

Latest Update on Active Weather Period Bringing Precipitation to US West Coast Updated: 31 January 2024

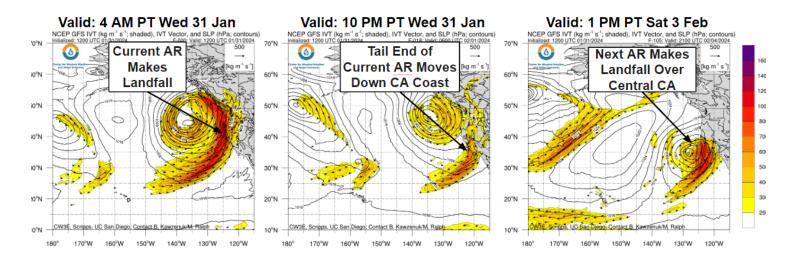
A quick look at the AR currently moving onshore over much of the USWC and a second AR forecast to bring heavy precipitation to Central and Southern California early next week.

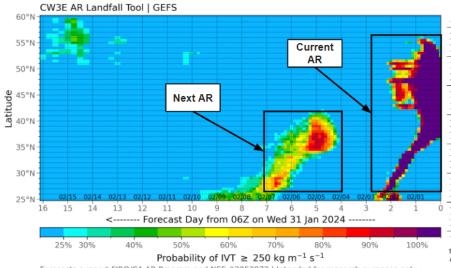
Forecast Highlights:

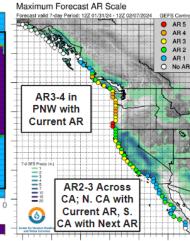
- An atmospheric river is currently moving onshore over the Pacific Northwest and Northern California, with maximum IVT > 800 km m⁻¹ s⁻¹ in the core of the AR.
- CW3E's AR Scale tools for the GEFS and EPS ensembles are indicating AR3/4 conditions (based on the Ralph et al. 2019 AR Scale) for much of coastal WA and OR, with two coastal OR locations forecast at an AR5 in the GEFS where the core of the AR is forecast to make landfall.
- The GEFS and EPS ensembles are also indicating AR1/2 conditions (based on the Ralph et al. 2019 AR Scale) for much of coastal California as the current landfalling AR slides down the coast.
- Precipitation totals of 3 to 5 inches are forecast over Northern CA and parts of the Central and Southern CA coasts with isolated totals above 6 inches.
- Heavy snowfall is expected in the Sierra Nevada with totals of one to two feet likely. Higher elevations could see more than three feet of snowfall accumulation.
- The NWS WPC has continued issuance of Excessive Rainfall Outlooks for California, with a slight (15%) risk area across much of Northern California and coastal areas of Northern and Central California for a period between 8 AM 31 Jan and 4 AM 01 Feb and in Southern California for a period between 4 AM 01 Feb and 4 AM 02 Feb.
- As of Wednesday morning, the NWS California Nevada River Forecast Center (CNRFC) has currently forecast 3 stations to rise above flood stage and 12 to rise above monitor stage in association with the heavy precipitation from the current AR.
- The next AR is forecast to develop north of Hawaii in the coming days, moving onshore early in the day on Sun 04 Feb with AR2/3 conditions forecast along the coast of Central California.
- The intensity of the second AR during landfall has increased over the past few model runs, with a stronger and more coherent core of IVT positioned along the coast of California between 12Z 04 Feb and 12Z 06 Feb in both the deterministic GFS and ECMWF.
- A Day 5 ERO valid 12Z Sun 04 Feb 12Z Mon 05 Feb was issued by the WPC in Southern CA associated with the second AR.

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

Center for Western Weather and Water Extremes SCRIPPS INSTITUTION OF OCEANOGRAPHY AT UC SAN DIEGO



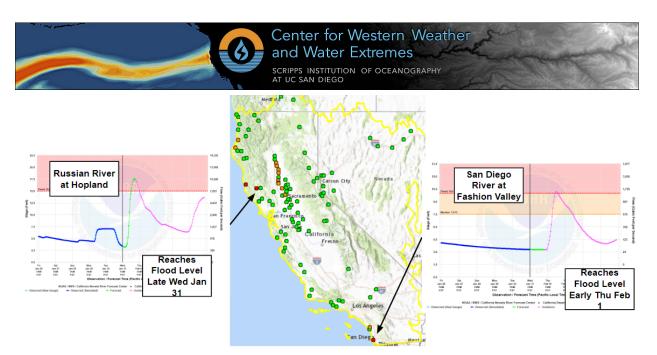




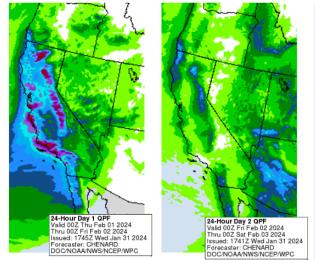
^{140°}W 135°W 130°W 125°W 120°W 115°W AR Scale based on Ralph et al. (2019; BAMS)

Stay tuned to the CW3E webpage for a full AR Update

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



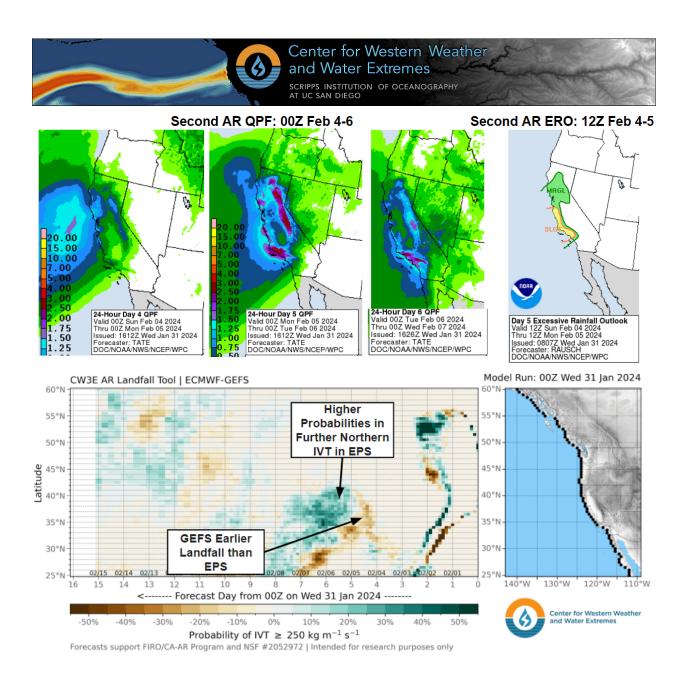
First AR QPF: 00Z Feb 1- 0Z Feb 3



First AR ERO: 16Z Jan 31- 12Z Feb 2







Additional Considerations:

 Visit <u>https://nwrfc.noaa.gov/</u> and <u>https://cnrfc.noaa.gov/</u> for specific river and stream forecasts and <u>https://www.weather.gov/</u> for point specific watches, warnings, and forecasts.
In-depth AR forecasts products can be found here: Update by S. Bartlett & M. Steen <u>http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/</u>
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Stay tuned to the CW3E webpage for a full AR Update