

MONTHLY CLIMATE SUMMARY, DECEMBER 2011

NIU WEATHER SERVICE: DE KALB, ILL.

Day	Record HI	Record LO	Average HI	Average LO	Obs. HI	Obs. LO	Obs. Avg.	GDD	CDD	HDD	Precip. (in)	Snowfall (in)
1	63	4	38	26	41	22	31.5	0	0	33.5	0.00	0.0
2	64	-5	38	24	46	25	35.5	0	0	29.5	0.02	0.2
3	66	-14	38	23	41	25	33	0	0	32	0.23	0.0
4	60	-4	36	21	49	41	45	0	0	20	0.48	0.0
5	64	-4	35	21	47	31	39	0	0	26	0.00	0.0
6	65	-7	35	18	36	28	32	0	0	33	T	T
7	66	-9	34	19	31	23	27	0	0	38	0.00	0.0
8	63	-8	34	21	32	22	27	0	0	38	0.00	0.0
9	59	-18	34	20	33	20	26.5	0	0	38.5	0.02	0.2
10	56	-18	35	19	25	8	16.5	0	0	48.5	0.00	0.0
11	60	-15	34	19	24	8	16	0	0	49	0.00	0.0
12	55	-10	33	17	42	21	31.5	0	0	33.5	0.00	0.0
13	60	-19	32	18	44	24	34	0	0	31	0.00	0.0
14	58	-12	33	21	42	35	38.5	0	0	26.5	0.87	0.0
15	59	-14	35	20	54	40	47	0	0	18	0.69	0.0
16	58	-17	34	19	42	23	32.5	0	0	32.5	0.00	0.0
17	57	-13	31	18	32	23	27.5	0	0	37.5	0.10	2.0
18	56	-12	29	15	29	14	21.5	0	0	43.5	T	T
19	55	-17	29	15	42	14	28	0	0	37	0.00	0.0
20	57	-19	30	15	45	33	39	0	0	26	0.00	0.0
21	57	-18	31	16	37	33	35	0	0	30	T	0.0
22	55	-12	31	16	38	30	34	0	0	31	T	0.0
23	58	-17	31	16	35	19	27	0	0	38	0.00	0.0
24	55	-22	29	14	30	19	24.5	0	0	40.5	0.00	0.0
25	60	-13	27	12	36	19	27.5	0	0	37.5	0.00	0.0
26	56	-22	28	12	41	22	31.5	0	0	33.5	0.00	0.0
27	55	-20	30	17	42	23	32.5	0	0	32.5	0.01	0.0
28	64	-24	33	18	38	19	28.5	0	0	36.5	0.00	0.0
29	63	-12	32	17	33	20	26.5	0	0	38.5	0.01	0.0
30	59	-13	31	14	45	32	38.5	0	0	26.5	0.10	0.0
31	57	-14	33	18	40	27	33.5	0	0	31.5	0.01	0.0

Temperature

1981-2010 AVG. HI: 35.6(F)
 1981-2010 AVG. LOW: 17.9(F)
 1981-2010 AVG. TEMP.: 25.3(F)
 December 2011 AVG. HI: 38.5(F)
 December 2011 AVG. LO: 24.0(F)
 December 2011 AVG. TEMP.: 31.2(F)

Precipitation

December 2011 TOTAL: 2.54 in.
 December AVG.: 2.17 in.
 December 2011 SNOW: 2.4 in.
 December SNOW AVG: 10.0 in.
 2011 liquid-eq. YEAR TO DATE: 42.80 in.
 liquid-eq. YEAR TO DATE AVG.: 36.79 in.
 2011-12 Seasonal SNOW TO DATE: 2.5 in.
 Seasonal SNOW TO DATE AVG.: 11.2 in.

Degree Days

COOLING: 12/11: 0
 1/11-Now: 898.5
 HEATING: 12/11: 1047.5
 7/11-Now: 2345.5
 GROWING: 12/11: 0
 1/11-Now: 2824

Discussion

December 2011 featured temperatures much above the historical (30-year, 1981-2010) averages. The monthly mean temperature of 31.2 degrees was some 5.9 degrees above the historical average mean of 25.3 degrees and ranked 15th highest on record since 1896. The monthly mean high temperature of 38.5 degrees was some 2.9 degrees above the historical average value of 35.6 degrees, and the monthly mean low temperature of 24.0 degrees was some 6.1 degrees above the historical average value of 17.9 degrees. Taking the monthly mean temperature as a basis, this December was the warmest since 2001, when the monthly mean temperature was 31.5 degrees. The month began with temperatures generally above the historical averages followed by a brief period around the 10th when the coldest temperatures of the month were recorded. The remainder of the month had temperatures that were generally above the historical averages, with a few brief interludes of near-normal temperatures.

Liquid-equivalent precipitation during December was above the historical average, totaling 2.54 in., some 118 percent of the historical average total of 2.17 in. Although liquid-equivalent precipitation exhibited a positive anomaly, snowfall totaled only 2.4 in., of which over 80 percent was recorded on the 17th and which is some 24 percent of the historical average total of 10.0 in. This total is the least of any December since 1979, when 2.3 in. was recorded.

The last day of covered by this summary marks the end of calendar year 2011. The annual mean temperature was 48.8 degrees, which tied with 1957 and 1980 for 45th warmest since 1896. The highest temperature was 97 degrees, recorded on 08 June and 21 July, and the lowest temperature was -13 degrees, recorded on 10 February. In general, the period from the beginning of the year to the end of May was cooler than normal; the summer months (June-August) were warmer than normal, bolstered by a July that was seventh warmest on record and warmest since 1983; the fall months began with the eighth-coolest September on record, followed by warmer-than-normal conditions generally in October and November; and December was much warmer than normal. The annual total liquid-equivalent precipitation was 42.80 in., some 116 percent of the historical average of 36.79 in. and 14th wettest since 1896. All months in 2011 featured above-normal liquid-equivalent precipitation except January, March, and October.

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 This summary was prepared by Daniel J. Brouillette, 31 December 2011. Forecast information (updated once daily at approx. 7:30 am): (815) 753-1623.
 Climate Website: <http://climate.niu.edu>

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December 2011 Daily Highs and Lows with 1981-2010 Average Highs and Lows
 Prepared by Daniel J. Brouillette, NIU Weather Director

