

OKLAHOMA MONTHLY CLIMATE SUMMARY

MARCH 2001

TABLE OF CONTENTS

March 2001 Oklahoma Climate Summary.....	2
March 2000/2001 Comparison Graphs.....	4
March 2001 State Summary Maps.....	6
March 2001 Data Summary Tables.....	9
Climate Division Map.....	14
Explanation of Tables.....	14
March 2001 Mesonet Summary.....	16
March 2001 Extremes and Comparisons.....	17
May Climatological Normals.....	18
May Tornado Statistics.....	19
90 - Day National Weather Service Outlook.....	19
May Oklahoma City Climate Calendar.....	20
May Tulsa Climate Calendar.....	21
May Wind Roses - Sunrise/Sunset Tables.....	22
Contact Information	23



Oklahoma Climatological Survey

MONTHLY SUMMARY FOR MARCH 2001

March 2001

*Statewide average temperature = 46.4° F
Statewide average rainfall = 1.45 inches*

March 2001 was both cooler and drier than normal. A succession of winter storms brought cold and snow to the state on three different occasions, without providing substantial amounts of moisture. The statewide-averaged temperature of 46.4 degrees was 4.3 degrees less than normal for the month, ranking this as Oklahoma's 21st coldest March since 1892. Monthly precipitation, when averaged across the state, totaled 1.45 inches, 1.36 inches less than normal and 27th least in March in the 110 years of reliable records.

The low temperatures brought the annual temperature-to-date to 41 degrees, 1.9 degrees less than normal, to rank this as the 20th coldest January-through-March on record. The five-month-long period, November 2000 through March 2001, had an average temperature of 39.4 degrees, 4.2 degrees less than normal to rank as the third coldest November-March on record. Only the winters of 1898-99 and 1911-12 were colder. Statewide-averaged precipitation over the first three months of 2001 was 7.72 inches, 1.91 inches greater than normal and the 13th greatest January-March precipitation on record.

Winter precipitation, including snow, sleet, and freezing rain, was reported in far northwestern Oklahoma on the 1st. Accumulations were slight, led by a 2-inch snowfall accumulation recorded at Hammon (Roger Mills County). The lowest temperatures of the month were recorded on the 1st when the Texas County Mesonet at sites at Goodwell and Hooker recorded daily minimum temperatures of 7 and 9 degrees, respectively. Elsewhere in the state, Broken Bow (McCurtain) reported 1.43 inches of rain and Coleman (Johnston) recorded 1.10 inches.

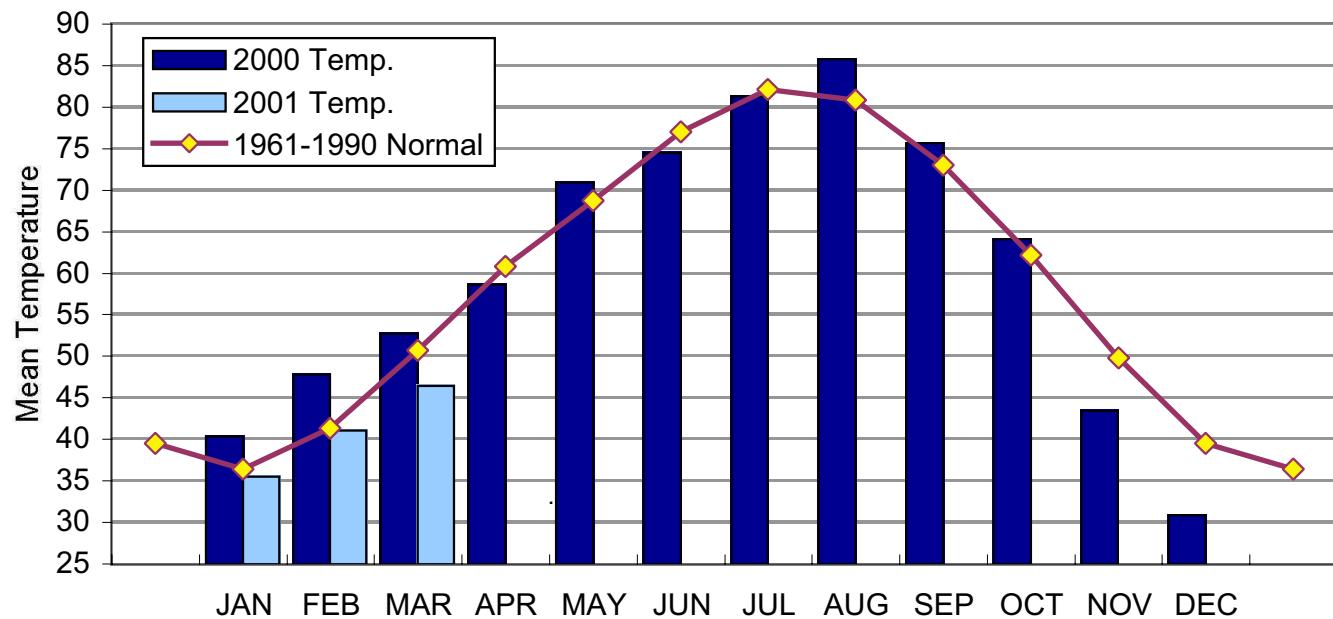
Thunderstorms on the 11th, extending through the morning of the 12th, produced high winds and spotty precipitation. Mesonet sites near Bristow (Creek) and Vinita (Craig) reported winds gusting to 53 miles per hour. Idabel (McCurtain) reported 2.18 inches of precipitation on the 12th. Carter Tower, Broken Bow, and Carnasaw Tower in McCurtain and Wann in Nowata County each reported 1.70 inches or more. A winter storm crossed the state on the 13th and 14th, producing 7 inches of snow at Boise City (Cimarron) and 3 inches at Beaver (Beaver). Otherwise precipitation was less than an inch, but the system produced very strong wind. Southerly winds in the west on the 14th produced gusts to 62 miles per hour at Boise City and Seiling (Dewey), according to Mesonet reports. Strong wind blew the roof off of a theater in Woodward (Woodward). On the 15th, with the prevailing winds having turned to northerly, high winds persisted throughout the day. Forty-nine Mesonet sites in the western half of the state recorded daily average wind speeds over 20 miles per hour. Winds at Alva (Woods) and Cheyenne (Roger Mills) averaged over 30 miles per hour over the full 24-hour period. Wind damage was reported in Stephens, Kiowa, Woodward, Custer, Jackson, Dewey, and Bryan counties.

(Continued on page 3.)

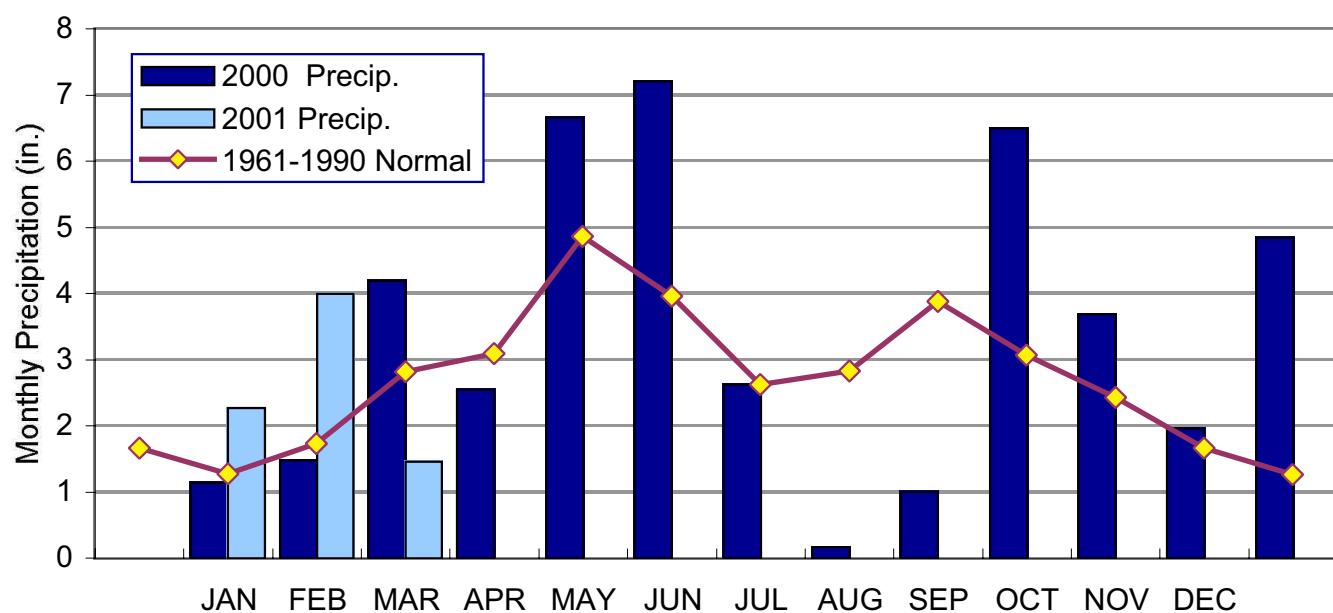
A period of mild temperatures that ensued shortly after mid-month, including 85-degree temperatures recorded by the Mesonet at Beaver and Slapout in Beaver County on the 21st, was terminated by a cold front and a less intense winter storm system from the 23rd through the 26th. Beaver reported 4 inches of snow on the 26th as snow and sleet was reported throughout the western third of the state. Allen (Pontotoc) reported 1.80 inches of rain. Mesonet sites near Ringling (Jefferson), Clayton (Pushmataha), and Talihina (LeFlore) recorded more than an inch of rain, as did conventional reporting stations at McGee Creek Dam (Atoka) and Ashland (Pittsburg).

Howard L. Johnson
Associate State Climatologist

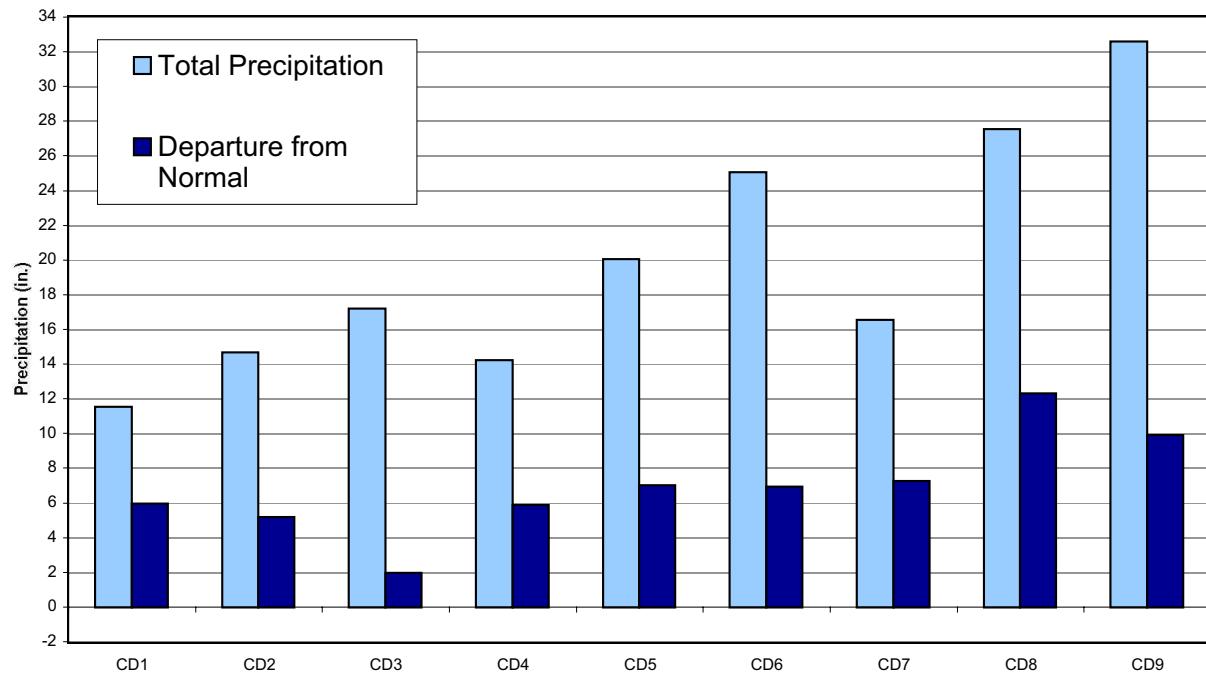
2000 AND 2001 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



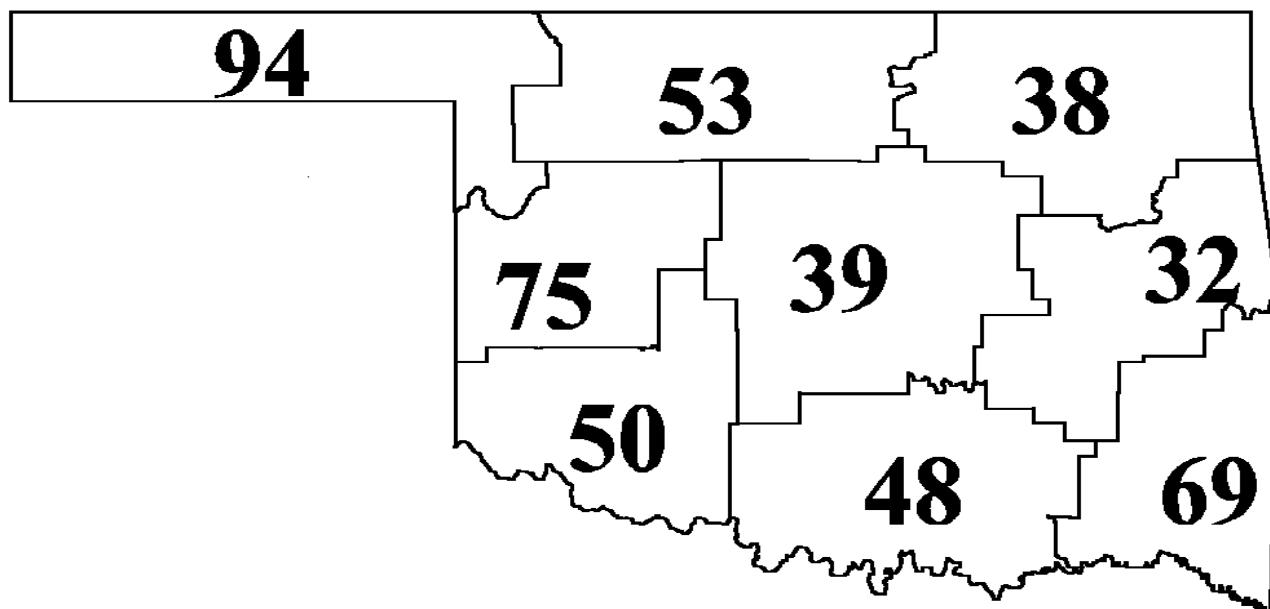
2000 AND 2001 STATEWIDE PRECIPITATION - MONTHLY TOTALS



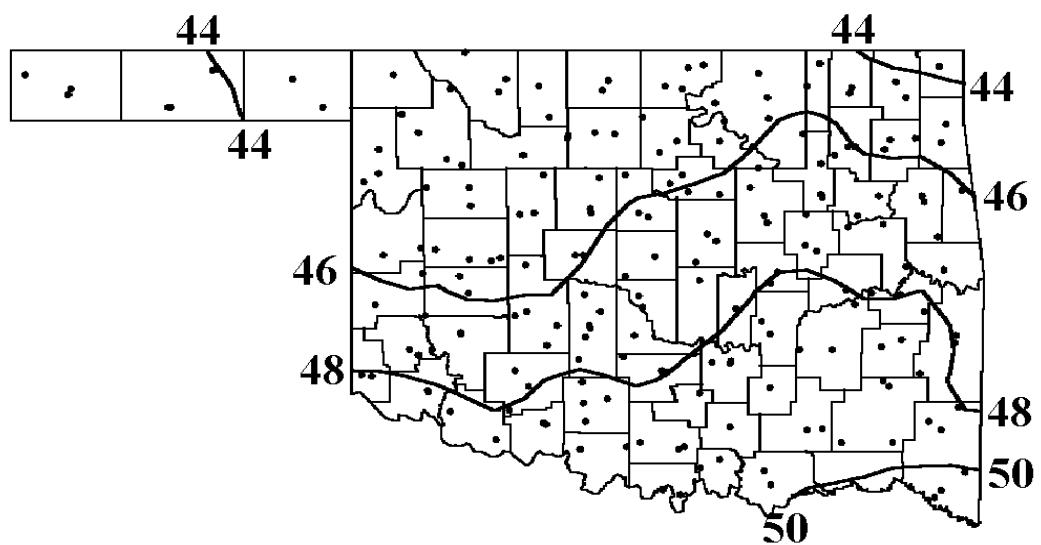
CLIMATE DIVISION AVERAGED PRECIPITATION - OCTOBER 2000 THROUGH MARCH 2001



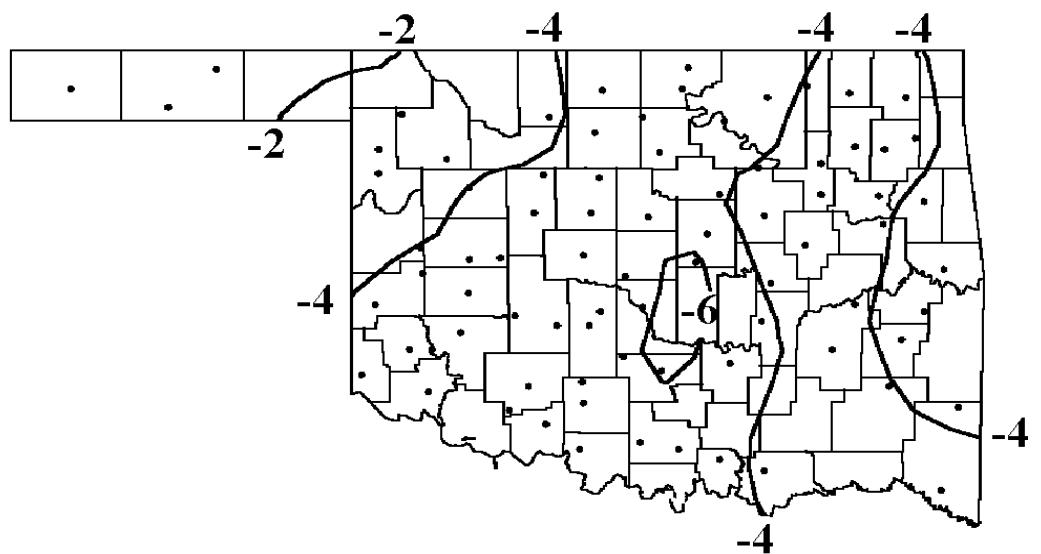
CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - MARCH 2001



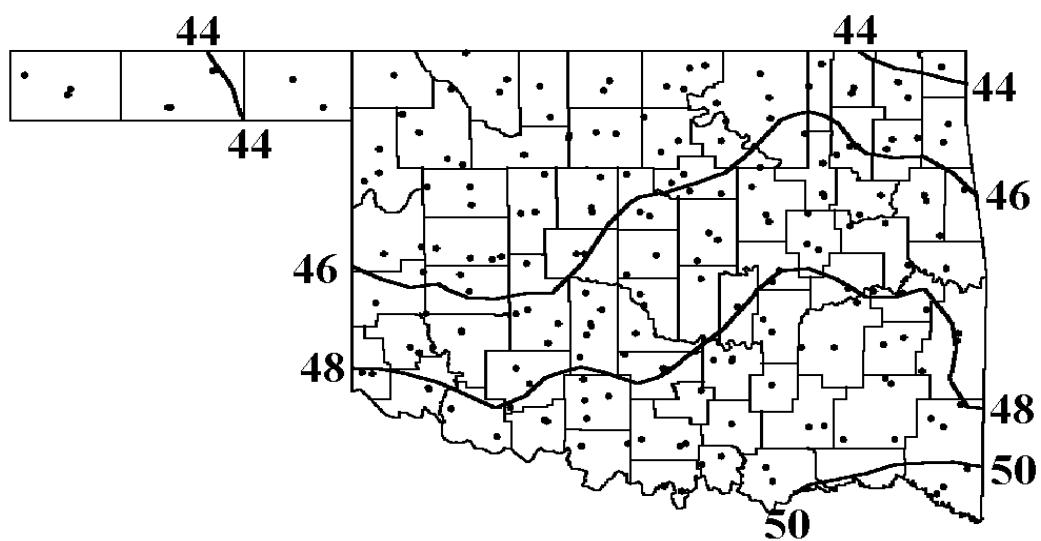
MARCH 2001 AVERAGE MONTHLY TEMPERATURE (°F)



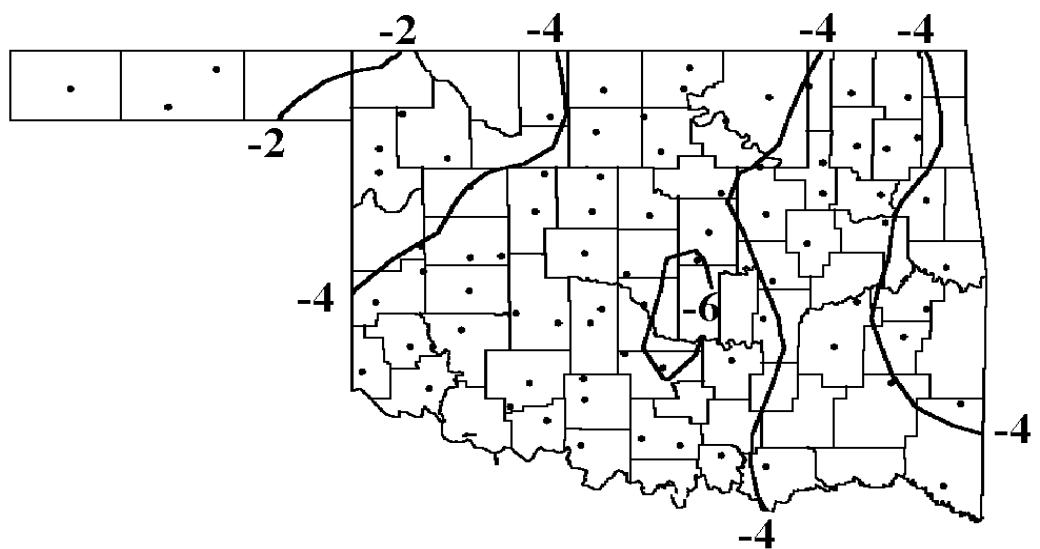
MARCH 2001 DEPARTURE FROM NORMAL TEMPERATURE (°F)



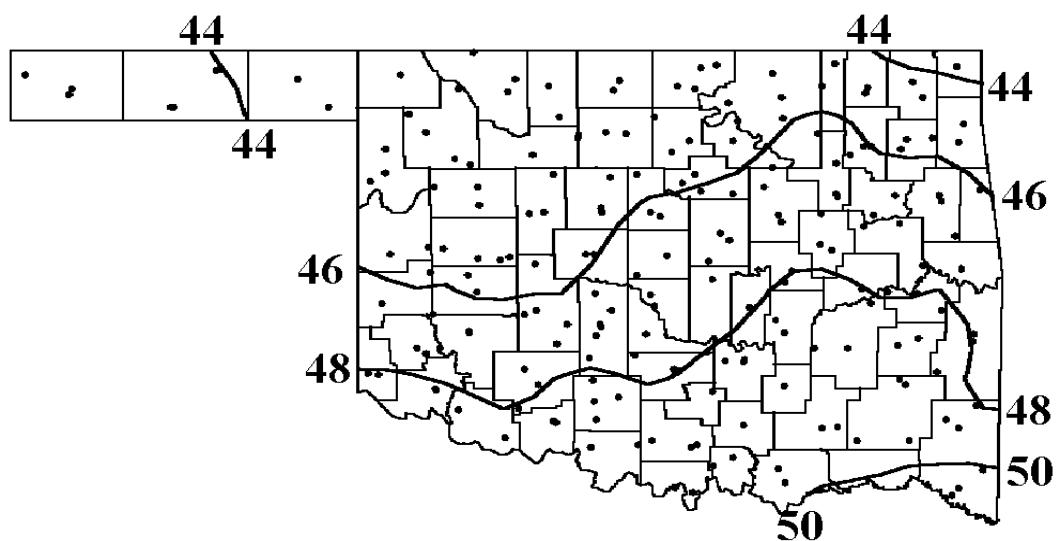
MARCH 2001 TOTAL PRECIPITATION (INCHES)



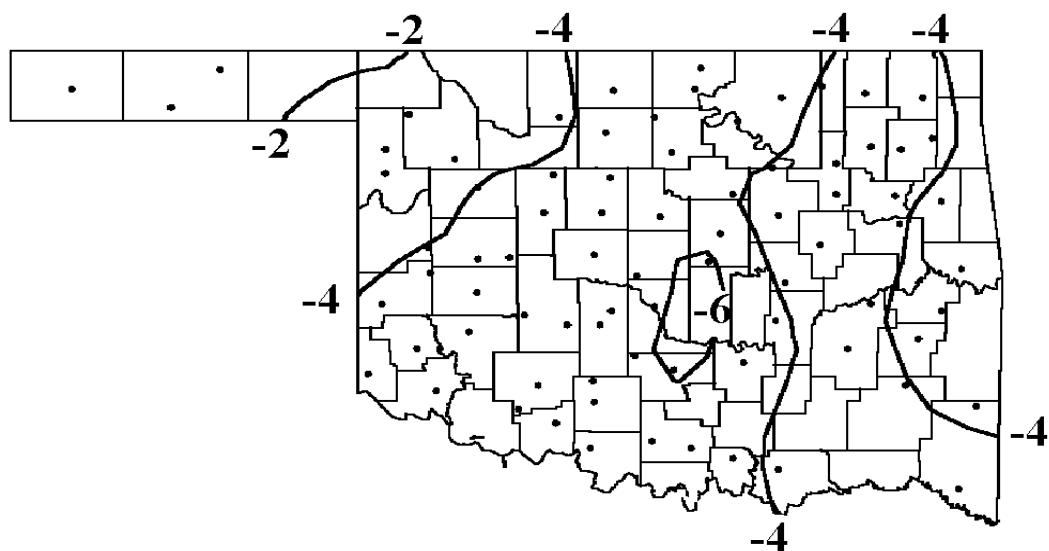
MARCH 2001 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



MARCH 2001 ACCUMULATED HEATING DEGREE DAYS (°F)



MARCH 2001 DEPARTURE FROM NORMAL HEATING DEGREE DAYS (°F)



MARCH 2001 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

NAME	ID	CD	DEV				HEAT				COOL				DEV			
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM		
ARNETT	332	1	43.0	31	-2.8	78	22	16	1	683	88	0	0	1.100	31	-0.53	0.28	1
BEAVER	593	1	42.3	29	*****	83	22	14	1	658	*****	0	*****	2.031	29	*****	0.48	14
BOISE CITY	908	1	43.6	31	-1.7	78	21	17	1	663	52	0	0	1.905	31	1.02	0.80	24
BUFFALO	1243	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.950	31	-0.91	0.70	15
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.203	31	-0.43	0.35	15
GAGE	3407	1	44.1	31	-3.9	81	22	17	1	649	115	0	-7	1.274	31	-0.24	0.38	15
GATE	3489	1	43.6	29	*****	80	22	16	1	622	*****	0	*****	2.430	29	*****	0.87	15
GOODWELL	3628	1	42.6	31	-1.3	80	22	8	1	695	41	0	0	1.071	31	0.20	0.35	24
HOOKER	4298	1	44.7	30	-1.2	80	21	13	1	609	17	0	0	1.482	30	*****	0.51	15
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.932	31	0.23	0.79	15
TURPIN	9017	1	42.5	24	****	81	22	15	2	540	*****	0	*****	1.990	24	*****	0.57	12

MARCH 2001 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

NAME	ID	CD	DEV				HEAT				COOL				DEV			
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM		
ALVA	193	2	43.8	31	*****	78	22	19	1	659	*****	0	*****	2.480	31	*****	1.66	15
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.801	31	*****	0.34	12
BILLINGS	755	2	44.0	31	-3.8	75	22	22	1	653	112	0	-8	0.791	31	-1.90	0.25	12
BLACKWELL 2E	818	2	43.5	29	*****	74	23	22	1	623	*****	0	*****	0.790	29	*****	0.21	1
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.671	30	*****	0.23	16
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.590	31	*****	0.46	16
CHEROKEE	1724	2	43.0	29	*****	75	22	19	2	638	*****	0	*****	2.620	29	*****	1.50	15
ENID	2912	2	44.6	31	-5.3	75	22	21	1	633	155	0	-10	1.485	31	-0.80	0.63	12
FT SUPPLY	3304	2	44.2	31	-1.8	80	21	17	1	644	48	0	-7	1.623	31	0.00	0.91	14
FREEDOM	3358	2	45.8	29	*****	82	23	19	1	558	*****	0	*****	1.774	31	-0.09	0.86	15
GREAT SALT P	3740	2	44.7	29	*****	76	22	20	1	590	*****	0	*****	1.020	29	*****	0.40	16
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.880	31	*****	0.42	12
HELENA	4019	2	43.4	31	-2.9	75	22	19	1	671	91	0	0	1.491	31	-0.90	0.41	16
JEFFERSON	4573	2	43.5	31	-5.6	76	22	21	1	668	168	0	-7	0.970	31	-1.62	0.39	12
LAHOMA	4950	2	44.3	31	*****	72	22	20	1	641	*****	0	*****	1.540	31	*****	0.52	16
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.761	31	*****	0.20	16
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.860	31	*****	0.29	12
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.310	31	*****	0.50	12
MUTUAL	6139	2	43.1	31	-3.1	75	22	18	1	679	96	0	0	1.391	31	-0.67	0.36	12
NEWKIRK	6278	2	42.7	31	-6.1	72	24	21	1	690	178	0	-10	0.840	31	-1.53	0.26	12
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.292	31	-0.80	0.54	16
PERRY	7012	2	45.6	30	-4.9	77	22	23	2	583	119	0	-14	0.962	31	-1.75	0.62	12
PONCA CITY	7201	2	44.2	31	-3.7	73	23	22	1	645	107	0	-8	0.344	31	-2.19	0.19	12
RED ROCK	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.870	31	-1.72	0.52	11
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.815	31	0.00	0.41	14

MARCH 2001 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

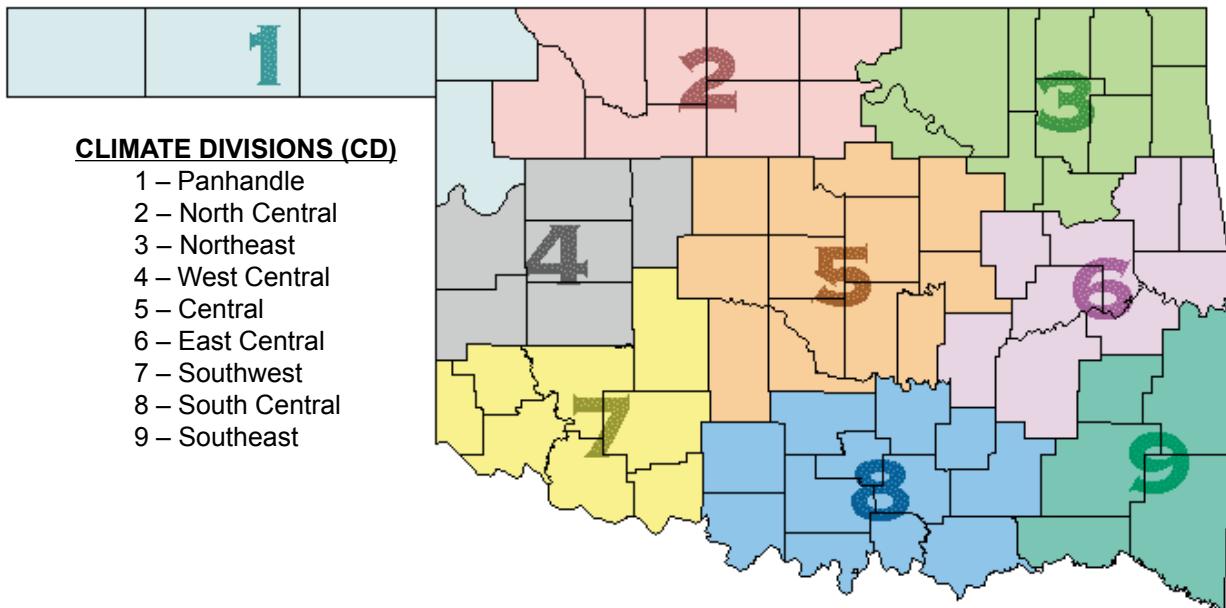
NAME	ID	CD	MEAN				DEV				HEAT				DEV				COOL				DEV			
			TEMP	NUM	FROM	NORM	MAX	TEMP	DAY	MIN	TEMP	DAY	DEG	FROM	DEG	FROM	TOT	NUM	PPT	OBS	FROM	MAX	24-HR	DAY		
BATTIEST	567	9	47.1	31	*****		78	24	26	17	554	*****	0	*****		4.095	31	*****		1.42	12					
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	0	*****	*****	*****	*****	2.080	31	*****		0.64	24					
BROKEN BOW	1162	9	*****	0	*****	***	0	****	0	*****	0	*****	*****	*****	*****	5.930	31	1.04	1.80	12						
CARNASAW	1499	9	*****	0	*****	***	0	****	0	*****	0	*****	*****	*****	*****	3.922	31	-1.34	1.70	12						
CARTER TWR	1544	9	*****	0	*****	***	0	****	0	*****	0	*****	*****	*****	*****	4.090	31	-0.77	1.86	12						
FANSHAWE	3065	9	*****	0	*****	***	0	****	0	*****	0	*****	*****	*****	*****	1.460	31	-2.87	0.38	12						
IDABEL	4451	9	51.2	31	-2.2	78	23	30	4	428	57	1	-11	4.780	31	-0.07	2.18	12								
PAGE	6842	9	45.8	17	*****	77	23	24	16	326	*****	0	*****		3.250	19	*****		2.58	15						
SMITHVILLE	8285	9	46.8	31	-5.0	77	23	25	17	565	143	0	-13	4.811	31	-0.52	1.32	12								
SPIRO	8416	9	*****	0	*****	***	0	****	0	*****	0	*****	*****	*****	*****	0.910	31	-3.40	0.23	12						
TUSKAHOMA	9023	9	50.0	31	-4.0	78	23	28	25	466	107	0	-18	2.252	31	-1.88	0.60	24								
VALLIANT	9118	9	*****	0	*****	***	0	****	0	*****	0	*****	*****	*****	*****	4.501	31	0.04	1.61	12						
WILBURTON	9634	9	48.5	31	-4.2	78	22	27	17	512	116	0	-14	1.161	31	-3.01	0.50	28								
WISTER	9724	9	48.0	31	*****	77	23	27	17	526	*****	0	*****		1.640	31	*****		0.57	29						

MARCH 2001 CLIMATE DIVISION SUMMARY

NAME	CD	MEAN				DEV				HEAT				DEV				COOL				DEV			
		TEMP	NUM	FROM	NORM	MAX	TEMP	DAY	MIN	TEMP	DAY	DEG	FROM	DEG	FROM	TOT	NUM	PPT	OBS	FROM	MAX	24-HR	DAY		
CLIMATE DIVISION 1	1	43.6	5	-2.4	83	22	8	1	660	69	0	-3	1.350	7	-0.09	0.87	15								
CLIMATE DIVISION 2	2	43.9	11	-4.3	82	23	17	1	651	124	0	-7	1.230	21	-1.07	1.66	15								
CLIMATE DIVISION 3	3	46.1	13	-3.6	78	22	23	26	582	98	0	-9	1.310	21	-2.16	1.75	12								
CLIMATE DIVISION 4	4	45.1	9	-4.3	78	22	18	1	615	124	0	-7	1.430	18	-0.48	1.00	12								
CLIMATE DIVISION 5	5	46.5	13	-4.8	78	22	23	1	568	133	0	-11	1.120	31	-1.74	1.00	31								
CLIMATE DIVISION 6	6	48.0	9	-3.8	79	23	25	5	527	105	0	-13	1.240	22	-2.66	1.06	24								
CLIMATE DIVISION 7	7	47.0	10	-5.0	79	21	22	1	559	145	0	-11	0.960	21	-0.97	0.70	12								
CLIMATE DIVISION 8	8	48.8	13	-4.8	80	23	20	2	497	127	0	-17	1.530	24	-1.65	1.80	24								
CLIMATE DIVISION 9	9	48.6	6	-4.4	78	22	24	16	508	121	0	-14	3.200	13	-1.46	2.58	15								

Note: The above climate division summary contains similar information to the preceding tables but are the averages or extremes over all of the stations reporting in each climate division.

CLIMATE DIVISION MAP



EXPLANATION OF TABLES

The tables appearing on the preceding pages contain the following information for each station or climate division:

Station Name: The name of the observing site.

Station Identification Number: These numbers usually are assigned by the National Climatic Data Center.

Climate Division: See the figure above.

Number of Temperature Observations: These numbers are the actual number of temperature reports recorded at the station during the current month. Missing observations may result in artificially high or low mean monthly temperatures.

Deviation from Normal: The deviation of the observed mean monthly temperature from the monthly station normal. A positive value indicates the month was warmer than normal. A negative value indicates the month was cooler than normal. Normal monthly temperatures may be calculated by subtracting the deviation from the observed temperature.

Maximum Daily Temperature: The maximum daily maximum temperature observed during the current month and year and the day on which it occurred.

Minimum Daily Temperature: The minimum daily minimum temperature observed during the current month and year and the day on which it occurred.

Heating Degree Days: HDD are calculated each day of the month for which there is a temperature report and the average temperature for the day is less than 65 degrees. Daily values are summed to arrive at a monthly total. HDD are a qualitative measure of how much heat was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. See the equation to the right for the HDD calculation.

Deviation from Normal Heating Degree Days: The difference between the actual HDD and the normal HDD for the month. A positive value indicates higher than normal heating requirements for the month as a whole. A negative value indicates lower than normal heating requirements for the month as a whole. Normal HDD may be calculated by subtracting the deviation from observed HDD.

Cooling Degree Days: CDD are calculated each day of the month for which there is a temperature report and the average temperature for the day exceeds 65 degrees. Daily values are summed to give a monthly total. CDD are a proxy measure of how much cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. See the equation to the right for the CDD calculation.

Deviation from Normal Cooling Degree Days: The difference between the actual HDD and the normal HDD for the month. A positive value indicates higher than normal cooling requirements for the month as a whole. A negative value indicates lower than normal cooling requirements for the month as a whole. Normal cooling degree days may be found by subtracting the deviation from the observed cooling degree days.

Total Precipitation: Often incorrectly referred to as a mean precipitation, this value is the sum of all precipitation reported during the month at a station. If snow occurred, it is to be melted and its water equivalent recorded.

Number of Precipitation Observations: The number of days a rain or no rain observation was reported. Missing observations frequently result in artificially low total precipitation values.

Deviation from Normal Precipitation: The difference between the actual rainfall and the normal rainfall for the month. A positive value indicates more rain than normal was received. A negative value indicates less than was expected rainfall was received. Normal rainfall may be calculated by subtracting the deviation from the monthly total.

Maximum 24-Hour Report and Day: The maximum amount of precipitation recorded during the station's 24-hour observation period for the current month and year and the day on which it was recorded.

Heating Degree Days Calculation

NumDays

$$\sum_{i=1}^{NumDays} 65 - ((TMAX_i + TMIN_i) / 2)$$

Where NumDays = the number of days in the month of interest (e.g., NumDays = 31 for January)

Cooling Degree Days Calculation

NumDays

$$\sum_{i=1}^{NumDays} ((TMAX_i + TMIN_i) / 2) - 65$$

Where NumDays = the number of days in the month of interest (e.g., NumDays = 30 for June)

EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION MARCH 2001

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	83	22	BEAVER	8	1	GOODWELL	.87	15	GATE	2.43	GATE
2	82	23	FREEDOM	17	1	FT SUPPLY	1.66	15	ALVA	2.62	CHEROKEE
3	78	22	WAGONER	23	25	VINITA	1.75	12	WANN	2.76	WANN
4	78	22	ERICK	18	1	REYDON	1.00	12	SWEETWATER	2.62	SWEETWATER
5	78	22	BRISTOW	23	1	MEEKER	1.00	31	TECUMSEH	1.86	EDMOND
6	79	23	WEBBERS FALL	25	5	TAHLEQUAH	1.06	24	ASHLAND	2.71	ASHLAND
7	79	21	HOLLIS	22	1	HOBART	.70	12	APACHE	1.76	APACHE
8	80	23	WAURIKA	20	2	ATOKA	1.80	24	ALLEN	3.09	MARIETTA
9	78	23	BATTIEST	24	16	PAGE	2.58	15	PAGE	5.93	BROKEN BOW
	78	24	BATTIEST								
	78	23	IDABEL								
	78	22	TUSKAHOMA								
	78	23	TUSKAHOMA								

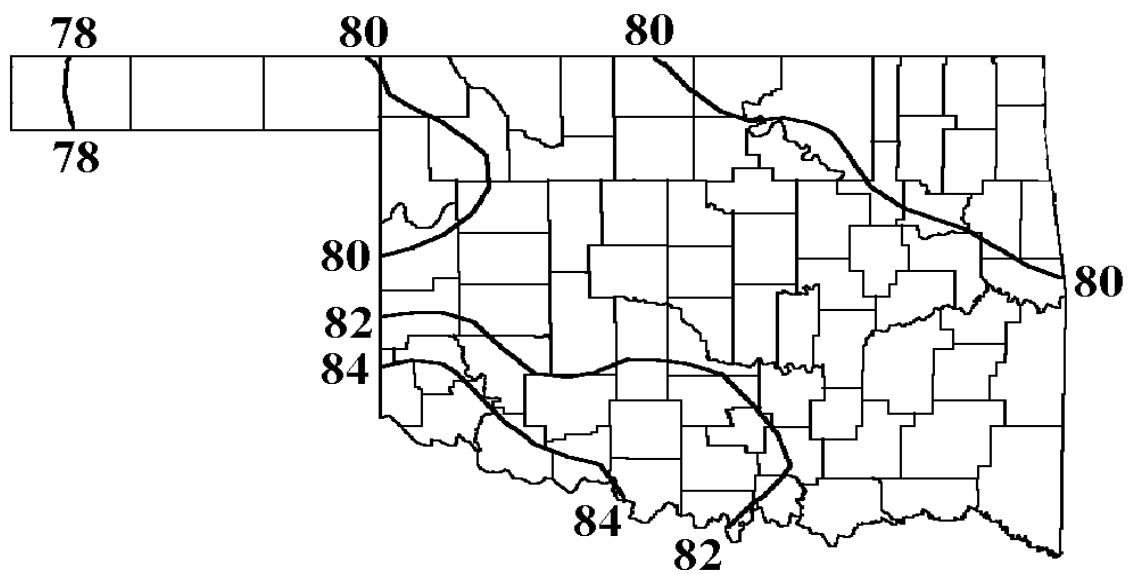
TABLE OF 2000/2001 COMPARISONS

Station	MARCH Temperature (°F)		MARCH Precipitation (in.)	
	2000	2001	2000	2001
Arnett	47.7	43.0	5.16	1.10
Enid	50.8	44.6	1.14	1.49
Tulsa	53.2	47.1	3.76	0.78
Elk City	50.7	44.8	6.39	1.85
Oklahoma City	53.4	46.6	3.12	1.02
McAlester	55.8	48.9	2.91	1.83
Altus Irr Station	53.7	47.8	4.87	0.96
Ardmore	58.5	51.0	3.32	0.48
Idabel	58.6	51.2	3.33	4.78

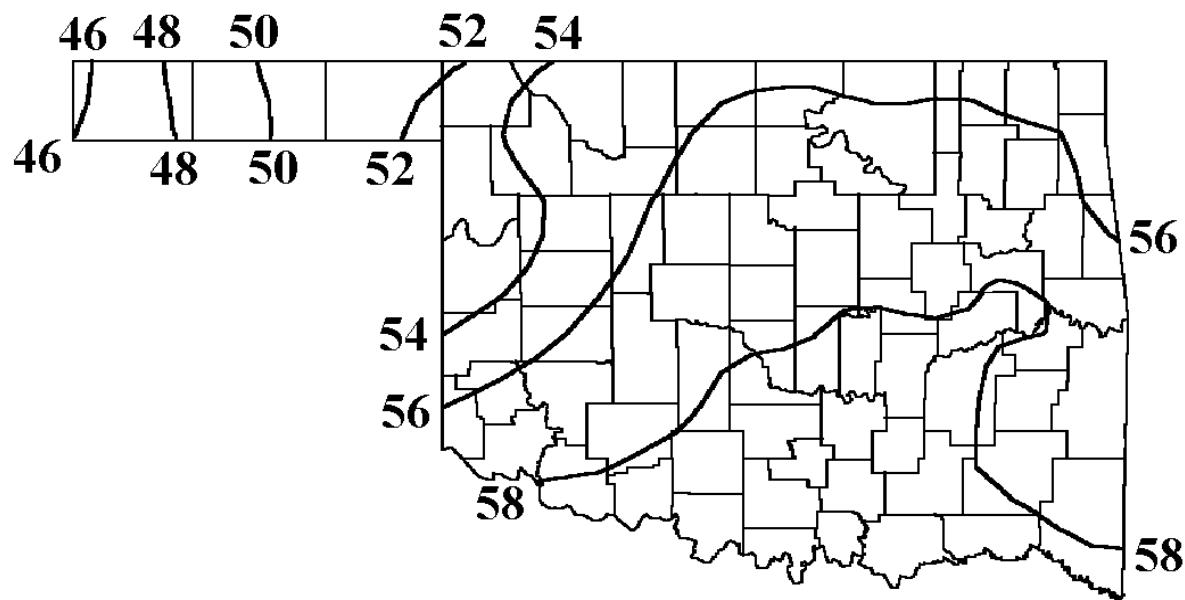
MARCH 2001 STATEWIDE EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature (°F)	Goodwell	1	8	1
Maximum temperature (°F)	Beaver	1	83	22
Maximum 24-hour Precipitation	Page	9	2.58	15

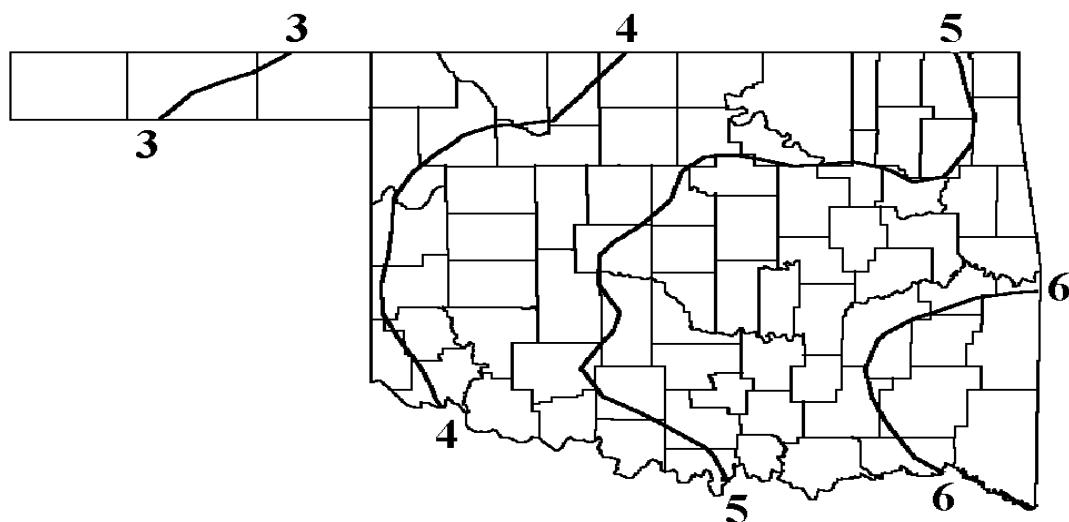
MAY NORMAL DAILY MAXIMUM TEMPERATURE (°F)



MAY NORMAL DAILY MINIMUM TEMPERATURE (°F)



MAY NORMAL MONTHLY PRECIPITATION (INCHES)



MAY TORNADO STATISTICS

The most tornadoes reported in **MAY** for Oklahoma was **(91)** in **1999**.

The average number of tornadoes in **MAY** for Oklahoma is **(20)**.

OUTLOOK FOR MAY 2001 THROUGH JULY 2001

BASED ON SEASONAL OUTLOOK PROVIDED BY THE CLIMATE PREDICTION CENTER

Temperature: Near normal temperature statewide

Precipitation: Near normal precipitation statewide

OKLAHOMA CITY CLIMATE CALENDAR

MAY

The data on this calendar are for Oklahoma City, Oklahoma.
 Normal values are calculated for the period 1961-1990.
 Temperature extremes are for the period 1905-1999.
 Precipitation extremes are for the period 1888-1999.

Day	Avg. Temp.	Ave. High	2001	Record High	Year	Lowest Max	Year	Ave. Low	2001	Highest Min.	Year	Record Low	Year	Avg. Precip.	2001	Greatest Precip.	Year
1	64	76	93	1948	53	1966	53	66	1938	33	1909	0.13		1.63	1954		
2	65	76	94	1943	51	1994	54	69	1959	39	1961	0.14		2.99	1990		
3	65	76	95	1920	49	1978	54	70	1949	32	1954	0.14		3.58	1898		
4	65	76	93	1955	44	1935	54	72	1950	34	1907	0.15		3.60	1898		
5	66	76	94	1940	50	1935	55	69	1940	37	1917	0.15		4.24	1899		
6	66	77	92	1918	48	1908	55	70	1986	37	1944	0.16		2.61	1930		
7	66	77	93	1955	55	1893	55	71	1927	39	1917	0.16		2.27	1892		
8	66	77	96	1918	50	1943	55	70	1927	37	1917	0.16		6.64	1993		
9	66	77	93	1895	55	1943	56	70	1963	40	1923	0.16		3.37	1943		
10	67	78	96	1967	53	1954	56	71	1963	40	1924	0.17		4.71	1950		
11	67	78	94	1923	54	1954	56	70	1963	37	1981	0.17		2.85	1920		
12	67	78	93	1992	55	1914	56	72	1956	39	1979	0.17		2.26	1982		
13	68	78	95	1984	49	1953	57	69	1991	39	1971	0.17		2.58	1983		
14	68	78	92	1952	55	1934	57	70	1998	41	1953	0.17		2.48	1986		
15	68	79	90	1966	48	1945	57	72	1999	38	1907	0.18		3.59	1920		
16	68	79	92	1966	56	1920	58	75	1974	42	1945	0.18		1.81	1986		
17	69	79	96	1966	61	1986	58	74	1974	40	1945	0.18		3.17	1951		
18	69	79	95	1956	59	1943	58	72	1996	45	1976	0.18		1.50	1902		
19	69	80	96	1973	61	1943	59	72	1996	40	1894	0.18		3.35	1955		
20	69	80	94	1990	63	1942	59	74	1902	43	1981	0.18		2.74	1979		
21	69	80	95	1953	56	1968	59	73	1953	42	1892	0.18		2.81	1922		
22	70	81	98	1939	57	1892	59	74	1953	42	1931	0.18		3.09	1952		
23	70	81	99	1939	60	1963	60	76	1996	42	1892	0.18		4.16	1908		
24	70	81	94	1939	59	1995	60	74	1996	42	1935	0.18		4.06	1903		
25	71	81	93	1990	59	1995	60	72	1965	47	1947	0.18		1.49	1968		
26	71	82	96	1953	58	1950	61	74	1916	45	1901	0.18		3.22	1995		
27	72	82	96	1927	59	1893	61	74	1912	42	1907	0.18		5.38	1987		
28	72	82	93	1895	52	1992	61	71	1942	43	1947	0.18		2.33	1987		
29	72	82	94	1985	57	1902	62	73	1989	39	1947	0.18		5.63	1970		
30	72	83	104	1985	64	1915	62	74	1974	45	1947	0.18		1.67	1958		
31	73	83	98	1934	54	1903	62	74	1991	44	1983	0.17		2.14	1892		
MONTH	68.4	79.1		104	1985	44	1935	57.7		76	1996	32	1954	5.22	6.64	1993	

DATA COURTESY OF NATIONAL WEATHER SERVICE – NORMAN
 Temperatures are in degrees Fahrenheit; precipitation is in inches.

TULSA CLIMATE CALENDAR

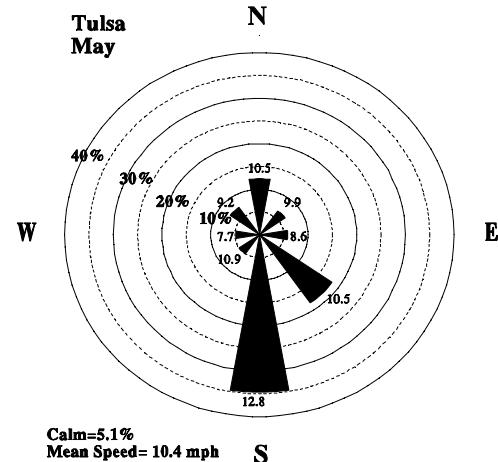
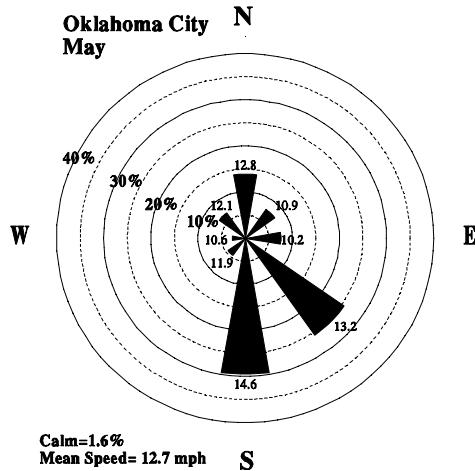
MAY

The data on this calendar are for Tulsa, Oklahoma.
 Normal values are calculated for the period 1961-1990.
 Temperature extremes are for the period 1905-2000.
 Precipitation extremes are for the period 1888-2000.

Day	Avg. Temp.	Ave. High	2001	Record High	Year	Lowest Max	Year	Ave. Low	2001	Highest Min.	Year	Record Low	Year	Avg. Precip.	2001	Greatest Precip.	Year
1	66	77		89	1948	53	1966	55		71	1936	32	1909	0.16		2.10	1944
2	66	77		94	1943	50	1994	55		69	1959	32	1909	0.16		1.70	1980
3	66	77		96	1920	52	1978	55		68	1938	36	1976	0.16		2.19	1979
4	66	77		96	1920	51	1935	55		72	1950	36	1954	0.17		2.30	1999
5	67	77		92	1952	51	1935	56		71	1964	36	1907	0.17		2.88	1913
6	67	77		90	1952	59	1944	56		71	1986	36	1944	0.17		2.83	2000
7	67	78		93	1918	52	1910	56		72	2000	40	1931	0.17		4.09	1995
8	67	78		97	1918	53	1943	56		71	1996	37	1938	0.18		3.66	1961
9	67	78		93	1918	61	1924	57		72	1948	38	1923	0.18		6.15	1943
10	68	78		93	1963	54	1924	57		71	1963	41	1909	0.18		4.36	1950
11	68	78		94	1980	58	1912	57		74	1956	39	1924	0.18		2.83	1992
12	68	79		91	1992	57	1939	57		75	1956	40	1960	0.18		4.05	1982
13	69	79		93	1911	51	1953	58		72	1991	41	1971	0.18		4.47	1933
14	69	79		93	1911	54	1907	58		71	1998	44	1976	0.18		2.51	1956
15	69	79		95	1911	52	1945	58		72	1996	35	1907	0.19		2.05	1910
16	69	80		94	1931	52	1945	59		74	1974	40	1907	0.19		1.40	1943
17	69	80		94	1911	65	1935	59		76	1974	40	1945	0.19		1.89	1928
18	70	80		94	1987	65	1952	59		74	1996	45	1976	0.19		2.48	1960
19	70	80		94	1911	65	1981	60		74	1996	46	1968	0.19		3.91	1949
20	70	80		94	1956	64	1967	60		71	1982	42	1981	0.19		2.50	1902
21	71	81		95	1925	56	1968	60		73	1962	45	1915	0.19		1.90	1978
22	71	81		93	1953	56	1917	61		77	1953	44	1931	0.19		2.10	1902
23	71	81		94	2000	62	1963	61		75	1953	41	1917	0.19		1.47	1947
24	71	82		94	1911	63	1956	61		75	1996	42	1935	0.19		3.16	1908
25	72	82		94	1911	64	1995	61		75	1996	45	1925	0.19		1.80	1974
26	72	82		94	1926	60	1992	62		73	1916	44	1925	0.19		2.40	1984
27	72	82		94	1911	65	1992	62		75	1912	45	1961	0.18		6.95	1984
28	72	83		94	1926	53	1992	62		73	1991	45	1947	0.18		2.08	1905
29	72	83		98	1926	62	1947	62		76	1989	40	1947	0.18		1.60	1903
30	73	83		98	1934	59	1964	63		76	1989	45	1947	0.18		2.71	1976
31	73	83		100	1934	63	1907	63		77	1991	49	1930	0.18		2.50	1926
MONTH	69.3	79.71		100	1934	50	1994	58.74		77	1991	32	1909	0.18		6.95	1984

DATA COURTESY OF NATIONAL WEATHER SERVICE – TULSA
 Temperatures are in degrees Fahrenheit; precipitation is in inches.

MAY WIND ROSES



May Wind Roses for Oklahoma City and Tulsa. The frequency (percent) of winds from each direction is represented by length of its bar. The numbers at the ends of the bars indicate the average wind speed from that direction in miles per hour.

MAY SUNRISE/SUNSET TIMES FOR 2001

ALL TIMES ARE CENTRAL STANDARD TIME

OKLAHOMA CITY

DATE	SUNRISE	SUNSET
5/1/01	5:38 AM	7:17 AM
5/2/01	5:37 AM	7:17 AM
5/3/01	5:36 AM	7:18 AM
5/4/01	5:35 AM	7:19 AM
5/5/01	5:34 AM	7:20 AM
5/6/01	5:33 AM	7:21 AM
5/7/01	5:32 AM	7:21 AM
5/8/01	5:31 AM	7:22 AM
5/9/01	5:30 AM	7:23 AM
5/10/01	5:29 AM	7:24 AM
5/11/01	5:29 AM	7:25 AM
5/12/01	5:28 AM	7:26 AM
5/13/01	5:27 AM	7:26 AM
5/14/01	5:26 AM	7:27 AM
5/15/01	5:25 AM	7:28 AM
5/16/01	5:25 AM	7:29 AM
5/17/01	5:24 AM	7:30 AM
5/18/01	5:23 AM	7:30 AM
5/19/01	5:22 AM	7:31 AM
5/20/01	5:22 AM	7:32 AM
5/21/01	5:21 AM	7:33 AM
5/22/01	5:21 AM	7:33 AM
5/23/01	5:20 AM	7:34 AM
5/24/01	5:19 AM	7:35 AM
5/25/01	5:19 AM	7:36 AM
5/26/01	5:18 AM	7:36 AM
5/27/01	5:18 AM	7:37 AM
5/28/01	5:18 AM	7:38 AM
5/29/01	5:17 AM	7:38 AM
5/30/01	5:17 AM	7:39 AM
5/31/01	5:16 AM	7:40 AM

TULSA

DATE	SUNRISE	SUNSET
5/1/01	5:31 AM	7:11 AM
5/2/01	5:30 AM	7:12 AM
5/3/01	5:29 AM	7:13 AM
5/4/01	5:28 AM	7:14 AM
5/5/01	5:27 AM	7:15 AM
5/6/01	5:26 AM	7:16 AM
5/7/01	5:25 AM	7:16 AM
5/8/01	5:24 AM	7:17 AM
5/9/01	5:23 AM	7:18 AM
5/10/01	5:22 AM	7:19 AM
5/11/01	5:21 AM	7:20 AM
5/12/01	5:20 AM	7:21 AM
5/13/01	5:19 AM	7:21 AM
5/14/01	5:18 AM	7:22 AM
5/15/01	5:18 AM	7:23 AM
5/16/01	5:17 AM	7:24 AM
5/17/01	5:16 AM	7:25 AM
5/18/01	5:15 AM	7:25 AM
5/19/01	5:15 AM	7:26 AM
5/20/01	5:14 AM	7:27 AM
5/21/01	5:13 AM	7:28 AM
5/22/01	5:13 AM	7:29 AM
5/23/01	5:12 AM	7:29 AM
5/24/01	5:11 AM	7:30 AM
5/25/01	5:11 AM	7:31 AM
5/26/01	5:10 AM	7:32 AM
5/27/01	5:10 AM	7:32 AM
5/28/01	5:09 AM	7:33 AM
5/29/01	5:09 AM	7:34 AM
5/30/01	5:09 AM	7:34 AM
5/31/01	5:08 AM	7:35 AM

ADD ONE HOUR FOR CENTRAL DAYLIGHT TIME

CONTACT INFORMATION



Oklahoma Climatological Survey

The University of Oklahoma
100 East Boyd Street, Suite 1210
Norman, OK 73019-1012

tel 405-325-2541
fax 405-325-2550

E-mail ocs@ou.edu

Office Hours: 8 AM to 5 PM, Monday-Friday

Mesonet Operators

tel 405-325-3231

E-mail operator@operations.ocs.ou.edu

Visit our web site at <http://www.ocs.ou.edu>.

Content: Howard Johnson
Shaye Palmer

Layout: Stdrovia Blackburn
John Humphrey

The University of Oklahoma is an equal opportunity employer.