OKLAHOMA MONTHLY CLIMATE SUMMARY
DECEMBER 2006

OKLAHOMA CLIMATOLOGICAL SURVEY

Winter struck with a vengeance in the Oklahoma Panhandle during December, while the eastern half of the state was blessed with between 3-6 inches of soaking rainfall. The Panhandle's fortunes were somewhat star-crossed as the wintry weather provided their wettest December on record, but also left thousands without power for nearly the latter half of the month and buried some areas under 20 feet of drifted snow. The heavy precipitation for both areas contributed to the 12th wettest December for the entire state. Despite the drought recovery realized in the year's latter half, the year-end total still finished eight inches below normal, ranking as the 23rd driest since records began in 1895. The month was also warm as all areas except the far western Oklahoma Panhandle experienced above normal temperatures. The 27th warmest December on record in the state contributed to 2006's final ranking as the 2nd warmest.

Precipitation

Two broad areas propelled the state to a statewide average surplus of nearly two inches. Western Oklahoma and portions of eastern Oklahoma were 200 percent of normal, while other areas were between 120-160 percent of normal. The Oklahoma Panhandle was more than three inches above normal. The west central region recorded a surplus of more than two inches. A portion of north central Oklahoma and the far southeastern corner were actually near or below normal. The southeast, on average, had a surplus of less than an inch. For the year, north central Oklahoma suffered its 8th driest January-December on record at nearly 12 inches below normal. The southeast bounced back from a very dry beginning to finish nearly four inches below normal, the 50th driest year on record.

Temperature

While virtually the entire state was above normal for the month, an area from northwest through north central Oklahoma saw the greatest temperature anomaly. At four degrees above normal, that area helped the statewide average temperature to finish at nearly three degrees above normal. The far western Panhandle was actually a bit below normal, but by less than a degree. That small cool spot didn't hamper the rest of that area from finishing nearly three degrees above normal as well, the 28th warmest December on record. For the year, the statewide average temperature was more than two degrees above normal, the second warmest year on record for Oklahoma, second to 1954.

December 2006 Statewide Extremes

Description	Extreme	Station	Date
High Temperature	79ºF	Erick	Dec 16
Low Temperature	-2ºF	Nowata	Dec 4
High Precipitation	6.11 in.	Hugo	
Low Precipitation	1.44 in.	Medford	

December Daily Highlights

December 1-6: Snow remaining on the ground from a late-November winter storm helped keep northern Oklahoma temperatures below normal for the first few days of December. While the rest of the state was enjoying high temperatures in the 40s and 50s, areas with snow pack in northern Oklahoma remained in the 30s. Low temperatures suffered a similar fate, dropping into the single digits and teens in northern Oklahoma, but in the 20s and 30s elsewhere. The lowest temperature of the month, -2 degrees, occurred at Nowata on the 4th. The entire state began to warm on the 5th and 6th with the help of strong southerly winds in advance of an approaching cold front. Highs in the 50s and 60s quickly melted the snow and gave the state a couple of pleasant days.

December 7-16: The next ten days were fairly uneventful, marked by a cold front passage on the 7th followed by unseasonably warm weather the 10th through the 16th. Lows were mostly in the 20s and 30s the first three days of this period, with highs struggling to reach 50 degrees. Strong southerly winds on the 10th ushered in more mild weather with highs in the 60s. Lows remained in the 40s and 50s on the 11th before temperatures rose into the 60s to near 70 degrees. High temperatures for the remainder of this period were 10-20 degrees above normal, mainly in the 60s and 70s. Very little precipitation fell during this period, other than a few light rain showers in eastern Oklahoma from the 9th through the 11th.

December 17-20: A cold front moved into the state early on the 17th, dropping temperatures into the 30s behind it. Temperatures rebounded in that region to the upper 40s, while south of the boundary highs reached into the mid-70s. The front

pushed through the state on the 18th, in time for the approach of a powerful upper-level storm on the 19th. Heavy rains occurred in western Oklahoma, with freezing rain and a bit of snow falling in the far northwestern corner of the state. The area around Butler and Cheyenne received nearly three inches, with 1-2 inch totals further north and east. The weather in the Panhandle turned into a major winter storm. More than an inch of ice coated the landscape during the initial ice storm. Later, the precipitation turned to snow, dropping up to five inches in some areas. The ice accumulation brought travel to a standstill and snapped power poles and lines, leaving thousands without power. Large tree limbs succumbed to the ice's weight, falling onto cars and structures. The precipitation shifted to the south and east during the nighttime hours. Amounts from 1-3 inches were reported across the state on the 20th.

December 21-27: Fairly seasonable weather ensued for the next seven days, with highs generally hovering in the 50s and lows in the 20s and 30s. A cold front on the 25th brought light rain to the east and a few snowflakes to the west. High temperatures that day only reached into the 40s, and northerly winds gusting to 35 mph made it seem much colder. Highs had warmed back up into the 60s by the 27th, accompanied by southerly winds gusting to 30 mph.

December 28-31: A powerful upper-level storm barreled its way towards Oklahoma on the 28th, increasing clouds and pumping moisture up on strong southerly winds. The upper-level storm arrived on the 29th and promptly slowed down, which resulted in a heavy rain event in eastern Oklahoma and another major winter storm for the Oklahoma Panhandle. The rain began early on the 29th and by the time it had ended on the 30th, more than four inches had fallen in the southeast. Most of the southeastern half of the state recorded at least an inch of rainfall, with totals tapering off to the northwest. Amounts once again increased in the extreme northwest. While freezing rain fell farther to the east, the western Oklahoma Panhandle was in the grip of a full-fledged Plains blizzard. Officially, up to 18 inches fell in Cimarron County. According to the NWS office in Amarillo, unofficial amounts of up to four feet were reported in western Cimarron County. Drifts of up to 20 feet were reported in the area, and most roads in Cimarron County were closed. Twenty families had to be dug out and rescued by emergency crews due to snow drifting over their houses. Farther to the east in Texas County, an ice storm warning was issued as freezing rain felled power poles and lines, leaving thousands without power. The month's final day was chilly with highs in the 30s and 40s and northerly winds gusting to over 30 mph.

December 2006 Statewide Statistics

Temperature

	Average	Depart.	Rank (1892-2006)
Month (Dec)	41.9ºF	2.9ºF	27th Warmest
Year-to-Date (Jan-Dec)	62.2ºF	2.5ºF	2nd Warmest

Precipitation

	Total	Depart.	Rank (1892-2006)
Month (Dec)	3.67 in.	1.65 in.	12th Wettest
Year-to-Date (Jan-Dec)	28.69 in.	-8.00 in.	23rd Driest

Depart. = Departure from 30-year normal

December 2006 Severe Weather

Significant Tornadoes (F2 or greater)

No significant tornadoes reported in the state.

Hail (2 inches in diameter or greater)

No significant hail reported in the state.

Wind Gusts (70 mph or greater)

No wind gust 70 mph or greater reported in the state.

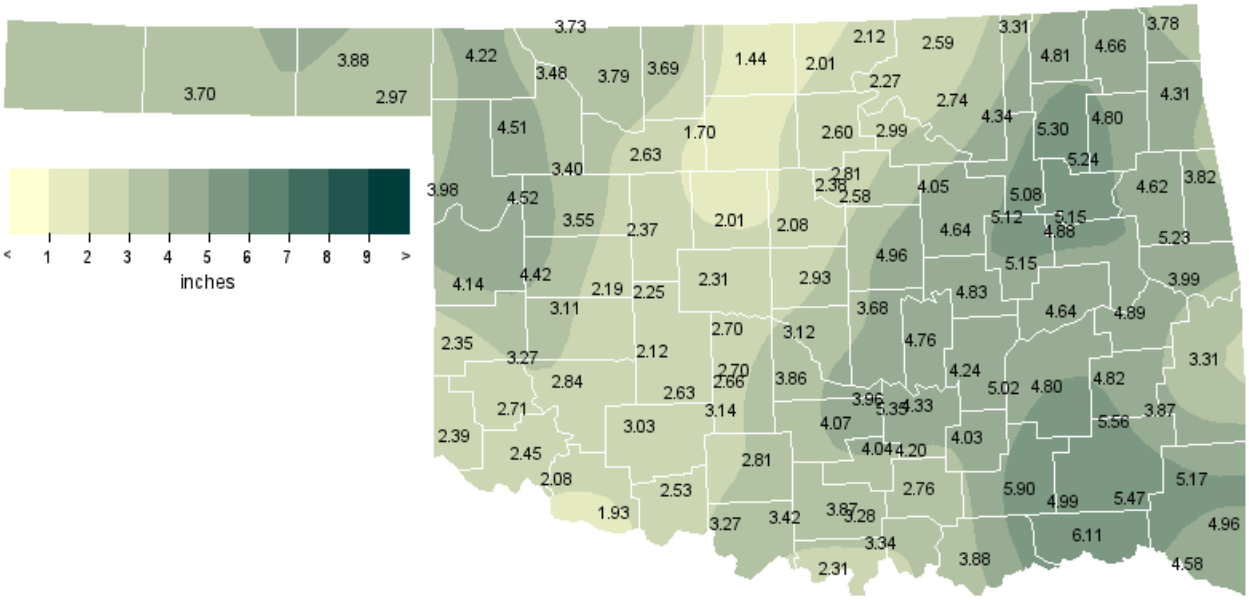
Flooding

Location	County	Day
2 E Soper	Choctaw	30
Antlers	Pushmataha	30
1 W McAlester	Pittsburg	30
5 W Wilburton	Latimer	30

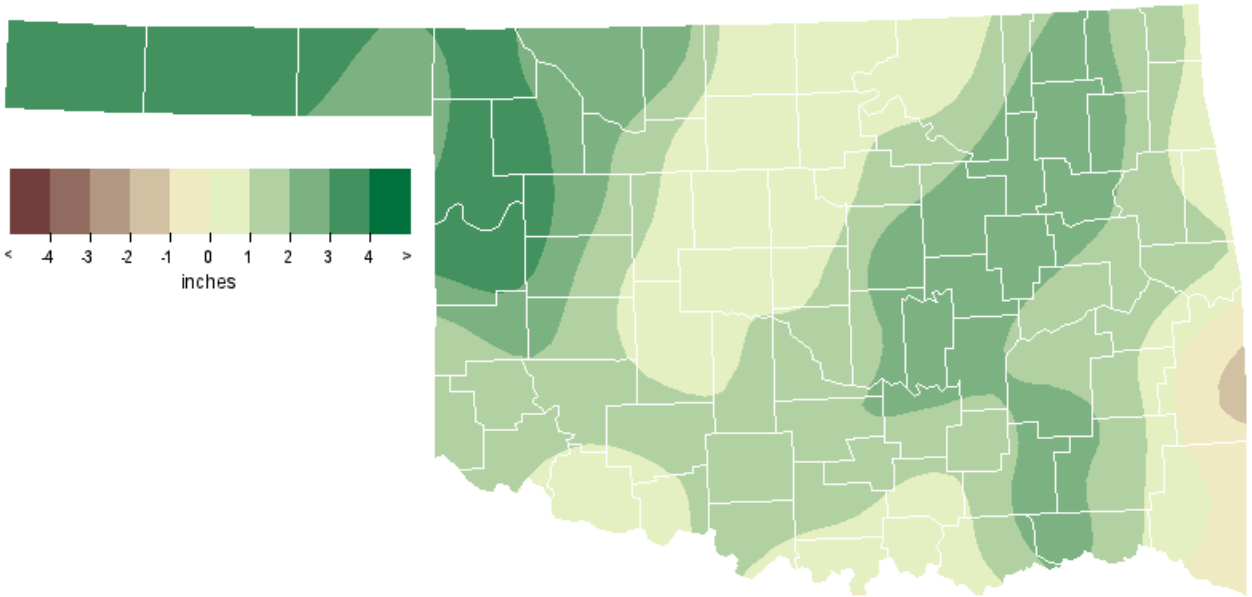
Record Event Report

Description	Day	Location	Record	Previous Record	Year
Coolest Minimum Temperature	1	McAlester	15	18	1985
Coolest Minimum Temperature	1	Tulsa	13	14	1985
Daily Snowfall	1	Tulsa	0.3 inches	0.1 inches	1991
Coolest Minimum Temperature	2	Tulsa	9	11	1985
Coolest Minimum Temperature	3	McAlester	19	21	1963
Coolest Minimum Temperature	3	Tulsa	14	15	1929
Coolest Minimum Temperature	4	Bartlesville	-2	19	2002
Coolest Minimum Temperature (tied)	4	McAlester	18	18	1978
Coolest Minimum Temperature	4	Muskogee	15	20	1945
Coolest Minimum Temperature	4	Tulsa	16	20	1945
Warmest Maximum Temperature	16	Oklahoma City	76	73	1939
Warmest Maximum Temperature	17	McAlester	74	72	2002
Daily Rainfall	20	Tulsa	1.83 inches	1.44 inches	1991
Daily Rainfall	29	Oklahoma City	0.51 inches	0.23 inches	1972
Daily Rainfall	30	Tulsa	0.56 inches	0.36 inches	1922

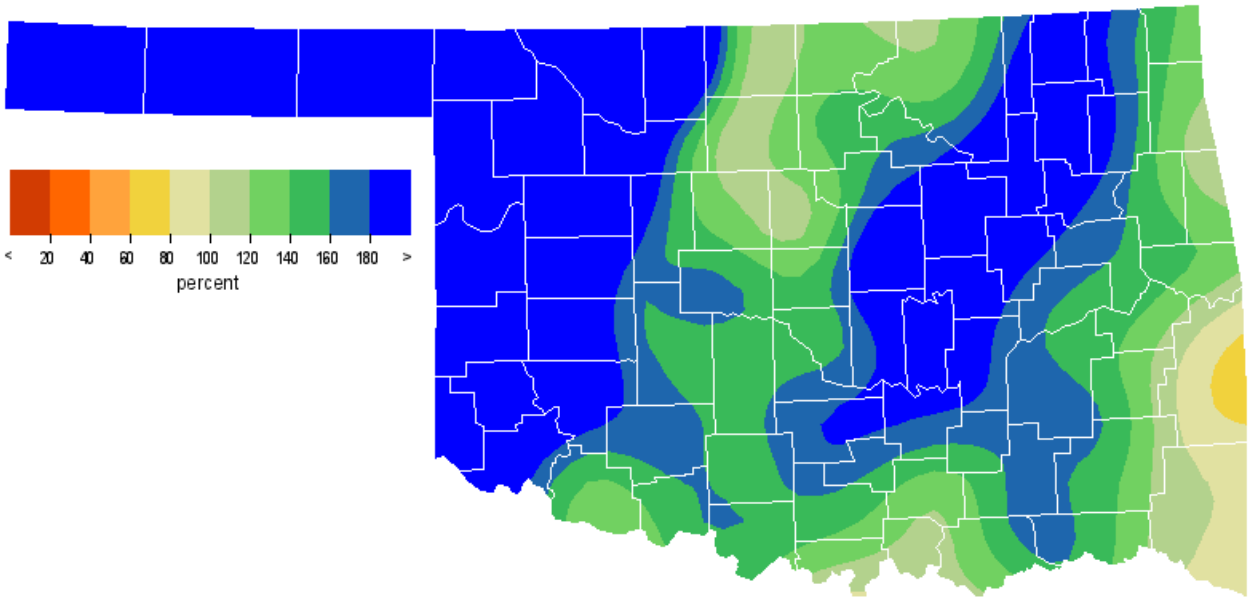
December 2006 Observed Precipitation



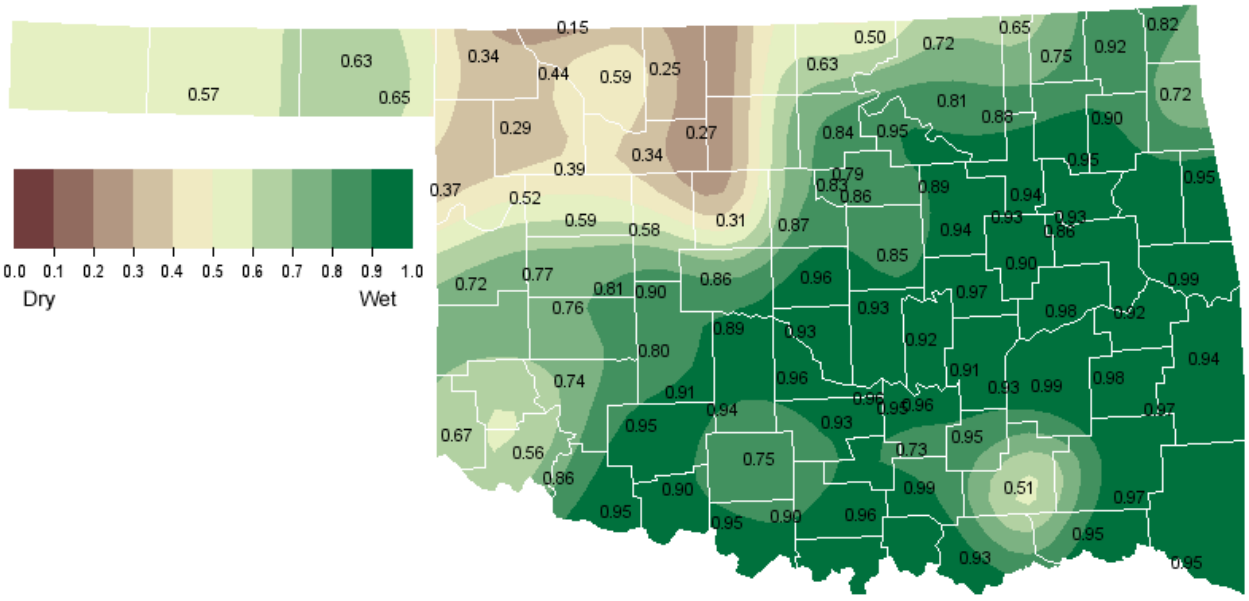
December 2006 Departure from Normal Precipitation



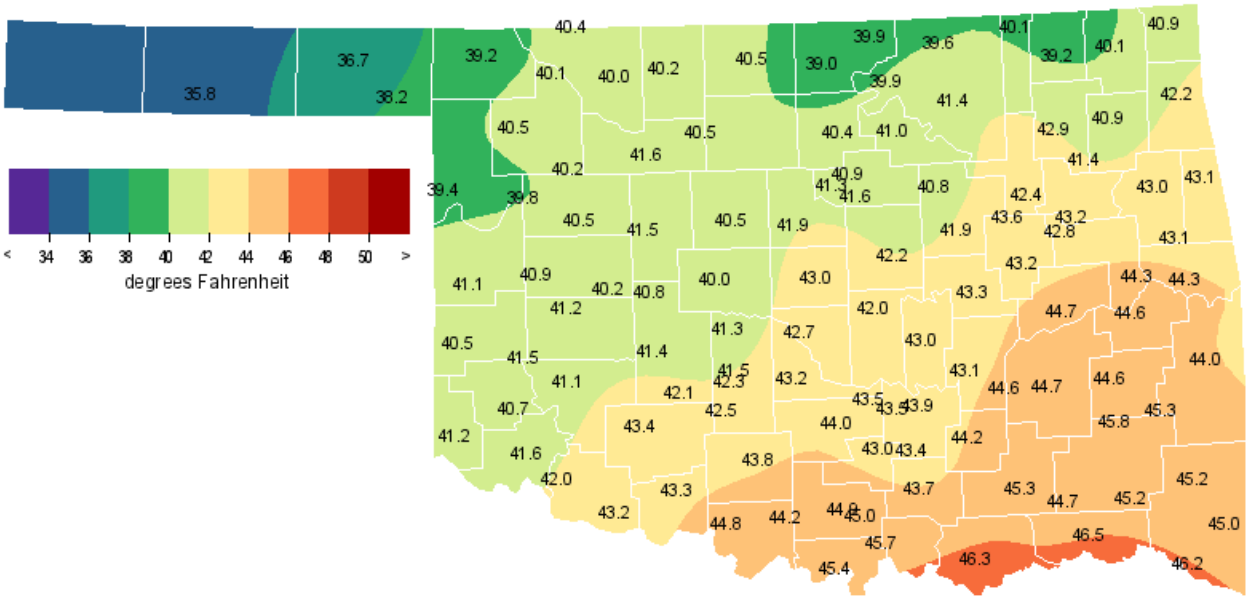
December 2006 Percent of Normal Precipitation



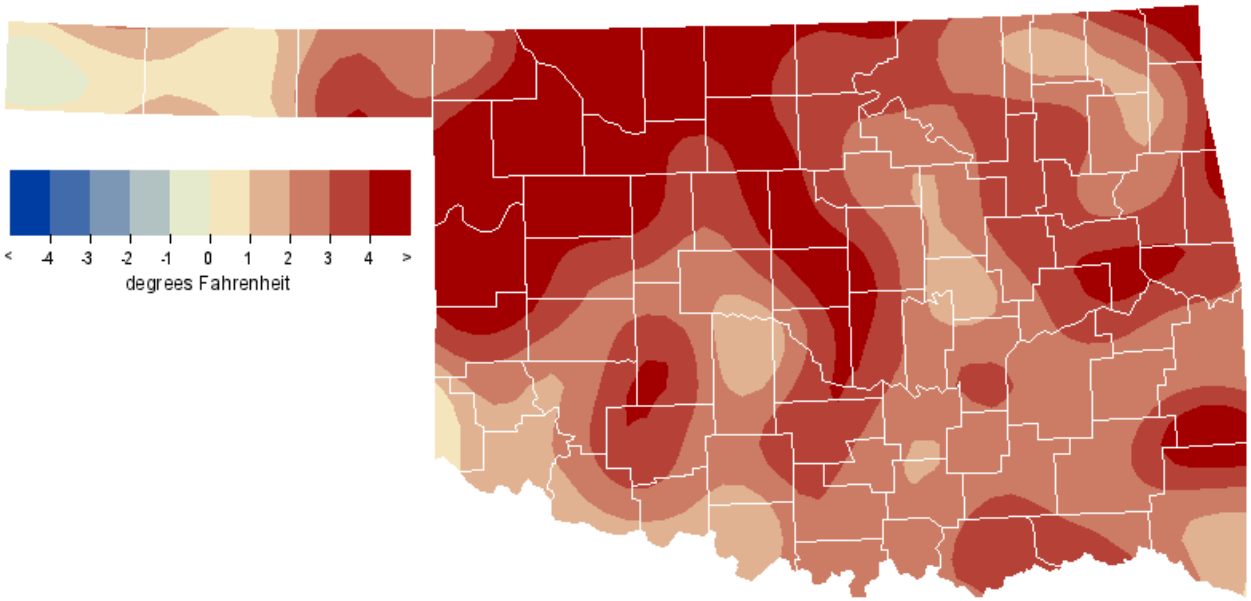
December 2006 Average Soil Moisture at 25cm



December 2006 Average Temperature



December 2006 Departure from Normal Temperature



Mesonet Monthly Summary for December 2006

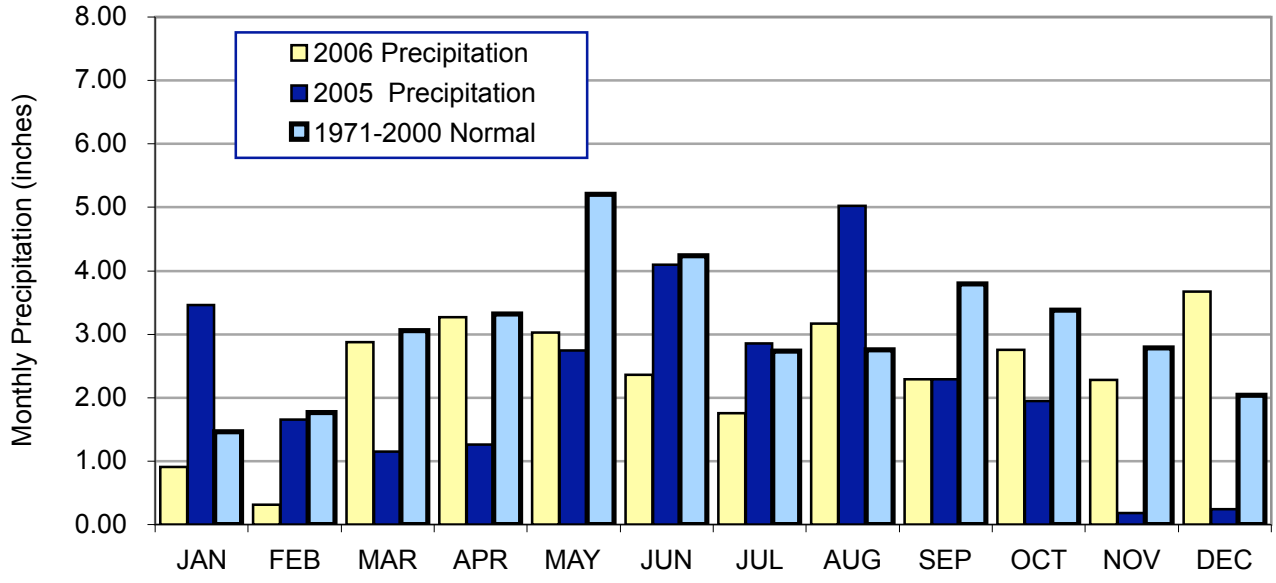
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	39.4	75	16	9	1	795	0	3.98	1.92	29
Beaver	36.7	67	15	3	1	877	0	3.88	2.66	29
Boise City	34.6	67	15	14	23	****	****	*****	.29	28
Buffalo	39.3	68	15	10	1	798	0	4.22	1.95	29
NORTH CENTRAL										
Alva	40.0	67	14	9	1	774	0	3.79	1.57	19
Blackwell	39.0	70	16	0	1	806	0	2.01	.73	20
Breckinridge	*****	***	***	***	***	****	****	*****	*****	***
Cherokee	40.2	67	14	7	1	769	0	3.69	1.79	19
Fairview	41.5	73	16	7	1	727	0	2.63	.90	19
Freedom	40.2	67	14	7	1	770	0	3.48	1.40	19
Lahoma	40.4	71	16	6	1	762	0	1.70	.60	20
NORTHEAST										
Bixby	42.4	74	16	6	2	700	0	5.08	1.67	20
Burbank	39.8	74	16	4	2	782	0	2.27	.74	20
Claremore	42.9	74	16	7	2	686	0	5.30	1.64	20
Copan	40.1	72	16	5	2	771	0	3.31	1.34	20
Foraker	39.2	72	16	3	2	****	****	2.59	.96	20
Inola	41.5	73	17	8	3	730	0	5.24	1.45	20
Jay	42.2	73	15	6	8	706	0	4.31	1.12	30
Miami	40.9	72	16	-1	2	748	0	3.78	1.14	30
WEST CENTRAL										
Bessie	41.2	75	16	8	1	737	0	3.11	1.44	19
Butler	40.9	77	16	6	1	748	0	4.42	2.94	19
Camargo	39.8	76	16	3	1	782	0	4.52	2.21	19
Cheyenne	41.1	75	16	16	1	740	0	4.14	2.63	19
Erick	40.5	79	16	6	1	760	0	2.35	1.10	29
CENTRAL										
Acme	42.5	75	16	4	1	699	0	3.14	1.16	19
Bowlegs	43.0	73	16	8	1	681	0	4.76	1.14	29
Bristow	42.0	74	16	7	2	714	1	4.64	1.46	20
Chandler	42.2	74	16	7	2	707	0	4.96	1.78	20
Chickasha	41.5	74	16	6	1	729	0	2.70	.83	19
El Reno	40.0	73	16	5	1	774	0	2.31	.84	20
Guthrie	42.0	75	16	9	1	714	0	2.08	.68	20
Kingfisher	40.4	72	16	4	1	762	0	2.01	.64	20
Marena	41.3	75	16	9	2	736	0	2.38	.75	20
Minco	41.3	72	16	11	1	734	0	2.70	.75	29
EAST CENTRAL										
Calvin	43.1	74	17	11	8	680	0	4.24	1.46	29
Cookson	43.2	72	16	5	8	677	0	5.23	1.57	30
Eufaula	44.7	72	16	13	8	629	1	4.64	2.06	29
Haskell	42.8	73	16	12	4	689	0	4.88	1.56	29
Hectorville	43.6	73	16	11	8	665	1	5.12	1.69	29
McAlester	44.8	73	17	12	8	630	2	4.80	2.71	29
Okmulgee	43.2	74	16	11	8	678	1	5.15	1.84	29
SOUTHWEST										
Altus	41.6	79	16	7	1	725	0	2.45	.89	19
Apache	42.1	73	16	13	1	710	0	2.63	1.14	19
Fort Cobb	41.5	74	16	8	1	729	0	2.12	.70	20
Grandfield	43.2	78	16	8	1	675	0	1.93	.68	19
Hinton	40.8	72	16	8	1	751	0	2.25	.73	20
Hobart	41.1	74	16	6	1	741	0	2.84	1.46	20
SOUTH CENTRAL										
Ada	43.8	73	16	12	8	657	0	4.33	1.51	29
Ardmore	45.0	73	16	15	1	619	0	3.28	.97	20
Burneyville	45.4	75	16	12	8	609	1	2.31	1.12	29
Byars	43.5	72	16	13	1	666	0	3.96	1.27	19
Centrahoma	44.2	73	16	12	8	646	1	4.03	1.60	29
Durant	46.3	74	17	15	8	582	4	3.88	1.87	29
Fittstown	43.4	72	16	12	8	670	0	4.20	1.52	29
Ketchum Ranch	43.9	76	16	10	1	655	0	2.81	1.07	19
Lane	45.3	74	16	15	8	613	1	5.90	3.75	29
SOUTHEAST										
Antlers	44.8	76	17	10	8	629	2	4.99	3.03	29
Broken Bow	45.0	75	16	10	8	620	0	4.96	1.28	30
Clayton	45.8	74	17	11	8	601	6	5.56	2.76	29
Cloudy	45.3	74	18	13	8	610	0	5.47	2.48	29
Hugo	46.5	76	18	14	8	577	4	6.11	4.14	29

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	35.8	69	5	11	1	906	0	3.70	2.10	29
Hooker	36.5	69	5	8	1	****	****	4.03	3.61	29
Kenton	33.3	67	5	4	23	****	****	*****	.24	26
Slapout	38.2	67	15	11	1	830	0	2.97	1.81	29
May Ranch	40.4	67	14	13	1	762	0	3.73	1.50	19
Medford	40.4	69	15	4	1	762	0	1.44	.48	29
Newkirk	39.9	71	15	5	1	779	0	2.12	.91	20
Red Rock	40.3	74	16	4	1	764	0	2.60	.88	20
Seiling	40.2	73	16	0	1	768	0	3.40	1.88	19
Woodward	40.5	71	16	14	1	761	0	4.51	1.69	29
Nowata	39.2	73	16	-2	4	798	0	4.81	1.89	20
Pawnee	41.0	75	16	7	1	745	0	2.99	1.16	20
Porter	43.2	73	17	10	2	675	0	5.15	1.51	29
Pryor	40.9	73	15	5	8	746	0	4.80	1.21	20
Skiatook	*****	***	***	***	***	****	****	4.34	1.28	20
Vinita	40.1	71	16	1	4	772	0	4.66	1.91	20
Wynona	41.4	74	16	7	1	731	0	2.74	1.16	20
Putnam	40.5	73	16	7	1	759	0	3.55	2.14	19
Retrop	41.5	75	16	9	1	728	0	3.27	1.49	19
Watonga	41.5	72	14	11	1	730	0	2.37	.75	20
Weatherford	40.3	70	16	5	1	767	0	2.19	.75	19
Marshall	*****	***	***	***	***	****	****	*****	*****	***
Ninnekah	42.3	74	16	7	1	704	0	2.66	.86	19
Norman	42.7	74	16	13	1	692	0	3.12	1.00	20
Oilton	40.7	74	16	4	2	752	0	4.05	1.22	20
Okemah	43.2	72	16	11	8	675	1	4.83	1.44	29
Perkins	41.6	74	16	9	1	725	0	2.58	.75	20
Shawnee	42.1	72	16	9	1	711	0	3.68	.87	29
Spencer	43.0	74	16	11	1	682	0	2.93	.81	29
Stillwater	40.9	77	16	4	1	747	0	2.81	.85	20
Washington	43.2	74	16	13	1	675	0	3.86	1.15	20
Sallisaw	44.3	74	16	11	8	641	0	3.99	1.14	30
Stigler	45.0	73	17	12	8	****	****	4.89	1.67	29
Stuart	44.6	72	16	12	8	633	2	5.02	2.51	29
Tahlequah	43.0	72	16	8	8	683	0	4.62	1.36	29
Webbers Falls	44.3	74	16	12	8	643	0	*****	*****	***
Westville	43.1	72	15	7	8	678	0	3.82	1.28	30
Hollis	41.2	79	16	6	1	738	0	2.39	1.37	19
Mangum	40.7	78	16	5	1	755	0	2.71	1.23	19
Medicine Park	43.4	74	16	12	1	669	0	3.03	1.02	29
Tipton	41.9	75	16	6	1	715	0	*****	.75	20
Walters	43.3	75	16	10	1	673	0	2.53	1.29	19
Madill	45.8	74	16	14	8	598	1	3.34	1.32	29
Newport	44.9	75	16	13	1	624	0	3.87	1.27	29
Pauls Valley	44.0	75	16	13	1	653	0	4.07	1.38	29
Ringling	44.2	73	16	13	1	645	0	3.42	1.16	19
Sulphur	42.9	72	16	9	1	685	0	4.04	1.08	29
Tishomingo	43.7	73	17	14	8	659	0	2.76	1.23	29
Vanoss	43.6	73	16	10	1	664	0	5.35	1.25	29
Waurika	44.7	78	16	11	1	631	1	3.27	1.20	19
Idabel	46.2	75	16	10	8	585	2	4.58	1.53	29
Mt Herman	45.1	74	18	11	8	618	2	5.17	1.36	29
Talihina	45.3	72	17	12	8	616	6	3.87	1.59	29
Wilburton	44.6	73	16	10	8	637	4	4.82	2.59	29
Wister	44.0	73	16	9	8	651	0	3.31	1.19	30

December 2006 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Dec-05
Panhandle	3.75	3.05	1st Wettest	2.55 (1913)	0.00 (1922)	0.16
North Central	2.92	1.62	10th Wettest	4.55 (1913)	0.00 (1922)	0.22
Northeast	4.09	1.81	11th Wettest	6.72 (1984)	0.16 (1950)	0.40
West Central	3.32	2.18	6th Wettest	4.03 (1932)	0.00 (1908)	0.28
Central	3.27	1.26	14th Wettest	6.67 (1984)	0.00 (1908)	0.17
East Central	4.70	1.72	13th Wettest	8.95 (1987)	0.21 (1908)	0.29
Southwest	2.45	1.07	18th Wettest	4.94 (1991)	0.00 (1908)	0.18
South Central	3.81	1.28	18th Wettest	7.01 (1932)	0.07 (1950)	0.26
Southeast	4.88	0.81	25th Wettest	12.76 (1971)	0.23 (2005)	0.23
Statewide	3.67	1.65	12th Wettest	4.98 (1984)	0.10 (1950)	0.24

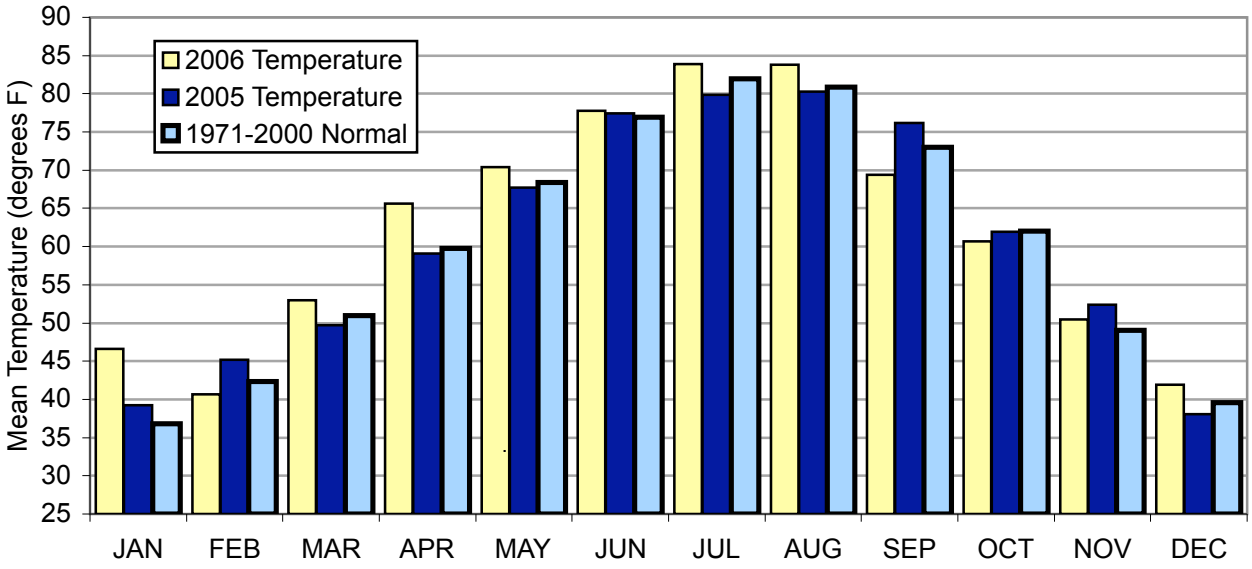
2005 and 2006 Statewide Precipitation Monthly Totals vs. Normal



December 2006 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Dec-05 (F)
Panhandle	37.9	2.9	28th Warmest	41.6 (1933)	22.6 (1983)	34.9
North Central	40.3	3.8	17th Warmest	43.7 (1965)	21.9 (1983)	35.4
Northeast	41.1	2.9	31st Warmest	45.1 (1931)	24.3 (1983)	36.3
West Central	40.8	3.4	25th Warmest	44.2 (1965)	24.0 (1983)	37.3
Central	41.9	2.6	29th Warmest	46.4 (1965)	25.3 (1983)	38.2
East Central	43.8	3.2	25th Warmest	47.6 (1933)	27.4 (1983)	39.0
Southwest	41.9	2.1	38th Warmest	46.7 (1965)	27.5 (1983)	39.5
South Central	44.4	2.3	35th Warmest	48.5 (1965)	29.2 (1983)	41.8
Southeast	45.2	2.9	25th Warmest	50.7 (1984)	30.7 (1983)	40.9
Statewide	41.9	2.9	27th Warmest	45.4 (1965)	25.8 (1983)	38.1

2005 and 2006 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for December 2006

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	75	16th	Arnett	3	1st	Beaver	4.22	Buffalo	2.66	29th	Beaver
North Central	74	16th	Red Rock	0	1st	Seiling	4.51	Woodward	1.88	19th	Seiling
Northeast	75	16th	Pawnee	-2	4th	Nowata	5.30	Claremore	1.91	20th	Vinita
West Central	79	16th	Erick	3	1st	Camargo	4.52	Camargo	2.94	19th	Butler
Central	77	16th	Stillwater	4	2nd	Oilton	4.96	Chandler	1.78	20th	Chandler
East Central	74	16th	Sallisaw	5	8th	Cookson	5.23	Cookson	2.71	29th	McAlester
Southwest	79	16th	Hollis	5	1st	Mangum	3.03	Medicine Park	1.46	20th	Hobart
South Central	78	16th	Waurika	9	1st	Sulphur	5.90	Lane	3.75	29th	Lane
Southeast	76	17th	Antlers	9	8th	Wister	6.11	Hugo	4.14	29th	Hugo
Statewide	79	16th	Erick	-2	4th	Nowata	6.11	Hugo	4.14	29th	Hugo

January Climatological Outlook

The weather in Oklahoma during January, Oklahoma's coldest and driest month, is marked by many and rapid variations. Cold fronts move through the state on a regular basis, bringing air from colder regions of the earth, but cold weather rarely lasts for more than a few days at a time. The north or northwest winds that spread the colder air typically give way to a day or so of calm and sunshine, followed by a return to the prevailing southerly winds which dominate the state's weather throughout the year. The state is located within the range of the winter meandering of the jet stream. Oklahoma's proximity to both the warm waters of the Gulf of Mexico to the southeast and the mountain barrier to the west enhances the potential for the development of winter storms beneath the jet. The Gulf provides moisture and is a source of thermal energy that interacts with the areas of low pressure, which are initiated under the jet stream east of the mountains. This interaction often results in the development of winter storms. Many of the winter storms in the eastern half of the country are born in Oklahoma.

Temperature

Mean: 36.8 degrees
Warmest January: 1923, 47.5 degrees
Coolest January: 1930, 24.9 degrees
Warmest location: Waurika, 41.9 degrees
Coolest Location: Turpin, 30.7 degrees
Hottest recorded: 92 degrees, Cloud Chief, January 31, 1911
Coldest recorded: -27 degrees, Watts, January 18, 1930

According to National Weather Service cooperative network data from 1971 through 2000, the statewide-averaged normal temperature for the month is 36.8 degrees. Normal temperatures across Oklahoma range from 41.9 degrees at Waurika in the south to 30.7 degrees at Turpin in the eastern panhandle. Normal daily maximum temperatures vary between 54.0 degrees at Waurika, near the Red River at Oklahoma's southern border, down to 41.9 degrees at Newkirk, near the state's northern border. Normal daily minimum temperatures range from 30.8 degrees at Okemah to 16.7 degrees at Turpin. The coldest January temperature ever recorded in the state is -27 degrees, recorded at Watts on January 18, 1930. At the other extreme, Cloud Chief reported a daily maximum temperature of 92 degrees on January 31, 1911. The warmest and coldest Januarys, averaged statewide, were 47.5 degrees in 1923 and 24.9 degrees in 1930, respectively.

Precipitation

Mean: 1.46 inches
Wettest Year: 1949, 5.23 inches
Driest Year: 1986, 0.04 inches
Wettest location: Broken Bow, 3.49 inches
Driest location: Goodwell, 0.29 inches
Most recorded: 13.85 inches, Smithville, 1950

Oklahoma's normal monthly precipitation during January, averaged across the state, is 1.46 inches. Normal monthly precipitation for the month ranges from 3.49 inches in the southeast at Broken Bow to 0.29 inch in the panhandle at Goodwell. Most of the precipitation falls as rain, although snow, sleet, and freezing rain are all observed. The statewide-averaged normal snowfall (including sleet) is 2.4 inches, most of which falls in the northern half of the state. The panhandle town of Boise City averages 7.0 inches of snow during January. On average, snowfalls of at least one inch occur on 2.5 January days at Boise City. The wettest January in the state's weather record is 1949, when the statewide average was 5.23 inches. The driest January was 1986, when the state's rain gauges collected an average of only 0.04 inches of precipitation. Smithville was deluged with 13.85 inches of precipitation during January 1950.

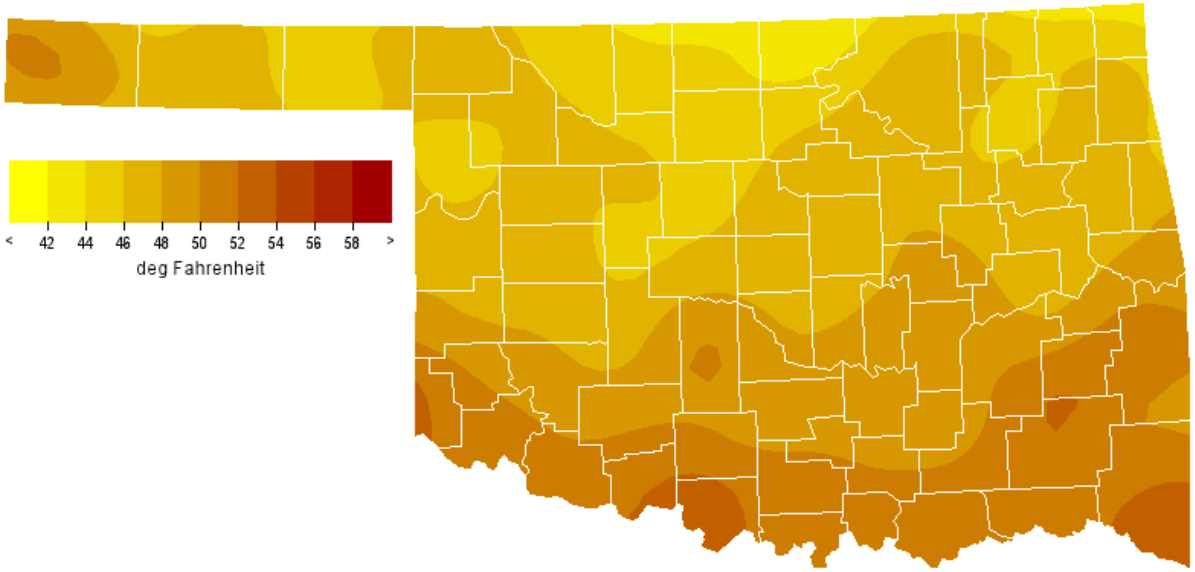
Snowfall records are not as reliable as those for temperature and total precipitation (which includes water obtained from melted snow), but the greatest January snowfalls appear to have been recorded in 1905, 1930, 1949, 1988, 1990, and 2001. Statewide information is somewhat sketchy regarding the 1905 event, but it is known that Fort Reno recorded a cumulative depth of 24.5 inches of snow over the course of the month. In January 1930, noted above for its extreme cold, 25.0 inches of snow fell at Jefferson, and the state's reporting stations averaged 11.7 inches for the month. The reported January 1949 snowfall totals include 30.1 inches at Union City and 25.3 inches at Ponca City. In 1988, most of the state was blanketed by 10 inches of snow (16 to 18 inches in some locales) in a major snowstorm that came on the heels of an ice storm during the previous month. Goodwell reported 16 inches on snow on January 19, 1990, accumulating 18 inches over a two-day period, in a snowstorm whose Oklahoma extent was mainly confined to the panhandle. The state record for January monthly snowfall is 32.7 inches, set at Kenton in 2001. Nearly half of that total (16 inches) was reported on the 16th.

Tornadoes

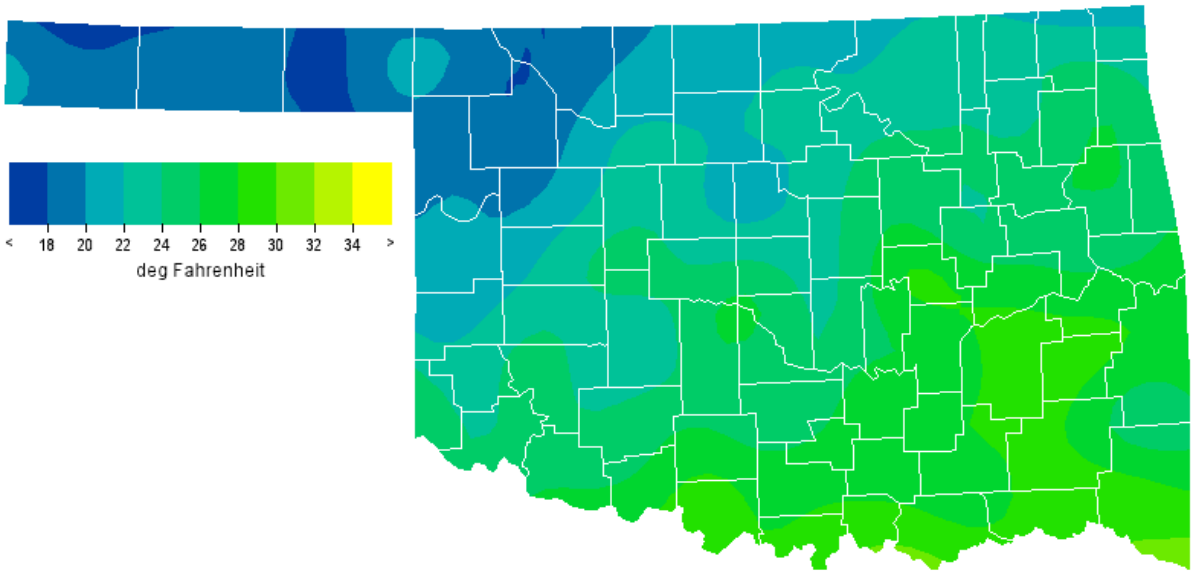
Average January Tornadoes: 0.2
Most: 4 (1967)

Tornadoes are not usually a part of the January weather in Oklahoma, but the month is not immune to them. Reasonably reliable counts of tornadoes in the state are available since 1950. During that time, 12 tornadoes have occurred during January, including 4 each in 1957 and 1967. On January 4, 1917, an F3 tornado (severe damage, estimated wind speeds of 158-206 miles per hour) struck a Choctaw boarding school at Vireton (13 miles northeast of McAlester), killing 16 students and injuring 10 others.

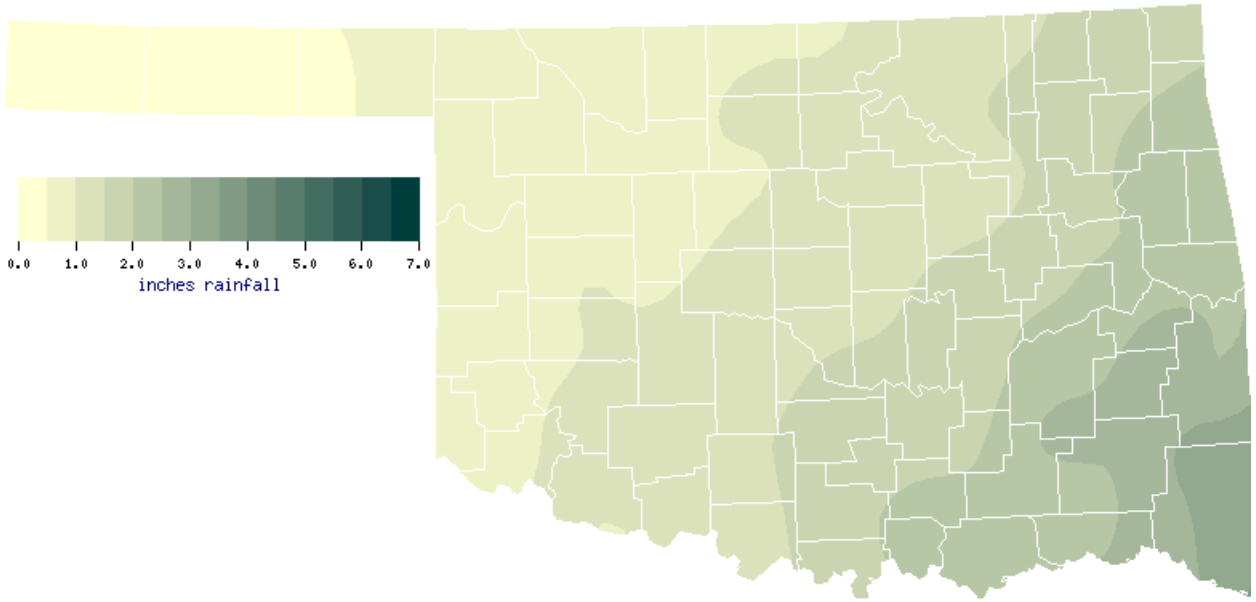
January Normal Monthly Maximum Temperature (1971-2000)



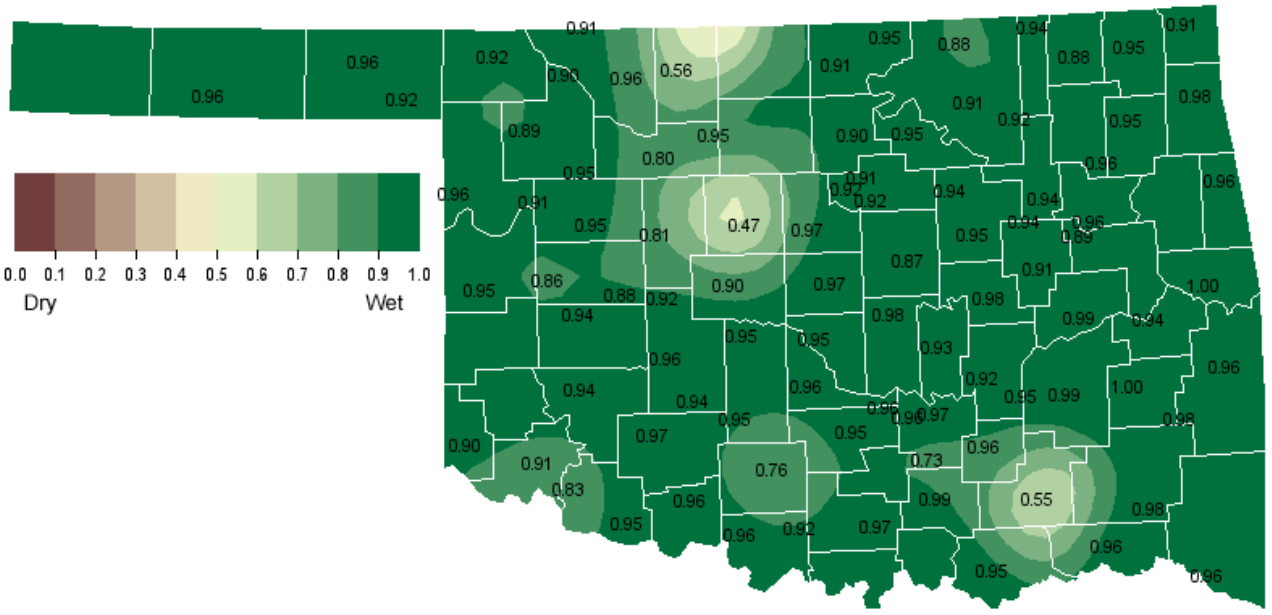
January Normal Monthly Minimum Temperature (1971-2000)



January Normal Precipitation (1971-2000)



January 1, 2007 Soil Moisture Conditions at 25cm



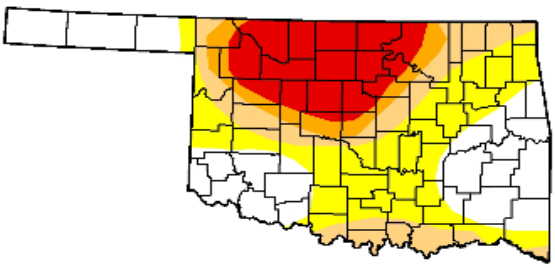
January 2007 Drought Indices

U.S. Drought Monitor
Oklahoma

January 2, 2007
Valid 8 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	31.3	68.7	39.8	24.5	18.2	0.0
Last Week (12/26/2006 map)	12.9	87.1	62.1	29.9	16.5	5.5
3 Months Ago (10/10/2006 map)	3.7	96.3	91.6	59.3	21.1	3.0
Start of Calendar Year (01/02/2007 map)	31.3	68.7	39.8	24.5	18.2	0.0
Start of Water Year (10/03/2006 map)	2.7	97.3	92.7	46.2	16.6	0.0
One Year Ago (01/03/2006 map)	1.3	98.7	79.9	40.8	10.1	5.7



Intensity:

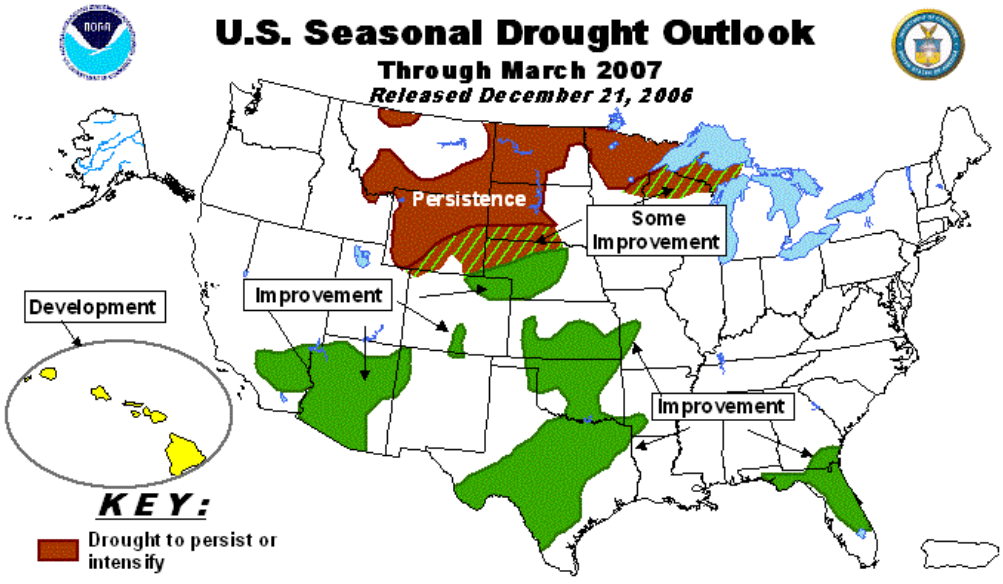
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

http://drought.unl.edu/dm

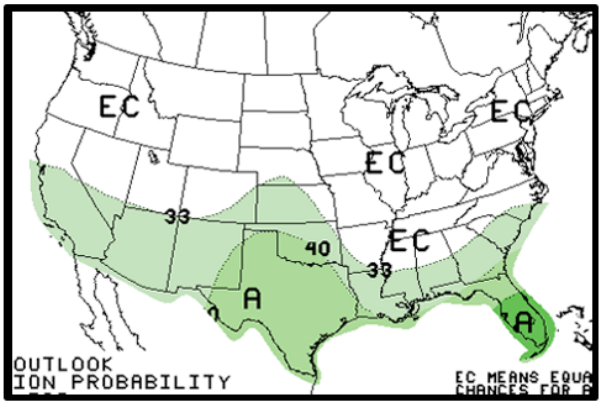
USDA · National Drought Mitigation Center

Released Thursday, January 4, 2007
Author: Brian Fuchs, National Drought Mitigation Center



Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more that a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

January 2007 U.S. Precipitation Forecast



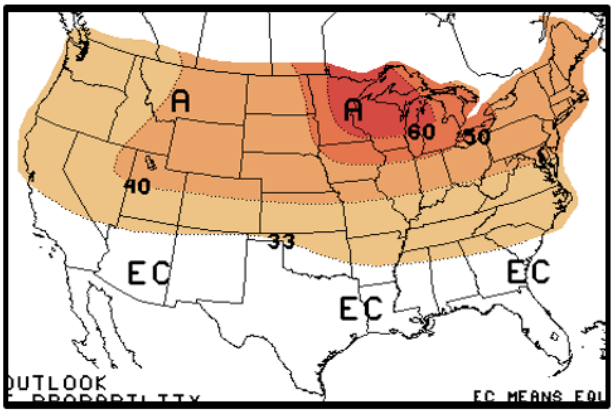
Percent Likelihood of Above or Below Average Precipitation*

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

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

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

January 2007 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

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

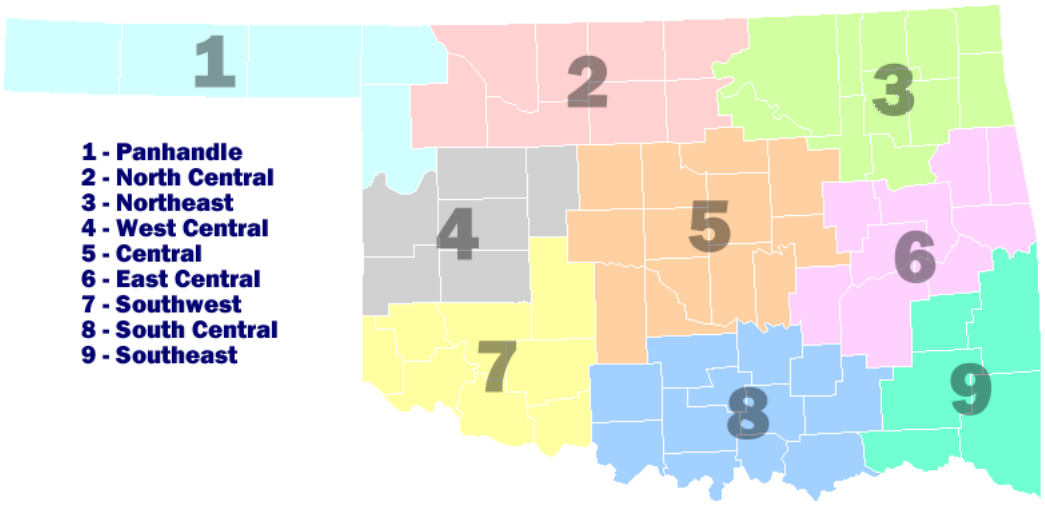
0% - 5%
5% - 10%
B = Below

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

January Climate Normals

Climate Division	Max. Temperature (∞F)	Min. Temperature (∞F)	Avg. Temperature (∞F)	Precipitation (inches)
1	47.3	19.2	33.3	0.51
2	44.7	20.5	32.6	0.95
3	46.3	24.0	35.2	1.58
4	46.9	22.4	34.6	0.83
5	47.5	24.5	36.0	1.33
6	48.0	26.4	37.2	2.10
7	49.7	24.2	37.0	1.08
8	50.4	27.2	38.8	1.91
9	51.3	27.7	39.5	2.81
Statewide	47.9	24.1	36.0	1.51

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

OKLAHOMA CLIMATOLOGICAL SURVEY

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Ken C. Crawford, Director and State Climatologist

Editor
Gary D. McManus, Climatologist

Contributors
Gary D. McManus
Mark A. Shafer, Director of Climate Information
Derek S. Arndt, Assistant State Climatologist
Howard Johnson, Associate State Climatologist (Ret.)

Design
Stdrovia Blackburn, Graphic Design Manager
Kelly Stokes, Administration/Graphics

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: 405-325-2550
e-mail: ocs@ou.edu
http://www.ocs.ou.edu