

# OKLAHOMA MONTHLY CLIMATE SUMMARY

## January 2009



An exceedingly dry and relatively mild January was interrupted near its end by the most significant winter storm to date of the current season. The storm, which struck on January 26-27, brought travel across the state to a standstill as snow, sleet, and freezing rain made roads nearly impassable. Up to 3 inches of sleet fell in central Oklahoma, with another couple of inches of ice accumulating on power lines in the east. More than 50,000 utility customers were left without power at the peak of the storm. The damage increased significantly into Arkansas. Before that storm, the month was shaping to be one of the driest on record. With that added boost of precipitation, however, the rankings rose to the 26th driest January since 1895 with a deficit of around three-quarter inches. The month was also warmer than normal by about a degree, which still ranked it as the 56th coolest on record.

### Precipitation

The precipitation statistics grew steadily worse from east to west, with around 3 inches along the Arkansas border to no precipitation in the western Panhandle. The Panhandle as a whole had an average of just a few hundredths inches of precipitation to rank as the 8th driest January on record for that area. In reality, east central Oklahoma was the only part of the state to see significant precipitation with an average of just over 2 inches, which was near normal and ranked the region's January as the 50th wettest on record. The Oklahoma Mesonet site at Sallisaw recorded the most precipitation with 3.61 inches while three Mesonet stations in the Oklahoma Panhandle went without a spot of moisture for the entire month. The first two months of the winter season finds an even larger deficit for the state. The statewide average precipitation total for December-January was 1.60 inches, nearly 2 inches below normal and the 14th driest such period on record.

### Temperature

Even though the statewide average temperature for January was a degree above normal, it still ranked on the cool side – the 56th coolest January since 1895. The Oklahoma Panhandle was nearly 3 degrees above normal to go along with their bone

Description	Extreme	Station	Day
High Temperature	84°F	Ringling, Waurika	22
Low Temperature	-1°F	Buffalo, Nowata	28
High Precipitation	3.61 in.	Sallisaw	
Low Precipitation	0.00 in.	Boise City, Goodwell, Kenton, Putnam	

dry weather. The only areas of the state below normal were east central and northeastern Oklahoma, but not by significant amounts. The December-January period was also a bit above normal, 0.2 degrees, but ranked on the cool side – 50th coolest since 1895.

### January Daily Highlights

**January 1-3:** The month had a warm start through the first three days with highs ranging from the 50s and 60s on the first to 70s and 80s on the third. The springtime temperatures quickly vanished later on the third as an arctic cold front swept through the state and dropped temperatures back into the 40s. The Oklahoma Mesonet stations at Burneyville and Newport recorded high temperatures of 82 degrees before the cold front passed, and four NWS observing stations set or tied record high temperatures for that day.

**January 4-9:** Winter weather returned after the arctic cold front. Winds gusted to over 30 mph the morning of the fourth and combined with temperatures in the teens and 20s to produce single-digit wind chills. A bit of freezing rain and sleet on the fifth gave way to a warm-up over the next couple of days. By the eighth and ninth, temperatures had risen into the 70s and 80s. Oklahoma City broke its high temperature record for the ninth with a reading of 75 degrees, and the Altus Mesonet site recorded a high of 81 degrees. A cold front moved through the state later that day and dropped temperatures back into the 50s and 60s, accompanied by wind gusts of over 50 mph.

**January 10-12:** Frigid temperatures on the 10th were the norm after the cold front. Northerly winds gusting over 50 mph accompanied low temperatures in the teens and 20s to produce wind chills close to zero. The weather warmed through the 12th until a late cold front brought the state back to the reality of winter.

**January 13-16:** Lows in the single digits on the 13th greeted the northwestern area of the state. A low pressure trough moved over the northwest in the afternoon and switched winds around from north-to-south at 5-10 mph. Temperatures managed to climb into the 40s and 50s. A modest warm-up on the 14th gave way to a reinforcing shot of cold air on the 15th with yet another cold front passage. A smattering of snow occurred in the far northern parts of the state. Most amounts were around a half of an inch. High temperatures on the 15th were in the 20s and 30s, with single-digit wind chills. The cold air began to move east on the 16th and high temperatures rose into the 60s in some areas.

**January 17-23:** A weak cold front did little to diminish the warm weather on the 17th. Highs rose into the 50s and 60s that afternoon. Those temperatures were parlayed into 60s and 70s over the next couple of days before a cold front slowed things down a bit on the 19th. High temperatures rebounded quickly and were once again into the 60s and 70s through the 23rd. The month's high temperature of 84 degrees was recorded on the 22nd at the Waurika and Ringling Mesonet sites. A more powerful cold front arrived in the state on the 23rd, however, dropping highs into the 40s as it passed, and kicked winds up from the north at 40 mph.

**January 24-27:** Frigid temperatures on the 24th set the stage for the most significant storm of the season. Light snow flurries fell that day amidst temperatures in the teens and 20s. Northerly winds gusting to 40 mph produced wind chills in the single digits. By afternoon, the sun had come out and highs ranged from the upper 20s to the low 40s. A similar day on the 25th gave way to an icy 26th, courtesy of an upper-level storm system to the west. The precipitation started as light freezing drizzle in south central Oklahoma, increasing to light freezing rain as it moved towards central Oklahoma. Travel problems quickly erupted and by evening, travel was

<b>January 2009 Statewide Statistics</b>			
<b>Temperature</b>			
	<b>Average</b>	<b>Depart.</b>	<b>Rank (1895-2009)</b>
Month (January)	37.1°F	1.0°F	56th Coolest
Season-to-Date (Dec-Jan)	37.8°F	0.2°F	50th Coolest
<b>Precipitation</b>			
	<b>Total</b>	<b>Depart.</b>	<b>Rank (1895-2009)</b>
Month (January)	0.70 in.	-0.75 in.	26th Driest
Season-to-Date (Dec-Jan)	1.60 in.	-1.87 in.	14th Driest
Depart. = Departure from 30-year normal			

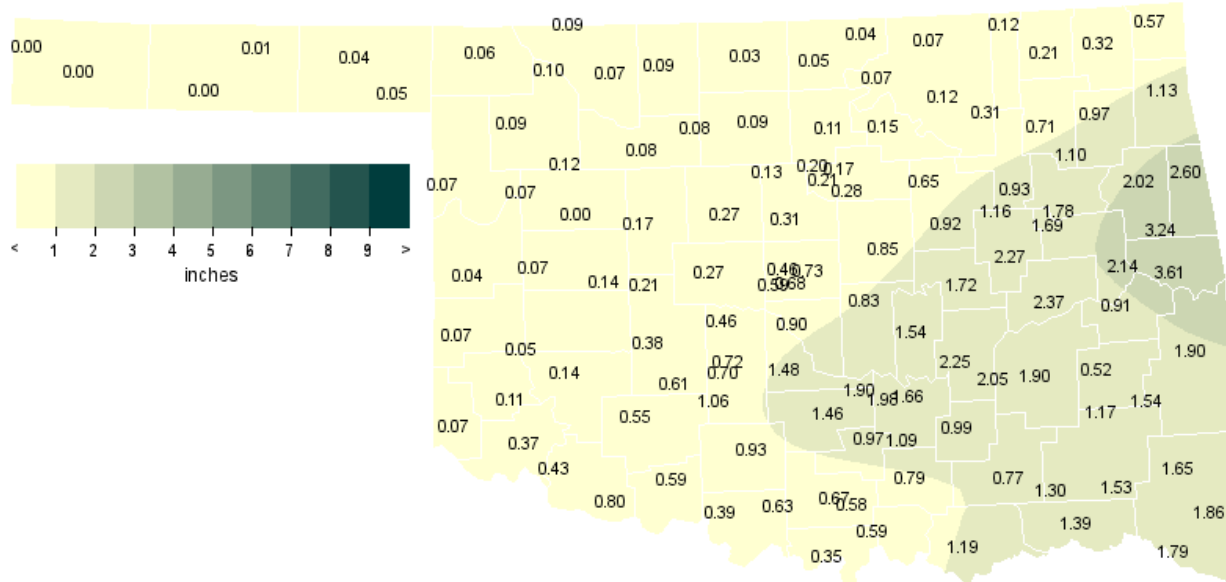
discouraged over much of the state. Freezing drizzle, freezing rain, sleet, and light snow continued overnight into the 27th. Some areas experienced thunder as well, signaling heavier convective precipitation. Up to 3 inches of sleet fell in central Oklahoma, and nearly 2 inches of ice accumulations were reported on power lines in east central Oklahoma. More than 50,000 electrical utility customers lost power in Oklahoma from downed power lines.

**January 28-31:** Temperatures were quite cold on the 28th, especially in the ice-encased areas. The month's low temperature reading of 31 degrees was recorded at Mesonet sites in Buffalo and Nowata. High temperatures rebounded into the low 50s in the west with plenty of sunshine and no ice. Where there was ice, however, temperatures struggled to rise into the 40s. A slow warm-up brought temperatures well into the 60s and 70s by the 31st. The ice melted quickly over those three days and gave some drought-stricken portions of Oklahoma a nice gentle soaking.

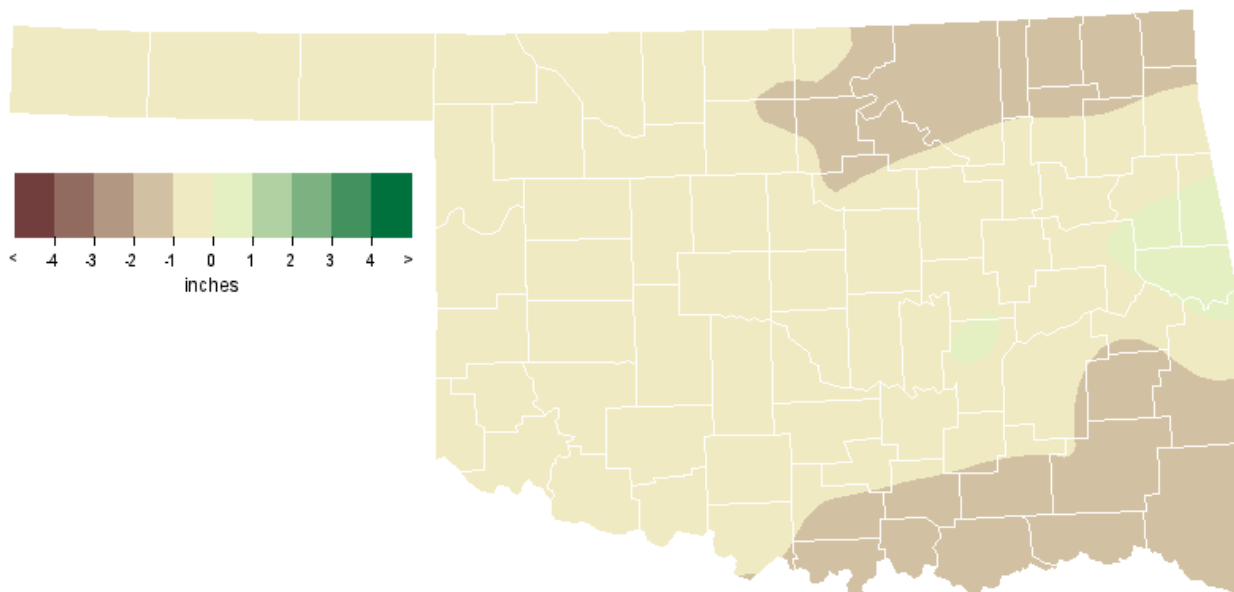
## Record Event Reports

<b>Description</b>	<b>Day</b>	<b>Location</b>	<b>Record</b>	<b>Previous Record</b>	<b>Year</b>
Highest Maximum Temperature (tied)	3	Bartlesville	75 degrees	75 degrees	1997
Highest Maximum Temperature	3	McAlester	81 degrees	76 degrees	1997
Highest Maximum Temperature	3	Muskogee	78 degrees	75 degrees	2006
Highest Maximum Temperature	3	Tulsa	78 degrees	75 degrees	2004
Highest Maximum Temperature	9	Oklahoma City	75 degrees	73 degrees	2002

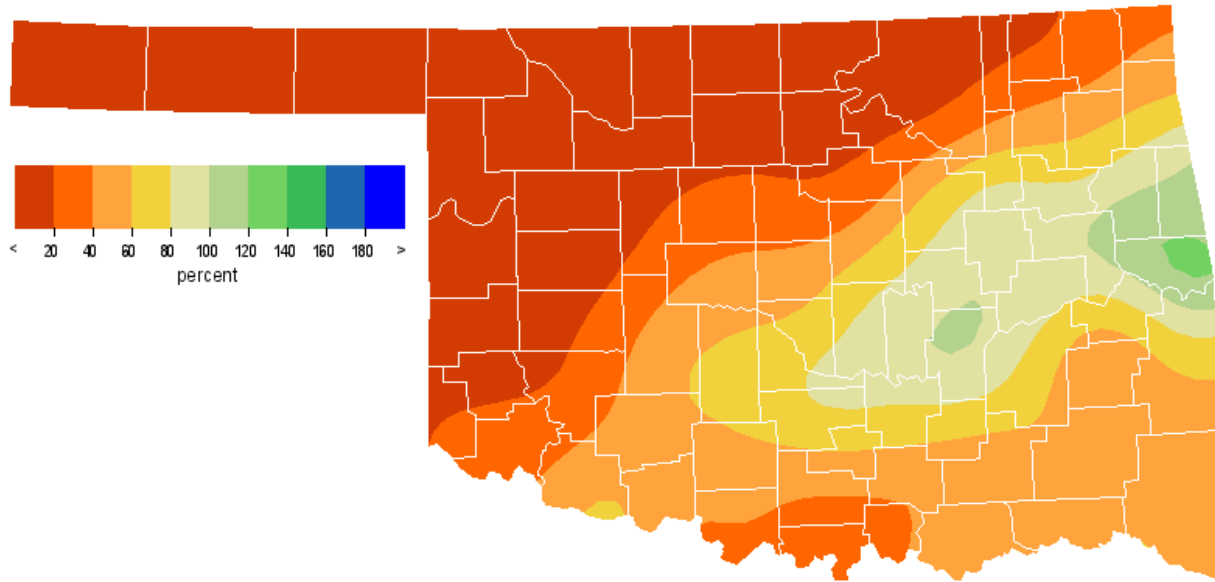
## January 2009 Observed Precipitation



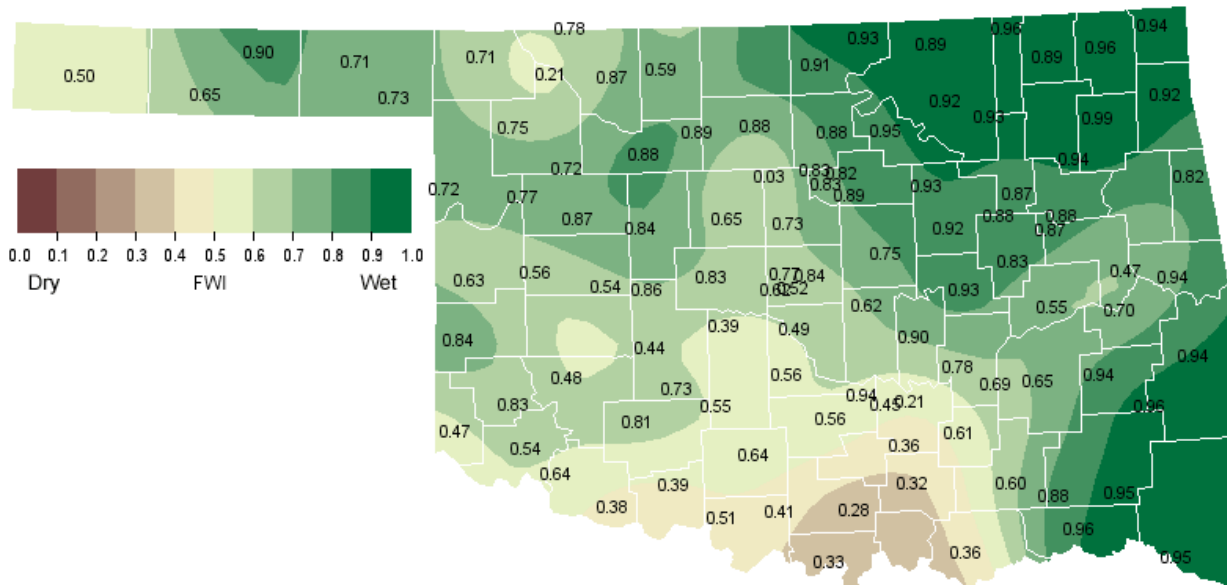
## January 2009 Departure from Normal Precipitation



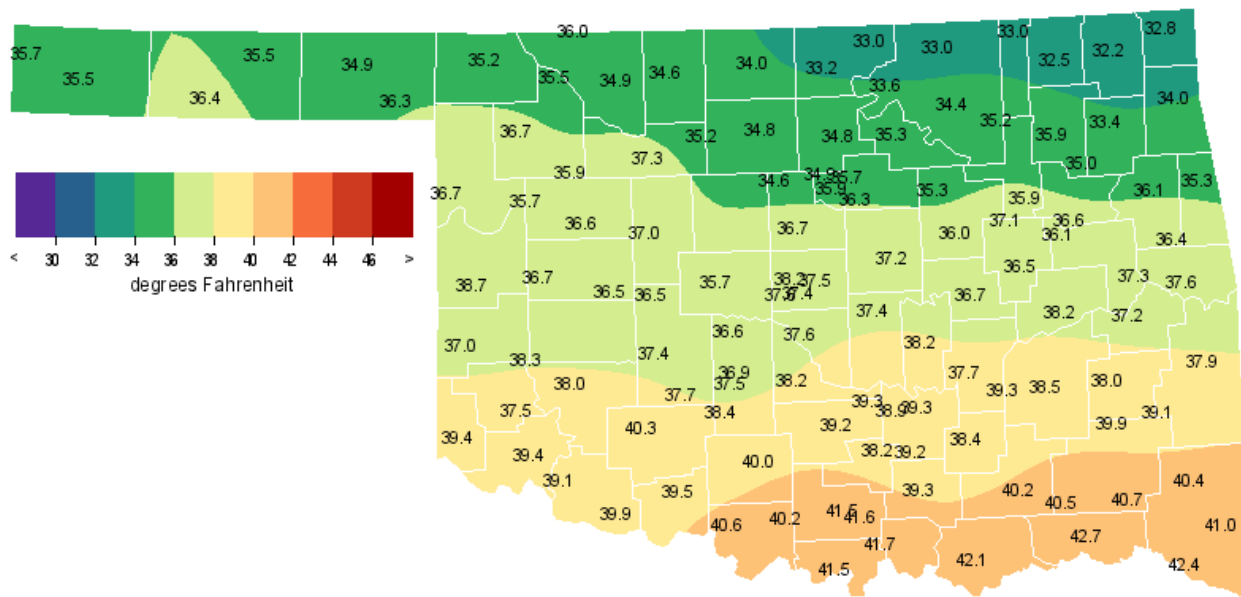
## January 2009 Percent of Normal Precipitation



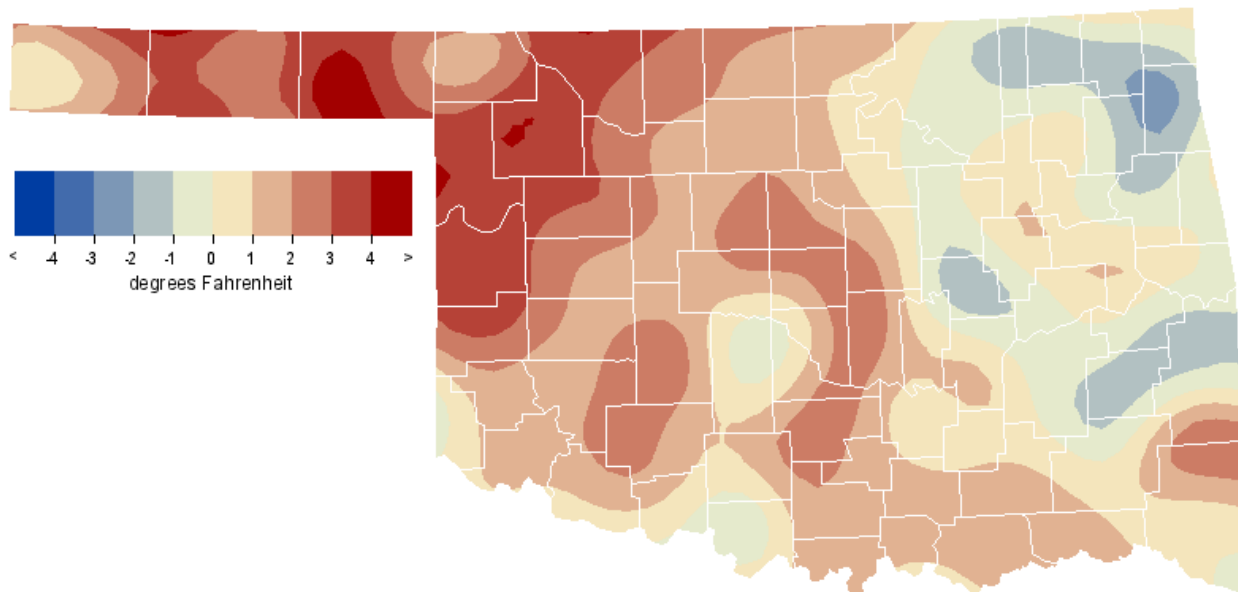
## January 2009 Average Soil Moisture at 25cm



## January 2009 Average Temperature



## January 2009 Departure from Normal Temperature



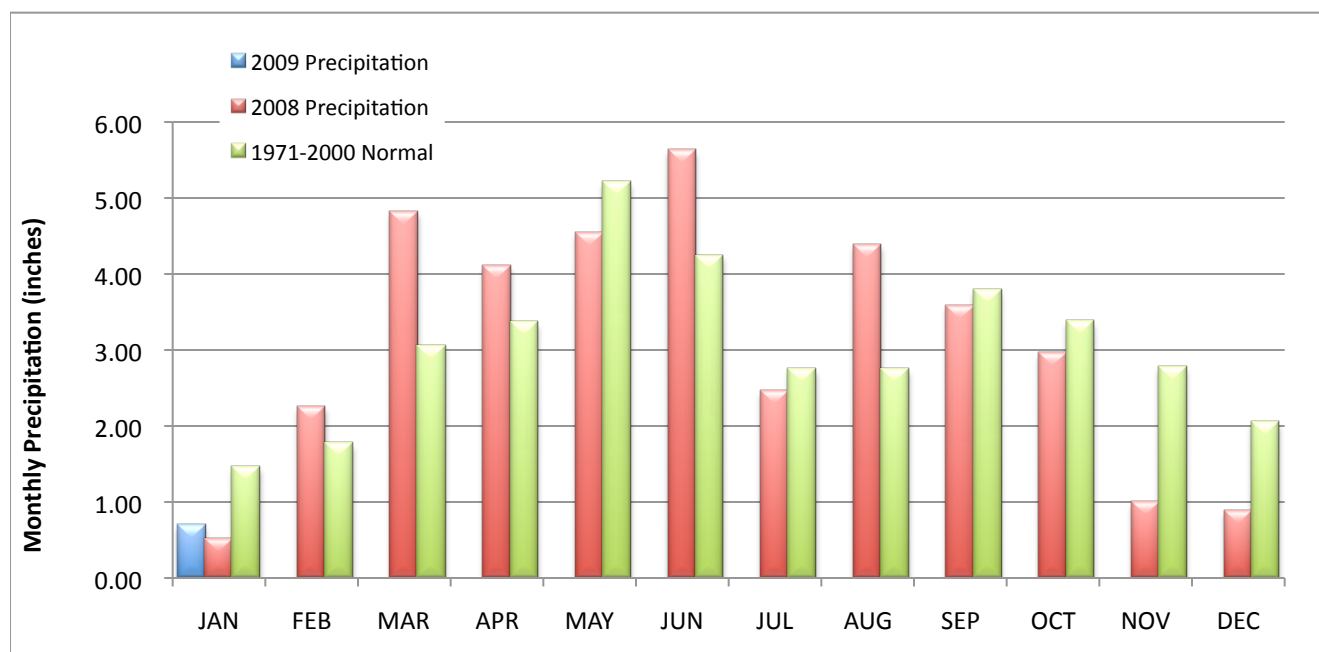
# Mesonet Monthly Summary for January 2009

NAME	MEAN HIGH			LOW			TOT HIGH			NAME	MEAN HIGH			LOW			TOT HIGH				
	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR		DAY	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY
<b>PANHANDLE</b>																					
Arnett	36.7	75	3	2	28	878	0	.07	.07	28	Goodwell	36.4	72	21	6	27	885	0	.00	.00	1
Beaver	34.9	72	22	1	28	932	0	.04	.04	28	Hooker	35.6	71	22	4	27	913	0	.01	.01	28
Boise City	35.6	73	21	1	27	912	0	.00	.00	1	Kenton	35.7	75	21	0	27	908	0	.00	.00	1
Buffalo	35.2	72	22	-1	28	924	0	.06	.06	28	Slapout	36.4	74	22	3	28	887	0	.05	.05	28
<b>NORTH CENTRAL</b>																					
Alva	34.9	71	31	1	28	932	0	.07	.06	28	May Ranch	36.0	70	31	3	28	899	0	.09	.09	28
Blackwell	33.3	70	31	4	28	983	0	.05	.04	28	Medford	34.0	71	31	5	28	960	0	.03	.03	28
Breckinridge	34.7	71	3	3	28	939	0	.09	.09	28	Newkirk	33.0	69	31	4	28	991	0	.04	.03	28
Cherokee	34.6	72	31	3	28	942	0	.09	.09	28	Red Rock	34.7	74	3	2	28	938	0	.11	.10	28
Fairview	37.3	74	3	5	28	859	0	.08	.08	28	Seiling	35.9	75	3	1	28	901	0	.12	.12	28
Freedom	35.6	70	31	0	28	913	0	.10	.10	28	Woodward	36.7	70	3	4	28	879	0	.09	.09	28
Lahoma	35.2	70	3	5	28	924	0	.08	.07	28											
<b>NORTHEAST</b>																					
Bixby	35.8	78	3	13	28	905	0	.93	.47	30	Nowata	32.5	74	3	-1	28	1009	0	.21	.11	28
Burbank	33.6	73	3	3	28	974	0	.07	.07	28	Pawnee	35.3	74	3	6	28	922	0	.15	.12	28
Claremore	35.9	77	3	10	28	902	0	.71	.30	29	Porter	36.6	78	3	13	28	882	0	1.78	.65	30
Copan	33.0	74	3	5	28	992	0	.12	.08	28	Pryor	33.4	76	3	3	28	979	0	.97	.54	30
Foraker	33.0	72	3	4	28	993	0	.07	.06	28	Skiatook	35.2	75	3	6	28	925	0	.31	.17	28
Inola	35.0	78	3	8	28	930	0	1.10	.60	30	Vinita	32.3	74	3	1	28	1014	0	.32	.27	29
Jay	34.0	76	3	7	16	962	0	1.13	.42	30	Wynona	34.4	74	3	5	28	949	0	.12	.09	28
Miami	32.8	74	3	6	28	999	0	.57	.28	29											
<b>WEST CENTRAL</b>																					
Bessie	38.2	75	3	7	28	****	****	.10	.10	28	Putnam	36.6	73	3	4	28	882	0	.00	.00	1
Butler	36.7	76	3	2	28	878	0	.07	.07	28	Retrop	38.3	76	3	4	28	829	0	.05	.05	28
Camargo	35.7	77	3	0	28	910	0	.07	.07	28	Watonga	37.0	69	3	5	28	868	0	.17	.17	28
Cheyenne	38.7	76	3	8	16	816	0	.04	.04	28	Weatherford	36.5	70	3	5	28	884	0	.14	.14	28
Erick	37.0	76	3	2	28	869	0	.07	.06	28											
<b>CENTRAL</b>																					
Acme	38.4	79	22	7	28	825	0	1.06	.49	30	Ninnekah	37.5	78	22	8	28	851	0	.70	.28	30
Bowlegs	38.1	78	3	10	16	833	0	1.54	.90	30	Norman	37.6	79	22	10	28	850	0	.90	.44	30
Bristow	35.9	77	3	10	28	902	0	.92	.50	30	Oilton	35.3	78	22	2	28	921	0	.65	.25	29
Lake Carl Blac	34.9	75	22	5	28	934	0	.20	.17	28	OKC E	37.4	77	22	10	28	856	0	.68	.36	29
Chandler	37.2	79	22	9	28	861	0	.85	.41	30	OKC N	38.1	77	22	10	16	833	0	.46	.31	29
Chickasha	36.9	80	22	8	28	871	0	.72	.41	29	OKC W	37.7	75	22	11	28	846	0	.59	.36	29
El Reno	35.7	74	22	4	28	909	0	.27	.20	28	Okemah	36.7	77	3	10	28	879	0	1.72	.88	30
Guthrie	36.7	77	22	6	28	878	0	.31	.21	28	Perkins	36.3	77	22	7	28	889	0	.28	.17	29
Kingfisher	35.7	74	3	5	28	****	****	.27	.22	28	Shawnee	37.4	78	22	11	28	855	0	.83	.49	30
Marena	35.9	77	22	6	28	902	0	.21	.15	28	Spencer	37.5	78	22	8	16	853	0	.73	.37	30
Minco	36.6	75	22	6	28	881	0	.46	.26	29	Stillwater	35.7	78	22	7	28	910	0	.17	.15	28
Marshall	34.7	72	3	1	28	941	0	.13	.13	28	Washington	38.3	80	22	9	28	829	0	1.48	.64	30
<b>EAST CENTRAL</b>																					
Calvin	37.7	78	3	12	16	845	0	2.25	.81	31	Sallisaw	37.6	79	3	16	11	850	0	3.61	3.39	27
Cookson	36.4	76	3	15	15	887	0	3.24	2.09	27	Stigler	37.2	80	3	16	16	862	0	.91	.53	30
Eufaula	38.2	80	3	14	16	830	0	2.37	1.04	30	Stuart	39.2	78	3	12	16	799	0	2.05	.85	30
Haskell	36.1	77	3	14	28	894	0	1.69	.69	30	Tahlequah	36.0	78	3	14	15	898	0	2.02	1.04	30
Hectorville	37.1	78	3	11	28	864	0	1.16	.77	30	Webbers Falls	37.3	80	3	17	11	858	0	2.14	1.40	30
McAlester	38.6	80	3	10	16	819	0	1.90	1.02	30	Westville	35.2	75	3	13	15	923	0	2.60	1.39	31
Okmulgee	36.5	78	3	13	16	884	0	2.27	.92	30											
<b>SOUTHWEST</b>																					
Altus	39.4	81	9	7	28	794	0	.37	.21	29	Hollis	39.4	79	9	8	28	793	0	.07	.07	28
Apache	37.6	76	22	8	16	848	0	.61	.24	30	Mangum	37.5	80	9	1	28	853	0	.11	.10	28
Fort Cobb	37.3	75	9	5	28	858	0	.38	.23	29	Medicine Park	40.3	77	22	11	28	764	0	.55	.31	29
Grandfield	39.9	81	22	9	28	777	0	.80	.32	29	Tipton	39.1	80	9	5	28	804	0	.43	.22	29
Hinton	36.5	71	3	6	28	882	0	.21	.18	28	Walters	39.4	82	22	10	28	792	0	.59	.28	29
Hobart	38.0	78	9	5	28	838	0	.14	.08	29											
<b>SOUTH CENTRAL</b>																					
Ada	39.3	79	3	10	16	797	0	1.66	.83	30	Madill	41.6	81	3	12	16	725	0	.59	.25	28
Ardmore	41.5	81	3	12	16	727	0	.58	.21	28	Newport	41.4	83	22	11	16	730	0	.67	.31	29
Burneyville	41.4	82	3	12	16	732	0	.35	.17	28	Pauls Valley	39.2	82	22	11	16	801	0	1.46	.54	30
Byars	39.3	78	22	10	28	798	0	1.90	.74	30	Ringling	40.2	84	22	11	28	768	0	.63	.34	29
Centrahoma	38.4	79	3	8	16	825	0	.99	.39	29	Sulphur	38.2	79	3	8	16	831	0	.97	.64	29
Durant	42.1	80	3	13	16	710	0	1.19	.29	5	Tishomingo	39.3	80	3	10	16	797	0	.79	.49	29
Fittstown	39.2	78	3	9	16	800	0	1.09	.69	29	Vanoss	38.9	79	22	8	16	809	0	1.98	.64	30
Ketchum Ranch	40.0	82	22	10	28	775	0	.93	.41	29	Waurika	40.6	84	22	12	28	756	0	.39	.23	28
Lane	40.3	79	3	14	16	767	1	.77	.32	26											
<b>SOUTHEAST</b>																					
Antlers	40.5	80	3	11	16	761	2	1.30	.46	27	Idabel	42.4	79	3	18	16	703	3	1.79	.77	5
Broken Bow	41.0	78	3	17	21	743	0	1.86	.74	5	Mt Herman	40.4	77	3	19	16	767	4	1.65	.78	27
Clayton	39.9	79	3	15	16	779	1	1.17	.42	26	Talihina	39.2	77	3	15	21	805	4	1.54	.75	27
Cloudy	40.7	77	3	16	16	752	0	1.53	.65	27	Wilburton	38.0	79	3	15	16	838	0	.52	.28	29
Hugo	42.7	78	3	18	16	696	5	1.39	.45	27	Wister	37.9	78	3	15	21	839	0	1.90	1.58	27

## January 2009 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jan-09
Panhandle	0.03	-0.49	8th Driest	1.92 (2005)	0.01 (1904)	0.15
North Central	0.08	-0.85	9th Driest	4.43 (1949)	0.00 (1912)	0.40
Northeast	0.57	-1.00	11th Driest	6.01 (1949)	0.01 (1986)	2.00
West Central	0.08	-0.80	8th Driest	4.08 (1949)	0.00 (1912)	0.55
Central	0.67	-0.70	38th Driest	6.18 (1949)	0.00 (1912)	0.59
East Central	2.17	0.04	50th Wettest	7.99 (1932)	0.04 (1986)	1.07
Southwest	0.39	-0.67	39th Driest	4.89 (1949)	0.00 (1902)	0.02
South Central	1.00	-0.90	37th Driest	6.85 (1932)	0.00 (1909)	0.26
Southeast	1.46	-1.35	26th Driest	11.08 (1932)	0.11 (2003)	0.94
Statewide	0.70	-0.75	26th Driest	5.23 (1949)	0.04 (1986)	0.67

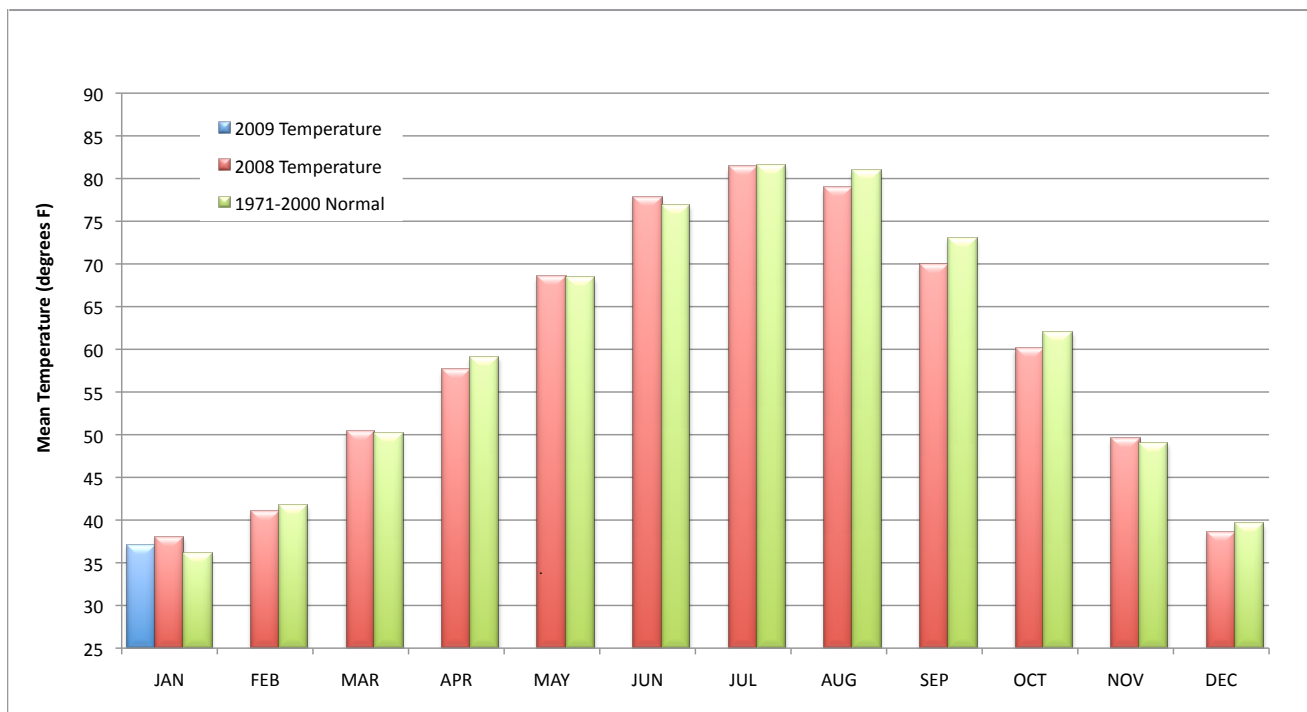
## 2008 and 2009 Statewide Precipitation Monthly Totals vs. Normal



## January 2009 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Sep-07 (F)
Panhandle	67.3	-2.1	17th Coolest	76.2 (1931)	62.4 (1974)	72.0
North Central	69.4	-2.7	19th Coolest	80.8 (1931)	64.0 (1974)	73.7
Northeast	69.1	-2.6	17th Coolest	79.1 (1931)	63.4 (1974)	73.2
West Central	69.7	-2.2	25th Coolest	80.4 (1931)	64.4 (1974)	73.8
Central	70.2	-2.6	20th Coolest	81.3 (1931)	65.0 (1974)	74.4
East Central	70.3	-2.4	13th Coolest	80.5 (1939)	65.1 (1974)	74.1
Southwest	71.4	-2.3	18th Coolest	81.2 (1931)	66.4 (1974)	75.6
South Central	71.4	-2.7	14th Coolest	81.3 (1998)	66.3 (1974)	76.1
Southeast	70.8	-2.3	16th Coolest	81.2 (1939)	65.9 (1974)	74.6
Statewide	69.9	-2.5	15th Coolest	79.8 (1931)	64.7 (1974)	74.2

## 2008 and 2009 Statewide Temperature Monthly Averages vs. Normal





## Mesonet Extremes for January 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	75	3rd	Arnett	-1	28th	Buffalo	0.07	Arnett	0.07	28th	Arnett
North Central	75	3rd	Seiling	0	28th	Freedom	0.12	Seiling	0.12	28th	Seiling
Northeast	78	3rd	Bixby	-1	28th	Nowata	1.78	Porter	0.65	30th	Porter
West Central	77	3rd	Camargo	0	28th	Camargo	0.17	Watonga	0.17	28th	Watonga
Central	80	22nd	Washington	1	28th	Marshall	1.72	Okemah	0.90	30th	Bowlegs
East Central	80	3rd	McAlester	10	16th	McAlester	3.61	Sallisaw	3.39	27th	Sallisaw
Southwest	82	22nd	Walters	1	28th	Mangum	0.80		0.32	29th	Grandfield
South Central	84	22nd	Waurika	8	16th	Sulphur	1.98	Vanoss	0.83	30th	Ada
Southeast	80	3rd	Antlers	11	16th	Antlers	1.90	Wister	1.58	27th	Wister
Statewide	84	22nd	Waurika	-1	28th	Buffalo	3.61	Sallisaw	3.39	27th	Sallisaw

## 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

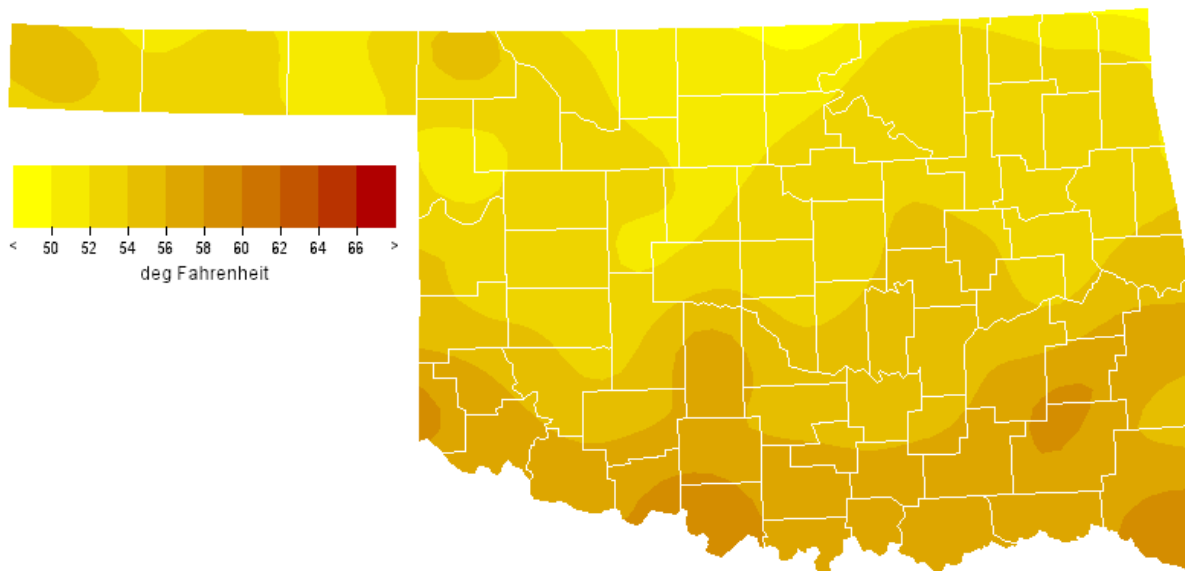
Oklahoma's extreme snowstorm of record was the blizzard of February 21-23, 1971. This blizzard buried northwestern Oklahoma under as much as three feet of snow, not accounting for drifts. Buffalo was the hardest hit, reporting 23 inches of snow on the 21st and a state-record snow depth of 36 inches by 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

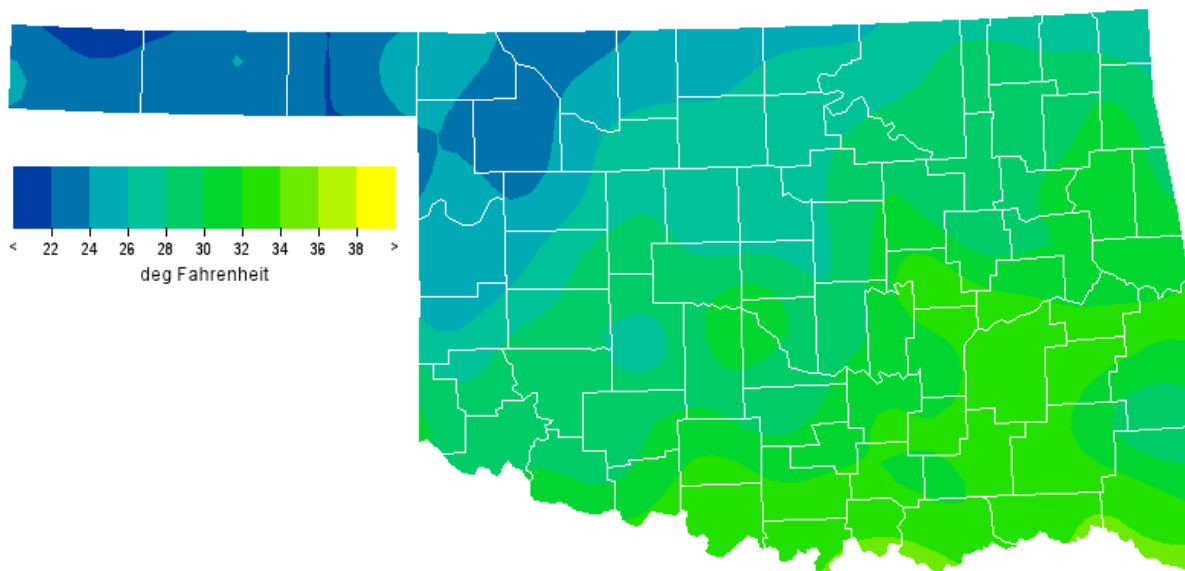
Average February Tornadoes: 0.8  
Most: 6 (1975)

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."

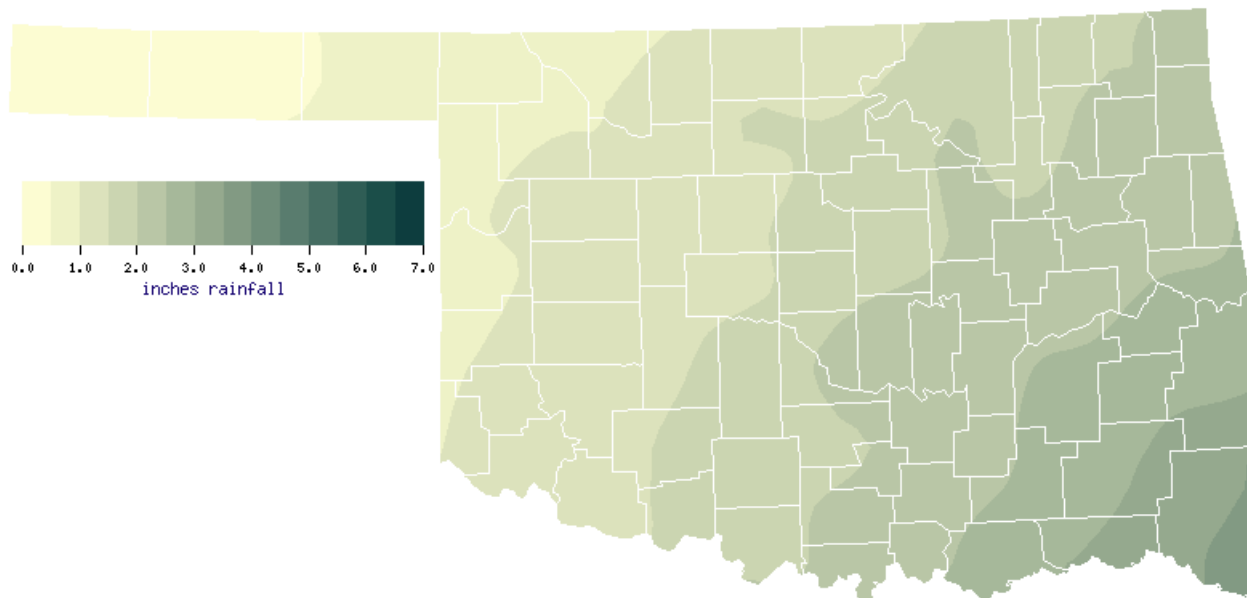
## February Normal Daily Maximum Temperature (1971-2000)



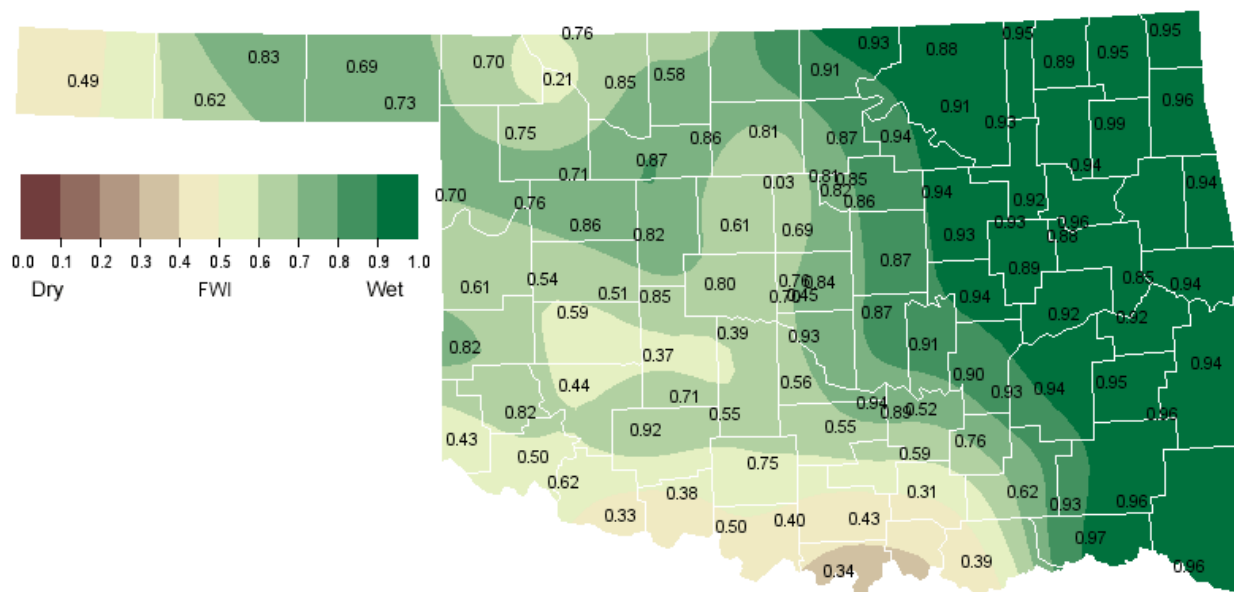
## February Normal Daily Minimum Temperature (1971-2000)



## February Normal Precipitation (1971-2000)



## February 1, 2009 Soil Moisture Conditions at 25cm



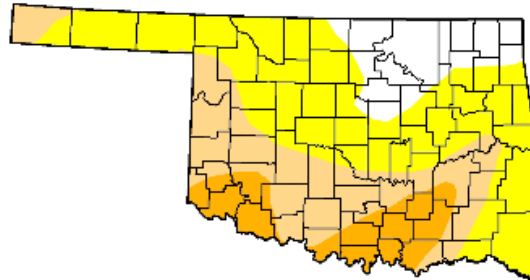
# U.S. Drought Monitor

## Oklahoma

January 27, 2009  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	13.8	86.2	38.8	12.4	0.0	0.0
Last Week (01/20/2009 map)	29.3	70.7	27.7	4.5	0.0	0.0
3 Months Ago (11/04/2008 map)	45.1	54.9	9.7	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 (10/07/2008 map)	84.4	15.6	5.0	3.5	0.0	0.0
One Year Ago (01/29/2008 map)	48.5	51.5	8.5	0.0	0.0	0.0



**Intensity:**

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

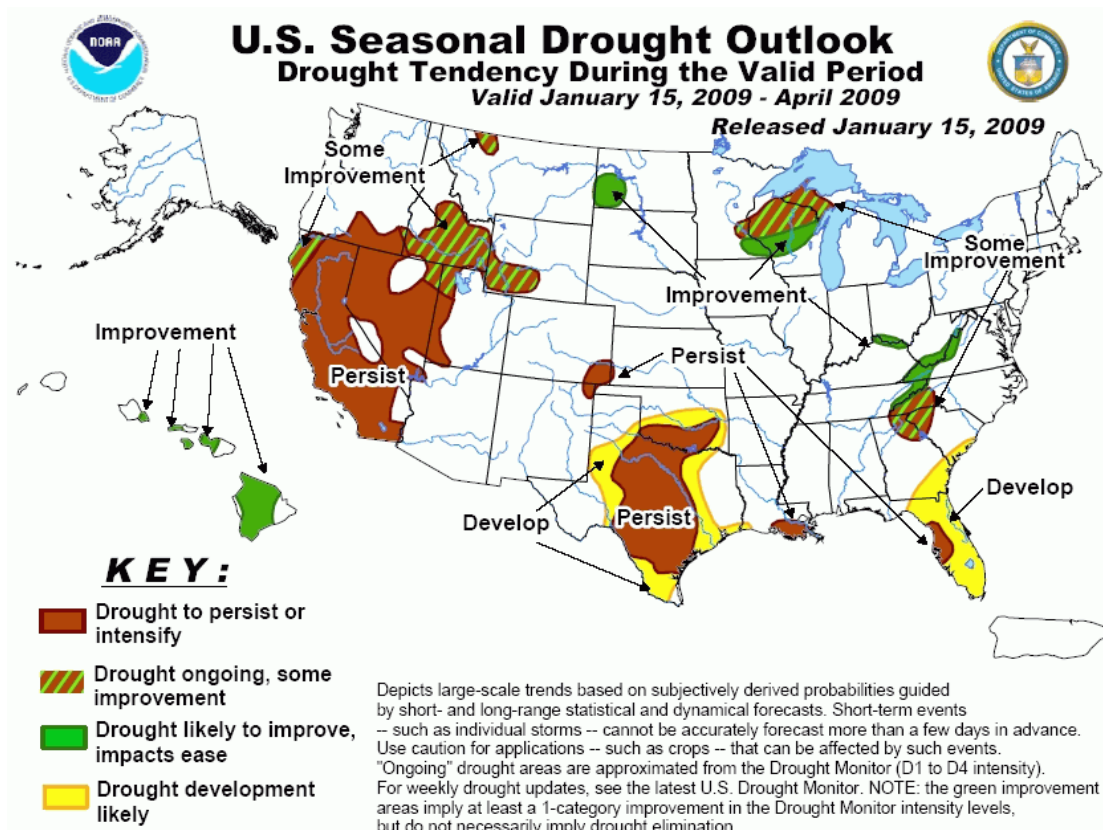
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

<http://drought.unl.edu/dm>

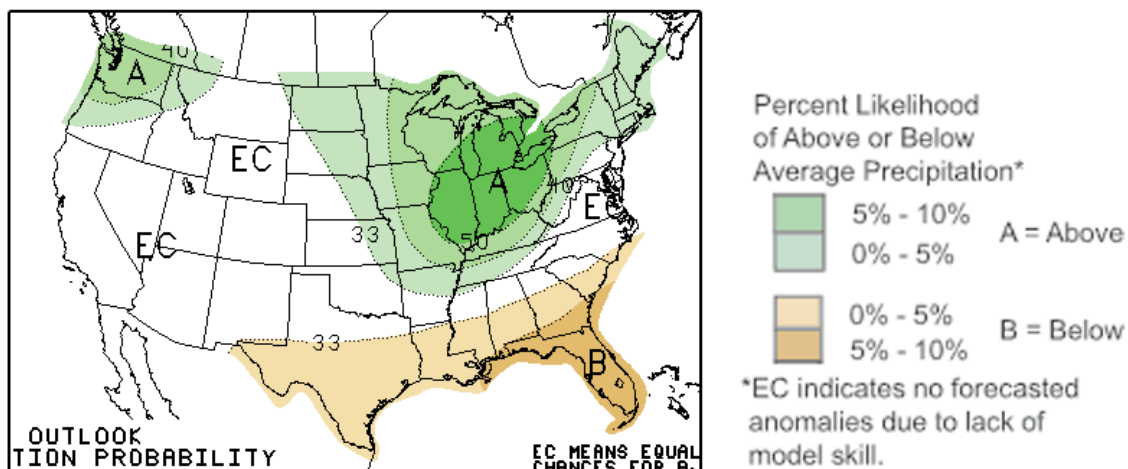


Released Thursday, January 29, 2009

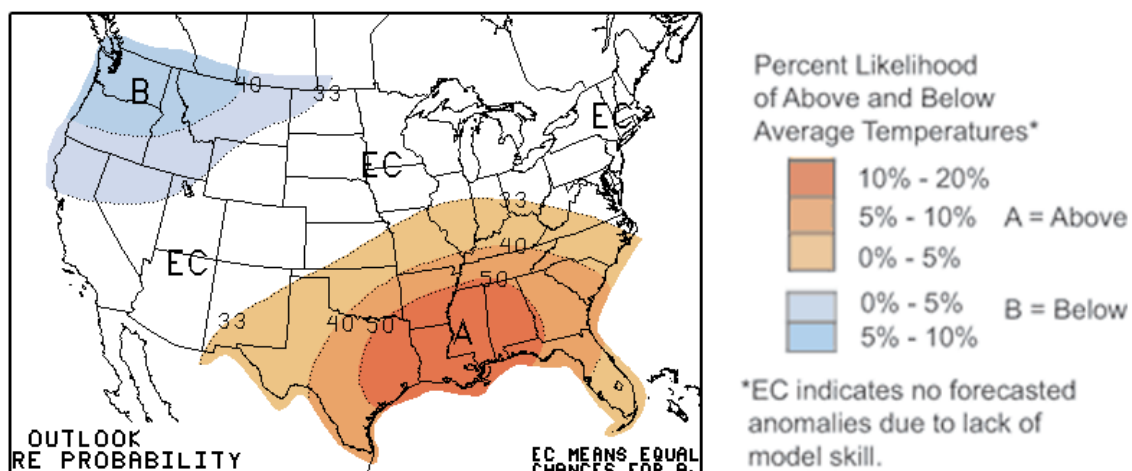
Author: Eric Luebehusen, U.S. Department of Agriculture



## February 2009 U.S. Precipitation Forecast



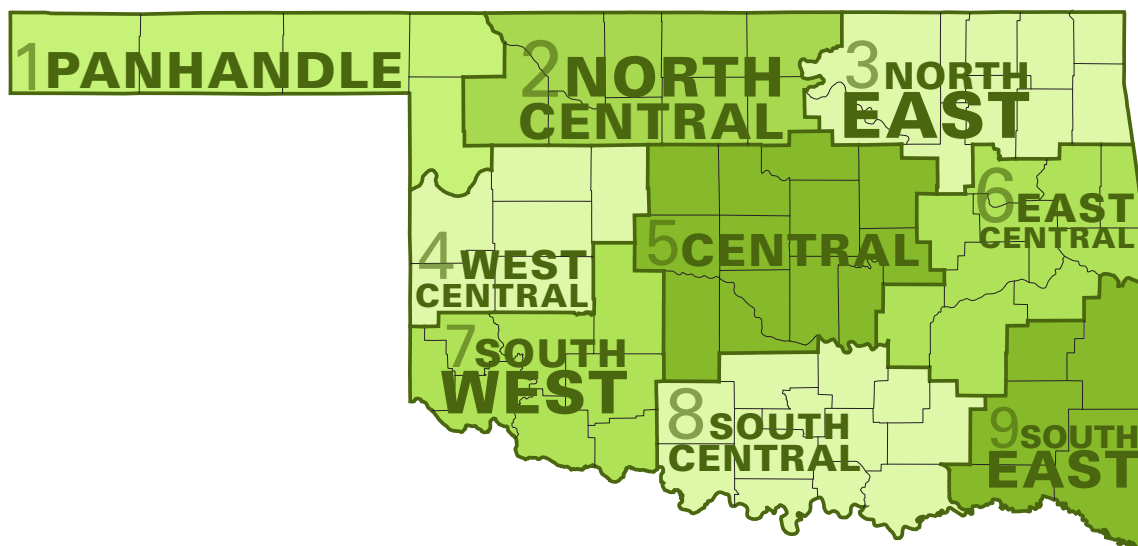
## February 2009 U.S. Temperature Forecast



## 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](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](mailto:ocs@ou.edu)) or telephone (405/325-2541)



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