

**OKLAHOMA  
ANNUAL SUMMARY  
1989**

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## SUMMARY OF THE YEAR

Temperature and precipitation reports from across the state reflected weather conditions that changed rapidly from one extreme to another. Near record conditions of wet, drought, heat and cold were all observed. The summer season of 1989 (June, July and August) was the third coolest and the sixth wettest in 98-years of Oklahoma weather records. Figures 1 and 2 contain graphical summaries of 1989 monthly conditions.

January temperatures averaged 4 to 7 degrees above normal and ranked as the tenth warmest January on record. It was the warmest January in the last 36 years. Dry soil conditions, clear skies and an air mass with low water content contributed to diurnal temperature ranges in excess of 45 degrees.

Record-breaking cold weather during the first week of the month contributed to the sixth coldest February on record. This month also ranked as the eleventh wettest February in Oklahoma since 1898. Record setting low temperatures between February 2 and 5 combined with 25mph winds to produce wind chills in excess of -20 to -40.

Seven weather-related deaths due to cold and snowy weather were reported in March. Pauls Valley reported 16" of snow. The roofs of some 150 northeastern Oklahoma poultry houses collapsed under the weight of accumulated snow, killing 3 million chickens (about 15% of the State's total). Damage was estimated at \$20 million. An unusual wintertime duststorm was reported across northwestern Oklahoma on March 12.

April 1989 was the driest April in 98-years of Oklahoma weather archives. A jet stream track located far to the north of the state prevented organized frontal systems from entering Oklahoma. Oklahoma City recorded its first April without a thunderstorm. The northerly jet track allowed warm air from the south and southwest to flow northward into Oklahoma. This warmer air produced a state averaged monthly mean temperature 2 degrees above normal.

Numerous May thunderstorms produced more than 10 days of precipitation at many stations. Six confirmed tornadoes were reported, 14 fewer than the 30-year May mean. A Wagoner County tornado damaged 35 houses in the Wagoner city area. Numerous hailstorms followed spring drought, a late freeze and heavy insect infestations of commercial cropland. On May 22 Ponca City reported hail accumulations of 6".

Oklahoma recorded its fourth wettest and third coolest June in history. More than 12 precipitation days and 24-hour rainfall accumulations in excess of 3 inches produced record June totals at several sites. Western and central Oklahoma CD's received more than twice their mean June precipitation. Several days of cloud cover and rain-cooled air produced low, record-breaking mean monthly temperatures at some stations. Scattered thunderstorms on June 9-14 produced a remarkable 9.19" of precipitation in 24-hours at Medford.

The state experienced its 13th coolest July since 1892 and its third consecutive month with below normal temperatures. Cloud cover and cool air contributed to much below normal daily maximum temperatures. Fewer than 50% of reporting stations recorded any days with 100 degree or warmer readings. July maximum temperatures typically range from 5 100-degree days in the northeast to more than 15 days in the southwest. Cloud cover and rain associated with the remnants of Hurricane Chantel kept temperatures several degrees below normal in eastern Oklahoma.

Nearly all stations recorded an unusual run of at least 10 consecutive August days with maximum temperatures below 90 degrees. Such conditions occur in Oklahoma only about once per decade.

On the first of September many stations recorded their first 100-degree readings of 1989. One of these stations, Oklahoma City, later recorded a record-breaking low temperature as unseasonably cool Arctic air dominated that last three weeks of the month. The cool spell produced the earliest

fall freeze (32 degrees) ever recorded at several sites. Statewide, the month ranked as the fourth coolest September on record. Widespread and active frontal thunderstorms during the first one-half of the month accounted for above normal precipitation across most of the state.

Oklahoma experienced its first warmer than average October since 1983. This is only the second such October in the last ten years. The last month during 1989 that state-averaged monthly temperatures registered above normal warmth was April.

Dry weather during November led to the depletion of soil moisture supplies, threatening crops and pasture and supporting numerous extensive wildfires (see "Oklahoma Wildfires"). The state suffered its third driest November on record. Many stations reported no precipitation during the entire month. Above normal temperatures and extremely dry weather statewide aggravated the moisture shortage.

December 1989 ranked as the third coldest and tenth driest December on record. Many stations set records for their lowest December temperatures during 2 days of sub-zero weather. All stations recorded below normal precipitation. Again, these conditions supported numerous extensive grassfires.

Figure 1. State-averaged Mean Monthly Temperature for 1989

(Record begins in 1892)

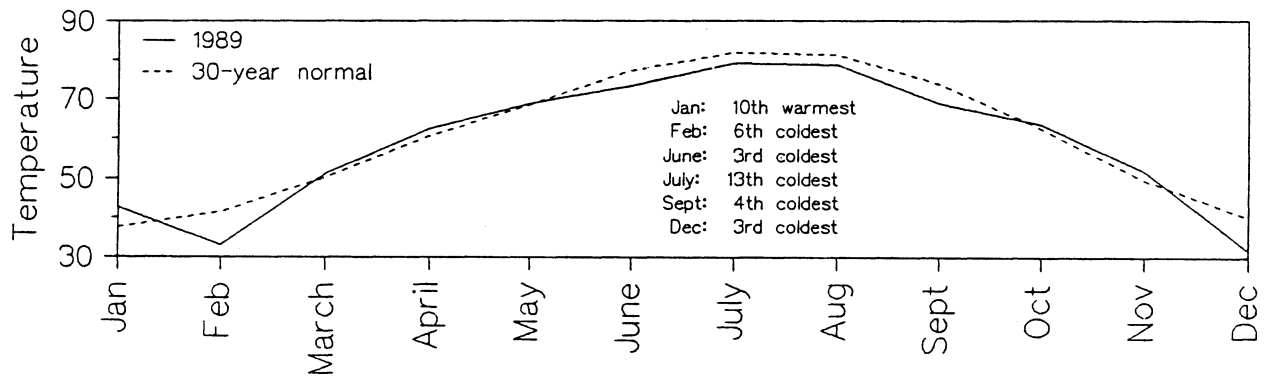
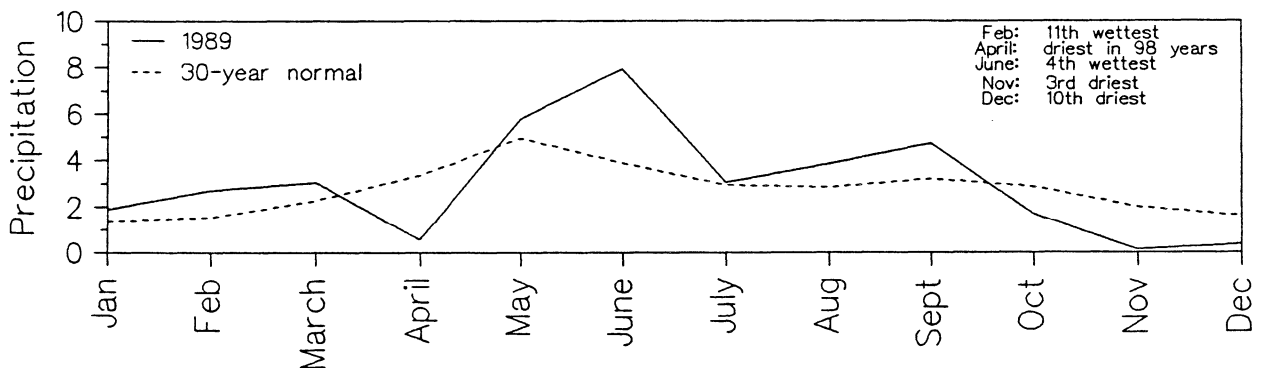


Figure 2. State-averaged Total Monthly Precipitation for 1989

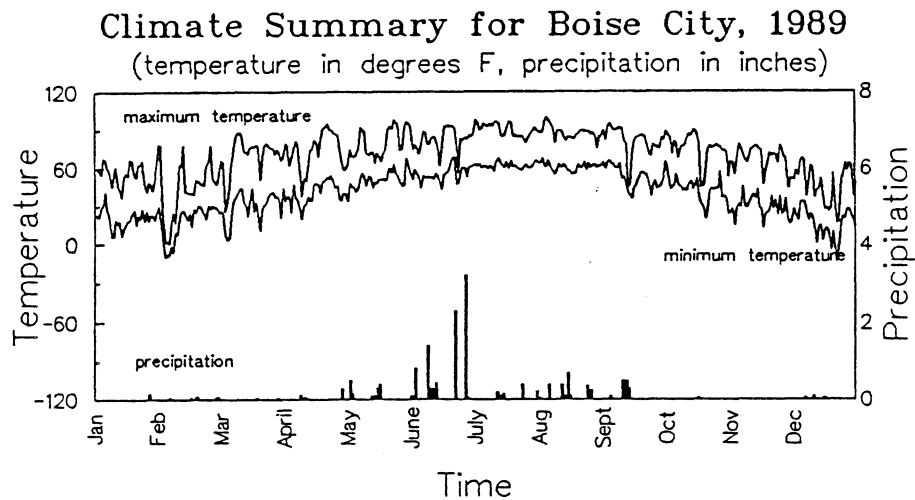
(Record begins in 1892)



## DRY AND WET SPELLS OF 1989

According to a summary of national moisture conditions appearing in the University of Nebraska "Drought Network News", severe to extreme long-term drought persisted over one-fourth of the contiguous U.S. while severe to extreme long-term wetness continued over one-eighth of the nation during the last six months of 1989. The pattern remained generally constant throughout the period with the wet areas limited to the Southeast, Northeast and Ohio Valley. Drought occurred on a month-to-month basis nationwide. Average rainfall across the nation was above the median for August and September, but most areas shifted to a dry regime during October and November. Nationwide, summer 1989 was the fifth wettest summer on record, while autumn 1989 ranked as the twenty-sixth driest. Oklahoma recorded its third coolest and sixth wettest summer in 98 years of weather records. Autumn in Oklahoma ranked as the 39th coolest and the 34th driest on record. The Figures and discussion which follow depict daily temperature and precipitation conditions for selected locations across the state during 1989.

### Northwestern Oklahoma (Boise City)



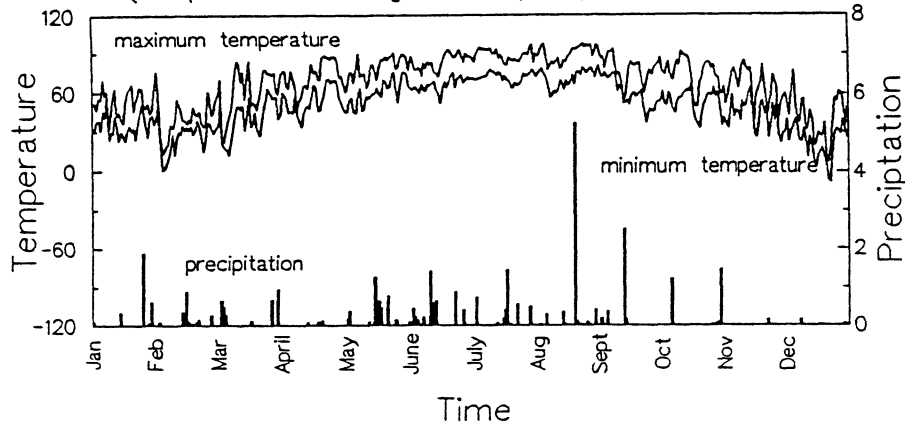
The western panhandle suffered dry conditions throughout the early spring. Thirteen 24-hour precipitation events in excess of .01" occurred from January through April. The long-term average moisture total during this time is 3.02", accumulating over an average of 16 rain days. The 1989 January through April precipitation total at Boise City was .98". Only three other years since 1948 have had smaller January through April precipitation totals; 1956, 1967 and 1972.

A second dry-spell occurred from October through December. Only five days with rainfall equal to or greater than .01" was reported during this time. This contrasts with a long-term average of 11 days. The three-month 1989 precipitation total was .30". The long-term average rainfall total for this same period is 1.86".

In spite of these seven dry months, an excessively wet June resulted in an above average annual precipitation total for 1989 of 17.14". The June 1989 rainfall in Boise City of 8.97" was 6.98" over the long-term average of 1.99", giving 1989 the wettest June of digitized record.

Northeastern Oklahoma (Tulsa)

### Climate Summary for Tulsa, 1989 (temperature in degrees F, precipitation in inches)



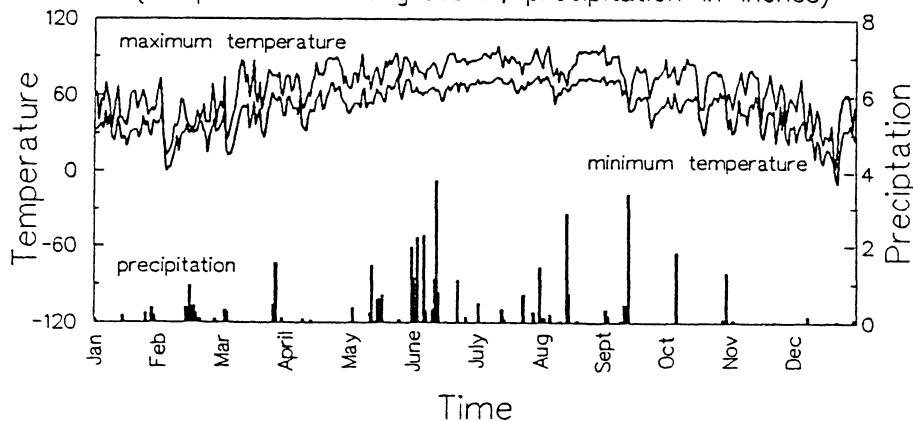
Unlike the northwest, northeastern Oklahoma reported above average precipitation from January through March. Excessively low April rainfall totaling only .34", was 3.81" below long-term average April conditions. This was the driest April in Tulsa since 1900. Measurable rainfall was reported on five days. On average there are nine days with 24-hour precipitation equal to or greater than 0.01" during April. Dry weather persisted through May.

Dry fall conditions began in the northeast during September. The four month September through December precipitation total of 7.8" was 5.71" below long-term expected values. In addition, there were only 17 days with measurable rainfall. On average there are nearly 27 days of rain from October through December in Tulsa. These extremely dry conditions followed on the heels of an extremely wet summer season and set the stage for large numbers of extensive grass and forest fires. The year ended with an annual precipitation total of 35.08", 3.69" below the long-term average for Tulsa of 38.77".

Although northeastern Oklahoma reported a wetter than average June, extreme conditions reported in Central portions of the state did not occur (see next section). The wettest month in Tulsa was August. The 6.69" reported was 3.68" above normal, the wettest August since 1942.

Central Oklahoma (Oklahoma City)

### Climate Summary for Oklahoma City, 1989 (temperature in degrees F, precipitation in inches)



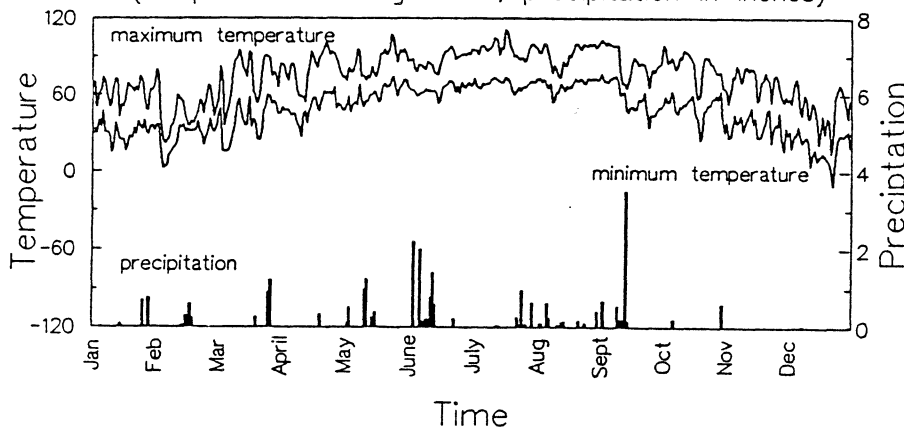
The first three months of 1989 registered above average precipitation totals in central Oklahoma, but April 1989 was excessively dry and only .17" of rainfall was reported. This was 2.74" below the long-term average level of 2.91". Oklahoma City normally reports eight April rain days. Only two days with measurable rainfall were reported during April of 1989. The only April in Oklahoma City drier than 1989 was that of 1936, in which only .03" of precipitation was reported. Dry conditions persisted into May.

Marked dry conditions were reported in November and December as well. These two months totaled 2.31" below normal rainfall levels. November 1989 in Oklahoma City was the fourth driest November since 1905. Drier Novembers were reported in 1910 (Trace), 1936 (.03") and 1969 (.05"). On average there are 10 rain days in November and December. There were only seven days with measurable rainfall during 1989.

An excessively wet June resulted in an annual precipitation total of 41.17", 10.28" greater than the long-term average value of 30.89". Oklahoma City June rainfall totaled 15.20". This is 11.33" greater than long-term average and was the wettest June on record at Oklahoma City.

Southwestern Oklahoma (Altus Irrigation Research Station)

Climate Summary for Altus, 1989  
(temperature in degrees F, precipitation in inches)

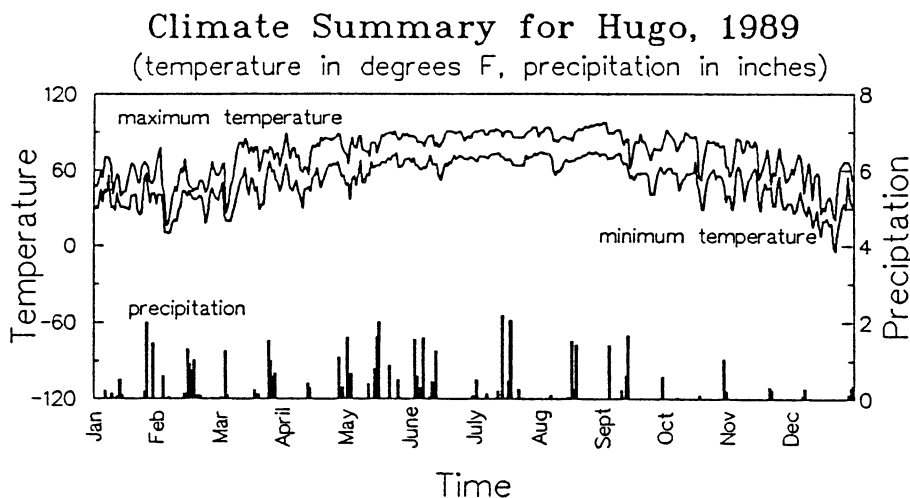


The 1989 rainfall pattern at Altus closely resembles that of Central Oklahoma, with above normal precipitation totals during January, February and March and drier than average conditions during April and May. The April through May precipitation total of 3.85" fell 2.83" short of the long-term average total of 6.68". This rain fell on two days in April and seven days in May. On the average there are five days with 24-hour accumulations equal to or greater than .01" in April and eight days in May. Drier April conditions at Altus have been reported only five times since 1948; .16" in 1960, 0.29" in 1961, 0.30" in 1964, 0.27" in 1969 and 0.0" in April 1987.

The fall and early winter dry-spell was far more dramatic in southwestern Oklahoma. As in the northwest, dry conditions began in October. No precipitation was reported on any November day. The last time Altus reported a rainless November was in 1965. Normal total precipitation for the three month period of October, November and December is 4.44". The October through December precipitation total for 1989 was .86". There were four days reporting 24-hour precipitation accumulations of .01" or more. On average there are 13 such days. Since 1948 there has been one year, 1950, with less precipitation from October through the end of December.

Although southwestern Oklahoma experienced several months with excessively wet conditions, only June and September precipitation totals were unusually large. The 7.66" of precipitation recorded during June 1989 ranks behind only 1985 with 8.31" as the wettest June since 1948. Although not as unusual as June, the 5.26" recorded for September 1989 ranked among the 10 wettest for the same period. The Altus precipitation total for the year (26.79") registered 2.74" above its long-term total of 24.05".

Southeastern Oklahoma (Hugo)



January through March of 1989 experienced moisture conditions well above the long-term average at Hugo. April registered only 2.03", 2.69" below the normal of 7.92". There were only four days during April with 24-hour totals of .01" or more. On average there are eight such days. April 1989 was the fifth driest April since 1948. The driest April on record at Hugo, .29", was recorded just two years ago, in 1987.

The end-of-year dry-spell began earlier in southeastern Oklahoma than in the rest of the state, lasting from August through December. These months normally average 34 days with 24-hour precipitation totals of .01" or more. There were 23 such days during August through December of 1989. The five month precipitation total for 1989 of 10.84" fell 8.03" short of the long-term average moisture total of 18.87". The driest period was October through December, which was 7.25" below normal rainfall levels. This is the driest fourth quarter recorded at Hugo in the digitized record.

The period May through July was excessively wet. This three month period accounted for 21.51" of precipitation. This is still less than a record 26.13" for the same three month period during 1968. May, June and July each ranked among the wettest since 1948. As a result, the 1989 annual precipitation total of 49.72" is 4.11" above the long-term average value of 45.61".

1989 Oklahoma Wildfires

(Source: Rob Doye, Oklahoma Department of Agriculture, Forestry Division)

Unusual weather patterns influenced Oklahoma wildfires in 1989. An early dry spell led to a record number of wildfires in April and fell two fires short of the record for May. Midsummer rains kept the summer fire season well below normal while producing unusually large amounts of grasses and other wildfire fuels. Another dry period started in September, setting the stage for the worst fall fire season in Oklahoma's history. The Oklahoma Forestry Division fought more fires in November than were ever fought in a one month period. Governor Bellmon banned all outdoor burning in 38 counties for a 25 day period in November and December which cut fire occurrences in half.

Wildfire Summary

	1978-1987 average	1988	1989
number of fires	1588	2261	2586
number of acres	36484	43864	59497
* cost	\$3.1 mill	\$3.7 mill	\$5.6 mill

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\* Cost per acre is estimated at a rate of \$85 per acre burned



### STORM SUMMARY REPORT

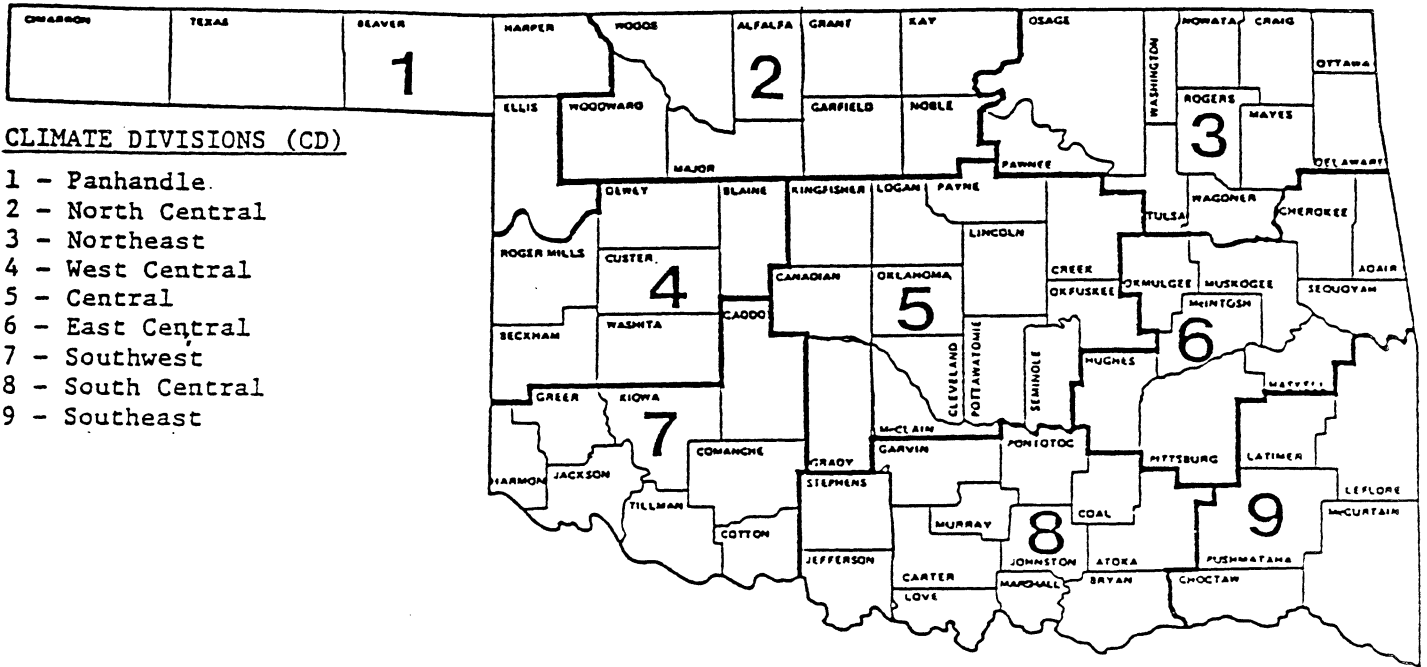
STATE OKLAHOMA MONTH \_\_\_\_\_ YEAR 1989

TYPE OF STORM	NUMBER	DAYS	DEATHS	INJURIES	DAMAGE*	
					PROPERTY	CROPS
TORNADOES	20	13	0	2	.10 - 1.00 Million Dollars	No Estimate
HAIL			0	0	.10 - 1.00 Million Dollars	No Estimate
THUNDERSTORM WINDS			1	9	.75 - 7.55 Million Dollars	No Estimate
HIGH WINDS			0	2	0	0
LIGHTNING			0	3	1.15 - 11.5 Million Dollars	No Estimate
FLASH FLOODS	26		1	0	5.15 - 51.5 Million Dollars	No Estimate
FLOODS	2		0	0	.05 - .50 Million Dollars	No Estimate
HEAVY SNOWSTORMS AND BLIZZARDS			0	0	5.00 - 50.00 Million Dollars	No Estimate
ICE STORMS #			0	0	0	0
HURRICANES & TROPICAL STORMS			0	0	0	0
ALL OTHERS	11	10	13		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

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

1989 STATION SUMMARY

The following tables contain summaries of the cooperative data received at the OCS during 1989. 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.

1989 TOTAL PRECIPITATION AND DEVIATION FROM NORMAL (Inches)

CD	ID	STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL															
1	0332	ARNETT	0.35	-0.00	0.96	0.02	1.33	0.00	0.68	-1.1	4.38	0.2	8.47	5.1	1.23	-0.8	3.84	1.4	5.35	3.4	1.51	-0.3	0.00	-1.0	0.23	-0.4	28.35	6.60		
1	0593	BEAVER	0.61	0.02	1.19	0.6	0.80	-0.3	0.16	-1.0	8.57	5.3	9.61	6.7	3.06	1.8	5.70	2.8	1.98	0.4	0.09	-1.1	0.00	-0.8	0.45	0.0	32.23	12.99		
1	0908	BOISE CITY 2 E	0.15	-0.2	0.23	-0.2	0.13	-0.2	0.47	-0.8	1.55	-0.8	8.97	6.9	1.07	-1.5	2.35	-0.0	1.90	0.3	0.05	-0.7	0.00	-0.7	0.25	-0.1	17.14	1.30		
1	1243	BUFFALO	0.51	-0.0	0.70	-0.2	1.72	0.0	2.27	0.2	7.03	2.6	8.31	4.7	3.20	-0.1	5.94	2.6	2.76	-0.0	0.28	-1.6	0.00	-1.6	0.29	-0.4	33.01	6.36		
1	3070	FARGO	0.28	-0.1	1.18	0.3	1.96	0.6	0.70	-1.1	4.83	0.8	5.58	2.3	1.67	-0.5	4.99	2.5	3.42	1.6	0.70	-0.9	0.00	-1.0	0.36	-0.2	25.68	4.26		
1	3407	GAGE FAA APT	0.35	-0.1	2.03	1.2	1.34	0.1	0.34	-1.5	4.03	0.3	5.29	2.5	1.70	-0.4	3.91	1.4	3.05	1.4	0.39	-1.2	0.00	-0.8	0.41	-0.2	22.86	2.93		
1	3489	GATE	0.38	*	1.10	*	0.85	*	0.25	*	7.16	*	6.57	*	4.39	*	3.72	*	2.74	*	0.15	*	0.00	*	0.15	*	0.48	*	27.80	*
1	3628	GOODWELL RES ST	0.72	0.4	0.58	0.2	0.25	-0.5	0.23	-0.8	4.83	1.9	5.23	2.9	1.44	-1.4	2.99	0.6	1.84	0.5	0.03	-0.9	0.00	-0.6	0.14	-0.1	18.29	2.29		
1	4298	HOOKER	0.78	0.3	0.64	0.1	0.19	-1.0	0.36	-0.8	3.58	0.1	7.31	4.3	1.63	-1.3	2.23	-0.5	1.17	-0.4	0.00	-1.1	0.00	-0.7	0.18	-0.2	18.09	-1.17		
1	4766	KENTON	0.19	-0.1	0.22	-0.0	0.07	-0.6	0.88	-0.4	2.16	-0.3	5.43	3.6	*	*	2.73	0.2	2.45	0.9	0.39	-0.5	0.00	-0.5	0.19	-0.1	*	*		
1	5045	LAVERNE	0.12	-0.5	0.65	-0.2	2.30	0.7	0.20	-1.3	4.29	0.9	6.11	3.1	4.96	2.4	3.56	0.5	2.46	0.4	0.19	-1.3	0.00	-0.9	0.36	-0.3	25.22	3.64		
1	6740	OPTIMA LAKE	0.40	*	*	*	0.39	*	0.32	*	5.31	*	5.06	*	1.44	*	1.82	*	1.87	*	0.04	*	0.04	*	0.12	*	*	*	*	
1	7412	RANGE	0.61	*	0.96	*	0.53	*	5.14	*	4.48	*	4.88	*	2.25	*	2.04	*	2.04	*	0.09	*	0.00	*	0.37	*	*	*	*	
1	7534	REGNIER	0.26	-0.0	0.10	-0.6	1.10	-0.0	1.52	-0.4	5.29	3.4	0.18	-2.3	1.58	-0.3	1.86	0.4	0.23	-0.5	0.00	-0.5	0.00	-0.5	0.06	-0.2	12.20	-1.22		
1	9017	TURPIN 4 SSE	0.64	*	0.86	*	0.64	*	0.23	*	4.66	*	12.51	*	3.18	*	3.31	*	1.23	*	0.03	*	0.00	*	0.15	*	27.44	*		
2	0193	ALVA	0.77	*	0.80	-0.0	2.68	1.0	0.90	-1.5	4.90	0.8	6.71	2.9	1.31	-1.2	8.09	5.2	2.62	0.1	0.30	-1.2	0.00	-1.2	0.73	*	29.81	4.94		
2	0755	BILLINGS	1.43	0.5	1.05	-0.1	4.71	2.6	0.27	-2.6	4.89	0.2	8.35	4.2	1.46	-2.0	5.29	2.4	3.80	-0.4	3.58	1.1	0.00	-1.8	0.05	-1.1	34.89	2.85		
2	0818	BLACKWELL 2E	0.97	*	0.39	*	2.48	*	0.54	*	4.21	*	10.75	*	2.80	*	4.97	*	3.52	*	4.13	*	0.00	*	0.27	*	35.05	*		
2	1075	BRAWN	1.25	*	2.93	*	0.43	*	3.79	*	12.26	*	2.40	*	3.90	*	2.70	*	2.89	*	2.89	*	0.06	*	0.14	*	*	*	*	
2	1620	CEDARDALE	0.66	*	1.13	*	1.97	*	0.74	*	4.21	*	6.96	*	0.93	*	5.48	*	1.53	*	*	*	*	*	*	*	*	*	*	
2	1724	CHEYKREE	1.17	0.4	0.87	-0.0	3.25	1.3	0.75	-1.8	4.94	1.0	12.45	8.4	1.43	-1.3	4.64	1.9	4.64	1.9	1.25	-0.5	0.00	-1.2	1.10	0.2	*	*		
2	2912	ENID	1.60	0.6	*	*	0.60	-2.1	4.80	-0.2	6.81	2.6	4.11	0.9	4.11	0.9	6.90	3.5	3.09	-0.1	3.36	0.5	0.04	-1.7	0.12	-0.9	*	*		
2	3358	FREEDOM	0.83	*	1.17	*	2.68	*	0.20	*	4.67	*	6.28	*	1.96	*	6.31	*	3.43	*	0.21	*	0.00	*	0.41	*	28.06	*		
2	3740	GREAT SALT PLNS	0.92	0.3	3.64	1.8	0.83	-1.8	3.84	0.2	6.22	2.7	1.02	-2.1	9.82	6.9	9.82	6.9	4.03	1.0	3.43	0.4	0.00	-1.4	0.00	*	*	*		
2	3909	HARDY	1.24	*	*	*	2.72	*	0.13	*	7.05	*	6.74	*	5.33	*	6.69	*	6.81	*	5.80	*	0.00	*	0.14	*	*	*		
2	4019	HELENA 1 SSE	0.95	0.2	0.80	-0.2	2.25	0.3	0.31	-2.2	4.56	0.2	5.56	1.6	1.91	-1.1	8.92	6.3	4.20	1.3	1.43	-0.6	0.00	-1.5	0.81	-0.1	31.71	4.06		
2	4573	JEFFERSON	1.38	0.6	0.55	-0.4	3.27	1.3	0.60	-2.1	4.75	0.8	10.28	6.3	1.65	-2.2	7.88	4.4	4.48	1.3	0.44	-2.1	0.00	-1.9	0.26	-0.7	35.35	5.28		
2	5013	LAMONT	1.22	*	0.61	*	2.65	*	0.67	*	6.44	*	8.05	*	5.25	*	8.23	*	3.67	*	2.98	*	0.02	*	0.32	*	40.12	*		
2	5768	MEDFORD	1.40	*	0.57	*	3.12	*	1.48	*	4.47	*	13.37	*	1.63	*	7.48	*	4.65	*	0.81	*	0.01	*	0.36	*	39.36	*		
2	6055	MORRISON	1.48	*	1.42	*	1.16	*	0.20	*	5.61	*	7.99	*	1.54	*	5.65	*	3.41	*	2.42	*	0.04	*	0.29	*	31.22	*		
2	6139	MUTUAL	0.62	0.1	1.15	0.2	2.29	0.7	0.63	-1.8	4.59	0.2	7.06	3.8	1.29	-1.2	3.43	1.2	2.95	0.4	0.93	-0.5	0.00	-1.1	0.66	0.0	25.60	2.08		
2	6278	NEMKIRK	0.55	-0.3	0.44	-0.6	1.21	-0.7	0.35	-2.6	4.15	-0.5	10.55	5.9	3.90	0.3	5.91	2.4	3.52	-0.0	3.70	0.9	0.03	-1.9	0.27	-0.9	34.59	1.89		
2	6751	ORIENTA	1.28	*	0.75	*	2.09	*	0.11	*	4.30	*	6.25	*	4.41	*	6.56	*	2.28	*	0.63	*	0.00	*	0.30	*	28.96	*		
2	7012	PERRY	1.35	0.4	1.65	0.3	3.24	0.8	0.17	-2.5	5.64	0.3	8.58	4.4	1.99	*	4.21	0.8	5.30	1.5	2.53	-0.1	0.04	-1.7	0.48	-0.7	35.18	2.29		
2	7201	PONCA CITY FAA	1.54	0.6	0.72	-0.5	3.24	1.1	0.46	-2.4	3.56	-0.9	9.32	5.1	2.42	-1.6	4.94	1.5	5.05	1.2	4.44	1.8	0.02	-2.0	0.36	-0.9	36.09	3.08		
2	7505	RED HOOK 1 NNE	1.11	0.2	1.07	-0.3	4.42	2.1	0.00	-2.7	3.46	-1.1	5.91	1.8	3.65	-0.0	5.25	2.3	3.99	0.2	4.54	2.0	0.00	-1.7	0.10	-1.1	33.50	1.68		
2	7556	RENFROW	1.29	0.5	0.57	-0.4	2.57	0.6	0.44	-2.1	3.45	-0.3	8.05	4.1	3.89	0.3	7.47	4.5	4.65	1.4	3.85	1.5	0.01	-1.6	0.39	-0.6	36.64	8.08		
2	9404	WAYNOKA	0.80	0.2	0.82	-0.1	1.58	-0.0	0.82	-1.3	4.83	0.3	6.50	2.7	4.10	1.5	5.96	3.2	2.19	-0.3	1.42	-0.2	0.00	-1.2	0.32	-0.4	29.34	4.25		
2	9760	WOODWARD	0.49	*	0.94	*	0.82	-0.0	1.21	*	4.22	*	6.50	*	2.20	*	4.05	*	2.47	*	0.55	*	0.00	*	0.33	*	23.38	-0.10		

