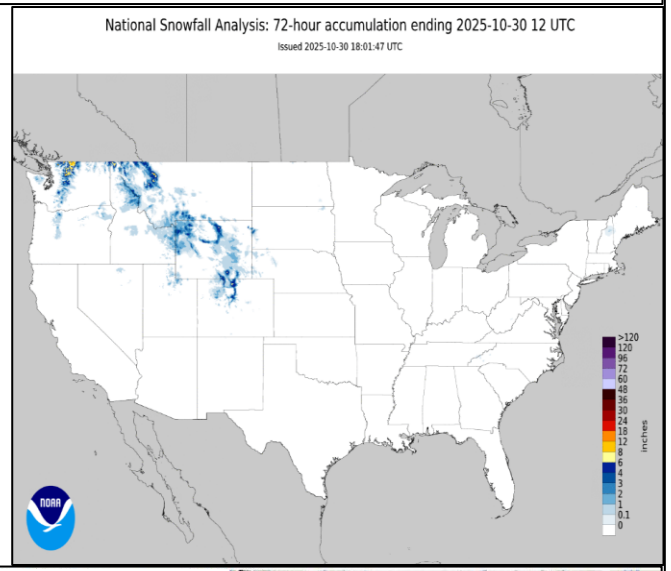


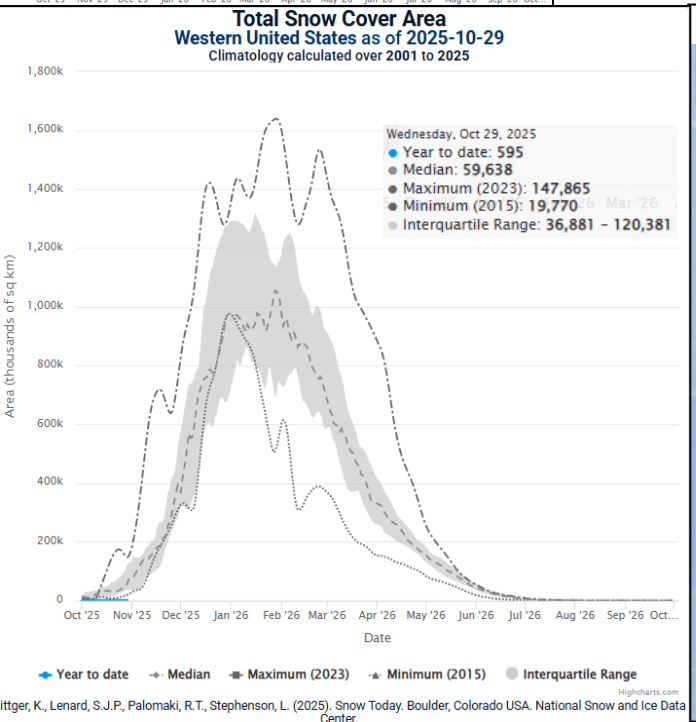


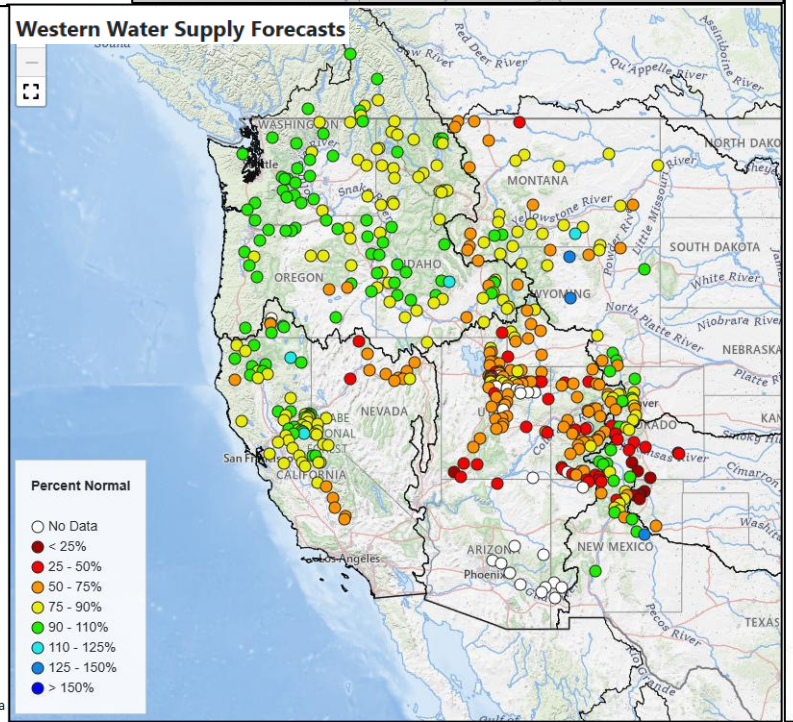
Current Snow Levels

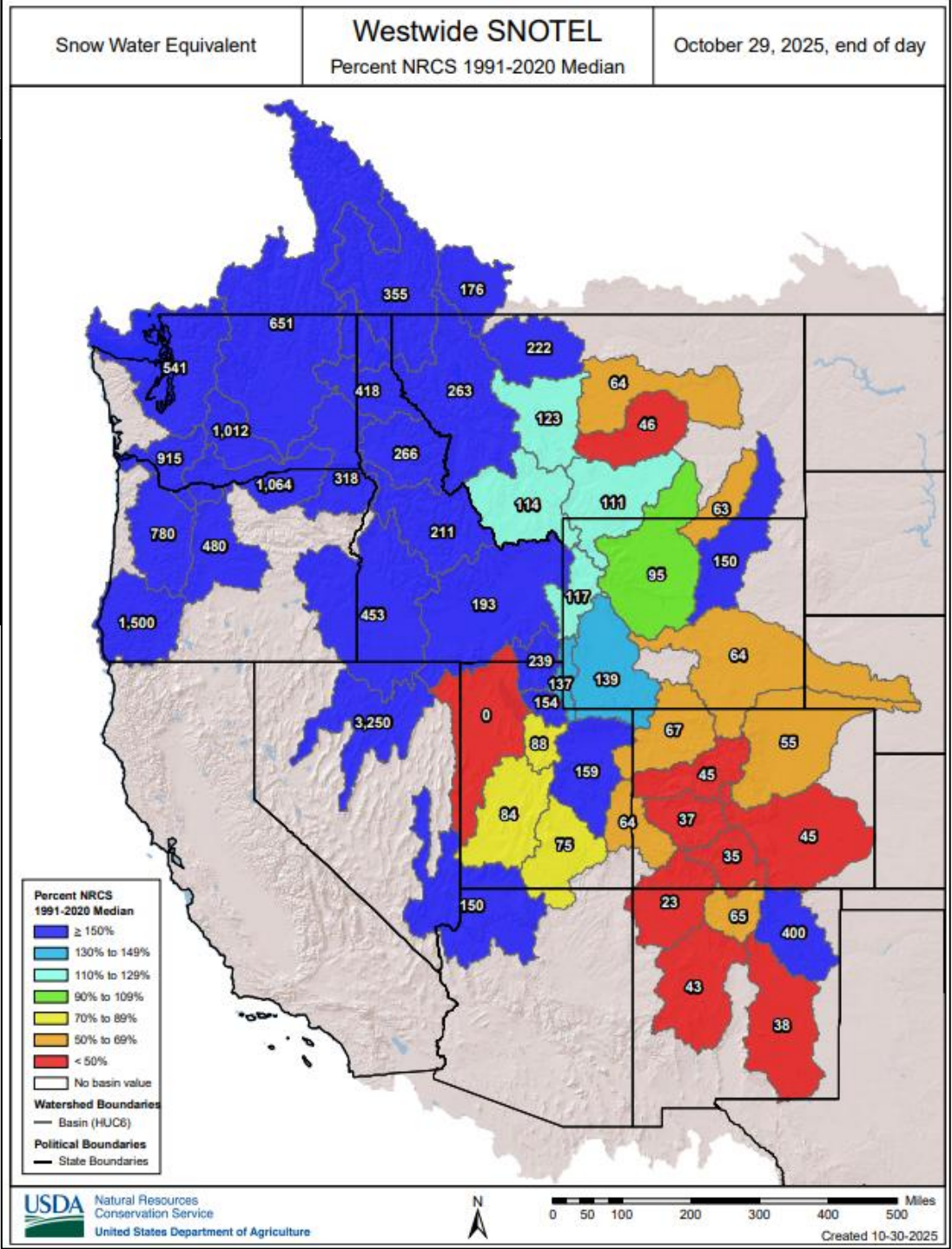


All the snow products for current conditions you could want to track impacts and runoff/spring allocations for water supply risks in 25-26 out West.

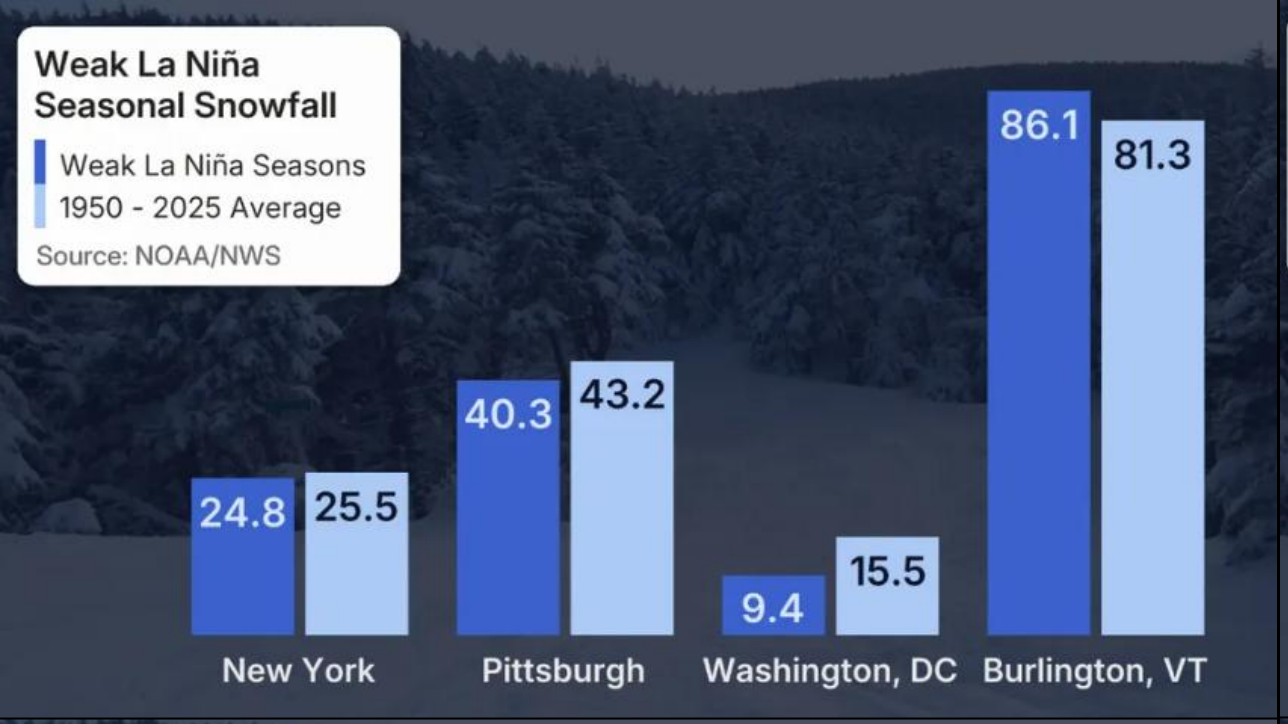


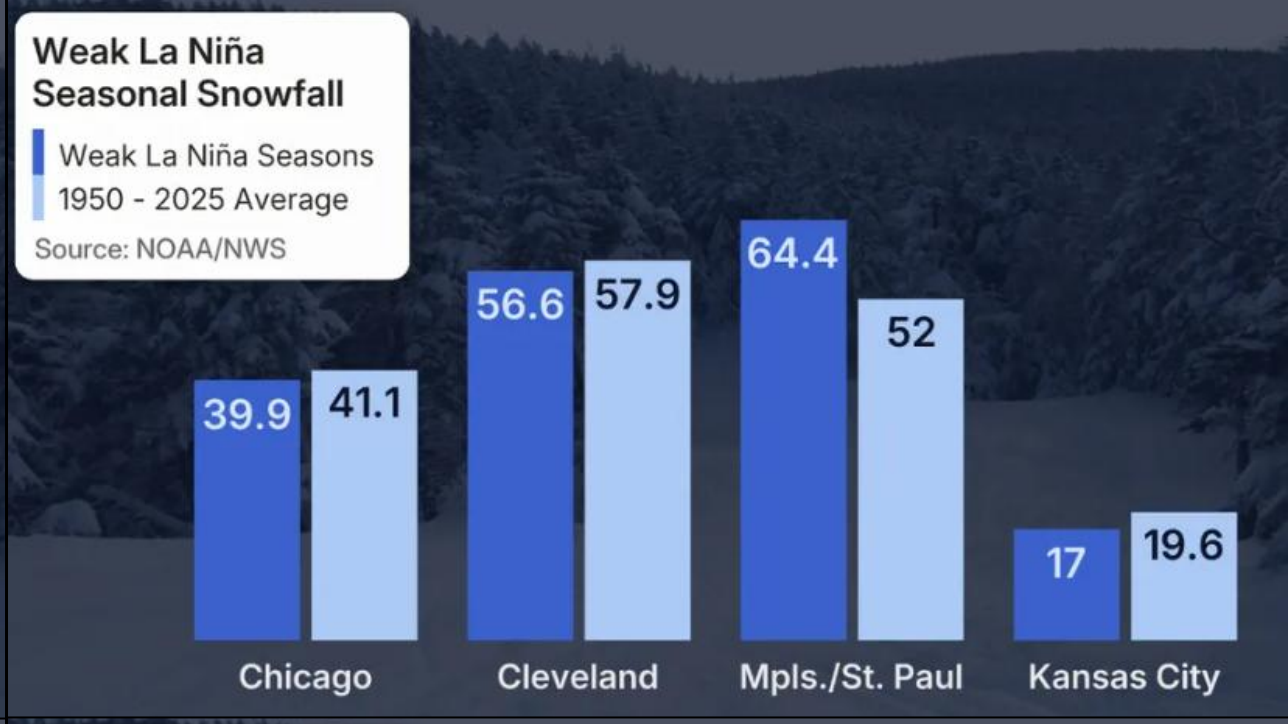


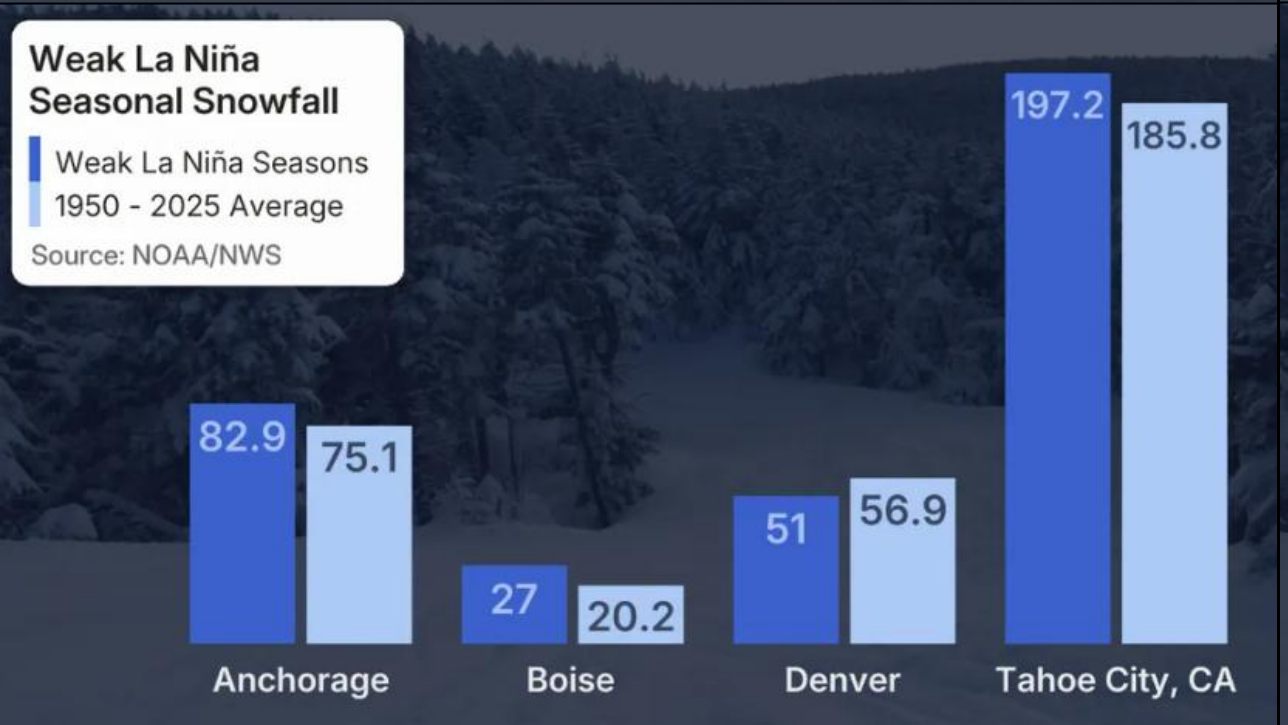


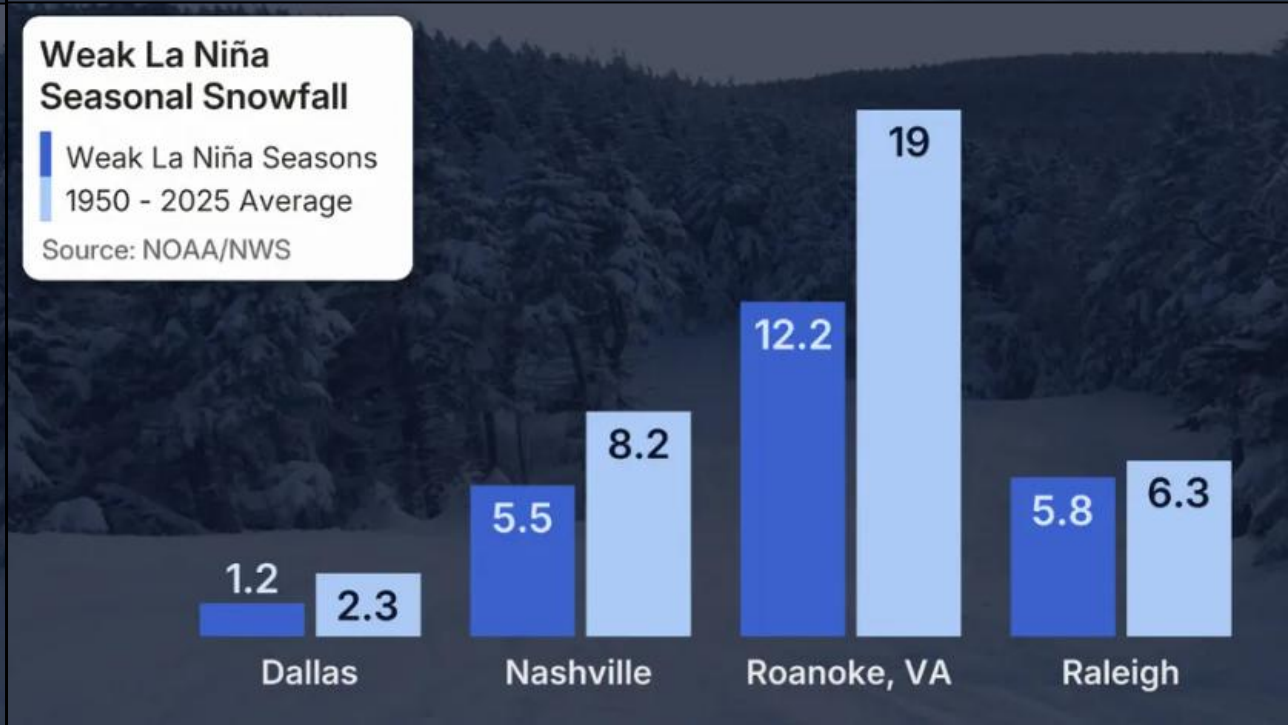


ittger, K., Lenard, S.J.P., Palomaki, R.T., Stephenson, L. (2025). Snow Today. Boulder, Colorado USA. National Snow and Ice Data Center

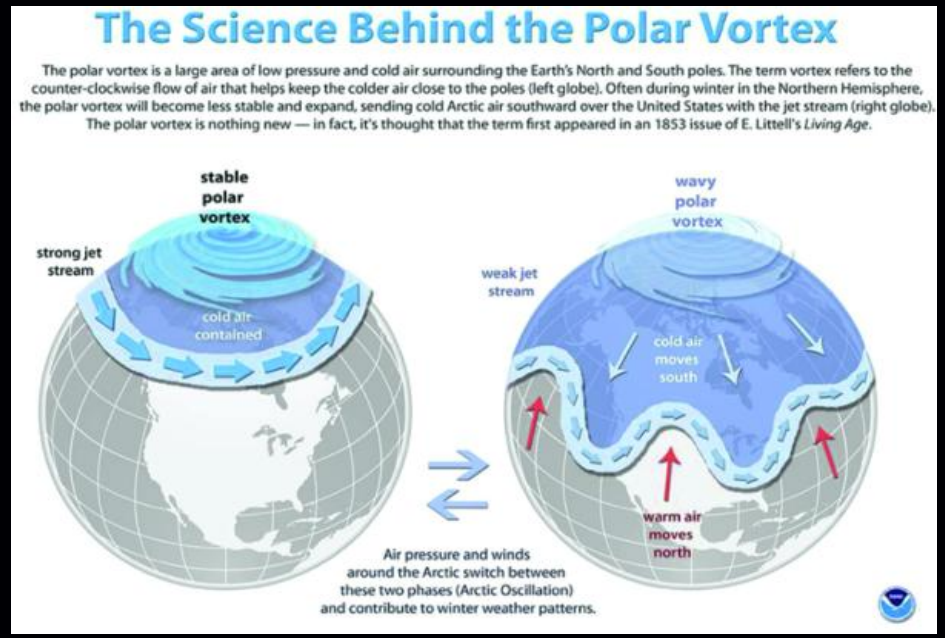

Weak La Niña Seasonal Snowfall
Weak La Niña Seasons
1950 - 2025 Average
Source: NOAA/NWS
24.8
25.5
40.3
43.2
9.4
15.5
86.1
81.3
New York
Pittsburgh
Washington, DC
Burlington, VT

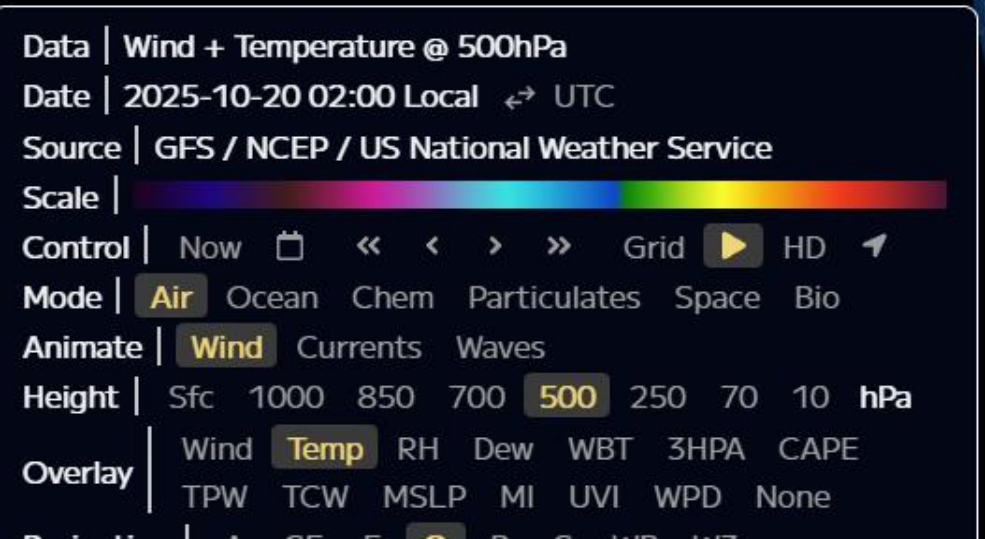

Weak La Niña Seasonal Snowfall
Weak La Niña Seasons
1950 - 2025 Average
Source: NOAA/NWS
39.9
41.1
56.6
57.9
64.4
52
17
19.6
Chicago
Cleveland
Mpls./St. Paul
Kansas City


Weak La Niña Seasonal Snowfall
Weak La Niña Seasons
1950 - 2025 Average
Source: NOAA/NWS
82.9
75.1
27
20.2
51
56.9
197.2
185.8
Anchorage
Boise
Denver
Tahoe City, CA


Weak La Niña Seasonal Snowfall
Weak La Niña Seasons
1950 - 2025 Average
Source: NOAA/NWS
1.2
2.3
5.5
8.2
12.2
19
5.8
6.3
Dallas
Nashville
Roanoke, VA
Raleigh

The pattern so far this year is far wavier than would be conducive to a seasonally stable winter. This means Polar Vortex events and Nor'easters are likely to be problematic.



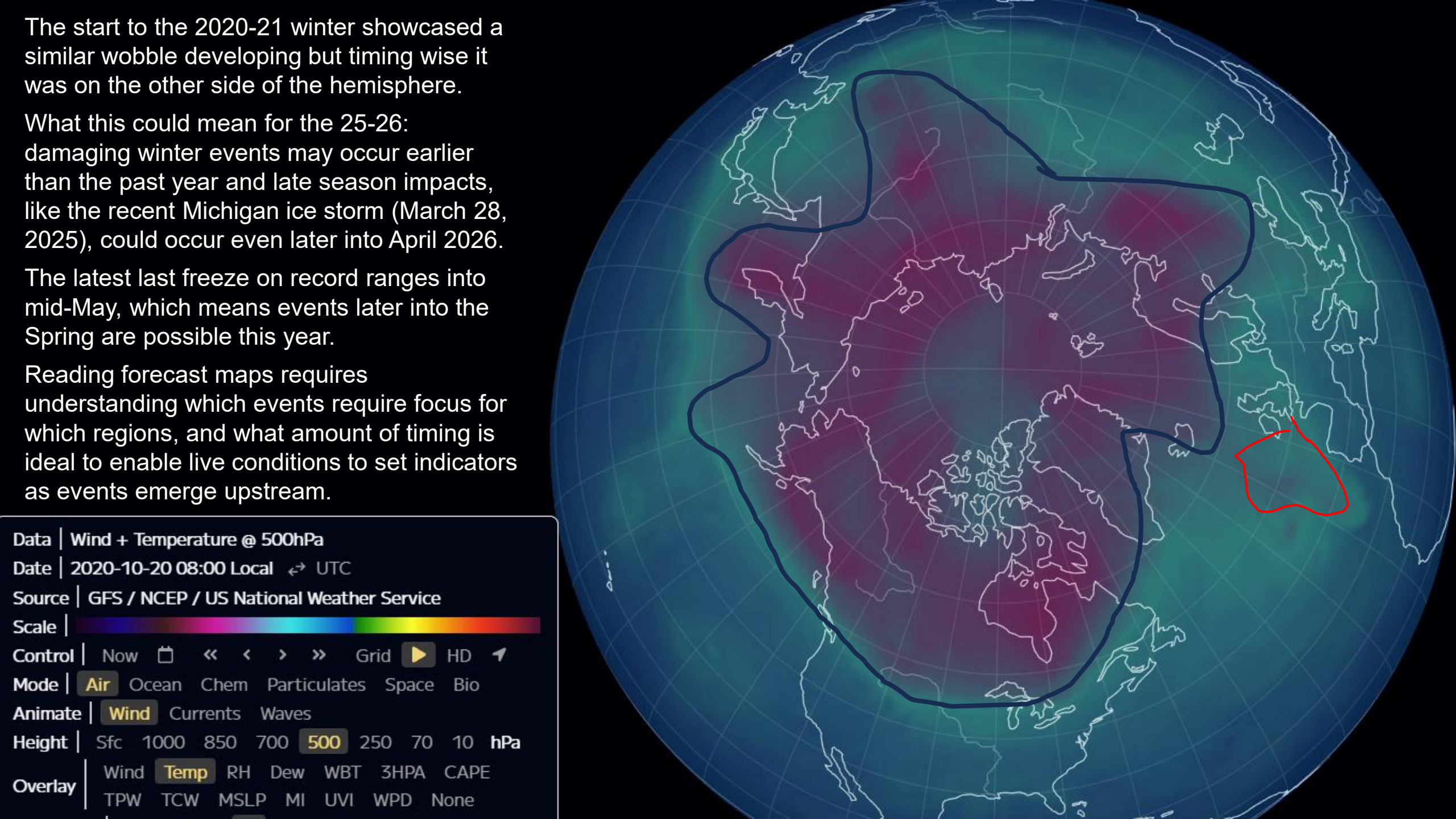


The start to the 2020-21 winter showcased a similar wobble developing but timing wise it was on the other side of the hemisphere.

What this could mean for the 25-26: damaging winter events may occur earlier than the past year and late season impacts, like the recent Michigan ice storm (March 28, 2025), could occur even later into April 2026.

The latest last freeze on record ranges into mid-May, which means events later into the Spring are possible this year.

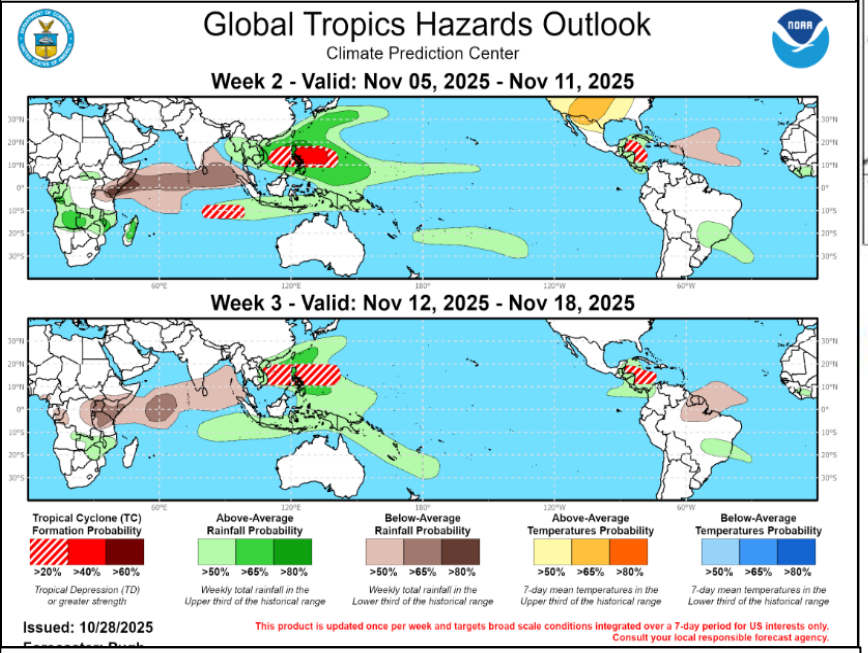
Reading forecast maps requires understanding which events require focus for which regions, and what amount of timing is ideal to enable live conditions to set indicators as events emerge upstream.

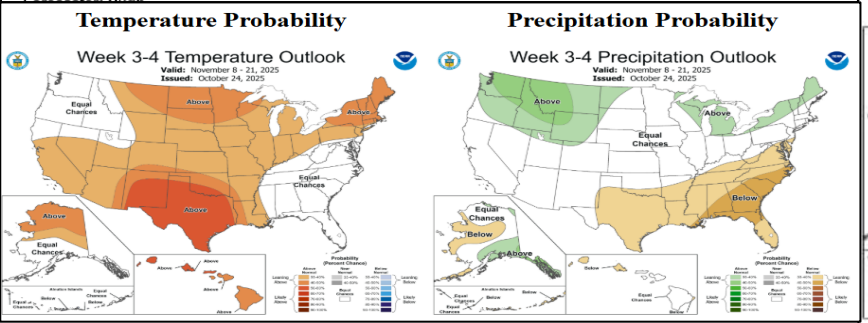


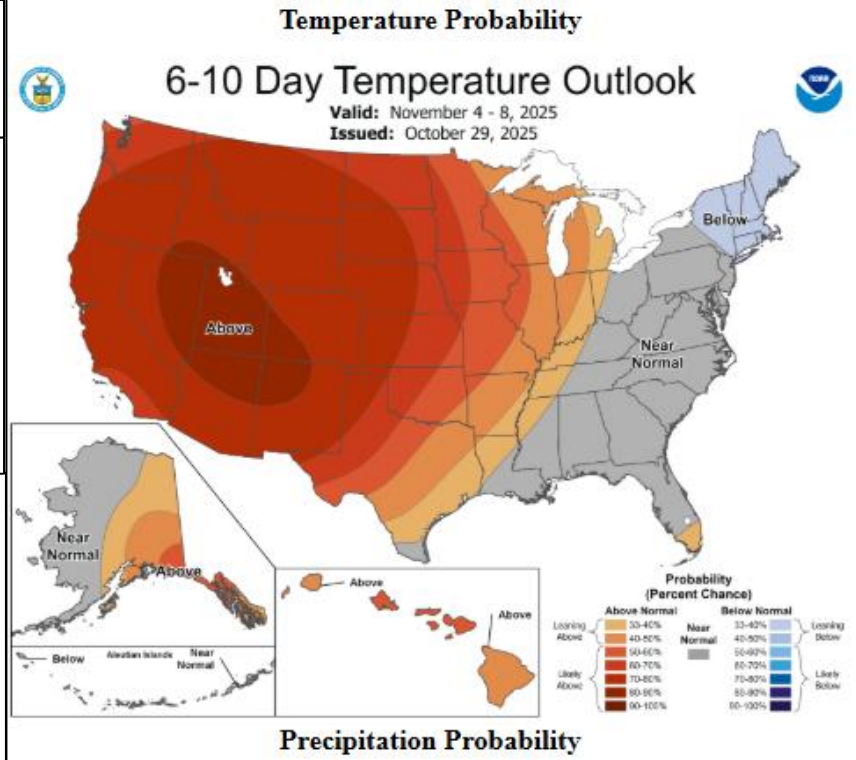
Created by DHS CISA Chief Meteorologist: Sunny Wescott

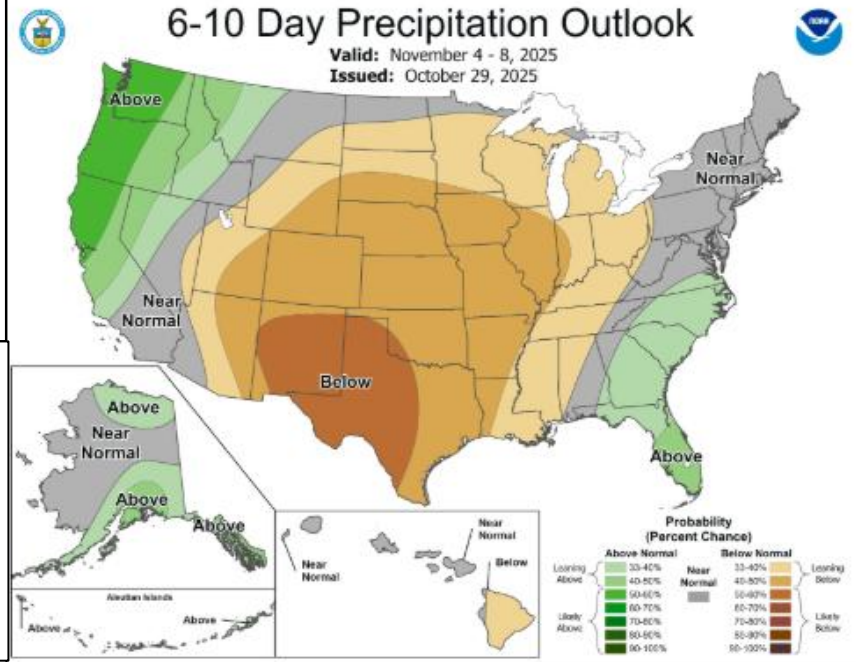
2-Week Outlook

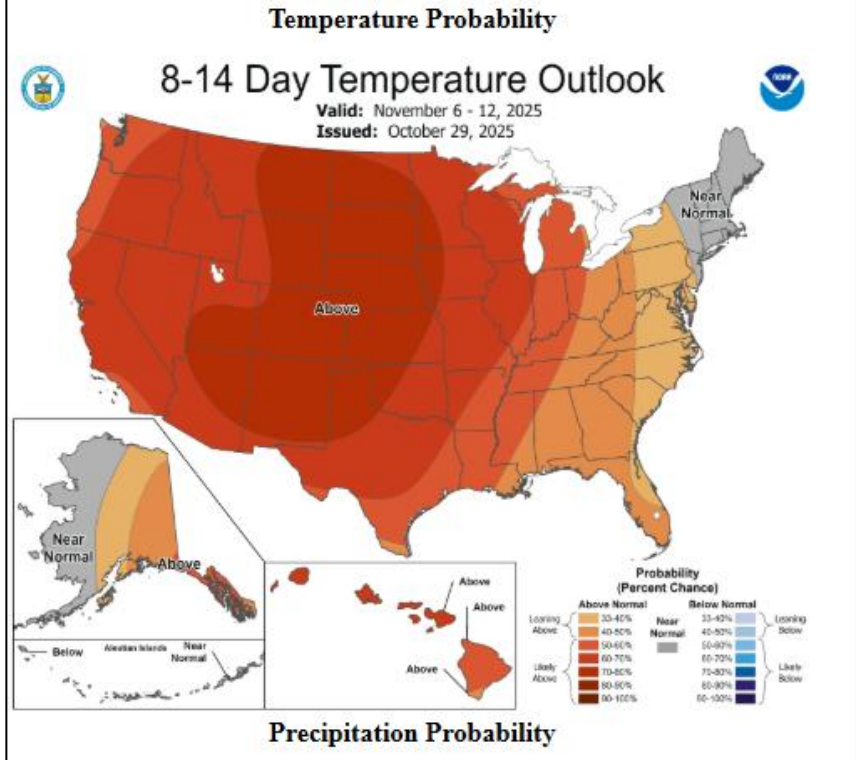
The area highlighted in the tropical hazards matches the area depicted in most cyclone models and the temperature swings forecasted are looking at the averages over the span of time against the historic norms. These forecasts will not account for short-burst events that do not produce lasting impacts for their region.

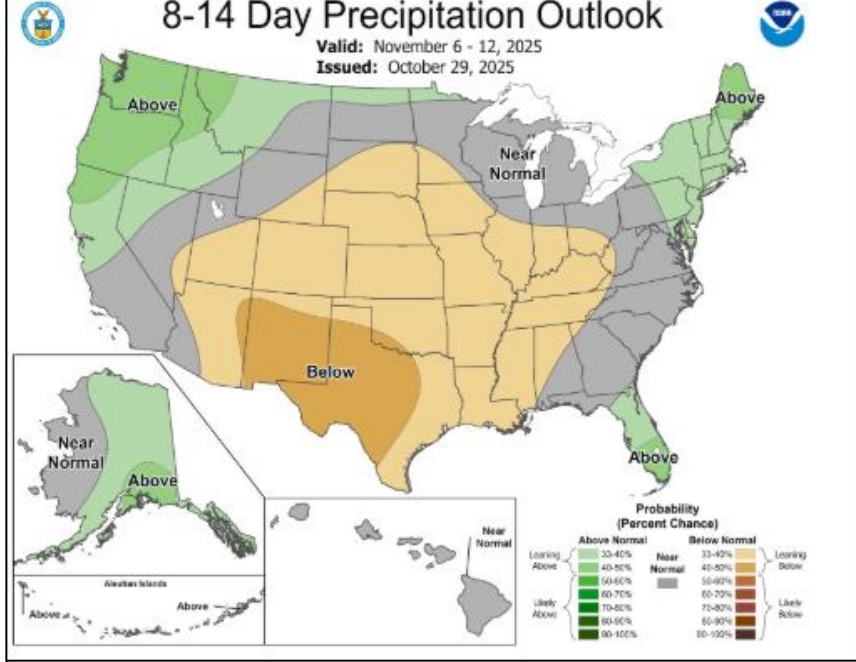










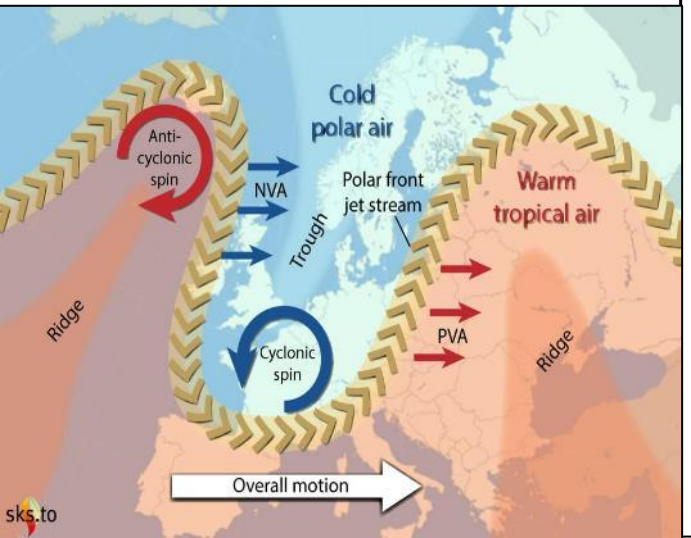


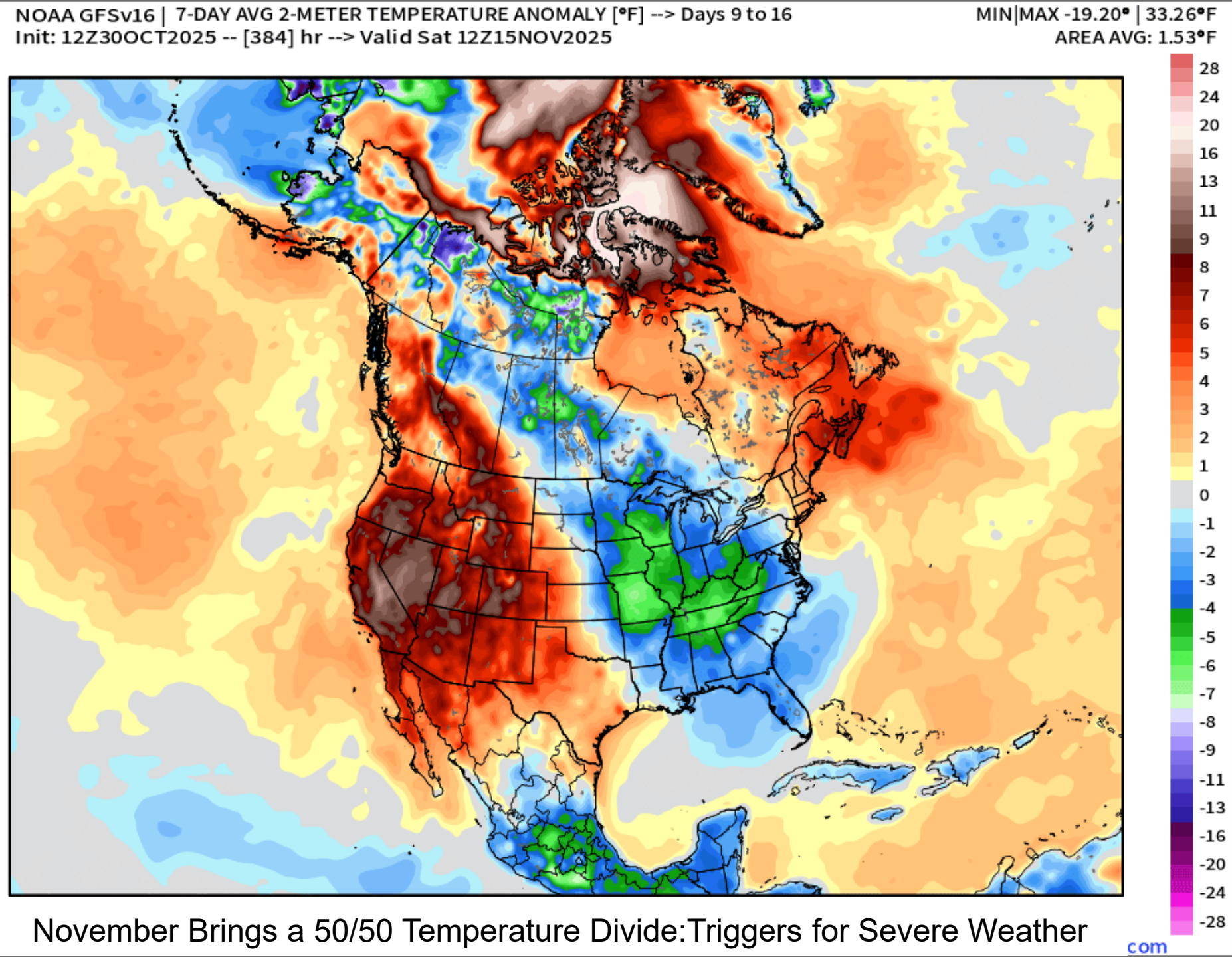
Temperature Swings

Major temperature swings persist as an overall issue in the Jet Stream across the Northern Hemisphere very clearly depicted on the 500mb temperature graphs.

Severe weather risks develop on the 7th due to the temperature disparity developing, along with a major surge of snowfall for the Northern Plains into the Upper Midwest on the 13th-15th. Snowfall totals in the current forecast could range to 7-9 inches.

Looking at light snowfall risks for the Appalachians on the 10-11th and again on the 13th to 14th . These events are likely to see melting quickly following the snowfall deposit.

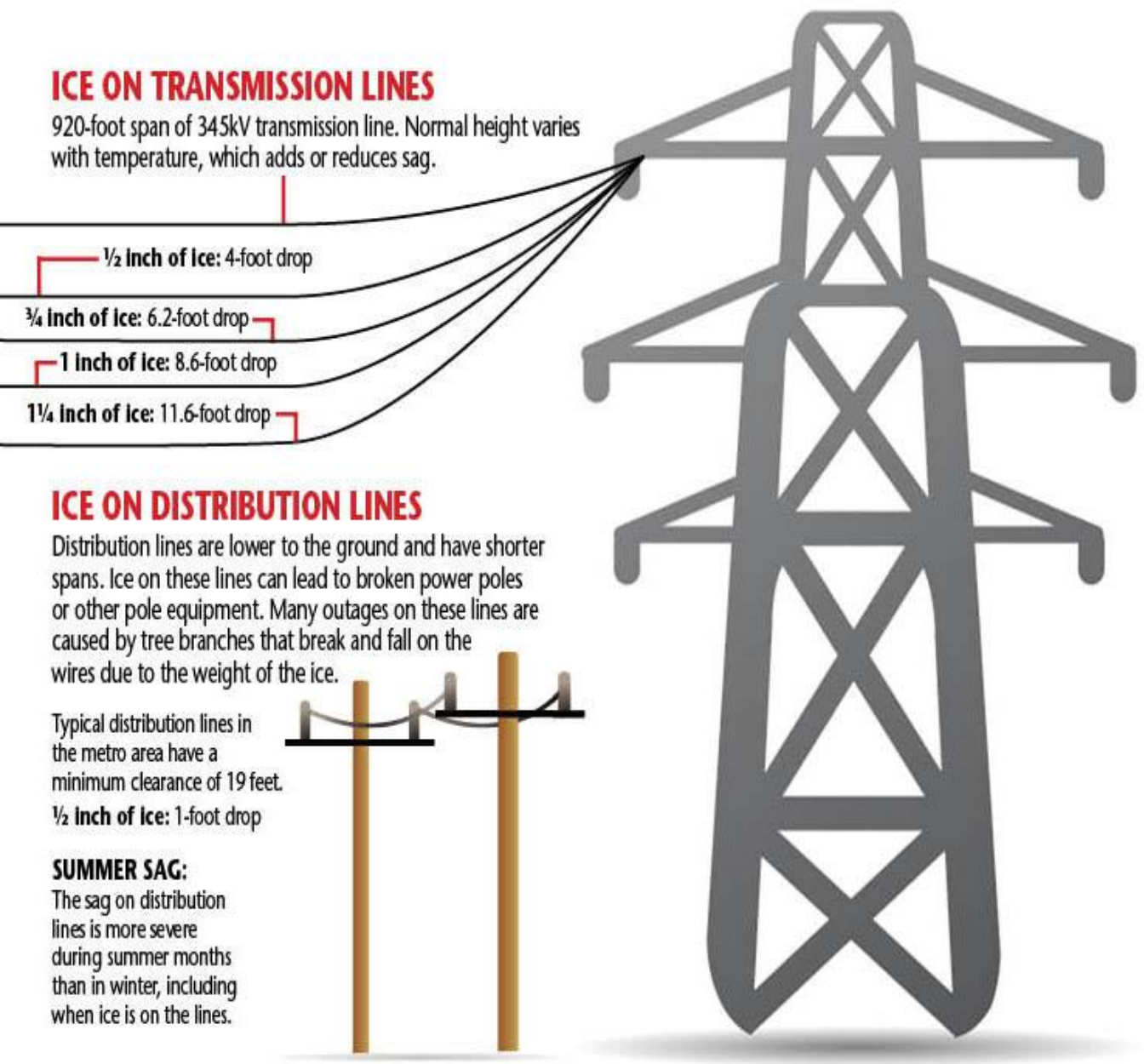




November Brings a 50/50 Temperature Divide:Triggers for Severe Weather

ICE ON TRANSMISSION LINES

920-foot span of 345kV transmission line. Normal height varies with temperature, which adds or reduces sag.



ICE ON DISTRIBUTION LINES

Distribution lines are lower to the ground and have shorter spans. Ice on these lines can lead to broken power poles or other pole equipment. Many outages on these lines are caused by tree branches that break and fall on the wires due to the weight of the ice.

Typical distribution lines in the metro area have a minimum clearance of 19 feet.

½ inch of ice: 1-foot drop

SUMMER SAG:
The sag on distribution lines is more severe during summer months than in winter, including when ice is on the lines.

WHAT ARE TRANSMISSION LINES?

These power lines carry electricity from generating stations to the substation.

WHAT ARE DISTRIBUTION LINES?

These lines carry electricity from substations to individual households, both overhead and underground.

Snow Load Can Cause Roof Damage or Failure

Weather Forecast Office
Medford, OR
Thursday, November 21

Weight Of Snow Based On Depth And Water Content

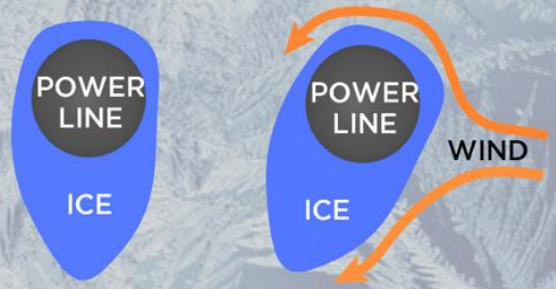
Source: Cornell Univ. Curt Gooch Roof Snow Depth	Fresh Dry Snow (lbs/sq ft.) ❄❄	In-Between Snow (lbs/sq ft.) ❄❄	Heavy Wet Snow (lbs/sq ft.) ❄❄
6 inches	1.5	6	10.5
1 foot	3	12	21
2 feet	6.5	24	42
3 feet	9.5	36	62
4 feet	12.5	48	83
5 feet	15.5	60	104
6 feet	19	72	124

The accumulated weight of snow/ice on a roof can cause structural damage or even collapse if the building is not designed or built for extreme weather. As you can see, the weight of snow varies significantly depending on the snow's water content.

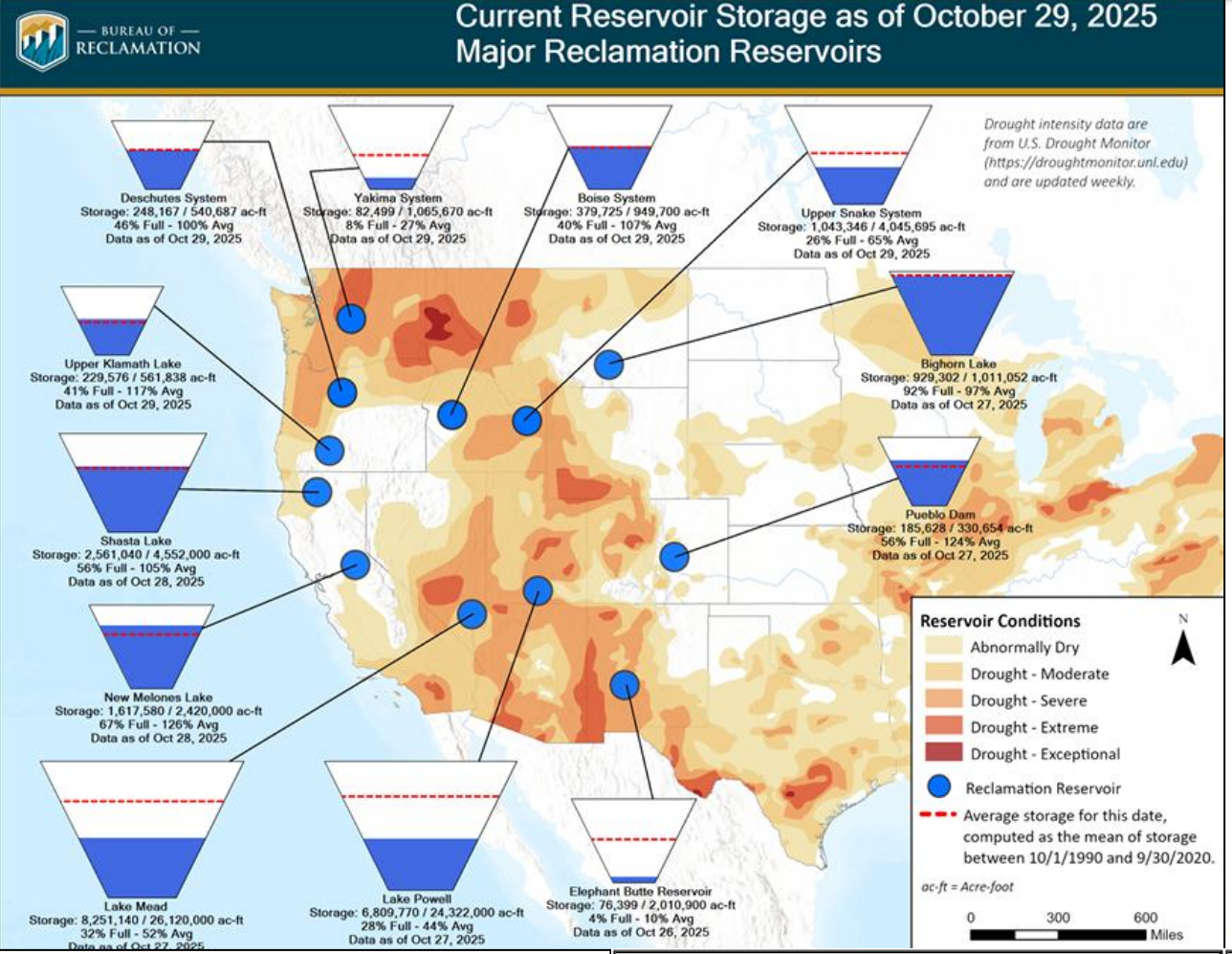
POWER GRID IMPACTS

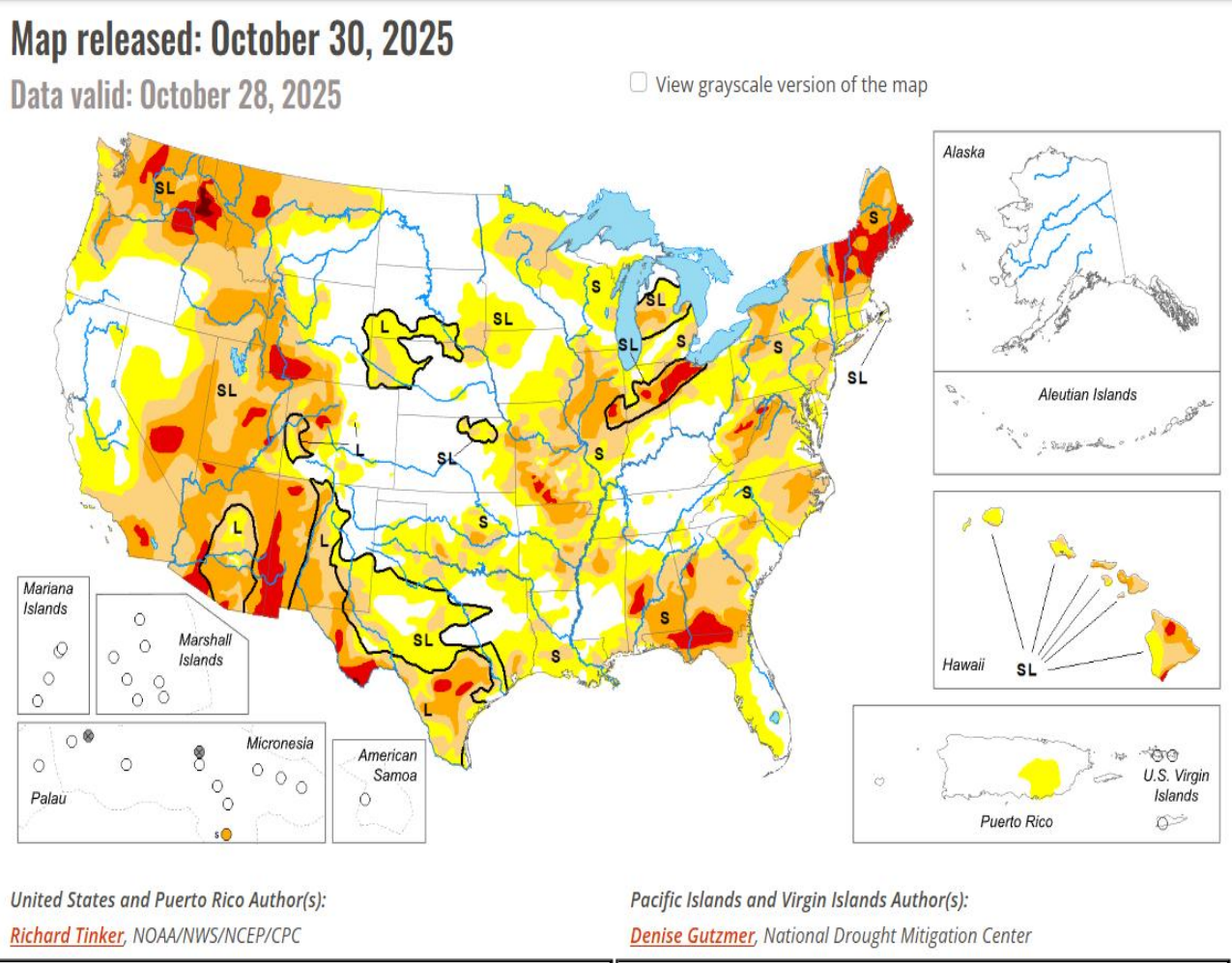
STORMTRACK WQAD 8

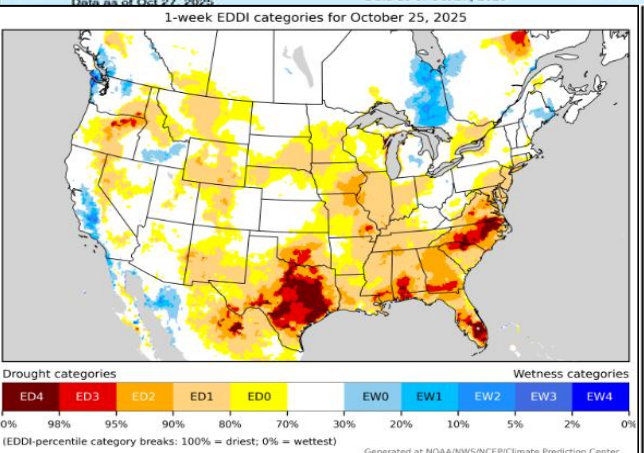
GALLOPING

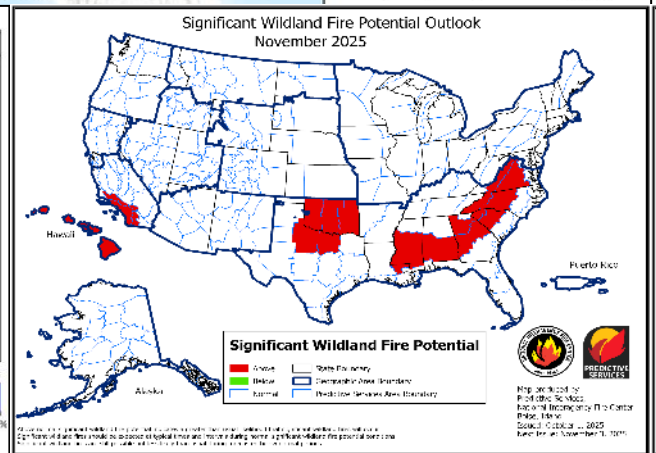


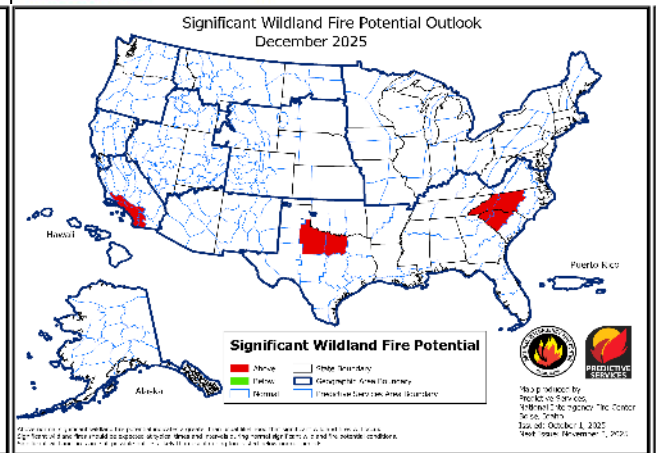
ICE FORMS TEARDROP SHAPE
WIRES CAN SWAY AND COLLIDE

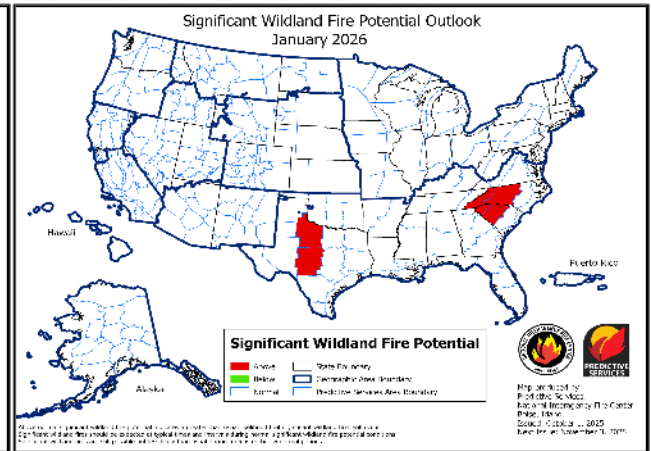

BUREAU OF RECLAMATION
Current Reservoir Storage as of October 29, 2025
Major Reclamation Reservoirs
Drought intensity data are from U.S. Drought Monitor (https://droughtmonitor.unl.edu) and are updated weekly.
Deschutes System
Storage: 248,167 / 540,687 ac-ft
46% Full - 100% Avg
Data as of Oct 29, 2025
Yakima System
Storage: 82,499 / 1,065,670 ac-ft
8% Full - 27% Avg
Data as of Oct 29, 2025
Boise System
Storage: 379,725 / 949,700 ac-ft
40% Full - 107% Avg
Data as of Oct 29, 2025
Upper Snake System
Storage: 1,043,346 / 4,045,695 ac-ft
26% Full - 65% Avg
Data as of Oct 29, 2025
Upper Klamath Lake
Storage: 229,576 / 561,838 ac-ft
41% Full - 117% Avg
Data as of Oct 29, 2025
Bighorn Lake
Storage: 929,302 / 1,011,052 ac-ft
92% Full - 97% Avg
Data as of Oct 27, 2025
Shasta Lake
Storage: 2,561,040 / 4,552,000 ac-ft
56% Full - 105% Avg
Data as of Oct 28, 2025
Pueblo Dam
Storage: 185,628 / 330,654 ac-ft
56% Full - 124% Avg
Data as of Oct 27, 2025
New Melones Lake
Storage: 1,617,580 / 2,420,000 ac-ft
67% Full - 126% Avg
Data as of Oct 28, 2025
Lake Mead
Storage: 8,251,140 / 26,120,000 ac-ft
32% Full - 52% Avg
Lake Powell
Storage: 6,809,770 / 24,322,000 ac-ft
28% Full - 44% Avg
Data as of Oct 27, 2025
Elephant Butte Reservoir
Storage: 76,399 / 2,010,900 ac-ft
4% Full - 10% Avg
Data as of Oct 26, 2025
Reservoir Conditions
Abnormally Dry
Drought - Moderate
Drought - Severe
Drought - Extreme
Drought - Exceptional
Reclamation Reservoir
Average storage for this date, computed as the mean of storage between 10/1/1990 and 9/30/2020.
ac-ft = Acre-foot
N
0 300 600 Miles


Map released: October 30, 2025
Data valid: October 28, 2025
View grayscale version of the map
Alaska
Aleutian Islands
Hawaii
Mariana Islands
Marshall Islands
Micronesia
Palau
American Samoa
Puerto Rico
U.S. Virgin Islands
United States and Puerto Rico Author(s):
Richard Tinker, NOAA/NWS/NCEP/CPC
Pacific Islands and Virgin Islands Author(s):
Denise Gutzmer, National Drought Mitigation Center


1-week EDDI categories for October 25, 2025
Drought categories
Wetness categories
ED4 ED3 ED2 ED1 ED0 EW0 EW1 EW2 EW3 EW4
0% 98% 95% 90% 80% 70% 30% 20% 10% 5% 2% 0%
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)


Significant Wildland Fire Potential Outlook
November 2025
Significant Wildland Fire Potential


Significant Wildland Fire Potential Outlook
December 2025
Significant Wildland Fire Potential


Significant Wildland Fire Potential Outlook
January 2026
Significant Wildland Fire Potential

Additional Storm Precipitation Maps for CONUS – Snow/Rain

WSSI™ The Winter Storm Severity Index

The Probabilistic Winter Storm Severity Index

This display shows the WSSI-P for a period of 24 hours. Each time-step forward is 6 hours starting at 24 hours and extending to 168 hours. As you move forward in time using the slider bar you can see how the WSSI-P is changing every six hours out to the end of the end of day 7 (168 hours). Select the tab with the element name of interest and then select the impact level radio button you are interested in.

Overall Winter Storm Impacts | Snow Amount | Snow Load | Ice Accumulation | Blowing Snow

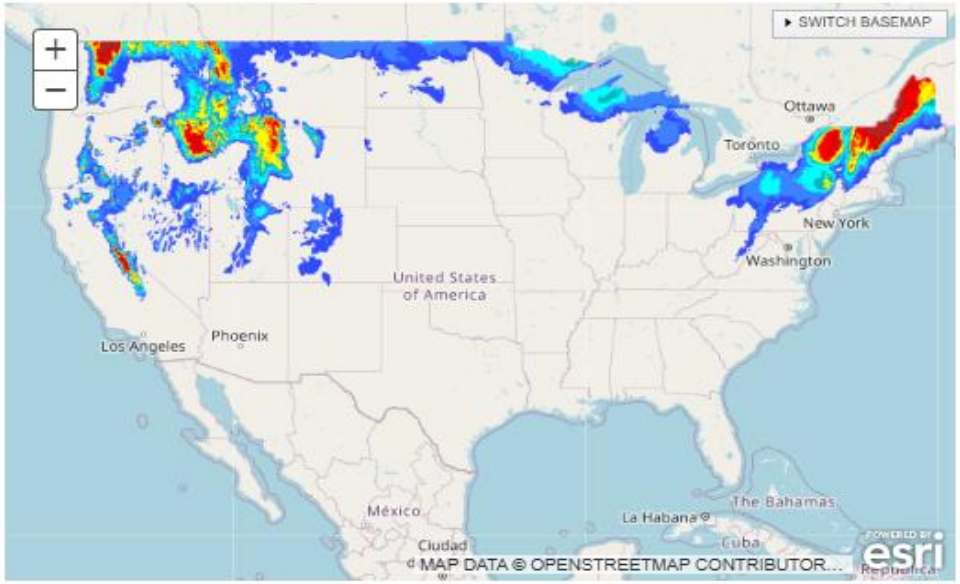
Select WSSI-P Impact Level: ◉ Winter Weather Area ○ Minor ○ Moderate ○ Major ○ Extreme Keyboard HotKeys for slider: > next < previous

Drag the slider or click the arrow buttons to display the probability forecast of **WWA** impacts from **Overall Winter Storm Impacts**

Forecast Initialized: 12Z Thu 30 Oct, 2025 | Forecast HR: 168 | 24 HR Forecast Valid at 8 AM EDT Friday, October 31, 2025 [12Z 10/31/2025]

Print Map

WSSI-P Last Updated: 14:02Z Thu, 30 Oct 2025



Click image to enlarge

Potential Winter Storm Impacts

Winter Weather Area
Expect Winter Weather.
- Winter driving conditions. Drive carefully.

Minor Impacts
Expect a few inconveniences to daily life.
- Winter driving conditions. Use caution while driving.

Moderate Impacts
Expect disruptions to daily life.
- Hazardous driving conditions. Use extra caution while driving.
- Closures and disruptions to infrastructure may occur.

Major Impacts
Expect considerable disruptions to daily life.
- Dangerous or impossible driving conditions. Avoid travel if possible.
- Widespread closures and disruptions to infrastructure may occur.

Extreme Impacts
Expect substantial disruptions to daily life.
- Extremely dangerous or impossible driving conditions. Travel is not advised.
- Extensive and widespread closures and disruptions to infrastructure may occur.
- Life-saving actions may be needed.

WSSI-P Resources:
WSSI-P User Guide
Product Description Document
Infographic

Download Latest WSSI-P in GIS Format:
Download Data in KML
Download Data in SHP

WSSI Product Suite:
The Winter Storm Severity Index (WSSI)

Likelihood of Impact

< 5% 5% 10% 20% 30% 40% 50% 60% 70% 80% 90% > 95%

Map Overlays

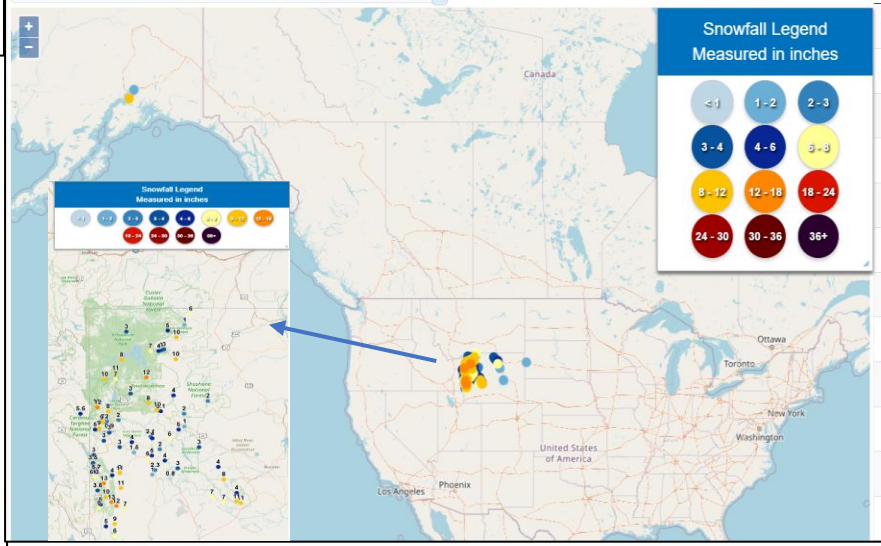
NWS County Warning Area Boundaries ☐ | River Forecast Center Boundaries ☐
FEMA Boundaries ☐ | Counties Boundaries ☐
State Boundaries ☐ | NWS Public Forecast Zones ☐
Urban Areas ☐ | ARTCC/FIR ☐

Snowfall Reports from the Last 24 Hours

Select the time range for the snowfall reports: 72 Hours

Search for a location on map: Hide Legend | Create a permalink

Show 20 entries Search:

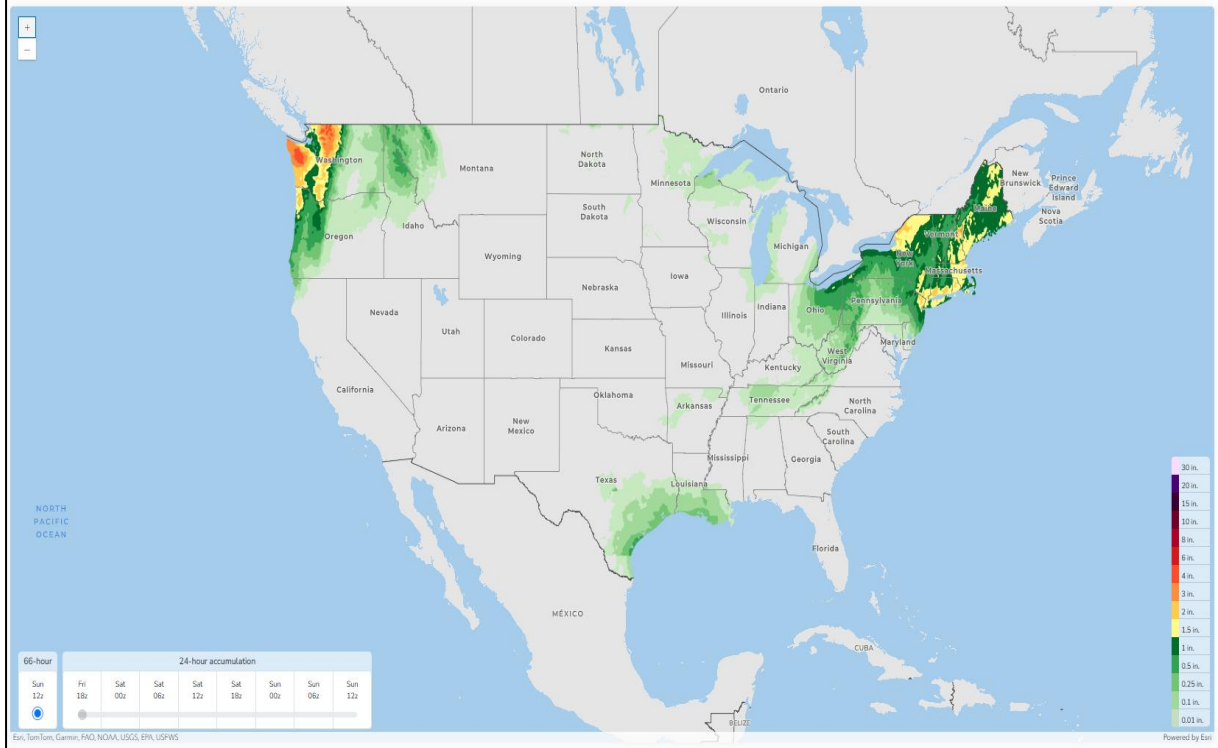


Date/Time	Location	Amou
12:41 pm EDT - 10/28/2025	3 SE Turnerville, WY	13
12:09 pm EDT - 10/28/2025	10 ESE Smoot, WY	13
12:29 pm EDT - 10/28/2025	22 E South Entrance, WY	12
12:41 pm EDT - 10/28/2025	15 ESE Smoot, WY	12
12:36 pm EDT - 10/28/2025	6 ENE Alta, WY	12
12:40 pm EDT - 10/28/2025	7 NNW South Pass City, WY	11
12:40 pm EDT - 10/28/2025	10 NNW South Pass City, WY	11
12:41 pm EDT - 10/28/2025	17 ESE Turnerville, WY	11
12:08 pm EDT - 10/28/2025	16 ENE Turnerville, WY	11
12:28 pm EDT - 10/28/2025	5 N South Entrance, WY	11
12:03 pm EDT - 10/28/2025	5 ENE Alta, WY	11
11:40 am EDT - 10/30/2025	8 SE Eagle River, AK	10.3

Expected Amount of Precipitation

66-hour accumulation: 18z Thu, Oct 30 to 12z Sun, Nov 2

18z Thu, Oct 30, 2025 Forecast Cycle



A significant cold wave spreads into western Europe, bringing severe weather to France, Italy, and the Alps

By Marko Korosec

Published: 20/09/2025

Global weather

Siberian permafrost could disappear by 2100 as rapid thawing accelerates

Forecasters warn of stormy winter ahead with blizzards and deep freezes set to hit much of the US

By JAMES GORDON, US NEWS REPORTER

PUBLISHED: 01:39 EDT, 5 October 2025 | **UPDATED:** 01:39 EDT, 5 October 2025

Coldest winter in decades about to hit Delhi, Gurgaon, Noida, Ghaziabad and Faridabad? Experts reveal how La Niña could chill India in 2025–26

TOI Trending Desk / etimes.in / Updated: Sep 30, 2025, 16:31 IST

Share | AA

Meteorologists predict a possible La Niña event. This climate pattern could bring colder winters to India in 2025-26. The US Climate Prediction Center issued a La Niña Watch. The India Meteorological Department also sees signs of a colder winter. La Niña may

September 2025: Earth's 3rd-warmest September on record

Only September 2023 and September 2024 were warmer.

by JEFF MASTERS

OCTOBER 14, 2025

September 2025 — Monthly analysis of Russian fossil fuel exports and sanctions

14 October 2025 by Vaibhav Raghunandan

Authors: Vaibhav Raghunandan, Petras Katinas

Russian fossil fuel export revenues hit lowest levels since the full-scale invasion of Ukraine but Turkstream supplies to Europe grow by 7% year-on-year

Article | Open access | Published: 24 September 2025

Increased persistence of warm and wet winter weather in recent decades in north-western Europe

Barend Spanjers, Eric Beutner, Dim Coumou & Julia Schaumburg

Communications Earth & Environment **6**, Article number: 760 (2025) | Cite this article

1017 Accesses | **21** Altmetric | Metrics

Air temperatures over Antarctica have soared 35°C above average. What does this unusual event mean for Australia?

Published: September 29, 2025 3:02pm EDT

Jeremy Stewardson/Getty

CULTIVATION/PRODUCTION, EUROPE, UK, IRELAND, MOST VIEWED STORIES, NEWS SEPTEMBER 2025, SUSTAINABILITY, TRENDS, WEATHER/CLIMATE CHANGE

'Heat, drought, deluge': Europe's 2025 climate shock – extremes redraw potato risk maps

on September 29, 2025

5 dead in September lightning strikes, matching a grim milestone

Three men were struck and killed by lightning on a single day in September. The lightning death toll for the year now stands at 19.

Five lightning strike-related fatalities were reported, the most in any September since 2013, said John Jensenius, a lightning safety specialist with the National Lightning Safety Council and a retired National Weather Service meteorologist. That also matches the number of people who died in September 2007.

News Article

Winter Weather Alerts Issued for 8 States With 6 Inches of Snow To Hit

PUBLISHED

OCT 02, 2025 AT 05:25 AM EDT

Accidents and disasters in China | *China / Politics*

800 Everest trekkers, guides, porters rescued in China after being stranded by blizzard

Snow that crushed climbers' tents and cut off all descent routes from the base camp

Reading Time: **2 minutes**

Why you can trust SCMP

THE STREAM

The Stream, September 30, 2025: Drought Could Cost Europe's Farmers $15 Billion Annually If Global Heating Persists

by Christian Thorsberg September 30, 2025

Southern Hemisphere Winter

According to the Bureau of Meteorology, the mean temperature across Australia this winter was 0.48C above the 1961-1990 baseline average.

- The greatest departures from normal were across north-east Queensland and near the South Australia-Western Australia border where winter was more than 1C warmer than normal.

The country reported swings in both temperature and precipitation with cold surges and widespread precipitation windows bringing snowfall to lower elevations and hitting areas which had been snowless for recent years.

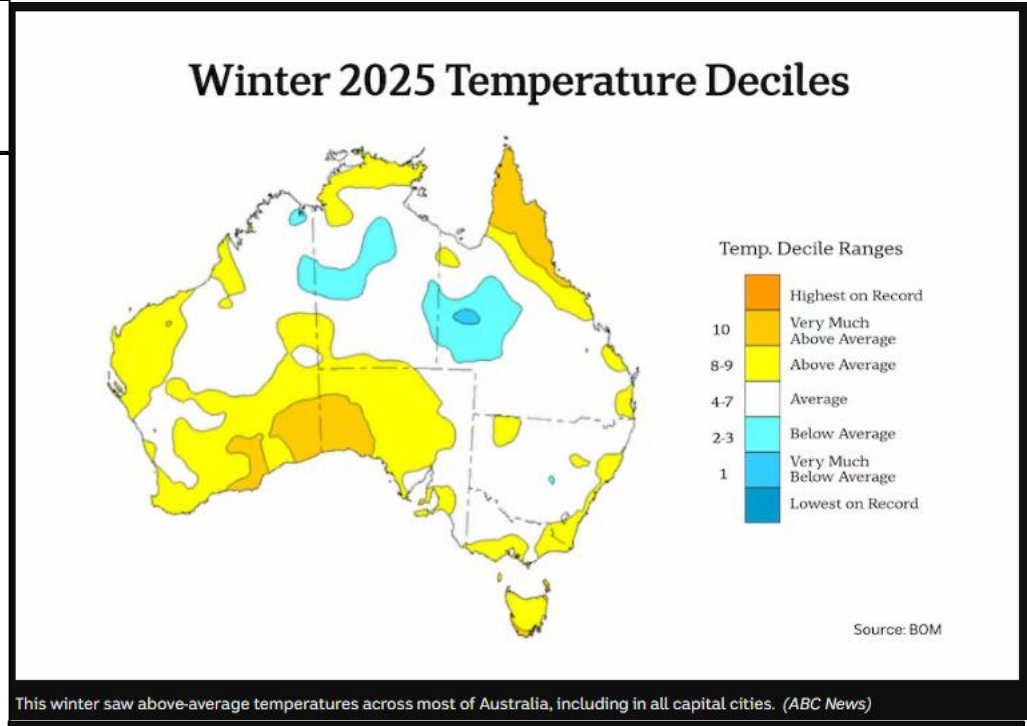
- An area which did see exceptional rain was the central NSW coast — Sydney's Observatory Hill station received 567 millimeters, 257mm above average and the wettest winter in 18 years.

Some important aspects of these storms resides in the intensities as well as the premature nature of some events.

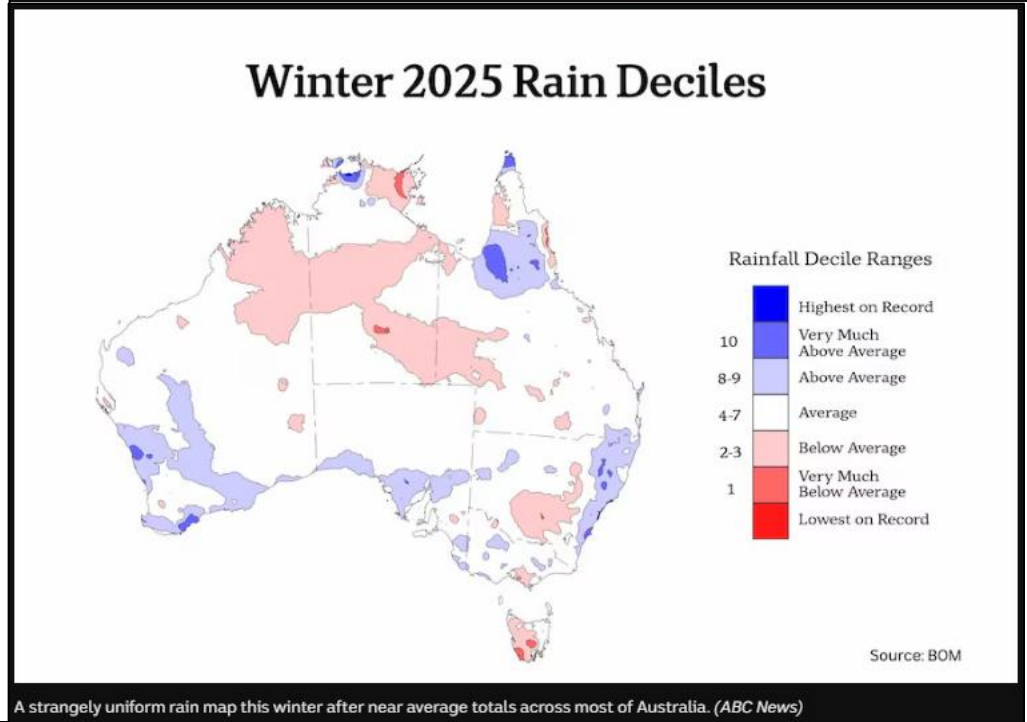
- Systems often brought widespread damaging winds, as well as cold air, showers, storms, small hail, large waves and snow down to low levels.

Africa: A powerful storm system brought winter to Lesotho and South Africa in early June 2025. Snow blanketed higher elevations, while strong winds, cold temperatures, and heavy rains affected lower-elevation and coastal areas.

- Snowfall ranged over a foot for areas which rarely see snow resulting in closures of highways and isolated communities due to road hazards.
- To the south / east of snow-affected regions, heavy rain triggered deadly flooding that submerged homes and damaged dozens of schools / hospitals.



This winter saw above-average temperatures across most of Australia, including in all capital cities. *(ABC News)*



A strangely uniform rain map this winter after near average totals across most of Australia. *(ABC News)*

South Korea: Weather Headlines

An early cold wave swept across the country on Tuesday, bringing the season's first frost and ice to many regions, including Seoul.

- It added that "frost and ice were observed for the first time this autumn in the central regions and parts of North Gyeongsang."
- In Seoul, the first ice appeared 10 days earlier than last year and six days earlier than average, while the first frost came nine days earlier than last year, matching the long-term average. North Gangneung in Gangwon reported frost and ice 22 to 30 days earlier than last year.
- A KMA official warned of wide temperature swings of up to 15 degrees between day and night through Thursday, urging people to take precautions against sudden temperature changes.

Pivots seen ahead of time: earlier in August 2025 Japan reported a wave of +40C temperatures while Mongolia reported a tornado.

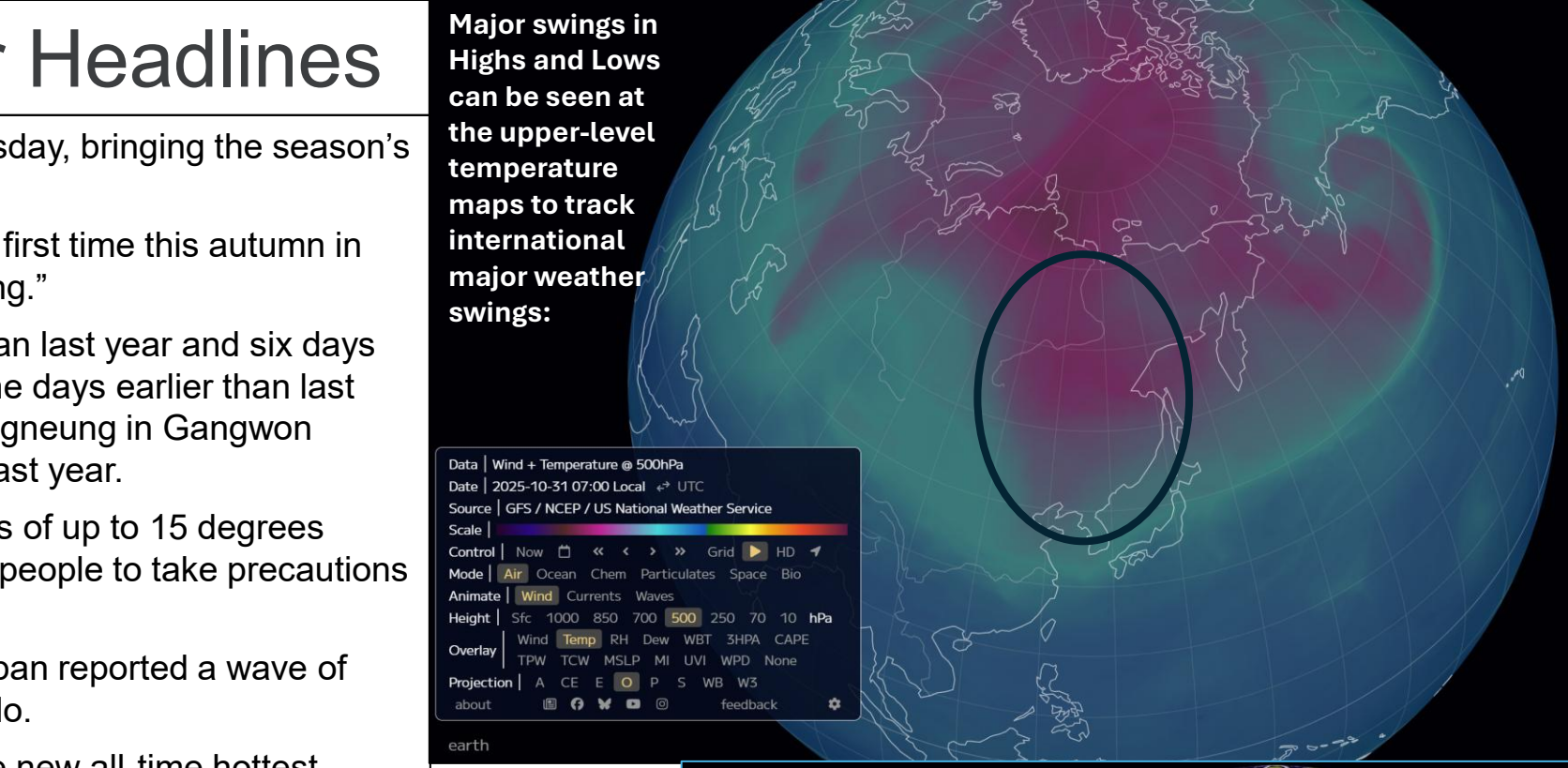
- The city of Isesaki hit 41.8 C this week. That's the new all-time hottest temperature on record for Japan. The previous record was 41.2 C, which was set last week in Tamba City. (41.1 C had been hit a couple times).

Earlier this week major weather events exiting the US have moved toward Iceland bringing significant blizzard warnings following a record setting heavy snowfall earlier this year during the tail end of the previous winter.

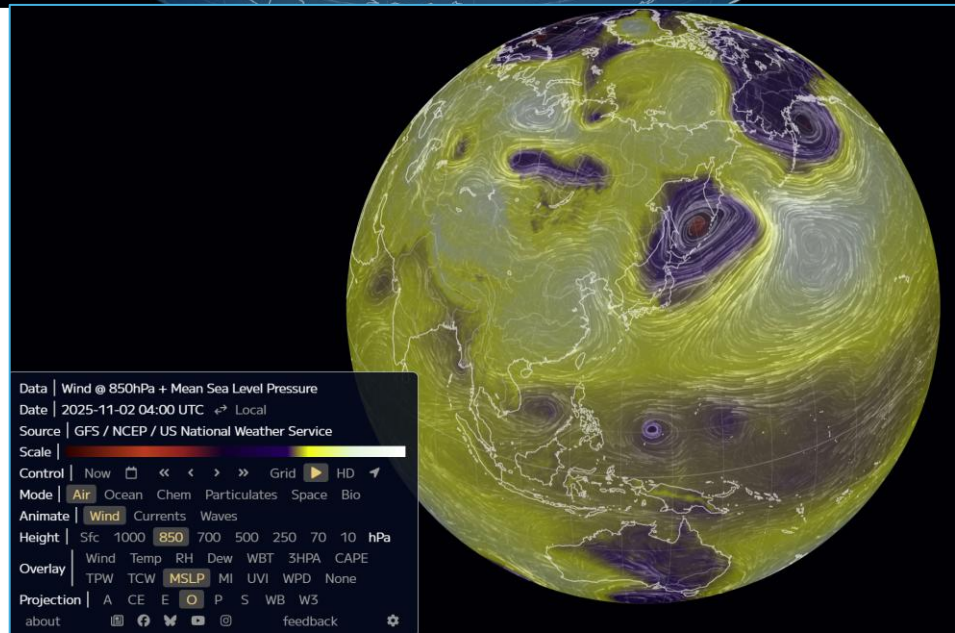
- These weather events are enroute to Europe, to include Hurricane Melissa joining the Polar Front Jetstream, which will work to disrupt the flow over the Asian continent.

A global forecast for the Northern Hemisphere winter:
https://travelandtourworld.com/news/article/japan-unites-with-siberia-mongolia-nepal-and-kazakhstan-to-face-unlivable-winter-2025-as-record-snowstorms-and-deadly-cold-could-bring-entire-regions-to-a-halt-check-these-new-factors-before-you-t/

Major swings in Highs and Lows can be seen at the upper-level temperature maps to track international major weather swings:



Looking at the regional forecast, the major swings in weather leave open the potential for a landfalling cyclone over the weekend which appears more potent than recent low-pressure centers over the area.



Vietnam: Weather Headlines

Last week, Typhoon Fengshen brought devastating rainfall to central Vietnam, causing historic flooding in large portions of Hoi An, a UNESCO World Heritage Site and tourist destination that annually attracts tens of thousands of Israeli backpackers among other tourists.

- The former imperial city of Hue was flooded after record rainfall in Vietnam. Nearly two meters of water fell in just 24 hours - a record that had been standing since 1999.

Heavy rains have caused major flooding in central Vietnam, with rivers swelling and submerging homes, farmland and tourist destinations including the historic cities of Hue and Hoi An.

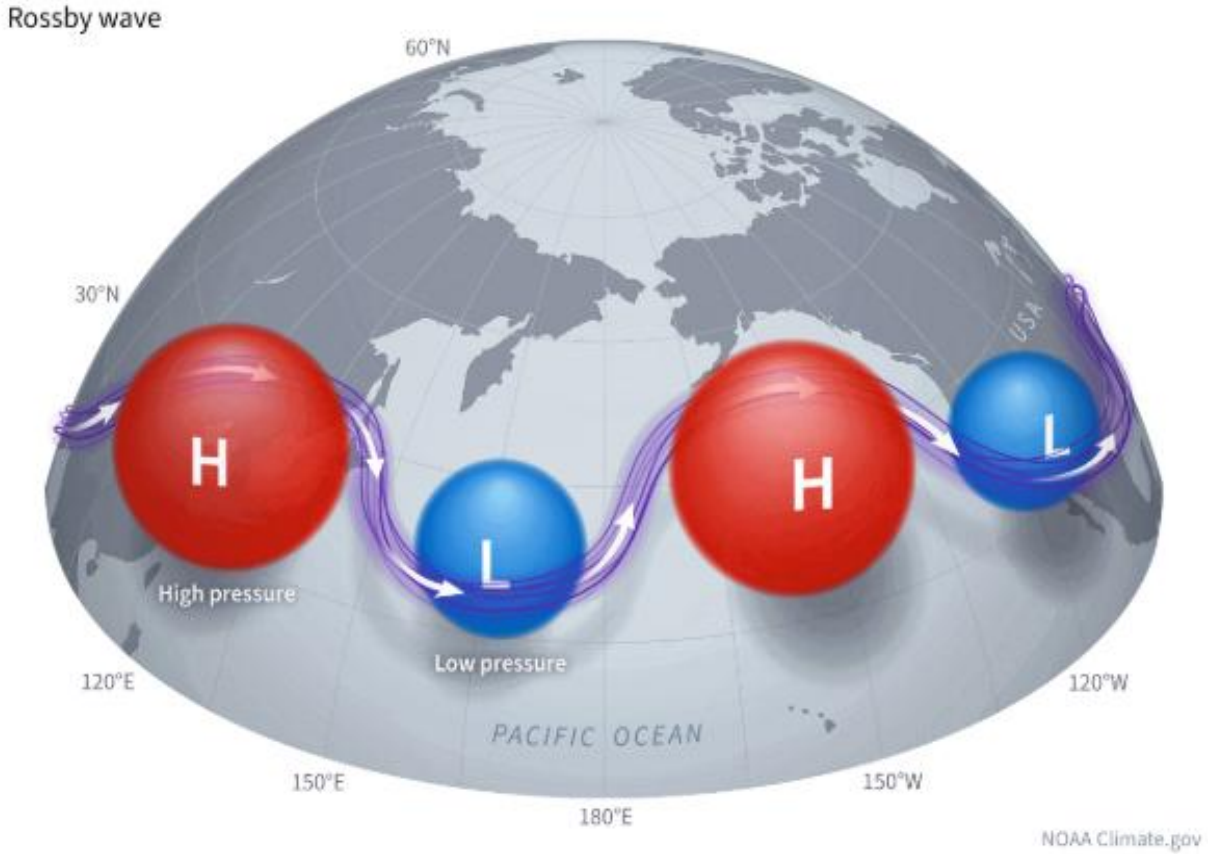
- Rainfall in the central city of Hue reached 1,085mm (42 inches) in 24 hours by late Monday, the highest volume ever recorded in Vietnam.
- By Tuesday morning, water levels in Hue's iconic Perfume River had risen to 4.62 meters (15 feet) and were waist-deep in the Unesco-listed former imperial capital and the ancient town of Hoi An.
    - Releases from hydroelectric dams caused water in the Hoai River to rise nearly 2 meters (6 feet 6 inches).

The train route between Hanoi in the north and the southern financial capital of Ho Chi Minh city was suspended, impacting thousands of passengers.

- On Monday evening, Vietnam's railways positioned 19 carriages laden with heavy stones weighing 980 tones (1,080 tons) on a bridge to prevent it from being swept away by floodwaters, state media said.

Ten typhoons or tropical storms usually affect Vietnam, directly or offshore, in a given year, but it has experienced 12 already in 2025. With 3,200 kilometers (around 2,000 miles) of coastline and a network of 2,300 rivers, Vietnam faces a high risk of flooding.

The daily (and seasonal) movement of the pressure systems is what causes these temperature patterns and weather changes. Pairs of pressure systems are known as **Rossby Waves**, which shape our daily weather. You can see an example of Rossby waves in the image below from NOAA, and how they are all connected and function with the jet stream.



The purple line connecting these pressure systems is called the jet stream. This rapid stream of air lies at around 9 to 14 kilometers (6 to 9 miles) altitude, which helps drive the pressure systems.

Southern Hemisphere: Australia

Multiple records were smashed yesterday in Queensland's southeast and Far North NSW, with regions between Byron Bay and the Sunshine Coast marking their hottest October days ever.

- Among the new records were the Sunshine Coast's high of 39.1, Brisbane's maximum of 38.7 and Coolangatta's top of 38.3. All previous records were set in 2004.

A strong southerly change was behind the cold snap, with Brisbane recording 18 degrees this morning.

- Nearly all eastern and southern Australia was affected by the change with Sydney and Melbourne set for a maximum temperature of 18 degrees, Canberra 14, Hobart 17, Adelaide 21 and Brisbane 22.

The Insurance Council of Australia (ICA) recently declared a Significant Event following a hailstorm that affected the greater Brisbane area, with insurers processing over 11,000 claims from residents and businesses as of Oct. 28.

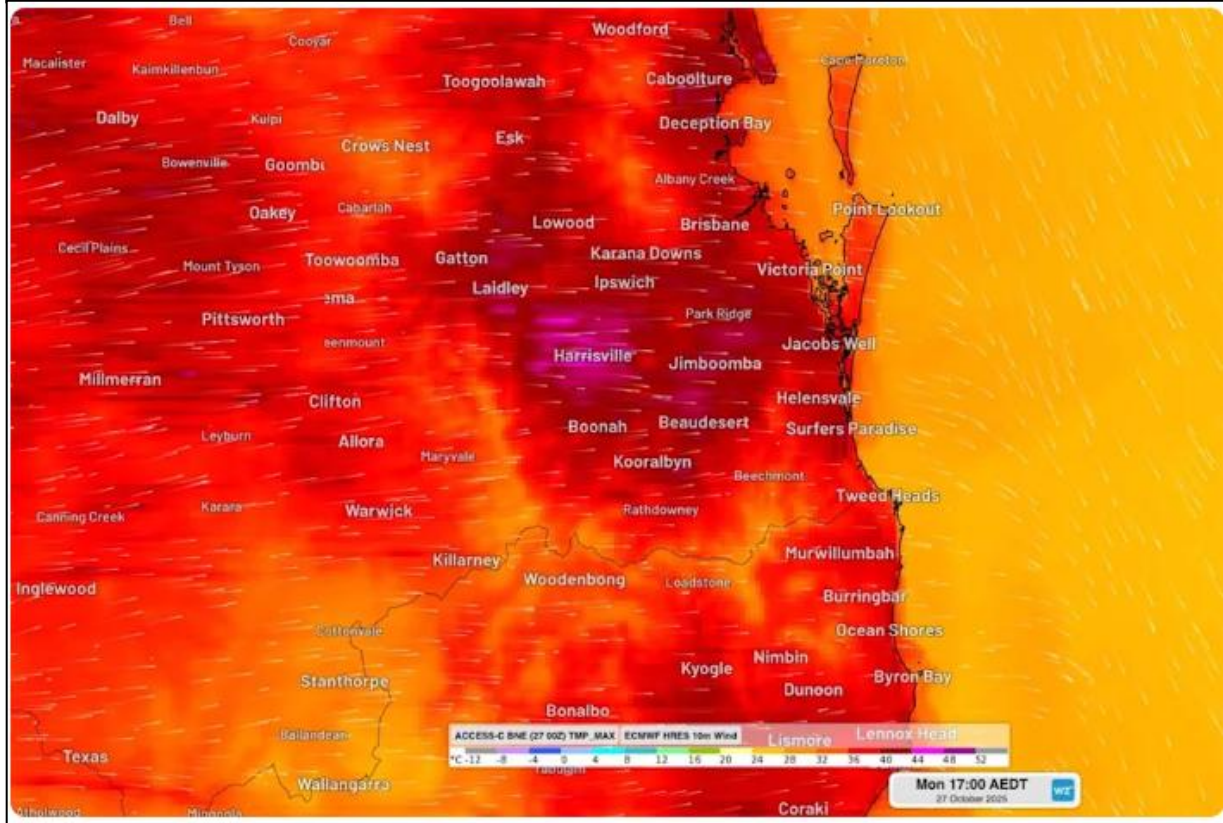
- The ICA has initiated its preliminary catastrophe protocols to evaluate the insurance implications of the hail, rain, and strong winds that impacted Brisbane and Ipswich.
- As part of the Significant Event declaration, the ICA is collecting and analyzing claims data in collaboration with its members.

The increase in road fatalities comes as Queensland faces the prospect of its highest annual toll since 2009.

Dramatic weather shift as millions across Australia go from extreme heat to rain, storms and snow

After sweltering through record-breaking temperatures on Monday, millions of Queenslanders woke to a 'dramatically' cooler day on Tuesday.

Kamilia Palu, News Editor
Updated Mon 27 October 2025 at 11:41 pm GMT-4
3 min read



This map shows extreme maximum temperatures over southeast Queensland on Monday. Source: Weatherzone

Queensland road deaths surge as severe weather intensifies

New Heat + Power Outage Graphics

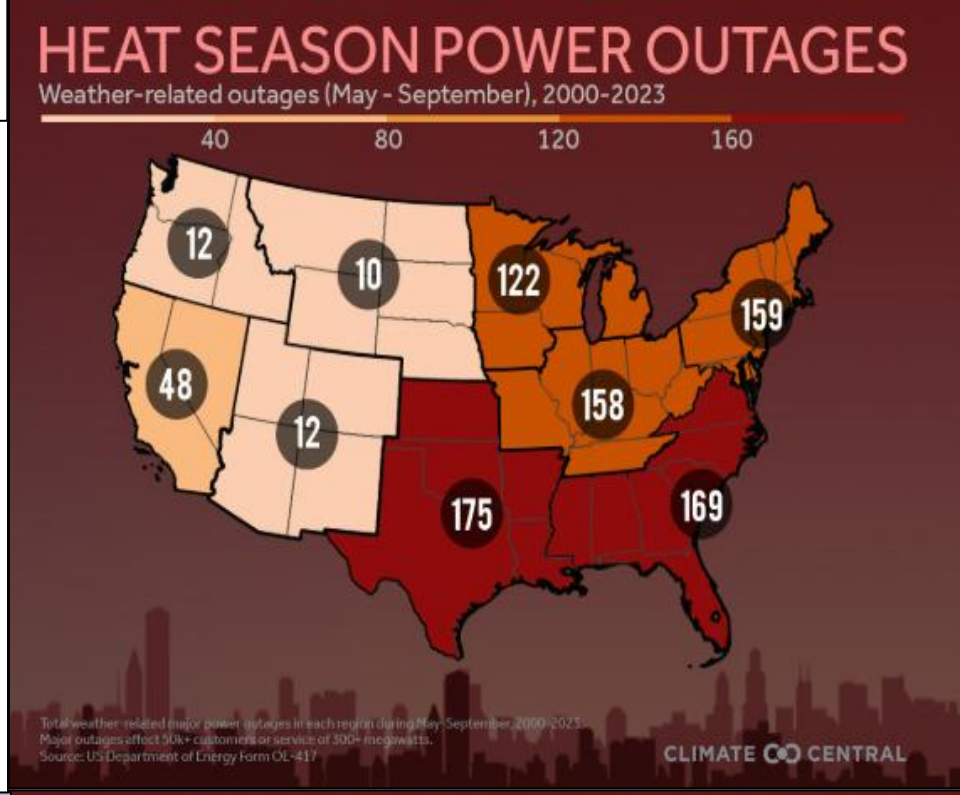
The U.S. experienced about **60% more heat season power outages** during the last 10 years (2014-2023) than during the first 10 years analyzed (2000-2009).

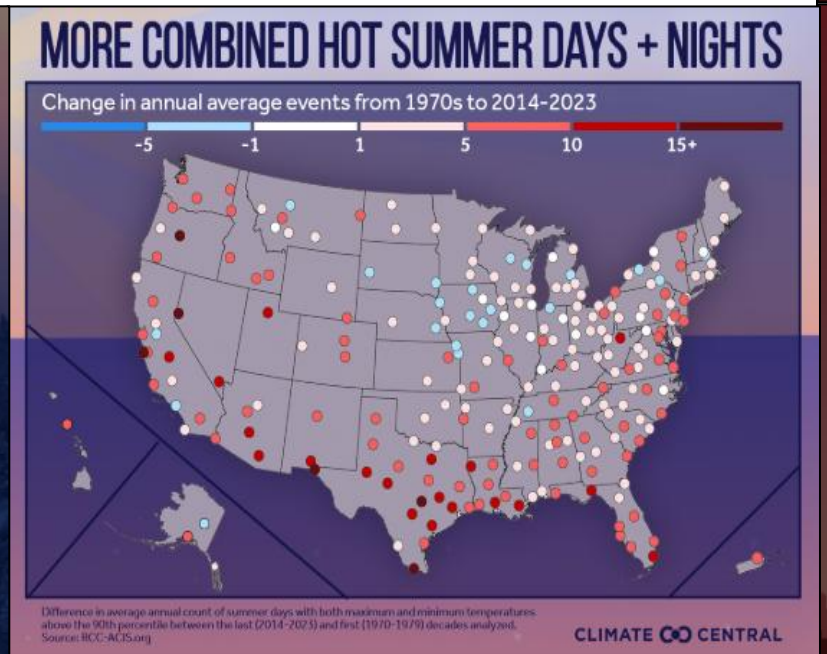
- The South faces more heat season power outages than any other region — followed closely by the Southeast, Northeast, and Ohio Valley.
    - Texas and Michigan led all other states in total heat season outages.

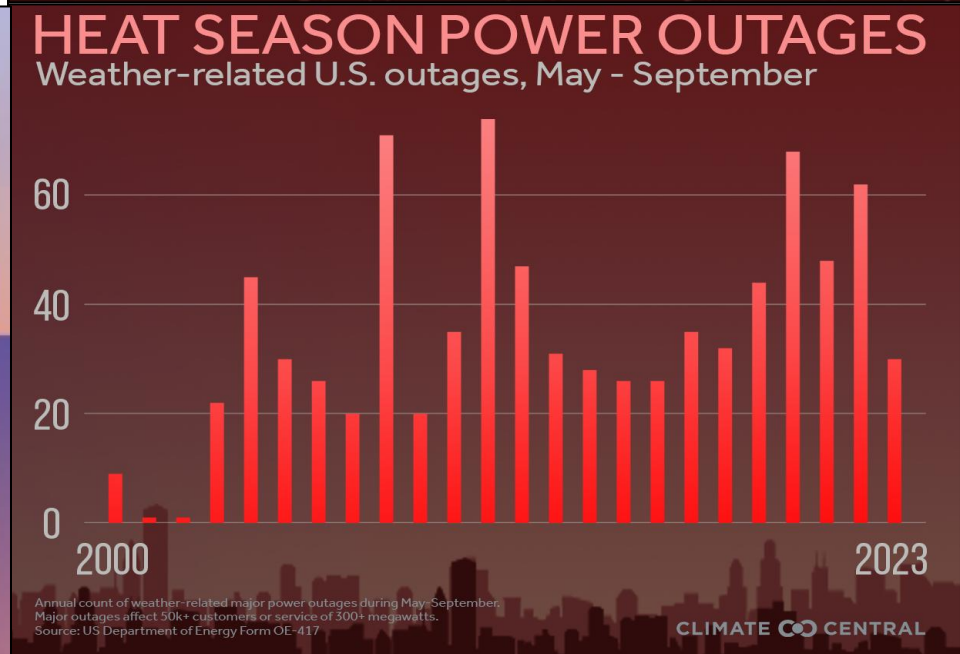
Multi-day heat streaks are dangerous. They worsen air quality and put people at risk from heat-related illness. They can also strain the grid and lead to power outages.

- They're also becoming more common, according to Climate Central analysis of the changing frequency of extreme heat streaks in 247 cities across the U.S. from 1970 to 2024.
- The annual number of extreme heat streaks increased in 198 (80%) of the cities analyzed.
- On average, these 198 cities now experience two more extreme heat streaks each year than in the early 1970s.

In Atlanta, Detroit, and Phoenix, between 68% and 100% of the population would face elevated risk of heat exhaustion or heat stroke during a combined blackout and heat wave. Such events could more than double rates of heat-related mortality in all three cities.







CONTACT

Infrastructure Support: Extreme Weather Emergency Response and Operations

Chief Meteorologist Sunny Wescott

LinkedIn: https://www.linkedin.com/in/sunnywescott/

- Email: Sunny@unlimitedweather.com
  - Federal Email: Sunny.Wescott@cisa.dhs.gov
  - Unable to reply federally until the government resumes operations

HELPFUL STARTS

- NOAA Repository:

https://www.ncei.noaa.gov/cdo-web/

- Frontal Boundaries:

https://aviationweather.gov/gfa/#progchart

- Infographics:

https://www.climatecentral.org/

- World Meteorological Organization:

https://wmo.int/topics/extreme-weather

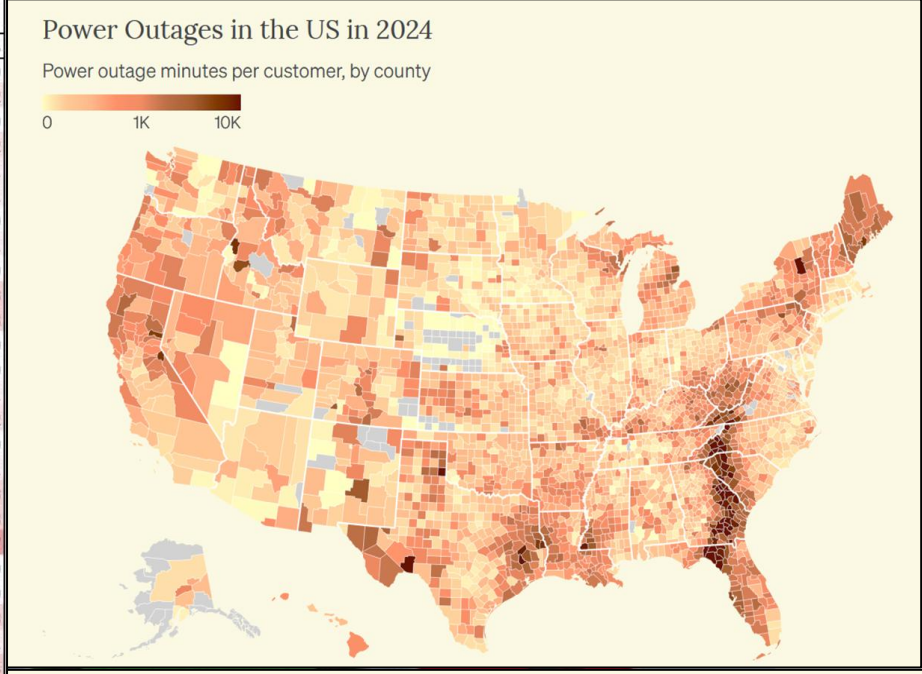
Number of Severe Power Outages Per Year

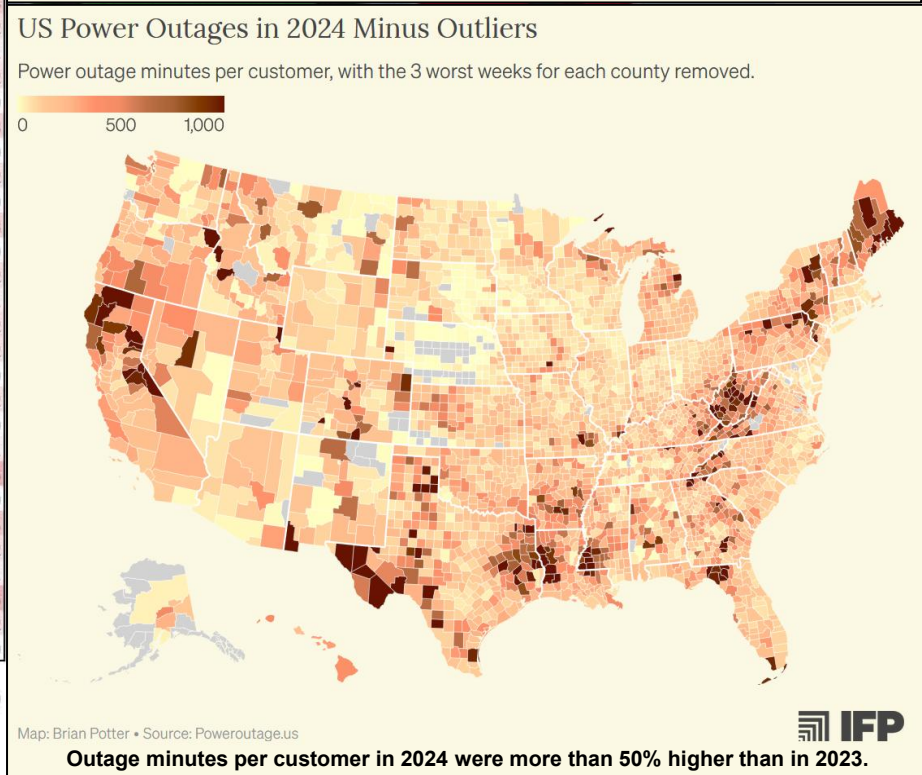
State	2018	2019	2020	2021	2022	2023	2024
Alabama	2	0	4	0	0	2	0
Alaska*	0	0	0	1	2	3	2
Arizona	0	0	0	0	0	0	0
Arkansas	1	1	2	1	1	6	2
California	0	3	0	0	0	1	1
Colorado*	0	1	0	0	0	0	1
Connecticut	3	1	2	0	1	1	0
Delaware	1	0	1	0	0	0	1
District of Columbia	1	0	0	0	0	0	0
Florida	2	0	1	0	2	1	3
Georgia	1	0	1	0	0	2	3
Hawaii	0	0	0	0	2	1	0
Idaho*	0	0	2	1	0	0	0
Illinois	0	0	1	0	0	1	1
Indiana	1	0	1	0	1	1	2
Iowa	0	0	2	1	0	0	0
Kansas*	0	0	0	1	0	1	1
Kentucky	2	0	1	3	1	3	3
Louisiana	0	3	8	6	1	2	3
Maine	5	2	7	1	5	5	7
Maryland	1	0	0	0	1	1	0
Massachusetts	3	1	2	1	0	1	0
Michigan	3	3	3	10	2	4	3
Minnesota	0	0	0	0	1	0	1
Mississippi	0	2	6	3	0	3	4
Missouri	0	1	0	1	0	4	2
Montana***	0	0	0	1	0	0	1
Nebraska*	0	0	0	2	0	0	2
Nevada	0	0	0	0	0	0	0
New Hampshire	3	2	2	1	2	2	3
New Jersey	2	1	2	0	0	0	0
New Mexico*	0	0	0	0	0	0	2
New York	4	0	1	0	0	0	0
North Carolina	4	1	2	1	2	0	3
North Dakota**	0	1	1	0	3	1	0
Ohio	0	0	0	0	1	3	2
Oklahoma	0	1	3	0	0	2	1
Oregon	0	1	1	3	2	0	2
Pennsylvania	2	1	2	0	0	1	2
Rhode Island	2	2	2	3	0	1	0
South Carolina	1	1	2	0	1	0	2
South Dakota**	0	1	1	0	1	0	0
Tennessee	0	0	1	1	3	3	1
Texas	0	1	1	2	0	3	5
Utah	0	0	1	0	0	0	0
Vermont	3	1	0	0	3	4	4
Virginia	3	0	1	2	2	0	2
Washington	1	2	1	2	1	0	1
West Virginia	4	3	2	4	7	4	5
Wisconsin	0	2	0	3	1	1	2
Wyoming**	0	0	1	0	0	0	0
US Total	55	39	71	55	49	68	80

* = 2018 data is incomplete

** = 2018 and 2019 data is incomplete

*** = 2018, 2019 and 2020 data is incomplete





Outage minutes per customer in 2024 were more than 50% higher than in 2023.