

Latest Update on Potential Storms Impacting the Western US

Updated: 22 March 2024

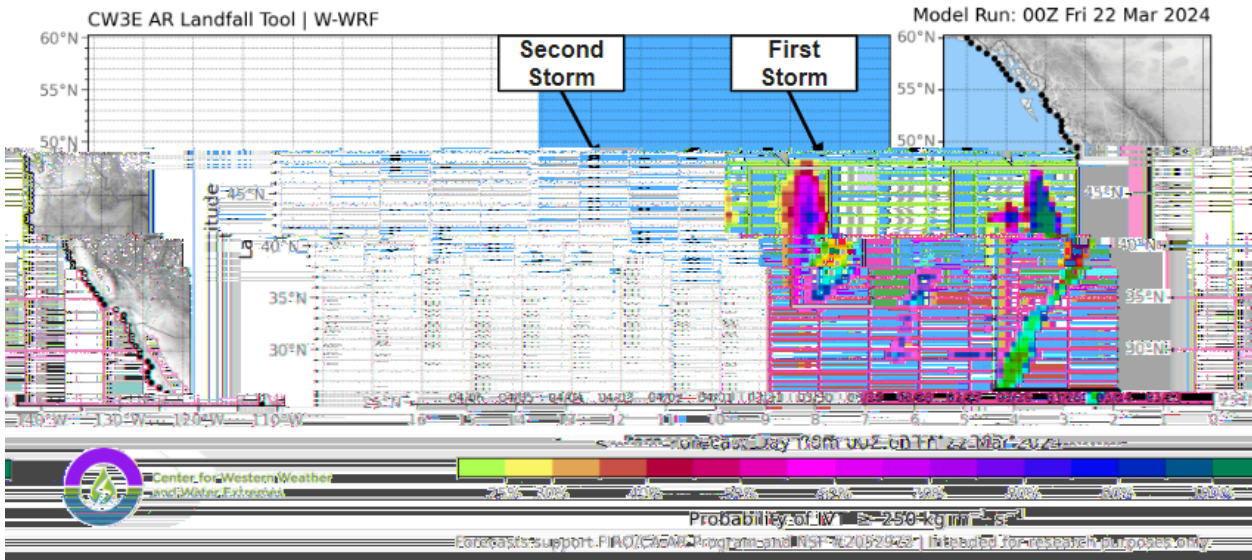
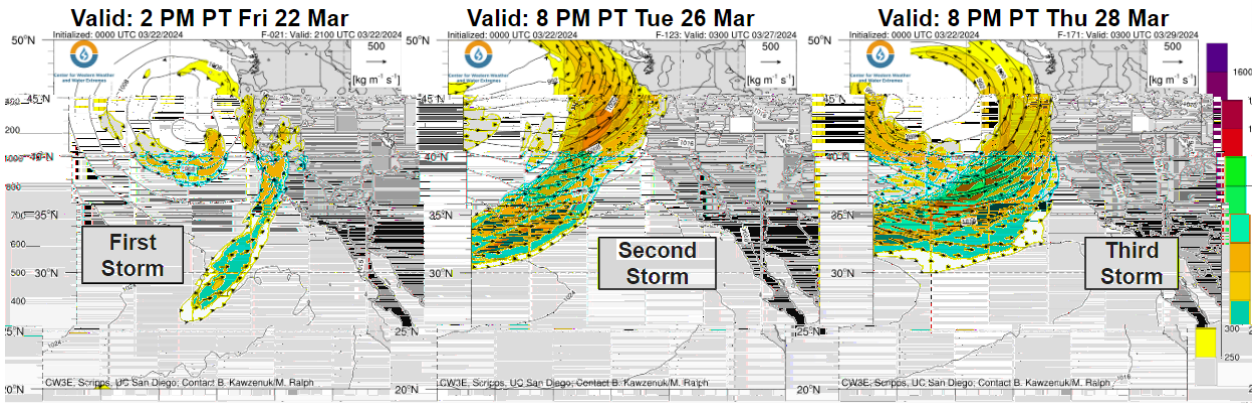
A series of storms are forecast to impact the Western US through the end of next week. These storms are likely to bring widespread precipitation, including potential for significant snowfall in the mountains.

Forecast Highlights:

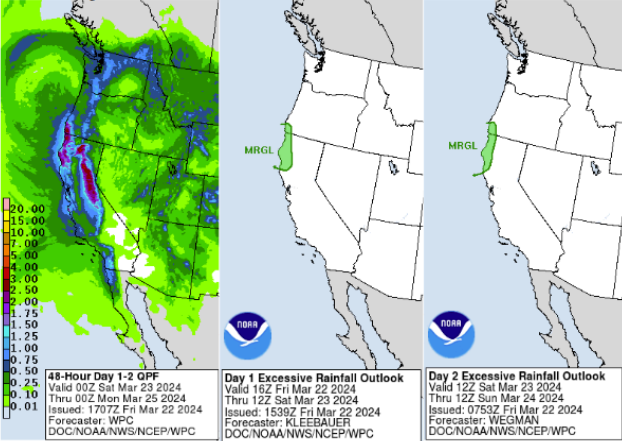
- A series of potential storms are forecast to impact the Western US now through the end of the month.
- CW3E's West-WRF AR Landfall tool shows two distinct periods of higher probabilities of AR landfall over Northern California and Oregon in the next seven days.
- The first of these periods is forecast to begin today alongside a low-pressure system moving over the Pacific Northwest. This system brings subtropical moisture to Oregon/Northern California that progresses down the California coast as the low moves onshore.
- The Weather Prediction Center (WPC) is forecasting at least 2 to 3 inches of precipitation over the Sierra Nevada and California/Oregon border for the 48-hour period ending 11 PM Sunday 24 Mar.
- While significant hydrologic impacts are not expected, WPC has issued a marginal risk excessive rainfall outlook (ERO) in the Northern CA/Southern OR Coast Ranges for the 24-hour periods ending 5 AM PT Sat 23 Mar and Sun 24 Mar.
- Winter Storm Warnings have been issued for the Sierra Nevada as snowfall accumulations of 1 to 2 feet are expected with possibilities of 4 feet over the peaks.
- The WPC's Winter Storm Severity Index is showing potential for major impacts over the Sierra Nevada as a result of the potential snowfall with this system.
- The second storm is forecast to begin early on Wednesday 27 Mar with AR conditions possible through the end of the day.
- National Blend of Models (NBM) 48-hour mean precipitation accumulations ending 5 AM PT Friday 29 Mar are forecast to exceed 2 inches in the northern Sierra Nevada and for regions along the WA and OR coasts and CA/OR border
- The WPC Day 3-7 hazards outlook indicates a risk of heavy snowfall over the Sierra Nevada and Cascades for Mar 27 and 28 with the second system.
- For the same period, the NBM mean snowfall accumulations are around 12-24 inches for portions of the Northern and Central Sierra Nevada.
- These two events are likely to drive snowpack in the Northern and Central Sierra Nevada well above normal by April 1, which is typically the peak for snow water equivalent.
- CW3E's subseasonal forecast products indicate a moderate likelihood of AR activity in Northern and Central CA on 29 and 30 Mar following the second storm. The Climate Prediction Center is highlighting a moderate risk of heavy snowfall over the Upper Colorado Basin for Mar 30 to Apr 2 as this system moves inland.

Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials

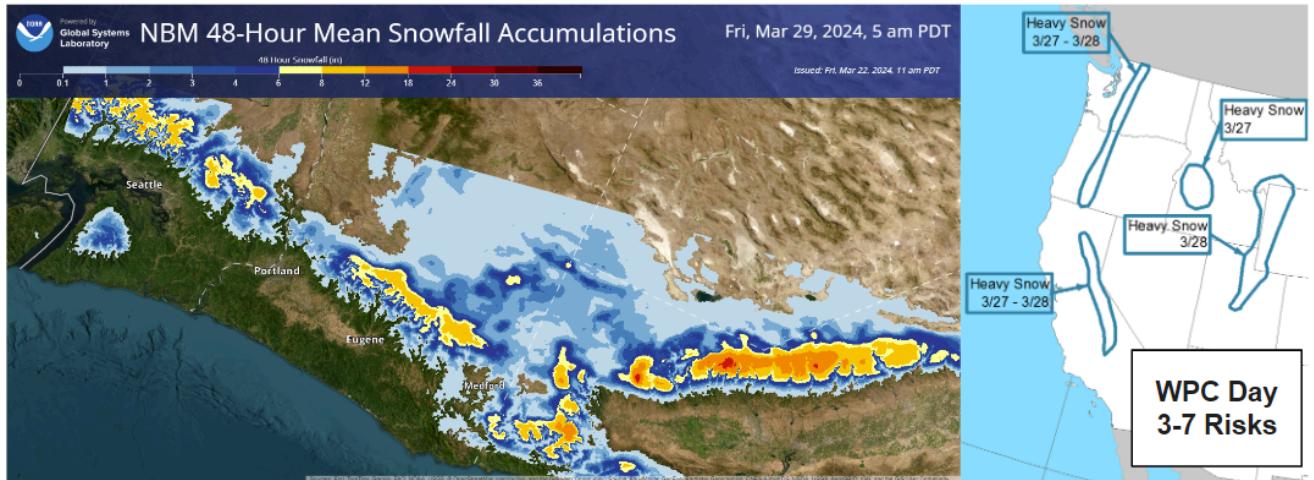
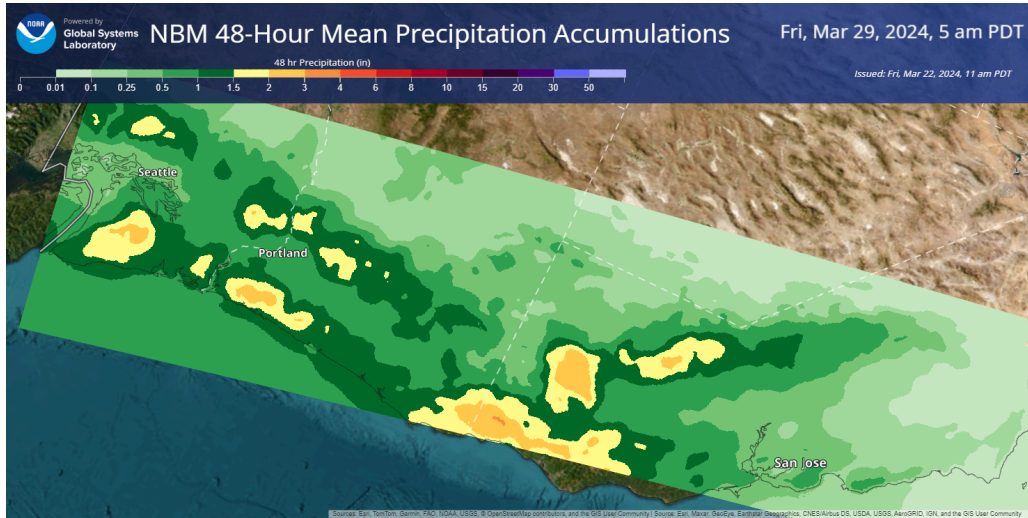
Stay tuned to the CW3E webpage for a full AR Update



National Weather Service Day 1-2 QPF and Day 1 and 2 Excessive Rainfall Outlooks

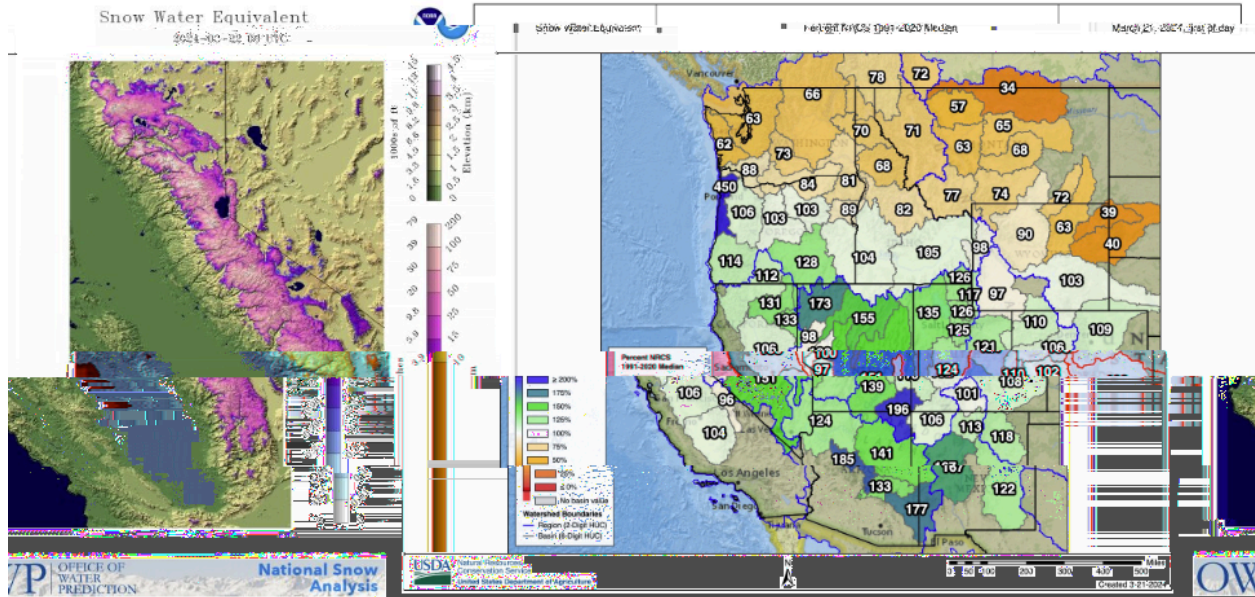


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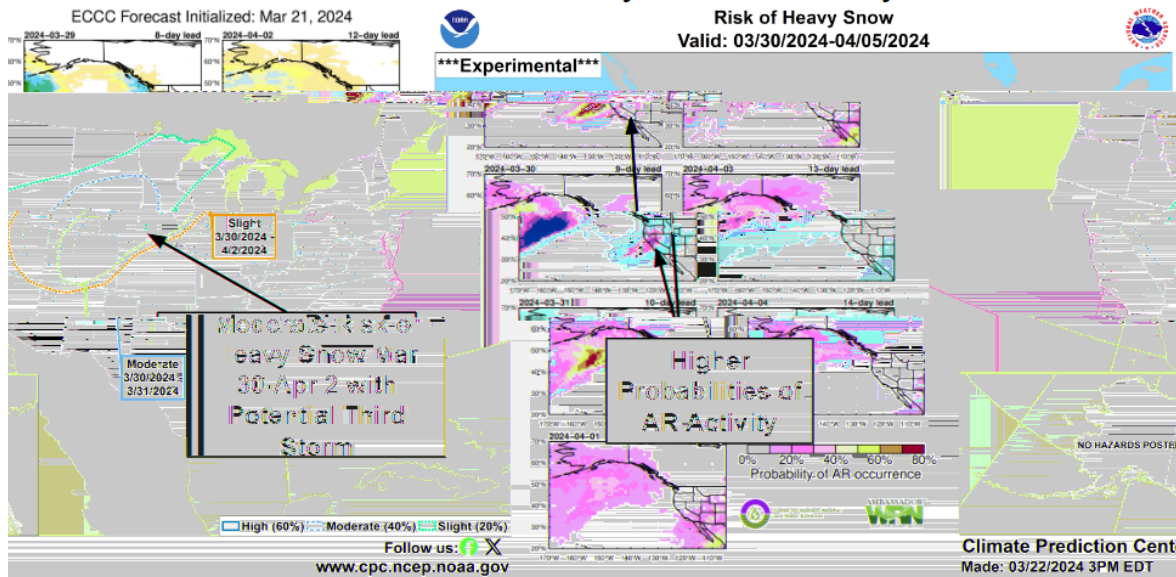


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Current Sierra Nevada Snow Water Equivalent and Percent of 1991-2020 Median SWE



CW3E Week 2 S2S Outlook and CPC Day 8-14 Risk of Heavy Snow Outlook



Additional Considerations:

- Visit <https://www.nwrfc.noaa.gov/> and <https://cnrfc.noaa.gov/> for specific river and stream forecasts and <https://www.weather.gov/> for point specific watches, warnings, and forecasts.

In-depth AR forecasts products can be found here:

<http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/>

Update by M. Steen

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