

OKLAHOMA MONTHLY SUMMARY OCTOBER 1990

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OCTOBER 1990 OKLAHOMA SUMMARY

The pleasant autumn conditions prevailing at the end of September continued throughout much of October. Afternoon highs in the 70's were commonplace, but nighttime lows in the 30's made many mornings a bit nippy. The cool nights helped to make October's statewide average temperature of 60.6 degrees the 22nd coolest on record. The average temperature for the year, thus far, is 64.8 degrees, the 18th warmest since 1892.

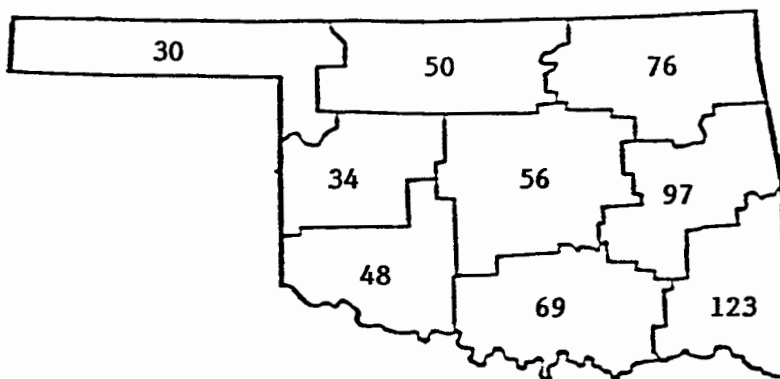
Warm afternoons were accompanied by an abundance of sunshine. Most of the precipitation recorded in October occurred in the first third of the month, with another round of rainfall near the 20th. No precipitation was recorded in the state after October 22. The statewide average of 1.93 inches, .83 inch below normal, was the 35th driest October on record. Most of the rainfall was concentrated in the south and east while the dry conditions of late-spring and summer continued in the northwest. Despite the relatively dry conditions during the month, the state-averaged annual total precipitation to date of 38.89 inches (13.47 inches above normal) ranks as Oklahoma's eighth greatest January through October rainfall.

Temperatures at several stations across western Oklahoma reached into the low 90's from October 5-7. A cold front moved slowly through the state from the 7th to 9th, bringing with it 24-hour rainfall totals in excess of 3 inches, including 3.94 inches at Antlers on the eighth. The combination of cloud cover and rainfall dropped high temperatures into the 40's and 50's in western Oklahoma, the same region that had recorded 90's just a few days earlier.

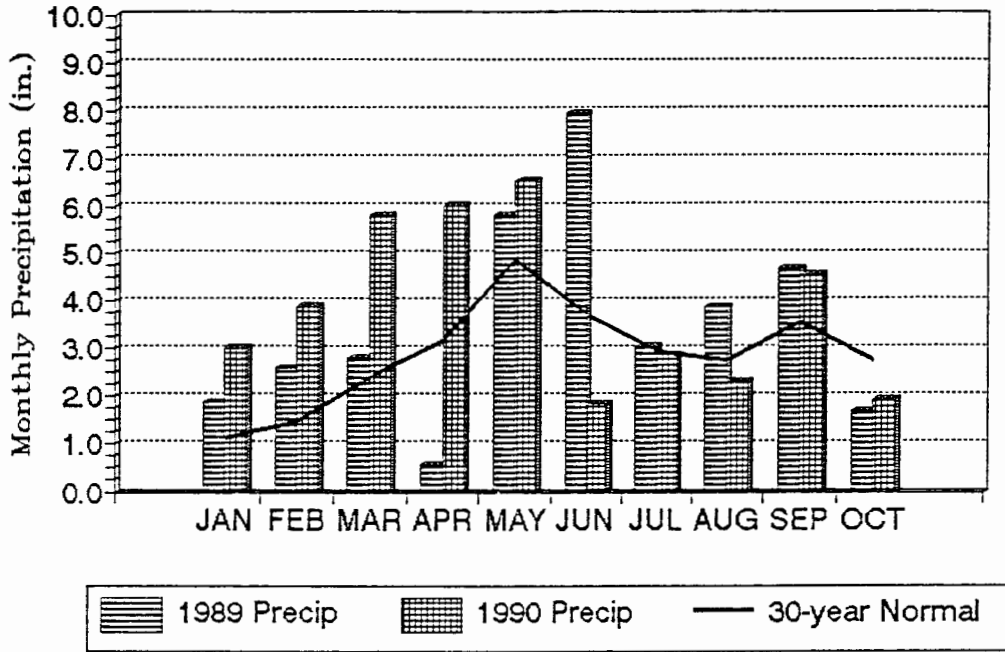
As the front passed and the skies cleared, nighttime temperatures dropped below freezing in many parts of western Oklahoma on October 10. However, the clear skies also brought a return of warm, sunny conditions statewide. Another cold front passed through the state on the 21st, once again dropping high temperatures into the 50's and bringing a second, much lighter, round of precipitation. Nighttime temperatures dipped to as low as 24 degrees (at Freedom) in western regions on the 22nd, the first hard-freeze of the season. A rapid warm-up led to pleasant conditions, which prevailed for the rest of the month with highs mostly in the 70's and 80's and no further rainfall.

-Mark A. Shafer

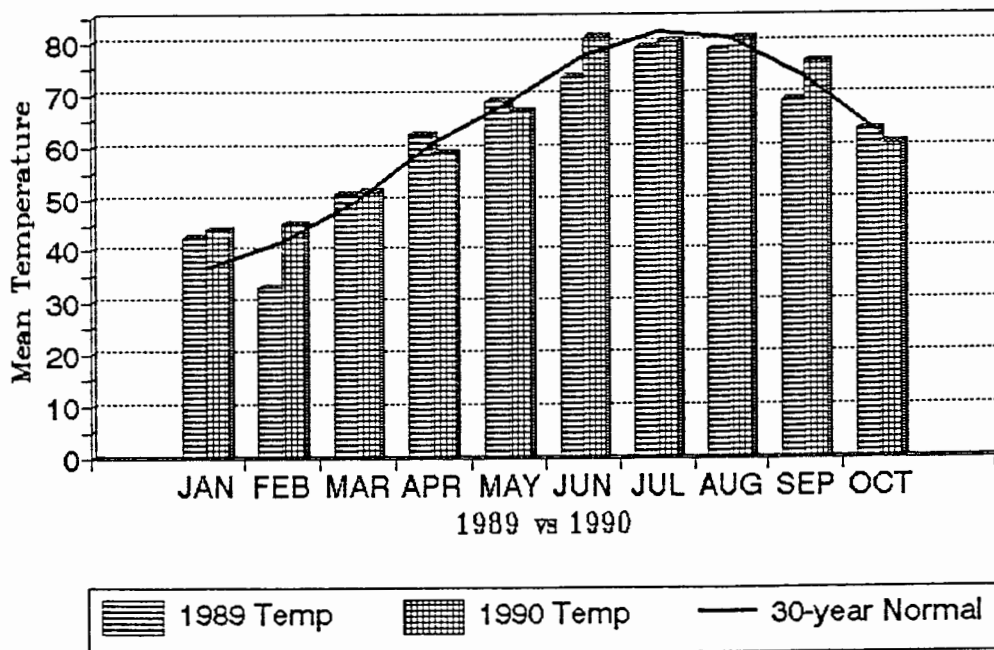
October 1990 percent of normal precipitation.



Comparison of Monthly Precipitation Statewide Average for Oklahoma



Comparison of Monthly Temperature Statewide Average for Oklahoma



THE FIRST 10 MONTHS OF 1990

As is typical of Oklahoma weather, 1990 so far has been a year of extreme variability. Most months featured near normal temperatures, while others were among the warmest on record. Precipitation totals for each month have ranged from the second wettest on record (March) to the tenth driest (June). The northern part of the state suffered from a prolonged dry spell, even as southern Oklahoma cleaned up from record floods. Spring thunderstorms brought with them a return of strong tornadoes to Oklahoma. 32 tornadoes have been recorded so far in 1990, the most since 1986. Much of the total occurred during two outbreaks (March 13 and May 14-15). Shattuck suffered heavy damage from a tornado on April 25, and one person died when Stillwater was struck three weeks later (May 15).

The year began warm and wet. January was both its fifth warmest and fifth wettest since 1892. Temperatures gradually retreated towards their long-term averages, but the wet pattern continued throughout the remainder of the winter and spring. State-averaged precipitation during the period from January to April was the highest ever recorded, but much of the precipitation was concentrated in the southern half of the state. Many lakes were brought to record levels, and continued rainfall resulted in widespread flooding. Waters in Lake Texoma topped the spillway for the first time since 1957 (which had the wettest January-May period on record). Heavy rains continued in the South through May, but the North began a prolonged dry spell which would not be broken until mid-September.

A drastic shift from the Spring pattern occurred in June. A hot, dry pattern became entrenched over Oklahoma from early June to mid-July. This made June the sixth warmest and tenth driest on record. A month-long respite from the heat occurred beginning mid-July, but the heat wave returned with a vengeance in late August and September. This second heat wave forced cancellation or rescheduling of classes at many schools. Several cold fronts pushed through the state late in the month, bringing an end to the heat wave and a return to pleasant autumn conditions. Warm, sunny afternoons and cool nights were commonplace in October, with the first frost or light freeze occurring on October 10 in many parts of the state.

The year to date stands as the eighth wettest on record, with a statewide average of 38.89 inches, 13.47 inches above normal. There is a large variability in this figure, with regions of southeast Oklahoma running up to 25 inches above normal, while north central Oklahoma averages over 2.5 inches below normal. The mild winter and the summer heat waves combined to push Oklahoma temperatures to the 18th warmest since 1892.

Mark A. Shafer

TABLE OF 1989/1990 COMPARISONS

Station	October Temperature (F)		October Precipitatin (in.)	
	1989	1990	1989	1990
Arnett	61.2	56.0	1.51	.86
Enid	63.7	60.8	3.35	1.65
Mutual	61.0	57.8	.93	.77
Tulsa	64.8	61.8	2.80	2.15
Elk City	63.5	60.4	1.71	1.08
Oklahoma City	63.8	61.3	3.28	1.27
McAlester	66.1	61.9	.89	3.42
Altus Irr Sta	66.6	62.7	.80	.87
Durant	65.0	61.7	1.54	3.01
Ada	64.2	60.6	1.92	1.49
Antlers	65.6	62.4	.99	8.45

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (F)	Kenton	1	24	21
	Freedom	2	24	22
Maximum temperature (F)	Buffalo	1	95	17
Maximum 24-hour precipitation	Smithville	9	6.60"	8

OCTOBER 1990 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID CD	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
		MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	MIN TEMP	MIN DAY									
ARNETT	332 1	56.0	31	-3.8	87.	7	30.	22	291.0	84.0	13.0	-33.0	.862	31	-.95	.55	9
BEAVER	593 1	56.5	31	-2.7	89.	17	28.	21	285.5	66.5	21.5	-18.5	.520	31	-.70	.41	8
BOISE CITY 2 E	908 1	57.4	31	.0	87.	7	27.	21	241.5	-7.5	7.0	-7.0	.251	31	-.58	.13	2
BUFFALO	1243 1	62.6	31	.5	95.	17	28.	10	136.0	-19.0	61.5	-3.5	.300	31	-1.65	.15	3
FARGO	3070 1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.630	31	-1.04	.54	9
GAGE FAA APT	3407 1	59.6	31	-.1	90.	6	32.	18	203.0	1.0	35.0	-3.0	.570	31	-1.02	.28	8
GATE	3489 1	58.3	31	*****	91.	17	31.	10	241.5	*****	34.0	*****	.630	31	*****	.26	8
GOODWELL RES	ST3628 1	56.0	31	-2.4	89.	6	27.	19	291.5	60.5	11.5	-15.5	.433	31	-.52	.29	8
GUYMON	3835 1	57.7	30	*****	89.	16	28.	18	238.5	*****	20.5	*****	.262	31	*****	.23	8
HOOKER	4298 1	56.5	31	-2.3	88.	17	28.	21	277.0	51.0	13.5	-20.5	.180	31	-.93	.07	3
KENTON	4766 1	55.1	31	-2.4	87.	6	24.	21	309.5	59.5	3.0	-15.0	.171	31	-.73	.13	9
LAVERNE	5045 1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.320	31	-1.19	.17	9
RANGE	7412 1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.250	31	*****	.20	8
REGNIER	7534 1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.200	31	-.56	.15	9
TURPIN 4 SSE	9017 1	56.0	30	*****	89.	17	29.	22	287.5	*****	18.5	*****	.271	30	*****	.14	8

OCTOBER 1990 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID CD	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
		MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	MIN TEMP	MIN DAY									
ALVA	193 2	60.7	31	*****	91.	6	32.	10	184.0	*****	50.5	*****	.740	31	*****	.55	9
VANCE AFB	302 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.181	31	*****	.52	8
BILLINGS	755 2	59.4	31	*****	88.	5	29.	22	205.5	*****	32.5	*****	1.612	31	-.86	.95	9
BLACKWELL 2E	818 2	60.1	31	*****	86.	6	33.	23	195.5	*****	43.5	*****	1.031	31	*****	.51	9
BRAMAN	1075 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.350	31	*****	.98	3
CHEROKEE	1724 2	61.8	31	-.4	90.	7	34.	28	163.5	12.5	64.0	.0	.780	31	-1.04	.28	8
ENID	2912 2	61.2	31	-1.7	88.	5	35.	10	174.0	40.0	55.5	-13.5	1.650	31	-1.16	1.14	9
FT SUPPLY DAM	3304 2	57.3	31	-4.0	91.	7	31.	10	261.5	97.5	24.0	-25.0	.480	31	-.95	.41	9
FREEDOM	3358 2	59.8	31	*****	92.	6	24.	22	202.5	*****	40.5	*****	.640	31	*****	.49	9
GREAT SALT PLNS	3740 2	60.1	31	*****	93.	7	33.	10	201.0	*****	48.0	*****	.900	22	*****	.45	9
HARDY	3909 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.662	31	*****	1.00	2
HELENA 1 SSE	4019 2	57.5	31	*****	88.	7	32.	29	255.0	*****	23.5	*****	.980	31	-1.14	.53	9
JEFFERSON	4573 2	59.7	31	-2.7	90.	6	25.	22	209.5	65.5	44.0	-19.0	.730	31	-1.82	.41	8
LAMONT	5013 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.620	31	*****	1.02	3
MEDFORD	5768 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.950	31	*****	.52	2
MORRISON	6065 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.160	31	*****	.76	3
MUTUAL	6139 2	57.8	31	-3.1	90.	7	31.	23	247.5	72.5	24.0	-24.0	.770	31	-.75	.43	9
NEWKIRK	6278 2	61.4	31	-.5	86.	6	34.	22	168.5	11.5	55.5	-5.5	.991	31	-1.78	.50	3
ORIENTA	6751 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.830	31	*****	.63	9
PERRY	7012 2	61.5	31	-2.0	87.	6	30.	21	157.5	32.5	49.5	-29.5	1.830	31	-.80	.96	3
PONCA CITY FAA	7201 2	61.7	30	.8	88.	6	32.	22	162.0	-17.0	61.5	10.5	1.250	31	-1.35	.64	8
RED ROCK 1 NNE	7505 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.970	31	-.50	.99	3
RENFROW	7556 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.390	31	-.93	.81	3
WAYNOKA	9404 2	59.7	31	-2.5	90.	6	28.	22	201.5	43.5	38.0	-33.0	.840	31	-.87	.62	9
WOODWARD	9760 2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.480	31	*****	.42	9

OCTOBER 1990 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		TOT	NUM	FROM	MAX	24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM						
BARNSDALL	535	3	58.7	31	*****	85.	6	27.	22	231.0	*****	37.0	*****	1.650	31	-1.42	.66	9			
BARTLESVILLE 2W	548	3	59.5	31	-2.1	88.	6	27.	22	215.5	55.5	44.0	-10.0	1.470	31	-1.74	.75	3			
BIXBY	782	3	57.8	31	-3.9	85.	7	29.	23	253.5	81.5	29.5	-40.5	2.070	31	-1.09	1.06	4			
BURBANK	1256	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.681	31	*****	.92	8			
CHELSEA 4 S	1717	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.310	31	*****	2.43	4			
CLAREMORE	1828	3	58.1	31	-3.3	85.	7	29.	22	249.0	69.0	34.0	-34.0	2.582	31	-.84	1.44	4			
CLEVELAND 5 WSW	1902	3	61.1	30	*****	87.	5	29.	22	174.5	*****	57.0	*****	2.120	30	*****	1.25	3			
FORAKER	3250	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.370	31	-1.73	.75	3			
HOMINY	4289	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.941	31	-1.01	.78	3			
HULAH DAM	4393	3	56.2	22	*****	84.	17	26.	23	208.5	*****	15.5	*****	2.321	29	*****	1.47	3			
JAY TOWER	4567	3	60.3	22	*****	86.	15	32.	25	141.0	*****	37.0	*****	2.900	22	*****	1.15	3			
KANSAS 1 ESE	4672	3	59.0	31	*****	81.	5	34.	23	219.5	*****	33.0	*****	5.192	31	*****	3.30	9			
KEYSTONE DAM	4812	3	58.3	30	*****	86.	7	31.	22	233.0	*****	33.5	*****	1.701	30	*****	.74	9			
LENAPAH	5118	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.320	31	*****	.62	9			
MANNFORD 6 NW	5522	3	60.0	30	*****	86.	6	27.	22	195.0	*****	43.5	*****	1.580	30	*****	.45	9			
MARAMEC	5540	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.583	31	-.58	1.92	3			
MIAMI	5855	3	58.6	31	-2.8	84.	17	30.	11	225.0	51.0	27.5	-35.5	1.190	30	*****	1.15	9			
NOWATA	6485	3	59.1	31	-2.7	85.	6	30.	22	214.5	57.5	33.0	-25.0	2.010	31	-1.29	.95	6			
ONETA 1 WNW	6713	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.120	31	*****	2.18	4			
PAWHUSKA	6935	3	59.5	31	-2.0	86.	6	28.	22	212.5	51.5	41.5	-11.5	2.791	31	-.14	2.01	3			
PAWNEE	6940	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.782	31	-.94	1.20	3			
PRYOR 6 N	7309	3	57.2	31	-4.2	85.	7	27.	23	260.5	93.5	17.5	-37.5	3.281	31	-.49	1.83	4			
RALSTON	7390	3	61.3	31	*****	88.	6	27.	22	175.5	*****	61.5	*****	1.330	31	-1.36	.87	3			
RAMONA 4 N	7394	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.510	31	*****	.73	8			
SKIATOOK	8258	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.860	31	-1.33	.92	4			
SPAVINAW	8380	3	61.7	31	*****	84.	6	35.	22	168.0	*****	64.5	*****	2.663	31	-.99	1.12	4			
TULSA WSO APT	8992	3	61.8	31	-.8	87.	6	35.	22	169.0	23.0	70.0	-2.0	2.154	31	-1.26	1.46	3			
UPPER SPAVINAW	9101	3	61.2	31	*****	89.	4	33.	23	196.0	*****	79.5	*****	3.152	31	*****	1.50	9			
VINITA 2 N	9203	3	58.5	31	-2.7	84.	6	27.	22	238.5	62.5	36.5	-21.5	3.630	31	-.09	2.78	4			
WAGONER	9247	3	60.7	31	-2.4	85.	6	32.	22	188.5	47.5	56.0	-26.0	2.000	31	-1.10	1.08	9			
WANN	9298	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.842	29	*****	.77	9			
WYNONA	9792	3	60.5	31	*****	87.	6	30.	22	198.0	*****	58.0	*****	1.995	31	*****	1.46	3			

OCTOBER 1990 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		TOT	NUM	FROM	MAX	24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	DEG	FROM	DEG	FROM						
CANYON DAM	1445	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.150	28	*****	.65	9			
CHEYENNE	1738	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.360	31	*****	.36	9			
CLINTON	1909	4	61.5	31	-.7	89.	5	28.	22	155.5	10.5	46.5	-11.5	.811	31	-1.89	.46	3			
COLONY	2039	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.710	31	*****	.58	3			
CORDELL	2125	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.501	31	-2.08	.35	3			
ELK CITY 1 E	2849	4	60.4	31	*****	85.	6	34.	22	177.0	*****	34.0	*****	1.081	31	-.91	.68	9			
ERICK 4 E	2944	4	59.9	31	-1.9	88.	6	30.	22	185.0	40.0	26.0	-19.0	1.090	31	-1.11	.61	9			
GEARY	3497	4	60.8	29	*****	86.	5	30.	22	162.5	*****	39.5	*****	.600	31	-1.83	.40	3			
HAMMON 1 NNE	3871	4	56.4	31	-4.9	86.	7	27.	22	283.5	113.5	16.0	-40.0	.900	31	-1.00	.60	9			
LEDEY	5090	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.880	31	-.88	.48	9			
MACKIE 4 NNW	5463	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.450	31	*****	.32	9			
MORAVIA 2 NNE	6035	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.940	31	-1.48	.57	3			
OKEENE	6629	4	60.9	31	-2.5	89.	6	31.	22	176.0	54.0	48.5	-24.5	.850	31	-1.27	.60	9			
RETROP	7565	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.720	31	*****	.40	3			
REYDON	7579	4	59.8	31	*****	87.	6	29.	22	195.5	*****	33.0	*****	.690	31	-.99	.30	8			
SAYRE	7952	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.990	31	-1.14	.67	9			
SWEETWATER 2 E	8652	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.701	31	*****	.31	8			
TALOGA	8708	4	58.6	31	-2.4	87.	5	25.	22	217.0	49.0	19.5	-24.5	1.010	31	-.85	.82	9			
THOMAS	8815	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.380	31	*****	.38	3			
VICI	9172	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.871	31	*****	.48	9			
WATONGA	9364	4	61.1	31	*****	86.	16	29.	22	169.5	*****	47.5	*****	.501	31	-1.72	.24	3			
WEATHERFORD	9422	4	59.5	31	-3.2	87.	6	33.	23	197.0	63.0	27.0	-36.0	.520	31	-2.21	.28	3			

OCTOBER 1990 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	DEV						HEAT		DEV		COOL		DEV		TOT	NUM	FROM	MAX	24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM	PPT	OBS	NORM							
AMBER	200	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.250	31	*****	.44	21			
ARCADIA	288	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.260	31	*****	.82	3			
TINKER AFB	325	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.993	30	*****	.77	8			
BLANCHARD 2 SSW	830	5	62.0	23	*****	88.	6	36.	22	126.0	*****	58.0	*****	*****	2.400	31	*****	.94	9			
BRISTOW	1144	5	60.5	31	-2.8	86.	6	29.	22	187.0	51.0	49.0	-36.0	*****	2.754	31	.21	1.17	4			
CHANDLER	1684	5	61.2	31	-2.1	86.	5	33.	22	172.0	43.0	54.5	-22.5	*****	1.890	31	-.54	.80	3			
CHICKASHA EX ST1750	5	5	62.4	31	-.8	90.	7	30.	22	153.0	25.0	73.0	1.0	*****	1.900	31	-.81	.82	21			
COX CITY 1 E	2196	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.920	30	*****	1.10	9			
CUSCENT	2242	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.550	31	*****	.31	3			
CUSHING	2318	5	59.0	28	*****	84.	17	35.	23	199.0	*****	30.0	*****	*****	2.170	29	*****	1.40	3			
EL RENO 1 N	2818	5	61.4	31	-1.0	86.	6	28.	22	169.0	29.0	57.0	-2.0	*****	.680	31	-2.20	.34	9			
GUTHRIE	3821	5	62.5	31	-.5	90.	6	30.	22	151.5	12.5	75.5	-1.5	*****	.830	31	-1.83	.37	9			
HENNESSEY 2 SE	4055	5	61.1	30	-1.7	87.	6	30.	22	164.5	23.5	47.5	-25.5	*****	.970	30	*****	.73	3			
INGALLS	4489	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.881	31	*****	1.38	5			
KINGFISHER 2 SE4861	5	5	60.8	31	-2.1	87.	5	28.	22	176.0	47.0	46.5	-17.5	*****	.810	31	-1.63	.47	3			
KONAWA	4915	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.141	31	-1.45	1.20	9			
MARSHALL	5589	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.980	31	-1.62	.63	3			
MEEKER 4 W	5779	5	60.7	31	-1.8	84.	6	30.	22	186.0	36.0	52.0	-21.0	*****	1.570	31	-1.21	.70	8			
MULHALL	6110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.910	31	*****	1.50	2			
NORMAN 3 S	6386	5	61.5	31	*****	88.	6	31.	22	163.0	*****	55.5	*****	*****	2.231	31	-.40	1.03	3			
OILTON 2 SE	6616	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.380	31	*****	.98	3			
OKEMAH	6638	5	61.8	31	-1.7	86.	6	35.	22	160.5	35.5	62.5	-16.5	*****	2.222	31	-.65	1.09	9			
OKLAHOMA CITY WS6661	5	5	61.3	31	-1.0	88.	6	35.	22	169.0	24.0	55.0	-6.0	*****	1.273	31	-1.44	.78	3			
PERKINS	7003	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.900	31	-1.25	1.02	3			
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	.830	31	*****	.33	3			
FRAGUE	7264	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.361	31	-1.51	.70	9			
PURCELL 5 SW	7327	5	60.3	31	-2.6	87.	6	27.	22	192.0	57.0	46.5	-23.5	*****	1.502	31	-1.68	.60	9			
SEMINOLE	8042	5	62.0	30	-2.5	86.	7	33.	22	154.5	54.5	66.0	-22.0	*****	2.331	30	*****	1.23	9			
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.650	31	-1.55	.48	21			
STELLA	8479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.740	31	*****	.55	21			
STILLWATER 2 W	8501	5	60.0	31	-1.9	88.	6	27.	22	202.5	44.5	48.0	-14.0	*****	1.241	31	-1.66	.82	3			
STROUD 1 N	8563	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.431	31	*****	.68	9			
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.060	31	*****	.80	9			
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.540	29	*****	1.27	9			
UNION CITY 1 SE9086	5	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.210	31	-1.88	.49	9			
WELTY 1 SSE	9479	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	1.620	31	*****	.60	9			
WEWOKA	9575	5	*****	0	*****	****	0	****	0	*****	*****	*****	*****	*****	2.380	31	-.60	1.15	21			

OCTOBER 1990 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID CD	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	DEV			
		MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY TEMP	DAY						NUM OBS	FROM NORM	MAX 24-HR	DAY
ASHLAND	364 6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.880	31	****	2.97	9
BEGGS	631 6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.650	31	****	.81	1
BOYNTON	1027 6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.740	31	****	1.80	9
CALVIN	1391 6	****	0	****	****	0	****	0	*****	*****	*****	*****	.672	31	-3.04	.52	8
CHECOTAH	1711 6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.843	31	-.60	1.87	9
CLAYTON 11 WNW	1858 6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.690	31	****	1.40	9
DEWAR 2 NE	2485 6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.960	31	-1.30	1.34	9
DUSTIN	2690 6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.100	31	****	1.89	9
EUFULA	2993 6	62.7	31	****	86.	5	36.	22	148.0	*****	77.5	*****	2.713	31	-.70	2.22	9
HANNA	3884 6	60.7	31	****	86.	6	31.	23	190.0	*****	56.5	*****	2.122	31	-1.15	1.69	9
HARTSHORNE	3946 6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.442	31	****	2.47	9
HASKELL	3956 6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.521	31	-.55	1.30	9
HOLDENVILLE	4235 6	60.8	29	****	88.	6	32.	22	174.0	*****	51.0	*****	2.951	29	****	2.19	9
LAKE EUFAULA	4975 6	61.2	31	****	87.	6	37.	23	184.0	*****	65.0	*****	4.322	31	****	3.23	9
LYONS 2 N	5437 6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.872	31	.79	3.10	8
MARBLE CITY	5546 6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.682	31	****	3.65	9
MALESTER FAA	5664 6	61.9	31	-1.3	87.	6	32.	22	183.0	50.0	85.5	7.5	3.423	31	-.48	2.36	8
MCCURTAIN 1 SE	5693 6	62.0	31	****	86.	6	30.	23	170.0	*****	77.5	*****	4.050	31	.74	1.75	9
MUSKOGEE	6130 6	59.9	30	-3.0	85.	6	32.	22	195.5	55.5	41.5	-33.5	2.220	30	****	.93	8
OKMULGEE W W	6670 6	57.5	30	-5.6	87.	7	28.	22	251.0	113.0	26.0	-53.0	2.182	29	****	.89	9
OKTAHA 2 NE	6678 6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.020	31	****	1.34	9
QUINTON	7372 6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.262	31	.65	2.99	9
SALLISAW 2 NE	7862 6	59.9	31	-3.5	86.	7	29.	26	205.0	79.0	46.0	-30.0	3.891	31	.03	1.85	9
SCIPIO	7979 6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.740	31	****	2.43	9
SCRAPER	7993 6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.840	31	****	1.25	9
SHORT	8170 6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.270	31	****	2.20	9
STILLWELL 1 NE	8506 6	59.4	31	****	82.	5	30.	25	210.5	*****	37.0	*****	4.271	31	.99	3.35	9
TAHLEQUAH	8677 6	59.4	30	-2.5	85.	6	30.	23	209.0	40.0	40.5	-32.5	3.000	30	****	1.02	9
WEBBERS FALLS	9445 6	59.0	31	-3.0	86.	7	31.	22	227.0	75.0	42.5	-16.5	3.361	31	-.39	2.62	9
WESTVILLE	9523 6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.500	31	****	1.75	9
WEUMKA 3 NE	9571 6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.862	31	-.27	1.36	9

OCTOBER 1990 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID CD	DEV							HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	DEV			
		MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DAY TEMP	DAY						NUM OBS	FROM NORM	MAX 24-HR	DAY
ALTUS IRR STA	179 7	62.7	31	-1.9	91.	6	29.	22	134.0	27.0	63.5	-31.5	.870	31	-1.68	.63	3
ALTUS DAM	184 7	60.9	31	****	90.	7	27.	23	182.5	*****	54.5	*****	.610	31	-2.09	.55	3
ANADARKO	224 7	61.9	24	****	88.	6	25.	22	120.5	*****	46.0	*****	.360	25	****	.36	2
APACHE	260 7	****	0	****	****	0	****	0	*****	*****	*****	*****	1.240	31	****	.78	9
ALTUS AFB	447 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.911	30	****	.62	3
CARNEGIE 2 ENE	1504 7	60.6	29	****	90.	6	25.	22	163.0	*****	34.0	*****	.611	29	****	.42	3
CHATTANOOGA	1706 7	63.4	31	-.9	93.	6	29.	22	130.0	29.0	79.5	.5	1.300	31	-1.47	.90	9
DUNCAN 12 W	2668 7	****	0	****	****	0	****	0	*****	*****	*****	*****	2.880	31	****	1.85	9
FREDERICK	3353 7	61.4	31	-4.2	88.	6	34.	22	162.5	69.5	49.5	-62.5	1.470	31	-.99	1.09	8
GRANDFIELD 4 NW	3709 7	****	0	****	****	0	****	0	*****	*****	*****	*****	1.210	31	-1.63	.70	9
HOBART FAA APT	4204 7	62.0	31	-.4	89.	6	28.	22	158.0	16.0	63.5	2.5	.791	31	-1.73	.65	3
HOLLIS	4249 7	61.0	29	****	90.	6	29.	22	150.0	*****	34.0	*****	.720	30	****	.51	3
HOLLISTER	4250 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.880	31	****	.88	9
LAWTON	5063 7	60.8	31	-3.2	91.	6	31.	23	180.0	65.0	50.0	-34.0	1.100	31	-1.75	.68	8
FORT SILL	5068 7	61.6	31	****	90.	6	32.	22	158.5	*****	54.5	*****	1.230	31	-1.62	.69	8
LOOKEBA 2 ENE	5329 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.930	31	****	.55	3
MANGUM RES STA	5509 7	61.4	31	-2.4	89.	6	29.	22	151.0	33.0	39.5	-41.5	.660	31	-1.96	.48	3
RANDLETT 9 E	7403 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.320	31	****	.32	3
ROOSEVELT	7727 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.970	31	-1.51	.60	3
SEDAN	8016 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.720	31	****	.39	9
VINSON 3 WNW	9212 7	****	0	****	****	0	****	0	*****	*****	*****	*****	1.060	31	-1.21	.60	9
WALTERS	9278 7	63.2	31	-1.6	91.	6	30.	22	132.5	16.5	75.5	-34.5	3.212	31	.29	2.23	8
WICHITA MT WLR	9629 7	59.2	31	-3.5	87.	6	30.	22	208.0	69.0	29.0	-39.0	.990	31	-1.74	.55	3
WILLOW	9668 7	****	0	****	****	0	****	0	*****	*****	*****	*****	.950	31	****	.55	3

OCTOBER 1990 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

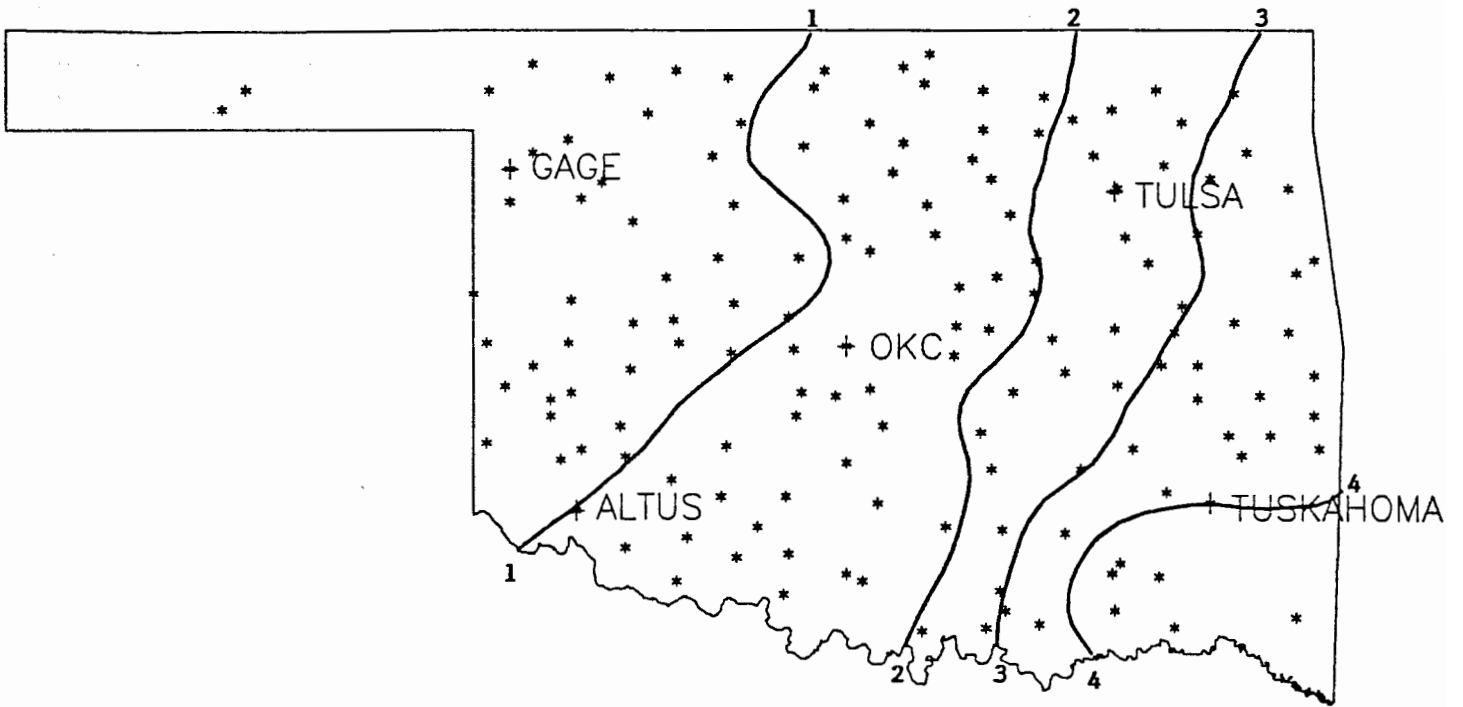
NAME	ID	CD	DEV					HEAT		DEV	COOL		DEV	DEV				
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR	DAY
ADA	17	8	60.4	31	-4.0	88.	6	31.	23	190.0	71.0	47.0	-53.0	1.490	31	-2.43	1.28	9
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.550	31	*****	1.55	9
ARDMORE	292	8	63.6	29	*****	90.	6	36.	22	123.0	*****	81.0	*****	2.170	29	*****	1.10	8
ATOKA DAM	394	8	62.2	31	*****	91.	7	36.	23	166.0	*****	78.5	*****	3.410	31	*****	1.72	9
BOKCHITO	917	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.000	31	*****	2.50	9
CANEY	1437	8	62.4	31	*****	90.	6	35.	22	163.5	*****	83.0	*****	4.030	31	*****	2.50	9
CENTRAHOMA	1648	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.000	31	*****	.65	19
CHICKASAW NRA	1745	8	60.1	31	*****	87.	7	29.	22	209.5	*****	56.5	*****	1.720	31	*****	1.05	9
COLEMAN	2011	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.490	31	*****	1.65	9
COMANCHE	2054	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.282	31	*****	.28	3
DAISY 4 ENE	2354	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.691	30	*****	1.01	9
DUNCAN	2660	8	61.3	31	-3.5	91.	7	32.	22	170.5	65.5	55.0	-44.0	1.580	31	-1.37	1.30	9
DURANT USDA	2678	8	61.7	31	*****	90.	7	33.	24	183.5	*****	80.0	*****	3.010	31	-.46	1.78	9
ELMORE CITY	2872	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.401	31	*****	.25	3
FARRIS 3 WNW	3083	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.200	31	*****	3.22	9
GRADY	3688	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.101	31	*****	.83	21
HEALDTON	4001	8	62.3	31	*****	90.	6	31.	22	159.5	*****	74.5	*****	1.050	31	-2.07	.48	21
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.691	31	*****	1.07	9
KEYCHUM RANCH	4780	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.910	31	*****	.80	8
KINGSTON	4865	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.680	31	-.96	1.43	8
LEHIGH	5108	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.081	31	*****	1.18	9
LINDSAY 2 W	5216	8	60.8	31	*****	87.	6	29.	22	183.0	*****	53.0	*****	1.513	31	-1.56	.95	9
LOCO 6 SE	5247	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.660	31	*****	.32	9
MADILL	5468	8	62.9	31	-2.4	91.	6	34.	23	147.0	54.0	80.5	-21.5	2.190	31	-1.38	1.10	8
MARIETTA	5563	8	64.5	31	-.9	92.	6	34.	22	119.5	27.5	103.5	-1.5	2.900	31	-.13	1.08	9
MARLOW 1 WSW	5581	8	62.5	31	*****	91.	6	26.	22	149.5	*****	73.0	*****	2.670	31	-.28	1.63	9
MCGEE CREEK DAM	5713	8	61.3	31	*****	90.	7	34.	23	186.0	*****	70.0	*****	6.280	31	*****	3.11	9
PAULS VALLEY	6926	8	61.8	31	-2.5	88.	6	29.	22	161.0	56.0	61.0	-22.0	2.190	31	-1.38	1.40	9
PONTOTOC	7214	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.140	31	-1.64	1.06	8
TISHOMINGO NWLR	8884	8	63.0	30	*****	91.	6	31.	23	151.5	*****	92.0	*****	2.850	31	-.78	1.38	9
TUSSY	9032	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.630	31	*****	1.32	9
WAURIKA	9395	8	64.8	31	-.7	93.	6	31.	22	104.0	10.0	97.5	-11.5	.010	31	-2.68	.01	21
WAURIKA DAM	9399	8	62.4	27	*****	92.	7	32.	23	133.5	*****	62.0	*****	1.320	29	*****	.82	9

OCTOBER 1990 SUMMARY FOR SOUTHEAST DIVISION (CD9)

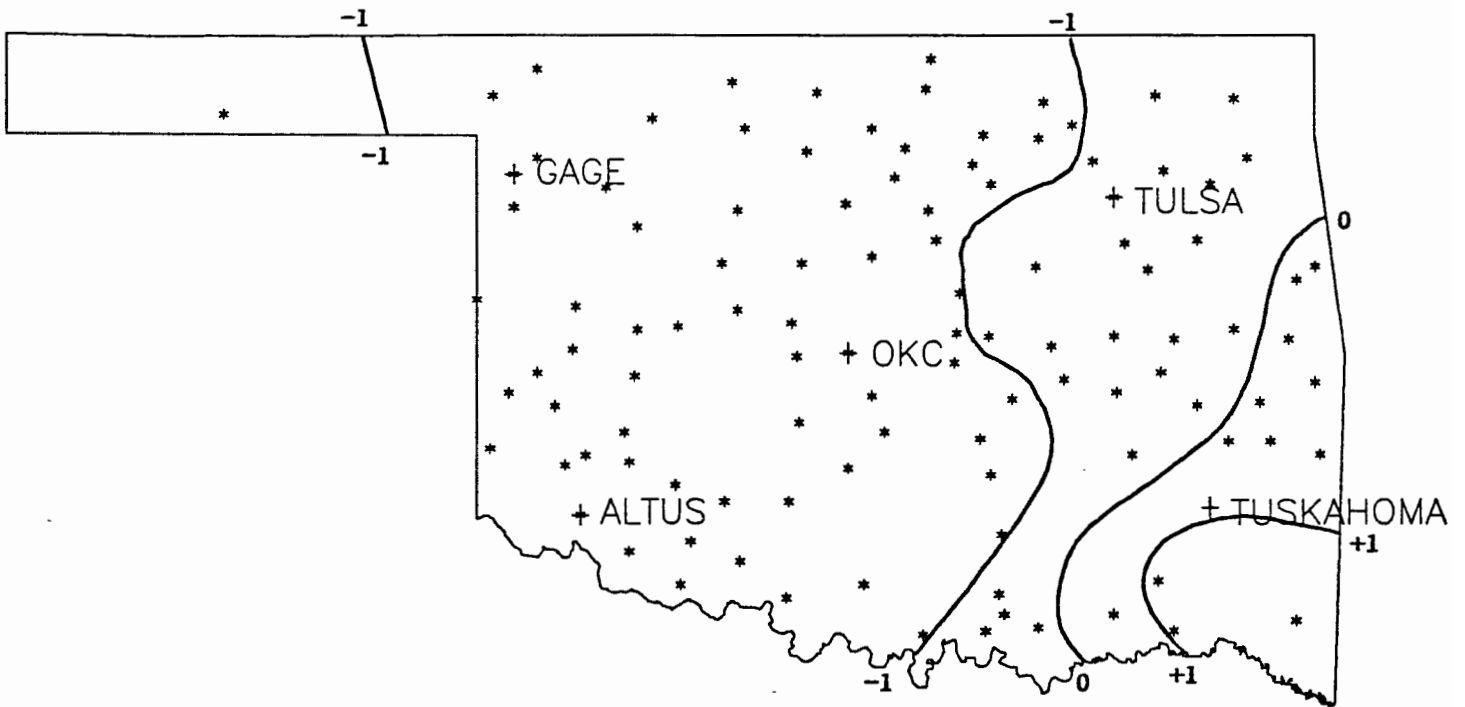
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			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	24-HR	DAY	
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR	DAY
ANTLERS	256	9	62.4	31	-1.1	89.	6	33.	23	160.0	36.0	80.0	2.0	8.450	31	4.54	3.94	8
BATTLEST 1 SSW	567	9	59.2	31	*****	83.	6	29.	23	228.5	*****	47.5	*****	4.611	31	*****	2.33	9
BEAR MT TWR	584	9	61.7	22	*****	90.	1	35.	23	117.5	*****	44.5	*****	4.850	23	*****	2.44	8
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.540	31	*****	1.17	9
BOSWELL 4 NNW	980	9	64.7	31	*****	91.	6	36.	24	121.0	*****	112.0	*****	4.431	31	.73	2.25	8
BROKEN BOW 1 N	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.610	31	2.78	3.51	8
BROKEN BOW DAM	1168	9	60.5	31	*****	87.	7	35.	24	195.0	*****	56.5	*****	4.340	31	*****	3.20	7
CARNASAW TWR	1499	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.010	31	.87	3.38	8
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.470	31	.89	2.13	8
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.370	31	.29	1.22	9
FLAGPOLE TWR	3169	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.970	31	*****	1.53	9
HEAVENER 1 SE	4008	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.960	31	.66	1.50	9
HEE MT TWR	4017	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.092	30	*****	2.56	8
HUGO	4384	9	62.7	31	-2.5	88.	6	35.	23	153.0	59.0	82.0	-19.0	3.730	31	-.21	2.10	8
IDABEL	4451	9	61.7	31	-2.4	89.	8	35.	24	189.0	74.0	86.0	-1.0	4.441	31	.60	2.18	8
JADIE TOWER	4560	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.620	31	*****	.38	22
POTEAU W W	7254	9	59.1	31	*****	86.	6	30.	25	222.5	*****	40.0	*****	4.150	31	*****	1.61	7
SMITHVILLE 1 W	8285	9	59.1	30	*****	86.	4	27.	22	225.0	*****	49.0	*****	9.950	30	*****	6.60	8
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.360	31	.05	1.57	9
TUSKAHOMA	9023	9	61.9	31	*****	86.	6	29.	23	174.0	*****	79.0	*****	3.621	31	*****	2.00	9
VALLIANT 3 W	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.521	31	3.90	3.60	8
WILBURTON 9 ENE	9634	9	60.5	31	-2.3	86.	6	29.	23	198.0	57.0	60.0	-13.0	3.050	31	-.50	1.40	8

OCTOBER 1990 CLIMATE DIVISION SUMMARY

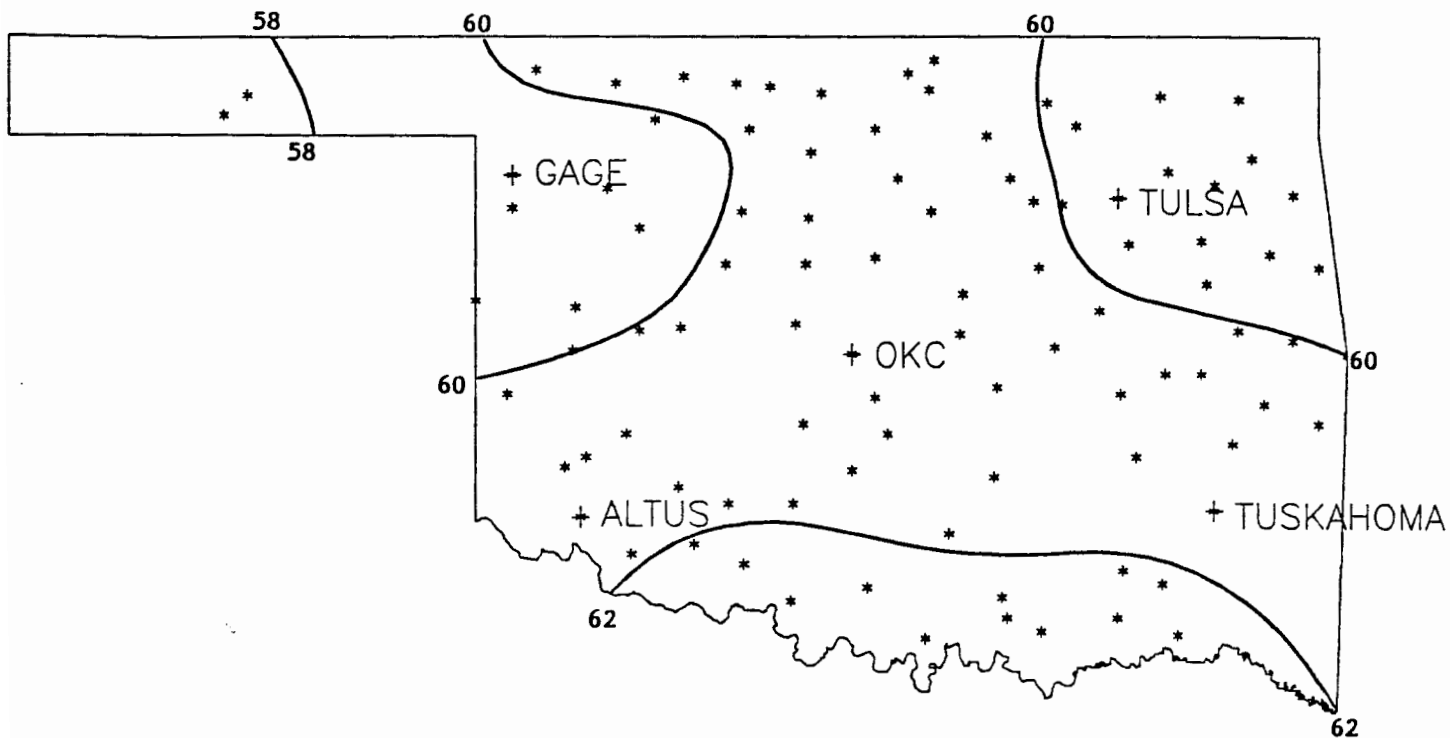
CLIMATE	DIV	MEAN	NUM	DEV					HEAT		DEV	COOL		DEV	DEV			
				TEMP	STA	FROM	MAX	MIN	DEGREE	FROM	DEGREE	FROM	TOT	NUM	FROM	MAX	24-HR	DAY
		TEMP	STA	NORM	TEMP	DAY	TEMP	DAY	DAYS	NORM	DAYS	NORM	PPT	STA	NORM	24-HR	DAY	
1		57.4	11	-1.7	95.0	17	24.0	21	254.8	37.4	21.7	-13.5	.40	14	-.90	.55	9	
2		60.0	15	-2.0	93.0	7	24.0	22	199.3	45.2	43.6	-18.0	1.12	24	-1.11	1.14	9	
3		59.6	19	-2.1	89.0	4	26.0	23	211.4	45.6	45.1	-17.3	2.34	25	-.87	3.30	9	
4		59.8	9	-2.4	89.0	6	25.0	22	195.1	49.0	33.1	-26.4	.74	21	-1.45	.82	9	
5		61.3	14	-1.7	90.0	6	27.0	22	171.5	35.4	56.3	-15.7	1.61	31	-1.20	1.50	2	
6		60.3	11	-2.6	88.0	6	28.0	22	197.5	58.5	54.1	-21.1	3.14	27	-.27	3.65	9	
7		61.7	10	-2.2	93.0	6	25.0	22	159.7	42.1	55.9	-26.6	1.17	20	-1.43	2.23	8	
8		62.1	15	-3.1	93.0	6	26.0	22	162.9	66.2	73.7	-30.0	2.29	30	-1.08	3.22	9	
9		61.2	10	-2.7	91.0	6	27.0	22	186.6	68.1	69.2	-15.6	4.43	19	.67	6.60	8	



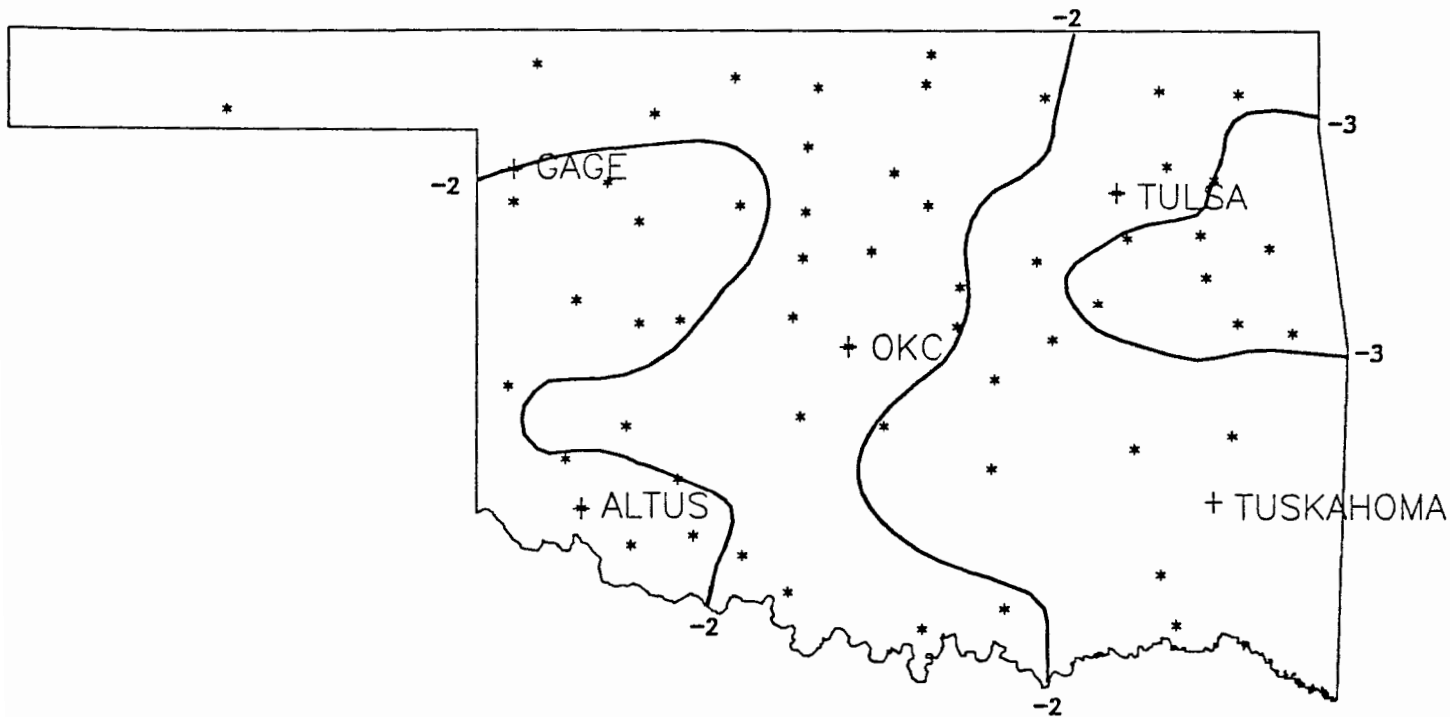
OCTOBER 1990 TOTAL PRECIPITATION
(Inches)



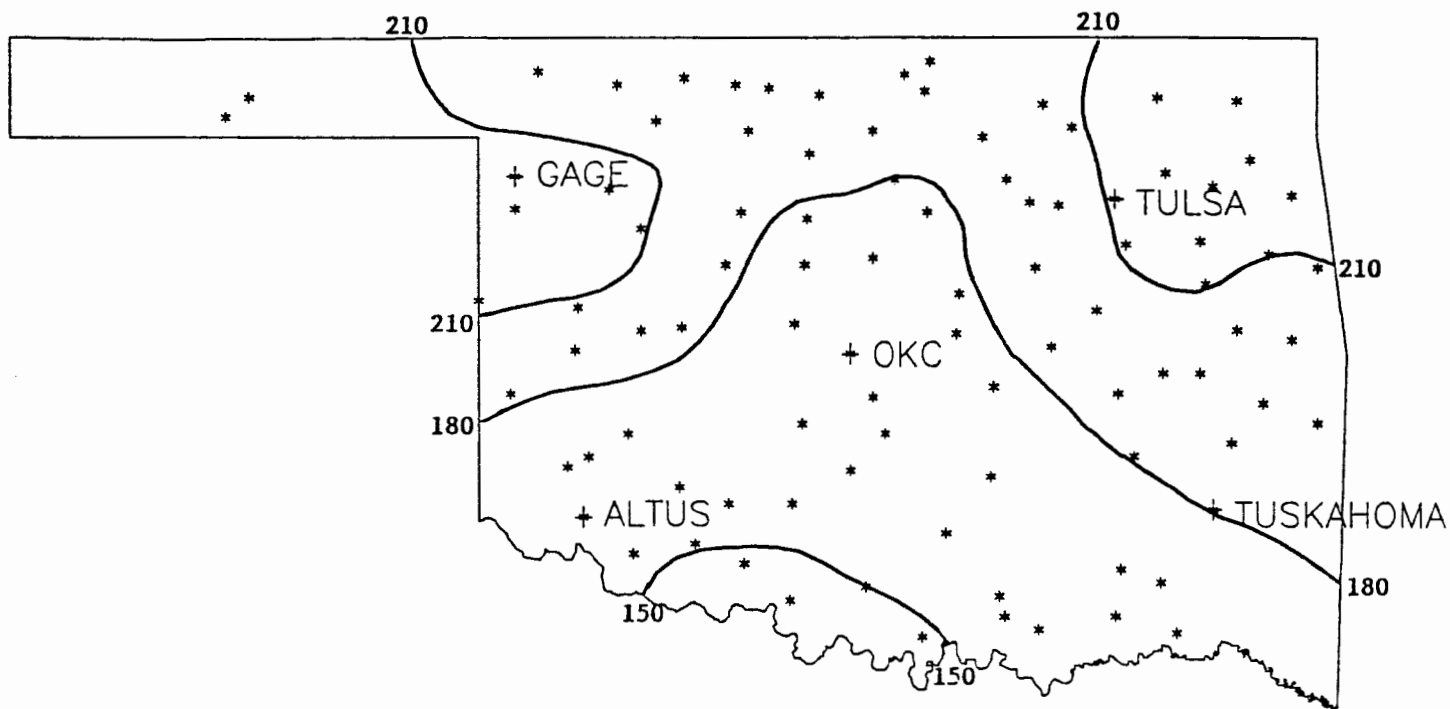
OCTOBER 1990 DEVIATION FROM NORMAL PRECIPITATION
(Inches)



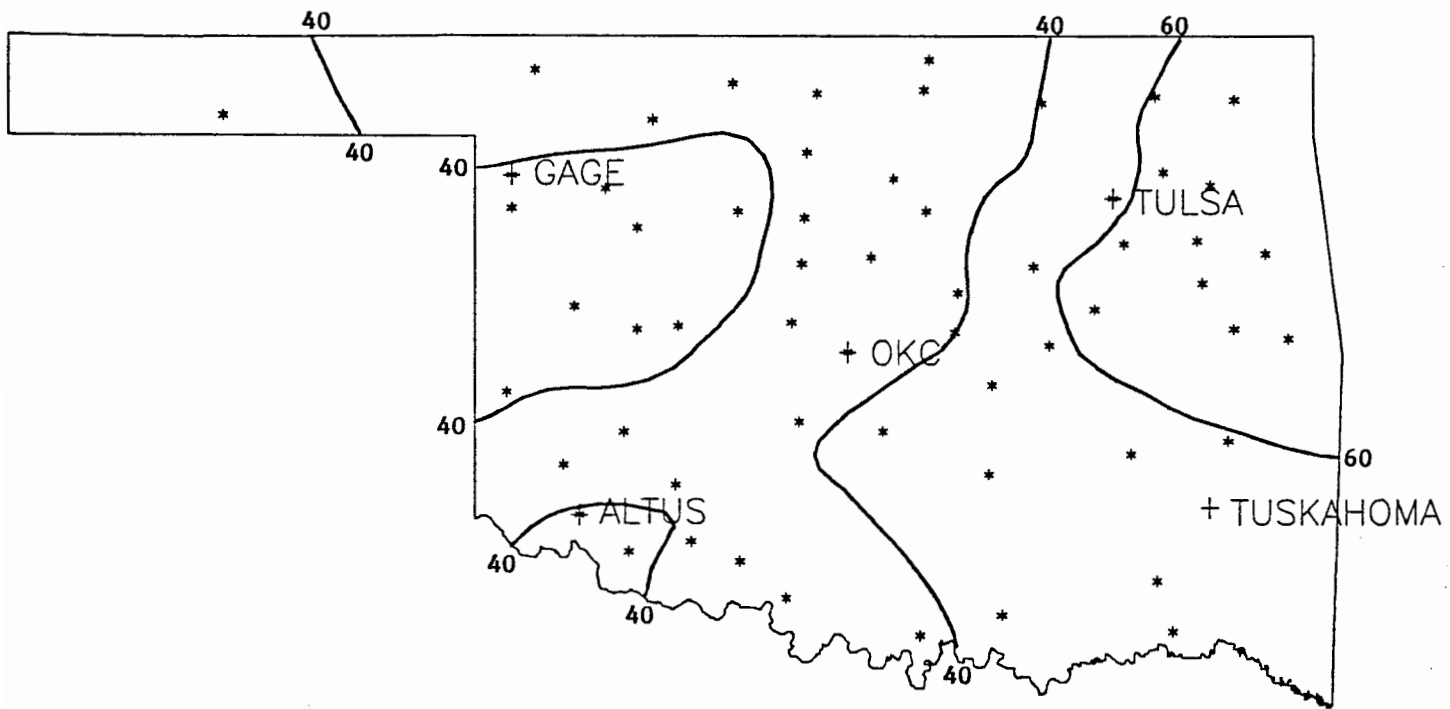
OCTOBER 1990 AVERAGE MONTHLY TEMPERATURES
(Degrees F)



OCTOBER 1990 DEVIATION FROM NORMAL TEMPERATURES
(Degrees F)

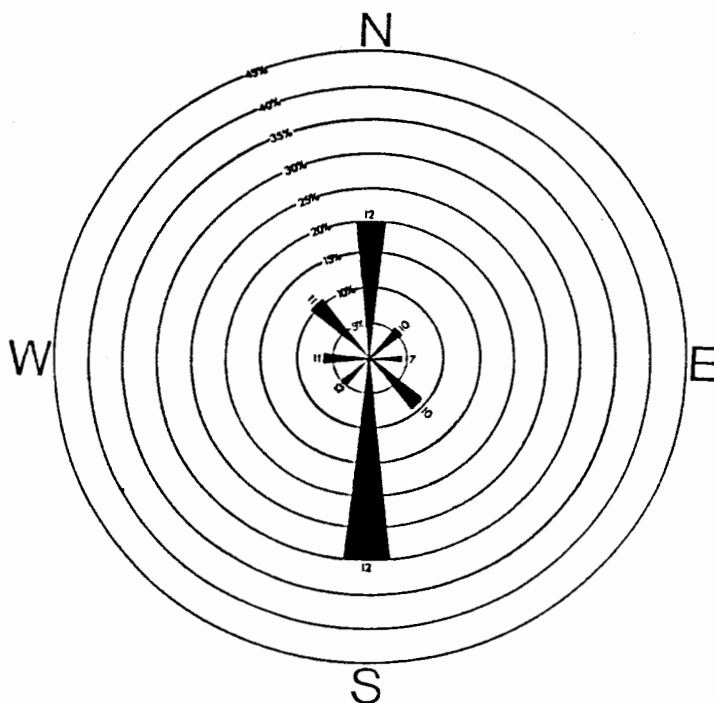
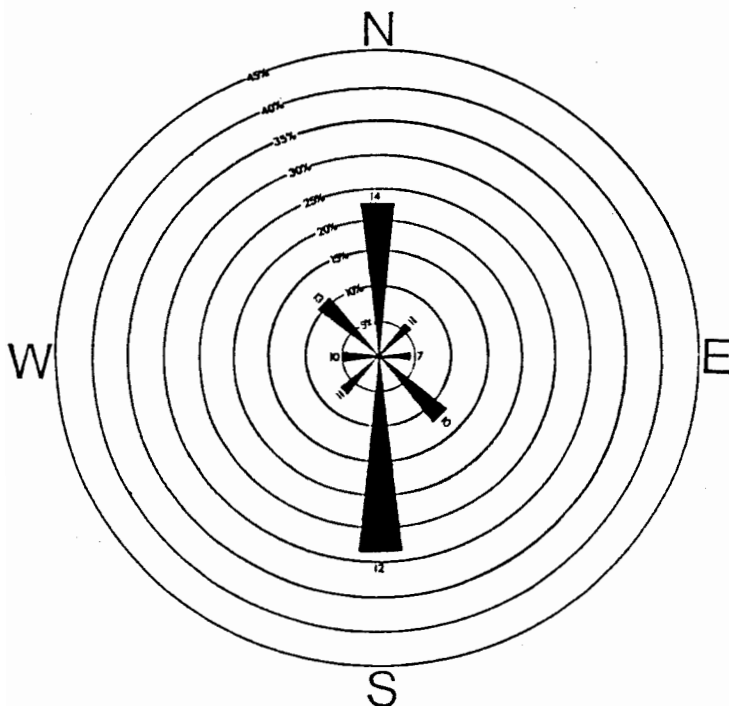


OCTOBER 1990 HEATING DEGREE DAYS



OCTOBER 1990 DEVIATION FROM NORMAL HEATING DEGREE DAYS

December 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 for winds coming from a direction. The numbers at the end of the bars indicate the average speed (miles per hour) of winds from that direction.



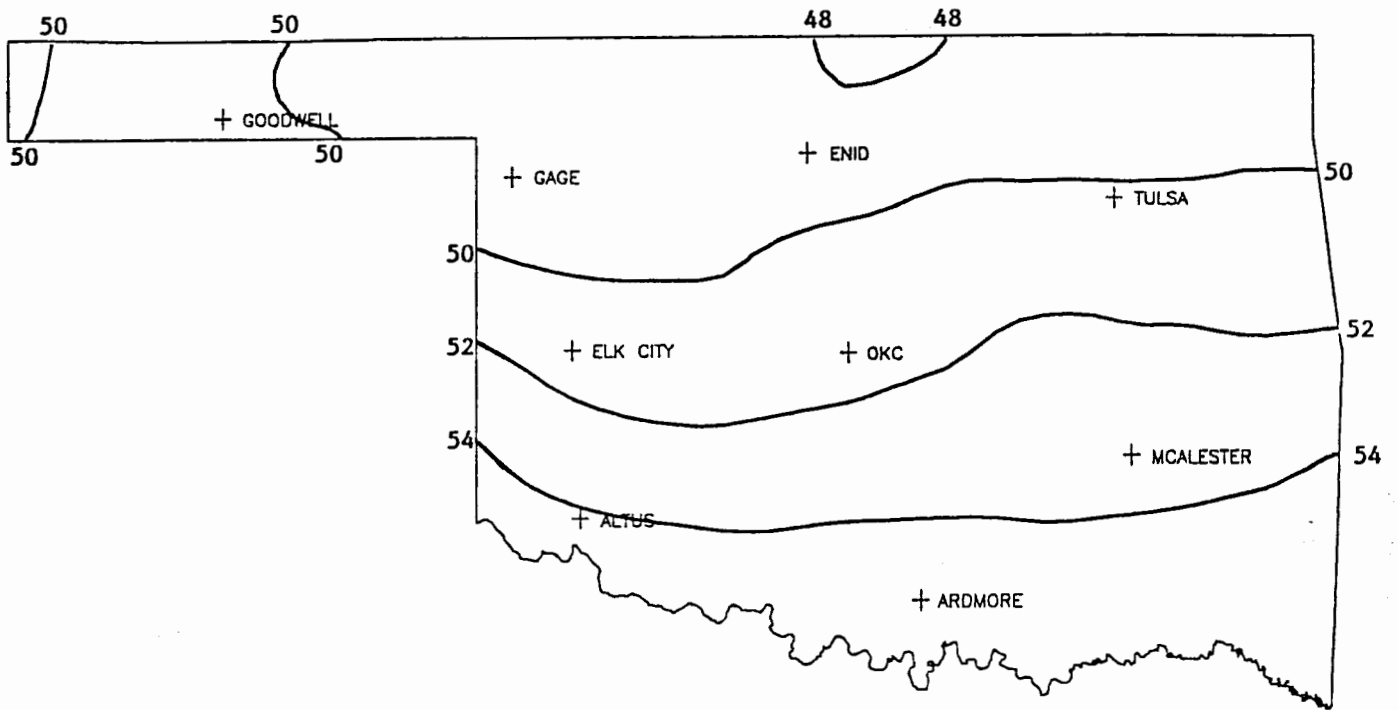
DECEMBER 1990 SUNRISE AND SUNSET

Oklahoma City

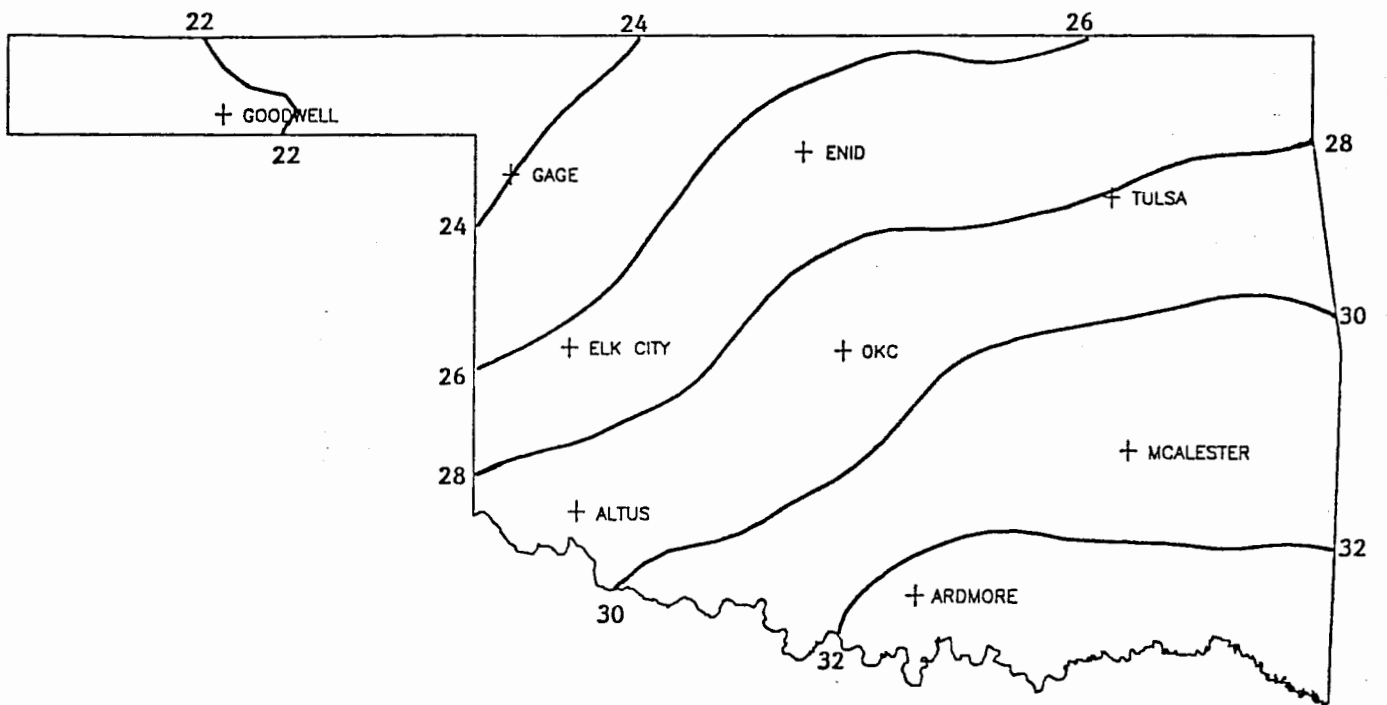
DATE	SUNRISE	SUNSET	DAYLIGHT
901201	7:19AM	5:21PM LT	10: 1
901202	7:20AM	5:21PM LT	10: 0
901203	7:21AM	5:21PM LT	9: 60
901204	7:22AM	5:20PM LT	9: 59
901205	7:23AM	5:20PM LT	9: 58
901206	7:23AM	5:20PM LT	9: 57
901207	7:24AM	5:20PM LT	9: 56
901208	7:25AM	5:20PM LT	9: 55
901209	7:26AM	5:21PM LT	9: 55
901210	7:27AM	5:21PM LT	9: 54
901211	7:27AM	5:21PM LT	9: 54
901212	7:28AM	5:21PM LT	9: 53
901213	7:29AM	5:21PM LT	9: 53
901214	7:29AM	5:21PM LT	9: 52
901215	7:30AM	5:22PM LT	9: 52
901216	7:31AM	5:22PM LT	9: 51
901217	7:31AM	5:22PM LT	9: 51
901218	7:32AM	5:23PM LT	9: 51
901219	7:32AM	5:23PM LT	9: 51
901220	7:33AM	5:23PM LT	9: 50
901221	7:33AM	5:24PM LT	9: 50
901222	7:34AM	5:24PM LT	9: 50
901223	7:34AM	5:25PM LT	9: 50
901224	7:35AM	5:25PM LT	9: 50
901225	7:35AM	5:26PM LT	9: 50
901226	7:36AM	5:26PM LT	9: 51
901227	7:36AM	5:27PM LT	9: 51
901228	7:36AM	5:27PM LT	9: 51
901229	7:37AM	5:28PM LT	9: 51
901230	7:37AM	5:29PM LT	9: 52
901231	7:37AM	5:29PM LT	9: 52

Tulsa

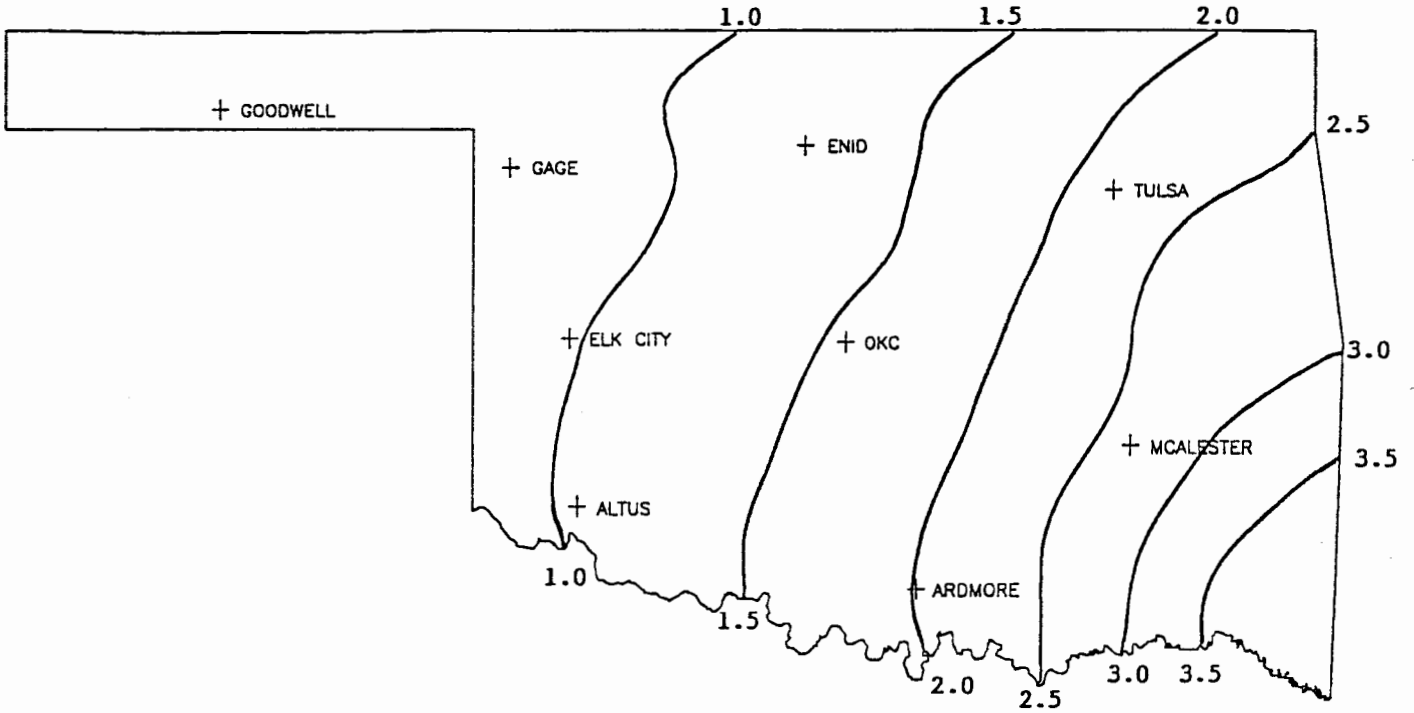
DATE	SUNRISE	SUNSET	DAYLIGHT
901201	7:14AM	5:12PM LT	9: 58
901202	7:15AM	5:12PM LT	9: 57
901203	7:16AM	5:12PM LT	9: 56
901204	7:17AM	5:12PM LT	9: 55
901205	7:18AM	5:12PM LT	9: 54
901206	7:19AM	5:12PM LT	9: 53
901207	7:19AM	5:12PM LT	9: 52
901208	7:20AM	5:12PM LT	9: 52
901209	7:21AM	5:12PM LT	9: 51
901210	7:22AM	5:12PM LT	9: 50
901211	7:22AM	5:12PM LT	9: 50
901212	7:23AM	5:12PM LT	9: 49
901213	7:24AM	5:12PM LT	9: 48
901214	7:25AM	5:13PM LT	9: 48
901215	7:25AM	5:13PM LT	9: 48
901216	7:26AM	5:13PM LT	9: 47
901217	7:26AM	5:13PM LT	9: 47
901218	7:27AM	5:14PM LT	9: 47
901219	7:28AM	5:14PM LT	9: 46
901220	7:28AM	5:15PM LT	9: 46
901221	7:29AM	5:15PM LT	9: 46
901222	7:29AM	5:15PM LT	9: 46
901223	7:30AM	5:16PM LT	9: 46
901224	7:30AM	5:16PM LT	9: 46
901225	7:31AM	5:17PM LT	9: 46
901226	7:31AM	5:17PM LT	9: 46
901227	7:31AM	5:18PM LT	9: 47
901228	7:32AM	5:19PM LT	9: 47
901229	7:32AM	5:19PM LT	9: 47
901230	7:32AM	5:20PM LT	9: 48
901231	7:32AM	5:20PM LT	9: 48



30-YEAR MEAN DECEMBER MAXIMUM TEMPERATURE



30-YEAR MEAN DECEMBER DAILY MINIMUM TEMPERATURE



30-YEAR MEAN DECEMBER PRECIPITATION

30- and 90-DAY NATIONAL WEATHER SERVICE OUTLOOK

30-DAY OUTLOOK (MID-NOVEMBER-MID-DECEMBER)

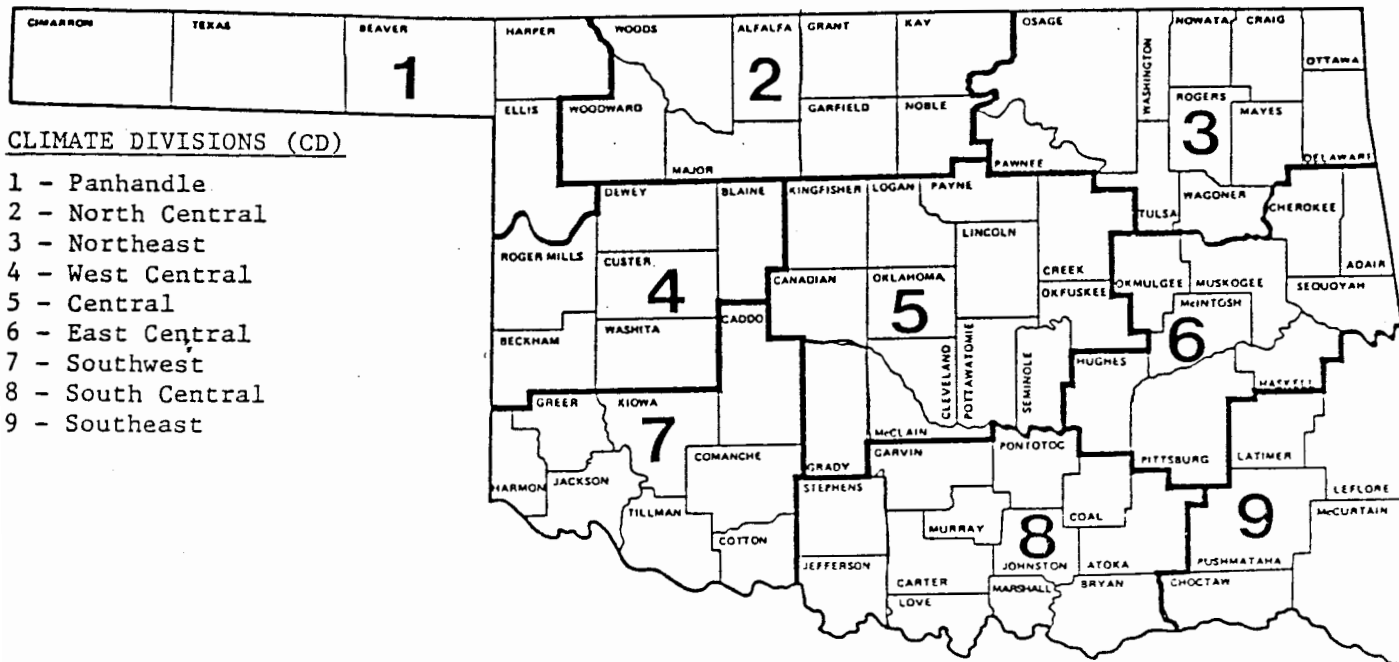
Precipitation - Above Normal Extreme Southeast
Near Normal Elsewhere

Temperature - Above Normal Southeast
Near Normal Elsewhere

90-DAY OUTLOOK (NOVEMBER-JANUARY)

Precipitation - Near Normal Statewide

Temperature - Below Normal Statewide



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.

CLIMATE CALENDAR - OKLAHOMA CITY

The data on this calendar are for Oklahoma City.
 Normal values are calculated for the period
 1948-1987. Extremes are found for the period
 of record (1924-present).

<p>Normal 1 54.7 max 33.3 min .018 pcpn 21 HDD 0 CDD</p> <p>Highest Max 76-1983 Lowest Max 20-1985 Lowest Min 12-1985 Highest Min 57-1933 Greatest pcpn .57-1958</p>	<p>Normal 2 55.5 max 33.2 min .068 pcpn 20 HDD 0 CDD</p> <p>Highest Max 77-1975 Lowest Max 24-1985 Lowest Min 10-1985 Highest Min 56-1951 Greatest pcpn 1.59-1953</p>	<p>Normal 3 56.4 max 32.7 min .025 pcpn 20 HDD 0 CDD</p> <p>Highest Max 74-1975 Lowest Max 30-1978 Lowest Min 17-1978 Highest Min 52-1961 Greatest pcpn 1.39-1947</p>	<p>Normal 4 55.4 max 33.9 min .032 pcpn 20 HDD 0 CDD</p> <p>Highest Max 75-1954 Lowest Max 25-1972 Lowest Min 16-1978 Highest Min 51-1956 Greatest pcpn 2.59-1930</p>	<p>Normal 5 55.7 max 33.8 min .045 pcpn 20 HDD 0 CDD</p> <p>Highest Max 77-1975 Lowest Max 32-1937 Lowest Min 10-1950 Highest Min 59-1980 Greatest pcpn 1.00-1935</p>	<p>Normal 6 51.8 max 32.3 min .020 pcpn 23 HDD 0 CDD</p> <p>Highest Max 77-1939 Lowest Max 19-1972 Lowest Min 5-1950 Highest Min 63-1980 Greatest pcpn 1.99-1926</p>	<p>Normal 7 52.6 max 30.6 min .045 pcpn 23 HDD 0 CDD</p> <p>Highest Max 80-1966 Lowest Max 24-1950 Lowest Min 5-1950 Highest Min 62-1980 Greatest pcpn 1.23-1980</p>	<p>Normal 8 50.1 max 30.1 min .075 pcpn 25 HDD 0 CDD</p> <p>Highest Max 71-1970 Lowest Max 26-1927 Lowest Min 7-1927 Highest Min 61-1946 Greatest pcpn 1.50-1980</p>	<p>Normal 9 48.3 max 28.6 min .012 pcpn 26 HDD 0 CDD</p> <p>Highest Max 71-1939 Lowest Max 21-1932 Lowest Min 10-1978 Highest Min 56-1946 Greatest pcpn .85-1943</p>	<p>Normal 10 50.0 max 29.4 min .081 pcpn 25 HDD 0 CDD</p> <p>Highest Max 72-1939 Lowest Max 24-1972 Lowest Min 11-1977 Highest Min 58-1965 Greatest pcpn 1.06-1960</p>	<p>Normal 11 49.4 max 28.5 min .029 pcpn 26 HDD 0 CDD</p> <p>Highest Max 75-1939 Lowest Max 21-1961 Lowest Min 8-1932 Highest Min 52-1946 Greatest pcpn 1.07-1946</p>	<p>Normal 12 48.6 max 27.2 min .011 pcpn 27 HDD 0 CDD</p> <p>Highest Max 73-1973 Lowest Max 17-1932 Lowest Min 6-1932 Highest Min 47-1984 Greatest pcpn 1.19-1928</p>	<p>Normal 13 47.6 max 27.4 min .054 pcpn 27 HDD 0 CDD</p> <p>Highest Max 77-1948 Lowest Max 17-1958 Lowest Min 6-1958 Highest Min 62-1929 Greatest pcpn .41-1928</p>	<p>Normal 14 48.9 max 28.2 min .080 pcpn 26 HDD 0 CDD</p> <p>Highest Max 74-1933 Lowest Max 18-1926 Lowest Min 6-1958 Highest Min 64-1948 Greatest pcpn 1.52-1984</p>	<p>Normal 15 48.0 max 27.5 min .067 pcpn 27 HDD 0 CDD</p> <p>Highest Max 75-1948 Lowest Max 26-1926 Lowest Min 3-1989 Highest Min 59-1979 Greatest pcpn .69-1959</p>	<p>Normal 16 51.0 max 27.8 min .029 pcpn 25 HDD 0 CDD</p> <p>Highest Max 73-1939 Lowest Max 21-1932 Lowest Min 7-1989 Highest Min 56-1929 Greatest pcpn .56-1931</p>	<p>Normal 17 50.8 max 28.4 min .044 pcpn 25 HDD 0 CDD</p> <p>Highest Max 75-1939 Lowest Max 21-1965 Lowest Min 2-1979 Highest Min 45-1939 Greatest pcpn 1.68-1959</p>	<p>Normal 18 49.5 max 28.6 min .033 pcpn 26 HDD 0 CDD</p> <p>Highest Max 69-1982 Lowest Max 19-1983 Lowest Min 5-1964 Highest Min 47-1939 Greatest pcpn .83-1933</p>	<p>Normal 19 50.0 max 28.0 min .045 pcpn 25 HDD 0 CDD</p> <p>Highest Max 75-1978 Lowest Max 9-1983 Lowest Min 3-1983 Highest Min 54-1978 Greatest pcpn 1.10-1987</p>	<p>Normal 20 49.7 max 28.0 min .043 pcpn 26 HDD 0 CDD</p> <p>Highest Max 73-1966 Lowest Max 21-1983 Lowest Min 4-1983 Highest Min 50-1967 Greatest pcpn .43-1972</p>	<p>Normal 21 48.8 max 26.5 min .029 pcpn 27 HDD 0 CDD</p> <p>Highest Max 68-1966 Lowest Max 11-1983 Lowest Min -2-1983 Highest Min 51-1941 Greatest pcpn .83-1942</p>	<p>Normal 22 51.5 max 28.7 min .016 pcpn 25 HDD 0 CDD</p> <p>Highest Max 70-1933 Lowest Max 4-1989 Lowest Min -4-1989 Highest Min 47-1979 Greatest pcpn 2.01-1932</p>	<p>Normal 23 51.0 max 30.1 min .033 pcpn 24 HDD 0 CDD</p> <p>Highest Max 70-1955 Lowest Max 10-1983 Lowest Min -8-1989 Highest Min 57-1965 Greatest pcpn 1.80-1932</p>	<p>Normal 24 49.4 max 27.7 min .096 pcpn 26 HDD 0 CDD</p> <p>Highest Max 86-1955 Lowest Max 3-1983 Lowest Min 0-1993 Highest Min 50-1955 Greatest pcpn 1.34-1965</p>	<p>Normal 25 47.7 max 26.6 min .030 pcpn 28 HDD 0 CDD</p> <p>Highest Max 71-1950 Lowest Max 13-1983 Lowest Min -1-1983 Highest Min 49-1936 Greatest pcpn 1.05-1987</p>	<p>Normal 26 49.3 max 27.3 min .017 pcpn 26 HDD 0 CDD</p> <p>Highest Max 68-1968 Lowest Max 25-1983 Lowest Min 11-1983 Highest Min 56-1936 Greatest pcpn 1.15-1940</p>	<p>Normal 27 49.6 max 28.2 min .056 pcpn 26 HDD 0 CDD</p> <p>Highest Max 75-1946 Lowest Max 26-1983 Lowest Min 15-1978 Highest Min 56-1946 Greatest pcpn 1.06-1927</p>	<p>Normal 28 48.1 max 29.7 min .067 pcpn 26 HDD 0 CDD</p> <p>Highest Max 72-1947 Lowest Max 23-1983 Lowest Min 8-1983 Highest Min 56-1984 Greatest pcpn 1.85-1979</p>	<p>Normal 29 48.5 max 28.4 min .035 pcpn 26 HDD 0 CDD</p> <p>Highest Max 76-1951 Lowest Max 20-1983 Lowest Min 3-1983 Highest Min 63-1984 Greatest pcpn .23-1972</p>	<p>Normal 30 45.7 max 26.7 min .078 pcpn 29 HDD 0 CDD</p> <p>Highest Max 88-1927 Lowest Max 21-1978 Lowest Min 3-1983 Highest Min 55-1965 Greatest pcpn .30-1974</p>	<p>Normal 31 45.4 max 25.9 min .097 pcpn 29 HDD 0 CDD</p> <p>Highest Max 79-1951 Lowest Max 17-1978 Lowest Min -1-1927 Highest Min 55-1965 Greatest pcpn 1.03-1984</p>
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DECEMBER AVERAGES

Temperature : 39.7°F
 Precipitation : 1.36"
 Heating Degree Days: 775
 Cooling Degree Days: 0