IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

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SECRETARY OF AGRICULTURE

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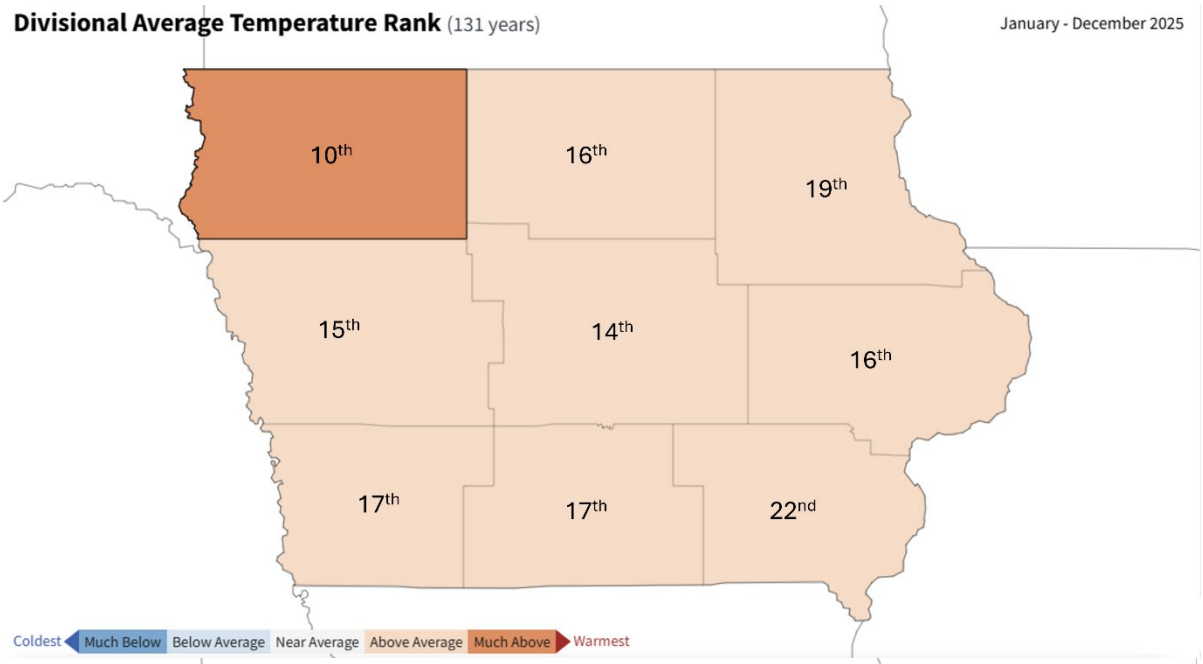
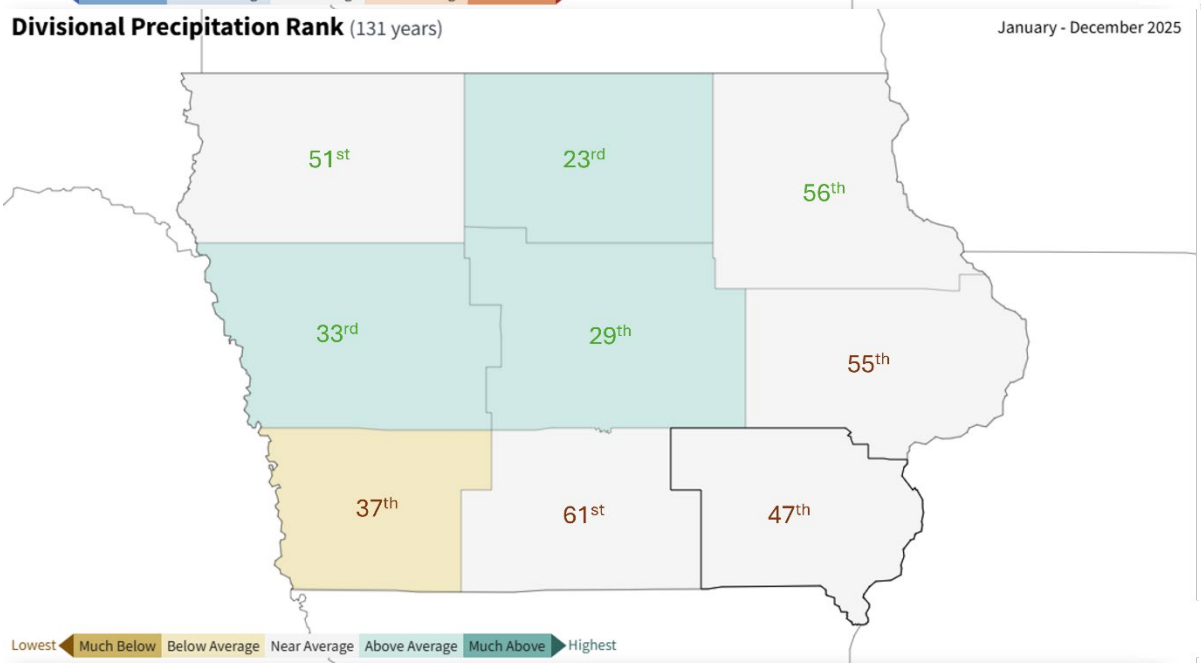
IOWA ANNUAL WEATHER SUMMARY – 2025

General Summary: Statewide annual temperatures averaged 49.7 degrees or 1.3 degrees above normal, tying 1973 and 1999 as the 25th warmest year on record. Annual precipitation averaged 33.59 inches or 1.96 inches less than normal, ranking as the 91st driest/63rd wettest year on record. A warmer year occurred just last year (5th warmest) while 2023 (2024) was drier (wetter).





Annual Precipitation Summary: Precipitation was above normal for three of the twelve months of 2025, with statewide July rainfall slightly over five inches above normal. May was the driest month of the year for the state; there was also a notable stretch from August through December with below normal precipitation. The wettest conditions of the year were found across much of northern two-thirds of the state with a central swath to the Iowa-Minnesota state line registering the highest positive departures; stations across the southern three tier of counties along with locations between Cedar Rapids (Linn County) and Davenport (Scott County) reported deficits in the six to 12-inch range. Annual minimum and maximum station precipitation totals ranged from 24.56 inches in Randolph (Fremont County) to 47.84 inches in Boone (Boone County).

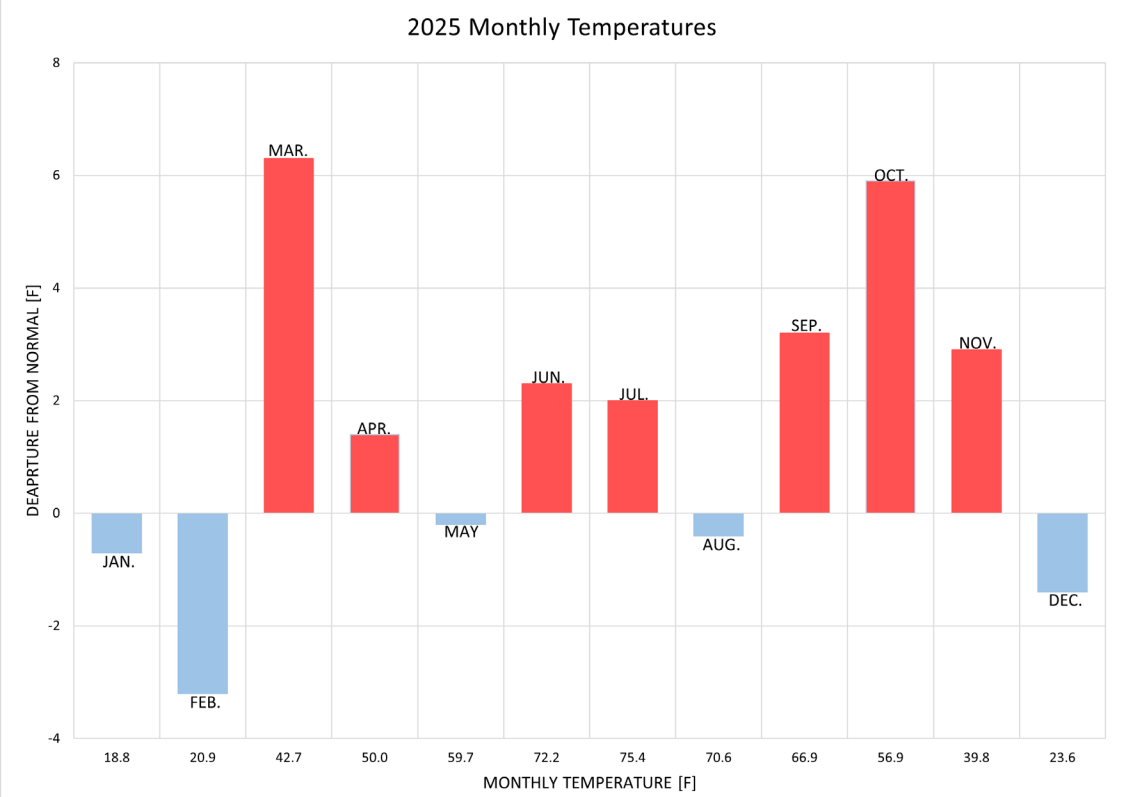
Annual Temperature Summary: In 2025, seven months had above normal temperatures with March and October having the largest departures. The remaining five months were colder than average temperatures with February experiencing the coldest conditions. Overall, annual average temperatures across the state were one to three degrees above normal for most National Weather Service (NWS) co-op stations with several stations experiencing near-normal readings. Fayette (Fayette County) and Pocahontas (Pocahontas County) reported the coldest annual temperature of -23 degrees F on February 18th while Little Sioux observed the warmest annual temperature of 101 degrees on June 20th.

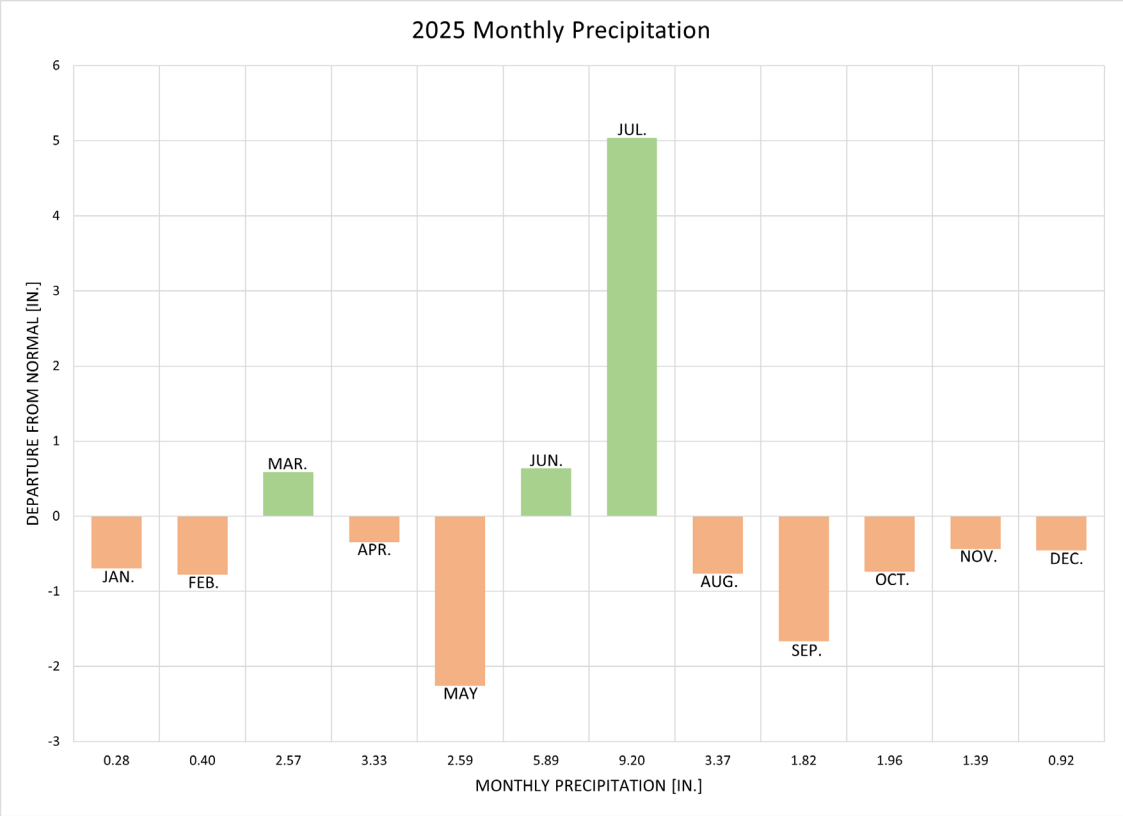
Seasonal Temperature and Precipitation Summary: Temperatures for the three winter months of December, January and February (DJF) averaged 22.6 degrees or 0.2 degree below normal while precipitation totaled 2.00 inches, 1.52 inches below normal. Winter 2024-2025 ties 1949 and 1966 as the 77th coldest and ranks as the 18th driest; 2019-2020 was colder while 2020-2021 was drier. The statewide average snowfall was 8.8 inches, 13.3 inches below normal, making it the 4th least snowy winter in 138 years of records

Temperatures for the three spring months of March, April and May averaged 50.8 degrees, 2.5 degrees above normal. This ranks as the 23rd warmest spring on record. Precipitation totaled 8.55 inches or 1.95 inches below normal, tying 1963 as the 64th driest in 153 years of observations; Spring 2024 was warmer while 2023 was drier.

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.

Temperatures over the three autumn months (September-October-November) averaged 54.6 degrees or 4.1 degrees above normal while precipitation totaled 5.13 inches, 2.86 inches below normal. Fall 2025 ties 2024 with the 4th warmest fall in the period of record; it also ranks as the 27th driest fall on record. Fall 2016 was warmer (3rd warmest) while 2022 was drier.





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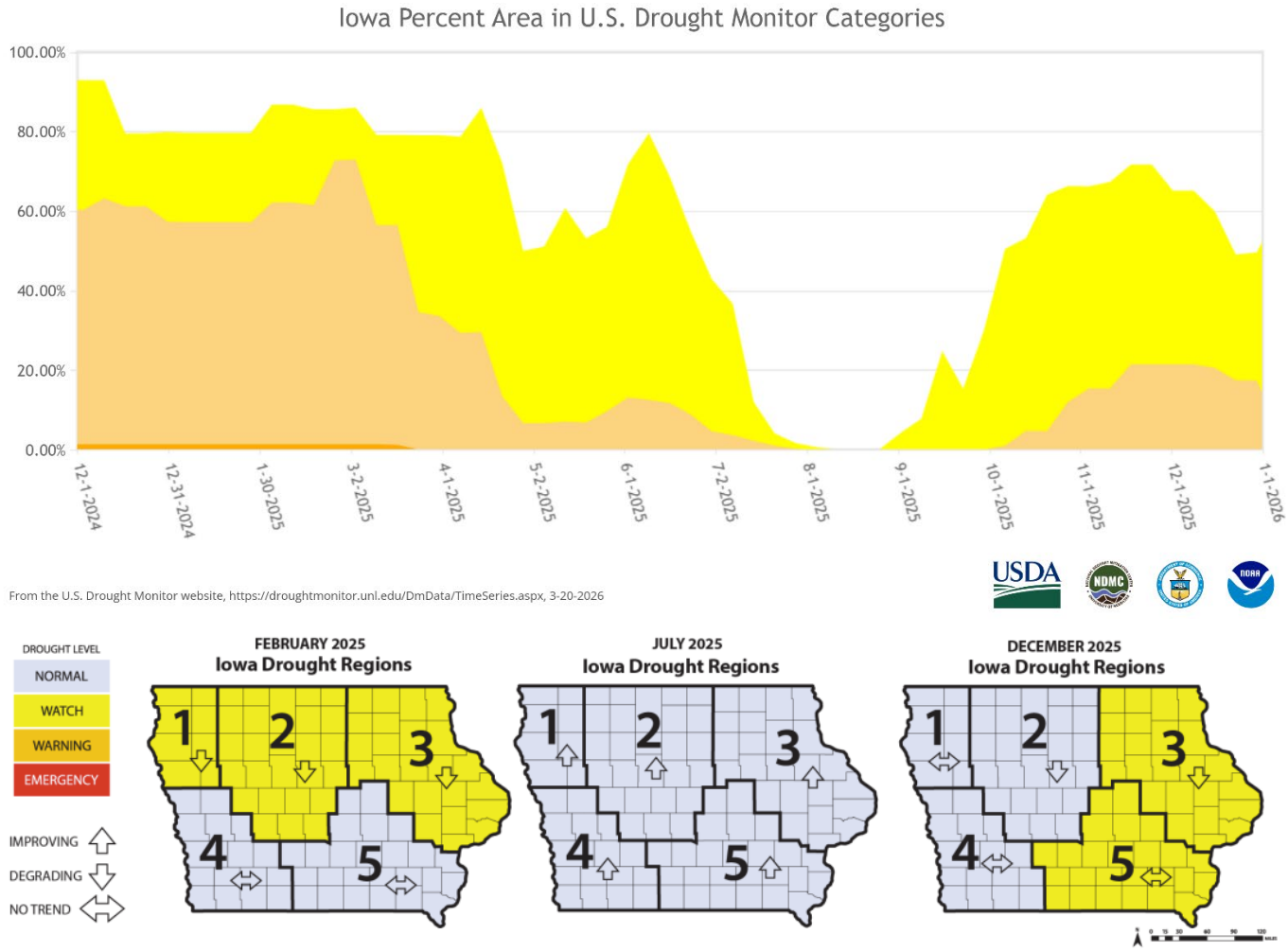
2025 Statewide Monthly Temperature Extremes							Statewide Monthly Rank*	
Month	Max. Temp.	Day	Location	Min. Temp.	Day	Location	Temperature	Precipitation
January	63	30th	Iowa Falls	-22	22nd	Emmetsburg Pocohontas	73rd coldest	9th driest
February	67	24th	Red Oak	-23	18th	Fayette Pocohontas	62nd coldest	17th driest
March	89	28th	Sioux City A.P.	9	2nd	Elkader Vinton	9th warmest	39th wettest
April	89	28th	Several stations	13	8th	Elkader	57th warmest	98th driest
May	95	15th	Muscatine	28	1st	Mason City	72nd coldest	64th driest
June	101	20th	Little Sioux	43	10th	Mount Ayr Stanley	24th warmest	37th wettest
July	99	29th	Carroll	50	18th	Fayette	46th warmest	2nd wettest
August	98	17th	Guttenber Lock & Dam	40	25th 26th	Spencer A.P. Chariton	43rd coldest	64th driest
September	99	13th	Davenport	32	7th	Stanley	23rd warmest	24th driest
October	93	3rd	Muscatine	21	24th	Vinton	14th warmest	65th driest
November	76	14th	Several stations	-6	30th	Spencer A.P.	37th warmest	66th driest
December	62	23rd	Clarinda	-20	14th 15th	Battle Creek Pocohontas	65th coldest	54th driest

Drought: The Iowa Drought Plan (IDP) was implemented in early 2023 as a collaborative effort among the Department of Natural Resources, the Department of Agriculture and Land Stewardship, and the Department of Homeland Security and Emergency Management. The plan divides the state into five drought regions, with conditions assessed and reported monthly. IDP classifications include Normal, Drought Watch, Drought Warning, and Drought Emergency. At the start of 2025, Drought Regions 1 (northwest Iowa), 2 (north-central Iowa) and 3 (northeast Iowa) were in Drought Watch, while the remaining regions were classified as Normal with stable conditions. Above-average rainfall in June and July led to significant improvement through the middle of the growing season, allowing all five regions to return to Normal status by late July. However, unseasonably warm and dry conditions during the fall reversed some of these gains. By the end of the season, Drought Regions 3 and 5 had returned to Drought Watch, with degrading conditions also emerging in Region 2.

The US Drought Monitor (one of the data sources used in the IDP) shows that Iowa had widespread drought conditions in early 2025 but returned to Abnormally Dry (D0) or no drought conditions after the 2nd wettest July and 6th wettest summer on record. Below is a

graph that shows statewide coverage of drought conditions for 2025, starting with nearly the 60% of Iowa in some form of drought and then no drought conditions in July. An anomalously dry fall (4th warmest and 27th driest) brought D0 conditions across most of Iowa with D1 (Moderate Drought) reemerging.



Severe Weather: After Iowa's most active severe weather year in 2024, 2025 saw a much less active severe weather season. There were several notable events with mid-April setting the stage for the first event. April 17th was an active weather day across the Midwest as a strong low pressure system moved across northern Iowa, the first round of strong to severe thunderstorms formed along the attendant cold front. During the evening hours, two supercell thunderstorms formed in eastern Nebraska and moved into southwest Iowa. These cells had a history of producing large hail and tornadoes; McClelland reported 4.00-inch hail with 2.75 inches observed in Essex (Page County). This storm had a long-track, wedge tornado that moved from Tabor (Fremont County) to Essex, where a Tornado Emergency was issued. Another tornado was reported by a trained spotter in Oakland (Pottawattamie County). The storms held together into central and eastern Iowa, though

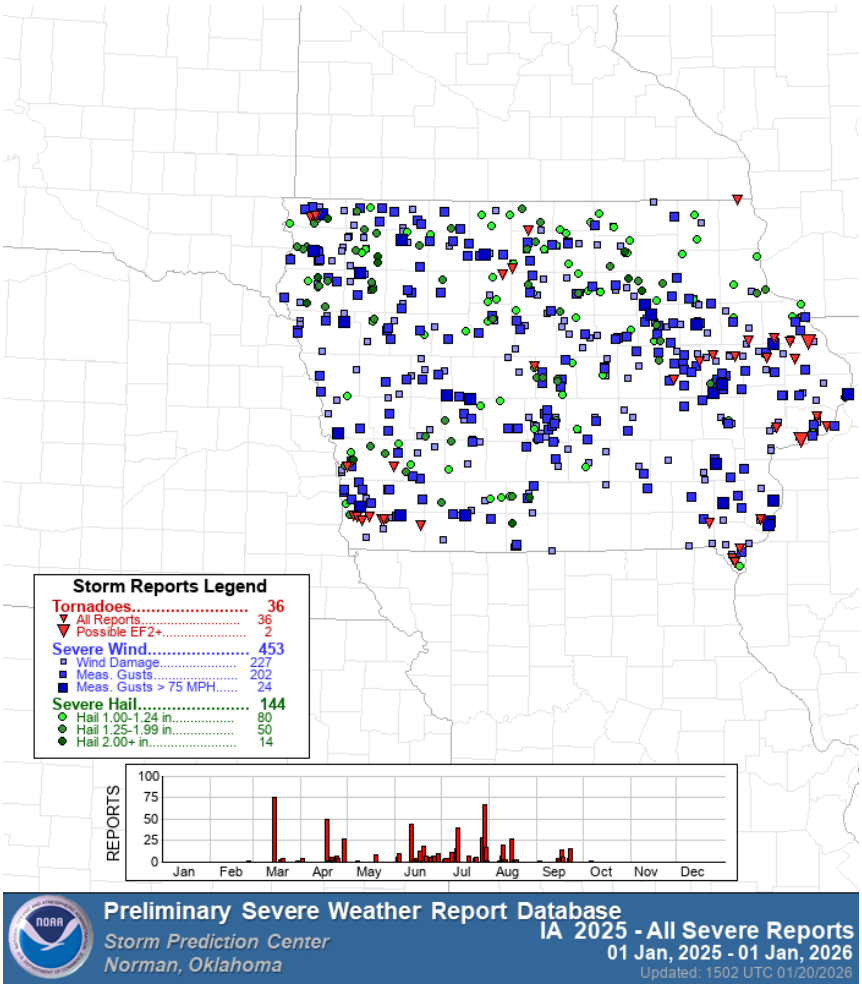
losing a great deal of strength. Farther northwest, severe thunderstorms with strong winds and large hail moved over the length of the state. Reports of hail and some wind damage came in from Sioux City (Woodbury County), Storm Lake (Buena Vista County) and Waverly (Bremer County).

Winds increased overnight into April 28th with ample moisture transport into the Midwest ahead of a potent low pressure system. Morning temperatures were unseasonably warm with a statewide average low of 50 degrees, eight degrees above normal. With afternoon conditions in the upper 70s and low 80s and abundant atmospheric instability, isolated severe thunderstorms fired along the low's attendant dry line; this surface feature is a boundary between very moist air to the east and drier air farther west. Additional storms developed later in the evening along the cold front trailing the dry line with some stronger cells moving through southwest Iowa. Luckily, a warm, stable layer in the lower levels of the atmosphere prevented a more widespread severe weather outbreak. Large hail was observed from Sioux City (Woodbury County) to Osage (Mitchell County) with the largest report being egg-sized hail in Lyon County. The strongest wind gusts were 62 to 64 mph from Ames (Story County) and in Sibley (Osceola County).

May 26th was another severe weather day over Iowa as a cold front transited the Upper Midwest. Afternoon temperatures reached into the upper 80s and low 90s ahead of the surface boundary with thunderstorms firing rapidly from southwest to northeast. Several cells turned severe, with high winds and two weak tornadoes near Corwith (Hancock County) and Lu Verne (Humboldt County). The line of storms pushed into eastern Iowa and finally out of the southwest corner by dawn on the 27th. Most Iowa stations received at least 0.50 inch with a west to north-central band of 2.00-4.00 inches; Carroll (Carroll County) observed 2.05 inches with 4.00 inches in Odebolt (Sac County). Winds shifted southerly into the 28th with light rain in northwestern Iowa. Conditions quickly changed by midnight in northwest Iowa as a bow echo with severe-warned thunderstorms dropped large hail and strong wind gusts; a 75-mph reading was observed near Cleghorn (Cherokee County). The complex diminished in strength early on the 29th with a few stations registering higher rainfall totals; Sioux Center hit 1.01 inches. Thunderstorms refired along a cold front in northeastern Iowa and held together into the early hours of the 30th before falling apart. Rain amounts were highest in southern and northeast Iowa where many stations collected more than an inch; Elkader (Clayton County) reported 1.14 inches while Promise City (Wayne County) observed 2.61 inches.

Clouds increased in northern Iowa after midnight on July 27 as a line of strong thunderstorms pushed south through the state. Numerous reports of strong straight-line winds were noted over northern Iowa as the line advanced before dissipating after sunrise on the 28th in southern Iowa. Many northern stations registered totals in the 0.50- to 1.50-inch range, with amounts tapering off farther south. Eastern Iowa locations reported the highest amounts, from 2.10 inches in Waucoma (Fayette County) to 2.48 inches in Asbury (Dubuque County). Later in the evening, severe thunderstorms in South Dakota coalesced into a bow echo that rapidly propagated through northern Iowa. Two spin-up tornadoes were observed near

Alvord (Lyon County), producing a swath of damage to corn and soybean fields. As the complex—later classified as a “derecho” by the Storm Prediction Center—moved into north-central Iowa, it dove southeast and sped across eastern Iowa. Numerous reports of significant wind gusts were logged along its path, including 99 mph at Sioux Center (Sioux County), 92 mph at both Orange City (Sioux County) and Spencer, and 83 mph in Cedar Rapids (Linn County).



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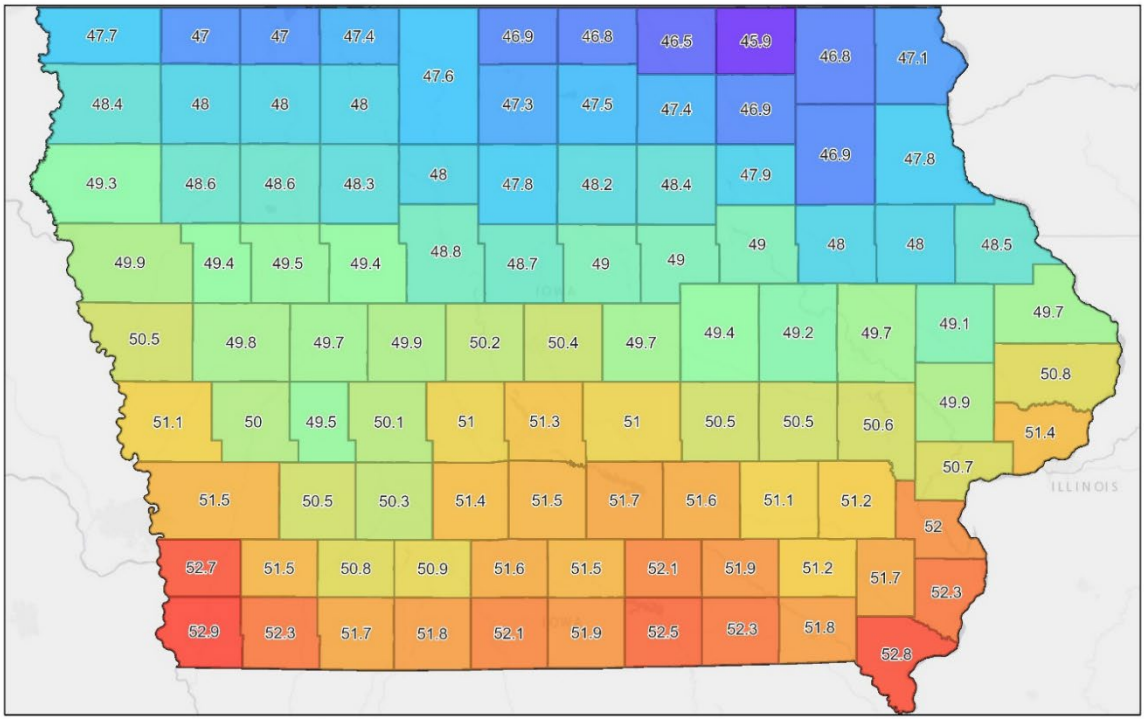
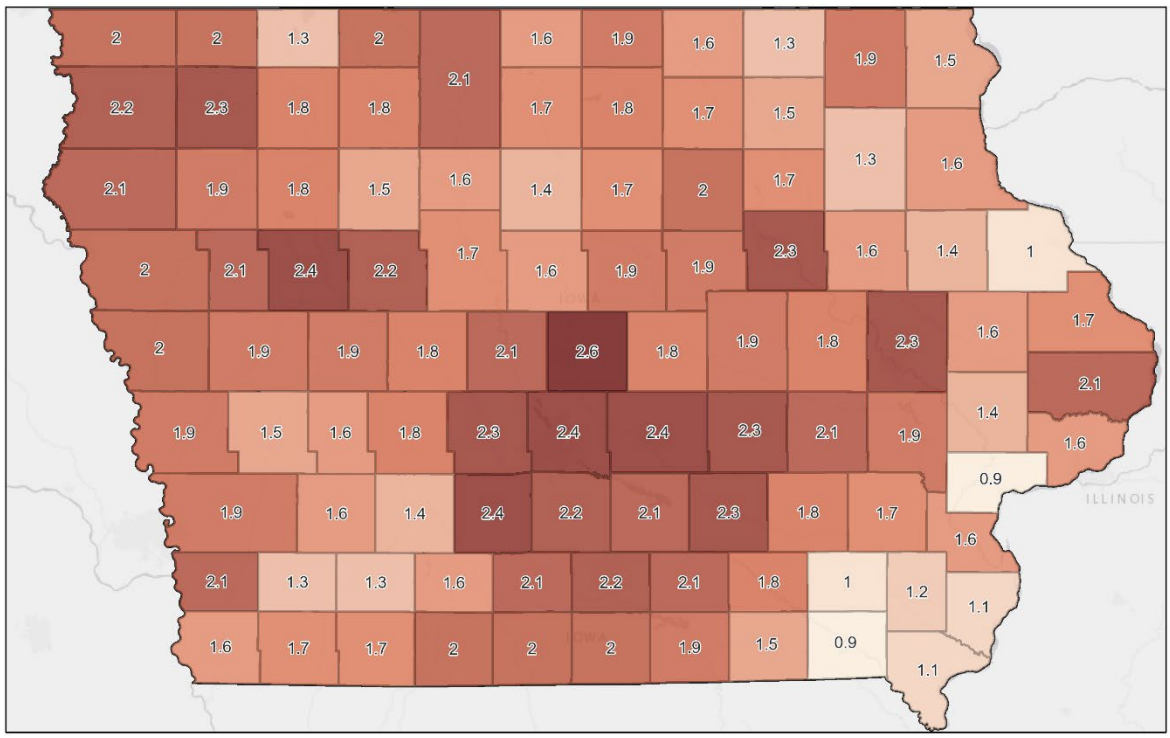
2025 Annual Average County Temperature [°F]



2025 Annual County Average Temperature Departure [°F]



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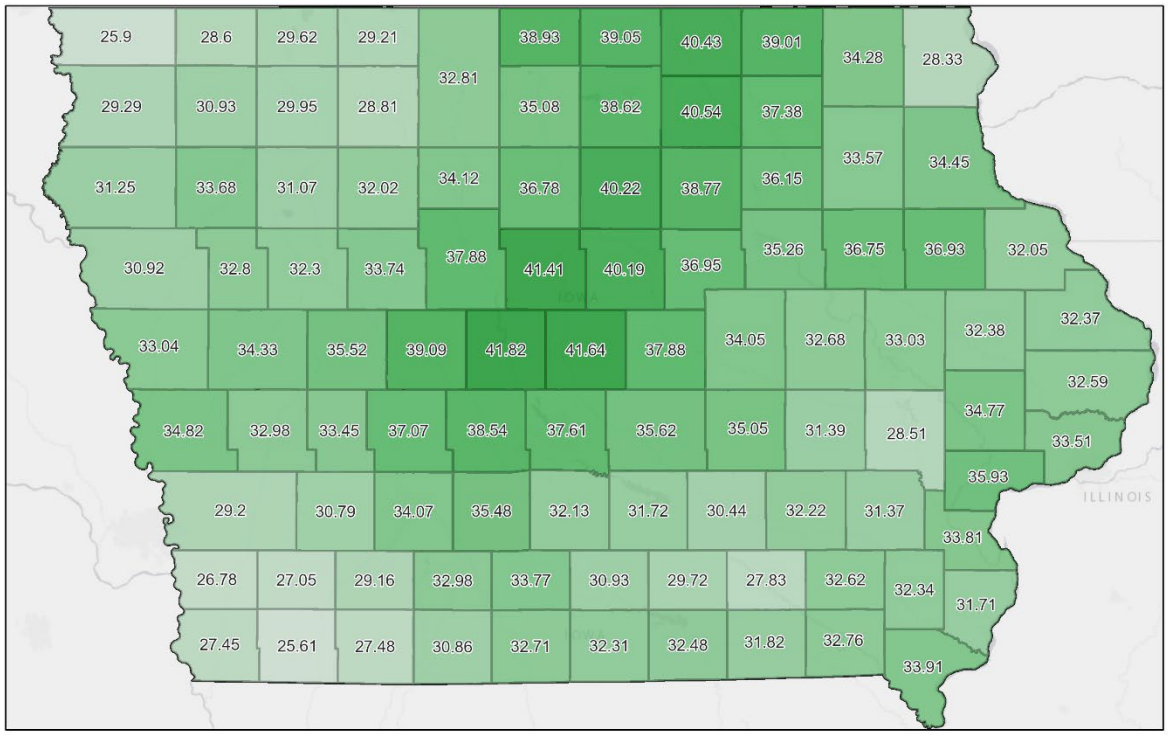
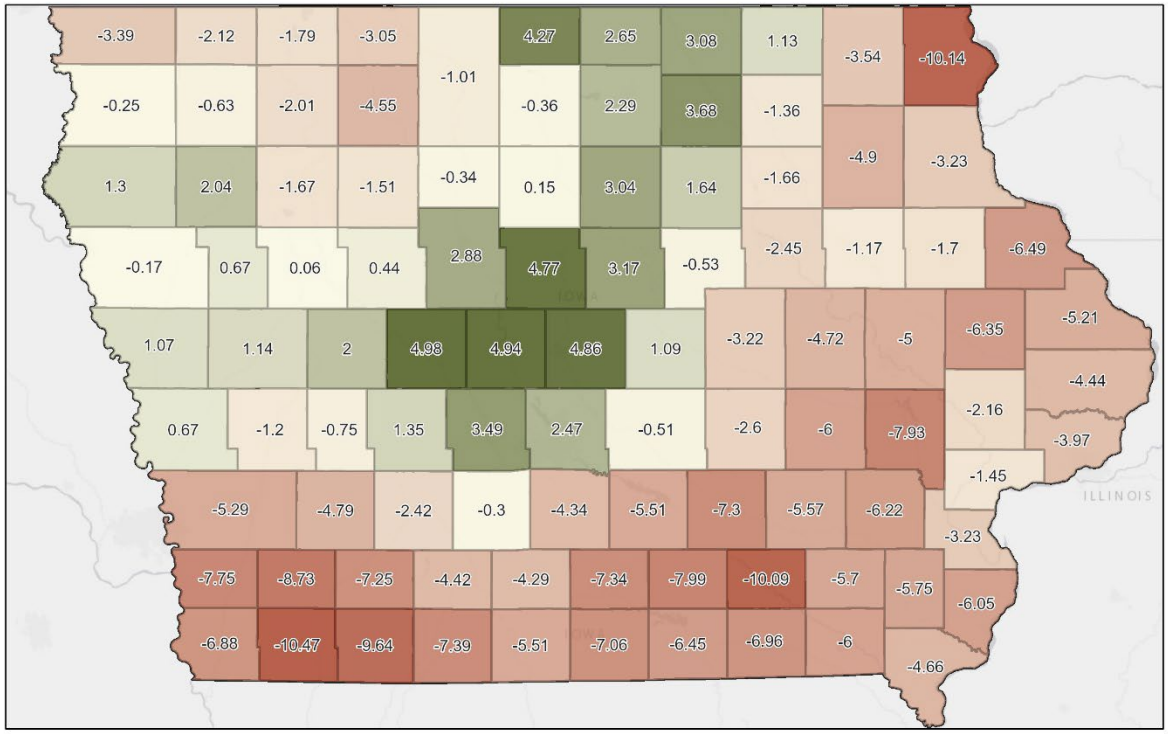
2025 Annual County Average Precipitation [in.]



2025 Annual County Average Precipitation Departure [in.]



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