OKLAHOMA MONTHLY CLIMATE SUMMARY
JANUARY 2007

OKLAHOMA CLIMATOLOGICAL SURVEY

Severe winter weather was the main story during January 2007. Three wintry blasts visited the state over the month with heavy sleet, freezing rain and snow. A benefit of the precipitation, frozen or not, is that it further curtailed drought conditions. The month was the 30th wettest January at more than a half of an inch above normal. The frequent arctic intrusions helped the statewide average temperature to finish as the 33rd coolest. The ice storm which struck on the 12th through the 14th left 125,000 customers without power at its peak. Although most of the power outages were in the eastern half, sporadic outages also occurred in the southwest. While freezing rain fell in those areas, other parts of the state were getting 2-4 inches of sleet. The sleet soon became an icy shell, disrupting traffic and collapsing structures due to the weight of the ice. Preliminary reports indicate a total of 32 fatalities either directly or indirectly a result of the three-day winter storm. Another storm hit a week later, bringing up to eight inches of snow to northwestern Oklahoma, with a cold rain falling further to the southeast. Yet another winter weather system struck on the month's final day. What started as a 1-2 inch blanket of snow turned into freezing drizzle, snarling traffic and causing numerous accidents on Oklahoma roadways.

Precipitation

The statewide average precipitation was just over two inches for the month, which is more than a half of an inch above normal. Southeastern Oklahoma was well above normal for the month with more than five inches averaged over the region, a surplus of more than two inches. That average is the 17th wettest January on record for that area. In reality, the entire southeastern half of the state experienced abundant moisture, along with portions of the Oklahoma Panhandle. Parts of west central though north central Oklahoma missed out on the bounty and finished with 60-90 percent of normal precipitation. Coupled with the moisture which fell in December, the winter season thus far is the 10th wettest on record, well over two inches above normal. The Panhandle in particular has been extremely wet, enjoying their wettest such period on record.

Temperature

January was more than a degree cooler than normal, good for the 33rd coolest on record. The Oklahoma Panhandle once again stood out at nearly four degrees below normal, the 19th coolest January since 1895 for that section of the state. The warm December kept the winter season thus far from being overly cold, with the December-January statewide average temperature remaining above normal by almost a full degree.

January 2007 Statewide Extremes

Description	Extreme	Station	Date
High Temperature	76ºF	Alva	Jan 11
Low Temperature	0ºF	Boise City, Kenton, Hooker	Jan 16 Jan 16 Jan 23
High Precipitation	5.96 in.	Broken Bow	
Low Precipitation	0.34 in.	Boise City	

January Daily Highlights

January 1-5: The New Year began clear and cold with lows in the teens and 20s as high pressure at the surface settled over the state. High temperatures reached seasonable levels in the 40s and 50s under sunny skies. An upper-level storm system traveling west across northern Mexico and southern Texas provided the state with cloud cover for the next few days. The clouds hampered high temperatures somewhat, which managed to reach 60 degrees in some areas on the 3rd. The upper-level storm helped kick winds up from the south at 10-20 mph. A few showers formed in southern Oklahoma on the 4th. The cloud cover helped keep low temperatures in the 40s that morning. High temperatures reached the 50s and 60s in the south, but low clouds in central and northern sections kept highs in the 40s and low 50s in those regions. A cold front entered northwestern Oklahoma on the 5th and dropped lows into the 30s in its wake. High temperatures struggled in the 40s behind the front but high temperatures ahead of the front climbed into the 60s.

January 6-11: A The cold front of the previous day made it through the entire state overnight, resulting in a cooler morning and northerly winds of 10-15 mph. A few sprinkles and flurries were scattered across the state, but amounts were on the light side. Another front on the 7th ushered in northerly winds of up to 40 mph in western Oklahoma. The clear skies allowed highs

to reach into the 50s and 60s, about five degrees above seasonal normals. Surface high pressure produced clear skies and light winds for the next several days, along with lows in the 20s and highs in the 50s and 60s. The 11th even saw a few 70s scattered across the state.

January 12-16: A powerful upper-level storm approached from the west early on the 12th as a strong cold front plunged into the state, setting the stage for a major icing event. Precipitation was often convective in nature, complete with thunder and lightning. Two-to-four inches of sleet fell in the northwestern half while 2-3 inches of freezing rain blanketed areas to the southeast. In the far southeastern corner, temperatures stayed above freezing long enough to keep the rain from freezing, allowing 3-5 inches of liquid precipitation in that area. The heavy coating of ice left 125,000 without power at the storm's peak, and contributed to a preliminary total of 32 fatalities in Oklahoma, the majority of which were traffic related. The upper-level storm spun out three separate waves of precipitation which allowed for nearly 72 hours of continuous precipitation. A reinforcing shot of cold air followed the initial cold front and dropped temperatures into the single digits in the northwest. Highs in that area struggled to eclipse the teens through the 14th. Meanwhile, the extreme southeastern corner continued with highs in the 50s. The next two days were bitterly cold across the ice-coated state. Lows on the 15th and 16th reached zero degrees in the Panhandle and the mid-20s in the southeast, while highs remained in the 20s and 30s. Southwesterly winds on the 16th allowed temperatures to reach 40 degrees in western Oklahoma.

January 17-19: A weak upper-level disturbance passed over the state and brought scattered light snow to the southwest. Temperatures barely eclipsed freezing that afternoon due to the associated cloud cover. Temperatures finally broke the freezing mark over most of the state on the 18th with mid-40s in the south and mid-30s in the north. The Panhandle remained below freezing. More pacific moisture kept skies overcast on the 19th. The cloud cover helped low temperatures to remain in the 20s and 30s, but also kept highs down in the 30s and 40s. A bit more moisture fell from the sky ahead of another approaching storm system, but amounts were once again light.

January 20-21: Another powerful upper-level storm crossed the state from the west, laden with moisture. This storm lacked the intense cold air that generated the previous weekend's ice storm, so rain was the main precipitation type. High temperatures on the 20th were in the upper 30s for most of the state but cold air in the northwestern third allowed for a decent snowstorm. Two-to-four inch amounts were common across the northwest. Totals of up to seven inches were reported in Cheyenne and Woodward, and over eight inches fell in Vici and Mooreland. Rainfall amounts farther to the southeast were between one and two inches, although a pocket of more than three inches was indicated by the Oklahoma Mesonet in east central Oklahoma. The precipitation ended overnight, replaced by cold high pressure on the 21st. Northerly winds of more than 20 mph made the temperatures feel colder than the 20s and 30s on the thermometer.

January 22-26: Low clouds kept skies overcast early on the 22nd. High pressure at the surface moved in shortly thereafter and produced clear skies and light northerly winds. The temperatures remained cold, basically in the 30s statewide. The snow pack in the northwest subtracted about five degrees off the temperatures in that area. The weather warmed up over the next several days, becoming a bit more seasonable. By the 26th high temperatures were in the 60s, 10-15 degrees above average, on the strength of the warm southwesterly winds gusting from 25-30 mph.

January 27-31: A couple of snow events ended the month's final week, with below average temperatures on the plate as well. An upper-level low tracked across the state on the 27th. With little moisture to work with, light rain changed over to light snow as the day progressed. High temperatures were in the 30s behind a cold front traversing the state, while 40s and 50s were recorded ahead of the front. The 28th was cool and fair, with lows in the teens and 20s and highs about 10 degrees below normal in the 40s. A couple of cold days on the 29th and 30th were culminated by yet another upper-level storm system on the month's last day. A mixed bag of precipitation occurred on the 31st, with snow early and then a snow/sleet/freezing rain mix later in the day. The snow tapered off around mid-evening with another bout forming in the Texas Panhandle and moving towards Oklahoma. Highs across the state were well below normal in the mid-20s to low 30s.

January 2007 Statewide Statistics

Temperature

	Average	Depart.	Rank (1892-2007)
Month (Jan)	34.9ºF	-1.2ºF	33rd Coolest
Season-to-Date (Dec-Jan)	38.4ºF	0.8ºF	56th Coolest

Precipitation

	Total	Depart.	Rank (1892-2007)
Month (Jan)	2.05 in.	0.60 in.	30th Wettest
Season-to-Date (Dec-Jan)	5.71 in.	2.24 in.	10th Wettest

Depart. = Departure from 30-year normal

January 2007 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.

Flooding

No flooding events reported in state.

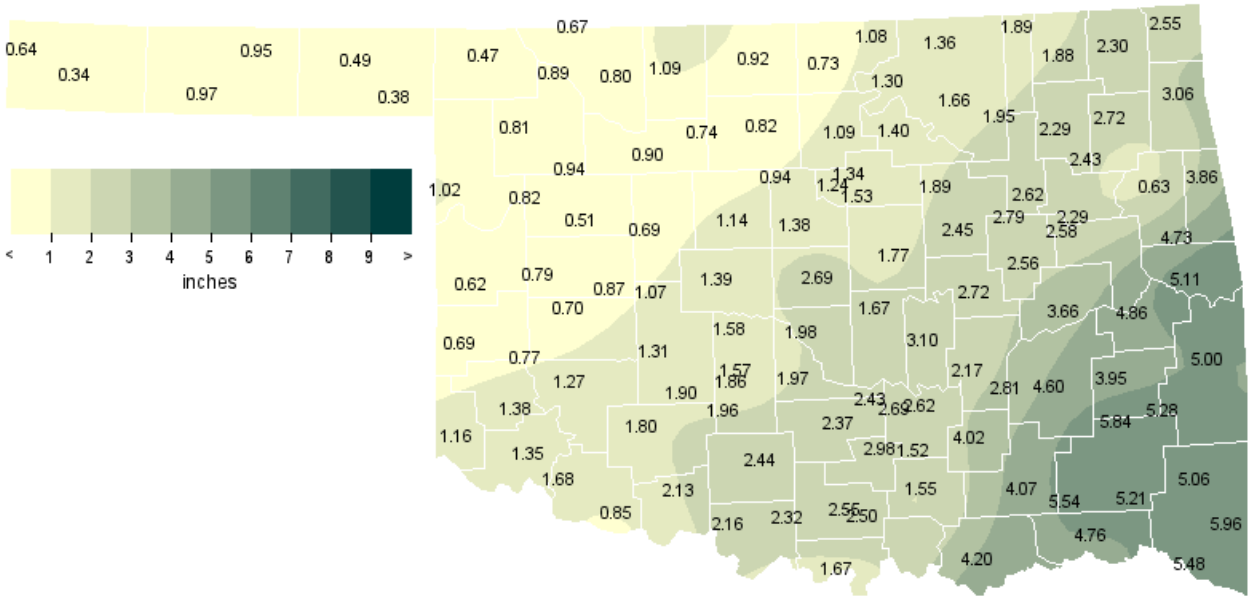
Wind Gusts

No flooding events reported in state.

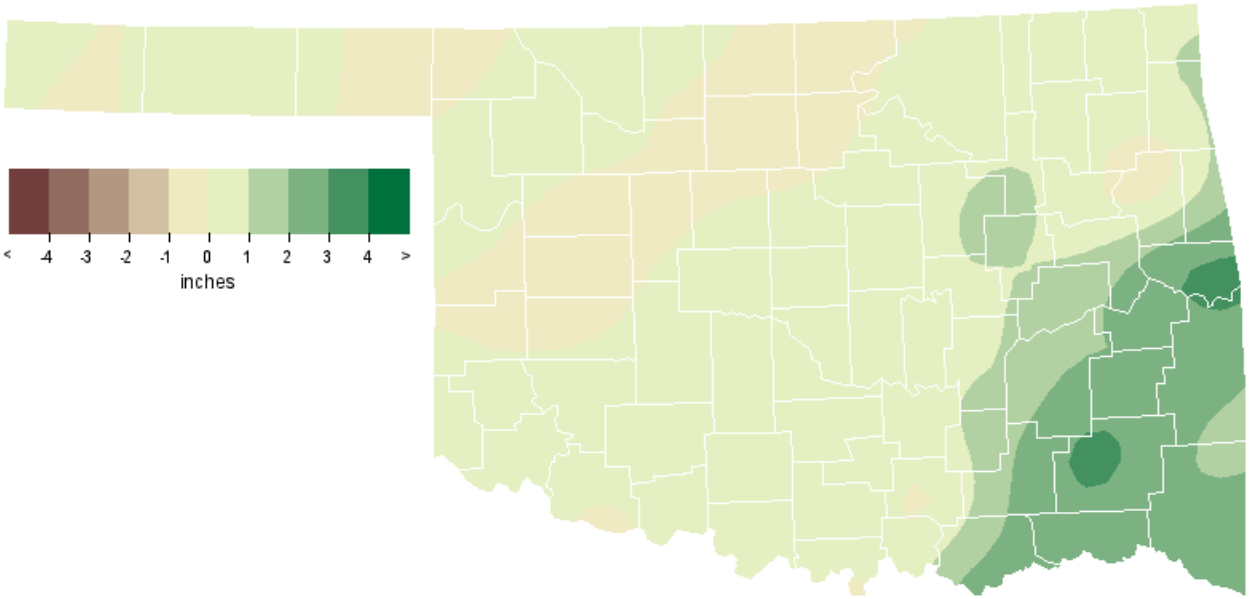
Record Event Report

Description	Day	Location	Record	Previous Record	Year
Daily Snowfall	14	Oklahoma City	1.3	1.1	1989
Daily Liquid Equivalent Precipitation	14	Oklahoma City	0.76	0.46	1898
Daily Snowfall	31	Tulsa	1.9	1	1985

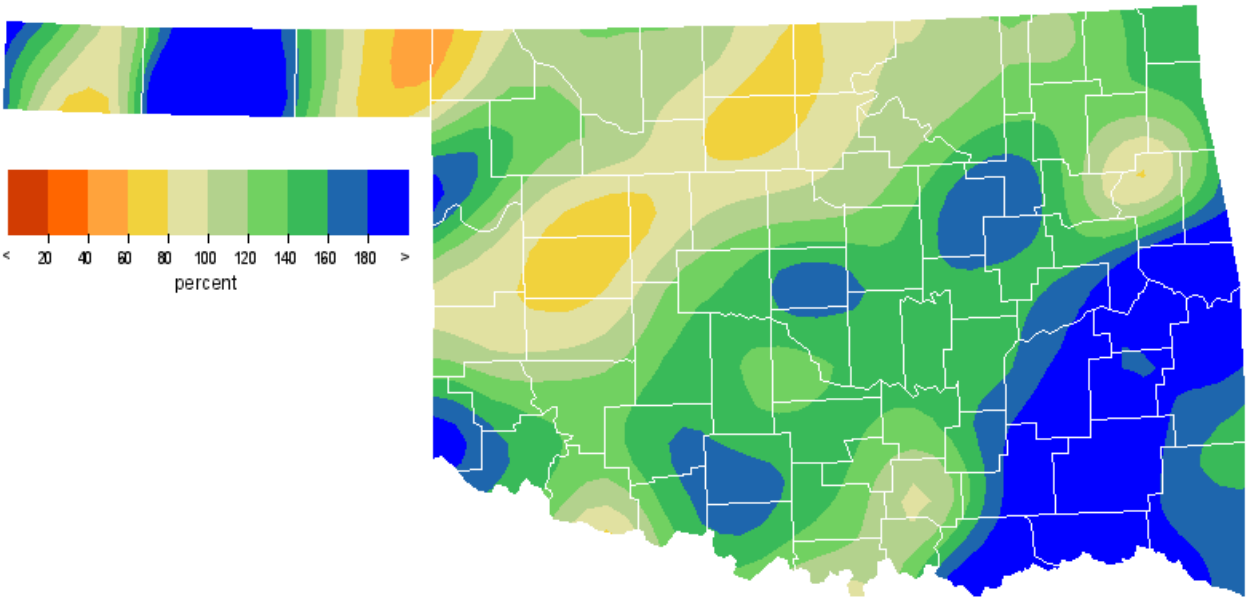
January 2007 Observed Precipitation



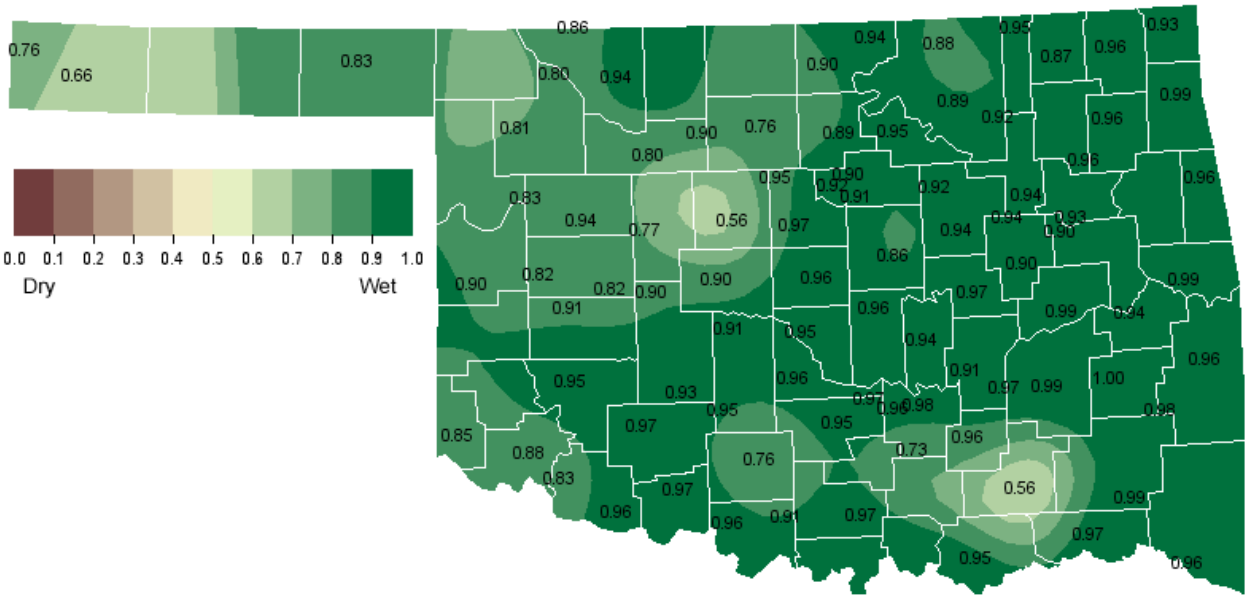
January 2007 Departure from Normal Precipitation



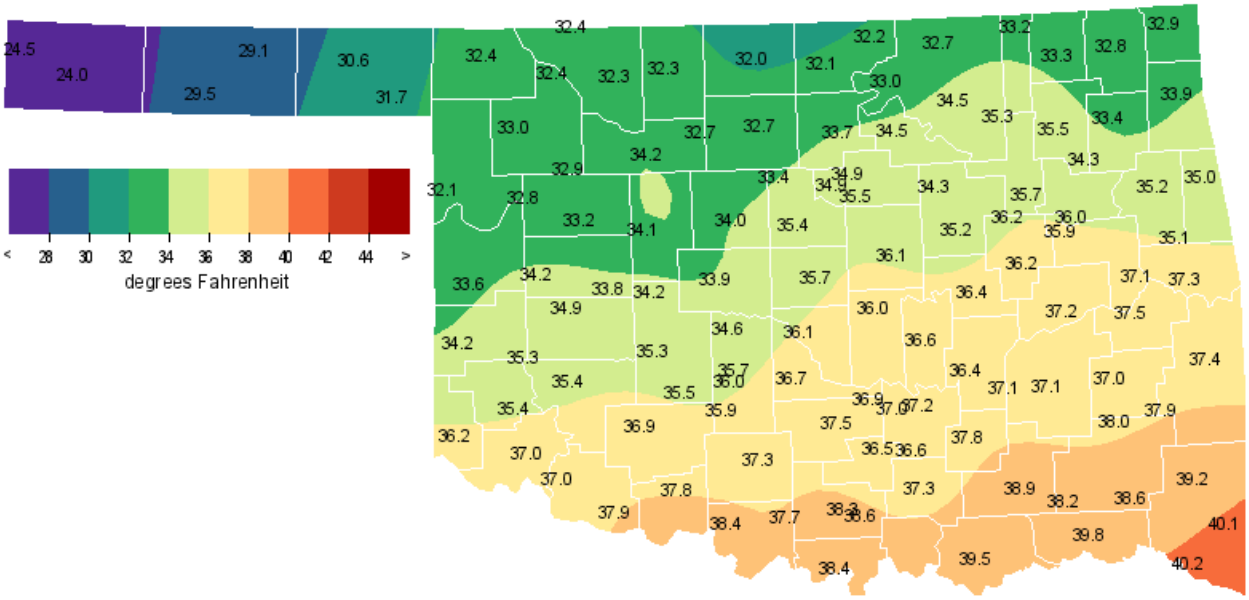
January 2007 Percent of Normal Precipitation



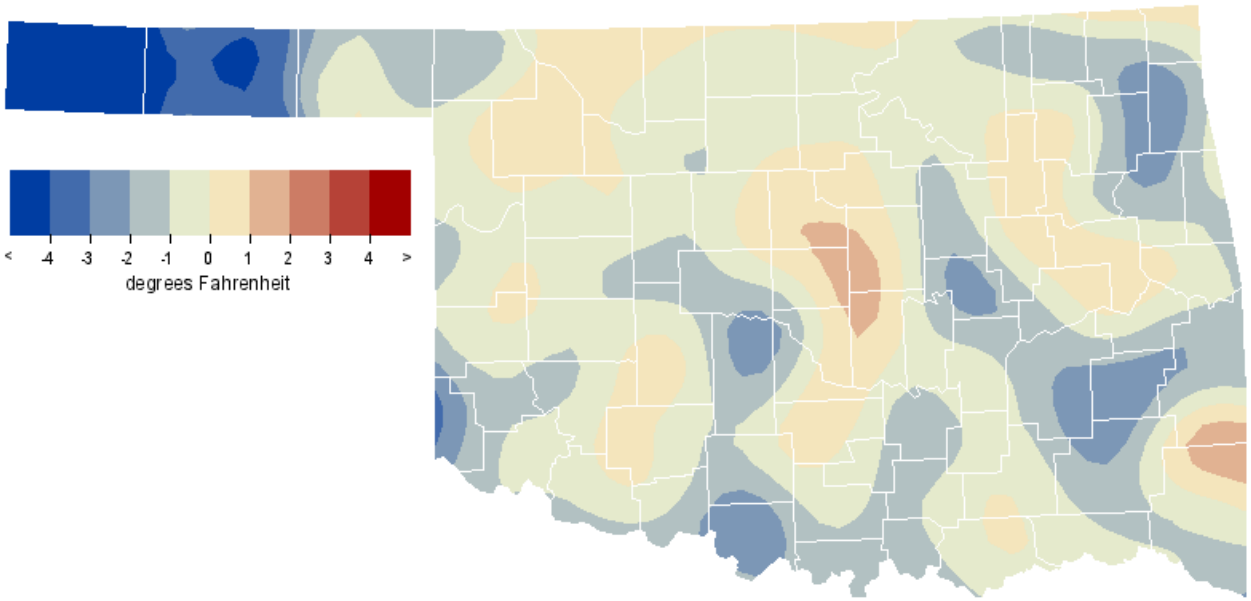
January 2007 Average Soil Moisture at 25cm



January 2007 Average Temperature



January 2007 Departure from Normal Temperature



Mesonet Monthly Summary for January 2007

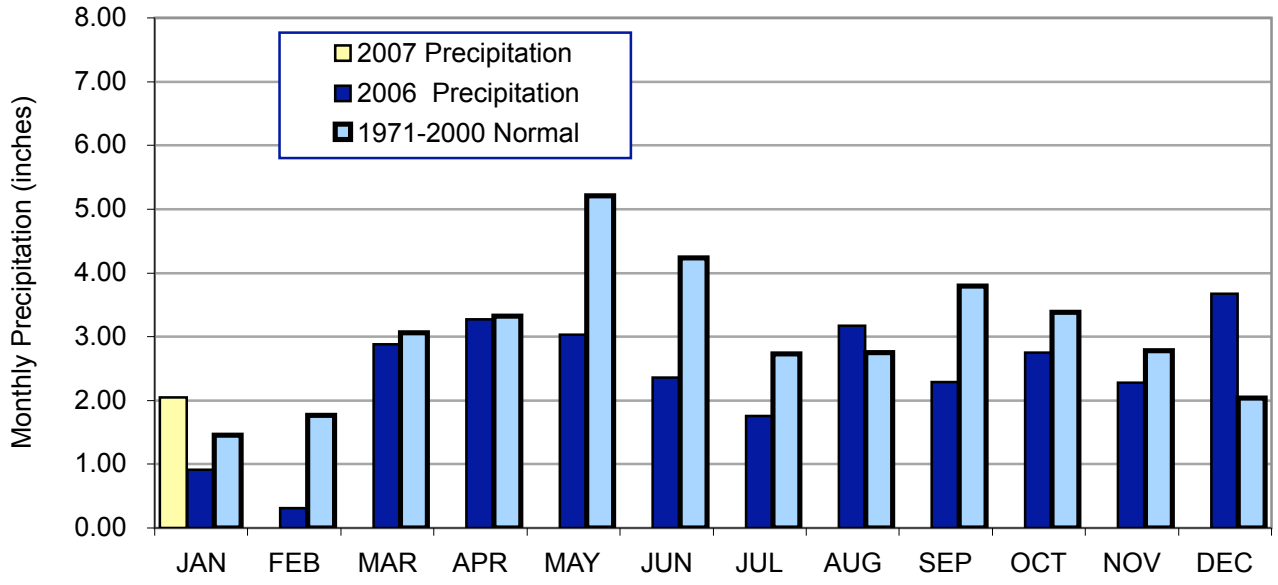
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	32.1	74	11	8	23	1020	0	1.02	.41	24
Beaver	30.6	68	11	2	23	1066	0	.49	.33	24
Boise City	24.0	48	4	0	16	1271	0	.34	.14	4
Buffalo	32.3	71	11	7	23	1013	0	.47	.33	24
NORTH CENTRAL										
Alva	32.3	76	11	7	16	1015	0	.80	.21	24
Blackwell	32.1	70	11	8	16	1020	0	.73	.32	21
Breckinridge	32.6	70	11	9	16	1003	0	.82	.36	21
Cherokee	32.3	73	11	9	23	1014	0	1.09	.29	25
Fairview	34.2	73	11	11	23	953	0	.90	.24	18
Freedom	32.4	72	11	7	23	1011	0	.89	.36	24
Lahoma	32.7	70	11	9	16	1000	0	.74	.25	18
NORTHEAST										
Bixby	35.8	66	11	15	16	906	0	2.62	.82	21
Burbank	33.0	71	11	9	16	991	0	1.30	.46	21
Claremore	35.5	64	11	13	16	916	0	2.29	.70	21
Copan	33.2	68	11	9	16	985	0	1.89	.62	21
Foraker	32.7	70	11	5	16	1001	0	1.36	.52	21
Inola	34.3	62	12	12	31	951	0	2.43	.91	21
Jay	33.8	62	11	9	31	967	0	3.06	.93	21
Miami	32.9	62	11	8	16	995	0	2.55	.66	21
WEST CENTRAL										
Bessie	35.0	69	11	14	15	930	0	.70	.26	23
Butler	34.2	70	11	9	23	955	0	.79	.33	24
Camargo	32.8	75	11	6	23	998	0	.82	.27	24
Cheyenne	33.5	70	11	11	15	976	0	.62	.21	23
Erick	34.2	71	11	10	23	953	0	.69	.27	23
CENTRAL										
Acme	35.9	66	11	16	15	903	0	1.96	.95	20
Bowlegs	36.5	67	11	16	16	883	0	3.10	.96	21
Bristow	35.2	69	11	14	31	924	0	2.45	.83	21
Chandler	36.1	70	11	16	16	897	0	1.77	.57	21
Chickasha	35.7	67	11	17	15	909	0	1.57	.56	20
El Reno	33.9	68	11	12	15	965	0	1.39	.39	21
Guthrie	35.4	69	11	14	16	917	0	1.38	.53	21
Kingfisher	34.1	69	11	14	16	958	0	1.14	.41	18
Marena	34.9	71	11	13	16	934	0	1.24	.53	21
Minco	34.6	65	11	15	15	941	0	1.58	.46	21
EAST CENTRAL										
Calvin	36.4	65	11	16	16	887	0	2.17	1.11	20
Cookson	35.1	62	12	10	30	926	0	4.73	1.95	13
Eufaula	37.2	63	11	17	16	863	0	3.66	1.56	21
Haskell	35.9	63	11	16	16	903	0	2.58	.96	21
Hectorville	36.2	66	11	15	16	893	0	2.79	.95	21
McAlester	37.1	63	11	18	16	866	0	4.60	1.76	12
Okmulgee	36.1	65	11	16	16	895	0	2.56	1.01	21
SOUTHWEST										
Altus	37.0	70	11	17	15	868	0	1.35	.53	20
Apache	35.5	65	11	15	15	913	0	1.90	.76	20
Fort Cobb	35.3	66	11	16	15	921	0	1.31	.40	20
Grandfield	37.9	68	11	19	15	841	0	.85	.80	12
Hinton	34.2	65	11	14	15	954	0	1.07	.34	18
Hobart	35.4	65	11	15	15	918	0	1.27	.37	20
SOUTH CENTRAL										
Ada	37.3	65	11	17	16	860	0	2.62	1.07	20
Ardmore	38.5	65	11	18	15	820	0	2.50	1.11	20
Burneyville	38.4	65	11	19	15	824	0	1.67	.81	20
Byars	36.9	67	11	16	15	871	0	2.43	.95	20
Centrahoma	37.7	64	11	17	16	847	0	4.02	1.71	12
Durant	39.4	67	12	21	16	792	0	4.20	2.10	12
Fittstown	36.7	64	11	18	16	879	0	1.52	.80	21
Ketchum Ranch	37.3	67	11	17	15	859	0	2.44	1.24	20
Lane	38.9	66	11	20	16	810	0	4.07	1.90	12
SOUTHEAST										
Antlers	38.2	65	11	17	29	830	0	5.54	1.85	12
Broken Bow	40.1	65	12	17	29	772	0	5.96	2.39	14
Clayton	37.9	63	12	19	28	840	0	5.84	2.41	13
Cloudy	38.7	63	12	18	29	817	0	5.21	2.01	13
Hugo	39.8	66	12	21	16	782	0	4.76	1.68	13

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	29.5	67	11	5	22	1101	0	.97	.29	24
Hooker	29.1	66	11	0	23	1113	0	.95	.32	24
Kenton	24.5	57	4	0	16	1254	0	.64	.22	4
Slapout	31.7	70	11	8	15	1034	0	.38	.34	24
May Ranch	32.3	70	11	8	16	1013	0	.67	.26	24
Medford	32.0	71	11	9	16	1024	0	.92	.28	21
Newkirk	32.2	70	11	7	16	1016	0	1.08	.34	21
Red Rock	33.7	71	11	11	16	972	0	1.09	.53	21
Seiling	32.8	74	11	4	23	997	0	.94	.34	24
Woodward	33.0	75	11	10	16	992	0	.81	.34	24
Nowata	33.3	65	11	11	16	982	0	1.88	.70	21
Pawnee	34.6	71	11	12	16	943	0	1.40	.68	21
Porter	36.0	63	11	15	16	898	0	2.29	.90	21
Pryor	33.4	63	12	11	30	978	0	2.72	.85	21
Skiatook	35.3	69	11	11	16	920	0	1.95	.58	21
Vinita	32.9	62	12	8	16	996	0	2.30	.74	21
Wynona	34.5	70	11	12	16	946	0	1.66	.67	21
Putnam	33.2	69	11	12	15	985	0	.51	.22	24
Retrop	35.3	69	11	14	15	921	0	.77	.30	23
Watonga	34.2	66	11	13	15	956	0	.69	.19	24
Weatherford	33.9	65	11	13	15	965	0	.87	.21	24
Marshall	33.4	69	11	12	16	980	0	.94	.38	21
Ninnekah	36.0	67	11	17	15	898	0	1.86	.95	20
Norman	36.1	69	11	16	15	897	0	1.98	.70	20
Oilton	34.3	70	11	10	31	953	0	1.89	.76	21
Okemah	36.4	65	11	16	16	886	0	2.72	1.01	21
Perkins	35.5	70	11	15	16	914	0	1.53	.60	21
Shawnee	36.0	67	11	16	15	899	0	1.67	.58	20
Spencer	35.7	70	11	14	16	908	0	2.69	.53	20
Stillwater	34.9	73	11	13	16	932	0	1.34	.54	21
Washington	36.7	67	11	15	15	879	0	1.97	.88	20
Sallisaw	37.3	65	12	16	31	858	0	5.11	2.28	13
Stigler	37.5	64	12	18	16	852	0	4.86	1.55	12
Stuart	37.1	64	11	17	16	865	0	2.81	1.38	12
Tahlequah	35.2	62	12	13	16	924	0	.63	.36	13
Webbers Falls	37.1	65	12	18	31	866	0	*****	*****	***
Westville	35.0	61	12	12	31	930	0	3.86	1.50	12
Hollis	36.2	73	11	16	15	894	0	1.16	.29	21
Mangum	35.4	69	11	15	15	917	0	1.38	.44	21
Medicine Park	36.9	65	11	15	15	871	0	1.80	.61	20
Tipton	37.0	69	11	18	15	868	0	1.68	.85	20
Walters	37.8	66	11	18	15	843	0	2.13	1.04	20
Madill	39.5	64	11	19	15	****	****	2.23	1.08	20
Newport	38.3	67	11	17	15	829	0	2.55	1.30	20
Pauls Valley	37.6	68	11	17	15	851	0	2.37	1.12	20
Ringling	37.8	66	11	18	15	844	0	2.32	1.23	20
Sulphur	36.6	65	11	17	16	881	0	2.98	1.16	20
Tishomingo	37.3	63	12	18	16	857	0	1.55	.76	20
Vanoss	36.9	66	11	17	16	870	0	2.69	1.07	20
Waurika	38.4	67	11	19	15	826	0	2.16	1.08	20
Idabel	40.2	68	12	20	29	768	0	5.48	1.75	14
Mt Herman	39.2	63	12	18	29	801	0	5.06	2.01	13
Talihina	37.9	64	12	18	29	840	0	5.28	2.19	13
Wilburton	37.0	64	12	18	16	867	0	3.95	1.72	12
Wister	37.4	65	12	16	31	856	0	5.00	2.22	13

January 2007 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jan-06
Panhandle	0.66	0.14	31st Wettest	1.64 (1939)	0.01 (1904)	0.14
North Central	0.88	-0.05	42nd Wettest	4.43 (1949)	0.00 (1912)	0.29
Northeast	2.11	0.54	38th Wettest	6.01 (1949)	0.01 (1986)	0.98
West Central	0.72	-0.16	52nd Wettest	4.08 (1949)	0.00 (1912)	0.28
Central	1.81	0.44	30th Wettest	6.18 (1949)	0.00 (1912)	0.49
East Central	3.36	1.23	22nd Wettest	7.99 (1932)	0.04 (1986)	1.49
Southwest	1.45	0.39	37th Wettest	4.89 (1949)	0.00 (1902)	0.13
South Central	2.63	0.73	21st Wettest	6.85 (1932)	0.00 (1909)	1.49
Southeast	5.21	2.40	17th Wettest	11.08 (1932)	0.11 (2003)	3.28
Statewide	2.05	0.60	30th Wettest	5.23 (1949)	0.04 (1986)	0.91

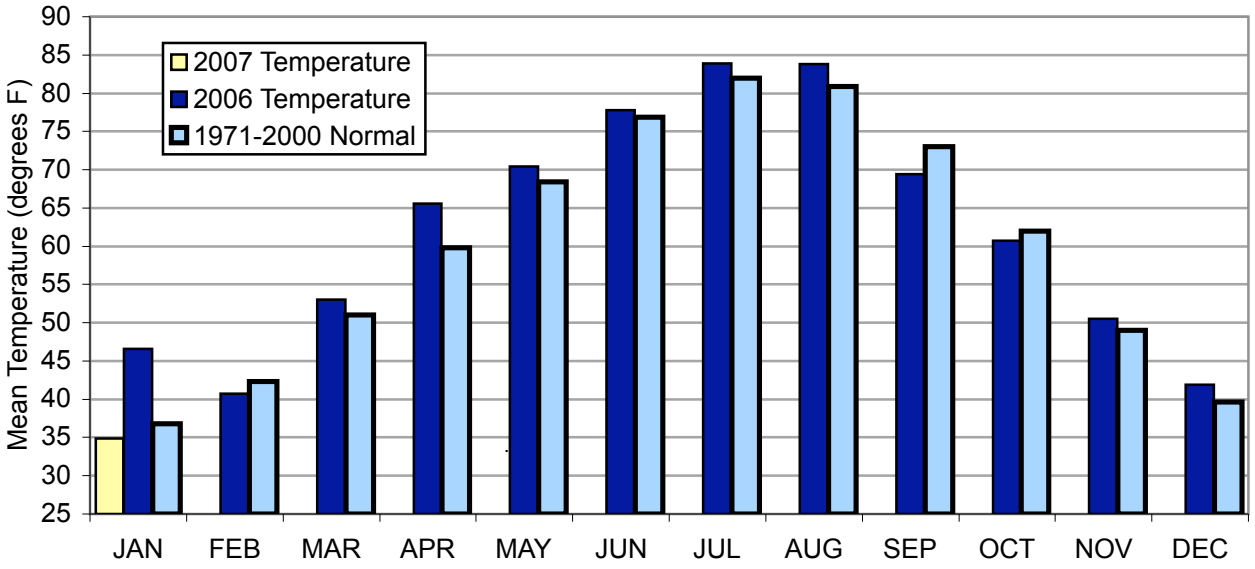
2006 and 2007 Statewide Precipitation Monthly Totals vs. Normal



January 2007 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jan-06 (F)
Panhandle	29.2	-3.8	19th Coolest	42.6 (1953)	19.5 (1930)	42.1
North Central	32.7	-0.8	36th Coolest	45.2 (2006)	19.4 (1930)	45.2
Northeast	34.1	-0.5	43rd Coolest	46.0 (2006)	21.3 (1940)	46.0
West Central	34.0	-1.0	38th Coolest	46.4 (2006)	20.8 (1930)	46.4
Central	35.4	-0.8	38th Coolest	47.4 (2006)	22.5 (1930)	47.4
East Central	36.4	-0.9	40th Coolest	47.7 (1933)	0.0 (2007)	47.6
Southwest	36.2	-1.3	35th Coolest	47.8 (1923)	24.2 (1930)	47.8
South Central	37.7	-1.4	27th Coolest	49.5 (1923)	27.0 (1930)	49.2
Southeast	38.6	-1.0	30th Coolest	49.4 (1952)	28.3 (1979)	47.9
Statewide	34.9	-1.2	33rd Coolest	46.6 (2006)	23.5 (1930)	46.6

2006 and 2007 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for January 2007

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	74	11th	Arnett	0	16th	Kenton	1.02	Arnett	0.41	24th	Arnett
North Central	76	11th	Alva	4	23rd	Seiling	1.09	Cherokee	0.53	21st	Red Rock
Northeast	71	11th	Pawnee	5	16th	Foraker	3.06	Jay	0.93	21st	Jay
West Central	75	11th	Camargo	6	23rd	Camargo	0.87	Weatherford	0.33	24th	Butler
Central	73	11th	Stillwater	10	31st	Oilton	3.10	Bowlegs	1.01	21st	Okemah
East Central	66	11th	Hectorville	10	30th	Cookson	5.11	Sallisaw	2.28	13th	Sallisaw
Southwest	73	11th	Hollis	14	15th	Hinton	2.13	Walters	1.04	20th	Walters
South Central	68	11th	Pauls Valley	16	15th	Byars	4.20	Durant	2.10	12th	Durant
Southeast	68	12th	Idabel	16	31st	Wister	5.96	Broken Bow	2.41	13th	Clayton
Statewide	76	11th	Alva	0	16th	Kenton	5.96	Broken Bow	2.41	13th	Clayton

February Climatological Outlook

February is the warmest of the Oklahoma's three winter months, a product of the combination of gradually lengthening days - often heralding an illusory approach of spring - and the very real existence of the continuing winter. Recorded temperatures in Oklahoma during the second month of the year traverse a range of 126 degrees Fahrenheit, from 99 degrees at Arapaho on February 24, 1918 to –27 degrees at Vinita on February 13, 1905. The latter thermometer reading is tied as the state's all-time lowest temperature. Oklahoma's normal monthly temperature, based on data obtained from 1971 through 2000, is 42.3 degrees. Monthly values of normal daily maximum temperatures across the state range between 60.3 degrees along the Red River at Waurika and 49.5 degrees at Newkirk near the state's northern border. Normal daily minimum temperatures vary between 34.4 degrees at Waurika and 22.0 degrees in the Panhandle at Beaver. The monthly mean temperatures for February, compiled as a statewide average since 1892, have varied between a high of 50.7 degrees in 1954 and a low of 26.6 degrees in both 1899 and 1905.

Temperature

Mean: 42.3 degrees
Warmest February: 1954, 51.8 degrees
Coolest February: 1899, 27.9 degrees
Hottest recorded: 99 degrees, Arapaho, February 24, 1918
Coldest recorded: -27 degrees, Vinita, February 13, 1905

Of all the other months, only January has a normal precipitation lower, when averaged statewide, than February's 1.77 inches. Southeastern Oklahoma's Idabel possesses the state's greatest precipitation normal during February at 3.60 inches. Kenton, in the shadow of Black Mesa, gains distinction as the state's driest reporting station during February with a normal total of 0.33 inch. The February statewide-averaged precipitation varies substantially, being bounded by a low of 0.18 inch attained 1996 and a high of, 4.66 inches in 1938. In contrast to the many stations that have suffered through February precipitation voids, Tuskahoma was treated to an excessive 13.21 inches during February 1945. Snow is an important part of the precipitation picture in northwestern Oklahoma. Helena and Woodward both average about 4.7 inches of snow during February, compared to less than one-half inch at stations in southeastern Oklahoma.

Precipitation

Mean: 1.77 inches
Wettest February: 1938, 6.44 inches
Driest February: 1947 and 1996, 0.20 inches
Wettest location: Idabel, 3.60 inches
Driest location: Kenton, 0.33 inches
Most recorded: 13.21 inches, Tuskahoma, 1945

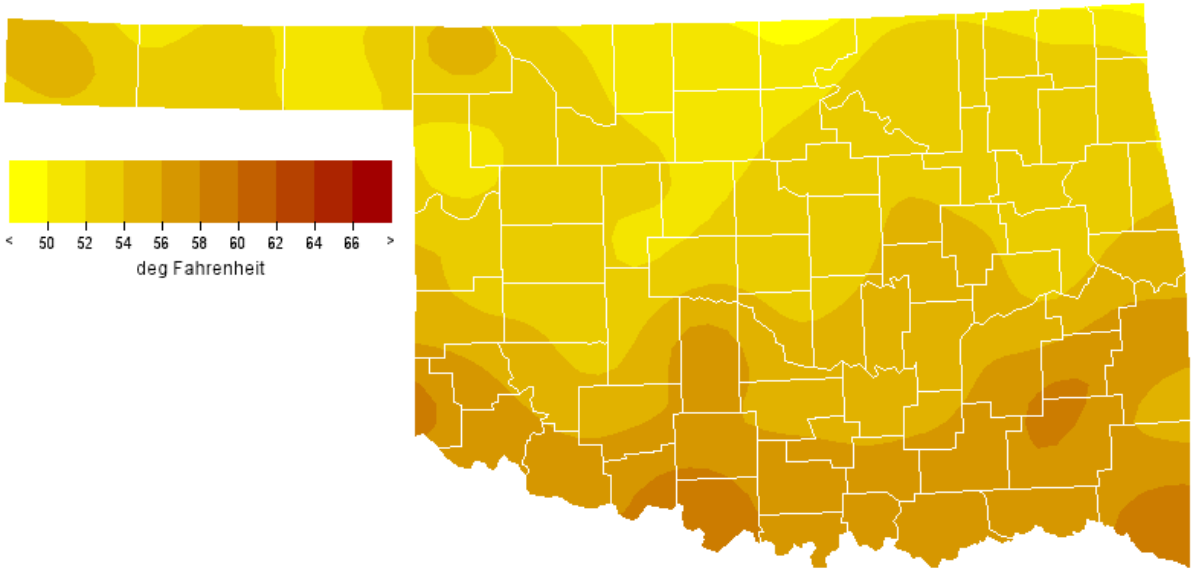
Oklahoma's extreme snowstorm of record was the blizzard of February 21-23, 1971. This blizzard buried northwestern Oklahoma under as much as three feet of snow, not accounting for drifts. Buffalo was the hardest hit, reporting 23 inches of snow on the 21st and a state-record snow depth of 36 inches by the morning of the 24th. The snow was driven by winds 30 to 50 miles per hour, producing drifts as high as 20 feet. Military cargo planes were used to airdrop hay to cattle stranded in the far-flung pastures of the region. Losses to agriculture were estimated at $2.1 million (1971 dollars). Lost livestock included approximately 11,000 cattle, 3,500 hogs, and 1,000 sheep. Buffalo reported a total of 39.5 inches of snow during the month (a state record for all months).

Tornadoes

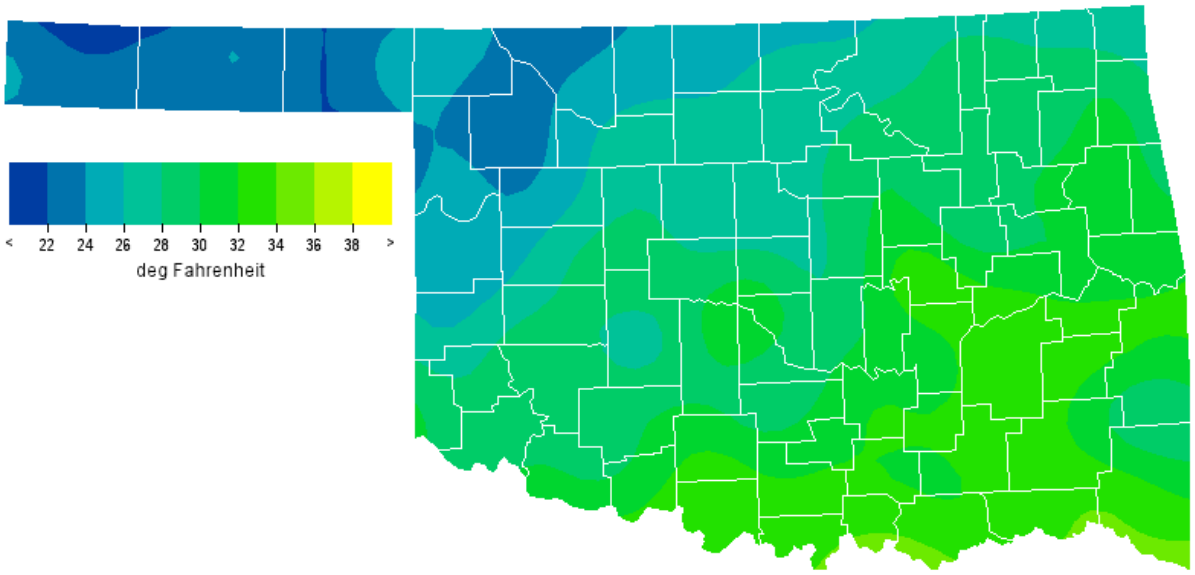
Average February Tornadoes: 0.8
Most: 6 (1975)

Tornadoes are not generally considered a February phenomenon, but a total of 44 February tornadoes have been recorded across the state since 1950, including six in 1975. Three people were killed on February 22, 1975, bringing the confirmed total of February tornado deaths in the state to nine, according to storm-by-storm death tolls compiled by Thomas P. Grazulis and published in the book "Significant Tornadoes: 1880-1989."

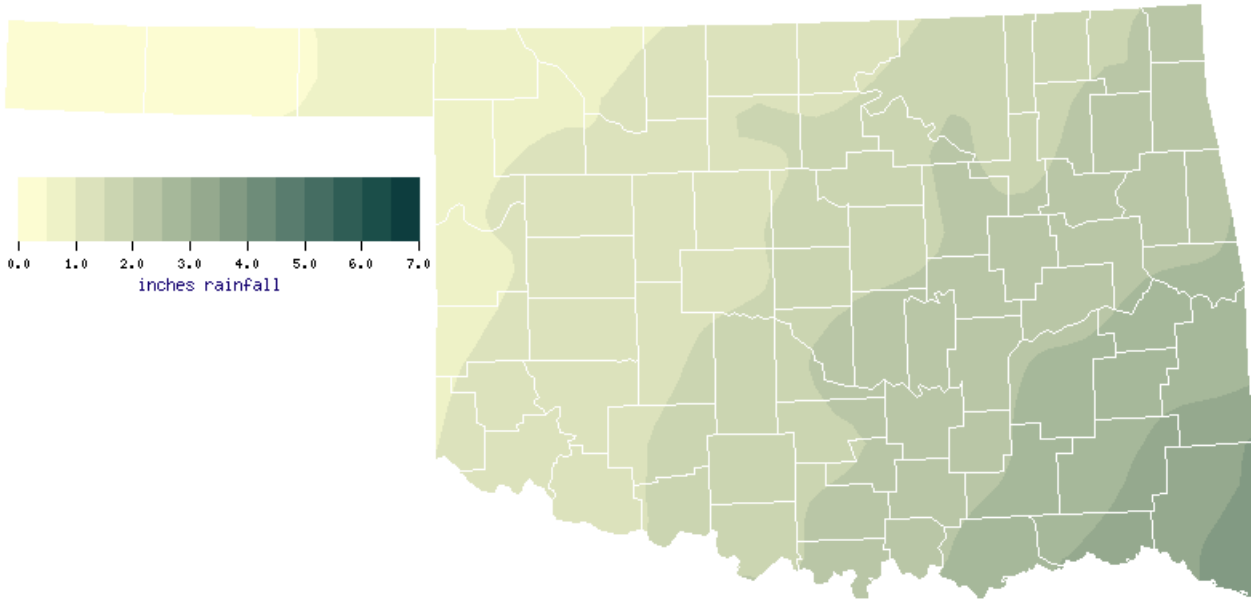
February Normal Monthly Maximum Temperature (1971-2000)



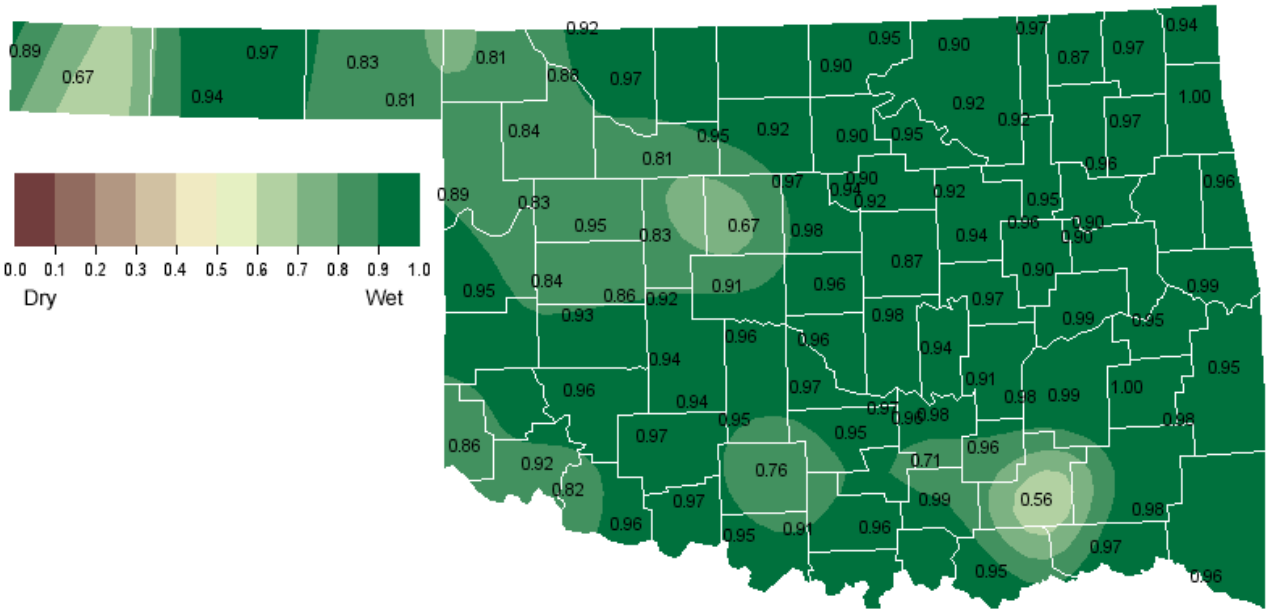
February Normal Monthly Minimum Temperature (1971-2000)



February Normal Precipitation (1971-2000)



February 1, 2007 Soil Moisture Conditions at 25cm



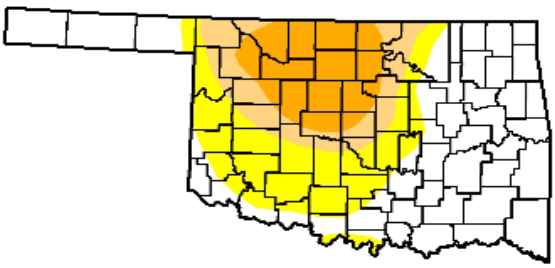
February 2007 Drought Indices

U.S. Drought Monitor
Oklahoma

January 30, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	50.2	49.8	26.9	15.5	0.0	0.0
Last Week (01/23/2007 map)	56.5	43.5	27.9	16.8	0.0	0.0
3 Months Ago (11/07/2006 map)	10.5	89.5	68.6	38.1	8.8	0.0
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 (01/31/2006 map)	0.0	100.0	88.6	70.6	29.7	3.9



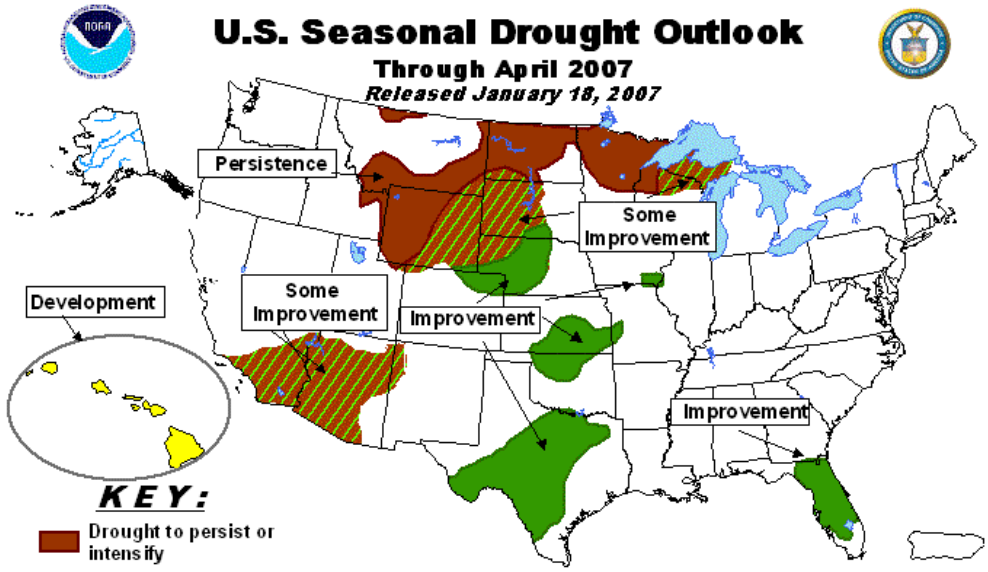
Intensity:

- 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

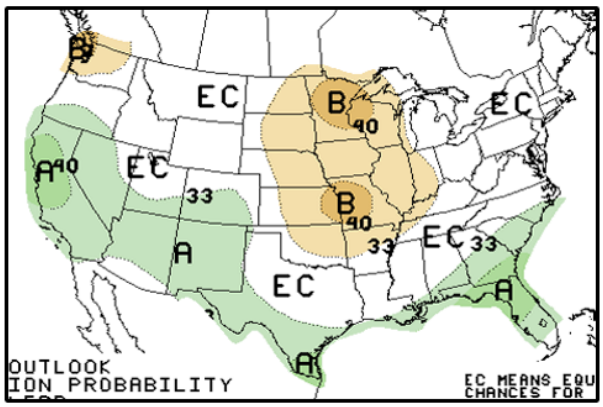
http://drought.unl.edu/dm

Released Thursday, February 1, 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.

February 2007 U.S. Precipitation Forecast



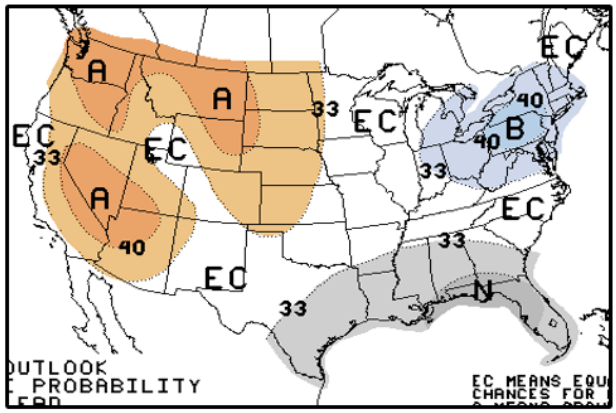
Percent Likelihood of Above or Below Average Precipitation*

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

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

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

February 2007 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

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

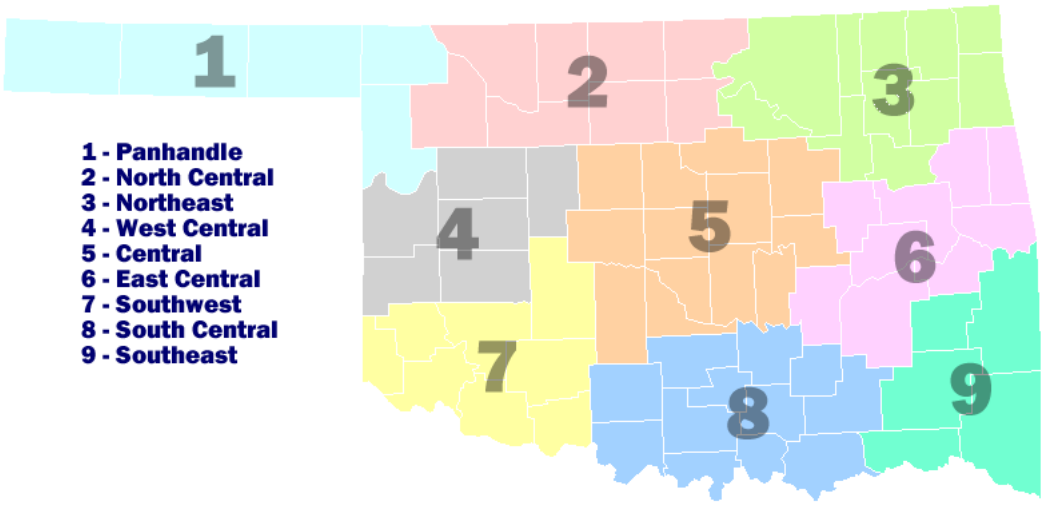
0% - 5%
5% - 10%
B = Below

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

February Climate Normals

Climate Division	Max. Temperature (∞F)	Min. Temperature (∞F)	Avg. Temperature (∞F)	Precipitation (inches)
1	53.3	23.8	38.6	0.64
2	51.4	25.1	38.3	1.23
3	52.9	28.8	40.9	1.96
4	53.2	26.9	40.1	1.09
5	53.9	29.2	41.6	1.77
6	54.4	31.2	42.8	2.35
7	55.9	29.0	42.5	1.36
8	56.8	31.9	44.4	2.21
9	57.3	31.9	44.6	3.13
Statewide	54.2	28.7	41.5	1.82

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

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