

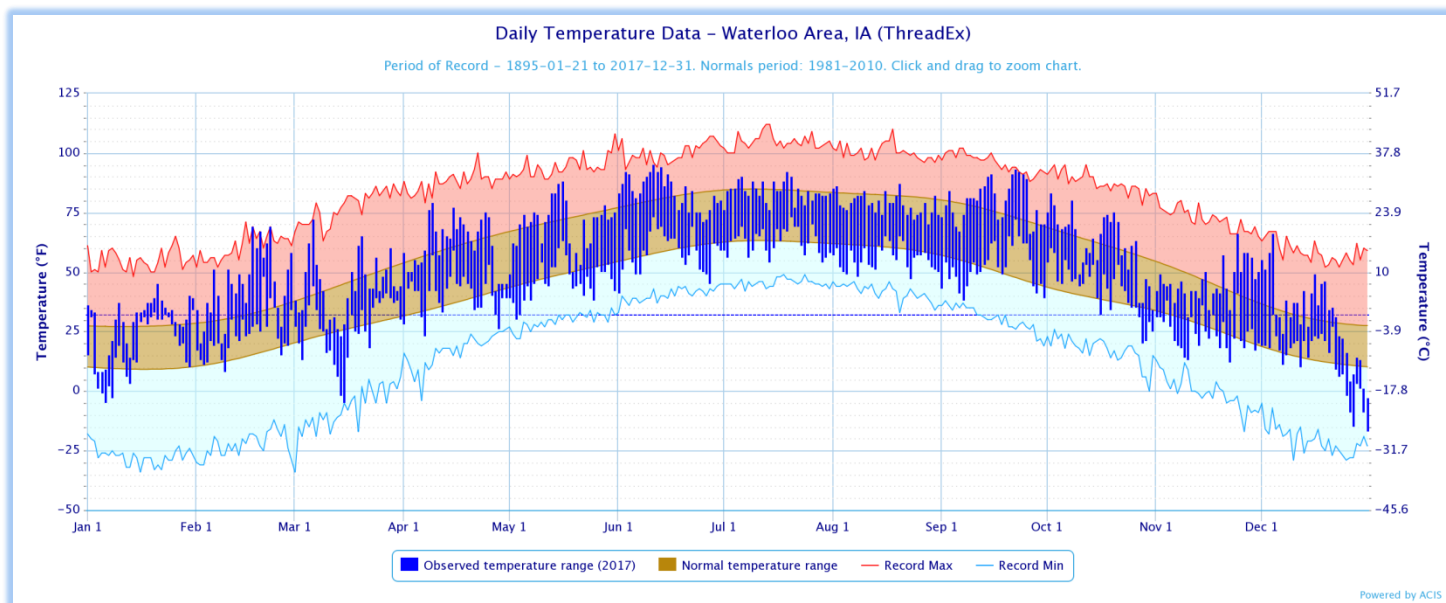
2017 Waterloo Monthly Precipitation, Temperature and Climate Facts

2017 Waterloo Temperature

*Rankings based on period of record from 1895-2017

Month	Average Max	Average Min	Mean	Normal	Departure	Ranking*	Above/Below
January	29.5	17.6	23.6	18.5	+5.1	21 st Warmest	Above
February	44.3	22.9	33.6	23.4	+10.2	4 th Warmest	Above
March	44.3	25.9	35.1	35.8	-0.7	66 th Coolest	Below
April	61.9	40.6	51.3	48.9	+2.4	T-22 nd Warmest	Above
May	69.9	45.8	57.9	60.5	-2.6	38 th Coolest	Below
June	83.6	58.4	71.0	70.0	+1.0	T-33 rd Warmest	Above
July	83.8	62.7	73.3	73.6	-0.3	T-57 th Coolest	Below
August	78.6	55.5	67.1	71.2	-4.1	9 th Coolest	Below
September	79.8	52.2	66.0	63.0	+3.0	T-22 nd Warmest	Above
October	62.0	42.6	52.3	50.3	+2.0	41 st Warmest	Above
November	45.7	24.0	34.9	36.3	-1.4	T-48 th Coolest	Below
December	31.3	12.5	21.9	22.2	-0.3	53 rd Coolest	Below
Annual	59.6	38.5	49.0	47.9	+1.1	21st Warmest	Above

Below is a graph of the daily temperature ranges for 2017. Much of the warm season was highlighted by near-normal temperatures, while the transition seasons were highlighted by large swings between above and below normal temperatures. Notably, the coldest temperatures of the year were seen just prior to midnight on December 31st, the very last moments of 2017.

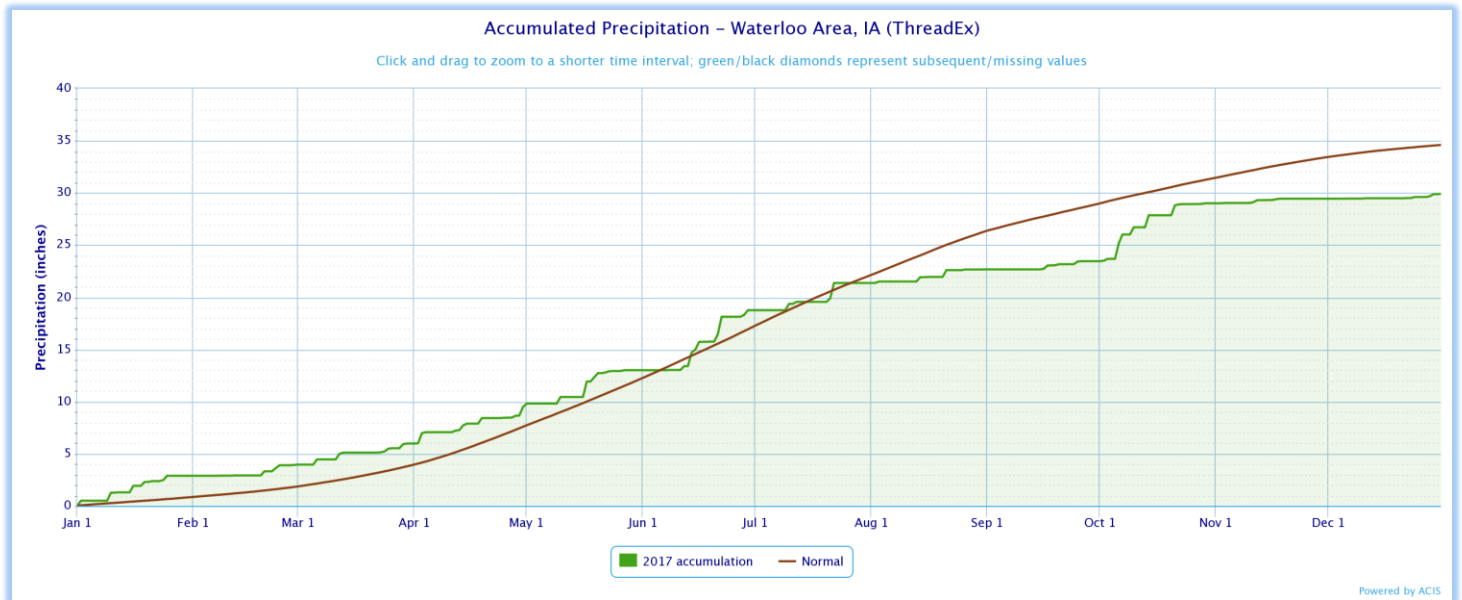


2017 Waterloo Precipitation

*Rankings based on period of record from 1895-2017

Month	Precipitation	Normal	Departure	Ranking*	Above/Below	Snowfall	Normal	Departure	Above/Below
January	2.89	0.83	+2.06	3 rd Wettest	Above	3.7	8.2	-4.5	Below
February	1.04	0.99	+0.05	T-56 th Wettest	Above	1.4	7.4	-6.0	Below
March	2.05	2.06	-0.01	74 th Driest	Below	10.6	4.6	+6.0	Above
April	3.51	3.71	-0.20	78 th Driest	Below	0.0	1.8	-1.8	Below
May	3.52	4.53	-1.01	58 th Driest	Below	0.0	0.0	-	-
June	5.75	4.98	+0.77	33 rd Wettest	Above	0.0	0.0	-	-
July	2.61	4.91	-2.30	37 th Driest	Below	0.0	0.0	-	-
August	1.30	4.27	-2.97	T-14 th Driest	Below	0.0	0.0	-	-
September	0.79	2.63	-1.84	6 th Driest	Below	0.0	0.0	-	-
October	5.55	2.48	+3.07	2 nd Wettest	Above	T	0.3	-0.3	Below
November	0.44	2.01	-1.57	T-16 th Driest	Below	T	3.1	-3.1	Below
December	0.46	1.20	-0.74	T-18 th Driest	Below	7.7	9.9	-2.2	Below
Annual	29.91	34.60	-4.69	T-43rd Driest	Below	23.4	35.3	-11.9	Below

Nothing was unusual when it came to precipitation through the first half plus of 2017, with near-normal totals throughout. However, the last 5 months of the year were notably dry with two long stretches of little to no precipitation sandwiching a near-record wet October. As a result, the year ended below normal, but was fortunate in the sense that much of dry conditions came late in the growing season.



2017 Climate Facts for Waterloo

- An average temperature of 49.0 degrees in 2017 meant Waterloo had another above normal year (21st warmest), though a full degree cooler than the 50.0 degrees in 2016.
- Even though 2017 remained on the warm side of normal, it was an even split when it came to months above and below normal. There were no long runs of above or below normal temperature either. Strings of above or below normal temperatures were no longer than two months in a row.
- Similar to Des Moines, Waterloo had two months finish in the top 10. Both of those months for Des Moines were above normal, while in Waterloo one was above normal (February 2017, 4th) and one was below normal (August 2017, 9th).
- The greatest departure from normal for any month was February with an average temperature of 33.6, which was a whopping 10.2 degrees above normal. February 2017 ranked 4th, behind 1998 (3rd – 34.4 degrees), 1931 (2nd – 34.9 degrees), and 1954 (1st – 35.2 degrees).
- No seasonal average temperature, including winter 2016-2017, ranked in the top 10 either direction, though winter 2016-2017 was the closest with an average temperature of 26.4 degrees which ranked tied for 11th.
- Waterloo did experience stretches of near-extreme temperatures though, with 4 notable above normal stretches that included February into early March, the first half of June, much of September, and the latter half of November into early December. In many cases, record highs were set or flirted with, especially in February. On the cool side, the most notable stretches were in mid-March, August into early September, late October into early November, and then the end of December.
- The coldest temperature of the year was recorded on the final day of the year, just minutes before midnight with a value of -17 degrees.
- For the most part, there was little remarkable when it came to precipitation during 2017. With a total value of 29.91 inches, 2017 went down as a year on the dry side, ranking 43rd driest, after a 2016 total that was more than 7 inches above the 34.60 inch normal.
- Overall, only 4 out of 12 months recorded above normal precipitation, with 3 of them occurring through June.
- After the 3rd wettest January on record (2.89 inches, 2.06 inches above normal), precipitation generally accrued at a near-normal pace through July then crossed and remained below normal, with regard to total accumulation, through the end of the year.
- Other than January, two other months ranked within the top 10 with respect to above or below normal precipitation, in back to back months no less. September came in 6th driest with a value of 0.79 inches that was 1.84 inches below normal and October came in 2nd wettest with a value of 5.55 inches that was 3.07 inches above normal.
- One of the driest stretches of the year occurred from October 24th through December 24th, where only 0.58” of rain fell, compared to a normal of 3.5” over that span.

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