REVISED
OKLAHOMA
MONTHLY SUMMARY
JUNE 1998

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MONTHLY SUMMARY FOR JUNE 1998

Oklahoma was hotter and drier than normal in June, despite some spectacular thunderstorms. The statewide-averaged temperature for the month, 80.2 degrees, was 3.2 degrees above normal, giving 1998 Oklahoma's 14th warmest June since 1892. The statewide-averaged total rainfall for the month, 1.77 inches, was 2.18 inches less than normal and ranks as the state's 10th lowest June total over 107 years of available records. During the first six months of 1998, the state had an average temperature of 56.9 degrees (1.0 degree above normal, 32nd highest) and a precipitation accumulation of 17.48 inches (0.23 inch less than normal, 54th lowest). Statewide-averaged precipitation during May and June totaled only 4.33 inches (3.78 inches less than normal), the lowest May-June precipitation ever tallied across the state. The statewide-averaged temperature over the same period (76.2 degrees) was 3.5 degrees above normal, the 7th highest May-June average temperature on record.

Altus Air Force Base (Jackson County) reported a 113-degree daily maximum temperature on the 1st and Chattanooga (Comanche) reported 112 degrees on the 3rd. A cold front slipped through the state on the 3rd and 4th, producing severe thunderstorms in extreme southeastern Oklahoma with significant thunderstorm-related wind damage and several funnel clouds reported in Bryan, Choctaw, and McCurtain counties. Temperatures failed to reach the 80s anywhere in the state on the 5th and 6th and Fort Supply (Woodward) and the Boise City Mesonet site (Cimarron) reported daily minimum temperatures of 36 and 38 degrees, respectively, on the 6th.

Several thunderstorm-producing systems moved through the state from the 7th through 22nd without substantially disturbing the heat wave that began developing in the southwest during the second week in June. Many thunderstorms produced large hail, most notably a reported 4.5-inch-diameter hail stone that fell in western Seminole County. Tornadoes were reported on the 8th near Maud in Pottawatomie and Seminole counties, and from 2.5 miles southwest of Wewoka (Seminole) to approximately 4 miles east of Yeager (Hughes). The separate, but related, tornadoes that struck Wewoka and near Yeager were both rated F2 (strong tornado with winds estimated to be between 133 and 157 miles per hour), based on damage surveys conducted by the National Weather Service. Other tornadoes were reported near Quinton in Pittsburg County and Kinta and Lequire in Haskell County. Observers in Healdton (Carter) reported 80 mile-per-hour winds on the 9th as thunderstorms rumbled through southern Oklahoma. Pontotoc (Johnston) and Lehigh (Coal) each reported over three inches of rain.

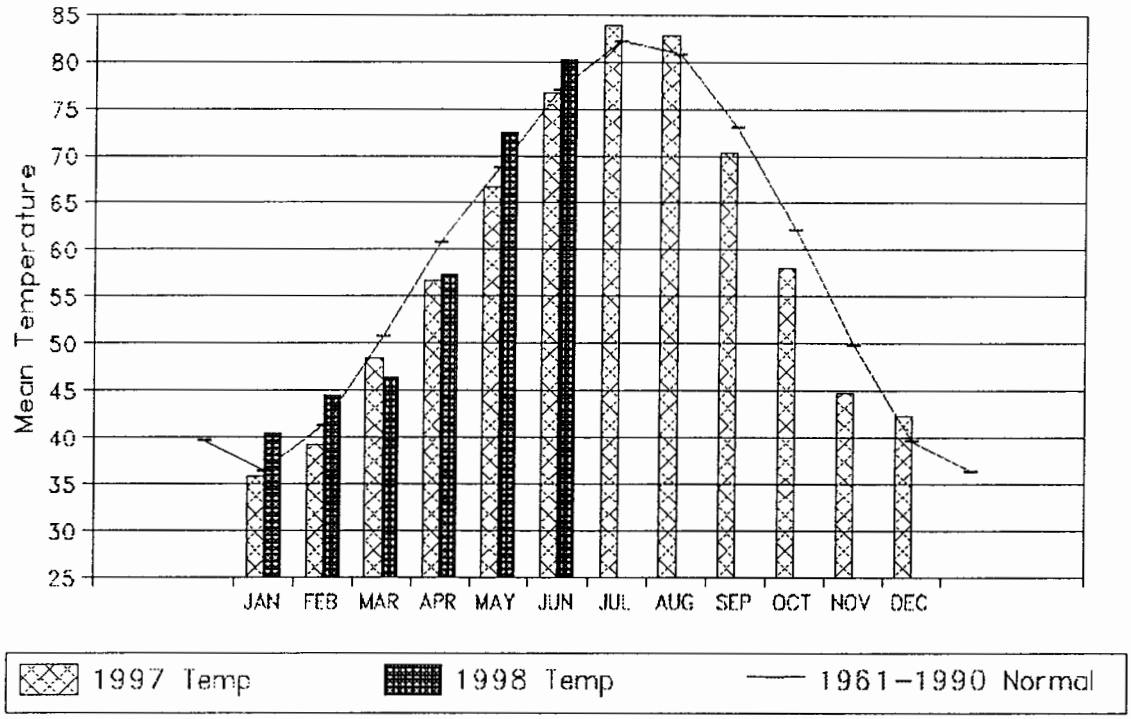
Strong thunderstorms buffeted many areas in central and northern Oklahoma on the 13th. Instruments at the Ponca City (Kay) airport recorded a wind gust of 80 miles per hour. Weak tornadoes was reported in Blaine County near Longdale, and in Logan County southwest of Guthrie. Two more funnels touched ground near El Reno (Canadian) as precursors to the four separate tornadoes that moved across northern Oklahoma City (Oklahoma). Two F1 (weak) tornadoes, one beginning as a water spout on Lake Hefner, damaged boats, vehicles and a number of structures. An anticyclonic (rotating clockwise, unlike most tornadoes) F2 tornado struck west of Nichols Hills, causing considerable damage to a strip mall and other structures. The fourth tornado in the series was an F2 storm that, as it followed a 5.5-mile path, threatened a busy amusement park damaging some facilities and numerous vehicles in its parking lot, crossed a busy interstate highway where it severely damaged a truck stop, overturning some empty semi-trailer trucks, dropping one semi-trailer on top of another, and then damaged several homes east of the highway. Related thunderstorm winds, measured as high as 105 miles per hour, caused extensive damage. A commercial radio station broadcast tower, designed to withstand 125 mile-per-hour winds, was toppled.

Although locally heavy rains fell in eastern Oklahoma after the 13th, hot, dry weather settled over most of western and southern parts of the state. Lake Eufaula (McIntosh), Loco (Stephens), Bengal (Latimer), and Mesonet sites near Wilburton (Latimer), Ringling (Jefferson), and Talihina (LeFlore) each reported a daily rainfall amount in excess of three inches from the 18th through 20th. Led by Hollis which reported a high temperature of 114 degrees on the 20th, most of western Oklahoma sweltered in triple-digit heat. The thunderstorms that did occur from the 21st through the 23rd produced large hail (hail stones greater than two inches in diameter in Grant, Kiowa, and Beaver counties), strong winds (96 miles per hour in northeastern Muskogee County and 100 miles per hour in southern Osage County), a small tornado near Porter in Wagoner County, and very few rainfall amounts over an inch.

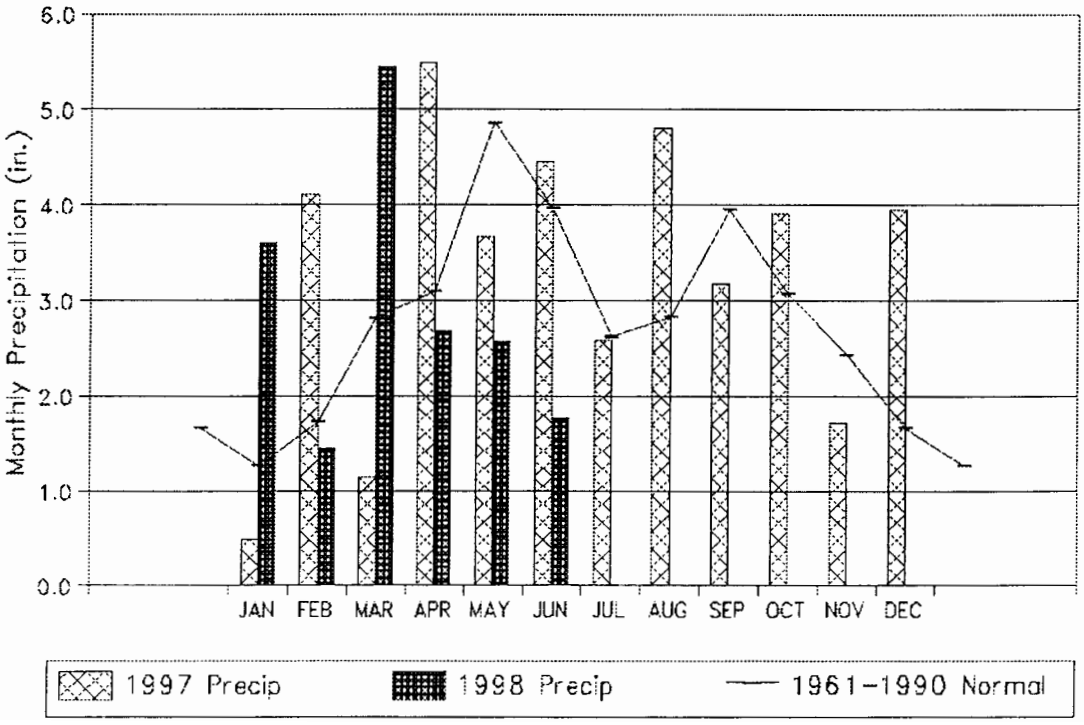
Hot, dry weather persisted through the 29th, forcing the state to implement a burning ban in 13 western counties and to seek a federal drought-disaster declaration for 31 counties. Isolated thunderstorms produced locally heavy rains on the 29th and 30th, including over three inches recorded at the Weatherford (Custer) Mesonet site and over two inches at Mesonet sites in Rogers County near Catoosa and Claremore.

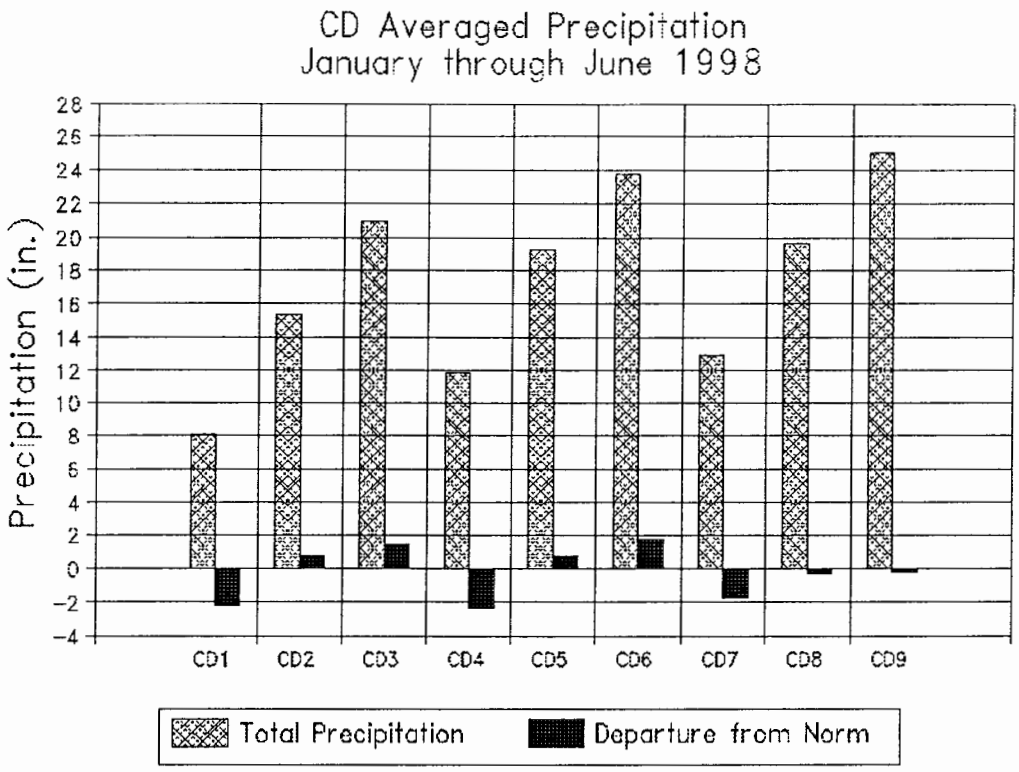
Howard L. Johnson

1997 and 1998 STATEWIDE TEMPERATURES
Monthly Averages

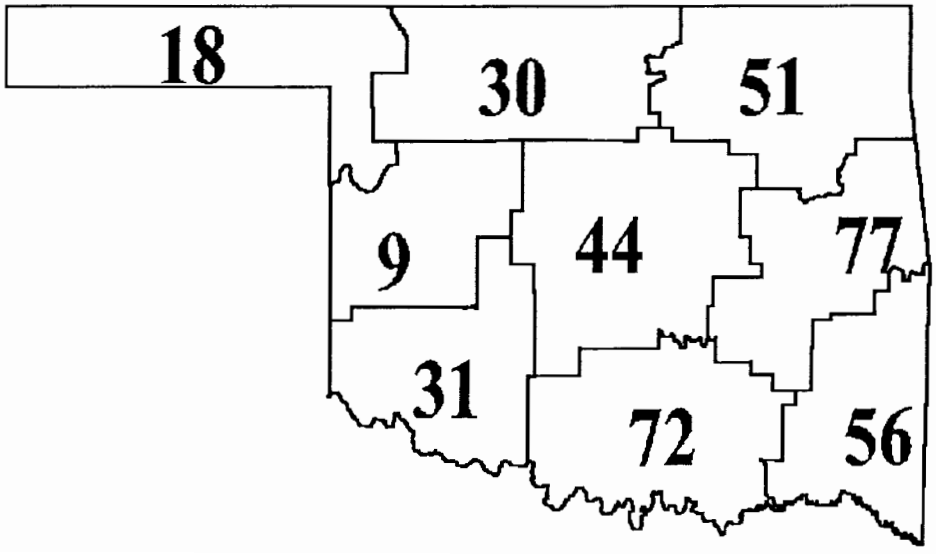


1997 and 1998 STATEWIDE PRECIPITATION
Monthly Totals





CD PERCENT OF NORMAL PRECIPITATION
MAY 1998



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

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	111	27	BEAVER	40	6	KENTON	1.20	7	BUFFALO	2.35	BUFFALO
	111	27	BUFFALO								
	111	29	BUFFALO								
	111	30	GOODWELL								
2	111	20	WAYNOKA	36	6	FT SUPPLY	1.52	11	VANCE AFB	2.85	LAMONT
3	100	29	MANNFORD	45	7	BARNSDALL	1.68	21	HOMINY	4.11	HOMINY
	100	21	RALSTON								
	100	28	UPPER SPAV								
4	110	20	CLINTON	43	6	REYDON	.74	30	WEATHERFORD	1.71	WEATHERFORD
	110	21	ERICK								
5	109	2	CHICKASHA	43	6	GUTHRIE	2.35	9	TECUMSEH	3.29	EL RENO
6	100	2	OKMULGEE	40	8	STILWELL	3.38	19	LAKE EUFAULA	5.78	LAKE EUFAULA
7	114	20	HOLLIS	45	7	MANGUM	2.26	10	CHATTANOOGA	3.21	WICHITA MT
8	107	1	WAURIKA	48	5	PAULS VALLEY	3.26	19	LOCO	5.70	LEHIGH
	107	3	WAURIKA								
9	101	21	IDABEL	46	7	WILBURTON	3.28	20	BENGAL	5.37	BENGAL
				46	7	WISTER					

TABLE OF 1997/1998 COMPARISONS

	JUNE Temperature (°F)		JUNE Precipitation (in.)	
Station	**1997**	**1998**	**1997**	**1998**
Arnett	71.9	76.3	1.52	0.24
Enid	76.4	****	5.29	****
Tulsa	75.5	79.9	5.77	3.37
Elk City	73.5	79.3	4.56	0.07
Oklahoma City	75.3	81.1	2.41	2.68
McAlester	74.1	81.4	3.47	4.25
Altus Irr Station	76.1	85.3	1.97	0.10
Ardmore	77.9	84.5	4.16	2.63
Idabel	74.8	81.2	3.87	0.85

EXTREMES

VARIABLE	STATION	DIVISON	OBSERVATION	DATE
Minimum temperature (°F)	Fort Supply	2	36	6
Maximum temperature (°F)	Hollis	7	114	20
Maximum 24-hour Precipitation	Lake Eufaula	6	3.38"	19

JUNE 1998 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	76.3	30	1.6	105	21	44	6	30	30	369	74	0.242	30	-3.46	0.19	22
BEAVER	593	1	76.6	30	1.7	111	27	42	6	24	16	372	67	0.360	30	-3.13	0.17	15
BUFFALO	1243	1	80.8	30	3.3	111	29	42	6	16	16	489	114	2.350	30	-1.64	1.20	7
FARGO	3070	1	*****	0 *	****	****	0	****	0	******	******	******	******	0.341	30	-2.97	0.20	22
GAGE	3407	1	77.9	28 *	****	106	28	42	6	21	******	383	******	0.174	29	*****	0.10	22
GATE	3489	1	77.9	28 *	****	110	28	44	6	27	******	390	******	0.701	28	*****	0.37	8
GOODWELL	3628	1	77.6	30	4.5	111	30	46	6	25	17	402	151	0.000	30	-2.68	0.00	30
GUYMON	3835	1	76.1	30 *	****	110	30	45	7	28	******	362	******	0.133	30	*****	0.13	15
HOOKER	4298	1	78.3	30	3.5	110	30	45	6	17	11	417	117	0.150	30	-2.79	0.09	15
KENTON	4766	1	72.9	29	1	107	29	40	6	20	8	248	29	0.744	30	-1.42	0.62	8
LAVERNE	5045	1	*****	0 *	****	****	0	****	0	******	******	******	******	0.540	30	-2.53	0.30	22
RANGE	7412	1	*****	0 *	****	****	0	****	0	******	******	******	******	0.100	30	*****	0.10	15
REGNIER	7534	1	*****	0 *	****	****	0	****	0	******	******	******	******	0.940	30	-1.30	0.60	8
TURPIN	9017	1	77.5	27 *	****	110	27	43	6	22	******	360	******	0.370	27	*****	0.22	8

JUNE 1998 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
ALVA	193	2	80.0	30 *	****	108	28	47	6	14	******	463	******	0.640	30	*****	0.50	8
VANCE AFB	302	2	*****	0 *	****	****	0	****	0	******	******	******	******	1.866	28	*****	1.52	11
BILLINGS	755	2	79.8	30	2.7	102	21	46	6	12	12	456	93	0.521	30	-3.63	0.38	20
BLACKWELL 2	E 818	2	78.5	30	1.3	103	21	49	6	14	14	420	54	2.244	30	-1.67	0.75	21
BRAMAN	1075	2	*****	0 *	****	****	0	****	0	******	******	******	******	1.252	30	*****	0.76	21
CEDARDALE	1620	2	*****	0 *	****	****	0	****	0	******	******	******	******	0.082	30	*****	0.05	22
CHEROKEE	1724	2	83.0	29	4.3	110	30	46	6	6	6	528	117	0.260	29	*****	0.26	7
FT SUPPLY	3304	2	77.4	30	2.1	107	28	36	6	22	16	396	81	0.150	30	-2.84	0.13	22
FREEDOM	3358	2	78.3	30	0.8	109	28	43	6	23	23	424	46	0.380	30	-2.76	0.35	8
HARDY	3909	2	*****	0 *	****	****	0	****	0	******	******	******	******	0.601	30	*****	0.26	8
HELENA	4019	2	80.1	30	3.8	107	21	48	6	13	13	465	126	0.593	30	-3.23	0.41	9
JEFFERSON	4573	2	80.8	30	2.4	108	20	45	6	7	7	480	78	1.881	30	-2.16	0.61	30
LAMONT	5013	2	*****	0 *	****	****	0	****	0	******	******	******	******	2.850	30	*****	1.45	11
MEDFORD	5768	2	*****	0 *	****	****	0	****	0	******	******	******	******	2.141	30	*****	0.66	20
MORRISON	6065	2	*****	0 *	****	****	0	****	0	******	******	******	******	2.130	30	*****	1.13	11
MUTUAL	6139	2	78.9	30	3	107	21	44	6	19	19	436	105	0.250	30	-3.06	0.12	9
ORIENTA	6751	2	*****	0 *	****	****	0	****	0	******	******	******	******	0.100	30	-3.61	0.10	14
PERRY	7012	2	80.4	30	2.7	103	3	49	6	11	11	474	93	1.430	30	-2.46	0.87	11
PONCA CITY	7201	2	80.2	30	3.2	102	20	49	6	9	9	465	105	2.376	30	-1.54	0.69	21
RED ROCK	7505	2	*****	0 *	****	****	0	****	0	******	******	******	******	0.890	30	-3.20	0.70	11
WAYNOKA	9404	2	81.8	28 *	****	111	20	46	5	10	******	480	******	0.980	28	*****	0.50	14
WOODWARD	9760	2	*****	0 *	****	****	0	****	0	******	******	******	******	0.421	30	-2.76	0.28	1

JUNE 1998 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	78.8	30	2	99	28	45	7	10	10	425	71	2.085	30	-2.65	1.07	8
BARTLESVILL	E 548	3	79.6	30	2.8	99	29	46	7	5	5	443	89	1.940	30	-2.11	1.01	11
BURBANK	1256	3	*****	0 *	****	****	0	****	0	******	******	******	******	3.612	30	-0.69	1.64	21
CHELSEA	1717	3	*****	0 *	****	****	0	****	0	******	******	******	******	2.870	30	*****	1.27	30
CLAREMORE	1828	3	77.9	30	2.3	96	30	46	7	12	12	400	82	1.310	30	-3.29	0.70	9
CLEVELAND 2	1902	3	77.8	30 *	****	96	29	48	6	12	******	395	******	1.791	30	*****	1.07	11
FORAKER	3250	3	*****	0 *	****	****	0	****	0	******	******	******	******	1.750	30	-2.15	0.68	9
HOLLOW	4258	3	*****	0 *	****	****	0	****	0	******	******	******	******	1.394	30	-3.28	0.61	9
HOMINY	4289	3	*****	0 *	****	****	0	****	0	******	******	******	******	4.110	30	0.22	1.68	21
KANSAS	4672	3	76.6	30	1.9	93	29	46	6	9	9	357	66	2.783	30	-2.21	1.22	11
LENAPAH	5118	3	*****	0 *	****	****	0	****	0	******	******	******	******	2.020	30	*****	0.83	9
MANNFORD	5522	3	79.5	28 *	****	100	29	48	6	6	******	411	******	1.200	29	*****	0.86	11
MARAMEC	5540	3	*****	0 *	****	****	0	****	0	******	******	******	******	2.321	30	-1.48	1.05	11
MIAMI	5855	3	77.0	30	2.1	95	29	46	7	13	13	373	76	1.930	30	-2.69	0.77	30
PAWHUSKA	6935	3	78.5	30	2.3	98	29	47	7	10	10	415	79	2.800	30	-1.74	1.50	9
PAWNEE	6940	3	*****	0 *	****	****	0	****	0	******	******	******	******	2.280	30	-1.56	1.22	11
PRYOR	7309	3	78.0	30	2.7	96	3	47	7	12	12	402	93	2.103	30	-2.89	1.12	9
RALSTON	7390	3	79.8	30	2.8	100	21	48	7	7	7	450	93	1.790	30	-2.36	0.90	11
SKIATOOK	8258	3	*****	0 *	****	****	0	****	0	******	******	******	******	1.170	30	-3.03	0.56	11
SPAVINAW	8380	3	80.3	30	3.7	96	29	51	6	6	6	466	118	1.123	30	-3.78	0.48	11
TULSA	8992	3	79.9	30	2.2	98	29	50	6	7	7	453	72	3.373	30	-1.07	1.49	30
UPPER SPAV	9101	3	81.1	30 *	****	100	28	50	7	6	******	490	******	2.344	30	*****	0.97	9
VINITA	9203	3	79.3	26 *	****	96	29	47	7	3	******	375	******	1.790	26	*****	0.54	9
WAGONER	9247	3	80.2	30	3.5	96	28	50	6	4	4	460	109	2.210	30	-3.21	0.62	11
WYNONA	9792	3	*****	0 *	****	****	0	****	0	******	******	******	******	3.175	30	*****	1.40	11

JUNE 1998 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
CANTON DAM	1445	4	80.0	30	3.6	107	21	47	6	14	14	465	123	0.360	30	-3.46	0.18	11
CLINTON	1909	4	82.7	30	4.3	110	20	47	6	11	11	541	142	0.240	30	-3.91	0.10	22
COLONY	2039	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.933	30	*****	0.62	10
CORDELL	2125	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.200	13	*****	0.10	28
ELK CITY	2849	4	79.3	30	2.3	109	21	46	6	17	17	446	86	0.073	30	-3.80	0.05	4
ERICK	2944	4	80.2	30	3.5	110	21	44	5	12	12	469	118	0.062	30	-3.64	0.04	4
GEARY	3497	4	78.7	30	1.8	103	3	55	6	0	0	410	56	0.630	30	-3.62	0.42	12
HAMMON	3871	4	78.4	30	1.9	107	21	45	6	23	23	424	75	0.080	30	-3.71	0.08	11
MACKIE	5463	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.000	30	*****	0.00	30
LEEDEY	5090	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.290	30	-3.23	0.29	10
MORAVIA	6035	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.171	30	-3.63	0.10	4
OKEENE	6629	4	81.4	30	3.1	106	20	47	6	7	7	500	101	0.302	30	-3.85	0.30	14
RETROP	7565	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.300	30	*****	0.14	9
REYDON	7579	4	77.7	27 *	****	109	21	43	6	22	******	365	******	0.001	27	*****	0.00	16
SAYRE	7952	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.070	30	-3.59	0.06	4
SWEETWATER	8652	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.000	30	*****	0.00	30
TALOGA	8708	4	79.7	30	2.9	109	21	46	6	17	17	458	104	0.171	30	-3.54	0.08	16
THOMAS	8815	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.070	30	*****	0.05	16
VICI	9172	4	*****	0 *	****	****	0	****	0	******	******	******	******	0.301	30	-3.24	0.25	30
WATONGA	9364	4	81.5	30	4.3	103	28	48	6	9	9	505	139	0.481	30	-3.57	0.19	11
WEATHERFORD	9422	4	81.7	30	4.6	106	20	49	5	13	13	514	151	1.710	30	-2.30	0.74	30

JUNE 1998 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	******	******	******	******	2.770	30	*****	2.34	11
ARCADIA	288	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.810	30	*****	1.11	14
BLANCHARD	830	5	81.9	30	4.8	105	2	49	6	5	5	511	148	1.810	30	-2.20	1.47	11
BRISTOW	1144	5	80.6	30	3.7	100	3	47	7	7	7	475	118	1.471	30	-2.40	0.85	9
CHANDLER	1684	5	79.5	29	2.5	99	29	51	7	7	7	428	68	2.870	30	-1.16	1.31	9
CHICKASHA E	XP 1750	5	83.9	30	5.5	109	2	49	6	4	4	571	169	0.000	30	-3.71	0.00	30
COX CITY	2196	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.370	30	*****	0.83	8
CRESCENT	2242	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.470	30	*****	0.69	10
CUSHING	2318	5	79.5	28 *	****	100	4	50	6	12	******	419	******	1.221	28	*****	0.85	11
EDMOND	2788	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.600	30	*****	1.10	10
EL RENO	2818	5	80.8	24 *	****	107	3	48	6	14	******	393	******	3.290	24	*****	2.01	9
GUTHRIE	3821	5	78.6	30	0.7	103	3	43	6	24	24	432	45	3.000	30	-1.23	1.80	11
HENNESSEY	4055	5	81.3	30	3.5	104	20	46	6	10	10	500	116	0.450	30	-3.73	0.22	14
INGALLS	4489	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.490	30	*****	1.00	30
KINGFISHER	4861	5	80.0	30	1.9	103	3	46	6	15	15	465	72	0.490	30	-3.78	0.21	11
KONAWA	4915	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.710	30	-2.37	0.71	10
MARSHALL	5589	5	*****	0 *	****	****	0	****	0	******	******	******	******	0.300	30	-3.68	0.11	11
MEEKER	5779	5	78.2	30	1.5	99	3	46	6	16	16	412	61	1.570	30	-2.61	1.02	11
MULHALL	6110	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.570	30	*****	1.29	11
NORMAN NWS	6386	5	81.0	29	3.8	103	2	49	6	7	7	472	106	2.102	30	-1.99	1.26	11
OKEMAH	6638	5	83.2	30	6.5	102	2	56	7	0	0	545	194	2.240	30	-1.95	0.98	5
OKLAHOMA CT	Y F.6659	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.974	30	*****	1.87	11
OKLAHOMA CT	Y 6661	5	81.1	30	4.4	105	2	50	7	4	4	486	135	2.675	30	-1.64	1.60	11
PERKINS	7003	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.220	30	-2.21	1.27	11
PIEDMONT	7068	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.850	30	*****	1.50	11
PRAGUE	7264	5	*****	0 *	****	****	0	****	0	******	******	******	******	0.751	30	-3.05	0.50	11
PURCELL	7327	5	79.7	29	2	102	3	49	7	4	4	431	50	1.230	29	*****	0.65	11
SEMINOLE	8042	5	80.4	30	2.1	102	2	51	7	9	9	472	73	2.011	30	-2.20	1.46	8
SHAWNEE	8110	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.970	30	-2.35	1.06	11
STELLA	8479	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.680	30	*****	0.87	11
STILLWATER	8501	5	80.0	30	3.8	103	3	48	6	9	9	460	124	1.386	30	-2.61	1.09	11
STROUD	8563	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.390	30	*****	1.44	11
TECUMSEH	8751	5	*****	0 *	****	****	0	****	0	******	******	******	******	2.350	30	*****	2.35	9
TROUSDALE	8960	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.330	30	*****	0.81	11
UNION CITY	9086	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.485	30	-3.20	1.10	11
WELTY	9479	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.850	30	*****	1.08	19
WEWOKA	9575	5	*****	0 *	****	****	0	****	0	******	******	******	******	1.761	30	-2.30	0.99	9

JUNE 1998 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	******	******	******	******	2.550	30	*****	1.25	11
BEGGS	631	6	*****	0 *	****	****	0	****	0	******	******	******	******	1.190	30	*****	0.55	9
CALVIN	1391	6	*****	0 *	****	****	0	****	0	******	******	******	******	1.650	30	-2.88	0.85	10
CHECOTAH	1711	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.111	30	-1.78	0.65	9
CLAYTON	1858	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.630	30	*****	1.07	10
DEWAR	2485	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.595	26	*****	1.93	19
DUSTIN	2690	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.190	30	*****	1.59	9
EUFAULA	2993	6	81.3	29	3.3	98	29	53	7	2	2	474	84	4.970	29	*****	1.55	19
HANNA	3884	6	80.5	30	3.3	97	28	47	7	5	5	471	105	5.703	30	1.99	2.72	9
HASKELL	3956	6	*****	0 *	****	****	0	****	0	******	******	******	******	1.590	30	-3.11	0.58	19
LAKE EUFAUL	A 4975	6	78.6	30 *	****	93	4	53	6	8	******	415	******	5.780	30	*****	3.38	19
LYONS	5437	6	*****	0 *	****	****	0	****	0	******	******	******	******	4.530	30	0.07	2.82	9
MARBLE CITY	5546	6	*****	0 *	****	****	0	****	0	******	******	******	******	4.397	30	*****	1.63	9
MCALESTER	5664	6	81.4	30	4.3	98	2	51	7	3	3	497	131	4.253	30	0.27	1.84	18
MCCURTAIN	5693	6	81.0	30	3.6	98	22	47	7	4	4	484	112	4.301	30	0.13	2.00	9
MUSKOGEE	6130	6	79.7	30	2.7	96	12	47	6	10	10	451	91	5.301	30	1.01	2.59	8
OKMULGEE	6670	6	79.4	29	3.3	100	2	48	7	11	11	427	94	2.641	29	*****	0.82	9
OKTAHA	6678	6	*****	0 *	****	****	0	****	0	******	******	******	******	0.950	30	*****	0.55	11
SALLISAW	7862	6	79.8	30	2.7	97	26	51	7	11	11	456	93	3.410	30	-0.15	1.13	5
SCIPIO	7979	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.190	30	*****	0.97	11
SHORT	8170	6	*****	0 *	****	****	0	****	0	******	******	******	******	3.850	30	*****	2.13	9
STILWELL	8506	6	75.3	30	0.3	92	29	40	8	10	10	321	21	4.590	30	0.37	1.44	18
TAHLEQUAH	8677	6	77.0	30	1.4	96	13	46	7	12	12	373	55	1.820	30	-2.71	0.58	12
WEBBERS FAL	L 9445	6	80.1	28 *	****	97	26	48	7	9	******	430	******	2.310	28	*****	1.12	10
WESTVILLE	9523	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.850	30	*****	0.90	22
WETUMKA	9571	6	*****	0 *	****	****	0	****	0	******	******	******	******	2.072	30	-2.03	1.25	8

JUNE 1998 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	84.7	30	4.8	111	21	49	6	4	4	595	148	0.130	30	-3.38	0.10	11
ALTUS DAM	184	7	85.3	30	6.4	112	28	55	7	3	3	612	195	0.100	30	-3.61	0.10	11
ANADARKO	224	7	81.1	30	3.6	103	3	46	6	11	11	495	120	2.250	30	-1.61	2.25	12
APACHE	260	7	*****	0 *	****	****	0	****	0	******	******	******	******	2.280	30	-1.65	1.86	11
CARNEGIE	1504	7	83.4	30	5.3	109	2	48	6	12	12	563	164	0.430	30	-3.57	0.31	9
CHATTANOOGA	1706	7	83.6	30	4.2	112	3	52	7	2	2	559	127	3.150	30	-0.24	2.26	10
DUNCAN 11 W	2668	7	*****	0 *	****	****	0	****	0	******	******	******	******	2.020	30	*****	1.54	10
FREDERICK	3353	7	83.3	29	4.1	110	1	53	5	6	6	535	109	0.750	29	*****	0.60	10
HEADRICK	3998	7	*****	0 *	****	****	0	****	0	******	******	******	******	0.700	30	*****	0.40	11
HOBART	4204	7	83.6	30	5	111	2	47	6	7	7	566	158	0.331	29	*****	0.26	10
HOLLIS	4249	7	83.9	30	4.3	114	20	48	6	6	6	575	137	0.410	30	-3.28	0.30	11
LAWTON	5063	7	83.2	30	4.9	109	3	52	6	3	3	550	151	2.320	30	-1.30	1.10	11
LOOKEBA	5329	7	*****	0 *	****	****	0	****	0	******	******	******	******	0.753	30	-3.41	0.38	20
MANGUM	5509	7	81.6	30	2.1	110	21	45	7	18	18	517	82	0.200	30	-3.57	0.20	18
RANDLETT	7403	7	*****	0 *	****	****	0	****	0	******	******	******	******	1.302	30	*****	0.60	11
ROOSEVELT	7727	7	*****	0 *	****	****	0	****	0	******	******	******	******	0.080	30	-3.58	0.05	11
SEDAN	8016	7	*****	0 *	****	****	0	****	0	******	******	******	******	0.490	30	*****	0.33	10
SNYDER	8299	7	*****	0 *	****	****	0	****	0	******	******	******	******	1.930	30	-1.53	0.80	10
VINSON	9212	7	*****	0 *	****	****	0	****	0	******	******	******	******	0.890	30	-2.57	0.79	4
WALTERS	9278	7	83.5	30	4.2	107	3	50	6	3	3	558	129	1.890	30	-2.25	0.72	11
WICHITA MT	9629	7	82.4	27 *	****	108	3	50	8	4	******	474	******	3.210	27	*****	1.70	11
WILLOW	9668	7	*****	0 *	****	****	0	****	0	******	******	******	******	0.690	30	*****	0.40	22

JUNE 1998 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
ADA	17	8	81.3	30	4.4	101	2	49	6	2	2	490	133	1.520	30	-2.58	0.71	11
ALLEN	147	8	*****	0 *	****	****	0	****	0	******	******	******	******	1.850	30	*****	1.00	11
ARDMORE	292	8	84.5	29	5.2	104	2	53	6	2	2	567	138	2.630	30	-1.23	1.37	11
ATOKA DAM	394	8	82.9	21 *	****	102	2	59	5	0	******	376	******	2.771	22	*****	1.47	11
BOKCHITO	917	8	*****	0 *	****	****	0	****	0	******	******	******	******	2.860	30	*****	1.24	11
CANEY	1437	8	*****	0 *	****	****	0	****	0	******	******	******	******	2.010	30	*****	1.11	10
CENTRAHOMA	1648	8	*****	0 *	****	****	0	****	0	******	******	******	******	3.050	30	*****	1.55	11
CHICKASAW	1745	8	80.6	29	3.7	101	2	49	6	6	6	458	101	4.041	29	*****	2.30	10
COMANCHE	2054	8	*****	0 *	****	****	0	****	0	******	******	******	******	0.791	30	-3.03	0.47	11
DAISY	2354	8	*****	0 *	****	****	0	****	0	******	******	******	******	4.381	30	0.12	2.40	10
DUNCAN	2660	8	81.8	30	3.9	104	3	52	7	3	3	509	122	2.310	30	-1.67	1.00	10
DURANT	2678	8	82.1	29	4.6	102	2	52	6	4	4	501	126	2.700	29	*****	1.17	11
ELMORE CITY	2872	8	*****	0 *	****	****	0	****	0	******	******	******	******	1.880	30	*****	0.54	10
GRADY	3688	8	*****	0 *	****	****	0	****	0	******	******	******	******	2.900	30	*****	1.30	11
HEALDTON	4001	8	82.7	28 *	****	102	3	51	8	0	******	496	******	4.210	28	*****	1.82	19
HENNEPIN	4052	8	*****	0 *	****	****	0	****	0	******	******	******	******	3.221	30	*****	1.84	10
KETCHUM RAN	4780	8	*****	0 *	****	****	0	****	0	******	******	******	******	2.760	30	*****	0.86	8
KINGSTON	4865	8	*****	0 *	****	****	0	****	0	******	******	******	******	3.440	30	-0.64	1.09	11
LEHIGH	5108	8	*****	0 *	****	****	0	****	0	******	******	******	******	5.701	30	*****	3.10	10
LINDSAY	5216	8	80.3	30	2.8	103	2	49	5	6	6	464	89	0.790	30	-3.23	0.41	10
LOCO	5247	8	*****	0 *	****	****	0	****	0	******	******	******	******	4.860	30	*****	3.26	19
MARIETTA	5563	8	81.1	30	3	100	2	53	7	3	3	486	93	3.850	30	-0.15	1.55	11
MARLOW	5581	8	83.2	30	6.1	106	2	54	5	2	2	547	184	1.670	30	-2.51	0.78	10
MCGEE CREEK	5713	8	81.0	29 *	****	100	2	51	7	4	******	469	******	3.680	30	*****	1.96	11
PAULS VALLE	Y 6926	8	81.6	29	3.3	102	29	48	5	7	7	489	90	1.590	29	*****	0.60	7
PONTOTOC	7214	8	*****	0 *	****	****	0	****	0	******	******	******	******	5.670	30	1.56	3.22	9
TISHOMINGO	8884	8	84.4	28 *	****	101	12	52	6	0	******	544	******	2.280	28	*****	1.01	10
TUSSY	9032	8	*****	0 *	****	****	0	****	0	******	******	******	******	2.750	30	*****	1.09	18
WAURIKA	9395	8	85.7	30	6.4	107	3	53	6	0	0	620	191	3.180	30	-0.55	1.23	9

JUNE 1998 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	81.7	30	4.5	99	30	49	6	2	2	503	137	1.700	30	-2.78	0.67	9
BATTIEST	567	9	78.0	30 *	****	98	26	49	8	12	******	403	******	3.401	30	*****	1.72	10
BENGAL	670	9	*****	0 *	****	****	0	****	0	******	******	******	******	5.370	30	*****	3.28	20
BOSWELL	980	9	80.6	29	3.2	98	21	52	6	5	5	457	85	3.061	29	*****	1.00	4
BROKEN BOW	1162	9	*****	0 *	****	****	0	****	0	******	******	******	******	1.610	30	-2.73	0.90	5
CARNASAW	1499	9	*****	0 *	****	****	0	****	0	******	******	******	******	1.800	30	-2.75	0.71	10
CARTER TWR	1544	9	*****	0 *	****	****	0	****	0	******	******	******	******	2.360	30	-1.91	1.10	10
FANSHAWE	3065	9	*****	0 *	****	****	0	****	0	******	******	******	******	1.511	30	-2.72	0.93	10
HEAVENER	4008	9	*****	0 *	****	****	0	****	0	******	******	******	******	1.540	30	-2.53	0.52	19
HUGO	4384	9	80.9	30	2.8	100	23	53	6	3	3	482	89	2.120	30	-2.63	1.00	5
IDABEL	4451	9	81.2	30	4.2	101	21	50	7	1	1	485	125	0.850	30	-3.44	0.48	5
PAGE	6842	9	80.2	26 *	****	98	11	49	5	9	******	404	******	2.220	26	*****	1.05	11
POTEAU	7254	9	79.8	30 *	****	100	25	48	6	9	******	455	******	1.631	30	*****	0.61	11
SMITHVILLE	8285	9	74.7	14 *	****	94	13	47	7	10	******	146	******	2.551	16	*****	1.50	5
SPIRO	8416	9	*****	0 *	****	****	0	****	0	******	******	******	******	3.660	30	0.13	1.61	9
VALLIANT	9118	9	*****	0 *	****	****	0	****	0	******	******	******	******	1.042	30	-2.95	0.40	10
WILBURTON	9634	9	80.1	30	3.8	97	30	46	7	5	5	458	119	4.430	30	0.31	1.73	18
WISTER	9724	9	79.7	19 *	****	98	26	46	7	6	******	284	******	1.730	25	*****	0.91	9

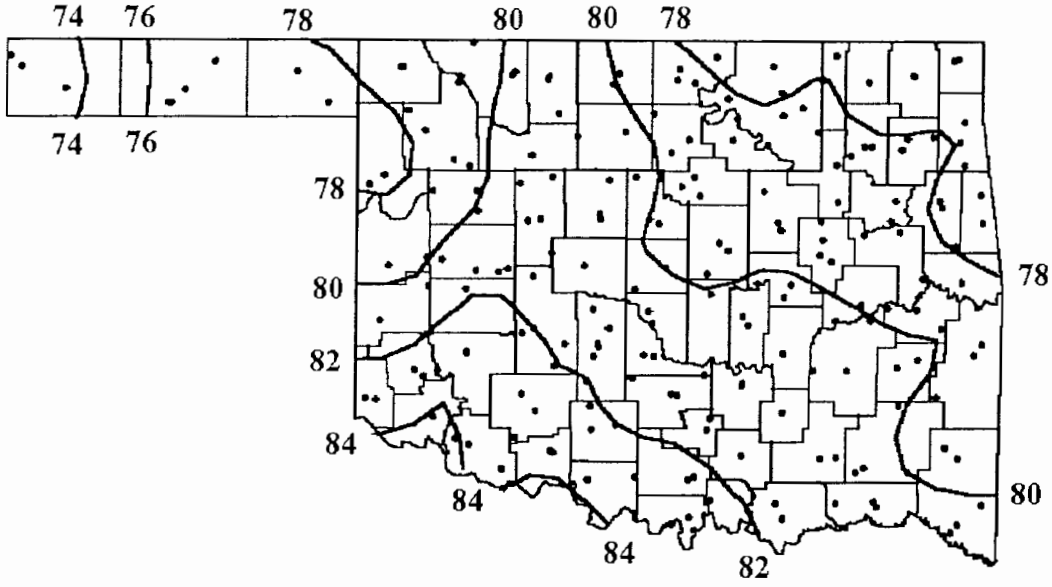
JUNE 1998 CLIMATE DIVISION SUMMARY

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
1	76.9	7	2	111	30	40	6	23	18	380	76	0.540	11	-2.50	1.20	7
2	79.8	11	2.6	111	20	36	6	13	13	455	88	1.100	19	-2.57	1.52	11
3	78.9	13	2.7	100	28	45	7	9	9	425	90	2.270	23	-2.16	1.68	21
4	80.4	10	3.3	110	21	43	6	12	12	473	110	0.330	19	-3.51	0.74	30
5	80.7	14	3.5	109	2	43	6	8	8	475	111	1.820	34	-2.34	2.35	9
6	79.4	10	2.7	100	2	40	8	7	7	437	85	3.180	22	-0.95	3.38	19
7	83.4	11	4.7	114	20	45	7	7	7	557	146	1.160	19	-2.53	2.26	10
8	82.1	11	4.2	107	3	48	5	3	3	509	122	2.950	23	-1.15	3.26	19
9	80.3	7	3.5	101	21	46	7	5	5	463	108	2.360	14	-1.87	3.28	20

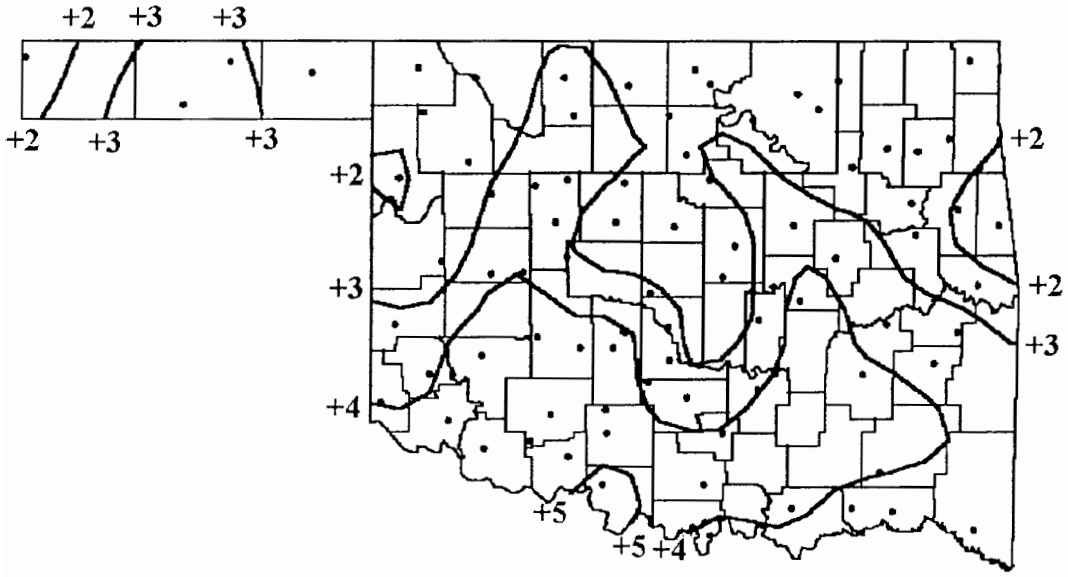
MESONET MONTHLY SUMMARY FOR JUNE 1998

NAME	MEAN MAX TEMP	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HDD	CDD	TOT PPT	MAX 24-HR	MAX DAY
PANHANDLE										
Arnett	78.3	107	20	46	5	22	422	.22	.10	15
Beaver	77.3	110	26	41	6	22	391	.33	.19	30
Boise City	72.6	108	29	38	6	31	258	1.03	.86	30
Buffalo	79.2	109	27	42	6	19	446	1.39	1.20	7
NORTH CENTRAL										
Alva	80.4	110	27	45	6	14	477	.66	.60	7
Blackwell	78.5	103	20	48	6	10	414	2.55	1.01	20
Breckenridge	80.2	103	20	46	6	9	465	1.49	.99	10
Cherokee	81.1	110	20	46	6	14	497	.84	.56	30
Fairview	81.7	109	20	45	6	12	514	.21	.10	15
Freedom	79.5	107	13	41	6	22	456	.32	.25	7
Lahoma	80.1	108	20	46	6	11	464	.45	.18	13
NORTHEAST										
Bixby	78.9	97	2	48	7	8	424	2.98	.86	8
Burbank	77.3	99	20	47	6	15	385	2.81	1.01	11
Catoosa	78.7	98	2	50	6	9	421	3.57	2.19	30
Claremore	77.9	97	28	48	7	11	399	3.31	2.14	30
Copan	77.5	99	29	50	6	10	384	2.45	1.12	8
Foraker	76.1	96	28	47	6	17	351	1.99	.94	11
Jay	76.7	96	28	44	6	19	371	3.05	1.42	30
Miami	76.9	95	28	47	7	16	373	2.88	1.50	30
WEST CENTRAL										
Bessie	82.3	110	20	46	6	11	530	1.15	.83	8
Butler	81.2	109	20	48	6	13	498	.25	.15	30
Camargo	78.8	107	20	46	6	18	432	.13	.07	15
Cheyenne	79.7	107	20	45	6	21	460	.17	.14	22
Erick	81.2	110	20	44	6	14	499	.04	.03	10
CENTRAL										
Acme	81.9	108	2	47	6	5	512	1.37	.91	11
Bowlegs	79.9	100	2	47	7	9	457	2.34	1.13	10
Bristow	78.8	100	2	45	7	12	425	1.42	.70	8
Chandler	79.0	98	2	49	6	7	427	3.49	2.04	8
Chickasha	82.0	109	2	49	6	2	511	2.10	1.51	11
El Reno	78.4	100	2	46	6	14	415	2.05	1.41	8
Guthrie	80.5	104	2	49	6	9	473	2.51	1.98	11
Kingfisher	81.4	104	2	45	6	7	500	.65	.21	13
Marena	78.5	101	2	48	6	12	418	2.02	1.56	11
Marshall	80.8	103	20	47	6	8	482	.35	.22	11
EAST CENTRAL										
Calvin	81.3	101	2	49	7	4	491	1.24	.74	8
Cookson	76.8	94	25	44	6	20	374	5.99	2.46	8
Eufaula	79.9	96	2	52	7	3	452	5.60	2.50	8
Haskell	78.8	97	2	49	6	7	421	3.08	1.09	8
Hectorville	79.4	97	28	51	6	5	436	1.47	.64	18
McAlester	80.7	98	1	50	7	5	476	5.03	1.99	18
Okmulgee	78.6	97	2	46	7	10	418	2.24	.77	18
SOUTHWEST										
Altus	84.6	111	1	50	6	2	588	.09	.08	10
Apache	81.2	106	2	48	6	6	491	2.00	.88	11
Fort Cobb	82.4	109	2	53	6	2	525	.75	.52	10
Grandfield	83.7	110	1	49	6	1	562	1.59	1.08	10
Hinton	80.7	107	2	46	6	12	484	1.74	.60	8
Hobart	83.4	109	2	48	6	6	557	.40	.25	9
SOUTH CENTRAL										
Ada	81.1	103	1	48	6	6	490	1.54	.58	11
Ardmore	82.6	105	1	52	6	1	527	2.82	1.24	11
Burneyville	82.6	104	1	51	6	2	530	4.28	1.27	11
Byars	81.3	101	2	49	6	7	495	1.42	.72	11
Centrahoma	80.8	100	1	48	7	5	480	3.76	1.61	11
Durant	82.4	101	1	53	6	2	523	1.46	.57	11
Ketchum Ranch	81.6	105	2	48	6	4	502	2.75	.84	8
SOUTHEAST										
Antlers	80.3	99	30	47	6	7	467	4.96	2.15	9
Broken Bow	80.1	100	30	51	7	0	453	1.67	1.08	4
Clayton	79.9	97	22	50	6	8	455	4.36	2.07	18
Cloudy	79.5	98	30	52	6	4	439	2.45	1.11	9
Hugo	81.4	99	30	52	6	3	495	2.12	.96	4

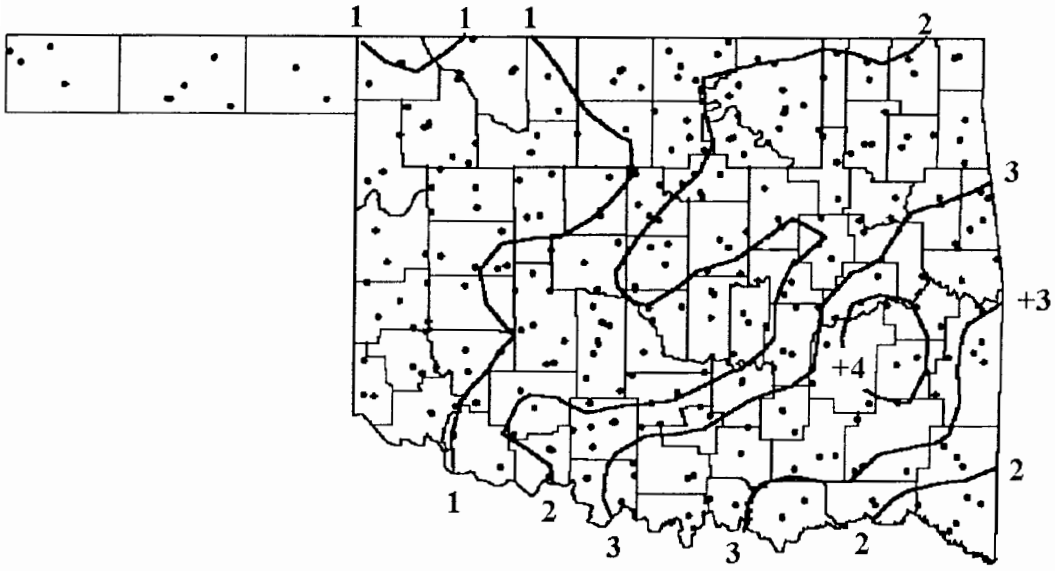
NAME	MEAN MAX TEMP	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HDD	CDD	TOT PPT	MAX 24-HR	MAX DAY
PANHANDLE										
Goodwell	75.7	109	29	42	6	24	345	.87	.62	30
Hooker	76.4	111	29	42	6	24	365	.12	.05	7
Kenton	72.2	106	29	39	6	34	249	.83	.54	30
Slapout	77.5	109	26	43	6	23	398	.30	.14	30
NORTH CENTRAL										
May Ranch	78.8	105	27	47	6	20	435	.76	.50	7
Medford	79.2	107	20	46	6	12	438	1.65	.54	20
Newkirk	77.1	98	20	46	6	17	379	1.21	.42	7
Red Rock	78.8	100	27	47	6	10	425	1.79	1.13	11
Seiling	80.0	108	20	46	6	16	466	.08	.06	15
Woodward	78.7	105	20	43	6	22	432	.16	.08	22
NORTHEAST										
Nowata	77.0	97	28	46	7	13	374	1.34	.58	8
Pawnee	78.7	100	20	49	6	9	420	2.30	1.04	11
Pryor	77.5	97	28	45	7	12	387	2.60	1.19	30
Skiatook	77.8	96	2	49	6	12	395	2.87	1.85	30
Tullahassee	79.3	97	2	46	6	7	434	2.75	.80	18
Vinita	76.0	96	29	47	7	15	346	2.60	.87	30
Wynona	77.5	96	2	49	7	10	386	4.84	1.42	11
WEST CENTRAL										
Putnam	79.9	107	20	47	6	16	464	.41	.37	30
Retrop	82.3	111	20	45	6	11	531	.22	.10	21
Watonga	80.9	106	20	46	6	14	490	1.21	.97	30
Weatherford	81.5	107	20	47	6	12	506	4.17	3.20	30
CENTRAL										
Minco	80.6	105	2	47	6	7	476	1.94	1.34	11
Ninnekah	82.3	106	2	51	6	3	522	1.61	1.09	11
Norman	81.3	105	2	51	6	5	495	2.34	1.40	11
Oilton	77.7	97	2	45	6	14	393	2.77	1.01	11
Okemah	80.1	99	2	50	6	8	461	2.20	.72	4
Perkins	80.5	103	2	49	6	6	472	2.73	1.06	11
Shawnee	81.0	102	2	47	6	10	491	1.04	.64	11
Spencer	80.3	103	2	46	6	10	470	1.98	1.13	11
Stillwater	79.3	101	2	46	6	10	439	1.52	1.14	11
Washington	81.2	103	2	50	6	4	490	.86	.49	8
EAST CENTRAL										
Preston	78.8	96	2	51	6	8	420	1.67	.74	8
Sallisaw	79.5	97	2	49	6	8	444	2.00	.59	11
Stigler	79.1	95	2	46	7	10	432	4.08	1.78	8
Stuart	80.4	98	28	48	6	8	470	2.35	1.06	11
Tahlequah	76.5	93	2	45	7	17	361	2.66	1.14	30
Webbers Falls	80.2	100	30	49	7	5	461	2.80	1.10	8
Westville	76.3	94	25	46	6	20	359	1.95	.54	8
SOUTHWEST										
Hollis	83.3	112	20	48	6	7	554	.03	.03	21
Mangum	82.7	112	20	46	6	7	536	.28	.13	10
Medicine Park	82.0	107	2	50	6	4	515	2.52	1.64	10
Tipton	84.7	109	1	50	6	1	591	.99	.74	10
Walters	83.7	109	1	50	6	0	562	1.88	.89	9
SOUTH CENTRAL										
Lane	80.8	99	1	51	7	2	477	2.62	.97	9
Madill	82.4	103	1	52	6	0	522	5.39	1.61	9
Pauls Valley	81.9	103	2	50	6	3	511	1.52	.76	8
Ringling	82.4	106	1	50	6	3	525	5.85	3.30	18
Sulphur	80.9	101	1	50	6	6	484	3.81	2.10	9
Tishomingo	81.6	104	1	52	6	3	500	2.57	1.27	11
Waurika	83.2	107	1	51	6	0	547	3.08	1.29	9
SOUTHEAST										
Idabel	81.9	100	20	53	7	0	508	.92	.62	4
Mt Herman	78.8	98	30	52	6	6	421	2.66	1.15	4
Talihina	80.4	97	22	47	7	7	468	4.50	3.06	18
Wilburton	80.2	96	12	49	7	7	461	5.42	3.43	18
Wister	78.7	99	25	45	7	12	424	2.13	1.04	10



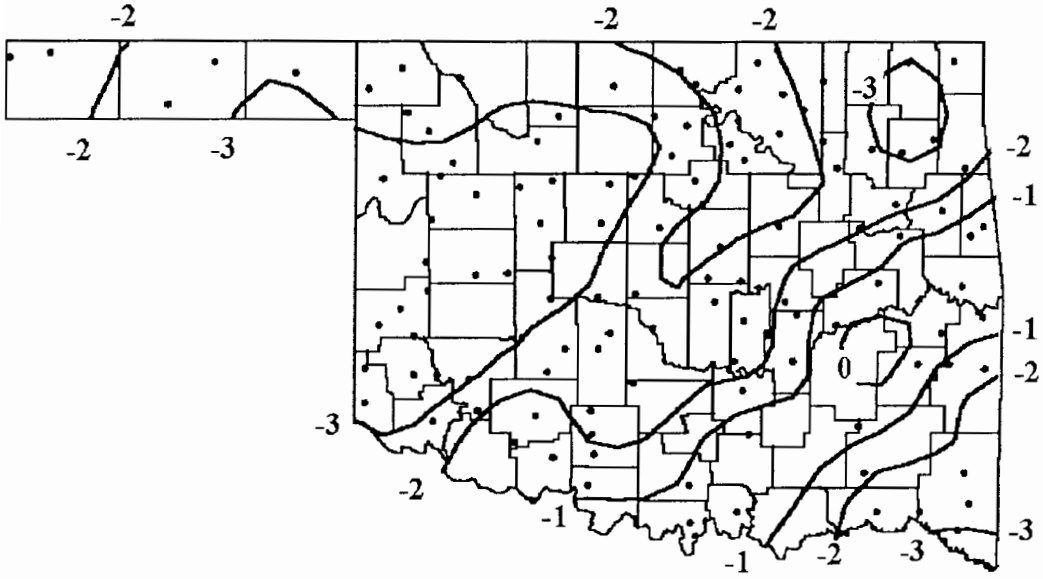
JUNE 1998 AVERAGE MONTHLY TEMPERATURE (°F)



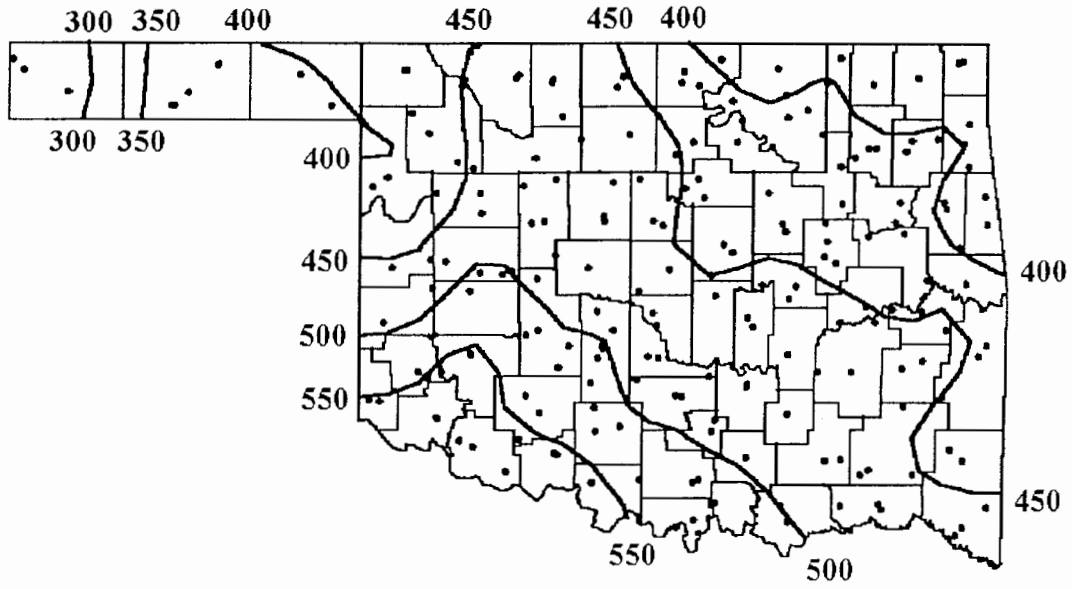
JUNE 1998 DEPARTURE FROM NORMAL TEMPERATURE (°F)



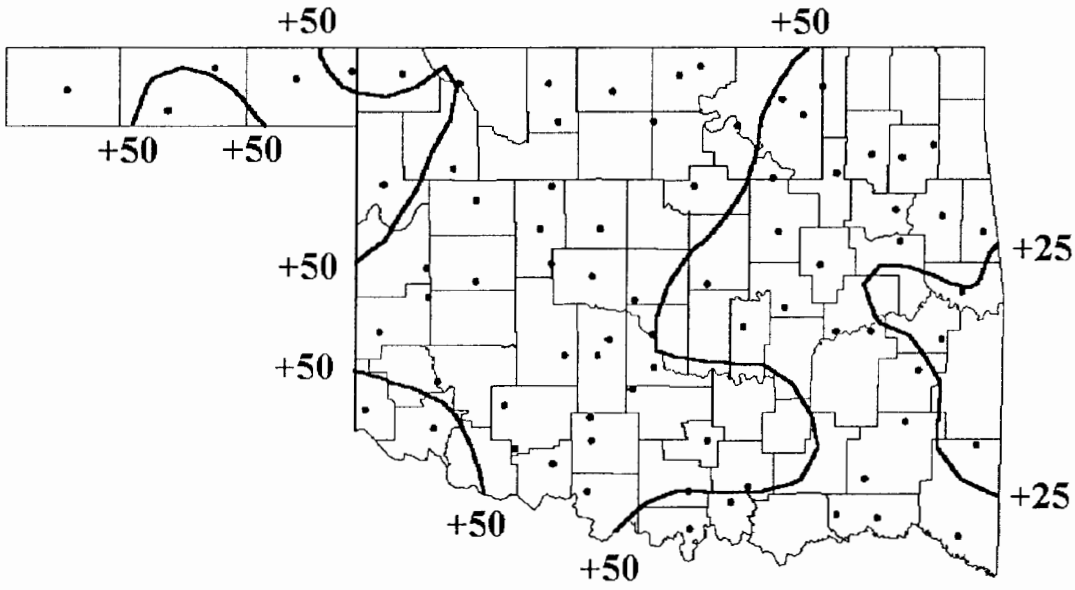
JUNE 1998 TOTAL PRECIPITATION
(INCHES)



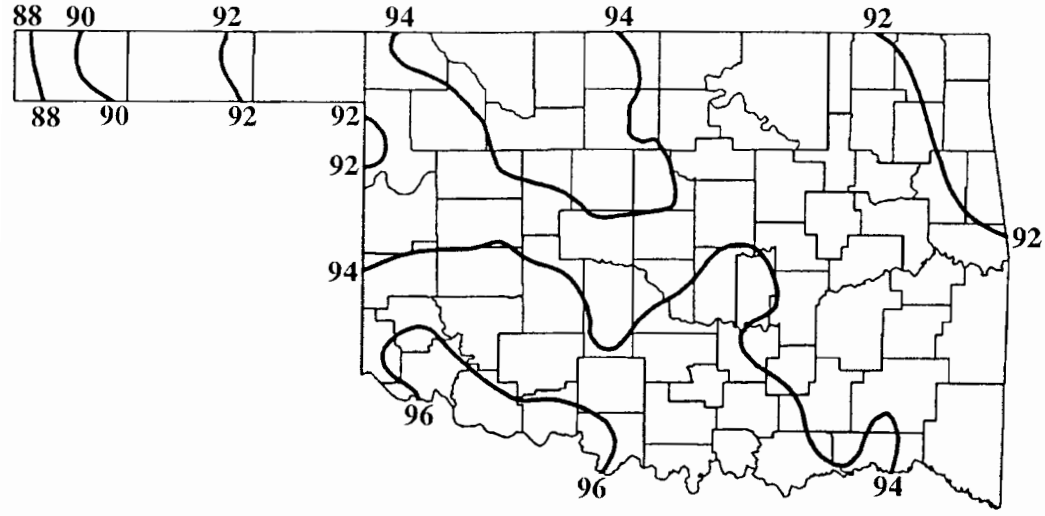
JUNE 1998 DEPARTURE FROM NORMAL PRECIPITATION
(INCHES)



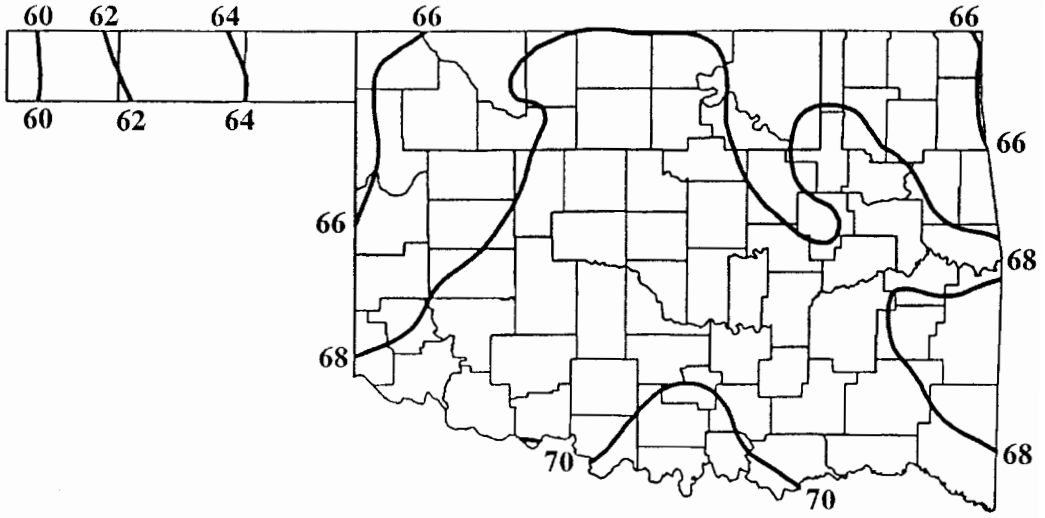
JUNE 1998 ACCUMULATED COOLING DEGREE DAYS (°F)



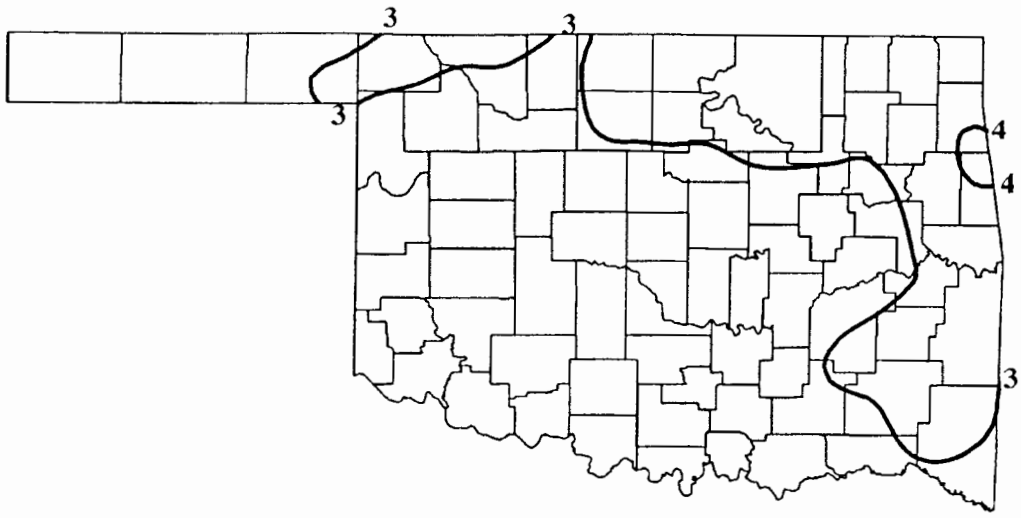
JUNE 1998 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)



AUGUST NORMAL DAILY MAXIMUM TEMPERATURE (°F)



AUGUST NORMAL DAILY MINIMUM TEMPERATURE (°F)



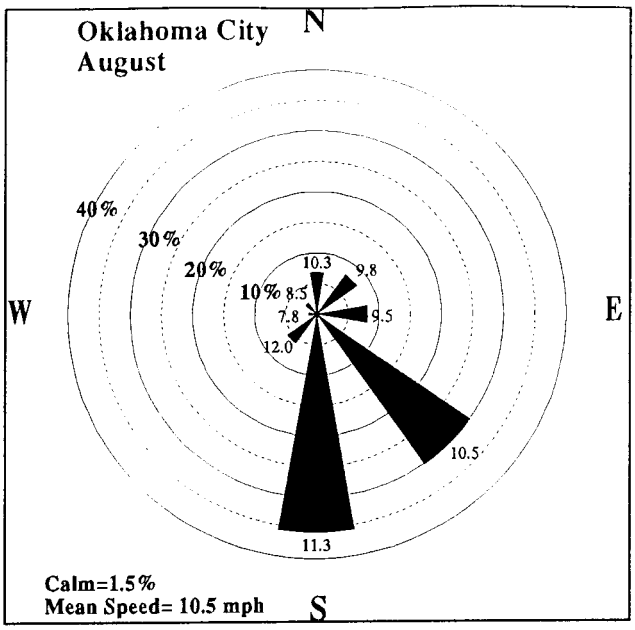
AUGUST NORMAL MONTHLY PRECIPITATION (inches)

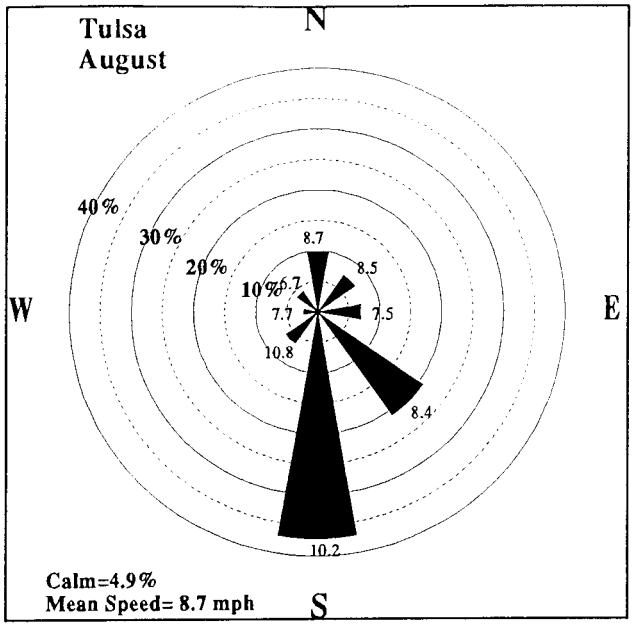
OUTLOOK FOR AUGUST THROUGH OCTOBER 1998

BASED ON SEASONAL OUTLOOKS PROVIDED BY THE CLIMATE PREDICTION CENTER

TEMPERATURE: Near Normal Northeast
Greater Than Normal Elsewhere

PRECIPITATION: Near Normal Statewide





August Wind Roses for Oklahoma City and Tulsa. The frequency (percent) of winds from each direction is represented by length of its bar. The numbers at the ends of the bars indicate the average wind speed from that direction in miles per hour.

SUNRISE/SUNSET TIMES FOR AUGUST 1998

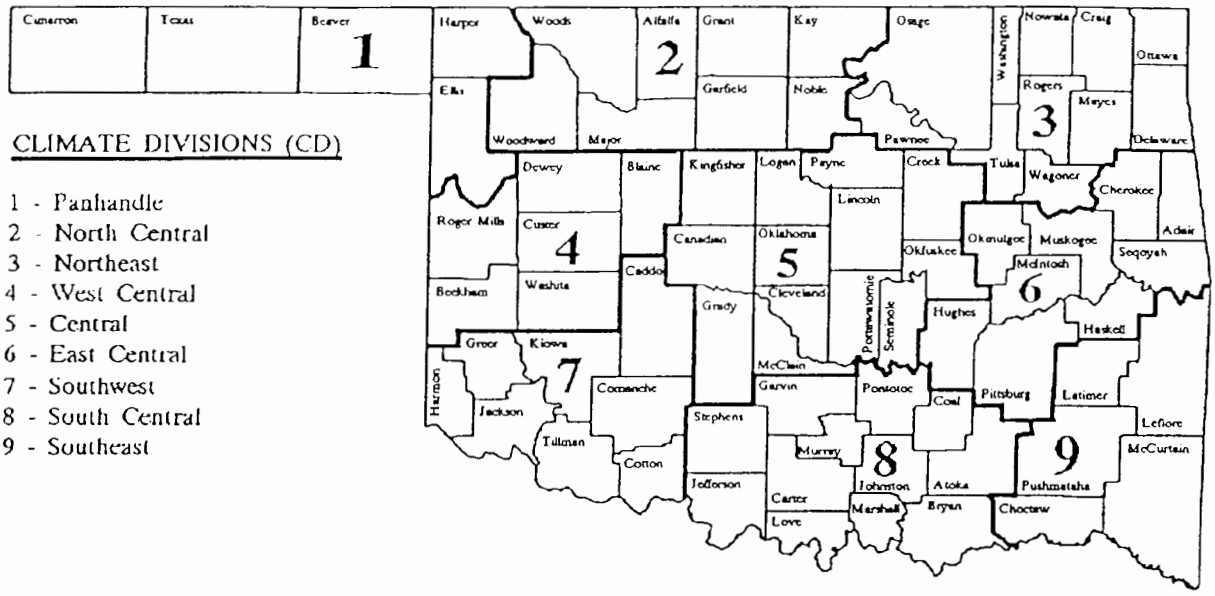
OKLAHOMA CITY

DATE	SUNRISE	SUNSET	DAYLIGHT
98 8 1	5:39AM	7:34PM cst	13 hrs 55 mins
98 8 2	5:40AM	7:34PM cst	13 hrs 54 mins
98 8 3	5:41AM	7:33PM cst	13 hrs 52 mins
98 8 4	5:41AM	7:32PM cst	13 hrs 51 mins
98 8 5	5:42AM	7:31PM cst	13 hrs 49 mins
98 8 6	5:43AM	7:30PM cst	13 hrs 47 mins
98 8 7	5:43AM	7:29PM cst	13 hrs 46 mins
98 8 8	5:44AM	7:28PM cst	13 hrs 44 mins
98 8 9	5:45AM	7:27PM cst	13 hrs 42 mins
98 810	5:46AM	7:26PM cst	13 hrs 41 mins
98 811	5:46AM	7:25PM cst	13 hrs 39 mins
98 812	5:47AM	7:24PM cst	13 hrs 37 mins
98 813	5:48AM	7:23PM cst	13 hrs 35 mins
98 814	5:49AM	7:22PM cst	13 hrs 33 mins
98 815	5:49AM	7:21PM cst	13 hrs 31 mins
98 816	5:50AM	7:20PM cst	13 hrs 30 mins
98 817	5:51AM	7:18PM cst	13 hrs 28 mins
98 818	5:51AM	7:17PM cst	13 hrs 26 mins
98 819	5:52AM	7:16PM cst	13 hrs 24 mins
98 820	5:53AM	7:15PM cst	13 hrs 22 mins
98 821	5:54AM	7:14PM cst	13 hrs 20 mins
98 822	5:54AM	7:12PM cst	13 hrs 18 mins
98 823	5:55AM	7:11PM cst	13 hrs 16 mins
98 824	5:56AM	7:10PM cst	13 hrs 14 mins
98 825	5:57AM	7: 9PM cst	13 hrs 12 mins
98 826	5:57AM	7: 7PM cst	13 hrs 10 mins
98 827	5:58AM	7: 6PM cst	13 hrs 8 mins
98 828	5:59AM	7: 5PM cst	13 hrs 6 mins
98 829	5:59AM	7: 3PM cst	13 hrs 4 mins
98 830	6: 0AM	7: 2PM cst	13 hrs 2 mins
98 831	6: 1AM	7: 1PM cst	13 hrs 0 mins

TULSA

DATE	SUNRISE	SUNSET	DAYLIGHT
98 8 1	5:31AM	7:29PM cst	13 hrs 59 mins
98 8 2	5:31AM	7:28PM cst	13 hrs 57 mins
98 8 3	5:32AM	7:28PM cst	13 hrs 55 mins
98 8 4	5:33AM	7:27PM cst	13 hrs 54 mins
98 8 5	5:34AM	7:26PM cst	13 hrs 52 mins
98 8 6	5:34AM	7:25PM cst	13 hrs 50 mins
98 8 7	5:35AM	7:24PM cst	13 hrs 49 mins
98 8 8	5:36AM	7:23PM cst	13 hrs 47 mins
98 8 9	5:37AM	7:22PM cst	13 hrs 45 mins
98 810	5:37AM	7:21PM cst	13 hrs 43 mins
98 811	5:38AM	7:20PM cst	13 hrs 42 mins
98 812	5:39AM	7:19PM cst	13 hrs 40 mins
98 813	5:40AM	7:18PM cst	13 hrs 38 mins
98 814	5:40AM	7:16PM cst	13 hrs 36 mins
98 815	5:41AM	7:15PM cst	13 hrs 34 mins
98 816	5:42AM	7:14PM cst	13 hrs 32 mins
98 817	5:43AM	7:13PM cst	13 hrs 30 mins
98 818	5:44AM	7:12PM cst	13 hrs 28 mins
98 819	5:44AM	7:10PM cst	13 hrs 26 mins
98 820	5:45AM	7: 9PM cst	13 hrs 24 mins
98 821	5:46AM	7: 8PM cst	13 hrs 22 mins
98 822	5:47AM	7: 7PM cst	13 hrs 20 mins
98 823	5:47AM	7: 5PM cst	13 hrs 18 mins
98 824	5:48AM	7: 4PM cst	13 hrs 16 mins
98 825	5:49AM	7: 3PM cst	13 hrs 14 mins
98 826	5:50AM	7: 1PM cst	13 hrs 12 mins
98 827	5:50AM	7: 0PM cst	13 hrs 10 mins
98 828	5:51AM	6:59PM cst	13 hrs 8 mins
98 829	5:52AM	6:57PM cst	13 hrs 6 mins
98 830	5:53AM	6:56PM cst	13 hrs 3 mins
98 831	5:53AM	6:55PM cst	13 hrs 1 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

DATA COURTSEY OF NATIONAL WEATHER SERVICE NORMAN.

AUGUST

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

Day	Avg. Temp	Avg. High	Record High	Year	Lowest Max	Year	1998	Avg. Low	Highest Min	Year	Record Low	Year	1998	Avg. Ppt.	Greatest Ppt.	Year	1998
1	81.9	93.3	108	1980	72	1950		70.5	83	1934	58	1971		0.07	2.38	1995	
2	81.7	93.0	110	1980	80	1898		70.3	81	1932	57	1971		0.03	1.41	1894	
3	82.3	93.9	106	1930	72	1907		70.7	80	1944	59	1973		0.06	1.82	1990	
4	81.5	92.5	105	1918	75	1978		70.6	82	1980	58	1973		0.09	1.32	1985	
5	82.3	94.0	106	1964	76	1920		70.6	80	1923	55	1894		0.04	0.60	1976	
6	83.0	94.6	107	1951	76	1971		71.5	80	1980	56	1894		0.11	1.38	1965	
7	82.2	93.8	107	1946	69	1997		70.7	82	1951	57	1993		0.13	2.15	1939	
8	81.6	93.1	106	1970	75	1997		70.1	82	1951	54	1989		0.10	2.60	1912	
9	81.3	93.0	109	1936	75	1927		69.5	80	1970	58	1908		0.15	1.83	1915	
10	81.4	92.6	112	1936	71	1989		70.1	81	1937	62	1917		0.09	1.18	1977	
11	81.1	92.5	113	1936	73	1968		69.7	82	1936	58	1931		0.02	2.86	1892	
12	81.0	92.8	110	1936	72	1920		69.2	83	1936	56	1967		0.04	1.85	1901	
13	81.6	93.0	107	1936	73	1989		70.2	83	1936	54	1967		0.11	1.67	1989	
14	81.6	92.4	106	1956	68	1989		70.8	79	1943	60	1967		0.14	1.93	1989	
15	81.6	92.6	107	1956	77	1942		70.7	81	1954	59	1992		0.20	2.69	1945	
16	82.4	93.6	107	1956	79	1964		71.2	81	1934	53	1994		0.05	1.32	1981	
17	81.9	93.1	108	1909	76	1932		70.8	82	1934	59	1994		0.03	0.93	1932	
18	81.1	92.3	104	1918	68	1992		69.9	81	1934	57	1943		0.13	2.87	1966	
19	80.0	90.9	106	1934	72	1915		69.2	80	1954	56	1932		0.10	0.87	1977	
20	80.4	91.7	105	1911	65	1950		69	81	1934	56	1950		0.08	1.83	1983	
21	80.8	92.6	105	1911	74	1920		69	81	1934	51	1956		0.10	1.20	1979	
22	80.4	91.7	104	1922	72	1920		69.1	80	1922	56	1956		0.03	3.17	1934	
23	79.9	91.4	105	1980	70	1966		68.4	80	1988	49	1891		0.06	2.27	1924	
24	80.3	92.1	107	1922	73	1966		68.5	78	1936	50	1891		0.06	1.11	1918	
25	80.3	91.9	102	1988	72	1934		68.6	78	1936	58	1966		0.02	1.81	1934	
26	80.3	92.3	104	1901	68	1992		68.2	78	1936	53	1910		0.06	1.16	1896	
27	80.3	91.7	104	1982	69	1987		68.9	78	1963	52	1906		0.07	1.53	1941	
28	79.3	90.4	103	1984	68	1988		68.1	80	1951	56	1906		0.07	1.44	1900	
29	79.4	90.8	106	1984	70	1968		68	79	1951	50	1893		0.07	2.33	1935	
30	79.9	91.5	105	1947	70	1915		68.3	78	1947	49	1915		0.04	1.32	1928	
31	78.6	89.6	104	1990	67	1993		67.7	79	1980	51	1915		0.16	2.35	1966	
MONTH	81.0	92.4	113	1936	65	1950		69.6	83	1936	49	1915		0.08	3.17	1934	

* The most tornadoes reported in August for Oklahoma was 13 in 1979.

TULSA CLIMATE CALENDAR

DATA COURTESY OF NATIONAL WEATHER SERVICE TULSA

AUGUST

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

Day	Avg. Temp	Avg. High	Record High	Year	Lowest Max	Year	1998	Avg. Low	Highest Min	Year	Record Low	Year	1998	Avg. Ppt.	Greatest Ppt.	Year	1998
1	81	92	106	1917	73	1951		71	82	1980	57	1995		0.12	1.95	1922	
2	82	92	105	1933	78	1995		72	83	1980	54	1924		0.12	2.51	1929	
3	82	92	107	1911	76	1941		72	80	1983	54	1924		0.12	2.75	1903	
4	82	92	108	1911	75	1915		72	85	1980	56	1924		0.11	1.93	1930	
5	82	92	108	1911	77	1972		72	81	1980	53	1915		0.11	1.55	1950	
6	82	93	111	1996	78	1960		72	82	1980	55	1972		0.11	1.62	1932	
7	83	93	103	1917	78	1908		73	84	1980	58	1967		0.11	1.35	1994	
8	83	93	106	1917	79	1905		73	81	1980	61	1958		0.11	1.02	1906	
9	83	93	107	1925	70	1905		73	82	1980	59	1952		0.11	3.80	1915	
10	83	93	105	1933	75	1950		73	84	1980	59	1961		0.10	2.20	1906	
11	83	93	107	1954	70	1996		73	82	1969	59	1905		0.10	2.30	1963	
12	83	93	109	1954	66	1953		73	84	1980	59	1975		0.10	1.35	1953	
13	83	94	111	1954	76	1953		73	85	1980	54	1975		0.10	1.95	1994	
14	83	94	112	1954	77	1961		73	85	1954	54	1967		0.10	3.25	1994	
15	83	94	111	1936	78	1959		73	85	1980	54	1967		0.10	3.91	1961	
16	84	94	109	1980	72	1967		73	87	1980	57	1967		0.10	2.55	1967	
17	84	94	110	1936	82	1989		73	82	1980	59	1967		0.10	1.85	1989	
18	84	94	113	1936	74	1967		73	84	1954	64	1984		0.10	2.72	1924	
19	84	94	113	1936	77	1908		73	83	1980	61	1947		0.09	2.20	1933	
20	84	94	109	1936	78	1970		73	82	1981	56	1971		0.09	2.35	1906	
21	84	94	109	1939	77	1950		73	83	1996	55	1970		0.09	1.89	1994	
22	84	94	109	1974	69	1947		73	85	1954	57	1970		0.09	3.12	1960	
23	84	94	107	1936	69	1947		73	83	1954	58	1970		0.09	1.85	1973	
24	84	95	110	1934	73	1947		73	80	1993	60	1927		0.09	1.95	1973	
25	84	95	108	1934	80	1950		73	82	1934	54	1911		0.09	2.34	1931	
26	84	95	106	1978	75	1959		73	81	1981	60	1905		0.09	1.81	1928	
27	84	95	106	1936	76	1977		73	81	1986	59	1971		0.09	7.54	1963	
28	84	95	109	1936	79	1911		73	83	1986	61	1920		0.09	2.72	1976	
29	84	95	110	1986	79	1981		73	81	1986	60	1969		0.09	1.24	1950	
30	84	95	110	1986	79	1971		73	85	1980	55	1971		0.09	3.78	1981	
31	84	95	108	1980	79	1925		73	81	1958	51	1971		0.09	1.04	1979	
MONTH	83	94	113	1936	66	1953		73	87	1980	51	1971		0.10	7.54	1963	

* The average number of Tornadoes in August for Oklahoma is 1.6.