



IOWA WEATHER SUMMARY – AUGUST 2017

General Summary. Iowa temperatures averaged 68.0° or 3.5° below normal while precipitation totaled 3.99 inches or 0.21 inches less than normal. This ranks as the 15th coolest and 58th wettest August among 145 years of records. A cooler August was last recorded in 2004 and a drier one in 2013.

Temperatures. Mild weather was the rule throughout the month with only five days (1st, 16th-17th, 20th-21st) averaging just slightly warmer than normal. The highest temperatures for the month were 93° readings at Donnellson on the 2nd and at Keosauqua on the 10th. There were no ninety degree readings anywhere in the state after the 19th and most of central and northern Iowa never reached 90 during the month. At Northwood the highest temperature recorded during August was only 81°. Daytime high temperatures reached only 64° at Sheldon on the 3rd and 66° at Sioux City on the 5th. The lowest minimum temperatures were 44° readings at Chariton on the 12th and also at Stanley on the 23rd.

Cooling Degree Day Totals. Home air conditioning requirements, as estimated by cooling degree day totals, averaged 52% less than normal and 48% less than last August. Thus far this air conditioning season cooling degree day totals are running 16% less than last season at this time and 5% less than normal.

Precipitation. As has been the case all summer rainfall totals varied widely across the state. However, the June and July pattern of wet weather over northeast and east central Iowa and dry elsewhere reversed in August. A wet period from the 14th through the 21st brought the bulk of the month's rain (2.75 inches statewide average). Locally heavy rains fell twice in west central Iowa. The first event was centered across northern Harrison County with 5.16 inches of rain north of Woodbine on the 15th-16th. The second event was more widespread on the morning of the 21st with a maximum reported rain total of 6.47 inches at Denison. The 21st brought the most widespread rain of the summer and frustrated many Iowan's plans for viewing the solar eclipse that early afternoon. This period of rain greatly reduced or eliminated drought conditions over most of the western one-third of Iowa. However, severe to extreme drought conditions persisted over south central Iowa where August rainfall was still much less than normal, despite being much greater than seen in June or July. Monthly rain totals varied from only 0.50 inches near Muscatine to 10.94 inches near Milford. At Milford this was their highest August total among 81 years of record (old record 8.93 in 1979). Mapleton also set an August record with 10.40 inches among 80 years of record (old record 9.86 in 1962).

Summer Summary. Precipitation averaged below normal for all three summer months with a statewide average of 10.65 inches or 3.06 inches less than normal. The unseasonably cool August cancelled out the relatively hot June and July with a statewide average temperature of 71.3° or 0.3° below normal. This ranks as the 72nd warmest and 38th driest summer among 145 years of records. A lower summer rainfall total has been recorded only twice (2012 and 2013) in the past 14 years. At Fairfield only 3.51 inches of rain fell this summer, breaking the previous summer-time low of 3.77 inches set in 1911 among 137 years of records. Meanwhile Fayette recorded 22.67 inches of rain, their sixth highest summer total among 126 years of record.

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August 2017

WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		COOLING DEGREE DAYS				PRECIPITATION (inches)			
	August 2017 Average	Departure*	August 2017 Average	Departure*	Since Jan., 1, 2017 Average	Departure*	August 2017 Average	Departure*	Since Jan.1, 2017 Average	Departure*
Northwest	66.9	-3.4	84	-101	612	-20	5.99	+2.21	21.65	-0.84
North Central	66.2	-3.4	67	-100	512	-61	3.83	-0.28	25.98	+0.34
Northeast	66.7	-3.5	80	-101	515	-79	1.74	-2.89	29.79	+3.22
West Central	67.9	-3.7	113	-105	708	-18	7.32	+3.43	25.80	+1.11
Central	68.1	-3.3	115	-98	694	-7	3.76	-0.70	23.26	-3.69
East Central	67.7	-4.1	103	-121	642	-98	1.88	-2.62	26.43	+0.13
Southwest	69.4	-3.7	150	-111	807	-35	4.67	+0.86	26.19	-0.25
South Central	69.7	-3.3	156	-100	817	-26	3.17	-1.12	21.74	-5.66
Southeast	70.1	-3.6	167	-110	851	-39	2.72	-1.54	19.75	-7.66
STATE	68.0	-3.5	113	-104	677	-36	3.99	-0.21	24.56	-1.34

* 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 ESTIMATES, AUGUST 2017 (inches)

