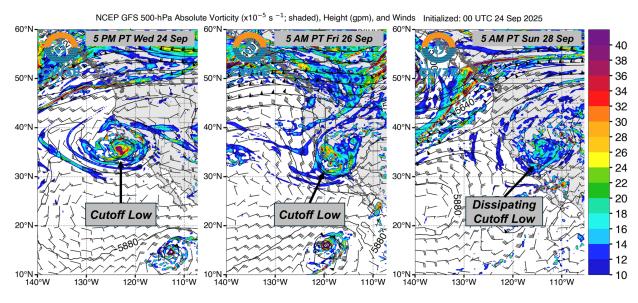
Quick Look at Heavy Precipitation Forecast over the Desert Southwest Updated: 24 September 2025

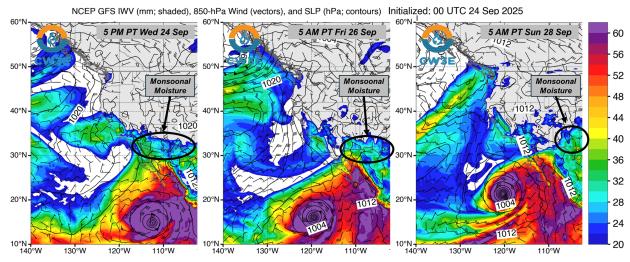
A cutoff low currently offshore of California is forecast to move over the Desert Southwest and interact with an area of monsoonal moisture, producing significant precipitation over the region.

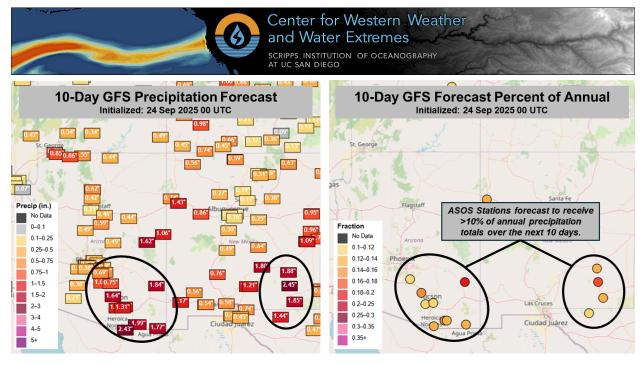
Forecast Highlights:

- An upper level cutoff low currently located offshore of California is forecast to move onshore over the Southwest US later today, Wed 24 Sep, moving gradually eastward during the remainder of the week.
- The cutoff low is forecast to interact with an area of anomalously high monsoonal moisture established over the Desert Southwest, resulting in multiple days of rainfall over the region.
- This area of monsoonal moisture, featuring IWV values >30 mm over southern Arizona and New Mexico, is forecast to remain in place until at least Sun 28 Sep.
- The cutoff low is forecast to dissipate starting midday Sun 28 Sep, as it shifts to the east during the weekend.
- The NWS Weather Prediction Center (WPC) is forecasting 72-hour (11 AM PT Thu 25 Sep–11 AM PT Sun 28 Sep) precipitation totals of 1–2 in. over southeastern Arizona and southern New Mexico, with regions of 2–4 in. possible.
- There are significant model-to-model differences in quantitative precipitation forecasts initialized at 00 UTC 24 Sep over southeastern Arizona (Upper San Pedro watershed), with the GFS forecasting 2.25 in. of rain (>10% of annual rainfall) and the ECMWF only forecasting 0.48 in. (<5% of annual rainfall) during the next 10 days.
- Model ensembles initialized at 00 UTC 24 Sep indicate significant uncertainty, with forecast precipitation totals over the Upper San Pedro watershed ranging from ~0.5–3.0 in. (mean of 1.5 in.) in the GEFS and ~0.25–1.0 in. (mean of 0.6 in.) in the EPS.
- GFS 10-day precipitation forecasts (initialized at 00 UTC 24 Sep) for ASOS stations over southern Arizona and New Mexico show multiple locations with 1.5–2.5 in. of rain forecast, with many of these locations forecast to receive 10–20% of their annual precipitation during this period.
- The NWS Tucson, AZ Weather Forecast Office has issued a Flash Flood Watch for southeastern Arizona for the period between Thu 25 Sep–Sat 27 Sep.
- The NWS WPC has also issued multiple excessive rainfall outlooks (EROs) for the period between 5 AM PT Thu 25 Sep through 5 AM PT Mon 29 Sep, with marginal risk (≥ 5%; level 1 of 4) EROs valid over southern Arizona and New Mexico and slight risk (at least 15%; level 2 of 4) EROs targeted over the Arizona/New Mexico border and southern New Mexico, highlighting the potential for flash flooding on multiple days over the region.

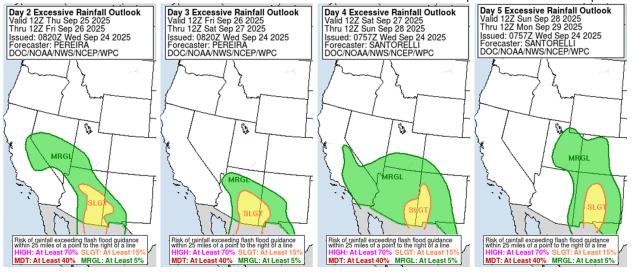
Stay alert to official NWS forecasts, watches, and warnings at weather.gov and follow guidance from local emergency management officials







NWS Weather Prediction Center Excessive Rainfall Outlooks: 5 AM PT Thu Sep 25-5 AM PT Mon Sep 29



Additional Considerations:

Visit <u>cbrfc.noaa.gov</u> for specific river and stream forecasts and <u>weather.gov</u> 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