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Weather Information for Garden City, 2018

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Weather Information for Garden City, 2018

Abstract

Summary of 2018 weather for research conducted at the Garden City field location.

Keywords

Garden City weather, 2018 weather, southwest Kansas weather report

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Weather Information for Garden City, 2018

J. Elliott

Precipitation for 2018 totaled 25.31 inches. This was 6.07 inches above the 30-year average of 19.24 inches and was the second consecutive year with above normal moisture. The year started out dry, with total moisture for January through May at 48 percent of normal. Then, excellent moisture in June and July resulted in very good summer crop yields. September and October also had above normal rainfall and favorable wheat planting conditions. Small hail was noted on March 18. The largest precipitation events were 3.99 inches falling from June 20 through 25 and 8.63 inches during the last week of July.

Measurable snowfall occurred in January, February, April, October, November, and December. Annual snowfall totaled 13.3 inches compared to an average of 19.7 inches. Seasonal snowfall (2017-2018) was only 1.30 inches, the lowest total since records began in 1956.

Average daily wind speed was 5.13 mph compared to the 30-year average of 5.10 mph. Open pan evaporation was measured daily from April through October, and totaled 76.25 inches. This was 7.51 inches above the 30-year mean of 70.26 inches.

Our mean annual temperature was 54.2°F which was similar to the 30-year average of 53.7°F. Triple-digit temperatures were observed on 10 days in 2018, with the highest being 104°F on July 20. Five record high temperatures were equaled or exceeded in 2018: 74°F on January 11, 87°F on March 24, 95°F on April 13, 102°F on June 2, and 97°F on October 4.

Sub-zero temperature occurred three times in 2018. The lowest temperature was -8°F noted on January 1. Six record low temperatures were equaled or exceeded: -8°F on January 1, 15°F on April 15, 23°F on April 16, 52°F on August 1, and 21°F again on October 15 and 16.

The last spring freeze was 32°F on April 26, which was three days earlier than the 30-year average. The first fall freeze was 31°F on October 14, which was two days later than normal. This resulted in a 171 day frost-free period, which is six days longer than the 30-year average.

The 2018 climate information for Garden City is summarized in Table 1.

Table 1. Climate data, Southwest Research-Extension Center, Garden City

Month	Precipitation		Monthly temperatures						Wind		Evaporation	
	2018	avg.	2018 avg.			2018 extreme			2018	30-year avg.	2018	30-year avg.
			Max	Min	Mean	30-year avg.	Max	Min				
	----- in. -----		----- °F -----						----- mph -----		----- in. -----	
January	0	0.46	50.0	13.5	31.8	30.4	74	-8	3.93	4.50	--	--
February	0.02	0.55	48.1	15.2	31.6	33.9	78	1	5.16	5.24	--	--
March	0.37	1.31	64.0	28.3	46.1	42.9	87	13	6.05	6.31	--	--
April	0.78	1.74	64.5	30.1	47.3	52.3	95	15	7.03	6.42	8.38	8.21
May	2.18	2.98	85.1	54.4	69.7	62.8	97	40	5.78	5.76	12.03	10.04
June	4.2	3.12	93.3	63.1	78.2	72.6	103	47	6.64	5.37	16.65	11.96
July	8.84	2.8	92.6	64.8	78.7	77.9	104	53	4.29	4.59	14.19	13.22
August	1.63	2.51	88.4	60.9	74.6	76.3	100	52	4.13	4.11	10.68	11.28
September	2.05	1.42	83.2	57.8	70.5	67.7	103	42	5.68	4.73	9.45	9.22
October	3.07	1.21	65.2	38.4	51.8	54.9	97	21	4.57	4.89	4.87	6.33
November	0.25	0.55	52.9	23.3	38.1	41.6	67	3	4.26	4.80	--	--
December	1.92	0.59	47.1	17.8	32.5	31.4	62	2	4.06	4.45	--	--
Annual	25.31	19.24	69.5	38.9	54.2	53.7	104	-8	5.13	5.10	76.25	70.26

Normal latest spring freeze (32°F): April 29. In 2018: April 26.

Normal earliest fall freeze (32°F): Oct. 12. In 2018: Oct 14.

Normal frost-free period (>32°F): 165 days. In 2018: 171 days.

30-year averages are for the period 1981-2010. All recordings were taken at 8:00 a.m.