Oklahoma Monthly Climate Summary

DECEMBER 2011

OKLAHOMA CLIMATOLOGICAL SURVEY

December would have ended up very unremarkable if not for a rather exciting snowstorm in the middle of the month. Other than that storm, which brought beneficial rains to other parts of the state, December was a bit warmer than normal with a statewide average of 40.1 degrees, the 52nd warmest since 1895 at 1.1 degrees above normal. The big snow and rain event propelled the month to the 27th wettest December on record at 2.39 inches averaged across the state, a surplus of less than half of an inch. The snowstorm was actually a full-fledged blizzard in the Oklahoma Panhandle. Preliminary reports from Kenton had 15 inches of snow falling with winds of over 40 mph producing drifts of 10 feet. The snow tapered off to the east. Beaver reported 3-4 inches with 3-4 feet drifts. The cold air never arrived in the main body of the state so the precipitation was mostly a liquid experience. The year ended as the eighth warmest on record at 61.8 degrees, 2.2 degrees above normal. Thanks to the catastrophic drought that had its beginnings in late-fall 2010, the year finished as the 11th driest at 25.71 inches averaged across the state, nearly 11 inches below normal.

December 2011 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	82°F	Cheyenne, Magnum	31
Low Temperature	-6°F	Kenton	6
High Precipitation	6.80 in.	Mt. Herman	--
Low Precipitation	1.04 in.	Boise City	--

PRECIPITATION

The month's precipitation was bolstered by a very wet period in northwestern Oklahoma where totals finished more than 180 percent of normal. That's contrasted by the 40-80 percent of normal for south central through northeastern Oklahoma. For the year, 2011 was extremely dry across the state, but especially so in western and southern Oklahoma. It was the third driest year since 1895 in the Panhandle with a deficit of 9.34 inches. Things were not much better across west central, southwest and south central Oklahoma, with ranks of sixth-, fourth- and sixth-driest on record for their areas. The Oklahoma Mesonet site at Hooker received 6.2 inches for the year, one of the lowest totals in state history.

TEMPERATURE

The main body of the state was well above normal for the entire month. Only the Panhandle's extensive snowpack from mid-month on kept it from following suit. Temperatures were actually 2-4 degrees below normal with the coldest weather in the far western Panhandle. Other than that area, temperatures were 2-4 degrees above normal for the most part. The extremely warm summer gave southwestern Oklahoma its second warmest year ever at 64 degrees, 3 degrees above normal. South central Oklahoma was close behind with a third-warmest ranking.

DECEMBER DAILY HIGHLIGHTS

DECEMBER 1-5: A cold front entered the state on the month's first day. The front brought cooler weather on the first before the front started to retreat towards the north as a warm front. This allowed showers and storms to form late on the second and into the third. A stronger cold front pushed the warm air out of the state again on the third and fourth but allowed for more showers and storms in the southeast. With the cold air in place on the fifth, another upper-level storm system crossed the southern part of the state and produced snow. Reports of up to 2 inches came in from southeastern Oklahoma. Liquid precipitation totals for the period topped 3 inches in the southeast and ranged down to about a half of an inch in other spots.

DECEMBER 6-10: This five-day period was mostly dry, although there was light snow on the sixth in north central Oklahoma. Amounts were mostly less than an inch. That day was also the coldest of the five with highs struggling into the 30s in some areas while 20s were in store for most of the state. Highs began to rise into more seasonable territory by the 10th.

December 2011 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2011)
Month (December)	40.1°F	1.1°F	52nd Warmest
Year-to-Date (Jan-Dec)	61.8°F	2.2°F	8th Warmest

Precipitation

	Average	Depart.	Rank (1895-2011)
Month (December)	2.39 in.	0.37 in.	27th Wettest
Year-to-Date (Jan-Dec)	25.71 in.	-10.98 in.	11th Driest

Depart. = departure from 30-year normal

DECEMBER 11-15: A mid-level disturbance moved across the state on the 11th and 12th and brought a bit of light rain to the southern quarter of the state. A return to southerly flow brought moist air up from the Gulf of Mexico with some low clouds and drizzle. Highs rose to near 60 by the 13th and lows only dropped into the 50s over parts of the state on the 14th. With the warm, humid air in place, a cold front swept into the state later that day and produced showers and storms. The rainfall was heaviest in the southeast where up to 2 inches fell through the 15th. The cold front cooled things down into the 40s and 50s.

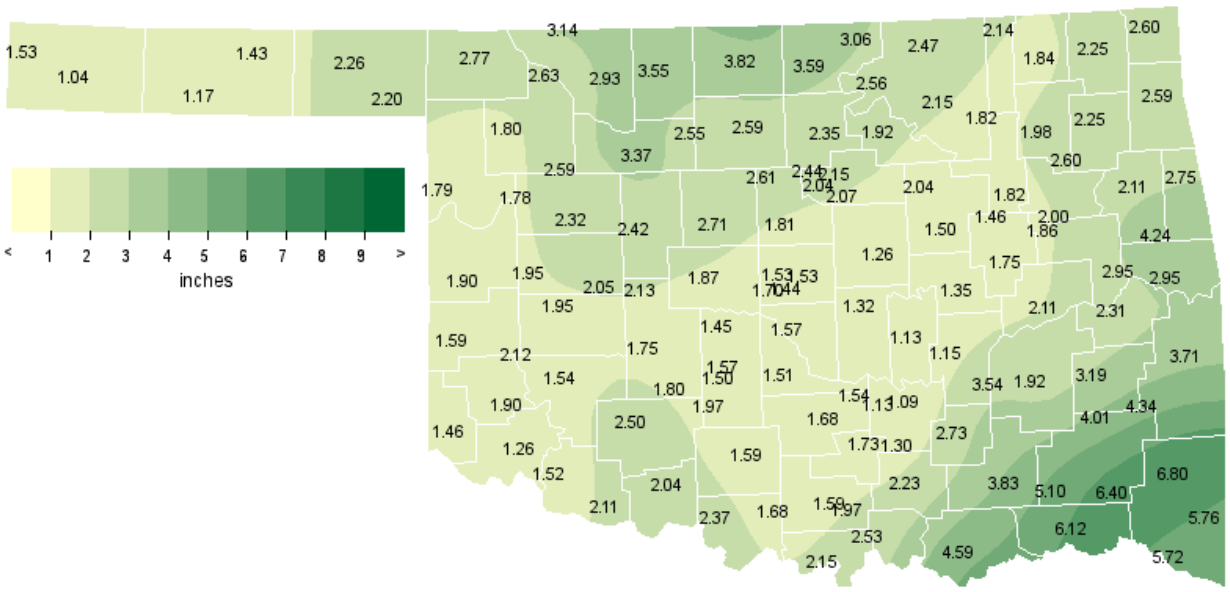
DECEMBER 16-18: A cool high pressure system moved in at the surface. Lows were in the 20s and 30s on the 16th but warm, moist air from the Gulf heated things up a bit by the 18th. Highs that day rose into the 50s and 60s.

DECEMBER 19-20: A strong upper-level low pressure system over New Mexico kicked up southeasterly winds with moisture from the Gulf. A strong cold front entered the Panhandle and northwestern Oklahoma that morning. Precipitation began in the state with rain falling first but then changing to snow in the Panhandle. With the strong winds, blizzard conditions soon developed in the Panhandle with whiteout conditions and visibilities less than a mile at times. The snow continued into the 20th. The snow eventually tapered off on the 20th but the blowing snow did not. Blizzard warnings from the National Weather Service remained in effect throughout the two-day period. Up to 15 inches of snow fell in Kenton with drifts of 10 feet. Snow tapered off dramatically to the east. Beaver received 3-4 inches but snow still drifted to 2-3 feet deep there. Farther to the east, up to 2 inches of rain fell in parts of north central Oklahoma and more than an inch fell in general across the northern third of the state. The front eventually moved through the entire state as temperatures quickly fell into the 30s.

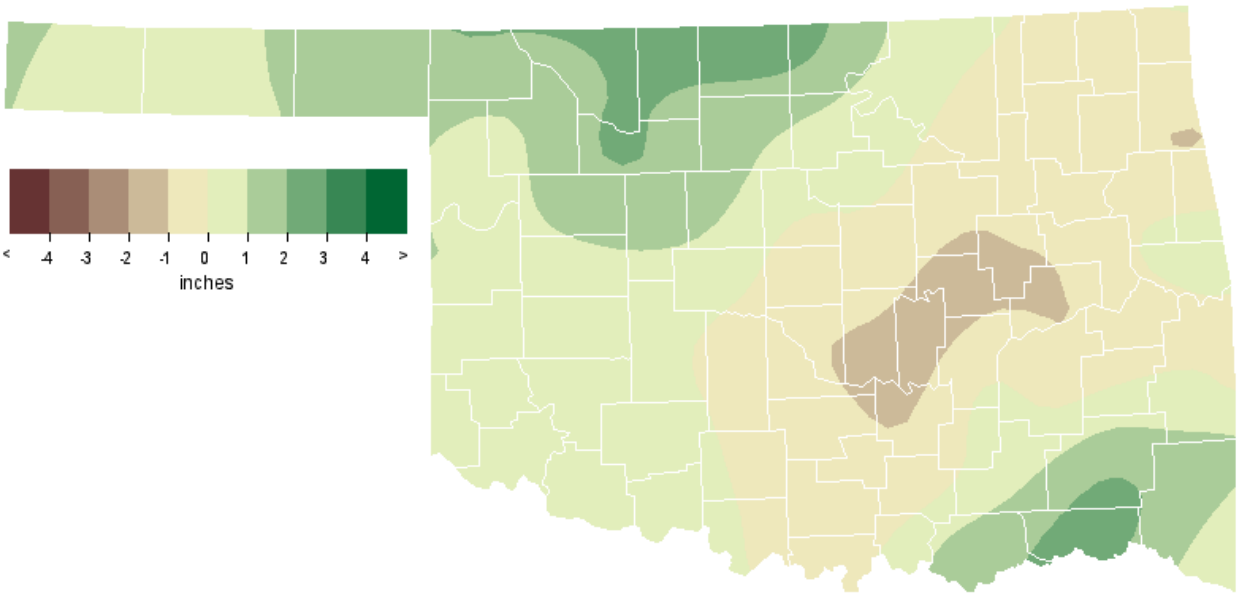
DECEMBER 21-26: Cold air moved in following the front with lows in the teens to 30s. A return of southerly winds allowed temperatures to warm into the 40s and 50s in most of the state, but snowpacked areas of the northwest remained in the 20s and 30s. That would continue for several more days as the snow chilled things in the Panhandle. A cold front on the 22nd and 23rd cooled things once again and allowed for some very light snow in the south. An upper low pressure system spread clouds and light rain into the southwest on the 25th. Amounts were once again very light. The light rain spread on the 26th until the upper low moved off to the northeast.

DECEMBER 27-31: A seasonable-to-warm end to the year, skies were mostly clear throughout this five-day period. High temperatures were mostly in the 50s and 60s, and even some 70s on the 31st. A cold front on the afternoon of the 31st returned the state to a blustery and cool winter experience.

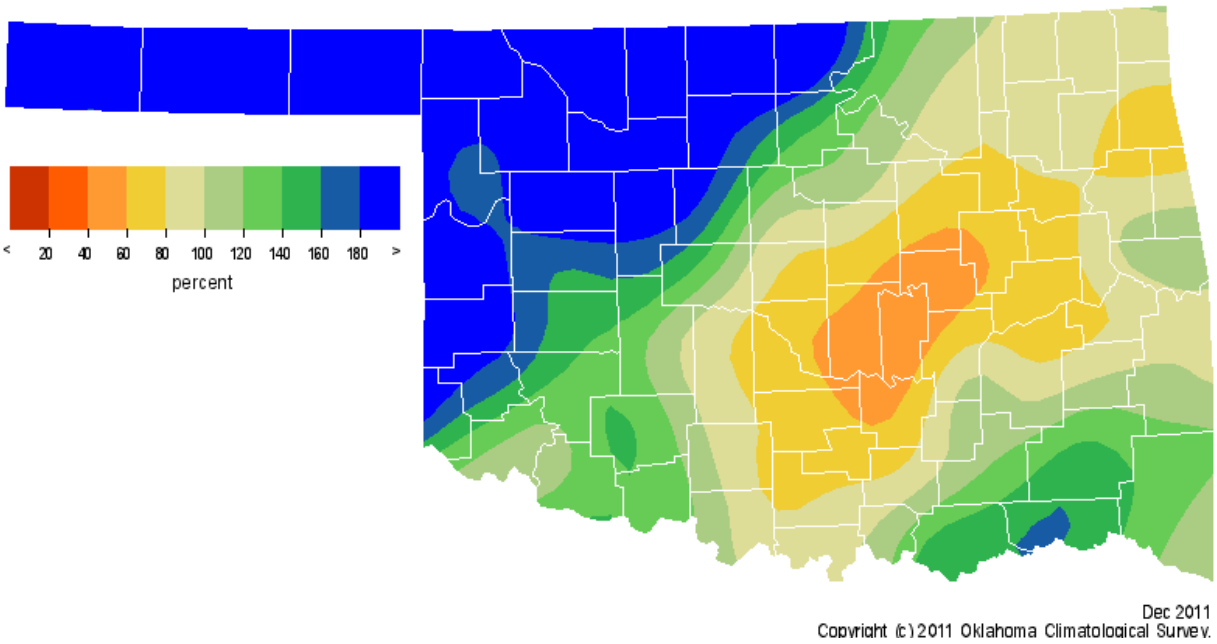
DECEMBER 2011 OBSERVED PRECIPITATION



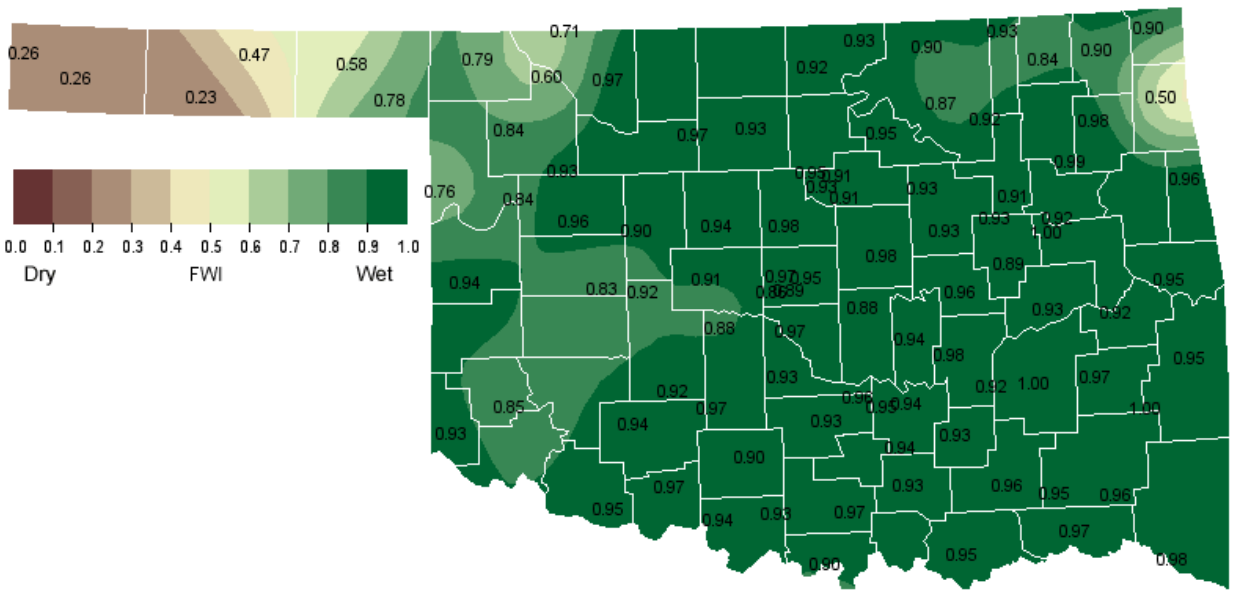
DECEMBER 2011 DEPARTURE FROM NORMAL PRECIPITATION



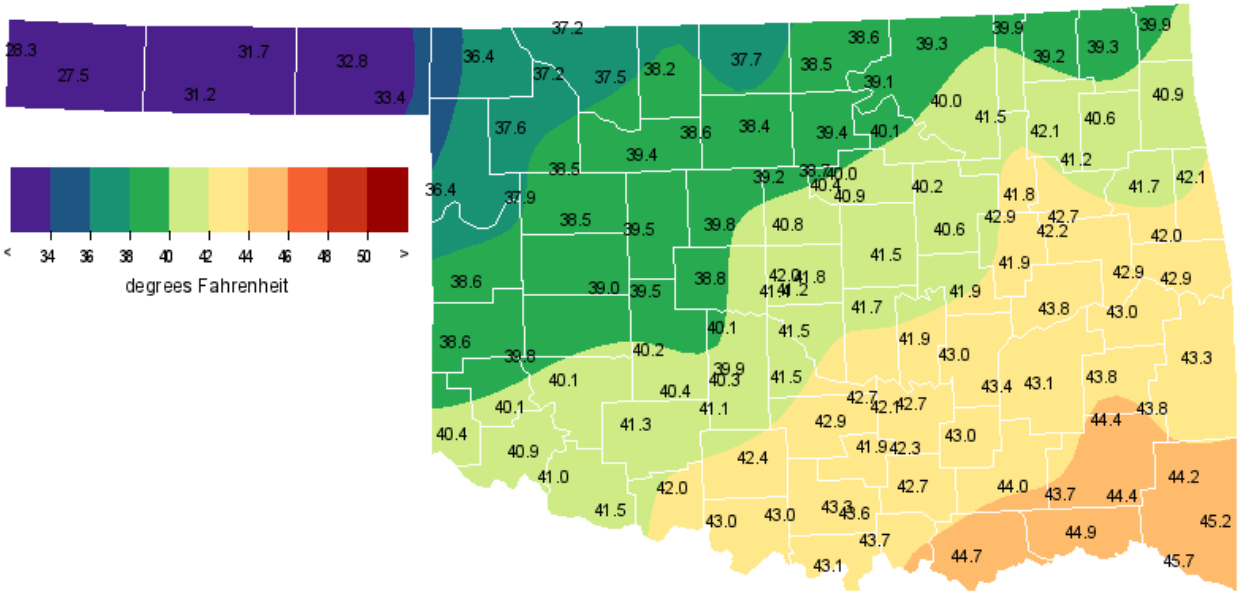
DECEMBER 2011 PERCENT OF NORMAL PRECIPITATION



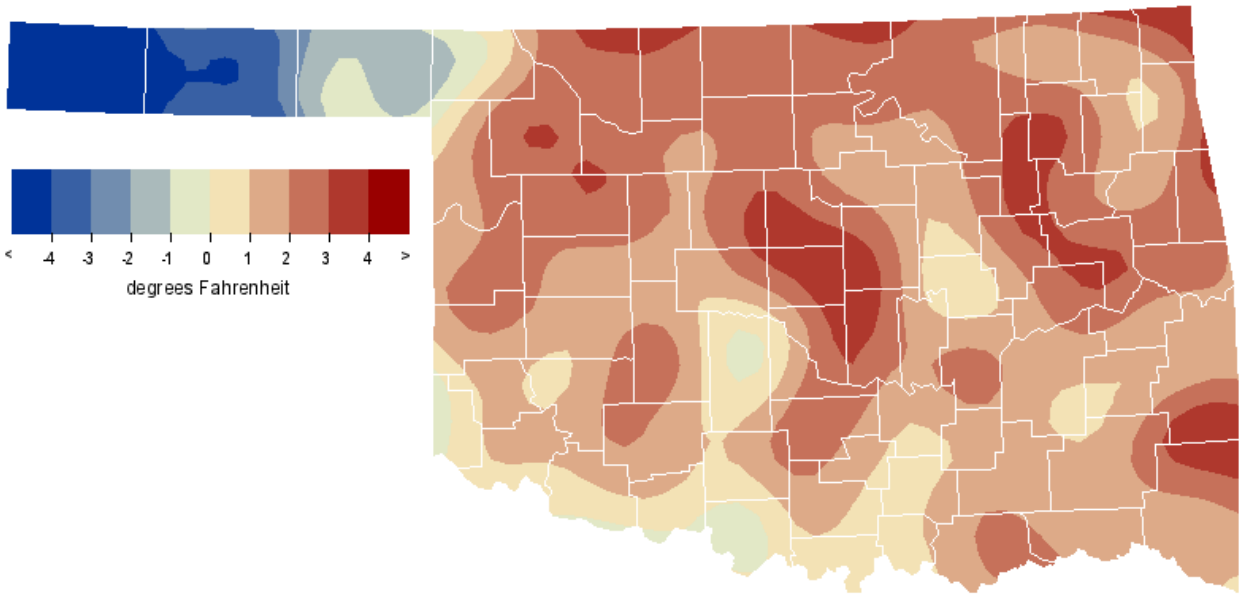
DECEMBER 2011 AVERAGE SOIL MOISTURE AT 25CM



DECEMBER 2011 AVERAGE TEMPERATURE



DECEMBER 2011 DEPARTURE FROM NORMAL TEMPERATURE

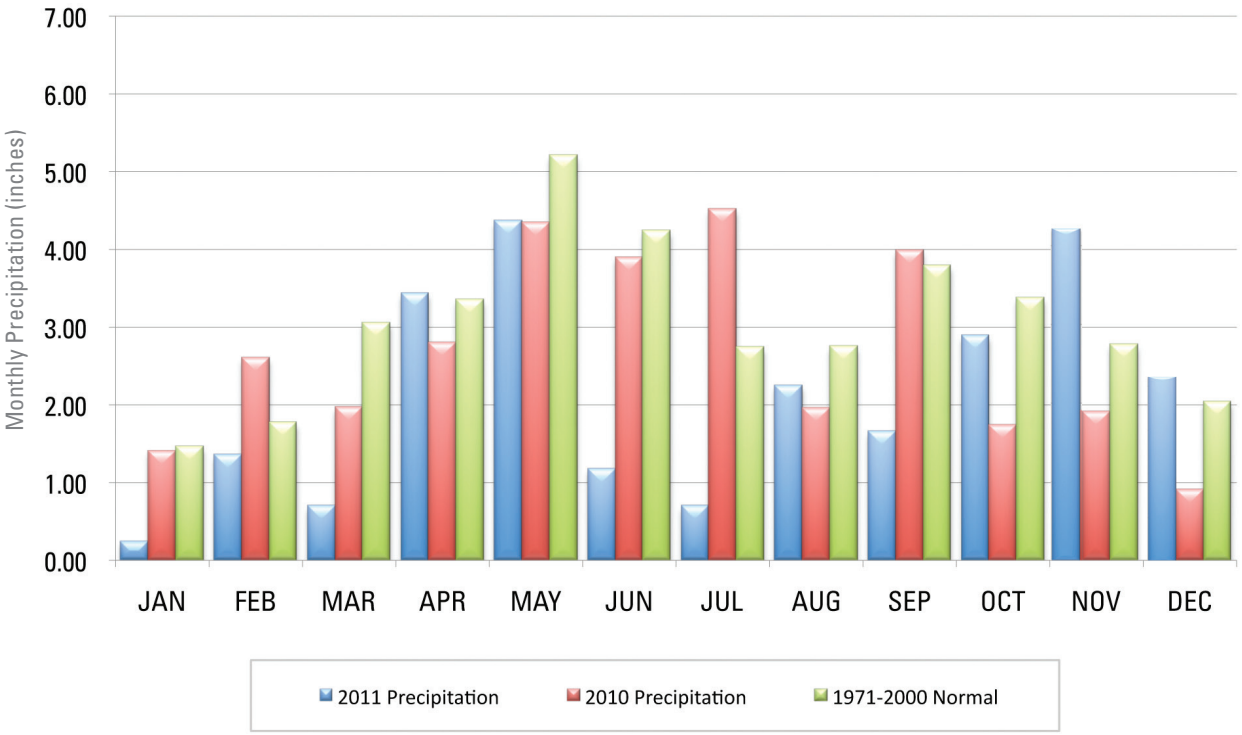


MESONET MONTHLY SUMMARY FOR DECEMBER 2011

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	36.4	77	31	11	6	886	0	1.79	.75	19
Beaver	32.8	70	31	5	23	998	0	2.26	1.27	19
Boise City	27.5	61	18	-4	6	1164	0	1.04	.49	19
Buffalo	36.4	74	31	14	6	888	0	2.77	1.76	19
NORTH CENTRAL										
Alva	37.5	77	31	14	7	852	0	2.93	1.66	19
Blackwell	38.4	66	14	16	7	825	0	3.59	1.84	19
Breckinridge	38.5	68	14	16	6	822	0	2.59	1.43	19
Cherokee	38.3	71	31	17	7	829	0	3.55	1.89	19
Fairview	39.5	72	31	16	6	792	0	3.37	1.25	19
Freedom	37.3	76	31	14	6	860	0	2.63	1.49	19
Lahoma	38.6	70	31	14	6	820	0	2.55	1.43	19
NORTHEAST										
Bixby	41.8	69	31	16	7	721	0	1.82	.75	19
Burbank	39.0	70	31	13	7	805	0	2.56	1.42	19
Claremore	42.1	68	31	17	7	710	0	1.98	.78	19
Copan	39.9	69	31	14	7	778	0	2.14	1.00	19
Foraker	39.2	71	31	13	7	799	0	2.47	1.35	19
Inola	41.2	67	31	17	7	738	0	2.60	.82	3
Jay	41.0	67	31	14	7	745	0	2.59	.94	19
Miami	39.9	67	31	15	7	777	0	2.60	1.04	19
WEST CENTRAL										
Bessie	6.5	77	31	***	7	751	0	1.95	.95	3
Butler	39.4	81	31	15	7	****	****	1.95	.74	19
Camargo	37.9	81	31	12	7	841	0	1.78	.64	19
Cheyenne	38.6	82	31	14	6	819	0	1.90	.65	19
Erick	38.6	79	31	15	7	817	0	1.59	.47	19
CENTRAL										
Acme	41.1	72	31	18	7	739	0	1.97	.84	3
Bowlegs	41.9	71	31	14	7	715	0	1.13	.47	3
Bristow	40.6	72	31	13	7	757	0	1.50	.65	3
Lake Carl Blac	38.7	70	31	11	7	815	0	2.44	.99	19
Chandler	41.6	73	31	15	7	726	0	1.26	.59	3
Chickasha	39.9	72	31	16	7	778	0	1.57	.75	3
El Reno	38.7	71	31	12	7	814	0	1.87	.79	19
Guthrie	40.8	70	31	16	7	752	0	1.81	.97	19
Kingfisher	39.8	71	31	17	7	782	0	2.71	1.21	19
Marena	40.3	72	31	14	7	767	0	2.04	1.06	19
Minco	40.1	71	31	16	7	773	0	1.45	.54	3
Marshall	39.2	69	31	15	7	801	0	2.61	1.29	19
EAST CENTRAL										
Cookson	42.0	66	31	16	7	714	0	4.24	2.07	14
Eufaula	43.9	67	31	19	7	656	0	2.11	.72	19
Haskell	42.2	67	31	18	7	707	0	1.86	.62	19
Hectorville	42.8	70	31	17	7	687	0	1.46	.56	3
Holdenville	43.0	68	31	17	7	683	0	1.15	.37	3
McAlester	43.1	69	31	15	7	679	0	1.92	.71	14
Okmulgee	41.9	70	31	15	7	717	0	1.75	.69	19
SOUTHWEST										
Altus	41.0	81	31	18	7	745	0	1.26	.48	3
Apache	40.4	71	31	18	7	763	0	1.80	.70	3
Fort Cobb	40.2	73	31	18	7	769	0	1.75	.64	3
Grandfield	41.4	75	31	20	7	730	0	2.11	.90	3
Hinton	39.5	72	31	18	6	791	0	2.13	.81	19
Hobart	40.1	76	31	17	7	773	0	1.54	.61	3
SOUTH CENTRAL										
Ada	42.6	70	31	16	7	694	0	1.09	.41	3
Ardmore	43.6	71	31	19	7	663	0	1.97	.66	14
Burneyville	43.1	74	31	16	7	680	0	2.15	.66	14
Byars	42.7	70	31	18	7	693	0	1.54	.56	14
Centrahoma	43.0	70	31	16	7	681	0	2.73	1.14	14
Durant	44.7	70	31	21	7	630	0	4.59	1.28	3
Fittstown	42.3	68	31	17	7	703	0	1.30	.51	14
Ketchum Ranch	42.4	73	31	18	7	701	0	1.59	.60	3
Lane	44.1	70	31	20	7	648	0	3.83	1.11	3
SOUTHEAST										
Antlers	43.7	69	31	18	7	660	0	5.10	1.15	3
Antlers	*****	***	***	***	***	****	****	*****	*****	***
Broken Bow	45.2	67	31	21	8	613	0	5.76	1.85	4
Clayton	44.4	68	31	21	7	640	0	4.01	1.08	3
Cloudy	44.4	67	31	22	7	638	0	6.40	1.62	3
Hugo	44.9	69	31	22	7	622	0	6.12	1.41	4

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	31.2	64	31	2	6	1048	0	1.17	.62	19
Hooker	31.7	62	18	6	24	1032	0	1.43	.74	19
Kenton	28.3	68	18	-6	6	1139	0	1.53	.42	13
Slapout	33.4	72	31	9	23	980	0	2.20	1.31	19
May Ranch	37.2	74	31	14	6	862	0	3.14	1.81	19
Medford	37.8	68	31	12	6	844	0	3.82	2.15	19
Newkirk	38.6	68	31	15	7	819	0	3.06	1.42	19
Red Rock	39.4	70	31	14	7	794	0	2.35	1.09	19
Seiling	38.4	80	31	13	6	825	0	2.59	1.08	19
Woodward	37.6	77	31	12	6	849	0	1.80	.73	3
Nowata	39.1	69	31	12	7	802	0	1.84	.76	19
Pawnee	40.1	72	31	13	7	773	0	1.92	.90	19
Porter	42.6	67	31	17	7	693	0	2.00	.67	3
Pryor	40.6	67	31	15	7	758	0	2.25	.79	3
Skiatook	41.5	69	31	16	7	728	0	1.82	.85	3
Vinita	39.3	66	31	15	7	795	0	2.25	.89	19
Wynona	40.1	72	31	13	7	773	0	2.15	1.10	19
Putnam	38.5	76	31	14	6	821	0	2.32	.85	19
Retrop	39.9	80	31	16	7	779	0	2.12	.92	3
Watonga	39.5	70	31	15	6	792	0	2.42	1.15	19
Weatherford	38.9	71	31	17	7	808	0	2.05	.93	19
Ninnekah	40.3	71	31	16	7	765	0	1.50	.75	3
Norman	41.4	72	31	17	7	731	0	1.57	.71	3
Oilton	40.1	72	31	12	7	771	0	2.04	.91	19
OKC East	41.2	71	31	16	7	737	0	1.44	.69	3
OKC North	41.9	71	31	20	7	716	0	1.53	.83	3
OKC West	41.4	71	31	17	7	732	0	1.70	.85	3
Okemah	41.8	68	31	15	7	719	0	1.35	.44	3
Perkins	40.8	72	31	16	7	750	0	2.07	1.07	19
Shawnee	41.7	71	31	17	7	722	0	1.32	.77	3
Spencer	41.8	71	31	19	7	720	0	1.53	.76	3
Stillwater	40.0	73	31	14	7	774	0	2.15	1.03	19
Washington	41.5	72	31	15	7	729	0	1.51	.63	3
Sallisaw	42.9	69	31	21	7	686	0	2.95	1.06	3
Stigler	43.0	67	31	19	7	680	0	2.31	.83	14
Stuart	43.3	68	31	19	7	672	0	3.54	1.95	14
Tahlequah	41.7	65	31	16	7	722	0	2.11	.65	3
Webbers Falls	42.9	69	31	20	7	684	0	2.95	1.49	14
Westville	42.2	65	31	18	7	708	0	2.75	.92	3
Hollis	40.4	82	31	17	7	762	0	1.46	.43	19
Mangum	40.0	82	31	13	7	775	0	1.90	.70	3
Medicine Park	41.3	74	31	18	7	735	0	2.50	.73	3
Tipton	41.0	77	31	18	7	743	0	1.52	.65	3
Walters	42.0	75	31	18	7	713	0	2.04	.97	3
Madill	43.8	71	31	15	7	657	0	2.53	.99	14
Newport	43.3	72	31	18	7	674	0	1.59	.66	14
Pauls Valley	42.9	73	31	18	7	684	0	1.68	.66	3
Ringling	42.9	72	31	19	7	684	0	1.68	.61	3
Sulphur	41.9	69	31	13	7	718	0	1.73	.66	14
Tishomingo	42.7	68	31	17	7	690	0	2.23	.63	14
Vanoss	42.1	70	31	15	7	711	0	1.13	.39	19
Waurika	43.0	75	31	17	7	683	0	2.37	.97	3
Idabel	45.7	68	31	23	8	600	0	5.72	1.90	4
Mt Herman	44.1	65	30	21	7	647	0	6.80	1.63	4
Talihina	43.7	66	31	22	8	659	0	4.34	1.25	3
Wilburton	43.7	67	31	19	7	660	0	3.19	.99	3
Wister	43.2	67	29	20	11	674	0	3.71	1.08	3

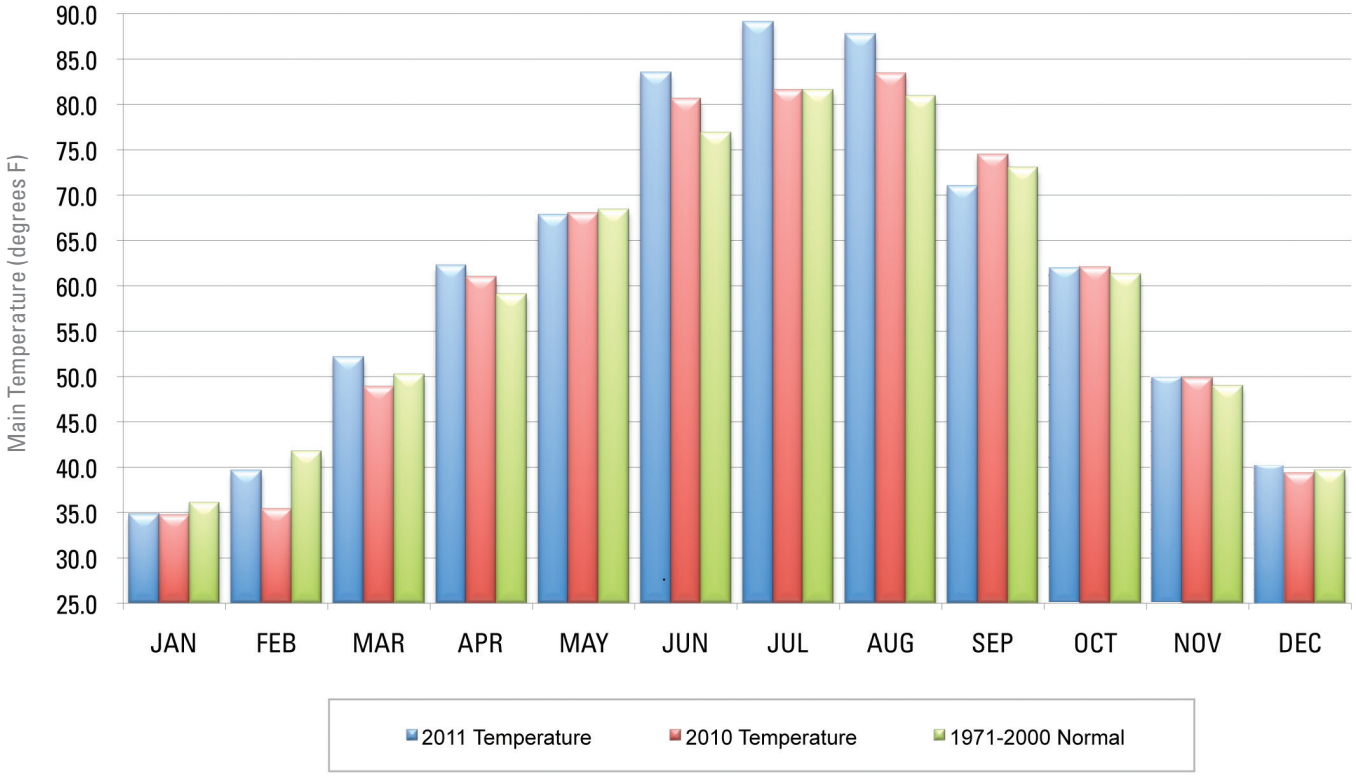
2010 AND 2011 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



December 2011 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Dec-10
Panhandle	1.77	1.07	7th Wettest	4.49 (2006)	0.00 (1922)	0.38
North Central	2.92	1.62	10th Wettest	4.55 (1913)	0.00 (1922)	0.19
Northeast	2.20	-0.08	42nd Wettest	6.72 (1984)	0.16 (1950)	0.57
West Central	2.01	0.87	21st Wettest	4.03 (1932)	0.00 (1908)	0.23
Central	1.75	-0.26	40th Wettest	6.67 (1984)	0.00 (1908)	0.37
East Central	2.39	-0.59	56th Wettest	8.95 (1987)	0.21 (1908)	1.28
Southwest	1.82	0.44	30th Wettest	4.94 (1991)	0.00 (1908)	0.08
South Central	2.10	-0.43	51st Wettest	7.01 (1932)	0.07 (1950)	2.03
Southeast	5.12	1.04	25th Wettest	12.76 (1971)	0.25 (1917)	2.97
Statewide	2.39	0.37	27th Wettest	4.98 (1984)	0.10 (1950)	0.87

2010 AND 2011 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



December 2011 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Dec-10 (F)
Panhandle	32.2	-2.8	25th Coolest	41.6 (1933)	22.6 (1983)	36.3
North Central	38.2	1.7	43rd Warmest	43.7 (1965)	21.9 (1983)	36.0
Northeast	40.5	2.3	34th Warmest	45.1 (1931)	24.3 (1983)	37.2
West Central	38.8	1.4	47th Warmest	44.2 (1965)	24.0 (1983)	38.8
Central	40.7	1.4	46th Warmest	46.4 (1965)	25.3 (1983)	39.9
East Central	42.7	2.1	37th Warmest	47.6 (1933)	27.4 (1983)	39.9
Southwest	40.7	0.9	58th Coolest	46.7 (1965)	27.5 (1983)	41.5
South Central	43.0	0.9	54th Warmest	48.5 (1965)	29.2 (1983)	42.4
Southeast	44.3	1.9	35th Warmest	50.7 (1984)	30.7 (1983)	41.1
Statewide	40.1	1.1	52nd Warmest	45.4 (1965)	25.8 (1983)	39.2

RECORD EVENT REPORTS

Description	Day	Location	Record	Previous Record	Year
Low Temperature	7	McAlester	16	16	1976

MESONET EXTREMES FOR DECEMBER 2011

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	77	31st	Arnett	-6	6th	Kenton	2.77	Buffalo	1.76	19th	Buffalo
North Central	80	31st	Seiling	12	6th	Medford	3.82	Medford	2.15	19th	Medford
Northeast	72	31st	Pawnee	12	7th	Nowata	2.60	Inola	1.42	19th	Burbank
West Central	82	31st	Cheyenne	12	7th	Camargo	2.42	Watonga	1.15	19th	Watonga
Central	73	31st	Chandler	11	7th	Lake Carl Blackwell	2.71	Kingfisher	1.29	19th	Marshall
East Central	70	31st	Okmulgee	15	7th	Okmulgee	4.24	Cookson	2.07	14th	Cookson
Southwest	82	31st	Mangum	13	7th	Mangum	2.50	Medicine Park	0.97	3rd	Walters
South Central	75	31st	Waurika	13	7th	Sulphur	4.59	Durant	1.28	3rd	Durant
Southeast	69	31st	Hugo	18	7th	Antlers	6.80	Mt Herman	1.90	4th	Idabel
Statewide	82	31st	Mangum	-6	6th	Kenton	6.80	Mt Herman	2.15	19th	Medford

JANUARY 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.

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.

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

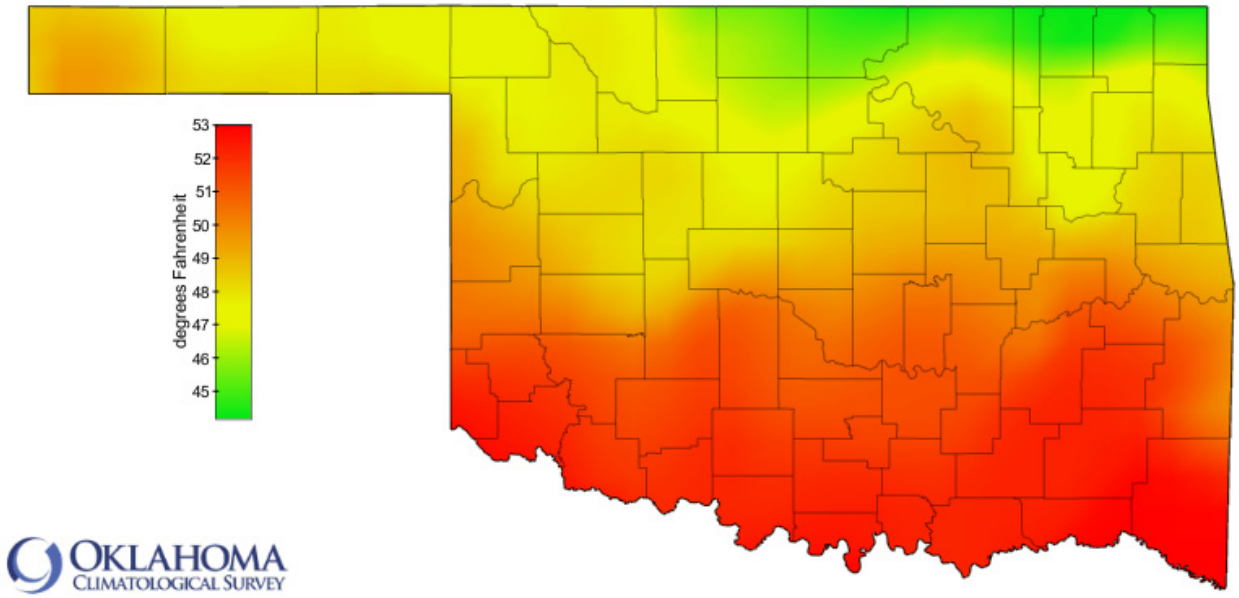
Tornadoes

Average Decembert Tornadoes	0.3
Most	4 (1967)

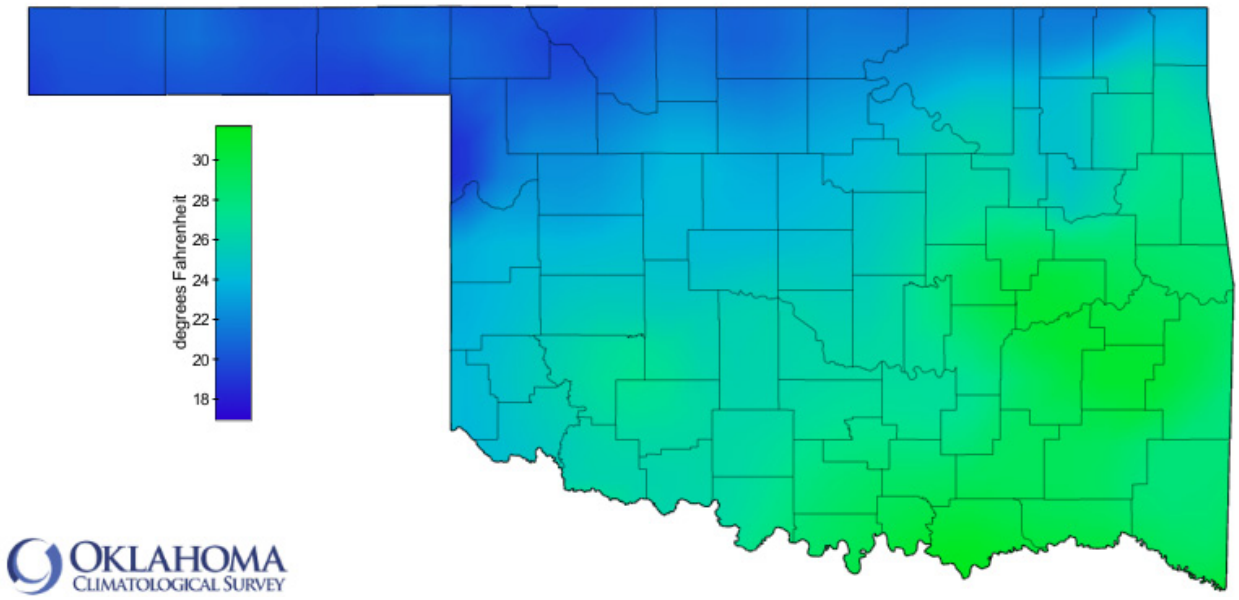
Snowfall records are not as reliable as those for temperature and total precipitation (which includes water obtained from melted snow), but the greatest January snowfalls appear to have been recorded in 1905, 1930, 1949, 1988, 1990, and 2001. Statewide information is somewhat sketchy regarding the 1905 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 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.

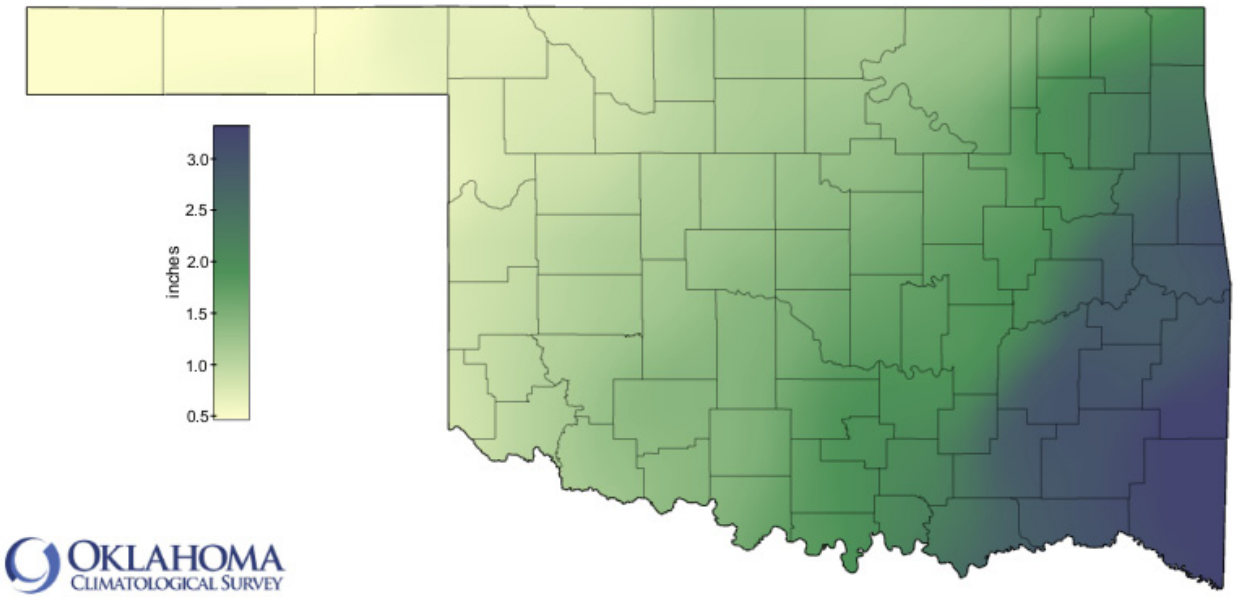
JANUARY NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)



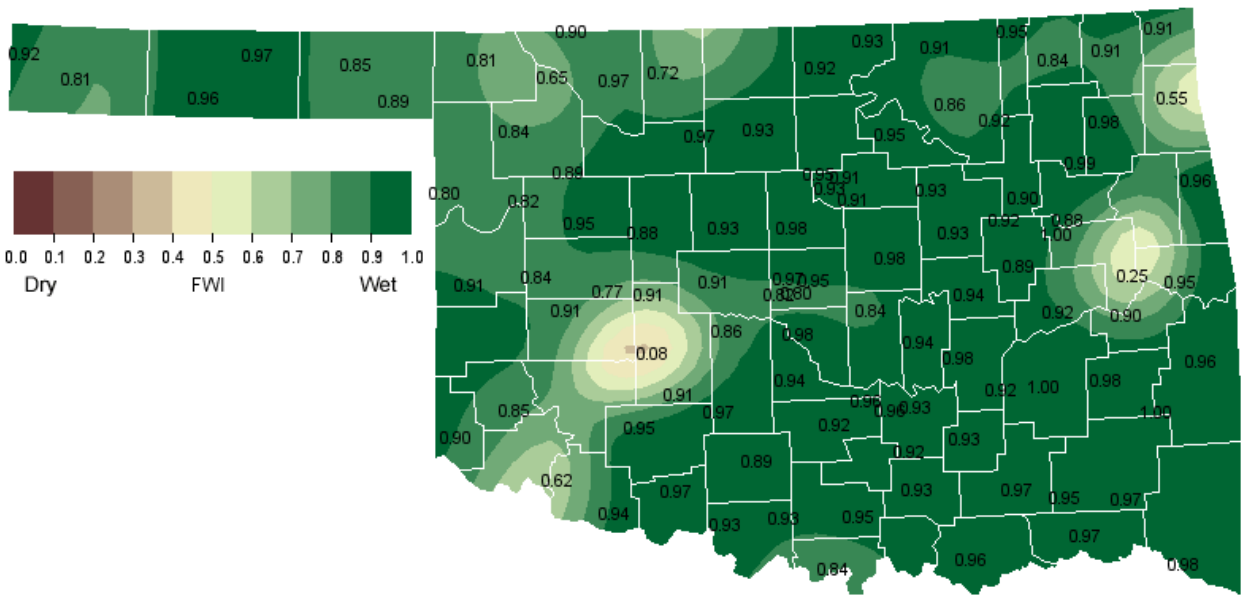
JANUARY NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)



JANUARY NORMAL PRECIPITATION (1981-2010)



JANUARY 1, 2011 SOIL MOISTURE CONDITIONS AT 25CM



JANUARY 2011 DROUGHT INDICES

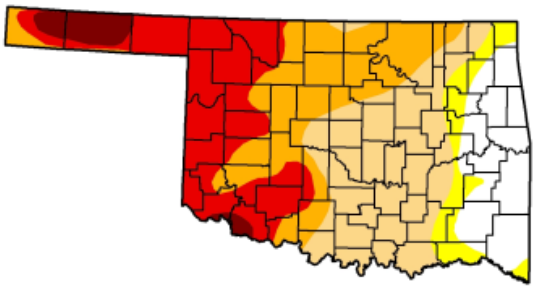
U.S. Drought Monitor

January 3, 2012
Valid 7 a.m. EST

Oklahoma

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.83	85.17	78.76	50.55	27.48	3.78
Last Week (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
3 Months Ago (10/04/2011 map)	0.00	100.00	100.00	100.00	78.97	69.82
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (12/28/2010 map)	13.82	86.18	47.90	1.50	0.00	0.00



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://droughtmonitor.unl.edu

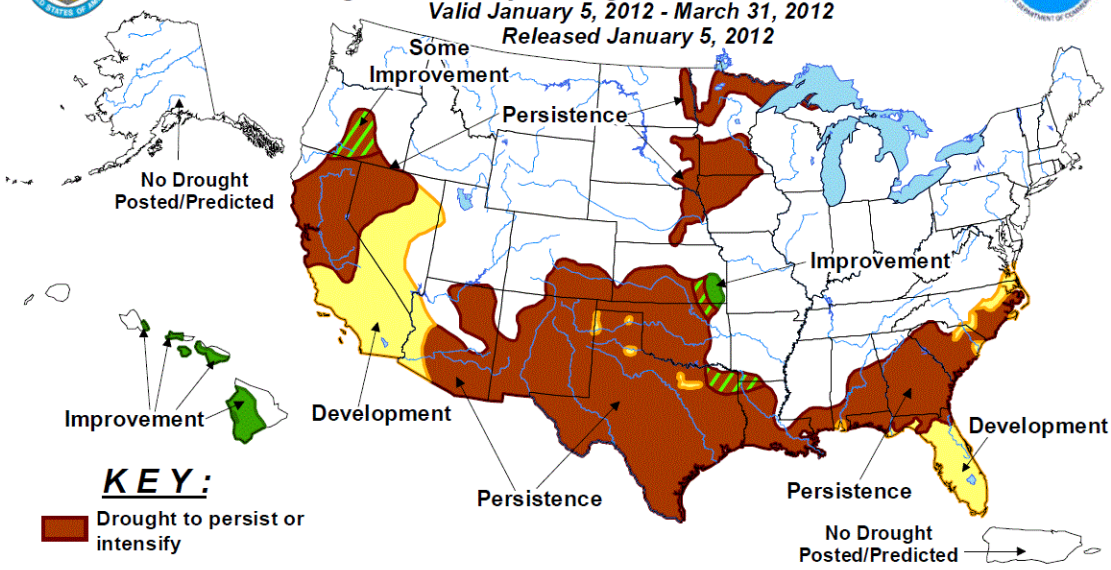
USDA National Drought Mitigation Center

Released Thursday, January 5, 2012
Brad Rippey, U.S. Department of Agriculture

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid January 5, 2012 - March 31, 2012
Released January 5, 2012

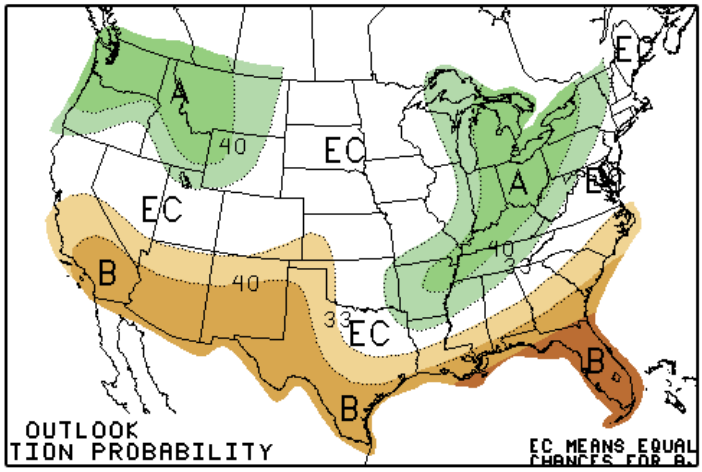


KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. 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 2011 U.S. PRECIPITATION FORECAST



Percent Likelihood of Above or Below Average Precipitation*

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

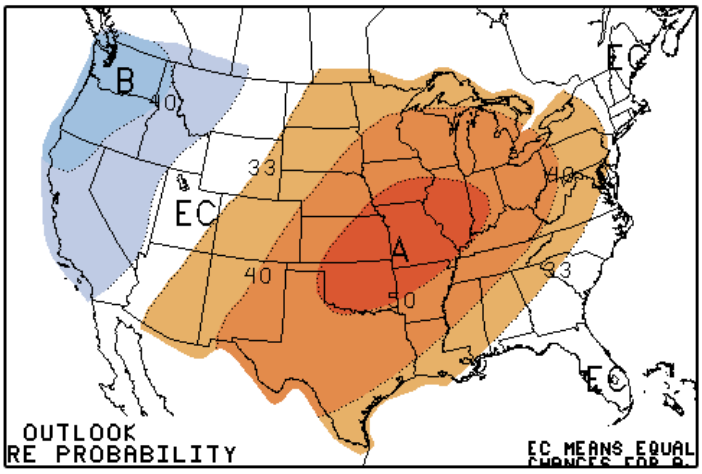
A = Above

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

B = Below

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

JANUARY 2011 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*

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

A = Above

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

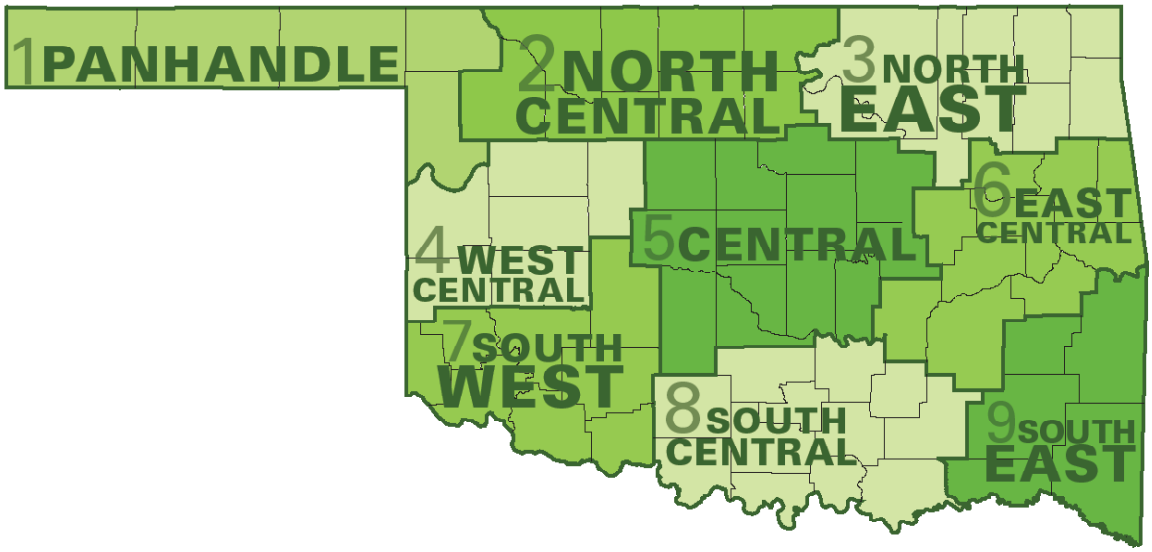
B = Below

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

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.mesonet.org or http://climate.ok.gov/

OKLAHOMA CLIMATOLOGICAL SURVEY

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

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