

Agriculture Weather Outlook Spring 2022

Ranchers Lunchtime Series

Feb. 24, 2022

J. Wes Lee

Mesonet Ag Coordinator

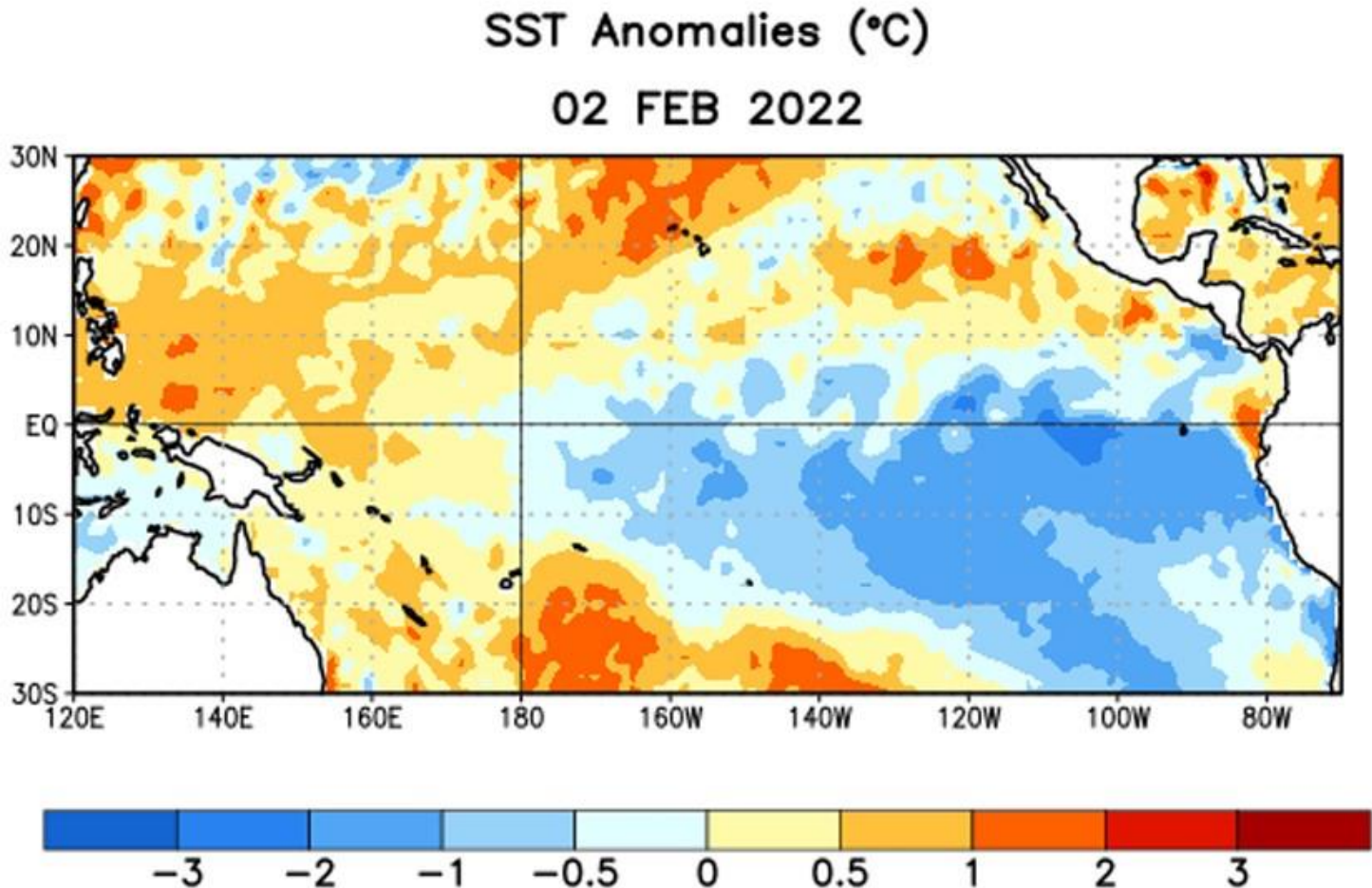


DEPARTMENT OF
BIOSYSTEMS AND
AGRICULTURAL ENGINEERING

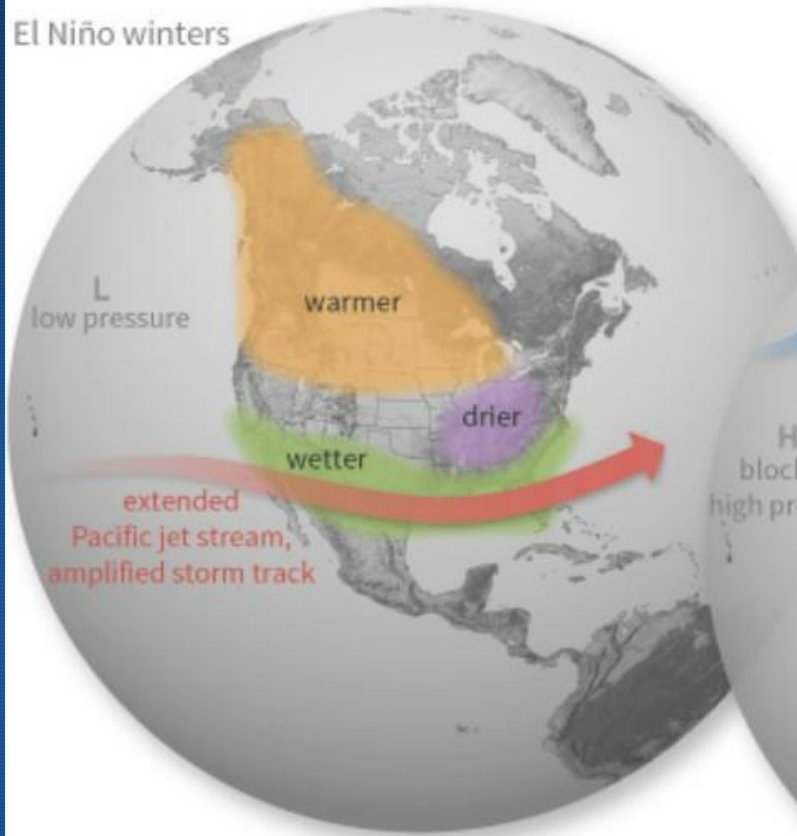


Mesonet
Oklahoma's Weather Network

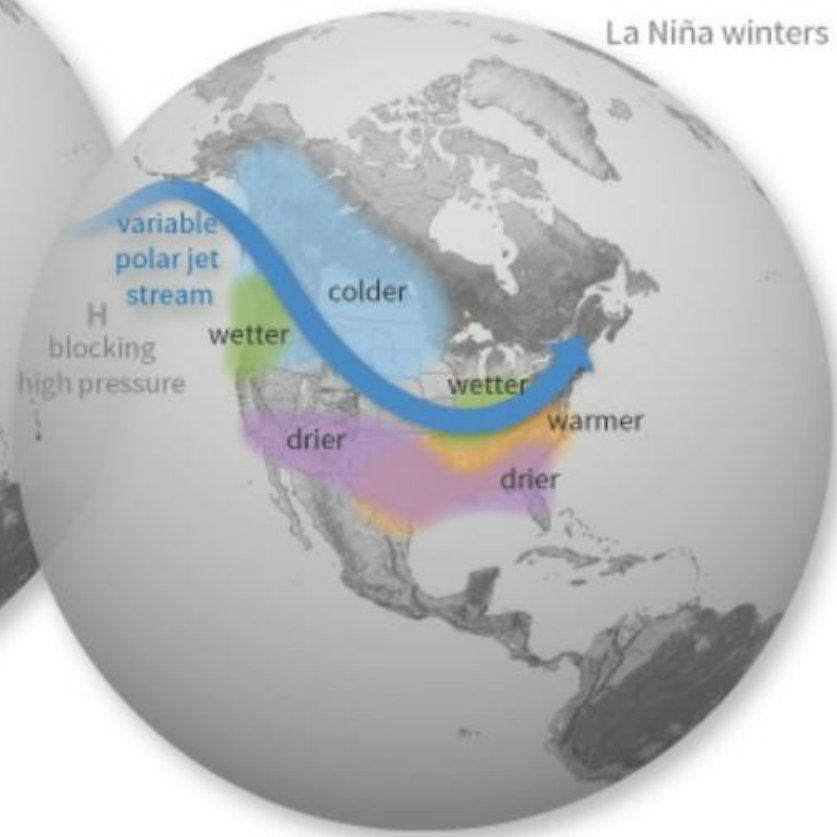
Powerful La Nina Continues



El Niño winters



La Niña winters



NOAA Climate.gov



Mesonet
Oklahoma's Weather Network

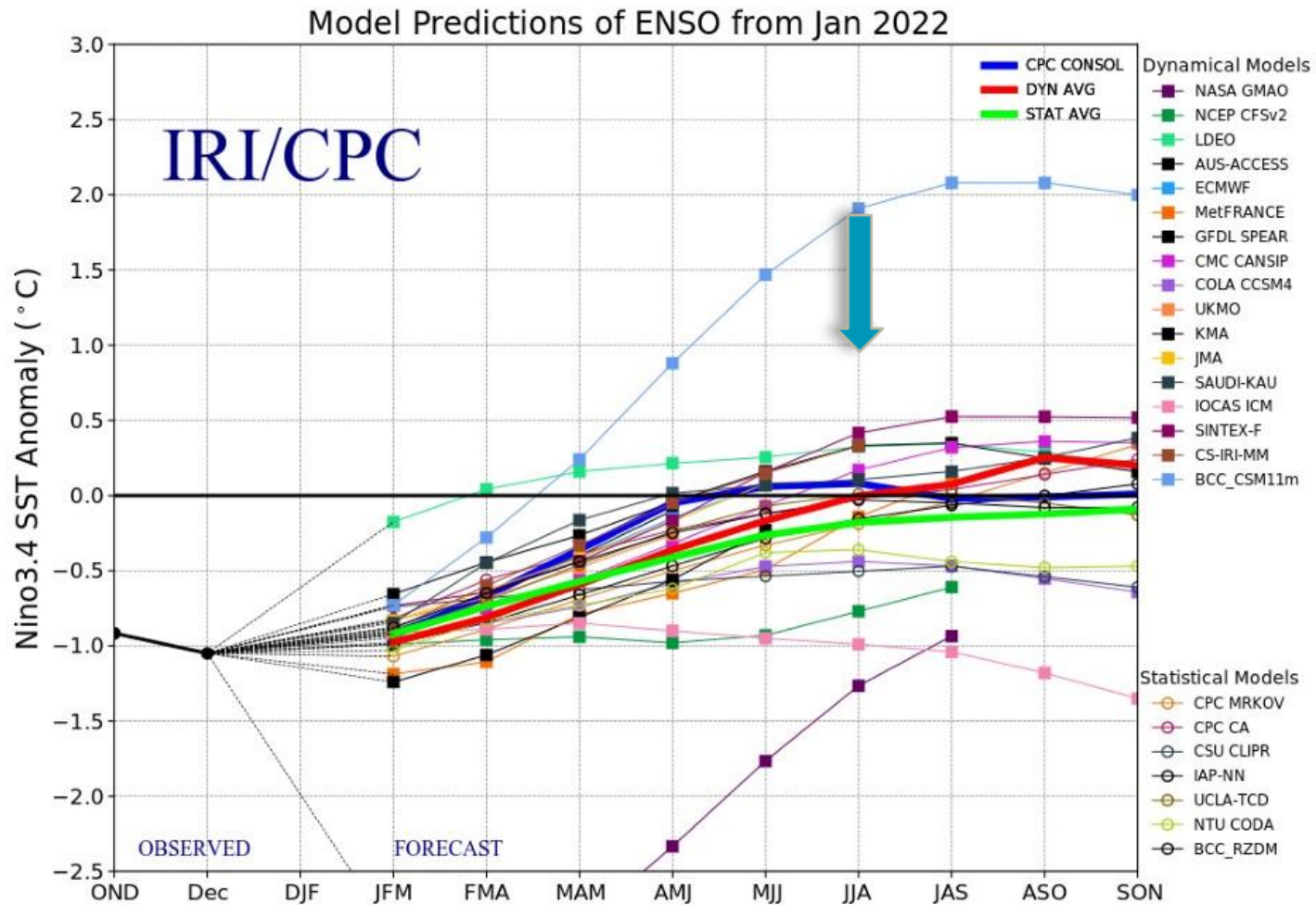
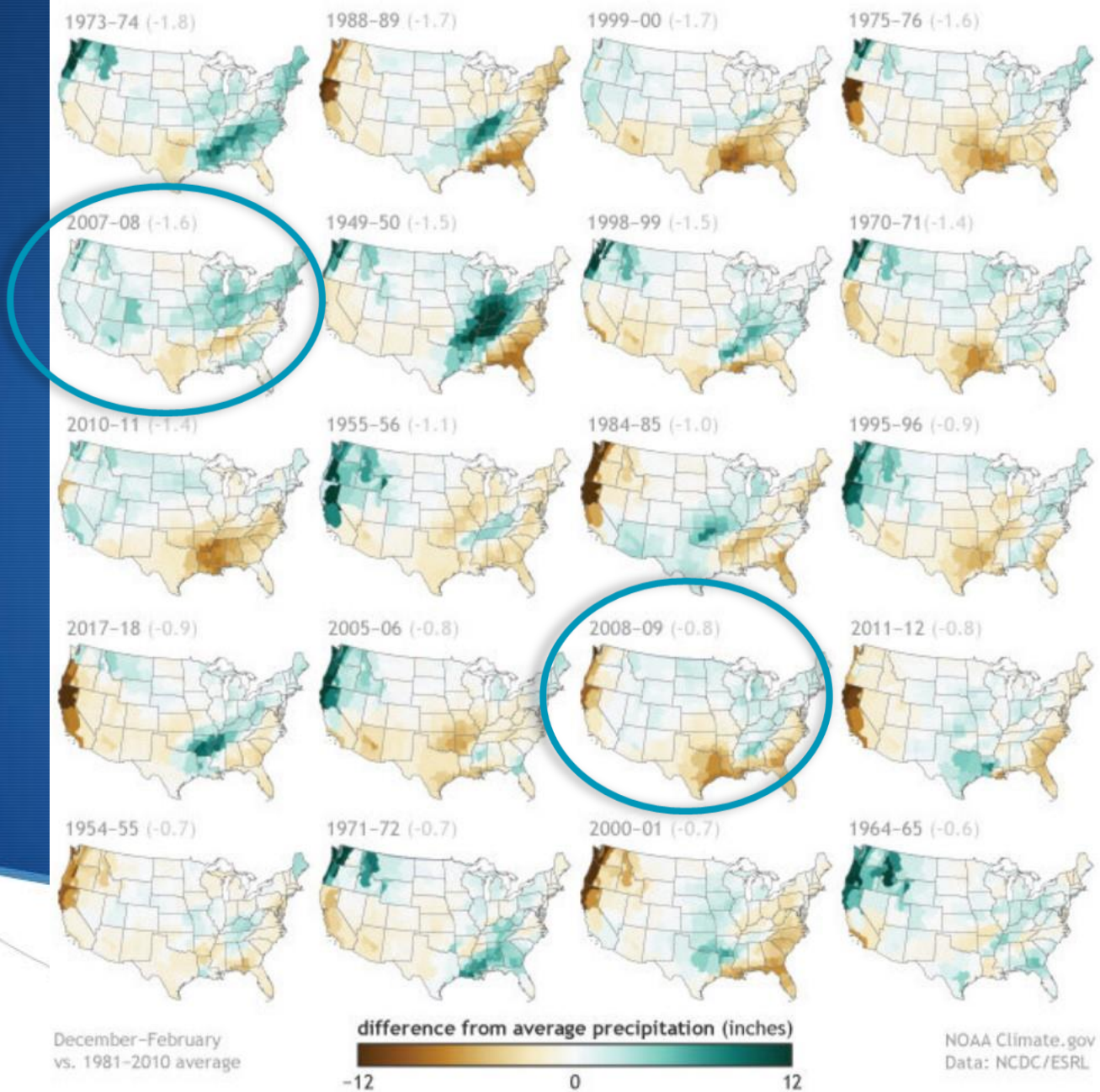
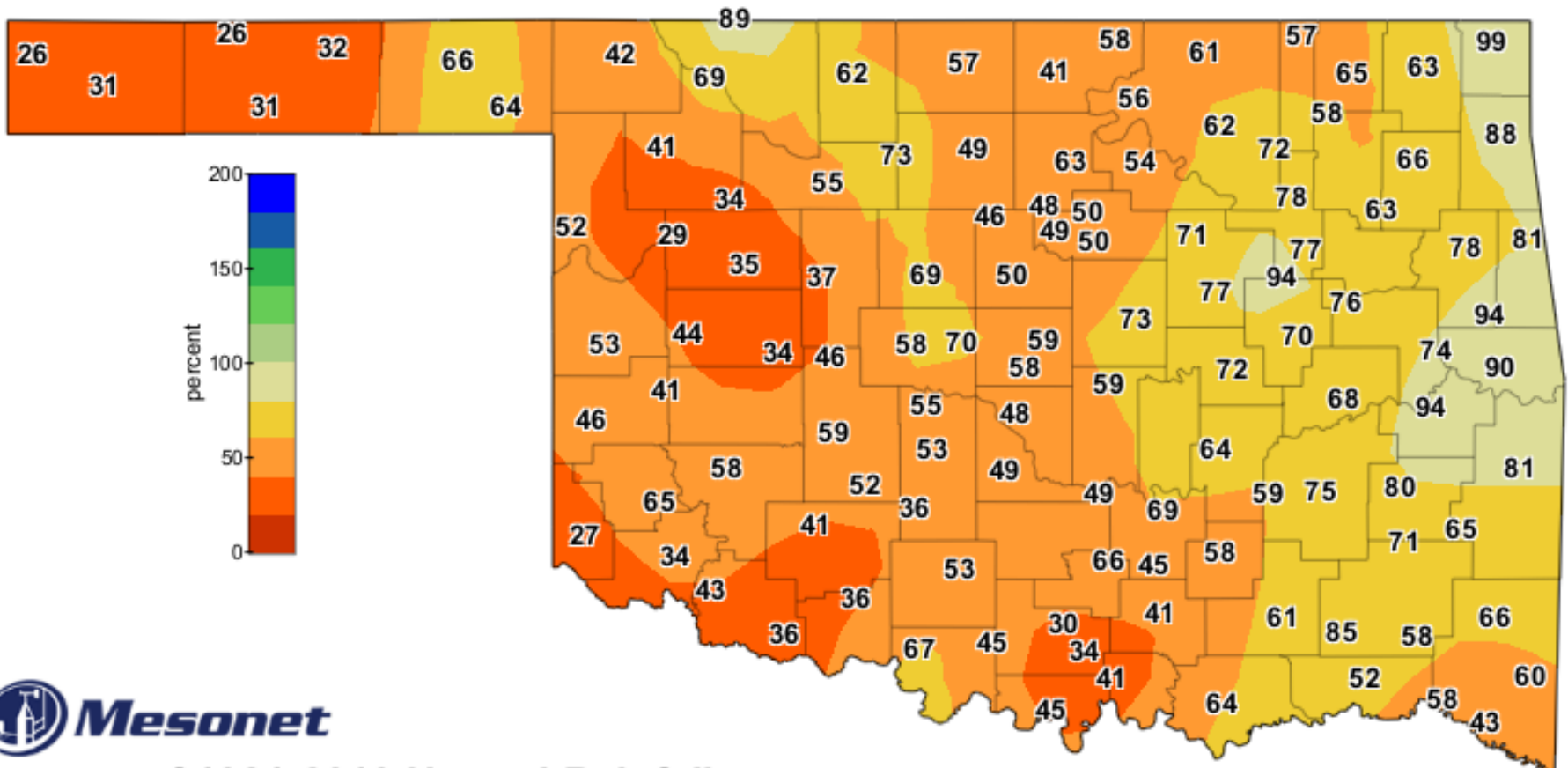


Figure 6. Forecasts of sea surface temperature (SST) anomalies for the Niño 3.4 region (5°N-5°S, 120°W-170°W). Figure updated 19 January 2022.

Winter precipitation during the 20 strongest La Niña events since 1950

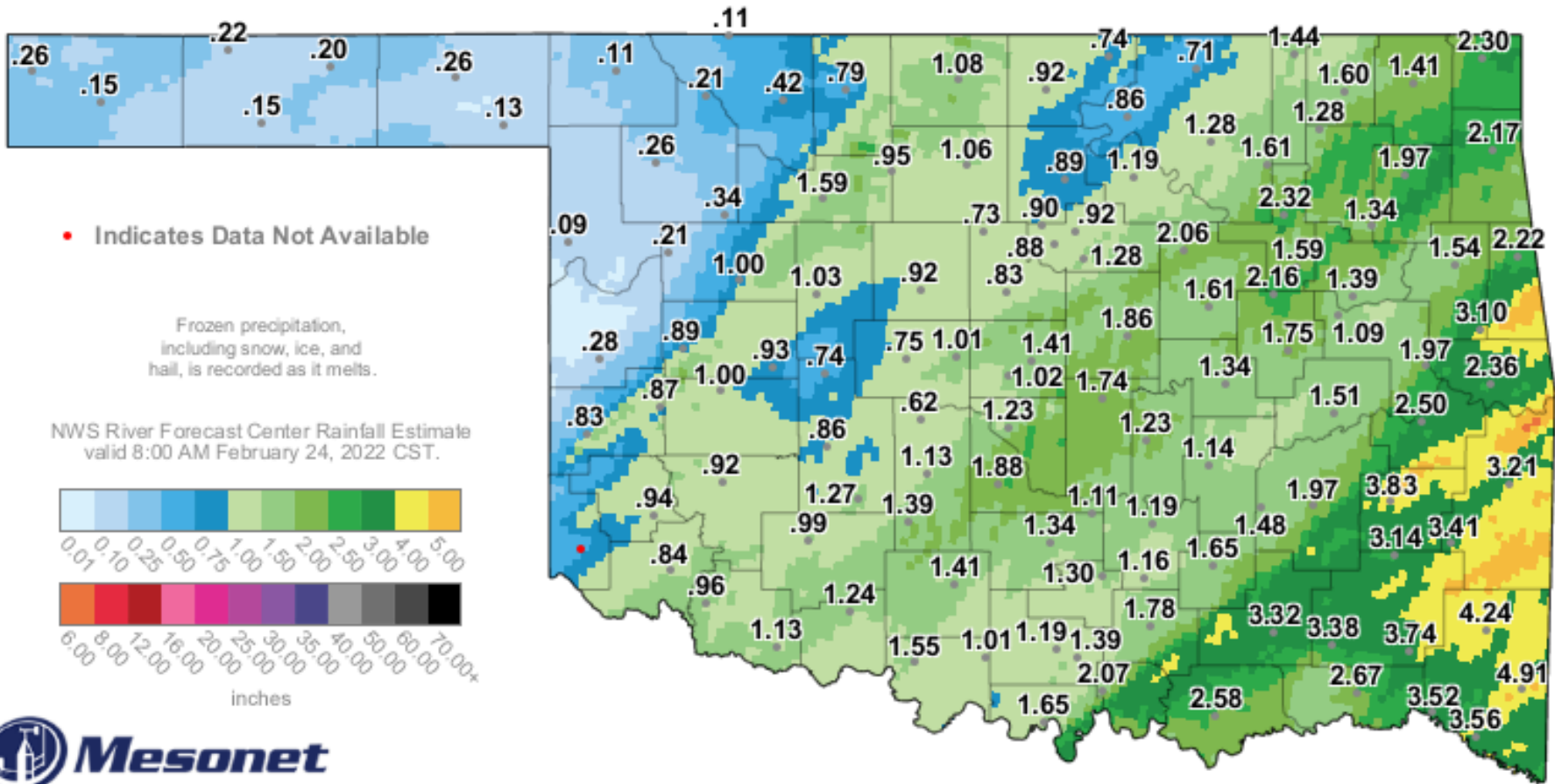
Dec-Feb (ONI value)





Percent of 1981-2010 Normal Rainfall
Growing Season to Date

Sep 1, 2021 through Feb 23, 2022
 Created 2:40:31 AM February 24, 2022 CST. Copyright 2022

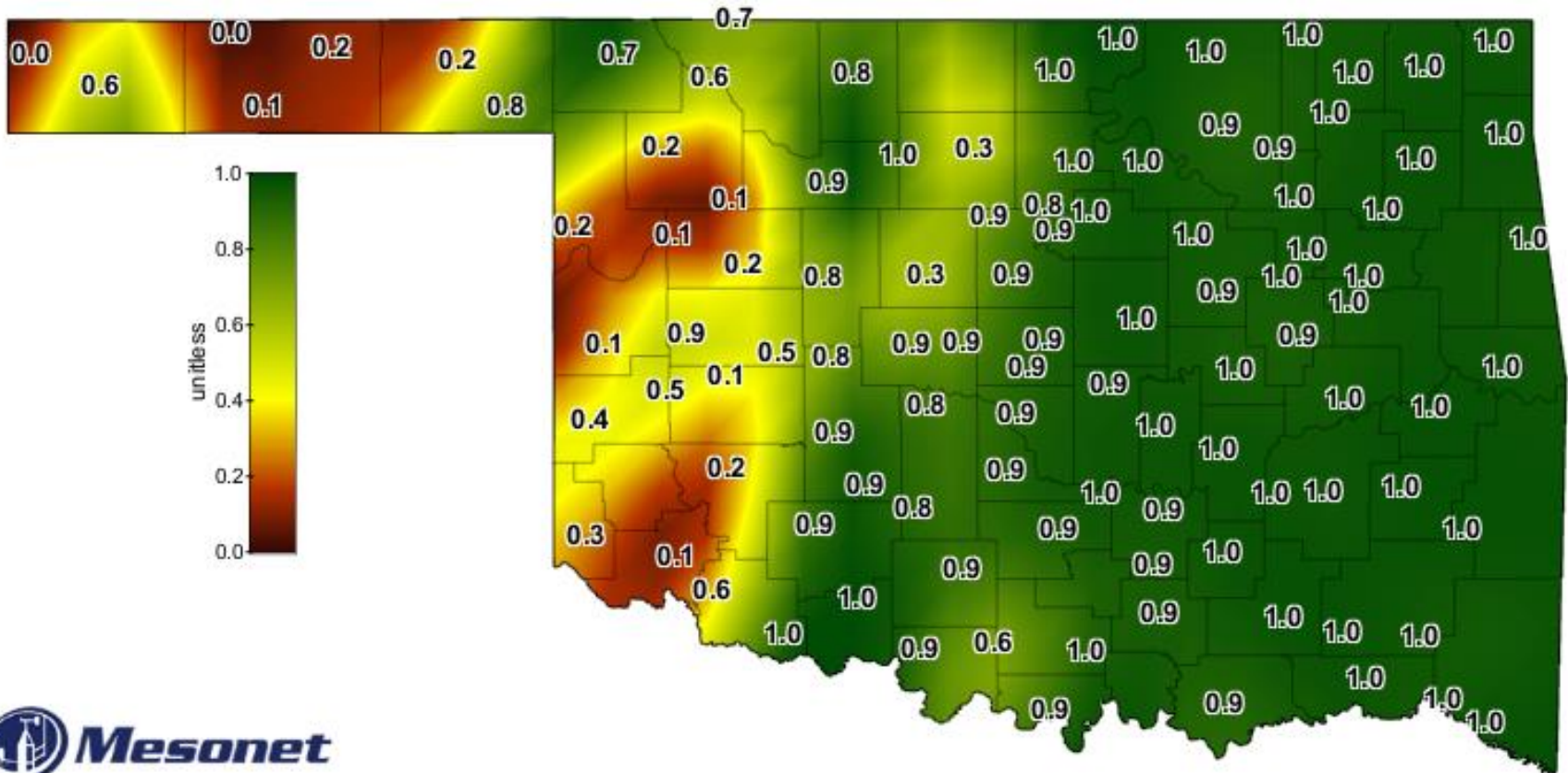


30-Day Rainfall Accumulation (inches)

8:45 AM February 24, 2022 CST

Created 8:50:55 AM February 24, 2022 CST. © Copyright 2022





1-day Average 10-inch Fractional Water Index

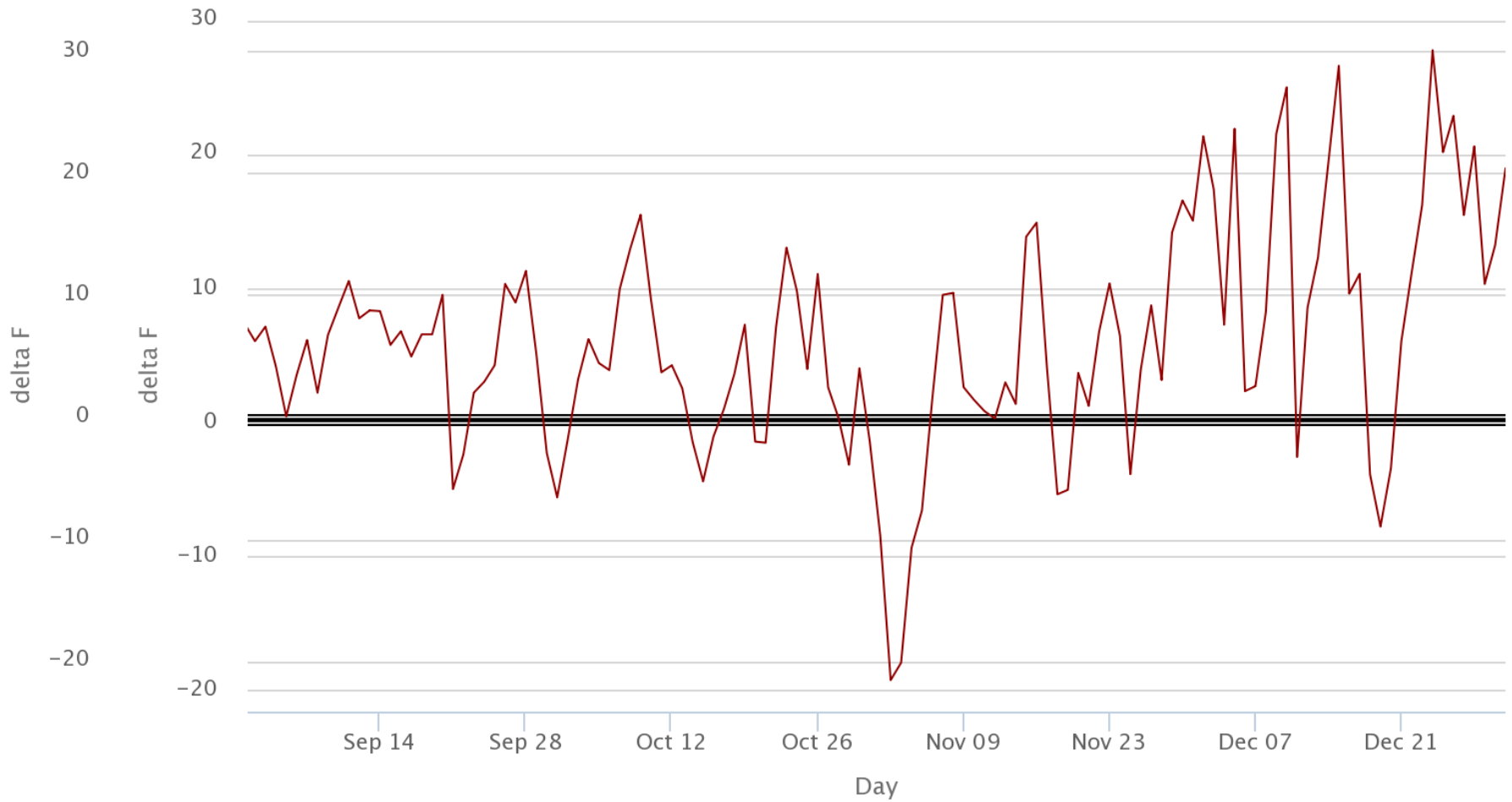
February 23, 2022

Created 6:30:13 AM February 24, 2022 CST. © Copyright 2022



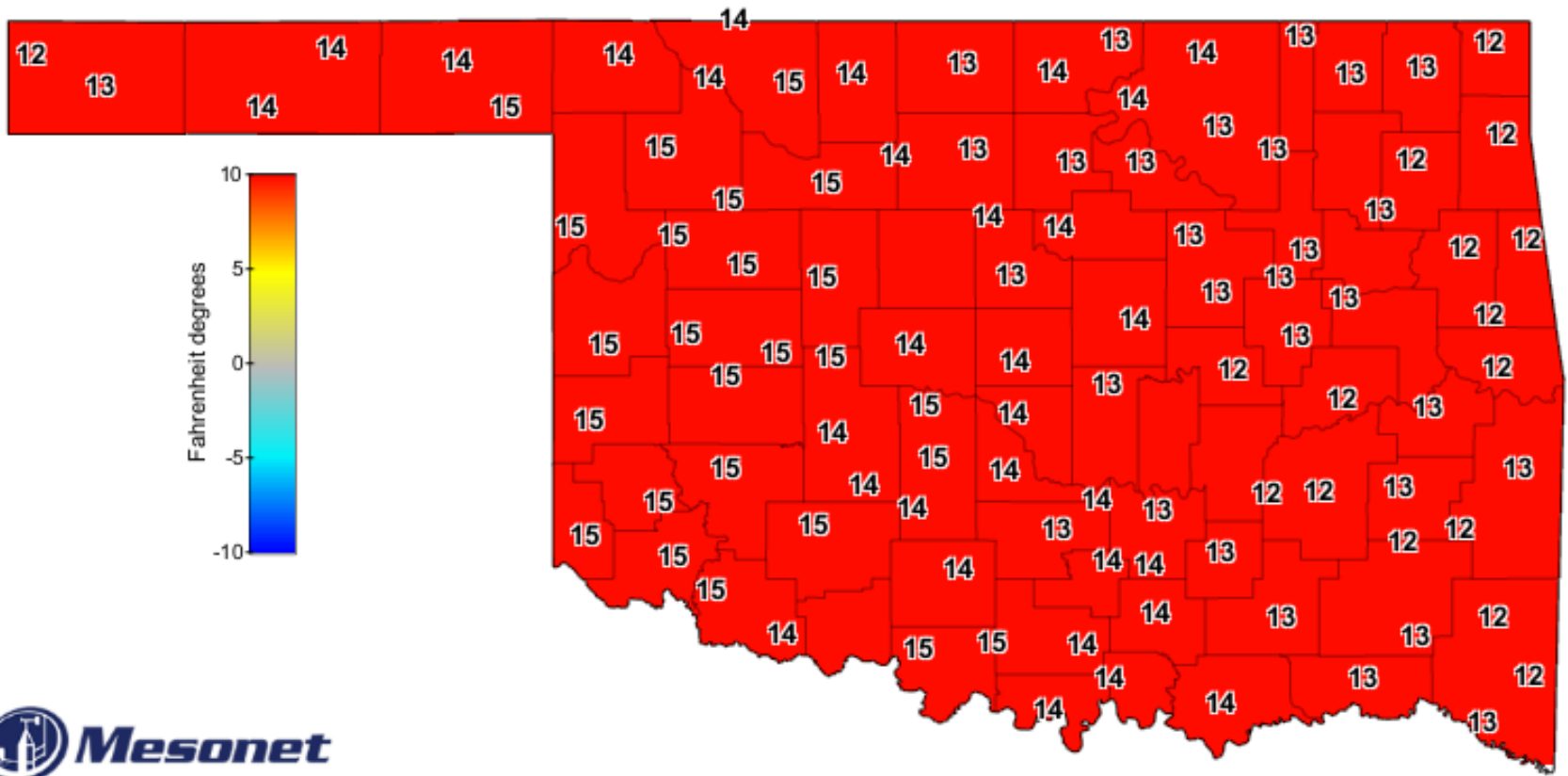
Mesonet
Oklahoma's Weather Network

Long-Term Averages



— Statewide Average Maximum Air Temperature, 2021 departure from average (delta F)





Average Maximum Air Temperature

Departure from Average, December 2021

Created 9:19:47 AM February 24, 2022 CST. © Copyright 2022



U.S. Drought Monitor Oklahoma

February 22, 2022

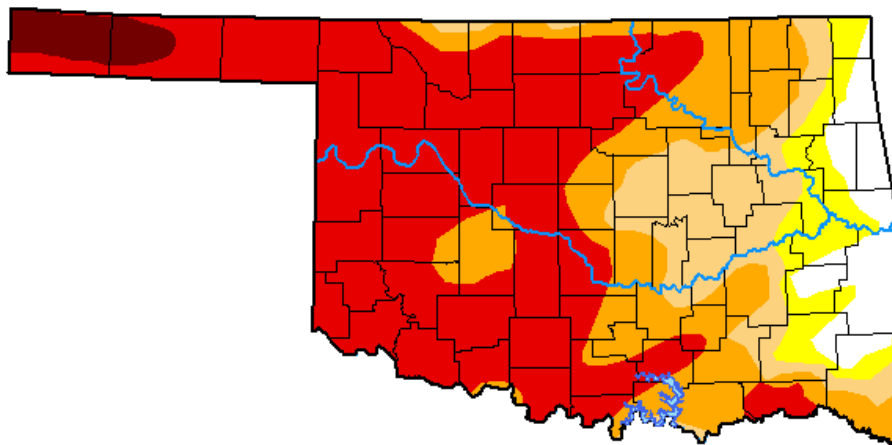
(Released Thursday, Feb. 24, 2022)

Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	6.69	93.31	86.65	73.94	52.05	2.90
Last Week <i>02-15-2022</i>	2.33	97.67	87.98	76.35	55.65	2.90
3 Months Ago <i>11-23-2021</i>	20.17	79.83	41.69	12.36	2.23	0.00
Start of Calendar Year <i>01-04-2022</i>	5.02	94.98	88.14	72.26	40.44	0.00
Start of Water Year <i>09-28-2021</i>	6.45	93.55	73.23	23.72	2.65	0.00
One Year Ago <i>02-23-2021</i>	69.33	30.67	14.83	4.17	0.23	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:

Brad Pugh
CPC/NOAA

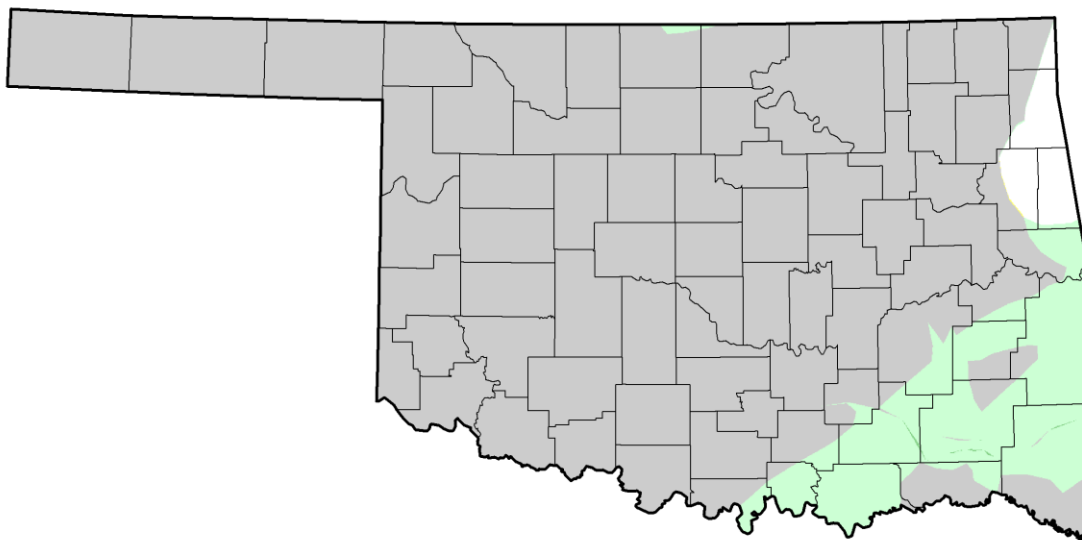


droughtmonitor.unl.edu



U.S. Drought Monitor Class Change - Oklahoma

1 Week



February 22, 2022
compared to
February 15, 2022



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

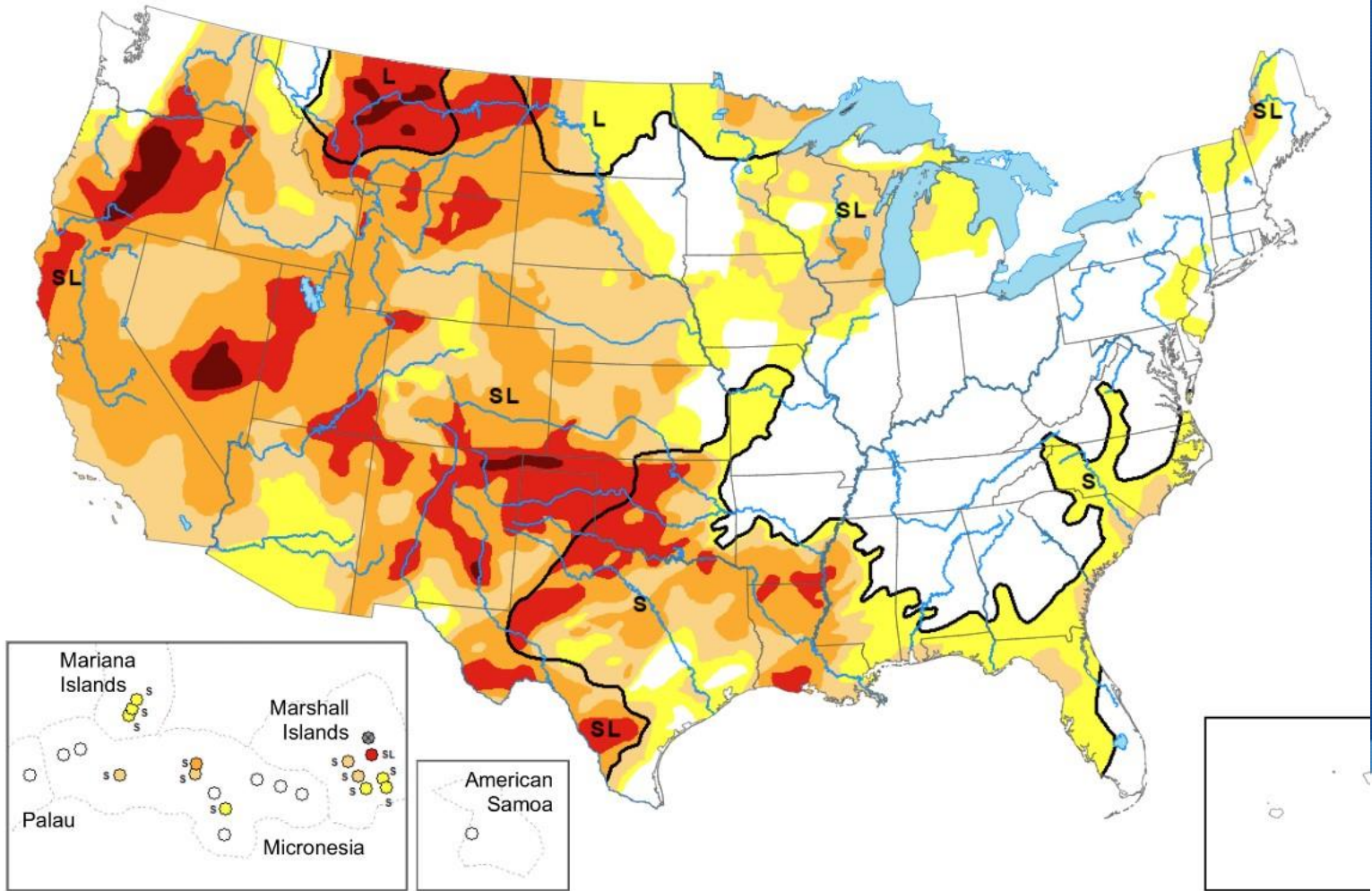
droughtmonitor.unl.edu



Mesonet
Oklahoma's Weather Network

Map released: February 24, 2022

Data valid: February 22, 2022



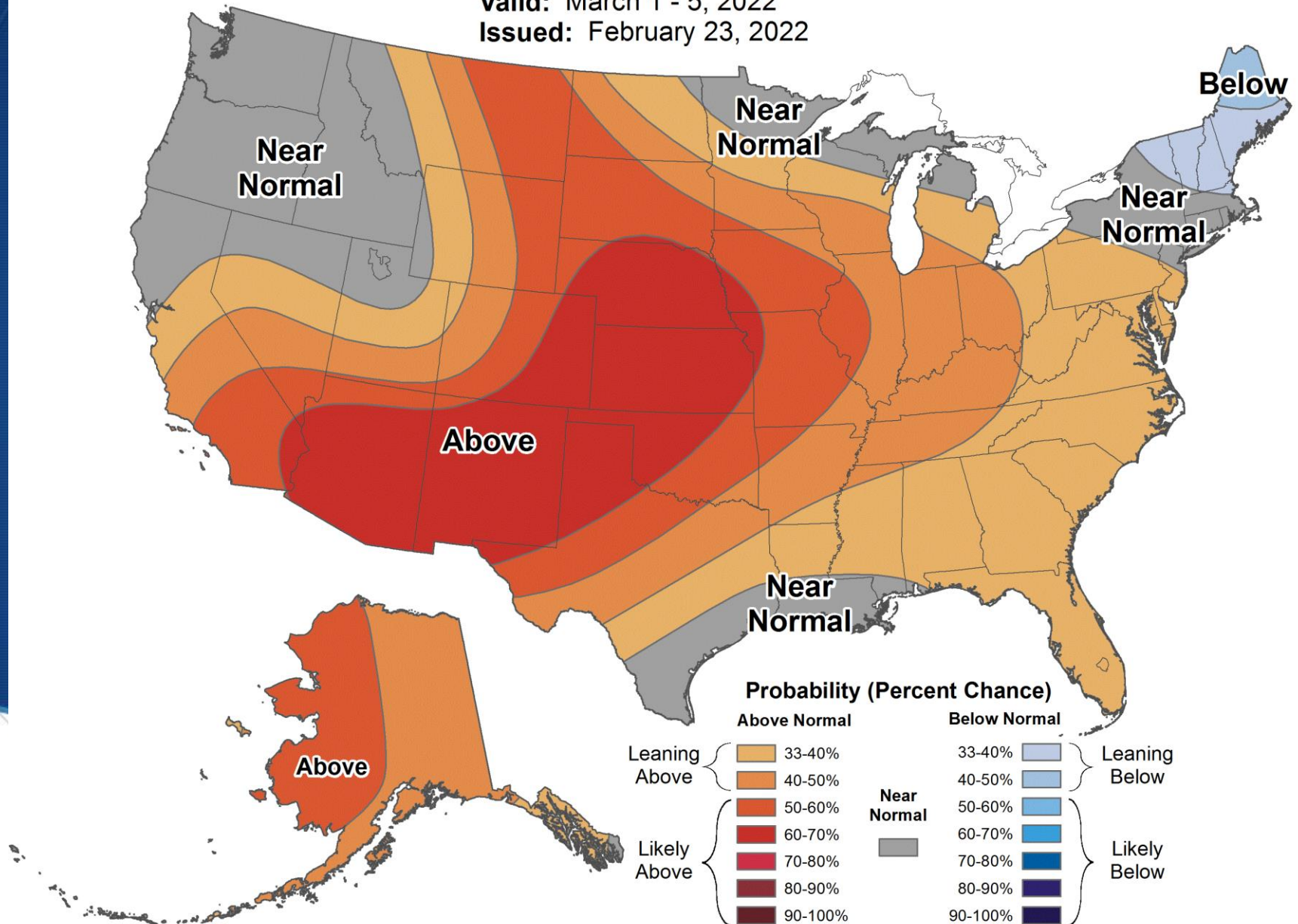


6-10 Day Temperature Outlook



Valid: March 1 - 5, 2022

Issued: February 23, 2022

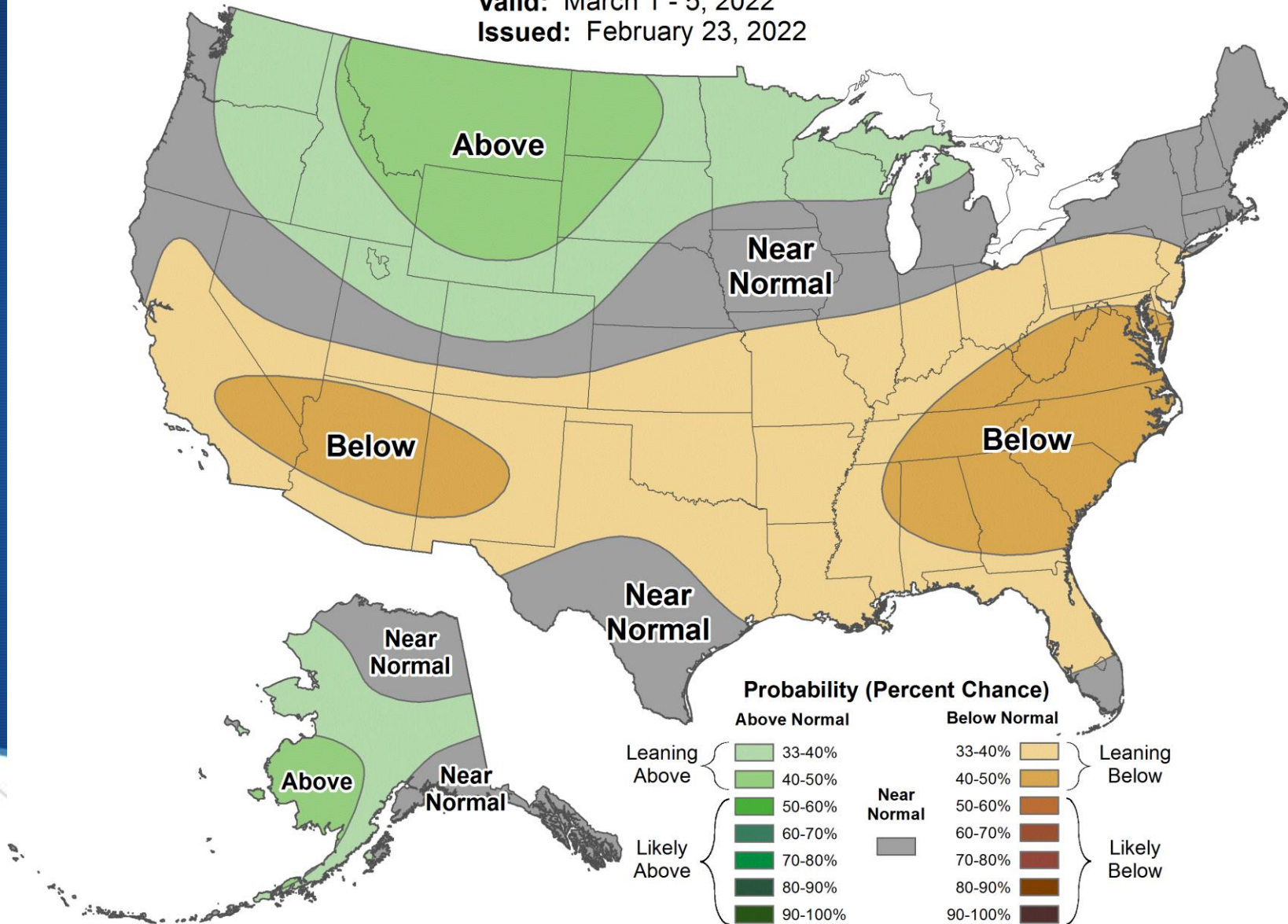




6-10 Day Precipitation Outlook



Valid: March 1 - 5, 2022
Issued: February 23, 2022

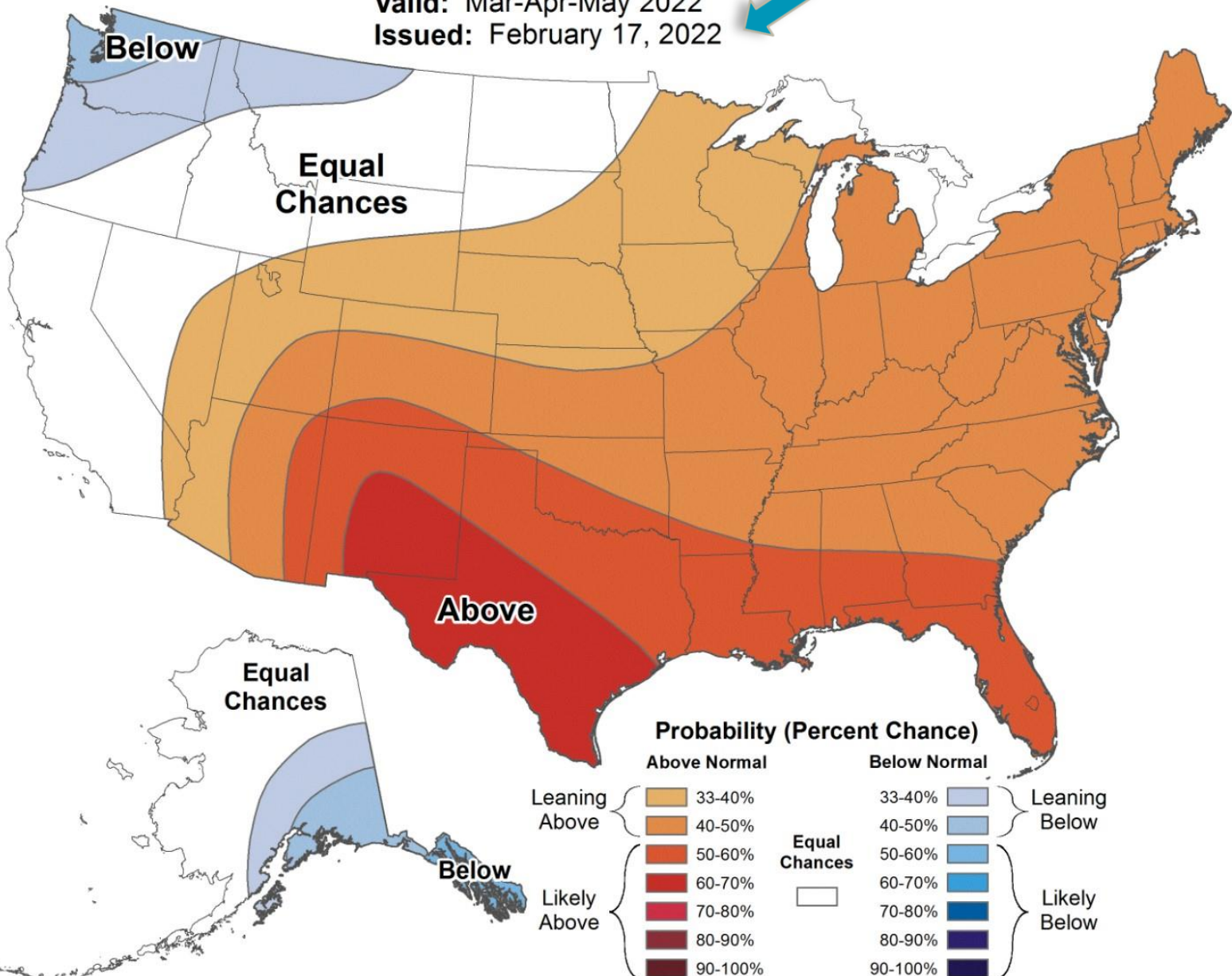




Seasonal Temperature Outlook



Valid: Mar-Apr-May 2022
Issued: February 17, 2022



Probability (Percent Chance)

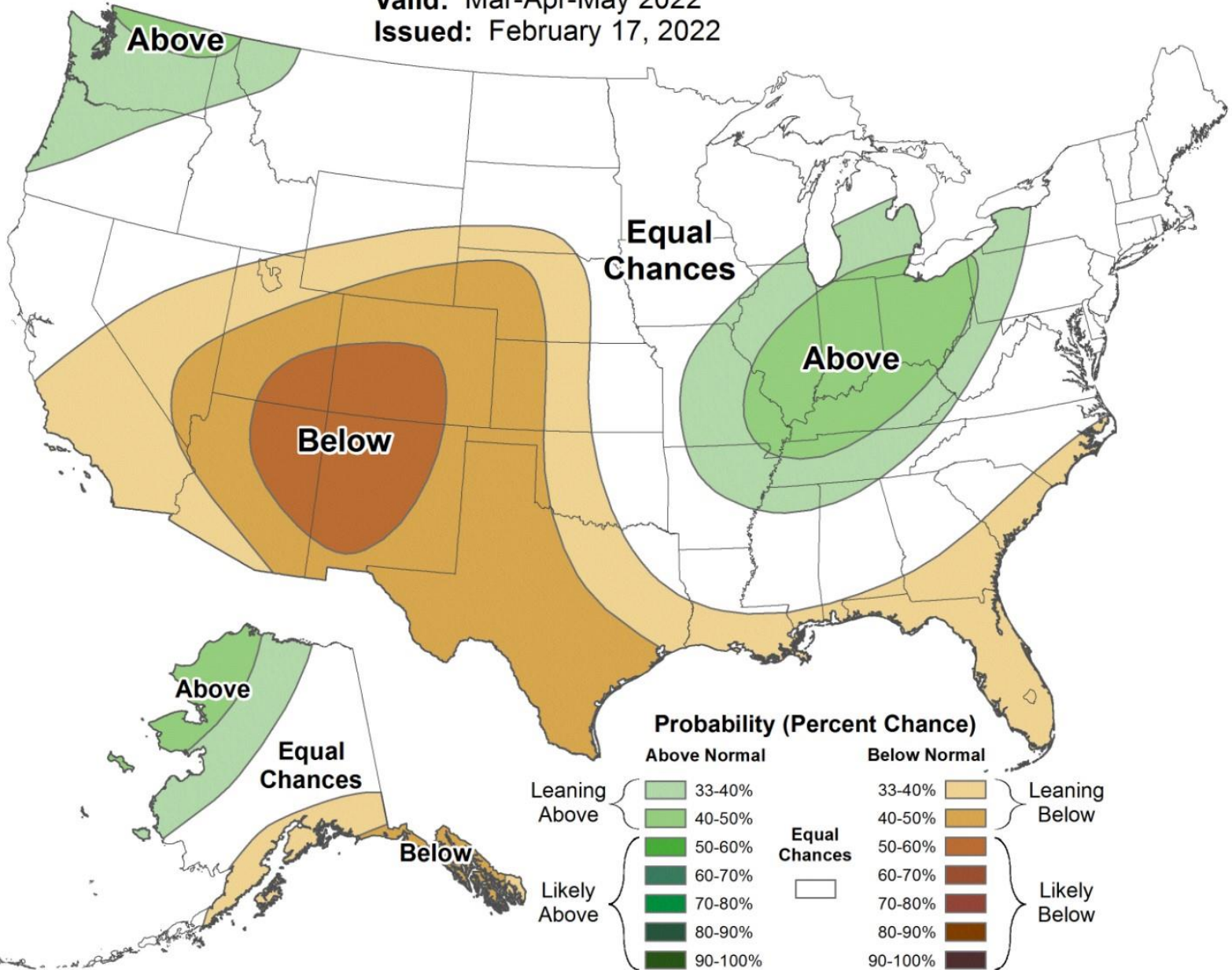
	Above Normal	Below Normal	
Leaning Above	33-40%	33-40%	Leaning Below
	40-50%	40-50%	
Likely Above	50-60%	50-60%	Likely Below
	60-70%	60-70%	
	70-80%	70-80%	
	80-90%	80-90%	
	90-100%	90-100%	
	Equal Chances		



Seasonal Precipitation Outlook



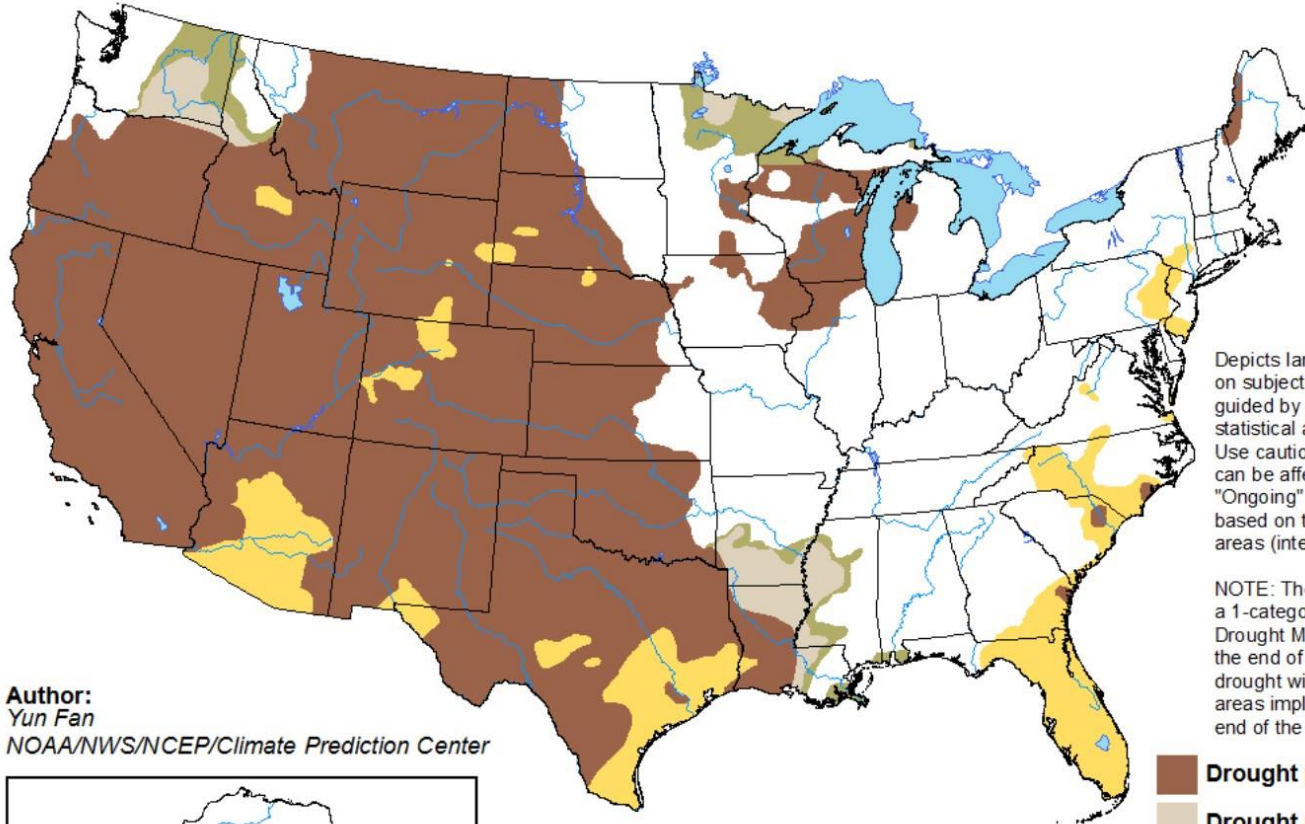
Valid: Mar-Apr-May 2022
Issued: February 17, 2022



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

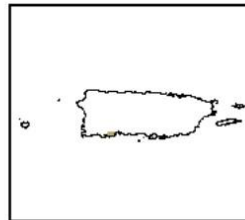
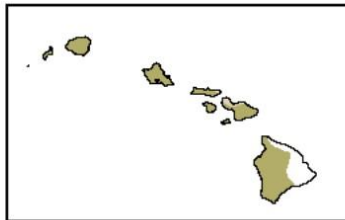
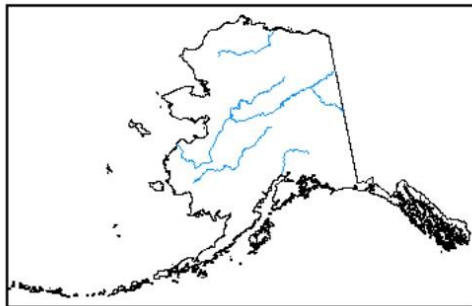
Valid for February 17 - May 31, 2022
Released February 17



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Yun Fan
NOAA/NWS/NCEP/Climate Prediction Center



-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>



Mesonet
Oklahoma's Weather Network

Teleconnections: Changes in Weather Linked Together

- *El Nino Southern Oscillation (ENSO)
- Artic Oscillation
- Atlantic Multidecadal Oscillation
- **Madden-Julian Oscillation**
- **North Atlantic Oscillation**
- **North Pacific Gyre Oscillation**
- **Pacific Decadal Oscillation**
- Pacific North American Pattern
- Others

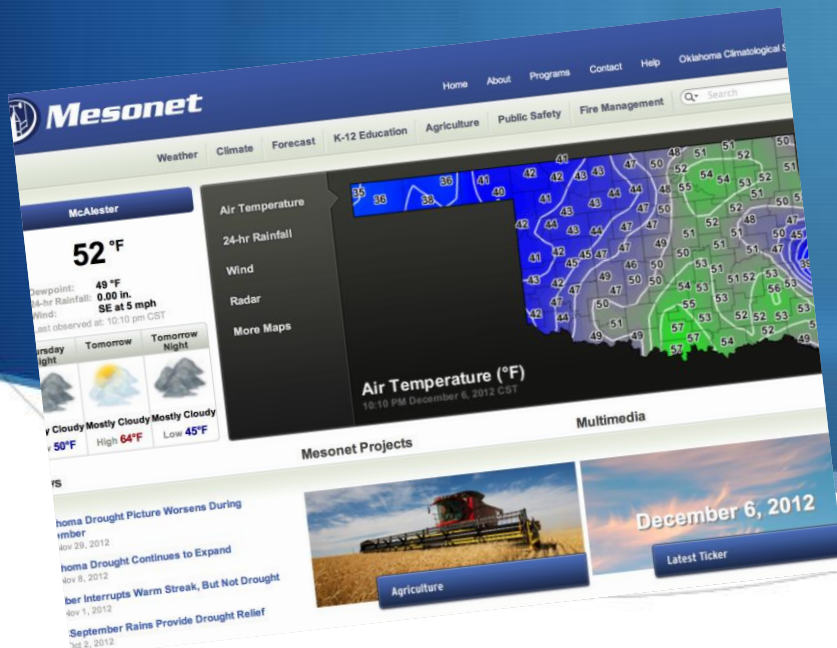


Thanks!

J. Wes Lee

wes.lee@okstate.edu

mesonet.org



Mesonet
Oklahoma's Weather Network