

MONTHLY CLIMATE SUMMARY, DECEMBER 2018

NIU WEATHER SERVICE: DE KALB, IL.

Day	Record	Record	Average		Average		Obs.		CDD	HDD	GDD	Precip. (in)	Snowfall (in)
	HI	LO	HI	LO	Obs. HI	Obs. LO	Avg.						
1	63	4	38	26	36	25	30.5	0	34.5	0	0	0	
2	64	-5	38	24	42	35	38.5	0	26.5	0	0.75	0	
3	66	-14	38	23	40	29	34.5	0	30.5	0	0.11	0.5	
4	69	-4	36	21	31	26	28.5	0	36.5	0	0.01	T	
5	64	-4	35	21	29	22	25.5	0	39.5	0	0.01	0	
6	65	-7	35	18	32	22	27	0	38	0	T	T	
7	66	-9	34	19	28	12	20	0	45	0	0	0	
8	63	-8	34	21	23	12	17.5	0	47.5	0	T	T	
9	59	-18	34	20	26	14	20	0	45	0	0	0	
10	56	-18	35	19	29	11	20	0	45	0	0	0	
11	60	-15	34	19	34	11	22.5	0	42.5	0	0	0	
12	55	-10	33	17	37	24	30.5	0	34.5	0	T	T	
13	60	-19	32	18	36	22	29	0	36	0	0	0	
14	60	-12	33	21	41	24	32.5	0	32.5	0	0.1	0	
15	59	-14	35	20	38	25	31.5	0	33.5	0	T	T	
16	58	-17	34	19	46	25	35.5	0	29.5	0	0	0	
17	57	-13	31	18	45	27	36	0	29	0	0	0	
18	56	-12	29	15	40	24	32	0	33	0	0	0	
19	55	-17	29	15	42	26	34	0	31	0	0	0	
20	57	-19	30	15	46	33	39.5	0	25.5	0	0.03	0	
21	57	-18	31	16	42	32	37	0	28	0	0.06	T	
22	55	-12	31	16	32	26	29	0	36	0	0	0	
23	58	-17	31	16	31	26	28.5	0	36.5	0	0	0	
24	57	-22	29	14	38	20	29	0	36	0	0	0	
25	60	-13	27	12	33	19	26	0	39	0	0	0	
26	56	-22	28	12	44	26	35	0	30	0	0	0	
27	55	-20	30	17	43	27	35	0	30	0	0.06	0	
28	64	-24	33	18	51	28	39.5	0	25.5	0	0.57	T	
29	63	-12	32	17	33	25	29	0	36	0	0.06	0.5	
30	59	-13	31	14	26	16	21	0	44	0	0.04	0.3	
31	57	-14	33	18	33	9	21	0	44	0	0.01	T	

Temperature

1981-2010 AVG HI: 36.5 °F
 1981-2010 AVG LOW: 17.9 °F
 1981-2010 AVG TEMP.: 26.8 °F
 December 2018 AVG HI: 36.4 °F
 December 2018 AVG LOW: 22.7 °F
 December 2018 AVG TEMP.: 29.5 °F

Precipitation

December 2018 TOTAL: 1.81 in.
 December AVG: 2.17 in.
 December 2018 SNOW: 1.3 in.
 December SNOW AVG.: 10.0 in.
 2018 Liquid-Eq. YEAR TO DATE: 39.17 in.
 Liquid-Eq. YEAR TO DATE AVG: 36.79 in.
 2018-2019 Seasonal SNOW TO DATE: 14.1 in.
 Seasonal SNOW TO DATE AVG: 11.2 in.

Degree Days

COOLING: 12/18: 0
 1/18-Now: 954
 HEATING: 12/18: 1100
 7/18-Now: 2692
 GROWING: 12/18: 0
 1/18-Now: 3238

Discussion

The average temperature of 2018 was 29.5 °F, which is 2.7 degrees warmer than the historical average temperature. December's average high of 36.4 degrees was 0.1 degrees cooler than the historical average high, with the average minimum temperature of 22.7 being warmer than the historical average by 4.8 degrees. December had 22 days with at or above average highs and 25 days with at or above average lows. December had its highest temperature on the 28th at 51 degrees which was 27 degrees above the average for the day. December of 2018 did not see any days with record-breaking temperatures

December's precipitation total for 2018 was 1.81 in., which was 0.36 in. below the average. The 2018 liquid-equivalent year to date is now 39.17 in. – which is 2.38 in. above the average liquid-equivalent year to date of 36.79 in. The total snowfall for the month of December 2018 was 1.3 inches, which is 8.7 inches below average for the month of December. This puts the 2018-2019 seasonal snow to date at 14.1 in. This is 2.9 in. above the seasonal snow to date average of 11.2 in. The first half of the month saw the most precipitation occur, as 54% of the liquid-equivalent precipitation fell in the first 15 days.

December of 2018 saw no cooling degree days (CDDs) or growing degree days (GDDs). Therefore, their respective totals from 1/18 to now are 954 and 3238 respectively. There were 1100 heating degree days (HDDs) for the month of December 2018, putting the total from 7/18 to now at 2692 HDDs.

As an author's note: the calculations of daily GDDs, CDDs and HDDs were rounded beginning with the May 2017 summary and continued as such until the October of 2018 Summary. This rounding likely impacted monthly totals in this time period. This calculation error has changed with the November 2018 summary released last month.

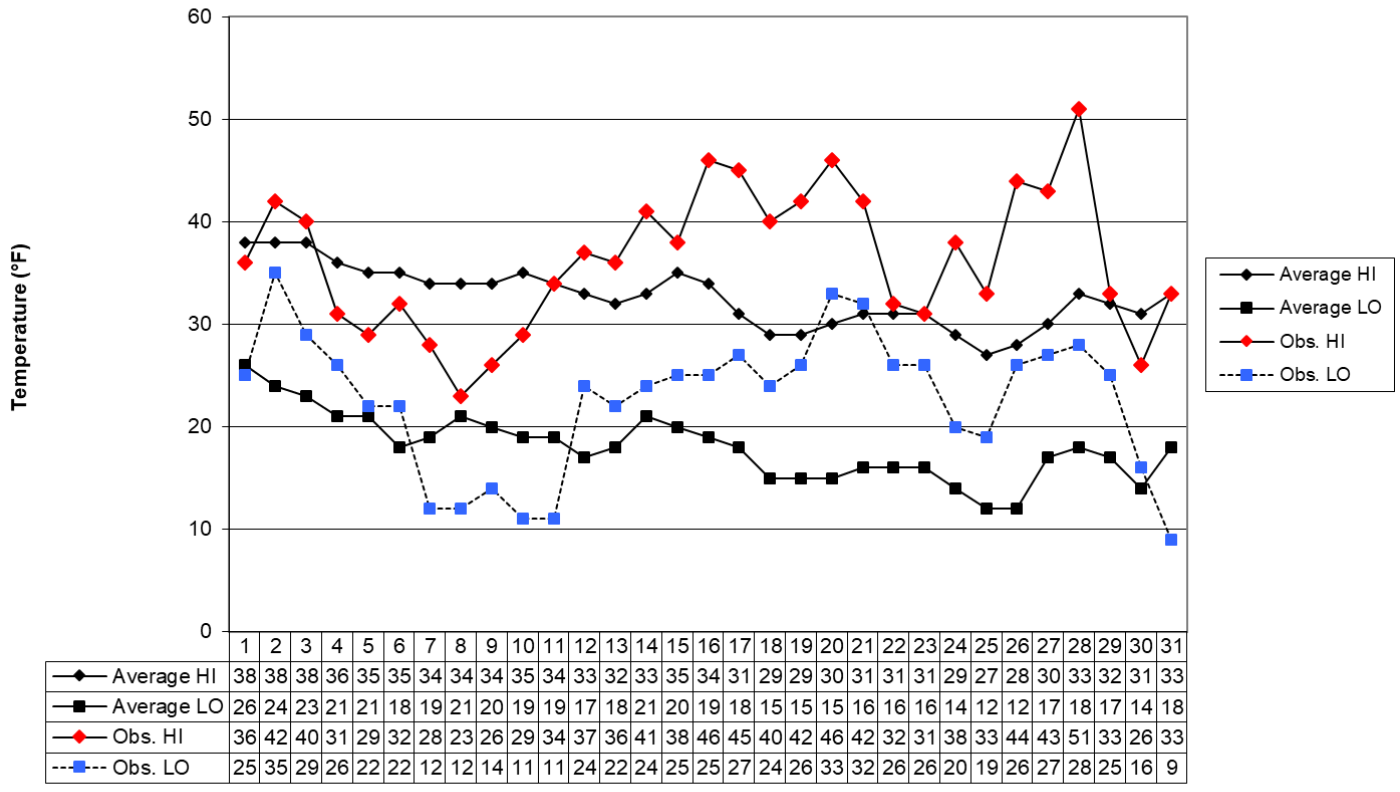
Nick Alonzo, Megan Bednaroski, Harry Bretz, Brent Brock, Logan Bundy, Lucas Carlson, Matthew Gontarek, Jacinda L. Mayer, Kyle Pittman— Cooperative Observers;
 Nicholas Rodeo — Weather Director

This summary was prepared by Nick Rodeo, 23 January 2019. Forecast information (updated once daily at approx. 7:30 am): (815) 753-1623.

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

The Climate Summary is supported by the Department of Geography, the College of Liberal Arts and Sciences, and the Department of Operations.

December 2018 Daily Highs and Lows with 1981-2010 Average Highs and Lows
 Prepared by Nick Rodeo, NIU Weather Director



Day