

MONTHLY CLIMATE SUMMARY, OCTOBER 2010

NIU WEATHER SERVICE: DE KALB, ILL.

Day	Record HI	Record LO	AverageHI	AverageLO	Obs. HI	Obs. LO	Obs. Avg.	CDD	HDD	GDD	Precip. (in)	Snowfall (in)
1	93	28	71	45	72	44	58	0	7	8	0	0
2	90	25	70	45	73	45	59	0	6	9	0.15	0
3	89	26	69	45	55	36	45.5	0	19.5	0	T	0
4	92	27	69	44	55	36	45.5	0	19.5	0	0	0
5	89	26	67	44	61	36	48.5	0	16.5	0	0	0
6	92	20	66	45	68	38	53	0	12	3	0	0
7	87	26	65	41	79	44	61.5	0	3.5	11.5	0	0
8	86	22	65	42	76	47	61.5	0	3.5	11.5	0	0
9	86	23	65	43	81	47	64	0	1	14	0	0
10	88*	21	63	40	88*	56	72	7	0	22	0	0
11	86	20	63	41	84	57	70.5	5.5	0	20.5	0	0
12	84	22	66	42	82	52	67	2	0	17	0	0
13	87	21	65	41	81	52	66.5	1.5	0	16.5	T	0
14	85	21	65	40	65	39	52	0	13	2	0	0
15	88	21	64	42	67	38	52.5	0	12.5	2.5	0	0
16	85	25	65	43	67	38	52.5	0	12.5	2.5	0	0
17	87	22	65	42	72	40	56	0	9	6	0	0
18	86	18	63	41	64	44	54	0	11	4	0	0
19	86	18	59	39	61	33	47	0	18	0	0	0
20	86	18	61	38	59	33	46	0	19	0	0	0
21	87	22	60	38	70	38	54	0	11	4	T	0
22	84	20	61	39	56	32	44	0	21	0	0	0
23	83	22	60	39	65	32	48.5	0	16.5	0	0	0
24	80	18	61	40	66	51	58.5	0	6.5	8.5	1.03	0
25	77	22	59	40	67	53	60	0	5	10	0.16	0
26	82	15	59	37	71	53	62	0	3	12	0.37	0
27	82	19	60	39	62	47	54.5	0	10.5	4.5	0.03	0
28	78	19	60	40	61	39	50	0	15	0	T	0
29	80	15	61	38	44	27	35.5	0	29.5	0	0	0
30	83	13	60	38	50	27	38.5	0	26.5	0	0	0
31	85	16	58	39	63	31	47	0	18	0	0	0

*A NEW RECORD HIGH was recorded on the 10th; the previous record was 87, which was set in 1938 at the former Sycamore site.

Temperature

1971-2000 AVG. HI: 63.1(F)
 1971-2000 AVG. LOW: 40.8(F)
 1971-2000 AVG. TEMP: 52.0(F)
 October 2010 AVG. HI: 67.3(F)
 October 2010 AVG. LO: 41.5(F)
 October 2010 AVG. TEMP: 54.4(F)

Precipitation

October 2010 TOTAL: 1.74 in.
 October AVG: 2.60 in.
 October 2010 SNOW: 0.0 in.
 2010 liquid-eq. YEAR TO DATE: 33.01 in.
 liquid-eq. YEAR TO DATE AVG: 32.40 in.
 2010-11 Seasonal SNOW TO DATE: 0.0 in.
 Seasonal SNOW TO DATE AVG: 0.1 in.

Degree Days

COOLING: 10/10: 16
 1/10-Now: 965
 HEATING: 10/10: 346
 7/10-Now: 448
 GROWING: 10/10: 189
 1/10-Now: 3326.5

Discussion

October 2010 ended with an above-average mean temperature of 54.4 degrees, some 2.4 degrees above the historical (30-year, 1971-2000) average of 52.0 degrees. Daytime (or maximum temperatures) generally had the greatest positive anomalies. The most anomalously warm temperatures occurred between the 9th and the 13th, and, during this period, a record high temperature of 88 degrees was recorded on the 10th. The first freeze of the cold season occurred on the 22nd, much later than 8 October, which is the historic average date of first freeze. Indeed, the late first freeze combined with an early last freeze in early April 2010 led to a longer-than-historical-average growing season of 195 days. The historical average growing season length is 162 days, and 187 days is the growing season length corresponding to being longer than 90 percent of all growing seasons.

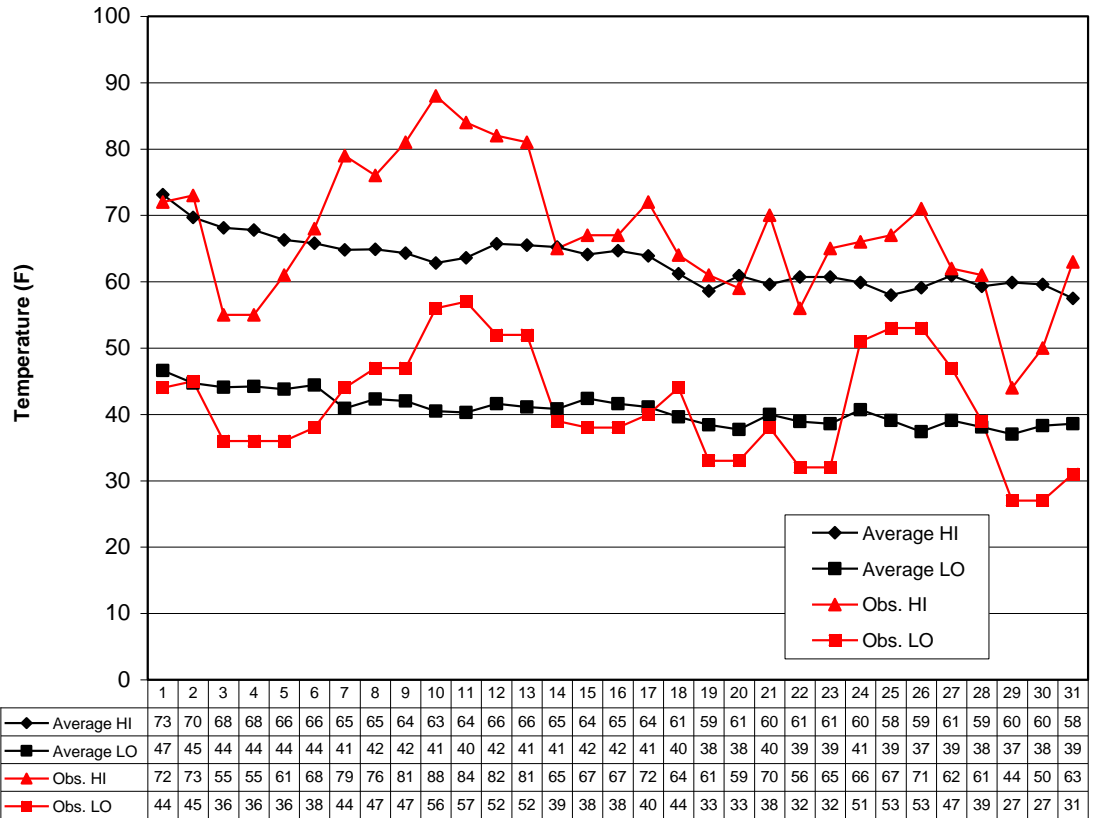
Precipitation during October was below the historical average. No snowfall was recorded. The total liquid equivalent precipitation of 1.74 in. was only 70 percent of the historical average of 2.60 in. Also, the precipitation that did fall lacked even temporal distribution. No measurable precipitation occurred for the 21-day period between the 3rd and the 23rd, the longest such period since a 24-day period between 21 August and 14 September 2005 during the historic drought which occurred that year. Moreover, all but 0.15 in. (which was recorded on the 2nd) of the month's precipitation fell in association with a powerful extratropical cyclone that traversed the Great Plains and western Midwest between the 24th and 27th. In fact, this extratropical cyclone had the second-lowest central barometric pressure on record for the continental United States and the lowest recorded for the region of the United States between the Rocky Mountains and the Appalachian chain. The lowest pressure recorded for this cyclone was 955.2 hPa (28.21 inHg) at the ASOS at Bigfork, Minn., around 1700 local time on the 26th. The lowest pressure for the cyclone that was recorded at the DeKalb-Taylor Municipal Airport AWOS four miles east-southeast of the Co-op station near Cortland was 981.3 hPa (28.98 inHg) at 0645 local time on the 26th. This storm caused strong winds that gusted to near 55 MPH in DeKalb on the 25th and 26th, two tornadoes rated EF-1 on the Enhanced Fujita Scale in the local area around dawn on the 26th (one approximately 20 miles west-southwest of the Co-op station along Meridian Road three miles southeast of Ashton; another approximately 15 miles east of the station along the Francis Side Road two miles west of Elburn), and a microburst around dawn on the 26th approximately 15 miles east-southeast of the station along Keslinger Road between Elburn and Daubermann Road.

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 This summary was prepared by Daniel J. Brouillette, 1 November 2010. Forecast information (updated once daily at approx. 7:30 am): (815) 753-1623.

Climate Website: <http://climate.niu.edu>

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October 2010 Daily Highs and Lows with 1971 - 2000 Average Highs and Lows
 Prepared by Daniel J. Brouillette, Co-Weather Dir.



Day