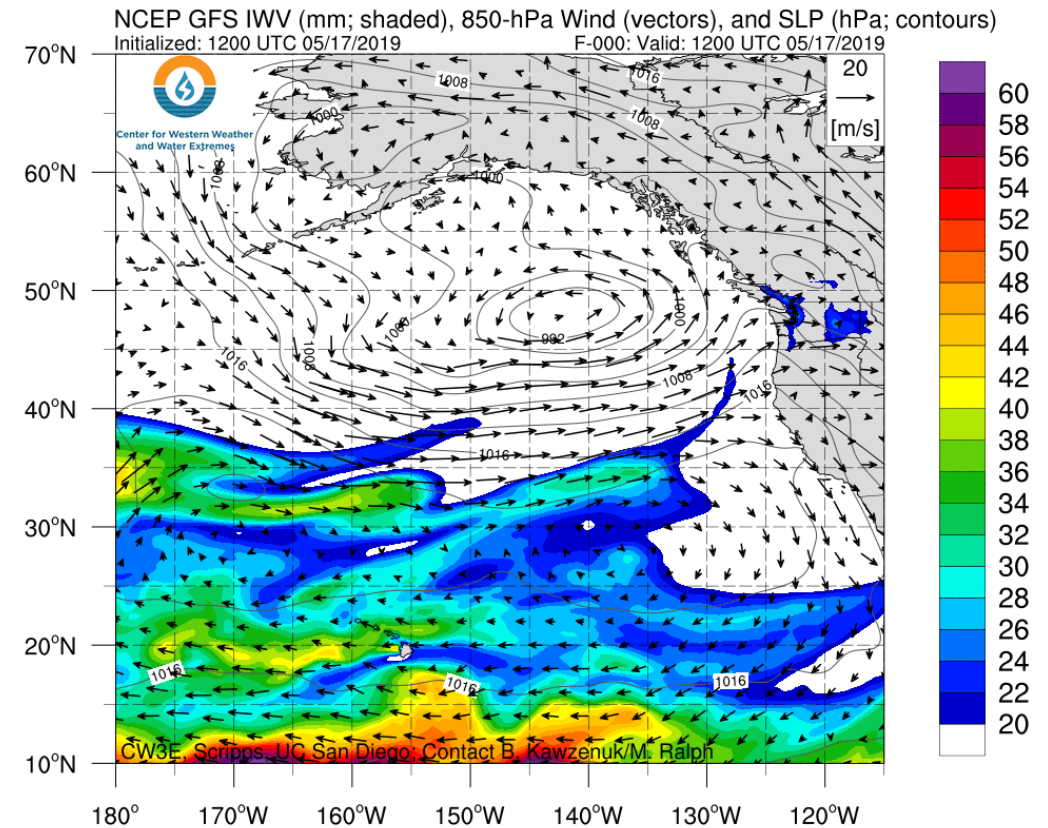
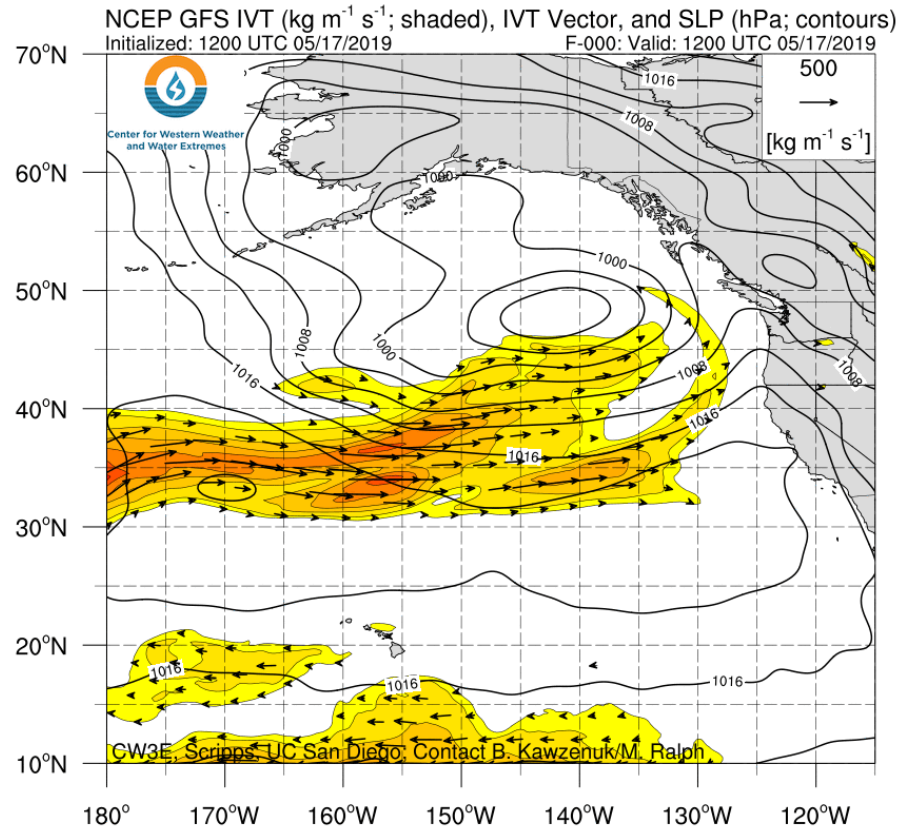


# CW3E Atmospheric River Outlook



## The last in a series of late season atmospheric rivers is forecast to bring precipitation to most of California this weekend

- The GEFS is currently predicting a high probability of weak AR conditions lasting ~12 hours for a majority of Coastal CA
- As much as 3 inches of precipitation is forecast to fall over the high elevations of the Coastal Mountains and Trinity Alps
- With as much as 6 inches of precipitation falling over the previous 72-hours, numerous locations across the state have double their normal precipitation for the month of May
- This system is forecast to be associated with seasonably low freezing levels (~5,000 ft.), resulting in a high probability of at least 8 inches of snow across most of the Sierra Nevada Mountains

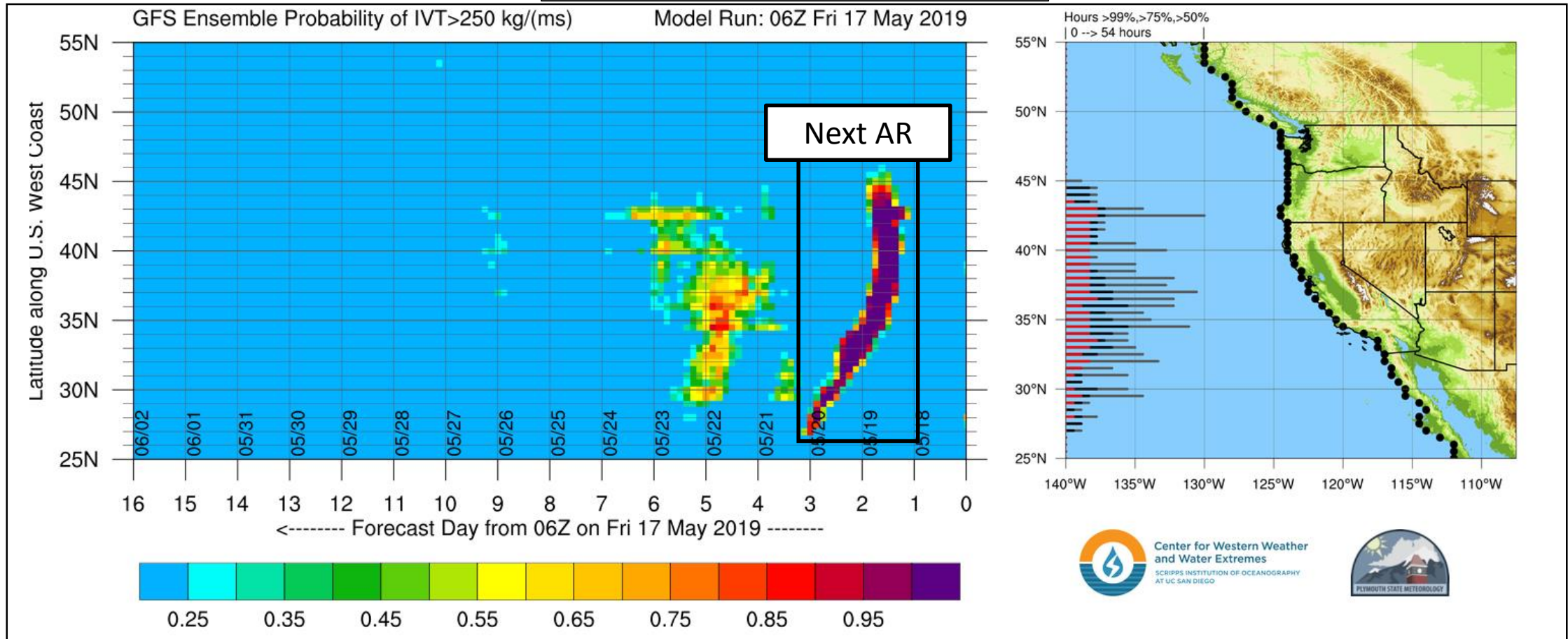


# AR Outlook: 17 May 2019



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## Odds of AR Conditions Along Coast



- The GFS is currently forecasting a high probability (>95% of ensemble members) of at least weak strength AR conditions (IVT > 250 kg/(ms)) over coastal locations from Central Oregon to Mexico
- A majority of Coastal locations are forecast to receive 6-12 hours of AR conditions with some slight uncertainty in exact onset and end of AR conditions

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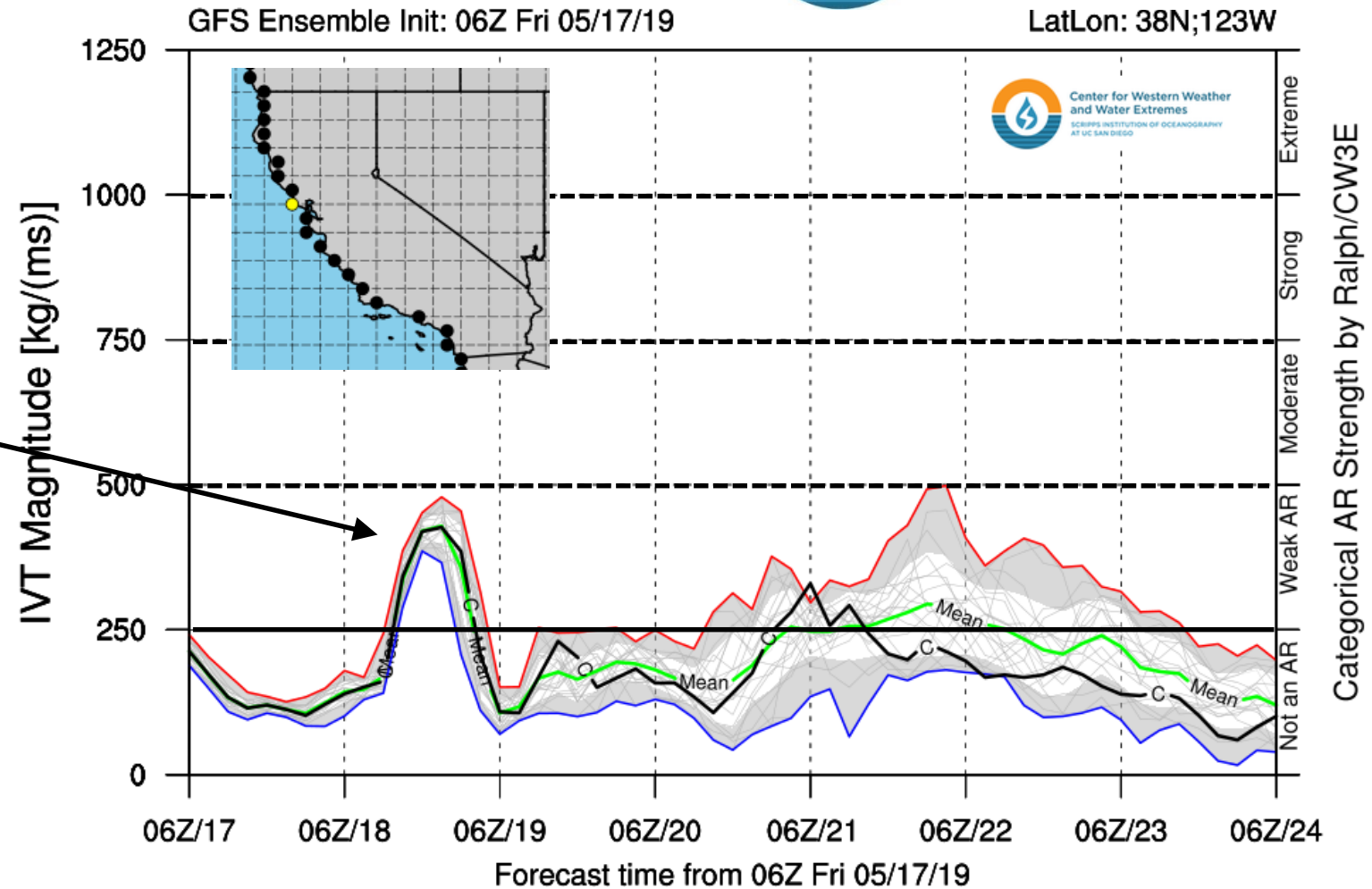
The GEFS is currently predicting weak strength AR conditions over Coastal Sonoma County, CA

## Maximum Magnitude of first potential AR

- Maximum predicted IVT  $\sim 475 \text{ kg m}^{-1} \text{ s}^{-1}$
- Mean IVT  $\sim 400 \text{ kg m}^{-1} \text{ s}^{-1}$
- Control IVT  $\sim 400 \text{ kg m}^{-1} \text{ s}^{-1}$

## Forecast duration of AR conditions

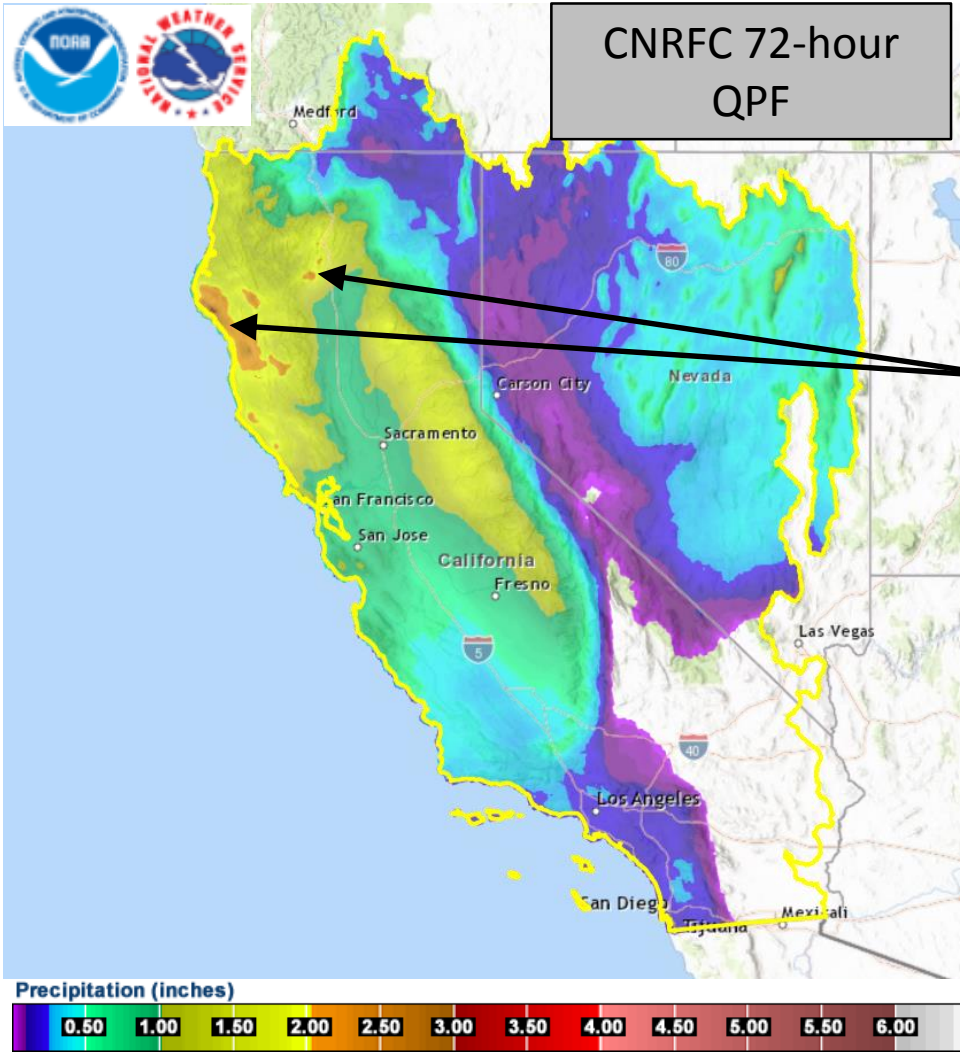
- Weak 12 hours  $\pm 3$



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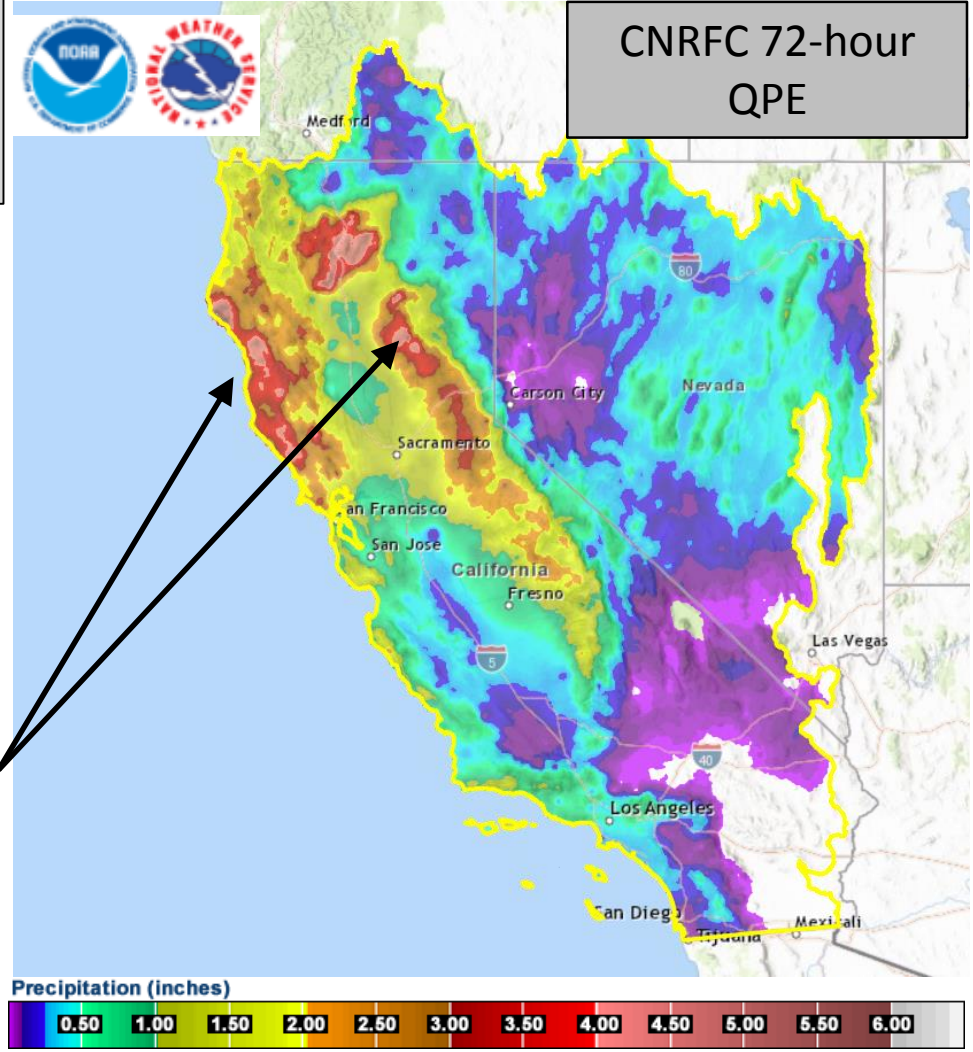


The CNRFC is currently forecasting as much as .5 to 3 inches of precipitation over Central to Northern California

The highest precipitation accumulations (1.25 to 3 inches) is forecast to fall over the Sierra Nevada, Trinity Alps, and Coastal Mountains

With as much as 5 to 6 inches of precipitation over the past 72-hours and the additional precipitation in the forecast, several locations across California have already doubled the average May precipitation

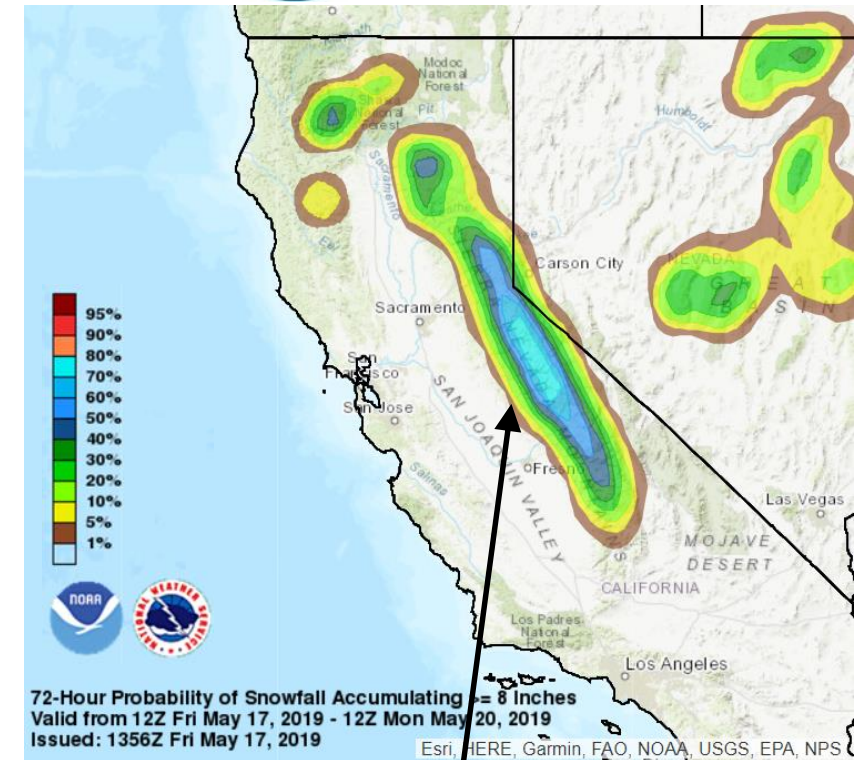
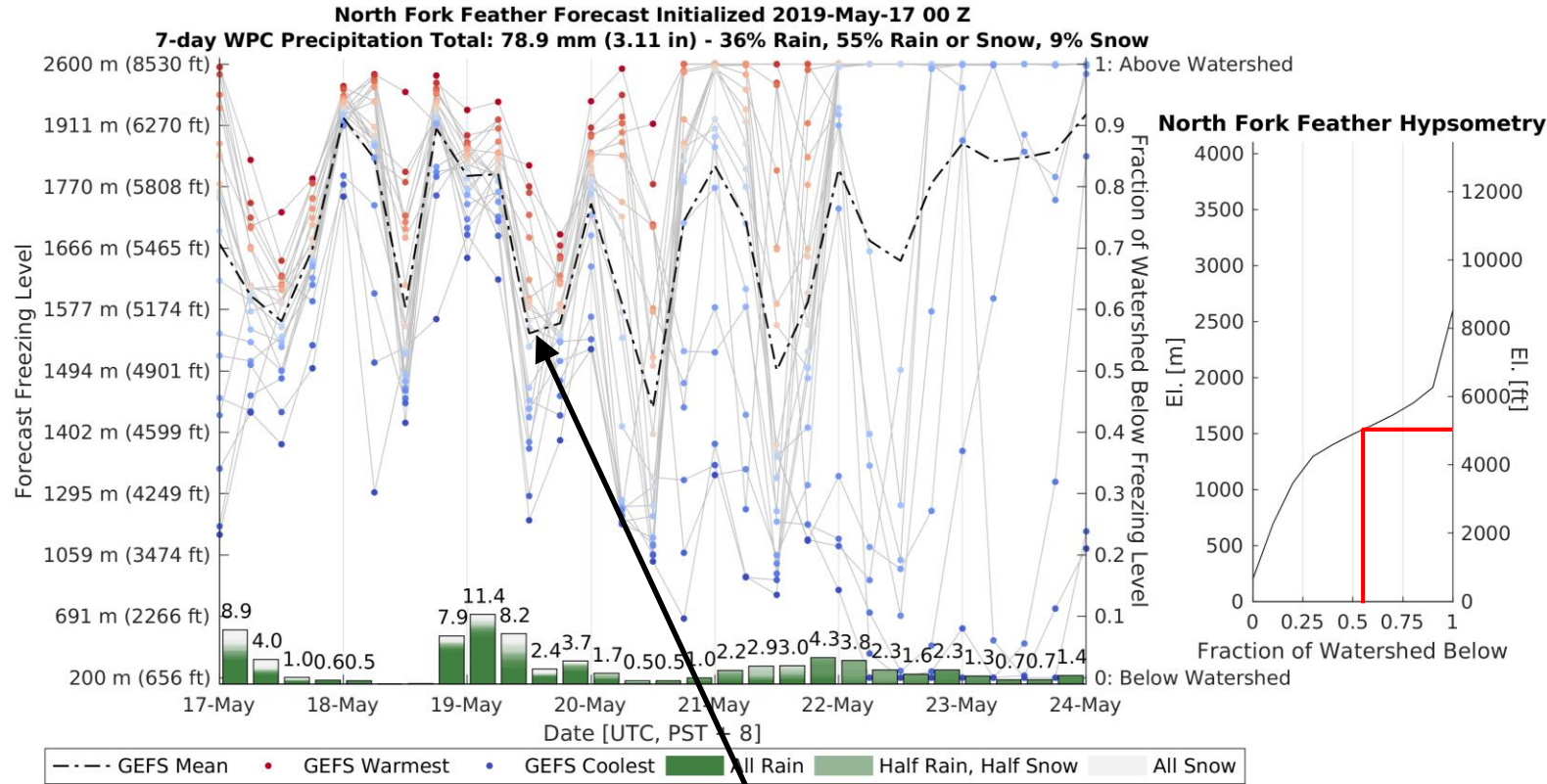
Precipitation products from [cnrfc.noaa.gov](http://cnrfc.noaa.gov) and



# AR Outlook: 17 May 2019



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**During the landfalling AR, freezing levels over the Northern Sierra Nevada Mountains are forecast to lower to ~5,000 feet, which would place ~55% of the North Fork of the Feather River Watershed below freezing**

**Due to the unseasonably low freezing levels associated with this event, there is a high probability (up to 80%) of at least 8 inches of snow for parts of the Sierra Nevada Mountains**