

MONTHLY CLIMATE SUMMARY, JUNE 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	106	34	77	55	81	58	69.5	19.5	4.5	0	0.05	0.0
2	97	38	78	56	81	56	68.5	18.5	3.5	0	0.00	0.0
3	102	34	74	54	76	56	66	16	1	0	0.05	0.0
4	97	34	72	52	91	65	78	28	13	0	0.00	0.0
5	98	33	74	53	91	65	78	28	13	0	0.00	0.0
6	98	40	76	56	87	65	76	26	11	0	0.00	0.0
7	97	38	80	58	96	65	80.5	30.5	15.5	0	0.00	0.0
8	98	35	80	59	97	76	86.5	36.5	21.5	0	0.00	0.0
9	95*	35	79	58	95	64	79.5	29.5	14.5	0	2.02	0.0
10	103	36	78	57	73	51	62	12	0	3	1.12	0.0
11	102	36	80	57	69	53	61	11	0	4	0.10	0.0
12	95	38	81	60	64	53	58.5	8.5	0	6.5	T	0.0
13	95	42	81	60	66	54	60	10	0	5	0.00	0.0
14	96	39	82	61	72	58	65	15	0	0	0.00	0.0
15	96	39	81	60	77	57	67	17	2	0	0.28	0.0
16	95	37	80	59	69	58	63.5	13.5	0	1.5	0.20	0.0
17	99	37	81	58	81	60	70.5	20.5	5.5	0	0.00	0.0
18	96	44	82	61	86	61	73.5	23.5	8.5	0	0.00	0.0
19	99	42	83	60	83	62	72.5	22.5	7.5	0	0.00	0.0
20	99	37	82	61	82	66	74	24	9	0	0.20	0.0
21	100	38	84	63	77	67	72	22	7	0	0.21	0.0
22	99	40	83	62	87	66	76.5	26.5	11.5	0	0.31	0.0
23	103	39	83	61	69	62	65.5	15.5	0.5	0	0.16	0.0
24	102	40	83	61	69	56	62.5	12.5	0	2.5	T	0.0
25	99	43	84	63	67	57	62	12	0	3	T	0.0
26	101	45	85	62	75	59	67	17	2	0	T	0.0
27	100	40	83	62	80	63	71.5	21.5	6.5	0	T	0.0
28	101	41	83	62	81	59	70	20	5	0	0.01	0.0
29	101	40	82	61	80	58	69	19	4	0	0.00	0.0
30	102	39	81	60	85	58	71.5	21.5	6.5	0	0.00	0.0

*A NEW RECORD HIGH was recorded on the 9th; the previous record was 93, which was set in 1999.

Temperature

1981-2010 AVG. HI: 80.3(F)
 1981-2010 AVG. LOW: 59.0(F)
 1981-2010 AVG. TEMP.: 69.7(F)
 June 2011 AVG. HI: 79.6(F)
 June 2011 AVG. LO: 60.3(F)
 June 2011 AVG. TEMP.: 69.9(F)

Precipitation

June 2011 TOTAL: 4.71 in.
 June AVG.: 4.18 in.
 June 2011 SNOW: 0
 June SNOW AVG: 0
 2011 liquid-eq. YEAR TO DATE: 20.37 in.
 liquid-eq. YEAR TO DATE AVG.: 17.27 in.
 2010-11 Seasonal SNOW TO DATE: 48.2 in.
 Seasonal SNOW TO DATE AVG.: 35.8 in.

Degree Days

COOLING: 6/11: 173
 1/11-Now: 239
 HEATING: 6/11: 25.5
 7/10-Now: 7103
 GROWING: 6/11: 597.5
 1/11-Now: 847.5

Discussion

June 2011 featured a mean temperature near the historical (30-year, 1981-2010) average; the mean temperature of 69.9 degrees was 0.2 degrees above the historical average mean of 69.7 degrees. The high temperature anomaly was negative (0.7 degrees below the historical average) at the same time that the low temperature anomaly was positive (1.3 degrees above the historical average), a condition that, again, resulted from frequent cloudiness. Temperatures at the beginning of the month were slightly above historical averages before they transitioned well above average between the 4th and 9th, when an early-season heat wave occurred. The high temperature of 97 degrees recorded on the 8th represented the highest temperature recorded since 1 August 2006, when the high was 97. A record-high temperature was achieved on the 9th, when 95 was recorded, the first daily high-temperature record broken during climatological summer (June-July-August) since the record broken was set in 1999 (on 9 June). Thereafter, temperatures fluctuated from near- to below-average values through the end of the month, with the most below-average conditions between the 11th and 13th and the 23rd and 25th.

The month had 4.71 in. of liquid-equivalent precipitation, some 113 percent of the historical average of 4.18 in. Exactly two-thirds of the monthly rainfall (3.14 in.) occurred in association with thunderstorms on the morning of the 10th, when a mesoscale convective complex affected portions of northern Illinois. Thereafter, although comparatively light, precipitation exhibited wide temporal distribution. The 25 June Crop Moisture Index (http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/cmi.gif) prepared by NOAA's Climate Prediction Center (CPC) indicated "slightly dry/favorably moist" crop moisture conditions across the northern Illinois climate divisions. However, the 25 June Palmer Drought Severity Index (PDSI) (http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif) map, prepared also by the CPC, indicates a PDSI value of +3.0 to +3.9, or "very moist spell," in the northeastern Illinois climate division. That is, long-term soil moisture is plentiful at this time.

Today, 30 June, marks the end of the 2010-2011 snow season, whose snowfall total was 48.2 in., some 135 percent of the historical (30-year, 1971-2000) average total of 35.8 in.

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 Special acknowledgment is given to Laura Schutte for serving as Summertime Observer-Director Liaison, Jeff Kilburg for expediting certain equipment replacements, and to Stephen Strader for spearheading a station improvement initiative. Their efforts have been significant and are appreciated.

This summary was prepared by Daniel J. Brouillette, 30 June 2011. Forecast information (updated once daily at approx. 7:30 am): (815) 753-1623.

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

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

