

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 JANUARY 1988

Extremely low temperatures, unusually warm temperatures, and a record-breaking snowstorm highlighted January weather. Cold weather, especially during the first two weeks of the month, resulted in mean monthly temperatures from 4.5 degrees below normal (west) to approximately 2 degrees below normal (east). Monthly precipitation averaged close to normal Statewide, with many stations receiving more than half of their precipitation from snow during the tremendous storm of the 6th and 7th.

A strong high pressure system and cold Arctic air mass dominated the State during the first few days of the month. Near-freezing temperatures delayed thawing of ice accumulated during the Christmas storm (see December Monthly Summary). By the 5th, the high pressure system drifted east of Oklahoma, allowing a new low pressure system to form to the west. This strengthening system encountered mid-level Gulf moisture over Oklahoma and produced a snowstorm of freakish magnitude. Many stations Statewide recorded unusually high snowfall amounts, including 12.1" at Oklahoma City, .8" above its previous 24-hour snowfall record. (See Table 1 and Map 1 for additional snowfall amounts). Two traffic deaths were blamed on the storm. Losses incurred in the State totalled millions of dollars. Excess weight from the snow resulted in numerous roof-collapses. One such collapse in Lawton resulted in \$1.5 million damage. Many cities spent thousands of dollars on snow removal operations and street repairs. The State hired private contractors to assure prompt snow removal on its roads. The cold created many problems for cattle producers. Farmers had to deliver feed to cattle unable to graze on the frozen ground. Ice created additional complications by clogging the cattle drinking holes, and causing some cattle to slip and break their legs. Reduced feed consumption and additional energy spent keeping warm could prove costly by increasing the time needed for cattle to reach slaughter weight. Crops suffered far less since the snow protected

the wheat from the ensuing cold, and most (approximately 90%) of the cotton crop had already been harvested.

More high pressure and very cold temperatures entered the State after the storm migrated northwest. On the morning of the 8th, at least one location within each climate division experienced below zero temperatures (see Table 2). Record low temperatures included Lawton (-4 degrees), Tulsa (-3 degrees), Oklahoma City (-4 degrees), Altus (-7 degrees) and Enid (-6 degrees). Below freezing temperatures prevailed through January 10th at all but a few southern stations.

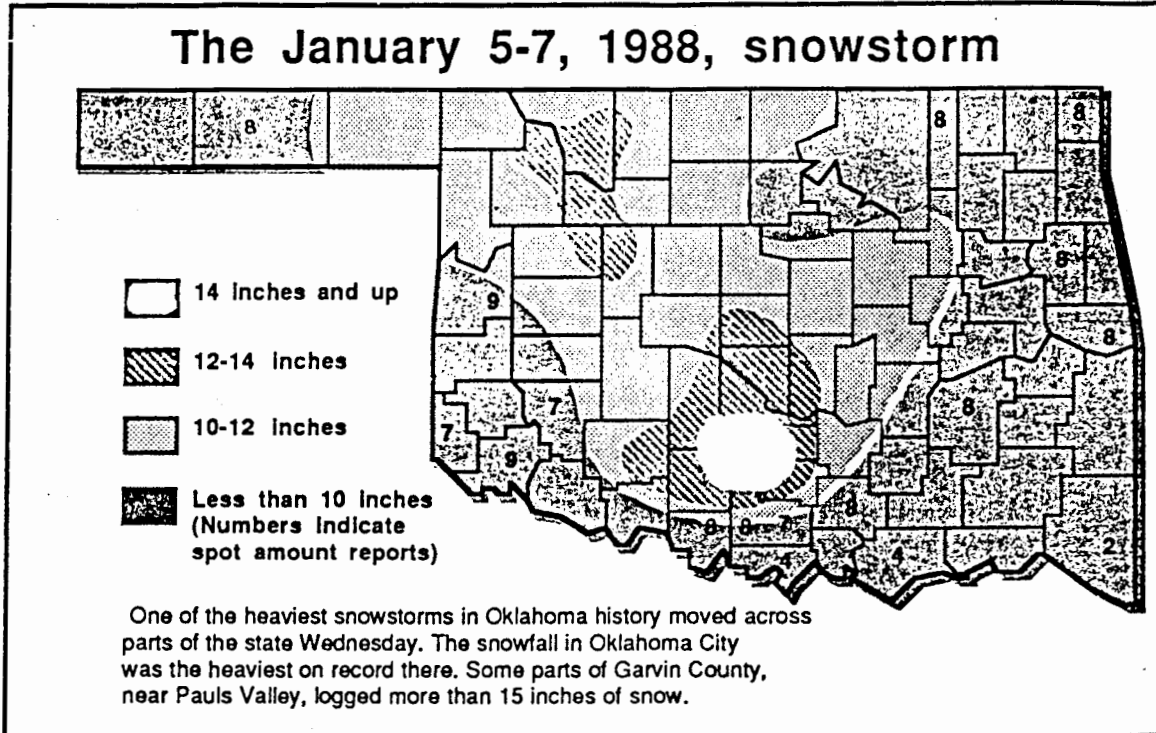
The State experienced southerly winds and a welcome warming during the middle week of the month as a low pressure system developed to the west. Temperatures rose into the 50's in all CD's by the 18th, with some 60-degree readings in the southeast. This new system moved into the State, accompanied by a surface cold front, bringing rain to most sections of Oklahoma on the 19th. Unseasonable weather in the southwestern section of the State included a thunderstorm in the Sterling area and pea-size hail near Frederick.

After the storm system moved out of the State, a northward migration of the jetstream and storm track resulted in several days of dry weather with near-normal temperatures Statewide. Near the end of the month, strong southerly winds brought warmer air into the State. Sixty degree temperatures spread Statewide on the 28th through the 31st. Eventually, all CD's experienced highs in the 70's. Nearly every reporting station recorded its highest temperature of January during these last four days.

CD	STATION	1988 JAN. 6-7 SNOWFALL (inches)	GREATEST JANUARY MONTHLY SNOWFALL RECORDED (1953-1984)	YEAR
1	Gage	10	15.5	1973
2	Enid	12	13.0	1962
3	Tulsa	11.5	13.0	1958
4	Clinton	7	11.0	1973
5	Okla. City	12.1	12.0	1962
6	McAlester	9	14.0	1977
7	Altus	9	11.1	1979
8	Duncan	13	15.9	1966

Table 1. Recorded snowfall amounts from the January 6-7, 1988 storm and greatest total January snowfall (1954-1983).

MAP 1



(Adapted from the Ardmore Ardmoreite January 7, 1988.)

CD	STATION	1-8-88 LOW TEMPERATURE	PREVIOUS LOWEST JANUARY TEMPERATURE
2	Billings	-15	-7
3	Ponca City	-11	-9
4	Geary	-10	-6
4	Watonga	-10	-9
5	Hennessey	-13	-10
6	Okmulgee	-11	-10
7	Anadarko	-13	-3
8	Lindsay	-10	-6

Table 2. January 8, 1988 record-breaking monthly low temperatures for selected Oklahoma stations (period of record 1954-1987).

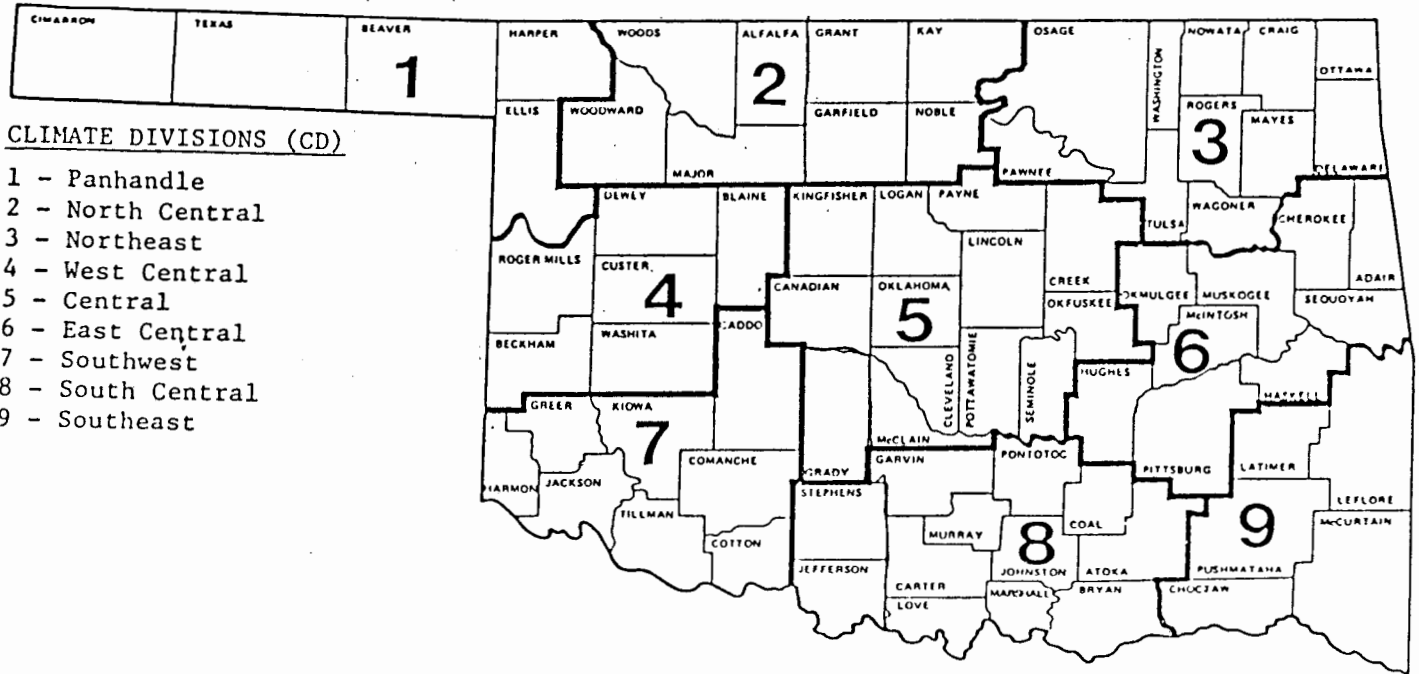
TABLE OF 1987/1988 COMPARISONS

Station	January Temperatures (F)		January Precipitation (in.)	
	1987	1988	1987	1988
Goodwell	33.5	28.0	.940	.336
Enid	34.0	31.6	2.050	1.551
Mutual	31.6	28.6	1.510	.941
Tulsa	35.8	35.7	1.813	1.080
Elk City	34.7	32.6	1.451	1.331
Oklahoma City	25.3	34.8	2.513	1.241
McAlester	40.2	37.1	3.432	1.323
Altus Irr. Sta.	38.7	35.7	1.531	1.470
Durant	41.3	38.0	3.252	1.280
Ada	38.7	35.9	3.021	1.660
Antlers	44.6	42.4	2.200	*

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Alva	2	-17	8
Maximum temperature (F)	Healdton	8	75	31
	Madill	8	75	31
	Marietta	8	75	31
	Waurika	8	75	31
	Pontotoc	8	2.00"	7
Maximum 24-hour precipitation				

O K L A H O M A



CLIMATE DIVISIONS (CD)

- 1 - Panhandle
- 2 - North Central
- 3 - Northeast
- 4 - West Central
- 5 - Central
- 6 - East Central
- 7 - Southwest
- 8 - South Central
- 9 - Southeast

EXPLANATION OF TABLES

Two kinds of tables appear in this summary. The first is a set of tables containing all reporting stations grouped by climate division. The figure above shows the locations of the climate divisions. Each table contains the following information for each station:

Station Name:

Station Identification Number: These are usually assigned by the National Climatic Data Center.

Climate Division: See the figure above.

Number of Temperature Observations: These are the actual number of temperature reports recorded at the station during the current month. Missing observations may result in artificially high or low mean monthly temperatures.

Deviation from Normal: The deviation of the observed mean monthly temperature from the monthly station normal. A positive value indicates the month was warmer than normal. A negative value indicates the month was cooler than normal. Normal monthly temperatures may be calculated by subtracting the deviation from the observed temperature.

Maximum Daily Maximum: The maximum daily maximum temperature observed during the current month and year and the day which it occurred.

Minimum Daily Minimum: The minimum daily minimum temperature observed during the current month and year and the day which it occurred.

Heating Degree Days: HDD are calculated each day of the month for which there is a temperature report and summed. They are a qualitative measure of how much heat was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. For February 1984 HDD would be calculated as:

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

Deviation from Normal Heating Degree Days: A positive value indicates higher than normal heating requirements for the month as a whole. A negative value indicates lower than normal heating requirements for the month as a whole. Normal HDD may be calculated by subtracting the deviation from observed HDD.

Cooling Degree Days: CDD are calculated each day of the month for which there is a temperature report and summed. They are a proxy measure of how much cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. For June, CDD would be calculated as:

$$\sum_{i=1}^{30} ((TMAX_i + TMIN_i)/2) - 65$$

Deviation from normal cooling Degree Days: A positive value indicates higher than normal cooling requirements for the month as a whole. A negative value indicates lower than normal cooling requirements for the month as a whole. Normal cooling degree days may be found by subtracting the deviation from the observed cooling degree days.

Total Precipitation: Often incorrectly referred to as mean precipitation, this value is the sum of all precipitation reported during the month at a station. If snow occurred, it is to be melted and its water equivalent recorded.

Number of Precipitation Observations: The number of days a rain or no-rain observation was reported. Missing observations frequently result in artificially low total precipitation values.

Deviation from Normal Precipitation: A positive value indicates more rain than normal was received. A negative value indicates less than was expected rainfall was received. Normal rainfall may be calculated by subtracting the deviation from monthly total.

Maximum 24-Hour Report and Day: The maximum amount of precipitation recorded during the station's 24-hour observation period for the current month and year and the day on which it was recorded.

The second set of tables contain similar information but are the average or extreme over all the stations reporting in each climate division.

EXPLANATION OF MAPS

To give a Statewide perspective, a series of maps is produced each month from the information contained in the station tables. Each map is calculated using between 50 and 200 observations. Only stations with complete monthly records are used. Each observation is put into one of three categories and assigned a plus (+), minus (-), or a dot (.). The minus is the lowest numeric category, the dot is the middle and the plus the highest numeric category. If a map location has no report, a value is estimated. Each map is accompanied by its own legend. The categories will vary from month to month throughout the year. The categories for the deviations from normal maps will always remain constant. This is to facilitate comparisons between months and across years.

JANUARY 1988 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	DIV	DEV					HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	FROM NORM	FROM NORM	FROM NORM						
ARNETT	332	1	28.6	30	-4.6	68.	29	-5.	9	1090.5	107.5	0.0	0.0	1.153	31	.72	.70	6		
BEAVER	593	1	26.8	30	-6.0	68.	29	-13.	9	1145.0	147.0	0.0	0.0	.890	31	.51	.48	6		
BUFFALO	1243	1	30.1	31	-4.6	72.	29	-13.	8	1080.5	141.5	0.0	0.0	1.150	31	.62	1.05	6		
FARGO	3070	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.041	31	.58	.61	6		
GAGE	3407	1	29.0	31	-3.5	68.	29	-15.	8	1092.0	109.0	0.0	0.0	.795	31	.34	.58	6		
GATE	3489	1	29.5	30	999.0	70.	28	-8.	7	1065.0	9999.0	0.0	9999.0	1.640	28	99.99	1.49	8		
GOODWELL RES.STA.	3628	1	28.0	30	-5.5	71.	29	-10.	7	1109.0	132.0	0.0	0.0	.336	31	.09	.24	6		
GUYMON	3835	1	30.3	29	999.0	71.	29	-10.	7	1005.0	9999.0	0.0	9999.0	.853	29	99.99	.51	6		
KENTON	4766	1	29.2	30	-5.2	70.	27	-14.	7	1075.0	126.0	0.0	0.0	.270	31	-.03	.14	7		
LAVERNE	5045	1	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.120	31	.49	.56	7		

JANUARY 1988 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	DIV	DEV					HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	FROM NORM	FROM NORM	FROM NORM						
ALVA	194	2	29.4	31	-4.7	69.	30	-17.	8	1102.5	144.5	0.0	0.0	.990	31	.43	.58	6		
VANCE AFB	302	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.650	31	99.99	.30	6		
BILLINGS	755	2	29.4	30	999.0	69.	30	-15.	8	1057.0	9999.0	0.0	9999.0	.942	31	.03	.48	7		
BLACKWELL	818	2	30.1	31	999.0	68.	30	-10.	8	1081.5	9999.0	0.0	9999.0	.734	31	99.99	.38	7		
BRAMAN	1075	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.773	31	99.99	.54	6		
CEDARDALE	1620	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.430	31	99.99	.63	6		
CHEROKEE	1724	2	30.6	31	-3.9	66.	30	-15.	8	1066.5	120.5	0.0	0.0	0.000	0	-.69	99.99	0		
ENID	2912	2	31.6	31	-3.8	68.	30	-6.	8	1036.5	118.5	0.0	0.0	1.551	31	.64	.95	6		
FT. SUPPLY DAM	3304	2	26.4	30	-8.2	66.	29	-14.	9	1158.5	216.5	0.0	0.0	.772	31	.27	.41	6		
FREEDOM	3358	2	29.3	31	999.0	68.	30	-15.	8	1107.5	9999.0	0.0	9999.0	1.010	31	99.99	.72	6		
GREAT SALT PLAINS	3740	2	29.6	30	999.0	68.	30	-10.	8	1062.0	9999.0	0.0	9999.0	1.332	19	.71	.51	6		
HARDY	3909	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.491	31	99.99	.22	18		
HELENA	4019	2	28.3	30	999.0	65.	30	-14.	8	1100.0	9999.0	0.0	9999.0	1.482	31	.77	.62	6		
JEFFERSON	4573	2	30.6	31	-3.8	68.	30	-16.	8	1067.0	118.0	0.0	0.0	1.332	31	.63	.69	5		
LAMONT	5013	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.170	31	99.99	.46	6		
MEDFORD	5768	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.340	31	99.99	.71	5		
MORRISON	6065	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.440	31	99.99	.25	7		
MUGUAL	6139	2	28.6	30	-5.4	66.	29	-10.	8	1090.5	132.5	0.0	0.0	.941	31	.44	.45	6		
NEWKIRK	6278	2	30.9	31	-2.5	67.	30	-8.	8	1058.0	78.0	0.0	0.0	1.061	31	.20	.63	6		
PERRY	7012	2	32.0	31	-3.5	70.	30	-8.	8	998.0	108.0	0.0	0.0	1.650	31	.78	.60	7		
PONCA CITY	7201	2	31.2	29	-1.2	68.	30	-11.	8	979.0	-32.0	0.0	0.0	.542	29	-.37	.26	6		
RED ROCK	7505	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.831	31	-.04	.36	7		
RENFROW	7556	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.220	31	.51	.70	6		
WAYNOKA	9404	2	30.2	31	-5.0	67.	30	-14.	8	1078.0	154.0	0.0	0.0	1.300	31	.70	.55	6		
WOODWARD	9760	2	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.251	31	.73	.71	6		

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

JANUARY 1988 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	DIV	DEV						HEAT		DEV		COOL		DEV		TOT PPT	OBS	DEV FROM	MAX	24-HR DAY
			MEAN	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM	DEG	FROM	NUM	FROM					
BARNSDALL	535	3	32.6	31	999.0	66.	30	-13.	8	1004.5	9999.0	0.0	9999.0	.753	31	-.45	.50	6			
BARTLESVILLE	548	3	32.3	31	-2.3	67.	28	-12.	8	1012.5	70.5	0.0	0.0	.841	31	-.32	.36	19			
BIXBY	782	3	31.8	30	-3.6	66.	30	-7.	8	996.0	78.0	0.0	0.0	1.301	31	-.15	.90	7			
BURBANK	1256	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.071	31	99.99	.67	6			
CHELSEA	1717	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.431	31	99.99	.65	7			
CLAREMORE	1828	3	31.2	28	-3.3	67.	29	-1.	8	946.5	.5	0.0	0.0	2.432	30	1.05	.99	7			
CLEVELAND	1902	3	33.3	26	999.0	69.	30	-9.	8	823.0	9999.0	0.0	9999.0	1.420	28	99.99	1.00	7			
FORAKER	3250	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.401	31	-.54	.38	19			
HOLLOW	4258	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.842	31	-.51	.36	19			
HOMINY	4289	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.741	31	-.33	.35	7			
HULAH DAM	4393	3	27.6	15	-4.8	67.	28	-10.	11	561.0	-450.0	0.0	0.0	.230	27	-.91	.23	19			
JAY TOWER	4567	3	35.7	31	999.0	66.	31	3.	9	908.5	9999.0	0.0	9999.0	1.390	31	99.99	.80	7			
KANSAS	4672	3	33.6	31	999.0	66.	31	-3.	8	973.0	9999.0	0.0	9999.0	1.374	31	99.99	.60	7			
KEYSTONE DAM	4812	3	29.1	15	999.0	66.	28	1.	8	539.0	9999.0	0.0	9999.0	1.000	27	99.99	.56	7			
LENAPAH	5118	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.170	31	99.99	.50	7			
MANNFORD	5522	3	34.8	31	999.0	69.	31	-7.	8	935.5	9999.0	0.0	9999.0	1.121	31	99.99	.46	7			
MARAMEC	5540	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.331	31	.28	.50	6			
MIAMI	5855	3	31.4	30	-3.3	67.	30	-7.	8	1007.5	68.5	0.0	0.0	.810	31	-.72	.61	7			
NOWATA	6485	3	32.4	31	-2.3	65.	31	-6.	8	1010.0	71.0	0.0	0.0	2.200	31	.92	1.25	5			
ONETA	6713	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.912	31	99.99	.32	17			
ORIENTA	6751	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.000	31	99.99	.80	6			
PAWHUSKA	6935	3	32.3	31	-2.2	67.	30	-12.	8	1015.0	69.0	0.0	0.0	1.212	31	.10	.68	6			
PAWHUSKA 2	6937	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.300	31	99.99	.48	6			
PRYOR	7309	3	30.1	30	-4.8	64.	30	-11.	8	1047.0	114.0	0.0	0.0	.785	31	-.74	.26	7			
QUAPAW	7358	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.060	31	-.49	.58	27			
RALSTON	7390	3	33.9	31	999.0	69.	30	-6.	8	963.5	9999.0	0.0	9999.0	1.073	31	.07	.50	6			
RAMONA	7394	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.960	31	99.99	.51	7			
SPAVINAW	8380	3	35.0	31	999.0	66.	31	0.	8	930.0	9999.0	0.0	9999.0	1.003	31	-.53	.52	7			
TULSA	8992	3	35.7	31	.5	69.	31	-5.	8	907.0	-17.0	0.0	0.0	1.000	31	-.27	.50	6			
UPPER SPAVINAW	9101	3	37.4	29	999.0	72.	30	0.	8	802.0	9999.0	1.5	9999.0	.865	31	99.99	.34	7			
VINITA	9203	3	32.5	31	-2.0	67.	31	-13.	8	1008.0	62.0	0.0	0.0	.320	31	-1.21	.14	17			
WAGONER	9247	3	35.3	31	-1.6	69.	31	-5.	8	919.5	48.5	0.0	0.0	1.651	31	-.07	.64	7			
WANN	9298	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.000	31	99.99	.52	19			
WYNONA	9792	3	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.941	31	99.99	.60	6			

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

JANUARY 1988 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	DIV	DEV				HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV		24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM	MAX					
CANTON DAM	1445	4	27.0	15	-8.6	60.	28	-11.	8	570.5	-340.5	0.0	0.0	1.000	19	.53	.53	6	
CHEYENNE	1738	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.960	31	99.99	.50	7	
CLINTON	1909	4	33.8	31	-2.6	69.	30	-7.	8	966.5	79.5	0.0	0.0	1.531	31	.82	.75	6	
COLONY	2039	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.000	31	99.99	.49	6	
CORDELL	2125	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.431	31	.73	.67	7	
ELK CITY	2049	4	32.6	30	999.0	67.	30	-3.	8	972.0	9999.0	0.0	9999.0	1.331	30	.78	.61	6	
ERICK	2944	4	33.0	31	-4.0	70.	30	-9.	8	991.5	123.5	0.0	0.0	.800	31	.32	.35	6	
GEARY	3497	4	30.1	29	-6.2	68.	31	-10.	8	1013.5	123.5	0.0	0.0	1.000	29	.34	.60	7	
LEEDEY	5090	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.301	31	-.16	.30	13	
MACKIE	5463	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.830	31	99.99	.43	6	
MORAVIA	6035	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.950	31	.45	.48	6	
OKEENE	6629	4	32.2	31	-4.2	68.	30	-10.	8	1017.0	130.0	0.0	0.0	1.400	31	.81	.55	19	
RETROP	7565	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.200	31	99.99	.70	6	
REYDON	7579	4	32.2	31	999.0	69.	29	-9.	8	1016.5	9999.0	0.0	9999.0	.530	31	.14	.48	6	
SAYRE	7952	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.920	31	.50	.44	6	
SWEETWATER	8652	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.470	31	99.99	.97	5	
TALOGA	8708	4	30.8	31	-4.3	67.	30	-13.	8	1060.5	133.5	0.0	0.0	.990	31	.44	.57	6	
THOMAS	8815	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.200	31	99.99	1.20	7	
VICI	9172	4	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.350	31	99.99	.72	6	
WATONGA	9364	4	31.9	31	999.0	70.	30	-10.	8	1026.5	9999.0	0.0	9999.0	1.610	31	.84	.71	6	
WEATHERFORD	9422	4	30.8	30	-5.8	68.	30	-4.	9	1027.0	147.0	0.0	0.0	1.230	31	.59	.58	6	

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

JANUARY 1988 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	DIV	DEV				MIN	DAY	DAY	HEAT DEG	DEV FROM	COOL DEG	DEV FROM	TOT PPT	NUM OBS	FROM NORM	DEV MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP												
AMBER	200	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.130	31	99.99	.57	6
ARCADIA	288	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.040	31	99.99	.56	6
TINKER AFB	325	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.152	29	99.99	.13	19
BLANCHARD	830	5	34.9	31	999.0	71.	30	-6.	8	932.0	9999.0	0.0	9999.0	1.010	31	99.99	.57	7
BRISTOW	1144	5	35.0	31	-1.7	69.	31	-8.	8	929.0	52.0	0.0	0.0	1.232	31	.08	.45	7
CHANDLER	1684	5	34.9	31	-2.5	68.	30	-6.	8	934.0	78.0	0.0	0.0	.160	31	-.99	.16	7
CHICKASHA	1750	5	32.6	31	-5.2	72.	30	-11.	8	1004.5	161.5	0.0	0.0	1.590	31	.69	.75	6
COX CITY	2196	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.350	31	99.99	1.50	6
CRESCENT	2242	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.830	31	99.99	.50	6
CUSHING	2318	5	31.3	30	-3.5	67.	30	-3.	9	1010.0	74.0	0.0	0.0	.901	31	-.14	.55	6
EL RENO	2818	5	32.5	30	-3.7	70.	30	-5.	8	976.5	83.5	0.0	0.0	2.350	31	1.52	1.47	7
GUTHRIE	3821	5	35.0	31	-1.2	71.	30	-8.	8	930.0	37.0	0.0	0.0	1.350	31	.44	.60	7
HENNESSEY	4055	5	31.3	31	-4.2	68.	30	-13.	8	1045.5	130.5	0.0	0.0	.641	31	-.07	.37	6
INGALLS	4489	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.191	31	99.99	.09	19
KINGFISHER	4861	5	32.2	31	-3.8	70.	30	-12.	8	1018.0	119.0	0.0	0.0	.820	31	-.01	.37	7
KINGFISHER CREEK	4862	5	32.2	31	999.0	70.	30	-12.	8	1018.0	9999.0	0.0	9999.0	.820	31	99.99	.37	7
KINGFISHER UJC	4864	5	32.1	30	999.0	70.	29	-12.	8	988.0	9999.0	0.0	9999.0	.820	31	99.99	.37	7
KONAWA	4915	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.130	31	.00	.00	17
MARSHALL	5589	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.170	31	.41	.61	7
MEEKER	5779	5	35.1	31	-1.4	69.	30	-6.	8	926.5	42.5	0.0	0.0	.250	31	-.02	.25	18
MULHALL	6110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.130	31	99.99	.44	5
NORMAN	6386	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.251	31	.12	.56	6
OILTON	6616	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.780	31	99.99	.69	6
OKEMAH	6638	5	34.6	31	-3.3	69.	31	-2.	8	941.5	101.5	0.0	0.0	2.300	31	.92	.00	17
OKLAHOMA CITY	6661	5	34.8	31	-1.1	69.	30	-4.	8	936.0	34.0	0.0	0.0	1.241	31	.28	.85	6
PERKINS	7003	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.840	31	-.28	.42	6
PIEDMONT	7068	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.030	31	99.99	.55	6
PRAGUE	7264	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.530	31	.29	1.28	7
PURCELL	7327	5	34.4	31	-2.5	71.	31	-11.	8	949.5	78.5	0.0	0.0	1.222	31	.15	.66	7
SEMINOLE	8042	5	36.7	31	-2.4	72.	31	-6.	8	878.5	75.5	1.0	1.0	2.460	31	1.16	1.02	17
SHAWNEE	8110	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.851	31	.63	1.11	7
STELLA	8479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.050	31	99.99	.53	7
STILLWATER	8501	5	30.9	30	-4.4	68.	30	-11.	8	1024.5	103.5	0.0	0.0	1.401	31	.50	.55	19
STROUD	8563	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.752	31	99.99	.38	7
TECUMSEH	8751	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.930	31	99.99	.49	7
TROUSDALE	8960	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.160	31	99.99	1.45	7
UNION CITY	9086	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.810	31	.72	.77	7
WELTY	9479	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.131	31	99.99	.90	7
WENOKA	9575	5	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.450	31	.03	.58	7

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

JANUARY 1988 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	DIV	DEV				HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	DEV			24-HR DAY			
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP						MIN DAY	NUM OBS	FROM NORM		MAX		
ASHLAND	364	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.990	31	99.99	.80	6
BEGGS	631	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.361	31	99.99	.69	19
BOYNTON	1027	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.300	31	99.99	.50	7
CALVIN	1391	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.772	31	.37	.55	19
CHECOTAH	1711	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.303	31	-.19	.41	7
DEWAR	2405	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.210	31	-.20	.54	7
DUSTIN	2690	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.350	31	99.99	.53	19
EUFALA	2993	6	37.1	31	999.0	71.	31	6.	0	865.5	9999.0	1.0	9999.0	1.440	31	-.09	.42	7
HANNA	3084	6	36.0	31	999.0	71.	31	-8.	0	900.5	9999.0	1.0	9999.0	1.720	31	.26	.66	7
HARTSHORNE	3946	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.273	31	99.99	.42	17
HASKELL	3956	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.660	31	.03	.45	7
HOLDENVILLE	4235	6	35.7	31	-3.1	72.	31	-3.	0	908.0	96.0	1.0	1.0	1.710	31	.37	.65	7
LAKE EUFALA	4975	6	34.4	30	999.0	67.	30	7.	0	919.0	9999.0	0.0	9999.0	1.040	31	99.99	.34	19
LYONS	5437	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.412	31	-1.31	.19	18
MCALESTER	5664	6	37.1	31	-1.0	72.	31	-6.	0	866.5	32.5	1.5	1.5	1.323	31	-.30	.40	18
MCCURTAIN	5693	6	38.2	31	999.0	71.	31	0.	0	832.0	9999.0	1.5	9999.0	2.062	31	.18	1.03	7
MUSKOGEE	6130	6	35.9	31	-1.0	70.	31	0.	10	902.0	56.0	0.0	0.0	1.130	31	-.50	.48	17
OKMULGEE WATER	6670	6	32.7	31	-4.4	70.	31	-11.	0	1001.0	145.0	0.0	0.0	2.541	31	.91	1.50	6
OKTAHA	6678	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.560	31	99.99	.58	7
QUINTON	7372	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.221	31	-.40	.42	6
SALLISAW	7862	6	35.4	31	-3.0	70.	31	-9.	0	918.0	93.0	.5	.5	1.674	31	-.11	.65	6
SCIPID	7979	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.990	31	99.99	.55	17
SCRAPER	7993	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.140	31	99.99	.46	7
SHORT	8170	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.602	31	99.99	.83	7
STILWELL	8506	6	34.6	31	999.0	66.	31	-6.	0	941.0	9999.0	0.0	9999.0	1.724	31	-.24	.56	7
TAHLEQUAH	8677	6	33.7	31	-3.3	68.	31	-8.	0	969.5	101.5	0.0	0.0	1.911	31	.13	.78	7
WEBBERS FALLS	9445	6	33.4	30	-2.5	66.	29	-4.	0	949.0	47.0	0.0	0.0	1.421	31	-.21	.58	19
WESTVILLE	9523	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.200	31	99.99	.80	7
WETUMKA	9571	6	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.233	31	-.19	.57	17

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

JANUARY 1988 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	DIV	DEV				HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	FROM NORM	MAX	24-HR DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM							
ALTUS IRR RES STA	179	7	35.7	31	-3.6	71.	30	-7.	8	907.5	110.5	0.0	0.0	1.470	31	.69	1.00	7	
ALTUS DAM	184	7	34.0	30	999.0	71.	30	-5.	9	931.0	9999.0	0.0	9999.0	1.010	31	.39	.65	7	
ANADARKO	224	7	33.4	27	-4.0	72.	30	-13.	8	852.0	-4.0	0.0	0.0	.760	28	-.18	.39	6	
APACHE	260	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.690	31	99.99	.88	7	
ALTUS AFB	447	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.332	30	99.99	.31	19	
CARNEGIE	1504	7	33.8	31	-3.5	71.	30	-13.	8	967.5	108.5	0.0	0.0	1.460	31	.60	.94	7	
CHATTANOOGA	1706	7	35.3	31	-3.7	71.	30	-9.	8	922.0	116.0	0.0	0.0	1.500	31	.59	1.47	7	
DUNCAN	2668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.181	31	99.99	1.65	7	
FREDERICK	3353	7	33.8	30	-6.8	71.	30	1.	8	936.0	100.0	0.0	0.0	1.200	31	.35	.60	7	
GRANDFIELD	3709	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.100	31	.02	.61	7	
HOBART	4204	7	33.3	31	-2.9	70.	30	-9.	8	981.5	88.5	0.0	0.0	.613	31	.00	.54	6	
HOLLIS	4249	7	34.9	30	-4.0	71.	30	-2.	8	903.5	94.5	0.0	0.0	.560	30	.03	.40	7	
LAWTON	5063	7	34.5	30	-4.3	71.	29	-2.	8	915.5	103.5	0.0	0.0	1.180	31	.11	.56	6	
FT. SILL	5068	7	35.1	31	999.0	71.	30	-6.	8	926.0	9999.0	0.0	9999.0	1.573	31	.50	1.35	6	
LOCO	5247	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.430	31	99.99	.86	19	
LOOKEBA	5329	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.370	31	99.99	.66	6	
MANGUM	5509	7	34.3	31	-4.3	71.	31	-8.	8	950.5	132.5	0.0	0.0	.480	31	-.15	.29	6	
RANDLETT	7403	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.890	31	99.99	.65	6	
ROOSEVELT	7727	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.850	31	1.17	1.68	7	
SEDAN	8016	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.050	31	99.99	.60	6	
SNYDER	8299	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.990	31	.15	.89	6	
VINSON	9212	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.550	31	.08	.35	6	
WALTERS	9278	7	39.6	24	-.3	73.	30	-3.	8	609.5	-168.5	0.0	0.0	3.250	24	2.05	.20	19	
WICHITA MTNS WILDLI	9629	7	32.3	25	-5.5	70.	30	-6.	8	817.5	-25.5	0.0	0.0	1.150	28	.25	1.05	7	
WILLOW	9668	7	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.040	31	99.99	.55	7	

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

JANUARY 1988 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

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 DAY	DAY							FROM NORM	MAX		
ADA	17	8	36.4	31	-3.2	74.	31	-3.	8	888.0	101.0	1.0	1.0	1.660	31	.30	.55	17
ALLEN	147	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.630	31	99.99	1.00	17
ARDMORE	292	8	38.5	31	-4.0	74.	31	2.	8	824.0	126.0	1.0	1.0	1.270	31	-.08	.95	6
ATOKA DAM	394	8	36.0	31	999.0	67.	28	9.	8	899.0	9999.0	0.0	9999.0	.940	31	99.99	.50	12
BOKCHITO	917	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.030	31	99.99	.49	11
CANEY	1437	8	37.9	30	999.0	70.	30	9.	7	813.5	9999.0	0.0	9999.0	1.340	31	99.99	.60	6
CENTRAHOMA	1640	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.550	31	99.99	.90	6
CHICKASAW	1745	8	33.7	30	999.0	68.	30	-5.	8	938.5	9999.0	0.0	9999.0	1.380	31	99.99	.57	7
COMANCHE	2054	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.490	31	99.99	1.45	7
DAISY	2354	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.824	31	-.13	.75	7
DUNCAN	2660	8	34.1	30	-5.8	72.	30	-4.	9	927.0	149.0	0.0	0.0	2.440	31	1.46	1.57	7
DURANT	2678	8	38.0	26	999.0	68.	30	3.	8	702.5	9999.0	0.0	9999.0	1.280	28	-.46	.96	7
ELMORE CITY	2872	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.141	31	99.99	1.05	9
FARRIS	3083	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.290	31	99.99	.72	7
GRADY	3688	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	.450	31	99.99	.45	6
HEALDTON	4001	8	37.3	31	999.0	75.	31	-3.	8	860.5	9999.0	.5	9999.0	1.730	31	.39	.86	6
KINGSTON	4865	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.071	31	-.64	.80	10
LEHIGH	5108	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.305	31	99.99	.95	8
LINDSAY	5216	8	34.7	31	999.0	70.	30	-10.	8	940.0	9999.0	0.0	9999.0	1.681	31	.55	1.33	6
MADILL	5468	8	39.4	31	-1.6	75.	31	4.	8	795.0	51.0	2.0	2.0	1.070	31	-.62	.58	6
MARIETTA	5563	8	39.6	31	-1.6	75.	31	7.	8	790.0	52.0	2.0	2.0	1.190	31	-.29	.80	7
MARLOW	5581	8	36.4	31	999.0	69.	31	-8.	8	887.5	9999.0	0.0	9999.0	1.571	31	.67	.81	7
MCGEE CREEK	5713	8	35.9	30	999.0	67.	30	8.	10	873.5	9999.0	0.0	9999.0	1.440	31	99.99	.89	7
PAULS VALLEY	6926	8	35.5	31	-3.7	73.	31	-7.	8	914.0	114.0	0.0	0.0	1.780	31	.47	.75	7
PONTOTOC	7214	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	2.520	31	1.19	2.00	7
TISHOMINGO	8884	8	37.4	30	999.0	72.	30	1.	8	829.0	9999.0	0.0	9999.0	1.400	31	-.13	.81	6
TUSSY	9032	8	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.692	31	99.99	.87	7
WAURIKA	9395	8	38.9	31	-2.1	75.	31	0.	8	812.0	68.0	3.5	3.5	1.830	31	.70	1.25	17

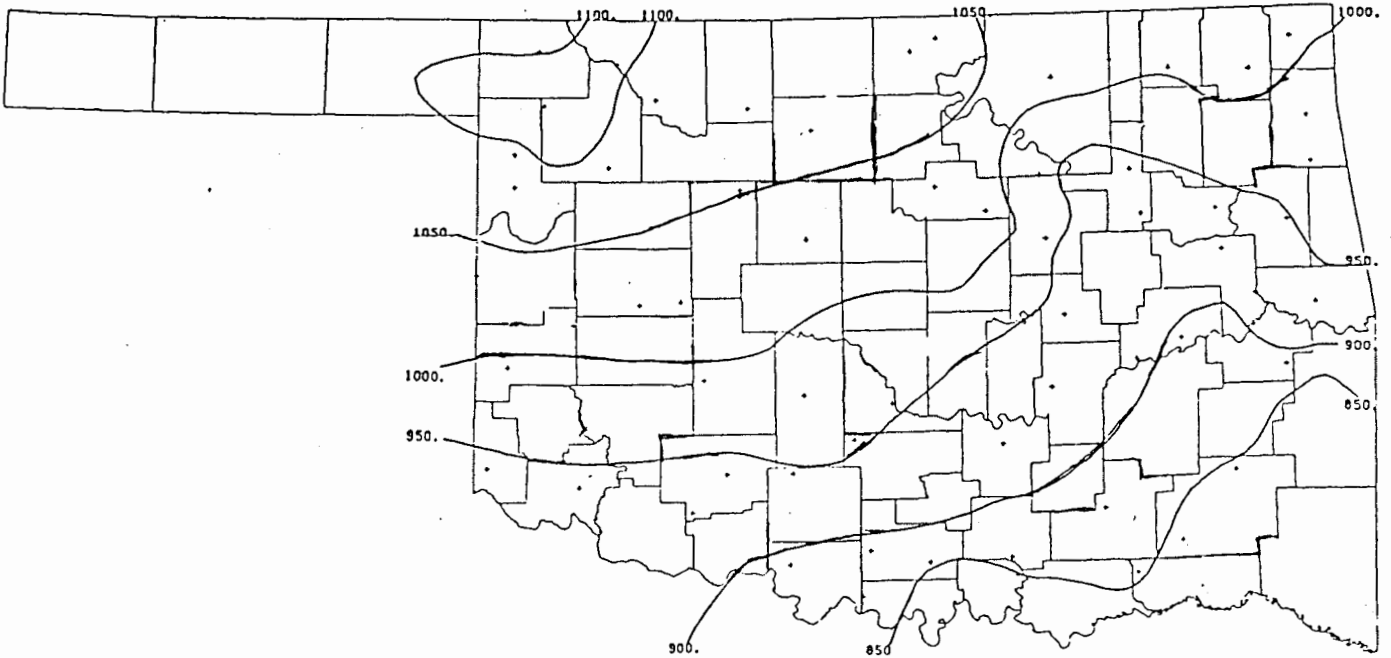
JANUARY 1988 SUMMARY FOR SOUTHEAST DIVISION (CD9)

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 DAY	DAY							FROM NORM	MAX		
ANTLERS	256	9	42.4	31	2.2	71.	31	24.	8	702.0	-67.0	.5	.5	0.000	0	-2.20	99.99	0
BATTIEST	567	9	36.7	30	999.0	67.	31	1.	8	849.0	9999.0	0.0	9999.0	1.100	28	99.99	.85	7
BENGAL	670	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.800	31	99.99	1.02	7
BOSWELL	980	9	39.1	31	999.0	72.	31	2.	8	808.5	9999.0	4.5	9999.0	1.340	31	-.76	.82	7
BROKEN BOW	1168	9	36.1	30	999.0	67.	28	10.	8	866.5	9999.0	0.0	9999.0	1.300	31	99.99	.95	7
FANSHAWE	3065	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.381	31	-.50	.74	7
HEAVENER	4008	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.495	31	-.75	1.26	7
HUGO	4384	9	39.6	31	-2.7	71.	31	6.	8	788.5	84.5	0.0	0.0	1.142	31	-1.08	.75	7
IDABEL	4451	9	37.2	31	-4.8	66.	28	13.	9	863.0	150.0	0.0	0.0	1.490	31	-1.55	1.03	7
POTEAU	7254	9	34.8	30	999.0	71.	30	-7.	7	907.5	9999.0	.5	9999.0	1.211	31	99.99	.57	7
SPIRO	8416	9	999.0	0	999.0	999.	0	999.	0	999.0	9999.0	999.0	9999.0	1.931	31	.11	1.04	7
TUSKAHOMA	9023	9	37.9	31	999.0	70.	31	-5.	8	839.5	9999.0	0.0	9999.0	.922	31	99.99	.50	7

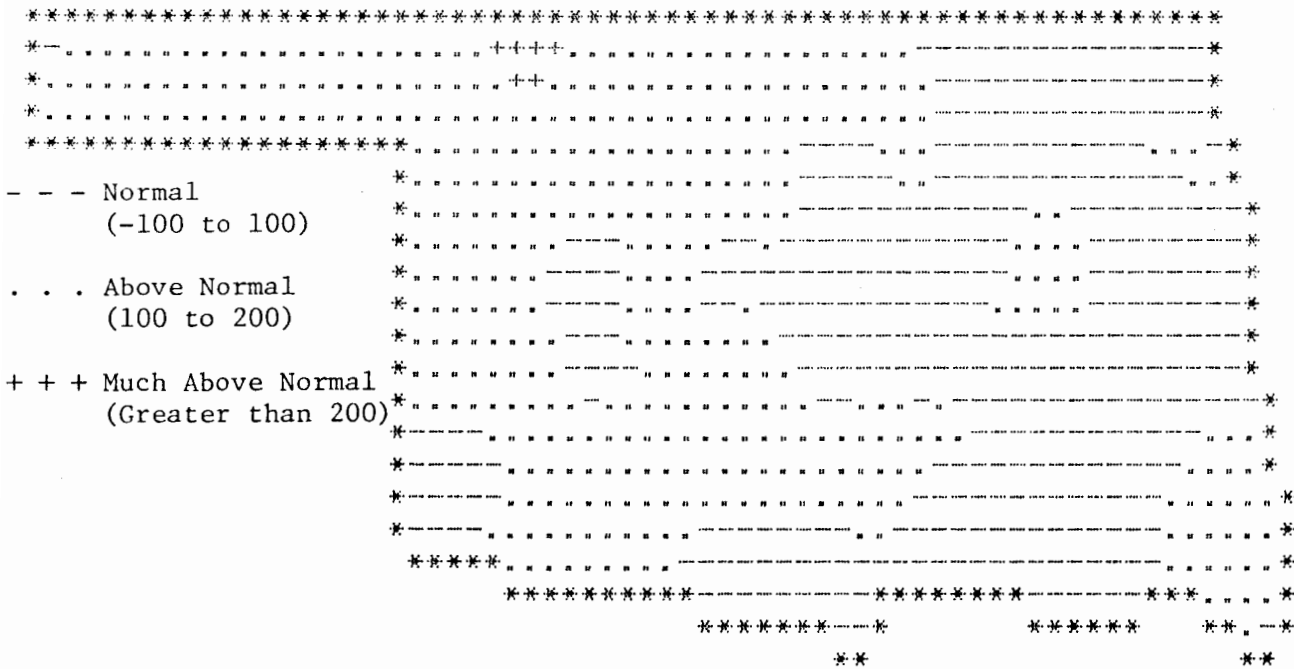
NOTE: 9999.0, 999.0, 99.99 indicates missing data TRACE = .001

JANUARY 1988 CLIMATE DIVISION SUMMARY

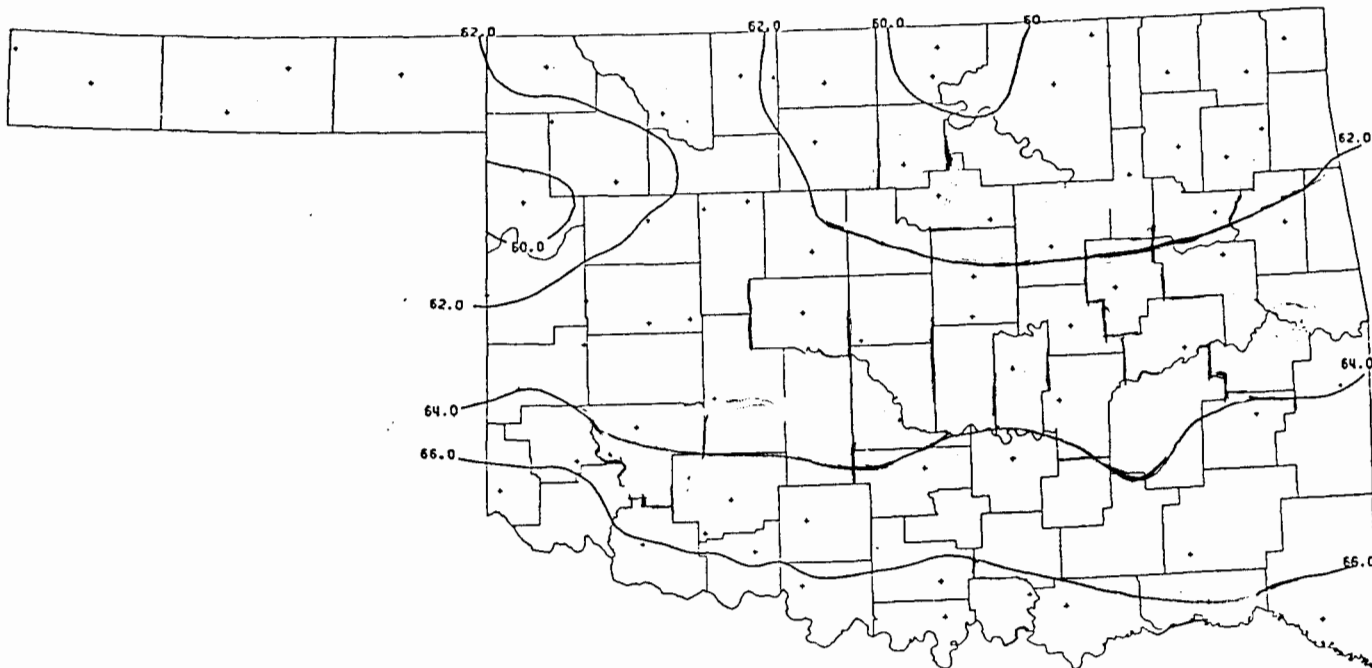
CLIMATE DIV	MEAN TEMP	NUM STA	DEV			HEAT		DEV		COOL		DEV		DEV	
			FROM NORM	MAX TEMP	MIN DAY TEMP	DEGREE DAY	DEGREE DAYS	FROM NORM	DEGREE DAYS	FROM NORM	TOT PPT	NUM STA	FROM NORM	MAX 24-HR DAY	
1	29.0	7	-4.5	72.0	29 -15.0	8	1083.9	107.9	0.0	0.0	.98	9	.53	1.49	8
2	29.9	15	-4.5	70.0	30 -17.0	8	1070.2	122.6	0.0	0.0	1.04	23	.32	.95	6
3	33.4	17	-1.6	72.0	30 -13.0	8	963.9	33.5	.1	.1	1.15	32	-.17	1.25	5
4	31.9	9	-4.3	70.0	30 -13.0	8	1010.1	117.3	0.0	0.0	1.10	20	.53	1.20	7
5	33.5	17	-3.0	72.0	31 -13.0	8	967.2	86.2	.1	.1	1.24	39	.17	1.50	6
6	35.4	12	-2.2	72.0	31 -11.0	8	914.3	65.3	.5	.5	1.49	29	-.12	1.50	6
7	34.4	11	-4.1	73.0	30 -13.0	8	926.6	106.0	0.0	0.0	1.14	24	.32	1.63	7
8	36.8	15	-3.9	75.0	31 -10.0	8	866.1	110.5	.7	.7	1.50	28	.10	2.00	7
9	38.0	8	-3.5	72.0	31 -7.0	7	828.1	99.4	.7	.7	1.37	11	-.84	1.26	7



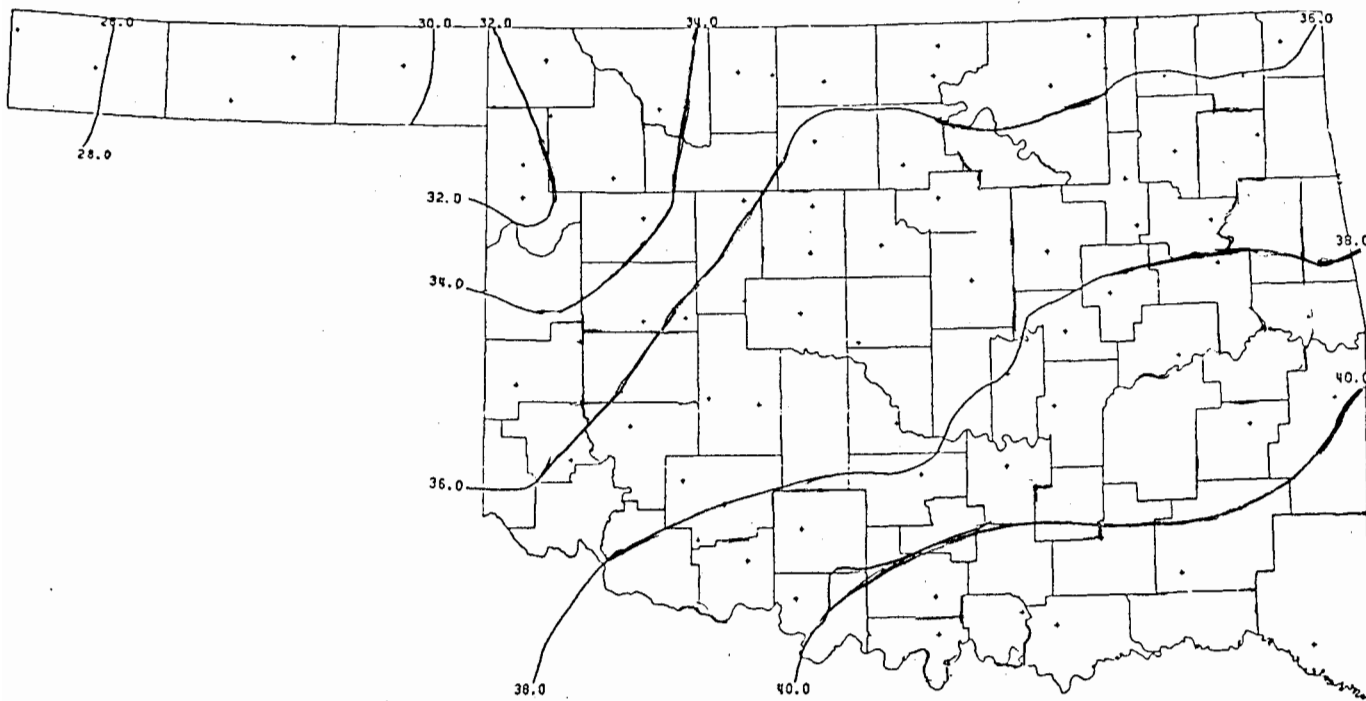
JANUARY 1988 TOTAL HEATING DEGREE DAYS



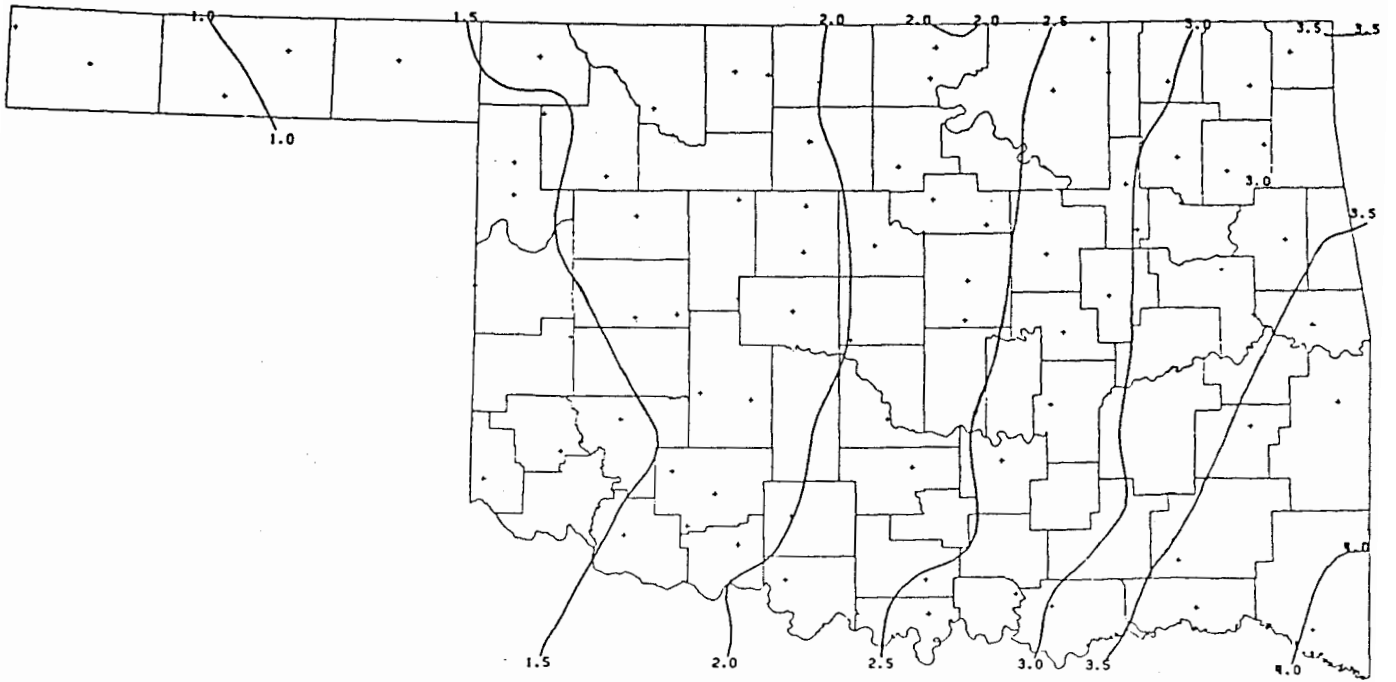
JANUARY 1988 DEVIATION FROM NORMAL HEATING DEGREE DAYS



30-YEAR MEAN MARCH DAILY MAXIMUM TEMPERATURE

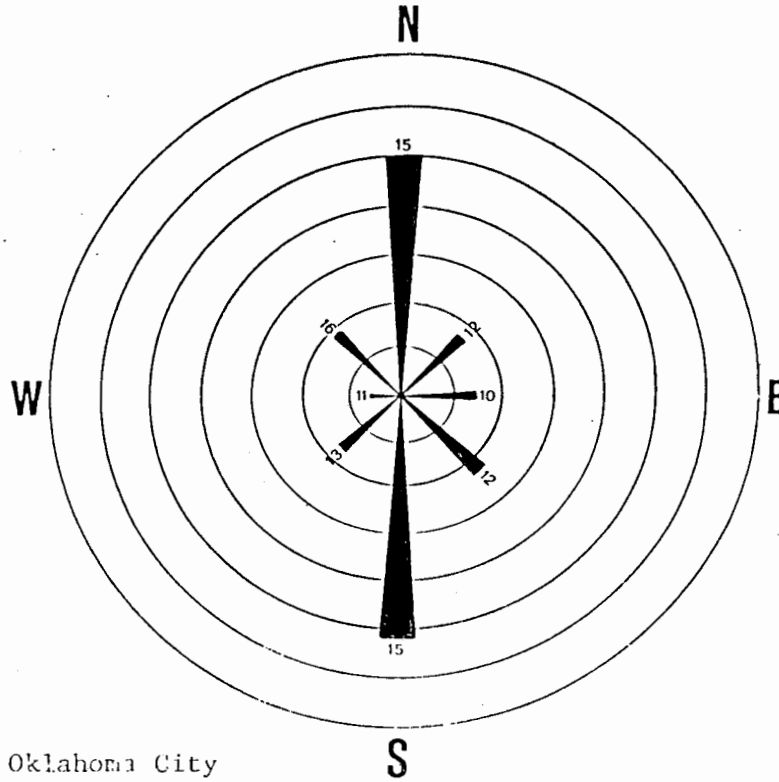


30-YEAR MEAN MARCH DAILY MINIMUM TEMPERATURE

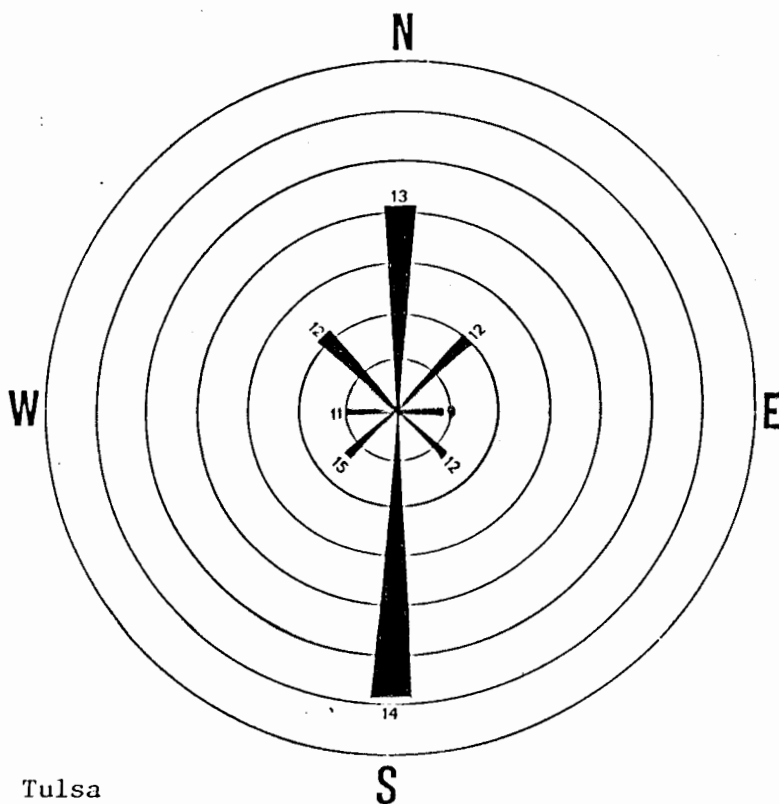


30-YEAR MEAN MARCH PRECIPITATION

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



Oklahoma City



Tulsa