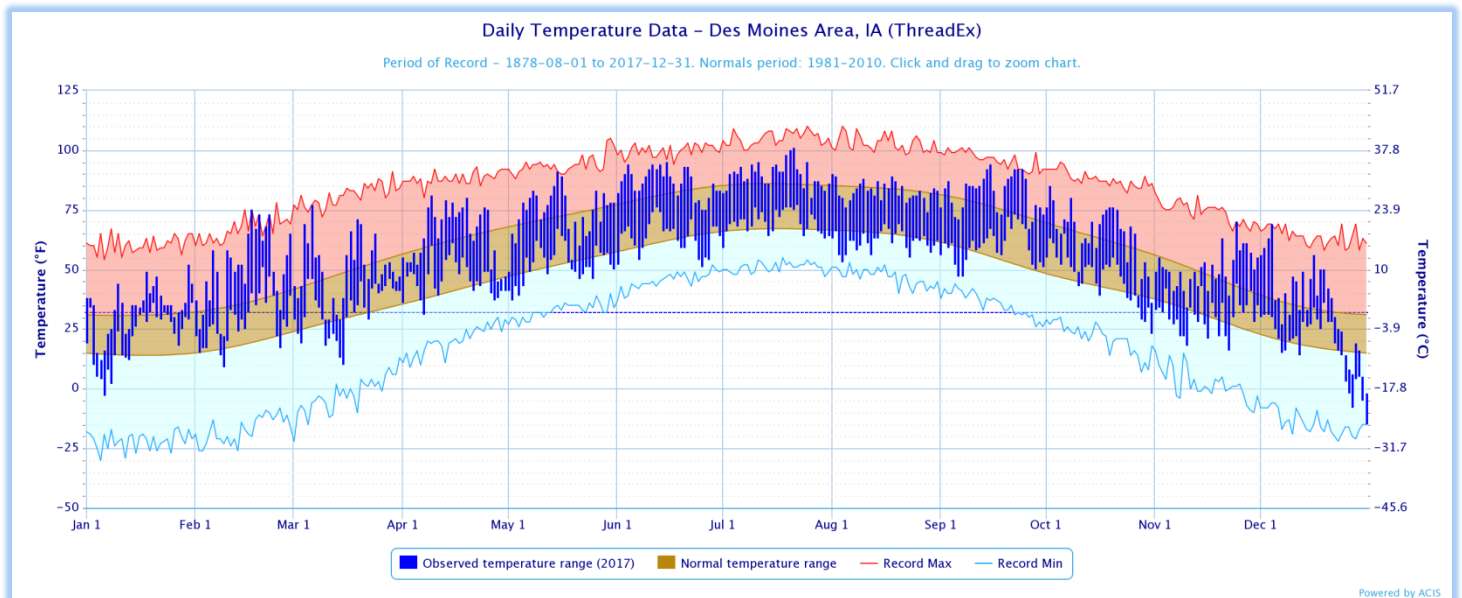# 2017 Des Moines Monthly Precipitation, Temperature and Climate Facts

2017 Des Moines Temperature

*Ranking based on period of record from August 1878 – December 2017

Month	Average Max	Average Min	Mean	Normal	Departure	Ranking*	Above/Below
January	34.0	21.7	27.9	22.6	+5.3	19th Warmest	Above
February	50.4	28.0	39.2	27.4	+11.8	1st Warmest	Above
March	50.3	32.9	41.6	39.3	+2.3	29th Warmest	Above
April	65.0	45.7	55.4	51.7	+3.7	14th Warmest	Above
May	73.8	52.0	62.9	62.3	+0.6	T50th Warmest	Above
June	86.5	63.3	74.9	71.8	+3.1	12th Warmest	Above
July	89.7	69.6	79.7	76.3	+3.4	T16th Warmest	Above
August	82.8	61.6	72.2	74.3	-2.1	39th Coolest	Below
September	82.1	59.6	70.8	65.6	+5.2	6th Warmest	Above
October	64.8	46.5	55.7	53.1	+2.6	T39th Warmest	Above
November	50.2	30.5	40.3	39.2	+1.1	53rd Warmest	Above
December	35.3	18.3	26.8	26.0	+0.8	73rd Warmest	Above
Annual	**63.8**	**44.2**	**54.0**	**50.9**	**+3.1**	**4th Warmest**	**Above**

Below is a graph of the daily temperature ranges for 2017. While the year ended up as one of the warmest on record, the warmest months of the year were not extremely above-normal. Much of the very above-normal temperatures came during the transition seasons from mid-February into March, September, and again from mid-November into early December. Of note as well, the coldest temperature of the year came at the end of December, just prior to midnight.
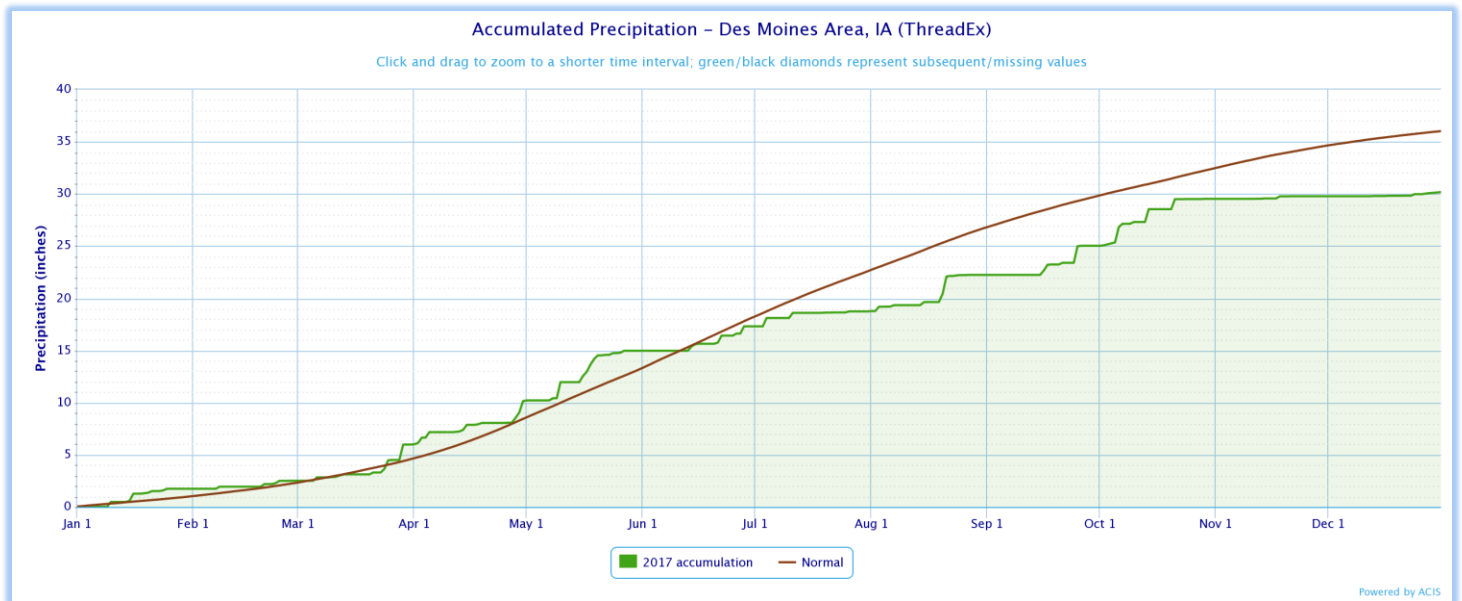
2017 Des Moines Precipitation

*Rankings based on period of record from August 1878 – December 2017

Month	Precipitation	Normal	Departure	Ranking*	Above/Below	Snowfall	Normal	Departure	Above/Below
January	1.74	1.00	+0.74	22nd Wettest	Above	2.5	8.5	-6.0	Below
February	0.77	1.28	-0.51	51st Driest	Below	4.4	7.9	-3.5	Below
March	3.47	2.30	+1.17	20th Wettest	Above	3.6	5.2	-1.6	Below
April	4.16	3.86	+0.30	43rd Wettest	Above	T	1.8	-1.8	Below
May	4.83	4.74	+0.09	48th Wettest	Above	0.0	0.0	-	-
June	2.34	4.94	-2.60	25th Driest	Below	0.0	0.0	-	-
July	1.43	4.47	-3.04	25th Driest	Below	0.0	0.0	-	-
August	3.50	4.13	-0.63	79th Driest	Below	0.0	0.0	-	-
September	2.79	3.05	-0.26	73rd Driest	Below	0.0	0.0	-	-
October	4.50	2.64	+1.86	15th Wettest	Above	T	0.4	-0.4	Below
November	0.25	2.19	-1.94	10th Driest	Below	T	2.5	-2.5	Below
December	0.42	1.42	-1.00	18th Driest	Below	6.7	9.0	-2.3	Below
Annual	**30.20**	**36.02**	**-5.82**	**61st Driest**	**Below**	**17.2**	**35.3**	**-18.1**	**Below**

After a near-normal first half of the year, precipitation eventually became hard to come by. During the last 5 months of the year, there were multiple significant stretches of little to no precipitation, including long stretches from early July through mid-August and then from roughly mid-October through the end of the year.

2017 Climate Facts for Des Moines

- While 2017 ended on an extremely cold note, the year as a whole was one of the warmest on record. The average temperature of 54.0 degrees ranked as 4th warmest, and was 3.1 degrees above normal.
- Eleven out of the 12 months during the calendar year registered above normal average temperatures. No, December was not the single below normal month either. Believe it or not, August registered as the only below normal month with an average temperature of 72.2 degrees that was 2.1 degrees shy of normal.
- While December ended the year breaking or nearly breaking numerous record lows and record low-highs, it remained above normal for the month, though just barely at 0.8 degrees.
- The warmest month when it comes to departure from normal was by far and away February. The month ended up a whopping 11.8 degrees above normal, becoming the warmest February on record with an average temperature of 39.2, crushing the old record of 38.1 degrees back in 1930.
- The most notable above normal daily departures from normal were seen during the months of February, September, and late November, during which multiple record highs were either broken or were in danger of being broken.
    - Notably, in February there were multiple successive days where both the daily high and low were above the normal high for the day.
- On the flip side, below normal temperatures were rarely in the extreme range when it came to threatening records. The most below normal stretch easily came at the end of the year, where multiple saw temperatures entirely below the normal low, including setting a record low on December 31st of -15 degrees just minutes before the New Year.
- Over the year, 235 days were above normal, 2 were normal, and 128 were below normal.
    - Looking at the extremes, there were 89 days that were 10 degrees above normal or more and only 30 days that were 10 degrees below normal or more.
    - The largest above normal departure was 30.1 degrees on February 22nd, while the largest below normal departure was 31.5 degrees on December 31st.
- While all seasons saw above normal temperatures, only one made the top 10. When you include December 2016 for the winter of 2016-2017, the season ranked 6th with an average temperature of 31.5 degrees. Recall the February 2017 was an extremely above normal month with a departure of 11.8 degrees.
- With 2017 annual precipitation of 30.20 inches, the year ended ranked as the 61st driest year on record.
- 2017 marked the second year in a row with below normal precipitation.
- The year started out near-normal, lasting through early July. From there below normal precipitation dominated, driving the below normal annual total.
- Five of the 12 months were above normal, including 4 of the first 5 months of 2017.
- Only one month ranked in the top 10 for either above or below normal precipitation. It was November 2017, ranking 10th driest with only 0.25 inches compared to a normal of 2.19 inches.
- As one might expect during an above normal year with few to no above normal precipitation extremes, snowfall once again was well below normal. Annual snowfall totaled only 17.2 inches, less than half of the normal value of 35.3 inches.

*All data used within this report are considered preliminary and may be subject to corrections before becoming final.