

## **Champaign-Urbana Weather Highlights – February 2010**

Jim Angel, State Climatologist

**Temperatures** for February were well below normal. The average high temperature of 31.2°F was 6.4°F below normal and the 16<sup>th</sup> coldest on record. The average low temperature of 17.6°F was 4.1°F below normal and the 31<sup>st</sup> coldest record. The average mean temperature of 24.4°F was 5.3°F below normal and the 20<sup>th</sup> coldest on record.

Precipitation for February was 1.61 inches, 0.40 inches below normal.

**Snowfall** for February was 11.5 inches, 6.0 inches above normal, and the 13<sup>th</sup> snowiest February on record (tied with 1908). The record February snowfall was 20.0 inches that fell in 2007. By the way, most of that came on the major winter storm of February 13-14. Seasonal snowfall through the end of February is 27.1 inches, 0.9 inches above the normal winter snowfall of 26.2 inches.

This winter we had 48 days when the high temperature did not get above freezing (average is 23 days). We had 55 days with an inch or more of snow on the ground (average is 30 days).

Regarding snow, the *snowfall amount* is the total snowfall that fell within the 24 hours previous to our 8 am observation time. The *snow depth* is the total depth of snow found at 8 am and may represent both new snow and any remaining snow from previous events. While the 24-hour *snowfall amount* is reported to the nearest tenth of an inch, *snow depth* is reported to the nearest inch. As a cooperative observer for the National Weather Service, we follow their guideline on measuring and reporting snowfall. These guidelines are described at http://www.nws.noaa.gov/om/coop/snowguid.htm.

## **Additional Information**

Additional information for February can be found at the Illinois Climate Network site that is collocated with our cooperative weather observer site at <a href="http://www.sws.uiuc.edu/warm/data/2010/February/Champaign.txt">http://www.sws.uiuc.edu/warm/data/2010/February/Champaign.txt</a>.

For more information on the climate of Illinois, visit the web site at <u>http://www.isws.illinois.edu/atmos/statecli/</u>.

Contact Information: 2204 Griffith Drive Champaign, IL 61820-7495 Phone: 217-333-0729 Email: jimangel@illinois.edu Local Climatological Data

Champaign-Urbana, IL - 118740

Illinois State Water Survey Water Survey Research Center

| DATE     | TEMPERATURE |          |          | PRECIP (in) SNOW (in) |          |        | WEATHER         | WIND               |                       | DEGI          | DEGREE DAYS |  |
|----------|-------------|----------|----------|-----------------------|----------|--------|-----------------|--------------------|-----------------------|---------------|-------------|--|
|          |             |          | Mean     |                       | Amnt     |        | TYPES           | Dir Speed<br>(mph) | Peak Gust<br>Gust Dir | Heat          | Cool        |  |
| 1        | 35          | 16       | 26       | 0.00                  | 0.0      | т      |                 | М                  | М                     | 39            | 0           |  |
| 2        | 34          | 21       | 28       | 0.00                  | 0.0      | Т      |                 | Μ                  | М                     | 37            | 0           |  |
| 3        | 28          | 19       | 24       | Т                     | Т        | Т      | H,S-            | Μ                  | М                     | 41            | 0           |  |
| 4        | 36          | 21       | 29       | Т                     | Т        | т      | H,S-            | Μ                  | Μ                     | 36            | 0           |  |
| 5        | 33          | 29       | 31       | 0.14                  | Т        | Т      | ZR-,SW-,H,F(AM) | Μ                  | М                     | 34            | 0           |  |
| 6        | 31          | 21       | 26       | 0.24                  | 1.8      | 2      | ZR-,SW,BS,F     | М                  | М                     | 39            | 0           |  |
| 7        | 28          | 15       | 22       | 0.00                  | 0.0      | 2      |                 | М                  | М                     | 43            | 0           |  |
| 8        | 28          | 15       | 22       | 0.00                  | 0.0      | 2      |                 | М                  | М                     | 43            | 0           |  |
| 9        | 25          | 9        | 17       | 0.25                  | 4.3      | 6      | SW              | М                  | М                     | 48            | 0           |  |
| 10       | 25          | 11       | 18       | 0.01                  | 1.0      | 7      | SW-,BS          | М                  | М                     | 47            | 0           |  |
| 11       | 26          | 4        | 15       | 0.00                  | 0.0      | 6      | <i>i</i> -      | M                  | M                     | 50            | 0           |  |
| 12       | 26          | 8        | 17       | 0.00                  | 0.0      | 5      |                 | M                  | M                     | 48            | 0           |  |
| 13       | 28          | 7        | 18       | 0.00                  | 0.0      | 5      | F(AM)           | M                  | M                     | 47            | 0           |  |
| 14       | 31          | 7        | 19       | T                     | T        | 5      | SW-, F(AM)      | M                  | M                     | 46            | 0           |  |
| 15       | 24          | 14       | 19       | 0.10                  | 2.4      | 7      | SW-,H           | M                  | M                     | 46            | 0           |  |
| 16       | 29          | 17       | 23       | 0.02                  | 0.7      | 8      | SW-             | M                  | M                     | 42            | 0           |  |
| 17       | 30          | 20       | 25       | 0.02                  | 0.0      | 7      | 011             | M                  | M                     | 40            | 0           |  |
| 18       | 31          | 20<br>14 | 23       | 0.00                  | 0.0      | 6      |                 | M                  | M                     | 40            | 0           |  |
| 19       | 36          | 12       | 24       | 0.00                  | 0.0      | 5      |                 | M                  | M                     | 41            | 0           |  |
| 20       | 38          | 29       | 34       | 0.00                  | 1.2      | 6      | SW-,RW-,ZR-     | M                  | M                     | 31            | 0           |  |
| 20       | 36          | 33       | 35       | 0.12                  | 0.0      | 3      | RW-             | M                  | M                     | 30            | 0           |  |
| 22       | 34          | 29       | 32       | 0.65                  | 0.0      | 2      | RW-,F(AM,PM)    | M                  | M                     | 33            | 0           |  |
| 22       | 34<br>34    | 29<br>21 | 28       | 0.03<br>T             | 0.0<br>T | 2      | RW-,SW-         | M                  | M                     | 33            | 0           |  |
| 23<br>24 | 34<br>22    | 21<br>14 | 20<br>18 | Т                     | 0.1      |        |                 | M                  | M                     | 47            | 0           |  |
| 24<br>25 |             |          |          | Т                     | 0.1<br>T | 2<br>1 | SW-,H<br>SW-    |                    |                       |               |             |  |
|          | 34          | 18       | 26       |                       |          |        | 300-            | M                  | M                     | 39            | 0           |  |
| 26       | 35          | 17       | 26       | 0.00<br>T             | 0.0<br>T | 1      | 014/            | M                  | M                     | 39            | 0           |  |
| 27       | 34          | 22       | 28       | Т                     | Т        | Т      | SW-             | M                  | M                     | 37            | 0           |  |
| 28       | 42          | 29       | 36       | 0.00                  | 0.0      | Т      |                 | М                  | М                     | 29            | 0           |  |
| AVG/TOT  | 31.2        | 17.6     |          | 1.61                  | 11.5     |        |                 | NW                 |                       | 1131          | 0           |  |
| DEP.     | -6.4        | -4.1     | -5.3     | -0.40                 | +6.0     |        |                 |                    |                       | +144          | 0           |  |
|          | r           |          |          |                       | NU       | MBER   | OF DAYS and DI  |                    |                       |               |             |  |
|          |             |          |          |                       |          |        | TATION          | SNOW               |                       |               |             |  |
|          | >=90 <      | =32      | <=32 <   | =0                    | >T >=.01 | >=.10  | >=.50 >=1.00    | >=1.0              |                       |               |             |  |
| TOTAL    | 0           | 15       | 27       | 0                     | 16 9     | 6      | 1 0             | 5                  |                       |               |             |  |
| DEP      | 0           | +5       | +4       | -2                    | 0        | +1     | 0 0             | +3                 |                       |               |             |  |
|          |             |          |          | R TYPES               |          | ]      | SEASONA         | DEGREE DAY         | ′S                    | PRECIPITATION |             |  |
|          | R L         | S Z      | IP A     | A T F [               | ) H BS   |        | HEATING (       | COOLING            |                       | JAN-February  |             |  |
| TOTAL    | 4 0         | 14 3     | 0        | 0 0 5                 | 0 5 2    |        | 4719            | 0                  |                       | 2.85          |             |  |
| DEP      | -1 -3 -     | +5 +1    |          | 0 +1                  |          |        | +233            | 0                  |                       | -1.05         |             |  |

## WEATHER TYPES: PRECIP INTENSITY - Light Precip amount "T" =Trace Moderate Z = Freezing rain/drizzle D = Dust R = Rain L = Drizzle IP = Ice pellets (sleet) H = Haze + Heavy S = SnowA = Hail BS = Blowing snow F = Fog T = Thunder RW = Rainshower SW = Snowshower

DEGREE DAYS Heat and Cool base 65F. Corn Growing base 50F, ceiling 86F. Heating DD season July-June. Cool and Corn DD season January-December.