

# OKLAHOMA MONTHLY CLIMATE SUMMARY

# JANUARY 2002

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**Oklahoma Climatological Survey**

## MONTHLY SUMMARY FOR JANUARY 2002

### **January 2002**

*Statewide average temperature = 39.9° F*

*Statewide average rainfall = 2.22 inches*

Oklahoma was enjoying a rather mundane January weather-wise - warm and dry - until a significant winter storm came visiting the state from the 29<sup>th</sup> through the 31<sup>st</sup>, bringing with it one of the most devastating ice storms in state history. That late-month event brought with it some much-needed moisture as well, bringing the statewide-averaged precipitation total to 2.22 inches, 0.76 inches above normal. That surplus ranks the month as the 20<sup>th</sup> wettest January since record keeping began 111 years ago. That wintry blast was not enough to overcome the mild air in place for most of the month, however. The statewide-averaged temperature of 39.9 degrees was 3.1 degrees above normal, marking the month as the 35<sup>th</sup> warmest on record since 1892.

All parts of the state received above normal precipitation for the month, with the central region of the state leading the pack at 201% of normal. The north central and west central climate divisions were both above 180% of normal precipitation as well. Coincidentally, these three climate divisions were the hardest hit by the ice storm, and much of that precipitation fell as freezing rain. The surplus for the month somewhat alleviated a precipitation deficit which began in western Oklahoma in June of 2001. For the 8-month period, however, the statewide-averaged precipitation remains below normal with a 5.55 inch deficit, the 25<sup>th</sup> driest June-January in the last 111 years. Another trend that is still holding is the above normal statewide-averaged temperature for the current cold season. The November-January average temperature of 49.4 degrees was 4.4 degrees above normal, tying it for the 9<sup>th</sup> warmest such period on record in the last 110 years. This is in contrast to the same period last year, which was 5.3 degrees cooler than normal and the coldest since record keeping began.

### **January Normals**

*Statewide average temperature = 36.8° F*

*Statewide average rainfall = 1.46 inches*

The month began on the chilly side as the state was recovering from a New Year's Eve snowstorm, before giving way to milder weather for the majority of the month. Light snow fell in northwestern and north central Oklahoma on New Year's Day, with no significant accumulations reported. The Kenton Mesonet site (Cimarron County) recorded the lowest temperature for the month at a bone-chilling -7 degrees on the 3<sup>rd</sup>. This was the only below-zero temperature recorded in January, although several temperatures in the low single-digits occurred on the first 4 days of the month. Kenton reported a low of zero on New Year's day, a figure matched on the 3<sup>rd</sup> by Ralston (Pawnee) and Buffalo (Harper).

A few days after those single-digit lows in northwestern parts of the state, temperatures soared into the 60s and 70s. The Alva (Woods), Seiling (Dewey), Butler (Custer), Camargo (Dewey), and Erick (Beckham) Mesonet sites reported daily highs of 79 degrees on the 8<sup>th</sup>. The month's highest daily maximum temperature of 80 degrees was reported at Goodwell (Texas) on the 9<sup>th</sup> and Altus (Jackson) on the 28<sup>th</sup>. There was a brief bout with thunderstorms in the eastern third of the state on the 23<sup>rd</sup> and the 24<sup>th</sup>. Small hail was reported at various

**(Continued on page 3.)**

locations in southeastern Oklahoma on the 23<sup>rd</sup>, with a 60 mph wind gust reported at Weleetka (Okfuskee). The rainfall amounts were generally less than 2 inches, although Sallisaw (Sequoyah) reported a daily precipitation total of 2.04 inches.

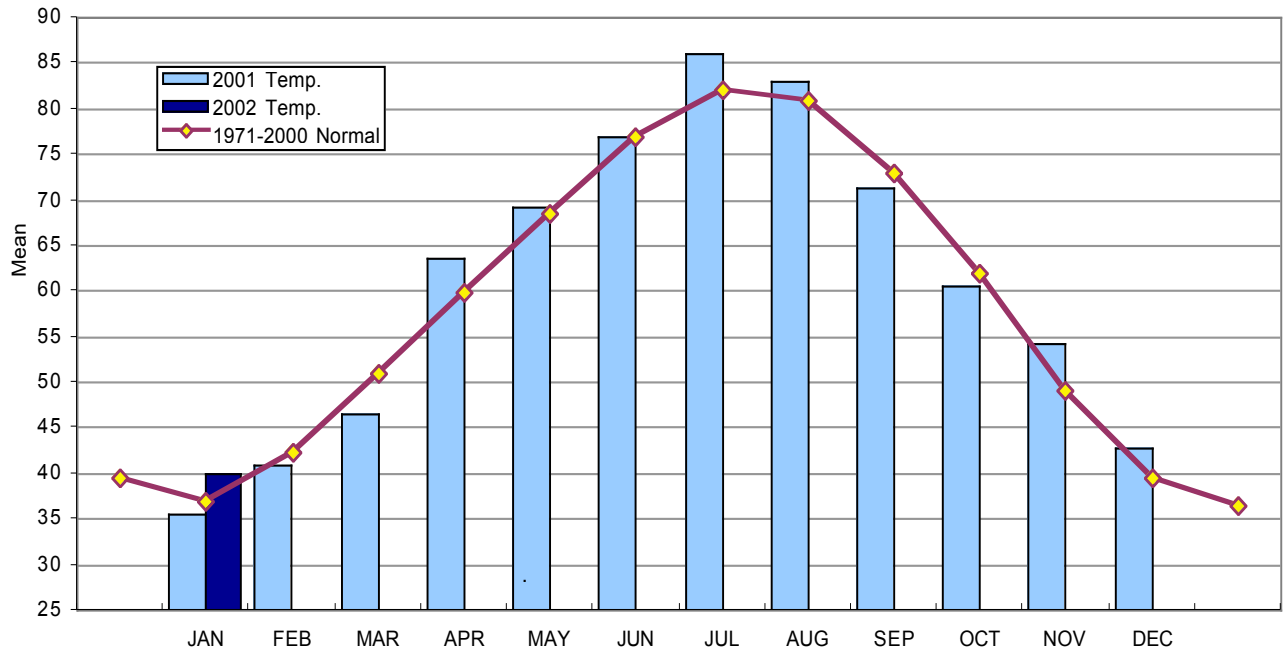
The balmy weather came to an abrupt halt on the last weekend of the month as wintry weather returned with a vengeance, bringing with it much-needed moisture in the form of rain, snow, and one of the worst ice storms in the state's recorded history. The cold air arrived in the northern half of the state on the 28<sup>th</sup> with the precipitation beginning in earnest the evening of the 29<sup>th</sup>. The boundary between freezing and liquid precipitation stretched roughly along I-44, from Tulsa (Tulsa) in the northeast to Oklahoma City (Oklahoma) to Lawton (Comanche) in the southwest. The areas hit hardest by the ice were west central and north central Oklahoma, with varying degrees of damage northwest and southeast of those regions. Rainfall totals in west central and north central Oklahoma were generally in the 2-to-3 inch range, allowing for ice accumulations of up to 6 inches on elevated surfaces in some locales. Some of the most significant rainfall amounts from the damaged areas include: 3.19 inches at the Red Rock Mesonet site (Noble), 3.00 inches at El Reno (Canadian), 2.89 inches at Perkins (Payne), 2.84 inches at the Marshall Mesonet site (Logan), and 2.83 inches at Edmond (Oklahoma). In far northwestern Oklahoma, the freezing rain quickly turned to snow as the frigid air filtered in. The highest snowfall amounts were found in the panhandle, where Turpin (Texas) reported 8 inches, Beaver (Beaver County) reported 6 inches, and Gate and Hooker (both in Beaver County) received 5.5 inches. Reports of 1-to-3 inch snowfall accumulations were scattered throughout far northwestern Oklahoma. Much of the southeastern half of the state experienced a good soaking rainfall from the storm, as that region's surface temperature remained above freezing for the most part. Leading the pack with 3.56 inches of rainfall was the Cloudy Mesonet site (Pushmataha). Other notable rainfall amounts include: 3.23 inches at Hugo (Choctaw), 3.01 inches at the Mt. Herman Mesonet site (McCurtain), and 2.70 inches at Ingalls (Payne).

The ice storm left over \$100 million of damage in its wake, leaving some 255,000 residences and businesses without power, including the entire city of Enid and its population of 47,000. Some rural areas of northwestern Oklahoma were expected to remain without power for up to 2 months. The ice downed over 31,000 power poles, and over 1,500 miles of power lines. The most serious casualty in the wake of the ice storm, however, was the toll in human lives. Seven fatalities were directly attributable to the effects of the late January storm.

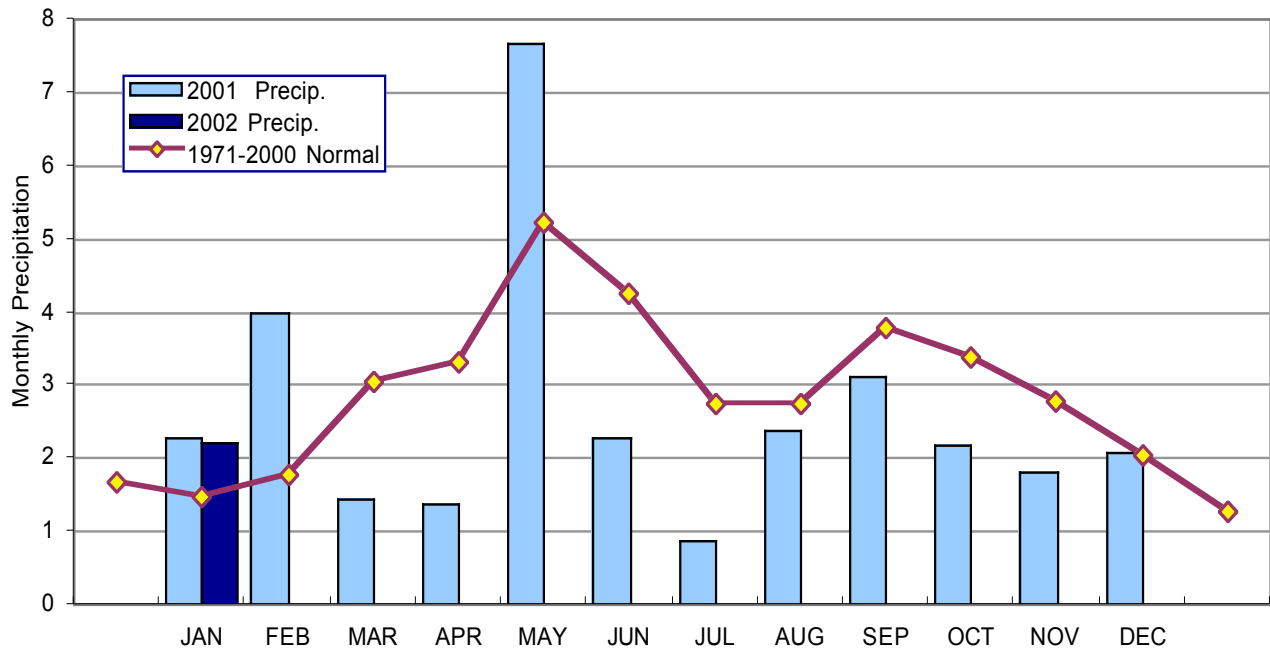
Gary D. McManus

(Note to the reader: Effective with this edition of the Monthly Summary, "departure from normal" refers to the 30-year station normals compiled from 1971 through 2000, as published by the National Climatic Data Center. Statewide and climate division normals are compiled from historical lists maintained by the Oklahoma Climatological Survey. OCS has compiled normal monthly precipitation values for stations not listed in the NCDC publication.)

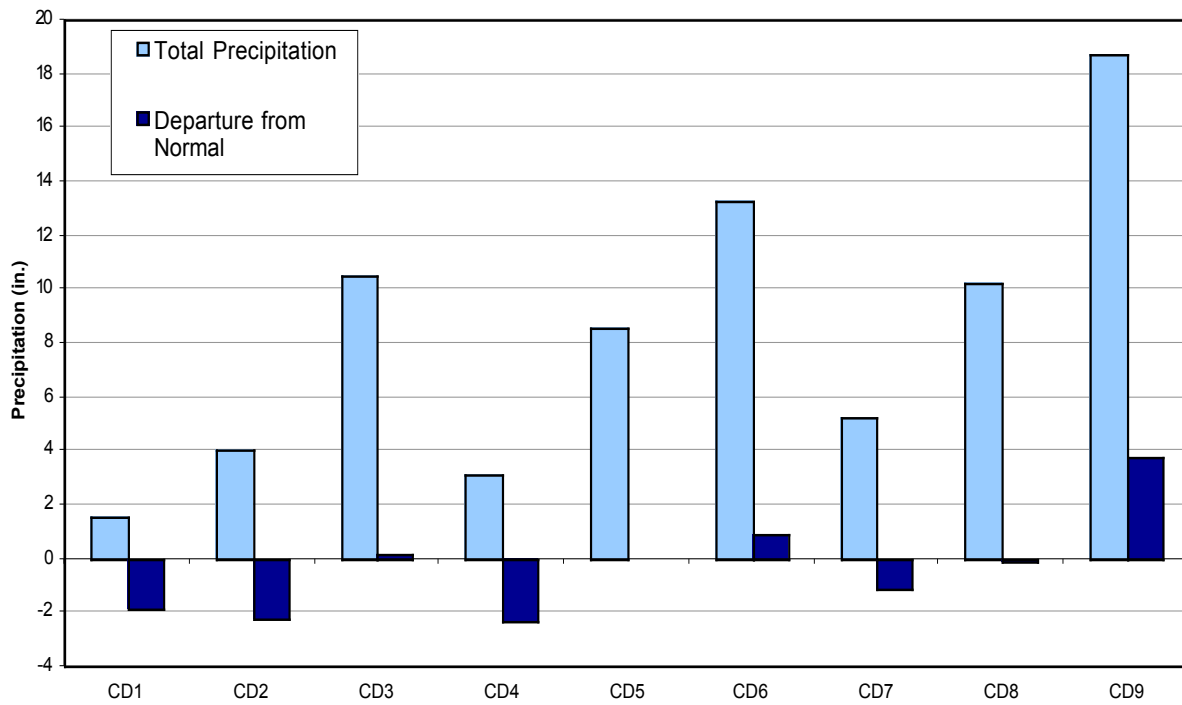
## 2001 AND 2002 STATEWIDE TEMPERATURES - MONTHLY AVERAGES



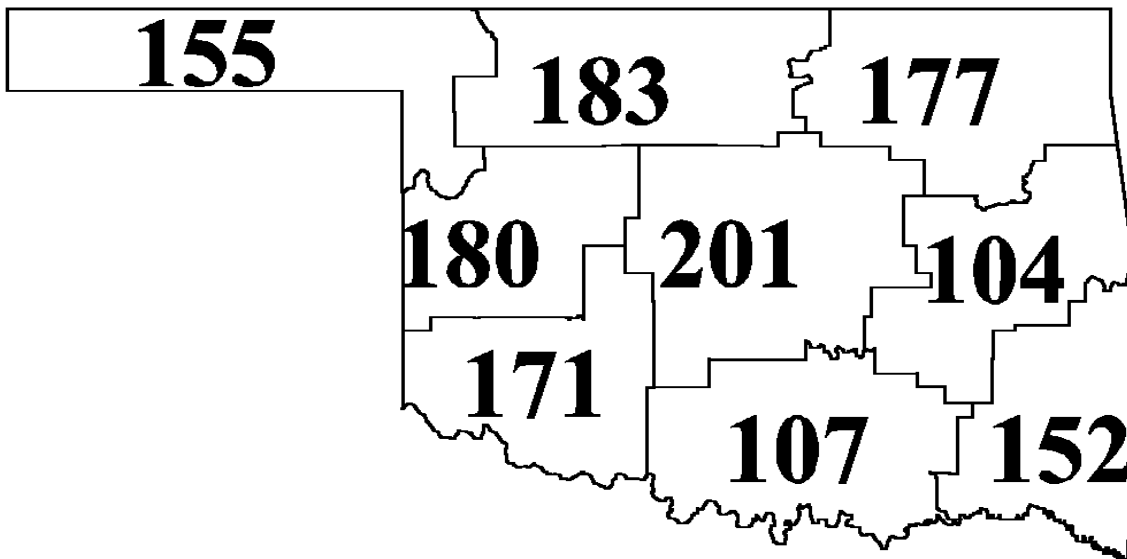
## 2001 AND 2002 STATEWIDE PRECIPITATION - MONTHLY TOTALS



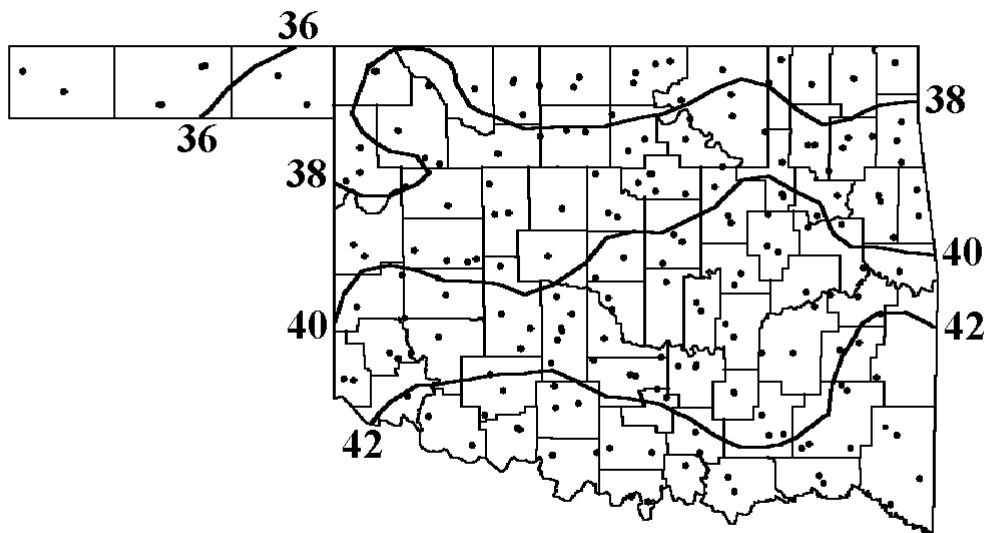
CLIMATE DIVISION AVERAGED PRECIPITATION - OCTOBER 2001 THROUGH JANUARY 2002



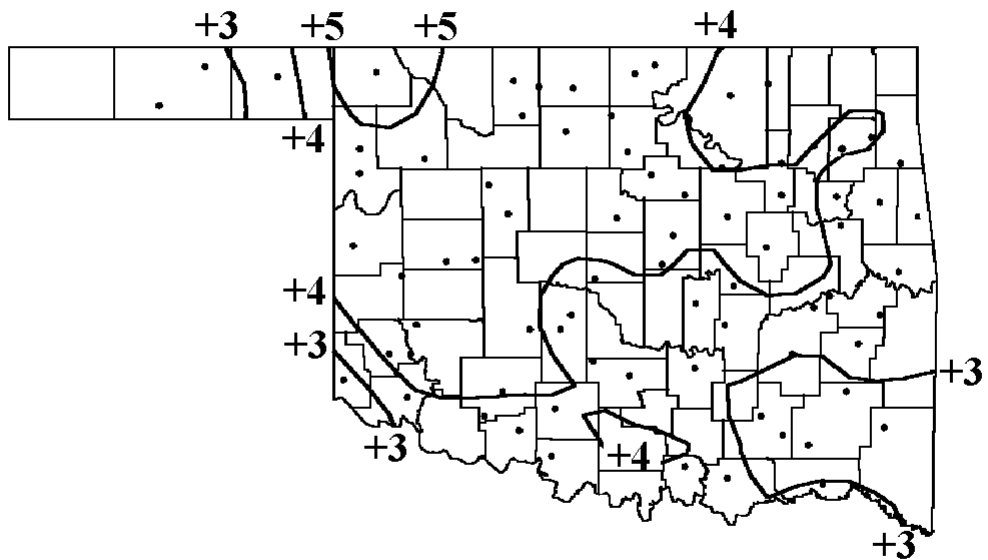
CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION - JANUARY 2002



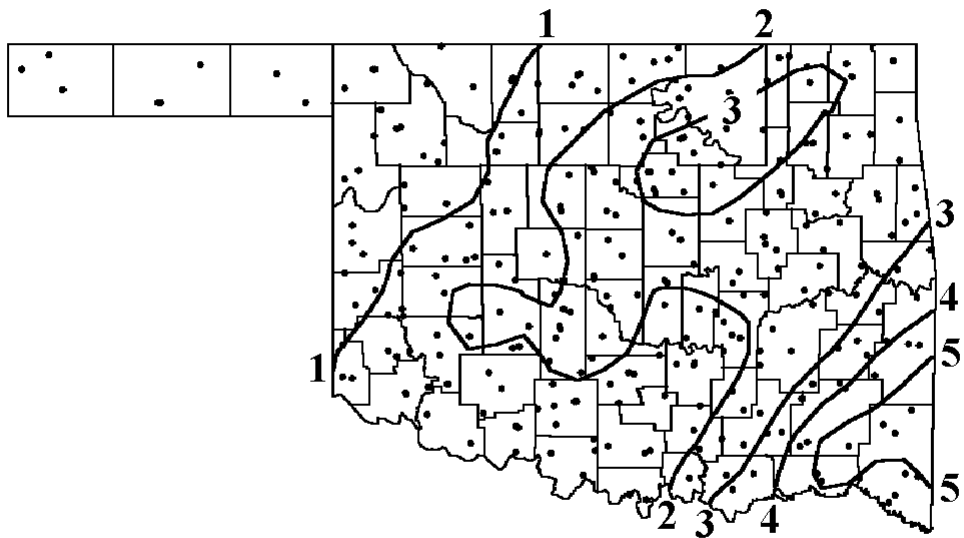
JANUARY 2002 AVERAGE MONTHLY TEMPERATURE (°F)



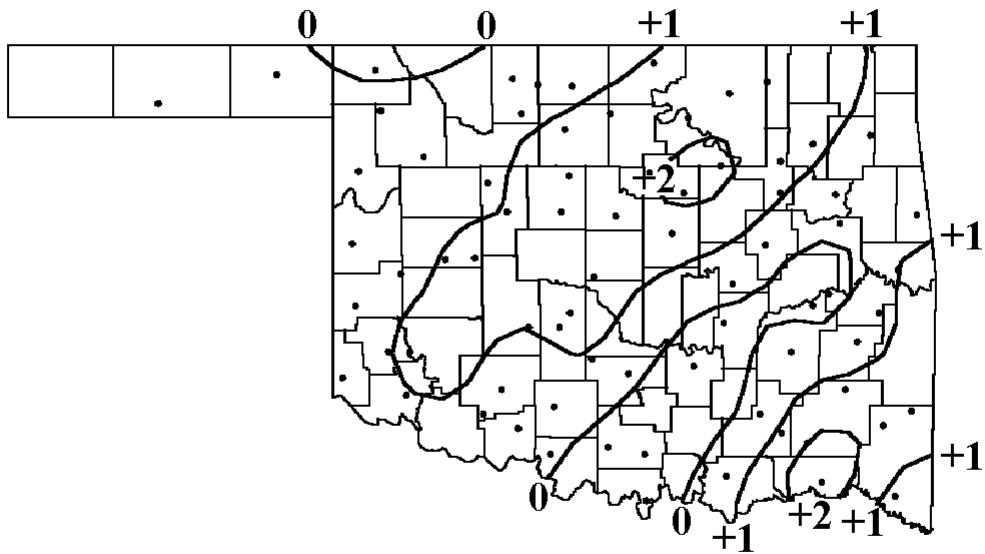
JANUARY 2002 DEPARTURE FROM NORMAL TEMPERATURE (°F)



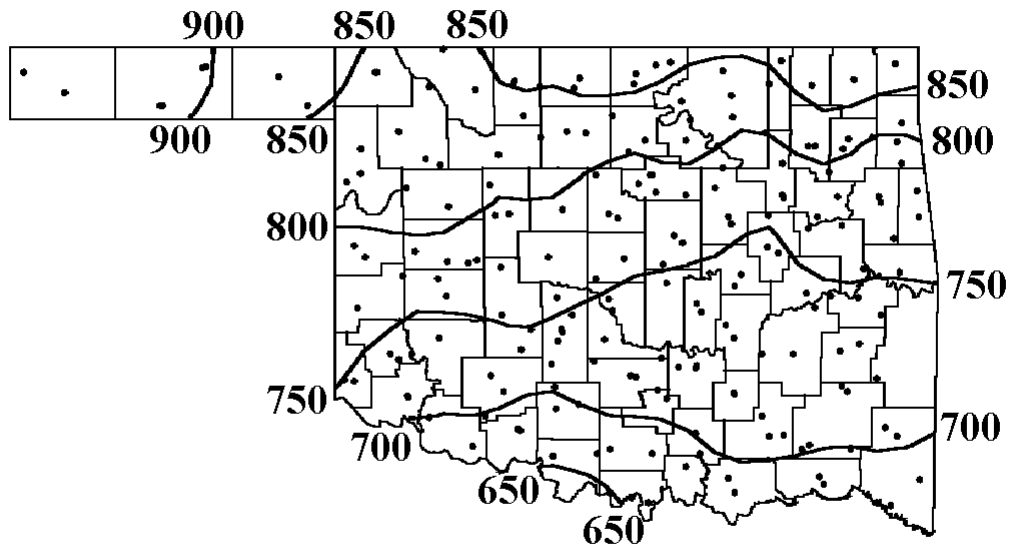
JANUARY 2002 PRECIPITATION (INCHES)



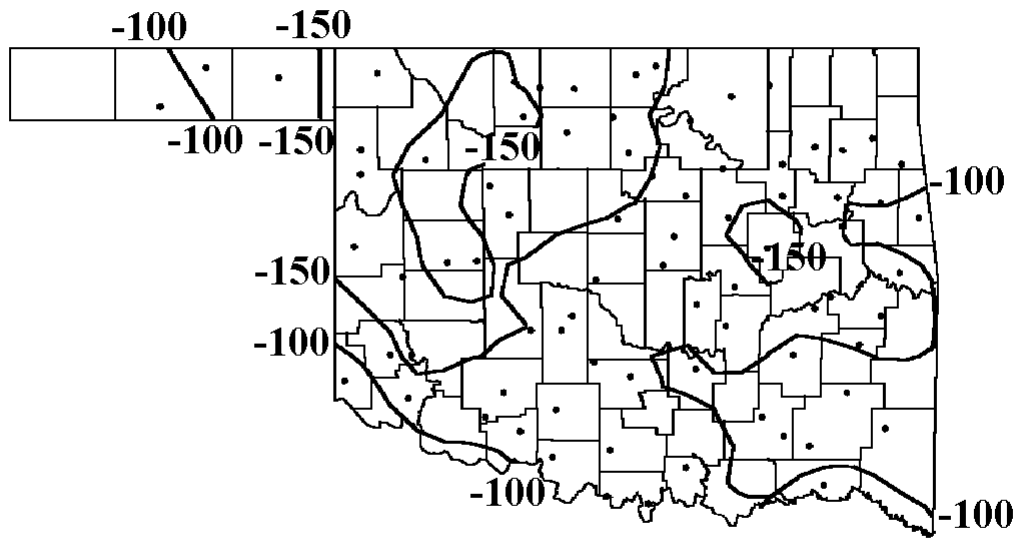
JANUARY 2002 DEPARTURE FROM NORMAL PRECIPITATION (INCHES)



JANUARY 2002 ACCUMULATED HEATING DEGREE DAYS (°F)



JANUARY 2002 DEPARTURE FROM NORMAL HEATING DEGREE DAYS (°F)





## JANUARY 2002 SUMMARY FOR PANHANDLE CLIMATE DIVISION (CD1)

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		
ARNETT	332	1	36.3	30	3.9	76	9	7	3	861	-150	0	0	1.211	31	0.58	0.84	31
BEAVER	593	1	34.8	31	3.0	75	10	8	4	936	-96	0	0	0.900	31	0.37	0.80	31
BUFFALO	1243	1	41.9	31	6.9	79	8	5	3	716	-213	0	0	0.000	31	-0.54	0.00	31
FARGO	3070	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.274	31	*****	0.81	31
GAGE	3407	1	37.6	30	4.7	77	8	4	3	822	-176	0	0	0.039	30	*****	0.02	4
GATE	3489	1	36.6	29*	****	74	27	7	2	824	*****	0	*****	0.931	30	*****	0.68	31
GOODWELL	3628	1	35.6	31	2.4	80	9	2	3	911	-76	0	0	0.502	31	0.21	0.40	31
GUYMON	3835	1	35.8	26*	****	78	9	4	3	760	*****	0	*****	0.260	26	*****	0.16	11
HOOKER	4298	1	36.6	30	2.8	79	8	4	2	852	-115	0	0	0.702	30	*****	0.40	30
LAVERNE	5045	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.221	31	*****	0.95	31
REGNIER	7534	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.433	31	*****	0.27	31
TURPIN	9017	1	34.8	22*	****	77	9	5	3	665	*****	0	*****	0.850	23	*****	0.85	31

## JANUARY 2002 SUMMARY FOR NORTH CENTRAL CLIMATE DIVISION (CD2)

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		
VANCE AFB	302	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.000	17	*****	0.00	17
BILLINGS	755	2	36.7	30	3.5	74	10	4	3	851	-136	0	0	2.471	31	1.29	1.25	31
BLACKWELL 2E	818	2	37.0	30	5.0	71	28	4	3	839	-185	0	0	0.791	30	*****	0.75	30
BRAMAN	1075	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.941	31	*****	0.94	31
CEDARDALE	1620	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.181	31	*****	0.91	31
CHEROKEE	1724	2	35.5	30	3.2	74	9	7	3	884	-131	0	0	1.123	31	0.15	1.00	31
ENID	2912	2	38.9	30	5.8	75	10	10	3	784	-208	0	0	2.071	31	0.93	1.19	31
FT SUPPLY	3304	2	35.3	29*	****	77	8	3	2	862	*****	0	*****	1.363	31	0.75	0.83	30
FREEDOM	3358	2	34.2	29*	****	79	9	1	4	893	*****	0	*****	0.002	29	*****	0.00	18
GREAT SALT P	3740	2	38.2	30	5.7	73	28	6	3	805	-203	0	0	1.510	31	0.65	1.50	31
HARDY	3909	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.942	31	*****	0.99	31
HELENA	4019	2	36.3	31	3.4	76	10	6	3	889	-110	0	0	1.820	31	0.86	1.51	31
JEFFERSON	4573	2	36.2	31	3.6	74	28	2	3	892	-115	0	0	1.750	31	0.73	1.40	31
LAHOMA	4950	2	38.9	29*	****	78	10	3	3	757	*****	0	*****	1.850	31	*****	1.12	31
LAMONT	5013	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.090	31	*****	2.08	31
MEDFORD	5768	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.930	31	*****	1.54	31
MUTUAL	6139	2	37.1	31	4.2	78	9	7	1	865	-131	0	0	1.180	31	0.42	0.89	31
NEWKIRK	6278	2	36.1	31	4.9	70	28	3	3	895	-155	0	0	2.051	31	1.03	1.20	31
ORIENTA	6751	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.830	31	*****	1.52	31
PERRY	7012	2	40.3	30	6.1	75	10	12	4	740	-218	0	0	3.440	30	*****	2.20	30
PONCA CITY	7201	2	37.8	29*	****	73	9	2	3	789	*****	0	*****	1.712	29	*****	1.57	30
RED ROCK	7505	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.952	31	*****	1.98	29
WAYNOKA	9404	2	37.8	29*	****	79	8	6	3	790	*****	0	*****	1.441	30	*****	0.85	30
WOODWARD	9760	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.251	31	*****	0.82	29

## JANUARY 2002 SUMMARY FOR NORTHEAST CLIMATE DIVISION (CD3)

NAME	ID	CD	MEAN	NUM	DEV		MIN	DAY	HEAT	DEV	COOL	DEV	TOT	NUM	DEV	MAX	DAY	
			TEMP	OBS	FROM	MAX				FROM	DEG	FROM		FROM	PPT			OBS
BARNSDALL	535	3	38.4	29 *	****	71	9	3	3	771	*****	0	*****	2.801	30	*****	2.38	31
BARTLESVILLE	548	3	38.4	31	3.0	69	27	3	3	824	-95	0	0	3.170	31	1.73	1.58	31
BIXBY	782	3	39.1	31	4.3	73	28	8	3	803	-134	0	0	2.351	31	0.89	0.76	30
BURBANK	1256	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.590	31	*****	2.32	30
CHELSEA	1717	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.490	31	*****	1.22	31
CLAREMORE	1828	3	37.9	31	4.2	72	29	7	4	841	-131	0	0	2.923	31	1.17	1.42	31
HOLLOW	4258	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.780	31	*****	1.66	31
HOMINY	4289	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.392	31	*****	1.90	31
KANSAS	4672	3	40.8	31	4.3	72	23	11	3	750	-135	0	0	1.701	31	-0.66	0.75	31
LENAPAH	5118	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.420	31	*****	1.85	31
MANNFORD	5522	3	40.3	31	3.9	75	9	4	3	767	-123	0	0	4.500	31	2.97	2.72	31
MARAMEC	5540	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.881	31	*****	2.20	31
MIAMI	5855	3	37.8	28 *	****	70	29	9	4	763	*****	0	*****	2.290	29	*****	1.36	31
PAWHUSKA	6935	3	38.8	30	4.0	71	9	3	3	786	-153	0	0	3.012	31	1.56	1.50	30
PAWNEE	6940	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.090	31	*****	1.55	31
PRYOR	7309	3	38.5	30	4.5	71	29	7	4	795	-167	0	0	1.250	30	*****	0.60	31
RALSTON	7390	3	37.1	31	3.4	73	9	0	3	865	-108	0	0	2.722	31	1.43	1.72	31
SPAVINAW	8380	3	41.4	31	4.0	70	28	10	3	732	-126	0	0	2.881	31	0.91	1.33	31
TULSA	8992	3	40.3	31	3.9	72	9	9	3	767	-132	0	0	2.671	31	1.07	1.80	30
UPPER SPAV	9101	3	39.4	30 *	****	73	29	9	3	769	*****	0	*****	2.373	30	*****	1.18	31
WAGONER	9247	3	40.6	31	3.2	73	28	8	3	756	-100	0	0	3.100	31	1.15	1.66	23
WANN	9298	3	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.800	31	*****	1.35	31

## JANUARY 2002 SUMMARY FOR WEST CENTRAL CLIMATE DIVISION (CD4)

NAME	ID	CD	MEAN	NUM	FROM	MAX	MIN	DAY	DEG	FROM	DEG	FROM	TOT	NUM	FROM	MAX	DAY	
			TEMP	OBS	NORM	TEMP				DEG	NORM	DEG		NORM	PPT	OBS		NORM
CANTON DAM	1445	4	38.0	30	4.5	78	10	6	1	809	-171	0	0	1.532	31	0.69	1.26	31
CLINTON	1909	4	38.1	30	2.9	74	9	11	3	807	-118	0	0	2.162	31	1.11	1.87	31
CORDELL	2125	4	40.0	30 *	****	73	9	12	3	749	*****	0	*****	2.852	31	*****	1.72	31
ELK CITY	2849	4	40.1	31	5.6	77	9	13	4	773	-176	0	0	1.162	31	0.31	1.07	31
ERICK	2944	4	40.2	29 *	****	79	9	14	3	720	*****	0	*****	0.921	31	0.27	0.85	31
GEARY	3497	4	40.3	28 *	****	74	9	11	3	693	*****	0	*****	2.401	29	*****	2.40	30
HAMMON	3871	4	37.1	26 *	****	79	9	6	3	727	*****	0	*****	0.990	29	*****	0.80	31
LEEDEY	5090	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	1.200	31	*****	0.95	31
MACKIE	5463	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	1.420	31	*****	1.42	31
MORAVIA	6035	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	1.183	31	*****	1.03	31
OKEENE	6629	4	41.8	29 *	****	77	9	7	3	673	*****	0	*****	1.631	30	*****	1.43	31
RETROP	7565	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.050	31	*****	1.85	31
REYDON	7579	4	39.5	30	4.9	79	9	15	4	765	-179	0	0	1.050	31	0.41	1.00	31
SAYRE	7952	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	0.891	31	*****	0.82	31
SWEETWATER	8652	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	0.001	31	*****	0.00	31
TALOGA	8708	4	36.3	29 *	****	78	9	1	4	832	*****	0	*****	1.142	30	*****	0.97	30
THOMAS	8815	4	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.301	31	*****	1.15	31
WATONGA	9364	4	38.4	30	4.3	76	10	3	1	798	-163	0	0	1.622	31	0.51	1.02	31
WEATHERFORD	9422	4	39.9	31	4.8	74	10	11	1	778	-149	0	0	2.902	31	1.92	1.72	30

## JANUARY 2002 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	*****	*****	*****	*****	1.770	31	****	1.02	31
BLANCHARD	830	5	42.7	31	3.7	74	28	10	3	692	-117	0	0	2.893	31	1.64	1.30	31
BRISTOW	1144	5	41.0	30	3.9	74	9	6	3	722	-146	0	0	3.090	30	*****	1.37	31
CHANDLER	1684	5	39.8	31	4.1	74	10	7	4	780	-129	0	0	3.000	31	1.63	1.80	31
CHICKASHA EXP	1750	5	42.2	31	3.6	72	28	9	3	706	-116	0	0	2.410	31	1.14	1.15	31
COX CITY	2196	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.620	31	*****	0.82	24
CUSHING	2318	5	39.5	31	4.3	73	9	10	3	789	-135	0	0	3.690	31	2.45	2.49	31
EDMOND	2788	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.541	31	*****	2.83	30
EL RENO	2818	5	40.2	26*	****	76	24	10	1	645	*****	0	*****	3.280	26	*****	3.00	30
GUTHRIE	3821	5	39.1	31	4.5	75	10	6	3	803	-142	0	0	3.151	31	1.82	2.15	31
HENNESSEY	4055	5	37.5	28*	****	74	10	7	1	769	*****	0	*****	3.740	31	2.79	2.00	30
INGALLS	4489	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.500	31	*****	2.70	31
KINGFISHER	4861	5	39.8	29*	****	78	9	7	1	732	*****	0	*****	2.900	31	1.80	1.36	31
KONAWA	4915	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.970	31	*****	0.80	23
MARSHALL	5589	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.160	31	*****	1.92	30
MEEKER	5779	5	39.4	30	5.0	72	29	6	4	767	-183	0	0	2.430	30	*****	1.12	31
MULHALL	6110	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.990	31	*****	1.47	31
NORMAN NWS	6386	5	40.6	31*	****	73	28	9	3	758	*****	0	*****	2.335	31	*****	1.37	30
OKEMAH	6638	5	41.7	31	2.2	75	28	11	3	723	-71	0	-1	1.990	31	0.28	0.74	24
OKLAHOMA CTY F.	6659	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.624	31	*****	2.22	30
OKLAHOMA CTY	6661	5	40.0	31	3.3	73	9	9	3	774	-110	0	0	2.624	31	1.34	2.13	30
PERKINS	7003	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.890	31	*****	2.89	31
PIEDMONT	7068	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.110	31	*****	1.50	31
PRAGUE	7264	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.160	31	*****	1.01	31
PURCELL	7327	5	38.3	24*	****	71	10	9	3	641	*****	0	*****	1.760	26	*****	0.77	24
SEMINOLE	8042	5	40.0	30	2.7	76	29	9	4	752	-108	0	0	1.821	30	*****	1.19	24
SHAWNEE	8110	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.980	31	*****	0.58	31
STELLA	8479	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.060	31	*****	1.20	31
STILLWATER	8501	5	39.0	31	4.5	74	10	6	3	806	-139	0	0	3.191	31	1.89	1.89	31
TECUMSEH	8751	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.280	31	*****	1.00	23
UNION CITY	9086	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.132	31	*****	2.51	31
WANETTE	9291	5	40.2	30*	****	74	29	6	4	745	*****	0	*****	2.460	30	*****	0.60	30
WEWOKA	9575	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.931	31	*****	0.87	24

## JANUARY 2002 SUMMARY FOR EAST CENTRAL CLIMATE DIVISION (CD6)

NAME	ID	CD	MEAN TEMP	NUM OBS	FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	DEG DAY	FROM NORM	DEG DAY	FROM NORM	TOT PPT	NUM OBS	FROM NORM	MAX 24-HR	DAY
ASHLAND	364	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.920	31	*****	0.90	31
BEGGS	631	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.680	31	*****	0.98	31
CALVIN	1391	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.300	31	*****	0.70	31
CHECOTAH	1711	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.771	31	*****	0.62	24
CLAYTON	1858	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.520	31	*****	1.70	31
DEWAR	2485	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.120	31	*****	1.52	24
DUSTIN	2690	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.011	31	*****	0.76	31
EUFAULA	2993	6	41.8	30	2.8	72	29	14	3	698	-112	0	0	1.500	31	-0.66	1.10	31
HOLDENVILLE	4235	6	41.8	31	5.3	76	28	8	3	720	-165	0	0	1.000	31	-0.73	0.45	30
LAKE EUFAULA	4975	6	40.1	31	4.1	73	30	13	4	771	-127	0	0	1.121	31	-1.05	0.54	31
LYONS	5437	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.241	31	*****	0.86	31
MCALESTER	5664	6	41.7	31	2.8	74	29	8	3	723	-86	0	0	3.363	31	1.08	1.55	23
MCCURTAIN	5693	6	44.0	31	4.0	76	29	11	3	652	-126	1	0	3.292	31	0.64	2.00	31
MUSKOGEE	6130	6	38.9	31	2.8	74	23	7	2	810	-87	0	0	1.760	31	-0.18	0.73	30
OKMULGEE	6670	6	43.1	31	7.4	77	28	13	3	679	-231	1	1	2.160	31	0.45	1.01	23
OKTAHA	6678	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.103	31	*****	0.77	31
SALLISAW	7862	6	40.3	31	3.6	74	30	12	3	766	-114	0	0	3.990	31	1.74	2.04	24
SCPIO	7979	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.230	31	*****	0.80	31
SHORT	8170	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.300	31	*****	1.30	31
STILWELL	8506	6	38.6	31	2.3	72	28	10	3	818	-73	0	0	3.150	31	0.70	2.20	31
TAHLEQUAH	8677	6	40.2	31	3.4	73	23	6	3	770	-105	0	0	1.510	31	-0.87	0.72	24
WEBBERS FALL	9445	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.900	29	*****	0.65	31
WETUMKA	9571	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.862	31	*****	1.13	24

## JANUARY 2002 SUMMARY FOR SOUTHWEST CLIMATE DIVISION (CD7)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ALTUS	179	7	41.0	31	3.7	80	28	15	3	744	-116	0	0	1.750	31	0.79	1.03	31
ALTUS DAM	184	7	42.9	31	5.8	76	23	15	3	687	-179	0	0	3.150	31	2.13	2.45	31
ANADARKO	224	7	38.9	30	4.0	73	29	6	4	784	-151	0	0	1.770	31	0.68	1.14	31
APACHE	260	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.500	31	*****	1.05	31
ALTUS AFB	447	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.011	17	*****	0.01	5
CARNEGIE	1504	7	41.5	29*	****	75	10	11	3	681	*****	0	*****	0.421	29	*****	0.33	5
CHATTANOOGA	1706	7	40.7	31	3.5	78	29	11	3	754	-109	0	0	2.020	31	0.96	0.81	2
DUNCAN 11 W	2668	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.032	31	*****	0.64	5
FREDERICK	3353	7	42.7	29*	****	78	28	16	2	646	*****	0	*****	1.240	30	*****	0.46	30
HEADRICK	3998	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.510	31	*****	0.70	31
HOBART	4204	7	41.4	29*	****	73	28	13	3	684	*****	0	*****	0.162	29	*****	0.11	29
HOLLIS	4249	7	40.2	31	2.1	73	22	12	3	769	-67	0	0	1.050	31	0.42	1.03	31
LAWTON	5063	7	42.5	31	4.3	76	29	14	3	698	-133	0	0	1.481	31	0.33	0.55	31
LOOKEBA	5329	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.071	31	*****	1.90	31
MANGUM	5509	7	40.7	31	4.2	77	29	16	22	754	-132	0	0	1.710	31	0.81	1.71	31
RANDLETT	7403	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.930	31	*****	0.61	31
ROOSEVELT	7727	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.880	31	*****	1.10	31
SEDAN	8016	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.961	31	*****	2.10	31
SNYDER	8299	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.503	31	*****	0.75	31
VINSON	9212	7	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.160	31	*****	1.00	31
WALTERS	9278	7	41.5	31	3.4	78	29	11	3	727	-109	0	0	1.560	31	0.11	0.62	31
WICHITA MT	9629	7	41.1	25*	****	74	30	8	3	597	*****	0	*****	1.180	25	*****	0.76	30

## JANUARY 2002 SUMMARY FOR SOUTH CENTRAL CLIMATE DIVISION (CD8)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ADA	17	8	41.3	31	2.5	74	28	9	3	736	-79	0	0	1.301	31	-0.55	0.47	5
ALLEN	147	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.440	31	*****	1.04	31
ARDMORE	292	8	44.6	29*	****	75	29	15	2	593	*****	0	*****	0.950	31	-0.89	0.50	6
ATOKA DAM	394	8	40.8	31	2.0	74	30	9	4	751	-63	0	0	2.200	31	0.05	1.22	31
BOKCHITO	917	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.050	31	*****	1.00	24
CANEY	1437	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.360	31	*****	1.54	31
CENTRAHOMA	1648	8	40.8	31*	****	76	30	10	4	750	*****	0	*****	2.100	31	*****	1.10	31
CHICKASAW	1745	8	40.3	25*	****	73	31	8	3	618	*****	0	*****	1.751	26	*****	0.70	24
COLEMAN	2011	8	43.0	27*	****	74	29	10	2	594	*****	0	*****	3.030	31	*****	1.15	24
COMANCHE	2054	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.750	31	*****	1.20	4
DAISY	2354	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.090	31	*****	2.00	31
DUNCAN	2660	8	42.3	31	4.1	75	29	12	4	705	-129	0	0	1.830	31	0.43	0.76	5
DURANT	2678	8	42.1	31	2.7	75	29	11	3	711	-84	0	0	3.002	31	0.77	1.53	30
ELMORE CITY	2872	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.280	31	*****	0.68	31
GRADY	3688	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.550	31	*****	0.95	5
HEALDTON	4001	8	43.2	31	4.6	76	29	10	4	677	-142	0	0	1.290	31	-0.40	0.65	5
HENNEPIN	4052	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.290	31	*****	0.64	5
KETCHUM RAN	4780	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.610	31	*****	0.70	5
KINGSTON	4865	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.100	31	*****	1.40	24
LEHIGH	5108	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.603	31	*****	0.90	31
LINDSAY	5216	8	40.7	31	4.1	74	28	9	3	754	-129	0	0	3.080	31	1.54	1.20	23
LOCO	5247	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.310	31	*****	0.58	5
MADILL	5468	8	44.3	30	5.5	76	30	12	3	620	-192	0	0	1.530	30	*****	0.64	5
MARIETTA 5 SW	5563	8	42.2	31	2.3	75	30	8	4	706	-74	0	0	1.160	31	-0.57	0.58	5
MARLOW	5581	8	43.7	31*	****	76	28	7	3	659	*****	0	*****	1.921	31	*****	0.77	5
MCGEE CREEK	5713	8	42.4	31	3.4	74	30	13	3	701	-106	0	0	2.810	31	0.29	1.76	31
PAULS VALLEY	6926	8	40.2	31	3.1	76	29	8	4	770	-96	0	0	1.730	31	0.06	0.80	31
PONTOTOC	7214	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.731	31	*****	0.60	30
TISHOMINGO	8884	8	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.000	31	*****	1.10	30
WAURIKA	9395	8	44.9	30	3.0	79	28	11	3	603	-114	0	0	1.411	31	0.15	0.81	5

## JANUARY 2002 SUMMARY FOR SOUTHEAST CLIMATE DIVISION (CD9)

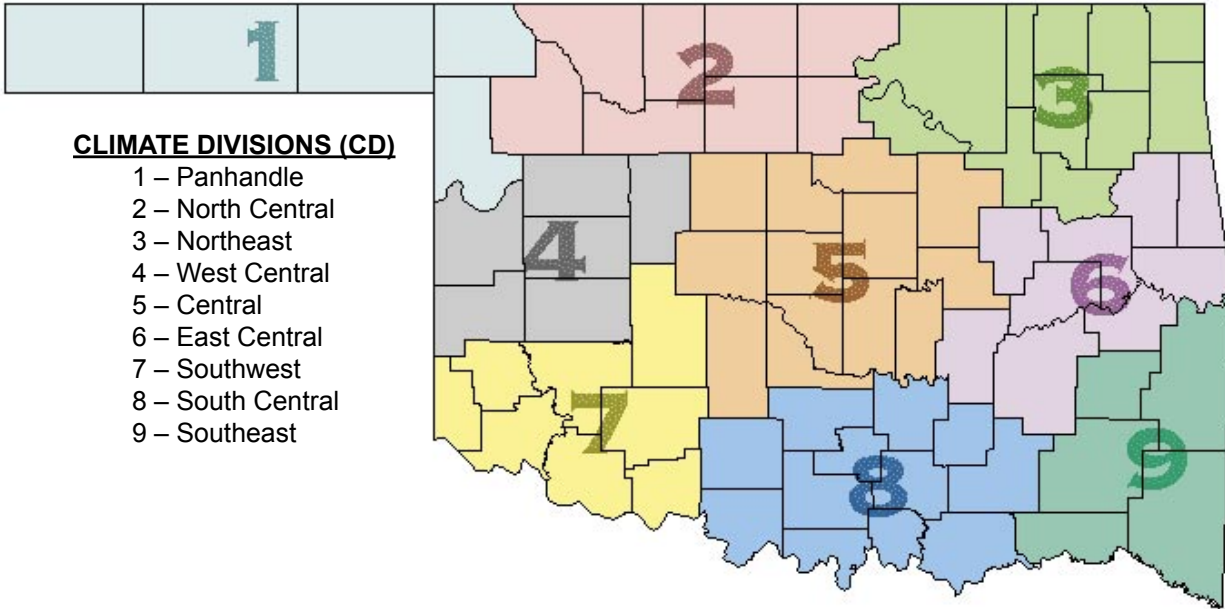
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	41.1	31	0.9	73	30	11	3	741	-28	0	0	5.420	31	3.27	2.57	31
BATTIEST	567	9	39.3	31	2.3	77	31	8	4	797	-74	0	0	5.052	31	1.81	1.88	31
BENGAL	670	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.760	31	*****	1.76	24
BROKEN BOW	1162	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	4.050	31	*****	1.50	31
CARTER TWR	1544	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.100	30	*****	0.86	24
FANSHAWE	3065	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	4.610	31	*****	2.18	31
HEAVENER	4008	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	5.640	31	*****	1.96	30
HUGO	4384	9	44.0	30	3.9	77	24	12	4	630	-144	0	0	5.990	31	3.41	3.23	31
IDABEL	4451	9	45.6	28 *	****	77	31	16	3	548	*****	6	*****	3.030	31	-0.13	0.94	23
PAGE	6842	9	42.2	27 *	****	73	31	5	3	617	*****	2	*****	2.290	28	*****	2.00	31
SMITHVILLE	8285	9	51.7	8 *	****	78	31	17	26	107	*****	0	*****	5.230	31	1.93	1.82	31
SPIRO	8416	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	2.810	31	*****	1.23	31
TUSKAHOMA	9023	9	44.1	31	3.4	73	29	7	3	649	-106	2	2	3.601	31	1.08	2.20	31
VALLIANT	9118	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.800	31	*****	1.46	31
WILBURTON	9634	9	42.4	31	3.1	74	29	8	3	701	-95	0	0	3.000	31	0.24	1.70	30
WISTER	9724	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	3.810	31	*****	2.31	31

## JANUARY 2002 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	37.1	6	4.2	80	9	2	3	850	-146	0	0	0.790	7	0.28	0.95	31
CLIMATE DIVISION 2	2	37.2	10	4.6	79	8	1	4	844	-160	0	0	1.740	18	0.79	2.20	30
CLIMATE DIVISION 3	3	39.4	12	4.1	75	9	0	3	788	-137	0	0	2.970	18	1.29	2.72	31
CLIMATE DIVISION 4	4	39.2	7	4.5	79	9	1	4	782	-160	0	0	1.550	15	0.69	2.40	30
CLIMATE DIVISION 5	5	40.4	13	4.4	78	9	6	4	755	-146	0	0	2.650	27	1.33	3.00	30
CLIMATE DIVISION 6	6	41.0	10	3.9	77	28	6	3	741	-125	0	0	2.270	22	0.09	2.20	31
CLIMATE DIVISION 7	7	41.0	8	4.1	80	28	6	4	739	-131	0	0	1.830	17	0.76	2.45	31
CLIMATE DIVISION 8	8	42.2	13	3.4	79	28	7	3	703	-109	0	0	1.960	28	0.13	2.00	31
CLIMATE DIVISION 9	9	42.2	5	2.9	78	31	5	3	703	-94	0	0	4.270	14	1.46	3.23	31

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 JANUARY 2002

NAME	MEAN MAX			MIN			TOT MAX			NAME	MEAN MAX			MIN			TOT MAX				
	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR		DAY	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY
<b>PANHANDLE</b>																					
Arnett	38.2	76	8	7	3	831	0	0.12	0.11	4	Goodwell	35.5	78	8	4	2	914	0	0.22	0.14	10
Beaver	36.3	78	8	6	2	891	0	0.10	0.06	19	Hooker	34.6	78	8	5	2	941	0	0.05	0.02	1
Boise City	34.8	77	8	4	3	935	0	0.34	0.14	10	Kenton	34.3	77	8	-7	3	952	0	0.40	0.22	10
Buffalo	36.5	77	8	0	3	882	0	0.04	0.03	1	Slapout	37.8	77	8	9	2	843	0	0.12	0.07	4
<b>NORTH CENTRAL</b>																					
Alva	37.9	79	8	4	3	840	0	0.04	0.03	31	May Ranch	38.3	75	8	5	2	829	0	0.00	0.00	1
Blackwell	37.0	73	9	3	3	867	0	1.18	1.08	30	Medford	37.3	72	8	5	3	860	0	0.07	0.05	19
Breckenridge	38.3	74	9	5	3	829	0	0.35	0.12	5	Newkirk	37.8	70	22	7	3	844	0	1.83	1.70	30
Cherokee	38.0	75	8	6	3	838	0	0.02	0.02	30	Red Rock	39.0	75	9	5	3	804	0	3.26	2.27	30
Fairview	40.1	78	8	7	3	772	0	0.08	0.05	4	Seiling	37.6	79	8	7	3	850	0	0.08	0.04	1
Freedom	37.6	78	8	4	2	850	0	0.04	0.04	30	Woodward	39.7	78	8	9	2	784	0	0.06	0.06	1
Lahoma	38.1	76	9	6	3	832	0	0.12	0.08	5											
<b>NORTHEAST</b>																					
Bixby	39.8	74	28	8	3	781	0	2.09	1.03	30	Nowata	36.2	68	23	3	3	894	0	3.80	2.80	30
Burbank	38.3	73	9	7	2	802	0	2.71	1.97	30	Pawnee	38.8	75	9	4	3	812	0	2.75	2.16	30
Claremore	38.8	72	28	5	3	813	0	3.26	2.05	30	Porter	40.9	74	28	11	3	747	0	3.01	1.49	23
Copan	37.6	66	27	4	3	848	0	2.78	2.38	30	Pryor	37.7	71	28	6	3	845	0	2.90	1.25	30
Foraker	37.4	70	9	5	3	857	0	0.20	0.10	23	Skiatook	39.8	70	9	7	3	781	0	4.12	2.91	30
Inola	38.9	73	28	7	3	809	0	1.82	0.93	30	Vinita	36.2	68	28	5	3	891	0	3.02	1.99	30
Jay	38.4	71	23	5	3	823	0	3.09	1.89	30	Wynona	38.7	73	9	5	3	814	0	*****	*****	**
Miami	36.9	68	28	7	3	872	0	2.69	1.72	30											
<b>WEST CENTRAL</b>																					
Bessie	41.1	74	8	14	3	740	0	1.62	1.43	30	Putnam	39.1	75	8	10	3	804	0	0.10	0.05	4
Butler	39.7	79	8	10	3	785	0	0.82	0.60	30	Retrop	42.2	75	8	14	3	661	0	0.57	0.20	31
Camargo	37.3	79	8	2	3	860	0	0.17	0.08	1	Watonga	39.7	74	8	13	3	784	0	0.12	0.03	4
Cheyenne	40.5	78	8	15	3	758	0	0.18	0.07	4	Weatherford	39.8	72	8	13	3	780	0	0.14	0.11	31
Erick	40.1	79	8	13	3	771	0	0.26	0.15	30											
<b>CENTRAL</b>																					
Acme	41.8	73	28	10	2	720	0	2.51	0.95	30	Minco	40.3	72	9	11	3	766	0	0.58	0.39	5
Bowlegs	41.0	74	28	6	3	745	0	2.17	0.66	23	Ninnekah	41.5	73	9	10	3	727	0	2.33	1.03	30
Bristow	39.5	73	9	6	3	791	0	2.69	1.47	30	Norman	40.8	73	9	8	3	750	0	2.04	1.35	30
Chandler	41.1	72	9	7	3	740	0	2.14	1.38	30	Oilton	38.2	74	9	3	3	829	0	4.06	3.12	30
Chickasha	40.2	73	9	9	3	769	0	2.23	1.15	30	Okemah	40.5	75	28	7	3	760	0	2.17	0.97	23
El Reno	38.5	74	8	3	2	821	0	0.41	0.16	5	Perkins	39.9	73	9	7	3	779	0	2.91	2.37	30
Guthrie	40.7	76	9	8	3	753	0	1.57	1.22	30	Shawnee	41.6	74	28	11	3	725	0	1.93	0.84	30
Kingfisher	39.3	75	8	6	3	797	0	2.69	1.98	30	Spencer	41.4	73	9	8	3	733	0	2.16	0.86	31
Marena	39.8	76	9	5	3	780	0	3.03	2.32	30	Stillwater	38.8	75	9	5	3	813	0	3.21	2.51	30
Marshall	38.5	74	9	5	3	820	0	2.82	2.00	30	Washington	41.5	73	28	10	3	728	0	2.70	1.06	23
<b>EAST CENTRAL</b>																					
Calvin	40.8	73	28	8	3	750	0	1.17	0.30	5	Sallisaw	40.2	74	28	10	3	769	0	3.05	1.19	31
Cookson	39.5	74	23	5	3	790	0	2.76	1.11	31	Stigler	40.8	75	23	10	3	749	0	3.85	1.96	23
Eufaula	42.3	74	29	12	3	703	0	2.14	0.70	23	Stuart	42.2	73	28	10	3	707	0	2.48	0.80	30
Haskell	39.8	74	28	10	3	782	0	2.41	0.94	23	Talleguah	38.7	72	23	8	3	814	0	1.65	0.58	30
Hectorville	41.7	74	28	10	3	723	0	1.96	0.90	30	Webbers Falls	40.6	78	23	9	3	756	0	2.05	0.79	31
McAlester	41.9	74	29	8	3	715	0	3.61	1.61	23	Westville	39.7	73	23	12	2	785	0	2.58	0.85	31
Okmulgee	40.1	76	28	7	3	771	0	1.95	0.74	23											
<b>SOUTHWEST</b>																					
Altus	42.7	79	28	14	25	692	0	1.92	1.65	30	Hollis	42.3	78	8	14	3	703	0	0.91	0.91	30
Apache	40.9	72	9	11	3	746	0	0.79	0.39	5	Mangum	40.5	76	22	10	2	760	0	2.51	2.40	30
Fort Cobb	40.6	74	9	9	3	755	0	3.16	2.59	30	Medicine Park	43.3	75	28	16	3	674	0	1.33	0.73	30
Grandfield	43.8	79	28	16	2	656	0	1.31	0.67	30	Tipton	42.7	79	28	14	3	690	0	1.04	0.72	30
Hinton	40.3	73	9	12	3	765	0	0.73	0.40	30	Walters	43.3	78	28	11	3	673	0	1.38	0.63	30
Hobart	40.4	73	9	13	3	761	0	0.21	0.10	31											
<b>SOUTH CENTRAL</b>																					
Ada	41.8	75	28	8	3	719	0	1.11	0.34	30	Lane	41.8	74	29	11	3	719	0	2.73	1.25	31
Ardmore	44.4	75	29	11	3	639	0	0.79	0.28	5	Madill	43.9	75	29	11	3	592	0	1.12	0.42	5
Bee	42.7	72	29	11	3	690	0	*****	*****	**	Pauls Valley	42.6	76	28	11	3	694	0	1.65	0.59	30
Burneyville	43.9	76	9	8	3	634	0	0.87	0.28	5	Ringling	43.1	75	28	11	3	679	0	1.33	0.50	5
Byars	42.7	74	28	12	3	690	0	1.68	0.44	30	Sulphur	41.8	73	28	8	3	720	0	1.24	0.45	30
Centrahoma	40.9	75	29	8	3	747	0	2.05	0.97	30	Tishomingo	42.0	73	29	9	3	712	0	1.31	0.53	30
Durant	43.8	73	29	13	3	657	0	3.61	1.47	31	Vanoss	42.2	76	28	7	3	706	0	1.50	0.52	30
Ketchum Ranch	42.7	76	28	10	3	692	0	1.55	0.58	30	Waurika	44.2	79	28	11	3	643	0	1.55	0.62	30
<b>SOUTHEAST</b>																					
Antlers	41.2	74	29	4	3	738	0	5.15	2.39	31	Idabel	44.1	79	30	14	3	650	2	4.68	1.95	31
Broken Bow	43.4	79	30	12	3	670	1	5.38	2.27	31	Mt Herman	42.3	75	30	9	3	706	1	6.10	3.01	31
Clayton	42.2	74	29	10	3	705	0	4.16	1.86	31	Talihina	42.4	74	23	10	3	704	4	4.72	2.70	31
Cloudy	42.7	75	30	10	3	691	0	6.82	3.56	31	Wilburton	40.8	75	29	7	3	750	0	2.48	1.42	31
Hugo	43.8	72	9	13	3	659	2	6.31	3.26	31	Wister	40.0	75	23	8	4	774	0	4.64	2.20	31



## EXTREME VALUES OF TEMPERATURE AND PRECIPITATION IN EACH CLIMATE DIVISION JANUARY 2002

CD	MAX TEMP	DATE	LOCATION	MIN TEMP	DATE	LOCATION	24-HOUR PRECIP	DATE	LOCATION	MONTHLY PRECIP	LOCATION
1	80	9	GOODWELL	2	3	GOODWELL	.95	31	LAVERNE	1.27	FARGO
2	79	9	FREEDOM	1	3	FREEDOM	2.20	30	PERRY	3.44	PERRY
	79	8	WAYNOKA	1	4	FREEDOM					
3	75	9	MANNFORD	0	3	RALSTON	2.72	31	MANNFORD	4.50	MANNFORD
4	79	9	ERICK	1	1	TALOGA	2.40	30	GEARY	2.90	WEATHERFORD
	79	9	HAMMON	1	3	TALOGA					
	79	9	REYDON	1	4	TALOGA					
5	78	9	KINGFISHER	6	3	BRISTOW	3.00	30	EL RENO	3.74	HENNESSEY
				6	3	GUTHRIE					
				6	4	MEEKER					
				6	3	STILLWATER					
				6	3	WANETTE					
6	77	28	OKMULGEE	6	3	TAHLEQUAH	2.20	31	STILWELL	3.99	SALLISAW
7	80	28	ALTUS	6	3	ANADARKO	2.45	31	ALTUS DAM	3.15	ALTUS DAM
				6	4	ANADARKO					
8	79	28	WAURIKA	7	3	MARLOW	2.00	31	DAISY	3.10	KINGSTON
9	78	31	SMITHVILLE	5	3	PAGE	3.23	31	HUGO	5.99	HUGO

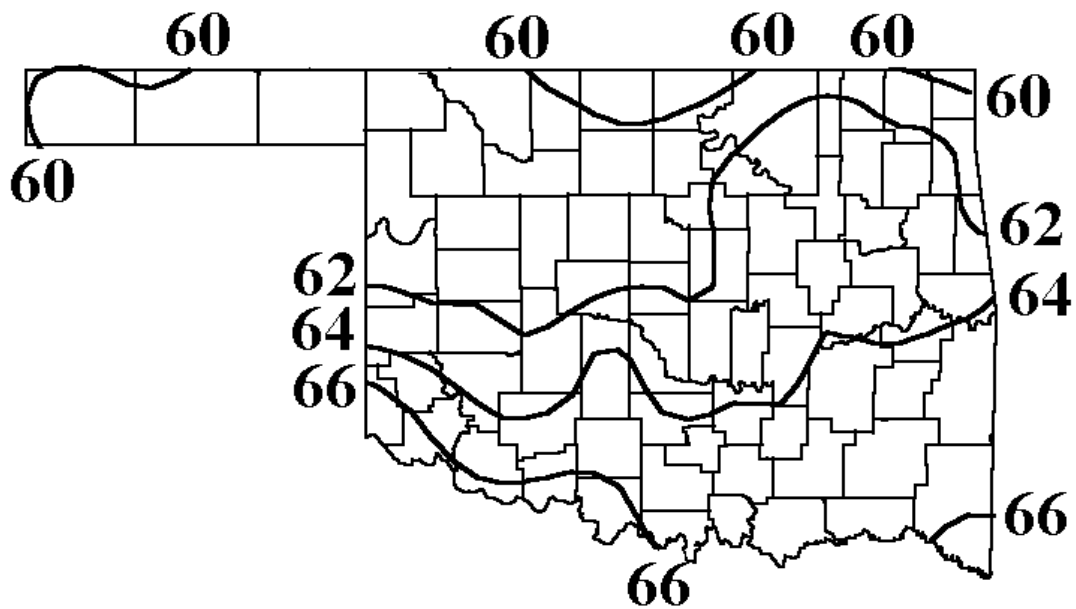
### TABLE OF 2001/2002 COMPARISONS

Station	JANUARY Temperature ( F)		JANUARY Precipitation (in.)	
	2001	2002	2001	2002
Arnett	33.6	36.3	1.85	1.21
Enid	34.0	38.9	1.73	2.07
Tulsa	35.3	40.3	2.09	2.67
Elk City	35.0	40.1	1.36	1.16
Oklahoma City	36.3	40.0	2.23	2.62
McAlester	39.3	41.7	2.07	3.36
Altus Irr Station	37.0	41.0	1.94	1.75
Ardmore	39.6	44.6	2.86	0.95
Idabel	40.6	45.6	2.43	3.03

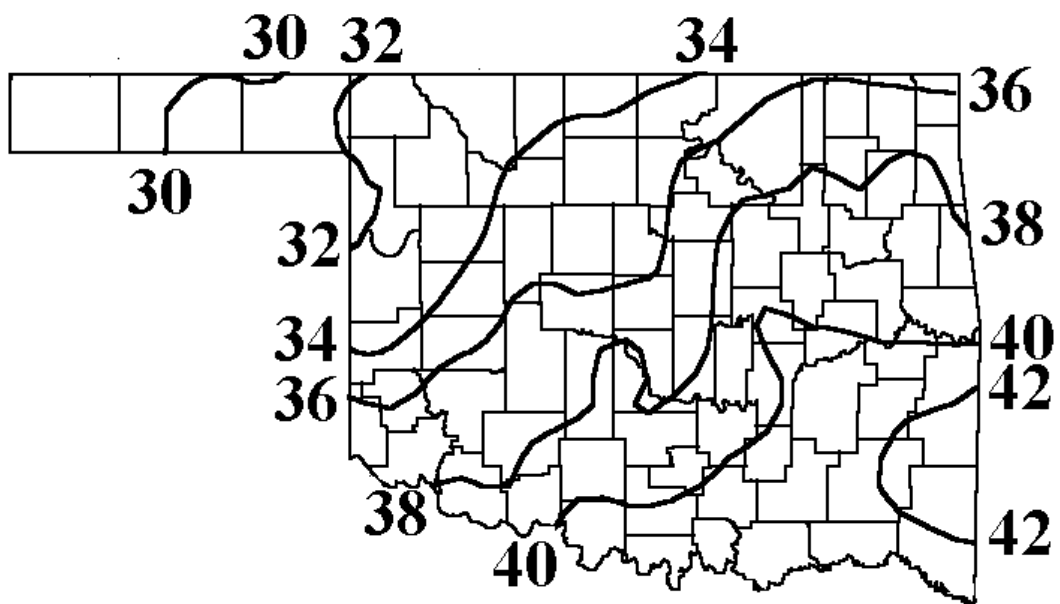
### JANUARY 2002 STATEWIDE EXTREMES

VARIABLE	STATION	DIVISION	OBSERVATION	DATE
Minimum temperature ( F)	Ralston	3	0	3
Maximum temperature ( F)	Goodwell	1	80	9
	Altus	7	80	28
Maximum 24-hour Precipitation	Hugo	9	3.23	31

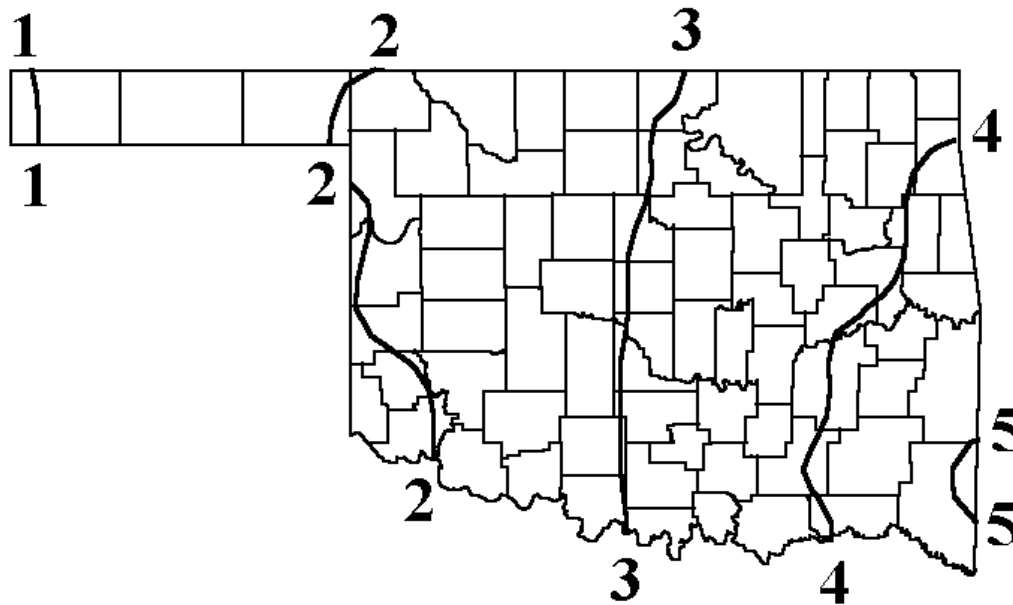
MARCH NORMAL DAILY MAXIMUM TEMPERATURE (°F)



MARCH NORMAL DAILY MINIMUM TEMPERATURE (°F)



## MARCH NORMAL MONTHLY PRECIPITATION (INCHES)



## MARCH TORNADO STATISTICS

The most tornadoes reported in **MARCH** for Oklahoma was (17) in 1991.

The average number of tornadoes in **MARCH** for Oklahoma is (3.6).

## OUTLOOK FOR MARCH 2002 THROUGH MAY 2002

BASED ON SEASONAL OUTLOOK PROVIDED BY THE CLIMATE PREDICTION CENTER

**Temperature: Above Normal Temperature Statewide**

**Precipitation: Near Normal Precipitation Statewide**

**OKLAHOMA CITY CLIMATE CALENDAR**

**MARCH**

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	Record High	Lowest Max	Year	Ave. Low	2002	Highest Min.	Year	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	45	57	85	20	1976	34		56	1940	4	1913	0.08		1.71	1948
2	46	57	88	23	1904	34		62	1976	6	1922	0.08		2.04	1988
3	46	57	84	18	1955	34		59	1992	3	1960	0.08		1.46	1985
4	46	58	84	18	1938	35		60	1938	8	1960	0.08		0.67	1933
5	46	58	91	24	1991	35		59	1921	10	1960	0.08		2.13	1894
6	47	58	83	21	1974	35		58	1911	8	1943	0.08		1.45	1973
7	47	59	83	22	1925	35		61	1974	7	1920	0.09		1.33	1905
8	48	59	84	26	1911	36		60	1897	9	1967	0.09		1.82	1994
9	48	60	89	29	1932	36		61	1886	11	1932	0.09		0.88	1913
10	48	60	89	26	1955	36		61	1990	4	1948	0.09		1.48	1974
11	49	60	93	16	1967	37		61	1911	1	1948	0.09		2.16	1902
12	49	61	90	27	1967	37		59	1972	4	1948	0.09		1.81	1999
13	49	61	90	34	1924	37		66	1918	14	1950	0.09		1.39	1922
14	50	61	84	26	1996	38		56	1955	13	1895	0.09		1.04	1990
15	50	62	84	28	1943	38		58	1919	13	1895	0.09		2.34	1944
16	50	62	84	28	1908	38		56	1945	18	1895	0.09		1.71	1998
17	51	62	91	24	1908	39		59	1992	11	1892	0.09		0.85	1905
18	51	63	89	30	1907	39		62	1898	9	1923	0.09		0.52	1998
19	51	63	97	26	1907	39		63	1921	10	1923	0.09		1.73	1903
20	52	63	92	33	1907	40		64	1935	12	1965	0.09		2.18	1985
21	52	64	95	29	1916	40		64	1907	16	1913	0.09		1.23	1921
22	52	64	89	33	1995	40		63	1907	13	1955	0.09		1.37	1979
23	53	64	88	36	1929	41		64	1907	20	1898	0.09		2.35	1984
24	53	65	91	30	1929	41		64	1904	23	1965	0.09		1.82	1920
25	53	65	88	33	1976	42		64	1907	18	1955	0.09		1.65	1922
26	54	66	85	33	1972	42		67	1907	13	1955	0.09		2.02	1938
27	54	66	90	32	1895	42		68	1907	13	1913	0.09		2.09	1912
28	54	66	88	36	1928	43		62	1985	16	1931	0.09		2.84	1988
29	55	67	87	34	1895	43		65	1963	19	1894	0.09		0.99	1897
30	55	67	88	28	1904	43		65	1895	22	1987	0.08		1.82	1963
31	56	67	94	40	1940	44		62	1967	20	1926	0.08		1.29	1988
<b>MONTH</b>	<b>50.3</b>	<b>62</b>	<b>97</b>	<b>16</b>	<b>1907</b>	<b>38.5</b>		<b>68</b>	<b>1907</b>	<b>1</b>	<b>1948</b>	<b>2.71</b>		<b>2.84</b>	<b>1988</b>

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

**TULSA CLIMATE CALENDAR**

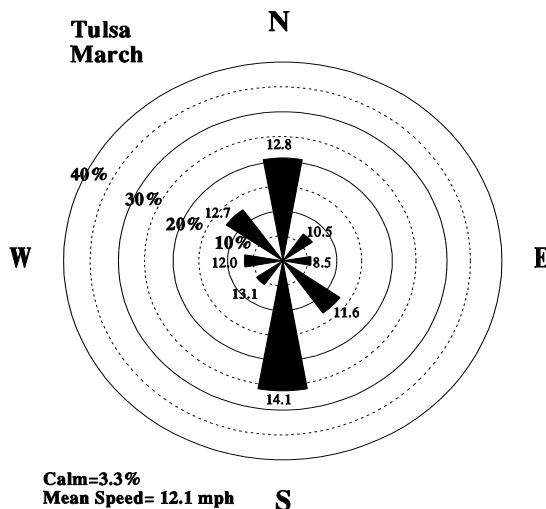
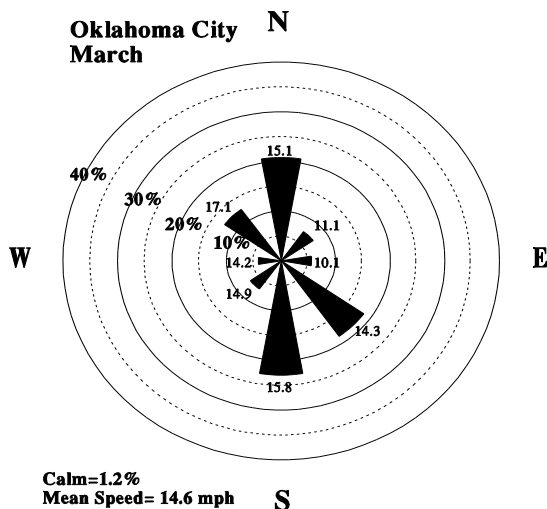
**MARCH**

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	Year	Lowest Max	Year	Ave. Low	2002	Highest Min.	2002	Record Low	Year	Avg. Precip.	2002	Greatest Precip.	Year
1	45	56	81	1967	26	1980	34		61	1932	9	1962	0.09		1.63	1973
2	45	56	84	1976	21	1943	34		59	1970	7	1943	0.10		2.06	1988
3	46	57	82	1955	25	1960	34		64	1960	3	1943	0.10		1.45	1953
4	46	57	83	1938	18	1960	35		57	1992	6	1960	0.10		1.53	1915
5	46	58	88	1991	20	1960	35		60	1956	5	1960	0.10		1.16	1933
6	47	58	87	1974	24	1943	35		64	1916	13	1943	0.10		1.57	1973
7	47	58	83	1925	31	1996	36		66	1974	6	1920	0.10		2.72	1998
8	48	59	87	1925	24	1932	36		63	1974	5	1967	0.11		1.67	1994
9	48	59	88	1911	28	1932	37		61	1925	8	1996	0.11		1.95	1922
10	48	60	91	1955	29	1948	37		60	1955	4	1948	0.11		1.91	1974
11	49	60	94	1967	17	1948	37		62	1967	-1	1948	0.11		1.97	1935
12	49	61	91	1967	29	1950	38		63	1967	-3	1948	0.11		1.85	1902
13	49	61	92	1967	33	1975	38		64	1938	12	1948	0.11		1.40	1937
14	50	61	85	1977	30	1906	38		58	1944	13	1975	0.11		1.56	1945
15	50	62	84	1921	30	1906	39		64	1905	21	1970	0.11		2.64	1944
16	51	62	86	1908	31	1906	39		58	1982	22	1962	0.12		1.34	1998
17	51	63	88	1916	34	1970	39		59	1992	20	1906	0.12		1.45	1977
18	51	63	99	1907	30	1965	40		63	1933	12	1923	0.12		1.29	1905
19	52	63	96	1907	32	1965	40		65	1921	8	1923	0.12		1.15	1968
20	52	64	92	1907	39	1983	41		68	1921	11	1965	0.12		1.70	1909
21	53	64	98	1916	32	1912	41		66	1907	18	1974	0.12		3.25	1921
22	53	65	94	1995	40	1952	41		67	1995	15	1955	0.12		1.25	1926
23	53	65	91	1907	33	1974	42		61	1994	21	1968	0.12		2.50	1969
24	54	65	91	1929	30	1965	42		62	1910	19	1966	0.12		2.00	1913
25	54	66	88	1910	28	1965	42		66	1935	18	1955	0.12		3.18	1920
26	54	66	87	1918	34	1955	43		70	1991	14	1955	0.12		2.48	1922
27	55	66	88	1956	36	1913	43		69	1907	13	1913	0.12		1.86	1975
28	55	67	90	1963	37	1931	43		69	1985	17	1931	0.12		2.55	1912
29	56	67	90	1967	34	1987	44		67	1963	24	1944	0.12		2.15	1918
30	56	68	86	1981	35	1926	44		66	1967	21	1964	0.11		1.78	1973
31	56	68	96	1974	44	1926	45		68	1917	24	1926	0.11		1.21	1957
<b>MONTH</b>	<b>51</b>	<b>62</b>	<b>99</b>	<b>1907</b>	<b>17</b>	<b>1948</b>	<b>39</b>		<b>70</b>	<b>1991</b>	<b>-3</b>	<b>1948</b>	<b>0.11</b>		<b>3.25</b>	<b>1921</b>

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

## MARCH WIND ROSES



**March 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.

## MARCH SUNRISE/SUNSET TIMES FOR 2002

ALL TIMES ARE CENTRAL STANDARD TIME

### OKLAHOMA CITY

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

### TULSA

DATE	SUNRISE	SUNSET
3/1/02	6:54 AM	6:19 PM
3/2/02	6:53 AM	6:19 PM
3/3/02	6:51 AM	6:20 PM
3/4/02	6:50 AM	6:21 PM
3/5/02	6:49 AM	6:22 PM
3/6/02	6:47 AM	6:23 PM
3/7/02	6:46 AM	6:24 PM
3/8/02	6:45 AM	6:25 PM
3/9/02	6:43 AM	6:26 PM
3/10/02	6:42 AM	6:27 PM
3/11/02	6:40 AM	6:28 PM
3/12/02	6:39 AM	6:29 PM
3/13/02	6:38 AM	6:29 PM
3/14/02	6:36 AM	6:30 PM
3/15/02	6:35 AM	6:31 PM
3/16/02	6:33 AM	6:32 PM
3/17/02	6:32 AM	6:33 PM
3/18/02	6:30 AM	6:34 PM
3/19/02	6:29 AM	6:35 PM
3/20/02	6:27 AM	6:36 PM
3/21/02	6:26 AM	6:36 PM
3/22/02	6:25 AM	6:37 PM
3/23/02	6:23 AM	6:38 PM
3/24/02	6:22 AM	6:39 PM
3/25/02	6:20 AM	6:40 PM
3/26/02	6:19 AM	6:41 PM
3/27/02	6:17 AM	6:41 PM
3/28/02	6:16 AM	6:42 PM
3/29/02	6:14 AM	6:43 PM
3/30/02	6:13 AM	6:44 PM
3/31/02	6:12 AM	6:45 PM

## CONTACT INFORMATION

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