

## IOWA MONTHLY WEATHER SUMMARY – DECEMBER 2023

General Summary: Temperatures averaged 34.7 degrees or 9.7 degrees above normal, while precipitation averaged 1.79 inches or 0.42 inch more than normal. December 2023 ranks as the 3rd warmest in 151 years of statewide records; it ties 1924 as the 27th wettest. A warmer December last occurred in 1889 (2nd warmest) while a wetter one was last recorded in 2018.

Temperatures: Monthly average temperatures were well above normal statewide with the warmest conditions reported across northern Iowa, where departures were nearly 12 degrees warmer than average. December's statewide average maximum temperature was 42.6 degrees, 9.4 degrees above normal while the average minimum temperature was 26.8 degrees, 10.1 degrees below normal. Two stations in Lee County, Donnellson and Keokuk Lock and Dam, reported the month's high temperature of 64 degrees on the 7<sup>th</sup>, on average 23 degrees above normal. Fayette (Fayette County) reported the month's low temperature of six degrees on the 19<sup>th</sup>, six degrees below normal.

Heating Degree Day Totals: Home heating requirements, as estimated by heating degree day totals, averaged 30% less than last December and 25% less than normal. Thus far this heating season, heating degree day totals are running 21% less than last year at this time and 18% less than normal.

Precipitation: For only the fourth month of 2023, Iowa saw above-average precipitation with widespread rainfall, though below-normal snowfall. Stations across western, southern and eastern Iowa reported positive departures with the wettest conditions in the northwest and southeast corners. Portions of northeastern Iowa reported the driest conditions with deficits approaching an inch at several stations. Monthly precipitation totals ranged from 0.50 inch in Waterloo (Black Hawk County) to 4.08 inches in Columbus Junction (Louisa County). The statewide average snowfall was 1.4 inches, 6.5 inches below normal, ranking as the 12<sup>th</sup> least snowy on record.

US Drought Monitor: As of the first week of December, drought conditions covered 99% of Iowa with D0 (Abnormally Dry) conditions over 15% of Iowa. Drought coverage by category was as follows: D1 (Moderate Drought) – 22%, D2 (Severe Drought) – 35% and D3 (Extreme Drought) – 27%. Overall drought and dryness in Iowa improved slightly through the month in northwest Iowa with degradation in central Iowa. The current categorical breakdown is: D0 – 14%, D1 – 18%, D2 – 30% and D3 – 35%.

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# December 2023

## WEATHER BY DISTRICTS

| DISTRICT      | TEMPERATURE (F)                    |                                    | HEATING DEGREE DAYS                |                                    |  |  | PRECIPITATION (inches)             |                                    |   |   | SNOWFALL |
|---------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|--|------------------------------------|------------------------------------|---|---|----------|
|               | December 2023<br>Average Departure | December 2023<br>Average Departure | December 2023<br>Average Departure | December 2023<br>Average Departure | Since Jul., 1, 2023<br>Average Departure | Since Jul., 1, 2023<br>Average Departure | December 2023<br>Average Departure | December 2023<br>Average Departure | Since Jan. 1, 2023<br>Average Departure | Since Jan. 1, 2023<br>Average Departure | Average  |
| Northwest     | 32.5                               | +10.6                              | 1008                               | -327                               | 2350                                     | -582                                     | 1.93                               | +0.94                              | 29.37                                   | -1.37                                   | 0.1      |
| North Central | 32.5                               | +10.4                              | 1008                               | -320                               | 2364                                     | -564                                     | 1.50                               | +0.23                              | 26.59                                   | -8.62                                   | 0.2      |
| Northeast     | 33.4                               | +10.2                              | 980                                | -315                               | 2357                                     | -509                                     | 1.26                               | -0.28                              | 26.07                                   | -11.93                                  | 1.5      |
| West Central  | 34.1                               | +9.4                               | 958                                | -291                               | 2185                                     | -510                                     | 1.81                               | +0.65                              | 26.53                                   | -6.61                                   | 0.9      |
| Central       | 35.2                               | +10.1                              | 924                                | -314                               | 2134                                     | -527                                     | 1.43                               | +0.07                              | 26.23                                   | -9.81                                   | 0.1      |
| East Central  | 35.8                               | +9.7                               | 905                                | -302                               | 2102                                     | -474                                     | 1.98                               | +0.28                              | 25.80                                   | -11.76                                  | 2.7      |
| Southwest     | 35.6                               | +8.2                               | 911                                | -255                               | 2075                                     | -398                                     | 1.63                               | +0.33                              | 27.05                                   | -8.44                                   | 0.7      |
| South Central | 37.2                               | +9.3                               | 862                                | -289                               | 1985                                     | -457                                     | 2.05                               | +0.62                              | 26.25                                   | -10.86                                  | 2.2      |
| Southeast     | 37.5                               | +9.1                               | 852                                | -283                               | 1972                                     | -409                                     | 2.68                               | +1.01                              | 27.31                                   | -10.54                                  | 2.3      |
| STATE         | 34.7                               | +9.7                               | 929                                | -304                               | 2158                                     | -498                                     | 1.79                               | +0.42                              | 26.82                                   | -8.73                                   | 1.4      |

\* Departures are computed from 1991-2020 normals.

The weather data in this report are based upon information collected by the U. S. Dept. of Commerce, NOAA National Weather Service.

