OKLAHOMA MONTHLY SUMMARY DECEMBER 1993

TABLE OF CONTENTS

December 1993 Oklahoma Summary.....2

Table of December 1992/1993 Comparisons.....5

December 1993 Data Summary Tables.....6

December 1993 State Map Summary.....9

February Climatological Normals.....13

90-Day National Weather Service Outlook.....15

Explanation of Tables and Maps.....16

February 1994 Oklahoma City Climate Calendar.....18

February 1994 Tulsa Climate Calendar.....19

MONTHLY SUMMARY FOR DECEMBER 1993

December statewide averages during 1993 show the month to have been both warmer and wetter than normal. Precipitation was distributed unevenly across the state, however, as seven-inch rains in southeastern Oklahoma produced local flooding early in the month while the state's far northwestern counties were experiencing their seventh consecutive month of below normal precipitation. Above normal temperatures prevailed across the state in the absence of major outbreaks of cold air.

The statewide average precipitation for the month of 1.88 inches was .22 inch above normal. The December precipitation brought the annual total for the state to 38.66 inches. 1993 precipitation across the state was 4.42 inches above normal, ranking as the 25th greatest statewide precipitation since 1892. The state's northwestern and west central climate divisions, however, received less than 75 percent of their normal May through December precipitation, leaving them with a deficit of about four inches over the last two-thirds of the year.

December temperatures averaged 42.4 degrees, 2.9 degrees above normal. The cooler than normal first half of the year combined with a mild autumn offset the hot summer to make 1993 the 11th coolest year on record for the state. The average temperature for the year of 59.2 degrees was 1.2 degrees below normal.

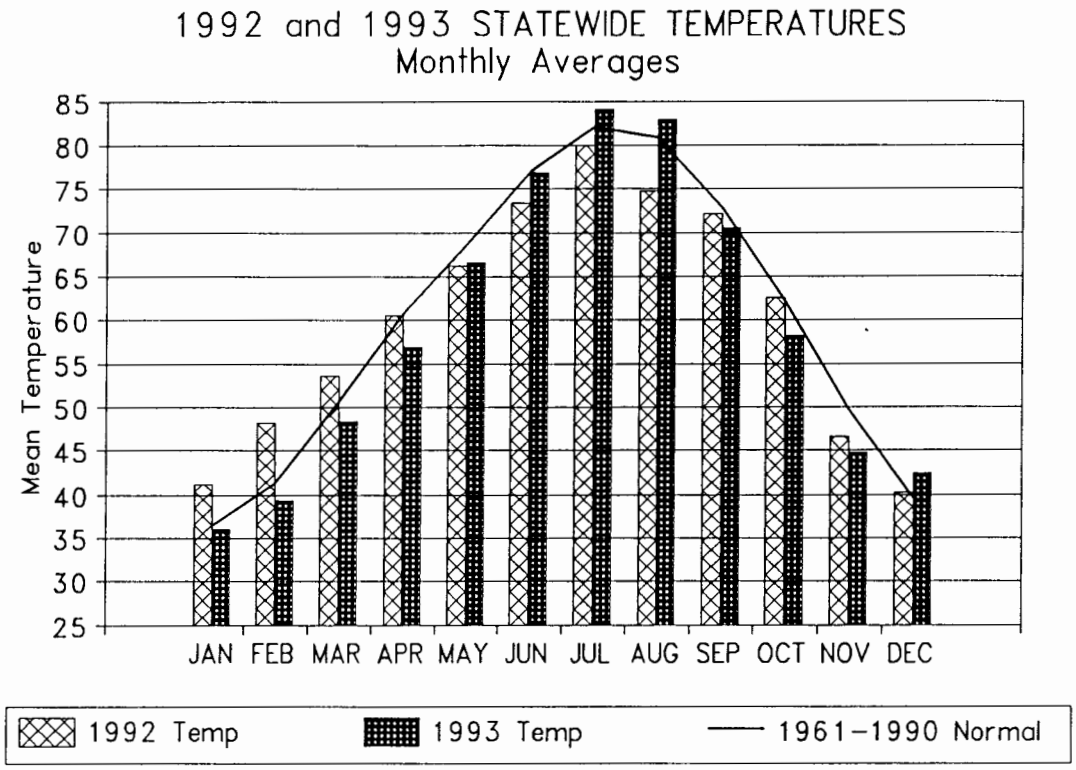
A low pressure system, which developed just south of the Red River, produced locally heavy rains in southeastern Oklahoma early on the morning of the 3rd. Precipitation in excess of 7 inches was reported in the vicinity of Broken Bow and Idabel. Several schools closed in southern McCurtain County due to high water and some Idabel residents were forced to evacuate.

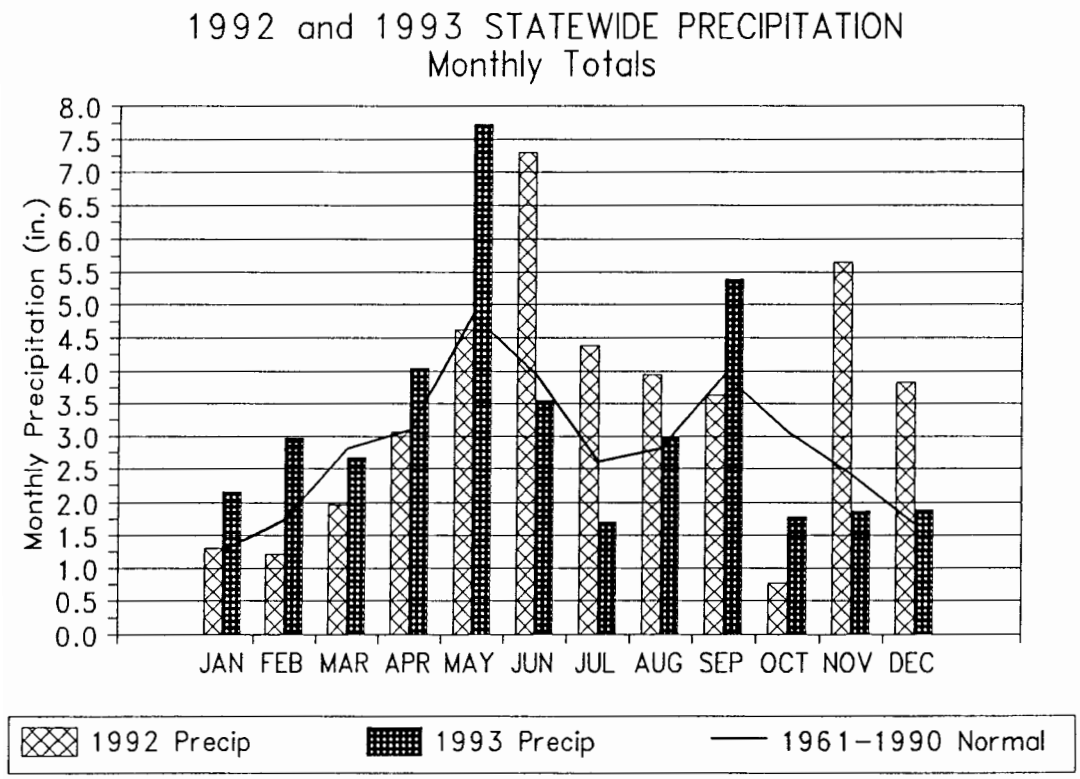
A mild period, featuring an 80 degree afternoon in Erick on the 9th, ended abruptly in western Oklahoma when a strong cold front crossed the state just before the middle of the month. Strong thunderstorms developed in southwestern Oklahoma on the afternoon of the 12th. Hailstones in excess of three-quarters of an inch were reported in several southwestern counties. Instruments at an Oklahoma Mesonetwork station near Hollis (Harmon County) recorded a wind speed of 74 miles per hour.

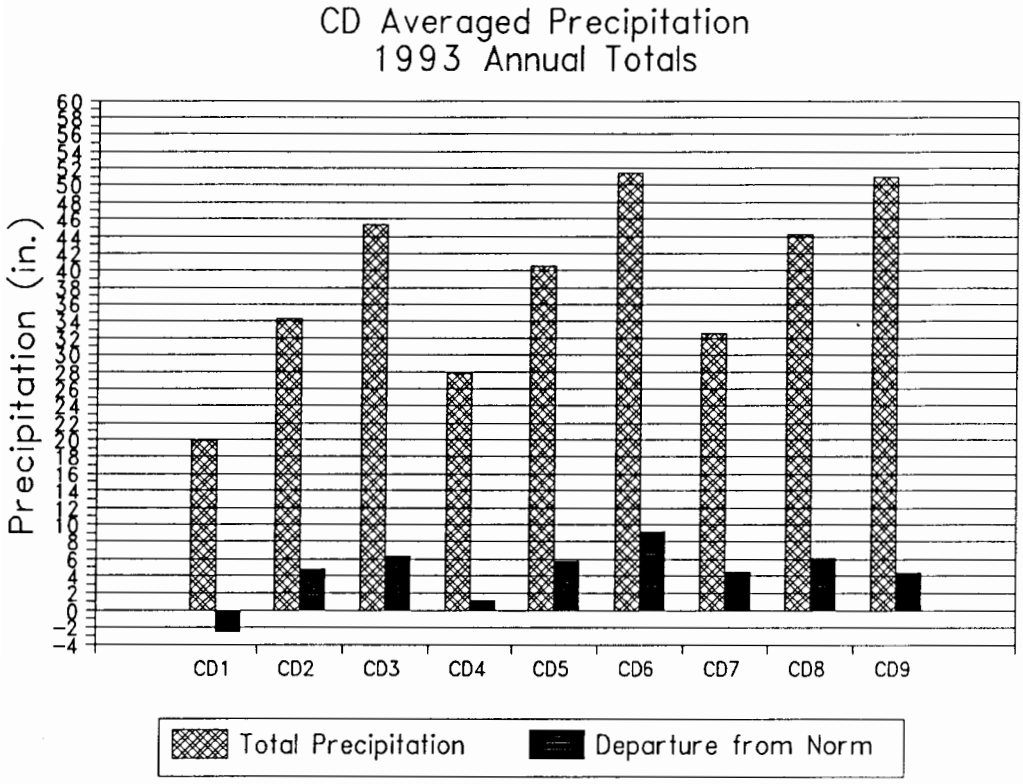
A mixture of rain and snow, accompanied by very strong northerly winds, peppered the Panhandle on the evening of the 12th as the front moved southward. The Mesonet station at Goodwell recorded a wind speed of 73 miles per hour. Gusts in excess of 50 miles per hour were felt for several hours in the Panhandle and, following the frontal passage, as far south as Tipton in Tillman County on the 13th. Light snow was reported in northeastern Oklahoma, with accumulations of less than one-half inch reported at Kansas (Delaware County) and Spavinaw (Mayes County).

Weather for the remainder of the month was uneventful. Freedom reported daily minimum temperatures of less than 10 degrees daily from the 21st through the 25th. Light to moderate snow, accompanied by 35 mile-per-hour winds, was reported in Cimarron County on the 23rd. Hooker (Texas County) reported one-half inch of snow and light snow was reported in Beaver County. Cold air across the state on the 28th kept temperatures across much of northern and western Oklahoma in the 20s on the 28th and 29th. Blackwell (Kay County) and Billings (Noble County) each reported a trace of snow.

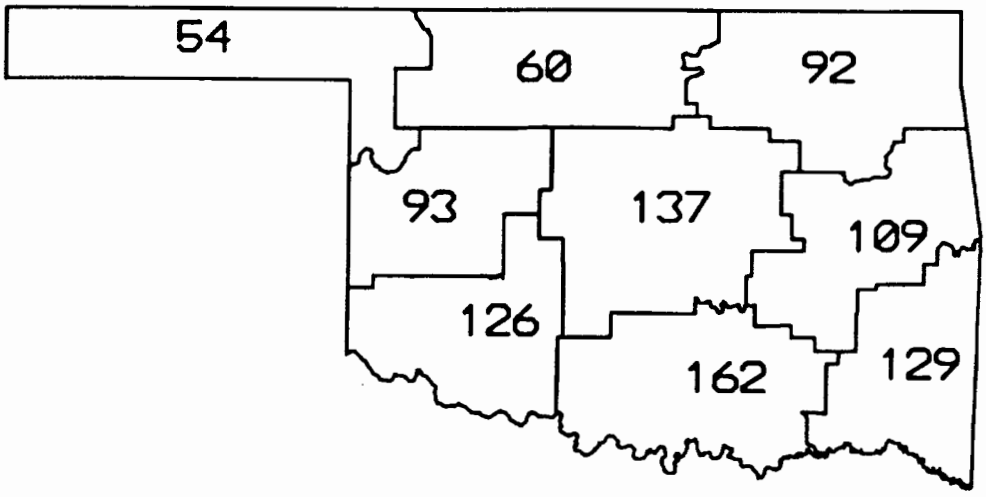
Howard L. Johnson


1992 and 1993 STATEWIDE TEMPERATURES
Monthly Averages
Mean Temperature
85
80
75
70
65
60
55
50
45
40
35
30
25
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1992 Temp
1993 Temp
1961-1990 Normal


1992 and 1993 STATEWIDE PRECIPITATION
Monthly Totals
Monthly Precipitation (in.)
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1992 Precip
1993 Precip
1961-1990 Normal



CD PERCENT OF NORMAL PRECIPITATION



DECEMBER 1993

EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION
DECEMBER, 1993

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	79	10	GOODWELL RES	10	24	BOISE CITY	.89	13	OPTIMA LAKE	.93	OPTIMA LAKE
2	70	9	FREEDOM	6	23	FREEDOM	.56	2	PERRY	1.44	PERRY
3	75	10	CLAREMORE	10	30	HULAH DAM	1.23	13	MARAMEC	2.48	BIXBY
	75	9	TULSA	10	23	JAY TOWER					
				10	30	JAY TOWER					
				10	23	MIAMI					
				10	30	MIAMI					
4	80	9	ERICK	12	30	HAMMON	.89	31	COLONY	1.78	COLONY
				12	23	TALOGA					
5	74	9	OKEMAH	14	30	BRISTOW	1.33	3	KONAWA	3.70	PURCELL
				14	30	MEEKER					
6	76	9	MCALESTER	12	30	LAKE EUFAULA	2.25	3	ASHLAND	4.78	CLAYTON
7	74	9	HOLLIS	13	29	ALTUS DAM	1.47	3	RANDLETT	2.36	RANDLETT
8	74	9	ARDMORE	13	24	WAURIKA DAM	3.68	3	MCGEE CREEK	5.18	MCGEE CREEK
	74	9	MARIETTA								
9	74	11	BROKEN BOW DA	12	30	POTEAU	4.34	3	BROKEN BOW DA	8.75	BROKEN BOW DAM

TABLE OF 1992/1993 COMPARISONS

	December Temperature (°F)		December Precipitation (in.)	
Station	1992	1993	1992	1993
Arnett	33.0	37.8	1.61	.33
Enid	37.5	41.2	1.71	.71
Mutual	34.8	38.5	1.95	.69
Tulsa	39.6	42.9	5.11	1.75
Elk City	39.7	42.3	1.07	.54
Oklahoma City	39.8	42.0	3.08	1.27
McAlester	44.7	46.3	7.39	3.12
Altus Irr Sta	42.5	44.1	2.18	1.18
Durant	45.0	45.3	4.48	4.26
Ada	42.8	44.8	5.67	3.67
Hugo	43.5	46.6	6.55	5.34

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (°F)	Freedom	2	6	23
Maximum temperature (°F)	Erick	4	80	9
Maximum 24-hour precipitation	Bkn Bow Dam	9	4.34"	3

DECEMBER 1993 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	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	37.8	31	2.4	69.	10	14.	25	842.5	-75.5	.0	.0	.331	31	-.44	.25	13
BEAVER	593	1	36.1	31	2.1	71.	10	12.	24	896.5	-64.5	.0	.0	.532	31	-.06	.47	13
BOISE CITY 2 E	908	1	38.9	31	3.2	71.	26	10.	24	809.0	-99.0	.0	.0	.861	30	*****	.37	13
BUFFALO	1243	1	40.2	31	3.1	69.	31	13.	23	768.0	-97.0	.0	.0	.130	31	-.67	.10	3
FARGO	3070	1	*****	0	*****	****	0	****	0	******	******	******	******	.330	31	-.44	.20	13
GAGE FAA APT	3407	1	39.4	31	2.7	72.	9	11.	23	794.0	-83.0	.0	.0	.252	31	-.41	.11	12
GATE	3489	1	39.1	31	4.1	71.	10	14.	24	803.0	-127.0	.0	.0	.164	31	-.54	.13	13
GOODWELL RES ST	3628	1	37.8	31	3.9	79.	10	12.	24	842.5	-121.5	.0	.0	.001	31	-.28	.00	24
GUYMON	3835	1	37.7	28	*****	76.	9	11.	24	765.0	******	.0	******	.014	29	*****	.01	24
HOOKER	4298	1	37.5	31	2.5	75.	10	13.	24	851.0	-79.0	.0	.0	.873	31	.46	.85	13
KENTON	4766	1	33.8	27	*****	72.	9	11.	23	843.5	******	.0	******	.450	27	*****	.45	12
LAVERNE	5045	1	*****	0	*****	****	0	****	0	******	******	******	******	.140	31	-.59	.07	14
OPTIMA LAKE	6740	1	37.1	31	*****	75.	10	12.	24	864.5	******	.0	******	.932	31	*****	.89	13
TURPIN 4 SSE	9017	1	36.9	31	*****	72.	10	14.	24	870.5	******	.0	******	.832	31	*****	.83	13

DECEMBER 1993 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	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	193	2	39.8	31	*****	66.	12	14.	24	780.0	******	.0	******	.130	31	*****	.11	13
VANCE AFB	302	2	*****	0	*****	****	0	****	0	******	******	******	******	1.025	31	*****	.39	13
BILLINGS	755	2	39.3	31	3.3	64.	1	15.	30	797.0	-102.0	.0	.0	.790	31	-.58	.30	14
BLACKWELL 2E	818	2	40.0	31	3.5	62.	9	14.	30	775.0	-109.0	.0	.0	1.153	31	-.20	.47	14
BRAMAN	1075	2	*****	0	*****	****	0	****	0	******	******	******	******	.650	31	*****	.28	4
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	******	******	******	******	.962	31	*****	.55	3
CHEROKEE	1724	2	39.6	31	2.3	63.	12	12.	23	786.0	-73.0	.0	.0	.100	31	-1.03	.10	13
ENID	2912	2	41.2	31	3.2	65.	1	17.	28	738.5	-98.5	.0	.0	.710	31	-.43	.30	3
FT SUPPLY DAM	3304	2	38.0	31	3.3	68.	10	14.	28	836.5	-102.5	.0	.0	.202	31	-.52	.09	14
FREEDOM	3358	2	35.5	31	-.9	70.	9	6.	23	913.0	26.0	.0	.0	.250	31	-.56	.24	4
GREAT SALT PLNS	3740	2	39.0	31	3.4	65.	11	15.	23	805.5	-105.5	.0	.0	.281	31	-.54	.24	4
HARDY	3909	2	*****	0	*****	****	0	****	0	******	******	******	******	.722	31	*****	.37	1
HELENA 1 SSE	4019	2	38.1	31	3.0	65.	3	13.	24	834.0	-93.0	.0	.0	.361	31	-.62	.26	4
JEFFERSON	4573	2	40.4	31	3.4	68.	1	12.	30	762.0	-106.0	.0	.0	.311	31	-.88	.20	3
LAMONT	5013	2	*****	0	*****	****	0	****	0	******	******	******	******	.411	31	*****	.22	4
MEDFORD	5768	2	*****	0	*****	****	0	****	0	******	******	******	******	.462	31	*****	.35	3
MORRISON	6065	2	*****	0	*****	****	0	****	0	******	******	******	******	.940	31	*****	.43	2
MUTUAL	6139	2	38.5	31	3.0	68.	9	14.	24	823.0	-92.0	.0	.0	.690	31	-.05	.46	3
NEWKIRK	6278	2	40.3	31	3.7	63.	9	14.	30	765.0	-115.0	.0	.0	.940	31	-.49	.52	4
ORIENTA	6751	2	*****	0	*****	****	0	****	0	******	******	******	******	.510	31	-.30	.25	3
PERRY	7012	2	43.8	31	5.0	66.	9	17.	30	657.5	-154.5	.0	.0	1.440	31	.11	.56	2
PONCA CITY FAA	7201	2	42.0	31	6.2	66.	2	14.	30	713.0	-192.0	.0	.0	.782	31	-.63	.33	13
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	******	******	******	******	.440	31	-.90	.24	7
WAYNOKA	9404	2	39.4	31	2.2	68.	8	10.	23	792.5	-69.5	.0	.0	.220	31	-.68	.09	3
WOODWARD	9760	2	*****	0	*****	****	0	****	0	******	******	******	******	.442	31	-.40	.18	3

DECEMBER 1993 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	CD	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	40.2	31	2.1	72.	9	11.	30	767.5	-66.5	.0	.0	1.723	31	-.18	.71	13
BARTLESVILLE 2W	548	3	41.4	31	3.3	73.	9	11.	30	732.0	-102.0	.0	.0	2.181	31	.55	.67	2
BIXBY	782	3	42.1	31	3.9	74.	11	16.	30	710.5	-120.5	.0	.0	2.480	31	.52	1.12	2
BURBANK	1256	3	*****	0	*****	****	0	****	0	******	******	******	******	.950	31	-.55	.37	13
CHELSEA 4 S	1717	3	*****	0	*****	****	0	****	0	******	******	******	******	1.550	31	*****	.92	2
CLAREMORE	1828	3	40.1	31	2.7	75.	10	13.	30	773.0	-83.0	.0	.0	2.020	31	-.16	.94	2
CLEVELAND 5 WSW	1902	3	42.4	31	*****	71.	9	17.	30	699.5	******	.0	******	1.782	31	*****	.72	13
FORAKER	3250	3	*****	0	*****	****	0	****	0	******	******	******	******	.680	31	-.82	.34	14
HOLLOW	4258	3	*****	0	*****	****	0	****	0	******	******	******	******	1.731	31	-.30	.63	13
HOMINY	4289	3	*****	0	*****	****	0	****	0	******	******	******	******	1.462	31	-.11	.72	13
HULAH DAM	4393	3	38.2	20	*****	72.	10	10.	30	537.0	******	.0	******	1.200	29	*****	.48	13
JAY TOWER	4567	3	39.9	31	*****	70.	10	10.	30	778.0	******	.0	******	2.100	31	*****	1.00	2
KANSAS 1 ESE	4672	3	41.9	31	2.4	70.	9	13.	30	717.0	-74.0	.0	.0	2.375	31	-.83	1.00	2
KEYSTONE DAM	4812	3	40.8	25	*****	72.	10	14.	30	604.0	******	.0	******	1.820	25	*****	.68	2
LENAPAH	5118	3	*****	0	*****	****	0	****	0	******	******	******	******	1.950	31	*****	.83	2
MANNFORD 6 NW	5522	3	42.5	30	3.6	73.	9	15.	30	675.5	-133.5	.0	.0	1.780	30	*****	.69	2
MARAMEC	5540	3	*****	0	*****	****	0	****	0	******	******	******	******	1.980	31	.50	1.23	13
MIAMI	5855	3	38.8	31	2.2	72.	9	10.	30	811.0	-69.0	.0	.0	1.571	31	-.89	.68	2
NOWATA	6485	3	40.6	31	2.6	73.	9	12.	30	757.0	-80.0	.0	.0	1.460	31	-.56	.73	3
ONETA 1 WNW	6713	3	*****	0	*****	****	0	****	0	******	******	******	******	2.130	31	*****	1.10	2
PAWHUSKA	6935	3	40.9	31	3.3	71.	9	12.	30	748.5	-100.5	.0	.0	1.860	31	.19	.61	2
PAWNEE	6940	3	*****	0	*****	****	0	****	0	******	******	******	******	1.360	31	-.17	.58	2
PRYOR 6 N	7309	3	39.7	31	2.6	74.	10	11.	31	783.0	-82.0	.0	.0	1.892	31	-.51	.90	2
RALSTON	7390	3	41.3	31	3.4	70.	9	12.	30	733.5	-106.5	.0	.0	1.430	31	-.13	.55	2
RAMONA 4 N	7394	3	*****	0	*****	****	0	****	0	******	******	******	******	1.290	31	*****	.74	2
SKIATOOK	8258	3	*****	0	*****	****	0	****	0	******	******	******	******	1.370	31	-.29	.59	14
SPAVINAW	8380	3	44.4	31	4.0	71.	9	16.	30	639.5	-123.5	.0	.0	2.271	31	-.23	1.03	2
TULSA WSO APT	8992	3	42.9	31	4.0	75.	9	16.	30	685.0	-124.0	.0	.0	1.750	31	-.41	.84	13
UPPER SPAVINAW	9101	3	45.2	26	*****	73.	9	18.	30	517.5	******	1.5	******	2.472	29	*****	1.00	2
VINITA 2 N	9203	3	40.7	31	3.2	73.	9	10.	30	754.5	-98.5	.0	.0	1.480	31	-1.05	.70	2
WAGONER	9247	3	44.5	31	3.9	74.	9	18.	30	634.5	-121.5	.0	.0	2.252	31	-.19	.81	14
WANN	9298	3	*****	0	*****	****	0	****	0	******	******	******	******	1.802	31	*****	.60	2
WYNONA	9792	3	*****	0	*****	****	0	****	0	******	******	******	******	1.392	31	*****	.60	13

DECEMBER 1993 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	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	39.3	31	3.1	67.	27	17.	29	797.5	-95.5	.0	.0	.630	31	-.19	.27	3
CHEYENNE	1738	4	*****	0	*****	****	0	****	0	******	******	******	******	.210	31	-.43	.21	2
CLINTON	1909	4	41.5	31	2.2	74.	9	17.	29	727.0	-70.0	.0	.0	1.240	31	.25	.52	13
COLONY	2039	4	*****	0	*****	****	0	****	0	******	******	******	******	1.781	31	*****	.89	31
CORDELL	2125	4	*****	0	*****	****	0	****	0	******	******	******	******	.640	31	-.26	.34	13
ELK CITY 1 E	2849	4	42.3	27	*****	77.	9	17.	24	612.5	******	.0	******	.540	29	*****	.46	13
ERICK 4 E	2944	4	42.2	31	3.2	80.	9	13.	23	707.5	-98.5	.0	.0	.480	31	-.23	.35	13
GEARY	3497	4	43.3	31	4.9	66.	10	17.	28	671.5	-153.5	.0	.0	.330	31	-.61	.33	13
HAMMON 1 NNE	3871	4	37.3	29	*****	76.	10	12.	30	804.5	******	.0	******	.231	29	*****	.23	13
LEEDEY	5090	4	*****	0	*****	****	0	****	0	******	******	******	******	.510	31	-.13	.28	13
MACKIE 4 NNW	5463	4	*****	0	*****	****	0	****	0	******	******	******	******	.360	31	*****	.22	13
MORAVIA 2 NNE	6035	4	*****	0	*****	****	0	****	0	******	******	******	******	.900	31	.08	.60	13
OKEENE	6629	4	41.4	31	2.5	67.	1	17.	30	730.5	-78.5	.0	.0	1.110	31	.06	.70	3
RETROP	7565	4	*****	0	*****	****	0	****	0	******	******	******	******	.980	31	*****	.63	13
REYDON	7579	4	*****	0	*****	****	0	****	0	******	******	******	******	.002	19	*****	.00	24
SAYRE	7952	4	*****	0	*****	****	0	****	0	******	******	******	******	.430	31	-.16	.32	13
SWEETWATER 2 E	8652	4	*****	0	*****	****	0	****	0	******	******	******	******	.441	31	*****	.44	12
TALOGA	8708	4	40.1	31	2.8	69.	26	12.	23	773.0	-86.0	.0	.0	.721	31	.04	.30	3
THOMAS	8815	4	*****	0	*****	****	0	****	0	******	******	******	******	.760	31	*****	.48	13
VICI	9172	4	*****	0	*****	****	0	****	0	******	******	******	******	.620	31	-.24	.30	3
WATONGA	9364	4	41.7	31	3.6	65.	26	16.	30	721.5	-112.5	.0	.0	.672	31	-.39	.30	3
WEATHERFORD	9422	4	*****	0	*****	****	0	****	0	******	******	******	******	.680	31	-.21	.47	12

DECEMBER 1993 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	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
AMBER	200	5	*****	0	*****	****	0	****	0	******	******	******	******	1.860	31	*****	.70	13
ARCADIA	288	5	*****	0	*****	****	0	****	0	******	******	******	******	2.630	31	*****	1.08	13
TINKER AFB	325	5	*****	0	*****	****	0	****	0	******	******	******	******	2.124	31	*****	1.12	13
BLANCHARD 2 SSW	830	5	43.8	31	2.5	68.	8	19.	29	656.5	-78.5	.0	.0	2.763	31	1.17	1.13	13
BRISTOW	1144	5	43.6	31	3.5	73.	9	14.	30	663.0	-109.0	.0	.0	2.940	31	.87	1.27	2
CHANDLER	1684	5	44.3	26	*****	73.	9	17.	30	539.0	******	.0	******	2.710	31	1.18	1.15	13
CHICKASHA EX ST	1750	5	42.7	31	2.2	68.	9	18.	30	690.5	-69.5	.0	.0	2.490	31	1.23	.84	3
COX CITY 1 E	2196	5	*****	0	*****	****	0	****	0	******	******	******	******	2.390	31	*****	1.23	3
CRESCENT	2242	5	*****	0	*****	****	0	****	0	******	******	******	******	1.460	31	*****	.56	3
CUSHING	2318	5	41.4	31	3.2	71.	10	20.	31	731.0	-100.0	.0	.0	1.750	31	.22	.78	13
EL RENO 1 N	2818	5	42.6	31	3.8	64.	9	18.	30	693.5	-118.5	.0	.0	1.190	31	.15	.40	13
GUTHRIE	3821	5	44.3	31	4.4	68.	9	19.	30	642.5	-135.5	.0	.0	2.600	31	1.10	.70	3
HENNESSEY 4 ESE	4055	5	41.5	30	3.4	64.	11	17.	29	704.5	-129.5	.0	.0	1.740	31	.70	.72	3
INGALLS	4489	5	*****	0	*****	****	0	****	0	******	******	******	******	1.570	31	*****	.53	13
KINGFISHER 2 SE	4861	5	42.6	29	*****	68.	10	16.	30	651.0	******	.0	******	2.030	31	.84	.74	14
KONAWA	4915	5	*****	0	*****	****	0	****	0	******	******	******	******	3.190	31	1.31	1.33	3
MARSHALL	5589	5	*****	0	*****	****	0	****	0	******	******	******	******	1.410	31	.26	.71	4
MEEKER 4 W	5779	5	43.2	31	3.0	69.	9	14.	30	676.5	-92.5	.0	.0	1.971	31	.55	.81	12
MULHALL	6110	5	*****	0	*****	****	0	****	0	******	******	******	******	1.120	31	*****	.62	3
NORMAN 3 S	6386	5	43.1	31	2.1	70.	9	17.	30	677.5	-66.5	.0	.0	2.982	31	1.40	1.05	13
OILTON 2 SE	6616	5	*****	0	*****	****	0	****	0	******	******	******	******	1.550	31	*****	.66	12
OKEMAH	6638	5	44.6	31	3.8	74.	9	19.	30	631.5	-118.5	.0	.0	2.560	31	.56	.90	2
OKLAHOMA CTY WS	6661	5	42.0	31	2.7	67.	9	17.	30	712.5	-84.5	.0	.0	1.274	31	-.13	.67	12
PERKINS	7003	5	*****	0	*****	****	0	****	0	******	******	******	******	2.410	31	.88	.81	2
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	******	******	******	******	.990	31	*****	.45	13
PRAGUE	7264	5	*****	0	*****	****	0	****	0	******	******	******	******	2.120	31	.30	1.00	12
PURCELL 5 SW	7327	5	43.7	31	3.2	70.	9	15.	30	661.0	-99.0	.0	.0	3.702	31	1.87	1.25	13
SEMINOLE	8042	5	44.2	31	2.2	69.	26	18.	30	644.0	-69.0	.0	.0	2.460	31	.64	.75	13
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	******	******	******	******	2.531	31	.65	.94	13
STELLA	8479	5	*****	0	*****	****	0	****	0	******	******	******	******	2.920	31	*****	1.02	13
STILLWATER 2 W	8501	5	41.7	31	4.3	68.	10	16.	30	722.5	-133.5	.0	.0	1.050	31	-.25	.45	13
STROUD 1 N	8563	5	*****	0	*****	****	0	****	0	******	******	******	******	2.873	31	*****	1.20	2
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	******	******	******	******	2.160	31	*****	.72	13
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	******	******	******	******	2.800	31	*****	1.10	1
UNION CITY 1 SE	9086	5	*****	0	*****	****	0	****	0	******	******	******	******	1.530	31	.18	.53	13
WELTY 1 SSE	9479	5	*****	0	*****	****	0	****	0	******	******	******	******	1.920	31	*****	.61	13
WEWOKA	9575	5	*****	0	*****	****	0	****	0	******	******	******	******	2.290	31	.39	.90	3

DECEMBER 1993 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	CD	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	*****	0	*****	****	0	****	0	******	******	******	******	3.151	31	*****	2.25	3
BEGGS	631	6	*****	0	*****	****	0	****	0	******	******	******	******	2.160	31	*****	.76	14
BOYNTON	1027	6	*****	0	*****	****	0	****	0	******	******	******	******	2.152	31	*****	.60	2
CALVIN	1391	6	*****	0	*****	****	0	****	0	******	******	******	******	2.900	31	.71	1.80	3
CHECOTAH	1711	6	*****	0	*****	****	0	****	0	******	******	******	******	2.561	31	.11	.71	3
CLAYTON 14 WNW	1858	6	*****	0	*****	****	0	****	0	******	******	******	******	4.780	31	*****	2.00	3
DEWAR 2 NE	2485	6	*****	0	*****	****	0	****	0	******	******	******	******	2.360	31	.27	.62	2
DUSTIN	2690	6	*****	0	*****	****	0	****	0	******	******	******	******	2.240	31	*****	1.32	3
EUFAULA	2993	6	45.2	31	2.3	74.	9	20.	30	613.0	-72.0	.0	.0	3.430	31	.73	1.95	3
HANNA	3884	6	44.2	31	2.7	74.	9	15.	30	645.0	-84.0	.0	.0	3.102	31	.66	1.15	3
HARTSHORNE	3946	6	*****	0	*****	****	0	****	0	******	******	******	******	3.500	31	*****	1.92	3
HASKELL	3956	6	*****	0	*****	****	0	****	0	******	******	******	******	1.870	31	-.41	.74	14
HOLDENVILLE	4235	6	44.6	31	2.8	75.	9	16.	30	632.0	-87.0	.0	.0	2.820	31	.87	1.63	3
LAKE EUFAULA	4975	6	43.1	30	*****	75.	11	12.	30	658.0	******	.0	******	3.310	31	*****	1.64	3
LYONS 2 N	5437	6	*****	0	*****	****	0	****	0	******	******	******	******	2.102	31	-.65	.93	13
MARBLE CITY	5546	6	*****	0	*****	****	0	****	0	******	******	******	******	2.571	31	*****	.89	2
MCALESTER FAA	5664	6	46.3	31	5.1	76.	9	17.	30	582.5	-155.5	2.0	2.0	3.115	31	.49	1.76	3
MCCURTAIN 1 SE	5693	6	46.1	31	3.6	74.	9	15.	30	587.5	-110.5	1.0	1.0	3.740	31	.92	1.15	3
MUSKOGEE	6130	6	43.9	31	3.3	74.	9	18.	23	654.0	-102.0	.0	.0	2.550	31	-.35	.97	13
OKMULGEE W W	6670	6	41.2	31	1.8	75.	10	13.	31	737.5	-56.5	.0	.0	1.940	30	*****	.50	2
OKTAHA 2 NE	6678	6	*****	0	*****	****	0	****	0	******	******	******	******	1.920	31	*****	.49	3
QUINTON	7372	6	*****	0	*****	****	0	****	0	******	******	******	******	3.170	31	.53	1.02	2
SALLISAW 2 NE	7862	6	43.2	31	1.9	72.	9	15.	23	676.0	-59.0	.0	.0	2.832	31	.02	1.00	14
SCIPIO	7979	6	*****	0	*****	****	0	****	0	******	******	******	******	3.340	31	*****	1.48	3
SHORT	8170	6	*****	0	*****	****	0	****	0	******	******	******	******	2.580	31	*****	.76	13
TAHLEQUAH	8677	6	43.3	31	3.6	68.	9	16.	30	672.0	-112.0	.0	.0	2.661	31	-.34	.84	13
WEBBERS FALLS	9445	6	41.8	31	2.4	74.	10	15.	31	719.0	-75.0	.0	.0	2.810	31	.10	.75	4
WESTVILLE	9523	6	*****	0	*****	****	0	****	0	******	******	******	******	2.400	31	*****	.65	2
WETUMKA 3 NE	9571	6	*****	0	*****	****	0	****	0	******	******	******	******	2.610	31	.49	1.12	3

DECEMBER 1993 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	CD	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	44.1	31	2.3	70.	26	17.	30	648.5	-70.5	.0	.0	1.180	31	.27	.65	3
ALTUS DAM	184	7	40.8	31	1.1	71.	10	13.	29	750.0	-34.0	.0	.0	1.270	31	.41	.66	3
ANADARKO	224	7	42.7	22	*****	69.	9	16.	23	491.5	******	.0	******	1.251	31	.05	.57	3
APACHE	260	7	*****	0	*****	****	0	****	0	******	******	******	******	1.690	31	.53	.63	3
ALTUS AFB	447	7	*****	0	*****	****	0	****	0	******	******	******	******	1.191	31	*****	.65	3
CARNEGIE 2 ENE	1504	7	42.7	31	2.8	71.	9	15.	30	690.5	-87.5	.0	.0	1.120	31	.06	.50	13
CHATTANOOGA	1706	7	44.5	30	3.0	70.	26	17.	30	615.5	-113.5	.0	.0	1.400	30	*****	.79	3
DUNCAN 11 W	2668	7	*****	0	*****	****	0	****	0	******	******	******	******	2.300	31	*****	1.19	2
FREDERICK	3353	7	43.1	31	2.7	68.	27	19.	29	679.5	-83.5	.0	.0	1.360	31	.33	.68	13
GRANDFIELD 4 NW	3709	7	*****	0	*****	****	0	****	0	******	******	******	******	1.680	31	.45	1.00	3
HEADRICK	3998	7	*****	0	*****	****	0	****	0	******	******	******	******	.650	30	*****	.60	3
HOBART FAA APT	4204	7	42.6	31	2.7	70.	9	18.	29	694.0	-84.0	.0	.0	1.020	31	.18	.65	3
HOLLIS	4249	7	42.7	31	1.9	74.	9	14.	23	691.0	-59.0	.0	.0	.630	31	-.05	.35	13
LAWTON	5063	7	44.0	31	4.1	69.	27	19.	30	651.0	-127.0	.0	.0	1.500	31	.25	.76	13
FORT SILL	5068	7	44.4	31	*****	69.	26	20.	29	639.5	******	.0	******	1.531	31	*****	.64	12
LOOKEBA 2 ENE	5329	7	*****	0	*****	****	0	****	0	******	******	******	******	.800	31	-.22	.38	13
MANGUM RES STA	5509	7	42.2	31	1.4	71.	26	16.	30	708.0	-42.0	.0	.0	1.320	31	.53	.75	3
RANDLETT 9 E	7403	7	*****	0	*****	****	0	****	0	******	******	******	******	2.360	31	*****	1.47	3
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	******	******	******	******	1.120	31	.15	.57	13
SEDAN	8016	7	*****	0	*****	****	0	****	0	******	******	******	******	.892	31	*****	.49	4
SNYDER	8299	7	*****	0	*****	****	0	****	0	******	******	******	******	1.271	31	.29	.57	13
VINSON 3 WNW	9212	7	*****	0	*****	****	0	****	0	******	******	******	******	.560	31	-.14	.28	3
WALTERS	9278	7	47.8	17	*****	67.	10	30.	16	292.0	******	.0	******	2.350	17	*****	1.35	3
WICHITA MT WLR	9629	7	41.2	30	2.7	66.	27	15.	23	713.5	-108.5	.0	.0	1.440	30	*****	.55	3
WILLOW	9668	7	*****	0	*****	****	0	****	0	******	******	******	******	1.030	31	*****	.65	13

DECEMBER 1993 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

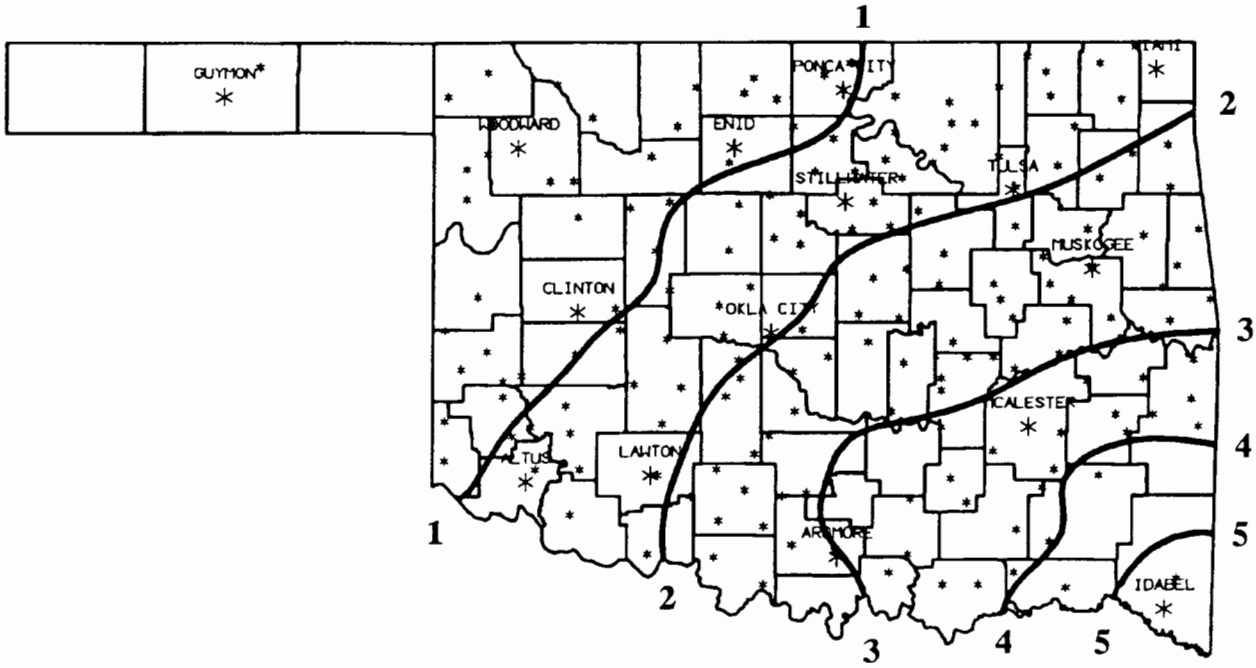
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ADA	17	8	44.8	31	2.6	72.	10	16.	30	625.5	-81.5	.0	.0	3.671	31	1.69	1.84	3
ALLEN	147	8	*****	0	*****	****	0	****	0	******	******	******	******	3.270	31	*****	1.35	2
ARDMORE	292	8	47.2	31	2.5	74.	9	21.	30	552.0	-77.0	.0	.0	3.520	31	1.67	2.86	2
ATOKA DAM	394	8	45.7	20	*****	73.	10	20.	30	387.0	******	.0	******	3.240	20	*****	2.24	3
BOKCHITO	917	8	*****	0	*****	****	0	****	0	******	******	******	******	3.930	31	*****	3.02	3
CANEY	1437	8	55.0	11	*****	72.	9	38.	11	111.0	******	1.5	******	3.470	12	*****	3.47	4
CENTRAHOMA	1648	8	*****	0	*****	****	0	****	0	******	******	******	******	3.550	31	*****	2.50	3
CHICKASAW NRA	1745	8	43.9	31	3.1	73.	10	16.	23	655.0	-95.0	.0	.0	3.561	31	1.69	2.38	3
COLEMAN	2011	8	*****	0	*****	****	0	****	0	******	******	******	******	2.680	31	*****	2.09	3
COMANCHE	2054	8	*****	0	*****	****	0	****	0	******	******	******	******	2.770	31	1.17	1.56	3
DAISY 4 ENE	2354	8	*****	0	*****	****	0	****	0	******	******	******	******	4.700	31	1.79	2.60	3
DUNCAN	2660	8	44.5	30	3.2	69.	11	19.	29	616.5	-118.5	.0	.0	2.630	30	*****	1.44	3
DURANT USDA	2678	8	45.3	31	3.1	73.	10	18.	23	612.0	-95.0	.0	.0	4.260	31	2.04	2.87	3
FARRIS 3 WNW	3083	8	*****	0	*****	****	0	****	0	******	******	******	******	4.030	23	*****	2.10	3
GRADY	3688	8	*****	0	*****	****	0	****	0	******	******	******	******	2.180	31	*****	1.35	2
HEALDTON	4001	8	45.4	31	3.1	73.	9	17.	23	608.0	-96.0	.5	.5	3.411	31	1.76	2.41	3
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	******	******	******	******	3.560	31	*****	1.90	3
KETCHUM RANCH	4780	8	*****	0	*****	****	0	****	0	******	******	******	******	3.240	31	*****	1.98	3
KINGSTON	4865	8	*****	0	*****	****	0	****	0	******	******	******	******	.310	29	*****	.30	13
LEHIGH	5108	8	*****	0	*****	****	0	****	0	******	******	******	******	3.212	31	*****	1.80	3
LINDSAY 2 W	5216	8	43.6	31	2.4	69.	10	17.	30	664.5	-73.5	.0	.0	2.751	31	1.06	1.17	3
LOCO 6 SE	5247	8	*****	0	*****	****	0	****	0	******	******	******	******	3.640	31	*****	2.96	3
MADILL	5468	8	46.7	31	2.9	73.	9	19.	23	567.0	-90.0	.0	.0	.900	31	-1.11	.53	3
MARIETTA	5563	8	47.4	31	3.6	74.	9	22.	30	546.0	-111.0	1.5	1.5	2.730	31	.88	2.24	3
MARLOW 1 WSW	5581	8	45.4	31	3.9	69.	9	15.	29	609.0	-120.0	.0	.0	2.330	31	.94	1.20	13
MCGEE CREEK DAM	5713	8	44.5	31	*****	72.	10	19.	30	635.5	******	.0	******	5.180	31	*****	3.68	3
PAULS VALLEY	6926	8	44.5	31	2.7	71.	9	15.	30	634.5	-84.5	.0	.0	2.850	31	1.05	1.55	3
PONTOTOC	7214	8	*****	0	*****	****	0	****	0	******	******	******	******	2.842	31	.98	2.00	2
TISHOMINGO NWLR	8884	8	47.3	19	*****	69.	10	17.	30	336.0	******	.0	******	4.420	31	2.29	3.28	3
TUSSY	9032	8	*****	0	*****	****	0	****	0	******	******	******	******	1.860	31	*****	1.82	3
WAURIKA	9395	8	45.0	31	1.6	70.	26	19.	29	620.5	-49.5	.0	.0	.760	31	-.79	.76	13
WAURIKA DAM	9399	8	44.0	27	*****	71.	27	13.	24	568.0	******	.0	******	2.330	26	*****	1.52	3

DECEMBER 1993 SUMMARY FOR SOUTHEAST DIVISION (CD9)

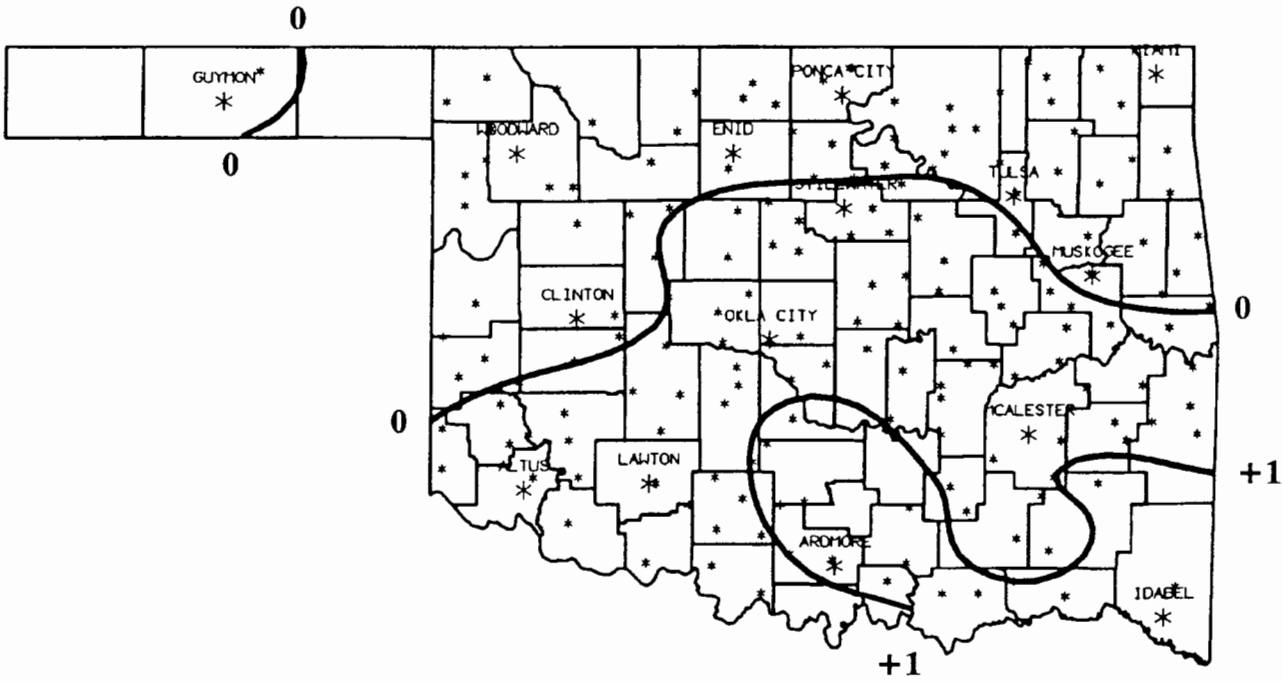
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	44.3	31	1.2	71.	9	16.	23	641.5	-37.5	.0	.0	******	0	*****	*****	0
BATTIEST 1 SSW	567	9	41.8	31	*****	66.	26	15.	30	720.0	******	.0	******	5.170	31	*****	2.04	3
BEAR MT TWR	584	9	45.5	21	*****	68.	11	21.	23	409.0	******	.0	******	5.941	31	1.68	2.40	3
BENGAL	670	9	*****	0	*****	****	0	****	0	******	******	******	******	4.361	31	*****	1.88	3
BOSWELL 4 NNW	980	9	44.4	31	.6	72.	9	16.	2	638.0	-19.0	.5	.5	4.262	31	1.48	2.32	3
BROKEN BOW 1 N	1162	9	*****	0	*****	****	0	****	0	******	******	******	******	7.230	31	3.25	4.04	3
BROKEN BOW DAM	1168	9	45.4	31	2.7	74.	11	19.	31	606.5	-84.5	.0	.0	8.751	29	*****	4.34	3
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	******	******	******	******	6.020	31	1.90	2.98	2
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	******	******	******	******	4.100	31	.89	1.60	3
HEAVENER 1 SE	4008	9	*****	0	*****	****	0	****	0	******	******	******	******	4.062	31	.57	2.06	3
HEE MT TWR	4017	9	*****	0	*****	****	0	****	0	******	******	******	******	5.041	31	.64	2.35	3
HUGO	4384	9	46.6	31	1.8	69.	26	20.	30	571.5	-54.5	.0	.0	5.342	31	2.02	1.95	3
IDABEL	4451	9	44.6	31	1.3	73.	11	20.	31	631.0	-42.0	.0	.0	8.634	31	4.95	4.33	3
POTEAU W W	7254	9	43.0	31	*****	71.	10	12.	30	683.0	******	.0	******	3.470	31	*****	1.20	2
SMITHVILLE 1 W	8285	9	41.9	31	.2	67.	26	13.	30	715.5	-6.5	.0	.0	6.556	31	2.21	3.45	3
SPIRO	8416	9	*****	0	*****	****	0	****	0	******	******	******	******	3.360	31	.30	.90	2
TUSKAHOMA	9023	9	45.0	31	1.8	71.	9	13.	30	620.5	-55.5	.0	.0	4.963	31	2.14	2.16	3
VALLIANT 3 W	9118	9	*****	0	*****	****	0	****	0	******	******	******	******	5.750	31	2.04	2.88	3
WILBURTON 9 ENE	9634	9	44.1	31	2.3	73.	9	14.	30	647.5	-71.5	.0	.0	3.811	31	.82	1.50	2

DECEMBER 1993 CLIMATE DIVISION SUMMARY

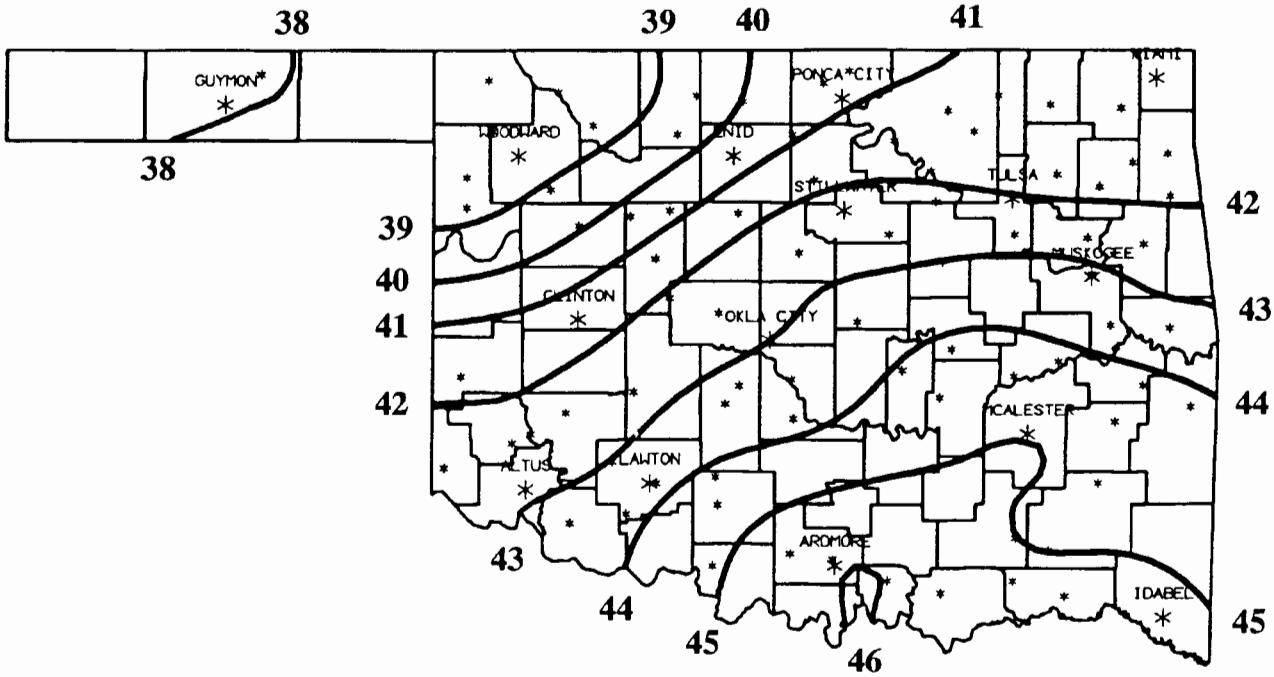
CLIMATE DIV	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEGREE DAYS	DEV FROM NORM	COOL DEGREE DAYS	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	38.1	10	2.9	79.0	10	10.0	24	834.2	-90.6	.0	.0	.41	11	-.17	.89	13
2	39.7	15	3.1	70.0	9	6.0	23	785.2	-96.8	.0	.0	.60	25	-.48	.56	2
3	41.4	17	3.3	75.0	9	10.0	30	729.4	-103.5	.0	.0	1.73	29	-.22	1.23	13
4	41.4	7	3.3	80.0	9	12.0	23	732.6	-102.3	.0	.0	.71	19	-.10	.89	31
5	43.0	14	3.1	74.0	9	14.0	30	679.1	-96.6	.0	.0	2.16	37	.62	1.33	3
6	43.9	11	2.9	76.0	9	12.0	30	652.4	-90.8	.3	.3	2.81	28	.30	2.25	3
7	42.9	11	2.4	74.0	9	13.0	29	680.1	-79.9	.0	.0	1.29	21	.26	1.47	3
8	45.2	13	2.8	74.0	9	13.0	24	611.2	-89.2	.2	.2	3.15	26	1.21	3.68	3
9	44.1	10	.9	74.0	11	12.0	30	647.5	-27.9	.1	.1	5.18	17	1.61	4.34	3



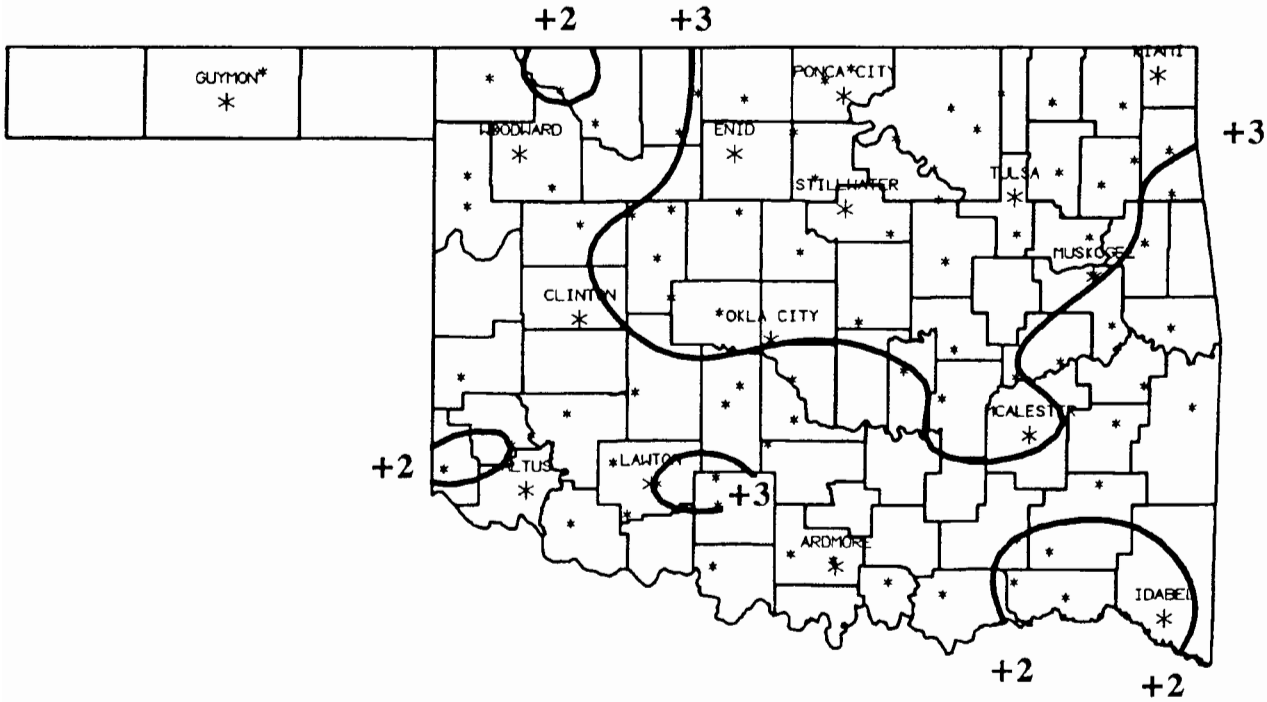
DECEMBER 1993 TOTAL PRECIPITATION
(Inches)



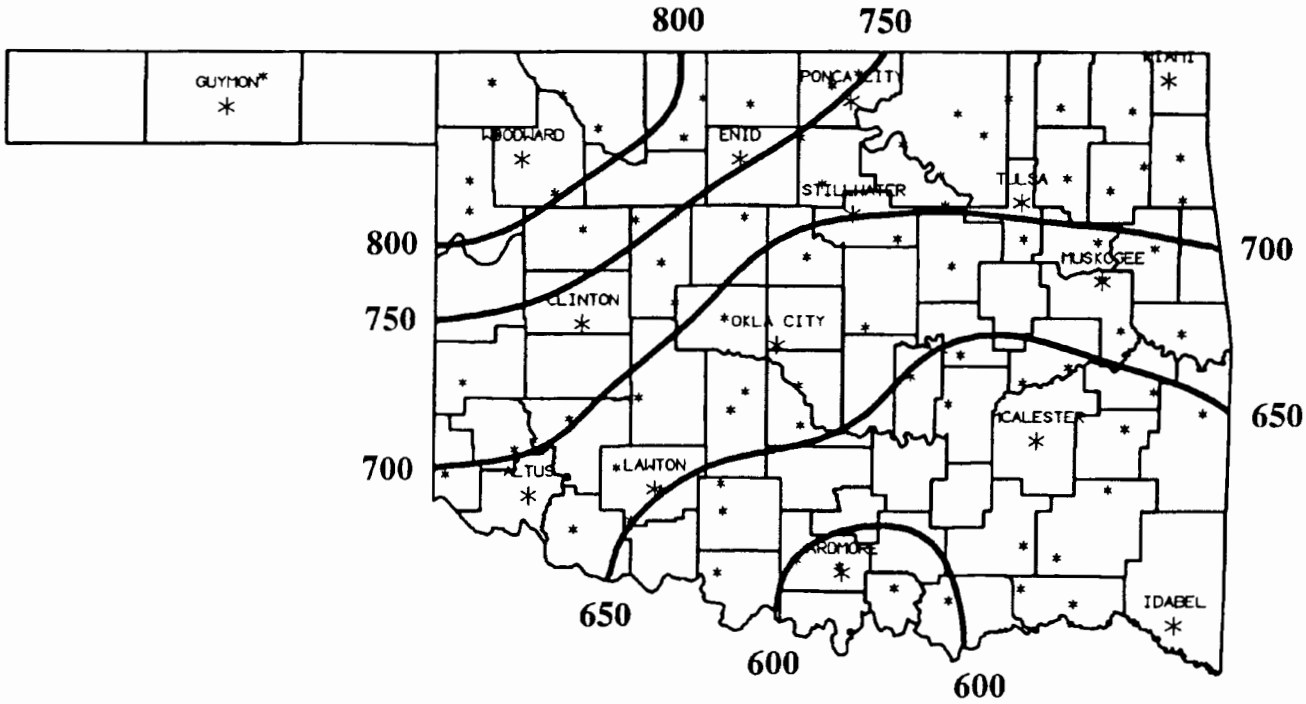
DECEMBER 1993 DEVIATION FROM NORMAL PRECIPITATION
(Inches)



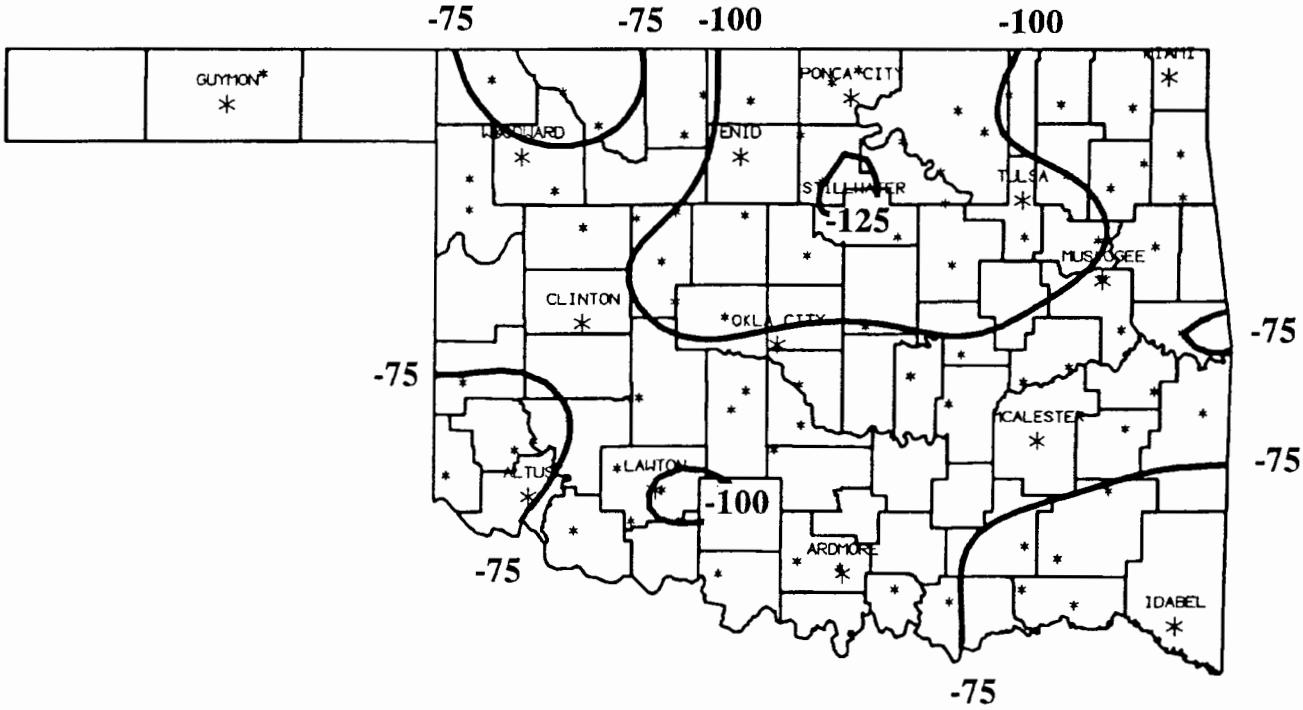
DECEMBER 1993 AVERAGE MONTHLY TEMPERATURES
(Degrees F)



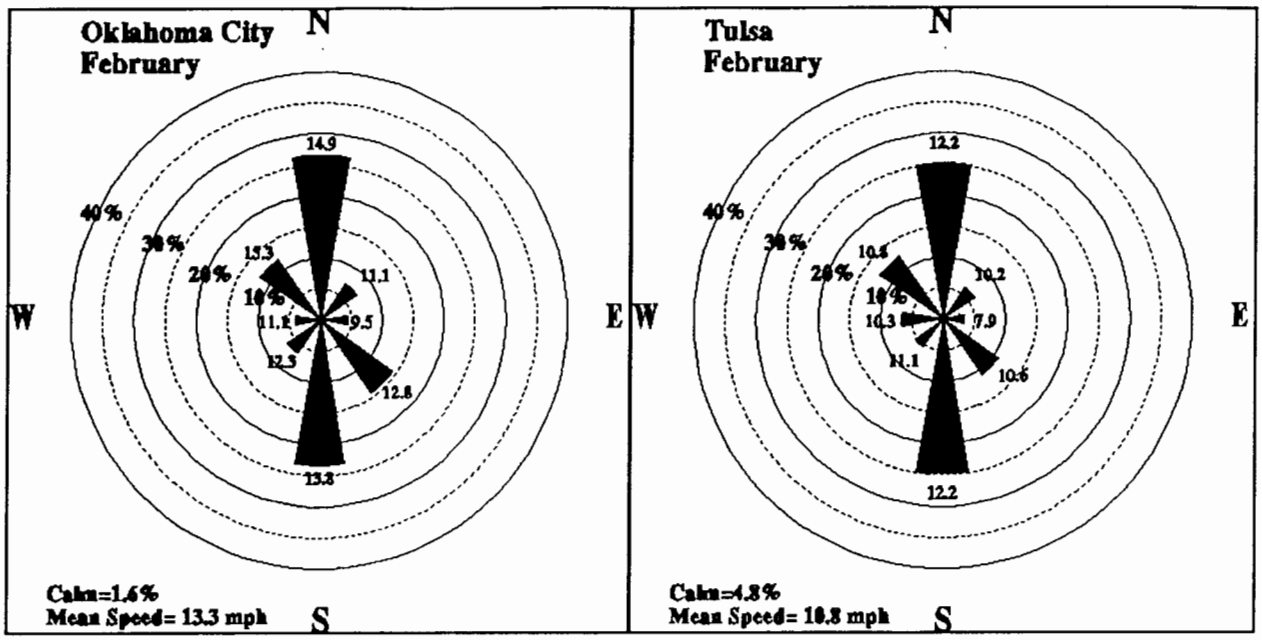
DECEMBER 1993 DEVIATION FROM NORMAL TEMPERATURES
(Degrees F)



DECEMBER 1993 HEATING DEGREE DAYS



DECEMBER 1993 DEVIATION FROM NORMAL HEATING DEGREE DAYS



February Wind Roses for Oklahoma City and Tulsa. Percents represent the frequency of winds from each direction. The numbers at the ends of the bars indicate the average wind speed (miles per hour) from that direction.

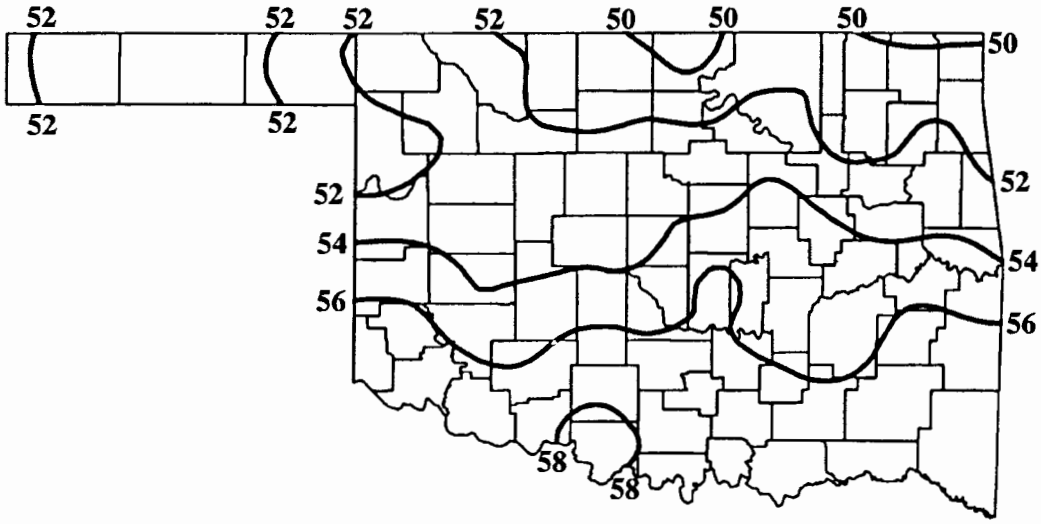
FEBRUARY 1994 SUNRISE AND SUNSET

OKLAHOMA CITY

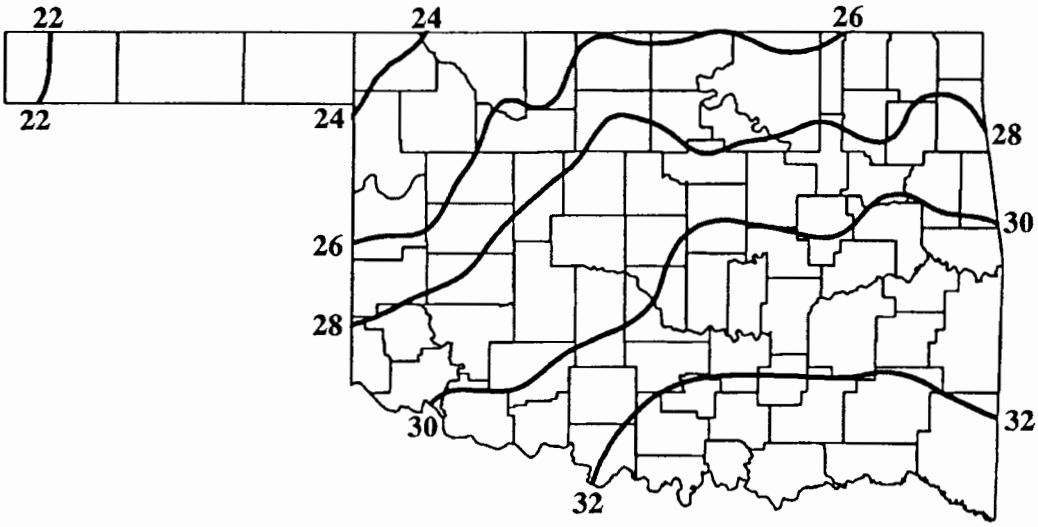
DATE	SUNRISE	SUNSET	DAYLIGHT
94 2 1	7:30AM	5:58PM CST	10 hrs 28 mins
94 2 2	7:29AM	5:59PM CST	10 hrs 29 mins
94 2 3	7:28AM	6: 0PM CST	10 hrs 31 mins
94 2 4	7:28AM	6: 1PM CST	10 hrs 33 mins
94 2 5	7:27AM	6: 2PM CST	10 hrs 35 mins
94 2 6	7:26AM	6: 3PM CST	10 hrs 36 mins
94 2 7	7:25AM	6: 4PM CST	10 hrs 38 mins
94 2 8	7:24AM	6: 5PM CST	10 hrs 40 mins
94 2 9	7:24AM	6: 6PM CST	10 hrs 42 mins
94 210	7:23AM	6: 7PM CST	10 hrs 44 mins
94 211	7:22AM	6: 8PM CST	10 hrs 46 mins
94 212	7:21AM	6: 9PM CST	10 hrs 48 mins
94 213	7:20AM	6:10PM CST	10 hrs 50 mins
94 214	7:19AM	6:11PM CST	10 hrs 52 mins
94 215	7:18AM	6:12PM CST	10 hrs 54 mins
94 216	7:17AM	6:13PM CST	10 hrs 56 mins
94 217	7:16AM	6:13PM CST	10 hrs 58 mins
94 218	7:15AM	6:14PM CST	11 hrs 0 mins
94 219	7:14AM	6:15PM CST	11 hrs 2 mins
94 220	7:13AM	6:16PM CST	11 hrs 4 mins
94 221	7:11AM	6:17PM CST	11 hrs 6 mins
94 222	7:10AM	6:18PM CST	11 hrs 8 mins
94 223	7: 9AM	6:19PM CST	11 hrs 10 mins
94 224	7: 8AM	6:20PM CST	11 hrs 12 mins
94 225	7: 7AM	6:21PM CST	11 hrs 14 mins
94 226	7: 5AM	6:22PM CST	11 hrs 16 mins
94 227	7: 4AM	6:23PM CST	11 hrs 19 mins
94 228	7: 3AM	6:24PM CST	11 hrs 21 mins

TULSA

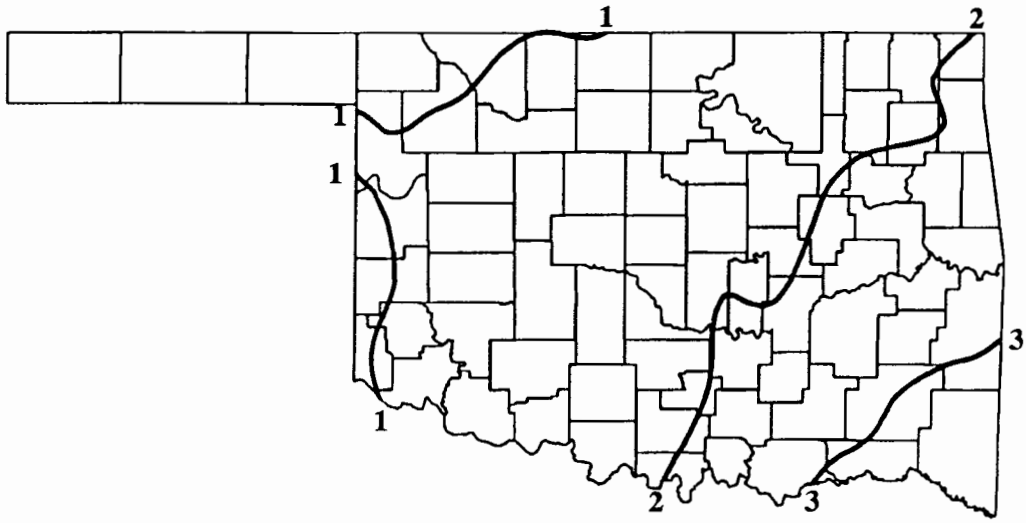
DATE	SUNRISE	SUNSET	DAYLIGHT
94 2 1	7:25AM	5:49PM CST	10 hrs 25 mins
94 2 2	7:24AM	5:50PM CST	10 hrs 27 mins
94 2 3	7:23AM	5:51PM CST	10 hrs 28 mins
94 2 4	7:22AM	5:52PM CST	10 hrs 30 mins
94 2 5	7:22AM	5:54PM CST	10 hrs 32 mins
94 2 6	7:21AM	5:55PM CST	10 hrs 34 mins
94 2 7	7:20AM	5:56PM CST	10 hrs 36 mins
94 2 8	7:19AM	5:57PM CST	10 hrs 38 mins
94 2 9	7:18AM	5:58PM CST	10 hrs 40 mins
94 210	7:17AM	5:59PM CST	10 hrs 42 mins
94 211	7:16AM	6: 0PM CST	10 hrs 43 mins
94 212	7:15AM	6: 1PM CST	10 hrs 45 mins
94 213	7:14AM	6: 2PM CST	10 hrs 47 mins
94 214	7:13AM	6: 3PM CST	10 hrs 50 mins
94 215	7:12AM	6: 4PM CST	10 hrs 52 mins
94 216	7:11AM	6: 5PM CST	10 hrs 54 mins
94 217	7:10AM	6: 6PM CST	10 hrs 56 mins
94 218	7: 9AM	6: 7PM CST	10 hrs 58 mins
94 219	7: 8AM	6: 8PM CST	11 hrs 0 mins
94 220	7: 7AM	6: 9PM CST	11 hrs 2 mins
94 221	7: 5AM	6:10PM CST	11 hrs 4 mins
94 222	7: 4AM	6:11PM CST	11 hrs 6 mins
94 223	7: 3AM	6:12PM CST	11 hrs 8 mins
94 224	7: 2AM	6:13PM CST	11 hrs 11 mins
94 225	7: 1AM	6:13PM CST	11 hrs 13 mins
94 226	6:59AM	6:14PM CST	11 hrs 15 mins
94 227	6:58AM	6:15PM CST	11 hrs 17 mins
94 228	6:57AM	6:16PM CST	11 hrs 19 mins



February Normal Daily Maximum Temperatures (°F)



February Normal Daily Minimum Temperatures (°F)



February Normal Monthly Precipitation (inches)

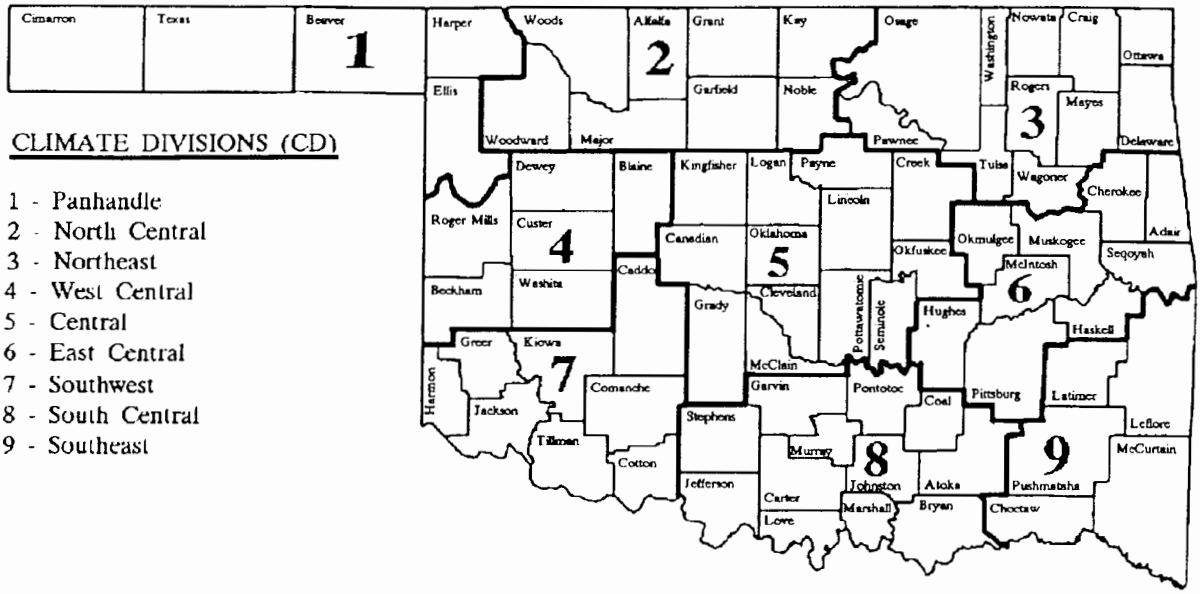
<u>90-DAY NATIONAL WEATHER SERVICE OUTLOOK</u>

(JANUARY 1994 - MARCH 1994)

Precipitation - Near Normal Statewide

Temperature - Below Normal Statewide

OKLAHOMA



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 the average temperature for the day exceeds 65 degrees. Daily values are summed to arrive at a monthly total. 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 the average temperature for the day is less than 65 degrees. Daily values are summed to give a monthly total. 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 that 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.

OKLAHOMA CITY CLIMATE CALENDAR

The data on this calendar are for Oklahoma City. Normal values are calculated for the period 1961-1990. Extremes are found for the period of record (1891-present).

February 1994

Normal 1		Actual	Normal 2		Actual	Normal 3		Actual	Normal 4		Actual	Normal 5		Actual	Normal 6		Actual	Normal 7		Actual
48.4	max		45.2	max		47.1	max		49.6	max		47.5	max		45.0	max		47.3	max	
27.5	min		26.1	min		26.6	min		28.5	min		28.3	min		26.3	min		24.9	min	
.04	ppt		.03	ppt		.06	ppt		.07	ppt		.09	ppt		.02	ppt		.05	ppt	
27	hdd		29	hdd		28	hdd		26	hdd		27	hdd		29	hdd		29	hdd	
0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd	
Highest Max	90-1911		Highest Max	76-1924		Highest Max	78-1962		Highest Max	77-1962		Highest Max	77-1942		Highest Max	73-1904		Highest Max	76-1937	
Lowest Max	14-1918		Lowest Max	10-1905		Lowest Max	7-1905		Lowest Max	15-1989		Lowest Max	16-1982		Lowest Max	16-1905		Lowest Max	6-1933	
Lowest Min	-2-1951		Lowest Min	-4-1895		Lowest Min	0-1989		Lowest Min	-1-1895		Lowest Min	3-1989		Lowest Min	3-1895		Lowest Min	-8-1895	
Highest Min	59-1986		Highest Min	58-1986		Highest Min	58-1986		Highest Min	58-1927		Highest Min	57-1938		Highest Min	54-1931		Highest Min	50-1894	
Greatest ppt	.71-1990		Greatest ppt	.88-1943		Greatest ppt	1.13-1960		Greatest ppt	1.32-1964		Greatest ppt	1.05-1987		Greatest ppt	1.38-1892		Greatest ppt	.84-1980	

Normal 8		Actual	Normal 9		Actual	Normal 10		Actual	Normal 11		Actual	Normal 12		Actual	Normal 13		Actual	Normal 14		Actual
48.8	max		50.8	max		53.1	max		49.4	max		52.2	max		53.5	max		52.4	max	
28.1	min		27.8	min		27.1	min		28.1	min		28.9	min		30.3	min		31.9	min	
.06	ppt		.04	ppt		.03	ppt		.06	ppt		.08	ppt		.04	ppt		.10	ppt	
27	hdd		26	hdd		25	hdd		26	hdd		25	hdd		23	hdd		23	hdd	
0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd	
Highest Max	73-1943		Highest Max	84-1932		Highest Max	79-1922		Highest Max	82-1962		Highest Max	84-1962		Highest Max	82-1962		Highest Max	81-1954	
Lowest Max	12-1929		Lowest Max	16-1899		Lowest Max	16-1933		Lowest Max	15-1899		Lowest Max	2-1905		Lowest Max	21-1905		Lowest Max	18-1951	
Lowest Min	-5-1933		Lowest Min	-3-1979		Lowest Min	4-1929		Lowest Min	-12-1899		Lowest Min	-17-1899		Lowest Min	-11-1905		Lowest Min	1-1936	
Highest Min	53-1966		Highest Min	51-1932		Highest Min	52-1952		Highest Min	57-1938		Highest Min	57-1962		Highest Min	54-1976		Highest Min	55-1954	
Greatest ppt	.62-1966		Greatest ppt	2.10-1898		Greatest ppt	.50-1953		Greatest ppt	1.12-1977		Greatest ppt	2.21-1978		Greatest ppt	.76-1908		Greatest ppt	.89-1938	

Normal 15		Actual	Normal 16		Actual	Normal 17		Actual	Normal 18		Actual	Normal 19		Actual	Normal 20		Actual	Normal 21		Actual
50.4	max		51.3	max		53.8	max		54.6	max		53.9	max		54.7	max		51.3	max	
30.5	min		29.8	min		30.0	min		32.4	min		32.0	min		31.7	min		30.6	min	
.06	ppt		.02	ppt		.04	ppt		.04	ppt		.05	ppt		.08	ppt		.10	ppt	
25	hdd		24	hdd		23	hdd		22	hdd		22	hdd		22	hdd		24	hdd	
0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd	
Highest Max	81-1954		Highest Max	81-1927		Highest Max	79-1991		Highest Max	78-1986		Highest Max	83-1986		Highest Max	84-1981		Highest Max	79-1935	
Lowest Max	17-1909		Lowest Max	15-1903		Lowest Max	17-1936		Lowest Max	24-1936		Lowest Max	21-1929		Lowest Max	25-1918		Lowest Max	25-1911	
Lowest Min	7-1909		Lowest Min	4-1903		Lowest Min	5-1900		Lowest Min	-1-1978		Lowest Min	7-1903		Lowest Min	9-1918		Lowest Min	9-1939	
Highest Min	53-1976		Highest Min	63-1911		Highest Min	50-1926		Highest Min	53-1971		Highest Min	49-1906		Highest Min	55-1894		Highest Min	58-1922	
Greatest ppt	.93-1938		Greatest ppt	2.15-1940		Greatest ppt	.88-1961		Greatest ppt	.88-1946		Greatest ppt	.68-1954		Greatest ppt	1.31-1985		Greatest ppt	1.63-1971	

Normal 22		Actual	Normal 23		Actual	Normal 24		Actual	Normal 25		Actual	Normal 26		Actual	Normal 27		Actual	Normal 28		Actual
54.0	max		54.4	max		53.9	max		57.8	max		58.6	max		58.3	max		56.9	max	
31.6	min		32.6	min		32.0	min		33.9	min		34.4	min		34.4	min		34.3	min	
.07	ppt		.03	ppt		.05	ppt		.02	ppt		.03	ppt		.08	ppt		.07	ppt	
22	hdd		22	hdd		22	hdd		19	hdd		19	hdd		19	hdd		19	hdd	
0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd		0	cdd	
Highest Max	83-1982		Highest Max	88-1918		Highest Max	87-1918		Highest Max	84-1917		Highest Max	78-1986		Highest Max	83-1918		Highest Max	90-1904	
Lowest Max	24-1968		Lowest Max	21-1914		Lowest Max	19-1960		Lowest Max	27-1960		Lowest Max	21-1934		Lowest Max	25-1962		Lowest Max	19-1922	
Lowest Min	11-1963		Lowest Min	7-1910		Lowest Min	7-1965		Lowest Min	10-1960		Lowest Min	10-1891		Lowest Min	12-1962		Lowest Min	7-1962	
Highest Min	55-1985		Highest Min	52-1956		Highest Min	58-1930		Highest Min	56-1944		Highest Min	59-1981		Highest Min	56-1981		Highest Min	52-1904	
Greatest ppt	1.15-1985		Greatest ppt	.81-1985		Greatest ppt	.94-1952		Greatest ppt	.74-1936		Greatest ppt	1.34-1903		Greatest ppt	1.32-1966		Greatest ppt	.98-1990	

FEBRUARY AVERAGES

TEMPERATURE	:	41.0°F
PRECIPITATION	:	1.51"
HEATING DEGREE DAYS	:	674
COOLING DEGREE DAYS	:	0

TULSA CLIMATE CALENDAR

The data on this calendar are for Tulsa. Normal values are calculated for the period 1948-1992. Temperature extremes are for the period 1905-1992; precipitation extremes are for the period 1948-1992.

February 1994

Day	Normal	Actual	Highest Max	Lowest Max	Lowest Min	Highest Min	Greatest ppt
1	max 48.0 min 27.0 ppt .09 hdd 27 cdd 0		90-1911	15-1951	-7-1979	53-1986	.63-1968
2	max 46.0 min 26.0 ppt .02 hdd 29 cdd 0		76-1924	25-1985	0-1917	56-1986	.16-1975
3	max 48.0 min 27.0 ppt .03 hdd 27 cdd 0		79-1934	13-1989	1-1989	59-1986	.53-1960
4	max 50.0 min 29.0 ppt .12 hdd 25 cdd 0		77-1962	15-1989	2-1989	51-1991	2.27-1971
5	max 48.0 min 29.0 ppt .09 hdd 26 cdd 0		75-1942	19-1982	4-1979	47-1974	1.36-1964
6	max 46.0 min 27.0 ppt .04 hdd 28 cdd 0		73-1925	21-1989	4-1985	48-1955	.36-1979
7	max 47.0 min 26.0 ppt .07 hdd 28 cdd 0		78-1909	27-1985	0-1933	49-1970	.76-1980
8	max 49.0 min 27.0 ppt .03 hdd 27 cdd 0		76-1990	16-1971	-5-1933	58-1966	.28-1965
9	max 49.0 min 28.0 ppt .06 hdd 26 cdd 0		82-1932	23-1982	-3-1979	50-1957	.78-1959
10	max 53.0 min 27.0 ppt .03 hdd 25 cdd 0		81-1922	23-1986	-3-1929	48-1993	.59-1953
11	max 50.0 min 28.0 ppt .08 hdd 26 cdd 0		77-1951	21-1981	-3-1981	49-1984	1.18-1977
12	max 50.0 min 29.0 ppt .09 hdd 25 cdd 0		86-1962	28-1948	0-1905	47-1952	1.78-1978
13	max 53.0 min 29.0 ppt .03 hdd 24 cdd 0		84-1962	31-1951	-15-1905	49-1976	.52-1951
14	max 52.0 min 32.0 ppt .06 hdd 23 cdd 0		80-1910	23-1951	-10-1905	59-1954	1.01-1951
15	max 51.0 min 31.0 ppt .08 hdd 24 cdd 0		80-1976	29-1958	3-1905	60-1976	.92-1974
16	max 51.0 min 30.0 ppt .03 hdd 25 cdd 0		78-1976	16-1979	3-1920	50-1976	.75-1975
17	max 54.0 min 29.0 ppt .05 hdd 23 cdd 0		79-1907	19-1993	9-1993	49-1992	1.37-1961
18	max 55.0 min 32.0 ppt .06 hdd 21 cdd 0		78-1930	26-1978	2-1936	60-1971	1.35-1974
19	max 55.0 min 31.0 ppt .07 hdd 21 cdd 0		77-1981	31-1959	9-1978	48-1951	1.31-1955
20	max 55.0 min 32.0 ppt .09 hdd 22 cdd 0		83-1981	33-1978	9-1918	50-1983	1.05-1951
21	max 52.0 min 31.0 ppt .10 hdd 23 cdd 0		80-1982	28-1968	7-1939	58-1985	1.08-1971
22	max 54.0 min 31.0 ppt .14 hdd 22 cdd 0		80-1982	28-1968	11-1963	57-1985	2.99-1985
23	max 55.0 min 33.0 ppt .07 hdd 21 cdd 0		81-1982	32-1975	10-1910	51-1992	1.40-1985
24	max 53.0 min 32.0 ppt .07 hdd 22 cdd 0		85-1918	24-1965	8-1965	45-1977	.86-1952
25	max 57.0 min 33.0 ppt .02 hdd 20 cdd 0		82-1917	31-1960	10-1965	52-1951	.98-1993
26	max 58.0 min 34.0 ppt .07 hdd 19 cdd 0		79-1986	30-1960	11-1960	58-1981	1.25-1984
27	max 58.0 min 35.0 ppt .16 hdd 19 cdd 0		81-1976	28-1962	13-1962	59-1981	1.12-1950
28	max 56.0 min 35.0 ppt .08 hdd 19 cdd 0		82-1972	22-1962	6-1962	53-1975	2.00-1987

FEBRUARY AVERAGES

TEMPERATURE	:	40.9°F
PRECIPITATION	:	1.93"
HEATING DEGREE DAYS	:	667
COOLING DEGREE DAYS	:	0