

MONTHLY CLIMATE SUMMARY, MARCH 2012

NIU WEATHER SERVICE: DE KALB, ILL.

Day	Record HI	Record LO	Average HI	Average LO	Obs. HI	Obs. LO	Obs. Avg.	CDD	HDD	GDD	Precip. (in)	Snowfall (in)
1	65	-13	38	22	53	32	42.5	0	0	22.5	0.03	T
2	66	-9	41	22	37	33	35	0	0	30	0.00	0.0
3	72	-5	38	21	37	28	32.5	0	0	32.5	0.43	4.3
4	70	-3	37	21	30	22	26	0	0	39	0.01	T
5	71	-7	41	23	28	19	23.5	0	0	41.5	T	0.1
6	69	-7	41	24	34	20	27	0	0	38	0.00	0.0
7	70	-7	40	23	65	31	48	0	0	17	0.00	0.0
8	77	-13	40	23	65	34	49.5	0	0	15.5	0.12	0.0
9	73	-3	41	23	42	26	34	0	0	31	0.00	0.0
10	69	-2	40	22	38	25	31.5	0	0	33.5	0.00	0.0
11	69	-3	42	24	59	25	42	0	0	23	0.00	0.0
12	72	-6	44	24	66	33	49.5	0	0	15.5	0.26	0.0
13	77	5	45	27	60	44	52	2	0	13	0.14	0.0
14	71	5	46	28	66	43	54.5	4.5	0	10.5	0.00	0.0
15	77¹	9	47	27	77	49	63	13	0	2	0.00	0.0
16	79²	-1	45	27	79	54	66.5	16.5	1.5	0	0.00	0.0
17	80³	-2	45	28	80	54	67	17	2	0	0.00	0.0
18	80⁴	-1	45	27	80	55	67.5	17.5	2.5	0	T	0.0
19	79⁵	-8	44	28	79	54	66.5	16.5	1.5	0	0.00	0.0
20	77	2	46	27	76	60	68	18	3	0	0.09	0.0
21	82⁶	4	46	28	82	61	71.5	21.5	6.5	0	0.00	0.0
22	83⁷	1	46	28	83	60	71.5	21.5	6.5	0	0.00	0.0
23	80⁸	0	50	29	80	60	70	20	5	0	0.10	0.0
24	84	3	51	31	69	51	60	10	0	5	T	0.0
25	81	3	52	32	64	52	58	8	0	7	0.00	0.0
26	80	7	51	33	74	35	54.5	4.5	0	10.5	T	0.0
27	82	9	53	33	45	35	40	0	0	25	0.00	0.0
28	82	8	54	34	72	37	54.5	4.5	0	10.5	0.00	0.0
29	84	12	53	33	65	37	51	1	0	14	0.00	0.0
30	84	5	52	34	53	36	44.5	0	0	20.5	0.00	0.0
31	81	7	55	35	55	37	46	0	0	19	T	0.0

¹A NEW RECORD HIGH was recorded on the 15th; the previous record was 74, which was set in 1995.

²A NEW RECORD HIGH was recorded on the 16th; the previous record was 77, which was set in 1945.

³A NEW RECORD HIGH was recorded on the 17th; the previous record was 71, which was set in 1966.

⁴A NEW RECORD HIGH was recorded on the 18th; the previous record was 79, which was set in 1903.

⁵A NEW RECORD HIGH was recorded on the 19th; the previous record was 78, which was set in 1921.

⁶A NEW RECORD HIGH was recorded on the 21st; the previous record was 77, which was set in 1938.

⁷A NEW RECORD HIGH was recorded on the 22nd; the previous record was 78, which was set in 1938.

⁸A RECORD HIGH was TIED on the 23rd; the record of 80 was first set in 1939.

Temperature

1981-2010 AVG. HI: 46.8(F)
 1981-2010 AVG. LOW: 27.0(F)
 1981-2010 AVG. TEMP: 36.2(F)
 March 2012 AVG. HI: 61.1(F)
 March 2012 AVG. LO: 40.1(F)
 March 2012 AVG. TEMP: 50.6(F)

Precipitation

March 2012 TOTAL: 1.38 in.
 March AVG: 2.26 in.
 March 2012 SNOW: 4.4 in.
 March AVG SNOW: 4.2 in.
 2012 liquid-eq. YEAR TO DATE: 4.39 in.
 liquid-eq. YEAR TO DATE AVG: 5.28 in.
 2011-12 Seasonal SNOW TO DATE: 24.1 in.
 Seasonal SNOW AVG: 33.9 in.

Degree Days

COOLING: 3/12: 28.5
 1/12-Now: 28.5
 HEATING: 3/12: 476
 7/11-Now: 5045
 GROWING: 3/12: 196
 1/12-Now: 196

Discussion

Temperatures in March 2012 were record warm. The mean temperature for the month was 50.6 degrees, some 14.4 degrees above the historical (30-year, 1981-2010) average of 36.2 degrees. This mean-temperature value is the highest on record since 1896; the previous record value was 47.5 degrees, set in 1945. The monthly average high temperature of 61.1 degrees (14.3 degrees above the historical-average value) was also the highest on record (old record: 59.7 degrees, 1910) as was the monthly average low temperature of 40.1 degrees (13.1 degrees above the historical-average value; old record: 35.7 degrees, 1945). With respect to mean temperature, if this March is ranked with the set of all Aprils since 1896, it ranks among the warmest 20 percent in that set. The first five days of the month featured near- or colder-than-seasonable temperatures. After that, temperatures were generally much above the historical averages and achieved many records. The earliest occurrence on record of a 79-degree temperature was recorded on the 16th as were that of an 80-degree temperature on the 17th, that of an 82-degree temperature on the 21st, and that of an 83-degree temperature on the 22nd. In fact, the 21st and 22nd each posted a daily temperature anomaly of 34.5 degrees. Between the 15th and 23rd, the temperature reached at least 70 degrees, the earliest such nine-day-or-longer streak on record, beating a 12-day streak that commenced on 10 April 1977. Between the 21st and 23rd, the temperature reached at least 80 degrees, the earliest such three-day streak, beating a three-day streak that commenced on 24 March 1910. Nine days in a row between the 16th and 24th beat or tied the record-high low temperature for the day. More records and statistics could surely be derived from this historic, once-in-a-lifetime (or more, relative to the time of year) warm spell.

Precipitation in March was below the historical average. Liquid-equivalent precipitation totaled 1.18 in., some 61 percent of the historical-average total of 2.26 in. The temporal distribution of the rainfall was a bit uneven, as it was focused on the early (and cooler) part of the month. Year-to-date precipitation as of the end of the month totaled 4.39 in., some 83 percent of the historical-average total of 5.28 in. Snowfall, nearly all of which occurred in frontogenetically-forced thunderstorms on the afternoon of the 2nd, totaled 4.4 in., some 105 percent of the historical-average total of 4.2 in.

As agricultural field work commences in DeKalb County and surrounding areas of northern Illinois, crop moisture is "slightly dry/favorably moist" according to the 24 March Crop Moisture Index map (<http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/cmi.gif>) released by the NOAA Climate Prediction Center. As of the 0700 observation on the 31st, the two- and four-inch soil temperatures under sod were 44 and 46 degrees, respectively.

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This summary was prepared by Daniel J. Brouillette, 31 March 2012. Forecast information (updated once daily at approx. 7:30 am): (815) 753-1623.

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March 2012 Daily Highs and Lows with 1981-2010 Average Highs and Lows
 Prepared by Daniel J. Brouillette, NIU Weather Director

