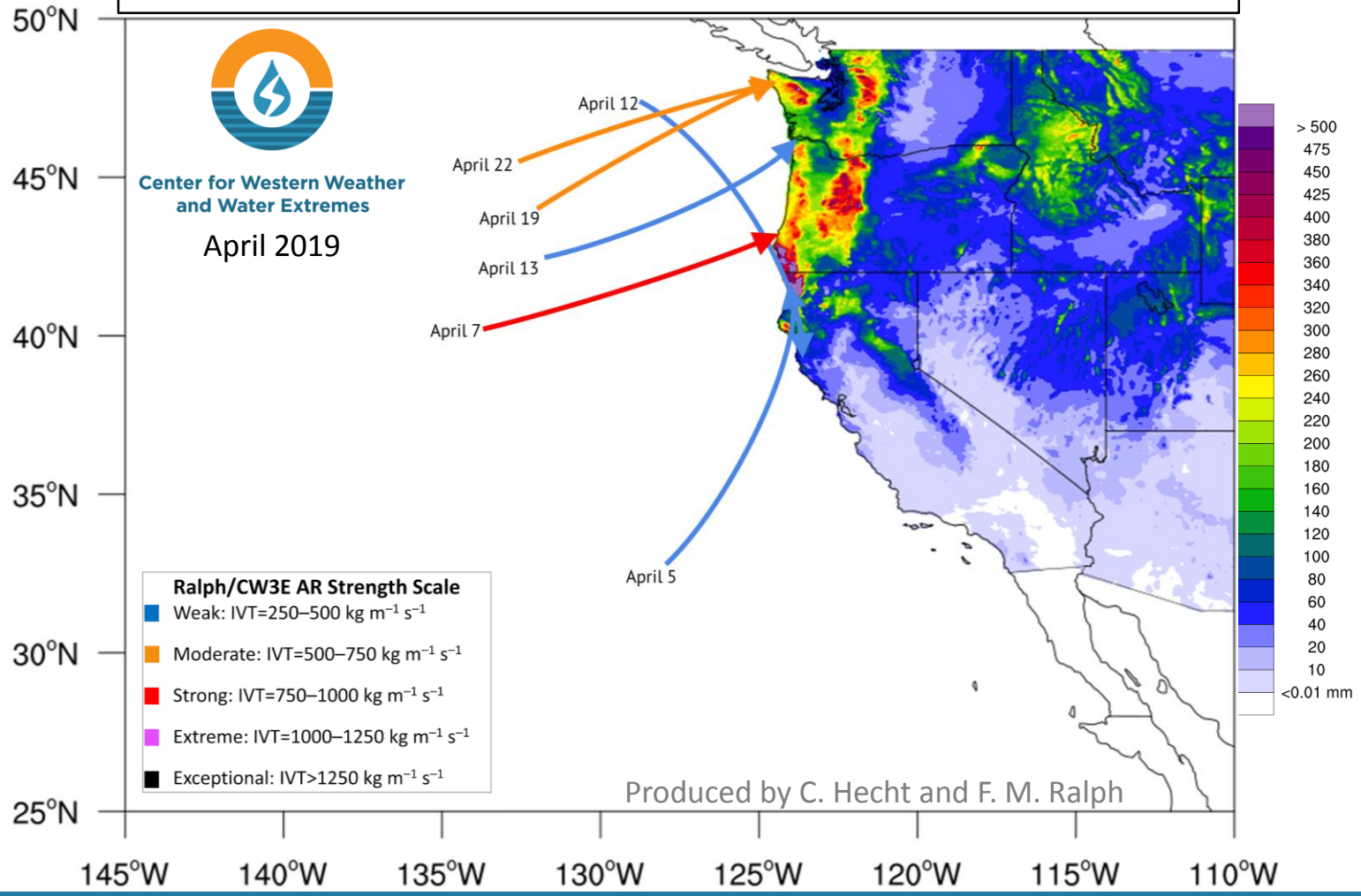
# Water Year 2019: April Atmospheric Rivers

Center for Western Weather and Water Extremes
SCRIPPS INSTITUTION OF OCEANOGRAPHY AT UC SAN DIEGO

| AR Strength | AR Count |
|---|---|
| Weak | 3 |
| Moderate | 2 |
| Strong | 1 |
| Extreme | 0 |
| Exceptional | 0 |

| Regions Impacted by Each AR | |
|---|---|
| State/Region | AR Conditions |
| Washington | 6 |
| Oregon | 6 |
| Northern CA | 4 |
| Central CA | 1 |
| Southern CA | 1 |

**Six** atmospheric rivers made landfall over the U.S. West Coast during April 2019 (Seventh month of WY 2019)



# April 2019 Precipitation

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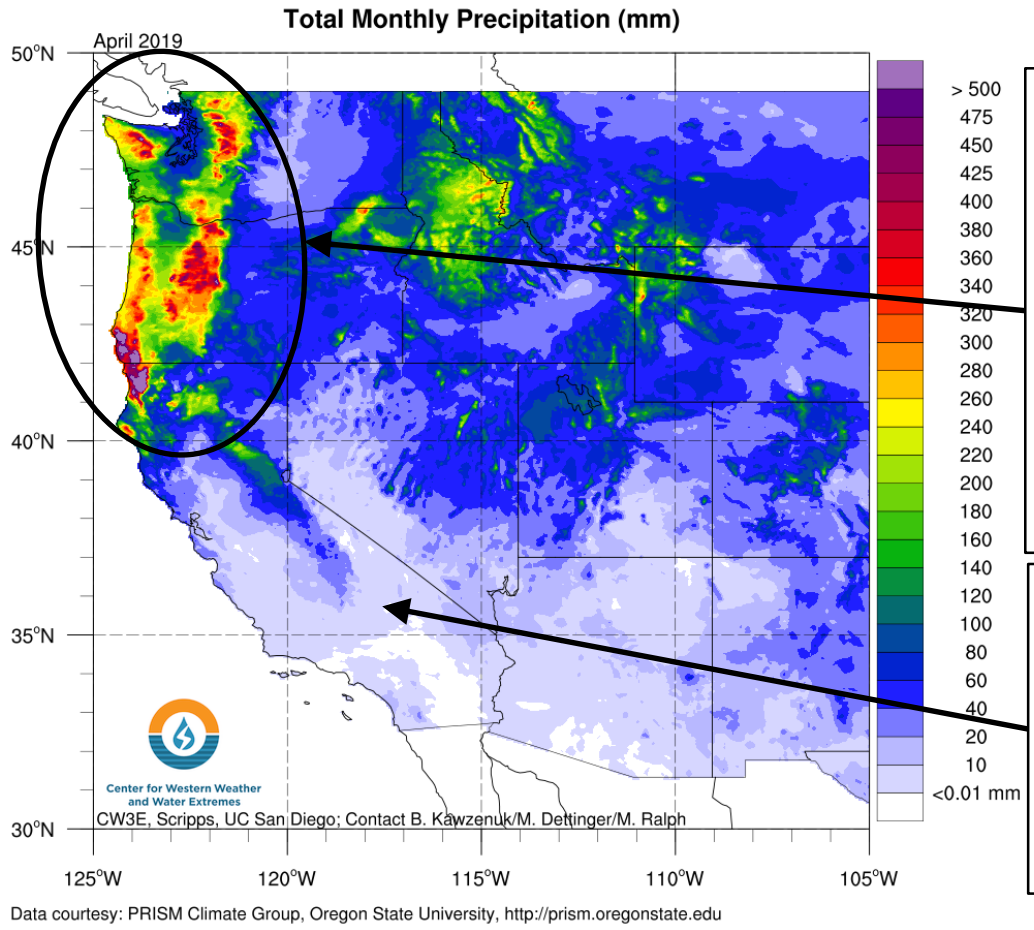
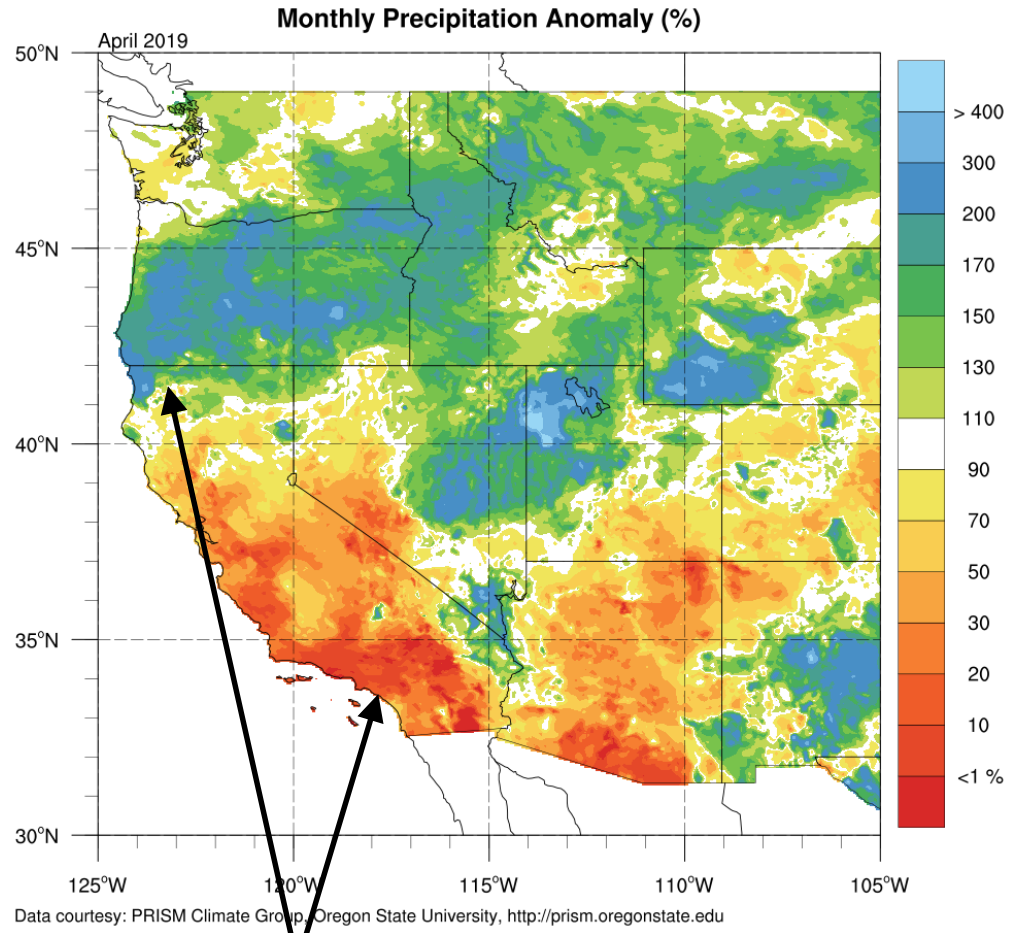



The highest precipitation accumulations (>400 mm; >15.7 inches) fell over the Coastal, Olympic, and Cascade Mountains of Western Washington, Oregon and far Northern California where the one strong AR made landfall

A large portion of California received <20 mm of precipitation where Central and Southern CA experienced AR conditions from one weak AR




- Oregon, portions of Washington, and far Northern California, where the highest precipitation accumulations fell, were the only locations along the West Coast to experience above normal precipitation for the month of April
- A larger majority of CA received below normal precipitation for the month of April, with parts of Southern CA receiving <1% of normal

# April 2019 Compared to April 2018

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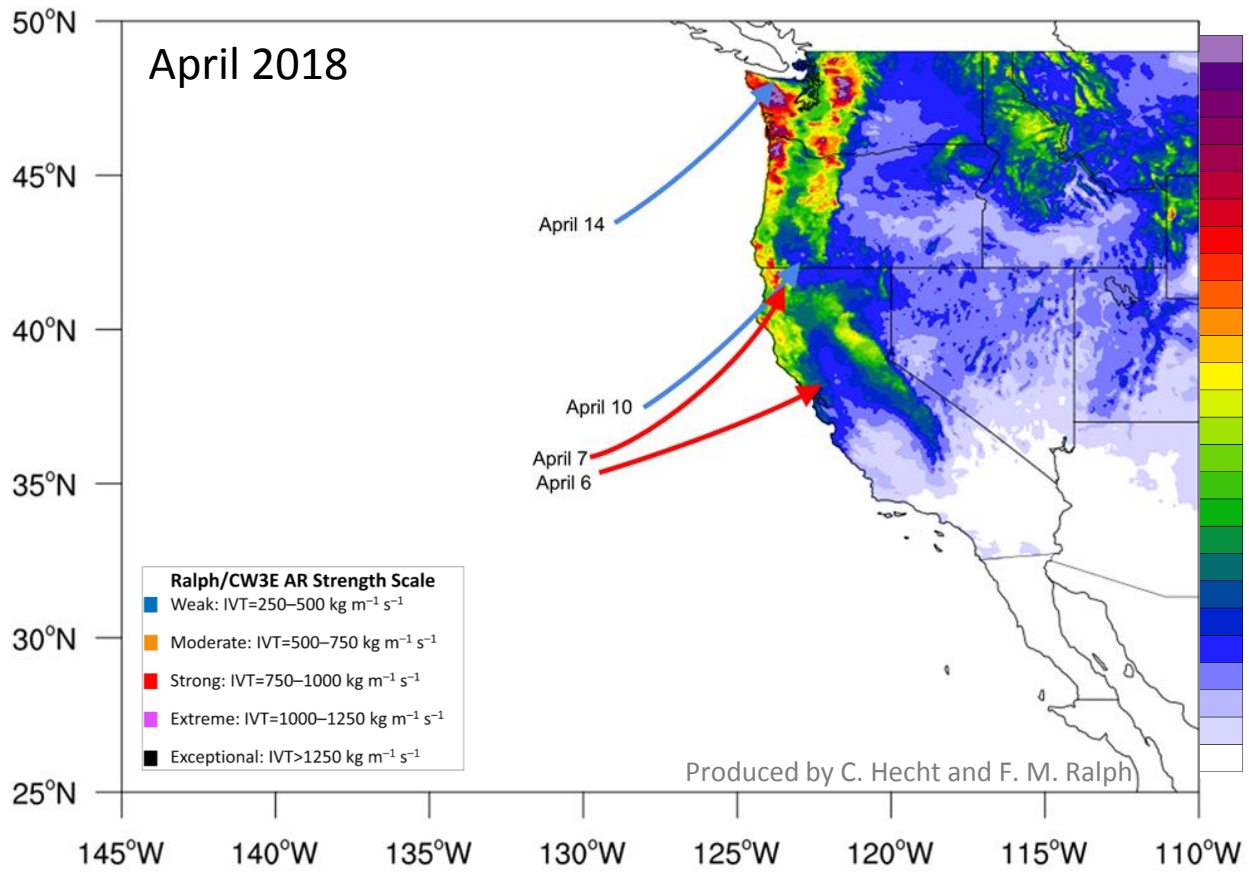


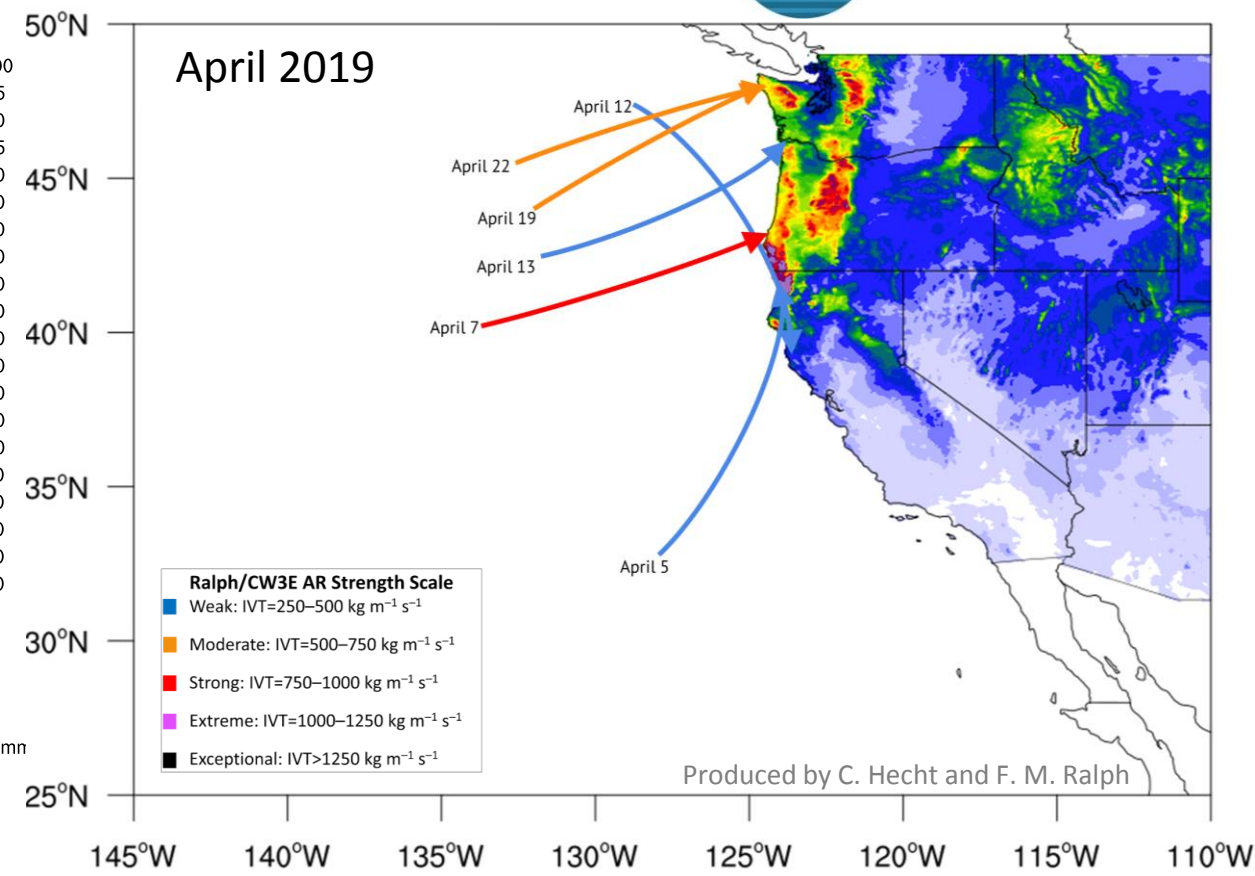


- April 2018 experienced one fewer AR compared to April 2019
- While April 2018 experienced one fewer AR than April 2019, two of the ARs that made landfall in April 2019 were strong
- The differences in AR landfall distribution and strength between April 2018 and April 2019 resulted in more precipitation falling over the Pacific Northwest in April 2018

# April 2019 Compared to April 2018

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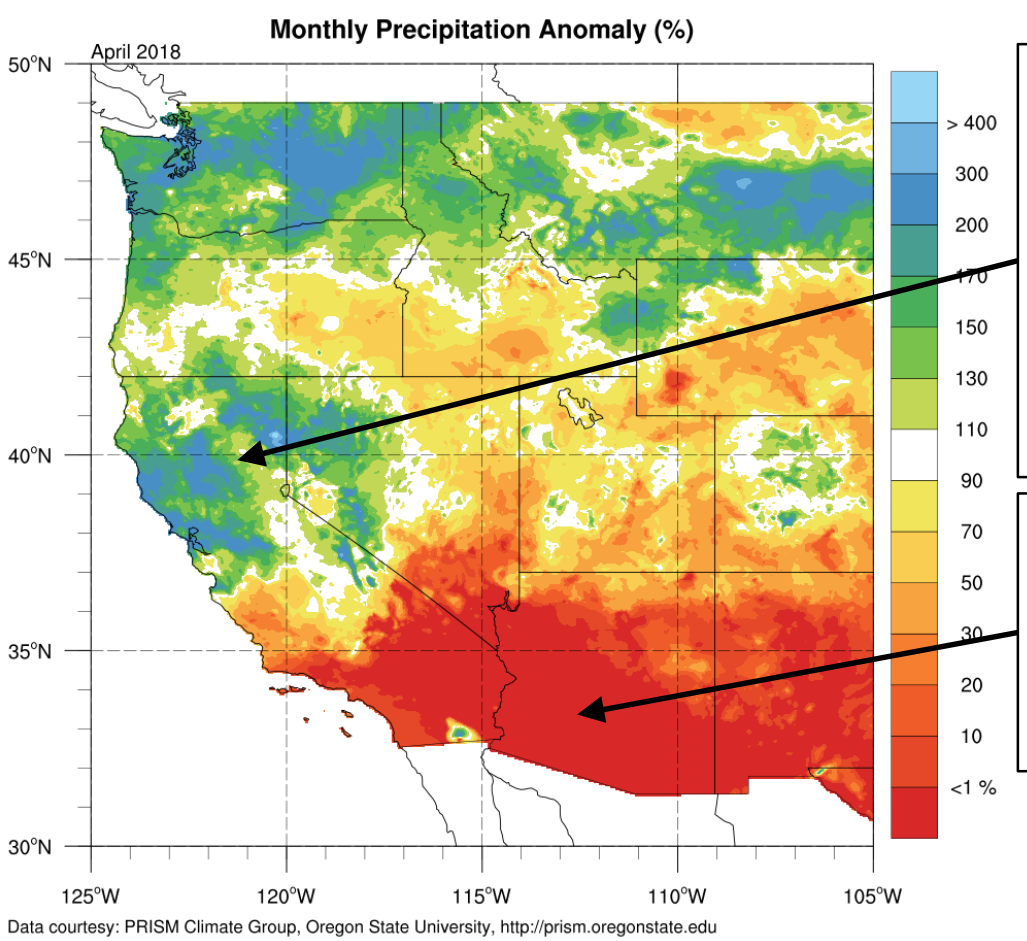
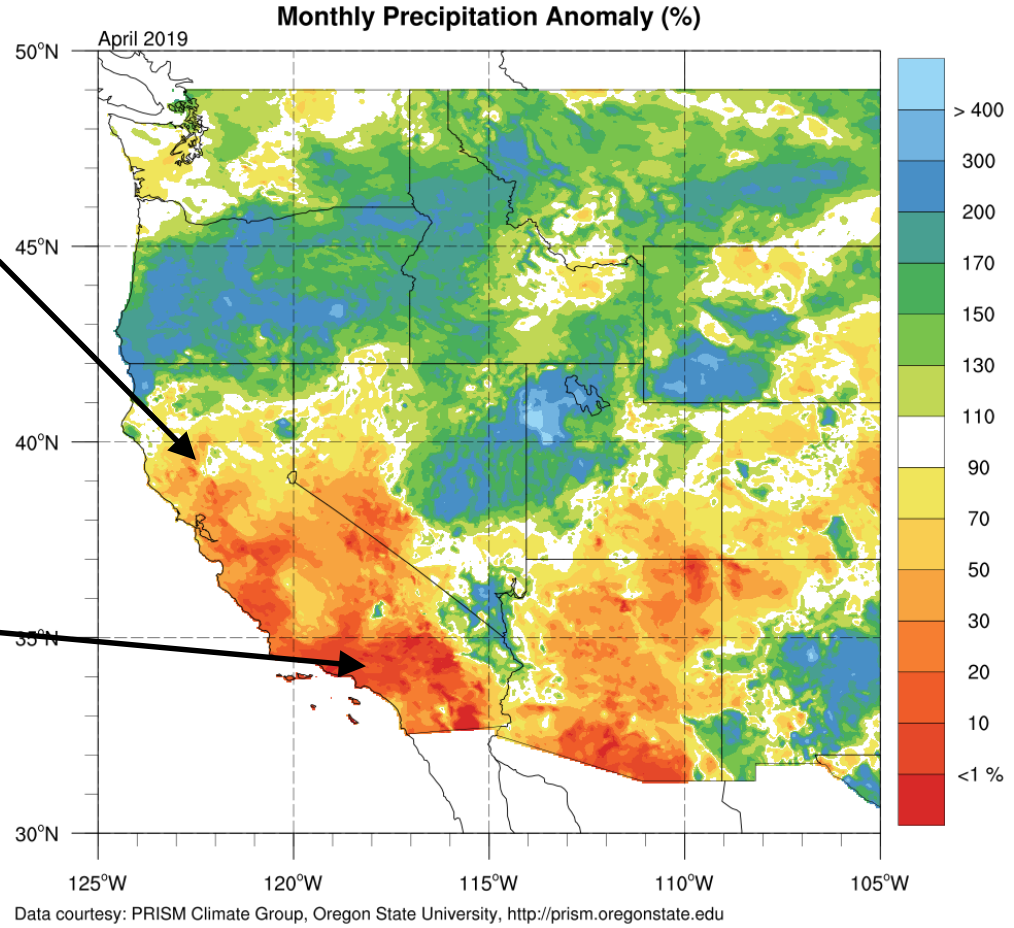


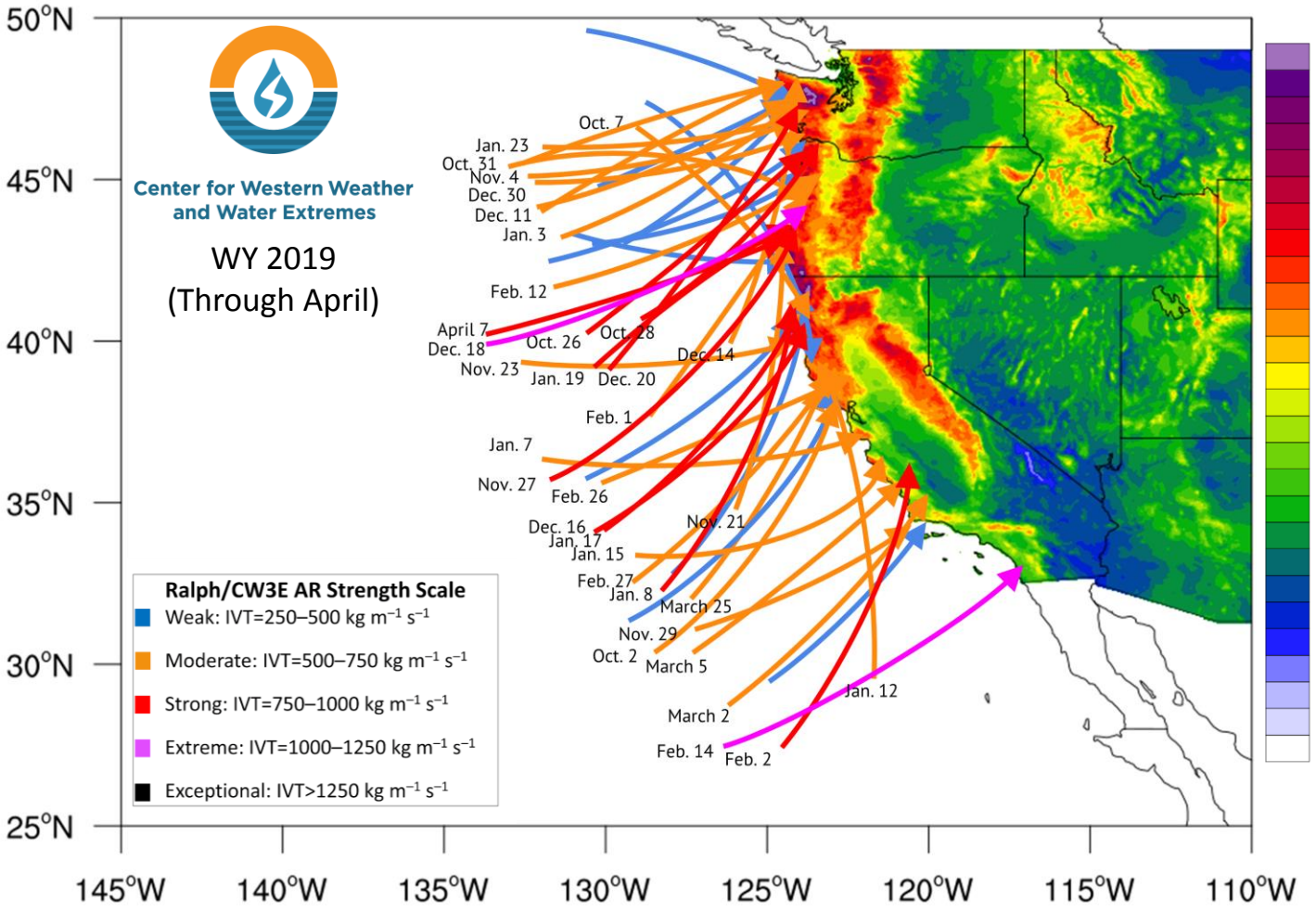

The main difference between April 2018 and April 2019 is that Central to Northern CA experienced above normal precipitation during April 2018 but below normal during April 2019

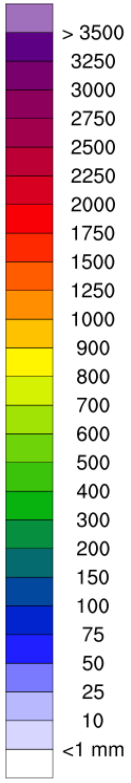
Southern California experienced below normal precipitation accumulations for both April 2018 and April 2019

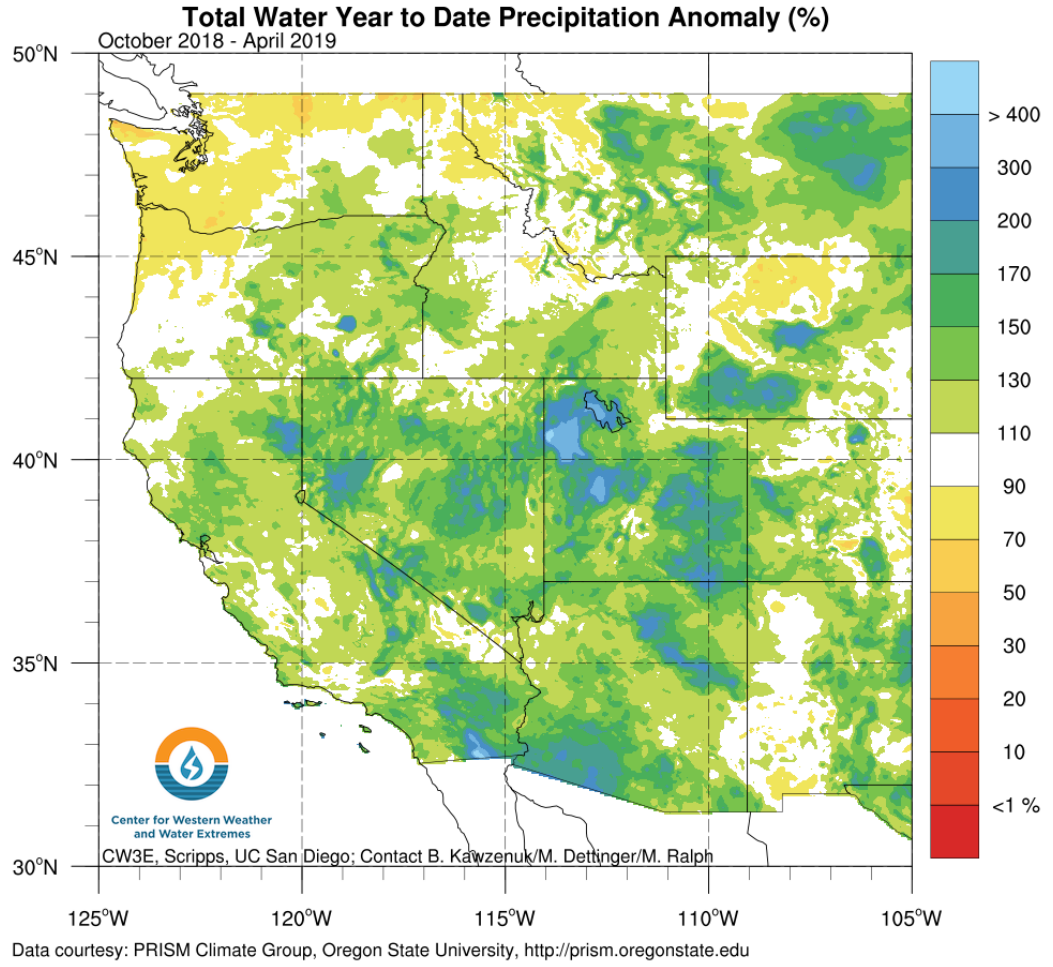



While Southern California experienced below normal precipitation for both April 2018 and 2019, the region that received <1% of normal during April 2018 was much larger, extending inland into Arizona and New Mexico

# Water Year to Date Summary (October through April)




The 6 ARs that made landfall during April 2019 brings the Water Year total to 47 (11 Weak, 24 Moderate, 10 Strong, and 2 Extreme)

The total number that made landfall through April 2018 was 45, two less than this year (16 Weak, 16 Moderate, 11 Strong, and 2 Extreme)

- Through April 2019, a majority of the Western U.S. has received near normal or above normal water year to date precipitation
- Western and Northern WA and Northwestern OR are the only locations that received below normal precip.