

CW3E Atmospheric River Outlook

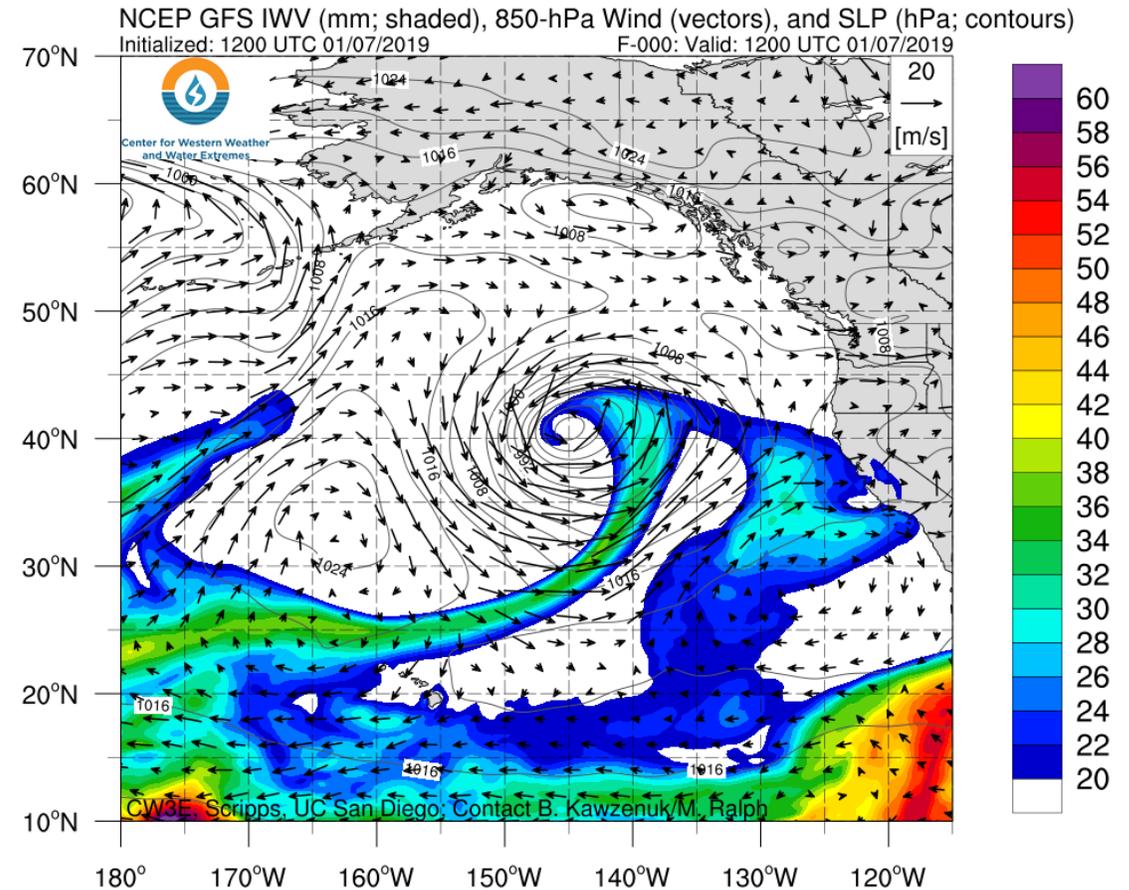
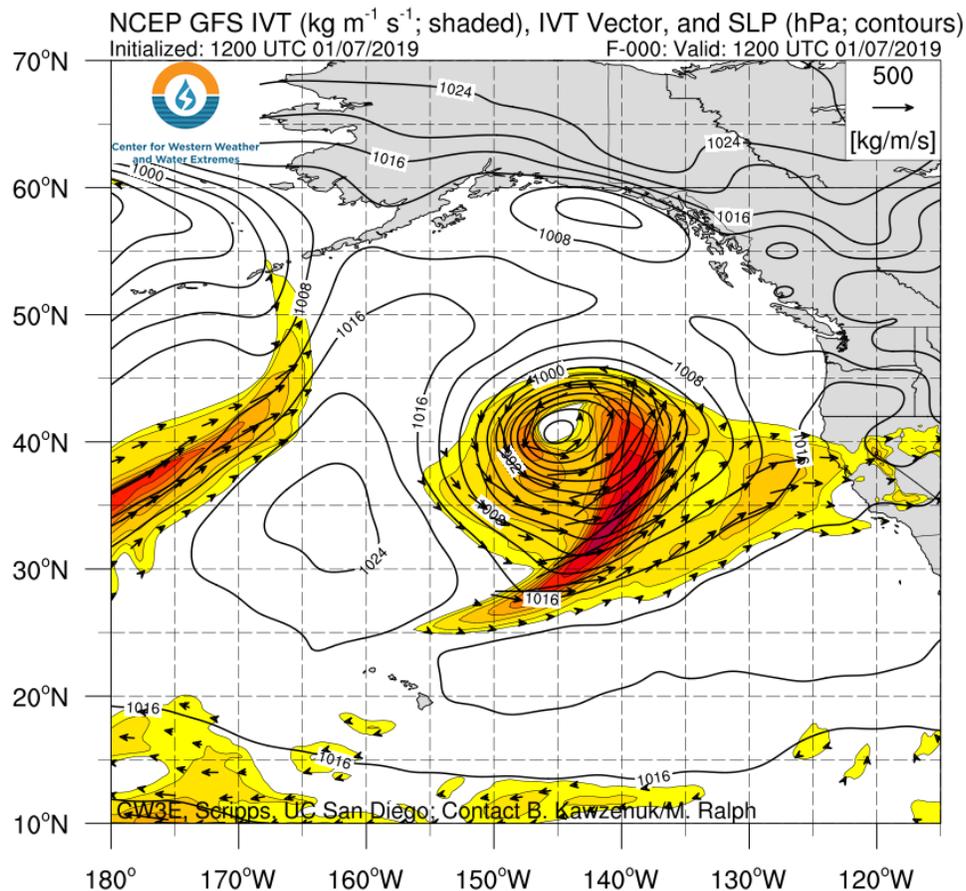
For California DWR's AR Program



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

Continued AR Activity Forecast for the USWC Over the next Several Days

- A potentially moderate AR is forecast to make landfall over northern CA
- AR conditions are currently forecast to last >24 hours over coastal locations north of 35°N latitude
- As much as 6 inches of precipitation could fall over the higher elevations of Northern California over the next 72-hours
- Additional ARs forecast to make landfall between 11 and 14 January bringing more precipitation to the USWC
- The additional ARs could bring precipitation to Southern CA with the 6-day NWS CNRFC predicting .5-3 inches



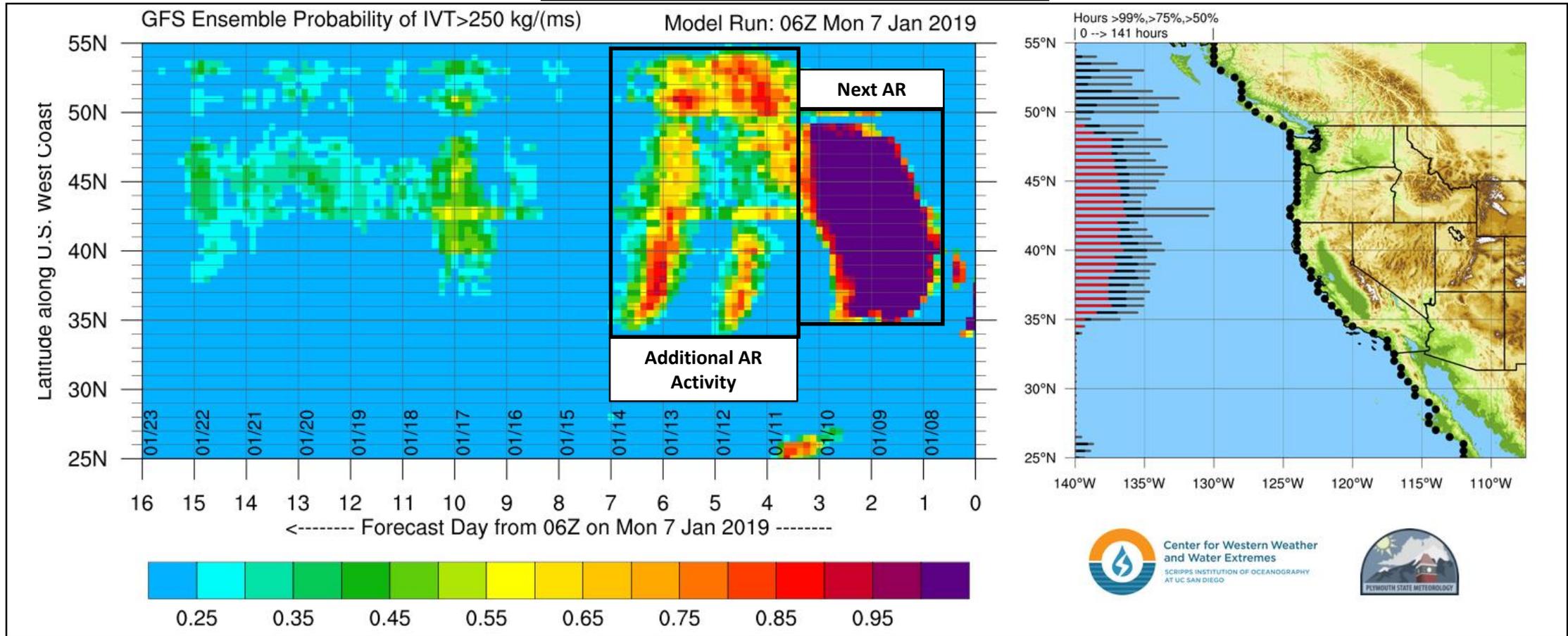
AR Outlook: 07 January 2019

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Odds of AR Conditions Along Coast



The GEFS is indicating a high probability (>95%) of AR conditions ($IVT > 250 \text{ kg m}^{-1} \text{ s}^{-1}$) for an extended period over WA, OR, and N. CA

There is a high probability that AR conditions will last for >24 hours between 49°N and 35°N along the coast

35–90% of GEFS ensemble members are predicting AR conditions over much of the U.S. West Coast within the next two potential ARs between 11 and 14 January 2019

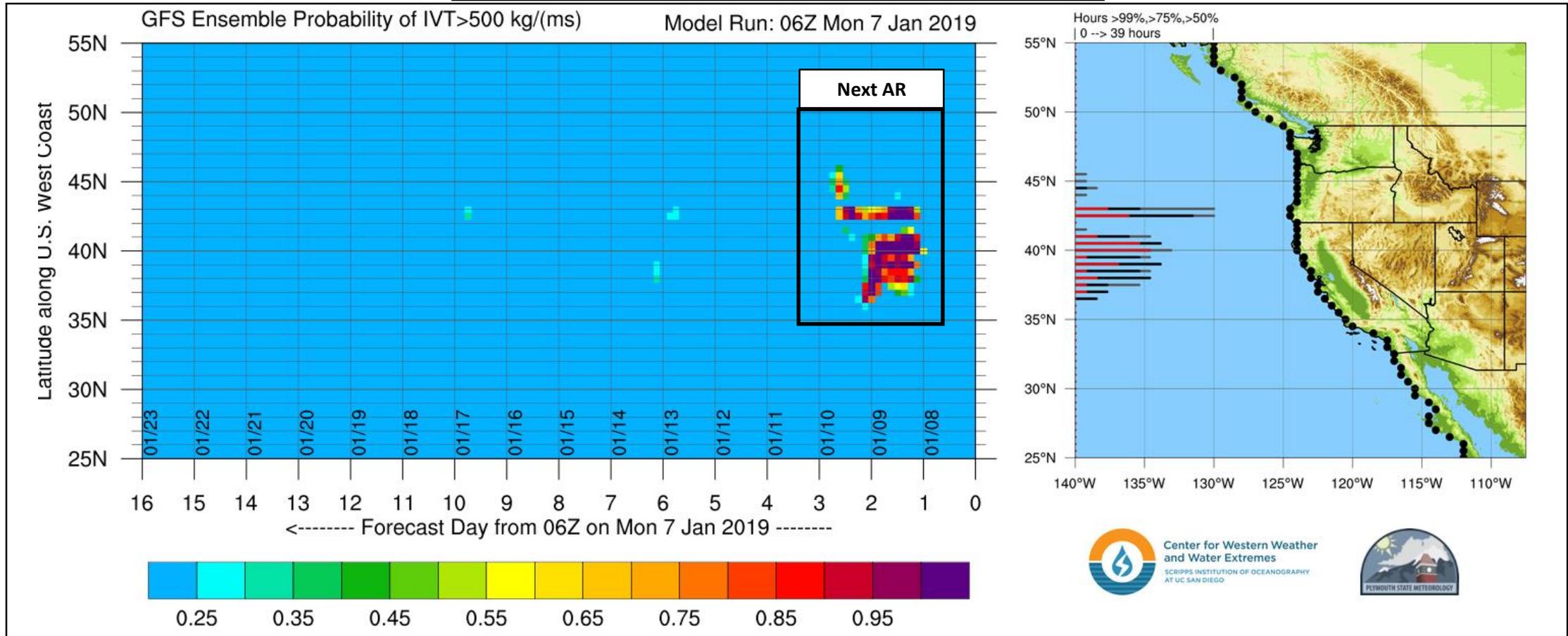
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Odds of Moderate AR Conditions Along Coast



There is also a high probability of moderate AR conditions ($IVT > 500 \text{ kg m}^{-1} \text{ s}^{-1}$) over Northern California and Southern Oregon for ~24 hours between 8 and 10 January 2019



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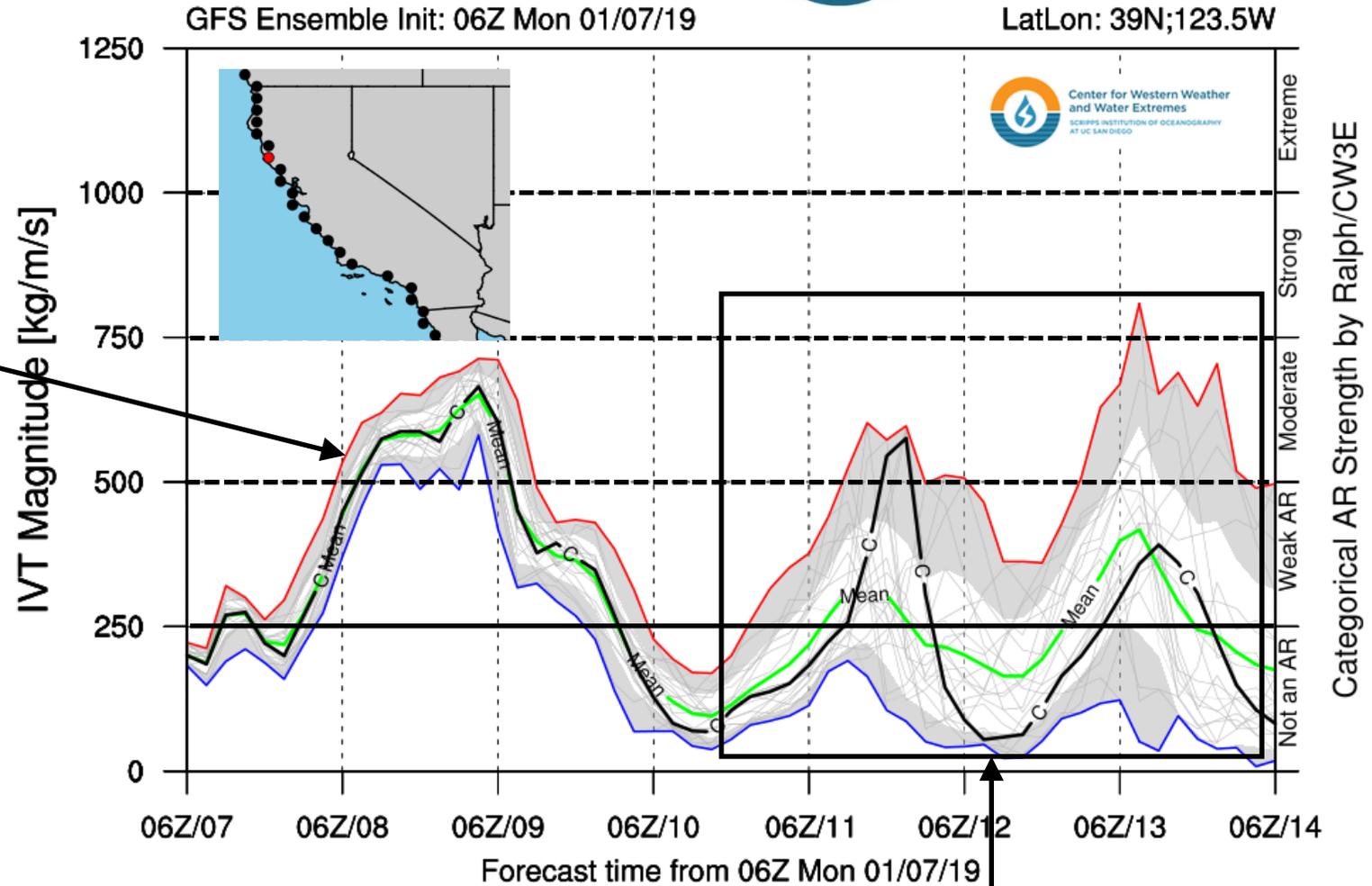
The GEFS is currently forecasting potentially moderate AR conditions for an extended period over the Northern California coast

Forecast Magnitude of AR (8–9 January)

- Maximum predicted IVT $\sim 700 \text{ kg m}^{-1} \text{ s}^{-1}$
- Mean IVT $\sim 650 \text{ kg m}^{-1} \text{ s}^{-1}$
- Minimum IVT $\sim 550 \text{ kg m}^{-1} \text{ s}^{-1}$

Forecast Duration of AR Conditions

- Weak 48 hours \pm 12
- Moderate 24 hours \pm 6

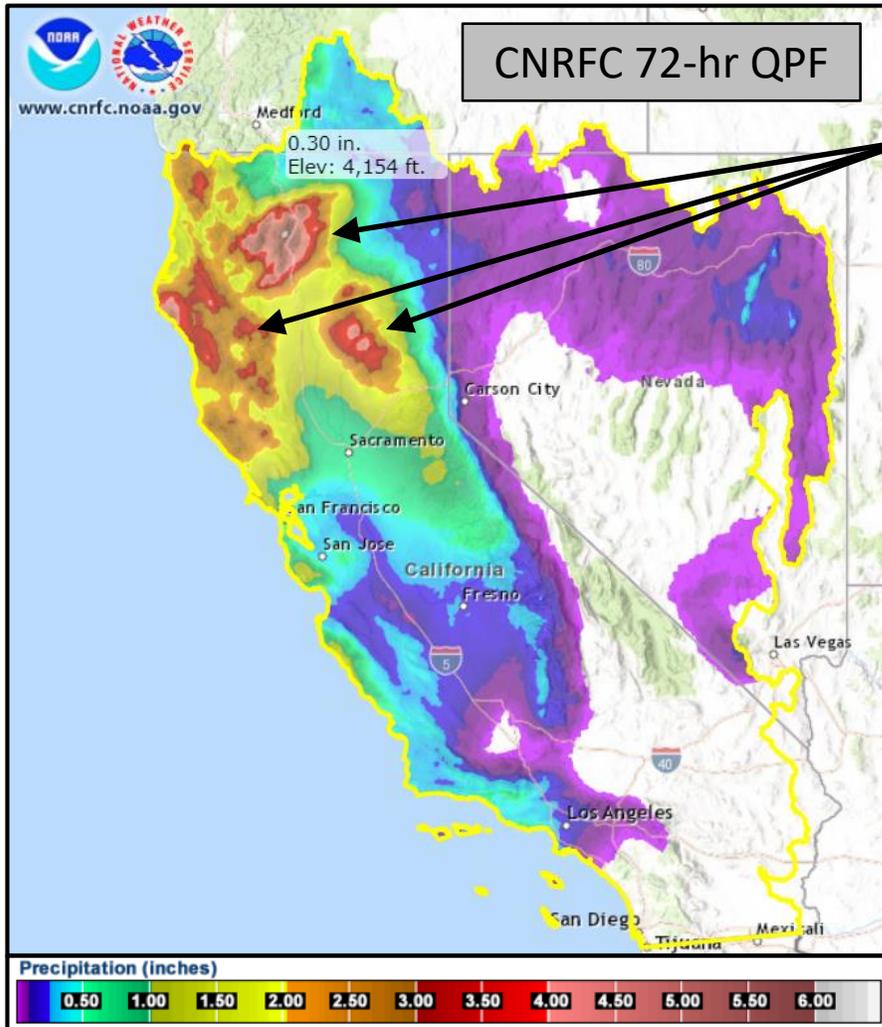


While forecast certainty is currently low, the GEFS is predicting potentially moderate to strong AR conditions within 2 ARs from 11–14 January 2018

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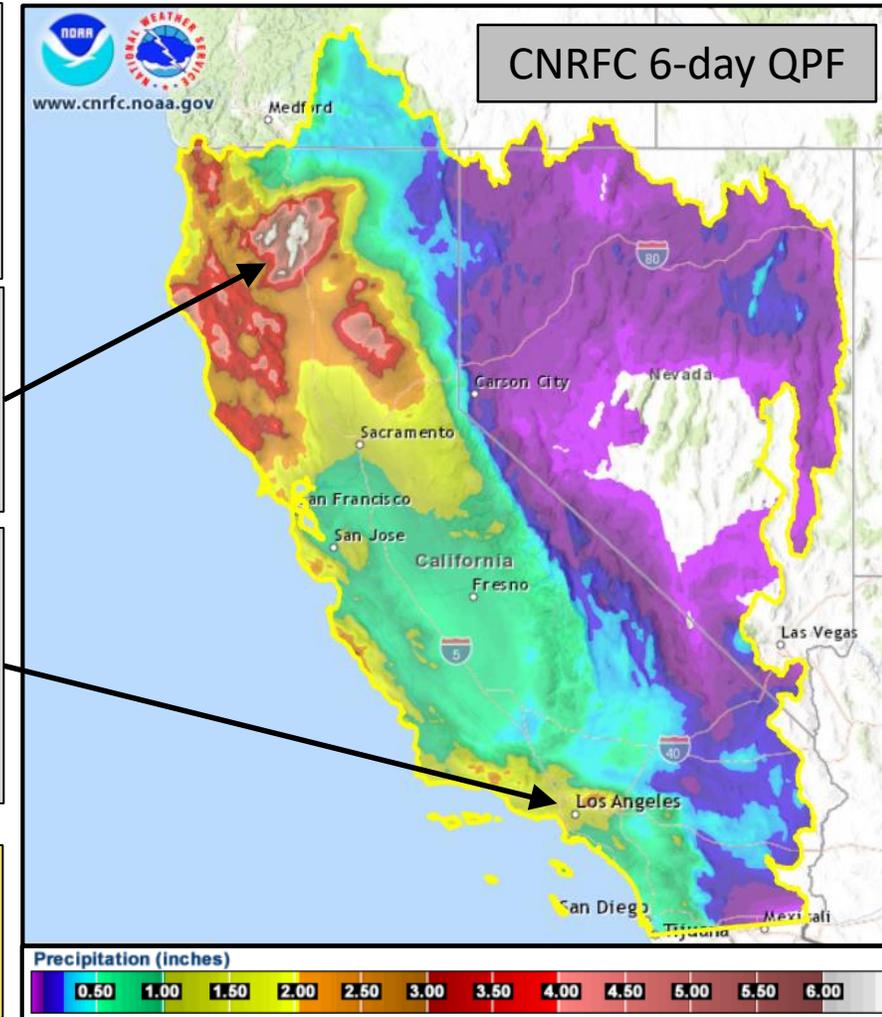


The CNRFC is currently forecasting 2.5–6 inches of precipitation over Northern CA, with locally higher amounts over higher terrain for the next 72-hrs

With additional ARs in the extended forecast, portions of N. CA could receive a total of 3–7 in. of precip. Over the next 6-days

The ARs in the extended forecast could also bring precipitation to southern CA, with 6-day forecast predicting .5 to 2.5 inches of precipitation

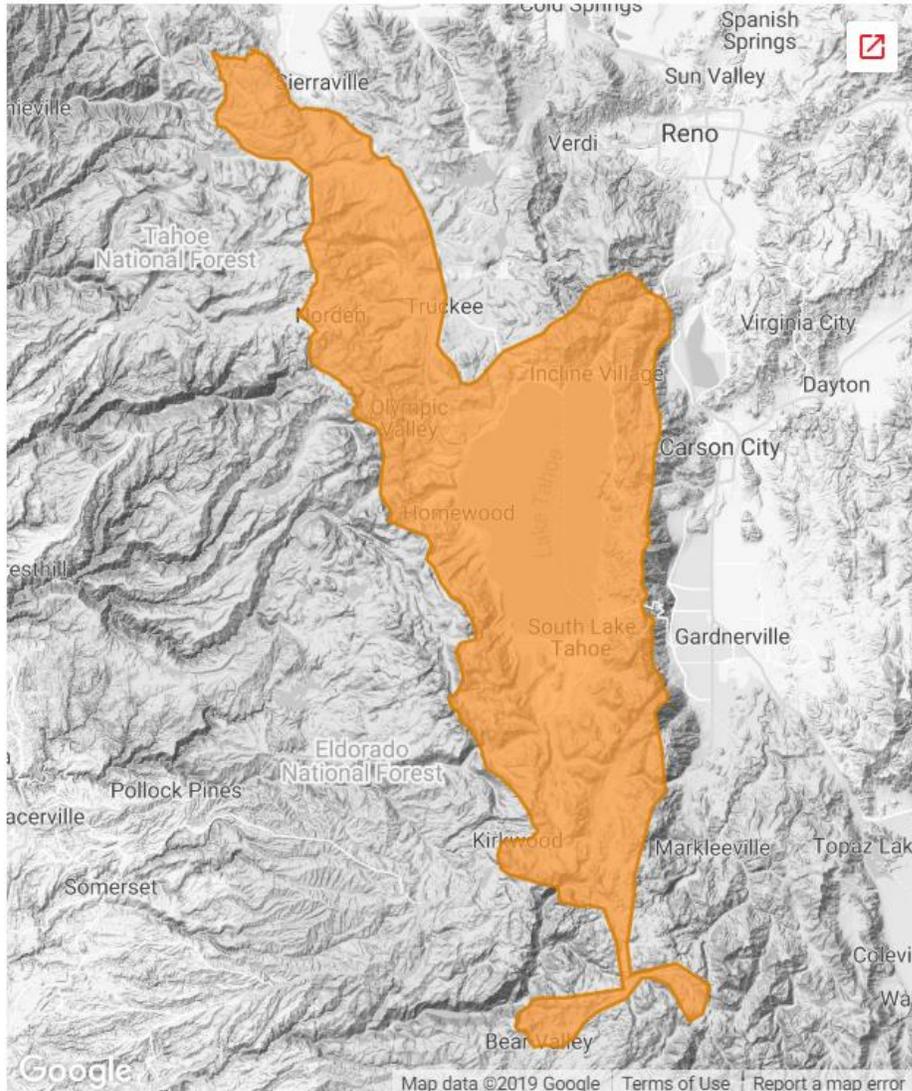
NWS California Nevada River Forecast Center forecast products are located at cnrfc.noaa.gov



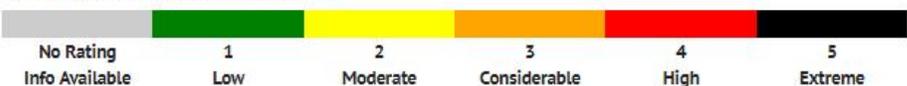
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AVALANCHE DANGER SCALE



Due to recent snowfall and the forecast snowfall associated with the impending AR, the Sierra Avalanche Center has issued an Avalanche Warning for the mountains surround Lake Tahoe

Additional information regarding avalanche warnings and forecasts can be found at www.sierraavalanchecenter.org



SIERRA AVALANCHE CENTER

Backcountry Avalanche, Snow, and Weather Information for the greater Lake Tahoe area

In partnership with:



BOTTOM LINE

[HOW TO READ THE FORECAST](#)

CONSIDERABLE avalanche danger exists at all elevations throughout the forecast region due to **wind slab** and storm **slab avalanche** problems. Dangerous **avalanche** conditions exist with the potential for large destructive **avalanches** today.

