

IOWA MONTHLY WEATHER SUMMARY – MARCH 2021

General Summary: Temperatures averaged 42.3 degrees or 6.4 degrees above normal while precipitation totaled 2.65 inches, which is 0.50 inch above normal. March 2021 ties 1977 as the 12th warmest March in 149 years of statewide observational records. This was also the 34th wettest March on record. A warmer March last occurred in 2012 while a wetter one occurred just last year.

Temperatures: Unseasonably warm temperatures blanketed Iowa during March with positive departures of up to eight degrees reported in western Iowa. The remaining portions of the state observed monthly averages between two to six degrees.

March's statewide average maximum temperature was 52.5 degrees, 6.3 degrees above normal while the average minimum temperature was 32.0 degrees, 6.4 degrees above normal. Desoto (Harrison County) reported the month's high temperature of 78 degrees on the 29th, 21 degrees above average. Elkader (Clayton County) reported the month's low temperature of 7 degrees on the 2nd, nine degrees below average.

Heating Degree Days: Home heating requirements, as estimated by heating degree day totals, averaged 6% less than last March and 19% less than normal. Heating degree day totals are running 3% more than last year at this time and 2% less than normal.

Precipitation: A majority of the state's National Weather Service co-op stations reported near to slightly above average precipitation during the month. The wettest conditions were found across portions of southwestern Iowa with above normal totals of up to three inches.

Monthly precipitation (melted snow and sleet plus rain) totals ranged from 0.89" at Estherville Municipal Airport (Emmet County) to 5.61" at a gauge near Pacific Junction (Mills County). In terms of snowfall, a majority of the stations across Iowa reported below-average totals with a preliminary statewide average of 2.2 inches, 2.5 inches below normal tying 2019 as the 27th lowest March total in 134 years of snowfall records; 2020 saw less snow. Muscatine (Harrison County) measured the highest accumulation of 10.0".

Severe Weather: Iowa experienced a relatively quiet month in terms of severe weather with only two days of severe weather reports. A strong low pressure center over the upper Midwest swung its attendant cold front through Iowa during the afternoon of the 10th. Stronger thunderstorms formed in south-central Iowa with a few severe- warned thunderstorms pushing into eastern Iowa; Osceola (Clarke County) reported hail up to an inch in diameter. The second severe weather event was also produced by a strong low pressure system spinning into Iowa from Missouri on the 24th. A brief spin-up tornado was observed near Fort Madison (Lee County) that caused some tree and shed damage.

US Drought Monitor: Drought and abnormally dry conditions contracted across Iowa during March as above-average precipitation helped ease dryness. The initial drought depiction at the beginning of March showed 52% of the state covered in D0 (Abnormally Dry) to D3 (Extreme Drought) conditions; the largest

share was D0, which covered the northeastern to southwestern one-third of Iowa. Extreme drought continued to cover around 3% of northwestern Iowa. Multiple large-scale weather systems moved through Iowa as the month progressed, gradually chipping away at all categories. Much of southwestern Iowa saw a one-category improvement though in mid-March with a reduction of D1 (Moderate Drought) and D2 (Severe Drought) conditions on the southeast periphery of the existing northwest Iowa core by the end of the month. As of the last week of March, D0-D3 conditions covered 41% of Iowa, the lowest extent since June 30, 2020

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March 2021

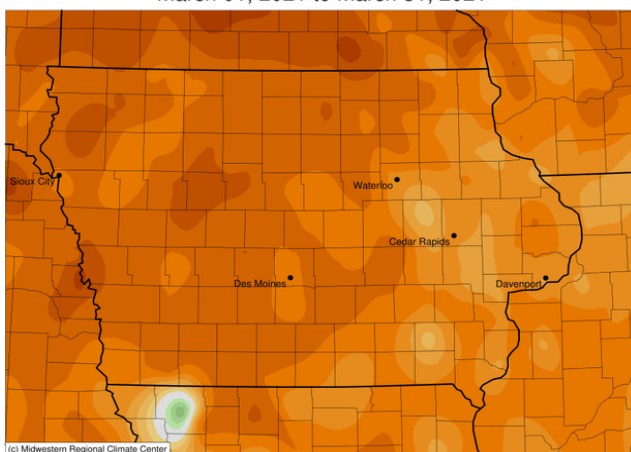
WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Mar 2021 Average
	March 2021 Average	Departure*	March 2021 Average	Departure*	Since Jul., 1, 2020 Average	Departure*	March 2021 Average	Departure*	Since Jan. 1, 2021 Average	Departure*	
Northwest	40.2	+7.1	769	-196	6421	-263	2.23	+0.35	3.74	+0.55	5.5
North Central	40.0	+7.2	775	-201	6495	-239	2.09	+0.13	3.62	-0.03	5.9
Northeast	39.6	+5.5	787	-170	6478	-129	2.38	+0.41	4.25	+0.16	4.3
West Central	42.9	+7.2	694	-189	5986	-200	3.24	+1.13	5.39	+1.68	1.8
Central	42.5	+6.6	706	-178	6074	-98	2.25	+0.06	4.04	-0.09	1.6
East Central	41.8	+4.5	719	-144	5996	-11	2.28	-0.00	4.60	-0.17	2.0
Southwest	45.5	+7.1	616	-192	5621	-98	3.91	+1.68	6.10	+2.03	0.0
South Central	45.2	+7.0	625	-184	5636	-42	2.88	+0.59	5.25	+0.83	0.0
Southeast	44.6	+5.1	642	-155	5610	+36	2.91	+0.34	5.83	+0.43	0.0
STATE	42.3	+6.4	711	-172	6059	-94	2.65	+0.50	4.68	+0.56	2.2

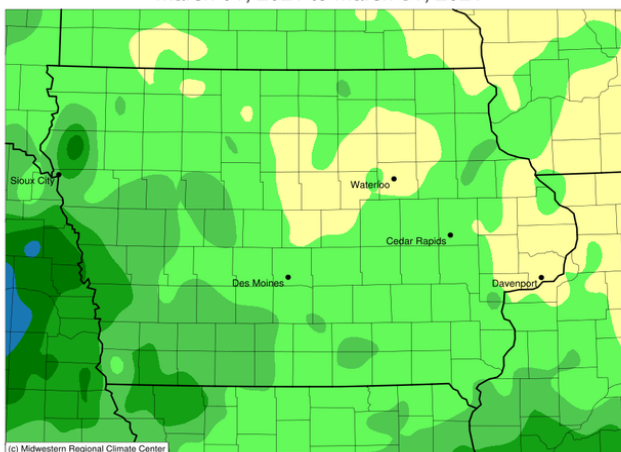
* Departures are computed from 1981-2010 normals.

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 1981-2010 Normals Accumulated Precipitation (in): Departure from 1981-2010 Normals
 March 01, 2021 to March 31, 2021

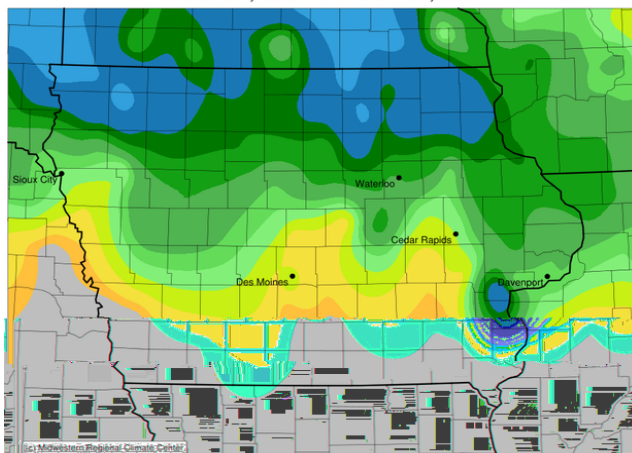


Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center
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Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center
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Accumulated Snowfall (in)
 March 01, 2021 to March 31, 2021



Stations from the following networks used: WBAN, COOP, FAA, GHCN