

## Weather Information for Garden City, 2016

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Precipitation for 2016 totaled 17.73 in. This was 1.51 in. below the 30-year average of 19.24 in. and followed two years of above normal moisture. April and July 2016 had considerably above average precipitation, causing good summer crop growing conditions. Rainfall diminished after July to 37% of the 30-year-average, resulting in dry conditions for fall wheat planting. Hail was not observed in 2016. Blowing dust was noted on two days in March. The largest daily rainfall events were 1.72 in. on April 16, and 1.68 in. on July 2.

Measurable snowfall occurred in February, March, and December. Annual snowfall totaled 4.0 in. (tied the least record from 1968) compared to an average of 19.7 inches. The largest daily snow amount was 1.5 in. recorded on February 2, and again on December 18. Seasonal snowfall (2015-2016) was only 2.6 in., which set a record for lowest seasonal snowfall amount.

Average daily wind speed was 5.01 mph compared to the 30-year average of 5.10 mph. Open pan evaporation was measured daily from April through October and totaled 79.31 in. This was 9.05 in. above the 30-year mean of 70.26 in.

The mean annual temperature was 56.1°F, which was 2.4°F above the 30-year average of 53.7°F. Triple-digit temperatures were observed on 6 days in 2016, with the highest being 101°F on July 24. Eight record high temperatures were equaled or exceeded in 2015: 90°F on February 19, 91°F on October 16, 98°F on October 17, 100°F on October 18, 90°F on October 29, 91°F on November 1, 82°F on November 16, and 87°F on November 17. On October 18, 100°F was the highest temperature recorded for the month of October.

Sub-zero temperatures occurred four times in 2016. The lowest temperature was -20°F noted on December 18 and was also a record low for the month of December. The all-time record low was -22°F on January 19, 1984. Four record low temperatures were equaled or exceeded: -1 on December 8, -20 on December 18, -11 on December 19, and -10 on December 20.

The last spring freeze was 32°F on May 3, which was four days later than the 30-year average. The first fall freeze was 30°F on October 7, which was five days earlier than normal. This resulted in a 157-day frost-free period, which is eight days shorter than the 30-year average.

The 2016 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	
	2016	avg.	2016 average			2016 extreme			2016	30-year avg.	2016	30-year avg.
			Max	Min	Mean	30-year avg.	Max	Min				
	----- in. -----		----- °F -----						----- mph -----		----- in. -----	
January	0.04	0.46	46.6	17.6	32.1	30.4	66	7	4.40	4.50	--	--
February	0.22	0.55	56.6	23.7	40.1	33.9	90	7	5.44	5.24	--	--
March	0.06	1.31	66.6	29.3	48.0	42.9	86	9	6.28	6.31	--	--
April	4.59	1.74	68.9	38.8	53.8	52.3	85	22	6.15	6.42	7.64	8.21
May	0.92	2.98	74.9	45.9	60.4	62.8	93	30	5.28	5.76	10.07	10.04
June	3.61	3.12	91.7	62.1	76.9	72.6	100	46	5.23	5.37	15.41	11.96
July	5.97	2.80	92.2	66.3	79.3	77.9	101	57	4.10	4.59	14.02	13.22
August	1.85	2.51	88.7	62.7	75.7	76.3	100	50	4.07	4.11	11.20	11.28
September	0.17	1.42	86.8	55.2	71.0	67.7	98	37	5.27	4.73	10.62	9.22
October	-	1.21	80.4	42.4	61.4	54.9	100	30	4.99	4.89	10.35	6.33
November	0.08	0.55	65.4	31.0	48.2	41.6	91	11	4.60	4.80	--	--
December	0.22	0.59	42.8	10.5	26.7	31.4	61	-20	4.25	4.45	--	--
Annual	17.73	19.24	71.8	40.5	56.1	53.7	101	-20	5.01	5.10	79.31	70.26

Normal latest spring freeze (32°F): April 29. In 2016: May 3.

Normal earliest fall freeze (32°F): Oct. 12. In 2016: October 7.

Normal frost-free period (>32°F): 165 days. In 2016: 157 days.

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