



**g fg cWg ba g bfc e E i ef be fggb c gg F fg b fg**  
*Updated: 21 October 2021*

A quick look at the atmospheric rivers that are forecast to impact the U.S. West Coast.

Forecast Highlights:

- Current forecast models are indicating that three strong ARs will make landfall along the U.S. West Coast over the next 7 days.
- Many coastal locations from Northern California to Washington continue to experience AR conditions that began on 19 Oct.
- The GEFS ensemble mean is forecasting AR4 conditions to continue to 12Z on 22 Oct in areas along the coast of Oregon and Washington due to the combination of maximum IVT magnitude (near  $1000 \text{ kg m}^{-1} \text{ s}^{-1}$ ) and AR duration ( $> 48$  hours).
- The GEFS control and ensemble mean are both forecasting AR5 conditions around the San Francisco Bay area in California on 23-25 Oct due to the combination of maximum IVT magnitude ( $> 1000 \text{ kg m}^{-1} \text{ s}^{-1}$ ) and AR duration ( $> 48$  hours). However, there is still considerable uncertainty in the maximum forecasted IVT magnitude and duration of AR conditions.
- AR 2 to AR 4 conditions are expected elsewhere between Los Angeles and the Olympic Peninsula.
- AR2 to AR3 conditions are expected inland from Southeastern California to central Northern Oregon
- As much as 10-15 inches of precipitation are possible over the next 7 days for higher elevations in Northern California, Southwestern Oregon, and Northwest Washington, with a significant portion of this precipitation expected during the second AR.
- With the potential for heavy precipitation, the National Weather Service has posted flash flood watches in Northern California due to the possibilities of post-fire debris flows near the Dixie Fire and North Complex burn scars.
- Precipitation from these early season storms will provide some much-needed relief to areas experiencing extreme long-term drought.

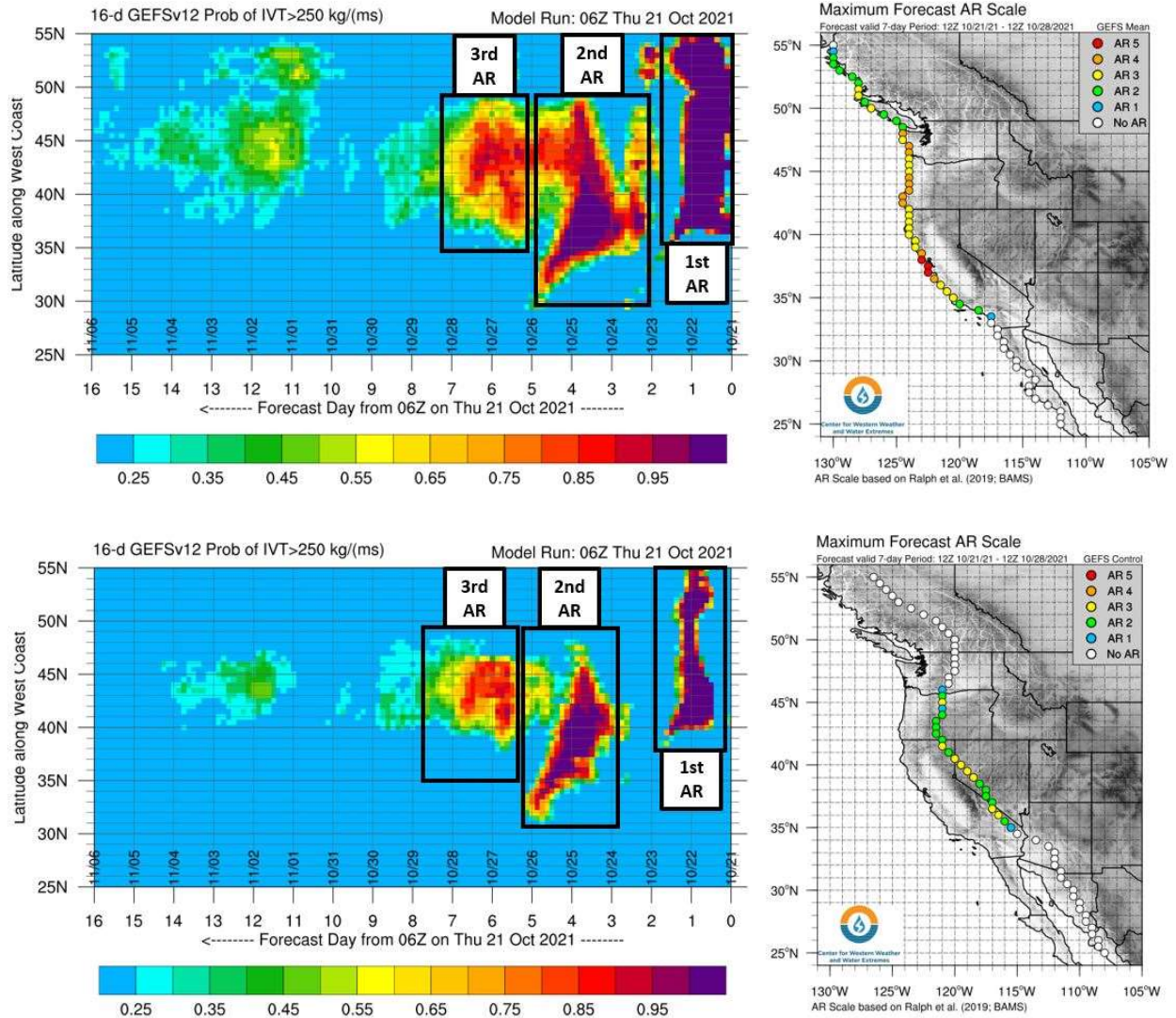
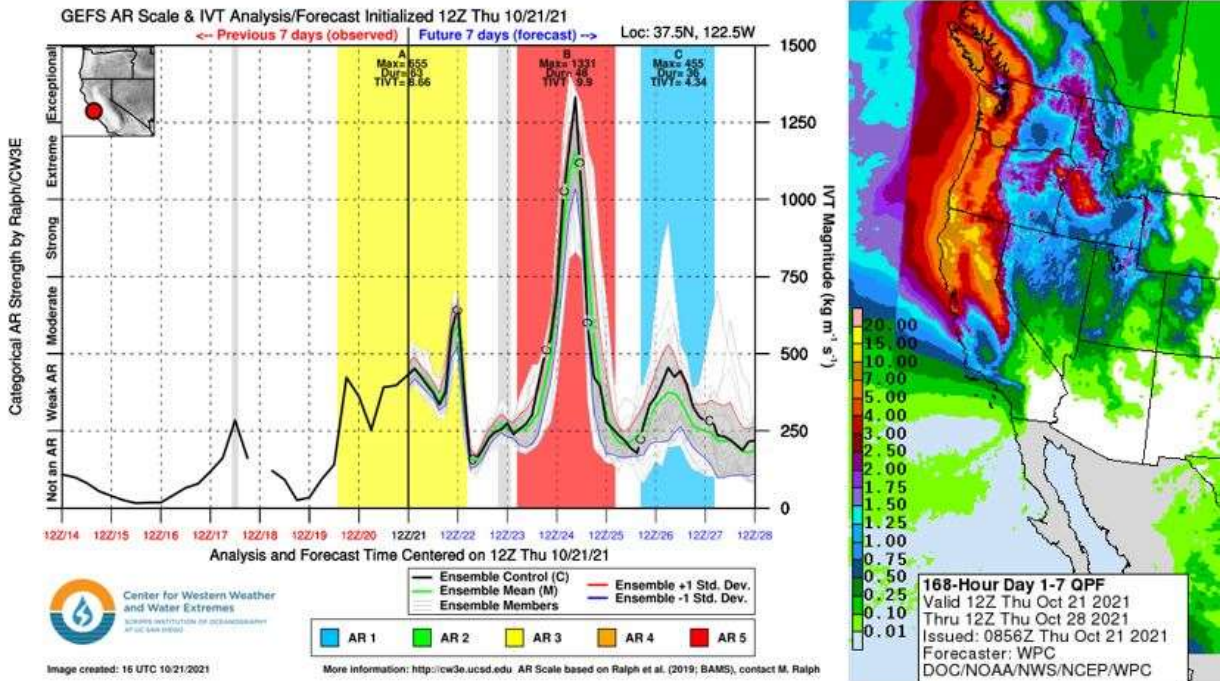


Fig 1 gha Wbg Uc be h E cWg



Additional Considerations:

- Visit <https://nwrfc.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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