

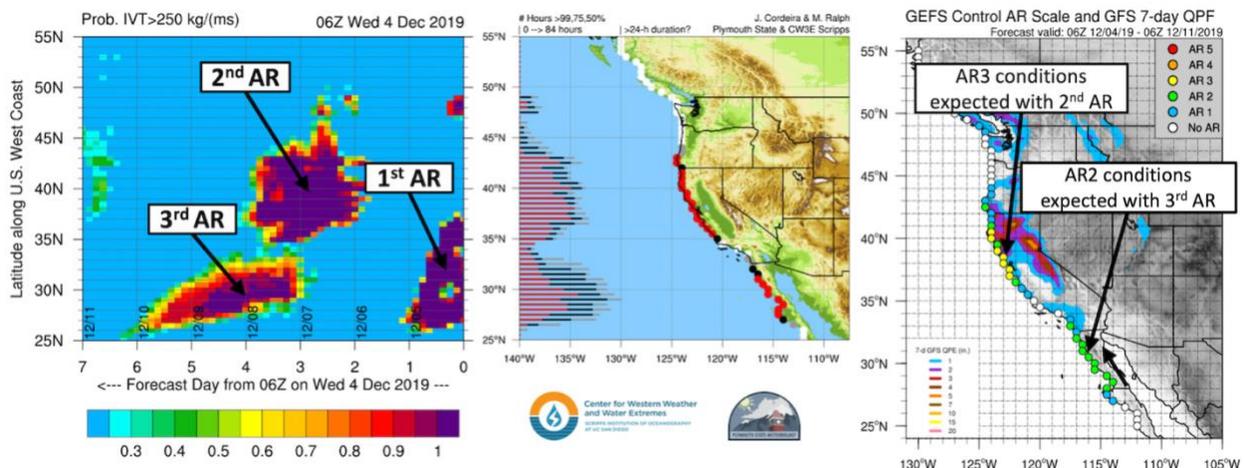
## Latest Update on Period of Active Weather Forecast to Impact California

Updated: 4 December 2019

A look into the ongoing precipitation event in California and the potential for additional atmospheric river (AR) activity over the next 7 days.

### Forecast Highlights:

- An AR (see 1<sup>st</sup> AR in figure below) will impact Central and Southern CA today, bringing AR1 conditions (based on the *Ralph et al. (2019)* AR Scale) to locations such as San Diego.
- Rainfall associated with a weak surface low will produce 0.5–1.5 inches of precipitation over much of Central and Southern CA, with higher amounts likely over the Transverse and Peninsular Ranges.
- A much larger system over the Northeast Pacific Ocean is expected to bring a prolonged period of AR conditions (see 2<sup>nd</sup> AR in figure below) to Central and Northern CA on 6–7 Dec
- Some locations along the coast may experience weak-to-moderate (maximum IVT > 500 kg m<sup>-1</sup> s<sup>-1</sup>) AR conditions (AR3) for more than 48 hours.
- This AR will bring another round of heavy rainfall and mountain snow to Central and Northern CA, with at least 3–5 inches of precipitation forecast over the Coast Ranges, Klamath Mountains, and 1–3 inches elsewhere.
- Upslope moisture flux may lead to orographic enhancement of precipitation over the Klamath Mountains and Northern Sierra Nevada.



**The next two landfalling ARs (2<sup>nd</sup> AR and 3<sup>rd</sup> AR) could produce AR3 conditions in Central and Northern CA, and AR2 conditions in Baja California, respectively.**

- Another long-duration AR (see 3<sup>rd</sup> AR in figure above) is becoming increasingly likely over Baja California between on 7–9 Dec. GFS ensemble forecasts are currently predicting AR2 conditions over Baja California, but there is some uncertainty in the duration and spatial extent of the 3<sup>rd</sup> AR.
- This AR may also impact Southern CA, but forecast confidence in AR conditions over Southern CA is not very high at this time (< 50% probability).

### Additional Considerations:

- Visit <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/>

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Stay tuned to the CW3E webpage for a full AR Update