

Champaign-Urbana 2000 Annual Weather Summary

ILLINOIS STATE WATER SURVEY

2204 Griffith Dr.

Champaign, IL 61820

wxobsrvr@sws.uiuc.edu

Maria Peters, Weather Observer

January: January started on a mild note, with a high of 60°F reported on the 2nd. Temperatures on the first 18 days of the month averaged 9.9°F above normal. This is the third January out of the last four where the high temperatures have reached 55°F or higher during the first week of the month (58°F on January 4, 1998, 64°F on January 4, 1997). Temperatures in the last 13 days of the month averaged 10°F below average and temperatures remained below freezing during this entire period.

February: Several records were set this month. The record high of 65°F on February 23rd broke the old record of 64°F set in 1996. The record high of 72°F on February 25th shattered the old record of 66°F set in 1930. This is also the new record high for the month of February. The old record was 71°F set on February 26, 1996 and on February 29, 1972. The low temperature of 50°F on February 26th was a new record high low for that date. The 1.39 inches of rain produced by the thunderstorm on February 18th is a new daily record amount for this date. The previous record was 0.77 inches in 1962. The mean high temperature for the month of 45.3°F is the 10th warmest on record. The mean daily temperature for the month of 36.5°F makes this the 11th warmest February on record.

Winter season (December 1999, January and February 2000): The average winter temperature of 31.4°F was 4.3°F above average. The mean high temperature of 39.8°F was 5.0°F above average. The average winter low temperature of 22.9°F was 3.4°F above average. Winter snowfall was 17.9 inches (3.2 inches below average). Precipitation totaled 5.99 inches (0.82 inches below average).

March: March was the 13th warmest since 1889. The average high temperature of 56.2°F was the 8th warmest. The high of 79°F on March 7 broke the previous record of 76°F set in 1974. The high of 77°F on March 8 broke the previous record of 76°F set in 1974.

April: This is the first month since October 1999 where the mean temperature was below average. No records were set this month.

May: The 6.18 inches of rain this month ranks as the 17th wettest May on record since 1889. May was only the second month this year and the second since August 1999 that precipitation was above average. The 2.85 inches of rain that fell on May 27 was the greatest amount ever recorded on this date, beating the old record of 1.37 inches in 1944.

Spring (March, April, May): Precipitation was 10.73 inches, 0.48 inches below average. The average mean temperature for spring of 53.3°F was 1.8°F above average. The average high temperature for spring of 64.6°F was 3.0°F above average. The average low temperature for spring of 42.0°F was 0.6°F above average. The last spring freeze (32°F or lower) occurred on April 13 (32°F), two weeks earlier than the median date of April 25. Both the average mean temperature and the average high temperature for spring were the 11th warmest since spring temperature records began in 1889.

June: No records were broken this month. Thunderstorms on the 14th produced high winds, causing widespread tree damage across Champaign-Urbana, especially north and west of the weather station.

July: Precipitation across Champaign-Urbana ranged from about 1.90 inches in northwest Champaign (near Parkland College) to 4.21” in southwest Champaign (near Kirby & Duncan). Champaign-Urbana set a new record of **no** days at or above 90°F in July and a new record of **no** days at or above 90°F for the first seven months of the year (January through July). The record for the least number of days at or above 90°F for the entire year is one, set in 1915. By the end of July, we expect to see 16 days at or above 90°F on average.

August: Champaign-Urbana finally experienced its first 90°F day on August 9th. This is the latest date in the summer for this since the records began in 1888. The heaviest rainfall of the month occurred on August 23 (1.84”). Most of that rain fell in 2 hours, a once in two-year event.

Summer (June, July, August): Average mean temperature for the summer was 72.5°F (0.7°F below average). Average high temperature for the summer was 82.5°F (1.2°F below average). Average low temperature for the summer was 62.3°F (0.3°F below average). Precipitation totaled 10.56 inches (1.99 inches below average). There were 6 days with temperatures of 90°F or higher (11 less than average).

September: No records were set for September.

October: The high of 49°F on October 7th is the new record of the coldest high temperature for that date since 1888. The low of 59°F on October 23rd is the new record of the warmest low temperature for that date since 1888. The station officially dropped below freezing for the first time on October 7 when the low temperature reached 29°F. This was part of a weeklong blast of cold Canadian air in the early part of the month. The killing frost followed by relatively warm and dry conditions in the second half of the month is the classic case of an “Indian Summer”.

November: The week before Thanksgiving was notable for its much below average temperatures with November 21st being 20°F below average. This was the 18th coldest November on record since 1888, tied with November 1997.

Fall (September, October, November): Precipitation totaled 10.84 inches, 1.70 inches above average. The average temperature for the fall was 53.6°F (0.8°F below average). The average high temperature was 64.2°F (0.1°F below average). The average low temperature was 42.9°F (1.3°F below average).

December: This December will be remembered for the cold and snowy conditions during most of the month. Most days were well below average, making this the second coldest December since records began in 1888. Only December 1983 was colder. This was also the 7th snowiest December on record. On December 17th, a new record low high temperature of 7°F was recorded. All of this is in marked contrast to the last two Decembers. December 1999 was 2.6°F above average with average snowfall (6 inches). December 1998 was even milder at 5.4°F above average with below average snowfall (4.6 inches).

Entire year: The 2000 annual mean temperature was 51.4°F (0.2°F below average). The average annual high temperature was 61.5°F (0.3°F above average). The average annual low temperature was 41.3°F (0.6°F below average). Precipitation was 37.80 inches (1.91 inches below average). Snowfall for the year totaled 28.8 inches (0.3 inches above average). Heating degree days for the year totaled 5844 (95 below average), while cooling degree days for the year totaled 956 (16 above average).

Prepared by Jim Angel, State Climatologist

2000 Annual Climate Summary for Champaign-Urbana

| MON | Temperature (°F) | | | | | Precipitation | | Degree Days | | | Wind (mph) | | |
|----------------|------------------|-------------|-------------|-----------|-----------|---------------|-------------|-------------|------------|-------------|------------|-------------|-------------|
| | Avg Max | Avg Min | Avg Mean | High Temp | Low Temp | Total (in) | Snow (in) | Heat | Cool | Corn Grow | Dir | Speed | Peak Gust |
| Jan | 33.8 | 17.4 | 25.6 | 60 | -4 | 1.54 | 11.0 | 1212 | 0 | 8 | W | 7.2 | 31.4 |
| Feb | 45.3 | 27.8 | 36.6 | 72 | 8 | 2.40 | 0.9 | 820 | 0 | 62 | S | 7.5 | 34.5 |
| Mar | 56.2 | 33.8 | 45.0 | 79 | 16 | 1.77 | 2.2 | 612 | 0 | 133 | S | 6.7 | 40.2 |
| Apr | 62.6 | 38.6 | 50.6 | 76 | 21 | 2.78 | 0.0 | 424 | 0 | 202 | N | 7.1 | 39.8 |
| May | 74.8 | 53.5 | 64.2 | 87 | 39 | 6.18 | | 97 | 80 | 470 | S | 6.3 | 39.4 |
| Jun | 79.9 | 60.4 | 70.2 | 89 | 48 | 4.52 | | 22 | 181 | 607 | SW | 5.3 | 42.3 |
| Jul | 82.6 | 63.3 | 73.0 | 88 | 53 | 2.45 | | 0 | 254 | 715 | NE | 3.5 | 19.3 |
| Aug | 85.2 | 63.2 | 74.2 | 97 | 55 | 3.59 | | 0 | 294 | 730 | NE | 3.9 | 22.6 |
| Sep | 78.4 | 52.9 | 65.7 | 94 | 37 | 4.24 | | 95 | 121 | 497 | S | 4.2 | 25.4 |
| Oct | 68.7 | 45.8 | 57.3 | 84 | 29 | 2.76 | 0.0 | 255 | 24 | 333 | SE | 3.8 | 22.4 |
| Nov | 45.5 | 30.1 | 37.8 | 79 | 12 | 3.84 | 0.0 | 810 | 2 | 51 | W | 6.5 | 32.1 |
| Dec | 24.4 | 8.6 | 16.5 | 40 | -4 | 1.73 | 14.7 | 1497 | 0 | 0 | W | 6.6 | 36.8 |
| Tot/Avg | 61.5 | 41.3 | 51.4 | 97 | -4 | 37.80 | 28.8 | 5844 | 956 | 3808 | S | 5.7 | 42.3 |
| Dep | +0.3 | -0.6 | -0.2 | | | -1.91 | +0.3 | -95 | +16 | +201 | S | -1.2 | |

Degree days: heating and cooling base 65°F. Corn Growing Degree Days base 50°F with a max temp cutoff at 86°F. Departures from the 1961-1990 30-year average.

Number of Days With:

| MON | Precipitation | | | | | Temperature | | | | Weather Phenomena | | | | | | Sky Cover | | | |
|--------------|---------------|-----------|-----------|-----------|-----------|-------------|-----------|------------|-----------|-------------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|
| | Snow | | | | | Max | | Min | | R | L | S | Z | T | A | F | CLR | PC | CLD |
| | >= .01 | >= .10 | >= .50 | >= 1.00 | >= 1.0 | >= 90 | <= 32 | <= 32 | <= 0 | | | | | | | | | | |
| Jan | 9 | 4 | 1 | 0 | 3 | 0 | 16 | 27 | 3 | 4 | 0 | 7 | 2 | 1 | 0 | 2 | 7 | 12 | 12 |
| Feb | 10 | 4 | 1 | 1 | 0 | 0 | 7 | 22 | 0 | 11 | 2 | 6 | 1 | 2 | 0 | 5 | 4 | 15 | 10 |
| Mar | 7 | 4 | 1 | 1 | 1 | 2 | 1 | 14 | 0 | 10 | 3 | 1 | 0 | 1 | 0 | 2 | 11 | 11 | 9 |
| Apr | 12 | 6 | 2 | 1 | 0 | 0 | 0 | 6 | 0 | 12 | 0 | 2 | 0 | 3 | 0 | 1 | 9 | 9 | 12 |
| May | 14 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 15 | 1 | 0 | 0 | 8 | 1 | 3 | 4 | 12 | 15 |
| Jun | 12 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 12 | 1 | 0 | 0 | 5 | 0 | 2 | 6 | 12 | 12 |
| Jul | 10 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 3 | 0 | 4 | 5 | 17 | 9 |
| Aug | 11 | 7 | 1 | 1 | 0 | 6 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 8 | 0 | 3 | 10 | 15 | 6 |
| Sep | 9 | 7 | 3 | 1 | 0 | 4 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 4 | 0 | 2 | 16 | 5 | 9 |
| Oct | 8 | 4 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 9 | 0 | 0 | 0 | 2 | 0 | 7 | 11 | 13 | 7 |
| Nov | 7 | 5 | 3 | 1 | 0 | 0 | 4 | 15 | 0 | 11 | 1 | 6 | 0 | 1 | 0 | 2 | 8 | 6 | 16 |
| Dec | 15 | 3 | 1 | 0 | 6 | 0 | 21 | 31 | 7 | 2 | 2 | 19 | 3 | 0 | 0 | 2 | 3 | 15 | 13 |
| Total | 124 | 64 | 26 | 10 | 10 | 10 | 49 | 119 | 10 | 118 | 10 | 41 | 6 | 38 | 1 | 35 | 94 | 142 | 130 |
| Dep | +6 | -9 | +0 | -1 | +1 | -10 | +7 | -0 | +2 | +2 | -25 | +1 | -3 | -4 | -3 | -14 | -14 | +28 | -13 |

Legend: F=Fog; T=Thunder; A=Hail; R=Rain; L=Drizzle; S=Snow; Z=Freezing Rain or Drizzle; CLR=Clear; PC=Partly Cloudy; CLDY=Cloudy. Departures are from the 1961-1990 average.

Seasonal Statistics

| | Mean Temp (°F) | Diff. From Avg.* | Precip (in) | Diff. From Avg.* | Snowfall (in) | Diff. From Avg.* |
|-----------------|----------------|------------------|-------------|------------------|---------------|------------------|
| Winter** | 31.4 | +4.3 | 5.99 | -0.82 | 17.9 | -3.2 |
| Spring | 53.3 | +1.8 | 10.73 | -0.48 | 2.2 | -2.9 |
| Summer | 72.5 | -0.7 | 10.56 | -1.99 | | |
| Fall | 53.6 | -0.8 | 10.84 | +1.74 | 0.0 | -2.3 |

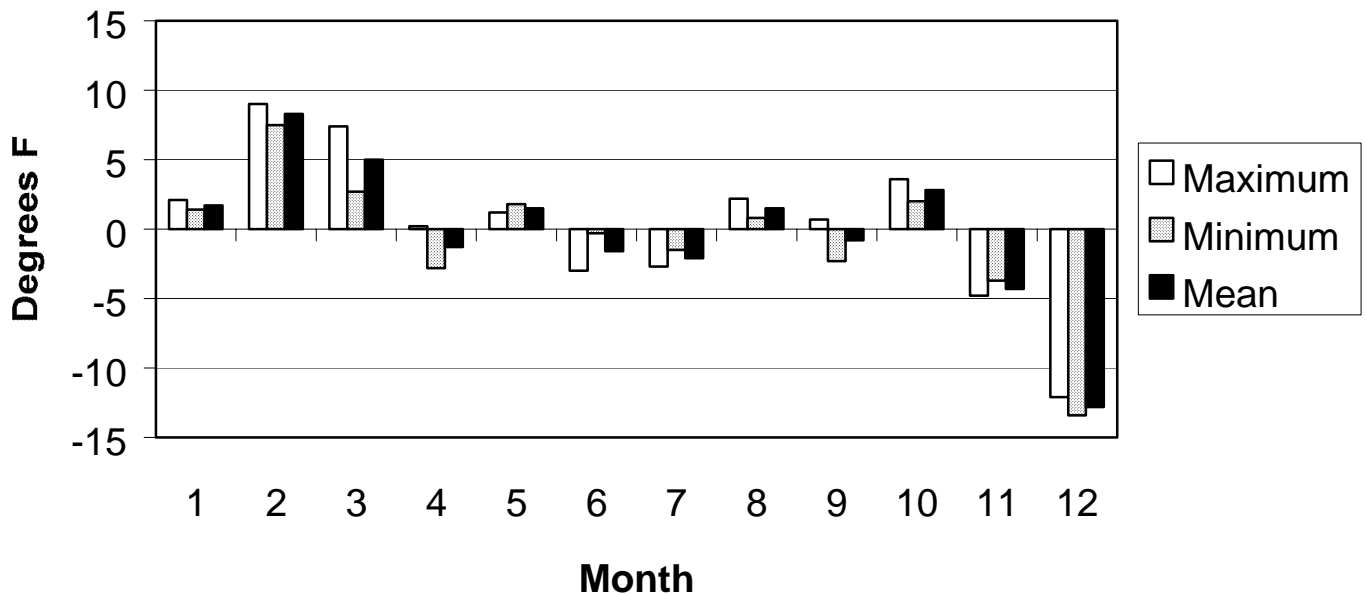
**December 1999-February 2000

*All climatological averages based on 1961-1990 data

The 2000 Growing Season

Last 32°F temperature in spring: April 13 (32°F)
First 32°F temperature in fall: October 7 (29°F)
Length of growing season: 177 days (-8)
Growing season precipitation (4/1-9/30): 23.76 inches (-0.08 inches)
Total growing season Corn GDD (4/1-9/30): 3,221 (+47)

2000 Monthly High, Low, and Mean Temperatures
Departure from Average



2000 Precipitation and Snowfall Departure from Average

