OKLAHOMA
MONTHLY SUMMARY
SEPTEMBER 1994

TABLE OF CONTENTS

September 1994 Oklahoma Summary.....2

Table of September 1993/1994 Comparisons.....5

September 1994 Data Summary Tables.....6

September 1994 State Map Summary.....11

November Climatological Normals.....14

90-Day National Weather Service Outlook.....16

Explanation of Tables and Maps.....17

November 1994 Oklahoma City Climate Calendar.....19

November 1994 Tulsa Climate Calendar.....20

MONTHLY SUMMARY FOR SEPTEMBER 1994

Mild, dry weather dominated Oklahoma's weather during September. The state-averaged precipitation of 2.42 inches was approximately an inch and a half below normal. Temperatures averaged 71.6 degrees across the state in September, 1.4 degrees below normal. For the year to date, the statewide precipitation of 26.09 inches is one inch less than normal. The average temperature through the first nine months of the year is 63.4 degrees, two-tenths of a degree below normal.

A frontal system that entered the state at the end of August produced widespread showers, especially notable in south central Oklahoma over the first two days of September. Cloudy, showery and cool weather prevailed in many areas over the next few days, although temperatures in the southwest reached the upper 90s on the 3rd through the 5th.

Thunderstorms developed in western Oklahoma the evening of the 7th and spread eastward overnight, producing scattered instances of hail or wind damage and some locally heavy rain. Winds estimated at 60 to 70 miles per hour accompanied dime-sized hail at Hooker (Texas County). Quarter-sized hail occurred near Optima (Texas County) and 50 to 60 mile-per-hour winds were reported at Beaver and Woodward . The Oklahoma Mesonetwork site at Cheyenne (Roger Mills) recorded a peak wind of 59 miles per hour. Winds destroyed a mobile home near Alex (Grady). Edmond (Oklahoma) received 4.6 inches of rain according to unofficial reports.

Another round of thunderstorms on the 14th and 15th produced the month's most significant widespread precipitation. Kingston (Marshall) and Kansas (Delaware) each reported over 4 inches of precipitation. Konowa (Seminole), Oktaha (Muskogee), Madill (Marshall) and Boynton (Muskogee) all reported more than three inches of rain.

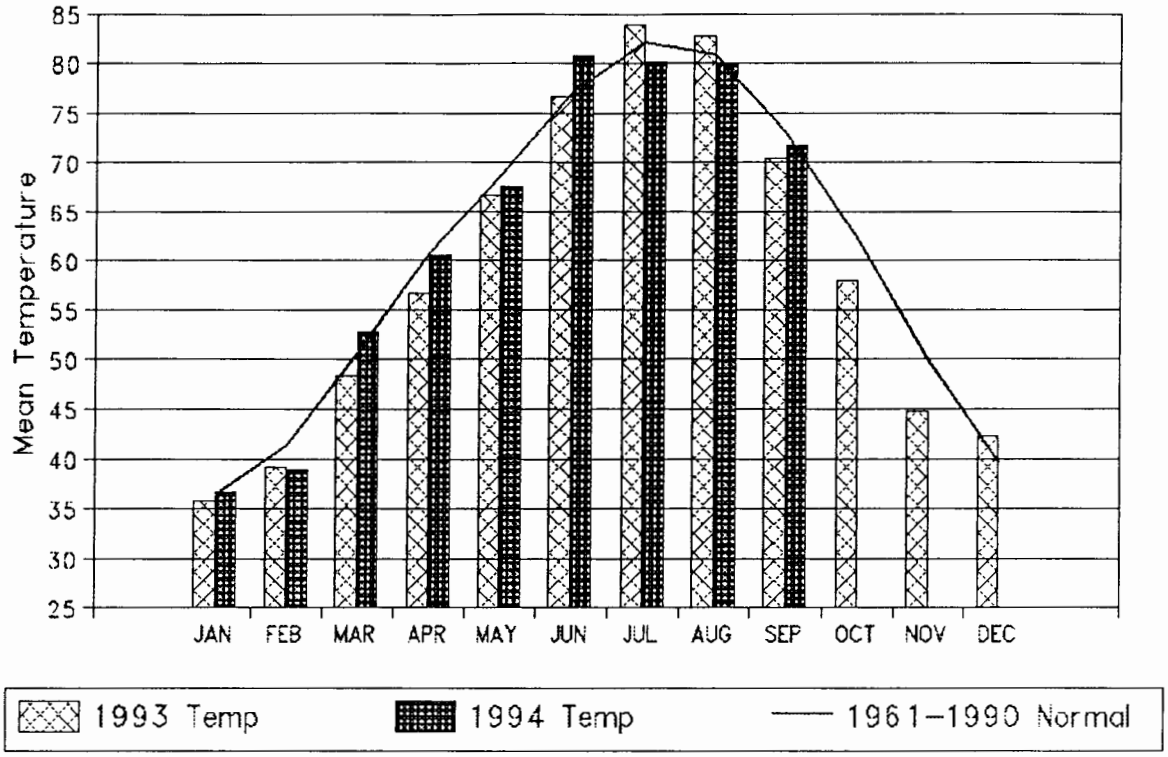
A strong cold front pushed through the state on the 21st, touching off a round of thunderstorms that produced strong winds and scattered reports of hail across much of northern Oklahoma. Mesonet sites near Woodward and Pawnee recorded wind gusts in excess of 60 knots. Three-quarter inch hail and 50 to 60 mile-per-hour wind were reported near Plainview (Woods) and Tangier (Woodward). Bristow (Creek) reported receiving small hail and 2.11 inches of rain.

The infusion of cooler air behind the cold front lowered overnight temperatures into the 30s. The lowest reported temperature for the month, 33 degrees, occurred at Waynoka on the 23rd. The National Weather Service cooperative observer at Laverne reported frost on the ground . Temperatures in the 30s were recorded at several Mesonetwork sites located in southeastern Oklahoma valleys. The 23rd and 24th were the coolest days of the month with daytime temperatures in the 50s in a few areas and the 60s and 70s over most of the state.

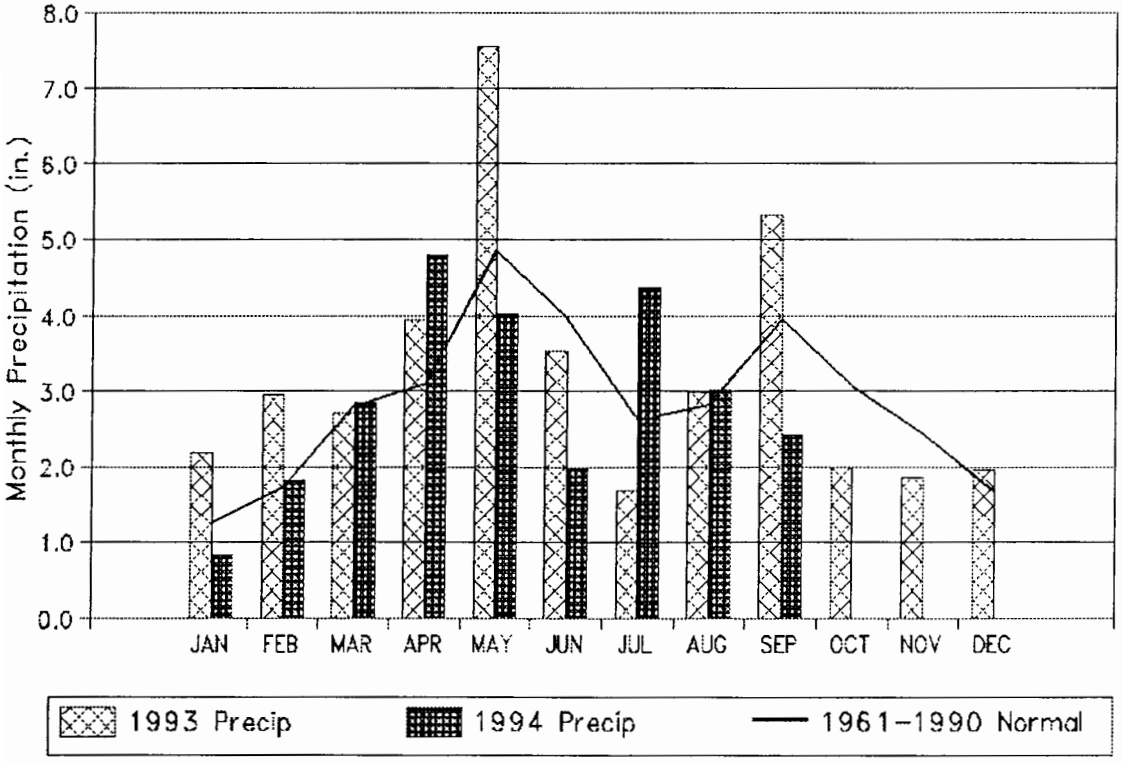
A warming trend during the last week of September gave the first few days of autumn a distinctively summer feel in western Oklahoma that extended statewide by the end of the month. Buffalo (Harper), Chattanooga (Comanche), McCurtain (Haskell), Jefferson (Grant) and Alva (Woods) all reported temperatures of 100 degrees or more on the 29th.

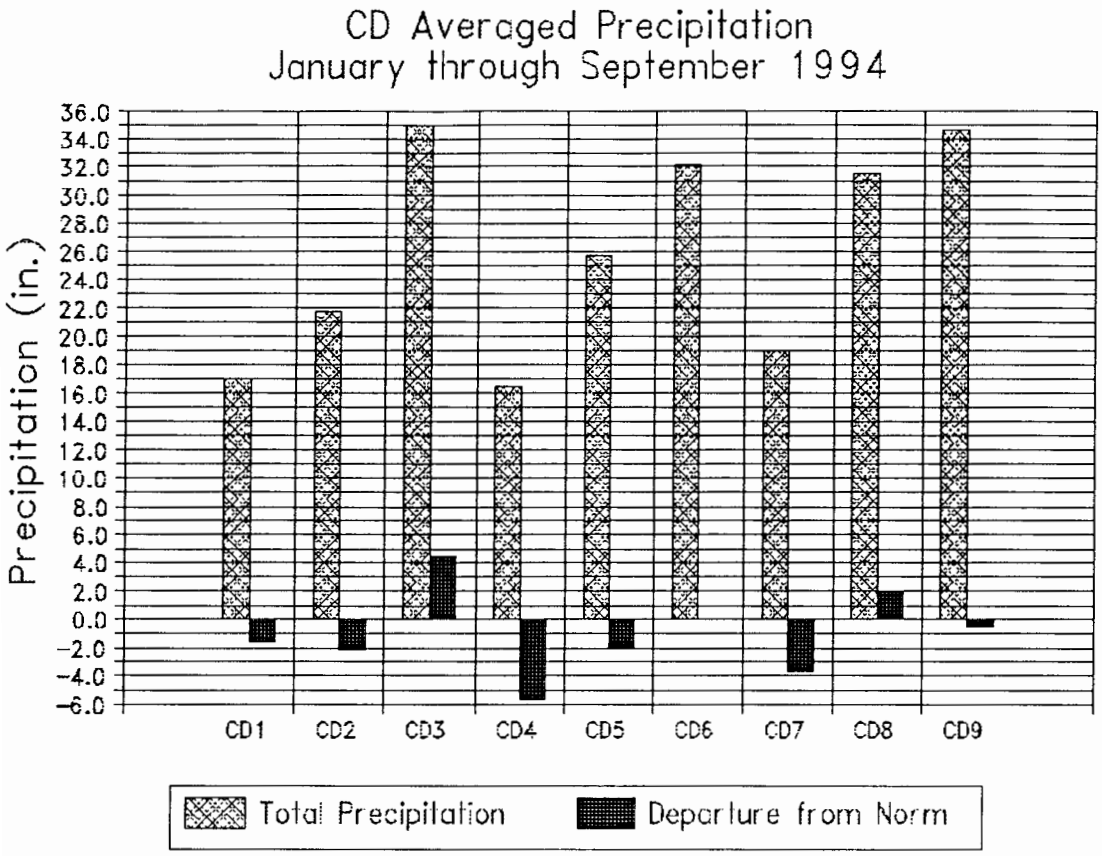
Howard L. Johnson

1993 and 1994 STATEWIDE TEMPERATURES
Monthly Averages

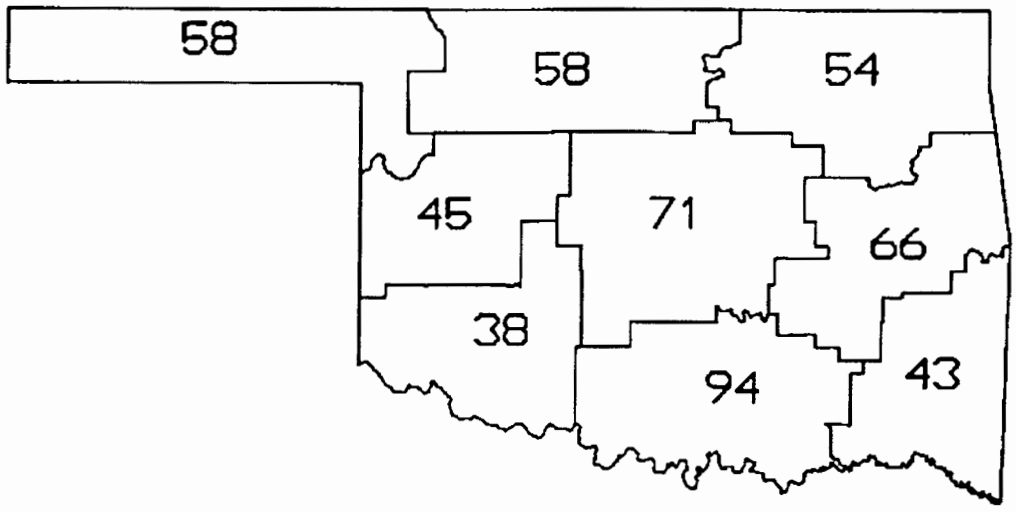


1993 and 1994 STATEWIDE PRECIPITATION
Monthly Totals





CD PERCENT OF NORMAL PRECIPITATION



SEPTEMBER 1994

EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION
SEPTEMBER, 1994

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	102	29	BUFFALO	36	24	ARNETT	1.13	8	GAGE	2.09	LAVERNE
				36	25	ARNETT					
				36	24	GAGE					
				36	21	KENTON					
				36	23	KENTON					
2	100	29	ALVA	33	23	WAYNOKA	2.58	15	BRAMAN	4.13	BRAMAN
	100	29	JEFFERSON								
3	94	30	KEYSTONE DAM	37	27	MIAMI	4.10	16	KANSAS	5.43	JAY TOWER
4	99	28	REYDON	37	24	HAMMON	1.83	1	GEARY	2.80	GEARY
5	98	29	HENNESSEY	40	24	CUSHING	3.89	16	KONAWA	6.45	PURCELL
				40	24	HENNESSEY					
6	100	29	MCCURTAIN	41	26	HANNA	3.31	16	OKTAHA	6.77	OKTAHA
				41	27	HANNA					
7	102	14	ALTUS DAM	39	23	CHATTANOOGA	1.69	9	RANDLETT	2.46	DUNCAN
				39	23	MANGUM					
8	96	30	ATOKA DAM	40	23	MARLOW	4.30	16	KINGSTON	7.95	MADILL
	96	30	MCGEE CREEK	40	23	MCGEE CREEK					
	96	30	WAURIKA DAM								
9	99	29	WILBURTON	37	23	ANTLERS	2.64	1	HEAVENER	3.67	BENGAL

TABLE OF 1993/1994 COMPARISONS

	September Temperature (°F)		September Precipitation (in.)	
Station	1993	1994	1993	1994
Arnett	65.4	69.2	2.78	1.42
Enid	70.0	72.3	2.16	1.01
Mutual	67.6	70.4	1.74	1.63
Tulsa	69.3	71.2	6.87	3.60
Elk City	70.9	72.8	1.23	2.15
Oklahoma City	69.7	70.7	7.05	1.65
McAlester	73.4	73.0	8.32	0.98
Altus Irr Sta	72.7	74.2	3.29	1.55
Durant	71.8	72.8	6.15	2.64
Ada	70.6	71.1	12.49	5.03
Hugo	74.5	73.8	3.25	2.82

EXTREMES

Variable	Station	Division	Observation	Date
Minimum temperature (°F)	Waynoka	2	33	23
Maximum temperature (°F)	Buffalo	1	102	29
Maximum 24-hour precipitation	Kingston	8	4.30"	16

SEPTEMBER 1994 SUMMARY FOR NORTHWEST DIVISION (CD1)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ARNETT	332	1	69.2	30	-.8	95.	29	36.	25	49.5	24.5	174.5	-.5	1.420	30	-1.11	1.00	8
BEAVER	593	1	69.1	30	-.6	99.	30	36.	25	48.5	17.5	171.0	-1.0	.780	30	-1.04	.63	8
BOISE CITY 2 E	908	1	69.2	30	1.4	98.	29	35.	24	38.0	6.0	163.0	47.0	.432	30	-1.40	.21	1
BUFFALO	1243	1	73.4	30	.5	102.	29	37.	24	28.0	15.0	281.5	31.5	.810	30	-2.27	.71	8
FARGO	3070	1	*****	0	*****	****	0	****	0	******	******	******	******	1.770	30	-.50	1.07	8
GAGE FAA APT	3407	1	71.4	29	-.2	98.	29	36.	24	37.5	19.5	223.0	7.0	1.843	29	*****	1.13	8
GATE	3489	1	70.8	30	-.4	100.	30	39.	24	39.0	22.0	211.5	8.5	1.973	30	-.12	.97	1
GOODWELL RES ST	3628	1	69.3	30	1.2	99.	30	38.	29	38.0	-1.0	166.0	34.0	.801	30	-.88	.54	8
GUYMON	3835	1	69.4	24	*****	98.	28	37.	24	40.0	******	144.5	******	1.131	28	*****	.63	8
HOOKER	4298	1	68.6	30	-.9	96.	30	36.	24	48.0	14.0	154.5	-14.5	1.920	30	-.13	1.23	8
KENTON	4766	1	68.1	30	1.4	94.	30	36.	24	47.5	-1.5	140.5	40.5	.526	30	-1.32	.14	3
LAVERNE	5045	1	*****	0	*****	****	0	****	0	******	******	******	******	2.092	30	.07	.98	1
OPTIMA LAKE	6740	1	68.7	30	*****	98.	30	36.	24	49.5	******	159.0	******	1.331	30	*****	1.03	8
REGNIER	7534	1	*****	0	*****	****	0	****	0	******	******	******	******	.181	30	-1.52	.13	21
TURPIN 4 SSE	9017	1	67.7	30	*****	96.	30	35.	24	55.5	******	135.5	******	2.211	30	*****	1.56	1

SEPTEMBER 1994 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ALVA	193	2	73.0	31	*****	100.	29	40.	24	23.5	******	271.0	******	1.650	31	*****	.78	1
VANCE AFB	302	2	*****	0	*****	****	0	****	0	******	******	******	******	.215	28	*****	.11	22
BILLINGS	755	2	69.8	30	-2.7	96.	30	43.	25	36.0	16.0	178.5	-63.5	1.393	30	-3.15	.55	6
BLACKWELL 2E	818	2	72.4	29	-.4	98.	29	46.	24	16.5	-.5	230.0	-21.0	4.044	30	-.04	2.38	8
BRAMAN	1075	2	*****	0	*****	****	0	****	0	******	******	******	******	4.130	30	*****	2.58	15
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	******	******	******	******	1.890	30	*****	.95	8
CHEROKEE	1724	2	72.4	29	-1.4	98.	29	40.	24	23.0	12.0	237.0	-38.0	2.150	29	*****	1.55	3
ENID	2912	2	72.3	30	-1.1	96.	29	42.	24	23.0	10.0	242.0	-23.0	1.010	30	-2.47	.43	1
FT SUPPLY DAM	3304	2	69.5	30	-.9	95.	30	36.	24	45.0	23.0	180.0	-4.0	3.370	30	1.06	2.02	1
FREEDOM	3358	2	68.9	30	-3.8	99.	30	37.	25	43.0	29.0	161.0	-84.0	2.180	30	-.41	.92	8
GREAT SALT PLNS	3740	2	70.4	30	-1.7	99.	30	41.	24	34.0	17.0	196.0	-34.0	1.350	30	-1.98	.69	1
HARDY	3909	2	*****	0	*****	****	0	****	0	******	******	******	******	1.815	30	*****	1.10	1
HELENA 1 SSE	4019	2	71.0	30	-.5	99.	30	40.	25	36.0	17.0	217.0	3.0	1.512	30	-1.72	.88	1
JEFFERSON	4573	2	71.3	30	-2.0	100.	29	41.	24	21.0	10.0	211.5	-48.5	1.591	30	-2.10	.88	5
LAMONT	5013	2	*****	0	*****	****	0	****	0	******	******	******	******	2.780	30	*****	.88	8
MEDFORD	5768	2	*****	0	*****	****	0	****	0	******	******	******	******	1.210	30	*****	.65	5
MORRISON	6065	2	*****	0	*****	****	0	****	0	******	******	******	******	1.890	30	*****	.68	9
MUTUAL	6139	2	70.4	30	-.8	98.	30	38.	24	35.0	16.0	196.0	-9.0	1.630	30	-1.02	.56	5
NEWKIRK	6278	2	70.6	30	-2.1	94.	29	44.	24	26.0	12.0	193.5	-51.5	1.532	30	-2.74	.45	22
ORIENTA	6751	2	*****	0	*****	****	0	****	0	******	******	******	******	3.130	30	.07	2.39	1
PERRY	7012	2	72.4	30	-1.2	96.	29	44.	24	13.0	-1.0	234.5	-37.5	1.570	30	-2.81	.43	8
PONCA CITY FAA	7201	2	71.9	30	-.2	96.	29	45.	24	29.0	6.0	236.5	.5	1.853	30	-2.49	.91	8
RED ROCK 1 NNE	7505	2	*****	0	*****	****	0	****	0	******	******	******	******	1.220	30	-3.01	.43	22
WAYNOKA	9404	2	70.6	30	-2.3	99.	29	33.	23	42.0	28.0	210.5	-40.5	1.930	30	-.64	1.26	1
WOODWARD	9760	2	*****	0	*****	****	0	****	0	******	******	******	******	1.431	30	-.91	.63	1

SEPTEMBER 1994 SUMMARY FOR NORTHEAST DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
BARNSDALL	535	3	69.3	30	-3.5	91.	6	44.	27	32.5	8.5	161.5	-96.5	1.603	30	-4.01	.61	9
BARTLESVILLE 2W	548	3	70.1	30	-2.7	92.	29	43.	27	26.5	10.5	178.5	-71.5	2.341	30	-2.23	.98	22
BIXBY	782	3	69.5	30	-2.0	93.	30	46.	25	31.0	10.0	167.0	-49.0	3.291	30	-1.42	1.00	22
BURBANK	1256	3	*****	0	*****	****	0	****	0	******	******	******	******	2.170	30	-2.49	1.33	8
CHELSEA 4 S	1717	3	*****	0	*****	****	0	****	0	******	******	******	******	2.810	30	*****	.75	16
CLAREMORE	1828	3	69.3	30	-2.7	90.	30	47.	27	34.0	10.0	162.5	-71.5	3.370	30	-1.08	.90	16
CLEVELAND 5 WSW	1902	3	70.4	30	*****	91.	29	45.	23	29.0	******	190.0	******	2.090	30	*****	1.20	22
FORAKER	3250	3	*****	0	*****	****	0	****	0	******	******	******	******	2.450	30	-2.39	1.30	22
HOLLOW	4258	3	*****	0	*****	****	0	****	0	******	******	******	******	2.190	30	-2.84	.86	15
HOMINY	4289	3	*****	0	*****	****	0	****	0	******	******	******	******	1.172	30	-3.95	.36	22
HULAH DAM	4393	3	68.2	30	-3.0	90.	30	41.	27	39.5	15.5	134.5	-75.5	2.052	30	-2.49	.78	22
JAY TOWER	4567	3	71.3	21	*****	93.	29	46.	27	14.0	******	147.0	******	5.430	23	*****	2.75	17
KANSAS 1 ESE	4672	3	69.4	30	-2.2	88.	15	46.	27	40.0	19.0	171.0	-48.0	5.317	30	-.12	4.10	16
KEYSTONE DAM	4812	3	69.5	27	*****	94.	30	47.	26	24.0	******	144.5	******	2.092	30	-2.68	.75	16
LENAPAH	5118	3	*****	0	*****	****	0	****	0	******	******	******	******	2.110	30	*****	.80	22
MANNFORD 6 NW	5522	3	69.8	28	*****	89.	30	44.	23	27.5	******	161.5	******	2.300	28	*****	.97	16
MARAMEC	5540	3	*****	0	*****	****	0	****	0	******	******	******	******	2.241	30	-2.45	1.39	22
MIAMI	5855	3	67.1	30	-3.9	95.	15	37.	27	60.0	29.0	123.5	-87.5	4.060	30	-1.01	1.16	1
NOWATA	6485	3	70.0	30	-2.4	90.	29	45.	27	31.0	11.0	180.5	-61.5	1.723	30	-3.63	.52	22
PAWHUSKA	6935	3	69.7	30	-2.7	91.	29	45.	27	26.5	5.5	166.0	-74.0	2.911	30	-2.02	.95	22
PAWNEE	6940	3	*****	0	*****	****	0	****	0	******	******	******	******	1.530	30	-3.51	.70	22
PRYOR 6 N	7309	3	68.7	30	-2.5	90.	30	44.	28	37.5	8.5	149.0	-66.0	3.703	30	-1.05	1.32	1
RALSTON	7390	3	70.0	30	-2.8	92.	29	45.	28	21.5	2.5	172.0	-81.0	.840	30	-3.83	.45	5
RAMONA 4 N	7394	3	*****	0	*****	****	0	****	0	******	******	******	******	.770	31	*****	.56	22
SKIATOOK	8258	3	*****	0	*****	****	0	****	0	******	******	******	******	3.010	30	-1.84	1.05	16
SPAVINAW	8380	3	71.9	30	-1.8	90.	30	47.	24	23.5	11.5	230.0	-43.0	3.443	30	-1.34	2.03	16
TULSA WSO APT	8992	3	71.2	30	-2.1	91.	29	49.	24	26.0	6.0	212.5	-56.5	3.603	30	-1.10	1.84	15
UPPER SPAVINAW	9101	3	69.7	29	*****	93.	14	44.	27	37.5	******	174.5	******	4.052	30	*****	2.88	16
VINITA 2 N	9203	3	70.8	26	*****	89.	29	42.	27	10.0	******	160.0	******	3.810	27	*****	1.34	1
WAGONER	9247	3	71.1	30	-2.3	90.	14	47.	24	24.0	10.0	206.5	-59.5	1.822	30	-2.74	.56	22
WANN	9298	3	*****	0	*****	****	0	****	0	******	******	******	******	2.050	30	*****	.75	1
WYNONA	9792	3	*****	0	*****	****	0	****	0	******	******	******	******	1.441	30	*****	.52	8

SEPTEMBER 1994 SUMMARY FOR WEST CENTRAL DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
CANTON DAM	1445	4	69.2	30	-2.8	97.	30	38.	24	46.5	30.5	171.0	-52.0	.760	30	-2.42	.33	8
CHEYENNE	1738	4	*****	0	*****	****	0	****	0	******	******	******	******	1.040	30	-1.92	.58	6
CLINTON	1909	4	72.7	30	-1.2	96.	29	40.	24	22.5	9.5	254.5	-25.5	2.680	30	-1.05	1.00	5
COLONY	2039	4	*****	0	*****	****	0	****	0	******	******	******	******	1.270	30	*****	.53	22
CORDELL	2125	4	*****	0	*****	****	0	****	0	******	******	******	******	1.081	30	-2.53	.41	22
ELK CITY 1 E	2849	4	72.8	30	.6	96.	28	39.	24	21.0	8.0	254.0	25.0	2.151	29	*****	.84	15
ERICK 4 E	2944	4	72.9	30	.5	98.	28	38.	24	21.5	8.5	259.5	24.5	1.961	30	-1.26	1.10	8
GEARY	3497	4	74.0	29	1.3	96.	30	46.	24	7.5	-8.5	269.5	22.5	2.800	30	-1.00	1.83	1
HAMMON 1 NNE	3871	4	69.9	29	-1.4	96.	30	37.	24	37.5	13.5	179.5	-33.5	1.281	29	*****	.61	8
LEEDEY	5090	4	*****	0	*****	****	0	****	0	******	******	******	******	1.250	30	-1.46	.75	8
MACKIE 4 NNW	5463	4	*****	0	*****	****	0	****	0	******	******	******	******	1.260	30	*****	.72	8
MORAVIA 2 NNE	6035	4	*****	0	*****	****	0	****	0	******	******	******	******	.430	30	-2.98	.27	8
OKEENE	6629	4	71.7	30	-2.0	97.	29	41.	26	27.5	14.5	227.5	-46.5	1.640	30	-2.05	1.36	1
RETROP	7565	4	*****	0	*****	****	0	****	0	******	******	******	******	.680	30	*****	.21	8
REYDON	7579	4	76.3	30	5.5	99.	28	44.	24	10.5	-7.5	350.5	158.5	1.741	30	-1.29	1.30	8
SAYRE	7952	4	*****	0	*****	****	0	****	0	******	******	******	******	2.060	30	-.98	1.34	15
SWEETWATER 2 E	8652	4	*****	0	*****	****	0	****	0	******	******	******	******	1.421	30	*****	.80	8
TALOGA	8708	4	71.8	30	-.3	96.	29	40.	24	26.5	12.5	231.0	4.0	1.304	30	-1.67	.70	8
THOMAS	8815	4	*****	0	*****	****	0	****	0	******	******	******	******	1.600	30	*****	.60	15
VICI	9172	4	*****	0	*****	****	0	****	0	******	******	******	******	1.680	30	-.96	.53	15
WATONGA	9364	4	72.4	30	-.3	97.	29	40.	24	22.5	6.5	244.0	-3.0	1.192	30	-2.18	.60	1
WEATHERFORD	9422	4	72.5	28	*****	95.	29	41.	23	15.5	******	224.5	******	1.590	28	*****	.90	4

SEPTEMBER 1994 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
AMBER	200	5	*****	0	*****	****	0	****	0	******	******	******	******	2.660	30	*****	1.46	1
ARCADIA	288	5	*****	0	*****	****	0	****	0	******	******	******	******	.700	30	*****	.70	23
TINKER AFB	325	5	*****	0	*****	****	0	****	0	******	******	******	******	3.042	26	*****	1.05	8
BLANCHARD 2 SSW	830	5	72.2	30	-1.8	95.	28	42.	24	21.5	10.5	238.5	-42.5	2.440	30	-1.72	1.10	1
BRISTOW	1144	5	70.1	30	-2.9	92.	29	44.	23	27.0	8.0	180.0	-79.0	5.182	30	.54	2.11	22
CHANDLER	1684	5	73.5	29	.2	95.	29	48.	24	13.5	-3.5	261.0	-5.0	5.301	29	*****	2.85	16
CHICKASHA EX ST	1750	5	72.2	30	-1.4	95.	28	42.	24	27.0	15.0	244.0	-26.0	3.870	30	.07	2.05	1
COX CITY 1 E	2196	5	*****	0	*****	****	0	****	0	******	******	******	******	2.960	30	*****	.65	1
CRESCENT	2242	5	*****	0	*****	****	0	****	0	******	******	******	******	1.560	30	*****	.57	6
CUSHING	2318	5	70.3	30	-2.2	92.	30	40.	24	31.0	16.0	191.0	-49.0	3.410	30	-.70	1.20	1
EL RENO 1 N	2818	5	72.1	30	-.7	93.	29	42.	24	21.0	8.0	235.0	-12.0	2.370	30	-1.76	1.20	1
GUTHRIE	3821	5	73.2	30	-1.0	96.	29	43.	24	18.5	4.5	263.5	-26.5	2.790	30	-1.52	.84	22
HENNESSEY 4 ESE	4055	5	71.8	29	-1.4	98.	29	40.	24	22.5	10.5	221.0	-37.0	1.160	30	-2.90	.46	1
INGALLS	4489	5	*****	0	*****	****	0	****	0	******	******	******	******	3.170	28	*****	1.50	9
KINGFISHER 2 SE	4861	5	71.2	29	-2.7	95.	29	43.	24	27.0	17.0	207.5	-69.5	2.030	30	-2.09	1.18	5
KONAWA	4915	5	*****	0	*****	****	0	****	0	******	******	******	******	5.200	30	.76	3.89	16
MARSHALL	5589	5	*****	0	*****	****	0	****	0	******	******	******	******	1.520	30	-2.31	.46	6
MEEKER 4 W	5779	5	72.4	22	*****	92.	30	44.	30	.5	******	163.0	******	3.991	22	*****	1.13	8
MULHALL	6110	5	*****	0	*****	****	0	****	0	******	******	******	******	1.710	30	*****	.89	6
NORMAN 3 S	6386	5	71.9	30	-2.1	95.	28	43.	24	29.5	19.5	236.5	-43.5	4.690	30	.60	1.77	9
OILTON 2 SE	6616	5	*****	0	*****	****	0	****	0	******	******	******	******	3.940	30	*****	2.65	15
OKEMAH	6638	5	74.1	30	.8	95.	29	50.	24	12.5	-2.5	285.5	21.5	2.620	30	-1.64	.79	22
OKLAHOMA CTY WS	6661	5	70.7	30	-2.3	93.	29	43.	24	32.0	17.0	202.5	-52.5	1.651	30	-2.19	.57	15
PERKINS	7003	5	*****	0	*****	****	0	****	0	******	******	******	******	2.380	30	-2.02	1.23	22
PIEDMONT	7068	5	*****	0	*****	****	0	****	0	******	******	******	******	2.410	30	*****	.85	22
PRAGUE	7264	5	*****	0	*****	****	0	****	0	******	******	******	******	3.770	30	-.71	1.10	5
PURCELL 5 SW	7327	5	71.3	30	-2.9	93.	28	42.	25	27.0	14.0	215.5	-73.5	6.451	30	2.09	2.55	16
SEMINOLE	8042	5	72.2	30	-2.6	93.	29	46.	24	19.0	10.0	235.0	-68.0	4.030	30	-.36	2.18	16
SHAWNEE	8110	5	*****	0	*****	****	0	****	0	******	******	******	******	2.280	30	-1.94	1.20	22
STILLWATER 2 W	8501	5	69.9	30	-2.2	93.	30	44.	23	28.5	11.5	175.0	-55.0	2.812	30	-1.48	1.26	16
STROUD 1 N	8563	5	*****	0	*****	****	0	****	0	******	******	******	******	3.520	30	*****	1.33	22
TECUMSEH	8751	5	*****	0	*****	****	0	****	0	******	******	******	******	.740	30	*****	.45	6
TROUSDALE	8960	5	*****	0	*****	****	0	****	0	******	******	******	******	4.040	30	*****	1.91	14
UNION CITY 1 SE	9086	5	*****	0	*****	****	0	****	0	******	******	******	******	3.000	29	*****	1.19	1
WELTY 1 SSE	9479	5	*****	0	*****	****	0	****	0	******	******	******	******	4.172	30	*****	1.08	6
WEWOKA	9575	5	*****	0	*****	****	0	****	0	******	******	******	******	2.841	30	-1.48	1.42	16

SEPTEMBER 1994 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ASHLAND	364	6	*****	0	*****	****	0	****	0	******	******	******	******	2.430	30	*****	1.05	1
BEGGS	631	6	*****	0	*****	****	0	****	0	******	******	******	******	3.760	30	*****	1.50	1
BOYNTON	1027	6	*****	0	*****	****	0	****	0	******	******	******	******	4.811	30	*****	3.15	16
CALVIN	1391	6	*****	0	*****	****	0	****	0	******	******	******	******	2.200	30	-2.24	.90	2
CHECOTAH	1711	6	*****	0	*****	****	0	****	0	******	******	******	******	2.900	30	-1.98	.75	22
CLAYTON 14 WNW	1858	6	*****	0	*****	****	0	****	0	******	******	******	******	2.450	30	*****	1.67	1
DEWAR 2 NE	2485	6	*****	0	*****	****	0	****	0	******	******	******	******	4.360	30	-.18	2.00	16
DUSTIN	2690	6	*****	0	*****	****	0	****	0	******	******	******	******	3.050	30	*****	1.23	16
EUFAULA	2993	6	*****	0	*****	****	0	****	0	******	******	******	******	2.380	30	-2.19	1.33	1
HANNA	3884	6	70.7	30	-2.9	94.	29	41.	27	28.5	16.5	198.5	-71.5	4.480	30	-.10	1.97	1
HASKELL	3956	6	*****	0	*****	****	0	****	0	******	******	******	******	4.302	30	-.09	2.29	16
HOLDENVILLE	4235	6	71.6	30	-2.2	94.	28	43.	25	23.5	13.5	221.5	-52.5	3.390	30	-.68	1.23	16
LAKE EUFAULA	4975	6	71.2	26	*****	97.	30	43.	23	27.5	******	189.5	******	.090	28	*****	.08	23
LYONS 2 N	5437	6	*****	0	*****	****	0	****	0	******	******	******	******	1.470	30	-3.35	.77	16
MARBLE CITY	5546	6	*****	0	*****	****	0	****	0	******	******	******	******	2.334	30	*****	1.12	6
MCALESTER FAA	5664	6	73.0	29	-.7	95.	29	44.	23	24.0	8.0	255.0	-22.0	.981	29	*****	.37	22
MCCURTAIN 1 SE	5693	6	72.4	30	-1.6	100.	29	43.	24	23.0	9.0	246.0	-38.0	1.184	30	-3.58	.60	1
MUSKOGEE	6130	6	72.0	29	-1.5	92.	30	47.	25	15.0	.0	217.5	-52.5	3.610	30	-.90	2.00	16
OKMULGEE W W	6670	6	69.5	30	-2.4	94.	31	44.	23	36.0	15.0	170.5	-57.5	2.350	30	-1.56	.64	1
OKTAHA 2 NE	6678	6	*****	0	*****	****	0	****	0	******	******	******	******	6.770	30	*****	3.31	16
SALLISAW 2 NE	7862	6	72.4	30	-1.4	95.	29	41.	26	27.5	16.5	250.5	-24.5	1.250	30	-3.26	.90	2
SCIPIO	7979	6	*****	0	*****	****	0	****	0	******	******	******	******	1.690	30	*****	.73	1
SHORT	8170	6	*****	0	*****	****	0	****	0	******	******	******	******	.940	30	*****	.51	1
STILWELL 1 NE	8506	6	68.6	30	-3.1	90.	29	42.	25	41.5	21.5	149.5	-71.5	1.900	30	-2.82	.52	16
TAHLEQUAH	8677	6	70.1	30	-2.4	91.	30	45.	27	35.0	8.0	188.0	-64.0	5.071	30	.08	3.12	16
WEBBERS FALLS	9445	6	70.9	30	-1.9	98.	30	44.	25	33.5	17.5	211.5	-38.5	1.670	30	-2.94	.50	22
WESTVILLE	9523	6	*****	0	*****	****	0	****	0	******	******	******	******	.080	31	*****	.05	22
WETUMKA 3 NE	9571	6	*****	0	*****	****	0	****	0	******	******	******	******	3.050	30	-1.53	1.54	16

SEPTEMBER 1994 SUMMARY FOR SOUTHWEST DIVISION (CD7)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ALTUS IRR STA	179	7	74.2	30	-.9	99.	28	40.	24	20.0	14.0	297.0	-12.0	1.550	30	-1.89	.62	15
ALTUS DAM	184	7	74.4	30	.4	99.	29	43.	25	23.5	15.5	306.0	28.0	1.370	30	-2.06	.75	6
ANADARKO	224	7	71.8	30	-1.9	94.	30	40.	24	22.0	9.0	224.5	-49.5	2.580	30	-1.13	1.11	9
APACHE	260	7	*****	0	*****	****	0	****	0	******	******	******	******	1.980	30	-1.77	.82	22
ALTUS AFB	447	7	*****	0	*****	****	0	****	0	******	******	******	******	.222	30	*****	.12	22
CARNEGIE 2 ENE	1504	7	72.9	30	-1.0	96.	28	40.	24	20.5	8.5	258.0	-21.0	1.051	30	-2.98	.55	22
CHATTANOOGA	1706	7	75.0	29	-.3	100.	29	39.	23	15.5	8.5	306.0	-10.0	.500	29	*****	.30	22
DUNCAN 11 W	2668	7	*****	0	*****	****	0	****	0	******	******	******	******	2.463	30	*****	1.17	8
FREDERICK	3353	7	74.0	30	-.5	98.	29	43.	24	21.5	14.5	291.5	-.5	1.270	30	-2.31	.50	15
GRANDFIELD 4 NW	3709	7	*****	0	*****	****	0	****	0	******	******	******	******	.520	30	-3.51	.20	15
HEADRICK	3998	7	*****	0	*****	****	0	****	0	******	******	******	******	1.570	30	*****	.50	5
HOBART FAA APT	4204	7	73.4	30	-.5	97.	29	41.	24	25.5	15.5	277.5	.5	1.342	30	-2.21	.65	22
HOLLIS	4249	7	74.2	30	-.3	99.	29	40.	24	15.0	9.0	290.0	-1.0	.601	30	-2.53	.33	8
LAWTON	5063	7	72.9	27	*****	97.	30	44.	24	20.5	******	234.0	******	1.810	28	*****	.64	3
FORT SILL	5068	7	73.3	30	*****	97.	28	44.	24	21.0	******	271.0	******	1.284	30	*****	.47	21
LOOKEBA 2 ENE	5329	7	*****	0	*****	****	0	****	0	******	******	******	******	1.942	30	-2.41	1.05	1
MANGUM RES STA	5509	7	73.6	30	-1.1	98.	28	39.	23	22.0	16.0	281.0	-16.0	1.000	30	-2.38	.52	22
RANDLETT 9 E	7403	7	*****	0	*****	****	0	****	0	******	******	******	******	2.300	30	*****	1.69	9
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	******	******	******	******	.750	30	-2.58	.35	15
SEDAN	8016	7	*****	0	*****	****	0	****	0	******	******	******	******	1.690	30	*****	1.03	22
SNYDER	8299	7	*****	0	*****	****	0	****	0	******	******	******	******	1.770	30	-1.80	.65	22
VINSON 3 WNW	9212	7	*****	0	*****	****	0	****	0	******	******	******	******	.750	30	-2.45	.41	8
WALTERS	9278	7	73.9	30	-1.6	96.	29	42.	24	18.0	9.0	284.5	-39.5	2.350	30	-1.90	1.40	8
WICHITA MT WLR	9629	7	71.2	30	-1.2	97.	29	39.	23	37.5	24.5	224.0	-11.0	2.370	30	-1.66	.75	6
WILLOW	9668	7	*****	0	*****	****	0	****	0	******	******	******	******	.920	30	*****	.58	22

SEPTEMBER 1994 SUMMARY FOR SOUTH CENTRAL DIVISION (CD8)

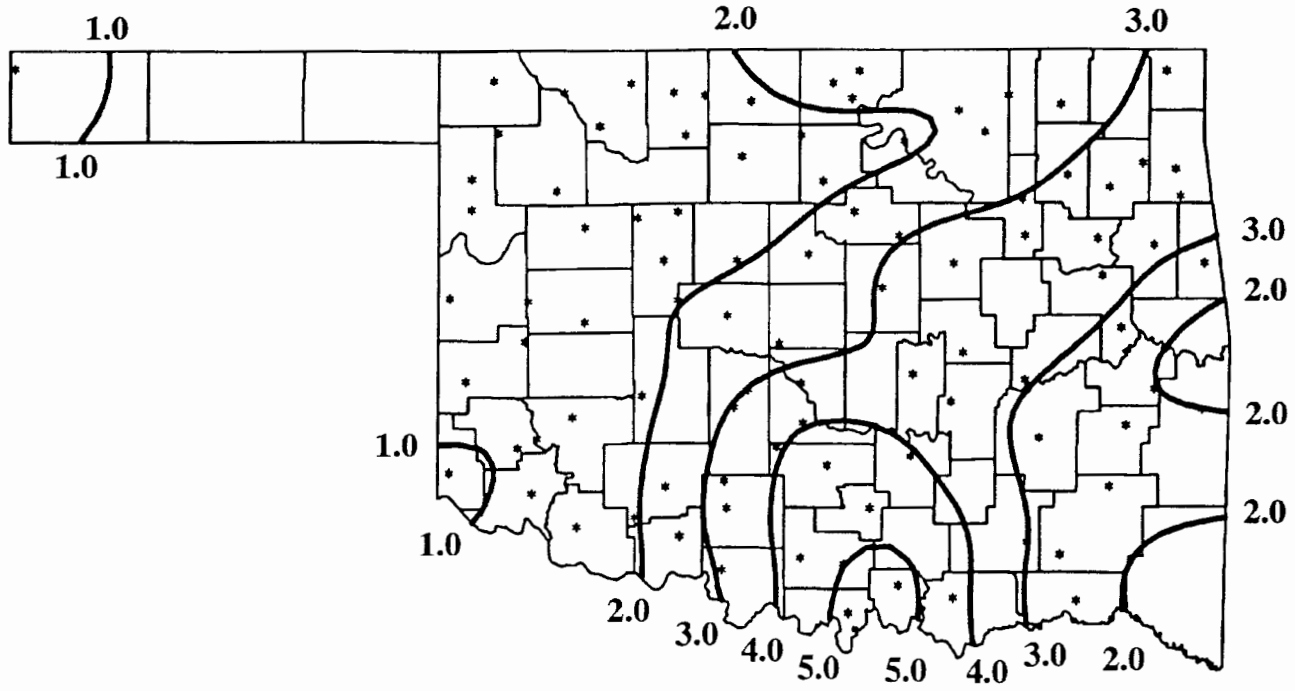
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ADA	17	8	71.1	30	-2.7	90.	29	45.	25	24.5	16.5	206.5	-65.5	5.031	30	.57	2.20	16
ALLEN	147	8	*****	0	*****	****	0	****	0	******	******	******	******	3.370	30	*****	2.25	16
ARDMORE	292	8	72.7	30	-3.5	92.	29	44.	24	22.5	17.5	253.5	-87.5	5.320	30	1.15	2.85	16
ATOKA DAM	394	8	73.9	21	*****	96.	30	46.	26	12.5	******	200.0	******	4.300	21	*****	2.48	2
BOKCHITO	917	8	*****	0	*****	****	0	****	0	******	******	******	******	1.950	30	*****	1.24	2
CANEY	1437	8	*****	0	*****	****	0	****	0	******	******	******	******	4.710	30	*****	3.01	1
CENTRAHOMA	1648	8	*****	0	*****	****	0	****	0	******	******	******	******	3.350	30	*****	.80	9
CHICKASAW NRA	1745	8	72.8	30	-.8	94.	29	44.	25	26.0	12.0	258.5	-13.5	3.550	30	-1.09	2.12	16
COLEMAN	2011	8	*****	0	*****	****	0	****	0	******	******	******	******	1.220	30	*****	.40	16
COMANCHE	2054	8	*****	0	*****	****	0	****	0	******	******	******	******	6.040	30	1.56	2.77	1
DAISY 4 ENE	2354	8	*****	0	*****	****	0	****	0	******	******	******	******	2.233	30	-3.33	.92	1
DUNCAN	2660	8	72.2	30	-2.0	94.	30	42.	23	27.5	18.5	242.0	-43.0	4.140	30	-.27	1.08	1
DURANT USDA	2678	8	72.5	30	-1.4	95.	30	46.	26	24.0	14.0	249.0	-28.0	2.640	30	-2.77	1.04	1
ELMORE CITY	2872	8	*****	0	*****	****	0	****	0	******	******	******	******	4.560	30	*****	1.40	16
FARRIS 3 WNW	3083	8	*****	0	*****	****	0	****	0	******	******	******	******	1.920	30	-2.95	1.28	1
GRADY	3688	8	*****	0	*****	****	0	****	0	******	******	******	******	2.470	30	*****	2.30	15
HEALDTON	4001	8	72.1	30	-2.6	93.	29	42.	24	28.0	20.0	240.5	-58.5	4.260	30	-.28	1.22	16
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	******	******	******	******	5.991	30	*****	1.89	16
KETCHUM RANCH	4780	8	*****	0	*****	****	0	****	0	******	******	******	******	4.590	30	*****	1.20	8
KINGSTON	4865	8	*****	0	*****	****	0	****	0	******	******	******	******	7.830	30	3.05	4.30	16
LEHIGH	5108	8	*****	0	*****	****	0	****	0	******	******	******	******	4.903	30	*****	2.05	2
LINDSAY 2 W	5216	8	71.6	30	-2.0	92.	29	42.	24	23.0	9.0	220.0	-52.0	3.531	30	-.78	1.23	16
LOCO 6 SE	5247	8	*****	0	*****	****	0	****	0	******	******	******	******	4.550	30	*****	1.36	16
MADILL	5468	8	72.0	30	-3.4	93.	21	42.	24	29.0	21.0	239.5	-80.5	7.950	30	3.13	3.30	14
MARIETTA	5563	8	73.7	30	-1.7	93.	29	45.	24	21.0	13.0	281.5	-38.5	6.620	30	2.43	2.70	16
MARLOW 1 WSW	5581	8	72.8	30	-.9	95.	29	40.	23	22.5	12.5	257.0	-14.0	4.270	30	-.06	1.90	9
MCGEE CREEK DAM	5713	8	72.0	30	*****	96.	30	40.	23	32.5	******	241.5	******	2.461	30	*****	.97	1
PAULS VALLEY	6926	8	72.2	30	-2.4	94.	28	42.	24	23.0	14.0	239.0	-58.0	5.400	30	1.35	2.27	16
PONTOTOC	7214	8	*****	0	*****	****	0	****	0	******	******	******	******	5.480	30	1.48	3.54	15
TISHOMINGO NWLR	8884	8	72.3	21	*****	95.	29	43.	23	16.5	******	170.0	******	6.520	30	1.61	2.90	9
TUSSY	9032	8	*****	0	*****	****	0	****	0	******	******	******	******	2.562	30	*****	1.05	22
WAURIKA	9395	8	74.2	30	-1.5	95.	29	49.	27	.0	.0	275.0	-51.0	2.101	30	-1.81	.80	8
WAURIKA DAM	9399	8	73.6	27	*****	96.	30	41.	23	25.0	******	258.0	******	2.181	30	*****	1.12	9

SEPTEMBER 1994 SUMMARY FOR SOUTHEAST DIVISION (CD9)

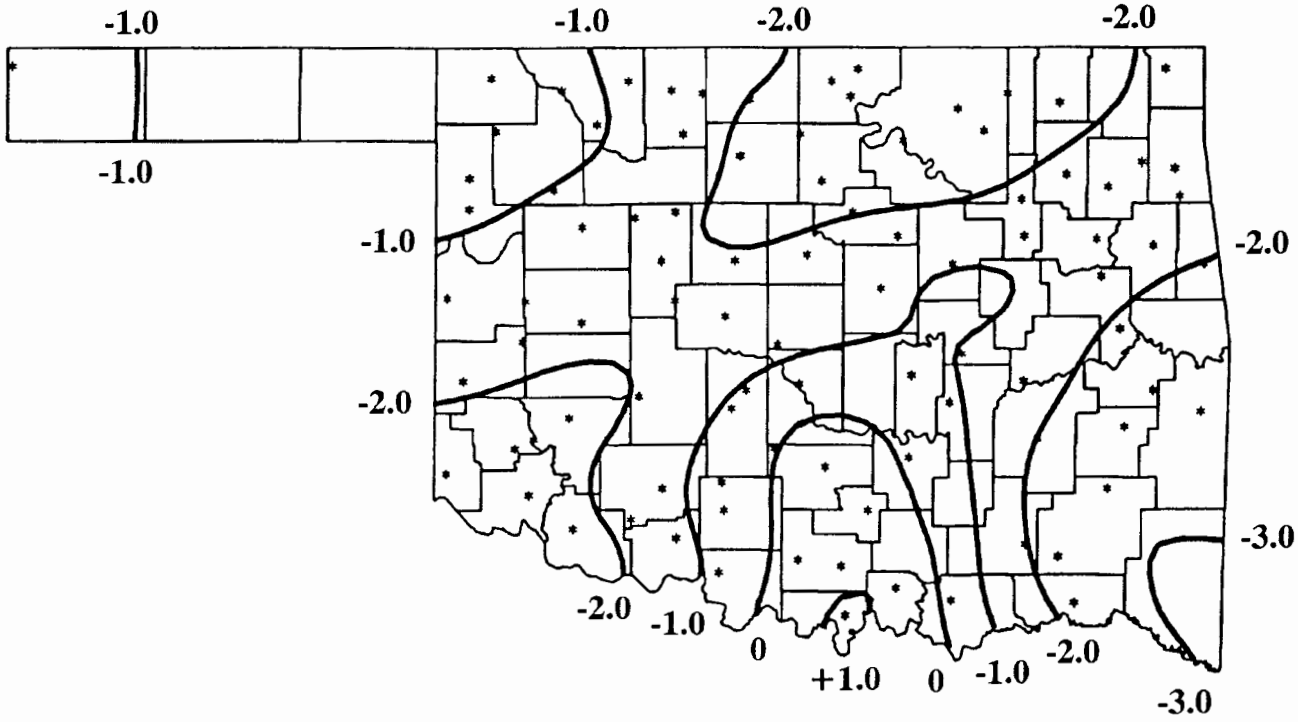
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	71.9	30	-2.2	96.	29	37.	23	30.0	20.0	236.5	-46.5	.050	28	*****	.05	2
BATTIEST 1 SSW	567	9	69.6	30	*****	94.	29	35.	23	38.0	******	174.5	******	2.310	30	*****	1.07	1
BEAR MT TWR	584	9	73.2	18	*****	97.	30	44.	25	18.5	******	165.5	******	1.880	30	-3.30	1.18	1
BENGAL	670	9	*****	0	*****	****	0	****	0	******	******	******	******	3.670	30	*****	2.19	1
BOSWELL 4 NNW	980	9	*****	0	*****	****	0	****	0	******	******	******	******	1.803	30	-2.67	1.29	1
BROKEN BOW 1 N	1162	9	*****	0	*****	****	0	****	0	******	******	******	******	.590	30	-3.95	.29	22
BROKEN BOW DAM	1168	9	72.6	30	-1.1	97.	30	40.	24	29.5	21.5	256.0	-13.0	1.770	30	-2.94	1.42	1
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	******	******	******	******	2.830	30	-1.96	1.56	1
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	******	******	******	******	3.340	30	-1.34	2.57	1
HEAVENER 1 SE	4008	9	*****	0	*****	****	0	****	0	******	******	******	******	3.370	30	-1.20	2.64	1
HEE MT TWR	4017	9	*****	0	*****	****	0	****	0	******	******	******	******	1.860	30	-2.76	1.03	1
HUGO	4384	9	73.5	30	-1.7	96.	29	44.	24	21.5	15.5	277.5	-34.5	2.822	30	-1.71	1.45	1
IDABEL	4451	9	72.7	30	-1.2	97.	30	42.	24	30.0	22.0	260.0	-15.0	1.632	30	-2.56	.63	1
POTEAU W W	7254	9	71.3	30	*****	97.	30	42.	25	34.0	******	222.0	******	2.432	30	*****	.86	5
SMITHVILLE 1 W	8285	9	69.2	30	-2.6	94.	29	39.	25	34.0	13.0	161.0	-64.0	1.902	30	-2.67	.90	2
SPIRO	8416	9	*****	0	*****	****	0	****	0	******	******	******	******	.240	30	-3.80	.17	6
TUSKAHOMA	9023	9	72.0	30	-2.2	97.	29	38.	23	32.5	19.5	243.0	-46.0	1.880	30	-3.30	.77	2
VALLIANT 3 W	9118	9	*****	0	*****	****	0	****	0	******	******	******	******	4.220	30	-.75	2.22	1
WILBURTON 9 ENE	9634	9	72.1	30	-.8	99.	29	40.	23	29.0	14.0	241.0	-11.0	.442	30	-4.45	.32	22

SEPTEMBER 1994 CLIMATE DIVISION SUMMARY

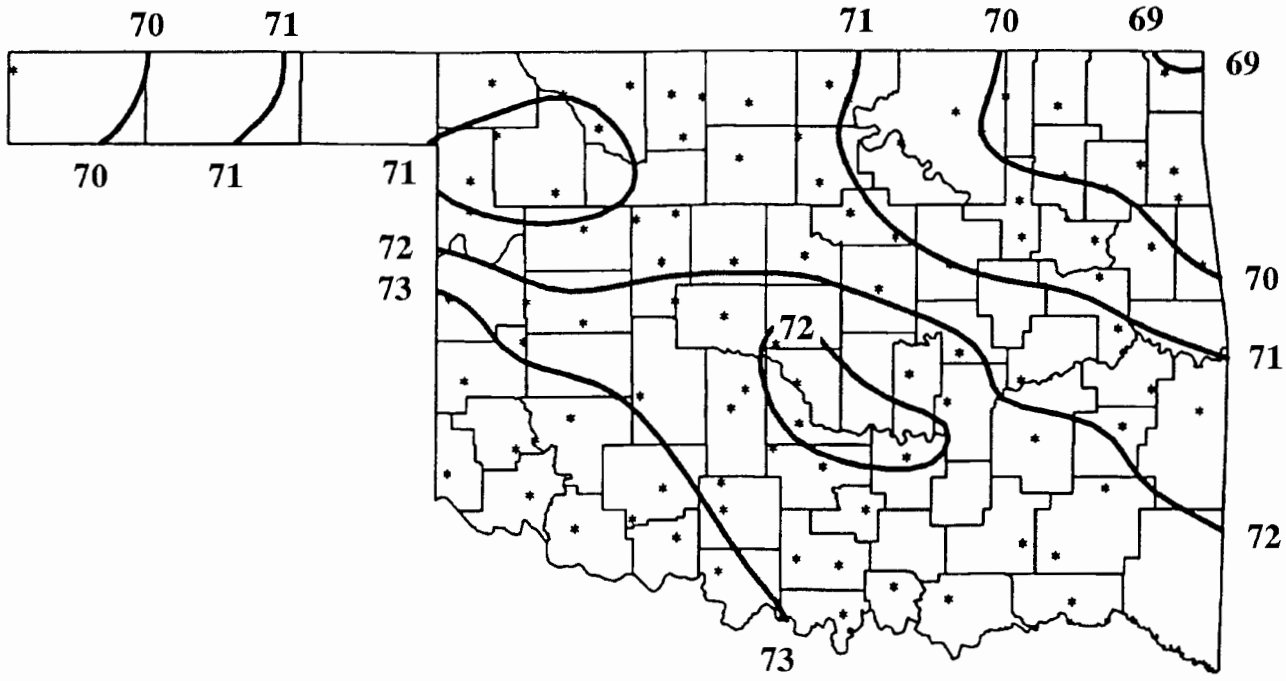
CLIMATE DIV	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEGREE DAYS	DEV FROM NORM	COOL DEGREE DAYS	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	69.6	11	-.2	102.0	29	35.0	24	43.5	14.9	180.0	9.7	1.25	13	-.83	1.56	1
2	71.1	15	-1.4	100.0	29	33.0	23	29.7	13.5	213.0	-27.6	2.00	23	-1.42	2.58	15
3	69.7	16	-2.5	95.0	15	37.0	27	32.5	10.9	173.7	-64.2	2.49	29	-2.38	4.10	16
4	72.4	10	-.1	99.0	28	37.0	24	24.4	9.3	244.1	4.9	1.47	19	-1.80	1.83	1
5	71.8	15	-1.6	98.0	29	40.0	24	23.8	10.3	226.1	-40.5	2.96	31	-1.25	3.89	16
6	71.1	10	-2.2	100.0	29	41.0	26	28.8	13.1	210.9	-53.0	2.84	26	-1.73	3.31	16
7	73.5	12	-.8	100.0	29	39.0	23	21.8	13.2	275.9	-11.0	1.46	23	-2.21	1.69	9
8	72.4	13	-2.1	96.0	30	40.0	23	23.3	14.6	246.4	-50.0	4.18	32	-.38	4.30	16
9	71.6	9	-2.2	99.0	29	35.0	23	30.9	20.1	230.2	-46.4	2.17	18	-2.50	2.64	1



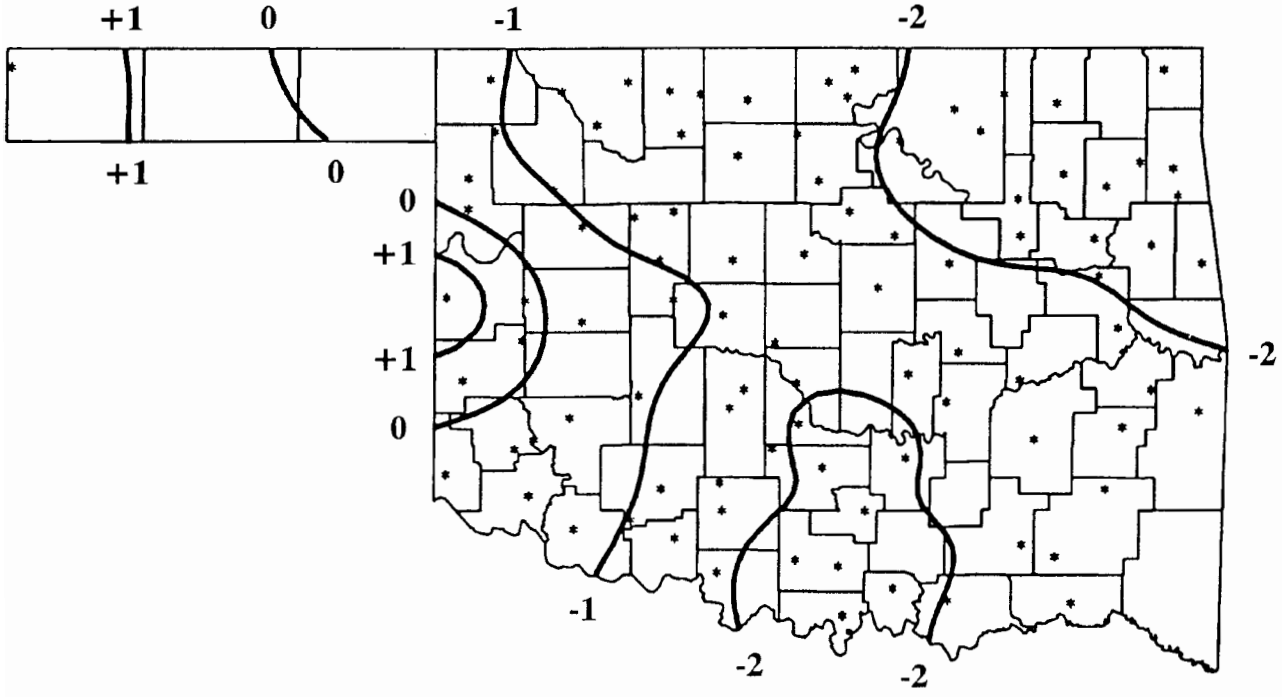
SEPTEMBER 1994 TOTAL PRECIPITATION
(Inches)



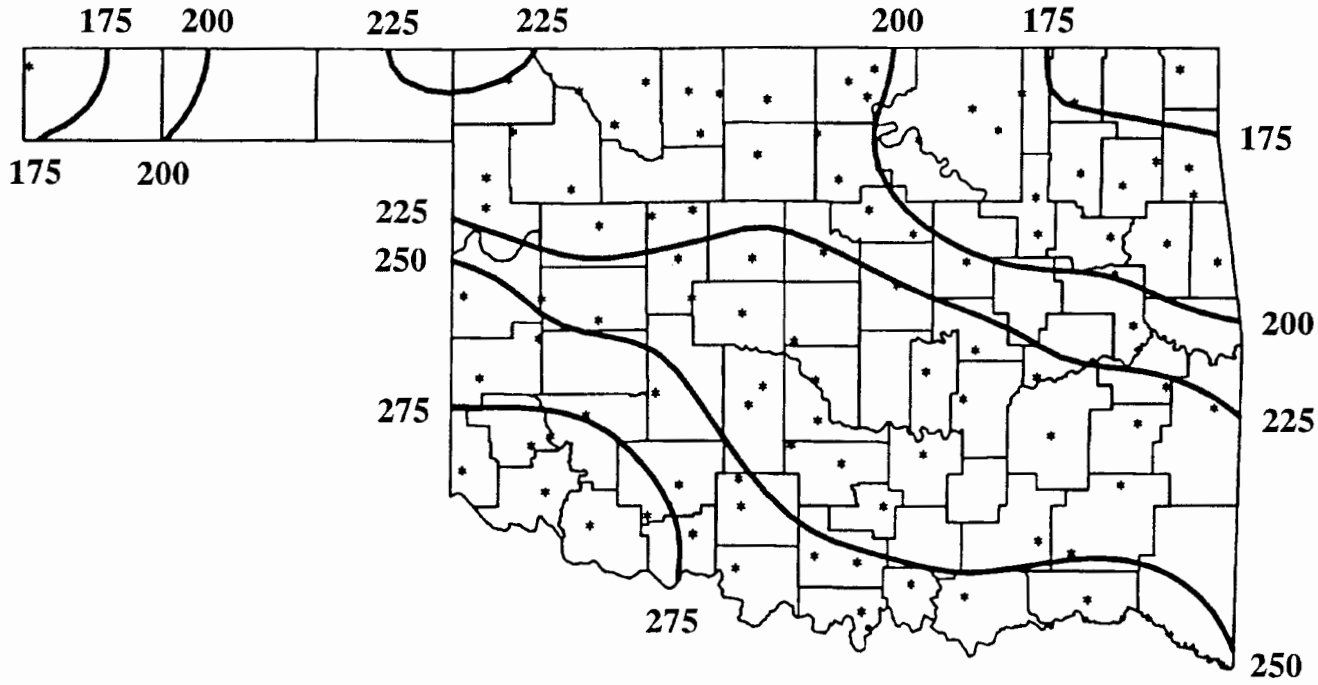
SEPTEMBER 1994 DEVIATION FROM NORMAL PRECIPITATION
(Inches)



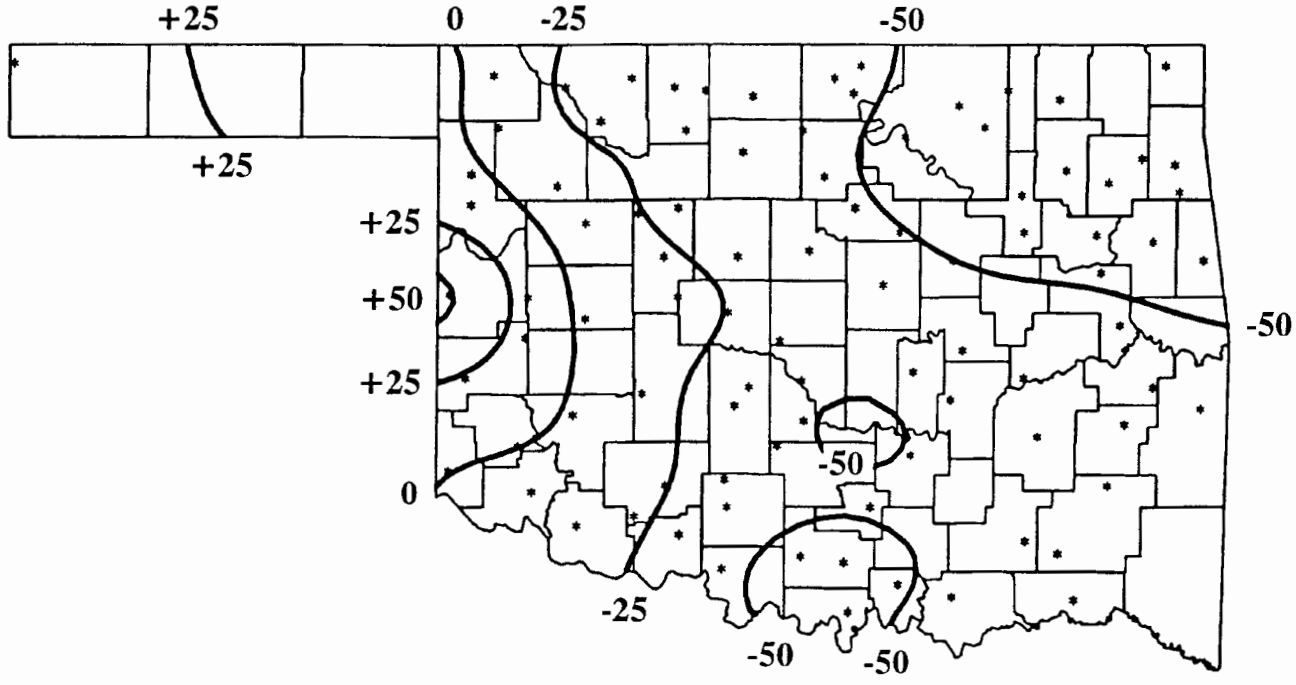
SEPTEMBER 1994 AVERAGE MONTHLY TEMPERATURES
(Degrees F)



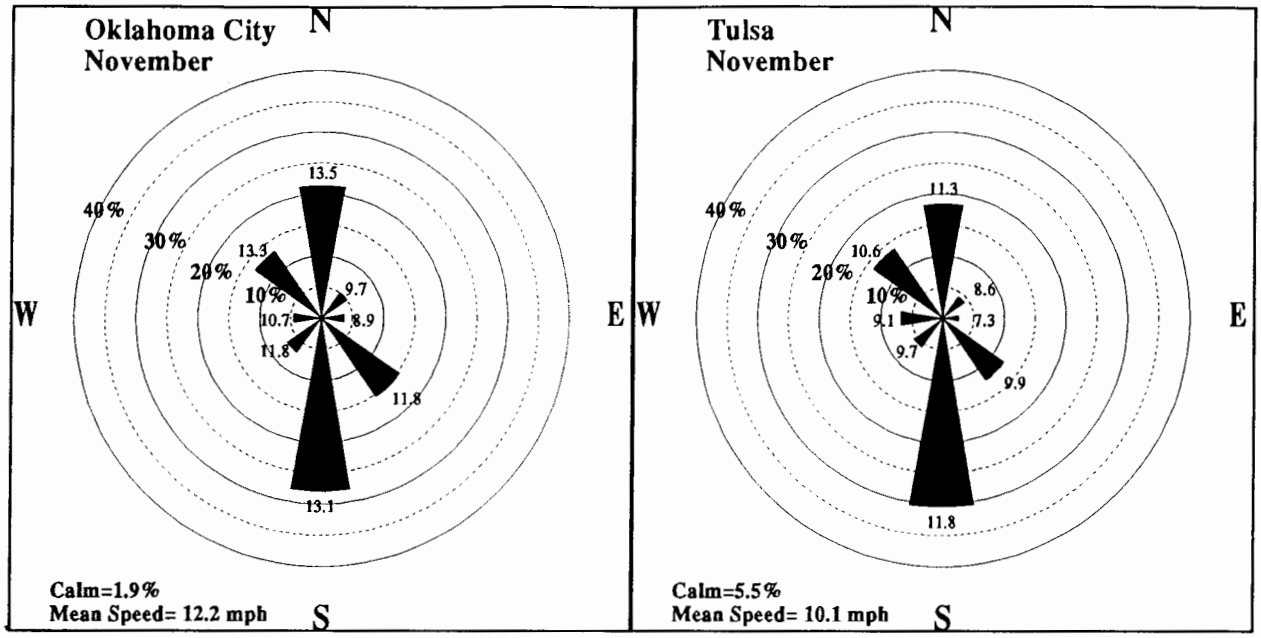
SEPTEMBER 1994 DEVIATION FROM NORMAL TEMPERATURES
(Degrees F)



SEPTEMBER 1994 COOLING DEGREE DAYS



SEPTEMBER 1994 DEVIATION FROM NORMAL COOLING DEGREE DAYS



November 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.

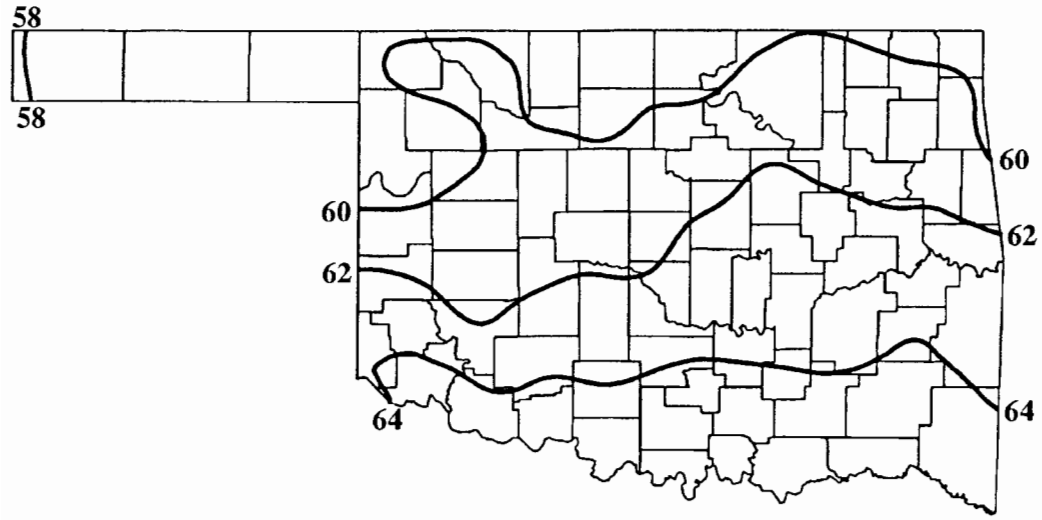
NOVEMBER 1994 SUNRISE AND SUNSET

OKLAHOMA CITY

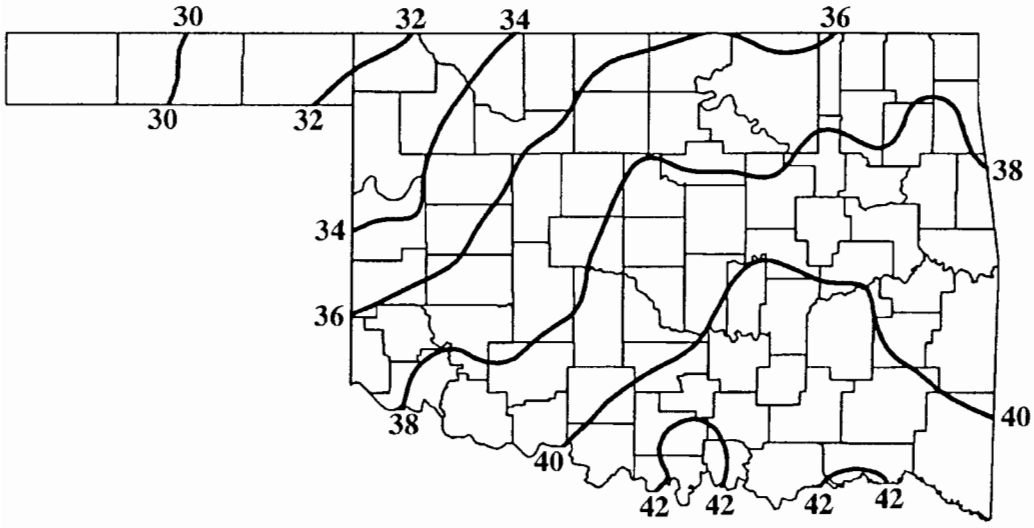
DATE	SUNRISE	SUNSET	DAYLIGHT
9411 1	6:51AM	5:38PM CST	10 hrs 47 mins
9411 2	6:52AM	5:37PM CST	10 hrs 45 mins
9411 3	6:52AM	5:36PM CST	10 hrs 43 mins
9411 4	6:53AM	5:35PM CST	10 hrs 41 mins
9411 5	6:54AM	5:34PM CST	10 hrs 39 mins
9411 6	6:55AM	5:33PM CST	10 hrs 38 mins
9411 7	6:56AM	5:32PM CST	10 hrs 36 mins
9411 8	6:57AM	5:31PM CST	10 hrs 34 mins
9411 9	6:58AM	5:31PM CST	10 hrs 32 mins
941110	6:59AM	5:30PM CST	10 hrs 31 mins
941111	7: 0AM	5:29PM CST	10 hrs 29 mins
941112	7: 1AM	5:29PM CST	10 hrs 27 mins
941113	7: 2AM	5:28PM CST	10 hrs 26 mins
941114	7: 3AM	5:27PM CST	10 hrs 24 mins
941115	7: 4AM	5:27PM CST	10 hrs 22 mins
941116	7: 5AM	5:26PM CST	10 hrs 21 mins
941117	7: 6AM	5:25PM CST	10 hrs 19 mins
941118	7: 7AM	5:25PM CST	10 hrs 18 mins
941119	7: 8AM	5:24PM CST	10 hrs 16 mins
941120	7: 9AM	5:24PM CST	10 hrs 15 mins
941121	7:10AM	5:24PM CST	10 hrs 13 mins
941122	7:11AM	5:23PM CST	10 hrs 12 mins
941123	7:12AM	5:23PM CST	10 hrs 11 mins
941124	7:13AM	5:22PM CST	10 hrs 9 mins
941125	7:14AM	5:22PM CST	10 hrs 8 mins
941126	7:15AM	5:22PM CST	10 hrs 7 mins
941127	7:16AM	5:22PM CST	10 hrs 6 mins
941128	7:17AM	5:21PM CST	10 hrs 5 mins
941129	7:18AM	5:21PM CST	10 hrs 4 mins
941130	7:18AM	5:21PM CST	10 hrs 2 mins

TULSA

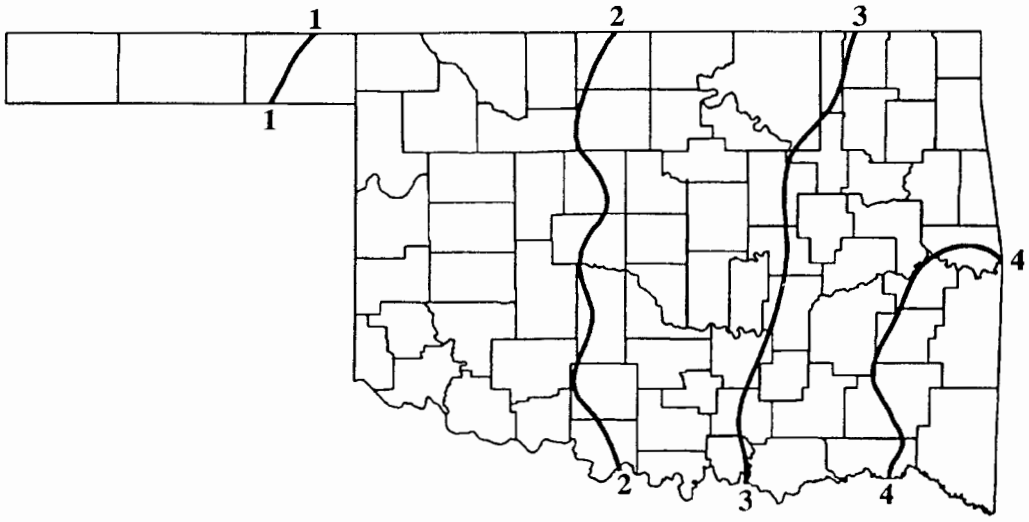
DATE	SUNRISE	SUNSET	DAYLIGHT
9411 1	6:45AM	5:30PM CST	10 hrs 45 mins
9411 2	6:46AM	5:29PM CST	10 hrs 43 mins
9411 3	6:47AM	5:28PM CST	10 hrs 41 mins
9411 4	6:48AM	5:27PM CST	10 hrs 39 mins
9411 5	6:49AM	5:26PM CST	10 hrs 37 mins
9411 6	6:50AM	5:25PM CST	10 hrs 35 mins
9411 7	6:51AM	5:24PM CST	10 hrs 33 mins
9411 8	6:52AM	5:23PM CST	10 hrs 31 mins
9411 9	6:53AM	5:23PM CST	10 hrs 30 mins
941110	6:54AM	5:22PM CST	10 hrs 28 mins
941111	6:55AM	5:21PM CST	10 hrs 26 mins
941112	6:56AM	5:20PM CST	10 hrs 24 mins
941113	6:57AM	5:20PM CST	10 hrs 23 mins
941114	6:58AM	5:19PM CST	10 hrs 21 mins
941115	6:59AM	5:18PM CST	10 hrs 19 mins
941116	7: 0AM	5:18PM CST	10 hrs 18 mins
941117	7: 1AM	5:17PM CST	10 hrs 16 mins
941118	7: 2AM	5:17PM CST	10 hrs 15 mins
941119	7: 3AM	5:16PM CST	10 hrs 13 mins
941120	7: 4AM	5:16PM CST	10 hrs 12 mins
941121	7: 5AM	5:15PM CST	10 hrs 10 mins
941122	7: 6AM	5:15PM CST	10 hrs 9 mins
941123	7: 7AM	5:14PM CST	10 hrs 7 mins
941124	7: 8AM	5:14PM CST	10 hrs 6 mins
941125	7: 9AM	5:14PM CST	10 hrs 5 mins
941126	7:10AM	5:13PM CST	10 hrs 3 mins
941127	7:11AM	5:13PM CST	10 hrs 2 mins
941128	7:12AM	5:13PM CST	10 hrs 1 mins
941129	7:13AM	5:12PM CST	10 hrs 0 mins
941130	7:13AM	5:12PM CST	9 hrs 59 mins



November Normal Daily Maximum Temperatures (°F)



November Normal Daily Minimum Temperatures (°F)



November Normal Monthly Precipitation (inches)

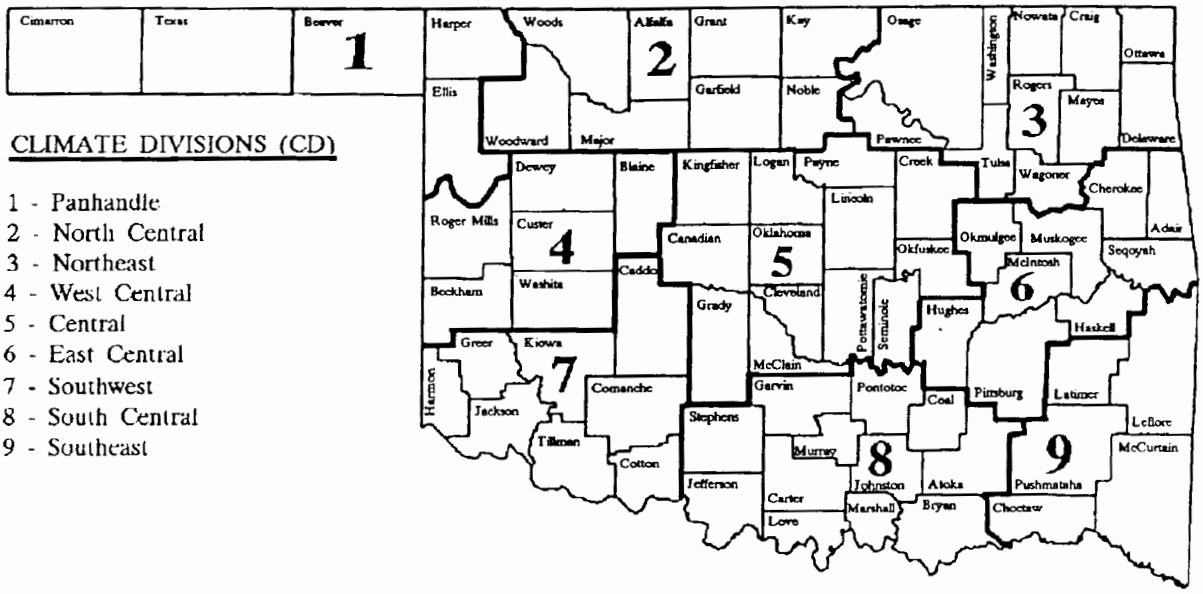
90-DAY NATIONAL WEATHER SERVICE OUTLOOK

(OCTOBER-DECEMBER 1994)

Precipitation - Above Normal Statewide

Temperature - Below 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 is less than 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 exceeds 65 degrees. Daily values are summed to give a monthly total. They are a proxy measure of how much cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value. For June, CDD would be calculated as:

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

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

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

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

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

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

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

OKLAHOMA CITY CLIMATE CALENDAR

November 1994

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).

Normal 1	Actual	Normal 2	Actual	Normal 3	Actual	Normal 4	Actual	Normal 5	Actual	Normal 6	Actual	Normal 7	Actual
67.4 max		63.4 max		62.1 max		63.2 max		62.0 max		63.4 max		63.4 max	
45.3 min		42.6 min		40.8 min		41.1 min		41.3 min		41.4 min		41.3 min	
.05 ppt		.09 ppt		.10 ppt		.10 ppt		.05 ppt		.04 ppt		.02 ppt	
9 hdd		12 hdd		14 hdd		13 hdd		13 hdd		13 hdd		13 hdd	
1 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	83-1916	Highest Max	83-1924	Highest Max	84-1909	Highest Max	83-1921	Highest Max	87-1891	Highest Max	85-1980	Highest Max	86-1980
Lowest Max	25-1991	Lowest Max	26-1991	Lowest Max	36-1991	Lowest Max	40-1990	Lowest Max	34-1951	Lowest Max	39-1959	Lowest Max	41-1953
Lowest Min	28-1912	Lowest Min	19-1991	Lowest Min	11-1991	Lowest Min	23-1936	Lowest Min	23-1951	Lowest Min	20-1959	Lowest Min	23-1993
Highest Min	65-1936	Highest Min	66-1938	Highest Min	61-1959	Highest Min	58-1916	Highest Min	64-1924	Highest Min	63-1945	Highest Min	62-1916
Greatest ppt	1.05-1981	Greatest ppt	1.51-1974	Greatest ppt	1.51-1964	Greatest ppt	2.17-1986	Greatest ppt	1.09-1946	Greatest ppt	2.14-1895	Greatest ppt	1.71-1920

Normal 8	Actual	Normal 9	Actual	Normal 10	Actual	Normal 11	Actual	Normal 12	Actual	Normal 13	Actual	Normal 14	Actual
63.7 max		62.7 max		62.7 max		63.7 max		63.9 max		64.4 max		62.1 max	
41.4 min		39.8 min		38.6 min		39.4 min		39.7 min		40.3 min		41.3 min	
.08 ppt		.02 ppt		.02 ppt		.03 ppt		.06 ppt		.06 ppt		.05 ppt	
13 hdd		14 hdd		15 hdd		14 hdd		13 hdd		13 hdd		14 hdd	
0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	87-1980	Highest Max	82-1988	Highest Max	81-1980	Highest Max	83-1911	Highest Max	79-1910	Highest Max	80-1967	Highest Max	79-1973
Lowest Max	39-1936	Lowest Max	37-1950	Lowest Max	33-1950	Lowest Max	33-1935	Lowest Max	29-1940	Lowest Max	28-1986	Lowest Max	29-1940
Lowest Min	19-1991	Lowest Min	25-1955	Lowest Min	20-1950	Lowest Min	17-1911	Lowest Min	14-1911	Lowest Min	12-1940	Lowest Min	14-1916
Highest Min	66-1966	Highest Min	61-1939	Highest Min	60-1982	Highest Min	61-1922	Highest Min	62-1902	Highest Min	61-1989	Highest Min	65-1897
Greatest ppt	1.42-1895	Greatest ppt	1.15-1977	Greatest ppt	1.17-1937	Greatest ppt	1.10-1988	Greatest ppt	1.18-1922	Greatest ppt	3.22-1909	Greatest ppt	1.56-1924

Normal 15	Actual	Normal 16	Actual	Normal 17	Actual	Normal 18	Actual	Normal 19	Actual	Normal 20	Actual	Normal 21	Actual
61.8 max		58.5 max		59.0 max		58.4 max		59.7 max		59.0 max		58.8 max	
40.2 min		38.9 min		36.6 min		38.1 min		37.1 min		35.5 min		35.7 min	
.11 ppt		.03 ppt		.08 ppt		.06 ppt		.11 ppt		.05 ppt		.02 ppt	
14 hdd		17 hdd		17 hdd		17 hdd		17 hdd		18 hdd		18 hdd	
0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	84-1903	Highest Max	82-1941	Highest Max	80-1896	Highest Max	80-1930	Highest Max	82-1898	Highest Max	78-1989	Highest Max	80-1927
Lowest Max	32-1932	Lowest Max	31-1937	Lowest Max	30-1903	Lowest Max	35-1903	Lowest Max	31-1937	Lowest Max	25-1906	Lowest Max	29-1926
Lowest Min	15-1940	Lowest Min	14-1932	Lowest Min	9-1894	Lowest Min	13-1903	Lowest Min	18-1937	Lowest Min	19-1937	Lowest Min	14-1898
Highest Min	61-1971	Highest Min	64-1958	Highest Min	61-1896	Highest Min	64-1934	Highest Min	63-1913	Highest Min	60-1990	Highest Min	69-1902
Greatest ppt	2.43-1890	Greatest ppt	3.94-1931	Greatest ppt	1.70-1984	Greatest ppt	2.14-1899	Greatest ppt	4.46-1899	Greatest ppt	1.74-1979	Greatest ppt	1.48-1916

Normal 22	Actual	Normal 23	Actual	Normal 24	Actual	Normal 25	Actual	Normal 26	Actual	Normal 27	Actual	Normal 28	Actual
59.1 max		57.6 max		56.2 max		60.5 max		57.9 max		51.6 max		49.5 max	
35.8 min		34.6 min		35.1 min		37.7 min		36.0 min		32.0 min		29.9 min	
.04 ppt		.03 ppt		.08 ppt		.07 ppt		.13 ppt		.06 ppt		.01 ppt	
18 hdd		19 hdd		19 hdd		16 hdd		18 hdd		23 hdd		25 hdd	
0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	78-1982	Highest Max	79-1973	Highest Max	84-1965	Highest Max	84-1965	Highest Max	81-1910	Highest Max	82-1905	Highest Max	81-1949
Lowest Max	27-1898	Lowest Max	29-1895	Lowest Max	32-1918	Lowest Max	28-1993	Lowest Max	31-1992	Lowest Max	26-1896	Lowest Max	26-1911
Lowest Min	15-1898	Lowest Min	19-1950	Lowest Min	15-1950	Lowest Min	15-1993	Lowest Min	13-1993	Lowest Min	16-1976	Lowest Min	14-1896
Highest Min	60-1966	Highest Min	60-1966	Highest Min	60-1966	Highest Min	62-1966	Highest Min	62-1990	Highest Min	63-1927	Highest Min	58-1927
Greatest ppt	1.54-1931	Greatest ppt	1.62-1931	Greatest ppt	1.14-1973	Greatest ppt	2.01-1940	Greatest ppt	1.80-1982	Greatest ppt	1.30-1908	Greatest ppt	1.44-1908

Normal 29	Actual	Normal 30	Actual
53.0 max		54.5 max	
30.0 min		31.9 min	
.01 ppt		.02 ppt	
24 hdd		22 hdd	
0 cdd		0 cdd	
Highest Max	80-1927	Highest Max	74-1945
Lowest Max	28-1897	Lowest Max	32-1896
Lowest Min	11-1911	Lowest Min	13-1975
Highest Min	64-1933	Highest Min	60-1933
Greatest ppt	.61-1930	Greatest ppt	.72-1909

NOVEMBER AVERAGES

TEMPERATURE	:	49.0°F
PRECIPITATION	:	1.68"
HEATING DEGREE DAYS	:	485
COOLING DEGREE DAYS	:	1

TULSA CLIMATE CALENDAR

November 1994

The data on this calendar are for Tulsa. Normal values are calculated for the period 1948-1992. Temperatures extremes are for the period 1905-1993; precipitation extremes are for the period 1948-1993.

Normal 1	Actual	Normal 2	Actual	Normal 3	Actual	Normal 4	Actual	Normal 5	Actual	Normal 6	Actual	Normal 7	Actual
69.0 max		65.0 max		63.0 max		64.0 max		62.0 max		62.0 max		63.0 max	
46.0 min		44.0 min		41.0 min		42.0 min		41.0 min		41.0 min		41.0 min	
.09 ppt		.17 ppt		.17 ppt		.08 ppt		.02 ppt		.06 ppt		.03 ppt	
8 hdd		11 hdd		13 hdd		12 hdd		13 hdd		14 hdd		13 hdd	
1 cdd		0 cdd		1 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	85-1916	Highest Max	89-1909	Highest Max	88-1909	Highest Max	86-1914	Highest Max	87-1914	Highest Max	87-1945	Highest Max	85-1980
Lowest Max	37-1951	Lowest Max	27-1991	Lowest Max	36-1991	Lowest Max	39-1951	Lowest Max	34-1951	Lowest Max	39-1959	Lowest Max	41-1991
Lowest Min	25-1991	Lowest Min	20-1966	Lowest Min	15-1991	Lowest Min	21-1991	Lowest Min	25-1976	Lowest Min	20-1959	Lowest Min	22-1991
Highest Min	64-1987	Highest Min	65-1983	Highest Min	67-1983	Highest Min	60-1987	Highest Min	60-1965	Highest Min	60-1965	Highest Min	60-1966
Greatest ppt	1.27-1984	Greatest ppt	2.82-1974	Greatest ppt	3.20-1974	Greatest ppt	1.25-1986	Greatest ppt	.32-1957	Greatest ppt	.90-1964	Greatest ppt	.63-1957
Normal 8	**Actual**	**Normal 9**	**Actual**	**Normal 10**	**Actual**	**Normal 11**	**Actual**	**Normal 12**	**Actual**	**Normal 13**	**Actual**	**Normal 14**	**Actual**
64.0 max		63.0 max		63.0 max		62.0 max		63.0 max		65.0 max		62.0 max	
43.0 min		40.0 min		39.0 min		39.0 min		40.0 min		39.0 min		41.0 min	
.09 ppt		.04 ppt		.06 ppt		.03 ppt		.09 ppt		.07 ppt		.06 ppt	
12 hdd		13 hdd		14 hdd		14 hdd		13 hdd		13 hdd		14 hdd	
0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	84-1980	Highest Max	82-1934	Highest Max	83-1949	Highest Max	85-1989	Highest Max	80-1989	Highest Max	84-1910	Highest Max	79-1989
Lowest Max	41-1991	Lowest Max	42-1950	Lowest Max	37-1950	Lowest Max	31-1986	Lowest Max	34-1986	Lowest Max	30-1986	Lowest Max	33-1959
Lowest Min	16-1991	Lowest Min	23-1955	Lowest Min	21-1950	Lowest Min	17-1950	Lowest Min	15-1911	Lowest Min	12-1940	Lowest Min	13-1916
Highest Min	67-1966	Highest Min	58-1984	Highest Min	62-1949	Highest Min	60-1949	Highest Min	62-1951	Highest Min	62-1989	Highest Min	62-1958
Greatest ppt	1.45-1977	Greatest ppt	.55-1974	Greatest ppt	.63-1986	Greatest ppt	1.57-1992	Greatest ppt	2.64-1972	Greatest ppt	1.80-1986	Greatest ppt	1.08-1978
Normal 15	**Actual**	**Normal 16**	**Actual**	**Normal 17**	**Actual**	**Normal 18**	**Actual**	**Normal 19**	**Actual**	**Normal 20**	**Actual**	**Normal 21**	**Actual**
63.0 max		61.0 max		60.0 max		58.0 max		60.0 max		58.0 max		58.0 max	
42.0 min		40.0 min		39.0 min		39.0 min		38.0 min		36.0 min		35.0 min	
.25 ppt		.06 ppt		.14 ppt		.09 ppt		.17 ppt		.20 ppt		.03 ppt	
13 hdd		15 hdd		16 hdd		16 hdd		16 hdd		18 hdd		18 hdd	
0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	82-1950	Highest Max	83-1963	Highest Max	80-1969	Highest Max	82-1930	Highest Max	81-1908	Highest Max	81-1989	Highest Max	79-1927
Lowest Max	38-1976	Lowest Max	37-1955	Lowest Max	32-1959	Lowest Max	37-1972	Lowest Max	35-1972	Lowest Max	38-1972	Lowest Max	34-1964
Lowest Min	11-1940	Lowest Min	14-1932	Lowest Min	11-1959	Lowest Min	19-1951	Lowest Min	14-1937	Lowest Min	16-1937	Lowest Min	18-1964
Highest Min	63-1964	Highest Min	65-1958	Highest Min	55-1975	Highest Min	60-1985	Highest Min	61-1979	Highest Min	62-1979	Highest Min	53-1966
Greatest ppt	2.50-1964	Greatest ppt	1.49-1978	Greatest ppt	1.24-1952	Greatest ppt	1.26-1964	Greatest ppt	1.65-1963	Greatest ppt	4.59-1979	Greatest ppt	.70-1961
Normal 22	**Actual**	**Normal 23**	**Actual**	**Normal 24**	**Actual**	**Normal 25**	**Actual**	**Normal 26**	**Actual**	**Normal 27**	**Actual**	**Normal 28**	**Actual**
59.0 max		58.0 max		56.0 max		60.0 max		57.0 max		52.0 max		50.0 max	
37.0 min		35.0 min		35.0 min		37.0 min		36.0 min		33.0 min		31.0 min	
.07 ppt		.02 ppt		.16 ppt		.07 ppt		.11 ppt		.08 ppt		.03 ppt	
17 hdd		18 hdd		20 hdd		16 hdd		18 hdd		23 hdd		25 hdd	
0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd		0 cdd	
Highest Max	79-1966	Highest Max	78-1974	Highest Max	80-1965	Highest Max	84-1965	Highest Max	83-1965	Highest Max	77-1927	Highest Max	81-1949
Lowest Max	38-1971	Lowest Max	33-1970	Lowest Max	36-1950	Lowest Max	31-1993	Lowest Max	30-1975	Lowest Max	35-1985	Lowest Max	28-1976
Lowest Min	16-1929	Lowest Min	17-1970	Lowest Min	14-1950	Lowest Min	17-1950	Lowest Min	14-1993	Lowest Min	16-1938	Lowest Min	13-1976
Highest Min	62-1966	Highest Min	63-1966	Highest Min	61-1966	Highest Min	61-1966	Highest Min	65-1990	Highest Min	56-1960	Highest Min	60-1991
Greatest ppt	.90-1982	Greatest ppt	.35-1952	Greatest ppt	2.54-1973	Greatest ppt	1.03-1986	Greatest ppt	1.56-1982	Greatest ppt	1.13-1982	Greatest ppt	.53-1968
Normal 29	**Actual**	**Normal 30**	**Actual**										
53.0 max		54.0 max											
30.0 min		31.0 min											
.05 ppt		.03 ppt											
23 hdd		23 hdd											
0 cdd		0 cdd											
Highest Max	82-1927	Highest Max	76-1933										
Lowest Max	36-1979	Lowest Max	33-1974										
Lowest Min	10-1976	Lowest Min	13-1964										
Highest Min	54-1975	Highest Min	55-1970										
Greatest ppt	1.08-1975	Greatest ppt	.73-1981										

NOVEMBER AVERAGES

TEMPERATURE	:	49.3°F
PRECIPITATION	:	2.62"
HEATING DEGREE DAYS	:	472
COOLING DEGREE DAYS	:	2