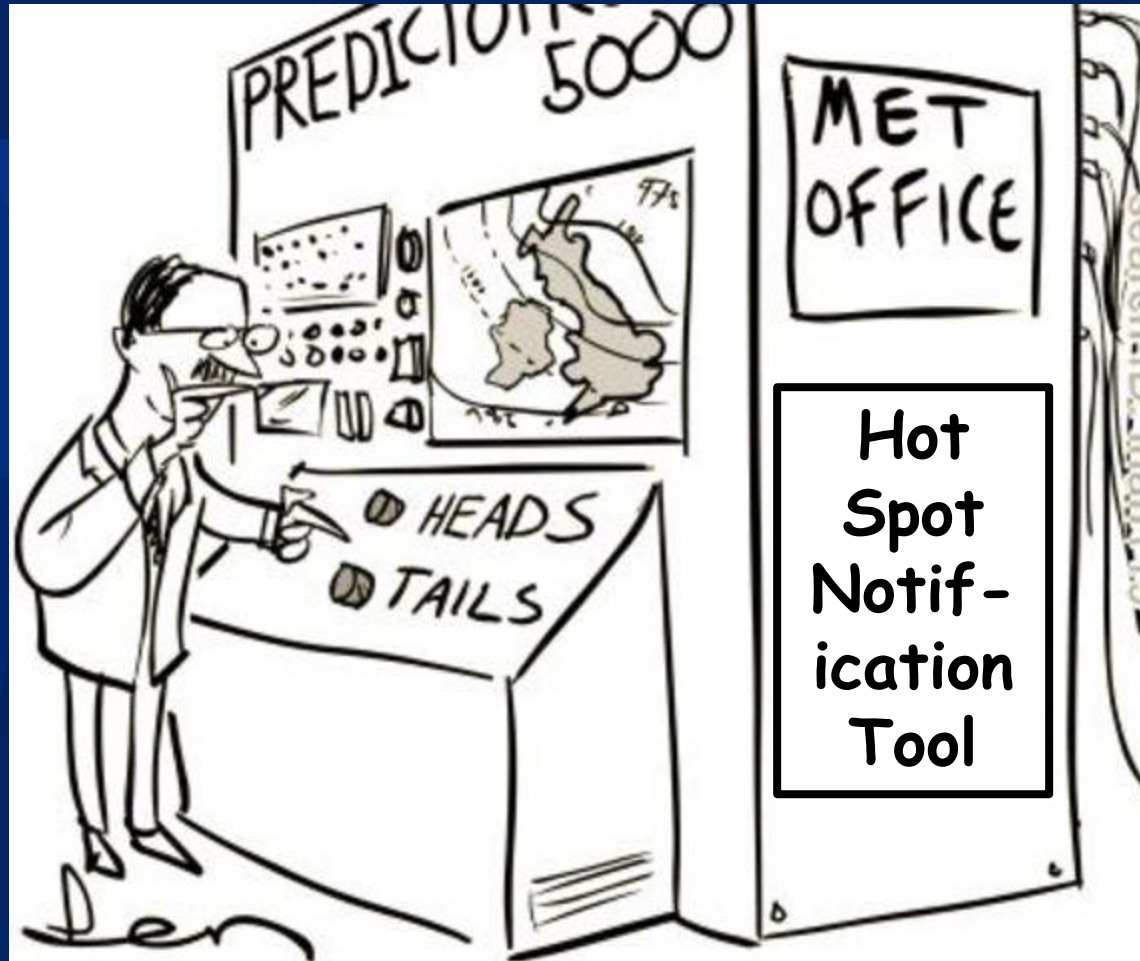


Fire Season Outlook & NWS Amarillo Updates

Mike Gittinger & Ken Schneider

**Warning Coordination Meteorologist / Senior Forecaster
National Weather Service Amarillo, TX**

Just Do We Predict Weather?



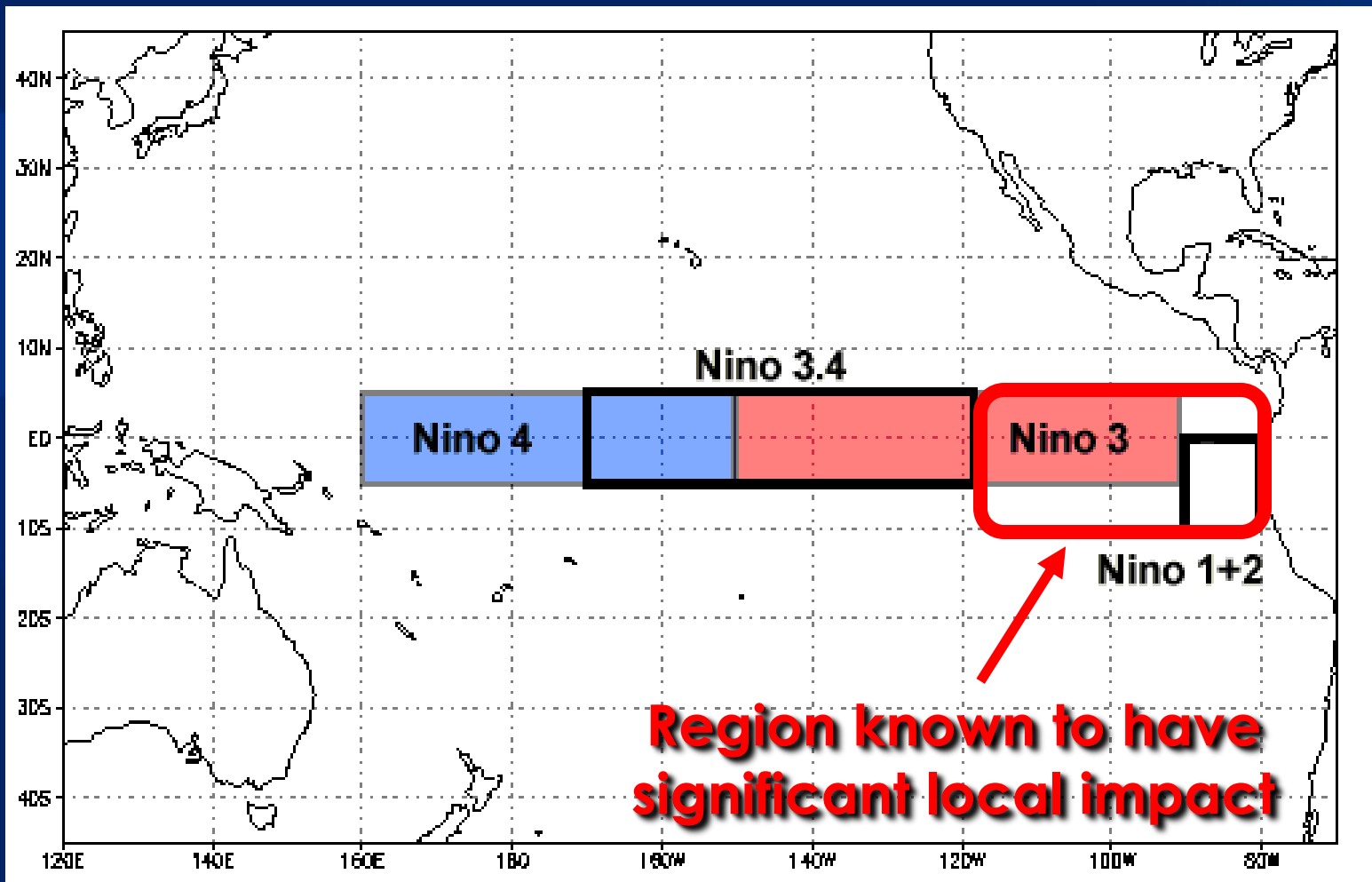


El Niño / La Niña
(AKA ENSO) Update

**How will this impact the
Seasonal Outlook?**

How is it Measured?

Nino 3.4 Typically Reference for Strength of the Event

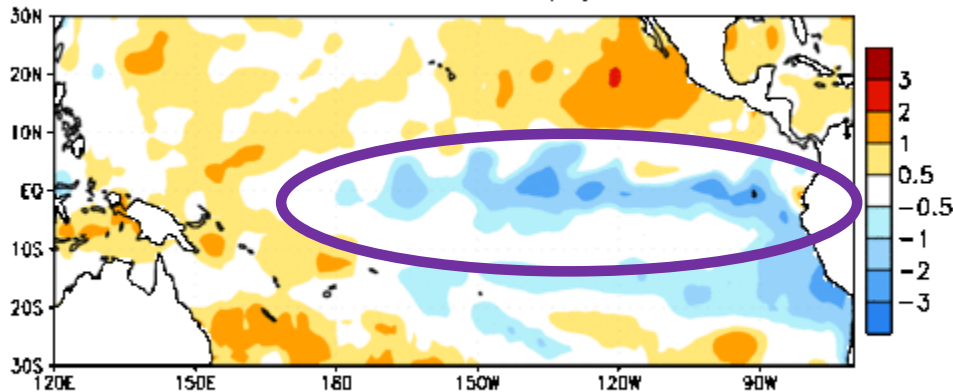


Recent SST Trends

Sea Surface Temperatures (SSTs)

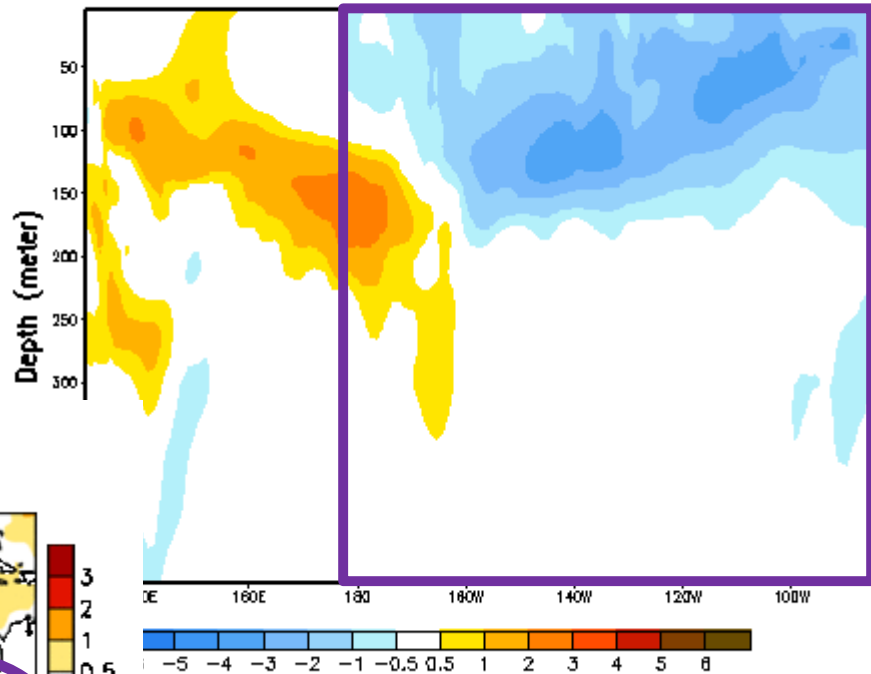
SST Anomalies

Week centered on 08 NOV 2017
SST Anomalies (°C)

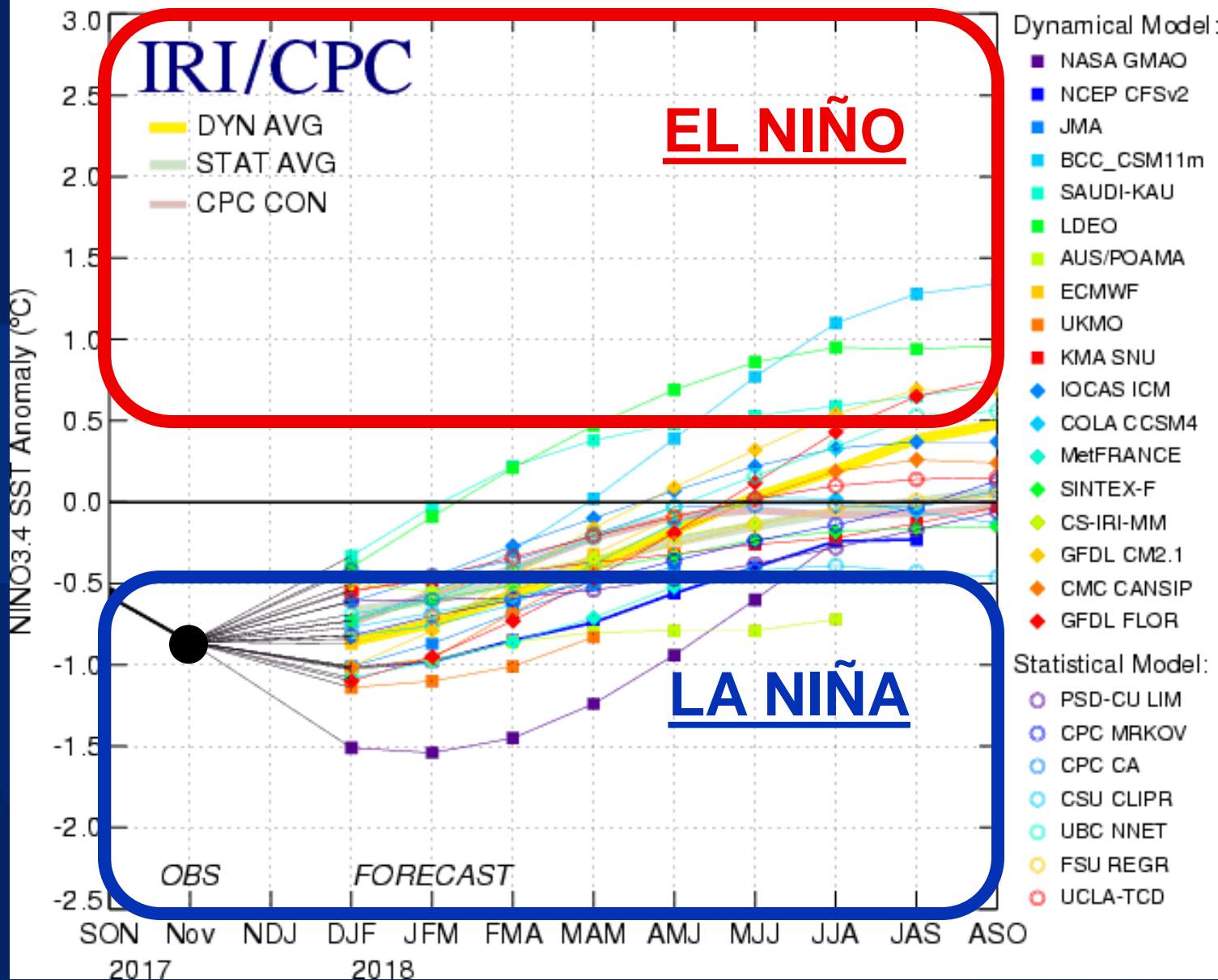


Equatorial Temperature Anomaly (°C)

Pentad centered on 24 NOV 2017



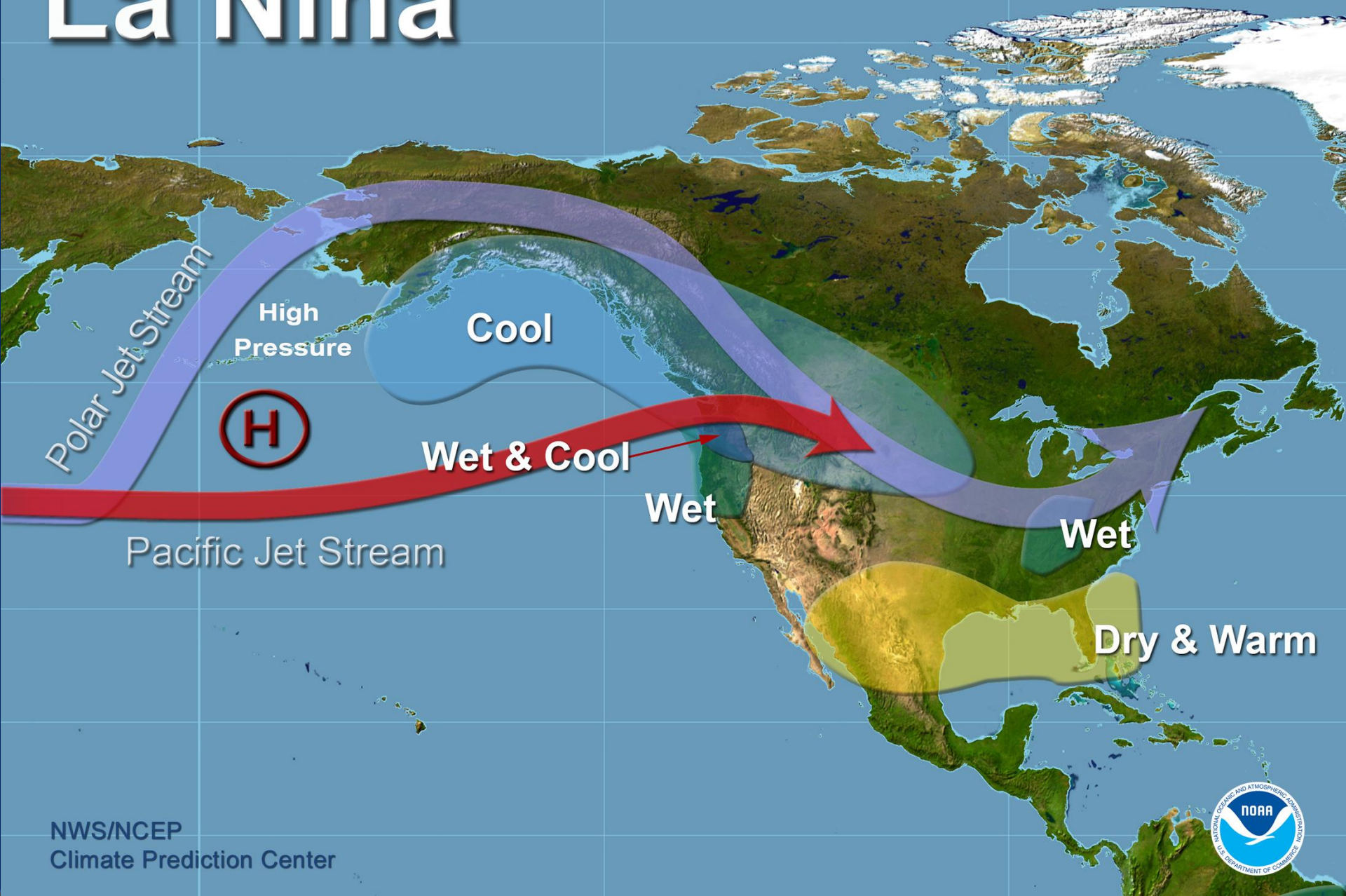
Mid-Dec 2017 Plume of Model ENSO Predictions



- ENSO is measured in 3 month averages
- 3 consecutive three month averages ± 0.5 required to declare an event

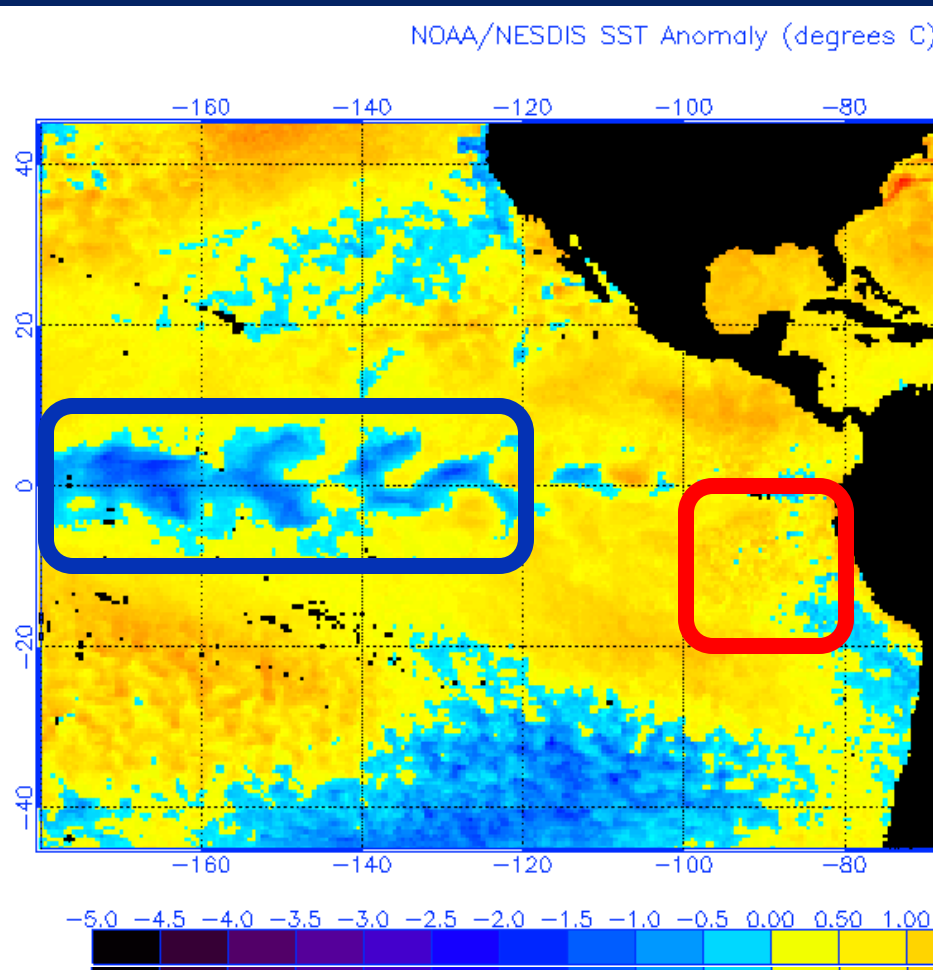
Typical Wintertime Pattern

La Niña

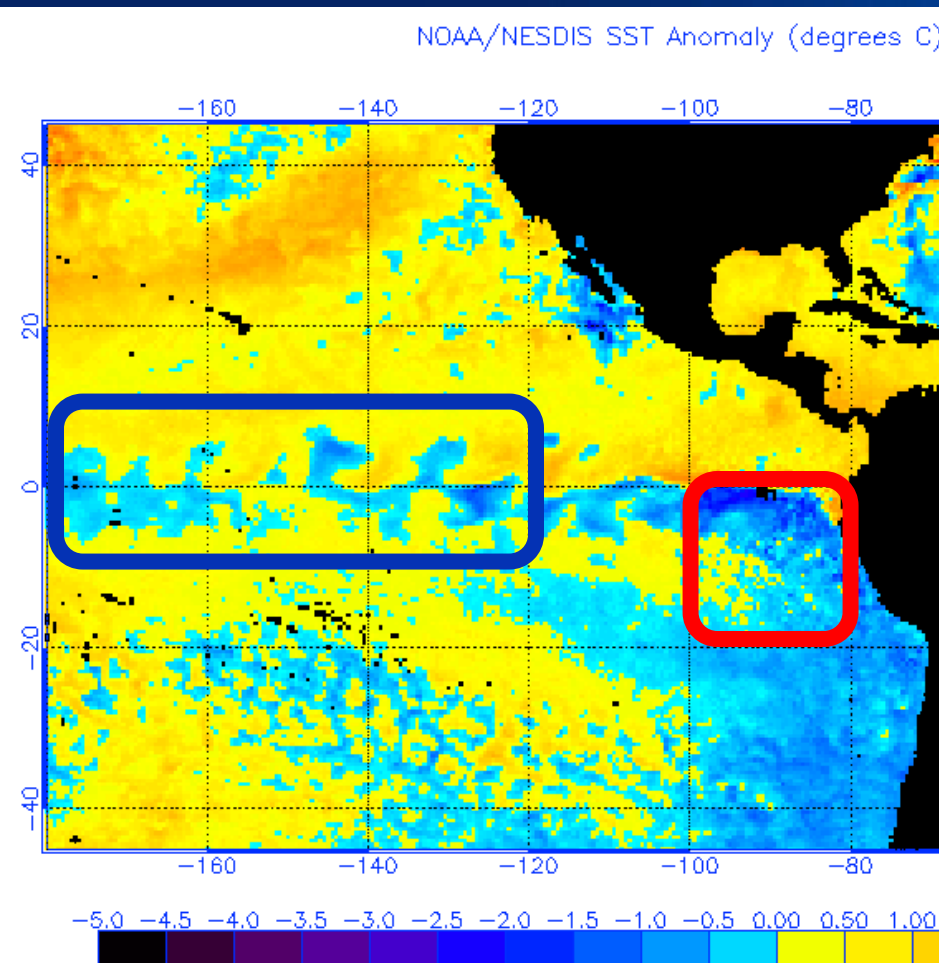


Comparison

Why 2016-17 La Niña so Much Less Impact than 17-18?



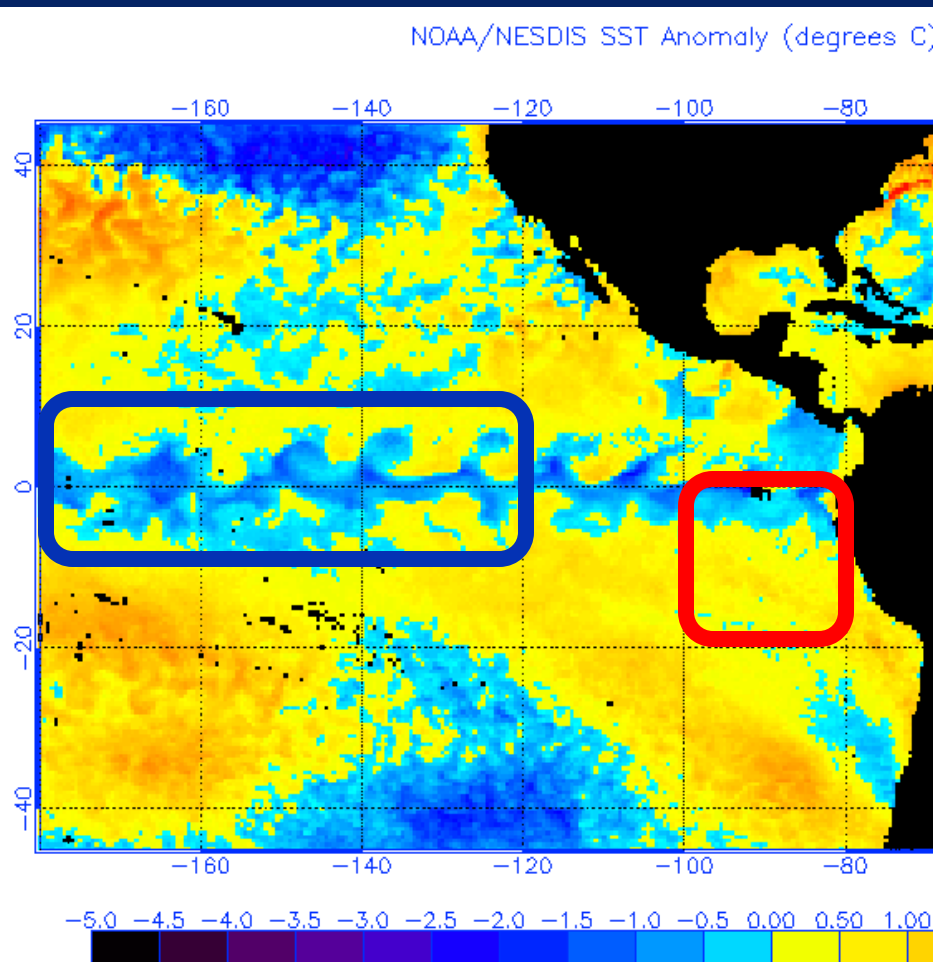
Oct 3, 2016



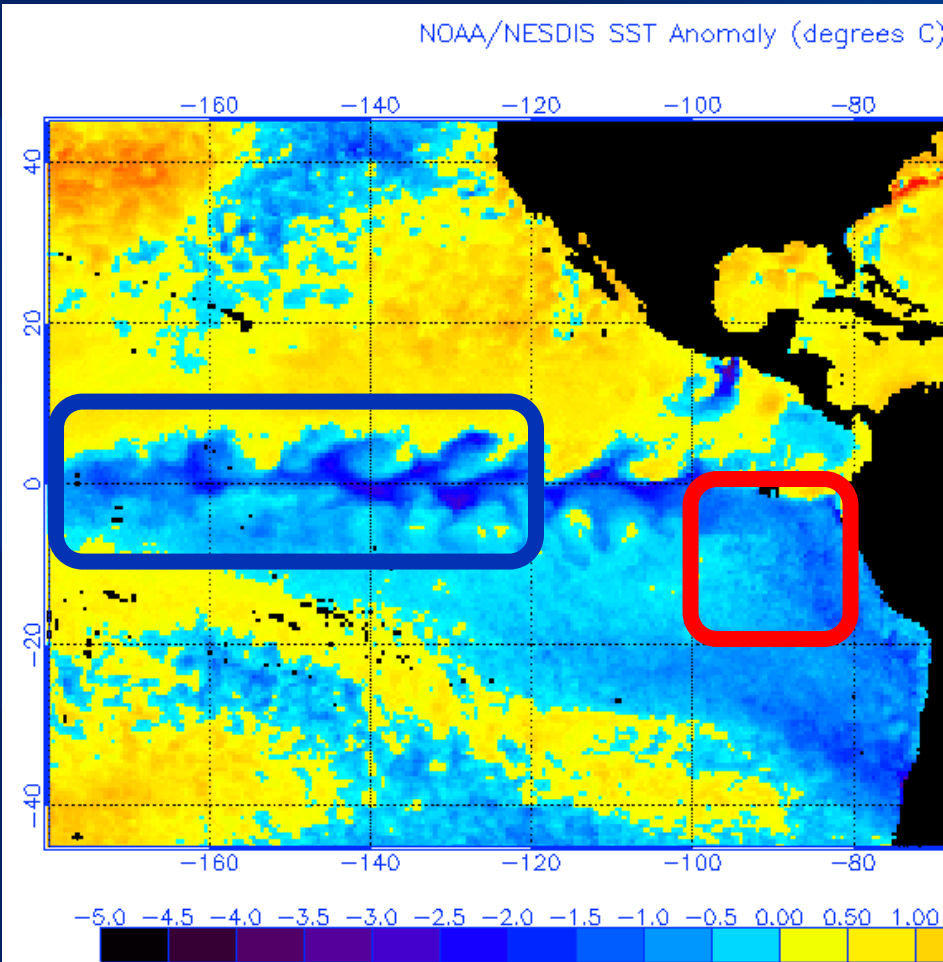
Oct 2, 2017

Comparison

Why 2016-17 La Niña so Much Less Impact than 17-18?



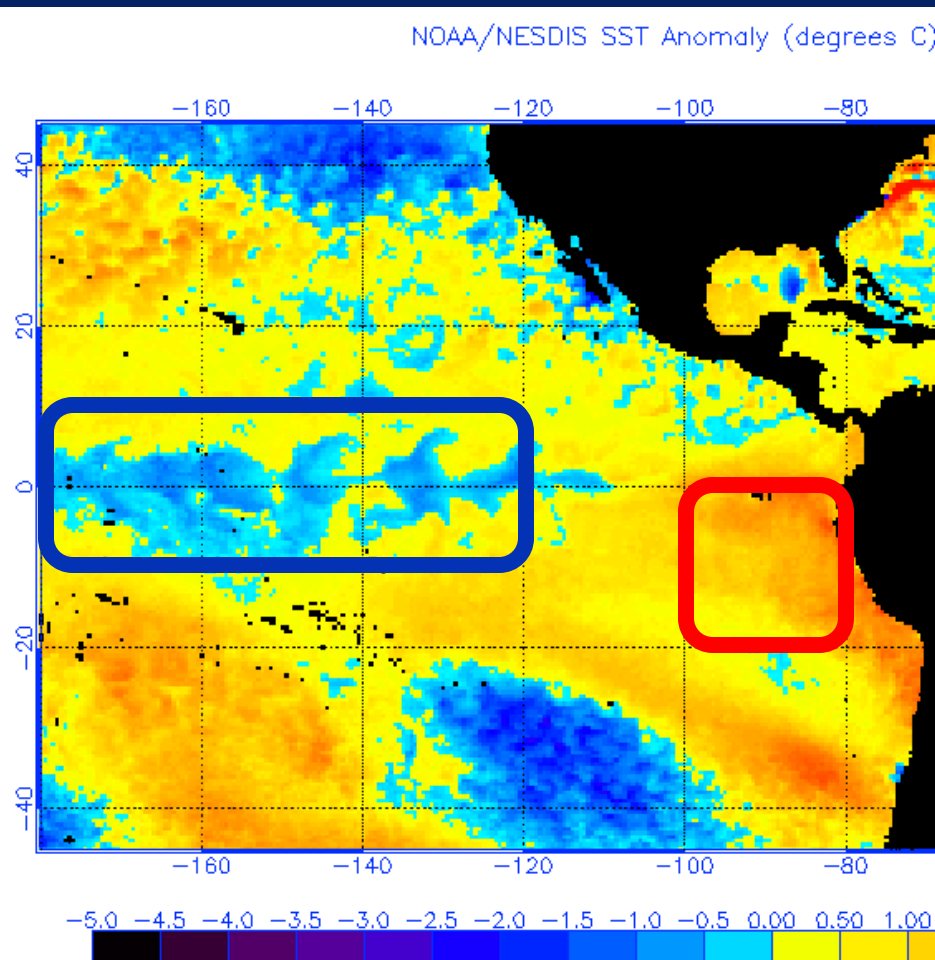
Dec 5, 2016



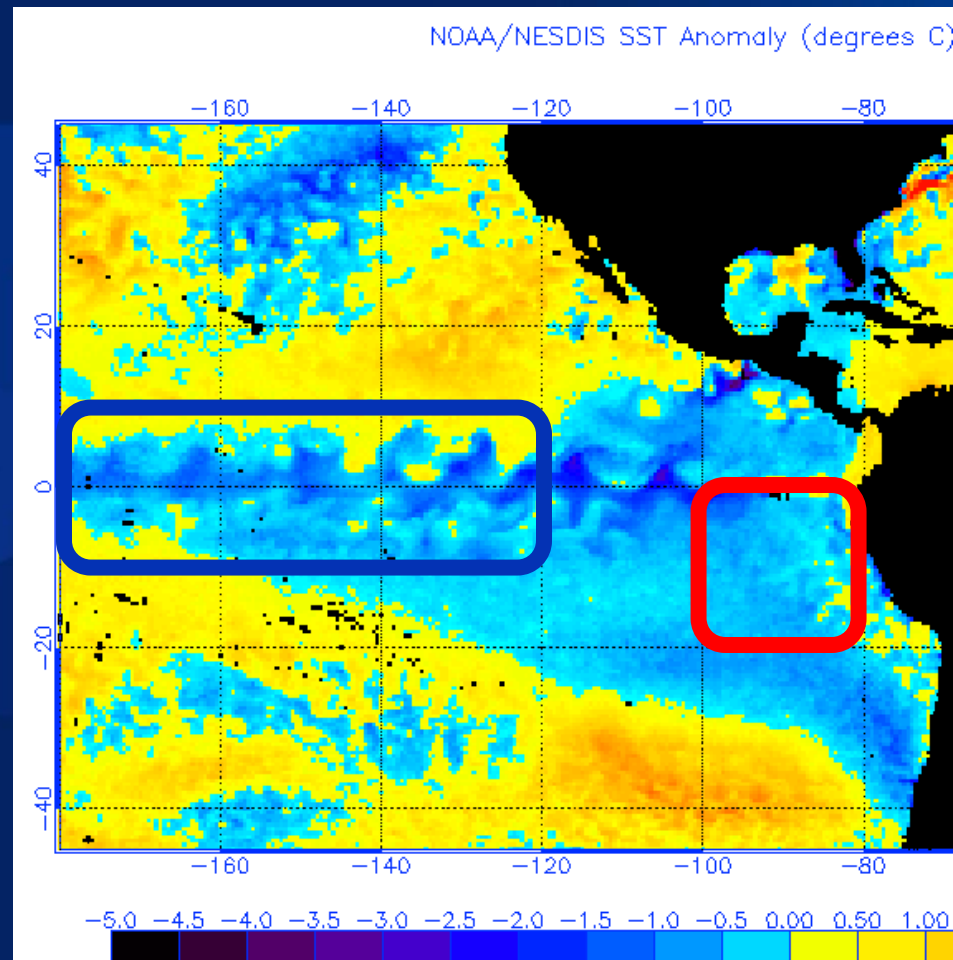
Dec 4, 2017

Comparison

Why 2016-17 La Niña so Much Less Impact than 17-18?

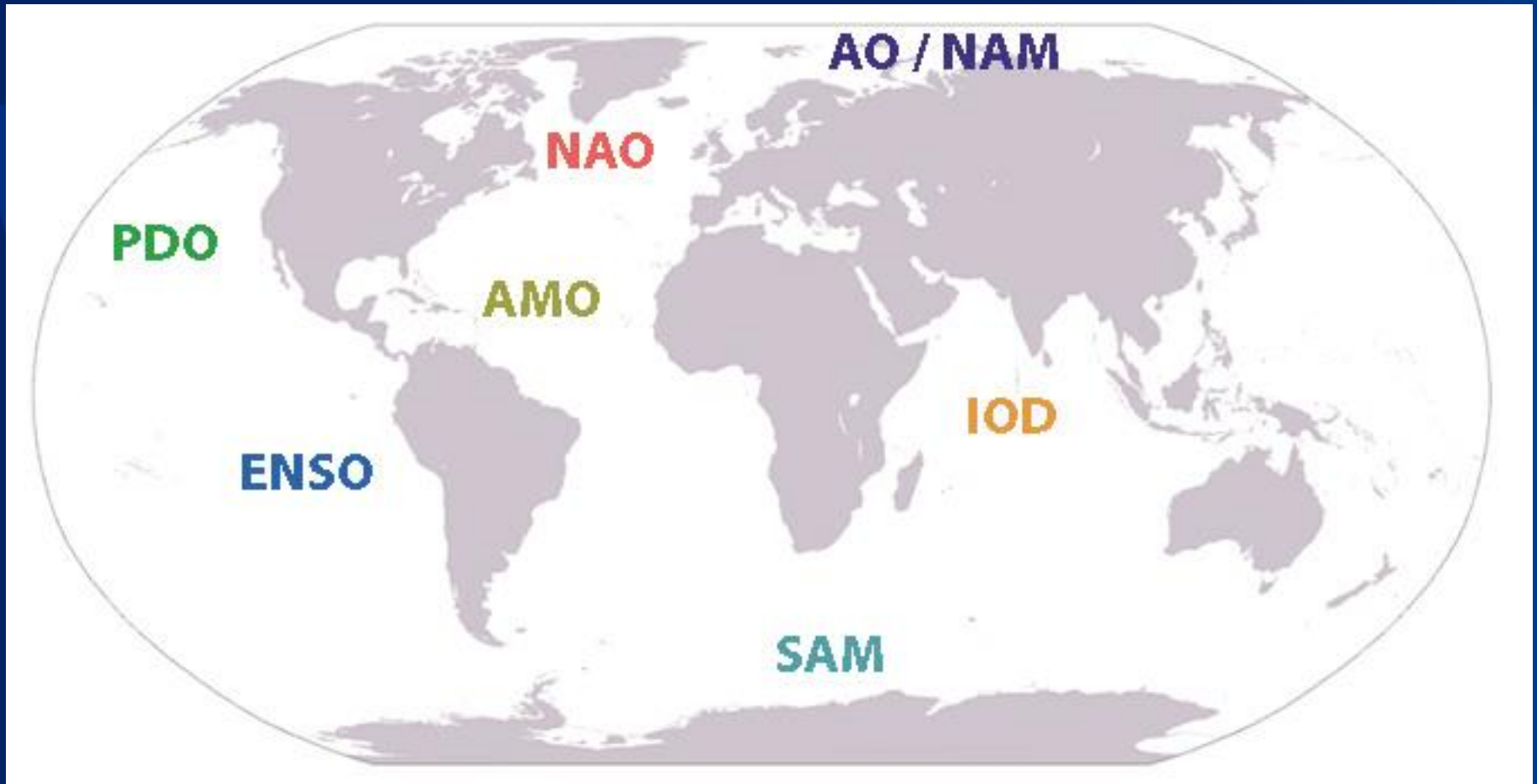


Jan 30, 2017



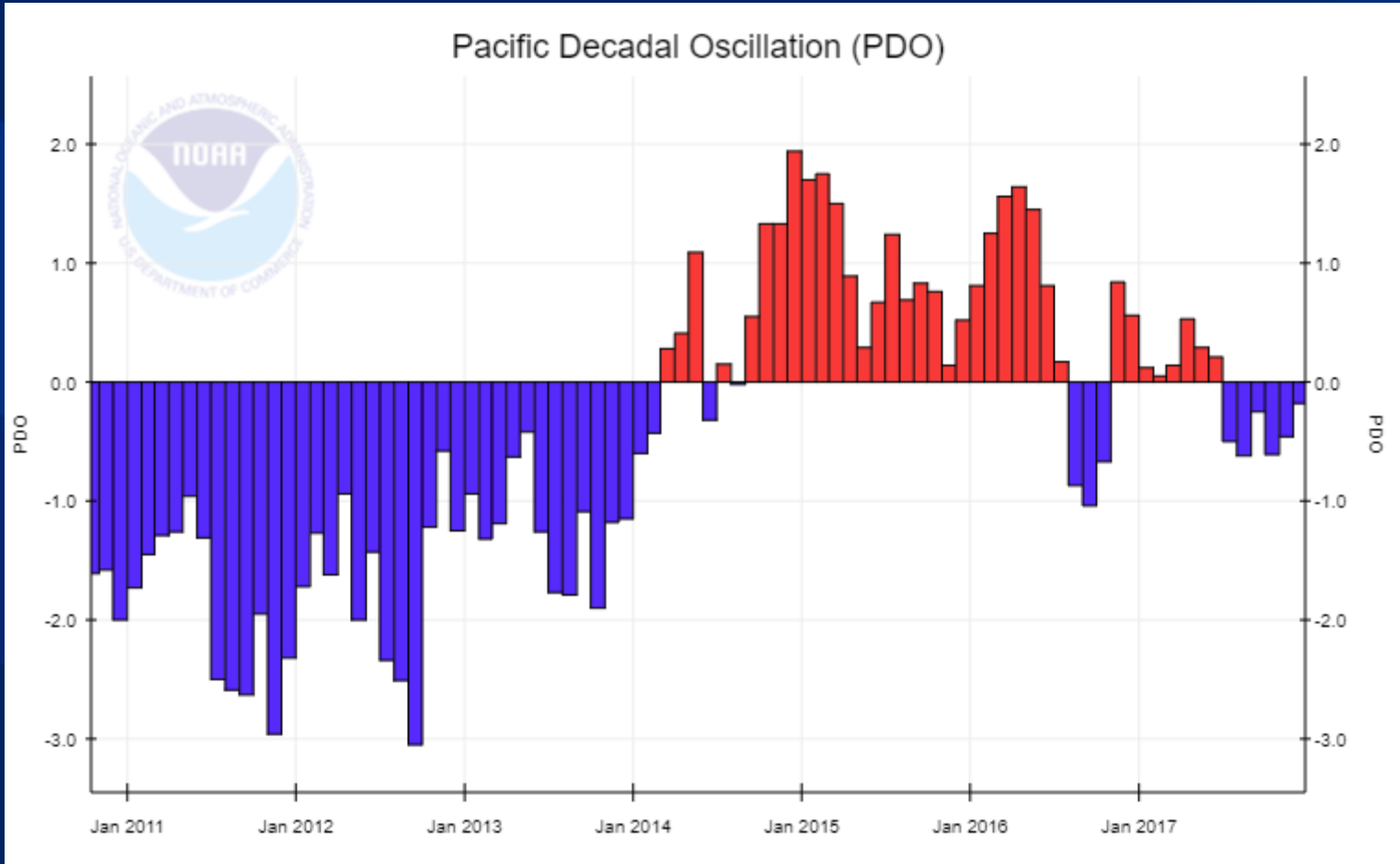
Jan 25, 2018

Other Important Oscillations



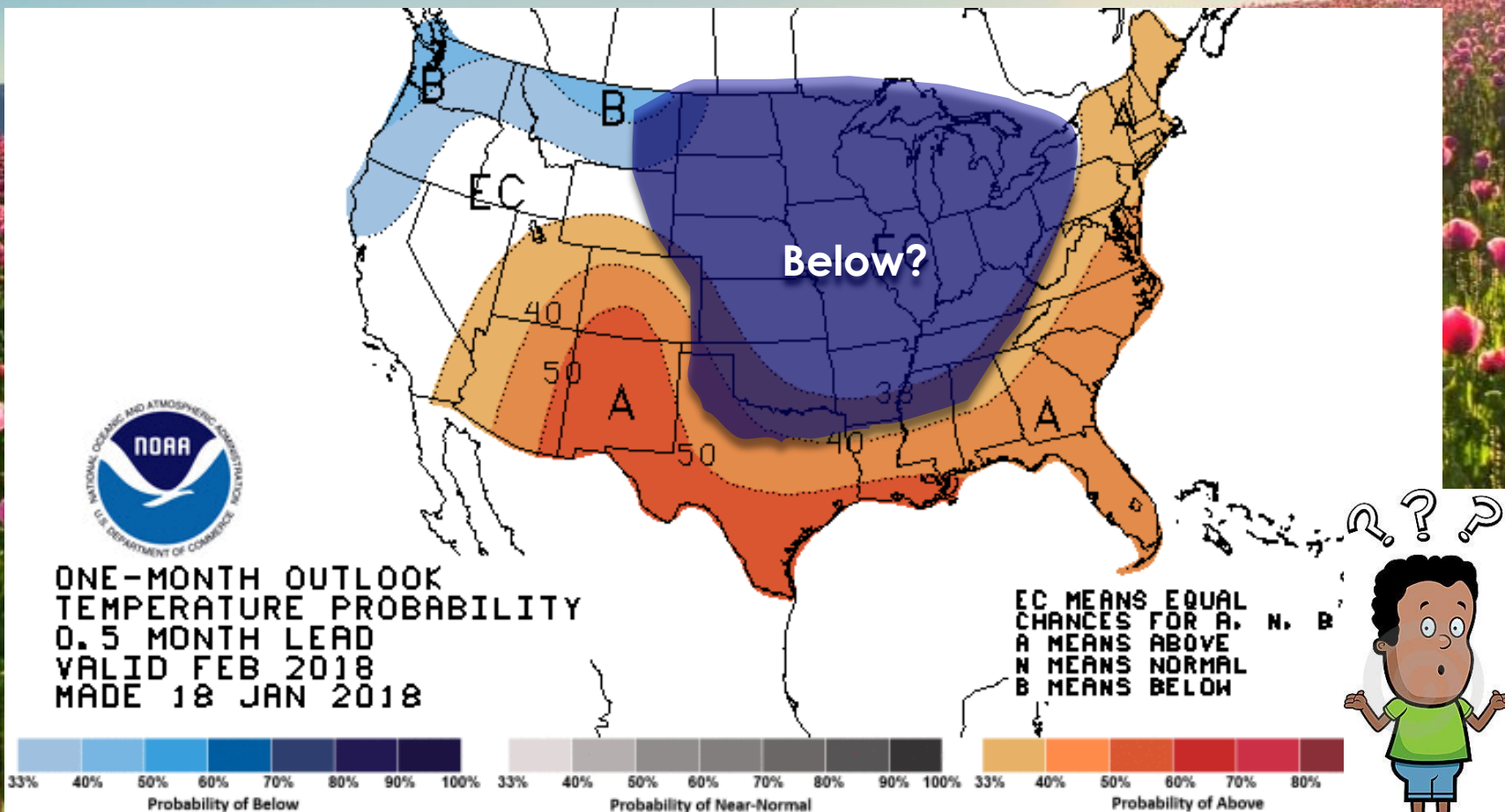
Pacific Decadal Oscillation (PDO)

Negative PDO Promotes Dry Conditions in Panhandles



February Outlook

Temperature

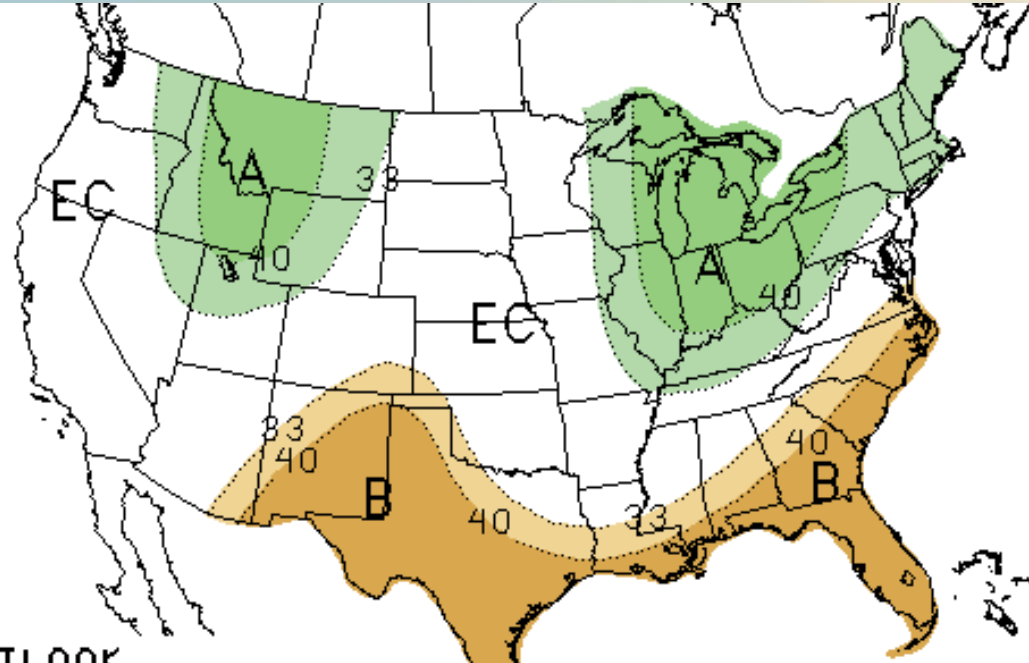


February Outlook

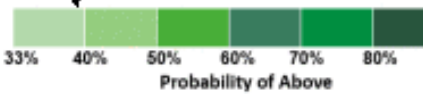
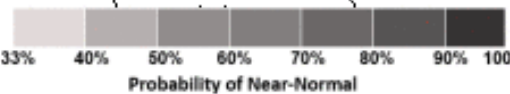
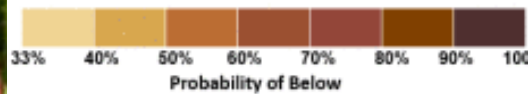
Precipitation



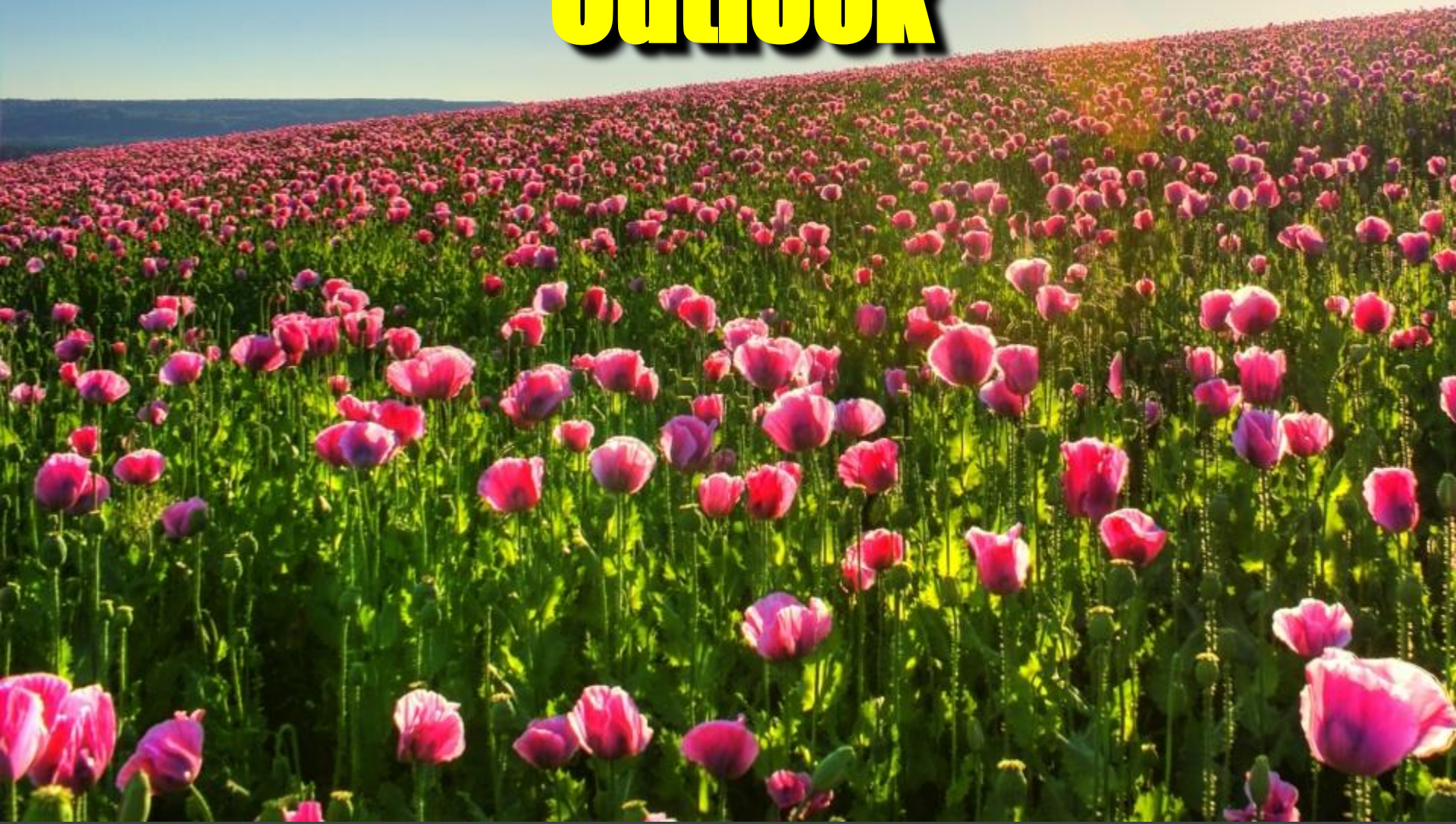
ONE-MONTH OUTLOOK
 PRECIPITATION PROBABILITY
 0.5 MONTH LEAD
 VALID FEB 2018
 MADE 18 JAN 2018



EC MEANS EQUAL CHANCES FOR A, N, B
 A MEANS ABOVE
 N MEANS NORMAL
 B MEANS BELOW



Spring / Early Summer Outlook

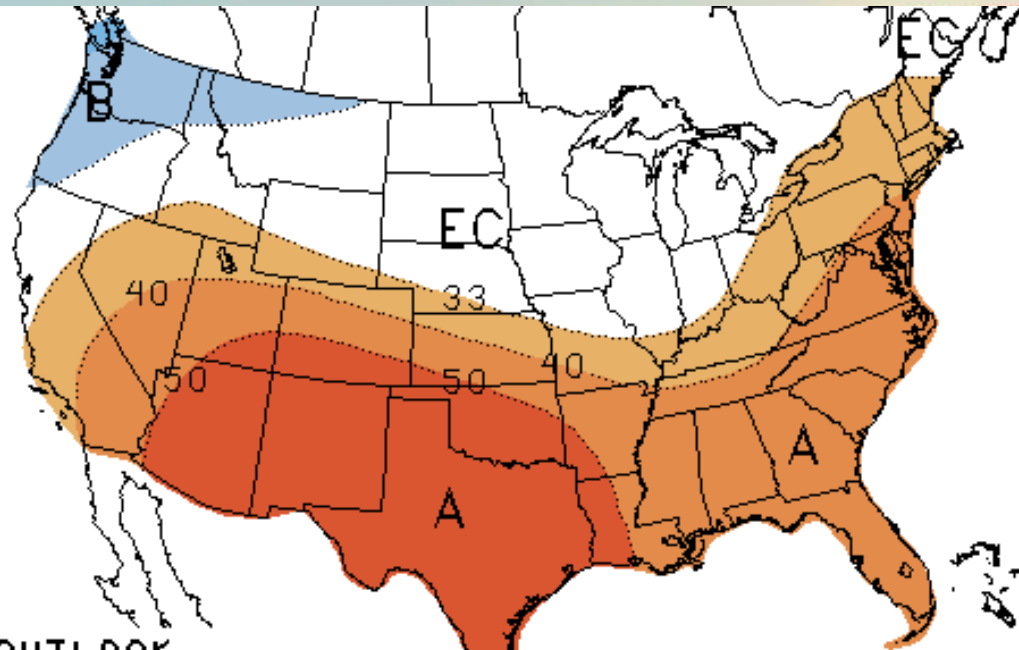


Spring Temperature Outlook

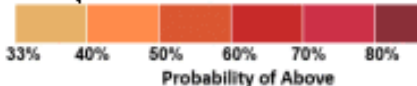
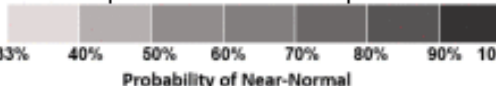
March to May



THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
1.5 MONTH LEAD
VALID MAM 2018
MADE 18 JAN 2018

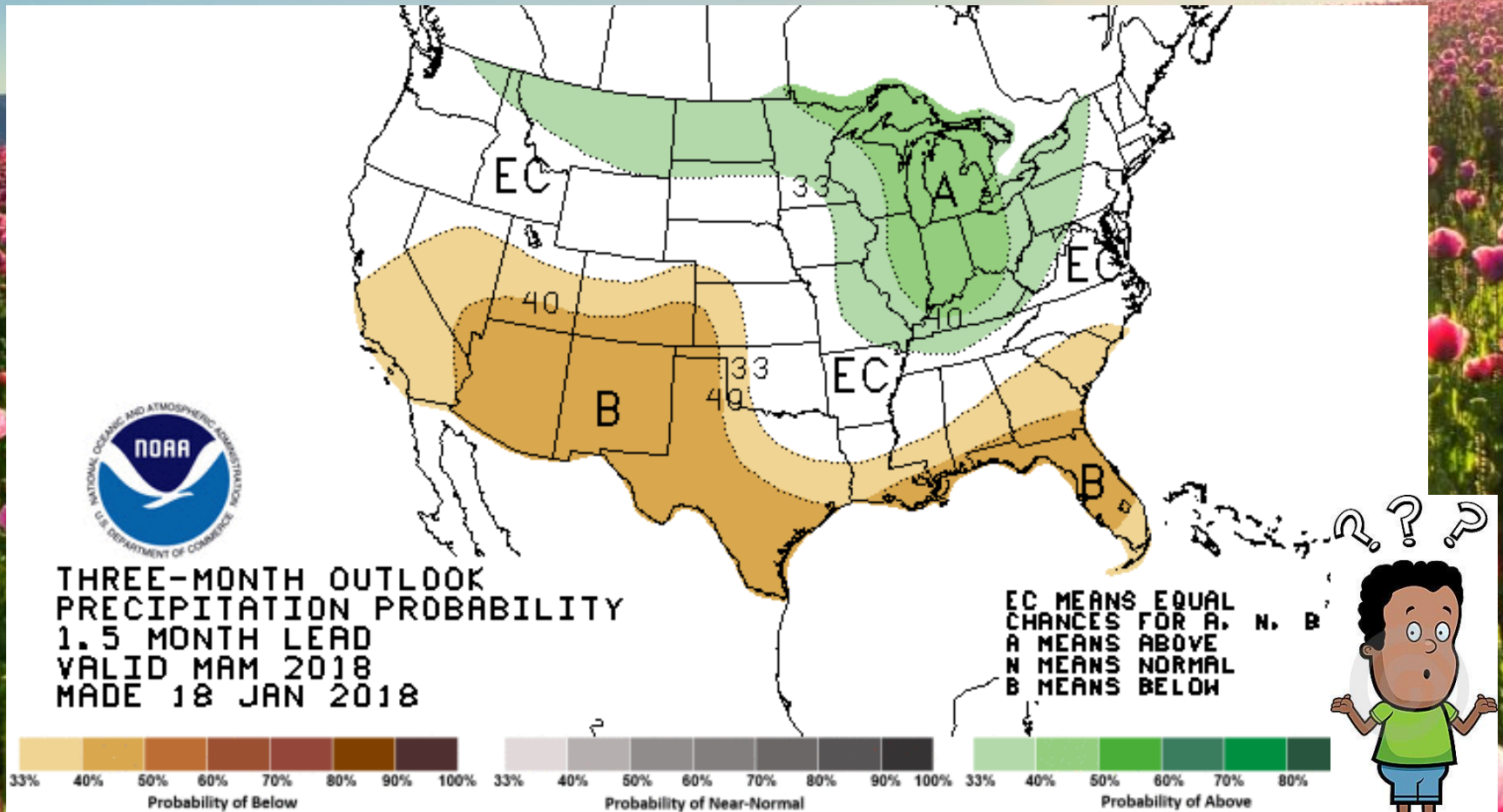


EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW



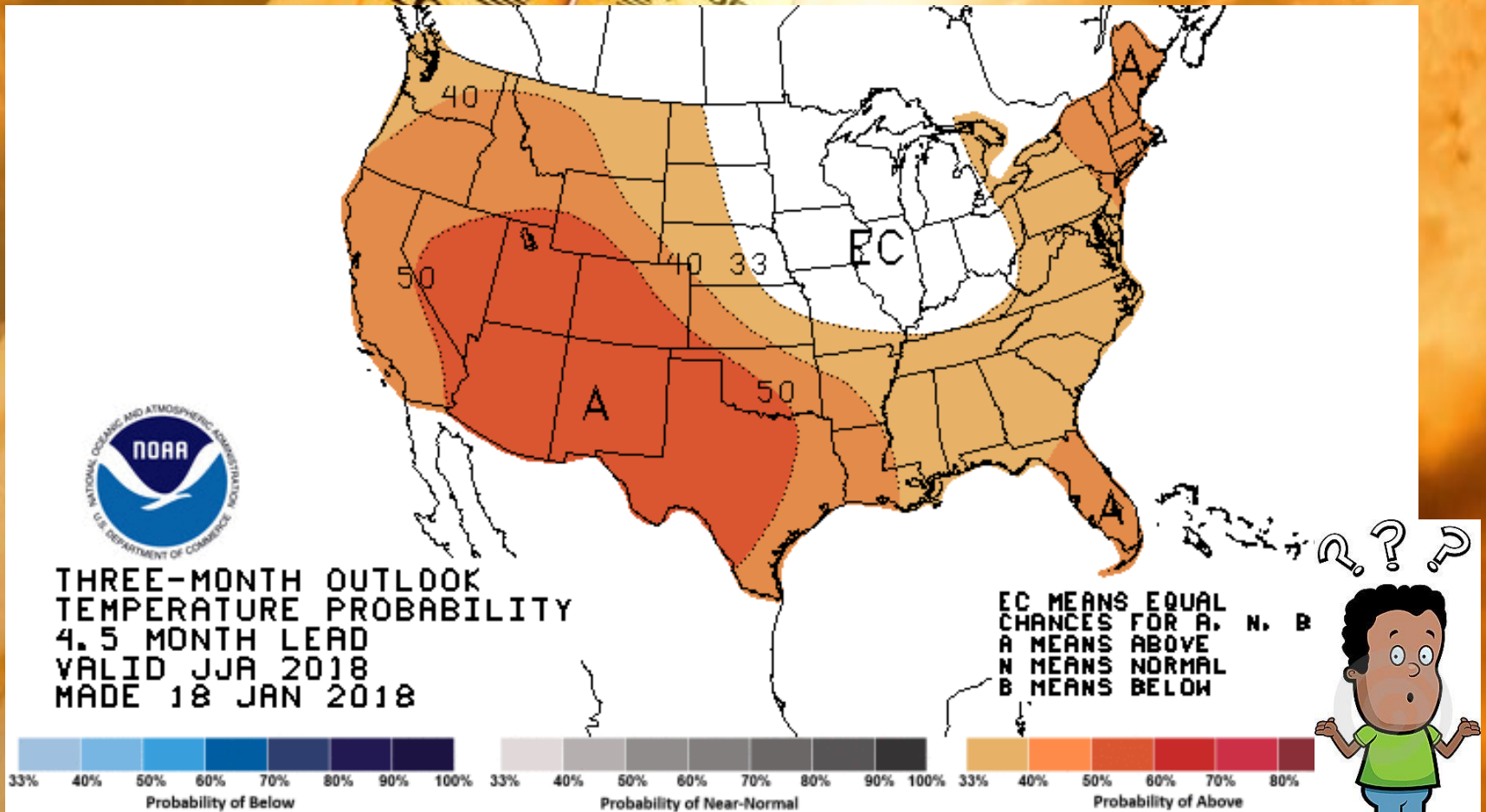
Spring Precipitation Outlook

March to May



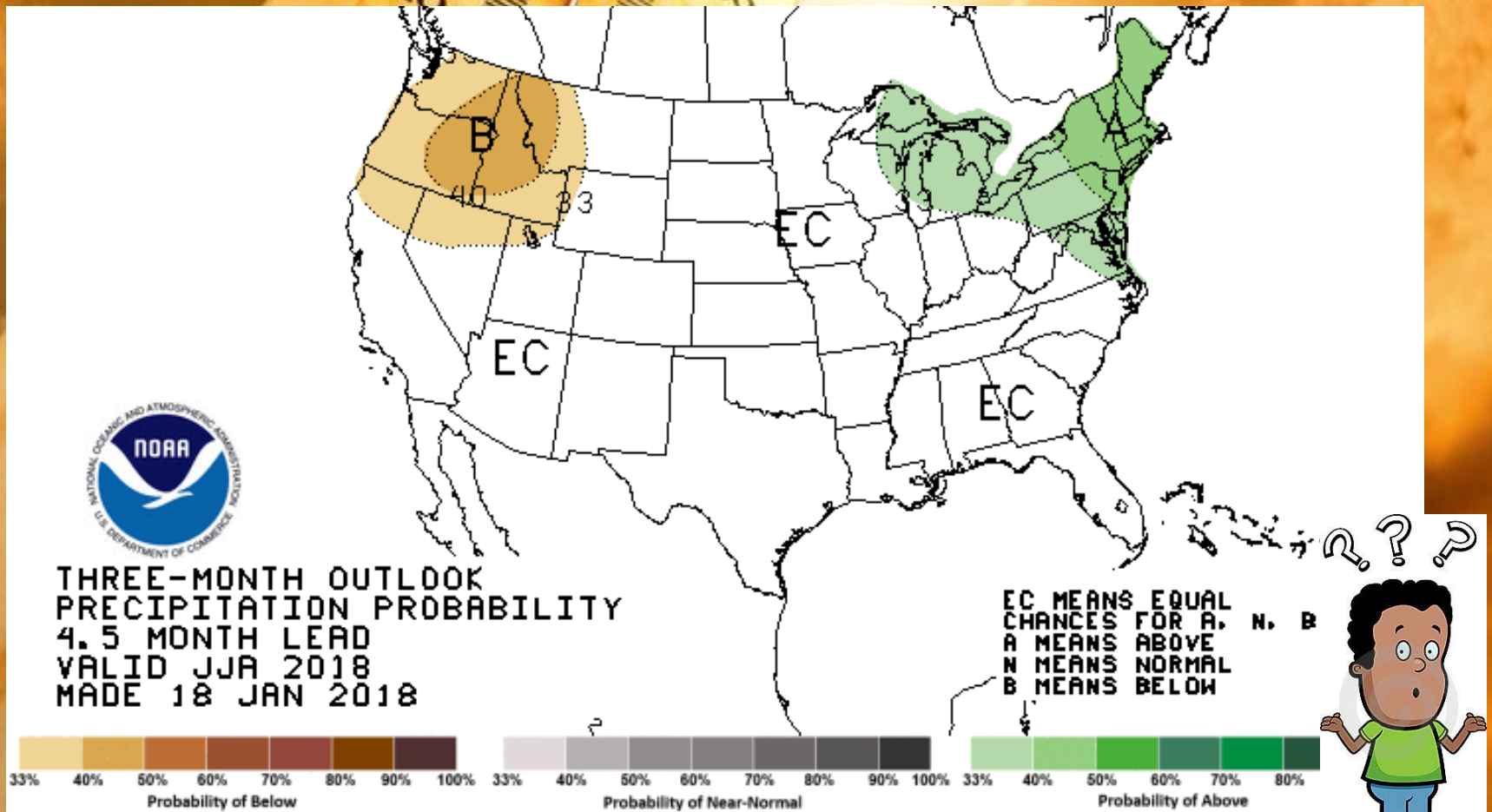
Summer Temperature Outlook

June – August



Summer Precipitation Outlook

June - August



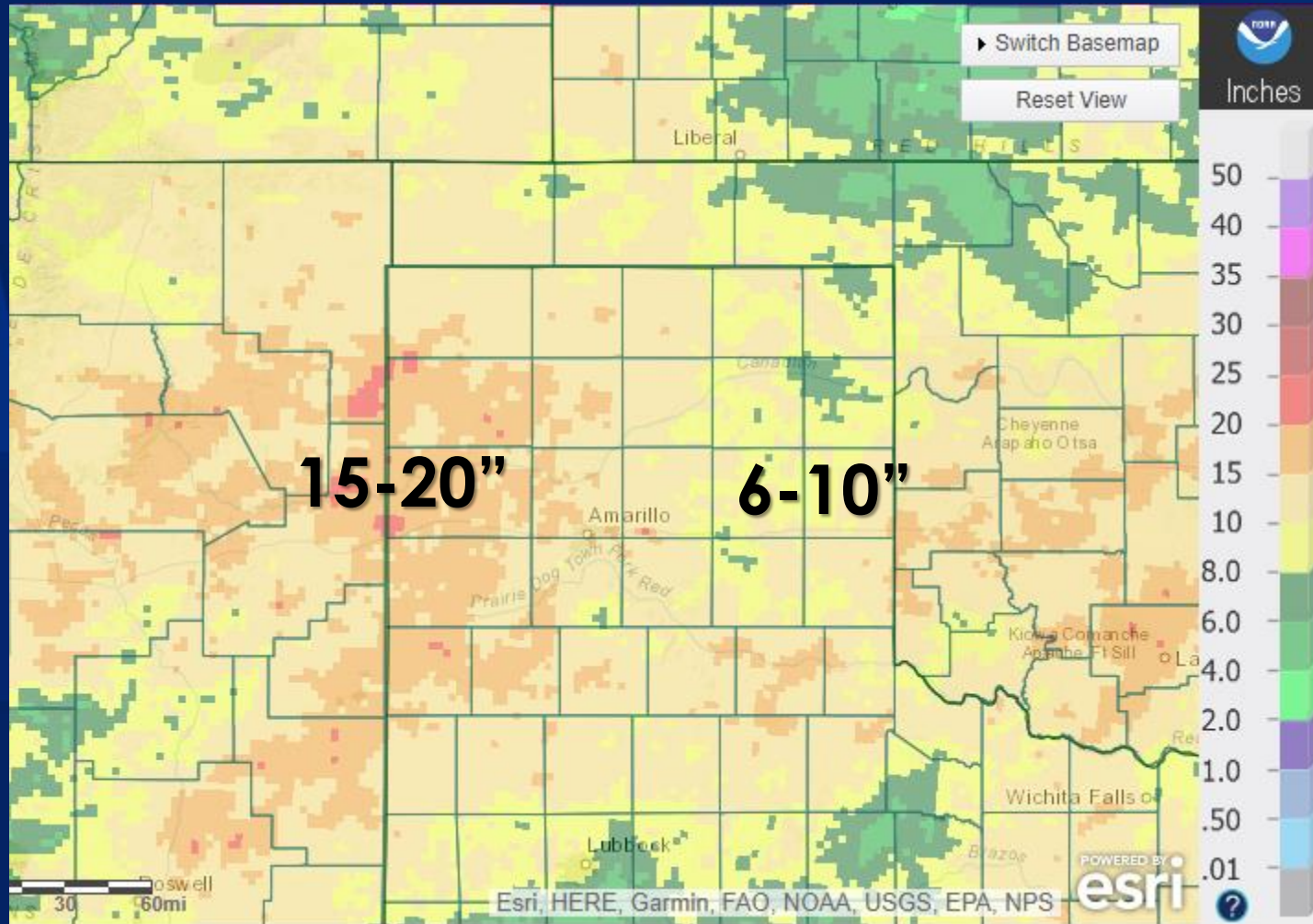
GETTY

Spring Wildfires?



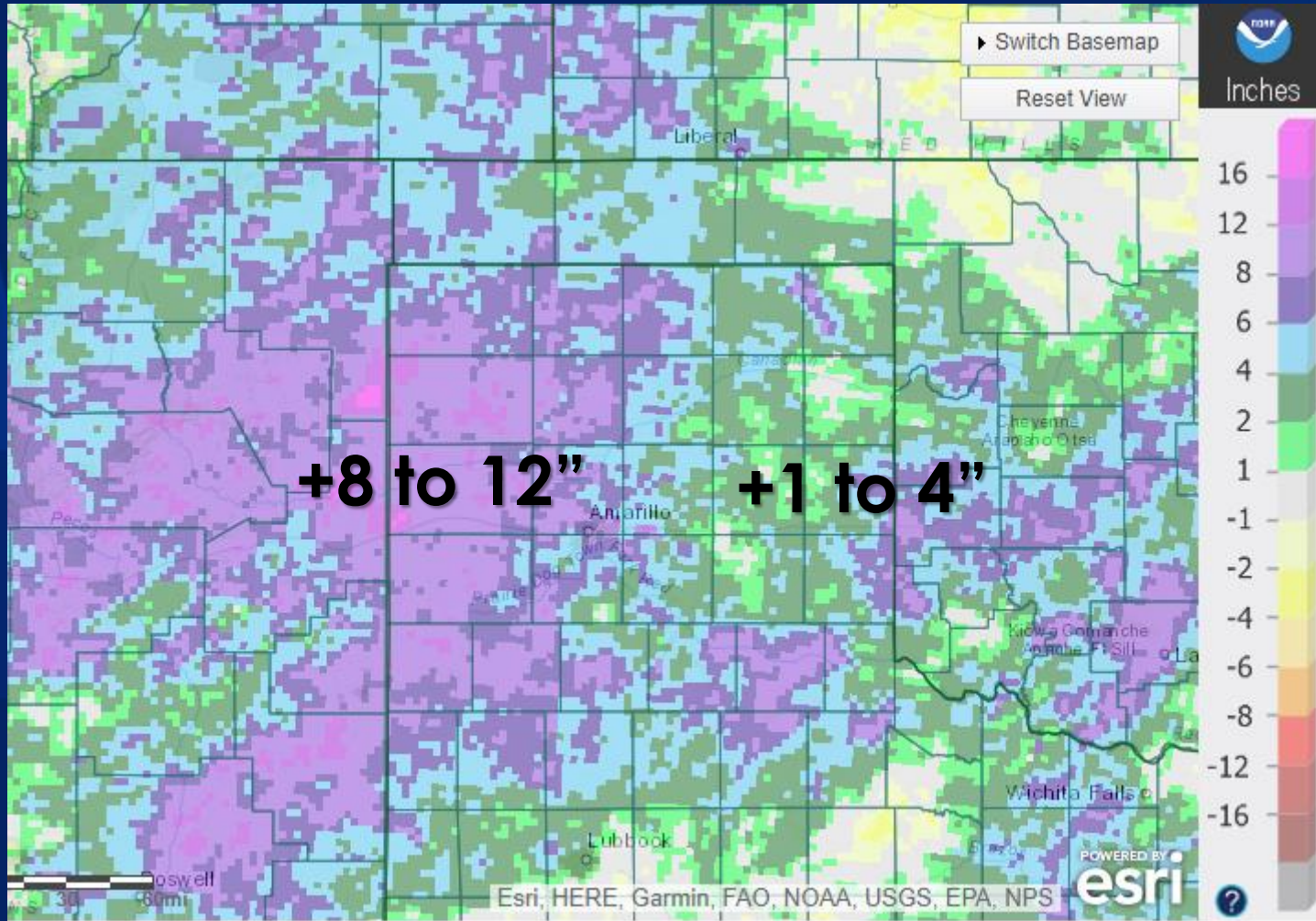
July 25 – Oct 23rd

Actual Amounts



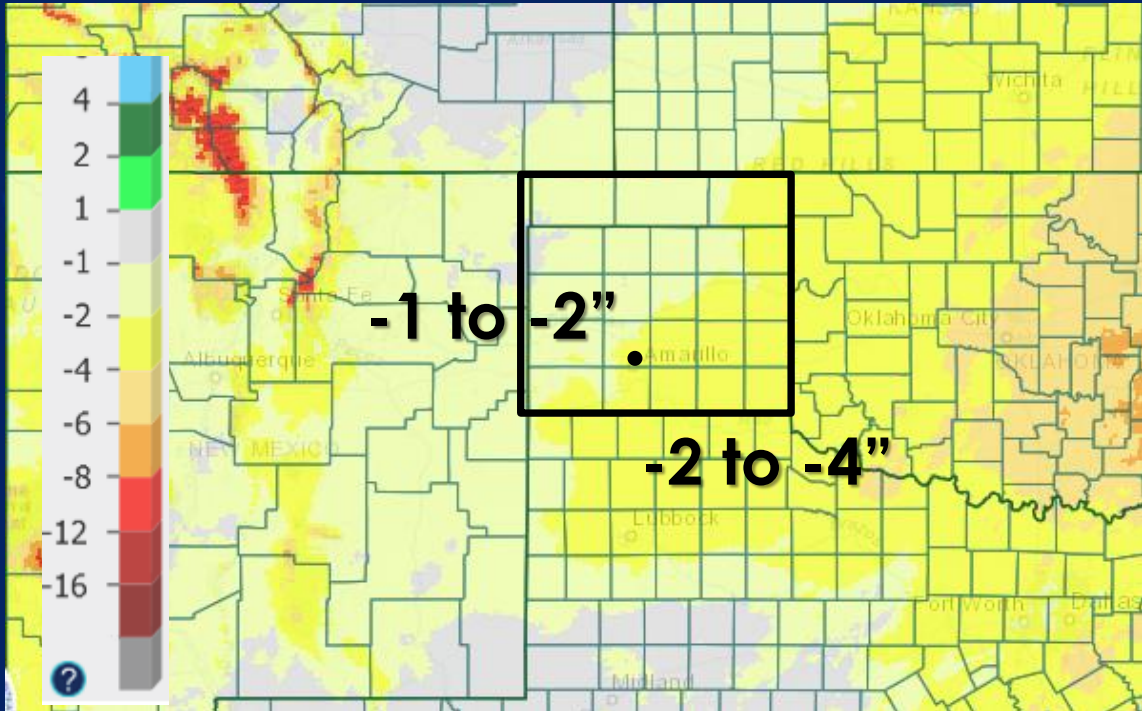
July 25 – Oct 23

Departure from Normal

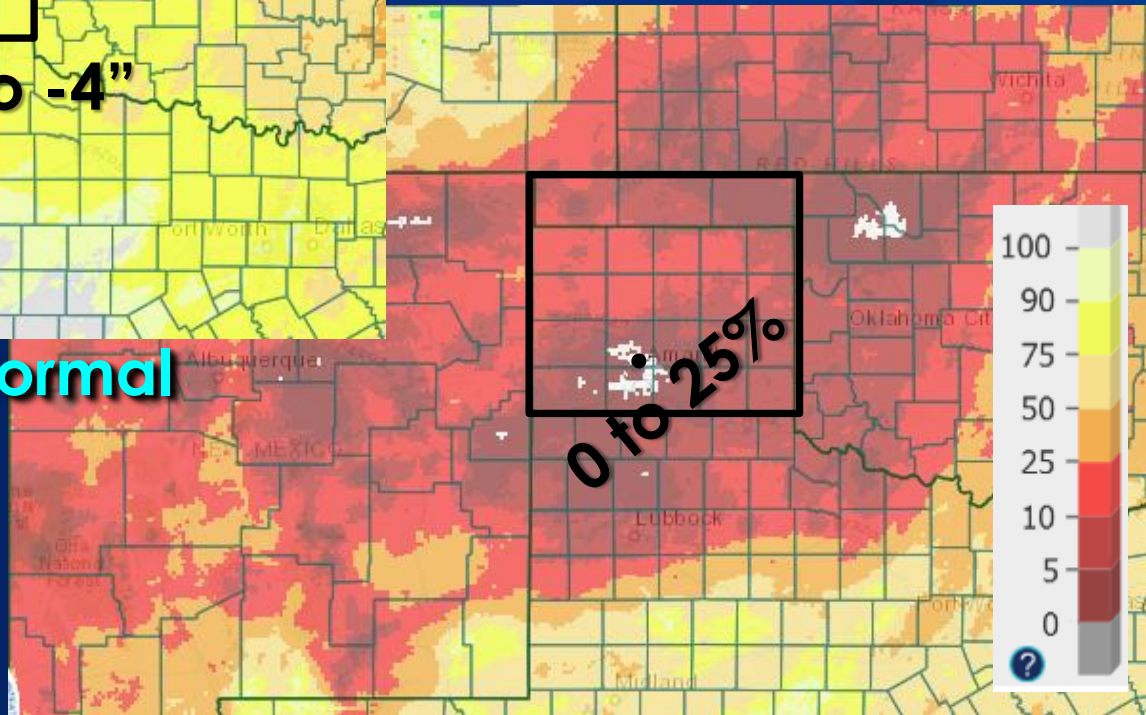


Last 90 Day Rainfall

Through 1/28/18



Departure from Normal

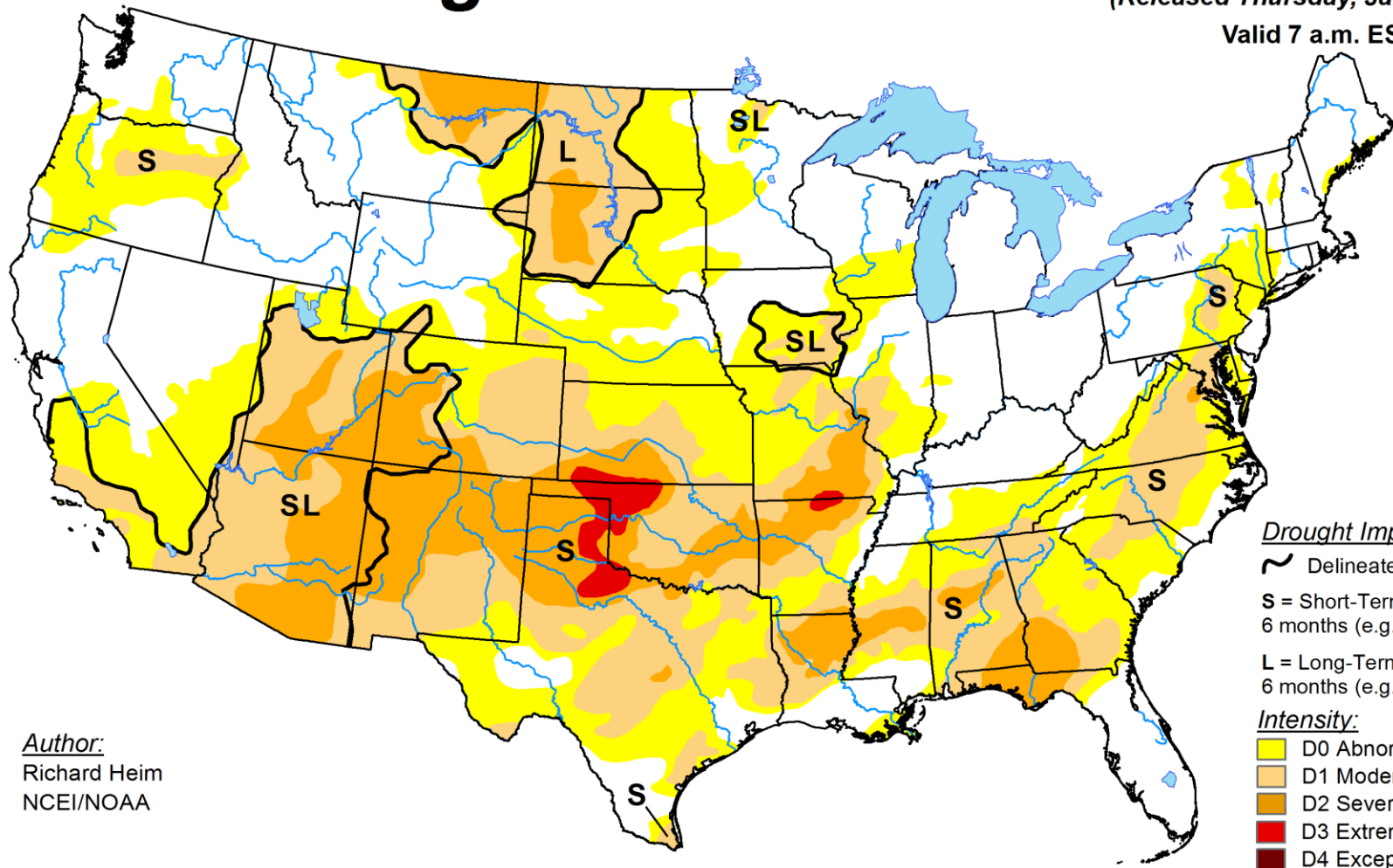


% of Normal

U.S. Drought Monitor

January 23, 2018
(Released Thursday, Jan. 25, 2018)

Valid 7 a.m. EST



Drought Impact Types:

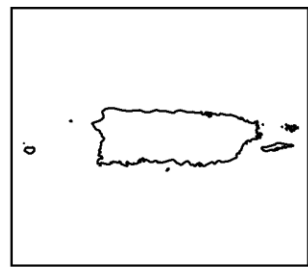
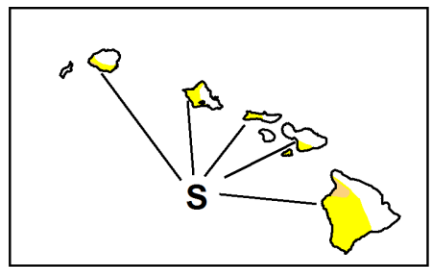
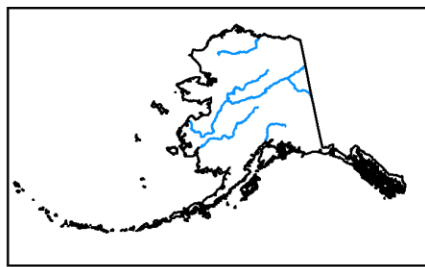
- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

Author:
Richard Heim
NCEI/NOAA

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

State of Fuels

Excessive late summer rains have provided significant 1-hr fuel loading

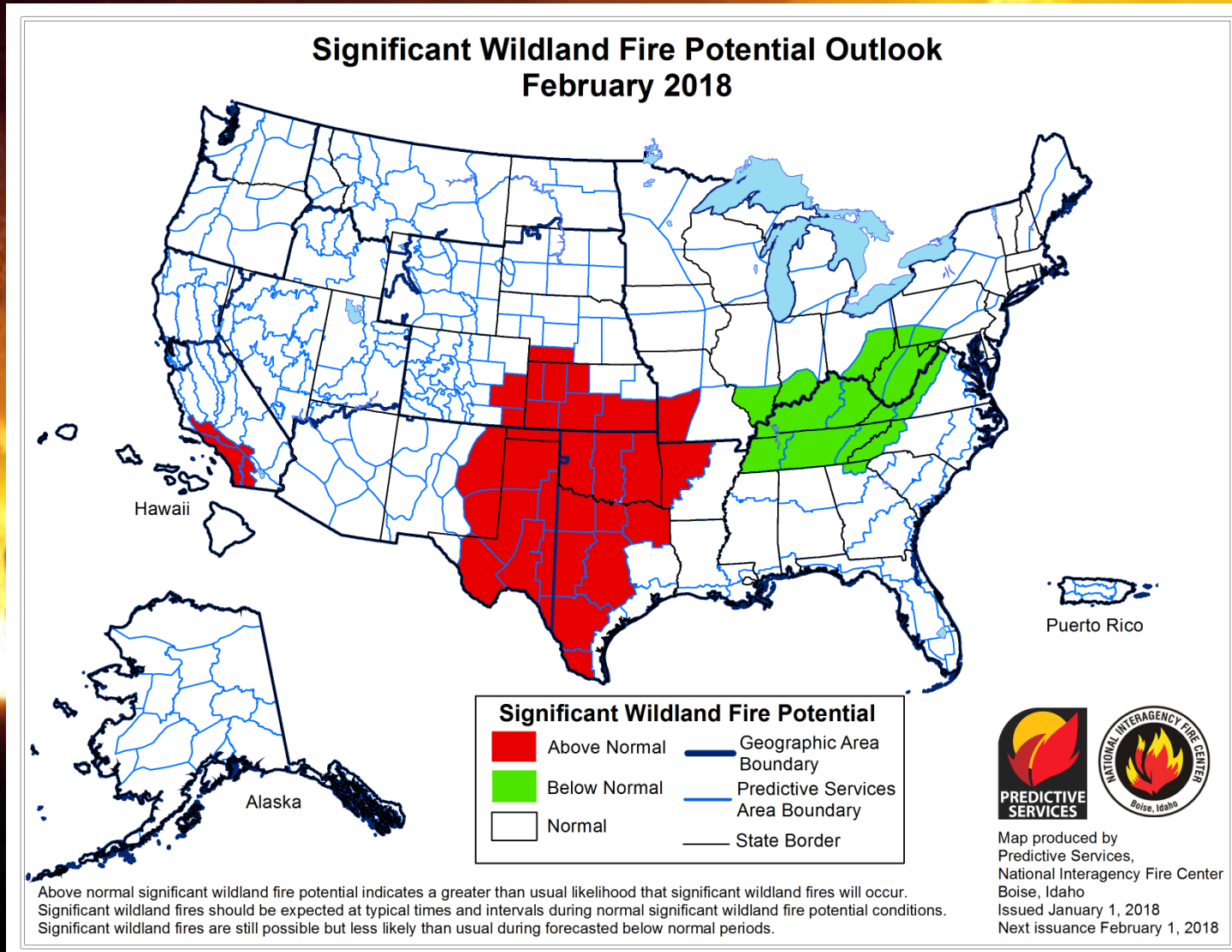


West of Amarillo on Hwy 60

Fire Potential Outlook

Feb 2018

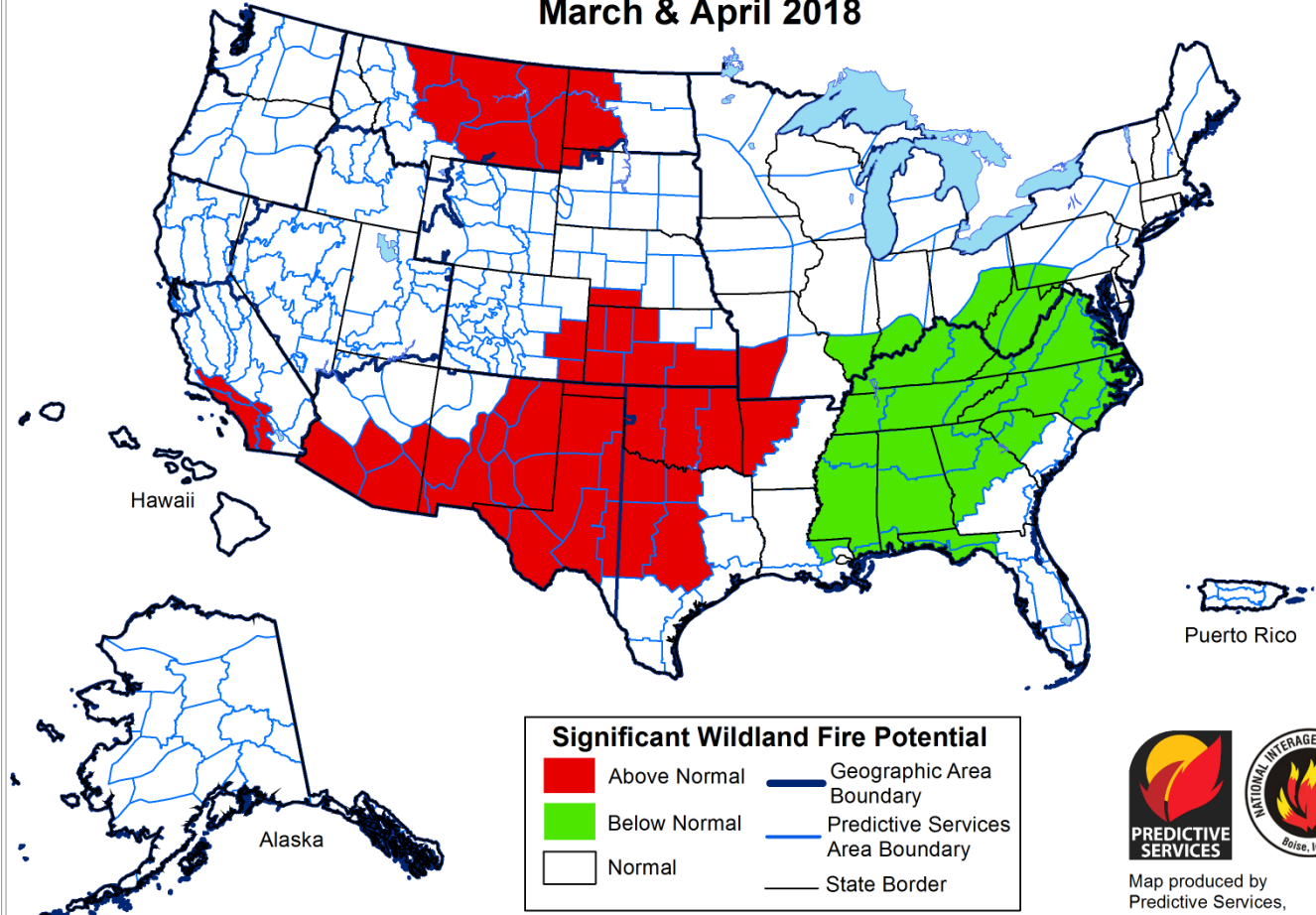
GETTY



Fire Potential Outlook

Mar/Apr 2018

Significant Wildland Fire Potential Outlook March & April 2018



Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur. Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions. Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.



Map produced by
 Predictive Services,
 National Interagency Fire Center
 Boise, Idaho
 Issued January 1, 2018
 Next issuance February 1, 2018

Spring/Summer 2018

“Most Likely Outcomes”

- Weak La Niña transitioning to neutral through spring
- Weather pattern response can lag ENSO changes
- La Niña weakening last in the east does not bode well for SW U.S.
- Below normal precipitation and above normal temperatures through spring
- Notable **Potential** for intense and long lived fire season
- Outbreaks are still dependent on weather patterns

QUESTIONS?

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Mike Gittinger

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NWS Amarillo

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www.weather.gov/amarillo

"Susie, you got half the problems wrong."
"That's ok, Dad. I want to be a meteorologist when I grow up."



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