

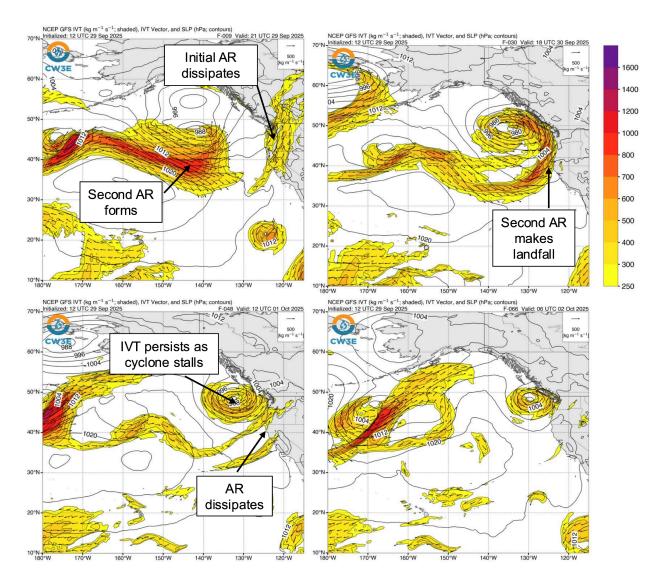
Quick Look at Atmospheric Rivers Forecast to Impact the U.S. West Coast Updated: 29 September 2025

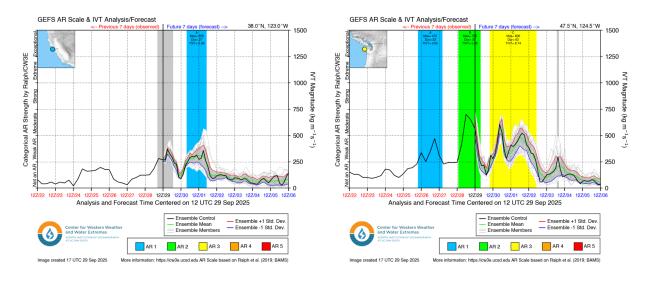
An active weather pattern continues over the U.S. West Coast through mid-week.

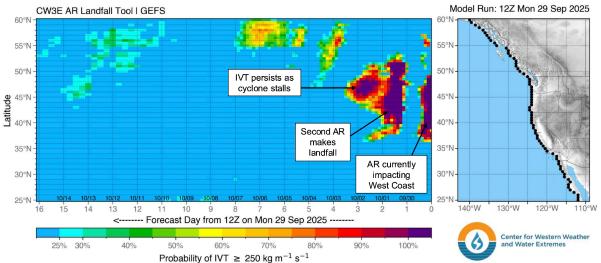
Forecast Highlights:

- An AR is currently impacting coastal Washington, Oregon, and Northern California and is forecast to weaken and dissipate through the evening of Mon, 29 Sep.
- A subsequent AR is currently forming in conjunction with a strengthening cyclone off the British Columbia coast and is forecast to make landfall along the northwest U.S. coast by midday on Tue, 30 Sep. Moderate (500–700 kg m⁻¹ s⁻¹) southwesterly IVT is forecast over coastal Washington, Oregon, and Northern California as the parent cyclone intensifies and then undergoes occlusion.
- AR conditions impacting northern California and southern Oregon are forecast to dissipate overnight on 30 Sep and through the following morning as the cyclone weakens; however, weak/moderate IVT values (250–750 kg m⁻¹ s⁻¹) to the north along the Washington and northern Oregon coast are forecast to persist until the morning of Thu, 2 Oct as the weakening cyclone stalls off the British Columbia coast.
- CW3E's AR Scale products based on the GEFS forecast initialized at 12 UTC 29 Sep indicate weak/moderate (250–750 kg m⁻¹ s⁻¹) and short-lived (≤ 24 hours) AR conditions over northern California, with duration increasing to the north over Oregon and Washington [30–60+ hours; AR2–AR3 based on the Ralph et al. (2019) AR Scale].
- CW3E's AR Landfall Tool based on GEFS forecast highlights a high likelihood (>90%) of AR conditions between Washington and Northern California on 30 Sep and for 2 days thereafter along the Washington and Oregon coast in connection with the stalled cyclone.
- The NWS Weather Prediction Center (WPC) forecast issued at 12 UTC 29 Sep depicts 1–3 inches of total precipitation in the Northern California Coast Ranges, the Northern Sierra Nevada, the Oregon Coast Ranges, and the Cascades during the next 3 days (ending 5 am PDT Thu, 2 Oct), with higher amounts (4–8 inches) forecast over the Olympic Peninsula.
- The WPC has issued a **marginal risk** (level 1 of 4; 5% probability) excessive rainfall outlook (ERO) for the 24-hour period ending 5 am PDT Mon, 30 Sep over parts of Northern California and far southwestern Oregon, as well as inland areas over eastern Oregon, Nevada, and Idaho. There is also a **marginal risk** over the Olympic Peninsula for the 24-hour period ending 5 am PDT Thu, 2 Oct.
- The rainfall will likely be beneficial for areas experiencing drought and helpful for wildfire containment and suppression efforts. As of this morning's update from the Northwest Interagency Coordination Center, there are 16 active large fires in Washington and Oregon, including the Bear Gulch Fire in Olympic National Forest.

Stay alert to official NWS forecasts, watches, and warnings at weather.gov and follow guidance from local emergency management officials

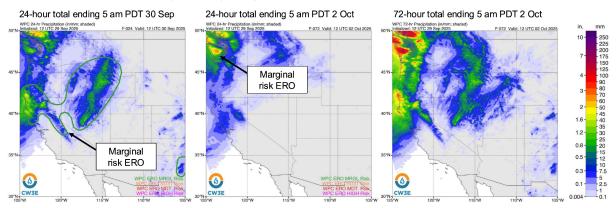


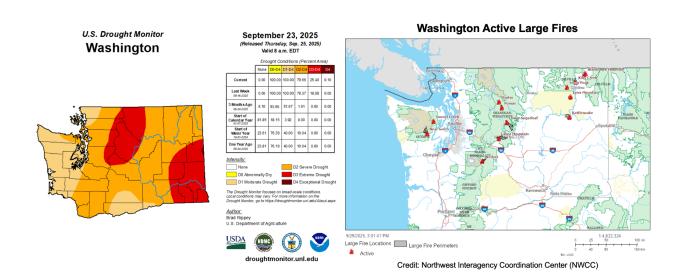




Forecasts support FIRO/CA-AR Program and NSF #2052972 I Intended for research purposes only







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: https://cw3e.ucsd.edu/iwv-and-ivt-forecasts/

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