

Quick Look at Precipitation from PRE Associated with Priscilla and Upper-Level Trough

Updated: 7 October 2025

A predecessor rain event associated with the moisture from Hurricane Priscilla is forecast to bring significant rainfall to Arizona and New Mexico Thu-Sat, followed by additional precipitation associated with an upper-level trough, which may continue into early next week.

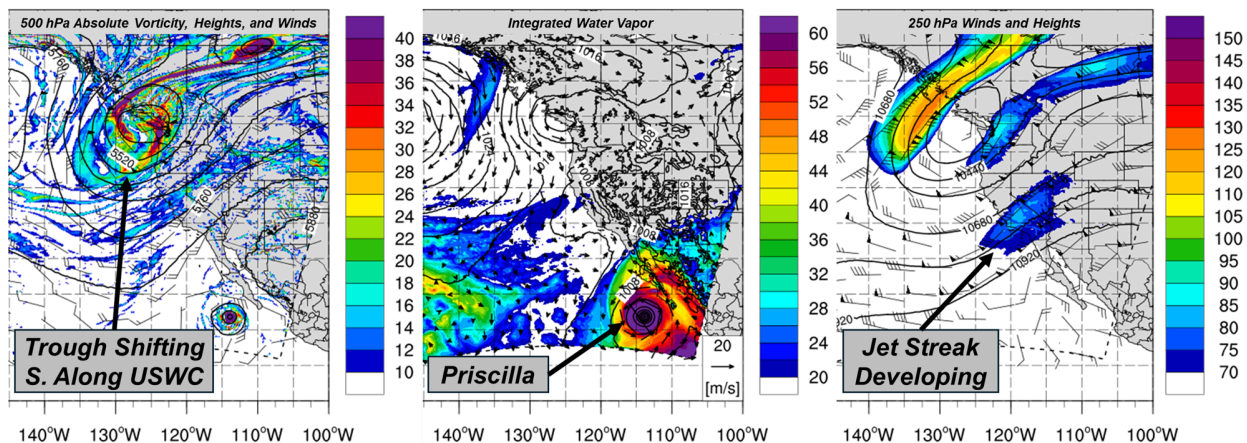
Forecast Highlights:

- A predecessor rain event (PRE) associated with Hurricane Priscilla is forecast to bring multiple days of rainfall to the Southwestern US between Thu 9 Oct and Sat 11 Oct.
- This PRE is forecast to develop in association with an area of highly anomalous moisture (IWV >44 mm) transported inland from Priscilla into a region of ascent beneath an equatorward jet entrance region ahead of a deep trough and associated cutoff low.
- The trough and associated cutoff low are forecast to shift onshore early on Fri 10 Oct, bringing precipitation to Northern California and the Pacific Northwest with totals of 1.0–2.0 in. primarily over terrain, including some snowfall at high elevations.
- As the trough and cutoff low shift eastward through Mon 13 Oct, forcing for ascent, moist air associated with the remnants of Priscilla, and elevated water vapor transport (IVT > 500 kg m⁻¹ s⁻¹) are forecast to persist over the Interior West, maintaining favorable conditions for multiple days of precipitation through early next week.
- CW3E's West-WRF AR Scale forecast illustrates the extent of the inland moisture transport, with an ensemble mean forecast of AR2 (out of 5) conditions forecast over central Arizona and ~50% of ensemble members forecasting AR3 or greater conditions for points inland.
- There is still some forecast uncertainty as to the exact progression of the trough across the Southwestern US, which may impact the timing and location of the heaviest precipitation from this event. This uncertainty is demonstrated through the spread of ensemble member forecast precipitation totals from CW3E West-WRF Meteograms.
- The NWS Weather Prediction Center (WPC) is forecasting multiple days of rainfall over the Southwestern US, with 5-day precipitation totals (5 AM PT Tue 7 Oct–5 AM PT Sun 12 Oct) >3 in. over Central Arizona and Southwestern Colorado, and 1.0–3.0 in. forecast over much of the rest of the Colorado Basin.
- The NWS WPC has issued multiple excessive rainfall outlooks (EROs) highlighting the potential for flash flooding over the Southwestern US between 5 AM Thu 9 Oct–5 AM Sun 12 Oct, with **marginal risk** (≥ 5%; level 1 of 4) EROs valid on all days and a **slight risk** (at least 15%; level 2 of 4) ERO centered on the Four Corners region Sat 11 Oct into Sun 12 Oct.
- The NWS Colorado River Basin River Forecast Center has forecast significant streamflow rises of 2–4 ft at multiple locations across the Southwestern US, including on the Gila River in central Arizona and the San Juan River in northern New Mexico.

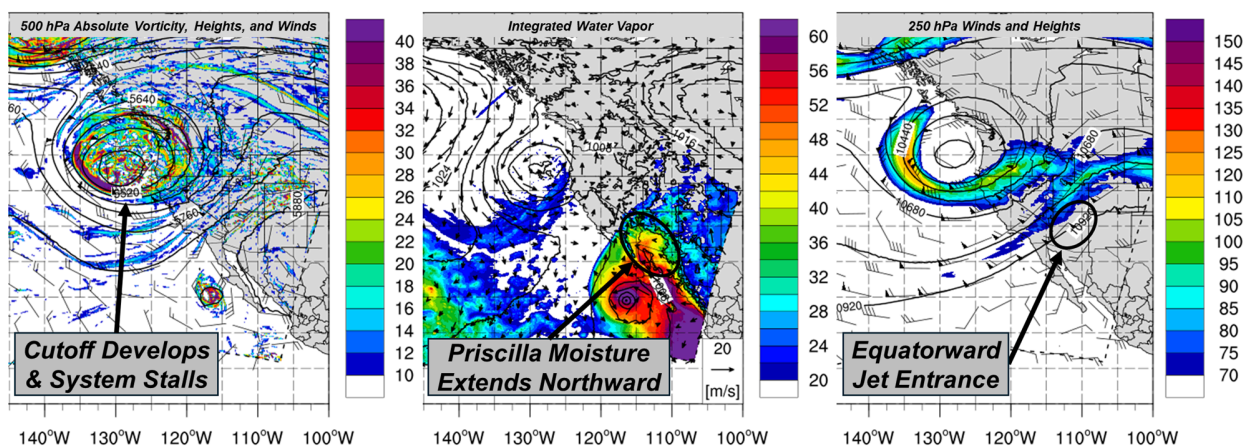
Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials

Stay tuned to the CW3E webpage for a full AR Update

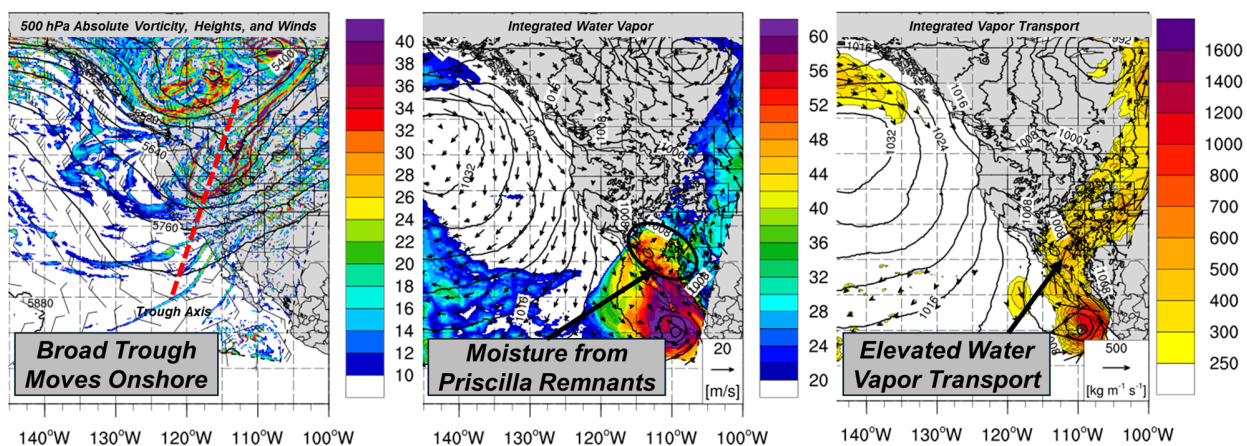
CW3E GFS West-WRF Forecast: Initialized 00 UTC 7 Oct 2025 - Valid 00 UTC 9 Oct 2025



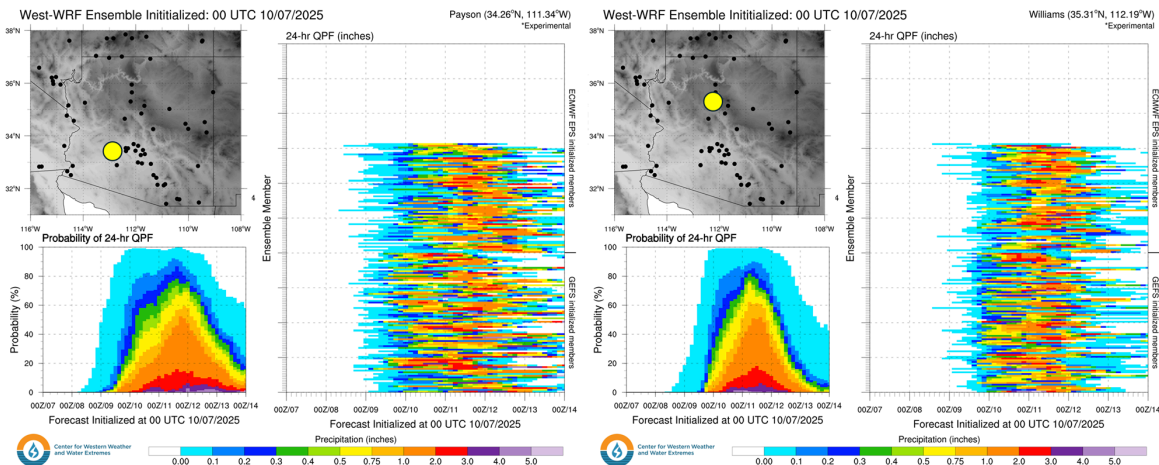
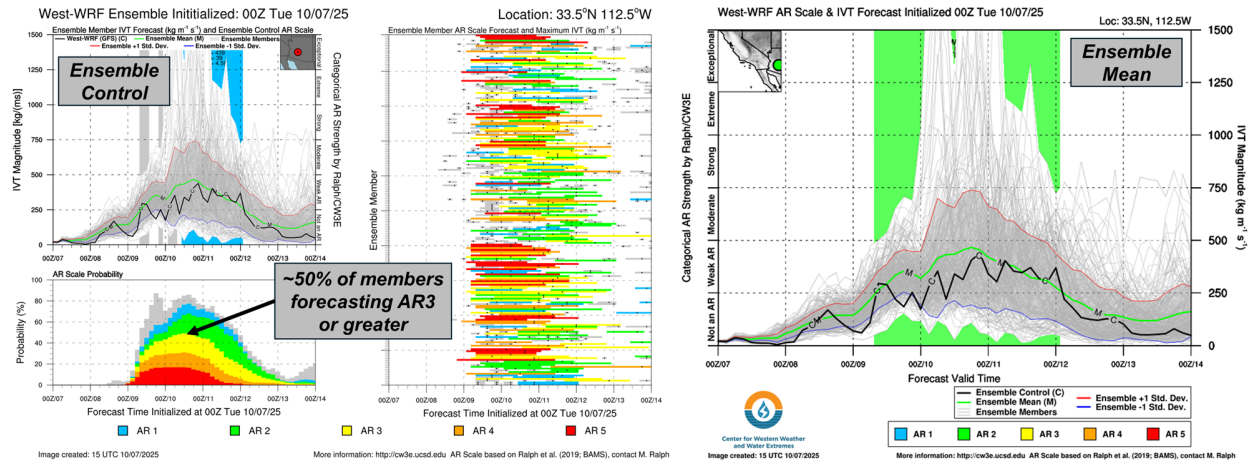
CW3E GFS West-WRF Forecast: Initialized 00 UTC 7 Oct 2025 - Valid 12 UTC 10 Oct 2025



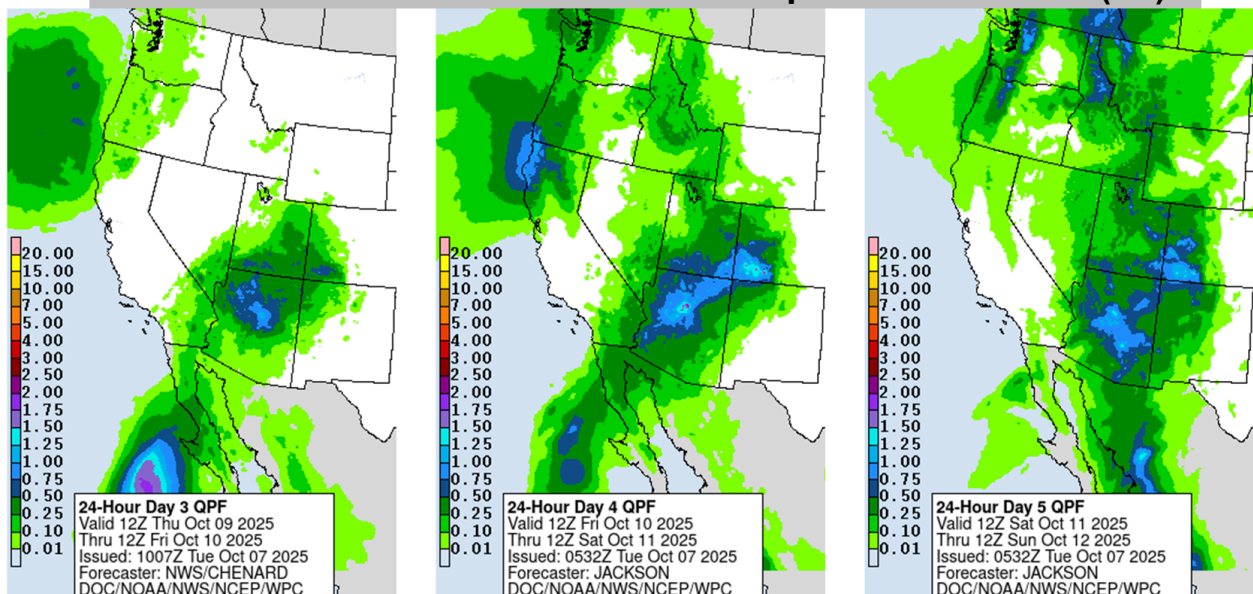
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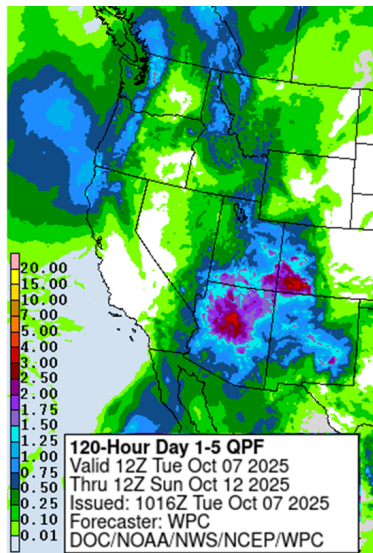
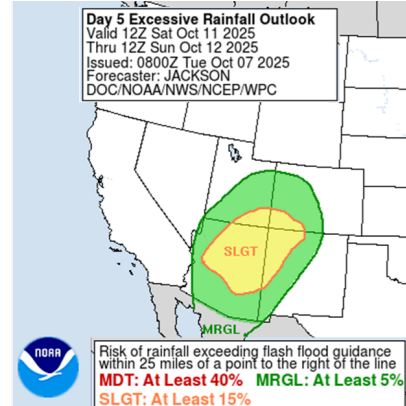
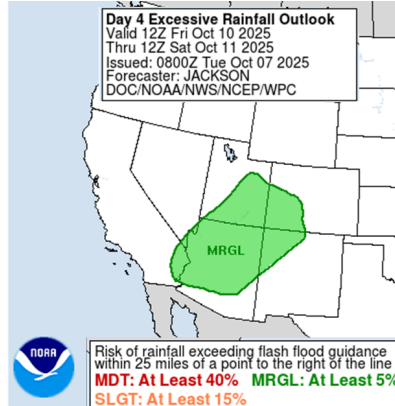
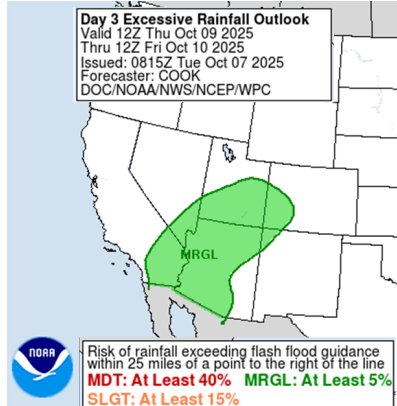
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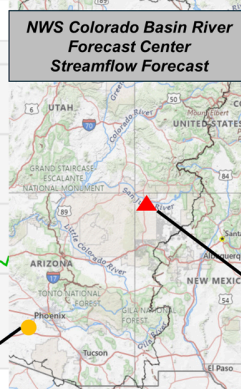
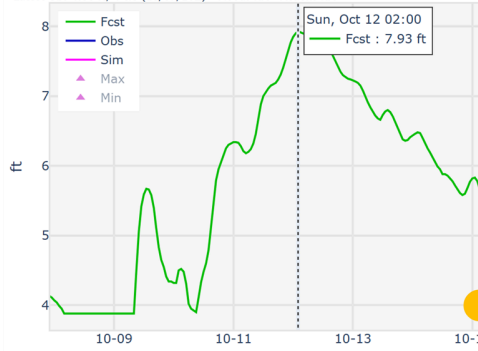
NWS WPC 24-hour Quantitative Precipitation Forecast (in.)



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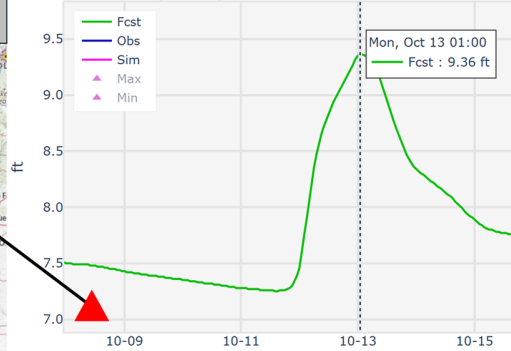


GGDA3: Gila - Gillespie Dam, Blo - Fcst Date: 10/07/15Z - [More Info](#)
Latest Ob: 4.00 ft, 4 cfs (10/07/16Z) - Flood: NA - Action: NA



SHRN5: San Juan - Shiprock - Fcst Date: 10/07/14Z - [More Info](#)

Latest Ob: 7.60 ft, 761 cfs (10/07/17Z) - Flood: 15.5 ft, 12488 cfs - Action: 13.5 ft, 8485 cfs



Additional Considerations:

Visit cbrfc.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/>

Update by S. Bartlett

smbartlett@ucsd.edu

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