

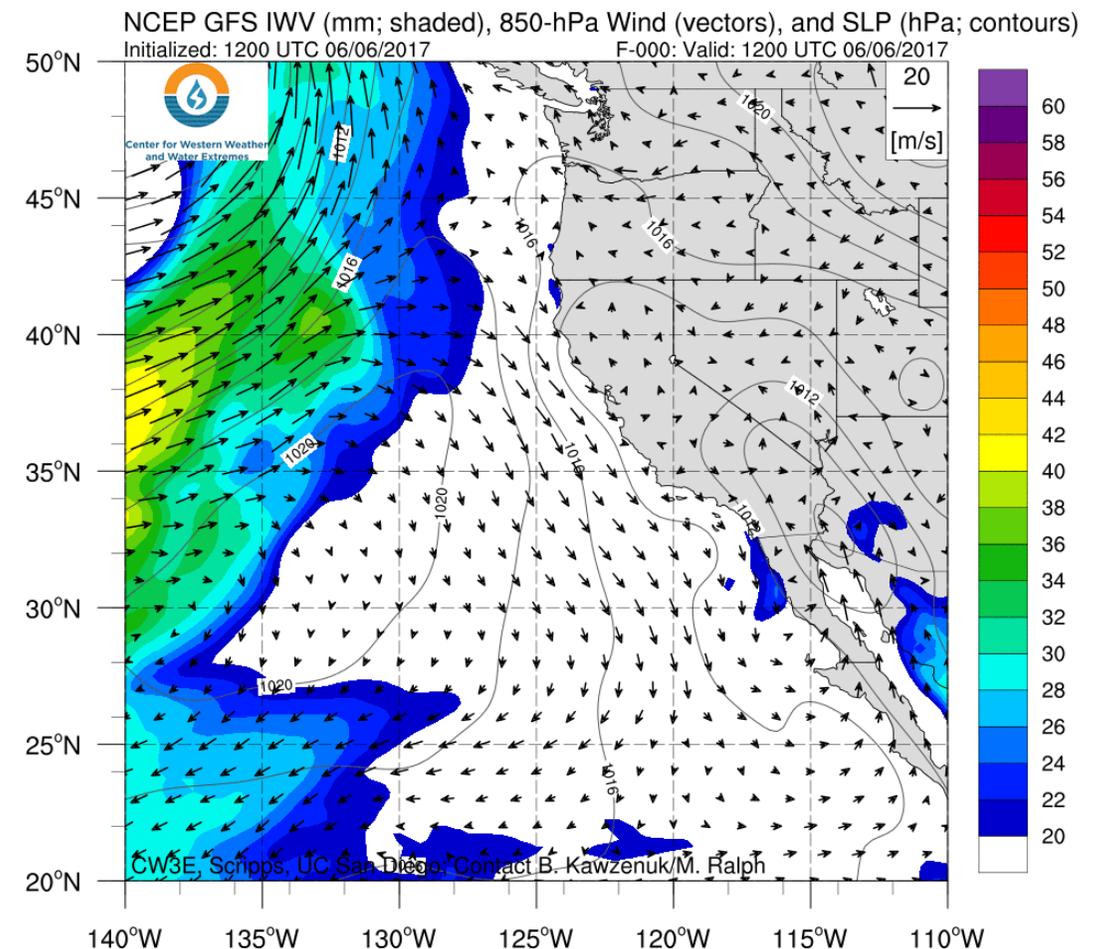
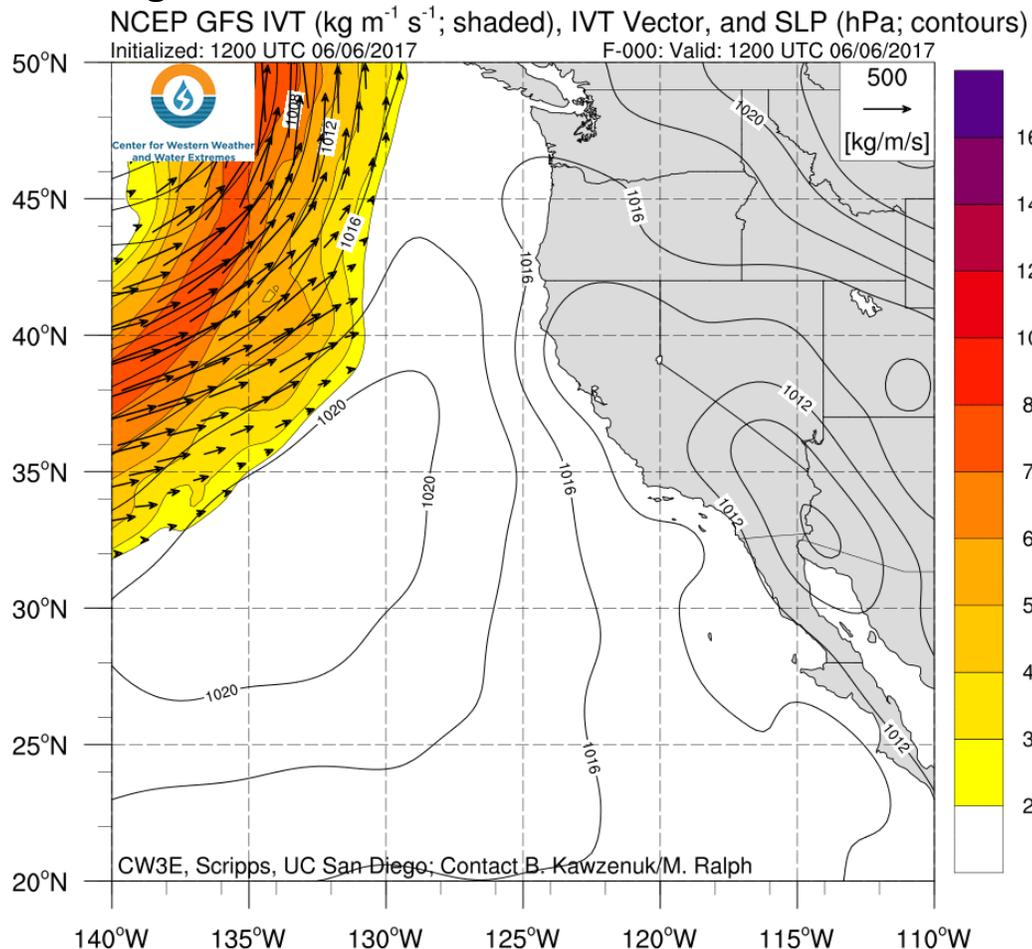
# CW3E Atmospheric River Update

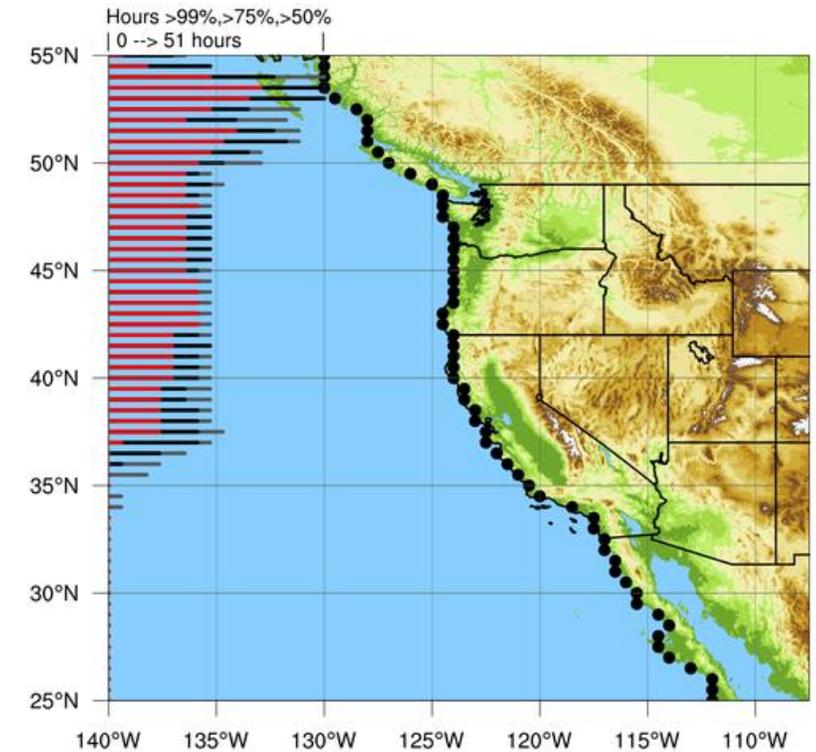
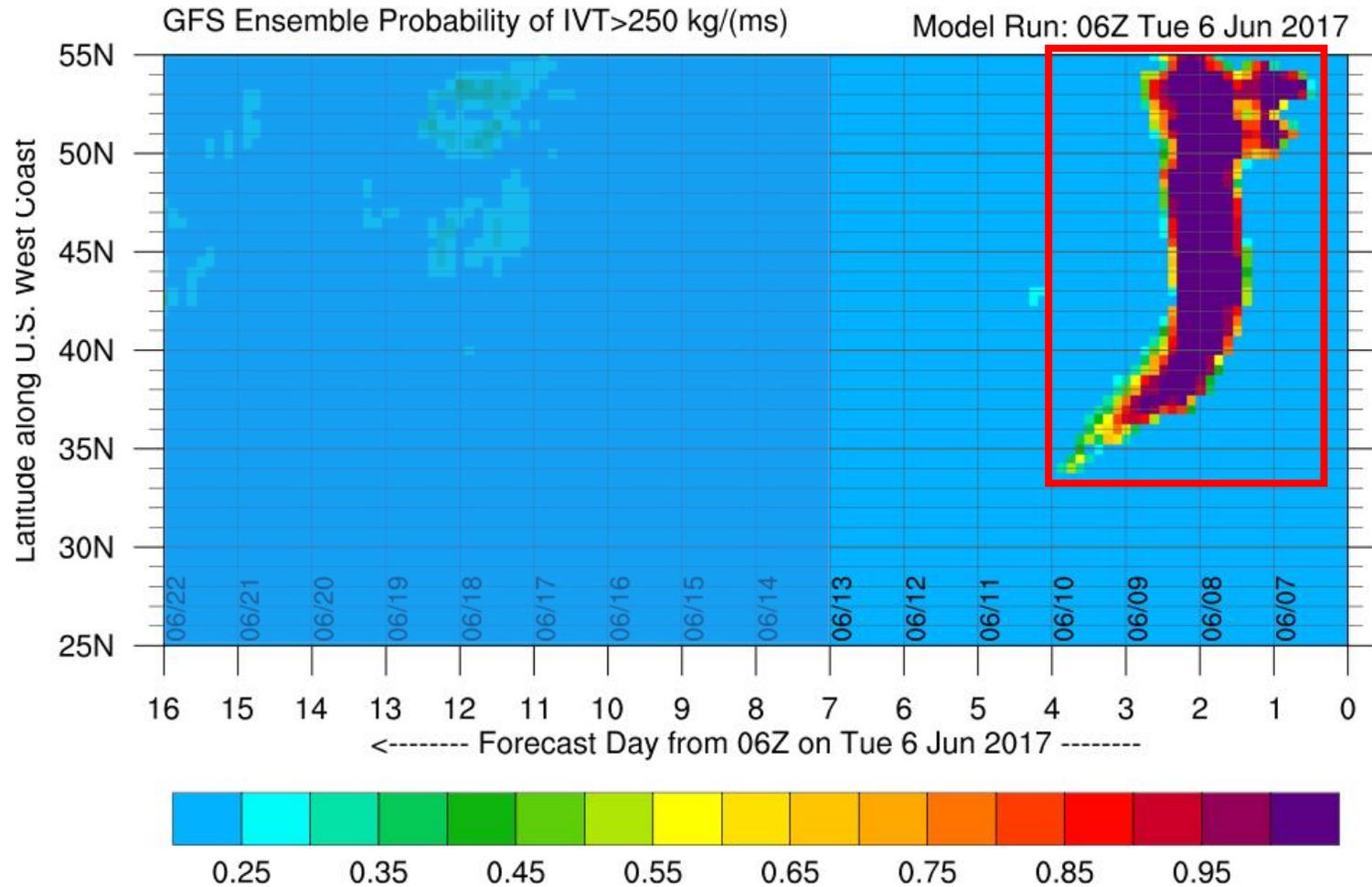


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## Update on Late Season AR Forecast to Impact West Coast Later This Week

- Little change from yesterday's forecast
- Ensemble GFS members are still in good agreement of the onset, duration, and maximum magnitude of coastal IVT
- WPC precipitation forecasts are predicting as much as 4.2 inches over the Coastal Mountains of Northern CA and OR
- A few rivers in the Cascade Range of WA and OR are forecast to rise to action or flood stage due to melting snow and the landfalling AR





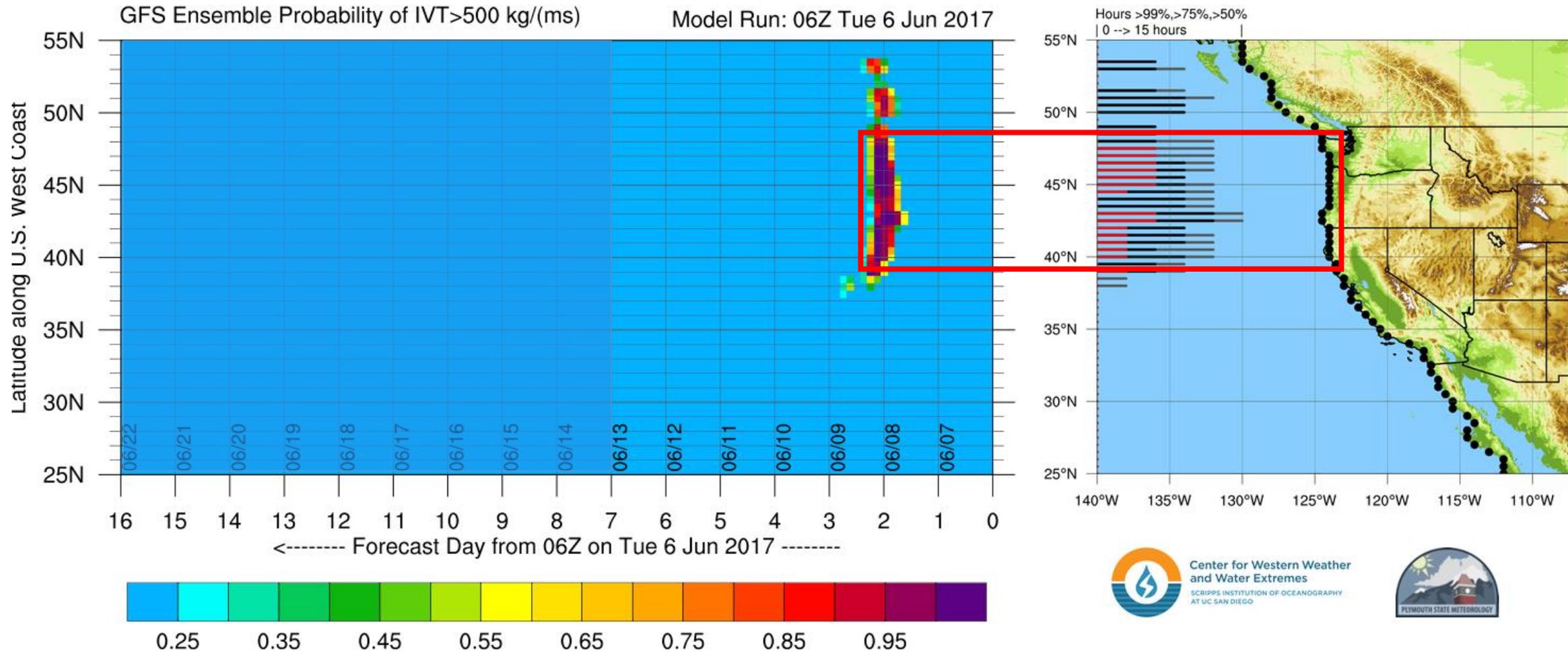
- Not much change in the ensemble probability of  $IVT > 250 \text{ kg m}^{-1} \text{ s}^{-1}$  along the coast since yesterday's forecast
- Still a high probability (indicated by purple colors) of AR conditions ( $IVT > 250 \text{ kg m}^{-1} \text{ s}^{-1}$ ) lasting ~24 hours over coastal locations from British Columbia to as far south as San Francisco

# AR Update: 6 June 2017

For California DWR's AR Program



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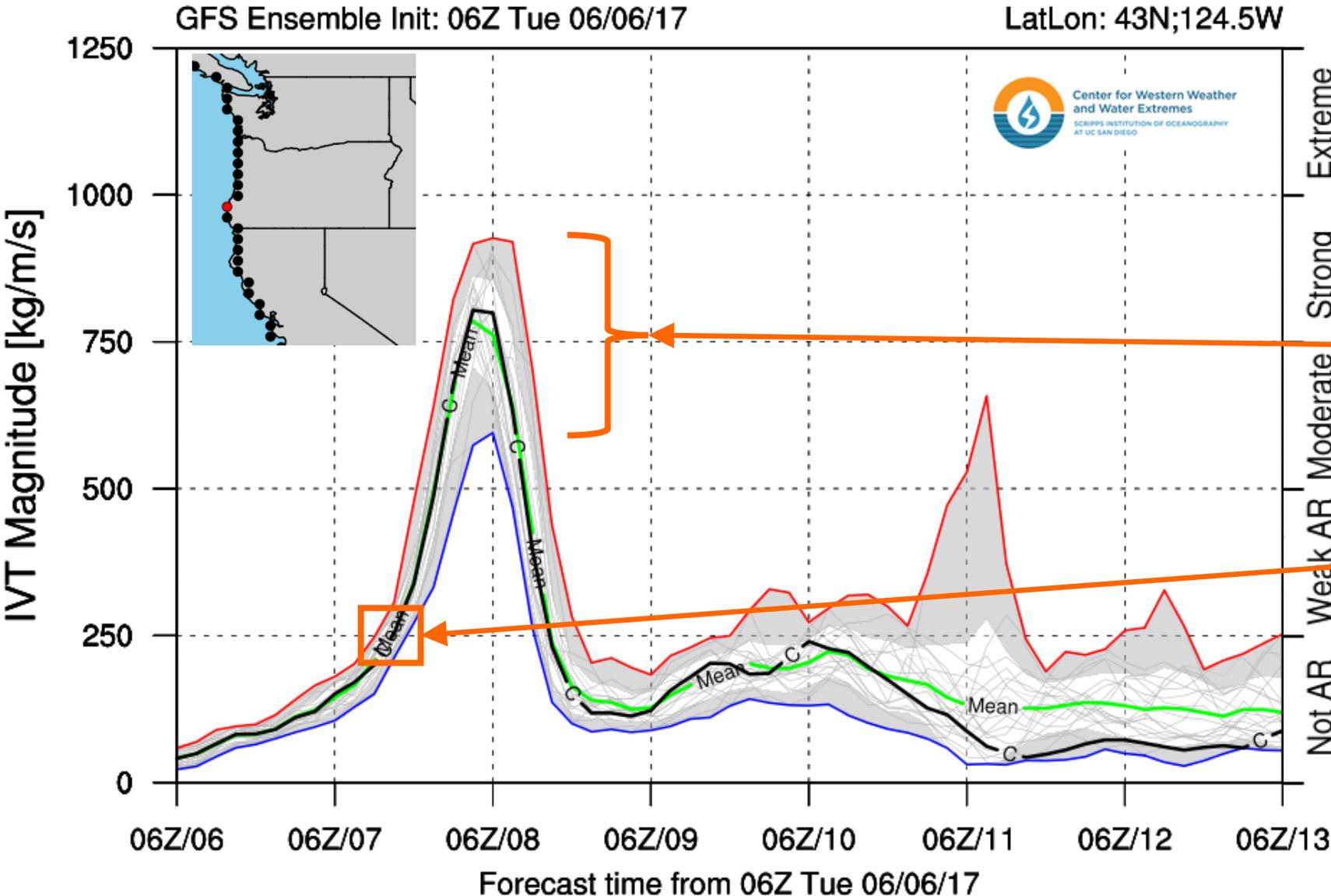
- Slight increase in probability and duration of moderate AR conditions ( $IVT > 500 \text{ kg m}^{-1} \text{ s}^{-1}$ ) over Coastal WA, OR, and NorCal
- Moderate AR conditions could potentially last >6 hours

# AR Update: 6 June 2017

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**GFS Ensemble members continue to stay in good agreement of the onset, magnitude, and duration of IVT along the OR Coast**

**Southern OR Forecast Magnitude**

- Max IVT  $\sim 900 \text{ kg m}^{-1} \text{ s}^{-1}$
- Mean IVT  $\sim 800 \text{ kg m}^{-1} \text{ s}^{-1}$
- Min. IVT  $\sim 650 \text{ kg m}^{-1} \text{ s}^{-1}$
- Uncertainty  $\sim \pm 13\%$

**Onset of first AR conditions**

- $\sim 7 \text{ AM Wednesday 7 June}$
- High confidence  $\pm 2 \text{ h}$

**Duration of AR conditions**

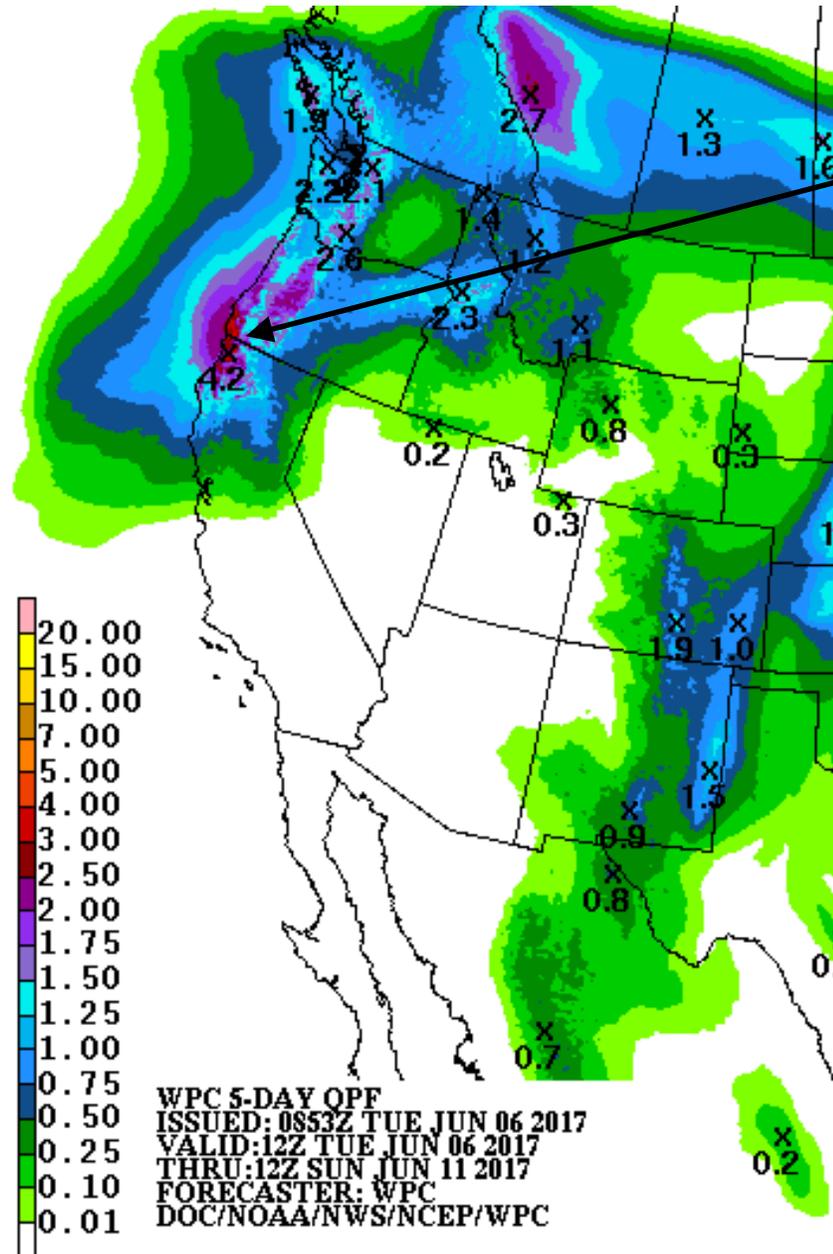
- Weak:  $\sim 24 \text{ hours}$
- Moderate:  $\sim 8 \text{ hours } \pm 6 \text{ h}$
- Strong:  $\sim 6 \text{ hours } \pm 6 \text{ h}$

# AR Update: 6 June 2017

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- NOAA Weather Prediction Center 1–5 day precipitation forecasts highlight a maximum accumulation of 4.2 inches over the higher elevations of the Coastal Range in Northern CA and Oregon

- The Higher elevations of the Cascade and Olympic Mountains in OR and WA are forecast to receive >2 inches of precipitation

- Lower elevations in WA, OR, and Northern CA are forecast to receive .5 to 1.5 inches

For official NOAA-WPC quantitative precipitation forecasts visit  
<http://www.wpc.ncep.noaa.gov/#>

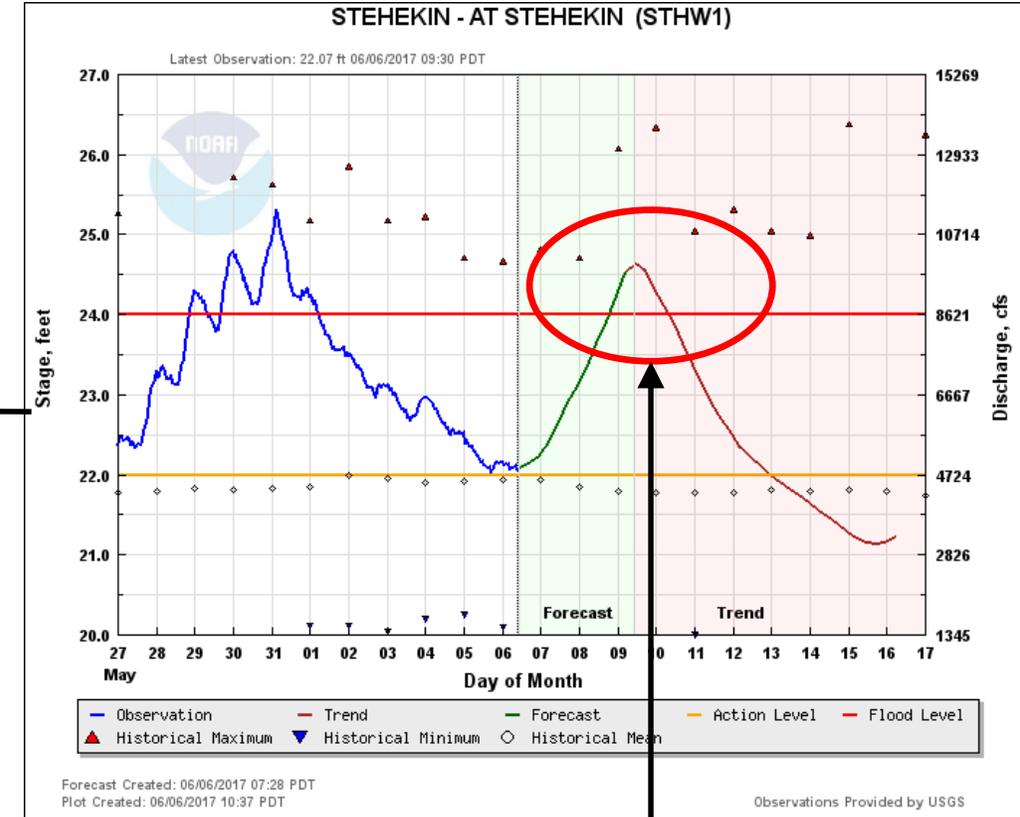
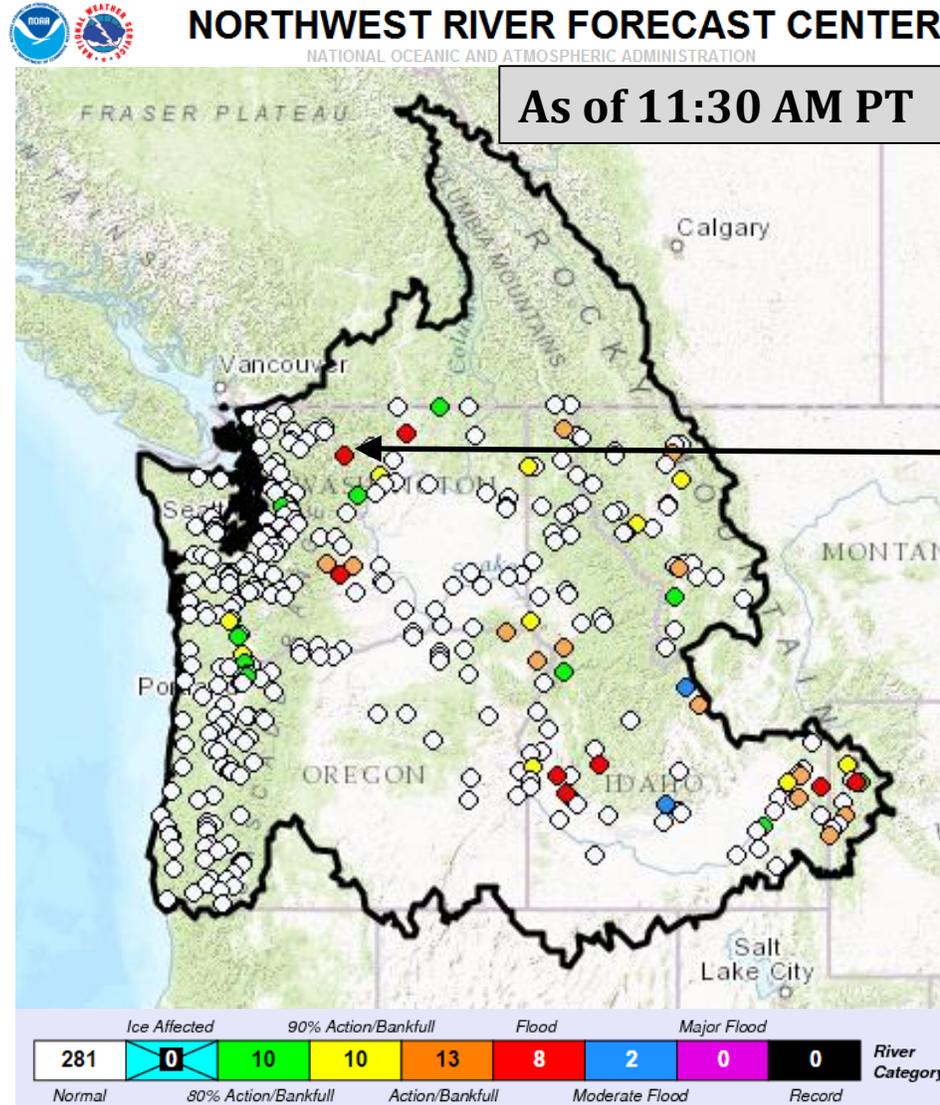
# AR Update: 6 June 2017

For California DWR's AR Program



There are currently 10 rivers that are at or forecast to rise above flood stage in the Pacific Northwest and Idaho due to the landfalling AR, snowmelt, or a combination of both.

For official NOAA-NWS Northwest River Forecast Center Streamflow Forecasts see [nwrfc.noaa.gov/rfc/](http://nwrfc.noaa.gov/rfc/)



Since yesterday, there has been little change to the forecast stage of the Stehekin river at Stehekin, WA which is forecast to rise to ~24.67 on 9 June, .67 feet above flood stage

# Forecast Summary

For California DWR's AR Program



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## Washington:

- Moderate AR conditions between ~3 PM PT 7 June and 5 AM 8 June
- Southerly oriented IVT associated with this AR may not maximize upslope moisture flux along the Coastal and Cascade Mts.
- 5 day precipitation forecasts range from .75 to 2.6 inches with higher accumulations over higher elevations

## Oregon:

- Moderate to Strong AR conditions between ~2 PM PT 7 June and ~5 AM PT 8 June
- Highest precipitation accumulations of >4 inches over the high elevations of the Coastal Mountains where the southerly oriented IVT makes landfall

## California:

- Moderate IVT in extreme Northwestern CA
- IVT dissipates as the AR propagates southward, bringing weak to potentially moderate AR conditions to the San Francisco Bay area later this week
- Higher 1–5 day precipitation accumulations (.5 to >4 inches) expected in extreme Northern California with the SF Bay area receiving .1 to .25 inches

## Potential Impacts

- A few rivers in the Cascade Mountains of Washington and Oregon are forecast to rise above flood stage due to the precipitation of this AR and snowmelt
- While some rivers in Northwestern CA see a rise in stage height due to this AR, no rivers are forecast to rise above flood stage

For NWS point specific precipitation forecasts and up to date hydrologic watches and warnings visit [weather.gov](http://weather.gov)