

# 1992 OKLAHOMA ANNUAL SUMMARY

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### 1992 ANNUAL SUMMARY FOR OKLAHOMA

Greater than normal precipitation in all but the Panhandle and one of the coolest, wettest summers on record were the traits identifying Oklahoma's climate during 1992. Precipitation, averaged over the entire state, totaled 41.66 inches, the 11th highest total in 101 years of statewide records. The annual average temperature for the state was 60 degrees, three-tenths of a degree below the normal value based on 1961 through 1990 data.

The average temperature of 76.1 during the summer months of June, July and August was 3.9 degrees below normal, the second coolest summer since 1892. The statewide average summer precipitation was 15.64 inches, 6.25 inches above normal and the fifth greatest summer precipitation on record.

Annual precipitation at stations for whom a complete record is available ranged from 14.52 inches (3.52 inches below normal) at Hooker to 68.94 inches (31.21 inches above normal) at Wewoka. June was the wettest month, statewide, as precipitation averaged 7.30 inches (the normal is 3.35 inches). The statewide average for November was 5.65 inches, exceeding the normal value by 3.19 inches. October was the driest month with a statewide average precipitation of 0.77 inches, 2.3 inches below normal. The greatest single month precipitation reported was 13.96 inches at Quinton. Several stations in western Oklahoma were rainless in October.

There were 64 confirmed tornadoes during the year, occurring on 16 days and resulting in 33 injuries but no deaths. Twenty-two of the verified tornadoes, which caused 26 injuries, occurred on May 11 in Pontotoc, Pittsburg, Marshall, Pushmataha, Latimer and Bryan Counties in southern and eastern Oklahoma. Thirteen people were injured in Kingston in Marshall County as a tornado moved through the town, destroying a number of homes and businesses.

Twenty-five tornadoes were reported in May, normally the month of greatest tornado occurrence in the state. The second most active month was September with 16 tornadoes occurring on four days.

The otherwise mild winter of 1991-92 was interrupted by a pair of winter storms in mid-January that brought heavy snow to central and southern Oklahoma. The second storm deposited as much as eight to ten inches of snow in extreme southern Oklahoma. The winter average temperature (including December 1991) of 44.2 degrees was 5.2 degrees above normal, the third warmest of the 100 winter seasons on record. Although total precipitation was near normal in January and only about 70 percent of normal in February, the season had started very wet (December 1991 precipitation exceeded the December normal by over 3 inches) and the state seasonal precipitation total of 7.29 inches stands as the ninth highest winter total.

Spring temperatures averaged very close to normal and precipitation for the season averaged 9.65 inches (1.11 inches below normal) across the state. Although total precipitation during March, April and May was below normal, the number of tornadoes reported was slightly greater than average. Thirty-six tornadoes were reported in the state during the season: 2 in March, 9 in April and 25 (all on the 10th and 11th) in May. The severe weather outbreak on May 11 produced, in addition to the Kingston tornado, the year's strongest tornado, a violent storm in rural Pittsburg County that was rated as F4, indicating estimated wind speeds of 207 to 260 miles per hour.

An extremely wet June, generally above average precipitation in July and August contributed to the second coolest summer on record. The average temperature over the three summer months was 76.1 degrees, nearly 4 degrees below normal for the state. Temperatures in excess of 100 degrees were reported in each of the three months, but no sustained periods of very hot weather occurred. Precipitation averaged 15.64 inches across the state. The summer total was 6.25 inches above normal, making this the state's fifth wettest summer. Eleven tornadoes were reported, nine on four different days in June and two in July. A tornado on July

2 caused considerable damage in the vicinity of Collinsville and Oologah. One death resulted from flooding south of Bristow on July 28. A number of instances of flash flooding were reported from around the state. Strong thunderstorm winds ripped the roof off the Cashion school on June 18.

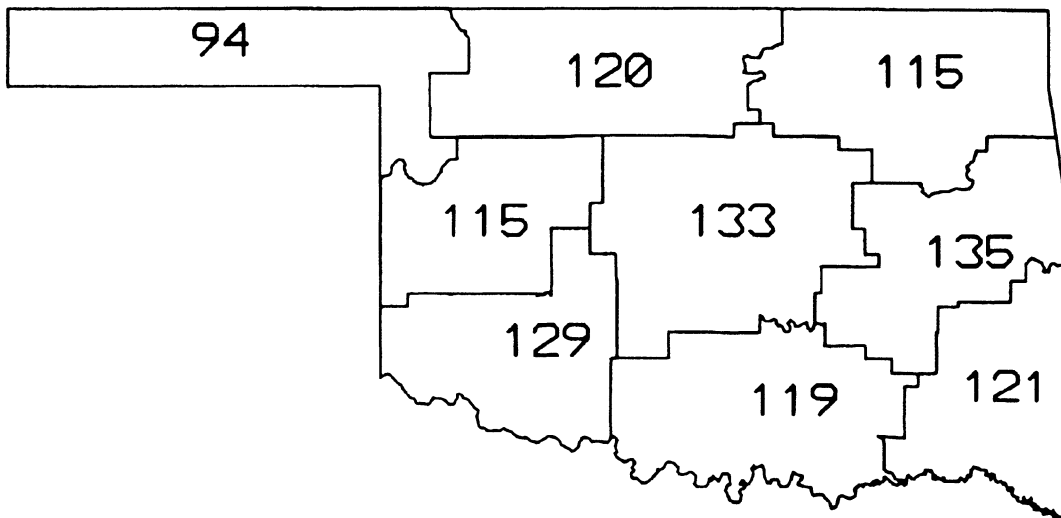
Heavy rains in east central and southeastern Oklahoma in September were part of a "second season" of severe thunderstorm activity. A total of 16 tornadoes reported in September shattered the previous record for the month (nine in 1970). An additional tornado struck in southwestern Oklahoma City on October 7, inflicting three injuries, brought the autumn month total to 17, which ties 1970 for the autumn record. Total precipitation for the season was 10.05 inches, compared to a normal value of 9.43 inches.

Winter weather made its return to the scene in northwestern Oklahoma just prior to Thanksgiving as heavy snow and high winds created havoc with holiday travel. Four to six inch snowfall reports were common and drifts of 10 to 15 feet were reported. Laverne received 19 inches of snow.

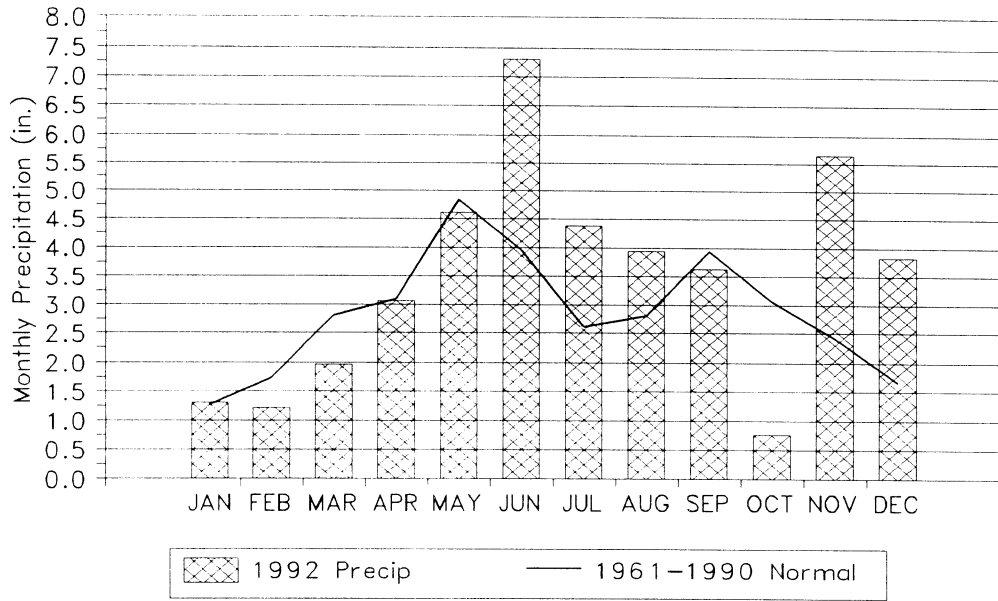
Frequent and heavy precipitation continued in December, usually in the form of snow, sleet or freezing rain in the north and west and rain in central and eastern Oklahoma. A winter storm on December 4th and 5th deposited 4 to 9 inches of snow in northwestern and north central Oklahoma and a mixture of snow, sleet and freezing rain in the northeast. Another storm just before mid-month produced 4 to 6 inches of snow in the Panhandle and extreme northwestern Oklahoma, freezing rain in southwestern and central parts of the state and 3 to 5 inches of rain which led to local flooding in the east. As the year came to an end, another winter storm moving across the state deposited a glaze of ice which restricted travel to New Year's Eve activities.

Howard L. Johnson

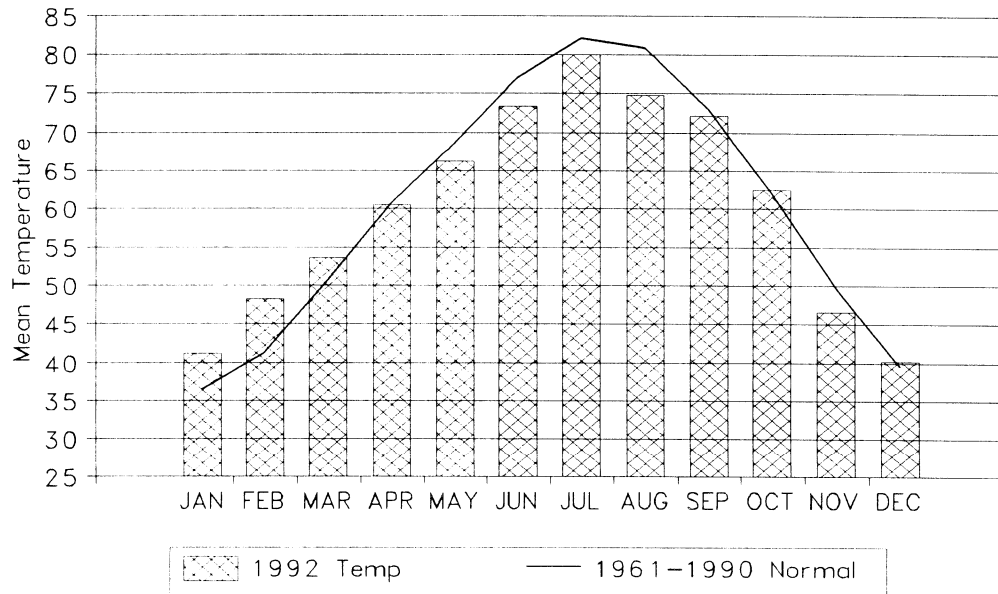
1992 CLIMATE DIVISION PERCENT OF NORMAL PRECIPITATION



### 1992 STATEWIDE PRECIPITATION Monthly Totals



### 1992 STATEWIDE TEMPERATURES Monthly Averages



### STORM SUMMARY REPORT

STATE OKLAHOMA MONTH \_\_\_\_\_ YEAR 1992

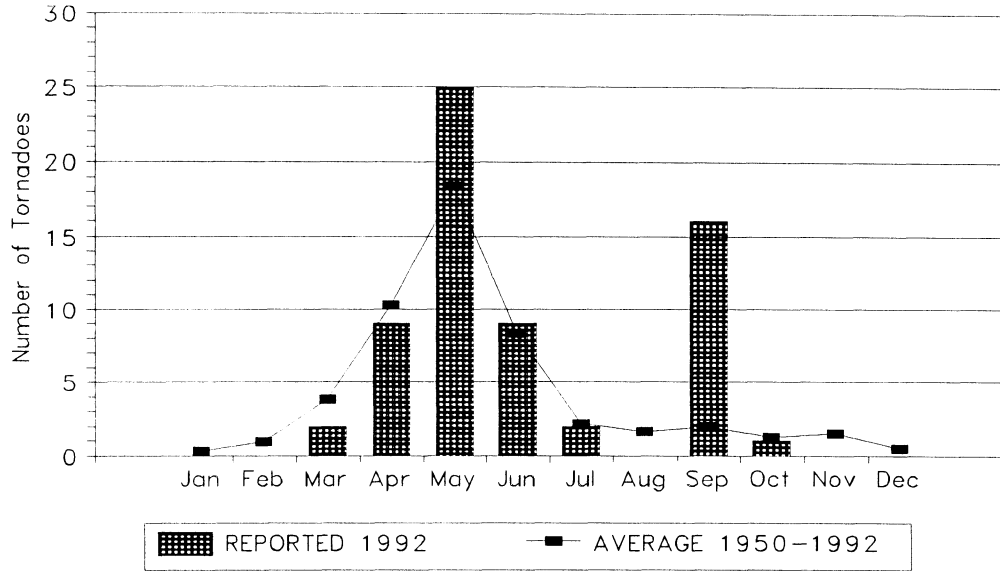
TYPE OF STORM	NUMBER	DAYS	DEATHS	INJURIES	DAMAGE*	
					PROPERTY	CROPS
TORNADOES	64	16	0	33	1.0 - 10.0 Million Dollars	No Estimate
HAIL			0	0	1.0 - 10.0 Million Dollars	.50 - 5.0 Thousand Dollars
THUNDERSTORM WINDS			0	6	.50 - 5.0 Million Dollars	No Estimate
HIGH WINDS			0	0	50.0 - 500. Thousand Dollars	No Estimate
LIGHTNING			0	15	.50 - 5.0 Million Dollars	.50 - 5.0 Thousand Dollars
FLASH FLOODS	74		3	3	5.0 - 50.0 Million Dollars	No Estimate
FLOODS	5		0	0	No Estimate	No Estimate
HEAVY SNOWSTORMS AND BLIZZARDS			0	0	50.0 - 500. Thousand Dollars	No Estimate
ICE STORMS #			0	0	No Estimate	No Estimate
HURRICANES & TROPICAL STORMS			0	0	No Estimate	No Estimate
ALL OTHERS			0	0	No Estimate	No Estimate

\* Total damage for month, by categories.

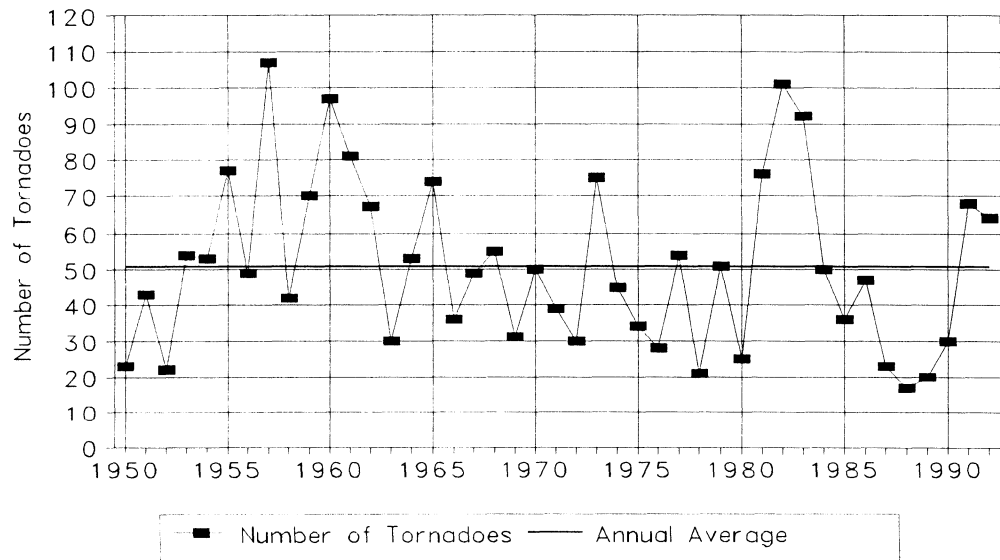
# Freezing drizzle and freezing rain, commonly known as glaze.

SUPERSEDES WS FORM F-2 WHICH SHOULD BE DESTROYED

1992 Tornadoes versus 1950-1992 Average  
by Month



Number of Tornadoes in Oklahoma  
Total each Year, 1950-1992



**TORNADO OCCURRENCES IN OKLAHOMA DURING 1992**  
 Listing is by event. See notes on next page.

<u>DATE</u>	<u>INT</u>	<u>TIME</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>DAMAGE</u>	<u>COUNTY</u>
3-08	F0	1815	0.25	100	3	Custer
3-08	F0	2203	0.50	100	0	Carter
4-09	F0	1615-1643	0.50	60	0	Woodward
4-09	F1	1615-1621	0.30	25	4	Woodward
4-09	F0	1620-1625	0.10	30	0	Woodward
4-09	F0	1635-1703	3.00	60	0	Woodward
4-09	F0	1650-1716	3.00	60	0	Woodward
4-09	F0	1705-1711	0.25	30	0	Ellis
4-09	F0	1708	0.25	20	0	Ellis
4-28	F0	1920	0.50	30	0	Greer
4-28	F0	1925	0.50	30	0	Jackson
5-10	F0	1611-1614	0.50	30	0	Oklahoma
5-11	F0	130-150	3.50	50	4	Tulsa, Wagoner
5-11	F0	220	0.25	30	3	Muskogee
5-11	F0	1120	6.00	75	0	Canadian, Kingfisher
5-11	F0	1125	0.50	50	0	Kingfisher
5-11	F0	1225	2.00	50	3	Garvin
5-11	F2	1250	3.00	150	4	Pontotoc, Murray
5-11	F1	1310	7.00	125	4	Hughes
5-11	F2	1315	5.00	150	4	Pontotoc
5-11	F3	1355-1418	12.0	150	5	Coal
5-11	F1	1355	1.00	50	3	Coal
5-11	F1	1420	10.0	100	4	Pittsburg
5-11	F2	1440-1458	10.0	300	0	Coal, Pittsburg
5-11	F4	1500-1525	10.0	400	5	Pittsburg
5-11	F2	1514	2.00	100	6	Marshall
5-11	F0	1515-1524	4.00	75	0	Coal, Atoka
5-11	F0	1524-1527	1.00	50	3	Marshall, Bryan
5-11	F1	1545-1610	9.00	300	0	Pittsburg
5-11	F0	1558	0.50	50	0	Kay
5-11	F1	1600	6.00	300	3	Latimer
5-11	F1	1600	0.25	100	0	Pittsburg
5-11	F2	1615-1640	16.0	100	4	Atoka, Pushmataha
5-11	F2	1620-1655	16.0	400	5	Latimer
5-11	F0	1620	0.50	50	0	Kay
5-11	F2	1625	1.00	100	5	Bryan
6-18	F0	1455	0.25	30	0	Pawnee
6-18	F0	1522	0.50	30	0	Major
6-18	F0	1524	0.50	30	0	Garfield
6-18	F0	1637	0.50	100	0	Kingfisher
6-19	F0	1316	0.25	30	0	Osage
6-19	F0	2009	0.25	30	0	Payne
6-19	F1	2010	2.00	25	6	Cimarron
6-23	F0	1300	0.01	20	0	Comanche

<u>DATE</u>	<u>INT</u>	<u>TIME</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>DAMAGE</u>	<u>COUNTY</u>
6-26	F0	1945	0.25	10	0	Texas
7-02	F3	1720-1747	4.00	100	5	Tulsa, Rogers
7-30	F0	1505	25.0	0.10	0	Delaware
9-02	F2	1715-1745	8.00	400	5	McClain
9-05	F0	1815	0.01	30	0	Major
9-05	F0	1850	0.01	30	0	Woodward
9-05	F0	1850	0.01	30	0	Major
9-05	F0	1923	0.01	30	0	Custer
9-05	F0	1926	0.01	30	0	Dewey
9-05	F0	1945	0.01	30	0	Dewey
9-05	F0	1955	0.25	40	3	Custer
9-08	F0	1830	0.01	30	0	Rogers
9-08	F0	1852	0.01	30	0	Mayes
9-08	F0	1912	0.01	30	0	Rogers
9-08	F0	1920	0.01	30	0	Mayes
9-08	F0	2000	0.01	30	0	Rogers
9-08	F0	2030	0.01	30	0	Mayes
9-21	F0	1545	0.01	30	0	Alfalpa
9-21	F0	1555	0.01	30	0	Bryan
10-07	F1	1455	0.25	25	5	Canadian

**NOTES:**

INTENSITY is based on wind speeds and observed damage:

- 0 40-72 m.p.h light damage
- 1 73-112 roof damage, mobile homes overturned
- 2 113-157 roofs torn off, trees snapped
- 3 158-206 some walls collapse, trees uprooted
- 4 207-260 houses leveled, cars thrown
- 5 261-318 houses disintegrate, trees debarked

TIME is local time (daylight time April 7-Oct 26)

LENGTH is the continuous tornado track measured in miles

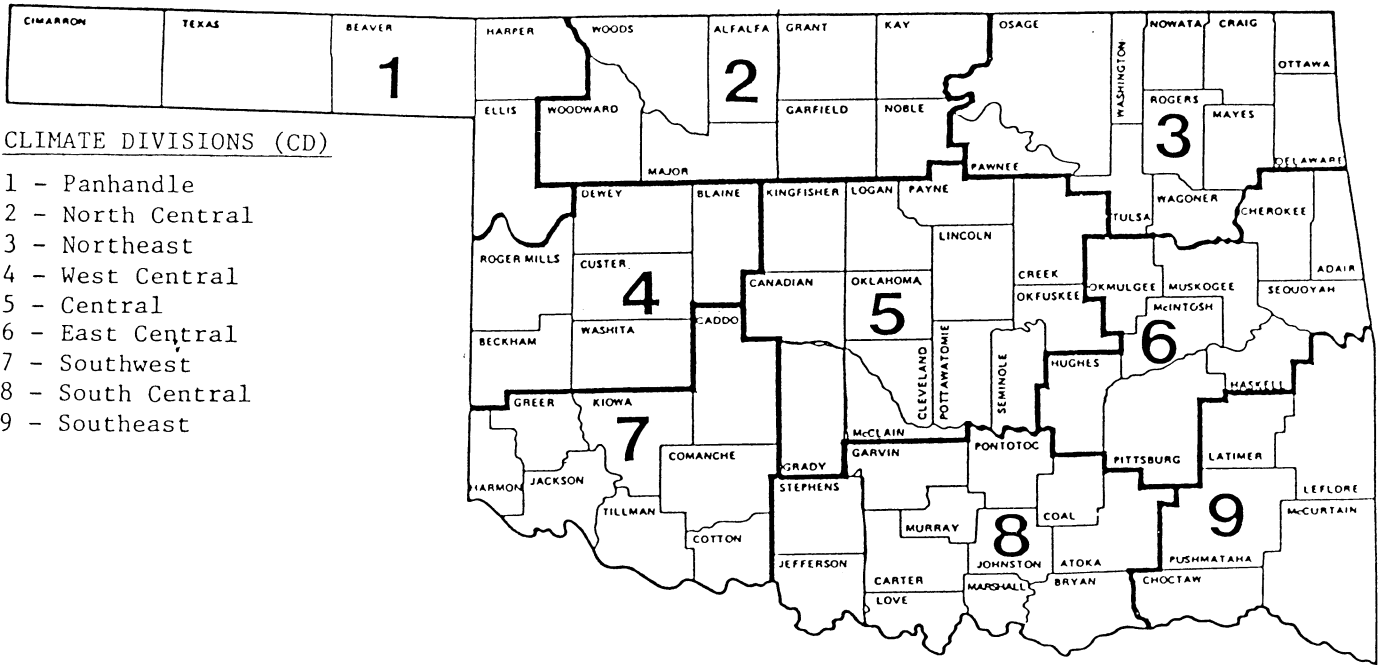
WIDTH is measured in yards (1760 yards = 1 mile)

DAMAGE is a monetary estimate:

- 1 Less than \$50
- 2 \$50 - \$500
- 3 \$500 - \$5,000
- 4 \$5,000 - \$50,000
- 5 \$50,000 - \$500,000
- 6 \$500,000 - \$5 million
- 7 \$5 million - \$50 million
- 8 \$50 million - \$500 million
- 9 \$500 million - \$5 billion



O K L A H O M A



CLIMATE DIVISIONS (CD)

- 1 - Panhandle
- 2 - North Central
- 3 - Northeast
- 4 - West Central
- 5 - Central
- 6 - East Central
- 7 - Southwest
- 8 - South Central
- 9 - Southeast

1992 STATION SUMMARY

The following tables contain summaries of the cooperative data received at the OCS during 1992. They represent a preliminary description of climate conditions across the state and have been initially quality controlled for accuracy. Even so, they may not always agree precisely with those final values published by the National Climatic Data Center. Asterisks indicate data are missing within the month or that 30-year "normals" were unavailable. A station is included in the table only if six or more months of complete data are available. Annual averages and totals are computed only if all twelve monthly values are present. Climate division averages and totals are based on complete monthly records.





CLIMATE DIVISION 5 (CENTRAL): 1992 PRECIPITATION AND DEPARTURES FROM NORMAL(INCHES)

CD	ID NAME	JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANNUAL	
		PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP	PCP	DEP
200	AMBER	1.42	*	0.94	*	1.76	*	3.34	*	3.49	*	4.93	*	4.59	*	4.79	*	1.81	*	0.51	*	5.99	*	3.46	*	37.03	*
288	ARCADIA	*	*	0.74	*	0.98	*	2.85	*	4.13	*	*	*	3.87	*	7.43	*	4.32	*	0.43	*	5.49	*	2.87	*	*	*
325	TINKER AFB	*	*	1.11	*	1.05	*	4.75	*	*	*	7.46	*	6.48	*	*	*	*	*	1.01	*	*	*	*	*	*	*
830	BLANCHARD	1.46	0.35	0.70	-1.05	0.75	-1.94	5.10	1.99	5.66	0.71	4.49	0.48	7.58	5.01	3.50	0.77	1.88	-2.28	0.58	-2.79	5.64	3.54	3.07	1.48	40.44	6.27
1144	BRISTOW	1.05	-0.33	1.06	-0.87	2.30	-0.74	4.71	1.38	5.70	0.19	9.55	5.68	2.95	0.21	7.29	4.63	5.82	1.18	0.96	-2.19	5.59	2.70	4.48	2.41	51.48	14.25
1684	CHANDLER	*	*	*	*	1.84	-1.08	*	*	*	*	9.37	5.34	3.43	0.72	4.06	1.44	3.65	-0.60	0.03	-2.99	7.16	4.68	4.21	2.68	*	*
1750	CHICKASHA	1.17	0.14	1.02	-0.57	0.90	-1.60	9.30	6.55	5.49	0.81	6.72	3.01	4.25	2.16	5.13	2.37	2.55	-1.25	1.10	-2.15	5.31	3.36	3.84	2.58	46.78	15.41
2196	COX CITY	1.70	*	0.79	*	1.65	*	3.46	*	6.04	*	5.29	*	1.02	*	4.38	*	3.65	*	0.87	*	9.32	*	3.61	*	41.78	*
2242	CRESCENT	0.40	*	0.82	*	2.57	*	3.47	*	2.99	*	11.38	*	3.64	*	7.23	*	1.84	*	1.56	*	6.56	*	3.15	*	45.61	*
2318	CUSHING	0.78	-0.35	1.08	-0.71	1.51	-1.59	2.95	-0.36	3.92	-1.48	7.09	2.82	3.06	-0.06	*	*	3.37	-0.74	*	*	*	*	*	*	*	*
2818	EL RENO	0.66	-0.34	1.14	-0.16	2.65	0.31	2.57	0.00	3.40	-2.01	7.76	3.37	2.51	0.23	5.02	2.23	1.21	-2.92	1.34	-1.18	7.76	6.01	3.04	2.00	39.06	7.54
3821	GUTHRIE	1.90	0.75	2.65	0.99	2.44	-0.38	3.54	0.88	5.47	0.50	8.48	4.25	3.45	1.12	6.73	4.46	2.33	-1.98	1.57	-1.14	9.28	6.99	4.50	3.00	52.35	19.44
4055	HENNESSEY	0.44	-0.42	0.40	-0.83	2.13	-0.22	2.96	0.27	3.14	-1.60	6.57	2.39	2.57	0.02	7.95	5.09	1.37	-2.69	0.59	-1.75	5.68	3.74	2.43	1.39	36.23	5.39
4489	INGALLS	0.93	*	1.30	*	1.13	*	3.81	*	3.49	*	7.43	*	2.02	*	7.61	*	2.38	*	2.22	*	*	*	3.50	*	*	*
4861	KINGFISHER	0.69	-0.31	0.65	-0.74	1.76	-0.49	5.38	2.77	2.92	-1.71	9.81	5.54	3.34	1.29	4.91	2.21	0.86	-3.26	2.01	-0.32	6.73	4.82	2.66	1.47	41.72	11.27
4915	KONAWA	1.34	-0.17	0.57	-1.51	3.25	0.04	4.68	0.60	8.44	2.74	9.27	5.19	7.90	5.88	3.21	1.22	3.86	-0.58	1.62	-2.45	6.03	3.30	4.92	3.04	55.10	17.30
5589	MARSHALL	0.69	-0.19	0.71	-0.56	1.51	-0.96	1.67	-0.89	1.76	-3.12	8.05	4.07	3.08	0.81	10.15	7.58	2.47	-1.36	0.69	-2.06	5.64	3.73	2.35	1.20	38.77	8.25
5779	MEEKER	0.68	-0.36	*	*	*	*	*	*	6.22	0.65	7.76	3.58	*	*	3.63	1.17	*	*	2.74	-0.80	*	*	3.85	2.43	*	*
6110	MULHALL	0.35	*	1.30	*	1.42	*	2.61	*	5.29	*	*	*	2.47	*	5.70	*	4.43	*	1.76	*	6.16	*	2.48	*	*	*
6386	NORMAN	1.26	-0.06	0.93	-0.79	1.94	-0.95	2.68	-0.55	4.33	-0.83	5.83	1.74	6.47	3.71	5.70	2.84	2.09	-2.00	0.89	-2.34	5.92	3.44	3.42	1.84	41.48	6.05
6616	OILTON	0.91	*	1.16	*	1.50	*	2.85	*	4.04	*	*	*	3.33	*	7.42	*	*	*	2.88	*	6.07	*	4.01	*	*	*
6638	OKEMAH	1.51	0.06	0.78	-1.13	2.58	-0.57	5.28	1.36	4.31	-0.99	10.73	6.54	8.10	4.94	4.37	1.73	11.48	7.22	1.01	-2.83	8.66	5.72	6.13	4.13	64.95	26.18
6661	OKLA CITY	1.16	0.03	1.28	-0.28	1.02	-1.69	3.64	0.87	4.88	-0.34	6.35	2.04	4.01	1.40	5.83	3.22	2.92	-0.92	1.12	-2.11	4.51	2.53	3.08	1.68	39.81	6.43
7003	PERKINS	0.74	-0.43	0.97	-0.70	1.31	-1.59	4.77	1.85	5.40	-0.09	6.84	2.41	2.74	0.08	7.00	4.46	2.47	-1.93	2.14	-0.83	6.38	3.94	3.58	2.05	44.34	9.22
7068	PIEDMONT	0.70	*	0.62	*	2.52	*	3.77	*	3.42	*	7.84	*	2.58	*	3.75	*	1.66	*	1.17	*	6.79	*	2.60	*	37.42	*
7264	PRAGUE	1.26	-0.17	*	*	1.68	-1.50	5.47	1.77	*	*	9.55	5.75	*	*	3.66	1.23	*	*	1.27	-2.56	4.25	1.58	5.52	3.70	*	*
7327	PURCELL	1.95	0.61	0.84	-1.13	2.56	-0.57	4.39	0.78	8.20	2.63	5.23	1.00	4.57	1.81	4.75	2.06	2.79	-1.57	0.90	-3.04	7.47	4.97	4.90	3.07	48.56	10.62
8042	SEMINOLE	0.68	-0.80	1.53	-0.48	3.03	-0.24	3.85	0.03	5.52	0.29	12.11	7.90	7.33	4.81	2.70	0.06	5.07	0.68	0.37	-3.48	8.51	5.59	5.77	3.95	56.47	18.31
8110	SHAWNEE	1.22	-0.15	1.21	-0.80	1.88	-1.31	3.99	0.01	6.17	0.50	8.30	3.98	3.88	1.71	2.71	0.21	4.83	0.61	0.92	-3.15	7.63	4.74	4.61	2.73	47.36	9.08
8479	STELLA	1.77	*	1.83	*	2.06	*	4.15	*	5.76	*	7.04	*	6.90	*	3.67	*	3.14	*	0.73	*	7.52	*	4.03	*	48.60	*
8501	STILLWATER	0.78	-0.37	1.49	-0.04	0.95	-1.84	3.53	0.61	2.72	-2.41	8.01	4.01	2.35	-0.55	8.50	5.74	2.72	-1.57	1.62	-1.21	6.65	4.40	3.49	2.19	42.83	8.96
8563	STROUD	1.53	*	0.74	*	2.38	*	5.17	*	4.28	*	7.11	*	2.95	*	4.31	*	4.35	*	0.81	*	6.87	*	4.12	*	44.64	*
8751	TECUMSEH	1.61	*	1.97	*	2.03	*	4.80	*	9.78	*	7.92	*	6.01	*	4.78	*	3.28	*	0.77	*	*	*	*	*	*	*
8960	TROUSDALE	1.23	*	1.15	*	2.30	*	4.82	*	7.55	*	5.55	*	7.19	*	4.05	*	3.23	*	0.90	*	12.87	*	3.98	*	54.82	*
9086	UNION CITY	0.81	-0.55	0.88	-0.70	1.94	-0.97	2.25	-0.61	4.75	-0.84	5.60	0.91	*	*	7.04	4.16	2.14	-2.09	0.46	-2.81	5.39	3.09	3.10	1.75	*	*
9479	WELTY	0.94	*	0.53	*	1.72	*	4.60	*	6.85	*	11.63	*	5.38	*	5.56	*	7.94	*	1.77	*	7.85	*	4.85	*	59.63	*
9575	WEWOKA	1.22	-0.23	1.03	-1.16	2.62	-0.63	3.72	0.01	8.72	3.51	12.48	8.42	8.75	6.38	7.98	5.21	5.14	0.82	1.05	-2.66	9.69	6.90	6.54	4.64	68.94	31.21