



REVISED OKLAHOMA MONTHLY SUMMARY MAY 1998

TABLE OF CONTENTS

May 1998 Oklahoma Summary.....	2
Table of May 1997/1998 Comparisons.....	5
May 1998 Data Summary Tables.....	6
May 1998 Mesonet Summary.....	11
May 1998 State Map Summary.....	12
May Climatological Normals.....	15
90 - Day National Weather Service Outlook.....	16
July Wind Roses - July 1998 Sunrise/Sunset Tables.....	17
Explanation of Tables.....	18
July Oklahoma City Climate Calendar.....	20
July Tulsa Climate Calendar.....	21

MONTHLY SUMMARY FOR MAY 1998

May was much warmer and drier than normal throughout Oklahoma. The state's average temperature for the month was 72.4 degrees (3.7 degrees greater than normal) ranking this as the 6th warmest May since 1892. Statewide-averaged precipitation, for what is typically the wettest month of the year, was only 2.56 inches (2.30 inches less than normal), providing 1998 with the 16th driest May over the 107-year period with statewide records.

The hot month completed an otherwise cool spring. Temperatures during March, April, and May averaged 58.6 degrees (1.4 degrees lower than normal), ranking this spring as the 28th coolest on record. Total spring precipitation averaged 10.67 inches across the state (0.09 inch less than normal, the 46th largest springtime precipitation). January-through-May temperature and precipitation were both greater than normal. The average temperature for the first five months of the year was 52.3 degrees, 0.5 degree higher than normal and the 41st highest on record. Statewide-averaged precipitation over the same period totaled 15.71 inches (1.96 inches greater than normal) to rank this as the state's 30th wettest January through May period.

Thunderstorms on the 5th and 6th produced tornadoes between Quinton and Featherston in Pittsburg County, in Poteau and Calhoun (F2, or significant tornado, damage reported) in LeFlore County, and near Boynton (Muskogee County). One-and-three-quarters-inch-diameter hail was reported at Yale (Payne). Okemah (Okfuskee) and Fanshawe (LeFlore) each reported 3.95 inches of rain. Large hail was reported at Beaver (Beaver) on the 7th and 2.45 inches of rain fell there on the 8th. Damaging hail was reported in western Oklahoma on the 8th and in central portions of the state on the 9th.

Winds at the Goodwell Mesonet site included a peak gust of 65 miles per hour (not associated with any thunderstorm) on the 14th. On the same date, thunderstorms in west central Oklahoma produced large hail (1-¼ inch hail stones at Hollis in Harmon County) and damaging winds (an estimated 80 miles per hour at Sayre in Roger Mills County, a measured 75 miles per hour at Vance Air Force Base in Garfield County and 72 miles per hour recorded at the Camargo Mesonet site in Dewey County). Erick (Roger Mills) received 2.62 inches of rain.

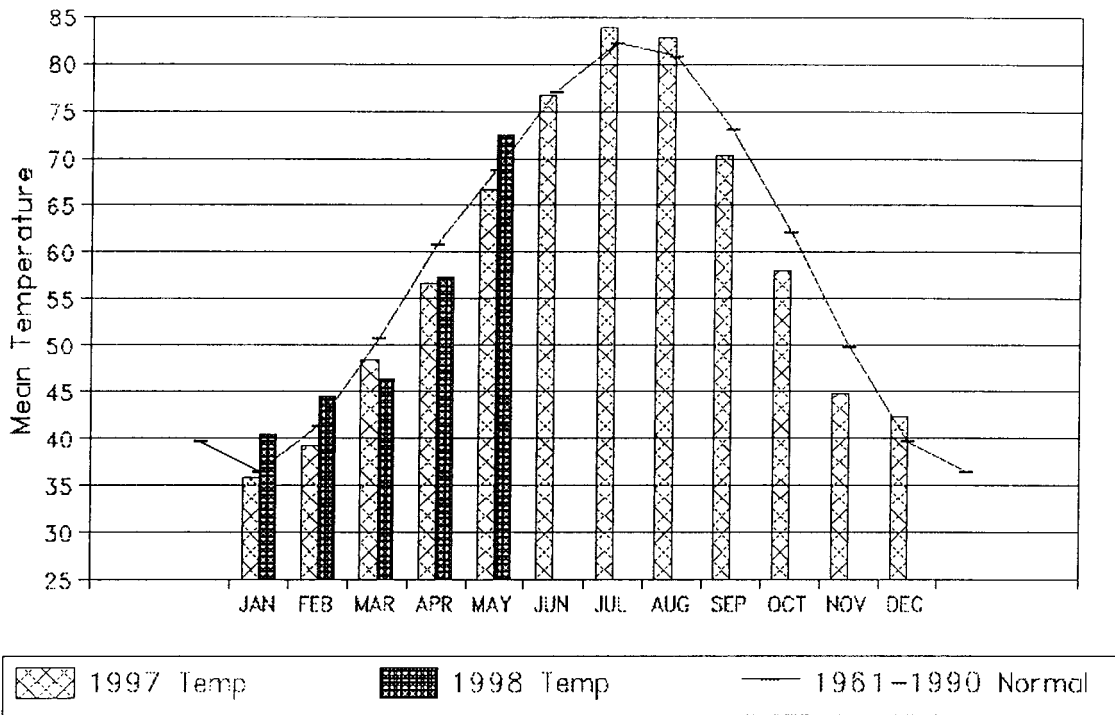
Temperatures soared and precipitation faltered from the 16th through the 23rd. Altus (Jackson), Chattanooga (Comanche), and Hollis, each reported daily maximum temperatures of 100 degrees during the period, and the Tipton Mesonet site (Tillman) reached the century mark or higher (including 101 degrees on the 20th) each day from the 19th through the 21st.

Very strong thunderstorms ripped across north central Oklahoma during the evening of the 24th through early morning on the 25th. Baseball-sized hail and 4.57 inches of rain were reported at Medford (Grant). A series of tornadoes touched down between Amorita (Alfalfa) and Tonkawa (Kay). In Grant County, tornadoes passed near Wakita, Medford, Jefferson, Pond Creek, and Braman and produced F3 (severe tornado) damage in and around Salt Fork and Lamont. Extensive wind damage was reported in Alva (Woods) where a man died from a heart attack suffered while going to his storm shelter. The Newkirk Mesonet site (Kay) recorded a peak wind of 73 miles per hour and over 3 inches of rain was reported at several locations. Preliminary estimates indicated significant hail and wind damage to a number of fields of maturing wheat.

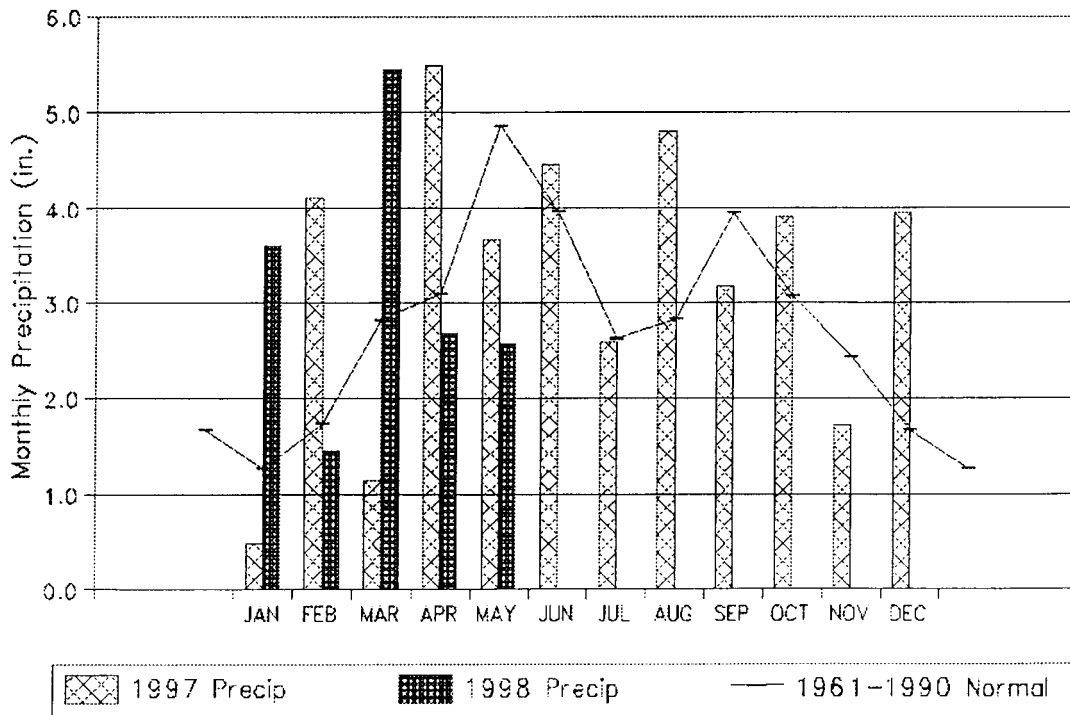
Several east central and southeastern Oklahoma locations received badly needed 2-to-3-inch rainfalls on the 26th and 27th, but statewide weather quickly segued into full-blown summer weather from the 28th through the end of the month. Southwestern and south central Oklahoma sweltered the most with Chattanooga hitting 107 degrees on the 30th and Waurika (Jefferson) reaching 108 degrees on 31st. Hollis, Altus, Hobart (Kiowa), and the Walters (Cotton) and Ringling (Jefferson) Mesonet sites each reached 106 degrees at least once during the 4-day period.

Howard L. Johnson

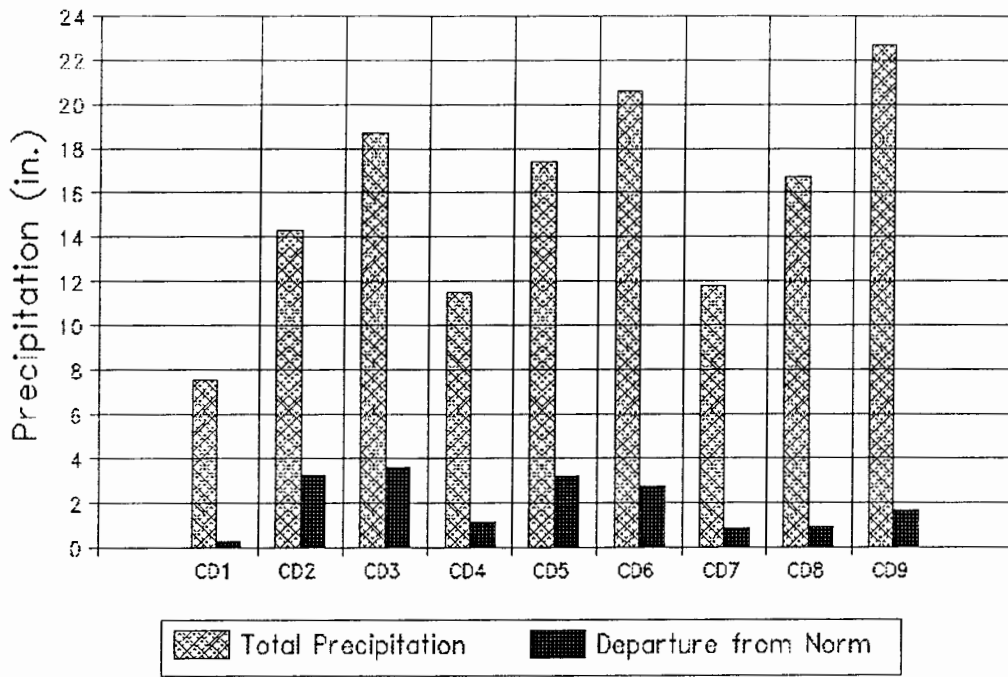
1997 and 1998 STATEWIDE TEMPERATURES Monthly Averages



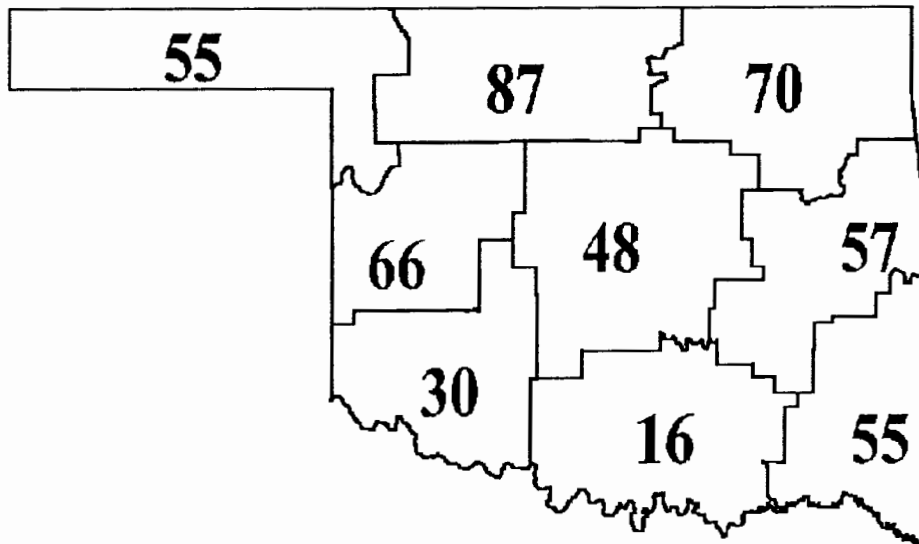
1997 and 1998 STATEWIDE PRECIPITATION Monthly Totals



CD Averaged Precipitation January through May 1998



CD PERCENT OF NORMAL PRECIPITATION MAY 1998



EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION
MAY, 1998

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	103	30	BUFFALO	33	1	BEAVER	2.45	9	BEAVER	3.38	BEAVER
2	102	31	CHEROKEE	32	2	FT SUPPLY	4.57	24	MEDFORD	5.88	FREEDOM
3	96	30	RALSTON	40	1	VINITA	2.62	25	FORAKER	5.58	LENAPAH
4	103	29	WEATHERFORD	37	1	HAMMON	2.62	15	ERICK	5.43	ERICK
				37	1	TALOGA					
5	103	30	CHICKASHA	36	1	NORMAN NWS	3.95	5	OKEMAH	5.30	OKEMAH
6	98	31	MCALESTER	42	1	WEBBERS FALLS	2.75	26	CLAYTON	5.97	LAKE EUFAULA
7	107	30	CHATTAHOOGA	39	1	MANGUM	1.96	26	WILLOW	3.13	WILLOW
8	108	31	WAURIKA	39	1	MARIETTA	1.82	26	ALLEN	2.96	DAISY
9	97	31	ANTLERS	39	1	SMITHVILLE	3.95	6	FANSHAWE	7.61	FANSHAWE
	97	31	POTEAU								
	97	29	WILBURTON								

TABLE OF 1997/1998 COMPARISONS

Station	MAY Temperature (°F)		MAY Precipitation (in.)	
	1998	1997	1998	1997
Arnett	68.7	62.0	3.21	4.73
Mutual	69.7	62.7	3.09	4.74
Tulsa	72.9	66.9	2.46	1.66
Elk City	71.5	65.5	2.42	3.80
Oklahoma City	72.5	66.7	2.13	3.68
McAlester	73.9	68.1	1.45	1.06
Altus Irr Station	75.3	68.4	1.01	3.76
Ardmore	76.9	69.3	0.23	7.19
Idabel	73.3	66.4	2.37	3.91

EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature (°F)	Ft. Supply	2	32	2
Maximum temperature (°F)	Waurika	8	108	31
Maximum 24-hour precipitation	Medford	2	4.57"	24

MAY 1998 SUMMARY FOR PANHANDLE DIVISION (CD1)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG DAY	DEV		COOL		TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP				FROM NORM	DEG DAY	DEG DAY	FROM NORM			MAX 24-HR		
ARNETT	332	1	68.7	31	3	97	30	38	1	41	-45	156	48	3.210	31	-0.92	2.06	9
BEAVER	593	1	68.9	31	4	101	31	33	1	48	-50	169	74	3.381	31	0.34	2.45	9
BOISE CITY	908	1	67.0	31	3.7	99	29	40	11	55	-66	118	50	0.542	31	-2.04	0.49	8
BUFFALO	1243	1	72.0	31	3.8	103	30	37	1	30	-28	247	91	2.250	31	-2.11	1.55	9
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.470	31	-1.22	1.94	9
GAGE	3407	1	70.7	31	3.5	99	29	37	1	39	-27	216	83	2.063	30	*****	1.33	9
GATE	3489	1	70.3	30	4	101	30	42	1	38	-50	197	70	2.003	30	*****	1.63	9
GOODWELL	3628	1	71.2	21	*****	102	31	45	17	22	*****	153	*****	0.000	21	*****	0.00	31
GUYMON	3835	1	67.9	31	*****	101	31	39	2	57	*****	147	*****	1.334	31	*****	0.86	9
HOOKER	4298	1	71.3	30	6.2	102	30	41	1	22	-73	211	114	1.350	31	-1.61	1.17	9
KENTON	4766	1	66.8	30	4.5	96	30	38	16	62	-63	116	76	0.636	31	-1.85	0.60	9
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.880	31	-1.41	1.38	9
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.473	31	-1.78	0.34	8
TURPIN	9017	1	70.4	21	*****	101	31	41	1	24	*****	137	*****	1.440	23	*****	1.10	9

MAY 1998 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG DAY	DEV		COOL		TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP				FROM NORM	DEG DAY	DEG DAY	FROM NORM			MAX 24-HR		
ALVA	193	2	71.2	31	*****	100	31	43	3	26	*****	218	*****	3.790	31	*****	1.35	9
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.542	31	*****	0.78	7
BILLINGS	755	2	70.6	31	3	101	31	43	4	35	-30	208	63	3.831	31	-0.68	1.20	25
BLACKWELL 2E	818	2	70.8	31	3.3	99	31	44	2	29	-27	208	74	4.452	31	-0.29	3.20	25
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.760	31	*****	3.32	25
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.391	31	*****	1.81	9
CHEROKEE	1724	2	74.5	30	5.5	102	31	47	3	3	-33	288	128	5.270	30	****	3.15	25
ENID	2912	2	71.5	29	*****	100	31	46	3	24	*****	213	*****	3.000	29	****	1.00	25
FT SUPPLY	3304	2	69.9	29	*****	100	29	32	2	41	*****	183	*****	2.580	30	****	1.88	8
FREEDOM	3358	2	71.1	29	*****	100	31	40	4	25	*****	202	*****	5.880	29	****	2.00	25
GREAT SALT P	3740	2	72.6	30	4.8	100	31	46	1	11	-46	238	95	4.421	31	0.57	2.51	25
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.791	31	****	1.95	25
HELENA	4019	2	71.1	31	4.6	99	31	43	3	27	-52	216	91	2.861	31	-1.16	0.97	25
JEFFERSON	4573	2	72.3	31	3.6	100	30	40	3	15	-27	241	84	4.630	31	0.11	3.70	24
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.650	31	****	2.36	25
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.672	31	****	4.57	24
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.400	31	****	1.25	7
MUTUAL	6139	2	69.7	31	3.7	99	31	36	1	47	-35	194	82	3.090	31	-0.93	1.52	9
NEWKIRK	6278	2	69.7	31	1.6	97	31	42	3	45	-6	189	43	1.860	31	-3.03	0.87	25
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.350	31	-1.43	1.26	9
PERRY	7012	2	73.6	31	4.4	98	31	45	3	15	-23	280	113	3.640	31	-1.63	0.95	7
PONCA CITY	7201	2	73.3	31	5.5	99	30	42	1	13	-56	269	114	3.371	31	-1.19	0.92	9
RED ROCK	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.980	31	-0.63	1.40	9
WAYNOKA	9404	2	73.9	27	*****	101	31	44	3	5	*****	246	*****	2.130	27	****	1.15	9
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.581	31	-1.38	1.68	9

MAY 1998 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV				MIN TEMP	DAY	HEAT DEG		DEV FROM		COOL DEG		DEV FROM		TOT PPT	NUM OBS	DEV FROM		MAX 24-HR	DAY
					FROM NORM	MAX TEMP	DAY	DAY			DAY	NORM	DAY	NORM	DAY	NORM	DAY	NORM			DAY			
BARNSDALL	535	3	71.3	31	2.7	94	23	42	3	18	-15	214	69	3.261	31	-1.54	1.70	25						
BARTLESVILLE	548	3	72.8	31	4.1	94	30	42	1	11	-25	251	102	2.392	31	-2.01	0.80	25						
BIXBY	782	3	71.2	31	3.6	93	31	43	1	18	-33	210	79	3.930	31	-1.07	2.00	25						
BURBANK	1256	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.790	31	-0.94	1.36	25						
CHELSEA	1717	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.510	31	*****	0.98	25						
CLAREMORE	1828	3	70.6	31	3.6	90	31	44	2	31	-36	204	75	3.430	31	-1.21	1.10	7						
CLEVELAND 2	1902	3	70.2	31	*****	92	30	42	1	21	*****	183	*****	2.510	31	*****	0.90	25						
FORAKER	3250	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.880	31	-1.22	2.62	25						
HOLLOW	4258	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.362	31	-0.66	1.90	25						
HOMINY	4289	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.122	31	-2.43	0.54	10						
KANSAS	4672	3	70.9	31	3.7	90	31	42	3	22	-33	203	81	4.300	31	-1.09	2.00	25						
LENAPAH	5118	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.580	31	*****	2.20	25						
MANNFORD	5522	3	71.8	31	3.3	92	30	42	1	16	-22	228	82	3.570	31	-1.25	1.47	25						
MARAMEC	5540	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.531	31	-1.26	1.11	25						
MIAMI	5855	3	70.1	31	3.4	92	31	39	10	31	-44	189	63	0.441	31	-4.57	0.41	13						
PAWHUSKA	6935	3	71.9	31	3.9	94	30	42	1	15	-31	228	89	3.932	31	-0.91	1.80	25						
PAWNEE	6940	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.240	31	-0.66	1.06	26						
PRYOR	7309	3	70.5	31	3.5	91	31	42	4	37	-32	207	77	3.411	31	-1.26	0.80	27						
RALSTON	7390	3	72.6	31	3.8	96	30	44	3	12	-29	248	90	2.791	31	-1.97	1.15	25						
SKIATOOK	8258	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.080	31	-2.61	0.65	10						
SPAVINAW	8380	3	73.8	31	5.1	92	31	44	3	13	-29	284	128	4.383	31	-0.39	1.50	7						
TULSA	8992	3	72.9	31	3.6	94	30	44	1	13	-29	256	82	2.462	31	-3.14	0.82	6						
UPPER SPAV	9101	3	73.5	31	*****	95	30	45	3	15	*****	280	*****	5.032	31	*****	1.67	25						
VINITA	9203	3	69.5	31	2.5	91	31	40	1	28	-41	169	38	3.630	31	-1.48	1.62	27						
WAGONER	9247	3	73.6	31	4.6	93	31	44	3	9	-25	276	118	0.000	31	-4.95	0.00	31						
WANN	9298	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.431	31	*****	1.75	25						
WYNONA	9792	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.271	31	*****	0.68	25						

MAY 1998 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV				MIN TEMP	DAY	HEAT DEG		DEV FROM		COOL DEG		DEV FROM		TOT PPT	NUM OBS	DEV FROM		MAX 24-HR	DAY
					FROM NORM	MAX TEMP	DAY	DAY			DAY	NORM	DAY	NORM	DAY	NORM	DAY	NORM			DAY			
CANTON DAM	1445	4	71.4	28	*****	99	31	40	1	28	*****	207	*****	3.210	28	*****	0.73	9						
CLINTON	1909	4	73.7	30	4.2	101	29	46	1	7	-23	267	97	2.771	30	*****	2.03	26						
COLONY	2039	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.812	31	*****	0.48	9						
CORDELL	2125	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.510	31	-3.18	0.56	9						
ELK CITY	2849	4	71.5	31	2.9	101	30	44	1	12	-16	212	73	2.420	31	-2.15	1.04	26						
ERICK	2944	4	71.5	31	3.2	100	30	39	1	18	-22	221	79	5.430	31	1.34	2.62	15						
GEARY	3497	4	73.3	29	*****	97	31	43	1	13	*****	254	*****	1.810	29	*****	0.66	26						
HAMMON	3871	4	70.2	30	3.3	98	30	37	1	33	-30	190	69	2.150	30	*****	1.04	9						
LEEDEY	5090	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.980	31	-1.44	1.47	10						
MORAVIA	6035	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.381	31	-2.29	1.10	26						
OKEENE	6629	4	72.8	31	3.5	100	30	43	3	18	-13	260	97	3.490	31	-0.95	1.30	5						
RETROP	7565	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.280	31	*****	1.62	26						
REYDON	7579	4	70.2	25	*****	99	30	40	1	30	*****	160	*****	3.630	26	*****	2.02	9						
SAYRE	7952	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.660	31	-0.67	1.41	26						
SWEETWATER	8652	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.951	31	*****	2.25	9						
TALOGA	8708	4	70.6	31	3	99	30	37	1	35	-16	210	78	2.480	31	-2.26	0.98	9						
THOMAS	8815	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.480	31	*****	0.78	26						
VICI	9172	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.312	31	-1.10	1.58	8						
WATONGA	9364	4	73.1	31	4.7	99	30	44	3	18	-19	268	126	3.310	31	-1.31	2.04	25						
WEATHERFORD	9422	4	72.3	30	4	103	29	46	1	15	-22	236	97	2.260	30	*****	1.58	25						

MAY 1998 SUMMARY FOR CENTRAL DIVISION (CD5)

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 FROM NORM	MAX 24-HR	DAY
					FROM NORM	MAX TEMP	DAY	TEMP											
AMBER	200	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.810	31	*****	0.95	9	
ARCADIA	288	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.920	31	*****	1.04	5	
BLANCHARD	830	5	74.0	31	4.4	97	30	46	1	4	-18	281	117	2.334	31	-2.62	1.55	26	
BRISTOW	1144	5	72.8	31	3.6	95	30	43	1	10	-17	253	96	3.523	31	-1.99	1.37	10	
CHANDLER	1684	5	71.6	30	2.4	93	31	43	1	17	-10	215	58	2.590	30	*****	1.47	5	
CHICKASHA EX	P 1750	5	74.4	31	4	103	30	42	1	6	-7	297	116	1.340	31	-3.34	0.75	26	
COX CITY	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.850	31	*****	0.58	26	
CRESCENT	2242	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.140	31	*****	0.95	26	
CUSHING	2318	5	71.8	30	3.8	96	31	46	1	14	-36	219	77	2.970	30	*****	1.47	26	
EDMOND	2788	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.480	31	*****	0.80	25	
EL RENO	2818	5	72.0	31	3.3	98	31	44	1	16	-11	233	92	3.080	31	-2.33	1.47	26	
GUTHRIE	3821	5	72.1	31	2.4	93	31	37	1	11	-18	230	56	4.630	31	-0.34	2.40	5	
HENNESSEY	4055	5	71.3	27	*****	100	30	42	3	24	*****	193	*****	2.180	29	*****	0.61	10	
INGALLS	4489	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.290	31	*****	0.95	25	
KINGFISHER	4861	5	70.3	31	0.9	98	31	41	2	37	7	202	35	3.090	31	-1.54	1.07	25	
KONAWA	4915	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.810	31	-4.89	0.46	25	
MARSHALL	5589	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.600	31	-2.28	0.78	10	
MEEKER	5779	5	69.2	31	0.2	93	31	40	2	36	7	167	14	2.140	31	-3.43	0.84	5	
MULHALL	6110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.970	31	*****	0.83	26	
NORMAN NWS	6386	5	71.0	30	1.3	98	30	36	1	18	3	198	37	1.541	31	-3.62	0.73	26	
OKEMAH	6638	5	74.9	31	5.9	97	30	49	1	3	-21	310	162	5.300	31	0.00	3.95	5	
OKLAHOMA CTY	F.6659	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.923	31	*****	1.05	10	
OKLAHOMA CTY	6661	5	72.5	31	4.1	96	30	48	3	10	-22	243	107	2.125	31	-3.09	0.89	9	
PERKINS	7003	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.460	31	-3.03	0.88	10	
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.440	31	*****	1.30	25	
PRAGUE	7264	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.290	31	-3.00	0.84	5	
PURCELL	7327	5	70.6	31	0.6	98	31	37	1	29	15	203	34	1.920	31	-3.65	1.55	26	
SEMINOLE	8042	5	73.5	31	2.9	98	30	47	3	1	-14	264	75	1.860	31	-3.37	1.19	25	
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.272	31	-2.40	2.51	26	
STELLA	8479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.701	31	*****	1.82	26	
STILLWATER	8501	5	72.1	31	4.4	95	31	43	1	15	-34	237	104	3.342	31	-1.79	1.15	26	
STROUD	8563	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.785	31	*****	0.91	26	
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.400	31	*****	1.40	25	
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.810	31	*****	1.11	27	
UNION CITY	9086	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.685	31	-3.90	0.86	9	
WELTY	9479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.850	31	*****	1.50	26	
WEWOKA	9575	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.880	31	-3.33	1.15	26	

MAY 1998 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

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 FROM NORM	MAX 24-HR	DAY
					FROM NORM	MAX TEMP	DAY	TEMP											
ASHLAND	364	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.523	31	*****	1.13	26	
BEGGS	631	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.540	31	*****	1.86	11	
CALVIN	1391	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.700	31	-2.98	1.80	27	
CHECOTAH	1711	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.833	31	-1.59	1.75	26	
CLAYTON	1858	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.190	31	*****	2.75	26	
DEWAR	2485	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.253	31	-0.98	2.50	5	
DUSTIN	2690	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.891	31	*****	1.03	10	
EUFAULA	2993	6	74.6	31	4.2	97	30	52	4	1	-16	300	116	3.780	31	-1.90	1.20	5	
HANNA	3884	6	72.8	31	3.3	94	31	42	1	10	-8	251	93	3.922	31	-2.09	1.67	26	
HASKELL	3956	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.450	31	-1.76	1.37	25	
LAKE EUFAULA	4975	6	72.0	25	*****	89	31	49	2	17	*****	193	*****	5.970	27	*****	2.26	6	
LYONS	5437	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.901	31	-2.71	1.18	26	
MARBLE CITY	5546	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.930	31	*****	1.70	26	
MCALESTER	5664	6	73.9	31	4.8	98	31	44	1	9	-27	285	123	1.453	31	-4.44	0.73	5	
MCCURTAIN	5693	6	76.5	22	*****	95	31	54	10	0	*****	253	*****	4.275	31	-1.77	2.02	6	
OKMULGEE	6670	6	72.6	30	4.4	95	31	48	3	3	-31	231	98	3.061	30	*****	1.33	26	
OKTAHA	6678	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.040	31	*****	1.83	26	
SALLISAW	7862	6	72.0	31	2.6	91	31	46	1	23	-4	240	76	3.100	31	-2.71	1.30	26	
SCPIO	7979	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.160	31	*****	1.10	26	
SCRAPER	7993	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.200	31	*****	2.00	26	
STILWELL	8506	6	68.0	30	0.6	88	23	40	9	47	-6	136	10	4.860	30	*****	2.15	26	
TAHLEQUAH	8677	6	71.5	31	3.5	90	31	41	3	21	-41	224	69	4.460	31	-0.92	3.30	26	
WEBBERS FALL	9445	6	72.1	31	3.6	93	31	43	2	12	-30	234	84	3.001	31	-2.64	1.35	26	
WETUMKA	9571	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.371	31	-1.92	1.90	26	

MAY 1998 SUMMARY FOR SOUTHWEST 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	
					NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ALTUS	179	7	75.3	31	3.7	106	29	45	1	2	-10	321	105	1.010	31	-3.22	0.43	26
ALTUS DAM	184	7	76.4	31	6.3	105	30	42	1	7	-14	360	181	2.440	31	-1.97	1.24	9
ANADARKO	224	7	73.3	26	*****	98	30	41	1	17	*****	233	*****	2.050	26	*****	1.52	26
APACHE	260	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.210	31	-3.80	0.60	26
ALTUS AFB	447	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.414	29	*****	0.56	26
CARNEGIE	1504	7	75.4	25	*****	104	29	51	9	6	*****	266	*****	1.340	30	*****	0.62	8
CHATTANOOGA	1706	7	74.7	30	3.7	107	30	48	11	8	-2	298	103	0.260	30	****	0.20	26
DUNCAN 11 W	2668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.323	31	****	0.20	26
FREDERICK	3353	7	75.3	31	5	105	29	43	1	6	-14	326	143	0.410	31	-3.89	0.25	25
HEADRICK	3998	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.860	31	****	0.40	26
HOBART	4204	7	74.3	31	4.4	106	29	45	1	7	-17	295	120	1.847	31	-2.65	1.02	9
HOLLIS	4249	7	75.2	31	4	106	29	47	1	4	-13	319	110	1.640	31	-1.88	0.87	26
LAWTON	5063	7	75.0	31	5	104	30	48	1	6	-9	315	145	0.140	31	-4.78	0.12	9
LOOKEBA	5329	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.732	31	-3.08	0.68	26
MANGUM	5509	7	73.4	31	2	104	30	39	1	11	-4	272	59	2.130	31	-2.12	1.07	26
RANDLETT	7403	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.181	31	****	0.18	9
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.840	31	-3.01	0.84	26
SEDAN	8016	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.470	31	****	0.63	9
SNYDER	8299	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.680	24	****	0.50	26
VINSON	9212	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.840	31	-1.13	1.28	26
WALTERS	9278	7	74.8	31	3.3	102	30	49	1	6	-3	311	100	0.300	31	-4.82	0.15	26
WICHITA MT	9629	7	73.8	29	*****	102	30	43	2	9	*****	263	*****	0.660	29	****	0.35	26
WILLOW	9668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.130	31	****	1.96	26

MAY 1998 SUMMARY FOR SOUTH CENTRAL 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	
					NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ADA	17	8	73.4	31	3.8	97	31	46	1	6	-14	267	104	0.852	31	-4.77	0.65	26
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.970	31	****	1.82	26
ARDMORE	292	8	76.9	31	4.9	100	31	50	1	2	-3	371	149	0.230	31	-4.75	0.11	26
ATOKA DAM	394	8	73.7	20	*****	93	29	42	1	8	*****	182	*****	1.460	20	****	1.08	26
BOKCHITO	917	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.900	31	****	0.50	28
CANEY	1437	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.030	31	****	0.46	9
CENTRAHOMA	1648	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.450	31	****	0.35	28
CHICKASAW	1745	8	72.6	31	3.6	96	31	42	1	17	-2	254	112	0.860	31	-4.89	0.32	26
COLEMAN	2011	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.830	31	****	0.40	9
COMANCHE	2054	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.050	31	-3.96	0.70	26
DAISY	2354	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.960	31	-3.95	1.34	6
DUNCAN	2660	8	73.2	31	3.2	99	31	43	2	13	-2	269	99	0.503	31	-4.64	0.19	10
DURANT	2678	8	74.0	26	*****	97	31	48	1	5	*****	238	*****	0.831	28	****	0.37	9
ELMORE CITY	2872	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.400	31	****	0.28	9
GRADY	3688	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.440	31	****	0.32	9
HEALDTON	4001	8	73.3	30	2.8	98	31	43	1	10	-4	257	77	0.820	30	****	0.42	26
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.270	31	****	0.24	8
KETCHUM RAN	4780	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.480	31	****	0.28	9
KINGSTON	4865	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.620	31	-4.67	0.43	9
LEHIGH	5108	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.051	31	****	0.75	26
LINDSAY	5216	8	72.4	31	2.4	100	31	46	1	10	-4	240	71	1.340	31	-4.10	1.12	25
LOCO	5247	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.350	31	****	0.23	9
MARIETTA	5563	8	72.9	31	2.2	96	31	39	1	14	3	259	71	0.680	31	-4.25	0.52	9
MARLOW	5581	8	74.4	31	4.9	102	31	47	1	3	-13	296	140	0.360	31	-4.79	0.13	26
MCGEE CREEK	5713	8	74.1	31	*****	97	31	46	1	5	*****	289	*****	2.430	31	****	1.30	26
PAULS VALLEY	6926	8	71.6	31	1	98	31	40	1	18	1	222	31	0.730	31	-5.01	0.46	26
PONTOTOC	7214	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.460	31	-4.23	1.00	25
TUSSY	9032	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.060	31	****	0.03	8
WAURIKA	9395	8	76.4	31	4.7	108	31	43	1	4	-5	357	141	0.331	31	-4.07	0.33	9

MAY 1998 SUMMARY FOR SOUTHEAST DIVISION (CD9)

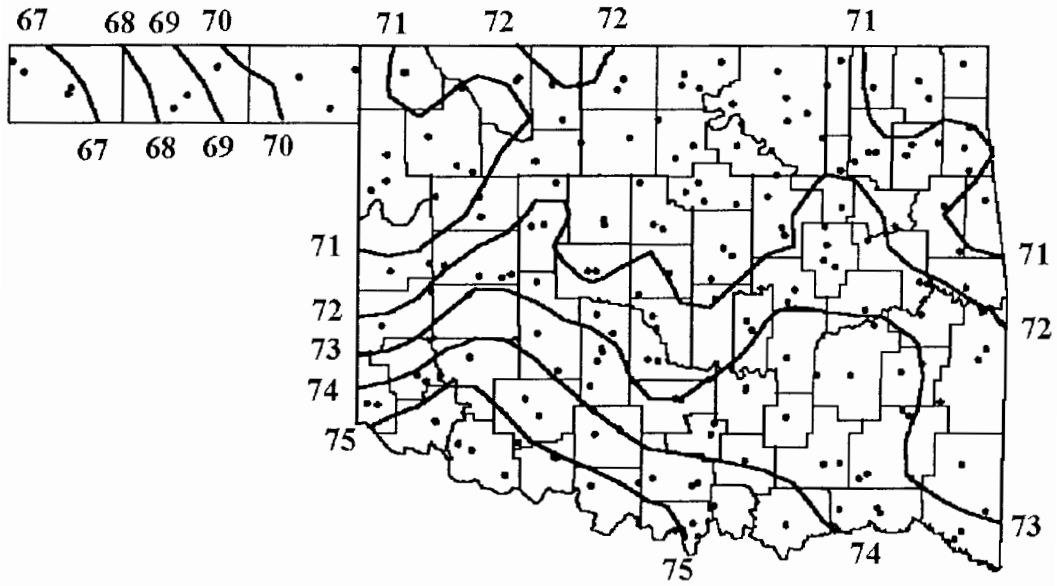
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	MIN TEMP	MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP										FROM NORM	MAX 24-HR	
ANTLERS	256	9	73.8	31	4.1	97	31	44	1	6	-11	278	117	3.120	31	-3.08	1.50	5
BATTIEST	567	9	70.9	29	*****	94	31	41	1	13	*****	184	*****	1.200	29	*****	0.75	28
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.300	31	*****	2.60	26
BOSWELL	980	9	72.7	31	2.8	95	31	43	1	10	-4	248	82	1.380	31	-4.29	0.53	28
BROKEN BOW	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.820	31	-3.50	1.90	28
CARNASAW	1499	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.790	31	-4.00	2.47	28
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.040	31	-4.78	1.89	27
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.610	31	0.98	3.95	6
HEAVENER	4008	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.590	31	-2.91	1.98	6
HUGO	4384	9	73.8	31	2.8	95	31	48	1	3	-8	276	80	2.350	31	-3.63	1.80	28
IDABEL	4451	9	73.3	31	3.6	96	31	43	1	9	-10	267	103	2.371	31	-3.53	2.10	28
PAGE	6842	9	69.9	27	*****	91	31	40	2	34	*****	167	*****	6.621	28	*****	2.78	26
POTEAU	7254	9	72.6	31	*****	97	31	44	2	10	*****	246	*****	5.660	31	*****	2.14	5
SMITHVILLE	8285	9	66.6	10	*****	93	31	39	1	18	*****	34	*****	1.501	11	*****	0.80	27
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.480	31	-2.24	1.10	27
TUSKAHOMA	9023	9	72.9	31	3.2	96	31	41	1	17	1	261	99	2.661	31	-4.04	1.41	26
VALLIANT	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.650	31	-3.53	2.09	28
WILBURTON	9634	9	73.4	31	4.5	97	29	41	1	8	-30	269	110	5.891	31	-0.20	2.58	25

MAY 1998 CLIMATE DIVISION SUMMARY

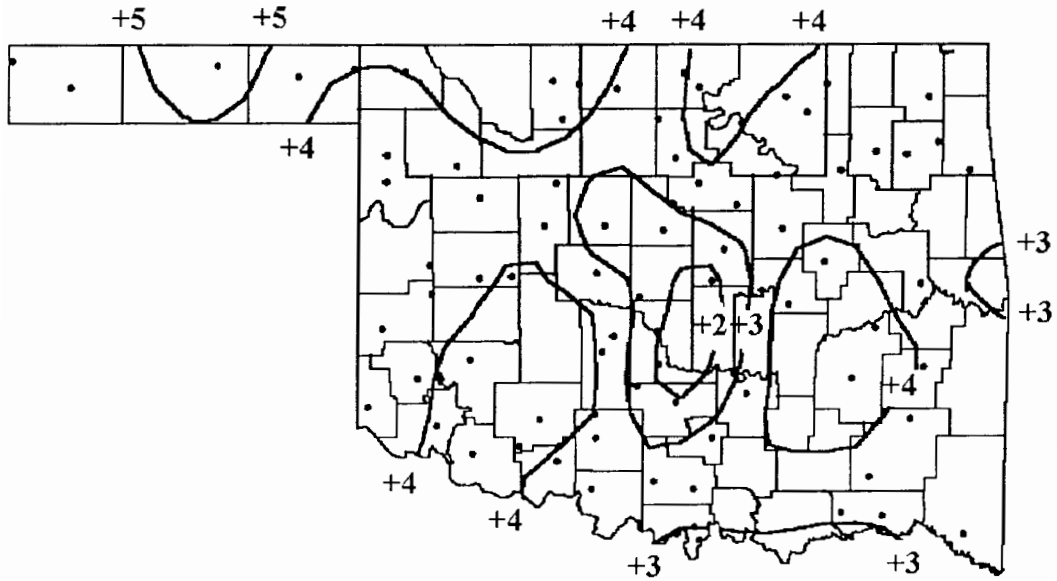
CD	MEAN TEMP	NUM OBS	DEV		MIN DAY	MIN TEMP	MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY
			FROM NORM	MAX TEMP										FROM NORM	MAX 24-HR	
1	69.3	9	4.2	103	30	33	1	43	-52	175	75	1.750	10	-1.44	2.45	9
2	71.7	11	3.8	102	31	32	2	24	-29	231	87	3.600	20	-0.67	4.57	24
3	71.7	16	3.7	96	30	39	10	19	-30	227	84	3.270	27	-1.61	2.62	25
4	72.0	8	3.7	103	29	37	1	19	-22	233	90	2.960	14	-1.51	2.62	15
5	72.2	15	3	103	30	36	1	15	-12	237	80	2.520	34	-2.73	3.95	5
6	72.2	8	3.3	98	31	40	9	16	-19	237	81	3.330	21	-2.27	3.30	26
7	74.9	9	4.6	107	30	39	1	6	-11	313	129	1.380	17	-3.19	1.96	26
8	73.8	11	3.6	108	31	39	1	9	-6	280	103	0.870	26	-4.51	1.82	26
9	73.2	7	3.7	97	29	39	1	9	-14	263	102	3.510	15	-2.81	3.95	6

MESONET MONTHLY SUMMARY for MAY 1998

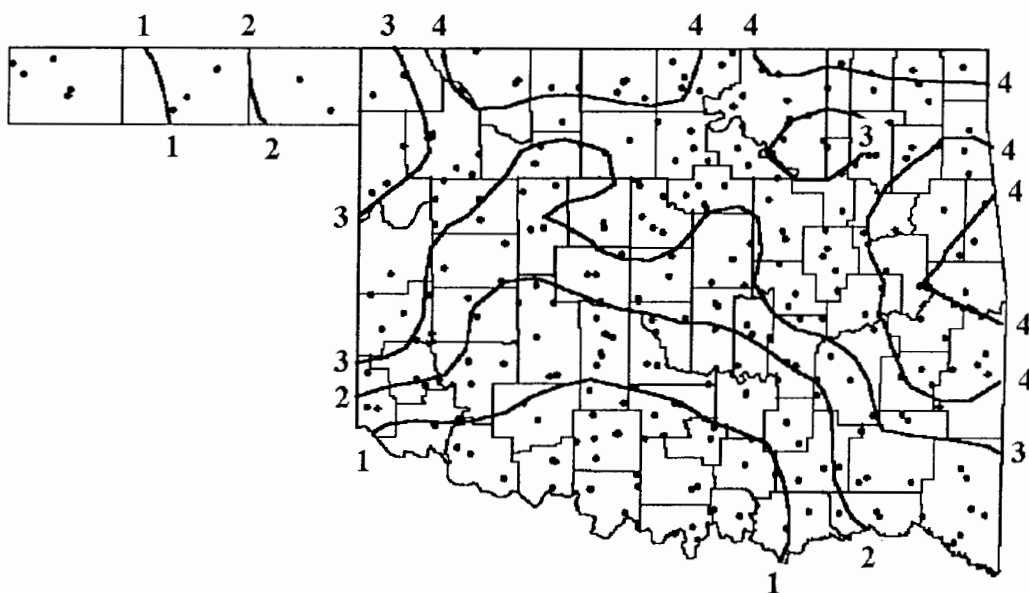
NAME	MEAN		MAX		MIN		TOT		MAX		NAME	MEAN		MAX		MIN		TOT		MAX	
	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY		TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY
PANHANDLE																					
Arnett	70.8	100	29	45	3	23	202	2.44	1.03	9	Goodwell	68.4	100	29	37	1	52	156	.73	.65	8
Beaver	70.4	101	28	39	1	35	202	2.70	1.60	9	Hooker	68.9	102	30	36	1	45	166	1.35	.92	8
Boise City	65.8	97	29	39	10	71	96	.51	.36	8	Kenton	65.8	96	29	40	1	74	97	.47	.26	8
Buffalo	71.1	101	30	38	3	40	230	2.57	1.33	9	Slapout	70.9	100	29	42	3	27	211	2.04	1.11	9
NORTH CENTRAL																					
Alva	70.1	99	30	43	1	30	189	4.90	1.34	5	May Ranch	*****	97	30	57	12	****	****	5.26	1.41	24
Blackwell	71.5	98	30	43	1	19	221	4.79	3.04	24	Medford	71.0	100	30	42	3	27	213	4.32	3.31	24
Breckenridge	70.7	98	30	41	1	29	206	2.74	.74	6	Newkirk	71.0	94	30	45	3	21	206	2.92	1.67	24
Cherokee	70.9	99	30	42	1	29	212	4.46	1.92	24	Red Rock	71.6	95	30	43	1	18	221	3.94	1.04	26
Fairview	72.0	102	30	42	1	28	244	2.08	.80	5	Seiling	71.1	97	29	42	3	25	214	3.79	1.87	9
Freedom	70.7	98	30	39	3	30	206	4.77	1.46	9	Woodward	71.2	96	29	41	3	29	221	2.39	1.07	9
Lahoma	70.8	101	30	43	1	28	207	1.78	.63	6											
NORTHEAST																					
Bixby	72.3	93	30	44	1	10	236	3.67	1.76	25	Nowata	70.1	91	30	38	1	29	187	3.65	.93	24
Burbank	71.4	95	30	41	1	18	216	2.76	.75	9	Pawnee	71.6	95	30	43	1	15	221	3.91	1.18	26
Catoosa	72.4	92	30	44	1	11	240	2.46	.66	26	Pryor	70.3	90	30	41	1	25	190	4.05	1.21	9
Claremore	71.7	92	30	43	3	16	224	3.44	1.06	6	Skiatook	71.5	90	30	43	1	15	218	2.23	.78	25
Copan	71.7	92	30	41	1	17	225	*****	1.27	24	Tulahassee	72.7	94	31	44	1	12	249	6.26	3.13	26
Foraker	71.2	92	30	45	1	14	208	6.60	3.38	24	Vinita	70.2	90	31	40	1	27	188	3.59	1.09	24
Jay	70.4	89	19	41	3	34	201	3.23	1.15	25	Wynona	71.6	93	30	41	1	14	219	2.11	.45	9
Miami	71.0	91	31	44	1	24	210	4.36	.95	25											
WEST CENTRAL																					
Bessie	73.7	101	29	48	1	6	277	2.22	1.57	26	Putnam	71.1	96	21	45	3	25	215	3.11	1.35	25
Butler	72.8	100	29	42	1	10	252	1.92	.61	26	Retrop	73.4	101	29	46	1	6	267	3.21	.98	26
Camargo	69.9	96	29	40	1	32	185	4.02	1.42	9	Watonga	72.1	100	21	46	3	22	244	3.14	1.18	25
Cheyenne	71.5	97	29	46	1	16	218	4.42	1.62	14	Weatherford	72.6	102	29	48	1	15	250	2.49	1.52	26
Erick	72.0	102	29	40	1	14	230	5.01	1.71	14											
CENTRAL																					
Acme	74.4	100	29	46	1	7	299	.51	.28	26	Minco	72.3	98	30	46	1	13	238	1.08	.46	9
Bowlegs	71.9	95	30	42	1	12	225	1.42	.64	25	Ninnekah	73.9	100	29	46	1	8	282	1.02	.66	26
Bristow	71.0	95	30	41	1	15	201	2.77	1.31	9	Norman	72.8	99	30	48	1	11	254	1.57	.67	9
Chandler	72.0	93	30	46	1	10	228	2.63	1.22	5	Oilton	70.8	93	30	41	1	23	203	3.50	.86	9
Chickasha	72.7	101	30	45	1	12	249	.86	.42	26	Okemah	71.7	95	30	43	1	12	221	5.75	3.67	5
El Reno	70.4	95	30	41	3	30	199	2.86	1.35	26	Perkins	72.5	98	30	44	1	14	246	2.87	.70	9
Guthrie	72.4	96	30	44	3	14	243	4.99	2.48	5	Shawnee	72.5	96	30	44	1	10	241	2.27	1.04	26
Kingfisher	71.5	99	30	40	1	25	228	2.77	.74	25	Spencer	72.9	95	30	44	1	11	256	2.34	.98	25
Marena	71.4	95	30	44	1	13	211	3.62	1.31	26	Stillwater	71.8	95	30	42	1	19	228	3.29	1.11	26
Marshall	71.6	98	30	41	3	24	229	2.87	1.02	26	Washington	72.7	97	30	47	1	7	245	1.12	.67	26
EAST CENTRAL																					
Calvin	73.3	97	30	45	1	7	264	2.07	.76	26	Preston	72.7	92	30	48	1	8	247	2.80	1.08	25
Cookson	70.5	94	20	40	1	27	199	3.87	1.13	26	Sallisaw	72.2	95	31	43	1	13	237	2.63	.72	26
Eufaula	72.7	94	31	44	1	10	250	5.20	1.98	5	Stigler	72.4	94	31	42	1	13	242	4.87	2.53	6
Haskell	71.8	93	30	42	1	15	226	3.70	1.51	25	Stuart	72.9	97	31	44	1	9	253	2.11	1.23	26
Hectorville	72.5	92	30	46	1	10	243	3.35	1.13	9	Tahlequah	70.4	90	31	39	1	29	196	4.71	2.07	26
McAlester	73.4	98	31	43	1	11	271	1.77	.79	5	Webbers Falls	73.3	98	31	44	1	11	268	3.80	1.50	26
Okmulgee	71.8	93	30	42	1	12	221	2.98	1.23	5	Westville	70.3	89	30	40	1	28	192	4.34	2.10	25
SOUTHWEST																					
Altus	76.1	103	29	47	1	1	344	.91	.35	15	Hollis	74.9	104	29	46	1	4	312	.28	.10	14
Apache	73.0	100	29	49	4	11	257	1.60	.87	26	Mangum	73.5	105	29	45	1	7	272	1.41	.43	15
Fort Cobb	74.2	104	29	47	1	8	295	.91	.39	9	Medicine Park	74.7	101	29	51	9	5	307	1.56	1.02	9
Grandfield	75.5	104	29	47	3	4	330	.12	.06	8	Tipton	76.5	104	29	47	1	2	358	.53	.19	25
Hinton	72.6	101	29	45	3	15	252	1.19	.48	26	Walters	75.3	106	31	48	1	3	322	.24	.13	26
Hobart	74.4	105	29	45	1	6	299	1.97	.90	9											
SOUTH CENTRAL																					
Ada	73.6	100	31	44	1	7	274	.95	.61	26	Lane	73.6	98	31	43	1	8	275	1.08	.43	27
Ardmore	75.1	102	31	48	1	1	314	.21	.17	8	Madill	75.4	101	31	49	1	0	322	.60	.23	8
Burneyville	75.3	102	31	46	1	2	323	.54	.35	8	Pauls Valley	74.3	99	30	48	1	2	289	.38	.24	8
Byars	73.7	96	30	49	1	4	274	1.39	1.02	26	Ringling	75.1	106	31	50	1	1	315	.62	.27	8
Centrahoma	73.3	99	31	42	1	9	265	.54	.23	27	Sulphur	73.6	98	31	45	1	6	273	1.18	.47	26
Durant	75.5	101	31	50	1	0	324	.97	.65	27	Tishomingo	73.6	101	31	44	1	4	271	.47	.18	8
Ketchum Ranch	74.7	103	31	49	1	0	302	.53	.29	8	Waurika	75.6	107	31	50	1	1	328	.35	.32	8
SOUTHEAST																					
Antlers	72.7	97	31	40	1	11	251	4.88	2.25	5	Idabel	74.2	97	31	45	1	6	292	2.27	2.21	27
Broken Bow	72.8	96	31	44	1	7	247	3.18	2.99	27	Mt Herman	72.1	94	31	43	1	13	233	2.90	2.50	27
Clayton	73.7	96	31	43	1	7	276	3.60	1.82	26	Talihina	73.0	94	31	41	1	12	259	3.64	1.37	26
Cloudy	72.5	95	31	43	1	10	242	1.84	1.05	27	Wilburton	73.0	96	31	42	1	12	259	3.57	1.91	26
Hugo	74.4	95	31	47	1	3	293	2.42	2.12	27	Wister	71.4	95	31	40	1	13	210	5.10	1.53	26



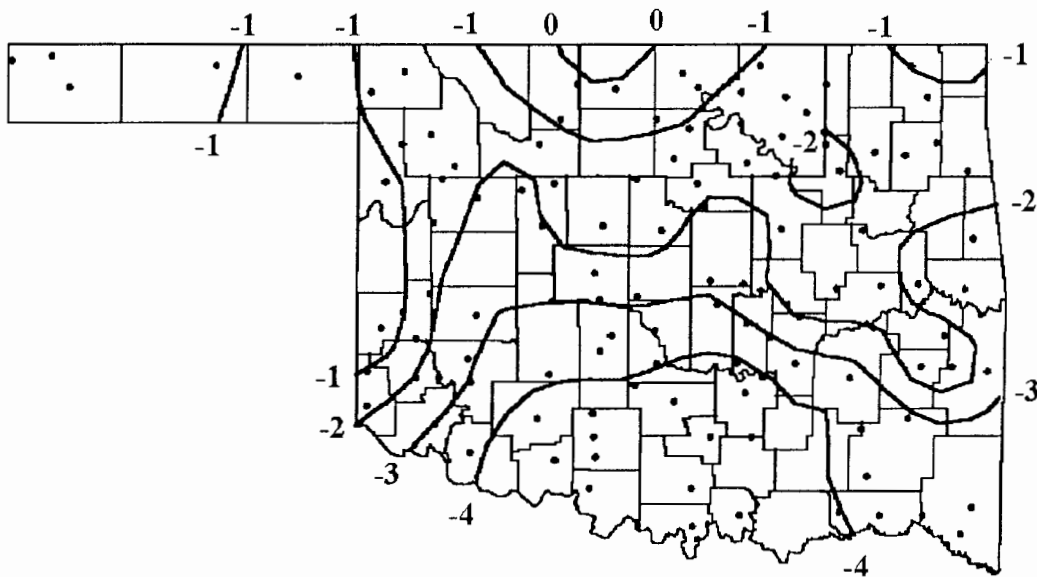
MAY 1998 AVERAGE MONTHLY TEMPERATURE (°F)



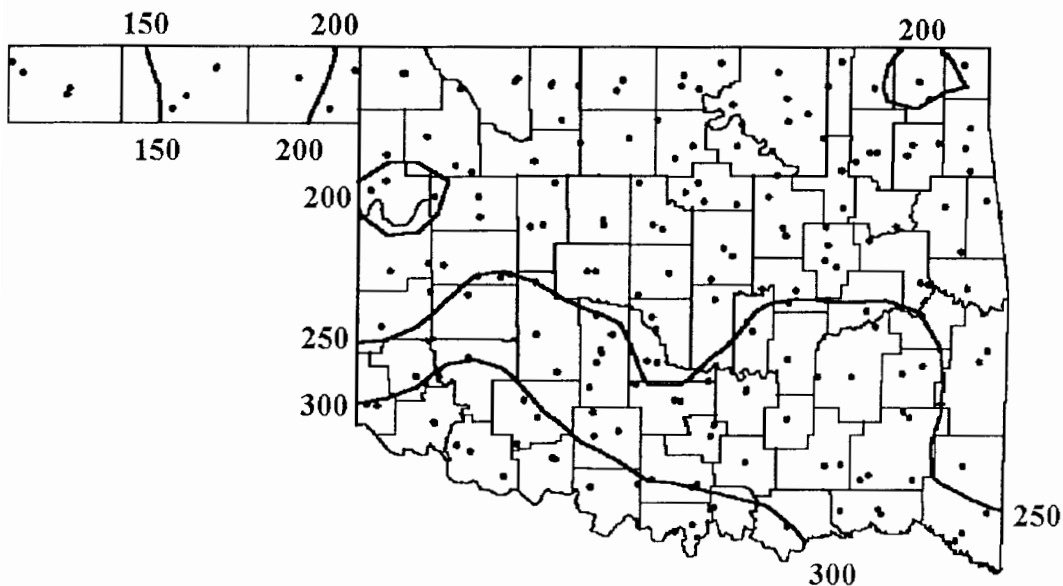
MAY 1998 DEPARTURE FROM NORMAL TEMPERATURE (°F)



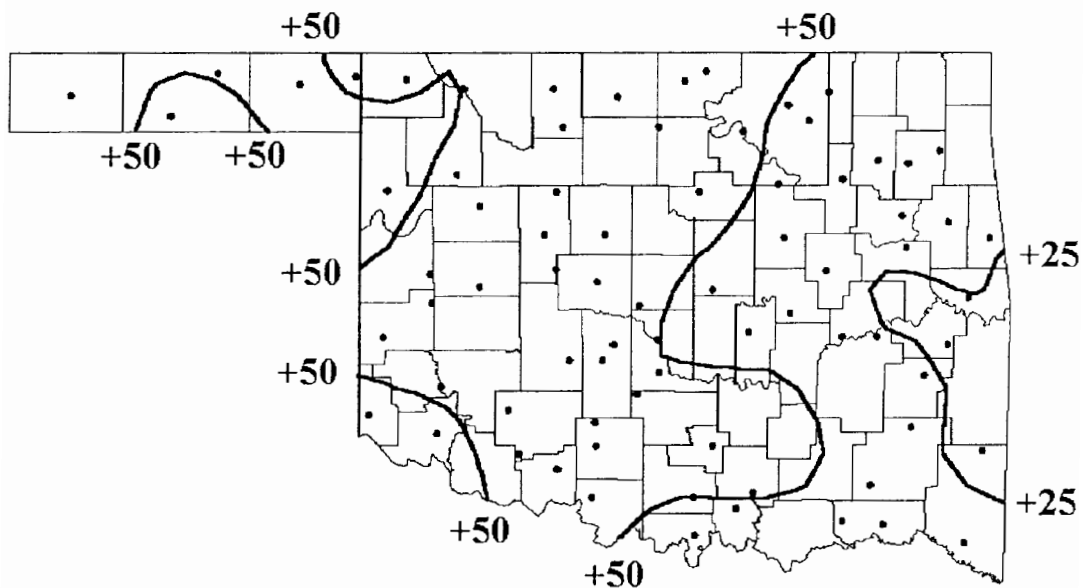
MAY 1998 TOTAL PRECIPITATION
(INCHES)



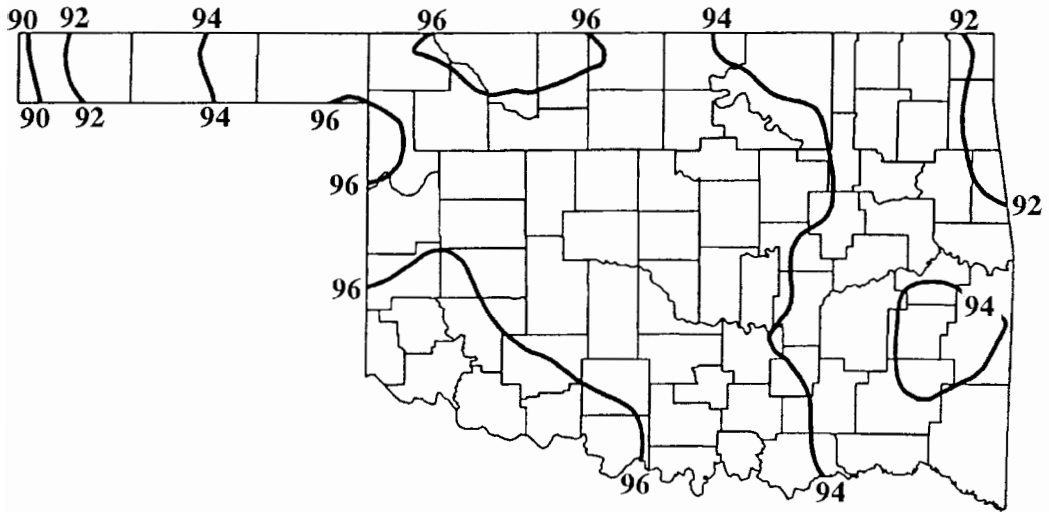
MAY 1998 DEPARTURE FROM NORMAL PRECIPITATION
(INCHES)



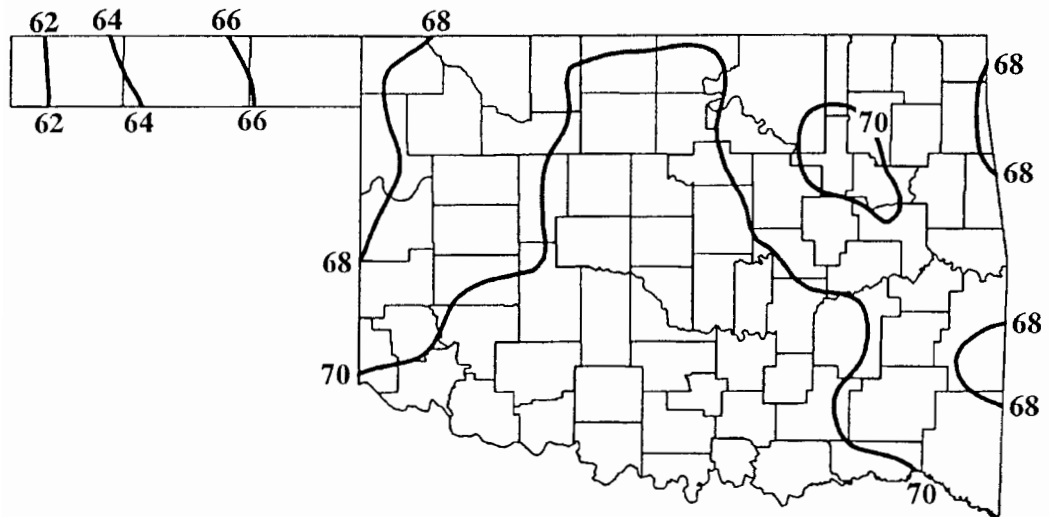
MAY 1998 ACCUMULATED COOLING DEGREE DAYS (°F)



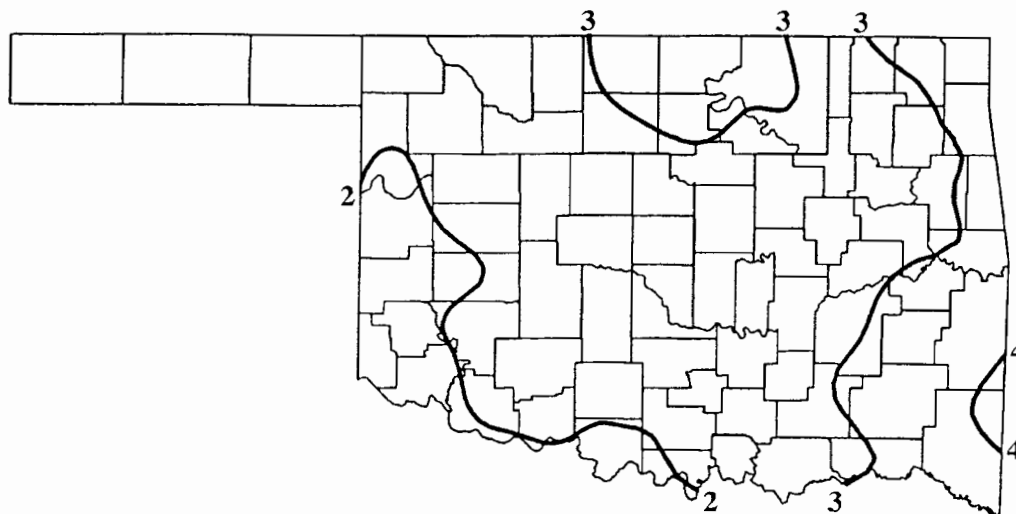
MAY 1998 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)



JULY NORMAL DAILY MAXIMUM TEMPERATURE (°F)



JULY NORMAL DAILY MINIMUM TEMPERATURE (°F)



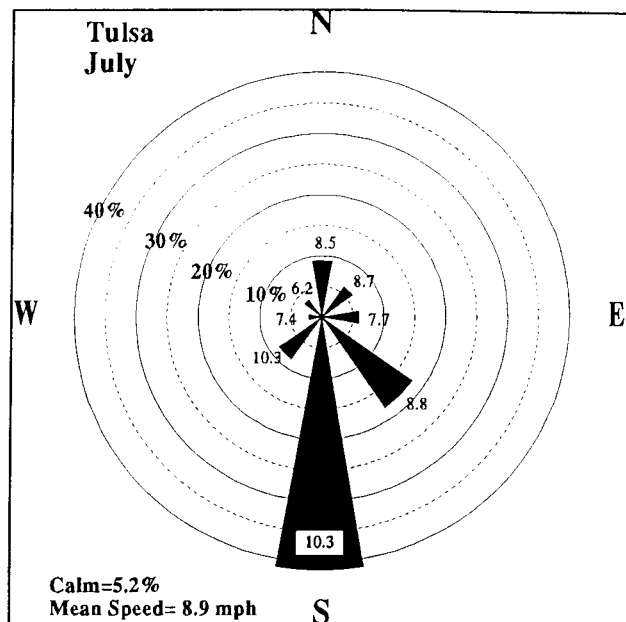
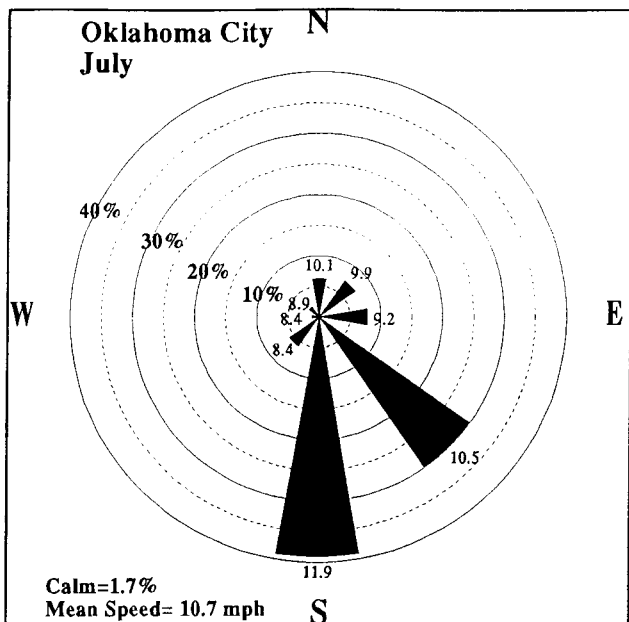
JULY NORMAL MONTHLY PRECIPITATION (inches)

OUTLOOK FOR JULY THROUGH SEPTEMBER 1998

BASED ON SEASONAL OUTLOOKS PROVIDED BY THE CLIMATE PREDICTION CENTER

**TEMPERATURE: Greater Than Normal Southwest
Near Normal Elsewhere**

PRECIPITATION: Near Normal Statewide



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.

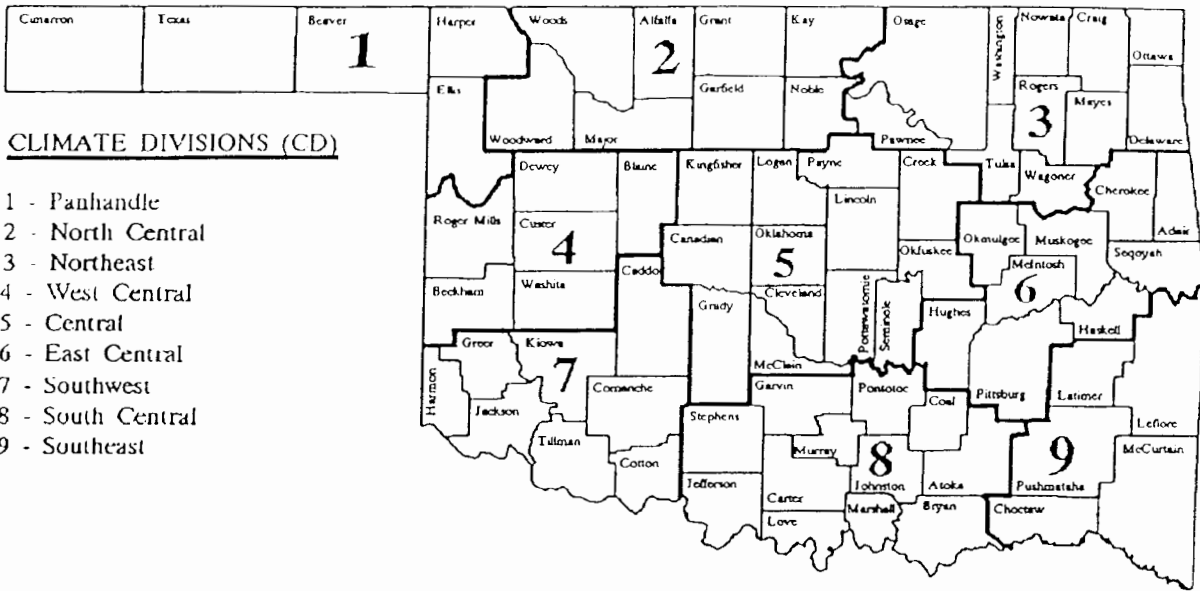
SUNRISE/SUNSET TIMES FOR JULY 1998

OKLAHOMA CITY

DATE	SUNRISE	SUNSET	DAYLIGHT
98 7 1	5:21AM	7:47PM CST	14 hrs 27 mins
98 7 2	5:21AM	7:47PM CST	14 hrs 26 mins
98 7 3	5:22AM	7:47PM CST	14 hrs 26 mins
98 7 4	5:22AM	7:47PM CST	14 hrs 25 mins
98 7 5	5:22AM	7:47PM CST	14 hrs 25 mins
98 7 6	5:23AM	7:47PM CST	14 hrs 24 mins
98 7 7	5:23AM	7:47PM CST	14 hrs 23 mins
98 7 8	5:24AM	7:47PM CST	14 hrs 23 mins
98 7 9	5:24AM	7:46PM CST	14 hrs 22 mins
98 7 10	5:25AM	7:46PM CST	14 hrs 21 mins
98 7 11	5:25AM	7:46PM CST	14 hrs 20 mins
98 7 12	5:26AM	7:46PM CST	14 hrs 20 mins
98 7 13	5:27AM	7:45PM CST	14 hrs 19 mins
98 7 14	5:27AM	7:45PM CST	14 hrs 18 mins
98 7 15	5:28AM	7:45PM CST	14 hrs 17 mins
98 7 16	5:28AM	7:44PM CST	14 hrs 16 mins
98 7 17	5:29AM	7:44PM CST	14 hrs 15 mins
98 7 18	5:30AM	7:43PM CST	14 hrs 14 mins
98 7 19	5:30AM	7:43PM CST	14 hrs 13 mins
98 7 20	5:31AM	7:42PM CST	14 hrs 12 mins
98 7 21	5:32AM	7:42PM CST	14 hrs 10 mins
98 7 22	5:32AM	7:41PM CST	14 hrs 9 mins
98 7 23	5:33AM	7:41PM CST	14 hrs 8 mins
98 7 24	5:34AM	7:40PM CST	14 hrs 7 mins
98 7 25	5:34AM	7:40PM CST	14 hrs 5 mins
98 7 26	5:35AM	7:39PM CST	14 hrs 4 mins
98 7 27	5:36AM	7:38PM CST	14 hrs 3 mins
98 7 28	5:36AM	7:38PM CST	14 hrs 1 mins
98 7 29	5:37AM	7:37PM CST	14 hrs 0 mins
98 7 30	5:38AM	7:36PM CST	13 hrs 58 mins
98 7 31	5:38AM	7:35PM CST	13 hrs 57 mins

TULSA

DATE	SUNRISE	SUNSET	DAYLIGHT
98 7 1	5:12AM	7:43PM CST	14 hrs 31 mins
98 7 2	5:12AM	7:43PM CST	14 hrs 30 mins
98 7 3	5:13AM	7:43PM CST	14 hrs 30 mins
98 7 4	5:13AM	7:42PM CST	14 hrs 29 mins
98 7 5	5:14AM	7:42PM CST	14 hrs 29 mins
98 7 6	5:14AM	7:42PM CST	14 hrs 28 mins
98 7 7	5:14AM	7:42PM CST	14 hrs 28 mins
98 7 8	5:15AM	7:42PM CST	14 hrs 27 mins
98 7 9	5:16AM	7:42PM CST	14 hrs 26 mins
98 7 10	5:16AM	7:41PM CST	14 hrs 25 mins
98 7 11	5:17AM	7:41PM CST	14 hrs 25 mins
98 7 12	5:17AM	7:41PM CST	14 hrs 24 mins
98 7 13	5:18AM	7:41PM CST	14 hrs 23 mins
98 7 14	5:18AM	7:40PM CST	14 hrs 22 mins
98 7 15	5:19AM	7:40PM CST	14 hrs 21 mins
98 7 16	5:20AM	7:39PM CST	14 hrs 20 mins
98 7 17	5:20AM	7:39PM CST	14 hrs 19 mins
98 7 18	5:21AM	7:39PM CST	14 hrs 18 mins
98 7 19	5:22AM	7:38PM CST	14 hrs 17 mins
98 7 20	5:22AM	7:38PM CST	14 hrs 15 mins
98 7 21	5:23AM	7:37PM CST	14 hrs 14 mins
98 7 22	5:24AM	7:36PM CST	14 hrs 13 mins
98 7 23	5:24AM	7:36PM CST	14 hrs 12 mins
98 7 24	5:25AM	7:35PM CST	14 hrs 10 mins
98 7 25	5:26AM	7:35PM CST	14 hrs 9 mins
98 7 26	5:26AM	7:34PM CST	14 hrs 8 mins
98 7 27	5:27AM	7:33PM CST	14 hrs 6 mins
98 7 28	5:28AM	7:32PM CST	14 hrs 5 mins
98 7 29	5:28AM	7:32PM CST	14 hrs 3 mins
98 7 30	5:29AM	7:31PM CST	14 hrs 2 mins
98 7 31	5:30AM	7:30PM CST	14 hrs 0 mins



CLIMATE DIVISIONS (CD)

- 1 - Panhandle
- 2 - North Central
- 3 - Northeast
- 4 - West Central
- 5 - Central
- 6 - East Central
- 7 - Southwest
- 8 - South Central
- 9 - Southeast

EXPLANATION OF TABLES

Two kinds of tables appear in this summary. The first is a set of tables containing all reporting stations grouped by climate division. The figure above shows the locations of the climate divisions. Each table contains the following information for each station:

- Station Name:**
- Station Identification Number:** These are usually assigned by the National Climatic Data Center.
- Climate Division:** See the figure above.
- Number of Temperature Observations:** These 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 Maximum:** The maximum daily maximum temperature observed during the current month and year and the day which it occurred.
- Minimum Daily Minimum:** The minimum daily minimum temperature observed during the current month and year and the day 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. They 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. For February 1984 HDD would be calculated as:

$$\sum_{i=1}^{29} 65 - ((TMAX_i + TMIN_i) / 2)$$

Deviation from Normal Heating Degree Days: 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. They 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. For June, CDD would be calculated as:

$$\sum_{i=1}^{30} ((TMAX_i + TMIN_i) / 2) - 65$$

Deviation from Normal Cooling Degree Days: 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 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: 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 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.

The second set of tables contain similar information but are the average or extreme over all the stations reporting in each climate division.

OKLAHOMA CITY CLIMATE CALENDAR
 DATA COURTESY OF NATIONAL WEATHER SERVICE NORMAN

JULY

The data on this calendar is for Oklahoma City.
 Normal values are calculated for the period 1961-1990.
 Temperature extremes are for the period 1891-1997.
 Precipitation extremes are for the period 1891-1997.

Day	Avg. Temp	Avg. High	Record High	Record High Year	Lowest Max	Lowest Max Year	1998	Avg. Low	Highest Min	Highest Min Year	Record Low	Record Low Year	1998	Avg. Ppt.	Greatest Ppt.	Year	1998
1	79.9	90.3	103	1917	67	1951		69.5	86	1937	57	1951		0.19	5.06	1913	
2	81.1	92.0	105	1980	72	1924		70.3	78	1980	58	1924		0.08	1.70	1922	
3	81.9	92.6	105	1980	75	1908		71.2	79	1953	57	1906		0.06	2.97	1947	
4	80.6	91.3	105	1996	73	1915		70.0	80	1980	57	1924		0.07	1.37	1900	
5	80.5	91.4	108	1996	77	1958		69.5	80	1933	55	1915		0.10	3.21	1979	
6	81.0	92.0	110	1996	73	1958		69.9	80	1953	55	1972		0.07	1.84	1929	
7	81.4	92.5	106	1996	76	1960		70.3	79	1996	57	1952		0.06	2.03	1895	
8	81.6	92.8	105	1964	70	1905		70.5	78	1970	57	1958		0.03	1.32	1959	
9	81.8	93.1	106	1964	71	1905		70.5	80	1933	56	1891		0.04	2.14	1898	
10	81.9	93.4	104	1978	66	1895		70.4	80	1933	56	1905		0.05	2.79	1996	
11	81.9	93.1	107	1933	67	1895		70.8	81	1933	58	1905		0.04	3.02	1996	
12	81.8	92.9	107	1954	62	1953		70.7	82	1933	56	1953		0.08	1.80	1926	
13	81.3	92.6	106	1954	73	1953		69.9	81	1934	56	1975		0.12	2.10	1963	
14	81.3	92.8	107	1954	80	1926		69.8	80	1934	57	1950		0.06	1.98	1996	
15	81.5	92.5	108	1936	71	1891		70.6	82	1936	59	1967		0.08	2.30	1921	
16	81.8	92.8	106	1980	74	1967		70.8	79	1939	61	1891		0.04	3.54	1900	
17	82.0	93.2	106	1980	80	1950		70.9	79	1943	63	1992		0.15	1.71	1959	
18	82.7	93.6	108	1936	72	1967		71.8	81	1936	62	1911		0.06	1.53	1893	
19	82.4	93.4	109	1936	74	1953		71.4	82	1936	63	1898		0.06	2.77	1916	
20	82.1	93.3	107	1936	77	1944		70.9	79	1934	60	1970		0.05	1.48	1897	
21	81.9	93.1	107	1939	78	1970		70.7	80	1981	54	1970		0.14	1.47	1950	
22	81.9	92.8	107	1974	73	1947		71.0	79	1981	57	1970		0.10	2.49	1899	
23	81.3	92.4	104	1981	77	1989		70.1	79	1981	55	1970		0.17	3.02	1960	
24	82.3	93.5	106	1943	73	1947		71.0	79	1993	61	1970		0.08	2.92	1975	
25	83.0	94.1	106	1977	76	1906		71.8	83	1934	58	1911		0.07	1.96	1906	
26	82.9	93.7	106	1978	75	1959		72.0	79	1981	63	1911		0.08	0.88	1978	
27	82.5	93.7	105	1986	75	1959		71.3	78	1939	59	1994		0.25	5.60	1981	
28	81.8	92.7	108	1986	75	1981		70.8	80	1946	58	1994		0.20	1.80	1963	
29	82.2	93.4	109	1986	76	1892		71.0	79	1966	60	1994		0.16	2.02	1975	
30	82.3	93.5	108	1986	73	1925		71.2	80	1986	57	1971		0.04	1.05	1996	
31	81.7	92.7	107	1980	76	1925		70.8	79	1943	53	1971		0.06	1.07	1978	
MONTH	81.8	92.8	110	1996	62	1953		70.7	86	1937	53	1971		2.84	5.60	1981	

* The most tornados reported in July for Oklahoma was 7 in 1956.

TULSA CLIMATE CALENDAR
 DATA COURTESY OF NATIONAL WEATHER SERVICE TULSA.
JULY

The data on this calendar is for Tulsa, OK.
 Normal values are calculated for the period of 1961-1990.
 Temperature extremes are for the period 1905-1997
 Precipitation extremes are for the period 1888-1997.

Day	Avg. Temp	Avg. High	Record High	Year	Lowest Max	Year	1998	Avg. Low	Highest Min	Year	Record Low	Year	1998	Avg. Ppt.	Greatest Ppt.	Year	1998
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	1.35	1953	
13	83	94	111	1954	76	1961		73	85	1980	54	1975		0.10	1.95	1994	
14	83	94	112	1954	77	1953		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	1.89	1994	
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	1993	60	1927		0.09	1.95	1973	
25	84	95	108	1934	80	1950		73	82	1934	54	1911		0.09	2.34	1931	
26	84	95	106	1978	75	1959		73	81	1981	60	1905		0.09	1.81	1928	
27	84	95	106	1936	76	1977		73	81	1986	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	81	1986	60	1969		0.09	1.24	1950	
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	94	113	1936	66	1953		73	87	1980	51	1971		3.09	7.54	1963	

* The average number of Tornadoes for July in Oklahoma is 2.2.