

Oklahoma Mesonet



Established 1994

Mesonet Measurements

Air temperature

Rainfall

Relative humidity

5 Min.

Solar radiation

Station pressure

Wind direction

Wind speed

15 Min.

Soil Temperature

30 Min.

Soil Moisture



Mesonet
Oklahoma's Weather Network

Data Delivery Formats

- 100's of Maps
- Meteograms
- Charts/Graphs

Stillwater

33 °F

wind chill:
24 °F

Dewpoint: **19** °F
24-hr Rainfall: **0.00** in.
Wind: **NNW 12** mph
Last observed at: 3:30 pm CST

Today Tonight Tomorrow



Decreasing
Clouds

High **39°F**



Mostly Clear

Low **22°F**



Partly Sunny

High **48°F**

Forecast by National Weather Service

Air Temperature

24-hr Rainfall

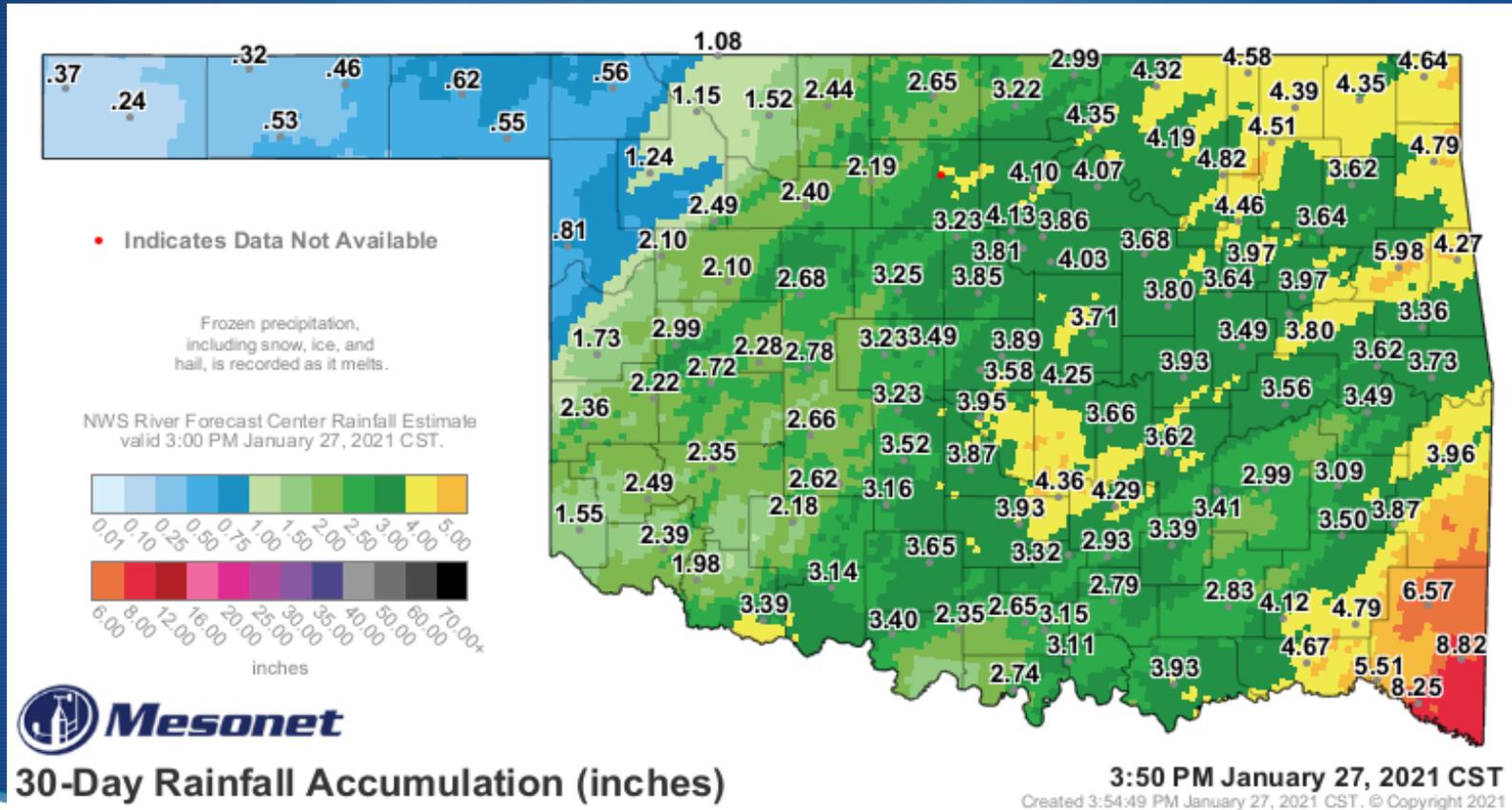
Wind

Radar

More Maps



61 Different Rainfall Maps





0

1

2

3

4



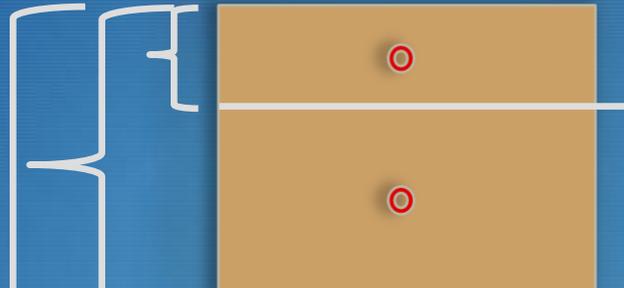
Mesonet
Oklahoma's Weather Network

Plant Available Water

4-inch P.A.W.

16-inch P.A.W.

32-inch P.A.W.



2-inch Sensor

10-inch Sensor

Soil Characteristics

	Texture Class	% Sand	% Silt	% Clay
5 cm depth	Loam	27.2	49.2	23.6
25 cm depth	Silt loam	24.9	50.2	24.9
60 cm depth	Silty clay	19.7	40	40.3
75 cm depth	Clay	17.2	39.8	43

or



Mesonet
Oklahoma's Weather Network

Fractional Water Index

2-inch F.W.I.



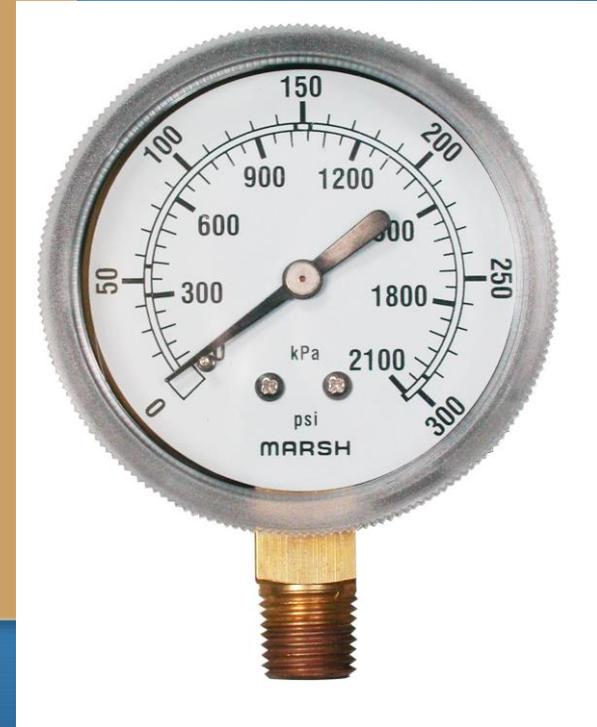
4-inch F.W.I.



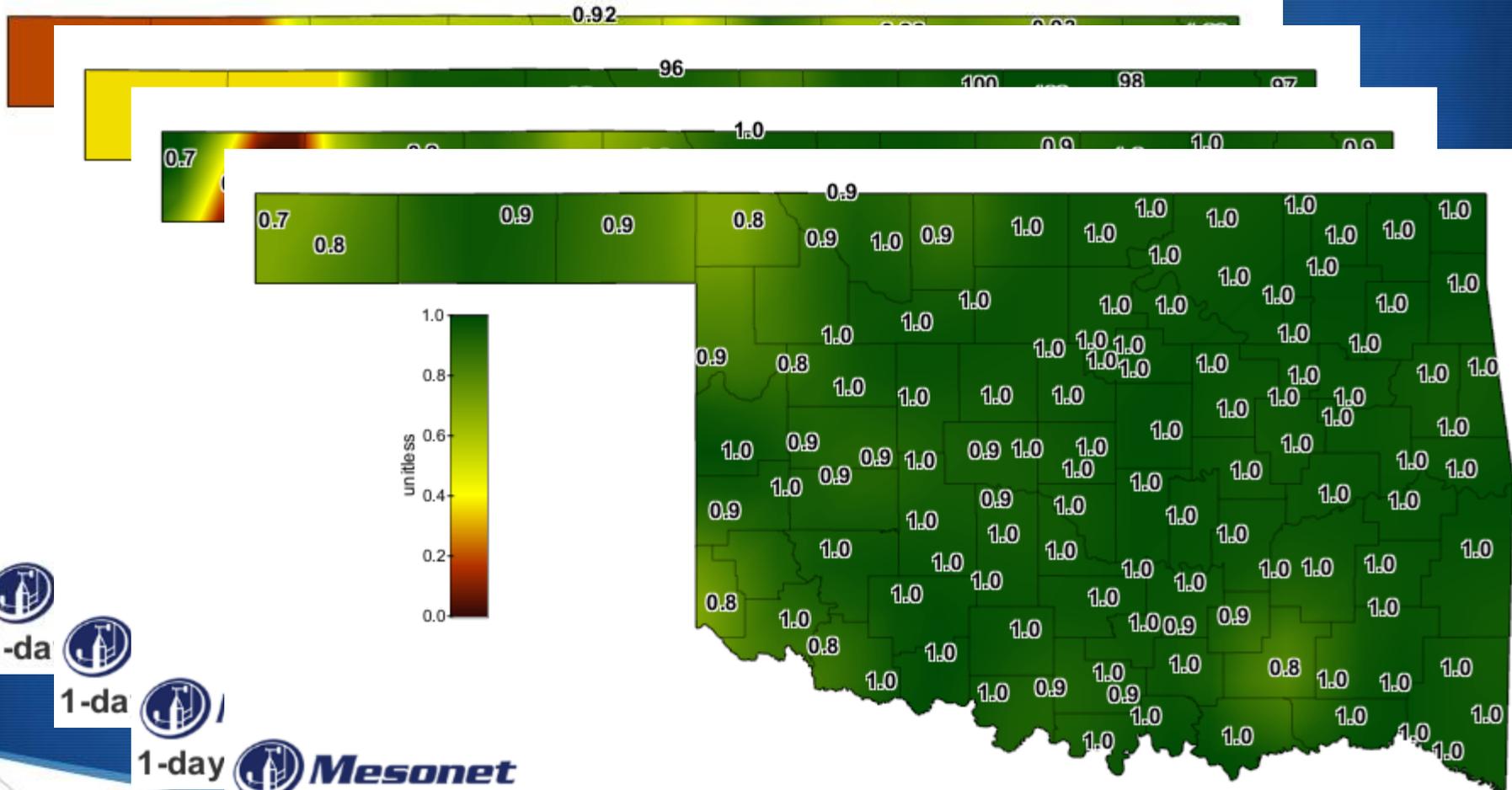
10-inch F.W.I.



24-inch F.W.I.



Soil Moisture Maps



1-da



1-da



1-day



Mesonet

1-day Average 4-inch Bare Soil Fractional Water Index

January 26, 2021

Created 6:30:14 AM January 27, 2021 CST. © Copyright 2021



Mesonet
Oklahoma's Weather Network

[Weather](#)

[Climate](#)

[Forecast](#)

[K-12 Education](#)

[Agriculture](#)

[Public Safety](#)

[Fire Management](#)

[Past Data](#)

Stillwater

33 °F

wind chill:
24 °F

Dewpoint: **19 °F**
24-hr Rainfall: **0.00 in.**
Wind: **NNW 12 mph**
Last observed at: 3:30 pm CST

Today

Tonight

Tomorrow



Decreasing
Clouds

High **39°F**



Mostly Clear

Low **22°F**



Partly Sunny

High **48°F**

Forecast by National Weather Service

Air Temperature

24-hr Rainfall

Wind

Radar

More Maps



Agriculture Essentials

- [Farm Monitor](#) >
- [Cattle Comfort Advisor](#) >
- [Drift Risk Advisor](#) >
- [Degree Day Heat Units](#) >
- [Irrigation Planner](#) ★ >
- [Drought](#) ★ >
- [Dispersion](#) >
- [Evapotranspiration](#) ★ >

Stillwater Farm Monitor

Current Conditions at 4:10 pm CST - January 27, 2021

[Change Mesonet Site](#)
[f Share](#) [t Tweet](#)
 Sunrise: 7:34 am
  Sunset: 5:49 pm

34°F

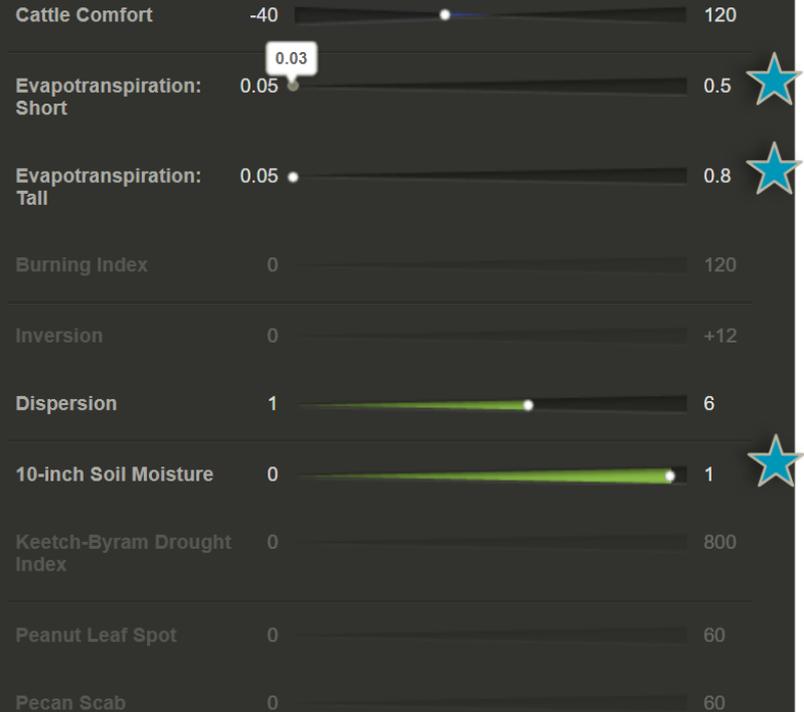
Wind Direction


 Feels Like: 25°F
 Humidity: 57%
 24-hr Rainfall: 0.00 in

 Wind Speed 10-meter: 12 mph
 Wind Speed 2-meter: 9 mph

 3-day Avg 4" Bare Soil: 44°F
 10-day Rainfall: 0.82 in

Today	Tonight	Tomorrow
		
Decreasing Clouds	Mostly Clear	Partly Sunny
High 39°F	Low 22°F	High 48°F



Drought

Oklahoma Drought Monitor Map >

U.S. Drought Monitor Map >

Palmer Drought Index >

Precip Needed - Palmer Drought Index >

Drought Links

North American Drought Monitor >

Oklahoma Drought Monitor Map

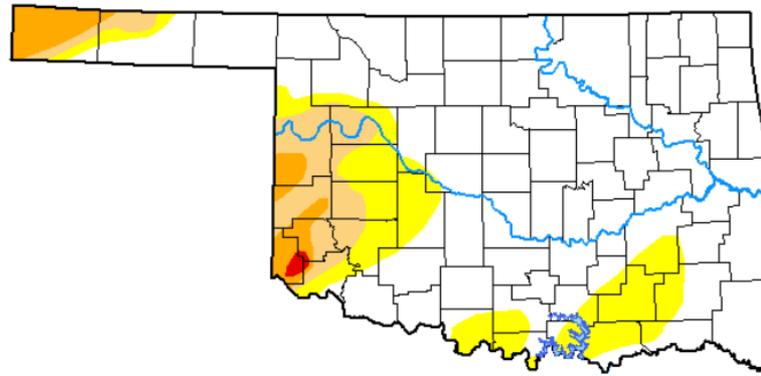
Share Tweet

U.S. Drought Monitor Oklahoma

January 26, 2021
(Released Thursday, Jan. 28, 2021)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.15	24.85	10.93	4.05	0.23	0.00
Last Week <small>01-19-2021</small>	67.61	32.39	11.96	5.52	0.83	0.00
3 Months Ago <small>10-27-2020</small>	47.94	52.06	32.42	15.58	3.61	0.00
Start of Calendar Year <small>12-29-2020</small>	56.83	43.17	25.21	7.75	1.45	0.00
Start of Water Year <small>09-29-2020</small>	66.79	33.21	17.71	11.97	1.55	0.00
One Year Ago <small>01-28-2020</small>	81.34	18.66	8.03	0.85	0.00	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

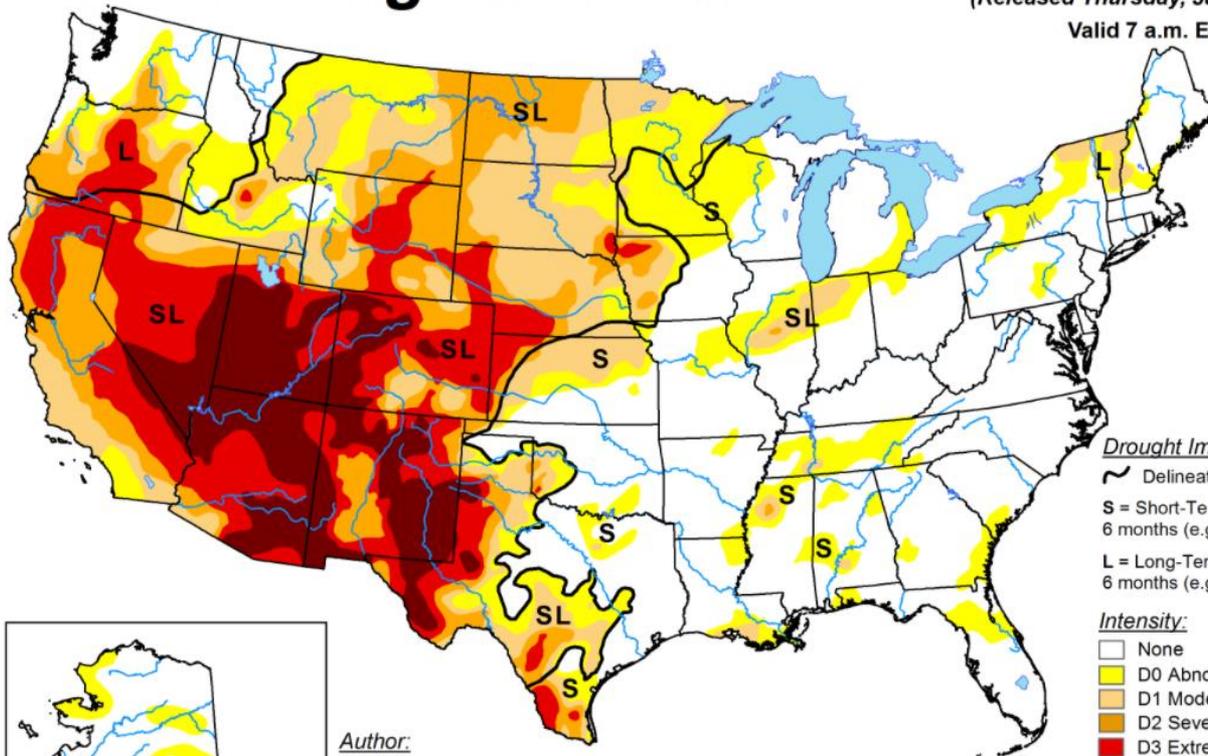


droughtmonitor.unl.edu



U.S. Drought Monitor

January 26, 2021
(Released Thursday, Jan. 28, 2021)
Valid 7 a.m. EST

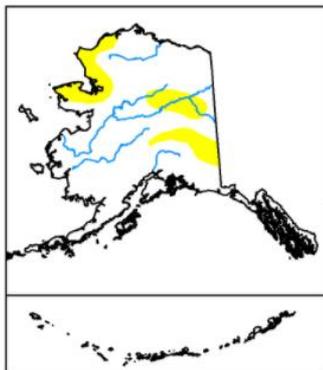


Drought Impact Types:

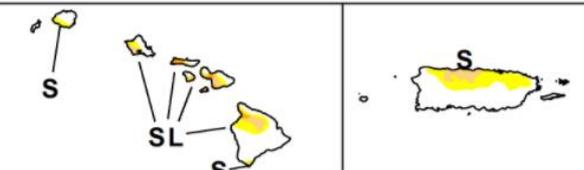
- Delineates dominant impacts
- S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

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



Author:
Richard Tinker
CPC/NOAA/NWS/NCEP



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>



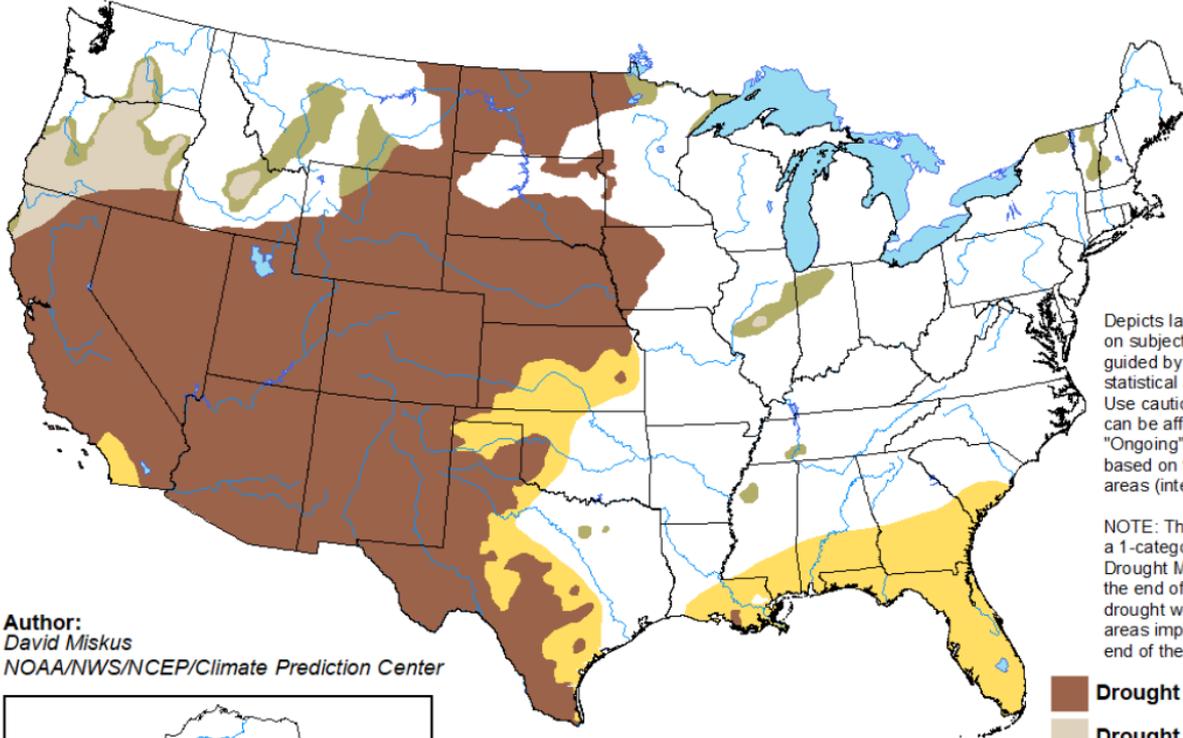
droughtmonitor.unl.edu



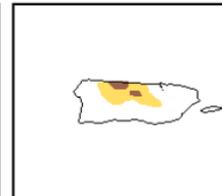
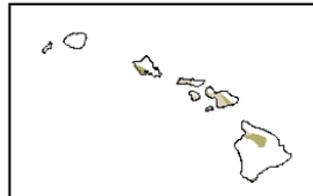
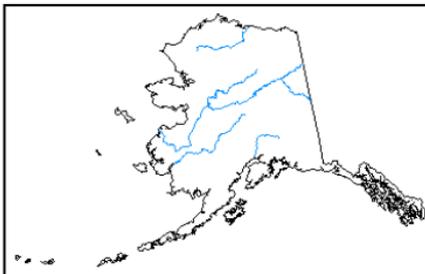
Mesonet
Oklahoma's Weather Network

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for January 21 - April 30, 2021
Released January 21



Author:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center



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).

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



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

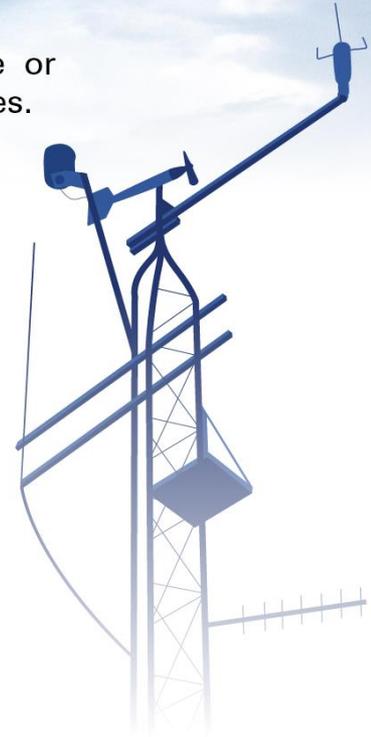


Mesonet
Oklahoma's Weather Network

Mesonet on the Go!

The Mesonet app brings weather information right to your iPhone or Android device, including forecasts, radar, and severe weather advisories.

mesonet.org



4:18 LTE

Norman

Observed at 2/26/19, 4:10 PM

31°

Dewpoint: 27°
Humidity: 85 %
Wind: N at 10 mph
Feels Like 22°F
Wind Gusts: 13 mph
24-hr. Rainfall: 0.00 in.
Pressure (MSLP): 30.14 in. Hg

Forecast Today

High 49

Tonight

Low 28 Chance Drizzle
Wind N to NE at 6 - 9 mph

Tomorrow

High 36 Chance Freezing Drizzle
Wind NE to N at 9 - 15 mph

Tomorrow Night

Low 26 Chance Freezing Rain
Wind N at 10 - 13 mph

Local Maps Radar Advisories More



4:28 LTE

Cancel Select Mesonet Site

A

Acme

Ada

Altus

Alva

Antlers

Apache

Ardmore

Arnett

B

Beaver

Bessie

Bixby

Blackwell

Boise City

Breckinridge

Bristow

Broken Bow

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
R
S
T
V
W
Y

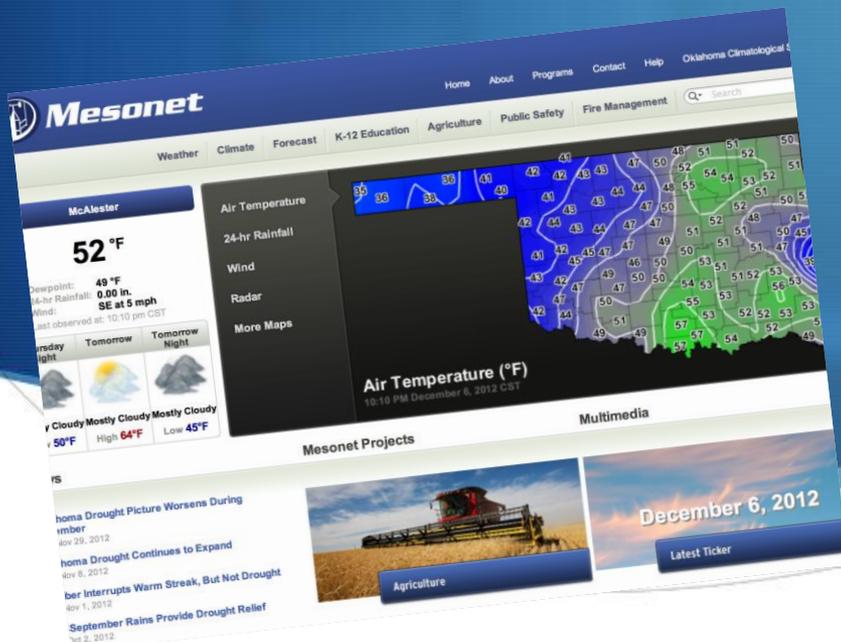


Thanks!

J. Wes Lee

wes.lee@okstate.edu

mesonet.org



Mesonet
Oklahoma's Weather Network