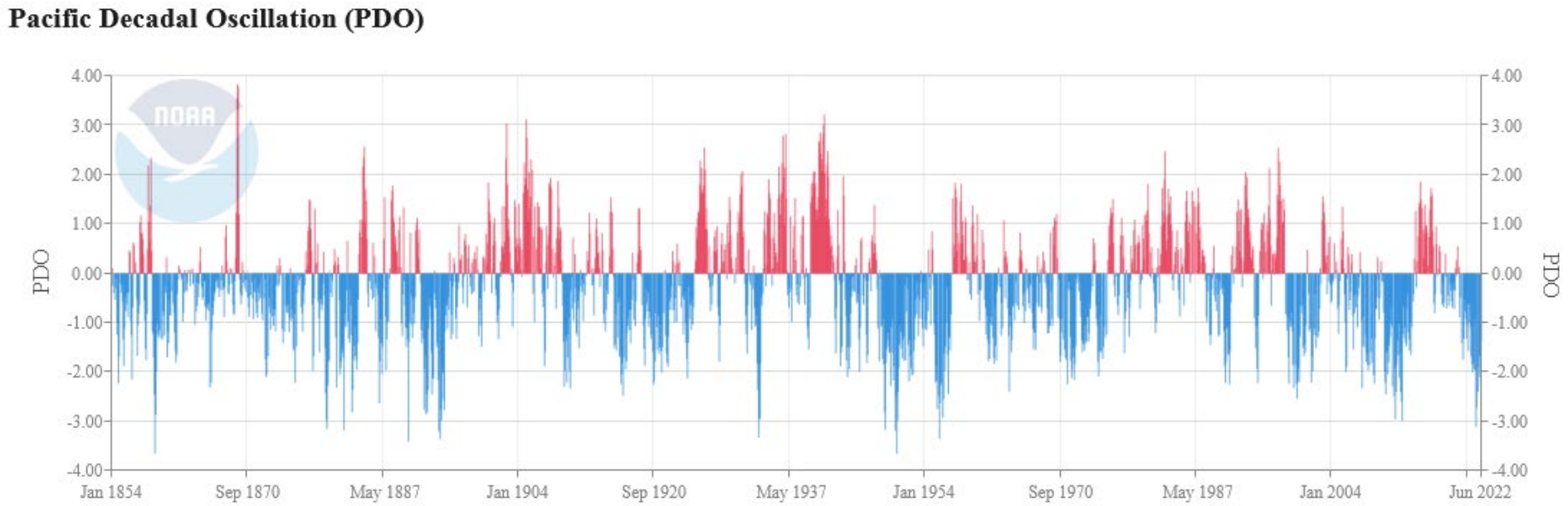
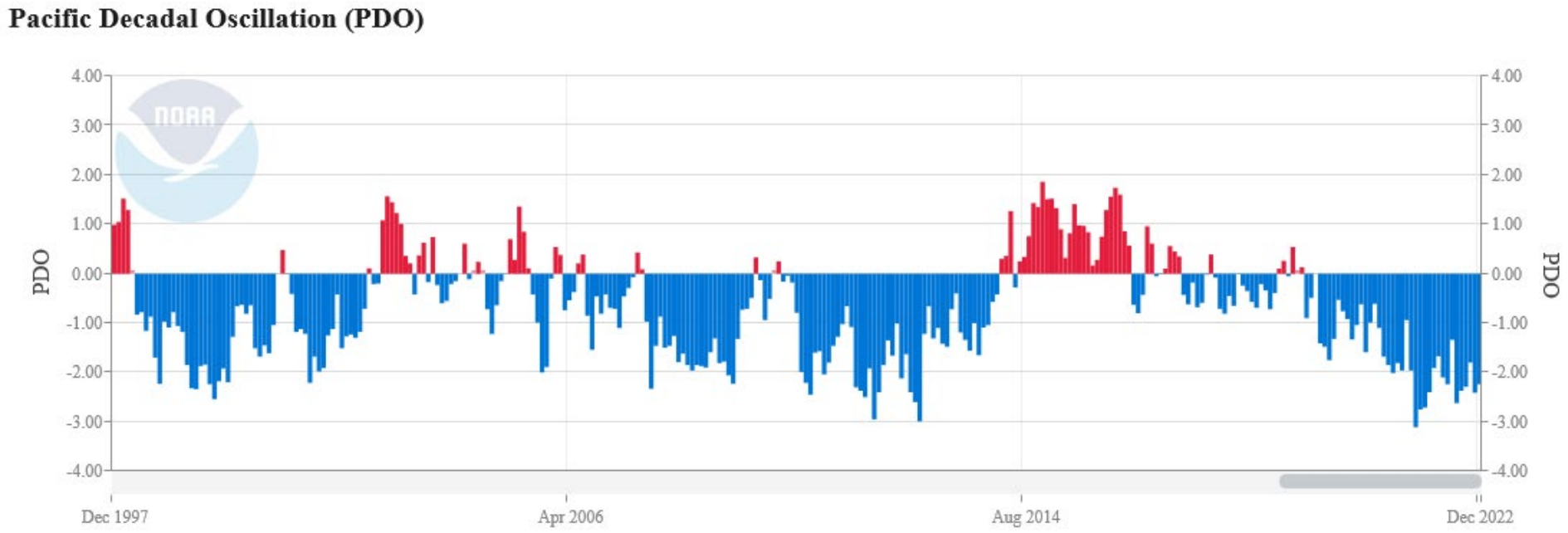
Pacific Decadal Oscillation (PDO)
Past 168 Years



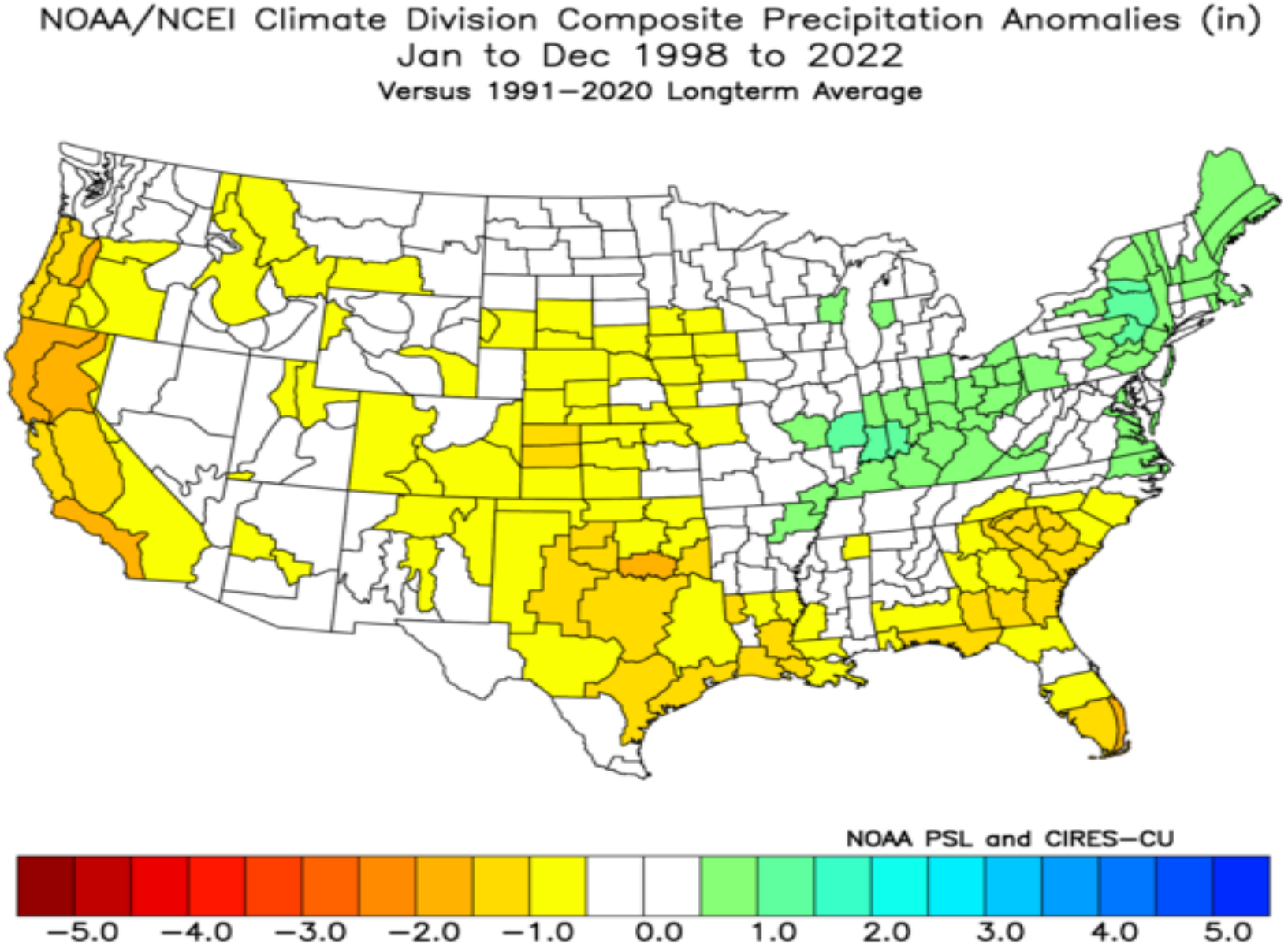
Source: https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/index/ersst.v5.pdo.dat

Pacific Decadal Oscillation (PDO)
Past 25 Years

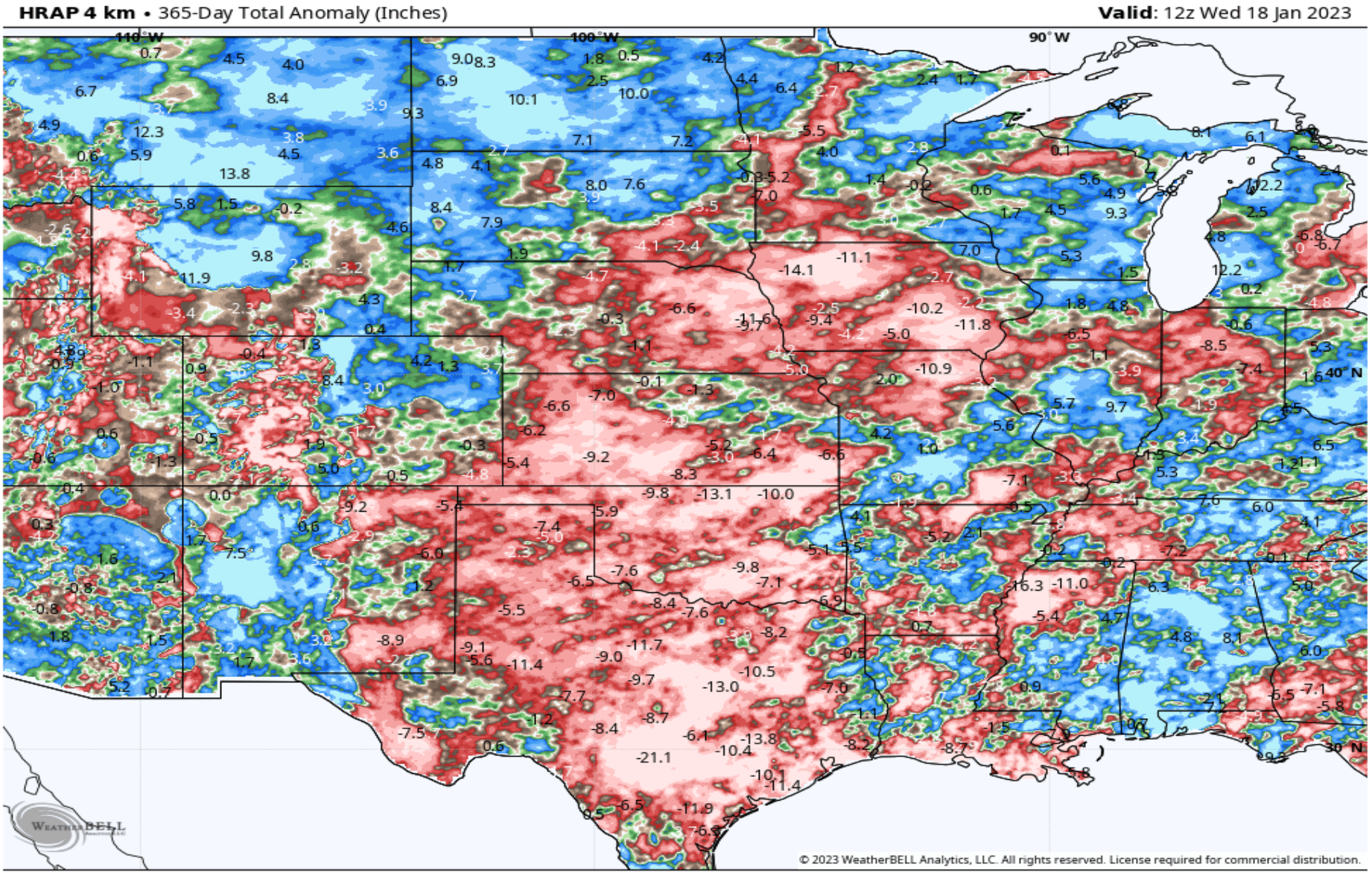


Source: https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/index/ersst.v5.pdo.dat

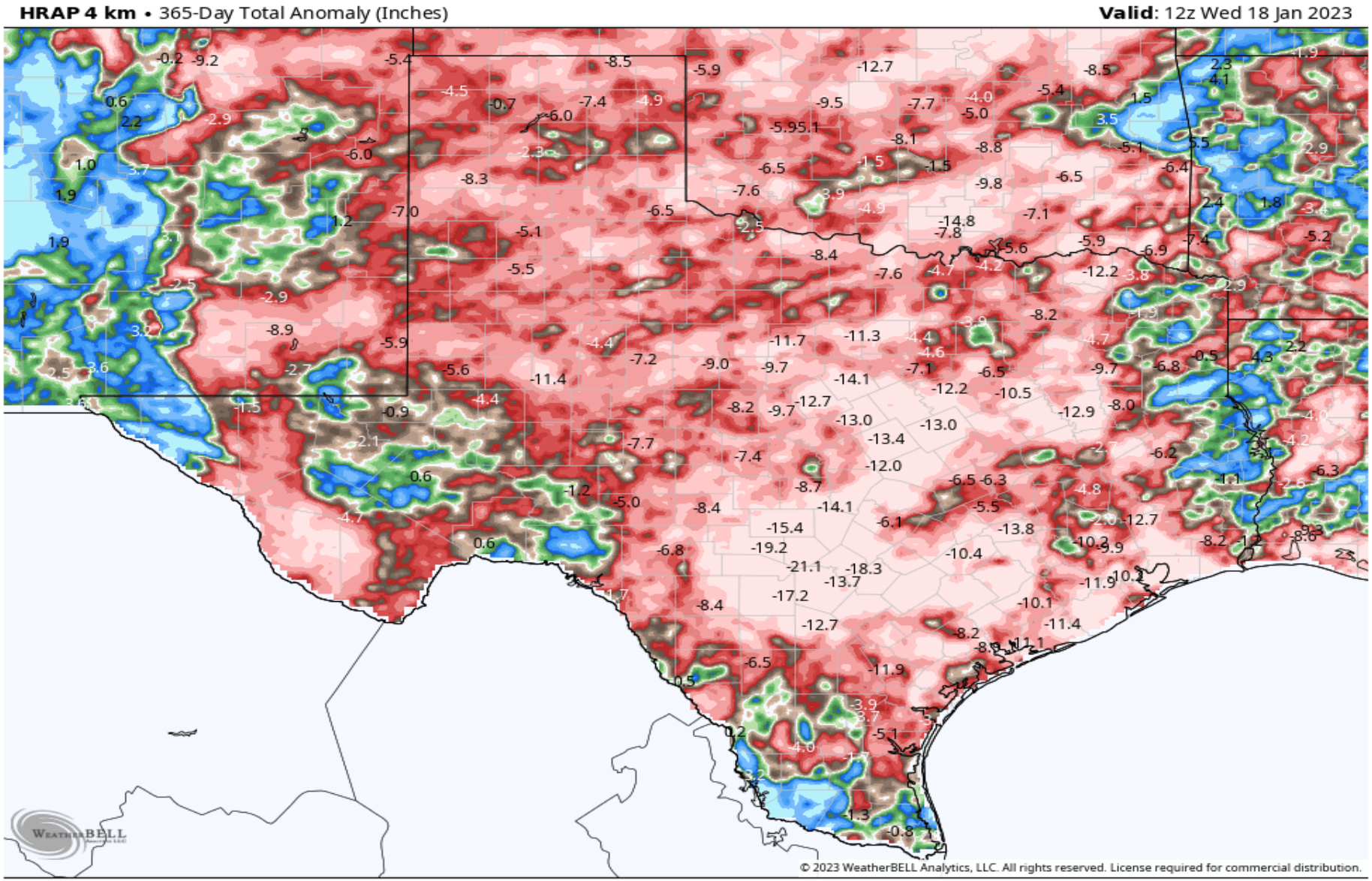
Precipitation Anomalies Past 25 Years



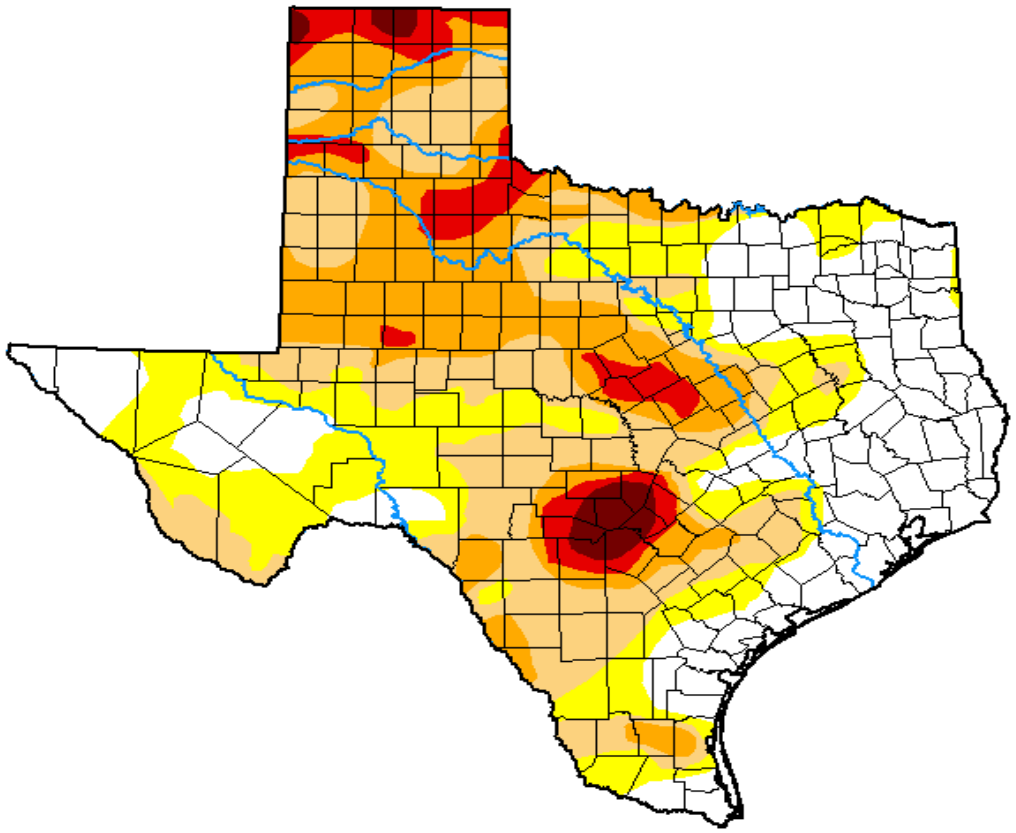
Precipitation Anomalies The Past Year…



Precipitation Anomalies The Past Year…



Latest Drought Monitor



January 10, 2023

(Released Thursday, Jan. 12, 2023)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	26.83	73.17	51.66	27.31	7.70	1.80
Last Week *01-03-2023*	28.84	71.16	49.90	26.60	7.41	1.60
3 Months Ago *10-11-2022*	5.75	94.25	72.82	43.58	15.25	1.48
Start of Calendar Year *01-03-2023*	28.84	71.16	49.90	26.60	7.41	1.60
Start of Water Year *09-27-2022*	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago *01-11-2022*	3.21	96.79	82.48	62.44	21.91	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

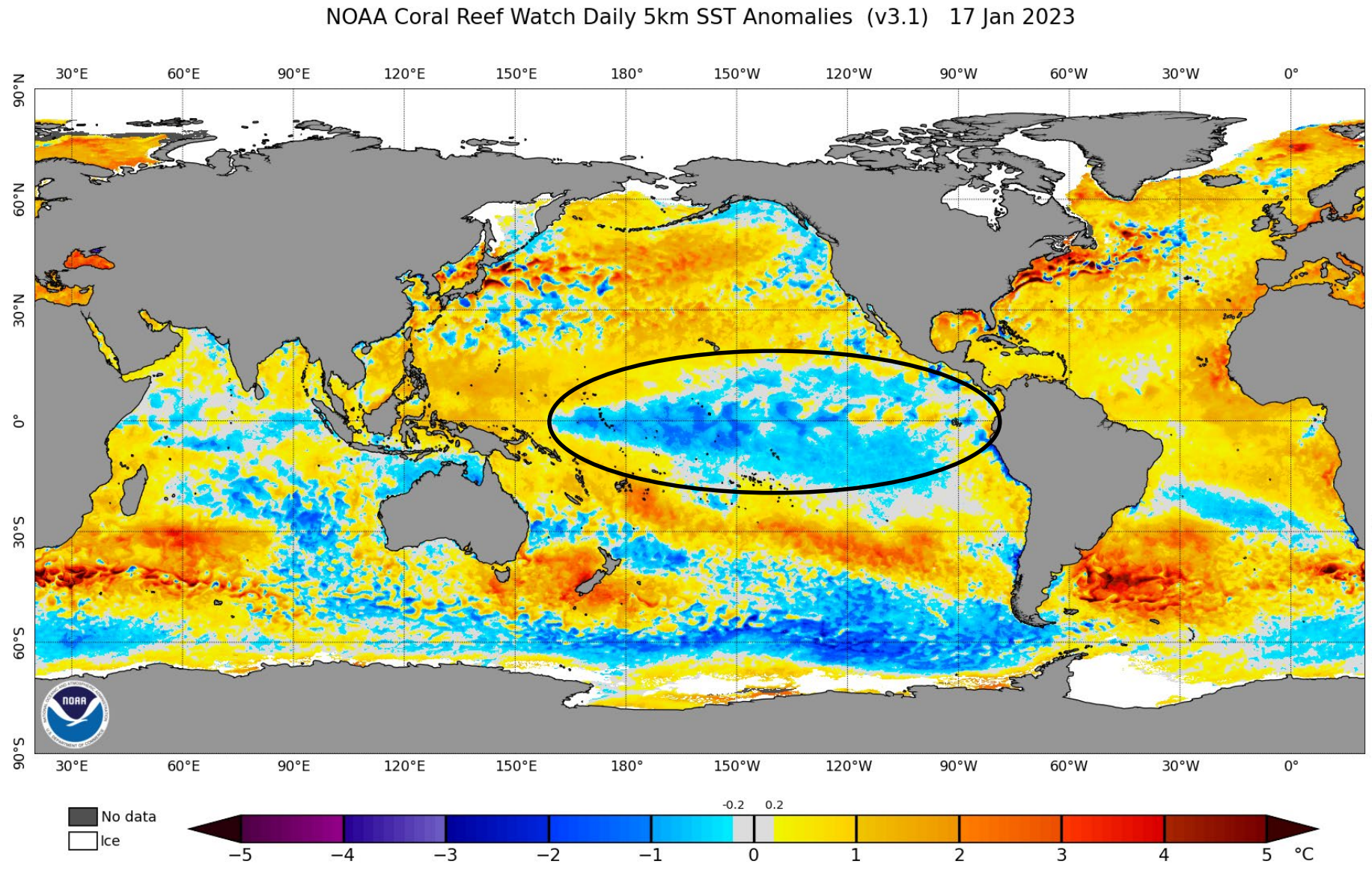
Richard Tinker

CPC/NOAA/NWS/NCEP

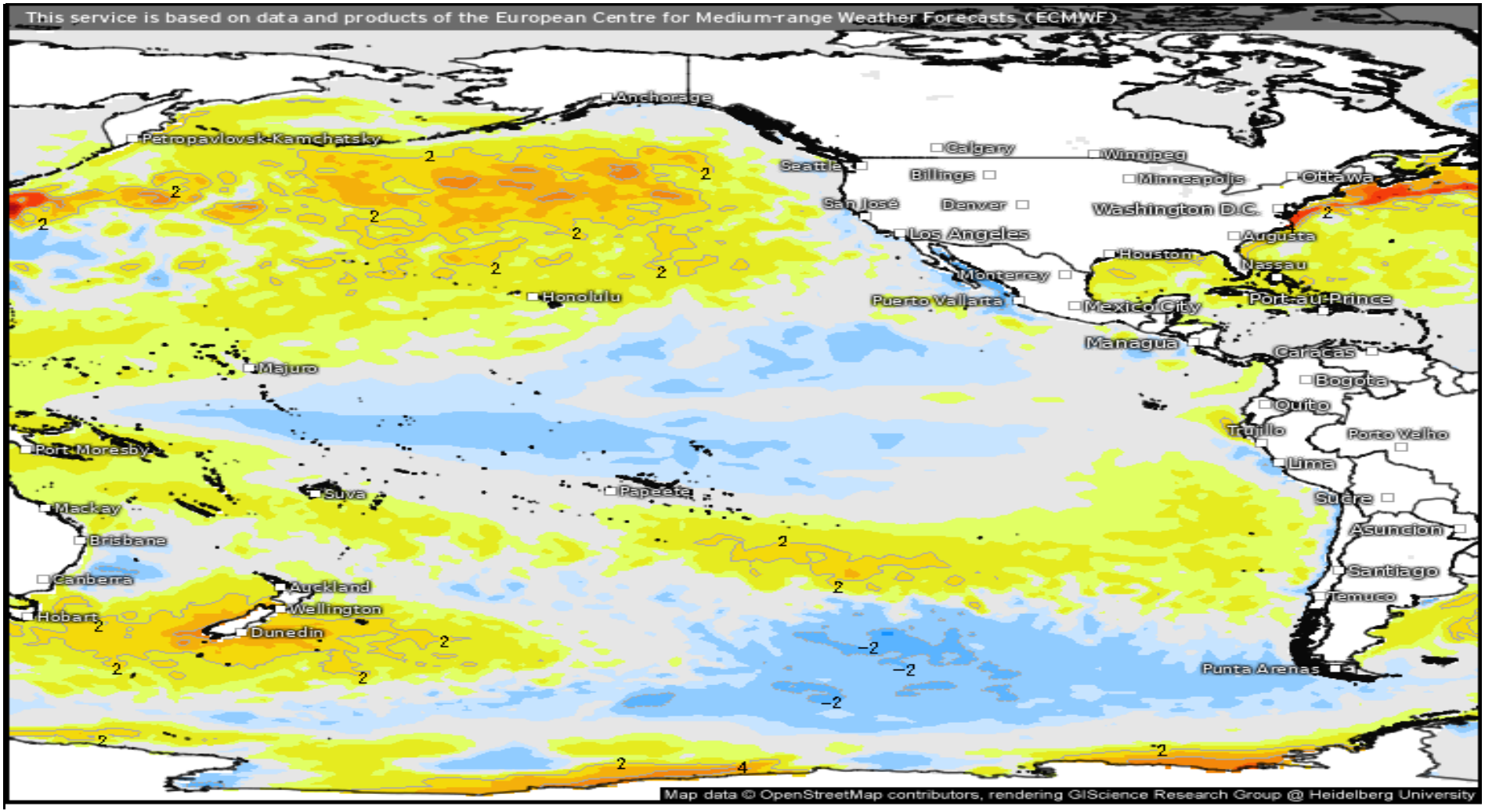
USDA NDMC NOAA

droughtmonitor.unl.edu

Current Sea Surface Temperature Anomalies



EURO Seasonal February SST Anomaly Forecast



Anomaly water temperature (°F)

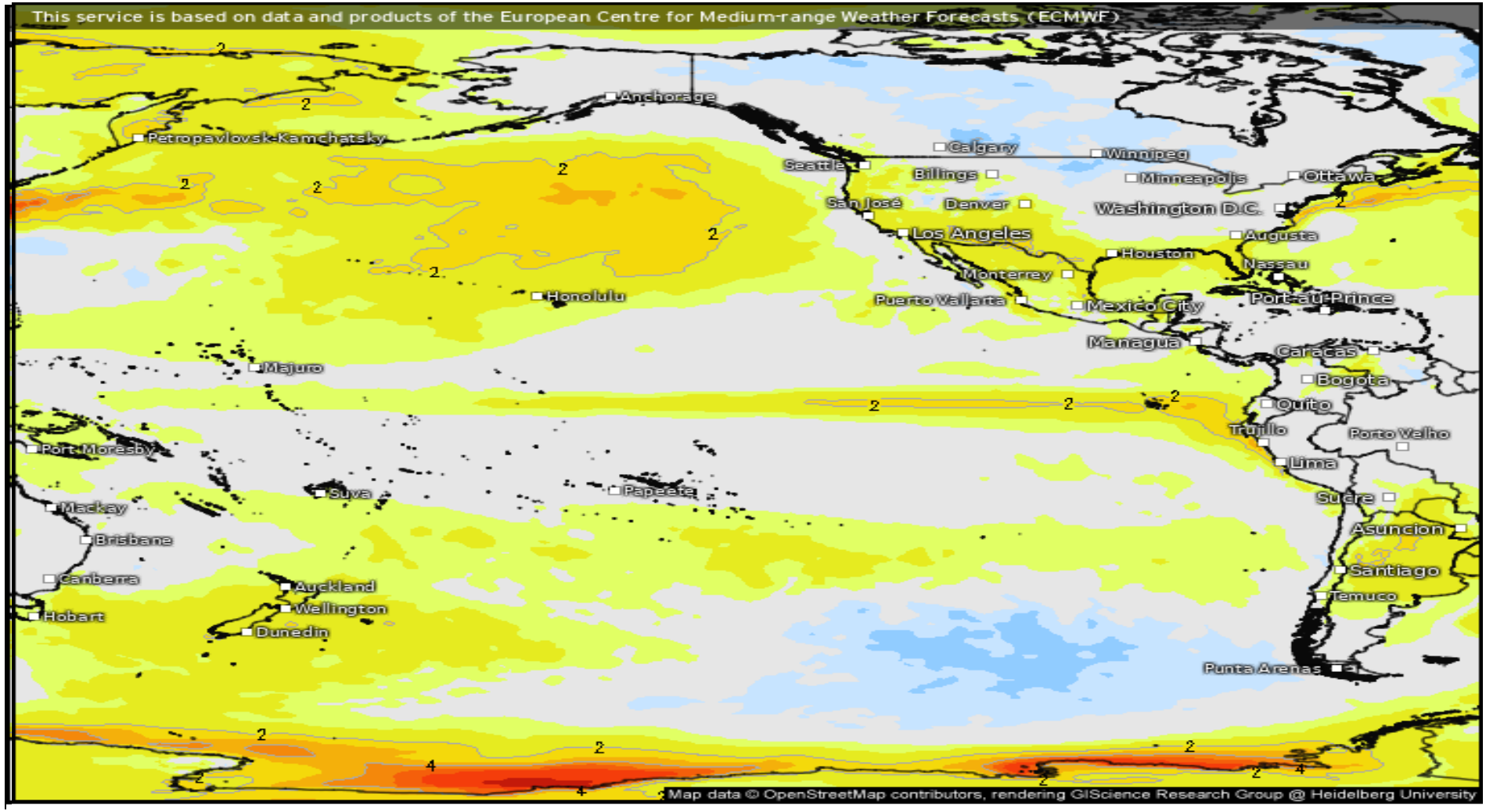
Valid for February 2023

−25 −20 −15 −10 −8 −6 −5 −4 −3 −2 −1 −0.5 0.5 1 2 3 4 5 6 8 10 15 20

Australia and Americas
ECMWF SEAS5 (monthly) from 01/01/2023/00z

Model: ECMWF weather.us

EURO Seasonal April SST Anomaly Forecast



Anomaly temperature (°F)

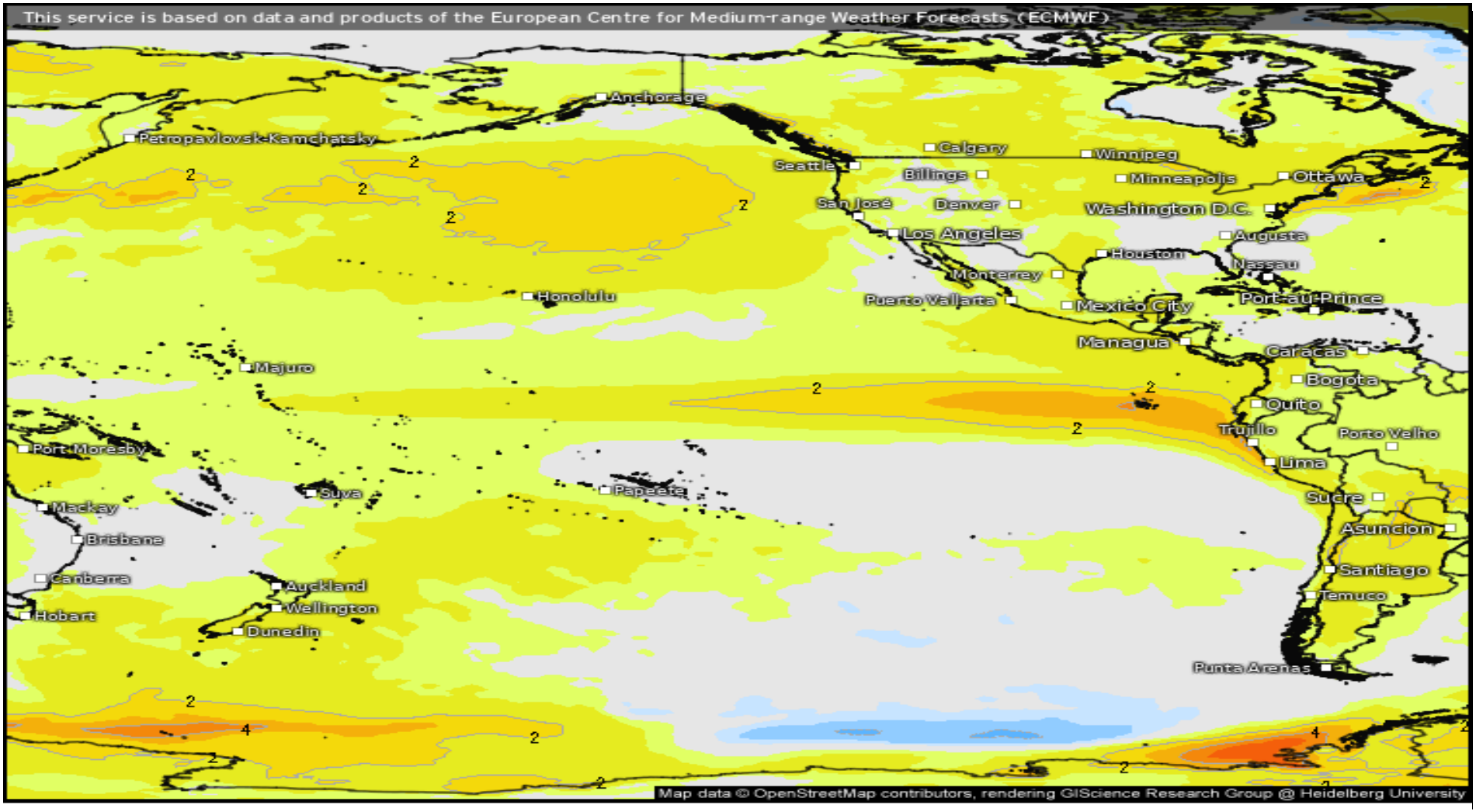
Valid for April 2023

−25 −20 −15 −10 −8 −6 −5 −4 −3 −2 −1 −0.5 0.5 1 2 3 4 5 6 8 10 15 20

Australia and Americas
ECMWF SEAS5 (monthly) from 01/01/2023/00z

Model: ECMWF weather.us

EURO Seasonal July SST Anomaly Forecast



Anomaly temperature (°F)

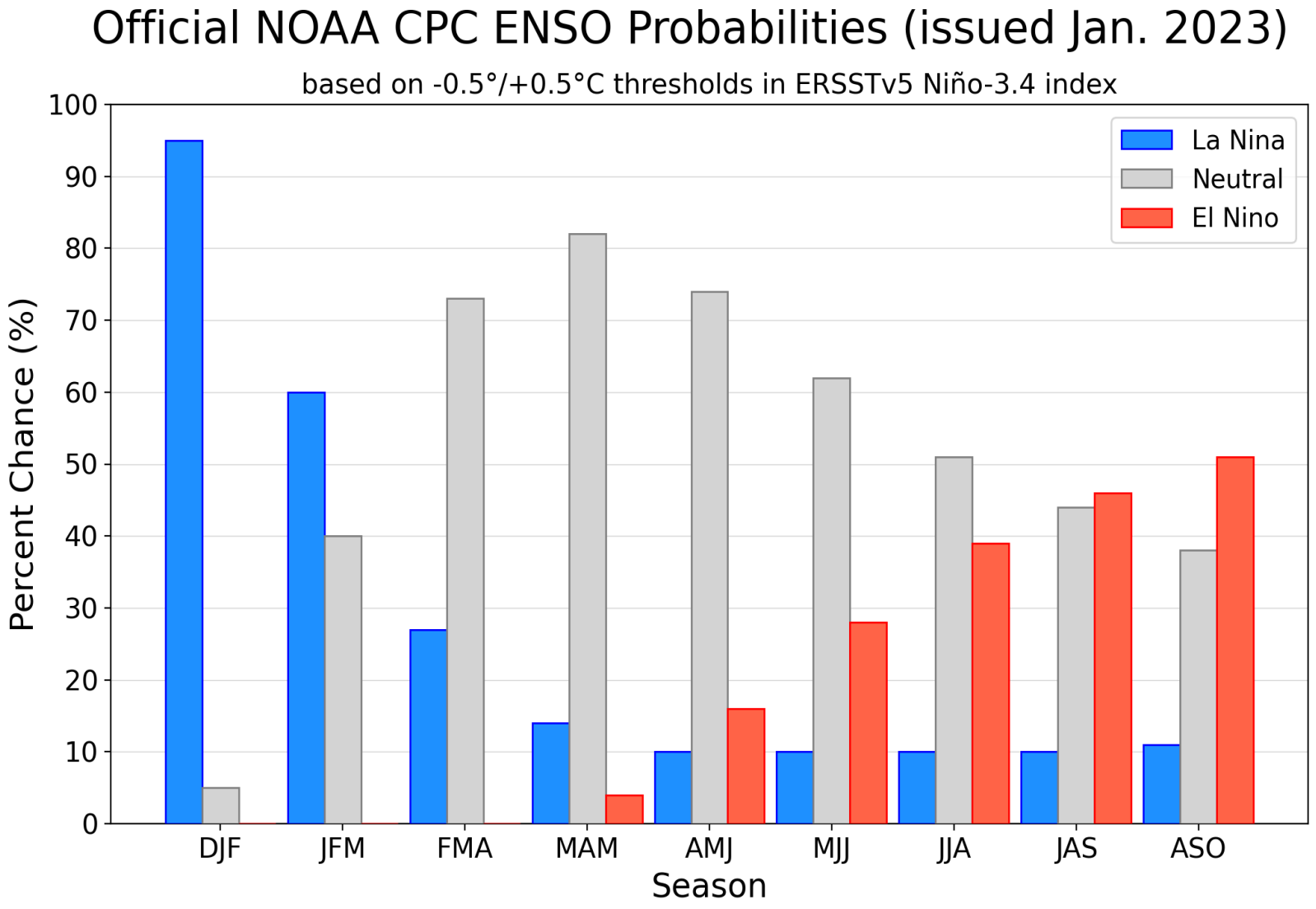
Valid for July 2023

−25 −20 −15 −10 −8 −6 −5 −4 −3 −2 −1 −0.5 0.5 1 2 3 4 5 6 8 10 15 20

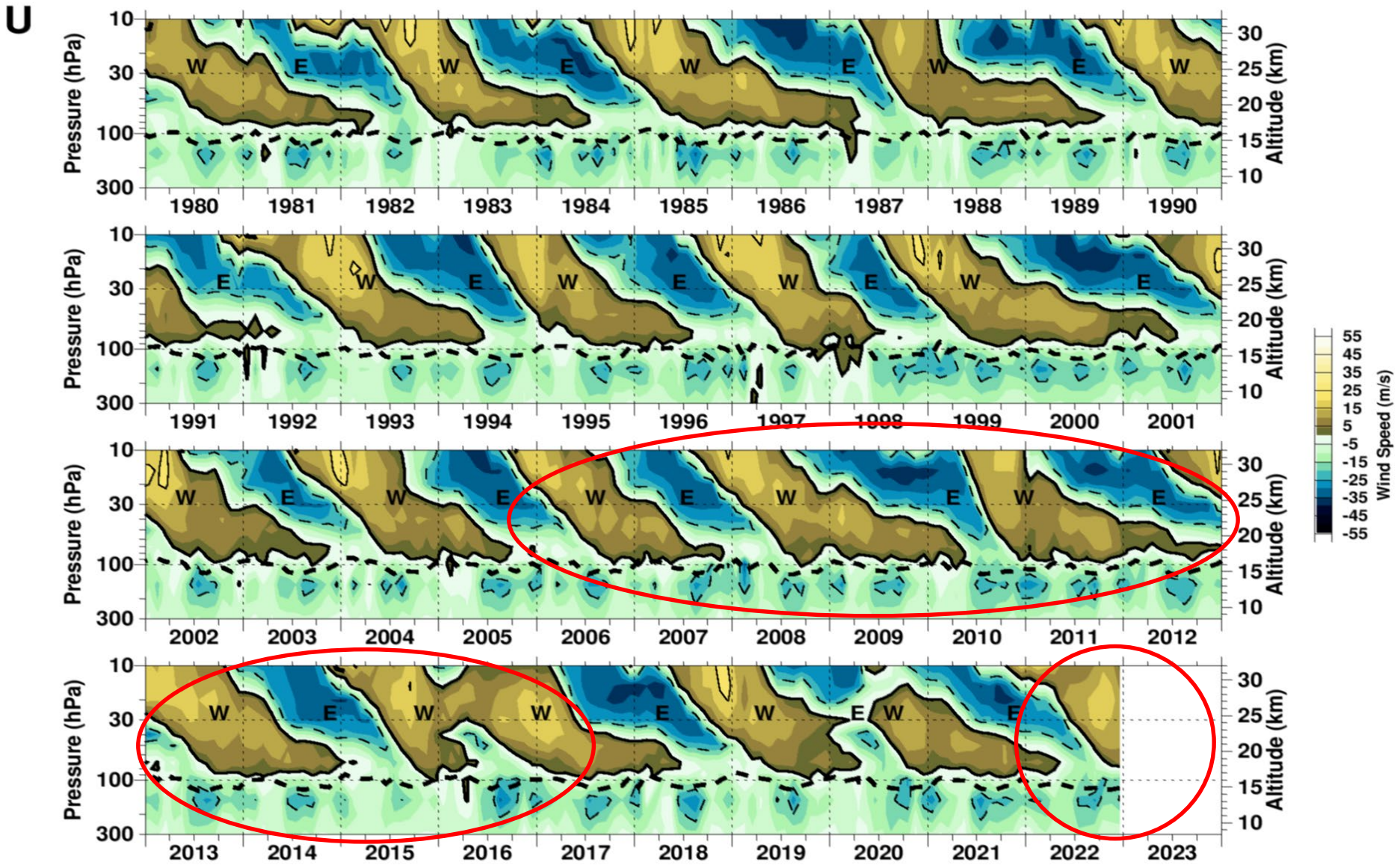
Australia and Americas
ECMWF SEAS5 (monthly) from 01/01/2023/00z

Model: ECMWF weather.us

La Niña Transitions to El Niño?

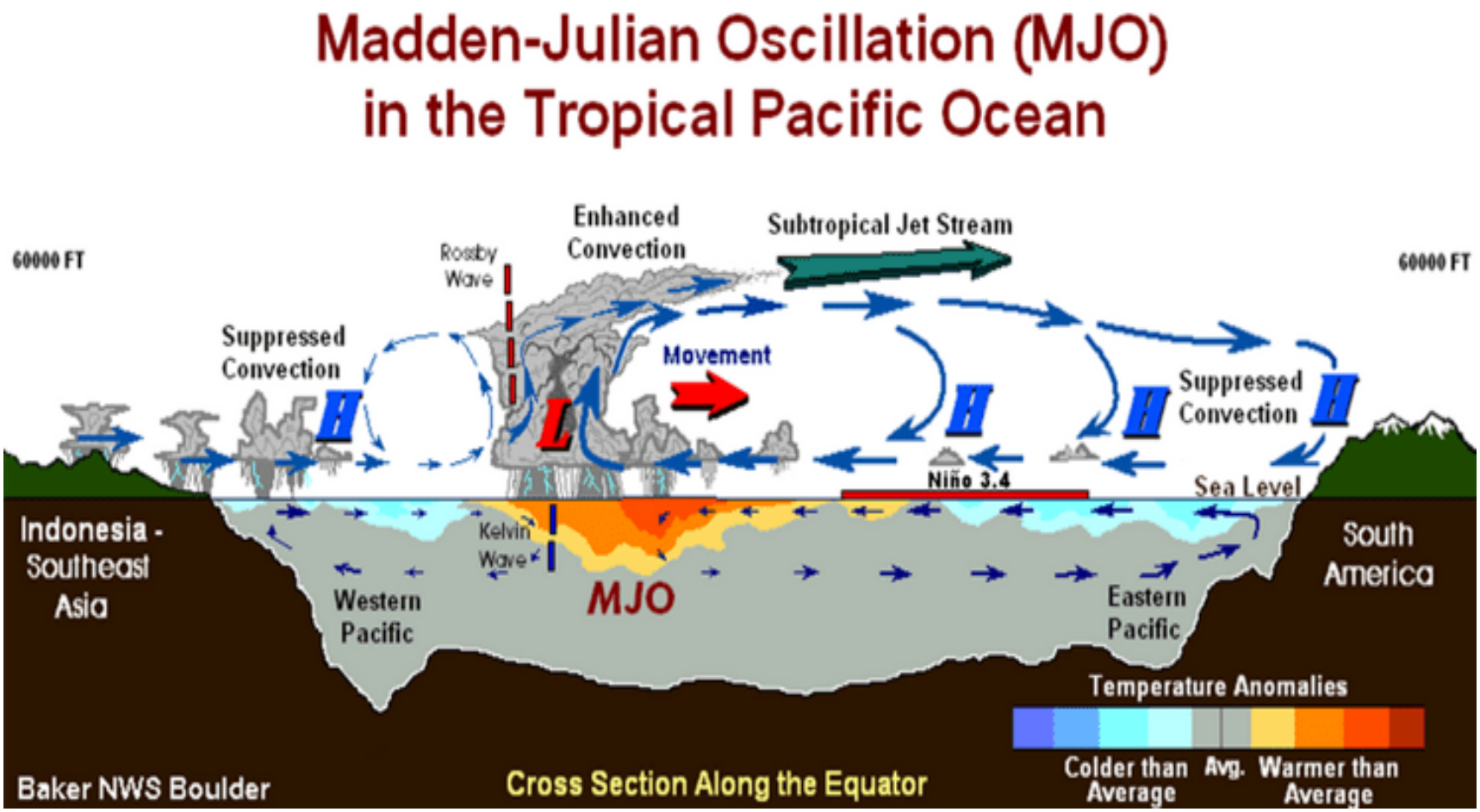


Westerly QBO Favors La Niña Ending …

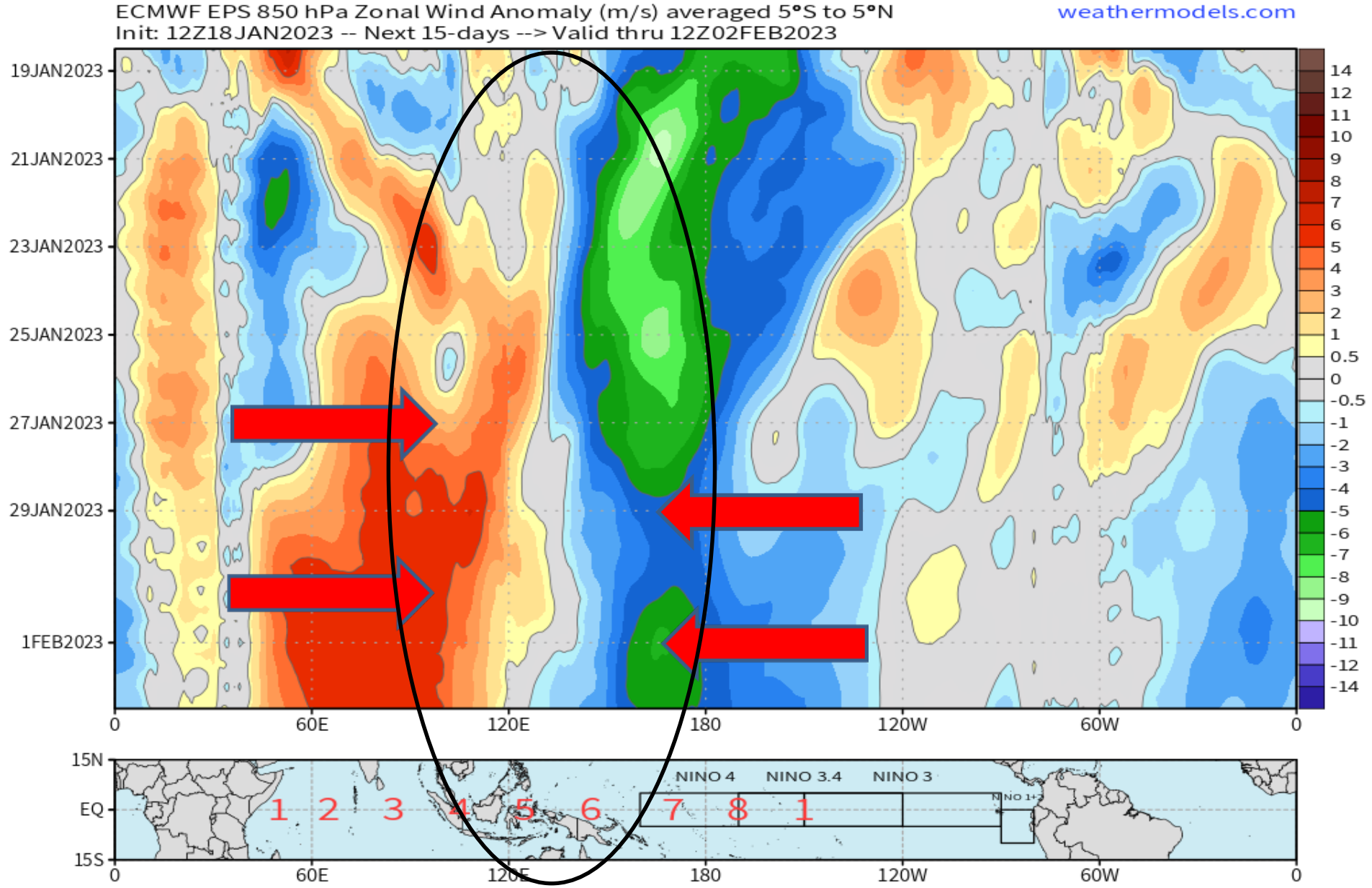


Paul A. Newman, Larry Coy, Leslie R. Lait, Eric R. Nash (NASA/GSFC) Mon Jan 2 17:22:39 2023

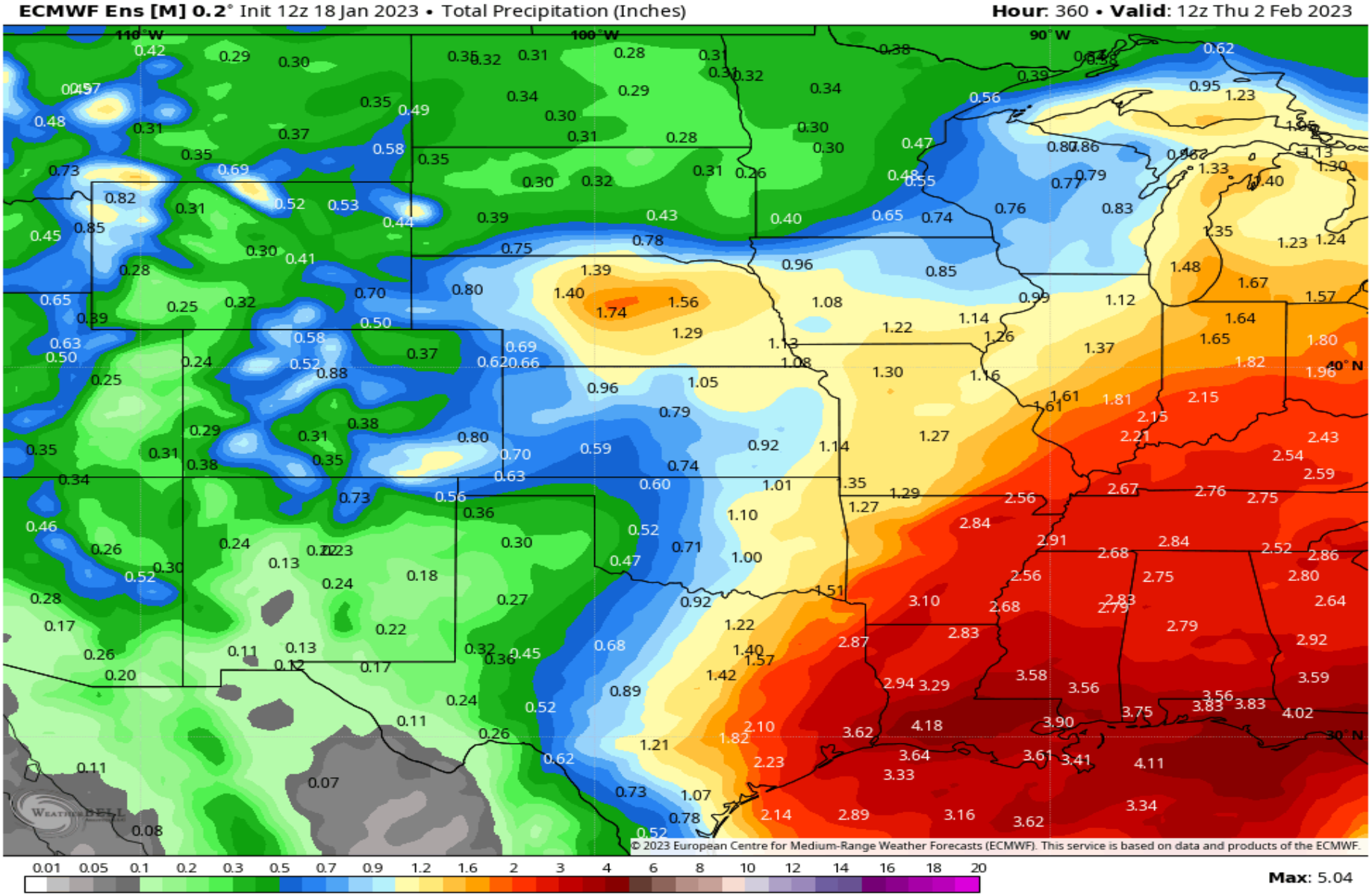
One of The Most Important Oscillations…



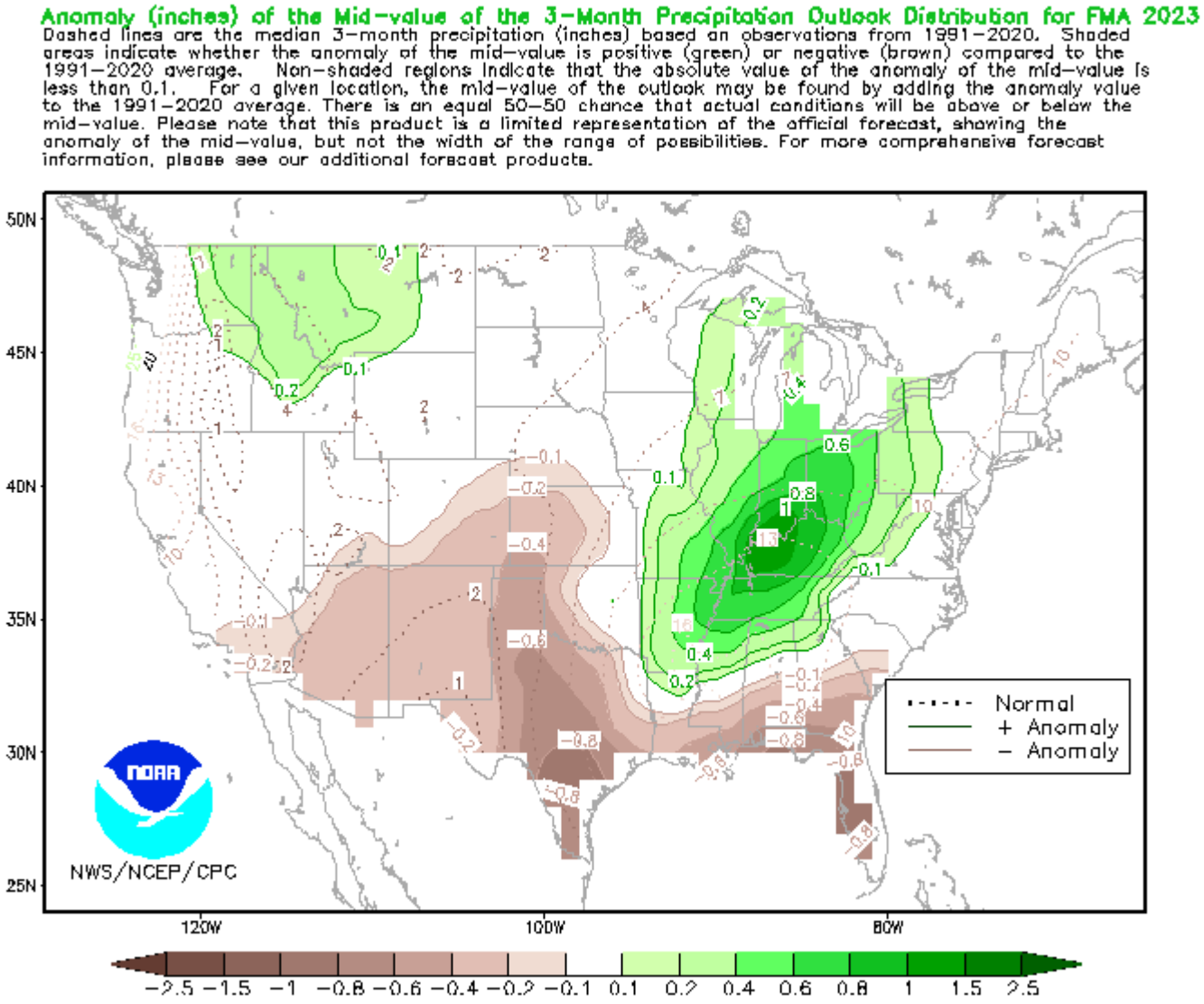
Easterlies Fade…Westerlies Getting Stronger!



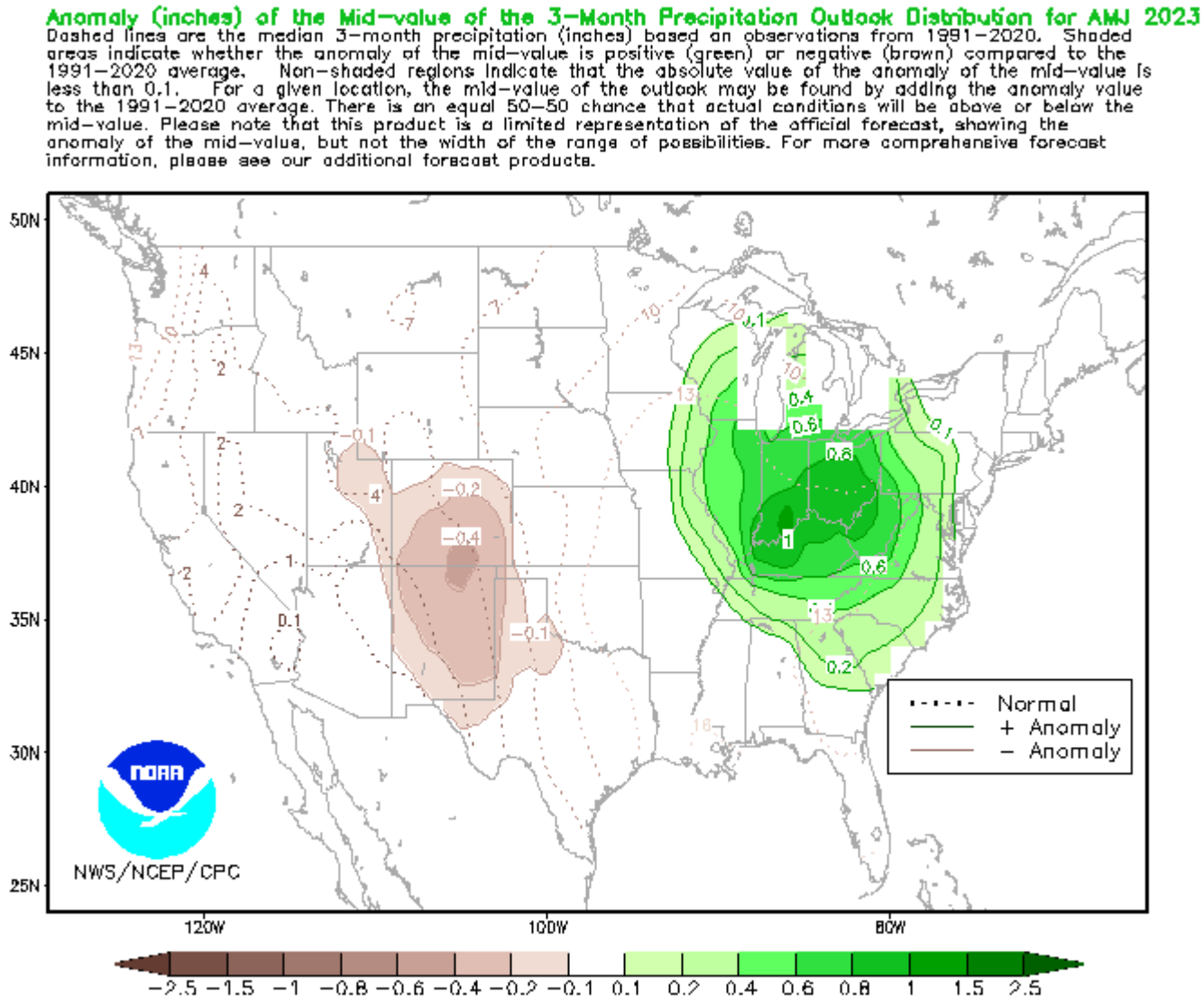
The Next Two Weeks…



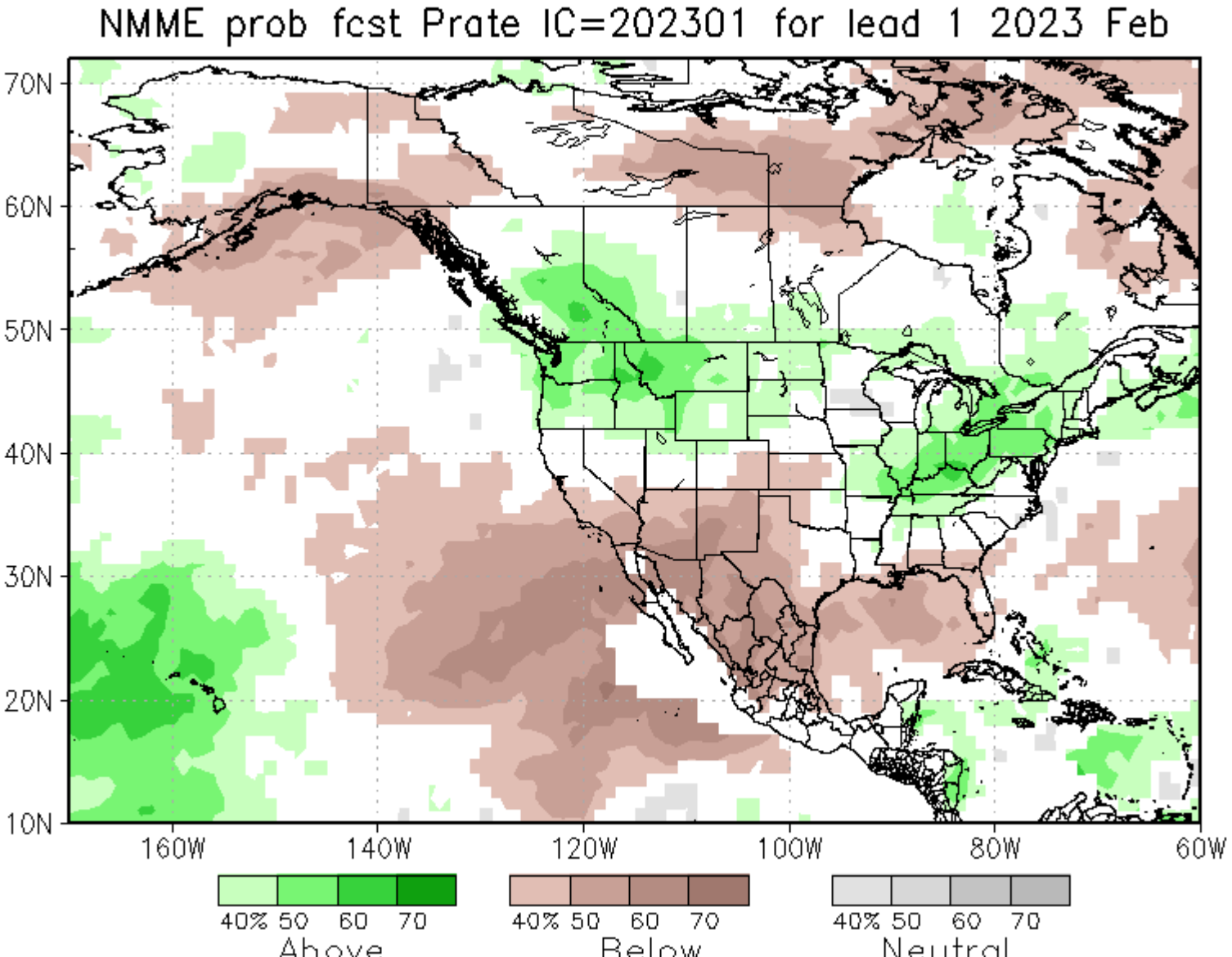
Climate Prediction Center Precipitation Anomaly Forecast



Climate Prediction Center Precipitation Anomaly Forecast



NMME Model Precipitation Forecast
Green = Wetter Brown = Drier White = “Average”



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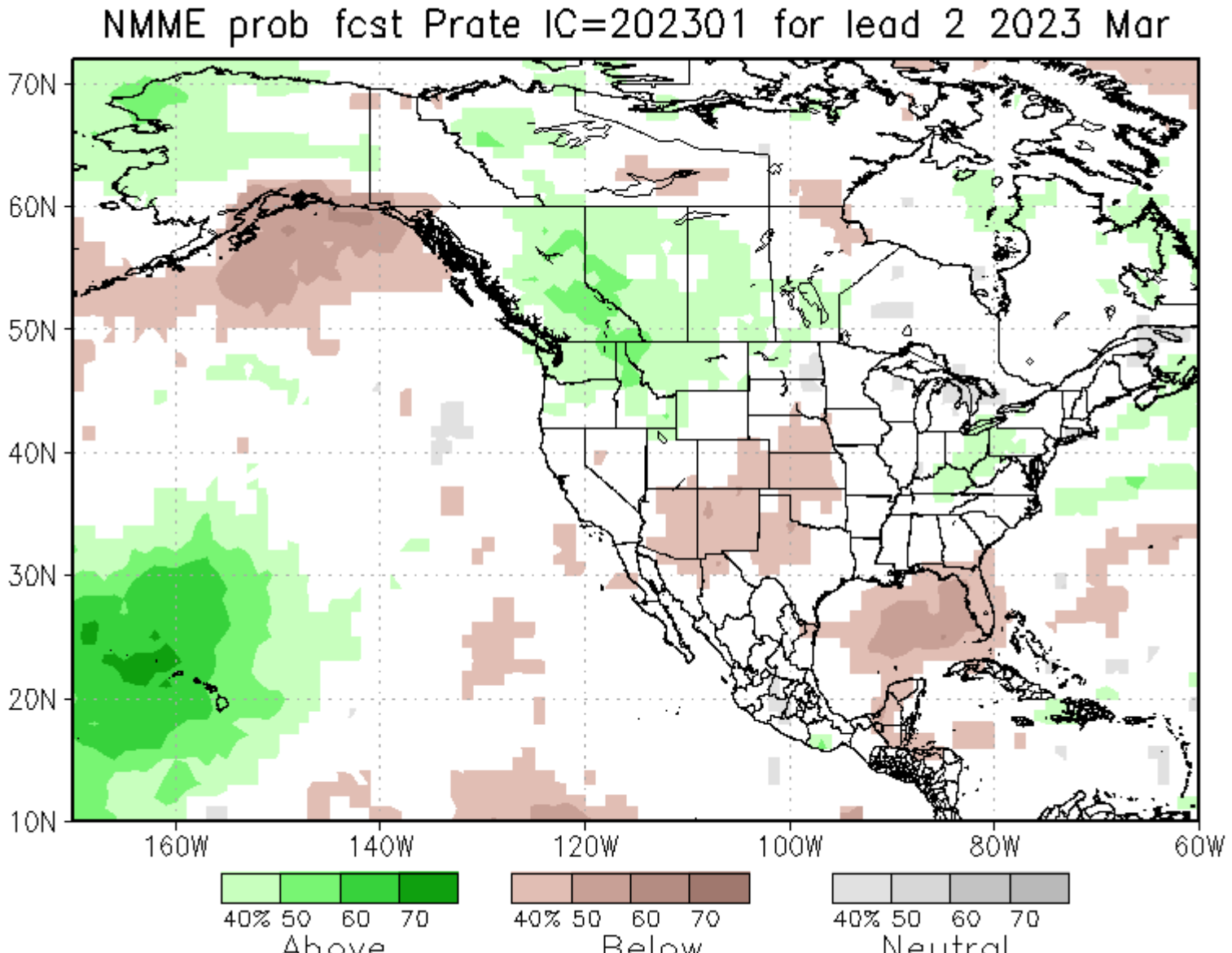

NMME Model Precipitation Forecast
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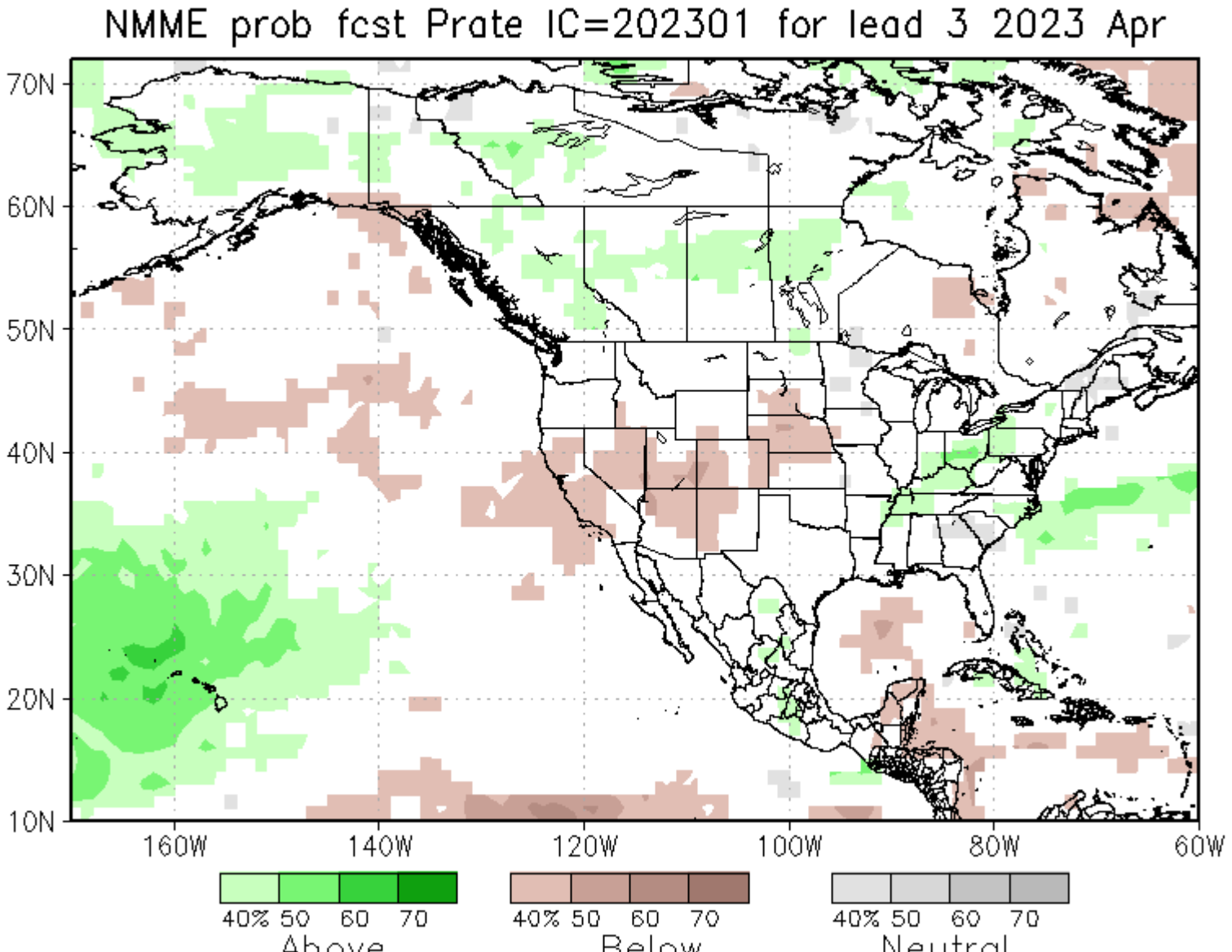

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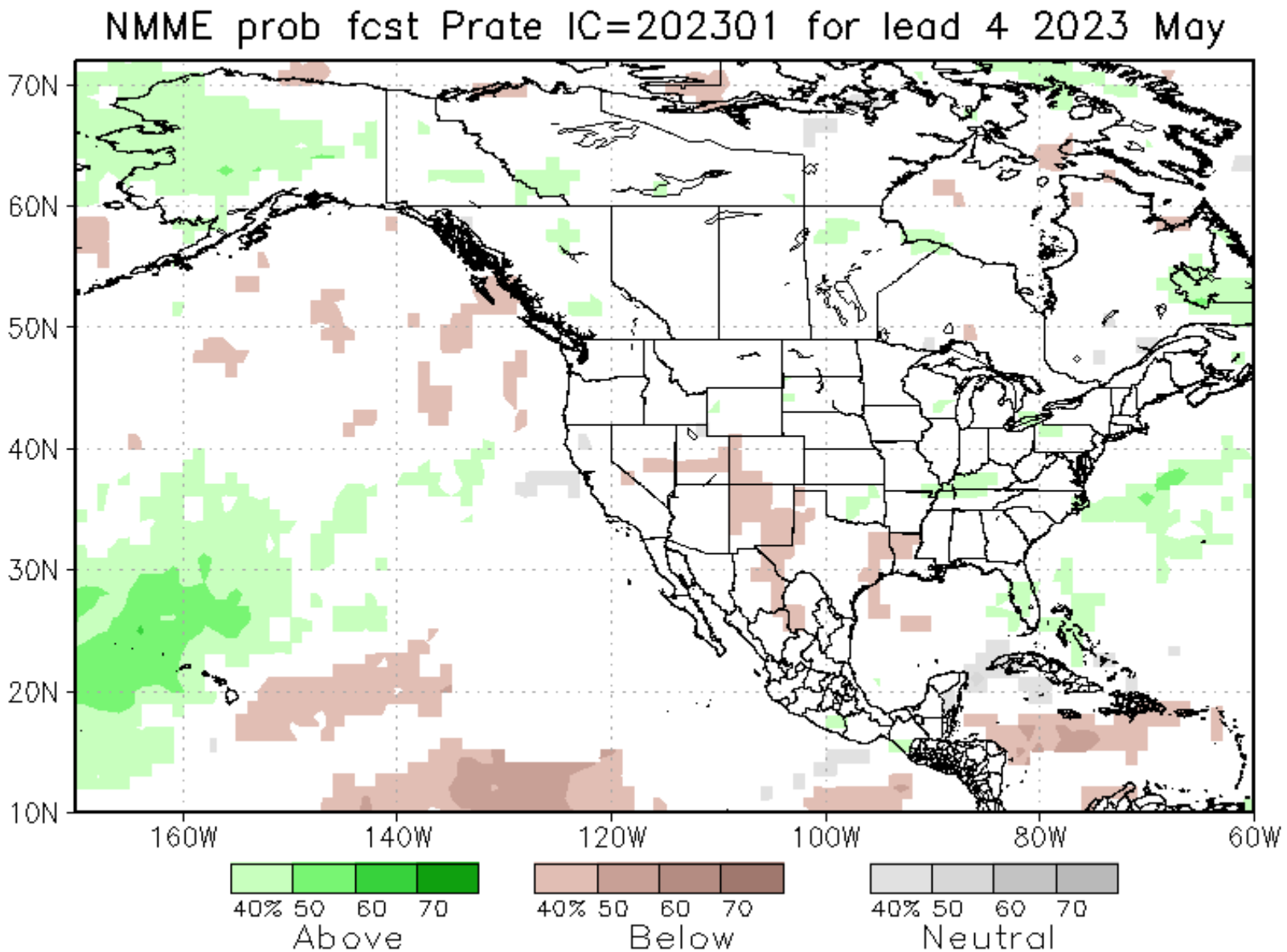

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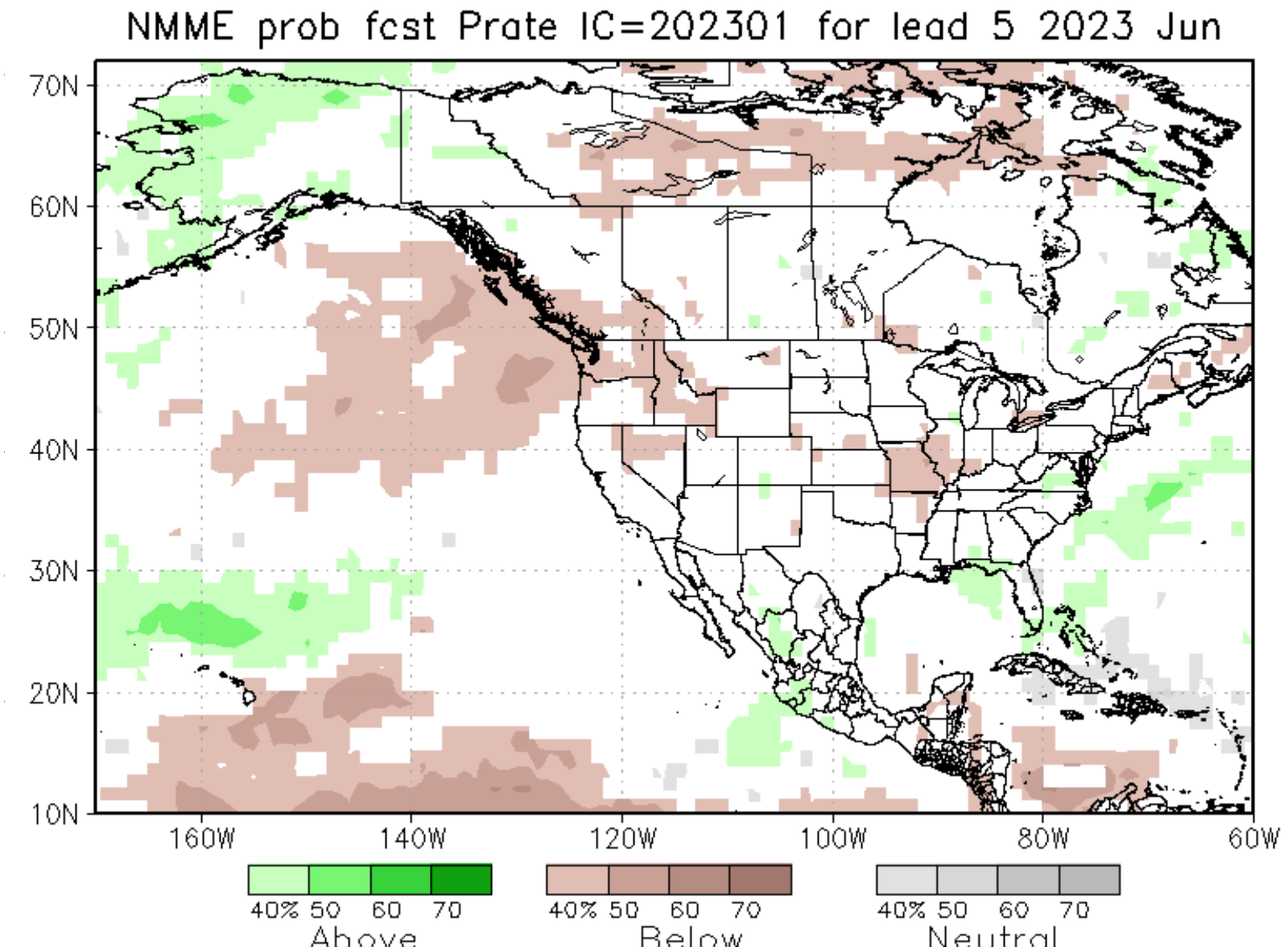

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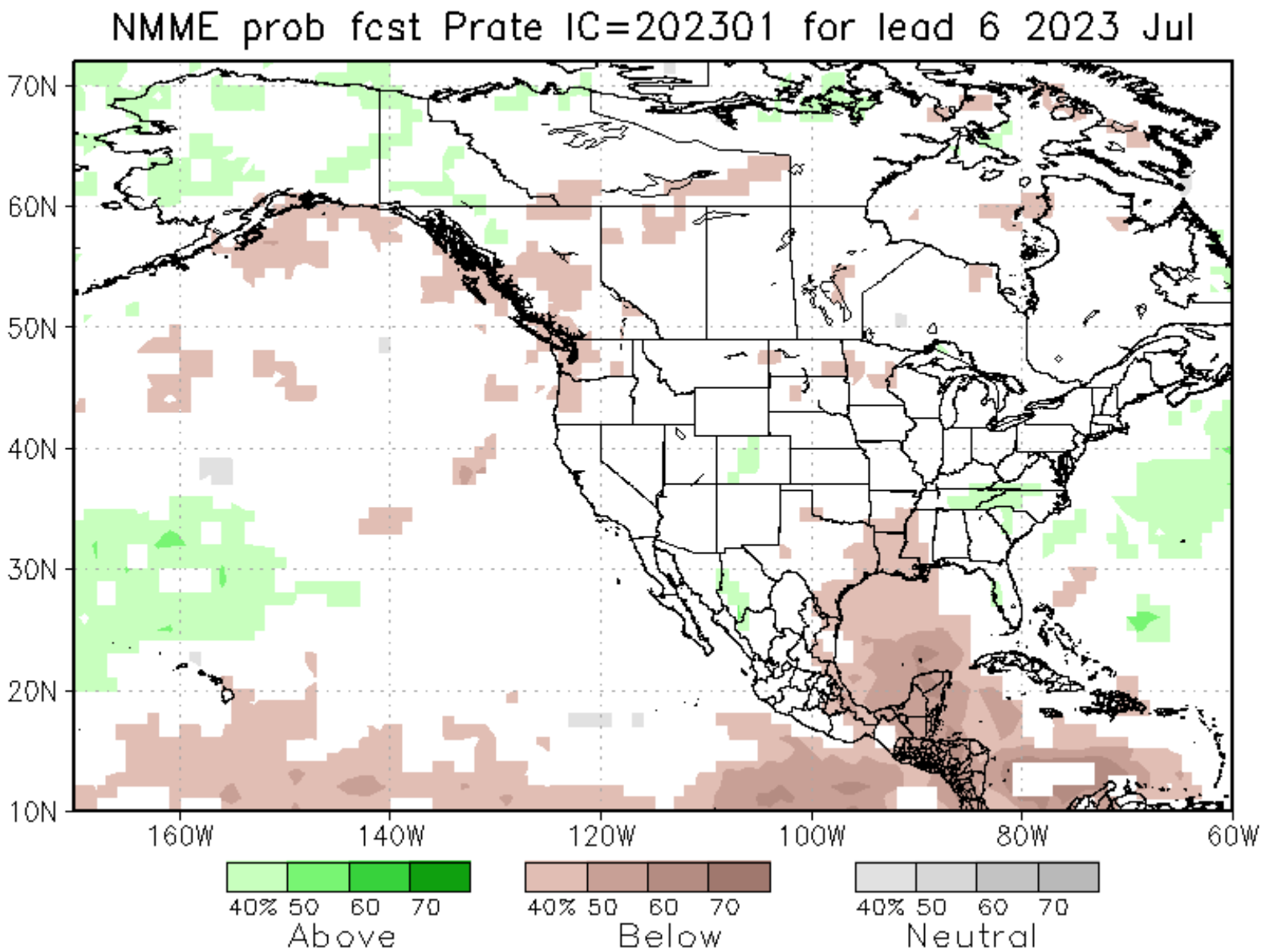
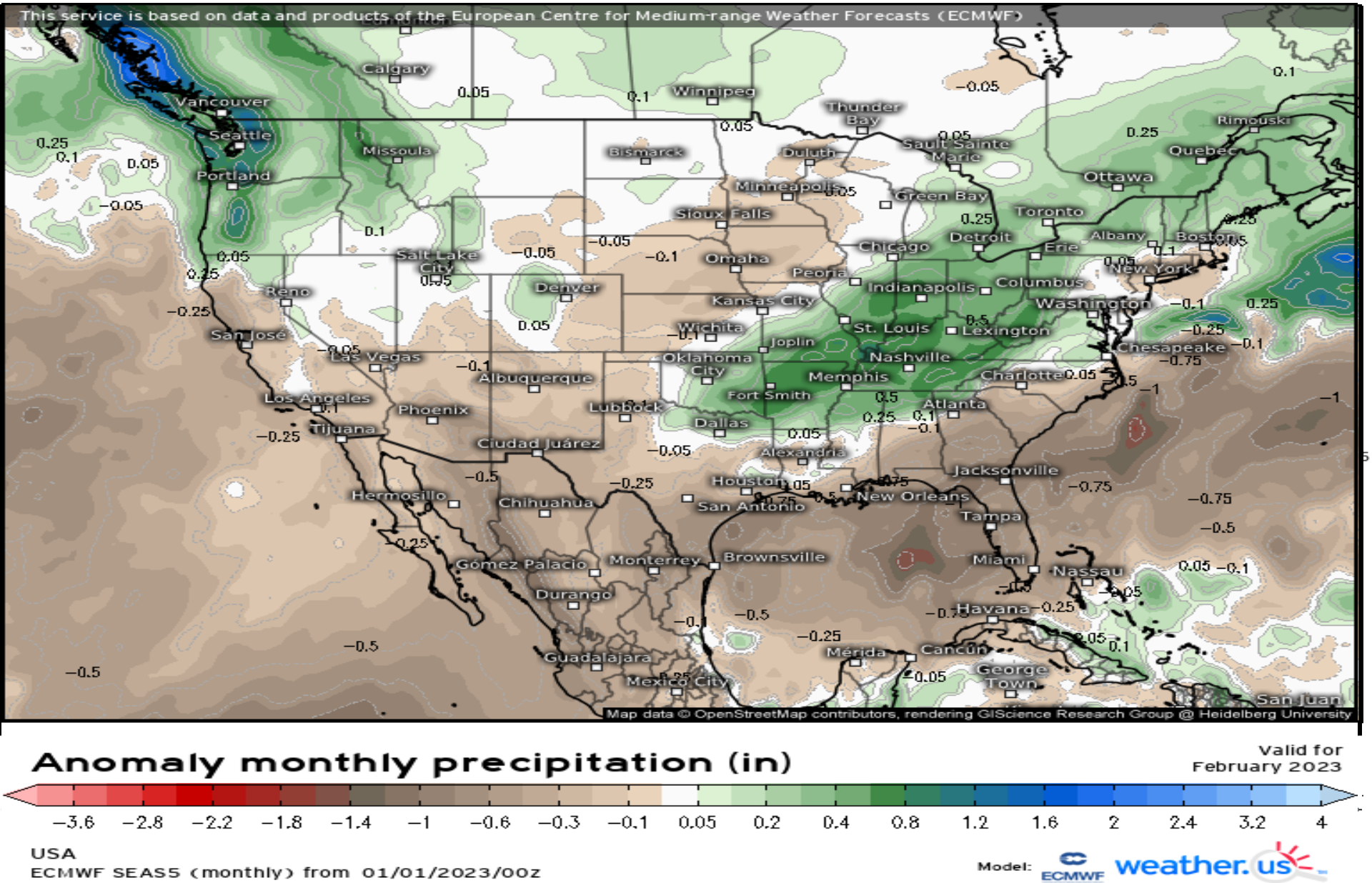


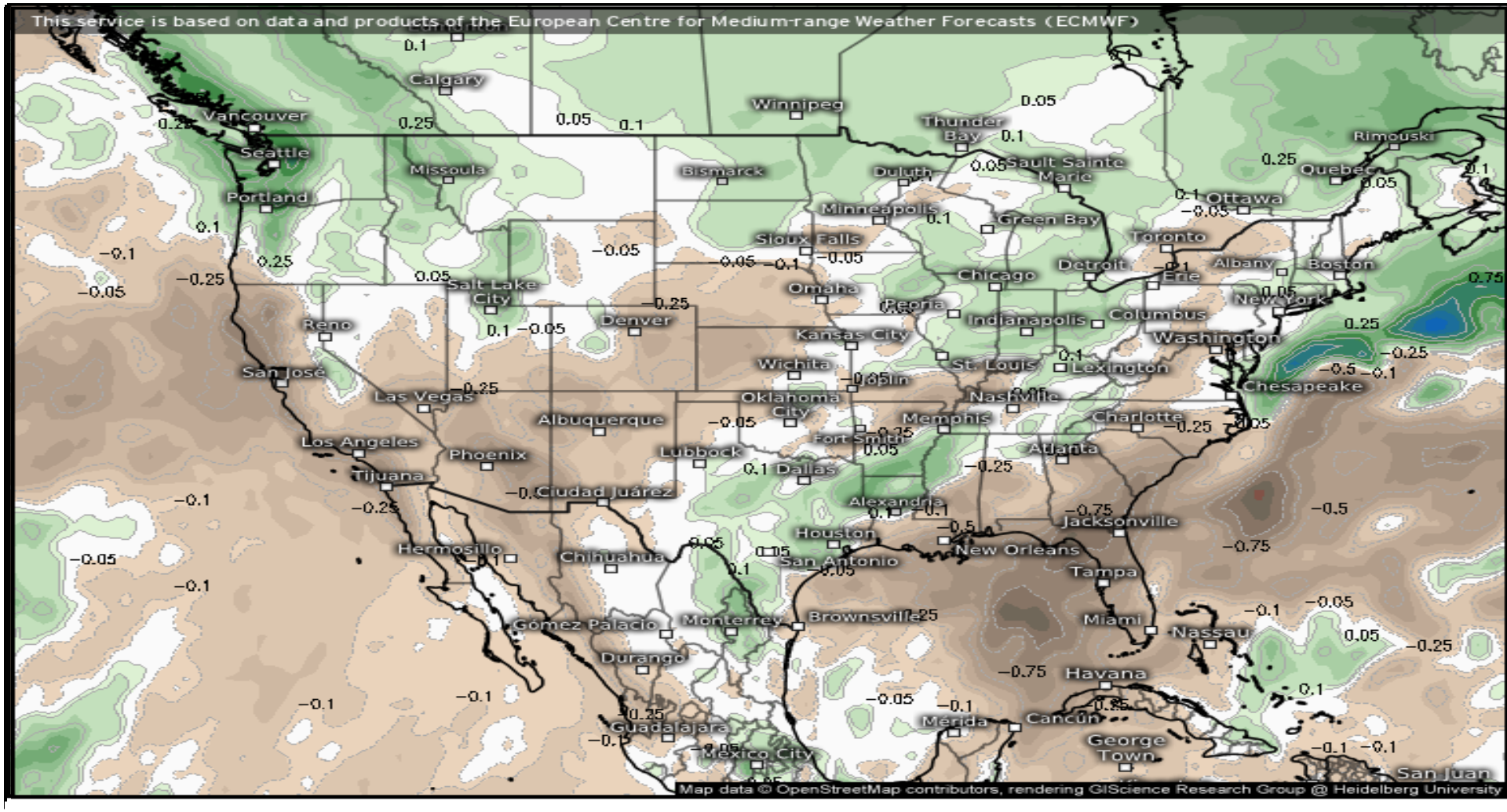
EURO Seasonal Model Precipitation Forecast

Green/Blue = Wetter Yellow/Brown = Drier Gray = “Average”



EURO Seasonal Model Precipitation Forecast

Green/Blue = Wetter Yellow/Brown = Drier Gray = “Average”



EURO Seasonal Model Precipitation Forecast

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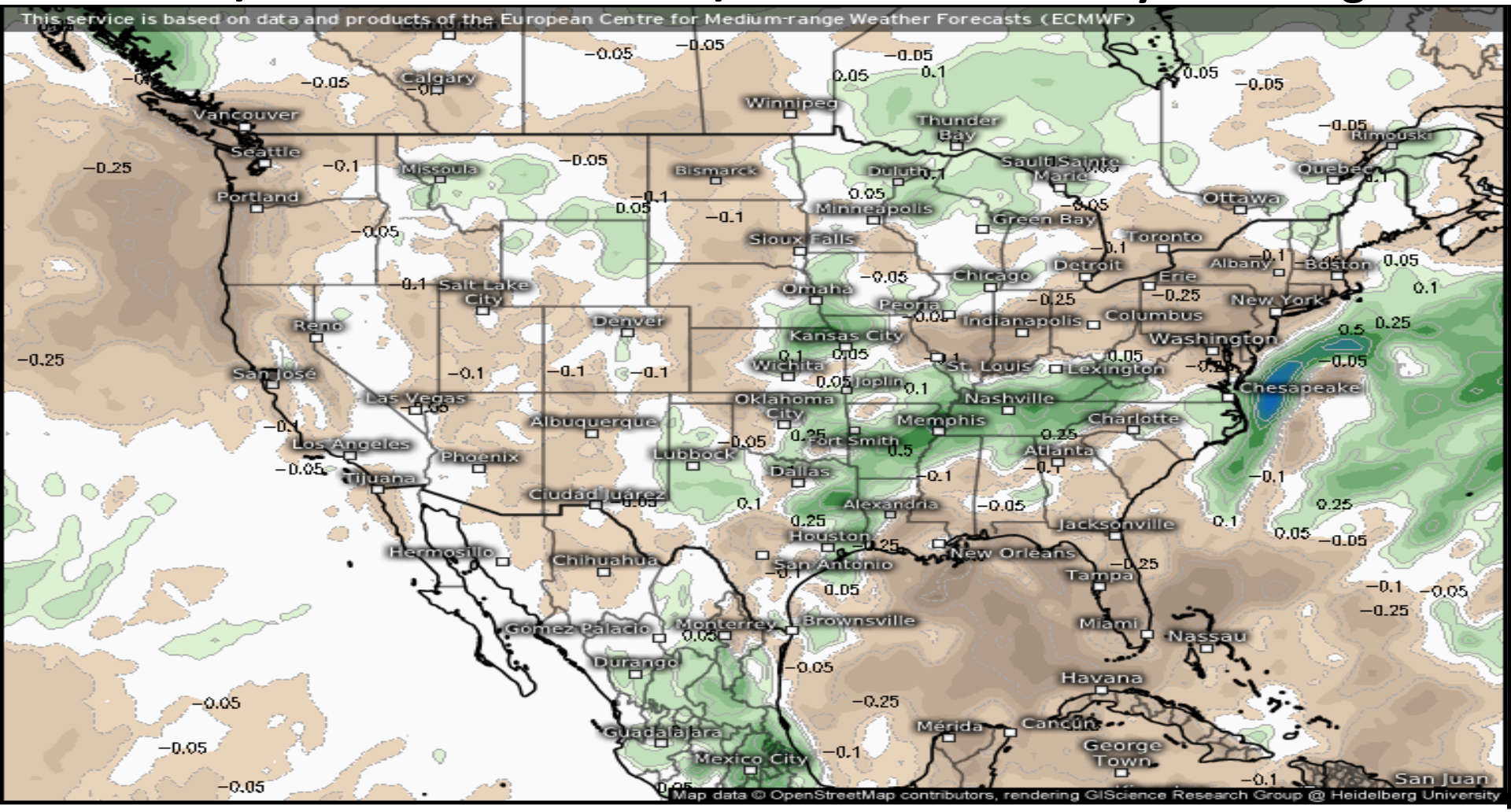

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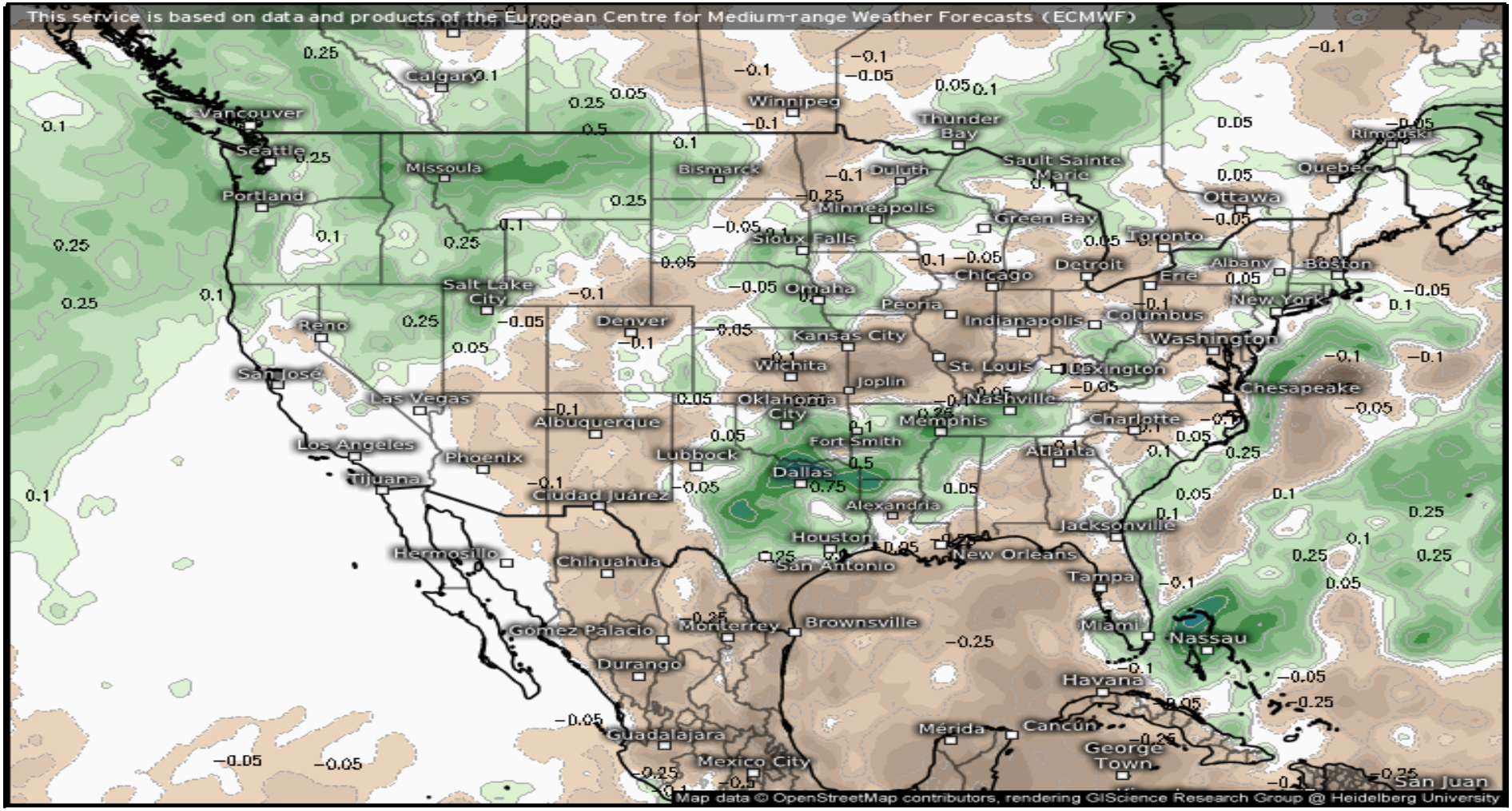

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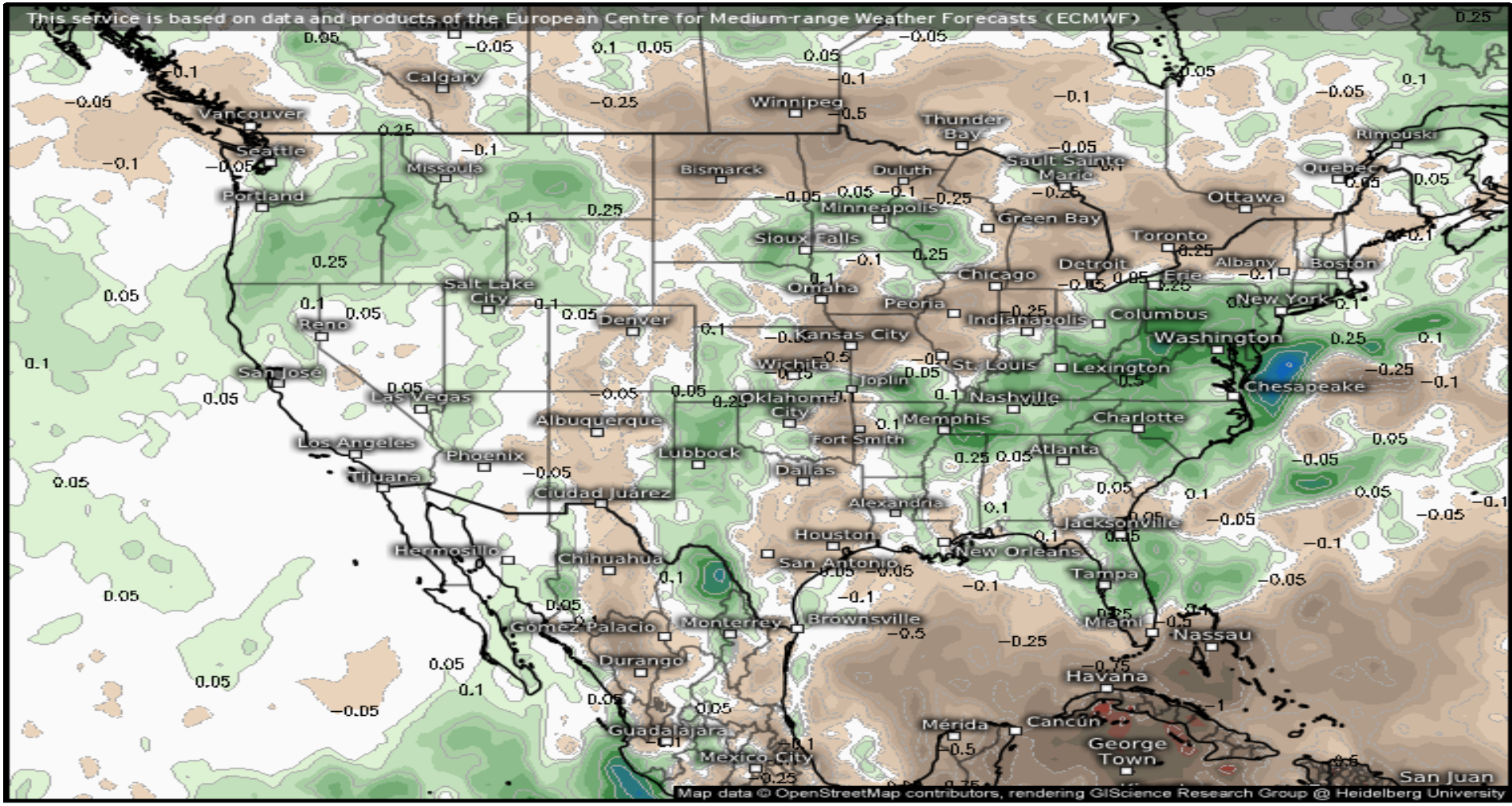


Anomaly monthly precipitation (in)

Valid for June 2023

−3.6 −2.8 −2.2 −1.8 −1.4 −1 −0.6 −0.3 −0.1 0.05 0.2 0.4 0.8 1.2 1.6 2 2.4 3.2 4

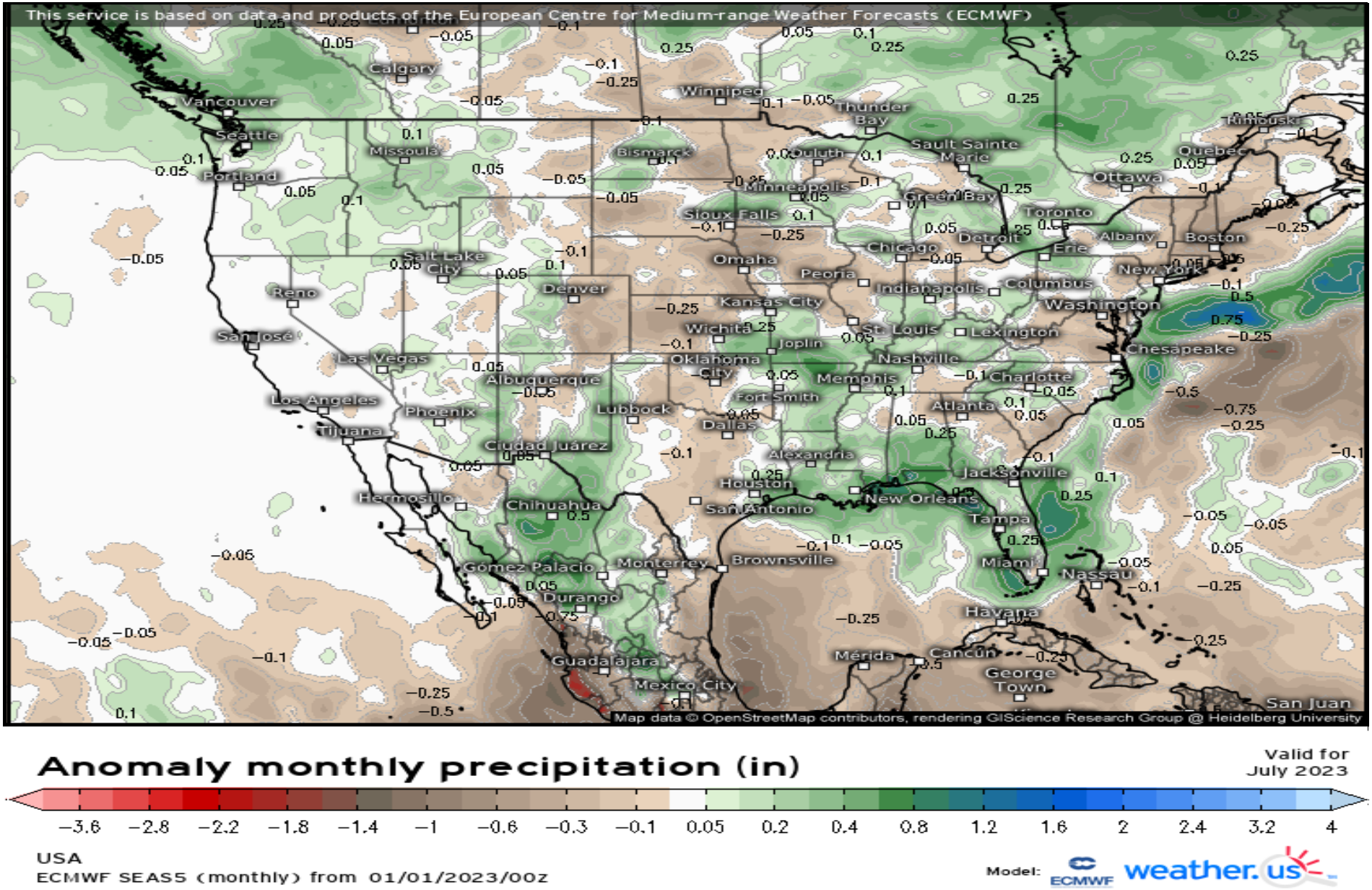
USA

ECMWF SEAS5 (monthly) from 01/01/2023/00z

Model: ECMWF weather.us

EURO Seasonal Model Precipitation Forecast

Green/Blue = Wetter Yellow/Brown = Drier Gray = “Average”



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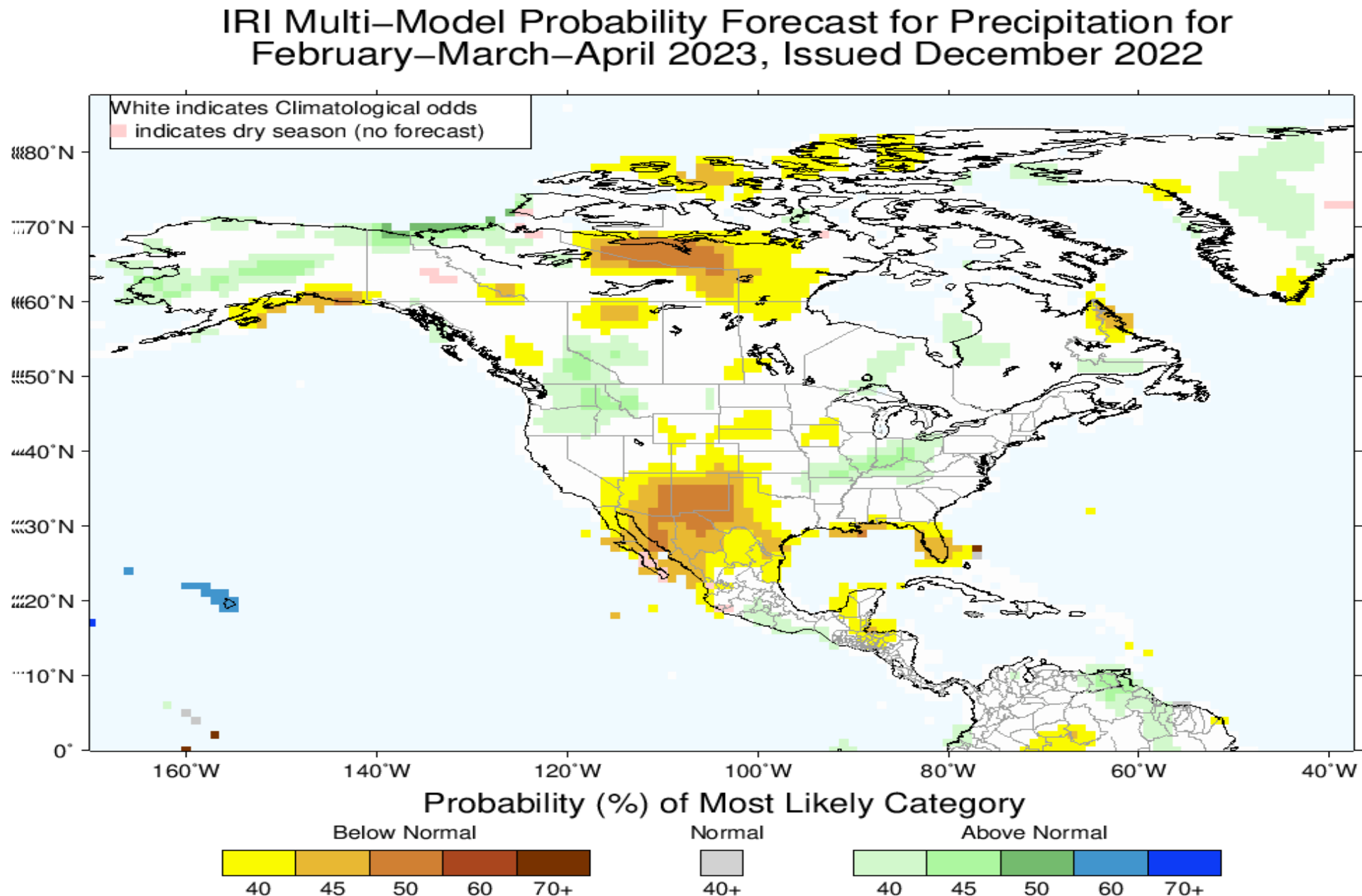

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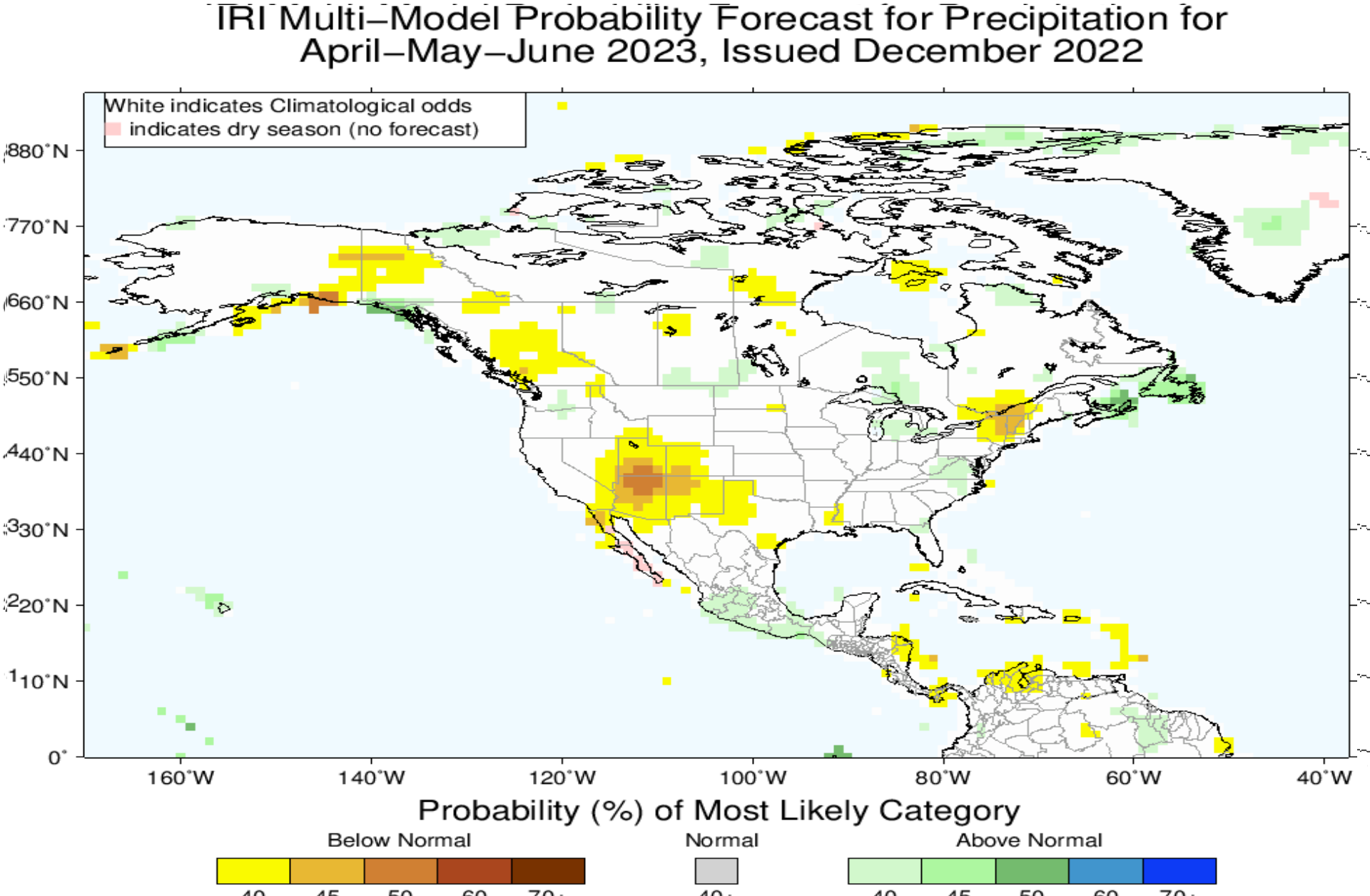
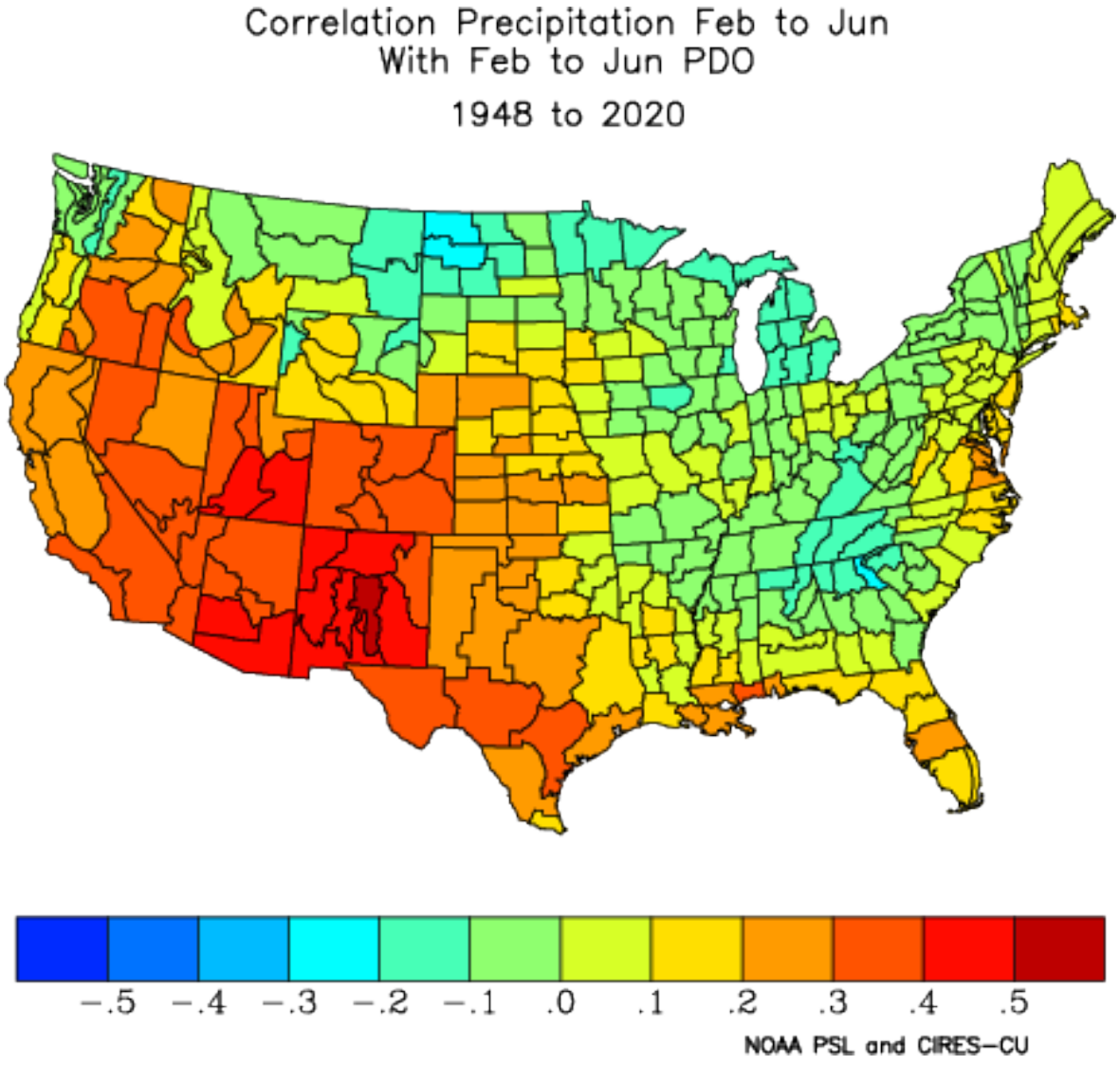
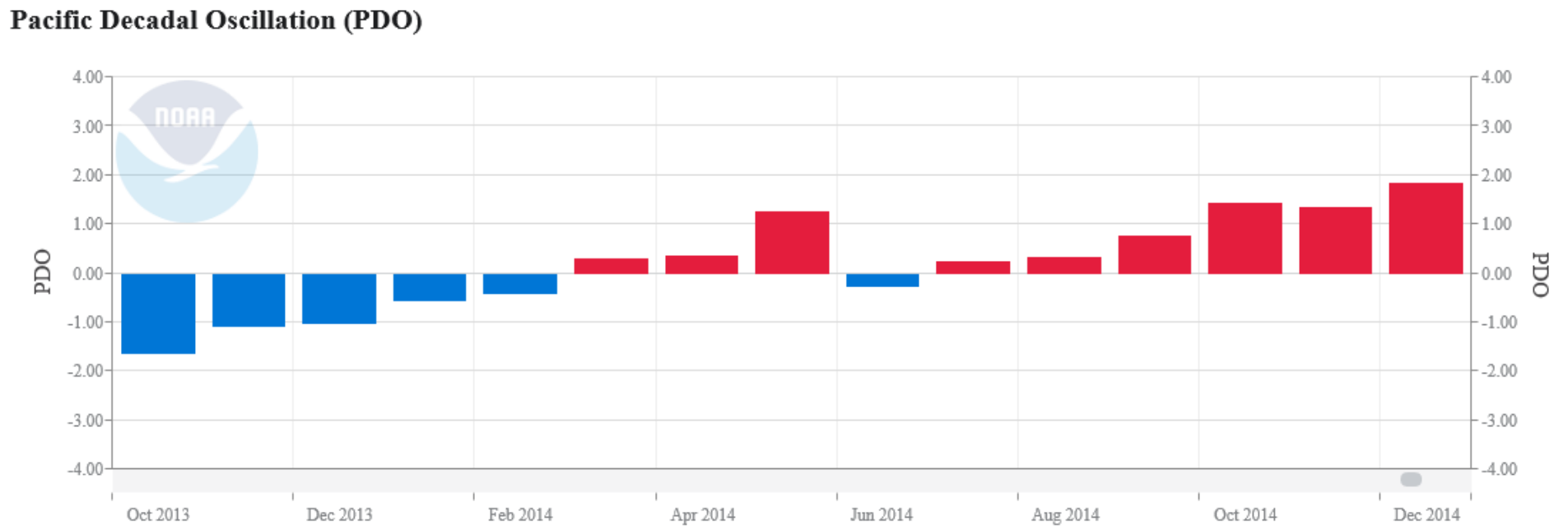


Historic Negative PDO Precipitation Anomalies…
Yellow/Brown=Drier Green/Blue=Wetter

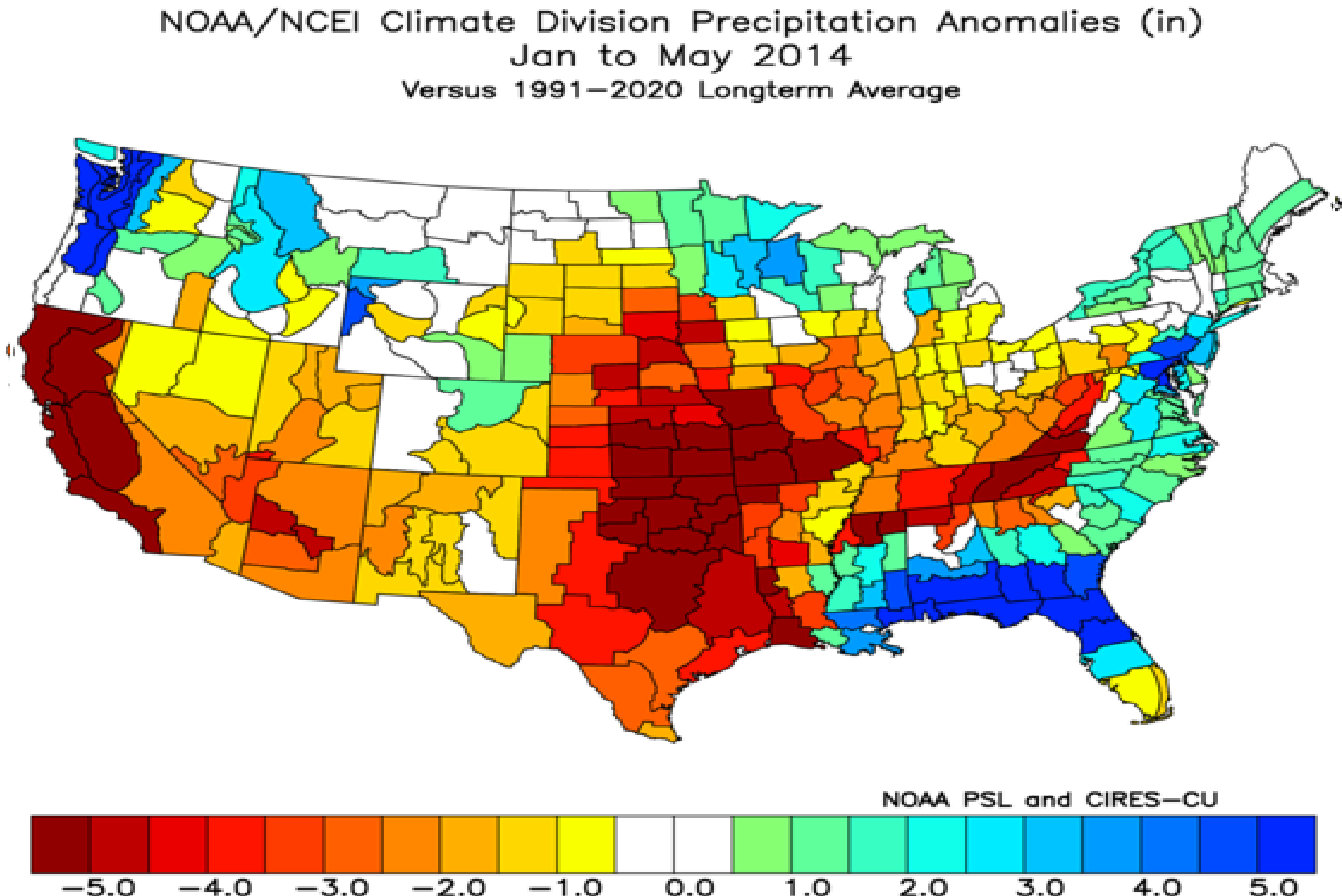


Pacific Decadal Oscillation (PDO)
Oct 2013 – Dec 2014

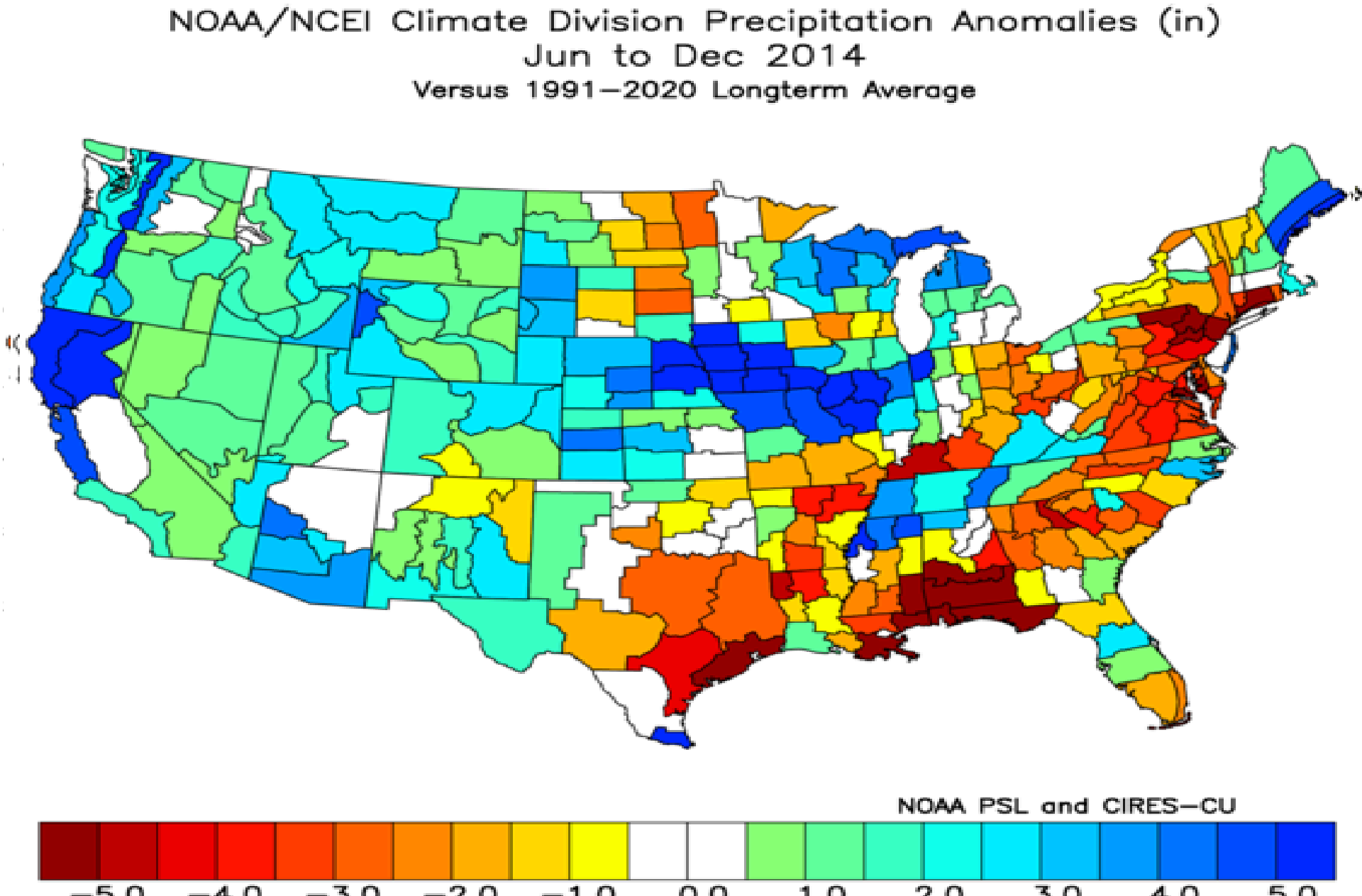


Source: https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/index/ersst.v5.pdo.dat

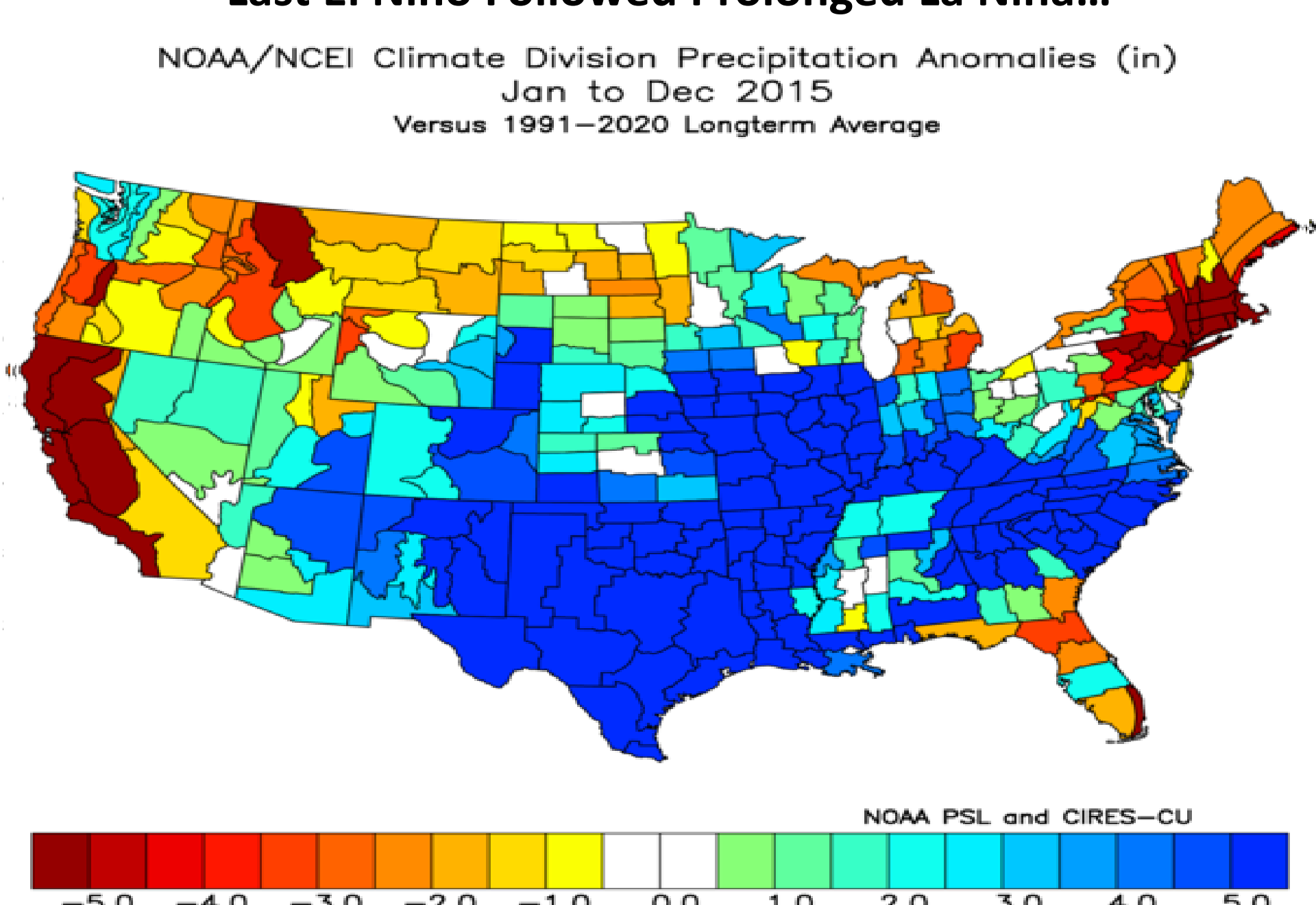
Potential Analog Year for The PDO Transition…



Potential Analog Year for The PDO Transition…



Last El Niño Followed Prolonged La Niña…



In Summary…

1) La Niña going away is a GOOD thing!!!

2) PDO still quite negative, but should become less negative in time. Possible phase shift is important in facilitating long term pattern change.

3) El Niño development later this year is not a certainty, but certainly seems likely. Doesn't necessarily imply immediate relief…see PDO

4) If nothing else, the pattern that has continuously caused and reinforced drought will loosen its grip on us. As always, it is VERY important to capitalize on the moisture we receive.

5) CAUTIOUS OPTIMISM!

BrianBledsoeWx, LLC

Making The Weather Work for You

Brian Bledsoe

Chief Meteorologist / Climatologist

719-661-1364

brianbledsoewx@gmail.com