



IOWA PRELIMINARY MONTHLY WEATHER SUMMARY – DECEMBER 2018

General Summary: Temperatures averaged 28.0 degrees or 5.1 degrees above normal while precipitation averaged 2.09 inches or 0.75 inches more than normal. This ranks as the 22nd warmest and ties with 2006 as the 10th wettest December among the observation records. A warmer and wetter December was last recorded in 2015.

Temperatures: A majority of December days had statewide average temperatures warmer than expected for this time of year. A long stretch of unseasonable warmth lasted from December 10th through the 27th with the average statewide temperature eight degrees above average. December 18th was the warmest day of the month; the statewide average high was 49 degrees, 18 degrees above the 30-year climatological average. Much of the southern third of Iowa had highs above 50 degrees, supported by southerly winds and clear skies. The longest stretch of below average temperatures occurred from the 3rd through the 9th, with highs generally in the 20s. December 6th was the coldest day of this period, as a strong high pressure situated over the state kept conditions clear and under cold, northerly flow. Overnight lows into the 7th were in the single digits to middle teens; Decorah Municipal Airport (Winneshiek County) reported a low of one degree, around 12 degrees below normal. December ended with more variable temperature behavior. December 30th was warmer than average with highs in the upper 30s to lower 40s. Daytime high temperatures fell across western Iowa as a cold front moved through the state on New Year's Eve. In terms of temperature extremes, Hawarden (Sioux County), Sheldon (O'Brien County) and Sibley (Osceola County) recorded the lowest overnight temperature of the month with a -4 degrees reading on the 29th. Sibley also reported the coldest daytime high of eight degrees on the 28th, 17 degrees below normal. Des Moines (Polk County) shared the month's daytime high of 57 degrees on the 18th with Bloomfield (Davis County), Centerville and Rathbun (Appanoose County). The reading was on average 23 degrees above normal.

Heating Degree Day Totals: Home heating requirements, as estimated by heating degree day totals, averaged 17% below normal and 14% less than seen during a cooler December last year. Heating degree totals thus far this heating season are running near normal and 6% more than at this time last year.

Precipitation: The first few days of December were unseasonably wet as a strong, slow moving low pressure system over Kansas and Missouri brought showers across the state; locally heavy rainfall was reported in southwest Iowa. Rain was the dominant precipitation type, but as the low moved east, light snow showers formed on the backside of the low. Precipitation totals through 7:00 am on December 4th were above 1.00 inches for over 40 stations with 1.61 inches reported in Clive (Polk County). Little Sioux (Harrison County) also reported 8.6 inches of snow over this period. December 4th through the 16th was unseasonably dry across all of Iowa. Accumulated precipitation departures were generally between 0.4 – 0.8 inches below average with the statewide average totaling 0.03 inches. Snowfall during this period also only averaged 0.20 inches. Just as the beginning of December was wetter than average, the end of the month saw another strong low pressure system move through Iowa on New Year's Eve, bringing a mixture of rain, freezing rain, sleet and snow across the southeast half of the state. Stations in Des Moines, Henry, Lee and Van



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Buren counties reported precipitation totals above 1.00 inch with Keokuk (Lee County) observing 1.33 inches, 63% of the station's monthly average. Northeast Iowa saw snow accumulations ranging from one to almost three inches; Conrad (Grundy County) observed 2.7 inches. Monthly precipitation totals (rain plus liquid equivalent of snow) ranged from 0.74 inches at Spencer Municipal Airport (Clay County) to 3.25 inches at Logan (Harrison County), the highest accumulation of the month and 2.00 inches above normal. The statewide average snowfall was 2.8 inches or 5.5 inches below normal. Snow totals for the month varied from 2.8 inches at Newton to 13.2 inches at Washta (Cherokee County).

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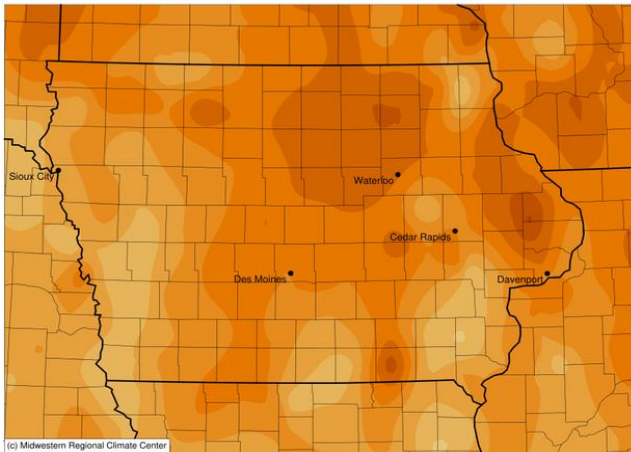
December 2018

WEATHER BY DISTRICTS

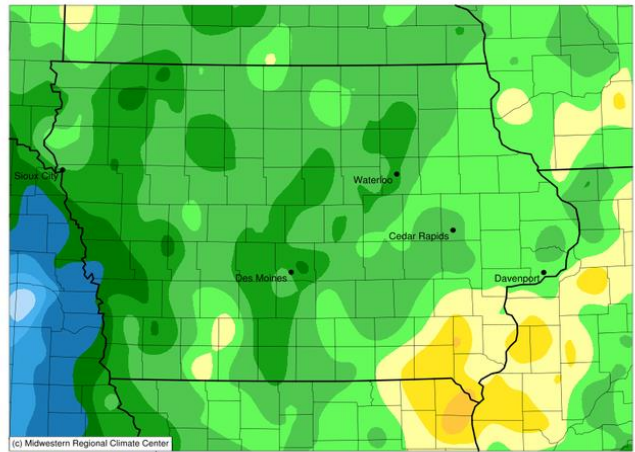
DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Dec 2018 Average
	December 2018 Average	Departure*	December 2018 Average	Departure*	Since Jul., 1, 2018 Average	Departure*	December 2018 Average	Departure*	Since Jan.1, 2018 Average	Departure*	
Northwest	24.6	+4.9	1155	-240	3001	-25	1.93	+1.03	43.82	+13.43	6.8
North Central	25.7	+6.2	1089	-309	2950	-73	2.03	+0.79	49.74	+15.45	3.0
Northeast	27.4	+6.1	1143	-220	2938	-21	2.13	+0.64	54.86	+18.60	1.6
West Central	26.3	+4.0	1181	-129	2865	+83	2.28	+1.19	40.53	+7.56	3.5
Central	28.6	+5.9	1092	-209	2733	-13	2.27	+0.95	46.89	+10.54	1.6
East Central	29.9	+5.3	1051	-212	2615	-31	2.14	+0.40	46.83	+10.17	0.5
Southwest	28.8	+3.4	1099	-124	2667	+115	2.25	+1.01	40.82	+5.19	4.1
South Central	30.8	+5.1	938	-271	2465	-48	2.19	+0.81	39.89	+2.17	0.8
Southeast	31.8	+4.7	926	-264	2418	-19	1.40	-0.41	39.08	+0.43	0.2
STATE	28.0	+5.1	1080	-214	2729	-7	2.09	+0.75	45.00	+9.73	2.8

* Departures are computed from 1981-2010 normals. Monthly estimates are preliminary and are likely to change.
 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
 December 01, 2018 to December 31, 2018



Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center
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