

IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

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IOWA MONTHLY WEATHER SUMMARY – MARCH 2022

<u>General Summary</u>: Temperatures averaged 37.2 degrees or 0.8 degree above normal while precipitation totaled 2.58 inches, 0.59 inch above normal. March 2022 ties 1995 and 1997 as the 52nd warmest and ranks as the 37th wettest in 150 years of statewide observational records. A warmer and wetter March occurred just last year.

<u>Temperatures</u>: For the month, temperatures were slightly above normal in north-central and southeastern Iowa with near-normal temperatures across the rest of Iowa when compared to the 1991-2020 climatology. March's statewide average maximum temperature was 47.8 degrees, 1.5 degrees above normal while the average minimum temperature was 26.6 degrees, 0.1 degree above normal. Muscatine (Muscatine County) reported the month's high temperature of 79 degrees on the 21st, 27 degrees above average. Rockwell City (Calhoun County) and Sioux City Airport (Woodbury County) reported the month's low temperature of -5 degrees on the 12th, on average 29 degrees below average.

<u>Heating Degree Days</u>: Home heating requirements, as estimated by heating degree day totals, averaged 21% more than last March and 3% less than normal. Heating degree day totals are running 4% less than last year at this time and 4% less than normal.

<u>Precipitation</u>: Most National Weather Service co-op stations across the southeastern two-thirds of Iowa reported near to above average precipitation during the month with generally below normal total in the northwest. The wettest conditions were found over northeastern Iowa with above normal totals of up to three inches. Monthly precipitation (melted snow and sleet plus rain) totals ranged from 0.85" in Estherville (Emmet County) to 5.77" at Elkader (Clayton County). In March, a majority of Iowa's northwestern stations measured below-average snow with a pocket of two to four inch positive totals in south-central Iowa; the preliminary statewide average snowfall was 3.0", 1.7" below normal.

<u>Severe Weather</u>: "On March 5, 2022, three supercells swept across Iowa, producing several tornadoes. Two supercells in southern Iowa produced three tornadoes. Meanwhile, a single long track supercell produced multiple tornadoes from the southwest corner of Iowa all the way through central Iowa and into east central Iowa. The largest tornado moved across Madison, Warren, Polk, and Jasper counties for nearly 70 miles and at its peak produced winds of nearly 170 mph. This is the first EF-4 tornado in Iowa since October 4, 2013, which occurred in Woodbury and Cherokee Counties. This is second longest tornado in Iowa since 1980, behind the longest occurring on June 7, 1984, at a length of 117 miles across southern Iowa." Unfortunately, the Winterset EF-4 claimed six lives and the Chariton EF-3 resulted in one fatality. This is highest loss of life since the Parkersburg EF-5 on May 25, 2008.

<u>US Drought Monitor</u>: Drought conditions generally improved across the state during March. The first US Drought Monitor (USDM) depiction of the month showed over 92% of Iowa was in some form of abnormal dryness (D0) or drought; by the start of April the percent coverage had declined to 62%. Improvement was most noticeable across southern, eastern and northeast Iowa. Moderate Drought (D1) conditions were reduced from 35% to 25% of the state during March. The USDM map released on March 15 showed an

area of Severe Drought (D2) introduction in western Iowa. The area of D2 designation covers 2.3 percent of the state. As of the first week of April, D0-D2 conditions covered 63% of Iowa with the categorical breakdown as follows: D0 (38%), D1 (23%) and D2 (2%).

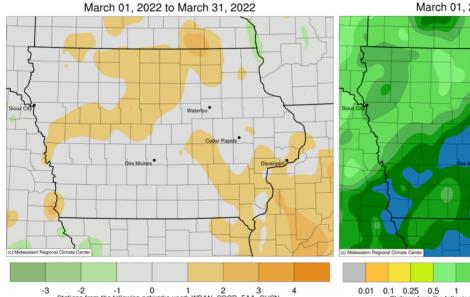
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March 2022											
WEATHER BY DISTRICTS											
	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				
DISTRICT	March 2022 Average Departure		March 2022 Average Departure'		Since Jul., 1, 2021 Average Departure'		March 2022 Average Departure'		Since Jan.1, 2022 Average Departure'		SNOWFALL Mar 2022 Average
			0.10				1.10		0.40		
Northwest	34.6	+0.6	942	-20	6250	-360	1.42	-0.24	2.18	-1.04	0.4
North Central	34.7	+1.4	939	-43	6485	-206	4.63	-0.30	2.76	-1.09	0.9
Northeast	34.5	+0.5	946	-16	6367	-165	3.49	+1.47	4.52	+0.13	3.4
West Central	37.8	+1.0	843	-34	5679	-438	1.94	+0.13	2.59	-0.96	1.6
Central	37.6	+1.2	849	-38	5837	-272	2.92	+0.92	4.05	0.00	3.5
East Central	37.8	+0.7	843	-22	5746	-195	2.99	+0.78	3.99	-0.89	4.0
Southwest	39.8	+0.4	781	-17	5244	-399	2.93	+0.95	3.85	-0.06	2.5
South Central	39.4	+0.3	794	-13	5347	-273	2.93	+0.83	4.59	+0.16	5.3
Southeast	40.0	+0.8	775	-27	5337	-201	3.35	+1.02	4.94	-0.33	4.0
STATE	37.2	+0.8	857	-27	5832	-258	2.58	+0.59	3.65	-0.48	3.1
* 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

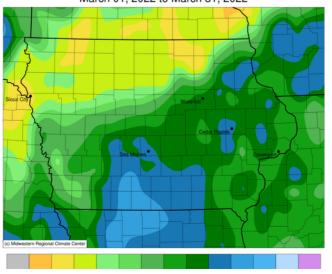
Accumulated Precipitation (in) March 01, 2022 to March 31, 2022



-2 -1 0 1 2 3 Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAC, NWSLI, Midwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment Generated at: 4/8/2022 1:03:48 AM CDT

0.01 0.1 0.25 0.5 1 1.5 2 2.5 3 4 5 6 Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Mdwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment Centrated at: 4/R/02/212(0736 AM CDT 8

Accumulated Snowfall (in) March 01, 2022 to March 31, 2022





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