

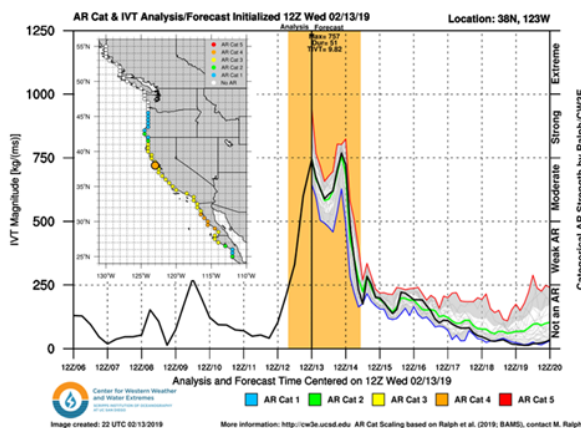
Latest update on Atmospheric River Forecast to impact most of California this Week

Updated: 13 February 2019

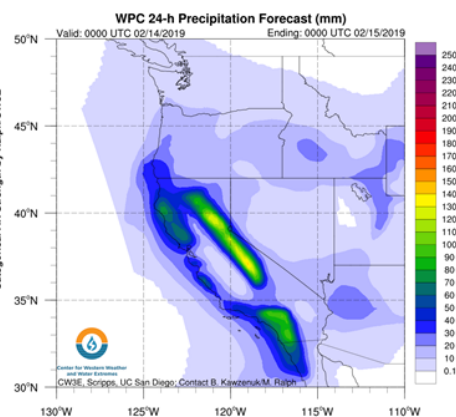
A strong atmospheric river (AR) is making landfall along the entire California Coast. The atmospheric river will continue to impact California until late tomorrow and possibly extend into Friday over Southern California.

Forecast Highlights:

- The AR is forecasted to be an AR CAT 4 in the Bay area of California and an AR CAT 3 in Southern CA based on the recently published AR Category Scale (Ralph et al. 2019).
- Models are now forecasting a stronger and longer duration AR forecast in Northern California than earlier in the day yesterday.
- Models currently suggest that maximum integrated vapor transport (IVT) magnitudes could be $> 750 \text{ kg m}^{-1} \text{ s}^{-1}$ (strong) over large portions of the California coast.



The Global Ensemble Forecast System analysis and forecasted AR IVT magnitude for San Francisco Bay area.



Weather Prediction Center 24-hour precipitation totals.

- NOAA Weather Prediction Center is currently forecasting as much as 4-7 inches of precipitation over high elevations during the next 24-hours
- A development of a mesoscale frontal wave will likely prolong the AR conditions in Northern California

Additional Considerations:

- High freezing-levels (~8,000 feet) for the AR combined with the recent heavy snowfall in the Sierra Nevada Mountains and the potential for rain-on-snow at lower levels introduces the concern for high run-off and flooding in the Central Valley and Sierra Foothills
- Currently the CA/NV River Forecast Center is forecasting 11 river gauges to go above flood stage and 25 to go above monitor stage. Visit <https://cnrfc.noaa.gov/> for specific river and stream forecast and weather.gov for point specific watches and warnings

In-depth AR forecasts products can be found here:
<http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/>

Update provided by J. Kalansky
jkalansky@ucsd.edu

Stay tuned to the CW3E webpage for a full AR Update