

OKLAHOMA MONTHLY SUMMARY APRIL 1990

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APRIL 1990 OKLAHOMA SUMMARY

Oklahoma recorded its 5th wettest April on record (See Table 1). Flooding forced evacuations, collapsed bridges, contaminated water supplies, and drowned 2 people. This fourth consecutive month of above normal precipitation (see Figure 1) contributed to the wettest January-April period since record-keeping began in 1892 (see Figure 2). Several southern and eastern stations reported rain on 13 days and record monthly precipitation totals (see Table 2). Extensive cloud cover, which limited solar radiation, combined with several cool air intrusions to produce below normal temperatures in all CD's.

A cold front triggered the development of severe thunderstorms over western Oklahoma on April 5. Durant recorded nickel-size hail before the front moved quickly eastward through the State. Many southeastern Oklahoma stations reported more than one inch of rain. Cool Canadian air behind the front limited high temperatures to the 50's on April 6, some 15 to 25 degrees below the highs of the previous day. The widespread freeze on the morning of April 7 encompassed even the southern cities of Altus, Marlow and Antlers.

Violent thunderstorms accompanied another cold front moving southeastward through the State on April 9 and 10. A tornado near Ardmore injured at least 5 people and caused an estimated \$300,000 damage. Powerful straight line winds damaged structures in Pushmataha and Leflore Counties. Cool air aloft and strong updrafts supported the growth of abundant hail in storms over much of the State, including 1.5" hailstones in Beaver County, golfball-size hail near Cherokee, quarter-size hail near Waynoka, and smaller hail in several northeastern counties.

On April 13, thunderstorms along a cold front produced hail which covered the ground to a depth of 6 inches in Canadian County, one of 53 Oklahoma counties included in a NWS-issued severe thunderstorm watch. The central Oklahoma storms also generated a funnel cloud near Watonga and 75 mph winds in Okarche.

A well-sustained, vigorous cold front and squall line raced through Oklahoma on April 15 and 16. The Statewide impacts included 92 mph winds (the strongest in 20 years) and 8 damaged aircraft at the Oklahoma City airport, baseball-size hail in Lincoln and Bryan Counties, golfball-size hail in Coal and Pontotoc Counties, uprooted trees in central Oklahoma, widespread street flooding, and 5 drowned cattle in Cherokee County. The Canadian air behind the front lowered temperatures 10 to 20 degrees.

An extreme rainfall scenario developed during the third week of the month. A very strong low pressure system entrenched itself over the western U.S., blocked by a high pressure ridge over the eastern states. For several days, upper level disturbances along and ahead of the low center spawned thunderstorms. On April 18 and 19 storms delivered 2-4" of rain to much of the southern one-half of the State. Additional rain-producing impulses on several consecutive days produced at least one day of 1 to 2" in all CD's. On the 23rd, turbulent waters on Fort Gibson Lake in east central Oklahoma overturned a boat and drowned its 2 passengers. A vigorous cold front accompanied the eventual progression of the system through the State on April 25 and 26. A tornado in downtown Shattuck on April 25 injured four people and caused an estimated \$2 million damage. Rainfall amounts associated with the frontal passage generally varied from .5 to 1.5" in the west and north, and 2 to 3.5" in the southeastern one-third of Oklahoma. CD-averaged precipitation totals for the 11-day period of April 16-26 are listed in Table 3 and expressed as a percent of the mean precipitation for the entire month of April.

Rising floodwaters prompted the evacuation of several homes in McCurtain, Roger Mills and Carter Counties late in the month. Bridge and road damage was estimated at \$2.5 million in Carter County alone. Flooding forced the closing of some recreational facilities at 35 State parks.

Figure 2.

Oklahoma's 5 Greatest Januray-April
Statewide-Averaged Precipitation Totals

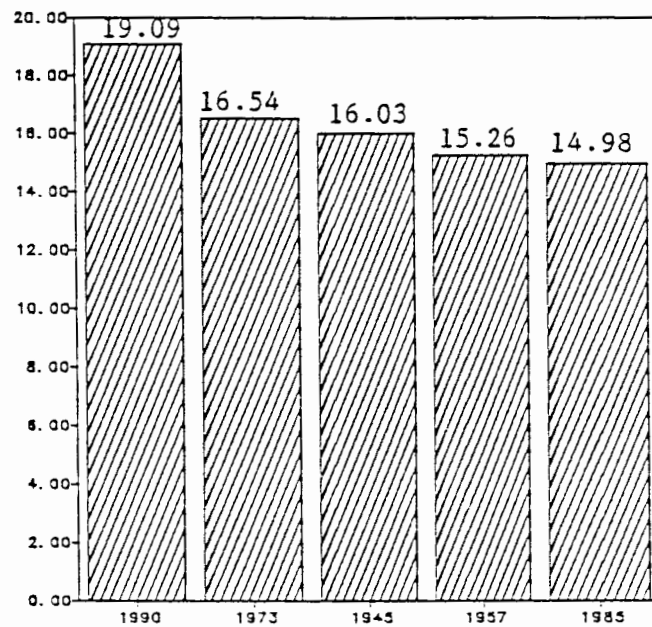


Table 2.

Record April Precipitation Amounts

CD	Station	1990	Previous Record	
			Amount	Year
5	Wewoka	9.54	9.37	1967
6	Sallisaw	13.39	12.11	1957
6	Wetumka	11.36	9.50	1967
7	Grandfield	7.18	6.30	1957
8	Healdton	12.02	9.26	1967
8	Marietta	13.72	12.82	1957
8	Tishomingo	14.37	14.18	1957

Table 3.

April 16-26, 1990 CD-Averaged Precipitation Accumulations and Comparison to Mean Precipitation for the Entire Month.

CD	April 1990 PPT	Percent of Mean PPT For Entire Month
1	2.71	150
2	1.68	63
3	3.72	104
4	2.97	130
5	5.56	171
6	8.01	178
7	3.52	156
8	8.63*	227
9	6.11	124

* Represents 88% of mean January-April total precipitation.

TABLE OF 1989/1990 COMPARISONS

Station	April Temperatures (F)		April Precipitation (in.)	
	1989	1990	1989	1990
Arnett	60.4	56.2	.68	2.96
Enid	62.7	58.0	.60	2.45
Mutual	60.6	54.8	.63	3.60
Tulsa	64.0	60.3	.34	5.31
Elk City	62.8	58.7	.001	1.62
Oklahoma City	63.9	59.9	.17	5.13
McAlester	63.7	61.0	.50	10.75
Altus Irr Sta	65.7	61.0	.34	3.40
Durant	63.1	60.5	.66	12.71
Ada	63.0	58.9	.54	11.37
Antlers	64.3	63.1	1.04	7.74

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Perry	2	15	7
Maximum temperature (F)	Boswell	9	92	29
	Tuskahoma	9	92	29
Maximum 24-hour precipitation	Cheyenne	4	8.68"	23

APRIL 1990 SUMMARY FOR NORTHWEST DIVISION (CD1)

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	PPT	OBS						
ARNETT	332	1	55.9	30	-1.5	84.	10	31.	6	290.0	42.0	18.0	-2.0	2.960	30	1.18	.94	18				
BEAVER	593	1	55.4	30	-1.7	87.	23	30.	6	303.0	49.0	14.5	-2.5	2.591	30	1.34	.95	17				
BOISE CITY 2 E	908	1	55.2	30	.8	84.	23	24.	6	301.5	-24.5	8.0	.0	.425	30	-.93	.15	26				
BUFFALO	1243	1	59.0	30	-.7	87.	22	27.	7	204.5	10.5	26.0	-9.0	2.440	30	.37	1.25	25				
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.652	30	1.82	2.25	17				
GAGE FAA APT	3407	1	57.3	30	-.3	85.	21	32.	6	261.5	18.5	29.0	11.0	2.474	30	.62	.78	17				
GATE	3489	1	56.3	30	*****	87.	23	31.	12	282.0	*****	22.0	*****	2.610	30	*****	1.05	25				
GOODWELL RES	ST3628	1	53.8	30	-2.1	85.	29	27.	6	342.5	52.5	5.5	-11.5	1.406	30	.30	.70	25				
GUYMON	3835	1	55.9	28	*****	87.	23	27.	6	267.0	*****	13.0	*****	1.932	29	*****	.55	10				
HOOKEE	4298	1	55.7	30	-.6	86.	24	29.	7	295.0	21.0	15.5	2.5	1.851	30	.66	.68	25				
KENTON	4766	1	53.8	30	-.7	84.	29	24.	6	338.0	10.0	.5	-9.5	.561	30	-.73	.21	27				
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.133	30	1.60	.90	26				
OPTIMA LAKE	6740	1	56.0	28	*****	88.	24	30.	7	271.0	*****	19.5	*****	5.112	30	*****	3.65	25				
RANGE	7412	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.972	30	*****	1.78	24				
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.742	30	-.37	.28	16				
TURPIN 4 SSE	9017	1	54.9	29	*****	84.	24	30.	6	303.0	*****	11.0	*****	3.410	30	*****	1.98	25				

APRIL 1990 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

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	PPT	OBS						
ALVA 1 ENE	194	2	58.1	30	-.8	88.	22	30.	7	237.5	23.5	31.5	.5	2.051	30	-.38	.72	24				
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.476	30	*****	.75	10				
BILLINGS	755	2	56.3	29	*****	86.	23	27.	7	275.0	*****	23.5	*****	1.581	30	-1.34	.55	10				
BLACKWELL 2E	818	2	56.8	30	*****	85.	23	31.	7	264.5	*****	20.0	*****	1.412	30	*****	.39	10				
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.122	30	*****	.37	24				
CHEROKEE	1724	2	58.2	29	-1.6	85.	22	32.	12	224.0	28.0	28.0	-12.0	3.350	30	.80	1.60	24				
ENID	2912	2	58.5	30	-1.9	83.	22	33.	7	228.5	50.5	34.0	-6.0	2.450	30	-.33	.73	17				
FREEDOM	3358	2	58.3	30	*****	86.	22	28.	7	233.0	*****	32.5	*****	1.892	30	*****	.54	24				
GREAT SALT PLNS	3740	2	58.2	30	*****	86.	23	32.	6	243.0	*****	37.5	*****	1.744	22	*****	.72	24				
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.024	28	*****	.59	9				
HELENA 1 SSE	4019	2	55.3	30	*****	84.	23	30.	7	311.0	*****	20.5	*****	2.406	30	-.16	1.12	17				
JEFFERSON	4573	2	58.7	30	-.9	87.	22	28.	7	226.5	28.5	36.5	.5	1.871	30	-.90	.43	23				
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.571	30	*****	.67	24				
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.670	30	*****	.53	23				
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.951	30	*****	.78	10				
MUTUAL	6139	2	54.8	30	-3.4	83.	22	29.	7	317.5	87.5	12.5	-13.5	3.600	30	1.15	1.19	17				
NEWKIRK	6278	2	58.0	30	-1.5	84.	22	31.	6	245.0	41.0	34.5	-4.5	2.100	30	-.85	.56	24				
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.680	30	*****	.94	17				
PERRY	7012	2	43.7	30	-17.8	68.	22	15.	7	638.5	481.5	.0	-52.0	4.110	30	1.41	1.55	17				
PONCA CITY FAA	7201	2	58.4	30	-.2	87.	22	31.	7	234.5	11.5	36.5	5.5	1.985	30	-.92	.40	10				
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.730	30	-.06	.71	10				
RENFROW	7556	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.653	30	-.91	.70	24				
WAYNOKA	9404	2	57.8	30	-2.5	86.	22	31.	12	250.0	73.0	33.0	-3.0	1.860	30	-.32	.62	26				
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.164	30	*****	1.18	17				

APRIL 1990 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	DAY	TEMP DAY							FROM NORM	MAX	
BARNSDALL	535 3	58.3	30	*****	83.	23	27.	7	233.0	*****	31.5	*****	4.505	30	1.22	1.06	26
BARTLESVILLE ZW	548 3	58.8	30	-2.0	86.	23	28.	7	226.5	55.5	39.0	-6.0	3.392	30	.07	.80	28
BIXBY	782 3	57.3	30	-3.3	86.	26	30.	8	258.0	90.0	28.5	-7.5	7.620	30	3.71	1.74	26
BURBANK	1256 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.892	30	*****	.80	26
CHELSEA 4 S	1717 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.350	30	*****	1.57	17
CLAREMORE	1828 3	56.9	30	-3.0	84.	24	28.	7	266.0	79.0	24.0	-10.0	6.033	30	2.27	1.34	21
CLEVELAND 5 WSW1902	3 60.1 30	*****	84.	23	33.	7	183.0	*****	36.0	*****	*****	8.080	30	*****	1.89	26	
FORAKER	3250 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.381	30	.25	.83	26
HOLLOW	4258 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.882	30	.16	.75	21
HOMINY	4289 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.460	30	1.34	1.16	26
HULAH DAM	4393 3	56.5	22	*****	86.	24	28.	3	205.0	*****	17.0	*****	4.511	30	1.35	.95	17
JAY TOWER	4567 3	59.4	30	*****	86.	30	30.	7	213.0	*****	46.0	*****	7.190	30	*****	2.50	10
KANSAS 1 ESE	4672 3	58.0	30	*****	83.	22	31.	7	240.0	*****	31.5	*****	7.503	30	*****	1.30	20
KEYSTONE DAM	4812 3	56.8	30	*****	83.	24	27.	7	266.0	*****	20.5	*****	5.941	30	*****	1.58	17
LENAPAH	5118 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.230	30	*****	1.00	21
MANNFORD 6 NW	5522 3	60.2	30	*****	88.	22	29.	7	183.5	*****	38.5	*****	6.040	30	2.75	1.91	26
MARAMEC	5540 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.913	30	2.92	1.72	26
MIAMI	5855 3	58.4	30	-1.7	85.	22	33.	12	223.0	37.0	25.5	-13.5	5.431	30	1.71	1.68	26
NOWATA	6485 3	57.4	30	-2.5	85.	22	31.	7	258.5	64.5	31.5	-9.5	3.970	30	.47	1.30	26
ONETA 1 WNW	6713 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.953	30	*****	2.44	26
PAWHUSKA	6935 3	58.0	30	-2.5	84.	23	28.	7	241.0	63.0	31.5	-11.5	4.792	30	1.72	.98	26
PAWHUSKA	6937 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.352	30	*****	.79	24
PAWNEE	6940 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.150	30	2.18	1.25	26
PRYOR 6 N	7309 3	56.3	30	-3.7	84.	24	28.	8	285.0	89.0	24.0	-22.0	6.684	30	2.78	1.68	26
RALSTON	7390 3	59.3	30	*****	86.	22	26.	6	207.5	*****	37.5	*****	4.403	30	1.43	1.10	26
RAMONA 4 N	7394 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.730	30	*****	1.05	28
SKIATOOK	8258 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.870	30	2.40	1.64	17
SPAVINAW	8380 3	59.5	30	*****	83.	22	32.	7	201.0	*****	37.0	*****	7.661	30	3.58	2.60	10
TULSA WSO APT	8992 3	60.3	30	-.6	85.	22	34.	7	183.5	15.5	41.5	-3.5	5.314	30	1.16	1.05	21
UPPER SPAVINAW	9101 3	53.5	28	*****	80.	23	24.	7	332.0	*****	11.0	*****	6.435	30	*****	1.56	10
VINITA 2 N	9203 3	57.9	30	-1.8	83.	23	27.	7	248.0	59.0	35.0	5.0	4.510	30	.44	1.51	26
WAGONER	9247 3	60.4	30	-1.2	83.	29	31.	7	181.0	31.0	42.0	-6.0	8.770	30	4.10	2.85	17
WANN	9298 3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.010	30	*****	.95	28
WYONONA	9792 3	60.8	30	*****	84.	23	32.	7	174.5	*****	48.5	*****	4.324	30	*****	.96	26

APRIL 1990 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	DAY	TEMP DAY							FROM NORM	MAX	
CANTON DAM	1445 4	55.1	30	-5.0	83.	23	28.	7	313.5	121.5	17.5	-27.5	5.322	30	3.03	2.60	24
CHEYENNE	1738 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.830	30	*****	8.68	23
CLINTON	1909 4	59.8	30	-.8	84.	21	32.	7	187.5	8.5	33.0	-14.0	3.551	30	1.16	1.50	24
COLONY	2039 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.341	30	*****	1.19	24
CORDELL	2125 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.803	30	.61	.77	17
ELK CITY 1 E	2849 4	58.7	30	*****	81.	21	32.	12	206.0	*****	16.0	*****	1.621	30	-.59	.41	17
ERICK 4 E	2944 4	59.0	30	-1.4	83.	22	33.	12	206.0	28.0	27.0	-13.0	2.793	30	.59	1.79	17
GEARY	3497 4	57.5	30	-3.2	83.	22	33.	7	250.0	78.0	26.0	-17.0	1.850	30	-.61	1.00	24
HAMMON 1 NNE	3871 4	55.7	30	-4.6	85.	22	30.	12	294.5	111.5	14.5	-27.5	2.991	30	.77	1.25	24
LEEDEY	5090 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.990	30	.49	.80	24
MACKIE 4 NNW	5463 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.510	30	*****	1.33	23
MORAVIA 2 NNE	6035 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.371	30	1.28	1.63	17
OKEENE	6629 4	57.7	30	-3.3	83.	22	31.	6	243.0	75.0	25.0	-23.0	4.970	30	2.64	2.12	24
RETROP	7565 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.220	30	*****	.93	17
REYDON	7579 4	59.3	30	*****	84.	21	31.	12	199.5	*****	27.5	*****	2.250	30	-.02	.79	23
SAYRE	7952 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.070	30	.02	1.02	17
SWEETWATER 2 E	8652 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.361	30	*****	.73	16
TALOGA	8708 4	56.9	30	-2.4	87.	21	27.	12	258.0	57.0	16.0	-14.0	5.131	30	2.69	1.64	17
THOMAS	8815 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.990	30	*****	2.12	24
VICI	9172 4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.150	30	*****	1.10	17
WATONGA	9364 4	57.9	30	*****	83.	22	30.	7	243.0	*****	30.5	*****	5.421	30	3.00	2.90	24
WEATHERFORD	9422 4	56.9	30	-3.9	84.	22	33.	12	263.5	95.5	20.0	-22.0	4.481	30	2.25	1.38	24

APRIL 1990 SUMMARY FOR CENTRAL DIVISION (CD5)

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						
AMBER	200	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.940	30	*****	1.41	19
ARCADIA	288	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.250	30	*****	2.96	17
TINKER AFB	325	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.142	29	*****	1.32	20
BLANCHARD 2 SSW	830	5	59.9	29	*****	84.	21	32.	7	181.0	*****	32.5	*****	6.370	30	*****	1.56	20
BRISTOW	1144	5	60.4	29	-1.5	84.	21	28.	7	177.5	21.5	44.0	-19.0	7.383	29	*****	1.43	26
CHANDLER	1684	5	60.2	30	-1.8	84.	22	30.	7	181.0	40.0	37.0	-14.0	9.730	30	6.51	4.10	17
CHICKASHA EX ST	1750	5	59.6	30	-2.7	85.	16	29.	7	195.0	53.0	34.0	-27.0	5.210	30	2.37	1.65	19
COX CITY 1 E	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.000	30	*****	1.90	19
CRESCENT	2242	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.010	30	*****	1.49	17
CUSHING	2318	5	57.4	27	*****	83.	24	35.	6	230.0	*****	23.5	*****	7.630	28	*****	2.30	26
EL RENO 1 N	2818	5	58.9	30	-1.6	84.	21	31.	7	214.5	36.5	31.5	-11.5	3.440	30	.86	1.63	17
GUTHRIE	3821	5	61.1	29	-.1	86.	23	30.	7	162.0	-2.0	50.0	.0	4.910	29	*****	1.90	17
HENNESSEY 2 SE	4055	5	57.7	30	-2.5	85.	21	31.	7	239.0	55.0	19.0	-21.0	4.130	30	1.75	1.75	17
INGALLS	4489	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.972	25	*****	2.31	26
KINGFISHER 2 SE	4861	5	59.3	30	-1.5	85.	22	30.	7	208.0	34.0	37.0	-11.0	3.990	30	1.57	1.51	17
KONAWA	4915	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.690	30	7.57	3.70	27
MARSHALL	5589	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.550	30	1.17	1.63	10
MEEKER 4 W	5779	5	59.7	30	-1.6	83.	22	29.	7	192.0	34.0	34.0	-13.0	7.110	30	3.55	1.91	25
MULHALL	6110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.240	30	*****	1.34	17
NORMAN 3 S	6386	5	59.9	30	*****	86.	22	31.	7	194.0	*****	40.5	*****	7.171	30	3.87	1.92	20
OKEMAH	6638	5	60.9	30	-.9	85.	22	37.	6	165.5	29.5	42.5	2.5	9.020	30	4.84	2.58	26
OKLAHOMA CITY WS	6661	5	59.9	30	-.3	85.	21	37.	12	189.0	5.0	37.0	-3.0	5.133	30	2.22	1.17	19
PERKINS	7003	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.340	30	4.70	3.02	17
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.041	30	*****	2.00	17
PRAGUE	7264	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.430	30	5.56	2.30	25
PURCELL 5 SW	7327	5	60.3	30	-1.4	84.	22	28.	7	174.0	20.0	34.5	-20.5	9.751	30	6.38	2.30	20
SEMINOLE	8042	5	61.6	30	-1.6	84.	24	31.	7	148.5	16.5	47.5	-30.5	8.880	30	4.79	3.52	26
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.841	30	3.97	2.12	26
STELLA	8479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.320	30	*****	1.88	20
STILLWATER 2 W	8501	5	56.9	30	-3.5	86.	22	27.	7	267.5	84.5	23.5	-21.5	5.881	30	3.30	2.12	17
STROUD 1 N	8563	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.522	30	*****	3.14	17
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.710	30	*****	3.10	26
UNION CITY 1 SE	9086	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.930	30	.60	.83	19
WELTY 1 SSE	9479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.651	30	*****	2.40	17
WEWOKA	9575	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.544	30	5.77	3.12	26

APRIL 1990 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	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM						
ASHLAND	364	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.141	30	*****	3.25	26					
BEGGS	631	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.640	30	*****	4.18	17					
BOYNTON	1027	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.491	30	*****	3.00	17					
CALVIN	1391	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.681	30	7.25	3.34	25					
CHECOTAH	1711	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.001	30	4.41	2.17	20					
CLAYTON 11 WNW	1858	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.830	30	*****	3.15	26					
DEWAR 2 NE	2485	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.180	30	4.90	2.43	26					
DUSTIN	2690	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.870	30	*****	3.08	26					
EUFULA	2993	6	61.7	30	*****	87.	29	34.	7	147.0	*****	47.0	*****	9.951	30	5.27	2.06	20					
HANNA	3884	6	61.0	30	*****	84.	29	28.	7	156.0	*****	34.5	*****	10.073	30	5.63	2.82	26					
HARTSHORNE	3946	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.071	30	*****	2.74	26					
HASKELL	3956	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.302	30	4.19	1.98	26					
HOLDENVILLE	4235	6	60.7	30	-1.5	84.	22	29.	7	167.5	36.5	38.5	-8.5	9.760	30	5.39	3.13	26					
LAKE EUFAULA	4975	6	59.8	30	*****	87.	30	36.	7	189.5	*****	33.0	*****	10.262	30	*****	2.43	20					
LYONS 2 N	5437	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.151	30	4.42	2.27	17					
MARBLE CITY	5546	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.182	30	*****	2.75	26					
MCALESTER FAA	5664	6	61.0	30	- .9	88.	29	29.	7	166.5	22.5	45.5	-5.5	10.753	30	6.21	3.65	26					
MCCURTAIN 1 SE	5693	6	62.7	30	*****	90.	29	28.	7	125.0	*****	57.0	*****	8.401	30	3.63	1.82	26					
MUSKOGEE	6130	6	60.8	30	-1.2	84.	29	30.	7	175.5	37.5	48.5	.5	6.610	30	2.03	1.45	25					
OKMULGEE W W	6670	6	55.4	20	*****	82.	5	30.	7	194.0	*****	2.0	*****	10.400	28	*****	2.82	26					
OKTAHA 2 NE	6678	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.930	30	*****	3.27	17					
QUINTON	7372	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.354	30	7.02	2.39	26					
SALLISAW 2 NE	7862	6	60.5	30	-1.8	88.	29	28.	7	177.0	47.0	40.5	-5.5	13.390	30	8.92	3.10	17					
SCIPIO	7979	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.070	30	*****	2.91	20					
SCRAPER	7993	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.560	30	*****	2.70	17					
SHORT	8170	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.400	30	*****	2.54	17					
STILWELL 1 NE	8506	6	58.8	30	*****	85.	29	26.	7	222.5	*****	35.0	*****	9.821	30	5.11	3.39	17					
TAHLEQUAH	8677	6	59.9	30	-1.2	88.	23	26.	7	198.0	35.0	44.0	-2.0	8.140	30	3.58	2.10	17					
WEBBERS FALLS	9445	6	58.7	25	*****	87.	30	29.	8	189.0	*****	31.5	*****	10.840	30	6.24	2.92	17					
WESTVILLE	9523	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.470	30	*****	3.62	17					
WETUMKA 3 NE	9571	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.264	30	6.89	3.11	26					

APRIL 1990 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	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM	DEG							
ALTUS IRR STA	179	7	61.0	30	-2.3	83.	16	31.	7	153.5	29.5	35.0	-38.0	3.400	30	1.37	1.25	19					
ALTUS DAM	184	7	59.0	30	*****	83.	24	35.	8	213.0	*****	34.0	*****	3.021	30	1.04	.80	19					
ANADARKO	224	7	58.2	22	*****	84.	21	25.	7	165.5	*****	15.0	*****	3.100	28	*****	1.25	19					
APACHE	260	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.400	30	*****	1.58	19					
ALTUS AFB	447	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.685	30	*****	1.09	20					
CARNEGIE 2 ENE	1504	7	59.9	29	-1.9	83.	22	28.	6	176.5	26.5	28.0	-26.0	2.510	29	*****	.79	17					
CHATANOOGA	1706	7	60.7	28	*****	82.	16	30.	7	150.0	*****	29.0	*****	5.200	28	*****	2.08	19					
DUNCAN 12 W	2668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.980	30	*****	2.20	19					
FREDERICK	3353	7	59.4	26	*****	85.	16	36.	6	173.5	*****	27.0	*****	6.620	26	*****	2.30	19					
GRANDFIELD 4 NW3709	7	*****	0	*****	****	0	****	0	0	*****	*****	*****	*****	7.180	30	4.76	2.33	19					
HOBART FAA APT	4204	7	59.0	30	-1.3	84.	21	33.	7	205.5	25.5	25.0	-14.0	4.492	30	2.25	1.19	24					
HOLLIS	4249	7	61.4	29	-1.8	87.	18	32.	7	139.0	17.0	36.0	-32.0	1.971	29	*****	.63	18					
LAWTON	5063	7	58.7	30	-4.0	82.	23	33.	7	208.5	81.5	18.0	-40.0	5.570	30	3.16	2.00	19					
FORT SILL	5068	7	59.6	30	*****	81.	22	34.	7	190.5	*****	28.0	*****	5.391	30	2.98	1.85	18					
LOOKEBA 2 ENE	5329	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.680	30	*****	.73	17					
MANGUM RES STA	5509	7	62.8	30	.1	90.	15	37.	5	124.5	-15.5	59.0	-12.0	3.140	30	1.25	.83	19					
RANDLETT 9 E	7403	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.601	30	*****	3.50	19					
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.050	30	1.80	1.20	19					
SEDAN	8016	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.273	30	*****	1.10	19					
VINSON 3 WNW	9212	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.720	30	-.35	.51	19					
WALTERS	9278	7	63.8	18	*****	85.	15	44.	19	61.5	*****	39.0	*****	9.280	18	*****	1.68	17					
WICHITA MT WLR	9629	7	56.7	30	-5.1	82.	22	27.	8	261.0	113.0	11.0	-41.0	5.940	30	3.49	1.92	19					
WILLOW	9668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.490	30	*****	1.35	17					

APRIL 1990 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

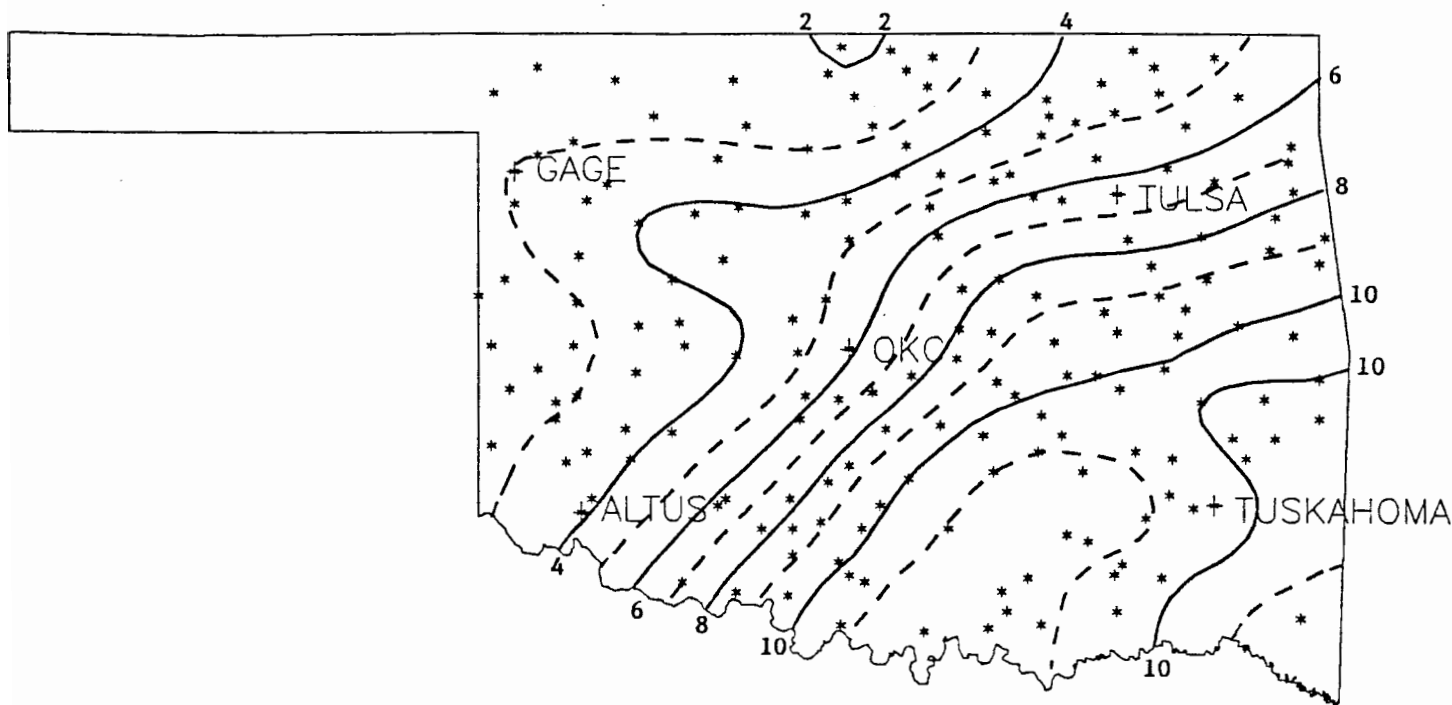
NAME	ID	CD	DEV						HEAT DEG	DEV FROM	COOL DEG	DEV FROM	TOT PPT	DEV				
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY						TEMP	DAY	FROM NORM	FROM NORM	FROM NORM
ADA	17	8	59.6	30	-2.9	83.	23	33.	8	193.5	62.5	31.5	-24.5	11.370	30	7.60	3.63	26
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.850	30	*****	4.50	25
ARDMORE	292	8	61.5	29	-3.7	83.	29	35.	8	146.0	65.0	44.0	-43.0	11.840	29	*****	3.34	26
ATOKA DAM	394	8	61.0	30	*****	86.	30	39.	12	163.0	*****	42.0	*****	8.820	30	*****	2.00	26
BOKCHITO	917	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.600	30	*****	3.00	26
CANEY	1437	8	61.6	30	*****	86.	29	32.	7	161.5	*****	59.0	*****	13.320	30	*****	5.22	26
CENTRAHOMA	1648	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.050	30	*****	3.20	26
CHICKASAW NRA	1745	8	59.1	30	*****	83.	23	29.	7	211.0	*****	34.5	*****	12.340	30	*****	5.30	26
COLEMAN	2011	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.960	30	*****	2.80	26
COMANCHE	2054	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.251	30	*****	2.85	19
DAISY 4 ENE	2354	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	14.201	30	8.77	3.19	21
DUNCAN	2660	8	59.5	30	-4.3	84.	17	34.	7	196.0	84.0	29.5	-43.5	9.590	30	6.88	3.10	20
DURANT USDA	2678	8	60.5	30	*****	89.	30	30.	7	178.5	*****	43.5	*****	12.710	30	8.17	5.07	26
ELMORE CITY	2872	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.591	30	*****	2.40	20
FARRIS 3 WNW	3083	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.290	30	*****	3.69	26
GRADY	3688	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.990	30	*****	5.86	26
HEALDTON	4001	8	61.6	30	*****	86.	15	31.	7	147.5	*****	45.0	*****	12.020	30	8.57	5.81	26
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.000	30	*****	3.40	26
KETCHUM RANCH	4780	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.650	30	*****	2.75	19
KINGSTON	4865	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	12.021	30	7.92	3.21	26
LEHIGH	5108	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.311	30	*****	2.75	26
LINDSAY 2 W	5216	8	59.4	27	*****	83.	21	30.	7	174.0	*****	22.5	*****	8.443	30	5.13	1.98	20
LOCO 6 SE	5247	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.863	30	*****	3.01	26
MADILL	5468	8	61.2	30	-2.3	86.	29	31.	8	158.0	51.0	43.0	-19.0	7.271	30	2.76	1.85	25
MARIETTA	5563	8	62.7	30	-.8	86.	29	35.	7	125.0	15.0	56.0	-9.0	13.721	30	9.92	4.25	26
MARLOW 1 WSW	5581	8	60.9	30	*****	84.	16	30.	7	160.0	*****	38.0	*****	7.690	30	5.01	1.94	20
MCGEE CREEK DAM5713	8	60.9	30	*****	90.	30	31.	7	172.0	*****	49.5	*****	12.550	30	*****	3.54	26	
OSWALT	6787	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.550	30	*****	3.00	26
PAULS VALLEY	6926	8	60.9	30	-2.4	83.	21	29.	7	163.0	45.0	39.5	-27.5	11.210	30	7.71	3.30	20
TISHOMINGO NWLR8884	8	60.9	30	*****	88.	29	32.	7	166.5	*****	42.5	*****	14.370	30	9.76	3.24	26	
TUSSY	9032	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.370	30	*****	2.33	26
WAURIKA	9395	8	62.9	30	-1.6	86.	16	33.	7	118.5	14.5	55.0	-34.0	8.071	30	5.11	2.47	19
WAURIKA DAM	9399	8	59.8	29	*****	86.	17	34.	7	184.5	*****	32.5	*****	9.412	29	*****	2.67	19

APRIL 1990 SUMMARY FOR SOUTHEAST DIVISION (CD9)

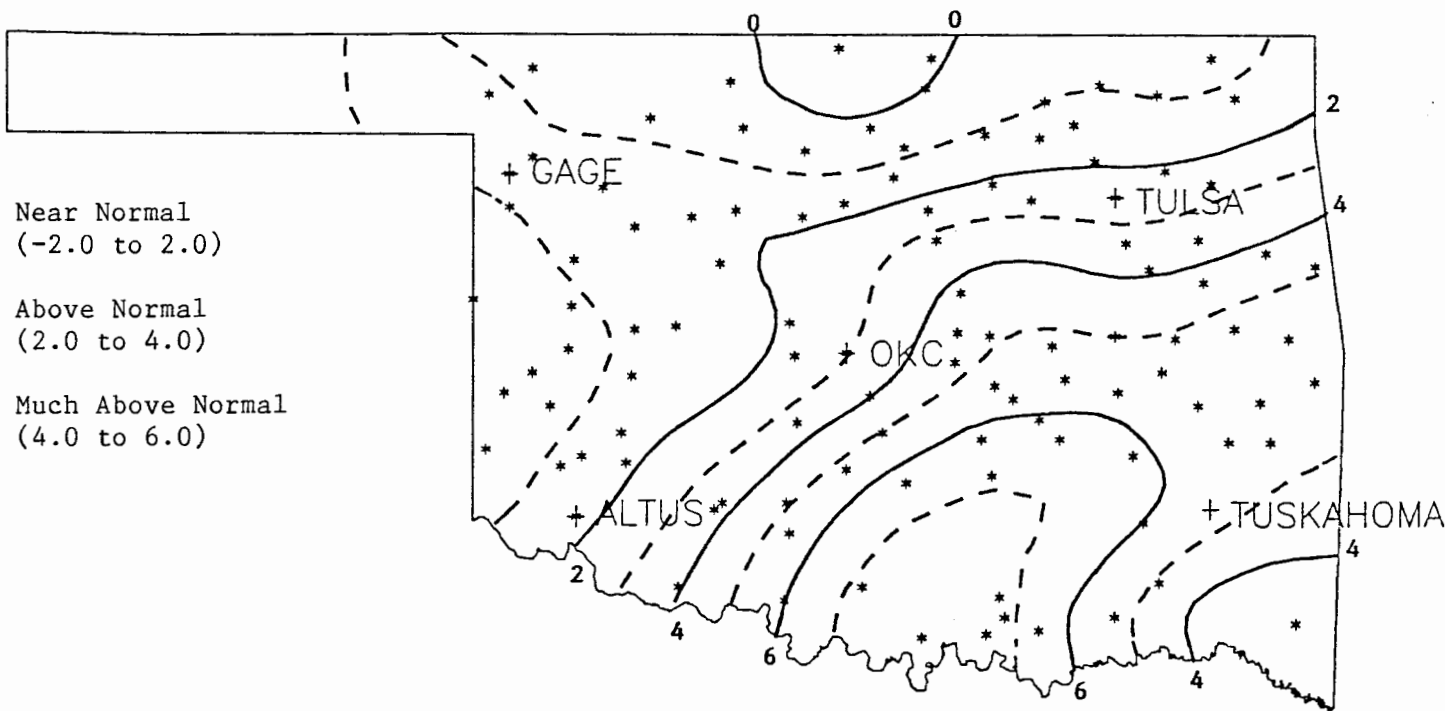
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			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY						TEMP	DAY	FROM NORM	FROM NORM	FROM NORM
ANTLERS	256	9	62.8	30	.2	90.	29	29.	7	130.0	9.0	63.0	14.0	7.740	30	2.63	1.38	5
BATTIEST 1 SSW	567	9	60.5	30	*****	90.	29	27.	7	170.0	*****	36.0	*****	7.440	30	*****	1.73	21
BEAR MT TWR	584	9	62.0	21	*****	90.	30	34.	12	80.5	*****	18.5	*****	6.412	30	1.31	1.42	6
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.870	30	*****	1.88	26
BOSWELL 4 NNW	980	9	64.6	30	*****	92.	29	36.	7	95.0	*****	83.5	*****	8.285	30	3.72	1.63	26
BROKEN BOW 1 N	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.770	30	1.44	1.83	5
BROKEN BOW DAM	1168	9	59.4	30	*****	91.	29	30.	7	215.0	*****	47.5	*****	6.770	30	*****	1.83	5
CARNASAW TWR	1499	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.930	10	*****	4.50	21
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.310	30	1.05	1.39	6
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.730	30	3.73	1.42	10
FLAGPOLE TWR	3169	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	10.980	30	*****	5.50	21
HEAVENER 1 SE	4008	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.712	30	1.78	2.18	21
HEE MT TWR	4017	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.791	30	*****	1.85	21
HUGO	4384	9	62.8	30	-1.3	91.	29	34.	7	123.0	29.0	58.5	-8.5	7.572	29	*****	1.80	6
IDABEL	4451	9	60.7	28	*****	91.	30	32.	7	175.5	*****	54.0	*****	6.240	28	*****	2.00	6
JADIE TOWER	4560	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.310	30	*****	2.51	6
POTEAU W W	7254	9	59.5	30	*****	90.	29	28.	6	203.0	*****	37.0	*****	6.880	30	*****	1.09	20
SMITHVILLE 1 W	8285	9	59.0	30	*****	88.	29	25.	7	201.5	*****	22.0	*****	8.081	30	*****	2.26	20
SOBAL TOWER	8305	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.660	25	*****	1.27	13
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	11.350	30	6.73	2.27	16
TUSKAHOMA	9023	9	61.8	30	*****	92.	29	26.	7	145.0	*****	50.5	*****	12.390	30	*****	4.46	21
VALLIANT 3 W	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.742	30	1.74	1.65	6
WILBURTON 9 ENE9634	9	61.3	29	-.8	90.	29	27.	7	146.0	6.0	39.5	-13.5	9.901	30	4.85	2.70	25	

APRIL 1990 CLIMATE DIVISION SUMMARY

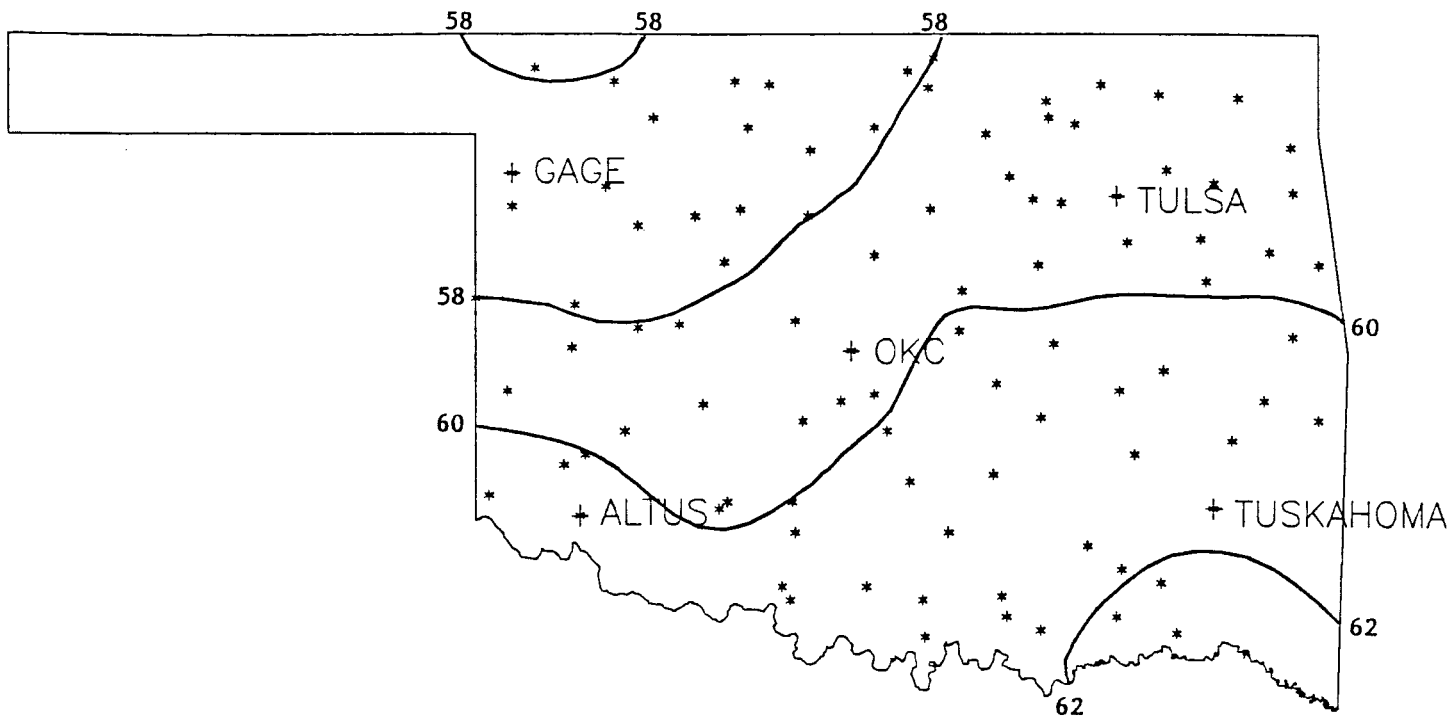
CLIMATE	MEAN	NUM	DEV		MIN	HEAT		DEV	COOL		DEV	TOT	NUM	DEV		
			FROM	MAX		DEGREE	FROM	DEGREE	FROM	FROM	MAX					
DIV	TEMP	STA	NORM	TEMP	DAY	TEMP	DAY	DAYS	NORM	DAYS	NORM	PPT	STA	NORM	24-HR	DAY
1	55.7	10	-.9	88.0	24	24.0	6	292.1	22.5	15.0	-2.3	2.36	15	.87	3.65	25
2	56.5	14	-3.1	88.0	22	15.0	7	280.6	83.2	27.2	-9.6	2.30	22	-.35	1.60	24
3	58.6	19	-1.6	88.0	22	24.0	7	224.8	43.9	34.2	-5.5	5.54	34	2.00	2.85	17
4	57.7	11	-2.7	87.0	21	27.0	12	242.2	62.1	23.0	-19.1	3.68	22	1.40	8.68	23
5	59.8	15	-1.5	86.0	22	27.0	7	192.6	31.5	36.3	-13.1	6.83	30	3.61	4.10	17
6	60.7	10	-1.1	90.0	29	26.0	7	172.4	28.4	42.3	-4.4	10.05	30	5.55	4.18	17
7	59.8	9	-2.8	90.0	15	25.0	7	185.8	50.2	30.4	-33.1	4.71	17	2.39	3.50	19
8	60.9	16	-2.8	90.0	30	29.0	7	165.3	56.3	42.8	-28.5	10.90	31	7.10	5.86	26
9	61.3	9	-1.7	92.0	29	25.0	7	158.7	43.0	48.6	-7.1	7.97	19	2.92	5.50	21



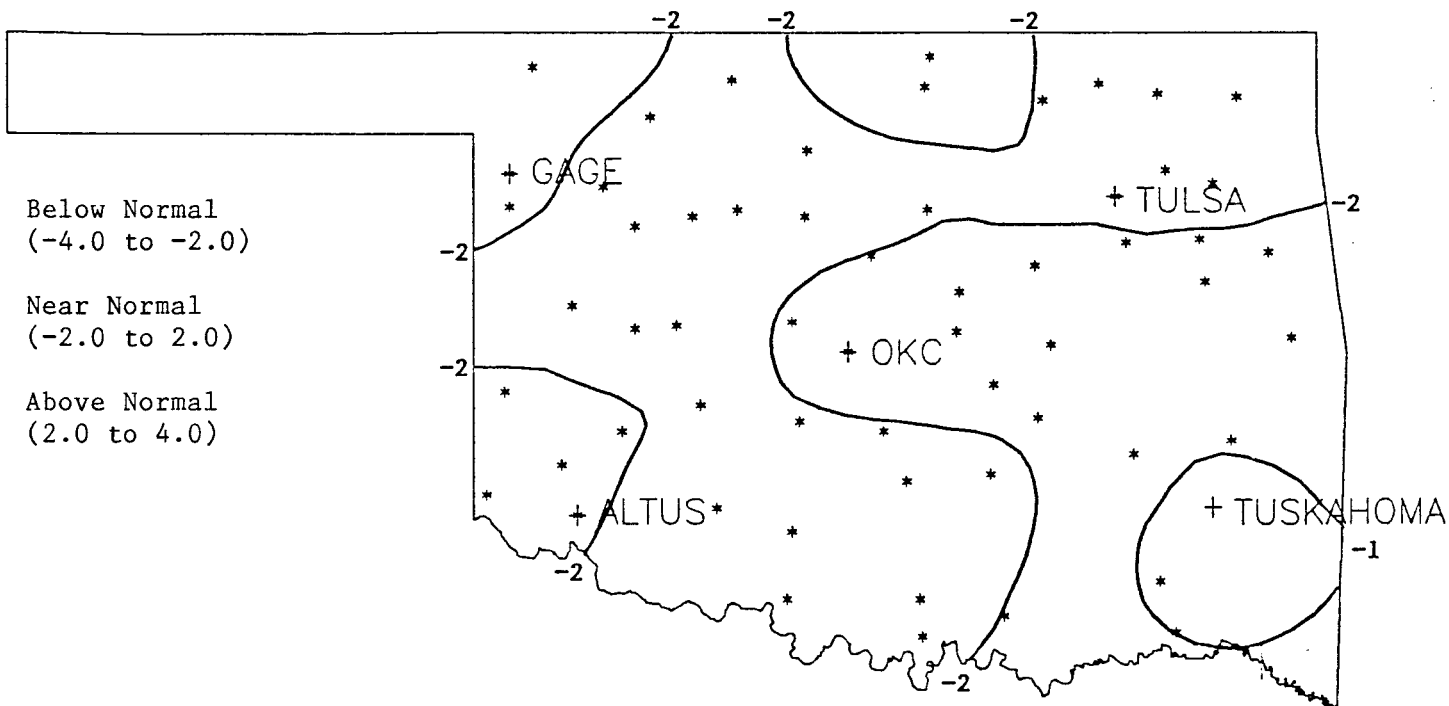
APRIL 1990 TOTAL PRECIPITATION
(Inches)



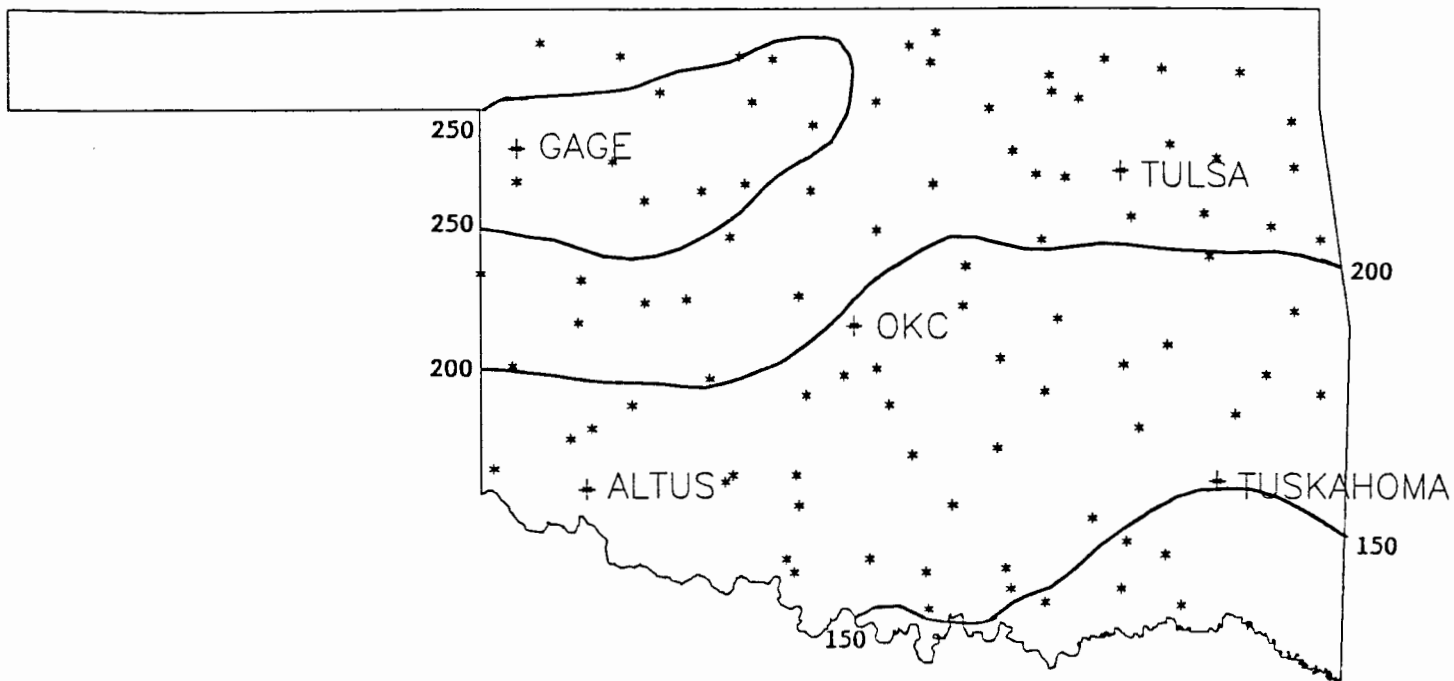
APRIL 1990 DEVIATION FROM NORMAL PRECIPITATION
(Inches)



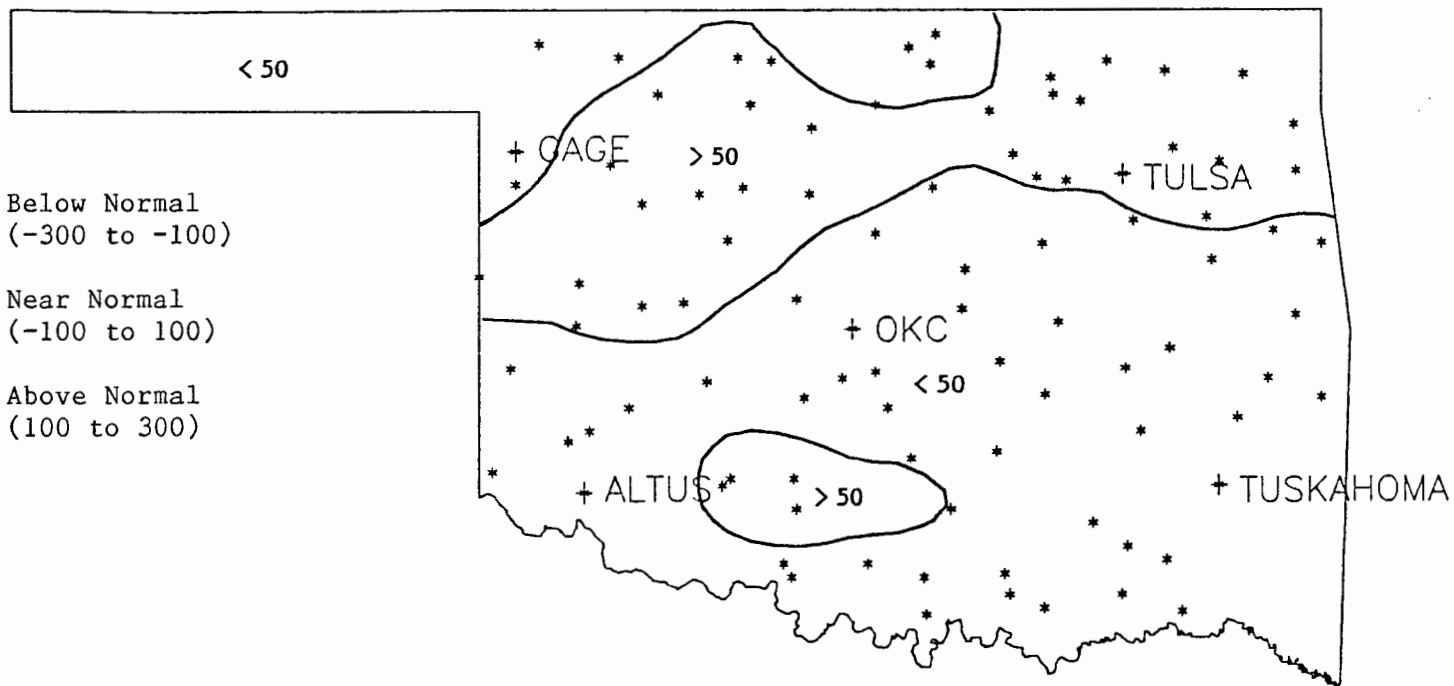
APRIL 1990 AVERAGE MONTHLY TEMPERATURES
(Degrees F)



APRIL 1990 DEVIATION FROM NORMAL TEMPERATURES
(Degrees F)

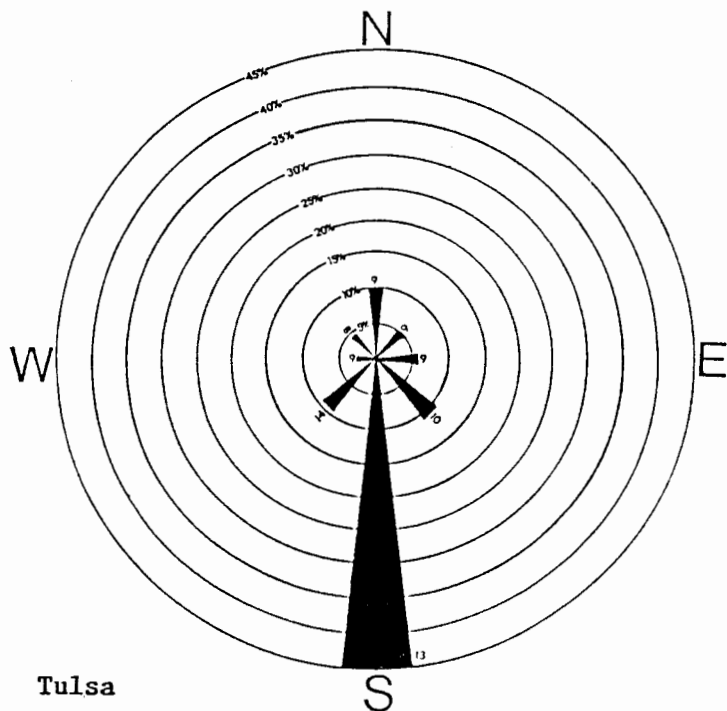
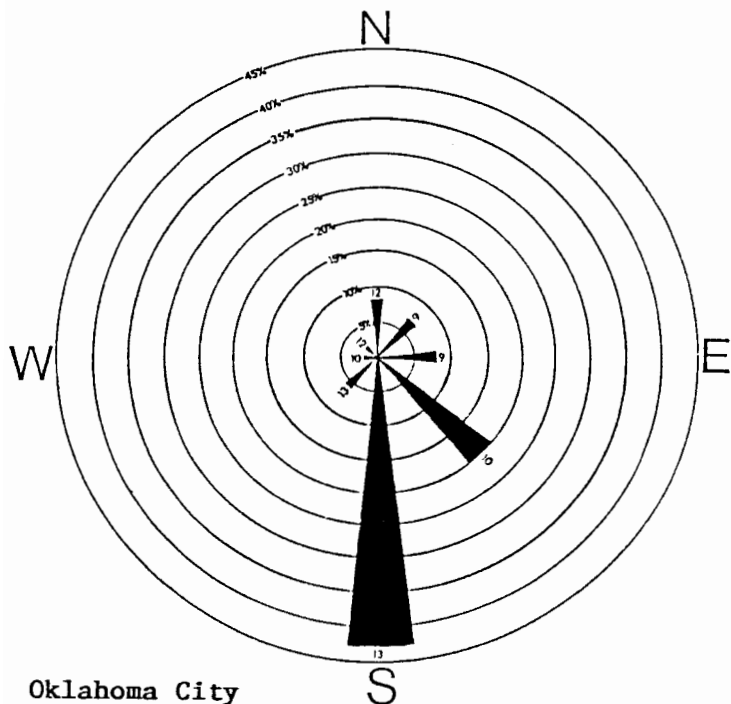


APRIL 1990 HEATING DEGREE DAYS



APRIL 1990 DEVIATION FROM NORMAL HEATING DEGREE DAYS

June wind roses for Oklahoma City and Tulsa for 10-year (1965-1974) mean winds (data adapted from NOAA Airport Climatology Series). Percents represent the percentages 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.



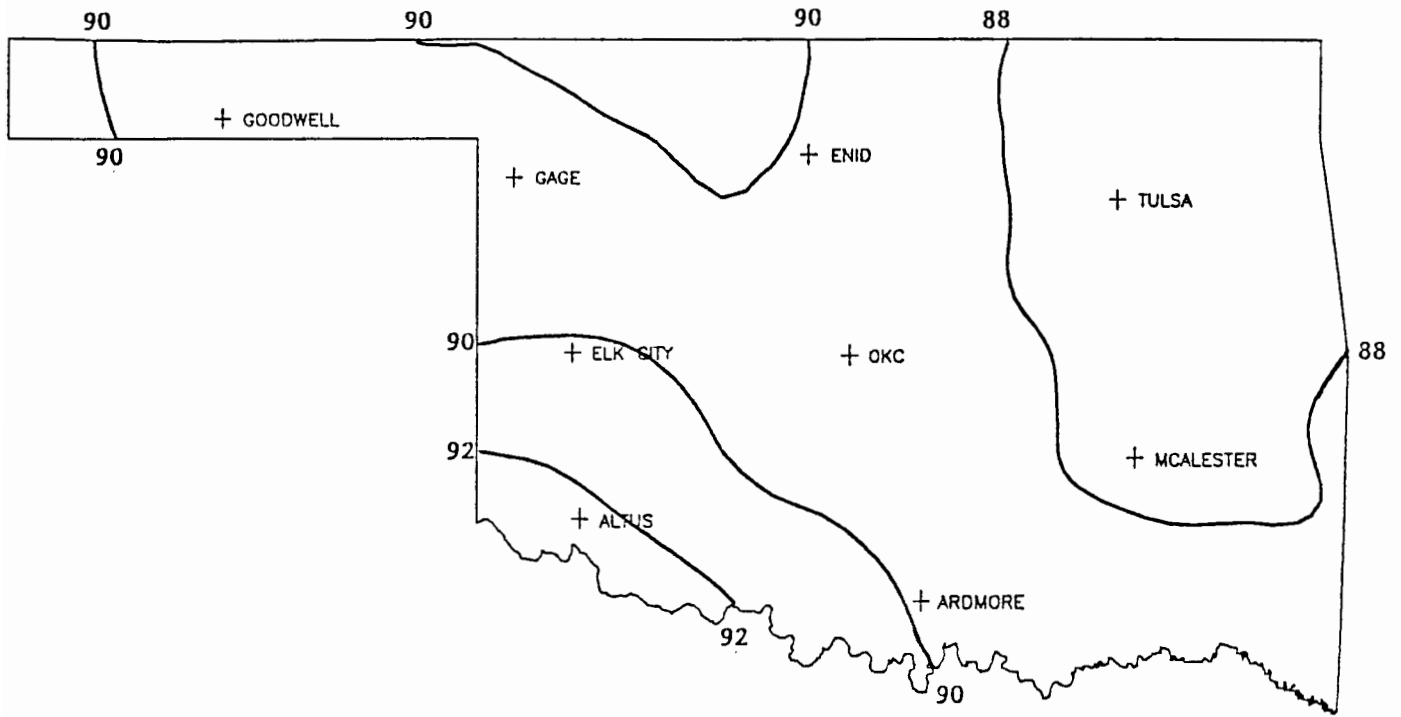
JUNE 1990 SUNRISE AND SUNSET

Oklahoma City

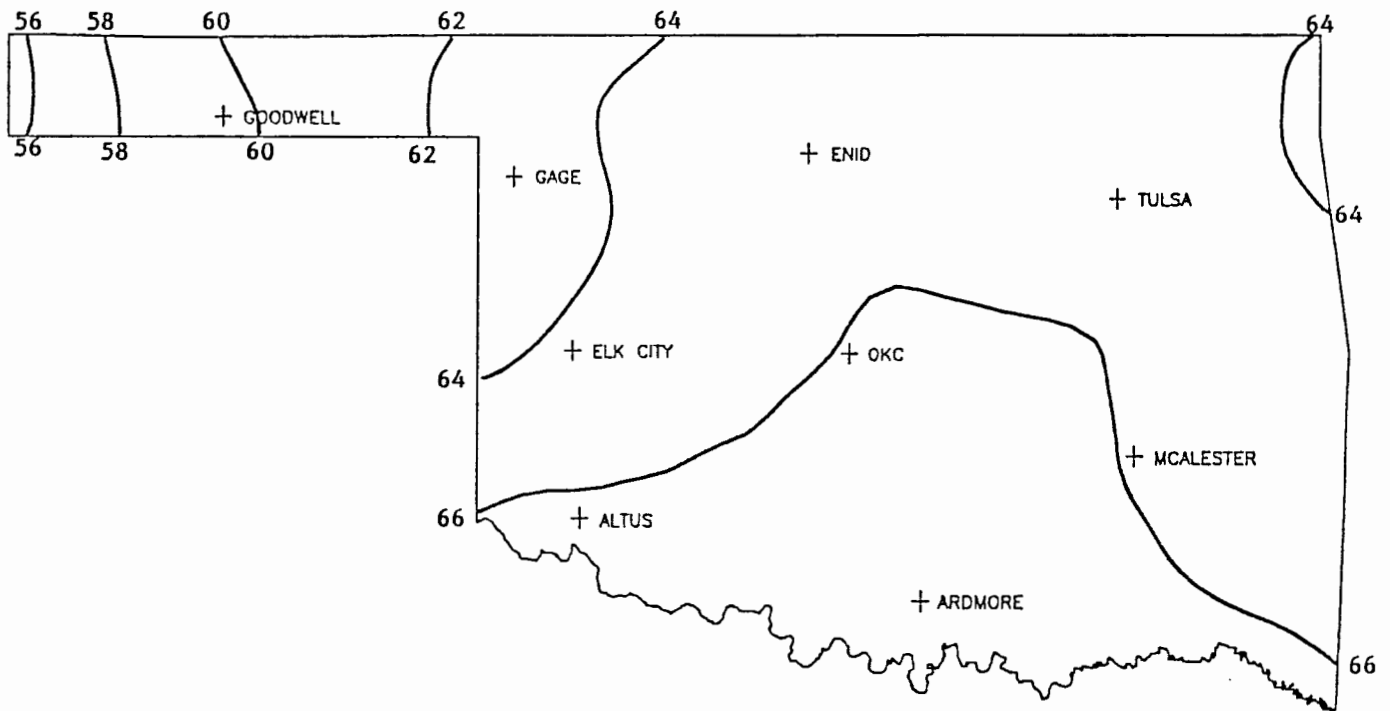
DATE	SUNRISE	SUNSET	DAYLIGHT
900601	6:19AM	8:37PM LT	14:19
900602	6:18AM	8:38PM LT	14:19
900603	6:18AM	8:38PM LT	14:20
900604	6:18AM	8:39PM LT	14:21
900605	6:18AM	8:40PM LT	14:22
900606	6:18AM	8:40PM LT	14:23
900607	6:17AM	8:41PM LT	14:23
900608	6:17AM	8:41PM LT	14:24
900609	6:17AM	8:42PM LT	14:24
900610	6:17AM	8:42PM LT	14:25
900611	6:17AM	8:43PM LT	14:26
900612	6:17AM	8:43PM LT	14:26
900613	6:17AM	8:43PM LT	14:26
900614	6:17AM	8:44PM LT	14:27
900615	6:17AM	8:44PM LT	14:27
900616	6:17AM	8:45PM LT	14:28
900617	6:17AM	8:45PM LT	14:28
900618	6:17AM	8:45PM LT	14:28
900619	6:17AM	8:46PM LT	14:28
900620	6:18AM	8:46PM LT	14:28
900621	6:18AM	8:46PM LT	14:28
900622	6:18AM	8:46PM LT	14:28
900623	6:18AM	8:46PM LT	14:28
900624	6:18AM	8:47PM LT	14:28
900625	6:19AM	8:47PM LT	14:28
900626	6:19AM	8:47PM LT	14:28
900627	6:19AM	8:47PM LT	14:28
900628	6:20AM	8:47PM LT	14:28
900629	6:20AM	8:47PM LT	14:27
900630	6:20AM	8:47PM LT	14:27

Tulsa

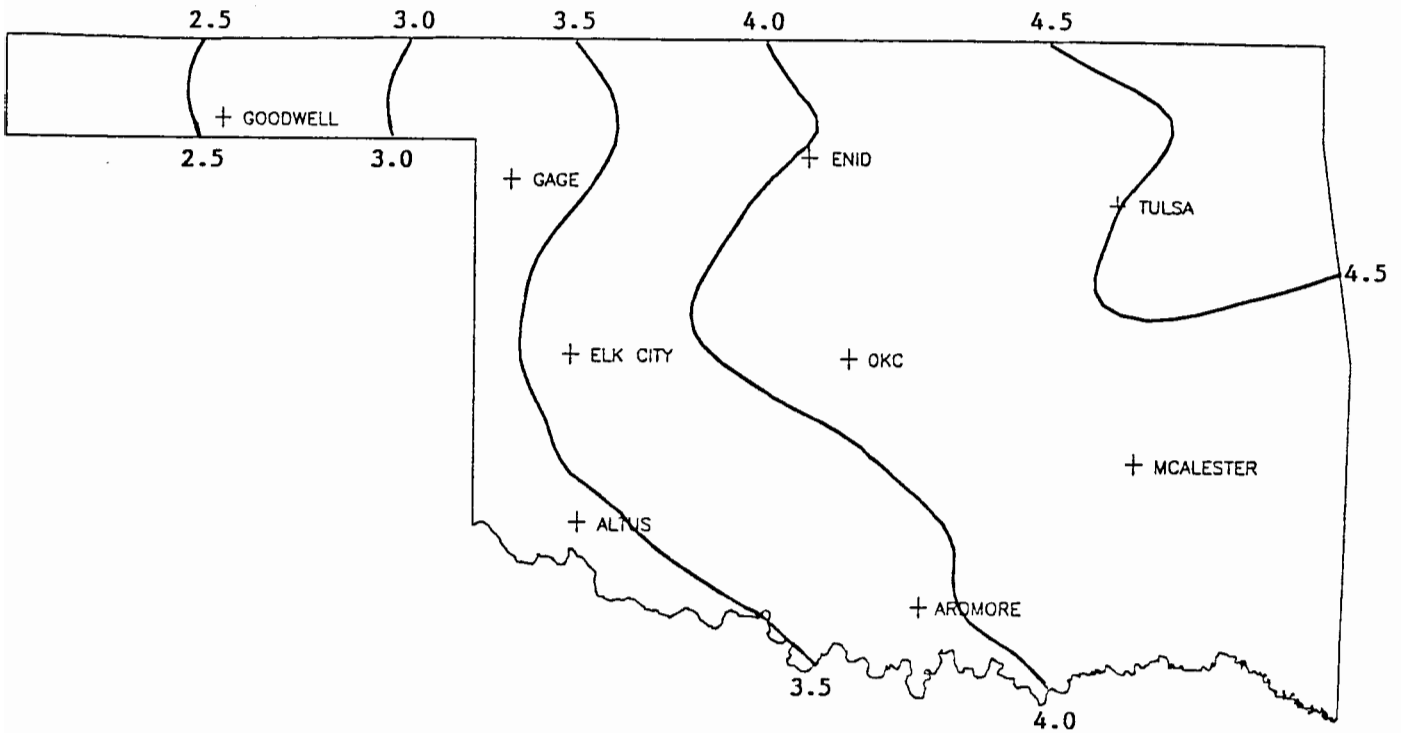
DATE	SUNRISE	SUNSET	DAYLIGHT
900601	6:10AM	8:32PM LT	14:23
900602	6:10AM	8:33PM LT	14:23
900603	6: 9AM	8:34PM LT	14:24
900604	6: 9AM	8:34PM LT	14:25
900605	6: 9AM	8:35PM LT	14:26
900606	6: 9AM	8:35PM LT	14:27
900607	6: 8AM	8:36PM LT	14:27
900608	6: 8AM	8:36PM LT	14:28
900609	6: 8AM	8:37PM LT	14:29
900610	6: 8AM	8:37PM LT	14:29
900611	6: 8AM	8:38PM LT	14:30
900612	6: 8AM	8:38PM LT	14:30
900613	6: 8AM	8:39PM LT	14:31
900614	6: 8AM	8:39PM LT	14:31
900615	6: 8AM	8:40PM LT	14:31
900616	6: 8AM	8:40PM LT	14:32
900617	6: 8AM	8:40PM LT	14:32
900618	6: 8AM	8:41PM LT	14:32
900619	6: 8AM	8:41PM LT	14:32
900620	6: 9AM	8:41PM LT	14:33
900621	6: 9AM	8:41PM LT	14:33
900622	6: 9AM	8:42PM LT	14:33
900623	6: 9AM	8:42PM LT	14:33
900624	6: 9AM	8:42PM LT	14:33
900625	6:10AM	8:42PM LT	14:32
900626	6:10AM	8:42PM LT	14:32
900627	6:10AM	8:42PM LT	14:32
900628	6:11AM	8:43PM LT	14:32
900629	6:11AM	8:43PM LT	14:32
900630	6:11AM	8:43PM LT	14:31



30-YEAR MEAN JUNE DAILY MAXIMUM TEMPERATURE



30-YEAR MEAN JUNE DAILY MINIMUM TEMPERATURE



30-YEAR MEAN JUNE PRECIPITATION

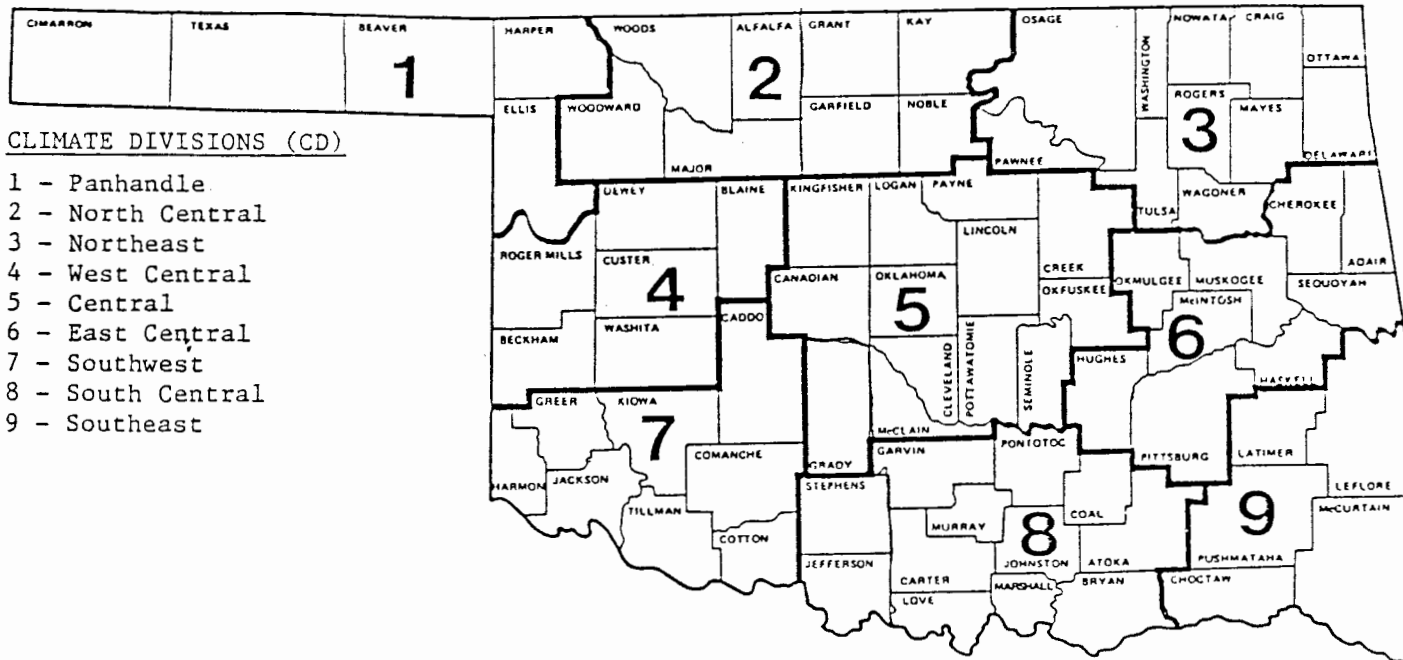
30- and 90-DAY NATIONAL WEATHER SERVICE OUTLOOK

30-DAY OUTLOOK (MAY)

Precipitation - Above Normal Statewide
Temperature - Below Normal Statewide

90-DAY OUTLOOK (MAY-JULY)

Precipitation - Near Normal in Western One-Half of Panhandle
Above Normal Elsewhere
Temperature - Below 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
 1948-1986. Extremes are found for the period
 of record (1924-present).

Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual																								
80.7 max 61.4 min .204 pcpn 0 HDD 7 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	96-1953 69-1970 49-1964 75-1943 3.37-1962	81.1 max 61.9 min .217 pcpn 1 HDD 7 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	94-1953 61-1946 52-1969 74-1943 1.66-1973	83.0 max 62.9 min .222 pcpn 0 HDD 8 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	94-1942 62-1928 47-1954 73-1943 3.38-1986	83.9 max 63.7 min .124 pcpn 0 HDD 9 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	98-1933 72-1950 52-1928 75-1933 3.72-1985	85.2 max 64.1 min .087 pcpn 0 HDD 10 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	95-1926 72-1950 53-1973 74-1934 3.01-1940	86.8 max 64.8 min .087 pcpn 0 HDD 11 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	97-1926 70-1935 51-1935 78-1980 1.37-1989	86.9 max 66.2 min .199 pcpn 0 HDD 12 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	100-1988 72-1938 56-1977 76-1984 2.60-1974	87.3 max 66.6 min .053 pcpn 0 HDD 12 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	98-1953 70-1927 53-1985 78-1958 4.56-1989	88.5 max 67.1 min .195 pcpn 0 HDD 13 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	105-1953 62-1947 51-1947 77-1953 3.95-1929	87.8 max 66.2 min .107 pcpn 0 HDD 12 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	103-1953 74-1969 55-1969 78-1933 3.01-1929	89.1 max 67.7 min .059 pcpn 0 HDD 14 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	100-1953 73-1926 55-1926 79-1953 1.68-1987	89.5 max 67.3 min .242 pcpn 0 HDD 14 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	105-1953 80-1961 51-1976 76-1942 .96-1932	90.2 max 68.4 min .150 pcpn 0 HDD 14 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	107-1936 74-1969 56-1935 79-1936 2.38-1957	89.9 max 68.3 min .041 pcpn 0 HDD 15 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	103-1980 76-1985 52-1974 79-1933 1.81-1985	91.9 max 69.6 min .014 pcpn 0 HDD 16 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	100-1933 81-1942 62-1985 78-1947 2.00-1987	88.0 max 67.9 min .212 pcpn 0 HDD 13 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	101-1933 73-1957 58-1958 77-1934 1.65-1963	88.1 max 67.9 min .150 pcpn 0 HDD 13 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	103-1933 67-1929 54-1957 78-1937 2.06-1948	88.5 max 68.2 min .234 pcpn 0 HDD 14 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	105-1980 68-1967 51-1974 79-1953 2.29-1960	89.3 max 68.2 min .117 pcpn 0 HDD 14 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	102-1972 71-1928 50-1958 81-1933 1.70-1986	89.9 max 68.3 min .041 pcpn 0 HDD 15 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	103-1980 76-1985 52-1974 79-1933 1.81-1985	91.2 max 68.7 min .074 pcpn 0 HDD 15 CDD Highest Max Lowest Max Lowest Min Highest Min Greatest pcpn	105-1980 81-1940 56-1974 78-1986 3.10-1988

JUNE AVERAGES

Temperature : 76.8
 Precipitation : 4.15"
 Heating Degree Days: 1
 Cooling Degree Days: 363