

IOWA MONTHLY WEATHER SUMMARY – AUGUST 2025

General Summary: Temperatures averaged 70.6 degrees or 0.4 degree below normal while precipitation totaled 3.37 inches of 0.76 inch below normal. August 2025 ties 1887, 1939 and 1996 as the 43rd coldest in 153 years of statewide records. It also ties 1896 and 1904 as the 64th driest. A cooler August occurred in 2019, while 2024 was drier.

Temperatures: Statewide average temperatures in August were near-normal across Iowa with some pockets of cooler conditions in western and southern Iowa. Guttenberg Lock and Dam (Clayton County) reported the month's high temperature of 98 degrees on the 17th, 16 degrees above normal. Spencer Municipal Airport (Clay County) and Chariton (Lucas County) reported the week's lowest temperature of 40 degrees on the 25th and 26th, respectively, which was on average 17 degrees below normal.

Cooling Degree Days: Home cooling requirements, as estimated by cooling degree day totals, were 7% less than last August and 7% less than normal. Cooling degree day totals since January are 6% more than last year at this time and 11% more than normal.

Precipitation: Most of Iowa's National Weather Service (NWS) co-op stations reported precipitation deficits with widespread one to two inch departures; many southeastern Iowa stations had two to four inch deficits. Stations in northern and western Iowa reported above average totals. Monthly precipitation totals ranged from 0.41 inch in Washington (Washington County) to 13.61 inches in Decorah (Winnebago County).

Scattered showers in western Iowa brought some stations a few tenths of an inch on the 4th, with Mondamin (Harrison County) collecting 0.44 inch. High temperatures rose into the upper 70s and low 80s during the afternoon hours as southerly winds shifted in advance of a complex of thunderstorms moving through South Dakota and Minnesota. The line entered northern Iowa after midnight on the 6th and continued south before dissipating in south-central Iowa during the late morning. Northwestern Iowa stations reported widespread one-inch totals, with 2.00 inches in Lake Park (Dickinson County) and 2.20 inches at Odebolt (Sac County). Overnight conditions into the 7th were generally seasonal as sluggish thunderstorms formed over south-central Iowa, bringing rainfall to the opening ceremony of the 166th Iowa State Fair in Des Moines (Polk County). Nearly 15 stations observed totals over two inches, with 2.04 inches in Earlham (Madison County), 3.22 inches in Williamson (Lucas County), and 4.01 inches in Osceola (Clarke County); totals farther north and west were in the 0.50–1.00 inch range.

Afternoon conditions stabilized with a persisting southerly wind and cloud cover in western and northern Iowa. Ample atmospheric moisture and instability helped fire stronger thunderstorms across northwestern Iowa toward the nighttime hours of the 8th in advance of a strong cold front. Several cells became severe-warned, with strong gusts in the 60–70 mph range in west-central Iowa. Flash flooding also occurred due to slow-moving thunderstorms producing heavy rain. The line lost strength as it advanced into central and eastern Iowa through the morning and early afternoon of the 9th. After a quiet late afternoon and evening, strong thunderstorms redeveloped into the morning of the 10th

ahead of a low-pressure system over southwest Iowa, spreading across the state. Thirty-six-hour rain totals showed nearly 50 stations in pockets of western, central, and eastern Iowa registering at least 2.00 inches, with the heaviest totals from 3.23 inches in Muscatine (Muscatine County) to 4.77 inches in Pacific Junction (Mills County). More than 130 stations observed at least one inch, with a statewide average of 0.86 inch. Isolated strong storms reformed in eastern Iowa toward evening but fell apart after sunset. Scattered showers and thunderstorms developed in southeastern Iowa through the day on the 11th; some storms became severe in extreme southeast Iowa, with two weak and short-lived tornadoes observed in Lee County. Rainfall was observed over Iowa's southeastern one-third, with widespread 0.50–1.00 inch totals; the highest amounts were found in a swath from south-central to eastern Iowa, ranging from 1.18 inches in Ottumwa (Wapello County) to 2.20 inches in Parnell (Iowa County). Stations farther north and west reported a few tenths of an inch from west to east. Daytime conditions were pleasant with light winds, lower relative humidity, and temperatures in the upper 70s and low 80s.

Winds shifted to a southeasterly direction into the 14th as scattered showers pushed across parts of Iowa, with numerous stations registering a tenth of an inch or less. Winds became blustery through the day as a low-pressure center approached the Upper Midwest. Clouds increased into the morning of the 15th as a small complex of thunderstorms propagated into northwestern Iowa from South Dakota. In the presence of ample moisture and instability, the complex expanded into a severe-warned bow echo and sped across northern Iowa before banking southeast into eastern Iowa by the evening hours. There were several reports along the storm's path of large hail and wind gusts above 60 mph; 72 mph gusts were observed at La Porte City (Black Hawk County) and East Amana (Iowa County). The strongest part of the line moved out of eastern Iowa by sundown, with scattered thunderstorms popping in northeast Iowa. Multiple stations along the swath observed totals above 0.75 inch, with two stations in Vinton (Benton County) registering 1.72 to 2.07 inches. Amounts on the periphery ranged from a few to several tenths of an inch, particularly across northwest, central, and eastern Iowa. Nearly stationary thunderstorms formed on an existing boundary along the Iowa–Wisconsin border into the morning of the 17th. Decorah Municipal Airport observed 1.02 inches, while Decorah's NWS co-op station reported 2.90 inches. This boundary was the forcing mechanism for slow-moving thunderstorms into the evening hours, one of which became severe and produced a weak tornado near Crystal Lake (Winnebago County). A broader complex of showers and thunderstorms formed in northwestern Iowa into the morning of the 18th and pushed through the state before exiting northeastern Iowa after noon. Flash flood warnings were issued for northeastern counties due to heavy rain. Several stations from north-central to northeast Iowa reported significant rainfall, including 4.15 inches in Fort Atkinson (Winnebago County), 6.51 inches in Elma (Howard County), and 8.64 inches in Decorah. Nearly 35 stations recorded totals in the 2.00–4.00 inch range, with numerous 1.00-inch amounts in western and northern Iowa. Showers and a few thunderstorms formed along a surface boundary through the nighttime hours, with the front fully exiting the state by daybreak on the 23rd. Rainfall was widespread, though very light, with most stations receiving less than 0.20 inch. Sioux City (Woodbury County) reported 1.05 inches from a thunderstorm, while two stations in Dallas Center (Dallas County) measured 0.75 to 0.81 inch from an overnight thundershower.

Clouds increased across portions of the state through the afternoon and evening hours, becoming more widespread after sunset on the 26th. Light rain showers developed during the early morning hours of the 27th and continued from north-central to eastern Iowa throughout the day. Much of the state's northeastern half received measurable rainfall, though all but three stations recorded less than

0.50 inch. Swea City (Kossuth County) collected 0.57 inch, while Lansing (Allamakee County) registered 0.93 inch. Foggy conditions were reported in eastern Iowa early on the 29th, with light easterly winds and temperatures in the upper 50s. A nearly stationary surface boundary draped northwest to southeast aided shower formation through the afternoon and evening hours, with some cells producing persistent rainfall over the same locations. Four stations reported an inch or more, including 4.07 inches in Hopkinton (Delaware County). Additional showers and thunderstorms developed along a narrow line on the existing boundary on the 30th from central to northwestern Iowa. Several stations reported higher totals, ranging from 0.74 inch in Westfield (Plymouth County) to 2.06 inches in Ames (Story County). A more concentrated shield of rain entered southwest Iowa on the morning of the 31st, producing widespread totals of 0.10 to 0.20 inch.

Summer Summary: Temperatures for the three summer months of June, July and August averaged 72.5 degrees, which is 1.1 degrees above normal. Precipitation totaled 18.16 inches or 4.60 inches above normal. This ties 1899, 1916, 1923 and 1948 as the 61st warmest summer on record. It also ranks as the 6th wettest summer in 153 years of records. Summer 2022 was warmer while 2014 was wetter and the 4th wettest on record.

US Drought Monitor (USDM): As of August 5th, less than 1% of Iowa was classified as Abnormally Dry (D0); this pocket in southwest Iowa was removed the week after. According to the Iowa Drought Plan (IDP) trigger tables updated on September 4th, all Drought Regions remain classified as “Normal.” However, short-term precipitation deficits increased across much of Iowa through the second half of August. As such, the first USDM depiction of September showed 4% coverage of D0 in pockets across southern Iowa.

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August 2025

WEATHER BY DISTRICTS

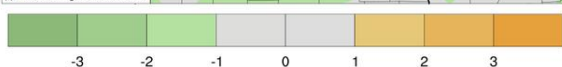
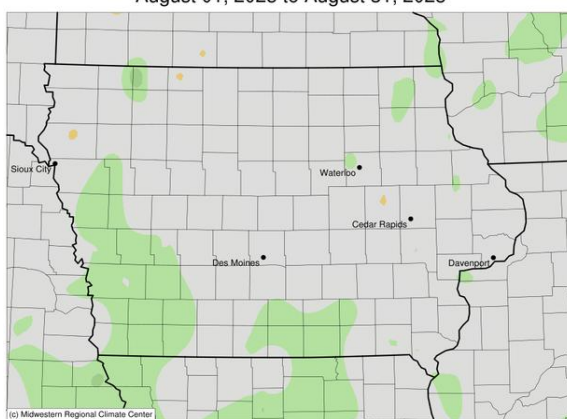
DISTRICT	TEMPERATURE (F)		COOLING DEGREE DAYS				PRECIPITATION (inches)			
	August 2025 Average Departure*		August 2025 Average Departure*		Since Jan., 1, 2025 Average Departure*		August 2025 Average Departure*		Since Jan.1, 2025 Average Departure*	
Northwest	70.0	0.0	184	-4	733	+67	3.10	-0.60	25.41	+2.56
North Central	69.0	-0.3	160	-11	668	+57	3.88	-0.27	31.39	+4.96
Northeast	69.0	-0.4	160	-13	659	+71	4.94	+0.75	29.36	+1.56
West Central	70.8	-0.3	206	-12	818	+71	4.03	-0.22	27.72	+2.95
Central	70.9	-0.1	206	-6	830	+97	2.97	-1.31	30.98	+4.27
East Central	70.7	-0.6	199	-19	834	+98	3.87	-0.27	27.01	-0.09
Southwest	71.6	-1.1	228	-32	882	+17	2.66	-1.51	21.88	-4.39
South Central	71.8	-0.9	232	-27	912	+66	2.64	-1.56	25.77	-1.38
Southeast	72.0	-0.8	236	-25	926	+63	1.67	-2.39	25.80	-1.61
STATE	70.6	-0.4	200	-14	811	+82	3.37	-0.76	27.50	+1.29

* 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.

Average Temperature (°F): Departure from 1991-2020 Normals

August 01, 2025 to August 31, 2025



Accumulated Precipitation (in)

August 01, 2025 to August 31, 2025

