#### Oklahoma Monthly Climate Summary

# **MAY 2015**



Historic rains during May virtually eliminated the drought that had plagued Oklahoma for much of the past five years. The storms that brought that relief came with a cost, however, spawning more than 60 tornadoes, catastrophic flooding, and the highest price of all, 11 fatalities. The rains began during the first week of May and by the end of the month the state had seen the most rainfall on record for any month in its history. The statewide average, as measured by the Oklahoma Mesonet, finished at 14.40 inches, 9.58 inches above normal. That mark claims the top spot as the wettest month ever for Oklahoma, eclipsing October 1941's tally of 10.75 inches. Those records date back to 1895. While the entire state saw much above normal rainfall, the southern half of the state bore the brunt of the excessive moisture with widespread amounts of 15-25 inches. Many individual locations shattered marks for their wettest month on record. The Norman Mesonet site recorded a total of 23.4 inches, obliterating their previous high monthly mark of 16.5 inches from October 1983. Oklahoma City claimed the same prize with 19.48 inches, besting June 1989's 14.66 inches. That

#### **May 2015 Statewide Extremes**

Description	Extreme	Station	Day		
High Temperature	91°F	Multiple	Multiple		
Low Temperature	35°F	Boise City, Goodwell	11		
High Precipitation	28.17 in.	Lane			
Low Precipitation	5.91 in.	Buffalo			

Oklahoma City total was 14.83 inches above normal. Of the Oklahoma Mesonet sites, Lane led the way with 28.17 inches. Twenty-two Mesonet stations recorded at least 20 inches of rain, and 54 recorded at least 15 inches. Buffalo had the lowest total with 5.91 inches, but even that total was more than 2 inches above normal. Climatological spring (March-May) ended as the second wettest in state history with a statewide average of 21.62 inches, 10.5 inches above normal. The first five months of the year were the third wettest on record with an average of 24 inches, 9.49 inches above normal. That's compared to 2014's January-May total of 7.39 inches, the fourth driest on record.

With all the rain and associated cloudiness obscuring the sun for much of the month, it's not a surprise that May was

on the cool side. The statewide average of 65.6 degrees was 2.6 degrees below normal, the 15th coolest on record. The Mesonet recorded temperatures of 90 degrees only five times during May, with the highest being 91 degrees at Beaver and Hooker on the third and Altus on the 18th. The average spring temperature was near normal at 59.4 degrees. The January-May temperature remained below normal by 0.7 degrees with a statewide average of 51 degrees, although that only ranks as the 58th coolest on record.

#### **May 2015 Statewide Statistics**

Temperature

	Average	Depart.	Rank (1895-2015)
Month (May)	65.6°F	-2.6°F	15th Coolest
Season-to-Date (Mar-May)	59.4°F	0.1°F	50th Warmest
Year-to-Date (Jan-May)	50.9°F	-0.7°F	57th Coolest

#### Precipitation

	Total	Depart.	Rank (1895- 2015)
Month (May)	14.40 in.	9.58 in.	1st Wettest
Season-to-Date (Mar-May)	21.65 in.	10.53 in.	2nd Wettest
Year-to-Date (Jan-May)	24.04 in.	9.53 in.	3rd Wettest

Depart. = departure from 30-year normal

Multiple bouts of flooding occurred in nearly every region of the state. According to the Oklahoma Department of Emergency Management, 10 residents died in May as a result of flooding. A Claremore firefighter attempting a water rescue was one of those killed. In addition, one person died in Bryan County as a result of a tornado. At least 49 injuries were reported due to storms during May as well. After a record low year with 16 tornadoes during all of 2014, May 2015 saw at least 60 confirmed tornadoes by month's end according to National Weather Service (NWS) numbers, with that number expected to rise as more possible twisters are investigated.

The extraordinary rains blasted the 2010-15 drought from existence, with the only vestiges remaining across the far

western Panhandle. The U.S. Drought Monitor showed 59 percent of the state in drought at the beginning of the month, but that area had shrunk to only 3 percent by the end of May. That's the lowest percentage of drought indicated for Oklahoma by the Drought Monitor since Oct. 26, 2010, when the drought was in its beginning stages. Dwindling reservoirs and dry farm ponds swelled with excess water as the torrential rains continued to add to their coffers. Lake Tom Steed in southwest Oklahoma, the main water supply for Altus, rose 18 feet during the month. Lake Texoma had risen to the highest level in its history on May 29. Several lakes still had some catching up to do, however. The reservoirs at Canton, Foss and Skiatook remained well below normal despite the generous moisture. Canton Lake was 9 feet below normal, or 39 percent of capacity, at the end of May.

#### **MAY 2015 DAILY SUMMARIES**

MAY 1-2: It was the calm before the storm with sunny skies and warming temperatures. Maximum temperatures ranged from 73 degrees in Westville to 83 degrees in Hooker on the 1st. On the 2nd, maximum temperatures were between 76 degrees in Westville and Mt. Herman and 88 degrees in Beaver. The highest minimum temperatures were in the upper 50s and low 60s, and the lowest minimum temperatures were in the 40s. Average wind speeds were less than 12mph on the 1st and less than 17mph on the 2nd.

MAY 3-5: The start of seemingly endless May rains occurred on the 3rd. Showers and thunderstorms passed through far northwest Oklahoma and the panhandle on the 3rd and 4th, eventually making its way through the rest of the state by the 5th. Precipitation amounts were less than half an inch on Sunday and Monday and as high as 3.71 inches in Minco and 3.63 inches in Medicine Park on Tuesday. The highest maximum temperatures dropped from 91 degrees on the 3rd to 82 degrees on the 5th. Similarly, the lowest maximum temperatures fell from 78 degrees to 64 degrees during this three-day period. The highest minimum temperatures were in the mid-60s and the coolest temperatures in the state were in the upper 40s and low 50s. Average daily wind speeds were generally less than 17mph, however, a few wind gusts peaked in the 60s on the 3rd and 5th.

MAY 6-10: Rain continued during this five-day stretch with increased intensity and severe storms. In fact, Oklahoma City broke its daily rainfall record on the 6th with 2.61 inches. However, that amount barely compared to some of the rainfall reports in other portions of the state. The highest amounts of rain recorded each day were 5.02 inches at the Oklahoma City East Mesonet site on the 6th, 4.52 inches in Durant on the 7th, 4.56 inches in Okemah on the 8th, 4.56 inches in Stigler on the 9th, and 4.50 inches in Madill on the 10th. 31 counties reported flooding during this period

throughout the southeast half of Oklahoma. Other forms of severe weather occurred with wind speeds over 70mph in Cleveland and Grady County on the 6th; Jackson, Kiowa, Cleveland, and Pottawatomie County on the 8th; and Le Flore County on the 10th. Hail over 2 inches in diameter fell in Grady, Jackson, Cleveland, and Grant County on the 6th; Jackson, Caddo, Tillman, Cleveland, Pottawatomie, and Okfuskee County on the 8th; and Stephens County on the 9th. The largest hailstone reported was 4 inches in Bearden on the 8th. In addition, two significant tornadoes, rated EF-3, were reported in Grady and Oklahoma County on the 6th. Maximum temperatures remained fairly consistent with the warmest highs remaining in the low-mid 80s. The lowest high reported each day fell from 73 degrees in Shawnee on Wednesday to 60 degrees in Kenton and Boise City on Sunday. The highest minimum temperatures were 66 degrees and 67 degrees and the lowest minimum temperatures fluctuated between 36 degrees in Kenton and 50 degrees in Goodwell. Despite the high gusts, daily average wind speeds were less than 20mph on the 6th, less than 18mph on the 7th, 9th, and 10th, and less than 14mph on the 8th.

MAY 11-12: Temperatures cooled and rainfall teetered out. Remnants of the previous storm systems only left .37 inches of rainfall in Wister, .26 inches in Mt. Herman, and less than two-tenths of an inch in other southeastern areas on the 11th. Flooding was still reported in Le Flore County that same day, but by the 12th, skies were rain-free. Maximum temperatures were between 62 degrees in Boise City and 78 degrees in Broken Bow. Minimum temperatures were between 35 degrees in Goodwell and Boise City, and 58 degrees in Idabel. Average wind speeds were 5-14mph on the 11th and less than 19mph on the 12th.

MAY 13: It was another cool day for Oklahoma as showers and isolated thunderstorms moved northward into the state and continued northeast. The top three rainfall totals on the 13th were 2.35 inches in Retrop, 1.78 inches in Grandfield, and 1.65 inches in Medicine Park. Flooding was reported in both Tillman and Comanche County. Highs ranged from 59 degrees in the panhandle to 72 degrees in Wilburton; lows ranged from 44 degrees in Nowata to 60 degrees in Burneyville. Average wind speeds were 5-15mph.

MAY 14-17: Although rain continued, temperatures were able to warm back up into the 80s. The warmest highs only fluctuated between 86 and 87 degrees. The lowest highs were generally in the mid-70s, except on the 16th when it only warmed to 67 degrees. High minimum temperatures were in the upper 60s and low minimum temperatures ranged from 41 degrees in Kenton on the 17th to 50 degrees in Boise City and Kenton on the 15th. Showers and thunderstorms exited through eastern Oklahoma on the 14th, leaving as much as 1.85 inches in Vinita and 1.38 inches in Talala. On the following three days, the highest amounts of precipitation

were recorded in southwest and central OK on the 15th, northwest OK on the 16th, and eastern OK on the 17th. The maximum 24-hour rainfall amounts were 1.09 inches (May 15), 3.18 inches (May 16), and 2.79 inches (May 17). Storms became severe on the 16th with an EF-2 tornado moving through Jackson, Tillman, and Kiowa County; 2.75 inch hail in Castle; wind gusts over 70mph in Comanche, Oklahoma, and Greer County; and flooding in nine different counties on the 16th and 17th. Some of the severe wind gusts on the 16th even managed to hit 80mph and 82mph in Moore and at the Tinker Air Force base, respectively. Daily average wind speeds were less than 15mph on the 14th, less than 19mph on the 15th, less than 18mph on the 16th, and less than 13mph on the 17th.

MAY 18-22: Despite a brief warm-up on the 18th, this period had a pretty significant cooling trend. The highest maximum temperatures fell from 91 degrees in Altus on the 18th to 70 degrees in Idabel and Kenton on the 22nd. The lowest maximum temperature was 67 degrees in Boise City and Kenton on the 18th, but fluctuated in the mid-50s the following four days. The warmest low temperatures dropped from the mid-60s to the mid-50s and the coolest temperatures recorded in the state varied between 38 degrees (May 20) and 44 degrees (May 22). Helping to make May the wettest month on record, rain continued from the 18th through the 22nd with a low pressure system guiding its way on the 19th. Showers and thunderstorms started in the panhandle, northwest OK, and southwest OK on the 18th, with as much as 1.53 inches in Mt. Herman. Most of Oklahoma got a chance to experience additional rain on the 19th with some areas receiving localized downpours. That day, Waurika got the most rain with 5.32 inches, followed by Norman with 4.67 inches. Southern OK took the brunt of the rain on the 20th and 21st while western and southern OK took it on the 22nd. The highest rainfall amounts were 4.41 inches on the 20th, .50 inches on the 21st, and 3.09 inches on the 22nd. Some storms were severe with a wind gust of 80mph in Granite on the 19th, as well as flooding in fourteen counties on the 19th and 20th. Daily average wind speeds were less than 16mph, 19mph, 20mph, 11mph, and 18mph each consecutive day.

MAY 23-25: Maximum temperatures ranged from the 60s to the mid-80s. The highest lows were in the 60s and the coolest lows were 53 degrees on the 23rd, 47 degrees on the 24th, and 43 degrees on the 25th, all in the panhandle. More showers and thunderstorms fell in far western and eastern Oklahoma on Saturday, northeast Oklahoma on Sunday, and the southern half of the state on Monday. Rainfall amounts were fairly extreme on the first two days, measuring as much as 7.05 inches in Washington on the 23rd and 6.54 inches in McAlester on the 24th. Although the maximum 24-hour rainfall amount on the 25th was only 1.99 inches in Hugo, storms did become more severe that day with two severe wind reports of 70mph and 78mph in Shady Point and Poteau, respectively. Flooding was

reported in 40 different counties from the 23rd through the 25th. Daily average wind speeds were 5-17mph on the 23rd, 3-13mph on the 24th, and 5-14mph on the 25th.

MAY 26-30: Another cool-down ensued with the warmest temperatures dropping from 90 degrees in Mangum on the 26th to 79 degrees in Broken Bow, Idabel, and Grandville on the 30th. Low maximum temperatures were generally in the low-mid 70s, except on the 30th when Foraker, Jay, and Tahlequah were only able to warm to 65 degrees. The warmest low temperatures were in the 60s and the coolest low temperatures were between 46 degrees and 50 degrees. The highest amount of recorded rainfall each day was 3.61 inches in Marshall on the 26th, 2.55 inches in Beaver on the 27th, 3.52 inches in Eufaula on the 28th, 3.11 inches in Okmulgee on the 29th, and 1.48 inches in Newport on the 30th. Severe weather was reported on Tuesday and Thursday with 70mph wind gusts in Greenfield on the 26th and a 72mph (Comanche) and 75mph (Fox) wind gust on the 28th. The counties with flood reports included Blaine and Logan County on the 26th; Pontotoc and Tulsa County on the 27th; Grady, Comanche, Stephens, Murray, Marshall, Johnston, Love, Tulsa, Le Flore, Ottawa, Adair, and Delaware County on the 28th; and Hughes, Tulsa, Rogers, Mayes, Wagoner, and Okmulgee County on the 29th. The highest daily average wind speeds in the state were between 11 and 17mph.

MAY 31: May ended with a bit less rain on the 31st; however, it did set the record as being the wettest month ever for Oklahoma. The precipitation that did manage to fall was confined to the panhandle with trace amounts to .55 inches measured in Boise City. Highs were between 66 degrees in Jay and 82 degrees in the panhandle. Lows were between 45 degrees in Woodward and 62 degrees in Sallisaw. Average wind speeds were less than 13mph.

# **MAY 2015 SEVERE WEATHER**

# **Significant Tornadoes (EF2 or greater)**

EF-rating	County	Day
EF3	Grady	6
EF3	Oklahoma	6
EF2	Jackson/Tillman/Kiowa	16

# Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2.50	9 E Altus	Jackson	6
2.75	Elmer	Jackson	6
2.00	2 SSE Norman	Cleveland	6
2.00	2 S Norman	Cleveland	6
2.50	4 W Pond Creek	Grant	6
2.00	4 WSW Pond Creek	Grant	6
2.50	Martha	Jackson	8
2.75	Carnegie	Caddo	8
2.75	Grandfield	Tillman	8
2.25	1 NW Norman	Cleveland	8
2.50	2 N Norman	Cleveland	8
2.75	N Shawnee	Pottawatomie	8
4.00	Bearden	Okfuskee	8
2.75	Comanche	Stephens	9
2.75	Castle	Okfuskee	16
2.00	5 S Frederick	Tillman	26
2.00	2 S Mountain View	Kiowa	26
3.00	2 SE Ames	Major	26
3.00	4 E Ames	Major	26
2.50	1 ESE Lahoma	Garfield	26
2.00	1 N Carrier	Garfield	26
2.50	Drummond	Garfield	26
2.50	2 W Carnegie	Kiowa	26
2.50	5 N Crescent	Logan	26

# Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
70.00	5 WNW Norman	Cleveland	6
82.00	4 E Tuttle	Grady	6
76.00	5 S Mustang	Grady	6
70.00	Martha	Jackson	8
70.00	Cooperton	Kiowa	8
70.00	N Norman	Cleveland	8
81.00	5 N Earlsboro	Pottawatomie	8
70.00	Panama	Le Flore	10
70.00	5 ENE Lawton	Comanche	16
80.00	3 N Moore	Oklahoma	16
82.00	Tinker Air Force Base	Oklahoma	16
75.00	2 E Inola	Rogers	16
80.00	Granite	Greer	19
70.00	Shady Point	Le Flore	25
78.00	2 N Poteau	Le Flore	25
70.00	10 W Greenfield	Blaine	26
72.00	7 SW Comanche	Stephens	28
75.00	Fox	Carter	28

# **Flooding**

Location	County	Day
Cyrill	Caddo	6
Newcastle	McClain	6
1 S Moore	Cleveland	6
3 NNW Warr Acres	Oklahoma	6
7 SW Oklahoma City	Oklahoma	6
Del City	Oklahoma	6
Norman	Cleveland	6
3 WNW Warren	Jackson	7
3 WSW Lawton	Comanche	7

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Trouting (cont.)				Country D				
Location	County	Day	Location	County	Day			
1 SE Eakly	Caddo	8	Nida	Johnston	10			
Del City	Oklahoma	8	Holdenville	Hughes	10			
4 N The Village	Oklahoma	8	Coalgate	Coal	10			
Lawton	Comanche	8	Vernon	McIntosh	10			
5 SSE Piedmont	Canadian	8	Arkoma	Le Flore	10			
4 WSW Moore	Cleveland	8	McAlester	Pittsburg	10			
Norman	Cleveland	8	Kinta	Haskell	10			
Waurika	Jefferson	8	Sallisaw	Sequoyah	10			
Velma	Stephens	8	3 NE Bixby	Tulsa	10			
Ardmore	Carter	8	Wagoner	Wagoner	10			
Seminole	Seminole	8	Okmulgee	Okmulgee	10			
2 ESE Ada	Pontotoc	8	Beggs	Okmulgee	10			
Durant	Bryan	8	Muldrow	Sequoyah	10			
Comanche	Stephens	8	Moffett	Sequoyah	10			
Okemah	Okfuskee	8	Pocola	Le Flore	10			
Castle	Okfuskee	8	Eufaula	McIntosh	10			
Tulsa	Tulsa	8	10 W Spiro	Le Flore	10			
Bixby	Tulsa	8	3 W Milton	Le Flore	10			
Idabel	McCurtain	8	Poteau	Le Flore	10			
2 SSE Idabel	McCurtain	8	3 E Bokoshe	Le Flore	11			
Marlow	Stephens	9	Grandfield	Tillman	13			
2 S Marlow	Stephens	9	Lawton	Comanche	13			
Minco	Grady	9	4 NNE Elgin	Comanche	13			
11 N Chickasha	Grady	9	Shattuck	Ellis	16			
1 SE Ada	Pontotoc	9	Mountain Park	Kiowa	16			
Norman	Cleveland	9	S Duncan	Stephens	16			
Duncan	Stephens	9	Stillwater	Payne	16			
1 SSE Pauls Valley	Garvin	9	Gore	Sequoyah	17			
Pauls Valley	Garvin	9	5 NE Sallisaw	Sequoyah	17			
Ada	Pontotoc	9	4 W Hulbert	Cherokee	17			
Henryette	Okmulgee	9	2 W Haywood	Pittsburg	17			
Sallisaw	Sequoyah	9	Gans	Sequoyah	17			
Onapa	McIntosh	9	1 N Robbers Cave State	Latimer	17			
Bixby	Tulsa	9	2 NW Heavener	Le Flore	17			
Sobol	Pushmataha	9	8 N Grandfield	Tillman	19			
6 NW Scipio	Pittsburg	9	Grandfield	Tillman	19			
Boley	Okfuskee	9	Anadarko	Caddo	19			
1 SW Idabel	McCurtain	9	Ryan	Jefferson	19			
1 NE Idabel	McCurtain	9	Norman	Cleveland	19			
Madill	Marshall	10	Blanchard	Grady	19			
Stringtown	Atoka	10	Chickasha	Grady	19			
Lebanon	Marshall	10	Noble	Cleveland	19			

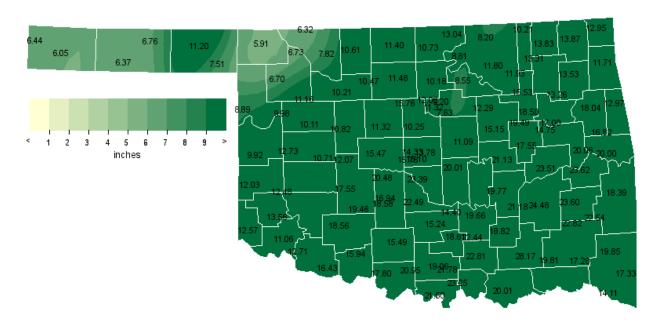
r looding (cont.)			Continued	on next page >	
Location	County	Day	Location	County	Day
Newcastle	McClain	19	N Blanchard	McClain	23
Altus	Jackson	19	Minco	Grady	23
2 S Ringling	Jefferson	19	Oklahoma City	Oklahoma	23
Lone Grove	Carter	19	Newcastle	McClain	23
Holdenville	Hughes	19	Shawnee	Pottawatomie	23
Stringtown	Atoka	20	2 N Agawam	Grady	23
Whitefield	Haskell	20	6 SSW Pocasset	Grady	23
Vian	Sequoyah	20	Blanchard	McClain	23
Sallisaw	Sequoyah	20	Fletcher	Comanche	23
Talihina	Le Flore	20	2 SE Norman	Cleveland	23
3 W Honobia	Pushmataha	20	N Lawton	Comanche	23
Clayton	Pushmataha	20	Noble	Cleveland	23
Nashoba	Pushmataha	20	Meers	Comanche	23
3 W McAlester	Pittsburg	20	Indiahoma	Comanche	23
Haileyville	Pittsburg	20	Brooksville	Pottawatomie	23
8 W Sayre	Beckham	23	Cache	Comanche	23
Elk City	Beckham	23	2 WSW Pink	Cleveland	23
Carter	Beckham	23	Wayne	McClain	23
Foss Reservoir	Custer	23	1 S Tecumseh	Pottawatomie	23
2 NE Foss	Custer	23	1 N Shawnee	Pottawatomie	23
3 NNE Ponca City	Kay	23	5 S Roosevelt	Kiowa	23
1 W Cordell	Washita	23	5 E Billings	Noble	23
3 W Blackwell	Kay	23	SE Norman	Cleveland	23
W Bison	Garfield	23	S Apache	Caddo	23
Enid	Garfield	23	Medicince Park	Comanche	23
Stillwater	Payne	23	2 S Apache	Caddo	23
4 N The Village	Oklahoma	23	Choctaw	Oklahoma	23
6 E Marland	Noble	23	4 S Manitou	Tillman	23
2 S Nichols Hills	Oklahoma	23	Lake Thunderbird	Cleveland	23
Del City	Oklahoma	23	1 SW Sand Springs	Tulsa	23
3 NW Oklahoma City	Oklahoma	23	Tulsa	Tulsa	23
3 SE Warr Acres	Oklahoma	23	Skiatook	Osage	23
WNW Oklahoma City	Oklahoma	23	Catoosa	Rogers	23
1 SSE Nichols Hills	Oklahoma	23	2 S Wister	Le Flore	23
E Blair	Jackson	23	2 ENE Broken Arrow	Wagoner	23
Mustang	Canadian	23	7 ESE Broken Arrow	Wagoner	23
2 SW Edmond	Oklahoma	23	Broken Arrow	Wagoner	23
Anadarko	Caddo	23	3 NW Broken Arrow	Wagoner	23
3 NNE Lake Hefner	Oklahoma	23	4 ENE Tulsa	Tulsa	23
Luther	Oklahoma	23	Okmulgee	Okmulgee	23
Norman	Cleveland	23	Sand Springs	Tulsa	23
1 WSW Nichols Hills	Oklahoma	23	Glenpool	Tulsa	23

# Flooding (cont.)

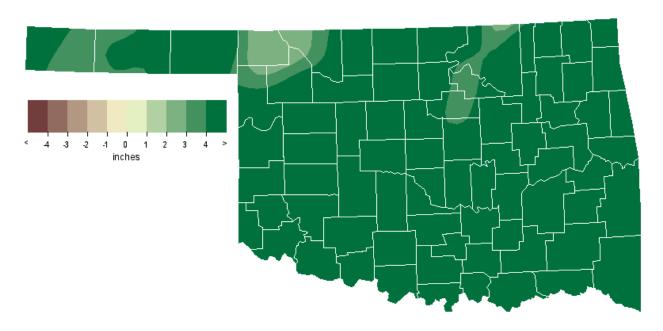
Location	County	Day
5 N Tulsa	Tulsa	23
Verdigris	Rogers	23
4 N Bixby	Tulsa	23
Sperry	Tulsa	23
6 NE Broken Arrow	Wagoner	23
Beggs	Okmulgee	23
6 N Tulsa	Tulsa	23
Coweta	Wagoner	24
Miami	Ottawa	24
Mazie	Mayes	24
Adair	Mayes	24
1 N Owasso	Tulsa	24
Tahlequah	Cherokee	24
Claremore	Rogers	24
6 SE Catoosa	Wagoner	24
Hulbert	Cherokee	24
3 NW Salina	Mayes	24
Sapulpa	Creek	24
Ft Gibson	Muskogee	24
McAlester	Pittsburg	24
Okemah	Okfuskee	24
6 ESE Broken Arrow	Wagoner	24
Clearview	Okfuskee	24
Beggs	Okmulgee	24
Eufaula	McIntosh	24
Checotah	McIntosh	24
Muskogee	Muskogee	24
Wister	Le Flore	24
Clayton	Pushmataha	24
Antlers	Pushmataha	24
Boswell	Choctaw	24
Nowata	Nowata	24
1 S Wister	Le Flore	24
4 ESE Battiest	McCurtain	24
N Madill	Marshall	25
Atoka	Atoka	25
2 ESE Mannsville	Johnston	25
Carnegie	Caddo	25
4 SW Tahlequah	Cherokee	25
1 NW Bunch	Adair	25
Talihina	Le Flore	25
3 W Spiro	Le Flore	25

Location	County	Day
Poteau	Le Flore	25
2 E Whitesboro	Le Flore	25
7 SE Broken Bow	McCurtain	25
Broken Bow	McCurtain	25
3 N Eagle City	Blaine	26
5 SE Marshall	Logan	26
Ada	Pontotoc	27
Glenpool	Tulsa	27
N Rush Springs	Grady	28
Lawton	Comanche	28
1 N Verden	Grady	28
Duncan	Stephens	28
Davis	Murray	28
Madill	Marshall	28
Tishomingo	Johnston	28
Burneyville	Love	28
Tulsa	Tulsa	28
Talihina	Le Flore	28
3 W Collinsville	Tulsa	28
Miami	Ottawa	28
2 E Miami	Ottawa	28
Stillwell	Adair	28
Bernice	Delaware	28
Holdenville	Hughes	29
3 S Bixby	Tulsa	29
1 W Claremore	Rogers	29
Pryor	Mayes	29
Salina	Mayes	29
Wagoner	Wagoner	29
Inola	Rogers	29
Tulsa	Tulsa	29
Owasso	Tulsa	29
2 E Morris	Okmulgee	29
3 ENE Owasso	Rogers	29
3 E Owasso	Rogers	29
5 NNE Oneta	Wagoner	29

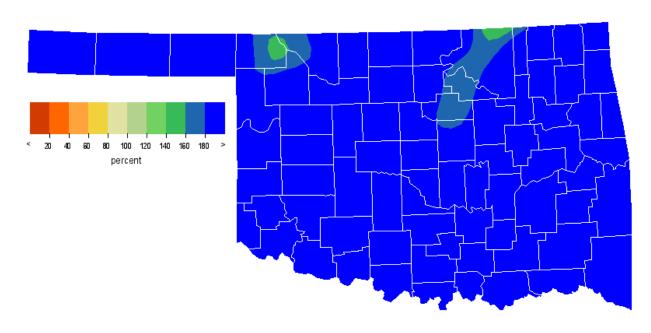
# **MAY 2015 OBSERVED PRECIPITATION**



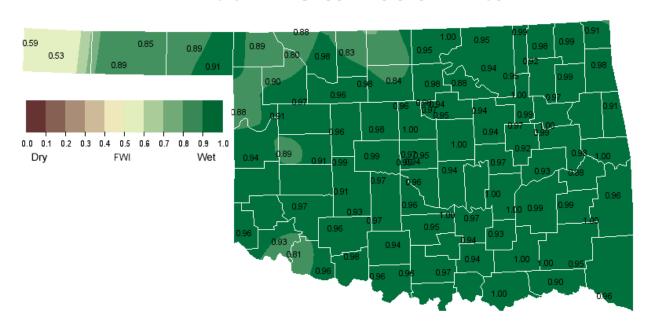
# **MAY 2015 DEPARTURE FROM NORMAL PRECIPITATION**



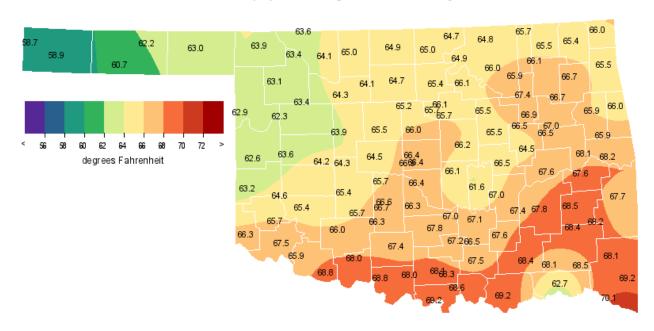
# **MAY 2015 PERCENT OF NORMAL PRECIPITATION**



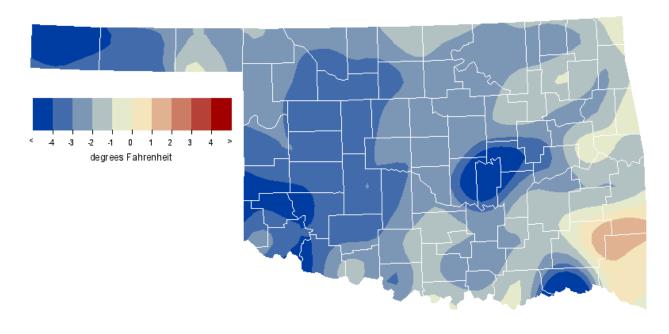
# **MAY 2015 AVERAGE SOIL MOISTURE AT 25CM**



# **MAY 2015 AVERAGE TEMPERATURE**



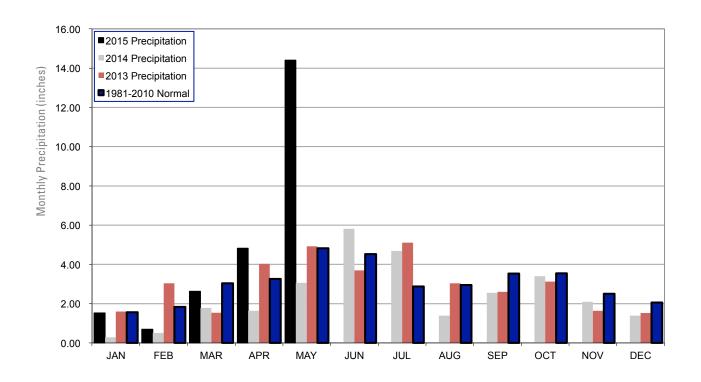
# **MAY 2015 DEPARTURE FROM NORMAL TEMPERATURE**



# **MESONET MONTHLY SUMMARY FOR MAY 2015**

NAME	MEAN TEMP		DAY	LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY	NAME	MEAN TEMP		DAY	LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY
PANHANDLE Arnett Beaver Boise City Buffalo	62.9 63.0 58.8 63.9	86 91 84 89	3 3 3 3	40 37 35 38	12 11 11 12	114 113 199 106	47 51 7 71	8.89 11.20 6.05 5.91	2.05 2.55 2.33 1.00	23 27 19 16	Goodwell Hooker Kenton Slapout	60.7 62.2 58.7 ****	87 91 84 ***	3 3 27 ***	35 37 36 ***	11 11 10 ***	152 128 201 ****	19 41 6 ****	6.37 6.76 6.44 7.51	1.28 1.36 2.87 1.39	5 5 19 16
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	64.0 65.0 64.7 64.9 64.3 63.3 64.1	85 86 85 85 84 85	3 27 27 27 27 3 27	39 42 41 41 41 40 41		99 77 86 84 86 109 87	77 76 81 65 57	7.82 10.73 11.48 10.61 10.21 6.73 10.47	2.00 3.53 2.78 2.72 2.90 2.17 2.61	16 23 23 16 23 16 23	May Ranch Medford Newkirk Red Rock Seiling Woodward	63.6 64.9 64.6 65.3 63.3	87 85 84 85 84 85	3 27 27 27 27 27	40 41 40 42 40 41	11 12 11 11 12 11	112 81 89 72 104 115	77 81	6.32 11.40 13.04 10.18 11.16 6.70	2.18 3.30 2.90 2.55 3.34 1.66	16 23 23 23 23 23
NORTHEAST Bixby Burbank Copan Foraker Inola Jay Miami Nowata	66.9 64.8 65.7 64.9 66.7 65.5 66.1	87 84 84 83 85 84 83	27 27 27 27 27 27 27 27	46 43 42 41 45 42 44	1 12 12 12 1 1 1 1	42 80 70 86 49 72 63 74	74 92 81 101 87 97	18.50 8.81 10.21 8.20 13.26 11.71 12.95 13.83	4.78 1.90 1.91 1.68 2.55 2.72 2.35 2.98	23 23 23 23 29 24 24 24	Pawnee Porter Pryor Skiatook Talala Tulsa Vinita Wynona	66.1 67.0 66.6 65.9 66.1 67.3 65.4 66.0	86 85 85 84 84 86 83	27 18 27 27 27 27 27 27 27	43 47 45 46 44 48 44 43	11 1 11 11 12 12 1	64 40 56 63 62 46 72 65	107 91 96 118 84	8.55 17.00 13.53 11.93 13.31 15.53 13.87 11.80	1.70 3.07 2.61 2.72 2.57 2.71 2.12 2.29	23 29 23 23 23 23 23 29 28
WEST CENTRAL Bessie Butler Camargo Cheyenne Erick	***** 63.7 62.2 62.6 63.2	*** 84 83 81 84	*** 27 3 3 26	*** 40 39 42 43	*** 12 12 11 12	**** 91 124 108 93	50 39 35	***** 12.73 9.98 9.92 12.03	**** 6.75 2.90 2.93 4.33	*** 23 23 23 23	Putnam Retrop Watonga Weatherford	**** 64.6 63.9 64.1	*** 85 83 83	*** 27 26 26	*** 43 42 43	*** 11 11 11	**** 75 89 80	63 55	10.11 12.48 10.82 10.71	4.22 2.35 4.33 3.30	23 13 23 23
CENTRAL Acme Bowlegs Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco Marshall	66.3 65.8 65.5 ***** 66.3 66.6 64.5 66.0 65.5 65.8 65.6	85 82 85 *** 84 86 83 83 85 84 84	18 28 18 *** 18 18 28 18 27 18 27	47 47 42 *** 46 47 40 44 43 45 45	12 *** 11 1 12 11	46 **** 65 **** 49 41 75 62 63 61 52 71	**** 80 **** 88 92 60 92 80 86 72	***** 15.15 12.08 11.09 16.94 15.47 10.25 11.32 11.32 20.48 15.76	***** 3.53 4.82 2.33 2.77 4.30 3.36 2.10 3.18 2.18 4.35 3.61	*** 6 23 23 23 23 23 23 23 23 23 26 26	Ninnekah Norman Oilton OKC East OKC North OKC West Okemah Perkins Shawnee Spencer Stillwater Washington	66.8 66.3 65.5 66.4 66.9 66.5 65.7 66.0 ****	85 84 84 83 85 84 84 ***	18 18 27 18 18 18 18 27 18 ***	47 48 43 47 47 48 47 45 45 44 48	12 11 12 12 11 11 12 11 11 ***	41 43 67 46 51 40 44 61 49 ****	85 83 89 95 100 91 83 82 ****	18.58 23.39 12.29 16.10 14.33 15.78 21.13 7.63 20.01 13.78 9.20 22.49	5.74 4.67 1.77 5.02 2.83 4.38 4.56 1.71 5.47 2.39 2.11 7.05	23 19 10 6 23 6 8 23 23 23 23 23 23
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	66.0 67.7 66.5 66.5 66.9 67.8 66.6	84 84 85 84 85 85	18 18 18 18 18 18	44 48 45 47 47 47	12 1 1 12 11 1	59 32 47 45 42 34 ****	116 93 91 102	16.82 23.51 14.75 19.49 19.77 24.48 17.55	3.60 4.30 2.09 5.69 3.26 6.54 3.11	24 9 29 23 19 24 29	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	68.3 67.5 67.4 65.9 68.1 66.0	85 85 84 83 86 83	16 18 18 27 18 27	45 43 49 42 46 45	1 1 12 1 1 1	32 37 36 59 33 58	115 108 87 129	20.00 23.62 21.18 18.04 20.06 12.97	3.87 4.56 4.45 4.30 5.05 2.93	10 9 9 24 24 24
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	67.5 65.7 65.3 68.8 64.3 65.4	91 85 84 89 82 86	18 18 14	49 46 47 48 43	12 11 12	36 48 50 28 75 56	70 60 147 53	11.06 19.46 17.55 16.43 12.07 16.89	1.79 5.17 4.56 3.02 2.97 3.78	19 23 23 5 23 8	Hollis Mangum Medicine Park Tipton Walters	66.3 65.7 66.0 68.1 68.0	88 90 84 89 87	26 26 18 18	48 47 48 49	11 11 11 11	48 55 43 ****	76 75 ****	12.57 13.56 18.56 12.71 15.94	2.57 2.74 4.21 4.00 2.87	
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch	67.1 68.3 69.2 66.9 67.6 69.2 66.5 67.4	83 85 88 83 83 86 82 86	18 18 17 28 27 28	47 51 46 48 47 53 49	11 1 1 1	39 29 21 42 34 17 41 34	131 152 101 114 148 87	19.66 21.78 21.50 14.40 18.82 20.01 22.44 15.49	2.87 3.23 3.50 2.00 2.49 4.52 2.64 1.88	9 8 10 22 24 7 5	Lane Madill Newport Pauls Valley Ringling Sulphur Tishomingo Waurika	68.4 68.6 68.1 67.7 68.0 67.2 67.5 68.8	85 86 85 87 84 84	18 18 28 18 18 18 28	49 49 52 50 51 50 49	1 12 12 11 1 1 11	22 23 29 32 28 35 32 27	134 125 115 121 103 110	28.17 23.25 19.06 15.24 20.95 18.61 22.81 17.80	3.95 4.50 3.14 2.00 3.97 3.15 2.50 5.32	9 7
SOUTHEAST Antlers Broken Bow Clayton Cloudy Hugo	68.1 69.2 68.4 68.5 69.6	85 86 86 84 85	16 18	45 46 45 51 52	1 1 1 1	21 18 26 15 ****	148 131 125	19.81 17.33 22.82 17.28 17.54	2.68 2.95 3.19 2.72 2.90	7 9 19 24 29	Idabel Mt Herman Talihina Wilburton Wister	70.2 68.1 68.3 68.4 67.7	86 84 87 85 86	16 18 18 18	49 49 43 48 41	1 1 1 1	12 22 27 26 38	117 128 131	14.11 19.85 22.54 23.60 18.39	2.66 2.91 4.41 4.04 3.38	20 10

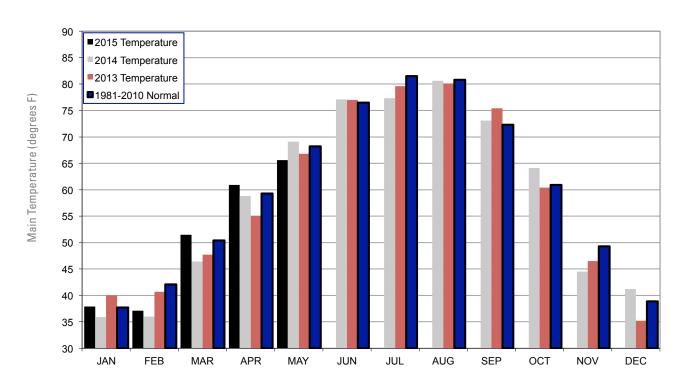
### 2013, 2014 AND 2015 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



**May 2015 Mesonet Precipitation Comparison** 

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	May-14
Panhandle	7.39	4.69	1st Wettest	6.92 (1902)	0.19 (2004)	1.57
North Central	9.76	5.40	5th Wettest	11.11 (1957)	0.63 (1970)	1.89
Northeast	12.69	7.00	2nd Wettest	17.98 (1943)	1.45 (1911)	3.03
West Central	11.10	7.03	2nd Wettest	12.10 (1982)	0.42 (1966)	3.14
Central	15.21	10.19	1st Wettest	12.07 (1982)	0.92 (1988)	2.50
East Central	19.40	13.57	1st Wettest	14.80 (1943)	1.56 (1921)	4.74
Southwest	14.99	10.78	1st Wettest	10.68 (1982)	0.44 (1966)	3.50
South Central	20.00	14.68	1st Wettest	12.82 (1982)	0.58 (1988)	2.52
Southeast	19.53	13.38	1st Wettest	13.78 (1990)	1.21 (1988)	6.38
Statewide	14.40	9.58	1st Wettest	10.54 (1957)	1.23 (1988)	3.13

### 2013, 2014 AND 2015 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



**May 2015 Mesonet Temperature Comparison** 

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	May-14 (F)
Panhandle	61.5	-3.6	16th Coolest	71.1 (1896)	58.0 (1907)	66.3
North Central	64.3	-3.1	16th Coolest	74.5 (1962)	60.6 (1907)	69.2
Northeast	66.0	-1.5	36th Coolest	74.4 (1962)	61.7 (1917)	68.2
West Central	63.5	-4.4	8th Coolest	75.0 (1896)	60.9 (1907)	69.4
Central	65.8	-2.8	14th Coolest	74.6 (1962)	62.0 (1907)	69.7
East Central	66.8	-1.7	27th Coolest	74.3 (1962)	63.2 (1917)	68.6
Southwest	66.3	-3.7	10th Coolest	76.4 (1996)	63.5 (1907)	71.2
South Central	67.9	-2.2	20th Coolest	75.1 (1996)	63.5 (1907)	70.0
Southeast	68.0	-0.6	45th Coolest	73.1 (1899)	62.8 (1917)	67.7
Statewide	65.6	-2.6	15th Coolest	74.0 (1962)	61.9 (1907)	68.9

### **RECORD EVENT REPORTS MAY 2015**

Description	Day	Location	Record	Previous Record	Year
Daily rainfall	6	Oklahoma City	7.1	2.61	1930
Monthly rainfall	24	Oklahoma City	18.19	14.52	2013
Rainfall for any month on record	24	Oklahoma City	18.19	14.66	Jun-89

# **MESONET EXTREMES FOR MAY 2015**

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	91	3rd	Beaver	35	11th	Goodwell	11.20	Beaver	2.87	19th	Kenton
North Central	87	3rd	May Ranch	39	12th	Alva	13.04	Newkirk	3.53	23rd	Blackwell
Northeast	87	27th	Bixby	40	1st	Nowata	18.50	Bixby	4.78	23rd	Bixby
West Central	85	27th	Retrop	39	12th	Camargo	12.73	Butler	6.75	23rd	Butler
Central	86	18th	Chickasha	40	12th	El Reno	23.39	Norman	7.05	23rd	Washington
East Central	86	18th	Webbers Falls	42	1st	Tahlequah	24.48	McAlester	6.54	24th	McAlester
Southwest	91	18th	Altus	43	12th	Hinton	19.46	Apache	5.17	23rd	Apache
South Central	88	18th	Waurika	46	1st	Burneyville	28.17	Lane	5.32	19th	Waurika
Southeast	87	18th	Talihina	41	1st	Wister	23.60	Wilburton	4.41	20th	Talihina
Statewide	91	3rd	Beaver	35	11th	Goodwell	28.17	Lane	7.05	23rd	Washington

#### **Oklahoma Climate Divisions**



# **MAY 2015 DROUGHT MONITOR**

U.S. Drought Monitor Oklahoma

May 26, 2015 (Released Thursday, May. 28, 2015) Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиптепт	77.31	22.69	2.74	0.00	0.00	0.00
Last Week 5/19/2015	49.19	50.81	41.94	8.98	0.00	0.00
3 Months Ago 224/2015	1.48	98.52	65.55	48.46	27.80	5.75
Start of Calendar Year 12/3/02/01/4	25.63	74.37	62.03	40.84	21.74	5.70
Start of Water Year 930/2014	8.55	91.45	73.31	58.13	20.92	4.64
One Year Ago 527/2014	5.78	94.22	79.94	73.26	55.04	26.47

Intensity:	
D0 Abnom ally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.

Author: Brad Rippey

U.S. Department of Agriculture









http://droughtmonitor.unl.edu/

#### INTERPRETATION INFORMATION

**MEAN DAILY TEMPERATURE:** Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points – typically the number of days in the month. Although this November differ from the "true" daily average, it is consistent with historical methods of observation and comparable to the normals and extremes for stations and regions of the state.

**DEGREE DAYS:** Degree Days are calculated each day of the month for which there is a temperature report and the mean temperature for the day is less than (Heating Degree Days) or greater than (Cooling Degree Days) 65 degrees. Daily values are summed to arrive at a monthly total. HDD/CDD are qualitative measures of how much heating/cooling was required to maintain a comfortable indoor temperature. Missing observations November result in an artificially high or low value.

**SEVERE WEATHER REPORTS:** Only the most significant events are listed. Tornadoes of F2 or greater strength (on the 0-5 Fujita scale), hail of two inches diameter or greater, and wind speeds of 70 miles per hour or above are listed. National Weather Service defines storms as severe when they produce a tornado, hail of three-quarters inch or greater, or wind speeds above 57 miles per hour (50 knots). For additional reports, contact the Oklahoma Climatological Survey, Storm Prediction Center, or your local National Weather Service forecast office.

**SOIL MOISTURE:** The soil moisture variable displayed is the Fractional Water Index (FWI), measured at a depth of 25 cm. This unitless value ranges from very dry soil having a value of 0, to saturated soils having a value of 1.

#### **ADDITIONAL RESOURCES**

#### **SUNRISE / SUNSET TABLES**

U.S. Naval Observatory: <a href="http://aa.usno.navy.mil/data">http://aa.usno.navy.mil/data</a>

#### **SEVERE STORM REPORTS**

Storm Prediction Center: http://spc.noaa.gov/climo/

National Climatic Data Center (more than about 4-5 months old): <a href="http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms">http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms</a>

#### **SEASONAL OUTLOOKS**

Climate Prediction Center:

http://www.cpc.ncep.noaa.gov/products/OUTLOOKS\_index.html

#### CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION

Oklahoma Climatological Survey:

http://climate.mesonet.org\_or http://climate.ok.gov/



Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Kevin Kloesel Director
Dr. Chris Fiebrich Associate Director

#### **EDITOR**

Gary D. McManus State Climatologist

#### **CONTRIBUTORS**

Gary D. McManus State Climatologist Dr. Mark A. Shafer Associate State Climatologist Monica Deming Service Climatologist

#### DESIGN

Ada Shih Creative Director

For more information, contact:

Oklahoma Climatological Survey

The University of Oklahoma 120 David L. Boren Blvd., Suite 2900

Norman, OK 73072-7305

**TEL**: 405-325-2541 **FAX**: 405-325-7282 **E-MAIL**: ocs@ou.edu

WEBSITE: http://climate.ok.gov