

# CLIMATOLOGICAL DATA

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## KANSAS SECTION

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### GENERAL SUMMARY

July, just passed, was the hottest month on record in Kansas, and, combined with June preceding, made the hottest 2-month period. Temperatures of 110° or higher occurred in almost every part of the State. At 50 of the 97 places where temperature records are kept new all-time extreme high temperature records were broken and at 14 of those places the previous all time high marks were equalled. The highest recorded during the month was 119° at Lincoln which exceeded by 3° the previous high mark for the State. The mean temperature of the month, 87.2° is 8.3° above normal. This was 5.8° higher than the mean for the hot July one year previous and 2.2° higher than the mean for the previous hottest month on the State's record, which was July, 1901.

An excessive amount of sunshine and an unusual shortage of rainfall accentuated the damaging effects of the heat.

No part of the State had sufficient rainfall for more than temporary needs. The average for the eastern third was 1.74 inches; the middle third, 0.91 inch; the western third, 0.74 inch; and for the State as a whole, 1.13 inches, which is 2.17 inches below normal. The greatest monthly amount reported was 3.29 inches at Pleasanton. At Smith Center no rain whatever was recorded.

Only one July, that of 1916, has passed with less rainfall in Kansas and it was preceded by a wet June. Combined with June preceding, this made the driest 2-month period for the time of year on the State's record, except in 1913, 1917, and 1933. It was the 5th successive month of deficient precipitation for the State as a whole and the 23d month of 31 in which a shortage of precipitation has been recorded.

The effects on growing crops approached disaster. Corn, which was rather badly in need of rain when the month began, was practically ruined as far as a yield of grain was concerned and much of it was so badly damaged it was not fit for fodder for winter feeding. A considerable amount was being cut for immediate feeding as the month ended.

Pastures dried up and in many western counties were burned bare. Except in a few favored localities, pastures were too poor to support livestock. The second crop of alfalfa, a light one, was secured early in the month. The crop made little or no growth. Gardens and truck were practically burned up, except in the few places where irrigated. Fruit was greatly damaged. Grain sorghums held up fairly well in the eastern half of the State though their growth was very slow. In the western half they were greatly damaged.

A shortage of water for live stock became serious in most of the eastern half of Kansas as the month progressed. Creeks and ponds dried up and rivers were at unusually low stages.

### IMPORTANT MISCELLANEOUS PHENOMENA

Light hail fell on the 5th at Dodge City, Oberlin, and near Healy; on the 13th at Minneapolis, Clifton, Florence, and near

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Bison; and on the 29th near Pomona and at the northeastern edge of Topeka.

Moderate hail was reported on the 4th and 7th at Leoti and on the 25th near Overbrook.

No heavy hail was reported.

Storms of especial severity are tabulated elsewhere in this bulletin.

### COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation (inches)						Aver. No. of days				
	Mean	Maximum	Minimum	Average						With 0.01 in. or more precip'n.	Clear	Partly cloudy	Cloudy	
				Eastern division	Middle division	Western division	State	Snow unmtd						
1887	80.1	108	52	1.79	1.78	2.49	2.02							
1888	81.2	110	32	2.53	2.25	3.14	2.64			5	17	10	4	7
1889	76.9	108	41	6.20	4.97	2.77	4.65			0	7	13	11	8
1890	83.1	113	45	1.97	0.47	1.45	1.30			0	4	17	11	3
1891	74.0	104	44	3.64	5.81	4.23	4.56			0	9	8	18	5
1892	77.5	109	41	4.09	3.29	2.63	3.34			0	7	15	11	5
1893	79.5	113	42	3.98	3.31	3.28	3.52			0	8	16	13	2
1894	77.8	114	42	1.83	1.43	1.61	1.62			0	8	20	8	3
1895	74.9	110	42	6.45	4.10	5.98	5.51			0	0	12	12	7
1896	78.1	108	48	5.75	5.33	2.74	4.61			0	0	12	12	7
1897	80.2	111	45	3.36	2.63	3.39	3.13			0	0	5	19	9
1898	77.7	110	46	3.31	2.72	2.98	3.00			0	0	17	11	3
1899	76.2	106	45	6.86	3.74	5.55	5.38			0	0	12	12	7
1900	77.9	106	43	4.69	2.98	2.25	3.31			0	0	6	19	9
1901	85.6	112	44	2.49	1.49	1.55	1.84			0	0	9	15	10
1902	76.8	105	43	5.33	3.95	3.32	4.20			0	0	7	18	10
1903	78.3	110	40	3.90	2.85	2.32	3.02			0	0	7	19	8
1904	75.6	108	46	7.32	6.38	3.60	5.97			11	9	16	10	5
1905	74.5	108	34	5.99	5.50	4.76	5.45			0	0	9	15	11
1906	73.8	102	42	4.97	4.41	4.46	4.61			0	0	9	15	5
1907	78.4	106	50	3.41	4.21	3.70	3.77			0	0	8	18	9
1908	75.8	107	41	3.26	3.82	3.22	3.43			0	0	8	18	11
1909	78.1	108	47	8.20	4.94	3.16	5.43			0	10	16	11	4
1910	79.5	111	48	2.27	1.88	1.77	2.01			0	5	19	10	2
1911	78.6	114	42	4.58	4.06	3.34	3.99			0	10	14	18	3
1912	79.9	111	47	2.64	2.26	2.78	2.56			0	7	17	11	4
1913	82.1	116	47	1.77	0.98	1.21	1.32			0	5	20	9	2
1914	79.9	111	45	3.14	2.28	2.62	2.66			0	4	17	16	4
1915	74.0	106	41	7.41	5.59	4.69	5.90			12	14	11	6	1
1916	81.2	107	48	0.81	0.66	0.87	0.73			0	2	26	4	6
1917	80.3	112	44	1.42	1.28	1.90	1.63			0	6	21	9	1
1918	78.3	110	45	2.09	2.49	3.20	2.59			0	8	16	10	5
1919	80.2	106	48	1.75	1.09	2.88	1.91			0	4	28	6	2
1920	77.6	110	46	4.06	3.07	2.62	3.25			0	7	19	10	2
1921	79.2	108	50	3.39	2.55	3.46	3.13			0	6	17	10	4
1922	77.0	109	42	6.78	5.19	2.69	4.89			0	8	18	10	3
1923	78.7	111	49	3.88	2.11	3.47	3.15			0	7	18	11	2
1924	75.6	109	42	4.74	3.81	2.53	3.69			0	8	18	10	3
1925	79.8	112	39	3.52	3.19	2.74	3.15			0	7	17	11	3
1926	78.8	110	47	2.33	2.74	2.47	2.51			0	7	17	20	9
1927	77.2	108	49	4.71	3.04	3.37	3.71			0	8	18	9	4
1928	77.5	105	52	4.13	5.37	3.65	4.38			0	8	16	10	5
1929	78.9	108	49	3.34	4.37	2.92	3.54			0	9	19	9	3
1930	81.4	112	48	1.37	1.96	2.65	1.99			0	0	22	5	4
1931	80.4	113	43	3.27	1.71	1.97	2.32			0	5	20	8	3
1932	81.6	110	50	4.37	3.20	1.78	3.12			0	6	20	8	3
1933	81.4	116	48	3.73	2.82	1.84	2.80			0	5	21	8	1
1934	87.2	119	47	1.74	0.91	0.74	1.13			0	3	23	7	2
Period	78.7	119	32	3.84	3.15	2.89	3.30			0	7	17	10	4

### PRESSURE, WIND, HUMIDITY, AND SUNSHINE DATA

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	A. v. hly velocity	Max. velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Concordia	29.86	30.15	28	29.41	13	8.8	33	w.	5	51	25	25	85
Dodge City	29.87	30.18	28	29.54	13	13.2	32	n.	5	46	23	22	89
Goodland						7.5	30		7				
Kansas City, Mo.	29.88	30.14	7	29.51	31	9.8	43	nw.	13	56	30	29	88
St. Joseph, Mo.	29.87	30.16	7	29.52	13	7.9	32	se.	13	55	30	28	86
Topeka						9.3	31	n.	13				82
Wichita	29.86	30.11	28	29.53	31	11.7	31	n.	13	52	26	25	87

Note: All wind velocity records, except those for Goodland, in this table are corrected values, obtained from 4-cup anemometers.





Daily Precipitation for July, 1934

Table with columns for Stations, Drainage-Basins, Day of month (1-31), and Total. Rows include stations like Aitchison, Bazaar, Blue Rapids, etc., grouped under Eastern Division and Middle Division.

Daily Precipitation for July, 1934-Continued

Table with columns for Stations, Drainage-Basins, Day of month (1-31), and Total. Rows include stations like Lindsborg, Lyons, Marion, Minneapolis, etc., with precipitation values for each day and a total for the month.

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. \*\*\* Regular Weather Bureau station; precipitation is for the 24 hours, midnight to midnight. † Evaporation station. T, Trace, or less than 0.005 inch. ||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete. \* Precipitation included in next following measurement.

DAILY EVAPORATION--INCHES--AND WIND MOVEMENT--MILES--FOR JULY, 1934 ( See temperature and precipitation data in Climatological Tables. )

Table with columns for Stations, Data, Day of Month (1-31), and Monthly. Rows include Tribune station with evaporation and wind movement data for each day and monthly totals.

\* Included in next reading. § Incomplete. Wind velocity records in this table are made with 4-cup anemometers.

Daily Temperatures for July, 1934

Table with columns for Stations, days 1-31, and Mean. Rows are grouped by division: Eastern Division, Middle Division, and Western Division. Each station entry includes maximum and minimum temperature values for each day.

Daily Temperatures for July, 1934—Continued

Table with columns for Stations, days 1-31, and Mean. Rows include Middle Division (Salina, Wichita, Winfield) and Western Division (Ashland, Atwood, Cimarron, Colby, Dodge City, Dresden, Garden City, Goodland, Healy, Hill City, Hoxie, Johnson, Lakin, Leoti, Liberal, Norton, Quinter, Richfield, St. Francis, Scott City, Sublette, Tribune, Wakeeney).

\* , b , c , etc. , indicate respectively 1 , 2 , 3 , etc. , days missing from record. Temperatures given in this table are in each instance for the 24-hour period ending about sunset, except as otherwise stated.
|| Regular Weather Bureau station; temperatures are for 24-hour period extending from midnight to midnight.
Records of daily temperatures are also kept at the following stations: Centralia, Columbus, Eskridge, Lebo, Toronto, Aiden, Bison, Chapman, Herington, Medicine Lodge, Plainville, Wellington, Elkhart, Jemore, Oakley, Oberlin and Ulysses. These are on file at the Weather Bureau Office, Topeka, Kansas.
\*\* Temperatures at this place are for 24-hour period ending 8 a. m.

