



Latest update on AR forecast to make landfall into California

Updated: 8 March 2023

A quick look at the atmospheric river (AR) forecast to make landfall along the California coast on Friday and the AR forecast to make landfall early next week

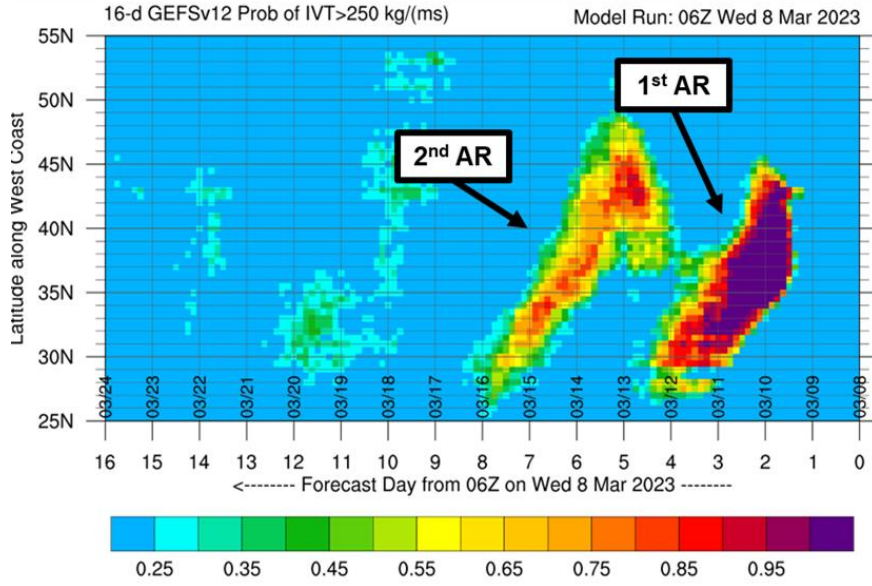
Forecast Highlights:

- The first AR is forecast to make landfall into Northern and Central California beginning early Friday with southwesterly IVT $> 1,000 \text{ kg m}^{-1} \text{ s}^{-1}$ in the core of the AR, eventually dissipating over Southern California overnight Saturday into Sunday
- The second AR is forecast to make landfall early on Sunday into southern Oregon and Northern California with southwesterly/southerly IVT $> 900 \text{ kg m}^{-1} \text{ s}^{-1}$ in the core of the AR
- The 12Z GEFS control is currently forecasting AR 4 conditions in Central California and AR 2 and 3 conditions along much of the coast of California during the first AR, with AR conditions extending from southern Oregon to southern California
- The first AR is forecast to be a warmer storm than prior ARs this season, with significant moisture transport extending from the tropics into the US West Coast. Freezing levels are forecast to be as high as 8,000 – 10,000 feet for much of the Central and Southern Sierra Nevada, leading to rain-on-snow. At high elevations, snow has cold content minimizing the risk for contributions to run-off from rain on snow.
- The NWS Weather Prediction Center is forecasting 5–7 inches of precipitation for locations in the Coast Ranges of Northern and Central California and greater than 7 inches in the Sierra Nevada over the next 5 days
- NWS WPC is also forecasting up to moderate risk (at least 40%) for excessive rainfall (exceeding flash flood guidance) for a broad area including the Coast Ranges of Central California, the Central Valley, and the Sierra Nevada between Thursday and Saturday. An additional region of between marginal (at least 5%) to slight (at least 15%) risk is forecast in the Coast Ranges of Northern California and the Sierra Nevada Saturday into Sunday
- The NWS California Nevada River Forecast Center has forecast multiple rivers in the Coast Ranges of Northern California and Central Valley to exceed flood stage over the next 5 days, with rivers expected to crest at or above flood stage on Friday. Hydrologic impacts are forecast to continue into next week as river levels remain elevated and precipitation associated with the next second AR moves into California
- NWS forecast offices have begun issuing watches and warnings for hydrologic impacts in the Coast Ranges of Central California and Central Valley and winter weather impacts in the Klamath Mountains and Sierra Nevada

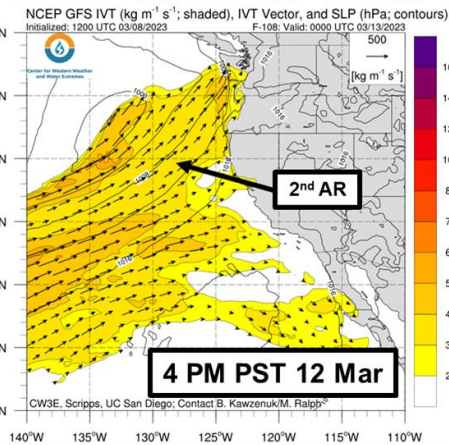
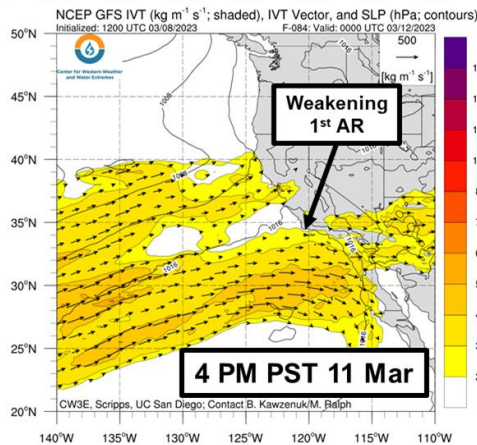
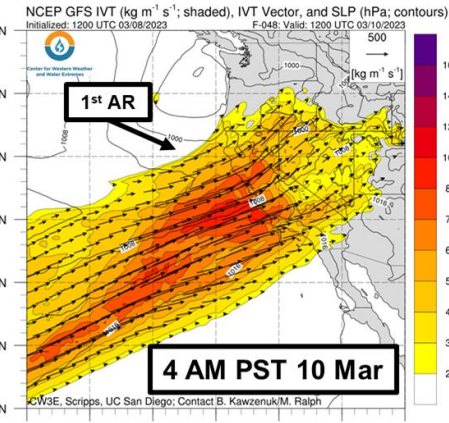
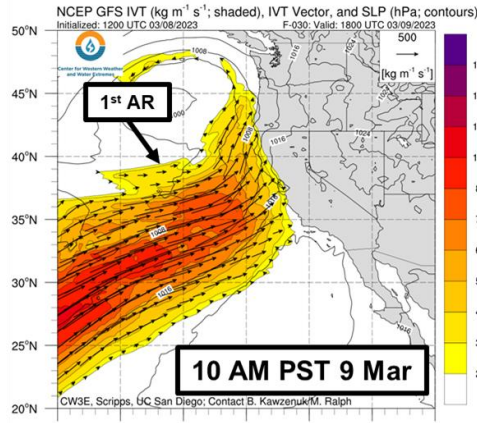
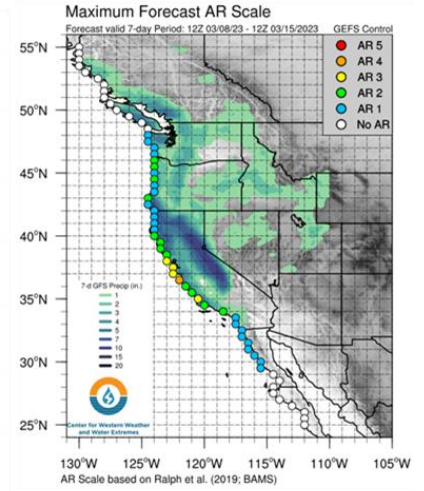
Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials

Stay tuned to the CW3E webpage for a full AR Update

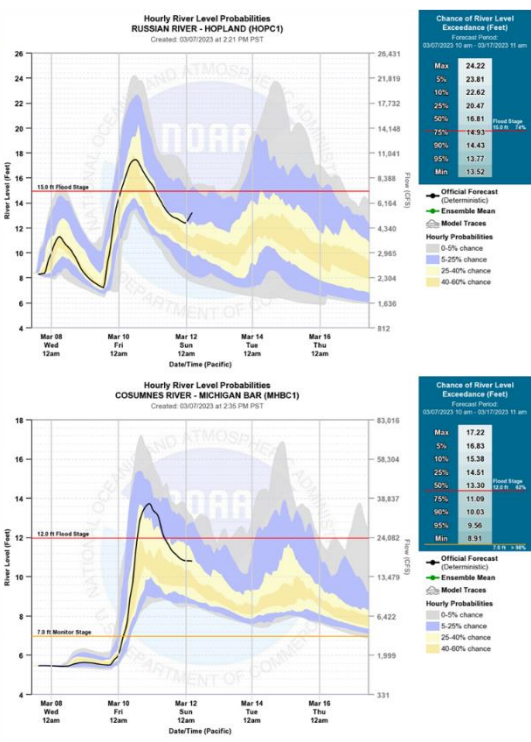
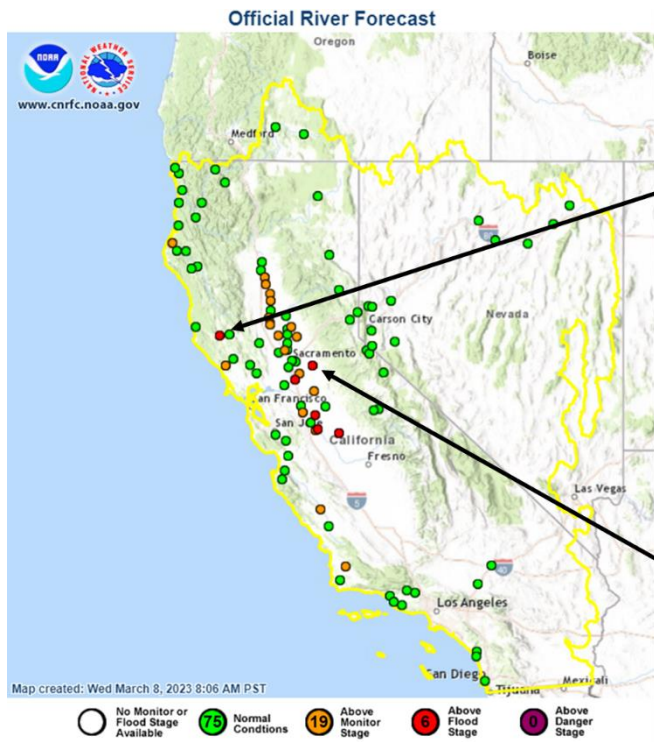
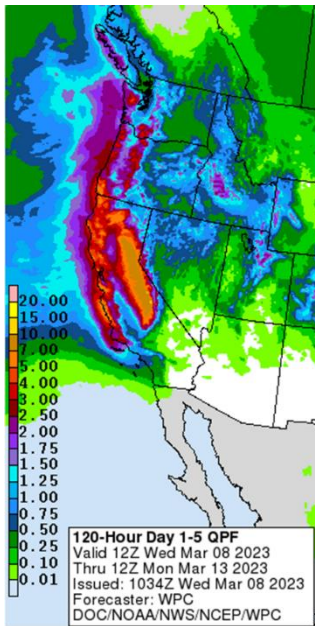
Model Initialization: 06Z Wed 8 Mar 2023



Model Initialization: 12Z Wed 8 Mar 2023



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Visit weather.gov and cnrfc.noaa.gov for point specific forecast and updated streamflow guidance

In-depth AR forecast products can be found here:
<http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/>

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