



Quick Look at the AR Forecast to Impact California Early this Week

Updated: 9 February 2026

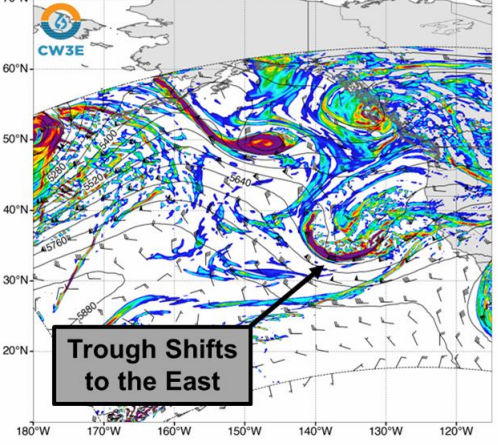
A weak atmospheric river is forecast to bring low-elevation rainfall and high-terrain snowfall to California through Wednesday, providing mainly beneficial impacts to the region.

Forecast Highlights:

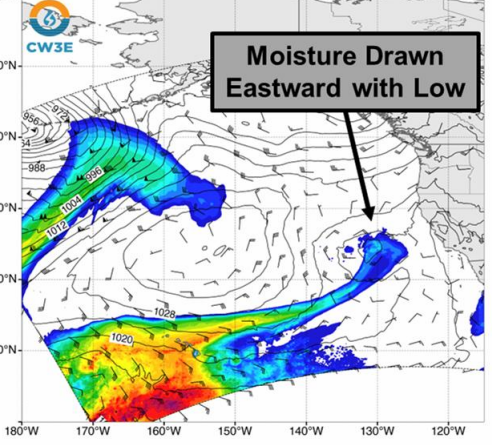
- A weak atmospheric river (AR) is forecast to make landfall Tue 10 Feb in Northern California and shift southward along the coast into Southern California through Thu 12 Feb.
- This AR is forecast to develop offshore of California in association with a mid-level low, trough, and narrow plume moisture originating from the sub-tropics near HI.
- IVT is forecast to exceed $250\text{--}500 \text{ kg m}^{-1} \text{ s}^{-1}$ at points along coastal Central and Southern California, although CW3E's AR Scale ensemble diagnostics (based on the Ralph et al. 2019 AR Scale) are primarily categorizing this system as a weak AR0 due to its short duration of less than 24 hours.
- The NWS Weather Prediction Center (WPC) is forecasting 72-hour (4 AM PT Mon 9 Feb–4 AM PT Thu 12 Feb) precipitation totals of 1.5–3.5 in. over the Sierra Nevada, 1–2 in. over the Coast Ranges of Central California, and 0.5–1.5 in. over the Transverse Ranges.
- Freezing levels over the Sierra Nevada are forecast to fall to 5,000–7,000 feet as this system moves through the region, leading to the potential for significant snowfall at higher elevations.
- NWS probabilistic 72-hour (4 AM PT Mon 9 Feb–4 AM PT Thu 12 Feb) snowfall totals of 12–36 inches are forecast along the Sierra Nevada. This snow will contribute positively to the below-normal snowpack over the region, which is currently sitting at approximately 50% of normal according to the California Department of Water Resources.
- Additional AR activity is forecast along the US West Coast later this week, with precipitation forecast over the region through the weekend, although there is still considerable uncertainty as to the timing and amount of any additional impacts. Stay tuned to CW3E's website for additional forecast updates.

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

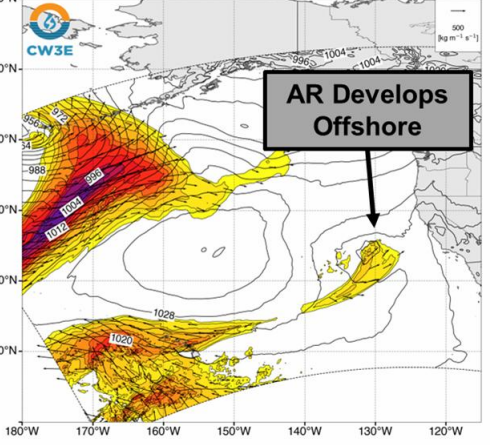
WRF-GFS 9-km 500-hPa Absolute Vorticity ($\times 10^{-5} \text{ s}^{-1}$; shaded), Height (gpm), and Wind
Initialized: 00 UTC 09 Feb 2026 F-024 Valid: 00 UTC 10 Feb 2026



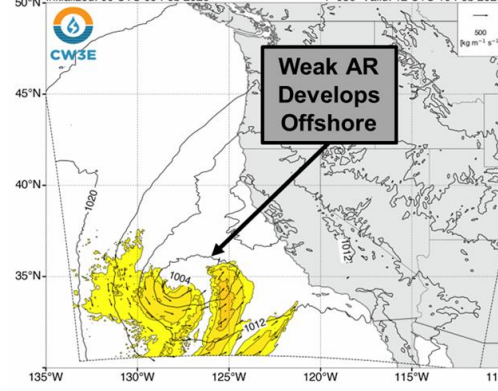
WRF-GFS 9-km IWV (mm; shaded), 850-hPa Wind (vectors), and SLP (hPa; contours)
Initialized: 00 UTC 09 Feb 2026 F-024 Valid: 00 UTC 10 Feb 2026



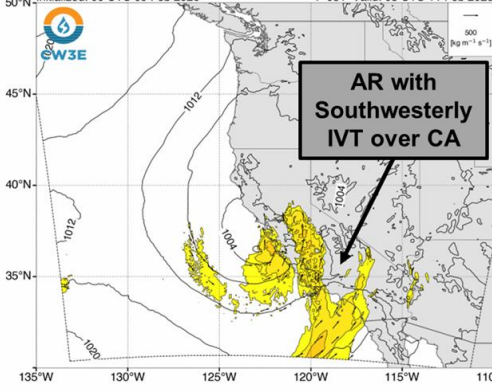
WRF-GFS 9-km IVT ($\text{kg m}^{-1} \text{ s}^{-1}$; shaded), IVT Vector, and SLP (hPa; contours)
Initialized: 00 UTC 09 Feb 2026 F-024 Valid: 00 UTC 10 Feb 2026



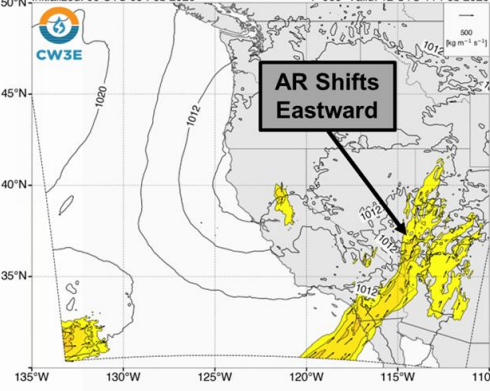
WRF-GFS 3-km IVT ($\text{kg m}^{-1} \text{ s}^{-1}$; shaded), IVT Vector, and SLP (hPa; contours)
Initialized: 00 UTC 09 Feb 2026 F-036 Valid: 12 UTC 10 Feb 2026



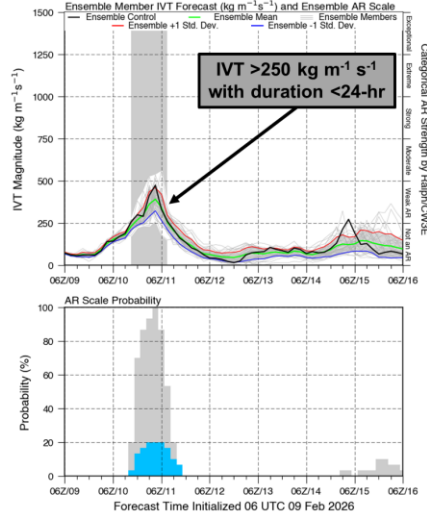
WRF-GFS 3-km IVT ($\text{kg m}^{-1} \text{ s}^{-1}$; shaded), IVT Vector, and SLP (hPa; contours)
Initialized: 00 UTC 09 Feb 2026 F-051 Valid: 03 UTC 11 Feb 2026



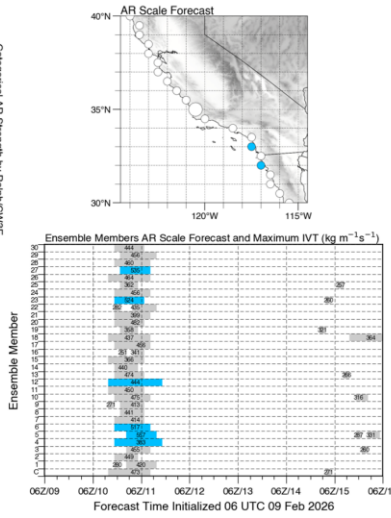
WRF-GFS 3-km IVT ($\text{kg m}^{-1} \text{ s}^{-1}$; shaded), IVT Vector, and SLP (hPa; contours)
Initialized: 00 UTC 09 Feb 2026 F-060 Valid: 12 UTC 11 Feb 2026

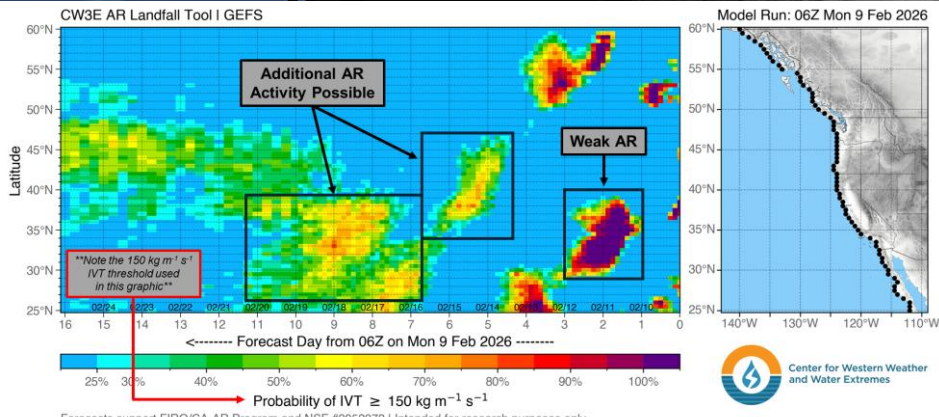


GEFS Ensemble Initialized 06 UTC 09 Feb 2026

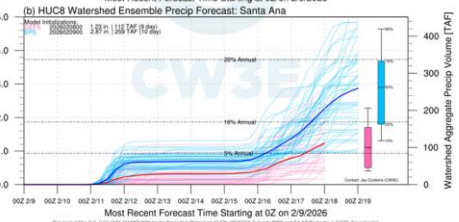
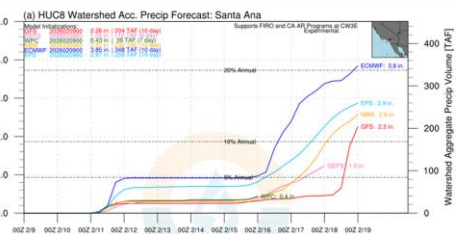
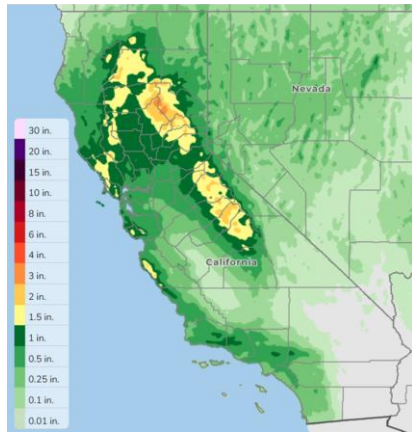


Location: 35.0°N, 120.5°W

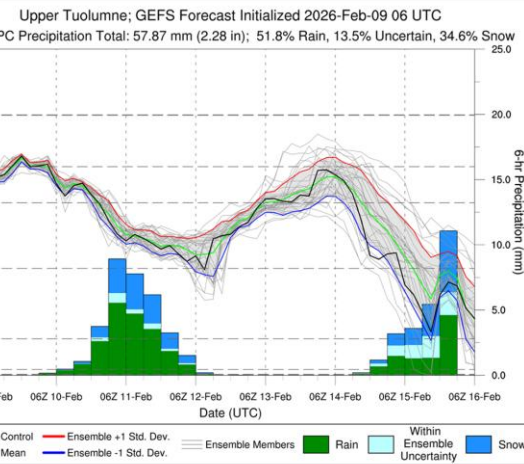
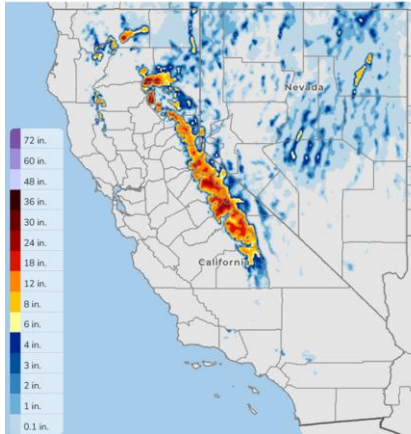




NWS Probabilistic Precipitation 72-hr Total
4 AM PT Mon 9 Feb–4 AM PT Thu 12 Feb



NWS Probabilistic Snowfall 72-hr Total
4 AM PT Mon 9 Feb–4 AM PT Thu 12 Feb



Additional Considerations:

Visit <https://www.cnrfc.noaa.gov/> for specific river and stream forecasts and

<https://www.weather.gov/> for point specific forecasts.

In-depth AR forecasts products can be found here:

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

Update by S. Bartlett

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