

OKLAHOMA MONTHLY SUMMARY AUGUST 1997

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MONTHLY SUMMARY FOR AUGUST 1997

Most of Oklahoma experienced a wet, cool August. Although much of south central and southeastern Oklahoma remained dry, frequent and occasionally heavy rains elsewhere produced a statewide-averaged monthly total precipitation, 4.84 inches, that was 2.02 inches greater than normal and that ranks as the 15th highest August precipitation since 1892. Despite the stubborn dryness near the state's southern border, each of Oklahoma's nine climate divisions recorded greater than normal precipitation during the month. The statewide-averaged temperature, depressed by the frequent cloudiness and rainfall, was 78.5 degrees, 2.3 degrees lower than normal, ranking this as the 15th coolest August on record.

The cool, wet August completed a mild summer during which the average reporting station in the state recorded 11.94 inches of rain (2.55 inches greater than normal and the 26th wettest summer on record). The summer temperature averaged 78.4 degrees, 1.6 degrees lower than normal and 16th coolest). For the year, to date, the statewide precipitation of 26.95 inches is 3.81 inches greater than normal and 27th greatest overall. The average temperature for the year, thus far, is 61.4 degrees, 1.1 degrees lower than normal and 20th coolest in 106 years.

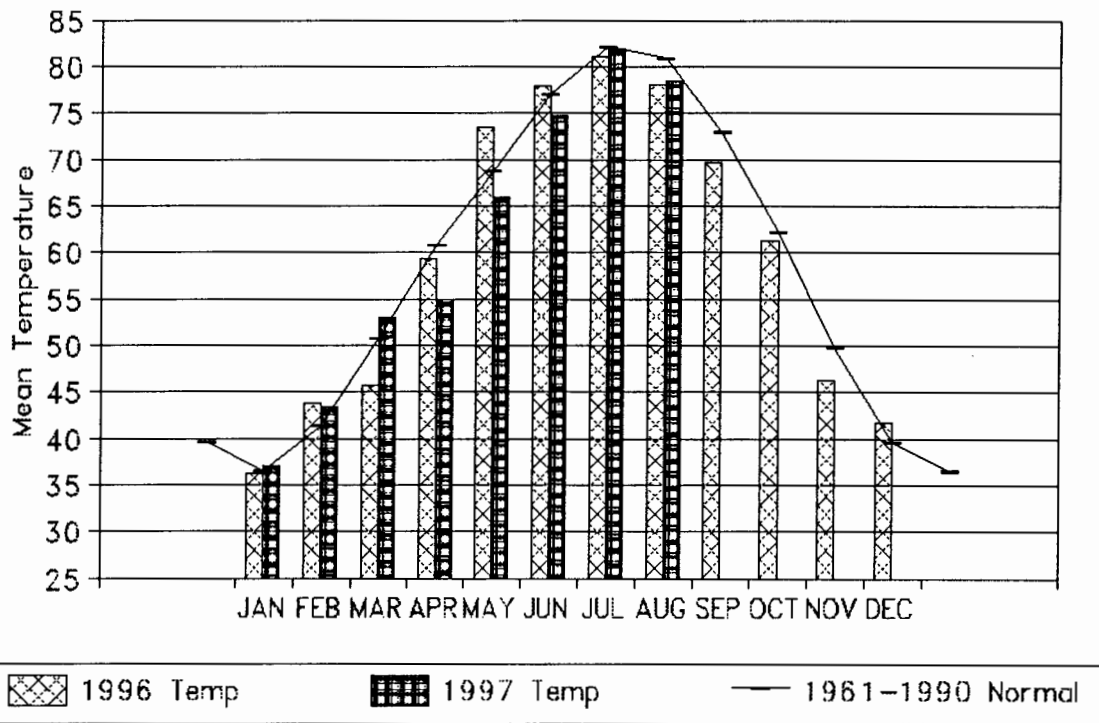
August started in typical fashion. Daytime temperatures in the upper 90s or low 100s were sometimes relieved by sporadic and very localized showers. A weak cold front that moved through the state from the 5th through the 7th dropped as much as 2.60 inches of rain (at the Oklahoma Mesonet site in Woods County near Alva). Locally heavy rains in the southwest on the 10th and in the northeast on the 11th initiated a period of showery weather that extended, for the most part, through the 22nd. Heavy rains produced local flooding in several areas, most notably in Hobart (Kiowa), where the local office of emergency management reported over 8 inches of rain. Elk City (Beckham) reported 5.17 inches and Mangum (Greer) 5.12 inches. Mesonet sites near Catoosa (Rogers), Claremore (Rogers) and Skiatook (Osage) each reported more the 3.50 inches of rain on the 11th. Official precipitation reports encompassing the 11th through the 14th included 6.72 inches at Mangum, 5.95 inches at Elk City and 5.30 inches at Skiatook. Heavy rains in northeastern New Mexico also pushed to Cimarron River to flood stage at Kenton (Cimarron) on the 11th.

Statewide weather was very active from the 16th through the 22nd. Local flooding was reported in many areas, most notably in Sulphur (Murray County), around Bixby (Tulsa), and in Watonga (Blaine). A small tornado was reported just east of Eagle City (Blaine) and lightning killed a man at Lake Carl Etling (Cimarron), both on the 18th. Hanna (McIntosh) with 5.43 inches of rain, and Stigler Mesonet (Haskell), noting 5.09 inches, returned the largest daily precipitation reports during the period. Checotah (McIntosh) reported 7.25 inches over a three-day period from the 18th through the 20th. Two-inch diameter hail stones and winds estimated at 80 miles per hour caused extensive damage in Burlington (Alfalfa) on the 20th. The Mesonet site near Bessie (Washita) recorded a peak wind of 84 miles per hour on the 22nd, a day on which thunderstorm winds were especially troublesome.

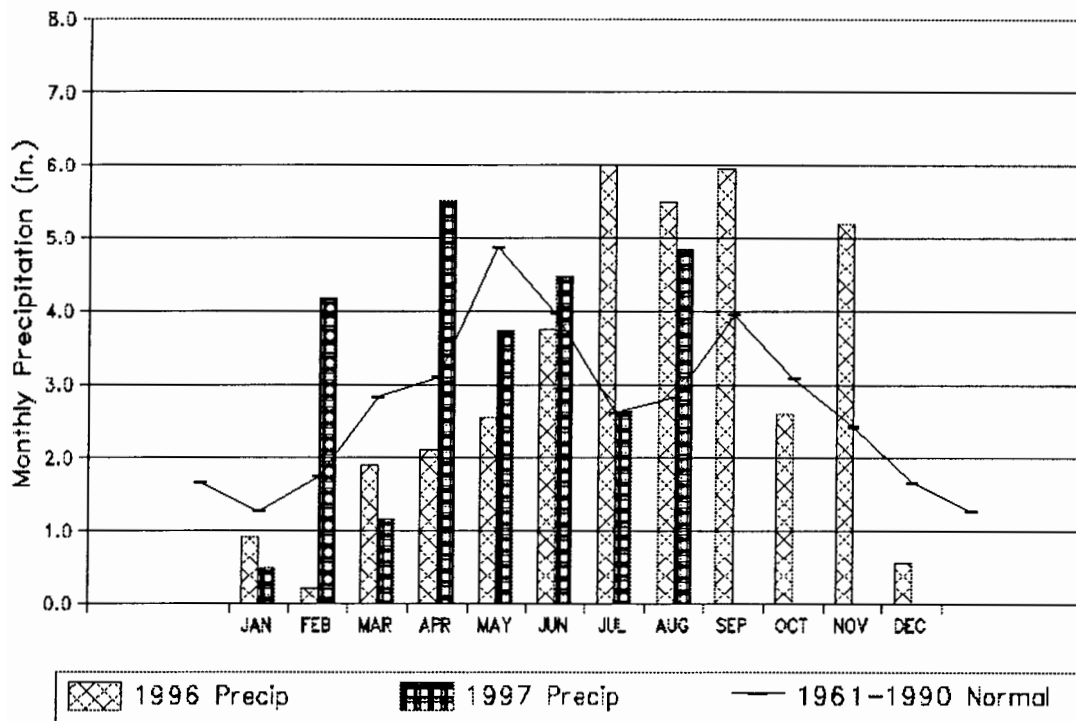
Mild weather, at least by Oklahoma's August standards, prevailed for the remainder of the month. The Ringling Mesonet site (Jefferson) recorded a maximum temperature of 104 degrees on the 26th, but generally, upper 80s and low-to-mid 90s prevailed across the state. Little or no precipitation was reported from the 24th through the 30th, but Tulsa (Tulsa), Range (Texas) and Guymon (Texas) each reported more than one inch of rain on the 31st.

Howard L. Johnson

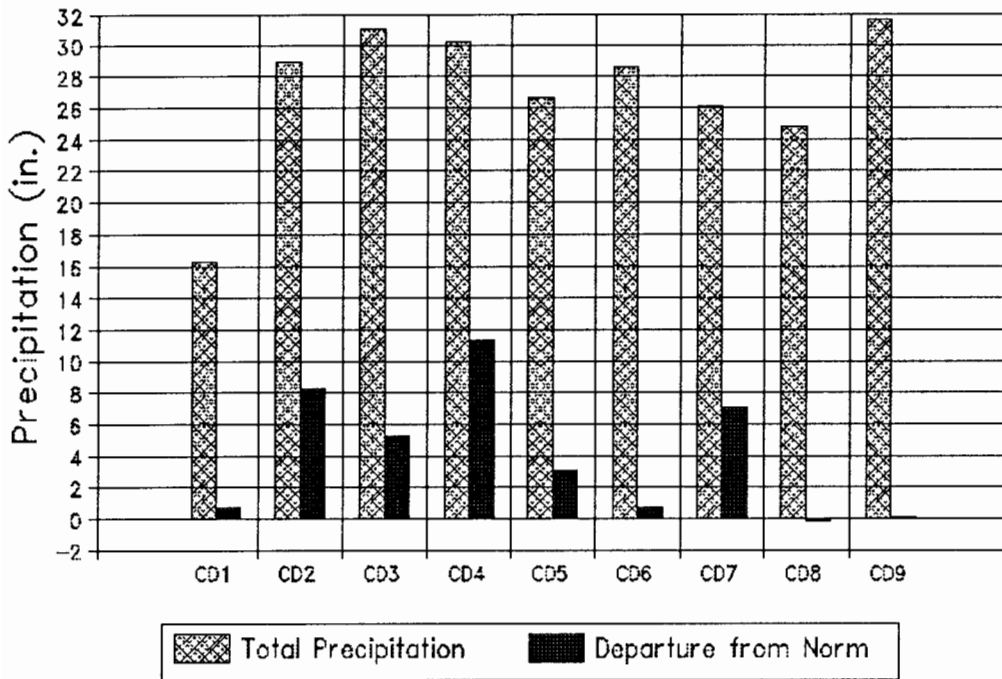
1996 and 1997 STATEWIDE TEMPERATURES Monthly Averages



1996 and 1997 STATEWIDE PRECIPITATION Monthly Totals

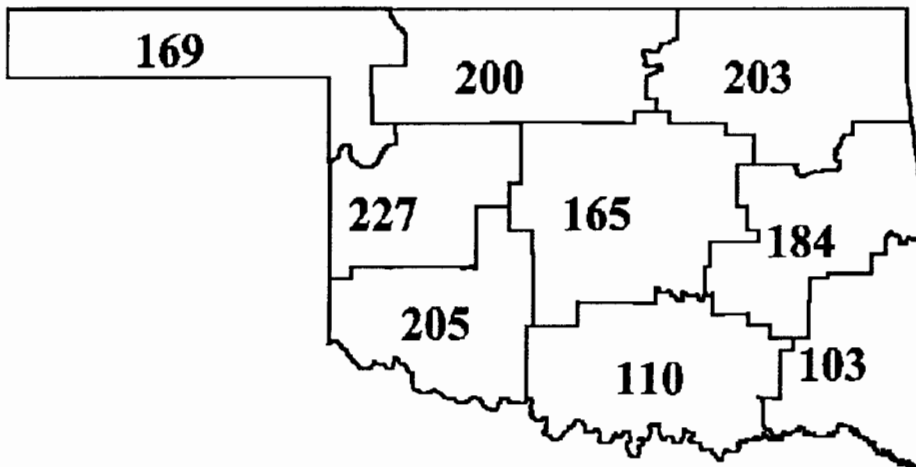


CD Averaged Precipitation January through August 1997



CD PERCENT OF NORMAL PRECIPITATION

August 1997



EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION
AUGUST, 1997

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	100	2	GATE	52	8	GAGE	2.42	7	GATE	6.77	BOISE CITY
				52	3	GOODWELL					
2	102	2	MUTUAL	56	8	MUTUAL	3.76	19	BLACKWELL	10.84	BLACKWELL
	102	3	MUTUAL	56	7	WAYNOKA					
	102	2	WAYNOKA								
	102	3	WAYNOKA								
3	97	5	PRYOR	56	14	CLEVELAND	3.34	11	SKIATOOK	10.38	PRYOR
	97	4	SPAVINAW	56	7	KANSAS					
				56	8	KANSAS					
				56	7	MANNFORD					
4	100	3	ERICK	54	8	ELK CITY	5.17	11	ELK CITY	11.25	WATONGA
5	100	30	HENNESSEY	54	7	BRISTOW	2.25	10	OILTON	8.15	OILTON
6	99	15	MCCURTAIN	51	23	STILWELL	5.43	18	HANNA	9.10	HANNA
	99	30	MCCURTAIN								
	99	16	WEBBERS FALL								
7	101	3	ALTUS DAM	55	8	ALTUS DAM	5.12	11	MANGUM	8.35	MANGUM
	101	4	CHATTANOOGA								
	101	3	FREDERICK								
	101	2	HOLLIS								
8	102	6	MCGEE CREEK	58	8	MCGEE CREEK	4.10	19	CHICKASAW	6.50	CHICKASAW
9	102	6	IDABEL	52	7	BATTIEST	2.06	18	SPIRO	5.42	VALLIANT

TABLE OF 1996/1997 COMPARISONS

AUGUST
Temperature (°F)

AUGUST
Precipitation (in.)

Station	1996	1997	1996	1997
Arnett	74.2	76.2	7.76	2.53
Mutual	75.5	77.2	6.56	4.79
Tulsa	79.7	78.6	0.95	7.86
Elk City	77.0	77.1	7.39	8.63
Oklahoma City	78.0	78.6	5.84	3.00
McAlester	78.0	78.7	1.00	0.00
Altus Irr Station	80.3	80.1	6.73	5.53
Ardmore	80.7	82.5	5.55	1.90
Idabel	76.8	78.7	5.74	2.80

EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature (°F)	Stilwell	06	51	23
Maximum temperature (°F)	Mutual	02	102	02
	Mutual	02	102	03
	Waynoka	02	102	02
	Waynoka	02	102	03
	McGee Creek	08	102	06
	Idabel	09	102	06
Maximum 24-hour precipitation	Hanna	06	5.43"	18

AUGUST 1997 SUMMARY FOR PANHANDLE DIVISION (CD1)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG	DAY	DEV		COOL DEG	DAY	DEV		TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP					FROM NORM	MAX TEMP			FROM NORM	MAX TEMP			FROM NORM	MAX TEMP	
ARNETT	332	1	76.2	31	-2.4	98	31	54	8	7	7	354	-69	2.532	31	0.12	1.05	7			
BEAVER	593	1	77.4	31	-1.2	99	17	55	8	5	5	391	-32	4.050	31	1.10	1.47	12			
BOISE CITY	908	1	75.6	31	0.1	95	30	56	7	1	1	330	4	6.772	31	4.32	1.45	5			
FARGO	3070	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.641	31	-0.07	1.39	7			
GAGE	3407	1	77.4	28*	****	99	2	52	8	0	*****	347	*****	1.754	30	*****	0.89	6			
GATE	3489	1	77.5	31	-2.2	100	2	56	8	6	6	394	-63	5.520	31	2.64	2.42	7			
GOODWELL	3628	1	76.5	31	0.1	98	18	52	3	2	2	358	5	3.320	31	1.16	1.16	11			
GUYMON	3835	1	77.4	31*	****	98	16	56	7	3	*****	388	*****	5.690	31	*****	1.93	11			
KENTON	4766	1	74.7	31	-0.5	95	29	53	7	2	2	302	-17	5.225	31	2.59	1.50	10			
LAVERNE	5045	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.603	31	0.74	1.67	7			
RANGE	7412	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.484	31	*****	1.13	13			
REGNIER	7534	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.264	31	2.38	2.21	12			

AUGUST 1997 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG	DAY	DEV		COOL DEG	DAY	DEV		TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP					FROM NORM	MAX TEMP			FROM NORM	MAX TEMP			FROM NORM	MAX TEMP	
VANCE AFB	302	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.736	30	*****	1.67	5			
BLACKWELL 2E	818	2	76.2	30	-4.9	96	16	61	8	1	1	336	-163	10.841	30	*****	3.76	19			
CHEROKEE	1724	2	80.2	29*	****	99	3	58	8	0	*****	441	*****	8.790	31	5.77	3.00	19			
ENID	2912	2	79.4	31	-2.3	97	15	59	7	0	0	448	-71	6.400	31	3.22	1.91	22			
HARDY	3909	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.991	31	*****	1.35	11			
HELENA	4019	2	78.1	31	-2.2	99	3	59	8	2	2	408	-67	6.151	31	3.39	2.22	7			
JEFFERSON	4573	2	78.4	31	-3.3	99	30	58	8	0	0	415	-103	6.531	31	3.30	1.93	6			
MEDFORD	5768	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	8.981	31	*****	2.73	18			
MORRISON	6065	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.402	31	*****	1.20	7			
MUTUAL	6139	2	77.2	31	-2.8	102	3	56	8	4	4	381	-85	4.791	31	2.59	1.87	21			
NEWKIRK	6278	2	76.3	31	-4.6	94	31	59	8	2	2	353	-140	7.980	31	4.53	2.64	19			
ORIENTA	6751	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.512	31	1.77	1.72	7			
PERRY	7012	2	79.3	29*	****	97	30	60	7	0	*****	416	*****	3.870	29	*****	1.46	7			
PONCA CITY	7201	2	80.7	29*	****	99	30	63	8	0	*****	456	*****	5.792	29	*****	1.16	23			
WAYNOKA	9404	2	79.0	31	-2.4	102	3	56	7	4	4	440	-69	4.310	31	1.39	1.88	6			

AUGUST 1997 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	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
BARNSDALL	535	3	77.1	31	-3.6	93	30	57	7	0	0	375	-113	7.264	31	3.81	1.68	18
BARTLESVILLE	548	3	78.4	31	-2.1	96	29	60	7	0	0	416	-65	3.811	31	0.66	0.73	12
BIXBY	782	3	76.6	30	-2.7	95	5	58	7	0	0	349	-94	3.500	30	*****	1.70	7
BURBANK	1256	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.341	31	3.93	1.76	18
CHELSEA	1717	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	8.110	31	*****	2.37	11
CLAREMORE	1828	3	76.4	31	-3.3	96	5	60	8	0	0	352	-104	9.120	31	6.05	2.50	17
CLEVELAND 2	1902	3	77.9	18*	****	92	16	56	14	0	*****	233	*****	2.700	18	*****	0.78	17
FORAKER	3250	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.950	31	0.49	1.40	19
HOLLOW	4258	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.320	31	1.11	1.62	12
HOMINY	4289	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.650	31	2.37	1.34	19
KANSAS	4672	3	76.2	29*	****	95	4	56	8	0	*****	326	*****	8.072	29	*****	3.10	17
LENAPAH	5118	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.940	31	*****	1.47	19
MANNFORD	5522	3	77.0	31	-3.8	93	30	56	7	0	0	373	-117	7.450	31	4.17	2.70	11
MARAMEC	5540	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.430	31	0.25	1.30	22
PAWNEE	6940	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.581	31	2.37	1.57	11
PRYOR	7309	3	77.6	23*	****	97	5	60	8	0	*****	290	*****	10.382	31	7.11	2.82	12
RALSTON	7390	3	77.0	31	-3.5	94	30	60	7	0	0	372	-110	7.582	31	4.27	1.90	11
SKIATOOK	8258	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	9.490	31	6.33	3.34	11
SPAVINAW	8380	3	79.2	31	-1.6	97	4	60	7	0	0	440	-51	8.650	31	4.74	2.80	12
TULSA	8992	3	78.3	31	-3.2	96	30	60	6	0	0	411	-101	7.862	31	4.74	1.89	11
UPPER SPAV	9101	3	77.9	29*	****	96	30	59	7	0	*****	374	*****	7.601	31	*****	2.18	17
VINITA	9203	3	76.4	24*	****	93	15	59	7	0	*****	274	*****	5.460	27	*****	1.92	12
WAGONER	9247	3	77.8	31	-3	95	4	63	27	0	0	396	-94	8.121	31	5.09	2.68	18
WANN	9298	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.870	31	*****	1.00	12
WYNONA	9792	3	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.870	31	*****	2.36	19

AUGUST 1997 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	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
CLINTON	1909	4	79.4	31	-3	98	2	55	7	3	3	449	-90	8.191	31	5.02	2.68	19
COLONY	2039	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.631	31	*****	2.52	19
CORDELL	2125	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.062	31	1.98	1.44	19
ELK CITY	2849	4	77.1	30	-3	96	31	54	8	5	5	368	-101	8.630	30	*****	5.17	11
ERICK	2944	4	78.1	31	-2	100	3	55	9	4	4	410	-58	5.801	31	3.29	1.39	14
GEARY	3497	4	78.6	31	-2.3	95	3	59	7	1	1	423	-70	5.500	31	3.30	1.42	19
HAMMON	3871	4	77.1	31	-2.8	98	3	56	8	4	4	379	-83	7.490	31	4.52	2.36	21
MACKIE	5463	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.340	31	*****	1.51	4
MORAVIA	6035	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.841	31	4.33	2.22	22
OKEENE	6629	4	79.0	31	-2.9	99	30	58	7	0	0	436	-89	5.691	31	2.96	1.95	6
RETROP	7565	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.010	31	*****	0.93	22
REYDON	7579	4	76.2	29*	****	97	31	55	8	6	*****	329	*****	3.620	29	*****	1.18	7
SWEETWATER	8652	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.360	31	*****	0.77	7
TALOGA	8708	4	77.9	31	-2.4	98	2	58	7	0	0	401	-73	5.151	31	2.72	1.28	7
THOMAS	8815	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.710	31	*****	1.40	19
VICI	9172	4	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.403	31	3.12	1.52	21
WATONGA	9364	4	78.4	31	-2.5	96	30	58	7	0	0	417	-77	11.251	31	8.96	4.92	19
WEATHERFORD	9422	4	78.2	30	-2.3	97	30	55	7	6	6	402	-79	4.561	30	*****	1.50	18

AUGUST 1997 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	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
AMBER	200	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.170	31	****	0.95	7
BLANCHARD	830	5	79.9	31	-1.9	98	4	58	7	2	2	464	-57	3.362	31	0.63	1.10	7
BRISTOW	1144	5	77.6	31	-3.3	95	30	54	7	2	2	394	-100	4.801	31	2.14	1.62	19
CHICKASHA	1750	5	80.6	31	-0.5	99	16	58	8	0	0	485	-14	4.140	31	1.38	1.06	22
COX CITY	2196	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.580	31	****	0.67	22
CRESCENT	2242	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.510	31	****	1.40	7
CUSHING	2318	5	77.6	27*	****	95	31	56	7	2	*****	343	*****	2.800	28	*****	1.00	7
EDMOND	2788	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.275	31	*****	1.31	21
EL RENO	2818	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.770	30	****	1.24	22
GUTHRIE	3821	5	78.8	28*	****	99	30	56	7	1	*****	387	*****	3.704	28	****	1.30	7
HENNESSEY	4055	5	78.6	31	-3	100	30	59	7	0	0	421	-95	4.601	31	1.74	1.65	7
INGALLS	4489	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.341	31	*****	1.18	7
KONAWA	4915	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.480	31	2.49	1.00	12
MARSHALL	5589	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.120	31	1.55	1.54	7
MEEKER	5779	5	77.6	31	-3.7	95	30	56	7	3	3	394	-111	3.450	31	0.99	1.06	6
MULHALL	6110	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.260	31	*****	1.21	22
NORMAN NWS	6386	5	78.1	31	-3.1	95	15	57	7	4	4	409	-94	4.082	31	1.22	1.21	22
OILTON	6616	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	8.153	31	****	2.25	10
OKEMAH	6638	5	80.9	31	0	98	30	59	7	0	0	493	-1	2.980	31	0.34	0.67	7
OKLAHOMA CTY	6661	5	78.6	31	-2.5	96	30	59	7	1	1	423	-76	3.003	31	0.40	1.22	22
PIEDMONT	7068	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.160	31	****	1.85	19
PRAGUE	7264	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.474	31	1.04	0.98	7
PURCELL	7327	5	78.8	31	-3.1	99	5	58	9	4	4	431	-93	5.340	31	2.65	2.05	19
SEMINOLE	8042	5	78.2	31	-4.4	97	31	58	6	3	3	412	-134	4.470	31	1.83	1.36	6
SHAWNEE	8110	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.280	31	1.78	1.37	7
STELLA	8479	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.560	31	****	1.34	8
STILLWATER	8501	5	78.2	31	-2.1	97	5	57	7	0	0	408	-66	4.910	31	2.15	1.05	7
STROUD	8563	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.161	31	****	1.00	13
TECUMSEH	8751	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.300	31	****	1.35	7
TROUSDALE	8960	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.130	31	****	0.87	22
UNION CITY	9086	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.821	31	0.94	1.18	19
WELTY	9479	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.543	31	****	0.92	7
WEWOKA	9575	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.320	31	2.55	1.17	7

AUGUST 1997 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	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
ASHLAND	364	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.292	31	****	1.42	18
BEGGS	631	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.600	31	****	1.80	18
CALVIN	1391	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.200	31	0.79	1.75	17
CHECOTAH	1711	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	8.770	31	5.93	3.62	18
CLAYTON	1858	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.900	31	*****	2.00	18
DEWAR	2485	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.452	31	1.94	1.63	18
DUSTIN	2690	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.981	31	****	3.25	18
EUFULA	2993	6	80.2	31	-2	98	15	62	8	0	0	471	-62	5.900	31	3.31	2.10	18
HANNA	3884	6	77.7	31	-3.3	95	14	56	10	2	2	395	-101	9.103	31	6.54	5.43	18
HASKELL	3956	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.420	31	4.90	3.37	18
LAKE EUFAULA	4975	6	77.0	31*	****	96	16	58	7	2	*****	372	*****	4.710	31	****	1.51	18
LYONS	5437	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.000	31	1.84	2.26	18
MARBLE CITY	5546	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.680	31	****	1.52	17
MCALESTER	5664	6	78.7	22*	****	98	15	60	26	0	*****	301	*****	0.002	20	****	0.00	14
MCCURTAIN	5693	6	77.9	31	-3.5	99	30	52	7	2	2	402	-107	6.611	31	3.70	3.05	18
MUSKOGEE	6130	6	78.4	31	-2.7	96	16	58	7	1	1	416	-83	5.340	31	2.50	2.50	17
OKMULGEE	6670	6	75.6	26*	****	95	31	55	7	2	*****	278	*****	4.222	27	*****	1.64	18
OKTAHA	6678	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.060	31	****	2.89	18
QUINTON	7372	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.181	31	1.12	0.80	10
SALLISAW	7862	6	77.3	31	-3.7	96	16	60	8	0	0	382	-114	3.440	31	0.05	1.91	18
SCIPIO	7979	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.380	31	****	4.00	18
SCRAPER	7993	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.200	31	****	2.20	17
SHORT	8170	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.820	31	****	1.20	18
STILWELL	8506	6	74.4	31	-4.4	93	4	51	23	0	0	292	-136	3.670	31	-0.22	1.29	17
TAHLEQUAH	8677	6	76.3	31	-3.5	93	15	57	8	0	0	350	-109	4.310	31	0.60	2.39	18
WEBBERS FALL	9445	6	78.8	31	-1.4	99	16	61	7	0	0	427	-45	7.080	31	4.19	3.00	18
WESTVILLE	9523	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.400	31	****	1.85	17
WETUMKA	9571	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.704	31	1.11	1.22	7

AUGUST 1997 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	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
ALTUS	179	7	80.1	31	-2.7	100	2	60	7	0	0	470	-83	5.530	31	3.08	2.47	11
ALTUS AFB	447	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.810	29	*****	1.99	6
ALTUS DAM	184	7	79.8	31	-2.7	101	3	55	8	4	4	463	-81	6.440	31	4.05	3.02	11
ANADARKO	224	7	78.1	30	-3.3	97	5	58	8	4	4	398	-110	3.870	30	*****	1.10	7
APACHE	260	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.270	31	1.84	1.27	14
CARNEGIE	1504	7	78.7	30	-3.1	98	30	57	7	1	1	412	-109	4.490	31	2.17	1.40	6
CHATTANOOGA	1706	7	81.8	30	-1.3	101	4	60	9	0	0	504	-58	4.220	31	1.54	1.31	11
DUNCAN 11 W	2668	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.742	31	*****	2.49	14
FORT SILL	5068	7	80.9	31*	****	100	15	61	7	2	*****	495	*****	4.800	31	*****	0.95	18
FREDERICK	3353	7	82.2	30	-0.8	101	3	61	7	0	0	515	-43	5.400	30	*****	2.00	7
HOBART	4204	7	79.9	28*	****	99	5	57	7	5	*****	421	*****	2.232	25	*****	1.81	10
HOLLIS	4249	7	79.9	31	-2.4	101	2	58	7	3	3	465	-71	4.380	31	1.94	1.51	11
LAWTON	5063	7	80.5	31	-1.8	100	19	62	9	1	1	483	-54	6.670	31	4.46	2.76	19
LOOKEBA	5329	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.980	30	*****	1.40	19
MANGUM	5509	7	80.7	31	-1.9	100	1	56	7	0	0	487	-60	8.350	31	6.07	5.12	11
ROOSEVELT	7727	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.520	31	1.14	1.46	11
SNYDER	8299	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.024	31	0.51	1.01	11
VINSON	9212	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.180	31	2.89	1.36	19
WALTERS	9278	7	81.5	30	-1.7	100	18	61	9	0	0	496	-68	2.390	31	-0.29	1.09	14
WICHITA MT	9629	7	79.3	25*	****	96	31	60	7	0	*****	359	*****	5.700	29	*****	2.05	11
WILLOW	9668	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.270	31	*****	1.87	22

AUGUST 1997 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	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
ALLEN	147	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.000	31	*****	1.50	14
ARDMORE	292	8	82.5	31	-0.9	99	19	61	7	2	2	545	-25	1.900	31	-0.63	0.87	22
ATOKA DAM	394	8	79.9	21*	****	100	18	59	8	2	*****	315	*****	1.680	21	*****	0.61	7
BOKCHITO	917	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.822	31	*****	0.82	6
CENTRAHOMA	1648	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.000	31	*****	2.50	13
CHICKASAW	1745	8	79.0	31	-2.6	98	5	60	8	2	2	437	-79	6.500	31	4.37	4.10	19
DUNCAN	2660	8	80.0	31	-2.1	98	5	61	8	2	2	466	-65	4.062	31	1.63	3.18	14
DAISY	2354	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.580	31	1.38	1.02	17
DURANT	2678	8	79.8	27*	****	98	23	59	7	4	*****	404	*****	1.435	27	*****	0.69	7
ELMORE CITY	2872	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.600	31	*****	0.88	22
GRADY	3688	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.450	31	*****	0.25	14
HEALDTON	4001	8	80.7	30	-1.5	100	6	59	9	2	2	474	-59	2.360	30	*****	1.02	19
HENNEPIN	4052	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.981	31	*****	0.92	12
KINGSTON	4865	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.170	31	-1.43	0.76	23
LEHIGH	5108	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.403	31	*****	0.90	23
LINDSAY	5216	8	79.4	31	-2.2	99	15	60	7	2	2	449	-67	0.486	31	-1.94	0.16	18
LOCO	5247	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.610	31	*****	0.96	7
MADILL	5468	8	83.1	16*	****	99	31	61	26	0	*****	290	*****	0.650	16	*****	0.65	22
MARIETTA	5563	8	81.9	30	-0.7	100	31	60	7	3	3	510	-36	1.445	31	-1.23	0.72	6
MARLOW	5581	8	81.0	31	-0.4	101	4	59	8	0	0	497	-11	4.200	31	1.60	1.77	14
MCGEE CREEK	5713	8	79.6	31*	****	102	6	58	8	4	*****	457	*****	1.911	31	*****	1.15	23
PONTOTOC	7214	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.051	31	2.32	1.66	18
TUSSY	9032	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.390	31	*****	1.86	8
WAURIKA	9395	8	82.4	31	-0.9	101	16	62	8	0	0	538	-29	2.400	31	-0.25	1.48	17
WAURIKA DAM	9399	8	81.5	29*	****	101	18	61	5	0	*****	480	*****	2.990	30	*****	1.85	18

AUGUST 1997 SUMMARY FOR SOUTHEAST DIVISION (CD9)

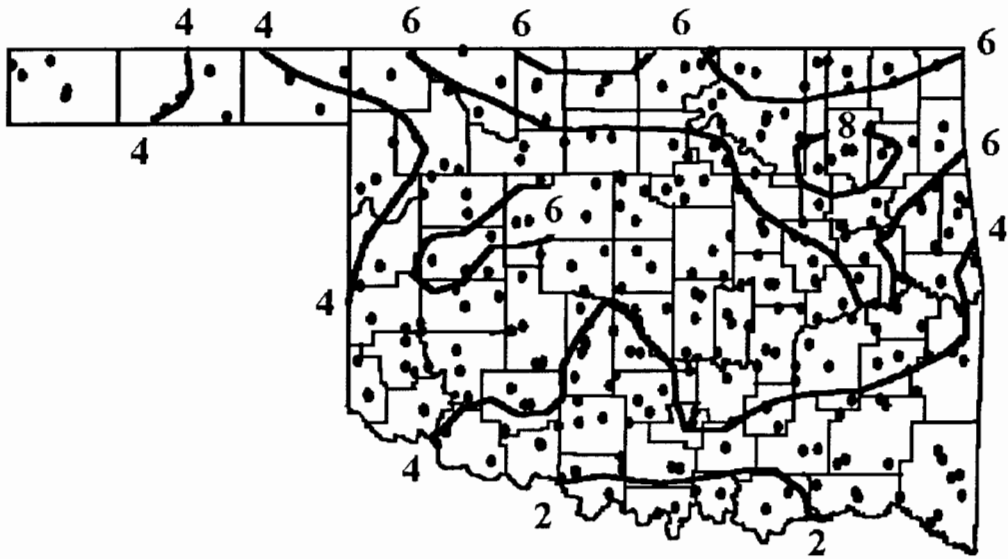
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	80.2	31	-1	100	5	58	27	0	0	470	-32	0.000	31	-2.79	0.00	31
BATTIEST	567	9	73.5	29 *	****	95	4	52	7	9	*****	257	*****	2.630	30	****	1.33	8
BEAR MT	584	9	80.3	22 *	****	101	5	57	11	0	*****	336	*****	3.430	28	****	1.13	7
BENGAL	670	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	4.220	31	****	1.52	18
BOSWELL	980	9	78.4	31	-2.9	100	6	59	27	2	2	417	-88	2.520	31	0.01	1.15	7
BROKEN BOW	1162	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.440	29	****	0.90	13
BROKEN BOW D	1168	9	78.2	31	-2	100	29	56	25	4	4	412	-59	0.000	31	-3.11	0.00	31
CARNASAW	1499	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.500	31	0.55	1.28	14
CARTER TWR	1544	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.530	31	-1.12	1.74	9
FANSHAWE	3065	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.850	31	-0.21	1.15	18
HEAVENER	4008	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.810	31	-0.53	0.85	18
HUGO	4384	9	79.0	31	-2.8	101	7	58	8	5	5	440	-81	2.741	31	0.07	1.10	7
IDABEL	4451	9	78.7	31	-1.8	102	6	58	26	4	4	428	-53	2.800	31	0.24	1.14	23
POTEAU	7254	9	77.8	31 *	****	98	4	59	6	3	*****	401	*****	5.250	31	****	1.68	17
SMITHVILLE	8285	9	76.0	23 *	****	97	20	55	26	6	*****	260	*****	2.302	25	****	0.90	8
SPIRO	8416	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.940	31	1.61	2.06	18
TUSKAHOMA	9023	9	79.2	31	-1.9	101	4	57	27	0	0	440	-59	3.400	31	0.10	1.71	18
VALLIANT	9118	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	5.420	31	2.96	1.81	14
WILBURTON	9634	9	78.8	31	-1.6	100	4	59	27	0	0	429	-48	4.130	31	1.03	1.43	17

AUGUST 1997 CLIMATE DIVISION SUMMARY

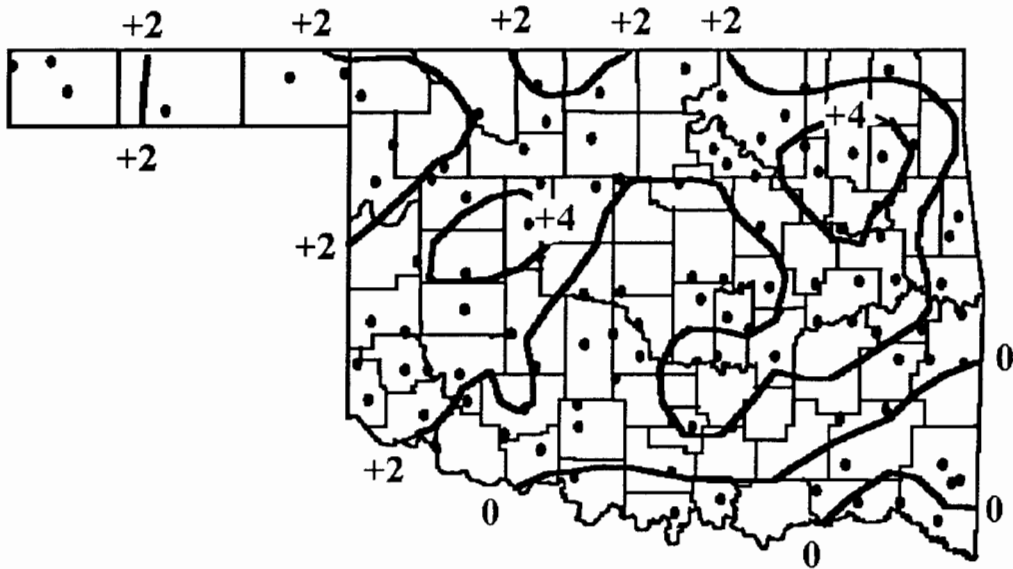
CD	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	76.5	7	-1.3	100	2	52	3	3.6	3.6	359.2	-35.9	4.28	11	1.74	2.42	7
2	77.8	7	-3.4	102	3	56	7	1.8	1.8	397	-104.6	6.08	11	3.04	3.76	19
3	77.5	9	-2.6	97	4	56	7	0	0	386.9	-82.6	6.78	21	3.47	3.34	11
4	78.2	9	-2.5	100	3	54	8	2.4	2.4	409.3	-76.6	5.96	15	3.33	5.17	11
5	78.8	11	-2.4	100	30	54	7	1.5	1.5	430.2	-74.1	4.33	30	1.7	2.25	10
6	77.5	9	-3.1	99	16	51	23	0.7	0.7	389.6	-95.2	5.35	26	2.44	5.43	18
7	80.4	11	-1.9	101	2	55	8	1.2	1.2	471.4	-64.9	4.95	15	2.53	5.12	11
8	80.7	9	-1.5	102	6	58	8	1.7	1.7	485.7	-48.7	2.85	20	0.27	4.1	19
9	78.8	8	-1.9	102	6	52	7	2.1	2.1	429.6	-56.4	3.07	15	0.1	2.06	18

MESONET MONTHLY SUMMARY FOR AUGUST 1997

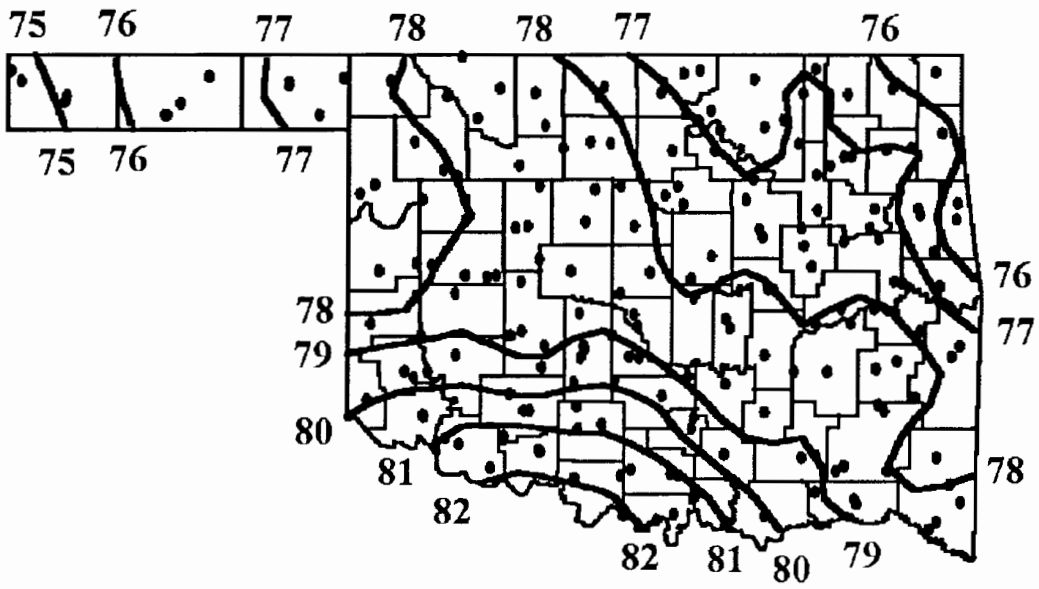
NAME	MEAN	MAX	MIN		HDD	CDD	TOT	MAX	DAY	NAME	MEAN	MAX	MIN		HDD	CDD	TOT	MAX	DAY											
	TEMP	TEMP	DAY	TEMP			DAY	PPT			24-HR	TEMP	TEMP	DAY			TEMP	DAY		PPT	24-HR	DAY								
PANHANDLE																														
Arnett	77.3	100	2	55	8	1	383	2.22	1.05	6	Goodwell	75.8	97	16	55	7	2	337	3.15	1.13	10									
Beaver	77.5	99	1	54	8	0	387	3.72	1.42	6	Hooker	76.4	97	16	56	8	4	356	2.81	1.15	6									
Boise City	74.5	95	1	56	6	1	296	4.90	.92	10	Kenton	74.1	93	16	52	7	4	287	6.28	1.93	5									
Buffalo	78.5	102	2	54	8	0	419	4.81	1.49	6	Slapout	76.8	98	2	53	8	1	367	2.79	1.27	6									
NORTH CENTRAL																														
Alva	78.6	101	2	57	8	0	421	6.81	2.60	6	May Ranch	77.5	98	2	57	8	0	387	7.27	2.35	6									
Blackwell	77.7	97	30	61	7	0	394	8.76	1.78	18	Medford	77.9	98	30	59	6	0	398	7.75	1.89	6									
Breckenridge	77.8	97	30	59	6	0	397	5.02	1.51	6	Newkirk	76.5	95	30	59	9	0	357	8.02	2.01	10									
Cherokee	79.0	100	15	59	6	0	435	9.04	2.59	18	Red Rock	77.4	96	30	61	6	0	383	4.07	1.22	6									
Fairview	79.3	102	2	59	7	0	443	5.92	1.90	6	Seiling	78.3	102	2	57	8	0	413	3.24	1.22	6									
Freedom	78.5	101	2	54	8	0	419	6.61	1.88	6	Woodward	77.9	100	2	56	8	0	400	3.68	1.37	22									
Lahoma	78.0	98	30	59	6	0	404	5.12	1.87	6																				
NORTHEAST																														
Bixby	77.5	95	4	58	7	0	386	9.06	4.59	18	Nowata	76.7	95	4	60	1	0	362	6.13	2.56	17									
Burbank	76.5	94	4	58	7	0	357	7.51	1.45	11	Pawnee	77.0	94	30	60	6	0	373	5.15	1.64	6									
Catoosa	77.3	96	4	59	7	0	380	10.28	4.42	11	Pryor	76.9	98	4	57	7	0	368	8.09	2.90	17									
Claremore	76.9	95	4	58	7	0	367	9.13	4.29	11	Skiatook	76.5	93	4	57	7	0	355	9.25	3.61	11									
Copan	77.3	95	4	60	7	0	382	4.65	1.60	11	Tullahassee	77.8	95	4	59	6	0	397	4.81	1.70	17									
Foraker	76.0	93	4	59	7	0	339	4.59	1.12	18	Vinita	75.7	95	4	58	6	0	332	5.68	2.27	11									
Jay	76.0	95	4	56	7	0	342	6.79	2.83	17	Wynona	76.5	93	30	59	7	0	357	6.46	1.37	18									
Miami	75.4	93	4	54	7	0	321	6.47	2.15	17																				
WEST CENTRAL																														
Bessie	78.8	99	2	56	7	2	431	5.49	1.92	10	Putnam	77.7	100	2	56	7	0	393	5.34	1.26	6									
Butler	78.5	99	2	58	7	0	419	7.28	1.83	22	Retrop	78.5	98	2	56	7	3	422	6.24	1.31	18									
Camargo	77.5	101	2	57	8	0	387	4.76	1.53	22	Watonga	77.6	96	4	57	7	1	393	6.59	2.17	18									
Cheyenne	77.1	96	2	56	7	3	379	6.43	1.99	18	Weatherford	78.4	97	1	55	7	3	417	3.73	1.18	18									
Erick	77.8	100	2	55	8	2	399	3.22	.93	14																				
CENTRAL																														
Acme	79.5	97	4	59	7	3	453	4.07	1.21	19	Minco	78.3	98	4	59	7	2	414	5.70	1.01	22									
Bowlegs	77.1	95	4	57	9	3	377	4.55	1.09	12	Ninnekah	80.1	97	4	60	7	2	469	3.82	.86	22									
Bristow	76.5	94	4	56	6	0	357	5.42	2.13	18	Norman	78.5	96	15	58	7	2	422	3.62	.98	22									
Chandler	77.0	94	30	56	6	3	376	3.37	.88	22	Oilton	76.5	94	30	57	7	0	358	6.86	1.21	6									
Chickasha	79.5	98	4	60	7	2	452	3.83	.99	22	Okemah	77.9	97	4	57	7	2	401	3.19	.85	22									
El Reno	77.1	97	28	57	7	2	378	4.47	1.03	22	Perkins	77.7	97	30	57	7	0	393	3.99	.84	6									
Guthrie	78.6	97	30	57	7	0	421	4.33	1.36	6	Shawnee	78.0	96	30	57	7	2	406	3.78	.77	22									
Kingfisher	78.7	97	4	59	7	0	425	5.01	1.49	6	Spencer	78.2	95	30	58	7	1	410	5.84	1.11	22									
Marena	77.4	96	30	57	7	0	385	5.63	1.07	22	Stillwater	77.2	94	4	57	7	0	379	4.99	1.03	6									
Marshall	78.7	99	30	59	7	0	423	4.13	1.40	6	Washington	79.1	98	4	59	7	3	440	4.16	1.44	19									
EAST CENTRAL																														
Calvin	77.9	96	4	59	9	2	403	4.96	1.24	12	Preston	77.2	94	4	55	6	2	379	6.88	2.80	18									
Cookson	76.0	96	15	57	7	0	340	4.14	1.65	17	Sallisaw	75.6	97	15	50	6	2	330	2.92	.96	18									
Eufaula	78.1	96	15	60	6	1	407	4.15	1.03	17	Stigler	78.0	98	14	60	6	1	403	8.00	5.09	18									
Haskell	77.2	96	15	58	6	0	378	4.13	1.61	18	Stuart	77.8	97	4	59	9	3	399	4.59	1.50	17									
Hectorville	77.5	96	4	56	6	0	388	7.39	3.54	18	Tahlequah	75.8	93	4	57	6	0	333	4.65	1.95	17									
McAlester	78.3	97	4	59	9	3	416	3.27	1.51	17	Webbers Falls	78.4	98	15	61	6	0	414	6.63	3.01	18									
Okmulgee	76.8	95	30	56	6	1	368	4.26	1.55	18	Westville	75.3	93	4	57	7	0	320	2.87	1.18	17									
SOUTHWEST																														
Altus	79.8	100	2	61	7	2	460	5.51	2.09	10	Hollis	80.5	101	2	60	7	1	482	4.02	1.21	10									
Apache	78.4	95	4	59	7	3	417	4.32	.75	22	Mangum	79.0	98	1	58	7	3	437	7.27	3.39	10									
Fort Cobb	78.5	97	4	59	7	2	421	3.65	.90	18	Medicine Park	79.4	96	16	60	7	3	450	3.57	.81	22									
Grandfield	81.9	101	17	63	7	0	523	2.62	.71	14	Tipton	81.0	100	16	62	7	0	496	3.77	1.13	22									
Hinton	78.0	97	4	55	7	4	407	4.26	1.87	18	Walters	82.0	101	17	63	7	0	528	2.21	.60	13									
Hobart	79.8	99	2	58	7	3	463	6.42	3.30	10																				
SOUTH CENTRAL																														
Ada	78.7	98	30	60	7	2	428	3.38	1.40	12	Lane	79.3	100	4	59	26	1	444	2.06	1.09	22									
Ardmore	81.2	100	5	61	7	1	503	1.59	.70	22	Madill	82.1	100	5	60	9	1	531	1.04	.71	22									
Burneyville	81.7	100	20	62	7	0	519	2.49	1.95	6	Pauls Valley	80.5	99	30	61	7	1	481	2.52	.78	22									
Byars	78.7	96	31	60	7	3	429	3.31	.88	22	Ringling	82.1	104	26	62	7	0	530	2.59	1.54	6									
Centrahoma	78.5	99	5	59	9	2	420	5.96	2.41	12	Sulphur	79.1	97	4	59	9	2	440	7.88	3.92	18									
Durant	80.1	99	5	60	7	1	471	1.53	.60	22	Tishomingo	79.0	99	4	57	9	1	436	2.28	.94	22									
Ketchum Ranch	81.5	101	27	61	7	1	513	2.54	.76	22	Waurika	82.2	102	17	62	7	0	533	2.64	1.58	17									
SOUTHEAST																														
Antlers	78.3	101	5	55	26	1	413	6.04	5.13	22	Idabel	78.9	100	5	58	26	0	430	2.25	1.09	7									
Broken Bow	78.8	102	5	58	25	0	426	3.69	1.24	13	Mt Herman	76.8	96	4	58	7	5	371	2.61	1.59	7									
Clayton	78.8	98	4	59	26	1	428	2.84	1.34	17	Talihina	78.2	99	4	58	26	2	411	3.28	1.31	7									
Cloudy	76.9	96	4	57	26	2	370	3.49	1.15	22	Wilburton	78.9	100	4	60	7	2	433	5.25	2.37	17									
Hugo	79.2	100	5	60	7	1	441	2.90	1.45	7	Wister	78.1	98	30	60	7	3	410	4.62	2.30	18									



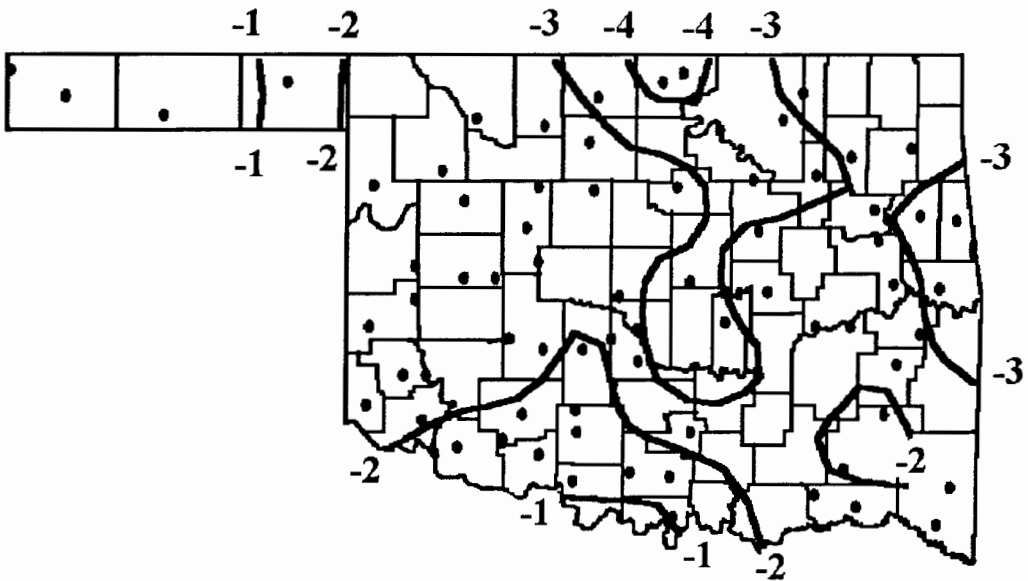
**AUGUST 1997 TOTAL PRECIPITATION
(INCHES)**



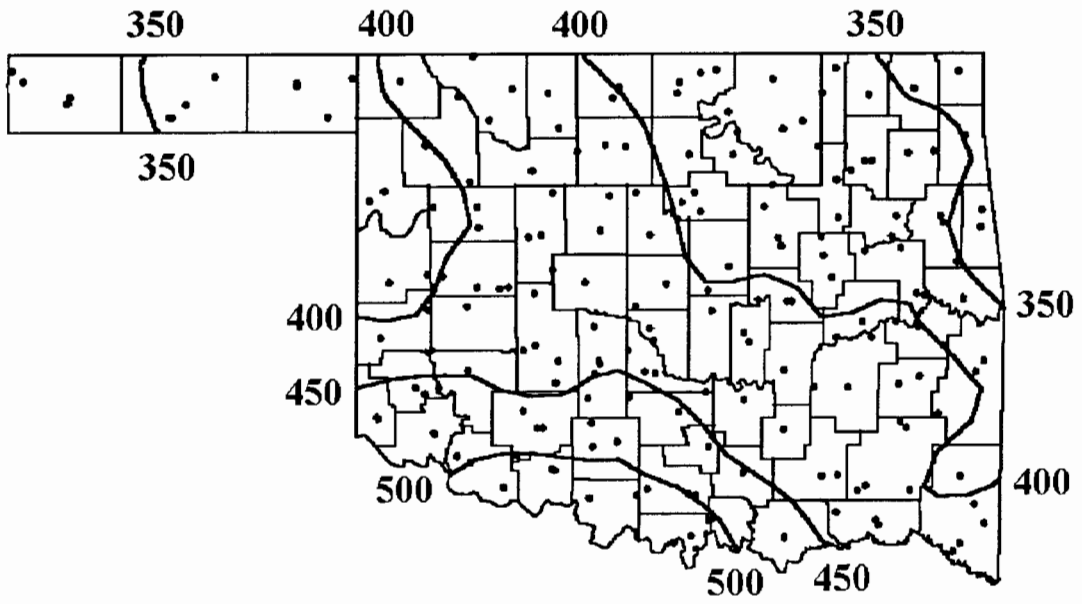
**AUGUST 1997 DEPARTURE FROM NORMAL PRECIPITATION
(INCHES)**



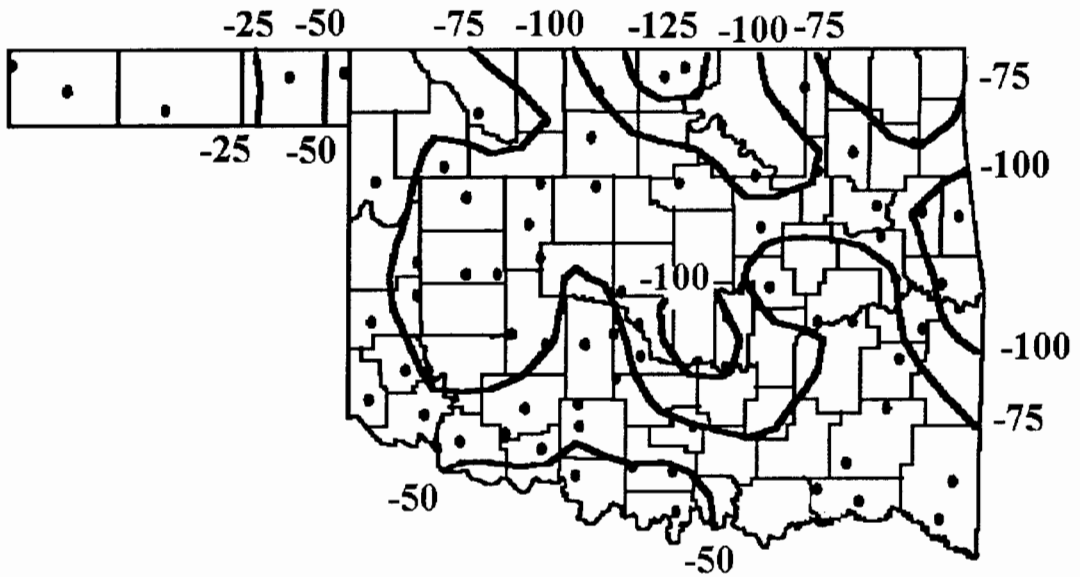
AUGUST 1997 AVERAGE MONTHLY TEMPERATURE (°F)



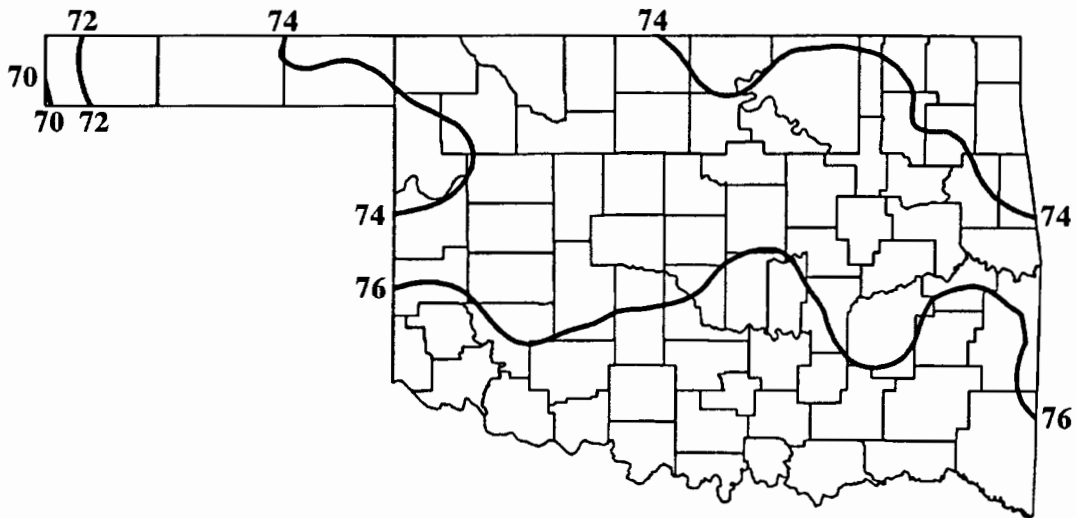
AUGUST 1997 DEPARTURE FROM NORMAL TEMPERATURE (°F)



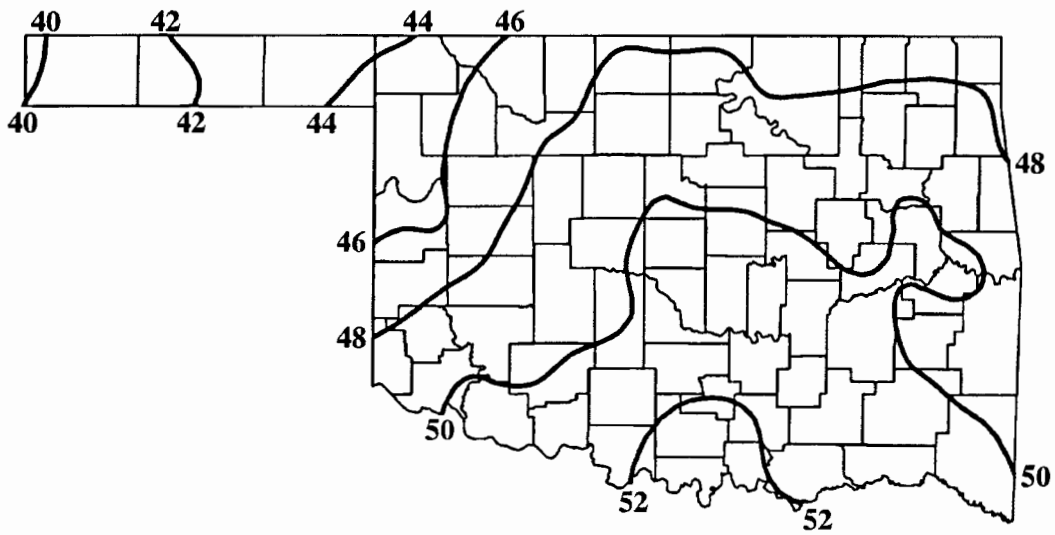
AUGUST 1997 ACCUMULATED COOLING DEGREE DAYS (°F)



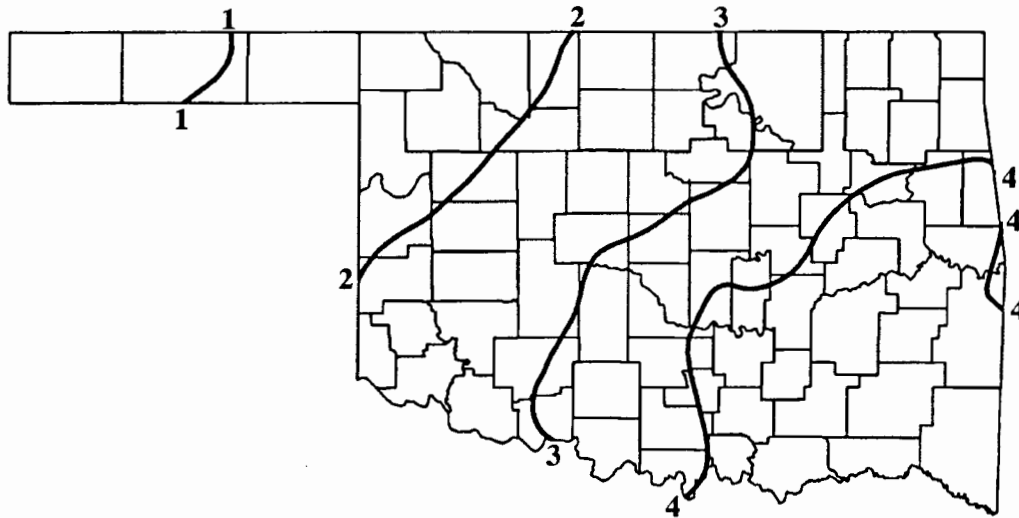
AUGUST 1997 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)



OCTOBER NORMAL DAILY MAXIMUM TEMPERATURE (°F)



OCTOBER NORMAL DAILY MINIMUM TEMPERATURE (°F)



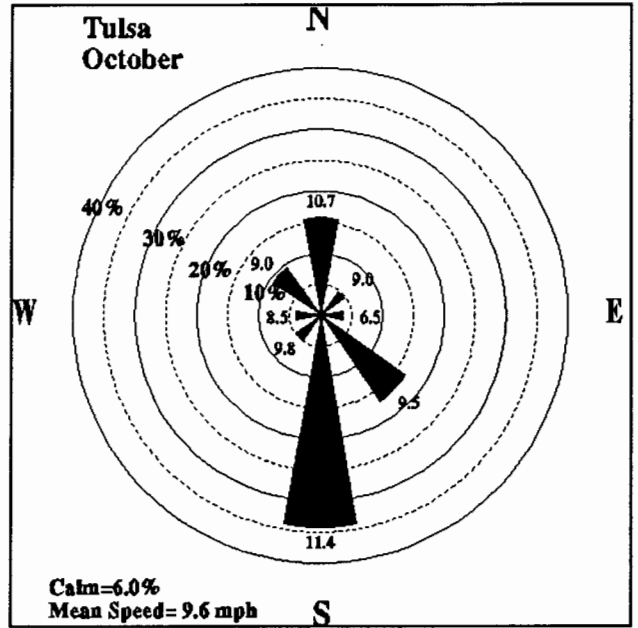
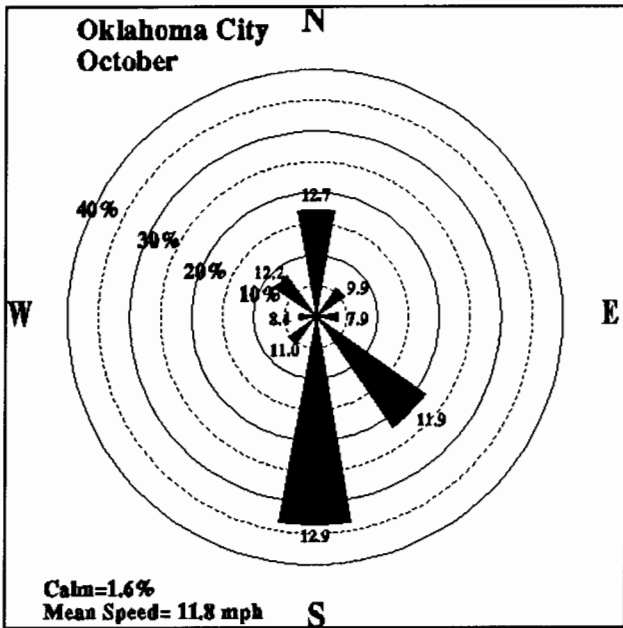
OCTOBER NORMAL MONTHLY PRECIPITATION (inches)

OUTLOOK FOR OCTOBER THROUGH DECEMBER 1997

BASED ON SEASONAL OUTLOOKS PROVIDED BY THE CLIMATE PREDICTION CENTER

**TEMPERATURE: Lower Than Normal Northwest
Near Normal Elsewhere**

**PRECIPITATION: Greater Than Normal East
Near Normal Elsewhere**



October 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.

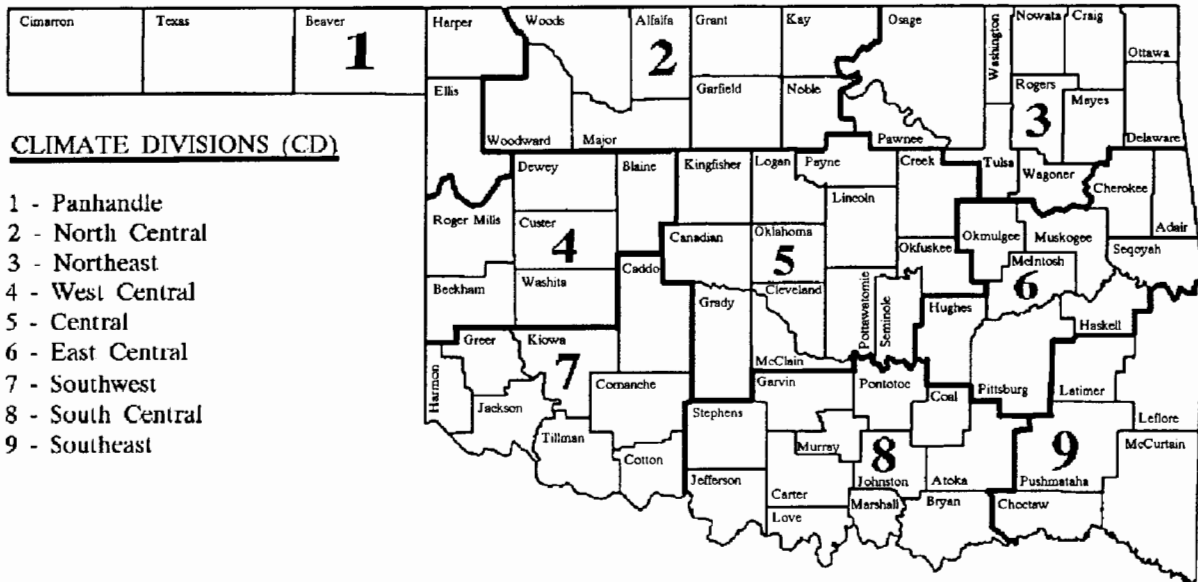
OCTOBER 1997 SUNRISE AND SUNSET

OKLAHOMA CITY

DATE	SUNRISE	SUNSET	DAYLIGHT
9710 1	7:24AM	7:16PM CDT	11 hrs 52 mins
9710 2	7:24AM	7:14PM CDT	11 hrs 50 mins
9710 3	7:25AM	7:13PM CDT	11 hrs 48 mins
9710 4	7:26AM	7:11PM CDT	11 hrs 46 mins
9710 5	7:27AM	7:10PM CDT	11 hrs 43 mins
9710 6	7:28AM	7: 9PM CDT	11 hrs 41 mins
9710 7	7:28AM	7: 7PM CDT	11 hrs 39 mins
9710 8	7:29AM	7: 6PM CDT	11 hrs 37 mins
9710 9	7:30AM	7: 5PM CDT	11 hrs 35 mins
971010	7:31AM	7: 3PM CDT	11 hrs 32 mins
971011	7:32AM	7: 2PM CDT	11 hrs 30 mins
971012	7:32AM	7: 1PM CDT	11 hrs 28 mins
971013	7:33AM	6:59PM CDT	11 hrs 26 mins
971014	7:34AM	6:58PM CDT	11 hrs 24 mins
971015	7:35AM	6:57PM CDT	11 hrs 22 mins
971016	7:36AM	6:55PM CDT	11 hrs 19 mins
971017	7:37AM	6:54PM CDT	11 hrs 17 mins
971018	7:38AM	6:53PM CDT	11 hrs 15 mins
971019	7:39AM	6:52PM CDT	11 hrs 13 mins
971020	7:39AM	6:50PM CDT	11 hrs 11 mins
971021	7:40AM	6:49PM CDT	11 hrs 9 mins
971022	7:41AM	6:48PM CDT	11 hrs 7 mins
971023	7:42AM	6:47PM CDT	11 hrs 5 mins
971024	7:43AM	6:46PM CDT	11 hrs 3 mins
971025	7:44AM	6:45PM CDT	11 hrs 1 mins
971026	7:45AM	6:44PM CDT	10 hrs 59 mins
971027	7:46AM	6:43PM CDT	10 hrs 57 mins
971028	7:47AM	6:42PM CDT	10 hrs 55 mins
971029	7:48AM	6:40PM CDT	10 hrs 53 mins
971030	7:49AM	6:39PM CDT	10 hrs 51 mins
971031	7:50AM	6:38PM CDT	10 hrs 49 mins

TULSA

DATE	SUNRISE	SUNSET	DAYLIGHT
9710 1	7:17AM	7: 9PM CDT	11 hrs 52 mins
9710 2	7:18AM	7: 7PM CDT	11 hrs 49 mins
9710 3	7:19AM	7: 6PM CDT	11 hrs 47 mins
9710 4	7:19AM	7: 4PM CDT	11 hrs 45 mins
9710 5	7:20AM	7: 3PM CDT	11 hrs 43 mins
9710 6	7:21AM	7: 1PM CDT	11 hrs 40 mins
9710 7	7:22AM	7: 0PM CDT	11 hrs 38 mins
9710 8	7:23AM	6:59PM CDT	11 hrs 36 mins
9710 9	7:24AM	6:57PM CDT	11 hrs 34 mins
971010	7:24AM	6:56PM CDT	11 hrs 31 mins
971011	7:25AM	6:55PM CDT	11 hrs 29 mins
971012	7:26AM	6:53PM CDT	11 hrs 27 mins
971013	7:27AM	6:52PM CDT	11 hrs 25 mins
971014	7:28AM	6:51PM CDT	11 hrs 23 mins
971015	7:29AM	6:49PM CDT	11 hrs 20 mins
971016	7:30AM	6:48PM CDT	11 hrs 18 mins
971017	7:31AM	6:47PM CDT	11 hrs 16 mins
971018	7:32AM	6:45PM CDT	11 hrs 14 mins
971019	7:32AM	6:44PM CDT	11 hrs 12 mins
971020	7:33AM	6:43PM CDT	11 hrs 9 mins
971021	7:34AM	6:42PM CDT	11 hrs 7 mins
971022	7:35AM	6:40PM CDT	11 hrs 5 mins
971023	7:36AM	6:39PM CDT	11 hrs 3 mins
971024	7:37AM	6:38PM CDT	11 hrs 1 mins
971025	7:38AM	6:37PM CDT	10 hrs 59 mins
971026	7:39AM	6:36PM CDT	10 hrs 57 mins
971027	7:40AM	6:35PM CDT	10 hrs 55 mins
971028	7:41AM	6:34PM CDT	10 hrs 53 mins
971029	7:42AM	6:33PM CDT	10 hrs 51 mins
971030	7:43AM	6:32PM CDT	10 hrs 49 mins
971031	7:44AM	6:31PM CDT	10 hrs 47 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

OCTOBER

The data on this calendar are for Oklahoma City.
 Normal values are calculated for the period
 1961-1990. Extremes are found for the period
 of record (1891 - present).

Normal 1 80.2 max 54.0 min .08 ppt 2 cdd 5 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.29-1969	Normal 2 80.3 max 55.8 min .26 ppt 5 cdd 2 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 4.63-1905	Normal 3 79.2 max 55.9 min .18 ppt 4 cdd 2 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.59-1991	Normal 4 77.8 max 55.9 min .10 ppt 2 cdd 4 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.22-1965	Normal 5 77.7 max 55.3 min .10 ppt 2 cdd 4 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.74-1970	Normal 6 74.9 max 53.8 min .08 ppt 3 cdd 3 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.36-1999	Normal 7 75.5 max 52.2 min .08 ppt 3 cdd 2 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.41-1967	Normal 8 79.0 max 53.5 min .05 ppt 3 cdd 4 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt .90-1978	Normal 9 77.1 max 52.8 min .08 ppt 3 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.09-1991	Normal 10 76.9 max 52.4 min .04 ppt 3 cdd 3 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt .94-1995	Normal 11 76.5 max 51.5 min .11 ppt 4 cdd 3 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.89-1991	Normal 12 76.6 max 53.4 min .05 ppt 4 cdd 4 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.45-1923	Normal 13 77.4 max 53.8 min .06 ppt 3 cdd 4 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.44-1923	Normal 14 76.2 max 52.9 min .08 ppt 3 cdd 3 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.45-1965	Normal 15 74.2 max 52.4 min .09 ppt 4 cdd 2 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.45-1923	Normal 16 74.6 max 50.0 min .06 ppt 5 cdd 2 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.08-1991	Normal 17 73.2 max 49.7 min .07 ppt 5 cdd 2 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.49-1942	Normal 18 72.1 max 49.1 min .15 ppt 5 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.34-1960	Normal 19 71.6 max 47.3 min .14 ppt 7 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 4.99-1993	Normal 20 72.0 max 48.4 min .23 ppt 9 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 5.45-1993	Normal 21 71.9 max 49.8 min .15 ppt 9 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 5.70-1972	Normal 22 71.3 max 49.2 min .13 ppt 6 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.87-1959	Normal 23 69.6 max 48.7 min .06 ppt 7 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.59-1920	Normal 24 69.0 max 46.3 min .05 ppt 8 cdd 0 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.44-1920	Normal 25 68.7 max 46.0 min .06 ppt 8 cdd 0 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.95-1999	Normal 26 70.4 max 46.3 min .04 ppt 7 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 3.79-1919	Normal 27 69.3 max 46.4 min .09 ppt 9 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 3.19-1994	Normal 28 67.7 max 45.6 min .07 ppt 9 cdd 0 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.99-1991	Normal 29 69.4 max 46.8 min .08 ppt 7 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.61-1941	Normal 30 69.1 max 46.7 min .19 ppt 8 cdd 9 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 2.94-1974	Normal 31 67.8 max 46.7 min .12 ppt 9 cdd 1 Highest Max Lowest Max Lowest Min Highest Min Greatest ppt 1.82-1972
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OCTOBER AVERAGES

TEMPERATURE : 62.1°F
 PRECIPITATION : 3.19"
 HEATING DEGREE DAYS : 155
 COOLING DEGREE DAYS : 67

TULSA CLIMATE CALENDAR

OCTOBER

The data on this calendar are for Tulsa. Normal values are calculated for the period 1948-1992; Temperature extremes are for the period 1905 - 1996; precipitation extremes are for the period 1948 - 1996.

<p>Normal 1 Actual</p> <p>81.0 max 54.0 min 2.08 ppt 6 cdd</p> <p>Highest Max 87-1910 Lowest Max 98-1966 Lowest Min 98-1966 Highest Min 66-1971 Greatest ppt 2.96-1966</p>	<p>Normal 2 Actual</p> <p>81.0 max 54.0 min 1.18 ppt 2 cdd</p> <p>Highest Max 96-1978 Lowest Max 66-1961 Lowest Min 38-1975 Highest Min 78-1984 Greatest ppt 5.46-1969</p>	<p>Normal 3 Actual</p> <p>80.0 max 56.0 min 1.05 ppt 2 cdd</p> <p>Highest Max 96-1968 Lowest Max 63-1967 Lowest Min 39-1967 Highest Min 74-1983 Greatest ppt 1.46-1990</p>	<p>Normal 4 Actual</p> <p>80.0 max 56.0 min 1.12 ppt 5 cdd</p> <p>Highest Max 97-1931 Lowest Max 84-1968 Lowest Min 39-1968 Highest Min 70-1964 Greatest ppt 2.17-1966</p>	<p>Normal 5 Actual</p> <p>79.0 max 55.0 min 1.18 ppt 4 cdd</p> <p>Highest Max 96-1947 Lowest Max 50-1988 Lowest Min 37-1984 Highest Min 73-1981 Greatest ppt 2.17-1978</p>	<p>Normal 6 Actual</p> <p>77.0 max 53.0 min 1.12 ppt 3 cdd</p> <p>Highest Max 98-1939 Lowest Max 57-1988 Lowest Min 35-1932 Highest Min 68-1990 Greatest ppt 3.24-1961</p>	<p>Normal 7 Actual</p> <p>77.0 max 53.0 min 1.05 ppt 3 cdd</p> <p>Highest Max 98-1978 Lowest Max 52-1988 Lowest Min 33-1932 Highest Min 67-1970 Greatest ppt 1.12-1992</p>	<p>Normal 8 Actual</p> <p>77.0 max 53.0 min 2.08 ppt 3 cdd</p> <p>Highest Max 97-1976 Lowest Max 56-1990 Lowest Min 32-1932 Highest Min 72-1978 Greatest ppt 1.61-1970</p>	<p>Normal 9 Actual</p> <p>78.0 max 53.0 min 2.03 ppt 4 cdd</p> <p>Highest Max 97-1933 Lowest Max 69-1930 Lowest Min 32-1917 Highest Min 70-1973 Greatest ppt .91-1986</p>	<p>Normal 10 Actual</p> <p>77.0 max 52.0 min 1.03 ppt 3 cdd</p> <p>Highest Max 95-1969 Lowest Max 57-1993 Lowest Min 30-1925 Highest Min 72-1973 Greatest ppt .91-1949</p>	<p>Normal 11 Actual</p> <p>78.0 max 52.0 min 1.17 ppt 4 cdd</p> <p>Highest Max 94-1979 Lowest Max 50-1987 Lowest Min 30-1906 Highest Min 68-1962 Greatest ppt 2.20-1973</p>	<p>Normal 12 Actual</p> <p>76.0 max 54.0 min 1.18 ppt 4 cdd</p> <p>Highest Max 94-1978 Lowest Max 46-1986 Lowest Min 32-1921 Highest Min 71-1982 Greatest ppt 3.37-1969</p>	<p>Normal 13 Actual</p> <p>77.0 max 54.0 min 1.09 ppt 3 cdd</p> <p>Highest Max 92-1903 Lowest Max 54-1986 Lowest Min 32-1917 Highest Min 71-1956 Greatest ppt 1.30-1981</p>	<p>Normal 14 Actual</p> <p>77.0 max 53.0 min 1.19 ppt 3 cdd</p> <p>Highest Max 92-1963 Lowest Max 59-1974 Lowest Min 34-1937 Highest Min 69-1968 Greatest ppt 1.86-1984</p>	<p>Normal 15 Actual</p> <p>75.0 max 52.0 min 1.10 ppt 4 cdd</p> <p>Highest Max 91-1963 Lowest Max 60-1970 Lowest Min 68-1966 Highest Min 68-1966 Greatest ppt 1.36-1967</p>	<p>Normal 16 Actual</p> <p>74.0 max 50.0 min 1.05 ppt 2 cdd</p> <p>Highest Max 98-1917 Lowest Max 69-1976 Lowest Min 62-1966 Highest Min 68-1965 Greatest ppt .66-1924</p>	<p>Normal 17 Actual</p> <p>75.0 max 49.0 min 1.04 ppt 5 cdd</p> <p>Highest Max 90-1947 Lowest Max 62-1966 Lowest Min 60-1978 Highest Min 66-1969 Greatest ppt .71-1993</p>	<p>Normal 18 Actual</p> <p>74.0 max 49.0 min 1.14 ppt 2 cdd</p> <p>Highest Max 91-1932 Lowest Max 61-1989 Lowest Min 29-1949 Highest Min 66-1979 Greatest ppt 1.44-1960</p>	<p>Normal 19 Actual</p> <p>73.0 max 48.0 min 1.08 ppt 5 cdd</p> <p>Highest Max 89-1940 Lowest Max 60-1976 Lowest Min 27-1917 Highest Min 75-1979 Greatest ppt 1.73-1989</p>	<p>Normal 20 Actual</p> <p>74.0 max 49.0 min 1.30 ppt 2 cdd</p> <p>Highest Max 91-1979 Lowest Max 63-1972 Lowest Min 30-1979 Highest Min 70-1979 Greatest ppt 4.96-1971</p>	<p>Normal 21 Actual</p> <p>74.0 max 49.0 min 1.13 ppt 5 cdd</p> <p>Highest Max 92-1978 Lowest Max 63-1984 Lowest Min 60-1917 Highest Min 66-1963 Greatest ppt 2.98-1972</p>	<p>Normal 22 Actual</p> <p>73.0 max 50.0 min 1.18 ppt 1 cdd</p> <p>Highest Max 88-1963 Lowest Max 61-1966 Lowest Min 51-1911 Highest Min 63-1963 Greatest ppt 1.20-1963</p>	<p>Normal 23 Actual</p> <p>70.0 max 49.0 min 1.03 ppt 1 cdd</p> <p>Highest Max 92-1938 Lowest Max 60-1981 Lowest Min 26-1937 Highest Min 70-1991 Greatest ppt 1.24-1970</p>	<p>Normal 24 Actual</p> <p>69.0 max 46.0 min 1.05 ppt 1 cdd</p> <p>Highest Max 88-1921 Lowest Max 60-1972 Lowest Min 24-1917 Highest Min 66-1963 Greatest ppt .89-1984</p>	<p>Normal 25 Actual</p> <p>69.0 max 46.0 min 1.11 ppt 8 cdd</p> <p>Highest Max 91-1939 Lowest Max 48-1927 Lowest Min 31-1925 Highest Min 66-1963 Greatest ppt 1.43-1964</p>	<p>Normal 26 Actual</p> <p>71.0 max 49.0 min 1.06 ppt 1 cdd</p> <p>Highest Max 90-1960 Lowest Max 46-1967 Lowest Min 27-1967 Highest Min 64-1996 Greatest ppt 1.61-1991</p>	<p>Normal 27 Actual</p> <p>70.0 max 48.0 min 1.11 ppt 1 cdd</p> <p>Highest Max 88-1922 Lowest Max 61-1970 Lowest Min 27-1967 Highest Min 64-1994 Greatest ppt 1.36-1973</p>	<p>Normal 28 Actual</p> <p>69.0 max 45.0 min 1.12 ppt 8 cdd</p> <p>Highest Max 88-1922 Lowest Max 43-1980 Lowest Min 23-1925 Highest Min 62-1991 Greatest ppt 2.46-1974</p>	<p>Normal 29 Actual</p> <p>69.0 max 46.0 min 1.14 ppt 1 cdd</p> <p>Highest Max 90-1966 Lowest Max 46-1978 Lowest Min 23-1915 Highest Min 66-1991 Greatest ppt 1.28-1967</p>	<p>Normal 30 Actual</p> <p>70.0 max 48.0 min 1.19 ppt 7 cdd</p> <p>Highest Max 90-1937 Lowest Max 41-1933 Lowest Min 15-1917 Highest Min 64-1977 Greatest ppt 1.78-1974</p>	<p>Normal 31 Actual</p> <p>69.0 max 49.0 min 1.18 ppt 7 cdd</p> <p>Highest Max 87-1960 Lowest Max 41-1991 Lowest Min 16-1998 Highest Min 66-1992 Greatest ppt 3.12-1981</p>
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OCTOBER AVERAGES

TEMPERATURE : 62.6°F

PRECIPITATION : 3.69"

HEATING DEGREE DAYS : 146

COOLING DEGREE DAYS : 78

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