



Latest Update on Atmospheric Rivers Forecast to Impact the US West Coast

Updated: 12 January 2023

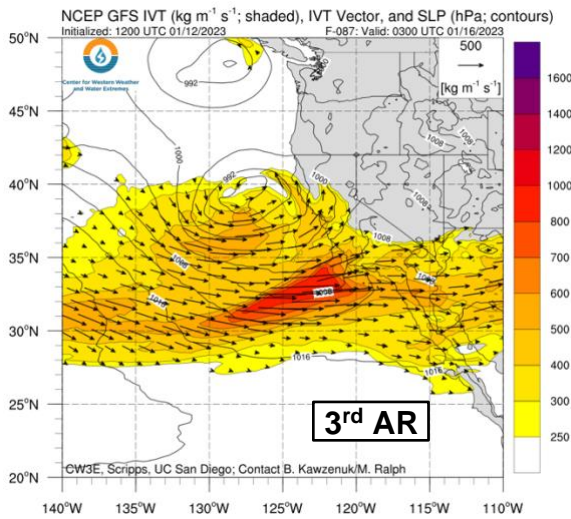
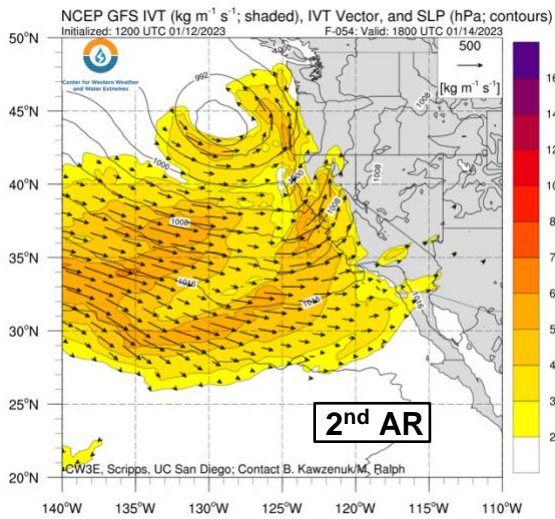
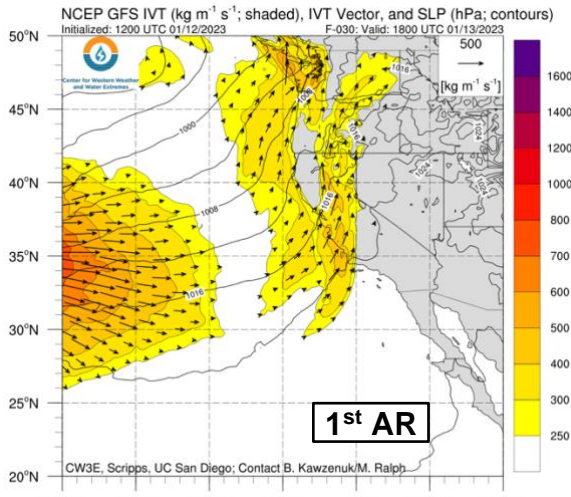
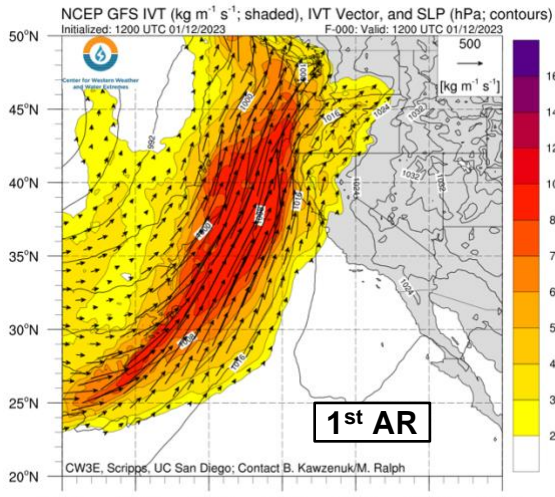
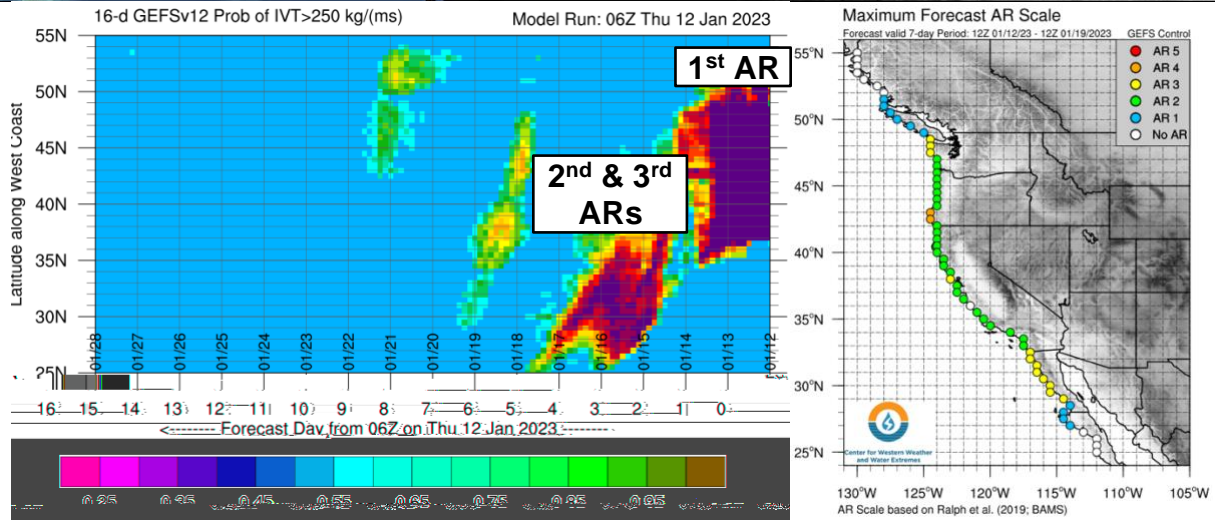
A quick look at the atmospheric rivers that are forecast to impact the US West Coast over the next several days.

Forecast Highlights:

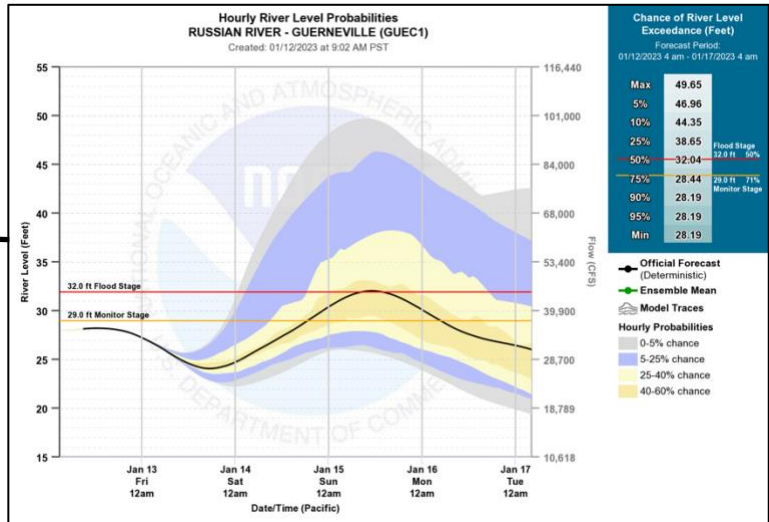
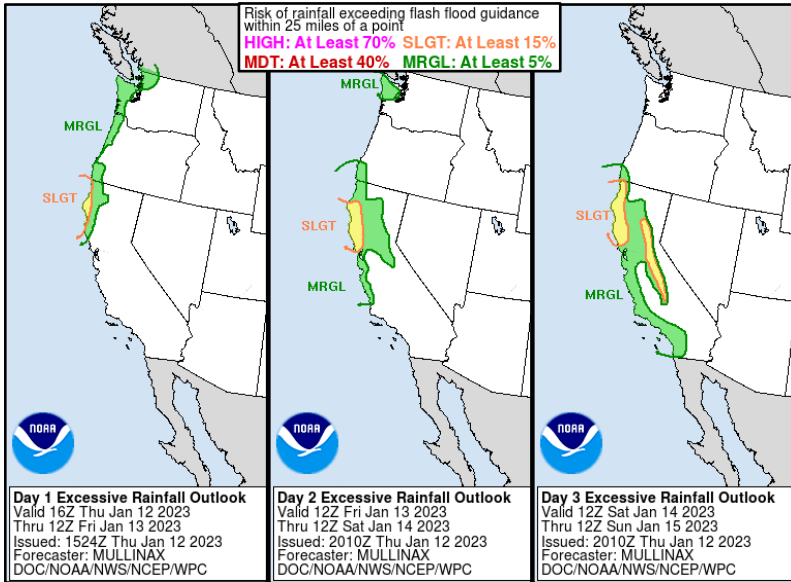
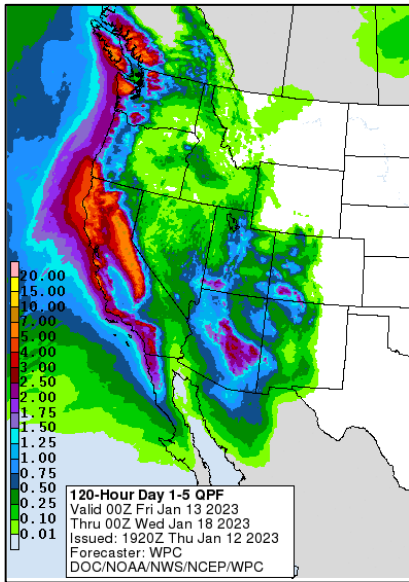
- A strong atmospheric river (AR) made landfall along the US West Coast yesterday morning
- This AR is expected to produce at least AR 2 conditions (based on the Ralph et al. 2019 AR Scale) between Monterey, CA, and Cape Flattery, WA
- An AR 4 is forecast in southern coastal Oregon, where AR conditions ($IVT \geq 250 \text{ kg m}^{-1} \text{ s}^{-1}$) may persist for more than 72 consecutive hours
- Two additional ARs are forecast to make landfall across California during 14–16 Jan, potentially bringing AR 2–3 conditions to Southern California and Baja California
- The NWS Weather Prediction Center is forecasting 5–10 inches of precipitation in the Olympic Mountains, Northern CA Coast Ranges, and Sierra Nevada, and 2–5 inches of precipitation in coastal Southern CA and central Arizona, during the next 5 days
- Given the high antecedent soil moisture and streamflow conditions, rain from these ARs is expected to result in additional hydrologic impacts in Northern and Central CA
- The NWS Weather Prediction Center has issued a moderate risk of rainfall exceeding flash flood guidance for coastal Northern CA (including the Russian River watershed) today through Sunday morning, as well as for the western foothills of the Sierra Nevada (including the Yuba–Feather watersheds) Saturday through Sunday morning.
- Statewide, 4 stream gages are forecast to exceed flood stage over the next 5 days, and 22 other stream gages are forecast to exceed monitor/action stage in California
- The Russian River at Guerneville is forecast to crest near flood stage on 15 Jan, with a 50% probability of exceeding flood stage during the next 5 days
- Freezing levels in the Northern Sierra Nevada are forecast to steadily drop from nearly 9,000 feet today to below 5,000 feet by Saturday morning, allowing for more precipitation from the next two ARs to fall in the form of snow compared to recent storms
- Total snowfall accumulations of 3–6 feet are possible in the Sierra Nevada by Tuesday
- The National Weather Service has issued watches and warnings for flooding and heavy mountain snow in Northern and Central California

Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials

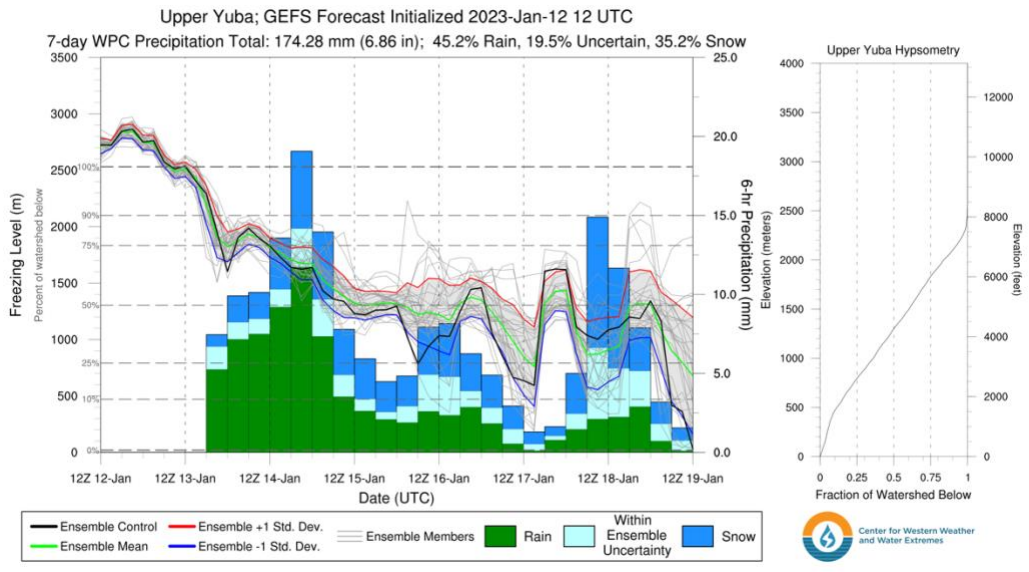
Stay tuned to the CW3E webpage for a full AR Update



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Additional Considerations:

- Visit cnrfc.noaa.gov and nwrfc.noaa.gov for specific river and stream forecasts and 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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