

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 AUGUST 1988

August was slightly warmer and drier than normal. Monthly mean temperatures averaged from 1 to 2 degrees above normal. Many stations recorded more days with high temperatures reaching at least 100 degrees than is normally expected during August (see Table 1). Hot summertime conditions most of the month were moderated by a record-breaking cool air mass which entered the State near the end of the month. Monthly precipitation varied from about one-third of normal in the western two-thirds of the State to nearly 100% of normal in the southeast (see Map 1).

A surface cold front and a weak upper level disturbance produced scattered thunderstorm outbreaks across the State on August 3-5. On the 3rd, scattered storms spread over the eastern two-thirds of Oklahoma, the strongest generating 60 mph winds and marble-size hail in Latimer County. On the 4th, winds from vigorous thunderstorms uprooted trees and overturned a mobile home in Washington County. Intense local rainfall, about 2-3 inches in an hour, produced street flooding in Durant on the 5th.

Clear skies and the subsiding and warming air associated with high pressure over Oklahoma produced 100 degree readings over most of the State on August 8. Several stations reported temperatures over 105 degrees. The National Weather Service issued heat alerts for the State. Heat Stress Indices reached 111 degrees in the southern cities of Ardmore and McAlester. Six central Oklahoma communities maintained their mandatory water rationing policies.

A weak cold front moved through the State on August 9, bringing with it significantly cooler air. An associated 80-mile wide band of thunderstorms extending from the Tulsa area into southwest Oklahoma

affected 44 of Oklahoma's 77 counties. The strongest activity, featuring hail and 80 mph winds, struck Edmond and central Oklahoma. The rain-cooled air lowered Oklahoma City's temperature 20 degrees in one hour.

The remnants of Hurricane Beryl delivered up to 5" of rain on August 12 to limited portions of southeastern Oklahoma, an area which has suffered severe drought conditions throughout the summer (see Drought Condition Table). A funnel cloud was spotted near Atoka. Although McCurtain County received abundant rains, most of the rain in Leflore County was limited to the southern one-half, thereby missing much of the county's crops.

A uniquely summertime weather phenomenon affected Oklahoma on the 16th when a westward-moving upper level system passed over the State. The system provided the trigger needed to generate thunderstorms over sections of western Oklahoma.

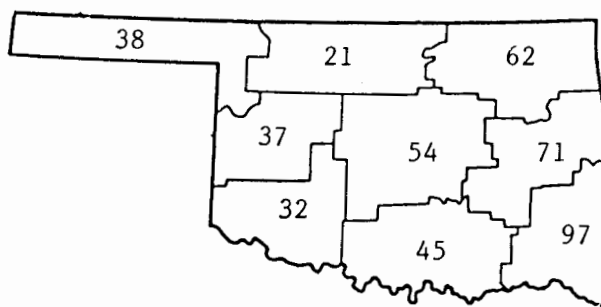
A weak front entered the State on August 19, reducing high temperatures by 5 to 10 degrees from the previous day in the northwestern one-half of the State. Stations in all 9 CD's reported precipitation from the system. Vigorous storms in Tulsa produced numerous lightning strikes to houses and a reported .61" of rain.

A dramatic temperature drop accompanied the arrival of an unseasonably cool arctic air mass in the State on August 28. On August 29, Oklahoma City's high temperature was 68 degrees, its lowest ever for the date. Many daily low temperature records were set during the last 3 days of the month (see Table 2).

Despite record-breaking low temperatures near the end of the month, all CD's recorded mean temperatures above normal. This is due to the excessive number of warmer than usual days. The table below compares this month's number of days with a maximum temperature of 100 degrees or more to the long-term mean number of such days for August for selected Oklahoma stations.

		Number of Days when Maximum Temperature \geq 100 Degrees	
<u>CD</u>	<u>STATION</u>	<u>AUGUST 1988</u>	<u>AUGUST MEAN</u>
1	Buffalo	17	11
4	Clinton	21	11
4	Weatherford	20	8
7	Chattanooga	22	15
7	Mangum	23	15

TABLE 1.



Map 1. Percent of Normal August Precipitation, 1988, by CD.

DROUGHT CONDITION TABLE

Area	Drought Severity	(3 Sept) PDI	(30 July) Change From Last Update	(3 Sept) Inches of Rainfall Needed To End Drought
Northwest	-	3.53	-	-
North Central	Mild	-1.67	-	3.27
Northeastern	Moderate	-2.63	+.27	8.11
West Central	Mild	-1.57	+.43	2.38
Central	Moderate	-2.66	-.20	6.87
East Central	Moderate	-2.81	-.19	8.64
Southwest	Mild	-1.52	+.33	2.43
South Central	Moderate	-2.71	+.11	7.40
Southeast	Severe	-3.14	+.43	9.98

* ND = No Drought at this time
 Mild = PDI = -1.0 to -2.0
 Moderate = PDI = -2.0 to -3.0
 Severe = PDI = -3.0 to -4.0
 Extreme = PDI = Less than -4.0
 PDI = Palmer Drought Index

Table 2. Record low temperatures during the end of August for selected Oklahoma stations.

CD	STATION	DATE	MIN TEMP	PREVIOUS LOW FOR THE DATE*	YEAR
2	PONCA CITY	29	49	56	1986
3	TULSA	29	52	54	1986
4	ELK CITY	29	51	56	1986
5	OKLAHOMA CITY	29	54	58	1986
7	ALTUS IRR	30	56	60	1961
8	DUNCAN	30	61	64	1978
9	ANTLERS	31	51	55	1986

* PERIOD OF RECORD: 1948-1987

TABLE OF 1987/1988 COMPARISONS

Station	August Temperatures (F)		August Precipitation (in.)	
	1987	1988	1987	1988
Arnett	77.9	80.5	2.241	.332
Enid	83.5	*	1.830	*
Mutual	79.4	81.3	1.450	.811
Tulsa	83.9	83.3	3.720	2.434
Elk City	80.4	81.7	3.852	1.201
Oklahoma City	83.0	83.3	1.822	1.603
McAlester	83.5	*	4.590	*
Altus Irr. Sta.	85.8	84.3	*	.602
Durant	83.2	82.7	2.090	3.490
Ada	83.7	83.4	2.690	1.602
Antlers	84.9	83.2	2.860	1.890

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Ralston	3	43	29
Maximum temperature (F)	Buffalo	1	110	14
Maximum 24-hour precipitation	Valliant	9	2.98"	12

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.

AUGUST 1988 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	DEV				MIN			HEAT	DEV	COOL	DEV	TOT	NUM	FROM	MAX	
			MEAN	NUM	FROM	MAX	DEG	DEG	DEG	DEG	DAY	NORM	DAY					NORM
ARNETT	332	1	80.4	31	1.1	104.	15	52.	30	3.5	3.5	480.5	37.5	.332	31	-2.08	.13	18
BOISE CITY 2 E	908	1	76.5	31	.8	98.	14	45.	29	6.0	6.0	362.0	30.0	.480	31	-1.90	.33	18
BUFFALO	1243	1	82.5	31	.7	110.	14	45.	29	2.5	2.5	545.0	24.0	1.430	31	-1.91	.57	22
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.542	31	-.93	1.12	18
GAGE FAA APT	3407	1	81.1	31	1.0	101.	15	45.	29	7.0	7.0	506.5	38.5	1.420	31	-1.00	.42	10
GATE	3489	1	82.4	31	*****	108.	15	48.	29	1.5	*****	541.5	*****	1.240	31	*****	.70	18
GOODWELL RES	ST3628	1	78.4	31	1.0	102.	15	46.	29	3.5	3.5	418.5	34.5	.492	31	-1.88	.18	26
GUYMON	3835	1	81.6	30	*****	106.	15	46.	29	4.0	*****	500.5	*****	1.550	30	*****	.52	26
HOOKER	4298	1	79.6	31	1.4	104.	15	49.	30	3.5	3.5	457.0	48.0	1.300	31	-1.48	.91	19
KENTON	4766	1	75.7	31	-.8	97.	15	44.	29	10.5	10.5	342.0	-15.0	1.870	31	-.63	.77	9
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.840	31	-2.13	.48	5
OPTIMA LAKE	6740	1	79.4	31	*****	103.	15	47.	30	5.0	*****	452.0	*****	.090	31	*****	.05	26
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.310	31	-.60	.93	25
TURPIN 4 SSE	9017	1	79.9	31	*****	104.	15	49.	29	3.5	*****	465.5	*****	1.810	31	*****	1.07	9

AUGUST 1988 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	DEV				MIN			HEAT	DEV	COOL	DEV	TOT	NUM	FROM	MAX	
			MEAN	NUM	FROM	MAX	DEG	DEG	DEG	DEG	DAY	NORM	DAY					NORM
ALVA	193	2	82.5	31	*****	107.	15	42.	29	1.5	*****	544.5	*****	.000	31	*****	.00	31
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.493	31	*****	.34	20
BILLINGS	755	2	84.1	31	*****	104.	9	45.	29	.0	*****	592.5	*****	.101	31	-2.79	.10	23
BLACKWELL 2E	818	2	84.4	31	*****	109.	8	46.	29	.0	*****	601.5	*****	.052	31	*****	.04	23
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.093	31	*****	.06	7
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.782	31	*****	.89	21
CHEROKEE	1724	2	85.2	31	3.0	107.	14	49.	31	.0	.0	627.0	94.0	.000	31	-2.58	.00	31
ENID	2912	2	84.3	31	2.2	105.	8	51.	29	.0	.0	599.5	69.5	.430	31	-2.93	.12	28
FT SUPPLY DAM	3304	2	79.8	31	-.6	100.	17	47.	29	9.0	9.0	468.5	-8.5	.000	31	-2.52	.00	31
FREEDOM	3358	2	81.2	31	*****	104.	13	47.	29	2.5	*****	505.0	*****	1.060	31	*****	.61	23
GREAT SALT PLNS	3740	2	84.3	31	*****	108.	9	49.	31	1.0	*****	599.0	*****	.581	26	*****	.28	23
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.870	31	*****	.80	19
HELENA 1 SSE	4019	2	83.1	31	*****	104.	9	48.	29	4.5	*****	564.5	*****	.270	31	-2.34	.16	23
JEFFERSON	4573	2	85.3	31	3.2	108.	8	51.	30	.0	.0	629.5	99.5	.421	31	-2.83	.29	22
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.110	31	*****	.06	28
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.480	31	*****	.90	27
MUTUAL	6139	2	81.6	31	.6	106.	15	47.	30	2.5	2.5	518.0	22.0	.811	31	-1.39	.55	9
NEWKIRK	6278	2	83.9	31	2.8	104.	8	50.	29	.0	.0	585.5	86.5	.200	31	-3.30	.05	28
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.740	31	*****	.51	20
PERRY	7012	2	85.3	31	3.2	104.	9	56.	30	.0	.0	629.0	99.0	.640	31	-2.69	.24	5
PONCA CITY FAA	7201	2	84.6	28	*****	103.	26	49.	29	3.0	*****	551.0	*****	.301	31	-3.06	.16	4
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.000	31	-2.94	.00	31
RENFROW	7556	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.861	31	-2.02	.46	5
WAYNOKA	9404	2	82.5	31	.4	106.	14	45.	29	2.0	2.0	545.0	15.0	.600	31	-2.10	.28	20
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.941	31	*****	.36	28

AUGUST 1988 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	DEV				MIN		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	DAY	TEMP							DAY	FROM NORM		MAX
ARNETT	332	1	80.4	31	1.1	104.	15	52.	30	3.5	3.5	480.5	37.5	.332	31	-2.08	.13	18
BOISE CITY 2 E	908	1	76.5	31	.8	98.	14	45.	29	6.0	6.0	362.0	30.0	.480	31	-1.90	.33	18
BUFFALO	1243	1	82.5	31	.7	110.	14	45.	29	2.5	2.5	545.0	24.0	1.430	31	-1.91	.57	22
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.542	31	-.93	1.12	18
GAGE FAA APT	3407	1	81.1	31	1.0	101.	15	45.	29	7.0	7.0	506.5	38.5	1.420	31	-1.00	.42	10
GATE	3489	1	82.4	31	*****	108.	15	48.	29	1.5	*****	541.5	*****	1.240	31	*****	.70	18
GOODWELL RES	ST3628	1	78.4	31	1.0	102.	15	46.	29	3.5	3.5	418.5	34.5	.492	31	-1.88	.18	26
GUYMON	3835	1	81.6	30	*****	106.	15	46.	29	4.0	*****	500.5	*****	1.550	30	*****	.52	26
HOOVER	4298	1	79.6	31	1.4	104.	15	49.	30	3.5	3.5	457.0	48.0	1.300	31	-1.48	.91	19
KENTON	4766	1	75.7	31	-.8	97.	15	44.	29	10.5	10.5	342.0	-15.0	1.870	31	-.63	.77	9
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.840	31	-2.13	.48	5
OPTIMA LAKE	6740	1	79.4	31	*****	103.	15	47.	30	5.0	*****	452.0	*****	.090	31	*****	.05	26
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.310	31	-.60	.93	25
TURPIN 4 SSE	9017	1	79.9	31	*****	104.	15	49.	29	3.5	*****	465.5	*****	1.810	31	*****	1.07	9

AUGUST 1988 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	DEV				MIN		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	DAY	TEMP							DAY	FROM NORM		MAX
ALVA	193	2	82.5	31	*****	107.	15	42.	29	1.5	*****	544.5	*****	.000	31	*****	.00	31
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.493	31	*****	.34	20
BILLINGS	755	2	84.1	31	*****	104.	9	45.	29	.0	*****	592.5	*****	.101	31	-2.79	.10	23
BLACKWELL 2E	818	2	84.4	31	*****	109.	8	46.	29	.0	*****	601.5	*****	.052	31	*****	.04	23
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.093	31	*****	.06	7
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.782	31	*****	.89	21
CHEROKEE	1724	2	85.2	31	3.0	107.	14	49.	31	.0	.0	627.0	94.0	.000	31	-2.58	.00	31
ENID	2912	2	84.3	31	2.2	105.	8	51.	29	.0	.0	599.5	69.5	.430	31	-2.93	.12	28
FT SUPPLY DAM	3304	2	79.8	31	-.6	100.	17	47.	29	9.0	9.0	468.5	-8.5	.000	31	-2.52	.00	31
FREEDOM	3358	2	81.2	31	*****	104.	13	47.	29	2.5	*****	505.0	*****	1.060	31	*****	.61	23
GREAT SALT PLNS	3740	2	84.3	31	*****	108.	9	49.	31	1.0	*****	599.0	*****	.581	26	*****	.28	23
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.870	31	*****	.80	19
HELENA 1 SSE	4019	2	83.1	31	*****	104.	9	48.	29	4.5	*****	564.5	*****	.270	31	-2.34	.16	23
JEFFERSON	4573	2	85.3	31	3.2	108.	8	51.	30	.0	.0	629.5	99.5	.421	31	-2.83	.29	22
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.110	31	*****	.06	28
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.480	31	*****	.90	27
MUTUAL	6139	2	81.6	31	.6	106.	15	47.	30	2.5	2.5	518.0	22.0	.811	31	-1.39	.55	9
NEWKIRK	6278	2	83.9	31	2.8	104.	8	50.	29	.0	.0	585.5	86.5	.200	31	-3.30	.05	28
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.740	31	*****	.51	20
PERRY	7012	2	85.3	31	3.2	104.	9	56.	30	.0	.0	629.0	99.0	.640	31	-2.69	.24	5
PONCA CITY FAA	7201	2	84.6	28	*****	103.	26	49.	29	3.0	*****	551.0	*****	.301	31	-3.06	.16	4
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.000	31	-2.94	.00	31
RENFROW	7556	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.861	31	-2.02	.46	5
WAYNOKA	9404	2	82.5	31	.4	106.	14	45.	29	2.0	2.0	545.0	15.0	.600	31	-2.10	.28	20
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.941	31	*****	.36	28

AUGUST 1988 SUMMARY FOR NORTHEAST DIVISION (CD3)

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	PPT						
BARNSDALL	535	3	81.8	31	****	101.	22	46.	29	1.0	*****	522.0	*****	.775	31	-2.40	.31	23		
BARTLESVILLE 2W	548	3	82.5	31	1.9	104.	8	46.	29	.0	.0	544.0	60.0	3.252	31	.23	1.20	13		
BIXBY	782	3	81.8	31	1.5	101.	26	53.	30	3.5	3.5	525.5	51.5	.801	31	-1.99	.42	28		
BURBANK	1256	3	****	0	****	****	0	****	0	*****	*****	*****	*****	.451	31	****	.19	4		
CHELSEA 4 S	1717	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.900	31	****	.71	12		
CLAREMORE	1828	3	82.5	31	2.2	101.	26	51.	29	4.0	4.0	545.5	71.5	1.820	31	-1.09	.75	28		
CLEVELAND 5 WSW	1902	3	83.1	29	****	104.	8	48.	29	.0	*****	526.0	*****	2.230	30	****	1.60	10		
FORAKER	3250	3	****	0	****	****	0	****	0	*****	*****	*****	*****	.571	31	-2.94	.22	20		
HOLLOW	4258	3	****	0	****	****	0	****	0	*****	*****	*****	*****	2.130	31	-1.17	1.02	21		
HOMINY	4289	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.611	31	-1.42	1.16	20		
HULAH DAM	4393	3	81.7	23	****	105.	9	44.	29	.0	*****	384.5	*****	2.212	23	****	.95	15		
JAY TOWER	4567	3	82.6	31	****	102.	18	54.	30	.0	*****	546.0	*****	4.350	31	****	1.40	5		
KANSAS 1 ESE	4672	3	80.5	31	****	99.	8	52.	30	.0	*****	479.5	*****	4.183	31	****	.90	10		
KEYSTONE DAM	4812	3	81.7	31	****	100.	26	49.	29	6.0	*****	523.5	*****	1.522	31	****	1.17	28		
LEWAPAH	5118	3	****	0	****	****	0	****	0	*****	*****	*****	*****	.600	31	****	.17	5		
MANNFORD 6 NW	5522	3	82.8	31	****	106.	8	55.	30	.0	*****	552.0	*****	2.490	31	****	1.50	10		
MARAMEC	5540	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.720	31	-1.20	.68	28		
MIAMI	5855	3	81.0	31	1.1	100.	16	48.	29	1.0	1.0	497.0	35.0	2.491	31	-1.02	.92	18		
NOWATA	6485	3	82.6	31	1.8	104.	8	50.	29	.0	.0	544.5	54.5	1.221	31	-2.17	1.00	10		
ONETA 1 WNW	6713	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.530	31	****	.43	29		
PAWHUSKA	6935	3	82.5	31	2.0	101.	25	46.	29	.5	.5	544.5	63.5	.718	31	-2.62	.45	9		
PAWHUSKA	6937	3	****	0	****	****	0	****	0	*****	*****	*****	*****	.892	31	****	.66	10		
PAWNEE	6940	3	****	0	****	****	0	****	0	*****	*****	*****	*****	.600	31	-2.41	.25	15		
PRYOR 6 N	7309	3	80.8	31	.5	101.	26	49.	30	6.0	6.0	496.0	22.0	1.991	31	-1.41	.52	28		
QUAPAW	7358	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.590	31	-1.85	.80	23		
RALSTON	7390	3	83.3	31	****	103.	8	43.	29	1.0	*****	567.5	*****	1.171	31	-1.75	.50	14		
RAMONA 4 N	7394	3	****	0	****	****	0	****	0	*****	*****	*****	*****	4.050	31	****	2.00	13		
SKIATOOK	8258	3	****	0	****	****	0	****	0	*****	*****	*****	*****	2.920	31	.06	1.96	9		
SPAVINAW	8380	3	82.4	31	****	99.	9	54.	29	.0	*****	540.0	*****	3.175	31	-.42	.80	10		
TULSA WSO APT	8992	3	83.5	31	1.8	100.	26	52.	29	.0	.0	574.0	56.0	2.434	31	-.58	1.02	28		
UPPER SPAVINAW	9101	3	85.4	28	****	107.	8	53.	30	.0	*****	570.0	*****	4.101	30	****	.82	18		
VINITA 2 N	9203	3	82.1	31	2.3	103.	9	46.	29	.0	.0	529.0	70.0	1.120	31	-2.49	.27	10		
WAGONER	9247	3	81.8	31	.7	98.	8	53.	29	.0	.0	521.5	22.5	3.320	31	.47	1.01	20		
WYCONA	9792	3	****	0	****	****	0	****	0	*****	*****	*****	*****	.922	16	****	.40	9		

AUGUST 1988 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	DEV				MIN		HEAT		DEV	COOL		DEV	DEV			
			MEAN	NUM	FROM	MAX	DAY	TEMP	DAY	DEG	FROM	DEG	FROM	DEG	TOT	NUM	FROM	MAX
CANTON DAM	1445	4	81.9	31	.2	104.	26	49.	29	5.5	5.5	528.5	10.5	.421	31	-1.83	.40	28
CHEYENNE	1738	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.661	31	*****	.66	28
CLINTON	1909	4	85.2	31	3.2	109.	25	52.	29	.0	.0	627.0	100.0	.850	31	-1.94	.35	12
COLONY	2039	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.190	31	*****	.25	29
CORDELL	2125	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.411	31	-2.22	.15	29
ELK CITY 1 E	2849	4	81.7	31	*****	103.	25	51.	29	3.0	*****	522.0	*****	1.201	31	-1.13	.60	31
ERICK 4 E	2944	4	81.5	31	.9	104.	14	51.	29	2.5	2.5	513.5	29.5	.400	31	-1.72	.23	28
GEARY	3497	4	81.6	31	-.3	103.	25	51.	29	1.0	1.0	515.0	-9.0	.800	31	-1.39	.50	29
HAMMON 1 NNE	3871	4	81.1	31	-.0	105.	25	48.	28	4.5	4.5	503.0	4.0	.960	31	-1.48	.85	28
LEEDEY	5090	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.031	31	-1.55	.93	28
MACKIE 4 NNW	5463	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.800	31	*****	1.01	1
MORAVIA 2 NNE	6035	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.630	31	-1.43	.30	20
OKEENE	6629	4	82.9	31	.4	104.	25	51.	29	.0	.0	555.5	12.5	.430	31	-2.14	.31	28
RETROP	7565	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.780	31	*****	.40	20
REYDON	7579	4	81.5	31	*****	104.	25	47.	29	4.5	*****	514.5	*****	1.270	31	-.96	.73	8
SAYRE	7952	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.820	31	-1.23	.52	2
SWEETWATER 2 E	8652	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.540	31	*****	.54	28
TALOGA	8708	4	82.4	31	1.7	105.	13	47.	28	8.0	8.0	548.0	61.0	.771	31	-1.67	.77	28
THOMAS	8815	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.490	31	*****	.49	28
VICI	9172	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.691	31	*****	.39	13
WATONGA	9364	4	82.0	31	*****	103.	25	53.	29	.5	*****	526.0	*****	1.792	31	-.26	1.20	18
WEATHERFORD	9422	4	83.7	31	2.1	109.	9	51.	29	5.0	5.0	583.5	68.5	.773	31	-1.92	.28	18

AUGUST 1988 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	TEMP	DAY	DEG	FROM	DEG	FROM	DEG	FROM	PPT						
AMBER	200	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.150	31	*****	.15	4				
ARCADIA	288	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.651	31	*****	.81	10				
TINKER AFB	325	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.883	30	*****	1.66	9				
BLANCHARD 2 SSW	830	5	83.7	31	*****	103.	8	53.	29	.0	*****	578.5	*****	*****	1.382	31	*****	.50	6				
BRISTOW	1144	5	83.2	31	2.0	103.	21	51.	29	.0	.0	565.0	63.0	*****	.845	31	-1.77	.31	29				
CHANDLER	1684	5	82.8	31	1.0	102.	8	53.	29	.0	.0	553.0	32.0	*****	3.351	31	1.10	2.10	10				
CHICKASHA EX ST	1750	5	82.3	31	1.1	103.	8	53.	31	.0	.0	535.0	33.0	*****	2.790	31	.27	.85	9				
COX CITY 1 E	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.360	31	*****	.15	19				
CRESCENT	2242	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.450	31	*****	1.60	5				
CUSHING	2318	5	82.9	31	1.5	101.	26	52.	29	4.5	4.5	559.5	51.5	*****	3.230	31	.54	.97	10				
EL RENO 1 N	2818	5	82.6	31	1.3	104.	8	51.	29	.5	.5	545.0	40.0	*****	1.030	31	-1.27	.34	28				
GUTHRIE	3821	5	85.5	31	3.4	108.	8	53.	29	.0	.0	634.0	104.0	*****	.911	31	-1.47	.40	28				
HENNESSEY 2 SE	4055	5	83.0	31	.7	105.	8	50.	29	.0	.0	559.5	23.5	*****	.681	31	-2.01	.35	28				
INGALLS	4489	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.101	31	*****	.73	28				
KINGFISHER 2 SE	4861	5	84.0	31	1.6	105.	25	51.	29	.0	.0	590.0	51.0	*****	1.560	31	-.83	.45	5				
KONAWA	4915	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.320	31	-2.14	.20	29				
MARSHALL	5589	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.650	31	-2.10	.40	25				
MEEKER 4 W	5779	5	82.8	30	1.5	102.	25	51.	29	.0	.0	533.0	28.0	*****	.411	31	-2.12	.14	29				
MULHALL	6110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.122	31	*****	.55	28				
NORMAN 3 S	6386	5	83.8	30	*****	106.	8	53.	31	.0	*****	565.0	*****	*****	2.250	31	-.31	1.85	10				
OILTON 2 SE	6616	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.700	31	*****	1.59	10				
OKEMAH	6638	5	81.6	31	.4	99.	25	53.	29	.0	.0	516.0	14.0	*****	.631	31	-1.97	.30	26				
OKLAHOMA CITY WS	6661	5	83.3	31	2.2	104.	8	54.	29	4.0	4.0	570.5	71.5	*****	1.603	31	-.80	1.10	9				
PERKINS	7003	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.550	31	-1.06	.65	10				
PRAGUE	7264	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.512	31	-1.00	.69	3				
PURCELL 5 SW	7327	5	83.1	31	1.2	105.	9	52.	31	.0	.0	561.5	37.5	*****	1.912	31	-.51	1.30	10				
SEMINOLE	8042	5	84.3	31	1.7	104.	8	54.	31	.0	.0	599.5	53.5	*****	1.740	31	-1.14	1.42	5				
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.390	31	-2.51	.13	29				
STELLA	8479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.400	31	*****	.72	10				
STILLWATER 2 W	8501	5	83.0	31	2.0	103.	9	50.	29	4.0	4.0	562.0	66.0	*****	.971	31	-1.86	.76	28				
STIROUD 1 N	8563	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.981	31	*****	2.08	10				
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.140	31	*****	.64	5				
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.430	31	*****	.25	29				
UNION CITY 1 SE	9086	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.700	31	-.85	.97	10				
WELTY 1 SSE	9479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.450	31	*****	.20	29				
WEWOKA	9575	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.360	31	-1.49	.71	20				

AUGUST 1988 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	CD	DEV				MIN		HEAT	DEV	COOL	DEV	TOT	DEV				
			MEAN	NUM	FROM	MAX	DAY	TEMP	DAY	DEG	FROM	DEG		FROM	NUM	FROM	MAX	
ASHLAND	364	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.122	31	*****	.70	20
BEGGS	631	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.460	31	*****	.46	29
BOYNTON	1027	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.111	31	*****	.37	13
CALVIN	1391	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.955	31	-.62	1.05	5
CHECOTAH	1711	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.692	31	-2.01	.19	29
DEWAR 2 NE	2485	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.790	31	-1.82	.30	26
DUSTIN	2690	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.890	31	*****	.38	26
EUFULA	2993	6	82.6	28	*****	99.	27	59.	31	.0	*****	494.0	*****	1.600	31	-1.13	1.12	18
HANNA	3884	6	81.6	31	*****	100.	21	53.	31	.0	*****	513.5	*****	1.592	31	-1.23	.70	4
HARTSHORNE	3946	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.332	9	*****	.33	27
HASKELL	3956	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.280	31	-1.05	.27	28
HOLDENVILLE	4235	6	82.7	31	.8	104.	8	52.	31	.0	.0	549.0	25.0	1.751	31	-.91	1.45	20
LAKE EUFAULA	4975	6	82.1	31	*****	102.	21	57.	30	.0	*****	531.5	*****	2.390	31	*****	.60	21
LYONS 2 N	5437	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.953	31	.08	1.80	12
MCCURTAIN 1 SE	5693	6	82.7	31	*****	102.	9	51.	30	.0	*****	547.5	*****	3.232	31	.22	.90	13
MUSKOGEE	6130	6	82.4	31	.9	101.	8	52.	30	.0	.0	538.5	26.5	2.440	31	-.59	1.29	11
OKMULGEE W W	6670	6	79.8	31	-1.0	99.	22	50.	11	.0	.0	459.0	-31.0	.711	31	-1.92	.52	3
OKTAHA 2 NE	6678	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.990	31	*****	.24	21
QUINTON	7372	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.252	31	1.15	.88	11
SALLISAW 2 NE	7862	6	82.2	31	1.2	102.	8	50.	30	.0	.0	533.5	37.5	2.193	31	-.98	.93	13
SCIPIO	7979	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.640	31	*****	.65	4
SCRAPER	7993	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.670	31	*****	1.13	13
SHORT	8170	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.770	31	*****	.70	18
STILWELL 1 NE	8506	6	80.3	31	*****	99.	6	50.	30	.0	*****	475.0	*****	3.971	31	.62	1.20	19
TAHLEQUAH	8677	6	80.8	31	.9	98.	9	53.	30	.0	.0	491.0	29.0	3.721	31	.66	1.21	18
WEBBERS FALLS	9445	6	80.7	31	.0	100.	9	52.	30	.0	.0	486.5	-.5	2.510	31	-.37	1.60	12
WESTVILLE	9523	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.950	31	*****	2.22	18
WETUMKA 3 NE	9571	6	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.292	31	-1.13	.70	4

AUGUST 1988 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	CD	DEV						HEAT		DEV		COOL		DEV		TOT	NUM	FROM	MAX	24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM	DAY	NORM	PPT	OBS						
ALTUS IRR STA	179	7	84.2	31	1.1	104.	8	56.	30	.0	.0	596.0	35.0	.602	31	-1.64	.30	18				
ALTUS DAM	184	7	84.9	31	*****	105.	9	56.	29	1.5	*****	618.5	*****	.480	31	-1.65	.25	29				
ANADARKO	224	7	82.3	30	.3	105.	8	50.	30	.0	.0	519.5	-7.5	2.470	31	-.01	1.85	10				
APACHE	260	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.700	31	*****	.26	20				
CARNEGIE 2 ENE	1504	7	83.5	31	1.2	105.	25	51.	29	.0	.0	575.0	39.0	.720	31	-1.41	.21	5				
CHATTANOOGA	1706	7	85.1	31	1.8	107.	9	56.	31	.0	.0	623.5	56.5	.434	31	-2.18	.43	17				
DUNCAN 12 W	2668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.121	31	*****	.71	20				
FREDERICK	3353	7	84.6	31	.0	105.	10	59.	31	.0	.0	608.5	.5	.450	31	-2.01	.30	10				
GRANDFIELD 4 NW	3709	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.070	31	-2.32	.07	28				
HOBART FAA APT	4204	7	83.3	31	1.2	105.	9	54.	29	.0	.0	566.5	36.5	.870	31	-1.01	.55	19				
HOLLIS	4249	7	82.9	31	-.5	104.	13	55.	30	1.5	1.5	555.5	-14.5	.710	31	-1.32	.30	20				
LAWTON	5063	7	84.9	31	2.2	105.	9	60.	30	.0	.0	616.0	67.0	.382	31	-1.77	.27	19				
FORT SILL	5068	7	84.5	31	*****	106.	8	59.	31	.0	*****	605.5	*****	1.403	31	-.75	.81	20				
LOOKEBA 2 ENE	5329	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.750	31	*****	.28	19				
MANGUM RES STA	5509	7	84.9	31	2.3	109.	8	56.	30	.0	.0	617.0	71.0	1.280	31	-1.80	.55	12				
RANDLETT 9 E	7403	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.134	31	*****	.13	29				
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.930	31	-1.21	.52	12				
SEDAN	8016	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.230	31	*****	.23	29				
SNYDER	8299	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.772	31	-1.44	.28	3				
VINSON 3 WNW	9212	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.850	31	-1.41	.62	12				
WALTERS	9278	7	85.1	31	1.4	106.	8	55.	29	.0	.0	624.5	44.5	.451	31	-2.12	.24	9				
WICHITA MT WLR	9629	7	83.5	31	2.0	105.	15	54.	31	2.5	2.5	576.0	64.0	1.060	31	-.98	.27	18				
WILLOW	9668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.551	31	*****	.26	29				

AUGUST 1988 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

NAME	ID	CD	DEV				MIN		HEAT		DEV	COOL		DEV	DEV			
			MEAN	NUM	FROM	MAX	DAY	TEMP	DAY	DEG	FROM	DEG	DAY	NORM	TOT	NUM	FROM	MAX
ADA	17	8	83.4	31	1.7	101.	21	58.	30	.0	.0	571.5	53.5	1.602	31	-1.49	1.08	5
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.050	31	*****	1.40	4
ARDMORE	292	8	84.7	31	.7	104.	23	58.	31	.0	.0	610.0	21.0	.150	31	-2.38	.15	20
ATOKA DAM	394	8	83.9	31	*****	104.	24	58.	30	.0	*****	587.0	*****	1.420	31	*****	.77	9
BOKCHITO	917	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.750	31	*****	.50	13
CANEY	1437	8	82.6	31	*****	104.	23	59.	30	.0	*****	547.0	*****	1.550	31	*****	.95	18
CHICKASAW NRA	1745	8	84.1	31	*****	104.	9	57.	31	.0	*****	592.5	*****	.191	31	*****	.07	20
COLEMAN	2011	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.500	31	*****	.35	4
COMANCHE	2054	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.111	31	*****	.10	20
DAISY 4 ENE	2354	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.733	31	-1.78	.81	12
DUNCAN	2660	8	84.0	31	1.0	103.	9	60.	31	.5	.5	590.0	32.0	.790	31	-1.56	.31	20
DURANT USDA	2678	8	82.7	31	*****	103.	28	55.	30	.0	*****	548.0	*****	3.490	31	1.02	2.82	6
FARRIS 3 WNW	3083	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.000	31	*****	.72	5
GRADY	3688	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.180	31	*****	.13	20
HEALDTON	4001	8	82.9	17	*****	103.	27	52.	31	.0	*****	304.0	*****	1.090	17	*****	1.06	20
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.571	31	*****	.30	17
KINGSTON	4865	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.800	31	-1.69	.38	11
LEHIGH	5108	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.402	31	*****	.25	11
LINDSAY 2 W	5216	8	83.3	30	*****	105.	8	50.	31	.0	*****	548.0	*****	1.442	30	*****	.41	9
LOCO 6 SE	5247	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.224	31	*****	1.22	20
MADILL	5468	8	84.8	31	1.7	105.	23	57.	31	.0	.0	612.5	51.5	1.240	31	-1.19	1.10	5
MARIETTA	5563	8	85.8	31	2.9	113.	23	58.	31	.0	.0	644.0	89.0	1.661	31	-.92	1.32	20
MARLOW 1 WSW	5581	8	84.3	31	*****	106.	8	57.	31	.0	*****	597.0	*****	.830	31	-1.59	.40	20
MCGEE CREEK DAM	5713	8	83.4	31	*****	106.	8	56.	30	.0	*****	570.0	*****	3.510	31	*****	1.28	19
OSWALT	6787	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.320	31	*****	.32	20
PAULS VALLEY	6926	8	83.8	31	.7	106.	8	51.	31	.0	.0	583.5	22.5	.491	31	-1.83	.15	29
PONTOC	7214	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.220	31	-1.49	.60	12
TISHOMINGO NWLR	8884	8	84.2	30	*****	108.	23	55.	31	.0	*****	574.5	*****	.500	31	-2.02	.35	12
TUSSY	9032	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.891	31	*****	1.05	9
WAURIKA	9395	8	85.3	31	1.5	106.	8	56.	31	.0	.0	629.0	46.0	1.381	31	-1.17	1.38	9
WAURIKA DAM	9399	8	84.6	31	*****	106.	9	52.	23	.0	*****	609.0	*****	.200	31	*****	.10	20

AUGUST 1988 SUMMARY FOR SOUTHEAST DIVISION (CD9)

NAME	ID	CD	DEV						HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	DEV NUM OBS	DEV FROM NORM	DEV MAX 24-HR	DAY	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	TEMP DAY										
ANTILERS	256	9	83.2	31	2.1	103.	8	51.	31	.0	.0	564.5	65.5	1.890	31	-1.34	1.19	11
BATTIEST 1 SSW	567	9	79.8	28	*****	99.	9	49.	31	.0	*****	413.5	*****	6.290	31	*****	5.30	12
BEAR MT TWR	584	9	81.5	31	*****	101.	9	55.	31	.0	*****	511.5	*****	6.790	31	3.21	5.37	11
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.842	31	*****	2.00	12
BOSWELL 4 NNW	980	9	82.9	31	*****	102.	8	50.	31	.0	*****	555.5	*****	2.533	31	-.15	1.18	19
BROKEN BOW 1 N	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.990	31	5.03	4.50	12
CARNASAW TWR	1499	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.790	31	2.69	3.68	12
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.160	30	*****	4.59	12
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.280	31	1.21	1.60	12
HEAVENER 1 SE	4008	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.410	31	1.06	1.90	12
HEE MT TWR	4017	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.570	31	*****	3.63	12
HUGO	4384	9	84.5	31	2.3	105.	23	57.	31	.0	.0	603.5	70.5	1.011	31	-2.43	.57	12
IDABEL	4451	9	81.7	31	.4	100.	8	58.	31	.0	.0	516.5	11.5	5.070	31	2.45	2.25	12
POTEAU W W	7254	9	81.5	31	*****	102.	9	49.	29	.0	*****	510.5	*****	2.451	31	*****	.86	11
SMITHVILLE 1 W	8285	9	78.8	31	*****	102.	7	47.	31	.0	*****	427.0	*****	5.720	31	*****	2.12	11
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.300	31	-1.30	.38	18
TUSKAHOMA	9023	9	81.3	31	*****	100.	9	51.	31	.0	*****	504.5	*****	4.480	31	*****	2.27	12
VALLIANT 3 W	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.972	31	2.21	2.98	12

AUGUST 1988 CLIMATE DIVISION SUMMARY

CLIMATE DIV	MEAN TEMP	NUM STA	DEV				HEAT DEGREE DAYS	DEV FROM NORM	COOL DEGREE DAYS	DEV FROM NORM	TOT PPT	DEV				
			FROM NORM	MAX TEMP	MIN DAY	TEMP DAY						NUM STA	FROM NORM	MAX 24-HR	DAY	
1	79.8	11	1.3	110.0	14	44.0	29	4.6	4.6	461.0	44.7	1.09	13	-1.47	1.12	18
2	83.4	14	1.8	109.0	8	42.0	29	1.6	1.6	572.1	59.0	.55	24	-2.37	.90	27
3	82.1	17	1.7	107.0	8	43.0	29	1.4	1.4	532.5	52.5	1.91	30	-1.26	2.00	13
4	82.3	11	.8	109.0	9	47.0	28	3.1	3.1	539.7	27.6	.90	22	-1.47	1.20	18
5	83.2	16	1.6	108.0	8	50.0	29	.8	.8	564.2	48.8	1.39	35	-1.18	2.10	10
6	81.5	10	.6	104.0	8	50.0	30	.0	.0	512.5	17.3	2.00	27	-.82	2.22	18
7	84.1	13	1.3	109.0	8	50.0	30	.4	.4	592.5	39.2	.76	23	-1.53	1.85	10
8	84.1	16	1.0	113.0	23	50.0	31	.0	.0	588.3	27.6	1.20	29	-1.37	2.82	6
9	81.9	8	.4	105.0	23	47.0	31	.0	.0	524.2	11.9	4.43	17	1.35	5.37	11

NEW DATA AVAILABLE

In response to many requests for data other than temperature and precipitation at locations other than Oklahoma City and Tulsa, the Survey began archiving the hourly 604 wire service airport observations for Oklahoma and nearby stations in surrounding states on August 1, 1988. The data are obtained from the University of Oklahoma Geosciences Computer Network and archived on DOS compatible PC floppy diskettes. Archived variables and stations are listed below and are available on request from the Survey.

Archived Variables

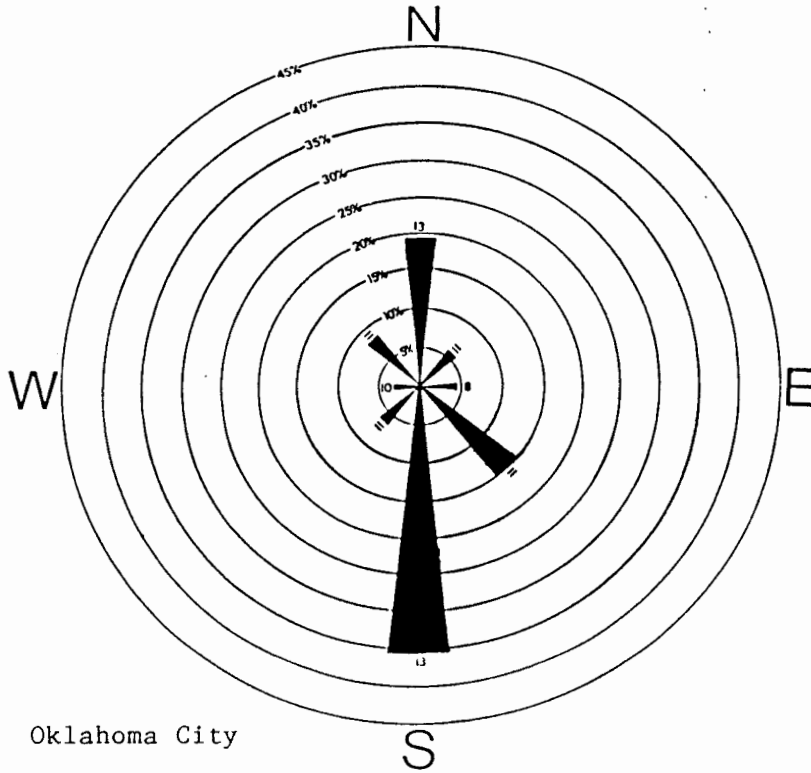
(All Conditions are at the Time of Observation)

Time of observation (hour and minute)
Temperature (degrees F)
Dew point (degrees F)
Relative humidity (percent)
Wind speed (knots)
Wind direction (degrees)
Peak gust since the last observation (knots)
Total cloud cover (clear, broken, overcast, scattered)
Weather (thunderstorm, rain, snow, fog, etc.)
Visibility (nautical miles)

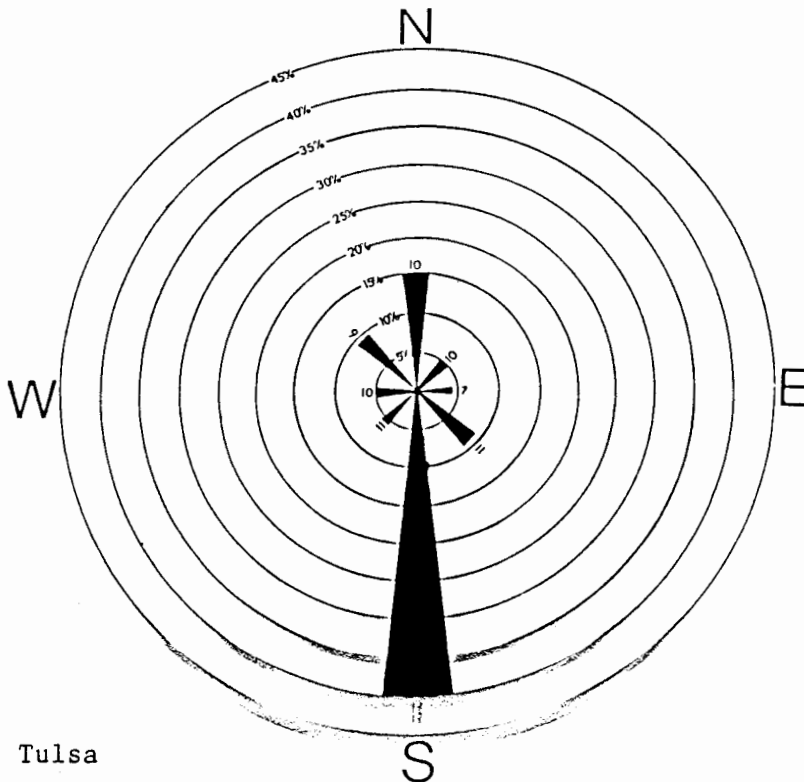
Archived Stations

Lubbock, TX	Altus AFB, OK
Joplin, MO	Hobart, OK
Texarkana, TX	Gage, OK
Fort Smith, AR	Oklahoma City, OK
Fayetteville, AR	Enid, OK
Longview, TX	Tinker AFB, OK
Stephensville, TX	Ponca City, OK
Childress, TX	Fort Sill, OK
Amarillo, TX	Ardmore, OK
	Tulsa, OK
	McAlester, OK

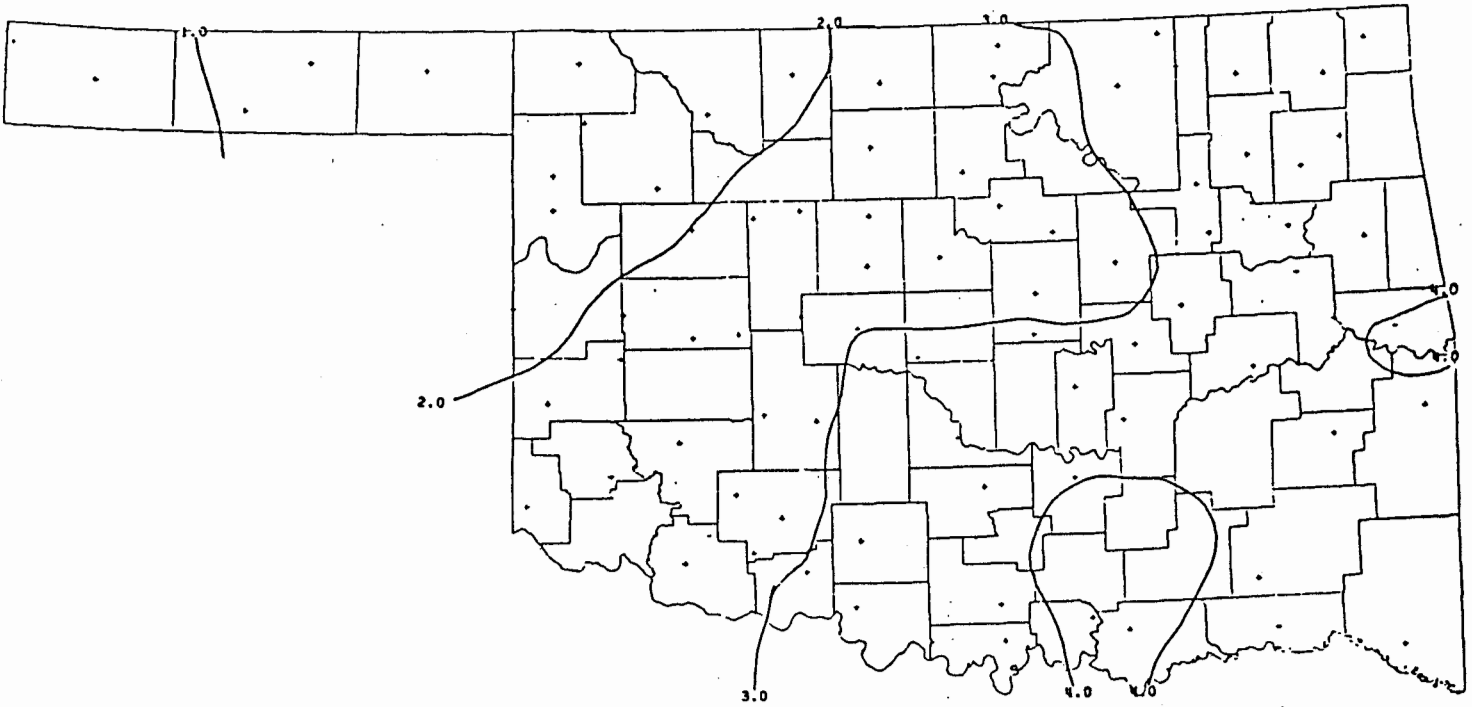
October wind roses for Oklahoma City and Tulsa for 10-year (1965-1974) mean winds (data adapted from NOAA Airport Climatology Series). Percents represent the percentage of winds coming from a direction. The numbers at the end of the bars indicate the average speed of winds from that direction. Graphics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



Oklahoma City



Tulsa

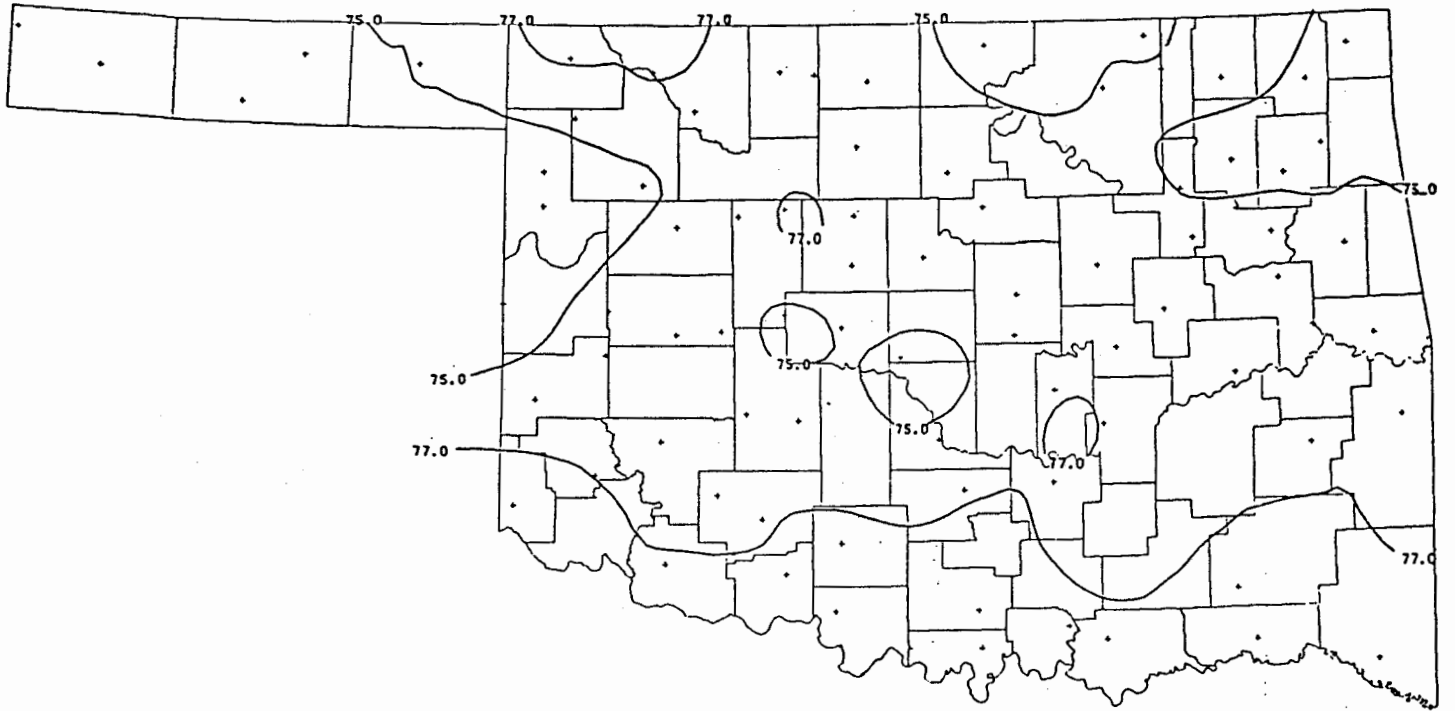


30-YEAR MEAN OCTOBER PRECIPITATION

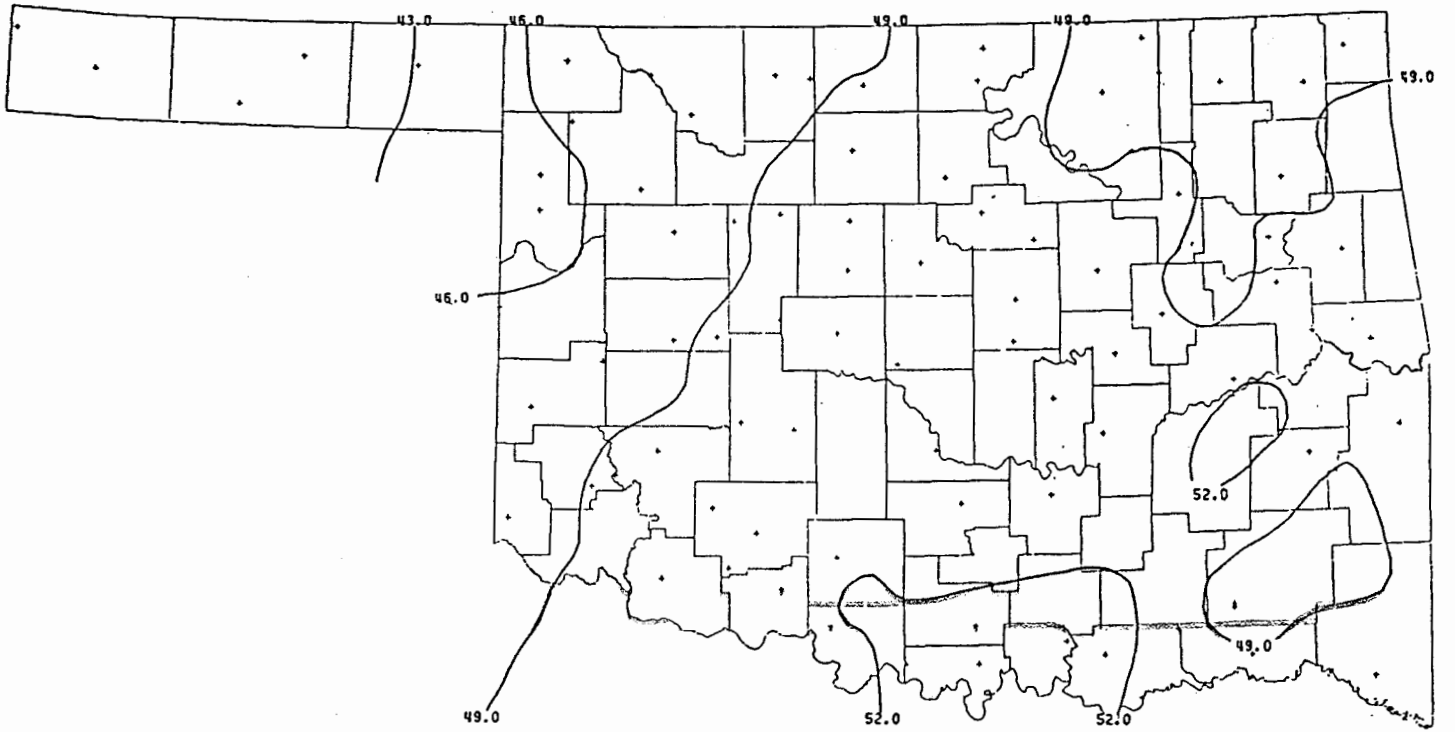
OKLAHOMA CITY OCTOBER 1988

SUNRISE AND SUNSET

DATE	SUNRISE	SUNSET	HOURS OF DAYLIGHT
881001	7:24AM	7:14PM	11:50
881002	7:25AM	7:13PM	11:48
881003	7:26AM	7:11PM	11:46
881004	7:27AM	7:10PM	11:43
881005	7:28AM	7: 9PM	11:41
881006	7:28AM	7: 7PM	11:39
881007	7:29AM	7: 6PM	11:37
881008	7:30AM	7: 5PM	11:35
881009	7:31AM	7: 3PM	11:32
881010	7:32AM	7: 2PM	11:30
881011	7:32AM	7: 1PM	11:28
881012	7:33AM	6:59PM	11:26
881013	7:34AM	6:58PM	11:24
881014	7:35AM	6:57PM	11:22
881015	7:36AM	6:55PM	11:19
881016	7:37AM	6:54PM	11:17
881017	7:38AM	6:53PM	11:15
881018	7:39AM	6:52PM	11:13
881019	7:39AM	6:50PM	11:11
881020	7:40AM	6:49PM	11: 9
881021	7:41AM	6:48PM	11: 7
881022	7:42AM	6:47PM	11: 5
881023	7:43AM	6:46PM	11: 3
881024	7:44AM	6:45PM	11: 1
881025	7:45AM	6:44PM	10:59
881026	7:46AM	6:43PM	10:57
881027	7:47AM	6:42PM	10:55
881028	7:48AM	6:40PM	10:53
881029	7:49AM	6:39PM	10:51
881030	7:50AM	6:38PM	10:49
881031	7:51AM	6:38PM	10:47



30-YEAR MEAN OCTOBER DAILY MAXIMUM TEMPERATURE



30-YEAR MEAN OCTOBER DAILY MINIMUM TEMPERATURE

NATIONAL WEATHER SERVICE 30 AND 90-DAY OUTLOOK

30-DAY OUTLOOK (MID-SEPTEMBER - MID-OCTOBER)

Precipitation - Near normal Statewide (see table below).
Temperature - Near normal Statewide.

90-DAY OUTLOOK (SEPTEMBER - NOVEMBER)

Precipitation - Below normal in western one-third. Near normal elsewhere.
Temperature - Slight chance of above normal in extreme southeast. Near normal elsewhere.

NORMALS FOR MID-SEPTEMBER THROUGH MID-OCTOBER

<u>DIVISION</u>	<u>MAXIMUM TEMPERATURES</u>	<u>MINIMUM TEMPERATURES</u>	<u>RAINFALL (In Inches)</u>
Panhandle	80	50	1.69
North Central	81	55	2.64
Northeast	82	55	3.96
West Central	82	55	2.51
Central	82	57	3.38
East Central	83	56	3.79
Southwest	84	57	2.81
South Central	84	58	3.67
Southeast	84	58	3.96
