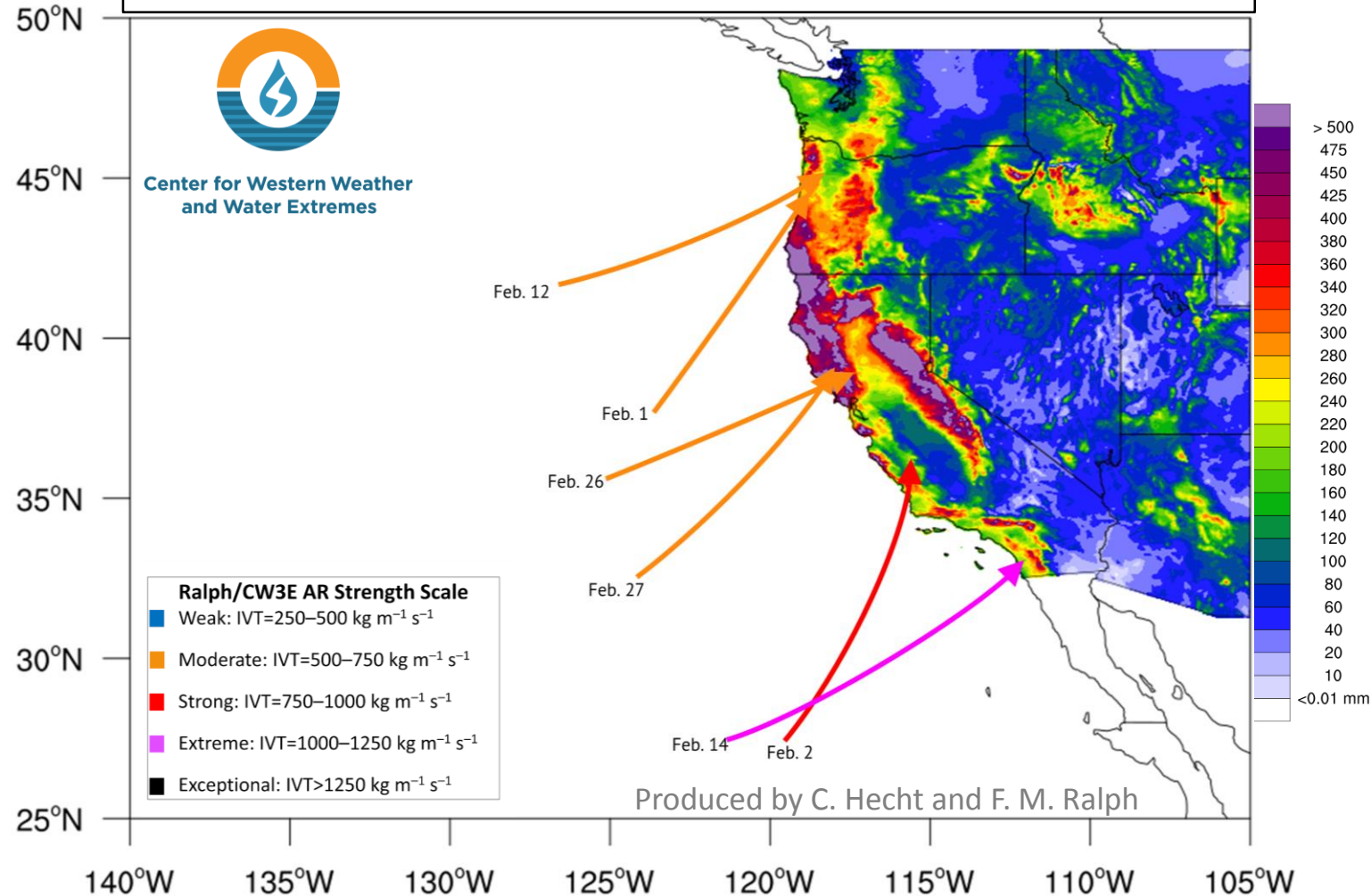


# Water Year 2019: February Atmospheric Rivers

AR Strength	AR Count
Weak	0
Moderate	4
Strong	1
Extreme	1
Exceptional	0

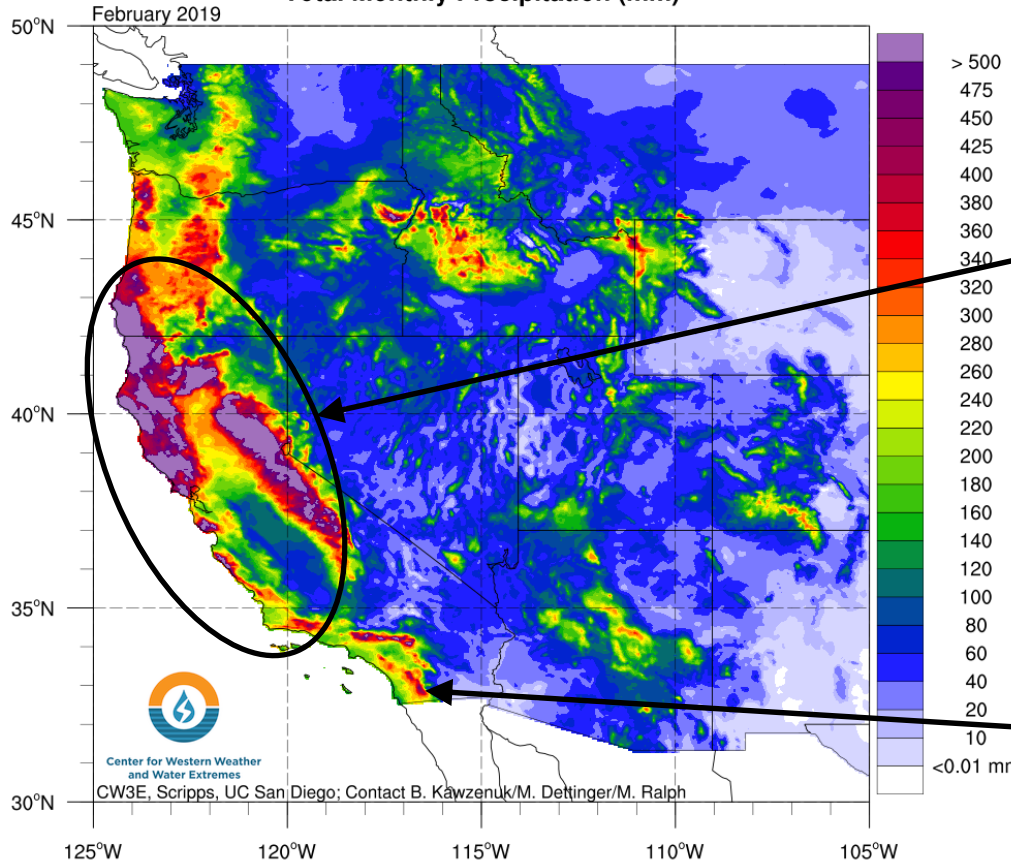
Regions Impacted by Each AR	
State/Region	AR Conditions
Washington	2
Oregon	5
Northern CA	6
Central CA	3
Southern CA	3

- **Six** atmospheric rivers made landfall over the U.S. West Coast during February 2019 (Fifth Month of WY 2019)



# February 2019 Precipitation

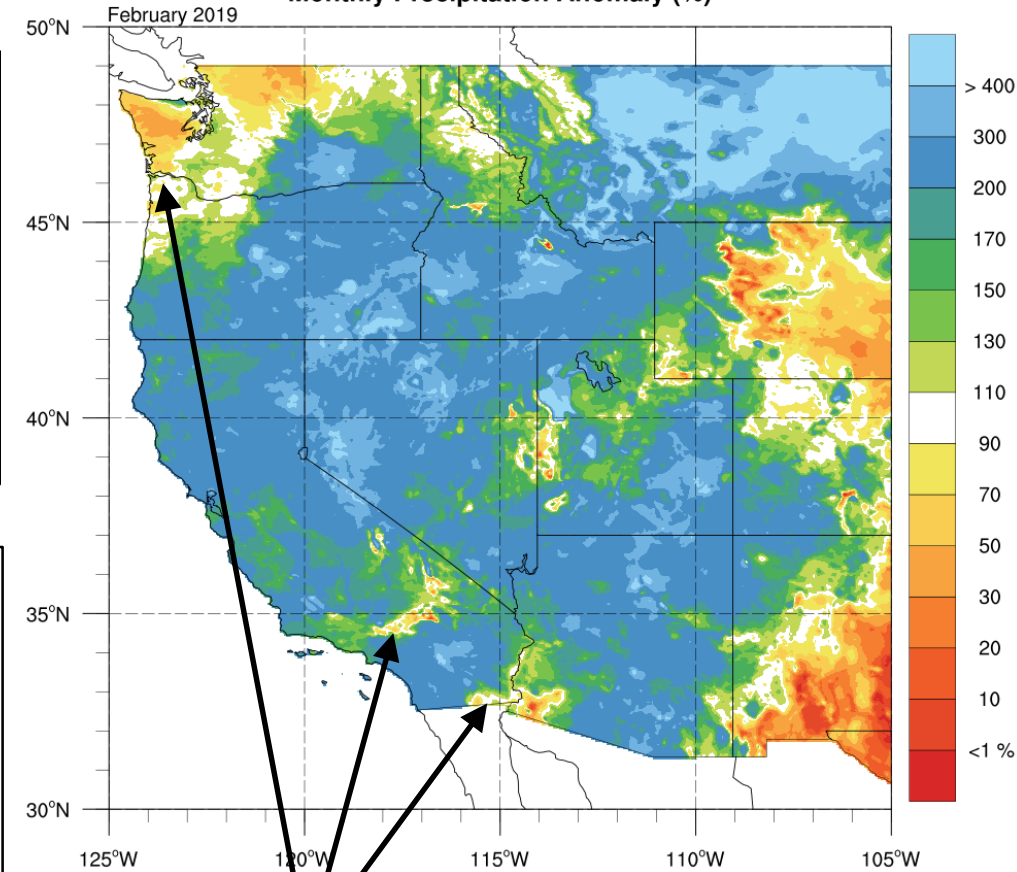
### Total Monthly Precipitation (mm)



The highest precipitation accumulations (>500 mm; >19.5 inches) fell over the Coastal Mountains of Northern CA and Southern OR, the Trinity Alps/Mt. Shasta, and the Sierra Nevada Mountains

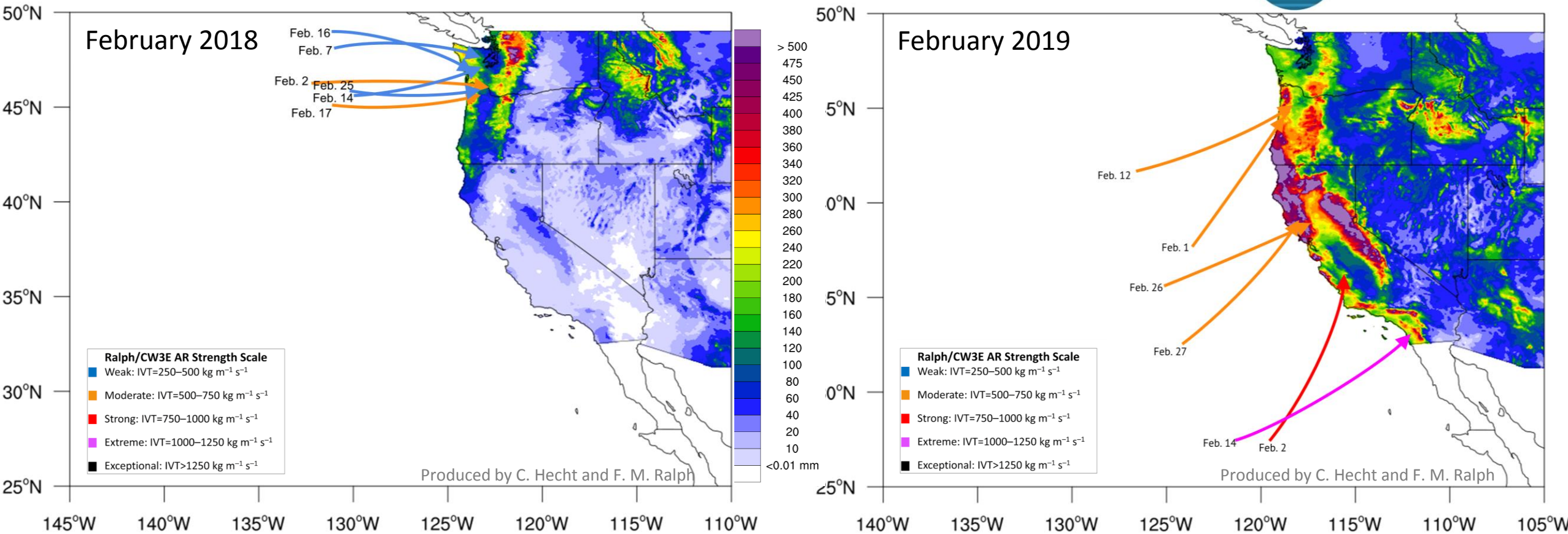
The mountains of Coastal Southern CA received >350 mm (12 inches), while the lower elevations of Coastal Southern California received >150 mm (6 inches)

### Monthly Precipitation Anomaly (%)



- The only locations across the U.S. West that experienced below normal precipitation during February were in Washington and portions of the California Desert.
- A majority of California, Oregon, Arizona, Nevada, Utah, and Idaho received 200% of normal February precipitation or greater

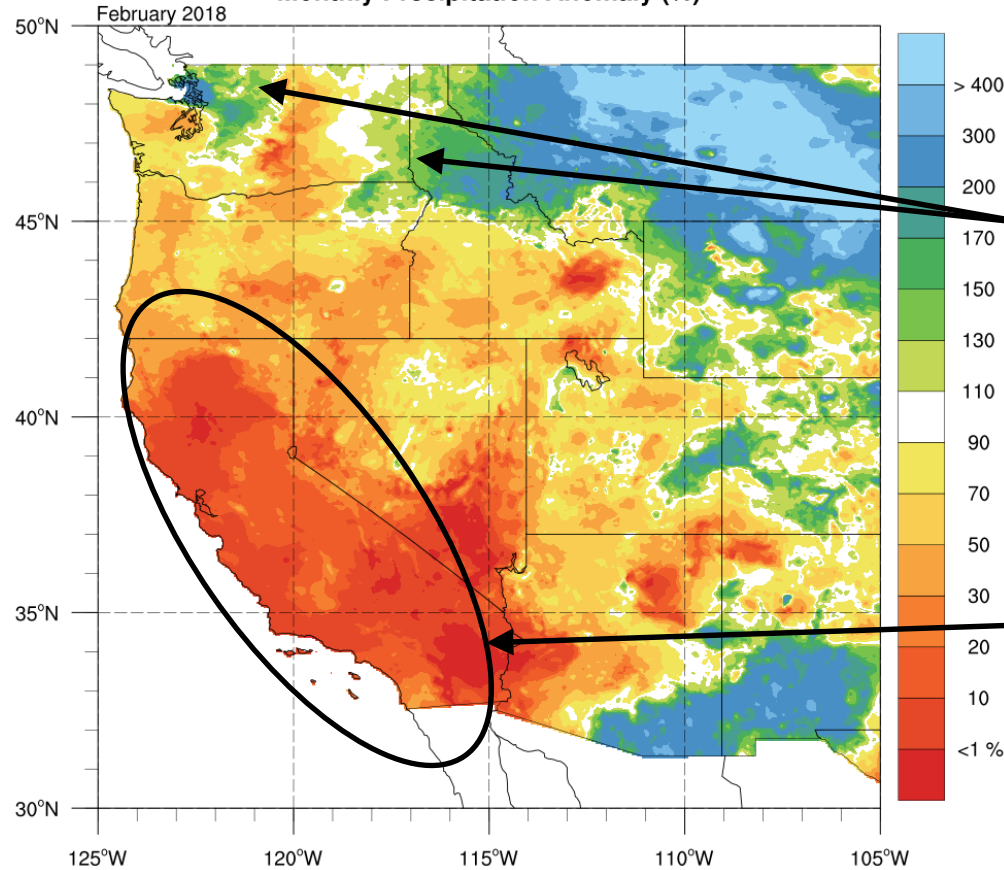
# February 2019 Compared to February 2018



- February 2018 also experienced 6 ARs, but 4 of the 6 were weak, and all the ARs were westerly and strongest over the Pacific Northwest
- February 2018 had 4 weak ARs and 2 moderate, where February 2019 had 4 moderate, 1 strong, and 1 extreme AR
- The strong and extreme AR and two moderate ARs that occurred during February 2019 were strongest over California
- These differences in AR landfall distribution, orientation, and strength between February 2018 and February 2019 resulted in vastly different monthly total precipitation accumulations and distributions

# February 2019 Compared to February 2018

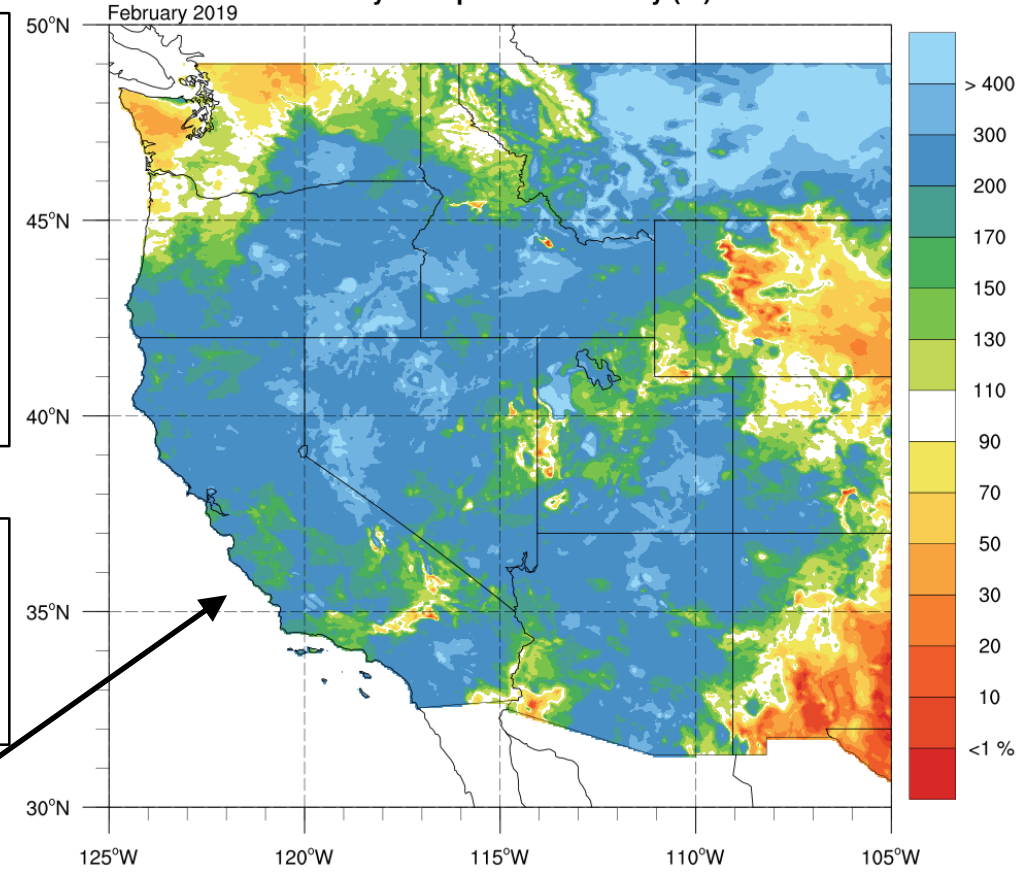
Monthly Precipitation Anomaly (%)



During February 2018, the only locations along the West Coast that experienced normal or slightly above normal monthly precipitation were in Northern and Eastern Washington

A majority of California experienced <20% of normal precipitation last February (2018)

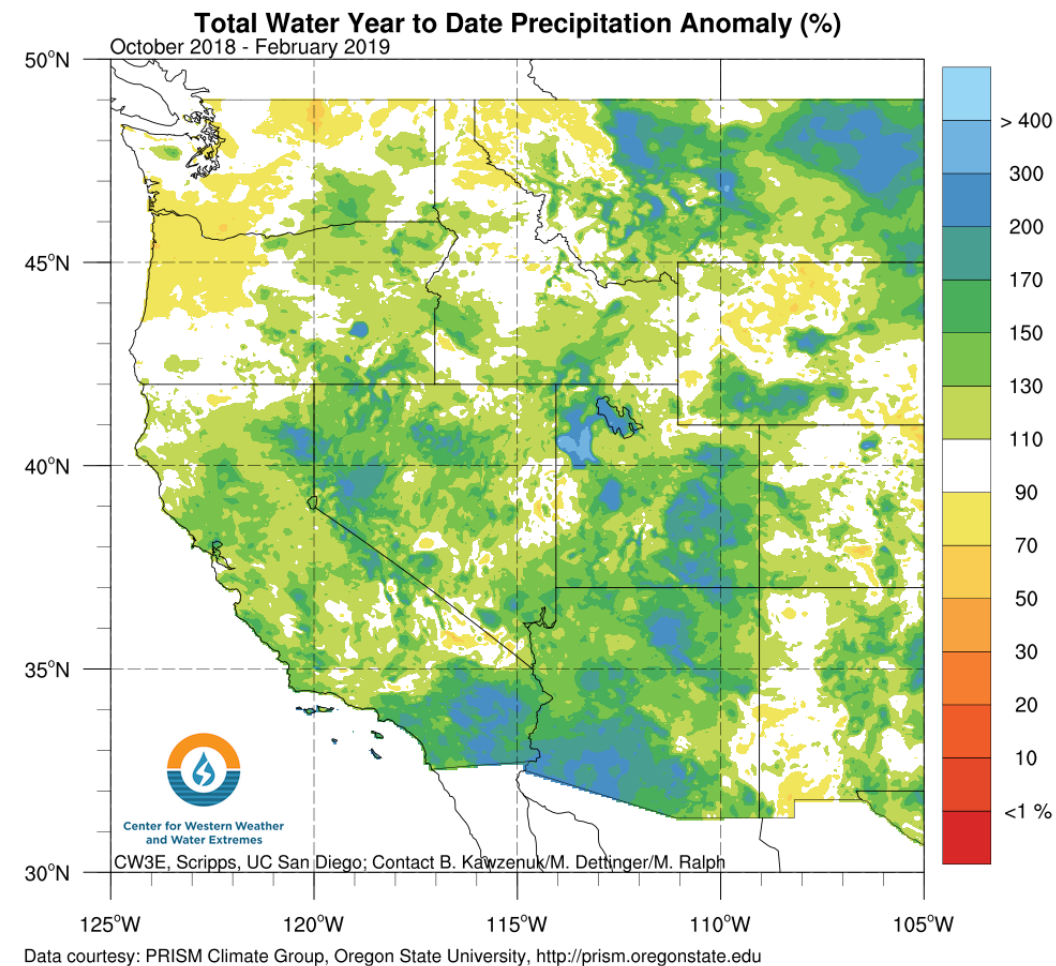
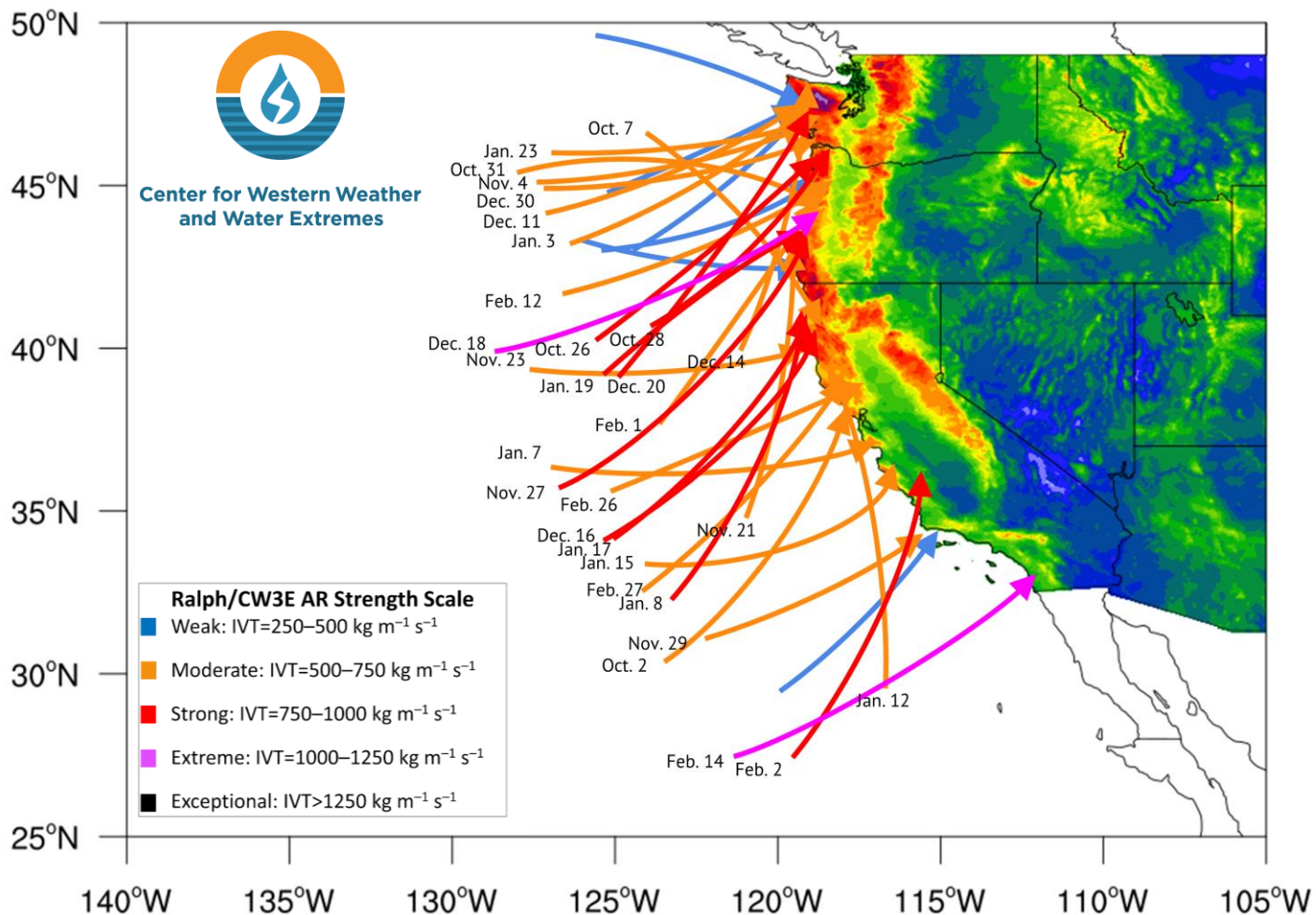
Monthly Precipitation Anomaly (%)



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

- While February '18 and February '19 both had 6 ARs over the West Coast, the precipitation that fell during this February was vastly different from last February, further illustrating the important role landfall location, AR orientation, and AR strength play on precipitation accumulations

# Water Year to Date Summary (Oct. through Feb.)



- The 6 ARs that made landfall during February 2019 brings the Water Year total to 36 (6 Weak, 19 Moderate, 9 Strong, and 2 Extreme)

- The total number that made landfall through February 2018 was 35 (12 Weak, 13 Moderate, 8 Strong, and 2 Extreme)

- Through February 2019, a majority of the Western U.S. has received near normal or above normal water year to date precipitation
- The Coastal Mts. between OR and WA and North-Central WA have received below normal precipitation