

OKLAHOMA CLIMATOLOGICAL SURVEY

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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 JULY 1987

Four strong storm systems with accompanying hail, rain, and strong winds accounted for most of the near-normal July precipitation recorded Statewide. Most stations received rain on only a few storm days in July (see Table 1). Although each climate division topped the 100 degree mark during the last two days of the month, mean monthly temperatures ranged from 2.1 to 3.6 degrees below normal. As a result, the State Health Department did not need to issue its first heat alert until the 29th, and only very limited water rationing was mandated.

The first significant storm system, a result of unstable air and an upper level disturbance, moved across the State during the first few days of the month. On the 2nd, Tulsa reported 1.12" of rain and marble-size hail. Other rainfall reports on the 2nd included Newkirk 1.72", Konawa 1.40", Ashland 1.31", and Elmore City 3.70". Duncan reported 60 mph winds which uprooted trees, and similarly strong winds toppled a mobile home in Minco. Before leaving the State, the storm system generated a strong squall line in northern Oklahoma on the morning of the 4th. Payne and Noble Counties recorded 70 mph winds which overturned mobile homes.

A second disturbance produced slow-moving, scattered thunderstorms over mostly northern portions of the State on the 8th. Hail reports included ping-pong ball size in Garfield County, and quarter size in Major County, with hail covering the ground at Ringwood. 60-70 mph winds snapped large tree limbs at nearby Waukomis.

On the 12th and 13th a vigorous front delivered large rainfall amounts as it moved southeastward through Oklahoma. At least 2 stations in each climate division (except 1 and 6) recorded their

greatest daily precipitation for the month on those days. The daily amounts ranged from .37" at Altus to 3.75" at Thomas, with numerous reports in the 1.00 to 1.75 inch range. After the front passed, high pressure and northerly winds provided cool relief for the entire State. Each climate division recorded its lowest monthly temperature on the 14th or 15th, as temperatures dropped to the low to mid 50's. The 49 degree reading at Buffalo on the morning of the 14th was the State's lowest for the month and Buffalo's lowest July reading for the last 30 years.

The fourth significant storm system produced a powerful squall line and 2 tornadoes in southwest Oklahoma on the 17th. One tornado was reported near Cache in Comanche County, causing only limited damage. The National Weather Service radar indicated surface winds up to 75 mph in some vigorous storms along a line from southern Grady to northern Garvin Counties. Nickle-size hail was reported at Pocasset. Additional hail fell near Mustang, and in Tillman and Kiowa Counties where a second tornado was spotted near Altus.

During the last 12 days of July most stations recorded no precipitation. Settled weather, typical summer-time conditions of high pressure, sunny skies, and warm southerly breezes continued for several days. By the 29th, near 100 degree readings prompted the State's first heat alert of 1987. Hot weather prevailed through the end of the month (see Graph #1). Temperatures topped 100 degrees in all sections of the State on the 31st.

TABLE 1

The atmosphere over Oklahoma is generally stable during the summer months when the surface heating is offset by warmer temperatures aloft. Infrequent disturbances in the upper atmosphere usually serve as the major rain-producing mechanism during this period. As a result of the infrequent occurrence of these storms, and a stable atmosphere, typically fewer rain days* occur in the summer months than in spring.

RAIN DAYS

CD	Station	APRIL, MAY, JUNE	JULY	JULY
		30 Year Mean	30 Year Mean	1987
1	Buffalo	7	6	5
2	Medford	12	4	6
3	Nowata	9	5	5
4	Clinton	7	4	2
5	Purcell	9	5	3
6	Tahlequah	11	5	5
7	Duncan	7	4	5
8	Ada	9	4	3
9	Antlers	10	4	4

* In this study, a rain day is a day on which at least .10" of rain was recorded.

Graph 1: Oklahoma City Apparent Temperature

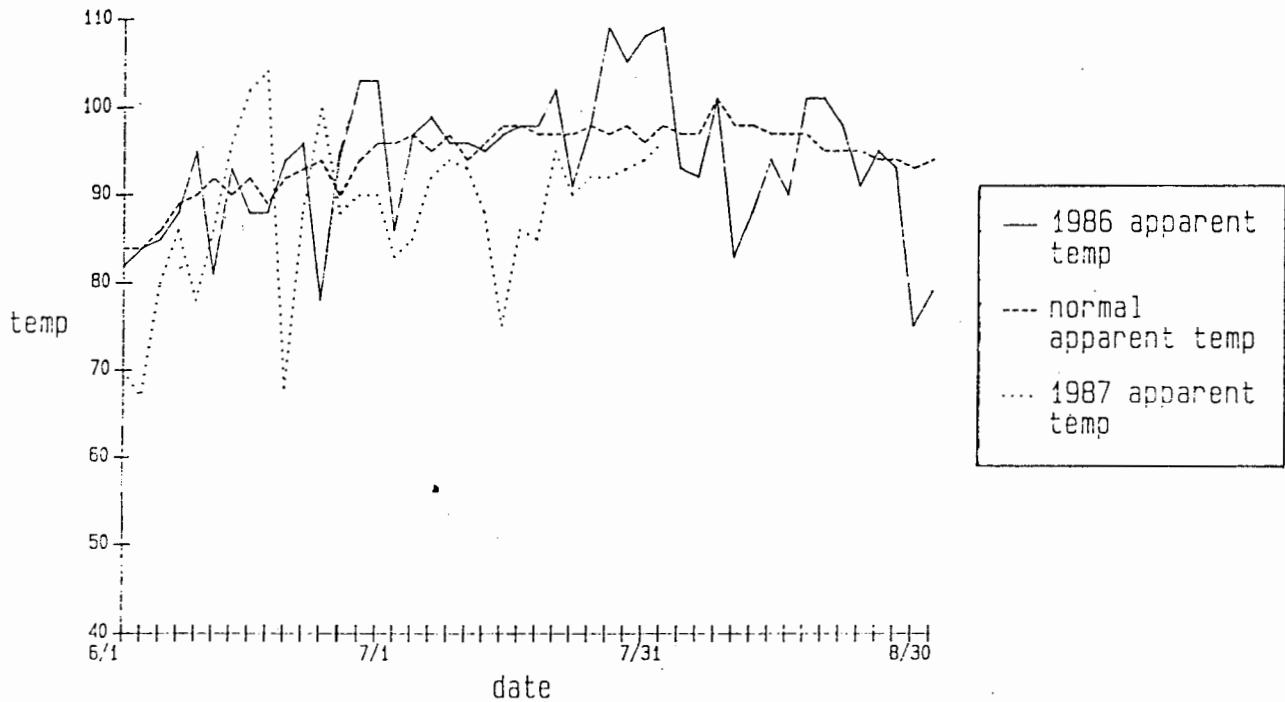


TABLE OF 1986/1987 COMPARISONS

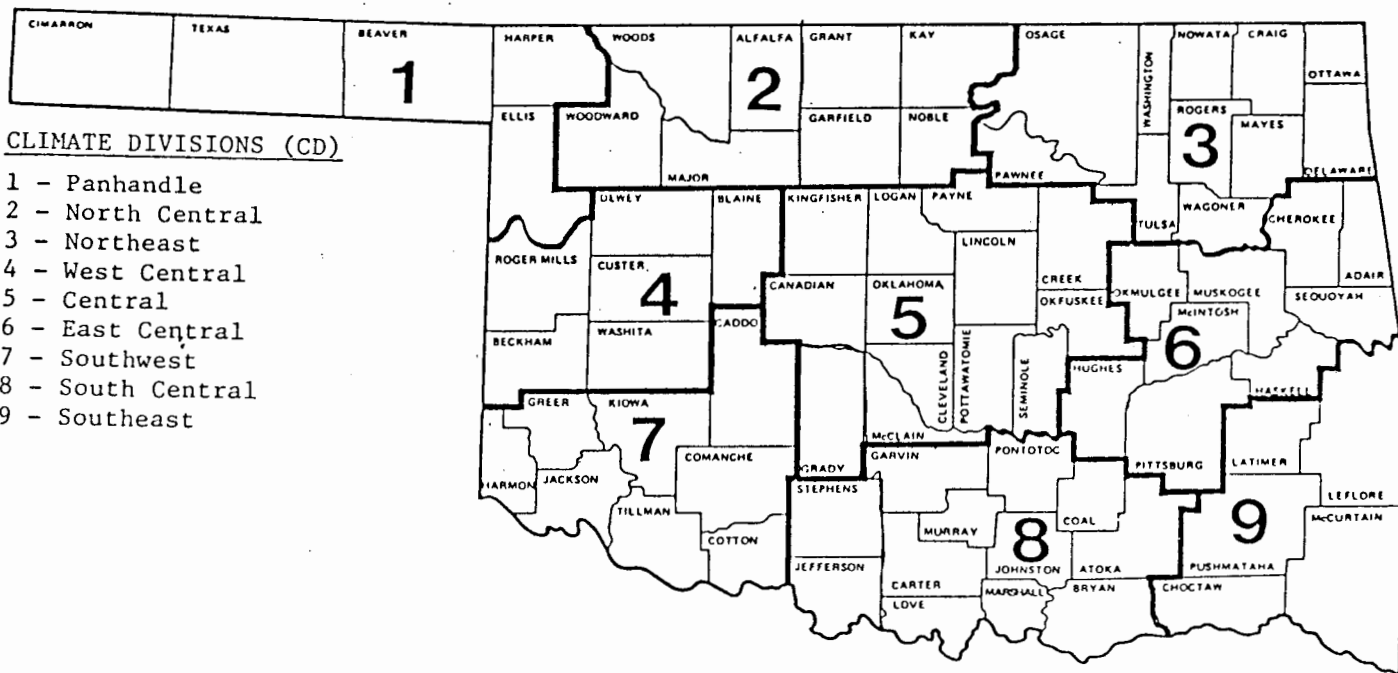
Station	July Temperatures (F)		July Precipitation (in.)	
	1986	1987	1986	1987
Arnett	80.1	76.4	2.372	1.512
Enid	85.4	81.0	2.430	3.590
Mutual	84.1	79.0	1.231	1.880
Tulsa	86.8	81.9	1.083	4.393
Elk City	81.9	78.5	5.282	2.052
Oklahoma City	86.0	80.0	.110	3.094
McAlester	85.4	79.9	.221	5.930
Altus Irr. Sta.	85.7	*	1.640	.933
Durant	86.0	79.8	.020	3.350
Ada	86.1	79.4	.100	3.141
Antlers	84.3	80.2	.390	1.980

* Indicates missing data

EXTREMES

Variable	Station	Division	Observati on	Date
Minimum temperature (F)	Kenton	1	48	13
Maximum temperature (F)	Upper Spavinaw	3	106	30
Maximum 24-hour precipitation	Canton Dam	4	4.71"	13

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.

JULY 1987 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	DIV	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN TEMP	DAY	DAY							FROM	MAX	
ARNETT	332	1	77.7	30	-3.1	94.	30	55.	14	0.0	0.0	381.5	-100.5	1.772	31	-1.32	1.47	17
BEAVER	593	1	78.9	30	-2.6	99.	30	54.	14	0.0	0.0	418.0	-94.0	.881	31	-1.99	.49	4
BOISE CITY	900	1	77.2	31	-.0	99.	20	53.	13	.5	.5	377.5	-25.5	.954	31	-1.65	.90	15
BUFFALO	1243	1	80.5	31	-2.9	102.	31	49.	14	0.0	0.0	479.0	-91.0	2.550	31	-.77	.85	17
FARGO	3070	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.530	31	-.66	1.35	17
GAGE	3407	1	78.6	30	-2.9	95.	31	50.	14	0.0	0.0	406.5	-105.5	1.060	30	-1.05	.77	17
GATE	3409	1	80.0	30	999.0	101.	30	55.	13	0.0	9999.0	451.0	9999.0	.862	31	99.99	.49	16
GOODWELL MS STA	3628	1	76.4	30	-3.0	99.	11	53.	13	0.0	0.0	313.0	-103.0	1.512	31	-1.37	.71	15
GUMON	3835	1	78.8	28	999.0	100.	31	54.	13	0.0	9999.0	386.5	9999.0	1.231	29	99.99	.87	14
HOOPER	4298	1	78.3	30	-2.0	101.	11	54.	14	0.0	0.0	399.5	-74.5	.802	31	-2.13	.25	15
KENTON	4766	1	77.1	30	-1.5	99.	10	48.	13	1.0	1.0	363.0	-59.0	1.930	31	-.96	.95	21
LAVERNE	5045	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.401	31	-1.09	.90	17
OPTIMA	6740	1	77.5	30	999.0	99.	11	53.	13	0.0	9999.0	376.0	9999.0	1.783	31	99.99	.90	15
REGIER	7534	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.253	31	-2.25	.16	3
TURPIN	9017	1	78.9	30	999.0	101.	18	54.	13	0.0	9999.0	416.5	9999.0	.951	31	99.99	.70	4

JULY 1987 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	DIV	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN TEMP	DAY	DAY							FROM	MAX	
ALVA	194	2	80.4	31	-3.0	100.	31	55.	15	0.0	0.0	476.0	-94.0	1.130	31	-1.46	.63	18
BILLINGS	755	2	80.4	30	999.0	99.	30	57.	14	0.0	9999.0	462.5	9999.0	2.781	31	-.74	1.30	4
BLACKWELL	818	2	80.4	31	999.0	102.	31	55.	14	0.0	9999.0	476.0	9999.0	3.190	31	99.99	1.43	13
BRAMAN	1075	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.522	31	99.99	1.12	1
CEDARDALE	1620	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.582	31	99.99	.48	17
CHEROKEE	1724	2	82.5	31	-1.2	102.	31	56.	15	0.0	0.0	542.0	-38.0	1.991	31	-.77	1.00	2
ENID	2912	2	81.0	31	-2.5	99.	31	56.	14	0.0	0.0	496.0	-78.0	3.590	31	.41	.80	2
FT. SUPPLY	3304	2	77.3	30	-4.5	94.	30	52.	14	0.0	0.0	369.0	-152.0	1.130	31	-1.06	1.02	17
FREEDOM	3358	2	79.9	31	999.0	99.	31	52.	14	0.0	9999.0	463.0	9999.0	1.581	31	99.99	.68	5
GREAT SALT PLAINS	3740	2	81.1	30	999.0	100.	30	56.	14	0.0	9999.0	482.0	9999.0	3.921	31	.74	1.55	13
HARDY	3909	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.830	31	99.99	.95	1
HELENA	4014	2	79.9	30	999.0	98.	30	54.	14	0.0	9999.0	448.5	9999.0	1.760	31	-1.32	1.12	2
JEFFERSON	4573	2	81.6	31	-2.0	101.	31	55.	14	0.0	0.0	516.0	-61.0	6.090	31	2.17	2.61	3
LAMONT	5013	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.700	31	99.99	1.19	13
MEDFORD	5760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.530	31	99.99	1.93	3
MORRISON	6065	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.370	31	99.99	1.44	4
MUTUAL	6139	2	79.0	30	-3.6	98.	30	52.	14	0.0	0.0	419.5	-126.5	1.980	31	-.68	.93	2
NEWKIRK	6278	2	80.1	31	-2.4	99.	31	55.	14	0.0	0.0	460.0	-75.0	3.900	31	.35	1.75	2
ORIENTA	6751	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.260	31	99.99	1.50	2
PERRY	7012	2	81.6	31	-1.6	100.	31	56.	14	0.0	0.0	515.5	-48.5	2.490	31	-1.04	1.07	4
PONCA CITY	7201	2	77.7	2	-4.7	101.	31	56.	14	0.0	0.0	25.5	-520.5	0.000	1	-4.10	0.00	9
REDROCK	7505	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.230	31	-1.49	.65	4
RENFROW	7556	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.960	31	-.55	.95	5
WAYNOKA	9404	2	80.2	31	-3.3	99.	31	50.	14	0.0	0.0	471.0	-103.0	2.270	31	-.28	.82	17
WOODWARD	9760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.470	31	-1.35	1.39	17

JULY 1987 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	DIV	DEV						HEAT				COOL				DEV					
			MEAN	NUM	FROM	MAX	MIN	DAY	TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DEG	FROM	DEG	FROM	TOT	NUM	FROM
BARNSDALL	535	3	79.2	31	999.0	98.	31	55.	14	0.0	9999.0	440.0	9999.0	3.430	27	.23	1.52	13				
BARTLESVILLE	540	3	80.5	31	-1.5	101.	31	55.	14	0.0	0.0	480.0	-47.0	3.670	31	.68	1.21	13				
BIXBY	782	3	78.9	28	-2.9	96.	30	56.	14	0.0	0.0	390.5	-130.5	5.542	30	2.33	1.47	4				
BURBANK	1256	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.800	31	99.99	.75	4				
CHELSEA	1717	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.580	30	99.99	1.09	13				
CLAREMORE	1828	3	83.5	23	1.9	101.	30	65.	3	0.0	0.0	426.0	-89.0	4.460	25	1.38	2.46	5				
CLEVELAND	1902	3	80.3	22	999.0	99.	30	56.	14	0.0	9999.0	336.0	9999.0	4.350	28	99.99	1.55	13				
FORAKER	3250	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.331	31	-.14	1.31	13				
HUMINY	4289	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.810	31	.39	1.43	13				
HULAH DAM	4393	3	77.8	17	-3.3	99.	30	53.	14	0.0	0.0	218.0	-281.0	4.130	22	1.19	1.71	5				
JAY TOWER	4567	3	79.7	31	999.0	98.	31	54.	14	0.0	9999.0	455.0	9999.0	1.600	31	99.99	.94	18				
HOLLOW	4258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.140	31	-.61	1.14	1				
KANSAS	4672	3	78.5	30	999.0	99.	31	54.	14	0.0	9999.0	400.0	9999.0	2.621	30	99.99	.85	5				
LENAPAH	5110	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.080	31	99.99	1.54	13				
MANNFORD	5522	3	79.6	31	999.0	102.	31	53.	14	0.0	9999.0	451.5	9999.0	3.340	31	99.99	1.04	5				
MARANEK	5540	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.640	31	.52	2.60	13				
MIAMI	5855	3	79.3	30	-1.7	100.	30	55.	14	0.0	0.0	430.5	-68.5	3.380	31	-.55	.97	12				
MOHATA	6485	3	79.6	31	-2.5	99.	31	56.	14	0.0	0.0	454.0	-76.0	3.900	31	.96	1.34	13				
ONEIDA	6713	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.220	31	99.99	1.64	18				
PANHUSKA	6935	3	79.4	31	-2.4	98.	31	55.	14	0.0	0.0	446.5	-74.5	3.510	31	.06	1.19	13				
PANHUSKA 2	6937	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.110	31	99.99	1.23	13				
PANTEE	6940	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.870	31	-.26	1.45	4				
PRYOR	7309	3	78.3	20	-3.2	96.	30	55.	14	0.0	0.0	267.0	-248.0	5.610	30	2.55	1.07	13				
QUAPAW	7358	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.000	31	.23	2.40	3				
RALSTON	7390	3	80.7	31	999.0	100.	31	55.	14	0.0	9999.0	487.0	9999.0	1.750	31	-1.74	.75	5				
RANONA	7394	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.720	31	99.99	2.32	1				
SKIATOOK	8258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.690	31	2.28	2.16	13				
SPAVINAN	8380	3	80.0	31	999.0	98.	31	59.	15	0.0	9999.0	465.0	9999.0	3.583	31	-.15	1.34	18				
TULSA	8992	3	81.9	30	-1.3	99.	31	60.	14	0.0	0.0	507.5	-56.5	4.393	30	.88	1.32	18				
UPPER SPAVINAN	9101	3	85.4	30	999.0	106.	30	60.	14	0.0	9999.0	613.5	9999.0	5.431	31	99.99	2.35	26				
VINITA	9203	3	78.4	27	-2.7	95.	28	54.	14	0.0	0.0	363.0	-136.0	3.440	27	.06	1.55	5				
WAGONER	9247	3	80.5	31	-1.9	99.	31	57.	14	0.0	0.0	479.5	-59.5	3.770	31	.27	1.08	13				
WARR	9298	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.440	31	99.99	1.44	13				
WYNOHA	9792	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.750	27	99.99	1.00	12				

JULY 1987 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	DIV	DEV				HEAT				COOL				DEV			
			HEAT	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR	DAY
CANTON DAM	1445	4	78.9	30	-4.0	98.	26	54.	14	0.0	0.0	416.0	-139.0	6.350	31	3.94	4.71	13
CHEYENNE	1738	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.941	31	99.99	2.68	17
CLINTON	1909	4	81.7	31	-1.6	100.	31	60.	1	0.0	0.0	517.0	-50.0	2.190	31	-.33	1.55	17
COLONY	2039	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.141	31	99.99	.68	17
CORDELL	2125	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.352	31	-.17	1.62	17
ELK CITY	2849	4	78.1	31	999.0	94.	30	52.	14	0.0	9999.0	406.5	9999.0	2.052	31	-.36	1.94	17
GEARY	3497	4	78.6	31	-4.4	95.	31	50.	14	0.0	0.0	423.0	-135.0	1.690	31	-.58	1.14	3
OKEENE	6629	4	80.6	31	-3.3	99.	31	57.	14	0.0	0.0	483.5	-102.5	2.600	31	.26	1.26	13
ERICK	2944	4	80.1	30	-1.0	98.	30	57.	14	0.0	0.0	452.0	-72.0	1.091	31	-1.04	.69	10
HAMMON	3071	4	77.5	30	-5.5	96.	30	50.	14	0.0	0.0	375.5	-182.5	2.351	31	.20	1.90	16
LEEDY	5090	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.201	31	1.23	3.20	17
MURKIN	6035	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.811	31	1.52	2.79	17
NETROP	7565	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.981	31	99.99	1.10	17
REYDUN	7579	4	79.0	31	999.0	97.	31	54.	14	0.0	9999.0	435.5	9999.0	2.521	31	.43	2.02	17
SAYRE	7952	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.900	31	-.17	1.44	17
SWEETWATER	8652	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.040	31	99.99	1.83	16
TALUGA	8708	4	79.7	31	-2.5	98.	31	55.	14	0.0	0.0	456.0	-77.0	1.301	31	-1.32	.88	17
THOMAS	8815	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.420	31	99.99	3.75	13
VICI	9172	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.551	31	99.99	.20	17
WATONGA	9364	4	79.8	31	999.0	97.	31	56.	14	0.0	9999.0	460.0	9999.0	2.891	31	.65	1.02	2
WEATHERFORD	9422	4	80.0	30	-3.0	99.	30	56.	14	0.0	0.0	451.0	-107.0	2.551	31	.06	1.90	13

JULY 1987 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	DIV	DEV				HEAT		COOL		TOT PPT	NUM OBS	DEV		24-HR DAY
			HEAT	DEV	COOL	DEV	DEG	FROM	DEG	FROM			FROM	MAX	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY			NORM			
AMBER	265	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.57	3
ARCADIA	288	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	.57	18
TINKER AFB	325	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	.55	13
BLANCHARD	830	5	79.0	31	999.0	95.0	31	57.0	14	0.0	9999.0	31	99.99	2.25	3
BRISTOW	1144	5	80.4	31	-1.0	101.0	31	54.0	14	0.0	0.0	31	-7.0	.92	17
CHANDLER	1684	5	79.0	31	-3.0	97.0	31	57.0	14	0.0	0.0	31	-7.5	1.15	17
CHICKASHA	1750	5	79.7	31	-3.3	97.0	31	55.0	14	0.0	0.0	31	-5.8	.75	18
COX CITY	2196	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	2.00	2
CRESCENT	2242	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.00	13
CUSHING	2318	5	80.5	29	-1.9	98.0	30	60.0	14	0.0	0.0	31	-2.41	.42	13
EL RENO	2818	5	78.7	26	-3.0	98.0	31	56.0	14	0.0	0.0	31	.21	1.05	5
GUTHRIE	3821	5	81.3	31	-1.0	100.0	31	57.0	14	0.0	0.0	31	.03	1.04	13
HENNESSEY	4055	5	79.9	31	-3.0	97.0	30	58.0	14	0.0	0.0	31	.44	1.18	13
INGALLS	4489	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.28	4
KINGFISHER	4831	5	79.9	31	-3.0	98.0	31	56.0	14	0.0	0.0	31	.12	1.36	18
KINGFISHER CREEK	4862	5	80.2	30	999.0	98.0	30	56.0	14	0.0	9999.0	31	99.99	1.36	18
UJC KINGFISHER	4864	5	80.2	30	999.0	98.0	30	56.0	14	0.0	9999.0	31	99.99	1.36	18
KONAWA	4915	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	1.00	1.40	2
MARSHALL	5589	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	-2.43	.16	1
MEEKER	5779	5	79.9	26	-2.4	97.0	31	57.0	14	0.0	0.0	31	-2.1	1.10	7
MULHALL	6110	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.00	13
NORMAN	6386	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	.38	1.31	2
WILTON	6516	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.75	3
OKEMAH	6638	5	79.4	31	-2.7	97.0	31	58.0	14	0.0	0.0	31	-5.0	1.38	18
OKLAHOMA CITY	6661	5	80.0	30	-2.1	98.0	9	61.0	14	0.0	0.0	30	.05	1.30	16
PERKINS	7003	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	-1.70	.70	13
PIEDMONT	7068	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	3.00	2
PRAGUE	7264	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	-1.25	.98	13
PURCELL	7327	5	78.0	31	-4.0	96.0	31	55.0	14	0.0	0.0	31	4.13	3.65	18
SEMINOLE	8042	5	81.5	31	-2.2	100.0	31	58.0	14	0.0	0.0	31	1.94	1.75	3
SHANNEE	8110	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	.26	1.01	13
STELLA	8479	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.79	2
STILLWATER	8501	5	79.7	30	-2.4	97.0	30	56.0	14	0.0	0.0	31	-0.87	.83	4
STROUD	8563	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.43	18
TECUMSEH	8751	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	1.45	18
TROUSDALE	8960	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	2.46	18
UNION CITY	9086	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	2.50	2.37	2
WELLY	9479	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	99.99	.75	18
WENOLA	9575	5	999.0	0	999.0	999.0	0	999.0	0	999.0	9999.0	31	.86	1.30	3

JULY 1987 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	DIR	DEV				HEAT		DEV		COOL		DEV		TOT PPT	OBS	FROM	MAX	24-HR	DAY
			HEAT	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	DEG	FROM	DEG						
ASHLAND	364	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.975	31	99.99	1.31	2		
BEGGS	631	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.440	31	99.99	.47	5		
BOYNTON	1027	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.321	31	99.99	1.90	5		
CALVIN	1391	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.612	31	-.94	1.15	3		
CHECOTAH	1711	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.720	31	.25	1.00	18		
DEWAR	2485	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.150	31	-.39	1.27	18		
DUSTIN	2690	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.690	31	99.99	1.49	18		
EUFALA	2993	6	81.1	31	999.0	99.	31	59.	14	0.0	9999.0	498.5	9999.0	4.560	31	.91	2.30	3		
HANNA	3884	6	79.7	31	999.0	99.	31	57.	14	0.0	9999.0	455.0	9999.0	2.522	31	-.64	.85	13		
HARTSHORNE	3946	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.171	31	99.99	1.11	3		
HASKELL	3956	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.350	31	1.17	1.79	18		
HOLDENVILLE	4235	6	79.1	31	-3.5	97.	30	55.	14	0.0	0.0	437.0	-109.0	3.940	31	.48	1.60	3		
LAKE EUFALA	4975	6	74.8	30	999.0	101.	30	58.	5	0.0	9999.0	445.0	9999.0	2.250	31	99.99	.93	13		
LYONS	5437	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.422	31	-.80	1.56	5		
MCALISTER	5664	6	79.9	29	-2.8	97.	31	57.	14	0.0	0.0	431.0	-143.0	5.930	30	2.52	1.97	25		
MCCURTAIN	5693	6	80.7	31	999.0	101.	31	58.	15	0.0	9999.0	486.0	9999.0	3.153	31	-.66	1.30	3		
MUSKOGEE	6130	6	81.0	31	-1.6	101.	31	57.	14	0.0	0.0	496.5	-49.5	4.580	31	1.48	1.57	4		
OKTAWA 2 NE	6678	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.250	31	99.99	1.61	5		
QUINTON	7372	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.782	31	-1.02	1.11	2		
SALLISAW	7862	6	80.0	31	-2.1	101.	31	54.	14	0.0	0.0	465.0	-65.0	3.891	31	.34	1.59	3		
SCIPIO	7979	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.820	31	99.99	1.20	25		
SCRAPER	7993	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.910	31	99.99	1.51	5		
SHORT	8170	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.560	31	99.99	.95	5		
STILWELL	8305	6	78.3	31	999.0	97.	31	52.	14	0.0	9999.0	411.5	9999.0	3.843	31	.12	1.10	25		
TAMLEQUAH	8677	6	79.0	31	-1.7	99.	31	52.	14	0.0	0.0	434.0	-53.0	3.231	31	-.16	1.55	5		
WEBBERS FALLS 5	MSW9445	6	79.9	30	-2.2	100.	30	55.	14	0.0	0.0	446.5	-83.5	2.930	31	-.22	1.19	1		
WESTVILLE	9523	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.500	31	99.99	1.44	1		
WETUMKA	9571	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.363	31	.17	1.20	18		

JULY 1987 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	DAY	DEV				MIN	DAY	TEMP	DAY	HEAT		COOL		TOT	NUM	DEV		24-HR	DAY
			MEAN	NUM	FROM	MAX					DEG	FROM	DEG	FROM			PPT	OBS		
ALTUS RR STA	179	7	82.4	31	-2.2	101.	4	60.	15	0.0	0.0	538.5	-69.5	0.000	31	-1.92	0.00	31		
ANADARKO	224	7	79.0	24	-4.2	97.	31	54.	15	0.0	0.0	335.0	-229.0	1.670	27	-.89	.59	3		
APACHE	260	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	2.900	31	99.99	1.18	18		
ALTUS AFB	447	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	.933	31	99.99	.37	13		
BRIDGEPORT	1092	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	0.000	31	99.99	0.00	31		
CARNEGIE ZENE	1504	7	80.5	31	-3.2	99.	31	56.	14	0.0	0.0	480.0	-100.0	1.810	31	-.75	.93	13		
CHATTANOOGA	1706	7	81.4	31	-2.9	100.	31	60.	14	0.0	0.0	507.5	-90.5	2.240	31	-.31	.77	13		
DUNCAN	2660	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	1.672	31	99.99	.49	13		
FREDRICK	3353	7	82.0	30	-3.8	99.	5	60.	14	0.0	0.0	509.0	-136.0	2.380	31	.19	1.45	17		
GRANDFIELD	3709	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	2.400	31	.34	1.09	12		
HOBART	4204	7	80.8	29	-2.7	98.	31	59.	14	0.0	0.0	457.0	-117.0	3.221	30	.73	2.13	17		
HOLLIS	4249	7	81.8	28	-3.1	102.	5	57.	14	0.0	0.0	469.5	-147.5	.880	29	-.99	.38	17		
LANTON	5063	7	81.1	30	-2.6	99.	30	56.	13	0.0	0.0	484.0	-96.0	1.501	31	-.93	1.23	16		
FORT SILL	5060	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	.011	31	-1.70	.61	13		
LOCO	5247	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	3.560	31	99.99	1.13	3		
LOOKER	5329	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	3.410	24	99.99	1.05	0		
HANGON RES STA	5509	7	81.1	31	-2.8	102.	4	57.	14	0.0	0.0	499.0	-87.0	2.450	31	-.24	1.26	17		
RANDLETT	7103	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	3.280	31	99.99	2.50	2		
ROOSEVELT	7727	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	1.990	31	-.38	1.31	17		
SEDAN	8016	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	1.230	31	99.99	.00	17		
SNYDER	8299	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	5.771	31	3.30	1.76	17		
VINSON	9212	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	1.510	31	-.45	.83	17		
WALTERS	9278	7	80.7	31	-3.8	98.	31	58.	14	0.0	0.0	480.0	-117.0	2.330	31	-.63	.96	13		
WICHITA MI. RES.	9629	7	78.1	30	-4.5	97.	30	57.	14	0.0	0.0	393.5	-152.5	3.890	30	1.40	2.35	17		
WILLOW	9668	7	99.0	0	99.0	99.	0	99.	0	99.0	999.0	99.0	999.0	3.500	31	99.99	2.96	17		

JULY 1987 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

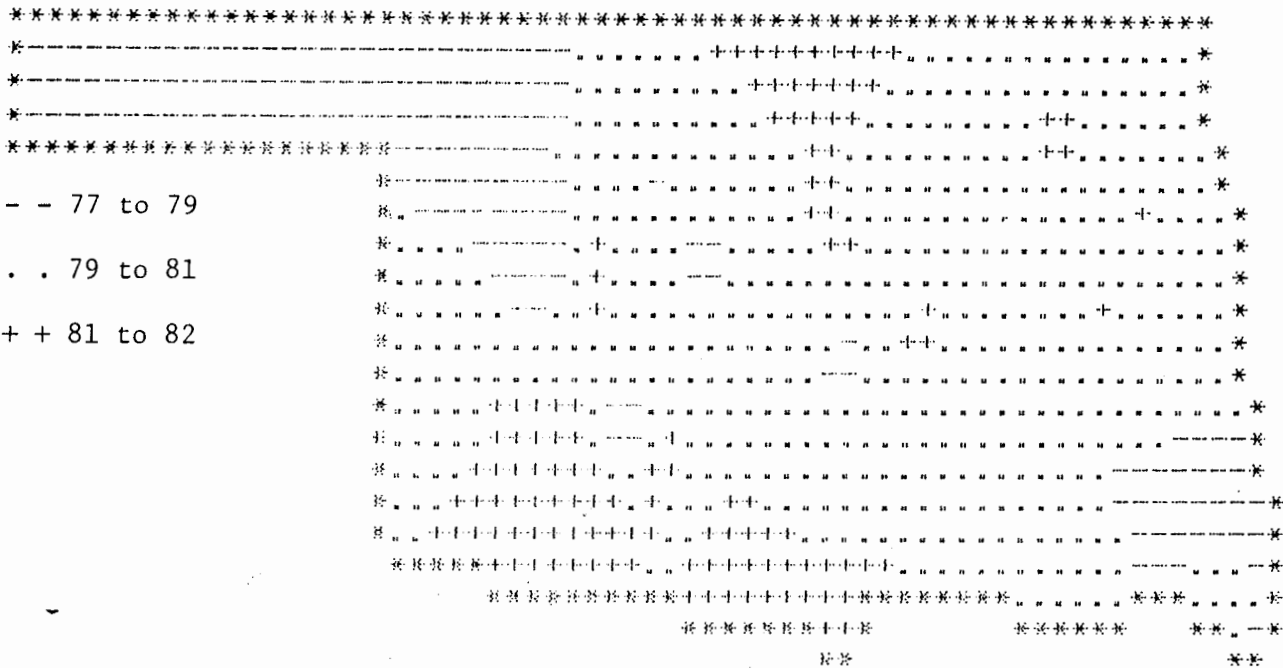
NAME	ID	DIV	DEV						HEAT		COOL		TOT PPT	DEV			24-HR DAY	
			HEAT	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM		NUM	FROM	MAX		
ADA	17	8	79.7	31	-3.0	98.	30	57.	14	0.0	0.0	455.5	-93.5	3.141	31	.45	1.89	13
ALLEN	147	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.180	31	99.99	1.70	2
ARONOFF	292	8	80.6	31	-4.2	97.	31	59.	14	0.0	0.0	482.5	-131.5	3.660	31	1.36	2.30	2
ATOKA DAM	394	8	79.8	30	999.0	98.	29	60.	14	0.0	9999.0	444.5	9999.0	2.411	31	99.99	1.12	13
BOKCHITO	917	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.860	31	99.99	1.02	25
CANEY	1437	8	79.8	30	999.0	98.	30	60.	14	0.0	9999.0	444.5	9999.0	2.200	31	99.99	1.50	13
CENTRALUMH	1648	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.070	31	99.99	.97	13
CHICKASAW HRA	1745	8	79.4	30	999.0	98.	30	54.	14	0.0	9999.0	433.5	9999.0	2.421	31	99.99	1.68	3
COLEMAN	2011	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.460	31	99.99	1.10	16
COMANCHE	2054	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.531	31	99.99	1.27	3
DAISY	2354	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.432	31	-.89	1.57	13
DUSANT	2678	8	79.8	30	999.0	98.	30	57.	14	0.0	9999.0	443.0	9999.0	3.350	31	.81	1.79	13
ELMOHE C.L.I.	2872	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.020	31	99.99	3.70	2
FARRIS	3083	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.830	31	99.99	.94	17
GRADY	3088	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.420	31	99.99	.62	13
HELDON	3001	8	79.6	21	999.0	91.	21	56.	13	0.0	9999.0	306.5	9999.0	3.461	21	1.09	1.39	18
HENRIEPIH	4052	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.660	31	99.99	2.04	2
KINGSTON	4865	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.250	31	.92	1.40	3
LEHIGH	5108	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.701	31	99.99	.75	3
LINDSAY	5216	8	79.8	31	999.0	97.	31	56.	14	0.0	9999.0	460.0	9999.0	4.660	31	2.05	2.51	2
MADILL	5468	8	80.4	31	-3.3	98.	31	58.	15	0.0	0.0	478.5	-101.5	2.911	31	.63	1.62	2
MARJETTA	5563	8	81.7	31	-1.9	100.	31	60.	14	0.0	0.0	518.5	-58.5	1.760	31	-.38	.64	2
MARLOW	5581	8	79.7	31	999.0	97.	31	60.	1	0.0	9999.0	457.0	9999.0	3.172	31	.60	1.83	3
OSWALT	5787	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.500	31	99.99	1.50	13
PAULS VALLEY	6926	8	79.5	31	-4.6	97.	31	57.	14	0.0	0.0	450.0	-142.0	4.091	31	1.76	2.75	3
PONTOTOC	7214	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.600	31	-.99	.40	8
TISHOMINGO	8884	8	80.6	17	999.0	101.	30	54.	14	0.0	9999.0	266.0	9999.0	3.160	24	.46	1.48	3
TUSSY	9032	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.571	31	99.99	1.69	3
MAURIKA	9395	8	81.8	31	-2.9	99.	31	59.	14	0.0	0.0	521.0	-90.0	2.980	31	.70	1.59	2
MAURIKA	9399	8	80.4	30	999.0	99.	30	60.	14	0.0	9999.0	463.5	9999.0	2.020	31	99.99	.96	13

JULY 1987 SUMMARY FOR SOUTHEAST DIVISION (CD9)

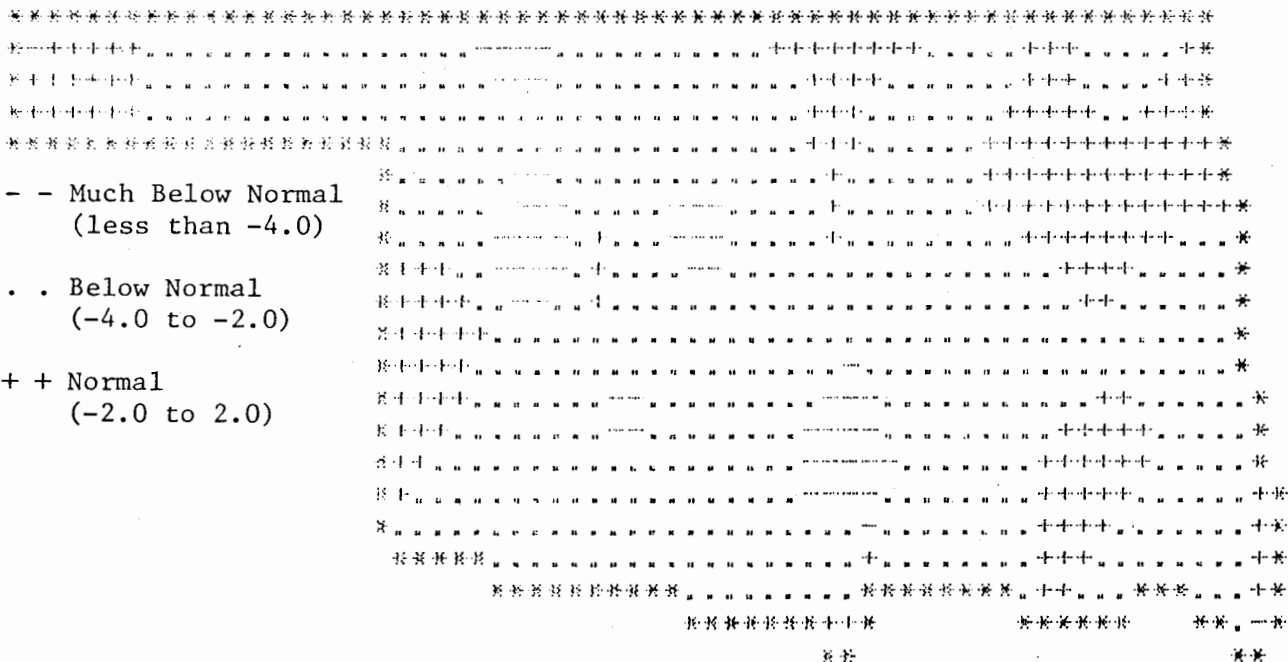
NAME	ID	DIV	DEV						HEAT	DEV	COOL	DEV	DEV					
			MEAN	NUM	FROM	MAX	MIN		DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX		
			TEMP	STA	NORM	TEMP	DAY	TEMP	DAY					PPT	OBS	NORM	24-HR	DAY
ANTLERS	256	9	80.2	31	-1.8	99.	28	58.	14	0.0	0.0	471.0	-56.0	1.980	31	-1.19	1.25	13
BATTLES	567	9	70.3	31	999.0	99.	30	57.	15	0.0	9999.0	411.5	9999.0	2.103	31	99.99	1.24	13
BENGAL	670	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.940	31	99.99	1.03	13
BOSWELL	900	9	79.7	31	999.0	97.	31	58.	14	0.0	9999.0	456.5	9999.0	2.852	31	.20	1.12	13
BROKEN COW	1152	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.610	31	-1.26	1.61	2
BUFFALO TW	1251	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.010	31	99.99	2.00	18
CARNASAW TW	1499	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.240	31	-1.90	.98	3
CARTER HT IN	1544	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.980	31	-1.41	1.48	13
FANSHAW	3065	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.090	31	-.94	1.10	1
FLAGPOLE TW	3169	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.300	31	99.99	2.30	13
HEAVENER	4000	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.132	31	.57	1.95	1
HEE HT TW	4017	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.950	31	99.99	2.98	25
HUGO	4304	9	80.8	31	-2.2	99.	30	61.	15	0.0	0.0	409.0	-69.0	1.811	31	-1.24	.77	13
IDABEL	4451	9	79.8	30	-2.1	99.	30	61.	16	0.0	0.0	445.5	-78.5	4.462	31	.85	1.33	25
JADIE TOWER	4560	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.770	31	99.99	.99	3
POTEAU	7254	9	80.0	30	999.0	102.	30	56.	13	0.0	9999.0	450.5	9999.0	2.420	31	99.99	.82	17
SMITHVILLE	8205	9	77.4	31	999.0	97.	30	58.	14	0.0	9999.0	381.5	9999.0	2.170	31	99.99	1.72	26
SOBAL TOWER	8305	9	80.0	31	999.0	98.	31	63.	14	0.0	9999.0	463.5	9999.0	2.451	31	-1.27	1.34	12
SPIRO	8416	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.640	31	-1.15	.74	3
TUSKATOMA	9023	9	79.0	31	999.0	98.	31	55.	14	0.0	9999.0	434.5	9999.0	4.991	31	99.99	1.98	1
VALIANT	9118	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.881	31	-1.70	1.10	13

JULY 1987 CLIMATE DIVISION SUMMARY

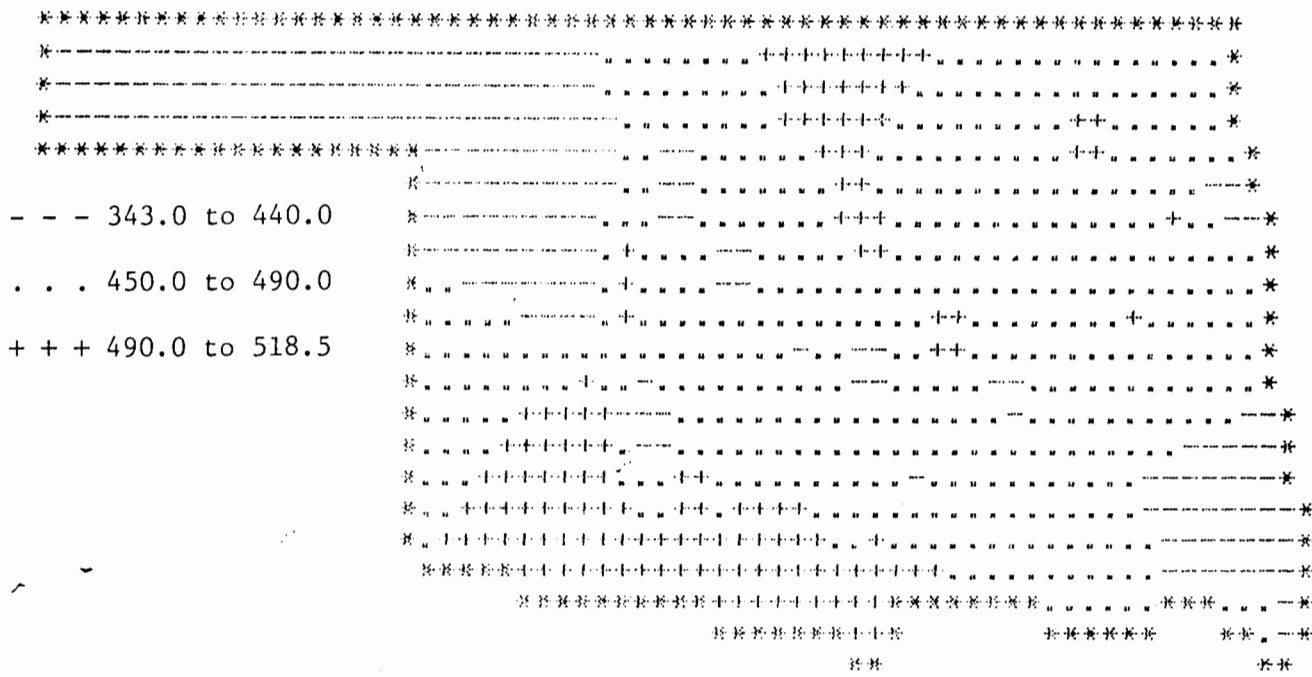
CLIMATE	DIV	DEV						HEAT	DEV	COOL	DEV	DEV					
		MEAN	NUM	FROM	MAX	MIN		DEGREE	FROM	DEGREE	FROM	TOT	NUM	FROM	MAX		
		TEMP	STA	NORM	TEMP	DAY	TEMP	DAY	DAYS	NORM	DAYS	NORM	PPT	STA	NORM	24-HR	DAY
1		78.3	12	-2.1	102.0	31	48.0	13	.1	.1	399.0	-78.0	1.30	15	-1.33	1.47	17
2		80.4	14	-2.6	102.0	31	50.0	14	0.0	0.0	471.0	-87.7	2.71	24	-.46	2.61	3
3		80.1	15	-1.7	106.0	30	53.0	14	0.0	0.0	458.0	-62.9	3.67	32	.32	2.46	5
4		79.5	11	-3.4	100.0	31	50.0	14	0.0	0.0	443.3	-111.6	2.48	21	.17	4.71	13
5		80.0	15	-2.7	101.0	31	54.0	14	0.0	0.0	459.3	-91.0	3.09	39	.11	3.65	18
6		79.9	11	-2.3	101.0	31	52.0	14	0.0	0.0	455.1	-80.4	3.46	28	.03	2.30	3
7		81.0	10	-3.1	102.0	4	54.0	15	0.0	0.0	482.6	-108.6	2.17	24	-.21	2.96	17
8		80.2	13	-3.7	101.0	30	54.0	14	0.0	0.0	465.5	-121.6	2.92	28	.34	3.70	2
9		79.5	9	-2.0	102.0	30	55.0	14	0.0	0.0	445.2	-91.2	2.99	21	-.64	2.98	25



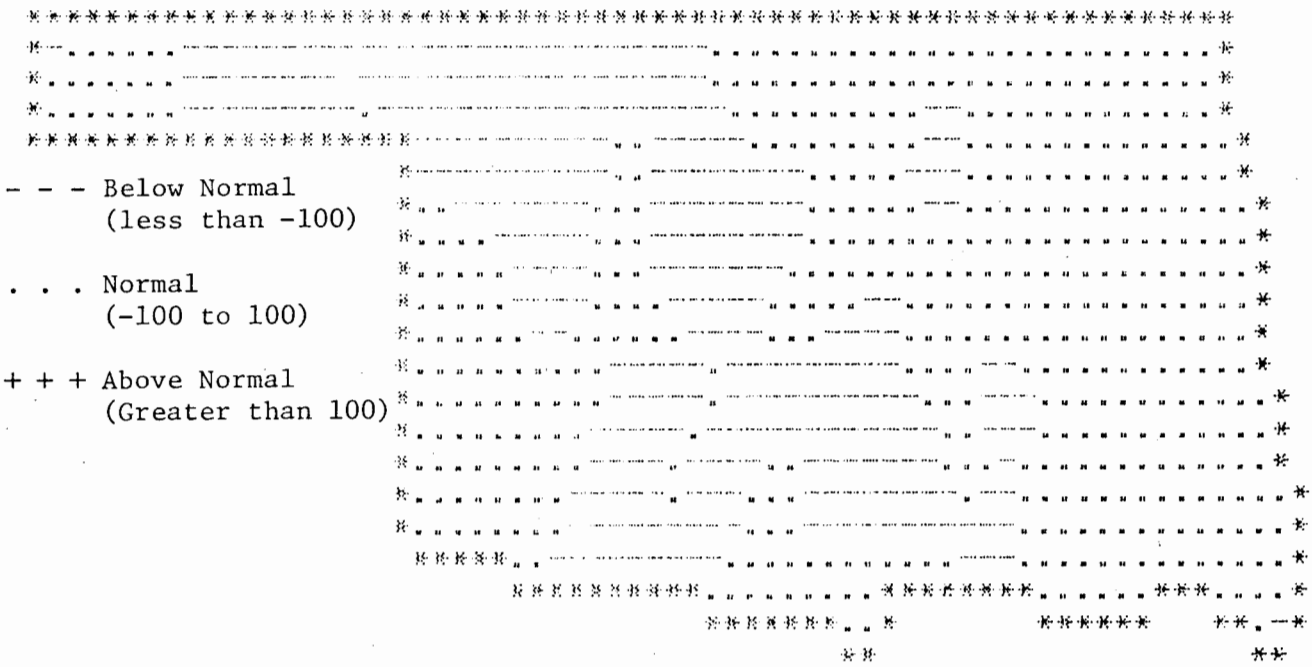
**JULY 1987 AVERAGE MONTHLY TEMPERATURE
(Degrees F)**



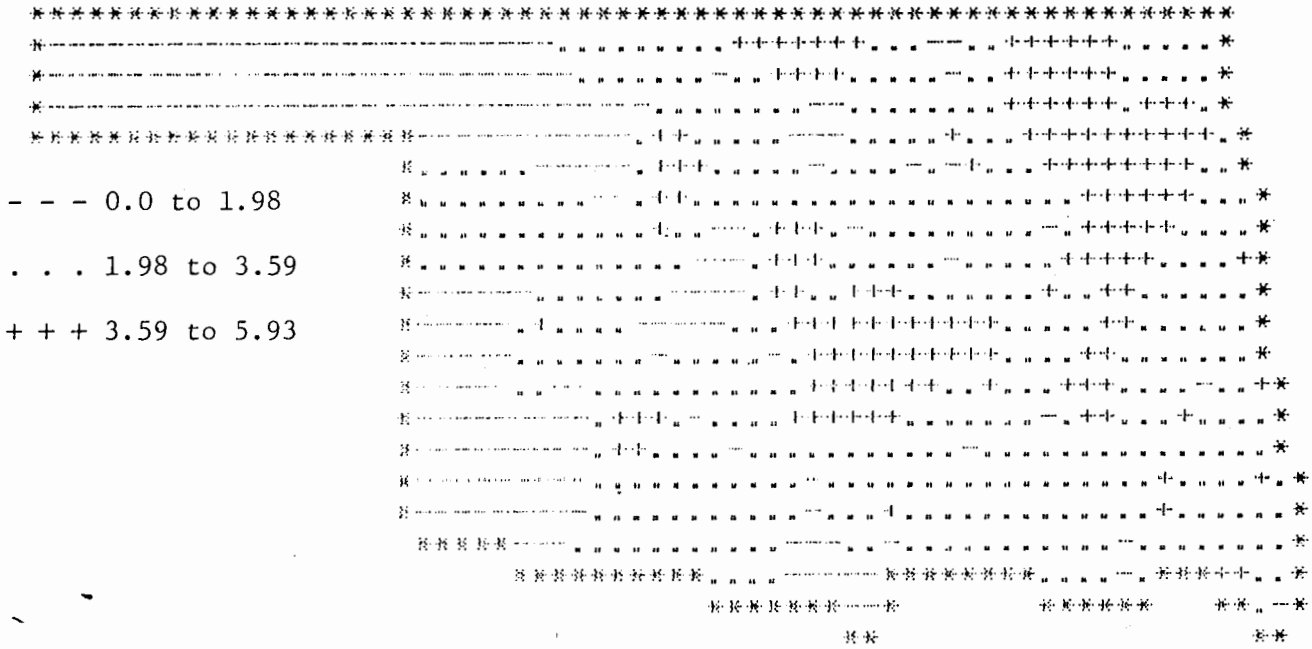
JULY 1987 DEVIATION FROM NORMAL TEMPERATURES



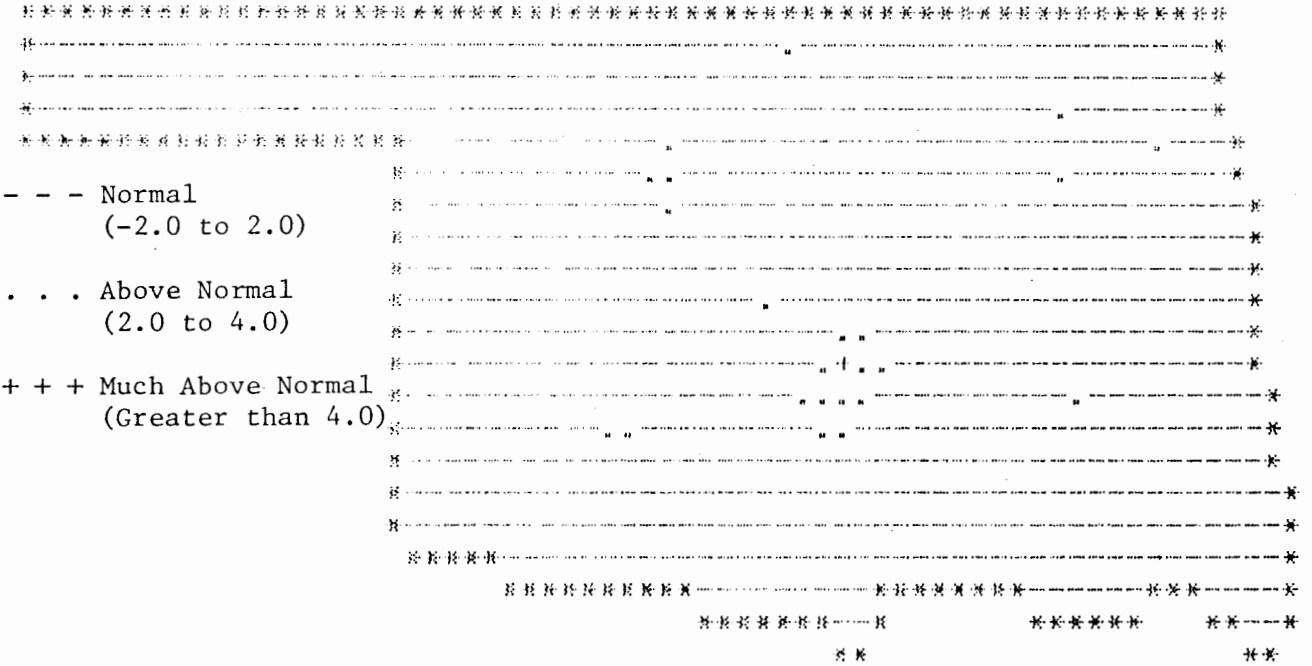
JULY 1987 TOTAL COOLING DEGREE DAYS



JULY 1987 DEVIATION FROM NORMAL COOLING DEGREE DAYS



**JULY 1987 TOTAL PRECIPITATION
(Inches)**



JULY 1987 DEVIATION FROM NORMAL PRECIPITATION