# Decorah Weather - March 2024 Summary 

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Weather data available online at http://faculty.luther.edu/~bernatzr/DecWx/

1. March 2024 Temperatures


Figure 1: Grey Bar: Observed temperature range for 2024, White Bar: Record temperature range, Red Circle: average high, Blue Circle: average low.

| Temperature $\left({ }^{\circ} \mathrm{F}\right)$ | March 2024 | Historical | Deviation |
| :--- | :---: | :---: | :---: |
| Average High | 54.6 | 42.9 | +11.7 |
| Average Low | 30.2 | 22.9 | +7.3 |
| Daily Average | 42.4 | 32.9 | +9.5 |

Table 1: March 2024 average temperatures compared to March averages.

- March 2024
- Record temperatures : Six record maximum temperatures. Records high temperatures (old records and year in parentheses) are $65^{\circ} \mathrm{F}$ on the $2 \mathrm{nd}\left(63^{\circ} \mathrm{F}\right.$ in 1964), $76^{\circ} \mathrm{F}$ on the 3 rd ( $65^{\circ} \mathrm{F}$ in 1946 and 1983), $76^{\circ} \mathrm{F}$ on the 4 th ( $67^{\circ} \mathrm{F}$ in 19663), $71^{\circ} \mathrm{F}$ on the 11 th ( $66^{\circ} \mathrm{F}$ in 2021 ), $73^{\circ} \mathrm{F}$ on the 12 th (ties with 1990). A record maximum minimum of $46^{\circ} \mathrm{F}$ on the 3 rd ( $42^{\circ} \mathrm{F}$ in 1983).
- Average temperature : $42.4^{\circ} \mathrm{F}\left(9.5^{\circ} \mathrm{F}\right.$ warmer than average)
- Warmest temperature : $76^{\circ} \mathrm{F}$ on the 3rd and 4th
- Coldest temperature : $16^{\circ} \mathrm{F}$ on the 24 th
- Heating degree-days ( $65^{\circ} \mathrm{F}$ basis) : 699.5, 293.8 degree-days less than the historical average of 993.3
- All Marches Since 1893 (132 years)
- Compared with March 2024, 2 Marches were warmer and 129 Marches were cooler.
- Warmest average : $51.0^{\circ} \mathrm{F}$ in 2012
- Coldest average : $20.3^{\circ} \mathrm{F}$ in 1899
- Warmest temperature : $84^{\circ} \mathrm{F}$ on the 29 th of 1895 and on the 30 th of 1986
- Coldest temperature : $-33^{\circ} \mathrm{F}$ on the 1st of 1962

2. March 2024 Precipitation


Figure 2: March precipitation for Decorah.

- March 2024
- Total precipitation for March 2024 : 2.18 inches, 0.28 inches more than the average amount of 1.90 inches
- Eight days with measurable precipitation (average is 7 days)
- Greatest 24-hour precipitation total of 0.61 inches on the 4 th
- Measurable snowfall 4.0 inches, 3.6 inches less than the average of 7.6 inches
- Two days with measurable snowfall (average is between three and four days)
- All Marches since 1893 (132 years)
- Compared with March 2024, 48 Marches were wetter and 83 Marches were drier.
- Wettest March : 4.74 inches in 1913
- Driest March : 0.05 inches in 1910
- Snowiest March : 29 inches in 1959

3. Twelve-Month Summary

| Month | Year | Ave Temp <br> $\left({ }^{\circ} \mathrm{F}\right)$ | Deviation <br> $\left({ }^{\circ} \mathrm{F}\right)$ | Rank $\dagger$ <br> $(\# /$ Total $)$ | Precip <br> $($ inches $)$ | Deviation <br> (inches) | Rank $\ddagger$ <br> $(\# /$ Total $)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | $46 / 130$ |
| November | 2023 | 40.0 | +4.7 | $19 / 131$ | 0.18 | -1.65 | $128 / 131$ |
| December | 2023 | 36.0 | +14.1 | $1 / 131$ | 1.07 | -0.14 | $71 / 131$ |
| January | 2024 | 24.0 | +7.6 | $14 / 131$ | 1.56 | +0.51 | $24 / 131$ |
| February | 2024 | 38.1 | +17.9 | $1 / 131$ | 0.37 | -0.59 | $107 / 130$ |
| March | 2024 | 42.4 | +9.5 | $3 / 132$ | 2.18 | +0.28 | $49 / 132$ |

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 past 12 months were warmer than average, including March 2024 (the 8th in a row).
- March 2024 is the fourth month, of the last 12, with greater than average precipitation.
- Precipitation deviations. last 3 months: +0.20 inches; last 6 months: -1.13 ; last 9 months: -3.21 inches; last 12 months: -5.90

4. Winter Summary : November 2023 - March 2024

This current winter season concludes with a severity rank of 131 th out of 131 seasons based on the 15 measures of winter severity*. The winter of $1950-51$ is the most severe for this interval, 1916 is the second most severe. Other more severe winters (in decreasing severity order): 1898, 1911, 1977, 2013, 1978, and 1958

The factors for this season that are worth mentioning include:

- The months of December and February this season are the warmest on record for their respective months. January 2024 ranked as the 14th warmest January, and March 2024 is the third warmest March on record.
- The length in days from the first measurable snowfall to the last this season is 119 days, just seven more than the average. It is the only one of the fifteen winter "measures" that ended above average..
- The maximum daily temperature failed to reach $32^{\circ} \mathrm{F}$ on just 12 days. The average number is 57 . The previous lowest number of below $32^{\circ} \mathrm{F}$ days was 24 in 2011 , the second least "wintry" winter.
- The average daily maximum temperature reading was $46^{\circ} \mathrm{F}$. The average is $34.8^{\circ} \mathrm{F}$.
- The average daily minimum temperature reading was $26.0^{\circ} \mathrm{F}$. The average is $16.0^{\circ} \mathrm{F}$.
- Total November - March snowfall measured 17.3 inches. The average is 36.6 inches.
*Severity is calculated using 15 weighted measures. Six measures use daily maximum temperatures : average maximum, number of days with maximum less than $32,20,10,0$, and -10 ; six use daily minimum temperatures : average minimum, numbers of days with minimum less $10,0,-10,-20,-30$; and three use snowfall : total snowfall, number of days with measurable snowfall, and the number of days between the first and last snowfalls.

