

MONTHLY CLIMATE SUMMARY, DECEMBER 2010
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	63	4	37	25	31	19	25	0	40	0	T	T
2	64	-5	38	23	24	18	21	0	44	0	T	T
3	66	-14	38	23	31	15	23	0	42	0	0	0
4	60	-4	37	22	27	15	21	0	44	0	0.26	4
5	64	-4	38	24	29	12	20.5	0	44.5	0	0.07	1
6	65	-7	37	22	23	1	12	0	53	0	0.00	0
7	66	-9	35	21	16	1	8.5	0	56.5	0	T	T
8	63	-8	34	22	17	4	10.5	0	54.5	0	0.00	0
9	59	-18	34	19	18	3	10.5	0	54.5	0	0.00	0
10	56	-18	33	18	27	11	19	0	46	0	0.07	1.5
11	60	-15	32	17	31	22	26.5	0	38.5	0	0.00	0
12	55	-10	34	18	34	19	26.5	0	38.5	0	0.12	0.5
13	60	-19	33	19	24	2	13	0	52	0	T	0.5
14	58	-12	35	21	10	-3	3.5	0	61.5	0	0.00	0
15	59	-14	37	22	12	-1	5.5	0	59.5	0	0.00	0
16	58	-17	35	20	20	4	12	0	53	0	0.00	0
17	57	-13	31	17	22	6	14	0	51	0	0.01	0.5
18	56	-12	30	15	13	4	8.5	0	56.5	0	0.00	0
19	55	-17	30	18	15	5	10	0	55	0	0.00	0
20	57	-19	32	16	13	4	8.5	0	56.5	0	0.00	0
21	57	-18	31	16	28	12	20	0	45	0	0.30	4.5
22	55	-12	31	15	31	14	22.5	0	42.5	0	0.00	0
23	58	-17	32	18	31	11	21	0	44	0	T	T
24	55	-22	32	17	24	11	17.5	0	47.5	0	T	T
25	60	-13	28	13	30	17	23.5	0	41.5	0	0.36	5.1
26	56	-22	27	13	28	17	22.5	0	42.5	0	T	T
27	55	-20	30	15	27	14	20.5	0	44.5	0	0.00	0
28	64	-24	32	16	17	4	10.5	0	54.5	0	0.00	0
29	63	-12	32	16	23	9	16	0	49	0	0.00	0
30	59	-13	30	14	34	10	22	0	43	0	0.01	0
31	57	-14	30	16	40	34	37	0	28	0	0.12	0

Temperature

1971-2000 AVG. HI: 32.3°F
 1971-2000 AVG. LOW: 16.9°F
 1971-2000 AVG. TEMP: 24.6°F
 December 2010 AVG. HI: 24.2°F
 December 2010 AVG. LO: 10.1°F
 December 2010 AVG. TEMP: 17.2°F

Precipitation

December 2010 TOTAL: 1.32 in.
 December AVG: 2.13 in.
 December 2010 SNOW: 17.6 in.
 December SNOW AVG: 9.5 in.
 2010 liquid-eq. YEAR TO DATE: 34.78 in.
 liquid-eq. YEAR TO DATE AVG: 37.38 in.
 2010-11 Seasonal SNOW TO DATE: 17.6 in.
 Seasonal SNOW TO DATE AVG: 11.8 in.

Degree Days

COOLING: 12/10: 0
 1/10-Now: 965
 HEATING: 12/10: 1483
 7/10-Now: 2665.5
 GROWING: 12/10: 0
 1/10-Now: 3350.5

Discussion

December 2010 temperatures were substantially colder than historical (30-year, 1971-2000) averages. The mean temperature of 17.2 degrees was 7.4 degrees below the historical average of 24.6 degrees and ranked ninth coldest on record since 1896. The monthly average high temperature of 24.2 degrees ranked fourth coldest on record, and the monthly average low temperature of 10.1 degrees tied with that recorded in 1924 as 13th coldest on record. While never extreme, the cold conditions were persistent, as temperatures above freezing were recorded only on the 12th, 30th, and 31st.

Monthly liquid-equivalent precipitation totaled 1.32 in., which was only 62 percent of the historical average total of 2.13 in. However, the sub-normal liquid-equivalent was due in large part to the persistent cold, which was attendant with a synoptic-scale pattern that largely precluded the occurrence of snowfalls for which substantial Gulf moisture was available. Nonetheless, snowfall totaled 17.6 in., which was 149 percent of the historical average of 9.5 in. and ranked 13th greatest on record since 1896. This December marked the sixth consecutive in which snowfall was above the historical average.

This month ended the 2010 calendar year whose mean temperature was 49.3 degrees, 1.5 degrees above the historical average of 47.8 degrees, and total liquid-equivalent precipitation was 34.78 in., some 93 percent of the historical average of 37.38 in.

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 This summary was prepared by Daniel J. Brouillette, 4 January 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 2010 Daily Highs and Lows with 1971-2000 Average Highs and Lows
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