

OKLAHOMA MONTHLY SUMMARY JUNE 1989

TABLE OF CONTENTS

June 1989 Oklahoma Summary.....	2
Table of June 1988/1989 Comparisons.....	5
June 1989 Data Summary Tables.....	6
June 1989 State Map Summary.....	12
August Climatological Normals.....	15
30- and 90-Day National Weather Service Outlook..	16
Explanation of Tables and Maps.....	18
August 1989 Climate Calendar.....	20

JUNE 1989 OKLAHOMA SUMMARY

Oklahoma recorded its fourth wettest and third coolest June in its 98-year climate history in 1989 (see Table 1). More than 12 precipitation days and 24-hour rainfall accumulations in excess of 3 inches produced record June totals at several sites (see Table 2). Western and central Oklahoma CD's received more than twice their mean June precipitation (see Map 1). Several days of cloud cover and rain-cooled air produced low, record-breaking mean monthly temperatures at some stations (see Table 3).

A spring-like succession of upper level lows during the first 2 weeks of the month tapped gulf moisture over Oklahoma and produced several days of flood-generating rainfall, hail and all of June's six tornadoes. Severe storms on June 2 produced a weak tornado in Tulsa County and 70-mph winds which toppled trees in neighboring Creek County. Several central Oklahoma areas reported small hail. Increasing upper-level winds supported storm development over western Oklahoma on June 3. Vigorous thunderstorms fed by abundant gulf moisture deposited over 2 inches of rain at many western and central Oklahoma sites. Reports included Arnett with 2.60", Weatherford with 3.12", Blanchard with 3.30" and Chattanooga with 4.47". A tornado caused minor damage near Blanchard. On the 4th, storms redeveloped in northwestern Oklahoma along a front which moved through the State. In north central Oklahoma, 70-mph winds and golfball-size hail destroyed hundreds of wheat acres in Garfield County. Violent storms in southwestern Oklahoma destroyed two mobile homes in Stephens County. Tornadoes were reported on June 6 in Roger Mills and Beckham Counties as another round of storms struck Statewide. Observers in central Oklahoma reported an unconfirmed tornado, while area stations recorded marble-size hail and over 2" of rain. On June 7 1 to 2 inches of additional rain fell on saturated ground, forcing the evacuation of several homes along the North Canadian River in Shawnee. The Washita River overflowed its banks and flooded sections of Caddo County. Over 3 inches of rain, including an estimated .5" in 20 minutes, resulted in localized flooding in Lawton.

Scattered thunderstorms on June 9-14 produced one-day precipitation maximums at many stations, including 3.02" at Hollow, 3.78" at Oklahoma City, 2.75" at Webbers Falls and a remarkable 9.19" at Medford. This Medford amount exceeded its expected 100-year, 24-hour rainfall event amount. Tree damage was reported from a tornado in Beckham County on June 12. Many CD-3 stations recorded their first 1-inch rainfall of the month during the period. By the middle of the month, most stations Statewide had already reported rain on at least 9 days with accumulations near 7".

The coolest weather of the month followed a frontal passage on June 15. Morning lows dipped into the 40's and 50's and numerous stations reported record low temperatures for the 15th and 16th.

As high pressure drifted eastward, southerly winds carried warmer air into the State, and the longest hot-weather spell of the month settled in during a mostly rain-free, 8-day period between June 19 and 26. High temperatures reached the low to mid 90's, accounting for most of the month's much fewer than normal 90-degree days (see Map 2). A cold front penetrated the northern two-thirds of the State on June 23, producing 1 to 3 inch rainfall amounts. Flash flooding in Oklahoma City and Spencer prompted evacuations. Storms on June 26 delivered more rain, with amounts mostly less than an inch, to the northern two-thirds of the State. Highs in the 80's, and drier weather dominated the last few days of the month.

TABLE 1.A

Oklahoma's 5 Wettest Junes
(1892 - 1989)

Rank	Year	Statewide Average Precipitation (in.)
1	1908	8.73
2	1904	8.26
3	1921	7.95
4	1989	7.89
5	1932	7.31

TABLE 1.B

Oklahoma's 5 Coolest Junes
(1892 - 1989)

Rank	Year	Statewide Average Monthly Temperature
1	1903	70.3
2	1982	73.0
3	1989	73.6
3	1899	73.6
3	1912	73.6

TABLE 2

Record June Precipitation Amounts
For Selected Oklahoma Stations

CD	Station	1989 June	Previous Record*	
		Precipitation	Amount	Year
4	Clinton	13.46	11.69	1962
5	El Reno	12.91	10.78	1962
5	Oklahoma City	15.20	14.12	1932+
7	Anadarko	10.98	8.56	1962
7	Okeene	10.36	8.76	1972
8	Ardmore	9.47	9.43	1962
8	Waurika	10.77	10.14	1973

* Period of Record: 1948-1989

+ Period of Record: 1890-1989

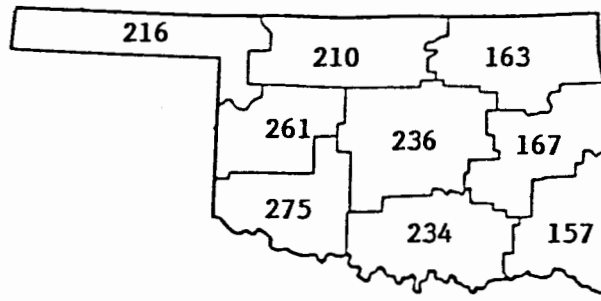
TABLE 3

Record Low June Monthly Mean Temperatures
For Selected Oklahoma Stations
(1948 - 1989)

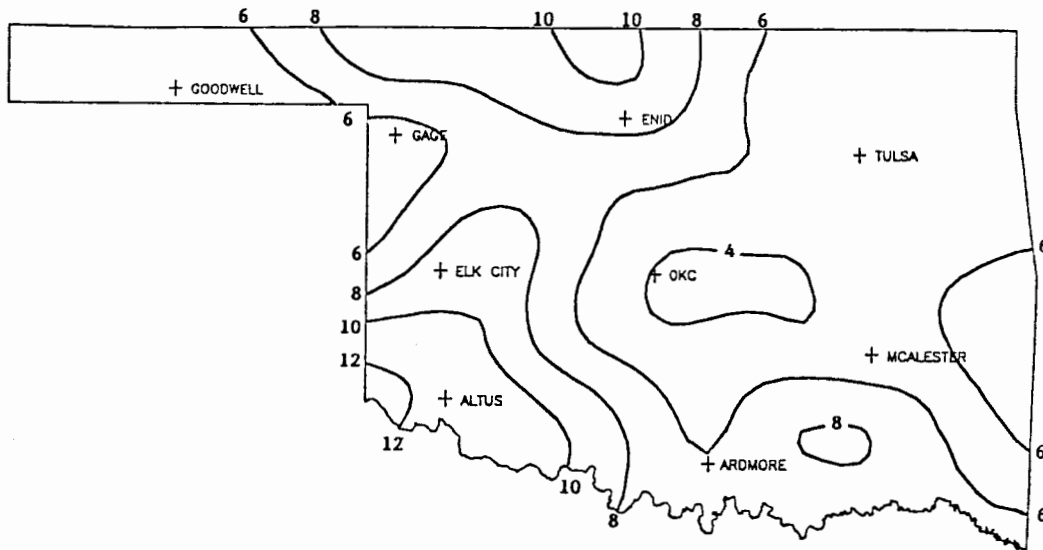
CD	Station	1989	Previous Record	
			Temperature	Year
2	Mutual	69.9	70.3	1982
4	Okeene	72.4	73.6	1982
5	Purcell	73.6	74.0	1955
6	Holdenville	73.9	74.1	1974
7	Walters	75.6	75.7	1976
8	Marlow	73.9	73.9	1961

MAP 1: PERCENT OF NORMAL PRECIPITATION

JUNE 1989



Map 2.A: Mean number of days in June 1989 with a maximum temperature of at least 90 degrees.



Map 2.B: Mean number of days in June with a maximum temperature of at least 90 degrees.

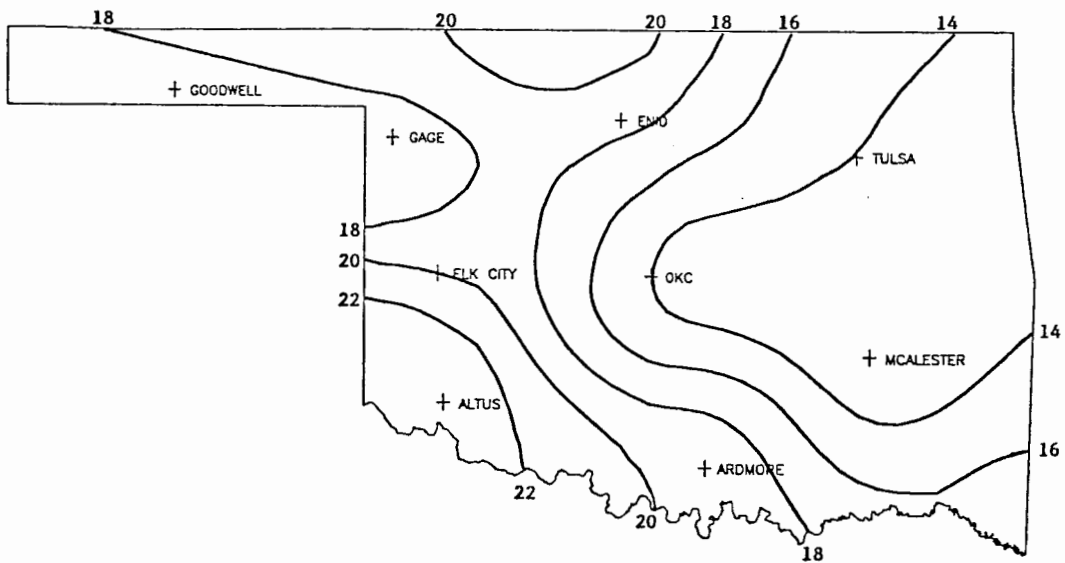


TABLE OF 1988/1989 COMPARISONS

Station	June Temperatures (F)		June Precipitation (in.)	
	1988	1989	1988	1989
Arnett	76.2	69.8	4.91	8.47
Enid	80.1	*	2.47	*
Mutual	76.9	69.9	2.52	7.06
Tulsa	79.8	75.1	.58	5.16
Elk City	77.5	72.5	.58	10.42
Oklahoma City	78.5	74.5	4.07	15.20
McAlester	79.0	75.4	.39	8.38
Altus Irr. Sta.	79.3	75.2	3.54	7.66
Durant	*	*	*	*
Ada	78.9	74.1	1.64	8.34
Antlers	78.1	75.2	4.54	7.52

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Okeene	4	36	1
Maximum temperature (F)	Upper Spavinaw	3	100	25
Maximum 24-hour precipitation	Medford	2	9.19"	10

JUNE 1989 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	DEV				HEAT		DEV	COOL	DEV	DEV						
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX			
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR	DAY
ARNETT	332	1	69.8	30	-5.9	93.	21	48.	15	26.0	19.0	171.0	-157.0	8.474	30	5.18	2.60	4
BEAVER	593	1	69.7	30	-6.5	96.	21	46.	15	37.5	27.5	179.5	-166.5	9.610	30	6.77	2.40	4
BOISE CITY 2 E	908	1	68.6	30	-4.9	94.	18	43.	15	41.5	31.5	148.5	-116.5	8.972	30	6.98	3.20	27
BUFFALO	1243	1	72.1	30	-6.3	97.	21	47.	15	13.0	7.0	225.5	-182.5	8.310	30	4.71	2.20	11
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.581	30	2.37	2.25	13
GAGE FAA APT	3407	1	70.3	30	-6.3	93.	21	47.	15	20.0	20.0	178.0	-175.0	5.291	30	2.52	1.80	13
GATE	3489	1	70.8	24	*****	96.	21	47.	14	22.5	*****	160.5	*****	6.570	30	*****	1.53	3
GOODWELL RES ST3628	1	68.1	30	-6.5	95.	21	40.	5	56.0	45.0	148.5	-150.5	5.234	30	2.93	1.42	9	
GUYMON	3835	1	69.9	27	*****	95.	19	45.	15	38.5	*****	170.5	*****	4.453	28	*****	1.35	9
HOOKER	4298	1	68.5	30	-7.1	94.	21	47.	15	47.0	37.0	153.0	-175.0	7.313	30	4.36	1.87	4
KENTON	4766	1	66.6	30	-7.1	94.	17	42.	5	69.5	55.5	118.0	-157.0	5.431	30	3.61	2.08	9
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.112	30	3.14	1.79	11
OPTIMA LAKE	6740	1	69.9	26	*****	95.	21	46.	15	27.5	*****	154.5	*****	5.063	30	*****	1.25	5
RANGE	7412	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.481	30	*****	1.30	22
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.292	30	3.49	1.58	9
TURPIN 4 SSE	9017	1	68.9	30	*****	95.	21	47.	15	45.0	*****	163.5	*****	12.511	30	*****	4.66	11

JUNE 1989 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	DEV				HEAT		DEV	COOL	DEV	DEV						
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX			
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR	DAY
ALVA 1 ENE	194	2	73.4	29	-4.7	97.	20	50.	16	5.0	.0	249.0	-149.0	6.710	30	2.91	1.87	11
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.202	29	*****	1.40	4
BILLINGS	755	2	73.3	30	*****	95.	20	53.	16	.0	*****	248.0	*****	8.350	30	4.24	2.55	23
BLACKWELL 2E	818	2	73.4	30	*****	97.	20	50.	16	4.0	*****	255.5	*****	10.752	30	*****	4.90	11
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.261	30	*****	4.31	11
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.960	30	*****	1.83	4
CHEROKEE	1724	2	74.7	29	-4.2	98.	21	50.	15	5.5	5.5	287.0	-130.0	12.451	30	8.46	3.60	13
ENID	2912	2	74.5	30	-4.0	96.	22	53.	16	4.0	4.0	288.0	-117.0	6.810	30	2.69	1.21	4
FT SUPPLY DAM	3304	2	69.1	30	-7.8	92.	21	46.	15	33.5	27.5	156.0	-207.0	5.120	30	2.18	1.42	4
FREEDOM	3358	2	72.4	30	*****	94.	22	48.	15	8.0	*****	230.5	*****	6.280	30	*****	1.33	27
GREAT SALT PLNS3740	2	73.9	30	*****	97.	21	51.	16	8.0	*****	274.0	*****	6.220	30	2.73	1.16	27	
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.743	30	*****	3.10	10
HELENA 1 SSE	4019	2	71.7	30	*****	96.	21	49.	16	10.0	*****	210.5	*****	5.561	30	1.61	1.30	4
JEFFERSON	4573	2	74.4	30	-4.3	98.	20	51.	16	3.5	3.5	285.0	-126.0	10.281	30	6.30	4.83	10
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.050	30	*****	2.26	11
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	13.371	30	*****	9.19	10
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.990	30	*****	2.37	23
MUTUAL	6139	2	69.8	30	-7.4	95.	21	49.	15	32.0	26.0	176.5	-195.5	7.060	30	3.89	2.12	7
NEWKIRK	6278	2	73.4	30	-4.1	93.	20	51.	15	5.0	5.0	258.0	-117.0	10.550	30	5.96	4.05	11
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.250	30	*****	1.25	3
PERRY	7012	2	72.9	30	-5.2	96.	25	47.	16	20.5	20.5	256.5	-136.5	8.580	30	4.45	1.90	23
PONCA CITY FAA	7201	2	73.9	29	-3.3	95.	20	53.	16	2.0	2.0	261.5	-104.5	9.324	30	5.15	2.26	11
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.910	30	1.88	1.60	12
RENFROW	7556	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.050	30	4.12	1.81	27
WAYNOKA	9404	2	71.9	30	-6.6	95.	20	48.	15	10.0	10.0	218.0	-187.0	6.500	30	2.75	1.32	27
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.501	30	*****	2.07	7

JUNE 1989 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID CD	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR DAY
		MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	TEMP DAY	DAY							FROM NORM	MAX	
BARNSDALL	535 3	72.3	29	*****	91.	20	48.	16	4.5	*****	215.0	*****	9.091	30	4.55	2.84	11
BARTLESVILLE ZW	548 3	73.8	30	-3.2	93.	25	49.	16	3.0	3.0	267.5	-92.5	6.461	30	2.37	3.04	11
BIXBY	782 3	73.3	30	-3.6	91.	26	49.	16	6.5	6.5	254.5	-106.5	7.921	30	3.18	2.00	12
BURBANK	1256 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.941	30	*****	2.07	11
CHELSEA 4 S	1717 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.210	30	*****	2.98	12
CLAREMORE	1828 3	74.1	29	-2.2	95.	26	49.	16	5.0	5.0	268.0	-71.0	8.452	30	3.82	2.61	12
CLEVELAND 5 WSW	1902 3	73.7	28	*****	91.	19	51.	17	.0	*****	244.0	*****	7.500	28	*****	1.85	1
FORAKER	3250 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.320	30	2.13	2.45	11
HOLLOW	4258 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.440	30	3.86	3.02	11
HOMINY	4289 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.681	30	3.53	1.46	11
HULAH DAM	4393 3	71.8	24	*****	90.	26	47.	16	7.0	*****	171.0	*****	6.200	26	*****	2.30	3
JAY TOWER	4567 3	72.0	30	*****	90.	26	44.	16	11.0	*****	221.5	*****	6.440	30	*****	1.90	11
KANSAS 1 ESE	4672 3	72.1	29	*****	89.	25	46.	16	8.0	*****	212.5	*****	7.302	30	*****	2.32	14
LENAPAH	5118 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.860	30	*****	2.80	11
MANNFORD 6 NW	5522 3	73.3	30	*****	92.	20	49.	16	1.5	*****	249.5	*****	7.450	30	3.57	1.40	11
MARAMEC	5540 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.300	30	2.40	2.16	23
MIAMI	5855 3	72.2	30	-4.0	90.	26	47.	17	.5	-6.5	215.5	-127.5	3.450	30	-1.43	.77	11
NOWATA	6485 3	73.3	30	-3.2	91.	20	56.	16	.0	.0	248.0	-101.0	6.760	30	1.98	2.13	12
ONETA 1 WNW	6713 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.760	30	*****	1.81	14
PAWHUSKA	6935 3	72.6	30	-4.0	91.	20	47.	16	5.0	5.0	234.0	-114.0	7.420	30	3.11	2.80	11
PAWHUSKA	6937 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.111	30	*****	2.88	11
PRYOR 6 N	7309 3	72.4	29	-4.0	92.	26	46.	16	7.0	7.0	220.5	-126.5	8.661	30	3.99	2.48	12
QUAPAW	7358 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.890	30	1.12	1.87	27
RALSTON	7390 3	75.2	30	*****	95.	21	49.	16	.5	*****	307.0	*****	8.171	30	3.78	2.90	23
RAMONA 4 N	7394 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.640	30	*****	1.89	11
SKIATOOK	8258 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.240	30	1.93	1.72	11
SPAVINAW	8380 3	73.1	30	*****	90.	20	50.	16	5.5	*****	248.5	*****	9.101	30	4.32	1.74	12
TULSA WSO APT	8992 3	75.1	30	-2.6	93.	25	52.	16	.5	.5	302.0	-79.0	5.163	30	.59	1.42	11
UPPER SPAVINAW	9101 3	77.3	30	*****	100.	25	49.	16	1.5	*****	369.5	*****	7.260	30	*****	1.68	12
VINITA 2 N	9203 3	73.4	24	*****	90.	26	46.	16	5.5	*****	206.5	*****	5.300	30	.43	2.45	12
WAGONER	9247 3	73.9	30	-3.3	90.	25	50.	16	3.0	3.0	269.5	-96.5	9.151	30	4.06	3.30	14
WANN	9298 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.251	30	*****	4.41	11

JUNE 1989 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID CD	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR DAY
		MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	TEMP DAY	DAY							FROM NORM	MAX	
CANTON DAM	1445 4	71.1	30	-6.6	95.	21	48.	16	10.0	10.0	191.5	-189.5	6.241	30	2.54	1.47	7
CHEYENNE	1738 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.010	30	*****	2.33	4
CLINTON	1909 4	74.6	30	-3.8	98.	21	52.	16	.0	.0	287.5	-114.5	13.460	30	10.11	3.01	7
COLONY	2039 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.811	30	*****	2.48	4
CORDELL	2125 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.151	30	7.08	2.65	12
ELK CITY 1 E	2849 4	72.4	30	*****	93.	20	50.	15	4.0	*****	227.5	*****	10.421	30	7.10	2.26	4
ERICK 4 E	2944 4	73.0	30	-4.7	93.	20	50.	15	2.5	2.5	243.5	-141.5	10.230	30	7.26	2.85	12
GEARY	3497 4	72.1	27	*****	92.	20	50.	15	4.5	*****	197.5	*****	9.921	30	6.11	2.61	7
HAMMON 1 NNE	3871 4	71.3	30	-6.8	94.	21	48.	15	8.0	2.0	197.0	-202.0	9.610	30	6.65	2.85	4
LEEDEY	5090 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.320	30	5.08	2.50	7
MACKIE 4 NNW	5463 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.950	30	*****	2.02	4
MORAVIA 2 NNE	6035 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.770	30	4.78	2.22	13
OKEENE	6629 4	73.1	30	-5.9	96.	20	52.	16	3.0	3.0	245.5	-174.5	6.770	30	2.80	1.41	12
RETROP	7564 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.480	30	*****	1.35	4
REYDON	7579 4	71.2	30	*****	93.	21	48.	15	9.0	*****	193.5	*****	7.661	30	4.35	2.02	1
SAYRE	7952 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.321	30	6.15	2.29	1
SWEETWATER 2 E	8652 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.652	30	*****	1.45	3
TALOGA	8708 4	72.6	30	-4.9	96.	20	47.	15	6.5	6.5	235.0	-140.0	6.881	30	3.61	1.98	7
THOMAS	8815 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.310	30	*****	1.60	22
VICI	9172 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.490	30	*****	1.24	7
WATONGA	9364 4	73.1	30	*****	94.	21	50.	16	5.0	*****	247.5	*****	9.324	30	5.55	3.01	23
WEATHERFORD	9422 4	73.2	30	-5.2	98.	20	49.	15	5.0	5.0	249.5	-149.5	11.232	30	7.60	3.12	4

JUNE 1989 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	DEV				MIN		HEAT		DEV	COOL		DEV	TOT	NUM	DEV		24-HR	DAY
			MEAN	NUM	FROM	MAX	TEMP	DAY	TEMP	DAY	DEG	FROM	DEG	FROM			DEG	FROM		
AMBER	200	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.630	30	*****	2.44	13		
ARCADIA	288	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.950	30	*****	3.15	23		
TINKER AFB	325	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	14.563	29	*****	2.82	7		
BLANCHARD 2 SSW	830	5	73.5	30	*****	91.	20	51.	16	.0	*****	256.0	*****	10.010	30	*****	3.30	4		
BRISTOW	1144	5	73.7	30	-3.5	92.	25	48.	16	2.0	2.0	261.5	-104.5	5.973	30	1.61	1.12	13		
CHANDLER	1684	5	73.6	30	-3.9	91.	21	53.	16	1.5	1.5	258.5	-116.5	8.560	30	4.76	2.70	23		
CHICKASHA EX ST1750	5	74.1	30	-4.7	96.	27	51.	16	.0	.0	272.0	-142.0	7.300	30	4.21	2.09	4			
COX CITY 1 E	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.870	30	*****	3.90	4		
CRESCENT	2242	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.680	30	*****	2.83	23		
CUSHING	2318	5	73.3	30	-3.7	91.	24	53.	17	3.5	3.5	251.0	-111.0	5.190	30	.90	1.90	4		
EL RENO 1 N	2818	5	73.6	30	-3.8	94.	20	52.	16	2.5	2.5	260.0	-112.0	12.910	30	9.28	3.63	4		
GUTHRIE	3821	5	74.9	30	-3.0	94.	20	52.	16	1.0	1.0	297.0	-90.0	8.700	30	4.74	1.67	23		
HENNESSEY 2 SE	4055	5	73.9	30	-4.6	96.	20	52.	15	2.0	2.0	269.0	-136.0	8.762	30	4.86	2.00	23		
INGALLS	4489	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.664	30	*****	1.57	23		
KINGFISHER 2 SE4861	5	73.6	30	-5.0	95.	20	53.	16	1.5	1.5	260.0	-148.0	9.160	30	5.40	2.02	23			
KONAWA	4915	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.071	30	3.35	3.10	4		
MARSHALL	5589	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.250	30	5.25	2.11	23		
MEEKER 4 W	5779	5	73.1	27	*****	90.	21	51.	16	2.5	*****	222.5	*****	9.860	30	6.16	3.66	23		
MULHALL	6110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.870	30	*****	1.62	4		
NORMAN 3 S	6386	5	74.4	30	*****	96.	20	49.	13	1.5	*****	283.5	*****	12.721	30	9.10	3.88	4		
OILTON 2 SE	6616	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.670	30	*****	1.73	11		
OKEMAH	6638	5	74.6	30	-2.5	92.	20	52.	16	1.0	1.0	287.5	-75.5	6.111	30	1.64	1.54	4		
OKLAHOMA CTY WS6661	5	74.5	30	-2.5	93.	21	56.	16	.0	.0	285.0	-75.0	15.201	30	11.33	3.78	13			
PERKINS	7003	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.200	30	5.03	3.48	23		
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.320	30	*****	2.10	4		
PRAGUE	7264	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.094	30	3.31	1.70	4		
PURCELL 5 SW	7327	5	73.6	30	-4.4	92.	21	49.	16	2.0	2.0	261.0	-129.0	8.522	30	4.93	3.00	4		
SEMINOLE	8042	5	75.4	30	-3.1	94.	20	51.	16	.0	.0	313.5	-91.5	8.110	30	4.31	2.65	7		
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.691	30	5.74	2.72	4		
STELLA	8479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.750	30	*****	2.48	4		
STILLWATER 2 W	8501	5	73.3	30	-3.7	93.	21	50.	16	3.5	3.5	253.5	-106.5	5.460	30	1.54	1.15	23		
STROUD 1 N	8563	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.601	30	*****	2.00	23		
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.940	30	*****	1.98	7		
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.200	30	*****	3.10	4		
UNION CITY 1 SE9086	5	*****	0	*****	****	0	****	0	0	*****	*****	*****	*****	14.821	30	10.61	3.02	4		
WELTY 1 SSE	9479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.821	30	*****	2.95	23		
WEWOKA	9575	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.880	30	2.67	2.13	7		

JUNE 1989 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	CD	DEV						HEAT		DEV		COOL		DEV		TOT	NUM	FROM	MAX	24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM						
ASHLAND	364	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.541	30	*****	1.55	13			
BEGGS	631	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.192	30	*****	1.55	23			
BOYNTON	1027	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.052	30	*****	2.10	11			
CALVIN	1391	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.660	30	2.13	2.60	4			
CHECOTAH	1711	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	7.181	30	3.13	2.00	12			
CLAYTON 11 WNW	1858	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	9.550	30	*****	2.00	13			
DEWAR 2 NE	2485	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	3.430	30	-.64	1.20	4			
DUSTIN	2690	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	5.900	30	*****	1.73	4			
EUFULA	2993	6	75.3	30	*****	91.	25	52.	16	.0	*****	307.5	*****	*****	7.071	30	2.95	1.86	11			
HANNA	3884	6	74.4	30	*****	92.	25	50.	16	2.5	*****	284.5	*****	*****	4.991	30	1.00	1.47	4			
HARTSHORNE	3946	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	10.410	30	*****	2.64	13			
HASKELL	3956	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	7.730	30	2.91	1.62	3			
HOLDENVILLE	4235	6	73.9	30	-3.6	91.	25	49.	16	3.0	3.0	271.0	-104.0	*****	6.290	30	2.46	2.04	4			
LYONS 2 N	5437	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.540	30	-3.92	.20	28			
MARBLE CITY	5546	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	10.331	30	*****	2.55	12			
MCALESTER FAA	5664	6	75.4	30	-2.4	92.	25	52.	16	.0	.0	311.5	-72.5	*****	8.380	30	4.72	2.20	11			
MCCURTAIN 1 SE	5693	6	75.3	30	*****	94.	24	47.	16	3.0	*****	313.0	*****	*****	3.855	30	-.43	1.25	12			
MUSKOGEE	6130	6	74.1	30	-3.4	90.	25	49.	16	3.0	3.0	277.0	-98.0	*****	7.260	30	2.66	2.10	11			
OKTAHA 2 NE	6678	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.550	30	*****	1.98	4			
QUINTON	7372	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	8.982	30	4.95	2.79	12			
SALLISAW 2 NE	7862	6	74.5	30	-2.9	93.	24	47.	16	5.0	5.0	289.0	-83.0	*****	4.910	30	.58	1.60	13			
SCIPIO	7979	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	8.640	30	*****	4.55	4			
SCRAPER	7993	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	8.210	30	*****	2.00	6			
SHORT	8170	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	8.311	30	*****	2.02	13			
STILWELL 1 NE	8506	6	72.0	30	*****	89.	24	45.	16	6.5	*****	217.5	*****	*****	8.160	30	3.68	1.82	12			
TAHLEQUAH	8677	6	73.1	30	-3.0	91.	24	45.	16	5.5	5.5	249.5	-83.5	*****	9.630	30	5.00	2.25	6			
WEBBERS FALLS	9445	6	74.5	26	*****	92.	26	49.	16	5.0	*****	252.5	*****	*****	7.590	30	3.50	2.75	12			
WESTVILLE	9523	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.221	30	*****	1.50	12			
WETUMKA 3 NE	9571	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	6.684	30	2.36	1.94	4			

JUNE 1989 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	CD	DEV						HEAT		DEV		COOL		DEV		TOT	NUM	FROM	MAX	24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM						
ALTUS IRR STA	179	7	75.6	30	-4.9	98.	21	53.	15	.5	.5	318.5	-146.5	*****	7.662	30	4.72	2.20	4			
ALTUS DAM	184	7	75.6	30	*****	98.	22	57.	15	.0	*****	319.0	*****	*****	8.200	30	4.72	2.30	7			
ANADARKO	224	7	73.4	23	*****	97.	18	48.	17	.0	*****	194.0	*****	*****	10.980	30	7.52	2.30	13			
APACHE	260	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	13.060	30	*****	3.43	13			
ALTUS AFB	447	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	7.722	29	*****	1.98	7			
CARNEGIE 2 ENE	1504	7	74.3	26	*****	95.	20	50.	15	2.0	*****	244.0	*****	*****	12.500	30	9.42	2.97	4			
CHATTANOOGA	1706	7	76.3	30	-3.6	96.	21	54.	15	.0	.0	340.5	-106.5	*****	10.531	30	7.73	4.47	4			
DUNCAN 12 W	2668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	9.661	30	*****	2.90	4			
FREDERICK	3353	7	75.3	30	-5.7	97.	27	54.	17	.0	.0	308.0	-172.0	*****	7.090	30	4.14	2.10	3			
GRANDFIELD 4 NW	3709	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	9.180	30	6.00	2.55	4			
HOBART FAA APT	4204	7	74.1	30	-4.8	98.	21	53.	15	1.0	1.0	273.0	-144.0	*****	7.383	30	4.48	1.62	13			
HOLLIS	4249	7	74.9	29	-6.1	98.	21	51.	15	1.0	1.0	288.0	-192.0	*****	5.270	30	2.29	1.36	12			
LAWTON	5063	7	74.7	30	-4.3	96.	21	53.	16	.0	.0	290.0	-130.0	*****	9.490	30	5.92	2.39	7			
FORT SILL	5068	7	75.0	30	*****	94.	21	55.	16	.0	*****	299.5	*****	*****	8.261	30	4.69	2.30	7			
LOOKEBA 2 ENE	5329	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	16.730	30	*****	2.91	4			
MANGUM RES STA	5509	7	77.1	30	-2.7	97.	30	60.	28	.0	.0	362.5	-81.5	*****	6.300	30	3.45	2.37	7			
SEDAN	8016	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	10.221	30	*****	1.95	4			
WICHITA MT WLR	9629	7	74.7	30	-3.0	96.	19	49.	16	2.0	2.0	293.5	-87.5	*****	10.360	30	6.90	2.90	4			
RANDLETT 9 E	7403	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	7.010	30	*****	2.21	4			
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	9.070	30	5.78	2.08	13			
SNYDER	8299	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	10.160	30	7.28	2.80	4			
VINSON 3 WNW	9212	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	5.801	30	2.97	1.33	13			
WALTERS	9278	7	75.8	30	-4.2	95.	20	54.	17	.0	.0	325.5	-124.5	*****	10.440	30	6.85	3.15	3			
WILLOW	9668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	5.511	30	*****	1.41	4			

JUNE 1989 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

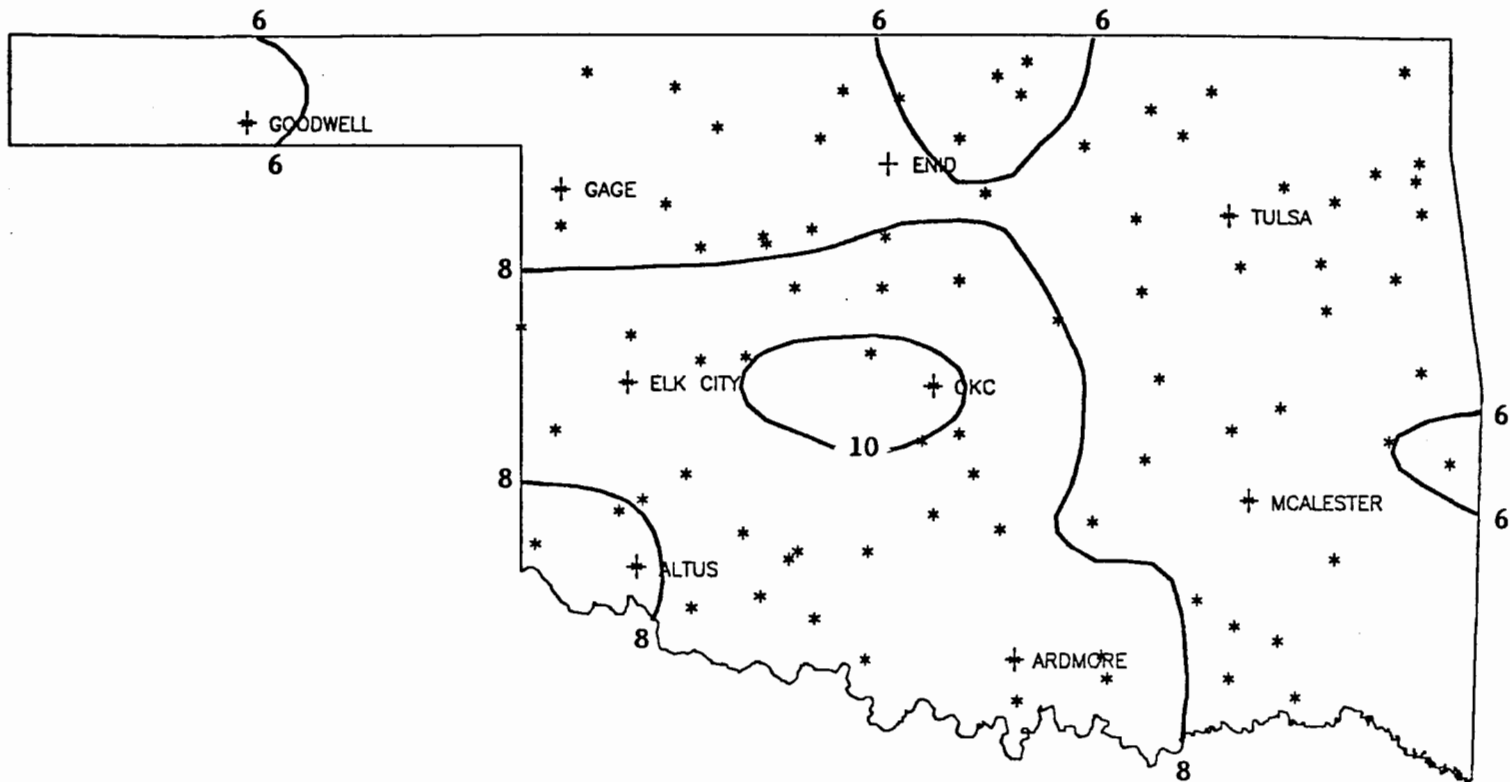
NAME	ID	CD	DEV					MIN	DAY	TEMP	DAY	HEAT DEG	DEV FROM	COOL DEG	DEV FROM	TOT PPT	NUM OBS	FROM NORM	MAX	24-HR	DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY														
ADA	17	8	74.4	30	-3.3	91.	26	51.	16	16	3.0	3.0	284.0	-97.0	8.342	30	4.61	2.65	7		
ALLEN	147	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	9.100	30	****	3.30	3		
ARDMORE	292	8	75.4	30	-4.9	92.	21	54.	16	16	.0	.0	311.0	-148.0	9.472	30	6.20	3.90	7		
ATOKA DAM	394	8	75.3	30	****	93.	25	52.	16	16	2.5	*****	311.0	*****	4.960	30	****	1.81	5		
BOKCHITO	917	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	8.030	30	****	3.02	4		
CANEY	1437	8	76.7	30	****	97.	18	60.	16	16	.0	*****	349.5	*****	8.740	30	****	3.10	4		
CENTRAHOMA	1648	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	5.900	30	****	1.30	6		
CHICKASAW NRA	1745	8	73.5	30	****	91.	20	50.	16	16	4.5	*****	259.0	*****	5.601	30	****	1.75	4		
COLEMAN	2011	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	6.050	30	****	2.40	4		
COMANCHE	2054	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	11.440	30	****	4.72	4		
DAISY 4 ENE	2354	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.041	30	2.56	2.00	11		
DUNCAN	2660	8	74.5	30	-4.5	93.	20	53.	16	16	.5	.5	285.0	-135.0	11.790	30	8.33	4.10	4		
DURANT USDA	2678	8	74.6	30	****	96.	29	51.	16	16	2.5	*****	290.0	*****	10.010	30	6.29	3.93	4		
ELMORE CITY	2872	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.690	28	****	2.68	4		
FARRIS 3 WNW	3083	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	6.230	30	****	1.57	4		
GRADY	3688	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	8.540	30	****	2.65	4		
HEALDTON	4001	8	75.2	20	****	91.	25	57.	6	6	.0	*****	204.0	*****	10.190	30	6.48	3.69	4		
HENNEPIN	4052	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.790	30	****	3.44	3		
KINGSTON	4865	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	8.381	30	4.76	2.30	4		
LEHIGH	5108	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	6.331	30	****	1.50	4		
LINDSAY 2 W	5216	8	74.3	30	****	94.	21	50.	16	16	1.5	*****	281.5	*****	6.893	30	3.48	2.18	4		
LOCO 6 SE	5247	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	8.400	30	****	2.93	4		
MADILL	5468	8	75.3	29	-3.6	92.	21	53.	16	16	.0	.0	300.0	-117.0	10.600	30	6.75	4.00	4		
MARIETTA	5563	8	75.8	30	-2.9	93.	21	54.	16	16	.0	.0	324.5	-86.5	7.980	30	4.35	2.70	4		
MARLOW 1 WSW	5581	8	73.9	30	****	95.	19	50.	16	16	2.0	*****	268.0	*****	9.520	30	5.70	3.93	4		
MCGEE CREEK DAM	5713	8	75.9	30	****	94.	26	53.	16	16	1.0	*****	327.5	*****	7.300	30	****	1.95	4		
OSWALT	6787	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	10.440	30	****	3.30	4		
PAULS VALLEY	6926	8	74.3	30	-5.2	93.	19	50.	16	16	1.0	1.0	280.0	-155.0	5.990	30	2.62	2.00	4		
PONTOTOC	7214	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	6.800	30	3.25	2.30	7		
TISHOMINGO NWR	8884	8	76.1	30	****	94.	25	54.	16	16	.0	*****	332.5	*****	10.560	30	7.10	3.80	4		
TUSSY	9032	8	****	0	****	****	0	****	0	0	*****	*****	*****	*****	8.791	30	****	4.45	4		
WAURIKA	9395	8	75.6	30	-4.5	96.	19	53.	16	16	.0	.0	317.5	-135.5	10.770	30	7.52	3.10	5		
WAURIKA DAM	9399	8	75.3	30	****	98.	21	54.	16	16	.0	*****	308.0	*****	11.222	30	****	3.99	4		

JUNE 1989 SUMMARY FOR SOUTHEAST DIVISION (CD9)

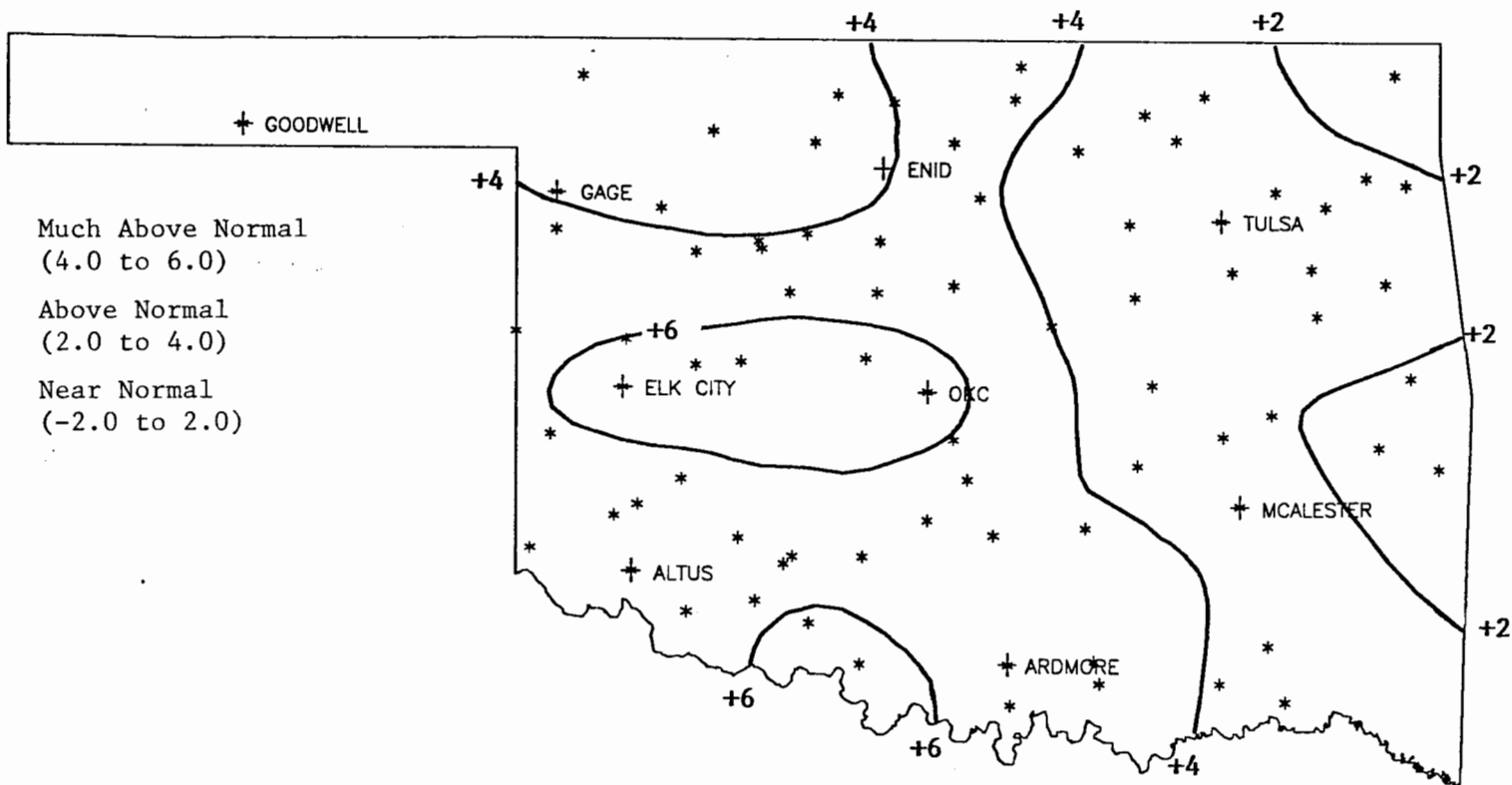
NAME	ID	CD	DEV					MIN	DAY	TEMP	DAY	HEAT DEG	DEV FROM	COOL DEG	DEV FROM	TOT PPT	NUM OBS	FROM NORM	MAX	24-HR	DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY														
ANTILERS	256	9	75.2	30	-2.3	92.	25	50.	16	16	.5	.5	305.0	-70.0	7.520	30	3.55	1.91	4		
BATTIEST 1 SSW	567	9	73.3	30	****	89.	25	47.	16	16	5.5	*****	256.0	*****	6.051	30	****	1.67	13		
BEAR MT TWR	584	9	74.3	20	****	92.	19	48.	17	17	1.5	*****	186.5	*****	7.430	30	3.81	2.15	13		
BENGAL	670	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	5.090	30	****	1.75	4		
BOSWELL 4 NNW	980	9	75.5	30	****	93.	25	51.	16	16	.0	*****	315.0	*****	6.624	30	3.00	1.92	4		
BROKEN BOW 1 N	1162	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.710	30	3.90	2.95	3		
BROKEN BOW DAM	1168	9	74.3	30	****	92.	25	49.	15	15	3.0	*****	281.0	*****	7.690	30	****	2.87	3		
CARNASAW TWR	1499	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.100	30	3.07	3.26	4		
CARTER TWR	1544	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.710	30	3.86	3.45	13		
FANSHAWE	3065	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	4.861	30	.65	2.40	4		
HEAVENER 1 SE	4008	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.660	30	3.66	3.00	4		
HEE MT TWR	4017	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	6.440	30	****	1.85	5		
HUGO	4384	9	75.8	30	-2.9	91.	25	52.	16	16	.0	.0	324.5	-86.5	6.110	30	1.59	1.60	8		
IDABEL	4451	9	75.1	30	-2.8	90.	26	52.	16	16	2.0	2.0	304.0	-83.0	8.990	30	5.30	2.20	8		
POTEAU W W	7254	9	74.8	30	****	93.	26	47.	15	15	5.5	*****	300.0	*****	4.061	30	****	1.56	3		
SMITHVILLE 1 W	8285	9	72.6	30	****	90.	24	44.	16	16	9.0	*****	237.0	*****	6.423	30	****	1.62	13		
SOBAL TOWER	8305	9	65.1	21	****	80.	18	45.	15	15	37.0	*****	39.0	*****	5.040	23	****	2.00	4		
SPIRO	8416	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	4.511	30	.96	.98	4		
TUSKAHOMA	9023	9	74.4	30	****	91.	24	46.	16	16	3.5	*****	285.0	*****	9.872	30	****	2.86	14		
VALLIANT 3 W	9118	9	****	0	****	****	0	****	0	0	*****	*****	*****	*****	7.874	30	4.17	2.51	4		

JUNE 1989 CLIMATE DIVISION SUMMARY

CLIMATE	MEAN	NUM	DEV		MIN	HEAT		DEV	COOL		TOT	NUM	DEV			
			FROM	MAX		DEGREE	FROM		DEGREE	FROM			MAX			
DIV	TEMP	STA	NORM	TEMP	DAY	TEMP	DAY	DAYS	NORM	DAYS	NORM	PPT	STA	NORM	24-HR	DAY
1	69.2	9	-6.4	97.0	21	40.0	5	39.5	31.0	165.1	-160.2	6.95	15	4.26	4.66	11
2	72.8	15	-5.1	98.0	20	46.0	15	10.1	8.4	243.6	-146.9	8.11	25	4.23	9.19	10
3	73.5	16	-3.1	100.0	25	44.0	16	3.9	2.7	256.4	-93.9	7.34	30	2.84	4.41	11
4	72.6	10	-5.5	98.0	20	47.0	15	5.3	4.6	231.8	-161.3	8.41	22	5.04	3.12	4
5	74.0	15	-3.7	96.0	20	48.0	16	1.5	1.5	271.3	-109.7	8.82	36	4.92	3.90	4
6	74.2	9	-3.0	94.0	24	45.0	16	3.2	3.2	280.1	-86.9	6.97	29	2.72	4.55	4
7	75.4	11	-4.2	98.0	21	48.0	17	.4	.4	310.7	-127.0	9.17	23	6.00	4.47	4
8	75.0	16	-4.1	98.0	21	50.0	16	1.2	1.2	301.8	-123.3	8.41	32	4.79	4.72	4
9	74.5	9	-3.5	93.0	26	44.0	16	3.2	3.2	289.7	-101.3	6.83	19	2.94	3.45	13

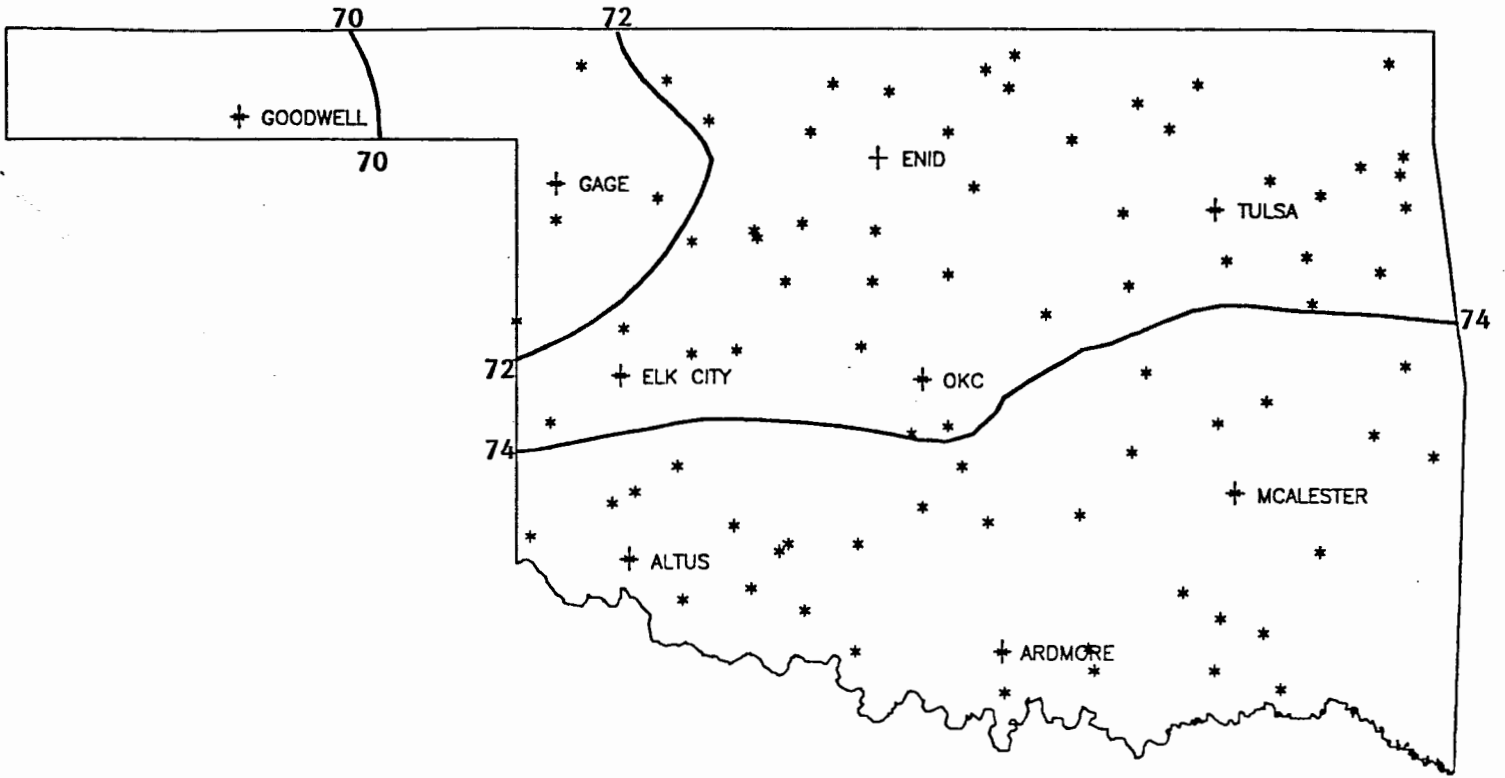


JUNE 1989 TOTAL PRECIPITATION
(Inches)

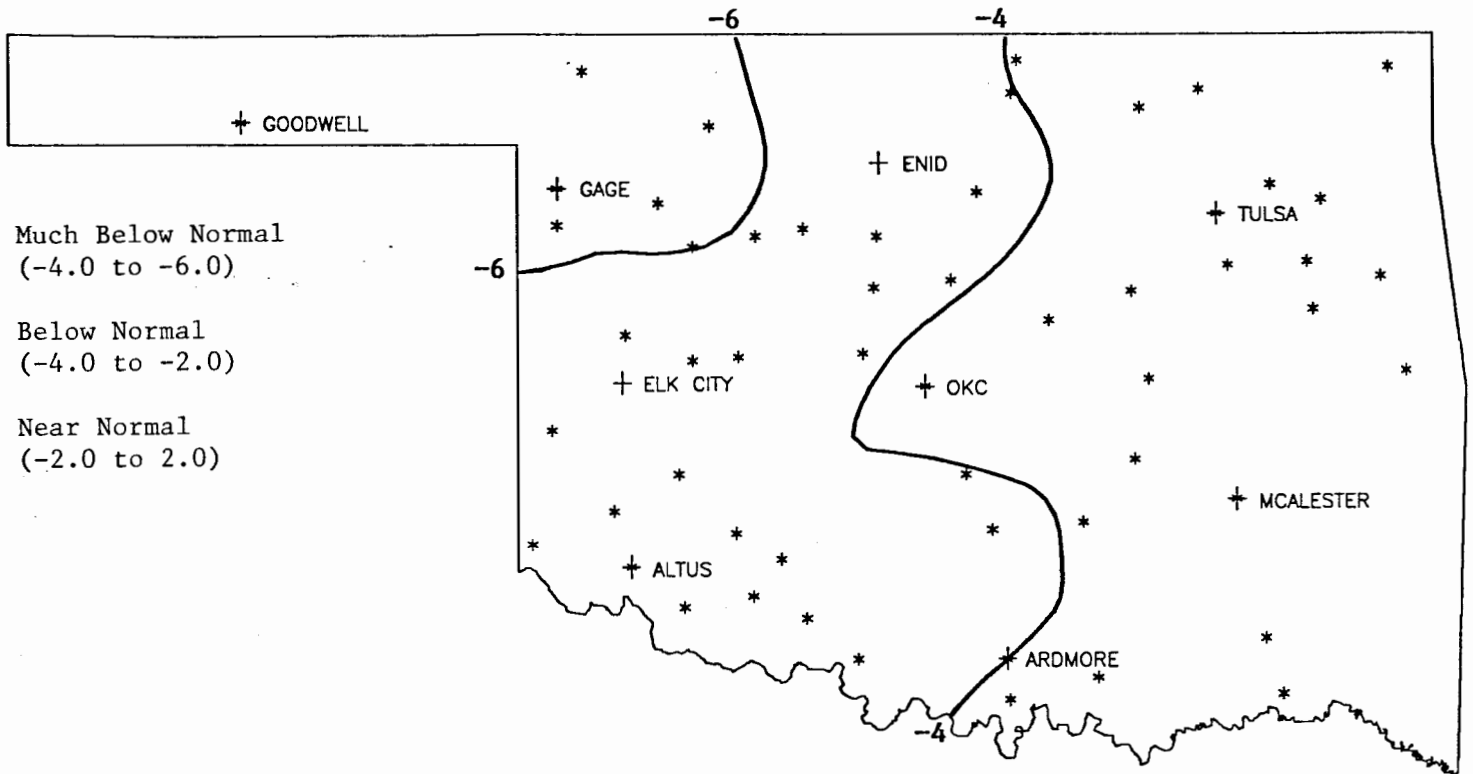


Much Above Normal
(4.0 to 6.0)
Above Normal
(2.0 to 4.0)
Near Normal
(-2.0 to 2.0)

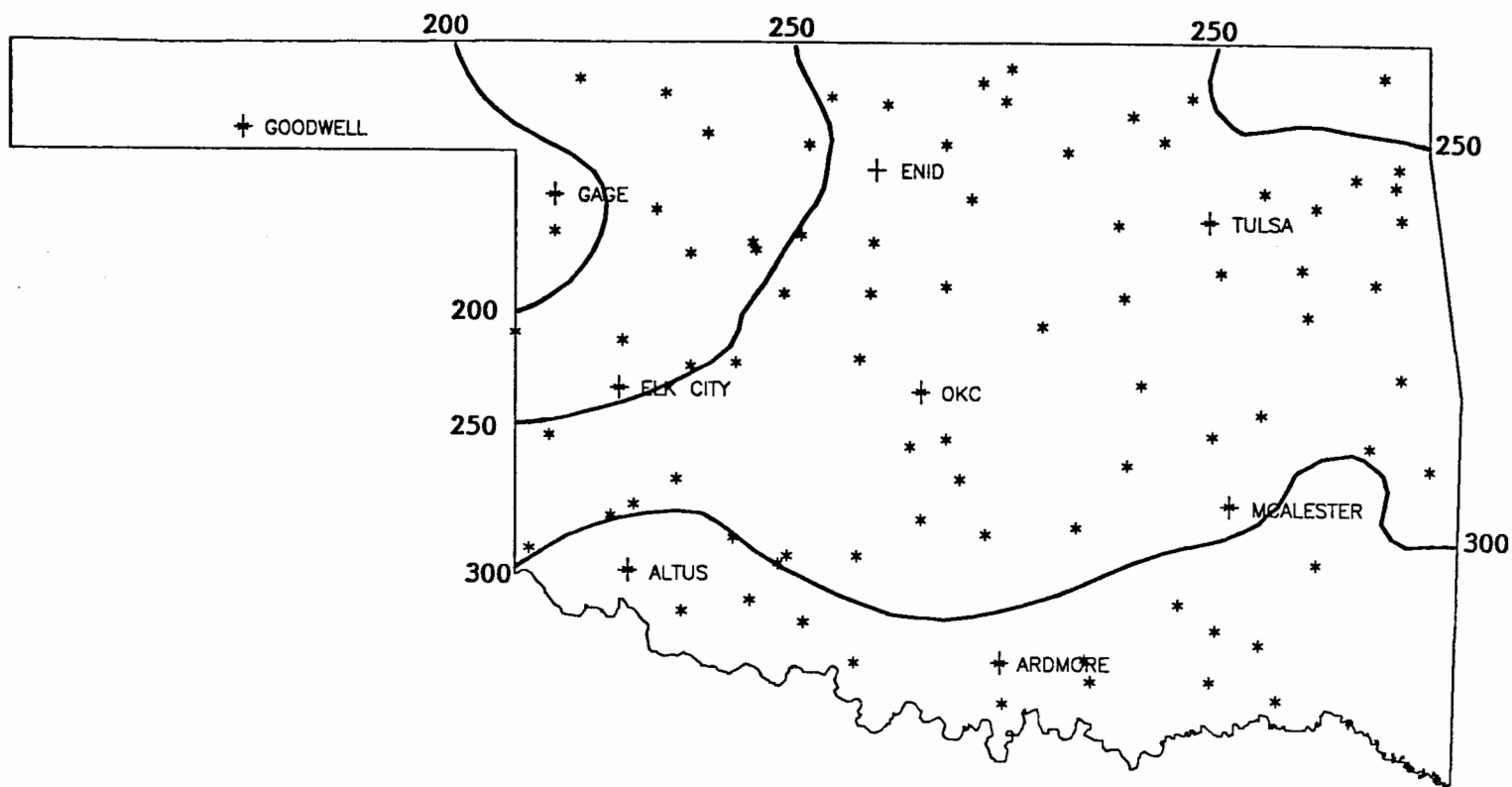
JUNE 1989 DEVIATION FROM NORMAL PRECIPITATION
(Inches)



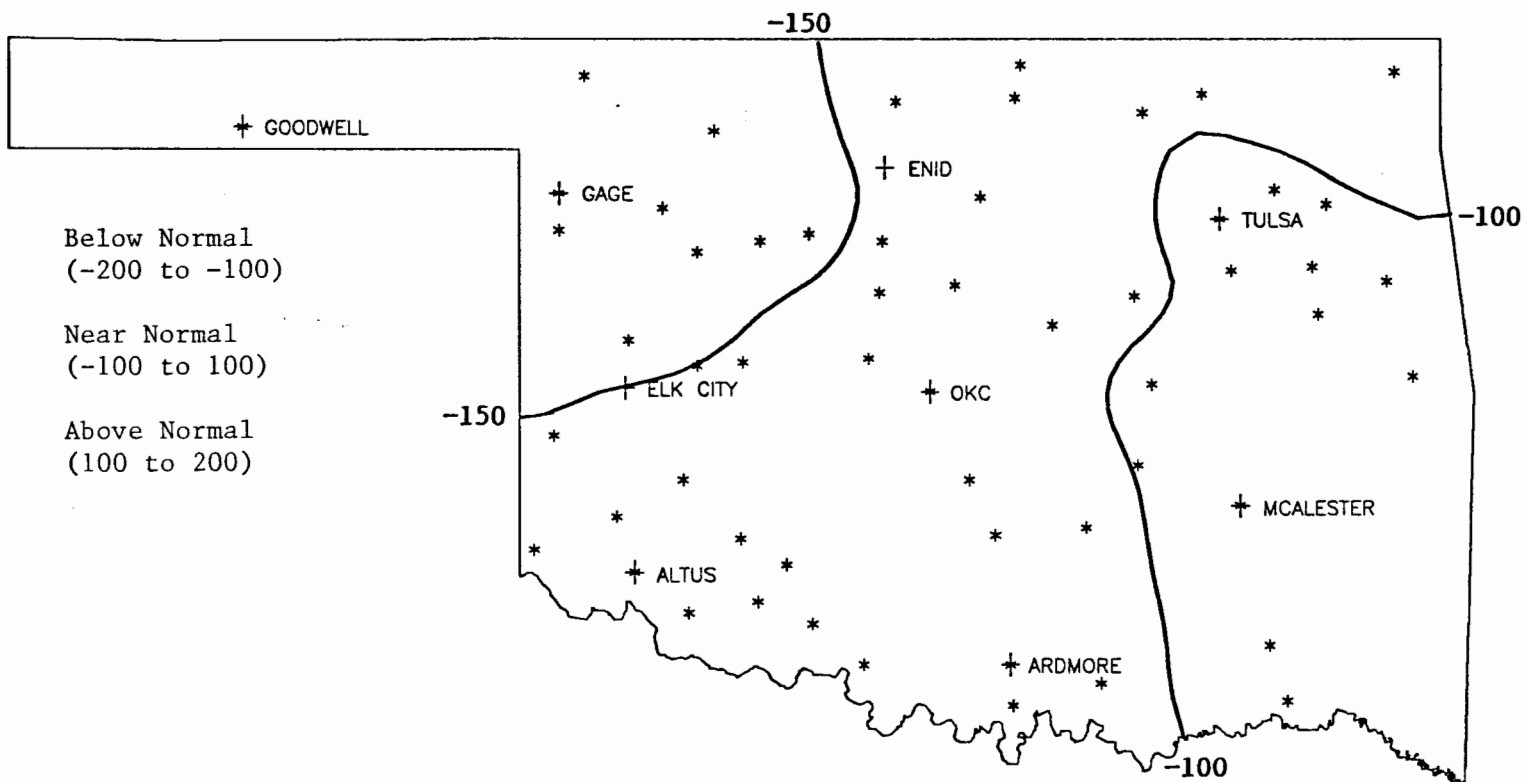
JUNE 1989 AVERAGE MONTHLY TEMPERATURES
(Degrees F)



JUNE 1989 DEVIATION FROM NORMAL TEMPERATURE
(Degrees F)

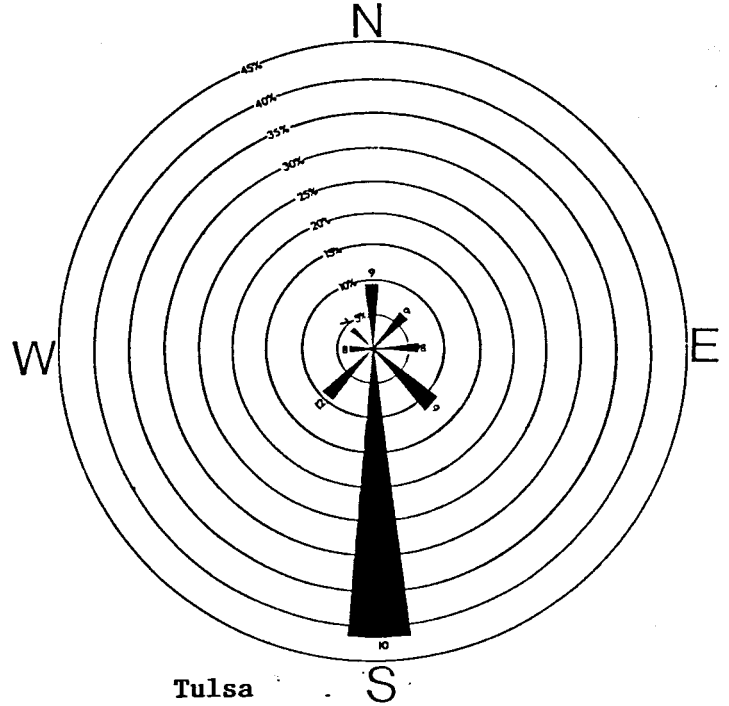
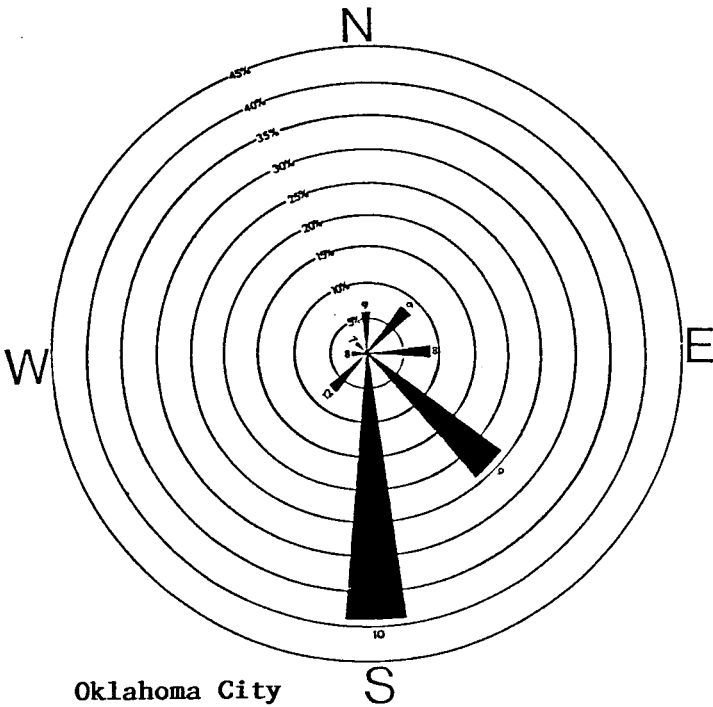


JUNE 1989 COOLING DEGREE DAYS



JUNE 1989 DEVIATION FROM NORMAL COOLING DEGREE DAYS

August wind roses for Oklahoma City and Tulsa for 10-year (1965-1974) mean winds (data adapted from NOAA Airport Climatology Series). Percents represent the percentage for winds coming from a direction. The numbers at the end of the bars indicate the average speed (miles per hour) of winds from that direction.



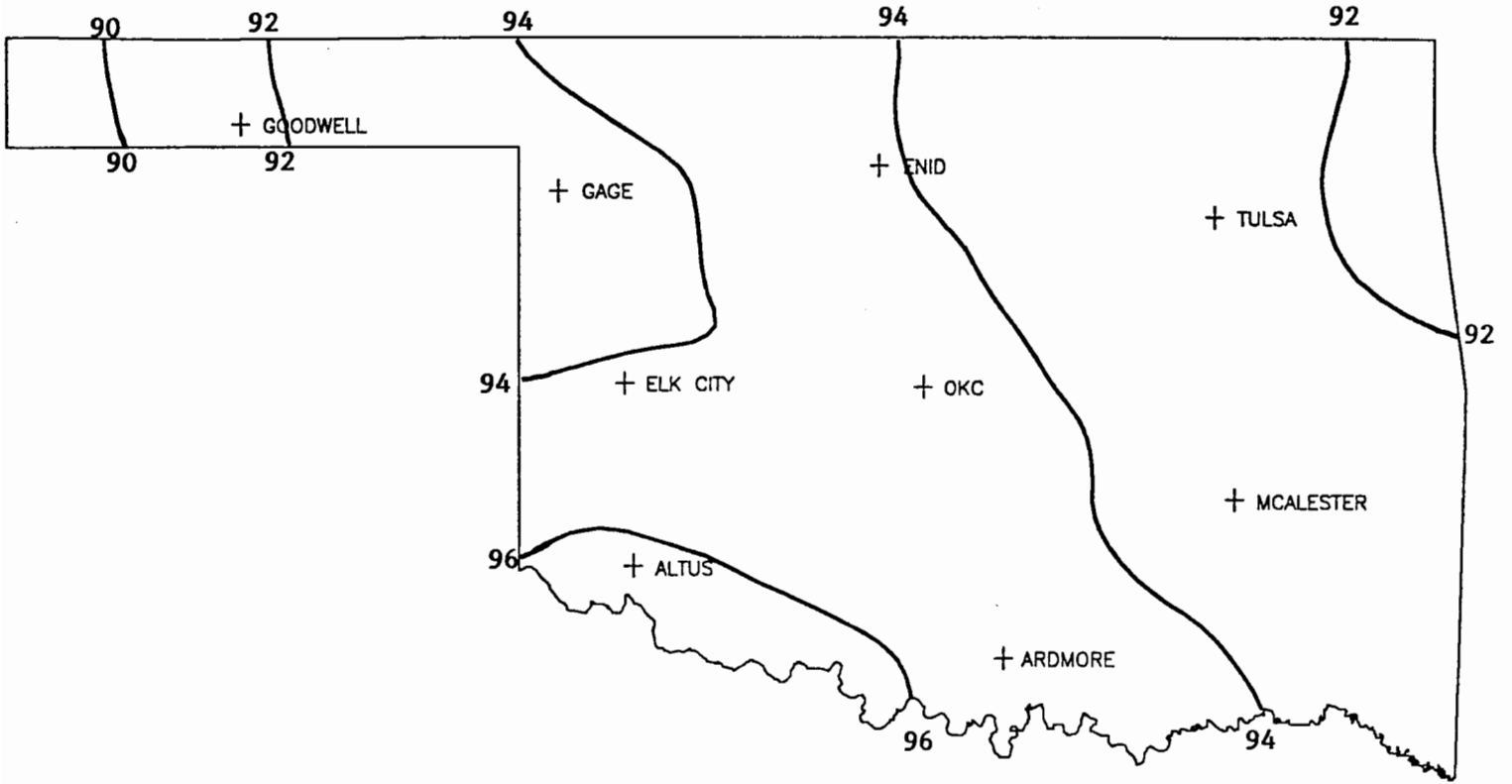
AUGUST 1989 SUNRISE AND SUNSET

Oklahoma City

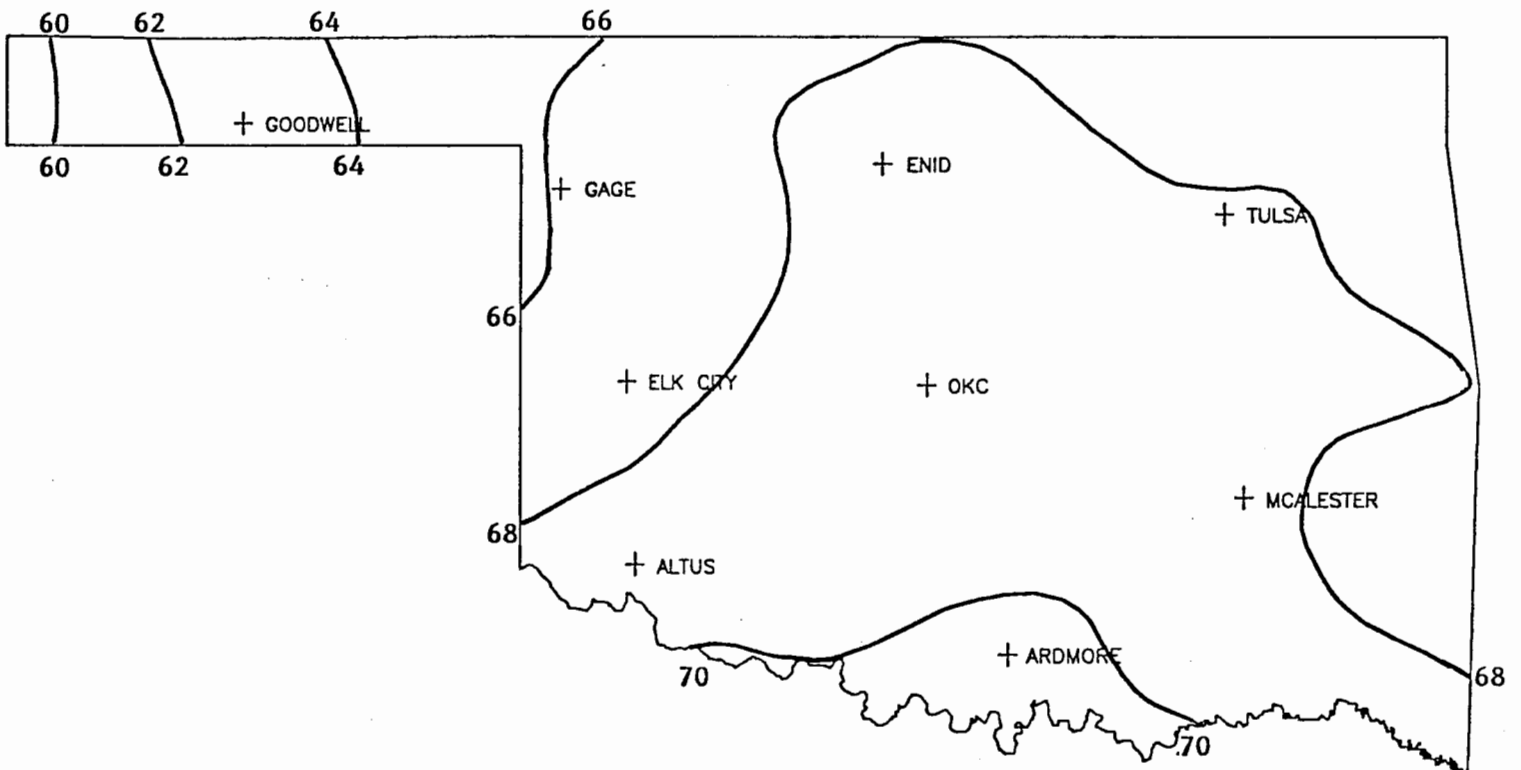
DATE	SUNRISE	SUNSET	DAYLIGHT
890801	6:39AM	8:34PM LT	13:55
890802	6:40AM	8:34PM LT	13:54
890803	6:41AM	8:33PM LT	13:52
890804	6:41AM	8:32PM LT	13:51
890805	6:42AM	8:31PM LT	13:49
890806	6:43AM	8:30PM LT	13:47
890807	6:43AM	8:29PM LT	13:46
890808	6:44AM	8:28PM LT	13:44
890809	6:45AM	8:27PM LT	13:42
890810	6:46AM	8:26PM LT	13:41
890811	6:46AM	8:25PM LT	13:39
890812	6:47AM	8:24PM LT	13:37
890813	6:48AM	8:23PM LT	13:35
890814	6:49AM	8:22PM LT	13:33
890815	6:49AM	8:21PM LT	13:31
890816	6:50AM	8:20PM LT	13:30
890817	6:51AM	8:18PM LT	13:28
890818	6:51AM	8:17PM LT	13:26
890819	6:52AM	8:16PM LT	13:24
890820	6:53AM	8:15PM LT	13:22
890821	6:54AM	8:14PM LT	13:20
890822	6:54AM	8:12PM LT	13:18
890823	6:55AM	8:11PM LT	13:16
890824	6:56AM	8:10PM LT	13:14
890825	6:57AM	8: 9PM LT	13:12
890826	6:57AM	8: 7PM LT	13:10
890827	6:58AM	8: 6PM LT	13: 8
890828	6:59AM	8: 5PM LT	13: 6
890829	6:59AM	8: 3PM LT	13: 4
890830	7: 0AM	8: 2PM LT	13: 2
890831	7: 1AM	8: 1PM LT	12:60

Tulsa

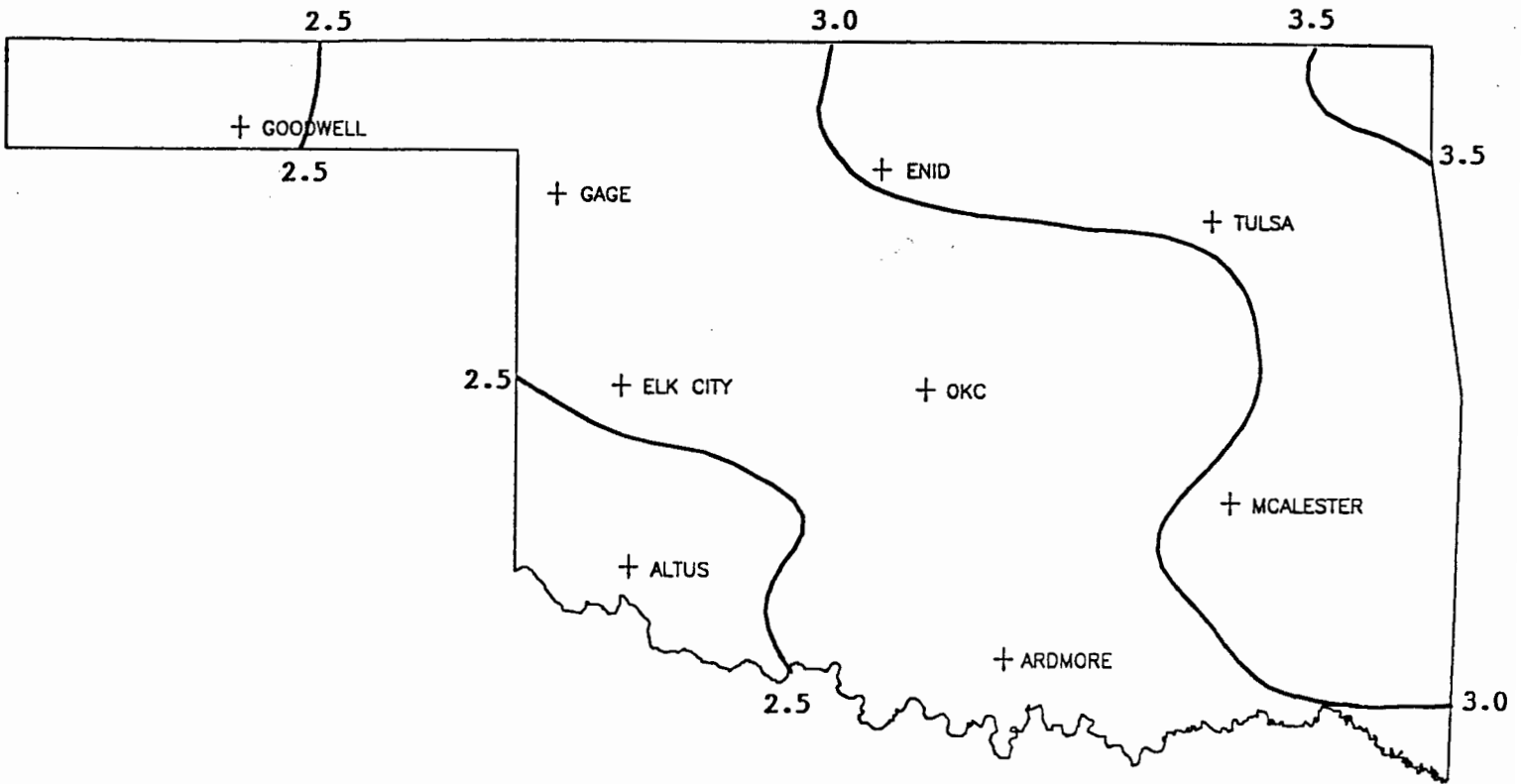
DATE	SUNRISE	SUNSET	DAYLIGHT
890801	6:31AM	8:29PM LT	13:59
890802	6:31AM	8:28PM LT	13:57
890803	6:32AM	8:28PM LT	13:55
890804	6:33AM	8:27PM LT	13:54
890805	6:34AM	8:26PM LT	13:52
890806	6:34AM	8:25PM LT	13:50
890807	6:35AM	8:24PM LT	13:49
890808	6:36AM	8:23PM LT	13:47
890809	6:37AM	8:22PM LT	13:45
890810	6:37AM	8:21PM LT	13:43
890811	6:38AM	8:20PM LT	13:42
890812	6:39AM	8:19PM LT	13:40
890813	6:40AM	8:18PM LT	13:38
890814	6:40AM	8:16PM LT	13:36
890815	6:41AM	8:15PM LT	13:34
890816	6:42AM	8:14PM LT	13:32
890817	6:43AM	8:13PM LT	13:30
890818	6:44AM	8:12PM LT	13:28
890819	6:44AM	8:10PM LT	13:26
890820	6:45AM	8: 9PM LT	13:24
890821	6:46AM	8: 8PM LT	13:22
890822	6:47AM	8: 7PM LT	13:20
890823	6:47AM	8: 5PM LT	13:18
890824	6:48AM	8: 4PM LT	13:16
890825	6:49AM	8: 3PM LT	13:14
890826	6:50AM	8: 1PM LT	13:12
890827	6:50AM	8: 0PM LT	13:10
890828	6:51AM	7:59PM LT	13: 8
890829	6:52AM	7:57PM LT	13: 6
890830	6:53AM	7:56PM LT	13: 3
890831	6:53AM	7:55PM LT	13: 1



30-YEAR MEAN AUGUST DAILY MAXIMUM TEMPERATURE



30-YEAR MEAN AUGUST DAILY MINIMUM TEMPERATURE



30-YEAR MEAN AUGUST PRECIPITATION

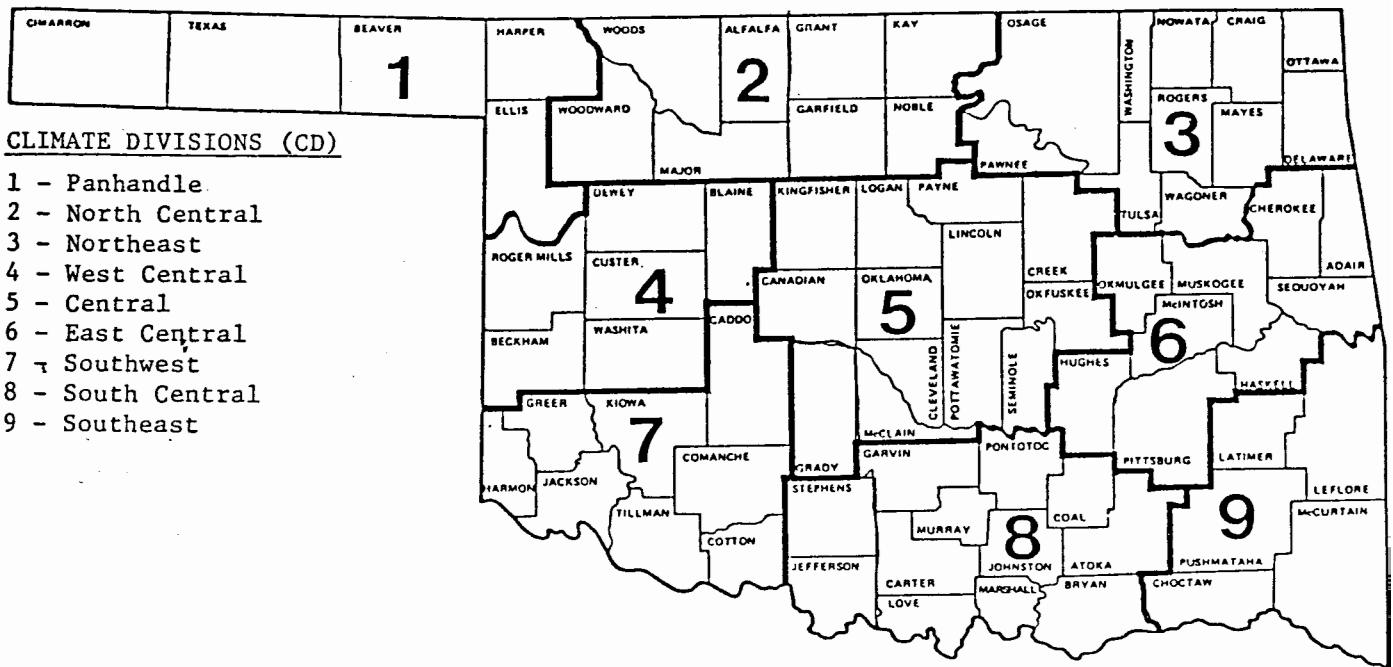
30- AND 90-DAY NATIONAL WEATHER SERVICE OUTLOOK

30-DAY OUTLOOK (JULY)

Precipitation - Near Normal Statewide
Temperatures - Above Normal Statewide

90-DAY OUTLOOK (JULY-SEPTEMBER)

Precipitation - Near Normal Statewide
Temperature - Near Normal Statewide



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 summed. 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:

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

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 summed. They are a proxy measure of how much cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. For June, CDD would be calculated as:

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

Deviation from Normal Cooling Degree Days: A positive value indicates higher than normal cooling requirements for the month as a whole. A negative value indicates lower than normal cooling requirements for the month as a whole. Normal cooling degree days may be found by subtracting the deviation from the observed cooling degree days.

Total Precipitation: Often incorrectly referred to as mean precipitation, this value is the sum of all precipitation reported during the month at a station. If snow occurred, it is to be melted and its water equivalent recorded.

Number of Precipitation Observations: The number of days a rain or no-rain observation was reported. Missing observations frequently result in artificially low total precipitation values.

Deviation from Normal Precipitation: A positive value indicates more rain than normal was received. A negative value indicates less than was expected rainfall was received. Normal rainfall may be calculated by subtracting the deviation from monthly total.

Maximum 24-Hour Report and Day: The maximum amount of precipitation recorded during the station's 24-hour observation period for the current month and year and the day on which it was recorded.

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

EXPLANATION OF MAPS

To give a Statewide perspective, a series of maps is produced each month from the information contained in the station tables. Each map is calculated using between 50 and 200 observations. Only stations with complete monthly records are used. Each observation is put into one of three categories and assigned a plus (+), minus (-), or a dot (.). The minus is the lowest numeric category, the dot is the middle and the plus the highest numeric category. If a map location has no report, a value is estimated. Each map is accompanied by its own legend. The categories will vary from month to month throughout the year. The categories for the deviations from normal maps will always remain constant. This is to facilitate comparisons between months and across years.

CLIMATE CALENDAR

The data on this calendar are for Oklahoma City.
 Normal values are calculated for the period
 1948-1987. Extremes are found for the period
 of record (1924-present).

1	2	3	4	5	6	7
Normal 93.5 max 70.5 min .039 pcpn 0 HDD 17 CDD Highest Max 108-1980 Lowest Max 73-1950 Lowest Min 58-1971 Highest Min 83-1934 Greatest pcpn .52-1950	Normal 93.4 max 70.2 min .031 pcpn 0 HDD 17 CDD Highest Max 110-1980 Lowest Max 82-1973 Lowest Min 57-1971 Highest Min 81-1932 Greatest pcpn 1.01-1927	Normal 94.1 max 70.6 min .015 pcpn 0 HDD 18 CDD Highest Max 106-1930 Lowest Max 78-1927 Lowest Min 59-1973 Highest Min 80-1943 Greatest pcpn .47-1933	Normal 92.4 max 70.4 min .097 pcpn 0 HDD 17 CDD Highest Max 104-1937 Lowest Max 75-1978 Lowest Min 58-1973 Highest Min 82-1980 Greatest pcpn 1.32-1985	Normal 94.1 max 70.5 min .040 pcpn 0 HDD 18 CDD Highest Max 106-1964 Lowest Max 81-1978 Lowest Min 60-1949 Highest Min 79-1970 Greatest pcpn .60-1976	Normal 95.0 max 71.7 min .112 pcpn 0 HDD 19 CDD Highest Max 106-1929 Lowest Max 76-1971 Lowest Min 62-1949 Highest Min 80-1962 Greatest pcpn 1.38-1965	Normal 94.4 max 70.9 min .136 pcpn 0 HDD 18 CDD Highest Max 107-1946 Lowest Max 84-1971 Lowest Min 60-1957 Highest Min 82-1951 Greatest pcpn 2.15-1939
8	9	10	11	12	13	14
Normal 93.4 max 70.5 min .103 pcpn 0 HDD 17 CDD Highest Max 106-1970 Lowest Max 78-1939 Lowest Min 61-1957 Highest Min 82-1951 Greatest pcpn 1.27-1952	Normal 93.2 max 69.8 min .131 pcpn 0 HDD 17 CDD Highest Max 109-1936 Lowest Max 75-1927 Lowest Min 59-1974 Highest Min 80-1970 Greatest pcpn 1.19-1974	Normal 93.1 max 70.2 min .090 pcpn 0 HDD 17 CDD Highest Max 112-1936 Lowest Max 76-1929 Lowest Min 64-1959 Highest Min 81-1936 Greatest pcpn 1.18-1977	Normal 92.9 max 69.8 min .025 pcpn 0 HDD 17 CDD Highest Max 113-1936 Lowest Max 73-1968 Lowest Min 59-1931 Highest Min 82-1936 Greatest pcpn .75-1929	Normal 93.2 max 69.1 min .046 pcpn 0 HDD 16 CDD Highest Max 110-1936 Lowest Max 81-1964 Lowest Min 56-1967 Highest Min 83-1936 Greatest pcpn .55-1961	Normal 93.5 max 70.2 min .068 pcpn 0 HDD 17 CDD Highest Max 107-1936 Lowest Max 80-1971 Lowest Min 54-1967 Highest Min 83-1936 Greatest pcpn 1.24-1968	Normal 92.9 max 70.9 min .102 pcpn 0 HDD 17 CDD Highest Max 106-1956 Lowest Max 76-1985 Lowest Min 60-1967 Highest Min 79-1943 Greatest pcpn 1.43-1971
15	16	17	18	19	20	21
Normal 93.0 max 70.7 min .208 pcpn 0 HDD 17 CDD Highest Max 107-1956 Lowest Max 77-1940 Lowest Min 61-1963 Highest Min 81-1954 Greatest pcpn 2.69-1945	Normal 93.9 max 71.2 min .054 pcpn 0 HDD 18 CDD Highest Max 107-1956 Lowest Max 79-1964 Lowest Min 64-1963 Highest Min 81-1934 Greatest pcpn 1.42-1981	Normal 93.2 max 70.6 min .035 pcpn 0 HDD 17 CDD Highest Max 105-1956 Lowest Max 76-1932 Lowest Min 62-1942 Highest Min 82-1934 Greatest pcpn .93-1932	Normal 92.3 max 69.8 min .128 pcpn 0 HDD 16 CDD Highest Max 103-1984 Lowest Max 78-1927 Lowest Min 57-1943 Highest Min 81-1934 Greatest pcpn 2.87-1966	Normal 90.7 max 69.0 min .101 pcpn 0 HDD 15 CDD Highest Max 106-1934 Lowest Max 75-1927 Lowest Min 56-1950 Highest Min 80-1936 Greatest pcpn .87-1977	Normal 91.4 max 68.7 min .090 pcpn 0 HDD 15 CDD Highest Max 104-1934 Lowest Max 67-1950 Lowest Min 56-1950 Highest Min 81-1934 Greatest pcpn 1.38-1937	Normal 92.2 max 68.7 min .110 pcpn 0 HDD 16 CDD Highest Max 103-1984 Lowest Max 80-1951 Lowest Min 51-1956 Highest Min 81-1934 Greatest pcpn 1.40-1983
22	23	24	25	26	27	28
Normal 91.3 max 68.7 min .032 pcpn 0 HDD 15 CDD Highest Max 101-1936 Lowest Max 76-1961 Lowest Min 56-1956 Highest Min 79-1948 Greatest pcpn 3.17-1934	Normal 91.2 max 68.1 min .068 pcpn 0 HDD 15 CDD Highest Max 105-1980 Lowest Max 70-1966 Lowest Min 59-1949 Highest Min 78-1936 Greatest pcpn 2.27-1934	Normal 91.9 max 68.3 min .065 pcpn 0 HDD 15 CDD Highest Max 105-1963 Lowest Max 73-1966 Lowest Min 55-1961 Highest Min 78-1936 Greatest pcpn .87-1987	Normal 91.5 max 68.2 min .025 pcpn 0 HDD 15 CDD Highest Max 102-1988 Lowest Max 70-1934 Lowest Min 58-1966 Highest Min 78-1936 Greatest pcpn 1.81-1934	Normal 91.9 max 67.9 min .069 pcpn 0 HDD 15 CDD Highest Max 101-1938 Lowest Max 76-1934 Lowest Min 55-1962 Highest Min 78-1936 Greatest pcpn .63-1987	Normal 91.4 max 68.7 min .075 pcpn 0 HDD 15 CDD Highest Max 103-1984 Lowest Max 69-1987 Lowest Min 58-1944 Highest Min 78-1936 Greatest pcpn 1.53-1941	Normal 90.6 max 68.0 min .066 pcpn 0 HDD 15 CDD Highest Max 104-1982 Lowest Max 68-1988 Lowest Min 52-1944 Highest Min 78-1938 Greatest pcpn 1.28-1959
29	30	31	AUGUST AVERAGES			
Normal 90.8 max 68.1 min .081 pcpn 0 HDD 15 CDD Highest Max 106-1984 Lowest Max 70-1935 Lowest Min 53-1988 Highest Min 75-1937 Greatest pcpn 2.33-1935	Normal 91.4 max 68.3 min .042 pcpn 0 HDD 15 CDD Highest Max 105-1947 Lowest Max 74-1968 Lowest Min 54-1946 Highest Min 75-1956 Greatest pcpn 1.32-1928	Normal 89.1 max 67.6 min .171 pcpn 0 HDD 14 CDD Highest Max 104-1947 Lowest Max 72-1986 Lowest Min 57-1988 Highest Min 76-1952 Greatest pcpn 2.35-1966	Temperature : 81.0 Precipitation : 2.45" Heating Degree Days: 0 Cooling Degree Days: 505			

JUNE 1989 CLIMATE DIVISION SUMMARY

CLIMATE DIV	MEAN	NUM	MAX	MIN	HEAT		COOL		DEV							
					DEGREE	FROM	DEGREE	FROM	NORM	STATION	TOT	NUM	FROM	MAX		
1	69.2	9	-6.4	97.0	21	40.0	5	39.5	31.0	165.1	-160.2	6.95	15	4.26	4.66	11
2	72.8	15	-5.1	98.0	20	46.0	15	10.1	8.4	243.6	-146.9	8.11	25	4.23	9.19	10
3	73.5	16	-3.1	100.0	25	44.0	16	3.9	2.7	256.4	-93.9	7.34	30	2.84	4.41	11
4	72.6	10	-5.5	98.0	20	47.0	15	5.3	4.6	231.8	-161.3	8.41	22	5.04	3.12	4
5	74.0	15	-3.7	96.0	20	48.0	16	1.5	1.5	271.3	-109.7	8.82	36	4.92	3.90	4
6	74.2	9	-3.0	94.0	24	45.0	16	3.2	3.2	280.1	-86.9	6.97	29	2.72	4.55	4
7	75.4	11	-4.2	98.0	21	48.0	17	.4	.4	310.7	-127.0	9.17	23	6.00	4.47	4
8	75.0	16	-4.1	98.0	21	50.0	16	1.2	1.2	301.8	-123.3	8.41	32	4.79	4.72	4
9	74.5	9	-3.5	93.0	26	44.0	16	3.2	3.2	289.7	-101.3	6.83	19	2.94	3.45	13

JUNE 1989 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

NAME	ID CD	TEMP				OBS				NORM				24-HR DAY			
		MEAN	NUM	FROM	MAX	MIN	DAY	TEMP	DAY	TEMP	DAY	TEMP	DAY	TEMP	DAY	TEMP	DAY
ADA	17 8	74.4	30	-3.3	91.26	51.16	3.0	3.0	284.0	-97.0	8.342	30	4.61	2.65	7	3.30	3
ALLEN	147 8	*****	0	*****	0	*****	0	*****	0	*****	9.100	30	*****	3.30	3	3.30	3
ARDMORE	292 8	75.4	30	-4.9	92.21	54.16	.0	.0	311.0	-148.0	9.472	30	6.20	3.90	7	1.81	5
AYOYA DAM	394 8	75.3	30	*****	93.25	52.16	2.5	2.5	311.0	*****	4.960	30	*****	1.81	5	3.02	4
BOKCHITO	917 8	*****	0	*****	0	*****	0	*****	0	*****	8.030	30	*****	3.10	4	3.10	4
CANEY	1437 8	76.7	30	*****	97.18	60.16	.0	.0	349.5	*****	8.740	30	*****	3.10	4	1.30	6
CENTRAHOMA	1648 8	*****	0	*****	0	*****	0	*****	0	*****	5.900	30	*****	1.30	6	1.30	6
CHICKASAW NRA	1745 8	73.5	30	*****	91.20	50.16	4.5	4.5	259.0	*****	5.601	30	*****	1.75	4	1.75	4
COLEMAN	2011 8	*****	0	*****	0	*****	0	*****	0	*****	6.050	30	*****	2.40	4	2.40	4
COMANCHE	2054 8	*****	0	*****	0	*****	0	*****	0	*****	11.440	30	*****	4.72	4	4.72	4
DAISY 4 ENE	2354 8	*****	0	*****	0	*****	0	*****	0	*****	7.041	30	2.56	2.00	11	2.00	11
DUNCAN	2660 8	74.5	30	-4.5	93.20	53.16	.5	.5	285.0	-135.0	11.790	30	8.33	4.10	4	4.10	4
DURANT USDA	2678 8	74.6	30	*****	96.29	51.16	2.5	2.5	290.0	*****	10.010	30	6.29	3.93	4	3.93	4
ELMORE CITY	2872 8	*****	0	*****	0	*****	0	*****	0	*****	7.690	28	*****	2.68	4	2.68	4
FARRIS 3 WNW	3083 8	*****	0	*****	0	*****	0	*****	0	*****	6.230	30	*****	1.57	4	1.57	4
GRADY	3688 8	*****	0	*****	0	*****	0	*****	0	*****	8.540	30	*****	2.65	4	2.65	4
HEALDTON	4001 8	75.2	20	*****	91.25	57.6	.0	.0	204.0	*****	10.190	30	6.48	3.69	4	3.69	4
HENNEPIN	4052 8	*****	0	*****	0	*****	0	*****	0	*****	7.790	30	*****	3.44	3	3.44	3
KINGSTON	4865 8	*****	0	*****	0	*****	0	*****	0	*****	8.381	30	4.76	2.30	4	2.30	4
LEHIGH	5108 8	*****	0	*****	0	*****	0	*****	0	*****	6.331	30	*****	1.50	4	1.50	4
LINDSAY 2 W	5216 8	74.3	30	*****	94.21	50.16	1.5	1.5	281.5	*****	6.893	30	3.48	2.18	4	2.18	4
LOCO 6 SE	5247 8	*****	0	*****	0	*****	0	*****	0	*****	8.400	30	*****	2.93	4	2.93	4
MAHILL	5468 8	75.3	29	-3.6	92.21	53.16	.0	.0	300.0	-117.0	10.600	30	6.75	4.00	4	4.00	4
MARLETTA	5563 8	75.8	30	-2.9	93.21	54.16	.0	.0	324.5	-86.5	7.980	30	4.35	2.70	4	2.70	4
MARTON 1 WSW	5581 8	73.9	30	*****	95.19	50.16	2.0	2.0	268.0	*****	9.520	30	5.70	3.93	4	3.93	4
MOORE CREEK DAMS	5713 8	75.9	30	*****	94.26	53.16	1.0	1.0	327.5	*****	7.300	30	*****	1.95	4	1.95	4
OSWALT	6787 8	*****	0	*****	0	*****	0	*****	0	*****	10.440	30	*****	3.30	4	3.30	4
PAULS VALLEY	6926 8	74.3	30	-5.2	93.19	50.16	1.0	1.0	280.0	-155.0	5.990	30	2.62	2.00	4	2.00	4
PONTOC	7214 8	*****	0	*****	0	*****	0	*****	0	*****	6.800	30	3.25	2.30	7	2.30	7
TISHOMINGO NW	8884 8	76.1	30	*****	94.25	54.16	.0	.0	332.5	*****	10.560	30	7.10	3.80	4	3.80	4
TUSSY	9032 8	*****	0	*****	0	*****	0	*****	0	*****	8.791	30	*****	4.45	4	4.45	4
WAURIKA	9395 8	75.6	30	-4.5	96.19	53.16	.0	.0	317.5	-135.5	10.770	30	7.52	3.10	5	3.10	5
WAURIKA DAM	9399 8	75.3	30	*****	98.21	54.16	.0	.0	308.0	*****	11.222	30	*****	3.99	4	3.99	4

JUNE 1989 SUMMARY FOR SOUTHEAST DIVISION (CD9)

NAME	ID CD	TEMP				OBS				NORM				24-HR DAY			
		MEAN	NUM	FROM	MAX	MIN	DAY	TEMP	DAY	TEMP	DAY	TEMP	DAY	TEMP	DAY	TEMP	DAY
ANTLEERS	256 9	75.2	30	-2.3	92.25	50.16	.5	.5	305.0	-70.0	7.520	30	3.55	1.91	4	1.91	4
BATTLEST 1 SSW	567 9	73.3	30	*****	89.25	47.16	5.5	5.5	256.0	*****	6.051	30	*****	1.67	13	1.67	13
BEAR MT TWR	584 9	74.3	20	*****	92.19	48.17	1.5	1.5	186.5	*****	7.430	30	3.81	2.15	13	2.15	13
BENGAL	670 9	*****	0	*****	0	*****	0	*****	0	*****	5.090	30	*****	1.75	4	1.75	4
BOSWELL 4 NNE	980 9	75.5	30	*****	93.25	51.16	.0	.0	315.0	*****	6.624	30	3.00	1.92	4	1.92	4
BROKEN BOW 1 N	1162 9	*****	0	*****	0	*****	0	*****	0	*****	7.710	30	3.90	2.95	3	2.95	3
BROKEN BOW DAM	1168 9	74.3	30	*****	92.25	49.15	3.0	3.0	281.0	*****	7.690	30	*****	2.87	3	2.87	3
CARNASAW TWR	1499 9	*****	0	*****	0	*****	0	*****	0	*****	7.100	30	3.07	3.26	4	3.26	4
CARTER TWR	1544 9	*****	0	*****	0	*****	0	*****	0	*****	7.710	30	3.86	3.45	13	3.45	13
FRANSHAWE	3065 9	*****	0	*****	0	*****	0	*****	0	*****	4.861	30	.65	2.40	4	2.40	4
HEAVENER 1 SE	4008 9	*****	0	*****	0	*****	0	*****	0	*****	7.660	30	3.66	3.00	4	3.00	4
HEE MT TWR	4017 9	*****	0	*****	0	*****	0	*****	0	*****	6.440	30	*****	1.85	5	1.85	5
HUGO	4384 9	75.8	30	-2.9	91.25	52.16	.0	.0	324.5	-86.5	6.110	30	1.59	1.60	8	1.60	8
IRABEL	4451 9	75.1	30	-2.8	90.26	52.16	2.0	2.0	304.0	-83.0	8.990	30	5.30	2.20	8	2.20	8
POTEAU W	7254 9	74.8	30	*****	93.26	47.15	5.5	5.5	300.0	*****	4.061	30	*****	1.56	3	1.56	3
SMITHVILLE 1 W	8285 9	72.6	30	*****	90.24	44.16	9.0	9.0	237.0	*****	6.423	30	*****	1.62	13	1.62	13
SOBAL TOWER	8305 9	65.1	21	*****	80.18	45.15	37.0	37.0	39.0	*****	5.040	23	*****	2.00	4	2.00	4
SEIRO	8416 9	*****	0	*****	0	*****	0	*****	0	*****	4.511	30	.96	.98	4	.98	4
TUSKAHOMA	9023 9	74.4	30	*****	91.24	46.16	3.5	3.5	285.0	*****	9.872	30	*****	2.86	14	2.86	14
VALLANT 3 W	9118 9	*****	0	*****	0	*****	0	*****	0	*****	7.874	30	4.17	2.51	4	2.51	4

JUNE 1989 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	MIN	DEG	FROM	DEG	FROM	HEAT	DEV	COOL	DEV	TOT	NUM	FROM	MAX	24-HR	DAY
ANNETT	332	1	69.8	30	-5.9	93.	21	48.	15	26.0	19.0	171.0	-157.0	8.474	30	5.18	PPT	OBS	NORM	24-HR	DAY	2.60	4	
BAVIER	593	1	69.7	30	-6.5	96.	21	46.	15	37.5	27.5	179.5	-166.5	9.610	30	6.77	PPT	OBS	NORM	24-HR	DAY	2.40	4	
BOISE CITY 2 E	908	1	68.6	30	-4.9	94.	18	43.	15	41.5	31.5	148.5	-116.5	8.972	30	6.98	PPT	OBS	NORM	24-HR	DAY	3.20	27	
BUFFALO	1243	1	72.1	30	-6.3	97.	21	47.	15	13.0	7.0	225.5	-182.5	8.310	30	4.71	PPT	OBS	NORM	24-HR	DAY	2.20	11	
PARCO	3070	1	0	0	0	0	0	0	0	0	0	0	0	5.581	30	2.27	PPT	OBS	NORM	24-HR	DAY	2.25	13	
GAGE FAA APT	3407	1	70.3	30	-6.3	93.	21	47.	15	20.0	20.0	178.0	-175.0	5.291	30	2.52	PPT	OBS	NORM	24-HR	DAY	1.80	13	
GATE	3489	1	70.8	24	0	96.	21	47.	14	22.5	22.5	160.5	0	6.570	30	0	PPT	OBS	NORM	24-HR	DAY	1.53	3	
GOODWELL RES	ST3628	1	68.1	30	-6.5	95.	21	40.	5	56.0	45.0	148.5	-150.5	5.234	30	2.93	PPT	OBS	NORM	24-HR	DAY	1.42	9	
GUYMON	3835	1	69.9	27	0	95.	19	45.	15	38.5	38.5	170.5	0	4.433	28	0	PPT	OBS	NORM	24-HR	DAY	1.35	9	
HOOKER	4298	1	68.5	30	-7.1	94.	21	47.	15	47.0	37.0	153.0	-175.0	7.313	30	4.36	PPT	OBS	NORM	24-HR	DAY	1.87	4	
KENTON	4766	1	66.6	30	-7.1	94.	17	42.	5	69.5	55.5	118.0	-157.0	5.431	30	3.61	PPT	OBS	NORM	24-HR	DAY	2.08	9	
LAVERNE	5045	1	0	0	0	0	0	0	0	0	0	0	0	6.112	30	3.14	PPT	OBS	NORM	24-HR	DAY	1.79	11	
OPTIMA LAKE	6740	1	69.9	26	0	95.	21	46.	15	27.5	27.5	154.5	0	5.063	30	0	PPT	OBS	NORM	24-HR	DAY	1.25	5	
RANGE	7412	1	0	0	0	0	0	0	0	0	0	0	0	4.481	30	0	PPT	OBS	NORM	24-HR	DAY	1.30	22	
REGNIER	7534	1	0	0	0	0	0	0	0	0	0	0	0	5.292	30	3.49	PPT	OBS	NORM	24-HR	DAY	1.58	9	
TURPIN 4 SSE	9017	1	68.9	30	0	95.	21	47.	15	45.0	45.0	163.5	0	12.511	30	0	PPT	OBS	NORM	24-HR	DAY	4.66	11	

JUNE 1989 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	MIN	DEG	FROM	DEG	FROM	HEAT	DEV	COOL	DEV	TOT	NUM	FROM	MAX	24-HR	DAY
ALVA 1 ENR	194	2	73.4	29	-4.7	97.	20	50.	16	5.0	0	249.0	-149.0	6.710	30	2.91	PPT	OBS	NORM	24-HR	DAY	1.87	11	
VANCE AFB	302	2	0	0	0	0	0	0	0	0	0	0	0	8.202	29	0	PPT	OBS	NORM	24-HR	DAY	1.40	4	
BILLINGS	755	2	73.3	30	0	95.	20	53.	16	0	0	248.0	0	8.350	30	4.24	PPT	OBS	NORM	24-HR	DAY	2.55	23	
BLACKWELL 2E	818	2	73.4	30	0	97.	20	50.	16	4.0	0	255.5	0	10.752	30	0	PPT	OBS	NORM	24-HR	DAY	4.90	11	
BRANFAN	1075	2	0	0	0	0	0	0	0	0	0	0	0	12.261	30	0	PPT	OBS	NORM	24-HR	DAY	4.31	11	
CEDARDALE	1620	2	0	0	0	0	0	0	0	0	0	0	0	12.451	30	0	PPT	OBS	NORM	24-HR	DAY	1.83	4	
CHEROKEE	1724	2	74.7	29	-4.2	98.	21	50.	15	5.5	5.5	287.0	-130.0	12.451	30	8.46	PPT	OBS	NORM	24-HR	DAY	3.60	13	
ENID	2912	2	74.5	30	-4.0	96.	22	53.	16	4.0	4.0	288.0	-117.0	6.810	30	2.69	PPT	OBS	NORM	24-HR	DAY	1.21	4	
FT SUPPLY DAM	3304	2	69.1	30	-7.8	92.	21	46.	15	33.5	27.5	156.0	-207.0	5.120	30	2.18	PPT	OBS	NORM	24-HR	DAY	1.42	4	
FREEDOM	3358	2	72.4	30	0	94.	22	48.	15	8.0	0	230.5	0	6.280	30	0	PPT	OBS	NORM	24-HR	DAY	1.33	27	
GREAT SALT PLNS3740	739	30	73.9	30	0	97.	21	51.	16	8.0	0	274.0	0	6.220	30	2.73	PPT	OBS	NORM	24-HR	DAY	1.16	27	
HARDY	3909	2	0	0	0	0	0	0	0	0	0	0	0	6.743	30	0	PPT	OBS	NORM	24-HR	DAY	3.10	10	
HELENA 1 SSE	4019	2	71.7	30	0	96.	21	49.	16	10.0	0	210.5	0	5.561	30	1.61	PPT	OBS	NORM	24-HR	DAY	1.30	4	
JEFFERSON	4573	2	74.4	30	-4.3	98.	20	51.	16	3.5	3.5	285.0	-126.0	10.281	30	6.30	PPT	OBS	NORM	24-HR	DAY	4.83	10	
LAWNT	5013	2	0	0	0	0	0	0	0	0	0	0	0	8.050	30	0	PPT	OBS	NORM	24-HR	DAY	2.26	11	
MEDFORD	5768	2	0	0	0	0	0	0	0	0	0	0	0	13.371	30	0	PPT	OBS	NORM	24-HR	DAY	9.19	10	
MORRISON	6065	2	0	0	0	0	0	0	0	0	0	0	0	7.990	30	0	PPT	OBS	NORM	24-HR	DAY	2.37	23	
MUTUAL	6139	2	69.8	30	-7.4	95.	21	49.	15	32.0	26.0	176.5	-195.5	7.060	30	3.89	PPT	OBS	NORM	24-HR	DAY	2.12	7	
NEWKIRK	6278	2	73.4	30	-4.1	93.	20	51.	15	5.0	5.0	258.0	-117.0	10.550	30	5.96	PPT	OBS	NORM	24-HR	DAY	4.05	11	
ORIENTA	6751	2	0	0	0	0	0	0	0	0	0	0	0	6.250	30	0	PPT	OBS	NORM	24-HR	DAY	1.25	3	
PERRY	7012	2	72.9	30	-5.2	96.	25	47.	16	20.5	20.5	256.5	-136.5	8.580	30	4.45	PPT	OBS	NORM	24-HR	DAY	1.90	23	
PONCA CITY FAA	7201	2	73.9	29	-3.3	95.	20	53.	16	2.0	2.0	261.5	-104.5	9.324	30	5.15	PPT	OBS	NORM	24-HR	DAY	2.26	11	
RED ROCK 1 NNE	7505	2	0	0	0	0	0	0	0	0	0	0	0	5.910	30	1.88	PPT	OBS	NORM	24-HR	DAY	1.60	12	
REDFORD	7556	2	0	0	0	0	0	0	0	0	0	0	0	8.050	30	4.12	PPT	OBS	NORM	24-HR	DAY	1.81	27	
WAYNOKA	9404	2	71.9	30	-6.6	95.	20	48.	15	10.0	10.0	218.0	-187.0	6.500	30	2.75	PPT	OBS	NORM	24-HR	DAY	1.32	27	
WOODWARD	9760	2	0	0	0	0	0	0	0	0	0	0	0	6.501	30	0	PPT	OBS	NORM	24-HR	DAY	2.07	7	