OKLAHOMA MONTHLY CLIMATE SUMMARY
NOVEMBER 2008

OKLAHOMA CLIMATOLOGICAL SURVEY

November finished as a warm and dry month – the 30th driest and 49th warmest on record. There were only two periods with significant rainfall, but the first instance brought the state a rare November outbreak of severe weather. Many reports of large hail, torrential rains and severe winds occurred with storms on the fifth, including the 83rd November tornado spotted in Oklahoma since 1950. The only region of the state with appreciable rainfall as compared to the established normal was a small area centered on Payne County. Most of the state was 20-60 percent of normal for the month. The fall season was below normal in both temperature and precipitation, ranked as the 30th coolest and 49th driest on record, respectively.

Precipitation

Most of the western one-half of the state recorded less than an inch of precipitation for the month, with much of that area receiving less than a half of an inch. With the moisture in such short supply, the northeast and a strip of the southeast were fortunate to have 2-4 inches in localized areas. Overall, the state was nearly 2 inches below normal for November. East Central and southeastern Oklahoma were below normal by the greatest amount at right around 3 inches for both. The season's state total rainfall average fell below normal by about 2.5 inches. The northwestern one-third of the state finished decidedly wet for autumn, however, at 1-4 inches above normal. North central Oklahoma was more than 3 inches above normal for that time period and ranked as the 10th wettest fall season on record for that region. The January-November period was 1.58 inches above normal, ranked as the 28th wettest such period on record.

Temperature

November was more than a degree above normal statewide, buoyed by exceptional warmth in the western half of the state. Parts of the Panhandle and west central Oklahoma were more than four degrees above normal. The fall season was still on the cool side, despite November's warmth. The statewide average autumn temperature was nearly a degree below normal. The January-November statewide average temperature remained just below normal to rank as the 56th coolest such period on record.

November 2008 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	86ºF	Slapout	2
Low Temperature	13ºF	Buffalo	21
High Precipitation	4.90 in.	Perkins	
Low Precipitation	0.02 in.	Altus	

November Daily Highlights

November 1-4: November's first four days were unusually warm and mild with highs 10-20 degrees above normal in the 70s and 80s and lows in the 40s and 50s. Virtually no rain fell across the state. Oklahoma City tied a record with a high temperature of 83 degrees on November 2. The month's highest temperature of 86 degrees occurred at Beaver and Slapout on the second.

November 5-6: An approaching storm system dragged a cold front across Oklahoma on the fifth which provided the focus for a rare November severe weather outbreak. Storms formed in central Oklahoma and moved towards the northeast. Severe winds, large hail and heavy rains were common with the thunderstorms. A brief tornado dropped down in Osage County, rolling a mobile home and injuring two occupants. Baseball size hail fell near Piedmont and 70 mph winds were reported near Kaw City and Inola. One-to-two inches of rain fell in the I-44 corridor between Oklahoma City and the northeast corner of the state. More than 4 inches of rain was recorded in Perkins. The cold front made for a cool day on the sixth. Low temperatures that morning fell into the 30s and 40s to go along with winds which gusted to nearly 30 mph. Highs that day rebounded into the 60s and 70s.

November 7-9: Low temperatures were generally in the 30s and highs rose into the 50s and 60s during this three-day period.

November 10-11: A fast-moving storm system brought rain and storms to Oklahoma on the 10th. Showers formed in the morning before dissipating. Stronger storms struck later that afternoon and provided southeastern Oklahoma a good 1-3 inch soaking. Some large hail accompanied these storms. Skies cleared on the 11th and temperatures rose into the 50s and 60s.

November 12-19: This eight-day period generally had very pleasant afternoons which followed chilly mornings. Cold fronts moved through the state on the 14th and the 17th which cooled the state down temporarily, but the afternoons bounced back nicely. High temperatures by the end of the period were in the 70s, 15-20 degrees above normal.

November 20-23: A cold front on the 20th kept high temperatures below the 22nd's marks by about 25 degrees in the 40s and 50s. Winds gusted from the north about 45 mph behind the front. A gradual warm up through the 23rd eventually saw high temperatures back in the 60s and 70s. The month's coolest temperature of 13 degrees occurred at Buffalo on the 21st.

November 24-30: A series of cold fronts kept the weather during this seven-day stretch seasonable with cool, windy mornings and pleasant afternoons for the most part. Fronts moved through on the 24th, 26th and 29th. Light rain fell on the 27th and 28th with a front, and a bit of snow was mixed with rain on the 30th.

November 2008 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2008)
Month (November)	49.5ºF	1.2ºF	49th Warmest
Season-to-Date (Sep-Nov)	59.9ºF	-0.8ºF	30th Coolest
Year-to-Date (Jan-Nov)	61.3ºF	-0.2ºF	56th Coolest

Precipitation

	Total	Depart.	Rank (1895-2008)
Month (November)	1.00 in.	-1.82 in.	30th Driest
Season-to-Date (Sep-Nov)	7.55 in.	-2.46 in.	49th Driest
Year-to-Date (Jan-Nov)	36.25 in.	1.58 in.	28th Wettest

Depart. = Departure from 30-year normal

November 2008 Severe Weather

Significant Tornadoes (EF2 or greater)

No significant tornadoes were reported in the state.

Flooding

No significant flooding events were reported in the state.

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2.50	1 S Piedmont	Canadian	5

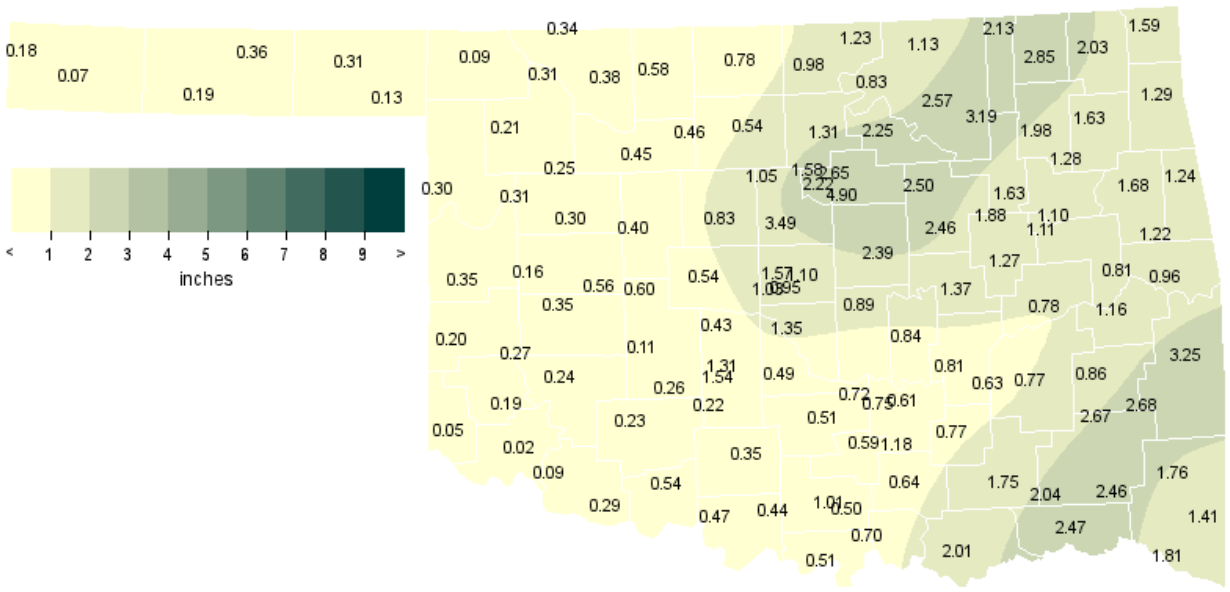
Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
70	Kaw City	Kay	5
70	Inola	Rogers	5

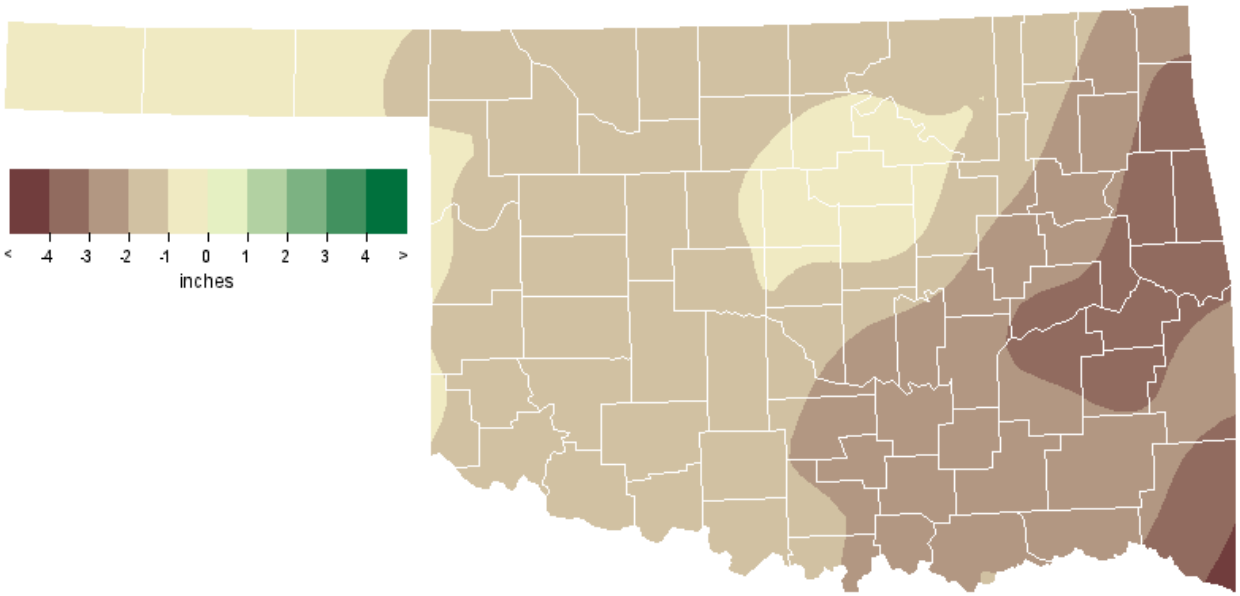
Record Event Reports

Description	Day	Location	Record	Previous Record	Year
High Maximum Temperature (tied)		Oklahoma City	83	83	1924

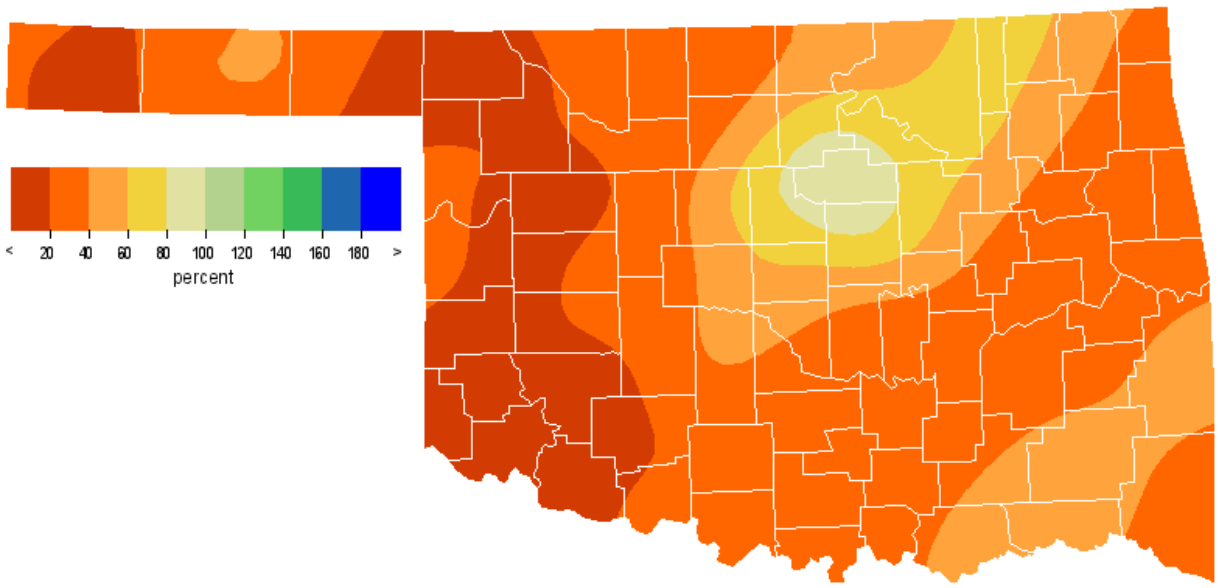
November 2008 Observed Precipitation



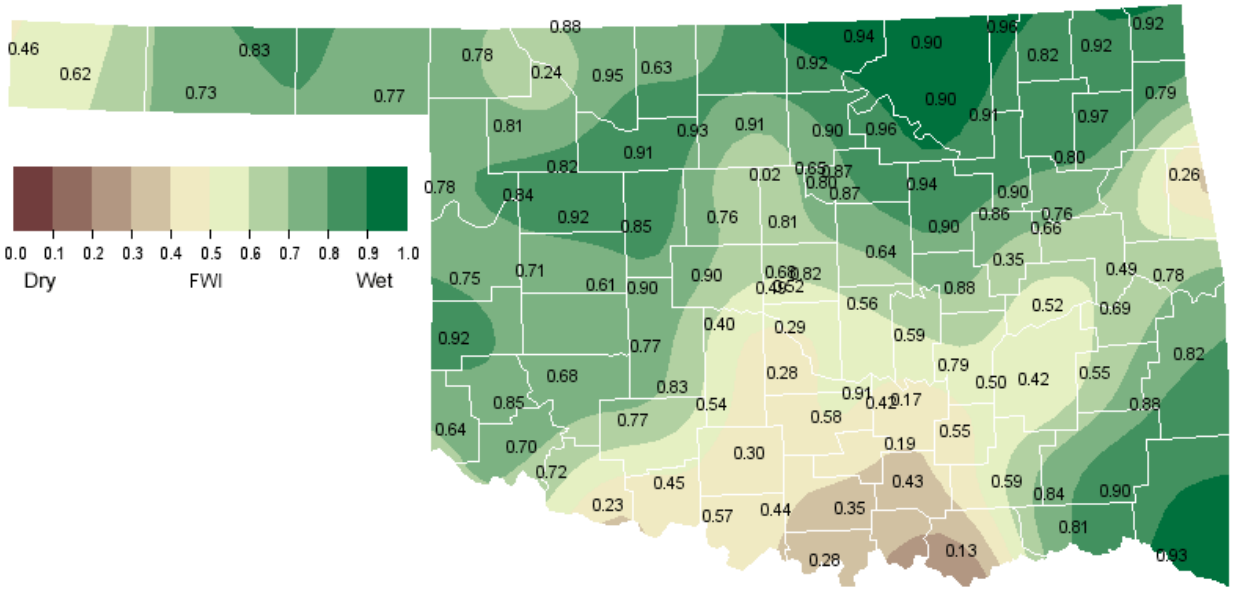
November 2008 Departure from Normal Precipitation



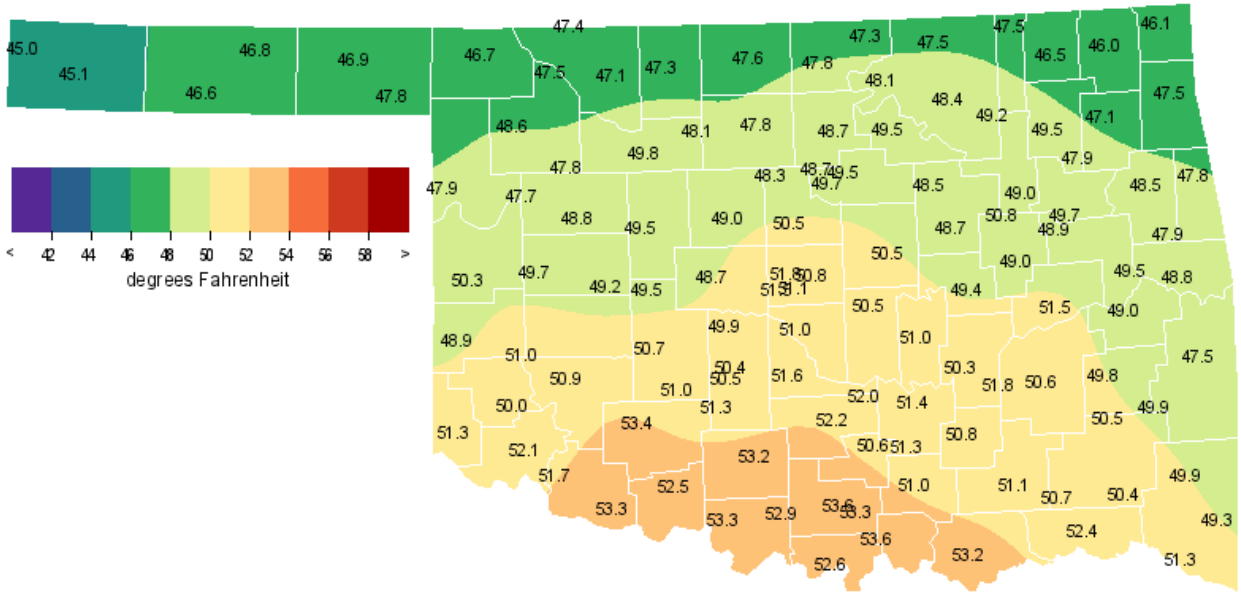
November 2008 Percent of Normal Precipitation



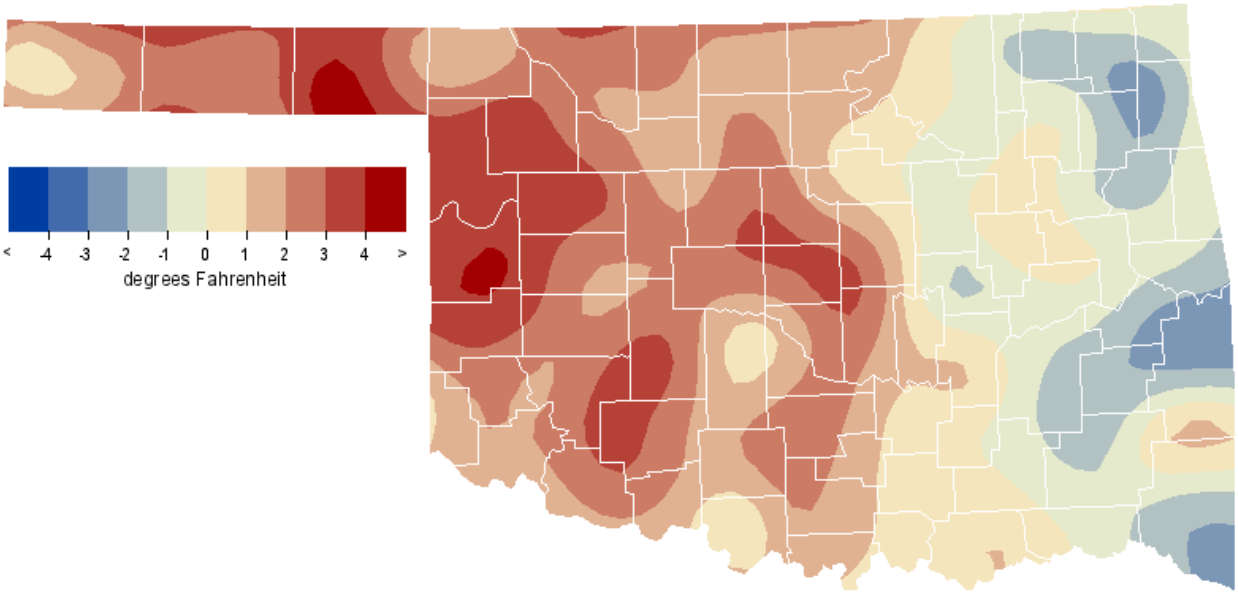
November 2008 Average Soil Moisture at 25cm



November 2008 Average Temperature



November 2008 Departure from Normal Temperature



Mesonet Monthly Summary for November 2008

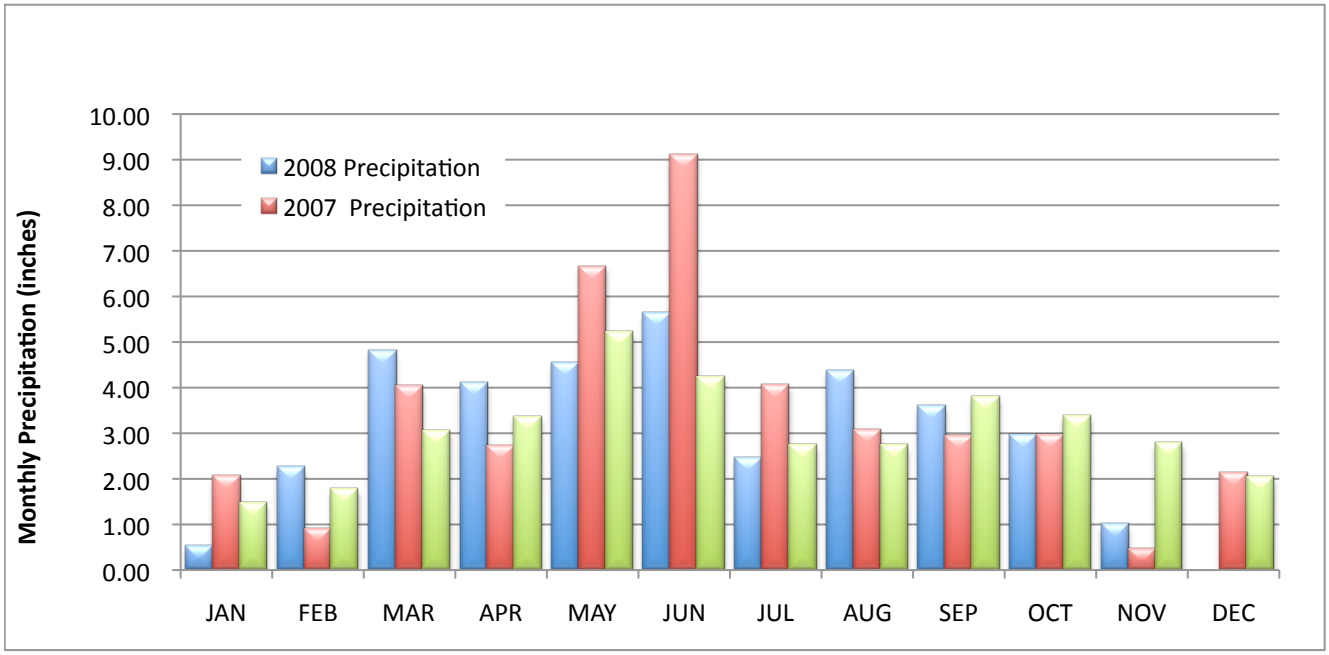
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	48.0	83	2	16	21	510	0	.30	.16	10
Beaver	46.9	86	2	15	21	548	4	.31	.18	10
Boise City	45.1	81	2	16	15	598	0	.07	.02	10
Buffalo	46.7	84	2	13	21	554	4	.09	.07	10
NORTH CENTRAL										
Alva	47.1	84	2	16	21	537	0	.38	.31	10
Blackwell	47.7	80	2	19	21	521	3	.98	.90	10
Breckinridge	47.8	81	2	16	21	520	4	.54	.52	10
Cherokee	47.3	82	2	18	21	533	1	.58	.43	10
Fairview	49.8	83	2	19	21	460	4	.45	.40	10
Freedom	47.5	85	2	15	21	526	2	.31	.29	10
Lahoma	48.1	82	2	20	21	509	2	.46	.41	10
NORTHEAST										
Bixby	49.0	80	1	22	21	485	6	1.63	.85	5
Burbank	48.1	81	3	17	21	515	7	.83	.69	10
Claremore	49.6	80	2	19	21	470	8	1.98	1.02	5
Copan	47.4	78	3	19	21	531	4	2.13	1.33	5
Foraker	47.5	80	3	16	21	528	4	1.13	.91	10
Inola	47.9	80	3	19	21	517	5	1.28	.60	5
Jay	47.4	78	2	16	21	534	7	1.29	.45	10
Miami	46.2	78	2	16	21	568	3	1.59	.85	5
WEST CENTRAL										
Bessie	51.0	82	2	21	21	****	****	.35	.21	10
Butler	49.7	83	2	18	21	463	3	.16	.10	10
Camargo	47.7	83	2	16	21	519	0	.31	.22	10
Cheyenne	50.2	81	19	21	21	443	1	.35	.25	10
Erick	48.9	81	2	16	21	485	0	.20	.10	10
CENTRAL										
Acme	51.2	82	2	16	21	423	9	.22	.15	10
Bowlegs	51.0	80	1	22	21	426	8	.84	.68	10
Bristow	48.7	81	2	20	21	495	5	2.46	1.49	5
Lake Carl Blac	48.7	82	2	18	21	496	7	1.58	.97	10
Chandler	50.6	80	2	20	21	440	7	2.39	1.74	5
Chickasha	50.4	83	2	23	21	445	8	1.31	.94	5
El Reno	48.7	82	2	17	21	490	1	.54	.26	5
Guthrie	50.4	82	2	22	21	448	12	3.49	2.92	5
Kingfisher	49.0	83	2	18	21	489	9	.83	.69	10
Marena	49.8	82	2	19	21	462	5	2.22	1.40	5
Minco	50.0	82	2	20	21	453	2	.43	.31	5
Marshall	48.4	82	2	16	21	509	10	1.05	.98	10
EAST CENTRAL										
Calvin	50.4	81	1	22	21	450	10	.81	.73	10
Cookson	48.0	76	2	21	21	513	3	1.22	.71	10
Eufaula	51.5	80	2	26	21	418	14	.78	.73	10
Haskell	48.9	79	2	21	21	485	1	1.11	.54	5
Hectorville	50.7	81	2	23	21	438	9	1.88	1.06	10
McAlester	50.6	80	1	22	21	441	9	.77	.62	10
Okmulgee	48.9	81	2	20	21	487	6	1.27	.77	10
SOUTHWEST										
Altus	52.1	83	5	23	21	393	7	.02	.01	10
Apache	51.0	81	2	19	21	422	2	.26	.15	5
Fort Cobb	50.6	83	2	25	21	436	4	.11	.04	5
Grandfield	53.3	84	5	21	21	360	9	.29	.25	10
Hinton	49.5	81	2	21	21	468	2	.60	.38	10
Hobart	50.9	83	2	21	21	426	2	.24	.14	10
SOUTH CENTRAL										
Ada	51.4	81	2	23	21	418	10	.61	.60	10
Ardmore	53.3	83	2	26	21	362	11	.50	.41	10
Burneyville	52.6	85	2	22	16	384	11	.51	.23	10
Byars	52.0	81	2	22	21	398	7	.72	.63	10
Centrahoma	50.7	81	2	21	21	439	11	.77	.57	10
Durant	53.2	85	2	28	21	370	15	2.01	1.73	10
Fittstown	51.3	80	1	23	21	417	5	1.18	.99	10
Ketchum Ranch	53.3	84	5	23	21	368	16	.35	.23	10
Lane	51.2	80	2	24	16	423	8	1.75	1.65	10
SOUTHEAST										
Antlers	50.7	80	2	23	16	436	6	2.04	1.91	10
Broken Bow	49.3	77	1	22	21	471	0	1.41	.57	11
Clayton	50.5	79	2	24	25	439	5	2.67	2.38	10
Cloudy	50.3	78	2	24	16	442	2	2.46	1.75	10
Hugo	52.4	80	2	27	21	382	4	2.47	1.84	10

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	46.6	82	2	18	22	552	0	.19	.14	10
Hooker	46.8	83	2	19	22	548	1	.36	.34	10
Kenton	45.1	81	2	14	25	598	0	.18	.09	28
Slapout	47.8	86	2	15	21	518	2	.13	.10	27
May Ranch	47.4	84	2	16	21	529	2	.34	.31	10
Medford	47.5	81	2	22	21	527	2	.78	.73	10
Newkirk	47.4	79	2	16	21	534	5	1.23	.98	10
Red Rock	48.7	81	2	17	21	494	7	1.31	.90	10
Seiling	47.8	84	2	15	21	517	1	.25	.12	10
Woodward	48.6	83	2	14	21	494	3	.21	.17	10
Nowata	46.5	78	1	18	21	558	2	2.85	2.10	5
Pawnee	49.8	81	2	20	21	****	****	2.25	1.59	5
Porter	49.7	81	2	21	21	465	7	1.10	.56	10
Pryor	47.1	80	2	17	21	539	2	1.63	.70	5
Skiatook	49.2	78	3	22	21	479	4	3.19	2.31	5
Vinita	45.9	78	2	16	21	573	1	2.03	1.36	5
Wynona	48.4	80	1	20	21	502	4	2.57	1.92	5
Putnam	48.8	82	2	19	21	489	2	.30	.28	10
Retrop	50.9	83	2	19	21	424	3	.27	.17	10
Watonga	49.5	80	2	20	21	467	1	.40	.33	10
Weatherford	49.2	79	1	19	21	475	1	.56	.37	10
Ninnekah	50.4	82	2	21	21	446	9	1.54	1.19	5
Norman	51.0	82	2	23	21	426	7	1.35	.96	5
Oilton	48.5	80	2	15	21	498	5	2.50	1.29	5
OKC East	50.4	82	2	23	21	****	****	.95	.50	5
OKC North	51.7	83	2	24	21	409	11	1.57	.90	5
OKC West	51.0	82	2	26	21	****	****	1.03	.58	10
Okemah	49.3	79	2	21	21	474	4	1.37	.71	5
Perkins	49.3	80	3	22	21	****	****	4.90	4.04	5
Shawnee	50.5	79	2	20	21	439	4	.89	.54	10
Spencer	50.9	81	2	20	21	432	9	1.10	.62	10
Stillwater	49.4	81	2	23	21	475	7	2.65	1.67	5
Washington	51.6	83	2	23	21	410	7	.49	.43	10
Sallisaw	48.7	80	2	23	16	493	4	.96	.74	10
Stigler	48.9	80	2	21	21	485	2	1.16	1.04	10
Stuart	51.8	81	1	23	21	409	12	.63	.62	10
Tahlequah	48.4	79	2	21	21	504	6	1.68	.98	6
Webbers Falls	49.5	82	2	24	21	469	5	.81	.66	10
Westville	47.8	77	1	18	21	519	2	1.24	.57	10
Hollis	51.3	83	2	21	21	414	3	.05	.04	27
Mangum	49.9	84	2	16	21	455	3	.19	.08	10
Medicine Park	53.4	81	2	25	21	354	7	.23	.17	5
Tipton	51.7	84	5	21	21	403	4	.09	.05	10
Walters	52.6	83	5	21	21	382	9	.54	.47	10
Madill	53.6	85	2	24	16	360	17	.70	.34	5
Newport	53.6	84	2	27	21	355	14	1.01	.61	5
Pauls Valley	52.2	83	2	26	21	395	10	.51	.51	10
Ringling	52.9	83	1	23	21	375	13	.44	.39	10
Sulphur	50.6	81	1	22	21	442	11	.59	.57	10
Tishomingo	50.8	82	2	23	16	****	****	.64	.44	10
Vanoss	51.2	81	2	22	21	****	****	.75	.70	10
Waurika	53.3	84	5	22	21	366	14	.47	.22	5
Idabel	51.2	79	2	24	25	417	4	1.81	.80	11
Mt Herman	49.9	77	1	24	16	455	2	1.76	.71	10
Talihina	49.8	80	1	21	25	461	5	2.68	2.43	10
Wilburton	49.8	81	1	22	16	467	11	.86	.65	10
Wister	47.5	81	1	20	22	526	0	3.25	2.98	10

November 2008 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Nov-07
Panhandle	0.20	-0.84	31st Driest	4.07 (1909)	0.00 (1897)	0.10
North Central	0.60	-1.48	38th Driest	6.48 (1964)	0.00 (1910)	0.06
Northeast	1.83	-1.79	41st Driest	7.37 (1994)	0.00 (1904)	0.61
West Central	0.32	-1.41	26th Driest	6.62 (1964)	0.00 (1897)	0.05
Central	1.57	-1.24	47th Driest	6.88 (1931)	0.00 (1910)	0.56
East Central	1.10	-3.20	23rd Driest	10.16 (1996)	0.20 (1914)	0.61
Southwest	0.24	-1.49	20th Driest	6.61 (2004)	0.00 (1897)	0.27
South Central	0.79	-2.31	25th Driest	7.62 (1902)	0.00 (1903)	0.77
Southeast	2.14	-2.93	36th Driest	13.16 (1946)	0.00 (1903)	1.13
Statewide	1.00	-1.82	30th Driest	6.12 (2004)	0.14 (1910)	0.47

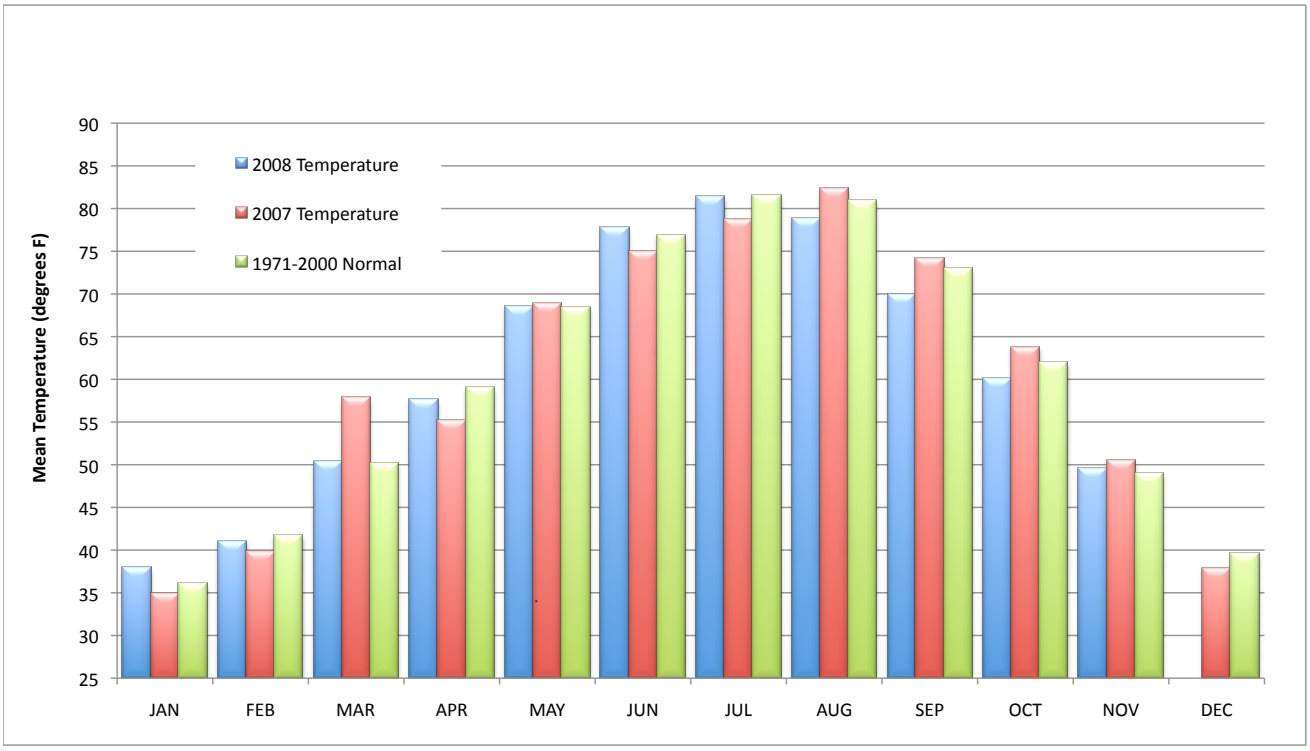
2007 and 2008 Statewide Precipitation Monthly Totals vs. Normal



November 2008 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Nov-07 (F)
Panhandle	46.6	2.6	28th Warmest	51.4 (1999)	36.0 (1929)	44.8
North Central	47.9	1.6	43rd Warmest	54.5 (1999)	39.0 (1929)	48.0
Northeast	48.0	0.0	56th Coolest	56.4 (1999)	40.9 (1929)	50.1
West Central	49.4	2.6	33rd Warmest	54.7 (1999)	39.7 (1929)	48.9
Central	50.1	1.3	48th Warmest	56.8 (1999)	41.3 (1929)	51.2
East Central	49.6	-0.3	54th Coolest	57.8 (1999)	43.4 (1929)	52.3
Southwest	51.5	2.3	36th Warmest	56.3 (1999)	42.1 (1929)	51.8
South Central	52.3	1.3	50th Warmest	58.3 (1927)	44.1 (1929)	54.4
Southeast	50.2	-0.5	46th Coolest	58.9 (1909)	44.1 (1976)	53.6
Statewide	49.5	1.2	49th Warmest	56.0 (1999)	41.3 (1929)	50.5

2007 and 2008 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for November 2008

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	86	2nd	Slapout	13	21st	Buffalo	0.36	Hooker	0.34	10th	Hooker
North Central	85	2nd	Freedom	14	21st	Woodward	1.31	Red Rock	0.98	10th	Newkirk
Northeast	81	2nd	Pawnee	16	21st	Miami	3.19	Skiatook	2.31	5th	Skiatook
West Central	83	2nd	Camargo	16	21st	Camargo	0.56	Weatherford	0.37	10th	Weatherford
Central	83	2nd	Chickasha	15	21st	Oilton	4.90	Perkins	4.04	5th	Perkins
East Central	82	2nd	Webbers Falls	18	21st	Westville	1.88	Hectorville	1.06	10th	Hectorville
Southwest	84	5th	Grandfield	16	21st	Mangum	0.60	Hinton	0.47	10th	Walters
South Central	85	2nd	Burneyville	21	21st	Centrahoma	2.01	Durant	1.73	10th	Durant
Southeast	81	1st	Wilburton	20	22nd	Wister	3.25	Wister	2.98	10th	Wister
Statewide	86	2nd	Slapout	13	21st	Buffalo	4.90	Perkins	4.04	5th	Perkins

December Climatological 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.

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

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.

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

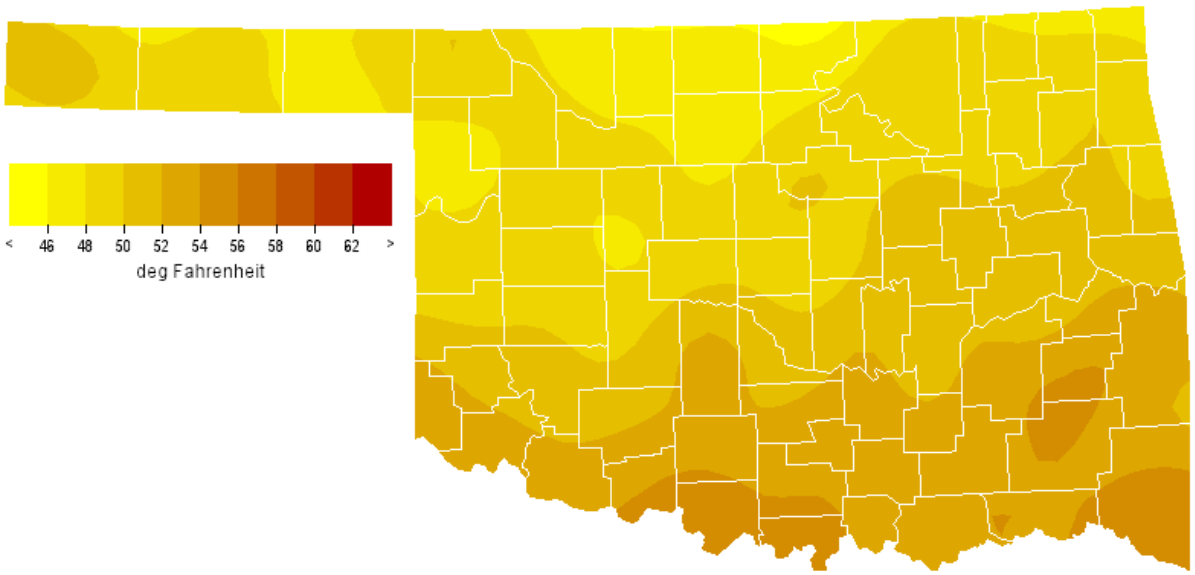
Snow is common in the northwestern portions of the state by late December. Boise City averages 6.1 inches of snow per December. Stations in the far southern portions of the state generally average less than one-half inch of snow during December. Records for snowfall extremes were set at Beaver. That 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.

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.

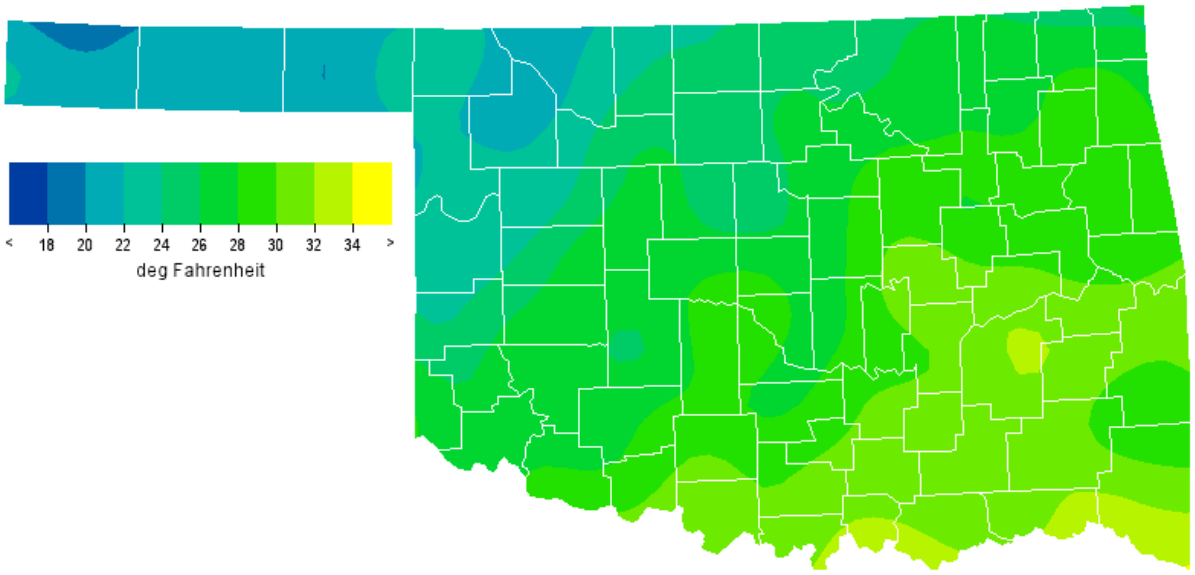
Tornadoes are not a regular December feature. Only 22, occurring in seven different years, are included in the comprehensive database that begins in 1950. Four tornadoes were reported in Oklahoma during each of 1971, 1975, and 1982.

Tornadoes
Average December Tornadoes: 0.4
Most: 4 (1982)

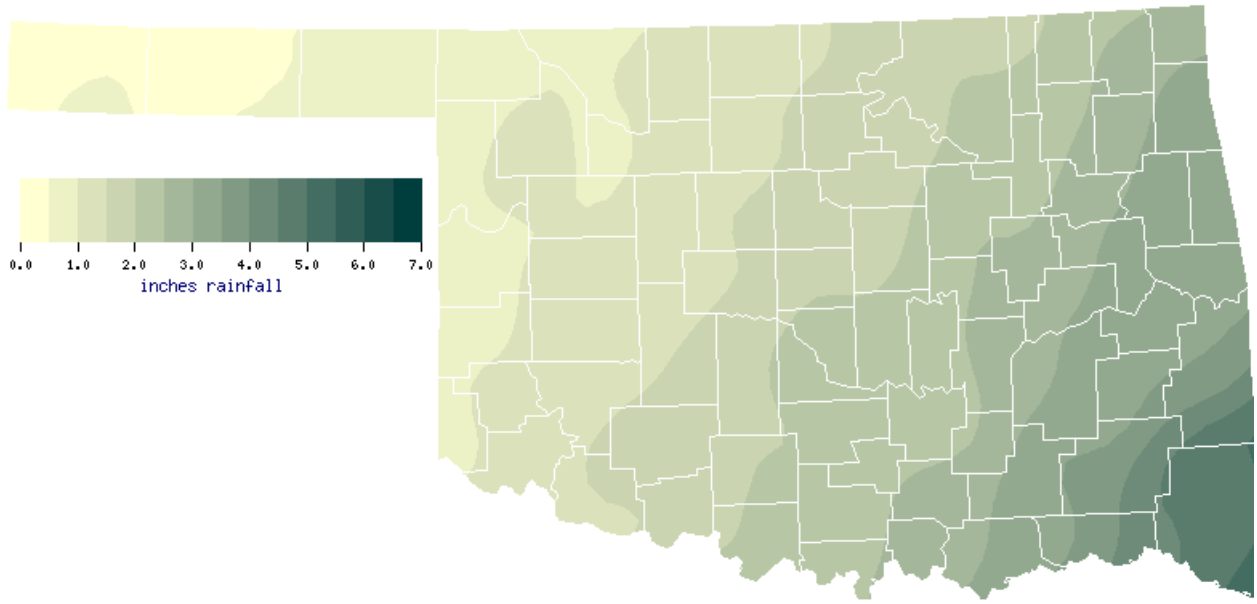
December Normal Daily Maximum Temperature (1971-2000)



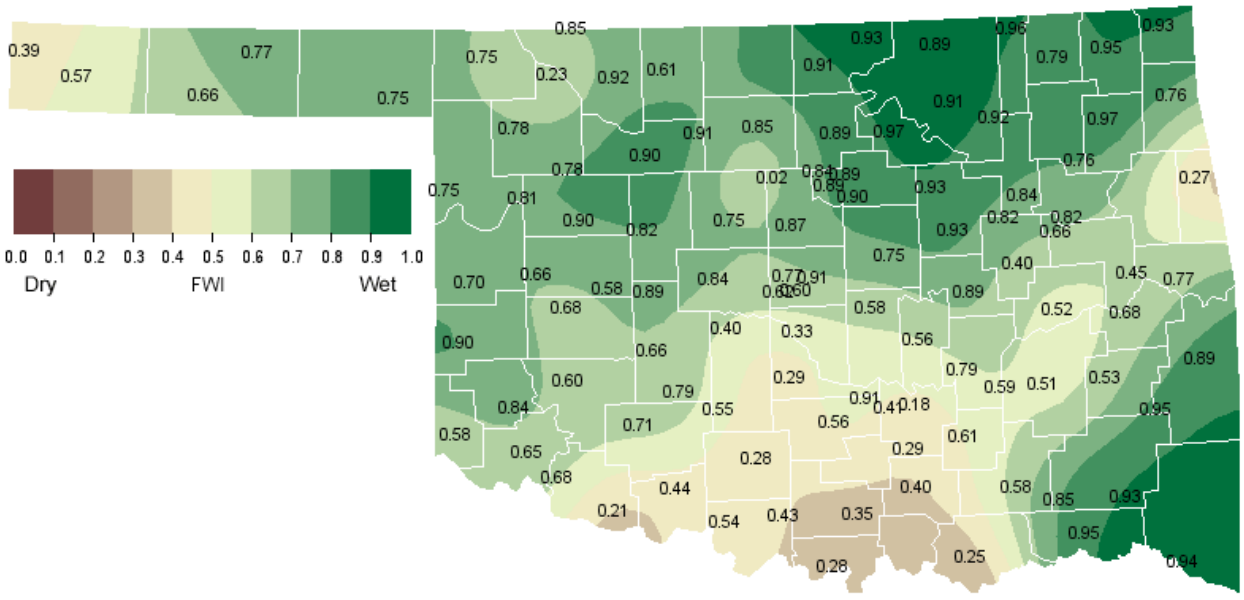
December Normal Daily Minimum Temperature (1971-2000)



December Normal Precipitation (1971-2000)



December 1, 2008 Soil Moisture Conditions at 25cm



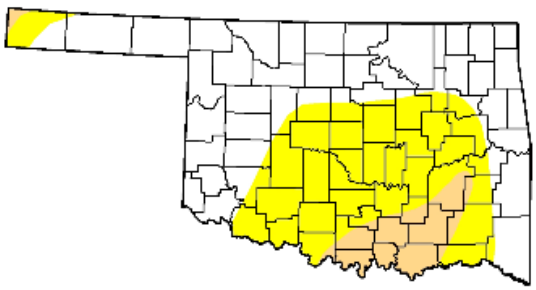
December 2008 Drought Indices

U.S. Drought Monitor
Oklahoma

December 2, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	55.2	44.8	8.6	0.0	0.0	0.0
Last Week (11/25/2008 map)	58.2	41.8	8.6	0.0	0.0	0.0
3 Months Ago (09/09/2008 map)	77.8	22.2	5.8	3.5	0.0	0.0
Start of Calendar Year (01/01/2008 map)	83.4	16.6	7.1	0.0	0.0	0.0
Start of Water Year (10/07/2008 map)	84.4	15.6	5.0	3.5	0.0	0.0
One Year Ago (12/04/2007 map)	64.5	35.5	15.7	0.0	0.0	0.0



Intensity:

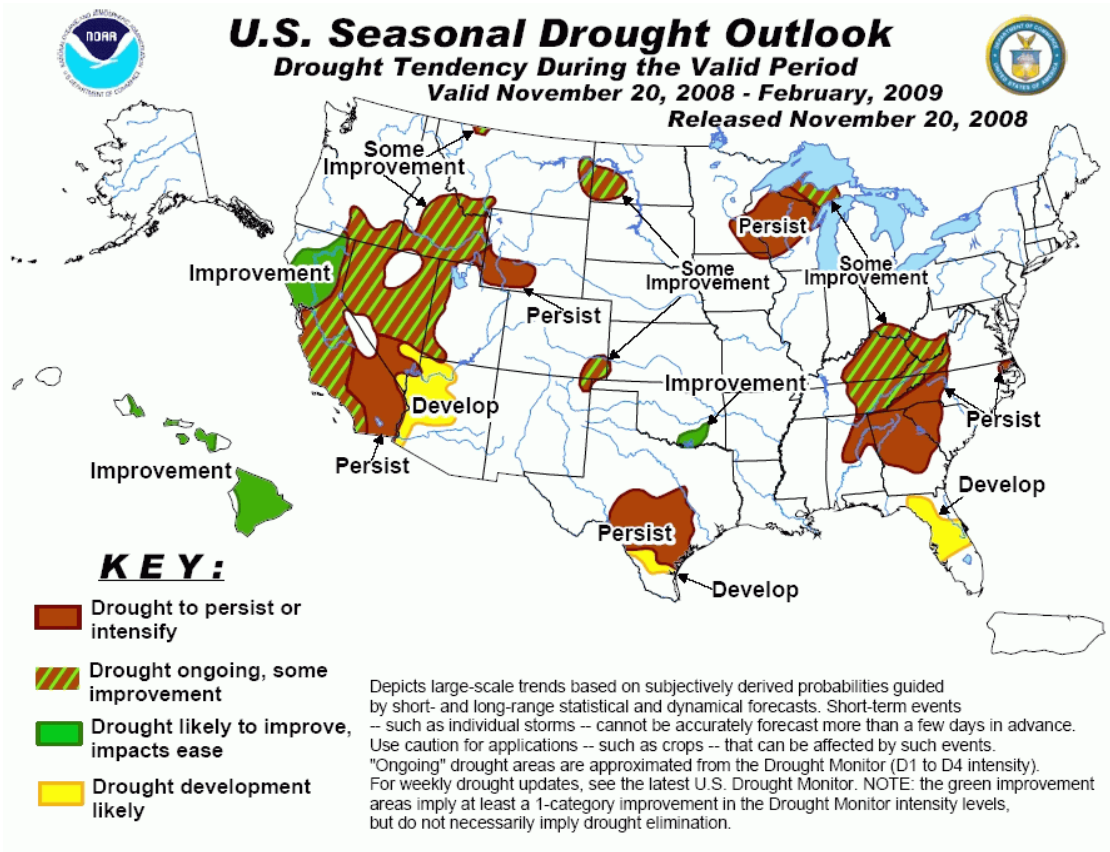
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

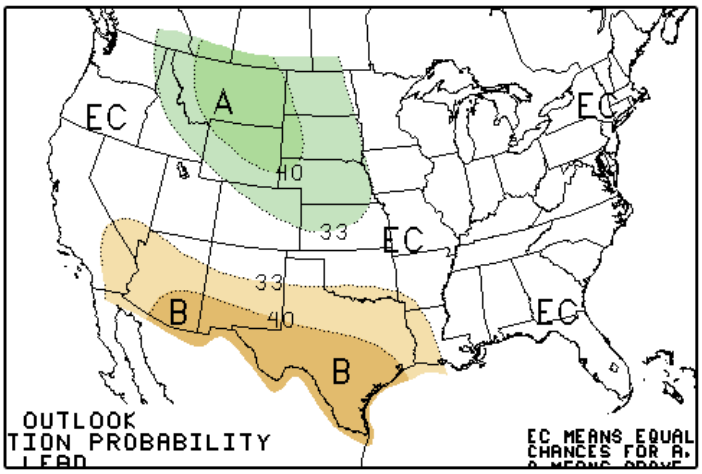
http://drought.unl.edu/dm

USDA · National Drought Mitigation Center

Released Thursday, December 4, 2008
Author: M. Brewer/L. Love-Brotak, NOAA/NESDIS/NCDC



December 2008 U.S. Precipitation Forecast



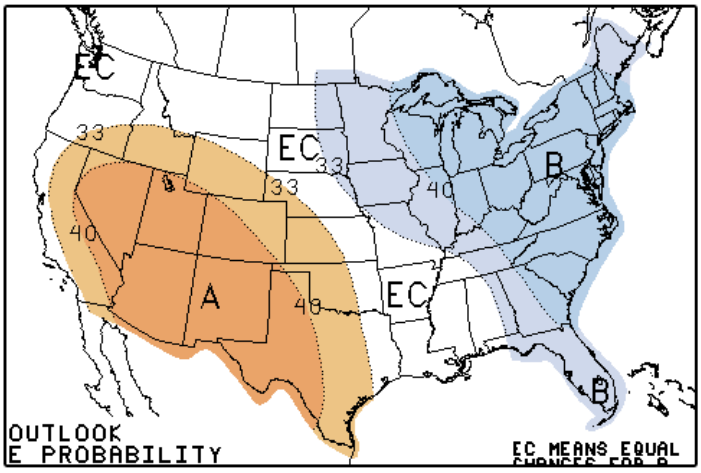
Percent Likelihood of Above or Below Average Precipitation*

5% - 10%
0% - 5%
A = Above

0% - 5%
5% - 10%
B = Below

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

December 2008 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

10% - 20%
5% - 10%
0% - 5%
A = Above

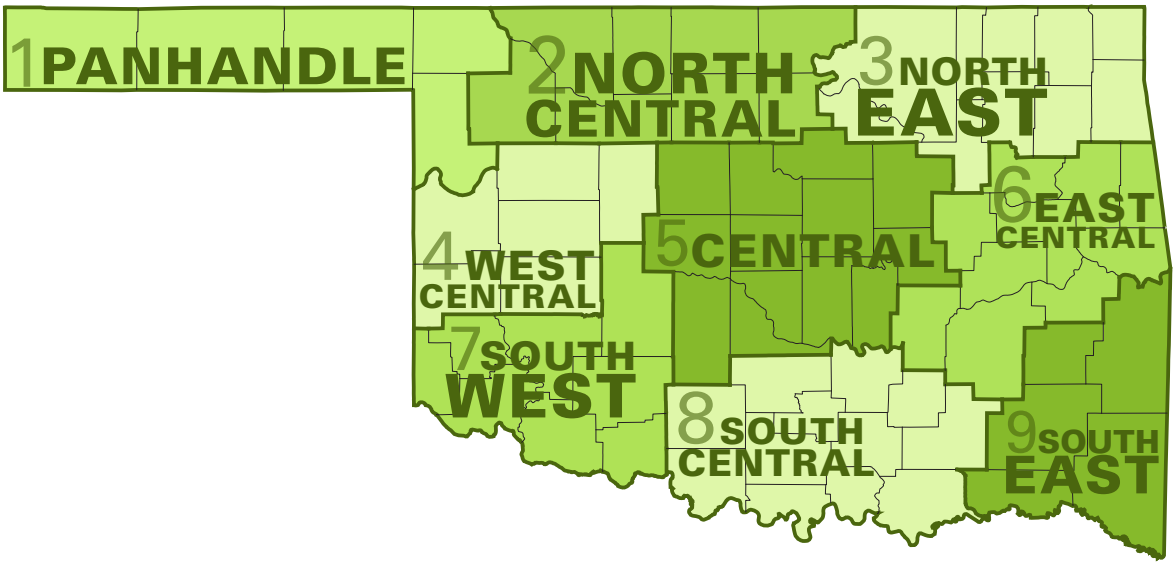
0% - 5%
5% - 10%
B = Below

*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/
E-mail (ocs@ou.edu) or telephone (405/325-2541)

OKLAHOMA CLIMATOLOGICAL SURVEY

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