

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 JUNE 1988

Few rain days and mostly scattered thunderstorms resulted in June rainfall totals which ranged from 96% (CD-1) to less than 25% (CD-3) of normal. The most extreme drought conditions in the State intensified as CD-9 received only 44% of its average June precipitation (see Current Drought Conditions discussion). Above normal temperatures in the east aggravated the drought problem. Elsewhere, June mean temperatures were near normal.

A surface front supported by an upper level low pressure area did manage to produce some strong thunderstorms in various sections of the State on June 2nd. The National Weather Service included 58 counties in severe thunderstorm watches. Vigorous storms in southeastern Oklahoma produced golfball-size hail at Idabel and Hugo and winds which uprooted trees in McCurtain County. Both Hugo and Boswell recorded over an inch of rain. Hail was also reported in central Oklahoma and in the Stillwater area.

Oklahoma experienced record-breaking high temperatures on the 8th of June. Air was warmed as it subsided in a high pressure system centered over Oklahoma resulting in 100 degree temperatures in all but the southeastern one-third of the State. Oklahoma City's reading of 100 degrees broke its 1911 record by 1 degree. The 115 degree high temperature recorded at Altus Air Force Base was the highest in the nation for that day. Other triple-digit temperatures included Hobart 111, Snyder 107, Ponca City 106, Gage 105, Enid 102, and Guymon 101 degrees. A cold front brought relief overnight and many maximum temperatures on the 9th were 15-20 degrees lower than those of the 8th.

The dry weather experienced earlier in the year continued into the middle of June as high pressure over the eastern one-half of the United States deterred storm systems from entering Oklahoma for nearly

three weeks. Many stations recorded no rainfall between the 5th and the 24th, and only 7 stations reported more than one inch accumulation. Oklahoma's long-term June precipitation average is 3 to 4.5 inches, west to east. According to Roger Davis, Director of the State Department of Agriculture, these extremely dry conditions contributed to a record 169 grass and forest fires which consumed 2579 acres, nearly 3 times the previous record acreage lost. Some crops also suffered from the dry weather. Planting of non-irrigated cotton in the southwest was delayed. Where planted, the cotton crop rated only fair to poor. Corn, sorghum, and peanut crop conditions were rated good but deteriorating.

Some relief arrived as an upper level low, combined with a weak surface front, produced scattered thunderstorms on June 26-29. All but a few eastern stations (and Orienta, in CD-2) recorded precipitation during the period. On June 26, strong winds during a thunderstorm in Sallisaw blew debris from the race track, injuring a spectator. Winds of nearly 80 mph damaged four Stillwater buildings. McClain, Oklahoma, Payne, Logan, and Lincoln Counties received hail. On June 28, strong thunderstorms produced 3 inches of rain, causing street flooding in Enid, and prompting a flash flood watch for most of western and central Oklahoma.

TABLE OF 1987/1988 COMPARISONS

Station	June Temperatures (F)		June Precipitation (in.)	
	1987	1988	1987	1988
Arnett	75.0	76.2	6.460	4.912
Enid	78.7	80.1	4.220	2.470
Mutual	75.8	76.9	3.041	2.520
Tulsa	79.3	79.8	3.120	.584
Elk City	75.3	77.5	2.513	.583
Oklahoma City	77.6	78.5	6.642	4.072
McAlester	77.6	79.0	4.802	.394
Altus Irr.Sta.	78.6	79.3	5.490	3.540
Durant	77.4	*	7.720	*
Ada	77.2	78.9	2.210	1.642
Antlers	76.7	78.1	3.700	4.540

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Vinita	3	41	10
Maximum temperature (F)	Weatherford	4	112	8
Maximum 24-hour precipitation	Vance AFB	2	3.24"	1

### Current Oklahoma Drought Conditions

Figure 1 contains weekly Palmer Drought Index (PDI) values for each Oklahoma Climate Division, February through June, 1988. The downward trend in the drought severity index noted in the May monthly summary has persisted through June. Although numerous convective days were reported throughout June, rainfall tended to be isolated and locally heavy. This has resulted in moisture improvements at specific locations, but regional moisture conditions have continued to deteriorate throughout the month.

As of 2 July, seven of nine climate divisions (more than two-thirds of the State) are experiencing some level of drought (Figure 2). West central and southwestern Oklahoma are experiencing moderate drought conditions. Northeastern, central, east central and south central portions of the State are experiencing moderate drought. Southeastern Oklahoma is suffering under severe drought conditions. Table 1 contains a regional summary of PDI values, their historical ranks and the precipitation needed to end existing drought conditions.

Table 1. Regional summary of current drought conditions  
(dashes indicate drought conditions do not exist at this time).

Region	* PDI ( 2 July, 1988)	** PDI rank (30 June, 1988)	inches of precip needed to end drought (30 June, 1988)
Panhandle	-	-	-
North Central	-	-	-
Northeast	-2.89	7	11.00
West Central	-1.55	20	3.33
Central	-2.07	11	7.16
East Central	-2.36	6	9.01
Southwest	-1.41	17	2.83
South Central	-2.43	9	7.86
Southwest	-3.39	** 4	14.85

\* PDI - Palmer Drought Index (Source: Climate Analysis Center, Washington, D.C.)

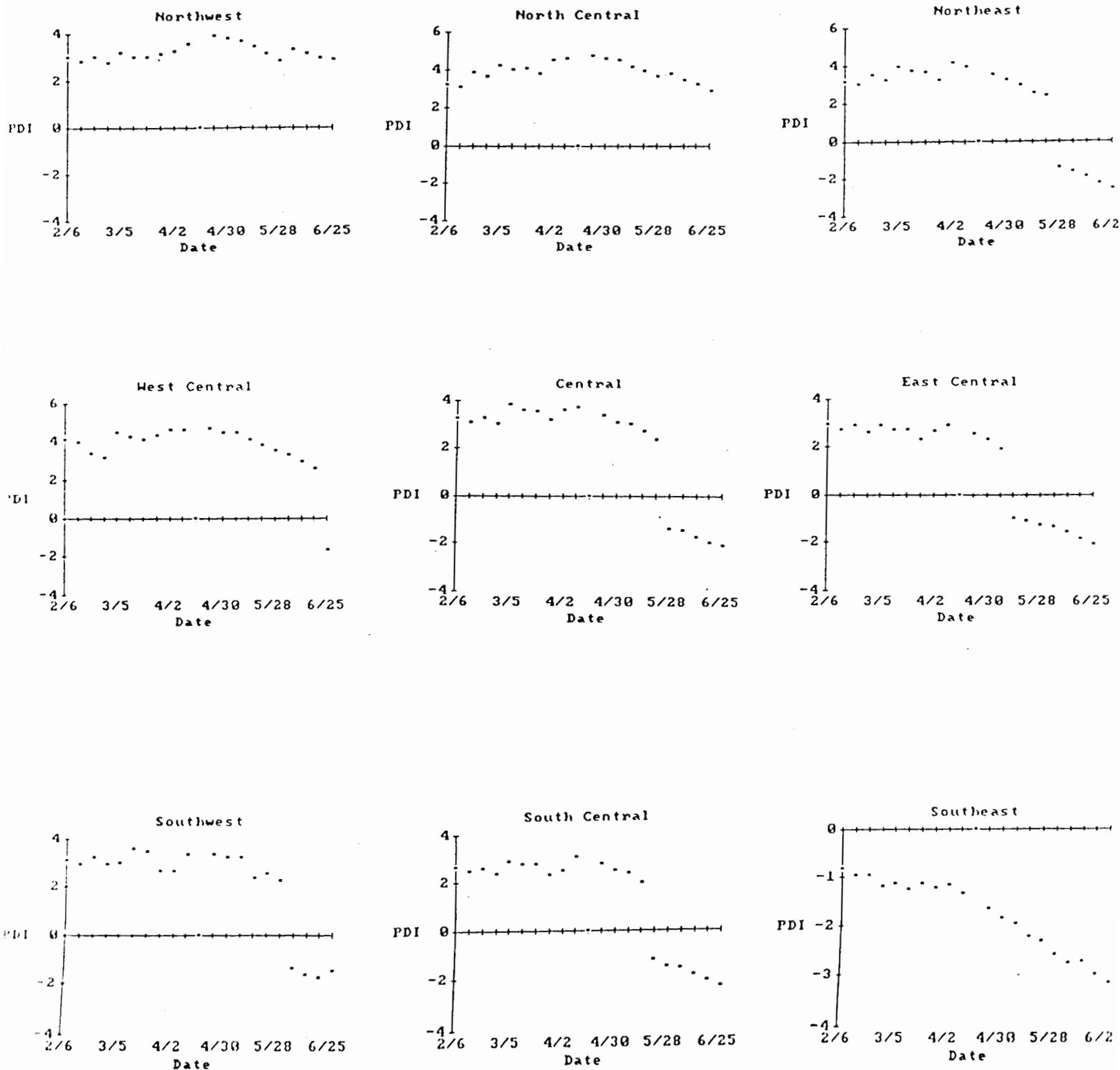
\*\* The ranks are based on monthly PDI values compiled by the National Climatic Data Center (NCDC) since 1931.  
A rank of 9, for instance, indicates that the June, 1988 PDI value has been lower (more severe) in only 8 previous years.

\* Preliminary figures, subject to change as more data become available.

\*\* This June, 1988 PDI value has been exceeded (lower) by June conditions during 1936, 1956 and 1964.

Figure 1

The Palmer Drought Index (PDI) is a meteorological drought index that classifies "spells" or "runs" of weather. In general, the index is a measure of the moisture abnormality. The longer the spell of dry (wet) weather, the lower (higher) the index. Values of 0 to -0.5 are considered near normal, -0.5 to -1.0 an incipient drought, -1.0 to -2.0 a mild drought, -2.0 to -3.0 a moderate drought, -3.0 to -4.0 a severe drought, and -4.0 or below an extreme drought. Corresponding categories of moisture excess relate to positive values.



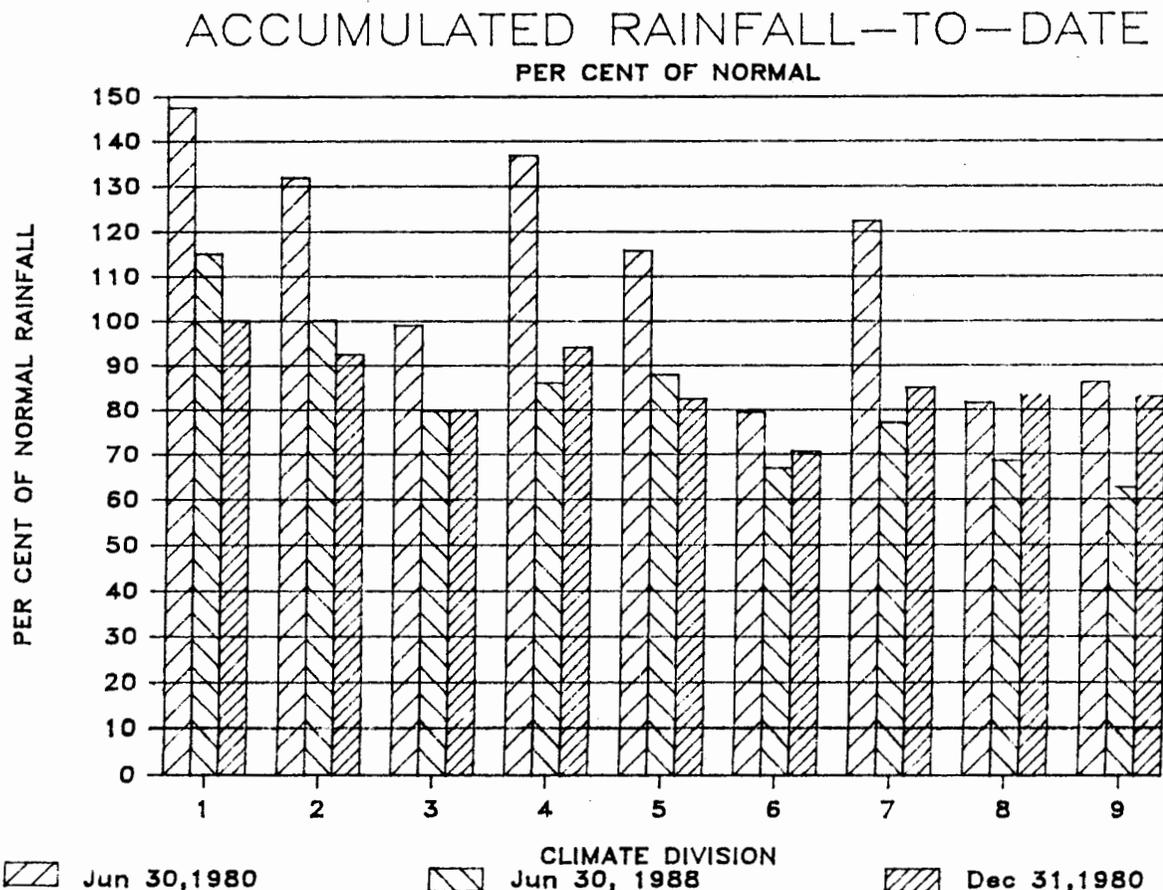


### TWO DRY YEARS: 1980 AND 1988

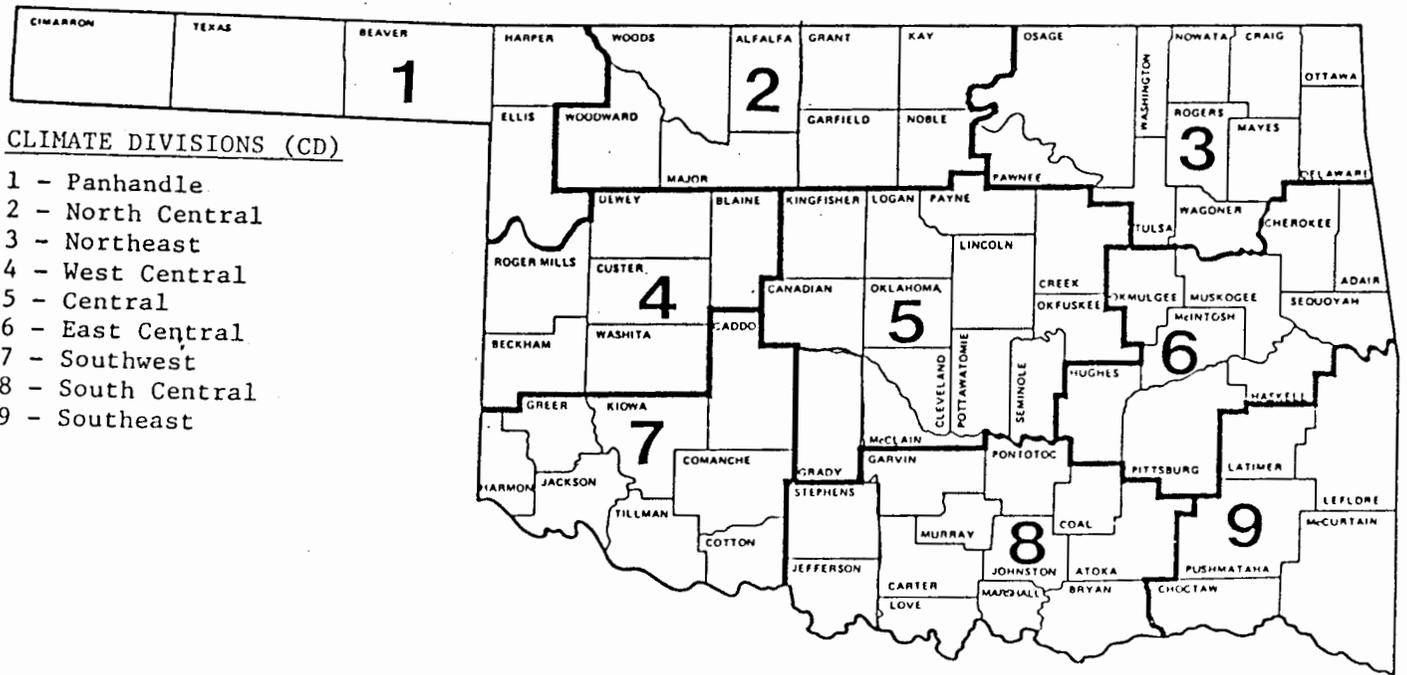
The dry spring of 1988 in eastern and central portions of the State has presented Oklahoma with its second drouth of the 1980's. The 1980 drouth, like the current one, was more severe to the east of the State, with the corn, soybean and cotton producing regions of the United States being most dramatically affected. In both years, the effects in Oklahoma were felt first in the east and southeast, spreading into the central part of the State. By the end of 1980, only CD's 1, 2, and 4 had received as much as 90 percent of normal rainfall.

The 1980 and 1988 drouths differ greatly in timing. In 1980 precipitation was greater than normal in all portions of the State except the southeastern one-third (CD's 6, 8, and 9) through June. The dry-spell began abruptly in July of that year and substantial rains did not return until the spring of 1981. Through June of 1988, only CD's 1 and 2 (roughly the northwestern one-third of the State) have received more than normal precipitation to date. As a result, the dry spell of 1988 has begun earlier and has affected a greater part of the State than did the drouth of 1980. Should the dryness persist, 1988 will be remembered as one of the very driest years on record. The atmosphere is in a constant state of change, however, and the conditions contributing to the drouth can change dramatically in a short time. For the present though, 1988 can certainly be remembered as a year with a very dry spring.

The chart below shows the percent of normal precipitation (averaged over each CD) received through June in 1980 and 1988 and the percent of normal precipitation for the year in 1980.



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:

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

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.

JUNE 1988 SUMMARY FOR NORTHWEST DIVISION (CD1)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM PPT	DEV						
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	24HR DAY			
ARNETT	332	1	76.2	29	.5	104.	8	54.	5	0.0	-7.0	325.5	-2.5	4.912	30	1.62	2.49	1
BUFFALO	1243	1	78.9	30	.5	108.	20	55.	11	0.0	-6.0	416.5	8.5	.920	30	-2.68	.55	16
FARCO	3070	1	*	0	*	999.	0	999.	0	*	*	*	*	2.661	31	-.55	1.91	1
GAGE	3407	1	77.2	30	.6	105.	8	54.	5	0.0	0.0	366.5	13.5	3.583	30	.81	2.78	1
GOODWELL	3628	1	74.5	29	-.1	102.	22	47.	1	3.5	-7.5	278.5	-20.5	3.193	30	.89	1.37	12
GUMON	3835	1	76.7	30	*	102.	23	50.	1	2.5	*	355.0	*	2.033	30	*	.75	27
LAVERNE	5045	1	*	0	*	999.	0	999.	0	*	*	*	*	2.290	30	-.68	1.60	1

JUNE 1988 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM PPT	DEV						
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	24HR DAY			
ALVA	194	2	78.1	30	-.0	108.	8	49.	5	0.0	-5.0	392.5	-5.5	2.130	30	-1.67	1.02	16
VANCE AFB	302	2	*	0	*	999.	0	999.	0	*	*	*	*	4.381	30	*	3.24	1
BILLINGS	755	2	78.1	29	*	105.	8	53.	10	0.0	*	380.0	*	2.344	30	-1.77	.99	28
BLACKWELL	818	2	79.0	30	*	105.	8	50.	11	0.0	*	420.0	*	.824	30	*	.47	2
BRAMAN	1075	2	*	0	*	999.	0	999.	0	*	*	*	*	.385	30	*	.38	1
CEDARDALE	1620	2	*	0	*	999.	0	999.	0	*	*	*	*	2.972	30	*	2.46	1
ENID	2912	2	80.1	30	1.6	105.	8	57.	11	0.0	0.0	452.5	47.5	2.470	30	-1.65	2.01	1
FREEDOM	3358	2	77.7	30	*	106.	8	49.	5	0.0	*	380.0	*	2.460	30	*	1.25	1
HARDY	3909	2	*	0	*	999.	0	999.	0	*	*	*	*	.414	30	*	.20	30
HELENA	4019	2	77.4	29	*	106.	8	52.	11	0.0	*	358.5	*	4.413	30	.46	2.30	1
LAMONT	5013	2	*	0	*	999.	0	999.	0	*	*	*	*	1.051	30	*	.48	1
MEDFORD	5768	2	*	0	*	999.	0	999.	0	*	*	*	*	1.452	30	*	1.39	30
MORRISON	6065	2	*	0	*	999.	0	999.	0	*	*	*	*	1.000	30	*	.47	30
MUTUAL	6139	2	76.9	29	-.3	106.	8	51.	5	0.0	-6.0	344.0	-28.0	2.520	30	-.65	1.55	1
NEAKIRK	6278	2	78.9	30	1.4	103.	8	52.	10	0.0	0.0	418.0	43.0	.934	30	-3.66	.30	4
ORIENTA	6751	2	*	0	*	999.	0	999.	0	*	*	*	*	.840	30	*	.78	1
PERRY	7012	2	80.4	30	2.3	104.	9	55.	10	0.0	0.0	461.0	68.0	3.250	30	-.88	1.81	29
PONCA CITY	7201	2	79.4	19	2.2	107.	8	54.	11	0.0	0.0	273.0	-93.0	.080	22	-4.09	.08	29
RED ROCK	7505	2	*	0	*	999.	0	999.	0	*	*	*	*	1.620	30	-2.41	.50	27
RENFROW	7556	2	*	0	*	999.	0	999.	0	*	*	*	*	1.090	30	-2.84	.74	1
WAYNOKA	9404	2	78.7	30	.2	107.	8	50.	5	0.0	0.0	410.5	5.5	1.530	30	-2.22	.90	1
WOODWARD	9760	2	*	0	*	999.	0	999.	0	*	*	*	*	2.480	30	-.66	1.76	1

JUNE 1988 SUMMARY FOR NORTHEAST DIVISION (CD3)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM PPT	DEV						
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	24HR DAY			
BARNSDALL	535	3	77.2	29	*	100.	30	45.	11	1.5	*	355.5	*	1.661	29	-2.88	1.38	2
BIDBY	782	3	77.3	29	.4	100.	8	49.	11	0.0	0.0	355.5	-5.5	1.111	30	-3.63	1.00	2
BURBANK	1256	3	*	0	*	999.	0	999.	0	*	*	*	*	1.131	30	*	.42	1
CHELSEA	1717	3	*	0	*	999.	0	999.	0	*	*	*	*	.530	30	*	.53	2
CLAREMORE	1828	3	77.4	29	1.1	99.	24	47.	11	0.0	0.0	361.0	22.0	1.003	30	-3.63	.72	2
HOLLOW	4256	3	*	0	*	999.	0	999.	0	*	*	*	*	.750	30	*	.54	16
HOMINY	4289	3	*	0	*	999.	0	999.	0	*	*	*	*	1.302	30	-2.85	1.18	2
JAY TOWER	4567	3	79.3	30	*	104.	25	49.	10	0.0	*	430.0	*	.490	30	*	.39	16
KANSAS	4672	3	76.9	30	*	99.	30	49.	11	.5	*	356.5	*	1.160	30	*	.43	2
KEYSTONE	4812	3	77.4	29	*	98.	28	45.	11	1.0	*	360.5	*	.324	30	*	.23	2
LENAPAH	5118	3	*	0	*	999.	0	999.	0	*	*	*	*	.401	30	*	.40	3
MANNFORD	5522	3	79.1	29	*	103.	30	50.	11	0.0	*	409.0	*	.400	29	*	.35	3
MARAMEC	5540	3	*	0	*	999.	0	999.	0	*	*	*	*	.490	30	-3.41	.46	2
MIAMI	5855	3	77.2	29	1.0	98.	27	48.	11	0.0	-7.0	355.0	12.0	2.690	30	-2.19	1.95	30
ONEIDA	6713	3	*	0	*	999.	0	999.	0	*	*	*	*	.560	30	*	.24	2
PAWUSKA	6935	3	77.3	30	.7	100.	30	46.	11	1.5	1.5	369.5	21.5	1.933	30	-2.38	.94	2
PAWUSKA	6937	3	*	0	*	999.	0	999.	0	*	*	*	*	1.601	30	*	1.08	3
PAWNEE	6940	3	*	0	*	999.	0	999.	0	*	*	*	*	.780	30	-3.24	.42	27
FRYOR	7309	3	75.6	27	-.8	99.	24	46.	11	2.0	2.0	287.0	-60.0	.792	30	-3.88	.57	2
QUAPPAW	7358	3	*	0	*	999.	0	999.	0	*	*	*	*	2.450	30	-2.32	1.63	30
RALSTON	7390	3	79.0	30	*	102.	30	46.	11	1.5	*	422.5	*	.771	30	-3.62	.25	2
RAMONA	7394	3	*	0	*	999.	0	999.	0	*	*	*	*	.240	30	*	.24	14
SKIATOOK	8258	3	*	0	*	999.	0	999.	0	*	*	*	*	.730	30	-3.58	.69	2
SPAVINAW	8380	3	78.6	30	*	98.	27	53.	11	0.0	*	409.0	*	.420	30	-4.36	.20	2
TULSA	8992	3	79.8	30	2.1	99.	8	54.	11	0.0	0.0	444.5	63.5	.584	30	-3.99	.38	2
UPPER SEVINAW	9101	3	82.4	29	*	107.	23	50.	11	0.0	*	505.0	*	.790	30	*	.35	2
VINITA	9203	3	76.4	28	.4	101.	28	41.	10	4.5	-2.5	325.0	-12.0	.720	28	-4.15	.50	14
WAGONER	9247	3	79.2	30	2.0	100.	30	52.	11	0.0	0.0	425.0	59.0	1.100	30	-3.99	.38	29
WANN	9298	3	*	0	*	999.	0	999.	0	*	*	*	*	1.380	30	*	1.20	3
WANONA	9792	3	*	0	*	999.	0	999.	0	*	*	*	*	1.250	30	*	.82	2

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

JUNE 1988 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT PPT	DEV						
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	NUM OBS	FROM NORM	MAX 24HR DAY	
CANTON DFM	1445	4	77.4	29	-.3	105.	8	52.	5	0.0	0.0	359.0	-22.0	2.731	30	-.97	1.34	1
CLINTON	1909	4	80.4	30	2.0	109.	8	53.	5	0.0	0.0	463.0	61.0	4.560	30	1.21	2.50	28
COLONY	2039	4	*	0	*	999.	0	999.	0	*	*	*	*	2.071	30	*	1.10	29
CORDELL	2125	4	*	0	*	999.	0	999.	0	*	*	*	*	1.411	30	-1.66	.95	17
ELK CITY	2849	4	77.5	30	*	106.	8	54.	5	0.0	*	376.0	*	.583	30	-2.74	.25	28
ERICK	2944	4	77.4	30	-.3	106.	8	44.	5	2.5	2.5	376.0	-9.0	3.732	30	.76	1.91	15
HAMMON	3871	4	77.3	29	-.8	110.	8	50.	5	0.0	-6.0	355.5	-43.5	1.330	30	-1.63	.55	1
LEEDEY	5090	4	*	0	*	999.	0	999.	0	*	*	*	*	3.930	30	.69	1.55	1
MACKIE	5463	4	*	0	*	999.	0	999.	0	*	*	*	*	2.190	30	*	1.14	1
MCAPTA	6485	4	80.0	23	3.5	102.	30	50.	11	0.0	0.0	345.5	-3.5	1.110	25	-3.67	.81	16
KEENE	6629	4	78.6	30	-.4	107.	8	51.	6	0.0	0.0	407.5	-12.5	2.650	30	-1.32	1.48	1
REIDOP	7565	4	*	0	*	999.	0	999.	0	*	*	*	*	4.670	30	*	1.80	1
REYDON	7579	4	78.1	30	*	106.	8	50.	5	0.0	*	391.5	*	1.200	30	-2.11	.47	26
SAYRE	7952	4	*	0	*	999.	0	999.	0	*	*	*	*	2.560	30	-.61	1.11	1
SWEETWATER	8652	4	*	0	*	999.	0	999.	0	*	*	*	*	.790	30	*	.52	15
TALOGA	8708	4	76.7	30	-.8	106.	8	50.	5	0.0	0.0	349.5	-25.5	2.721	30	-.55	1.25	27
THOMAS	8815	4	*	0	*	999.	0	999.	0	*	*	*	*	1.120	30	*	.40	16
VICI	9172	4	*	0	*	999.	0	999.	0	*	*	*	*	1.152	30	*	.60	27
WATONGA	9364	4	78.6	30	*	107.	8	52.	5	0.0	*	408.0	*	2.341	30	-1.43	1.15	1
WEATHERFORD	9422	4	79.3	29	1.0	112.	8	51.	5	0.0	0.0	414.0	15.0	2.623	30	-1.01	.95	17

JUNE 1988 SUMMARY FOR CENTRAL DIVISION (CD5)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT PPT	DEV						
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	NUM OBS	FROM NORM	MAX 24HR DAY	
AMBER	200	5	*	0	*	999.	0	999.	0	*	*	*	*	4.360	30	*	1.35	27
TINKER AFB	325	5	*	0	*	999.	0	999.	0	*	*	*	*	2.453	30	*	1.57	27
BLANCHARD	830	5	77.3	30	*	100.	8	52.	30	0.0	*	368.0	*	2.602	30	*	.86	27
BRISTOW	1144	5	78.9	30	1.7	102.	8	47.	11	0.0	0.0	418.0	52.0	1.642	30	-2.72	.88	28
CHANDLER	1684	5	78.7	30	1.2	98.	30	56.	6	0.0	0.0	411.5	36.5	.932	30	-2.87	.62	29
COX CITY	2196	5	*	0	*	999.	0	999.	0	*	*	*	*	2.790	30	*	1.12	3
CRESCENT	2242	5	*	0	*	999.	0	999.	0	*	*	*	*	1.440	30	*	.94	1
CUSHING	2318	5	77.0	26	.1	99.	8	44.	12	2.5	2.5	314.5	-47.5	2.700	29	-1.59	.67	29
EL RENO	2818	5	78.1	30	.7	103.	8	53.	11	0.0	0.0	391.5	19.5	3.140	30	-.49	1.50	27
GUTHRIE	3821	5	80.3	30	2.4	104.	9	53.	11	0.0	0.0	458.5	71.5	1.691	30	-2.27	.75	29
HENNESSEY	4055	5	78.7	30	.2	105.	8	51.	11	0.0	0.0	409.5	4.5	2.591	30	-1.31	1.45	1
INGALLS	4489	5	*	0	*	999.	0	999.	0	*	*	*	*	1.284	30	*	.64	3
KINGFISHER	4861	5	78.4	30	-.2	105.	8	51.	11	0.0	0.0	403.5	-4.5	1.320	30	-2.44	.69	1
KONAWA	4915	5	*	0	*	999.	0	999.	0	*	*	*	*	2.680	30	-1.04	1.48	29
MEEKER	5779	5	76.7	26	-.4	97.	30	49.	11	0.0	0.0	305.5	-60.5	1.750	26	-1.95	.93	29
NORMAN	6386	5	*	0	*	999.	0	999.	0	*	*	*	*	3.521	30	-.10	1.57	3
OILTON	6616	5	*	0	*	999.	0	999.	0	*	*	*	*	2.400	30	*	2.07	29
OKEMAH	6638	5	77.9	30	.8	98.	30	54.	11	0.0	0.0	388.5	25.5	2.060	30	-2.41	.96	3
OKLAHOMA CITY	6661	5	78.5	30	1.5	100.	8	59.	12	0.0	0.0	404.0	44.0	4.072	30	.20	3.10	29
PIEDMONT	7068	5	*	0	*	999.	0	999.	0	*	*	*	*	2.491	30	*	1.63	1
PRAGUE	7264	5	*	0	*	999.	0	999.	0	*	*	*	*	.791	30	-2.99	.25	29
FURCELL	7327	5	77.1	30	-.9	98.	30	48.	11	0.0	0.0	364.0	-26.0	3.560	30	-.03	1.35	27
SEMINOLE	8042	5	79.8	30	1.3	100.	25	50.	11	0.0	0.0	445.5	40.5	1.230	30	-2.57	.33	29
SHAWNEE	8110	5	*	0	*	999.	0	999.	0	*	*	*	*	.900	30	-3.05	.37	1
STELLA	8479	5	*	0	*	999.	0	999.	0	*	*	*	*	3.910	30	*	1.16	3
STILLWATER	8501	5	77.1	29	.1	103.	8	47.	11	0.0	0.0	350.0	-10.0	1.301	30	-2.62	.53	27
SIROUD	8563	5	*	0	*	999.	0	999.	0	*	*	*	*	3.622	30	*	1.30	27
TROUSDALE	8960	5	*	0	*	999.	0	999.	0	*	*	*	*	3.620	30	*	1.27	29
UNION CITY	9086	5	*	0	*	999.	0	999.	0	*	*	*	*	1.901	30	-2.31	1.41	27

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

JUNE 1988 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM PPT OBS	DEV					
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	MAX 24HR DAY		
ASHLAND	364	6	*	0	* 999.	0	999.	0	*	*	*	2.920	30	*	.99	28	
BOYNTON	1027	6	*	0	* 999.	0	999.	0	*	*	*	1.920	30	*	1.38	17	
CALVIN	1391	6	*	0	* 999.	0	999.	0	*	*	*	1.682	30	-2.85	.52	25	
CHECOTAH	1711	6	*	0	* 999.	0	999.	0	*	*	*	1.273	30	-2.78	.77	17	
DEWAR	2485	6	*	0	* 999.	0	999.	0	*	*	*	1.620	30	-2.45	1.08	17	
ELFAULA	2993	6	79.3	30	*	100.	30	54. 11	0.0	*	428.0	*	1.180	30	-2.94	.49	25
HANNA	3884	6	77.8	30	*	100.	30	46. 11	0.0	*	383.5	*	.912	30	-3.08	.45	17
HARSHORNE	3946	6	*	0	* 999.	0	999.	0	*	*	*	2.052	30	*	.92	3	
HOLDENVILLE	4235	6	78.1	30	*	100.	30	47. 12	0.0	0.0	392.0	17.0	1.170	30	-2.66	.39	25
MCALESTER	5664	6	79.0	30	1.2	99.	29	52. 11	0.0	0.0	420.5	36.5	.394	30	-3.27	.20	3
MCCURTAIN	5693	6	79.8	30	*	103.	30	48. 11	0.0	*	444.5	*	.911	30	-3.37	.63	3
MUSKOGEE	6130	6	78.9	30	1.4	101.	30	50. 11	0.0	0.0	417.5	42.5	1.620	30	-2.98	.79	16
OKTAWA	6678	6	*	0	* 999.	0	999.	0	*	*	*	2.320	30	*	1.14	3	
QUINTON	7372	6	*	0	* 999.	0	999.	0	*	*	*	.725	30	-3.31	.53	18	
SCIPIO	7979	6	*	0	* 999.	0	999.	0	*	*	*	.590	30	*	.47	17	
SCRAPER	7993	6	*	0	* 999.	0	999.	0	*	*	*	1.440	30	*	.70	26	
SHORT	8170	6	*	0	* 999.	0	999.	0	*	*	*	2.661	30	*	1.23	3	
STILLWELL	8506	6	77.1	30	*	100.	30	46. 10	1.0	*	363.5	*	.742	30	-3.74	.38	3
TABLEQUAH	8677	6	76.9	30	.8	100.	30	47. 11	0.0	0.0	358.5	25.5	1.170	30	-3.46	.35	29
WEBBERS FALLS	9445	6	77.5	29	.4	99.	28	50. 11	0.0	0.0	362.0	-1.0	2.421	30	-1.67	1.00	3
WESTVILLE	9523	6	*	0	* 999.	0	999.	0	*	*	*	.500	30	*	.15	3	
WEIUMKA	9571	6	*	0	* 999.	0	999.	0	*	*	*	1.264	30	-3.06	.51	17	

JUNE 1988 SUMMARY FOR SOUTHWEST DIVISION (CD7)

STATION	ID	CD	DEV				HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM PPT OBS	DEV					
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	TEMP DAY	FROM NORM	MAX 24HR DAY		
ALTIUS IRR RS	179	7	79.3	30	-1.2	110.	8	54. 7	0.0	0.0	428.0	-37.0	3.540	30	.60	1.08	27
ALTIUS DAM	184	7	80.3	29	*	109.	8	59. 5	0.0	*	442.5	*	1.260	30	-2.22	.60	27
ANAPARKO	224	7	79.5	11	1.0	106.	8	56. 12	0.0	0.0	159.0	-246.0	.800	23	-2.66	.38	17
APACHE	260	7	*	0	* 999.	0	999.	0	*	*	*	*	.830	30	*	.26	3
ALTIUS AFB	447	7	*	0	* 999.	0	999.	0	*	*	*	*	1.142	30	*	.44	27
CARNEGIE	1504	7	79.0	30	-.2	111.	8	48. 6	0.0	0.0	420.5	-5.5	1.610	30	-1.47	.57	29
CHATTANOOGA	1706	7	79.8	30	-.1	109.	8	54. 12	0.0	0.0	445.0	-2.0	1.382	30	-1.42	.81	27
DUNCAN	2668	7	*	0	* 999.	0	999.	0	*	*	*	*	2.730	30	*	1.22	1
GRANDFIELD	3709	7	*	0	* 999.	0	999.	0	*	*	*	*	1.730	30	-1.45	1.00	27
HOBART	4204	7	79.3	29	.4	111.	8	54. 5	0.0	0.0	415.0	-2.0	1.572	30	-1.33	.64	29
HOLLIS	4249	7	79.8	30	-1.2	108.	9	55. 5	0.0	0.0	443.5	-36.5	6.840	30	3.86	2.15	16
FT SILL	5068	7	78.7	29	*	104.	7	57. 11	0.0	*	396.0	*	1.152	30	-2.42	.68	16
LOCKEBA	5329	7	*	0	* 999.	0	999.	0	*	*	*	*	1.380	30	*	.54	29
RANDLETT	7403	7	*	0	* 999.	0	999.	0	*	*	*	*	1.790	30	*	1.45	26
ROOSEVELT	7727	7	*	0	* 999.	0	999.	0	*	*	*	*	1.770	30	-1.52	.88	27
SEDAN	8016	7	*	0	* 999.	0	999.	0	*	*	*	*	.640	30	*	.44	16
SNYDER	8299	7	*	0	* 999.	0	999.	0	*	*	*	*	1.060	30	-1.82	.77	27
VINSON	9212	7	*	0	* 999.	0	999.	0	*	*	*	*	3.370	30	.54	1.26	15
WALTERS	9278	7	78.8	30	-1.2	103.	9	55. 11	0.0	0.0	415.5	-34.5	3.070	30	-.52	1.48	26
WICHITA MT WLR	9629	7	78.7	29	1.0	110.	8	53. 5	0.0	0.0	397.0	16.0	1.320	30	-2.14	.57	29
WILLOW	9668	7	*	0	* 999.	0	999.	0	*	*	*	*	2.551	30	*	1.34	1

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

**JUNE 1988 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)**

STATION	ID	CD	DEV				MIN	HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM		DEV		
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						DAY	PPT	OBS	FROM NORM	24HR DAY
ADA	17	8	78.9	30	1.2	98.30	55.5	0.0	0.0	418.0	37.0	1.642	30	-2.09	.62	1
ATOKA DPM	394	8	80.6	29	*	101.26	59.11	0.0	*	453.5	*	.510	30	*	.28	1
BOKCHITO	917	8	*	0	*	999.0	999.0	*	*	*	*	3.120	30	*	3.00	3
CANEY	1437	8	78.5	29	*	99.29	57.11	0.0	*	391.0	*	1.180	30	*	.69	1
CENSAHOMA	1648	8	*	0	*	999.0	999.0	*	*	*	*	2.050	30	*	.80	24
COMPACHE	2054	8	*	0	*	999.0	999.0	*	*	*	*	3.441	30	*	1.85	1
DAISY	2354	8	*	0	*	999.0	999.0	*	*	*	*	3.171	30	-1.31	1.00	25
DUNCAN	2660	8	77.7	29	-1.3	99.8	56.11	0.0	0.0	369.5	-50.5	3.110	30	-.35	1.09	17
GRADY	3688	8	*	0	*	999.0	999.0	*	*	*	*	3.500	30	*	1.15	1
HEALDTON	4001	8	77.3	28	*	97.8	49.11	0.0	*	343.5	*	4.951	30	1.24	1.67	17
HENNEPIN	4052	8	*	0	*	999.0	999.0	*	*	*	*	2.602	30	*	1.27	2
KINGSTON	4865	8	*	0	*	999.0	999.0	*	*	*	*	4.711	30	1.09	1.96	29
LEHIGH	5108	8	*	0	*	999.0	999.0	*	*	*	*	2.414	30	*	1.50	3
LINDSAY	5216	8	77.6	30	*	98.30	48.11	0.0	*	379.0	*	3.471	30	.06	.93	3
LOCO	5247	8	*	0	*	999.0	999.0	*	*	*	*	4.941	30	*	1.61	17
MADILL	5468	8	78.7	30	-2	96.30	52.11	0.0	0.0	410.0	-7.0	3.840	30	-.01	1.61	1
MARLEITA	5563	8	79.4	30	.7	100.30	57.11	0.0	0.0	432.5	21.5	3.200	30	-.43	1.92	1
MARLOW	5581	8	78.0	30	*	99.30	50.11	0.0	*	389.0	*	3.310	30	-.51	1.73	17
MCGEE CREEK	5713	8	79.6	29	*	101.24	54.11	0.0	*	424.0	*	3.160	30	*	2.38	3
PAULS VALLEY	6926	8	78.1	30	-1.4	99.24	46.11	0.0	0.0	391.5	-43.5	1.450	30	-1.92	.88	1
TUSSY	9032	8	*	0	*	999.0	999.0	*	*	*	*	1.660	30	*	.51	3
WAURIKA	9395	8	79.3	30	-.8	100.8	54.11	0.0	0.0	428.0	-25.0	4.950	30	1.70	1.65	2
WAURIKA DPM	9399	8	77.1	29	*	100.8	52.8	0.0	*	349.5	*	4.290	30	*	1.80	1

**JUNE 1988 SUMMARY FOR SOUTHEAST DIVISION (CD9)**

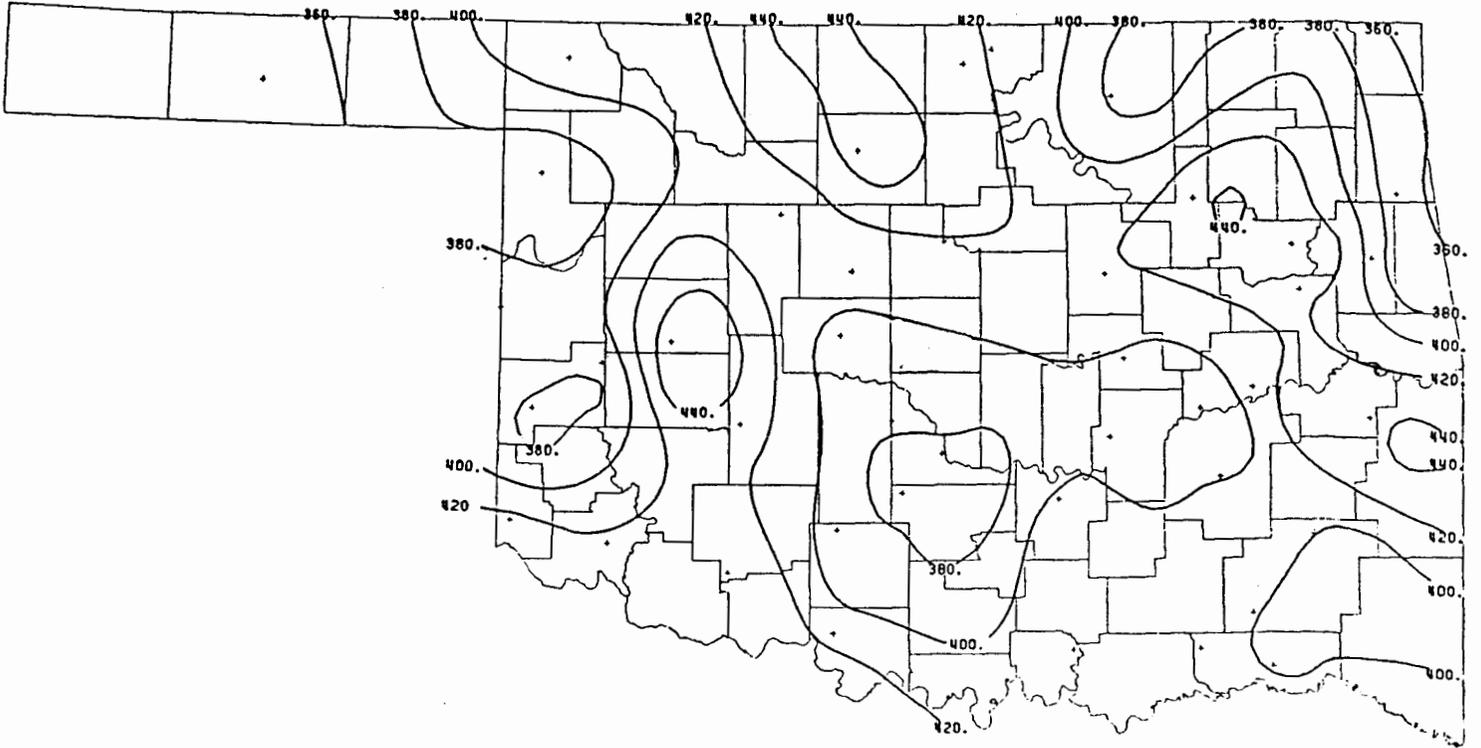
STATION	ID	CD	DEV				MIN	HEAT DEG DAYS	DEV FROM NORM	COOL DEG DAYS	DEV FROM NORM	TOT NUM		DEV		
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						DAY	PPT	OBS	FROM NORM	24HR DAY
ANTILERS	256	9	78.1	30	.6	100.24	47.11	0.0	0.0	393.5	18.5	4.540	30	.57	2.68	26
BENGAL	670	9	*	0	*	999.0	999.0	*	*	*	*	.840	30	*	.21	18
BOSWELL	980	9	78.6	30	*	100.30	47.11	0.0	*	409.0	*	1.543	30	-2.08	1.20	3
FANSHAWE	3065	9	*	0	*	999.0	999.0	*	*	*	*	.630	30	-3.58	.27	4
HEAVENER	4008	9	*	0	*	999.0	999.0	*	*	*	*	1.441	30	-2.56	.65	4
HUGO	4384	9	79.6	30	.9	101.30	54.11	0.0	0.0	439.0	28.0	1.381	30	-3.14	1.15	3
POTEAU	7254	9	77.6	29	*	101.29	46.10	0.0	*	365.0	*	1.891	30	*	.97	2
TUSKAHOMA	9023	9	77.6	30	*	100.30	44.11	0.0	*	378.5	*	1.974	30	*	.65	25

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

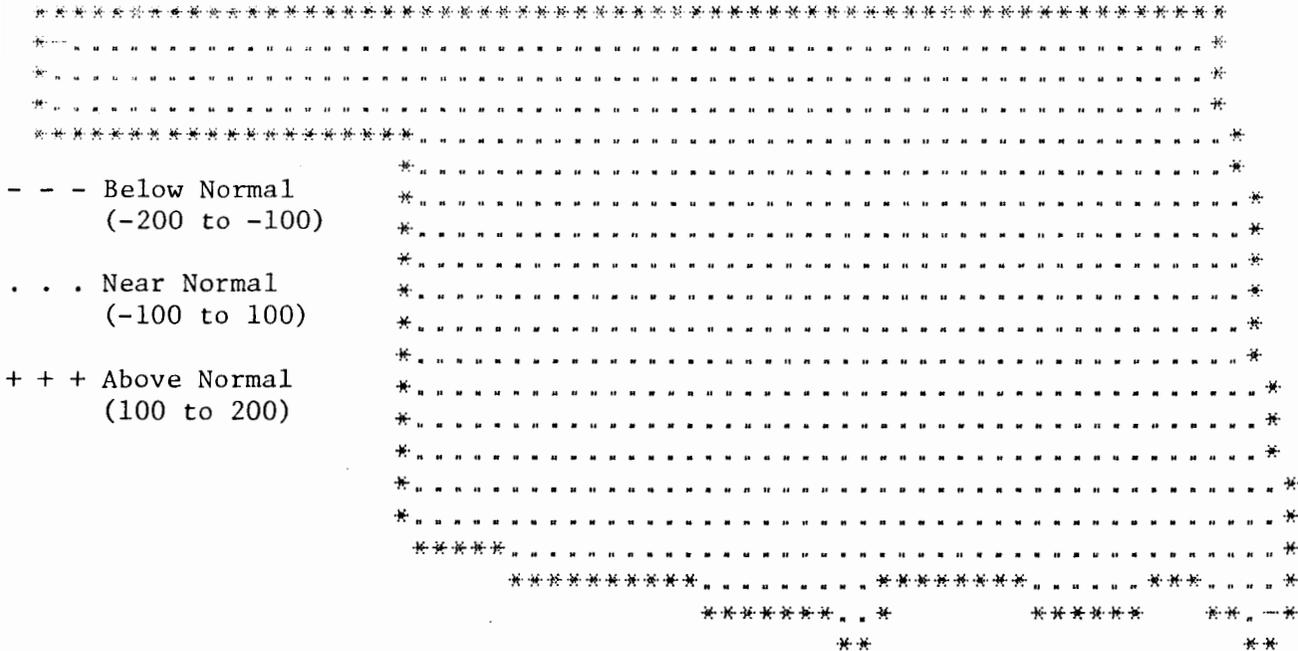
**JUNE 1988 CLIMATE DIVISION SUMMARY**

CLIMATE DIV	MEAN TEMP	NUM STA	DEV				MIN DAY	HEAT DEGREE DAYS	DEV FROM NORM	COOL DEGREE DAYS	DEV FROM NORM	TOT NUM		DEV		
			FROM NORM	MAX TEMP	DAY	PPT						STA	FROM NORM	24-HR DAY		
1	76.7	5	.4	108.0	20	47.0	1	1.2	-4.8	348.4	1.4	2.80	7	-.22	2.78	1
2	78.5	10	.6	108.0	8	49.0	5	0.0	-1.6	401.7	14.0	1.93	21	-1.98	3.24	1
3	78.1	16	1.5	107.0	23	41.0	10	.8	-1.0	385.7	32.9	.98	30	-3.55	1.95	30
4	78.1	10	.2	112.0	8	44.0	5	.3	-.5	390.0	1.2	2.34	19	-1.13	2.50	28
5	78.4	12	.8	105.0	8	44.0	12	0.0	0.0	401.0	22.7	2.31	29	-1.60	3.10	29
6	78.3	9	1.1	103.0	30	46.0	10	.1	.1	396.7	30.7	1.43	22	-2.76	1.38	17
7	79.3	9	-.2	111.0	8	48.0	6	0.0	0.0	422.6	-11.3	2.04	20	-1.14	2.15	16
8	78.5	13	-.5	101.0	24	46.0	11	0.0	0.0	398.4	-21.1	3.07	23	-.59	3.00	3
9	78.3	5	.2	101.0	29	44.0	11	0.0	0.0	397.0	4.0	1.78	8	-2.28	2.68	26



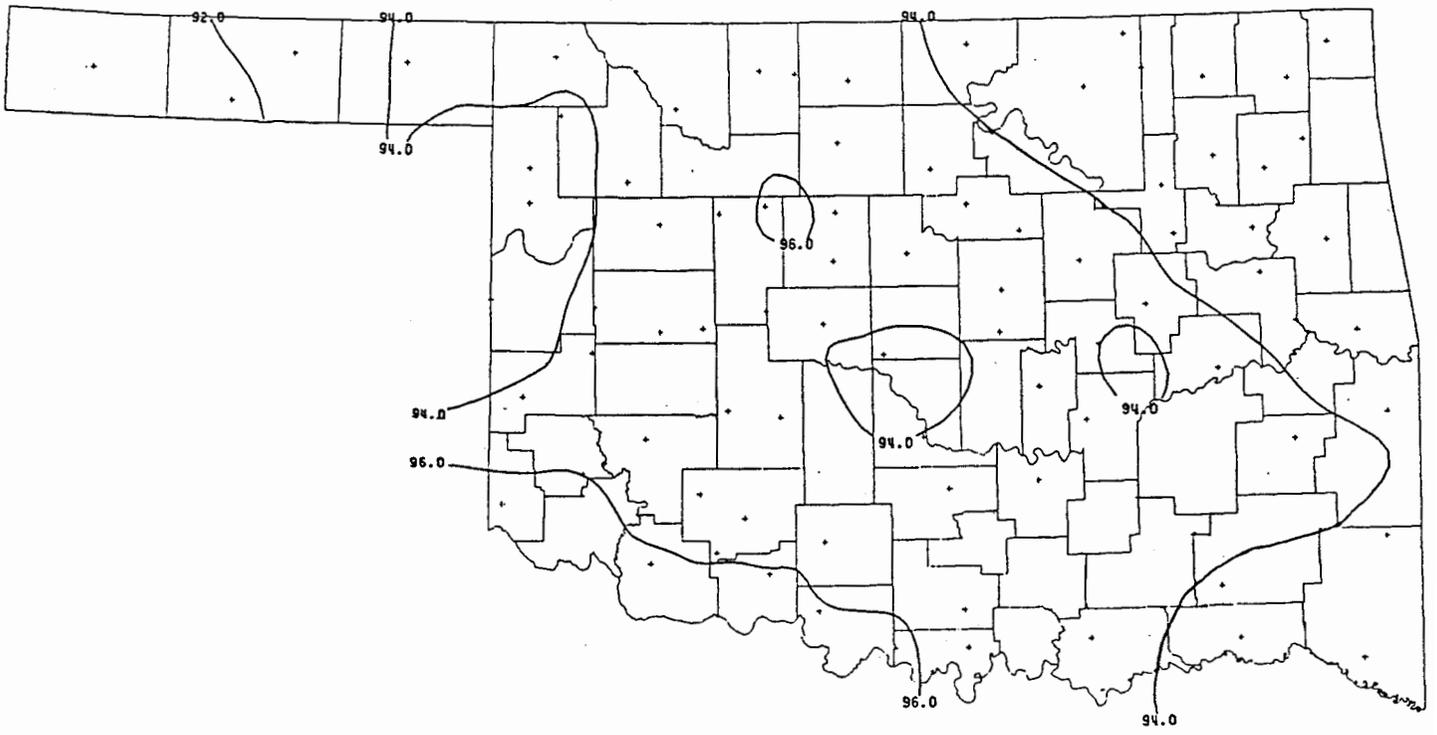


JUNE 1988 TOTAL COOLING DEGREE DAYS

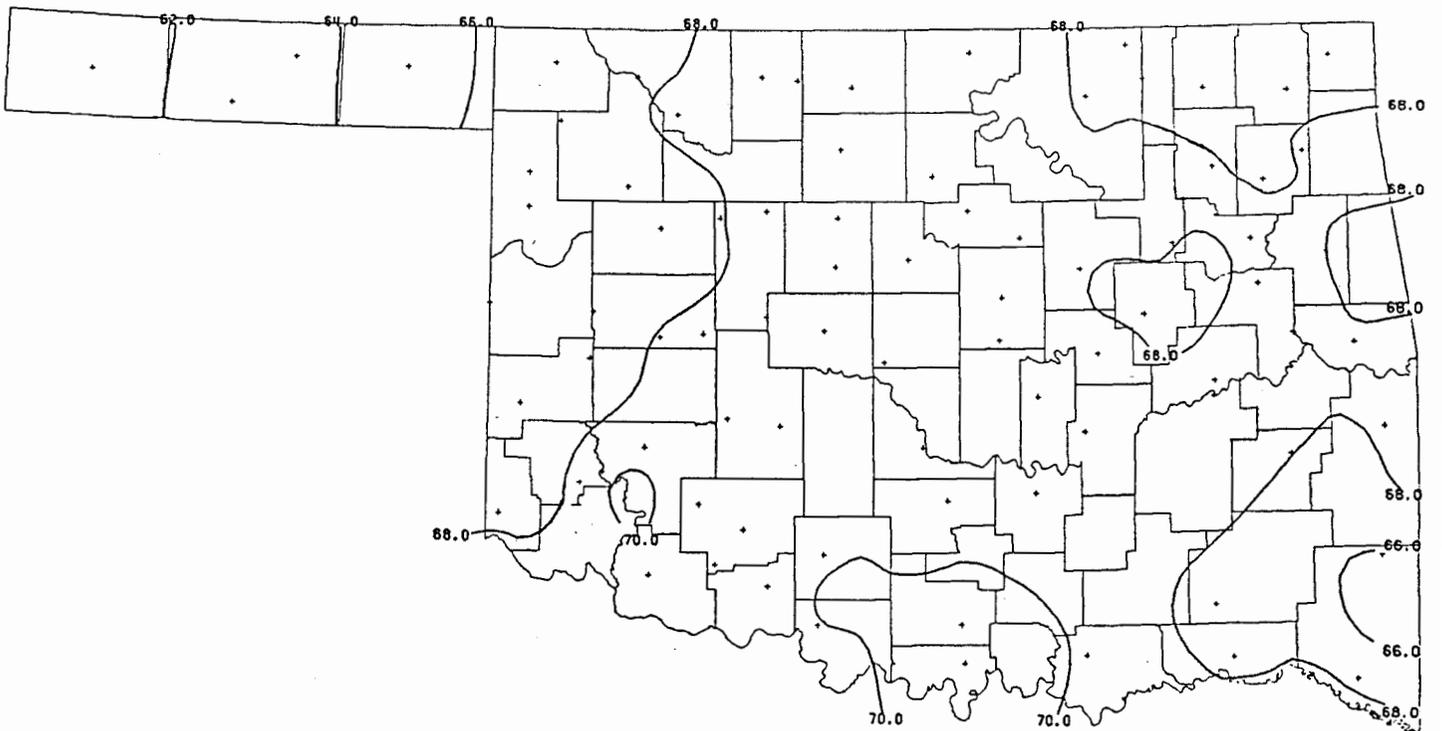


JUNE 1988 DEVIATION FROM NORMAL COOLING DEGREE DAYS

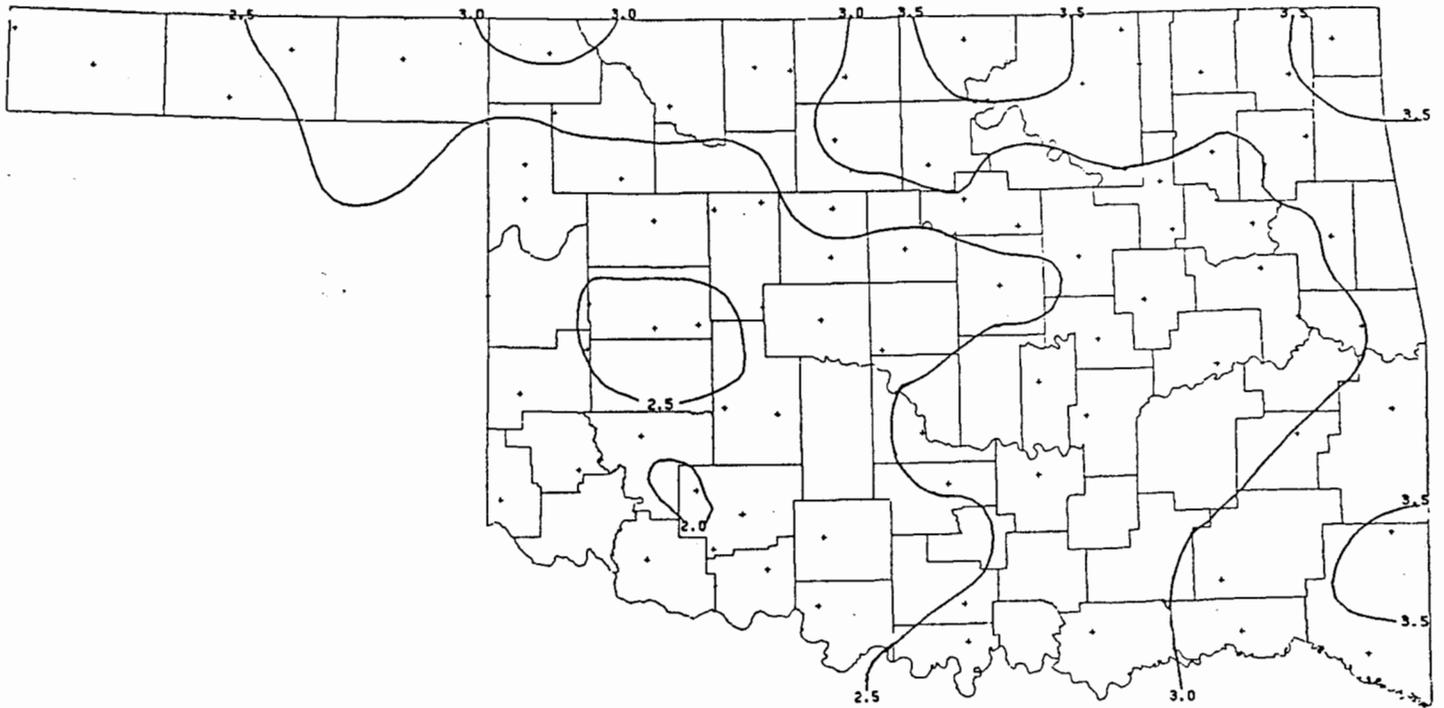




30-YEAR MEAN AUGUST DAILY MAXIMUM TEMPERATURE



30-YEAR MEAN AUGUST DAILY MINIMUM TEMPERATURE



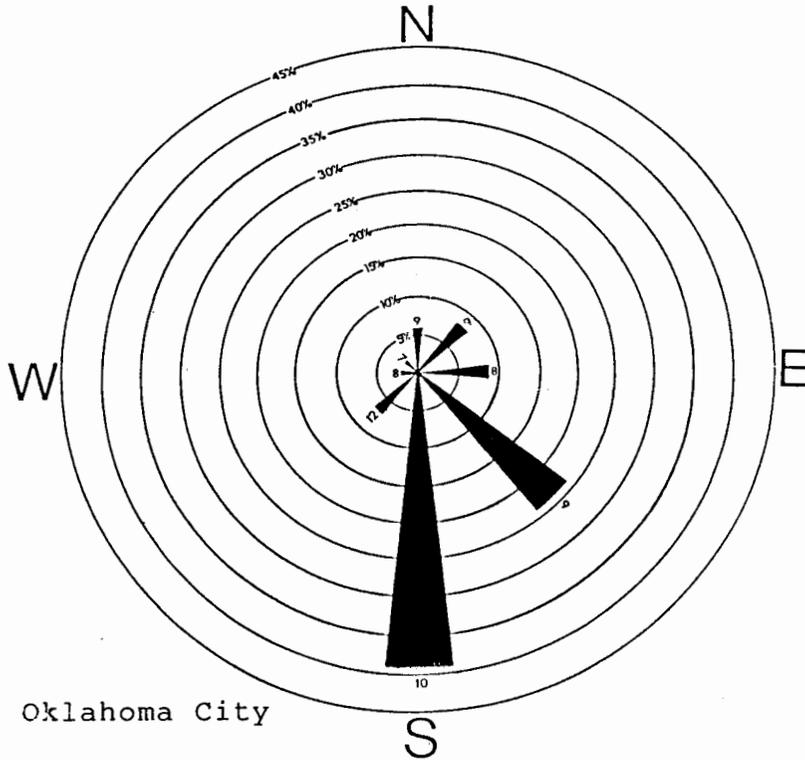
**30-YEAR MEAN AUGUST PRECIPITATION**

OKLAHOMA CITY AUGUST 1988

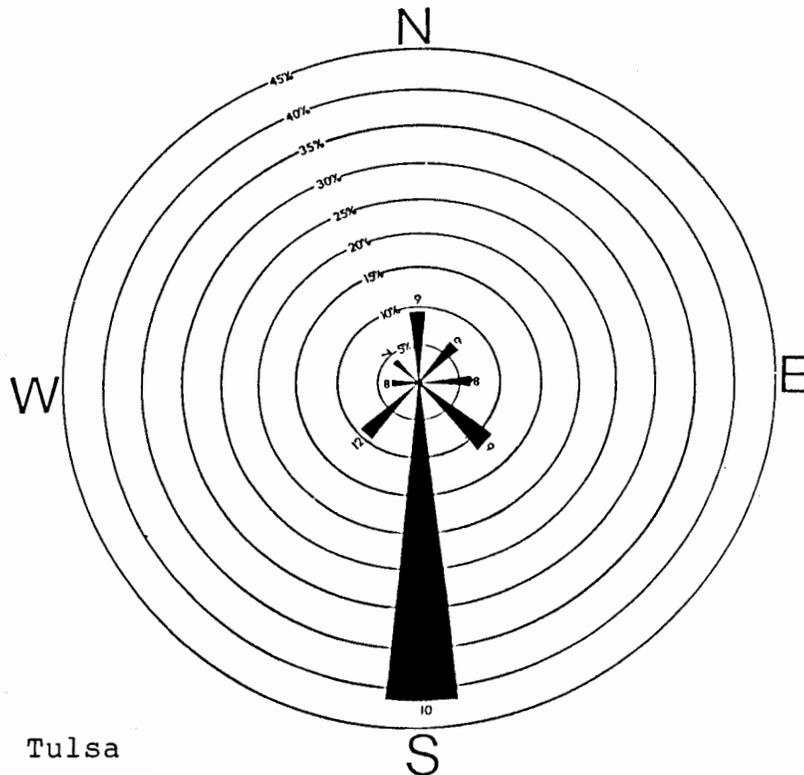
SUNRISE AND SUNSET

Date	Sunrise	Sunset	Date	Sunrise	Sunset
1	6:40 a.m.	8:34 p.m.	16	6:51 a.m.	8:18 p.m.
2	6:41	8:33	17	6:51	8:17
3	6:41	8:32	18	6:52	8:16
4	6:42	8:31	19	6:53	8:15
5	6:43	8:30	20	6:54	8:14
6	6:43	8:29	21	6:54	8:12
7	6:44	8:28	22	6:55	8:11
8	6:45	8:27	23	6:56	8:10
9	6:46	8:26	24	6:57	8:09
10	6:46	8:25	25	6:57	8:07
11	6:47	8:24	26	6:58	8:06
12	6:48	8:23	27	6:59	8:05
13	6:49	8:22	28	6:59	8:03
14	6:49	8:21	29	7:00	8:02
15	6:50	8:20	30	7:01	8:01
			31	7:02	7:59

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 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.



Oklahoma City



Tulsa

# AUGUST 1988 CLIMATE CALENDAR

The data on this calendar are for Oklahoma City.  
Normal values are calculated for the period  
1950-1979. 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																																												
<b>1</b> Normal 92.9 max 69.8 min .051 pcpn 0 HDD 17 CDD	Actual 108-1930 Highest Max 73-1930 Lowest Max 58-1971 83-1971 Highest Min 83-1971 Lowest Min 52-1934 Greatest pcpn .52-1950	<b>2</b> Normal 93.0 max 69.9 min .039 pcpn 0 HDD 17 CDD	Actual 110-1980 Highest Max 82-1973 Lowest Max 57-1971 81-1932 Highest Min 81-1932 Lowest Min 57-1971 Greatest pcpn 1.01-1927	<b>3</b> Normal 94.0 max 70.3 min .019 pcpn 0 HDD 17 CDD	Actual 106-1930 Highest Max 78-1927 Lowest Max 59-1973 80-1943 Highest Min 80-1943 Lowest Min 59-1973 Greatest pcpn .47-1933	<b>4</b> Normal 92.0 max 70.1 min .073 pcpn 0 HDD 16 CDD	Actual 104-1937 Highest Max 78-1978 Lowest Max 58-1978 82-1980 Highest Min 82-1980 Lowest Min 58-1978 Greatest pcpn 1.32-1985	<b>5</b> Normal 94.4 max 70.8 min .021 pcpn 0 HDD 18 CDD	Actual 106-1964 Highest Max 81-1978 Lowest Max 60-1949 79-1970 Highest Min 79-1970 Lowest Min 60-1949 Greatest pcpn .60-1976	<b>6</b> Normal 95.1 max 71.2 min .093 pcpn 0 HDD 18 CDD	Actual 106-1929 Highest Max 76-1971 Lowest Max 62-1949 80-1962 Highest Min 80-1962 Lowest Min 62-1949 Greatest pcpn 1.38-1965	<b>7</b> Normal 94.6 max 70.8 min .116 pcpn 0 HDD 18 CDD	Actual 107-1946 Highest Max 84-1971 Lowest Max 60-1957 82-1951 Highest Min 82-1951 Lowest Min 60-1957 Greatest pcpn 2.15-1939	<b>8</b> Normal 94.4 max 70.4 min .099 pcpn 0 HDD 18 CDD	Actual 106-1970 Highest Max 78-1939 Lowest Max 61-1957 82-1951 Highest Min 82-1951 Lowest Min 61-1957 Greatest pcpn 1.27-1952	<b>9</b> Normal 93.8 max 69.4 min .121 pcpn 0 HDD 17 CDD	Actual 109-1936 Highest Max 75-1927 Lowest Max 59-1974 80-1970 Highest Min 80-1970 Lowest Min 59-1974 Greatest pcpn 1.19-1974	<b>10</b> Normal 93.6 max 70.0 min .116 pcpn 0 HDD 17 CDD	Actual 112-1936 Highest Max 76-1929 Lowest Max 59-1931 81-1936 Highest Min 81-1936 Lowest Min 59-1931 Greatest pcpn 1.18-1977	<b>11</b> Normal 93.0 max 69.1 min .030 pcpn 0 HDD 16 CDD	Actual 113-1936 Highest Max 73-1968 Lowest Max 59-1931 82-1936 Highest Min 82-1936 Lowest Min 59-1931 Greatest pcpn .75-1929	<b>12</b> Normal 92.7 max 68.4 min .047 pcpn 0 HDD 16 CDD	Actual 110-1936 Highest Max 81-1964 Lowest Max 56-1967 83-1936 Highest Min 83-1936 Lowest Min 56-1967 Greatest pcpn .55-1961	<b>13</b> Normal 92.9 max 69.2 min .080 pcpn 0 HDD 16 CDD	Actual 107-1936 Highest Max 81-1971 Lowest Max 54-1967 83-1936 Highest Min 83-1936 Lowest Min 54-1967 Greatest pcpn 1.24-1968	<b>14</b> Normal 92.9 max 70.2 min .106 pcpn 0 HDD 17 CDD	Actual 106-1956 Highest Max 76-1985 Lowest Max 60-1967 79-1943 Highest Min 79-1943 Lowest Min 60-1967 Greatest pcpn 1.43-1971	<b>15</b> Normal 92.6 max 70.2 min .267 pcpn 0 HDD 17 CDD	Actual 107-1956 Highest Max 77-1940 Lowest Max 61-1963 81-1954 Highest Min 81-1954 Lowest Min 61-1963 Greatest pcpn 2.69-1945	<b>16</b> Normal 93.5 max 70.8 min .027 pcpn 0 HDD 17 CDD	Actual 107-1956 Highest Max 79-1964 Lowest Max 64-1963 81-1974 Highest Min 81-1974 Lowest Min 64-1963 Greatest pcpn 1.42-1991	<b>17</b> Normal 92.9 max 70.2 min .036 pcpn 0 HDD 17 CDD	Actual 105-1956 Highest Max 76-1932 Lowest Max 62-1942 82-1934 Highest Min 82-1934 Lowest Min 62-1942 Greatest pcpn .93-1932	<b>18</b> Normal 92.0 max 69.4 min .170 pcpn 0 HDD 16 CDD	Actual 103-1984 Highest Max 78-1927 Lowest Max 57-1943 81-1934 Highest Min 81-1934 Lowest Min 57-1943 Greatest pcpn 2.87-1966	<b>19</b> Normal 90.4 max 68.5 min .101 pcpn 0 HDD 15 CDD	Actual 106-1934 Highest Max 75-1927 Lowest Max 56-1932 80-1936 Highest Min 80-1936 Lowest Min 56-1932 Greatest pcpn .87-1977	<b>20</b> Normal 90.9 max 68.2 min .055 pcpn 0 HDD 15 CDD	Actual 104-1934 Highest Max 67-1950 Lowest Max 58-1950 81-1934 Highest Min 81-1934 Lowest Min 58-1950 Greatest pcpn 1.38-1937	<b>21</b> Normal 91.7 max 67.8 min .141 pcpn 0 HDD 15 CDD	Actual 103-1984 Highest Max 80-1951 Lowest Max 51-1956 81-1934 Highest Min 81-1934 Lowest Min 51-1956 Greatest pcpn 1.40-1983	<b>22</b> Normal 90.1 max 67.9 min .037 pcpn 0 HDD 14 CDD	Actual 101-1936 Highest Max 76-1961 Lowest Max 56-1956 79-1948 Highest Min 79-1948 Lowest Min 56-1956 Greatest pcpn 3.17-1934	<b>23</b> Normal 90.3 max 67.8 min .091 pcpn 0 HDD 14 CDD	Actual 105-1980 Highest Max 70-1966 Lowest Max 59-1949 78-1936 Highest Min 78-1936 Lowest Min 59-1949 Greatest pcpn 2.27-1934	<b>24</b> Normal 91.1 max 68.2 min .057 pcpn 0 HDD 15 CDD	Actual 105-1963 Highest Max 73-1966 Lowest Max 55-1961 78-1936 Highest Min 78-1936 Lowest Min 55-1961 Greatest pcpn .87-1987	<b>25</b> Normal 91.4 max 68.0 min .033 pcpn 0 HDD 15 CDD	Actual 102-1936 Highest Max 72-1934 Lowest Max 58-1966 78-1936 Highest Min 78-1936 Lowest Min 58-1966 Greatest pcpn 1.81-1934	<b>26</b> Normal 91.5 max 67.4 min .026 pcpn 0 HDD 15 CDD	Actual 101-1938 Highest Max 76-1934 Lowest Max 55-1962 78-1936 Highest Min 78-1936 Lowest Min 55-1962 Greatest pcpn .63-1987	<b>27</b> Normal 91.5 max 68.4 min .045 pcpn 0 HDD 15 CDD	Actual 103-1984 Highest Max 69-1987 Lowest Max 58-1944 78-1936 Highest Min 78-1936 Lowest Min 58-1944 Greatest pcpn 1.53-1941	<b>28</b> Normal 90.8 max 68.5 min .088 pcpn 0 HDD 15 CDD	Actual 104-1982 Highest Max 76-1944 Lowest Max 52-1944 78-1938 Highest Min 78-1938 Lowest Min 52-1944 Greatest pcpn 1.28-1959	<b>29</b> Normal 90.3 max 68.4 min .089 pcpn 0 HDD 15 CDD	Actual 106-1984 Highest Max 70-1935 Lowest Max 57-1931 75-1937 Highest Min 75-1937 Lowest Min 57-1931 Greatest pcpn 2.33-1935	<b>30</b> Normal 90.6 max 68.0 min .011 pcpn 0 HDD 15 CDD	Actual 105-1947 Highest Max 74-1968 Lowest Max 54-1946 75-1956 Highest Min 75-1956 Lowest Min 54-1946 Greatest pcpn 1.32-1928	<b>31</b> Normal 88.9 max 66.8 min .222 pcpn 0 HDD 13 CDD	Actual 104-1947 Highest Max 72-1986 Lowest Max 57-1968 76-1952 Highest Min 76-1952 Lowest Min 57-1968 Greatest pcpn 2.35-1966

three weeks. Many stations recorded no rainfall between the 5th and the 24th, and only 7 stations reported more than one inch accumulation. Oklahoma's long-term June precipitation average is 3 to 4.5 inches, west to east. According to Roger Davis, Director of the State Department of Agriculture, these extremely dry conditions contributed to a record 169 grass and forest fires which consumed 2579 acres, nearly 3 times the previous record acreage lost. Some crops also suffered from the dry weather. Planting of non-irrigated cotton in the southwest was delayed. Where planted, the cotton crop rated only fair to poor. Corn, sorghum, and peanut crop conditions were rated good but deteriorating.

Some relief arrived as an upper level low, combined with a weak surface front, produced scattered thunderstorms on June 26-29. All but a few eastern stations (and Orienta, in CD-2) recorded precipitation during the period. On June 26, strong winds during a thunderstorm in Sallisaw blew debris from the race track, injuring a spectator. Winds of nearly 80 mph damaged four Stillwater buildings. McClain, Oklahoma, Payne, Logan, and Lincoln Counties received hail. On June 28, strong thunderstorms produced 3 inches of rain, causing street flooding in Enid, and prompting a flash flood watch for most of western and central Oklahoma.

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