

OKLAHOMA MONTHLY SUMMARY JULY 1993

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MONTHLY SUMMARY FOR JULY 1993

Mid-summer heat, frequently accompanied by strong southerly winds dominated Oklahoma weather during July. Rainfall was sparse in most of the southern and southeastern portions of the state, and was associated mostly with local downpours elsewhere. Flash flooding occurred in several counties in northern and western Oklahoma while stations in the south, east and southeast went without significant rainfall during the month. Temperatures in the upper 90s and low 100s were commonplace during the first half of the month and dominant during the closing days of July.

The statewide average temperature for the month was 84.1 degrees, ranking as the 16th hottest July in 102 years of records. July was the first month this year with a greater than normal average temperature. The year-to-date average temperature for the state of 58.5 degrees is 1.2 degrees below normal. Even with the hot July, 1993 is, thus far, the 18th coolest year on record.

Precipitation totals across the state averaged just 1.69 inches, missing the normal for the month by .93 inch. Precipitation for the first seven months of the year, averaged statewide, is 24.78 inches, exceeding the normal accumulation by 4.46 inches. The year-to-date ranks as the 18th wettest January-through-July. Stations in the state's southwestern climate division received an average of 150 percent of normal monthly precipitation. Conversely, the stations in the south central and southeastern climate divisions, several of which reported no precipitation for the month, averaged less than 10 percent of normal precipitation.

Hot, windy weather dominated during the first nine days of the month. Oklahoma City winds averaged over 15 miles per hour each day and gusts as high as 39 miles per hour were recorded. Guymon reached 105 degrees on the eighth, one of several triple-digit temperatures reported early in the month.

A series of weak disturbances in the upper atmosphere produced thunderstorms in several areas from the 5th through the 20th. Jay Tower, Vinita and Upper Spavinaw in the northeast each reported over 2.5 inches of overnight precipitation the morning of the 6th, as did Lookeba in the southwest. Strong thunderstorms moved across northern Oklahoma overnight on the 6th with winds at Pond Creek reportedly reaching 105 miles per hour.

Locally heavy rain in northern Harmon County and southern Beckham County on the 7th led to flood warnings along the North and Salt Fork of the Red River. Up to a foot of rain reportedly fell in northern Harmon County. Official reports included 6.43 inches near Vinson and 3.33 inches at Willow.

Thunderstorms in the Panhandle on the 9th and 10th produced up to 3 inches of rain in Texas County. Flash flood warnings were issued for part of the county. Wind gusts to 60 miles per hour were reported at Eva and Goodwell.

Thunderstorms on the 11th produced large hail and heavy rain east of Boise City, wind and hail damage in Woods, Alfalfa, Grant, Kay and Osage Counties and highway flooding north and east of Pawhuska, where 3.9 inches of rain were reported.

Up to 3.5 inches of rain were reported near Loyal in Kingfisher County on the 12th. Minor flooding occurred in Cherokee on the morning of the 14th in response to 2.5 inches of rain.

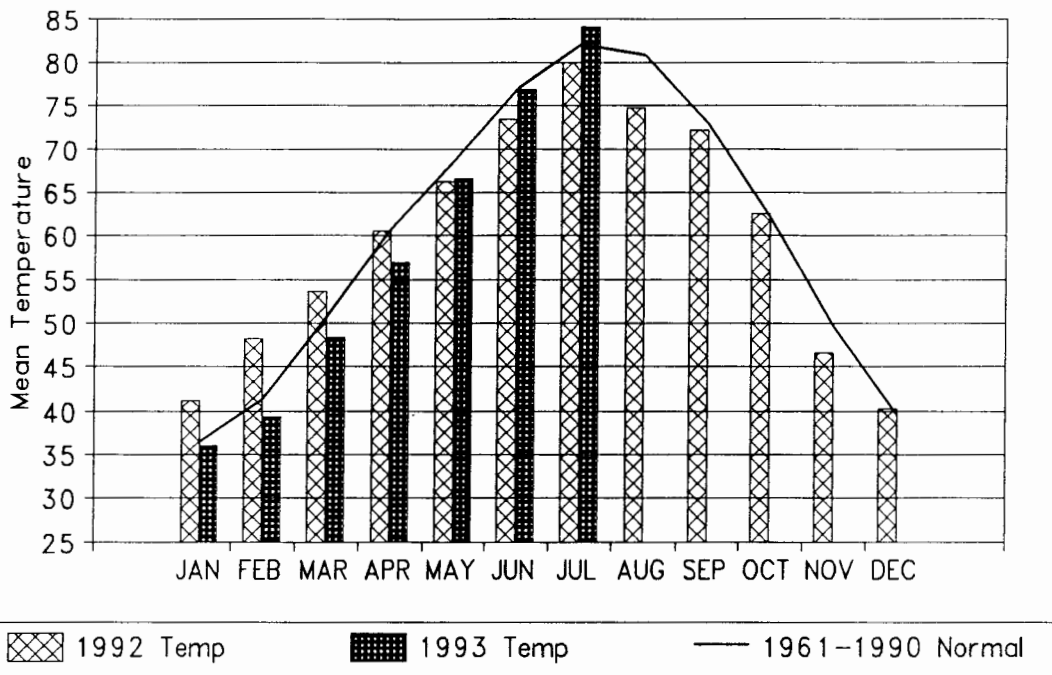
Minor flooding was reported on the Chikaskia river in Grant and Kay Counties on the 15th. Trees and power poles were knocked down in Oklahoma, Payne and Pawnee Counties on the 18th. Severe thunderstorms caused wind damage in Craig and Mayes Counties on the 20th. Hooker's morning precipitation report on the 21st was 2.22 inches.

The heat intensified after the 17th and daytime high temperatures in the 80s and 90s were replaced by temperatures in the upper 90s and 100s. Triple digit temperatures appeared in the southeast on the 17th at Wilburton, McCurtain and Poteau and spread northeast. Readings of 105 or greater were first reported from Chattanooga on the 23rd with several other stations including Buffalo and Wilburton joining in on the 24th. The high temperature for the month was 109 degrees recorded at Buffalo on the 30th. At least two deaths were directly attributable to the heat.

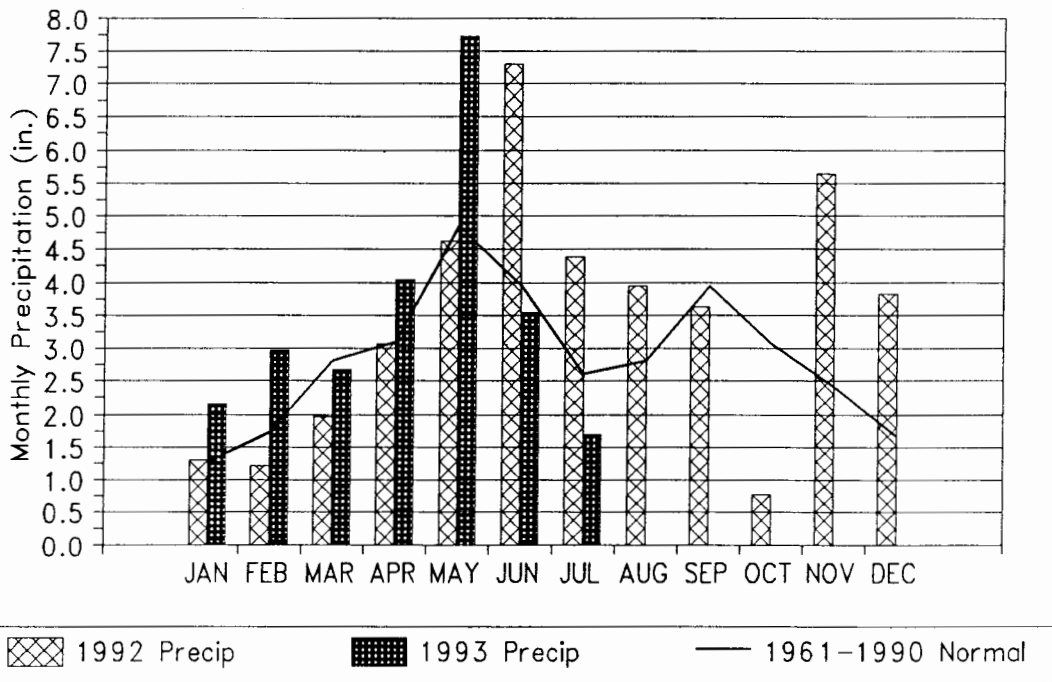
At month's end, a heavy thunderstorm provided relief in Hammon with 1.56 inches of rain, and dime-sized hail fell at Wheelless in Cimarron County. Wilburton and McCurtain each reported highs of 108 degrees. Among the state's reporting stations, only Jay Tower at 98 and Kansas at 99 remained below 100 degrees on the 31st.

Howard L. Johnson

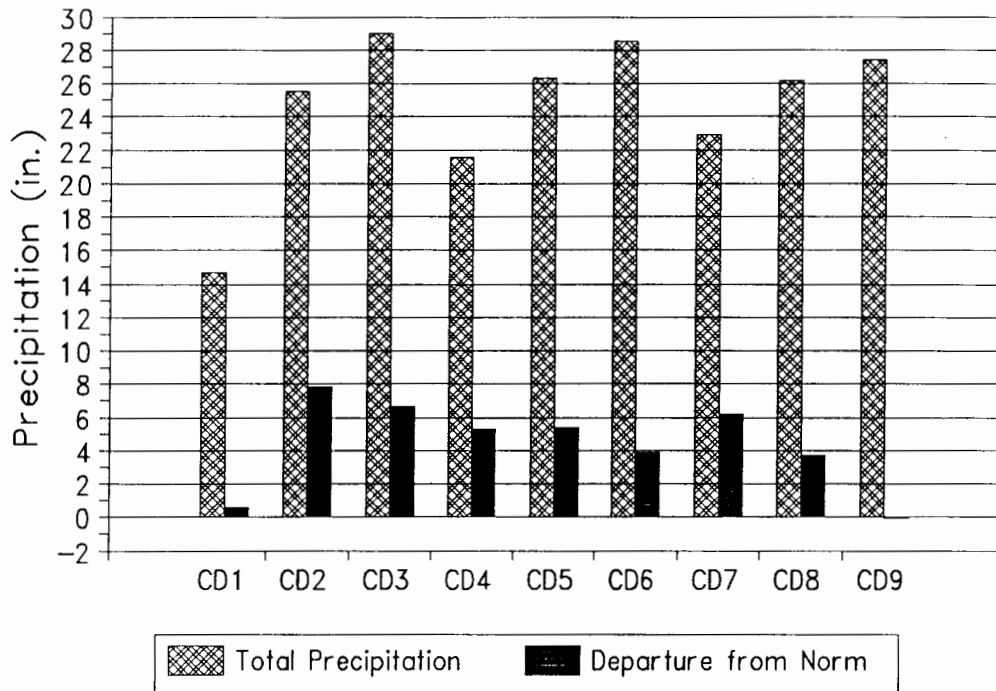
1992 and 1993 STATEWIDE TEMPERATURES Monthly Averages



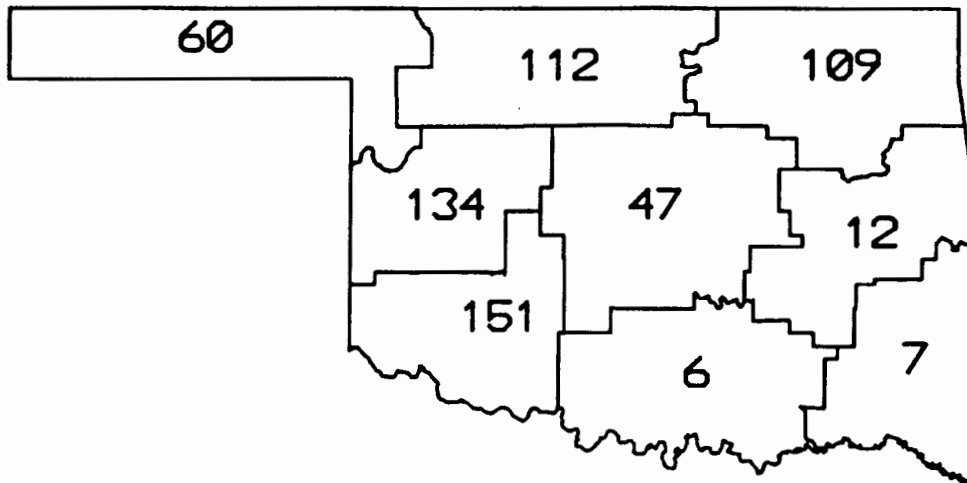
1992 and 1993 STATEWIDE PRECIPITATION Monthly Totals



CD Averaged Precipitation 1993 January through July Totals



CD PERCENT OF NORMAL PRECIPITATION



JULY 1993

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

CD	MAX			MIN			24-HOUR			MONTHLY	
	TEMP	DATE	LOCATION	TEMP	DATE	LOCATION	PRECIP	DATE	LOCATION	PRECIP	LOCATION
1	109	30	BUFFALO	54	22	GOODWELL RES	2.22	21	HOOKER	3.33	HOOKER
2	106	31	CHEROKEE	62	11	WAYNOKA	2.50	14	CHEROKEE	7.40	CHEROKEE
3	104	31	MANNFORD	57	23	CLEVELAND	3.90	12	PAWHUSKA	6.91	HULAH DAM
4	104 104	31 31	TALOGA	65	14	ELK CITY	2.97	7	MORAVIA	4.38	RETROP
			WEATHERFORD	65	19	REYDON					
				65	29	REYDON					
				65	7	WEATHERFORD					
				65	14	WEATHERFORD					
5	107	31	HENNESSEY	67	7	BLANCHARD	2.00	19	TECUMSEH	3.31	MULHALL
				67	7	CHICKASHA					
				67	7	EL RENO					
				67	7	HENNESSEY					
				67	12	KINGFISHER					
6	108	31	MCCURTAIN	64	10	SALLISAW	1.48	19	DUSTIN	1.48	DUSTIN
				64	11	SALLISAW					
7	107	31	CARNEGIE	62	29	WICHITA MT WLR	6.43	7	VINSON	9.53	VINSON
	107	24	CHATTANOOGA								
	107	25	CHATTANOOGA								
8	107	30	CANEY	65	19	MARLOW	.40	30	CENTRAHOMA	1.06	DUNCAN
9	108	31	WILBURTON	60	27	BATTIEST	1.24	21	BENGAL	1.40	CARTER TWR
				60	10	SMITHVILLE					
				60	27	SMITHVILLE					

TABLE OF 1992/1993 COMPARISONS

Station	July Temperature (°F)		July Precipitation (in.)	
	1992	1993	1992	1993
Arnett	76.3	79.7	1.58	1.48
Enid	82.7	84.4	3.41	3.94
Mutual	78.9	82.8	2.38	0.93
Tulsa	82.1	84.7	1.79	2.42
Elk City	79.9	82.4	5.81	2.54
Oklahoma City	81.1	83.6	4.01	1.24
McAlester	81.4	86.9	6.45	0.09
Altus Irr Sta	82.1	85.7	1.71	1.73
Durant	80.1	84.5	8.71	0.01
Ada	79.7	84.5	6.21	0.25
Hugo	79.9	85.6	7.39	0.11

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (°F)	Goodwell	1	54	22
Maximum temperature (°F)	Buffalo	1	109	30
Maximum 24-hour precipitation	Vinson	7	6.43"	7

JULY 1993 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	DEV					MIN	DAY	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
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY													
ARNETT	332	1	79.7	31	-.7	100.	31	65.	15	.0	.0	456.5	-20.5	1.482	31	-.41	.59	21		
BOISE CITY 2 E	908	1	78.3	31	.4	103.	8	55.	6	.0	.0	412.5	12.5	1.191	31	-1.56	.58	28		
BUFFALO	1243	1	85.0	31	1.8	109.	30	65.	14	.0	.0	621.5	57.5	1.300	31	-1.69	.60	21		
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.670	31	-1.37	.24	21		
GAGE FAA APT	3407	1	83.1	31	1.2	105.	31	63.	20	.0	.0	560.5	36.5	.552	31	-1.32	.29	21		
GATE	3489	1	82.3	31	.5	104.	31	65.	30	.0	.0	535.0	14.0	2.322	31	-1.11	1.48	12		
GOODWELL RES ST	3628	1	77.9	31	-.6	104.	9	54.	22	.0	.0	400.0	-19.0	2.450	31	-.07	1.46	10		
GUYMON	3835	1	81.1	27	****	105.	8	59.	6	.0	*****	434.5	*****	1.331	25	*****	.93	10		
HOOKER	4298	1	79.5	31	-.5	104.	9	58.	7	.0	.0	450.5	-14.5	3.332	31	1.04	2.22	21		
KENTON	4766	1	78.7	31	1.2	107.	9	55.	6	.0	.0	425.0	37.0	.960	31	-2.38	.96	9		
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.891	31	-1.64	.57	21		
OPTIMA LAKE	6740	1	80.7	31	*****	104.	31	60.	6	.0	*****	486.5	*****	2.390	31	*****	1.14	10		
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.981	31	-1.36	.43	29		

JULY 1993 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	DEV					MIN	DAY	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
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY													
ALVA	193	2	83.9	31	*****	105.	31	66.	7	.0	*****	585.5	*****	4.990	31	*****	1.93	14		
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.192	30	*****	2.00	8		
BILLINGS	755	2	83.2	31	-.1	102.	31	66.	12	.0	.0	565.5	-1.5	3.071	31	-.06	1.35	12		
BLACKWELL 2E	818	2	83.8	31	1.2	105.	31	68.	12	.0	.0	582.0	36.0	3.160	31	.02	1.56	14		
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.402	31	*****	1.50	14		
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.522	31	*****	.60	21		
CHEROKEE	1724	2	85.2	31	1.1	106.	31	66.	8	.0	.0	627.0	35.0	7.400	31	4.66	2.50	14		
ENID	2912	2	84.4	31	1.1	103.	31	67.	12	.0	.0	602.5	35.5	3.940	31	1.18	2.04	8		
FT SUPPLY DAM	3304	2	81.5	31	.8	100.	31	65.	15	.0	.0	510.0	23.0	.741	31	-1.45	.37	14		
FREEDOM	3358	2	82.5	31	-.5	103.	31	66.	30	.0	.0	543.0	-15.0	2.541	31	1.18	1.05	12		
GREAT SALT PLNS	3740	2	83.1	31	.1	104.	31	67.	14	.0	.0	560.5	2.5	5.131	31	2.44	1.91	14		
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.023	31	*****	1.55	13		
HELENA 1 SSE	4019	2	82.7	31	.8	103.	31	66.	8	.0	.0	549.5	25.5	6.882	31	4.26	2.02	12		
JEFFERSON	4573	2	84.3	31	.8	105.	31	66.	12	.0	.0	598.5	24.5	4.761	31	1.43	1.91	11		
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.271	31	*****	1.06	14		
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.751	31	*****	2.10	11		
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.970	31	*****	1.25	14		
MUTUAL	6139	2	82.8	31	1.0	105.	31	66.	13	.0	.0	553.0	32.0	.931	31	-1.42	.40	14		
NEWKIRK	6278	2	83.2	31	.7	102.	31	66.	11	.0	.0	564.0	21.0	2.191	31	-1.09	.78	14		
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.600	31	.00	1.18	14		
PERRY	7012	2	85.2	31	2.5	104.	31	69.	12	.0	.0	627.5	78.5	1.121	31	-1.97	.60	14		
PONCA CITY FAA	7201	2	85.6	31	3.1	105.	30	69.	12	.0	.0	638.5	95.5	3.503	31	-.20	1.20	19		
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.430	31	-1.46	.87	12		
WAYNOKA	9404	2	83.9	31	.7	105.	31	62.	11	.0	.0	584.5	20.5	2.050	31	-.38	.83	14		
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	.590	31	-2.00	.36	21		

JULY 1993 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		DEV		24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DEG	DEG	FROM	FROM	DEG	DEG	TOT	NUM	FROM	MAX		
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM			
BARNSDALL	535	3	83.3	31	1.1	103.	31	68.	12	.0	.0	568.5	35.5	2.181	31	-.75	.83	15	
BARTLESVILLE 2W	548	3	83.8	31	1.7	103.	31	68.	12	.0	.0	583.5	53.5	4.531	31	1.93	1.76	12	
BIXBY	782	3	84.2	31	3.2	103.	31	69.	16	.0	.0	595.0	99.0	.430	31	-2.44	.28	26	
BURBANK	1256	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.562	31	-.68	1.93	14	
CHELSEA 4 S	1717	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.340	31	*****	.78	6	
CLAREMORE	1828	3	82.7	31	1.5	101.	31	67.	27	.0	.0	547.5	45.5	2.400	31	-.57	.85	6	
CLEVELAND 5 WSW	1902	3	82.9	22	*****	101.	31	57.	23	.0	*****	394.0	*****	3.391	25	*****	1.68	12	
FORAKER	3250	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	4.910	31	1.84	1.74	12	
HOLLOW	4258	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.870	29	*****	.97	15	
HOMINY	4289	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.332	31	.26	.96	15	
HULAH DAM	4393	3	81.5	22	*****	100.	31	64.	31	.0	*****	364.0	*****	6.910	31	4.37	1.96	13	
JAY TOWER	4567	3	81.3	31	*****	98.	31	68.	13	.0	*****	506.5	*****	5.100	31	*****	3.50	6	
KANSAS 1 ESE	4672	3	80.8	31	.9	99.	31	68.	10	.0	.0	489.0	27.0	1.723	31	-.89	.67	22	
KEYSTONE DAM	4812	3	84.2	26	*****	102.	31	69.	12	.0	*****	500.0	*****	.752	27	*****	.28	12	
LENAPAH	5118	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.330	24	*****	.66	12	
MANNFORD 6 NW	5522	3	83.8	31	1.8	104.	31	68.	12	.0	.0	584.0	57.0	1.970	31	-.80	1.04	12	
MARAMEC	5540	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.190	31	.40	.82	13	
MIAMI	5855	3	81.3	31	1.2	100.	31	67.	16	.0	.0	505.0	37.0	5.130	29	*****	2.30	6	
NOWATA	6485	3	82.5	31	.6	101.	31	68.	13	.0	.0	541.0	17.0	3.621	31	.79	.89	12	
ONETA 1 WNW	6713	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.150	31	*****	.79	26	
PAWHUSKA	6935	3	82.7	29	*****	98.	24	65.	12	.0	*****	512.0	*****	6.420	29	*****	3.90	12	
PAWNEE	6940	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	5.630	31	2.90	1.95	14	
PRYOR 6 N	7309	3	80.8	30	.1	96.	29	66.	27	.0	.0	473.0	-14.0	3.091	29	*****	1.60	6	
RALSTON	7390	3	83.6	31	1.7	102.	31	68.	20	.0	.0	578.0	54.0	2.370	31	-.57	1.62	14	
RAMONA 4 N	7394	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.290	31	*****	2.20	12	
SKIATOOK	8258	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.280	31	-.86	.94	12	
SPAVINAW	8380	3	84.1	31	2.1	100.	31	72.	30	.0	.0	592.0	65.0	2.931	31	-.09	2.35	6	
TULSA WSO APT	8992	3	84.7	31	1.4	103.	31	70.	12	.0	.0	611.5	44.5	2.415	31	-.68	1.23	15	
UPPER SPAVINAW	9101	3	86.0	31	*****	102.	25	70.	16	.0	*****	651.0	*****	3.452	31	*****	2.60	6	
VINITA 2 N	9203	3	81.4	23	*****	95.	23	68.	16	.0	*****	377.0	*****	5.060	23	*****	2.63	6	
WAGONER	9247	3	84.8	31	2.9	103.	31	72.	28	.0	.0	613.0	89.0	.582	31	-2.25	.58	15	
WANN	9298	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	4.970	31	*****	1.84	7	
WYONONA	9792	3	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.630	31	*****	.66	15	

JULY 1993 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		DEV		24-HR	DAY
			MEAN	NUM	FROM	MAX	MIN	DEG	DEG	FROM	FROM	DEG	DEG	TOT	NUM	FROM	MAX		
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM			
CANTON DAM	1445	4	82.7	31	.6	102.	31	66.	14	.0	.0	549.0	19.0	2.641	31	.29	1.02	13	
CHEYENNE	1738	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.880	31	1.15	1.48	1	
CLINTON	1909	4	84.0	31	.2	103.	31	66.	14	.0	.0	589.5	6.5	2.591	31	.50	.76	22	
COLONY	2039	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.841	31	*****	1.59	13	
CORDELL	2125	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.310	31	1.38	1.71	7	
ELK CITY 1 E	2849	4	82.4	31	.5	101.	31	65.	14	.0	.0	540.0	16.0	2.540	31	.65	.94	7	
ERICK 4 E	2944	4	81.9	31	.2	102.	31	66.	14	.0	.0	523.5	5.5	3.230	31	1.54	1.05	15	
GEARY	3497	4	85.2	31	3.0	102.	31	71.	13	.0	.0	625.0	92.0	2.890	31	.83	1.25	7	
HAMMON 1 NNE	3871	4	82.5	30	.5	102.	24	66.	19	.0	.0	524.0	-3.0	3.121	30	*****	1.56	31	
LEEDEY	5090	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.760	31	-.02	1.00	12	
MACKIE 4 NNW	5463	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.920	31	*****	1.86	12	
MORAVIA 2 NNE	6035	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	4.240	31	2.48	2.97	7	
OKEENE	6629	4	84.1	31	.6	102.	31	67.	14	.0	.0	592.0	18.0	2.710	31	.35	1.20	7	
RETROP	7565	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	4.380	31	*****	2.92	7	
REYDON	7579	4	82.7	31	2.1	103.	31	65.	29	.0	.0	549.0	65.0	1.431	31	-.37	.72	12	
SAYRE	7952	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.720	31	1.05	.71	7	
SWEETWATER 2 E	8652	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.571	31	*****	.40	14	
TALOGA	8708	4	83.5	31	1.5	104.	31	66.	14	.0	.0	573.0	46.0	1.482	31	-.75	1.00	14	
THOMAS	8815	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.780	31	*****	2.03	14	
VICI	9172	4	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.110	31	-.05	1.60	14	
WATONGA	9364	4	84.2	31	1.8	102.	31	67.	14	.0	.0	596.5	57.5	3.551	31	1.28	1.73	13	
WEATHERFORD	9422	4	84.0	31	1.9	104.	31	65.	14	.0	.0	590.5	60.5	2.451	31	.35	1.20	13	

JULY 1993 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	DEV						HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR DAY	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN TEMP	DAY							FROM NORM	MAX		
AMBER	200	5	****	0	****	****	0	****	0	****	****	****	.830	31	****	.48	6	
ARCADIA	288	5	****	0	****	****	0	****	0	****	****	****	1.540	31	****	.62	13	
TINKER AFB	325	5	****	0	****	****	0	****	0	****	****	****	1.323	31	****	.56	14	
BLANCHARD 2 SSW	830	5	84.0	31	1.4	102.	31	67.	7	.0	.0	590.0	44.0	1.971	31	-.60	.73	19
BRISTOW	1144	5	84.3	31	2.3	104.	30	69.	27	.0	.0	597.5	70.5	.524	31	-2.22	.18	15
CHANDLER	1684	5	84.5	31	2.0	103.	31	68.	19	.0	.0	606.0	63.0	.470	31	-2.24	.42	14
CHICKASHA EX ST	1750	5	84.8	31	1.9	104.	31	67.	7	.0	.0	615.0	60.0	1.521	31	-.57	.52	14
COX CITY 1 E	2196	5	****	0	****	****	0	****	0	****	****	****	****	.530	31	****	.26	14
CRESCENT	2242	5	****	0	****	****	0	****	0	****	****	****	****	3.120	31	****	1.52	6
CUSHING	2318	5	83.8	30	1.9	102.	31	70.	12	.0	.0	565.5	41.5	1.340	31	-1.78	.54	14
EL RENO 1 N	2818	5	84.3	28	****	102.	31	67.	7	.0	****	540.0	****	1.750	28	****	1.48	7
GUTHRIE	3821	5	85.9	31	2.6	106.	31	68.	7	.0	.0	649.0	82.0	.981	31	-1.35	.48	14
HENNESSEY 4 ESE	4055	5	85.1	26	****	107.	31	67.	7	.0	****	522.5	****	3.261	31	.71	1.30	13
INGALLS	4489	5	****	0	****	****	0	****	0	****	****	****	****	2.603	31	****	1.35	13
KINGFISHER 2 SE	4861	5	84.1	28	****	103.	31	67.	12	.0	****	536.0	****	1.610	31	-.44	.54	14
KONAWA	4915	5	****	0	****	****	0	****	0	****	****	****	****	.041	31	-1.98	.04	15
MARSHALL	5589	5	****	0	****	****	0	****	0	****	****	****	****	.570	31	-1.70	.22	7
MEEKER 4 W	5779	5	83.8	30	1.9	101.	31	70.	12	.0	.0	565.0	41.0	.490	30	****	.19	31
MULHALL	6110	5	****	0	****	****	0	****	0	****	****	****	****	3.310	26	****	1.67	6
NORMAN 3 S	6386	5	84.0	31	1.8	105.	31	68.	20	.0	.0	588.5	55.5	.491	31	-2.27	.28	14
OILTON 2 SE	6616	5	****	0	****	****	0	****	0	****	****	****	****	1.610	31	****	.54	12
OKEMAH	6638	5	84.7	31	3.1	104.	31	70.	10	.0	.0	611.0	96.0	.741	31	-2.42	.71	19
OKLAHOMA CTY WS	6661	5	83.6	31	1.6	103.	31	67.	7	.0	.0	576.5	49.5	1.242	31	-1.37	.51	7
PERKINS	7003	5	****	0	****	****	0	****	0	****	****	****	****	1.010	31	-1.65	.66	14
PIEDMONT	7068	5	****	0	****	****	0	****	0	****	****	****	****	1.450	31	****	.95	7
PRAGUE	7264	5	****	0	****	****	0	****	0	****	****	****	****	.230	31	-2.73	.16	25
PURCELL 5 SW	7327	5	85.0	31	2.2	105.	30	67.	20	.0	.0	620.5	68.5	.383	31	-2.38	.12	14
SEMINOLE	8042	5	85.5	31	2.1	103.	31	71.	16	.0	.0	637.0	67.0	.101	31	-2.42	.09	6
SHAWNEE	8110	5	****	0	****	****	0	****	0	****	****	****	****	.621	31	-1.55	.20	6
STELLA	8479	5	****	0	****	****	0	****	0	****	****	****	****	.580	31	****	.30	14
STILLWATER 2 W	8501	5	83.6	31	2.0	102.	31	68.	13	.0	.0	576.5	61.5	2.570	31	-.33	1.19	14
STROUD 1 N	8563	5	****	0	****	****	0	****	0	****	****	****	****	.793	31	****	.47	26
TECUMSEH	8751	5	****	0	****	****	0	****	0	****	****	****	****	2.200	31	****	2.00	19
UNION CITY 1 SE	9086	5	****	0	****	****	0	****	0	****	****	****	****	1.481	31	-.82	1.19	7
WELTY 1 SSE	9479	5	****	0	****	****	0	****	0	****	****	****	****	.550	31	****	.55	15
WEWOKA	9575	5	****	0	****	****	0	****	0	****	****	****	****	.030	31	-2.34	.03	29

JULY 1993 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	CD	DEV						HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR DAY	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN TEMP	DAY							FROM NORM	MAX		
ASHLAND	364	6	****	0	****	****	0	****	0	****	****	****	****	.002	31	****	.00	14
BEGGS	631	6	****	0	****	****	0	****	0	****	****	****	****	.000	31	****	.00	31
BOYNTON	1027	6	****	0	****	****	0	****	0	****	****	****	****	.001	31	****	.00	6
CALVIN	1391	6	****	0	****	****	0	****	0	****	****	****	****	.421	31	-2.65	.42	15
CHECOTAH	1711	6	****	0	****	****	0	****	0	****	****	****	****	.131	31	-2.91	.13	6
CLAYTON 14 WNW	1858	6	****	0	****	****	0	****	0	****	****	****	****	.371	31	****	.25	31
DEWAR 2 NE	2485	6	****	0	****	****	0	****	0	****	****	****	****	.020	31	-3.36	.02	19
DUSTIN	2690	6	****	0	****	****	0	****	0	****	****	****	****	1.480	31	****	1.48	19
EUFULA	2993	6	85.7	31	2.4	103.	31	70.	10	.0	.0	643.0	76.0	.000	31	-3.29	.00	31
HANNA	3884	6	84.0	31	2.2	104.	31	66.	27	.0	.0	590.5	69.5	.111	31	-2.70	.08	15
HARTSHORNE	3946	6	****	0	****	****	0	****	0	****	****	****	****	.100	31	****	.10	31
HASKELL	3956	6	****	0	****	****	0	****	0	****	****	****	****	.582	31	-2.03	.38	15
HOLDENVILLE	4235	6	84.1	31	2.2	104.	31	70.	27	.0	.0	593.5	69.5	.032	31	-2.75	.03	15
LAKE EUFAULA	4975	6	85.3	30	****	106.	26	68.	10	.0	****	609.0	****	.120	30	****	.12	6
LYONS 2 N	5437	6	****	0	****	****	0	****	0	****	****	****	****	.202	31	-2.71	.18	6
MARBLE CITY	5546	6	****	0	****	****	0	****	0	****	****	****	****	.571	31	****	.57	7
MCALESTER FAA	5664	6	86.9	31	5.0	106.	29	71.	10	.0	.0	678.5	154.5	.092	31	-2.58	.09	30
MCCURTAIN 1 SE	5693	6	87.0	31	4.6	108.	31	68.	10	.0	.0	681.5	142.5	1.000	31	-2.17	1.00	21
MUSKOGEE	6130	6	85.2	31	3.0	104.	31	69.	10	.0	.0	625.0	92.0	.131	31	-2.51	.10	14
OKMULGEE W W	6670	6	83.8	31	3.1	104.	31	65.	27	.0	.0	581.5	94.5	.005	31	-2.68	.00	31
OKTAHA 2 NE	6678	6	****	0	****	****	0	****	0	****	****	****	****	.170	31	****	.10	6
QUINTON	7372	6	****	0	****	****	0	****	0	****	****	****	****	.080	31	-3.38	.08	21
SALLISAW 2 NE	7862	6	83.5	31	1.7	103.	26	64.	11	.0	.0	575.0	54.0	.112	31	-2.89	.11	31
SCIPPIO	7979	6	****	0	****	****	0	****	0	****	****	****	****	.110	31	****	.11	6
SCRAPER	7993	6	****	0	****	****	0	****	0	****	****	****	****	.700	31	****	.42	15
SHORT	8170	6	****	0	****	****	0	****	0	****	****	****	****	.220	31	****	.22	22
STILWELL 1 NE	8506	6	82.7	31	2.8	103.	31	66.	11	.0	.0	550.0	88.0	.372	31	-2.68	.22	6
TAHLEQUAH	8677	6	82.3	31	1.8	101.	31	66.	10	.0	.0	536.5	55.5	1.401	31	-1.58	.55	14
WEBBERS FALLS	9445	6	84.2	30	2.5	106.	27	67.	27	.0	.0	575.0	57.0	.310	31	-2.17	.30	6
WESTVILLE	9523	6	****	0	****	****	0	****	0	****	****	****	****	.641	31	****	.40	21
WETUMKA 3 NE	9571	6	****	0	****	****	0	****	0	****	****	****	****	.410	31	-2.51	.27	6

JULY 1993 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY						
ALTUS IRR STA	179	7	85.7	31	1.2	104.	31	68.	23	.0	.0	643.0	38.0	1.730	31	-.03	.90	14		
ALTUS DAM	184	7	85.4	31	1.2	105.	31	65.	7	.0	.0	632.0	37.0	3.260	31	1.35	1.03	15		
ANADARKO	224	7	83.3	28	*****	100.	31	65.	7	.0	*****	512.5	*****	4.380	28	*****	2.34	6		
APACHE	260	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.920	31	-.11	.93	7		
ALTUS AFB	447	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.365	31	*****	.66	15		
CARNEGIE 2 ENE	1504	7	84.5	29	*****	107.	31	65.	7	.0	*****	565.5	*****	2.870	29	*****	1.09	7		
CHATTANOOGA	1706	7	87.1	31	2.8	107.	25	69.	27	.0	.0	685.0	87.0	1.440	31	-.68	.56	15		
DUNCAN 11 W	2668	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.290	31	*****	.76	12		
FREDERICK	3353	7	84.6	31	.2	103.	25	70.	14	.0	.0	608.5	7.5	3.330	31	1.25	1.38	14		
GRANDFIELD 4 NW	3709	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.840	31	-.14	.55	15		
HEADRICK	3998	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.530	31	*****	1.10	13		
HOBART FAA APT	4204	7	85.4	30	1.7	104.	24	65.	7	.0	.0	612.5	32.5	5.871	31	3.79	2.42	14		
HOLLIS	4249	7	84.7	31	.5	104.	31	67.	22	.0	.0	610.5	15.5	2.581	31	.96	1.24	15		
LAWTON	5063	7	85.7	31	2.2	104.	25	70.	7	.0	.0	641.0	67.0	.800	31	-1.10	.46	14		
FORT SILL	5068	7	85.8	31	*****	104.	30	69.	7	.0	*****	644.5	*****	1.495	31	*****	.70	13		
LOOKEBA 2 ENE	5329	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	5.100	31	3.21	3.28	6		
MANGUM RES STA	5509	7	83.3	31	-.9	104.	31	64.	7	.0	.0	566.5	-28.5	3.500	31	1.47	1.10	15		
RANDLETT 9 E	7403	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.650	31	*****	.40	22		
ROOSEVELT	7727	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	3.410	31	1.35	1.81	14		
SEDAN	8016	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	2.720	31	*****	.70	14		
SNYDER	8299	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.000	18	*****	.00	31		
VINSON 3 WNW	9212	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	9.531	31	7.90	6.43	7		
WALTERS	9278	7	85.8	31	1.7	105.	31	69.	19	.0	.0	646.0	54.0	1.500	31	-.86	.95	13		
WICHITA MT WLR	9629	7	82.9	29	*****	102.	31	62.	29	.0	*****	519.5	*****	2.030	30	*****	.95	15		
WILLOW	9668	7	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	4.510	31	*****	3.33	7		

JULY 1993 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

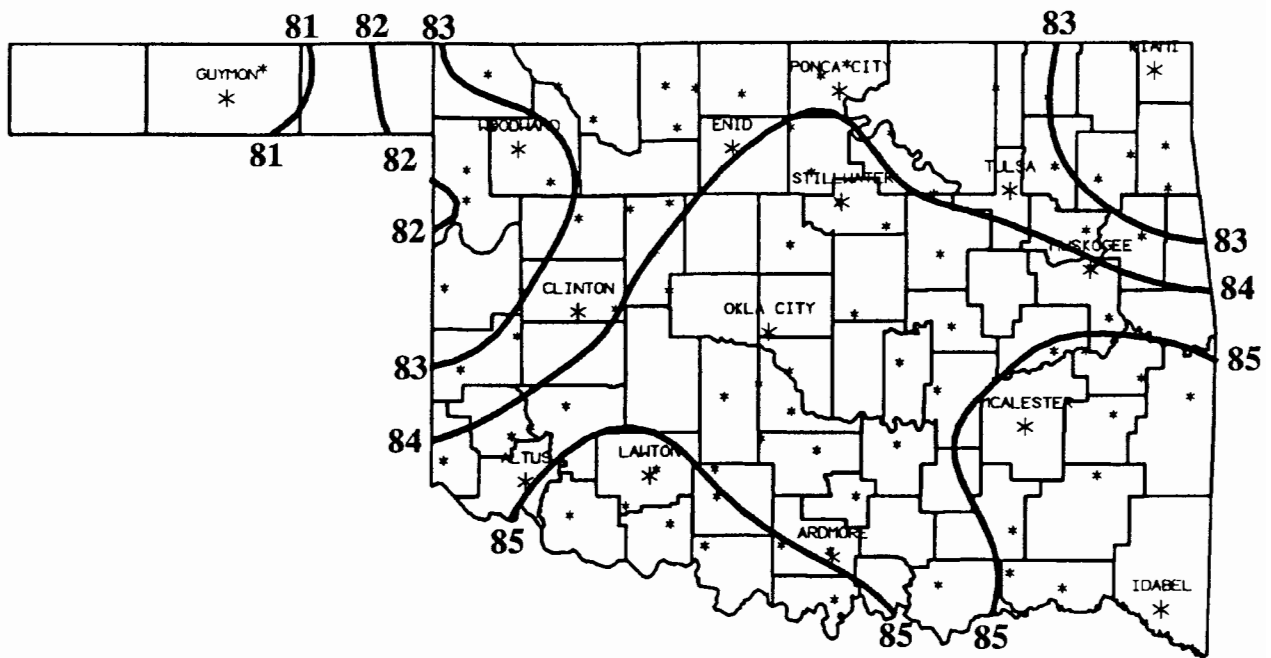
NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	MIN DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY						
ADA	17	8	84.5	31	2.3	102.	31	69.	7	.0	.0	605.0	72.0	.250	31	-2.16	.09	15		
ALLEN	147	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.271	31	*****	.15	8		
ARDMORE	292	8	84.8	30	.8	101.	31	72.	10	.0	.0	595.5	6.5	.050	31	-2.08	.05	14		
ATOKA DAM	394	8	86.1	21	*****	104.	30	71.	6	.0	*****	442.5	*****	.110	31	-2.42	.11	30		
BOKCHITO	917	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.250	31	*****	.25	12		
CANEY	1437	8	87.3	31	*****	107.	30	72.	10	.0	*****	690.0	*****	.000	31	*****	.00	31		
CENTRAHOMA	1648	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.400	31	*****	.40	30		
CHICKASAW NRA	1745	8	84.0	31	1.9	102.	31	69.	7	.0	.0	590.5	60.5	.190	31	-2.48	.16	14		
COLEMAN	2011	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.000	31	*****	.00	31		
COMANCHE	2054	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.280	31	-1.67	.09	15		
DAISY 4 ENE	2354	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.000	31	-3.43	.00	31		
DUNCAN	2660	8	84.3	30	1.2	102.	25	69.	7	.0	.0	578.5	17.5	1.061	30	*****	.27	13		
DURANT USDA	2678	8	84.5	31	2.2	102.	30	68.	26	.0	.0	604.0	68.0	.010	31	-2.28	.01	30		
ELMORE CITY	2872	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.150	18	*****	.15	6		
FARRIS 3 WNW	3083	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.000	31	-2.63	.00	31		
GRADY	3688	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.230	31	*****	.23	15		
HEALDTON	4001	8	85.2	31	2.3	103.	31	69.	26	.0	.0	625.0	70.0	.001	31	-1.97	.00	15		
KETCHUM RANCH	4780	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.370	31	*****	.14	13		
KINGSTON	4865	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.000	31	-2.11	.00	31		
LEHIGH	5108	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.001	31	*****	.00	30		
LINDSAY 2 W	5216	8	84.4	31	1.7	101.	31	68.	7	.0	.0	600.5	51.5	.431	31	-1.63	.26	14		
LOCO 6 SE	5247	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.160	31	*****	.12	23		
MADILL	5468	8	85.4	31	2.1	102.	31	70.	10	.0	.0	633.5	66.5	.000	31	-2.19	.00	31		
MARIETTA	5563	8	85.7	31	2.5	103.	31	71.	16	.0	.0	642.0	78.0	.000	31	-2.11	.00	31		
MARLOW 1 WSW	5581	8	84.0	31	1.7	106.	31	65.	19	.0	.0	588.0	52.0	.790	31	-1.53	.26	15		
MCCEE CREEK DAM	5713	8	85.2	31	*****	106.	30	69.	27	.0	*****	625.5	*****	.000	31	*****	.00	31		
PAULS VALLEY	6926	8	85.2	31	1.9	105.	30	69.	20	.0	.0	627.0	60.0	.020	31	-2.24	.02	7		
PONTOTOC	7214	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.040	31	-2.50	.04	14		
TISHOMINGO NWLR	8884	8	86.1	21	*****	102.	29	70.	28	.0	*****	444.0	*****	.000	31	-2.72	.00	31		
TUSSY	9032	8	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.040	31	*****	.04	7		
WAURIKA	9395	8	86.1	31	1.8	104.	31	69.	19	.0	.0	655.5	57.5	.001	31	-1.81	.00	15		
WAURIKA DAM	9399	8	85.7	31	*****	104.	31	69.	19	.0	*****	641.0	*****	.211	31	*****	.18	6		

JULY 1993 SUMMARY FOR SOUTHEAST DIVISION (CD9)

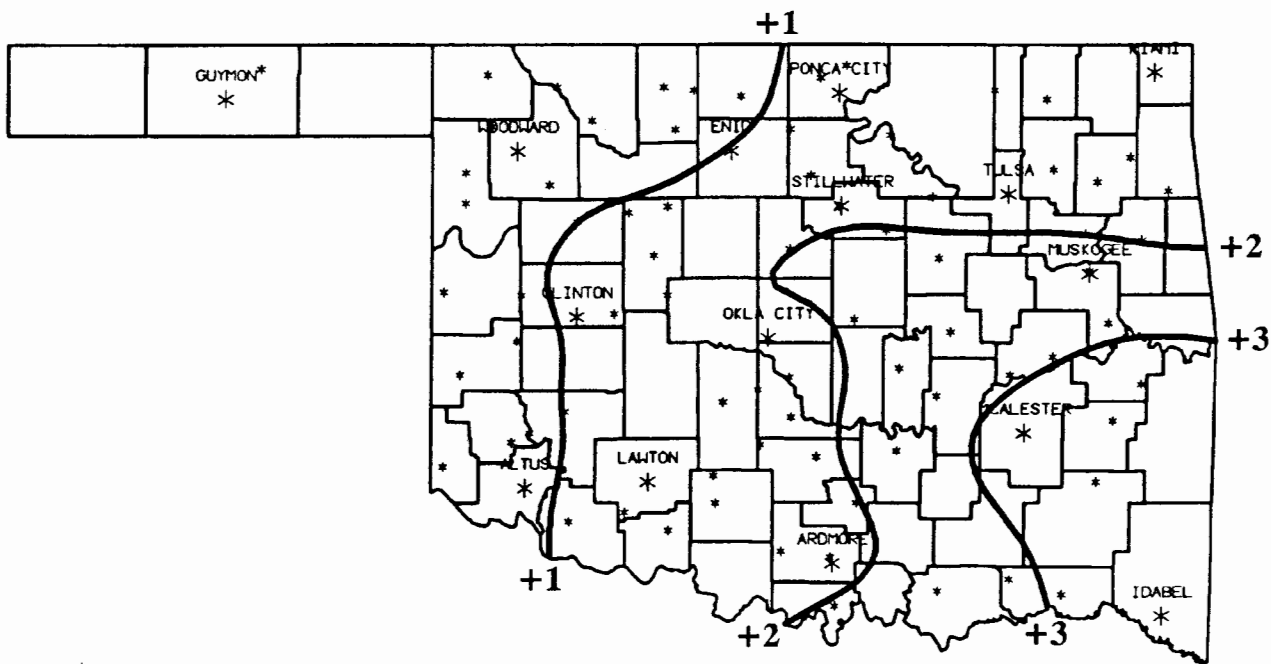
NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		DEV		MAX	DAY
			MEAN	NUM	FROM	MAX	MIN	DEG	FROM	DEG	FROM	DEG	TOT	NUM	FROM	MAX			
			TEMP	OBS	NORM	TEMP	DAY	TEMP	DAY	DAY	NORM	DAY	NORM	PPT	OBS	NORM	24-HR		
ANTLERS	256	9	84.2	31	2.9	103.	29	64.	27	.0	.0	596.0	91.0	.000	31	-3.27	.00	31	
BATTIEST 1 SSW	567	9	81.5	31	*****	102.	29	60.	27	.0	*****	511.0	*****	.550	31	*****	.20	30	
BEAR MT TWR	584	9	85.5	31	4.1	105.	29	69.	30	.0	.0	636.0	128.0	.310	31	-3.46	.31	30	
BENGAL	670	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.340	31	*****	1.24	21	
BOSWELL 4 NNW	980	9	84.7	31	2.8	105.	29	67.	10	.0	.0	611.5	87.5	.001	31	-2.52	.00	29	
BROKEN BOW 1 N	1162	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.170	31	-3.36	.17	29	
BROKEN BOW DAM	1168	9	83.4	31	2.9	105.	29	64.	28	.0	.0	569.5	88.5	.030	31	-3.87	.03	30	
CARNASAW TWR	1499	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.000	31	-4.01	.00	31	
CARTER TWR	1544	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	1.400	31	-2.59	.76	30	
FANSHAWE	3065	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.160	31	-3.45	.16	21	
HEAVENER 1 SE	4008	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.043	31	-3.40	.04	21	
HEE MT TWR	4017	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.070	31	-3.75	.07	30	
HUGO	4384	9	85.6	31	3.3	105.	29	69.	10	.0	.0	637.5	101.5	.110	31	-2.68	.11	30	
IDABEL	4451	9	84.7	31	3.8	105.	30	66.	10	.0	.0	610.0	117.0	.010	31	-3.33	.01	30	
POTEAU W W	7254	9	84.9	31	*****	105.	31	64.	9	.0	*****	617.5	*****	.000	31	*****	.00	31	
SMITHVILLE 1 W	8285	9	81.7	31	2.5	103.	31	60.	27	.0	.0	518.0	78.0	.001	31	-4.31	.00	29	
SPIRO	8416	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.220	31	-3.02	.09	30	
TUSKAHOMA	9023	9	85.1	30	3.4	106.	29	65.	27	.0	.0	602.5	84.5	.070	31	-3.64	.07	30	
VALLIANT 3 W	9118	9	*****	0	*****	*****	0	****	0	*****	*****	*****	*****	.060	31	-3.40	.06	30	
WILBURTON 9 ENE	9634	9	85.3	31	4.1	108.	31	65.	27	.0	.0	629.0	127.0	.001	31	-3.76	.00	21	

JULY 1993 CLIMATE DIVISION SUMMARY

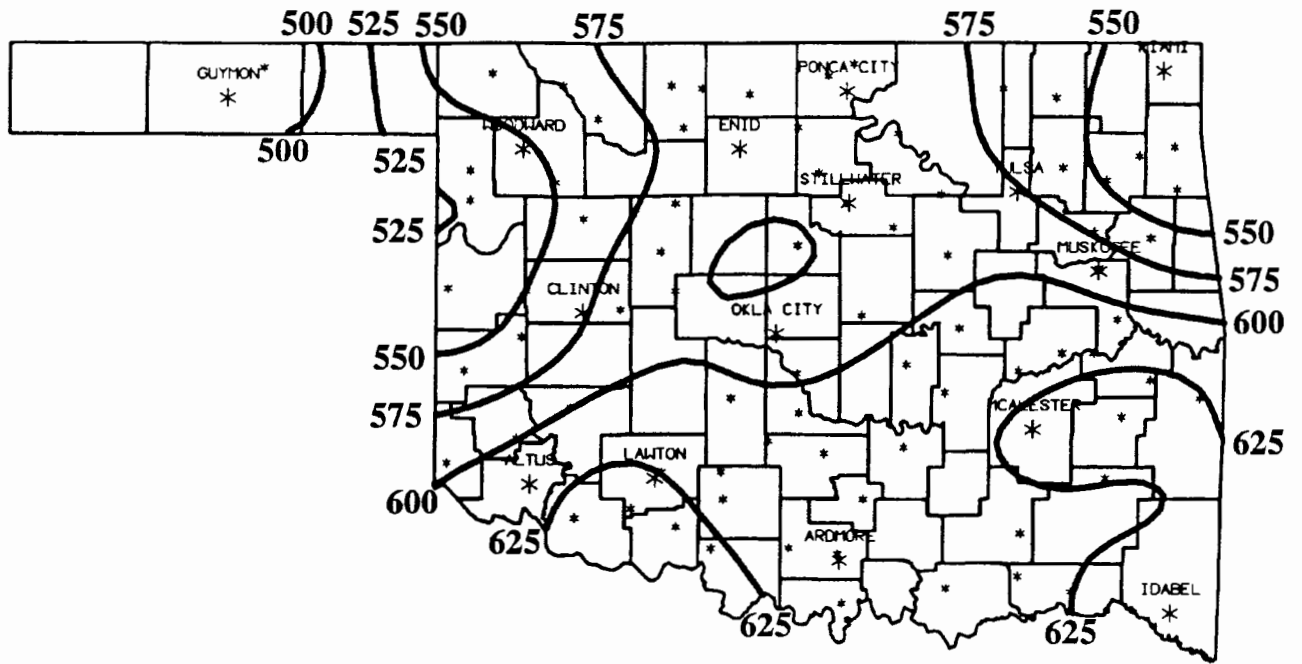
CLIMATE	MEAN	NUM	DEV					HEAT	DEV	COOL	DEV		DEV		MAX	DAY
			FROM	MAX	MIN	DEGREE	FROM				DEGREE	FROM	TOT	NUM		
DIV	TEMP	STA	NORM	TEMP	DAY	TEMP	DAY	DAYS	NORM	DAYS	NORM	PPT	STA	NORM	24-HR	DAY
1	80.6	9	.4	109.0	30	54.0	22	.0	.0	483.1	13.4	1.54	12	-.91	2.22	21
2	83.7	15	1.0	106.0	31	62.0	11	.0	.0	579.4	30.6	3.12	24	.31	2.50	14
3	83.2	15	1.8	104.0	31	57.0	23	.0	.0	562.6	53.8	3.08	25	.15	3.90	12
4	83.4	11	1.1	104.0	31	65.0	14	.0	.0	568.4	31.1	2.76	21	.77	2.97	7
5	84.4	13	2.1	107.0	31	67.0	20	.0	.0	599.8	61.5	1.16	33	-1.37	2.00	19
6	84.6	12	2.9	108.0	31	64.0	11	.0	.0	603.3	87.2	.33	30	-2.62	1.48	19
7	85.4	10	1.6	107.0	25	62.0	29	.0	.0	629.0	48.1	2.87	21	.88	6.43	7
8	85.1	15	2.1	107.0	30	65.0	19	.0	.0	620.1	64.0	.14	30	-2.20	.40	30
9	84.2	11	3.1	108.0	31	60.0	27	.0	.0	594.4	93.6	.23	20	-3.33	1.24	21



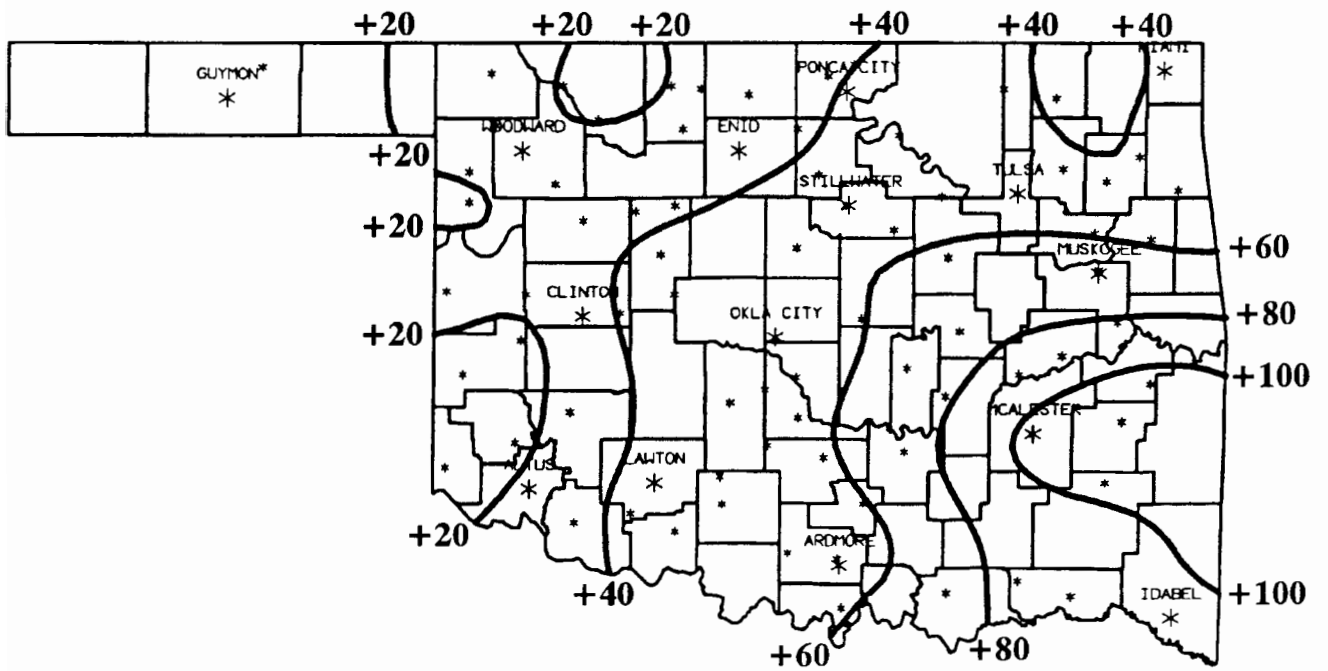
**JULY 1993 AVERAGE MONTHLY TEMPERATURES
(Degrees F)**



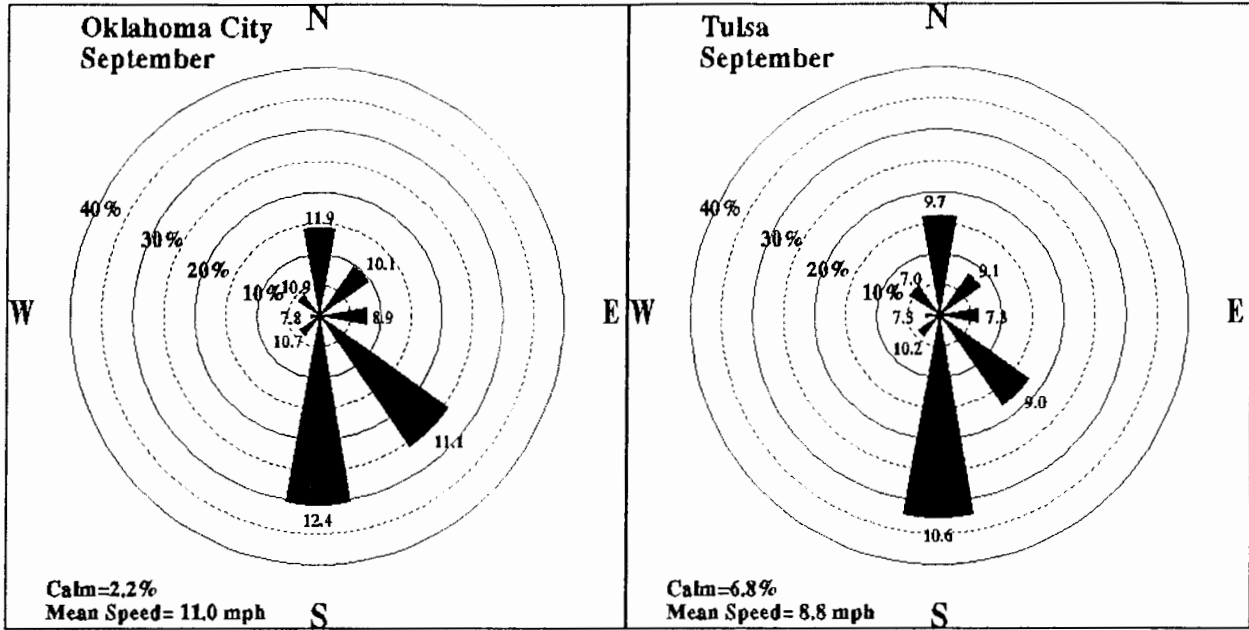
**JULY 1993 DEVIATION FROM NORMAL TEMPERATURES
(Degrees F)**



JULY 1993 COOLING DEGREE DAYS



JULY 1993 DEVIATION FROM NORMAL COOLING DEGREE DAYS



September 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.

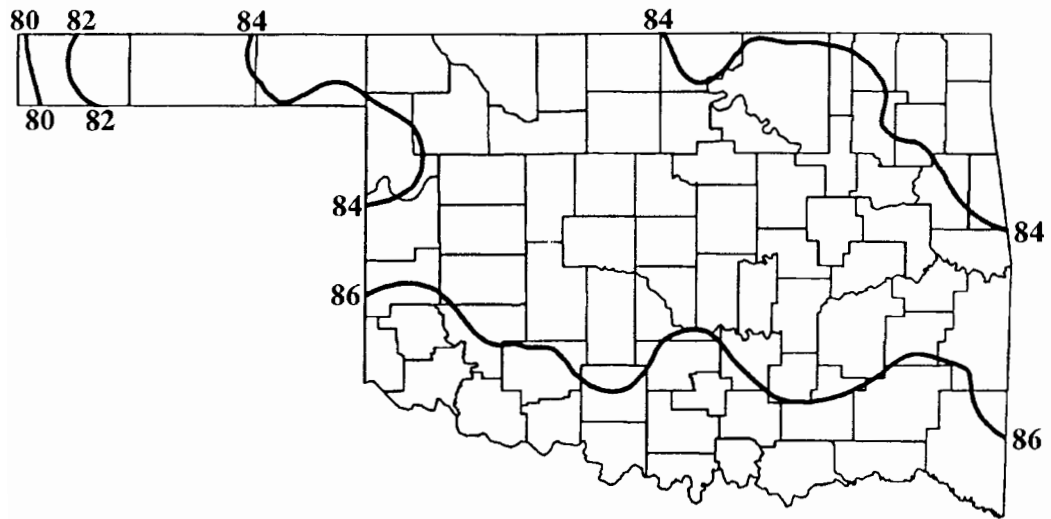
SEPTEMBER 1993 SUNRISE AND SUNSET

OKLAHOMA CITY

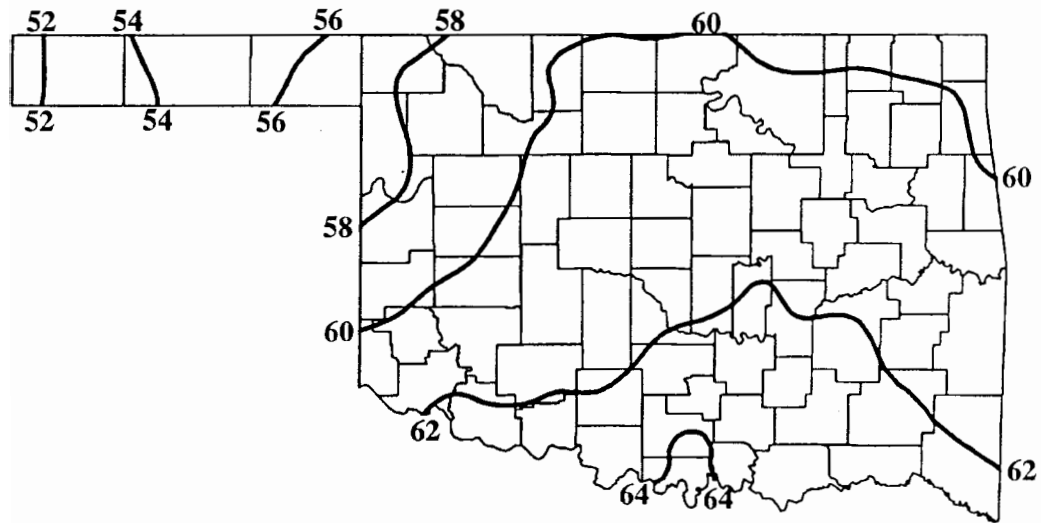
TULSA

DATE	SUNRISE	SUNSET	DAYLIGHT
93 9 1	7: 2AM	7:59PM CDT	12 hrs 58 mins
93 9 2	7: 2AM	7:58PM CDT	12 hrs 56 mins
93 9 3	7: 3AM	7:56PM CDT	12 hrs 53 mins
93 9 4	7: 4AM	7:55PM CDT	12 hrs 51 mins
93 9 5	7: 4AM	7:54PM CDT	12 hrs 49 mins
93 9 6	7: 5AM	7:52PM CDT	12 hrs 47 mins
93 9 7	7: 6AM	7:51PM CDT	12 hrs 45 mins
93 9 8	7: 7AM	7:49PM CDT	12 hrs 43 mins
93 9 9	7: 7AM	7:48PM CDT	12 hrs 41 mins
93 9 10	7: 8AM	7:46PM CDT	12 hrs 38 mins
93 9 11	7: 9AM	7:45PM CDT	12 hrs 36 mins
93 9 12	7: 9AM	7:44PM CDT	12 hrs 34 mins
93 9 13	7: 10AM	7:42PM CDT	12 hrs 32 mins
93 9 14	7: 11AM	7:41PM CDT	12 hrs 30 mins
93 9 15	7: 12AM	7:39PM CDT	12 hrs 28 mins
93 9 16	7: 12AM	7:38PM CDT	12 hrs 25 mins
93 9 17	7: 13AM	7:36PM CDT	12 hrs 23 mins
93 9 18	7: 14AM	7:35PM CDT	12 hrs 21 mins
93 9 19	7: 15AM	7:33PM CDT	12 hrs 19 mins
93 9 20	7: 15AM	7:32PM CDT	12 hrs 16 mins
93 9 21	7: 16AM	7:30PM CDT	12 hrs 14 mins
93 9 22	7: 17AM	7:29PM CDT	12 hrs 12 mins
93 9 23	7: 18AM	7:27PM CDT	12 hrs 10 mins
93 9 24	7: 18AM	7:26PM CDT	12 hrs 8 mins
93 9 25	7: 19AM	7:24PM CDT	12 hrs 5 mins
93 9 26	7: 20AM	7:23PM CDT	12 hrs 3 mins
93 9 27	7: 21AM	7:21PM CDT	12 hrs 1 mins
93 9 28	7: 21AM	7:20PM CDT	11 hrs 59 mins
93 9 29	7: 22AM	7: 19PM CDT	11 hrs 57 mins
93 9 30	7: 23AM	7: 17PM CDT	11 hrs 54 mins

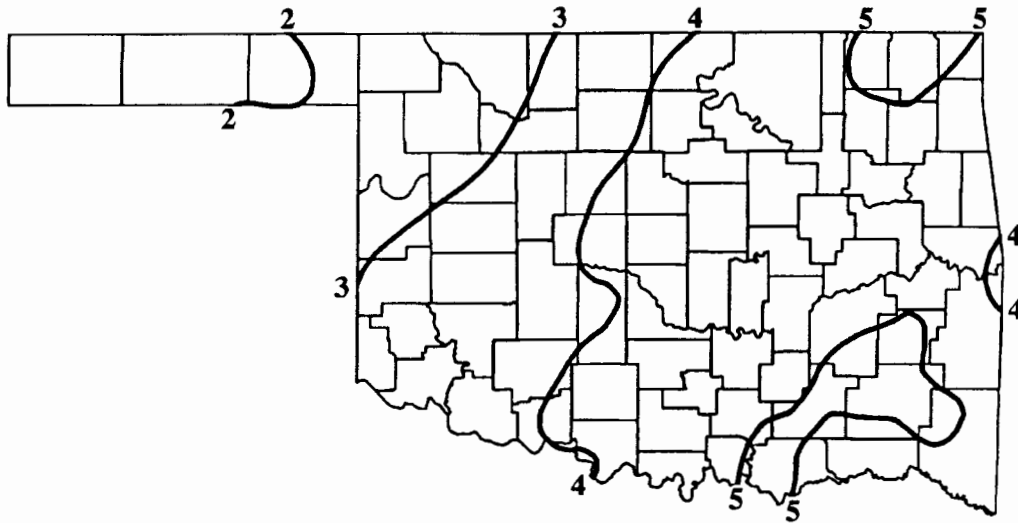
DATE	SUNRISE	SUNSET	DAYLIGHT
93 9 1	6:54AM	7:53PM CDT	12 hrs 59 mins
93 9 2	6:55AM	7:52PM CDT	12 hrs 57 mins
93 9 3	6:56AM	7:50PM CDT	12 hrs 55 mins
93 9 4	6:56AM	7:49PM CDT	12 hrs 53 mins
93 9 5	6:57AM	7:48PM CDT	12 hrs 50 mins
93 9 6	6:58AM	7:46PM CDT	12 hrs 48 mins
93 9 7	6:59AM	7:45PM CDT	12 hrs 46 mins
93 9 8	6:59AM	7:43PM CDT	12 hrs 44 mins
93 9 9	7: 0AM	7:42PM CDT	12 hrs 42 mins
93 9 10	7: 1AM	7:40PM CDT	12 hrs 39 mins
93 9 11	7: 2AM	7:39PM CDT	12 hrs 37 mins
93 9 12	7: 2AM	7:37PM CDT	12 hrs 35 mins
93 9 13	7: 3AM	7:36PM CDT	12 hrs 33 mins
93 9 14	7: 4AM	7:34PM CDT	12 hrs 30 mins
93 9 15	7: 5AM	7:33PM CDT	12 hrs 28 mins
93 9 16	7: 5AM	7:31PM CDT	12 hrs 26 mins
93 9 17	7: 6AM	7:30PM CDT	12 hrs 24 mins
93 9 18	7: 7AM	7:28PM CDT	12 hrs 21 mins
93 9 19	7: 8AM	7:27PM CDT	12 hrs 19 mins
93 9 20	7: 8AM	7:25PM CDT	12 hrs 17 mins
93 9 21	7: 9AM	7:24PM CDT	12 hrs 15 mins
93 9 22	7: 10AM	7:22PM CDT	12 hrs 12 mins
93 9 23	7: 11AM	7:21PM CDT	12 hrs 10 mins
93 9 24	7: 11AM	7:19PM CDT	12 hrs 8 mins
93 9 25	7: 12AM	7:18PM CDT	12 hrs 5 mins
93 9 26	7: 13AM	7:16PM CDT	12 hrs 3 mins
93 9 27	7: 14AM	7:15PM CDT	12 hrs 1 mins
93 9 28	7: 15AM	7:13PM CDT	11 hrs 59 mins
93 9 29	7: 15AM	7:12PM CDT	11 hrs 56 mins
93 9 30	7: 16AM	7:10PM CDT	11 hrs 54 mins



September Normal Daily Maximum Temperatures (°F)



September Normal Daily Minimum Temperatures (°F)



September Normal Monthly Precipitation (inches)

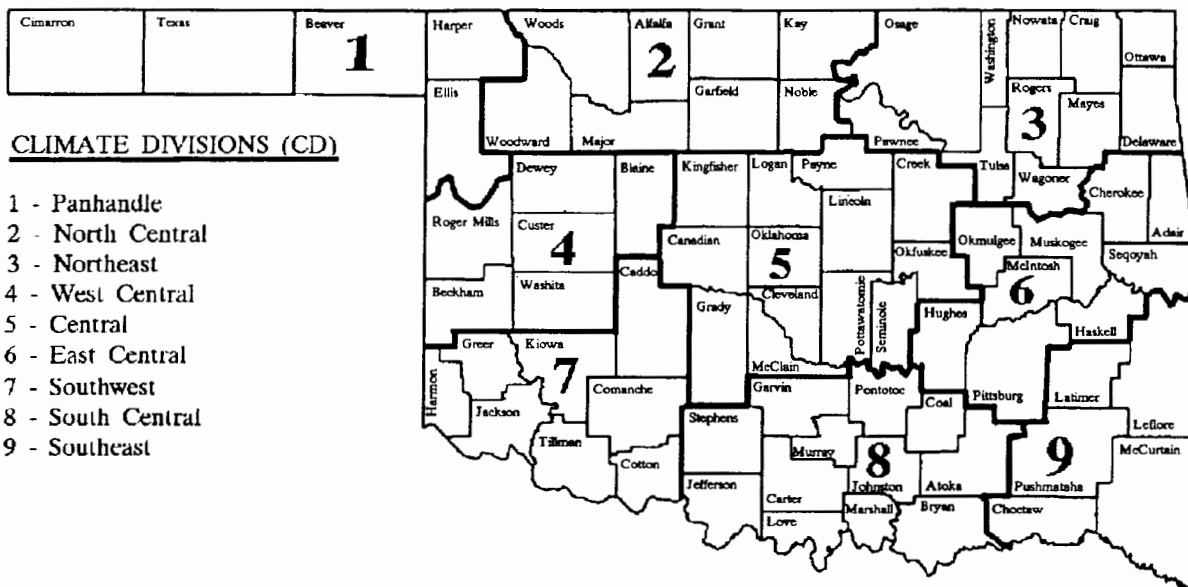
90-DAY NATIONAL WEATHER SERVICE OUTLOOK

(AUGUST 1993 - OCTOBER 1993)

Precipitation - Near Normal Statewide

Temperature - Near Normal Statewide

OKLAHOMA



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 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 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.

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).

OKLAHOMA CITY CLIMATE CALENDAR

September 1993

Normal 1	Actual	Normal 2	Actual	Normal 3	Actual	Normal 4	Actual	Normal 5	Actual	Normal 6	Actual	Normal 7	Actual
89.8 max 66.4 min 1.15 ppt 0 hdd 13 cdd Highest Max 105-1951 Lowest Max 69-1932 Lowest Min 53-1956 Highest Min 80-1951 Greatest ppt 2.53-1974	89.8 max 66.4 min 1.15 ppt 0 hdd 13 cdd Highest Max 105-1951 Lowest Max 69-1932 Lowest Min 53-1956 Highest Min 80-1951 Greatest ppt 2.53-1974	89.5 max 66.4 min 1.12 ppt 0 hdd 13 cdd Highest Max 105-1951 Lowest Max 68-1967 Lowest Min 52-1974 Highest Min 78-1961 Greatest ppt 4.08-1991	89.8 max 65.8 min 0.25 ppt 0 hdd 13 cdd Highest Max 105-1947 Lowest Max 68-1961 Lowest Min 46-1974 Highest Min 80-1939 Greatest ppt 3.16-1926	88.5 max 66.1 min 0.05 ppt 0 hdd 12 cdd Highest Max 103-1931 Lowest Max 64-1962 Lowest Min 47-1974 Highest Min 77-1939 Greatest ppt 1.65-1992	89.2 max 66.0 min 0.03 ppt 0 hdd 13 cdd Highest Max 106-1947 Lowest Max 71-1918 Lowest Min 51-1974 Highest Min 76-1970 Greatest ppt 2.20-1895	88.2 max 66.0 min 0.07 ppt 0 hdd 12 cdd Highest Max 102-1936 Lowest Max 66-1962 Lowest Min 49-1998 Highest Min 77-1936 Greatest ppt 1.37-1905	89.9 max 61.8 min 0.18 ppt 0 hdd 9 cdd Highest Max 102-1965 Lowest Max 59-1989 Lowest Min 45-1902 Highest Min 78-1978 Greatest ppt 1.88-1895	85.2 max 63.3 min 0.22 ppt 0 hdd 10 cdd Highest Max 102-1930 Lowest Max 64-1989 Lowest Min 45-1898 Highest Min 78-1930 Greatest ppt 3.03-1961	83.9 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	83.8 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	81.6 max 60.7 min 0.14 ppt 0 hdd 7 cdd Highest Max 97-1980 Lowest Max 61-1934 Lowest Min 39-1893 Highest Min 76-1931 Greatest ppt 2.04-1990	81.6 max 60.7 min 0.14 ppt 0 hdd 7 cdd Highest Max 97-1980 Lowest Max 61-1934 Lowest Min 39-1893 Highest Min 76-1931 Greatest ppt 2.04-1990
Normal 8	Actual	Normal 9	Actual	Normal 10	Actual	Normal 11	Actual	Normal 12	Actual	Normal 13	Actual	Normal 14	Actual
88.1 max 65.0 min 0.03 ppt 0 hdd 12 cdd Highest Max 101-1922 Lowest Max 75-1957 Lowest Min 48-1957 Highest Min 80-1895 Greatest ppt 2.66-1941	88.1 max 65.0 min 0.03 ppt 0 hdd 12 cdd Highest Max 101-1922 Lowest Max 75-1957 Lowest Min 48-1957 Highest Min 80-1895 Greatest ppt 2.66-1941	87.5 max 64.6 min 0.06 ppt 0 hdd 11 cdd Highest Max 99-1970 Lowest Max 67-1929 Lowest Min 51-1962 Highest Min 77-1895 Greatest ppt 1.88-1891	86.3 max 63.6 min 0.09 ppt 0 hdd 10 cdd Highest Max 101-1936 Lowest Max 64-1929 Lowest Min 47-1962 Highest Min 77-1938 Greatest ppt 2.40-1925	85.2 max 63.3 min 0.22 ppt 0 hdd 10 cdd Highest Max 102-1930 Lowest Max 64-1989 Lowest Min 45-1898 Highest Min 78-1930 Greatest ppt 3.03-1961	83.9 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.8 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.8 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	81.6 max 60.7 min 0.14 ppt 0 hdd 7 cdd Highest Max 97-1980 Lowest Max 61-1934 Lowest Min 39-1893 Highest Min 76-1931 Greatest ppt 2.04-1990	81.6 max 60.7 min 0.14 ppt 0 hdd 7 cdd Highest Max 97-1980 Lowest Max 61-1934 Lowest Min 39-1893 Highest Min 76-1931 Greatest ppt 2.04-1990
Normal 15	Actual	Normal 16	Actual	Normal 17	Actual	Normal 18	Actual	Normal 19	Actual	Normal 20	Actual	Normal 21	Actual
83.2 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.2 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.6 max 62.2 min 0.12 ppt 1 hdd 8 cdd Highest Max 101-1978 Lowest Max 59-1903 Lowest Min 44-1903 Highest Min 76-1955 Greatest ppt 1.97-1991	82.3 max 62.2 min 0.14 ppt 1 hdd 8 cdd Highest Max 99-1972 Lowest Max 58-1973 Lowest Min 44-1903 Highest Min 78-1978 Greatest ppt 1.42-1936	83.9 max 62.5 min 0.07 ppt 0 hdd 9 cdd Highest Max 98-1954 Lowest Max 56-1971 Lowest Min 44-1971 Highest Min 76-1978 Greatest ppt 1.81-1942	83.8 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	84.5 max 62.0 min 0.09 ppt 1 hdd 9 cdd Highest Max 99-1952 Lowest Max 53-1971 Lowest Min 42-1981 Highest Min 78-1978 Greatest ppt 3.10-1923	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	83.8 max 61.1 min 0.17 ppt 0 hdd 8 cdd Highest Max 100-1954 Lowest Max 52-1896 Lowest Min 41-1971 Highest Min 76-1954 Greatest ppt 3.82-1890	83.9 max 62.5 min 0.12 ppt 1 hdd 9 cdd Highest Max 100-1955 Lowest Max 57-1903 Lowest Min 46-1916 Highest Min 76-1856 Greatest ppt 2.35-1925	81.6 max 60.7 min 0.14 ppt 0 hdd 7 cdd Highest Max 97-1980 Lowest Max 61-1934 Lowest Min 39-1893 Highest Min 76-1931 Greatest ppt 2.04-1990	81.6 max 60.7 min 0.14 ppt 0 hdd 7 cdd Highest Max 97-1980 Lowest Max 61-1934 Lowest Min 39-1893 Highest Min 76-1931 Greatest ppt 2.04-1990
Normal 22	Actual	Normal 23	Actual	Normal 24	Actual	Normal 25	Actual	Normal 26	Actual	Normal 27	Actual	Normal 28	Actual
82.3 max 59.8 min 0.27 ppt 1 hdd 7 cdd Highest Max 96-1956 Lowest Max 62-1915 Lowest Min 45-1975 Highest Min 76-1931 Greatest ppt 7.53-1970	82.3 max 59.8 min 0.27 ppt 1 hdd 7 cdd Highest Max 96-1956 Lowest Max 62-1915 Lowest Min 45-1975 Highest Min 76-1931 Greatest ppt 7.53-1970	81.1 max 59.0 min 0.06 ppt 1 hdd 6 cdd Highest Max 97-1931 Lowest Max 58-1925 Lowest Min 40-1895 Highest Min 75-1931 Greatest ppt 1.47-1988	80.4 max 58.3 min 0.17 ppt 2 hdd 6 cdd Highest Max 98-1939 Lowest Max 56-1974 Lowest Min 36-1989 Highest Min 74-1958 Greatest ppt 3.87-1959	80.3 max 58.2 min 0.15 ppt 1 hdd 5 cdd Highest Max 98-1977 Lowest Max 46-1926 Lowest Min 35-1912 Highest Min 72-1923 Greatest ppt 1.74-1973	80.5 max 58.5 min 0.11 ppt 2 hdd 6 cdd Highest Max 96-1953 Lowest Max 47-1927 Lowest Min 38-1942 Highest Min 72-1923 Greatest ppt 1.75-1936	80.9 max 58.7 min 0.06 ppt 1 hdd 6 cdd Highest Max 97-1939 Lowest Max 53-1926 Lowest Min 41-1989 Highest Min 74-1933 Greatest ppt 1.41-1893	80.4 max 58.3 min 0.17 ppt 2 hdd 6 cdd Highest Max 98-1939 Lowest Max 56-1974 Lowest Min 36-1989 Highest Min 74-1958 Greatest ppt 3.87-1959	80.3 max 58.2 min 0.15 ppt 1 hdd 5 cdd Highest Max 98-1977 Lowest Max 46-1926 Lowest Min 35-1912 Highest Min 72-1923 Greatest ppt 1.74-1973	80.3 max 58.2 min 0.15 ppt 1 hdd 5 cdd Highest Max 98-1977 Lowest Max 46-1926 Lowest Min 35-1912 Highest Min 72-1923 Greatest ppt 1.74-1973	80.5 max 58.5 min 0.11 ppt 2 hdd 6 cdd Highest Max 96-1953 Lowest Max 47-1927 Lowest Min 38-1942 Highest Min 72-1923 Greatest ppt 1.75-1936	80.5 max 58.5 min 0.11 ppt 2 hdd 6 cdd Highest Max 96-1953 Lowest Max 47-1927 Lowest Min 38-1942 Highest Min 72-1923 Greatest ppt 1.75-1936	80.5 max 58.5 min 0.11 ppt 2 hdd 6 cdd Highest Max 96-1953 Lowest Max 47-1927 Lowest Min 38-1942 Highest Min 72-1923 Greatest ppt 1.75-1936	80.5 max 58.5 min 0.11 ppt 2 hdd 6 cdd Highest Max 96-1953 Lowest Max 47-1927 Lowest Min 38-1942 Highest Min 72-1923 Greatest ppt 1.75-1936
Normal 29	Actual	Normal 30	Actual	SEPTEMBER AVERAGES									
79.8 max 56.9 min 0.10 ppt 2 hdd 5 cdd Highest Max 98-1953 Lowest Max 47-1945 Lowest Min 39-1916 Highest Min 71-1939 Greatest ppt 2.93-1986	79.8 max 56.9 min 0.10 ppt 2 hdd 5 cdd Highest Max 98-1953 Lowest Max 47-1945 Lowest Min 39-1916 Highest Min 71-1939 Greatest ppt 2.93-1986	79.2 max 55.1 min 0.09 ppt 2 hdd 5 cdd Highest Max 100-1977 Lowest Max 54-1985 Lowest Min 36-1895 Highest Min 72-1977 Greatest ppt 1.79-1986	79.2 max 55.1 min 0.09 ppt 2 hdd 5 cdd Highest Max 100-1977 Lowest Max 54-1985 Lowest Min 36-1895 Highest Min 72-1977 Greatest ppt 1.79-1986	TEMPERATURE : 73.2°F PRECIPITATION : 3.47" HEATING DEGREE DAYS : 22 COOLING DEGREE DAYS : 270									

The data on this calendar are for Tulsa. Normal values are calculated for the period 1948-1991. Temperature extremes are for the period 1905-1992; precipitation extremes are for the period 1948-1992.

TULSA CLIMATE CALENDAR

September 1993

Normal 1 max 90.0 min 67.0 ppt .16 hdd 0 cdd 14 Highest Max 105-1985 Lowest Max 77-1974 Lowest Min 48-1987 Highest Min 78-1982 Greatest ppt 2.24-1974	Normal 2 max 89.0 min 67.0 ppt .18 hdd 0 cdd 13 Highest Max 109-1939 Lowest Max 68-1974 Lowest Min 51-1974 Highest Min 78-1985 Greatest ppt 2.06-1974	Normal 3 max 89.0 min 67.0 ppt .19 hdd 0 cdd 14 Highest Max 109-1939 Lowest Max 70-1974 Lowest Min 47-1934 Highest Min 76-1983 Greatest ppt 3.27-1962	Normal 4 max 89.0 min 67.0 ppt .22 hdd 0 cdd 14 Highest Max 107-1947 Lowest Max 66-1967 Lowest Min 46-1974 Highest Min 78-1983 Greatest ppt 2.80-1971	Normal 5 max 88.0 min 67.0 ppt .10 hdd 0 cdd 13 Highest Max 107-1913 Lowest Max 70-1962 Lowest Min 49-1974 Highest Min 79-1985 Greatest ppt 1.16-1977	Normal 6 max 89.0 min 67.0 ppt .16 hdd 0 cdd 13 Highest Max 107-1907 Lowest Max 69-1962 Lowest Min 52-1974 Highest Min 80-1990 Greatest ppt 4.05-1971	Normal 7 max 87.0 min 63.0 ppt .06 hdd 0 cdd 12 Highest Max 106-1936 Lowest Max 65-1986 Lowest Min 50-1918 Highest Min 79-1985 Greatest ppt 1.30-1962
Normal 8 max 88.0 min 65.0 ppt .07 hdd 0 cdd 12 Highest Max 103-1925 Lowest Max 75-1949 Lowest Min 50-1956 Highest Min 78-1983 Greatest ppt 1.45-1984	Normal 9 max 88.0 min 65.0 ppt .13 hdd 0 cdd 12 Highest Max 102-1909 Lowest Max 77-1962 Lowest Min 51-1943 Highest Min 76-1991 Greatest ppt 2.67-1951	Normal 10 max 87.0 min 64.0 ppt .03 hdd 0 cdd 10 Highest Max 105-1936 Lowest Max 75-1989 Lowest Min 48-1968 Highest Min 75-1991 Greatest ppt .74-1958	Normal 11 max 87.0 min 64.0 ppt .14 hdd 0 cdd 10 Highest Max 103-1909 Lowest Max 74-1957 Lowest Min 45-1940 Highest Min 77-1983 Greatest ppt 1.88-1977	Normal 12 max 86.0 min 62.0 ppt .15 hdd 0 cdd 10 Highest Max 102-1930 Lowest Max 68-1989 Lowest Min 48-1959 Highest Min 77-1991 Greatest ppt 1.75-1988	Normal 13 max 84.0 min 62.0 ppt .16 hdd 0 cdd 9 Highest Max 103-1965 Lowest Max 55-1989 Lowest Min 49-1960 Highest Min 77-1978 Greatest ppt 2.03-1961	Normal 14 max 84.0 min 63.0 ppt .25 hdd 1 cdd 10 Highest Max 103-1965 Lowest Max 57-1989 Lowest Min 46-1961 Highest Min 77-1986 Greatest ppt 2.15-1957
Normal 15 max 83.0 min 62.0 ppt .25 hdd 1 cdd 8 Highest Max 103-1956 Lowest Max 60-1949 Lowest Min 46-1961 Highest Min 78-1956 Greatest ppt 2.87-1962	Normal 16 max 84.0 min 63.0 ppt .25 hdd 0 cdd 9 Highest Max 103-1956 Lowest Max 67-1966 Lowest Min 45-1934 Highest Min 77-1956 Greatest ppt 5.78-1971	Normal 17 max 83.0 min 63.0 ppt .09 hdd 1 cdd 9 Highest Max 104-1931 Lowest Max 61-1971 Lowest Min 44-1981 Highest Min 79-1978 Greatest ppt 1.32-1971	Normal 18 max 85.0 min 62.0 ppt .11 hdd 1 cdd 9 Highest Max 100-1952 Lowest Max 56-1971 Lowest Min 42-1981 Highest Min 80-1978 Greatest ppt 2.39-1971	Normal 19 max 85.0 min 64.0 ppt .20 hdd 0 cdd 10 Highest Max 100-1954 Lowest Max 58-1971 Lowest Min 45-1991 Highest Min 79-1954 Greatest ppt 4.30-1974	Normal 20 max 85.0 min 62.0 ppt .07 hdd 0 cdd 9 Highest Max 102-1954 Lowest Max 65-1991 Lowest Min 39-1998 Highest Min 76-1954 Greatest ppt 1.05-1990	Normal 21 max 82.0 min 61.0 ppt .07 hdd 1 cdd 8 Highest Max 98-1980 Lowest Max 62-1975 Lowest Min 38-1978 Highest Min 78-1980 Greatest ppt 1.56-1965
Normal 22 max 82.0 min 60.0 ppt .16 hdd 1 cdd 7 Highest Max 99-1921 Lowest Max 61-1989 Lowest Min 44-1918 Highest Min 73-1980 Greatest ppt 3.78-1970	Normal 23 max 82.0 min 59.0 ppt .13 hdd 0 cdd 6 Highest Max 101-1931 Lowest Max 63-1974 Lowest Min 44-1989 Highest Min 79-1985 Greatest ppt 1.90-1968	Normal 24 max 81.0 min 59.0 ppt .14 hdd 1 cdd 6 Highest Max 99-1931 Lowest Max 58-1974 Lowest Min 37-1989 Highest Min 76-1958 Greatest ppt 1.84-1959	Normal 25 max 81.0 min 60.0 ppt .11 hdd 1 cdd 6 Highest Max 99-1939 Lowest Max 66-1962 Lowest Min 43-1926 Highest Min 75-1986 Greatest ppt 2.07-1959	Normal 26 max 82.0 min 59.0 ppt .14 hdd 1 cdd 7 Highest Max 96-1938 Lowest Max 57-1984 Lowest Min 37-1912 Highest Min 73-1981 Greatest ppt 1.70-1973	Normal 27 max 80.0 min 59.0 ppt .10 hdd 1 cdd 6 Highest Max 96-1954 Lowest Max 54-1984 Lowest Min 35-1942 Highest Min 73-1977 Greatest ppt 1.09-1961	Normal 28 max 80.0 min 58.0 ppt .03 hdd 2 cdd 6 Highest Max 102-1953 Lowest Max 55-1984 Lowest Min 38-1908 Highest Min 73-1986 Greatest ppt .58-1987
Normal 29 max 80.0 min 57.0 ppt .16 hdd 2 cdd 6 Highest Max 98-1953 Lowest Max 57-1984 Lowest Min 32-1910 Highest Min 73-1955 Greatest ppt 4.45-1986	Normal 30 max 79.0 min 55.0 ppt .09 hdd 2 cdd 5 Highest Max 99-1979 Lowest Max 59-1959 Lowest Min 35-1984 Highest Min 72-1977 Greatest ppt 1.85-1959	SEPTEMBER AVERAGES				TEMPERATURE : 73.6°F PRECIPITATION : 4.10" HEATING DEGREE DAYS : 17 COOLING DEGREE DAYS : 283