

# The Landfalling Atmospheric Rivers of Water Year (WY) 2026

AR Strength	AR Count
Weak	20
Moderate	19
Strong	12
Extreme	5
Exceptional	0

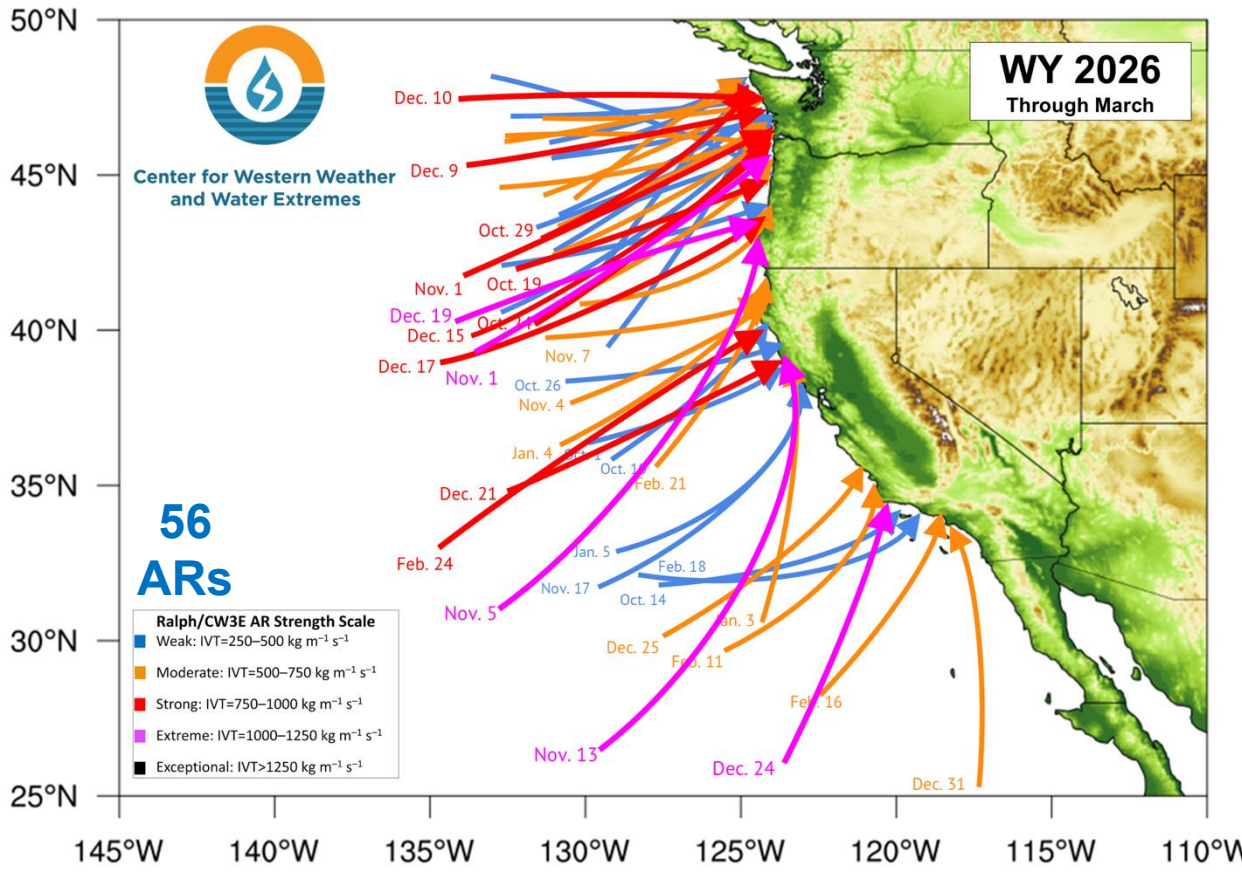
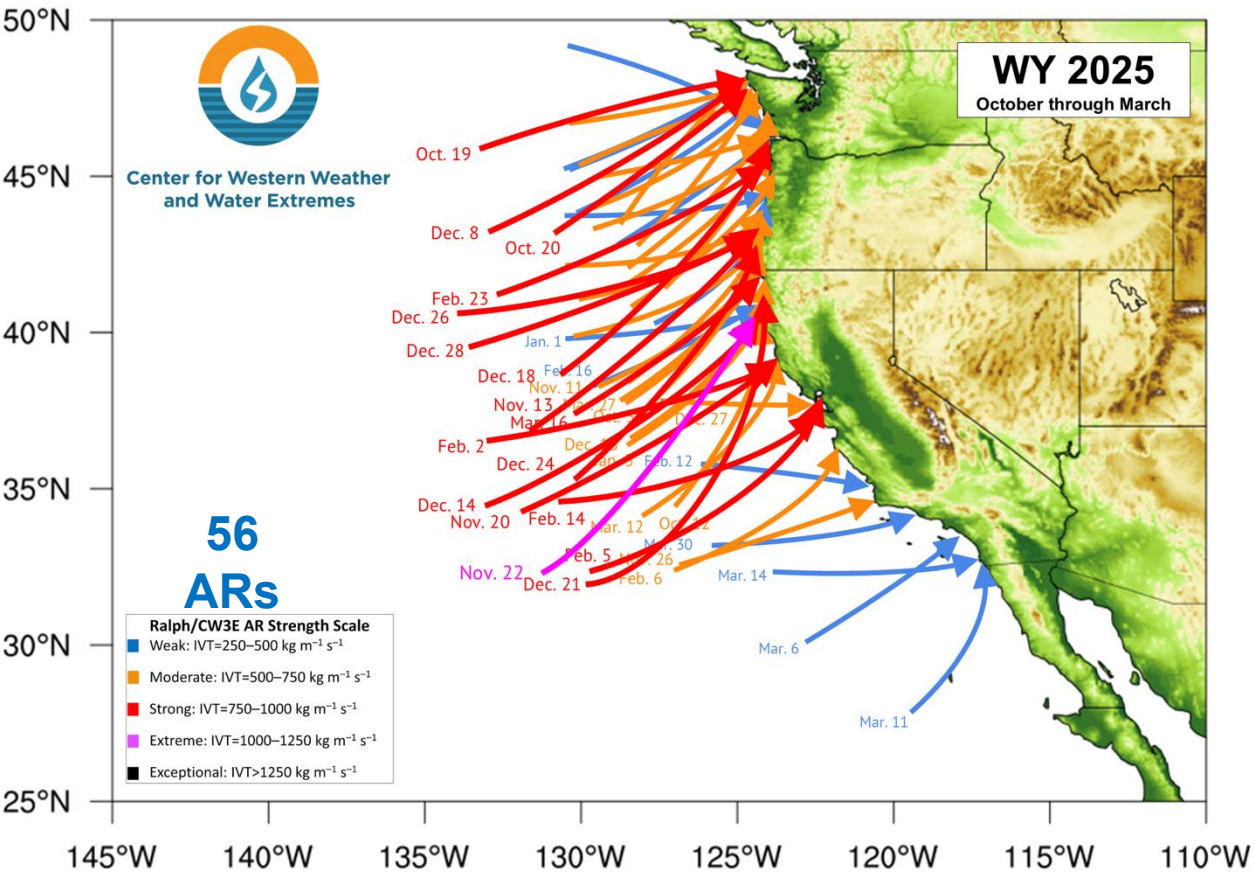
Regions Impacted by Each AR	
State/Region	ARs
Washington	45
Oregon	48
Northern CA	33
Central CA	20
Southern CA	12

**56 atmospheric rivers** made landfall over the U.S. West Coast during Water Year 2026



\*Arrows are placed on the map where each AR was strongest over the coast

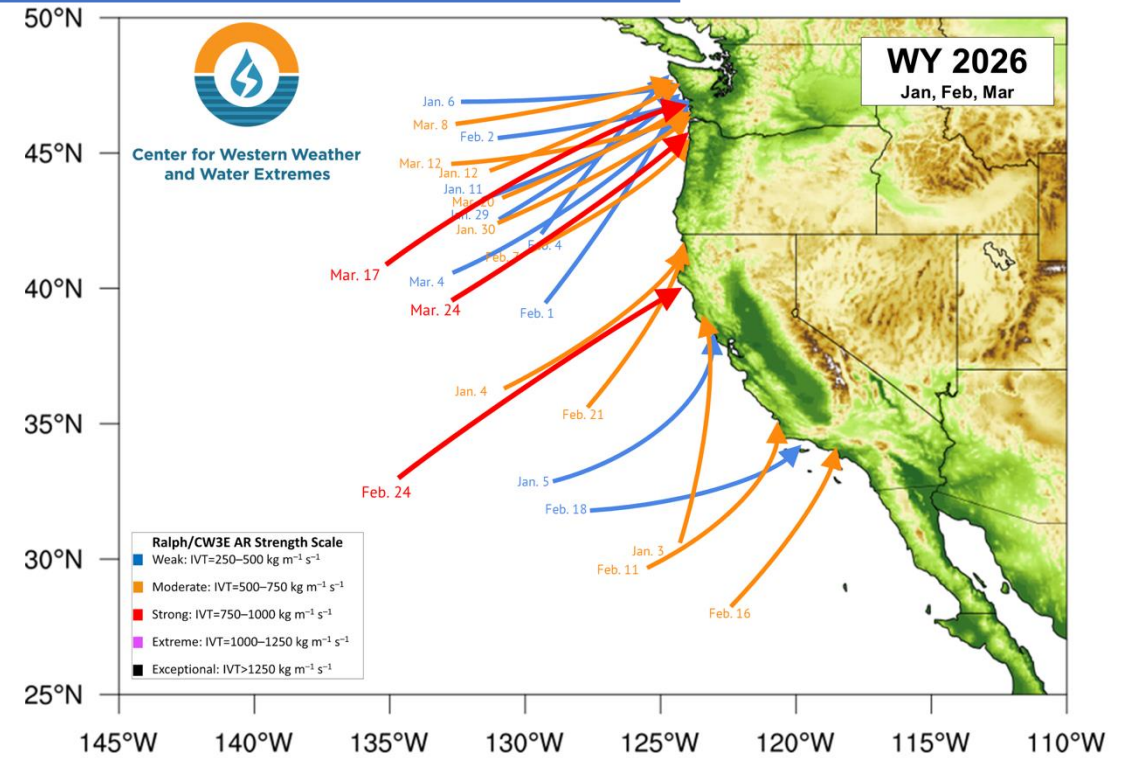
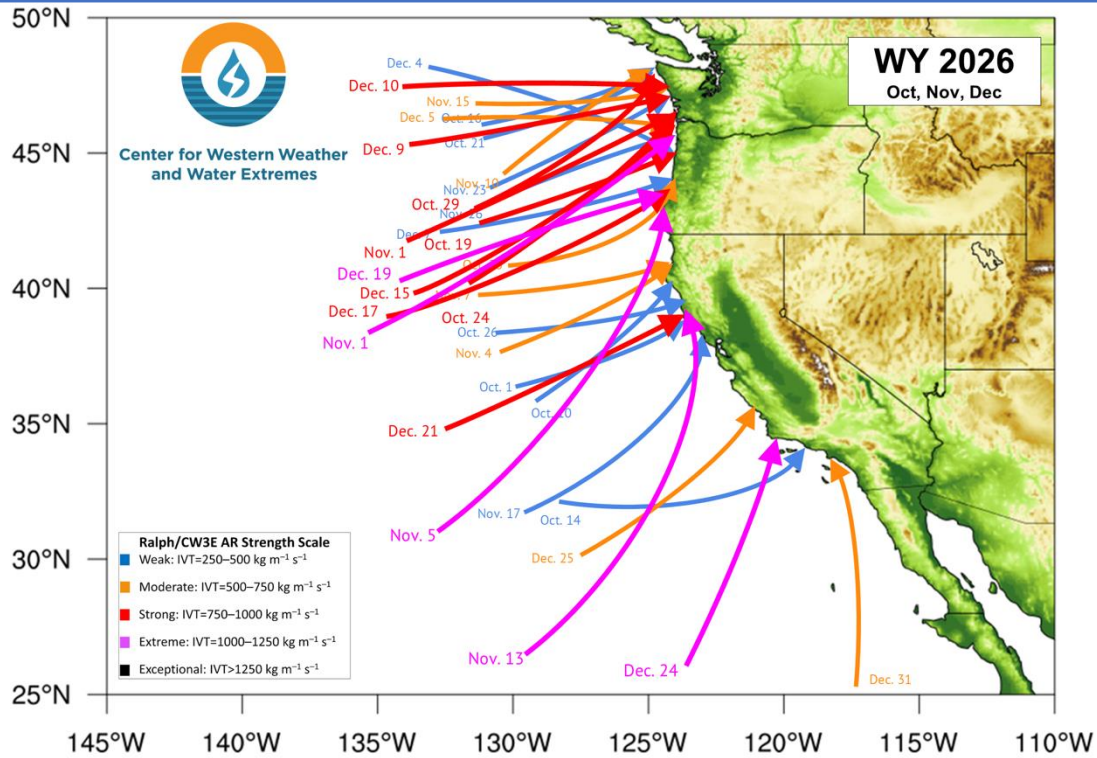
# Water Year 2026 Compared to Water Year 2025



- Water Year 2026 and 2025 both experienced 56 total ARs while also experiencing the same number of strong or greater ARs (17)
- Water Year 2026 had 5 extreme ARs spread across the West whereas Water Year 2025 only had one that was primarily focused over Northern California
- The increase in extreme ARs during WY 2026 across the U.S. West led to a wider distribution of above or near normal water year precipitation accumulations on April 1<sup>st</sup>

\*Arrows are placed on the map where each AR was strongest over the coast

# The West's Two Halves



- The U.S. West Coast experienced 14 strong or greater magnitude ARs in the first three months of the water year while only experiencing three strong ARs in second three months of the water year, leading to large discrepancies in precipitation

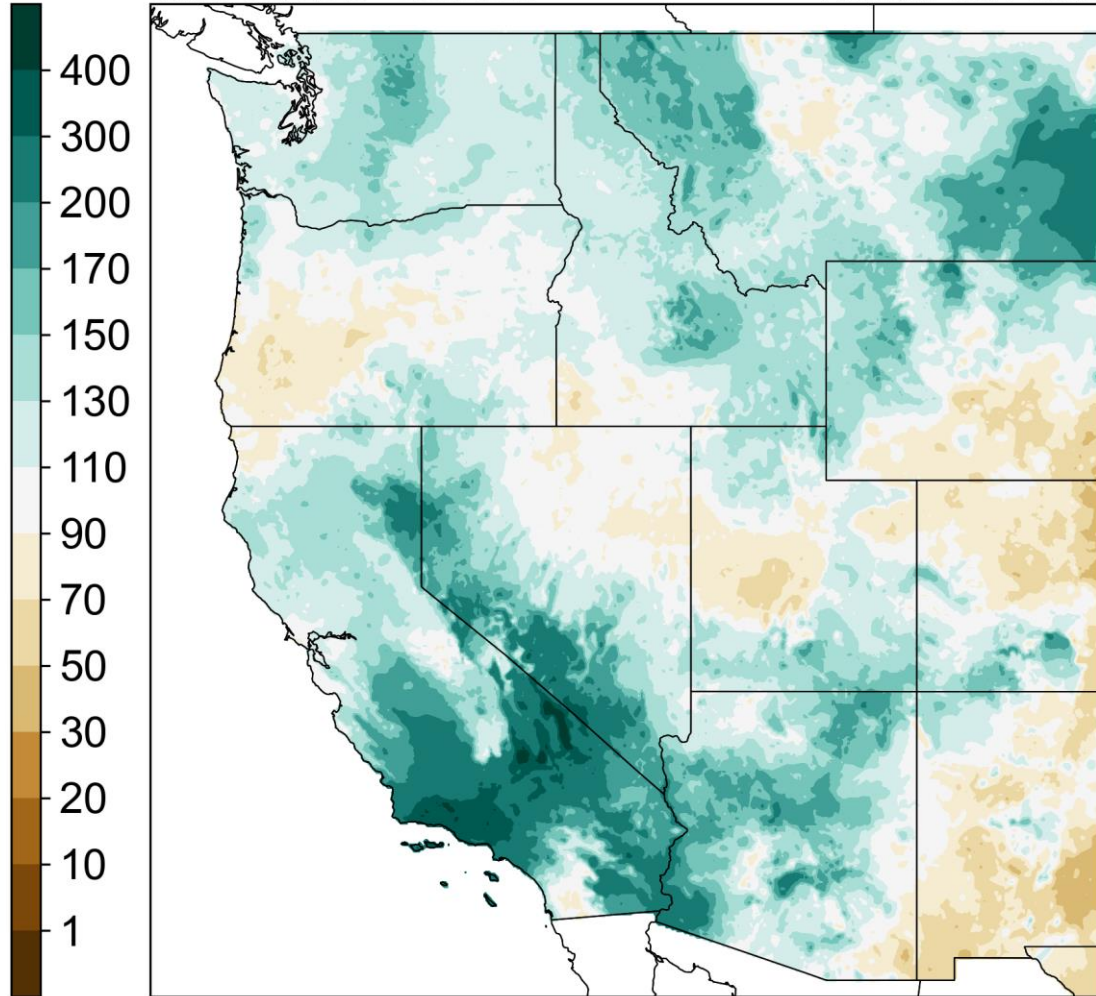
All ARs	Weak	Moderate	Strong	Extreme	Exceptional	Total
<b>OND</b>	<b>11</b>	<b>8</b>	<b>9</b>	<b>5</b>	<b>0</b>	<b>33</b>
<b>JFM</b>	<b>9</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>23</b>

# The West's Two Halves

Percent of Normal Precipitation (%)

Valid: Oct 2025 - Dec 2025

Normal: 1991-2020

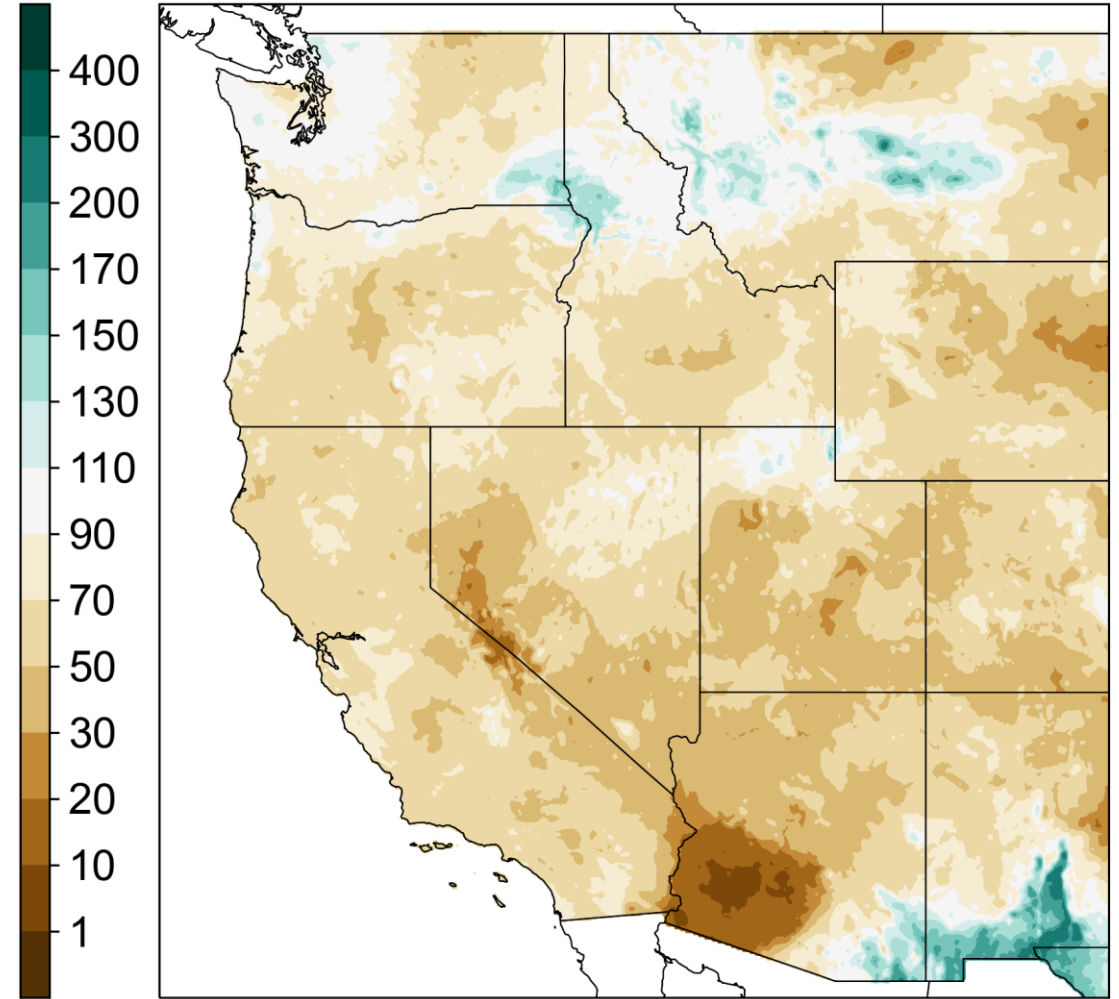


Data Courtesy: PRISM Climate Group, Oregon State University, <https://prism.oregonstate.edu/>

Percent of Normal Precipitation (%)

Valid: Jan 2026 - Mar 2026

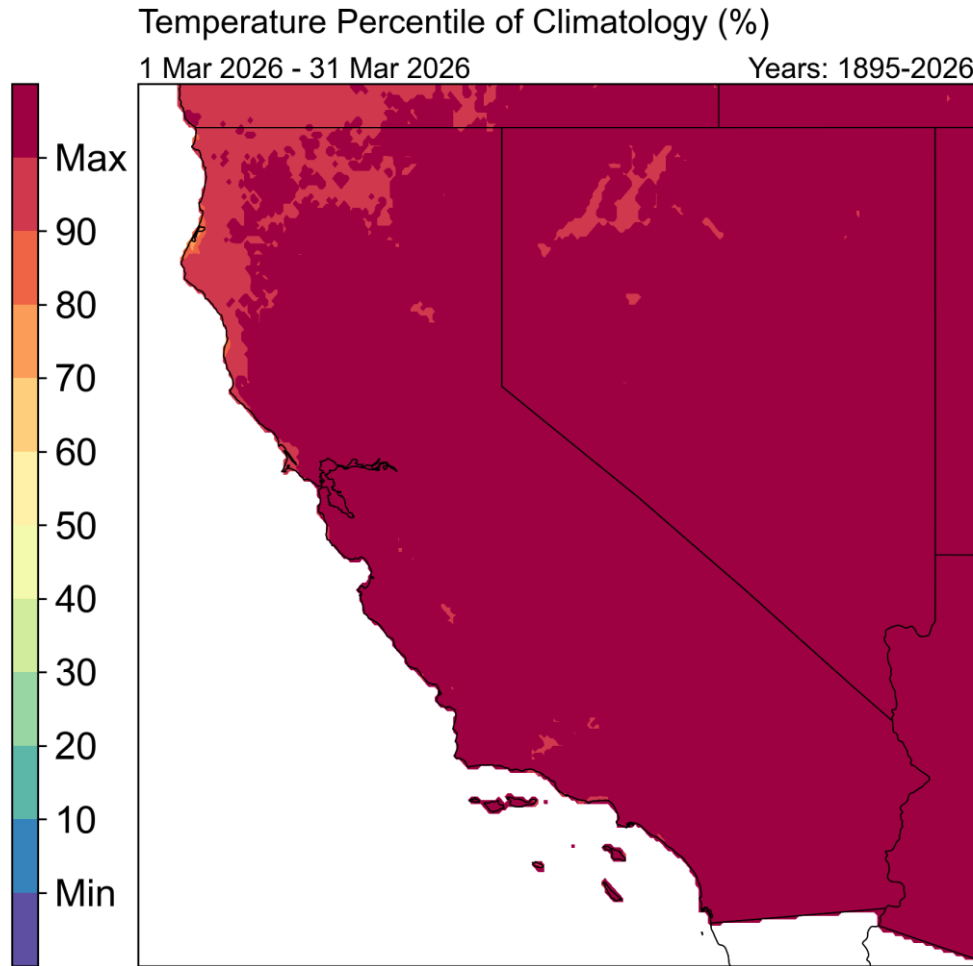
Normal: 1991-2020



Data Courtesy: PRISM Climate Group, Oregon State University, <https://prism.oregonstate.edu/>

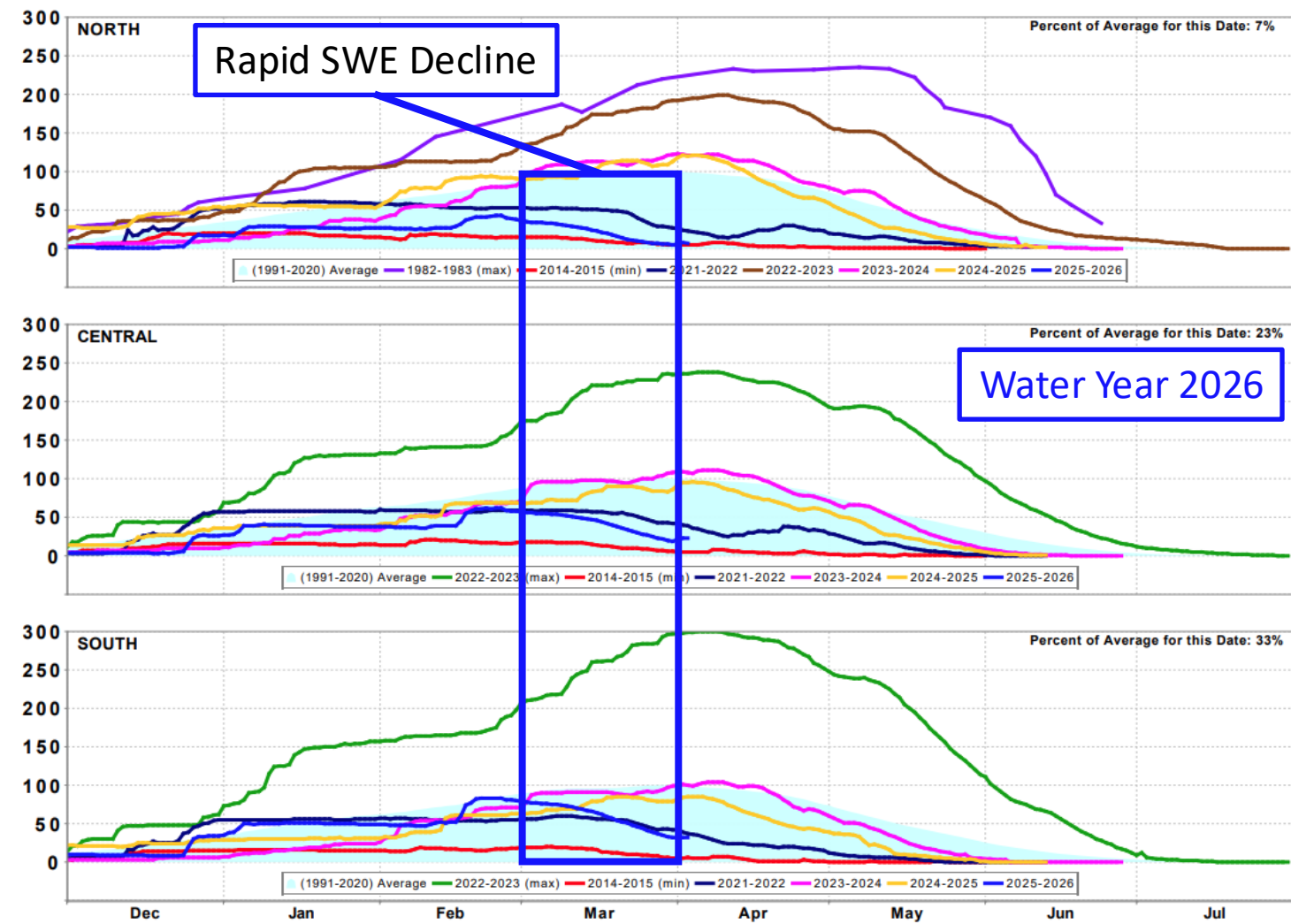
# A Record-Breaking March

- A majority of the western United States experienced its warmest March on record resulting in rapid snowmelt during a relatively below-normal snowpack year



Data Courtesy: PRISM Climate Group, Oregon State University, <https://prism.oregonstate.edu/>

California Snow Water Content, April 3, 2026, Percent of April 1 Average



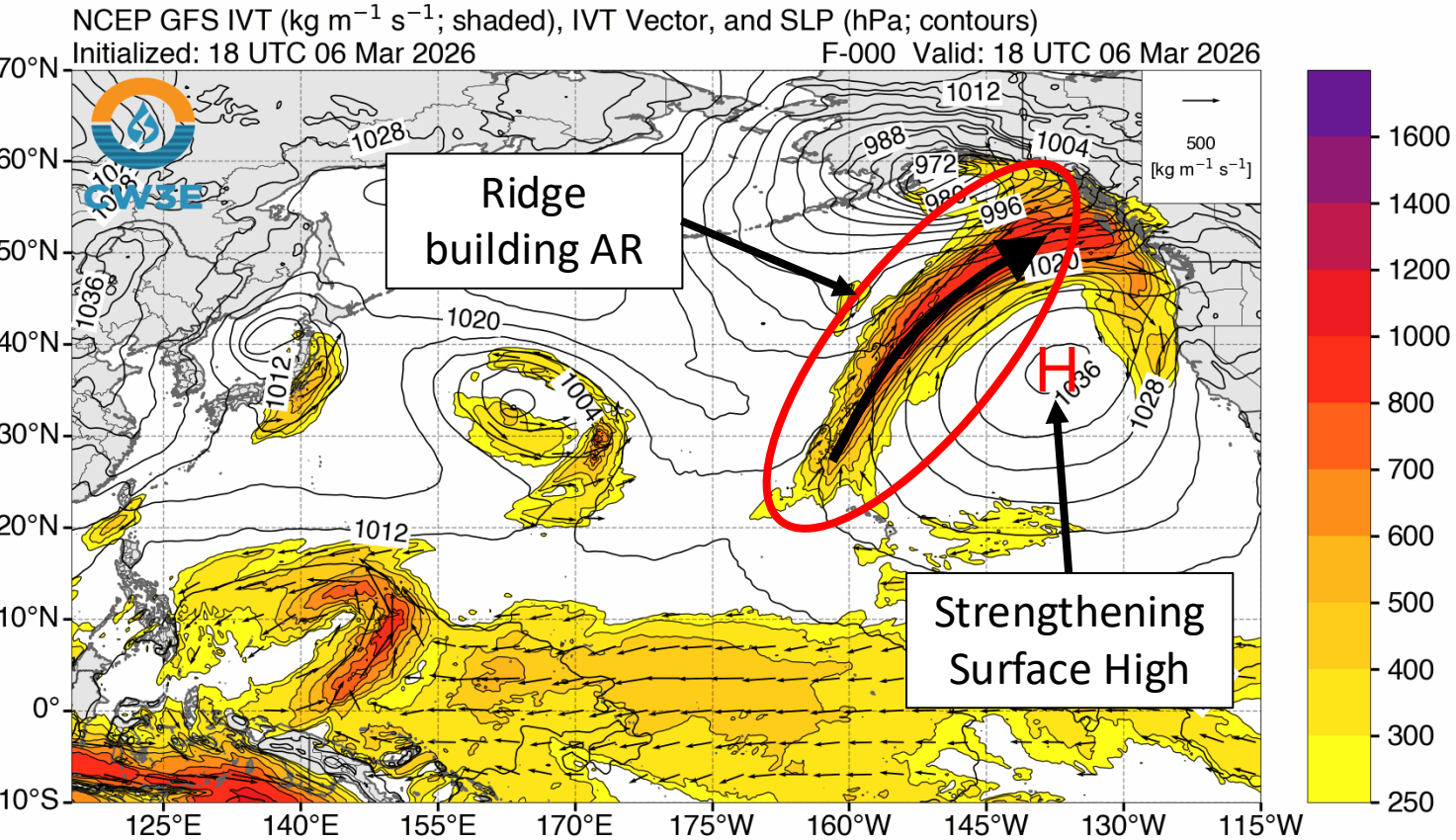
Statewide Percent of April 1: 20.0%

Statewide Percent of Average for Date: 20.0%

\*Arrows are placed on the map where each AR was strongest over the coast

# A Record-Breaking March

- One of the main drivers for the record-breaking heat over the western U.S. heat was a poleward atmospheric river that drove the building of an upper-level ridge and surface high pressure



Prior studies have identified the role atmospheric rivers play in amplifying Western North American Heatwaves

The AR that aided in the building of the ridge/surface high that led to the June 2021 heatwave

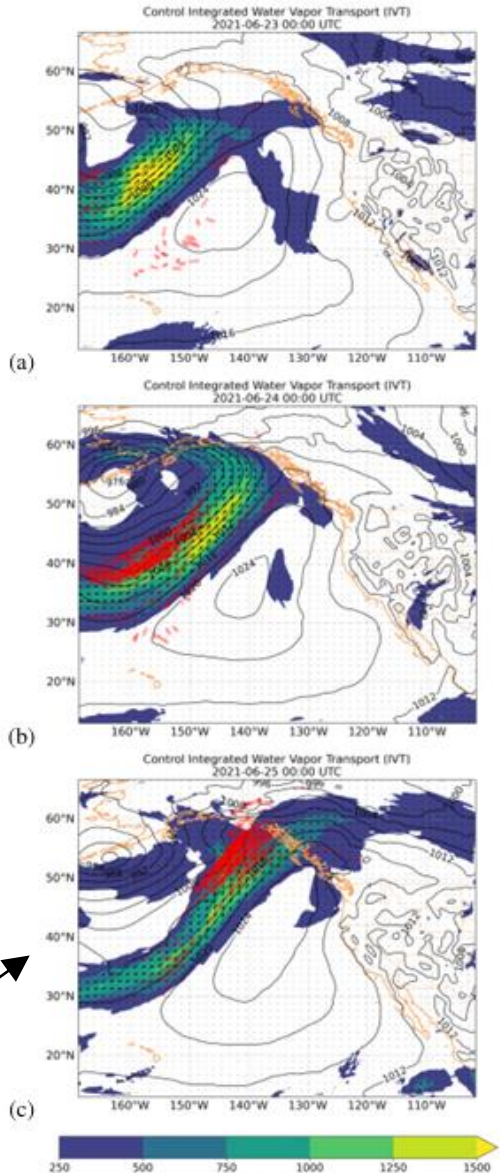
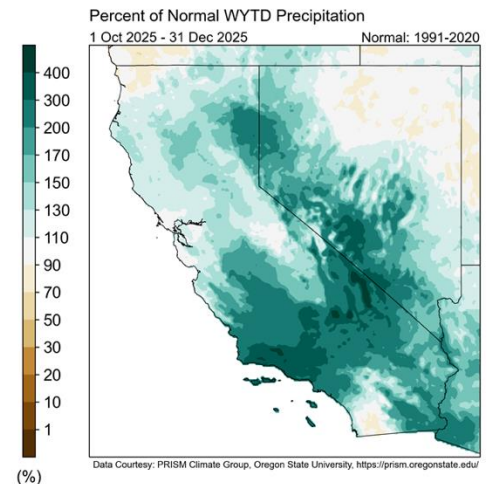
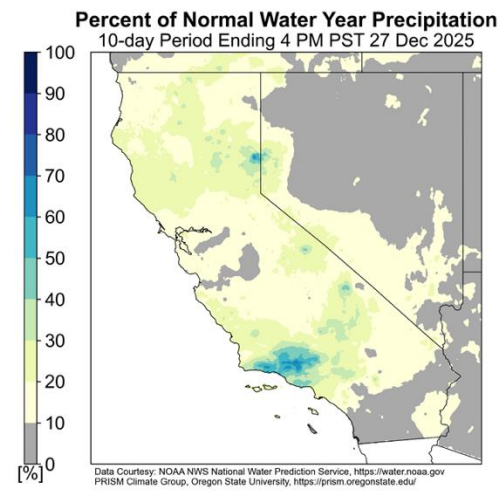
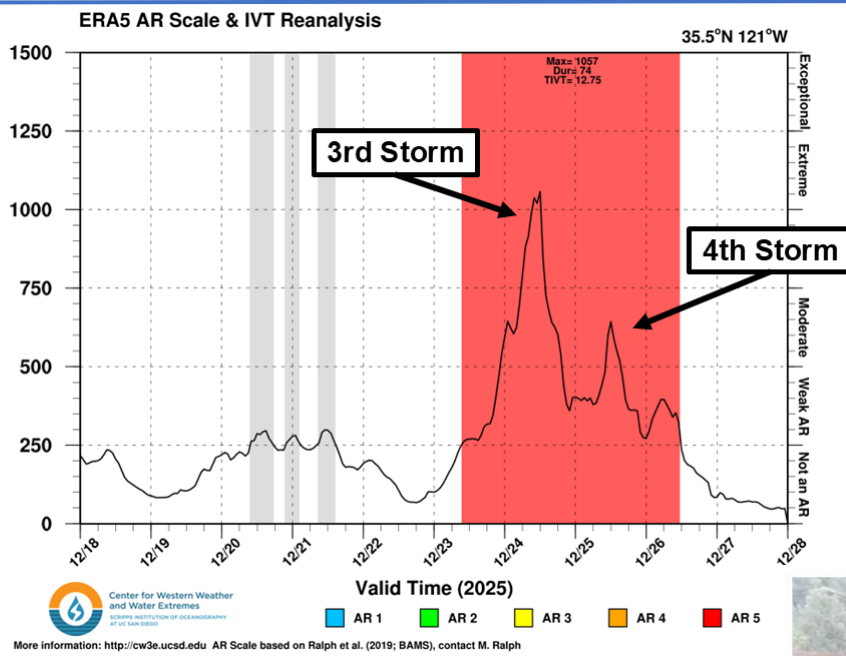
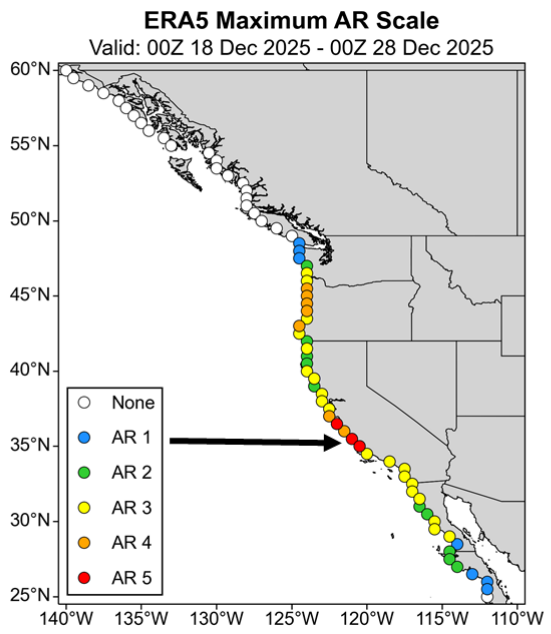


Fig. 5: Integrated water vapor transport from WRF control simulation ( $\text{kg m}^{-1} \text{s}^{-1}$ , vectors, magnitude shaded as in colorbar), and sea level pressure (contours, interval 4 hPa). Locations of trajectories at or below the 600-hPa level and within  $\pm 1$  h of the valid time are shown as semi-transparent red circles. (a) 0000 UTC 23 June; (b) 0000 UTC 24 June; (c) 0000 UTC 25 June.

# WY 2026 Highlights: California's Holiday Storms



- The strongest atmospheric river to impact California this year occurred during an active period from 18 to 27 December, bringing extreme AR conditions to Southern California
- This wet period that included the extreme storm on Christmas Eve brought the majority of California from below normal/slightly above normal precipitation to date to well above normal (>200% over Southern California)
- While the extreme AR provided much needed precipitation, it also led to widespread flooding and numerous debris flows and landslides across the state



<https://x.com/SBCOUNTYFIRE/status/2003921544309862547>



<https://x.com/VictorVlyStr/status/2004272656963833883>