

# OKLAHOMA CLIMATOLOGICAL SURVEY



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# OKLAHOMA REVISED MONTHLY SUMMARY OCTOBER 1997

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## MONTHLY SUMMARY FOR OCTOBER 1997

An extended period of locally heavy rain in central and eastern Oklahoma and a rare autumn blizzard in the Panhandle combined to give the state a wetter- and cooler-than-normal October. The statewide-averaged monthly precipitation of 3.92 inches, 0.85 inch greater than normal, is the 29th greatest October precipitation in the state since 1892. Oklahoma's year-to-date precipitation of 34.06 inches, 3.91 inches greater than normal, ranks 25th on the 106-year-long all-time list. The statewide-averaged monthly temperature, 61.7 degrees, was 0.4 degree less than normal, ranking as the state's 40th coolest October. The year-to-date average temperature for the state is 62.7 degrees, 0.8 degree lower than normal, making 1997, so far, the 24th coolest year on record.

An approaching low pressure system, evident in the upper atmosphere ended a period of warm, early-autumn weather on the 6th, ushering in a week-long period of locally heavy rains over most of the state. Heavy thunderstorms on the 8th produced a small tornado near Billings (Noble County) along with large hail and strong winds in central and northeastern Oklahoma. Local flooding was reported in east central Oklahoma on the evening of the 8th and the morning of the 9th, in response to heavy downpours that yielded daily precipitation reports of 5.85 inches at Webbers Falls (Muskogee), 4.71 inches at Haskell (Muskogee), 4.48 inches at Beggs (Okmulgee), 4.10 inches at Dewar (Okmulgee) and 4.05 inches at Stroud (Lincoln). Elsewhere in the state, Waurika Mesonet (Jefferson) recorded 4.30 inches on the 9th and Idabel (McCurtain) reported 3.58 inches on the 10th. Daily rainfall amounts of between two and three inches were again recorded in most areas of the state on the 12th.

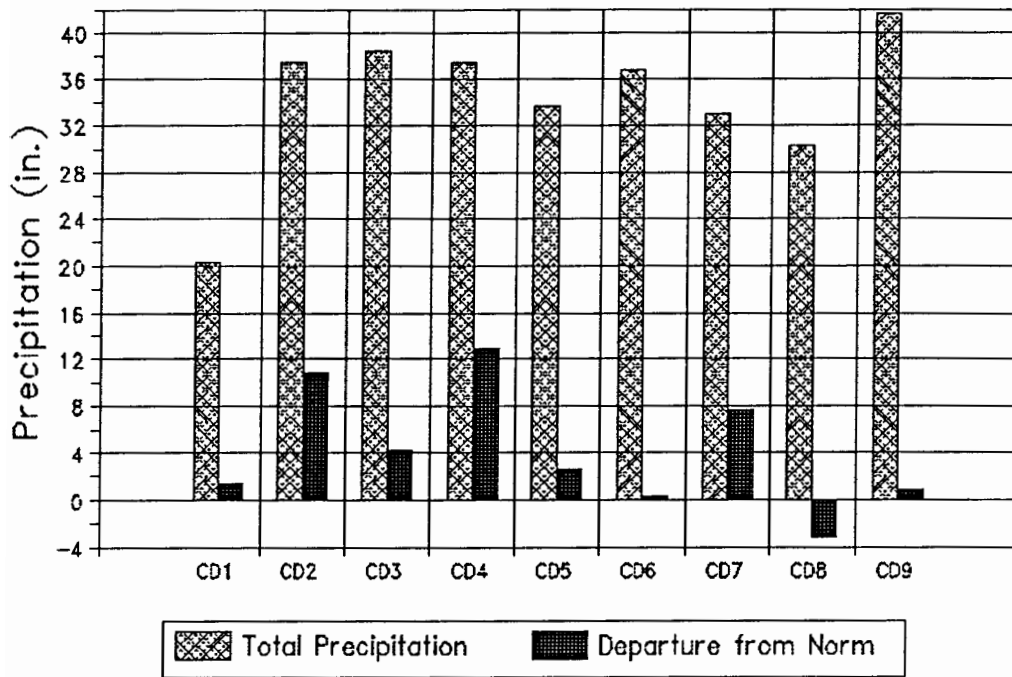
Precipitation totals recorded from the 7th through the early morning hours of the 13th included: 8.17 inches at Webbers Falls, 7.83 inches at Cookson Mesonet (Cherokee), 7.34 inches at Idabel, 7.04 inches at Broken Bow Mesonet (McCurtain), 6.77 inches at Sallisaw (Sequoyah), and 6.55 inches at Smithville (McCurtain). Strong winds heralded the final passage of the storm system on the 12th, as 26 of the 114 reporting stations of the Oklahoma Mesonet, all northwest of a line drawn from Newkirk (Kay) in north central Oklahoma to Hobart (Kiowa) in the southwest, recorded average wind speeds for the entire day in excess of 20 miles per hour.

Although Goodwell (Texas) recorded the state's first sub-freezing temperature of the autumn on October 14 (30 degrees), Oklahoma enjoyed several days of mild, mostly dry, fall weather from the 13th through the 24th. That period ended abruptly on the 25th when a major winter storm that formed in the lee of the Rockies on Colorado's southern High Plains sank southward into the Texas Panhandle and then moved rapidly and forcefully northeastward across western Oklahoma. Far in advance of the storm, thunderstorms in southeastern Oklahoma produced hail and high winds and a tornado near Stigler (Haskell). Strong winds dominated most of western Oklahoma, and the western Panhandle was buried under wind-driven snow in a blizzard of major proportions. Peak wind reports from Oklahoma Mesonet sites included: 66 miles per hour at Goodwell, 63 miles per hour at Kenton (Cimarron), and 62 miles per hour at Boise City (Cimarron) and Hooker (Texas). Average wind speeds for the day were 37 miles per hour at Boise City, 34 miles per hour at Goodwell, and 30 miles per hour at both Hooker and Kenton. National Weather Service cooperative observers at Kenton and Regnier (Cimarron) reported 15 and 12 inches of snow, respectively. Boise City reported 8 inches, Guymon (Texas) noted 4.5 inches and Range (Texas) reported 4 inches. The report at Kenton appears to be the greatest October snowfall ever reported in the state. One death, caused by hypothermia related to the blizzard, occurred when an elderly Texas County woman tried to walk from her disabled automobile to her home, a mile away, during the height of the storm.

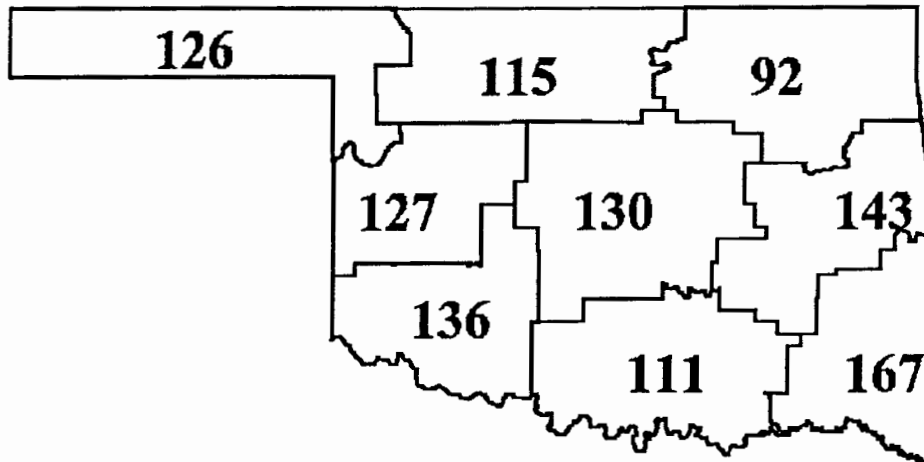
A general freeze spread across all but the extreme southeastern part of the state, bottoming out with a low temperature of 14 degrees reported at Freedom (Woods) on the 27th. The gradual warming trend that followed was accompanied by locally heavy rains in the southeast on the 30th and 31st. Smithville recorded 4.85 inches of rain for the 24 hours ending on the morning of the 31st, bringing its October total to 12.65 inches.

Howard L. Johnson

### CD Averaged Precipitation January through October 1997



### CD PERCENT OF NORMAL PRECIPITATION



**OCTOBER 1997**

OCTOBER 1997 SUMMARY FOR PANHANDLE DIVISION (CD1)

NAME	ID	CD	MEAN		DEV		MAX	MIN			HEAT		DEV		COOL		DEV		TOT	NUM	DEV		DAY
			TEMP	NUM	FROM	MAX		DAY	TEMP	DAY	DAY	DEG	FROM	DEG	FROM	DEG	FROM	DEG			FROM	FROM	
ARNETT	332	1	58.0	31	-0.8	91	3	20	27	286	63	67	36	3.140	31	1.31	1.66	12					
BEAVER	593	1	58.3	31	0.7	93	3	19	28	272	25	65	48	1.410	31	0.22	0.67	25					
BOISE CITY	908	1	55.5	31	-1.7	89	5	18	25	336	82	41	28	2.393	31	1.53	1.49	7					
BUFFALO	1243	1	61.7	31	0.1	97	2	21	27	209	53	108	57	1.700	31	-0.24	0.85	25					
FARGO	3070	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.081	31	0.44	0.97	12					
GAGE	3407	1	59.9	27*	****	95	2	19	27	218	*****	79	*****	1.525	28	*****	1.07	11					
GATE	3489	1	59.4	31	0.1	94	3	23	27	256	51	81	53	2.032	31	0.62	0.90	26					
GOODWELL	3628	1	58.7	31	1.9	94	4	19	27	273	5	79	65	0.730	31	-0.23	0.45	25					
GUYMON	3835	1	58.3	31*	****	93	3	19	25	287	*****	78	*****	0.410	31	*****	0.40	25					
HOOKER	4298	1	58.3	31	0.1	93	4	21	27	282	42	75	46	1.180	31	0.24	1.02	25					
KENTON	4766	1	57.1	29*	****	88	1	18	26	269	*****	39	*****	2.041	30	*****	1.27	26					
LAVERNE	5045	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.833	31	0.42	0.90	26					
RANGE	7412	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	0.581	31	*****	0.21	25					
REGNIER	7534	1	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.080	31	1.32	1.00	25					

OCTOBER 1997 SUMMARY FOR NORTH CENTRAL DIVISION (CD2)

NAME	ID	CD	MEAN		DEV		MAX	MIN			HEAT		DEV		COOL		DEV		TOT	NUM	DEV		DAY
			TEMP	NUM	FROM	MAX		DAY	TEMP	DAY	DAY	DEG	FROM	DEG	FROM	DEG	FROM	DEG			FROM	FROM	
ALVA	193	2	60.1	31*	****	96	3	21	27	244	*****	94	*****	2.410	31	*****	0.85	12					
VANCE AFB	302	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.831	27	*****	0.73	12					
BILLINGS	755	2	60.6	31	-0.3	93	3	31	28	229	62	93	53	2.700	31	-0.03	0.91	13					
BLACKWELL 2E	818	2	60.1	31	-1.1	92	3	32	28	241	85	89	50	4.342	31	1.64	2.62	13					
BRAMAN	1075	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.580	31	*****	1.53	13					
CEDARDALE	1620	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.491	31	*****	1.03	12					
CHEROKEE	1724	2	62.8	31	0.6	96	2	24	27	191	57	122	75	3.300	31	1.39	0.80	8					
ENID	2912	2	62.7	31	0.3	95	2	29	27	198	61	127	71	2.580	31	-0.53	1.38	12					
FREEDOM	3358	2	58.5	31	-2.5	97	3	14	27	281	120	78	41	1.390	31	-0.47	0.57	12					
HARDY	3909	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.220	31	*****	1.72	13					
HELENA	4019	2	60.7	31	0.9	94	3	25	27	238	45	104	73	2.602	31	0.51	1.01	13					
JEFFERSON	4573	2	61.8	31	-0.2	96	2	29	27	208	66	109	60	1.592	31	-1.06	0.73	11					
LAMONT	5013	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.810	31	*****	1.32	12					
MEDFORD	5768	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.451	31	*****	0.97	11					
MORRISON	6065	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.762	31	*****	1.54	13					
MUTUAL	6139	2	59.0	31	-0.4	95	3	22	27	268	65	84	55	2.740	31	1.06	0.97	9					
NEWKIRK	6278	2	60.0	31	-1.6	91	3	31	28	245	98	89	48	4.101	31	0.87	2.12	13					
ORIENTA	6751	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.780	31	-0.10	0.62	12					
PERRY	7012	2	61.7	25*	****	94	3	33	29	157	*****	74	*****	2.590	26	*****	1.35	12					
PONCA CITY	7201	2	64.2	29*	****	95	2	34	26	153	*****	131	*****	3.063	30	*****	1.94	12					
RED ROCK	7505	2	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.181	31	-0.61	1.21	13					

OCTOBER 1997 SUMMARY FOR CENTRAL DIVISION (CD5)

NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
AMBER	200	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.150	31	*****	1.10	12
BLANCHARD	830	5	63.6	30	0.2	94	2	34	27	159	38	116	45	4.600	31	1.23	1.87	13
BRISTOW	1144	5	62.3	31	-0.7	91	3	35	27	178	47	94	25	5.822	31	2.67	3.96	9
CHICKASHA EX	P 1750	5	64.0	31	1	95	2	30	27	156	31	127	64	4.700	31	1.45	1.07	13
COX CITY	2196	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.800	31	*****	1.26	13
EL RENO	2818	5	64.0	31	1.9	95	2	36	27	148	12	116	70	4.000	31	1.48	1.60	13
GUTHRIE	3821	5	61.6	29*	****	94	2	33	27	206	*****	107	*****	3.330	29	*****	1.50	12
HENNESSEY	4055	5	63.7	25*	****	96	2	30	27	135	*****	103	*****	1.841	28	*****	1.03	12
KINGFISHER	4861	5	60.5	31	-2.3	91	5	20	28	242	118	104	48	2.900	31	0.57	1.28	13
KONAWA	4915	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.570	31	-0.50	1.74	12
MARSHALL	5589	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.480	31	-0.27	1.01	13
MEEKER	5779	5	62.2	30	-0.5	92	2	34	27	181	47	96	34	6.910	31	3.37	3.62	8
MULHALL	6110	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.720	31	*****	0.84	13
NORMAN NWS	6386	5	61.9	31	-1.4	92	2	33	27	201	89	106	47	3.862	31	0.63	1.74	12
OILTON	6616	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.510	31	*****	1.91	25
OKEMAH	6638	5	65.3	31	2.2	94	3	38	26	122	-3	133	66	3.990	31	0.15	1.96	9
OKLAHOMA CTY	6661	5	62.3	31	0.3	93	2	34	27	193	56	108	64	3.234	31	0.00	0.93	11
PERKINS	7003	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.060	23	*****	1.35	13
PRAGUE	7264	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.333	31	1.50	2.27	9
PURCELL	7327	5	62.2	31	-1	94	3	34	27	200	81	114	51	4.300	31	0.36	1.16	12
SEMINOLE	8042	5	62.5	31	-1.9	93	2	36	27	183	89	105	30	3.211	31	-0.64	1.21	12
SHAWNEE	8110	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.081	31	1.01	2.02	13
STELLA	8479	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.871	31	*****	1.40	14
STILLWATER	8501	5	61.7	31	1.2	93	3	33	27	207	39	105	77	2.980	31	0.15	2.17	13
STROUD	8563	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.905	31	*****	4.05	9
TROUSDALE	8960	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.380	31	*****	1.32	13
UNION CITY	9086	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.791	31	0.52	1.07	13
WELTY	9479	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.433	31	*****	3.20	9
WEWOKA	9575	5	*****	0*	****	****	0	****	0	*****	*****	*****	*****	3.140	31	-0.57	1.10	13

OCTOBER 1997 SUMMARY FOR EAST CENTRAL DIVISION (CD6)

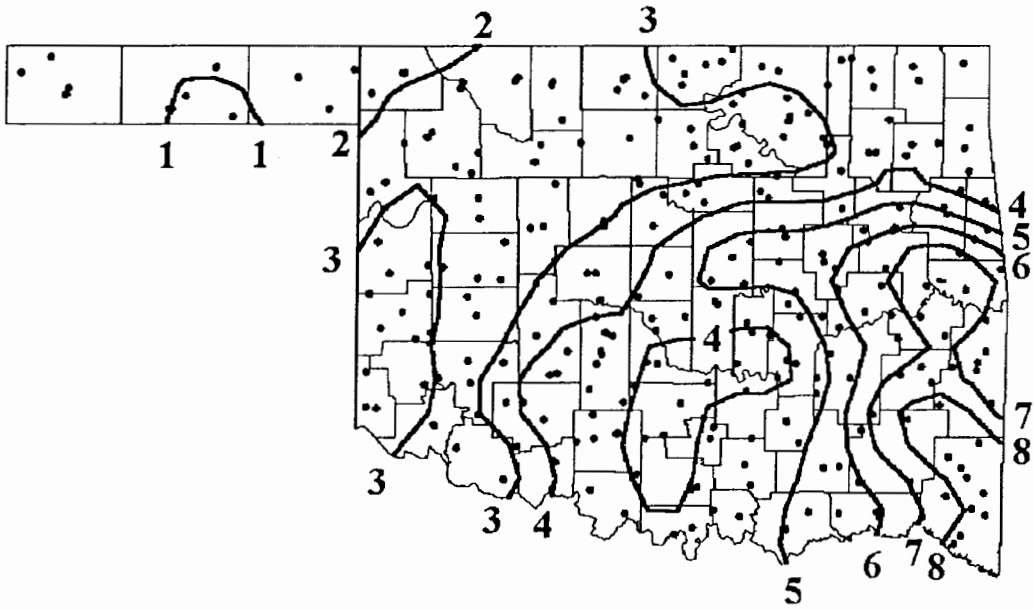
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG DAY	DEV FROM NORM	COOL DEG DAY	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ASHLAND	364	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.562	31	*****	1.47	9
BEGGS	631	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.300	31	*****	4.48	9
CALVIN	1391	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.950	31	-1.15	1.95	13
CHECOTAH	1711	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.581	31	2.35	4.00	9
CLAYTON	1858	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	10.480	31	*****	2.89	31
DEWAR	2485	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.573	31	3.61	4.10	9
DUSTIN	2690	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.291	31	*****	2.35	9
EUFULA	2993	6	63.8	30	-0.8	92	3	37	26	145	42	110	19	8.180	30	*****	3.28	9
HANNA	3884	6	62.6	31	-0.4	92	3	34	28	161	43	87	31	6.692	31	2.54	1.66	31
HASKELL	3956	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.241	31	3.17	4.71	9
LAKE EUFAULA	4975	6	62.2	30*	****	92	4	36	28	194	*****	110	*****	6.642	31	*****	3.35	9
LYONS	5437	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.500	31	3.02	2.52	9
MARBLE CITY	5546	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.540	20	*****	3.70	9
MCALESTER	5664	6	63.5	27*	****	94	3	35	22	158	*****	117	*****	0.784	25	*****	0.61	23
MCCURTAIN	5693	6	61.2	31	-2.5	93	3	25	28	201	86	83	8	7.100	31	3.20	2.50	9
MUSKOGEE	6130	6	62.4	30	-0.2	90	3	36	28	168	34	89	29	6.080	30	*****	2.69	8
OKMULGEE	6670	6	60.7	31	-1	92	4	31	28	209	53	75	21	5.850	31	1.84	3.45	9
OKTAHA	6678	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	6.100	31	*****	3.39	9
QUINTON	7372	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.163	31	1.06	2.00	12
SALLISAW	7862	6	61.6	31	-1.6	90	4	35	28	208	83	103	34	7.950	31	3.51	3.90	9
SCIPIO	7979	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	5.250	31	*****	1.52	13
SCRAPER	7993	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	2.100	31	*****	0.90	20
SHORT	8170	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	7.540	31	*****	2.85	9
STILWELL	8506	6	60.1	31	-1.2	87	7	32	28	220	60	68	23	4.810	31	0.73	2.05	13
TAHLEQUAH	8677	6	60.7	31	-1.1	87	4	33	28	215	58	82	24	4.932	31	0.72	2.05	13
WEBBERS FALL	9445	6	60.7	21*	****	93	4	34	28	154	*****	64	*****	9.811	22	*****	5.85	9
WESTVILLE	9523	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	1.920	31	*****	1.70	9
WETUMKA	9571	6	*****	0*	****	****	0	****	0	*****	*****	*****	*****	4.471	31	0.63	1.15	26

OCTOBER 1997 SUMMARY FOR SOUTHEAST DIVISION (CD9)

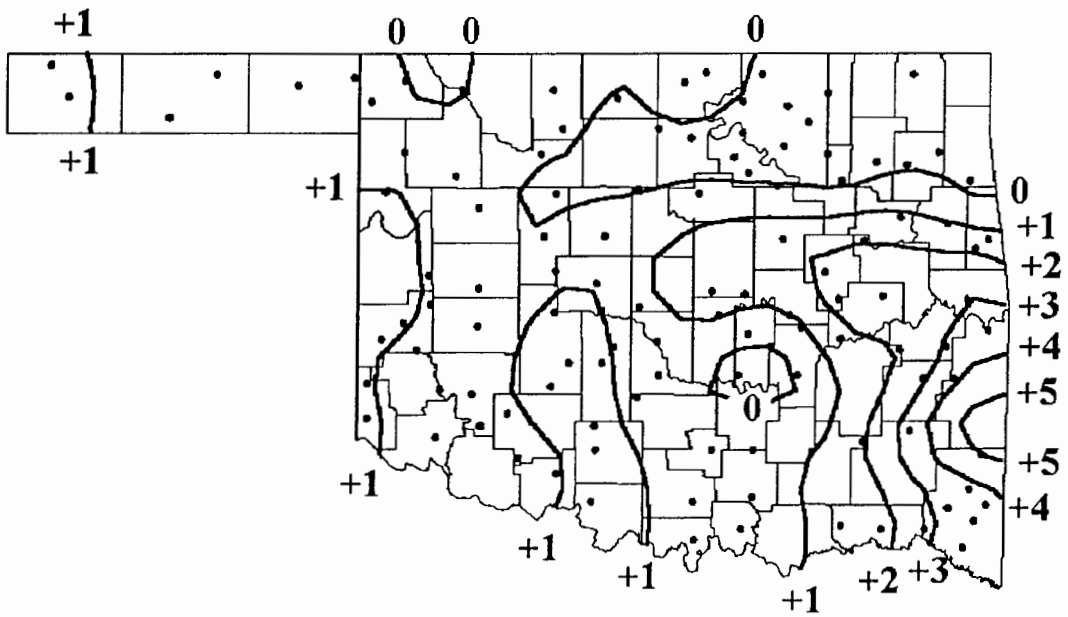
NAME	ID	CD	MEAN TEMP	NUM OBS	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG	DEV FROM NORM	COOL DEG	DEV FROM NORM	TOT PPT	NUM OBS	DEV FROM NORM	MAX 24-HR	DAY
ANTLERS	256	9	64.1	31	0.8	92	4	34	29	143	23	114	47	*****	0	*****	*****	0
BATTIEST	567	9	57.8	30 *	****	90	1	29	29	255	*****	38	*****	9.770	31	*****	2.32	8
BEAR MT	584	9	62.9	20 *	****	94	2	36	27	110	*****	68	*****	7.390	31	3.08	2.02	13
BENGAL	670	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	7.440	31	*****	2.07	13
BOSWELL	980	9	63.0	31	-0.8	95	1	36	28	174	68	112	43	5.950	31	1.76	2.28	9
BROKEN BOW	1162	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	7.650	31	3.32	2.30	10
BROKEN BOW D	1168	9	61.0	28 *	****	91	6	32	28	168	*****	56	*****	5.210	27	*****	1.20	30
CARNASAW	1499	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	6.870	31	2.27	1.38	13
CARTER TWR	1544	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	7.100	31	2.04	2.46	9
FANSHAWE	3065	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	8.480	31	4.59	2.64	31
HEAVENER	4008	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	5.140	31	1.07	1.50	13
HUGO	4384	9	64.4	31	-0.4	92	3	37	28	141	49	122	36	4.550	31	0.31	1.70	12
IDABEL	4451	9	63.0	31	-0.4	95	1	32	29	171	56	109	44	9.181	31	4.71	3.58	10
PAGE	6842	9	59.9	30 *	****	88	3	30	28	232	*****	78	*****	3.862	31	*****	1.81	13
POTEAU	7254	9	61.0	31 *	****	93	3	31	28	203	*****	80	*****	5.620	31	*****	1.92	9
SMITHVILLE	8285	9	57.9	31	-3.2	91	1	29	29	268	108	47	8	12.654	31	7.10	4.85	31
SPIRO	8416	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	6.970	31	3.15	2.01	13
TUSKAHOMA	9023	9	62.4	31	-1.4	91	6	33	28	181	73	101	31	8.510	31	4.30	2.73	13
VALLIANT	9118	9	*****	0 *	****	****	0	****	0	*****	*****	*****	*****	7.331	31	3.33	2.30	13
WILBURTON	9634	9	63.2	31	0.9	94	3	31	28	159	19	103	46	6.020	31	1.71	1.58	12
WISTER	9724	9	62.2	30 *	****	91	5	31	28	160	*****	77	*****	6.520	31	*****	1.98	13

OCTOBER 1998 CLIMATE DIVISION SUMMARY

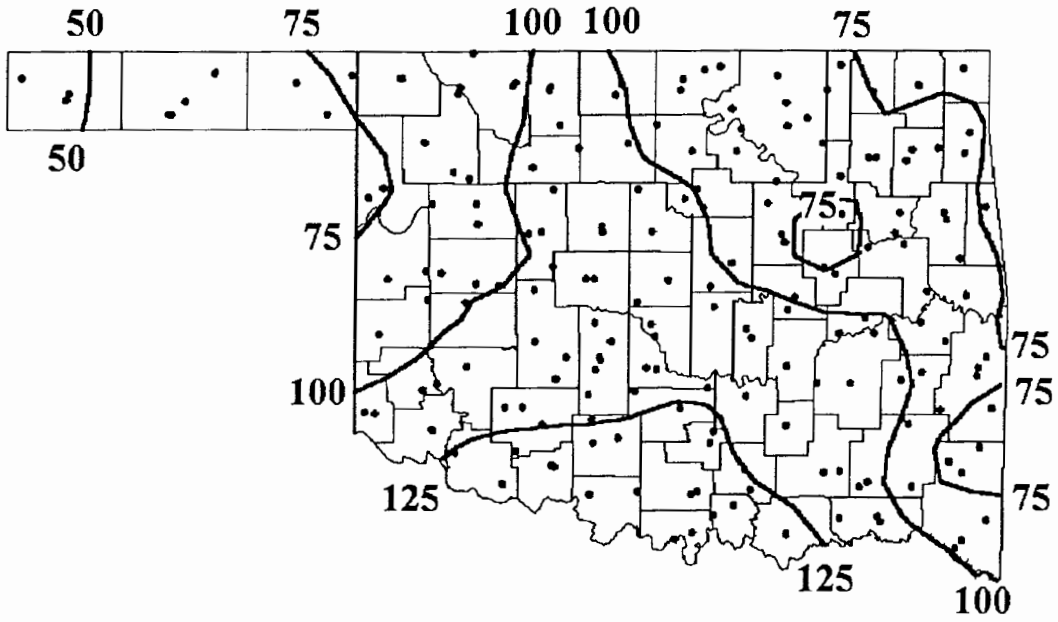
CD	MEAN TEMP	NUM STA	DEV FROM NORM	MAX TEMP	DAY	MIN TEMP	DAY	HEAT DEG	DEV FROM NORM	COOL DEG	DEV FROM NORM	TOT PPT	NUM STA	DEV FROM NORM	MAX 24-HR	DAY
1	58.5	8	0.1	97	2	18	26	275	44	74	48	1.630	12	0.34	1.66	12
2	60.6	10	-0.6	97	3	14	27	234	76	99	56	2.780	18	0.29	2.62	13
3	61.6	11	0.2	92	3	30	28	196	39	92	44	3.130	23	-0.29	2.20	13
4	61.1	8	-0.3	95	2	20	28	221	68	100	58	2.880	15	0.61	2.25	12
5	62.7	12	-0.1	96	2	20	28	181	55	110	52	4.260	26	0.98	4.05	9
6	61.7	9	-0.9	94	3	25	28	191	56	89	27	5.870	23	1.76	5.85	9
7	62.9	8	-0.4	98	4	22	27	188	69	123	57	3.620	17	0.95	3.23	9
8	64.0	10	-0.1	98	1	28	27	162	59	131	55	4.300	21	0.41	4.02	9
9	61.7	11	-1.5	95	1	29	29	189	69	89	23	7.210	19	2.84	4.85	31



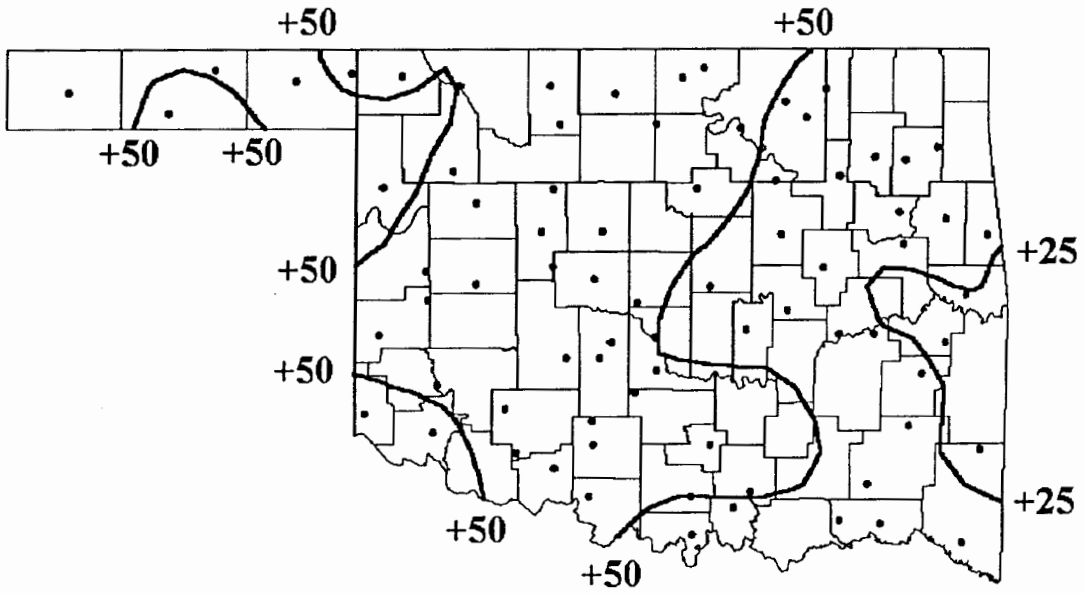
OCTOBER 1997 TOTAL PRECIPITATION  
(INCHES)



OCTOBER 1997 DEPARTURE FROM NORMAL PRECIPITATION  
(INCHES)

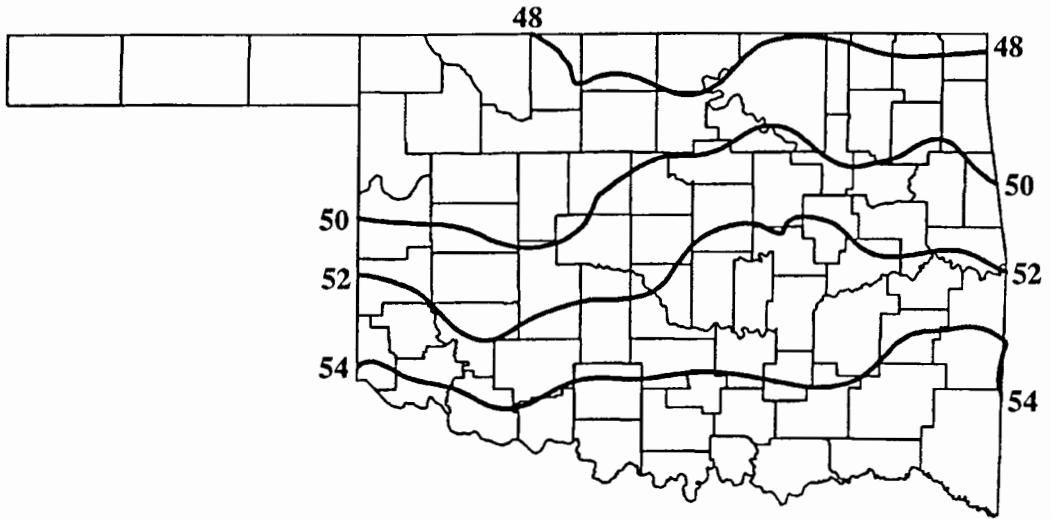


OCTOBER 1997 ACCUMULATED COOLING DEGREE DAYS (°F)

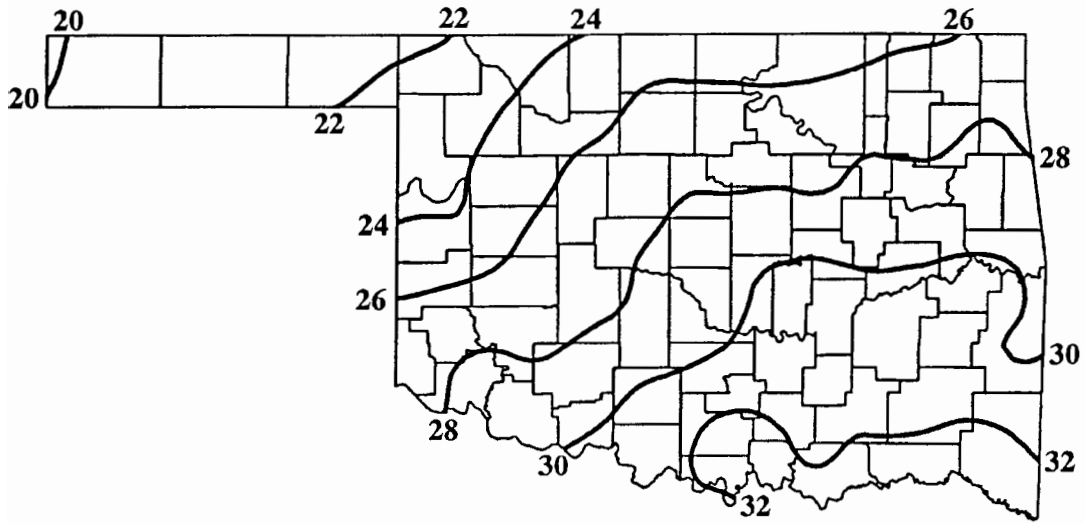


OCTOBER 1997 DEPARTURE FROM NORMAL COOLING DEGREE DAYS (°F)

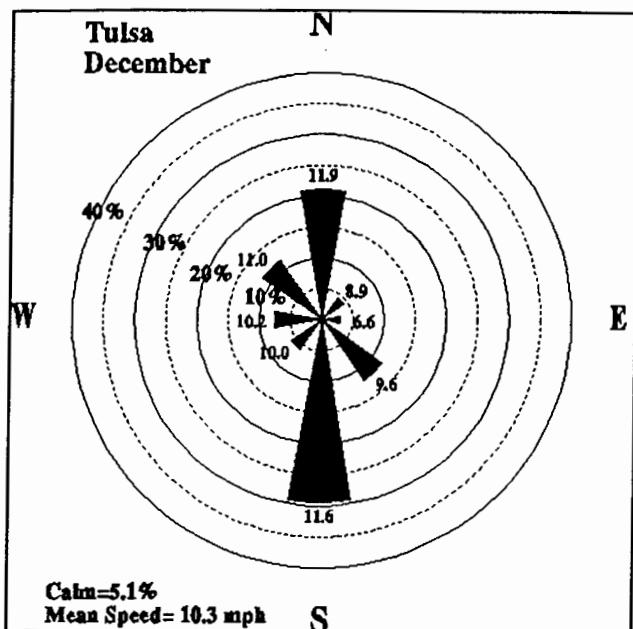
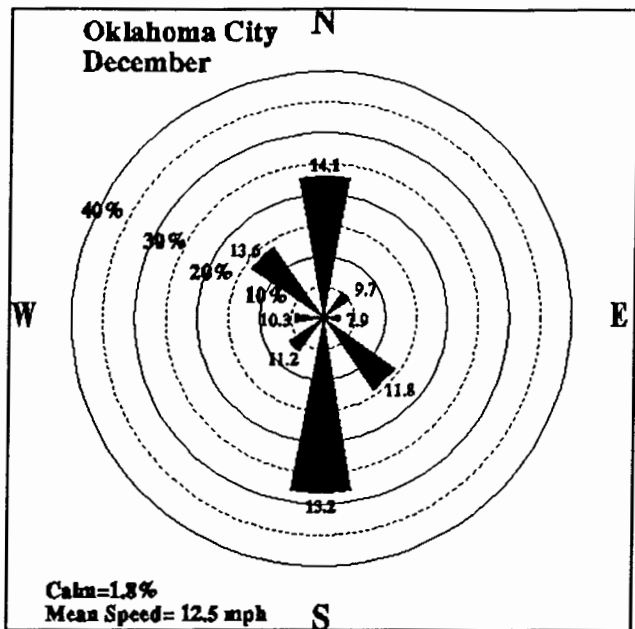




DECEMBER NORMAL DAILY MAXIMUM TEMPERATURE (°F)



DECEMBER NORMAL DAILY MINIMUM TEMPERATURE (°F)



December 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.

DECEMBER 1997 SUNRISE AND SUNSET

OKLAHOMA CITY

DATE	SUNRISE	SUNSET	DAYLIGHT
9712 1	7:19AM	5:21PM CST	10 hrs 1 mins
9712 2	7:20AM	5:21PM CST	10 hrs 0 mins
9712 3	7:21AM	5:21PM CST	10 hrs 0 mins
9712 4	7:22AM	5:20PM CST	9 hrs 59 mins
9712 5	7:23AM	5:20PM CST	9 hrs 58 mins
9712 6	7:23AM	5:20PM CST	9 hrs 57 mins
9712 7	7:24AM	5:20PM CST	9 hrs 56 mins
9712 8	7:25AM	5:20PM CST	9 hrs 55 mins
9712 9	7:26AM	5:21PM CST	9 hrs 55 mins
971210	7:27AM	5:21PM CST	9 hrs 54 mins
971211	7:27AM	5:21PM CST	9 hrs 54 mins
971212	7:28AM	5:21PM CST	9 hrs 53 mins
971213	7:29AM	5:21PM CST	9 hrs 53 mins
971214	7:29AM	5:21PM CST	9 hrs 52 mins
971215	7:30AM	5:22PM CST	9 hrs 52 mins
971216	7:31AM	5:22PM CST	9 hrs 51 mins
971217	7:31AM	5:22PM CST	9 hrs 51 mins
971218	7:32AM	5:23PM CST	9 hrs 51 mins
971219	7:32AM	5:23PM CST	9 hrs 51 mins
971220	7:33AM	5:23PM CST	9 hrs 50 mins
971221	7:33AM	5:24PM CST	9 hrs 50 mins
971222	7:34AM	5:24PM CST	9 hrs 50 mins
971223	7:34AM	5:25PM CST	9 hrs 50 mins
971224	7:35AM	5:25PM CST	9 hrs 50 mins
971225	7:35AM	5:26PM CST	9 hrs 50 mins
971226	7:36AM	5:26PM CST	9 hrs 51 mins
971227	7:36AM	5:27PM CST	9 hrs 51 mins
971228	7:36AM	5:27PM CST	9 hrs 51 mins
971229	7:37AM	5:28PM CST	9 hrs 51 mins
971230	7:37AM	5:29PM CST	9 hrs 52 mins
971231	7:37AM	5:29PM CST	9 hrs 52 mins

TULSA

DATE	SUNRISE	SUNSET	DAYLIGHT
9712 1	7:14AM	5:12PM CST	9 hrs 58 mins
9712 2	7:15AM	5:12PM CST	9 hrs 57 mins
9712 3	7:16AM	5:12PM CST	9 hrs 56 mins
9712 4	7:17AM	5:12PM CST	9 hrs 55 mins
9712 5	7:18AM	5:12PM CST	9 hrs 54 mins
9712 6	7:19AM	5:12PM CST	9 hrs 53 mins
9712 7	7:19AM	5:12PM CST	9 hrs 52 mins
9712 8	7:20AM	5:12PM CST	9 hrs 52 mins
9712 9	7:21AM	5:12PM CST	9 hrs 51 mins
971210	7:22AM	5:12PM CST	9 hrs 50 mins
971211	7:22AM	5:12PM CST	9 hrs 50 mins
971212	7:23AM	5:12PM CST	9 hrs 49 mins
971213	7:24AM	5:12PM CST	9 hrs 48 mins
971214	7:25AM	5:13PM CST	9 hrs 48 mins
971215	7:25AM	5:13PM CST	9 hrs 48 mins
971216	7:26AM	5:13PM CST	9 hrs 47 mins
971217	7:26AM	5:13PM CST	9 hrs 47 mins
971218	7:27AM	5:14PM CST	9 hrs 47 mins
971219	7:28AM	5:14PM CST	9 hrs 46 mins
971220	7:28AM	5:15PM CST	9 hrs 46 mins
971221	7:29AM	5:15PM CST	9 hrs 46 mins
971222	7:29AM	5:15PM CST	9 hrs 46 mins
971223	7:30AM	5:16PM CST	9 hrs 46 mins
971224	7:30AM	5:16PM CST	9 hrs 46 mins
971225	7:31AM	5:17PM CST	9 hrs 46 mins
971226	7:31AM	5:17PM CST	9 hrs 46 mins
971227	7:31AM	5:18PM CST	9 hrs 47 mins
971228	7:32AM	5:19PM CST	9 hrs 47 mins
971229	7:32AM	5:19PM CST	9 hrs 47 mins
971230	7:32AM	5:20PM CST	9 hrs 48 mins
971231	7:32AM	5:20PM CST	9 hrs 48 mins

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

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

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

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

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

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

