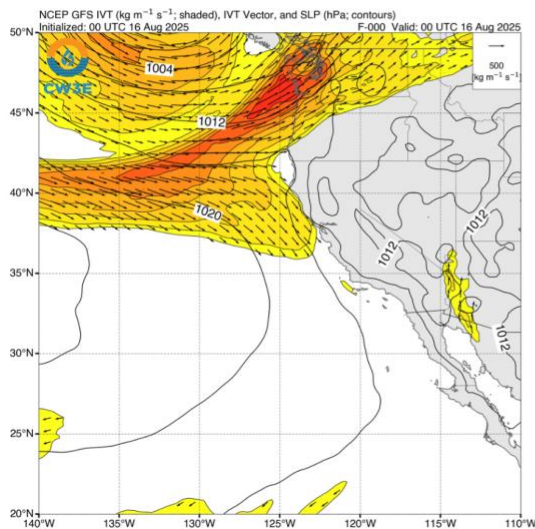


## Quick Summary of the Recent Atmospheric River in Washington

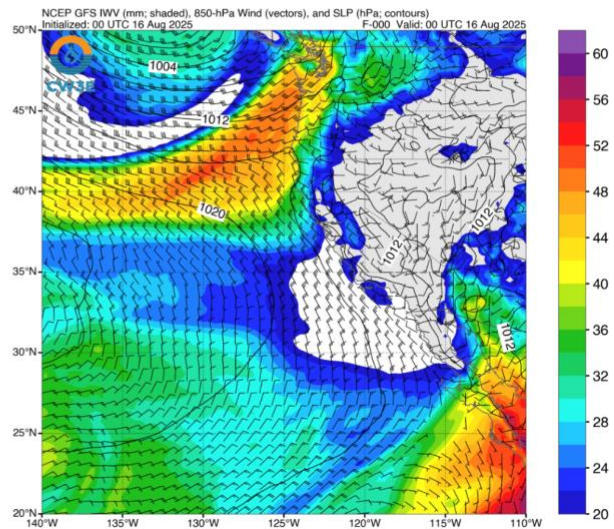
*Updated: 19 August 2025*

- An unusually potent summer atmospheric river (AR) made landfall over the Pacific Northwest late Thu 14 Aug, bringing strong AR conditions ( $\text{IVT} \geq 750 \text{ kg m}^{-1} \text{ s}^{-1}$ ) and much-needed rainfall to western Washington.
- This AR formed within a plume of very moist air extending eastward from the Western Pacific. Salem, OR, recorded its 3rd highest all-time (and highest summertime) precipitable water (1.79 inches) on Fri 15 Aug.
- GEFS analyses indicated an AR 3 (based on the Ralph et al. 2019 AR Scale) over much of coastal Washington and an AR2 over portions of the Washington Cascades foothills, including the Green River Basin.
- Since 1960, only 14 previous ARs have reached an AR 3 or greater at  $47.0^\circ\text{N}$ ,  $124.0^\circ\text{W}$  (Grays Harbor County, WA) during the month of August. The event maximum IVT of  $851 \text{ kg m}^{-1} \text{ s}^{-1}$  makes this the 5th strongest August AR observed at this location since 1960.
- This AR produced an estimated 3–8 inches of precipitation in portions of the Olympic Peninsula and Washington Cascades, with 1–3 inches observed in the Green River Basin.
- Despite the heavy rainfall, hydrologic impacts were limited due to dry antecedent soil conditions and low antecedent streamflow.

### GEFS IVT & SLP Analysis Valid 5 PM PDT 15 Aug 2025



### GEFS IWV, 850-hPa Wind & SLP Analysis Valid 5 PM PDT 15 Aug 2025



## GEFS Control AR Scale Analysis

