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 1985

Below normal monthly temperatures and precipitation dominated the State during July, 1985. Climate division mean monthly temperatures ranged from .5 to 1.9 degrees cooler than normal. Although locally heavy thunderstorms resulted in isolated monthly precipitation maximums, only southeastern Oklahoma reported slightly above normal moisture conditions over a significant area. No new monthly temperature or precipitation records were set during July.

A stormy July began violently on Tuesday, July 2. 24-hour rainfall events were as great as 5.5 inches. Another cold front passed through the State on Thursday, July 4. These storms were accompanied by 60 to 70 mph wind gusts and hail. Baseball-size hail was reported near Blackwell and Newkirk. Hail and wind damage were reported in Kay, Lincoln and Creek Counties. Only light rain was produced by these storms which were accompanied by an impressive lightning display.

Apache received much needed rain on Monday, July 15, but high winds caused damages estimated at more than $100,000. Widely scattered thunderstorms moved across southwestern Oklahoma on Tuesday, July 16. Two boys were struck by lightning while playing baseball in Lawton. Again, only light precipitation was reported from these storms.

The Laverne area was subjected to an unusual severe weather event on the afternoon of July 19. Mr. G.W. Armor of Laverne writes:

> "This storm cell had an interesting aspect and that is it appeared to go from southeast to northwest across Laverne. Near where the mobile home was destroyed, a parked 18-wheel truck was blown over and the winds that blew it over blew it in an opposite direction from the direction the mobile was taken. We received no weather warnings, nor did Oklahoma City radar ever seem to indicate any severe activity in our area. This storm occurred at 5:30 p.m."

Our thanks go to Mr. Armor for passing this information on to us.

Storms which produced heavy rainfall were reported in northeastern Oklahoma on Sunday, July 21. Significant precipitation was again reported on Thursday and Friday, July 25 and 26. Although these storms did not reach severe limits, the Tulsa area received locally-heavy rainfall.

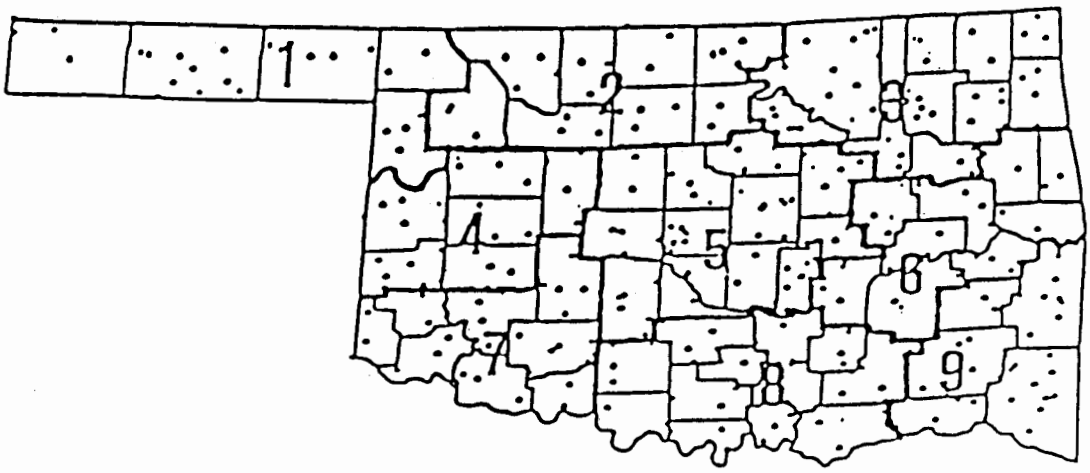
Widespread showers at the end of July brought much needed relief to fields and pastures in western and northern Oklahoma. Below normal temperatures across the State during this last week of July helped to reduce heat related damage to Oklahoma summer crops. Most portions of the State still indicate above normal cumulative precipitation since March 1. Southwestern Oklahoma led the State, having received nearly 20 percent more rainfall than normal during this five month period. Most of this unexpected moisture was received early in the growing season. West central Oklahoma continues to suffer under the largest moisture deficits, having received only 92 percent of normally expected precipitation since March 1.

TABLE OF 1984/1985 JULY COMPARISONS

	July Temperatures (F)		July Precipitation (in.)	
Station	1984	1985	1984	1985
Goodwell	78.1	78.9	1.02	.913
Lahoma	81.3	81.7	.95	3.861
Mutual	81.3	80.7	.16	7.14
Tulsa	82.0	83.2	.23	2.382
Elk City	81.0	80.6	.73	.880
Oklahoma City	81.6	80.9	.30	1.164
McAlester	81.5	81.9	1.38	.782
Altus Irr. Sta.	84.7	84.0	.93	1.151
Durant	82.7	82.3	1.10	3.521
Ada	81.6	81.9	.93	.742
Tuskahoma	79.6	81.0	3.34	3.662

JULY EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Reydon	4	43	15
Maximum temperature (F)	Beaver	1	109	18
	Cherokee Power Plant	2	109	11
Maximum 24-hour precipitation	Antlers	9	5.50"	3



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 provides the general station distribution and the locations of the climate divisions. Each station table contains the following:

station name:
station identification number: These are usually assigned by the National Climatic Data Center.
climate division: See the figure above.
mean monthly temperature:
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 an indoor temperature of 65 degrees. Missing observations may result in a 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 an indoor temperature of 65 degree. Missing observations may result in an artificially high or low value. For June, CDD would be calculted as:

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 recieved. A negative valued 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 station 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 catory, 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 1985 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ARNETT	332	1	80.8	30	.0	102.	11	62.	23	0.0	0.0	475.0	-15.0	.761	31	-1.33	.53	25
BEAVER	593	1	83.5	30	2.0	109.	18	56.	6	0.0	0.0	556.0	44.0	.870	31	-2.00	.40	24
BOISE CITY	908	1	78.8	31	.8	104.	7	52.	3	0.0	0.0	428.0	25.0	2.160	30	-.44	1.60	23
BUFFALO	1243	1	82.0	31	-1.4	105.	18	55.	6	0.0	0.0	527.0	-43.0	1.670	31	-1.65	1.17	24
FARGO	3070	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.750	31	.56	1.45	25
GAGE	3407	1	80.7	31	-.8	104.	11	57.	3	0.0	0.0	488.0	-24.0	2.671	31	.56	1.35	25
GATE	3489	1	82.8	30	999.0	108.	17	59.	5	0.0	9999.0	535.0	9999.0	1.170	31	99.99	.75	24
GOODWELL RES. STA.	3628	1	78.9	30	-.5	103.	13	57.	26	0.0	0.0	416.5	-29.5	.913	31	-1.97	.33	29
GUYMON	3835	1	81.3	31	999.0	108.	13	58.	6	0.0	9999.0	506.5	9999.0	.212	31	99.99	.12	23
HOOKER	4298	1	80.2	31	-.1	103.	19	57.	2	0.0	0.0	470.0	-4.0	.380	31	-2.55	.16	15
KENTON	4766	1	78.6	31	-.0	102.	14	49.	3	0.0	0.0	421.5	-.5	3.350	31	.46	2.60	23
LAVERNE	5045	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.570	31	-.92	.73	20
REGNIER	7534	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.550	31	.05	2.41	23
TURPIN	9017	1	80.3	30	999.0	103.	18	55.	2	0.0	9999.0	460.0	9999.0	1.160	31	99.99	.63	21

JULY 1985 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ALVA	194	2	82.7	31	-.7	105.	12	57.	8	0.0	0.0	548.0	-22.0	1.370	31	-1.22	.67	31
BILLINGS	755	2	81.9	30	999.0	106.	11	56.	1	0.0	9999.0	506.5	9999.0	2.900	31	-.62	1.86	25
BLACKWELL	818	2	81.9	31	999.0	107.	11	60.	2	0.0	9999.0	525.0	9999.0	4.431	31	99.99	1.73	25
BRAMAN	1075	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.251	31	99.99	1.91	26
CEDARDALE	1629	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.753	31	99.99	2.23	22
CHEROKEE POWER PLAN	1724	2	85.2	31	1.5	109.	11	60.	6	0.0	0.0	626.5	46.5	1.640	31	-1.12	.96	25
ENID	2912	2	82.2	31	-1.3	104.	11	62.	28	0.0	0.0	532.0	-42.0	2.910	31	-.27	1.74	25
FORT SUPPLY DAM	3304	2	80.7	30	-1.1	105.	18	60.	4	0.0	0.0	470.5	-50.5	1.880	31	-.31	1.35	25
FREEDOM	3358	2	83.1	31	999.0	106.	11	58.	3	0.0	9999.0	560.0	9999.0	1.950	31	99.99	.72	25
GREAT SALT PLAINS	D3740	2	82.4	30	999.0	107.	11	62.	6	0.0	9999.0	522.0	9999.0	.970	31	-2.21	.37	25
HARDY	3909	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.971	31	99.99	2.00	24
HELENA 1 SSE	4019	2	82.4	30	999.0	108.	11	60.	8	0.0	9999.0	522.0	9999.0	2.591	31	-.49	.78	17
JEFFERSON	4573	2	83.1	31	-.5	107.	11	60.	7	0.0	0.0	561.5	-15.5	2.741	31	-1.18	1.75	24
LAHOMA AGRIC	4950	2	81.7	21	999.0	107.	12	59.	8	0.0	9999.0	350.0	9999.0	3.861	26	99.99	3.52	25
LAMONT	5013	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.650	31	99.99	2.58	25
MEDFORD	5768	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.961	31	99.99	1.51	28
MORRISON	6065	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.540	31	99.99	.60	5
MUTUAL	6139	2	80.7	30	-1.9	106.	12	58.	6	0.0	0.0	469.5	-76.5	3.570	31	1.01	1.60	22
NEWKIRK	6278	2	81.3	31	-1.2	105.	11	62.	2	0.0	0.0	504.5	-38.5	6.711	31	3.16	2.71	25
ORIENTA	6751	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.200	31	99.99	1.08	16
PERRY	7012	2	81.5	31	-1.7	102.	12	60.	6	0.0	0.0	513.0	-51.0	1.970	31	-1.56	1.18	22
PONCA CITY	7201	2	83.5	30	1.0	106.	11	63.	2	0.0	0.0	554.5	8.5	3.602	31	-.50	1.39	29
RED ROCK	7505	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.060	31	.34	1.88	22
RENFROW	7556	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.930	31	.42	1.59	25
WAYNOKA	9404	2	82.7	31	-.8	105.	12	58.	2	0.0	0.0	549.0	-25.0	2.400	31	-.15	1.30	22
WOODWARD	9760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.801	31	-.02	.84	15

NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

JULY 1985 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
BARNSDALL	535	3	81.9	31	999.0	101.	11	61.	6	0.0	9999.0	524.5	9999.0	2.131	31	-1.07	.93	24
BARTLESVILLE	548	3	81.7	31	-.3	101.	11	61.	2	0.0	0.0	517.5	-9.5	1.112	31	-1.88	.58	22
BIXBY	782	3	80.8	30	-1.0	102.	11	62.	28	0.0	0.0	473.0	-48.0	1.860	31	-1.35	1.48	26
BURBANK	1256	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.130	31	99.99	.55	5
CHELSEA 4S	1717	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.530	31	99.99	1.36	26
CLAREMORE	1828	3	80.7	30	-.9	99.	11	60.	6	0.0	0.0	469.5	-45.5	1.662	31	-1.42	1.50	26
CLEVELAND	1900	3	81.4	27	-1.1	100.	11	60.	28	0.0	0.0	443.5	-99.5	1.781	27	-1.82	.90	26
FORAKER	3250	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.410	31	-.06	1.54	22
HOLLOW	4258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.331	31	-.42	2.38	26
HOMINY	4289	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.620	31	-1.80	.74	5
HULAH DAM	4393	3	79.4	8	-1.7	97.	14	60.	2	0.0	0.0	115.0	-384.0	.850	27	-2.09	.70	22
KEYSTONE DAM	4812	3	79.4	30	999.0	100.	11	58.	27	0.0	9999.0	431.5	9999.0	3.480	31	99.99	1.82	26
LENAPAH	5118	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.340	31	99.99	1.77	22
JAY TOWER	5467	3	81.1	30	999.0	99.	19	60.	27	0.0	9999.0	483.0	9999.0	1.400	31	99.99	1.40	26
KANSAS 1ESE	4672	3	79.4	31	999.0	97.	12	61.	6	0.0	9999.0	445.0	9999.0	4.420	31	99.99	3.04	26
MANNAFORD	5522	3	80.1	30	999.0	101.	12	58.	27	0.0	9999.0	452.5	9999.0	4.340	30	99.99	2.40	26
MARAMEC	5540	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.200	31	1.00	2.86	26
MIAMI	5855	3	78.8	30	-2.3	101.	11	55.	5	0.0	0.0	413.5	-85.5	3.702	31	-.23	2.41	21
NOWATA	6485	3	82.0	31	-.1	101.	11	63.	26	0.0	0.0	525.5	-4.5	2.850	31	-.09	2.00	26
ONETA 1WNW	6713	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.143	31	99.99	1.65	26
PAWNEE	6940	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.680	31	-1.45	.95	22
PAWHUSKA 2	6973	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.960	31	99.99	.32	5
PRYOR 6N	7309	3	79.8	30	-1.7	99.	11	59.	6	0.0	0.0	445.5	-69.5	1.872	31	-1.19	1.80	26
QUAPAW	7358	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.950	31	-1.82	1.57	26
RALSTON	7390	3	80.6	31	999.0	100.	12	59.	27	0.0	9999.0	483.0	9999.0	1.002	31	-2.49	.38	29
RAMONA 4N	7394	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.590	31	99.99	1.94	22
SKIATOOK	8258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.281	31	-1.13	1.36	21
SPAVINAW	8380	3	81.4	31	999.0	100.	12	60.	6	0.0	9999.0	507.0	9999.0	1.551	31	-2.18	1.55	26
SPAVINAW LAKE	8382	3	80.9	29	999.0	100.	12	60.	7	0.0	9999.0	462.5	9999.0	1.551	29	99.99	1.55	26
TULSA	8992	3	83.2	31	.0	100.	12	64.	2	0.0	0.0	564.5	.5	2.382	31	-1.13	1.24	26
VINITA	9203	3	80.7	31	-.4	99.	12	59.	6	0.0	0.0	486.0	-13.0	1.660	31	-1.72	.99	26
WAGONER	9247	3	81.2	31	-1.2	97.	31	63.	2	0.0	0.0	502.5	-36.5	1.811	31	-1.69	1.81	26
WANN	9298	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.621	31	99.99	.24	26
WYNONA	9792	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.640	31	99.99	.53	23

NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

JULY 1985 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
CANTON DAM	1445	4	81.0	30	-1.9	104.	9	61.	7	0.0	0.0	481.0	-74.0	3.840	31	1.43	1.20	25
CHEYENNE	1738	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.000	31	99.99	1.00	25
CLINTON	1909	4	84.9	31	1.6	107.	11	62.	5	0.0	0.0	616.0	49.0	1.020	31	-1.50	.92	25
COLONY	2039	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.791	31	99.99	.94	24
CORDELL	2125	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.360	31	-2.16	.23	25
ELK CITY	2849	4	80.6	31	999.0	102.	11	59.	9	0.0	9999.0	484.5	9999.0	.880	31	-1.53	.88	25
ERICK	2944	4	81.1	31	-.8	102.	18	60.	5	0.0	0.0	498.0	-26.0	.941	31	-1.19	.88	25
GEARY	3497	4	81.0	31	-2.0	100.	11	63.	11	0.0	0.0	495.5	-62.5	.800	31	-1.67	.70	25
HAMMON	3871	4	82.0	30	-1.0	103.	18	61.	6	0.0	0.0	509.5	-48.5	2.570	31	.42	2.52	25
LEEDEY	5090	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.520	31	-1.45	.40	16
MORAVIA	6035	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.220	31	-.07	2.09	25
OKEENE	6629	4	83.7	31	-.2	107.	12	59.	7	0.0	0.0	580.0	-6.0	1.390	31	-.95	.67	25
RETROP	7565	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.670	31	99.99	1.82	25
REYDON	7579	4	79.6	31	999.0	103.	11	43.	15	0.0	9999.0	454.0	9999.0	.700	31	-1.39	.35	14
SAYRE	7952	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.520	31	.45	2.52	25
SWEETWATER	8652	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.620	31	99.99	.39	25
TALOGA	8708	4	81.3	31	-.9	104.	12	56.	5	0.0	0.0	506.0	-27.0	1.604	31	-1.02	1.30	25
THOMAS	8815	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.380	31	99.99	.82	18
WATONGA	9364	4	82.5	31	999.0	104.	11	60.	7	0.0	9999.0	543.5	9999.0	1.642	31	-.60	.69	25
WEATHERFORD	9422	4	82.3	30	-.7	103.	11	62.	6	0.0	0.0	520.5	-37.5	1.000	31	-1.49	.68	22

NOTE : 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

JULY 1935 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	DIV	MEAN TEMP	DEV NUM OBS	DEV FROM NORM	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	DEV NUM OBS	DEV FROM NORM	MAX 24-HR	MAX 24-HR DAY
AMBER	200	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.800	31	99.99	1.40	2
ARCADIA	288	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.361	31	99.99	.66	29
TINKER AFB	325	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.890	31	99.99	.71	29
BLANCHARD	830	5	81.0	31	999.0	99.	31	61.	7	0.0	9999.0	497.0	9999.0	.481	31	99.99	.20	26
BRISTOW	1144	5	80.8	30	-1.4	101.	30	59.	27	0.0	0.0	474.5	-58.5	2.231	30	-1.33	.87	16
CHICKASHA RES. STA.	1750	5	82.6	31	-.4	101.	30	61.	7	0.0	0.0	547.0	-11.0	.621	31	-1.90	.29	2
COX CITY	2196	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.270	31	99.99	.20	25
CRESCENT	2242	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.200	31	99.99	.89	29
CUSHING	2318	5	80.3	28	-2.1	102.	20	64.	1	0.0	0.0	428.0	-111.0	1.700	30	-2.02	.62	26
EL RENO	2818	5	80.0	31	-2.5	101.	11	53.	15	0.0	0.0	463.5	-79.5	.730	31	-2.04	.56	16
GUTHRIE	3821	5	82.5	31	-.6	101.	12	63.	7	0.0	0.0	542.0	-19.0	3.040	31	.20	1.62	26
HENNESSEY	4055	5	82.2	31	-1.5	106.	9	59.	23	0.0	0.0	534.5	-45.5	1.535	31	-.97	.41	27
INGALLS	4489	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.163	31	99.99	1.33	22
KINGFISHER	4861	5	82.2	31	-1.5	104.	11	60.	7	0.0	0.0	532.5	-47.5	.692	31	-1.88	.27	26
KINGFISHER CREEK	4862	5	82.4	30	999.0	104.	10	60.	7	0.0	9999.0	522.5	9999.0	.692	31	99.99	.27	26
U. JOHNS CR. KINGFI	4864	5	82.4	30	999.0	104.	10	60.	7	0.0	9999.0	523.5	9999.0	.692	31	99.99	.27	26
KONAWA	4915	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.442	31	-2.09	.32	5
MARSHALL	5589	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.130	31	.54	.94	28
MULHALL	6110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.550	31	99.99	.22	24
NORMAN	6386	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.750	31	-1.48	.72	23
OILTON	6616	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.040	31	99.99	2.56	26
OKEMAH	6638	5	81.6	31	-.5	100.	30	64.	5	0.0	0.0	515.0	-15.0	1.630	31	-1.75	.71	5
OKLAHOMA CITY	6661	5	80.9	31	-1.2	98.	31	63.	6	0.0	0.0	492.0	-38.0	1.164	31	-1.88	.36	25
PERKINS	7003	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.280	31	.75	1.28	26
PIEDMONT	7068	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.030	31	99.99	.91	22
PRAGUE	7264	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.601	31	-2.61	.30	3
PURCELL	7327	5	80.5	29	-2.3	99.	31	60.	7	0.0	0.0	449.5	-102.5	1.061	31	-1.94	.66	16
SEMINOLE	8042	5	82.7	31	-1.0	100.	31	64.	7	0.0	0.0	549.0	-31.0	1.180	31	-1.77	.53	24
SHAWNEE	8110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.950	31	-1.71	.51	5
STELLA	8479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.300	31	99.99	.54	17
STILLWATER	8501	5	79.3	30	-2.8	99.	11	57.	7	0.0	0.0	429.0	-101.0	2.441	31	-1.35	.75	28
STROUD	8563	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.101	31	99.99	.83	26
TECUMSEH	8751	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.152	31	99.99	.59	29
TROUSDALE	8960	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.560	31	99.99	3.42	16
UNION CITY	9086	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.301	31	-1.84	.25	16
WELTY	9479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.850	31	99.99	.50	5
WEWOKA	9575	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.681	31	-1.11	.73	29

NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

JULY 1985 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	DIV	MEAN TEMP	DEV NUM OBS	DEV FROM NORM	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	DEV NUM OBS	DEV FROM NORM	MAX 24-HR	MAX DAY
ASHLAND	364	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.002	31	99.99	1.40	22
BEGGS	631	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.490	31	99.99	3.03	25
BOYTON	1027	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.650	31	99.99	.60	26
CALVIN	1391	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.893	31	-2.66	.46	28
CHECOTAH	1711	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.034	31	-3.43	.03	5
CLAYTON WNW	1858	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.610	31	99.99	1.64	29
DEWAR	2485	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.870	31	-2.67	.34	17
DUSTIN	2690	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.440	31	99.99	.25	16
HANNA	3884	6	81.9	31	999.0	101.	11	60.	6	0.0	9999.0	524.0	9999.0	1.202	31	-1.96	.44	16
HARTSHORNE	3946	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.840	31	99.99	.30	2
HASKELL	3956	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.910	31	-1.27	1.85	26
MUSKOGEE	6130	6	82.0	31	-.6	101.	31	62.	6	0.0	0.0	528.0	-18.0	.550	31	-2.55	.55	25
HOLDENVILLE	4235	6	80.9	31	-1.7	100.	30	60.	6	0.0	0.0	492.5	-53.5	1.060	31	-2.40	.53	5
LAKE EUFAULA	4975	6	83.2	30	999.0	103.	30	64.	6	0.0	9999.0	545.0	9999.0	1.410	31	99.99	1.37	17
LYONS	5437	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.130	31	1.91	2.10	25
OKMULGEE WATER WORK	6670	6	81.1	31	-.6	104.	11	58.	27	0.0	0.0	498.5	-19.5	.550	31	-2.50	.35	25
OKTAHA	6678	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.432	31	99.99	.13	26
QUINTON	7372	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.434	31	-1.37	1.95	15
SALLISAW	7862	6	81.7	31	-.4	102.	30	57.	6	0.0	0.0	518.0	-12.0	1.011	31	-2.54	.70	26
SCIPIO	7979	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.750	31	99.99	.41	16
SCAPER	7993	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.920	31	99.99	1.69	26
SHORT-1	8170	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.440	31	99.99	1.30	16
STILWELL	8506	6	79.6	31	999.0	98.	15	58.	6	0.0	9999.0	452.5	9999.0	2.402	31	-1.33	1.80	26
TAHLEQUAH	8677	6	80.4	31	-.3	99.	31	58.	6	0.0	0.0	476.5	-10.5	1.190	31	-2.20	1.19	26
WEBBER FALLS	9445	6	81.0	30	-1.1	101.	12	58.	6	0.0	0.0	479.5	-50.5	1.031	31	-2.12	.55	25
WESTVILLE	9523	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.070	31	99.99	1.97	26
WETUMKA	9571	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.807	31	-2.38	.38	29
MCALESTER	5664	6	81.9	31	-.8	100.	31	60.	5	0.0	0.0	523.0	-51.0	.782	31	-2.63	.33	16

NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

JULY 1985 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ALTUS IRR. STA.	179	7	84.0	31	-.6	104.	29	66.	11	0.0	0.0	588.0	-20.0	1.151	31	-.77	.70	25
ALTUS AFB	184	7	83.4	30	999.0	102.	18	63.	3	0.0	9999.0	552.5	9999.0	1.790	31	-.81	.97	24
ANADARKO	224	7	82.1	25	-1.1	99.	31	58.	7	0.0	0.0	427.0	-137.0	.790	27	-1.77	.50	16
ALTUS AFB	447	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.732	31	99.99	.73	25
CARNEGIE	1504	7	82.4	31	-1.3	103.	12	60.	7	0.0	0.0	539.0	-41.0	4.060	31	1.50	1.87	24
CHATTANOOGA	1706	7	83.2	31	-1.1	103.	31	62.	7	0.0	0.0	565.5	-32.5	.660	31	-1.89	.35	25
DUNCAN	2668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.552	31	99.99	.32	17
GRANDFIELD	3709	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.340	31	-1.72	.20	16
FREDERICK	3353	7	84.9	30	-.9	104.	29	65.	6	0.0	0.0	598.5	-46.5	2.860	31	.67	2.00	21
HOBART	4204	7	82.9	30	-.6	103.	9	63.	3	0.0	0.0	536.5	-37.5	1.701	31	-.79	1.29	25
HOLLIS	4249	7	80.1	29	-4.8	102.	18	54.	6	0.0	0.0	439.0	-178.0	1.450	29	-.42	.83	25
LAWTON FIRE STA.	5063	7	82.7	28	-.9	100.	30	62.	7	0.0	0.0	497.0	-83.0	1.910	30	-.60	1.23	23
FORT SILL	5068	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.462	31	-1.05	.88	24
LOCO	5247	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.180	31	99.99	.17	16
LOOKEBA	5329	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.700	31	99.99	.41	25
MANGUN RES. STA.	5509	7	84.1	31	.2	107.	18	63.	8	0.0	0.0	592.5	6.5	.690	31	-2.00	.57	25
RANDLETT	7403	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.150	31	99.99	.49	25
ROOSEVELT	7727	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.620	31	-1.75	.62	25
SEDAN	8016	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.290	31	99.99	.97	15
SNYDER	8299	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.250	31	-2.22	.18	23
VICI	9172	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.270	31	99.99	2.00	22
VINSON	9212	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.731	31	.77	2.48	25
WALTERS	9278	7	83.3	31	-1.2	105.	29	62.	7	0.0	0.0	566.0	-39.0	.310	31	-2.65	.23	25
WICHITA MT. WL. REF	9629	7	82.6	30	-.0	103.	10	59.	7	0.0	0.0	526.5	-19.5	1.790	31	-.70	.97	24
WILLOW	9668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.773	31	99.99	1.55	25

NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

JULY 1985 SUMMARY FOR SOUTHCENTRAL DIVISION (CD8)

NAME	ID	DIV	MEAN TEMP	DEV NUM OBS	DEV FROM NORM	MAX TEMP	MAX DAY	MIN TEMP	MIN DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	MAX DAY
ADA	17	8	81.9	31	-.8	98.	31	62.	6	0.0	0.0	524.0	-25.0	.742	31	-1.95	.30	21
ALLEN	147	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.650	31	99.99	.65	5
ARDMORE	292	8	82.3	31	-2.5	100.	30	66.	7	0.0	0.0	536.5	-77.5	2.560	31	.26	1.60	3
BOKCHITO	917	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.860	31	99.99	2.00	5
CANEY	1437	8	81.3	30	999.0	98.	29	62.	3	0.0	9999.0	488.0	9999.0	2.740	31	99.99	1.95	3
CENTRAHOMA	1648	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.992	31	99.99	.60	22
CHICKASAW NAT'L.	RE1745	8	80.8	30	999.0	99.	30	60.	6	0.0	9999.0	474.5	9999.0	2.460	31	99.99	.72	23
COMANCHE	2054	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.340	31	99.99	.20	25
COLEMAN	2011	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.800	31	99.99	2.45	3
DAISY	2354	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.633	31	-1.69	1.58	3
DUNCAN	2660	8	82.7	30	-1.1	102.	29	65.	7	0.0	0.0	530.5	-52.5	.430	31	-1.90	.22	17
DURANT USDA	2678	8	82.3	30	999.0	100.	30	63.	6	0.0	9999.0	518.0	9999.0	3.521	31	.98	2.64	3
ELMORE CITY	2872	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.962	31	99.99	.55	22
FARRIS	3083	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.290	31	99.99	2.19	3
GRADY	3688	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.850	31	99.99	.61	17
HEALDTON	4001	8	82.2	28	999.0	102.	29	61.	6	0.0	9999.0	481.5	9999.0	.910	28	-1.46	.41	25
HENNEPIN	4052	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.930	31	99.99	.64	2
KINGSTON	4865	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.210	31	-.12	1.50	3
LEHIGH	5108	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.902	31	99.99	1.70	20
MADILL	5468	8	81.9	31	-1.8	101.	29	64.	6	0.0	0.0	525.0	-55.0	2.661	31	.38	1.72	3
MARIETTA	5563	8	82.7	31	-.9	102.	29	66.	6	0.0	0.0	550.0	-27.0	1.750	31	-.39	.87	3
MARLOW	5581	8	80.8	31	999.0	100.	29	60.	7	0.0	9999.0	489.5	9999.0	.211	31	-2.36	.16	25
OSWALT	6787	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.900	31	99.99	.60	22
PAULS VALLEY	6926	8	82.2	31	-1.9	98.	31	63.	7	0.0	0.0	532.5	-59.5	.930	31	-1.40	.40	4
PONTOTOC	7214	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.050	31	-1.54	.50	26
TISHOMINGO NWR	8884	8	81.9	16	999.0	98.	30	61.	8	0.0	9999.0	271.0	9999.0	3.630	23	.93	1.10	21
TUSSY	9032	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.192	31	99.99	1.10	23
WAURIKA	9395	8	82.4	31	-2.3	102.	29	64.	7	0.0	0.0	539.0	-72.0	.200	31	-2.08	.15	17

NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001

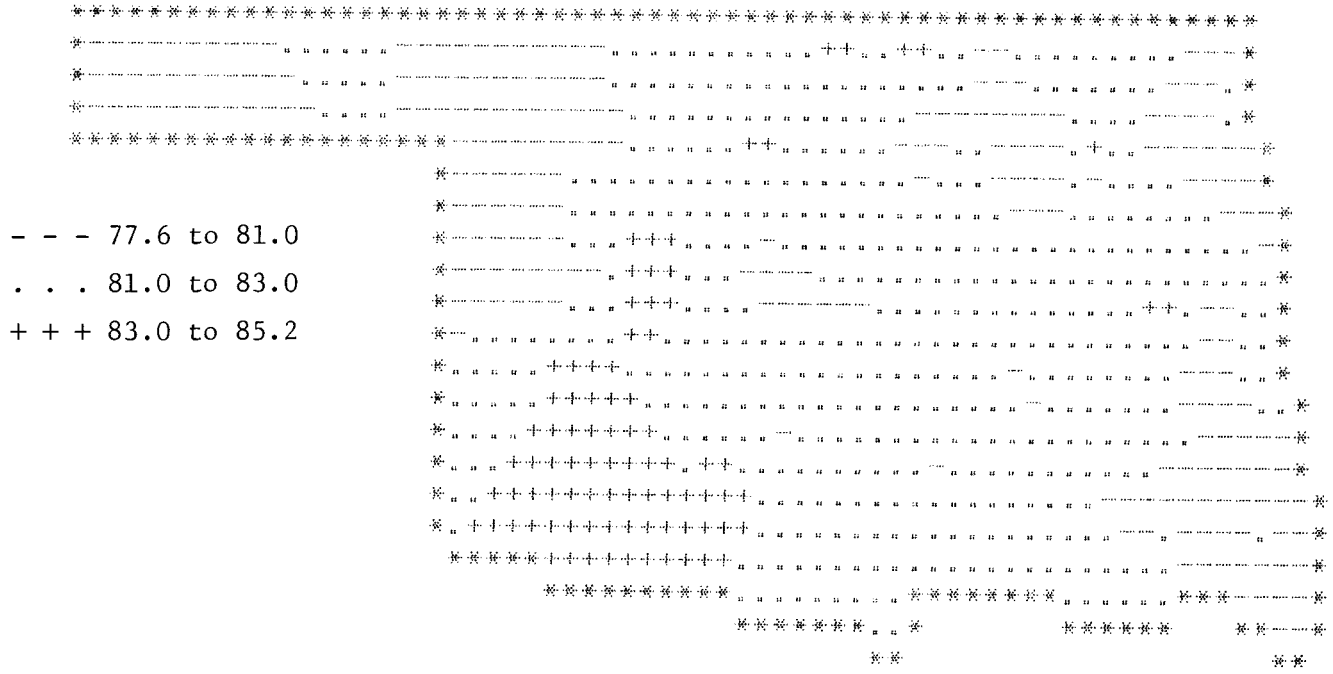
JULY 1985 SUMMARY FOR SOUTHEAST DIVISION (CD9)

NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	80.6	31	-1.4	98.	19	58.	6	0.0	0.0	485.0	-42.0	8.730	31	5.56	5.50	3
BATTIEST	567	9	78.7	20	999.0	98.	15	58.	6	0.0	9999.0	273.5	9999.0	1.660	31	99.99	.58	22
BEAR MT.	584	9	80.5	31	999.0	102.	31	61.	3	0.0	9999.0	481.0	9999.0	3.002	31	-1.05	2.25	3
BENGAL	609	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.240	31	99.99	.97	16
BOSWELL	980	9	81.7	31	999.0	102.	31	64.	11	0.0	9999.0	518.5	9999.0	3.664	31	1.01	2.87	3
BROKEN BOW 1N	1162	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.690	31	-1.18	1.04	3
BROKEN BOW DAM	1168	9	81.0	30	999.0	100.	30	62.	7	0.0	9999.0	480.0	9999.0	4.950	31	99.99	1.80	22
BUFFALO MTN. TOWER	1251	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.110	9	99.99	.10	30
CARNASAW TOWER	1499	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.240	31	1.10	1.23	24
CARTER MTN.	1544	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.910	31	-.48	.85	22
FANSHAWE	3065	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.031	31	-2.00	1.80	17
HEAVENER	4008	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.602	31	-1.96	1.37	17
HEE MT. TOWER	4017	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.000	31	99.99	.77	3
HUGO	4384	9	81.1	31	-1.9	101.	31	62.	6	0.0	0.0	499.0	-59.0	3.490	31	.44	1.50	3
IDABEL	4451	9	80.7	30	-1.2	99.	30	60.	3	0.0	0.0	470.0	-54.0	1.591	31	-1.96	.73	3
JADIE TOWER	4560	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.580	31	99.99	1.45	3
POTEAU	7246	9	83.3	31	.6	102.	12	63.	6	0.0	0.0	568.5	19.5	1.410	31	-2.27	.46	15
POTEAU PUBLIC WORKS	7254	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.031	31	99.99	2.28	17
SMITHVILLE	8285	9	77.6	31	999.0	97.	31	58.	7	0.0	9999.0	392.0	9999.0	1.771	31	99.99	.60	3
SOBAL TOWER	8305	9	79.7	22	999.0	96.	31	62.	3	0.0	9999.0	323.5	9999.0	2.652	31	-1.07	2.14	3
SPIRO	8416	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.640	31	-2.15	.98	22
TUSKAHOMA	9023	9	81.0	31	999.0	103.	10	56.	6	0.0	9999.0	495.0	9999.0	3.662	31	99.99	1.57	17
UPPER SPAVINAW	9101	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.071	31	99.99	1.80	26
VALLIANT	9118	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.911	31	.33	1.31	3
WILBURTON	9634	9	79.5	31	-2.5	101.	10	62.	27	0.0	0.0	448.0	-79.0	2.251	31	-2.08	2.10	16

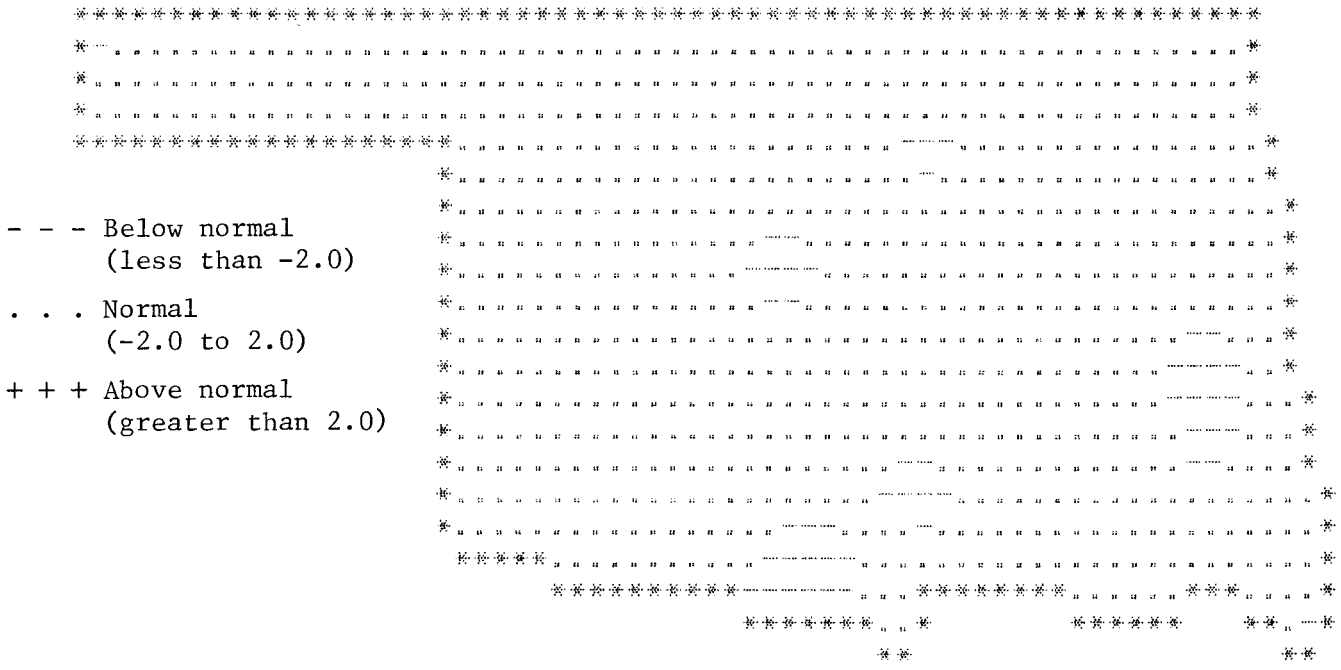
JULY 1985 CLIMATE DIVISION SUMMARY

CLIMATE DIV	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEGREE DAYS	DEV FROM NORM	COOL DEGREE DAYS	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	80.7	11	.3	109.0	18	49.0	3	0.0	0.0	480.3	1.7	1.58	14	-1.04	2.60	23
2	82.3	15	-.7	109.0	11	56.0	1	0.0	0.0	531.0	-28.5	2.95	26	-.22	3.52	25
3	80.8	18	-1.0	102.0	11	55.0	5	0.0	0.0	479.4	-43.4	2.17	34	-1.19	3.04	26
4	81.8	11	-1.1	107.0	12	43.0	15	0.0	0.0	517.1	-37.7	1.52	20	-.79	2.52	25
5	81.4	15	-1.4	106.0	9	53.0	15	0.0	0.0	500.0	-51.4	1.58	37	-1.39	3.42	16
6	81.4	10	-.7	104.0	11	57.0	6	0.0	0.0	503.7	-29.2	1.50	28	-1.87	3.03	25
7	83.1	11	-1.0	107.0	18	54.0	6	0.0	0.0	545.5	-45.6	1.41	25	-.99	2.48	25
8	82.0	12	-2.0	102.0	29	60.0	7	0.0	0.0	515.7	-70.8	1.91	27	-.64	2.64	3
9	80.7	10	-1.6	103.0	10	56.0	6	0.0	0.0	483.7	-53.3	3.03	24	-.67	5.50	3

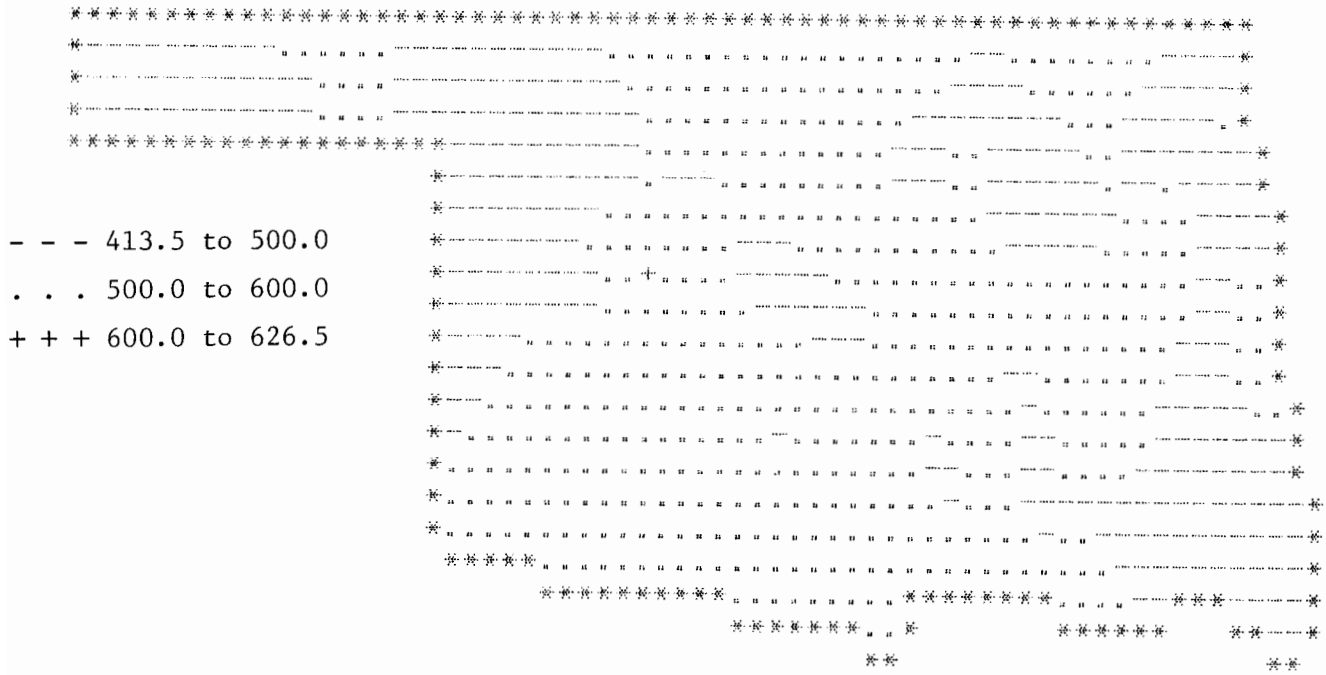
NOTE: 9999.0, 999.0, 99.99 indicate missing records.
Trace = .001



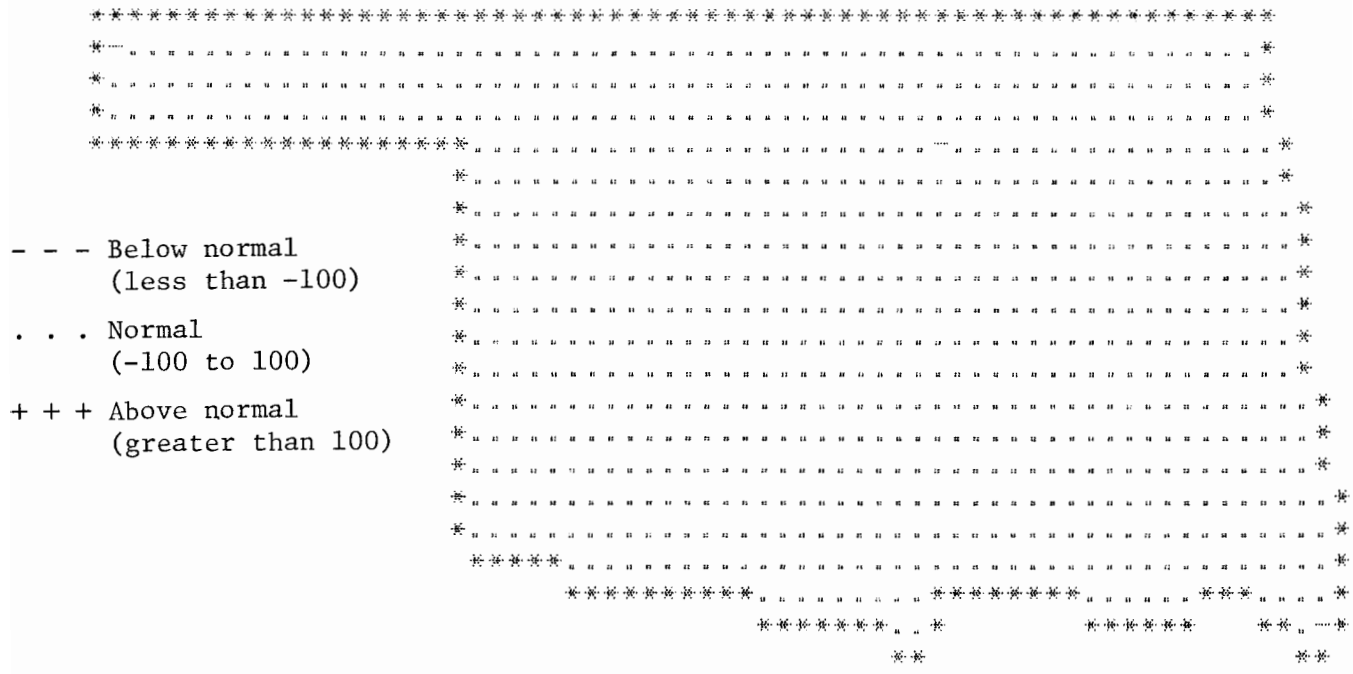
JULY 1985 AVERAGE MONTHLY TEMPERATURE
(DEGREES F)



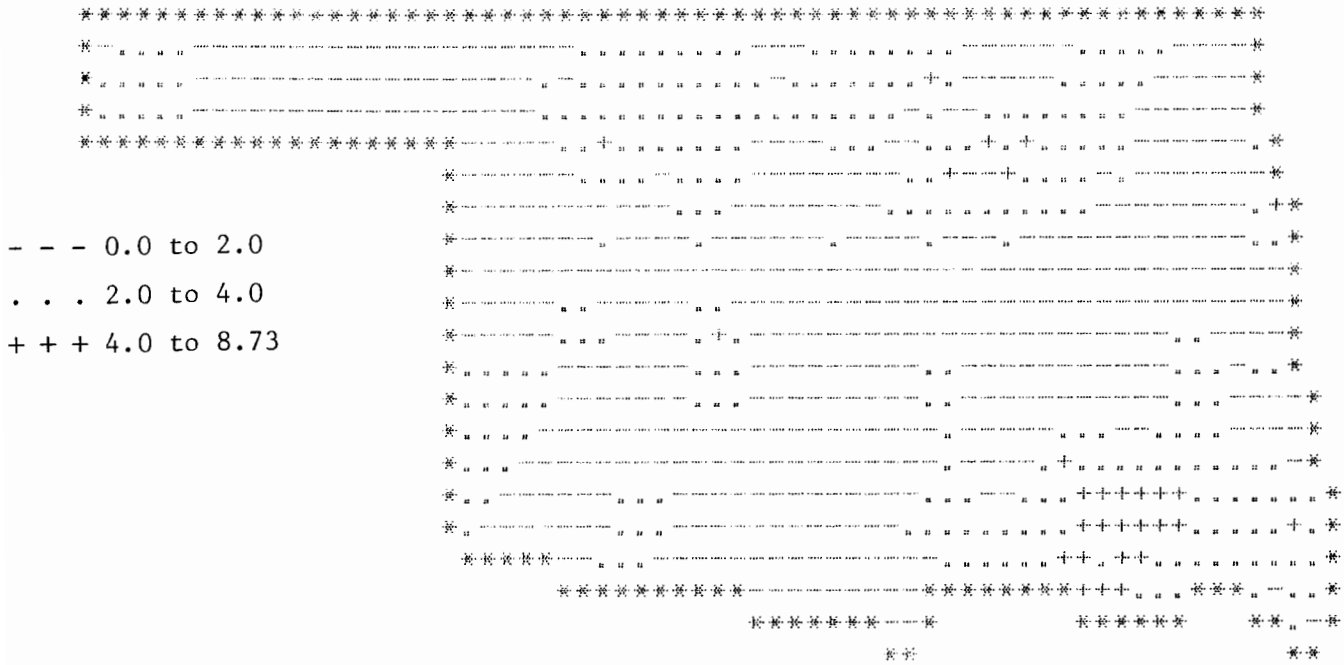
JULY 1985 DEVIATION FROM NORMAL TEMPERATURE



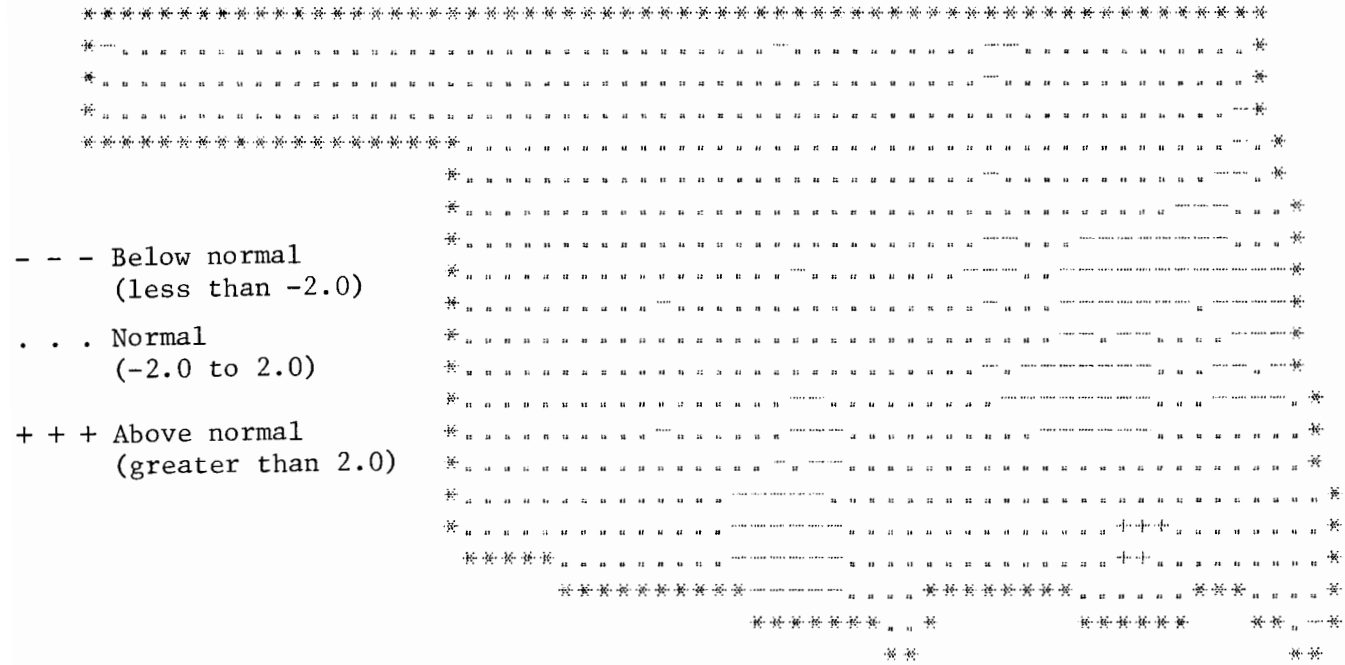
JULY 1335 TOTAL COOLING DEGREE DAYS



JULY 1985 DEVIATION FROM NORMAL COOLING DEGREE DAYS



JULY 1935 TOTAL PRECIPITATION
(INCHES)



JULY 1935 DEVIATION FROM NORMAL PRECIPITATION

DIGITIZED RADAP DATA NOW AVAILABLE

Several weather radars across the United States, including one in Oklahoma City, have been equipped by the National Weather Service with a computerized analysis and recording system known as RADAP. This new tool is improving the operational and research use of radar data through computer processing and storage of the data. The data are actually millions of numbers which indicate the strength of the radar beam as it is returned after bouncing off raindrops in clouds. The clouds may be anywhere from 10 to 125 miles from the radar.

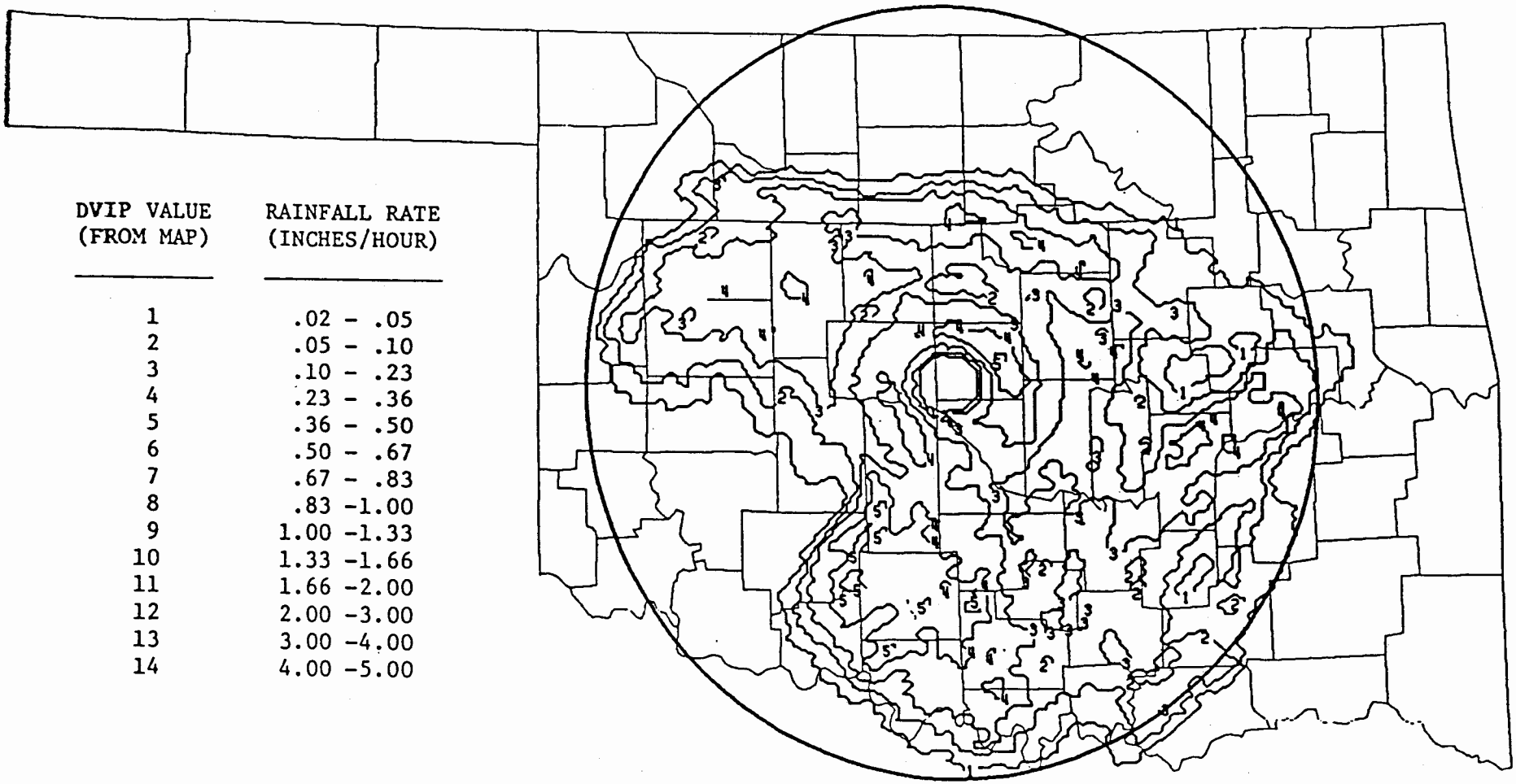
The greater the concentration and size of the drops in the clouds, the greater the strength (return) of the radar beam. This return is then used as an estimate of the rainfall intensity at and under the point where the raindrops were detected. Thus rainfall rates, which are of much interest to civil engineers, agriculturalist and many others, can be estimated for the entire area a radar sweeps, an area of over 60000 square miles (see Figure 1).

In addition, twice per hour, the system vertically tilts the radar to gather data which can be used to calculate other important weather information including the height of cloud tops (see Figure 2) and the amount of moisture in a cloud. Although the radars have been providing this data for several years, the RADAP system now allows the data to be archived and made available to researchers in a simple, structured format.

The Oklahoma Climate Survey is in charge of this archiving, involving the huge amount of data RADAP produces. Monthly, OCS receives from each radar site about 50 reusable floppy diskettes full of data. We then execute computer programs which read this data, check its validity, and write the valid data in a simple format onto computer tapes. A single tape stores as much data as about 50 diskettes. These tapes are then available to the public upon request. The Oklahoma Climate Survey has created programs which analyze the data from these tapes and generate useful computer graphics such as the figures below.

RADAP data from April 15 to present are now available at the Oklahoma Climate Survey for sites at Oklahoma City, Oklahoma, wichita, Kansas, Monett, Missouri, Garden City, Kansas, Amarillo, Texas, Limon, Colorado, Charleston, West Virginia, Ruskin, Florida, and Pittsburg, Pennsylvania. Questions concerning these data should be directed to Mr. Howard Johnson or Mr. Robert Sladewski of the Oklahoma Climate Survey.

FIGURE 1



DVIP VALUE (FROM MAP)	RAINFALL RATE (INCHES/HOUR)
1	.02 - .05
2	.05 - .10
3	.10 - .23
4	.23 - .36
5	.36 - .50
6	.50 - .67
7	.67 - .83
8	.83 -1.00
9	1.00 -1.33
10	1.33 -1.66
11	1.66 -2.00
12	2.00 -3.00
13	3.00 -4.00
14	4.00 -5.00

RADAR INDICATED PRECIPITATION INTENSITIES MARCH 20, 1985 08Z

(March 20, 2:00 a.m. LST)

SEPTEMBER 1985
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	1	Actual
89.3	max	
65.9	min	
.155	pcpn	
0	HDD	
13	CDD	
Highest Max		105-1939
Lowest Max		69-1932
Lowest Min		53-1956
Highest Min		77-1936
Greatest pcpn		2.53-1974

Normal	2	Actual
89.0	max	
66.0	min	
.110	pcpn	
0	HDD	
13	CDD	
Highest Max		104-1939
Lowest Max		68-1967
Lowest Min		52-1974
Highest Min		78-1936
Greatest pcpn		2.04-1969

Normal	3	Actual
90.2	max	
65.6	min	
.316	pcpn	
0	HDD	
13	CDD	
Highest Max		105-1947
Lowest Max		71-1974
Lowest Min		47-1974
Highest Min		80-1939
Greatest pcpn		3.16-1926

Normal	4	Actual
88.2	max	
66.4	min	
.096	pcpn	
0	HDD	
13	CDD	
Highest Max		106-1947
Lowest Max		66-1961
Lowest Min		46-1974
Highest Min		79-1936
Greatest pcpn		1.74-1940

Normal	5	Actual
87.4	max	
65.1	min	
.050	pcpn	
0	HDD	
12	CDD	
Highest Max		103-1931
Lowest Max		64-1962
Lowest Min		47-1974
Highest Min		77-1939
Greatest pcpn		.70-1926

Normal	6	Actual
88.2	max	
65.0	min	
.035	pcpn	
0	HDD	
12	CDD	
Highest Max		106-1947
Lowest Max		72-1962
Lowest Min		51-1974
Highest Min		76-1936
Greatest pcpn		.75-1973

Normal	7	Actual
87.9	max	
65.0	min	
.085	pcpn	
0	HDD	
12	CDD	
Highest Max		102-1936
Lowest Max		66-1962
Lowest Min		52-1950
Highest Min		77-1936
Greatest pcpn		.86-1951

Normal	8	Actual
88.2	max	
64.4	min	
.030	pcpn	
0	HDD	
12	CDD	
Highest Max		98-1936
Lowest Max		75-1957
Lowest Min		48-1957
Highest Min		77-1936
Greatest pcpn		2.66-1940

Normal	9	Actual
87.1	max	
64.6	min	
.056	pcpn	
0	HDD	
11	CDD	
Highest Max		99-1936
Lowest Max		67-1928
Lowest Min		51-1962
Highest Min		77-1936
Greatest pcpn		1.22-1951

Normal	10	Actual
85.5	max	
62.9	min	
.090	pcpn	
0	HDD	
10	CDD	
Highest Max		100-1936
Lowest Max		64-1928
Lowest Min		47-1962
Highest Min		77-1938
Greatest pcpn		1.98-1934

Normal	11	Actual
86.5	max	
62.2	min	
.049	pcpn	
0	HDD	
10	CDD	
Highest Max		98-1930
Lowest Max		70-1928
Lowest Min		48-1940
Highest Min		77-1936
Greatest pcpn		1.69-1943

Normal	12	Actual
84.1	max	
62.7	min	
.209	pcpn	
0	HDD	
9	CDD	
Highest Max		102-1930
Lowest Max		65-1975
Lowest Min		48-1959
Highest Min		78-1930
Greatest pcpn		3.03-1961

Normal	13	Actual
83.4	max	
61.2	min	
.137	pcpn	
0	HDD	
8	CDD	
Highest Max		102-1965
Lowest Max		61-1975
Lowest Min		50-1959
Highest Min		78-1978
Greatest pcpn		.78-1977

Normal	14	Actual
83.5	max	
61.9	min	
.184	pcpn	
1	HDD	
9	CDD	
Highest Max		102-1965
Lowest Max		58-1975
Lowest Min		47-1961
Highest Min		77-1931
Greatest pcpn		3.61-1957

Normal	15	Actual
83.8	max	
62.6	min	
.093	pcpn	
0	HDD	
9	CDD	
Highest Max		100-1965
Lowest Max		58-1949
Lowest Min		47-1961
Highest Min		78-1931
Greatest pcpn		2.30-1982

Normal	16	Actual
83.4	max	
62.6	min	
.157	pcpn	
0	HDD	
9	CDD	
Highest Max		101-1978
Lowest Max		66-1966
Lowest Min		47-1979
Highest Min		76-1965
Greatest pcpn		1.15-1969

Normal	17	Actual
81.7	max	
62.0	min	
.149	pcpn	
1	HDD	
8	CDD	
Highest Max		99-1931
Lowest Max		58-1973
Lowest Min		46-1981
Highest Min		78-1978
Greatest pcpn		1.42-1936

Normal	18	Actual
84.9	max	
61.5	min	
.054	pcpn	
1	HDD	
9	CDD	
Highest Max		99-1952
Lowest Max		53-1971
Lowest Min		42-1981
Highest Min		78-1978
Greatest pcpn		1.17-1971

Normal	19	Actual
84.1	max	
62.4	min	
.078	pcpn	
1	HDD	
9	CDD	
Highest Max		98-1954
Lowest Max		56-1971
Lowest Min		44-1971
Highest Min		76-1978
Greatest pcpn		1.49-1942

Normal	20	Actual
83.8	max	
61.4	min	
.093	pcpn	
1	HDD	
8	CDD	
Highest Max		100-1954
Lowest Max		56-1983
Lowest Min		41-1971
Highest Min		76-1931
Greatest pcpn		.99-1946

Normal	21	Actual
81.2	max	
61.0	min	
.128	pcpn	
1	HDD	
7	CDD	
Highest Max		97-1980
Lowest Max		61-1934
Lowest Min		39-1983
Highest Min		76-1931
Greatest pcpn		1.48-1957

Normal	22	Actual
81.4	max	
59.4	min	
.363	pcpn	
1	HDD	
6	CDD	
Highest Max		96-1956
Lowest Max		64-1972
Lowest Min		45-1975
Highest Min		76-1931
Greatest pcpn		7.53-1970

Normal	23	Actual
82.0	max	
60.0	min	
.037	pcpn	
1	HDD	
7	CDD	
Highest Max		93-1984
Lowest Max		63-1974
Lowest Min		46-1983
Highest Min		75-1931
Greatest pcpn		.54-1968

Normal	24	Actual
80.4	max	
59.0	min	
.250	pcpn	
1	HDD	
6	CDD	
Highest Max		98-1939
Lowest Max		56-1974
Lowest Min		48-1942
Highest Min		74-1931
Greatest pcpn		3.87-1959

Normal	25	Actual
81.1	max	
59.3	min	
.079	pcpn	
1	HDD	
6	CDD	
Highest Max		97-1938
Lowest Max		53-1926
Lowest Min		43-1926
Highest Min		74-1933
Greatest pcpn		.95-1955

Normal	26	Actual
81.3	max	
59.2	min	
.155	pcpn	
1	HDD	
6	CDD	
Highest Max		98-1977
Lowest Max		46-1936
Lowest Min		39-1942
Highest Min		73-1981
Greatest pcpn		1.74-1973

Normal	27	Actual
80.9	max	
59.0	min	
.115	pcpn	
1	HDD	
6	CDD	
Highest Max		96-1953
Lowest Max		48-1926
Lowest Min		38-1942
Highest Min		70-1971
Greatest pcpn		1.75-1936

Normal	28	Actual
80.7	max	
57.5	min	
.005	pcpn	
2	HDD	
6	CDD	
Highest Max		103-1953
Lowest Max		53-1926
Lowest Min		41-1936
Highest Min		73-1977
Greatest pcpn		2.88-1945

Normal	29	Actual
81.7	max	
57.6	min	
.005	pcpn	
1	HDD	
6	CDD	
Highest Max		98-1953
Lowest Max		47-1945
Lowest Min		41-1976
Highest Min		71-1933
Greatest pcpn		1.97-1945

Normal	30	Actual
80.3	max	
55.4	min	
.068	pcpn	
2	HDD	
5	CDD	
Highest Max		100-1977
Lowest Max		57-1945
Lowest Min		37-1972
Highest Min		72-1977
Greatest pcpn		1.08-1959

Normal	31	Actual
	max	
	min	
	pcpn	
	HDD	
	CDD	
Highest Max		
Lowest Max		
Lowest Min		
Highest Min		
Greatest pcpn		