

# OKLAHOMA MONTHLY CLIMATE SUMMARY FEBRUARY 2003

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**Oklahoma Climatological Survey**

## MONTHLY SUMMARY FOR FEBRUARY 2003

### **February 2003**

*Statewide average temperature = 37.8° F*  
*Statewide average rainfall = 1.79 inches*

A series of winter storms spread snow across various parts of Oklahoma during February, providing for the state a month of below average temperature with near normal precipitation. Winter weather arrived with a vengeance, in stark contrast to the decidedly dull weather of January. Pleasant weather at the beginning of the month provided many with a false hope for an early spring. Those hopes were dashed quite emphatically, however, by a powerful late-month blast of record-breaking glacial weather.

According to preliminary data from the National Weather Service, the month finished as the 21<sup>st</sup> coldest and 40<sup>th</sup> wettest February since record keeping began in 1892. At 1.79 inches, 0.02 inch greater than normal, the statewide-averaged precipitation was augmented considerably by four separate snowstorms that afflicted various portions of the state. The statewide-averaged temperature finished 4.5 degrees below normal at 37.8 degrees. Bolstered by the cold February, this winter season finished as the 30<sup>th</sup>-coldest since 1893 with a statewide-averaged temperature of 38.4 degrees, 1.3 degrees below normal. Oklahoma's coldest winter occurred in 1979, with an average temperature of 32.2 degrees. Precipitation during the 2002-2003 winter finished 0.41 inches below normal with 4.85 inches (rainfall and melted snow), making it the 61<sup>st</sup> driest winter on record. Through its first two months, 2003 has been both cooler and dryer than normal. The combined January-February temperature, averaged statewide, of 37.3 degrees is 2.2 degrees lower than normal and ranks this as the 24<sup>th</sup> coldest of the 112 such periods on record. The state's two-month precipitation of 1.86 inches is 1.37 inches less than normal and ranks this as the 29<sup>th</sup> driest January-February period on record.

### **February Normals**

*Statewide average temperature = 42.3° F*  
*Statewide average rainfall = 1.77 inches*

The month started out on a high note with daily maximum temperatures in the 70s and 80s across the state. The state's high temperature for the month, 87 degrees, occurred at Altus (Jackson County) on the 2<sup>nd</sup>, setting a new statewide record high for that date. The previous high temperature for February 2<sup>nd</sup> was 86 degrees and was measured at two locations: El Reno in 1911 and Hollis in 1995. The warmth of the 2<sup>nd</sup> was short-lived, however, as a strong cold front dropped temperatures below normal and set the stage for February's first taste of wintry precipitation. A low pressure system approached the state from the west and combined with the cold air already in place to dump 2 to 4 inches of snow across an area generally north of I-40. Locally heavier amounts up to 6 inches were found in northwestern and west central Oklahoma. The snow cover encouraged substantial local cooling, leading to a reported lowest temperature of -6 degrees at Fort Supply (Woodward) on the 8<sup>th</sup>.

**(Continued on page 3.)**

A second winter storm, on the 9<sup>th</sup> and 10<sup>th</sup>, brought additional snowfall totals as great as 7 inches across the northern half of the state. Snowfall amounts were greatest in the northeast, where heavy bands of snow reportedly dropped up to 10 inches in Wagoner, Cherokee, and southern Delaware Counties. Snow fell across southwestern and central portions of the state, but rising temperatures quickly melted the snow as the afternoon progressed. Temperatures statewide rose into the 50s and 60s on the following day and ushered in a period of more seasonable weather. Strong southerly winds on the 15<sup>th</sup> produced daily average wind speeds in excess of 25 miles per hour at several stations of the Oklahoma Mesonet. The station at Minco (Grady) posted a 24-hour average wind speed of 28.5 miles per hour. Daily average wind speeds at Cheyenne (Roger Mills: 25.9), Medicine Park (Comanche: 25.2), and Weatherford (Custer: 25.0) also breached the quarter-century mark. Severe thunderstorms rumbled across the northern portions of the state on the 15<sup>th</sup>, producing strong winds, heavy rains, and 1-inch diameter hail in the Tulsa area.

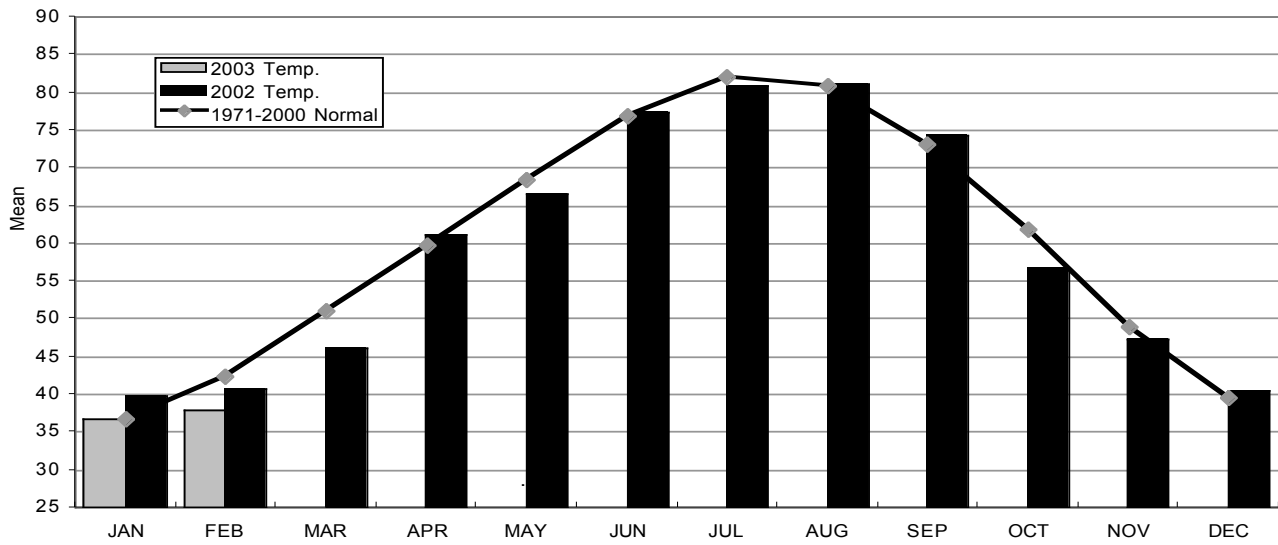
The seasonable weather came to an end on the 23<sup>rd</sup> when a large dome of arctic air plunged into the state from the north. Temperatures over parts of northern Oklahoma remained below freezing for the next five days – over 130 consecutive hours in all. The frigid air combined with a series of upper-level storms to produce significant snowfall amounts across the state. The first upper-level storm affected the state on the 23<sup>rd</sup>, covering the northern-third of the state with 6 to 10 inches of snow. Public reports from Kildare (Kay) indicated that 18 inches of snow fell there. Kay County observers in the NWS cooperative network reported storm total snowfalls of 17.5 inches each at Braman, 15.5 inches at Blackwell, and 14.6 inches at Newkirk. Wann (Nowata) and Lamont (Grant) each reported snowfall accumulations of 14 inches. Numerous accounts of 8 inches or more of snow were reported across the northern third of the state from Helena (Major) eastward. Blizzard conditions forced road closings along the Oklahoma-Kansas border as 40 mph winds drifted snow across highways. The white-out conditions contributed to a 30-car pileup along I-44 near Miami.

A second round of snow struck overnight on the 24<sup>th</sup> and affected the southern half of the state. The extreme southeastern counties received the heaviest snowfall, with totals of 6 to 8 inches being commonly reported, prompting rare school closings across the region. Clayton in Pushmataha County reportedly received 10 inches. The NWS observer at Smithville (McCurtain) reported an 8-inch snowfall.

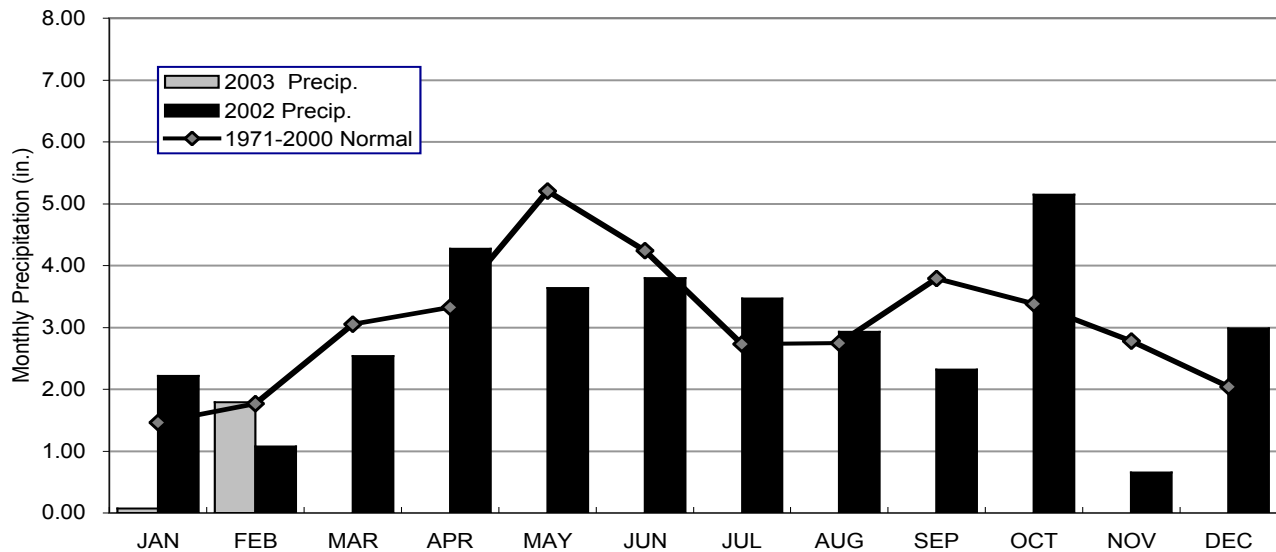
The icy weather held throughout the remainder of the month. On the 25<sup>th</sup> and 26<sup>th</sup>, another storm moved across the state and produced a light band of freezing drizzle, which was enough to cause numerous accidents on Oklahoma streets and highways. Another 4 to 5 inches of snowfall fell across parts of northwestern Oklahoma overnight on the 26<sup>th</sup>. Roads were closed in several areas of the state as they simply became too slick for travel.

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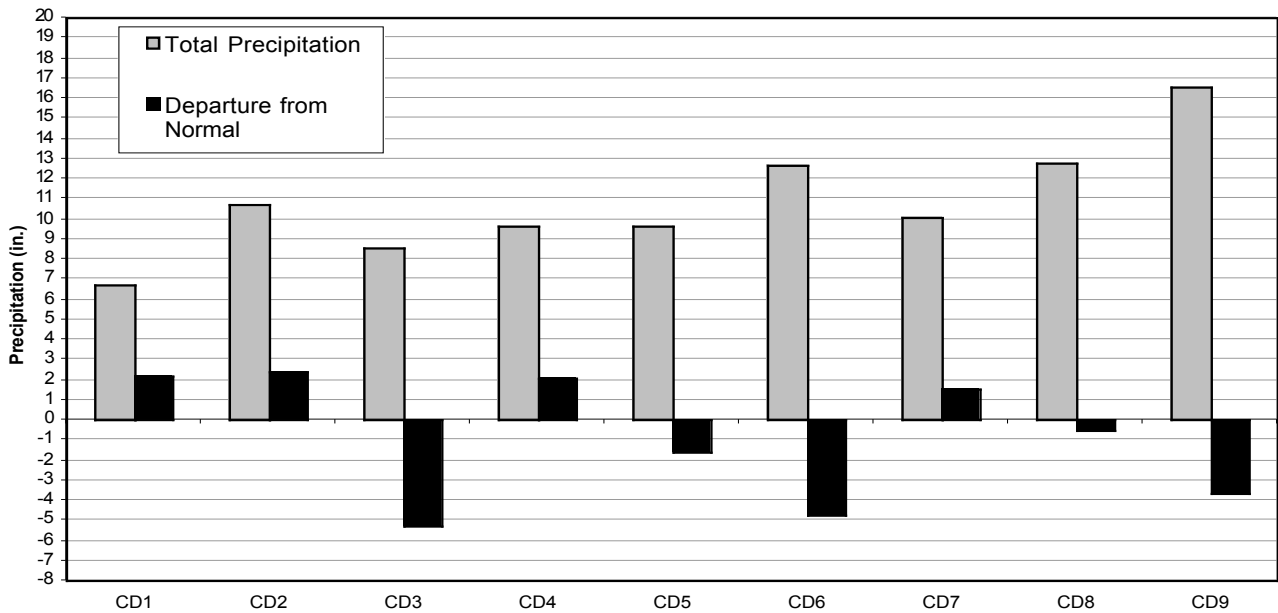
## 2002 AND 2003 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



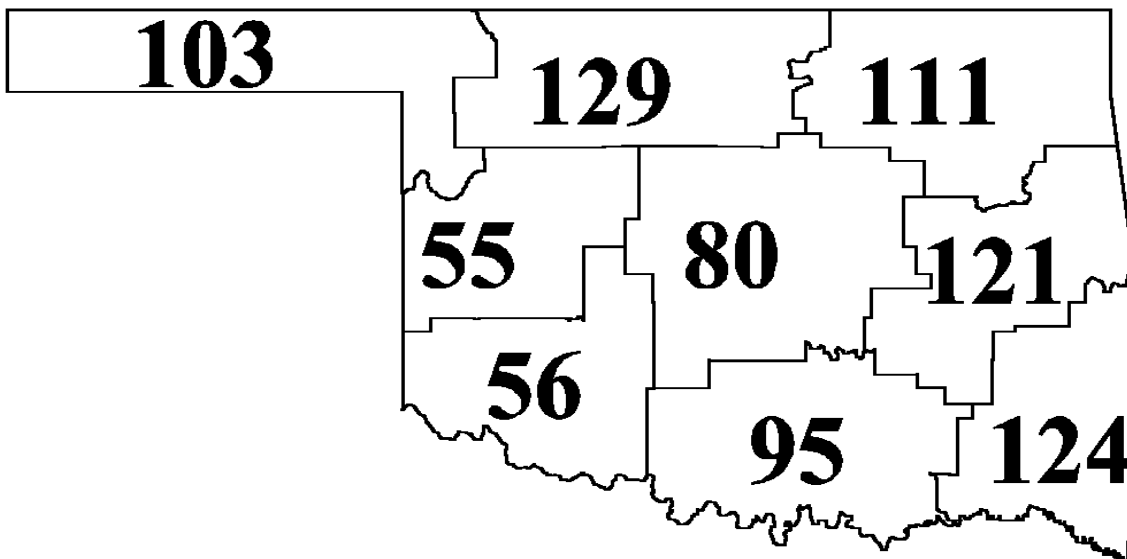
## 2002 AND 2003 STATEWIDE PRECIPITATION - MONTHLY TOTALS



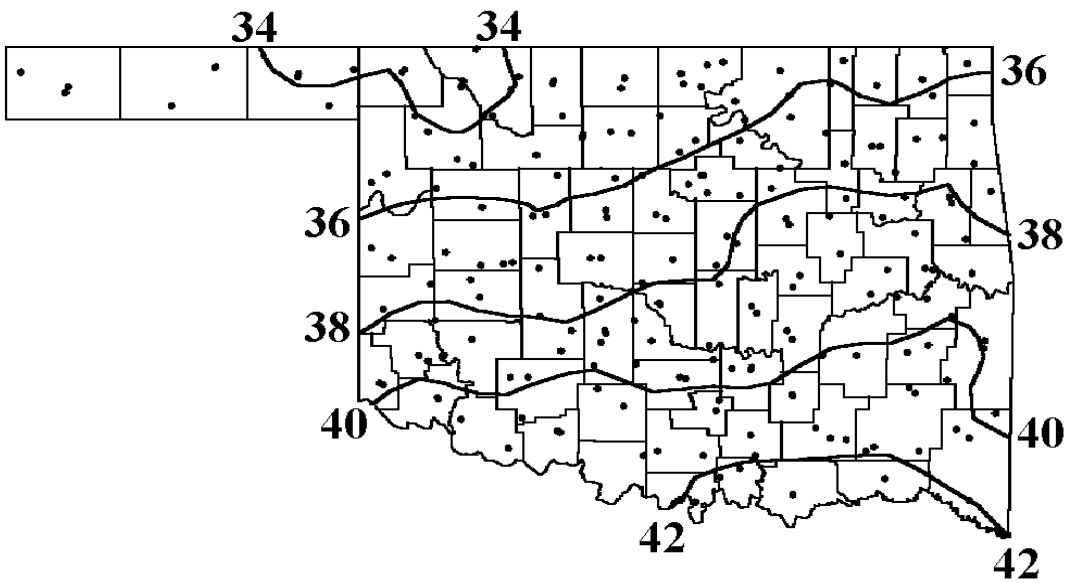
CLIMATE DIVISION AVERAGED PRECIPITATION - OCTOBER 2002 THROUGH FEBRUARY 2003



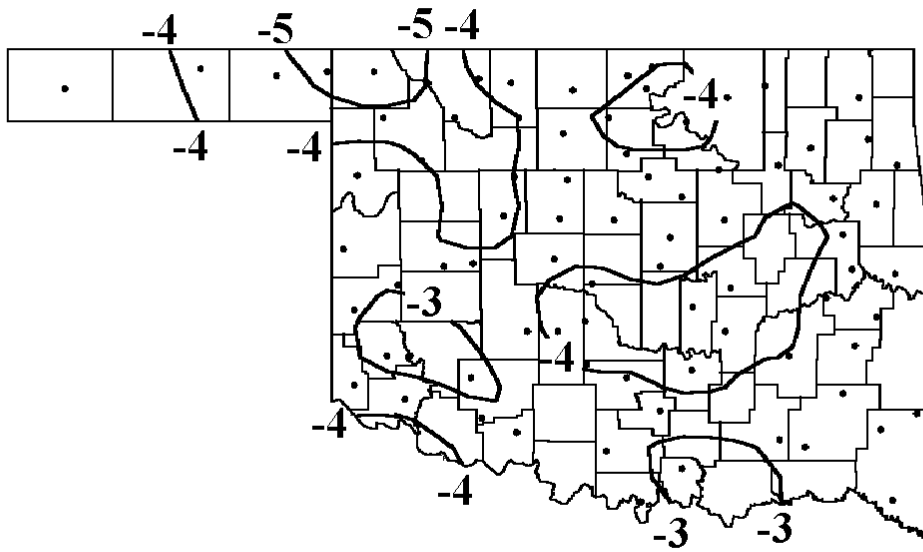
CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - FEBRUARY 2003



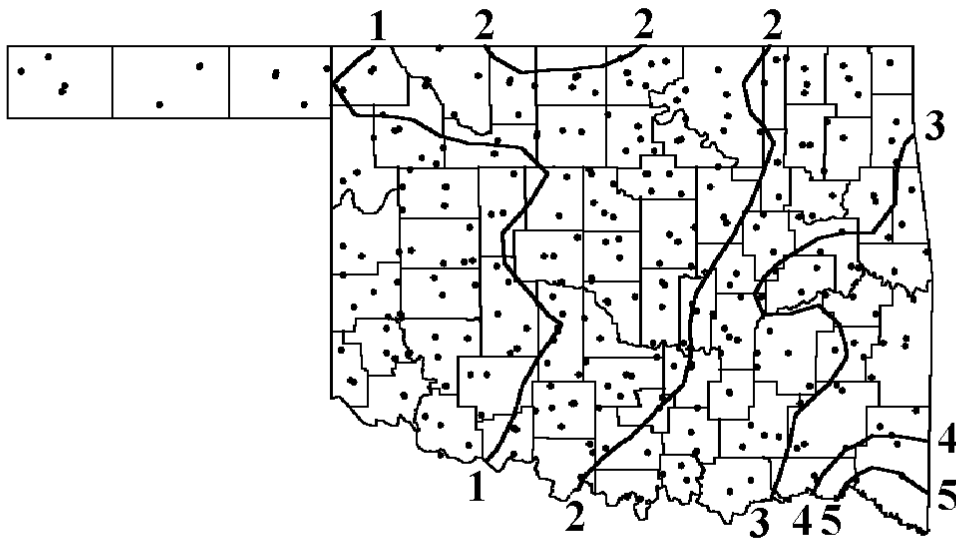
FEBRUARY 2003 AVERAGE MONTHLY TEMPERATURE (°F)



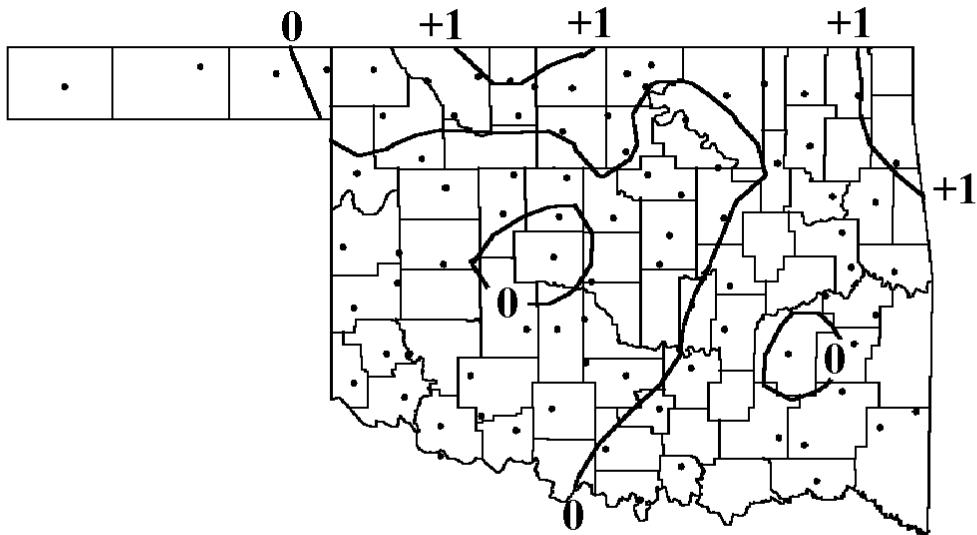
FEBRUARY 2003 DEPARTURE FROM NORMAL TEMPERATURE (°F)



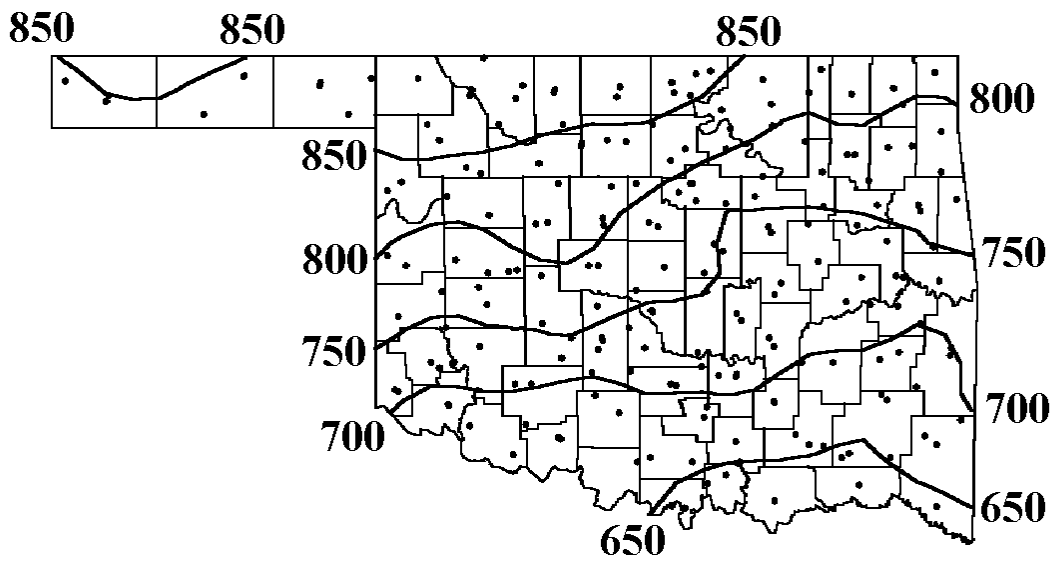
FEBRUARY 2003 PRECIPITATION (INCHES)



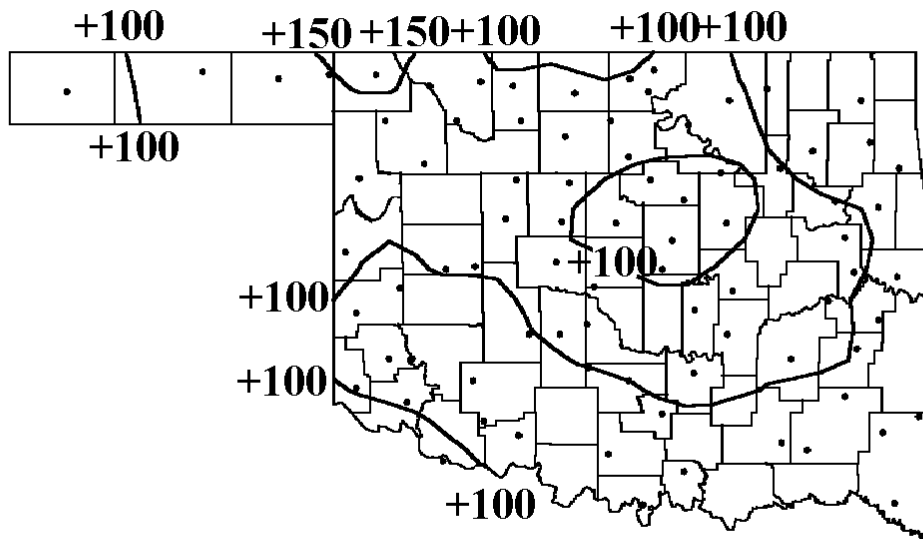
FEBRUARY 2003 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



FEBRUARY 2003 ACCUMULATED HEATING DEGREE DAYS (°F)



FEBRUARY 2003 DEPARTURE FROM NORMAL HEATING DEGREE DAYS (°F)





## FEBRUARY 2003 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	TEMP	DAY	HEAT	DEV	COOL	DEV	TOT PPT	NUM OBS	DEV		DAY
					DEG	FROM				DEG	FROM	FROM	NORM			FROM	MAX	
ARNETT	332	1	34.7	28	-3.0	78	3	0	25	850	85	0	0	0.991	28	0.04	0.27	27
BEAVER	593	1	32.5	28	-4.7	79	3	0	8	911	131	0	0	0.382	28	-0.35	0.17	19
BOISE CITY	908	1	35.6	28	-3.1	76	2	1	24	823	85	0	0	0.154	28	-0.28	0.12	28
BUFFALO	1243	1	33.9	28	-7.4	78	2	1	25	871	199	0	-5	1.001	28	0.04	0.35	19
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.813	28	*****	0.37	27
GAGE	3407	1	36.1	24	*****	79	1	3	23	695	*****	0	*****	0.644	26	*****	0.31	26
GATE	3489	1	33.8	28	-5.2	79	2	1	24	875	146	0	0	1.123	28	0.36	0.31	19
GUYMON	3835	1	35.9	22	*****	79	2	2	25	641	*****	0	*****	0.080	25	*****	0.06	19
HOOKER	4298	1	35.3	28	-4.2	79	1	2	24	831	116	0	0	0.286	28	-0.20	0.12	6
LAVERNE	5045	1	36.1	26	*****	78	1	2	24	752	*****	0	*****	1.431	28	*****	0.30	19
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.183	28	*****	0.11	19
TURPIN	9017	1	33.2	20	*****	78	3	3	24	636	*****	0	*****	0.280	21	*****	0.18	19

## FEBRUARY 2003 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	TEMP	DAY	HEAT	DEV	COOL	DEV	TOT PPT	NUM OBS	DEV		DAY
					DEG	FROM				DEG	FROM	FROM	NORM			FROM	MAX	
ALVA	193	2	35.0	28	-2.7	82	3	2	24	839	71	0	0	1.720	28	0.74	0.55	23
BILLINGS	755	2	34.2	28	-4.5	76	15	1	24	862	122	0	-2	1.978	28	0.44	0.63	23
BLACKWELL 2E	818	2	35.0	28	-2.7	76	15	3	25	840	70	0	0	1.736	28	0.59	0.54	23
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.890	28	*****	1.65	24
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.224	28	*****	0.36	6
CHEROKEE	1724	2	34.2	28	-3.7	76	4	-2	25	863	104	0	0	3.601	28	2.43	0.95	10
ENID	2912	2	35.3	28	-3.3	75	15	5	24	832	89	0	-1	1.222	28	-0.42	0.45	23
FT SUPPLY	3304	2	32.6	28	-4.3	79	3	-6	8	909	120	0	0	1.211	28	0.32	0.28	27
FREEDOM	3358	2	33.0	28	-4.9	83	2	-2	24	895	135	0	0	1.580	28	0.66	0.50	22
GREAT SALT P	3740	2	34.0	26	*****	75	3	2	24	807	*****	0	*****	1.330	28	0.22	0.60	23
HELENA	4019	2	33.9	28	-4.2	76	15	0	8	872	118	0	0	1.721	28	0.43	0.49	23
JEFFERSON	4573	2	34.1	28	-4.1	75	15	-2	24	866	114	0	0	2.050	28	0.71	0.90	6
LAHOMA	4950	2	35.8	28	*****	75	15	3	25	817	*****	0	*****	1.220	28	*****	0.23	22
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.472	28	*****	0.32	24
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.820	28	*****	0.41	24
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.622	28	*****	0.38	24
MUTUAL	6139	2	34.4	28	-3.5	82	3	0	25	857	97	0	0	0.641	28	-0.34	0.20	24
NEWKIRK	6278	2	33.0	28	-4.2	75	15	1	24	896	114	0	0	1.881	28	0.52	0.50	24
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.211	28	*****	0.34	24
PERRY	7012	2	36.0	28	-3.9	75	15	5	24	811	104	0	-3	2.263	28	0.56	0.67	7
PONCA CITY	7201	2	34.5	28	-5.2	77	14	1	24	854	135	0	-6	0.226	28	-1.18	0.05	18
RED ROCK	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.519	28	*****	0.53	23
WAYNOKA	9404	2	33.4	28	-5.8	84	2	-2	24	886	161	0	0	1.141	28	0.06	0.36	22
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.031	28	*****	0.30	27

## FEBRUARY 2003 SUMMARY FOR NORTHEAST CLIMATE DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	MIN TEMP	MIN DAY	HEAT	DEV	COOL	DEV	TOT PPT	NUM OBS	DEV		DAY
					DEG DAY	FROM NORM				DEG DAY	FROM NORM	FROM NORM	FROM NORM			FROM NORM	FROM NORM	
BARTLESVILLE	548	3	37.1	28	-4.0	79	14	5	24	783	110	0	-3	2.921	28	0.99	1.20	24
BURBANK	1256	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.301	28	*****	1.18	23
CHELSEA	1717	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.250	28	*****	0.68	19
CLAREMORE	1828	3	36.3	28	-3.1	75	15	11	25	803	85	0	0	3.126	28	0.96	0.94	15
HOLLOW	4258	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.291	28	*****	0.75	24
HOMINY	4289	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.462	28	*****	0.85	14
KANSAS	4672	3	37.9	28	-4.2	70	14	9	7	760	118	0	-2	4.130	28	1.64	0.73	19
LENAPAH	5118	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.710	28	*****	0.53	19
MANNFORD	5522	3	38.4	28	-3.9	78	14	7	24	745	102	0	-7	1.842	28	-0.28	0.52	24
NOWATA	6485	3	37.4	25	*****	77	14	8	25	690	*****	0	*****	1.480	28	-0.48	0.92	13
PAWHUSKA	6935	3	37.6	28	-3.1	78	15	5	25	767	83	0	-4	1.972	28	-0.12	0.56	20
PAWNEE	6940	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.872	28	*****	0.70	24
PRYOR	7309	3	40.0	21	*****	73	15	12	8	524	*****	0	*****	3.080	23	*****	0.89	28
RALSTON	7390	3	34.6	28	-4.9	78	14	5	7	851	132	0	-2	1.463	28	-0.32	0.50	23
SPAVINAW	8380	3	39.2	27	-3.5	70	15	10	24	698	69	0	-4	3.601	27	*****	0.89	24
TULSA	8992	3	37.7	28	-4.3	77	14	8	24	766	108	0	-1	1.763	28	-0.19	0.68	23
UPPER SPAV	9101	3	38.0	26	*****	72	14	12	8	701	*****	0	*****	2.412	28	*****	0.75	19
VINITA	9203	3	37.1	27	-3.2	71	14	7	24	754	62	0	0	3.181	28	1.13	0.81	24
WAGONER	9247	3	39.1	28	-3.9	74	14	13	7	726	103	0	-7	1.662	28	-0.61	0.43	22
WANN	9298	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.682	28	*****	1.26	24

## FEBRUARY 2003 SUMMARY FOR WEST CENTRAL CLIMATE DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	MIN TEMP	MIN DAY	HEAT	DEV	COOL	DEV	TOT PPT	NUM OBS	DEV		DAY
					DEG DAY	FROM NORM				DEG DAY	FROM NORM	FROM NORM	FROM NORM			FROM NORM	FROM NORM	
CLINTON	1909	4	35.9	28	-4.8	78	3	8	25	814	132	0	0	1.333	28	0.16	0.86	14
COLONY	2039	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.620	28	*****	0.28	8
CORDELL	2125	4	37.1	28	*****	76	3	10	26	781	*****	0	*****	0.623	28	*****	0.30	6
ELK CITY	2849	4	37.5	28	-2.3	80	3	6	25	771	65	0	0	0.630	28	-0.57	0.23	6
ERICK	2944	4	37.0	28	-3.2	82	3	6	25	784	91	0	0	0.413	28	-0.53	0.18	9
GEARY	3497	4	35.7	25	*****	75	14	7	24	733	*****	0	*****	1.070	25	*****	0.23	5
HAMMON	3871	4	36.6	25	*****	82	3	6	26	711	*****	0	*****	0.690	28	-0.30	0.28	6
LEEDEY	5090	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.580	28	*****	0.58	9
OKEENE	6629	4	37.8	28	-3.6	76	14	6	25	763	94	0	-6	0.363	28	-1.01	0.15	19
MORAVIA	6035	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.111	28	*****	0.06	9
RETROP	7565	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.580	28	*****	0.33	4
REYDON	7579	4	35.9	28	-4.4	82	3	3	26	814	121	0	0	0.370	28	-0.58	0.17	6
SAYRE	7952	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.430	28	*****	0.18	9
SWEETWATER	8652	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.450	28	*****	0.43	10
TALOGA	8708	4	32.7	25	*****	77	15	3	8	807	*****	0	*****	0.443	28	-0.63	0.26	7
THOMAS	8815	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.830	28	*****	0.39	6
VICI	9172	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.845	28	*****	0.20	6
WATONGA	9364	4	34.4	28	-4.8	74	3	3	8	857	135	0	0	1.042	28	-0.37	0.25	6
WEATHERFORD	9422	4	37.5	28	-3.4	75	15	8	24	769	87	0	-4	1.020	28	-0.14	0.48	6

## FEBRUARY 2003 SUMMARY FOR CENTRAL CLIMATE DIVISION (CD5)

NAME	ID	CD	DEV					MIN		HEAT		DEV		COOL		DEV		DEV	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY		
AMBER	200	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.420	28	*****	0.33	22	
ARCADIA	288	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.111	28	*****	0.19	22	
BLANCHARD	830	5	38.9	28	-5.2	80	3	11	24	732	138	0	-9	1.090	28	-0.68	0.30	7	
BRISTOW	1144	5	39.5	28	-3.3	77	14	10	24	714	86	0	-6	2.480	28	0.40	0.60	24	
CHANDLER	1684	5	38.1	27	-3.0	79	15	8	25	727	51	0	-5	0.630	28	-1.34	0.60	10	
CHICKASHA EXP	1750	5	40.5	28	-3.8	78	2	11	24	687	99	1	-6	1.091	28	-0.70	0.35	22	
COX CITY	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.130	28	*****	0.55	22	
CRESCENT	2242	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.233	28	*****	0.51	24	
CUSHING	2318	5	38.3	27	-2.7	78	15	9	24	720	40	0	-5	1.243	28	-0.65	0.32	24	
EDMOND	2788	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.320	28	*****	0.25	9	
EL RENO	2818	5	36.5	28	-3.7	76	15	9	25	797	98	0	-3	3.733	28	2.37	1.50	7	
GUTHRIE	3821	5	36.6	28	-3.6	78	15	7	25	797	100	0	-2	1.430	28	-0.42	0.29	24	
HENNESSEY	4055	5	34.6	28	-4.0	72	15	-3	8	852	111	0	0	1.501	28	0.14	0.66	24	
INGALLS	4489	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.912	28	*****	0.60	24	
KINGFISHER	4861	5	36.0	28	-3.2	76	15	9	24	812	88	0	-1	1.330	28	-0.17	0.30	7	
KONAWA	4915	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.040	28	*****	0.90	21	
MARSHALL	5589	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.770	28	*****	0.38	24	
MEEKER	5779	5	36.6	28	-3.1	77	15	10	25	797	89	0	0	1.372	28	-0.61	0.40	23	
MULHALL	6110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.770	28	*****	0.44	24	
NORMAN NWS	6386	5	38.1	28	*****	78	2	10	24	754	*****	0	*****	1.420	28	*****	0.58	21	
OKEMAH	6638	5	40.0	28	-5.2	76	14	12	25	700	134	0	-11	2.650	28	0.55	0.72	22	
OKLAHOMA CTY	6661	5	37.7	28	-4.6	76	14	9	24	764	116	0	-1	0.880	28	-0.68	0.28	21	
OKLAHOMA CTY	6659	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.040	28	*****	0.35	21	
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.900	28	*****	0.17	9	
PRAGUE	7264	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.471	28	*****	0.44	22	
SEMINOLE	8042	5	37.9	27	-5.1	77	15	11	25	733	113	0	-3	2.151	28	-0.01	0.65	22	
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.722	28	*****	0.52	22	
STELLA	8479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.331	28	*****	0.55	22	
STILLWATER	8501	5	36.8	28	-3.2	79	15	6	24	789	85	0	-3	1.454	28	-0.17	0.57	24	
STROUD	8563	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.290	28	*****	0.33	24	
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.260	28	*****	0.66	22	
UNION CITY	9086	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.092	28	*****	0.34	9	
WANETTE	9291	5	38.3	28	*****	77	15	12	25	748	*****	0	*****	1.340	28	*****	0.70	22	
WEWOKA	9575	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.250	28	*****	0.63	22	

## FEBRUARY 2003 SUMMARY FOR EAST CENTRAL CLIMATE DIVISION (CD6)

NAME	ID	CD	DEV					MIN		HEAT		DEV		COOL		DEV		DEV	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY		
ASHLAND	364	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.994	28	*****	0.79	22	
BEGGS	631	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.810	28	*****	0.69	22	
CALVIN	1391	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.200	28	*****	0.80	22	
CHECOTAH	1711	6	40.2	28	*****	75	14	14	24	698	*****	2	*****	3.662	28	*****	0.90	22	
CLAYTON	1858	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.190	28	*****	0.70	6	
DEWAR	2485	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.694	28	*****	0.70	19	
DUSTIN	2690	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.000	28	*****	1.42	6	
HASKELL	3956	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.030	28	*****	0.68	14	
HOLDENVILLE	4235	6	38.6	28	-3.6	78	14	14	24	739	91	0	-7	3.102	28	1.03	1.05	21	
LAKE EUFAULA	4975	6	38.4	28	-3.4	72	15	13	25	746	91	0	-3	2.331	28	-0.09	0.95	22	
LYONS	5437	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.110	28	*****	0.82	19	
MCALESTER	5664	6	40.4	28	-4.2	75	14	15	24	689	109	0	-6	2.114	28	-0.64	0.87	21	
MCCURTAIN	5693	6	41.5	28	-3.9	73	14	15	7	659	99	0	-9	4.024	28	1.22	1.00	22	
MUSKOGEE	6130	6	37.4	28	-4.2	75	14	14	6	772	116	0	-1	3.362	28	1.16	0.87	18	
OKTAHA	6678	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.840	28	*****	1.19	19	
SALLISAW	7862	6	39.1	28	-3.1	72	15	16	8	725	86	0	0	3.160	28	0.48	0.96	22	
SCPIO	7979	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.330	28	*****	0.94	14	
SHORT	8170	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.541	28	*****	1.00	14	
TAHLEQUAH	8677	6	38.9	28	-3.5	72	14	10	7	730	90	0	-5	2.323	28	-0.12	0.61	15	
WEBBERS FALL	9445	6	37.8	28	-4.0	76	15	13	8	762	109	0	-3	3.450	28	0.92	0.88	22	
WETUMKA	9571	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.832	28	*****	0.84	22	

## FEBRUARY 2003 SUMMARY FOR SOUTHWEST CLIMATE DIVISION (CD7)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG	DEV FROM	COOL DEG	DEV FROM	TOT PPT	NUM OBS	DEV		DAY	
					FROM NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ALTUS DAM	184	7	40.4	28	-2.2	85	3	13	26	689	56	0	-5	0.831	28	-0.41	0.50	9
ALTUS	179	7	38.8	28	-4.2	87	2	12	26	735	118	0	0	0.701	28	-0.49	0.28	9
ANADARKO	224	7	36.5	28	-4.2	78	3	11	25	797	115	0	0	0.907	28	-0.62	0.30	22
APACHE	260	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.610	28	*****	0.31	22
CHATTANOOGA	1706	7	39.6	28	-2.9	83	3	13	25	712	80	0	0	0.672	28	-0.82	0.35	9
DUNCAN 11 W	2668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.132	28	*****	0.46	22
FREDERICK	3353	7	39.9	26	*****	84	2	12	24	652	*****	0	*****	1.490	28	0.07	0.35	28
HOLLIS	4249	7	40.2	28	-3.5	86	2	11	25	696	99	0	0	0.353	28	-0.80	0.20	9
LAWTON	5063	7	37.3	16	*****	70	15	13	25	444	*****	0	*****	0.470	27	*****	0.30	9
LOOKEBA	5329	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.790	28	*****	0.25	6
MANGUM	5509	7	40.2	28	-2.0	84	3	10	26	694	54	0	0	0.124	28	-1.04	0.06	14
RANDLETT	7403	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.093	28	*****	0.43	22
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.040	28	*****	0.37	9
SEDAN	8016	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.793	28	*****	0.30	9
SNYDER	8299	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.810	28	*****	0.30	22
VINSON	9212	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.213	28	*****	0.16	6
WALTERS	9278	7	40.7	28	-2.8	84	3	13	25	681	74	0	-2	1.180	28	-0.57	0.50	22
WICHITA MT	9629	7	39.2	27	-2.3	82	3	6	24	697	38	0	0	0.722	28	-0.89	0.32	9
WILLOW	9668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.501	28	*****	0.23	6

## FEBRUARY 2003 SUMMARY FOR SOUTH CENTRAL CLIMATE DIVISION (CD8)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG	DEV FROM	COOL DEG	DEV FROM	TOT PPT	NUM OBS	DEV		DAY	
					FROM NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ADA	17	8	38.9	28	-5.4	76	14	13	26	730	143	0	-6	2.073	28	-0.12	0.60	6
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.391	28	*****	1.50	14
ATOKA	391	8	40.7	28	*****	76	15	15	25	681	*****	0	*****	3.123	28	*****	0.75	22
BOKCHITO	917	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.300	28	*****	1.07	22
CANEY	1437	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.070	28	*****	0.76	23
CENTRAHOMA	1648	8	40.4	28	*****	75	15	15	25	689	*****	0	*****	1.900	28	*****	0.60	22
CHICKASAW	1745	8	40.1	28	-3.5	78	15	14	25	697	93	0	-4	2.410	28	0.36	0.52	22
COLEMAN	2011	8	42.8	19	*****	75	14	16	6	422	*****	0	*****	2.050	23	*****	0.65	14
COMANCHE	2054	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.105	28	*****	0.35	7
DAISY	2354	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.494	28	*****	0.95	6
DUNCAN	2660	8	40.1	24	*****	81	3	13	25	598	*****	0	*****	1.391	28	-0.47	0.61	22
ELMORE CITY	2872	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.410	28	*****	0.65	22
GRADY	3688	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.300	28	*****	0.47	22
HEALDTON	4001	8	41.3	28	-3.2	80	3	14	26	665	85	0	-3	2.210	28	0.15	0.74	22
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.910	28	*****	0.63	22
KETCHUM RAN	4780	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.170	28	*****	0.53	22
KINGSTON	4865	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.500	28	*****	0.90	25
LOCO	5247	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.340	28	*****	0.58	22
LINDSAY	5216	8	37.6	27	-4.6	80	2	13	24	741	99	0	-3	0.370	28	-1.27	0.16	6
MADILL	5468	8	42.7	28	-1.7	78	15	15	26	627	45	3	-3	2.640	28	0.22	0.60	22
MARIETTA 5 SW	5563	8	41.3	28	-4.0	76	15	16	26	664	107	0	-5	2.621	28	0.48	0.74	22
MARLOW	5581	8	43.3	28	*****	83	2	12	24	614	*****	6	*****	1.095	28	*****	0.53	22
MCGEE CREEK	5713	8	41.9	28	-3.0	74	15	16	25	648	81	0	-4	3.062	28	0.20	0.86	25
PAULS VALLEY	6926	8	39.3	28	-3.3	81	3	13	25	720	91	0	0	1.823	28	-0.19	0.70	9
PONTOTOC	7214	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.880	28	*****	0.47	5
TISHOMINGO	8884	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.510	28	*****	0.94	24
TUSSY	9032	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.422	28	*****	0.65	22
WAURIKA	9395	8	42.7	28	-4.7	83	2	15	25	625	121	0	-9	1.020	28	-0.70	0.40	21

## FEBRUARY 2003 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

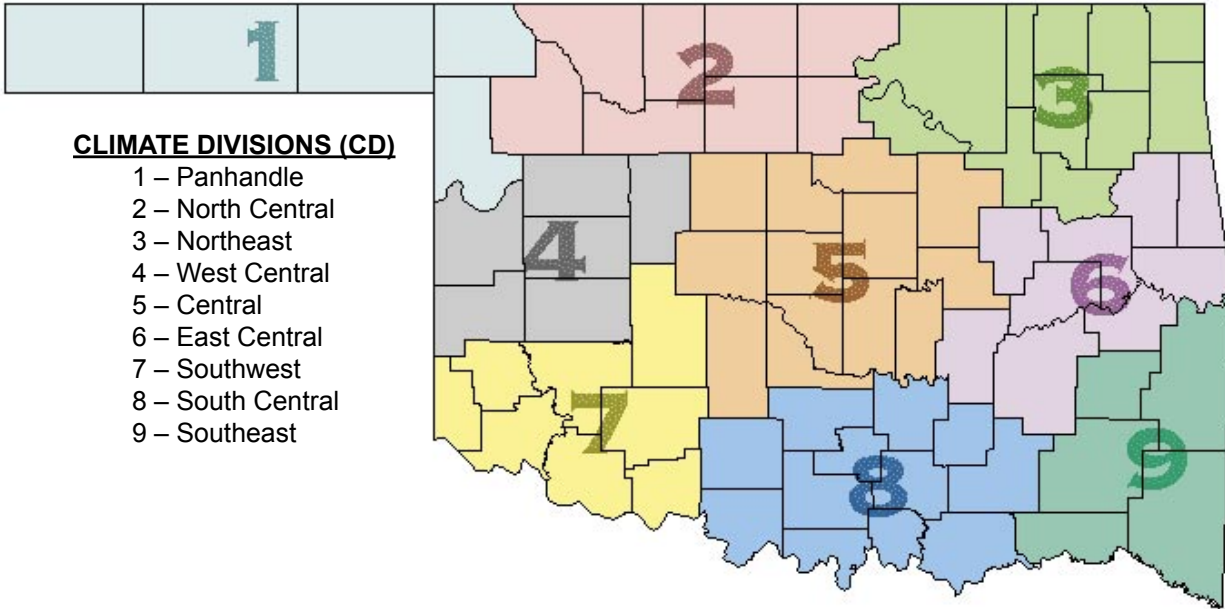
NAME	ID	CD	DEV					HEAT			DEV			COOL			DEV		
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY		
ANTLERS	256	9	42.1	27	-3.4	72	15	17	8	619	67	0	-4	2.700	28	0.17	0.93	25	
BATTIEST	567	9	39.0	28	-3.1	69	1	12	7	728	87	0	0	3.907	28	0.48	1.08	13	
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.720	28	*****	0.65	14	
BROKEN BOW	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.980	28	*****	1.20	14	
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.900	28	*****	0.90	22	
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.310	28	*****	0.97	10	
HUGO	4384	9	42.6	25	*****	73	3	18	25	559	*****	0	*****	3.253	28	0.00	1.16	25	
IDABEL	4451	9	42.3	28	-3.5	70	2	23	7	635	96	0	0	6.620	26	*****	1.27	22	
PAGE	6842	9	38.7	25	*****	69	15	12	8	659	*****	0	*****	1.990	25	*****	1.04	13	
SMITHVILLE	8285	9	38.6	27	-2.9	70	2	12	8	713	56	0	0	3.231	28	-0.11	1.30	14	
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.190	28	*****	0.97	14	
TUSKAHOMA	9023	9	42.1	28	-3.6	72	14	14	8	640	95	0	-4	3.210	28	0.38	0.72	25	
VALLIANT	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.431	28	*****	2.09	7	
WILBURTON	9634	9	40.4	28	-4.1	72	14	13	8	688	110	0	-3	2.363	28	-0.42	0.70	13	
WISTER	9724	9	40.7	28	*****	71	15	13	8	680	*****	0	*****	3.910	28	*****	1.41	14	

## FEBRUARY 2003 CLIMATE DIVISION SUMMARY

NAME	CD	DEV					HEAT			DEV			COOL			DEV		
		MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY		
PANHANDLE	1	34.3	6	-4.2	79	1	0	8	860	116	0	-1	0.710	9	0.02	0.37	27	
NORTH CENTRAL	2	34.3	15	-4.0	84	2	-6	8	860	108	0	-1	1.600	24	0.36	1.65	24	
NORTH EAST	3	37.5	10	-3.7	79	14	5	7	765	93	0	-3	2.310	18	0.22	1.26	24	
WEST CENTRAL	4	36.6	8	-3.5	82	3	3	8	794	95	0	-1	0.630	18	-0.51	0.86	14	
CENTRAL	5	37.8	16	-3.8	80	3	-3	8	758	95	0	-4	1.440	34	-0.35	1.50	7	
EAST CENTRAL	6	39.1	9	-3.6	78	14	10	7	724	95	0	-4	3.000	21	0.52	1.42	6	
SOUTHWEST	7	39.4	8	-3.3	87	2	6	24	712	86	0	-2	0.780	18	-0.62	0.50	22	
SOUTH CENTRAL	8	40.8	12	-3.5	83	2	12	24	675	90	1	-4	1.980	27	-0.11	1.50	14	
SOUTHEAST	9	40.8	7	-3.6	73	3	12	8	672	90	0	-2	3.850	13	0.75	2.09	7	

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)*

# MESONET MONTHLY SUMMARY FOR FEBRUARY 2003

NAME	MEAN MAX		MIN		TOT MAX				NAME	MEAN MAX		MIN		TOT MAX							
	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	36.0	79	2	2	25	812	0	.44	.19	9	Goodwell	34.3	80	1	3	24	860	0	.21	.10	18
Beaver	33.9	81	1	-1	7	870	0	.43	.18	18	Hooker	34.0	79	1	2	24	867	0	.22	.12	18
Boise City	33.4	76	1	2	24	885	0	.22	.07	28	Kenton	34.2	75	1	3	24	863	0	.21	.07	7
Buffalo	35.8	78	1	0	23	****	****	.61	.32	18	Slapout	34.5	81	1	1	25	853	0	.76	.21	9
<b>NORTH CENTRAL</b>																					
Blackwell	34.1	75	14	3	24	864	0	.87	.14	13	Medford	34.3	74	14	-3	24	859	0	1.02	.23	28
Breckenridge	34.6	75	14	3	24	850	0	.94	.21	9	Newkirk	34.4	76	14	2	24	856	0	.94	.21	18
Cherokee	34.4	76	2	-2	25	856	0	.66	.16	13	Red Rock	35.5	76	14	2	24	827	0	1.39	.32	13
Fairview	35.7	76	14	4	25	822	0	.87	.25	9	Seiling	35.4	83	2	2	25	828	0	.62	.26	8
Freedom	33.9	80	2	0	25	872	0	.78	.33	18	Woodward	35.4	81	2	-1	25	829	0	.40	.16	8
Lahoma	34.5	74	14	3	25	855	0	.68	.18	9	Alva	33.6	82	2	-1	25	880	0	*****	*****	***
May Ranch	33.5	78	2	-2	25	883	0	.94	.44	18											
<b>NORTHEAST</b>																					
Bixby	38.1	75	14	12	24	752	0	2.58	.60	15	Pryor	36.2	71	1	7	24	806	0	2.32	.73	13
Burbank	35.6	76	14	7	24	823	0	1.65	.45	13	Skiatook	36.6	76	14	8	24	797	0	1.58	.41	13
Copan	35.3	76	14	6	24	831	0	1.60	.46	13	Vinita	35.2	72	14	4	24	833	0	1.85	.56	13
Foraker	34.8	77	14	4	24	845	0	1.42	.37	13	Wynona	35.7	80	14	6	24	821	0	1.63	.42	13
Jay	36.9	71	14	9	7	788	0	2.73	.59	13	Porter	38.3	75	14	12	24	747	0	2.75	.66	21
Miami	35.8	72	2	7	25	816	0	2.38	.78	13	Inola	37.0	74	14	11	24	784	0	2.69	.42	19
Nowata	34.9	75	14	6	24	843	0	2.18	.75	13	Claremore	37.7	75	14	9	24	763	0	2.22	.67	13
Pawnee	36.6	79	14	7	24	794	0	1.30	.28	8											
<b>WEST CENTRAL</b>																					
Bessie	38.4	80	2	9	25	746	0	.78	.25	9	Putnam	36.3	78	14	4	7	802	0	.63	.31	8
Butler	37.9	82	2	7	25	758	0	.66	.30	6	Retrop	38.7	82	2	9	25	737	0	.59	.26	6
Camargo	35.9	83	2	4	7	815	0	.49	.17	9	Watonga	35.8	73	14	6	7	818	0	.72	.23	9
Cheyenne	37.6	81	2	5	25	768	0	.54	.24	8	Weatherford	36.6	73	2	4	7	796	0	.73	.28	9
Erick	37.7	81	2	7	25	766	0	.45	.21	9											
<b>CENTRAL</b>																					
Bowlegs	39.2	77	14	13	24	723	0	2.00	.75	21	Oilton	36.5	77	14	8	24	797	0	1.08	.24	6
Bristow	37.7	77	14	11	24	765	0	1.84	.38	21	Okemah	38.9	76	14	13	24	731	0	2.38	.79	21
Chandler	38.5	77	14	10	24	743	0	1.35	.30	9	Perkins	37.5	76	14	8	24	771	0	1.04	.18	8
Chickasha	38.0	78	2	12	24	756	0	1.15	.46	21	Shawnee	38.7	75	14	11	24	737	0	1.49	.46	21
El Reno	36.1	77	14	8	24	809	0	1.05	.27	8	Spencer	38.2	76	2	8	24	752	0	1.10	.31	9
Guthrie	38.1	77	14	8	24	754	0	1.33	.27	8	Stillwater	36.5	79	14	7	24	799	0	.95	.26	6
Kingfisher	36.8	76	14	9	24	789	0	****	****	***	Washington	39.3	79	2	12	24	720	1	1.57	.70	21
Marena	36.9	79	14	6	24	785	0	****	****	***	Ninnekah	39.0	79	2	12	24	728	0	1.12	.43	21
Marshall	36.0	76	14	6	24	813	0	.88	.15	8	Acme	39.3	81	2	11	24	719	0	1.16	.49	21
Minco	37.7	76	2	10	24	763	0	.93	.27	9	Norman	38.8	79	2	11	24	734	0	1.30	.53	21
<b>EAST CENTRAL</b>																					
Calvin	39.7	77	14	15	24	709	0	2.18	.75	21	Stigler	39.1	74	14	15	8	726	0	3.47	1.11	21
Cookson	37.9	71	14	12	7	760	0	3.34	.73	21	Stuart	40.2	75	14	14	7	693	0	2.20	.89	21
Eufaula	39.4	74	14	15	24	716	0	2.97	1.02	21	Tahlequah	37.9	72	14	10	7	758	0	1.86	.25	10
Haskell	****	***	***	***	***	****	****	****	****	***	Webbers Falls	39.4	75	1	18	24	718	0	2.63	.56	13
McAlester	40.3	75	14	15	24	692	0	2.66	1.03	21	Westville	37.3	69	1	9	7	776	0	3.08	.54	10
Okmulgee	38.5	76	14	13	24	743	0	2.81	.75	21	Hectorville	39.1	76	14	11	24	725	0	2.01	.44	21
Sallisaw	38.8	73	14	13	8	733	0	3.20	1.11	21											
<b>SOUTHWEST</b>																					
Altus	40.8	87	2	13	25	679	0	.71	.29	9	Medicine Park	40.5	82	2	11	25	686	0	1.04	.34	6
Fort Cobb	38.6	78	2	11	24	739	0	.82	.29	6	Tipton	41.0	84	2	14	25	673	0	.81	.28	9
Hinton	36.8	75	2	7	7	791	0	.98	.27	9	Walters	41.4	84	2	14	24	663	1	.85	.40	21
Hobart	38.4	79	2	11	25	745	0	.77	.34	9	Apache	38.4	79	2	11	24	745	0	1.10	.34	21
Hollis	39.5	86	2	10	25	715	0	.32	.18	9	Grandfield	41.5	85	2	15	25	657	0	.67	.38	21
Mangum	39.4	86	2	10	25	718	0	.57	.23	9											
<b>SOUTH CENTRAL</b>																					
Ada	39.8	77	14	14	25	704	0	1.89	.57	21	Pauls Valley	40.9	81	2	14	24	676	2	1.36	.62	21
Ardmore	42.1	77	14	15	25	645	3	2.26	.70	21	Ringling	41.6	79	2	15	25	659	3	2.25	.75	21
Burneyville	42.2	80	14	16	25	643	6	1.98	.71	21	Sulphur	40.4	77	14	14	25	689	1	2.16	.79	21
Byars	39.8	75	14	13	24	706	1	1.45	.60	21	Tishomingo	41.2	76	14	15	24	668	0	2.30	.56	21
Centrahoma	40.2	75	14	15	24	695	0	2.25	.79	21	Waurika	****	***	***	***	***	****	****	****	****	***
Durant	43.4	75	14	17	25	607	2	2.73	.73	21	Vanoss	39.7	78	14	13	24	709	1	1.91	.78	21
Ketchum Ranch	40.7	82	2	13	24	683	2	1.58	.82	21	Bee	41.8	73	14	15	25	649	0	2.68	.67	21
Lane	41.6	74	2	16	25	656	0	2.86	.95	21	Newport	42.2	79	14	15	25	643	4	1.92	.64	21
Madill	42.6	76	14	15	25	630	3	2.74	.75	21											
<b>SOUTHEAST</b>																					
Antlers	41.3	74	2	14	8	663	0	2.80	.68	27	Mt Herman	41.1	69	1	16	8	670	0	4.10	.79	13
Clayton	41.1	74	14	15	8	670	0	2.90	.69	13	Talihina	40.7	72	14	14	8	679	0	3.03	.76	13
Cloudy	41.6	71	2	16	8	656	0	3.37	.72	21	Wilburton	39.8	74	14	13	8	704	0	2.67	.92	21
Hugo	42.9	72	2	18	25	620	0	3.20	.82	27	Wister	39.5	73	14	12	8	715	0	3.35	1.01	13
Idabel	****	***	***	***	***	****	****	****	****	***											



**EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION  
FEBRUARY 2003**

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	79	3	BEAVER	0	25	ARNETT	.37	27	FARGO	1.43	LAVERNE
	79	1	GAGE	0	8	BEAVER					
	79	2	GATE								
	79	2	GUYMON								
	79	1	HOOKER								
2	84	2	WAYNOKA	-6	7	FT SUPPLY	1.65	24	BRAMAN	3.60	CHEROKEE
				-6	8	FT SUPPLY					
3	79	14	BARTLESVILLE	5	24	BARTLESVILLE	1.26	24	WANN	4.13	KANSAS
				5	25	PAWHUSKA					
				5	7	RALSTON					
4	82	3	ERICK	3	25	REYDON	.86	14	CLINTON	1.33	CLINTON
				3	26	REYDON					
				3	8	TALOGA					
				3	7	WATONGA					
5	80	3	BLANCHARD	-3	8	HENNESSEY	1.50	7	EL RENO	3.73	EL RENO
6	78	14	HOLDENVILLE	10	7	TAHLEQUAH	1.42	6	DUSTIN	4.02	MCCURTAIN
7	87	2	ALTUS	6	24	WICHITA MT	.50	9	ALTUS DAM	1.49	FREDERICK
								22	WALTERS		
8	83	2	MARLOW	12	24	MARLOW	1.50	14	ALLEN	3.49	DAISY
	83	2	WAURIKA								
9	73	3	HUGO	12	7	BATTIEST	2.09	7	VALLIANT	7.43	VALLIANT
				12	8	PAGE					
				12	8	SMITHVILLE					

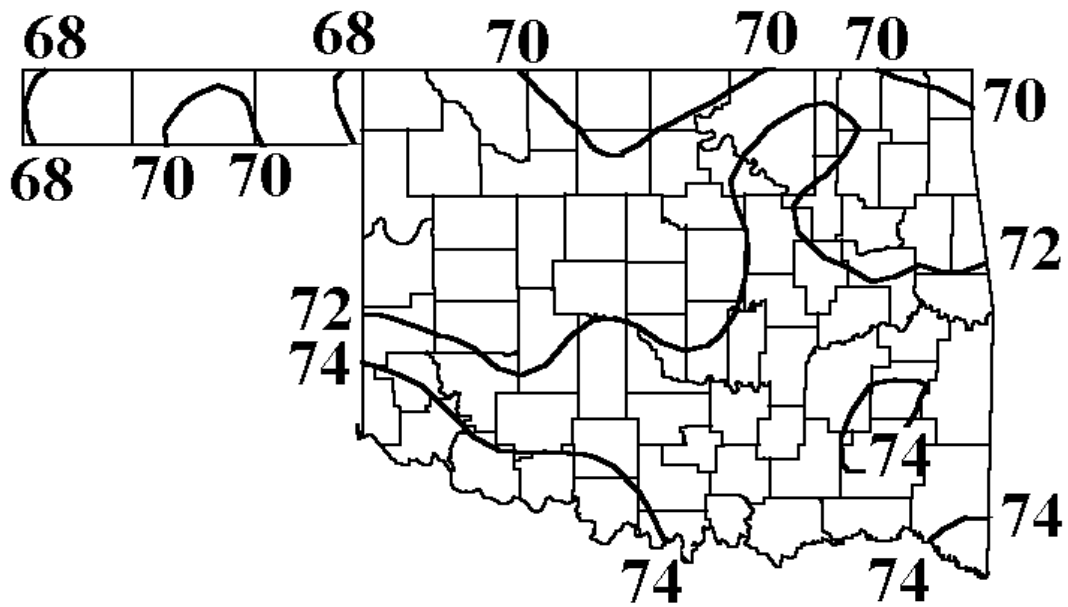
**TABLE OF 2002/2003 COMPARISONS**

Station	FEBRUARY Temperature ( F )		FEBRUARY Precipitation ( in. )	
	2002	2003	2002	2003
Arnett	37.6	34.7	0.72	0.99
Enid	41.0	35.3	0.68	1.22
Tulsa	42.1	37.7	0.90	1.76
Elk City	40.5	37.5	0.73	0.63
Oklahoma City	41.1	37.7	0.47	0.88
McAlester	41.7	40.4	1.28	2.11
Altus Irr Station	42.0	38.8	0.56	0.70
Ardmore	44.3	***	0.75	***
Idabel	42.7	42.3	2.17	6.62

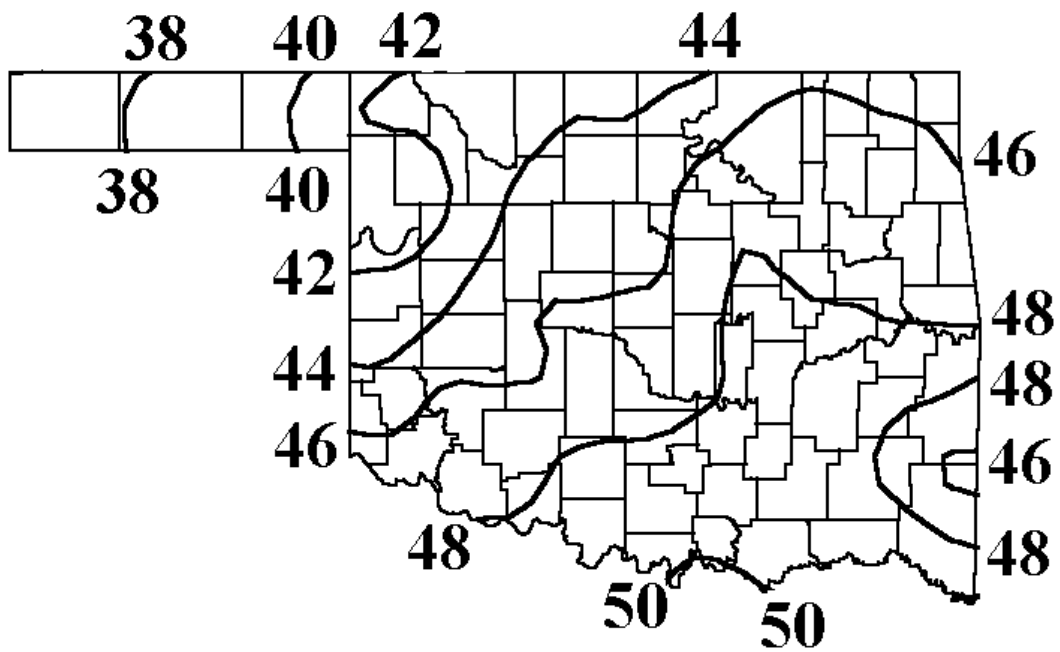
**FEBRUARY 2003 STATEWIDE EXTREMES**

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature ( F )	FT. SUPPLY	2	-6	7 & 8
Maximum temperature ( F )	ALTUS	7	87	2
Maximum 24-hour Precipitation	VALLIANT	7	2.09	7

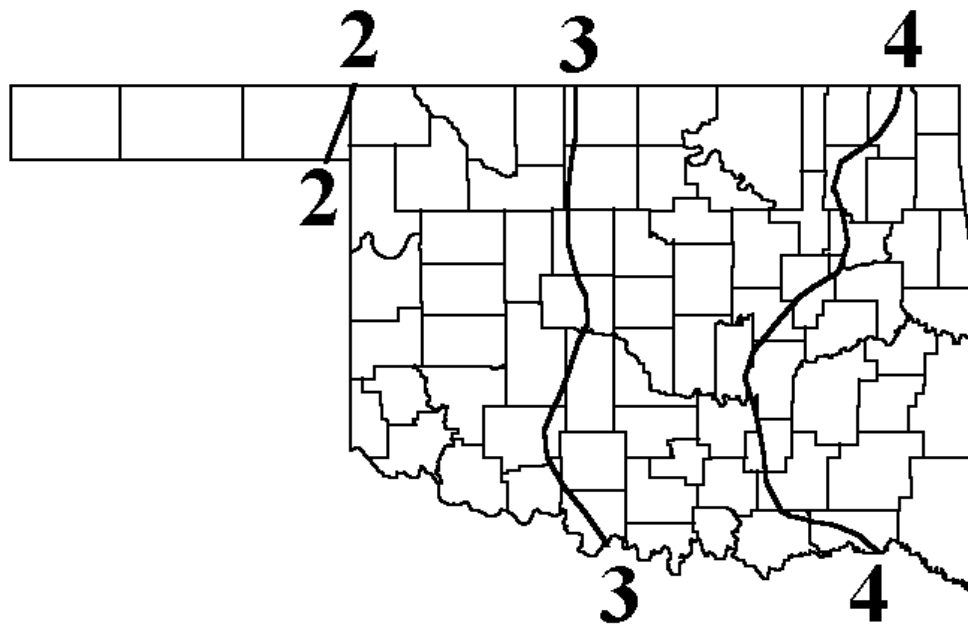
APRIL NORMAL DAILY MAXIMUM TEMPERATURE (°F)



APRIL NORMAL DAILY MINIMUM TEMPERATURE (°F)



## APRIL NORMAL MONTHLY PRECIPITATION (INCHES)



## APRIL TORNADO STATISTICS

The most tornadoes reported in **APRIL** for Oklahoma was **(40)** in **1957**.

The average number of tornadoes in **APRIL** for Oklahoma is **(10.8)**.

## OUTLOOK FOR APRIL 2003 THROUGH JUNE 2003

BASED ON SEASONAL OUTLOOK PROVIDED BY THE CLIMATE PREDICTION CENTER

**Temperature: Near Normal Temperature Statewide**

**Precipitation: Near Normal Precipitation Statewide**

**OKLAHOMA CITY CLIMATE CALENDAR**

**APRIL**

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 1905-2001.  
 Precipitation extremes are for the period 1888-2001.

Day	Avg. Temp.	Ave. High	2003	Record High	Year	Lowest Max	Year	Ave. Low	2003	Highest Min.	Year	Record Low	Year	Avg. Precip.	2003	Greatest Precip.	Year
1	56	68		92	1946	45	1938	44		68	1946	26	1899	0.08		2.87	1905
2	56	68		88	1918	43	1975	44		67	1946	20	1936	0.08		0.99	1922
3	57	68		92	1893	43	1979	45		66	1934	21	1975	0.08		1.37	1919
4	57	69		93	1893	38	1920	45		68	1929	22	1891	0.08		2.06	1906
5	57	69		94	1893	43	1899	45		65	1978	26	1970	0.08		3.39	1953
6	58	69		95	1893	41	1899	46		68	1967	26	1936	0.08		1.24	1940
7	58	70		94	1893	38	1938	46		68	1893	27	1938	0.08		1.76	1942
8	58	70		88	1905	36	1938	47		63	1999	28	1938	0.08		2.99	1922
9	59	70		90	1930	44	1973	47		66	1927	25	1914	0.08		2.91	1944
10	59	71		91	1934	45	1958	47		66	1965	28	1973	0.08		1.40	1979
11	59	71		90	1972	47	1952	47		66	1972	29	1940	0.08		1.14	1997
12	59	71		100	1972	35	1957	48		70	1972	23	1957	0.08		3.11	1967
13	60	71		94	1972	43	1957	48		65	1941	20	1957	0.08		3.75	1910
14	60	72		92	1936	46	1928	48		68	1972	27	1980	0.08		1.27	1947
15	60	72		90	1940	51	1902	49		66	1982	30	1928	0.08		1.67	1947
16	61	72		92	1940	49	1905	49		67	1896	31	1921	0.09		1.08	1970
17	61	72		92	1987	47	1905	49		67	1963	30	1953	0.09		1.40	1908
18	61	73		96	1925	47	1953	50		66	1964	30	1953	0.09		2.97	1942
19	62	73		94	1987	50	1918	50		68	1948	33	1953	0.09		2.92	1919
20	62	73		91	1961	43	1918	50		69	1985	33	1966	0.09		2.07	1937
21	62	74		90	1965	45	1959	51		70	1961	34	1966	0.10		1.39	1996
22	62	74		95	1955	45	1909	51		69	1961	34	1959	0.10		1.98	1915
23	63	74		89	1989	52	1931	51		70	1989	33	1909	0.10		0.96	1945
24	63	74		89	1901	52	1947	52		68	1989	35	1995	0.11		1.67	1948
25	63	74		91	1939	51	1997	52		66	1893	35	1910	0.11		3.79	1999
26	63	75		92	1896	50	1919	52		68	1975	35	1907	0.11		2.77	1998
27	64	75		91	1959	57	1979	52		69	1970	35	1920	0.12		1.57	1897
28	64	75		93	1902	50	1922	53		70	1970	37	1979	0.12		1.97	1960
29	64	75		92	1936	50	1994	53		68	1933	34	1908	0.12		2.87	1974
30	64	75		93	1948	48	1994	53		68	1936	32	1907	0.13		3.45	2000
<b>MONTH</b>	<b>60.4</b>	<b>71.9</b>		<b>100</b>	<b>1972</b>	<b>35</b>	<b>1957</b>	<b>48.8</b>		<b>70</b>	<b>1889</b>	<b>20</b>	<b>1957</b>	<b>2.77</b>		<b>3.75</b>	<b>1910</b>

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

**TULSA CLIMATE CALENDAR**

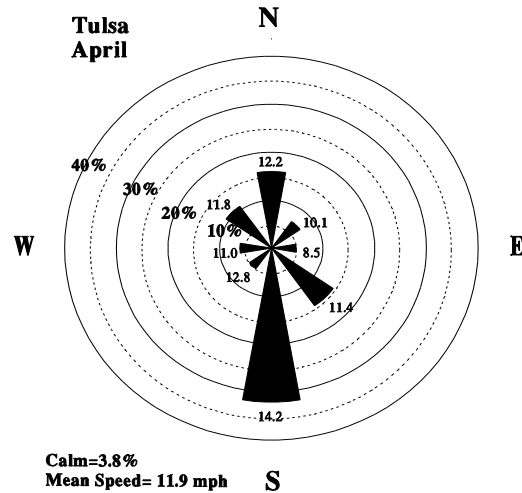
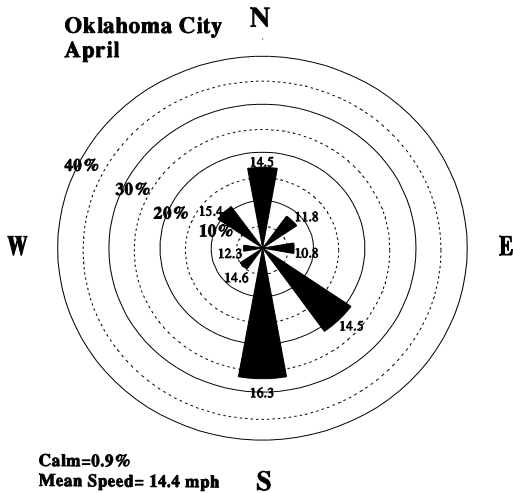
**APRIL**

The data on this calendar are for Tulsa, Oklahoma.  
 Normal values are calculated for the period 1971-2000.  
 Temperature extremes are for the period 1905-2001.  
 Precipitation extremes are for the period 1888-2001.

Day	Avg. Temp.	Ave. High	Record High	Lowest Max	Year	Ave. Low	2003	Highest Min.	Year	Record Low	Year	Avg. Precip.	2003	Greatest Precip.	Year
1	57	69	94	44	1946	45		69	1946	28	1972	0.12		1.60	1888
2	57	69	89	41	1918	45		69	1946	22	1936	0.11		0.89	1916
3	58	69	88	46	1965	46		69	1981	23	1975	0.11		1.25	1978
4	58	70	90	46	1943	46		68	1929	27	1972	0.11		4.40	1964
5	58	70	88	47	2000	46		68	2001	22	1920	0.11		2.54	1933
6	59	70	92	43	1960	47		72	2001	29	1996	0.11		1.40	1940
7	59	71	88	46	1949	47		68	2001	28	1939	0.11		1.47	1975
8	59	71	88	37	1965	48		66	2001	29	1938	0.11		2.33	1913
9	60	71	90	43	1930	48		69	2001	24	1914	0.11		1.78	1925
10	60	72	92	47	1927	48		71	2001	31	1973	0.11		2.72	1908
11	60	72	93	46	1972	49		68	1972	30	1940	0.11		1.73	1901
12	61	72	102	36	1972	49		68	1981	26	1957	0.12		2.88	1945
13	61	73	96	45	1936	49		69	1972	22	1957	0.12		1.69	1945
14	61	73	94	47	1936	50		71	1936	31	1957	0.12		2.55	1929
15	62	73	93	53	1936	50		68	1982	27	1928	0.12		2.51	1941
16	62	73	93	49	1982	50		72	1963	31	1953	0.12		1.38	1968
17	62	74	92	56	1987	51		70	1963	28	1921	0.12		1.75	1953
18	62	74	98	48	1925	51		70	1963	29	1953	0.12		2.61	1941
19	63	74	94	45	1987	51		70	1964	34	1953	0.13		2.52	1917
20	63	74	92	41	1963	51		71	1964	32	1953	0.13		3.30	1929
21	63	75	94	49	1965	52		71	1961	32	1966	0.13		2.54	1928
22	64	75	91	49	1965	52		69	1961	32	1931	0.13		1.39	1985
23	64	75	93	56	1958	52		70	1925	32	1909	0.13		3.22	1953
24	64	75	91	46	1975	53		71	1989	37	1909	0.14		1.67	1947
25	64	76	89	49	1939	53		68	1989	36	1910	0.14		2.76	1999
26	64	76	91	48	1987	53		70	1975	35	1910	0.14		2.09	1915
27	65	76	92	57	1966	53		70	1989	36	1920	0.14		2.33	1998
28	65	76	88	53	1970	54		71	1970	37	1965	0.15		3.04	1912
29	65	76	92	49	1987	54		68	1942	38	1969	0.15		1.99	1994
30	65	76	91	50	1987	54		71	1936	35	1908	0.15		3.00	1970
<b>MONTH</b>	<b>61.5</b>	<b>73</b>	<b>102</b>	<b>36</b>	<b>1972</b>	<b>49.9</b>		<b>72</b>	<b>2001</b>	<b>22</b>	<b>1957</b>	<b>0.12</b>		<b>3.30</b>	<b>1929</b>

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

## APRIL WIND ROSES



**April 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.

## APRIL SUNRISE/SUNSET TIMES FOR 2003

ALL TIMES ARE CENTRAL STANDARD TIME

OKLAHOMA CITY			TULSA		
DATE	SUNRISE	SUNSET	DATE	SUNRISE	SUNSET
4/1/03	6:17 AM	6:52 PM	4/1/03	6:10 AM	6:46 PM
4/2/03	6:16 AM	6:52 PM	4/2/03	6:09 AM	6:46 PM
4/3/03	6:14 AM	6:53 PM	4/3/03	6:08 AM	6:47 PM
4/4/03	6:13 AM	6:54 PM	4/4/03	6:06 AM	6:48 PM
4/5/03	6:12 AM	6:55 PM	4/5/03	6:05 AM	6:49 PM
4/6/03	6:10 AM	6:56 PM	4/6/03	6:03 AM	6:50 PM
4/7/03	6:09 AM	6:56 PM	4/7/03	6:02 AM	6:51 PM
4/8/03	6:07 AM	6:57 PM	4/8/03	6:01 AM	6:51 PM
4/9/03	6:06 AM	6:58 PM	4/9/03	5:59 AM	6:52 PM
4/10/03	6:05 AM	6:59 PM	4/10/03	5:58 AM	6:53 PM
4/11/03	6:03 AM	7:00 PM	4/11/03	5:56 AM	6:54 PM
4/12/03	6:02 AM	7:00 PM	4/12/03	5:55 AM	6:55 PM
4/13/03	6:01 AM	7:01 PM	4/13/03	5:54 AM	6:56 PM
4/14/03	5:59 AM	7:02 PM	4/14/03	5:52 AM	6:56 PM
4/15/03	5:58 AM	7:03 PM	4/15/03	5:51 AM	6:57 PM
4/16/03	5:57 AM	7:04 PM	4/16/03	5:50 AM	6:58 PM
4/17/03	5:55 AM	7:05 PM	4/17/03	5:48 AM	6:59 PM
4/18/03	5:54 AM	7:05 PM	4/18/03	5:47 AM	7:00 PM
4/19/03	5:53 AM	7:06 PM	4/19/03	5:46 AM	7:01 PM
4/20/03	5:52 AM	7:07 PM	4/20/03	5:44 AM	7:02 PM
4/21/03	5:50 AM	7:08 PM	4/21/03	5:43 AM	7:02 PM
4/22/03	5:49 AM	7:09 PM	4/22/03	5:42 AM	7:03 PM
4/23/03	5:48 AM	7:10 PM	4/23/03	5:41 AM	7:04 PM
4/24/03	5:47 AM	7:10 PM	4/24/03	5:39 AM	7:05 PM
4/25/03	5:46 AM	7:11 PM	4/25/03	5:38 AM	7:06 PM
4/26/03	5:44 AM	7:12 PM	4/26/03	5:37 AM	7:07 PM
4/27/03	5:43 AM	7:13 PM	4/27/03	5:36 AM	7:08 PM
4/28/03	5:42 AM	7:14 PM	4/28/03	5:35 AM	7:08 PM
4/29/03	5:41 AM	7:15 PM	4/29/03	5:34 AM	7:09 PM
4/30/03	5:40 AM	7:15 PM	4/30/03	5:32 AM	7:10 PM

## CONTACT INFORMATION

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