

La Niña and Spring Weather Outlook

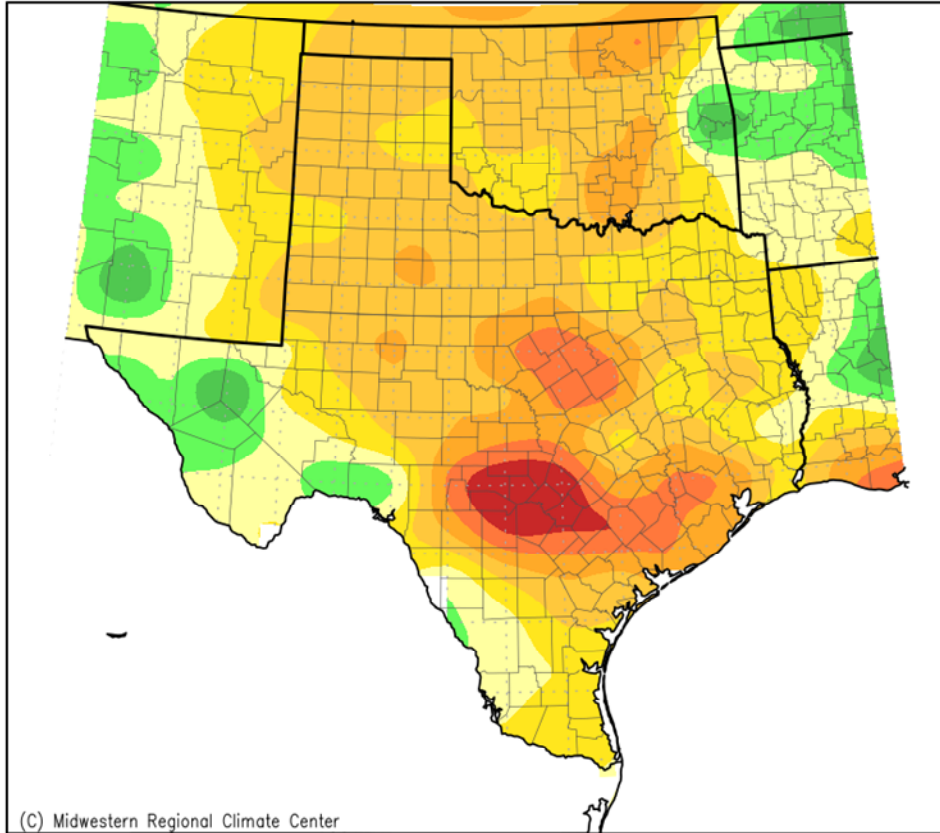
Planning and Public Policy
Committee Meeting

Feb. 22, 2023

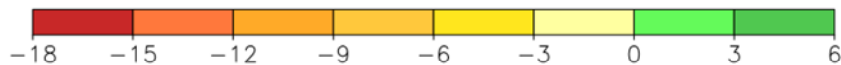


2022 Rainfall Departure From Normal

Accumulated Precipitation (in): Departure from Mean
January 1, 2022 to December 31, 2022



Mean period is 1991–2020.



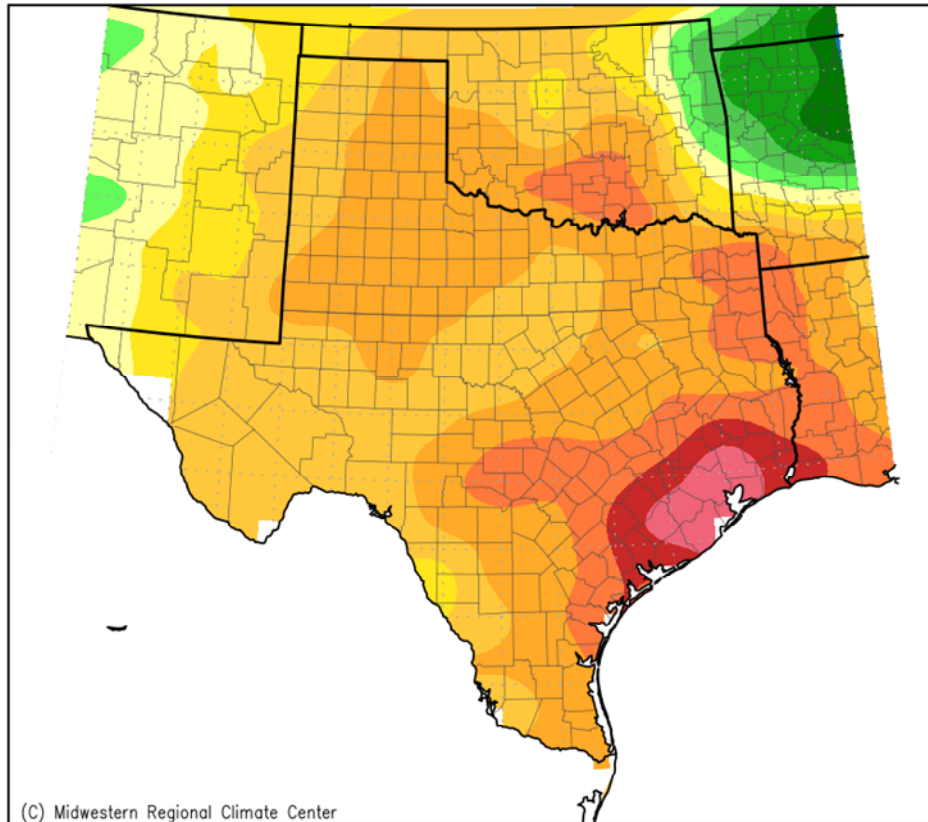
Midwestern Regional Climate Center

**Rain was 5.5
inches below
normal**

**The 13th-driest
year on record
for Texas**

2011 Rainfall Departure From Normal

Accumulated Precipitation (in): Departure from Mean
January 1, 2011 to December 31, 2011



Mean period is 1991-2020.

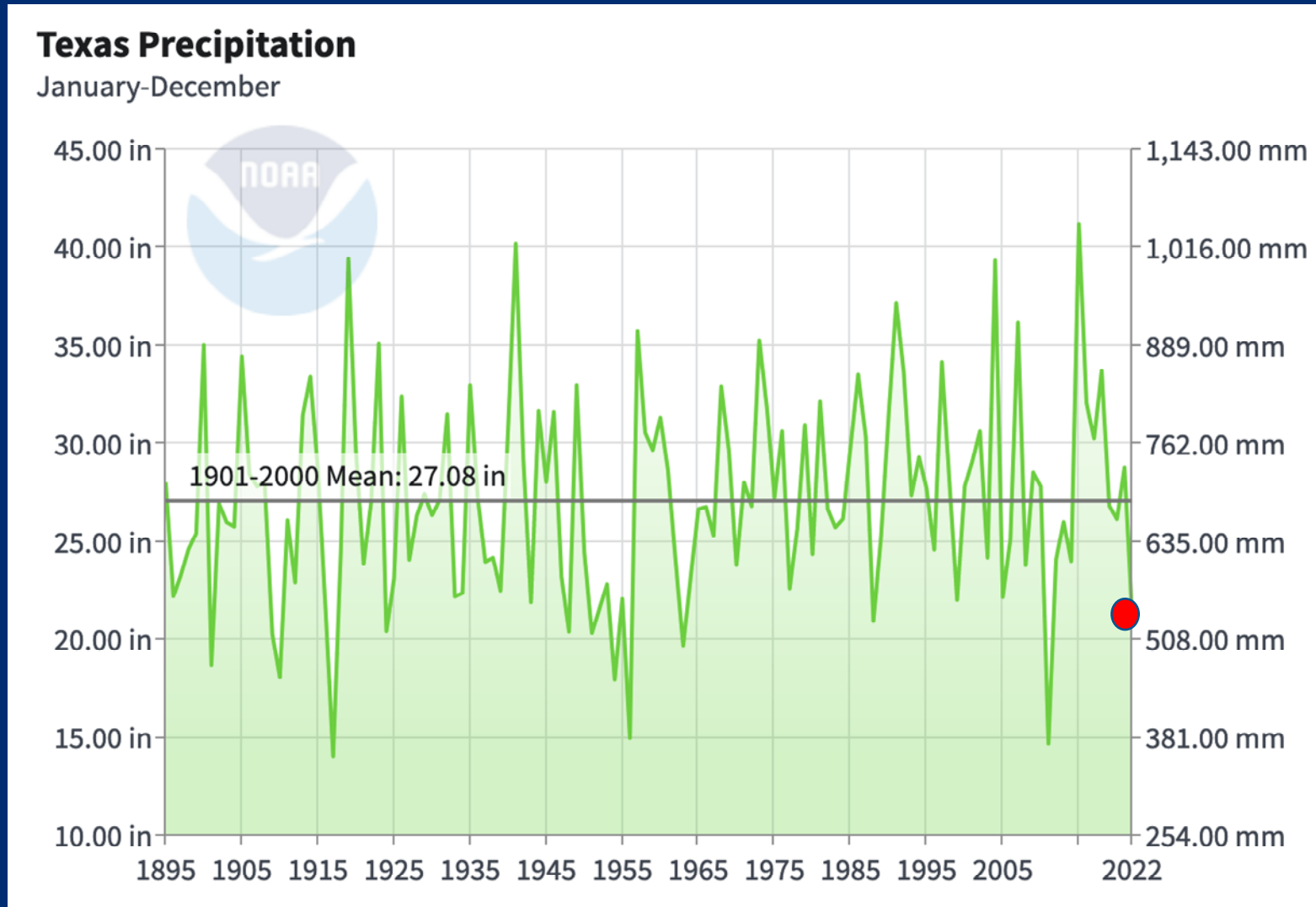


Midwestern Regional Climate Center

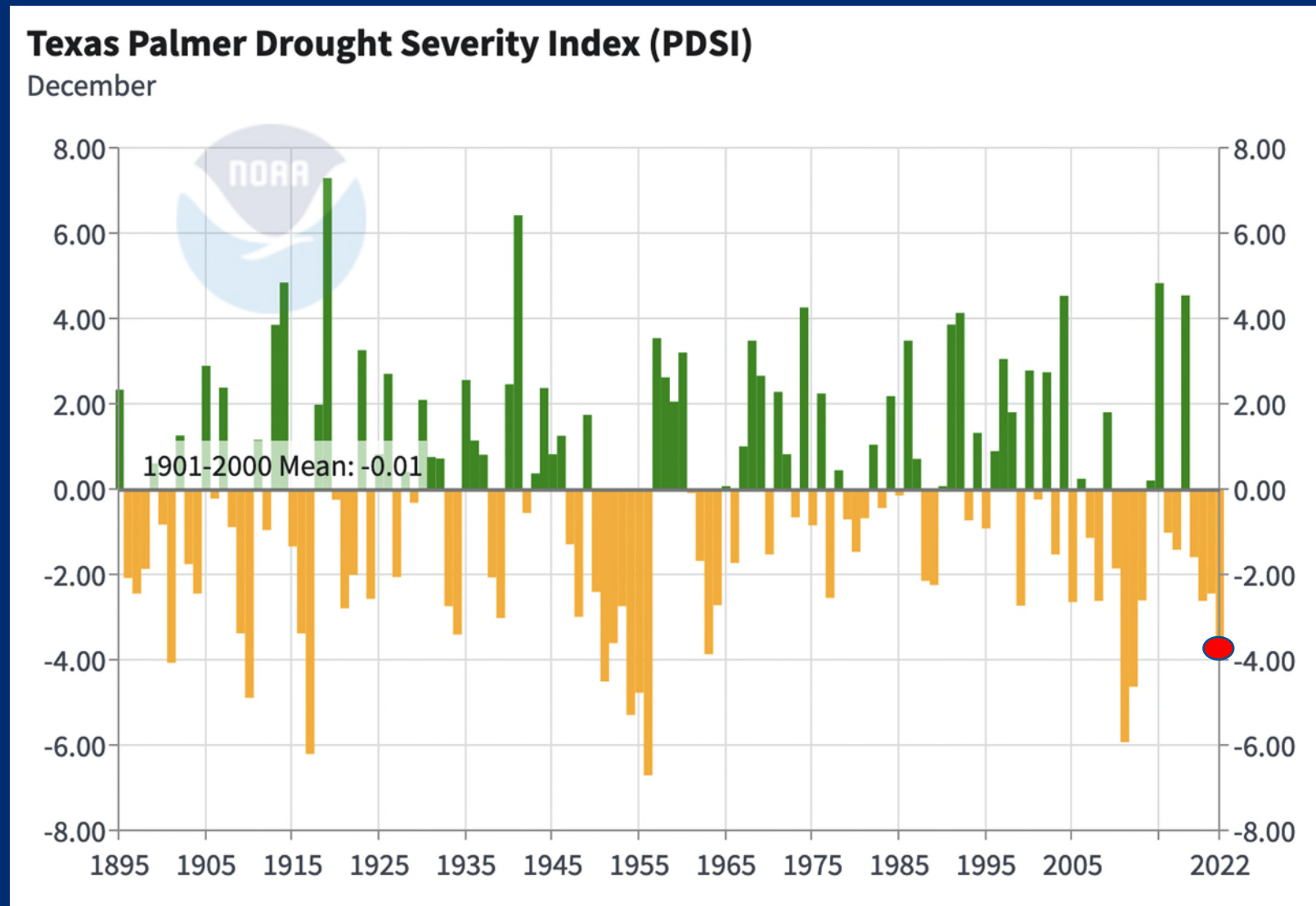
**Rain was 12.38
inches below
normal**

**The second-driest
year on record
for Texas**

The Third-Driest Year Since 1956



2022 was the Tenth “Drouthiest” on Record



Climate Division 6 2022 Rainfall

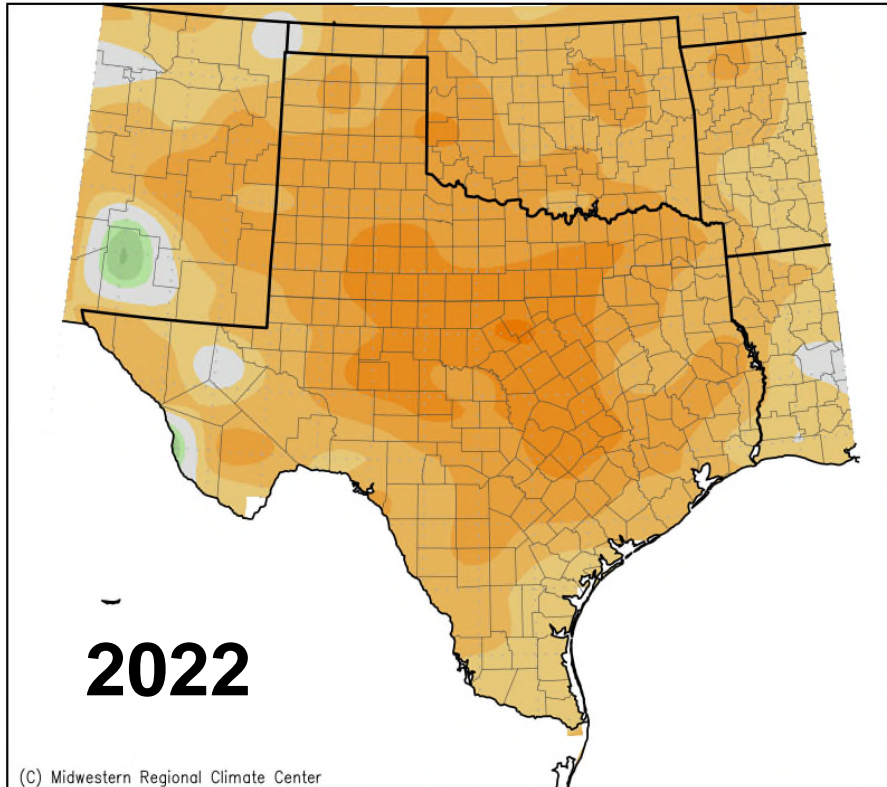


- **14.58 inches**
- **8.81 inches below normal**
- **Seventh-driest year on record**

- **2011 total 11.16 inches**
- **Third-driest year on record**

Departure From Normal Temperature Summer 2022 vs. 2011

Average Temperature (°F): Departure from Mean
June 1, 2022 to August 31, 2022

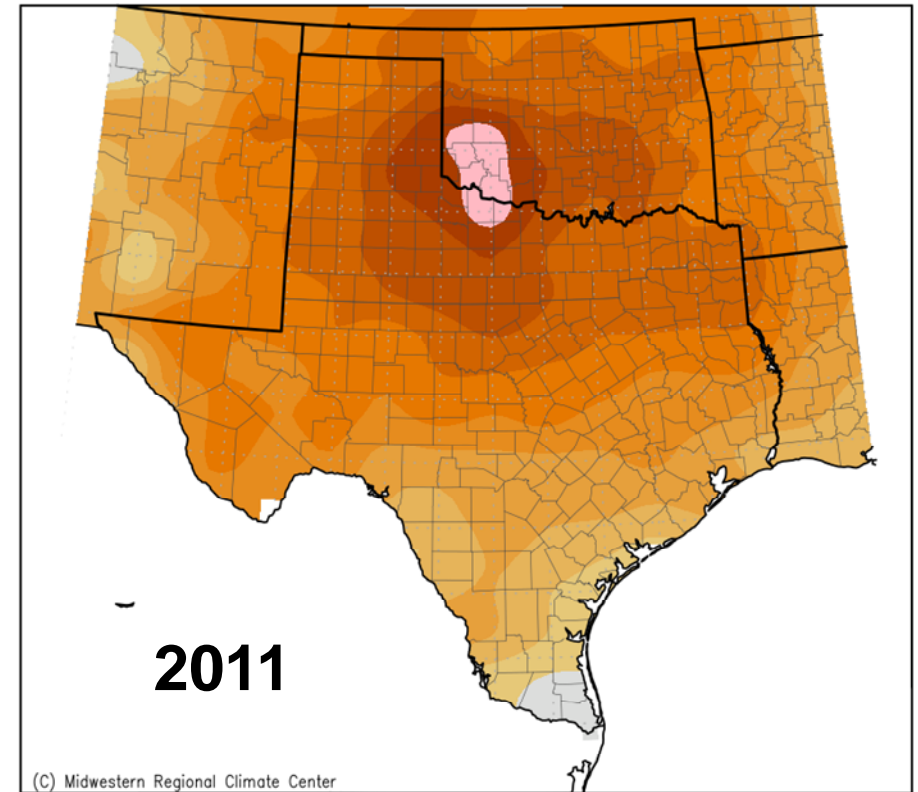


Mean period is 1991–2020.



Midwestern Regional Climate Center

Average Temperature (°F): Departure from Mean
June 1, 2011 to August 31, 2011



Mean period is 1991–2020.

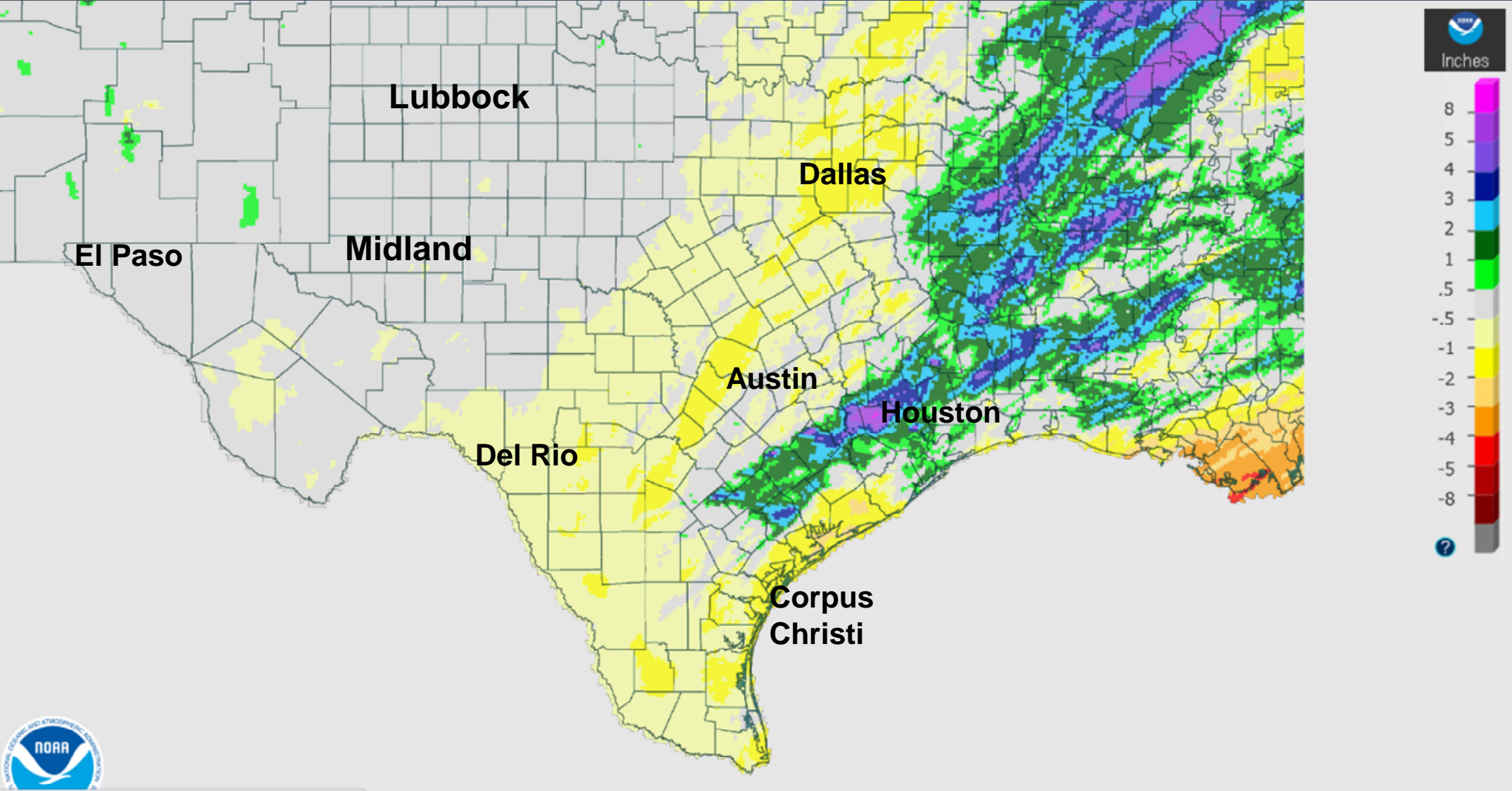


Midwestern Regional Climate Center

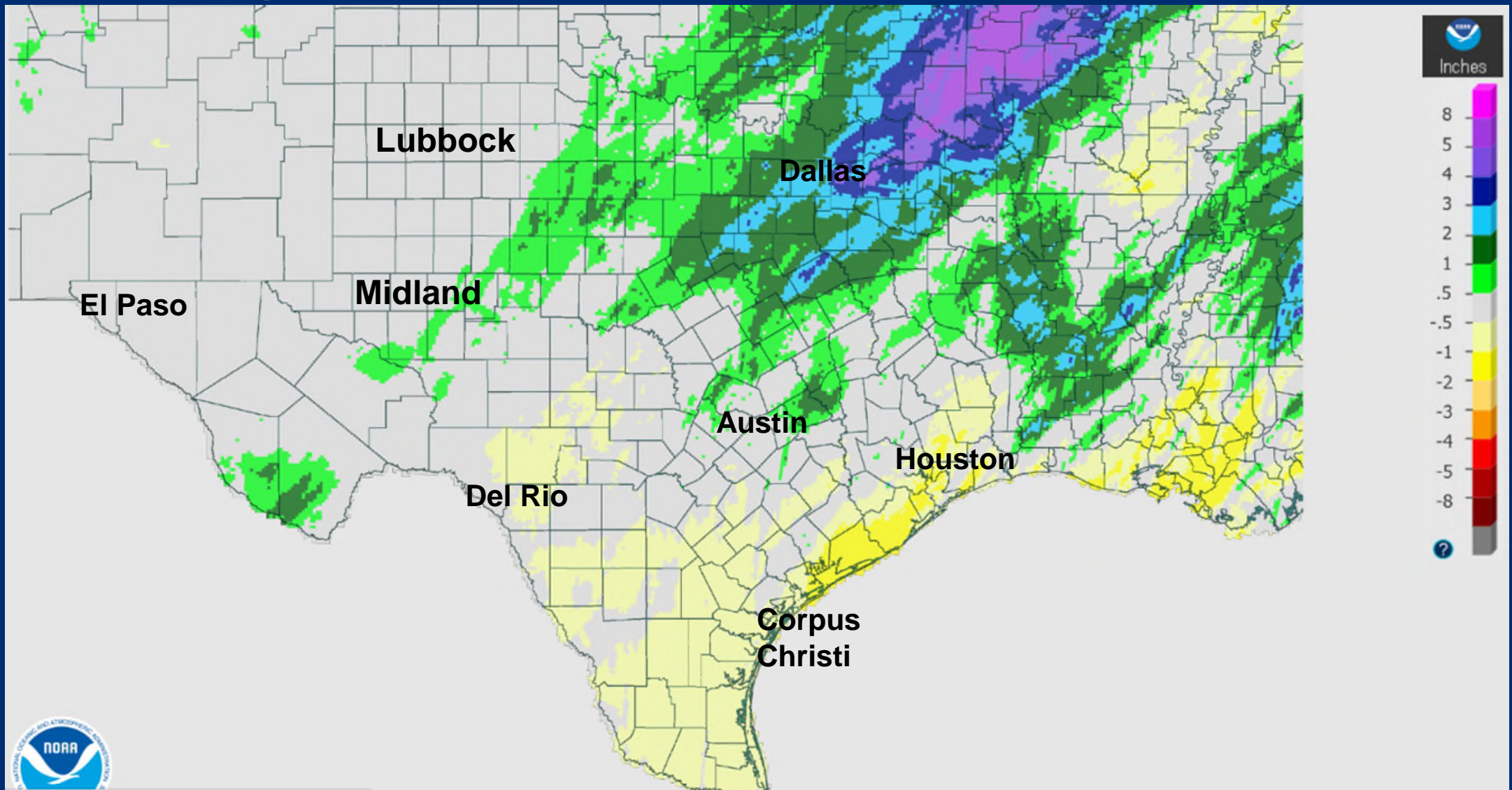
2022 Temperature Data for Texas

- Average temperature was 1.9 degrees above normal
- 2022 ranked the 13th-warmest year on record
- Summer 2022's average temperature was 3.4 degrees above normal
- Summer 2022 ranks as the second-hottest summer on record, behind 2011
- For comparison, 2011's summer temperature averaged 5.5 degrees above normal

Rainfall Departure From Normal: January 2023



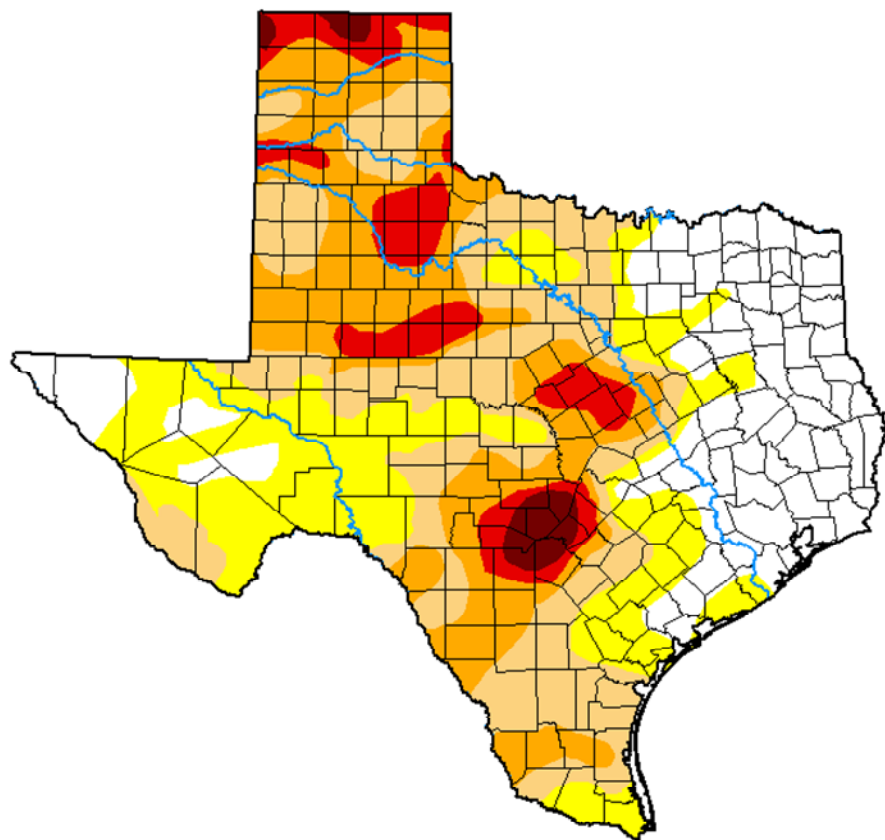
Rainfall Departure From Normal: February 2023



U.S. Drought Monitor

U.S. Drought Monitor Texas

February 14, 2023
(Released Thursday, Feb. 16, 2023)
Valid 7 a.m. EST



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>

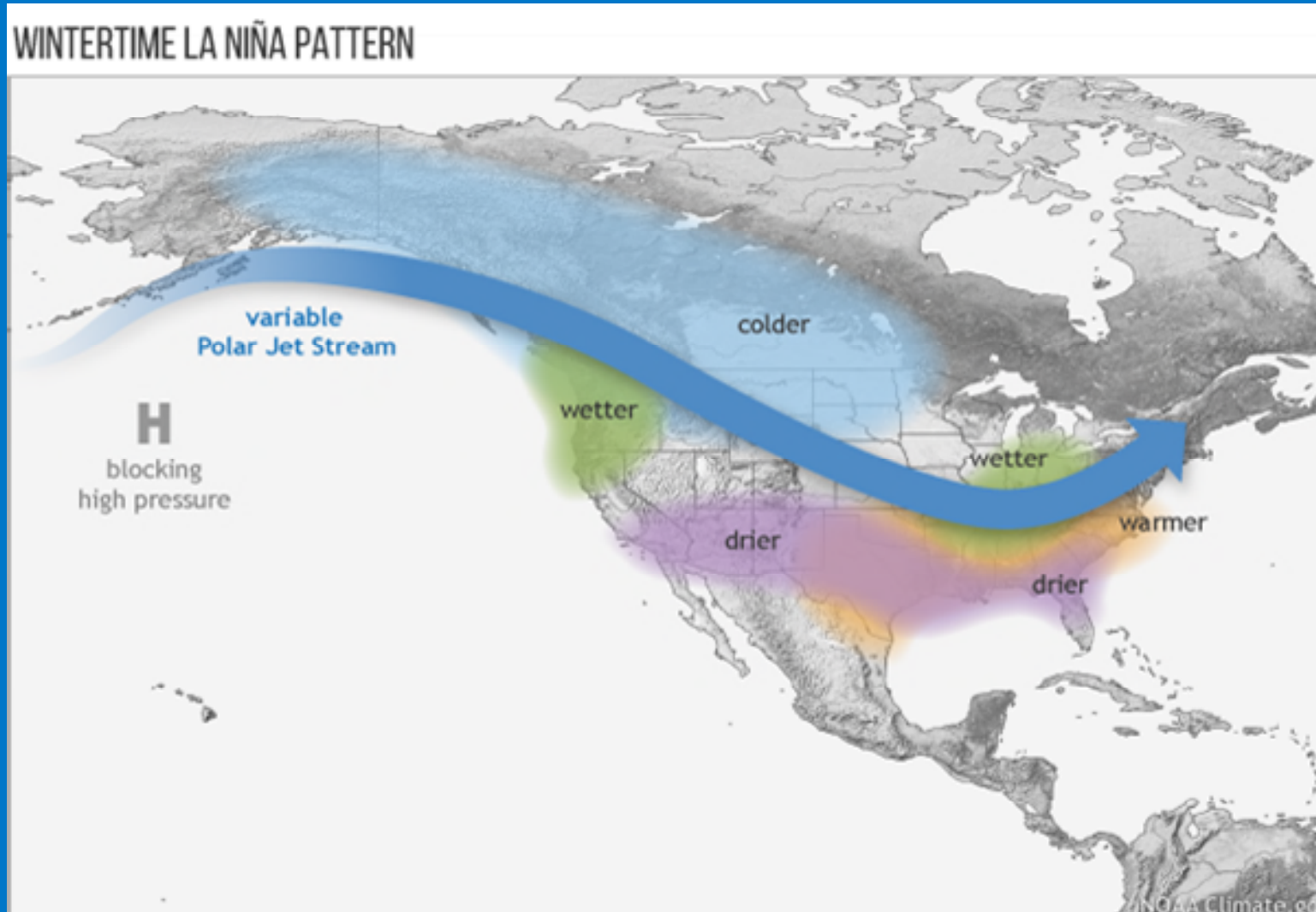
Author:

Brian Fuchs
National Drought Mitigation Center



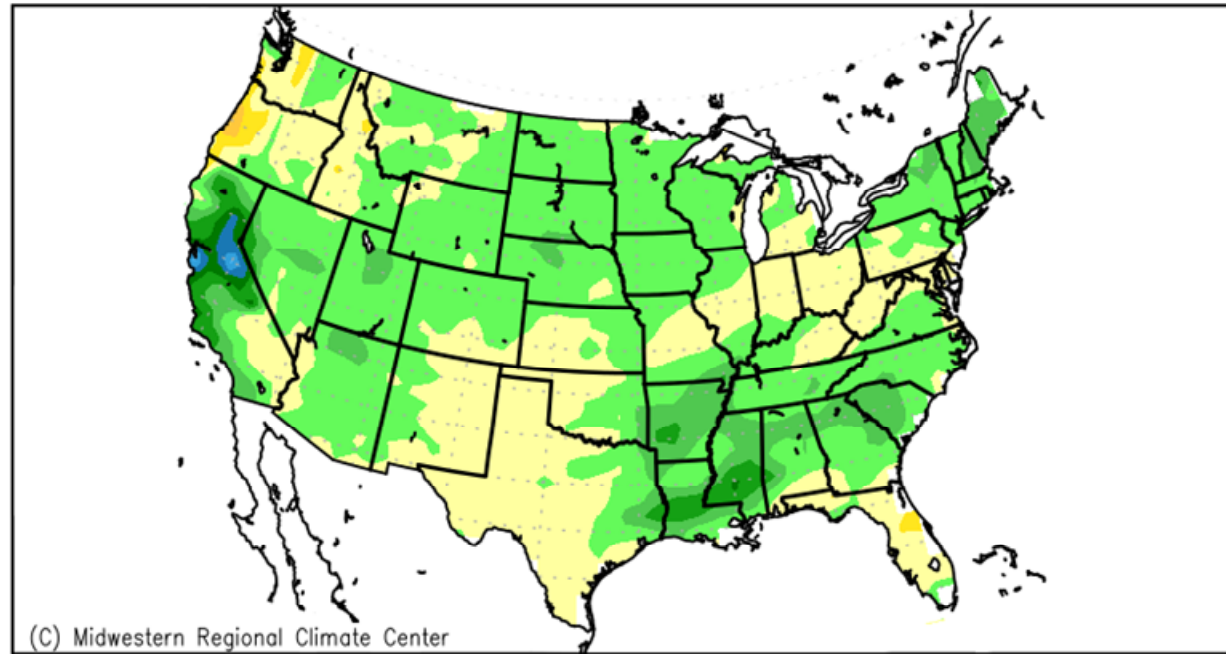
droughtmonitor.unl.edu

Typical Wintertime La Niña Pattern



Percent of Normal Rainfall, Dec. 1-Feb. 14

Accumulated Precipitation (in): Departure from Mean
December 1, 2022 to February 14, 2023

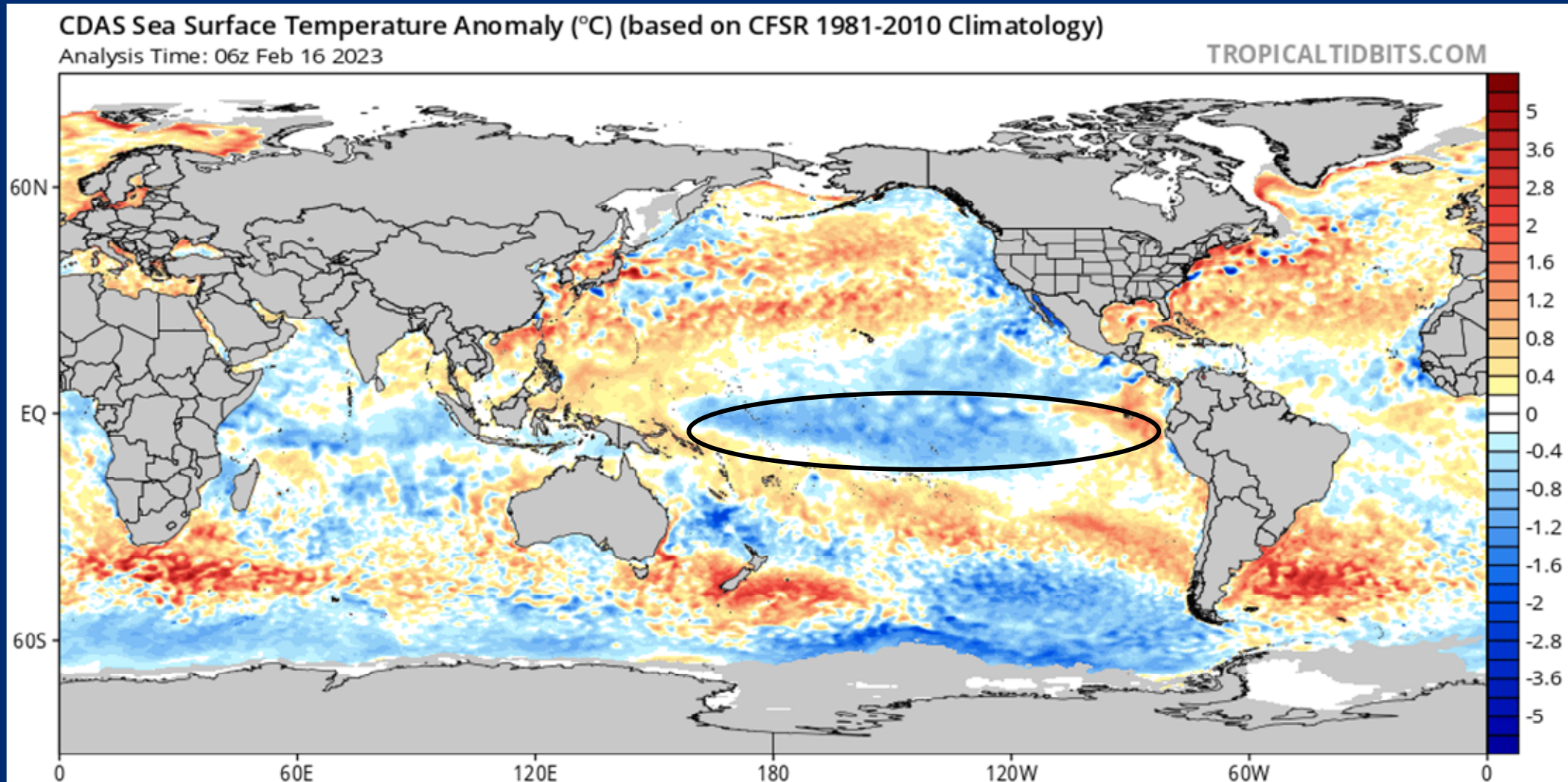


Mean period is 1991–2020.



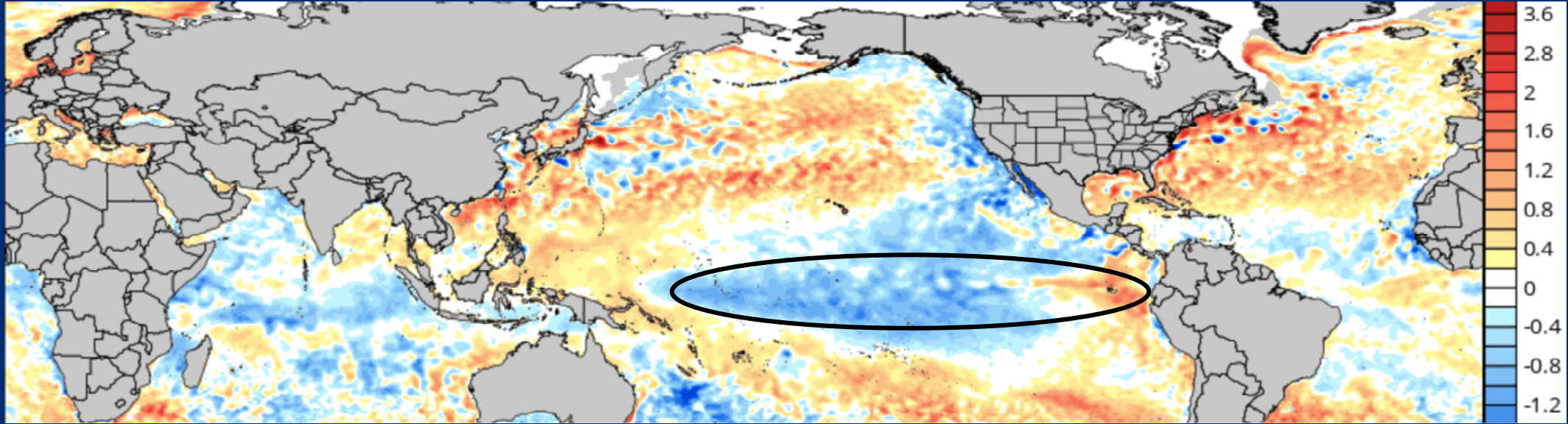
Midwestern Regional Climate Center

February 2023: A Weak La Niña Continues

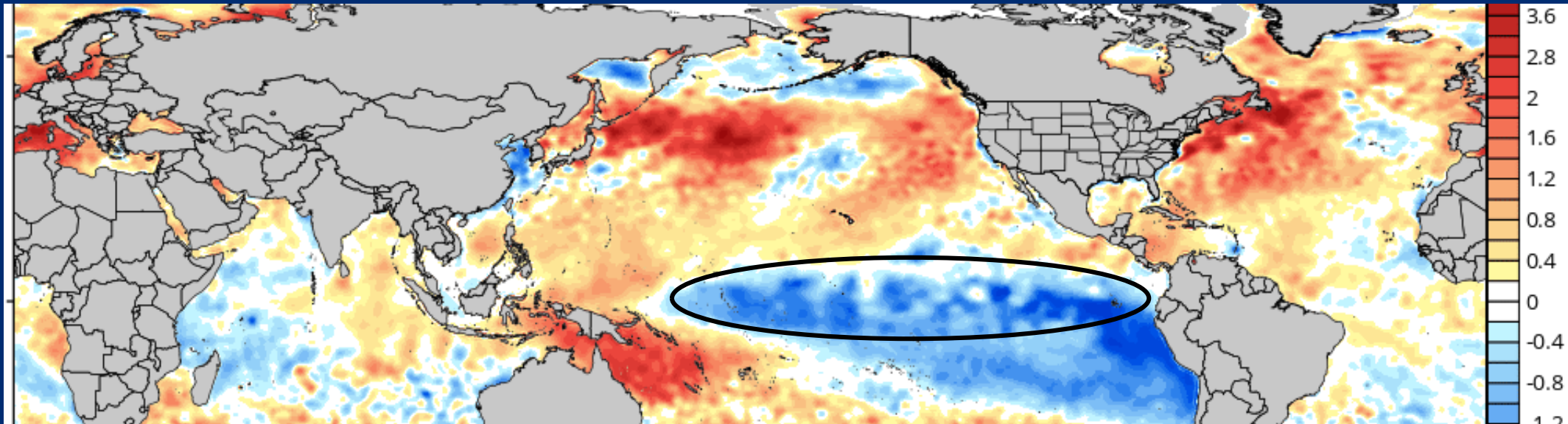


Pacific Waters are Warming

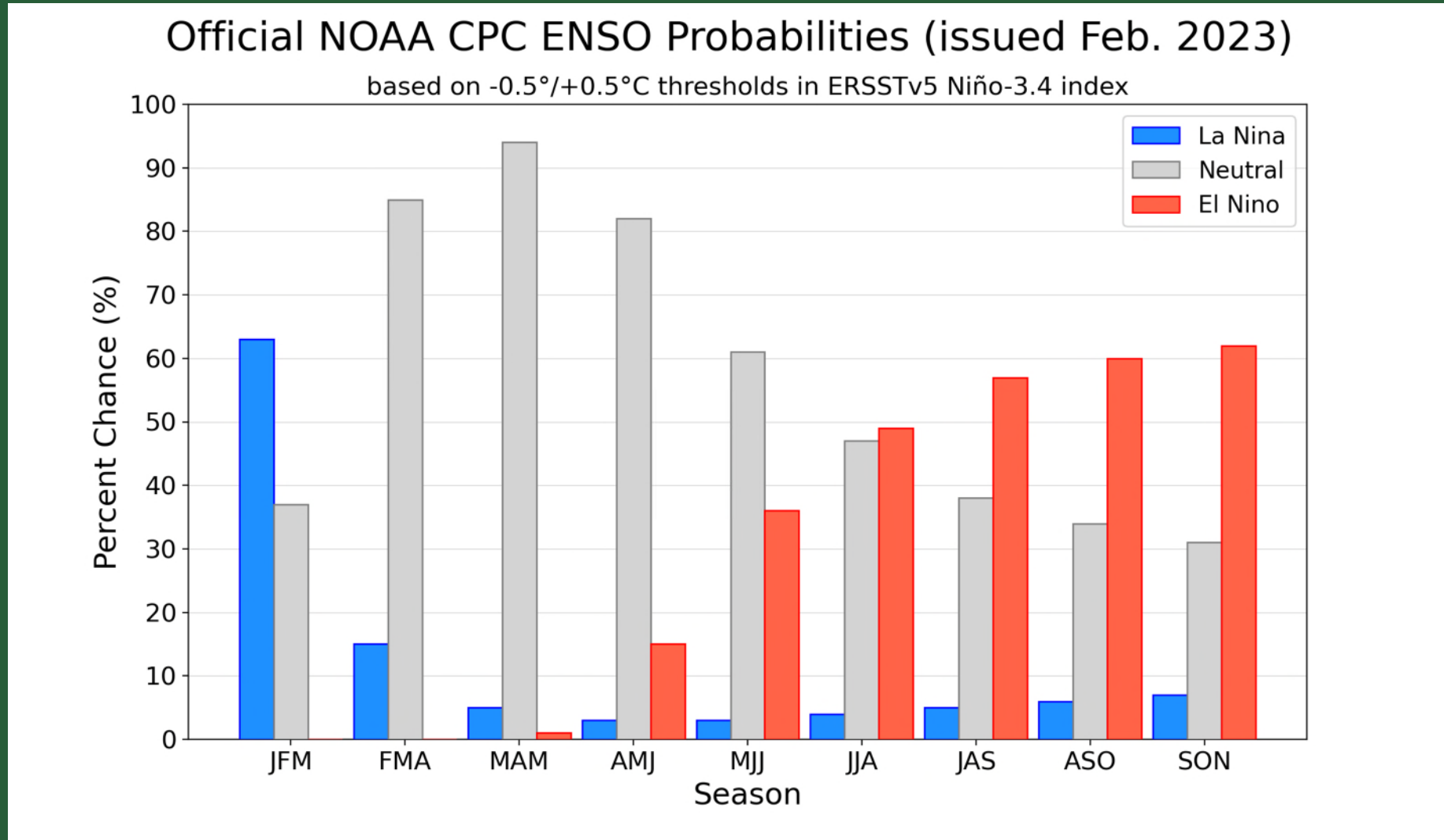
February
2023



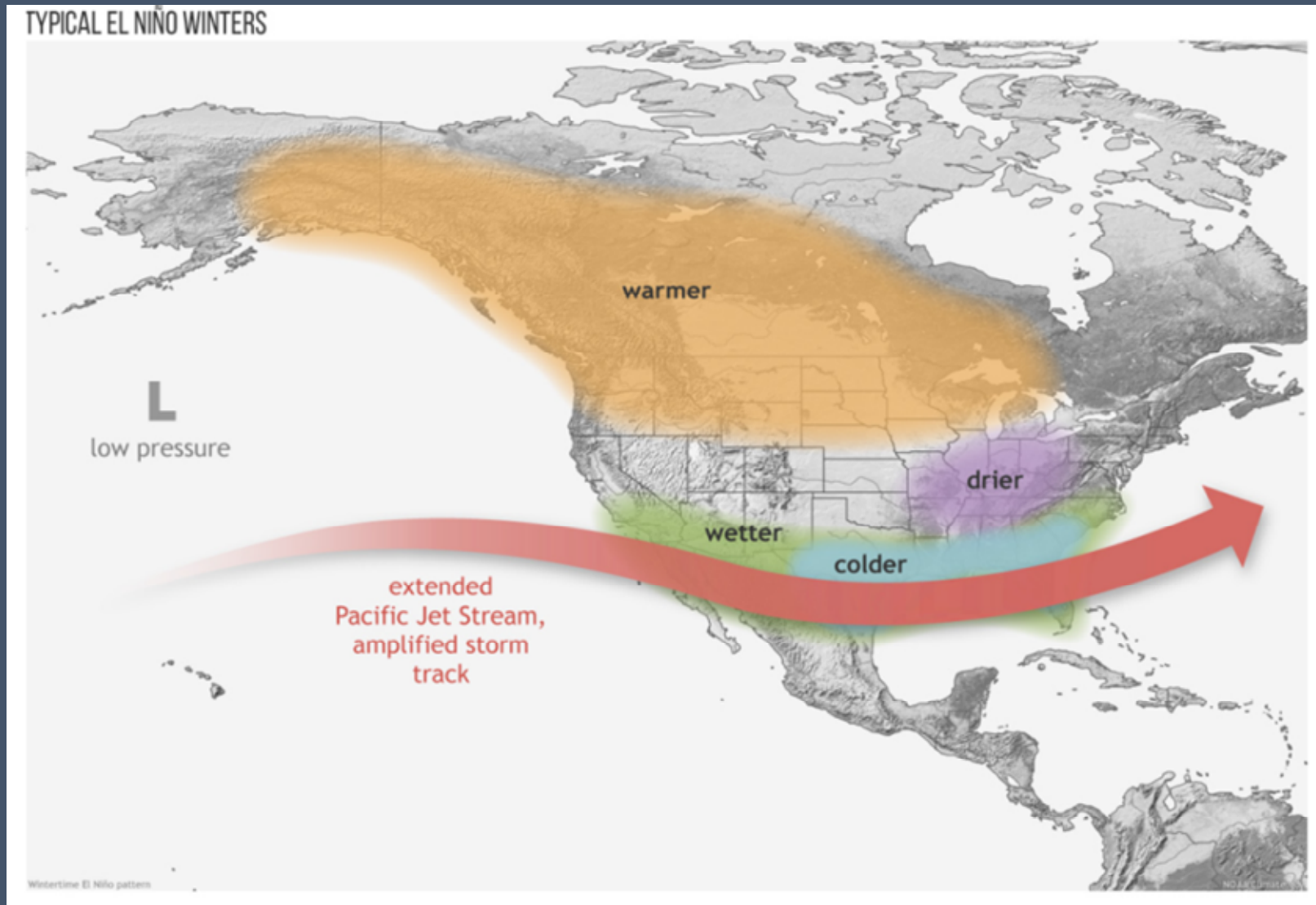
October
2022



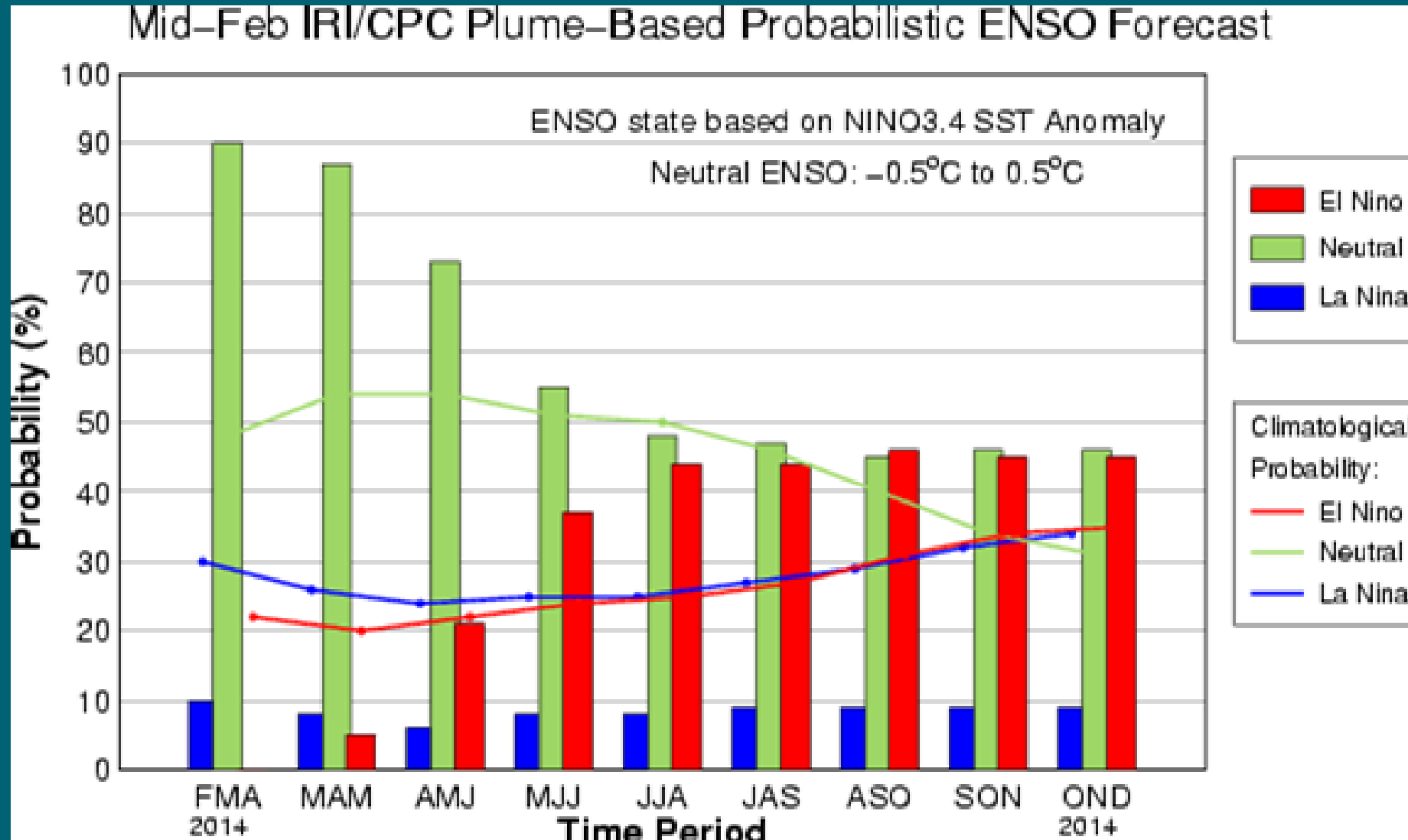
La Niña Ending This Spring; Headed to El Niño by Fall?



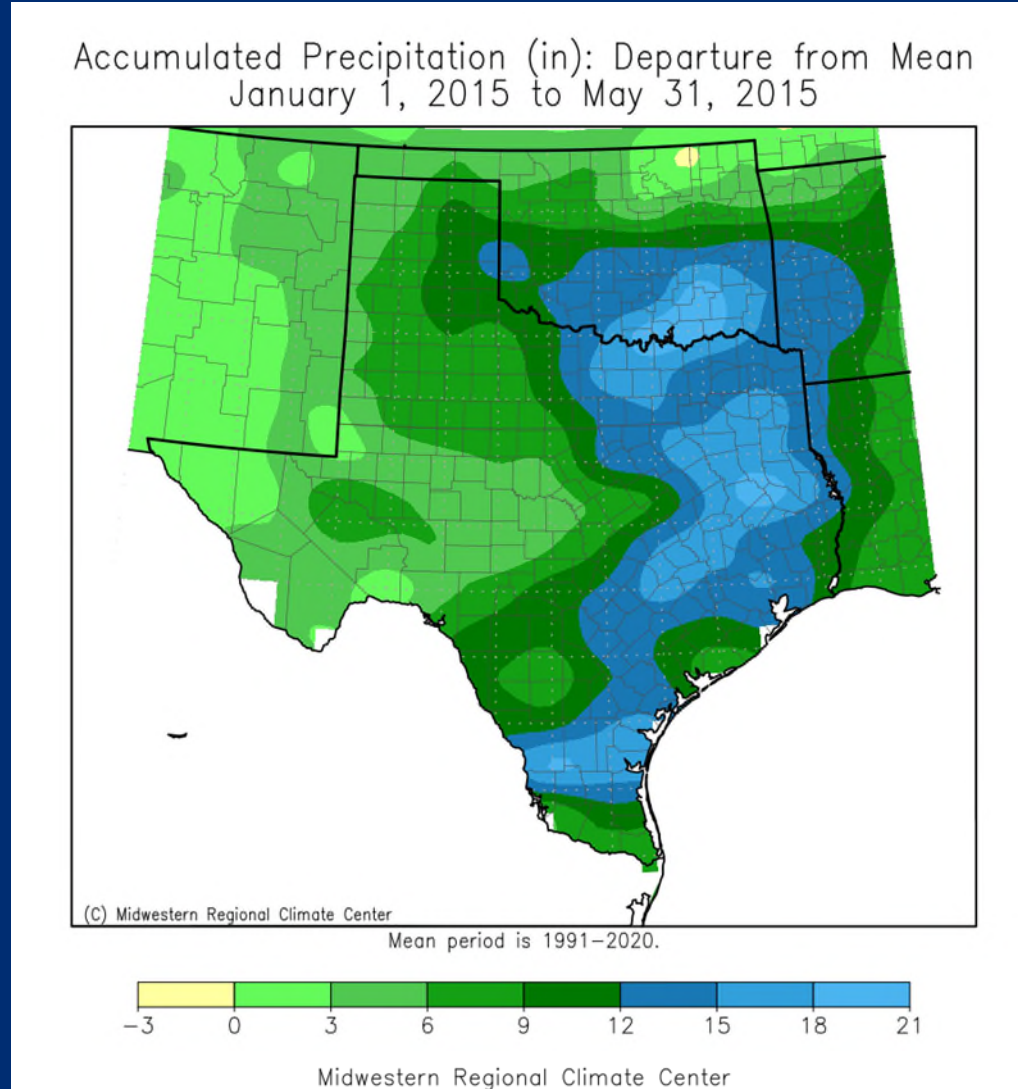
Typical Wintertime El Niño Pattern



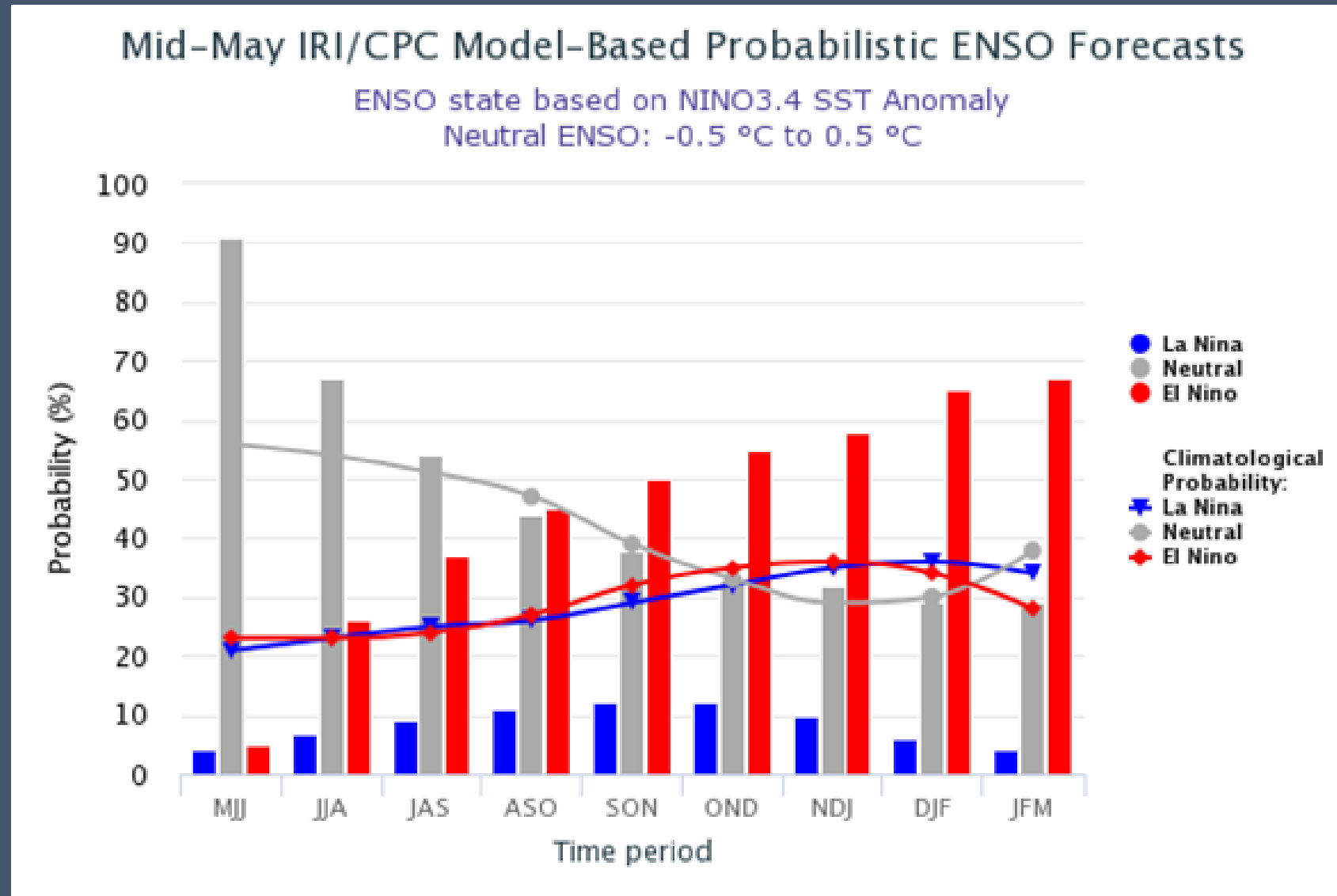
El Niño Forecast from Winter 2014



Departure from Normal Rainfall January through May 2015

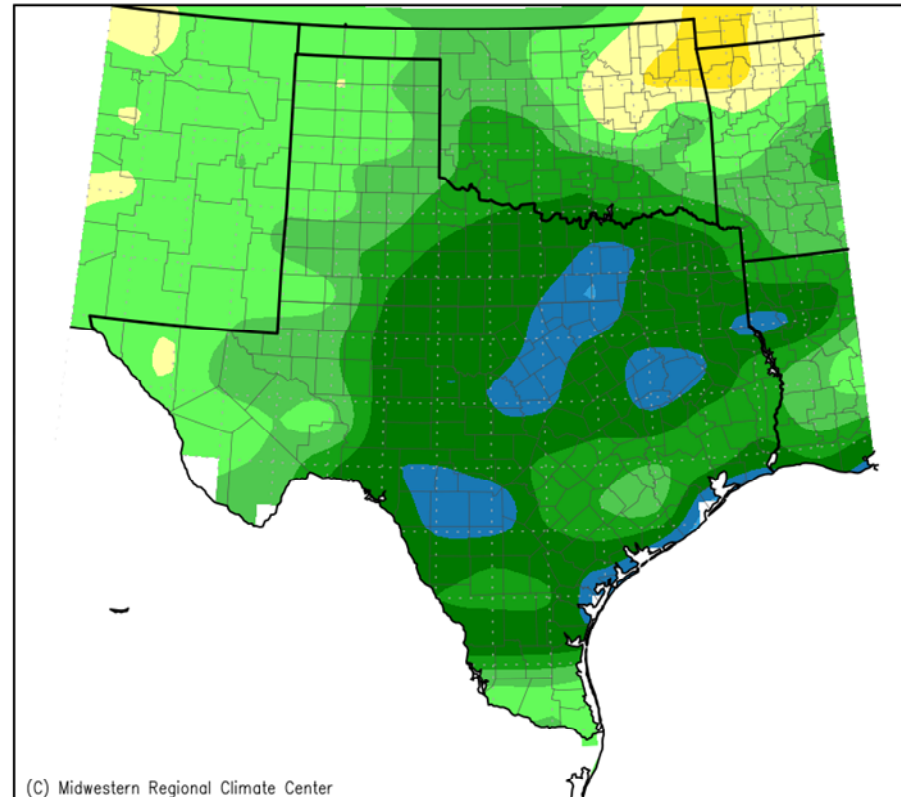


El Niño Forecast from Spring 2018



Departure from Normal Rainfall September through November 2018

Accumulated Precipitation (in): Departure from Mean
September 1, 2018 to November 30, 2018

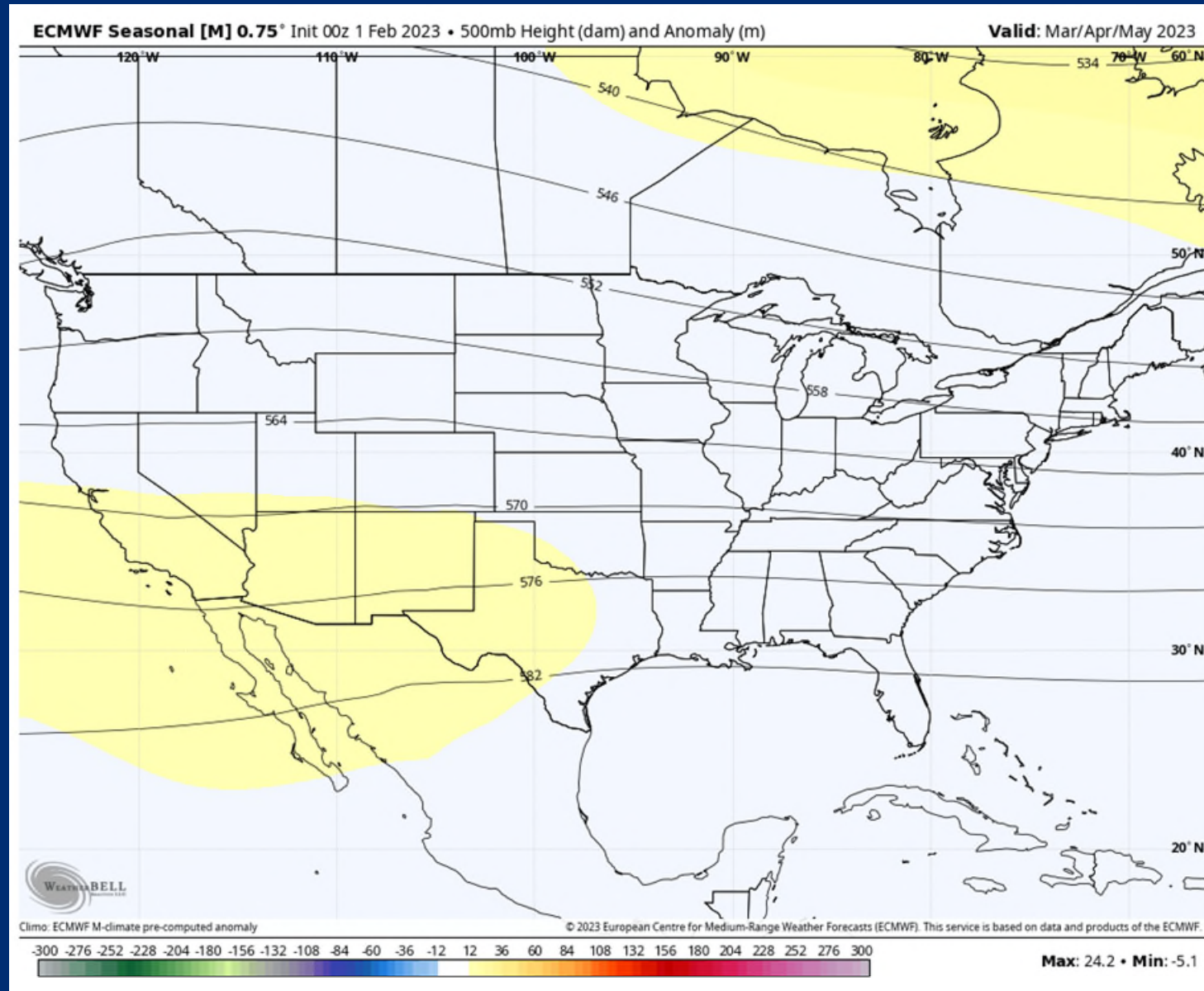


Mean period is 1991–2020.

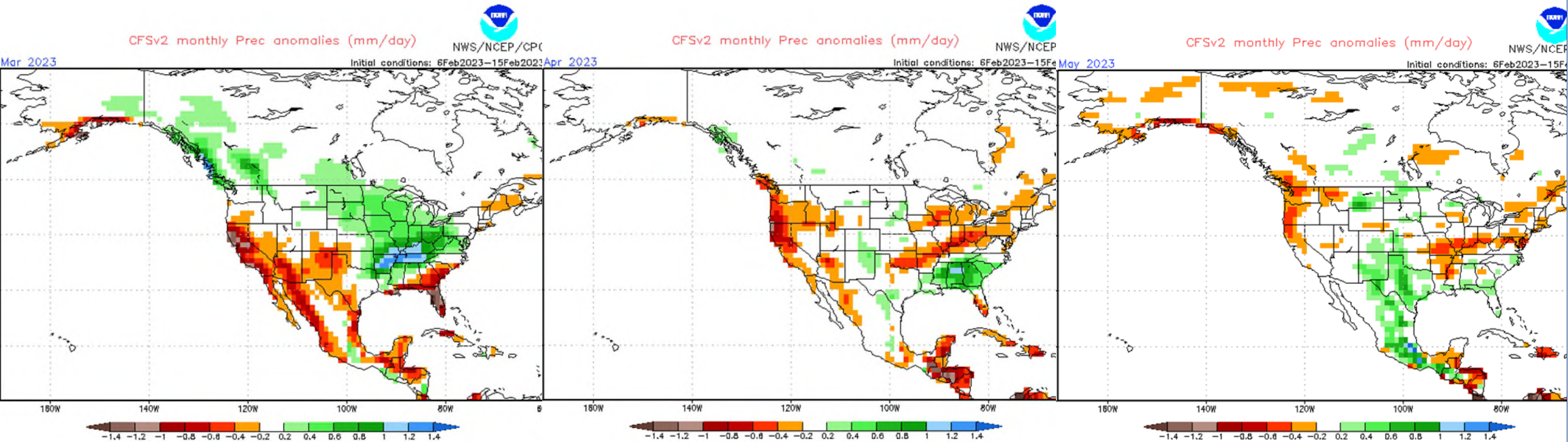


Midwestern Regional Climate Center

Forecast Model Jet Stream for Spring



Spring Rain Outlook – Climate Forecast System Model

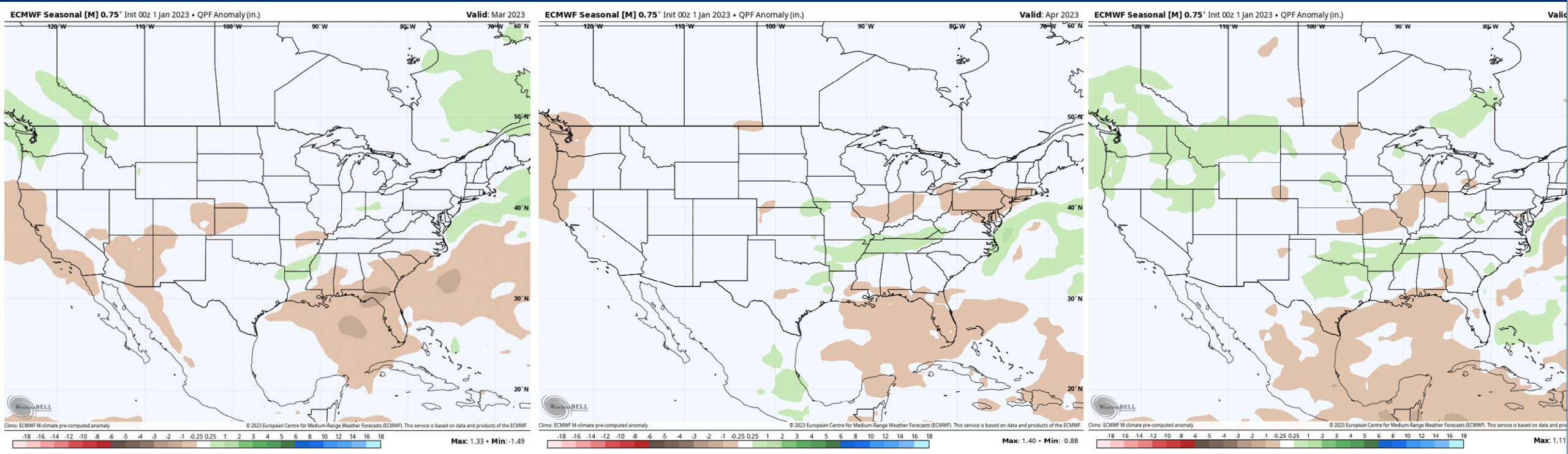


March

April

May

Spring Rain Outlook – European Model

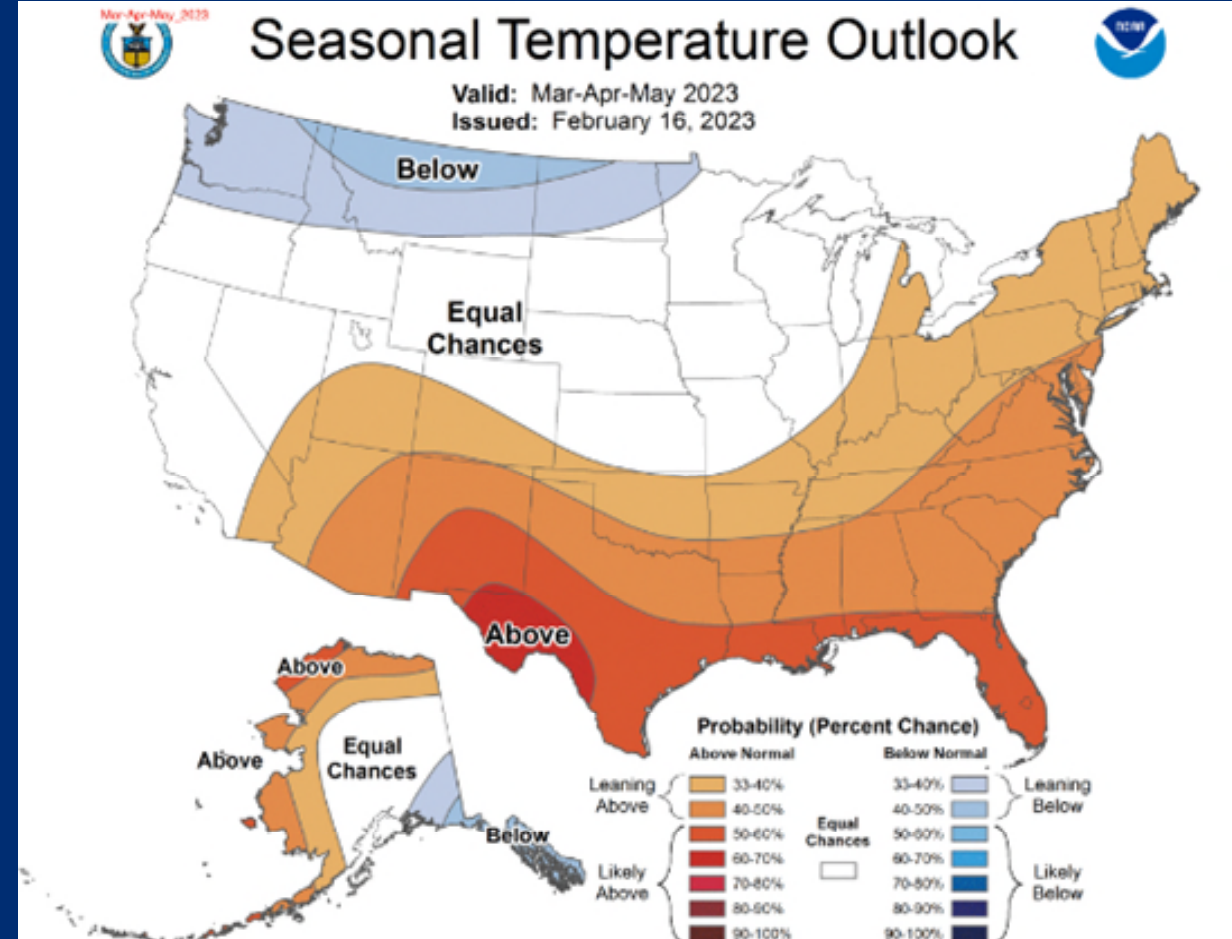
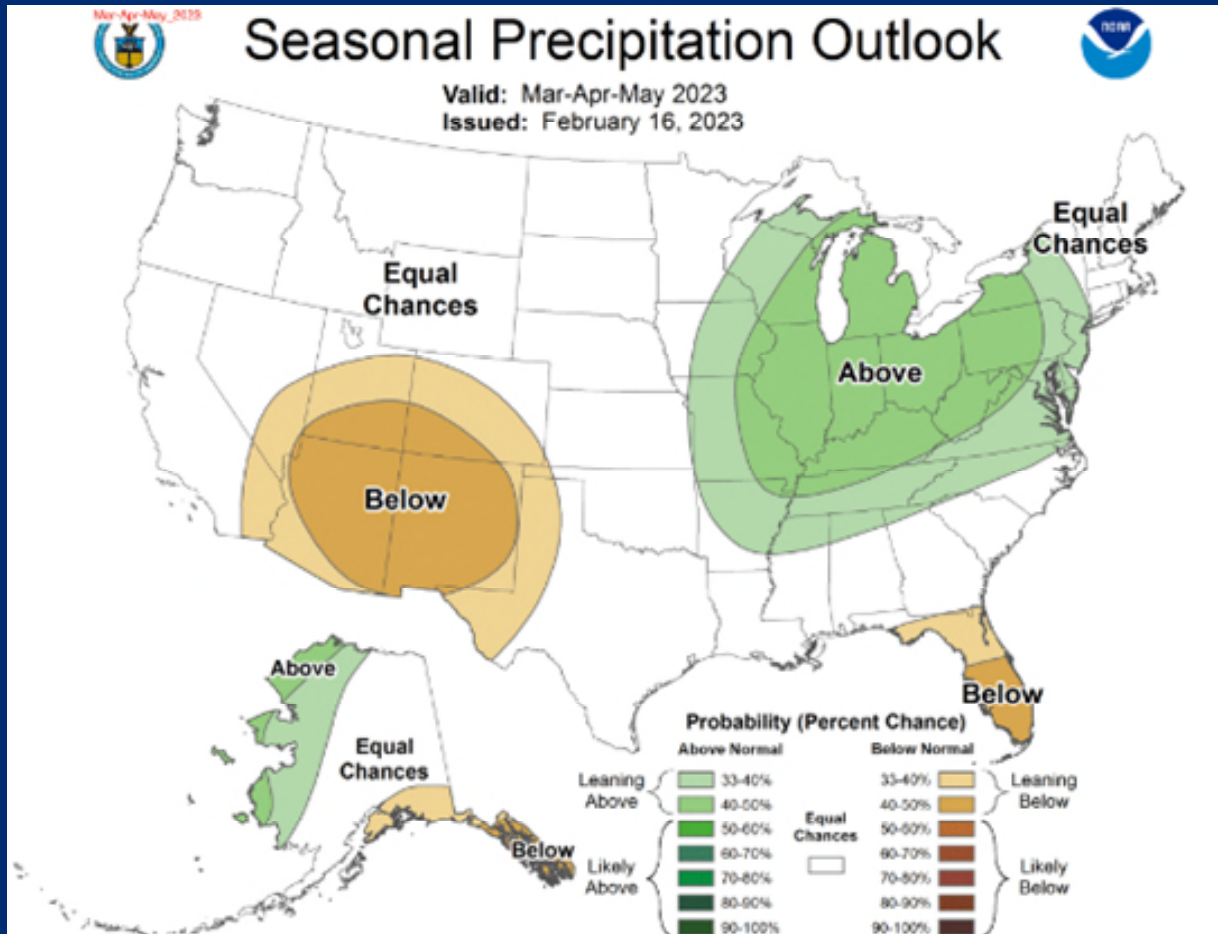


March

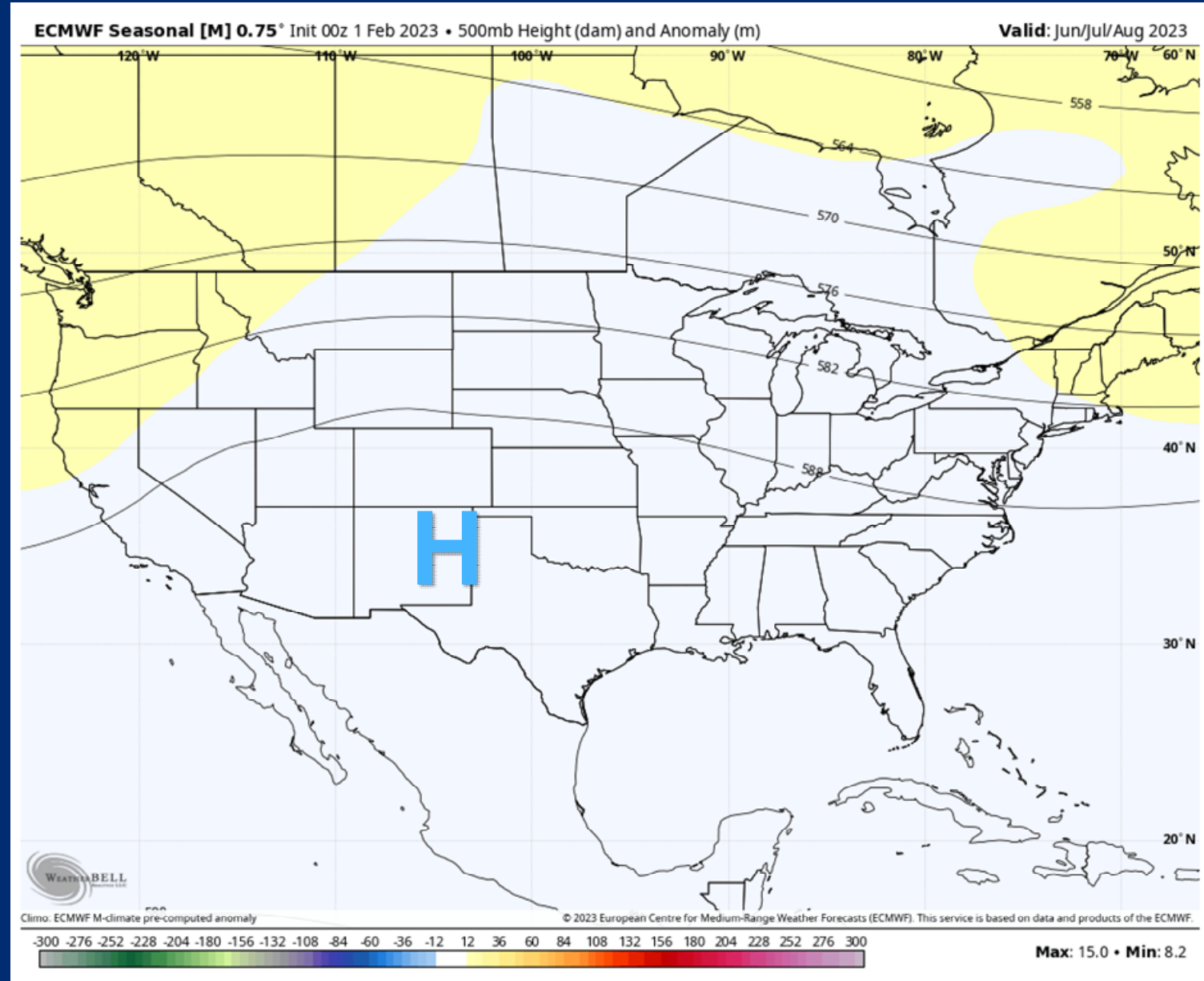
April

May

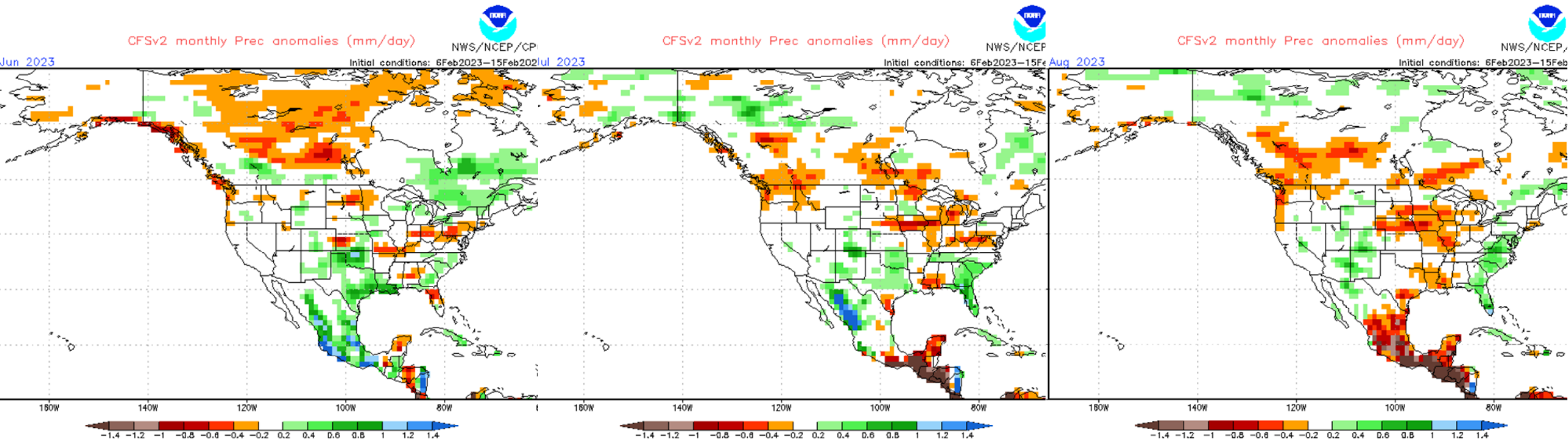
National Oceanic and Atmospheric Administration's Spring Outlook



Forecast Model Jet Stream for Summer



Summer Rain Outlook – CFS Model

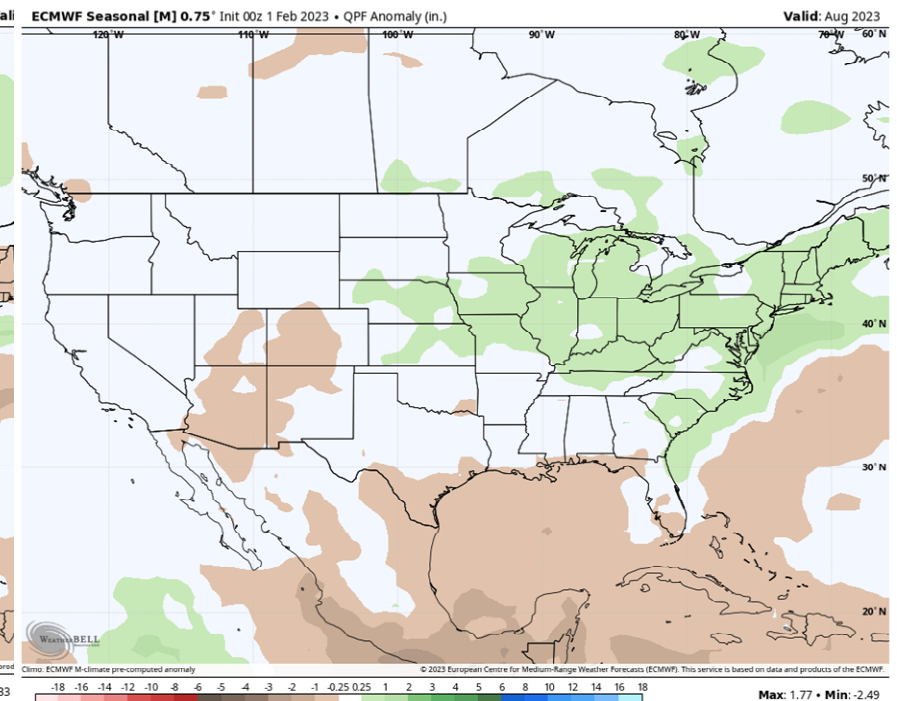
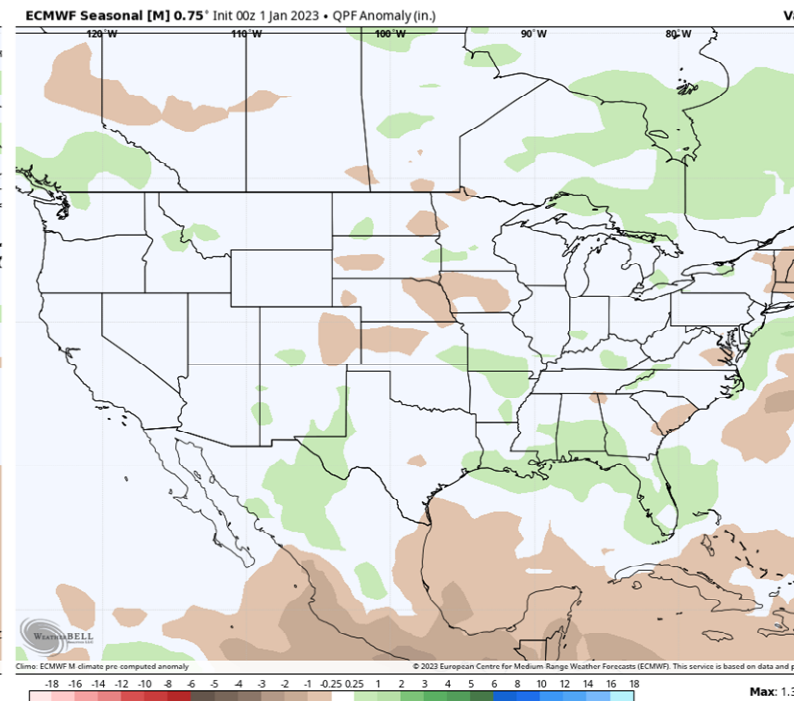
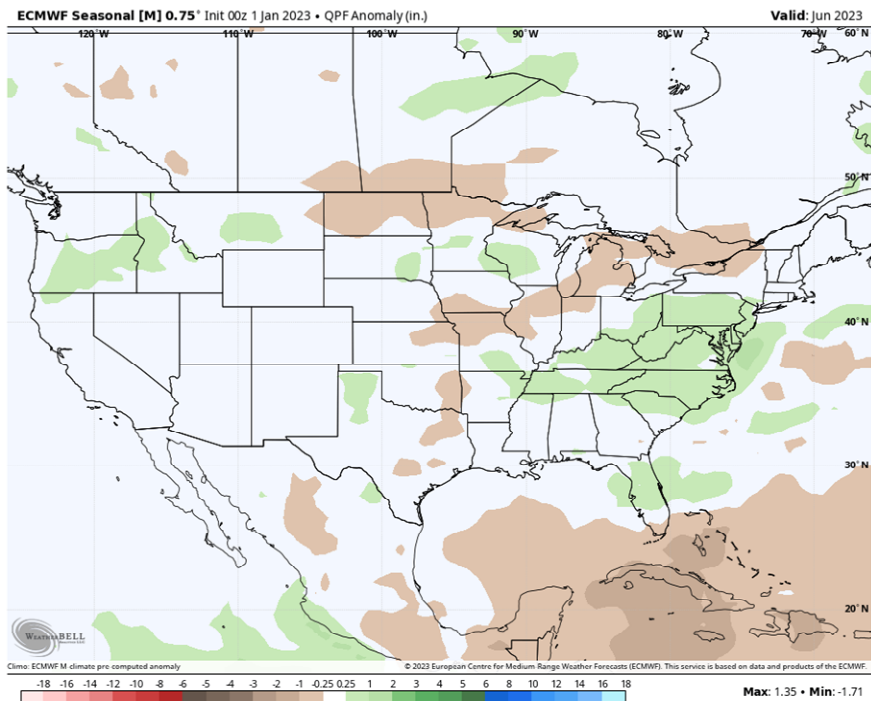


June

July

August

Summer Rain Outlook – European Model

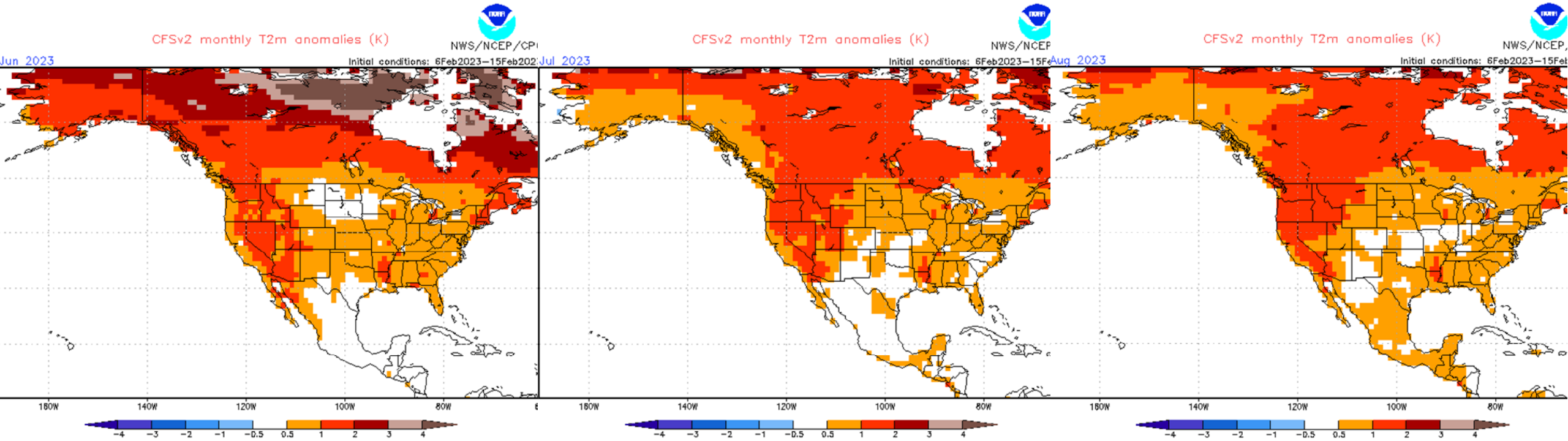


June

July

August

Summer Temperature Outlook – CFS Model

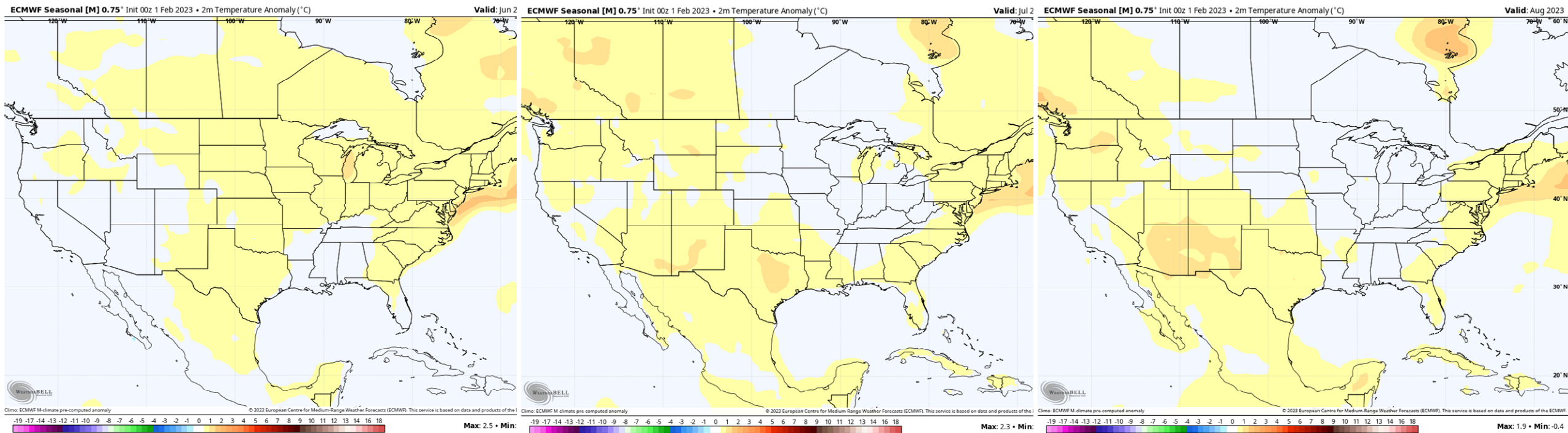


June

July

August

Summer Temperature Outlook – European Model

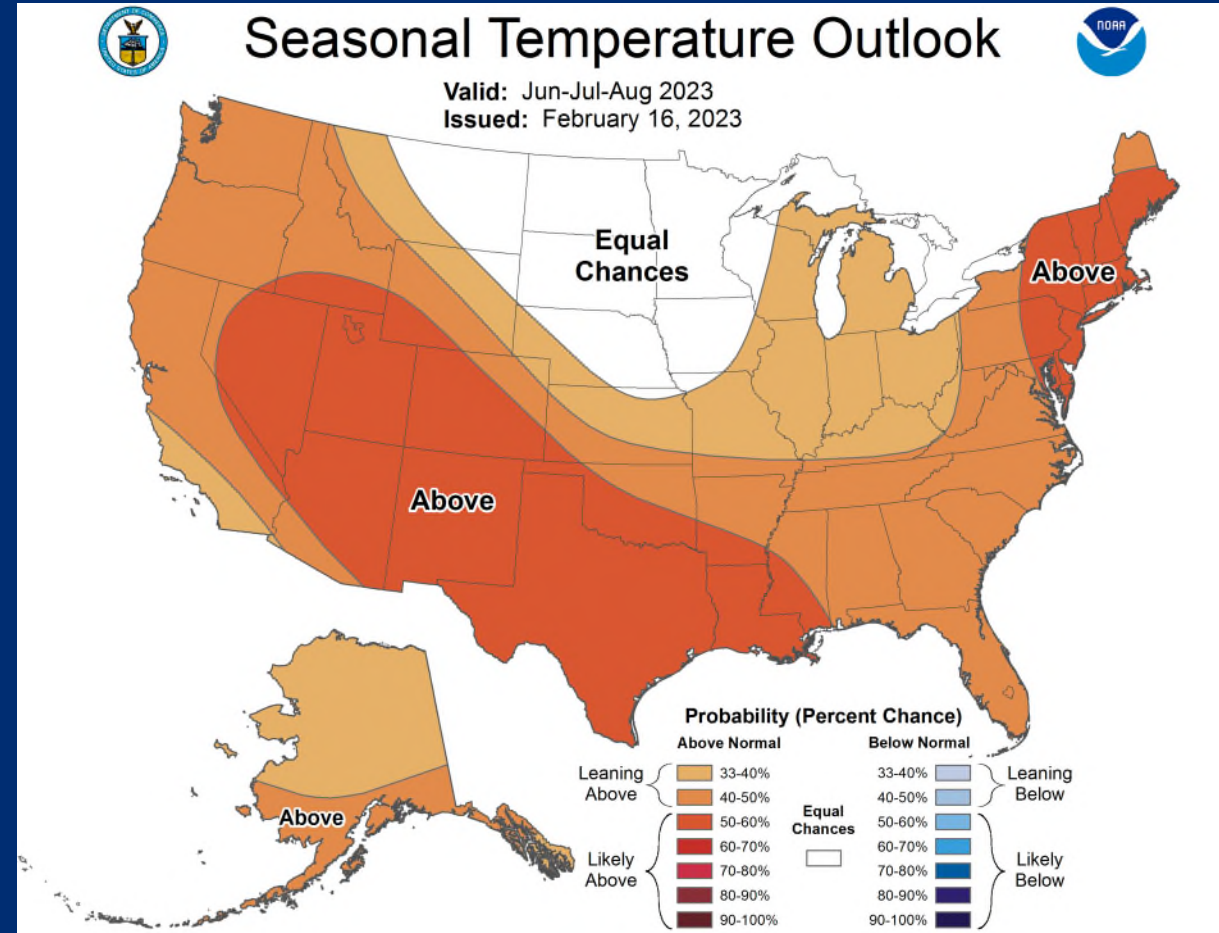
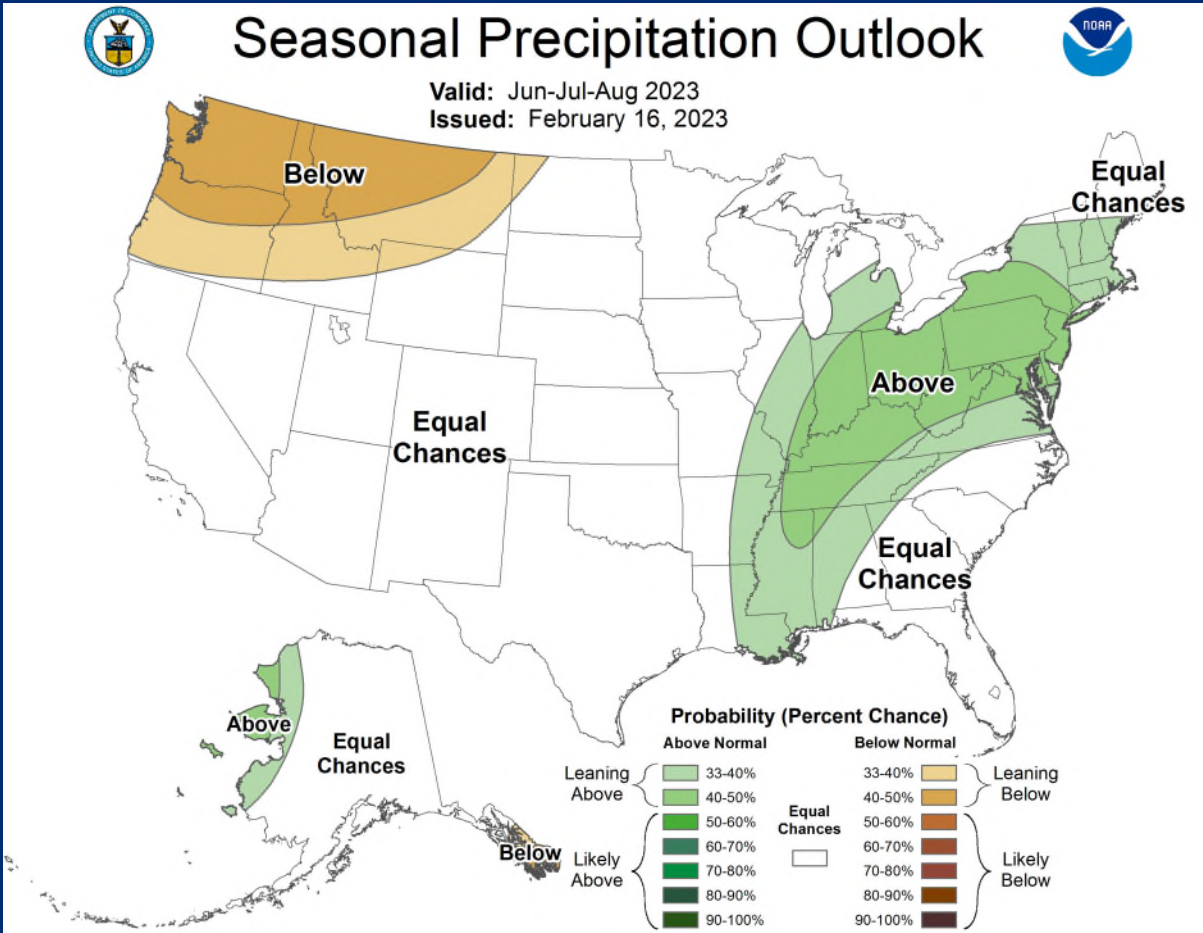


June

July

August

NOAA's Summer Outlook



Spring Into Summer Outlook

- **La Niña should end in March or April, with a neutral Pacific expected late spring through summer**
- **It's not clear when the atmosphere and jet stream will respond to the end of La Niña**
- **Near-normal to below-normal rain forecast in March**
- **Near-normal to slightly above-normal rain forecast April through June**
- **Summer 2023 is not expected to be as hot or as dry as last summer**
- **Odds increasing for the development of El Niño by fall**

An aerial photograph of a landscape at sunset. The sun is low on the horizon, casting a warm, golden glow over the scene. The landscape is a mix of green trees and brown, dry earth. A winding river or stream flows through the center of the image. Several power lines and towers are visible, stretching across the landscape. The overall mood is serene and natural.

LCRA

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