



Update on AR Impacting California

- Three ARs are currently forecast to make landfall over the U.S. West Coast at different times over the next 5 days
- The first AR is forecast to make landfall over the Pacific Northwest today and is associated with strong AR conditions (IVT 750–1000 $\text{kg m}^{-1} \text{s}^{-1}$)
- The second AR is forecast to make landfall over Southern CA from 20 – 22 Jan and is associated with strong AR conditions (IVT 750–1000 $\text{kg m}^{-1} \text{s}^{-1}$)
- The third AR is forecast to make landfall over Central CA and could potentially be associated with strong AR conditions (IVT 750–1000 $\text{kg m}^{-1} \text{s}^{-1}$)
- Forecast uncertainty is currently high with both AR 2 and 3
- Weather Prediction Center precipitation forecasts currently range from 3–9 inches with AR 1, 2–4 inches with AR 2, and 2–5 inches with AR 3

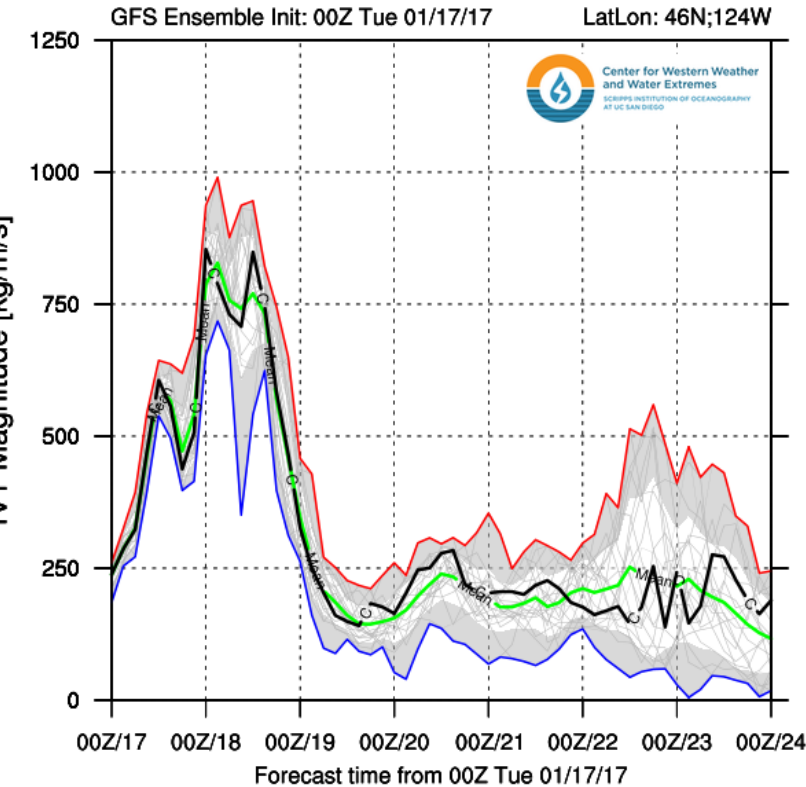
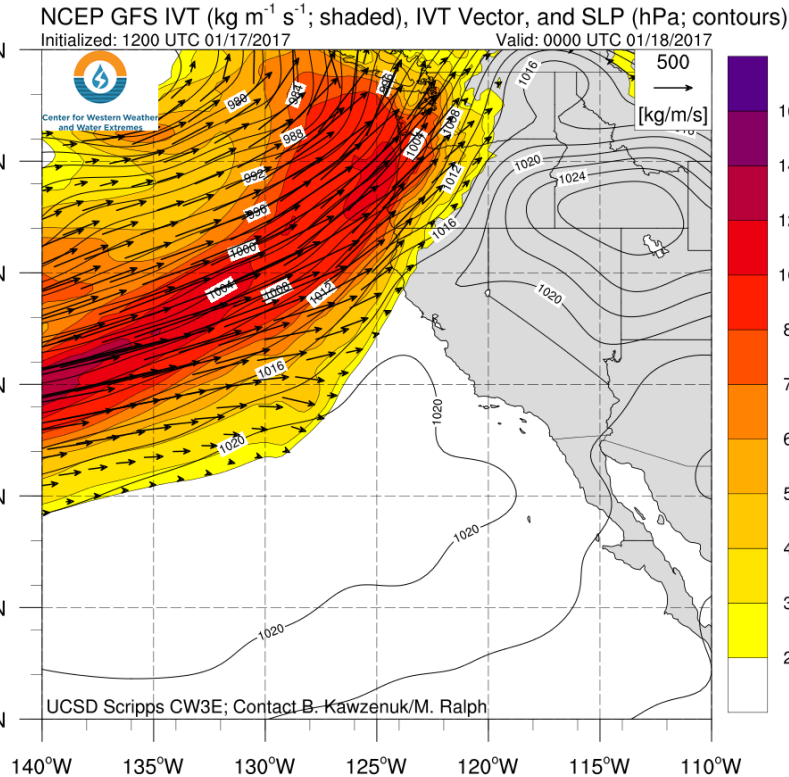
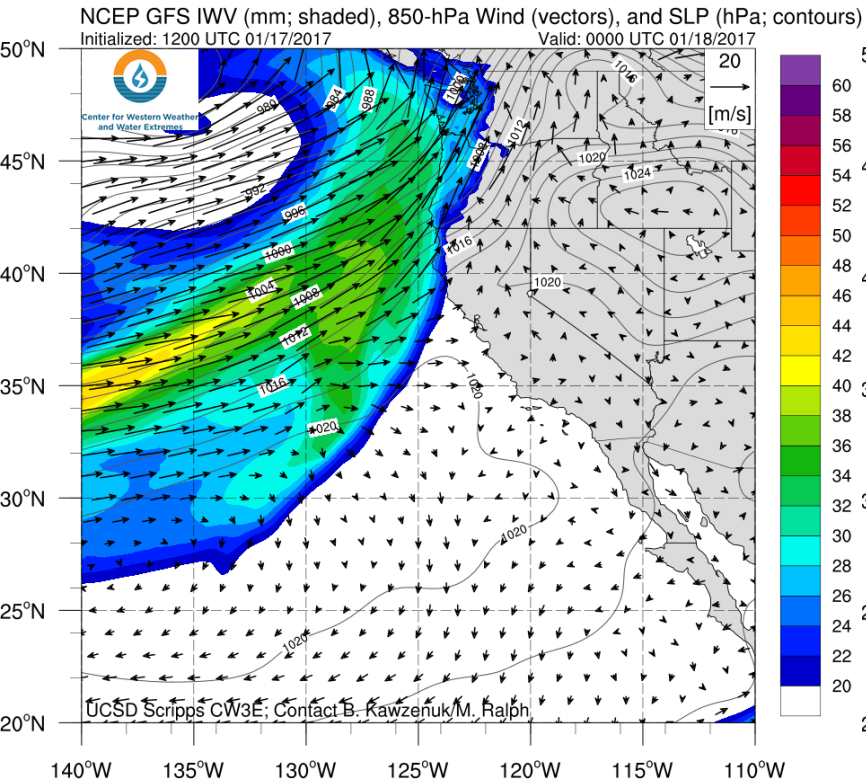
AR Outlook: 17 January 2017

For California DWR's AR Program



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AR 1: 17 – 19 Jan 2017 Pacific NW/Northern CA



- AR 1 is forecast to impact the Pacific Northwest beginning today and ending on 19 January 2017
- Forecasts of IVT magnitude range from ~ 700 to $900 \text{ kg m}^{-1} \text{s}^{-1}$ (Potentially Strong AR)

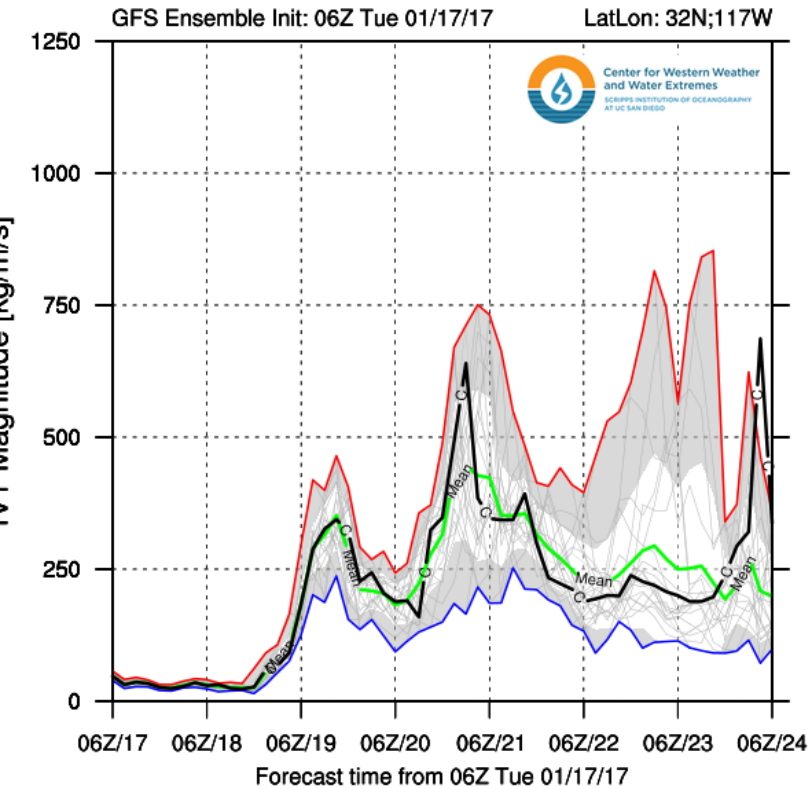
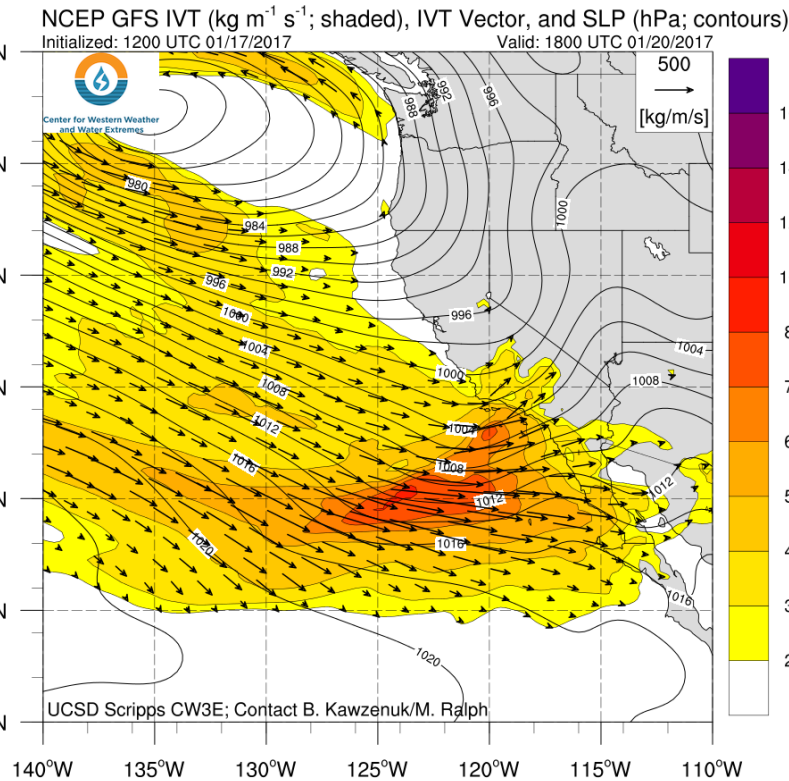
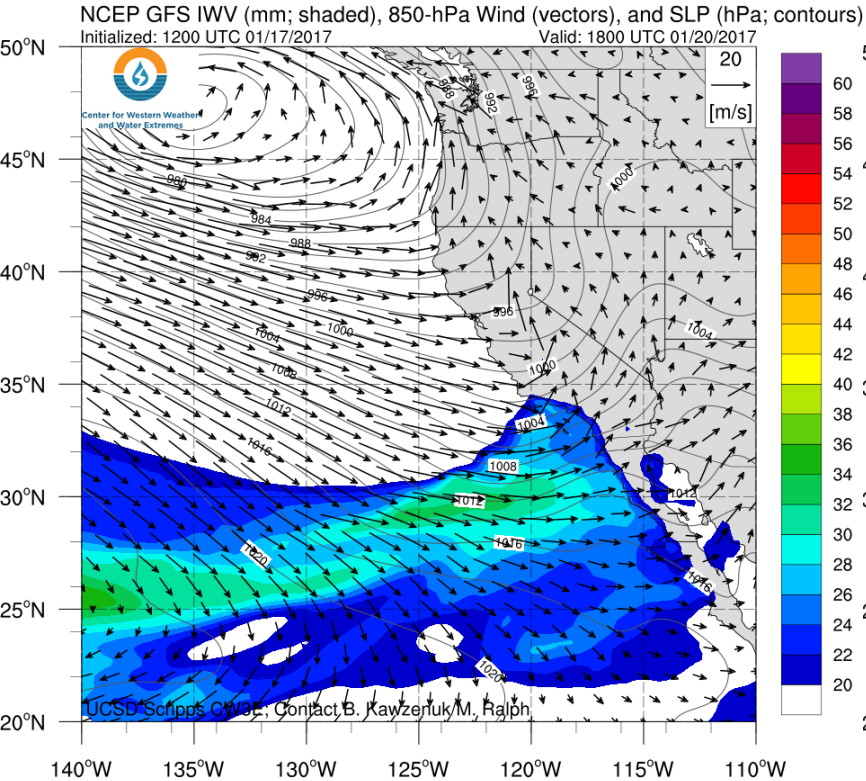
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AR 2: 20 – 22 Jan 2017 Southern CA



- AR 2 is forecast to impact Southern California from 20 to 22 Jan 2017
- Forecasts of IVT magnitude range from ~ 250 to $750 \text{ kg m}^{-1} \text{s}^{-1}$ (Weak to Moderate AR)

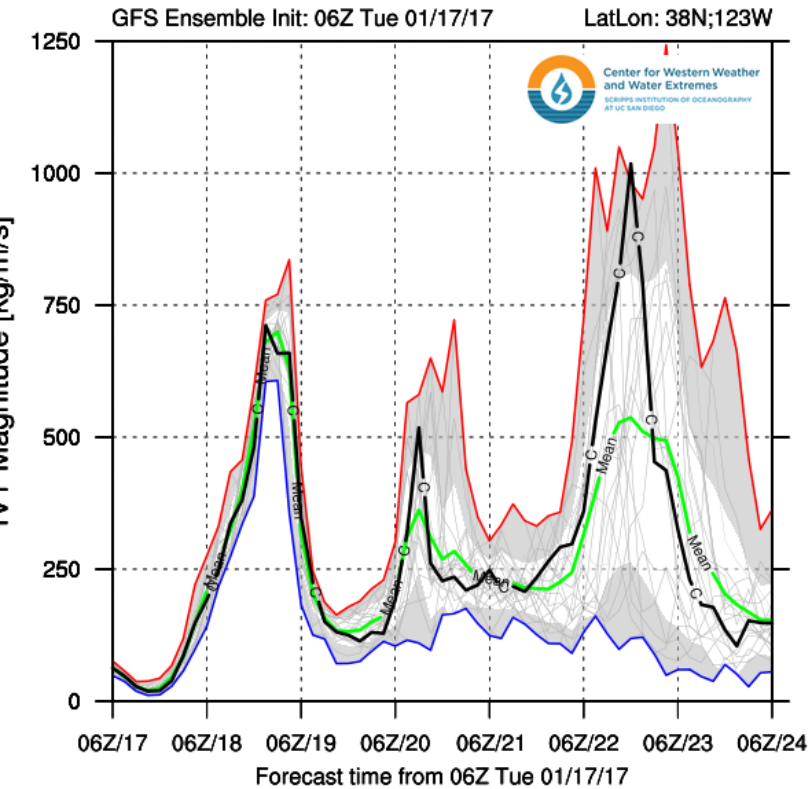
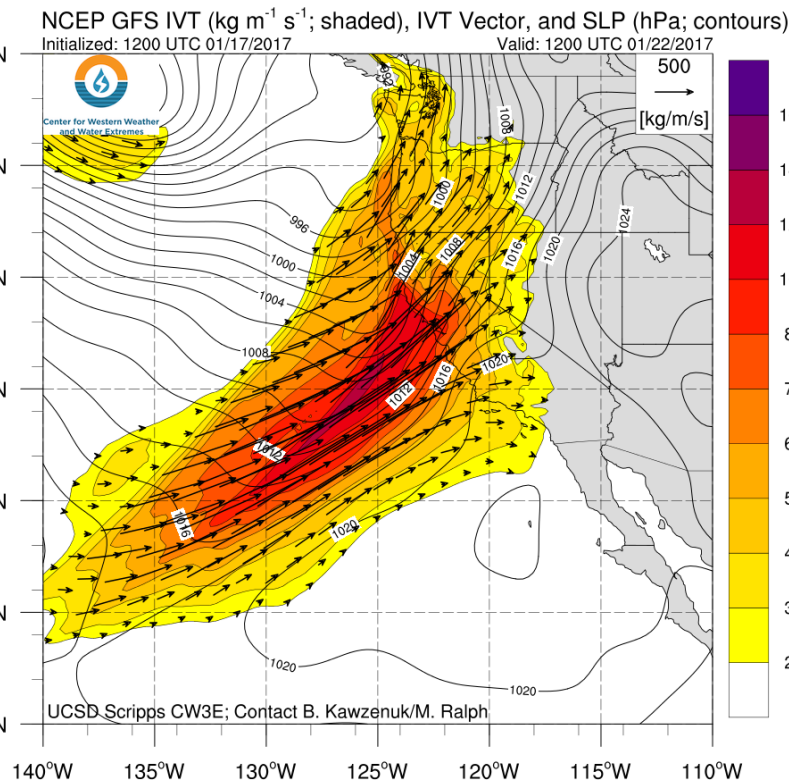
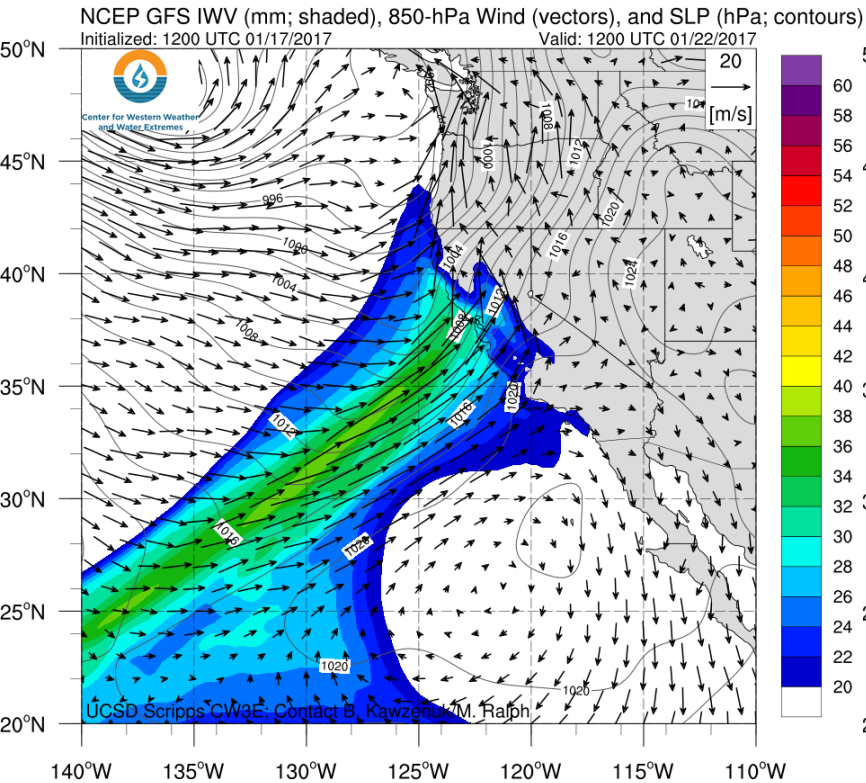
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AR 3: 22 – 24 Jan 2017 Central CA



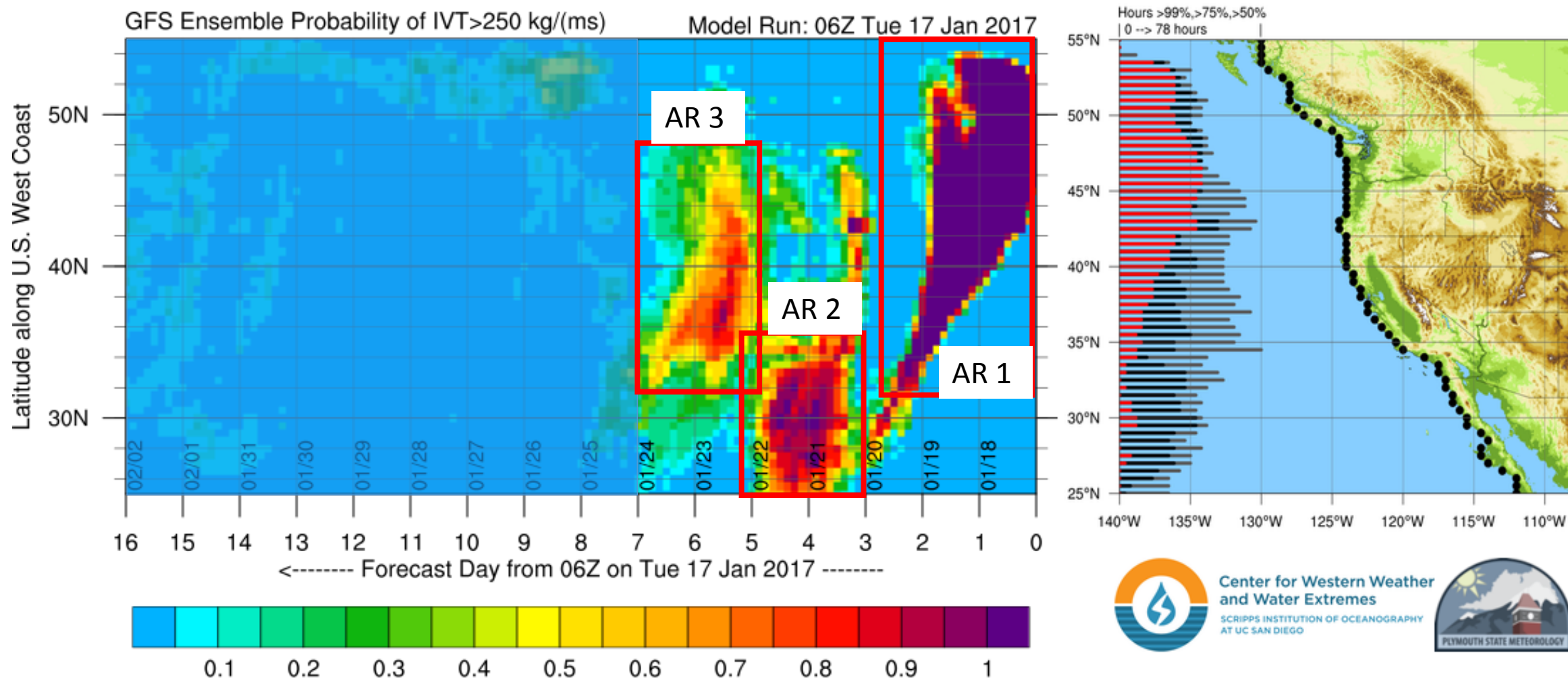
- AR 3 is forecast to impact Southern California from 20 to 22 Jan 2017
- Forecasts of IVT magnitude range from <250 to $>1000 \text{ kg m}^{-1} \text{s}^{-1}$ (Weak to Strong AR)
- Very high uncertainty in forecasts of IVT magnitude

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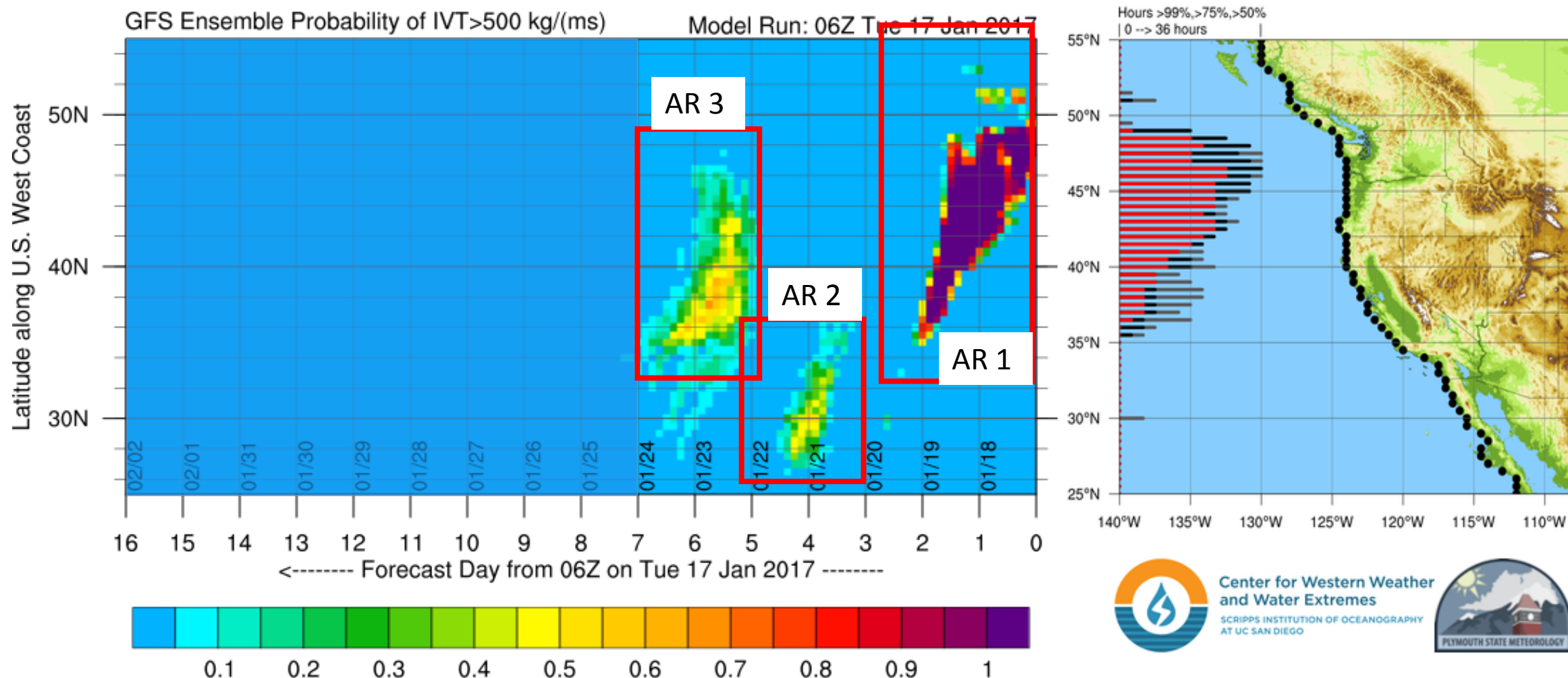
- High probability of AR conditions ($\text{IVT} > 250 \text{ kg m}^{-1} \text{ s}^{-1}$) associated with AR 1 for up to 48-h in some locations
- Lower probability of AR conditions ($\text{IVT} > 250 \text{ kg m}^{-1} \text{ s}^{-1}$) associated with AR 2 for ~24-h over southern CA
- Low certainty of AR conditions ($\text{IVT} > 250 \text{ kg m}^{-1} \text{ s}^{-1}$) associated with AR 3 in Central CA

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- Moderate AR conditions ($\text{IVT} > 500 \text{ kg m}^{-1} \text{ s}^{-1}$) could potentially last ~24-hrs in the Pacific Northwest (WA and OR)
- Low probability of Moderate AR conditions ($\text{IVT} > 500 \text{ m}^{-1} \text{ s}^{-1}$) associated with AR 3 and 4

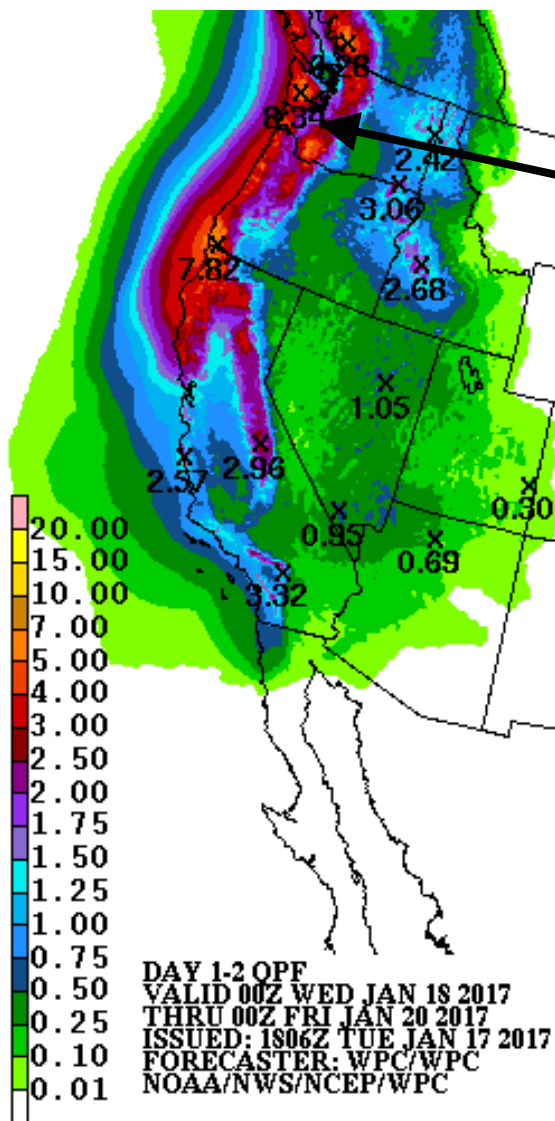
Summary by C. Hecht and F.M. Ralph 3 PM PT Mon 17 Jan. 2017

AR Outlook: 17 January 2017

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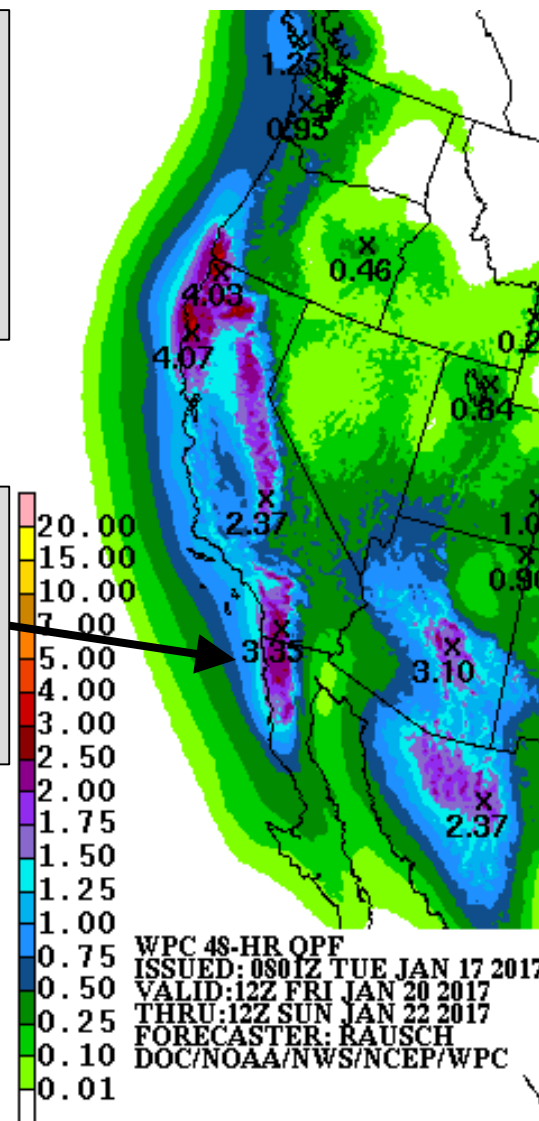


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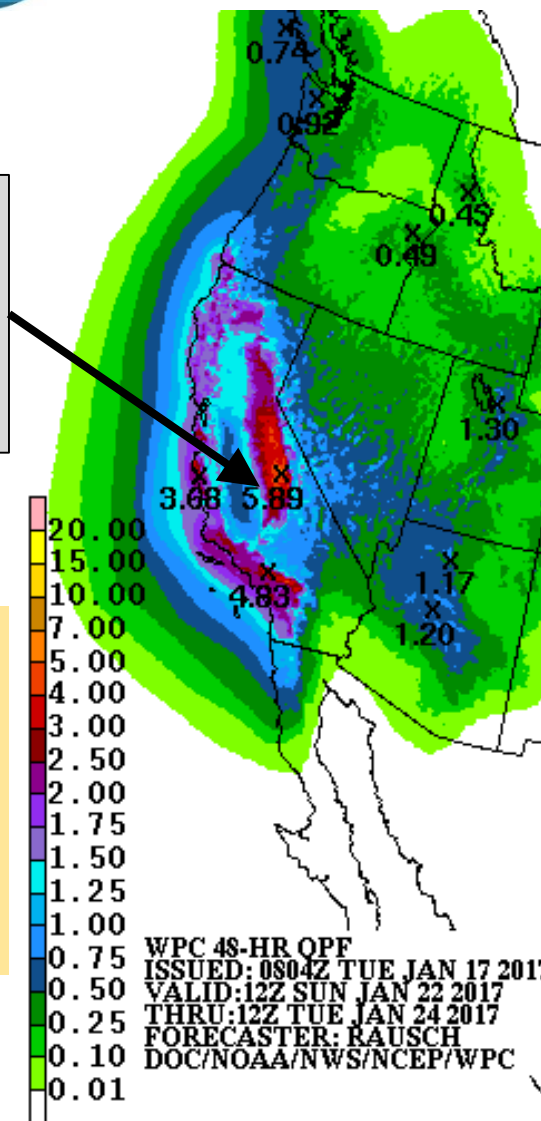
1 – 2 day WPC
precipitation
forecasts >8 inches
over the Cascade
Mts. Associated with
AR 1

Day 4/5 WPC
precipitation
forecasts >3 inches
over Southern CA
associated with AR 2



Day 6/7 WPC
precipitation
forecasts >5 inches
over the Sierra's
associated with AR 3

For Official NOAA-
NWS Precipitation
Forecasts see
www.wpc.ncep.noaa.gov/qpf/qpf2.shtml





Summary AR 1:

- Strong AR conditions (IVT 750–1000 kg m⁻¹ s⁻¹) forecast to impact the Pacific Northwest from 17 - 19 Jan 2017
- High confidence in forecasts of IVT magnitude and duration
- Precipitation forecasts >8 inches in northwestern WA

Summary AR 2:

- Weak to moderate AR conditions (IVT 250–750 kg m⁻¹ s⁻¹) forecast to impact Southern California 20–22 Jan 2017
- Lower confidence in forecasts of IVT magnitude and duration
- 48-h precipitation forecasts range from 2–3 inches over portions of Southern CA

Summary AR 2:

- Potentially strong AR conditions (IVT >750 kg m⁻¹ s⁻¹) forecast to impact Central California 22–24 Jan 2017
- Very high uncertainty in timing, duration, and magnitude of AR conditions
- 48-h precipitation forecasts range from 3–6 inches over portions of Central CA