

OKLAHOMA MONTHLY CLIMATE SUMMARY

AUGUST 2002

TABLE OF CONTENTS

August 2002 Oklahoma Climate Summary.....	2
August 2001/2002 Comparison Graphs.....	4
August 2002 State Summary Maps.....	6
August 2002 Data Summary Tables.....	9
Climate Division Map.....	14
Explanation of Tables.....	14
August 2002 Mesonet Summary.....	16
August 2002 Extremes and Comparisons.....	17
October Climatological Normals.....	18
90 - Day National Weather Service Outlook.....	19
October Tornado Statistics.....	19
October Oklahoma City Climate Calendar.....	20
October Tulsa Climate Calendar.....	21
October Wind Roses - Sunrise/Sunset Tables.....	22
Contact Information	23



Oklahoma Climatological Survey

MONTHLY SUMMARY FOR AUGUST 2002

August 2002

Statewide average temperature = 81.2° F
Statewide average rainfall = 3.08 inches

Oklahoma's weather during August 2002 can best be described as "near-normal." The statewide-averaged temperature of 81.2 degrees was 0.3 degree greater than normal and ranks this as the state's 54th warmest August of the 111 on record. Monthly precipitation was also slightly greater than normal when averaged statewide. August's 3.08 inches of precipitation, bolstered by welcome greater-than-average rainfall in the drought-plagued Panhandle, bettered the statewide-averaged normal for the month by 0.33 inch and ranks as the 42nd greatest August precipitation in the state since the first appearance of such records in 1892. Only three of the state's nine climate divisions (West Central, Southwest, and Southeast) received less than normal precipitation.

Seasonal and annual-to-date statistics also fall within the near-normal range. The three summer months produced a statewide-averaged temperature of 79.8 degrees (0.2 degree lower than normal) the 50th lowest such value on record. Summer precipitation totaled 10.35 inches, averaged statewide, exceeding the normal value by 0.63 inch and ranking this as the 44th wettest August since 1892. Through the first nine months of the year, the state was both slightly cooler and drier than normal. January-through-August temperatures averaged 61.9 degrees in 2002, 0.6 degree below normal and the 35th lowest such temperature on record. The statewide-averaged total precipitation of 24.14 inches over the same period, although 0.31 inch less than normal for the period, was the 46th greatest January-August precipitation yet recorded.

August Normals

Statewide average temperature = 80.9° F
Statewide average rainfall = 2.75 inches

Cold fronts moving through the state just before mid-month and early in its last week were the primary weather producers. Tahlequah (Cherokee County) and Coleman (Johnston) reported 7.35 and 7.10 inches of rain, respectively, on the 14th to highlight a week's worth of stormy weather. Bokchito (Bryan) reported 5.50 inches of rain over a two-day period on the 11th and 12th. Mesonet sites at Westville (Adair) and Inola (Rogers) recorded 5.35 and 5.18 inches of rain, respectively, on the 13th. Several other stations reported rainfall totals four inches or more, mostly on the 13th, but Panhandle-station rainfall totals of 1.50-to-2.00 on the 9th and 10th may have had more impact, considering the persistently dry conditions that dominated that region over the past 14 months. Rainfall was not so intense with the late-month foray, but the Oilton Mesonet site (Creek) recorded 3.51 inches of rain on the 24th and Pauls Valley (Garvin) reported 3.15 inches on the 27th. In a locally heavy rainfall event between the two major systems, the Boise City Mesonet site (Cimarron) recorded 3.87 inches of precipitation on the 20th.

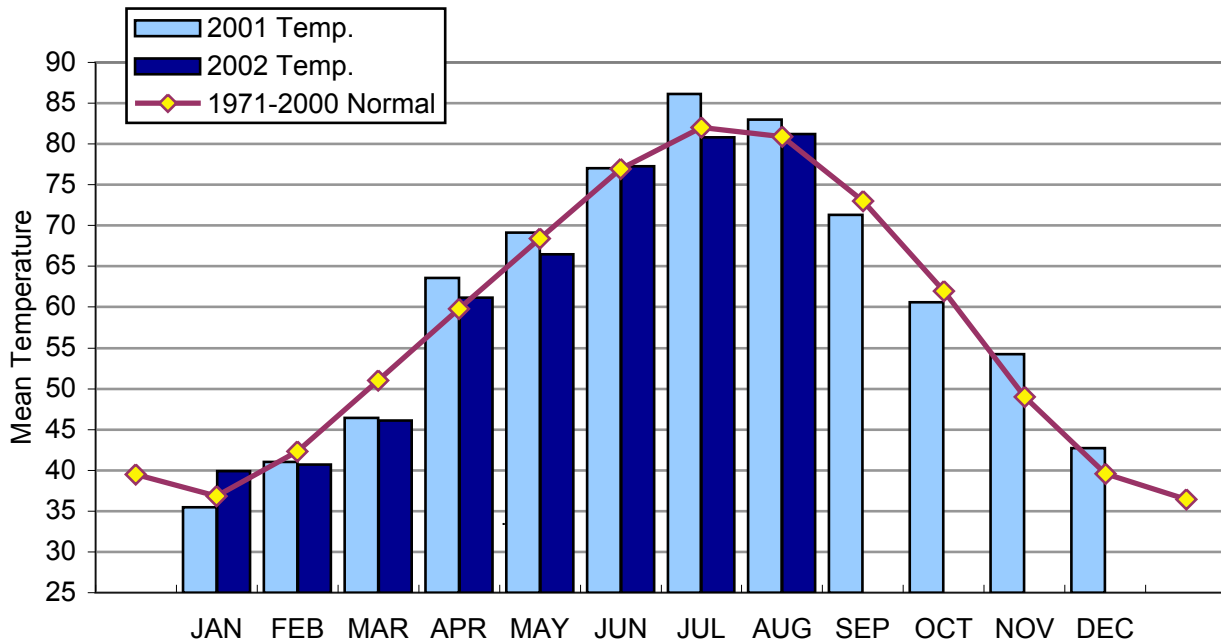
(Continued on page 3.)

The storm at Boise City on the 20th led to localized flooding in eastern Cimarron and western Texas counties. Other minor flooding incidents were reported near Pawnee (Pawnee) on the 13th, Tyrone (Beaver) on the 16th, and near Picher (Ottawa) on the 23rd. Severe weather in the form of large hail or damaging thunderstorm winds was reported on 12 days during the course of the month. Peak winds of 80 miles per hour were recorded (or estimated by knowledgeable observers) on several occasions, including Edmond (Oklahoma) early on the morning of the 13th, Drummond (Garfield) on the 24th, and at Weatherford, Norman, and Piedmont on the 26th. The storms on the latter date knocked out electrical service to more than 10,000 residences and businesses in central Oklahoma. Four people were injured on the 6th near Vinita (Craig) when microburst winds from a collapsing thunderstorm destroyed a trailer and knocked down several large trees.

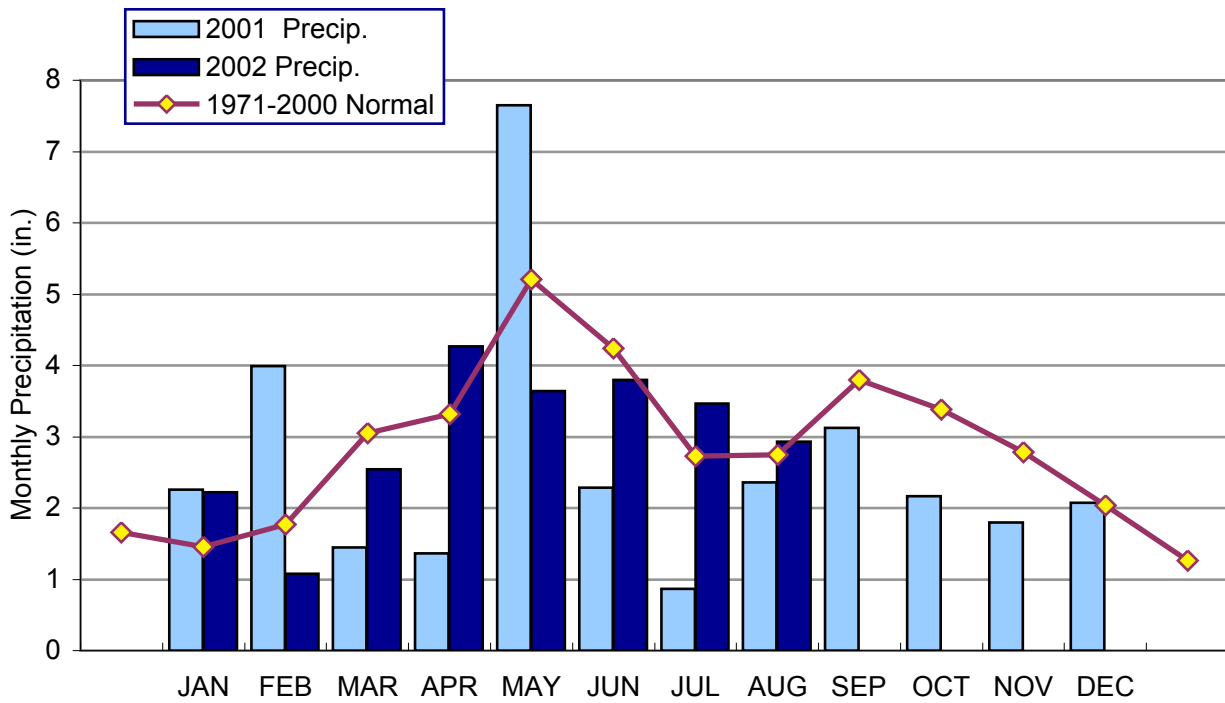
Triple-digit daytime temperatures were common in western Oklahoma through the month, but the heat remained within the bounds generally anticipated for August in Oklahoma. The National Weather Service cooperative observer at Hollis (Harmon) and Mesonet stations at Mangum(Greer) and Butler (Custer) each reported daily maximum temperatures of 105 degrees on the 23rd. The months lowest reported temperature was 50 degrees at Hammon (Roger Mills) on the 14th. As of the end of August, Oklahoma City's official reporting station (Will Rogers World Airport) had not recorded a triple-digit temperature this year – an uncommon but by no means rare event. The last year without a 100-degree-plus temperature reading in Oklahoma City was 1997.

Howard L. Johnson

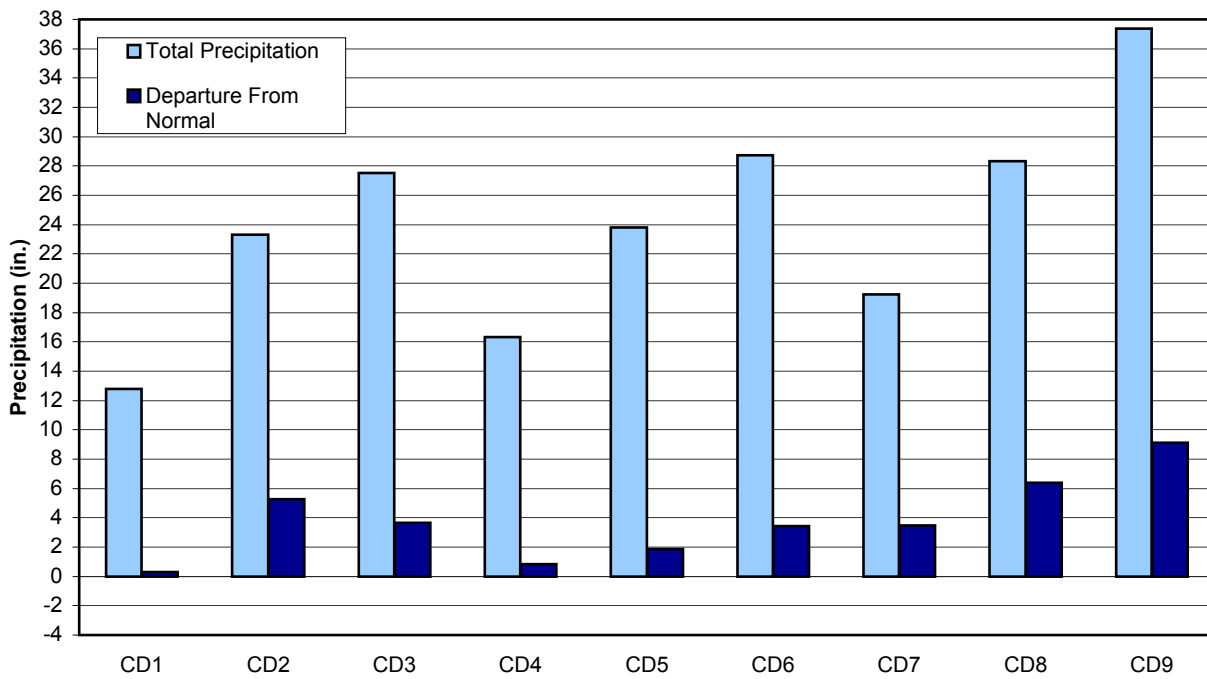
2001 AND 2002 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



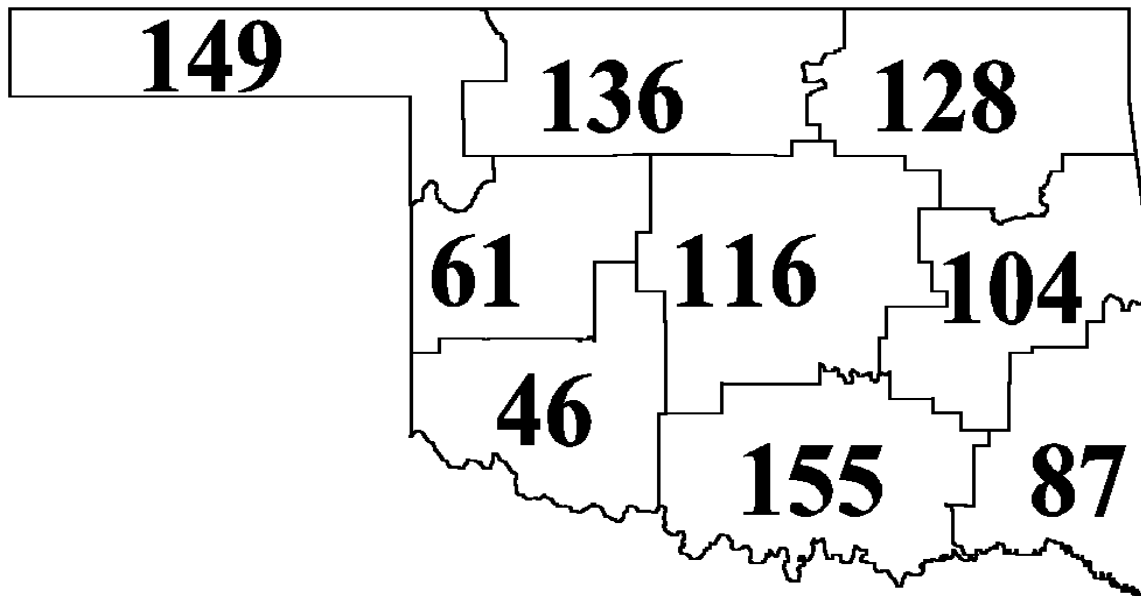
2001 AND 2002 STATEWIDE PRECIPITATION - MONTHLY TOTALS



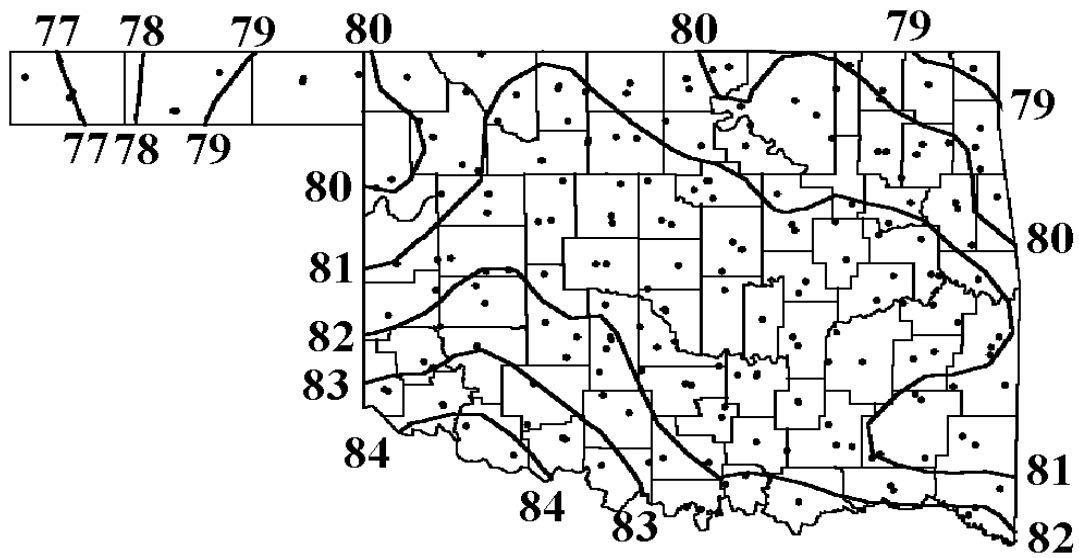
CLIMATE DIVISION AVERAGED PRECIPITATION - JANUARY THROUGH AUGUST 2002



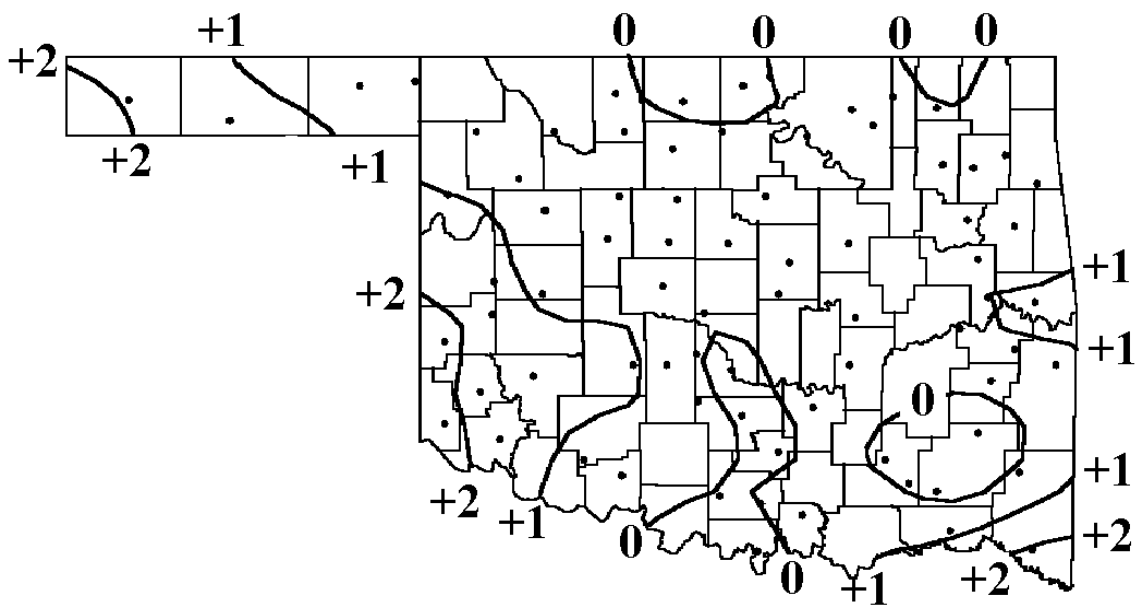
CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - AUGUST 2002



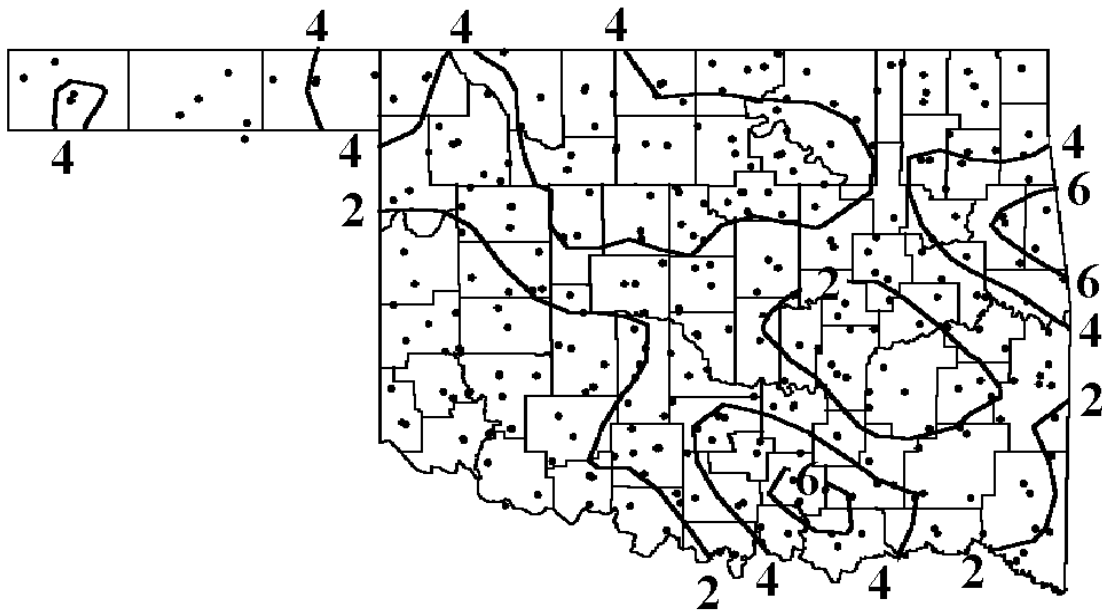
AUGUST 2002 AVERAGE MONTHLY TEMPERATURE (°F)



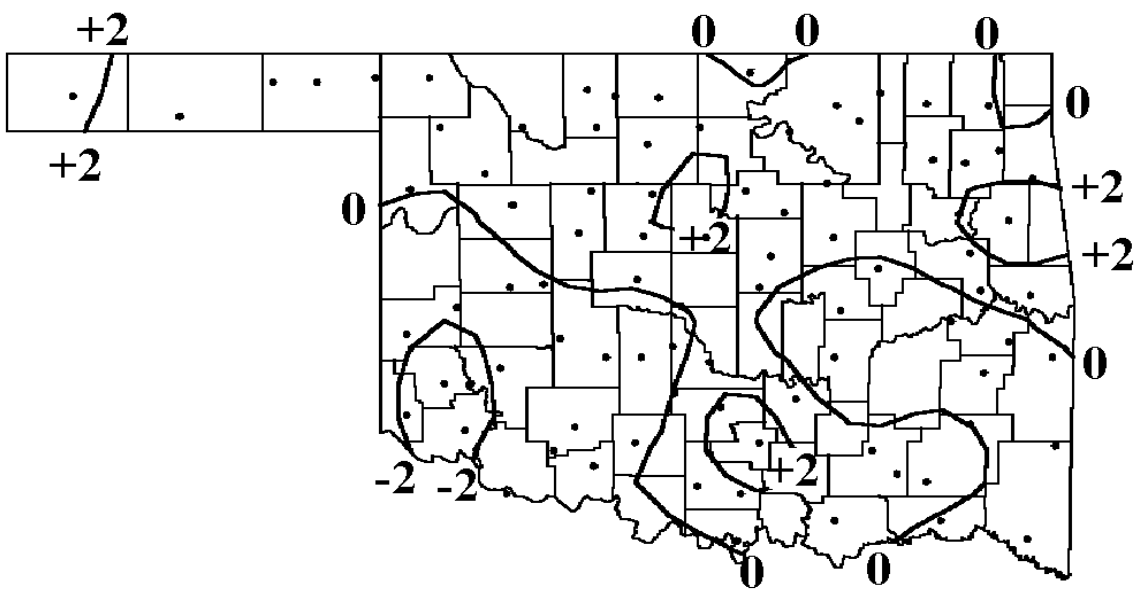
AUGUST 2002 DEPARTURE FROM NORMAL TEMPERATURE (°F)



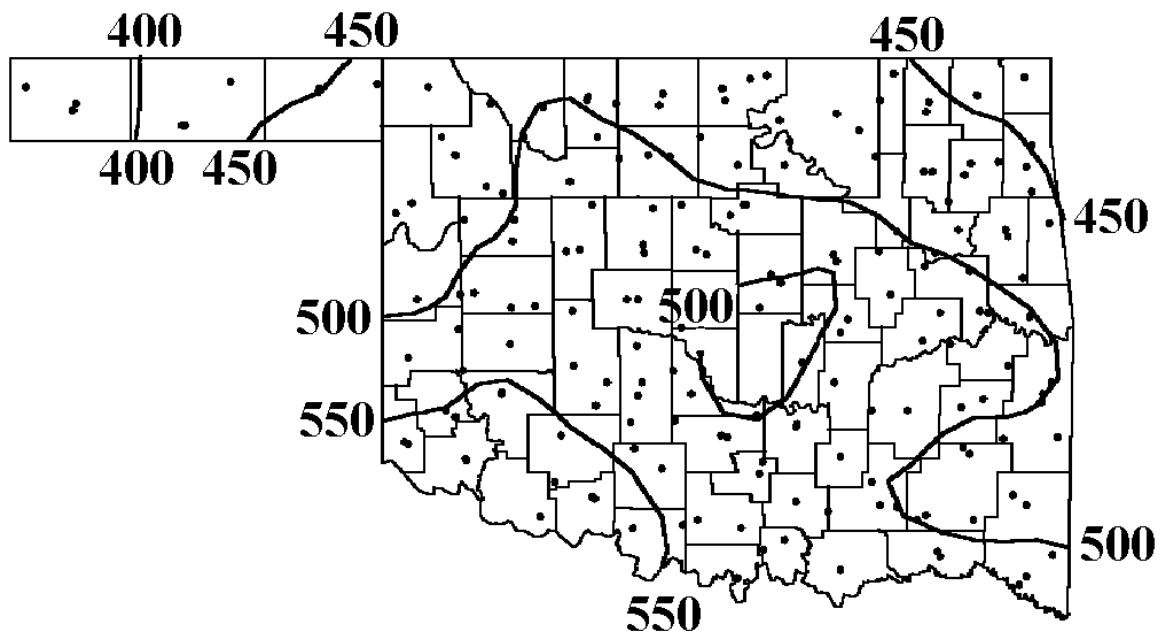
AUGUST 2002 PRECIPITATION (INCHES)



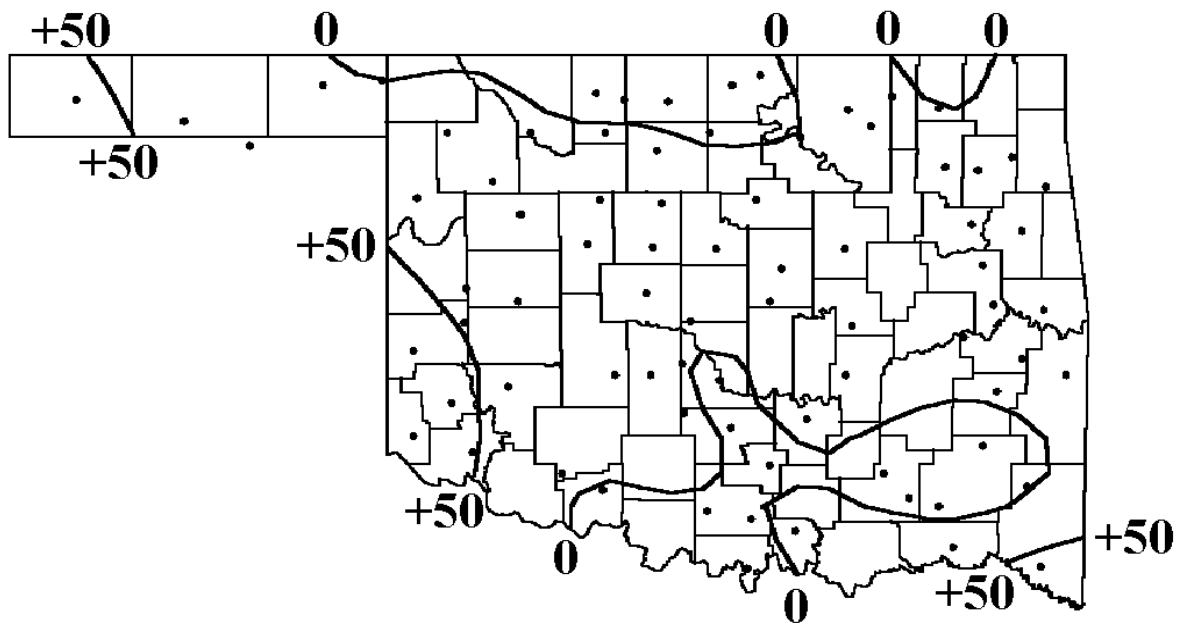
AUGUST 2002 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



AUGUST 2002 ACCUMULATED COOLING DEGREE DAYS (°F)



AUGUST 2002 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)



AUGUST 2002 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

NAME	ID	CD	MEAN		DEV		MIN	DAY	TEMP	DAY	HEAT	DEG	DEV	COOL	DEG	DEV	TOT	NUM	OBS	FROM	DEV	MAX	DAY	
			TEMP	NUM	FROM	MAX																		FROM
ARNETT	332	1	78.5	31	0.9	100	23	54	14	11	9	431	38	2.650	31	0.24	1.07	10						
BEAVER	593	1	79.1	31	0.1	103	5	54	14	0	-2	439	5	5.300	31	2.91	1.90	10						
BOISE CITY	908	1	77.4	31	2.1	102	18	53	13	0	-2	384	63	5.750	31	2.90	3.87	20						
BUFFALO	1243	1	81.3	27	*****	104	19	57	15	0	*****	441	*****	4.471	31	1.73	2.01	10						
FARGO	3070	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.312	31	*****	1.49	27						
GATE	3489	1	79.8	31	-0.2	101	23	51	14	0	-2	458	-10	3.573	31	0.81	1.09	26						
GATE	3489	1	82.1	10	*****	102	2	65	3	0	*****	171	*****	2.572	31	-0.19	1.21	26						
GOODWELL	3628	1	78.8	31	1.1	103	19	55	14	0	-2	427	33	2.001	31	-0.06	1.15	10						
GUYMON	3835	1	77.7	25	*****	101	19	56	22	0	*****	317	*****	4.130	31	*****	1.54	9						
HOOKER	4298	1	80.1	31	1.7	103	18	56	13	0	-2	468	50	3.091	31	0.97	0.99	10						
LAVERNE	5045	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.600	31	*****	2.50	10						
RANGE	7412	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	1.630	31	*****	0.99	10						
REGNIER	7534	1	*****	0	*****	***	0	***	0	*****	*****	*****	*****	2.701	31	*****	1.43	21						
TURPIN	9017	1	79.8	24	*****	103	2	57	14	0	*****	356	*****	3.030	31	0.69	1.53	10						

AUGUST 2002 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

NAME	ID	CD	MEAN		DEV		MIN	DAY	TEMP	DAY	HEAT	DEG	DEV	COOL	DEG	DEV	TOT	NUM	OBS	FROM	DEV	MAX	DAY	
			TEMP	NUM	FROM	MAX																		FROM
BILLINGS	755	2	80.8	30	-0.1	98	24	58	14	0	-1	475	-19	6.031	31	2.85	1.65	12						
BLACKWELL 2E	818	2	80.4	30	-0.1	101	24	57	15	2	-1	463	-18	4.391	30	*****	1.17	14						
BRAMAN	1075	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	3.160	31	*****	1.56	13						
CEDARDALE	1620	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.720	31	*****	1.64	13						
CHEROKEE	1724	2	81.6	30	0.6	102	24	59	15	0	-1	499	1	5.340	31	1.95	2.20	13						
ENID	2912	2	82.1	31	1.3	101	24	57	14	3	-1	535	42	3.914	31	0.54	1.45	12						
FT SUPPLY	3304	2	79.2	31	1.0	103	24	54	18	0	-3	440	28	2.170	31	-0.29	1.45	10						
FREEDOM	3358	2	79.4	24	*****	102	22	54	13	0	*****	345	*****	3.850	24	*****	1.45	26						
GREAT SALT P	3740	2	81.0	30	0.1	101	2	58	13	0	-2	481	-13	4.110	31	0.61	1.38	13						
HARDY	3909	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	2.781	31	*****	0.72	24						
HELENA	4019	2	80.7	31	0.0	102	2	57	14	2	1	488	1	6.001	31	2.96	1.80	12						
JEFFERSON	4573	2	80.0	31	-1.0	101	24	55	15	3	2	466	-30	3.690	31	0.63	0.97	14						
LAHOMA	4950	2	81.9	31	*****	103	2	58	14	3	*****	526	*****	5.100	31	*****	2.50	12						
LAMONT	5013	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	3.830	31	*****	1.13	13						
MEDFORD	5768	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	3.681	31	*****	1.05	13						
MORRISON	6065	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.880	31	*****	1.50	14						
MUTUAL	6139	2	80.1	31	0.8	102	24	55	15	2	-1	471	27	2.460	31	0.16	1.06	27						
NEWKIRK	6278	2	79.8	31	0.3	98	24	56	15	4	1	464	11	2.410	31	-0.87	0.86	14						
ORIENTA	6751	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	3.381	31	*****	0.99	13						
PERRY	7012	2	82.6	29	*****	102	3	59	15	0	*****	511	*****	3.610	29	*****	1.10	14						
RED ROCK	7505	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	6.740	31	*****	3.06	14						
WAYNOKA	9404	2	81.2	31	-0.1	102	1	56	14	1	-1	503	-3	3.930	31	1.15	0.99	13						
WOODWARD	9760	2	*****	0	*****	***	0	***	0	*****	*****	*****	*****	4.343	31	*****	1.46	24						

AUGUST 2002 SUMMARY FOR NORTHEAST CLIMATE DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		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	
					FROM NORM	MAX TEMP												
BARNSDALL	535	3	81.4	31	1.0	99	23	61	14	0	-1	509	32	3.321	31	0.08	1.95	25
BARTLESVILLE	548	3	81.2	31	0.3	101	23	59	9	0	-1	502	7	3.410	31	0.55	1.74	14
BIXBY	782	3	81.2	29	****	99	23	63	8	0	*****	470	*****	0.440	29	*****	0.41	24
BURBANK	1256	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.561	31	*****	1.50	13
CHELSEA	1717	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.230	31	*****	0.90	25
CLAREMORE	1828	3	80.4	31	0.6	98	7	60	9	0	-2	476	16	4.842	31	1.83	4.24	14
FORAKER	3250	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.930	31	*****	1.42	24
HOLLOW	4258	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.441	31	*****	0.81	11
HOMINY	4289	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.831	31	*****	2.60	14
KANSAS	4672	3	80.3	31	1.2	98	6	60	9	0	-3	474	35	5.320	31	1.90	4.45	13
LENAPAH	5118	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.120	31	*****	2.00	24
MANNFORD	5522	3	80.7	29	*****	99	23	62	14	0	*****	457	*****	4.240	31	0.79	1.82	14
MARAMEC	5540	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.420	31	*****	2.66	25
MIAMI	5855	3	80.8	29	*****	99	3	61	8	0	*****	458	*****	0.970	29	*****	0.67	24
NOWATA	6485	3	80.5	31	-0.5	98	22	62	9	0	-1	482	-15	4.490	31	1.60	1.86	14
PAWHUSKA	6935	3	81.1	31	0.5	98	23	60	14	0	-1	499	15	4.643	31	1.09	1.90	14
PAWNEE	6940	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.640	31	*****	3.11	14
PRYOR	7309	3	80.4	31	0.5	98	7	60	9	0	-2	477	15	4.603	31	1.39	4.08	14
RALSTON	7390	3	79.4	31	-0.5	96	23	57	14	0	-1	445	-17	5.201	31	1.66	2.40	25
SPAVINAW	8380	3	82.0	31	0.5	97	7	66	9	0	0	526	15	2.350	31	-1.12	1.56	14
UPPER SPAV	9101	3	79.4	31	*****	99	4	57	9	0	*****	447	*****	2.840	31	*****	2.40	14
VINITA	9203	3	79.6	29	*****	98	1	63	30	0	*****	424	*****	2.900	31	-0.34	1.95	14
WAGONER	9247	3	81.5	31	0.5	98	2	65	9	0	-1	512	14	4.570	31	1.70	2.94	14
WANN	9298	3	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.750	31	*****	1.69	24

AUGUST 2002 SUMMARY FOR WEST CENTRAL CLIMATE DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		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	
					FROM NORM	MAX TEMP												
CANTON DAM	1445	4	80.3	29	*****	104	3	53	27	4	*****	447	*****	5.180	29	*****	1.30	27
CLINTON	1909	4	82.1	30	0.3	103	24	56	15	0	0	513	-8	1.601	31	-1.34	1.08	13
CORDELL	2125	4	82.1	31	*****	104	24	56	15	0	*****	531	*****	1.251	31	*****	1.25	27
ELK CITY	2849	4	81.1	31	2.1	102	24	55	14	1	-2	501	65	0.500	31	-2.38	0.42	27
ERICK	2944	4	81.8	31	2.4	103	24	54	15	0	-1	522	77	0.690	31	-1.87	0.43	21
HAMMON	3871	4	80.8	30	1.2	102	24	50	14	3	2	476	23	0.900	30	*****	0.87	27
LEEDEY	5090	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.320	31	*****	0.52	27
MACKIE	5463	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.590	31	*****	0.59	27
MORAVIA	6035	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.110	31	*****	0.10	21
OKEENE	6629	4	82.5	30	0.4	102	23	58	14	0	-1	526	-3	1.920	31	-0.91	0.76	25
RETROP	7565	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.300	31	*****	0.18	27
REYDON	7579	4	79.7	29	*****	99	19	54	15	2	*****	428	*****	0.750	29	*****	0.75	27
SAYRE	7952	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.340	31	*****	0.15	21
SWEETWATER	8652	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.251	31	*****	0.13	29
TALOGA	8708	4	80.8	31	1.1	103	24	53	14	5	4	494	37	3.490	31	0.97	1.05	30
THOMAS	8815	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.360	31	*****	0.97	27
VICI	9172	4	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.351	31	*****	0.90	27
WATONGA	9364	4	80.8	31	0.3	100	24	57	15	1	-1	491	10	6.581	31	3.79	1.76	14
WEATHERFORD	9422	4	82.4	29	*****	101	24	62	27	0	*****	506	*****	2.010	31	-0.70	1.00	27

AUGUST 2002 SUMMARY FOR CENTRAL CLIMATE DIVISION (CD5)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM			MAX 24-HR	DAY
AMBER	200	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.230	31	*****	1.23	27	
ARCADIA	288	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.210	31	*****	2.10	13	
BLANCHARD	830	5	81.6	31	-0.4	101	24	63	14	0	0	514	-11	3.590	31	1.15	1.90	27	
BRISTOW	1144	5	81.2	31	1.0	99	24	62	31	0	-3	503	29	3.830	31	1.20	1.90	25	
CHANDLER	1684	5	81.9	31	1.2	101	24	63	15	0	-1	524	38	3.140	31	0.62	1.62	14	
CHICKASHA EXP	1750	5	82.9	31	0.5	102	23	63	14	0	0	556	17	1.500	31	-1.23	0.95	27	
COX CITY	2196	5	****	0	****	****	0	****	0	*****	*****	*****	*****	5.080	31	*****	3.55	14	
CRESCENT	2242	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.881	31	*****	2.12	13	
CUSHING	2318	5	82.5	20	****	101	25	68	31	0	*****	351	*****	3.111	31	0.41	1.29	13	
EDMOND	2788	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.250	31	*****	2.55	12	
EL RENO	2818	5	81.3	31	0.9	102	25	58	15	0	-1	507	29	1.930	31	-0.79	0.90	14	
GUTHRIE	3821	5	81.0	31	0.5	98	24	61	15	0	-2	497	16	5.440	31	3.02	2.86	13	
HENNESSEY	4055	5	81.1	31	0.6	101	2	58	15	1	-1	500	18	5.250	31	2.17	1.60	13	
INGALLS	4489	5	****	0	****	****	0	****	0	*****	*****	*****	*****	5.860	31	*****	2.32	24	
KINGFISHER	4861	5	81.4	31	0.6	101	24	58	14	0	-1	509	19	5.290	31	2.54	1.51	14	
KONAWA	4915	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.660	31	*****	4.30	13	
MARSHALL	5589	5	****	0	****	****	0	****	0	*****	*****	*****	*****	4.060	31	*****	1.33	14	
MEEKER	5779	5	80.2	31	1.4	99	24	60	31	0	-2	472	43	1.980	31	0.05	0.70	24	
MULHALL	6110	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.720	31	*****	0.88	14	
NORMAN NWS	6386	5	81.3	31	****	99	23	63	14	0	*****	506	*****	1.391	31	*****	0.98	25	
OKEMAH	6638	5	81.6	31	-0.7	99	23	65	30	0	0	514	-23	0.830	31	-1.59	0.37	14	
OKLAHOMA CTY	6661	5	81.2	31	0.0	99	23	62	14	0	0	504	7	1.581	31	-0.90	0.69	13	
OKLAHOMA CTY F.	6659	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.672	31	*****	0.55	14	
PERKINS	7003	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.060	31	*****	0.68	13	
PIEDMONT	7068	5	****	0	****	****	0	****	0	*****	*****	*****	*****	3.780	31	*****	1.30	14	
PRAGUE	7264	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.420	31	*****	0.45	14	
PURCELL	7327	5	80.0	31	-1.2	96	24	62	13	0	-1	466	-36	2.750	31	0.00	1.35	27	
SEMINOLE	8042	5	81.6	29	****	98	3	63	30	0	*****	482	*****	0.841	29	*****	0.66	14	
SHAWNEE	8110	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.331	31	*****	0.81	21	
STELLA	8479	5	****	0	****	****	0	****	0	*****	*****	*****	*****	3.100	31	*****	1.16	26	
STILLWATER	8501	5	82.4	31	1.1	100	24	60	14	0	-1	540	35	4.701	31	1.65	2.50	24	
TECUMSEH	8751	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.980	31	*****	0.75	11	
UNION CITY	9086	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.881	31	*****	0.87	27	
WANETTE	9291	5	80.8	28	****	98	3	62	30	0	*****	443	*****	2.710	28	*****	2.10	14	
WEWOKA	9575	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.972	31	*****	0.47	14	

AUGUST 2002 SUMMARY FOR EAST CENTRAL CLIMATE DIVISION (CD6)

NAME	ID	CD	DEV					HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV	
			MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	DEG DAY	FROM NORM			MAX 24-HR	DAY
ASHLAND	364	6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.520	31	*****	1.14	14	
BEGGS	631	6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.330	31	*****	1.48	14	
CALVIN	1391	6	****	0	****	****	0	****	0	*****	*****	*****	*****	0.950	31	*****	0.70	14	
CHECOTAH	1711	6	82.6	31	****	100	23	65	29	0	*****	546	*****	3.560	31	*****	1.87	14	
CLAYTON	1858	6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.630	31	*****	1.49	14	
DEWAR	2485	6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.510	31	*****	0.95	25	
DUSTIN	2690	6	****	0	****	****	0	****	0	*****	*****	*****	*****	0.260	31	*****	0.16	27	
HOLDENVILLE	4235	6	82.6	31	2.1	101	2	64	9	0	-1	545	65	1.711	31	-1.21	0.73	25	
LAKE EUFAULA	4975	6	80.8	31	1.1	99	24	67	25	0	-3	491	34	2.111	31	-0.47	1.14	25	
LYONS	5437	6	****	0	****	****	0	****	0	*****	*****	*****	*****	6.750	31	*****	5.12	14	
MCCURTAIN	5693	6	83.0	31	1.1	100	23	64	29	0	-2	558	33	2.301	31	-0.48	1.65	14	
MUSKOGEE	6130	6	81.8	30	1.0	99	23	63	28	0	-1	504	14	4.250	31	1.83	3.96	13	
OKMULGEE	6670	6	****	0	****	****	0	****	0	*****	*****	*****	*****	1.890	31	-0.72	0.83	13	
OKTAHA	6678	6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.360	31	*****	1.83	11	
SALLISAW	7862	6	81.7	31	1.5	98	7	65	29	0	-2	517	45	3.200	31	-0.01	2.65	14	
SCIOPI	7979	6	****	0	****	****	0	****	0	*****	*****	*****	*****	0.430	31	*****	0.19	28	
SHORT	8170	6	****	0	****	****	0	****	0	*****	*****	*****	*****	7.280	31	*****	4.20	14	
TAHLEQUAH	8677	6	79.4	31	-0.6	97	2	62	9	0	-1	447	-17	9.601	31	6.37	7.35	14	
WEBBERS FALL	9445	6	82.0	31	1.0	103	24	61	30	0	-2	528	31	2.320	31	-0.59	2.12	14	
WETUMKA	9571	6	****	0	****	****	0	****	0	*****	*****	*****	*****	0.883	31	*****	0.50	25	

AUGUST 2002 SUMMARY FOR SOUTHWEST CLIMATE DIVISION (CD7)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR	DAY
					FROM NORM	MAX TEMP									FROM NORM	MAX		
ALTUS DAM	184	7	****	0	****	****	0	****	0	*****	*****	*****	0.350	31	-2.40	0.35	27	
ALTUS	179	7	84.1	31	2.0	104	23	58	14	0	0	592	65	0.080	31	-2.75	0.05	29
ANADARKO	224	7	81.7	30	1.7	101	24	62	15	0	-1	501	36	1.110	31	-1.63	0.65	27
APACHE	260	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.470	31	*****	1.22	27
CARNEGIE	1504	7	83.3	28	*****	104	23	55	14	0	*****	513	*****	1.651	31	-0.89	1.50	27
CHATTANOOGA	1706	7	83.2	30	0.2	103	26	64	15	0	0	547	-10	1.740	31	-0.82	1.28	26
DUNCAN 11 W	2668	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.240	31	*****	1.78	27
FREDERICK	3353	7	83.5	27	*****	103	24	62	14	0	*****	499	*****	0.720	29	*****	0.72	13
HEADRICK	3998	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.301	31	*****	0.15	27
HOBART	4204	7	83.9	31	1.7	104	23	56	14	0	0	586	55	0.973	31	-1.69	0.78	27
HOLLIS	4249	7	84.2	31	2.4	105	23	57	14	0	0	595	76	0.520	31	-2.01	0.44	29
LAWTON	5063	7	83.5	26	*****	101	25	63	15	0	*****	482	*****	1.500	31	-0.86	0.87	27
LOOKEBA	5329	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.180	31	*****	0.97	27
MANGUM	5509	7	82.1	31	1.2	102	24	56	16	0	-1	532	39	0.061	31	-2.69	0.04	21
RANDLETT	7403	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.511	31	*****	1.03	27
ROOSEVELT	7727	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.280	31	*****	1.32	27
SEDAN	8016	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.040	31	*****	0.95	27
SNYDER	8299	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.530	31	*****	1.20	27
VINSON	9212	7	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.340	31	*****	0.20	29
WALTERS	9278	7	82.8	30	0.4	100	26	64	15	0	0	533	-7	3.180	31	0.70	2.25	14

AUGUST 2002 SUMMARY FOR SOUTH CENTRAL CLIMATE DIVISION (CD8)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV		24-HR	DAY
					FROM NORM	MAX TEMP									FROM NORM	MAX		
ADA	17	8	81.5	31	0.5	97	24	65	14	0	-1	513	18	2.620	31	-0.40	0.93	14
ALLEN	147	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.900	31	*****	1.95	15
ARDMORE	292	8	83.2	31	0.2	100	24	65	26	0	0	565	10	4.770	31	2.27	2.49	13
ATOKA DAM	394	8	81.4	30	-1.0	99	25	61	30	0	0	492	-47	2.080	31	-0.22	1.37	14
BOKCHITO	917	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	7.000	31	*****	3.00	12
CANEY	1437	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.630	31	*****	5.80	14
CENTRAHOMA	1648	8	81.5	31	*****	100	25	65	10	0	*****	511	*****	1.450	31	*****	0.80	14
CHICKASAW	1745	8	80.7	31	-1.0	96	25	64	31	0	0	486	-31	6.490	31	4.46	4.05	14
COLEMAN	2011	8	81.1	31	*****	98	24	62	29	0	*****	501	*****	8.790	31	*****	7.10	14
COMANCHE	2054	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.980	31	*****	0.60	27
DAISY	2354	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.480	31	*****	1.29	13
DUNCAN	2660	8	82.5	27	*****	100	25	66	15	0	*****	473	*****	1.580	31	-0.92	1.19	27
DURANT	2678	8	81.6	20	*****	99	4	64	28	0	*****	333	*****	4.350	31	1.55	2.66	13
ELMORE CITY	2872	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.110	31	*****	2.35	14
GRADY	3688	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.000	31	*****	0.70	27
HEALDTON	4001	8	81.7	31	0.1	101	25	64	31	0	0	517	2	2.610	31	0.37	1.36	27
HENNEPIN	4052	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.451	31	*****	3.78	14
KETCHUM RAN	4780	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.720	31	*****	1.00	27
KINGSTON	4865	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.800	31	*****	3.30	14
LINDSAY	5216	8	81.8	31	0.7	100	23	64	31	0	0	520	21	0.367	31	-1.90	0.19	13
LOCO	5247	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.910	31	*****	1.05	27
MADILL	5468	8	83.5	30	1.7	100	25	65	14	0	0	555	33	4.990	30	*****	2.94	14
MARIETTA 5 SW	5563	8	80.3	31	-1.8	98	25	63	31	0	0	475	-56	2.390	31	-0.32	1.13	14
MARLOW	5581	8	83.1	31	*****	104	24	62	31	0	*****	560	*****	1.860	31	*****	0.98	27
MCGEE CREEK	5713	8	82.0	31	0.7	101	3	65	14	0	0	528	22	2.770	31	0.38	1.80	14
PAULS VALLEY	6926	8	81.2	31	0.0	98	25	62	28	0	0	503	1	7.550	31	5.54	3.45	14
PONTOTOC	7214	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.370	31	*****	4.62	13
TISHOMINGO	8884	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.070	31	*****	4.00	13
TUSSY	9032	8	*****	0	*****	****	0	****	0	*****	*****	*****	*****	4.383	31	*****	2.20	14
WAURIKA	9395	8	83.5	28	*****	103	24	66	31	0	*****	519	*****	1.291	31	-1.12	1.12	27

AUGUST 2002 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

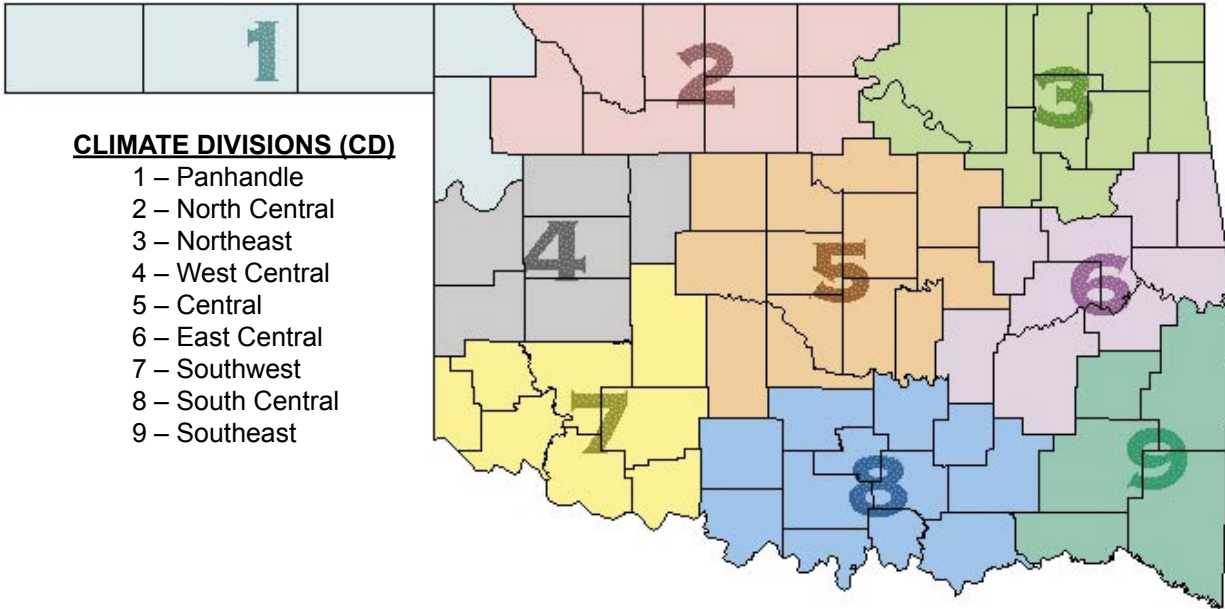
NAME	ID	CD	DEV			MIN	DAY	TEMP	DAY	HEAT	DEV	COOL	DEV	TOT	NUM	DEV	MAX	DAY
			DEG	FROM	DEG					FROM	DEG	FROM	DEG			FROM		
			MEAN	NUM	FROM	MAX			DEG	FROM	DEG	FROM	PPT	OBS	FROM	24-HR		
ANTLERS	256	9	79.9	31	-1.7	97	25	61	30	0	0	461	-52	6.180	31	3.87	2.25	10
BATTIEST	567	9	77.4	30	-0.4	97	7	59	30	0	-4	372	-28	4.730	30	*****	2.99	12
BENGAL	670	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.430	31	*****	0.85	14
BROKEN BOW	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.660	31	*****	1.74	14
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	3.280	31	*****	1.25	14
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.090	31	*****	1.10	25
HEAVENER	4008	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.490	31	*****	0.53	13
HUGO	4384	9	82.1	31	1.2	99	4	64	28	0	-1	530	38	0.990	31	-1.50	0.71	14
IDABEL	4451	9	84.0	31	2.7	102	25	67	31	0	0	588	84	1.650	31	-0.68	1.07	8
PAGE	6842	9	80.2	31	*****	96	23	59	30	0	*****	471	*****	1.870	31	*****	0.72	25
POTEAU	7254	9	81.4	31	0.7	99	6	62	30	0	-1	510	25	2.600	31	0.19	2.39	13
SMITHVILLE	8285	9	79.3	27	*****	100	4	58	30	0	*****	387	*****	1.111	31	-1.60	0.93	14
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	2.690	31	*****	1.99	14
TUSKAHOMA	9023	9	80.6	31	-0.5	99	24	59	30	0	-1	483	-16	2.540	31	-0.17	0.90	14
VALLIANT	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	1.610	31	*****	1.22	14
WILBURTON	9634	9	80.8	31	-0.1	100	23	60	30	0	-1	489	-4	2.221	31	-0.39	1.02	13
WISTER	9724	9	81.4	31	*****	99	24	60	29	0	*****	507	*****	1.940	31	*****	0.71	14

AUGUST 2002 CLIMATE DIVISION SUMMARY

NAME	CD	DEV			MIN	DAY	TEMP	DAY	HEAT	DEV	COOL	DEV	TOT	NUM	DEV	MAX	DAY
		DEG	FROM	DEG					FROM	DEG	FROM	DEG			FROM		
		MEAN	NUM	FROM	MAX			DEG	FROM	DEG	FROM	PPT	OBS	FROM	24-HR		
PANHANDLE	1	79.0	6	0.4	104	19	51	14	2	0	434	12.2	3.700	14	1.21	3.87	20
NORTH CENTRAL	2	80.7	12	0.3	103	2	54	13	2	-1	484	4.4	4.130	20	1.09	3.06	14
NORTHEAST	3	80.7	11	0.5	101	23	57	9	0	-2	486	13.4	4.080	22	0.89	4.45	13
WEST CENTRAL	4	81.5	8	1.2	104	24	50	14	1	0	506	30.9	1.670	16	-1.05	1.76	14
CENTRAL	5	81.4	14	0.3	102	25	58	14	0	-1	508	10.9	3.040	33	0.43	4.30	13
EAST CENTRAL	6	81.7	8	1.3	103	24	61	30	0	-2	517	37.1	2.940	20	0.11	7.35	14
SOUTHWEST	7	83.1	7	1.2	105	23	55	14	0	0	555	30.6	1.210	19	-1.43	2.25	14
SOUTHCENTRAL	8	81.8	13	-0.1	104	24	61	30	0	0	517	-4.8	3.820	29	1.36	7.10	14
SOUTHEAST	9	80.8	9	0.6	102	25	58	30	0	-1	490	18.0	2.270	16	-0.33	2.99	12

Note: The above climate division summary contains similar information to the preceding tables but are the averages or extremes over all of the stations reporting in each climate division.

CLIMATE DIVISION MAP



EXPLANATION OF TABLES

The tables appearing on the preceding pages contain the following information for each station or climate division:

Station Name: The name of the observing site.

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

Climate Division: See the figure above.

Number of Temperature Observations: These numbers 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 Temperature: The maximum daily maximum temperature observed during the current month and year and the day on which it occurred.

Minimum Daily Temperature: The minimum daily minimum temperature observed during the current month and year and the day on 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. HDD 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. See the equation to the right for the HDD calculation.

Deviation from Normal Heating Degree Days: The difference between the actual HDD and the normal HDD for the month. 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. CDD 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. See the equation to the right for the CDD calculation.

Deviation from Normal Cooling Degree Days: The difference between the actual HDD and the normal HDD for the month. 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 a 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: The difference between the actual rainfall and the normal rainfall for the month. 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 the 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.

Heating Degree Days Calculation

NumDays

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

Where NumDays = the number of days in the month of interest (e.g., NumDays = 31 for January)

Cooling Degree Days Calculation

NumDays

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

Where NumDays = the number of days in the month of interest (e.g., NumDays = 30 for June)

MESONET MONTHLY SUMMARY FOR AUGUST 2002

NAME	MEAN MAX		MIN		HDD	CDD	TOT MAX			NAME	MEAN MAX		MIN		HDD	CDD	TOT MAX				
	TEMP	TEMP	DAY	TEMP			DAY	PPT	24-HR		DAY	TEMP	TEMP	DAY			TEMP	DAY	PPT	24-HR	DAY
PANHANDLE																					
Arnett	80.3	100	23	54	14	0	475	1.88	.45	10	Goodwell	77.6	101	18	56	14	0	389	*****	*****	***
Beaver	79.6	104	1	56	13	0	452	5.32	1.65	9	Hooker	78.9	103	18	57	14	0	431	2.93	1.35	9
Boise City	75.9	102	18	53	13	1	339	4.75	2.30	20	Kenton	76.2	102	18	55	13	0	349	3.47	1.55	10
Buffalo	81.0	103	18	56	14	0	497	4.40	1.79	9	Slapout	*****	***	***	***	***	****	****	*****	*****	***
NORTH CENTRAL																					
Alva	81.1	101	1	57	14	0	499	4.68	1.59	13	May Ranch	80.4	101	22	58	13	****	****	4.14	1.12	24
Blackwell	80.3	99	23	57	14	0	474	3.74	1.21	13	Medford	80.9	100	1	57	14	0	494	3.53	1.54	12
Breckenridge	81.1	100	1	57	14	0	498	2.93	1.42	12	Newkirk	79.4	98	23	57	14	0	446	2.72	1.04	13
Cherokee	82.3	103	22	60	14	0	536	4.76	2.55	13	Red Rock	80.4	98	23	58	14	0	476	6.06	3.44	13
Fairview	82.5	104	1	58	14	0	541	4.16	1.81	13	Seiling	80.9	102	23	55	14	0	494	4.10	1.07	13
Freedom	81.0	104	18	55	14	0	495	2.72	.64	26	Woodward	80.9	102	18	54	14	0	494	2.30	.60	26
Lahoma	80.9	102	1	59	14	****	****	4.72	2.30	12											
NORTHEAST																					
Bixby	80.9	98	23	63	9	0	494	3.19	1.83	13	Nowata	79.4	97	23	59	9	0	445	5.30	2.67	23
Burbank	79.7	98	23	57	14	0	455	3.20	1.51	13	Pawnee	80.2	97	23	60	14	0	471	7.63	4.45	13
Claremore	80.3	97	2	61	9	0	475	4.37	3.84	13	Porter	80.9	98	2	62	9	0	492	3.52	2.38	13
Copan	79.8	99	23	60	14	0	460	3.10	1.87	23	Pryor	79.7	98	6	57	9	0	457	3.94	2.44	13
Foraker	*****	***	***	***	***	****	****	*****	*****	***	Skiatook	80.8	98	23	63	9	0	490	3.36	2.12	13
Inola	80.3	100	6	60	9	0	473	6.10	5.18	13	Vinita	78.9	99	23	58	9	0	431	2.62	1.34	24
Jay	79.0	97	3	60	8	0	434	2.20	1.27	13	Wynona	79.8	96	23	61	14	0	460	4.62	1.57	24
Miami	79.1	96	2	60	9	0	436	2.96	.95	23											
WEST CENTRAL																					
Bessie	82.9	103	23	57	14	****	****	.05	.04	13	Putnam	81.0	102	23	56	14	0	496	2.54	.98	27
Butler	82.7	105	23	54	14	0	550	1.23	.68	27	Retrop	83.1	103	23	56	14	0	562	.33	.22	27
Camargo	81.4	103	23	54	14	0	507	1.76	.81	27	Watonga	80.8	101	23	57	14	0	488	6.35	1.57	1
Cheyenne	80.9	100	23	55	14	0	492	1.06	.82	27	Weatherford	82.4	103	23	58	14	0	538	2.17	1.01	27
Erick	81.5	101	23	54	14	0	512	.93	.59	20											
CENTRAL																					
Acme	82.1	102	23	62	31	0	530	2.19	1.20	27	Minco	82.3	102	23	61	14	0	537	1.53	1.30	27
Bowlegs	80.4	98	23	61	30	0	479	1.00	.57	13	Ninnekah	83.1	102	23	64	14	0	561	1.63	1.03	27
Bristow	80.2	98	23	60	9	0	471	3.58	1.43	25	Norman	82.4	101	23	64	14	****	****	2.03	.87	27
Chandler	81.0	99	23	64	14	0	496	3.82	1.91	13	Oilton	80.1	97	23	62	31	****	****	6.64	3.51	24
Chickasha	82.9	103	23	64	14	****	****	1.67	1.13	27	Okemah	81.6	100	23	63	30	0	514	.98	.46	13
El Reno	81.4	104	23	55	14	0	508	2.66	1.09	27	Perkins	82.3	102	23	61	14	****	****	3.24	1.28	23
Guthrie	82.0	99	23	61	14	0	526	6.61	3.41	13	Shawnee	82.2	100	23	64	30	****	****	*****	*****	***
Kingfisher	82.4	102	23	60	14	0	539	3.20	1.35	12	Spencer	81.1	99	23	62	14	0	499	4.26	2.32	12
Marena	81.5	101	23	59	14	0	510	4.11	2.28	23	Stillwater	81.8	102	23	61	14	0	521	4.87	2.61	23
Marshall	81.6	100	3	57	14	0	516	4.70	1.65	13	Washington	81.4	99	23	64	14	0	509	3.98	2.00	27
EAST CENTRAL																					
Calvin	81.2	98	23	62	9	****	****	1.67	.64	13	Sallisaw	80.9	98	23	63	29	0	494	3.32	2.19	13
Cookson	80.1	98	6	61	29	0	467	4.33	3.35	13	Stigler	81.3	100	23	63	28	****	****	3.04	1.44	13
Eufaula	82.5	102	23	64	30	0	542	1.19	.50	13	Stuart	82.2	100	23	63	9	0	534	.77	.38	5
Haskell	81.0	99	23	63	9	0	496	3.54	1.57	13	Tahlequah	80.0	98	6	62	9	0	464	6.38	3.44	13
Hectorville	82.6	101	23	66	30	0	545	2.65	1.42	13	Webbers Falls	83.0	104	23	63	29	0	557	2.65	2.18	13
McAlester	82.3	101	2	63	29	0	536	.42	.24	14	Westville	79.4	98	3	61	9	0	446	7.89	5.35	13
Okmulgee	80.7	101	23	60	30	0	487	1.46	.63	13											
SOUTHWEST																					
Altus	82.8	100	23	59	14	0	552	.03	.02	29	Hollis	83.5	104	23	58	14	0	573	.56	.46	29
Apache	82.2	101	23	62	14	0	533	2.46	1.15	27	Mangum	82.7	105	23	52	14	0	548	.15	.06	8
Fort Cobb	81.5	101	23	60	14	0	512	1.38	1.21	27	Medicine Park	83.1	102	23	62	14	0	561	1.10	1.07	27
Grandfield	84.6	104	24	65	13	0	608	.74	.56	13	Tipton	84.7	103	23	62	14	****	****	.46	.46	13
Hinton	82.2	102	23	56	14	0	533	2.47	1.04	27	Walters	83.4	102	24	64	13	0	571	4.16	3.34	13
Hobart	83.2	103	23	56	14	0	565	.88	.88	27											
SOUTH CENTRAL																					
Ada	81.4	99	24	63	30	0	509	2.09	.99	13	Lane	81.5	99	2	64	30	0	511	2.57	1.70	13
Ardmore	81.5	97	23	64	30	****	****	6.10	1.96	13	Madill	82.2	99	24	66	27	0	534	3.63	1.68	27
Bee	*****	***	***	***	***	****	****	7.43	2.21	27	Pauls Valley	81.8	97	23	66	30	0	521	6.40	3.28	13
Burneyville	82.6	100	24	63	31	****	****	1.84	.59	27	Ringling	82.8	102	24	66	30	0	552	1.87	.90	27
Byars	81.1	96	23	65	30	0	498	2.05	1.12	13	Sulphur	81.5	96	24	65	27	0	512	4.87	2.28	13
Centrahoma	80.9	99	24	61	30	****	****	1.22	.61	13	Tishomingo	80.8	97	2	65	13	0	490	7.55	4.87	13
Durant	82.4	99	2	66	14	0	540	6.14	2.62	14	Vanoss	81.5	97	24	64	30	****	****	3.18	1.69	13
Ketchum Ranch	82.2	102	24	65	14	0	535	2.10	1.35	27	Waurika	83.8	104	23	65	31	0	583	1.33	1.13	27
SOUTHEAST																					
Antlers	80.1	99	2	59	30	0	469	5.62	3.02	13	Idabel	82.4	100	2	63	29	0	539	2.11	.76	23
Broken Bow	80.8	100	24	61	8	0	490	1.47	.88	14	Mt Herman	80.7	98	6	61	8	0	488	2.79	2.10	14
Clayton	80.8	98	2	61	30	0	489	1.48	.83	14	Talihina	81.6	100	23	61	30	0	515	2.43	1.47	25
Cloudy	80.3	99	2	62	29	0	476	4.81	1.82	14	Wilburton	81.0	100	23	61	29	0	495	1.40	.62	25
Hugo	82.3	99	2	64	30	0	536	1.84	1.66	14	Wister	80.6	99	23	59	29	0	483	1.54	.51	13

EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION AUGUST 2002

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	104	19	BUFFALO	51	14	GATE	3.87	20	BOISE CITY	6.60	LAVERNE
2	103	2	FT SUPPLY	54	14	FT SUPPLY	3.06	14	RED ROCK	6.74	RED ROCK
	103	24	FT SUPPLY	54	15	FT SUPPLY					
	103	2	LAHOMA	54	13	FREEDOM					
3	101	23	BARTLESVILLE	57	14	RALSTON	4.45	13	KANSAS	7.64	PAWNEE
				57	9	UPPER SPAV					
4	104	3	CANTON DAM	50	14	HAMMON	1.76	14	WATONGA	6.58	WATONGA
	104	24	CORDELL								
5	102	23	CHICKASHA EX EL RENO	58	14	EL RENO	4.30	13	KONAWA	5.86	INGALLS
				58	15	EL RENO					
				58	15	HENNESSEY					
				58	14	KINGFISHER					
6	103	2	WEBBERS FALL	61	29	WEBBERS FALL	7.35	14	TAHLEQUAH	9.60	TAHLEQUAH
	103	24	WEBBERS FALL	61	30	WEBBERS FALL					
7	105	23	HOLLIS	55	14	CARNEGIE	2.25	14	WALTERS	3.18	WALTERS
8	104	24	MARLOW	61	30	ATOKA DAM	7.10	14	COLEMAN	8.79	COLEMAN
9	102	5	IDABEL	58	8	SMITHVILLE	2.99	12	BATTIEST	6.18	ANTLERS
		7	IDABEL	58	28	SMITHVILLE					
		25	IDABEL	58	29	SMITHVILLE					
			IDABEL	58	30	SMITHVILLE					

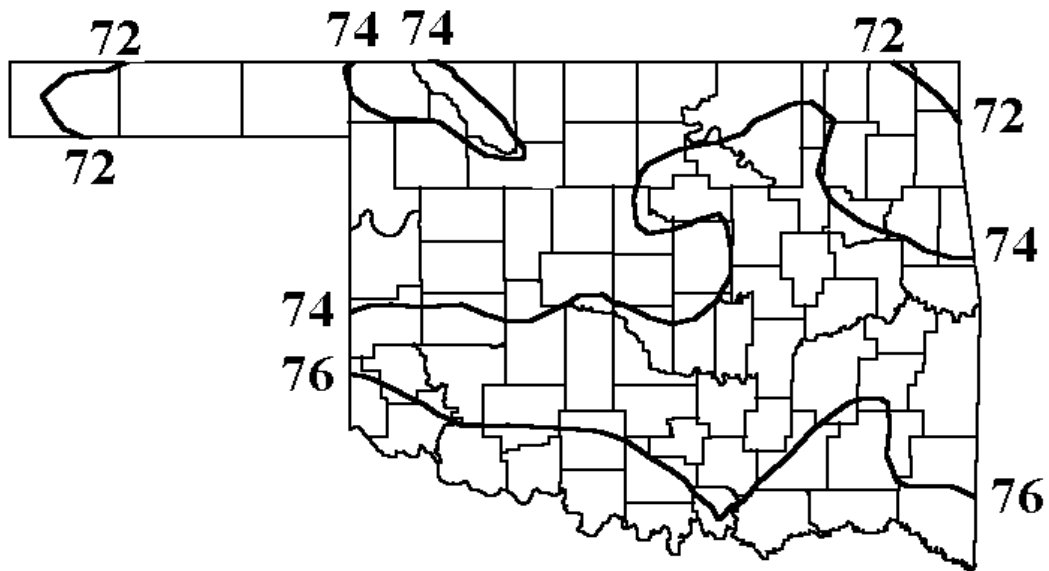
TABLE OF 2001/2002 COMPARISONS

Station	AUGUST Temperature (F)		AUGUST Precipitation (in.)	
	2001	2002	2001	2002
Arnett	79.7	78.5	3.26	2.65
Enid	85.6	82.1	0.90	3.91
Tulsa	85.1		2.26	
Elk City	81.8	81.1	1.11	0.50
Oklahoma City	82.9	81.2	1.96	1.58
McAlester	83.5		1.50	
Altus Irr Station	82.6	84.1	4.53	0.35
Ardmore	84.9	83.2	2.24	4.77
Idabel	83.9	84.0	5.04	1.65

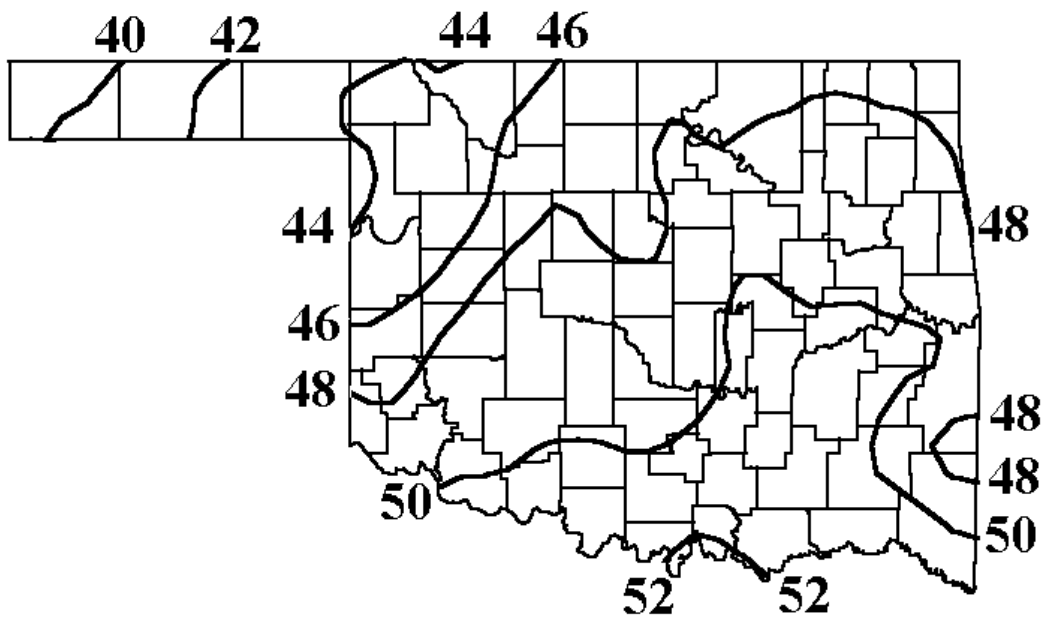
AUGUST 2002 STATEWIDE EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature (F)	HAMMON	4	50	14
Maximum temperature (F)	HOLLIS	7	105	23
Maximum 24-hour Precipitation	TAHLEQUAH	6	7.35	14

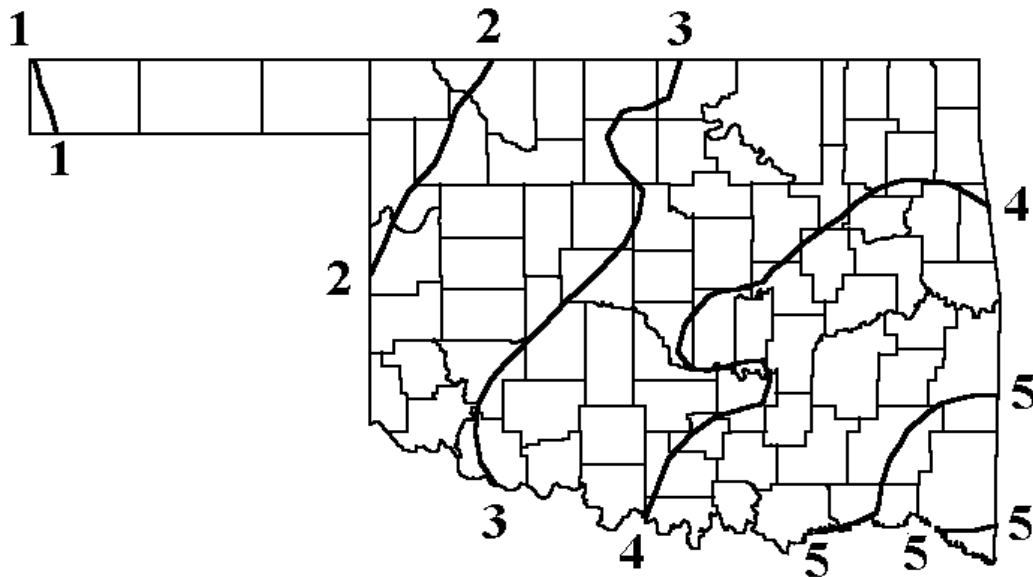
OCTOBER NORMAL DAILY MAXIMUM TEMPERATURE (°F)



OCTOBER NORMAL DAILY MINIMUM TEMPERATURE (°F)



OCTOBER NORMAL MONTHLY PRECIPITATION (INCHES)



OCTOBER TORNADO STATISTICS

The most tornadoes reported in **OCTOBER** for Oklahoma was (27) in 1998.

The average number of tornadoes in **OCTOBER** for Oklahoma is (1.9).

OUTLOOK FOR OCTOBER 2002 THROUGH DECEMBER 2002

BASED ON SEASONAL OUTLOOK PROVIDED BY THE CLIMATE PREDICTION CENTER

Temperature: Near Normal Temperature Statewide

Precipitation: Near Normal Precipitation Statewide

OKLAHOMA CITY CLIMATE CALENDAR

OCTOBER

The data on this calendar are for Oklahoma City, Oklahoma.
 Normal values are calculated for the period 1961-1990.
 Temperature extremes are for the period 1905-2001.
 Precipitation extremes are for the period 1888-2001.

Day	Avg. Temp.	Ave. High	Record High	Year	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	68	79	97	1938	61	1985	56		74	1911	38	1958	0.13		2.28	1959
2	67	79	96	1951	57	1902	56		73	1911	41	1975	0.12		4.52	1955
3	67	78	97	1898	56	1959	56		73	1954	40	1975	0.12		1.59	1981
4	67	78	96	1931	51	1902	55		75	1911	40	1891	0.12		2.22	1955
5	66	78	95	1947	53	1988	55		69	1981	38	1932	0.12		1.74	1970
6	66	77	94	1939	55	1891	54		72	1931	37	2001	0.12		1.38	1989
7	66	77	94	1979	50	1976	54		73	1939	32	1952	0.12		1.41	1967
8	65	77	94	1979	50	1970	54		71	1949	34	2000	0.12		0.90	1978
9	65	76	96	1965	52	1909	53		72	1949	28	2000	0.11		2.35	2001
10	64	76	95	1965	49	1985	53		71	1973	30	2000	0.11		0.94	1985
11	64	76	94	1979	51	1987	52		69	1962	35	1896	0.11		1.88	1981
12	64	75	94	1978	47	1986	52		70	1928	34	1987	0.11		2.45	1923
13	64	75	90	1963	52	1969	52		72	1899	36	1893	0.11		1.44	1923
14	63	75	91	1950	47	1923	51		70	1899	32	1969	0.11		2.45	1956
15	62	74	92	1962	54	1914	51		68	1968	38	1974	0.11		1.46	1953
16	62	74	95	1917	54	1941	50		67	1965	31	1977	0.10		1.08	1981
17	62	74	96	1972	51	1925	50		68	1934	33	1976	0.10		1.43	1942
18	61	73	91	1932	50	1989	50		67	1934	33	1898	0.10		2.34	1960
19	61	73	92	1894	46	1925	49		69	1979	25	1917	0.10		4.98	1983
20	61	72	93	1979	42	1910	49		72	1979	26	1976	0.10		5.45	1983
21	60	72	90	1978	46	1930	48		66	1941	30	1917	0.10		3.70	1972
22	59	71	87	1939	42	1936	48		65	1941	31	1898	0.10		3.90	2000
23	59	71	89	1927	45	1895	48		67	1934	26	1917	0.09		1.58	1920
24	59	71	88	1927	48	1949	47		68	1939	30	1995	0.09		1.44	1920
25	58	70	87	1939	43	1957	47		68	1939	29	1957	0.09		1.65	1899
26	58	70	92	1891	42	1936	46		71	1939	26	1957	0.09		3.76	1918
27	58	69	86	1922	43	1919	46		66	1940	22	1957	0.09		3.19	1984
28	57	69	89	1938	34	1925	46		65	1961	22	1925	0.09		1.38	1991
29	57	68	89	1950	34	1925	45		67	1961	22	1917	0.09		1.61	1941
30	56	68	87	1937	39	1993	45		67	1946	16	1917	0.08		2.84	1974
31	56	67	86	1938	36	1991	44		65	1982	16	1993	0.08		1.82	1972
MONTH	62	73.6	97	1938	34	1925	50.4		75	1911	16	1993	3.23		5.45	1983

DATA COURTESY OF NATIONAL WEATHER SERVICE – NORMAN
 Temperatures are in degrees Fahrenheit; precipitation is in inches.

TULSA CLIMATE CALENDAR

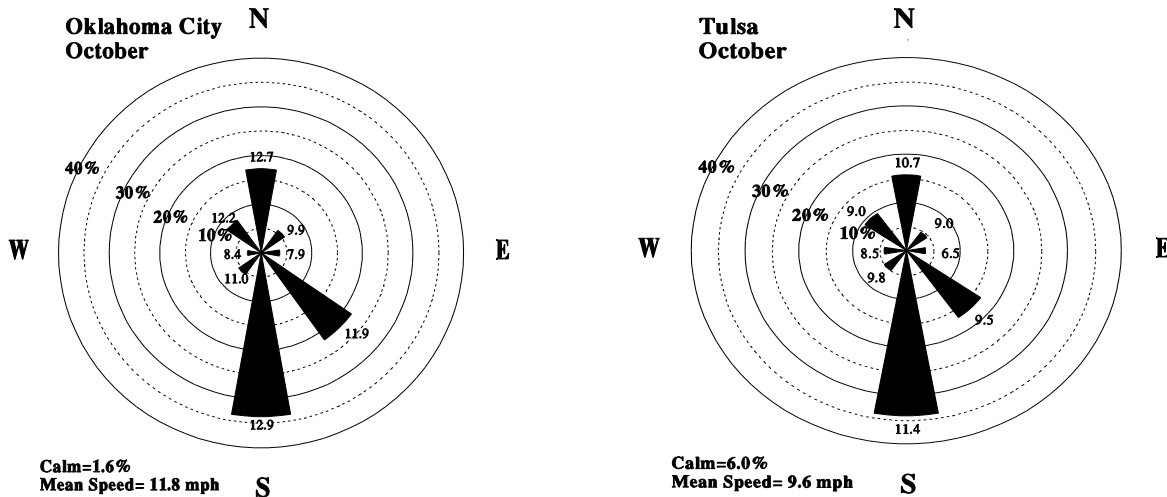
OCTOBER

The data on this calendar are for Tulsa, Oklahoma.
 Normal values are calculated for the period 1971-2000.
 Temperature extremes are for the period 1905-2001.
 Precipitation extremes are for the period 1888-2001.

Day	Avg. Temp.	Ave. High	Record High	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	68	79	97	62	1910	57		71	1927	38	1985	0.15		2.95	1986
2	68	79	96	59	1978	57		73	1954	39	1908	0.15		5.45	1959
3	68	79	95	63	1963	56		74	1983	39	1959	0.15		1.74	1926
4	68	79	97	58	1931	56		70	1954	39	1945	0.15		3.79	1941
5	68	79	95	50	1947	56		73	1981	37	1988	0.15		4.80	1998
6	67	79	98	57	1939	56		75	1941	35	1988	0.14		3.24	1951
7	67	79	98	52	1979	55		75	1939	33	1988	0.14		2.07	1928
8	67	79	97	54	1979	54		73	1939	30	2000	0.14		4.71	1936
9	66	78	97	54	1963	53		70	1973	28	2000	0.14		0.98	1937
10	65	77	95	57	1963	53		73	1913	30	1993	0.14		1.33	2001
11	65	76	94	50	1979	53		71	1912	30	1987	0.13		2.20	1973
12	64	75	94	49	1978	53		71	1962	32	1986	0.13		3.37	1969
13	64	75	92	54	1963	52		71	1956	32	1986	0.13		3.50	1923
14	63	75	92	50	1963	52		69	1968	34	1923	0.13		1.85	1984
15	63	75	91	55	1963	52		69	1968	38	1943	0.13		2.12	1941
16	63	74	93	57	1917	51		69	1965	32	1943	0.13		1.92	1923
17	62	74	90	52	1947	51		73	1998	30	1966	0.13		1.32	1998
18	61	73	91	51	1932	50		69	1938	29	1989	0.13		1.94	1960
19	61	73	89	41	1940	50		73	1979	27	1916	0.12		1.73	1983
20	61	73	91	47	1979	50		76	1979	30	1910	0.12		4.96	1971
21	60	72	92	50	1978	49		66	1963	30	1930	0.12		2.98	1972
22	60	72	88	44	1963	49		66	1941	31	1936	0.12		4.05	1920
23	60	71	92	41	1939	48		70	1991	26	1908	0.12		2.40	1908
24	59	71	88	50	1921	48		71	1939	24	1972	0.12		0.74	1920
25	59	70	91	48	1939	47		71	1939	31	1957	0.12		1.53	1932
26	58	69	90	40	1950	47		71	1939	27	1913	0.12		2.48	1919
27	58	69	88	46	1922	47		64	1989	27	1936	0.12		2.23	1918
28	58	69	86	43	1922	46		62	1998	23	1980	0.12		2.45	1974
29	57	68	90	37	1950	46		66	1961	23	1925	0.12		2.08	1941
30	56	67	90	41	1937	45		71	1946	15	1993	0.12		1.86	1941
31	56	67	87	41	1950	45		68	1982	18	1991	0.12		3.12	1981
MONTH	62.6	74.0	98	37	1979	51.1		75	1941	15	1917	0.13		5.45	1959

DATA COURTESY OF NATIONAL WEATHER SERVICE – TULSA
 Temperatures are in degrees Fahrenheit; precipitation is in inches.

OCTOBER WIND ROSES



October Wind Roses for Oklahoma City and Tulsa. The frequency (percent) of winds from each direction is represented by length of its bar. The numbers at the ends of the bars indicate the average wind speed from that direction in miles per hour.

OCTOBER SUNRISE/SUNSET TIMES FOR 2002

ALL TIMES ARE CENTRAL STANDARD TIME

OKLAHOMA CITY			TULSA		
DATE	SUNRISE	SUNSET	DATE	SUNRISE	SUNSET
10/1/02	6:25 AM	6:14 PM	10/1/02	6:19 AM	6:07 PM
10/2/02	6:26 AM	6:13 PM	10/2/02	6:20 AM	6:06 PM
10/3/02	6:27 AM	6:11 PM	10/3/02	6:20 AM	6:05 PM
10/4/02	6:27 AM	6:10 PM	10/4/02	6:21 AM	6:03 PM
10/5/02	6:28 AM	6:08 PM	10/5/02	6:22 AM	6:02 PM
10/6/02	6:29 AM	6:07 PM	10/6/02	6:23 AM	6:00 PM
10/7/02	6:30 AM	6:06 PM	10/7/02	6:24 AM	5:59 PM
10/8/02	6:31 AM	6:04 PM	10/8/02	6:25 AM	5:57 PM
10/9/02	6:31 AM	6:03 PM	10/9/02	6:25 AM	5:56 PM
10/10/02	6:32 AM	6:01 PM	10/10/02	6:26 AM	5:55 PM
10/11/02	6:33 AM	6:00 PM	10/11/02	6:27 AM	5:53 PM
10/12/02	6:34 AM	5:59 PM	10/12/02	6:28 AM	5:52 PM
10/13/02	6:35 AM	5:57 PM	10/13/02	6:29 AM	5:51 PM
10/14/02	6:36 AM	5:56 PM	10/14/02	6:30 AM	5:49 PM
10/15/02	6:36 AM	5:55 PM	10/15/02	6:31 AM	5:48 PM
10/16/02	6:37 AM	5:54 PM	10/16/02	6:32 AM	5:47 PM
10/17/02	6:38 AM	5:52 PM	10/17/02	6:32 AM	5:45 PM
10/18/02	6:39 AM	5:51 PM	10/18/02	6:33 AM	5:44 PM
10/19/02	6:40 AM	5:50 PM	10/19/02	6:34 AM	5:43 PM
10/20/02	6:41 AM	5:49 PM	10/20/02	6:35 AM	5:41 PM
10/21/02	6:42 AM	5:47 PM	10/21/02	6:36 AM	5:40 PM
10/22/02	6:43 AM	5:46 PM	10/22/02	6:37 AM	5:39 PM
10/23/02	6:43 AM	5:45 PM	10/23/02	6:38 AM	5:38 PM
10/24/02	6:44 AM	5:44 PM	10/24/02	6:39 AM	5:37 PM
10/25/02	6:45 AM	5:43 PM	10/25/02	6:40 AM	5:35 PM
10/26/02	6:46 AM	5:42 PM	10/26/02	6:41 AM	5:34 PM
10/27/02	6:47 AM	5:40 PM	10/27/02	6:42 AM	5:33 PM
10/28/02	6:48 AM	5:39 PM	10/28/02	6:43 AM	5:32 PM
10/29/02	6:49 AM	5:38 PM	10/29/02	6:44 AM	5:31 PM
10/30/02	6:50 AM	5:37 PM	10/30/02	6:45 AM	5:30 PM
10/31/02	6:51 AM	5:36 PM	10/31/02	6:46 AM	5:29 PM

ADD ONE HOUR FOR CENTRAL DAYLIGHT TIME

CONTACT INFORMATION



Oklahoma Climatological Survey

The University of Oklahoma
100 East Boyd Street, Suite 1210
Norman, OK 73019-1012

tel 405-325-2541
fax 405-325-2550

e-mail ocs@ou.edu

Office Hours: 8 AM to 5 PM, Monday-Friday

Mesonet Operators

tel 405-325-3231

e-mail operator@operations.ocs.ou.edu

Visit our web site at <http://www.ocs.ou.edu>.

Content: Howard Johnson
Shaye Palmer

Layout: Stdrovia Blackburn
John Humphrey

The University of Oklahoma is an equal opportunity employer.