

The Oklahoma Climatological Survey was established with its own budget and offices in the spring of 1980. The mission of the Survey is to provide a climatological archiving and information service to the State of Oklahoma. Although as many as 160 stations may appear in any one summary, it may not be possible to list every station report received at the Survey as we plan to have the summaries in the mail before the middle of each month. If you would like information about a station that does appear, please feel free to contact the Climate Survey. If you would like to know more about the services we offer or our plans for the future, please let us hear from you. You can help us by contributing to our newspaper clipping file. If you see an article in your local newspaper dealing with some impact of climate on your community, please clip it and send it to us along with the name of the newspaper and the date the article appeared.

#### OKLAHOMA CLIMATE SUMMARY APRIL 1988

April weather was cooler than normal with above normal precipitation. Temperatures averaged 1.4 to 4.2 degrees below normal. This was a result of several days of slightly below normal temperatures rather than a brief extreme cold spell. Only 6 stations outside of northwestern Oklahoma (CD1) recorded consecutive days with lows of 32 degrees or below, and only 5 recorded a low temperature below 30 degrees. Above normal precipitation in the northwestern two-thirds of the State was delivered by a very strong storm system on the 1st, and a steady intrusion of fronts throughout most of the month.

A strong upper level low and surface cold front delivered a second consecutive day of heavy precipitation to the State on April 1st. The panhandle received several inches of snow. Guymon reported an 18" snowfall. Further east, rainfall accumulations from this system exceeded 4 inches producing flooding in various parts of the State. Bird Creek flooded 20 homes and 7 businesses in Skiatook. In Stephens County, flood damage was estimated at \$500,000.

Cooler air behind a fast-moving cold front resulted in 10-15 degree drops in maximum temperatures Statewide from the 5th to the 6th of April. A line of thunderstorms developed as the front displaced warm moist air in eastern Oklahoma on April 5th. Some of these thunderstorms became severe. A funnel cloud was reported near Morris. Hail, including some stones as large as golfballs, was reported in Atoka, Pittsburgh, and Okmulgee Counties.

Most stations received rainfall on April 18th as a strong upper level low-pressure system, which had developed over southern California, moved toward Oklahoma. Thunderstorms formed along an associated cold front. Over one inch of rainfall was reported by at

least one station in each CD. Strong high pressure and northerly winds behind the front delivered temperatures in the low 30's to most CD's. Only two reporting stations recorded freezing temperatures later than April 21st (see Table 1).

A low pressure system entered Oklahoma on the 24th, bringing rain to the northeastern one-third of the State. North central Oklahoma received the heaviest rainfall (Newkirk 3.70", Cherokee 2.00").

Locally heavy rainfall occurred on the 29th in southwestern Oklahoma. Although thunderstorms produced 2.50" at Altus, and 1.55" at Carneigie, the rest of Oklahoma did not receive significant rainfall from this system. The month ended with south central and southeastern sections of the State in need of moisture.

Table 1: Last recorded freezing temperature by CD for April, 1988.

<u>CD</u>	<u>STATION</u>	<u>DATE</u>
1	Buffalo	27
2	Freedom	12
3	Vinita	19
4	Hammon	27
5	Chickasha	19
6	Sallisaw	19
7	Chattanooga	19
8	McGee Creek	21
9	Poteau	18

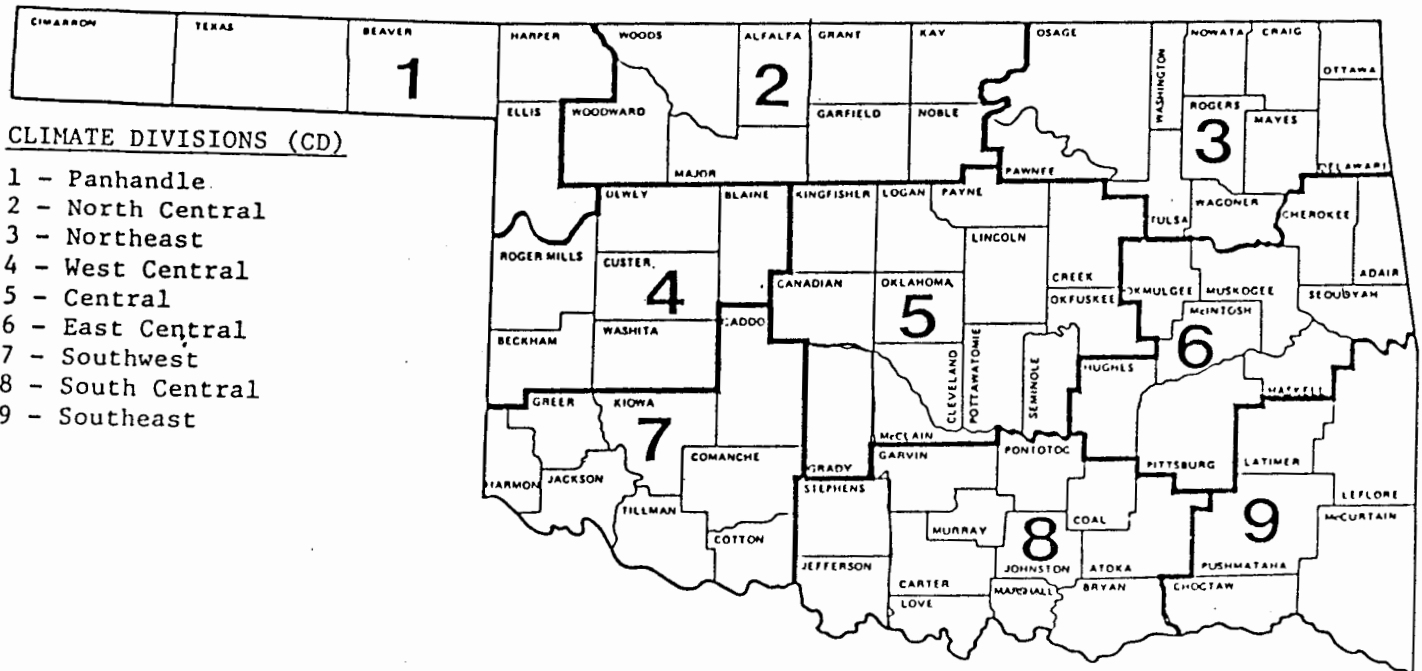
TABLE OF 1987/1988 COMPARISONS

Station	April Temperatures (F)		April Precipitation (in.)	
	1987	1988	1987	1988
Arnett	56.6	53.4	1.350	3.321
Enid	61.7	58.1	.420	4.460
Mutual	56.7	52.7	.670	3.890
Tulsa	63.2	60.1	.730	3.382
Elk City	58.8	58.0	.042	5.882
Oklahoma City	62.0	61.0	.420	3.050
McAlester	62.1	*	.210	*
Altus Irr. Sta.	62.1	60.9	*	2.190
Durant	63.3	59.3	.290	2.190
Ada	62.3	60.6	.351	1.800
Antlers	62.4	62.4	*	1.440

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Kenton	1	23	11
Maximum temperature (F)	Mangum	7	95	8
Maximum 24-hour precipitation	Purcell	5	5.20"	1

O K L A H O M A



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:

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

Deviation from Normal Heating Degree Days: A positive value indicates higher than normal heating requirements for the month as a whole. A negative value indicates lower than normal heating requirements for the month as a whole. Normal HDD may be calculated by subtracting the deviation from observed HDD.

Cooling Degree Days: CDD are calculated each day of the month for which there is a temperature report and 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.

APRIL 1988 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	DIV	DEV						HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM							
ARNETT	332	1	53.5	29	-3.9	85.	7	31.	12	334.5	86.5	0.0	-20.0	3.321	30	1.54	1.12	1			
BEAVER	593	1	52.0	29	-5.1	88.	7	26.	11	378.0	124.0	0.0	-17.0	3.580	30	2.33	1.02	18			
BOISE CITY	908	1	53.3	30	-1.1	86.	8	24.	11	351.5	25.5	0.0	-8.0	1.250	30	-1.0	.50	1			
BUFFALO	1243	1	54.7	30	-5.0	89.	4	30.	12	318.5	124.5	8.5	-26.5	4.060	30	1.99	1.60	18			
FARGO	3070	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.480	30	1.65	1.52	1			
GAGE	3407	1	54.6	30	-2.9	86.	8	27.	11	321.0	78.0	9.0	-9.0	3.100	30	1.25	.77	1			
GATE	3489	1	54.8	28	999.0	85.	20	33.	10	289.5	9999.0	3.5	9999.0	2.350	30	99.99	.76	1			
GOODWELL RES.STA.	3628	1	50.9	29	-5.0	85.	7	27.	12	400.0	118.0	0.0	-17.0	2.530	30	1.42	1.19	17			
GUYMON	3835	1	54.3	26	999.0	88.	8	29.	12	289.5	9999.0	12.0	9999.0	4.120	28	99.99	1.35	1			
HOOKER	4298	1	51.3	29	-5.0	87.	7	29.	4	396.5	122.5	0.0	-13.0	4.440	30	3.25	1.25	17			
KENTON	4766	1	51.6	29	-2.8	87.	8	23.	11	389.5	61.5	.5	-9.5	1.340	30	.05	.41	17			
LAVERNE	5045	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.690	30	2.16	.91	1			
OPTIMA LAKE	6740	1	52.0	28	999.0	87.	7	26.	11	364.5	9999.0	0.0	9999.0	3.870	30	99.99	1.21	1			
REGNIER	7534	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.430	30	.32	.85	1			
TURPIN	9017	1	51.5	29	999.0	86.	7	29.	12	391.0	9999.0	0.0	9999.0	4.400	30	99.99	1.35	18			

APRIL 1988 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	DIV	DEV						HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM							
ALVA	194	2	56.6	30	-2.3	86.	22	28.	11	259.5	45.5	6.5	-24.5	5.330	30	2.90	1.30	1			
VANCE AFB	302	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.451	28	99.99	1.60	1			
BILLINGS	755	2	55.0	29	999.0	84.	7	33.	19	296.5	9999.0	5.5	9999.0	7.971	30	5.05	3.85	1			
BLACKWELL	818	2	56.5	30	999.0	82.	8	33.	11	260.5	9999.0	6.5	9999.0	7.562	30	99.99	2.90	1			
BRAMON	1075	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.601	30	99.99	2.07	1			
CEDARDALE	1620	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.592	30	99.99	1.22	25			
CHEROKEE	1724	2	57.8	30	-2.0	85.	7	32.	11	228.0	32.0	11.0	-29.0	3.270	30	.72	2.00	25			
ENID	2912	2	58.1	30	-2.3	85.	4	35.	11	228.0	50.0	21.5	-18.5	4.460	30	1.68	1.40	1			
FT SUPPLY DAM	3304	2	53.6	29	-5.4	85.	7	29.	13	331.0	115.0	1.5	-34.5	3.860	30	2.27	1.60	1			
FREEDOM	3358	2	57.2	30	999.0	88.	4	30.	11	249.5	9999.0	14.0	9999.0	4.050	30	99.99	2.13	18			
GREAT SALT PLAINS	3740	2	55.2	29	999.0	84.	4	34.	11	288.5	9999.0	4.5	9999.0	5.532	25	2.88	1.69	18			
HARDY	3909	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.283	30	99.99	1.22	17			
HELENA	4019	2	53.3	29	999.0	83.	7	33.	11	340.0	9999.0	0.0	9999.0	4.890	30	2.32	1.40	18			
JEFFERSON	4573	2	56.9	30	-2.7	84.	7	33.	11	252.0	54.0	10.0	-26.0	4.650	30	1.88	1.63	17			
LAMONT	5013	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.981	30	99.99	1.77	1			
MEDFORD	5760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	7.020	30	99.99	1.94	18			
MUTUAL	6139	2	52.7	29	-5.5	83.	4	31.	12	355.5	125.5	0.0	-26.0	3.890	30	1.44	1.23	25			
NEWKIRK	6278	2	57.7	30	-1.7	83.	8	35.	11	234.0	30.0	16.5	-22.5	10.480	30	7.53	3.70	25			
ORIENTA	6751	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.400	30	99.99	1.18	2			
PERRY	7012	2	59.9	30	-1.6	86.	5	34.	11	190.0	33.0	37.0	-15.0	5.690	30	2.99	2.39	1			
PONCA CITY	7201	2	57.6	28	-1.0	86.	9	36.	19	244.5	21.5	36.0	5.0	6.611	30	3.71	2.53	1			
RED ROCK	7505	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	7.310	30	4.52	2.70	18			
RENFROW	7556	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.220	30	3.66	1.78	2			
WAYNOKA	9404	2	56.2	30	-4.1	87.	4	32.	11	275.5	98.5	12.0	-24.0	4.510	30	2.33	1.49	1			
WOODWARD	9760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.731	30	1.73	1.01	1			

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	DIV	DEV						HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX 24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM						
BARNSDALL	535	3	58.7	30	999.0	87.	21	33.	19	213.5	9999.0	24.5	9999.0	5.330	30	2.04	2.20	2		
BARTLESVILLE	548	3	59.2	30	-1.6	90.	21	33.	19	198.5	27.5	25.5	-19.5	6.250	30	2.93	2.90	1		
BIXBY	782	3	57.9	29	-2.7	88.	22	33.	20	228.0	60.0	21.0	-15.0	2.530	30	-1.38	1.15	1		
BURBANK	1256	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.400	30	99.99	2.36	1		
CHELSEA	1717	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.300	30	99.99	1.74	18		
CLAREMORE	1828	3	57.8	29	-2.1	87.	4	34.	19	227.0	40.0	19.0	-15.0	3.971	30	.21	1.13	1		
CLEVELAND	1902	3	60.3	27	999.0	87.	4	34.	19	169.0	9999.0	41.0	9999.0	6.040	27	99.99	3.21	1		
FORAKER	3250	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.740	30	3.61	4.10	1		
HOLLOW	4258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.780	30	1.06	1.60	1		
HOMINY	4289	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.220	30	3.10	2.69	1		
HULAH DAM	4393	3	56.9	15	-2.3	89.	21	34.	19	127.0	-76.0	5.0	-24.0	3.800	27	.64	1.34	10		
JAY TOWER	4567	3	60.2	27	999.0	86.	22	32.	19	154.5	9999.0	26.0	9999.0	4.020	29	99.99	.90	2		
KANSAS	4672	3	59.0	30	999.0	83.	22	33.	19	201.5	9999.0	21.5	9999.0	3.281	30	99.99	.77	2		
KEYSTONE DAM	4812	3	56.9	29	999.0	86.	4	32.	19	241.5	9999.0	6.0	9999.0	4.223	30	99.99	2.14	1		
LENAPAH	5118	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	7.740	30	99.99	3.78	1		
MANNFORD	5522	3	60.6	30	999.0	89.	4	33.	19	169.0	9999.0	38.0	9999.0	5.030	30	99.99	2.26	1		
MARANEC	5540	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	7.220	30	4.23	4.32	1		
MIAMI	5855	3	58.8	29	-1.3	85.	21	33.	19	196.0	10.0	15.0	-24.0	4.720	30	1.00	1.79	2		
NOWATA	6485	3	58.0	30	-1.9	87.	21	35.	19	234.0	40.0	23.0	-10.0	5.020	30	1.52	2.00	1		
ONETA	6713	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.793	30	99.99	.98	1		
PAWUSKA	6935	3	58.6	29	-1.9	88.	21	34.	19	213.5	35.5	29.0	-14.0	7.522	29	4.45	3.26	1		
PAWUSKA 2	6937	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	7.380	30	99.99	3.45	1		
PANNEE	6940	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.330	30	2.36	2.37	1		
FRYOR	7309	3	56.4	29	-3.6	85.	22	33.	20	260.0	64.0	10.0	-36.0	5.640	30	1.74	1.61	2		
QUAPAW	7358	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.690	30	-3.29	.31	25		
RALSTON	7390	3	60.0	30	999.0	89.	4	34.	19	180.0	9999.0	30.5	9999.0	7.221	30	4.25	3.80	1		
RAMONA	7394	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.020	30	99.99	2.65	2		
SKIATOOK	8258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.750	30	.28	1.56	1		
SPAVINAW	8380	3	59.5	30	999.0	84.	23	36.	19	190.5	9999.0	24.0	9999.0	5.143	30	1.06	1.94	2		
TULSA	8992	3	60.1	30	-.8	87.	22	37.	19	185.0	17.0	37.0	-8.0	3.382	30	-.77	1.60	1		
UPPER SPAVINAW	9101	3	61.4	29	999.0	94.	20	35.	19	134.0	9999.0	29.5	9999.0	3.822	30	99.99	1.58	2		
VINITA	9203	3	57.2	30	-2.5	84.	21	32.	19	247.5	58.5	14.5	-15.5	4.430	30	.36	1.11	18		
WAGONER	9247	3	60.4	30	-1.2	85.	22	35.	19	176.0	26.0	37.0	-11.0	3.170	30	-1.50	1.72	2		
WANN	9298	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	8.670	30	99.99	3.44	1		
WYNONA	9792	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.413	30	99.99	1.30	17		

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	DIV	DEV				HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY								
CANTON DAM	1445	4	54.7	29	-5.4	84.	4	31.	11	306.0	114.0	6.5	-38.5	4.441	30	2.15	1.39	25	
CHEYENNE	1738	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.601	30	99.99	.75	25	
CLINTON	1909	4	57.5	30	-3.1	88.	4	33.	19	232.5	53.5	6.0	-41.0	3.830	30	1.44	1.45	1	
COLONY	2039	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.940	30	99.99	1.37	1	
CORDELL	2125	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.431	30	2.24	1.32	18	
ELK CITY	2849	4	57.6	30	999.0	88.	4	34.	12	232.5	9999.0	11.5	9999.0	5.882	30	3.67	1.86	30	
ERICK	2944	4	57.0	30	-3.4	89.	4	30.	12	245.0	67.0	6.5	-33.5	3.801	30	1.60	1.47	18	
GEARY	3497	4	55.6	30	-5.1	85.	4	33.	19	282.5	110.5	0.0	-43.0	5.540	30	3.08	2.10	1	
HAMMON	3871	4	53.1	29	-7.2	88.	4	24.	12	345.5	162.5	1.0	-41.0	3.800	30	1.58	1.10	1	
LEEDEY	5090	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.920	30	1.42	1.72	1	
MACKIE	5463	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.350	30	99.99	.87	25	
MORAVIA	6035	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.790	30	3.70	1.51	25	
OKEENE	6629	4	57.4	30	-3.6	85.	4	34.	19	239.5	71.5	11.0	-37.0	5.120	30	2.79	1.70	1	
RETROP	7565	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.050	30	99.99	1.75	30	
REYDON	7579	4	57.8	30	999.0	90.	4	30.	12	236.5	9999.0	22.0	9999.0	3.430	30	1.16	1.24	17	
SAYRE	7952	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.120	30	3.07	1.56	30	
SWEETWATER	8652	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.660	30	99.99	1.62	17	
TALOGA	8708	4	55.8	30	-3.5	85.	4	29.	11	279.0	78.0	3.5	-26.5	2.690	30	.25	.85	30	
VICI	9172	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.890	30	99.99	1.12	25	
WATONGA	9364	4	57.2	30	999.0	85.	4	31.	19	255.0	9999.0	20.0	9999.0	4.991	30	2.57	1.38	1	
WEATHERFORD	9422	4	56.4	29	-4.4	86.	4	33.	19	257.5	89.5	8.0	-34.0	4.451	30	2.22	1.15	2	

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001



APRIL 1988 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	DIV	DEV				HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	DEV							
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP					MIN DAY	TEMP DAY	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY	
AMBER	200	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.290	30	99.99	1.72	1
ARCADIA	288	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.521	30	99.99	1.50	1
TINKER AFB	325	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.891	28	99.99	1.08	18
BLANCHARD	830	5	60.5	30	999.0	86.	20	33.	19	171.5	9999.0	38.0	9999.0	4.653	30	99.99	2.18	1
BRISTOW	1144	5	59.9	30	-2.0	87.	4	31.	19	185.5	29.5	32.5	-30.5	2.981	30	-5.7	1.57	1
CHANDLER	1684	5	60.4	30	-1.6	86.	5	33.	19	182.0	41.0	44.0	-7.0	5.350	30	2.13	3.30	1
CHICKASHA	1750	5	57.6	30	-4.7	85.	20	32.	19	233.0	91.0	10.0	-51.0	4.450	30	1.61	1.70	1
COX CITY	2196	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.000	30	99.99	.45	29
CRESCENT	2242	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.470	30	99.99	1.05	1
CUSHING	2318	5	58.5	29	-1.9	86.	21	38.	20	207.0	38.0	18.0	-13.0	4.220	30	1.04	1.95	1
EL RENO	2818	5	58.9	28	-1.6	86.	20	31.	19	200.5	22.5	29.0	-14.0	5.780	30	3.20	2.00	1
GUTHRIE	3821	5	61.0	30	-2	86.	7	34.	19	165.5	1.5	46.0	-4.0	4.760	30	2.16	2.00	1
HENNESSEY	4055	5	56.9	30	-3.3	81.	4	34.	11	254.5	70.5	11.5	-28.5	6.550	30	4.17	2.12	1
INGALLS	4489	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.270	30	99.99	2.10	1
KINGFISHER	4861	5	57.8	30	-3.0	86.	4	33.	19	232.0	58.0	16.5	-31.5	6.510	30	4.09	2.57	1
KONAWA	4915	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.600	30	.48	2.39	1
MARSHALL	5589	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.580	30	4.20	2.56	1
MEEKER	5779	5	59.7	29	-1.6	86.	5	33.	19	191.0	33.0	36.0	-11.0	1.601	30	-1.96	.63	10
MULHALL	6110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.960	30	99.99	1.64	1
NORMAN	6386	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.200	30	1.90	2.16	1
OILTON	6616	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.260	30	99.99	3.28	1
OKEMAH	6638	5	60.4	30	-1.4	85.	21	36.	19	169.5	33.5	30.5	-9.5	4.890	30	.71	2.83	1
OKLAHOMA CITY	6661	5	61.0	30	.8	86.	23	33.	19	165.0	-19.0	46.0	6.0	3.050	29	.14	.90	18
PERKINS	7003	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.070	30	2.43	2.20	1
PIEDMONT	7060	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.820	30	99.99	1.74	1
PRAGUE	7264	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.133	30	-1.74	.98	2
PURCELL	7327	5	60.1	30	-1.6	87.	5	31.	19	178.0	24.0	31.5	-23.5	7.621	30	4.25	5.20	1
SEMINOLE	8042	5	61.9	30	-1.3	89.	4	33.	19	141.5	9.5	48.0	-30.0	3.530	30	-5.6	1.98	1
SHAWNEE	8110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.601	30	1.73	3.30	1
STELLA	8479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.870	30	99.99	4.96	1
STILLWATER	8501	5	56.3	29	-4.1	87.	4	32.	19	260.5	77.5	9.5	-35.5	4.192	30	1.61	1.75	1
STROUD	8563	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.663	30	99.99	2.55	1
TECUMSEH	8751	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.064	30	99.99	2.40	1
THOMAS	8815	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.450	30	99.99	1.20	1
TROUSDALE	8960	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.990	30	99.99	1.98	1
UNION CITY	9086	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.030	30	2.70	2.15	1
WELTY	9479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.030	30	99.99	1.80	1
WEWOKA	9575	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.370	30	-4.0	1.71	1

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	DIV	DEV				HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	TEMP DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	FROM NORM	MAX 24-HR			DAY	
ASHLAND	364	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.211	30	99.99	.77	18
BEGGS	631	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.930	30	99.99	1.20	1
BOYNTON	1027	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.540	30	99.99	1.10	2
CALVIN	1391	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.160	30	-1.27	1.42	1
CHECOTAH	1711	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.543	30	-2.05	.67	18
DEWAR	2485	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.421	30	-.86	2.30	1
DUSTIN	2690	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.540	30	99.99	1.95	1
EUFALA	2993	6	61.6	30	999.0	86.	22	35.	19	139.0	9999.0	37.5	9999.0	2.360	30	-2.32	.90	18
HANNA	3884	6	60.6	30	999.0	85.	22	32.	19	164.5	9999.0	33.0	9999.0	2.873	30	-1.57	.75	1
HARTSHORNE	3946	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.011	30	99.99	1.41	18
HASKELL	3956	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.780	30	-1.33	.90	6
HOLDENVILLE	4235	6	60.7	30	-1.5	87.	4	31.	19	163.5	32.5	33.5	-13.5	3.061	30	-1.31	1.16	1
LAKE EUFALA	4975	6	59.7	29	999.0	87.	4	31.	19	172.5	9999.0	18.5	9999.0	2.630	30	99.99	.86	18
LYONS	5437	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.160	30	.43	1.78	1
MCCURTAIN	5693	6	61.5	30	999.0	87.	22	34.	19	143.0	9999.0	39.5	9999.0	3.812	30	-.96	1.50	2
MUSKOGEE	6130	6	61.5	30	-.5	88.	22	33.	19	147.5	9.5	43.0	-5.0	2.220	30	-2.36	.59	5
OKMULGEE	6670	6	59.4	30	-2.9	87.	4	33.	19	195.0	64.0	26.0	-24.0	2.973	30	-1.55	1.40	1
OKTAHA	6678	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.630	30	99.99	.56	18
QUINTON	7372	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.231	30	-2.10	.99	17
SALLISAW	7862	6	60.0	30	-2.2	87.	22	32.	19	175.0	45.0	24.5	-21.5	2.212	30	-2.26	1.15	2
SCIPIO	7979	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.400	30	99.99	.75	18
SCRAPER	7993	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.920	30	99.99	.92	2
SHORT	8170	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.701	30	99.99	1.73	2
STILWELL	8506	6	59.0	30	999.0	84.	22	30.	19	204.5	9999.0	23.5	9999.0	3.464	30	-1.25	1.02	2
TAHQEQUAH	8677	6	58.3	30	-2.8	85.	22	28.	19	220.0	57.0	20.0	-26.0	2.921	30	-1.64	.78	2
WEBBERS FALLS	9445	6	58.2	29	-2.4	86.	22	33.	20	210.5	39.5	13.0	-26.0	2.961	30	-1.64	.76	18
WESTVILLE	9523	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.020	30	99.99	.79	2
WETUMKA	9571	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.683	30	-1.69	1.25	1

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	DIV	DEV							HEAT				COOL				DEV			
			MEAN	NUM	FROM	MAX	MIN	DAY	TEMP	DAY	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY	
ALTUS IRR STA	179	7	60.6	29	-2.7	93.	3	31.	11	140.5	16.5	12.5	-60.5	2.190	30	.16	.82	18			
ALTUS DAM	184	7	58.1	29	999.0	90.	4	34.	13	212.0	9999.0	11.5	9999.0	5.560	30	3.58	2.50	30			
ANADARKO	224	7	57.7	26	-4.3	86.	20	29.	19	204.5	62.5	14.5	-37.5	5.560	26	2.97	2.09	1			
APACHE	260	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.710	30	99.99	2.34	1			
ALTUS AFB	447	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.341	29	99.99	1.06	18			
CARNEGIE	1504	7	59.2	30	-2.6	88.	20	31.	19	201.5	51.5	27.5	-26.5	6.610	30	4.19	2.54	1			
CHATTANOOGA	1706	7	60.2	30	-2.6	87.	4	32.	19	164.0	35.0	20.5	-42.5	2.720	30	.24	.97	1			
DUNCAN	2668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.370	30	99.99	1.22	1			
FREDERICK	3353	7	60.2	29	-4.2	91.	4	34.	11	156.5	51.5	18.0	-69.0	3.040	30	.72	1.13	17			
GRANDFIELD	3709	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.650	30	.23	.85	17			
HOBART	4204	7	57.7	30	-2.6	89.	21	31.	11	236.5	56.5	18.0	-21.0	3.540	30	1.30	1.46	18			
HOLLIS	4249	7	59.1	28	-4.1	92.	4	30.	19	174.0	52.0	9.5	-58.5	3.200	29	1.00	1.70	16			
LANTON	5063	7	58.9	29	-3.8	90.	3	33.	18	183.0	56.0	6.5	-51.5	1.882	30	-.53	1.00	17			
FT SILL	5068	7	58.9	29	999.0	90.	3	34.	19	184.0	9999.0	8.5	9999.0	2.220	30	-.19	.93	17			
LOCO	5247	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.650	30	99.99	1.13	18			
LOOKEBA	5329	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.050	30	99.99	2.00	1			
MANGUM	5509	7	61.5	30	-1.2	95.	0	34.	11	142.5	2.5	37.0	-34.0	4.240	30	2.35	1.42	17			
RANDLETT	7403	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.142	30	99.99	1.46	17			
ROOSEVELT	7727	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.740	30	2.49	2.00	1			
SEDAN	8016	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.732	30	99.99	1.68	1			
SNYDER	8299	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.872	30	.82	1.56	1			
VINSON	9212	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.920	30	.85	1.24	18			
WALTERS	9278	7	61.7	30	-1.8	91.	4	34.	11	131.0	7.0	33.5	-48.5	1.860	30	-.97	1.36	17			
WICHITA MT REF	9629	7	59.0	29	-2.8	90.	4	28.	19	192.5	44.5	19.5	-32.5	4.040	30	1.59	2.10	1			
WILLOW	9668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.680	30	99.99	1.46	18			

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

NAME	ID	DIV	DEV							HEAT				COOL				DEV			
			MEAN	NUM	FROM	MAX	MIN	DAY	TEMP	DAY	DEG	FROM	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR	DAY	
ADA	17	8	60.9	30	-1.6	87.	4	33.	19	148.5	17.5	26.5	-29.5	1.800	30	-1.97	.86	2			
ALLEN	147	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.510	30	99.99	.90	18			
ARDMORE	292	8	62.7	29	-2.5	89.	4	37.	19	111.5	30.5	45.5	-41.5	1.671	29	-2.20	.72	17			
ATOKA DAM	394	8	60.9	29	999.0	87.	4	38.	19	142.5	9999.0	23.5	9999.0	2.600	30	99.99	1.50	18			
BOKCHITO	917	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.000	30	99.99	2.00	18			
CANEY	1437	8	61.7	29	999.0	85.	3	40.	19	121.0	9999.0	25.0	9999.0	1.410	30	99.99	.75	18			
CENTRAHOMA	1684	8	999.0	0	-62.0	999.	0	999.	0	999.0	-141.0	999.0	-51.0	1.410	30	-1.81	.55	17			
CHICKASAW	1745	8	59.4	29	999.0	88.	4	30.	19	183.0	9999.0	20.5	9999.0	1.960	30	99.99	.83	18			
COLEMAN	2011	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.941	30	99.99	.94	18			
COMANCHE	2054	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.450	30	99.99	1.98	1			
DAISY	2354	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.432	30	-3.00	.82	18			
DUNCAN	2660	8	60.2	29	-3.5	89.	4	34.	19	155.0	43.0	16.5	-56.5	4.620	30	1.91	1.72	1			
DURANT	2678	8	59.2	29	999.0	84.	22	32.	19	180.0	9999.0	11.5	9999.0	2.190	30	-2.35	1.13	18			
ELMORE CITY	2872	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.253	30	99.99	.85	17			
FARRIS	3083	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.540	30	99.99	.95	18			
GRADY	3688	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.200	30	99.99	1.04	17			
HEALDTON	4001	8	61.5	30	999.0	90.	4	30.	19	141.5	9999.0	37.0	9999.0	2.270	30	-1.18	.89	18			
HENNEPIN	4052	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.170	30	99.99	1.20	30			
KINGSTON	4865	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.300	30	-2.80	1.15	18			
LEHIGH	5108	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.274	30	99.99	.98	18			
LINDSAY	5216	8	60.1	30	999.0	85.	4	32.	19	176.5	9999.0	30.5	9999.0	4.490	30	1.18	3.78	1			
MADILL	5468	8	62.2	30	-1.2	89.	5	34.	19	126.5	19.5	44.0	-18.0	1.870	30	-2.64	.73	1			
MARIETTA	5563	8	63.6	30	.1	89.	5	34.	19	102.5	-7.5	60.0	-5.0	1.350	30	-2.45	.62	18			
MARLOW	5581	8	60.5	30	999.0	88.	5	29.	19	165.5	9999.0	29.0	9999.0	5.270	30	2.59	1.58	1			
MCGEE CREEK	5713	8	60.8	29	999.0	87.	4	32.	21	139.0	9999.0	18.5	9999.0	1.640	30	99.99	.85	18			
PAULS VALLEY	6926	8	60.9	29	-2.4	89.	4	31.	19	156.0	38.0	36.0	-31.0	2.400	30	-1.10	.82	18			
PONTOTOC	7214	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.200	30	-2.89	.55	18			
TISHOMINGO	8884	8	61.7	24	999.0	89.	4	31.	19	113.0	9999.0	33.0	9999.0	1.551	27	-3.06	.71	1			
TUSSY	9032	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.401	30	99.99	1.78	1			
WAURIKA	9395	8	62.5	30	-2.0	92.	5	32.	19	112.0	8.0	38.5	-50.5	2.740	30	-.22	1.28	17			
WAURIKA DAM	9399	8	60.7	27	999.0	91.	4	34.	19	130.5	9999.0	15.5	9999.0	3.800	30	99.99	1.69	18			

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 SUMMARY FOR SOUTHEAST DIVISION (CD9)

NAME	ID	DIV	DEV					HEAT		DEV		COOL		DEV		DEV		
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY	
ANTLERS	256	9	62.4	29	-2	86.	22	37.	19	97.5	-23.5	23.5	-25.5	1.440	30	-3.67	1.12	17
BATTIEST	567	9	60.0	30	999.0	87.	23	34.	11	165.5	9999.0	16.0	9999.0	4.500	30	99.99	1.95	18
BEAR MT TOWER	584	9	62.9	21	999.0	87.	7	36.	19	63.0	9999.0	19.0	9999.0	3.310	25	-1.79	1.67	2
BENGAL	670	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.011	30	99.99	1.89	2
BOSWELL	980	9	61.8	30	999.0	87.	22	34.	19	129.5	9999.0	33.5	9999.0	2.585	30	-1.99	1.42	18
BROKEN BOW	1162	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.390	30	-2.94	1.59	17
BKN BOW DAM	1168	9	60.3	29	999.0	92.	22	33.	11	146.0	9999.0	10.5	9999.0	2.390	30	99.99	1.59	17
CARNASAW TW	1499	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.470	30	-3.01	1.25	18
CARTER TW	1544	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.410	29	.15	3.09	2
FANSHAW	3065	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.161	30	-.84	1.82	2
HEAVENER	4008	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.030	30	.10	1.78	18
HEE MT TW	4017	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.850	30	99.99	1.85	18
HUGO	4384	9	62.5	30	-1.5	86.	22	36.	19	102.5	0.5	29.0	-38.0	3.441	30	-1.20	1.57	18
IDABEL	4451	9	61.2	29	-2.0	87.	23	37.	11	126.5	18.5	16.0	-38.0	1.760	30	-3.64	1.39	18
POTEAU	7254	9	58.5	29	999.0	88.	21	32.	18	196.5	9999.0	8.0	9999.0	4.900	30	99.99	1.94	1
SPIRO	8416	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.840	30	.22	2.75	2
TUSKAHOMA	9023	9	61.1	30	999.0	87.	22	31.	19	154.0	9999.0	37.0	9999.0	3.701	30	99.99	1.80	18
VALLIANT	9118	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.710	30	-1.29	1.65	2

NOTE: 999.0, 9999.0, 99.99 indicates missing data TRACE = .001

APRIL 1988 CLIMATE DIVISION SUMMARY

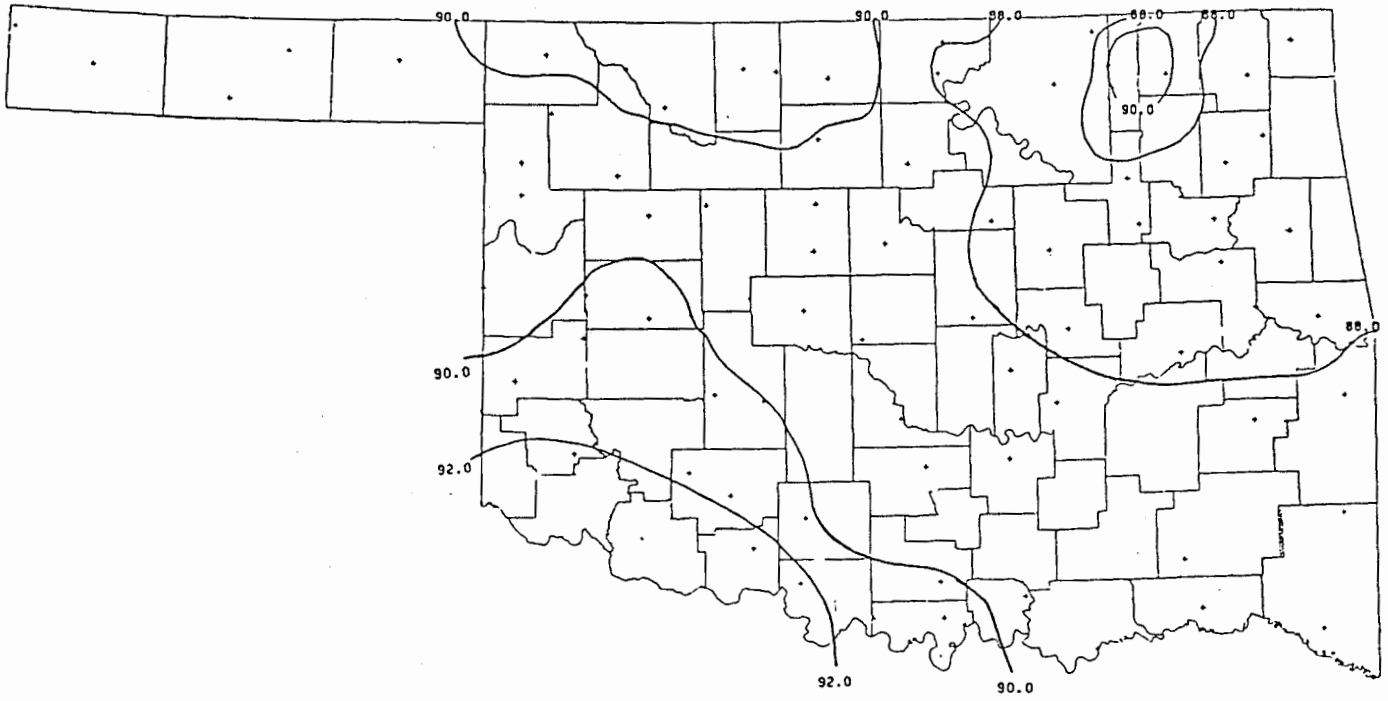
CLIMATE	DIV	DEV					HEAT		DEV		COOL		DEV		DEV	
		MEAN TEMP	NUM STA	FROM NORM	MAX TEMP	MIN DAY	DEGREE DAYS	FROM NORM	DEGREE DAYS	FROM NORM	DEGREE DAYS	TOT PPT	NUM STA	FROM NORM	MAX 24-HR	DAY
1	52.7	11	-3.9	89.0	4	23.0	11	358.4	88.8	2.0	-15.3	3.13	15	1.64	1.60	18
2	56.3	15	-3.3	88.0	4	28.0	11	268.9	69.6	12.2	-24.5	5.41	24	2.86	3.85	1
3	59.0	19	-1.3	94.0	20	32.0	19	201.0	20.1	24.8	-14.8	4.94	35	1.37	4.32	1
4	56.4	11	-4.0	90.0	4	24.0	12	264.7	84.6	8.7	-33.4	4.23	21	1.94	2.10	1
5	59.4	15	-1.9	89.0	4	31.0	19	195.8	34.7	29.8	-19.6	4.51	38	1.29	5.20	1
6	60.0	11	-1.7	88.0	22	28.0	19	175.9	31.9	28.4	-17.6	2.91	28	-1.60	2.30	1
7	59.6	12	-3.0	95.0	8	28.0	19	176.5	41.0	18.5	-45.0	3.40	25	1.10	2.54	1
8	61.1	16	-2.4	92.0	5	29.0	19	143.2	30.2	29.9	-38.9	2.38	31	-1.40	3.78	1
9	61.0	8	-2.3	92.0	22	31.0	19	139.7	32.1	21.7	-35.0	3.56	17	-1.48	3.09	2



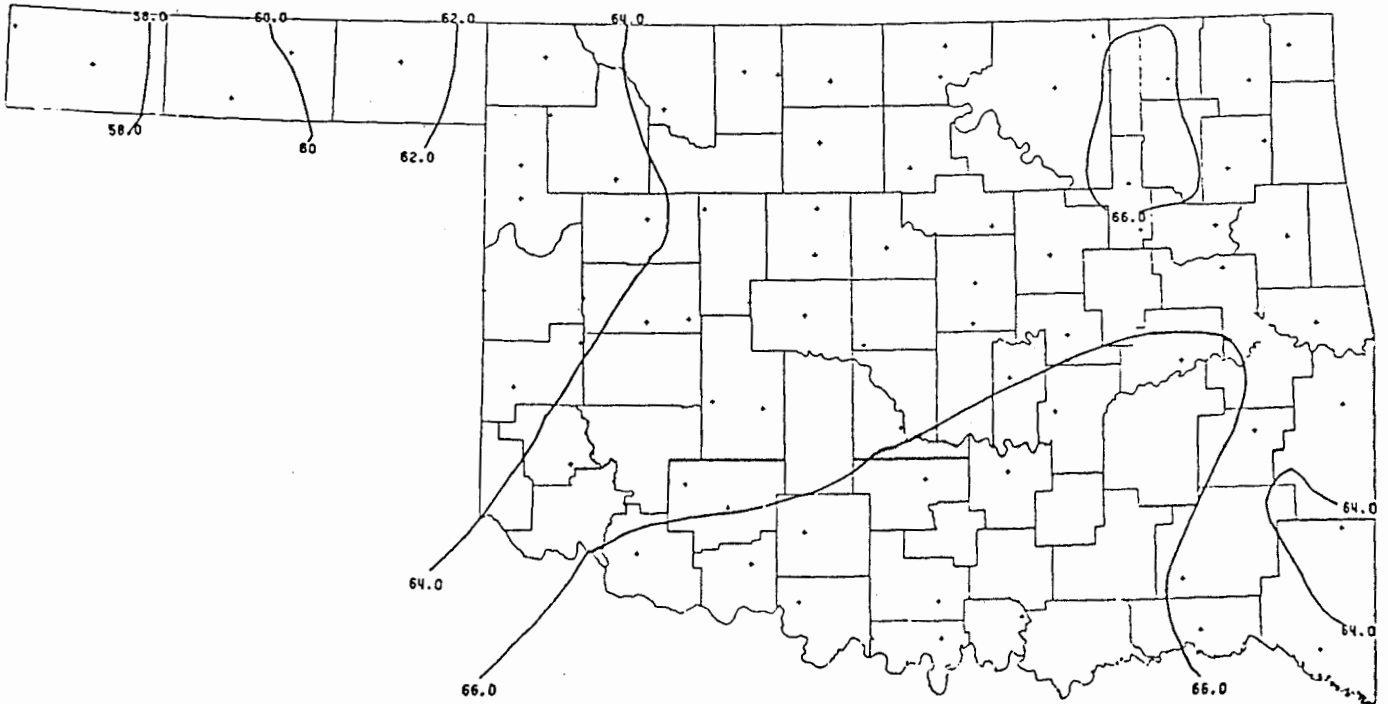




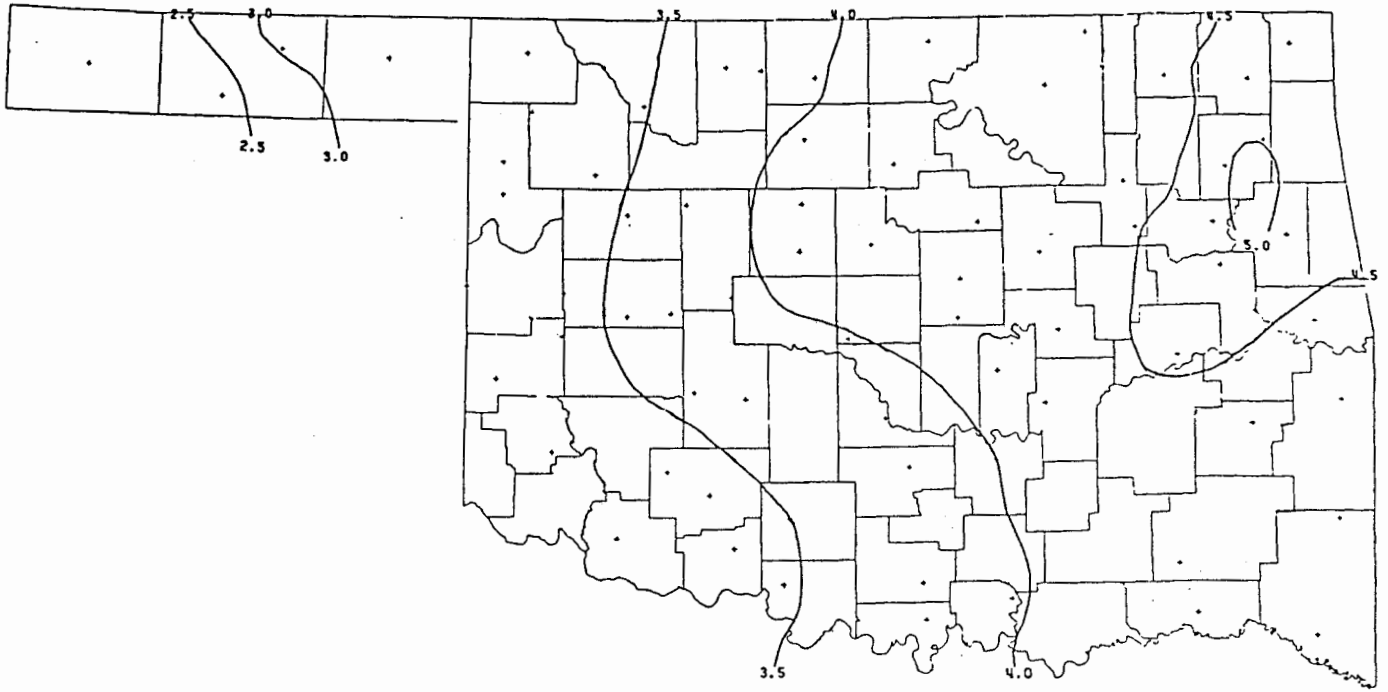




30-YEAR MEAN JUNE DAILY MAXIMUM TEMPERATURE

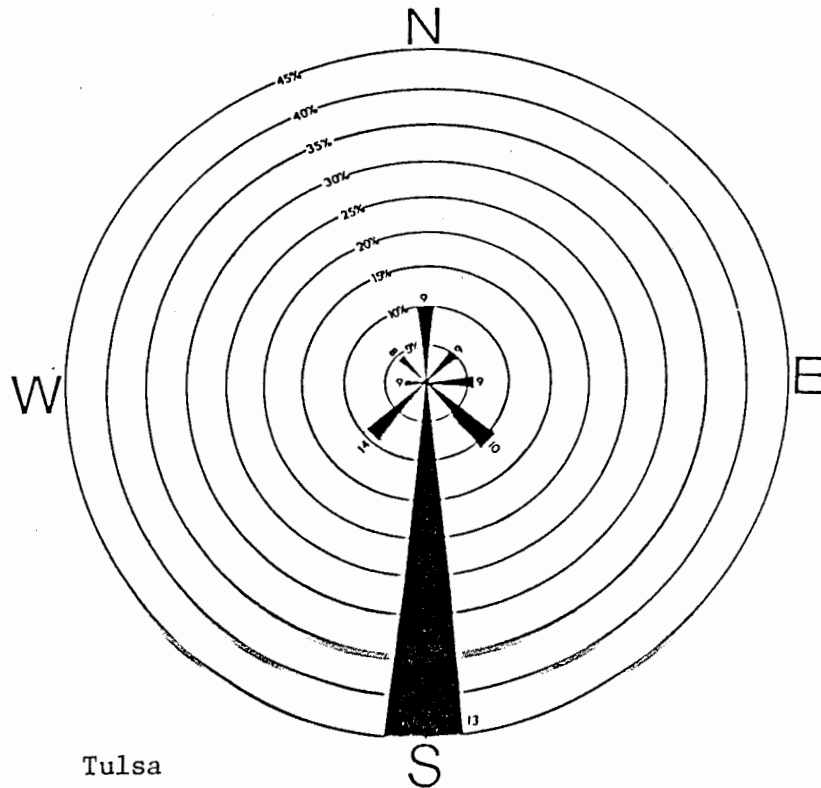
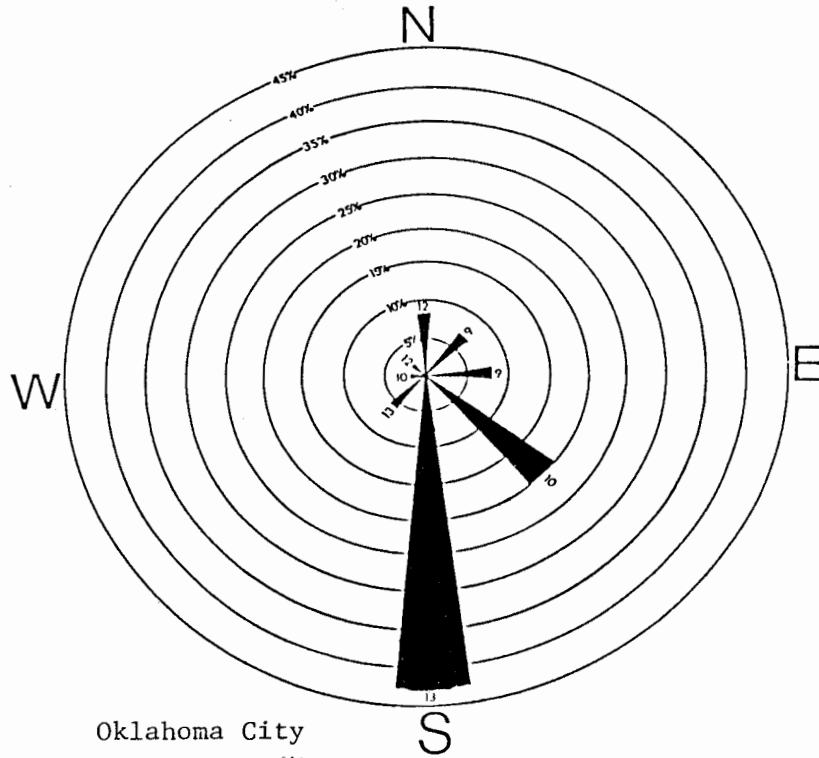


30-YEAR MEAN JUNE DAILY MINIMUM TEMPERATURE



30-YEAR MEAN JUNE PRECIPITATION

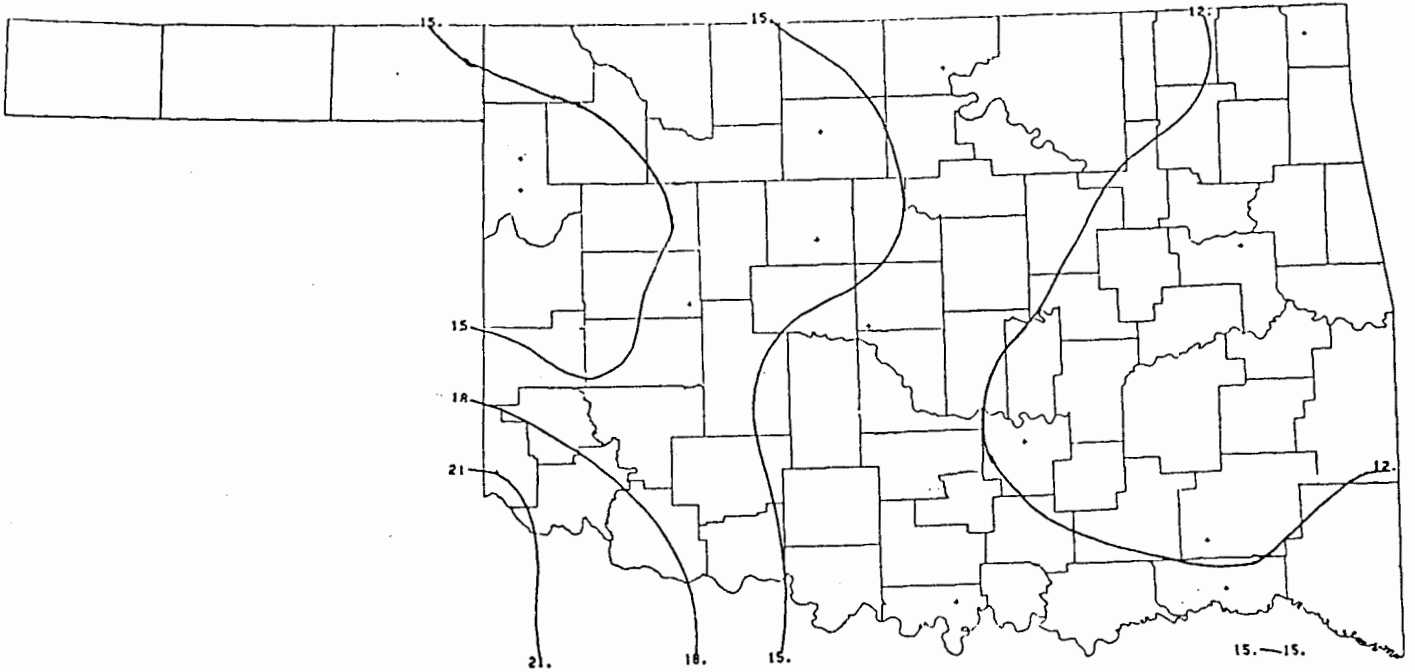
June wind roses for Oklahoma City and Tulsa for 10-year (1965-1974) mean winds (data adapted from NOAA Airport Climatology Series). Percents represent the percentage of winds coming from a direction. The numbers at the end of the bars indicate the average speed of winds from that direction. Graphics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



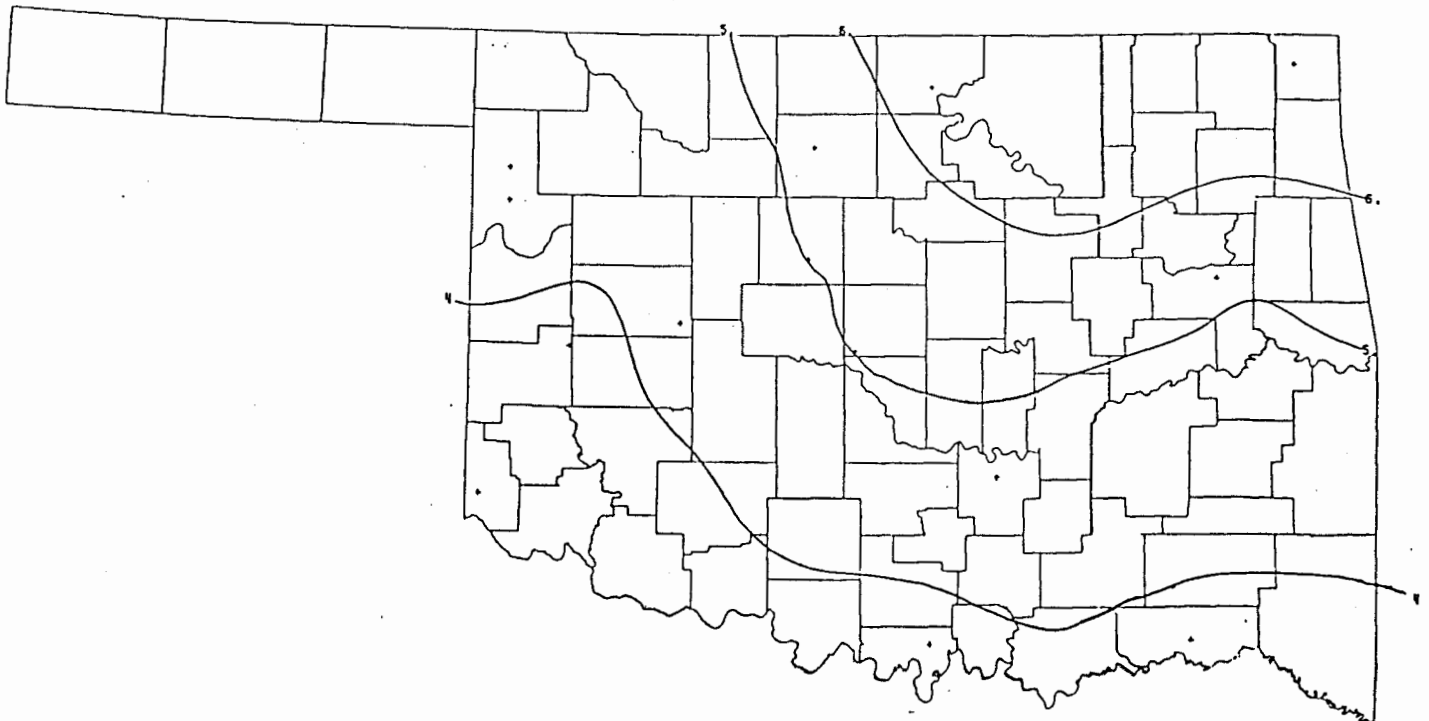
### JUNE: SUMMER BEGINS IN OKLAHOMA

Summer officially begins with the summer solstice on June 22nd. The hot, relatively humid weather associated with Oklahoma summers is normally well entrenched in the State by the end of the month. The transition from spring into summer begins in the southwest and migrates across the State to the northeast. Temperatures begin to rise and the day-to-day variations associated with spring lessen. By the end of the month, high temperatures in the 90's normally have become the rule rather than the exception. Rainfall patterns also change as the rapidly moving systems which produce the violent spring thunderstorms give way to summer's more subtle rain-producing situations. Summer thunderstorms tend to be more isolated and less violent than those of spring, but they also produce less rain.

The maps on the following page depict Statewide average number of days with high temperatures over 90F degrees and the average number of days that precipitation exceeds .1 inch. Southwestern Oklahoma tends to be fully entrenched in summer throughout the month. High temperatures in southern and southeastern portions lag behind those of the southwest, largely because those regions tend to retain a higher humidity which slows the daily heating process. The slightly cooler northeast normally receives more frequent rainfall during the month as it is closer to the average storm track which in June passes through the Central Plains into southern Missouri.



LONG TERM MEAN NUMBER OF DAYS IN JUNE WITH MAXIMUM TEMPERATURE GREATER THAN OR EQUAL TO 90 DEGREES F.



LONG TERM MEAN NUMBER OF DAYS IN JUNE WITH AT LEAST .10" OF PRECIPITATION.