

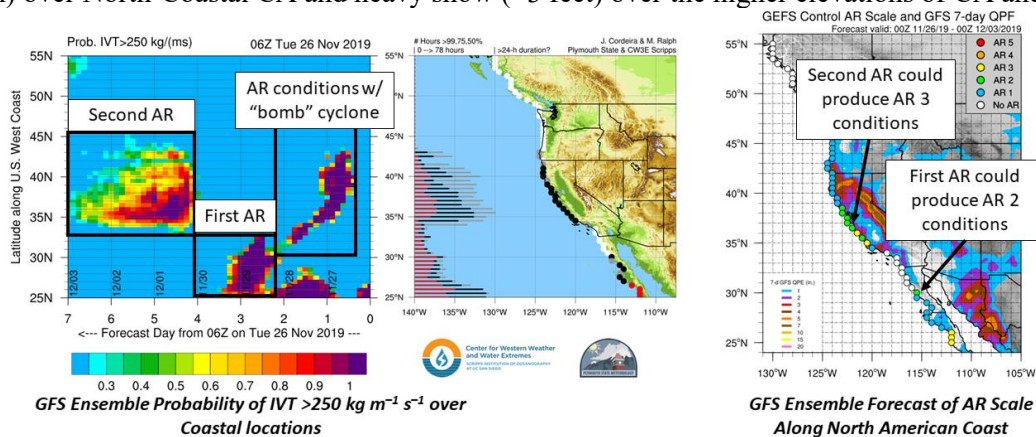
Latest Update on Period of Active Weather Forecast to Impact the Western U.S.

Updated: 26 November 2019

A look into the rapidly deepening cyclone over the eastern Pacific and the potential for additional atmospheric river (AR) activity over the next 7–10 days.

Forecast Highlights:

- GEFS continues to portray confidence in the short burst of moderate AR conditions associated with the cyclone that is undergoing rapid intensification over the Eastern Pacific.
- IVT is forecast to reach a peak of $\sim 520 \text{ kg m}^{-1} \text{ s}^{-1}$ at $\sim 4 \text{ PM PST}$ over the North Bay Region where AR conditions are forecast to last ~ 12 hours before propagating southward down the coast, bringing precipitation to a large portion of CA.
- Despite the intense pressure changes and winds in the rapidly deepening cyclone, the storm is not predicted to create large storm-total precipitation (liquid equivalent), relative to the more hydrologically significant storms, because the AR associated is fast moving, and does not contain large water vapor content. Thus it ranks as an AR 1.
- The primary impacts associated with the first event will be strong winds (gusting as high as 90–100 mph) over North-Coastal CA and heavy snow (>3 feet) over the higher elevations of CA and OR.



The next two landfalling ARs (First AR and Second AR) could produce AR 2–3 conditions based on the Ralph et al. 2019 AR Scale, but uncertainty is currently higher in association with Second AR.

- After the strong cyclone moves inland, the focus turns to the potential for two additional ARs to impact Southern CA and AZ (First AR; 28–30 Nov.) and Central to Southern CA (Second AR; 30 Nov.).
- The First AR could produce as much as 2–3 inches of precipitation to an already wet Southern CA and AZ, whereas the Second AR could bring >5 inches of precip. to Northern and Central CA.
- There is currently larger uncertainty in the overall onset, magnitude and duration of AR conditions associated with Second AR compared to the First AR.

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/>

Update provided by C. Hecht
checht@ucsd.edu

Stay tuned to the CW3E webpage for a full AR Update