



IOWA MONTHLY WEATHER SUMMARY – OCTOBER 2017

General Summary. Temperatures averaged 53.2° or 2.4° above normal and precipitation 5.35 inches or 2.74 inches above normal. This ranks as the 34th warmest and 4th wettest October among 145 years of records. A wetter October was last recorded in 2009 and a warmer one just last year.

Temperatures. The unseasonably warm pattern that began during the second week of September continued with only brief breaks through October 26. Temperatures reached into the eighties somewhere in the state on eleven dates during October with the last one coming on the 21st when Burlington reached 82°. There were a few very brief cold weather episodes earlier in the month with the first freeze of the season reported at Rock Rapids and Sibley on the morning of the 10th and a hard freeze the next morning over portions of far western and northwest Iowa where Sheldon recorded a low of 25°. Much colder air finally arrived late in the month. A hard freeze was widespread over most of the northwest one-half of the state on the morning of the 28th. The first statewide freeze hit on the morning of the 29th with all but the extreme east seeing another hard freeze on the morning of the 31st. Monthly extremes varied from highs of 88° at Burlington, Indianola, Iowa City, Oskaloosa and Ottumwa on the 2nd with lows down to 14° at Little Sioux on the morning of the 28th and also at Le Mars, Sheldon and Spencer on the morning of the 31st.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged 18% less than normal but 19% more than last October. Thus far this heating season heating requirements are running an estimated 25% less than normal and 22% more than last year at this time.

Precipitation. The big weather news of the month was the frequent and heavy rainfall during the first one-half of October. There were four widespread significant rain events during the first fourteen days of the month. The largest of these events began on the 5th and continued into the afternoon of the 7th bringing a statewide average of 2.27 inches of rain (nearly matching the October normal of 2.63 inches). Heaviest rains with this event fell across western and northwestern Iowa with 6.69 inches reported near New Market in Taylor County. Other widespread rain events came on the 1st-3rd, mainly over west and northwest Iowa; then on the 10th over eastern Iowa and on the 13th-14th with greatest amounts over the southeast one-half of the state. A welcome period of dry weather prevailed from the 15th through the 20th but was followed by another period of widespread rain on the 21st-22nd when heaviest rains fell from south central into northeast Iowa. A statewide average of only 0.06 inches of precipitation fell over the last nine days of the month. The first snow of the season came from late on the 26th through the morning of the 28th but with only a few small areas of northern Iowa seeing a brief very light accumulation. There were more snow flurries scattered across Iowa on the 30th. Monthly precipitation totals ranged from 2.58 inches at Maquoketa to 9.39 inches near New Market. Every reporting point in the state exceeded their normal October precipitation total except for De Witt and Maquoketa. Three locations set new records for most October rainfall. At Grundy Center 7.37 inches of rain was recorded, breaking their old record of 6.84 inches set in 1919 among 126 years of record. Meanwhile Sioux City recorded 6.83 inches, breaking their old record of 5.80 inches set in 1881 among 135 years of records and Glenwood picked up 7.13 inches surpassing their 1881 record of 6.85 also set in 1881. Relatively dry conditions prior to the early October rains prevented any significant flooding. Drought, with coverage peaking at 45% of the state in mid-August had shrunk to only 6% of Iowa by the end of October. Nevertheless, the latest USDA Ag Statistics weekly weather summary indicated that more than 60% of south central and southeast Iowa remained short or very short of subsoil moisture.

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October 2017

WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Oct 2017 Average
	October 2017		October 2017		Since Jul., 1, 2017		October 2017		Since Jan.1, 2017		
	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	
Northwest	50.2	+1.2	452	-52	559	-133	4.77	+2.53	29.47	+1.51	T
North Central	51.3	+2.4	423	-83	530	-173	5.48	+3.10	33.63	+2.43	T
Northeast	52.8	+3.2	379	-105	491	-174	5.83	+3.25	36.76	+4.27	T
West Central	52.1	+1.6	398	-59	486	-126	5.36	+2.95	34.52	+4.27	T
Central	53.5	+2.8	360	-92	433	-171	5.68	+3.06	30.97	-1.92	T
East Central	54.7	+3.0	330	-93	412	-146	4.29	+1.40	32.03	-0.48	T
Southwest	54.9	+2.5	319	-84	371	-147	6.87	+4.26	35.42	+2.97	T
South Central	54.9	+2.6	321	-85	370	-162	5.19	+2.34	29.64	-4.43	T
Southeast	56.1	+2.5	295	-74	342	-129	4.84	+1.78	27.52	-6.74	T
STATE	53.2	+2.4	368	-81	450	-152	5.35	+2.74	32.25	+0.37	T

* 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.

State Climatologist, Iowa Dept. of Agriculture & Land Stewardship

COUNTY PRECIPITATION AVERAGES, OCTOBER 2017 (inches)

