

# OKLAHOMA MONTHLY CLIMATE SUMMARY

# DECEMBER 2001

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**Oklahoma Climatological Survey**

## MONTHLY SUMMARY FOR DECEMBER 2001

### **December 2001**

*Statewide average temperature = 42.7° F*

*Statewide average rainfall = 2.07 inches*

Oklahoma's December statewide-averaged monthly precipitation total illustrates the occasionally misleading nature of such simplified indicators. Heavy rains in southeastern Oklahoma, where normal December precipitation typically is substantially greater than it is elsewhere in the state, offset extremely dry conditions elsewhere to provide the state with "greater-than-normal" precipitation for the month. Although four of the state's nine climate divisions each received less than half of its normal precipitation in December, the state's composite total for the month, 2.07 inches, is 0.41 inches greater than the established normal. December 2001 thus ranks as the 30<sup>th</sup> wettest December since such record keeping began in 1892.

The precipitation surplus for the month was not sufficient however, to offset the rest of a predominately dry year, leaving the state with a less-than-normal annual precipitation for the first time since 1988. This year's annual total precipitation of 31.98 inches fell 2.26 inches below the normal figure (based on 1961 through 1990 data) and ranks this as the 43<sup>rd</sup> driest of the 110 years on record. The annual deficit was established by the developing drought in western portions of the state beginning in June. From June 1 through the end of the year, the statewide-averaged precipitation totaled 15.25 inches, which is 6.31 inches less than normal and the 20<sup>th</sup> driest such period yet recorded in the state.

### **December Normals**

*Statewide average temperature = 39.5° F*

*Statewide average rainfall = 1.66 inches*

This December was mild, despite a post-Christmas outbreak of frigid air that blanketed the state. The statewide-averaged temperature for the month, 42.7 degrees, was 3.2 degrees greater than normal and ranks this as the 28<sup>th</sup> warmest December since 1892. The mild December left the state slightly warmer-than-normal for the year, as evidenced by an annual temperature of 61.0, which, at 0.7 degree greater than normal, ranks 2001 as the 32<sup>nd</sup> warmest year on record.

The state enjoyed a solid week of mild weather at the start of the month with daily maximum temperatures in the 50s, 60s, and 70s, statewide and sub-freezing daily minimum temperatures confined to the northwest. Somewhat cooler air made it into the state during the second week. Overnight temperatures dropped below freezing over most of the state on the 9<sup>th</sup>. Boise City (Cimarron County) reported an inch of snow on the 12<sup>th</sup> and the Kenton Mesonet site (also Cimarron) recorded a 7-degree temperature on the 13<sup>th</sup> as a surge of cold air pushed through the state. The wintry surge triggered locally heavy rains when it reached the moisture-laden air of the state's southeastern corner.

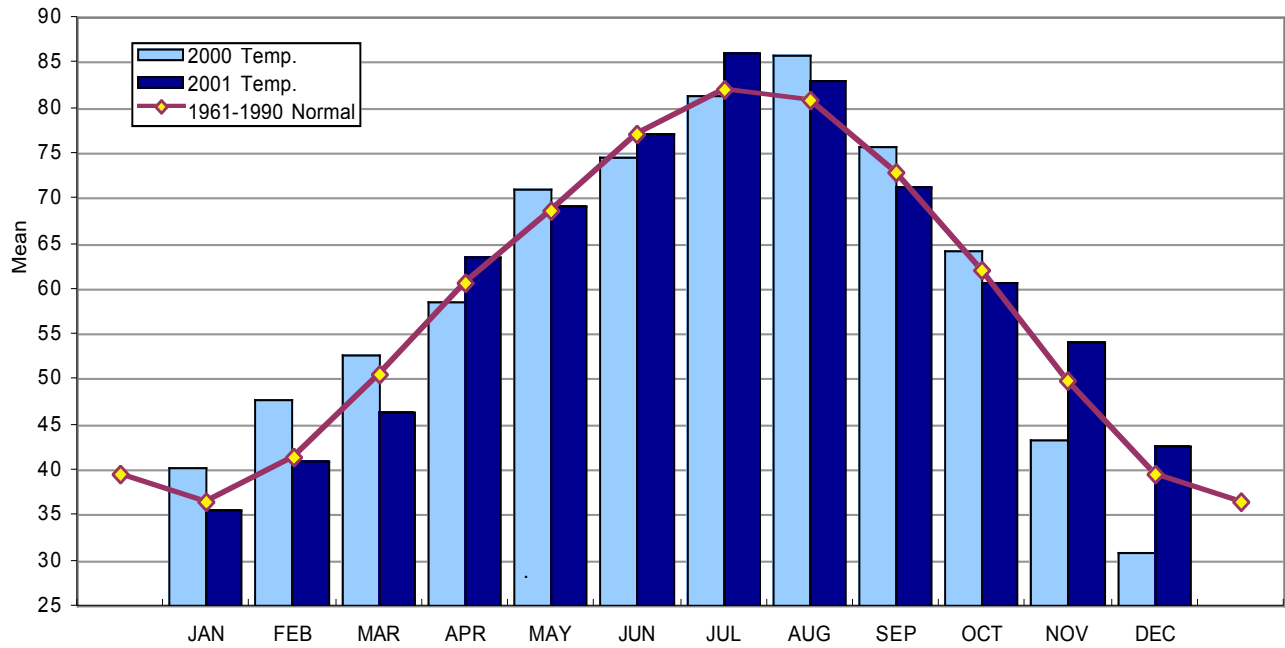
**(Continued on page 3.)**

Localized flooding was reported on the 16<sup>th</sup> in LeFlore County along the Kiamichi, Poteau, and Black Fork rivers and in rural areas of McCurtain, Choctaw, and Pushmataha counties. Several cars were washed off of the road or simply stalled at low-water bridges. Especially notable rainfall totals from the 15<sup>th</sup> through the morning reporting time, generally 7 AM, on the 17<sup>th</sup> included (all in McCurtain County): 8.33 inches at the Mount Herman Mesonet site, 8.05 inches eight miles west of Broken Bow, 7.91 inches at Smithville, and 7.71 inches at Valliant.

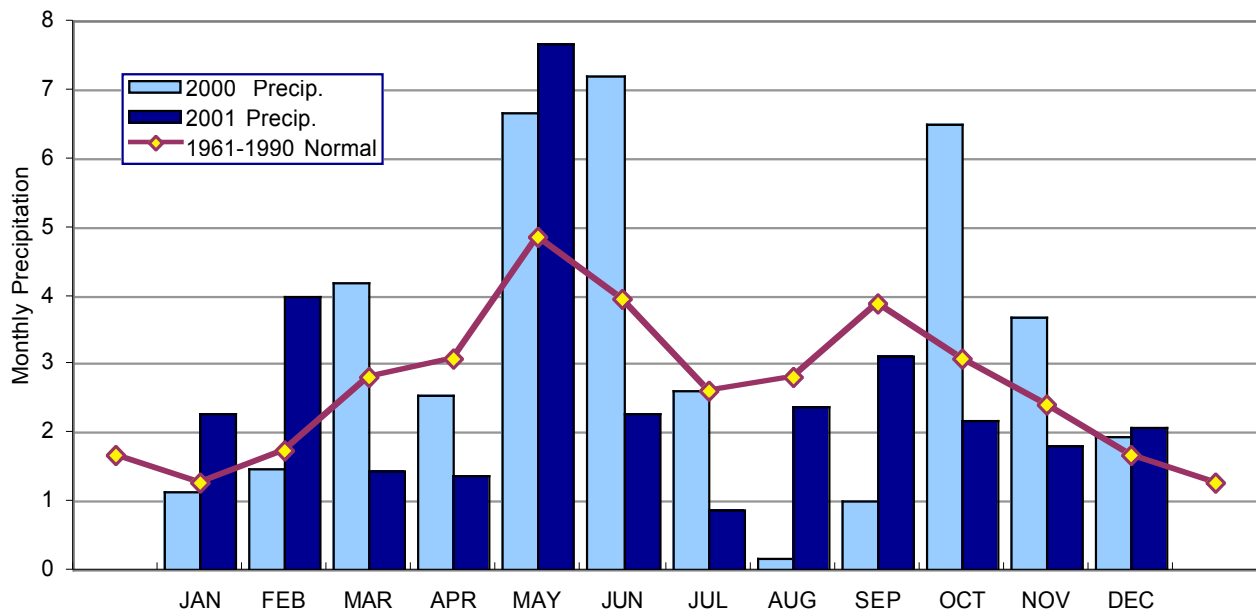
After a moderating period that brought southwestern Oklahoma temperatures in the 70s on the 18<sup>th</sup>, a new blast of cold air, along with some real wintry weather appeared in the state just before Christmas. Temperatures dived into the single digits in the northwest, bottoming out at one degree above zero as reported at Fort Supply (Woodward) on the 30<sup>th</sup> and by the Seiling Mesonet site (Dewey) on the 31<sup>st</sup>. One-to-four inches of snow blanketed the western half of the state on the 30<sup>th</sup> and 31<sup>st</sup>. Retrop (Beckham) and Reydon (Roger Mills) were the lucky recipients of the 4-inch snowfalls. Less general one-to-two inch snowfalls were reported east as far as Scipio (Pittsburg) and Carter Tower (McCurtain). The snow, along with some ice accumulations, led to a spate of traffic accidents in the Oklahoma City metropolitan area and points west. Twenty-five cars were involved in a series of non-fatal accidents near Weatherford that halted traffic on Interstate 40 for several hours.

Howard L. Johnson  
Associate State Climatologist

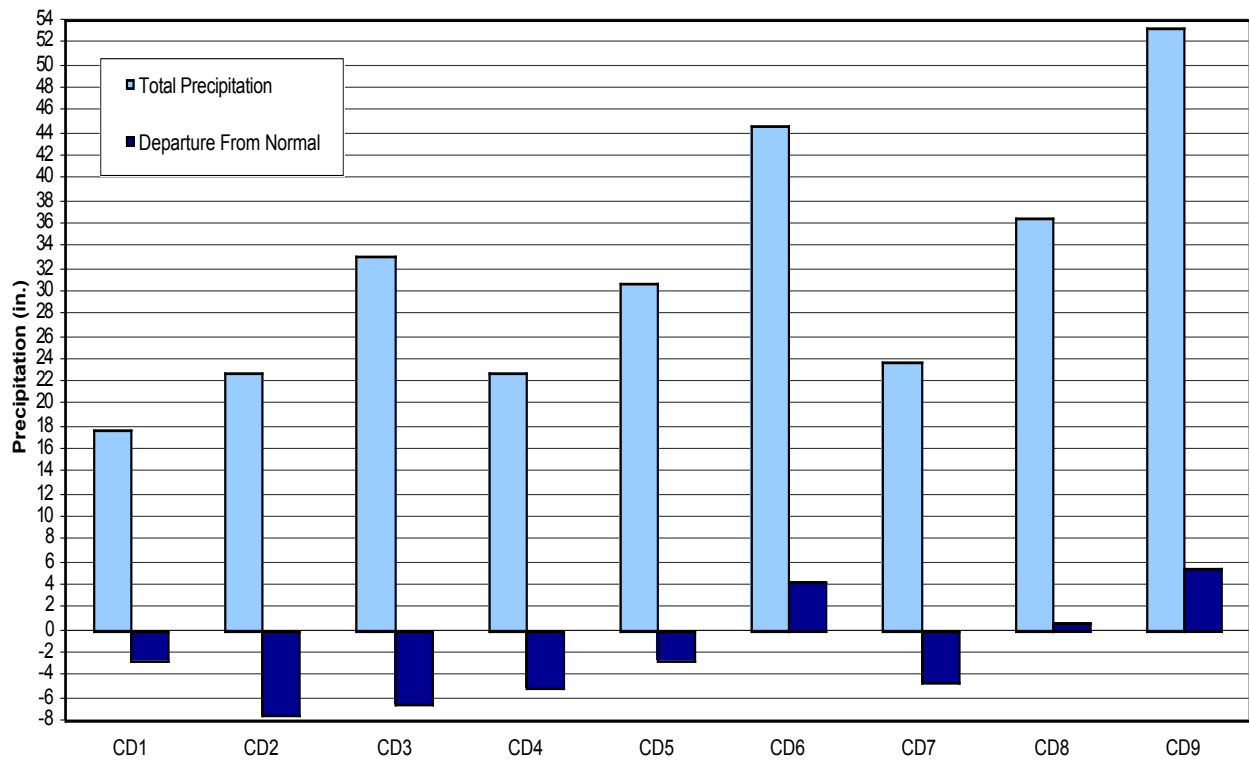
## 2000 AND 2001 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



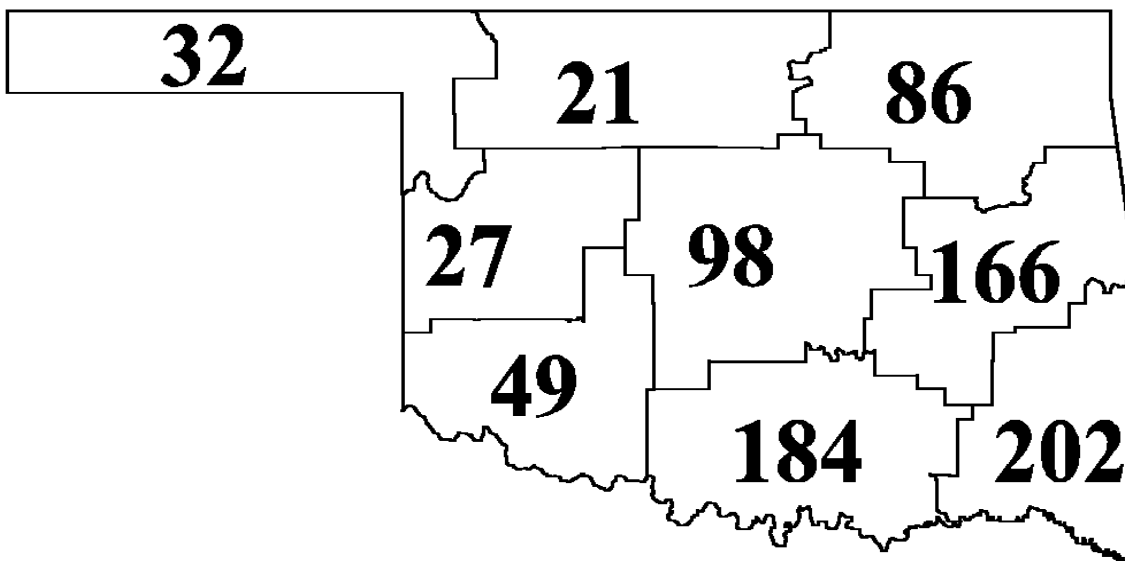
## 2000 AND 2001 STATEWIDE PRECIPITATION - MONTHLY TOTALS



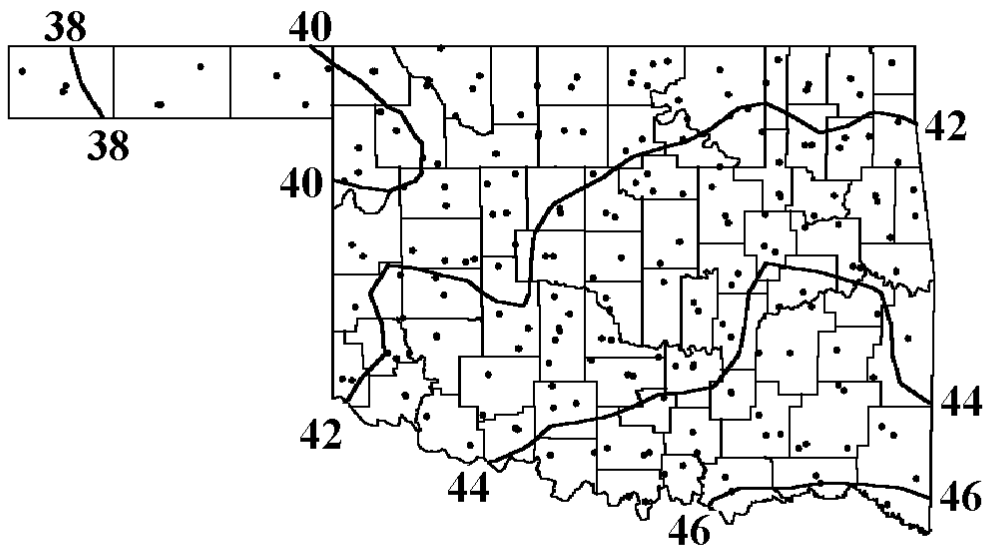
### CLIMATE DIVISION AVERAGED PRECIPITATION - JANUARY THROUGH DECEMBER 2001



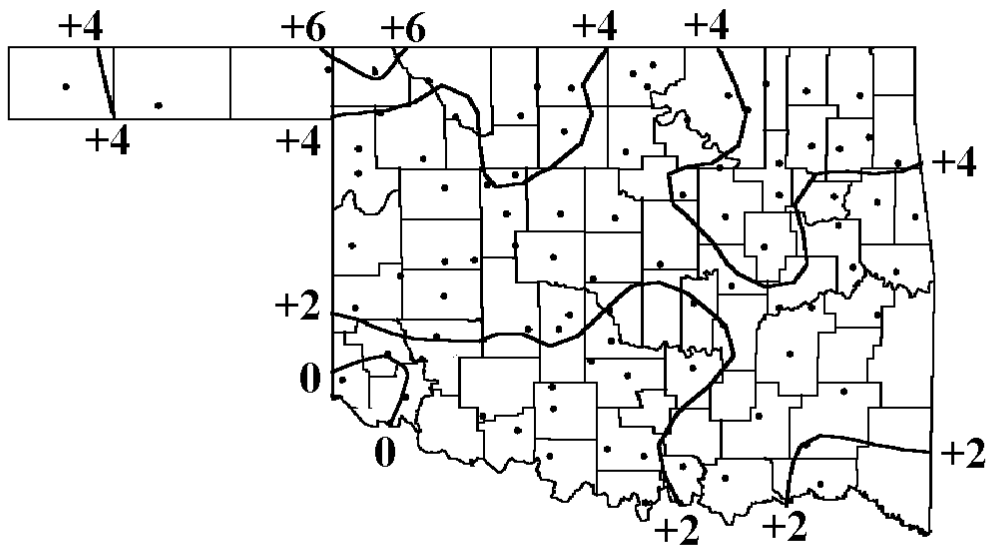
### CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - DECEMBER 2001



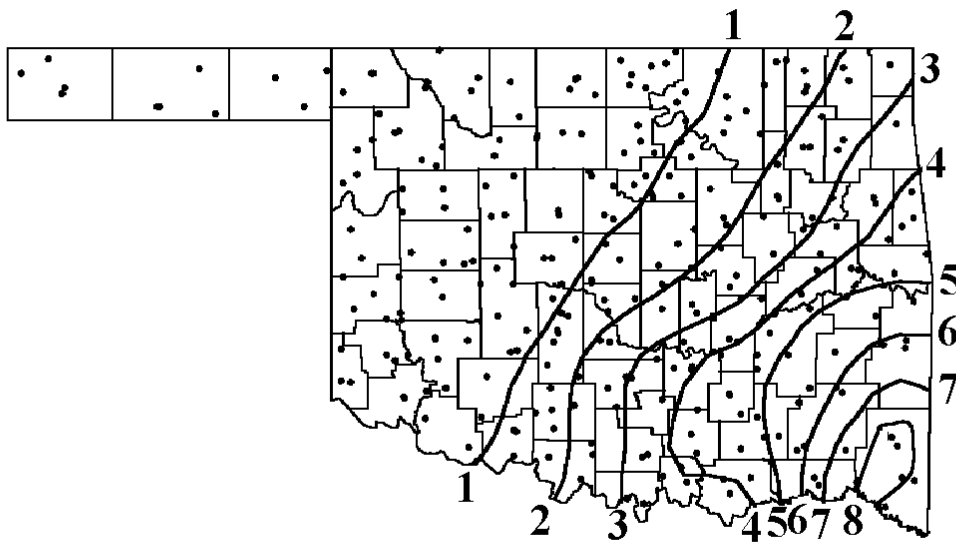
DECEMBER 2001 AVERAGE MONTHLY TEMPERATURE (°F)



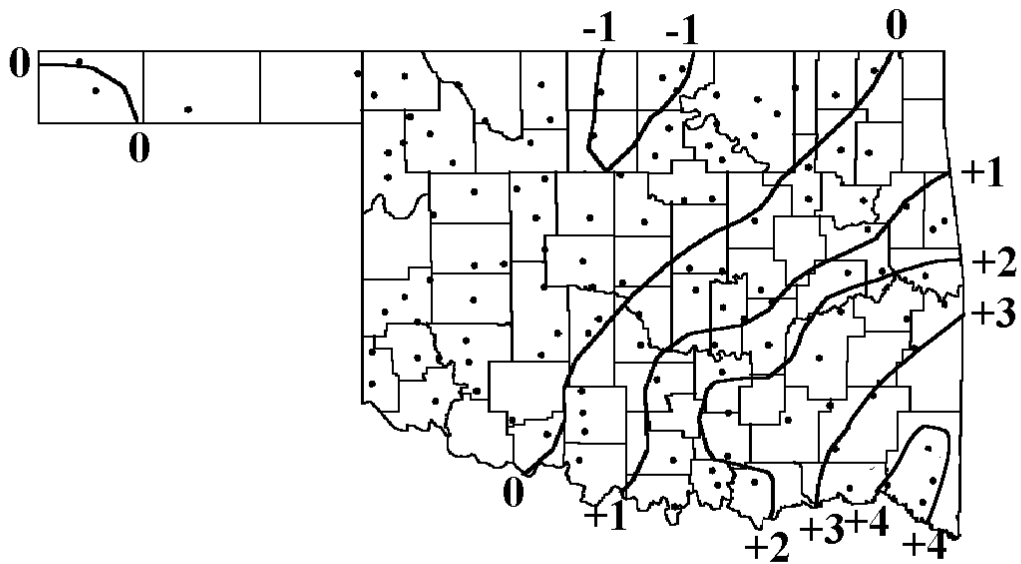
DECEMBER 2001 DEPARTURE FROM NORMAL TEMPERATURE (°F)



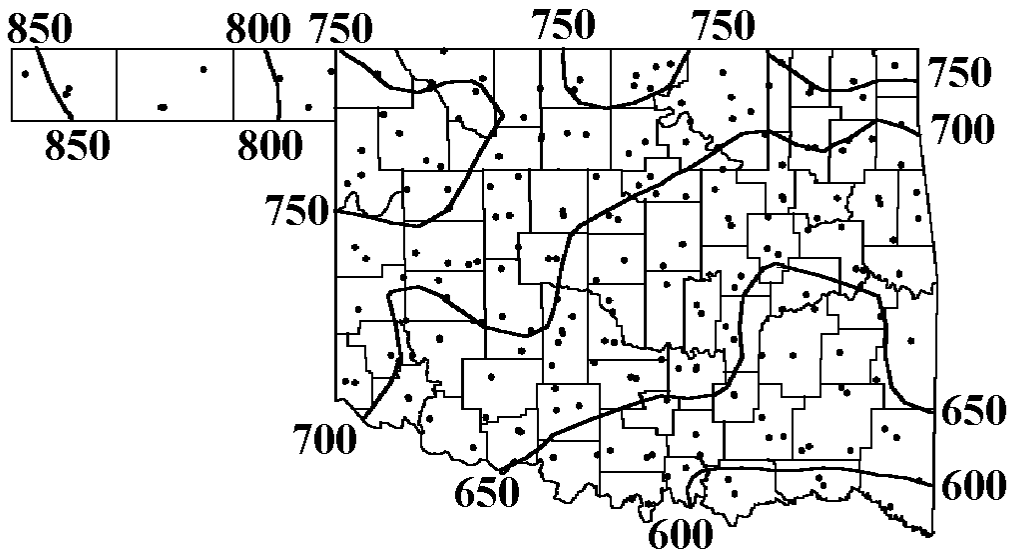
DECEMBER 2001 TOTAL PRECIPITATION (INCHES)



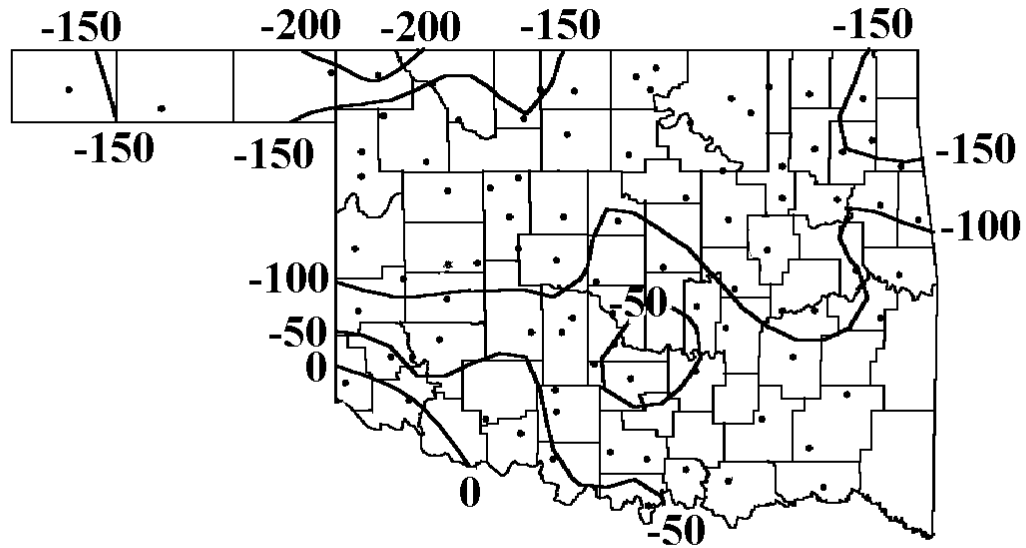
DECEMBER 2001 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



DECEMBER 2001 ACCUMULATED HEATING DEGREE DAYS (°F)



DECEMBER 2001 DEPARTURE FROM NORMAL HEATING DEGREE DAYS (°F)





## DECEMBER 2001 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV	
					FROM NORM	MAX TEMP			DEG DAY	FROM NORM	DEG DAY	FROM NORM	FROM NORM	FROM NORM	FROM NORM	FROM NORM			FROM NORM	FROM NORM
ARNETT	332	1	39.5	31	4.1	74	3	9	31	792	-127	0	0	0.200	31	-0.57	0.16	31		
BEAVER	593	1	38.3	29	*****	75	4	9	24	773	*****	0	*****	0.130	30	*****	0.13	31		
BOISE CITY	908	1	38.6	30	2.9	75	3	6	31	791	-117	0	0	0.482	31	0.10	0.20	30		
BUFFALO	1243	1	45.7	31	8.6	77	3	12	31	601	-264	2	2	0.000	31	-0.80	0.00	31		
FARGO	3070	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.141	31	-0.63	0.14	31		
GAGE	3407	1	38.7	31	2.0	74	2	6	31	816	-62	0	0	0.106	31	-0.55	0.10	30		
GATE	3489	1	40.2	30	5.2	76	4	12	31	744	-187	0	0	0.143	31	-0.56	0.11	31		
GOODWELL	3628	1	39.2	30	5.3	74	4	13	31	774	-191	0	0	0.171	31	-0.11	0.12	30		
GUYMON	3835	1	38.7	24	*****	73	4	13	31	632	*****	0	*****	0.050	28	*****	0.05	12		
HOOKER	4298	1	39.6	26	*****	75	3	12	29	662	*****	0	*****	0.130	29	*****	0.09	30		
LAVERNE	5045	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.122	31	-0.61	0.12	31		
RANGE	7412	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.201	31	*****	0.20	31		
REGNIER	7534	1	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.310	31	-0.02	0.17	22		
TURPIN	9017	1	40.6	23	*****	75	4	12	31	562	*****	0	*****	0.000	23	*****	0.00	31		

## DECEMBER 2001 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		MIN TEMP	DAY	HEAT		DEV		COOL		DEV		TOT PPT	NUM OBS	DEV	
					FROM NORM	MAX TEMP			DEG DAY	FROM NORM	DEG DAY	FROM NORM	FROM NORM	FROM NORM	FROM NORM	FROM NORM			FROM NORM	FROM NORM
ALVA	193	2	40.4	30	*****	75	3	14	31	737	*****	0	*****	0.130	31	*****	0.11	13		
VANCE AFB	302	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.092	29	*****	0.07	14		
BILLINGS	755	2	42.3	26	*****	76	5	10	31	594	*****	3	*****	0.152	27	*****	0.06	13		
BLACKWELL 2E	818	2	40.9	31	4.4	75	6	11	31	749	-136	2	2	0.161	31	-1.19	0.05	13		
BRAMAN	1075	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.160	31	*****	0.10	13		
CEDARDALE	1620	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.134	31	*****	0.13	31		
CHEROKEE	1724	2	37.9	29	*****	74	4	11	31	785	*****	0	*****	0.611	31	-0.52	0.60	13		
ENID	2912	2	42.3	31	4.3	72	6	14	31	705	-132	1	1	0.133	31	-1.01	0.06	12		
FT SUPPLY	3304	2	37.6	31	2.9	73	2	1	30	850	-89	0	0	0.110	31	-0.61	0.11	30		
FREEDOM	3358	2	39.7	30	3.3	77	3	6	31	760	-128	0	0	0.221	31	-0.59	0.22	13		
GREAT SALT P	3740	2	41.3	30	5.7	74	3	14	30	712	-199	0	0	0.051	30	*****	0.03	14		
HARDY	3909	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.303	31	*****	0.20	13		
HELENA	4019	2	40.3	31	5.2	72	3	9	31	767	-160	0	0	0.122	31	-0.86	0.04	13		
JEFFERSON	4573	2	40.0	31	3.0	75	6	8	31	777	-92	1	1	0.071	31	-1.12	0.02	16		
LAHOMA	4950	2	41.9	31	*****	74	6	9	31	718	*****	1	*****	0.130	31	*****	0.04	31		
LAMONT	5013	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.062	31	*****	0.04	16		
MEDFORD	5768	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.132	31	*****	0.05	15		
MORRISON	6065	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.690	31	*****	0.23	17		
MUTUAL	6139	2	39.8	31	4.3	73	3	6	31	780	-135	0	0	0.111	31	-0.63	0.11	31		
NEWKIRK	6278	2	40.0	31	3.4	75	6	8	31	775	-105	2	2	0.191	31	-1.24	0.09	12		
ORIENTA	6751	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.151	31	-0.66	0.07	13		
PERRY	7012	2	42.7	31	3.9	75	6	14	31	695	-117	3	3	0.422	31	-0.91	0.15	14		
PONCA CITY	7201	2	40.7	31	4.9	76	4	6	31	757	-148	3	3	0.302	31	-1.11	0.10	13		
RED ROCK	7505	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.500	31	-0.84	0.21	13		
WAYNOKA	9404	2	40.0	31	2.8	76	2	7	30	774	-88	0	0	0.221	31	-0.68	0.14	12		
WOODWARD	9760	2	*****	0	*****	****	0	****	0	*****	*****	*****	*****	0.291	31	-0.55	0.16	14		

## DECEMBER 2001 SUMMARY FOR NORTHEAST CLIMATE DIVISION (CD3)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		DAY	MIN TEMP	DAY	HEAT		DAY	DEV FROM NORM	COOL DEG	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP				DEG DAY	FROM NORM							FROM NORM	FROM NORM	
BARNSDALL	535	3	42.0	31	3.9	75	5	8	31	715	-120	3	3	1.492	31	-0.41	0.52	14		
BARTLESVILLE	548	3	42.0	31	3.9	76	5	8	31	716	-118	3	3	1.531	31	-0.10	0.68	17		
BIXBY	782	3	42.0	30	3.8	75	5	13	31	692	-140	3	3	2.320	31	0.36	1.40	16		
BURBANK	1256	3	****	0	****	****	0	****	0	*****	*****	*****	*****	0.770	31	-0.73	0.28	12		
CHELSEA	1717	3	****	0	****	****	0	****	0	*****	*****	*****	*****	2.040	31	*****	1.21	17		
CLAREMORE	1828	3	41.8	31	4.4	75	6	11	31	721	-135	3	3	2.292	31	0.11	1.28	17		
HOLLOW	4258	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.940	31	-0.09	1.04	17		
HOMINY	4289	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.200	31	-0.37	0.65	17		
KANSAS	4672	3	44.3	30	4.8	71	5	14	26	623	-169	1	1	3.240	30	*****	1.60	17		
LENAPAH	5118	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.460	31	*****	0.65	17		
MANNFORD	5522	3	42.9	30	4.0	75	5	12	31	667	-142	5	5	1.600	30	*****	0.91	17		
MARAMEC	5540	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.581	31	0.10	0.53	16		
MIAMI	5855	3	40.8	27	****	74	5	8	31	653	*****	0	*****	1.390	29	*****	0.50	12		
NOWATA	6485	3	42.5	31	4.5	75	6	10	31	704	-133	5	5	1.640	31	-0.38	0.68	17		
PAWHUSKA	6935	3	42.2	31	4.6	77	5	9	31	712	-137	5	5	1.442	31	-0.23	0.48	17		
PAWNEE	6940	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.010	31	-0.52	0.30	17		
PRYOR	7309	3	41.7	30	4.6	74	5	12	31	703	-163	3	3	2.951	31	0.55	1.93	17		
RALSTON	7390	3	40.3	31	2.4	77	5	6	31	767	-73	2	2	0.871	31	-0.69	0.28	17		
SPAVINAW	8380	3	45.5	30	5.1	72	4	15	31	589	-175	3	3	2.761	30	*****	1.56	17		
TULSA	8992	3	43.5	31	4.6	76	5	14	31	668	-141	3	3	2.255	31	0.09	1.46	16		
UPPER SPAV	9101	3	43.9	28	****	72	5	8	31	591	*****	2	*****	3.131	30	*****	1.43	17		
VINITA	9203	3	41.7	30	4.2	72	4	11	31	701	-153	0	0	2.990	30	*****	1.72	17		
WAGONER	9247	3	43.8	31	3.2	72	4	13	31	660	-96	3	3	3.120	31	0.68	1.64	15		
WANN	9298	3	****	0	****	****	0	****	0	*****	*****	*****	*****	1.411	31	*****	0.39	17		

## DECEMBER 2001 SUMMARY FOR WEST CENTRAL CLIMATE DIVISION (CD4)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV		DAY	MIN TEMP	DAY	HEAT		DAY	DEV FROM NORM	COOL DEG	DEV FROM NORM	TOT PPT	NUM OBS	DEV		DAY
					FROM NORM	MAX TEMP				DEG DAY	FROM NORM							FROM NORM	FROM NORM	
CANTON DAM	1445	4	41.1	31	4.9	71	19	5	31	741	-152	0	0	0.220	31	-0.60	0.15	31		
CLINTON	1909	4	41.0	31	1.7	71	19	16	22	744	-54	0	0	0.295	31	-0.69	0.27	29		
COLONY	2039	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.165	31	*****	0.16	31		
CORDELL	2125	4	42.4	31	3.3	72	19	16	25	700	-104	0	0	0.282	31	-0.62	0.23	31		
ELK CITY	2849	4	43.0	31	4.3	72	19	17	31	682	-133	0	0	0.470	31	-0.30	0.23	31		
ERICK	2944	4	41.6	31	2.6	73	3	15	26	726	-80	0	0	0.330	31	-0.38	0.18	31		
GEARY	3497	4	41.5	31	3.1	71	5	12	31	730	-95	0	0	0.110	31	-0.83	0.11	31		
HAMMON	3871	4	40.1	29	****	72	19	12	25	722	*****	0	*****	0.202	29	*****	0.20	31		
LEEDEY	5090	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.070	31	-0.57	0.05	12		
MACKIE	5463	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.200	31	*****	0.20	31		
MORAVIA	6035	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.290	31	-0.53	0.20	31		
OKEENE	6629	4	43.0	31	4.1	72	5	7	31	685	-125	1	1	0.093	31	-0.96	0.05	12		
RETROP	7565	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.250	31	*****	0.20	31		
REYDON	7579	4	41.6	30	3.6	72	3	16	30	701	-136	0	0	0.270	30	*****	0.27	31		
SAYRE	7952	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.181	31	-0.41	0.14	31		
SWEETWATER	8652	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.101	31	*****	0.10	31		
TALOGA	8708	4	40.1	31	2.8	71	19	2	31	772	-88	0	0	0.260	31	-0.42	0.21	31		
THOMAS	8815	4	****	0	****	****	0	****	0	*****	*****	*****	*****	0.140	31	*****	0.14	31		
WATONGA	9364	4	41.5	31	3.4	71	6	5	31	729	-105	0	0	0.253	31	-0.81	0.15	31		
WEATHERFORD	9422	4	42.4	31	5.3	71	19	12	31	702	-163	0	0	0.221	31	-0.67	0.18	31		

## DECEMBER 2001 SUMMARY FOR CENTRAL CLIMATE 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	*****	*****	*****	*****	0.820	31	*****	0.34	17
BLANCHARD	830	5	44.5	30	3.2	76	5	13	31	616	-119	0	0	1.442	31	-0.15	0.61	17
BRISTOW	1144	5	44.0	31	3.9	75	5	11	31	657	-115	6	6	1.810	31	-0.26	1.30	17
CHANDLER	1684	5	42.4	26	****	77	6	15	26	588	*****	0	*****	1.510	28	*****	0.85	17
CHICKASHA EXP	1750	5	43.4	31	2.9	75	5	7	31	676	-85	5	5	1.211	31	-0.05	0.40	17
COX CITY	2196	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.160	31	*****	1.02	17
CUSHING	2318	5	43.4	31	5.2	76	6	17	31	675	-156	4	4	1.410	31	-0.12	0.61	17
EDMOND	2788	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.512	31	*****	0.62	15
EL RENO	2818	5	43.7	31	4.9	74	6	13	31	663	-150	2	2	1.100	31	0.06	0.75	31
GUTHRIE	3821	5	42.5	31	2.6	76	6	7	31	701	-77	3	3	0.950	31	-0.55	0.40	17
HENNESSEY	4055	5	40.8	29	****	74	6	8	31	703	*****	1	*****	0.250	30	*****	0.10	14
INGALLS	4489	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.480	31	*****	0.85	17
KINGFISHER	4861	5	42.6	31	3.5	75	6	7	31	695	-109	1	1	0.320	31	-0.87	0.14	31
KONAWA	4915	5	****	0	****	****	0	****	0	*****	*****	*****	*****	3.850	31	1.97	2.95	16
MARSHALL	5589	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.000	31	-1.15	0.00	31
MEEKER	5779	5	42.4	31	2.2	76	6	10	31	704	-66	3	3	1.740	31	0.32	0.80	17
MULHALL	6110	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.300	31	*****	0.20	9
NORMAN NWS	6386	5	42.2	31	1.2	75	5	10	31	707	-37	1	1	1.933	31	0.35	1.23	16
OKEMAH	6638	5	44.6	31	3.8	73	5	17	31	635	-116	3	3	2.440	31	0.44	1.46	17
OKLAHOMA CTY F.	6659	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.962	31	*****	0.55	17
OKLAHOMA CTY	6661	5	42.2	31	2.9	73	5	15	31	707	-91	1	1	0.912	31	-0.49	0.55	16
PERKINS	7003	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.000	31	-0.53	0.65	12
PIEDMONT	7068	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.460	31	*****	0.20	30
PRAGUE	7264	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.381	31	0.56	1.16	17
PURCELL	7327	5	42.4	31	1.9	74	6	10	26	700	-60	1	1	2.401	31	0.57	0.98	16
SEMINOLE	8042	5	43.2	31	1.2	75	7	14	31	676	-37	2	2	1.131	31	-0.69	0.50	16
SHAWNEE	8110	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.481	31	0.60	1.07	17
STELLA	8479	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.650	31	*****	1.20	16
STILLWATER	8501	5	44.7	27	****	76	6	19	30	552	*****	3	*****	0.732	27	*****	0.33	17
STROUD	8563	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.521	31	*****	0.84	17
TECUMSEH	8751	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.900	31	*****	1.00	15
UNION CITY	9086	5	****	0	****	****	0	****	0	*****	*****	*****	*****	0.812	31	-0.54	0.22	17
WANETTE	9291	5	43.7	29	****	76	6	7	31	618	*****	2	*****	3.360	29	*****	1.60	17
WELTY	9479	5	****	0	****	****	0	****	0	*****	*****	*****	*****	1.920	31	*****	1.20	17
WEWOKA	9575	5	****	0	****	****	0	****	0	*****	*****	*****	*****	2.991	31	1.09	1.65	17

## DECEMBER 2001 SUMMARY FOR EAST CENTRAL CLIMATE 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	*****	*****	*****	*****	5.430	31	*****	2.93	17
CALVIN	1391	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.150	31	0.96	2.10	16
CHECOTAH	1711	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.531	31	1.08	1.78	17
CLAYTON	1858	6	****	0	****	****	0	****	0	*****	*****	*****	*****	5.060	31	*****	2.00	16
DUSTIN	2690	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.060	31	*****	1.54	17
EUFULA	2993	6	46.0	30	3.1	72	5	20	31	576	-110	6	6	6.350	31	3.65	3.60	16
HANNA	3884	6	44.9	30	3.4	74	7	16	25	607	-122	3	3	3.640	30	*****	1.65	17
HOLDENVILLE	4235	6	42.8	30	1.0	74	4	13	31	665	-55	0	0	3.070	30	*****	1.81	15
LAKE EUFAULA	4975	6	43.8	24	****	73	5	19	31	512	*****	2	*****	4.662	24	*****	1.94	20
LYONS	5437	6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.062	31	1.31	1.72	17
MCALESTER	5664	6	44.3	31	3.1	74	7	14	31	645	-94	2	2	5.251	31	2.63	3.67	16
MCCURTAIN	5693	6	45.7	31	3.2	77	4	17	31	607	-92	8	8	5.655	31	2.83	2.85	17
MUSKOGEE	6130	6	42.1	31	1.5	74	4	12	30	713	-43	3	3	3.062	31	0.16	1.59	16
OKMULGEE	6670	6	46.4	30	7.0	77	5	19	31	563	-231	6	6	2.810	30	*****	1.83	16
OKTAHA	6678	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.310	31	*****	1.62	17
SALLISAW	7862	6	44.0	31	2.7	76	5	18	31	653	-82	3	3	5.200	31	2.39	2.25	17
SCPIO	7979	6	****	0	****	****	0	****	0	*****	*****	*****	*****	4.440	31	*****	2.20	17
SHORT	8170	6	****	0	****	****	0	****	0	*****	*****	*****	*****	3.640	31	*****	2.00	16
STILWELL	8506	6	42.4	30	2.4	69	8	11	31	679	-97	0	0	4.310	31	1.15	3.50	16
TAHLEQUAH	8677	6	42.8	31	3.1	73	4	13	25	689	-95	1	1	4.271	31	1.27	1.30	17
WEBBERS FALL	9445	6	43.3	31	3.9	76	5	13	31	676	-118	2	2	4.700	31	1.99	1.92	17
WETUMKA	9571	6	****	0	****	****	0	****	0	*****	*****	*****	*****	2.801	31	0.68	1.39	17

## DECEMBER 2001 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		DAY	
					FROM NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ALTUS	179	7	42.5	31	0.7	74	18	17	31	698	-22	0	0	0.200	31	-0.71	0.07	31
ALTUS DAM	184	7	44.8	31	5.1	74	19	17	31	628	-157	0	0	0.220	31	-0.64	0.11	31
ANADARKO	224	7	40.7	31	1.1	73	6	8	31	756	-31	3	3	0.611	31	-0.59	0.27	17
APACHE	260	7	****	0	****	****	0	****	0	****	****	****	****	1.090	31	-0.07	0.32	17
ALTUS AFB	447	7	****	0	****	****	0	****	0	****	****	****	****	0.071	28	****	0.05	12
CHATTANOOGA	1706	7	41.3	31	-0.2	72	6	13	31	734	5	1	1	0.670	31	-0.51	0.28	16
DUNCAN 11 W	2668	7	****	0	****	****	0	****	0	****	****	****	****	1.501	31	****	0.54	17
FREDERICK	3353	7	44.0	27	****	73	6	19	30	567	****	0	****	0.500	28	****	0.31	15
HEADRICK	3998	7	****	0	****	****	0	****	0	****	****	****	****	0.030	31	****	0.03	31
HOBART	4204	7	41.9	31	2.0	70	18	11	31	717	-62	0	0	0.142	31	-0.70	0.03	16
HOLLIS	4249	7	40.7	31	-0.1	70	18	14	29	755	5	0	0	0.090	31	-0.59	0.05	31
LAWTON	5063	7	43.3	28	****	74	5	16	31	609	****	0	****	1.000	28	****	0.43	16
LOOKEBA	5329	7	****	0	****	****	0	****	0	****	****	****	****	0.200	31	-0.82	0.10	31
MANGUM	5509	7	40.4	31	-0.4	75	18	13	27	762	12	0	0	0.061	31	-0.73	0.04	17
RANDLETT	7403	7	****	0	****	****	0	****	0	****	****	****	****	1.481	31	****	0.65	17
ROOSEVELT	7727	7	****	0	****	****	0	****	0	****	****	****	****	0.150	31	-0.82	0.10	31
SEDAN	8016	7	****	0	****	****	0	****	0	****	****	****	****	0.172	31	****	0.12	31
SNYDER	8299	7	****	0	****	****	0	****	0	****	****	****	****	0.151	31	-0.83	0.15	11
VINSON	9212	7	****	0	****	****	0	****	0	****	****	****	****	0.361	31	-0.34	0.18	31
WALTERS	9278	7	42.7	31	0.2	74	6	14	31	693	-6	0	0	1.220	31	-0.18	0.50	16
WICHITA MT	9629	7	40.8	24	****	70	6	12	31	582	****	0	****	0.720	25	****	0.72	16

## DECEMBER 2001 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		DAY	
					FROM NORM	MAX TEMP									FROM NORM	MAX 24-HR		
ADA	17	8	43.9	31	1.7	72	5	14	31	658	-50	2	2	4.040	31	2.06	1.82	16
ALLEN	147	8	****	0	****	****	0	****	0	****	****	****	****	4.900	31	****	1.80	15
ARDMORE	292	8	46.2	31	1.5	72	6	20	31	587	-42	3	3	2.790	31	0.94	1.69	15
ATOKA DAM	394	8	44.6	31	2.7	74	8	16	24	635	-82	2	2	4.670	31	2.38	1.95	16
BOKCHITO	917	8	****	0	****	****	0	****	0	****	****	****	****	3.070	31	****	2.07	16
CANEY	1437	8	****	0	****	****	0	****	0	****	****	****	****	6.470	31	****	3.89	17
CENTRAHOMA	1648	8	44.6	31	****	74	8	17	31	634	****	2	****	4.800	31	****	2.50	17
CHICKASAW	1745	8	45.6	25	****	72	6	15	27	487	****	2	****	2.920	26	****	1.65	17
COLEMAN	2011	8	46.0	27	****	73	7	16	8	514	****	2	****	5.360	28	****	1.94	17
COMANCHE	2054	8	****	0	****	****	0	****	0	****	****	****	****	1.001	31	-0.60	1.00	16
DAISY	2354	8	****	0	****	****	0	****	0	****	****	****	****	5.194	31	2.28	2.26	16
DUNCAN	2660	8	43.7	31	2.4	73	6	17	31	660	-75	0	0	1.901	31	0.41	0.73	16
DURANT	2678	8	46.3	30	4.1	77	8	20	23	566	-142	5	5	3.126	31	0.91	1.50	15
ELMORE CITY	2872	8	****	0	****	****	0	****	0	****	****	****	****	3.200	31	****	1.82	17
GRADY	3688	8	****	0	****	****	0	****	0	****	****	****	****	1.750	31	****	1.45	16
HEALDTON	4001	8	44.7	30	2.4	76	6	19	31	610	-94	2	2	2.790	30	****	1.74	17
HENNEPIN	4052	8	****	0	****	****	0	****	0	****	****	****	****	2.930	31	****	1.57	17
KETCHUM RAN	4780	8	****	0	****	****	0	****	0	****	****	****	****	2.070	31	****	1.42	16
KINGSTON	4865	8	****	0	****	****	0	****	0	****	****	****	****	3.601	31	1.48	1.40	16
LEHIGH	5108	8	****	0	****	****	0	****	0	****	****	****	****	4.304	31	****	1.95	17
LINDSAY	5216	8	41.5	30	0.3	75	5	10	30	708	-30	3	3	2.150	30	****	0.93	16
LOCO	5247	8	****	0	****	****	0	****	0	****	****	****	****	2.401	31	****	1.32	17
MADILL	5468	8	46.5	31	2.7	76	8	21	31	577	-80	3	3	4.121	31	2.11	2.22	17
MARIETTA 5 SW	5563	8	44.4	31	0.6	77	8	18	26	643	-14	3	3	3.910	31	2.06	1.93	17
MARLOW	5581	8	44.3	31	2.8	75	5	8	31	647	-83	5	5	1.630	31	0.24	0.63	17
MC GEE CREEK	5713	8	46.7	31	****	75	8	22	31	571	****	4	****	4.681	31	****	2.12	16
PAULS VALLEY	6926	8	42.5	31	0.7	76	6	11	31	698	-22	2	2	3.092	31	1.29	1.75	17
PONTOTOC	7214	8	****	0	****	****	0	****	0	****	****	****	****	4.730	31	2.87	2.18	16
TISHOMINGO	8884	8	****	0	****	****	0	****	0	****	****	****	****	5.100	31	2.97	3.80	16
WAURIKA	9395	8	45.5	31	2.1	79	4	18	31	612	-59	6	6	1.970	31	0.42	1.75	16

## DECEMBER 2001 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

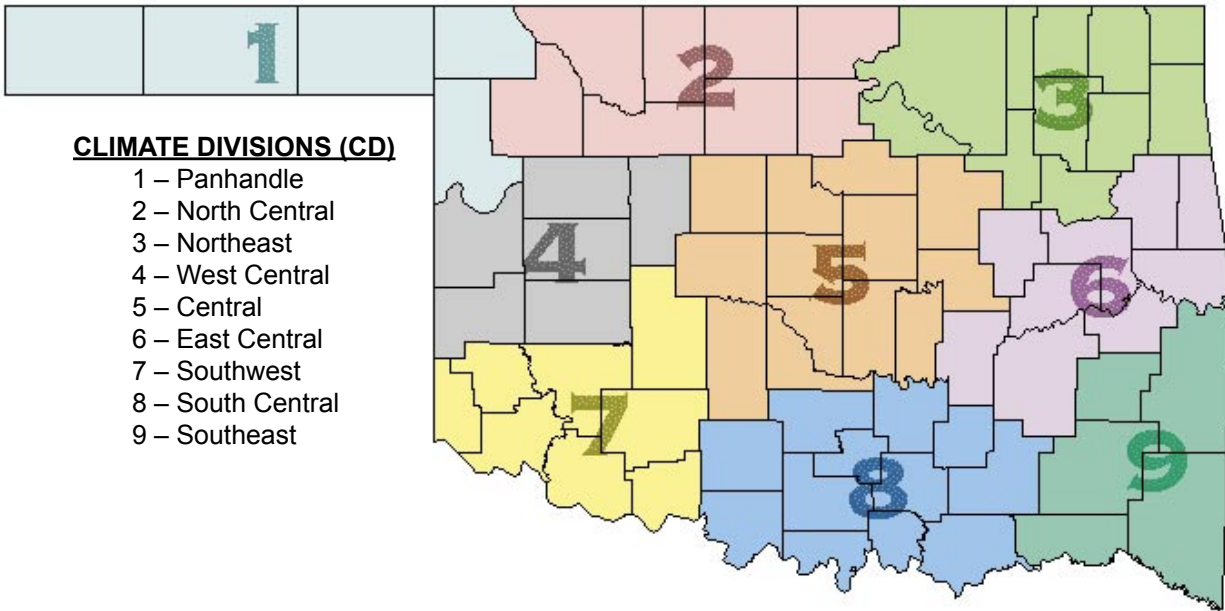
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	44.4	31	1.3	77	5	18	24	643	-36	3	3	6.020	31	3.14	2.93	16
BATTIEST	567	9	43.2	31	*****	77	5	14	24	681	*****	4	*****	8.842	31	*****	3.12	16
BROKEN BOW	1162	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	8.950	31	4.97	4.73	17
CARTER TWR	1544	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	5.150	31	1.03	2.25	16
FANSHAWE	3065	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.210	31	3.00	1.90	16
HUGO	4384	9	46.0	30	1.2	77	6	22	27	577	-50	5	5	7.290	31	3.97	4.80	16
IDABEL	4451	9	50.8	28	*****	77	3	28	31	399	*****	0	*****	7.690	31	4.01	3.84	17
PAGE	6842	9	45.4	27	*****	76	5	14	24	535	*****	5	*****	7.400	27	*****	5.35	16
SMITHVILLE	8285	9	49.5	14	*****	77	5	20	10	220	*****	3	*****	10.660	16	*****	4.95	17
SPIRO	8416	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	6.070	31	3.01	2.76	17
TUSKAHOMA	9023	9	46.4	31	3.2	77	6	16	31	584	-92	6	6	5.951	31	3.13	2.38	17
VALLIANT	9118	9	*****	0	*****	****	0	****	0	*****	*****	*****	*****	9.731	31	6.02	4.03	16
WISTER	9724	9	49.9	17	*****	78	6	18	10	257	*****	1	*****	6.120	31	*****	2.60	17

## DECEMBER 2001 CLIMATE DIVISION SUMMARY

NAME	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
CLIMATE DIVISION 1	1	40.3	6	5.0	77	3	6	31	753	-167	0	0	0.190	10	-0.40	0.20	31
CLIMATE DIVISION 2	2	40.5	14	4.0	77	3	1	30	754	-128	1	1	0.230	23	-0.84	0.60	13
CLIMATE DIVISION 3	3	42.6	14	4.3	77	5	6	31	688	-139	3	3	1.740	18	-0.29	1.93	17
CLIMATE DIVISION 4	4	41.7	11	3.7	73	3	2	31	719	-116	0	0	0.220	18	-0.60	0.27	31
CLIMATE DIVISION 5	5	43.2	13	3.2	77	6	7	31	678	-98	2	2	1.520	31	-0.03	2.95	16
CLIMATE DIVISION 6	6	44.1	11	3.1	77	5	11	31	643	-103	3	3	4.290	18	1.70	3.67	16
CLIMATE DIVISION 7	7	41.9	8	1.3	75	18	8	31	718	-41	0	0	0.490	17	-0.52	0.72	16
CLIMATE DIVISION 8	8	44.7	14	2.3	79	4	8	31	629	-72	3	3	3.520	26	1.61	3.89	17
CLIMATE DIVISION 9	9	45.0	4	1.7	78	6	14	24	621	-54	4	4	7.090	11	3.58	5.35	16

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

$$\sum_{i=1} \text{NumDays} \left( 65 - \left( \frac{TMAX_i + TMIN_i}{2} \right) \right)$$

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

### Cooling Degree Days Calculation

NumDays

$$\sum_{i=1} \text{NumDays} \left( \left( \frac{TMAX_i + TMIN_i}{2} \right) - 65 \right)$$

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

# MESONET MONTHLY SUMMARY FOR DECEMBER 2001

NAME	MEAN MAX				MIN		TOT MAX					NAME	MEAN MAX				MIN		TOT MAX					
	TEMP	TEMP	DAY	TEMP	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY		TEMP	TEMP	DAY	TEMP	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY	
<b>PANHANDLE</b>																								
Arnett	40.3	74	2	13	25	765	0	0.02	0.02	12	Goodwell	38.0	72	3	11	29	838	0	0.12	0.06	11			
Beaver	39.0	77	3	10	25	805	0	0.06	0.05	31	Hooker	37.5	74	3	10	29	851	0	0.07	0.05	30			
Boise City	36.5	74	3	8	31	882	0	0.36	0.16	11	Kenton	36.4	76	3	3	31	886	0	0.11	0.07	13			
Buffalo	38.5	74	3	8	31	821	0	0.01	0.01	31	Slapout	40.0	75	3	13	29	774	0	0.00	0.00	1			
<b>NORTH CENTRAL</b>																								
Alva	40.3	76	2	9	29	767	0	0.28	0.24	12	May Ranch	41.0	74	2	12	29	744	0	0.22	0.19	12			
Blackwell	40.2	74	4	9	31	771	2	0.23	0.10	13	Medford	39.9	73	5	9	25	777	0	0.08	0.04	13			
Breckenridge	40.9	74	5	9	31	749	1	0.19	0.11	13	Newkirk	41.1	75	5	12	26	741	1	0.39	0.24	12			
Cherokee	****	***	**	**	**	****	****	****	****	**	Red Rock	42.1	76	5	12	31	714	3	0.61	0.27	13			
Fairview	41.9	71	2	9	31	716	0	0.19	0.09	31	Seiling	39.7	73	2	1	31	784	0	0.09	0.09	31			
Freedom	40.1	75	2	8	31	773	0	0.28	0.22	12	Woodward	41.3	75	2	11	31	734	0	0.02	0.01	12			
Lahoma	40.5	72	5	10	31	760	0	0.10	0.04	31														
<b>NORTHEAST</b>																								
Bixby	42.5	75	4	13	31	700	3	2.46	1.49	16	Nowata	39.4	73	4	7	31	793	1	2.02	1.02	16			
Burbank	41.3	77	5	9	31	736	2	0.73	0.28	12	Pawnee	42.2	76	5	11	31	710	3	1.12	0.49	16			
Claremore	41.8	74	4	10	31	722	1	2.31	1.33	16	Porter	43.7	73	4	16	31	662	1	2.61	1.87	16			
Copan	41.1	76	5	9	31	740	0	1.43	0.51	16	Pryor	40.6	72	4	10	31	756	1	3.06	1.95	16			
Foraker	40.9	77	5	11	31	749	1	0.98	0.31	12	Skiatook	42.8	74	5	13	31	690	1	1.37	0.76	16			
Jay	41.5	72	4	8	31	730	1	3.01	1.36	16	Vinita	39.8	72	4	10	31	783	1	2.28	1.23	16			
Miami	40.6	73	4	9	31	758	1	2.79	1.21	16	Wynona	42.3	77	5	10	31	705	3	0.61	0.27	13			
<b>WEST CENTRAL</b>																								
Bessie	43.0	72	18	18	25	683	0	0.12	0.05	11	Putnam	41.3	70	18	13	26	734	0	0.18	0.11	5			
Butler	41.0	72	18	12	25	745	0	0.07	0.03	5	Retrop	43.3	73	18	12	31	649	0	0.16	0.09	12			
Camargo	39.0	75	2	5	31	806	0	0.02	0.01	16	Watonga	42.2	69	5	13	31	706	0	0.17	0.08	31			
Cheyenne	42.5	71	2	16	29	699	0	0.07	0.05	12	Weatherford	41.8	71	18	15	26	718	0	0.17	0.11	31			
Erick	41.1	71	18	14	25	741	0	0.11	0.08	12														
<b>CENTRAL</b>																								
Acme	42.7	73	5	7	31	691	1	1.34	0.72	16	Minco	42.5	73	5	15	31	698	0	0.70	0.28	16			
Bowlegs	43.1	74	5	11	31	679	0	2.77	1.97	16	Ninnekah	42.4	75	5	8	31	703	2	1.31	0.81	16			
Bristow	42.0	75	5	10	31	715	1	1.76	1.15	16	Norman	42.7	75	5	11	31	693	1	1.35	0.94	16			
Chandler	43.6	76	5	12	31	667	3	1.65	1.03	16	Oilton	41.8	76	5	9	31	722	2	1.49	0.92	16			
Chickasha	41.3	73	5	7	31	735	1	1.19	0.71	16	Okemah	43.0	74	5	16	25	682	1	2.56	1.92	16			
El Reno	40.8	73	4	7	25	751	1	0.46	0.15	11	Perkins	42.6	75	5	12	31	696	1	1.12	0.65	16			
Guthrie	43.0	76	5	7	31	683	2	0.70	0.31	16	Shawnee	43.5	74	5	12	31	668	2	2.27	1.54	16			
Kingfisher	41.5	74	4	5	31	729	2	0.25	0.09	31	Spencer	43.5	75	5	12	31	668	2	1.37	0.84	16			
Marena	42.5	77	5	13	31	698	2	0.61	0.24	16	Stillwater	41.8	76	5	11	31	722	3	0.81	0.36	16			
Marshall	41.2	74	4	6	31	741	2	0.43	0.19	13	Washington	43.3	75	5	14	31	673	1	2.13	1.33	16			
<b>EAST CENTRAL</b>																								
Calvin	43.1	73	5	12	31	680	0	3.26	2.43	16	Sallisaw	43.0	76	4	16	31	683	3	5.02	3.46	16			
Cookson	41.9	73	4	11	25	716	1	4.50	2.62	16	Stigler	****	***	**	**	**	****	****	****	****	**			
Eufaula	45.2	74	4	16	31	615	2	4.04	2.53	16	Stuart	44.9	74	7	16	31	625	1	4.94	3.60	16			
Haskell	43.0	73	4	16	31	685	1	2.66	1.93	16	Tahlequah	41.5	72	4	12	31	729	1	2.99	1.78	16			
Hectorville	44.5	74	4	16	31	637	2	2.30	1.58	16	Webbers Falls	43.6	78	4	15	31	668	4	3.92	2.42	16			
McAlester	44.3	75	4	13	31	645	3	5.50	3.79	16	Westville	42.4	71	4	12	31	700	0	4.93	2.38	16			
Okmulgee	42.8	74	5	13	31	690	1	2.64	1.97	16														
<b>SOUTHWEST</b>																								
Altus	43.5	74	18	19	25	665	0	0.14	0.06	11	Hollis	43.3	74	18	17	25	674	0	0.05	0.02	12			
Apache	43.0	72	5	16	31	681	0	0.71	0.36	16	Mangum	41.7	75	18	13	25	722	0	0.17	0.06	11			
Fort Cobb	41.9	71	4	11	31	717	0	0.20	0.09	11	Medicine Park	44.9	72	5	18	31	622	0	0.64	0.26	16			
Grandfield	44.1	73	4	19	31	648	2	0.77	0.58	16	Tipton	42.7	71	5	14	31	690	0	0.18	0.06	16			
Hinton	42.1	70	5	10	31	711	0	0.27	0.08	31	Walters	43.5	75	4	14	31	668	3	1.03	0.60	16			
Hobart	41.7	70	5	9	31	721	0	0.25	0.12	31														
<b>SOUTH CENTRAL</b>																								
Ada	43.9	73	5	13	31	657	1	3.64	2.98	16	Lane	45.0	75	4	20	31	623	4	4.33	2.88	16			
Ardmore	45.5	74	5	19	31	587	2	3.95	3.01	16	Madill	45.8	75	5	19	25	597	2	4.97	3.95	16			
Bee	45.1	75	7	20	31	615	0	****	****	**	Pauls Valley	44.4	76	5	16	31	642	2	3.33	2.83	16			
Burneyville	45.0	75	5	18	25	621	2	3.01	2.45	16	Ringling	44.4	75	5	17	31	641	2	2.61	2.35	16			
Byars	44.7	74	5	13	31	632	1	3.58	2.98	16	Sulphur	43.5	72	5	12	31	667	1	2.99	2.45	16			
Centrahoma	43.6	74	7	13	31	663	1	4.75	3.56	16	Tishomingo	44.2	75	5	18	25	647	1	4.50	3.31	16			
Durant	46.2	75	7	22	25	587	4	2.85	1.67	16	Vanoss	44.0	75	5	12	31	653	2	4.10	3.41	16			
Ketchum Ranch	43.6	74	5	15	31	663	1	1.94	1.44	16	Waurika	44.9	76	5	17	31	623	1	2.30	1.92	16			
<b>SOUTHEAST</b>																								
Antlers	44.4	79	4	17	10	644	7	5.75	3.73	16	Idabel	46.8	79	4	22	24	571	8	7.91	4.29	16			
Broken Bow	45.9	79	4	20	27	594	1	7.87	3.50	16	Mt Herman	44.8	76	4	17	24	630	4	11.74	6.50	16			
Clayton	45.1	77	4	17	31	620	4	5.84	3.92	16	Talihina	44.8	77	4	17	24	632	6	****	****	**			
Cloudy	45.4	77	4	20	27	612	5	7.40	4.02	16	Wilburton	43.5	77	4	12	31	669	4	5.25	3.66	16			
Hugo	46.6	78	4	22	25	577	7	6.38	3.86	16	Wister	42.8	78	4	16	25	693	6	5.70	3.49	16			



**EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION  
DECEMBER 2001**

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	77	3	BUFFALO	6 6	31 31	BOISE CITY GAGE	.20 .20	30 31	BOISE CITY RANGE	.48	BOISE CITY
2	77	3	FREEDOM	1	30	FT SUPPLY	.60	13	CHEROKEE	.69	MORRISON
3	77 77	5 5	PAWHUSKA RALSTON	6	31	RALSTON	1.93	17	PRYOR	3.24	KANSAS
4	73	3	ERICK	2	31	TALOGA	.27 .27	29 31	CLINTON REYDON	.47	ELK CITY
5	77	6	CHANDLER	7 7 7 7	31 31 31 31	CHICKASHA GUTHRIE KINGFISHER WANETTE	2.95	16	KONAWA	3.85	KONAWA
6	77 77	4 5	MCCURTAIN OKMULGEE	8	24	STILWELL	3.67	16	MCALESTER	6.35	EUFULA
7	75	18	MANGUM	8	31	ANADARKO	.72	16	WICHITA MT	1.50	DUNCAN
8	79	4	WAURIKA	8	31	MARLOW	3.89	17	CANEY	6.47	CANEY
9	78 78	4 6	WISTER WISTER	14 14	24 24	BATTIEST PAGE	5.35	16	PAGE	10.66	SMITHVILLE

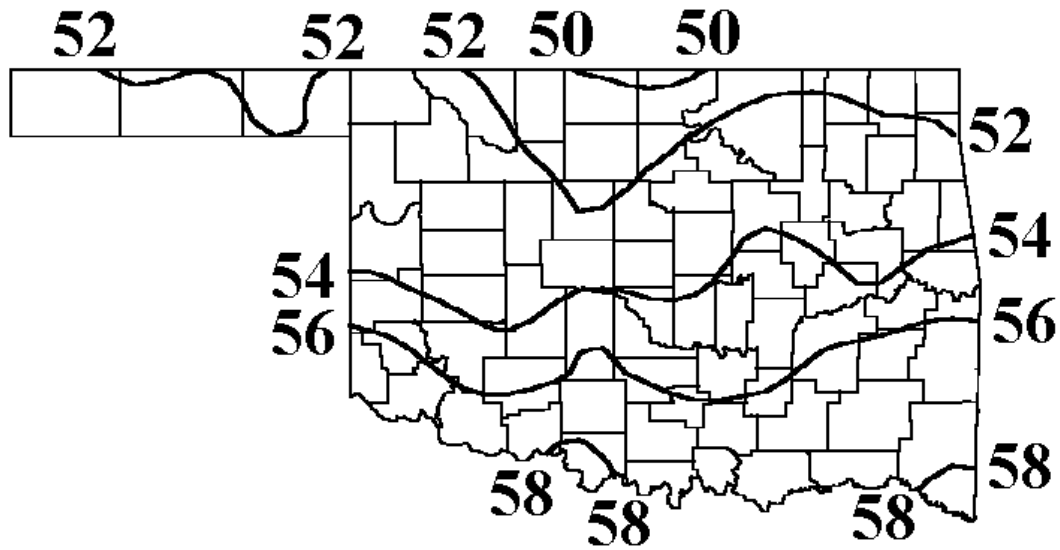
**TABLE OF 2000/2001 COMPARISONS**

Station	DECEMBER Temperature ( F)		DECEMBER Precipitation (in.)	
	2000	2001	2000	2001
Arnett	28.4	39.5	0.78	0.20
Enid	28.3	42.3	1.82	0.15
Tulsa	28.6	43.5	1.63	2.26
Elk City	30.6	43.0	1.76	0.47
Oklahoma City	60.5	42.2	2.31	0.91
McAlester	34.4	44.3	2.15	5.25
Altus Irr Station	34.2	41.6	1.14	0.20
Ardmore	36.1	46.2	4.82	2.79
Idabel	35.6	50.8	4.60	7.69

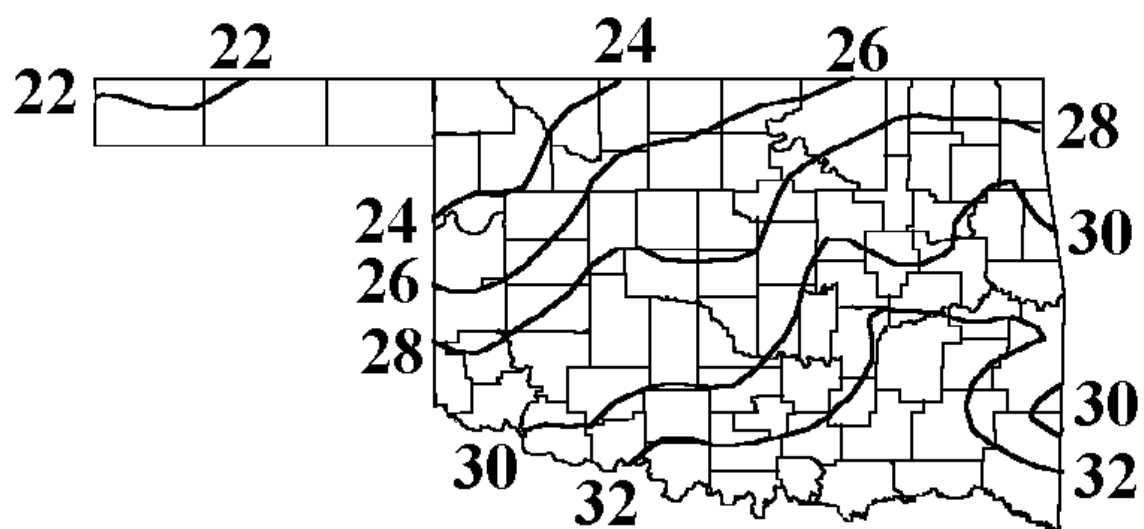
**DECEMBER 2001 STATEWIDE EXTREMES**

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature ( F)	Ft. Supply	2	1	30
Maximum temperature ( F)	Waurika	8	79	4
Maximum 24-hour Precipitation	Page	9	5.35"	16

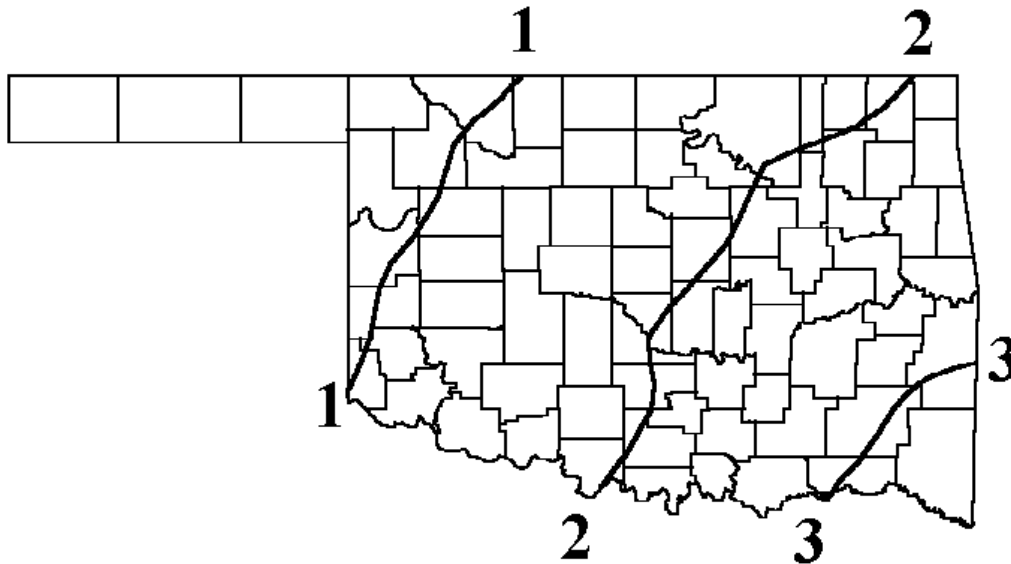
FEBRUARY NORMAL DAILY MAXIMUM TEMPERATURE (°F)



FEBRUARY NORMAL DAILY MINIMUM TEMPERATURE (°F)



## FEBRUARY NORMAL MONTHLY PRECIPITATION (INCHES)



## FEBRUARY TORNADO STATISTICS

The most tornadoes reported in **FEBRUARY** for Oklahoma was **(6)** in **1975**.

The average number of tornadoes in **FEBRUARY** for Oklahoma is **(.8)**.

## OUTLOOK FOR FEBRUARY 2002 THROUGH APRIL 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**  
**FEBRUARY**

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 1905-1999.  
Precipitation extremes are for the period 1888-1999.

Day	Avg. Temp.	Ave. High	2002	Record High	Year	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	37	48		90	1911	14	1918	27		59	1986	-2	1951	0.04		0.71	1990
2	38	49		77	1995	10	1905	27		58	1986	-4	1895	0.04		0.88	1943
3	38	49		78	1962	7	1905	27		58	1986	0	1996	0.04		1.13	1960
4	38	49		77	1962	15	1989	27		58	1927	-3	1996	0.04		1.32	1964
5	38	49		77	1942	16	1982	27		57	1938	3	1989	0.04		1.05	1987
6	39	50		73	1904	16	1905	27		54	1931	3	1895	0.05		1.38	1892
7	39	50		76	1937	6	1933	28		50	1894	-8	1895	0.05		0.84	1980
8	39	50		76	1999	12	1929	28		53	1966	-5	1933	0.05		0.62	1966
9	39	50		84	1932	16	1899	28		51	1932	-3	1979	0.05		2.10	1898
10	40	51		79	1922	16	1933	28		52	1999	4	1929	0.05		0.50	1953
11	40	51		82	1962	15	1899	29		57	1938	-12	1899	0.05		1.12	1977
12	40	51		84	1962	2	1905	29		57	1962	-17	1899	0.05		2.21	1978
13	40	52		82	1962	21	1905	29		54	1976	-11	1905	0.05		0.76	1908
14	41	52		81	1954	18	1951	29		55	1954	1	1936	0.05		0.89	1938
15	41	52		81	1954	17	1909	30		53	1976	7	1909	0.06		0.93	1938
16	41	52		81	1927	15	1903	30		63	1911	4	1903	0.06		2.15	1940
17	41	53		79	1991	17	1936	30		50	1926	5	1900	0.06		0.88	1961
18	42	53		78	1986	24	1936	30		53	1971	-1	1978	0.06		0.88	1946
19	42	53		83	1986	21	1929	31		54	1997	7	1903	0.06		0.69	1994
20	42	54		84	1981	25	1918	31		55	1894	9	1918	0.06		1.55	1997
21	43	54		82	1996	25	1911	31		58	1922	9	1939	0.06		1.63	1971
22	43	54		92	1996	24	1968	31		55	1985	11	1963	0.07		1.15	1985
23	43	55		88	1918	21	1914	32		52	1956	7	1910	0.07		0.81	1985
24	44	55		87	1918	19	1960	32		58	1930	7	1965	0.07		0.94	1952
25	44	55		84	1917	27	1960	32		56	1944	10	1960	0.07		0.74	1936
26	44	56		82	1996	21	1934	33		59	1981	10	1891	0.07		1.34	1903
27	44	56		83	1918	25	1962	33		56	1981	12	1962	0.07		1.32	1966
28	45	56		90	1904	19	1922	33		62	1904	7	1962	0.07		0.98	1990
29				81	1972	22	1960			58	1932	13	1960	0.07		0.42	1948
<b>MONTH</b>	<b>40.9</b>	<b>52.1</b>		<b>92</b>	<b>1996</b>	<b>2</b>	<b>1905</b>	<b>29.6</b>		<b>63</b>	<b>1911</b>	<b>-17</b>	<b>1899</b>	<b>1.56</b>		<b>2.21</b>	<b>1978</b>

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

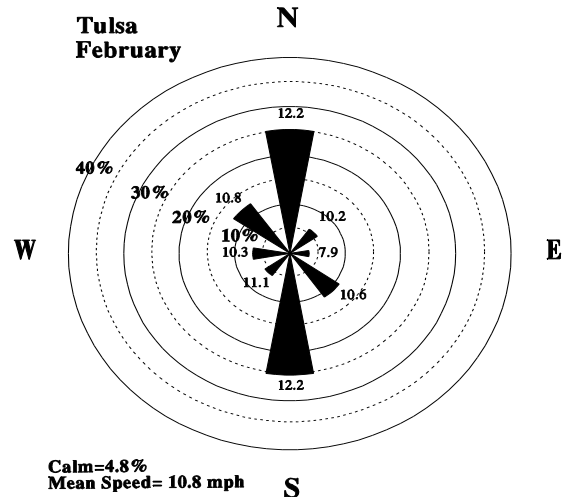
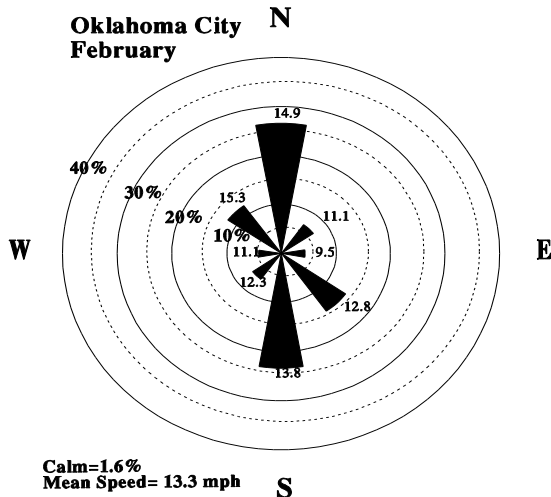
**TULSA CLIMATE CALENDAR**  
**FEBRUARY**

The data on this calendar are for Tulsa, 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	Lowest Max	Year	Ave. Low	Record Low	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	37	47	90	15	1911	26	-7	53	1986	-7	1979	0.05		0.78	1923
2	37	47	77	16	1995	26	0	56	1986	0	1917	0.05		0.69	1943
3	37	48	79	8	1934	27	-5	59	1986	-5	1996	0.06		0.53	1960
4	37	48	77	11	1962	27	-11	57	1927	-11	1996	0.06		2.27	1971
5	38	48	75	16	1942	27	4	60	1938	4	1979	0.06		1.36	1964
6	38	48	73	21	1999	27	4	59	1928	4	1985	0.06		0.64	1999
7	38	49	78	27	1909	28	0	68	1927	0	1933	0.06		0.76	1980
8	38	49	75	11	1957	28	-5	61	2001	-5	1933	0.06		1.32	1944
9	39	49	82	20	1932	28	-3	55	1938	-3	1979	0.06		0.79	1908
10	39	49	81	23	1922	28	-3	63	1932	-3	1929	0.06		0.80	1905
11	39	50	77	21	1951	28	-3	54	1915	-3	1981	0.06		1.18	1977
12	39	50	86	10	1962	29	0	57	1938	0	1905	0.07		1.78	1978
13	40	50	84	18	1962	29	-15	59	1938	-15	1905	0.07		0.70	1946
14	40	51	80	23	1910	29	-10	59	1954	-10	1905	0.07		1.01	1951
15	40	51	80	17	1976	29	3	60	1976	3	1905	0.07		1.74	1938
16	41	51	78	16	1976	30	3	51	1927	3	1920	0.07		1.03	1938
17	41	52	79	18	1907	30	9	63	1911	9	1993	0.07		1.37	1961
18	41	52	78	26	1930	30	2	60	1971	2	1936	0.07		1.35	1974
19	41	52	77	24	1981	31	9	54	1997	9	1978	0.08		1.31	1955
20	42	53	83	21	1981	31	9	55	1997	9	1918	0.08		1.94	1997
21	42	53	82	28	1996	31	7	55	1922	7	1939	0.08		1.43	1913
22	42	53	90	28	1996	32	1	57	1985	1	1963	0.08		2.99	1985
23	43	54	81	15	1982	32	10	55	2000	10	1910	0.08		1.47	2001
24	43	54	85	24	1918	32	8	64	1930	8	1965	0.08		0.86	1952
25	43	54	82	31	1917	32	10	60	1944	10	1965	0.09		0.94	1908
26	44	55	79	20	1996	33	11	61	1996	11	1960	0.09		1.25	1984
27	44	55	81	23	1976	33	13	59	1981	13	1962	0.09		1.12	1950
28	45	56	82	22	1972	33	6	53	1976	6	1962	0.09		2.00	1987
29	45	56	82	21	1972	33	15	57	1972	15	1960	0.09		0.20	1948
<b>MONTH</b>	<b>40.4</b>	<b>51.17</b>	<b>90</b>	<b>8</b>	<b>1996</b>	<b>29.62</b>	<b>-15</b>	<b>68</b>	<b>1927</b>	<b>-15</b>	<b>1905</b>	<b>0.07</b>		<b>2.99</b>	<b>1985</b>

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

## FEBRUARY WIND ROSES



**February 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.

## FEBRUARY SUNRISE/SUNSET TIMES FOR 2002

ALL TIMES ARE CENTRAL STANDARD TIME

### OKLAHOMA CITY

DATE	SUNRISE	SUNSET
2/1/02	7:30 AM	5:58 PM
2/2/02	7:29 AM	5:59 PM
2/3/02	7:28 AM	6:00 PM
2/4/02	7:27 AM	6:01 PM
2/5/02	7:26 AM	6:02 PM
2/6/02	7:25 AM	6:03 PM
2/7/02	7:25 AM	6:04 PM
2/8/02	7:24 AM	6:05 PM
2/9/02	7:23 AM	6:06 PM
2/10/02	7:22 AM	6:07 PM
2/11/02	7:21 AM	6:08 PM
2/12/02	7:20 AM	6:09 PM
2/13/02	7:19 AM	6:10 PM
2/14/02	7:18 AM	6:11 PM
2/15/02	7:16 AM	6:12 PM
2/16/02	7:15 AM	6:13 PM
2/17/02	7:14 AM	6:14 PM
2/18/02	7:13 AM	6:15 PM
2/19/02	7:12 AM	6:16 PM
2/20/02	7:11 AM	6:17 PM
2/21/02	7:10 AM	6:18 PM
2/22/02	7:08 AM	6:19 PM
2/23/02	7:07 AM	6:20 PM
2/24/02	7:06 AM	6:21 PM
2/25/02	7:05 AM	6:22 PM
2/26/02	7:03 AM	6:23 PM
2/27/02	7:02 AM	6:24 PM
2/28/02	7:01 AM	6:25 PM

### TULSA

DATE	SUNRISE	SUNSET
2/1/02	7:24 AM	5:51 PM
2/2/02	7:24 AM	5:52 PM
2/3/02	7:23 AM	5:53 PM
2/4/02	7:22 AM	5:54 PM
2/5/02	7:21 AM	5:55 PM
2/6/02	7:20 AM	5:56 PM
2/7/02	7:19 AM	5:57 PM
2/8/02	7:18 AM	5:58 PM
2/9/02	7:17 AM	5:59 PM
2/10/02	7:16 AM	6:00 PM
2/11/02	7:15 AM	6:01 PM
2/12/02	7:14 AM	6:02 PM
2/13/02	7:13 AM	6:03 PM
2/14/02	7:12 AM	6:04 PM
2/15/02	7:11 AM	6:05 PM
2/16/02	7:10 AM	6:06 PM
2/17/02	7:09 AM	6:07 PM
2/18/02	7:08 AM	6:08 PM
2/19/02	7:06 AM	6:09 PM
2/20/02	7:05 AM	6:10 PM
2/21/02	7:04 AM	6:11 PM
2/22/02	7:03 AM	6:12 PM
2/23/02	7:02 AM	6:13 PM
2/24/02	7:00 AM	6:14 PM
2/25/02	6:59 AM	6:15 PM
2/26/02	6:58 AM	6:16 PM
2/27/02	6:56 AM	6:17 PM
2/28/02	6:55 AM	6:18 PM

## CONTACT INFORMATION

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