Decorah Weather - October 2023 Summary

 $\label{eq:constraint} by Richard Bernatz \\ Weather data available online at http://faculty.luther.edu/~bernatzr/DecWx/$

1. October 2023 Temperatures

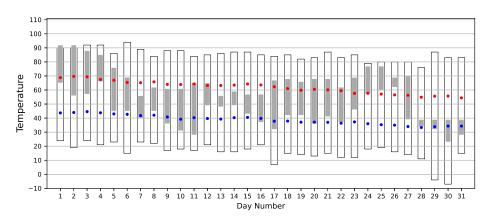


Figure 1: Grey Bar: Observed temperature range for 2023, White Bar: Record temperature range, Average temperature range: Red circle for average high, blue circle for average low.

Temperature ($^\circ$ F)	October 2023	Historical	Deviation
Average High	65.1	61.8	+3.3
Average Low	43.6	38.8	+4.8
Daily Average	54.3	50.3	+4.0

Table 1: October 2023 Temperatures compared with October History.

- October 2023
 - Average temperature : 54.3° F (4.0° F warmer than average)
 - Record Temperatures: Maximum of 92° F on October 1 (previous of 90° F in 1976 and 2019), maximum of 92° F on October 2 (previous of 90° F in 1953), maximum minimum of 60° F on October 25 (previous of 58° F in 2000), maximum minimum of 62° F on October 26 (previous of 60° F in 2000)
 - Above average maximum temperatures were recorded on 17 days.
 - Warmest temperature : 90° F on the 1st and 2nd.
 - Coldest temperature : 23° F on the 30th.
 - Heating degree days : 377.0 (82.3 less than average).
- ALL OCTOBERS SINCE 1893 (130 years, data for 1926 are missing)
 - Compared with October 2023, 18 were warmer and 111 were cooler
 - Warmest average : 60.2° F in 1963
 - Coldest average : 37.8° F in 1925
 - Warmest temperature : 94° F on the 6th of 1963
 - Coldest temperature : -7° F on the 30th of 1925

2. October 2023 Precipitation

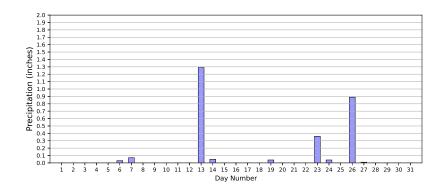


Figure 2: October precipitation for Decorah.

- October 2023
 - Total precipitation for October 2023 : 2.78 inches (average is 2.32)
 - Precipitation excess of 0.45 inches
 - Maximum 24-hour total: 1.29 inches on the 13th.
 - Nine days with measurable precipitation. The average for October is between 7 and 8 days.
- ALL OCTOBERS SINCE 1893 (130 years, data for 1898 are missing)
 - Compared with October 2023, 45 Octobers were wetter, and 84 were drier
 - Wettest October : 5.92 inches in 2017
 - Driest October : 0.00 inches in 1895

3. TWELVE-MONTH SUMMARY

		Ave Temp	Deviation	Rank†	Precip	Deviation	Rank‡
Month	Year	$(^{o}\mathbf{F})$	$(^{o}\mathbf{F})$	(#/Total)	(inches)	(inches)	(#/Total)
November	2022	38.5	+3.3	31/130	2.31	+0.46	36/130
December	2022	21.8	+0.5	64/130	1.81	+0.60	27/130
January	2023	24.4	+8.1	11/130	2.17	+1.12	12/130
February	2023	26.6	+6.5	21/113	2.00	+1.04	9/129
March	2023	36.2	+3.4	36/131	1.89	-0.11	70/131
April	2023	50.5	+3.2	23/130	2.84	-0.26	66/130
May	2023	63.0	+4.1	17/128	4.19	-0.04	58/127
June	2023	71.1	+2.8	22/129	2.36	-2.39	109/129
July	2023	72.5	-0.1	63/129	3.32	-0.76	69/130
August	2023	74.9	+4.5	11/131	0.91	-3.14	125/131
September	2023	69.3	+7.0	1/130	5.54	+1.84	26/130
October	2023	54.3	+4.0	19/130	2.78	+0.45	46/130

Table 2: A summary of the last twelve months. \dagger - The smaller the number (#), the warmer the month. \ddagger - The smaller the number (#), the wetter the month. Boxed entries are within the historical top or bottom ten.

- Eleven of the last 12 months were warmer than average.
- Six of the last twelve months were drier than average, 4 of the last 6 were drier than average.
- Precipitation deviations (in inches). last three months : -0.86, last six months : -4.06, last nine months: -3.40, last twelve months: -2.66