

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE		HYDROLOGIC SERVICE AREA (HSA) Tulsa, Oklahoma (TSA)	
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS				REPORT FOR: MONTH October	
				YEAR 2025	
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283				SIGNATURE Steven F. Piltz (Meteorologist-in-Charge)	
				DATE November 4, 2025	

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

☒ An "X" in the box indicates no flood stages were reached in this Hydrologic Service Area (HSA) during the month above.

October 2025 was very warm, with average monthly temperatures 4°F-6°F above normal across the region. A large portion of eastern OK and northwest AR received below normal rainfall this month, but a swath of above normal rainfall occurred from north central OK into west central AR. This report, past E-5 reports, and monthly hydrology and climatology summaries can be found at https://www.weather.gov/tsa/climo_summary_e5list.

Monthly Summary

Using the radar-derived estimated observed precipitation from the RFCs (Fig. 1a), rainfall totals for October 2025 ranged from around 0.8" to 10" across eastern OK and northwest AR, with the highest totals of 4"-10" from north central OK into west central AR. These rainfall totals correspond to 20% to 280% of the normal October rainfall (Fig. 1b).

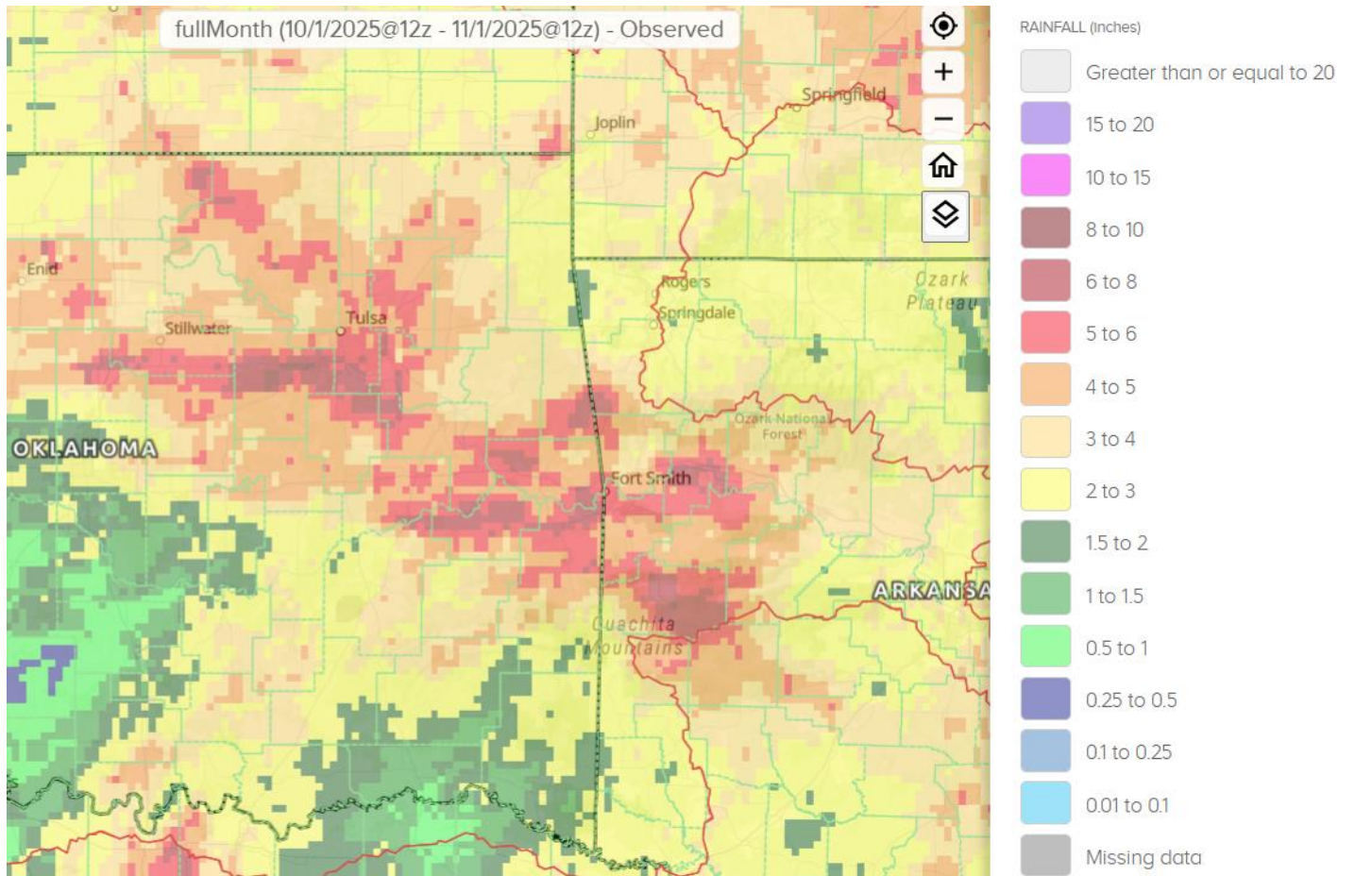


Fig. 1a. Estimated Observed Rainfall for October 2025

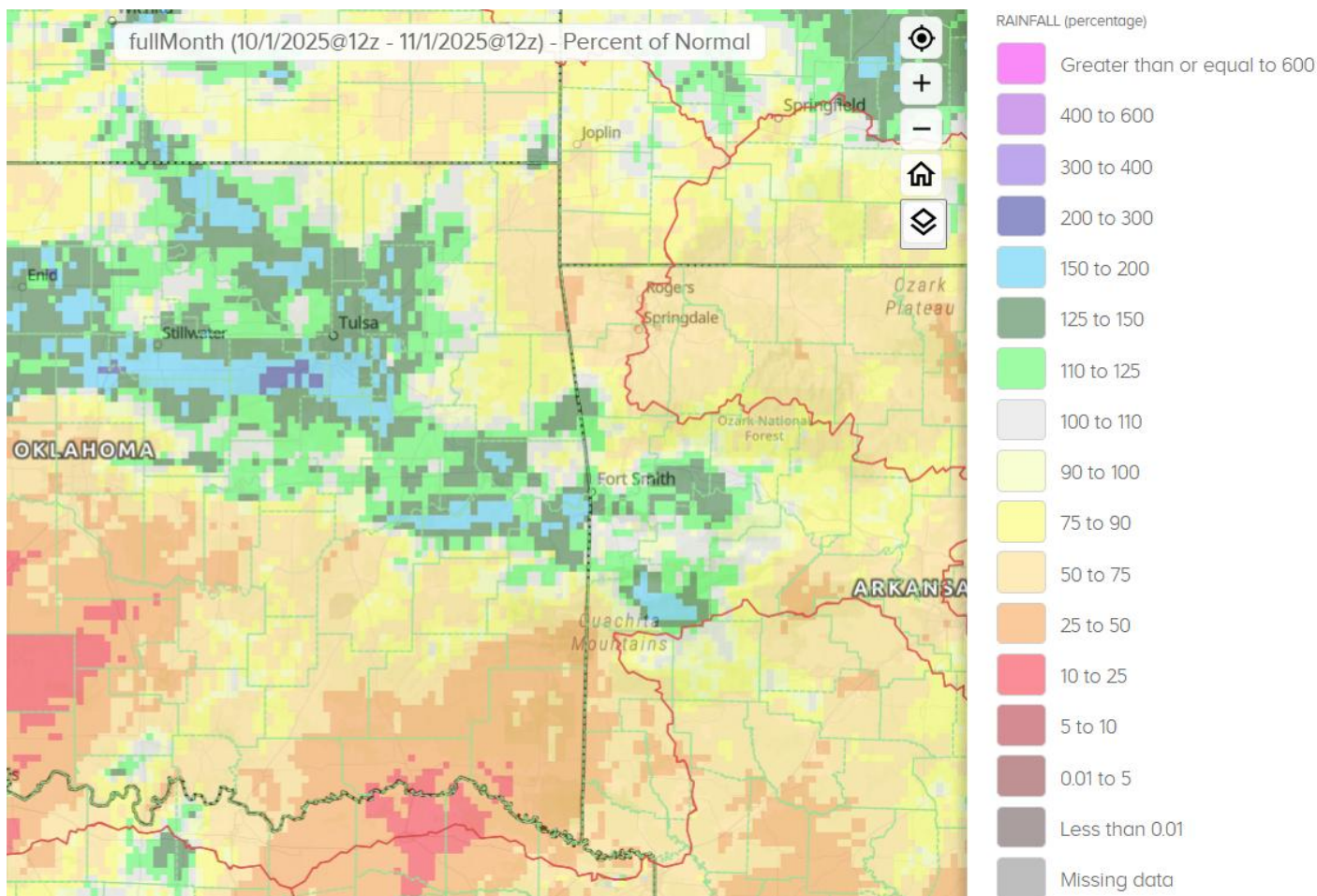


Fig. 1b. Estimated % of Normal Rainfall for October 2025

In Tulsa, OK, October 2025 ranked as the 8th warmest October (67.4°F; since records began in 1905) and the 42nd wettest October (4.68"; since records began in 1888). Fort Smith, AR had the 9th warmest October (68.1°F; since records began in 1882) and the 34th wettest October (5.30"; since records began in 1882). Fayetteville, AR had the 5th warmest (63.7°F) and the 29th driest (2.89") October since records began in 1949.

Some of the larger precipitation reports (in inches) for October 2025 included:

Stigler, OK (meso)	7.93	Bixby 3.4SW, OK (coco)	6.41	Drumright 0.6SW, OK (coco)	6.41
Bunch 0.8N, OK (coco)	6.27	Glenpool 0.6S, OK (coco)	6.24	Oakhurst 3.5SSE, OK (coco)	6.05
Ozark, AR (coop), AR	6.01	Vian 5.3ENE, OK (coco)	5.99	Tulsa 5.4SSE, OK (coco)	5.98

Some of the lowest precipitation reports (in inches) for October 2025 included:

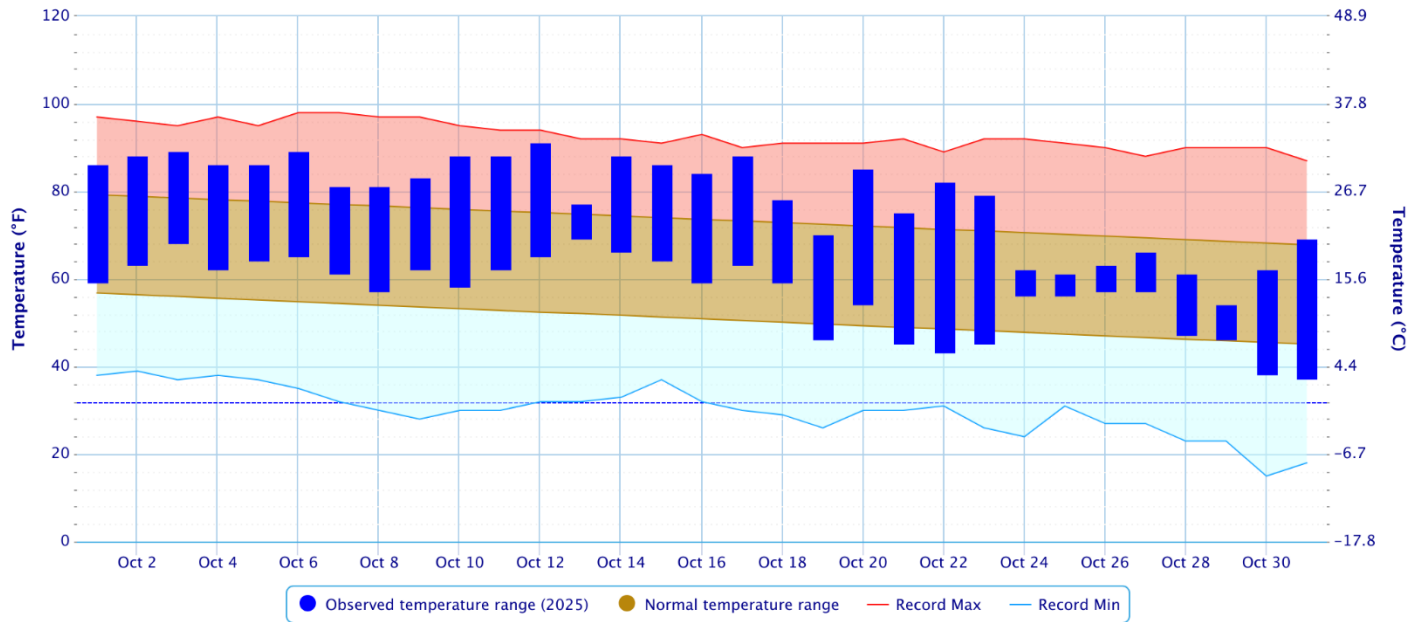
Hugo, OK (meso)	1.07	Antlers 6.3SE, OK (coco)	1.11	Antlers, OK (coop)	1.31
Cloudy, OK (meso)	1.34	Fayetteville 4.2NW, AR (coco)	2.24	Rogers Airport, AR (AWOS)	2.25
Jay, OK (meso)	2.43	Stuart, OK (meso)	2.47	Bentonville Airport, AR (AWOS)	2.49

According to statistics from the [Oklahoma Climatological Survey](#) (OCS) Mesonet:

Rank since 1921	October 2025	Autumn-to-Date (Sep 1 – Oct 31)	Last 90 Days (Aug 3 – Oct 31)	Last 120 Days (Jul 4 – Oct 31)	Last 180 Days (May 5 – Oct 31)	Year-to-Date (Jan 1 – Oct 31)	Last 365 Days (Nov 1, 2024 – Oct 31, 2025)
Northeast OK	38 th wettest	43 rd driest	47 th driest	48 th driest	14 th wettest	10 th wettest	6 th wettest
East Central OK	37 th wettest	45 th driest	52 nd driest	50 th wettest	14 th wettest	6 th wettest	4 th wettest
Southeast OK	34 th driest	26 th driest	30 th driest	48 th driest	34 th wettest	25 th wettest	14 th wettest
Statewide	47 th driest	28 th driest	45 th driest	47 th driest	25 th wettest	12 th wettest	6 th wettest

Daily Temperature Data – Tulsa Area, OK (ThreadEx)

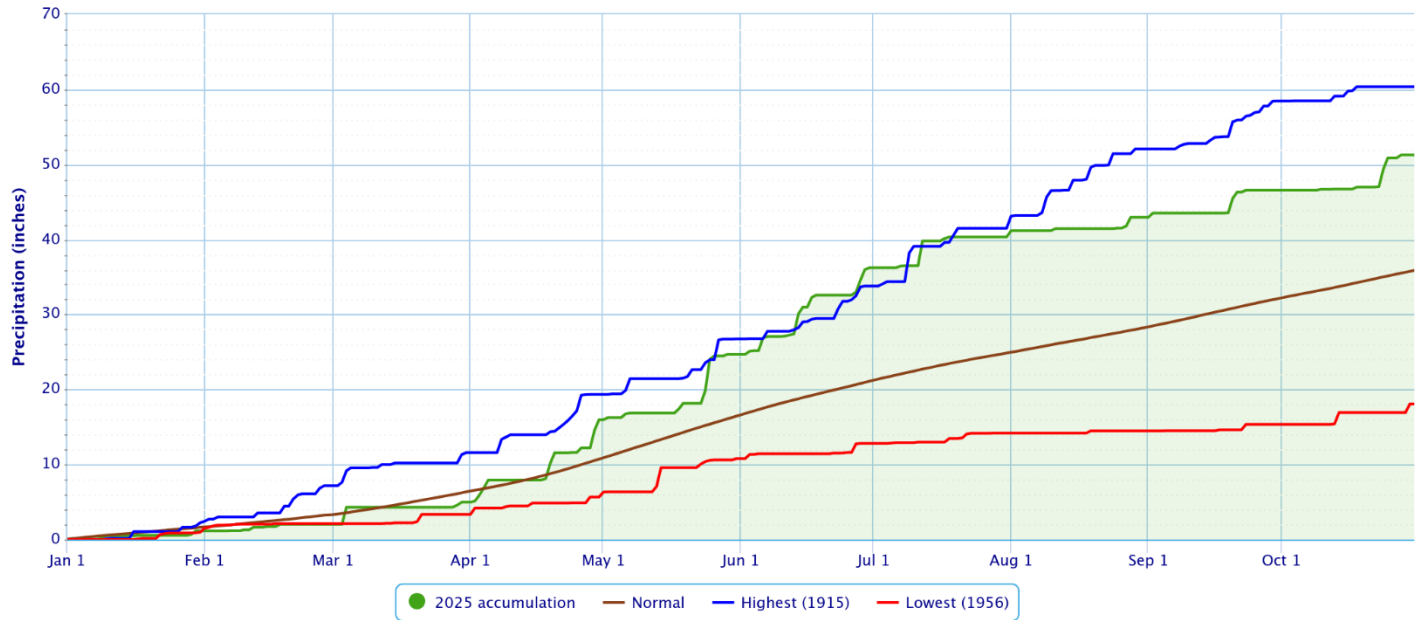
Period of Record – 1905-01-06 to 2025-11-03. Normals period: 1991-2020. Click and drag to zoom chart.



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Accumulated Precipitation – Tulsa Area, OK (ThreadEx)

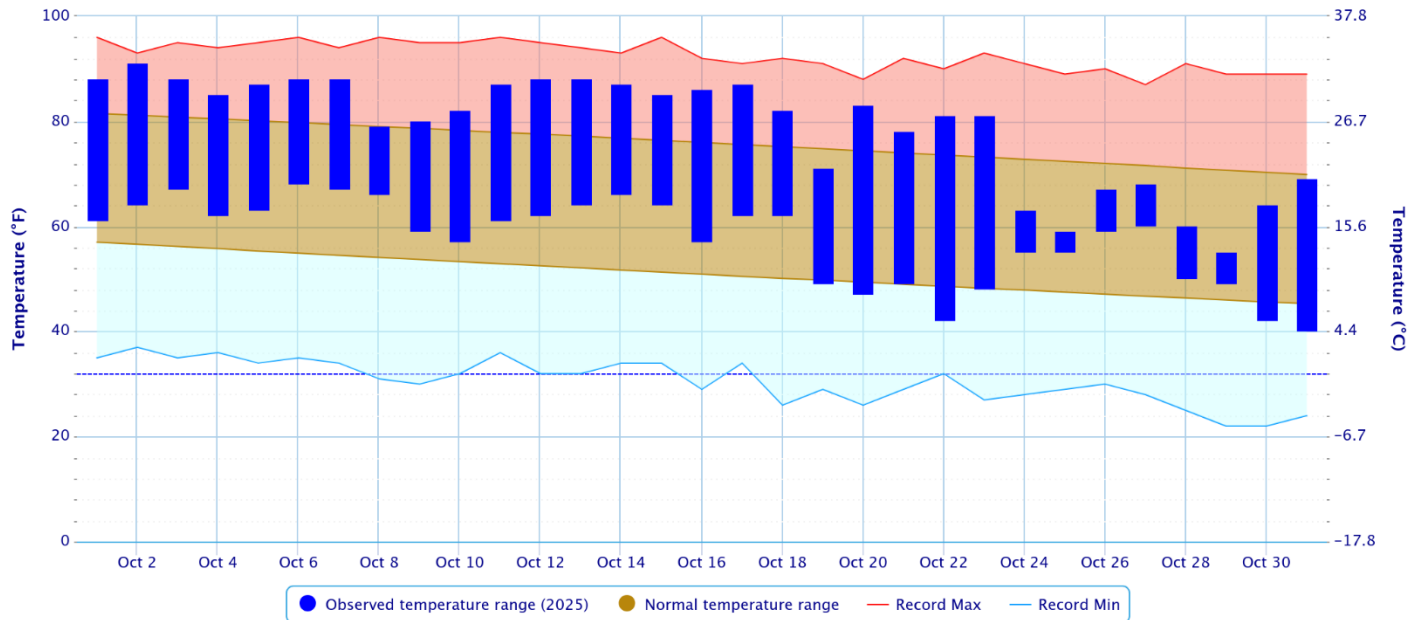
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Daily Temperature Data – Fort Smith Area, AR (ThreadEx)

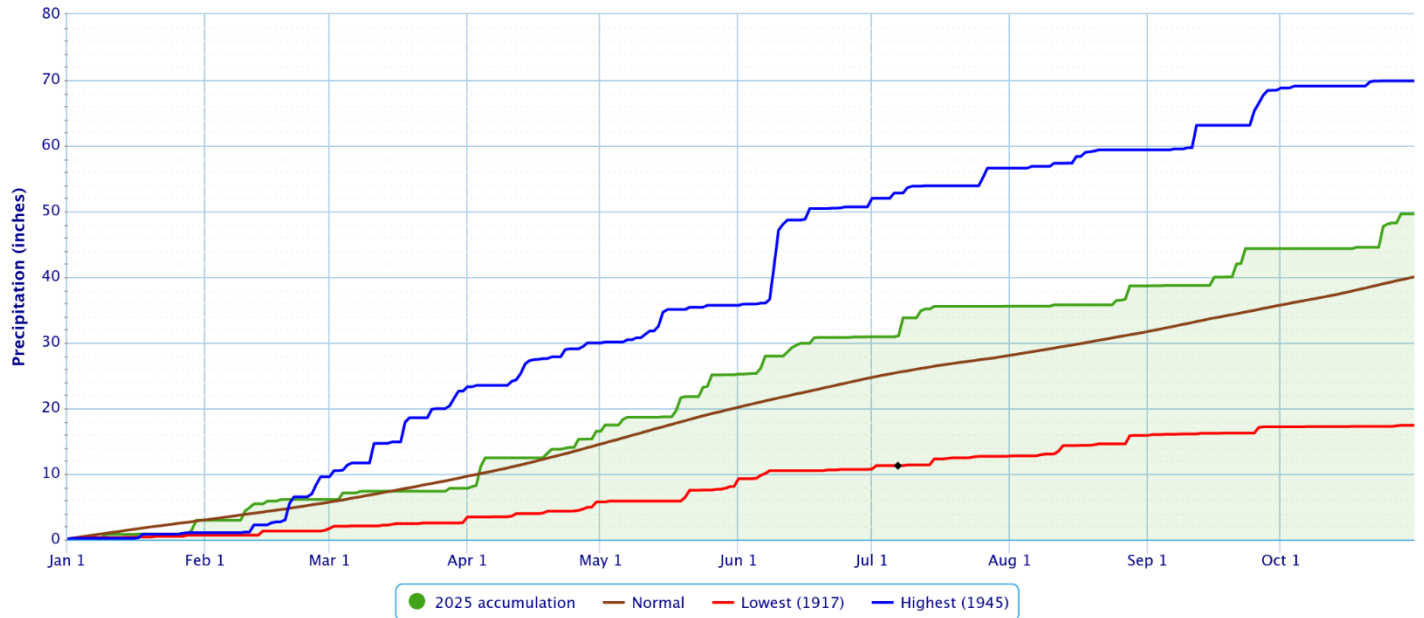
Period of Record – 1882-06-01 to 2025-11-03. Normals period: 1991-2020. Click and drag to zoom chart.



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Accumulated Precipitation – Fort Smith Area, AR (ThreadEx)

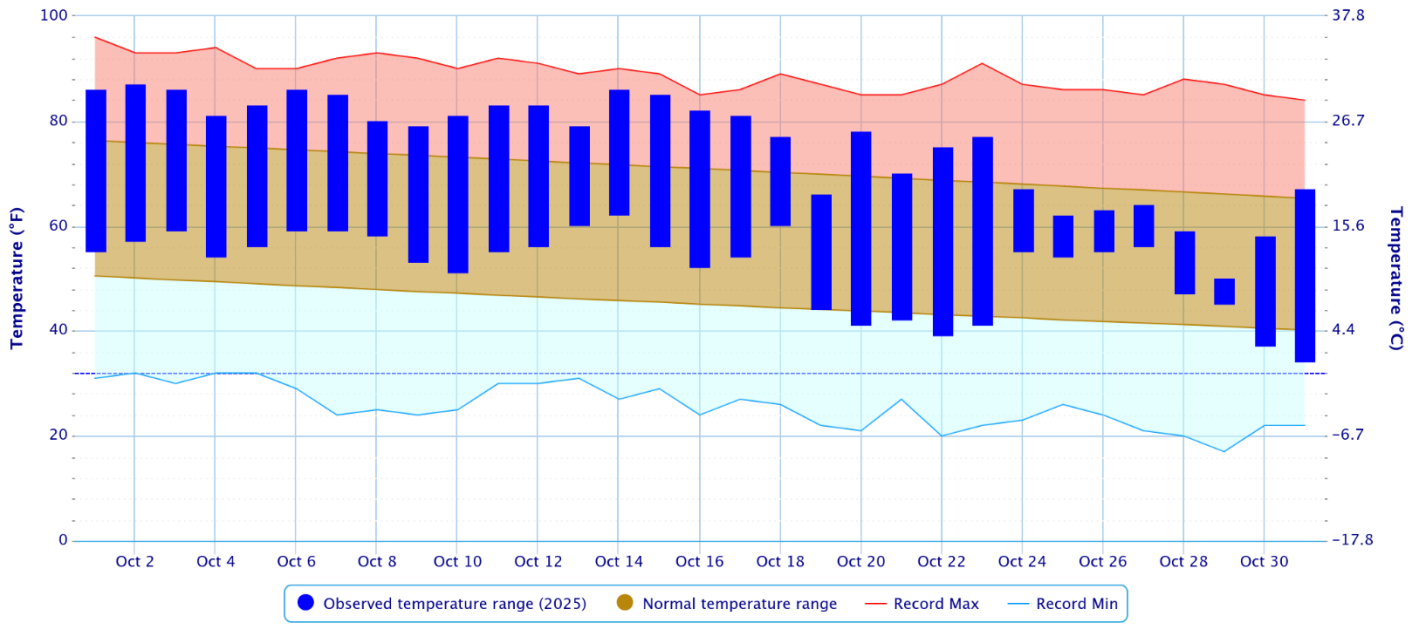
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Daily Temperature Data – FAYETTEVILLE DRAKE FIELD, AR

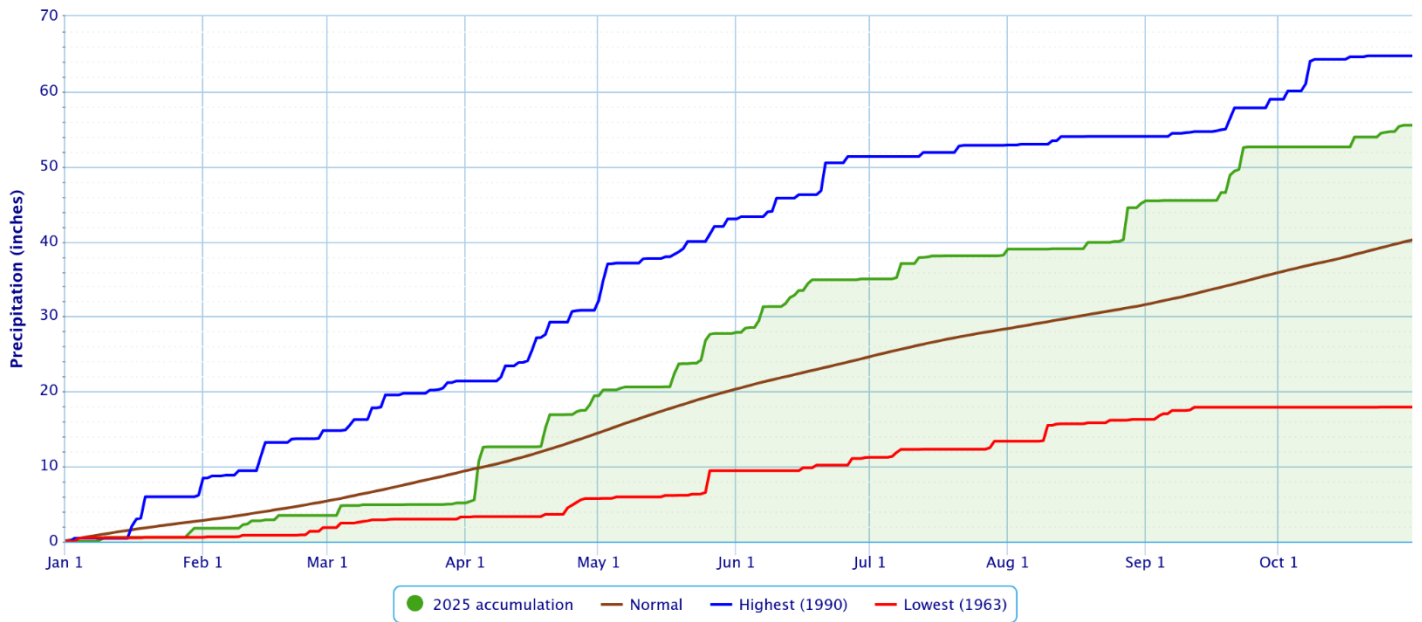
Period of Record – 1949-07-14 to 2025-11-03. Normals period: 1991-2020. Click and drag to zoom chart.



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Accumulated Precipitation – FAYETTEVILLE DRAKE FIELD, AR

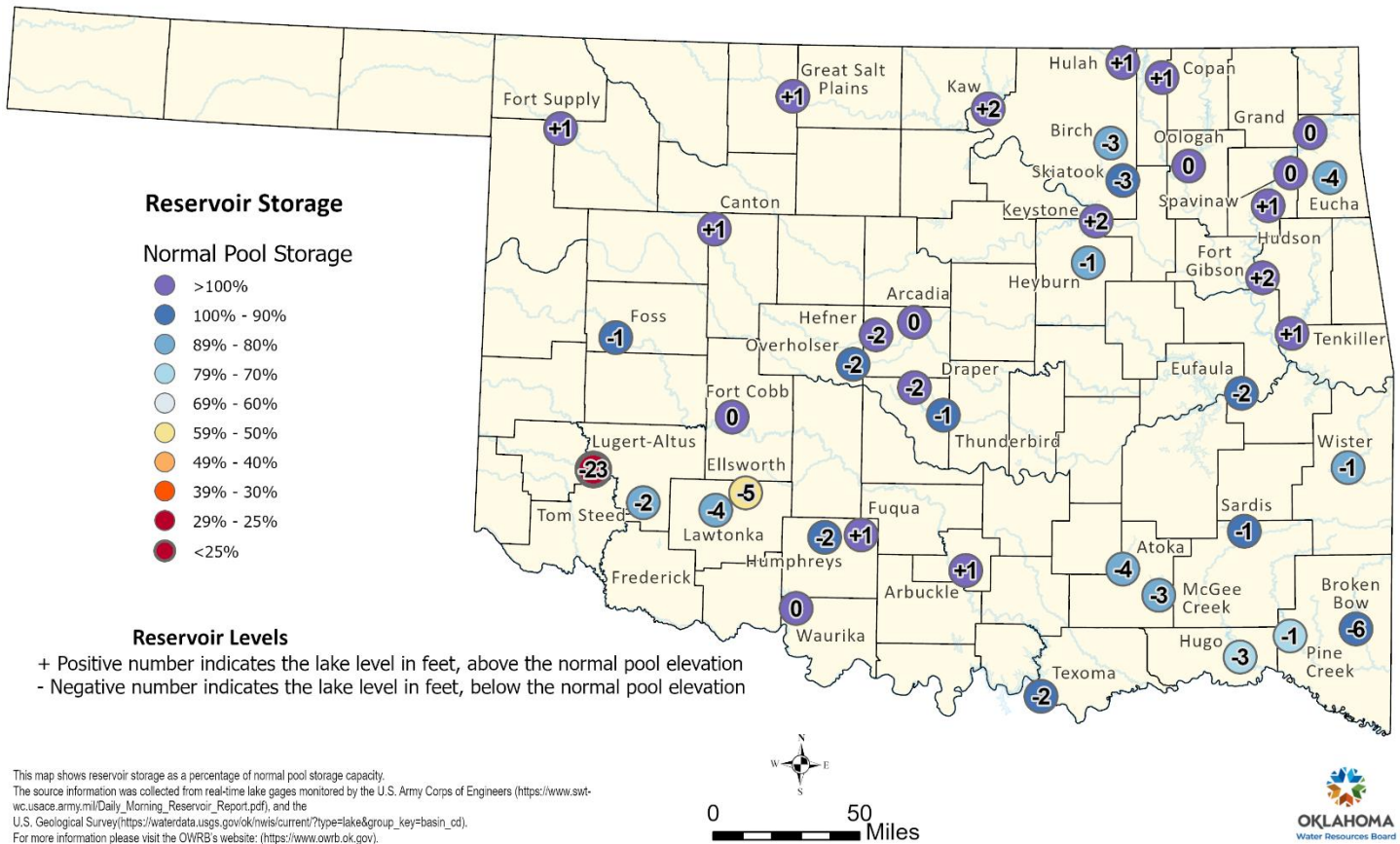
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Reservoirs

Oklahoma Reservoir Levels and Storage as of 11/3/2025



According to the USACE, a few lakes in the HSA were above 3% of top of their conservation pools as of 11/1/2025: Hudson Lake 6%, Kaw Lake 4%, and Keystone Lake 4%. Several lakes were more than 3% below the top of their conservation pools: Heyburn Lake 70%, Hugo Lake 75%, Wister Lake 83%, Birch Lake 83%, and Skiatook Lake 91%.

Drought

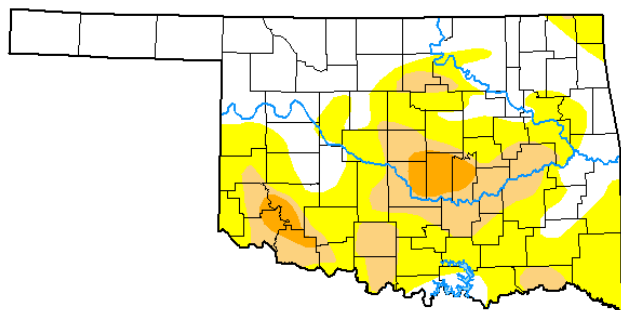
According to the [U.S. Drought Monitor](#) (USDM) from October 28, 2025 (Figs. 2, 3), Moderate (D1) Drought conditions were present in portions of Pawnee, Okmulgee, Okfuskee, McIntosh, Pittsburg, Muskogee, Craig, and Choctaw Counties in eastern OK. Abnormally Dry (D0) but not in drought conditions were occurring in parts of Craig, Ottawa, Delaware, Osage, Pawnee, Creek, Okfuskee, Okmulgee, Wagoner, Rogers, Mayes, Muskogee, McIntosh, Pittsburg, Haskell, Latimer, Cherokee, Sequoyah, Le Flore, Pushmataha, and Choctaw Counties in eastern OK and Benton, Carroll, Sebastian, and Franklin Counties in northwest AR.

U.S. Drought Monitor Oklahoma

October 28, 2025

(Released Thursday, Oct. 30, 2025)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	43.62	56.38	19.04	3.48	0.00	0.00
Last Week 10-21-2025	27.06	72.94	27.96	5.73	0.00	0.00
3 Months Ago 07-29-2025	95.27	4.73	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2025	70.28	29.72	5.52	0.33	0.00	0.00
Start of Water Year 09-30-2025	64.08	35.92	4.86	0.00	0.00	0.00
One Year Ago 10-29-2024	7.73	92.27	83.54	67.70	41.57	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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

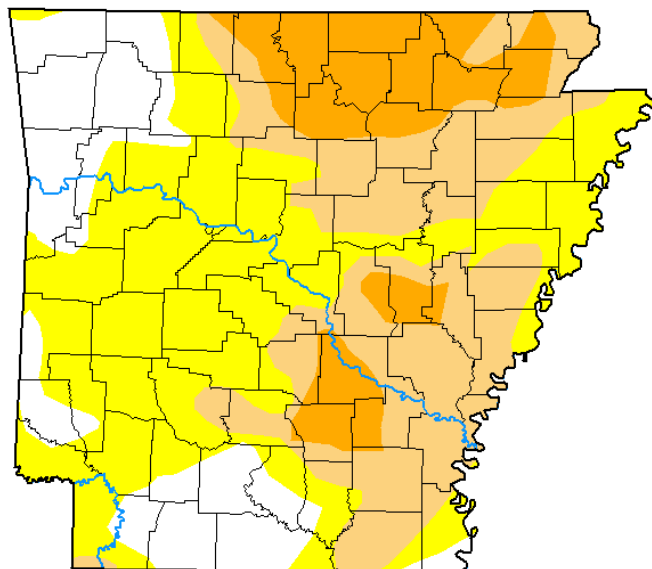
Fig. 2. Drought Monitor for Oklahoma

U.S. Drought Monitor Arkansas

October 28, 2025

(Released Thursday, Oct. 30, 2025)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	17.72	82.28	41.86	14.39	0.00	0.00
Last Week 10-21-2025	16.93	83.07	44.61	14.39	0.00	0.00
3 Months Ago 07-29-2025	99.62	0.38	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2025	86.02	13.98	0.00	0.00	0.00	0.00
Start of Water Year 09-30-2025	19.70	80.30	48.43	20.14	0.00	0.00
One Year Ago 10-29-2024	19.67	80.33	64.96	47.43	8.77	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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>

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CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

Fig. 3. Drought Monitor for Arkansas

Outlooks

The [Climate Prediction Center](#) (CPC) outlook for November 2025 (issued October 31, 2025) indicates an enhanced chance for above normal temperatures and below median precipitation across all of eastern OK and northwest AR. This outlook was based on dynamical and statistical model output along with long-term trends and soil moisture considerations.

For the 3-month period November-December-January 2025-26, CPC is forecasting an enhanced chance for above normal temperatures and an equal chance for above, near, or below median precipitation across all of eastern OK and northwest AR (outlook issued October 16, 2025). This outlook is based on long-term trends, ENSO state, and incorporates a suite of statistical and dynamical forecast tools. According to CPC, “La Niña conditions are present and favored to persist through December 2025 - February 2026, with a transition to ENSO-neutral likely in January-March 2026 (55% chance).”

Summary of Heavy Precipitation Events Daily quality-controlled rainfall maps can be found at:

http://water.weather.gov/precip/index.php?location_type=wfo&location_name=tsa

Convection developed across far northeast OK, where warm advection was strongest along the low-level jet axis, just before sunrise on the 18th, with more showers and thunderstorms developing along a line from south central OK into northeast OK during the mid-morning hours as mid-level forcing moved into the region. A second line of showers and thunderstorms moved into eastern OK and merged with the first by late morning, resulting in widespread rain across eastern OK and northwest AR. This activity continued eastward, ending from west to east through the afternoon. Isolated thunderstorms developed along a cold front just northwest of I-44 during the early evening and moved southeastward across eastern OK and northwest AR through the late evening hours before dissipating. Rainfall totals ranged from around 0.1” to 3” (Fig. 4).

As an upper-level low moved slowly east from the southern Rockies into the southern Plains, numerous rounds of showers and thunderstorms affected eastern OK and northwest AR. Strong warm air advection ahead of this low, combined with precipitable water (PWAT) values locally in excess of 1.5”, resulted in heavy rainfall over several days. A line of storms first moved out of central OK and into eastern OK late evening of the 23rd. Widespread showers and isolated thunderstorms then continued across eastern OK through the overnight hours, eventually spreading into northwest AR. By 7am CDT Oct. 24, rainfall totals were 0.1”-3.5” (Figs. 5, 6). As these storms continued off to the east through mid-morning of the 24th, ending from west to east, another round of widespread showers and thunderstorms moved back into northeast OK from the west. The rain continued for much of northeast OK, north of I-40 through mid-afternoon, with more scattered rainfall elsewhere. By 3 pm CDT, widespread 1”-3” of rain (24-hour total) had fallen across northeast OK (Fig. 7). The widespread area of rain then began to shift to the southeast during the late afternoon and evening, with scattered showers and thunderstorms still continuing across portions of northeast OK. This activity again became widespread over much of eastern OK into west central AR from late evening into the early morning hours of the 25th, with only widely scattered rain primarily over far northwest AR. At 7am Oct. 25, the 24-hour rainfall totals ranged from 0.3” to 7”, with much of eastern OK and northwest AR receiving 1.5”-3.5” (Fig. 8). A corridor of 4”-7” fell over northern Creek County. Lighter rain then continued across primarily northeast OK and northwest AR during the morning, but decreased in coverage while shifting east as a dry slot moved into the area through the afternoon. Most locations had a break from the rain during the evening, though isolated showers and thunderstorm continued throughout the region. A cluster of showers and thunderstorms formed around midnight over southeast OK and moved north-northeast into east central OK and west central and northwest AR overnight through the pre-dawn hours of the 26th. 24-hour rainfall totals ending at 7am CDT Oct. 26 ranged from 0.1” to around 1.5” (Fig. 9). Some widely scattered showers persisted through the remainder of the morning across far northeast OK and northwest AR before lifting to the northeast as the upper-low finally exited the region. Over the 3-day period, 0.5” to 9.3” of rain fell in total (Figs. 10, 11), with much of eastern OK and northwest AR receiving 2”-4”. Widespread 3”-6” of rain fell over Creek and Tulsa Counties in particular, with the highest rainfall of 5”-9” across northern Creek and southern Tulsa Counties. Despite these high totals, no widespread or significant flooding occurred. This was due to drier antecedent soil conditions (Moderate/D1 Drought conditions) and the slow and steady nature of the rainfall.

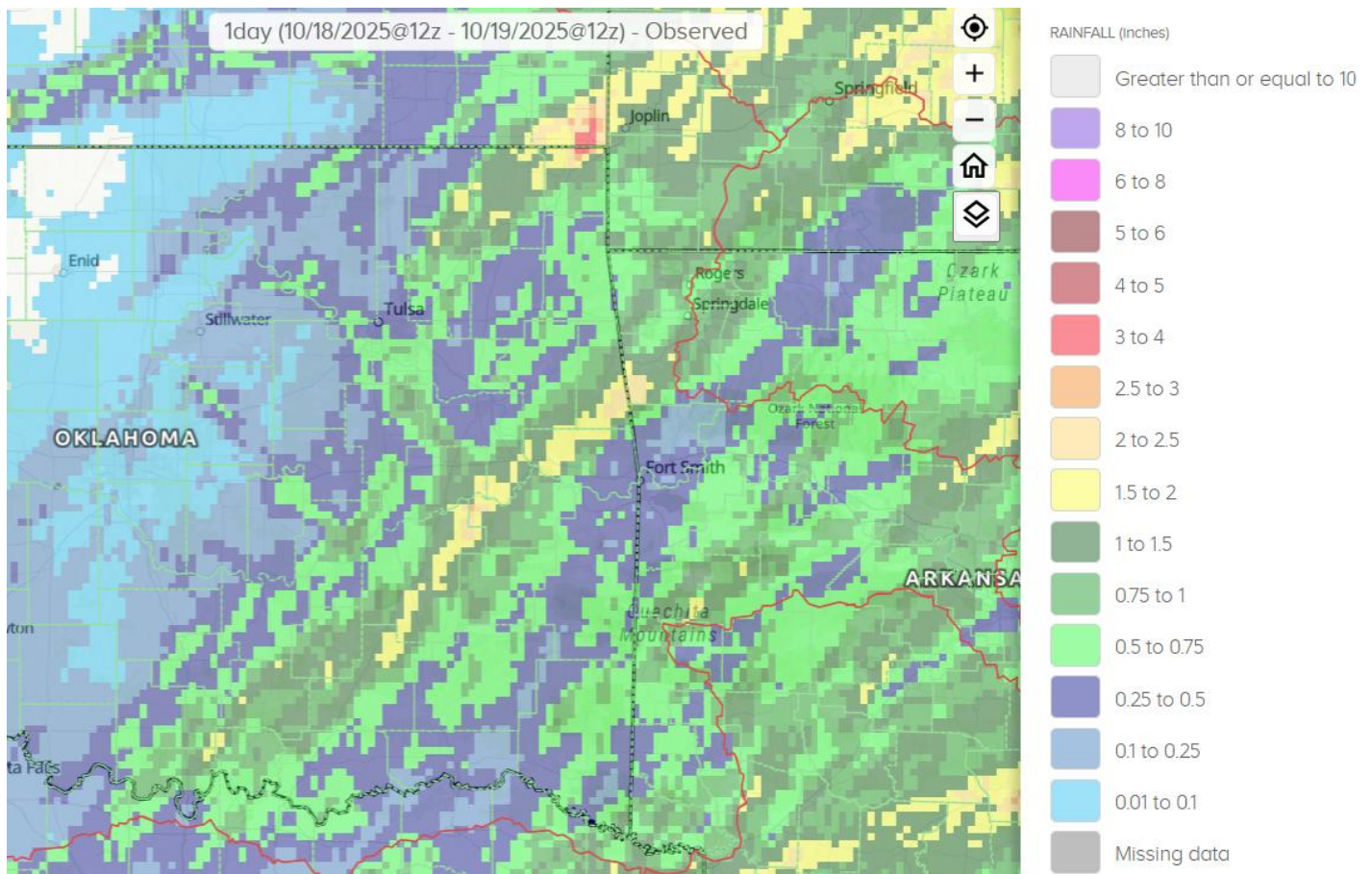


Fig. 4. 24-hour Estimated Observed Rainfall ending at 7am CDT 10/19/2025.

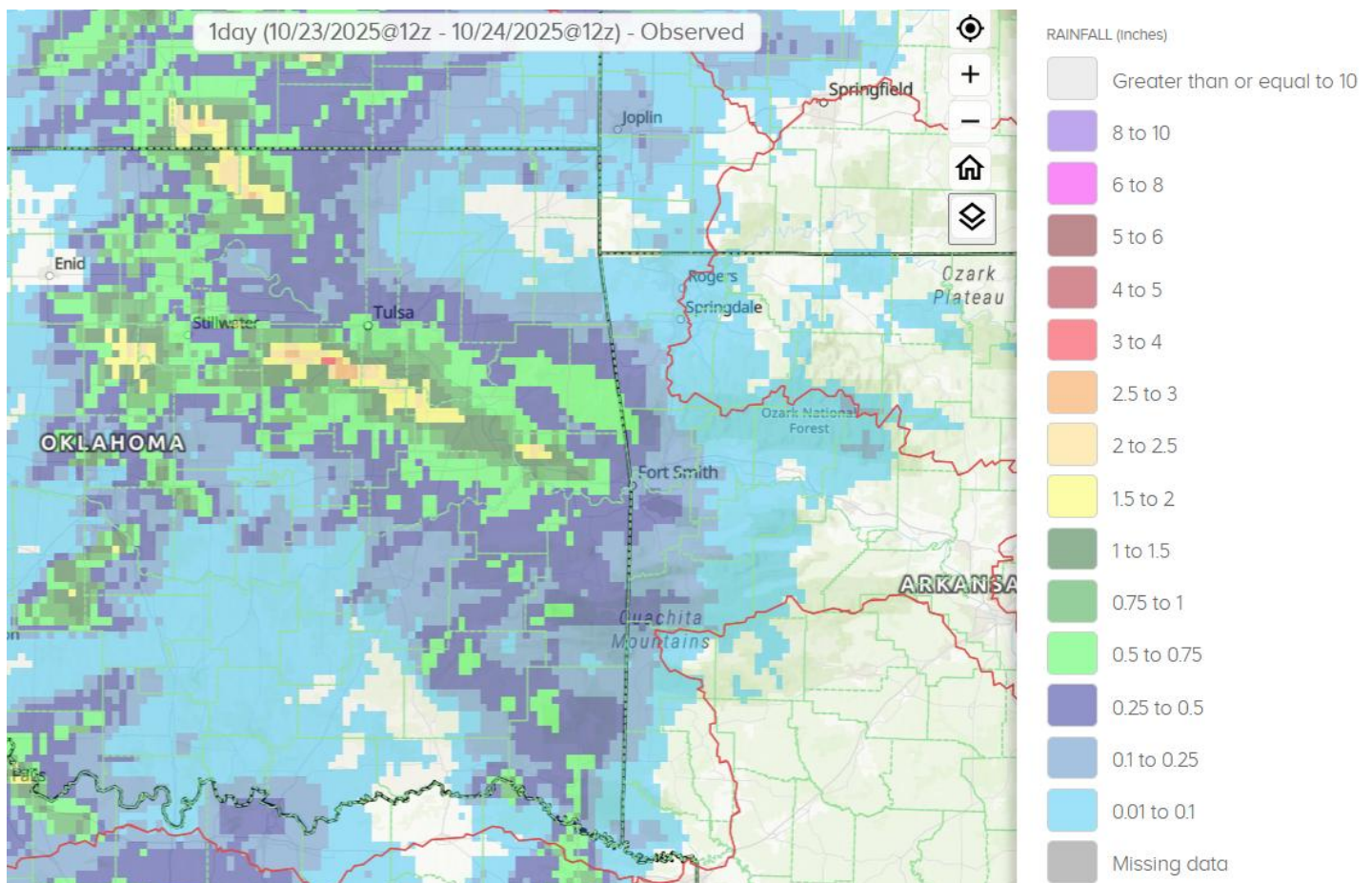
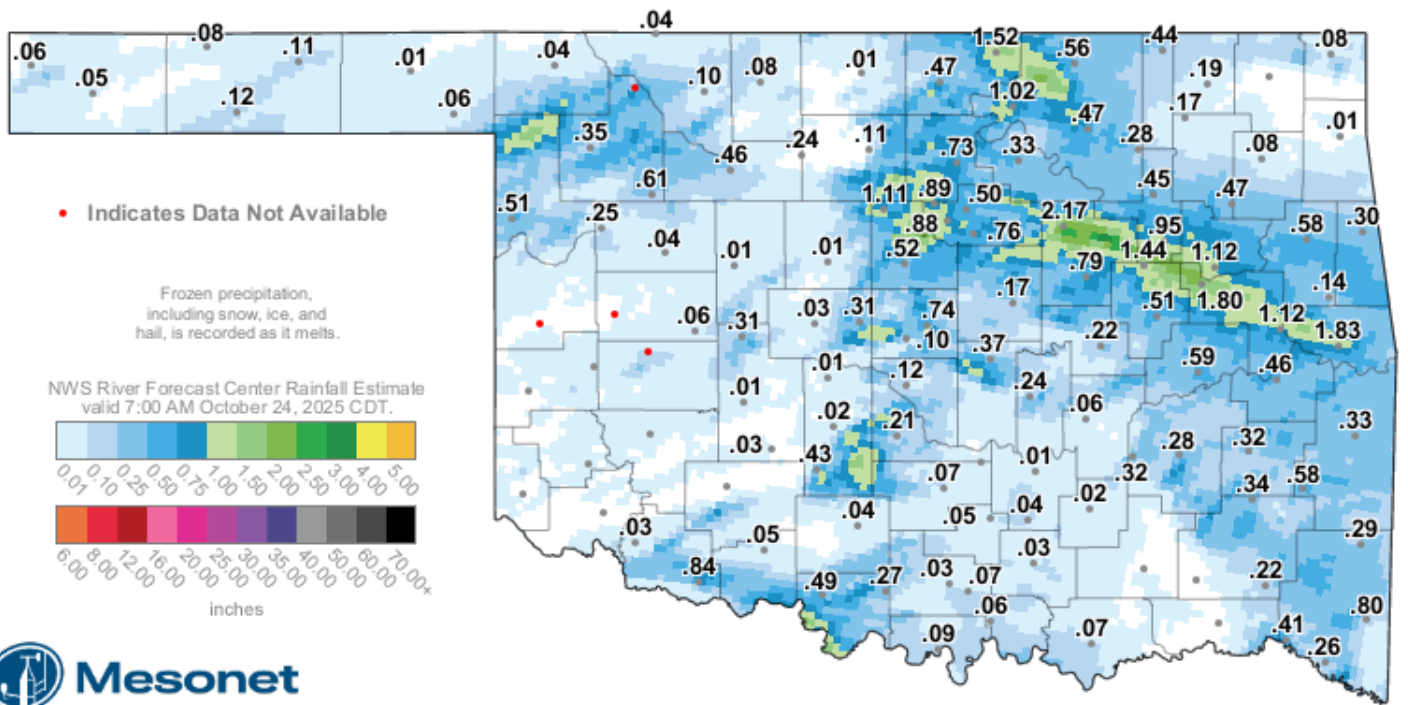


Fig. 5. 24-hour Estimated Observed Rainfall ending at 7am CDT 10/24/2025.

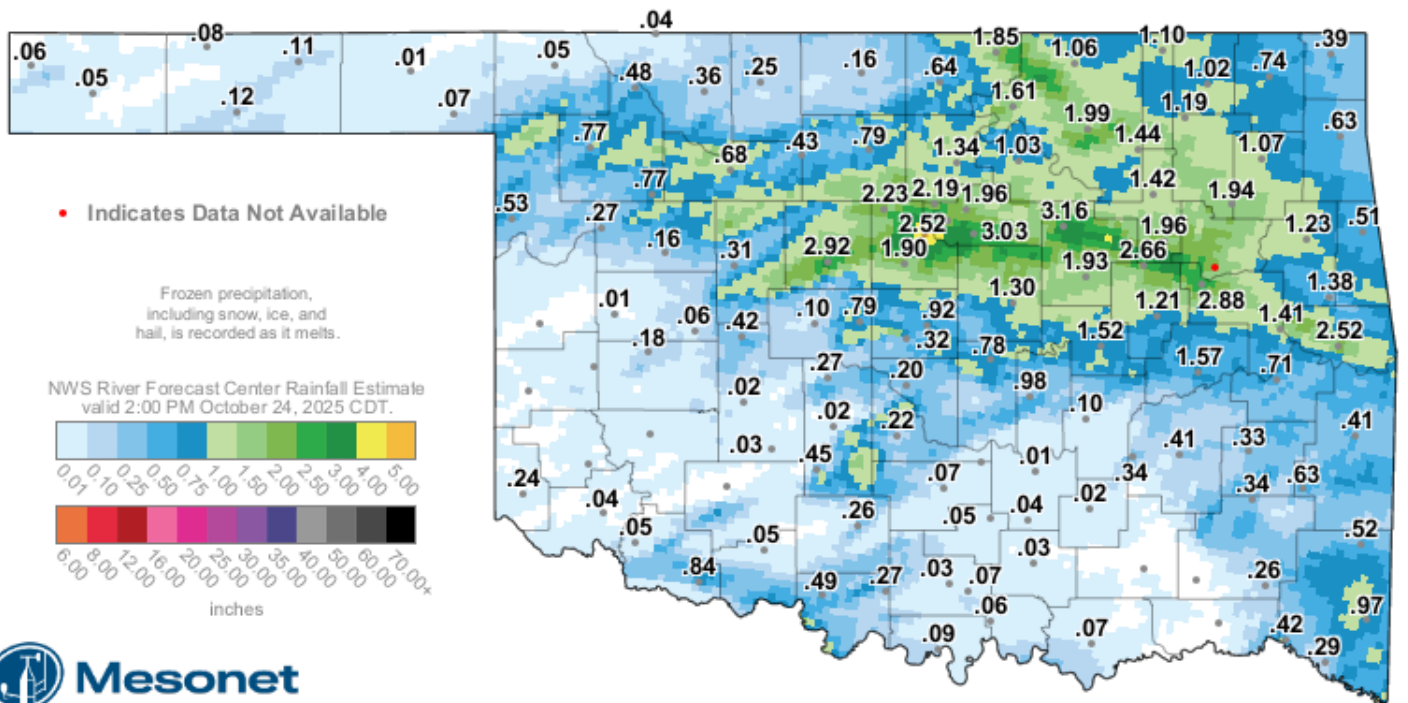


24-Hour Rainfall Accumulation (inches)

8:10 AM October 24, 2025 CDT

Created 8:16:45 AM October 24, 2025 CDT. © Copyright 2025

Fig. 6. OK Mesonet (values) and NWS RFC rainfall estimate (image) 24-hour rainfall ending at 8:10 am CDT 10/24/2025.



24-Hour Rainfall Accumulation (inches)

3:15 PM October 24, 2025 CDT

Created 3:21:33 PM October 24, 2025 CDT. © Copyright 2025

Fig. 7. OK Mesonet (values) and NWS RFC rainfall estimate (image) 24-hour rainfall ending at 3:15 pm CDT 10/24/2025.

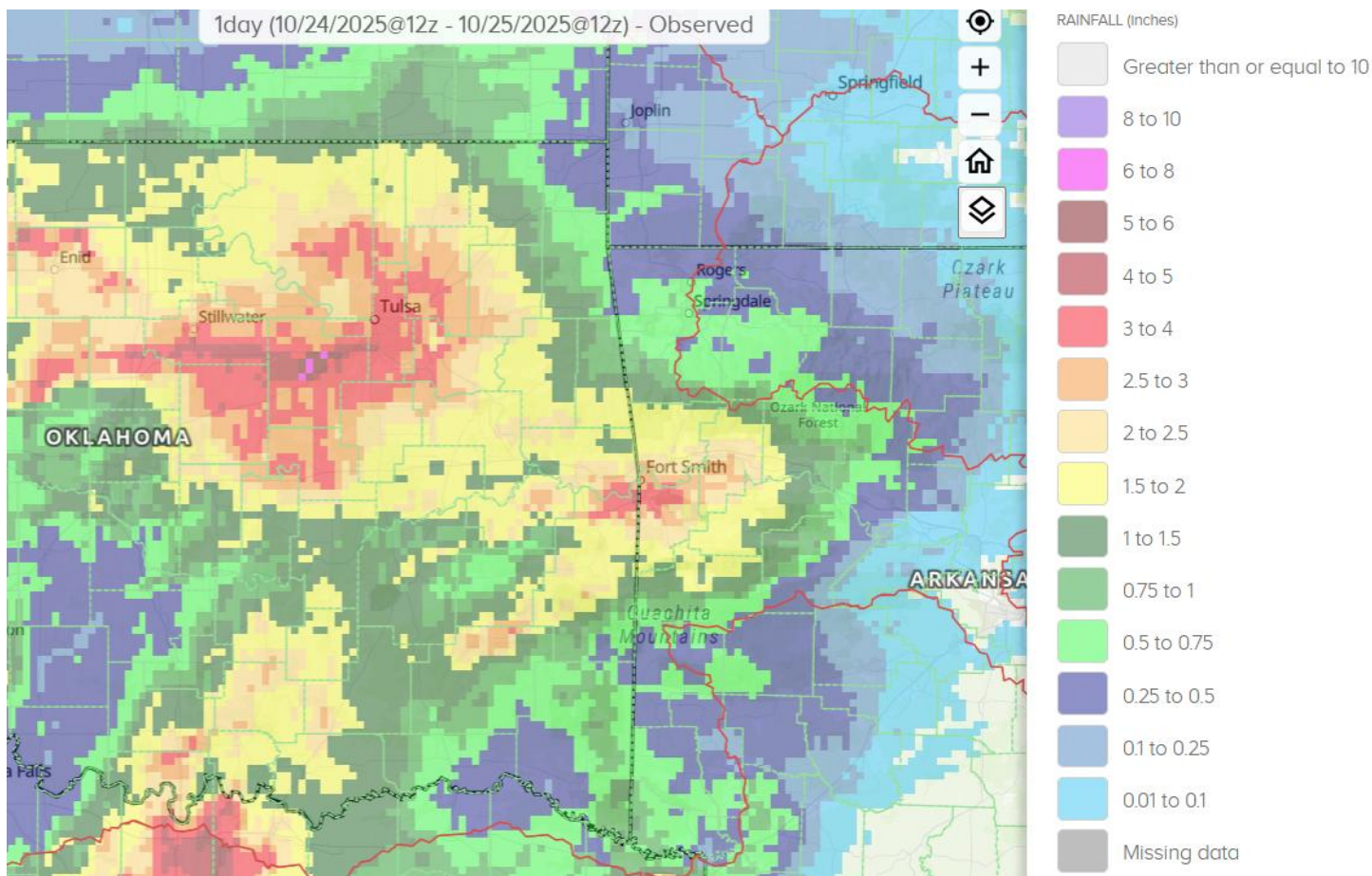


Fig. 8. 24-hour Estimated Observed Rainfall ending at 7am CDT 10/25/2025.

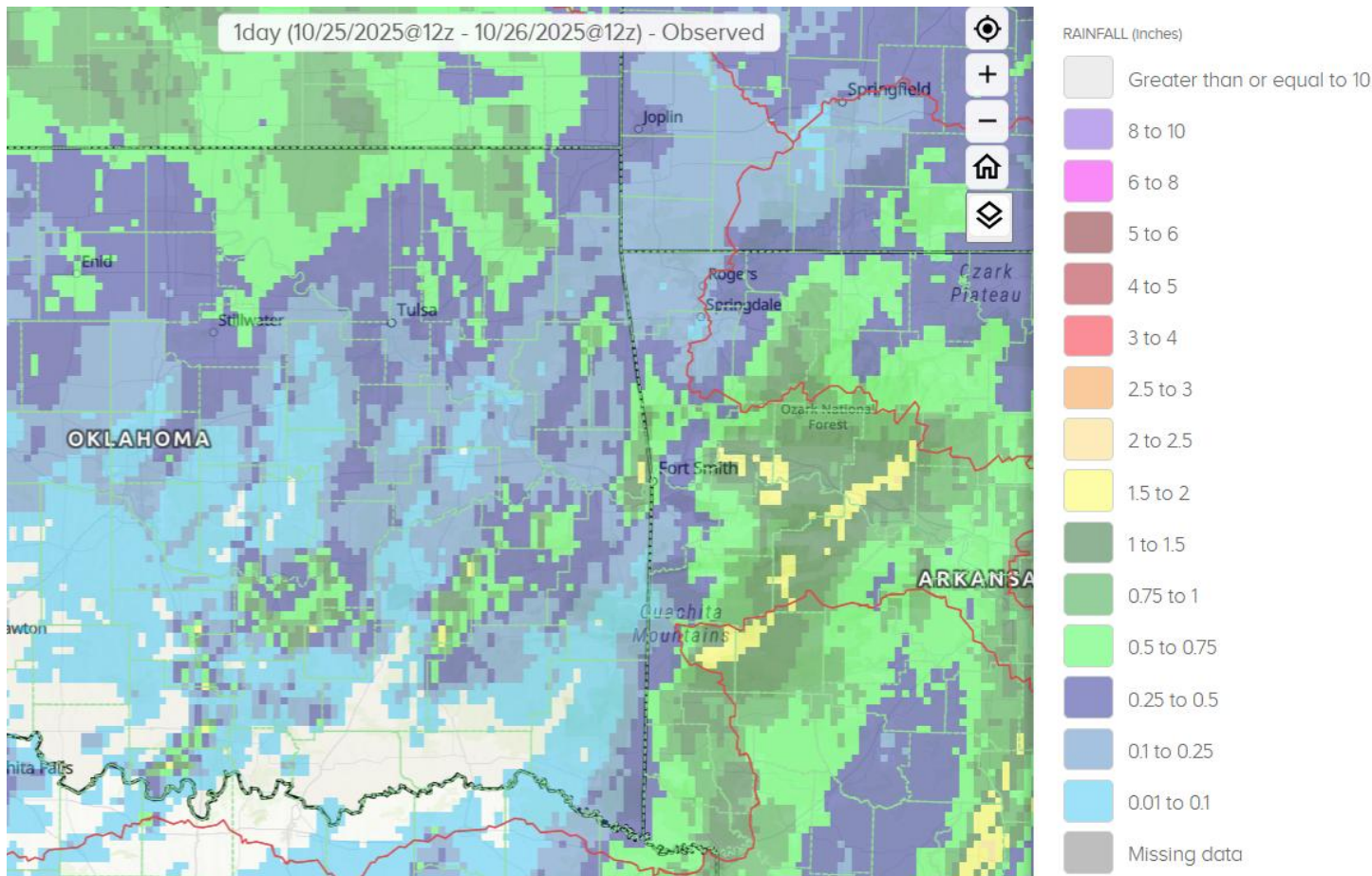
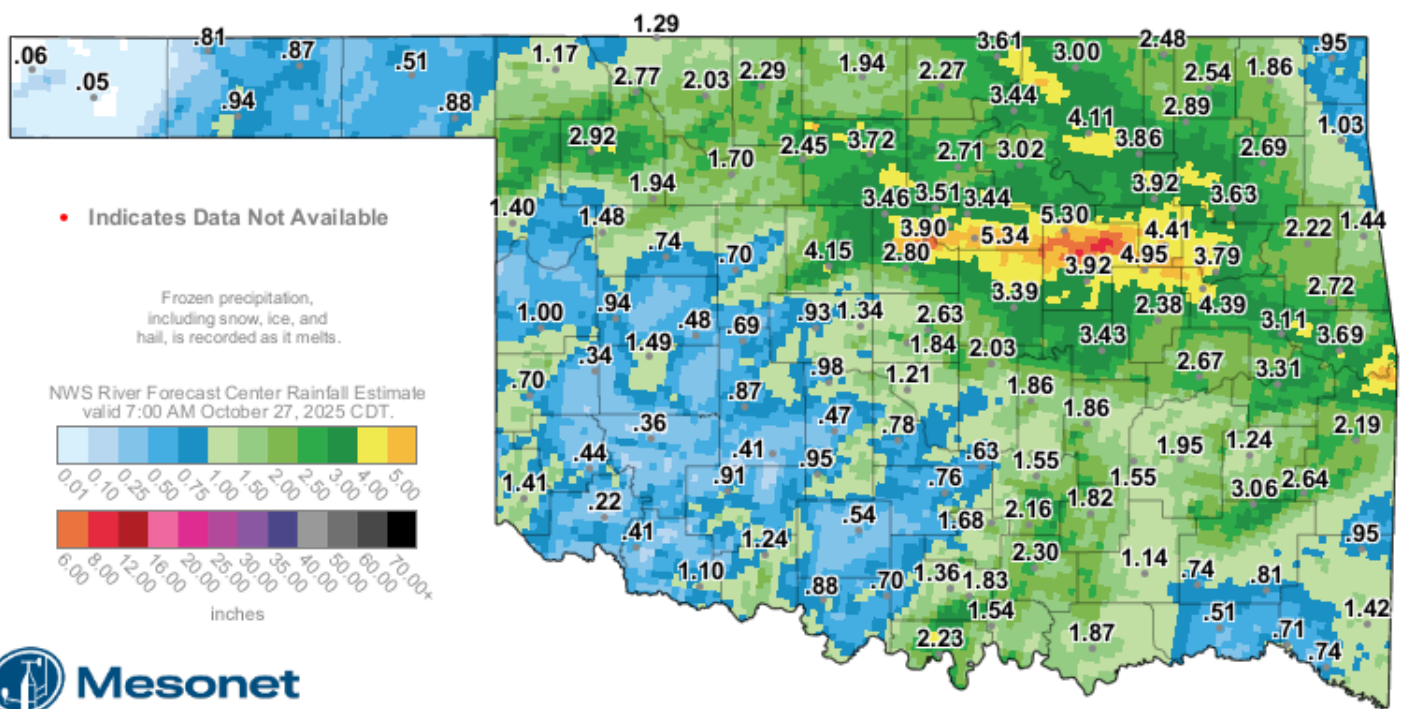


Fig. 9. 24-hour Estimated Observed Rainfall ending at 7am CDT 10/26/2025.



4-Day Rainfall Accumulation (inches)

8:25 AM October 27, 2025 CDT

Created 8:31:33 AM October 27, 2025 CDT. © Copyright 2025

Fig. 10. OK Mesonet (values) and NWS RFC rainfall estimate (image) 4-day rainfall ending at 8:25 am CDT 10/27/2025.

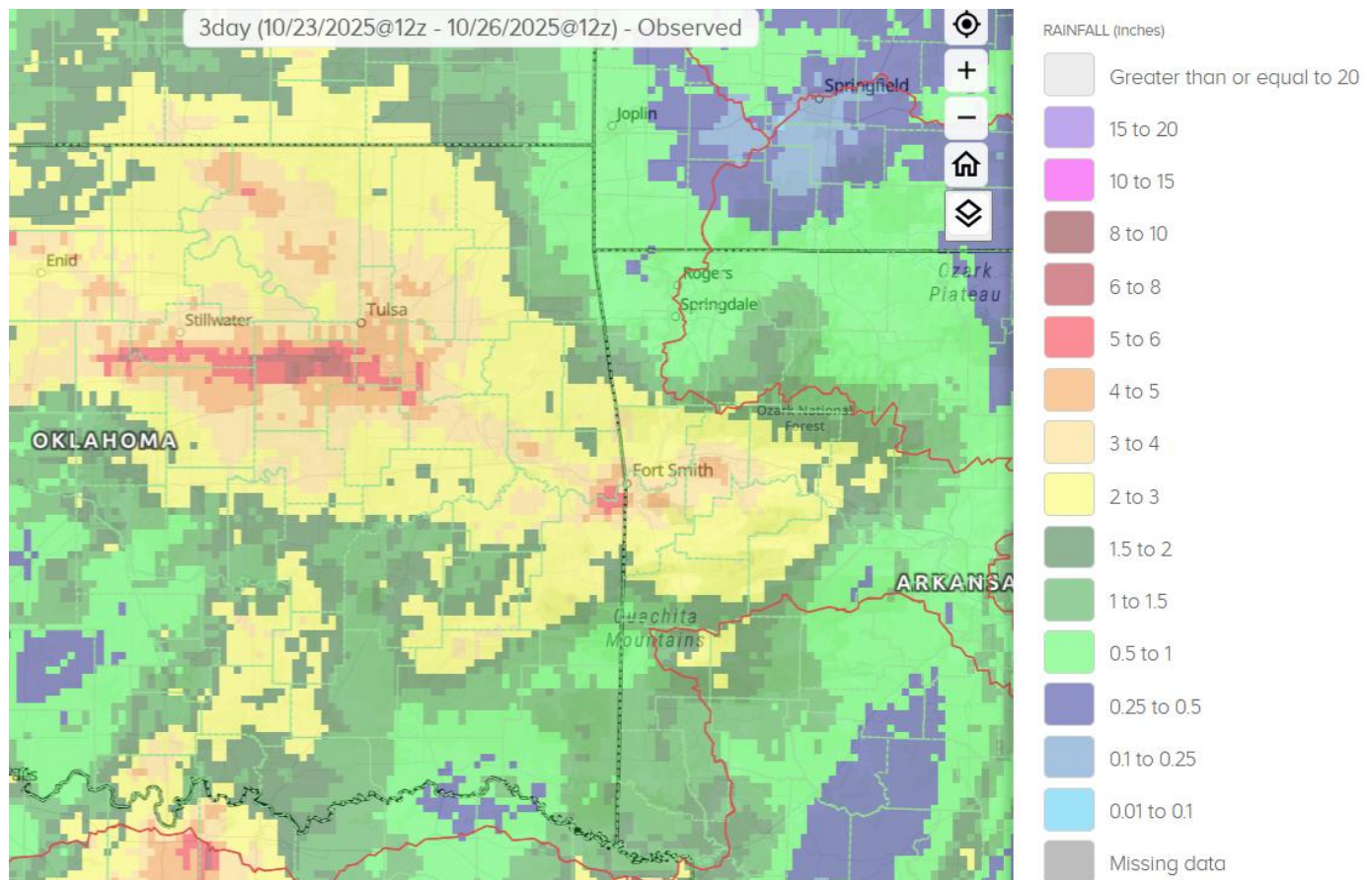


Fig. 11. 3-day Estimated Observed Rainfall ending at 7am CDT 10/26/2025.

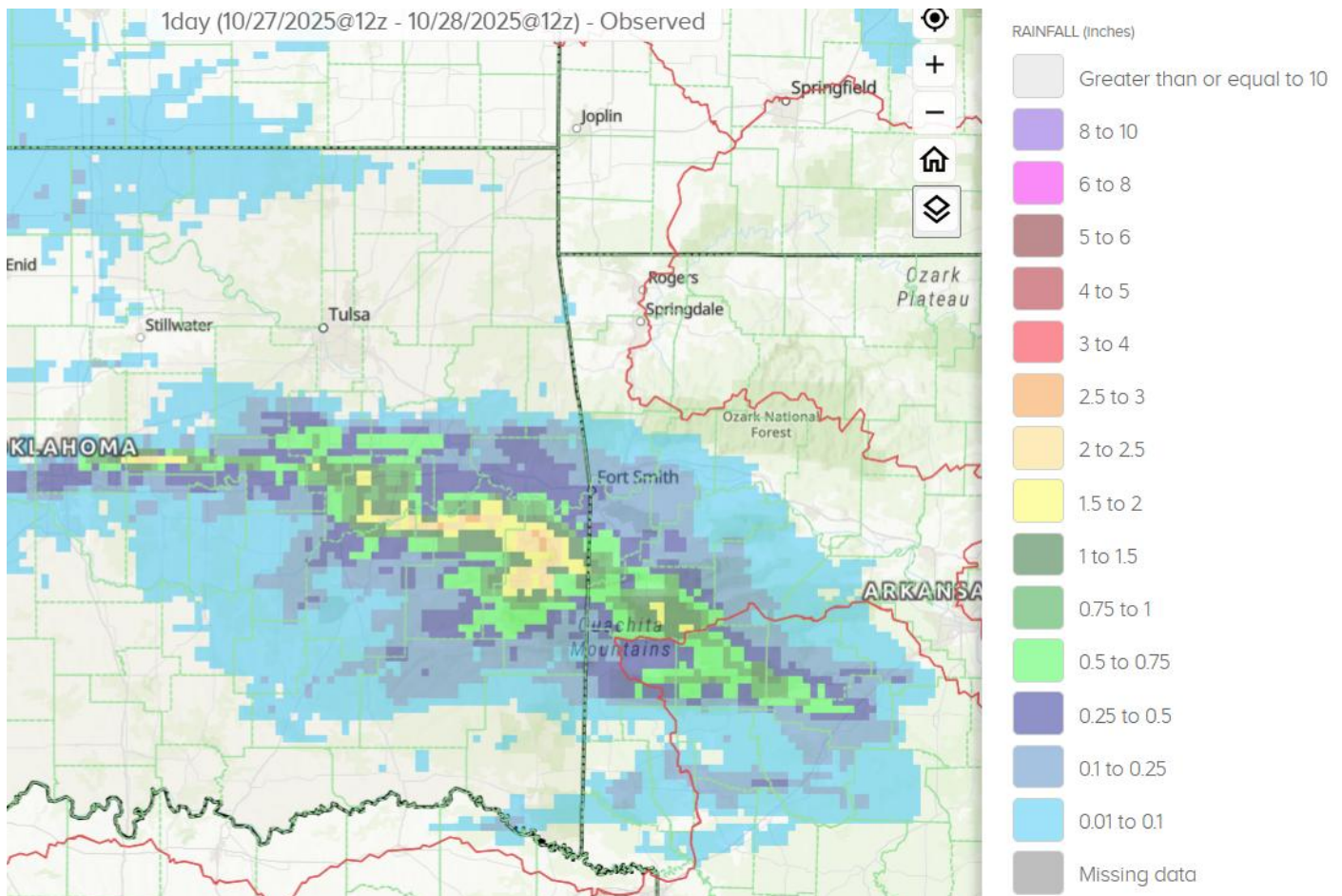


Fig. 12. 24-hour Estimated Observed Rainfall ending at 7am CDT 10/28/2025.

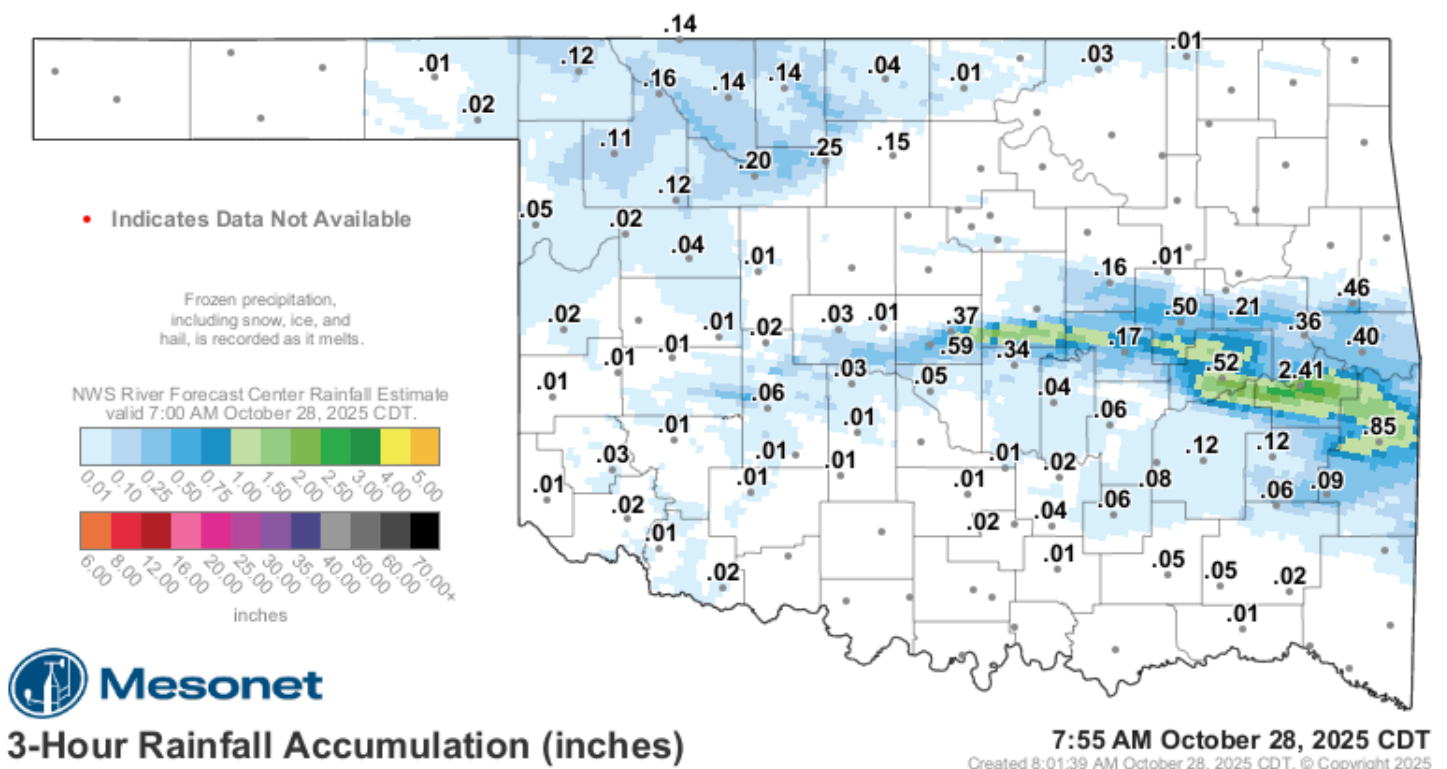
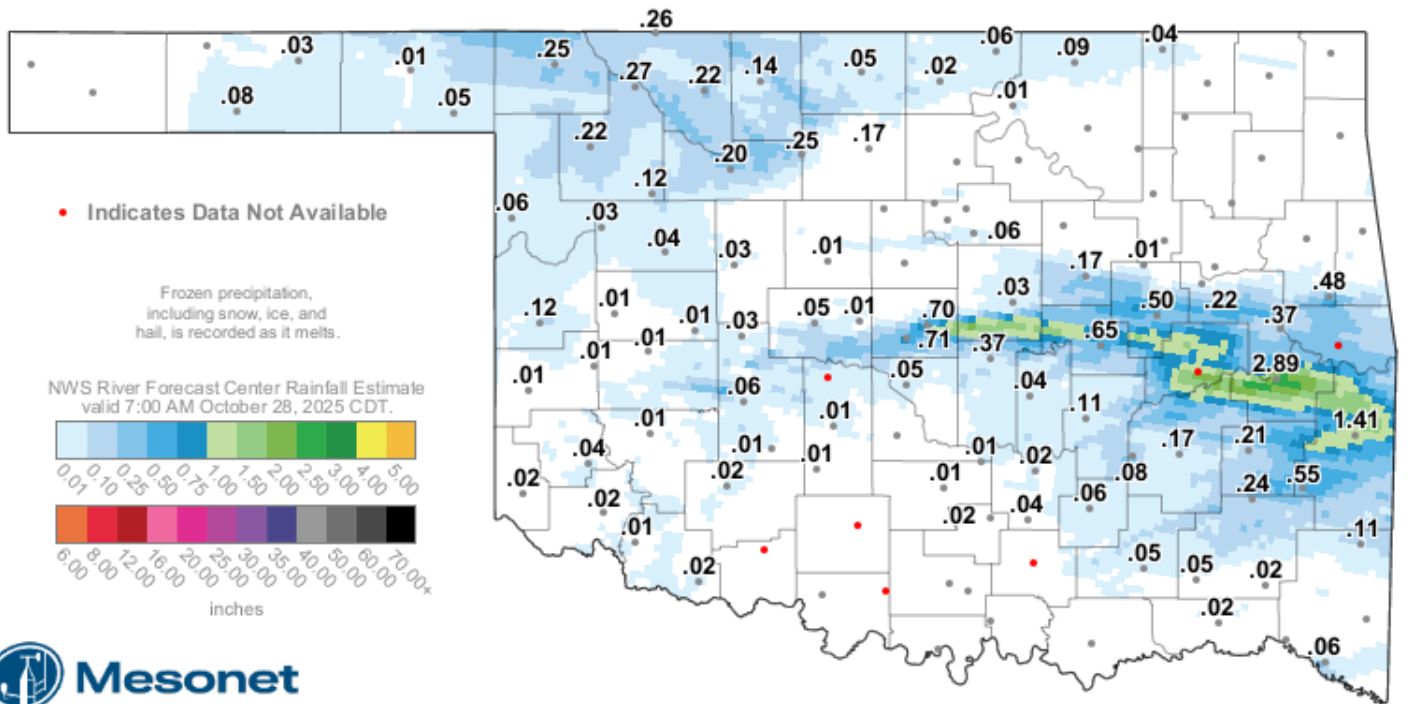


Fig. 13. OK Mesonet (values) and NWS RFC rainfall estimate (image) 3-hour rainfall ending at 7:55 am CDT 10/28/2025.

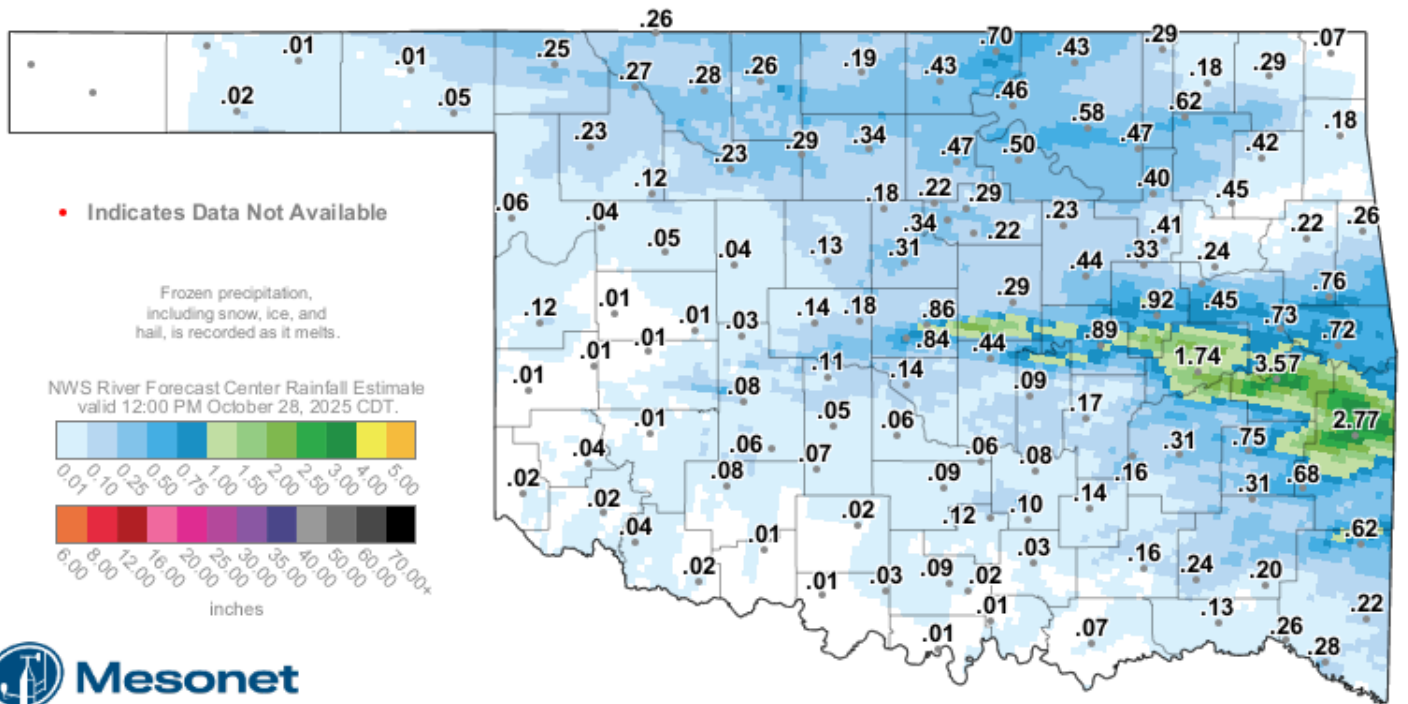


6-Hour Rainfall Accumulation (inches)

8:00 AM October 28, 2025 CDT

Created 8:06:31 AM October 28, 2025 CDT. © Copyright 2025

Fig. 14. OK Mesonet (values) and NWS RFC rainfall estimate (image) 6-hour rainfall ending at 8:00 am CDT 10/28/2025.



12-Hour Rainfall Accumulation (inches)

2:25 PM October 28, 2025 CDT

Created 2:31:22 PM October 28, 2025 CDT. © Copyright 2025

Fig. 15. OK Mesonet (values) and NWS RFC rainfall estimate (image) 12-hour rainfall ending at 2:25 pm CDT 10/28/2025.

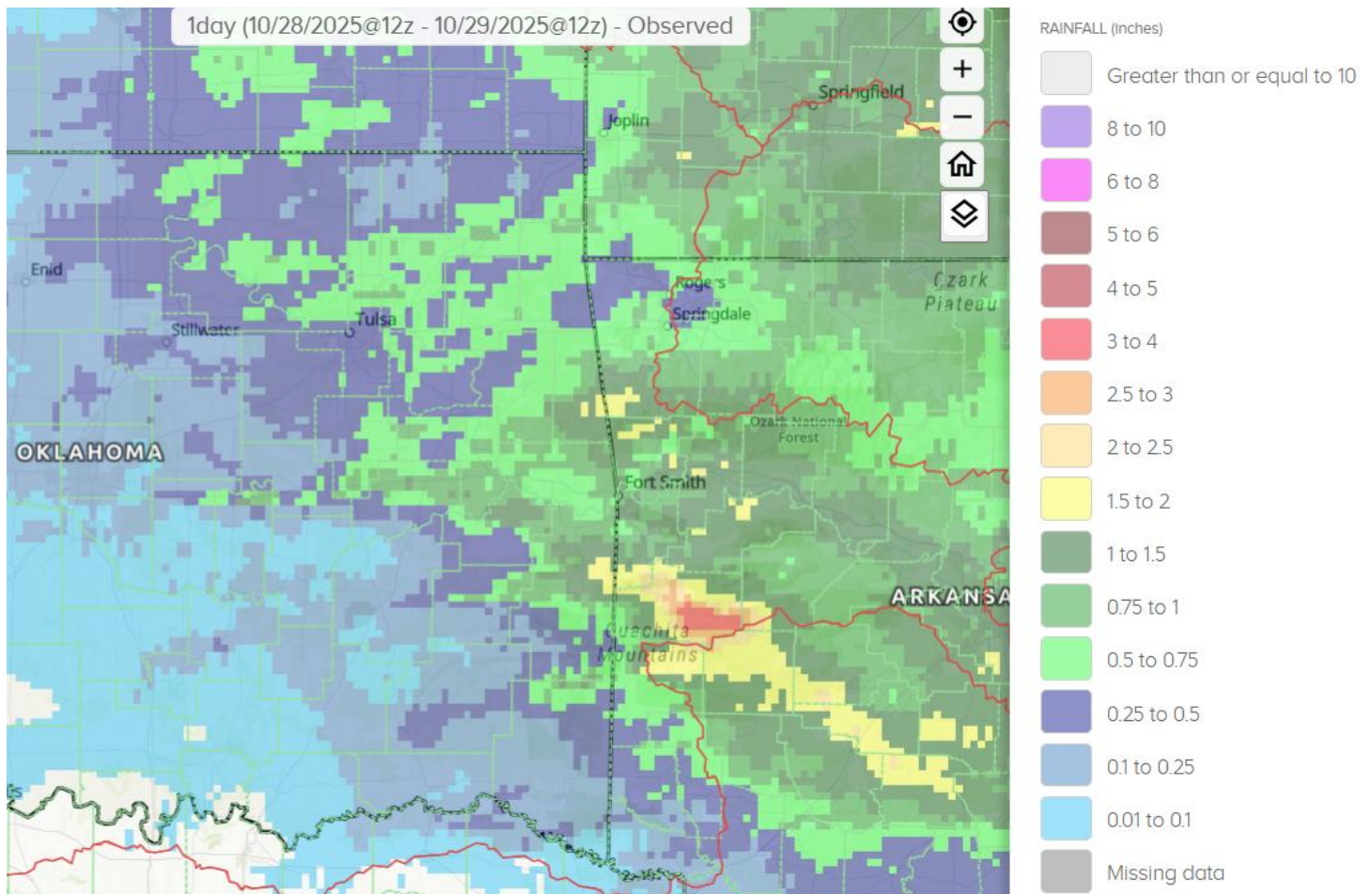


Fig. 16. 24-hour Estimated Observed Rainfall ending at 7am CDT 10/29/2025.

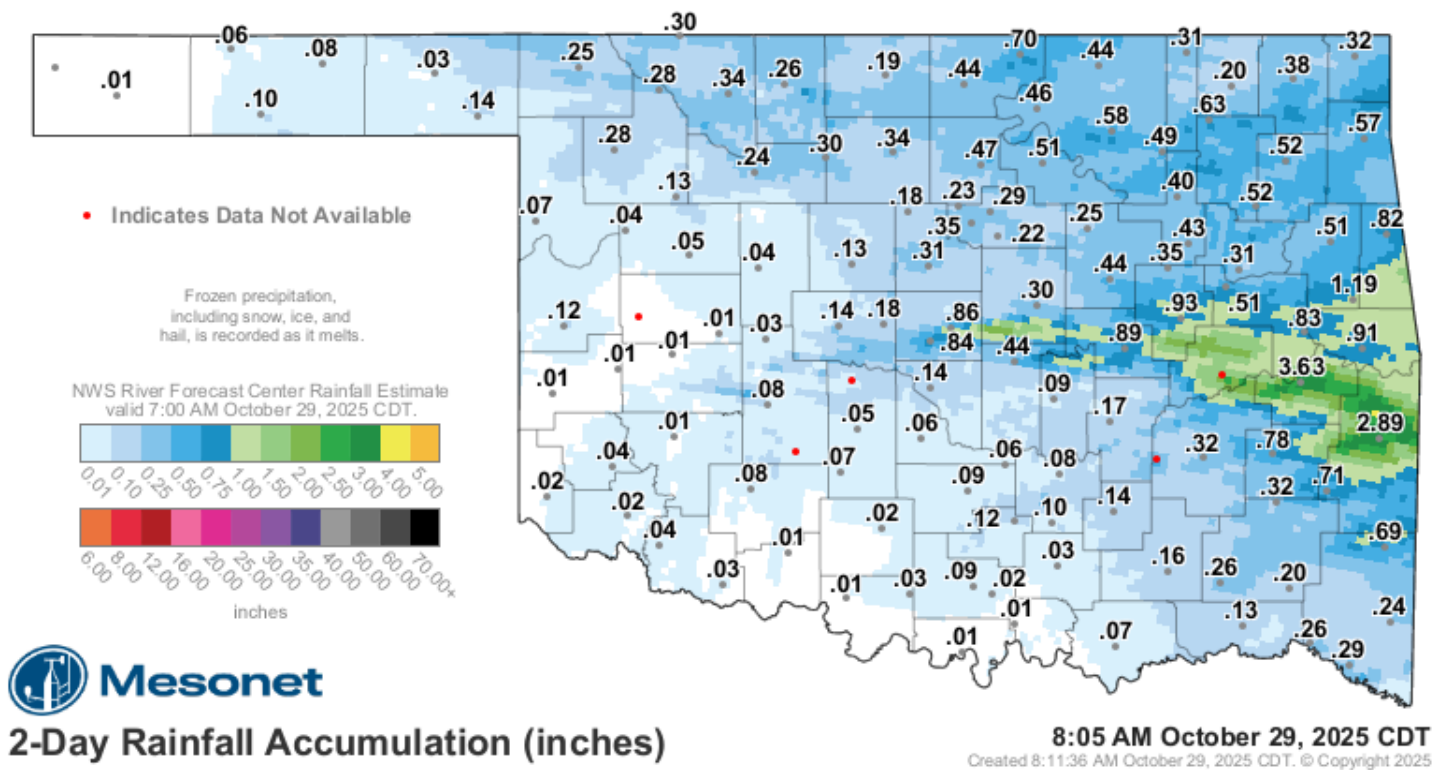


Fig. 17. OK Mesonet (values) and NWS RFC rainfall estimate (image) 2-day rainfall ending at 8:05 am CDT 10/29/2025.

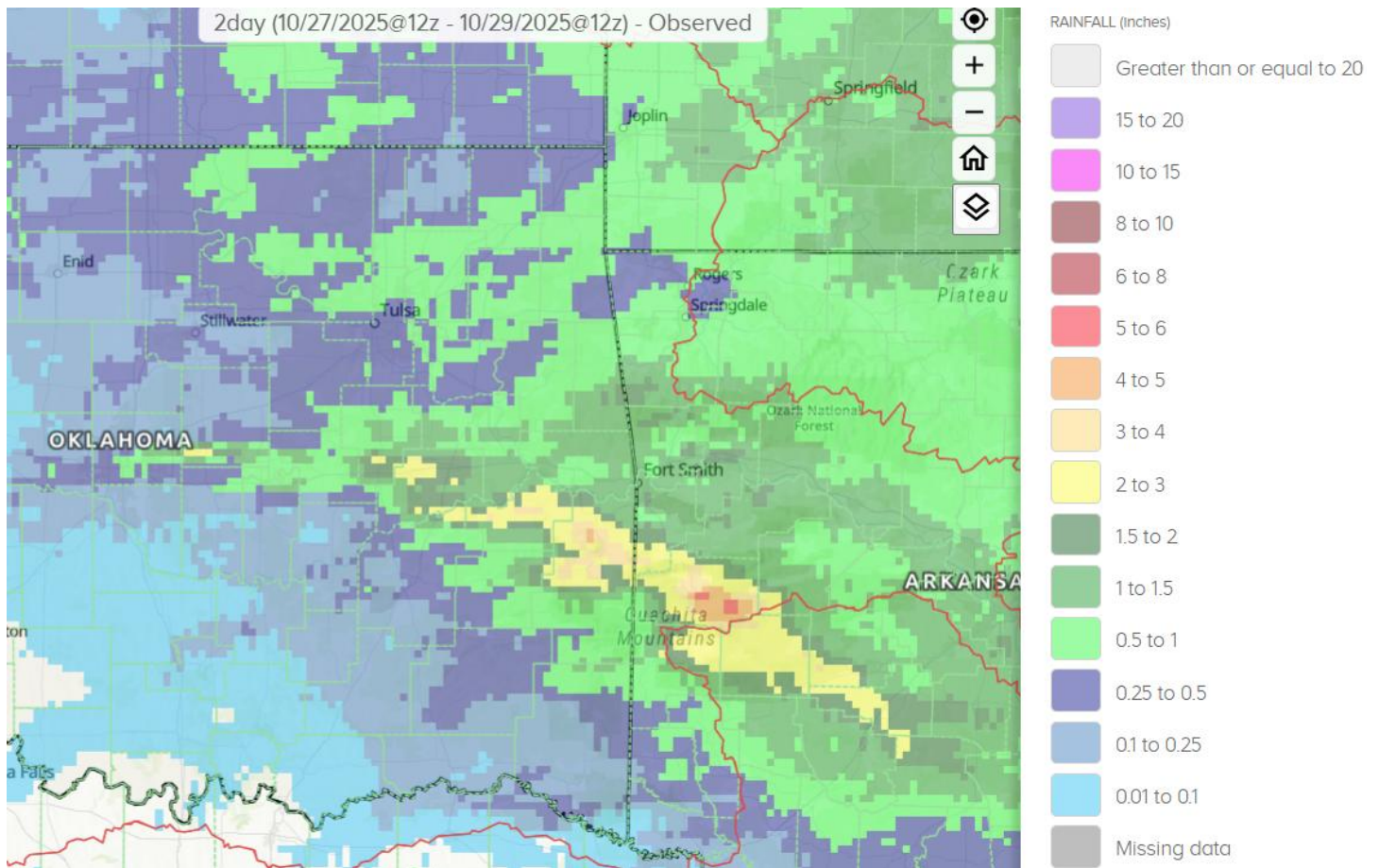


Fig. 18. 2-day Estimated Observed Rainfall ending at 7am CDT 10/29/2025.

After midnight on the 28th, a line of showers and thunderstorms developed across southeast OK due to a combination of factors: a warm front lifting north, a 30-40kt low-level jet, an expanding area of warm air advection, and frontogenetical forcing. These storms lifted north through the early morning hours and were located across east central OK and west central AR by 7am. Rainfall totals at this time ranged from 0.1" to around 2.5", with the highest totals of 1.5"-2.5" falling in three hours across Haskell and northern Le Flore Counties (Figs. 12-14). This activity expanded and became more scattered as it continued to move east-northeast through the morning. Meanwhile, showers and isolated thunderstorms had developed along a cold front, which moved into northeast OK by mid-morning. This activity moved east through the day, affecting northeast OK and northwest AR primarily along and north of I-40. Most of the rain ended by midnight, though some light, widely scattered rain remained over northwest AR through the overnight hours. The additional 24-hour rainfall totals at 7am Oct. 29 ranged from 0.15"-2" (Fig. 16). Storm total rainfall was around 0.2" to 4" (Figs. 17, 18).

Written by:

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Products issued in October 2025:

- 2 Flash Flood Warnings (FFW)
- 2 Flash Flood Statements (FFS)
- 1 Flash/Areal Flood Watches (FFA) (4 Watch FFA CON/EXT/EXA/EXB/CAN)
- 6 Urban and Small Stream Advisories (FLS)
- 0 Areal Flood Warnings (FLW)
- 0 Areal Flood Statements (FLS)
- 0 River Flood Warnings (FLW) (includes category increases)
- 0 River Flood Statements (FLS)
- 0 River Flood Advisories (FLS) (0 Advisory FLS CON/EXT/CAN)
- 0 River Flood Watches (FFA) (0 Watch FFA CON/EXT/CAN)
- 0 River Statements (RVS)
- 0 Hydrologic Outlooks (ESF)
- 0 Drought Information Statements (DGT)

Preliminary Hydrographs:

None