

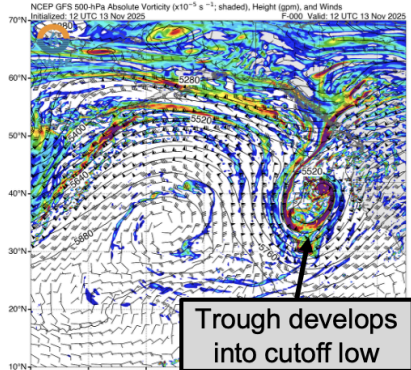
## Quick Summary of Last Week's Heavy Rainfall Event in California

*Updated: 19 November 2025*

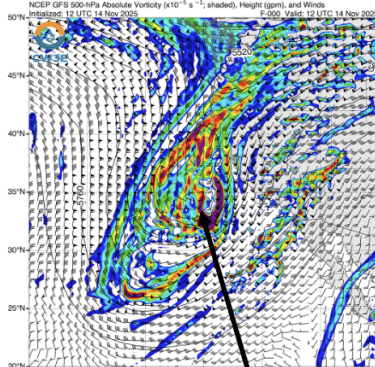
- A strong atmospheric river (AR) associated with a deepening mid-level trough made landfall over northern and central California late Wed 12 Nov, then gradually propagated southeastward across the state.
- As the trough approached the California coast, it developed into a cutoff low and stalled offshore, prolonging the event through much of the weekend.
- Strengthening southwesterly flow downstream of the cutoff low facilitated the poleward transport of tropical and subtropical moisture from the eastern North Pacific, leading to a re-intensification of the AR over southern California on Sat 15 Nov.
- The AR was ranked as an AR 3 (based on the Ralph et al. 2019 AR Scale) over much of coastal northern and central California, reaching an AR 4 in coastal Marin County where maximum IVT exceeded  $1000 \text{ kg m}^{-1} \text{ s}^{-1}$  and AR conditions ( $\text{IVT} \geq 250 \text{ kg m}^{-1} \text{ s}^{-1}$ ) lasted 36 hours.
- An AR 2/AR 3 was also observed in coastal southern California due to the long duration of continuous AR conditions ( $\geq 48$  hours).
- This storm produced 4–8 inches of total precipitation in the Sierra Nevada, Central California Coast Ranges, and Transverse Ranges. Precipitation totals  $>10$  inches were reported in the western Transverse Ranges.
- Numerous stations in central and southern California set daily precipitation records on Fri Nov 14 and Sat Nov 15. Oxnard National Weather Service (NWS) and Santa Barbara Airport both recorded their 3rd wettest November days (3.18 inches and 2.90 inches, respectively) on Sat 15 Nov.
- While most of the precipitation fell as rain, decreasing freezing levels allowed for significant snowfall accumulations ( $>12$  inches) above 8,000 feet in the central and southern Sierra Nevada. An estimated 36+ inches of snow fell near the Sierra crest south of Mammoth Lakes.
- Heavy rainfall caused widespread pluvial flooding and landslides, resulting in numerous highway closures. The NWS received  $>120$  reports of flooding and  $>40$  reports of landslides/debris flows statewide, with the highest concentration of reports in Kern, Ventura, and Los Angeles Counties.
- Precipitation from this storm will likely contribute toward an improvement in drought conditions over portions of southern California in this week's drought status update. A wet start to the water year has helped reduce some of the long-term precipitation deficits dating back to May 2024.

## GFS 500-hPa Geopotential Height & Vorticity Analysis

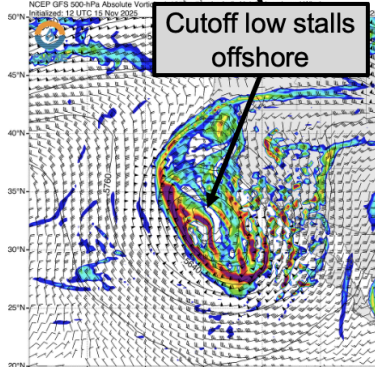
Valid: 4 AM PT 13 Nov



Valid: 4 AM PT 14 Nov

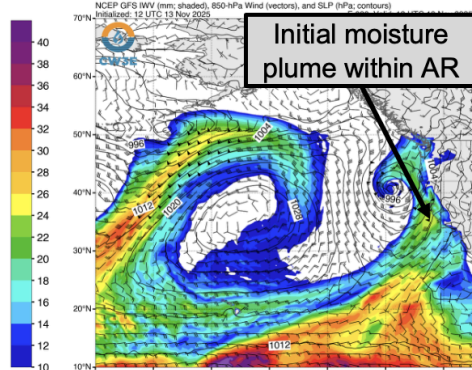


Valid: 4 AM PT 15 Nov

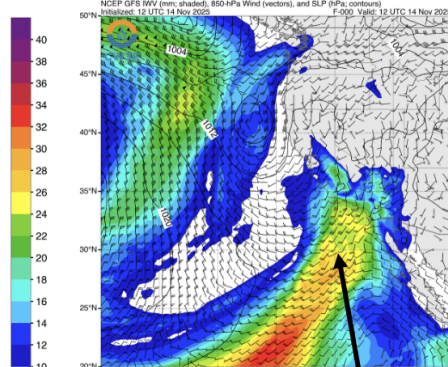


## GFS IWV, SLP & 850-hPa Wind Analysis

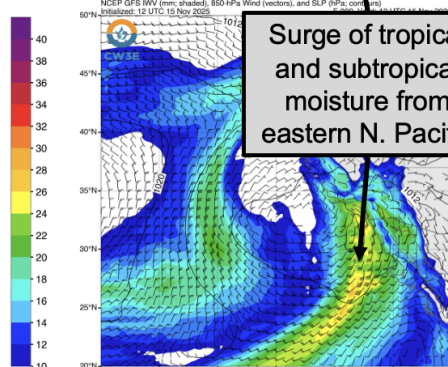
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Valid: 4 AM PT 14 Nov

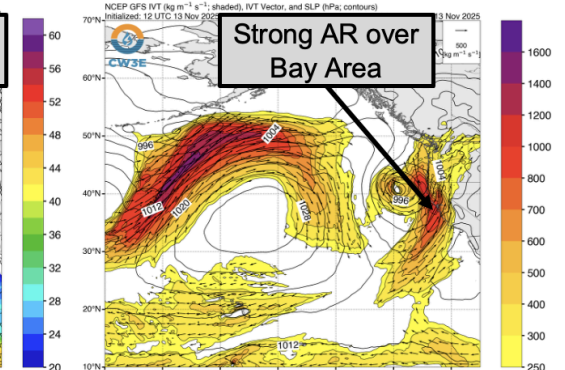


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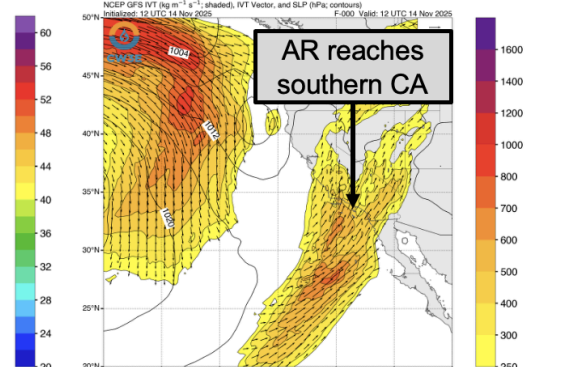


## GFS IVT & SLP Analysis

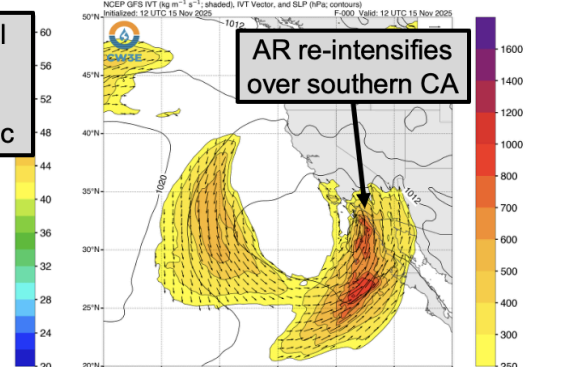
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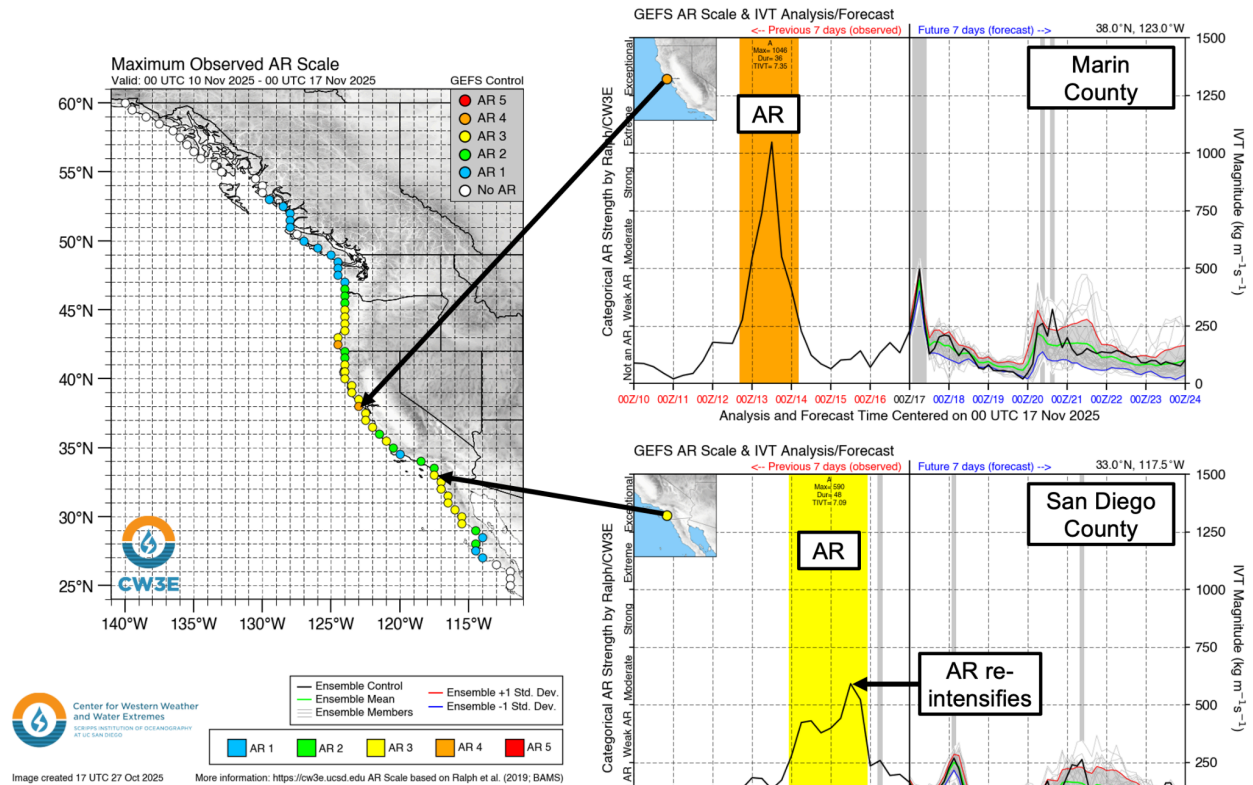
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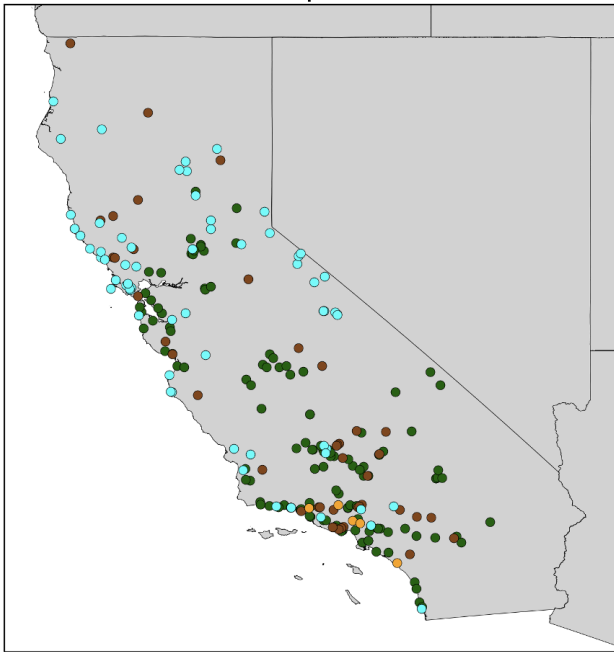
Valid: 4 AM PT 15 Nov







### NWS Local Storm Reports: 12-16 Nov 2025



Data Courtesy: Iowa Environmental Mesonet, <https://mesonet.agron.iastate.edu/>

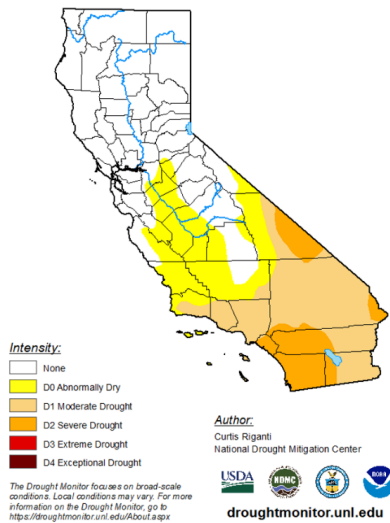
● Flooding ● Landslides ● Severe Wx ● Wind



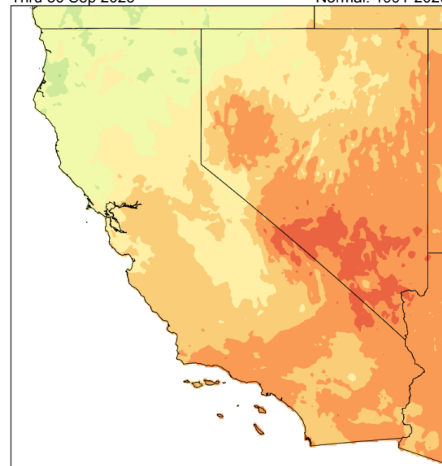
Credit: Caltrans District 7

### U.S. Drought Monitor California

November 11, 2025  
(Released Thursday, Nov. 13, 2025)  
Valid 7 a.m. EST

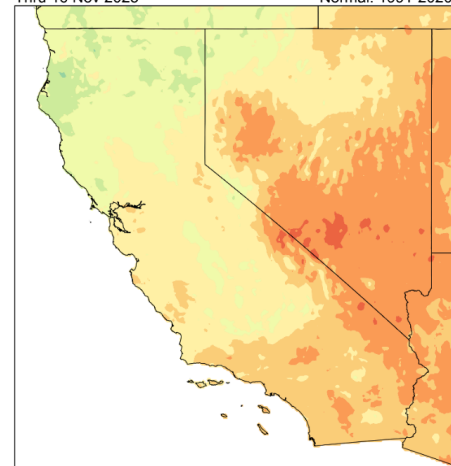


### Years of Normal Precipitation Missing Since 1 May 2024 Thru 30 Sep 2025



Data Courtesy: PRISM Climate Group, Oregon State University, <https://prism.oregonstate.edu/>

### Years of Normal Precipitation Missing Since 1 May 2024 Thru 16 Nov 2025



Data Courtesy: PRISM Climate Group, Oregon State University, <https://prism.oregonstate.edu/>

