

OKLAHOMA MONTHLY CLIMATE SUMMARY

MAY 2002

TABLE OF CONTENTS

May 2002 Oklahoma Climate Summary.....	2
May 2001/2002 Comparison Graphs.....	4
May 2002 State Summary Maps.....	6
May 2002 Data Summary Tables.....	9
Climate Division Map.....	14
Explanation of Tables.....	14
May 2002 Mesonet Summary.....	16
May 2002 Extremes and Comparisons.....	17
July Climatological Normals.....	18
90 - Day National Weather Service Outlook.....	19
July Tornado Statistics.....	19
July Oklahoma City Climate Calendar.....	20
July Tulsa Climate Calendar.....	21
July Wind Roses - Sunrise/Sunset Tables.....	22
Contact Information	23



Oklahoma Climatological Survey

MONTHLY SUMMARY FOR MAY 2002

May 2002

Statewide average temperature = 66.5° F
Statewide average rainfall = 3.64 inches

May 2002 was a relatively quiet month, especially when measured against the turbulent weather typical of past Mays. Only five tornadoes were reported during the month, compared to a long-term average of 20. The tornadoes, all of which were weak, tied for the 4th fewest tornadoes since 1950, the year official records began. Only seven other times in the past 53 years has the month of May gone without a significant (F2 or greater) tornado.

The month was calm in other regards too. The 66.5-degree statewide-averaged temperature, according to preliminary data, was the 24th lowest on record. The cool May caps a spring that ended as the 17th coolest on record. May was also dry; the statewide-averaged precipitation total of 3.64 inches was 1.49 inches below normal, or 71 percent of the normal May rainfall. Eastern portions of the state fared well, while the western portions, particularly the panhandle, were considerably drier than normal.

May began on an ominous note as temperatures soared into the 90s across much of the state, with the Altus Mesonet site (Jackson County) topping out at 101 degrees. Relief came quickly, however, as a strong cold front swept across Oklahoma on the 2nd. The front brought hail and high winds to Cherokee County, where lightning damaged a house. Behind the front, temperatures dipped as low as 32 degrees at Fort Supply (Woodward) on the 3rd, while high temperatures at several locations remained only in the 50s.

May Normals

Statewide average temperature = 68.4° F
Statewide average rainfall = 5.13 inches

A storm system moved across northern portions of the state on the evening of May 5th and morning of May 6th. A tornado destroyed a mobile home near Seiling (Dewey) and another was reported in southwestern Ellis County on the 5th. Elsewhere, high winds were the major threat. The Mesonet site at Nowata (Nowata) recorded a gust of 79 miles per hour, and other Mesonet wind speed observations included 64 at Wynona (Osage) and 60 at Foraker (Osage) and Camargo (Dewey). The storms also brought over an inch of rain to several northern Oklahoma locations, including 2.10 inches at Nowata.

A localized storm in Osage and Washington Counties on May 7th brought a collective sigh of relief from residents of Bartlesville, where water supply issues had become a critical concern. A prolonged drought in Kansas reduced streamflow into Hulah Lake, leaving it nearly dry. Runoff from the storms raised the lake level by five feet, bringing the level above the conservation pool but still about four feet below normal. Storms over the following several days pushed the Caney River above flood stage, sweeping three men downstream when the waters toppled a boat. All three men were rescued.

Northern Oklahoma was hit again on May 8th – 9th by strong winds, hail, tornadoes, and flooding. A tornado touched down near Braman (Kay), but no damage was reported. Winds between 55 and 64 miles per hour were recorded at eleven different Mesonet sites, ranging from

(Continued on page 3.)

Kenton (Cimarron) in the west to Okemah (Okfuskee) in the east. Wind damage was reported in Ottawa County, and golfball-size hail was reported in northwestern Garfield County. A two-day total of 2.84 inches of rain at Miami helped push the Neosho River out of its banks, sending it six feet above flood stage.

More storms on May 12th brought heavy rains to portions of east-central Oklahoma. Rainfall totals over two inches were reported at Heavener (2.50 inches; Leflore), Wister Mesonet (2.23 inches; Leflore), Spavinaw (2.10 inches; Mayes), and Bengal (2.09 inches; Latimer). Numerous other sites reported more than an inch of rain. Lightning or high winds toppled a historic church steeple in McAlester (Pittsburg).

Another bout of severe weather affected the state on May 16th – 17th. Rainfall totals exceeded three inches across an area stretching from Major to Okmulgee Counties, with one-inch or more common across much of the eastern two-thirds of the state. Flash flooding was reported in the Tulsa area. The Mesonet site at Fairview (Major) recorded a two-day total of 5.53 inches of rain. Cooperative observers reported 3.62 inches at Beggs (Okmulgee), 3.50 inches at Bristow (Creek), 3.30 inches at Hominy (Osage), 3.16 inches at Mannford (Pawnee), and 3.10 inches at Mulhall (Logan). Unofficial reports of over five inches of rainfall were received from near Sand Springs (Osage) and Okmulgee (Okmulgee). In addition to the rainfall, wind and hail damage was reported near Leedy (Roger Mills), Kingfisher and Cashion (both Kingfisher County). Tornadoes touched down north of Texola (Beckham) and near Burns Flat (Washita), and a storm chaser suffered back injuries in an auto accident near Kingfisher.

Meanwhile, in Western Oklahoma, farmers and ranchers were still looking to the skies for some rain. Despite more than an inch of rain at Goodwell (1.74 inches; Texas County) on the 16th, drought in the Panhandle was described as “reminiscent of the 1930s”. An observer at Hooker reported “Moisture is badly needed in the region as drought conditions worsen.”

Rain again fell across north central Oklahoma as a strong cold front pushed through the state on the 24th. Temperatures across the front varied by as much as 24 degrees in less than a forty-mile span. Over two inches of rain were reported at Newkirk (2.92 inches; Kay), Mutual (2.64 inches; Woodward), Blackwell Mesonet (2.64 inches; Kay), Braman (2.42 inches; Kay) and Lamont (2.00 inches; Grant) on the 24th and 25th.

One last bout of storms affected northeastern Oklahoma from May 26th – 28th, complicating efforts to manage the river flow near the I-40 bridge collapse site near Webbers Falls (Muskogee). Up to four inches of rain fell across the upstream portion of the Arkansas River watershed, including 3.50 inches at Bixby (Tulsa), ending the morning of the 28th, 3.31 inches at Oktaha (Muskogee) and 2.70 inches at McCurtain (Haskell), ending the morning of the 29th. Mesonet sites at Pryor (Mayes) and Haskell (Muskogee) also recorded more than two inches on the 28th. More than two inches of rain fell at several sites in McCurtain and Leflore counties on the 28th and 29th.

Mark Shafer

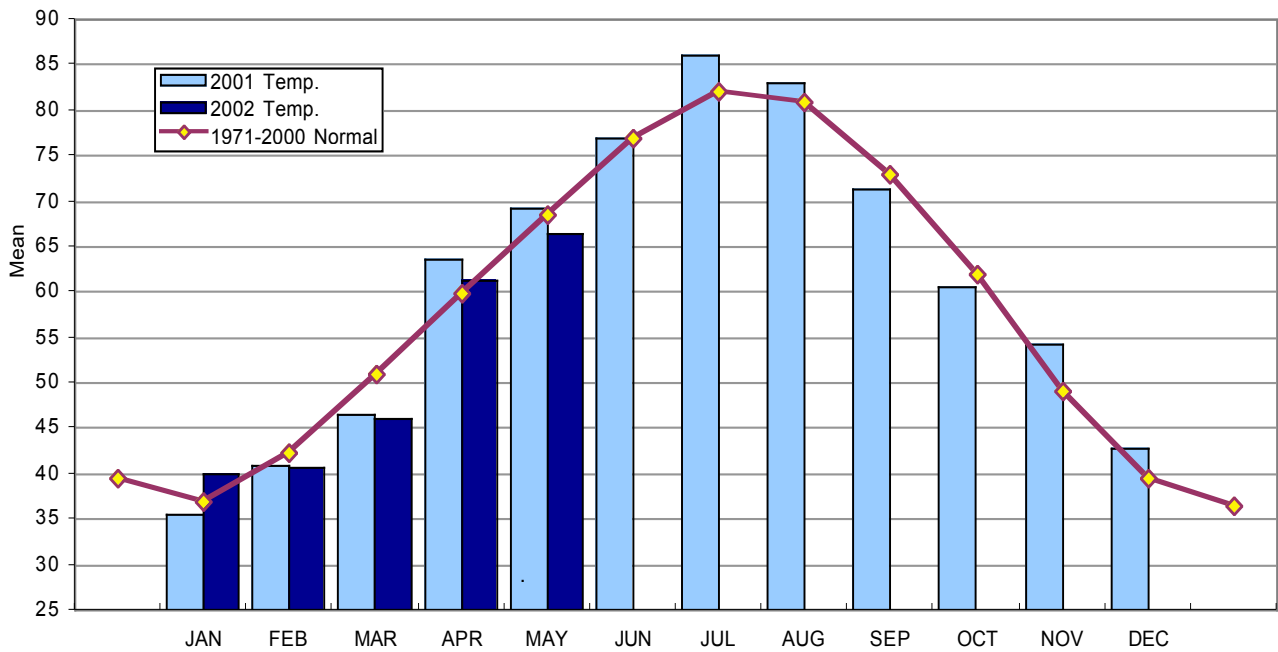
STATEWIDE STATISTICS FOR MAY 2002

	<u>May 2002</u>	<u>Year-to-date</u>	<u>Spring 2002</u>
Mean Temperature	66.5 degrees	53.7 degrees	57.9 degrees
Departure from Normal *	-1.9 degrees	+1.9 degrees	-1.8 degrees
Rank *	24 th coolest	21 st warmest	17 th coolest
Total Precipitation	3.64 inches	13.79 inches	10.49 inches
Departure from Normal *	-1.49 inches	-0.95 inch	-1.02 inches
Rank *	37 th driest	48 th wettest	54 th wettest

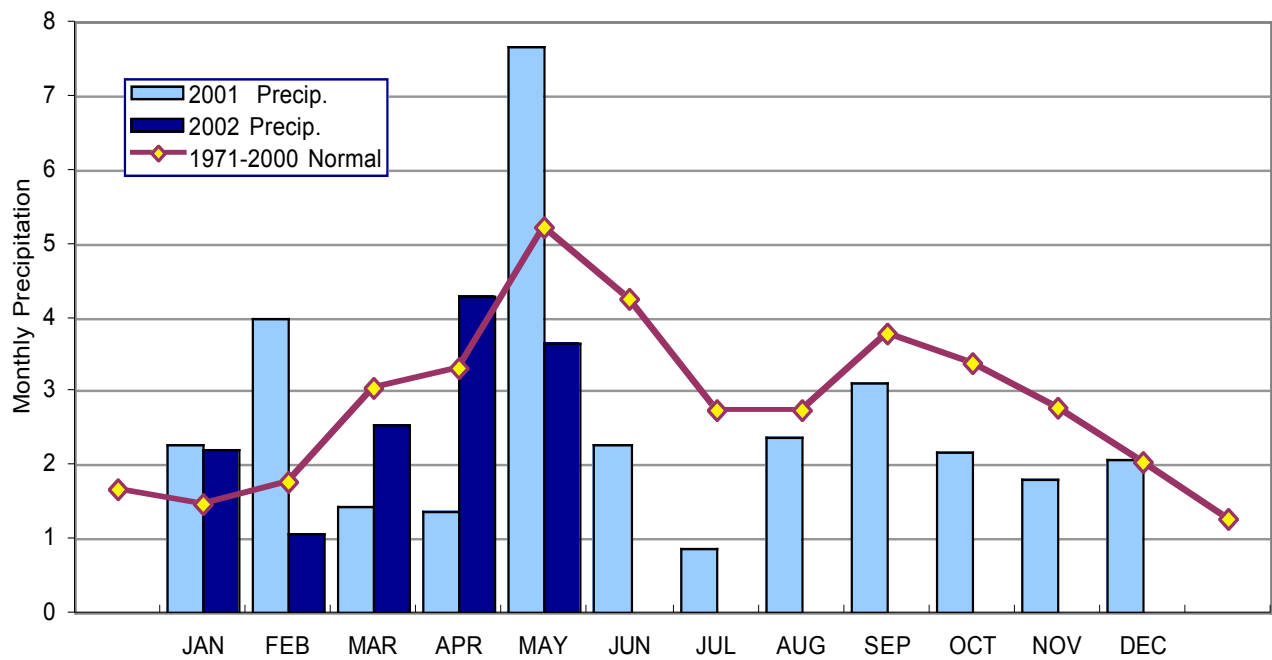
* Normal based on data from 1971-2000

+ Rank based on data from 1892-2002 (111 years)

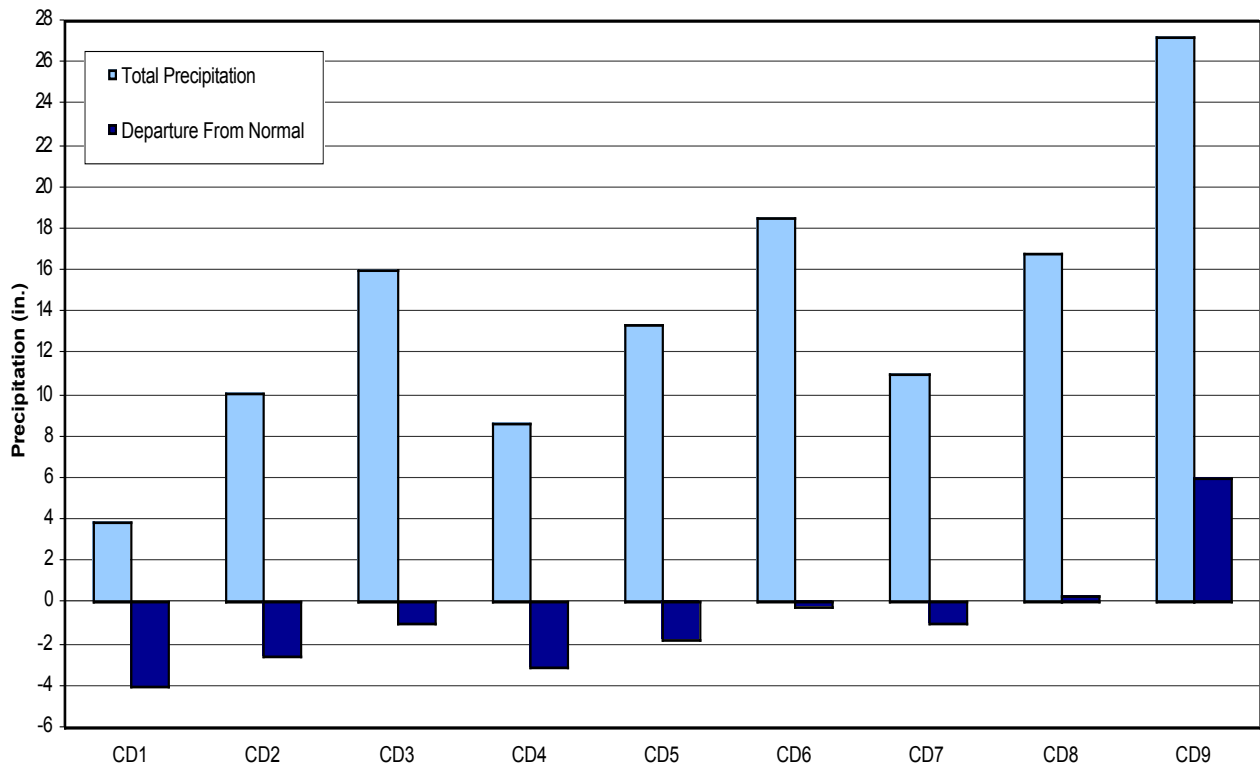
2001 AND 2002 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



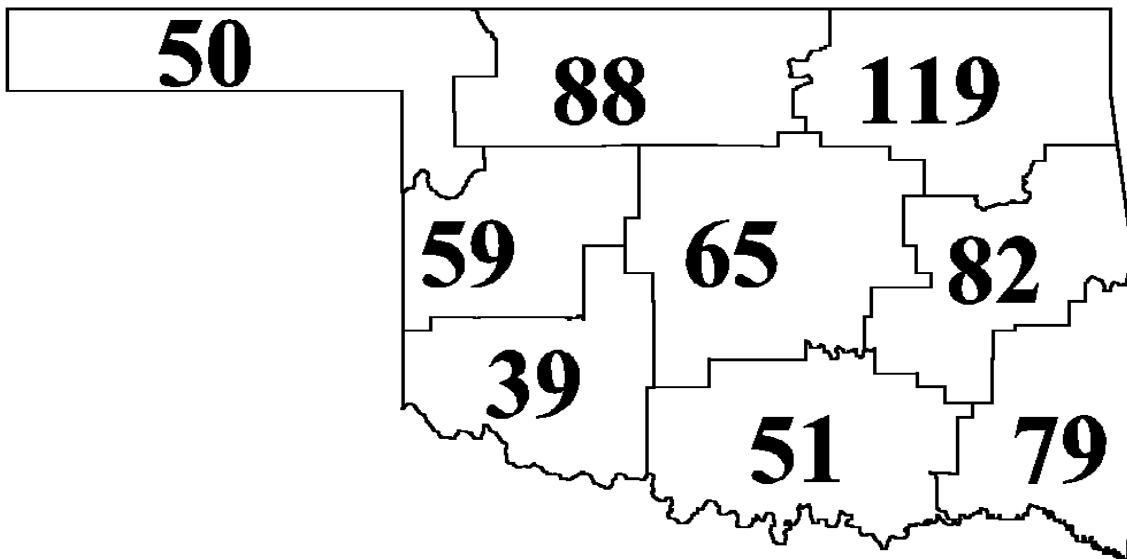
2001 AND 2002 STATEWIDE PRECIPITATION - MONTHLY TOTALS



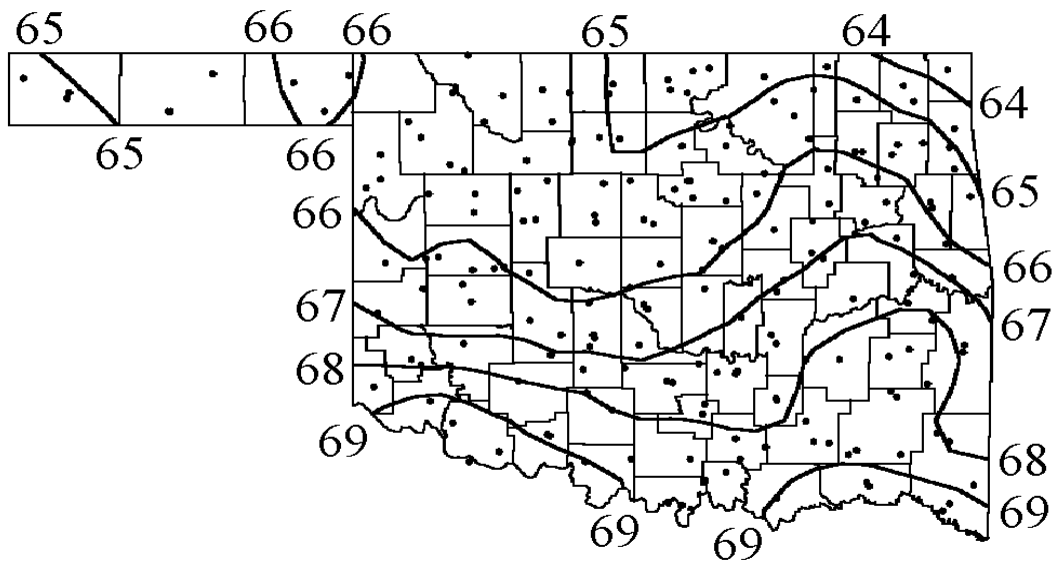
CLIMATE DIVISION AVERAGED PRECIPITATION - JANUARY THROUGH MAY 2002



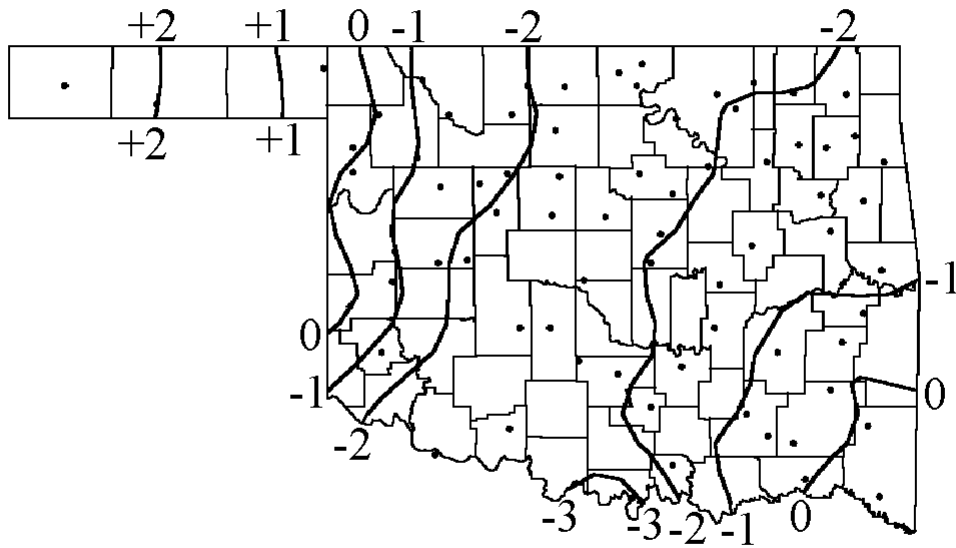
CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - MAY 2002



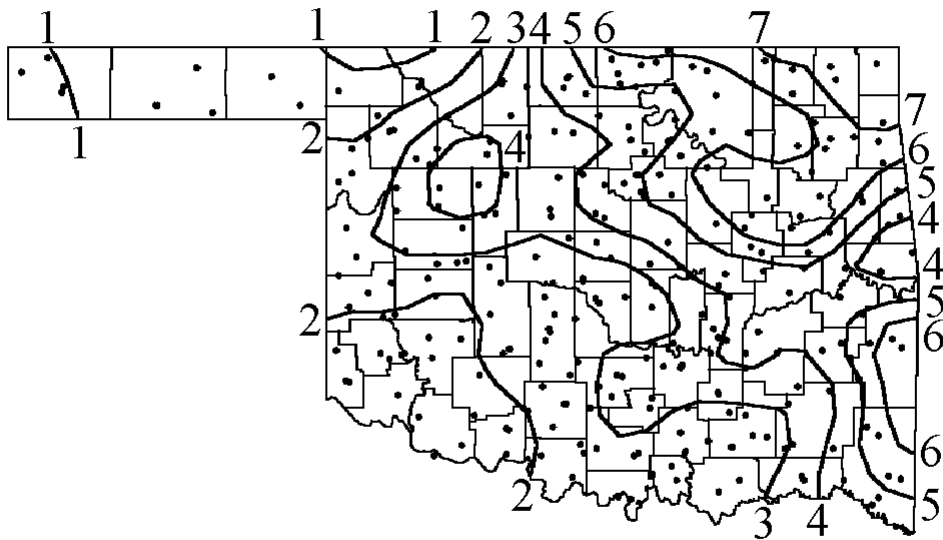
MAY 2002 AVERAGE MONTHLY TEMPERATURE (°F)



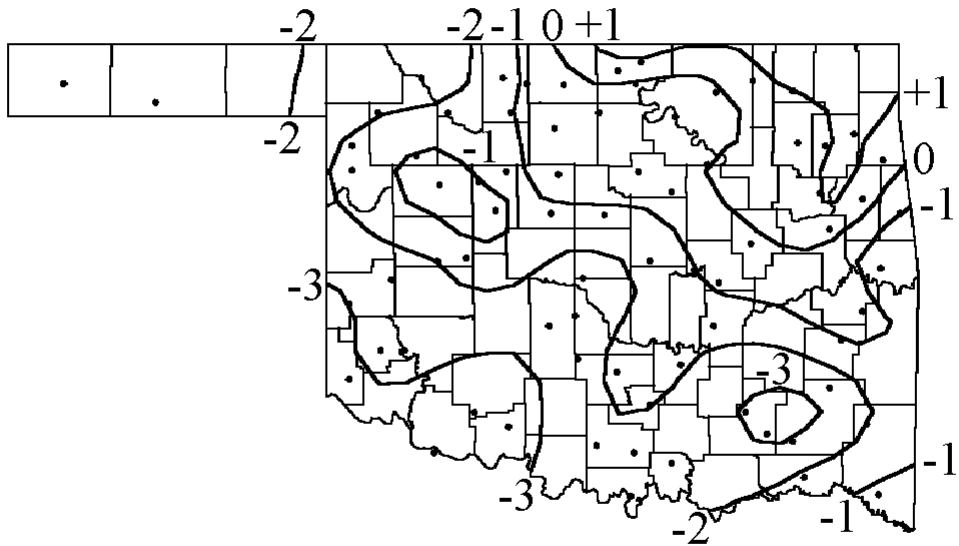
MAY 2002 DEPARTURE FROM NORMAL TEMPERATURE (°F)



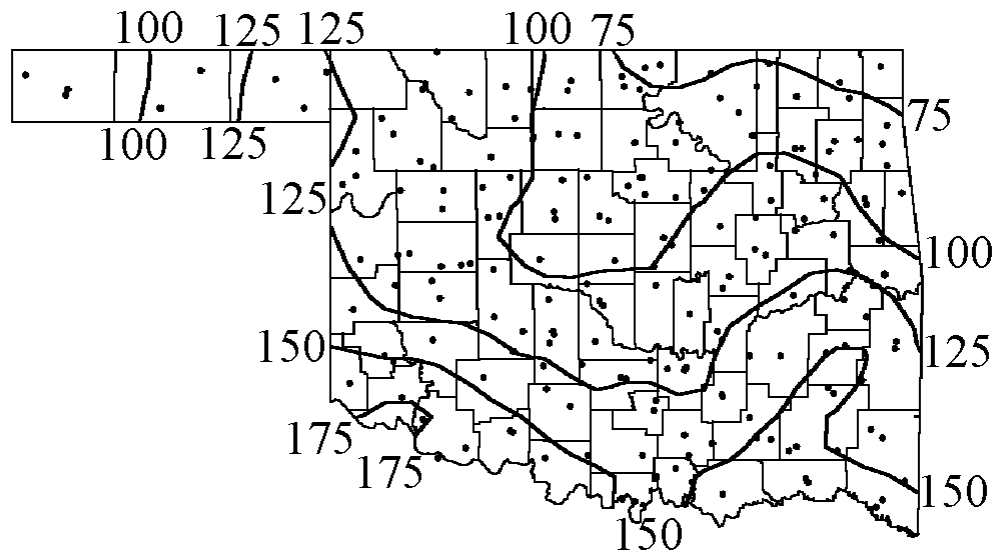
MAY 2002 PRECIPITATION (INCHES)



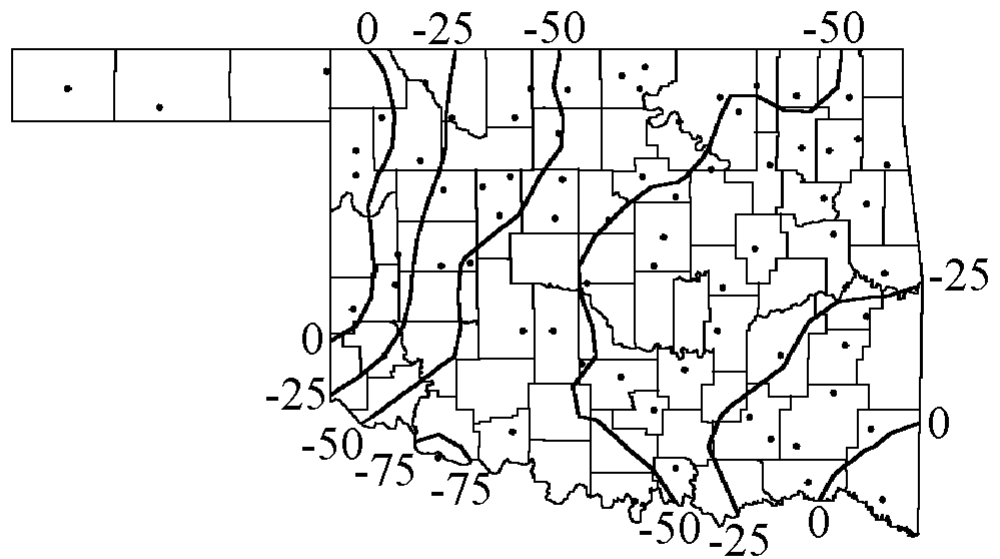
MAY 2002 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



MAY 2002 ACCUMULATED COOLING DEGREE DAYS (°F)



MAY 2002 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)



MAY 2002 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY		
					FROM NORM	MAX TEMP								FROM NORM	MAX 24-HR			
ARNETT	332	1	63.7	31	-0.6	92	9	36	3	123	21	82	2	2.792	31	-1.75	0.88	24
BEAVER	593	1	64.6	29	*****	99	8	36	25	109	*****	97	*****	1.840	30	*****	0.89	28
BOISE CITY	908	1	65.6	30	2.9	97	31	37	2	62	-84	79	7	1.081	31	-1.50	0.57	31
BUFFALO	1243	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.050	30	*****	0.50	26
FARGO	3070	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	2.021	31	*****	0.80	24
GAGE	3407	1	66.2	31	0.6	97	8	33	3	100	9	138	30	1.507	31	-2.21	0.66	24
GATE	3489	1	66.2	30	0.6	97	7	37	25	92	-4	126	11	1.003	30	*****	0.48	27
GOODWELL	3628	1	66.2	31	2.0	96	8	38	9	71	-38	108	24	2.432	31	-0.71	2.18	16
GUYMON	3835	1	67.4	28	*****	95	2	38	9	40	*****	109	*****	0.890	28	*****	0.70	17
HOOKER	4298	1	67.4	29	*****	101	31	38	13	64	*****	134	*****	0.451	30	*****	0.44	27
LAVERNE	5045	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	0.755	31	*****	0.34	28
RANGE	7412	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.881	31	*****	0.75	17
REGNIER	7534	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.231	31	*****	0.53	17
TURPIN	9017	1	65.9	23	*****	96	31	36	13	61	*****	81	*****	1.050	24	*****	0.93	28

MAY 2002 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY		
					FROM NORM	MAX TEMP								FROM NORM	MAX 24-HR			
BILLINGS	755	2	63.9	29	*****	88	31	39	13	97	*****	64	*****	3.853	31	-0.99	1.10	24
BLACKWELL 2E	818	2	65.4	30	-1.2	88	31	44	3	71	-8	82	-43	6.472	31	1.52	1.93	25
BRAMAN	1075	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	5.541	31	*****	2.42	25
CEDARDALE	1620	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.051	31	*****	1.54	18
CHEROKEE	1724	2	64.9	29	*****	93	9	37	3	92	*****	90	*****	2.674	31	-1.84	0.75	9
ENID	2912	2	66.2	31	-1.6	91	31	42	25	67	13	105	-33	4.235	31	-0.63	2.94	17
FT SUPPLY	3304	2	65.4	31	0.4	97	7	32	3	100	1	112	15	2.093	31	-2.07	1.46	17
FREEDOM	3358	2	65.3	31	-1.6	96	6	39	12	105	32	113	-19	1.010	31	-3.21	0.40	27
GREAT SALT P	3740	2	66.2	31	-1.2	93	9	41	3	67	-1	105	-36	3.920	31	-0.62	0.92	24
HARDY	3909	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	5.780	31	*****	1.54	25
HELENA	4019	2	65.0	31	-1.6	91	9	39	3	94	18	93	-34	4.034	31	-0.56	1.84	24
JEFFERSON	4573	2	63.7	31	-3.9	90	31	37	4	109	47	69	-75	4.460	31	-0.50	1.53	24
LAHOMA	4950	2	65.8	30	*****	90	31	40	3	78	*****	101	*****	1.620	30	*****	0.80	25
LAMONT	5013	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	5.731	31	*****	2.00	24
MEDFORD	5768	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	5.291	31	*****	2.01	17
MORRISON	6065	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.430	31	*****	1.23	17
MUTUAL	6139	2	63.9	31	-0.9	94	9	37	3	119	10	85	-20	4.491	31	-0.04	2.64	24
NEWKIRK	6278	2	62.4	31	-3.6	87	31	35	9	129	50	50	-61	7.141	31	2.20	2.92	25
ORIENTA	6751	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.171	31	*****	1.77	17
PONCA CITY	7201	2	65.1	31	-3.1	89	31	41	3	85	15	88	-79	3.185	31	-1.74	1.03	24
RED ROCK	7505	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	2.750	31	*****	0.95	8
WAYNOKA	9404	2	65.9	31	-2.4	97	8	41	12	91	35	119	-38	2.900	31	-1.84	1.06	16
WOODWARD	9760	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	2.271	31	*****	1.19	16

MAY 2002 SUMMARY FOR NORTHEAST CLIMATE DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY		
					FROM NORM	MAX TEMP												
BARNSDALL	535	3	66.7	30	-1.1	88	31	44	18	48	-4	100	-38	6.280	30	****	1.42	29
BARTLESVILLE	548	3	66.5	31	-2.2	90	31	42	3	58	18	104	-52	5.830	31	1.07	2.18	17
BIXBY	782	3	66.2	29	****	92	1	45	19	54	****	89	****	6.380	29	****	3.50	28
BURBANK	1256	3	****	0	****	****	0	****	0	****	****	****	****	3.572	31	****	0.97	8
CHELSEA	1717	3	****	0	****	****	0	****	0	****	****	****	****	5.290	31	****	1.04	17
CLAREMORE	1828	3	65.4	31	-1.3	91	2	44	18	75	4	87	-36	4.336	31	-1.04	1.09	17
FORAKER	3250	3	****	0	****	****	0	****	0	****	****	****	****	7.221	31	****	1.63	27
HOLLOW	4258	3	****	0	****	****	0	****	0	****	****	****	****	7.040	31	****	2.26	8
HOMINY	4289	3	****	0	****	****	0	****	0	****	****	****	****	7.422	31	****	3.30	17
KANSAS	4672	3	66.1	31	-0.8	88	1	41	18	64	1	99	-22	5.660	31	0.24	1.75	12
LENAPAH	5118	3	****	0	****	****	0	****	0	****	****	****	****	5.800	31	****	1.37	9
MANNFORD	5522	3	66.3	31	-2.0	87	31	43	14	58	14	97	-48	6.330	31	0.90	3.12	17
MARAMEC	5540	3	****	0	****	****	0	****	0	****	****	****	****	5.851	31	****	2.02	17
MIAMI	5855	3	65.9	25	****	88	1	40	3	44	****	66	****	7.230	26	****	1.80	8
NOWATA	6485	3	66.1	31	-2.1	87	31	44	18	53	3	88	-62	6.420	31	1.35	2.10	6
PAWHUSKA	6935	3	66.1	31	-1.9	88	31	42	3	59	9	93	-47	4.542	31	-1.13	1.51	9
PAWNEE	6940	3	****	0	****	****	0	****	0	****	****	****	****	4.600	31	****	1.62	17
PRYOR	7309	3	64.9	31	-2.0	91	2	44	19	82	11	79	-50	5.573	31	0.47	1.60	13
RALSTON	7390	3	64.9	30	-2.9	88	31	39	3	85	27	81	-63	4.253	31	-1.25	1.40	9
SPAVINAW	8380	3	67.4	31	-1.4	90	1	43	18	45	0	119	-42	6.792	31	1.90	2.10	13
TULSA	8992	3	66.9	30	-2.4	91	1	44	18	59	21	116	-48	5.215	30	****	1.29	17
UPPER SPAV	9101	3	65.0	31	****	90	1	40	19	91	****	92	****	7.474	31	****	1.93	17
VINITA	9203	3	65.2	30	-1.9	89	1	41	18	71	10	76	-48	9.230	30	****	1.96	6
WAGONER	9247	3	67.3	30	-1.5	91	1	46	18	51	9	120	-42	8.320	31	2.82	2.54	17
WANN	9298	3	****	0	****	****	0	****	0	****	****	****	****	8.390	31	****	2.16	8

MAY 2002 SUMMARY FOR WEST CENTRAL CLIMATE DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY		
					FROM NORM	MAX TEMP												
CANTON DAM	1445	4	66.2	30	-0.4	90	31	40	3	69	-7	105	-21	3.200	31	-1.59	1.12	24
CLINTON	1909	4	66.3	30	-1.8	94	2	40	3	56	-4	95	-58	2.103	31	-2.96	1.36	17
CORDELL	2125	4	66.0	31	****	94	2	42	14	79	****	110	****	1.752	31	****	0.73	25
ELK CITY	2849	4	65.8	31	-0.5	96	9	42	4	74	4	100	-10	2.650	31	-2.21	0.97	17
ERICK	2944	4	67.0	31	0.7	97	9	40	13	78	-1	139	20	1.002	31	-3.56	0.41	28
GEARY	3497	4	64.9	28	****	92	1	42	13	84	****	80	****	2.300	29	****	1.35	16
HAMMON	3871	4	64.6	30	-1.3	95	9	37	4	115	30	102	-6	3.330	30	****	1.42	17
LEEDEY	5090	4	****	0	****	****	0	****	0	****	****	****	****	3.300	31	****	2.45	17
MACKIE	5463	4	****	0	****	****	0	****	0	****	****	****	****	2.530	31	****	1.52	17
MORAVIA	6035	4	****	0	****	****	0	****	0	****	****	****	****	1.361	31	****	0.72	25
OKEENE	6629	4	67.3	31	-1.6	92	31	42	13	55	10	126	-41	2.555	31	-2.21	1.11	17
RETROP	7565	4	****	0	****	****	0	****	0	****	****	****	****	1.720	31	****	0.78	25
REYDON	7579	4	65.5	17	****	94	9	40	14	60	****	69	****	1.320	19	****	0.87	15
SAYRE	7952	4	****	0	****	****	0	****	0	****	****	****	****	2.270	31	****	1.27	17
SWEETWATER	8652	4	****	0	****	****	0	****	0	****	****	****	****	2.261	31	****	0.83	28
TALOGA	8708	4	65.3	31	-1.6	92	9	37	3	83	14	92	-34	5.202	31	0.14	1.72	24
THOMAS	8815	4	****	0	****	****	0	****	0	****	****	****	****	3.630	31	****	2.38	17
WATONGA	9364	4	64.8	31	-2.7	88	9	41	3	93	34	87	-49	5.120	31	0.21	2.61	17
WEATHERFORD	9422	4	66.6	31	-2.5	94	2	42	3	64	21	112	-57	4.330	31	-0.72	1.78	17

MAY 2002 SUMMARY FOR CENTRAL CLIMATE DIVISION (CD5)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
					FROM NORM	MAX TEMP												
AMBER	200	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.700	31	****	0.96	17
BLANCHARD	830	5	70.9	14	****	97	2	45	13	8	*****	91	*****	2.852	31	-2.28	0.95	17
BRISTOW	1144	5	68.0	29	****	91	1	44	14	38	*****	124	*****	5.630	30	****	3.50	17
CHANDLER	1684	5	66.3	30	-1.8	91	2	45	19	63	18	102	-40	4.520	30	****	1.70	17
CHICKASHA EXP	1750	5	68.6	31	-2.6	94	1	41	14	40	17	152	-62	2.250	31	-2.99	1.19	17
COX CITY	2196	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.920	31	****	1.62	17
CUSHING	2318	5	65.7	31	-2.6	86	31	46	3	73	27	96	-53	4.942	31	-0.89	2.97	17
EDMOND	2788	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.022	31	****	2.00	16
GUTHRIE	3821	5	65.2	31	-2.8	87	2	42	18	81	32	87	-54	4.480	31	-1.00	2.86	17
HENNESSEY	4055	5	63.5	31	-3.7	87	31	42	13	106	40	60	-72	5.390	31	0.40	2.87	17
INGALLS	4489	5	****	0	****	****	0	****	0	*****	*****	*****	*****	6.042	31	****	2.82	17
KINGFISHER	4861	5	64.6	30	-2.9	89	31	42	13	94	33	82	-54	3.210	31	-1.80	1.33	17
KONAWA	4915	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.760	31	****	1.20	12
MARSHALL	5589	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.930	31	****	1.26	17
MEEKER	5779	5	64.9	31	-1.6	93	2	42	18	88	28	83	-22	3.611	31	-2.11	1.64	29
MULHALL	6110	5	****	0	****	****	0	****	0	*****	*****	*****	*****	5.521	31	****	3.10	17
NORMAN NWS	6386	5	66.1	31	****	94	1	44	14	68	*****	103	*****	2.125	31	****	1.02	17
OKEMAH	6638	5	67.7	31	-3.0	94	1	47	19	40	19	125	-71	5.491	31	-0.20	1.78	29
OKLAHOMA CTY F.	6659	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.955	31	****	0.87	6
OKLAHOMA CTY	6661	5	65.9	31	-2.5	92	1	45	14	68	25	97	-48	2.487	31	-2.95	0.90	17
PERKINS	7003	5	****	0	****	****	0	****	0	*****	*****	*****	*****	5.850	31	****	3.10	17
PIEDMONT	7068	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.710	31	****	1.53	17
PRAGUE	7264	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.911	31	****	1.73	28
PURCELL	7327	5	66.7	23	****	94	2	45	16	49	*****	87	*****	3.260	23	****	1.09	15
SEMINOLE	8042	5	66.3	27	****	94	2	45	15	47	*****	82	*****	3.152	27	****	1.45	28
SHAWNEE	8110	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.370	31	****	0.95	17
STELLA	8479	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.682	31	****	1.12	16
STILLWATER	8501	5	66.6	31	-1.5	88	31	44	14	56	4	105	-45	4.964	31	-0.45	2.73	17
TECUMSEH	8751	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.710	31	****	0.91	17
UNION CITY	9086	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.412	31	****	1.07	17
WANETTE	9291	5	66.1	27	****	91	2	44	19	57	*****	86	*****	2.330	27	****	0.91	17
WEWOKA	9575	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.431	31	****	0.90	13

MAY 2002 SUMMARY FOR EAST CENTRAL CLIMATE DIVISION (CD6)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
					FROM NORM	MAX TEMP												
ASHLAND	364	6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.910	31	****	1.77	13
BEGGS	631	6	****	0	****	****	0	****	0	*****	*****	*****	*****	7.680	31	****	3.62	17
CALVIN	1391	6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.350	31	****	1.85	5
CHECOTAH	1711	6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.611	31	****	1.47	17
CLAYTON	1858	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.490	31	****	1.35	13
DEWAR	2485	6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.943	31	****	1.04	17
HOLDENVILLE	4235	6	67.8	31	-0.5	94	1	45	14	44	4	130	-13	3.653	31	-1.90	1.72	12
LAKE EUFAULA	4975	6	65.1	29	****	87	2	47	18	70	*****	73	*****	4.162	29	****	1.97	29
LYONS	5437	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.151	31	****	0.95	17
MCALESTER	5664	6	68.2	30	-1.1	88	1	45	14	36	-4	133	-41	3.026	30	****	1.35	12
MCCURTAIN	5693	6	69.0	31	-0.8	89	1	44	19	38	9	161	-15	6.353	31	0.54	2.70	29
MUSKOGEE	6130	6	66.6	31	-2.1	89	1	43	18	60	17	109	-48	5.615	31	0.21	1.38	16
OKMULGEE	6670	6	67.5	31	-0.2	93	1	48	19	33	-22	112	-25	5.270	31	-0.49	1.87	17
OKTAHA	6678	6	****	0	****	****	0	****	0	*****	*****	*****	*****	7.732	31	****	3.31	29
SALLISAW	7862	6	66.8	31	-1.5	88	2	46	19	54	7	110	-39	2.790	31	-2.88	0.86	9
SCPIO	7979	6	****	0	****	****	0	****	0	*****	*****	*****	*****	6.210	31	****	1.93	28
SHORT	8170	6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.950	31	****	0.55	9
STILWELL	8506	6	64.0	28	****	87	1	38	19	79	*****	50	*****	4.460	31	-1.50	0.96	17
TAHLEQUAH	8677	6	66.0	31	-1.9	88	1	41	18	67	9	97	-50	6.983	31	1.32	2.92	17
WETUMKA	9571	6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.975	31	****	1.25	13

APRIL 2002 SUMMARY FOR SOUTHWEST CLIMATE DIVISION (CD7)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY	
					FROM NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ALTUS DAM	184	7	70.1	19	****	97	2	48	3	23	*****	119	*****	2,010	31	-2.64	0.57	25
ANADARKO	224	7	65.2	30	****	92	2	40	14	86	32	92	-55	2,620	30	****	1.55	17
APACHE	260	7	****	0	****	****	0	****	0	*****	*****	*****	*****	3,640	31	****	1.40	17
CHATTANOOGA	1706	7	68.3	29	****	95	2	42	14	38	*****	133	*****	1,180	31	-3.68	0.70	27
DUNCAN 11 W	2668	7	****	0	****	****	0	****	0	*****	*****	*****	*****	1,870	31	****	0.65	26
FREDERICK	3353	7	68.9	25	****	97	1	46	18	38	*****	135	*****	0,540	25	****	0.20	5
HOBART	4204	7	66.6	12	****	95	31	42	18	64	*****	109	*****	0,845	27	****	0.27	25
HOLLIS	4249	7	67.3	17	****	96	8	42	18	23	*****	51	*****	0,690	31	-3.32	0.28	28
LAWTON	5063	7	68.6	27	****	88	17	47	15	34	*****	130	*****	1,750	28	****	0.50	25
LOOKEBA	5329	7	****	0	****	****	0	****	0	*****	*****	*****	*****	2,311	31	****	1.54	17
MANGUM	5509	7	67.2	31	-1.5	96	9	42	15	71	21	140	-25	2,480	31	-2.17	1.20	25
RANDLETT	7403	7	****	0	****	****	0	****	0	*****	*****	*****	*****	1,630	31	****	0.59	28
ROOSEVELT	7727	7	****	0	****	****	0	****	0	*****	*****	*****	*****	1,530	31	****	0.57	25
SEDAN	8016	7	****	0	****	****	0	****	0	*****	*****	*****	*****	1,190	31	****	0.45	28
SNYDER	8299	7	****	0	****	****	0	****	0	*****	*****	*****	*****	0,790	17	****	0.31	27
VINSON	9212	7	****	0	****	****	0	****	0	*****	*****	*****	*****	2,540	31	****	1.10	25
WALTERS	9278	7	68.4	30	-1.2	94	2	45	15	38	1	140	-39	1,130	31	-3.69	0.49	27
WICHITA MT	9629	7	67.1	29	****	95	2	41	14	59	*****	121	*****	1,941	30	****	1.30	25

APRIL 2002 SUMMARY FOR SOUTH CENTRAL CLIMATE DIVISION (CD8)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY	
					FROM NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ADA	17	8	66.7	31	-2.3	91	1	43	26	49	14	103	-56	3,811	31	-1.72	1.61	13
ALLEN	147	8	****	0	****	****	0	****	0	*****	*****	*****	*****	4,430	31	****	2.50	11
ARDMORE	292	8	70.0	28	****	95	1	50	12	21	*****	161	*****	2,650	31	-2.42	1.45	16
ATOKA DAM	394	8	68.3	31	-1.0	90	2	43	14	48	14	150	-16	2,150	31	-3.47	1.09	17
BOKCHITO	917	8	****	0	****	****	0	****	0	*****	*****	*****	*****	2,360	31	****	1.59	17
CANEY	1437	8	****	0	****	****	0	****	0	*****	*****	*****	*****	1,840	31	****	1.41	17
CENTRAHOMA	1648	8	67.3	31	****	87	2	45	14	48	*****	121	*****	3,650	31	****	1.30	13
CHICKASAW	1745	8	67.6	31	-1.2	93	2	42	14	49	12	129	-24	3,630	31	-1.91	1.60	13
COLEMAN	2011	8	67.4	31	****	88	1	45	18	46	*****	121	*****	2,050	31	****	1.15	17
COMANCHE	2054	8	****	0	****	****	0	****	0	*****	*****	*****	*****	2,900	31	****	1.70	26
DAISY	2354	8	****	0	****	****	0	****	0	*****	*****	*****	*****	2,953	31	****	0.97	17
DUNCAN	2660	8	67.2	27	****	93	2	46	14	34	*****	93	*****	3,600	28	****	2.14	26
DURANT	2678	8	68.5	26	****	89	31	44	13	32	*****	124	*****	2,670	26	****	1.80	16
ELMORE CITY	2872	8	****	0	****	****	0	****	0	*****	*****	*****	*****	1,390	31	****	0.54	25
GRADY	3688	8	****	0	****	****	0	****	0	*****	*****	*****	*****	3,280	31	****	1.05	28
HEALDTON	4001	8	67.8	29	****	94	2	45	15	43	*****	124	*****	3,140	31	-2.04	1.25	17
HENNEPIN	4052	8	****	0	****	****	0	****	0	*****	*****	*****	*****	3,510	31	****	0.95	17
KETCHUM RAN	4780	8	****	0	****	****	0	****	0	*****	*****	*****	*****	2,880	31	****	1.55	17
KINGSTON	4865	8	****	0	****	****	0	****	0	*****	*****	*****	*****	1,890	31	****	1.11	17
LEHIGH	5108	8	****	0	****	****	0	****	0	*****	*****	*****	*****	2,100	31	****	1.40	17
LINDSAY	5216	8	66.6	31	-2.5	91	1	42	13	61	25	111	-51	2,970	31	-2.65	1.34	16
LOCO	5247	8	****	0	****	****	0	****	0	*****	*****	*****	*****	1,730	31	****	0.65	13
MADILL	5468	8	69.0	31	-1.1	93	2	46	15	34	4	157	-31	2,850	31	-2.40	1.40	17
MARIETTA 5 SW	5563	8	66.1	31	-4.2	91	2	40	15	66	41	100	-88	3,310	31	-1.76	1.57	17
MARLOW	5581	8	69.0	31	****	91	1	43	14	33	*****	157	*****	2,390	31	****	0.88	17
MCGEE CREEK	5713	8	69.1	31	-0.5	90	2	46	19	32	-2	160	-14	3,090	31	-3.28	1.15	17
PAULS VALLEY	6926	8	66.8	31	-2.3	90	2	43	14	57	20	114	-51	4,820	31	-1.22	1.60	13
PONTOTOC	7214	8	****	0	****	****	0	****	0	*****	*****	*****	*****	2,390	31	****	0.98	16
TISHOMINGO	8884	8	****	0	****	****	0	****	0	*****	*****	*****	*****	1,980	31	****	1.06	16
TUSSY	9032	8	****	0	****	****	0	****	0	*****	*****	*****	*****	3,220	31	****	1.23	17
WAURIKA	9395	8	68.8	31	-3.7	93	1	45	15	30	14	148	-100	0,964	31	-3.57	0.61	27

APRIL 2002 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

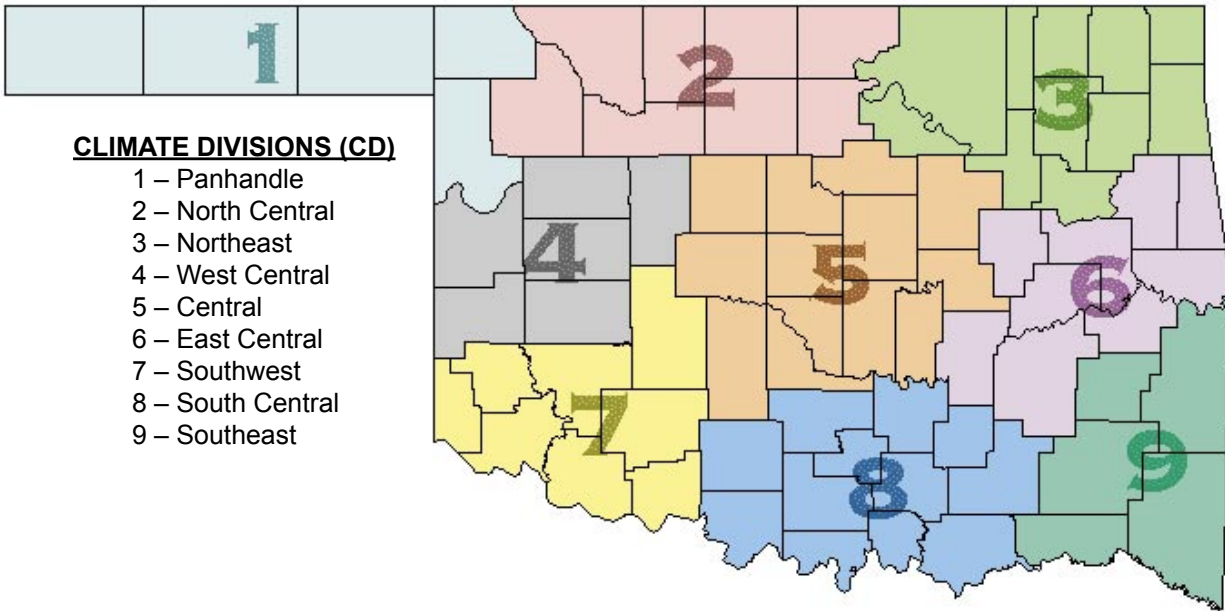
NAME	ID	CD	DEV				MIN	HEAT		DEV		COOL		DEV		TOT	NUM	DEV		DAY
			MEAN	NUM	FROM	MAX		DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM			MAX		
ANTLERS	256	9	68.3	31	-1.4	86	2	43	19	46	17	149	-25	2.130	31	-3.88	1.33	17		
BATTIEST	567	9	66.4	31	-0.1	87	2	39	19	62	-6	105	-9	4.906	31	-2.12	2.90	28		
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.090	31	*****	2.09	13		
BROKEN BOW	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.400	31	*****	1.24	28		
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.500	21	*****	0.50	27		
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.400	31	*****	1.78	13		
HEAVENER	4008	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.870	31	*****	2.50	12		
HUGO	4384	9	70.3	31	0.3	88	2	47	18	17	-9	180	2	4.501	31	-1.19	0.99	10		
IDABEL	4451	9	70.8	31	0.9	94	2	48	17	17	-12	196	18	5.400	31	-0.54	1.92	28		
PAGE	6842	9	67.1	21	*****	88	1	42	18	43	*****	87	*****	5.660	21	*****	2.03	29		
SMITHVILLE	8285	9	65.7	28	*****	85	2	38	19	65	*****	85	*****	5.706	30	*****	2.29	28		
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.880	31	*****	1.43	9		
TUSKAHOMA	9023	9	69.7	31	0.3	88	31	42	19	32	-4	177	6	3.350	31	-3.50	1.50	13		
VALLIANT	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.810	31	*****	0.91	13		
WILBURTON	9634	9	69.3	31	0.2	88	31	42	15	36	-7	170	3	5.744	31	-0.37	1.58	27		
WISTER	9724	9	67.7	30	*****	85	9	42	19	52	*****	132	*****	7.110	30	*****	2.71	28		

APRIL 2002 CLIMATE DIVISION SUMMARY

NAME	CD	DEV				MIN	HEAT		DEV		COOL		DEV		TOT	NUM	DEV		DAY
		MEAN	NUM	FROM	MAX		DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM			MAX		
PANHANDLE	1	65.6	5	0.6	101	31	33	3	89	-14	106	5	1.710	8	-1.71	2.18	16		
NORTH CENTRAL	2	65.0	12	-1.8	97	8	32	3	93	17	93	-39	4.110	22	-0.56	2.94	17		
NORTHEAST	3	66.1	14	-1.7	92	1	39	3	64	9	96	-44	6.040	20	0.64	3.50	28		
WEST CENTRAL	4	66.0	10	-1.3	97	9	37	3	76	13	107	-27	2.810	16	-1.96	2.61	17		
CENTRAL	5	65.9	11	-2.7	97	2	41	14	70	27	99	-55	3.550	27	-1.94	3.50	17		
EAST CENTRAL	6	67.4	7	-0.8	94	1	38	19	47	-2	122	-25	4.730	18	-1.02	3.62	17		
SOUTHWEST	7	66.9	3	-2.4	97	1	40	14	65	21	124	-55	1.850	12	-2.88	1.55	17		
SOUTH CENTRAL	8	67.7	12	-2.1	95	1	40	15	46	14	131	-49	2.770	29	-2.71	2.50	11		
SOUTHEAST	9	68.9	7	0.2	94	2	38	19	37	-5	158	2	5.040	12	-1.30	2.90	28		

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

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

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

Cooling Degree Days Calculation

NumDays

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

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

MESONET MONTHLY SUMMARY FOR MAY 2002

NAME	MEAN		MAX		MIN			TOT				MAX		NAME	MEAN		MAX		MIN			TOT				MAX	
	TEMP	TEMP	TEMP	TEMP	DAY	DAY	HDD	CDD	PPT	24-HR	DAY	TEMP	TEMP		TEMP	TEMP	DAY	DAY	HDD	CDD	PPT	24-HR	DAY				
PANHANDLE																											
Arnett	66.2	94	8	36	3	89	127	4.05	1.19	5	Goodwell	64.6	100	31	36	9	111	100	2.06	1.74	16						
Beaver	66.4	100	7	36	13	97	140	1.92	0.98	27	Hooker	65.4	102	31	37	13	97	111	0.40	0.29	26						
Boise City	63.0	100	31	34	25	131	71	0.29	0.12	8	Kenton	64.3	101	31	33	25	110	89	0.21	0.19	8						
Buffalo	66.0	99	6	39	10	93	122	0.87	0.31	27	Slapout	65.8	97	6	36	3	105	128	1.35	0.85	27						
NORTH CENTRAL																											
Alva	66.0	97	8	38	3	93	126	****	****	**	May Ranch	65.8	96	6	40	3	94	119	0.65	0.18	28						
Blackwell	64.6	89	31	40	3	90	79	6.11	2.64	24	Medford	64.9	92	31	39	3	98	93	4.52	1.77	17						
Breckenridge	64.5	91	31	40	3	101	87	2.63	0.53	17	Newkirk	64.0	87	31	43	3	97	67	7.73	2.98	24						
Cherokee	66.2	93	8	36	3	87	125	3.09	0.94	17	Red Rock	65.1	88	31	42	3	87	89	4.88	1.13	17						
Fairview	66.6	93	31	39	3	76	126	7.52	4.32	16	Seiling	65.8	93	8	36	3	94	118	4.96	1.32	28						
Freedom	66.2	95	31	39	13	92	129	1.43	0.66	27	Woodward	66.2	95	8	38	3	90	128	1.76	0.65	24						
Lahoma	65.0	91	31	40	3	97	96	2.75	0.97	17																	
NORTHEAST																											
Bixby	67.0	92	1	46	14	60	120	6.94	2.07	17	Miami	63.7	86	1	40	18	106	67	8.07	2.60	7						
Burbank	64.5	87	31	43	3	85	70	2.02	0.66	17	Nowata	64.2	86	31	41	18	91	67	4.65	1.11	5						
Claremore	66.0	90	1	42	18	71	101	****	****	**	Pawnee	65.0	87	31	45	3	82	83	4.46	0.97	5						
Copan	64.3	87	31	43	18	94	71	7.95	1.71	7	Porter	67.1	92	1	46	18	57	121	7.24	3.77	17						
Foraker	63.9	86	31	43	3	98	64	4.75	1.08	8	Pryor	64.9	89	1	42	19	89	85	6.54	2.36	28						
Inola	66.1	90	1	44	18	68	103	6.62	2.44	17	Skiatook	65.0	87	31	44	18	85	84	5.13	1.78	17						
Jay	64.0	88	1	37	18	106	74	7.78	1.94	12	Vinita	63.8	86	1	40	18	106	68	8.37	1.75	7						
WEST CENTRAL																											
Bessie	66.9	94	1	42	3	73	132	2.50	1.12	24	Putnam	65.7	92	1	39	3	87	108	4.87	2.01	16						
Butler	67.1	95	8	39	3	72	139	3.74	0.82	16	Retrop	****	***	**	***	**	****	****	****	****	**						
Camargo	65.7	94	8	36	3	99	121	1.26	0.58	23	Watonga	65.4	90	31	41	3	90	102	5.72	1.59	24						
Cheyenne	66.4	93	8	40	3	77	120	2.81	1.33	16	Weatherford	65.7	91	31	40	3	86	109	2.38	0.88	16						
Erick	67.2	96	8	39	14	73	142	1.54	0.73	24																	
CENTRAL																											
Acme	66.8	92	1	42	14	62	117	2.31	1.44	17	Minco	65.9	92	1	43	3	77	104	2.36	1.38	17						
Bowlegs	66.7	91	1	44	14	54	106	2.39	0.71	12	Ninnekah	67.3	95	1	43	14	55	127	2.00	1.23	17						
Bristow	65.8	90	1	43	14	76	100	4.91	2.61	17	Norman	66.4	93	1	45	14	66	110	1.88	0.79	17						
Chandler	66.2	91	1	45	18	68	104	3.52	1.27	17	Oilton	65.1	87	1	40	14	95	97	7.35	2.89	28						
Chickasha	66.9	93	1	40	14	63	122	2.12	1.14	17	Okemah	66.7	92	1	45	14	56	110	4.69	1.40	28						
El Reno	64.6	91	1	39	3	100	88	2.07	1.43	17	Perkins	66.0	88	31	44	3	72	105	5.11	2.94	17						
Guthrie	66.6	89	31	44	3	67	116	5.06	2.54	17	Shawnee	66.7	92	1	45	18	62	115	1.99	0.79	17						
Kingfisher	65.9	92	31	41	3	81	108	2.54	0.71	17	Spencer	66.2	93	1	43	18	68	104	2.38	0.98	17						
Marena	65.4	87	31	45	3	79	92	4.70	2.45	17	Stillwater	65.9	88	31	44	3	75	102	4.94	2.70	17						
Marshall	65.5	90	31	41	3	85	99	3.19	1.55	17	Washington	66.7	91	1	46	13	55	107	3.11	1.21	17						
EAST CENTRAL																											
Calvin	67.7	89	1	44	14	41	124	3.41	1.43	12	Sallisaw	67.2	89	31	42	18	52	120	3.19	0.79	17						
Cookson	65.6	87	1	38	18	77	95	2.77	0.93	17	Stigler	67.5	89	1	43	19	48	124	3.24	0.82	27						
Eufaula	67.7	89	1	46	19	43	127	3.77	1.16	17	Stuart	68.1	88	31	45	14	36	132	6.18	1.83	28						
Haskell	67.1	92	1	45	18	57	121	8.70	3.68	17	Tahlequah	65.1	86	1	41	18	82	85	6.22	2.63	17						
Hectorville	66.7	90	1	47	18	61	112	7.50	3.57	17	Webbers Falls	68.6	93	1	45	19	35	146	3.79	0.92	28						
McAlester	68.6	89	1	44	14	35	147	3.08	1.35	12	Westville	64.7	87	31	40	18	91	82	4.75	1.58	12						
Okmulgee	66.7	92	1	43	14	61	113	4.66	1.81	12																	
SOUTHWEST																											
Altus	70.0	101	1	43	13	40	196	0.94	0.44	24	Hollis	68.7	99	1	43	18	49	165	0.60	0.26	28						
Apache	66.6	94	1	42	3	69	118	3.66	1.07	17	Mangum	68.1	98	1	38	13	62	157	2.09	0.84	24						
Fort Cobb	67.5	95	1	43	3	57	135	1.72	0.50	28	Medicine Park	68.0	94	1	46	13	42	133	1.86	0.75	25						
Grandfield	69.4	94	30	44	13	37	173	0.66	0.23	27	Tipton	70.1	98	1	43	18	36	194	1.18	0.42	23						
Hinton	65.9	92	1	41	3	85	113	1.56	0.91	17	Walters	69.3	93	1	45	14	31	164	0.86	0.32	10						
Hobart	66.8	93	1	42	13	75	131	1.17	0.38	25																	
SOUTH CENTRAL																											
Ada	67.5	91	1	45	14	44	122	3.47	1.44	12	Lane	69.3	89	1	45	14	31	164	2.38	0.92	27						
Ardmore	68.7	91	1	45	14	32	147	2.58	1.21	17	Madill	69.3	90	1	43	14	27	161	2.52	1.42	17						
Bee	69.5	89	31	45	14	28	167	1.96	1.06	17	Pauls Valley	68.6	92	1	46	14	33	146	4.74	1.37	12						
Burneyville	69.3	93	1	42	14	32	165	1.71	1.00	17	Ringling	68.6	90	1	45	14	34	146	2.14	0.56	12						
Byars	67.4	90	1	47	18	43	119	3.62	1.68	12	Sulphur	68.1	91	1	45	14	37	133	4.10	1.85	12						
Centrahoma	68.0	87	1	43	14	40	132	3.31	1.26	17	Tishomingo	67.9	89	1	43	14	38	127	2.18	0.99	17						
Durant	69.2	89	1	45	14	29	161	1.86	1.36	17	Vanoss	67.8	92	1	45	14	42	127	2.85	0.71	26						
Ketchum Ranch	67.7	91	1	46	14	40	124	2.86	1.63	17	Waurika	69.4	92	1	45	14	26	163	1.68	0.83	27						
SOUTHEAST																											
Antlers	68.3	89	1	41	14	46	149	1.68	1.00	17	Idabel	69.7	88	1	45	19	26	171	4.42	1.09	17						
Broken Bow	68.5	89	1	43	14	35	142	4.67	1.07	16	Mt Herman	67.5	86	31	43	14	46	123	7.01	2.47	28						
Clayton	69.2	88	1	42	19	36	166	****	****	**	Talihina	69.0	90	31	42	19	38	164	3.62	1.61	12						
Cloudy	68.4	87	31	44	19	39	143	4.59	1.56	28	Wilburton	68.1	89	31	43	14	43	139	4.21	1.28	12						
Hugo	69.4	88	1	47	19	27	165	4.33	0.95	12	Wister	67.7	89	1	42	19	47	131	6.98	2.23	12						

**EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION
MAY 2002**

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	101	31	HOOKER	33	3	GAGE	2.18	16	GOODWELL	2.79	ARNETT
2	97 97	7 8	FT SUPPLY WAYNOKA	32	3	FT SUPPLY	2.94	17	ENID	7.14	NEWKIRK
3	92	1	BIXBY	39	3	RALSTON	3.50	28	BIXBY	9.23	VINITA
4	97	9	ERICK	37 37 37	3 4 3	HAMMON HAMMON TALOGA	2.61	17	WATONGA	5.20	TALOGA
5	97	2	BLANCHARD	41	14	CHICKASHA EX	3.50	17	BRISTOW	6.04	INGALLS
6	94	1	HOLDENVILLE	38	19	STILWELL	3.62	17	BEGGS	7.73	OKTAHA
7	97 97	2 1	ALTUS DAM FREDERICK	40	14	ANADARKO	1.55	17	ANADARKO	3.64	APACHE
8	95	1	ARDMORE	40	15	MARIETTA	2.50	11	ALLEN	4.82	PAULS VALLEY
9	94	2	IDABEL	38	19	SMITHVILLE	2.90	28	BATTIEST	8.87	HEAVENER

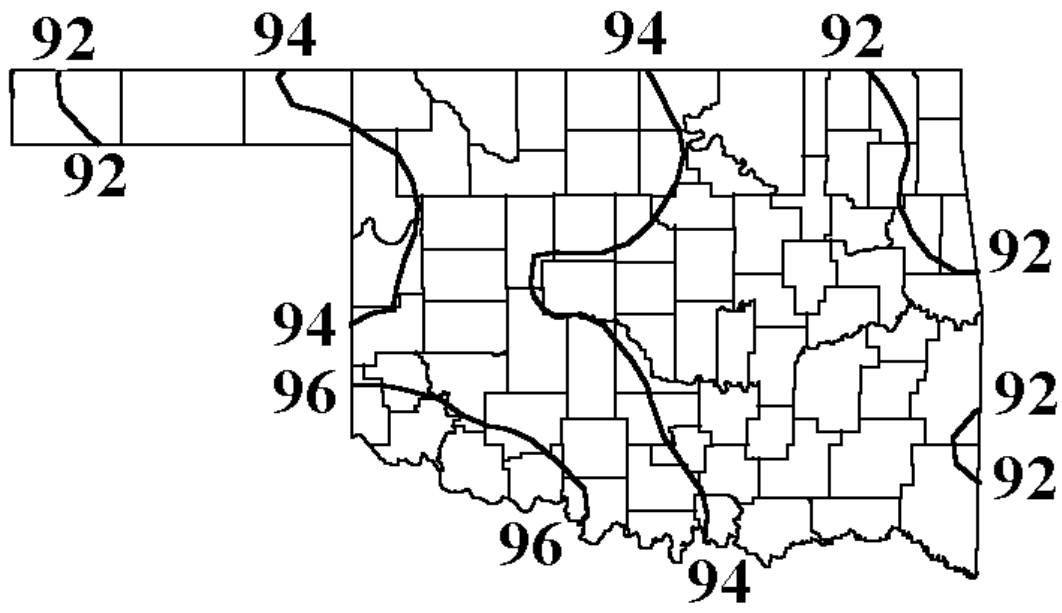
TABLE OF 2001/2002 COMPARISONS

Station	MAY Temperature (F)		MAY Precipitation (in.)	
	2001	2002	2001	2002
Arnett	65.0	63.7	7.85	2.79
Enid	70.0	66.2	6.16	4.24
Tulsa	70.5	66.9	6.32	5.22
Elk City	68.0	65.8	14.52	2.65
Oklahoma City	69.5	65.9	7.71	2.49
McAlester	70.1	68.2	7.82	3.03
Altus Irr Station	71.1	****	7.24	****
Ardmore	73.5	70.0	6.14	2.65
Idabel	72.4	70.8	7.03	5.40

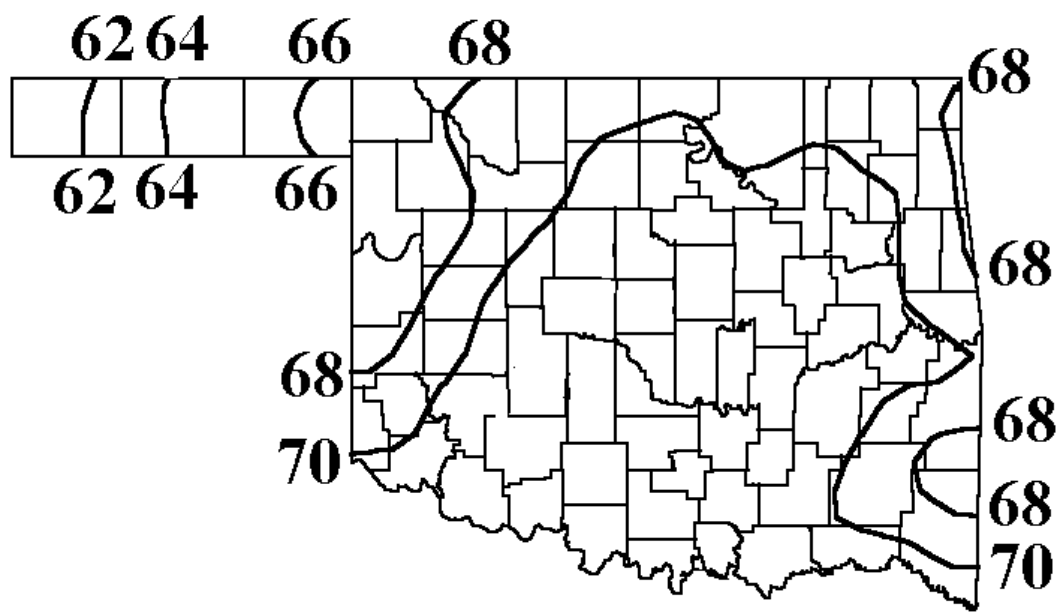
MAY 2002 STATEWIDE EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature (F)	Ft. Supply	2	32	3
Maximum temperature (F)	Hooker	1	101	31
Maximum 24-hour Precipitation	Beggs	6	3.62"	17

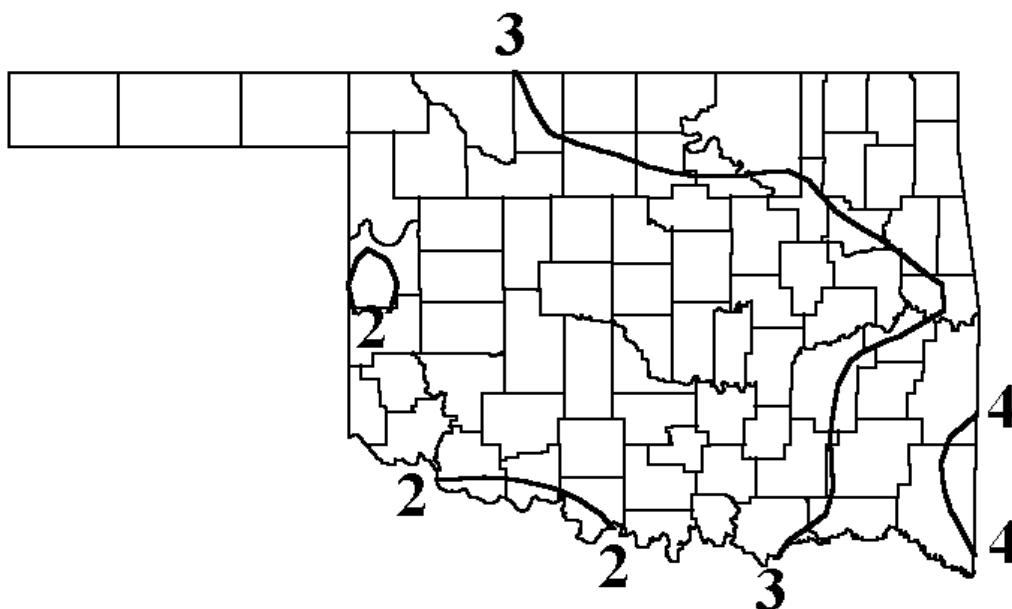
JULY NORMAL DAILY MAXIMUM TEMPERATURE (°F)



JULY NORMAL DAILY MINIMUM TEMPERATURE (°F)



JULY NORMAL MONTHLY PRECIPITATION (INCHES)



JULY TORNADO STATISTICS

The most tornadoes reported in **JULY** for Oklahoma was (7) in 1956.

The average number of tornadoes in **JULY** for Oklahoma is (2.2).

OUTLOOK FOR JULY 2002 THROUGH SEPTEMBER 2002

BASED ON SEASONAL OUTLOOK PROVIDED BY THE CLIMATE PREDICTION CENTER

Temperature: Near Normal Temperature Statewide

Precipitation: Near Normal Precipitation Statewide

OKLAHOMA CITY CLIMATE CALENDAR

JULY

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	2002	Record High	Year	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	80	91		103	1917	67	1951	69		86	1937	57	1951	0.11		5.06	1913
2	80	91		105	1980	72	1924	69		78	1980	58	1924	0.11		3.16	2000
3	81	92		105	1980	75	1908	70		79	1953	57	1906	0.10		2.97	1947
4	81	92		105	1996	73	1915	70		80	1980	57	1924	0.10		1.38	1997
5	81	92		108	1996	77	1958	70		80	1933	55	1915	0.10		3.21	1979
6	81	92		110	1996	73	1958	70		80	1953	55	1972	0.10		1.84	1929
7	81	92		106	1996	76	1960	70		79	1996	57	1952	0.10		2.03	1895
8	81	93		105	1964	70	1905	70		78	1970	57	1958	0.09		1.32	1959
9	81	93		106	1964	71	1905	70		80	1933	56	1891	0.09		2.14	1898
10	82	93		105	1998	66	1895	70		80	1933	56	1905	0.09		2.79	1996
11	82	93		107	1933	67	1895	71		81	1933	58	1905	0.09		3.02	1996
12	82	93		107	2001	62	1953	71		82	1933	56	1953	0.09		1.80	1926
13	82	93		106	1954	73	1953	71		81	1934	56	1975	0.09		2.10	1963
14	82	94		107	1954	80	1926	71		80	1934	57	1950	0.08		1.98	1996
15	82	94		108	1936	71	1891	71		82	1936	59	1967	0.08		2.30	1921
16	82	94		106	1980	74	1967	71		79	1939	61	1891	0.08		3.54	1900
17	82	94		106	1980	80	1950	71		79	2001	63	1992	0.08		1.71	1959
18	82	94		108	1936	72	1967	71		81	1936	62	1911	0.08		1.53	1893
19	82	94		109	1936	74	1953	71		82	1936	63	1898	0.08		2.77	1916
20	82	94		107	1936	77	1944	71		79	1934	60	1970	0.08		1.48	1897
21	83	94		107	1939	78	1970	71		80	1981	54	1970	0.08		1.58	1997
22	83	94		107	1974	73	1947	71		79	1981	57	1970	0.08		2.49	1899
23	83	94		105	1998	77	1989	71		79	1981	55	1970	0.07		3.02	1960
24	83	94		106	1998	73	1947	71		79	1993	61	1970	0.07		2.92	1975
25	83	94		106	1998	76	1906	71		83	1934	58	1911	0.07		1.96	1906
26	83	94		107	1998	75	1959	71		81	1998	63	1911	0.07		3.54	1978
27	83	94		105	1986	75	1959	71		78	1939	59	1994	0.07		5.60	1981
28	83	94		108	1986	75	1981	71		80	1946	58	1994	0.07		1.80	1963
29	83	95		109	1986	76	1892	71		79	1966	60	1994	0.07		2.02	1975
30	83	95		108	1986	73	1925	71		81	1998	57	1971	0.07		1.05	1996
31	83	95		107	1980	76	1925	71		79	1943	53	1971	0.07		1.07	1978
MONTH	82	93.4		110	1996	62	1953	70.6		86	1937	53	1971	2.61		5.60	1981

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

TULSA CLIMATE CALENDAR

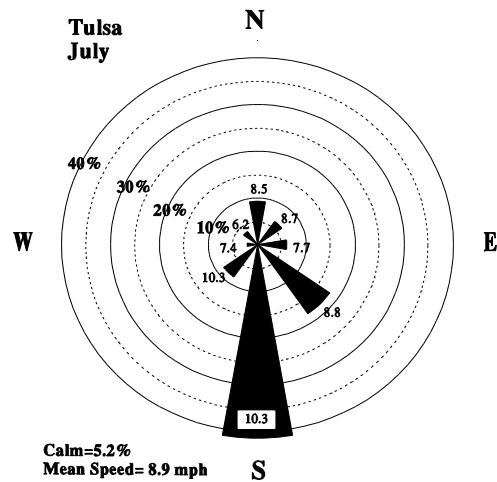
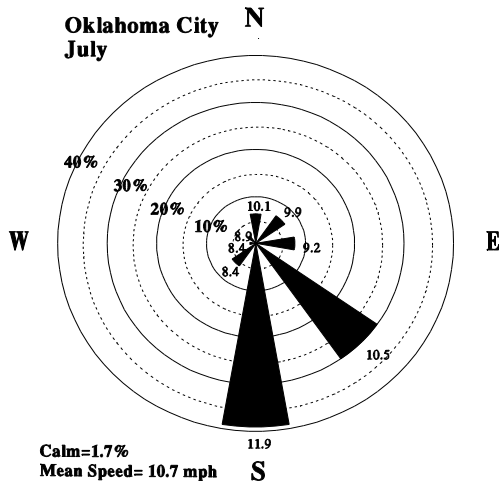
JULY

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	2002	Record High	Year	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	81	92		106	1917	73	1951	71		82	1980	57	1995	0.12		1.95	1922
2	82	92		105	1933	78	1995	72		83	1980	54	1924	0.12		2.51	1929
3	82	92		107	1911	76	1941	72		80	1983	54	1924	0.12		2.75	1903
4	82	92		108	1911	75	1915	72		85	1980	56	1924	0.11		1.93	1930
5	82	92		108	1911	77	1972	72		81	1980	53	1915	0.11		1.55	1950
6	82	93		111	1996	78	1960	72		82	1980	55	1972	0.11		1.62	1932
7	83	93		103	1917	78	1908	73		84	1980	58	1967	0.11		1.35	1994
8	83	93		106	1917	79	1905	73		81	1980	61	1958	0.11		1.02	1906
9	83	93		107	1925	70	1905	73		82	1980	59	1952	0.11		3.80	1915
10	83	93		105	1933	75	1950	73		84	1980	59	1961	0.10		2.20	1906
11	83	93		107	1954	70	1996	73		82	1969	59	1905	0.10		2.30	1963
12	83	93		109	1954	66	1953	73		84	1980	59	1975	0.10		1.61	1998
13	83	94		111	1954	76	1953	73		85	1980	54	1975	0.10		1.95	1994
14	83	94		112	1954	77	1961	73		85	1954	54	1967	0.10		3.25	1994
15	83	94		111	1936	78	1959	73		85	1980	54	1967	0.10		3.91	1961
16	84	94		109	1980	72	1967	73		87	1980	57	1967	0.10		2.55	1967
17	84	94		110	1936	82	1989	73		82	1980	59	1967	0.10		1.85	1989
18	84	94		113	1936	74	1967	73		84	1954	64	1984	0.10		2.72	1924
19	84	94		113	1936	77	1908	73		83	1980	61	1947	0.09		2.20	1933
20	84	94		109	1936	78	1970	73		82	1981	56	1971	0.09		2.35	1906
21	84	94		109	1939	77	1950	73		83	1996	55	1970	0.09		2.85	2000
22	84	94		109	1974	69	1947	73		85	1954	57	1970	0.09		3.12	1960
23	84	94		107	1936	69	1947	73		83	1954	58	1970	0.09		1.85	1973
24	84	95		110	1934	73	1947	73		80	2001	60	1927	0.09		1.95	1973
25	84	95		108	1934	80	1950	73		82	2001	54	1911	0.09		2.34	1931
26	84	95		106	1978	75	1959	73		81	1999	60	1905	0.09		1.81	1928
27	84	95		106	1936	76	1977	73		81	1999	59	1971	0.09		7.54	1963
28	84	95		109	1936	79	1911	73		83	1986	61	1920	0.09		2.72	1976
29	84	95		110	1986	79	1981	73		82	1999	60	1969	0.09		1.64	2000
30	84	95		110	1986	79	1971	73		85	1980	55	1971	0.09		3.78	1981
31	84	95		108	1980	79	1925	73		81	1958	51	1971	0.09		1.04	1979
MONTH	83.29	93.71		113	1936	66	1953	72.77		87	1980	51	1971	0.10		3.91	1961

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

JULY WIND ROSES



July 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.

JULY SUNRISE/SUNSET TIMES FOR 2002

ALL TIMES ARE CENTRAL STANDARD TIME

OKLAHOMA CITY

DATE	SUNRISE	SUNSET
7/1/02	5:18 AM	7:49 PM
7/2/02	5:19 AM	7:49 PM
7/3/02	5:19 AM	7:49 PM
7/4/02	5:20 AM	7:49 PM
7/5/02	5:20 AM	7:49 PM
7/6/02	5:21 AM	7:49 PM
7/7/02	5:21 AM	7:48 PM
7/8/02	5:22 AM	7:48 PM
7/9/02	5:23 AM	7:48 PM
7/10/02	5:23 AM	7:48 PM
7/11/02	5:24 AM	7:47 PM
7/12/02	5:24 AM	7:47 PM
7/13/02	5:25 AM	7:47 PM
7/14/02	5:26 AM	7:46 PM
7/15/02	5:26 AM	7:46 PM
7/16/02	5:27 AM	7:45 PM
7/17/02	5:28 AM	7:45 PM
7/18/02	5:28 AM	7:44 PM
7/19/02	5:29 AM	7:44 PM
7/20/02	5:30 AM	7:43 PM
7/21/02	5:30 AM	7:42 PM
7/22/02	5:31 AM	7:42 PM
7/23/02	5:32 AM	7:41 PM
7/24/02	5:33 AM	7:40 PM
7/25/02	5:33 AM	7:40 PM
7/26/02	5:34 AM	7:39 PM
7/27/02	5:35 AM	7:38 PM
7/28/02	5:35 AM	7:37 PM
7/29/02	5:36 AM	7:36 PM
7/30/02	5:37 AM	7:36 PM
7/31/02	5:38 AM	7:35 PM

TULSA

DATE	SUNRISE	SUNSET
7/1/02	5:10 AM	7:45 PM
7/2/02	5:11 AM	7:45 PM
7/3/02	5:11 AM	7:45 PM
7/4/02	5:12 AM	7:44 PM
7/5/02	5:12 AM	7:44 PM
7/6/02	5:13 AM	7:44 PM
7/7/02	5:13 AM	7:44 PM
7/8/02	5:14 AM	7:44 PM
7/9/02	5:14 AM	7:43 PM
7/10/02	5:15 AM	7:43 PM
7/11/02	5:16 AM	7:43 PM
7/12/02	5:16 AM	7:42 PM
7/13/02	5:17 AM	7:42 PM
7/14/02	5:18 AM	7:41 PM
7/15/02	5:18 AM	7:41 PM
7/16/02	5:19 AM	7:40 PM
7/17/02	5:20 AM	7:40 PM
7/18/02	5:20 AM	7:39 PM
7/19/02	5:21 AM	7:39 PM
7/20/02	5:22 AM	7:38 PM
7/21/02	5:22 AM	7:38 PM
7/22/02	5:23 AM	7:37 PM
7/23/02	5:24 AM	7:36 PM
7/24/02	5:25 AM	7:36 PM
7/25/02	5:25 AM	7:35 PM
7/26/02	5:26 AM	7:34 PM
7/27/02	5:27 AM	7:33 PM
7/28/02	5:28 AM	7:32 PM
7/29/02	5:28 AM	7:32 PM
7/30/02	5:29 AM	7:31 PM
7/31/02	5:30 AM	7:30 PM

ADD ONE HOUR FOR CENTRAL DAYLIGHT TIME

CONTACT INFORMATION



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