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Weather Information for Garden City, 2019

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Weather Information for Garden City, 2019

Abstract

Summary of 2019 weather for research conducted at the Garden City field location.

Keywords

Garden City weather, 2019 weather, southwest Kansas weather report

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Weather Information for Garden City, 2019

J. Elliott

Precipitation for 2019 totaled 17.49 inches. This was 1.75 inches below the 30-year average of 19.24 inches. By the end of May, we had received 10.81 inches which was 3.77 inches above normal for that point of the year, resulting in good spring planting conditions. May had 19 days with measurable precipitation which was the most of any month on record. Each month after May 2019 exhibited below normal moisture until a rain event after Christmas pulled the December monthly precipitation above normal. Hail was noted on May 6 and July 20. The largest precipitation event was 2.65 inches falling from May 19 through May 24.

Measurable snowfall occurred in January, February, March, October, and November. Annual snowfall totaled 23.8 inches compared to an average of 19.7 inches. Seasonal snowfall (2018–2019) was 33.4 inches and was 13.67 inches above the average of 19.73 inches.

The average daily wind speed was 4.86 mph compared to the 30-year average of 5.10 mph. Open pan evaporation was measured daily from April through October, and totaled 72.74 inches. This was 2.48 inches above the 30-year mean of 70.26 inches.

Our mean annual temperature was 53.3°F which was similar to the 30-year average of 53.7°F. Triple-digit temperatures were observed on 10 days in 2019, with the highest being 103°F on July 18, 20, and 21 as well as August 1 and 21. No record high temperatures were recorded in 2019.

Sub-zero temperature occurred four times in 2019. The lowest temperature was -3°F noted on March 5. Two record low temperatures were equaled or exceeded: 49°F on June 24 and 6°F on October 31.

The last spring freeze was 30°F on April 19, which was ten days earlier than the 30-year average. The first fall freeze was 17°F on October 11, which was one day earlier than normal, and was unusual because it was a much lower temperature than the normal first fall freeze. This resulted in a 175 day frost-free period, which is ten days longer than the 30-year average.

The 2019 climate information for Garden City is summarized in Table 1.

Table 1. 30-year averages are for the period 1981-2010

Month	2019	Average precipitation 1981-2010	Temperatures						Wind		Evaporation		
			Average 2019			Average 1981-2010	2019 extremes		2019	Average 1981-2010	2019	Average 1981-2010	
			Max	Min	Mean		Max	Min					
										----- mph -----		----- in. -----	
January	0.85	0.46	42.2	19.4	30.8	30.4	60	4	4.45	4.5	n/a	n/a	
February	1.42	0.55	39.9	14.5	27.2	33.9	70	-2	5.00	5.24	n/a	n/a	
March	1.98	1.31	49.7	24.4	37.1	42.9	80	-3	5.94	6.31	n/a	n/a	
April	0.09	1.74	71.2	38.2	54.7	52.3	89	20	5.96	6.42	8.94	8.21	
May	6.47	2.98	71.1	46.2	58.7	62.8	91	35	4.01	5.76	7.37	10.04	
June	1.20	3.12	86.7	57.5	72.1	72.6	102	41	4.75	5.37	12.30	11.96	
July	1.74	2.8	93.5	64.3	78.9	77.9	103	56	5.20	4.59	14.69	13.22	
August	1.76	2.51	93.1	64.4	78.8	76.3	103	56	3.83	4.11	11.56	11.28	
September	0.12	1.42	90.6	60.4	75.5	67.7	100	48	5.96	4.73	11.92	9.22	
October	0.36	1.21	66.9	33.0	50.0	54.9	93	7	5.03	4.89	5.96	6.33	
November	0.20	0.55	57.3	23.2	40.3	41.6	80	0	4.43	4.8	n/a	n/a	
December	1.30	0.59	51.8	20.2	36.0	31.4	69	10	3.73	4.45	n/a	n/a	
Annual	17.49	19.24	67.8	38.8	53.3	53.7	103	-3	4.86	5.10	72.74	70.26	
		Average											
		2019											
Latest spring freeze		April 29	April 19										
Earliest fall freeze		October 12	October 11										
Frost free period		165 days	175 days										