

Quick Look at Storm Currently Impacting California Updated: 31 March 2025

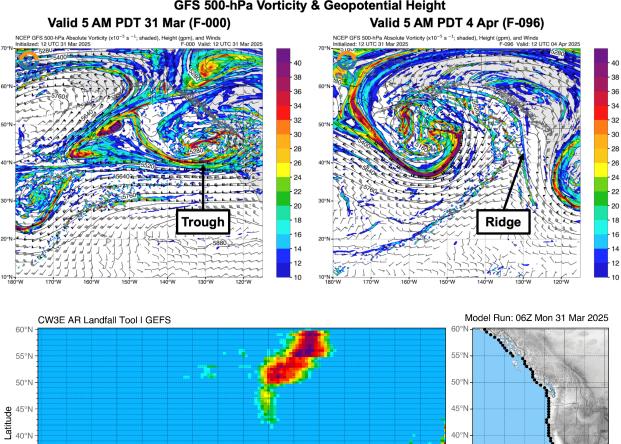
A storm system will continue to bring rain and mountain snow to Northern and Central California through tomorrow Tue 1 Apr. Later this week, a major pattern shift is expected to bring warmer and drier conditions to much of the western US.

Forecast Highlights:

- A slow-moving trough off the US West Coast will drive moderate-to-heavy precipitation over Northern and Central California today and tomorrow.
- Over the next few days, an amplifying ridge is forecast to build over the Northeast Pacific and gradually migrate eastward towards the US West Coast.
- Large-scale ridging over the Northeast Pacific is expected to shut off landfalling AR activity over the US West Coast, as indicated by the very low likelihood (<25% probability) of AR conditions (IVT ≥250 kg m⁻¹ s⁻¹) in CW3E's AR Landfall Tool through Sun 6 Apr.
- The current storm is forecast to produce an additional 3–6 inches of precipitation today through early Wed 2 Apr in portions of the Northern California Coast Ranges, Klamath Mountains, and Sierra Nevada.
- All deterministic models and most GEFS, EPS, and West-WRF ensemble model members are forecasting >2.5 inches of mean areal precipitation from this storm in the New Bullards Bar reservoir catchment. The deterministic 3-km and 9-km West-WRF initialized with the GFS model are both forecasting this storm to produce >5% of the catchment's normal annual precipitation (~3.75 inches) in a 48-hour period.
- Low freezing levels will allow a significant portion of precipitation to fall as snow in watersheds surrounding the Klamath Mountains, southern Cascades, and Sierra Nevada.
- At least 12–36 inches of additional snowfall are forecast above 5,000 feet, with higher amounts possible near the crest in the Northern and Central Sierra Nevada. Major-to-extreme winter storm impacts are expected in these areas due to heavy snow and strong winds.
- The return of ridging near the US West Coast will likely usher in a period of warmer and drier weather to much of the western US late this week into early next week.
- Yesterday's 6–10 Day outlooks from the Climate Prediction Center (CPC) showed >60% probability of above-normal temperatures >40% probability of below-normal precipitation over the Pacific Northwest during Sat 5 Apr Wed 9 Apr.

Stay alert to official NWS forecasts, watches, and warnings at weather.gov and follow guidance from local emergency management officials





35°N

30°N

25°N

ò

1

100%

Ś 2

90%

140°W

130°W

120°W

Center for Western Weather and Water Extremes

110°W

GFS 500-hPa Vorticity & Geopotential Height

Forecasts support FIRO/CA-AR Program and NSF #2052972 I Intended for research purposes only

50%

40%

8

<----- Forecast Day from 06Z on Mon 31 Mar 2025 ------

Probability of IVT \geq 250 kg m⁻¹ s⁻¹

60%

6 5

80%

70%

35°N

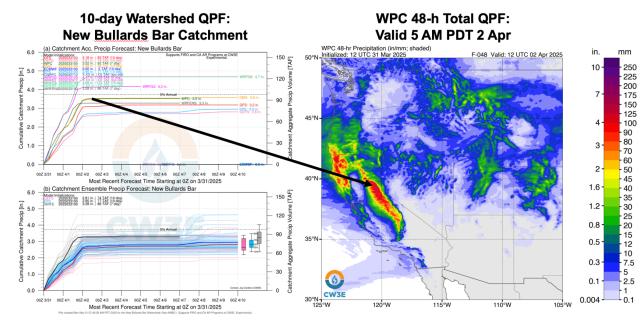
30°N

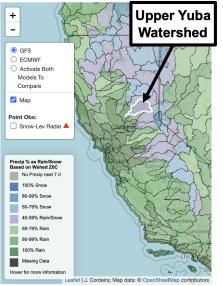
25°N

16 15 14 13 12 11 10 9

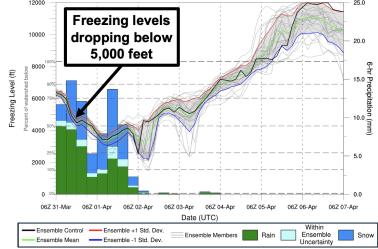
25% 30%



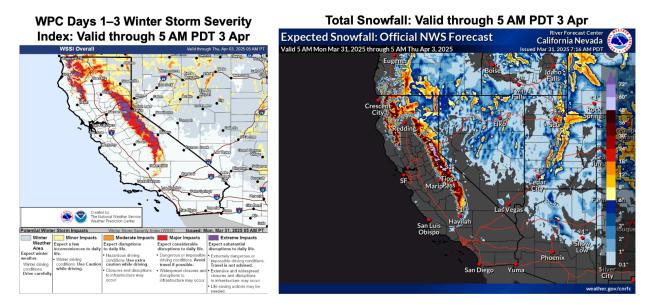




Upper Yuba; GEFS Forecast Initialized 2025-Mar-31 06 UTC 7-day WPC Precipitation Total: 78.06 mm (3.07 in); 49.1% Rain, 8.4% Uncertain, 42.5% Snow







Additional Considerations:

• Visit <u>cnrfc.noaa.gov/</u> and <u>nwrfc.noaa.gov/</u> for specific river and stream forecasts and <u>weather.gov/</u> for point specific watches, warnings, and forecasts.

In-depth AR forecasts products can be found here: https://cw3e.ucsd.edu/iwv-and-ivt-forecasts/ Update by C. Castellano <u>c1castellano@ucsd.edu</u>