Oklahoma Monthly Climate Summary

NOVEMBER 2009

OKLAHOMA CLIMATOLOGICAL SURVEY

The final month of climatological autumn could not have been more different from the previous two – the unusually wet and cool September and October months were followed by a distinctly dry and warm November. The statewide average precipitation total finished more than 2 inches below normal, the 22nd driest since 1895. The statewide average temperature averaged nearly 5 degrees above normal for the eighth-warmest November on record. The western two-thirds of the state were exceedingly dry with most locations receiving less than a half of an inch of rainfall. Despite the warm and dry month, however, fall finished as the 15th coolest and 18th wettest on record. The first 11 months of the year were on pace to finish a bit cooler and wetter and normal and ranked as the 57th coolest and 29th wettest through November.

PRECIPITATION

The entire state was significantly dry with deficits from a little under an inch in the Panhandle to nearly 4 inches in the southeast. The statewide average stood around a half on an inch. The Oklahoma Mesonet site at Talihina led the way with 2.12 inches while Camargo brought up the rear with a barely-wet 0.05 inches. The fall ended with nearly 12 inches of rainfall on average statewide, due mainly to above normal precipitation in the eastern half of the state. The western half of the state was actually below normal for the season. That holds true for the year-to-date total as well with below-normal totals in the western half as opposed to surpluses in the east. The southeast region of the state was more than 12 inches above normal for January-November, the 6th wettest such period on record for that area. In contrast, the Panhandle experienced its 20th driest period over a similar time frame.

November 2009 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	89°F	Buffalo, Slapout, Beaver, Woodward	6
Low Temperature	17°F	Beaver	30
High Precipitation	1.60 in.	Talihina	--
Low Precipitation	0.05 in.	Camargo	--

TEMPERATURE

The statewide average temperature was 53.1 degrees and all areas of the state finished well above normal for the month. The highest temperature for the month was 89 degrees recorded at four separate Mesonet sites over two days. The lowest temperature was 17 degrees at Beaver. Despite the warm November, the fall finished well below normal by 1.6 degrees across the state on average. The year-to-date period was a couple of tenths of a degree below normal.

November 2009 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2009)
Month (November)	53.1°F	4.8°F	8th Warmest
Season-to-Date (Sep-Nov)	59.1°F	-1.6°F	15th Coolest
Year-to-Date (Jan-Nov)	61.4°F	-0.2°F	57th Coolest

Precipitation

	Average	Depart.	Rank (1895-2009)
Month (November)	0.63 in.	-2.19 in.	22nd Driest
Season-to-Date (Sep-Nov)	11.94 in.	1.93 in.	18th Wettest
Year-to-Date (Jan-Nov)	36.45 in.	1.78 in.	29th Wettest

Depart. = departure from 30-year normal

NOVEMBER DAILY HIGHLIGHTS

NOVEMBER 1-8: The first eight days of the month were dry – not a drop of rain was recorded across the state. Temperatures were above average for the most part despite a couple of weak cool fronts. Low temperatures were generally in the 40s, with 30s and 50s at times, and high temperatures were generally in the 70s. The month's highest temperature of 89 degrees was recorded by the Oklahoma Mesonet sites at Buffalo, Slapout and Beaver on the sixth, and Woodward on the seventh.

NOVEMBER 9-10: A slow-moving cold front entered the state from the north and kicked off showers and storms in north central Oklahoma. Low temperatures were 10 degrees above normal in the 50s. Highs later in the day on the ninth reached into the 70s. Highs on the 10th were still seasonable in the 60s with even a few 70s in the south.

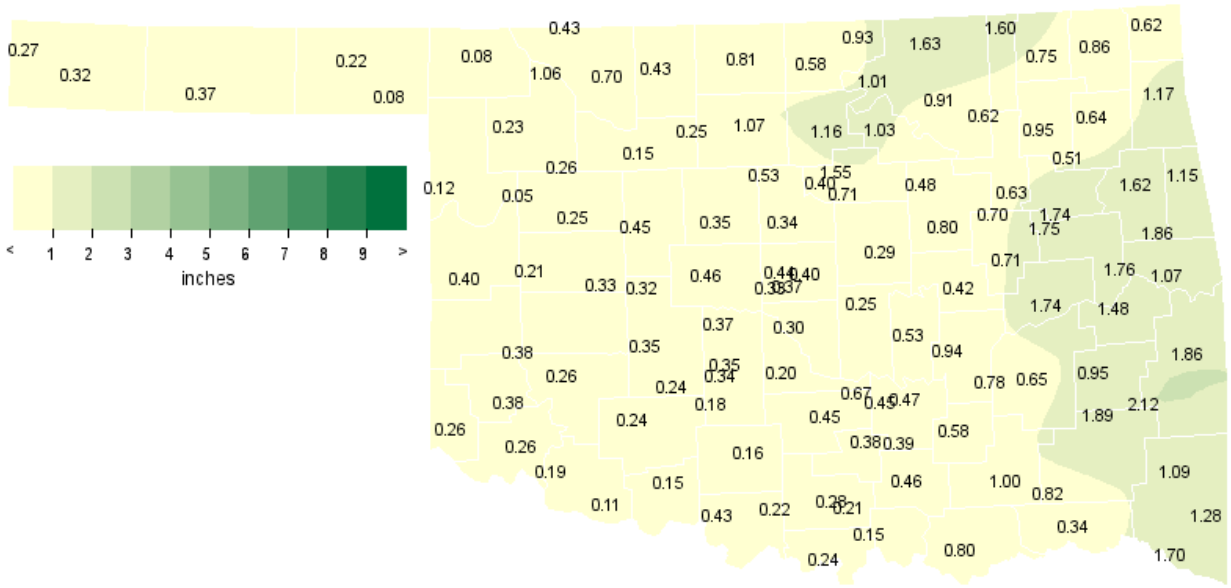
NOVEMBER 11-17: The 11th-13th was warm with highs in the 70s for the most part and lows in the 40s and 50s. A cold front on the 13th began to enter northwestern Oklahoma just as an upper-level storm approached from the west. Light snow fell in the Panhandle on the 14th with amounts generally less than 2 inches scattered about. Showers and a few storms fired along the front on the 15th after it had become stationary in the south. More than an inch of rain fell in the southeast. The upper-level storm hung around for a couple of days into the 17th that kept winds from the north and kept temperatures on the cool side. Lows during the latter half of this period were in the 30s with highs in the 40s and 50s.

NOVEMBER 18-22: The first widespread freeze of the season occurred overnight on the 18th. Lows in the 20s and 30s were common over the eastern two-thirds of the state. Warm air from the south helped temperatures rebound quite nicely into the 60s during the afternoon. A stationary front moved in on the 19th with southerly winds ahead of the front to go along with temperatures in the 60s and 70s. Behind the front temperatures lagged in the 50s and 60s. The cold front continued to move south on the 20th with light rain and drizzle forming after sunrise. The afternoon turned cloudy and cool with a few heavier showers popping up in eastern Oklahoma. Southerly winds returned on the 21st into the 22nd as a low pressure system formed in the Panhandle. That allowed temperatures to once again warm into the 60s.

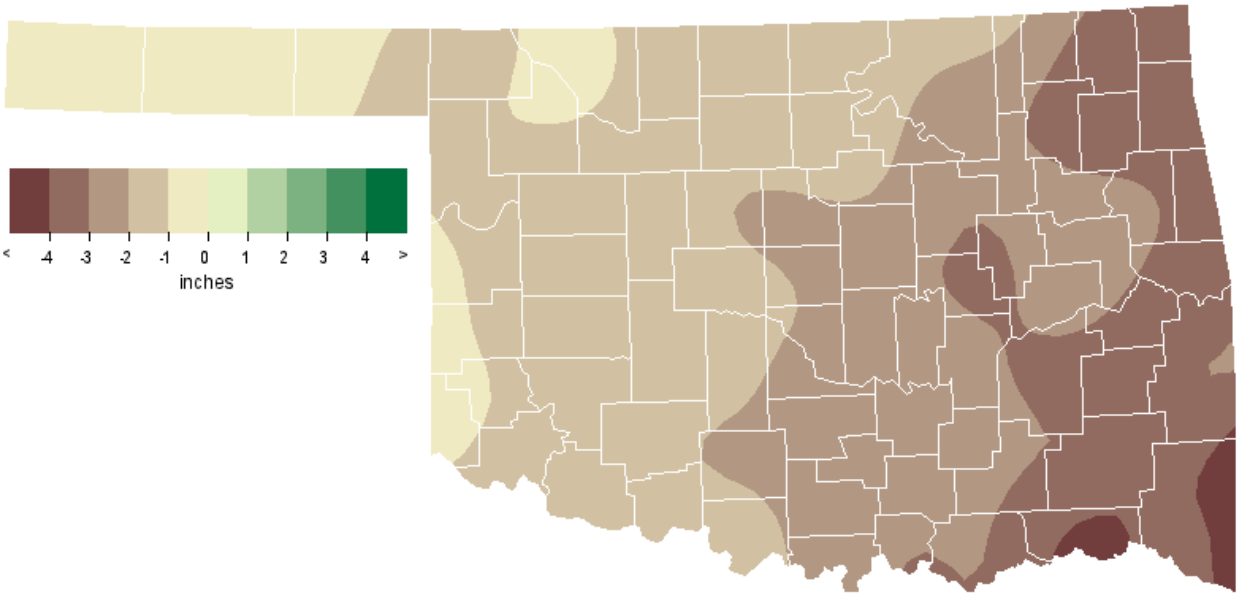
NOVEMBER 23-28: This five-day period was mostly warm but also windy. Low temperatures were seasonably cool for the most part with high temperatures at times in the 60s and 70s. Very little rain fell during this period save for a few light showers in eastern Oklahoma.

NOVEMBER 29-30: The warmth of the previous few days was extinguished by a cold front that barreled through the state overnight on the 29th. Light precipitation formed along the front with most areas seeing less than a half of an inch. Temperatures rebounded from the 40s and 50s on the 29th to the 50s and 60s on the 30th. High pressure at the surface led to sunny skies and a pleasant end for the month.

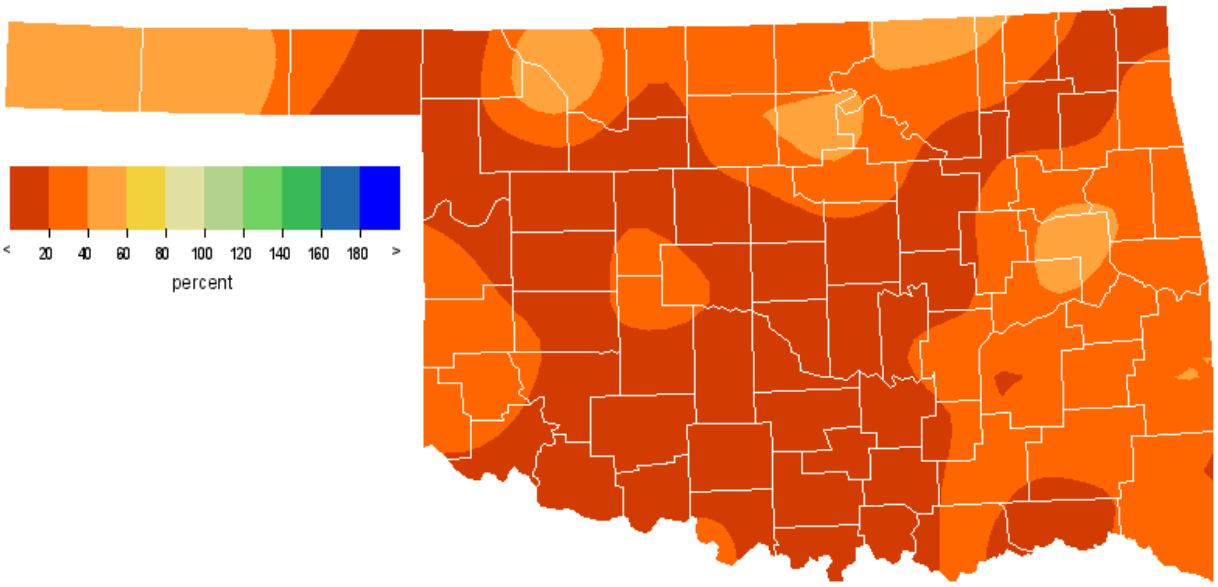
NOVEMBER 2009 OBSERVED PRECIPITATION



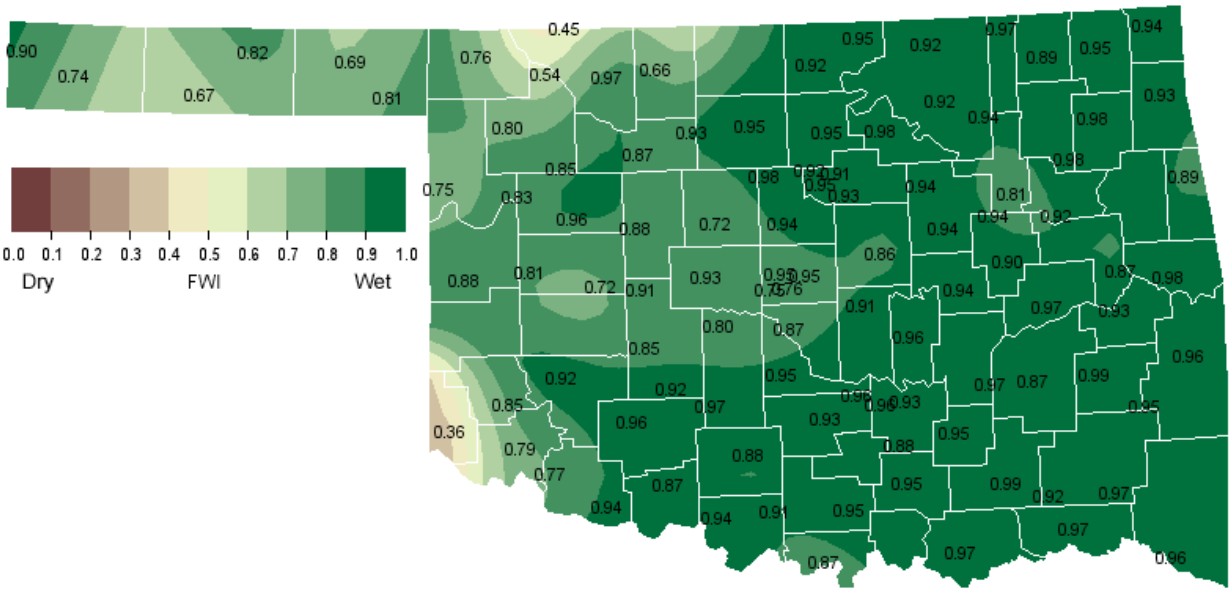
NOVEMBER 2009 DEPARTURE FROM NORMAL PRECIPITATION



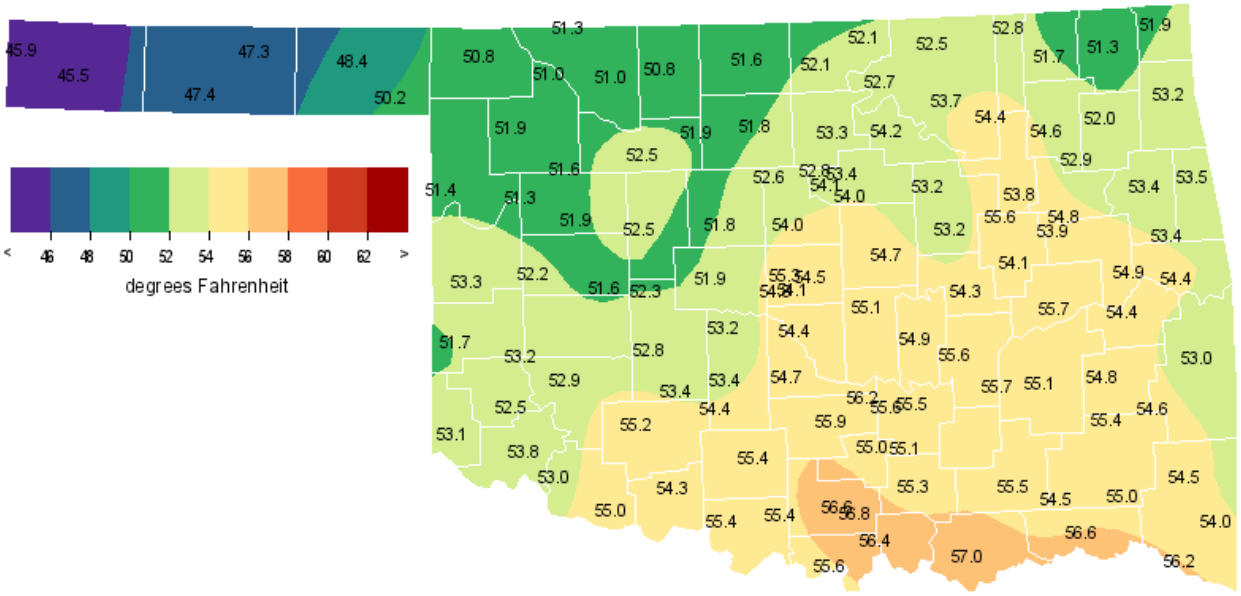
NOVEMBER 2009 PERCENT OF NORMAL PRECIPITATION



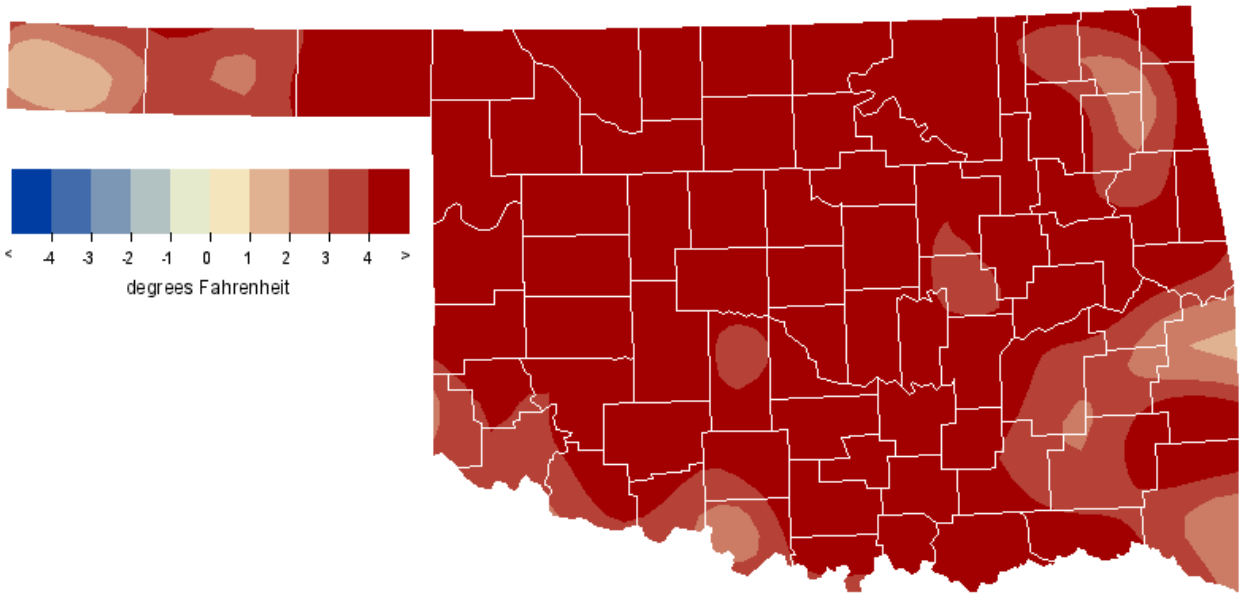
NOVEMBER 2009 AVERAGE SOIL MOISTURE AT 25CM



NOVEMBER 2009 AVERAGE TEMPERATURE



NOVEMBER 2009 DEPARTURE FROM NORMAL TEMPERATURE

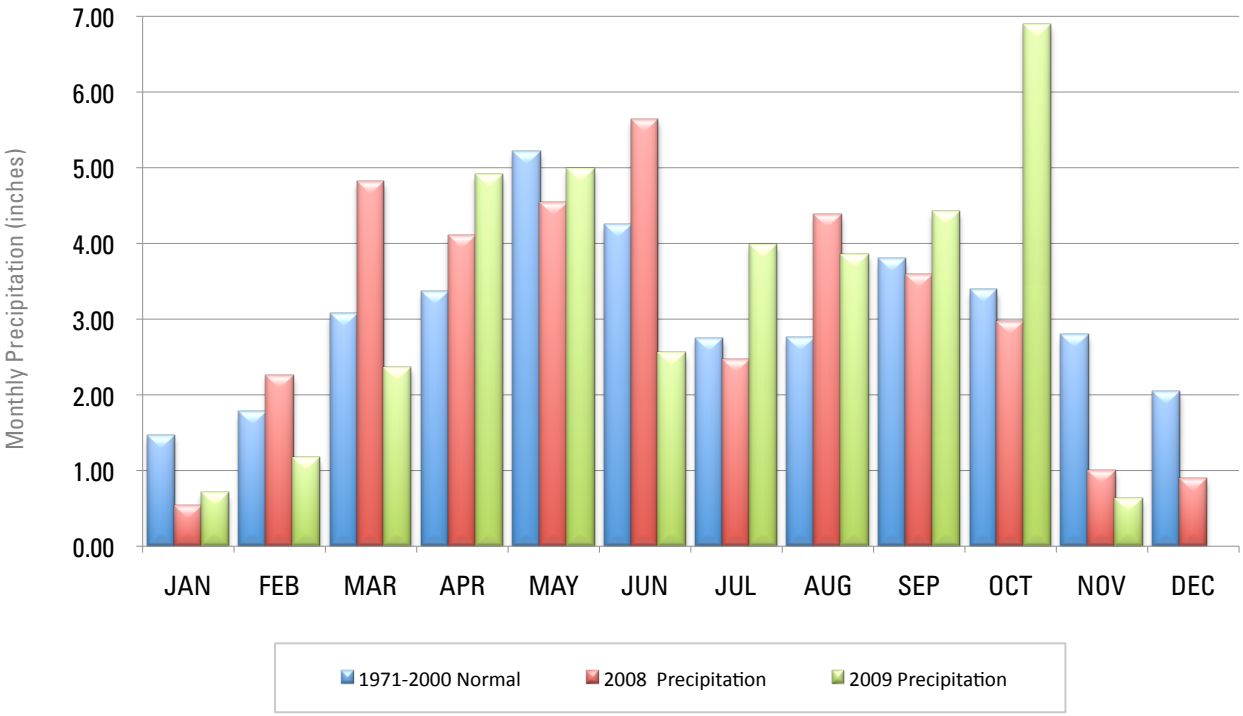


MESONET MONTHLY SUMMARY FOR NOVEMBER 2009

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	51.4	88	7	23	25	419	10	.12	.08	15
Beaver	48.4	89	6	17	30	502	4	.22	.15	15
Boise City	45.5	82	6	19	30	585	0	.32	.13	16
Buffalo	50.8	89	6	23	19	438	13	.08	.07	15
NORTH CENTRAL										
Alva	51.1	83	6	24	18	426	7	.70	.56	9
Blackwell	52.1	80	7	23	26	393	5	.58	.37	15
Breckinridge	51.8	79	7	25	30	398	3	1.07	.66	9
Cherokee	50.8	80	7	23	18	427	2	.43	.23	15
Fairview	52.4	80	7	26	26	386	9	.15	.15	15
Freedom	51.0	86	6	23	18	430	9	1.06	.88	9
Lahoma	51.8	81	7	26	30	398	3	.25	.22	15
NORTHEAST										
Bixby	53.8	79	7	27	26	342	5	.63	.33	15
Burbank	52.7	82	7	25	30	373	5	1.01	.51	15
Claremore	54.6	79	7	30	26	315	4	.95	.70	15
Copan	52.8	80	7	26	30	372	4	1.60	1.43	15
Foraker	52.5	81	7	26	26	381	5	1.63	.81	9
Inola	52.9	77	7	29	26	364	1	.51	.18	15
Jay	53.2	78	7	26	26	358	4	1.17	.94	15
Miami	52.0	76	7	26	30	392	2	.62	.53	15
WEST CENTRAL										
Bessie	53.3	77	7	29	30	****	****	.24	.18	15
Butler	52.2	82	6	22	25	389	5	.21	.15	15
Camargo	51.2	85	7	22	18	416	3	.05	.05	15
Cheyenne	53.4	83	6	29	30	352	5	.40	.27	15
Erick	51.7	84	6	21	18	400	1	*****	*****	***
CENTRAL										
Acme	54.3	77	7	24	18	322	2	.18	.10	29
Bowlegs	54.9	78	7	29	26	307	3	.53	.23	29
Bristow	53.2	80	7	27	25	359	6	.80	.33	20
Lake Carl Blac	52.8	82	7	24	26	378	11	*****	*****	***
Chandler	54.7	79	7	28	26	313	4	.29	.16	29
Chickasha	53.0	77	9	24	18	****	****	.35	.19	29
El Reno	51.9	79	7	23	18	394	0	.46	.19	15
Guthrie	54.0	79	7	25	26	336	7	.34	.18	15
Kingfisher	51.8	79	7	23	26	397	0	.35	.21	15
Marena	54.1	82	7	24	26	335	8	.40	.26	15
Minco	53.2	76	7	28	26	354	0	.37	.22	29
Marshall	52.6	79	7	23	26	378	5	.53	.43	15
EAST CENTRAL										
Cookson	53.4	74	7	27	26	347	0	1.86	.63	20
Eufaula	55.6	76	6	33	26	285	3	1.74	.64	15
Haskell	53.9	77	7	28	26	335	0	1.75	.83	20
Hectorville	55.6	80	7	31	26	289	7	.70	.30	20
Holdenville	55.5	78	6	31	30	287	2	.94	.38	29
McAlester	55.1	77	6	26	26	302	4	.65	.30	29
Okmulgee	54.1	79	7	29	26	333	6	.71	.39	15
SOUTHWEST										
Altus	53.7	79	6	26	25	338	0	.26	.19	29
Apache	53.4	75	7	28	30	349	0	.24	.14	29
Fort Cobb	52.8	78	7	26	25	367	0	.35	.21	29
Grandfield	55.0	77	6	28	26	300	0	.11	.05	29
Hinton	52.3	77	7	27	18	381	1	.32	.14	15
Hobart	52.8	76	6	24	25	365	0	.26	.14	29
SOUTH CENTRAL										
Ada	55.5	78	7	27	26	288	4	.47	.36	29
Ardmore	56.8	77	4	31	18	249	3	.21	.15	29
Burneyville	55.6	78	4	26	26	285	3	.24	.14	29
Byars	56.2	78	7	31	18	269	4	.67	.50	29
Centrahoma	55.2	77	4	26	26	****	****	.58	.29	29
Durant	57.1	77	14	33	26	240	2	.80	.65	15
Fittstown	55.1	77	4	29	26	296	0	.39	.18	29
Ketchum Ranch	55.3	78	7	29	18	291	1	.16	.08	29
Lane	55.5	76	6	29	25	285	0	1.00	.59	15
SOUTHEAST										
Antlers	54.6	77	6	28	26	313	0	.82	.64	15
Broken Bow	54.0	77	10	29	27	330	0	1.28	.90	15
Clayton	55.4	78	6	28	25	289	2	1.89	1.49	15
Cloudy	55.0	76	6	29	27	300	1	*****	*****	***
Hugo	56.6	78	10	33	26	254	2	.34	.14	20

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	47.4	87	6	20	30	530	3	.37	.15	14
Hooker	47.4	86	6	21	30	529	0	*****	*****	***
Kenton	45.9	82	6	17	25	574	0	.27	.21	16
Slapout	50.2	89	6	22	18	454	9	.08	.06	15
May Ranch	51.3	87	6	25	18	418	8	.43	.30	15
Medford	51.6	79	7	24	26	407	4	.81	.46	15
Newkirk	52.1	80	7	25	26	393	7	.93	.53	15
Red Rock	53.3	81	7	25	26	362	10	1.16	.60	15
Seiling	51.6	84	7	23	18	410	7	.26	.14	15
Woodward	51.9	89	7	25	30	408	16	.23	.12	9
Nowata	51.6	78	7	24	30	405	3	.75	.58	15
Pawnee	54.2	83	7	26	26	332	8	1.03	.47	15
Porter	54.8	78	7	29	26	308	2	1.74	.76	15
Pryor	52.1	77	7	26	30	389	3	.64	.24	15
Skiatook	54.4	80	7	30	30	322	5	.62	.44	15
Vinita	51.3	76	7	25	26	414	2	.86	.64	15
Wynona	53.7	82	7	29	26	347	7	.91	.58	15
Putnam	51.9	78	7	27	30	395	1	.25	.17	15
Retrop	53.2	79	6	28	30	354	0	.38	.22	29
Watonga	52.5	77	7	29	18	375	1	.45	.22	15
Weatherford	51.6	73	7	27	26	404	0	.33	.18	15
Ninnekah	53.4	76	7	24	18	348	0	.34	.15	29
Norman	54.4	78	7	27	26	322	3	.30	.22	29
Oilton	53.1	81	7	22	26	362	7	.48	.18	29
OKC East	54.2	77	7	27	26	328	3	.37	.17	29
OKC North	55.4	78	7	30	18	295	6	.44	.30	29
OKC West	54.7	78	7	30	18	313	4	.33	.20	29
Okemah	54.3	77	7	27	26	322	2	.42	.19	29
Perkins	54.0	80	7	26	26	336	6	.71	.30	10
Shawnee	55.1	78	7	31	30	303	5	.25	.15	29
Spencer	54.5	78	7	26	26	318	4	.40	.21	29
Stillwater	53.4	81	7	26	26	356	8	1.55	.74	15
Washington	54.7	78	6	27	18	313	4	.20	.11	29
Sallisaw	54.4	78	6	29	27	317	0	1.07	.40	15
Stigler	54.4	77	6	30	27	319	0	1.48	.69	20
Stuart	55.7	76	6	31	26	281	2	.78	.30	29
Tahlequah	53.4	76	7	25	26	349	1	1.62	.79	15
Webbers Falls	54.9	79	6	30	27	306	2	1.76	.73	20
Westville	53.6	75	7	29	26	344	1	1.15	.58	15
Hollis	53.2	82	6	23	25	353	0	.26	.17	29
Mangum	52.5	81	7	22	25	374	0	.38	.19	29
Medicine Park	55.2	76	7	33	26	295	1	.24	.20	29
Tipton	53.0	78	6	24	25	361	0	.19	.15	29
Walters	54.3	77	7	26	18	320	0	.15	.07	29
Madill	56.4	77	4	28	26	258	1	.15	.11	29
Newport	56.5	77	4	32	30	256	2	.28	.18	29
Pauls Valley	55.9	79	7	28	25	277	4	.45	.33	29
Ringling	55.4	77	7	26	25	289	1	.22	.15	29
Sulphur	55.0	77	4	24	25	301	1	.38	.25	29
Tishomingo	55.3	77	4	29	30	292	0	.46	.28	29
Vanoss	55.5	78	4	27	26	287	4	.45	.38	29
Waurika	55.4	79	7	28	18	287	0	.43	.30	29
Idabel	56.2	78	10	31	27	267	3	1.70	.96	15
Mt Herman	54.5	75	10	28	26	314	0	1.09	.71	15
Talihina	54.6	76	4	26	26	312	1	2.12	1.60	15
Wilburton	54.8	77	6	24	26	310	3	.95	.45	15
Wister	53.0	76	10	26	26	360	0	1.86	1.07	15

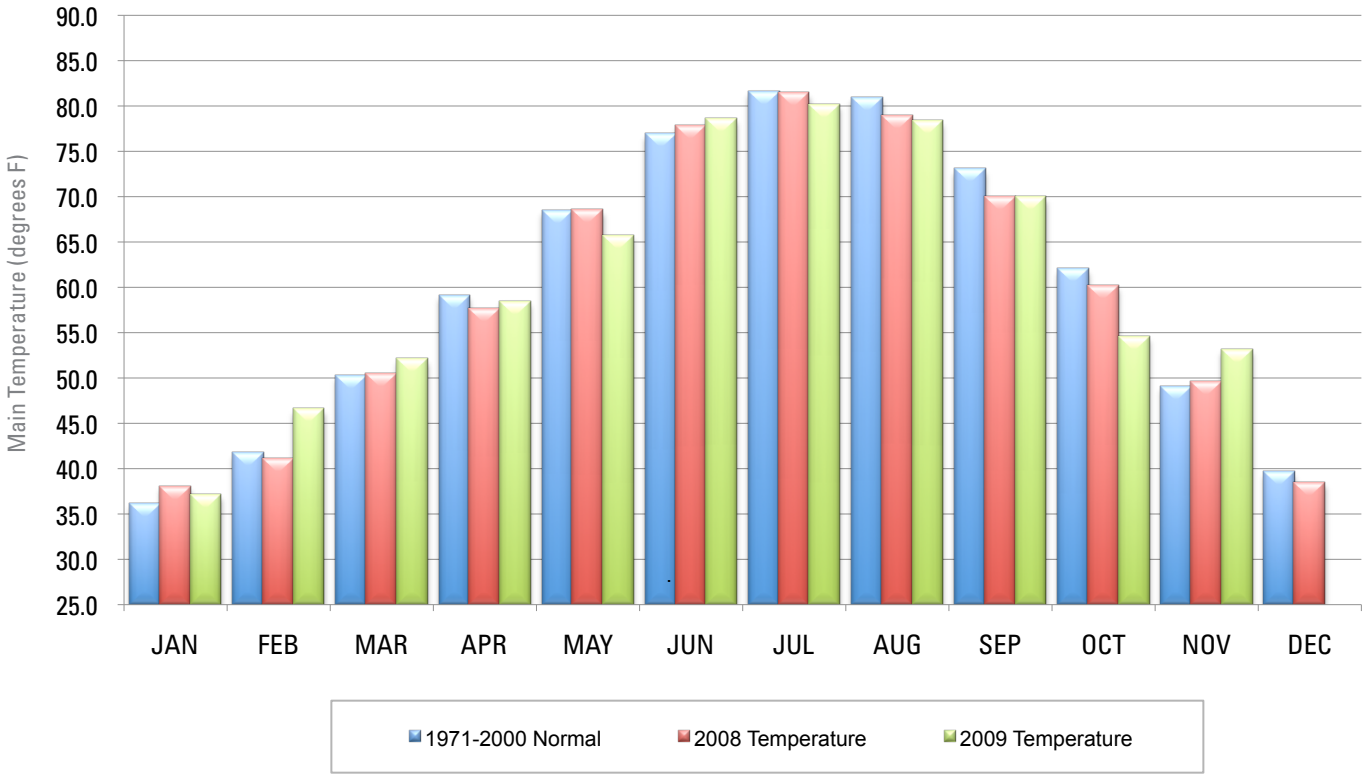
2008 AND 2009 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



November 2009 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Nov-08
Panhandle	0.21	-0.83	30th Driest	4.07 (1909)	0.00 (1897)	0.23
North Central	0.62	-1.46	38th Driest	6.48 (1964)	0.00 (1910)	0.54
Northeast	0.98	-2.64	20th Driest	7.37 (1994)	0.00 (1904)	2.06
West Central	0.30	-1.43	26th Driest	6.62 (1964)	0.00 (1897)	0.41
Central	0.45	-2.36	21st Driest	6.88 (1931)	0.00 (1910)	1.41
East Central	1.25	-3.05	26th Driest	10.16 (1996)	0.20 (1914)	1.08
Southwest	0.25	-1.48	22nd Driest	6.61 (2004)	0.00 (1897)	0.06
South Central	0.43	-2.67	11th Driest	7.62 (1902)	0.00 (1903)	0.88
Southeast	1.34	-3.73	13th Driest	13.16 (1946)	0.00 (1903)	2.17
Statewide	0.63	-2.19	22nd Driest	6.12 (2004)	0.14 (1910)	1.00

2008 AND 2009 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



November 2009 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Nov-08 (F)
Panhandle	48.4	4.4	12th Warmest	51.4 (1999)	36.0 (1929)	47.3
North Central	51.8	5.5	5th Warmest	54.5 (1999)	39.0 (1929)	47.2
Northeast	53.1	5.1	8th Warmest	56.4 (1999)	40.9 (1929)	48.4
West Central	52.2	5.4	6th Warmest	54.7 (1999)	39.7 (1929)	49.1
Central	53.9	5.1	8th Warmest	56.8 (1999)	41.3 (1929)	50.4
East Central	54.6	4.7	10th Warmest	57.8 (1999)	43.4 (1929)	50.2
Southwest	53.5	4.3	8th Warmest	56.3 (1999)	42.1 (1929)	51.8
South Central	55.8	4.8	9th Warmest	58.3 (1927)	44.1 (1929)	52.3
Southeast	54.9	4.2	18th Warmest	58.9 (1909)	44.1 (1976)	50.2
Statewide	53.1	4.8	8th Warmest	56.0 (1999)	41.3 (1929)	49.6

MESONET EXTREMES FOR NOVEMBER 2009

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	89	6th	Buffalo	17	30th	Beaver	0.37	Goodwell	0.21	16th	Kenton
North Central	89	7th	Woodward	23	18th	Seiling	1.16	Red Rock	0.88	9th	Freedom
Northeast	83	7th	Pawnee	24	30th	Nowata	1.74	Porter	1.43	15th	Copan
West Central	85	7th	Camargo	21	18th	Erick	0.45	Watonga	0.27	15th	Cheyenne
Central	82	7th	Lake Carl Blackwell	22	26th	Oilton	1.55	Stillwater	0.74	15th	Stillwater
East Central	80	7th	Hectorville	25	26th	Tahlequah	1.86	Cookson	0.83	20th	Haskell
Southwest	82	6th	Hollis	22	25th	Mangum	0.38	Mangum	0.21	29th	Fort Cobb
South Central	79	7th	Pauls Valley	24	25th	Sulphur	1.00	Lane	0.65	15th	Durant
Southeast	78	10th	Idabel	24	26th	Wilburton	2.12	Talihina	1.60	15th	Talihina
Statewide	89	6th	Buffalo	17	30th	Beaver	2.12	Talihina	1.60	15th	Talihina

DECEMBER OUTLOOK

The winter month of December is Oklahoma's second coldest and third driest month. Overnight freezes are the rule, particularly in northern portions of the state, and winter storms often provide the state with snow and ice that create more havoc than the precipitation totals they provide are worth.

The statewide-averaged monthly mean temperature in December is 39.6 degrees. The range of mean temperature from south-to-north is greater than 10 degrees Fahrenheit, ranging from 44.2 degrees at Waurika to 33.5 degrees at Turpin. Since 1892, the historical range of December statewide-averaged mean temperature is from a low of 25.8 degrees in 1983 to a high of 45.4 degrees, achieved in 1965. Normal daily maximum temperatures for the month range from 45.2 degrees at Newkirk to 56.0 degrees at Waurika. Normals of daily minimum temperatures vary from 19.7 degrees at Beaver to 33.9 degrees at Okemah. The state's recorded December temperature extremes are 92 degrees at Ardmore on December 30, 1951 and 18 degrees below zero (-18) at Perry on December 22, 1989.

Temperature

Mean	39.6 degrees
Warmest December	1933 and 1965, 46.5 degrees
Coolest December	1983, 26.5 degrees
Warmest location	Waurika, 44.2 degrees
Coolest location	Turpin, 33.5 degrees
Hottest recorded	92 degrees, Ardmore, December 30, 1951
Coldest recorded	-19 degrees, Goodwell, December 12, 1932

December precipitation, including rain and melted snow or sleet, when averaged statewide, accumulates only to a depth of 2.04 inches. The historical range of statewide-averaged monthly precipitation is from 0.10 inch in 1950 to 4.98 inches in 1984.The range of normal precipitation, increasing from the northwest to the southeast, is from 0.34 inch at Goodwell to 5.19 inches at Smithville. The extreme southeastern corner of the state received a record-breaking soaking in December 1971, exemplified by the 18.13 inches recorded at Bear Mountain Tower in Western McCurtain County, which established the state record for December precipitation at a given station. The state record for daily precipitation during December (11.34 inches) was established at the same location on December 10, 1971.

Snow is common in the northwestern portions of the state by late December. Boise City averages 6.1 inches of snow per December. Stations in the far southern portions of the state generally average less than one-half inch of snow during December. Records for snowfall extremes were set at Beaver. That panhandle city, while en route to a state-record seasonal snowfall of 87 inches, received 35 inches of snow in December 1911, including 22 inches reported on the 19th. From 1911 forward, sufficient snow has been on the ground on Christmas morning for large portions of the state to declare a "White Christmas" in seventeen different years. Most snowy Christmases have occurred in the state's northwestern half, but other areas of the state have also been affected from time-to-time.

Precipitation

Mean	2.04 inches
Wettest year	1984, 4.98 inches
Driest year	1980, 0.07 inches
Wettest location	Smithville, 5.19 inches
Driest location	Goodwell, 0.34 inches
Most recorded	18.13 inches, Bear Mountain Tower, 1971

Tornadoes

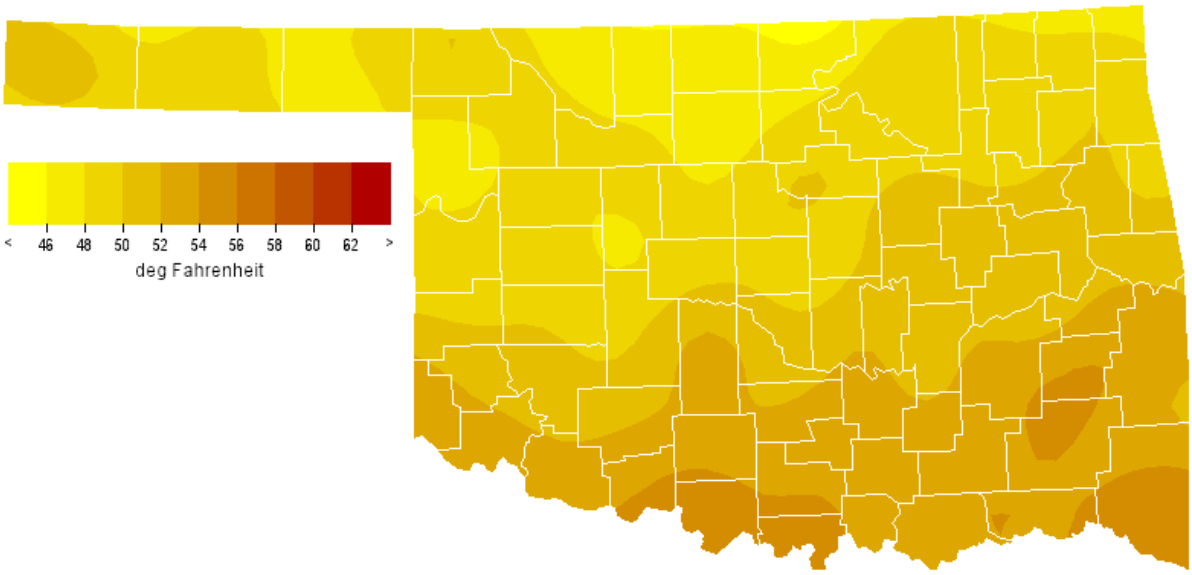
Average November Tornadoes	0.4
Most	4 (1982)

An unfortunate by-product of developing winter storms is the presence of sleet or freezing rain. Major ice storms spread across much of the state, beginning on Christmas Day in 1987 and, again, in 2000. Those two storms left 114,000 and 175,000 customers, respectively, without power for several days. A similar storm in mid-December 1937 left extensive damage to power and telephone lines in central and northern Oklahoma.

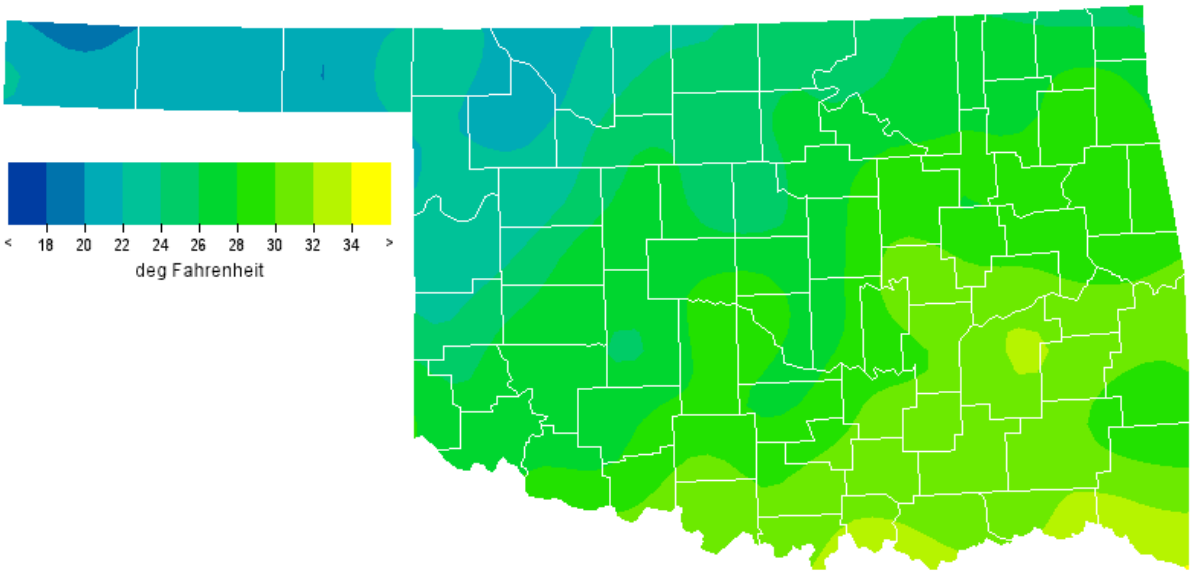
For many late December travelers, the winter storms that seem inevitable during the week between Christmas and New Year's Day sometimes appear to have become something of an Oklahoma tradition. Other major ice storms struck Oklahoma during the Decembers of 1897, 1916, 1924, 1969, 1972, and 1998.

Tornadoes are not a regular December feature. Only 22, occurring in seven different years, are included in the comprehensive database that begins in 1950. Four tornadoes were reported in Oklahoma during each of 1971, 1975, and 1982.

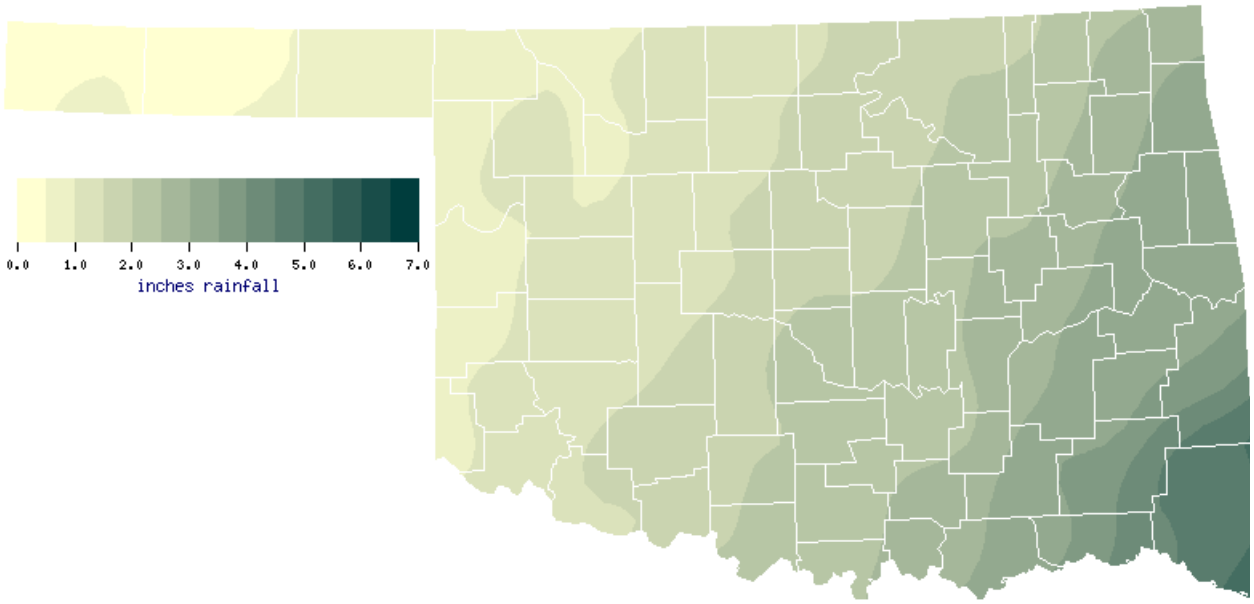
DECEMBER NORMAL DAILY MAXIMUM TEMPERATURE (1971-2000)



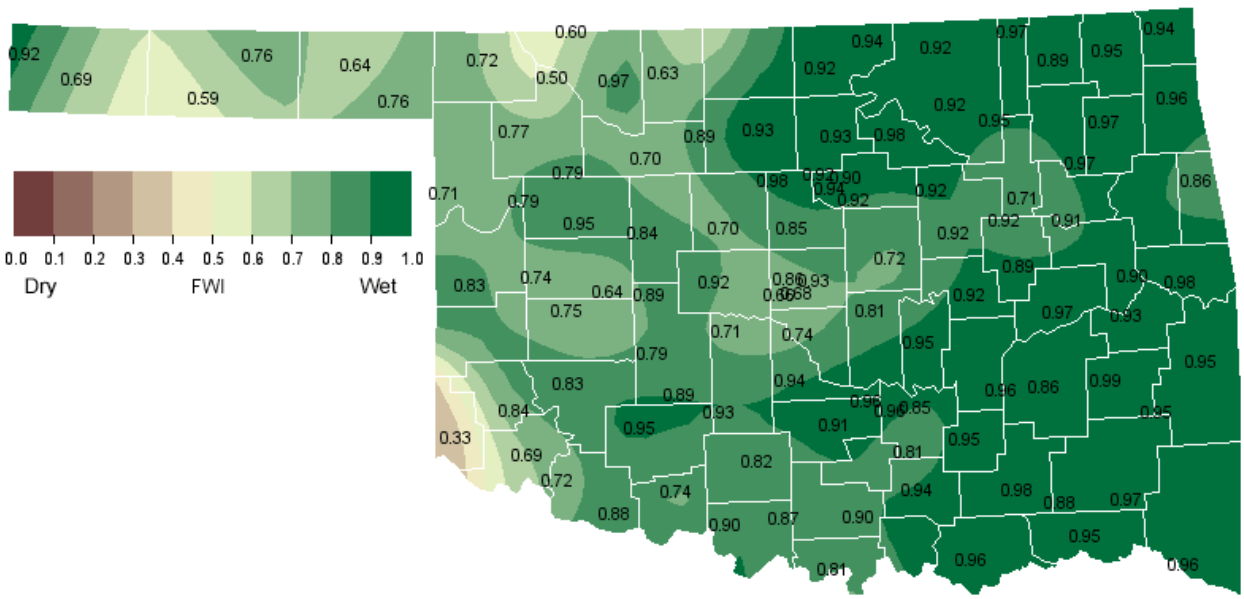
DECEMBER NORMAL DAILY MINIMUM TEMPERATURE (1971-2000)



DECEMBER NORMAL PRECIPITATION (1971-2000)



DECEMBER 1, 2009 SOIL MOISTURE CONDITIONS AT 25CM



DECEMBER 2009 DROUGHT INDICES

U.S. Drought Monitor

Oklahoma

December 1, 2009
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.0	0.0	0.0	0.0	0.0	0.0
Last Week (11/24/2009 map)	100.0	0.0	0.0	0.0	0.0	0.0
3 Months Ago (09/08/2009 map)	87.3	12.7	2.7	0.0	0.0	0.0
Start of Calendar Year (01/06/2009 map)	41.6	58.4	12.0	3.4	0.0	0.0
Start of Water Year (10/06/2009 map)	98.0	2.0	0.0	0.0	0.0	0.0
One Year Ago (12/02/2008 map)	55.2	44.8	8.6	0.0	0.0	0.0

Intensity:

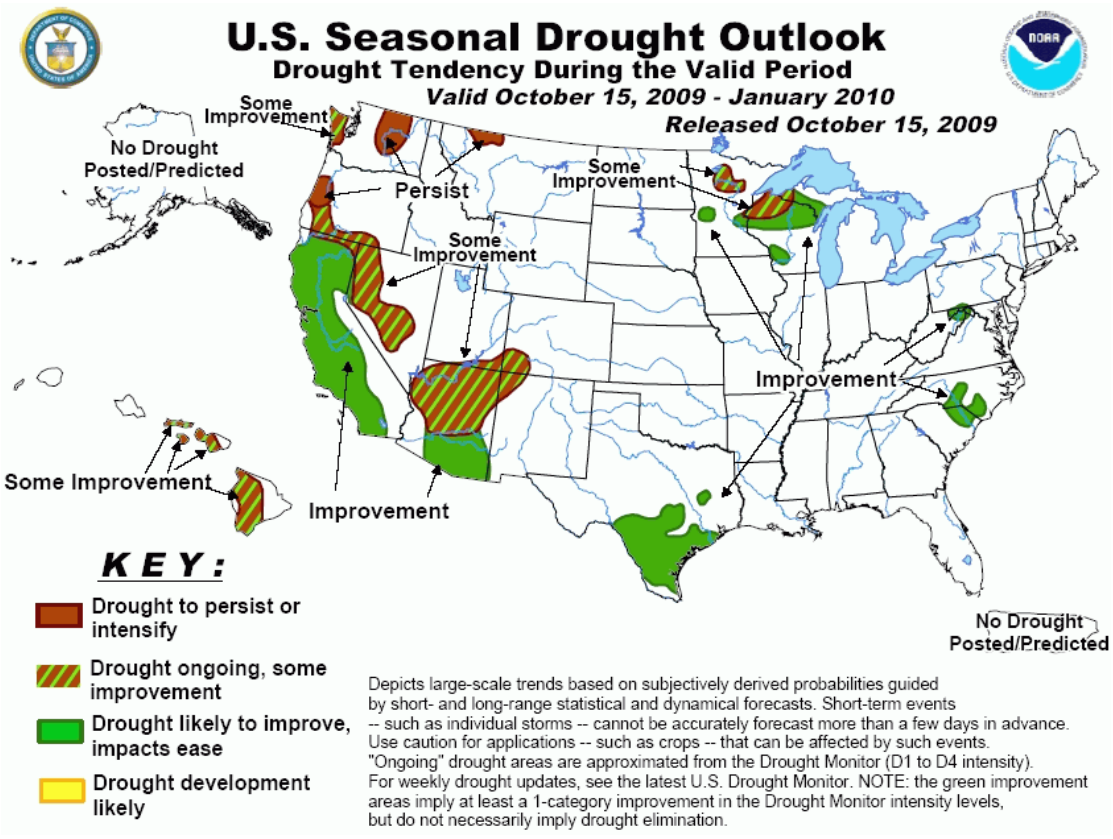
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

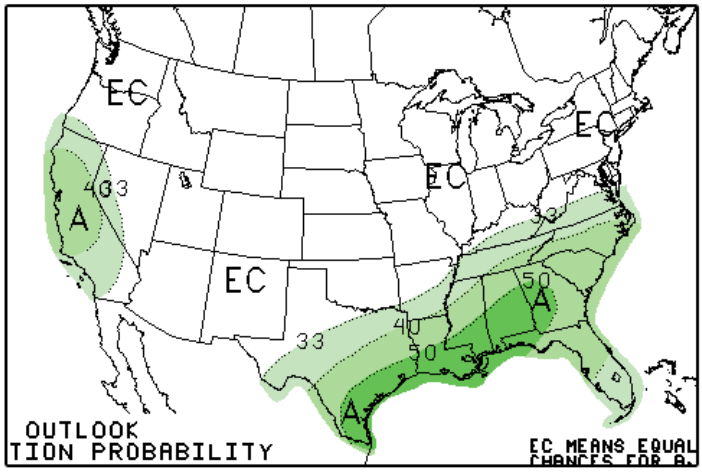
http://drought.unl.edu/dm

USDA National Drought Mitigation Center

Released Thursday, December 3, 2009
Author: Anthony Artusa, CPC/NOAA



DECEMBER 2009 U.S. PRECIPITATION FORECAST



Percent Likelihood of Above or Below Average Precipitation*

- 5% - 10%
- 0% - 5%

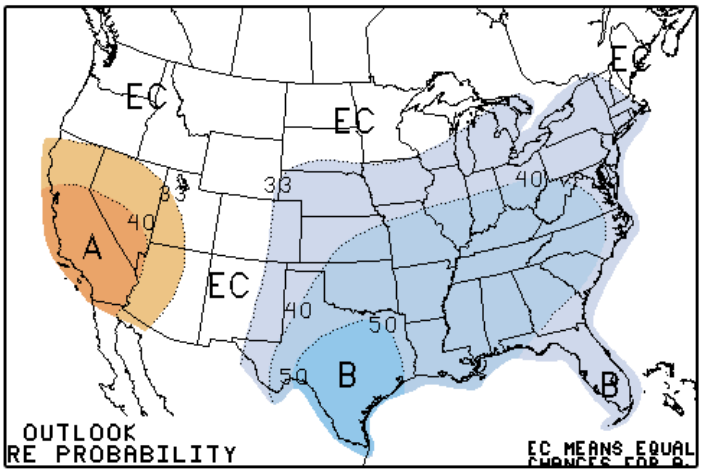
A = Above

- 0% - 5%
- 5% - 10%

B = Below

*EC indicates no forecasted anomalies due to lack of model skill.

DECEMBER 2009 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*

- 10% - 20%
- 5% - 10%
- 0% - 5%

A = Above

- 0% - 5%
- 5% - 10%

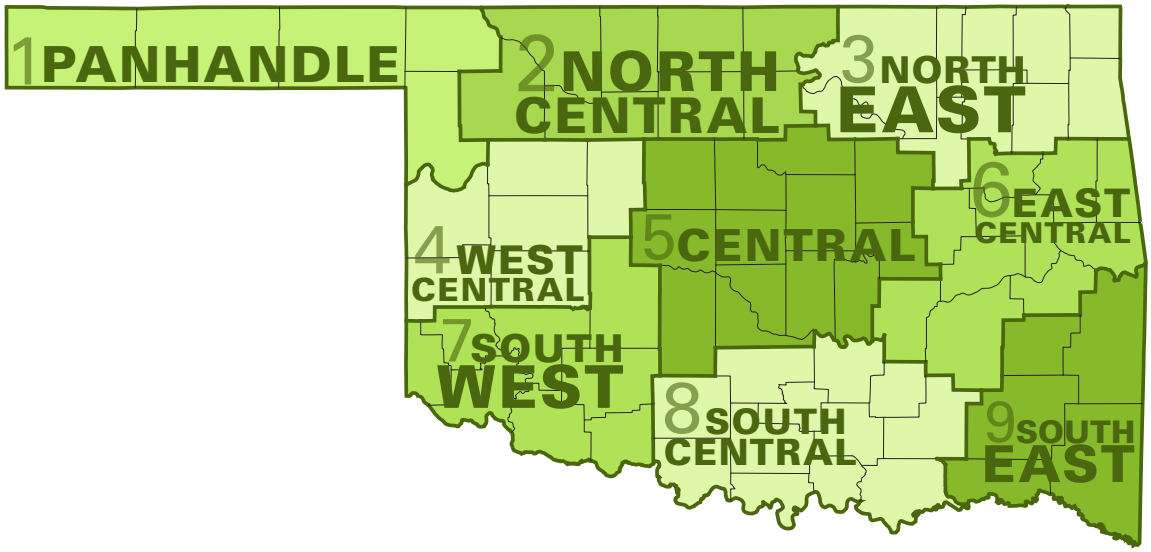
B = Below

*EC indicates no forecasted anomalies due to lack of model skill.

DECEMBER CLIMATE NORMALS

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	49.2	21.7	35.5	0.68
2	47.2	23.9	35.6	1.30
3	49.4	27.8	38.6	2.29
4	48.8	25.3	37.1	1.11
5	50.2	28.0	39.1	1.98
6	51.2	30.0	40.6	3.01
7	51.6	27.1	39.4	1.39
8	53.3	30.4	41.9	2.54
9	53.9	30.7	42.3	4.21
Statewide	50.5	27.3	38.9	2.14

Oklahoma Climate Divisions



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 may 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 may 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: http://aa.usno.navy.mil/data

SEVERE STORM REPORTS
Storm Prediction Center: http://spc.noaa.gov/climo/

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

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

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