

## CHAMPAIGN-URBANA 2003 ANNUAL WEATHER SUMMARY

### ILLINOIS STATE WATER SURVEY

2204 Griffith Dr.

Champaign, IL 61820

wxobsrvr@sws.uiuc.edu

Maria Peters, Weather Observer

Official Champaign-Urbana temperature and precipitation records began in August 1888, while snowfall records began in 1903. The site was first located at the Morrow Plots on the campus of the University of Illinois from 1888 until 1984, before moving to its present location at the Water Survey Research Center near the corner of First Street and Windsor Road. It was originally operated by the University of Illinois before its operation was taken over by the Illinois State Water Survey in 1948. This station is part of the Cooperative Observer Network, operated by the National Weather Service (NWS). As such, we follow NWS observing practices and use NWS equipment. The records ultimately reside in the national archive at the National Climatic Data Center in Asheville, NC.

**Monthly highlights** can be found in the monthly weather summaries. For an archive of past reports, please see <http://www.sws.uiuc.edu/atmos/statecli/Champ-Urb/CU.htm>

**Annual:** Annual precipitation for 2003 was 39.98" (normal – 41.05"), making it the 37<sup>th</sup> wettest year on record. The mean annual temperature for 2003 was 51.5°F (normal – 51.7°F). The snowfall for the snowfall season of October 2002 to April 2003 was 27.6", just slightly above the 1971-2000 normal of 26.2". It ranks as the 26<sup>th</sup> highest snowfall on record.

*Prepared by Jim Angel, State Climatologist*

## 2003 ANNUAL CLIMATE SUMMARY FOR CHAMPAIGN-URBANA

Month	Temperature (°F)					Precipitation		Degree Days			Wind (mph)		
	Avg Max	Avg Min	Avg Mean	High	Low	Total (in)	Snow (in)	Heat	Cool	Corn	Dir	Speed	Peak Gust
Jan	29.3	12.9	21.1	55	-7	0.79	8.0	1352	0	3	W	7.0	31.4
Feb	33.0	17.2	25.1	56	2	1.60	10.4	1110	0	3	NE	6.5	32.9
Mar	54.1	31.2	42.7	75	9	2.08	1.2	686	0	144	S	6.3	37.4
Apr	65.4	42.6	54.0	84	29	2.20	0.0	336	13	273	NE	7.0	32.2
May	71.4	51.4	61.4	87	37	3.59	0.0	134	30	385	NE	5.3	38.6
Jun	78.7	56.9	67.8	91	42	3.04	0.0	41	132	544	NE	3.8	30.0
Jul	84.9	64.1	74.5	96	55	6.98	0.0	0	303	742	SW	3.8	27.2
Aug	85.3	64.3	74.8	98	58	6.27	0.0	0	309	742	NE	3.1	18.6
Sep	75.3	52.4	63.9	85	36	4.07	0.0	98	70	455	W	3.2	24.0
Oct	66.1	42.9	54.5	83	30	1.31	0.0	325	7	271	NW	4.0	33.0
Nov	53.7	35.9	44.8	77	22	4.94	0.3	601	2	118	S	6.9	38.3
Dec	39.9	26.3	33.1	53	10	3.11	5.6	978	0	4	NW	6.2	28.5
2003	61.4	41.5	51.5	98	-7	39.98	25.5	5661	866	3684	W	5.3	38.6
Depart	0.1	-0.5	-0.2			-1.07	-0.7	-164	-120	28		-1.1	

Degree days: heating and cooling base 65°F. Corn Growing Degree Days base 50°F with a max temp cutoff at 86°F. Depart = Departures from the 1971-2000 30-year average.

### NUMBER OF DAYS WITH:

Mon	Temperature				Precipitation				Snow	Weather Phenomena							Sky Cover			
	>= 90°	<= 32°	<= 32°	<= 0°	>= 0.01	>= 0.10	>= 0.50	>= 1.00	>= 1.0	R	L	S	Z	IP	A	T	F	CLR	PC	CLD
Jan	0	19	30	7	8	5	0	0	3	3	2	15	1	2	0	0	2	8	13	10
Feb	0	14	28	0	9	4	1	0	4	4	2	16	1	3	0	0	4	5	11	12
Mar	0	2	17	0	12	5	1	1	0	13	3	8	1	2	0	2	9	7	14	10
Apr	0	0	5	0	10	7	0	0	0	13	3	1	0	1	0	3	2	12	7	11
May	0	0	0	0	13	9	2	1	0	17	2	0	0	0	0	9	2	7	12	12
Jun	2	0	0	0	11	9	1	0	0	11	1	0	0	0	1	4	4	10	12	8
Jul	6	0	0	0	10	7	4	2	0	12	0	0	0	0	1	8	0	9	17	5
Aug	6	0	0	0	9	5	2	2	0	13	0	0	0	0	1	5	7	12	10	9
Sep	0	0	0	0	9	5	2	2	0	11	2	0	0	0	0	3	5	10	13	7
Oct	0	0	1	0	5	3	1	0	0	8	1	0	0	0	0	1	2	16	9	6
Nov	0	1	12	0	15	8	2	1	0	12	7	2	0	1	0	0	7	7	10	13
Dec	0	8	26	0	13	8	2	0	3	9	3	11	0	1	0	0	3	9	6	16
2003	14	44	119	7	124	75	18	9	10	126	26	53	3	10	3	35	47	112	134	119
Dep	-6	2	0	-1	6	2	-8	-2	1	10	-9	13	-6		-1	-7	-2	4	20	-24

## 2003 GROWING SEASON SUMMARY

<b>Last 32°F temperature in spring:</b>	April 13 (32°F)
<b>First 32°F temperature in fall:</b>	October 3 (30°F)
<b>Length of growing season:</b>	173 days (-5)
<b>Growing season precipitation (4/1-9/30):</b>	26.15 inches (+1.23 inches)
<b>Total growing season Corn GDD (4/1-9/30):</b>	3,141 (-67)

### CHAMPAIGN – URBANA EXTREMES

Temperature and precipitation periods of record 1888 to 2002

t – indicates a tie with the most recent record given.

Month	Temperature (°F)								Winds			
	2003		Period of Record		2003		Period of Record		2003		1989-2003	
	High Max	Date	High Max	Date	Low Min	Date	Low Min	Date	Peak Gust	Date	Peak Gust	Date
Jan	55	8	70	23/1909	-7	27	-25	05/1999-t	31.4	11	44.3	11/1990
Feb	56	3	72	25/2000	2	25	-25	13/1905-t	32.9	4	55.2	11/1999
Mar	75	24	85	24/1910-t	9	10	-5	17/1906	37.4	28	58.9	15/1990
Apr	84	14	95	17/1894	29	6	15	02/1899	32.2	20	49.7	18/1995
May	87	9	97	31/1934	37	3	26	01/1903	38.6	11	45.1	9/1990
Jun	91	25	103	25/1988-t	42	1	34	06/1894	30.0	8	47.9	8/1993
Jul	96	4	109	14/1954	55	24	41	02/1904	27.2	8	38.5	28/1999
Aug	98	26	102	17/1988	58	19	37	30/1893-t	18.6	2	39.4	9/1995
Sep	85	11,13,24	102	05/1899	36	29	24	30/1899	24.0	24	45.8	8/1989
Oct	83	20	93	03/1954	30	3	12	30/1895	33.0	30	44.8	30/1996
Nov	77	3	80	01/1950	22	24,29	-5	25/1950	38.3	12	51.4	21/1994
Dec	53	22	71	04/1998	10	20	-20	24/1983-t	28.5	16	48.4	15/1992
Annual	98	08/26	109	07/14/1954	-7	01/27	-25	01/19/1994	38.6	05/11	58.9	03/15/1990

Month	Daily Precipitation Extremes								Monthly Precipitation Extremes					
	2003		Period of Record		2003		1903-2003		Period of Record					
	Max 24-hour Precip	Date	Max 24-hour Precip	Date	Max 24-hour Snow	Date	Max 24-hour Snow	Date	High Precip	Year	Low Precip	Year	High Snowfall	Year
Jan	0.24	31	2.43	26/1967	2.0	2	11.4	31/1982	7.62	1950	0.06	1986-t	28.3	1979
Feb	0.61	14	2.30	22/1990	5.0	15	11.0	21/1912	6.05	1990	0.15	1947	18.5	1914-t
Mar	1.11	13	2.93	13/1917	0.5	5	14.0	20/1906	8.35	1922	0.38	1910	32.0	1906
Apr	0.47	24	3.09	20/1964	T	5,6	6.0	5/1920	9.55	1964	0.50	1899	8.0	1920
May	1.11	4	4.50	26/1921	0.0	-	2.5	2/1929	11.20	1943	0.22	1925	2.5	1929
Jun	0.96	11	3.89	19/1983					11.58	1902	0.32	1988		
Jul	3.25	9	4.43	30/1987					13.82	1992	0.47	1930-t		
Aug	2.75	31	5.32	12/1993					10.02	1993	0.06	1893		
Sep	1.91	1	3.91	15/1931					9.76	1926	0.06	1891		
Oct	0.67	14	3.72	21/1983	0.0	-	2.8	19/1989	9.01	1941	0.16	1964	3.3	1989
Nov	2.45	18	4.07	02/1936	0.3	28	9.1	27/1980	10.08	1985	0.00	1904	11.2	1932
Dec	0.78	28	2.97	13/1901	2.2	18	9.5	19/1973	6.63	1967	0.05	1890	19.1	1983
Annual	3.25	07/09	5.32	08/12/1993	5.0	02/15	14.0	03/20/1906	58.54	1993	18.28	1894	51.9	1977

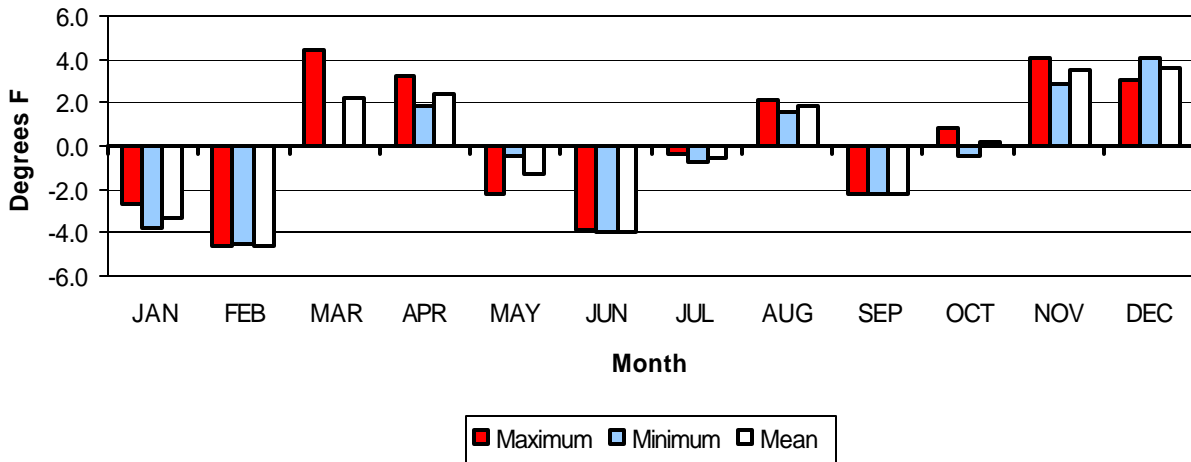
## SEASONAL STATISTICS

Season	Mean Temp (°F)	Depart* from Average	Precip (in)	Depart* from Average	Snowfall (in)	Depart* from Average
Winter**	26.1	-1.8	3.93	-2.73	25.9	5.7
Spring	52.7	1.2	7.87	-3.79	1.2	-2.6
Summer	72.4	-0.9	16.29	3.04		
Fall	54.4	0.5	10.32	0.84	0.3	-1.9

\*All climatological averages based on 1971-2000 data

\*\*December 2002 – February 2003

### 2003 Monthly Temperatures Departures from Average



### 2003 Monthly Precipitation & Snowfall Departure from Average

