OKLAHOMA
MONTHLY SUMMARY
AUGUST 1997

TABLE OF CONTENTS

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.

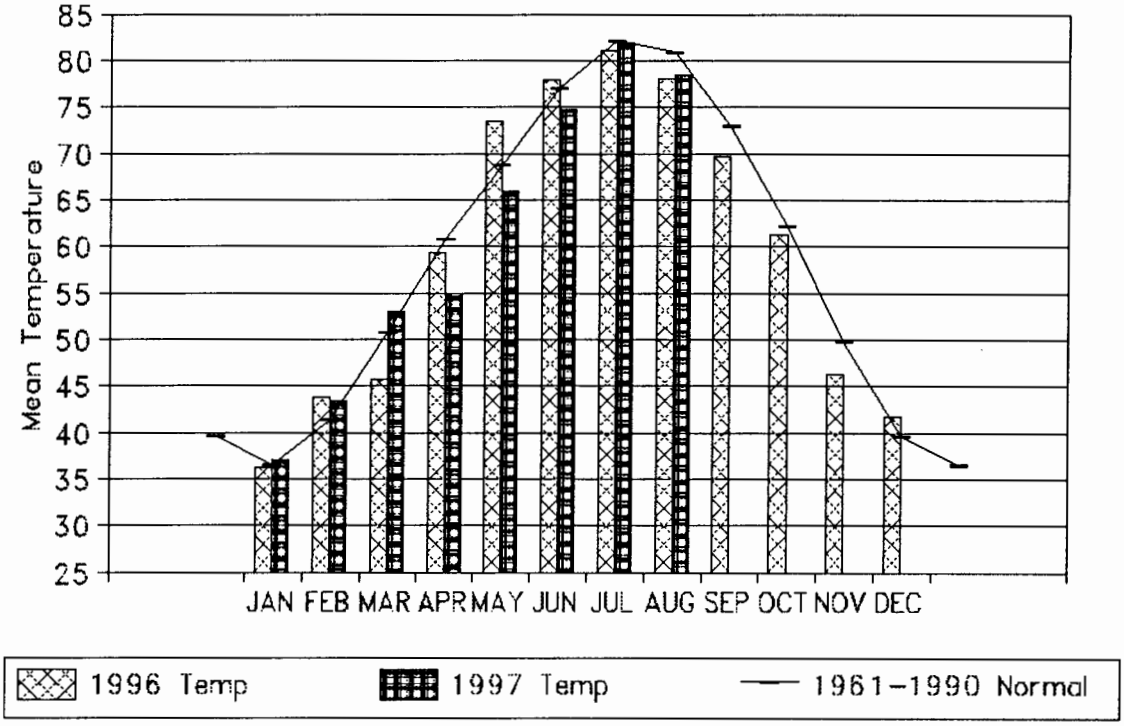
August started in typical fashion. Daytime temperatures in the upper 90s or low 100s were sometimes relieved by sporadic and very localized showers. A weak cold front that moved through the state from the 5th through the 7th dropped as much as 2.60 inches of rain (at the Oklahoma Mesonetwork site in 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.

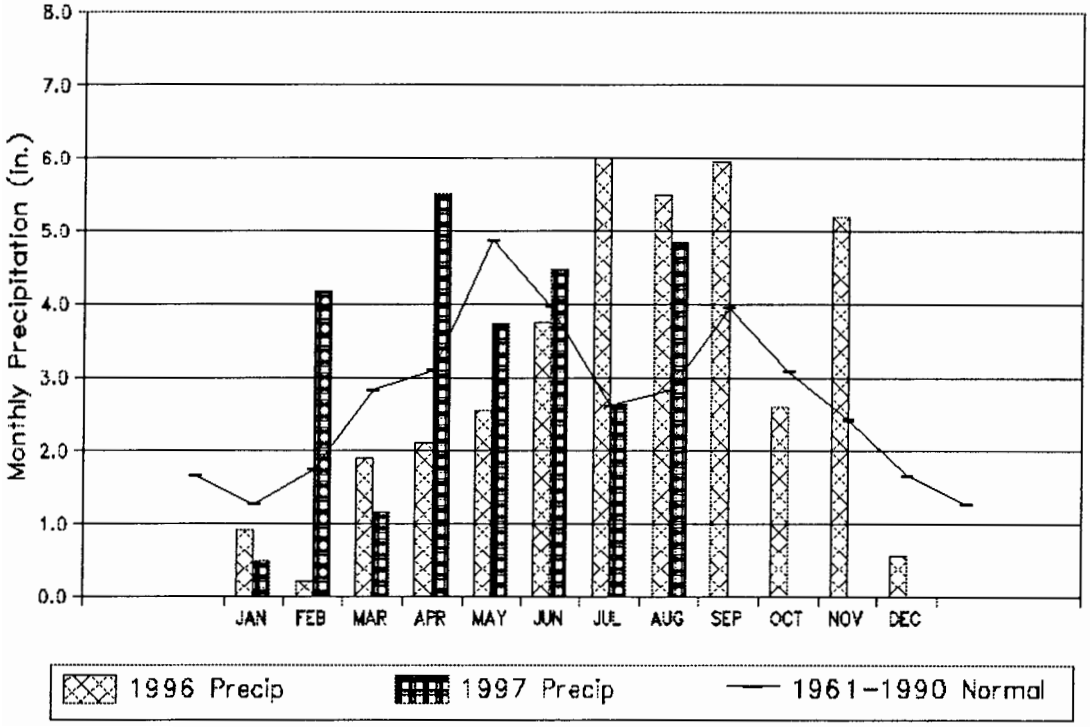
Mild weather, at least by Oklahoma's August standards, prevailed for the remainder of the month. The Ringling Mesonet site (Jefferson) recorded a maximum temperature of 104 degrees on the 26th, but generally, upper 80s and low-to-mid 90s prevailed across the state. Little or no precipitation was reported 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.

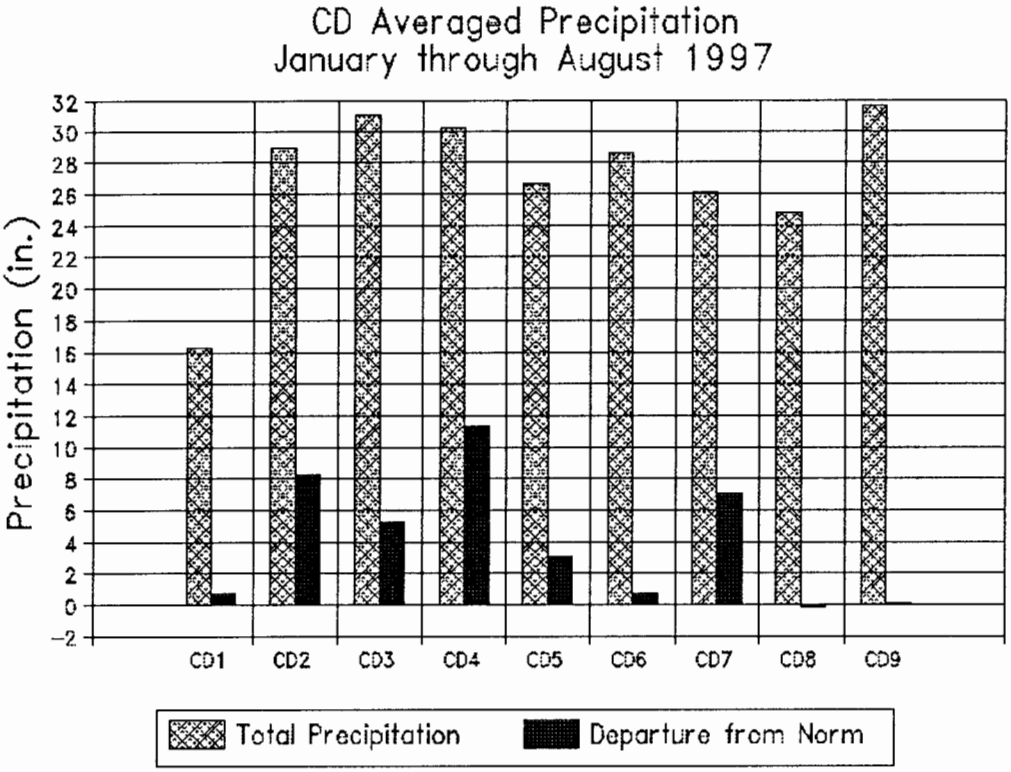
Howard L. Johnson

1996 and 1997 STATEWIDE TEMPERATURES
Monthly Averages



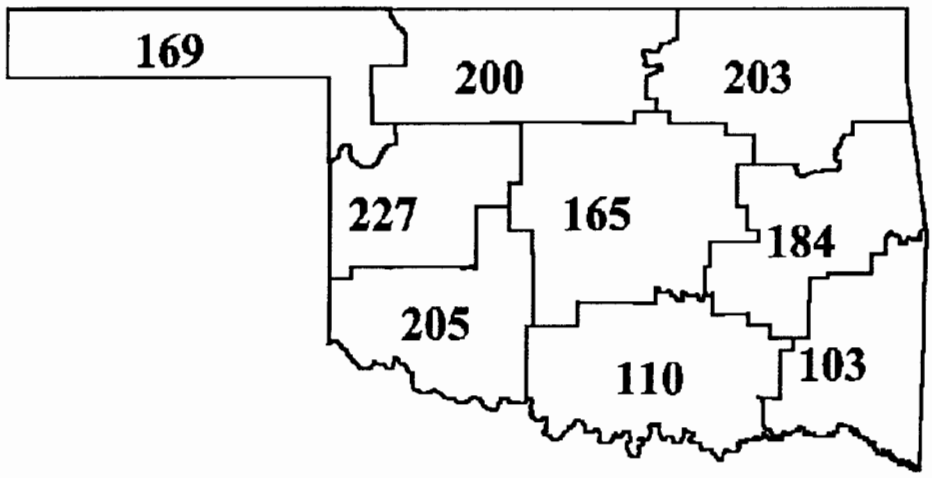
1996 and 1997 STATEWIDE PRECIPITATION
Monthly Totals





CD 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

Station	AUGUST Temperature (°F) 1996	1997	AUGUST Precipitation (in.) 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 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
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 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
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
EUFAULA	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)

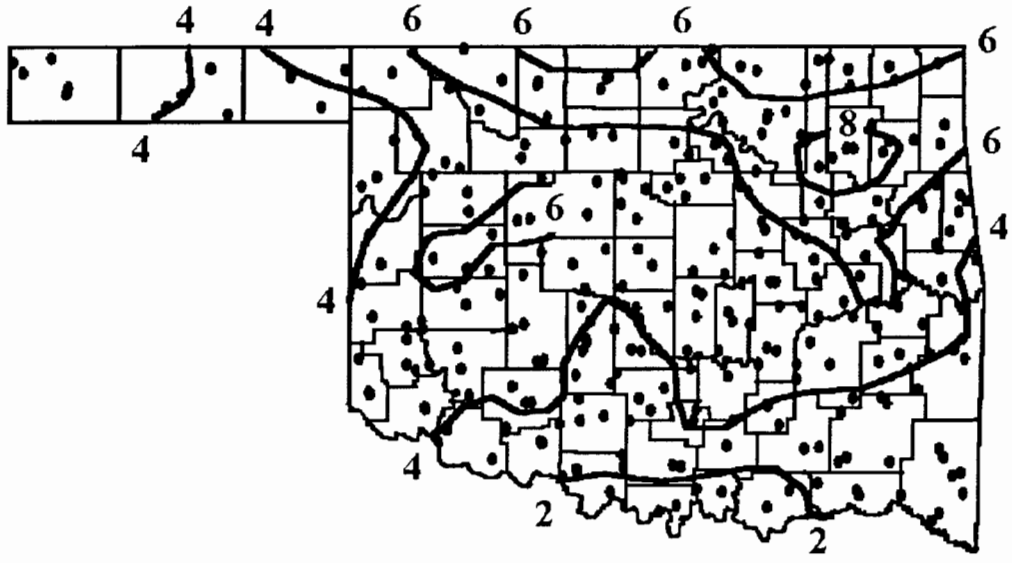
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	80.2	31	-1	100	5	58	27	0	0	470	-32	0.000	31	-2.79	0.00	31
BATTIEST	567	9	73.5	29 *	****	95	4	52	7	9	******	257	******	2.630	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

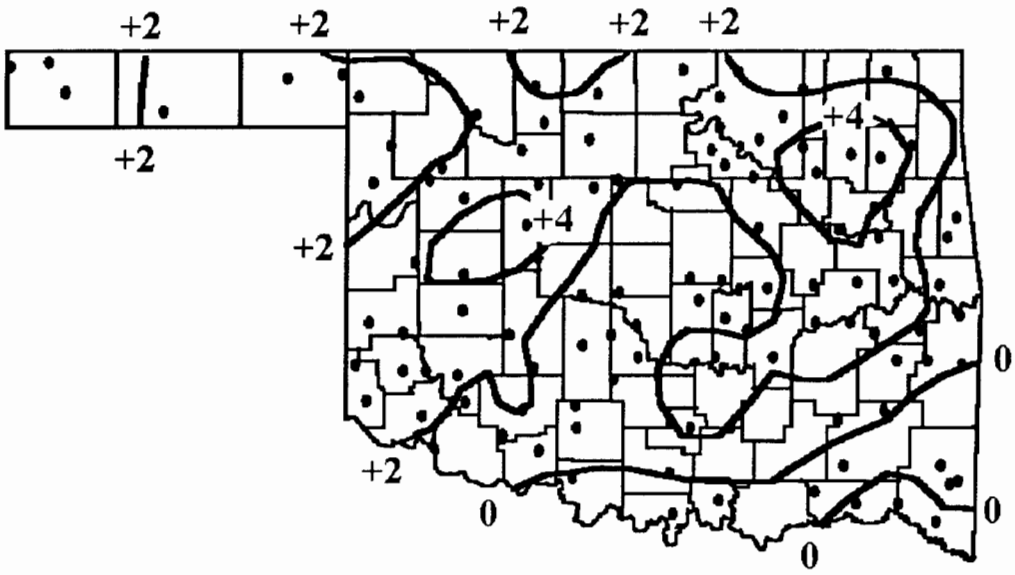
CD	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	76.5	7	-1.3	100	2	52	3	3.6	3.6	359.2	-35.9	4.28	11	1.74	2.42	7
2	77.8	7	-3.4	102	3	56	7	1.8	1.8	397	-104.6	6.08	11	3.04	3.76	19
3	77.5	9	-2.6	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

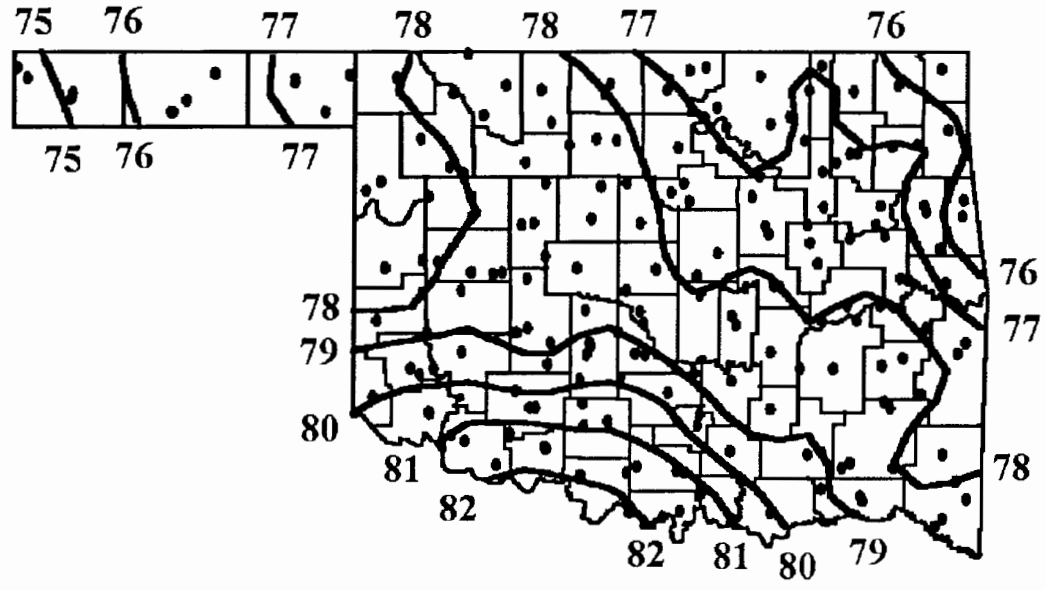
NAME	MEAN TEMP	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HDD	CDD	TOT PPT	MAX 24-HR	MAX 24-HR DAY	NAME	MEAN TEMP	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HDD	CDD	TOT PPT	MAX 24-HR	MAX 24-HR DAY
PANHANDLE																					
Arnett	77.3	100	2	55	8	1	383	2.22	1.05	6	Goodwell	75.8	97	16	55	7	2	337	3.15	1.13	10
Beaver	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



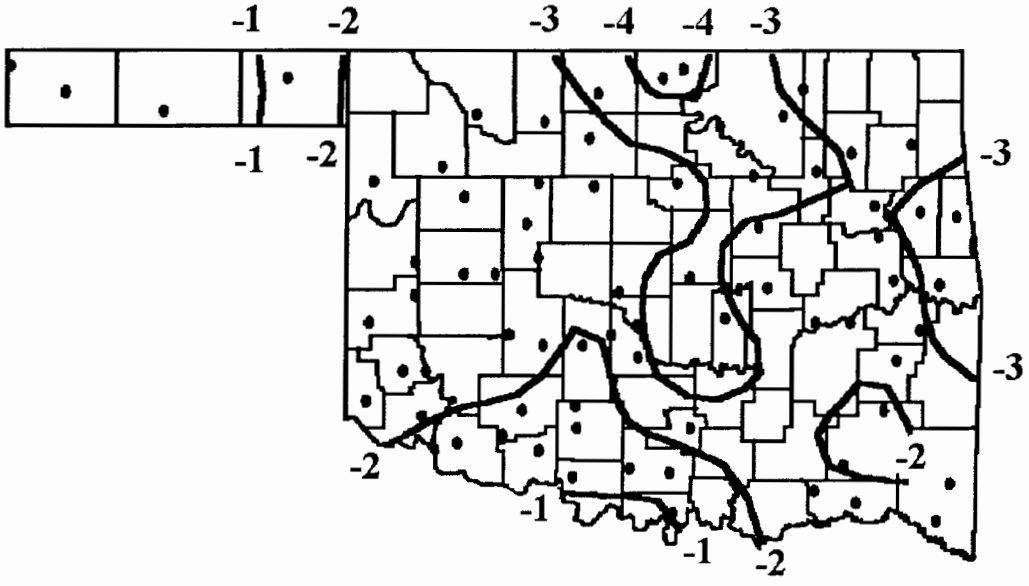
AUGUST 1997 TOTAL PRECIPITATION
(INCHES)



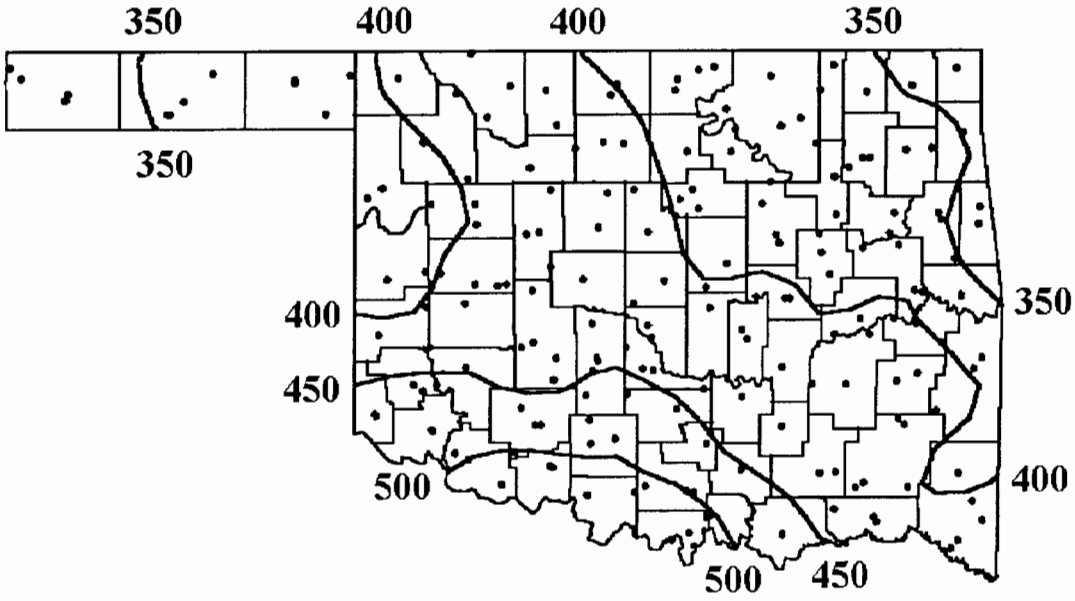
AUGUST 1997 DEPARTURE FROM NORMAL PRECIPITATION
(INCHES)



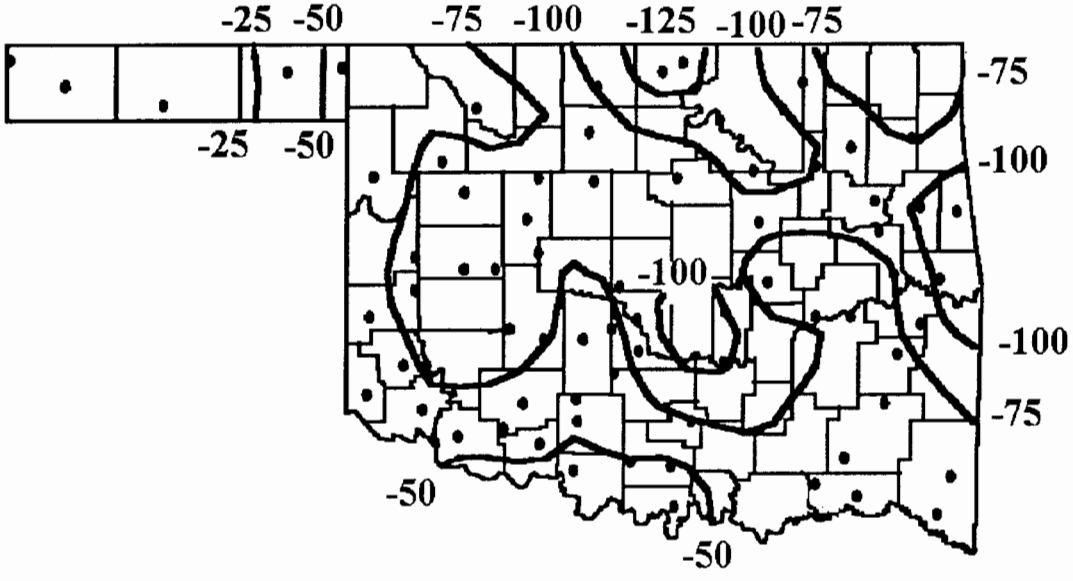
AUGUST 1997 AVERAGE MONTHLY TEMPERATURE (°F)



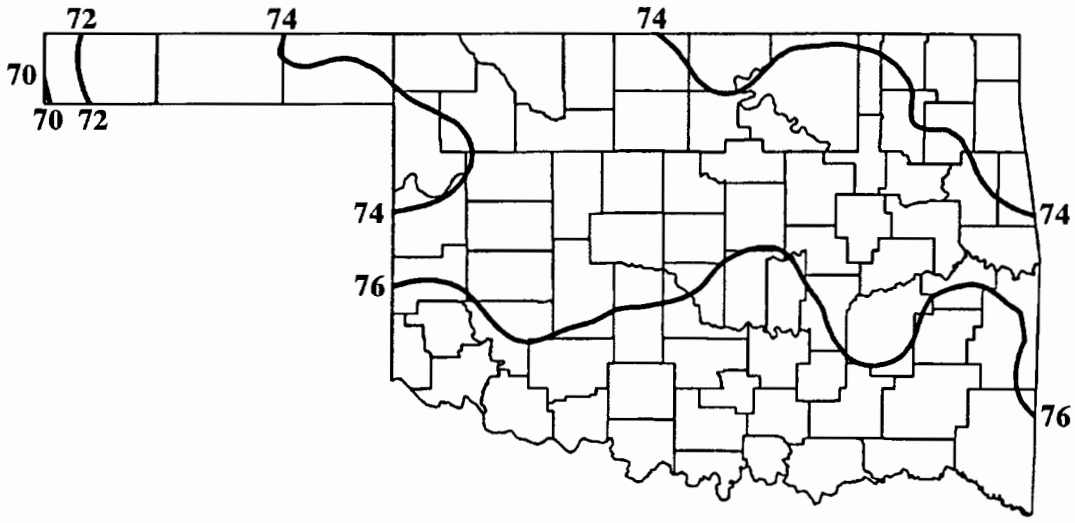
AUGUST 1997 DEPARTURE FROM NORMAL TEMPERATURE (°F)



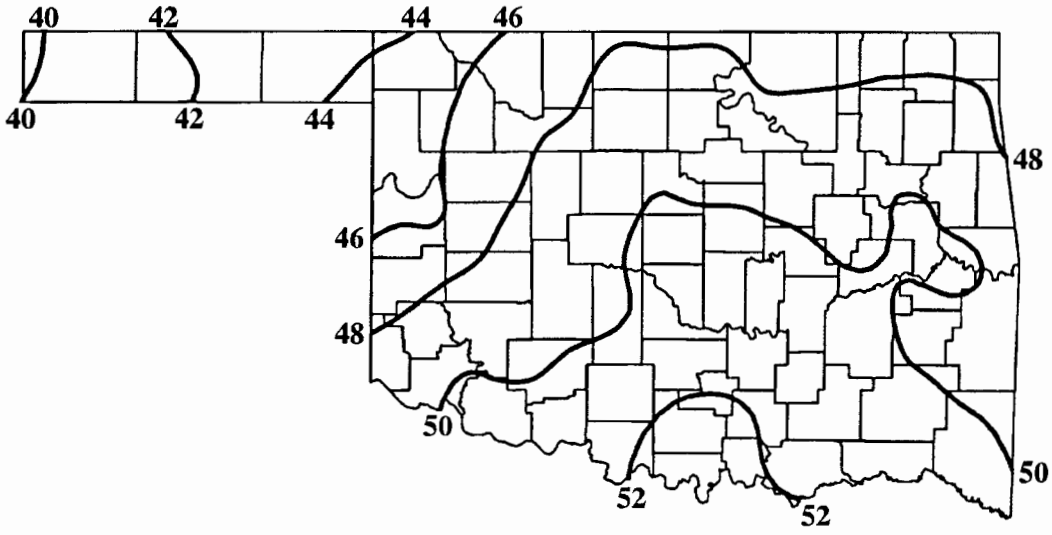
AUGUST 1997 ACCUMULATED COOLING DEGREE DAYS (°F)



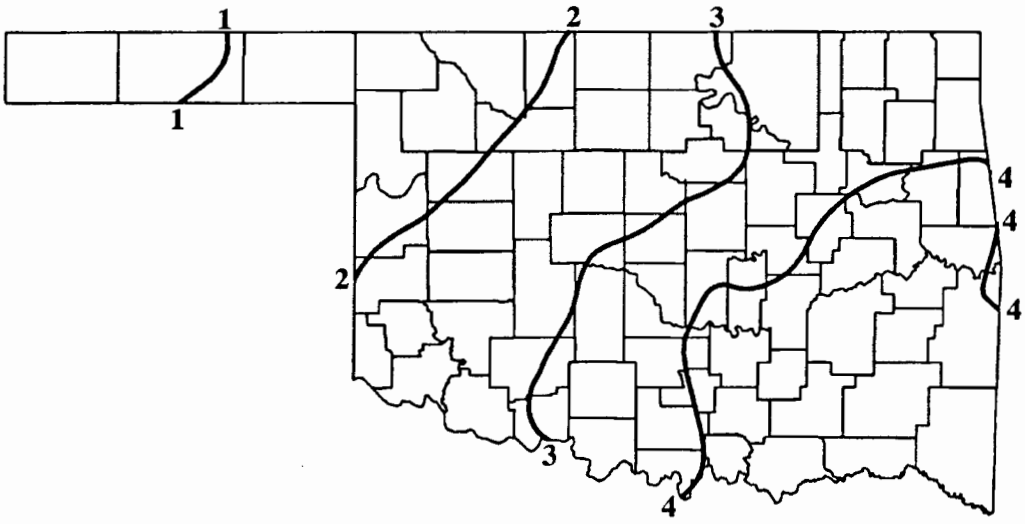
AUGUST 1997 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)



OCTOBER NORMAL DAILY MAXIMUM TEMPERATURE (°F)



OCTOBER NORMAL DAILY MINIMUM TEMPERATURE (°F)



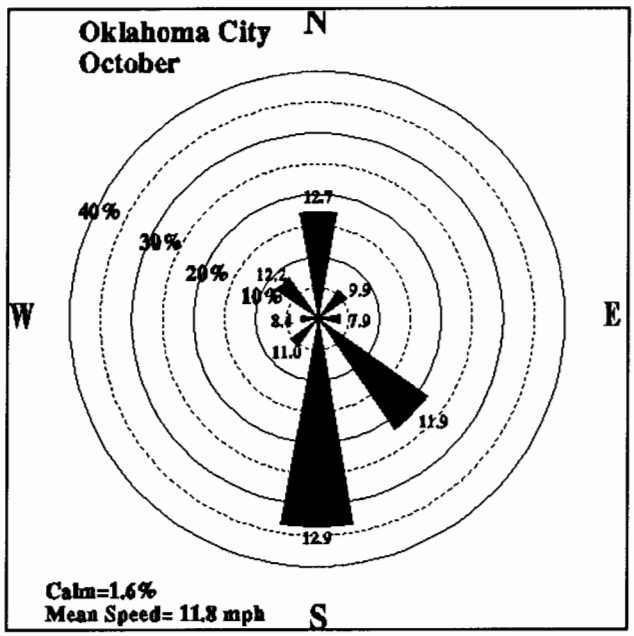
OCTOBER NORMAL MONTHLY PRECIPITATION (inches)

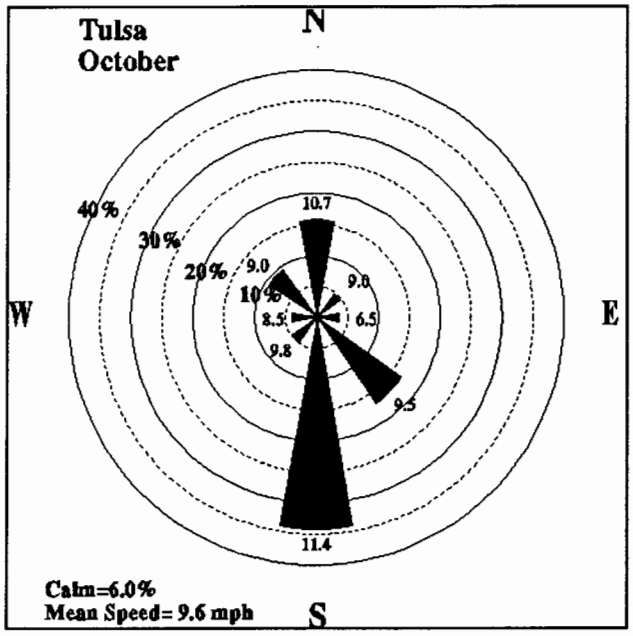
OUTLOOK FOR OCTOBER THROUGH DECEMBER 1997

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

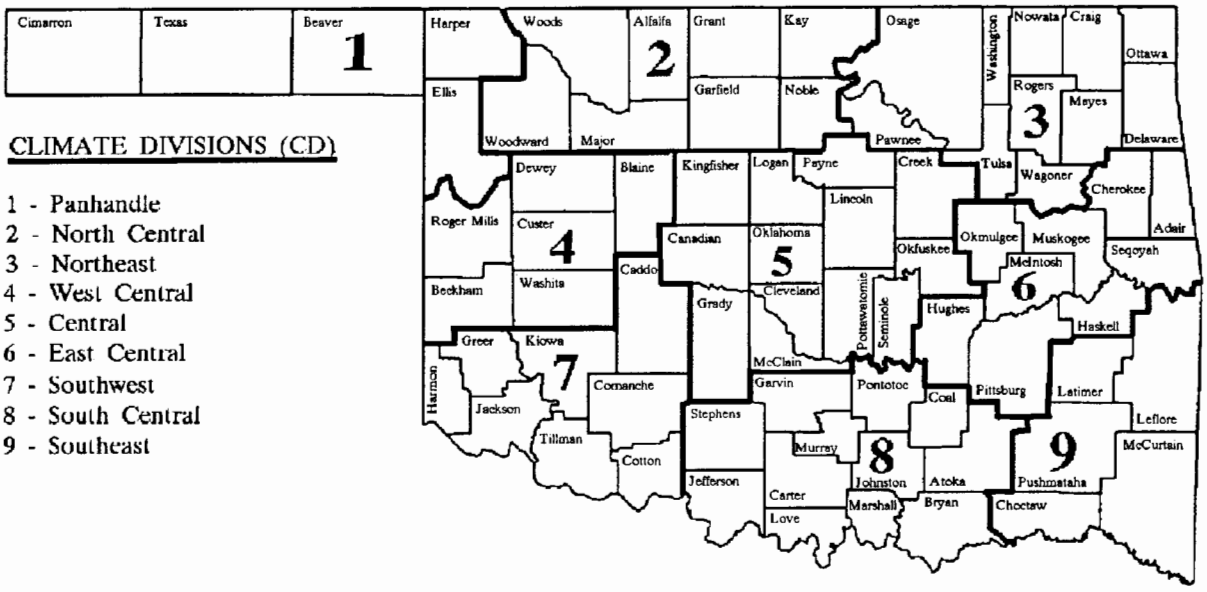
OKLAHOMA CITY

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

OKLAHOMA



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 that 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	Actual	Normal 2	Actual	Normal 3	Actual	Normal 4	Actual	Normal 5	Actual	Normal 6	Actual	Normal 7	Actual
80.2 max		80.3 max		79.2 max		77.8 max		77.7 max		74.8 max		75.5 max	
54.6 min		55.6 min		55.9 min		55.9 min		55.3 min		53.8 min		52.2 min	
.08 ppt		.26 ppt		.18 ppt		.10 ppt		.10 ppt		.08 ppt		.06 ppt	
2 hdd		2 hdd		2 hdd		2 hdd		2 hdd		3 hdd		3 hdd	
5 cdd		5 cdd		4 cdd		4 cdd		4 cdd		3 cdd		2 cdd	
Highest Max 97-1938		Highest Max 97-1951		Highest Max 96-1951		Highest Max 96-1931		Highest Max 95-1947		Highest Max 94-1939		Highest Max 94-1979	
Lowest Max 61-1985		Lowest Max 57-1902		Lowest Max 56-1959		Lowest Max 51-1902		Lowest Max 53-1988		Lowest Max 55-1891		Lowest Max 50-1976	
Lowest Min 38-1958		Lowest Min 41-1975		Lowest Min 40-1975		Lowest Min 40-1891		Lowest Min 38-1932		Lowest Min 40-1976		Lowest Min 32-1952	
Highest Min 74-1911		Highest Min 73-1911		Highest Min 73-1954		Highest Min 76-1911		Highest Min 69-1961		Highest Min 72-1931		Highest Min 73-1939	
Greatest ppt 2.28-1969		Greatest ppt 4.52-1955		Greatest ppt 1.59-1981		Greatest ppt 2.22-1955		Greatest ppt 1.74-1970		Greatest ppt 1.38-1989		Greatest ppt 1.41-1957	

Normal 8	Actual	Normal 9	Actual	Normal 10	Actual	Normal 11	Actual	Normal 12	Actual	Normal 13	Actual	Normal 14	Actual
76.0 max		77.1 max		76.9 max		76.5 max		76.6 max		77.4 max		76.2 max	
53.5 min		52.8 min		52.4 min		51.5 min		53.4 min		53.8 min		52.9 min	
.05 ppt		.08 ppt		.04 ppt		.11 ppt		.05 ppt		.06 ppt		.08 ppt	
4 hdd		3 hdd		3 hdd		4 hdd		4 hdd		3 hdd		3 hdd	
3 cdd		3 cdd		3 cdd		3 cdd		4 cdd		4 cdd		3 cdd	
Highest Max 94-1979		Highest Max 96-1965		Highest Max 95-1965		Highest Max 94-1979		Highest Max 94-1978		Highest Max 90-1963		Highest Max 91-1950	
Lowest Max 50-1970		Lowest Max 52-1909		Lowest Max 49-1985		Lowest Max 51-1987		Lowest Max 47-1986		Lowest Max 52-1969		Lowest Max 47-1923	
Lowest Min 35-1976		Lowest Min 34-1892		Lowest Min 35-1979		Lowest Min 36-1896		Lowest Min 34-1987		Lowest Min 36-1893		Lowest Min 32-1969	
Highest Min 71-1949		Highest Min 72-1949		Highest Min 71-1973		Highest Min 65-1972		Highest Min 70-1928		Highest Min 72-1899		Highest Min 70-1899	
Greatest ppt .90-1978		Greatest ppt 2.09-1951		Greatest ppt .94-1985		Greatest ppt 1.66-1981		Greatest ppt 2.45-1923		Greatest ppt 1.44-1923		Greatest ppt 2.45-1956	

Normal 15	Actual	Normal 16	Actual	Normal 17	Actual	Normal 18	Actual	Normal 19	Actual	Normal 20	Actual	Normal 21	Actual
74.2 max		74.6 max		73.2 max		72.1 max		71.6 max		72.0 max		71.8 max	
52.4 min		50.0 min		49.8 min		49.1 min		47.3 min		48.4 min		48.8 min	
.09 ppt		.06 ppt		.07 ppt		.15 ppt		.14 ppt		.23 ppt		.15 ppt	
4 hdd		5 hdd		5 hdd		5 hdd		7 hdd		6 hdd		6 hdd	
2 cdd		2 cdd		2 cdd		1 cdd		1 cdd		1 cdd		1 cdd	
Highest Max 92-1962		Highest Max 95-1917		Highest Max 96-1972		Highest Max 91-1932		Highest Max 92-1894		Highest Max 93-1979		Highest Max 90-1978	
Lowest Max 54-1914		Lowest Max 54-1941		Lowest Max 51-1925		Lowest Max 50-1989		Lowest Max 46-1925		Lowest Max 42-1910		Lowest Max 46-1930	
Lowest Min 36-1974		Lowest Min 31-1977		Lowest Min 33-1976		Lowest Min 33-1896		Lowest Min 25-1917		Lowest Min 26-1976		Lowest Min 30-1917	
Highest Min 66-1966		Highest Min 67-1965		Highest Min 66-1934		Highest Min 67-1934		Highest Min 69-1979		Highest Min 72-1979		Highest Min 66-1941	
Greatest ppt 1.46-1953		Greatest ppt 1.08-1981		Greatest ppt 1.43-1942		Greatest ppt 2.34-1960		Greatest ppt 4.98-1983		Greatest ppt 5.45-1983		Greatest ppt 3.70-1972	

Normal 22	Actual	Normal 23	Actual	Normal 24	Actual	Normal 25	Actual	Normal 26	Actual	Normal 27	Actual	Normal 28	Actual
71.3 max		69.6 max		69.0 max		68.7 max		70.4 max		69.3 max		67.7 max	
49.2 min		48.7 min		46.3 min		46.0 min		46.3 min		46.4 min		45.6 min	
.13 ppt		.06 ppt		.05 ppt		.06 ppt		.04 ppt		.09 ppt		.07 ppt	
6 hdd		7 hdd		8 hdd		8 hdd		7 hdd		8 hdd		9 hdd	
1 cdd		1 cdd		0 cdd		0 cdd		1 cdd		1 cdd		0 cdd	
Highest Max 87-1999		Highest Max 89-1927		Highest Max 88-1927		Highest Max 87-1939		Highest Max 92-1891		Highest Max 88-1922		Highest Max 89-1938	
Lowest Max 42-1936		Lowest Max 45-1895		Lowest Max 48-1949		Lowest Max 43-1957		Lowest Max 42-1936		Lowest Max 43-1919		Lowest Max 34-1925	
Lowest Min 31-1898		Lowest Min 26-1917		Lowest Min 32-1917		Lowest Min 29-1957		Lowest Min 26-1957		Lowest Min 22-1957		Lowest Min 22-1925	
Highest Min 65-1941		Highest Min 67-1934		Highest Min 66-1939		Highest Min 66-1939		Highest Min 71-1939		Highest Min 66-1940		Highest Min 65-1961	
Greatest ppt 1.87-1959		Greatest ppt 1.58-1920		Greatest ppt 1.44-1920		Greatest ppt 1.85-1899		Greatest ppt 3.76-1918		Greatest ppt 3.19-1984		Greatest ppt 1.38-1991	

Normal 29	Actual	Normal 30	Actual	Normal 31	Actual
69.4 max		69.1 max		67.8 max	
46.8 min		46.4 min		46.7 min	
.08 ppt		.19 ppt		.12 ppt	
7 hdd		8 hdd		9 hdd	
1 cdd		1 cdd		1 cdd	
Highest Max 89-1950		Highest Max 87-1937		Highest Max 86-1938	
Lowest Max 34-1925		Lowest Max 39-1993		Lowest Max 36-1991	
Lowest Min 22-1917		Lowest Min 16-1917		Lowest Min 16-1993	
Highest Min 67-1961		Highest Min 67-1946		Highest Min 65-1962	
Greatest ppt 1.61-1941		Greatest ppt 2.84-1974		Greatest ppt 1.82-1972	

OCTOBER AVERAGES

TEMPERATURE	:	**62.1°F**
PRECIPITATION	:	**3.13"**
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.

Normal 1	Actual	Normal 2	Actual	Normal 3	Actual	Normal 4	Actual	Normal 5	Actual	Normal 6	Actual	Normal 7	Actual
81.0 max		81.0 max		80.0 max		80.0 max		78.0 max		77.0 max		77.0 max	
54.0 min		56.0 min		56.0 min		56.0 min		55.0 min		53.0 min		53.0 min	
.08 ppt		.18 ppt		.05 ppt		.12 ppt		.18 ppt		.12 ppt		.05 ppt	
2 hdd		2 hdd		2 hdd		2 hdd		2 hdd		3 hdd		3 hdd	
5 cdd		5 cdd		5 cdd		5 cdd		4 cdd		3 cdd		3 cdd	
Highest Max	97-1910	Highest Max	96-1978	Highest Max	95-1969	Highest Max	97-1931	Highest Max	95-1947	Highest Max	98-1939	Highest Max	98-1979
Lowest Max	62-1985	Lowest Max	65-1961	Lowest Max	63-1959	Lowest Max	64-1950	Lowest Max	50-1988	Lowest Max	57-1988	Lowest Max	52-1988
Lowest Min	38-1985	Lowest Min	39-1975	Lowest Min	39-1987	Lowest Min	39-1968	Lowest Min	37-1964	Lowest Min	35-1952	Lowest Min	33-1952
Highest Min	66-1971	Highest Min	73-1954	Highest Min	74-1985	Highest Min	70-1954	Highest Min	73-1981	Highest Min	68-1990	Highest Min	67-1970
Greatest ppt	2.95-1966	Greatest ppt	5.45-1959	Greatest ppt	1.46-1990	Greatest ppt	2.17-1955	Greatest ppt	2.17-1970	Greatest ppt	3.24-1951	Greatest ppt	1.12-1962
Normal 8	**Actual**	**Normal 9**	**Actual**	**Normal 10**	**Actual**	**Normal 11**	**Actual**	**Normal 12**	**Actual**	**Normal 13**	**Actual**	**Normal 14**	**Actual**
77.0 max		78.0 max		77.0 max		78.0 max		76.0 max		77.0 max		77.0 max	
53.0 min		53.0 min		52.0 min		52.0 min		54.0 min		54.0 min		53.0 min	
.06 ppt		.03 ppt		.03 ppt		.17 ppt		.18 ppt		.09 ppt		.19 ppt	
3 hdd		3 hdd		4 hdd		4 hdd		3 hdd		3 hdd		3 hdd	
3 cdd		4 cdd		3 cdd		3 cdd		4 cdd		4 cdd		3 cdd	
Highest Max	97-1979	Highest Max	97-1963	Highest Max	95-1963	Highest Max	94-1979	Highest Max	94-1978	Highest Max	92-1963	Highest Max	92-1963
Lowest Max	56-1990	Lowest Max	58-1990	Lowest Max	57-1993	Lowest Max	50-1987	Lowest Max	49-1986	Lowest Max	54-1986	Lowest Max	59-1974
Lowest Min	32-1952	Lowest Min	32-1917	Lowest Min	30-1925	Lowest Min	30-1906	Lowest Min	32-1921	Lowest Min	32-1917	Lowest Min	34-1937
Highest Min	72-1979	Highest Min	70-1973	Highest Min	72-1979	Highest Min	69-1962	Highest Min	71-1962	Highest Min	71-1956	Highest Min	69-1968
Greatest ppt	1.61-1970	Greatest ppt	.91-1968	Greatest ppt	.61-1949	Greatest ppt	2.20-1973	Greatest ppt	3.37-1969	Greatest ppt	1.30-1961	Greatest ppt	1.85-1984
Normal 15	**Actual**	**Normal 16**	**Actual**	**Normal 17**	**Actual**	**Normal 18**	**Actual**	**Normal 19**	**Actual**	**Normal 20**	**Actual**	**Normal 21**	**Actual**
75.0 max		74.0 max		75.0 max		74.0 max		73.0 max		74.0 max		74.0 max	
52.0 min		50.0 min		49.0 min		49.0 min		48.0 min		49.0 min		49.0 min	
.10 ppt		.06 ppt		.04 ppt		.14 ppt		.08 ppt		.30 ppt		.13 ppt	
4 hdd		5 hdd		5 hdd		5 hdd		6 hdd		5 hdd		5 hdd	
3 cdd		2 cdd		2 cdd		2 cdd		2 cdd		2 cdd		2 cdd	
Highest Max	91-1963	Highest Max	93-1917	Highest Max	90-1947	Highest Max	91-1932	Highest Max	89-1940	Highest Max	91-1979	Highest Max	92-1978
Lowest Max	60-1970	Lowest Max	58-1976	Lowest Max	52-1966	Lowest Max	51-1989	Lowest Max	50-1976	Lowest Max	53-1972	Lowest Max	53-1984
Lowest Min	38-1966	Lowest Min	32-1966	Lowest Min	30-1976	Lowest Min	29-1948	Lowest Min	27-1917	Lowest Min	30-1976	Lowest Min	30-1917
Highest Min	69-1966	Highest Min	69-1965	Highest Min	66-1966	Highest Min	66-1979	Highest Min	75-1979	Highest Min	76-1979	Highest Min	66-1963
Greatest ppt	1.35-1967	Greatest ppt	.58-1984	Greatest ppt	.71-1993	Greatest ppt	1.94-1960	Greatest ppt	1.73-1983	Greatest ppt	4.96-1971	Greatest ppt	2.98-1972
Normal 22	**Actual**	**Normal 23**	**Actual**	**Normal 24**	**Actual**	**Normal 25**	**Actual**	**Normal 26**	**Actual**	**Normal 27**	**Actual**	**Normal 28**	**Actual**
73.0 max		70.0 max		69.0 max		69.0 max		71.0 max		70.0 max		69.0 max	
50.0 min		49.0 min		46.0 min		46.0 min		46.0 min		46.0 min		45.0 min	
.16 ppt		.09 ppt		.05 ppt		.11 ppt		.06 ppt		.11 ppt		.12 ppt	
5 hdd		6 hdd		8 hdd		8 hdd		7 hdd		8 hdd		8 hdd	
1 cdd		1 cdd		1 cdd		1 cdd		1 cdd		1 cdd		0 cdd	
Highest Max	88-1963	Highest Max	92-1939	Highest Max	88-1921	Highest Max	91-1939	Highest Max	90-1950	Highest Max	88-1922	Highest Max	88-1922
Lowest Max	51-1996	Lowest Max	50-1981	Lowest Max	50-1972	Lowest Max	48-1957	Lowest Max	46-1957	Lowest Max	51-1970	Lowest Max	43-1980
Lowest Min	31-1911	Lowest Min	26-1937	Lowest Min	24-1917	Lowest Min	31-1925	Lowest Min	27-1957	Lowest Min	27-1957	Lowest Min	29-1925
Highest Min	63-1953	Highest Min	70-1991	Highest Min	65-1963	Highest Min	65-1963	Highest Min	64-1996	Highest Min	64-1964	Highest Min	62-1991
Greatest ppt	1.20-1959	Greatest ppt	1.24-1970	Greatest ppt	.89-1984	Greatest ppt	1.49-1954	Greatest ppt	1.61-1991	Greatest ppt	1.95-1979	Greatest ppt	2.45-1974
Normal 29	**Actual**	**Normal 30**	**Actual**	**Normal 31**	**Actual**								
69.0 max		70.0 max		69.0 max									
46.0 min		48.0 min		49.0 min									
.14 ppt		.19 ppt		.18 ppt									
8 hdd		7 hdd		7 hdd									
1 cdd		1 cdd		1 cdd									
Highest Max	90-1950	Highest Max	90-1997	Highest Max	87-1950								
Lowest Max	46-1976	Lowest Max	41-1993	Lowest Max	41-1991								
Lowest Min	23-1913	Lowest Min	15-1917	Lowest Min	18-1998								
Highest Min	66-1961	Highest Min	64-1977	Highest Min	66-1962								
Greatest ppt	1.28-1967	Greatest ppt	1.73-1974	Greatest ppt	3.12-1981								

OCTOBER AVERAGES

TEMPERATURE	:	**62.6°F**
PRECIPITATION	:	**3.59"**
HEATING DEGREE DAYS	:	**146**
COOLING DEGREE DAYS	:	**78**

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