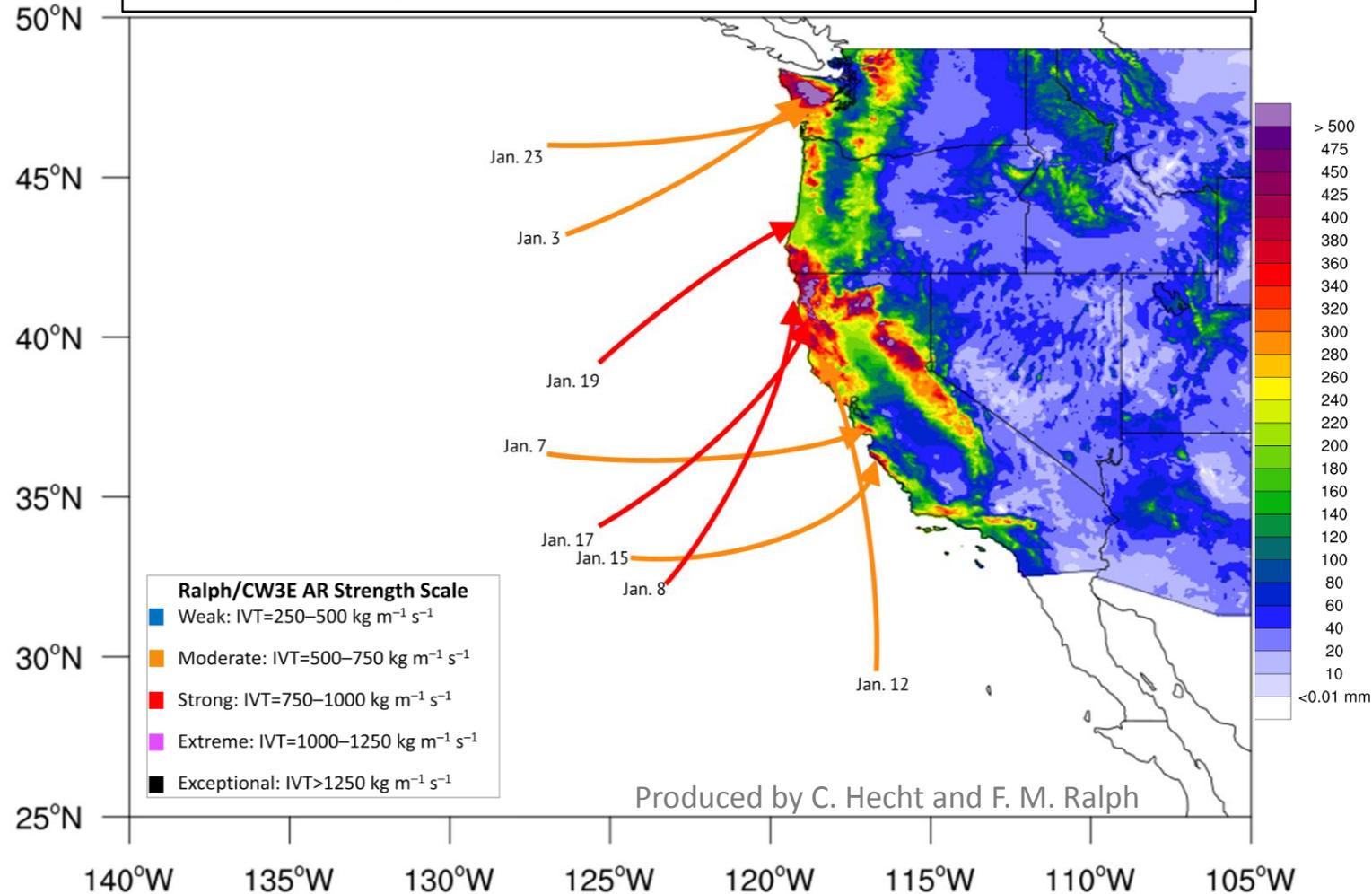


# Water Year 2019: January Atmospheric Rivers

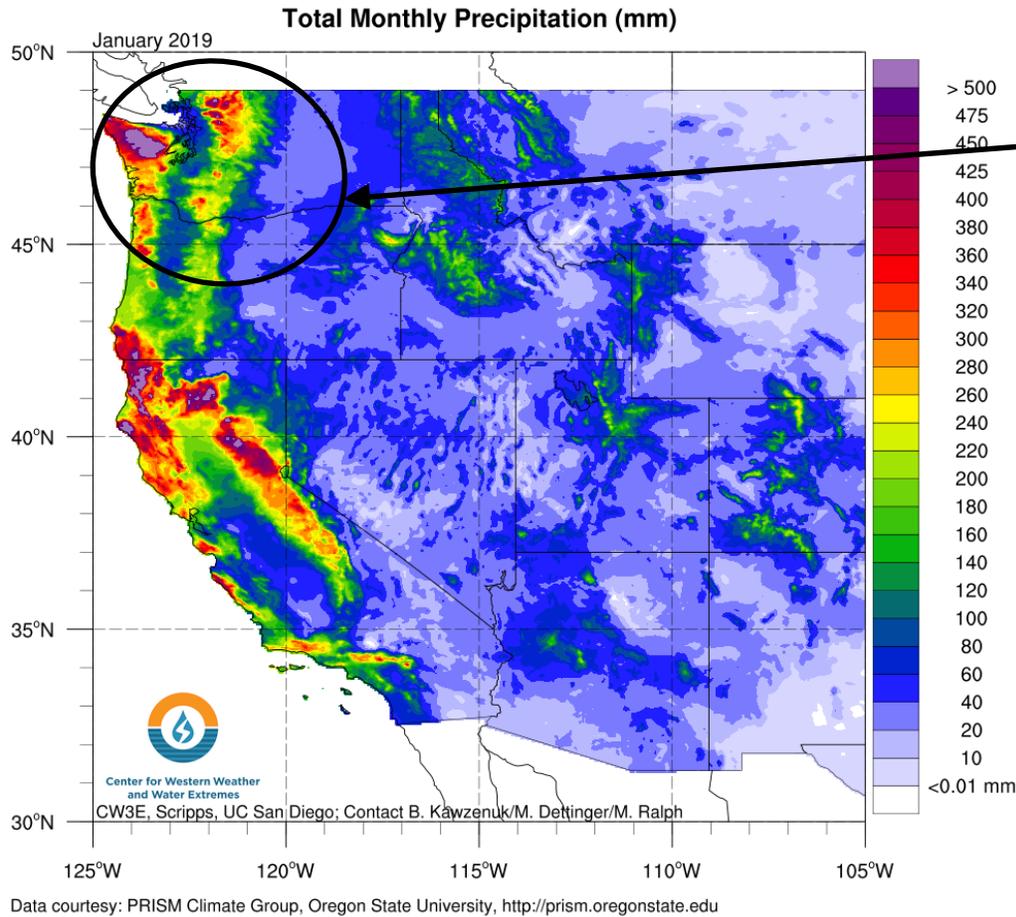
AR Strength	AR Count
Weak	0
Moderate	5
Strong	3
Extreme	0
Exceptional	0

Regions Impacted by Each AR	
State/Region	AR Conditions
Washington	6
Oregon	6
Northern CA	6
Central CA	5
Southern CA	4

- **Eight** atmospheric rivers made landfall over the U.S. West Coast during January 2019 (Fourth Month of WY 2019)

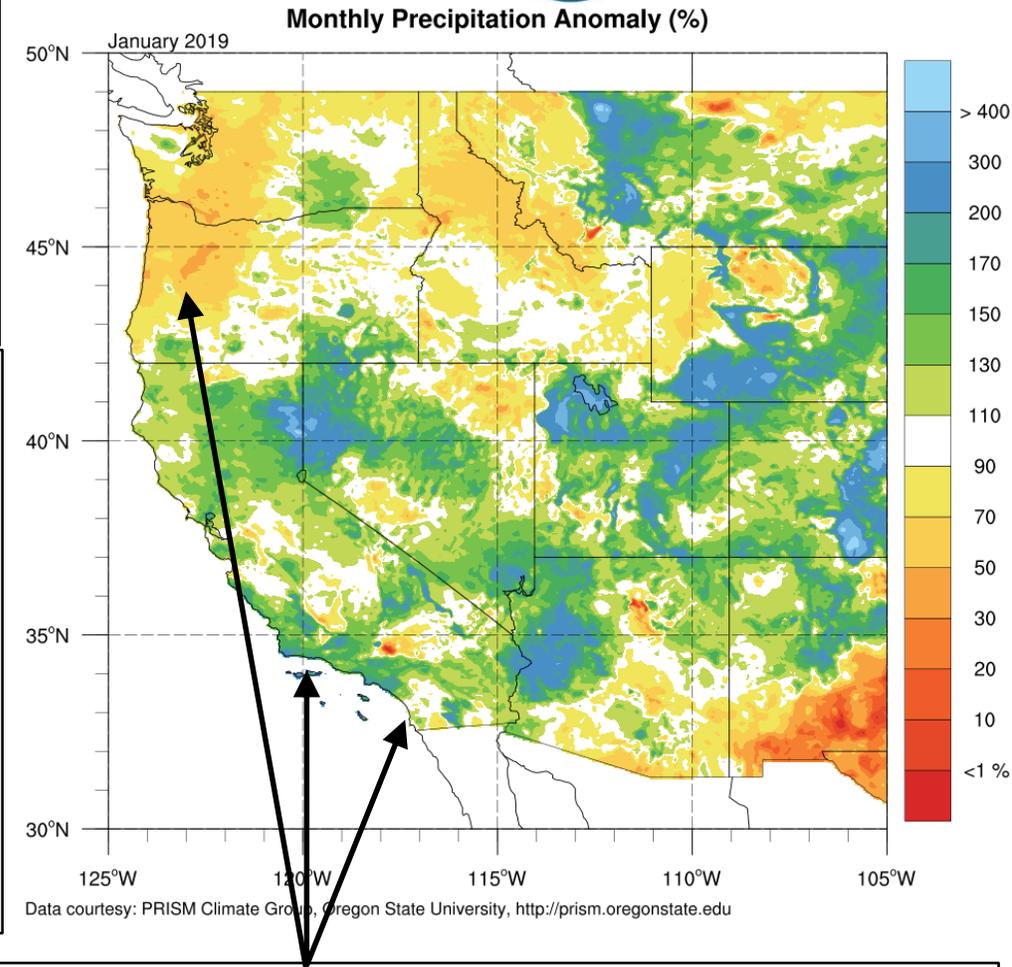


# January 2019 Precipitation



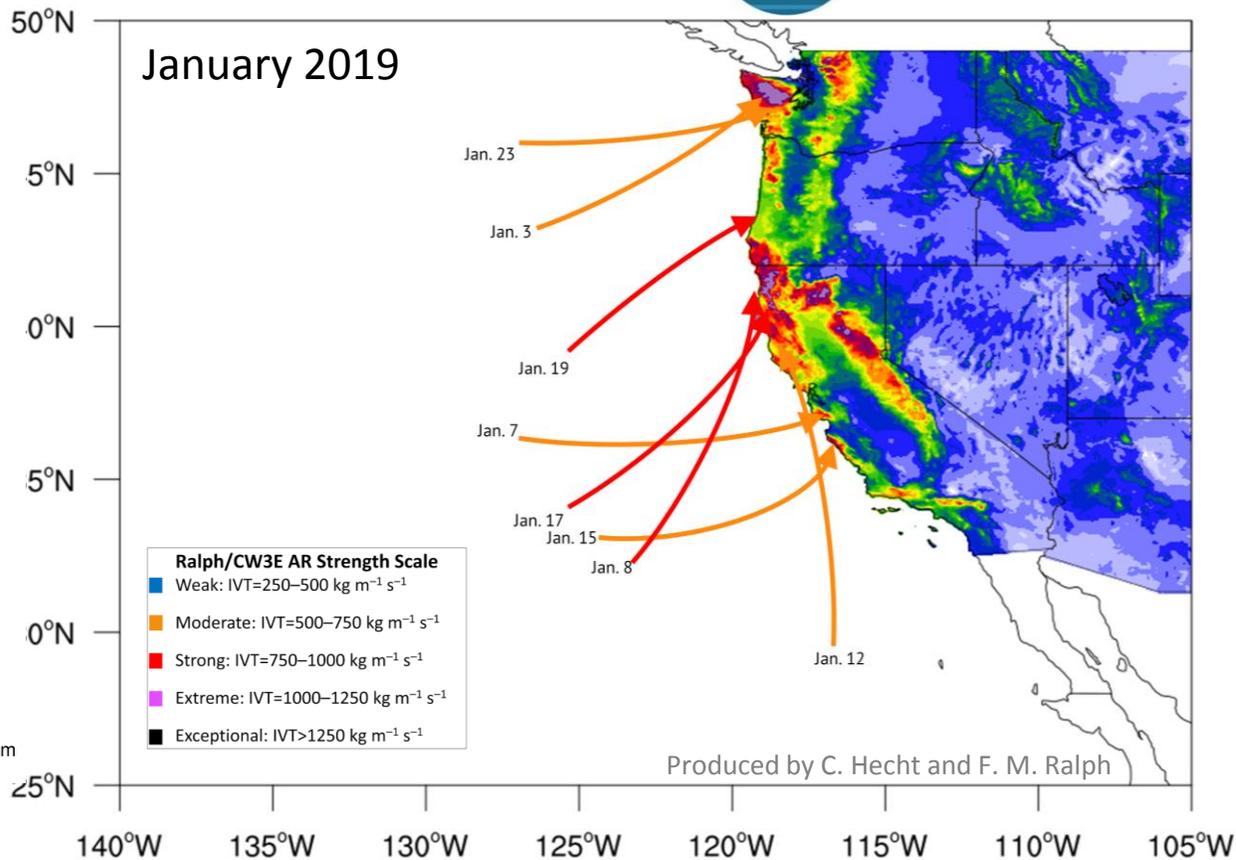
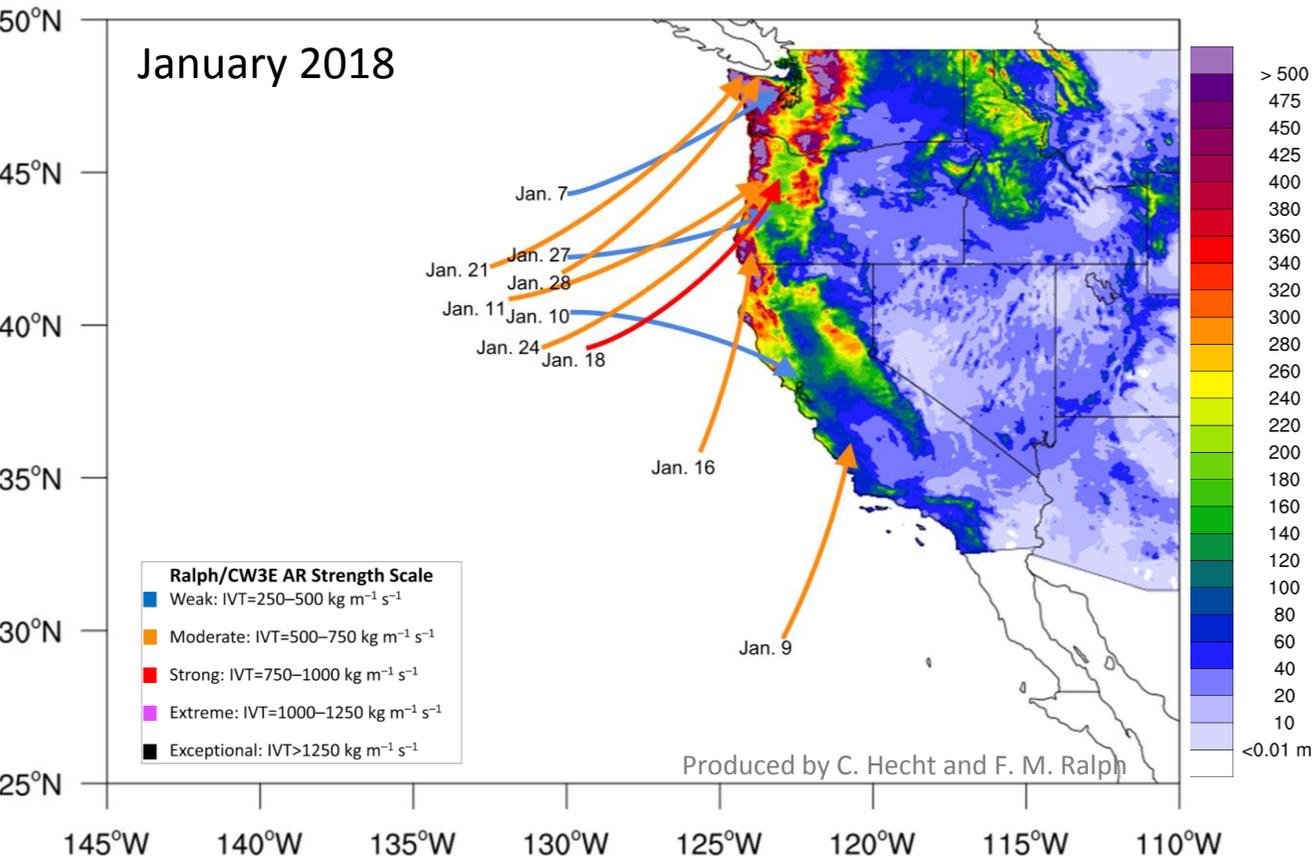
- The 8 total landfalling ARs contributed to >400 mm over portions of the Coastal, Olympic, and Cascade Mts. In Washington and Northern Oregon

- Parts of Northern CA received >400 mm, while southern California received 40–300 mm, with the highest accumulations falling over the higher elevations of the Transverse, Coastal and Sierra Nevada Mountains



- While the Pacific Northwest received high precipitation accumulations during the month of January, only the Olympic Mountains and Eastern Washington and Oregon received above normal precipitation for the month
- A majority of California received above normal or above normal precipitation for the month of January

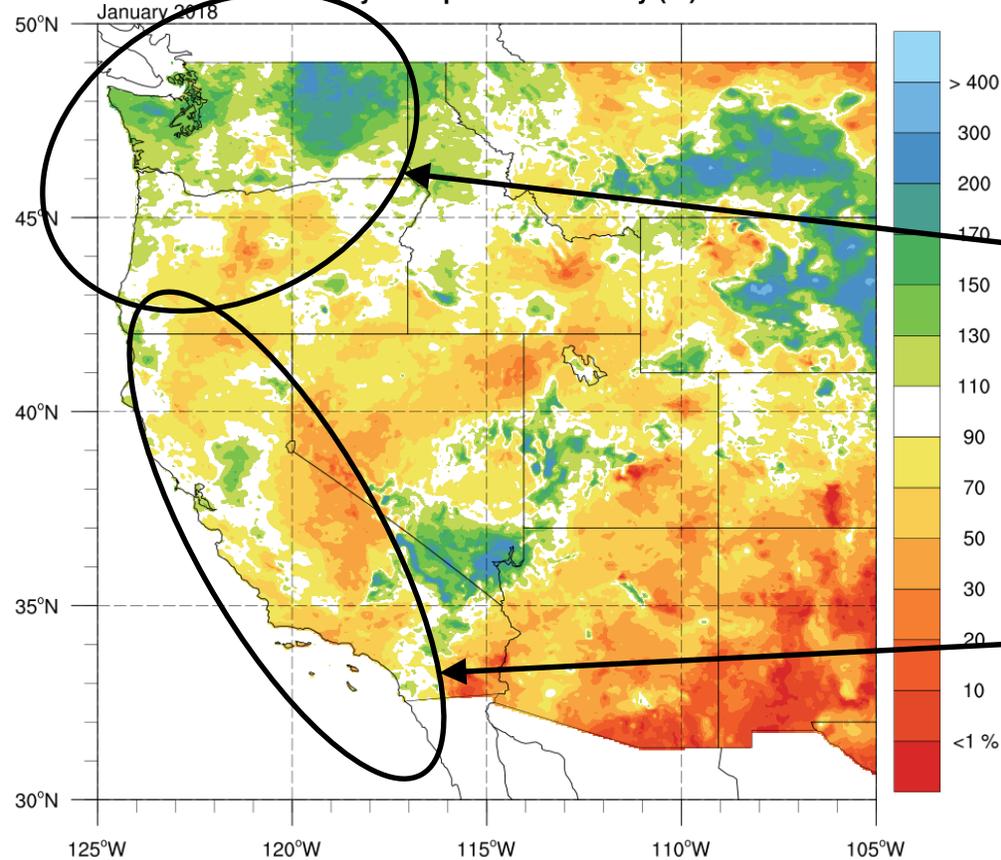
# January 2019 Compared to January 2018



- January 2018 experienced two more landfalling ARs compared to January 2019
- January 2018 also only had 1 strong AR, whereas January 2019 had 3 strong ARs
- A larger majority of the ARs that made landfall during January 2018 were stronger over the Pacific Northwest (Washington and Oregon)
- Due to this difference in AR location, January 2018 experienced higher precipitation accumulations over Washington and Oregon, whereas January 2019 experienced higher precipitation accumulations over portions of California.

# January 2019 Compared to January 2018

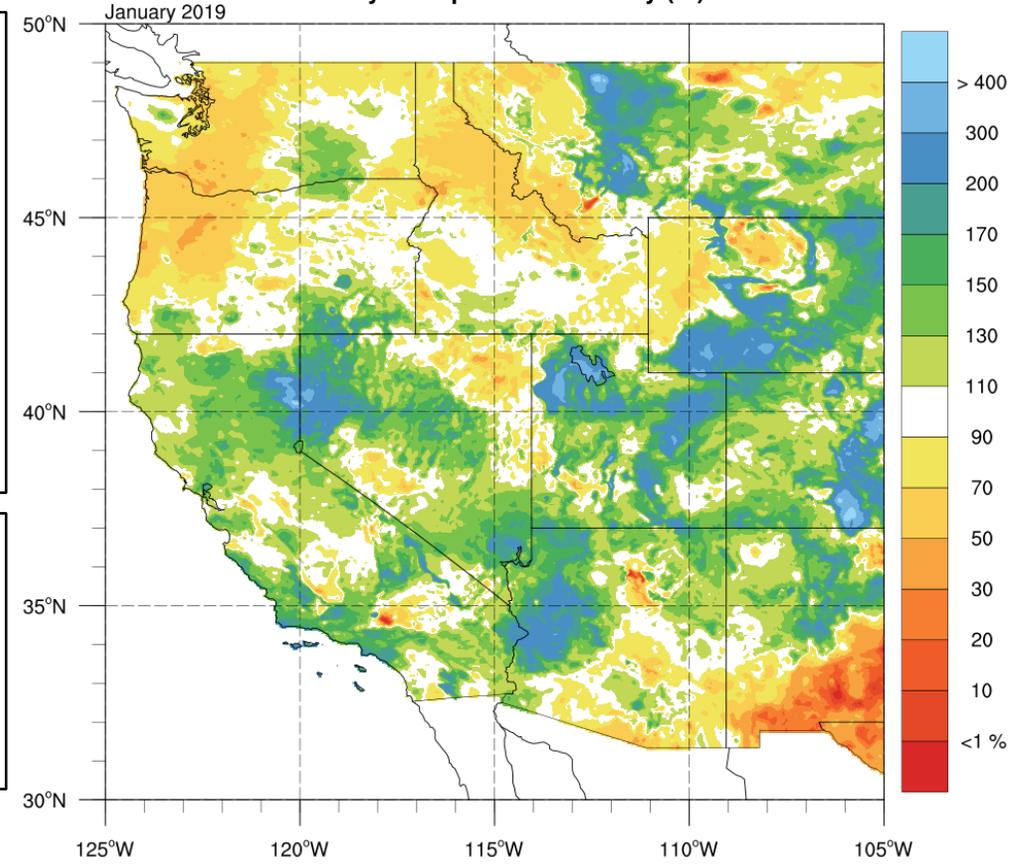
Monthly Precipitation Anomaly (%)



- During January 2018, the only locations along the West Coast that experienced normal or slightly above normal monthly precipitation were in WA, Coastal OR, and North Coastal CA

- A large majority of California experienced below normal precipitation for the Month

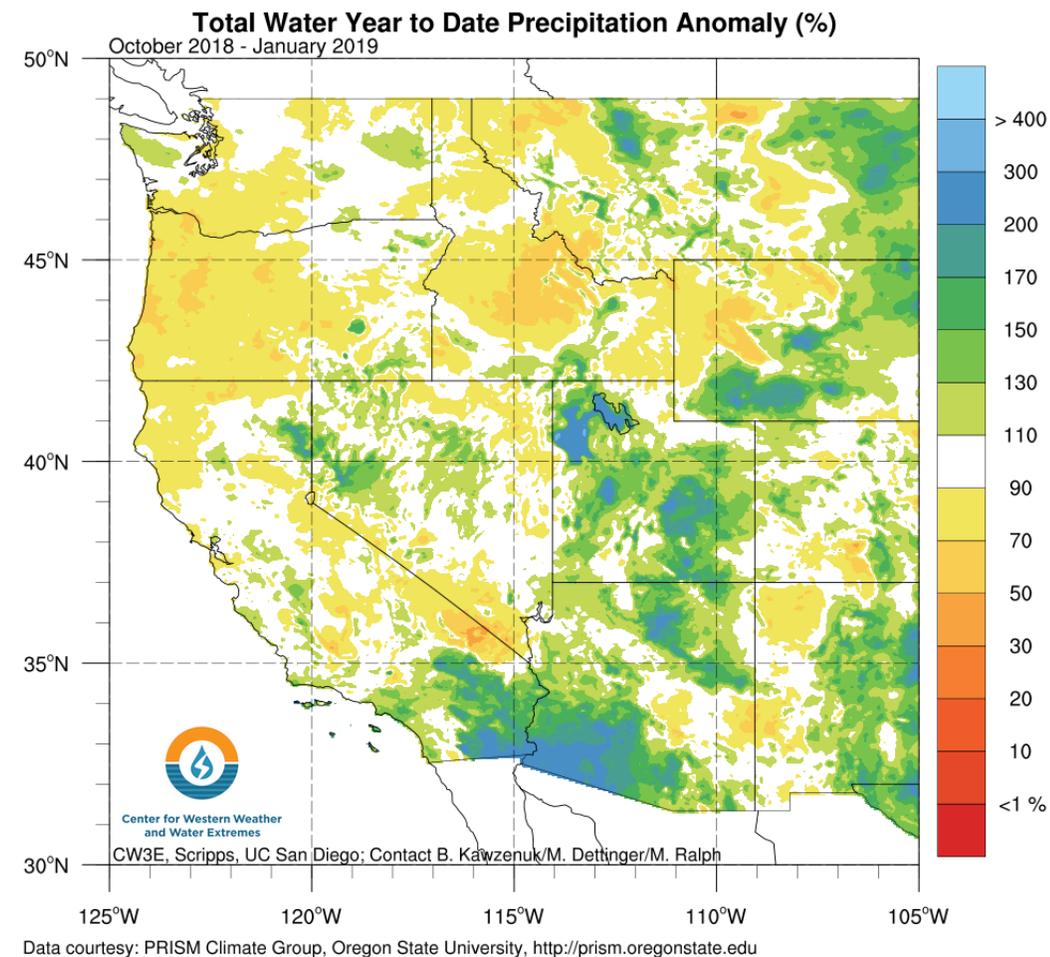
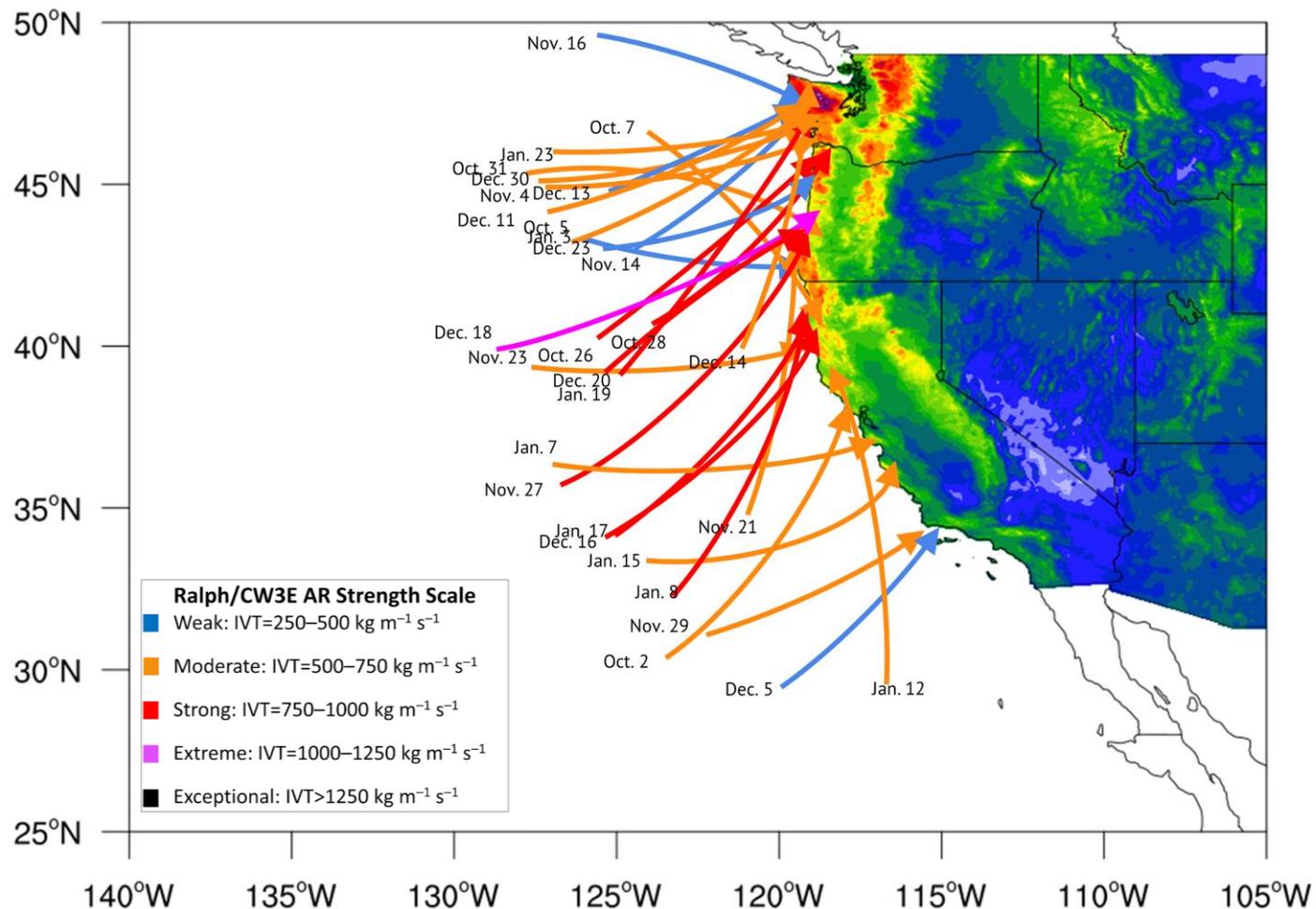
Monthly Precipitation Anomaly (%)



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

- When comparing this January to last January, there was almost a reversal in precipitation accumulations
- Much of Coastal Washington (except the Olympic Mts.) and Northern Coastal Oregon were below normal during this January (2019)
- A majority of California experienced above normal precipitation during this Jan. (2019), which is opposite of what happened last Jan.

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



- The 8 ARs that made landfall during January 2019 brings the Water Year total to 30 (6 Weak, 15 Moderate, 8 Strong, and 1 Extreme)

- The total number that made landfall through January 2018 was 29 (8 Weak, 11 Moderate, 8 Strong, and 2 Extreme)

- Through January 2019, Most of Washington, the southern Central Valley, and Southern California has received near or above normal precipitation
- Coastal Northern CA, OR, and Southern WA has received below normal WY to date precipitation