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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 OCTOBER 1987

Relatively cool and dry conditions dominated most of the October weather. Temperatures in all CD's averaged at least 2 degrees below normal. Miami's 6.6 degree drop from its monthly mean represented the State's extreme deviation and contributed to CD 3 recording the lowest average temperature (57.6) of all CD's. Oklahoma received only about 50% of its mean October precipitation and little of this fell during the first half of the month.

A Canadian air mass brought cool and dry weather to the State during the first few days of October. On the 3rd, Tulsa recorded a low of 39 degrees, breaking its 1975 record by 2 degrees. The dry characteristics of the Canadian mass provided a much-needed dry period, permitting farmers to reseed winter wheat fields washed out by the abundant rains of late September. By the middle of the month, the cooler weather had produced the first frost in many sections of the State, serving to accelerate row crop harvesting and reduce the tremendous number of bothersome pollen in the air. The frost was not severe and damaged only little of the mature cotton crop.

The cool and dry conditions prevailed into the second half of the month, eventually becoming detrimental. Soil moisture levels diminished to their lowest level since mid-August, threatening some of the wheat crop. Relief arrived, however, as a series of thunderstorms accompanied some unsettled weather in Oklahoma. A frontal boundary lingered over the State from the 22nd through the 26th. Most stations recorded some precipitaion, and many their greatest one-day amounts, during this period. The southern half of Oklahoma experienced the greatest rainfall, and on the 24th, vigorous storms developed along a cold front and nearly the entire half of the State was under a severe storm watch. The Fort Cobb area recorded 55 mph winds and large hail.

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Strong winds in Lone Grove lifted the roof off a school gymnasium, causing an estimated $300,000 damage. In Madill, winds toppled a 50-foot elevator onto a peanut storage warehouse.

As the storms left the State, warmer and drier air entered. Many northern stations then recorded their monthly high temperatures despite the lower energy received from the sun during these last few days of the month. Scattered, slight rain accompanied a weak surface front on the 30th and 31st. Although these and the week-earlier rains did replenish soil moisture, they managed to bring monthly precipitation totals to just a fraction of normal (see Table 1).

TABLE 1

CD	October 1987 Precipitation	Average October Precipitation	Percent Normal
1	.25	1.58	16
2	.61	2.28	27
3	2.17	3.32	65
4	.53	2.29	23
5	1.59	2.85	56
6	2.47	3.45	72
7	1.86	2.54	73
8	2.43	3.40	71
9	2.72	3.57	76

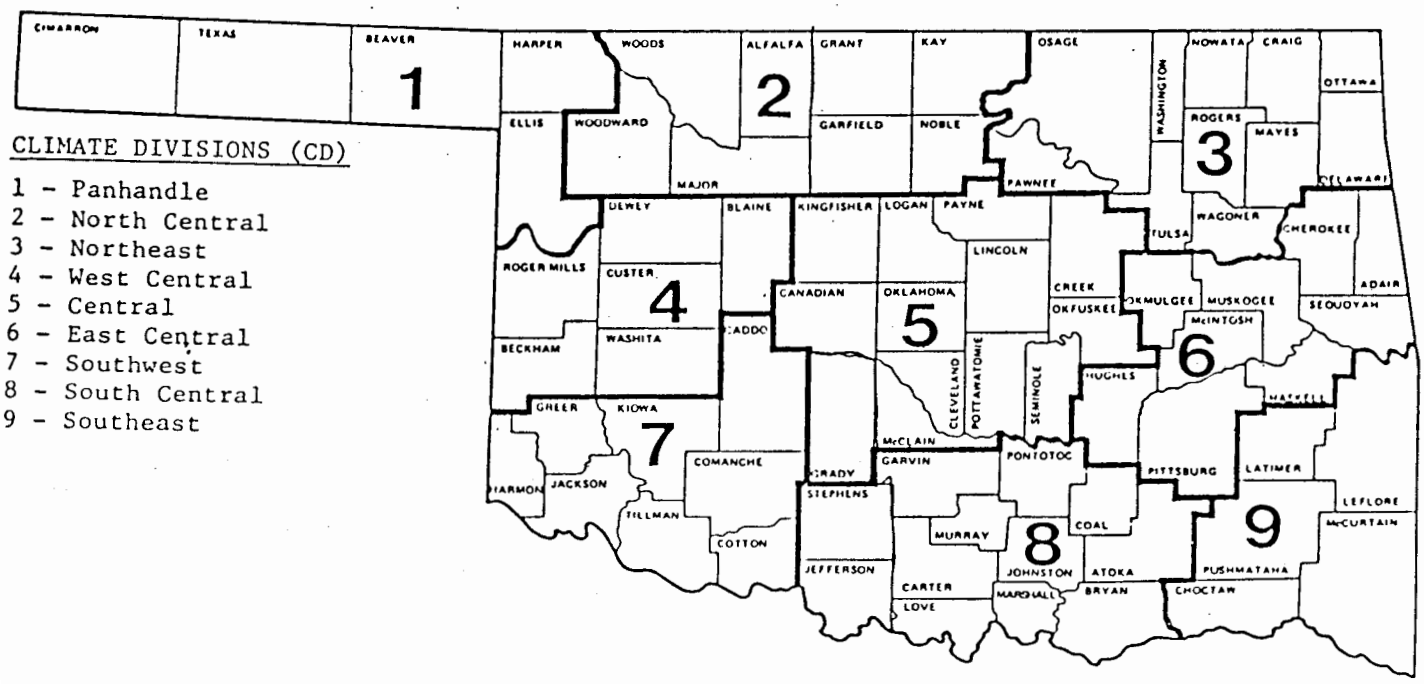
TABLE OF 1986/1987 COMPARISONS

	October Temperatures (F)		October Precipitation (in.)	
Station	1986	1987	1986	1987
Arnett	57.3	56.7	6.521	.374
Enid	*	59.5	*	.262
Mutual	57.6	57.1	3.860	*
Tulsa	61.3	59.9	6.024	1.352
Elk City	59.4	60.6	9.103	.191
Oklahoma City	61.7	60.2	1.691	1.824
McAlester	62.4	60.2	1.691	2.531
Altus Irr. Sta.	62.2	63.1	6.720	2.302
Durant	63.5	59.2	5.810	3.550
Ada	62.4	60.1	3.303	1.580
Antlers	63.4	60.3	3.360	4.170

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Vinita	3	21	20
Maximum temperature (F)	Hollis	7	96	8
Maximum 24-hour precipitation	Snyder	7	3.91"	24

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.

OCTOBER 1987 SUMMARY FOR NORTHWEST DIVISION (CD1)

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
ARNETT	332	1	56.7	30	-3.1	88.	29	33.	13	251.5	44.5	2.5	-43.5	.374	31	-1.44	.25	15
BUFFALO	1243	1	59.8	31	-2.3	89.	29	31.	12	179.5	24.5	18.5	-46.5	.200	31	-1.75	.15	15
FARGO	3070	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.070	31	-1.60	.02	25
GAGE	3407	1	58.8	31	-.9	86.	9	32.	12	216.0	14.0	22.5	-15.5	.242	31	-1.35	.15	15
GATE	3489	1	57.4	23	999.0	85.	3	38.	20	176.0	9999.0	2.0	9999.0	.640	30	99.99	.64	14
GOODWELL RES.STA.	3628	1	55.6	30	-2.8	88.	8	32.	27	284.0	53.0	1.5	-25.5	.103	31	-.85	.08	15
GUYMON	3835	1	58.1	26	999.0	90.	5	34.	20	202.5	9999.0	23.5	9999.0	.160	28	99.99	.16	15
HOOKER	4289	1	56.2	30	999.0	90.	4	33.	27	270.5	9999.0	5.0	9999.0	.250	31	-2.70	.24	15
KENTON	4766	1	54.8	30	-2.7	87.	8	27.	23	307.5	57.5	.5	-17.5	.010	31	-.89	.01	25
LAVERNE	5045	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.391	31	-1.12	.27	15

OCTOBER 1987 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

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
ALVA	194	2	57.3	31	-4.8	89.	1	26.	21	253.0	99.0	13.0	-51.0	.430	31	-1.14	.18	24
VANCE AFB	302	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.373	31	99.99	.19	31
BILLINGS	755	2	58.1	30	999.0	81.	1	30.	12	209.5	9999.0	3.5	9999.0	.433	31	-2.04	.28	23
BLACKWELL	818	2	59.0	31	999.0	81.	8	35.	12	188.0	9999.0	3.0	9999.0	.950	31	99.99	.32	16
BRAMAN	1075	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.541	31	99.99	.21	25
CHEROKEE	1724	2	60.1	29	-2.1	86.	2	35.	21	158.0	7.0	16.0	-48.0	.650	30	-1.17	.32	24
ENID	2912	2	59.5	31	-3.4	82.	9	29.	19	186.0	52.0	14.0	-55.0	.262	31	-2.55	.10	31
FORT SUPPLY DAM	3304	2	57.3	30	-4.0	86.	1	31.	13	236.5	72.5	4.5	-44.5	.230	31	-1.20	.12	15
GREAT SALT PLAINS	3740	2	58.3	30	999.0	84.	1	33.	22	202.5	9999.0	2.5	9999.0	1.360	31	-.67	.45	31
HELENA	4019	2	57.3	30	999.0	84.	30	33.	22	235.5	9999.0	3.5	9999.0	.322	31	-1.80	.26	25
JEFFERSON	4753	2	59.8	31	999.0	84.	29	33.	21	173.0	9999.0	11.0	9999.0	.733	31	99.99	.27	25
LAHOMA RES.STA.	4950	2	59.2	30	999.0	74.	1	43.	22	175.5	9999.0	2.0	9999.0	0.000	0	99.99	99.99	0
LAMONT	5013	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.631	31	99.99	.22	24
MEDFORD	5768	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.872	31	99.99	.41	23
MUTUAL	6139	2	57.1	30	-3.8	86.	1	33.	12	238.5	63.5	2.0	-46.0	0.000	31	-1.52	0.00	31
ORIENTA	6751	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.030	31	99.99	.03	16
PERRY	7012	2	60.2	31	-3.3	82.	9	34.	17	174.0	49.0	26.5	-52.5	.990	31	-1.64	.43	19
PONCA CITY	7201	2	58.6	27	-2.3	81.	2	33.	21	186.5	7.5	14.0	-37.0	.701	29	-1.90	.40	24
RENFROW	7556	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.380	31	-1.94	.14	16
FREEDOM	3358	2	58.8	31	999.0	88.	1	29.	12	203.0	9999.0	12.0	9999.0	.240	31	99.99	.18	16
HARDY	3999	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.672	31	99.99	.66	24
NEWKIRK	6278	2	58.2	31	-3.7	79.	1	33.	21	214.0	57.0	3.0	-58.0	1.321	31	-1.45	.50	24
RED ROCK	7505	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.510	31	-1.96	.40	31
WAYNOKA	9404	2	58.6	31	-3.6	87.	29	30.	21	206.5	48.5	8.5	-62.5	.050	31	-1.66	.05	15
WOODWARD	9760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.231	31	-1.59	.23	9

OCTOBER 1987 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	DIV	MEAN TEMP	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 24-HR DAY
BARNSDALL	535	3	56.9	31	999.0	81.	29	27.	21	256.5	9999.0	6.5	9999.0	1.001	31	-2.07	.34	23
BARTLESVILLE	548	3	57.6	31	-4.0	83.	29	26.	21	239.5	79.5	11.0	-43.0	1.420	31	-1.79	.45	19
BIXBY	782	3	55.7	30	-6.0	82.	29	30.	22	280.0	109.0	1.5	-68.5	1.710	31	-1.45	.56	20
BURBANK	1256	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.843	31	99.99	.43	24
CHELSEA	1717	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.630	31	99.99	.43	24
CLAREMORE	1828	3	57.1	30	-4.3	82.	29	34.	22	240.5	60.5	4.5	-63.5	2.170	31	-1.25	.74	19
CLEVELAND	1902	3	60.2	25	999.0	83.	29	30.	21	130.5	9999.0	11.0	9999.0	.932	26	99.99	.40	31
FORAKER	3250	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.190	31	-1.91	.51	24
HOLLOW	4258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.101	31	-.43	1.21	19
HOMINY	4289	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.821	31	-2.13	.37	24
HULAH LAKE	4393	3	53.3	16	-7.3	84.	29	25.	22	186.5	-3.5	0.0	-53.0	1.361	24	-1.84	.49	26
JAYTOWER	4567	3	57.0	30	999.0	80.	30	31.	12	242.5	9999.0	2.0	9999.0	3.700	31	99.99	2.00	24
KANSAS	4672	3	57.0	31	999.0	77.	30	29.	12	254.5	9999.0	6.5	9999.0	3.421	31	99.99	1.20	19
KEYSTON	4812	3	56.9	30	999.0	83.	29	29.	21	246.5	9999.0	4.0	9999.0	.510	31	99.99	.29	23
LENAPAH	5118	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.790	31	99.99	.68	18
MANNFORD	5522	3	59.2	31	999.0	85.	29	28.	21	195.5	9999.0	17.0	9999.0	1.170	31	99.99	.70	31
MARAMEC	5540	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.800	31	-2.36	.46	31
MIAMI	5855	3	54.8	30	-6.6	81.	30	29.	22	309.0	135.0	2.5	-60.5	3.530	31	-.21	1.14	24
NOWATA	6485	3	57.2	25	-4.6	81.	29	31.	20	202.0	45.0	8.0	-50.0	2.330	25	-.97	.70	24
ONETA	6713	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.491	31	99.99	.43	24
PAWHUSKA	6935	3	57.9	31	-3.6	82.	29	28.	21	232.0	71.0	13.0	-40.0	1.122	31	-1.81	.53	24
PAWHUSKA 2	6937	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.101	31	99.99	.60	24
PAWNEE	6940	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.831	31	-1.89	.42	31
PRYOR	7309	3	54.4	30	-7.0	80.	30	27.	21	318.0	151.0	1.0	-54.0	2.512	31	-1.26	.88	24
QUAPAW	7358	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.401	31	.74	1.02	31
RALSTON	7390	3	59.6	31	999.0	84.	29	29.	21	180.5	9999.0	13.0	9999.0	.903	31	-1.79	.35	31
RAMONA	7394	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.340	31	99.99	1.02	24
SKIATOOK	8258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.192	31	-2.00	.60	31
SPAVINAW	8380	3	58.7	31	999.0	77.	30	30.	12	209.5	9999.0	15.5	9999.0	2.991	31	-.66	.72	20
TULSA	8992	3	59.9	31	-2.7	82.	30	34.	21	180.5	34.5	23.0	-49.0	1.352	31	-2.06	.46	19
UPPER SPAVINAW	9101	3	58.7	29	999.0	80.	29	32.	21	190.5	9999.0	7.5	9999.0	5.562	31	99.99	1.83	25
VINITA	9203	3	56.7	30	-4.5	80.	30	21.	20	258.5	82.5	9.5	-48.5	3.120	30	-.60	1.42	19
WAGONER	9247	3	58.9	31	-4.2	79.	29	33.	12	206.0	65.0	18.0	-64.0	4.060	31	.96	1.48	19
WANN	9298	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.381	31	99.99	.92	19
WYNONA	9792	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.053	31	99.99	.38	31

OCTOBER 1987 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
CHEYENNE	1738	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.002	31	99.99	.00	26
CLINTON	1909	4	61.0	31	-1.2	87.	8	33.	21	142.0	-3.0	17.0	-41.0	.331	31	-2.37	.18	31
COLONY	2039	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.070	31	99.99	.74	31
CORDELL	2125	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.140	31	-1.44	.76	31
ELK CITY	2849	4	60.6	28	999.0	89.	8	37.	20	142.5	9999.0	19.0	9999.0	.191	28	-1.80	.15	23
ERICK	2944	4	60.3	31	-1.5	91.	8	32.	12	166.5	21.5	20.5	-24.5	.840	31	-1.36	.48	24
GEARY	3497	4	58.9	31	-3.7	83.	8	33.	12	196.0	56.0	8.0	-58.0	.940	31	-1.49	.94	31
HAMMON	3871	4	56.5	30	-4.8	88.	8	28.	12	257.0	87.0	1.5	-54.5	.130	31	-1.77	.07	16
LEEDEY	5090	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.001	31	-1.76	.00	31
MACKIE	5463	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.170	31	99.99	.17	13
MORAVIA	6035	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.912	31	-1.51	.60	31
OKEENE	6629	4	60.5	31	-2.9	84.	1	33.	21	151.0	29.0	12.0	-61.0	.300	31	-1.62	.16	31
RETROP	7565	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.780	31	99.99	.41	31
REYDON	7579	4	60.6	31	999.0	86.	8	33.	20	159.0	9999.0	23.0	9999.0	.232	31	-1.45	.18	15
SAYRE	7952	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.701	31	-1.43	.54	31
TALOGA	8708	4	58.9	31	-2.1	87.	31	29.	21	204.0	36.0	14.0	-30.0	.060	31	-1.80	.03	31
VICI	9172	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.171	31	99.99	.17	16
WATONGA	9364	4	60.0	31	999.0	84.	8	34.	21	167.0	9999.0	11.5	9999.0	.543	31	-1.68	.45	30
WEATHERFORD	9422	4	58.1	30	-4.6	86.	8	32.	12	211.0	77.0	3.0	-60.0	.440	31	-2.29	.34	31

OCTOBER 1987 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 DAY
AMBER	260	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.860	31	99.99	.95	31
ARCADIA	288	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.111	31	99.99	.82	31
TINKER AFB	325	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.380	31	99.99	1.04	31
BLANCHARD	830	5	61.4	31	999.0	83.	8	33.	12	140.0	9999.0	29.0	9999.0	1.582	31	99.99	.75	24
BRISTOW	1144	5	59.3	31	-4.0	83.	29	28.	21	196.0	60.0	20.5	-64.5	1.681	31	-.86	.69	24
CHANDLER	1684	5	60.7	31	-2.6	82.	8	31.	21	155.5	26.5	23.5	-53.5	1.020	31	-1.41	.61	30
CHICKASHA	1750	5	59.6	31	-4.2	86.	8	31.	21	202.0	74.0	14.5	-57.5	1.480	31	-1.23	.83	24
COX CITY	2196	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.000	31	99.99	1.90	23
CRESCENT	2242	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.940	31	99.99	.70	31
CUSHING	2318	5	58.2	29	-4.2	81.	29	36.	21	203.0	53.0	6.5	-62.5	.660	30	-2.02	.60	31
EL RENO	2818	5	59.8	28	-2.6	83.	8	29.	13	158.5	18.5	14.0	-45.0	1.030	31	-1.85	.93	31
GUTHRIE	3821	5	61.3	31	-1.7	83.	9	33.	12	141.5	2.5	26.5	-50.5	1.281	31	-1.38	1.08	31
HENNESSEY	4055	5	59.4	31	-3.4	83.	8	33.	21	180.5	39.5	7.5	-65.5	.480	31	-1.63	.38	31
INGALLS	4489	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.043	31	99.99	.81	31
KINGFISHER	4861	5	59.8	31	-3.1	83.	8	33.	21	172.0	43.0	10.5	-53.5	.820	31	-1.62	.62	31
KINGFISHER CREEK	4862	5	59.5	30	999.0	83.	7	33.	21	169.0	9999.0	2.5	9999.0	.820	31	99.99	.62	31
KINGFISHER UJC	4864	5	59.9	31	999.0	83.	8	33.	21	170.0	9999.0	10.5	9999.0	.820	31	99.99	.62	31
KONAWA	4915	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.520	31	-.07	1.58	26
MARSHALL	5589	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.730	31	1.13	1.20	8
MEEKER	5779	5	59.9	31	-2.6	82.	8	29.	21	180.5	30.5	21.0	-52.0	1.100	31	-1.68	.62	31
NORMAN	6386	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.293	31	-1.34	.85	24
OILTON	6616	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.580	31	99.99	.68	31
OKEMAH	6638	5	59.2	31	-4.3	79.	8	33.	12	191.5	66.5	11.0	-68.0	1.952	31	-.92	.89	10
OKLAHOMA CITY	6661	5	60.6	31	-1.7	82.	9	36.	12	159.5	14.5	24.5	-36.5	1.824	31	-.89	1.50	31
PERKINS	7003	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.000	31	-2.15	.87	31
PIEDMONT	7068	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.220	31	99.99	.85	31
PRAGUE	7264	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.831	31	-2.04	.41	24
PURCELL	7327	5	60.3	31	-2.6	84.	8	30.	21	171.5	36.5	25.0	-45.0	2.452	31	-.73	2.00	24
SEMINOLE	8042	5	61.4	31	-3.2	83.	8	32.	12	137.0	37.0	24.0	-64.0	2.060	31	-.79	1.19	26
SHAWNEE	8110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.860	31	-1.34	.86	24
STELLA	8479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.280	31	99.99	.69	24
STILLWATER	8501	5	58.1	30	-3.8	83.	29	29.	21	217.5	59.5	9.5	-52.5	1.242	31	-1.66	.59	31
STROUD	8563	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.311	31	99.99	.50	24
TROUSDALE	8960	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.640	31	99.99	.80	26
UNION CITY	9086	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.300	31	-.79	1.96	31
WELTY	9479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.481	31	99.99	.55	24
WEWOKA	9575	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.890	31	-.09	1.74	26

OCTOBER 1987 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

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
ASHLAND	364	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.830	31	99.99	1.18	25
BEGGS	631	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.180	31	99.99	.53	24
BOYNTON	1027	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.913	31	99.99	.90	24
CALVIN	1391	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.522	31	-1.19	1.82	26
DEWAR	2485	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.520	31	-1.74	.70	25
EUFAULA	2993	6	60.2	31	999.0	82.	9	37.	21	175.0	9999.0	27.0	9999.0	2.591	31	-.82	.82	25
HANNA	3884	6	59.5	31	999.0	83.	9	30.	12	193.5	9999.0	24.5	9999.0	1.581	31	-1.69	.80	25
HARTSHORNE	3946	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.120	31	99.99	.81	24
HASKELL	3956	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.550	31	-.52	1.13	24
HOLDENVILLE	4235	6	59.7	31	-4.4	82.	9	30.	12	184.0	69.0	19.0	-68.0	2.981	31	-.56	1.66	26
LYONS	5437	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.650	31	.57	1.32	25
MCALESTER	5664	6	60.2	31	-3.0	84.	10	34.	21	177.0	44.0	28.0	-50.0	2.531	31	-1.37	.89	24
MCCURTAIN	5693	6	61.2	31	999.0	84.	9	32.	21	156.5	9999.0	38.0	9999.0	1.751	31	-1.56	1.00	25
MUSKOGEE	6130	6	59.4	29	-3.5	79.	29	32.	21	174.5	34.5	12.5	-62.5	3.680	29	.34	2.28	24
OKMULGEE	6670	6	57.0	31	-6.1	81.	30	27.	12	253.0	115.0	5.5	-73.5	2.270	31	-.62	.88	25
OKTAHA	6678	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.890	31	99.99	.82	24
QUINTON	7372	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.304	31	-2.31	.57	24
SALLISAW	7862	6	58.5	31	-4.9	84.	9	29.	21	212.5	86.5	12.0	-64.0	2.692	31	-1.17	1.68	25
SCIPIO	7979	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.450	31	99.99	.47	25
SCRAPER	7993	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	6.170	31	99.99	1.68	13
SHORT	8170	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.140	31	99.99	1.13	20
STILWELL	8306	6	58.1	31	999.0	79.	29	30.	21	228.5	9999.0	15.0	9999.0	2.234	31	99.99	1.14	19
TAHLEQUAH	8677	6	57.3	31	-4.6	79.	29	27.	12	248.5	79.5	8.5	-64.5	3.190	31	-.20	1.42	24
WEBBERS FALLS	9445	6	57.3	30	-4.7	81.	9	31.	22	232.0	80.0	2.5	-56.5	1.830	31	-1.92	.92	25
WESTVILLE	9523	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.711	31	99.99	.83	20
WETUMKA	9571	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.251	31	-1.88	.76	25

OCTOBER 1987 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	63.1	30	-1.5	94.	7	34.	12	87.0	-20.0	30.0	-65.0	2.302	31	-.25	1.20	31
ALTUS DAM	184	7	60.8	30	999.0	93.	8	33.	12	147.5	9999.0	21.0	9999.0	3.711	31	1.01	3.09	31
ANADARKO	224	7	60.2	26	-2.9	86.	8	28.	21	142.5	15.5	17.5	-50.5	1.650	26	-.99	1.02	31
APACHE	260	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.680	31	99.99	.88	24
ALTUS AFB	447	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.982	31	99.99	1.73	24
CARNEGIE	1504	7	61.4	31	-1.8	89.	8	30.	12	145.0	19.0	33.0	-38.0	2.060	31	-.13	1.46	31
CHATTANOOGA	1706	7	63.4	31	-.9	90.	9	34.	21	98.0	-3.0	49.5	-29.5	1.740	31	-1.03	1.74	24
DUNCAN	2668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.221	31	99.99	2.21	24
FREDERICK	3353	7	61.7	30	-3.9	92.	8	38.	12	122.5	29.5	24.0	-88.0	1.130	31	-1.33	1.11	24
GRANDFIELD	3709	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.380	31	-2.46	.38	24
HOBART	4204	7	61.0	30	-1.4	92.	9	32.	12	153.5	11.5	33.5	-27.5	1.723	31	-.80	.87	31
HOLLIS	4249	7	61.4	24	-2.6	96.	8	33.	21	97.0	-13.0	10.5	-68.5	.690	25	-1.56	.42	31
LAWTON	5063	7	60.9	30	-3.1	88.	7	36.	12	149.0	34.0	25.0	-59.0	3.432	31	.58	3.33	23
FT.SILL	5068	7	60.4	30	999.0	86.	7	36.	12	148.0	9999.0	11.0	9999.0	1.924	31	-.93	1.88	24
LOCO	5247	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.780	31	99.99	.63	24
LOOKEBA	5329	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.030	31	99.99	1.76	31
MANGUM	5509	7	63.3	31	-.5	95.	8	32.	20	105.0	-13.0	51.0	-30.0	3.400	31	.78	2.50	31
RANDLETT	7403	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.260	31	99.99	.26	24
ROOSEVELT	7727	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.640	31	-.84	.82	31
SNYDER	8299	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.011	31	1.65	3.91	24
VINSON	9212	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.690	31	-1.58	.41	31
WALTERS	9278	7	62.7	31	-2.1	88.	9	34.	21	108.0	-8.0	36.5	-73.5	1.880	31	-1.04	1.85	24
WILLOW	9668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.800	31	99.99	.47	24

OCTOBER 1987 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

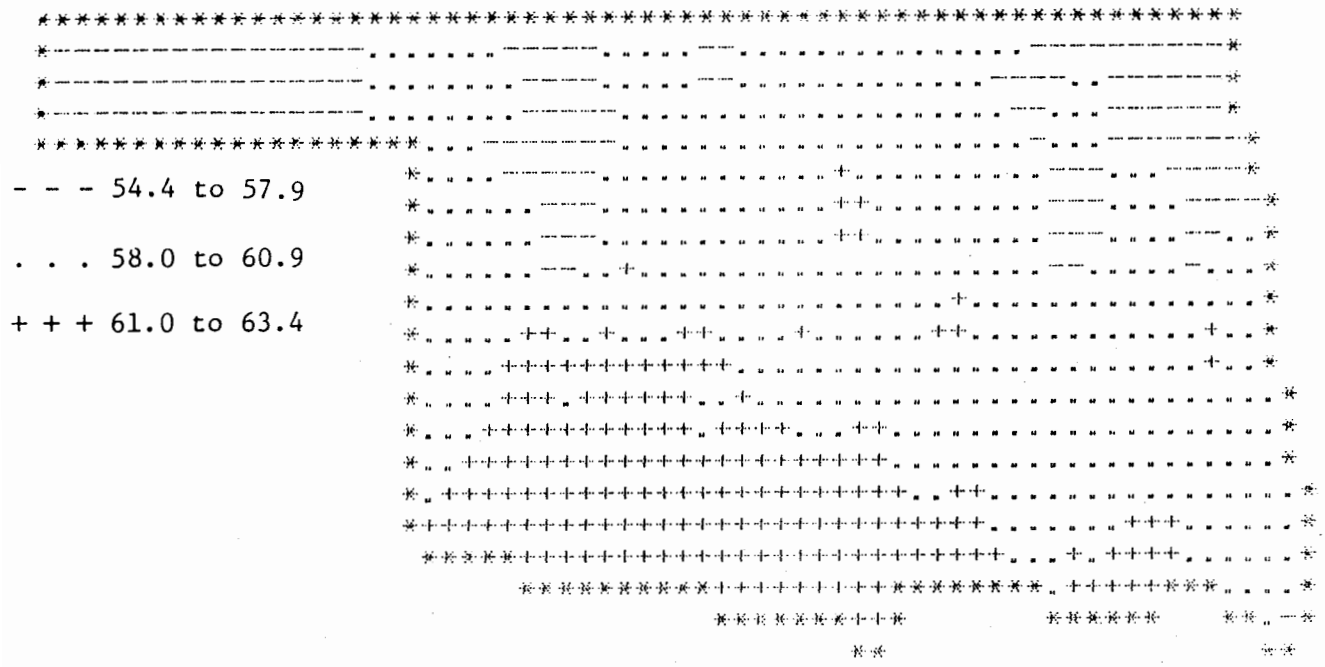
NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ADA	17	8	60.1	31	-4.3	83.	9	32.	12	164.5	45.5	12.0	-88.0	1.580	31	-2.34	.64	26
ALLEN	147	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.800	31	99.99	1.10	26
ARDMORE	292	8	62.7	31	-4.2	85.	9	38.	13	107.5	38.5	37.5	-90.5	2.530	31	-.87	1.40	26
ATOKA DAM	394	8	59.4	30	999.0	85.	11	35.	21	171.0	9999.0	4.0	9999.0	2.810	31	99.99	2.50	26
BOKCHITO	917	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.070	31	99.99	1.15	26
CANEY	1437	8	66.5	21	999.0	80.	5	39.	21	98.5	9999.0	5.0	9999.0	2.580	23	99.99	1.50	26
CENTRAHOMA	1648	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.250	31	99.99	1.15	25
CHICKASAW	1745	8	59.5	30	999.0	83.	9	30.	12	179.5	9999.0	13.0	9999.0	3.600	31	99.99	1.96	26
COMANCHE	2054	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.391	31	99.99	1.35	24
DAISY	2354	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.810	31	-1.00	1.77	25
DURANT	2678	8	59.2	30	999.0	83.	8	33.	21	186.0	9999.0	10.5	9999.0	3.550	31	.08	2.25	26
ELMORE CITY	2872	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.800	31	99.99	.70	24
FARRIS	3083	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.590	31	99.99	1.48	26
GRADY	3688	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.420	31	99.99	.78	25
HEALDTON	4001	8	61.3	31	999.0	85.	8	32.	21	150.5	9999.0	36.0	9999.0	.550	31	-2.57	.44	24
KINGSTON	4865	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	3.350	31	-.29	1.55	26
LEHIGH	5108	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.171	31	99.99	1.15	26
LINDSAY 2W	5220	8	60.1	28	999.0	83.	7	30.	21	149.0	9999.0	13.0	9999.0	2.740	30	99.99	1.86	24
MADILL	5468	8	62.6	31	-2.7	86.	8	38.	12	128.0	35.0	52.5	-49.5	3.690	31	.12	1.80	26
MARIETTA	5563	8	63.3	31	-2.1	86.	9	37.	21	102.5	10.5	49.0	-56.0	1.900	31	-1.13	1.23	19
MARLOW	5581	8	61.6	31	999.0	85.	8	30.	12	138.0	9999.0	31.5	9999.0	3.302	31	.35	3.04	24
MCGEE CREEK	5713	8	60.0	30	999.0	86.	9	36.	21	156.0	9999.0	6.5	9999.0	3.980	31	99.99	1.54	26
OSWALT	6787	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.500	31	99.99	.50	18
PAULS VALLEY	6926	8	61.3	31	-3.0	85.	8	31.	21	147.0	42.0	32.0	-51.0	2.501	31	-1.07	1.60	26
PONTOTOC	7214	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.580	31	-1.20	1.23	27
TISHOMINGO	8884	8	61.0	17	999.0	85.	7	32.	21	78.0	9999.0	9.5	9999.0	3.440	22	-.19	2.56	26
TUSSY	9032	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.923	31	99.99	1.30	26
WAURIKA	9395	8	63.4	31	-2.1	88.	8	35.	21	100.0	6.0	51.5	-57.5	1.580	31	-1.11	1.40	24
WAURIKA LAKE	9399	8	62.1	28	999.0	87.	8	36.	21	104.5	9999.0	22.5	9999.0	1.240	30	99.99	1.09	24

OCTOBER 1987 SUMMARY FOR SOUTHEAST DIVISION (CD9)

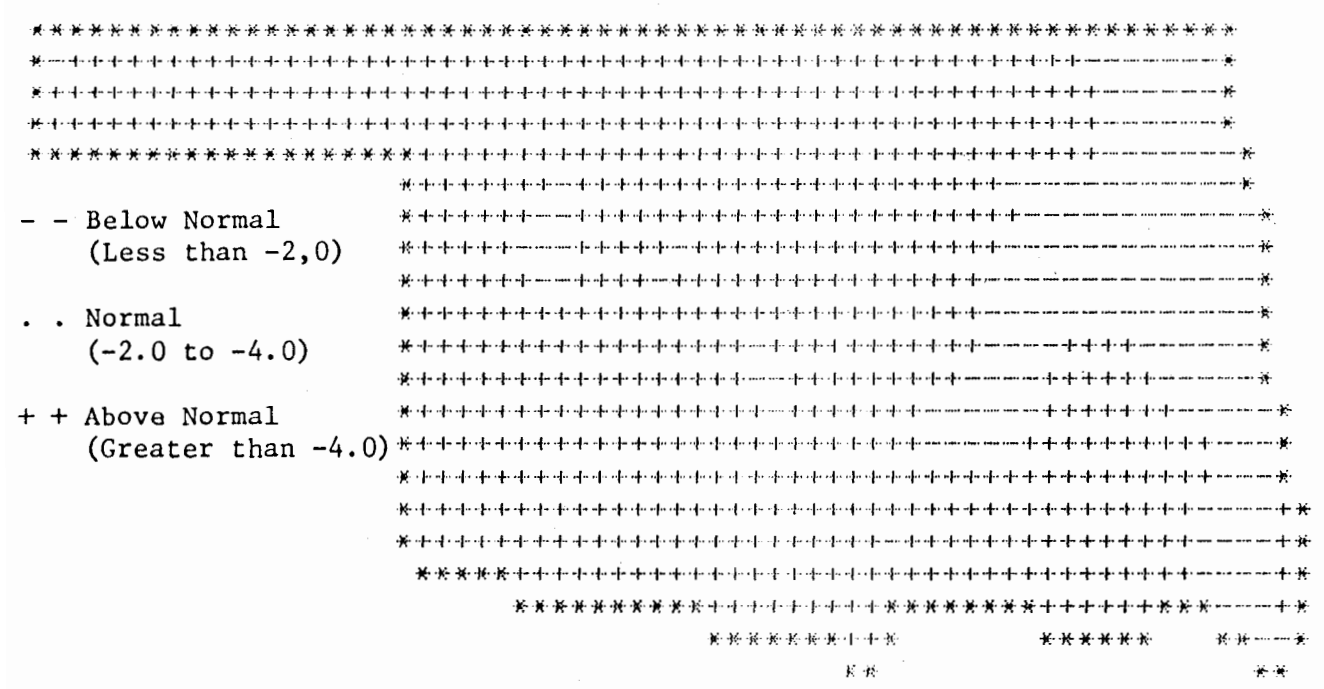
NAME	ID	DIV	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	60.3	31	-3.2	87.	9	38.	28	160.5	36.5	14.5	-63.5	4.170	31	.26	1.53	24
BATTIEST	567	9	58.5	17	999.0	83.	10	34.	14	117.5	9999.0	6.5	9999.0	5.260	31	99.99	1.74	25
BENGAL	670	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.600	31	99.99	.60	25
ROSWELL	980	9	61.0	31	999.0	85.	9	34.	21	152.5	9999.0	27.0	9999.0	5.041	31	1.34	1.90	26
FANSHAW	3065	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.920	31	-1.16	.80	25
HEAVENER	4008	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.092	31	-1.21	.72	25
HEE MT.TOWER	4017	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	4.010	31	99.99	1.78	26
HUGO	4384	9	61.8	31	-3.4	85.	9	37.	22	121.5	27.5	21.0	-80.0	4.200	31	.26	1.70	19
IDABEL	4451	9	59.8	30	-4.3	85.	5	37.	13	163.5	48.5	7.0	-80.0	5.250	31	1.41	2.10	26
POTEAU	7254	9	57.9	30	999.0	85.	8	30.	20	219.0	9999.0	5.5	9999.0	1.420	31	99.99	.47	24
SPIRO	8416	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.860	31	-.45	1.29	25
TUSKAHOMA	9023	9	60.0	31	999.0	83.	9	30.	21	183.0	9999.0	28.0	9999.0	2.341	31	99.99	.81	24
VALLIANT	9118	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	5.890	31	2.27	1.63	19
ZOE	9985	9	55.5	7	999.0	83.	11	28.	21	71.0	9999.0	4.5	9999.0	1014*3	22	97.73	99.90	7

OCTOBER 1987 CLIMATE DIVISION SUMMARY

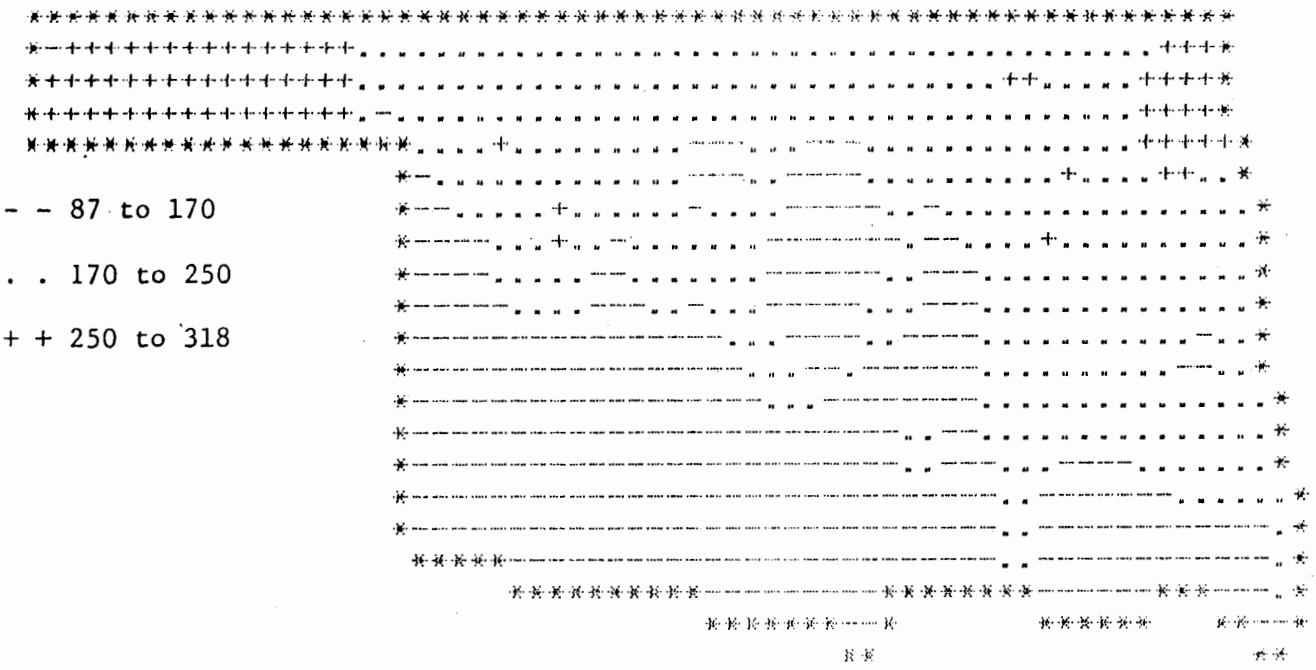
CLIMATE DIV	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEGREE DAYS	DEV FROM NORM	COOL DEGREE DAYS	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	57.0	6	-2.5	90.0	4	27.0	23	251.5	42.5	8.4	-30.4	.24	10	-1.42	.64	14
2	58.6	16	-3.4	89.0	1	26.0	21	202.5	47.3	8.7	-53.1	.58	24	-1.56	.66	24
3	57.5	17	-4.2	85.0	29	21.0	20	237.6	71.8	9.2	-53.2	1.98	33	-1.29	2.00	24
4	59.5	10	-2.6	91.0	8	28.0	12	179.6	33.3	12.9	-44.9	.47	19	-1.72	.94	31
5	59.9	17	-3.1	86.0	8	28.0	21	173.3	37.2	16.5	-55.6	1.56	37	-1.26	2.00	24
6	59.0	11	-4.0	84.0	9	27.0	12	203.2	64.2	17.5	-57.8	2.44	26	-.96	2.28	24
7	61.9	10	-2.1	96.0	8	28.0	21	126.3	10.8	31.5	-52.5	1.85	22	-.73	3.91	24
8	61.2	14	-4.1	88.0	8	30.0	12	141.7	46.4	26.5	-78.0	2.38	27	-1.05	3.04	24
9	60.1	6	-4.2	87.0	9	28.0	21	166.7	55.7	17.2	-71.5	3.54	13	-.06	99.90	7



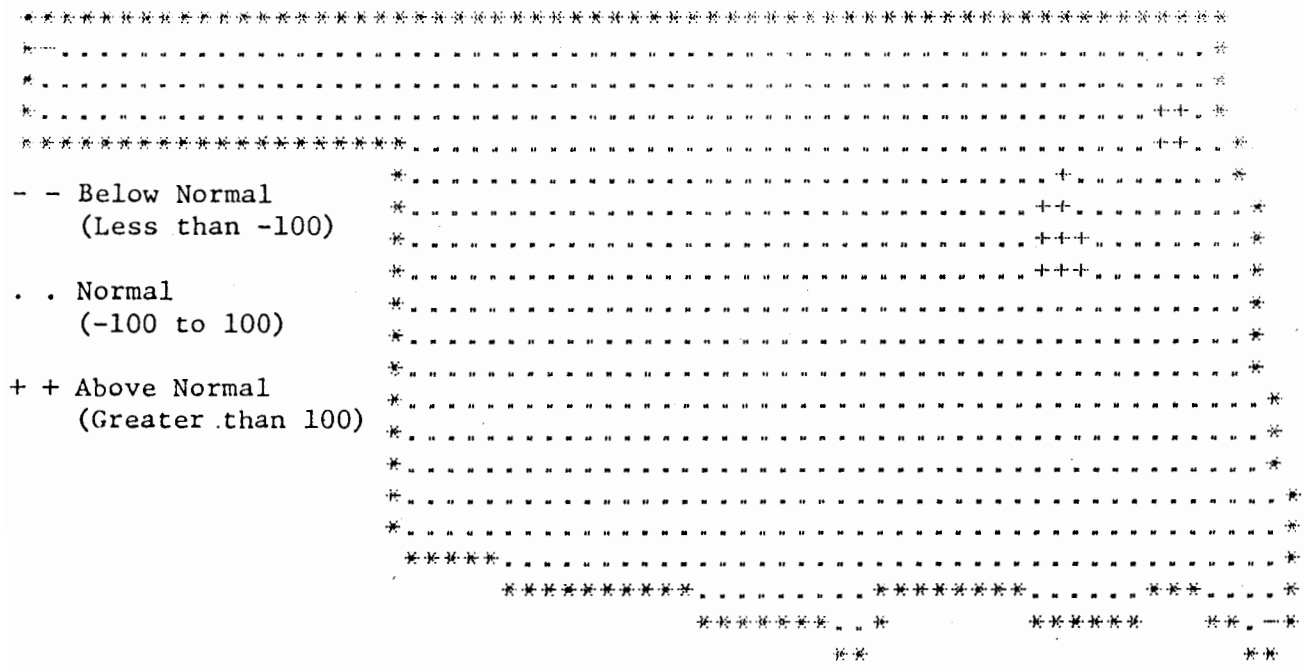
OCTOBER 1987 AVERAGE MONTHLY TEMPERATURE
(Degrees F)



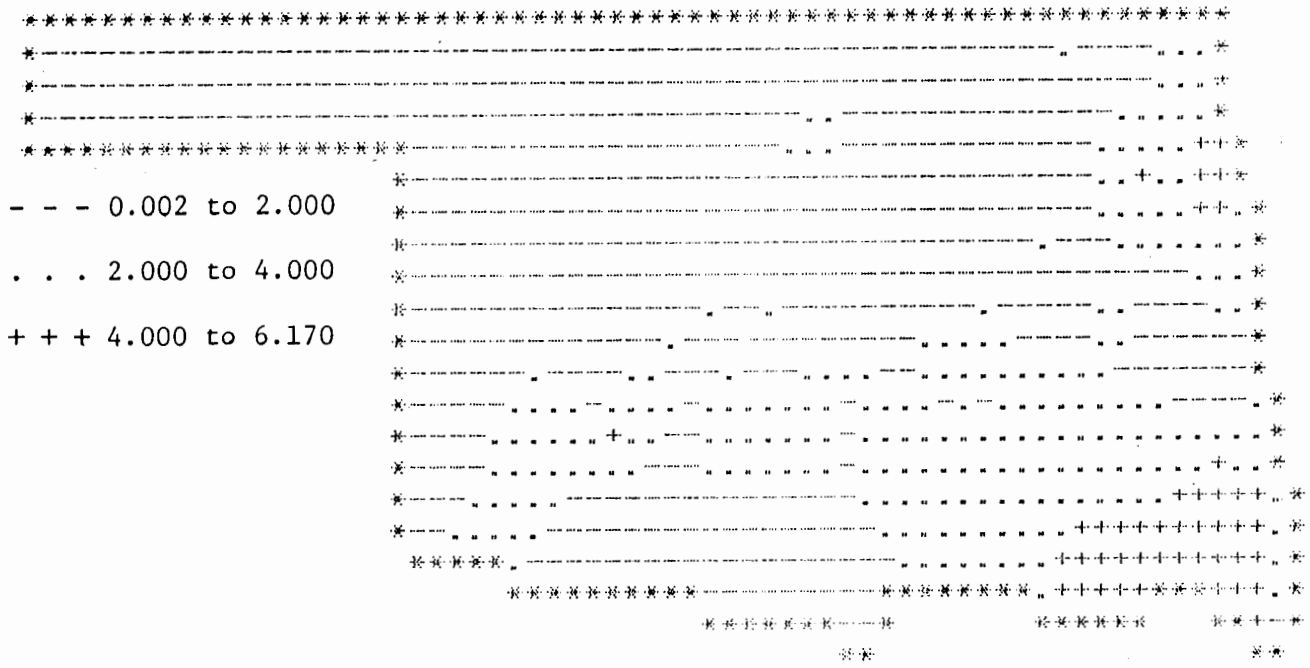
OCTOBER 1987 DEVIATION FROM NORMAL TEMPERATURES



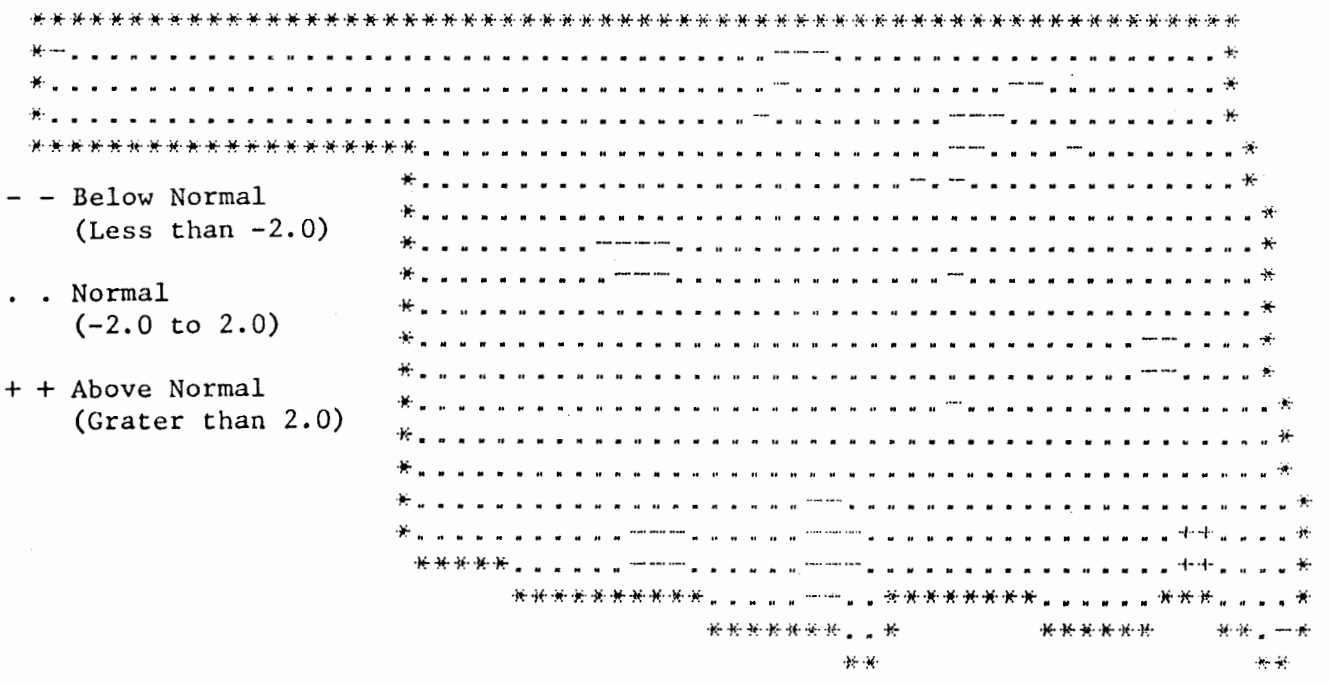
OCTOBER 1987 TOTAL HEATING DEGREE DAYS



OCTOBER 1987 DEVIATION FROM NORMAL HEATING DEGREE DAYS



OCTOBER 1987 TOTAL PRECIPITATION
(Inches)



OCTOBER 1987 DEVIATION FROM NORMAL PRECIPITATION

DECEMBER 1987
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
56.0	max	
33.7	min	
.022	pcpn	
20	HDD	
0	CDD	
Highest Max		76-1983
Lowest Max		20-1985
Lowest Min		12-1985
Highest Min		57-1933
Greatest pcpn		.57-1958

Normal	2	Actual
57.9	max	
34.0	min	
.088	pcpn	
19	HDD	
0	CDD	
Highest Max		77-1975
Lowest Max		24-1985
Lowest Min		10-1985
Highest Min		56-1951
Greatest pcpn		1.59-1953

Normal	3	Actual
57.1	max	
32.9	min	
.015	pcpn	
20	HDD	
0	CDD	
Highest Max		74-1975
Lowest Max		30-1978
Lowest Min		17-1978
Highest Min		52-1961
Greatest pcpn		1.39-1947

Normal	4	Actual
55.6	max	
33.6	min	
.027	pcpn	
20	HDD	
0	CDD	
Highest Max		75-1954
Lowest Max		25-1972
Lowest Min		16-1978
Highest Min		51-1956
Greatest pcpn		2.59-1930

Normal	5	Actual
55.0	max	
33.1	min	
.053	pcpn	
21	HDD	
0	CDD	
Highest Max		77-1975
Lowest Max		32-1937
Lowest Min		10-1950
Highest Min		59-1980
Greatest pcpn		1.00-1935

Normal	6	Actual
48.9	max	
29.8	min	
.014	pcpn	
25	HDD	
0	CDD	
Highest Max		77-1939
Lowest Max		19-1972
Lowest Min		5-1950
Highest Min		63-1989
Greatest pcpn		1.99-1926

Normal	7	Actual
49.9	max	
28.1	min	
.009	pcpn	
26	HDD	
0	CDD	
Highest Max		80-1966
Lowest Max		24-1950
Lowest Min		5-1950
Highest Min		62-1980
Greatest pcpn		1.23-1980

Normal	8	Actual
50.0	max	
28.7	min	
.062	pcpn	
25	HDD	
0	CDD	
Highest Max		71-1970
Lowest Max		26-1927
Lowest Min		7-1927
Highest Min		61-1946
Greatest pcpn		1.50-1980

Normal	9	Actual
47.9	max	
27.7	min	
.015	pcpn	
27	HDD	
0	CDD	
Highest Max		71-1939
Lowest Max		21-1932
Lowest Min		10-1978
Highest Min		56-1946
Greatest pcpn		.85-1943

Normal	10	Actual
49.4	max	
28.4	min	
.099	pcpn	
26	HDD	
0	CDD	
Highest Max		72-1939
Lowest Max		24-1972
Lowest Min		11-1977
Highest Min		58-1965
Greatest pcpn		1.06-1960

Normal	11	Actual
48.2	max	
27.4	min	
.036	pcpn	
27	HDD	
0	CDD	
Highest Max		75-1939
Lowest Max		21-1961
Lowest Min		8-1932
Highest Min		52-1946
Greatest pcpn		1.07-1946

Normal	12	Actual
48.2	max	
26.5	min	
.012	pcpn	
27	HDD	
0	CDD	
Highest Max		73-1973
Lowest Max		17-1932
Lowest Min		6-1932
Highest Min		47-1984
Greatest pcpn		1.19-1928

Normal	13	Actual
48.1	max	
26.4	min	
.003	pcpn	
27	HDD	
0	CDD	
Highest Max		77-1948
Lowest Max		17-1953
Lowest Min		6-1958
Highest Min		62-1929
Greatest pcpn		.41-1928

Normal	14	Actual
49.4	max	
27.2	min	
.049	pcpn	
26	HDD	
0	CDD	
Highest Max		74-1933
Lowest Max		18-1926
Lowest Min		6-1958
Highest Min		64-1943
Greatest pcpn		1.52-1984

Normal	15	Actual
46.8	max	
27.0	min	
.038	pcpn	
28	HDD	
0	CDD	
Highest Max		75-1948
Lowest Max		26-1926
Lowest Min		6-1926
Highest Min		59-1929
Greatest pcpn		.69-1959

Normal	16	Actual
51.2	max	
27.5	min	
.038	pcpn	
25	HDD	
0	CDD	
Highest Max		73-1939
Lowest Max		21-1932
Lowest Min		10-1932
Highest Min		56-1929
Greatest pcpn		.56-1931

Normal	17	Actual
51.1	max	
27.8	min	
.058	pcpn	
25	HDD	
0	CDD	
Highest Max		75-1939
Lowest Max		21-1965
Lowest Min		2-1979
Highest Min		45-1939
Greatest pcpn		1.68-1959

Normal	18	Actual
50.6	max	
28.7	min	
.037	pcpn	
25	HDD	
0	CDD	
Highest Max		69-1982
Lowest Max		19-1983
Lowest Min		5-1964
Highest Min		47-1939
Greatest pcpn		.83-1933

Normal	19	Actual
51.8	max	
29.8	min	
.022	pcpn	
24	HDD	
0	CDD	
Highest Max		75-1978
Lowest Max		9-1983
Lowest Min		3-1983
Highest Min		54-1978
Greatest pcpn		.57-1956

Normal	20	Actual
50.4	max	
28.8	min	
.026	pcpn	
25	HDD	
0	CDD	
Highest Max		73-1966
Lowest Max		21-1983
Lowest Min		4-1983
Highest Min		50-1967
Greatest pcpn		.43-1972

Normal	21	Actual
49.9	max	
27.2	min	
.015	pcpn	
26	HDD	
0	CDD	
Highest Max		68-1966
Lowest Max		11-1983
Lowest Min		-2-1983
Highest Min		51-1941
Greatest pcpn		.83-1942

Normal	22	Actual
53.5	max	
29.1	min	
.018	pcpn	
23	HDD	
0	CDD	
Highest Max		70-1933
Lowest Max		9-1983
Lowest Min		-3-1983
Highest Min		47-1979
Greatest pcpn		2.01-1932

Normal	23	Actual
51.4	max	
30.2	min	
.043	pcpn	
24	HDD	
0	CDD	
Highest Max		70-1955
Lowest Max		10-1983
Lowest Min		1-1983
Highest Min		57-1965
Greatest pcpn		1.80-1932

Normal	24	Actual
51.0	max	
28.6	min	
.091	pcpn	
25	HDD	
0	CDD	
Highest Max		86-1955
Lowest Max		3-1983
Lowest Min		0-1983
Highest Min		50-1955
Greatest pcpn		1.34-1965

Normal	25	Actual
51.5	max	
28.6	min	
.003	pcpn	
25	HDD	
0	CDD	
Highest Max		71-1950
Lowest Max		13-1983
Lowest Min		-1-1983
Highest Min		49-1936
Greatest pcpn		.26-1939

Normal	26	Actual
51.1	max	
28.3	min	
.011	pcpn	
25	HDD	
0	CDD	
Highest Max		68-1968
Lowest Max		25-1983
Lowest Min		11-1983
Highest Min		56-1936
Greatest pcpn		1.15-1940

Normal	27	Actual
49.3	max	
27.9	min	
.052	pcpn	
26	HDD	
0	CDD	
Highest Max		75-1946
Lowest Max		26-1983
Lowest Min		15-1938
Highest Min		56-1946
Greatest pcpn		1.06-1927

Normal	28	Actual
48.2	max	
29.8	min	
.081	pcpn	
26	HDD	
0	CDD	
Highest Max		72-1947
Lowest Max		23-1983
Lowest Min		8-1983
Highest Min		56-1984
Greatest pcpn		1.85-1979

Normal	29	Actual
48.9	max	
29.7	min	
.040	pcpn	
25	HDD	
0	CDD	
Highest Max		76-1951
Lowest Max		20-1983
Lowest Min		3-1983
Highest Min		63-1984
Greatest pcpn		.23-1972

Normal	30	Actual
45.3	max	
27.2	min	
.034	pcpn	
29	HDD	
0	CDD	
Highest Max		88-1927
Lowest Max		21-1978
Lowest Min		3-1983
Highest Min		55-1965
Greatest pcpn		.30-1974

Normal	31	Actual
45.4	max	
25.2	min	
.041	pcpn	
29	HDD	
0	CDD	
Highest Max		79-1951
Lowest Max		17-1978
Lowest Min		1-1927
Highest Min		55-1965
Greatest pcpn		1.03-1984