

National Weather Service

2026 Winter Partners Webinar

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U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service



Presentation Will Be Available!

- Presentation PDF and Recording will be made available!
- Publicly posted at our Weather Ready Nation calendar page:
- <https://www.weather.gov/wrn/calendar>

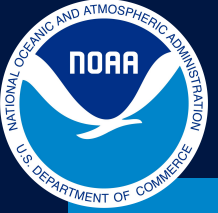


The screenshot shows the top section of the National Weather Service website. At the top left are the NOAA and National Weather Service logos. The main header reads "NATIONAL WEATHER SERVICE" in large, bold, black letters, with "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION" in smaller text below it. To the right of the header is a blue decorative element with a small NOAA logo. Below the header, the word "Calendar" is prominently displayed in a large, bold, blue font. Underneath "Calendar" is a breadcrumb trail: "Weather.gov > Weather-Ready Nation > Calendar". To the right of "Calendar" is the text "Weather-Ready Nation" in a bold, black font, with "National Program" in a smaller font below it. Below the breadcrumb trail and "Weather-Ready Nation" text is a horizontal navigation bar with several links: "Weather Hazards", "Safety Campaigns", "Ambassador", "Education", "Collaboration", "News & Events", "International", and "About". Below the navigation bar is a paragraph of text: "Be a Force of Nature when it comes to extreme weather by learning about potential hazards. Help advance the Weather-Ready Nation by being prepared for the worst. NOAA's National Weather Service (NWS) and its partners encourage individuals, families, businesses and communities to know their risk, take action, and be an example when it comes to dangerous weather." At the bottom of the section, the words "UPCOMING EVENTS" are written in a bold, orange font.

- Winter Season Outlook
- NWS Winter Weather Services Overview
- NWS Winter Products
- Outreach Materials



NOAA 2026-2027 Winter Season Outlook

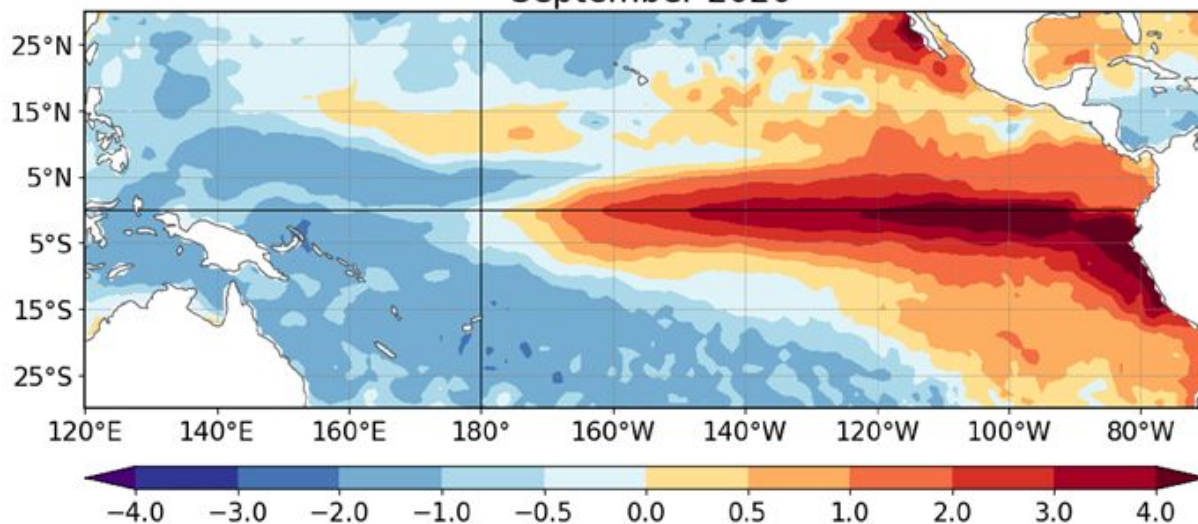


Factors Influencing the NOAA Winter Outlook

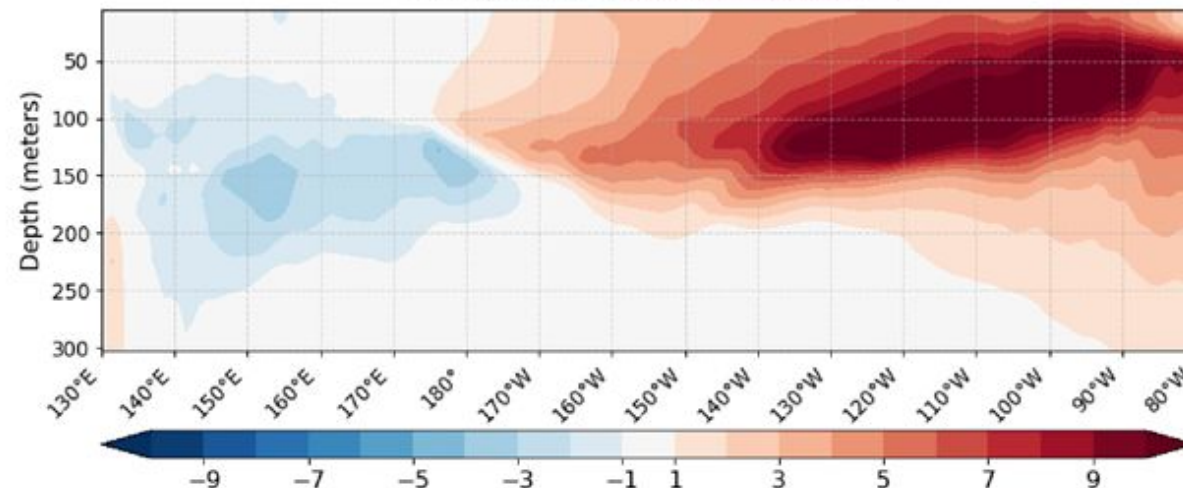


- The ongoing strong to very strong El Niño event
 - Forecast guidance, tools and information keyed to historical El Niño events
 - Particular focus and inspection of previous historically strong El Niño events
- Short term climate prediction ensemble model guidance from U.S. and international modeling centers
- Stratosphere conditions: Quasi Biennial Oscillation (QBO), El Niño and their relationship to the Polar Vortex
- Assessment of northern hemisphere anomalous snow cover and both positive and negative long-term temperature trends
- “Super Intelligence” (SI) experimental seasonal forecast tools and information

Relative Sea Surface Temperature (SST) Anomalies (°C)
September 2026



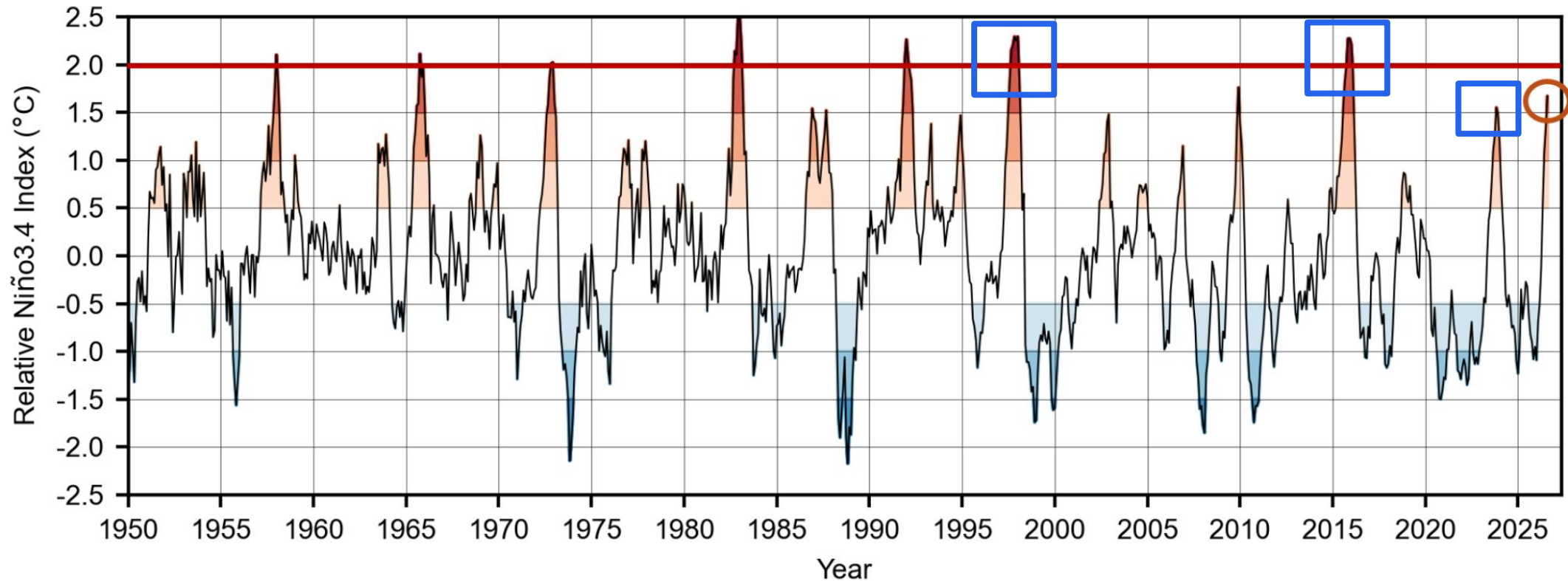
Equatorial Subsurface Temperature Anomalies (°C)
Pentad centered on 30 Sep 2026



ENSO Alert System Status: **El Niño Advisory**

- El Niño conditions are present and forecast to continue through the Spring of 2027.
- Equatorial Pacific sea surface temperatures (SSTs) are well above normal in the central and eastern Pacific (*left*)
- Ocean subsurface temperatures (*right*) depict a large reservoir of warmer than normal water below the surface (red shades) across the east-central Pacific Ocean to a depth of over 200 meters

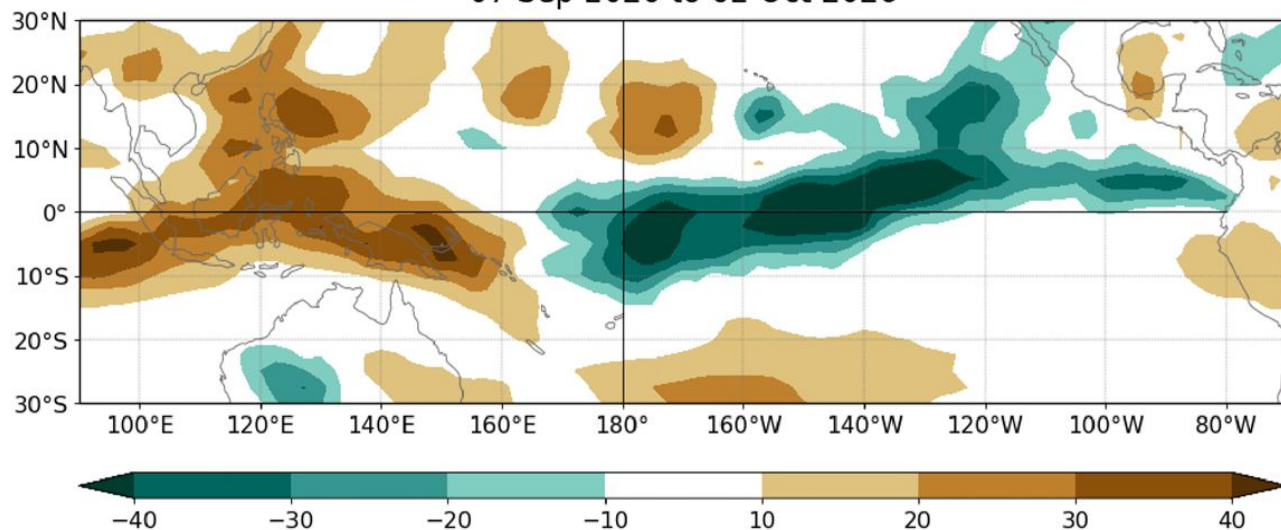
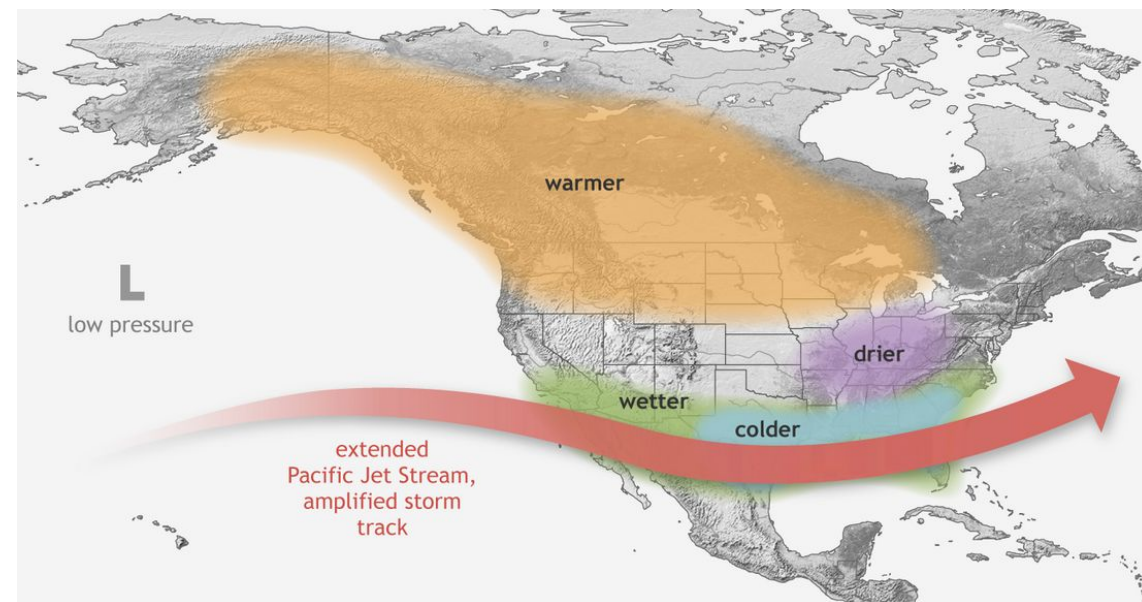
The El Niño-Southern Oscillation



The time series of the Relative Nino3.4 SST index for 1950 - present

Current Atmosphere Conditions – Pacific Ocean

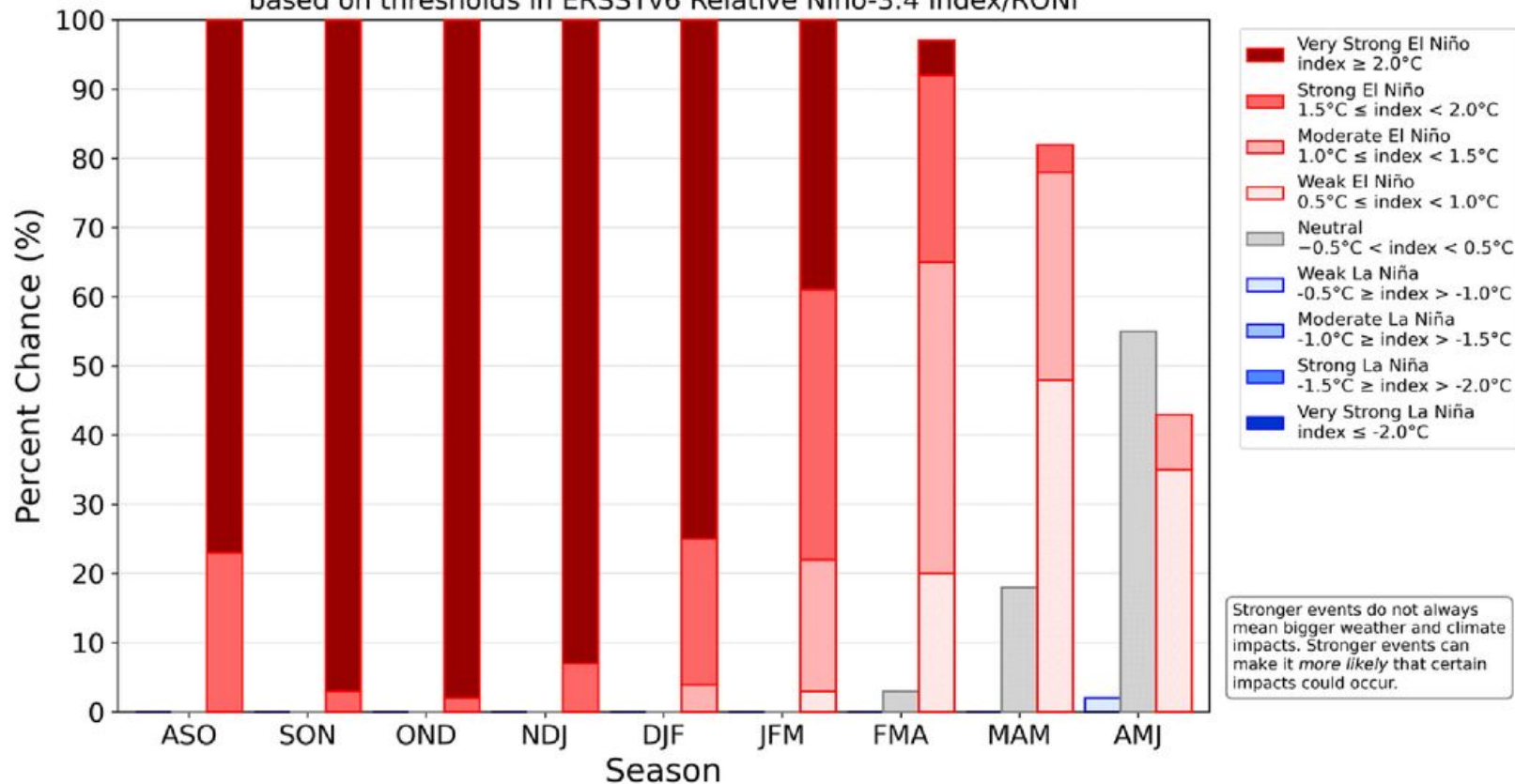
Outgoing Longwave Radiation (OLR) Anomalies (W/m^2)
07 Sep 2026 to 02 Oct 2026



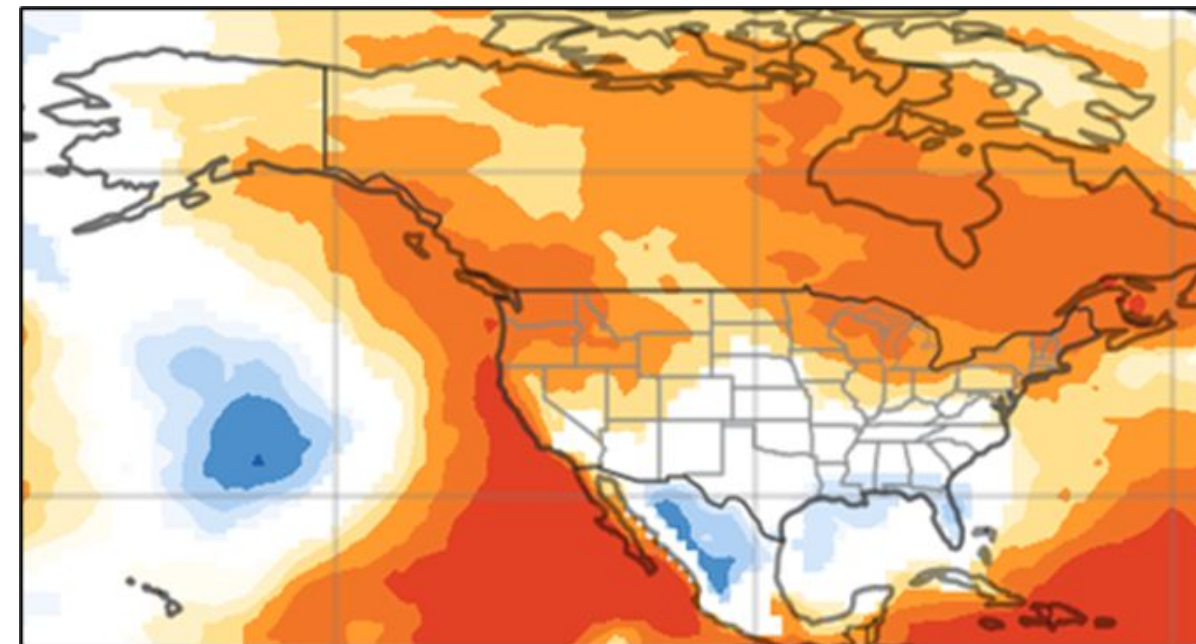
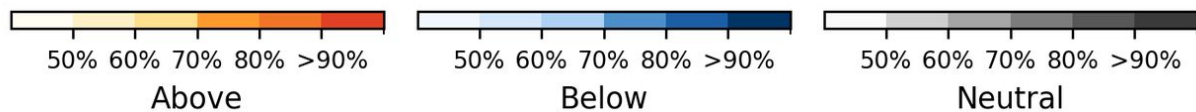
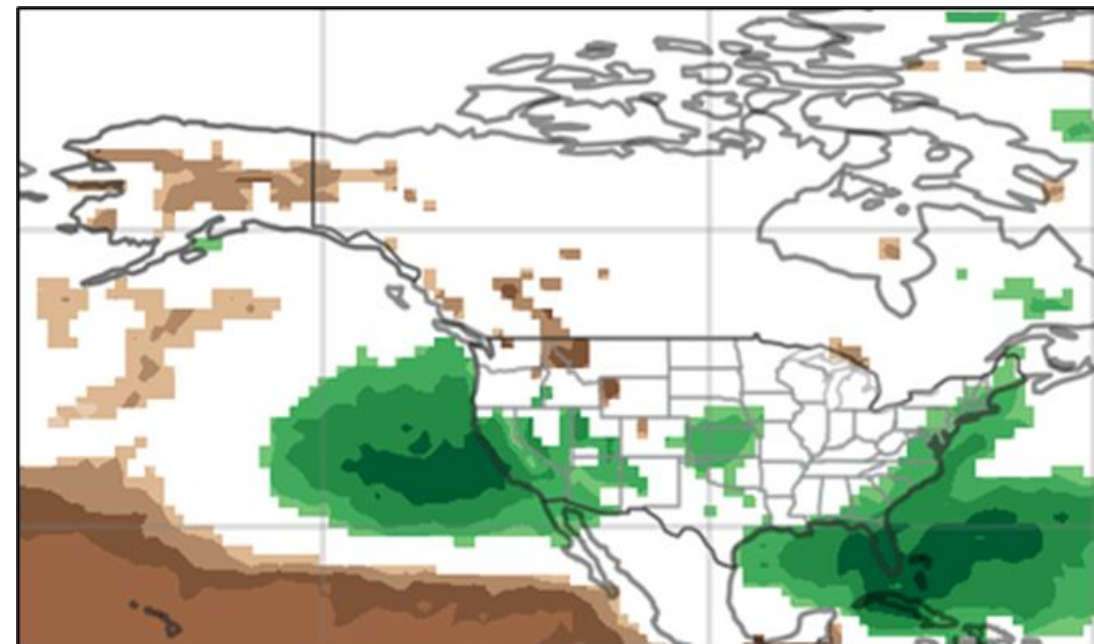
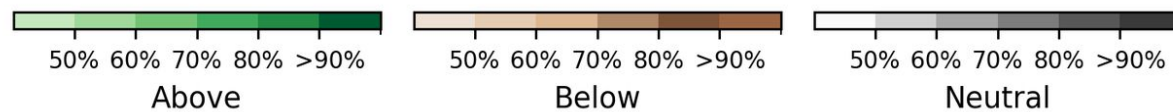
- Anomalous Outgoing Longwave Radiation (OLR) - proxy for tropical rainfall (*left*)
- Strongly enhanced tropical rainfall (*green*) in the central and eastern Pacific and suppressed tropical rainfall (*brown*) over Indonesia and the western Pacific
- This atmospheric response is critical for the changes in the jet stream and associated impacts for the U. S. winter season (*right*)

NOAA CPC ENSO Strength Probabilities (issued September 2026)

based on thresholds in ERSSTv6 Relative Niño-3.4 index/RONI



- El Niño is forecast to continue through the spring of 2027
- The strength of this event is highly likely enter the very strong category (*dark red, left*) at its peak
- ENSO neutral is not forecast to return until the Apr-May-Jun (AMJ) season

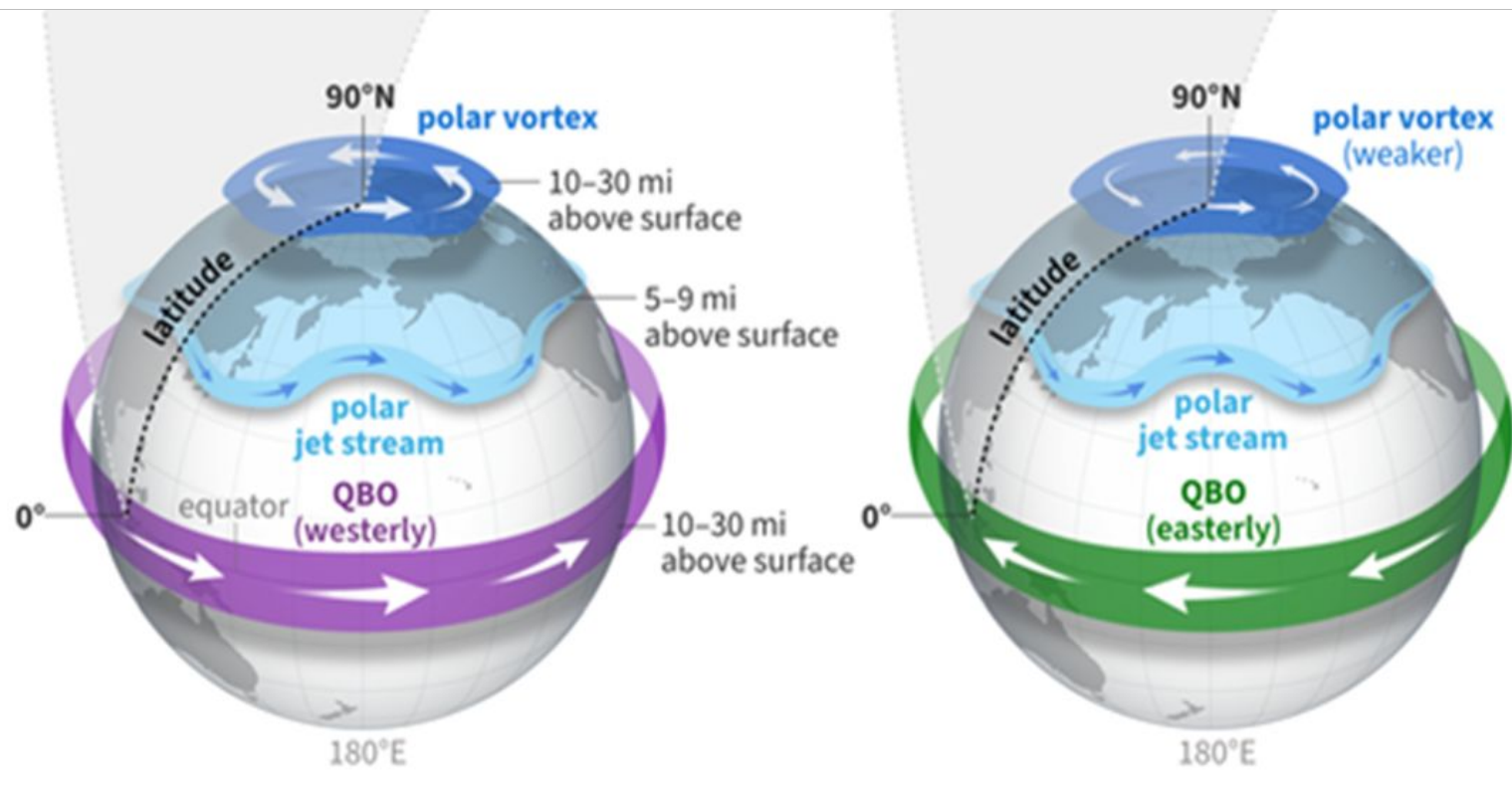


- North American Multi-Model Ensemble (NMME)
- Temperature probabilities (left), Precipitation probabilities (right)
- Model guidance consistent with typical El Niño impacts

Other Factors - Stratospheric Polar Vortex

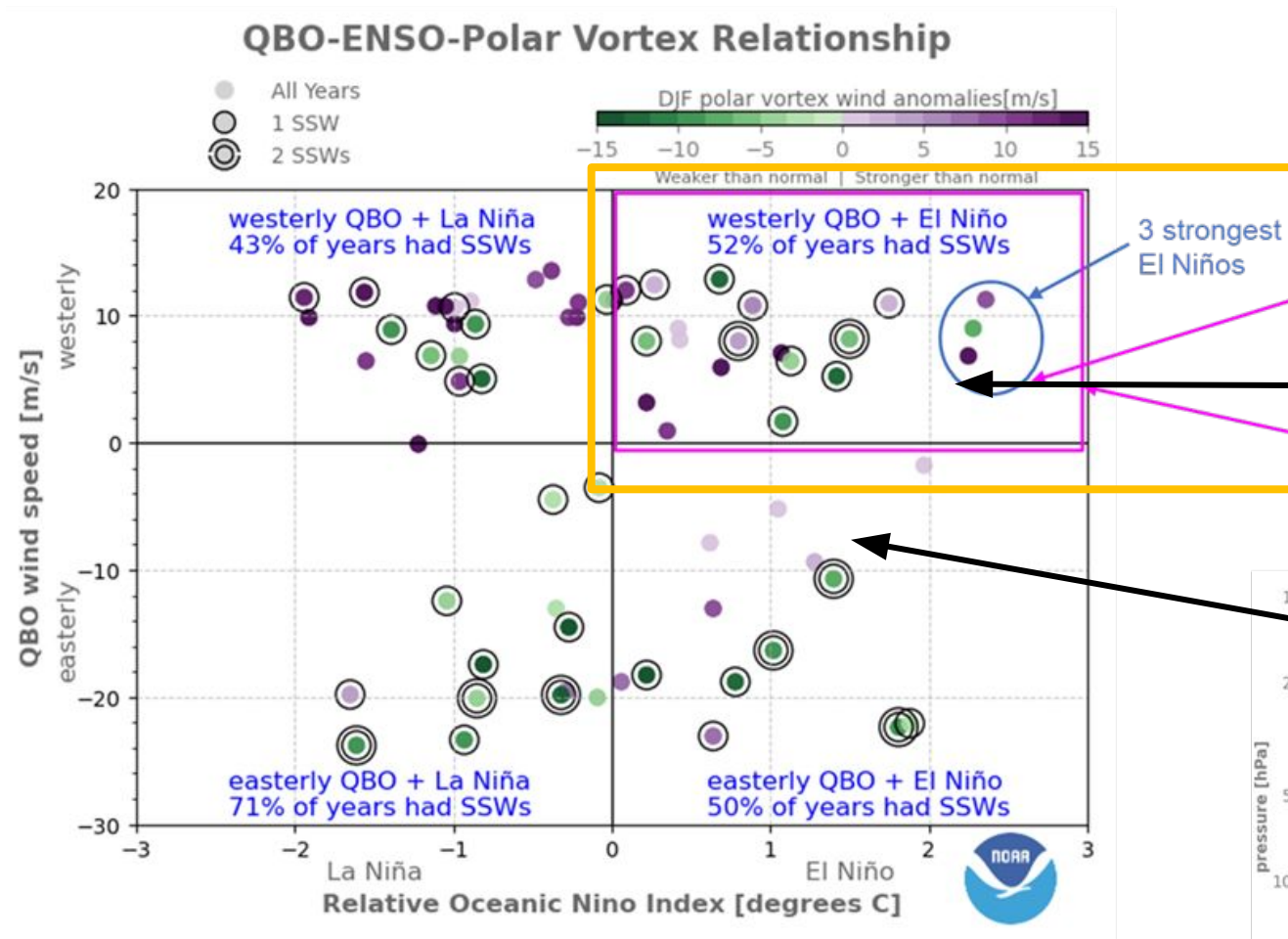
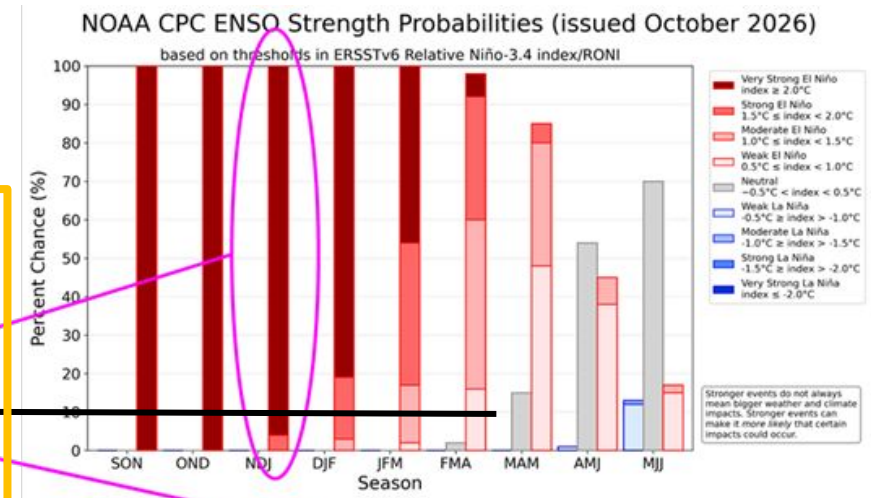
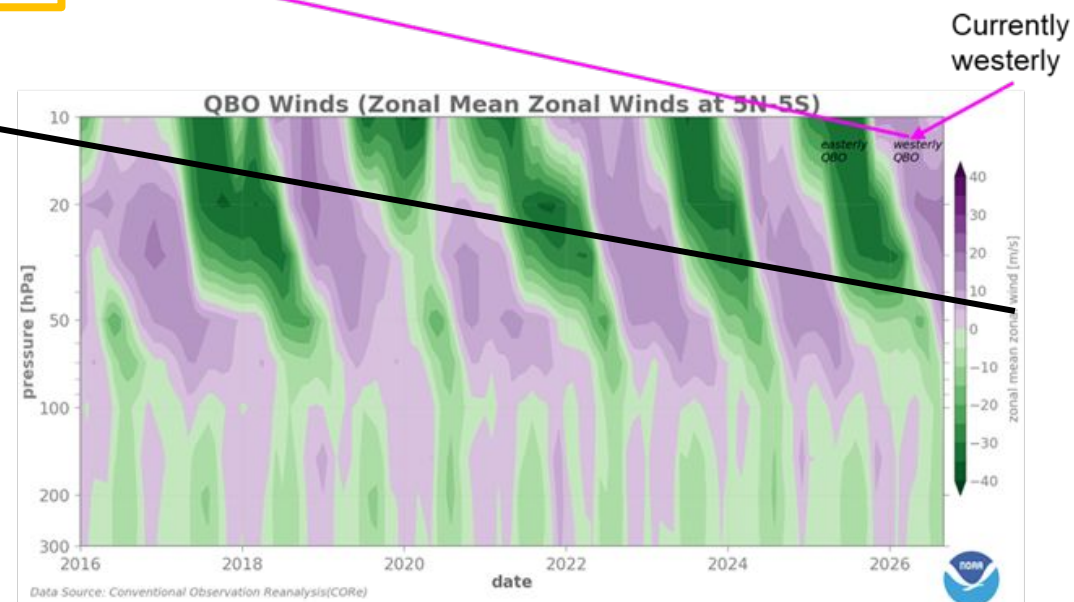
Westerly QBO

Easterly QBO



- The QBO is in the westerly phase for the 2026-2027 extended winter season
- The polar vortex (PV) is typically stronger or more stable during the westerly phase of the QBO
- A strong PV can reduce the odds for Arctic air outbreaks

Other Factors - Stratospheric Polar Vortex



Historical relationship between QBO, ENSO, and strength of Polar Vortex

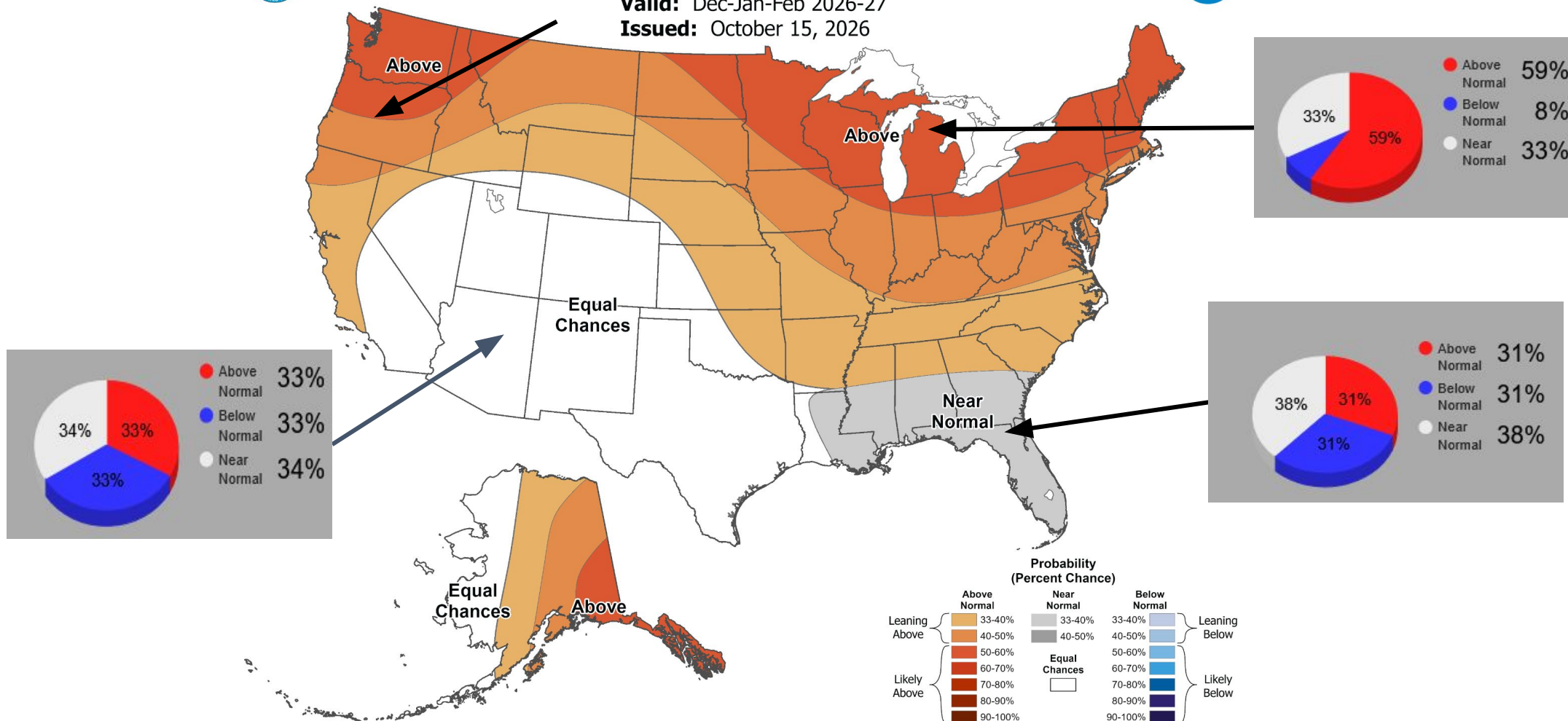
Dec-Jan-Feb 2026-2027 Temperature Outlook



Seasonal Temperature Outlook

Valid: Dec-Jan-Feb 2026-27

Issued: October 15, 2026



To be updated at 8:30 AM November 19, 2026

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/

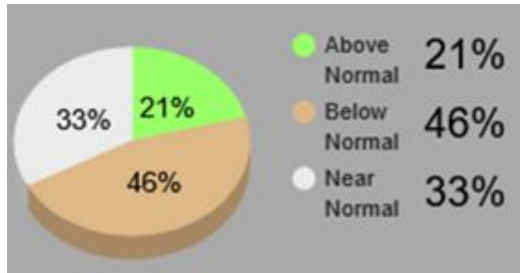
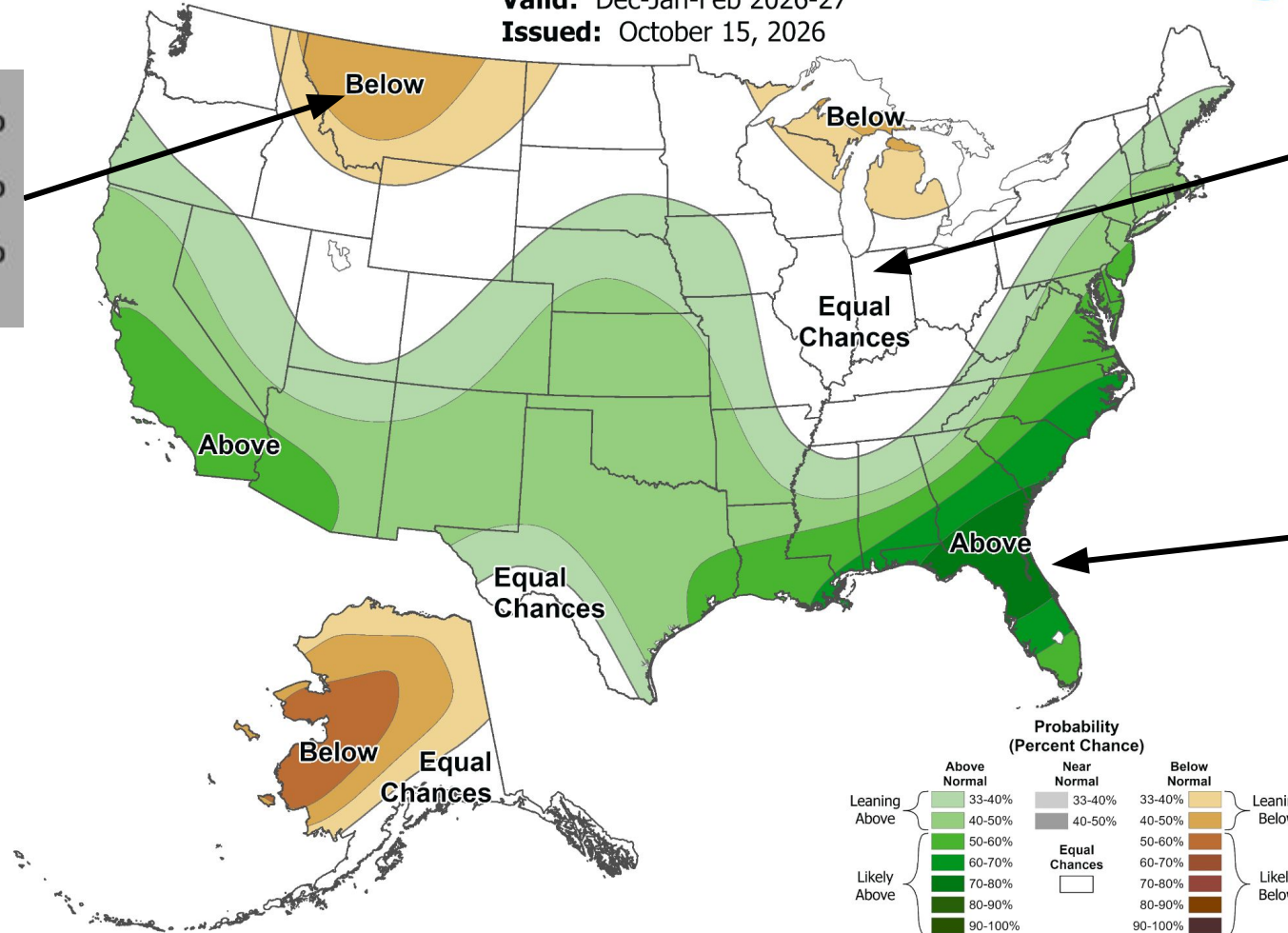
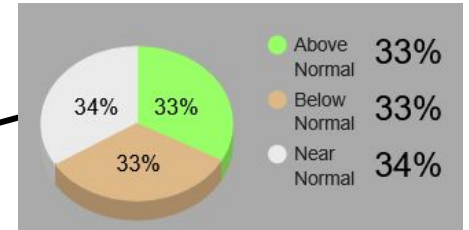
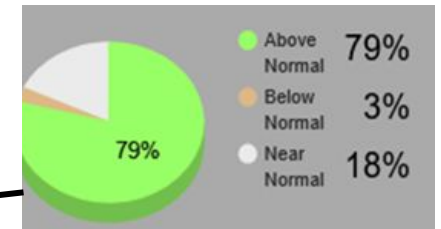
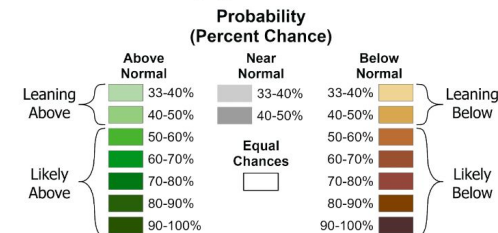
Dec-Jan-Feb 2026-2027 Precipitation Outlook



Seasonal Precipitation Outlook

Valid: Dec-Jan-Feb 2026-27

Issued: October 15, 2026



To be updated at 8:30 AM November 19, 2026

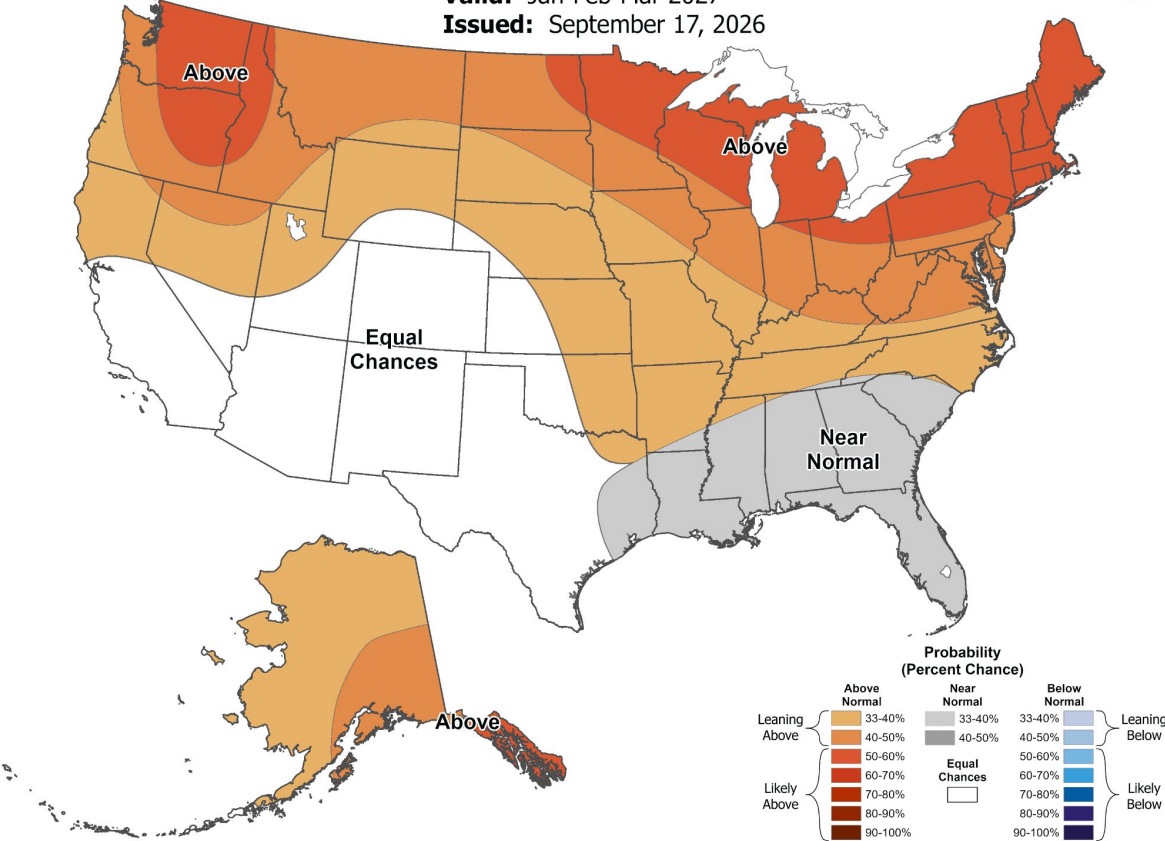
https://www.cpc.ncep.noaa.gov/products/predictions/long_range/

Jan-Feb-Mar 2027 T/P Outlooks



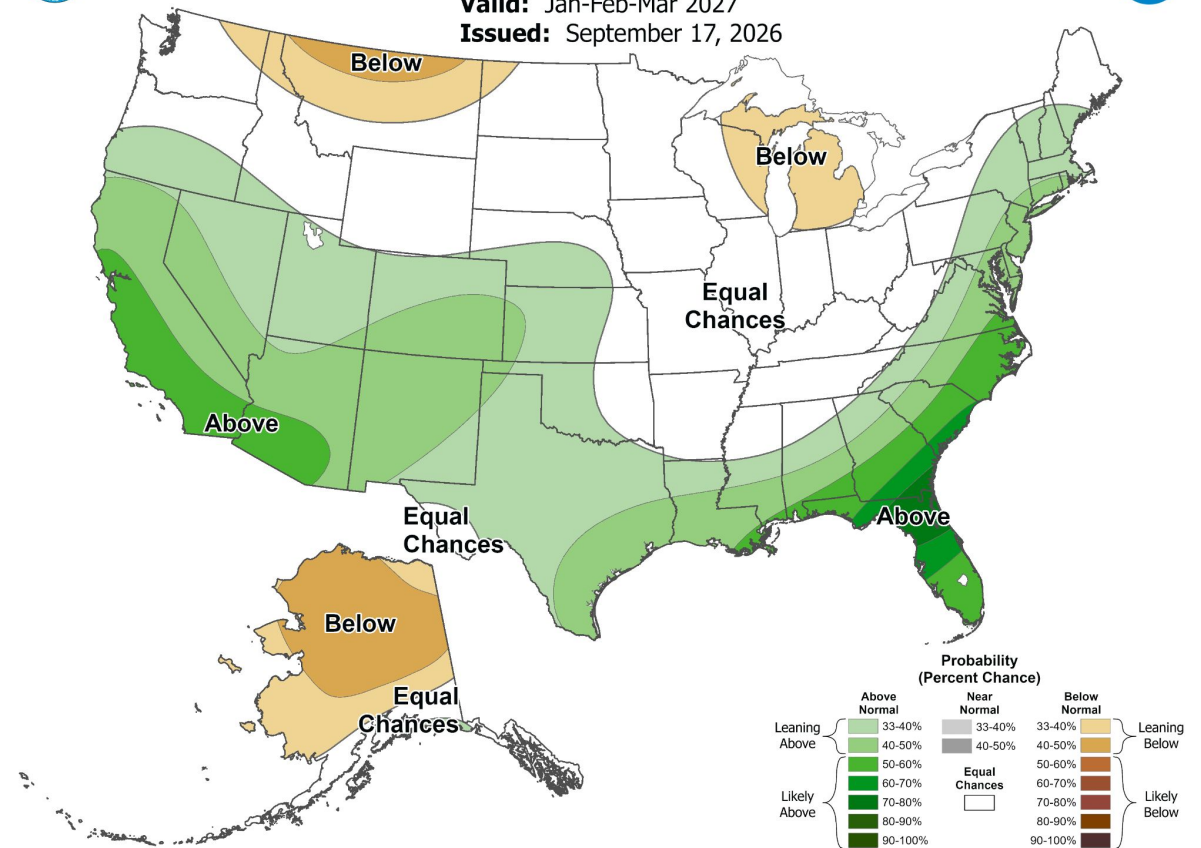
Seasonal Temperature Outlook

Valid: Jan-Feb-Mar 2027
Issued: September 17, 2026



Seasonal Precipitation Outlook

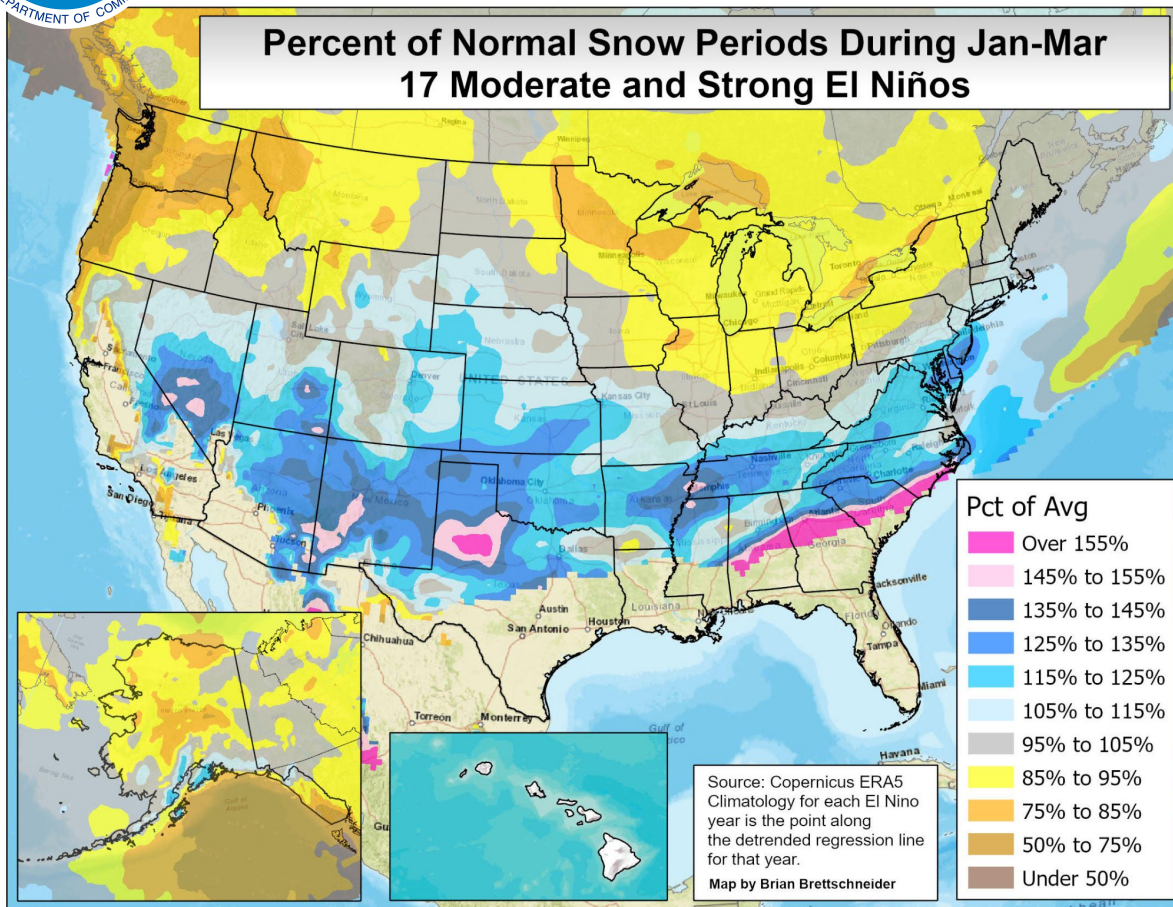
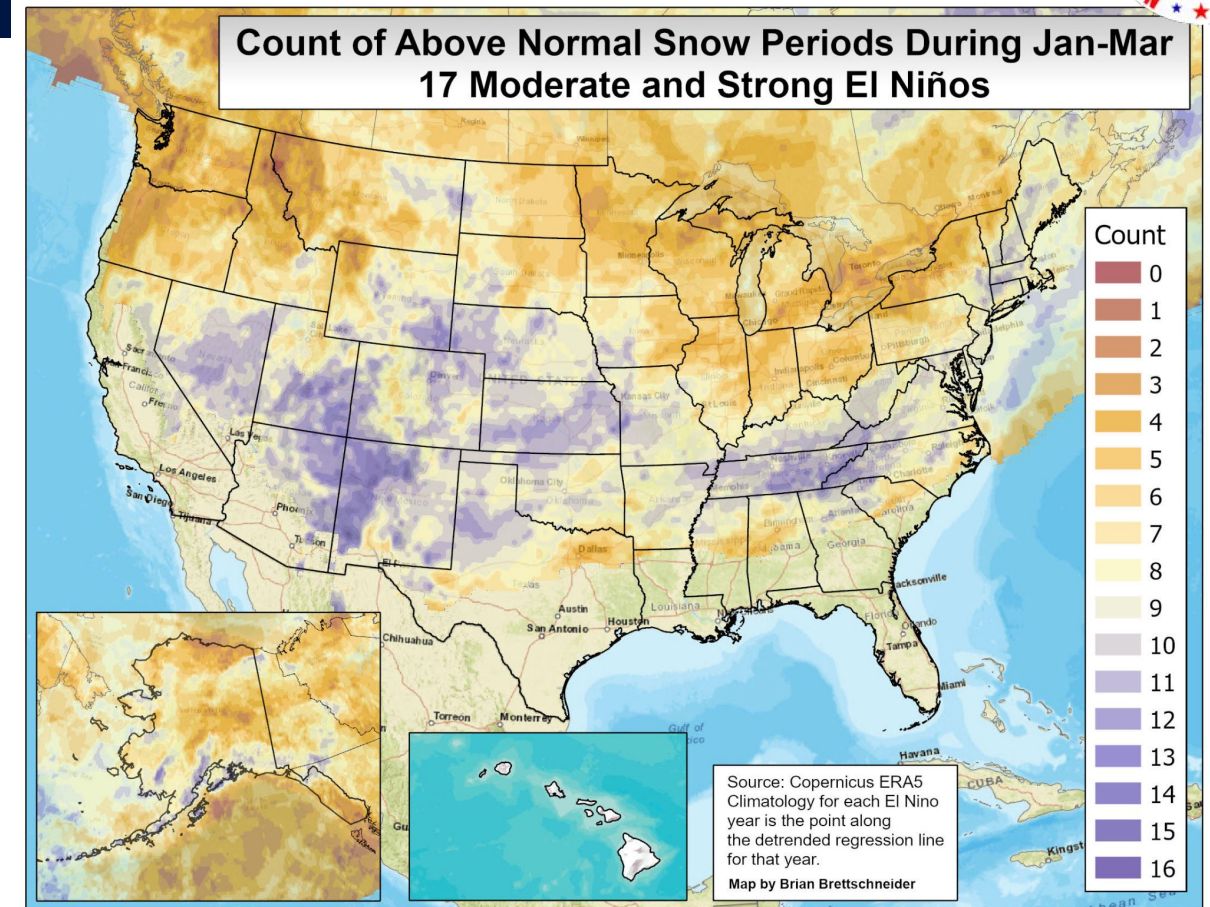
Valid: Jan-Feb-Mar 2027
Issued: September 17, 2026



To be updated at 8:30 AM November 19, 2026

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/

El Niño Potential Impacts - Snowfall



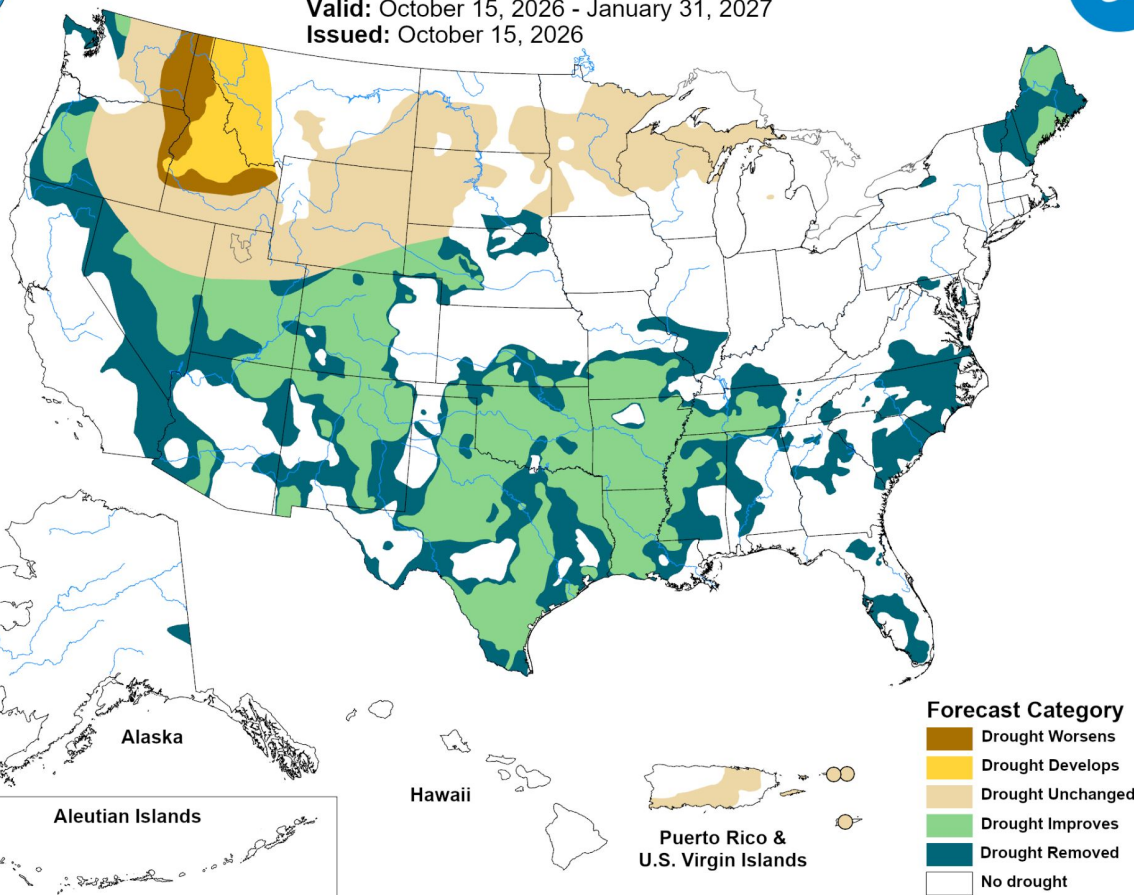
- Jan-Feb-Mar (JFM) seasonal snowfall departures (% of normal) for moderate or greater El Niño events (*left*)
- Frequency (# of years out of total) for above-normal seasonal snowfall (*right*)

Drought Outlook and Other Impacts

Seasonal Drought Outlook

Valid: October 15, 2026 - January 31, 2027

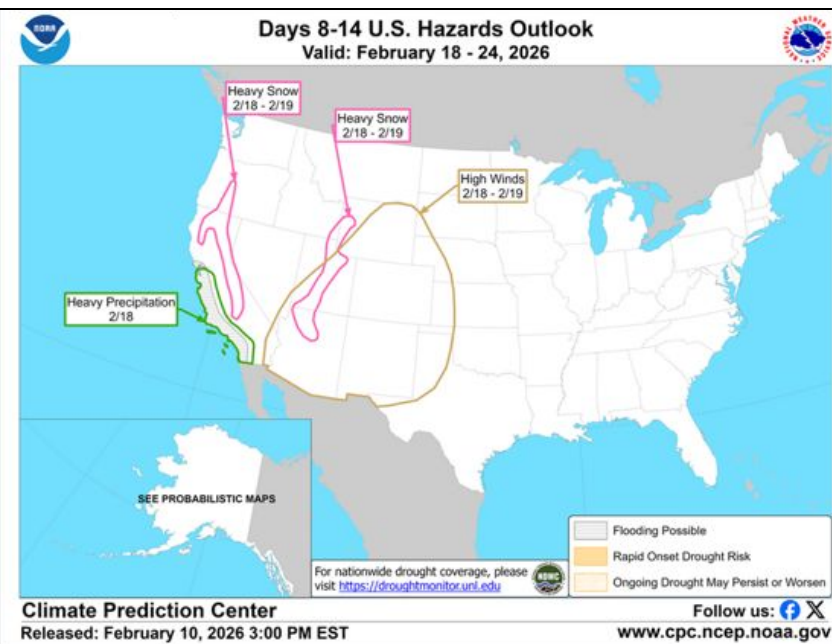
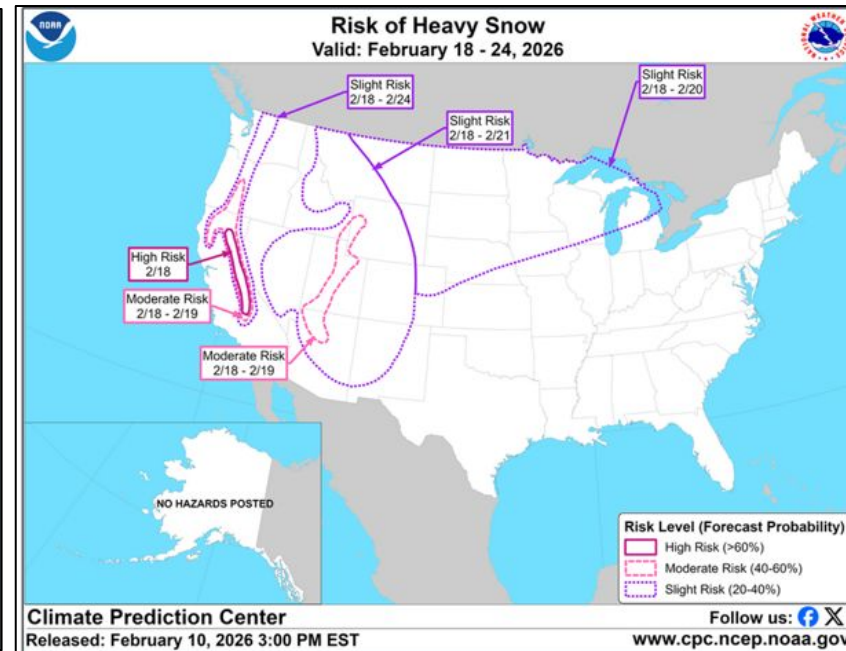
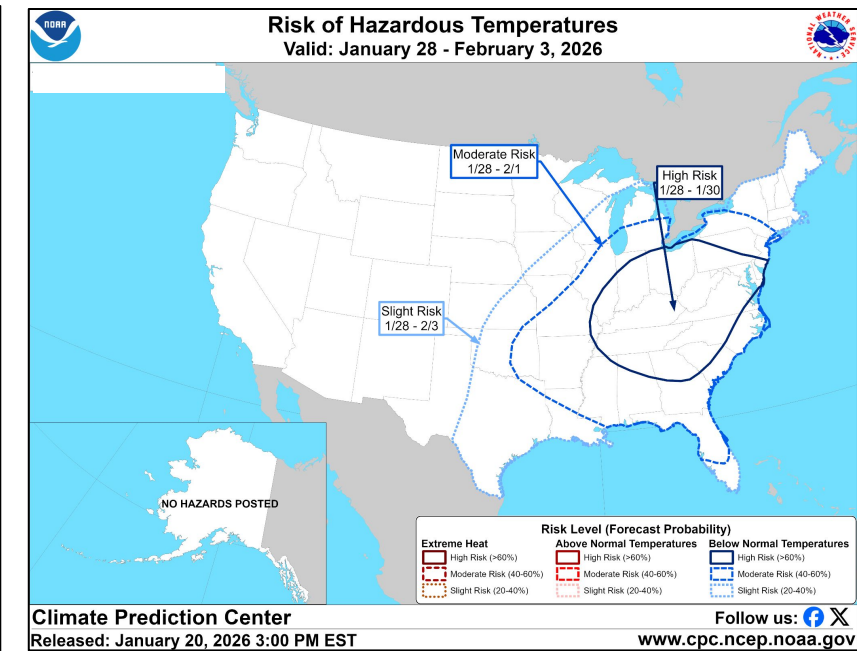
Issued: October 15, 2026



- Elevated odds for heavy precipitation events during strong El Niño events along West Coast and southern tier of the U.S.
 - Atmospheric river events
 - Flooding
 - Landslides/mudslides especially in burn scar areas
- Elevated risk of late winter severe weather for Florida, eastern Gulf Coast

To be updated at 8:30 AM November 19, 2026

https://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.png



- Monitor the CPC Week 2 U.S. Hazards Outlook for potential hazardous weather events related to temperature, wind and precipitation
- Composite map includes flooding (*left*), risk levels for heavy snowfall (*center*) and extreme cold (*right*)



Take Home Messages



- El Niño Advisory in effect as El Niño conditions are present in the both the ocean and atmosphere and forecast to continue through the Spring of 2027.
- High likelihood (~95%) of a very strong El Niño event at his peak late this year.
- No two El Niño events are alike and impacts vary. Strong events substantially increase the odds for the impacts described, but not necessarily their intensity (e.g., precipitation departures from normal).
- El Niño itself and the forecast stratosphere conditions - El Niño relationship tilts toward less Arctic air outbreaks, on average, over the winter season.



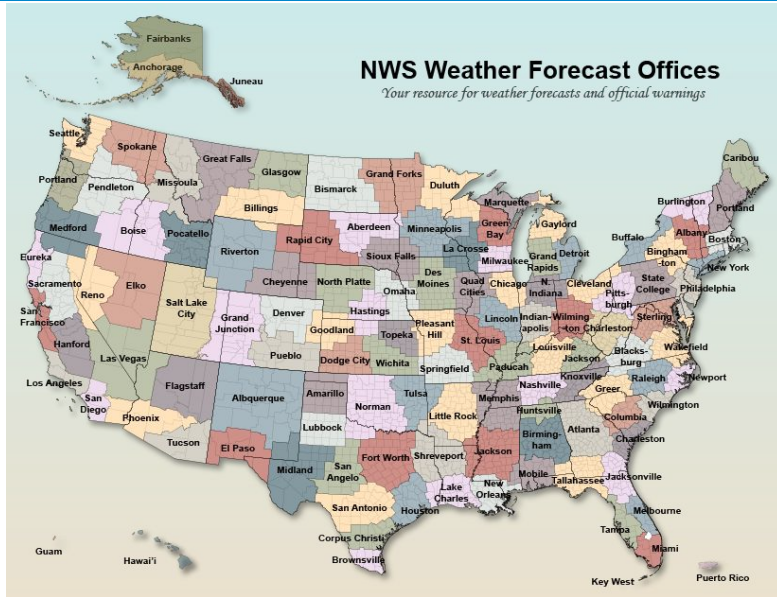
Take Home Messages (cont.)



- Elevated odds for above-normal precipitation for California, the Southwest, the central and southern Plains, Southeast and along the Eastern Seaboard.
- Elevated odds for above-normal snowfall for the California mountains, southern Intermountain West and Rockies, southern Plains and mid-Atlantic.
- Favored below-normal snowfall signal for the interior Northeast, Great Lakes, upper Mississippi Valley, northern Rockies and interior Alaska.
- Follow CPC extended- and subseasonal-range outlooks (Week 2, Weeks 3-4 and monthly) within the extended winter season.

NWS Winter Weather Services Overview

How Does NWS Forecast Winter Weather?



Weather Forecast Offices (WFOs)

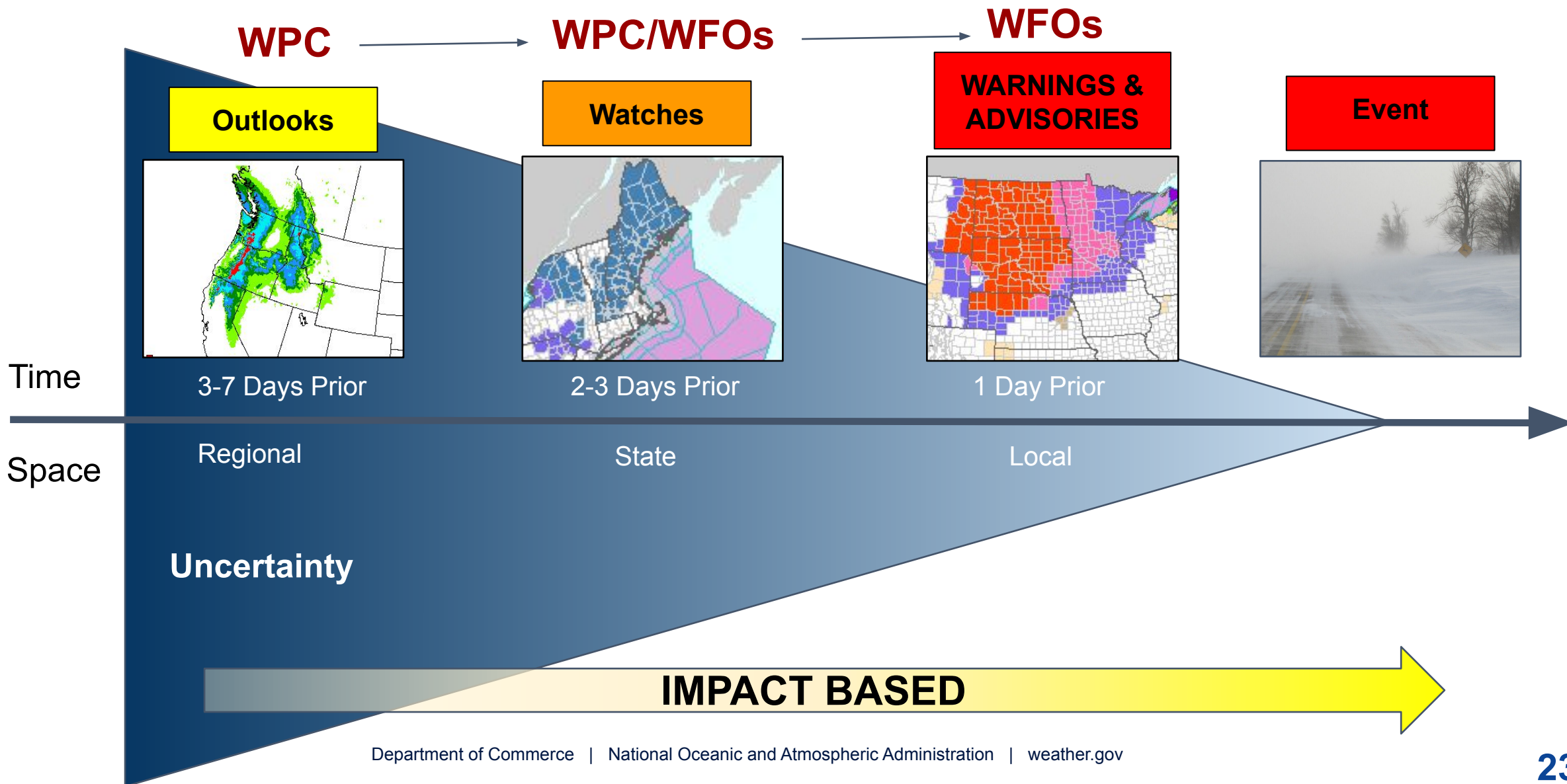
- Issue ALL winter-related Advisories, Watches, and Warnings



Weather Prediction Center (WPC)

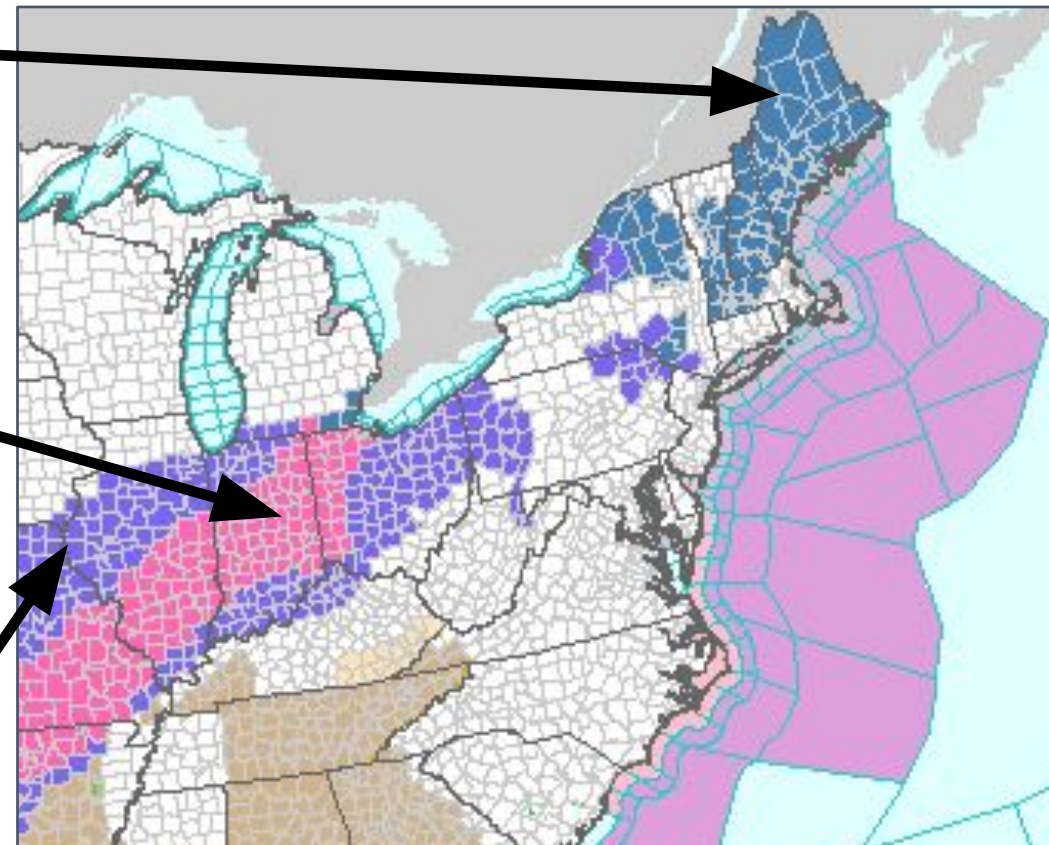
- Specializes in bigger picture, longer-term (days) winter outlook, and impact information

Winter Weather Product Cascade



Winter Hazard Products

- **Winter Storm Watch:** Conditions favorable ($\geq 50\%$ confidence) for a winter weather event to meet or exceed locally defined criteria or cause severe impacts
- **Winter Storm Warning:** A winter weather event is expected ($\geq 80\%$ confidence) to meet or exceed locally defined criteria or cause severe impacts
- **Winter Weather Advisory:** A winter weather event is expected to cause impacts, but will not exceed warning criteria or reach high enough severity levels to warrant a warning

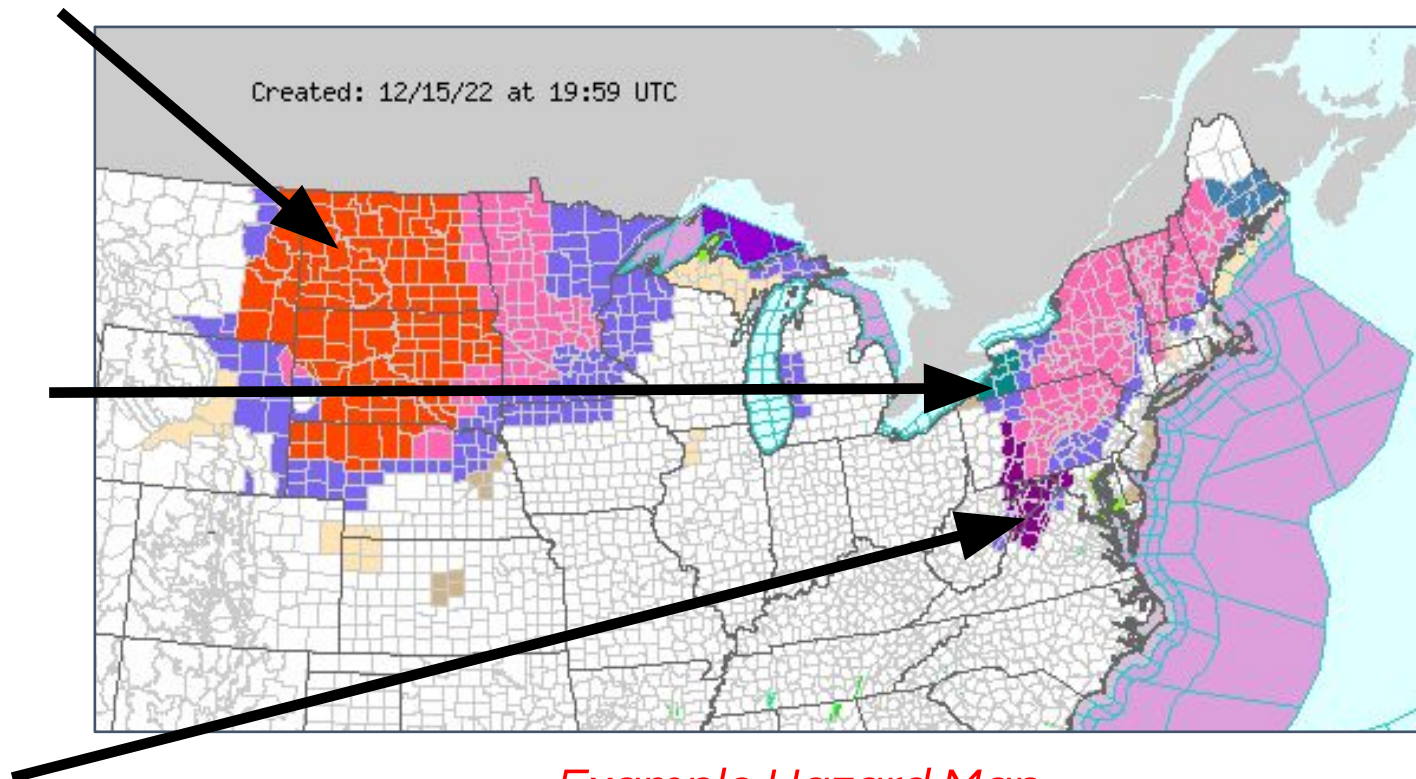


Example Hazard Map

Snow Criteria Map: weather.gov/snow-criteria

Winter Hazard Products

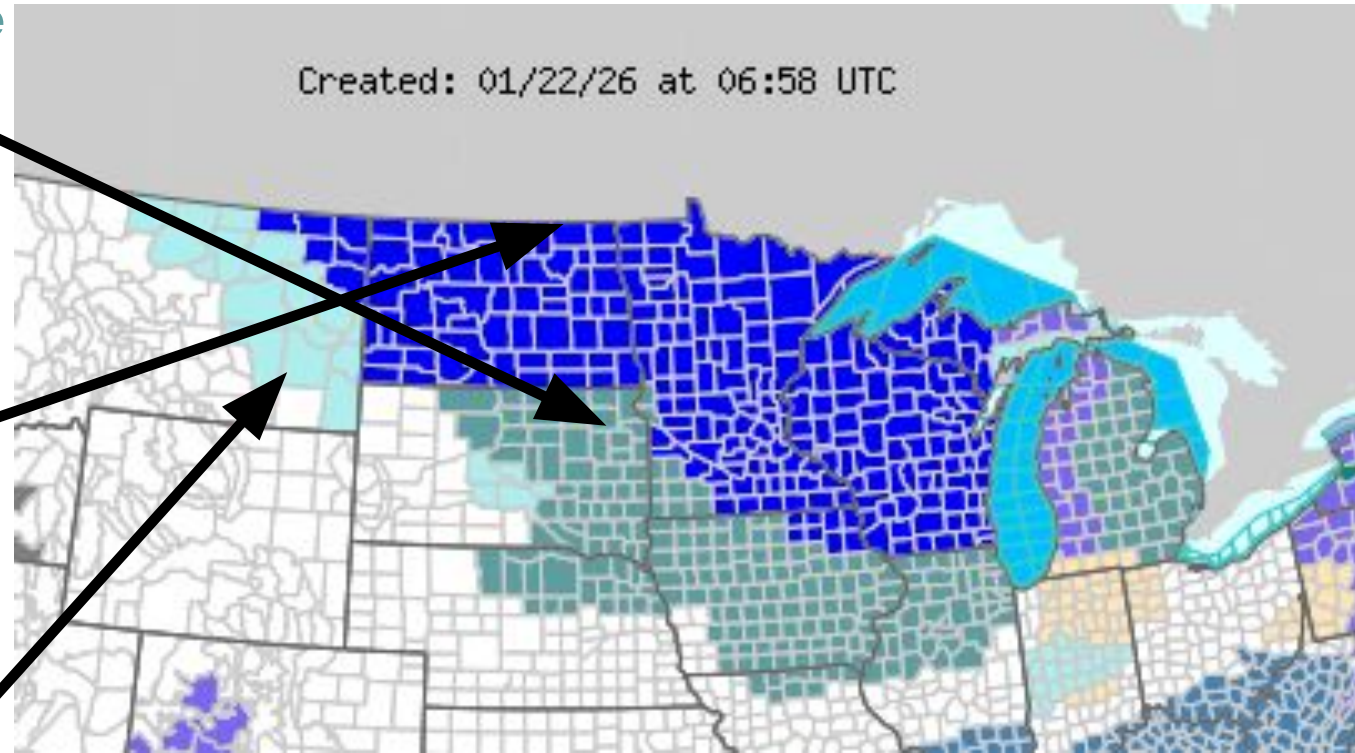
- **Blizzard Warning:** Sustained or frequent wind gusts ≥ 35 mph and visibility $\leq \frac{1}{4}$ mile in snow or blowing snow is expected ($\geq 80\%$ confidence) to last for ≥ 3 hours
- **Lake Effect Snow Warning:** Lake Effect Snow is expected ($\geq 80\%$ confidence) to meet or exceed locally defined warning criteria or cause severe impacts. *Used in the Northeast U.S. only*
- **Ice Storm Warning:** Ice accumulation is expected ($\geq 80\%$ confidence) to meet or exceed locally defined ice amount criteria or cause severe impacts



Example Hazard Map

Cold Hazard Products

- **Extreme Cold Watch:** Conditions favorable ($\geq 50\%$ confidence) for an extreme cold event to meet or exceed locally defined criteria or cause severe impacts
- **Extreme Cold Warning:** An extreme cold event is expected ($\geq 80\%$ confidence) to meet or exceed locally defined criteria or cause severe impacts
- **Cold Weather Advisory:** A cold weather event is expected to cause impacts, but will not exceed warning criteria



Example Hazard Map

NWS Winter Products

NEW - Particularly Dangerous Situation

Implementation Date

October 1, 2026

Overview

The National Weather Service will implement the capability to use **“Particularly Dangerous Situation”** wording in select Blizzard Warnings and Ice Storm Warnings.

High Confidence

High Confidence in timing, intensity, and duration of historically extreme event

Extreme Severity

Forecasted conditions significantly exceed the standard warning threshold

Exceptional Threat

Significant and widespread threat, including loss of life, unprecedented disruptions to emergency services

Motivation: This language allows the NWS to alert partners and the public during rare events of extreme and historic severity that pose an exceptional threat, creating imminent danger to life and unprecedented disruptions to emergency services.

- Appears as a separate bullet within official warning products
- No unique Valid Time Event Code (VTEC)
- No trigger of Wireless Emergency Alerts

Example

...BLIZZARD WARNING REMAINS IN EFFECT UNTIL 7 AM EST SUNDAY...

* **THIS IS A PARTICULARLY DANGEROUS SITUATION.**

* **WHAT...Historic blizzard conditions expected.**

NEW - Radial Ice Forecasts and Measurements

NWS standardized forecasting and reporting radial ice instead of “elevated flat ice” on 10/1/26

Infrastructure Thresholds



- Radial ice on a cylindrical object better captures impacts to trees and powerlines, especially when combined with wind
- We know what these thresholds are

Impacts Focus



- Flat ice matters primarily for roads, where any glaze can result in major impacts
- Forecasts don't match ground reality

Data Consistency



- Most Local Storm Report (LSRs) are already radial
- Consistency improves verification and case study accuracy

Ice Storm Warning Criteria



- Criteria will not change this season, NWS to reevaluate criteria for next winter season
- Just because ice amounts are now “lower” does not mean the storm is not as impactful!



WFOs will still create flat ice forecasts if needed by local partners!

$$\text{radial ice} = 0.394 * \text{flat ice}$$



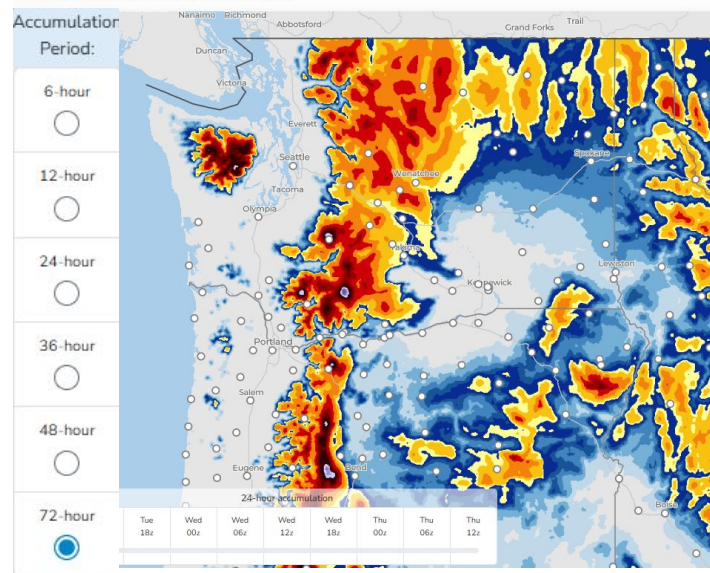
Goal:

A website to view probabilistic snow, ice, and liquid precipitation forecasts for up to 72 hours

2026 Updates:

- Became an operational product on 10/5/26
- New Timeframes:
 - 6-, 12-, 36-, 48-hours, also 24- & 72 hours
- New percentile maps:
 - 25th, 50th, and 75th percentiles
 - 5th and 95th also available to download on FTP site
 - 10th and 90th still available too
- New domains:
 - Alaska (PQPF, PWPF)
 - Hawaii & Puerto Rico (PQPF)

Expected Amount of Snowfall
72-hour accumulation: 12z Mon, Nov 18 to 12z Thu, Nov 21



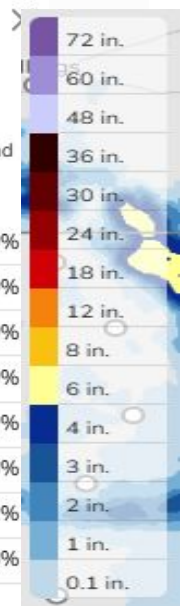
Stevens Pass, WA

12z Mon – 12z Thu

10" 15" 22"
Low End Expected High End

EXCEEDANCE PROBABILITIES

At least 0.1 inches	100%
At least 1 inch	100%
At least 2 inches	100%
At least 4 inches	100%
At least 6 inches	99%
At least 8 inches	96%
At least 12 inches	82%
At least 18 inches	35%



PPP Available here :

https://www.wpc.ncep.noaa.gov/Prob_Precip/

Links/Outreach: <https://www.weather.gov/prob-snow/>

Local Winter Web Pages

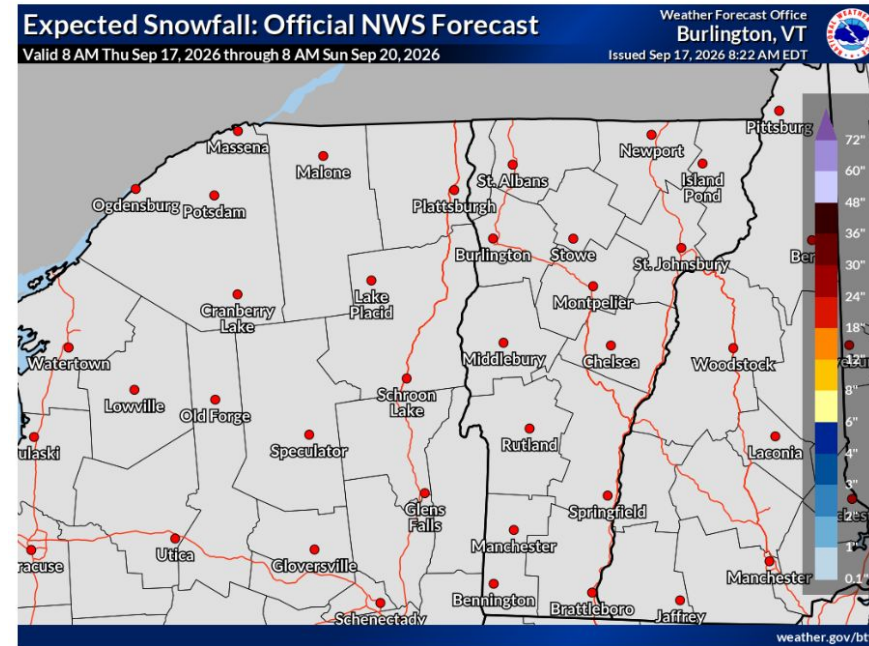
Goal:

Provide customers and partners a range of snowfall amounts to better communicate forecast uncertainty during winter weather events on a local level

2026 Updates:

- Return of town list by county dropdown
 - One of the most requested features by end users
 - Town list is customizable by WFO
- Brighter maps for better label granularity and ocean distinction

3 Day (72 Hour) Snow/Sleet Amount Potential



The "Point" map is the official NWS snowfall forecast in inches during the time period shown on the graphic. This snowfall amount is determined by NWS forecasters to be the most likely outcome based on evaluation of data from computer models, satellite, radar, and other observations. Note that forecast snow amounts also includes sleet.

The "Range" map is the 25th percentile (lower number) to 75th percentile (higher number) of possible snowfall amounts based on the

High End Amount

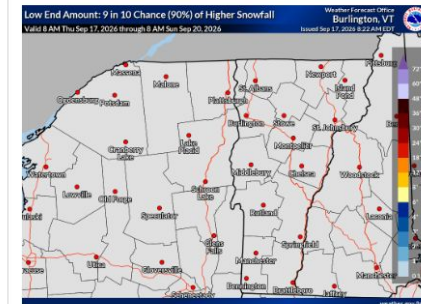
1 in 10 Chance (10%) of Higher Snowfall



What's this?

Low End Amount

9 in 10 Chance (90%) of Higher Snowfall



What's this?

Local Office Winter Web Pages:
<https://www.weather.gov/prob-snow/>

Winter Key Messages

Goal:

Galvanize partners and the media around a consistent, coordinated message

Used for high-impact storms and cold outbreaks that are expected to cause travel disruptions or pose a hazard to life and property and/or are rare events

No changes for 2026

Available here :

https://www.wpc.ncep.noaa.gov/key_messages/LatestKeyMessage_1.png

https://www.wpc.ncep.noaa.gov/key_messages/LatestKeyMessage_2.png



Key Messages for Mid-Atlantic & Northeast Winter Storm

Issued: Fri, Feb 20, 2026 3:15 PM EST

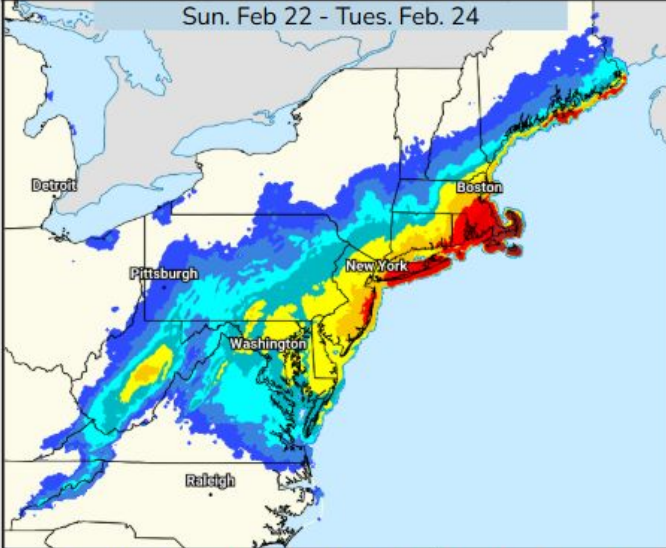
Heavy snow and gusty winds are increasingly likely beginning on Sunday

- Increasing Confidence**
A winter storm with significant impacts is becoming increasingly likely in the Mid-Atlantic and Northeast Sunday into Monday. A combination of heavy snow and gusty winds is most likely along the I-95 corridor from Philadelphia, to New York City, to Boston, and nearby areas closer to the coast. Changes to the forecast are expected. Check back for the latest updates.
- Heavy Snow Likely**
Snowfall rates over 1" per hour will occur at times, leading to hazardous travel conditions. Where snow accumulates more than 6 inches, the weight of the heavy, wet snow may lead to scattered power outages.
- Strong Winds and Blowing Snow**
Strong, gusty winds are expected in the coastal Mid-Atlantic, as well as coastal and southern New England, which may lead to power outages. Where these strong winds overlap with snowfall, expect reduced visibility and difficult travel.
- Coastal Flooding and Erosion**
Moderate coastal flooding, with inundation of roads and property near the waterfront, is most likely in coastal New Jersey and Long Island.

Chance of AT LEAST Moderate Impacts

Potential for Hazardous Travel & Infrastructure Impacts

Sun. Feb 22 - Tues. Feb. 24



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



National Oceanic and Atmospheric Administration
U.S. Department of Commerce

For more information go to:
www.wpc.ncep.noaa.gov and www.weather.gov

Weather Prediction Center
College Park, Maryland

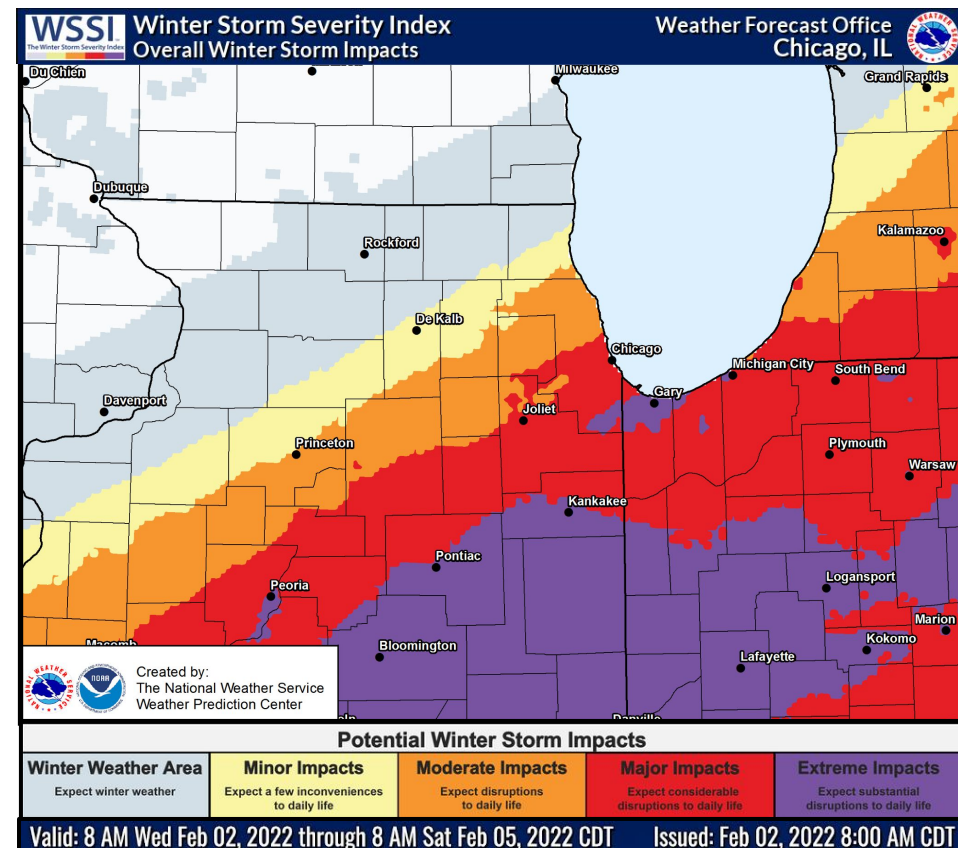
Winter Storm Severity Index (WSSI)

Goal:

Forecast the **severity** of community impacts from winter storms throughout the contiguous United States, including tree damage, property damage, transportation impacts, and disruptions to daily life

2026 updates:

- Cleaner static images to assist with messaging
- Optimized code to reduce product runtime & downtime
- No science updates this year



Available here: www.weather.gov/wssi

WSSI Components & Scale



Snow Amount

Indicates potential impacts due to the total amount of snow expected



Snow Load

Indicates potential infrastructure impacts due to the weight of snow



Ice Accumulation

Indicates potential infrastructure impacts due to combined effects and severity of ice and wind



Blowing Snow

Indicates the potential disruption due to blowing and drifting snow, either pre-existing or currently falling



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.

Impact definitions

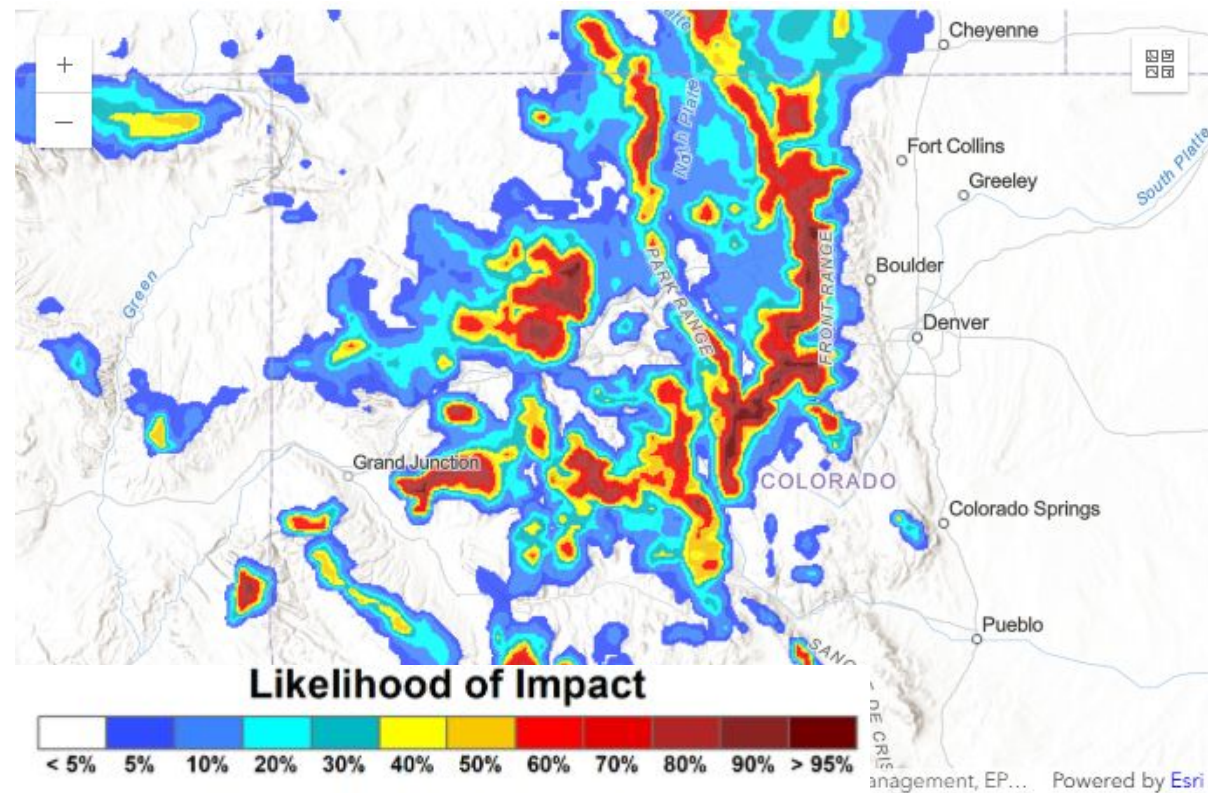
Probabilistic Winter Storm Severity Index (WSSI-P)

Goal:

Forecast the **probability** of reaching community impact from winter storms throughout the continental United States using the WSSI impact thresholds

2026 updates:

- Optimized code to reduce product downtime
- No science updates this year

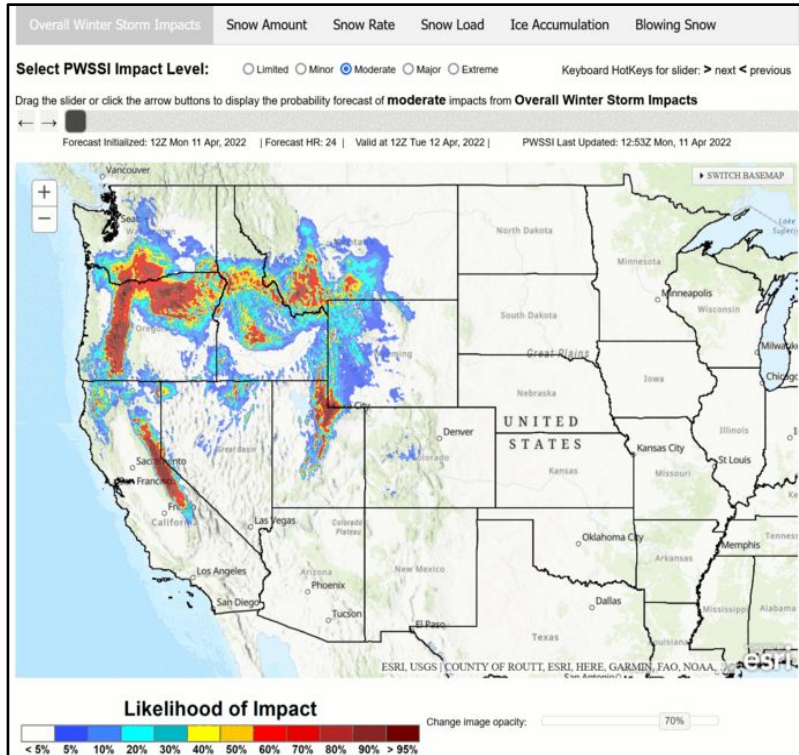


Example: High Probabilities of Minor in this image provides an envelope of expected impacts

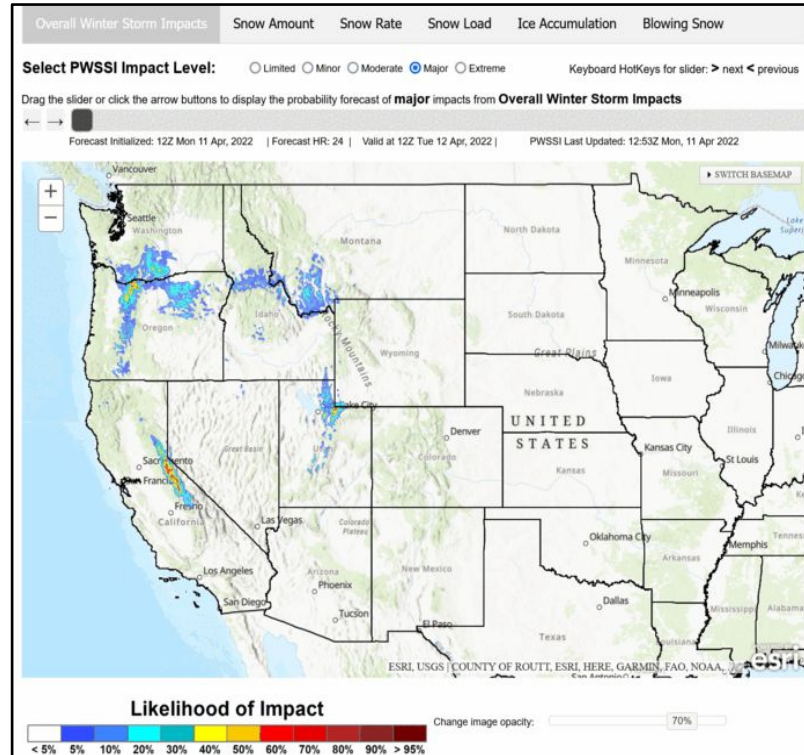
Available here :

<https://www.weather.gov/wssi-p>

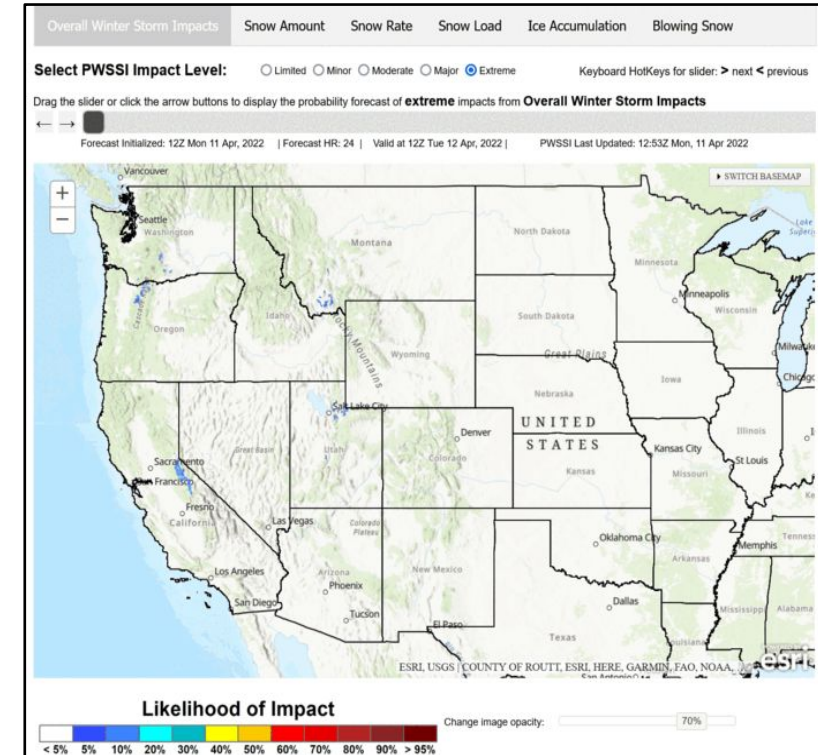
WSSI-P Impact Probabilities Example



Moderate Impacts



Major Impacts



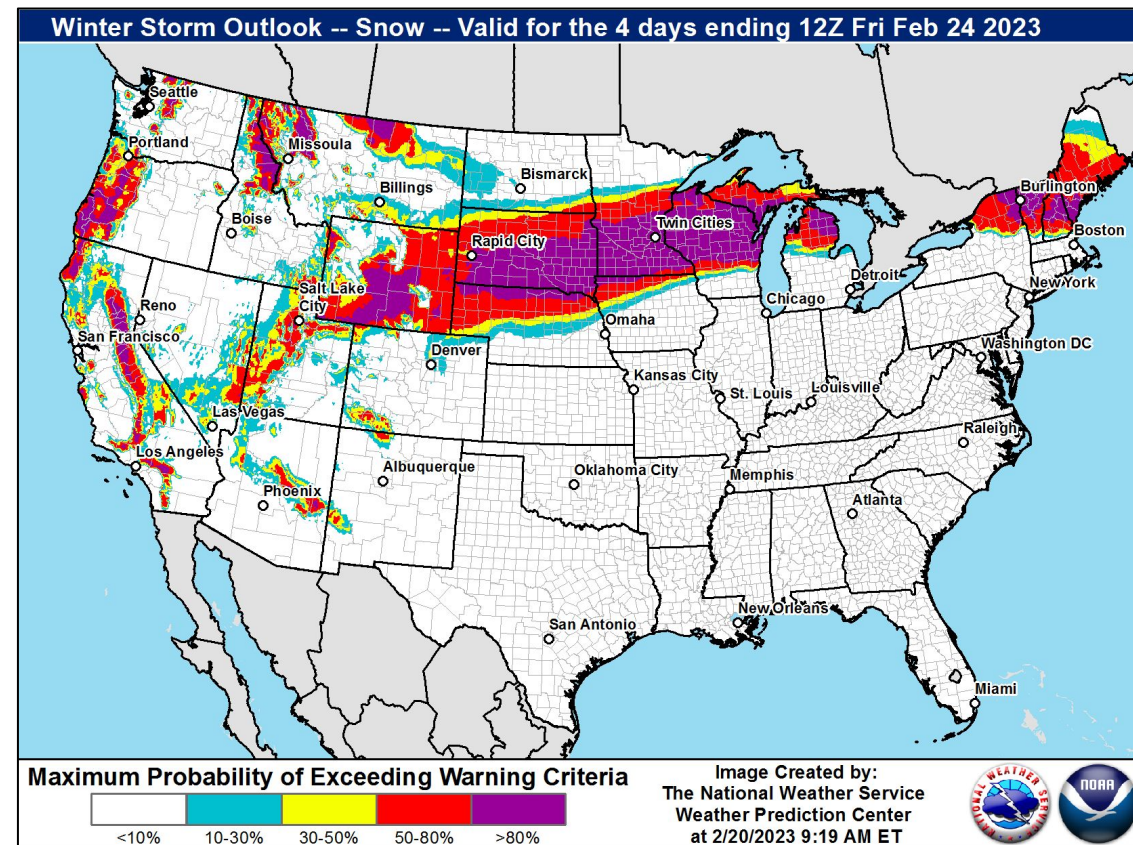
Extreme Impacts

Experimental Winter Storm Outlook (WSO)

Goal:

Display the probability of realizing hazardous snow/ice accumulations using WFO-specific Watch/Warning criteria as a proxy threshold

No changes for 2026



Available here :

<https://www.wpc.ncep.noaa.gov/wwd/wso>

Snowfall Criteria :

weather.gov/snow-criteria

Snow Squall Warnings and IBW Tags

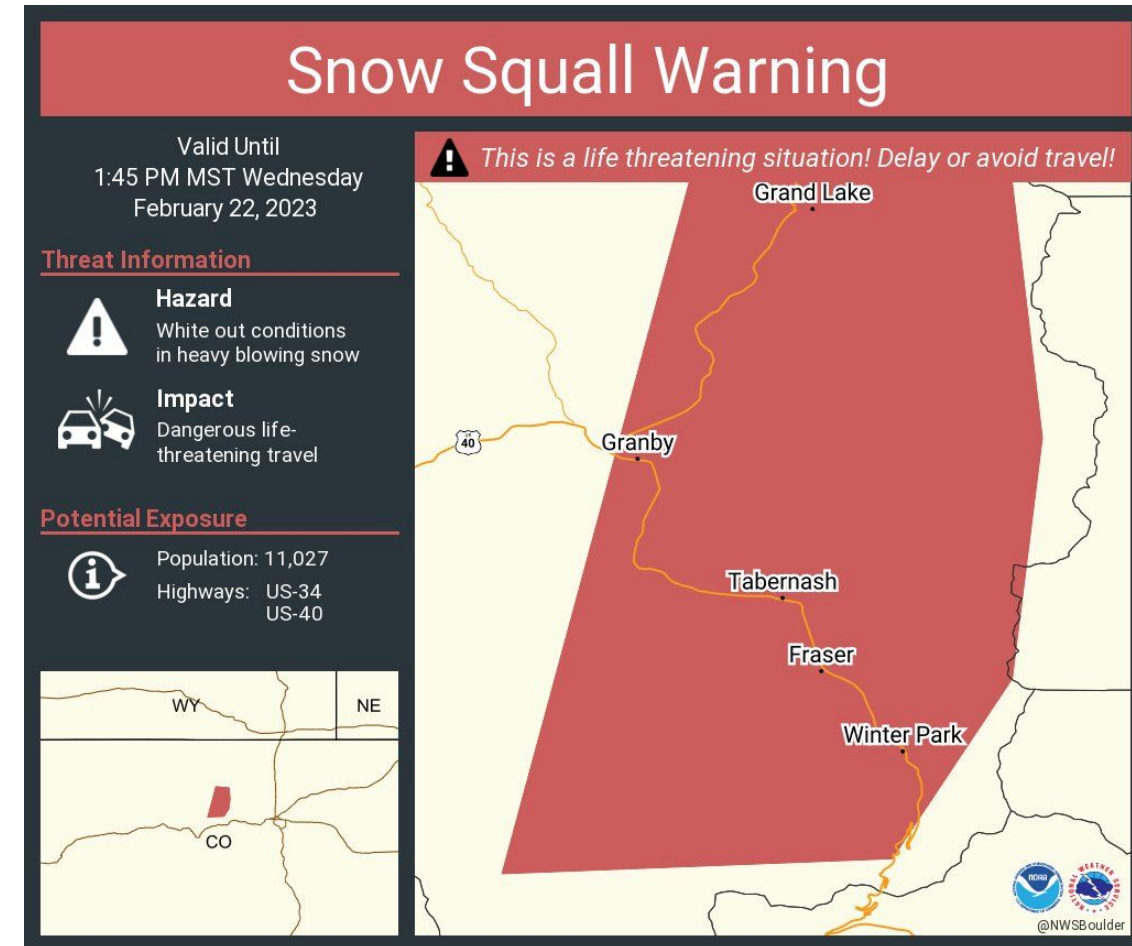
Goal:

Issued for intense, but brief, heavy snow, gusty winds, and reduced visibilities

Impact Based Warning (IBW) tags have been implemented:

- No tag - indicates snow squall conditions are expected
- "SIGNIFICANT" tag - an intense snow squall with a substantial threat to safe travel is expected

No changes for 2026



WEA will **ONLY** activate for high-end events with the "SIGNIFICANT" tag

Avalanche Weather

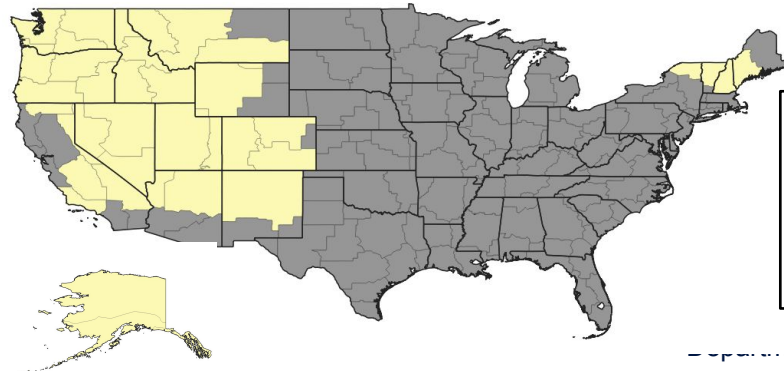
Avalanche Weather Guidance:

Goal:

Provide partners & public with weather forecasts for prediction of avalanche conditions, risk, mitigation, & recovery

...Mount St. Helens...

Date	Friday 09/23							Saturday 09/24				
Time (LT)	06	09	12	15	18	21	00	03	06	09	12	15
	6a	9a	12	3p	6p	9p	12	3a	6a	9a	12	3p
Cloud Cover	SC	FW	SC	SC	SC	SC	SC	SC	FW	SC	SC	SC
Cloud Cover (%)	40	15	30	30	40	40	35	30	25	25	30	30
Temperature	40	44	49	51	49	45	45	44	44	49	55	57
Max/Min Temp					51				44			
Wind Dir	W	NW	W	W	NW	W	NW	NW	NW	NW	S	SW
Wind (mph)	8	4	4	6	5	5	8	8	5	2	3	4
Wind Gust (mph)	20			16			19	17				
Precip Prob (%)	10	5	10	10	10	10	10	10	10	5	5	0
Precip Type												
12 Hour QPF					0.00			0.00				
12 Hour Snow					0.0			0.0				
Low End Snow					0.0			0.0				
High End Snow					0.0			0.0				
12 Hour Ice					0.00			0.00				
Snow Level (kft)	8.5	8.5	9.5	10.0	10.0	10.0	10.0	10.0	9.6	10.5	11.0	11.0



Offices that provide avalanche weather services in Yellow.

Experimental Avalanche Weather Web Pages:

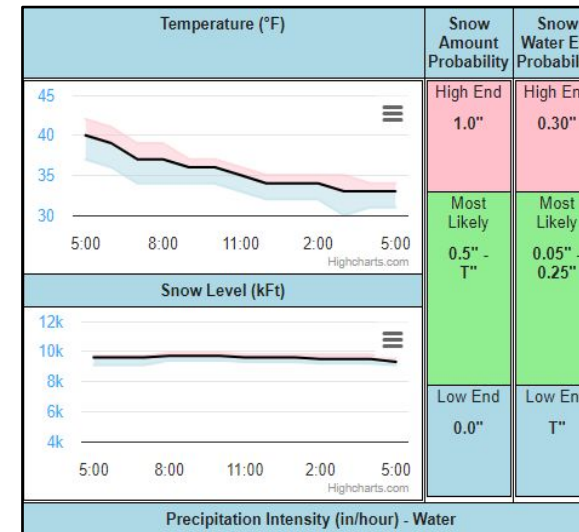
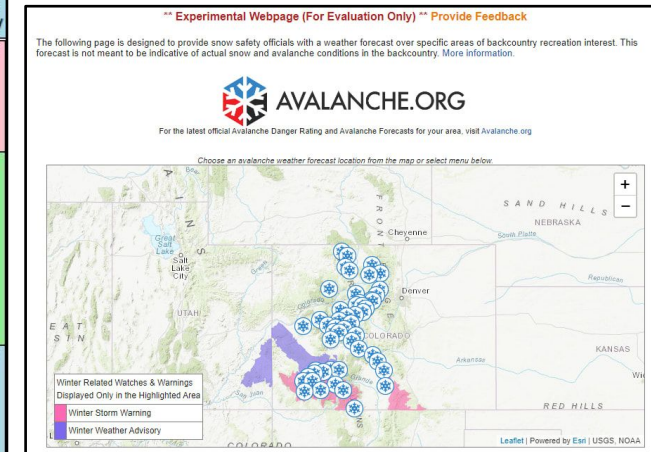
Goal:

Information for partners & public to obtain avalanche weather products & information

No changes for 2026

Available here :

www.weather.gov/wrh/AvalancheWeather



Impact of Proactive IDSS Messaging - Jan 2024



Key Messages for Jan 8-11 Major Winter Storm

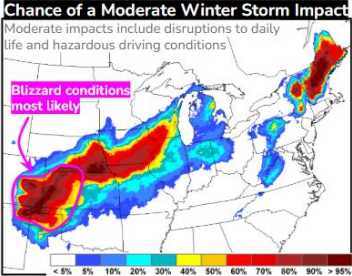
Updated Jan 8, 2024
3:00 AM CST

Rapidly strengthening storm will lead to widespread, significant impacts over much of the U.S.

- Hazardous Travel Expected in Areas of Heavy Snow**
Snow will develop in the Plains on Monday, and advance into the Midwest on Monday Night and Tuesday. Bursts of heavy snow may accumulate up to 2 inches in an hour, and result in hazardous travel. A heavy, wet snow will also develop in the interior Northeast Tuesday Afternoon and Night.
- Extremely Dangerous Plains Blizzard**
A blizzard is expected in the plains of northeast New Mexico, eastern Colorado, the Oklahoma and Texas Panhandles, western Kansas, and southwest Nebraska. Wind gusts as high as 60-70 MPH will create ferocious blizzard conditions with whiteouts. Travel will become extremely dangerous to impossible. If you must travel, pack a winter survival kit as wind chills will plummet below zero.
- Significant River, Flash, and Coastal Flooding**
Widespread and potentially significant river and flash flooding are likely for the central Gulf Coast and Eastern U.S. Monday through early Wednesday. Powerful onshore winds will lead to widespread coastal flooding along the eastern Gulf Coast and much of the East Coast. Significant coastal flooding is likely, especially on the Mid Atlantic coastline, including tidal rivers and bays.
- Damaging Winds May Lead to Power Outages**
Widespread wind gusts in excess of 50 MPH are likely in the eastern Gulf Coast, central Appalachians, much of the East Coast, and New England. Prepare for power outages.

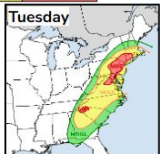
Chance of a Moderate Winter Storm Impact

Moderate impacts include disruptions to daily life and hazardous driving conditions



Chance of Rainfall-Caused Flash Flooding

5% to 15% 15% to 40% 40% to 70%

National Oceanic and Atmospheric Administration
U.S. Department of Commerce

For more information go to:
www.wpc.ncep.noaa.gov and www.weather.gov

Weather Prediction Center
College Park, MD

Coordinated Widespread Response

State Response: Early disaster proclamations and activations across KS, NM, and MO.

• **Transportation (DOTs):** Pre-treated roads and staged plows; closed major routes (I-80, I-25, I-40) proactively.

• **Aviation:** Coordinated ground stops/delays at ORD to manage heavy icing and visibility.

• **Proactive School Closures:** Hundreds of K-12 districts and universities across IA, WI, MO, IL, KS, and NE closed early.

• **Vulnerable Populations:** Fast-tracked hotel vouchers and emergency shelters opened in NE and KS.

Proactive Coordination Success: Early briefings and constant communication allowed agencies to shift from reactive response to advanced preparation.

Partner Testimonials

“Because of the resources provided by your groups (packets and webinar), we were able to confidently make those decisions the night before... allows families to prepare.”
— Dan Butler, Superintendent, Western Dubuque (IA)

“If it wasn't for the National Weather Service updates and deployments to our state EOC, we'd be reactive instead of proactive and prepared.”
— Jeremy Slinker, Kentucky EM Director

“It allows for local agencies to be provided with reliable facts... a reliable set of data that can be trusted.”
— Chris Helle, Fulton County ESDA Director

Outreach Material

NWS Winter Safety Content

- NWS Winter Safety Graphics:
 - <https://www.weather.gov/safety/cold-winter-hazards>
 - <https://www.weather.gov/safety/winter>
 - <https://www.weather.gov/safety/cold>
- The Great Outdoors: Feature on weather safety while recreating outdoors
 - <https://www.noaa.gov/explainers/great-outdoors-weather-safety>

**PROTECT YOURSELF FROM
SNOW SQUALLS**

 **If a Snow Squall Warning is issued, delay travel.**
If you're already driving, safely exit the road at the next opportunity.

If you cannot exit the road in time:

 **Slow down,**
but avoid slamming the brakes

 **Turn on your lights**
(low-beam headlights & hazards)

 **Pull over safely to the side of the road,**
and when safe, quickly exit your vehicle and move as far away from the road as possible



weather.gov 

**AVALANCHE
Safety Tips**

- **Get the Forecast** from your local avalanche center for current snowpack conditions
- **Get the Training:**
avalanche.org/avalanche-education
- **Get the Gear** and learn how to use it:
 - **Transceiver** to transmit general location under snow
 - **Probe** to pinpoint exact location under snow
 - **Shovel** to dig out your partner
 - **Airbag Pack** to increase your chances of staying near the surface of an avalanche



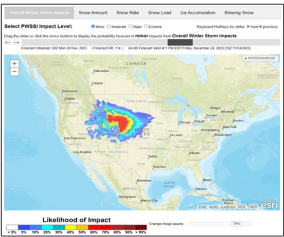
 **AVALANCHE.ORG**
weather.gov 

NWS Educational/Outreach Materials

- Probabilistic Winter Precipitation Resources: <https://www.weather.gov/prob-snow>
- Snow Squall Warning Resources: <https://www.weather.gov/media/safety/Snow-Squall-IBW.pdf>
- Winter Storm Severity Index Resources: www.weather.gov/wssi
- Probabilistic Winter Storm Severity Index: www.weather.gov/wssi-p
- **Winter Social Media Campaign starts TODAY!**

Probabilistic Winter Storm Severity Index (WSSI-P)

The WSSI-P is an online weather prediction tool that provides likelihoods of winter weather impacts. It is intended for use alongside official NWS forecasts, providing more information to enable enhanced preparedness and decision making.



HOW DOES IT WORK?
The WSSI-P displays a range of winter weather impact probabilities over a geographic area. These different likelihoods (the chances of impacts happening) are shown as percentages represented by colors.

IMPACT LEVELS
Results can be selected for different impact levels: **Minor, Moderate, Major, Extreme.** In the three-graphic example shown, minor impacts are the most likely to occur.

COMPONENTS
In addition to showing Overall Winter Storm Impacts, the WSSI-P can display the impact likelihoods of individual storm components: **Snow Amount, Snow Rate, Snow Load, Ice Accumulation, and Blowing Snow.**

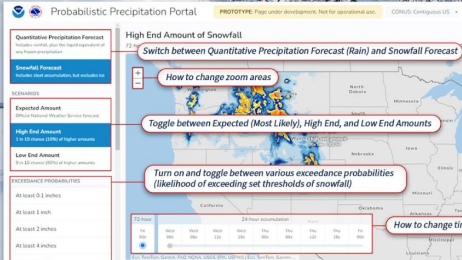
WSSI and WSSI-P
The deterministic WSSI is based on the official NWS forecast. The WSSI-P can be used in conjunction to get expected, best case, and worst case scenarios.

weather.gov/wssi-p

Probabilistic Precipitation Portal (PPP) Snowfall Forecast

Why is Probabilistic Precipitation Important?
Probabilistic snowfall information can help you understand more about forecast uncertainty to make informed decisions. This range of possibilities is important to consider when planning and making your decisions.

How to Use the Portal
View the low end, expected, and high end amounts of snow, as well as probabilities of exceeding various threshold amounts of snow. Data is viewable through an interactive map, tables, and graphics.

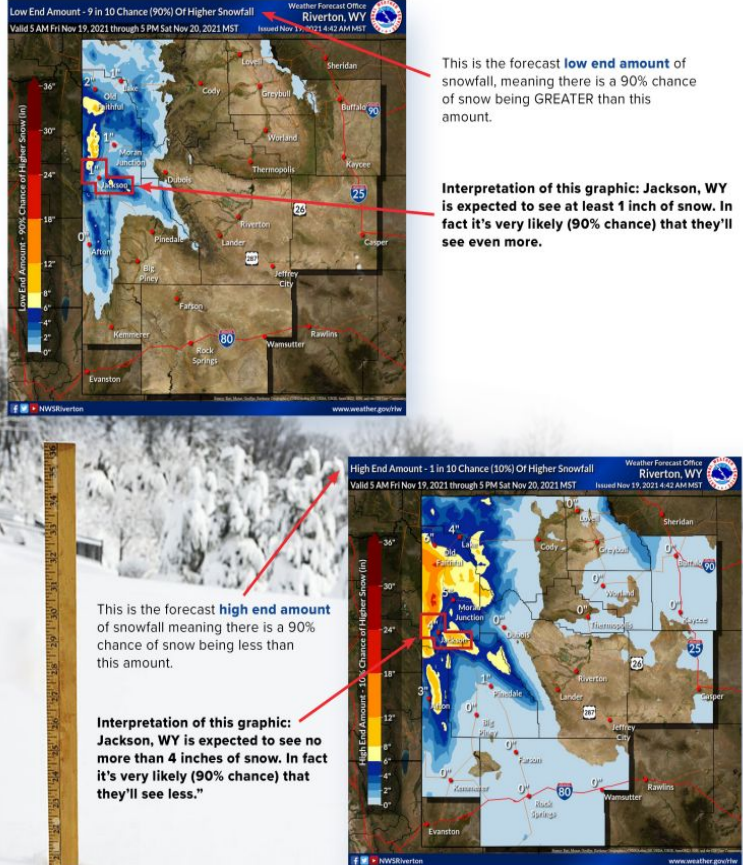


Exceedance Probabilities

Exceedance Probability	Low End Amount	Expected Amount	High End Amount
All least 0.1 inches	0.1	0.1	0.1
All least 0.2 inches	0.2	0.2	0.2
All least 0.4 inches	0.4	0.4	0.4
All least 0.8 inches	0.8	0.8	0.8

https://www.wpc.ncep.noaa.gov/Prob_Precip

Expected Snowfall and Percentile Graphics (continued)



Low End Amount - 9 in 10 Chance (90%) Of Higher Snowfall
Valid 5 AM Fri Nov 19, 2021 through 5 PM Sat Nov 20, 2021 MST
Issued Nov 19, 2021 4:42 AM MST

This is the forecast **low end amount** of snowfall, meaning there is a 90% chance of snow being **GREATER** than this amount.

Interpretation of this graphic: Jackson, WY is expected to see at least 1 inch of snow. In fact it's very likely (90% chance) that they'll see even more.

High End Amount - 1 in 10 Chance (10%) Of Higher Snowfall
Valid 5 AM Fri Nov 19, 2021 through 5 PM Sat Nov 20, 2021 MST
Issued Nov 19, 2021 4:42 AM MST

This is the forecast **high end amount** of snowfall meaning there is a 90% chance of snow being **LESS** than this amount.

Interpretation of this graphic: Jackson, WY is expected to see no more than 4 inches of snow. In fact it's very likely (90% chance) that they'll see less."



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Important Links



WPC Key Messages

https://www.wpc.ncep.noaa.gov/key_messages/LatestKeyMessage_1.png

https://www.wpc.ncep.noaa.gov/key_messages/LatestKeyMessage_2.png

Probabilistic Precipitation Portal (PPP)

https://www.wpc.ncep.noaa.gov/Prob_Precip/

Winter Storm Severity Index (WSSI)

www.weather.gov/wssi

Probabilistic Winter Storm Severity Index (WSSI-P)

<https://www.weather.gov/wssi-p>

Local Probabilistic Snow Webpages

<https://www.weather.gov/prob-snow/>

Avalanche Weather

www.weather.gov/wrh/AvalancheWeather

Experimental Winter Storm Outlook (WSO)

<https://www.wpc.ncep.noaa.gov/wwd/wso>