

A Look Back at 2010 in Central and Southeast Illinois

Winter Season (December 1, 2009 through February 28, 2010):

Seasonal Averages:

- **Temperatures** -- Below normal.
- **Precipitation** -- Above normal, except below normal near the Indiana border.

TEMPERATURES -- Meteorological winter began on a mild note, with highs in the mid to upper 50s common on December 1. However, highs on the 10th were only in the teens in some areas, and a second cold snap at mid month resulted in lows in the single digits north of I-74. Temperatures moderated into the 40s and 50s just before Christmas, but sub-zero conditions returned at the end of the month.

The bitter cold continued into the first part of January, with temperatures averaging 18 to 20 degrees below normal through the 10th. High temperatures were frequently in the single digits, and nighttime wind chills were well below zero. Northeast of Galesburg, Altona reported a low temperature of 17 below zero on the 10th. Some moderation finally began during the second week of the year, with highs returning to the 30s and 40s. By the 23rd, some 50s were observed, reaching as high as 57 degrees at Lawrenceville on the 24th, just ahead of the passage of a cold front. Cooler than normal weather prevailed the remainder of the month.

February on average turned out to be colder than normal, but was mild to start the month. A cold snap prevailed from the 7-19th, with temperatures close to 15 degrees below normal during the middle part of the month, following a winter storm which produced a fresh coating of snow.

WEATHER -- While missing the brunt of a major storm system on December 9, up to 6 inches of snow fell in Knox County and winds gusted from 45-60 mph following the passage of the system. Later in the month, a very slow moving low pressure system meandered across the Mississippi Valley just before Christmas. Rainfall amounts of 2 to 4 inches were common from the 22-24th west of a Galesburg to Olney line. As colder air moved in around Christmas Day, a wide swath of 3 to 6 inches of snow occurred along and west of the Illinois River.

A winter storm on January 6-7 resulted in widespread 4 to 8 inch snowfalls, from Jacksonville to Mattoon northward. Upwards of 8 inches occurred along the I-74 corridor from Galesburg to Champaign. Later that month, freezing rain deposited a tenth to quarter inch of ice along and north of I-72.

A persistent, deep upper low over Illinois resulted in a [3-day snowfall](#) from February 8-10, of 3 to 6 inches across most areas from I-70 northward. A few 6 to 8 inch amounts were reported from Galesburg to Champaign. Another system on the 21-22nd produced 5 to 8 inches of snow along and west of the Illinois River, with mainly rain east of I-55.

During the 3 month period, Peoria reported 41.5 inches of snow, missing the record December-February total by only an inch.

Spring Season (March through May):



This weak landspout tornado touched down northwest of Princeville on May 26. Photo by Brian Dallinger.

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Seasonal Averages:

- **Temperatures** -- Above normal.
- **Precipitation** -- Above normal west of I-55, and below normal east.

TEMPERATURES -- A quick transition to springlike temperatures began in early March, and temperatures were in the 60s and 70s by the 10th, with Lawrenceville reporting a high of 74 degrees that day. Temperatures by the end of the month hit 80 degrees in several areas, and was as warm as 83 degrees in Jacksonville on the 31st.

April was abnormally warm across the region. Springfield and Peoria both had their warmest April on record, and the state as a whole had its warmest April as well. Most of the abnormal warmth was during the first half of the month, averaging nearly 18 degrees above normal the first week, and 9 degrees above normal the 2nd week. Temperatures were in the lower to mid 80s on the 1st and again around mid-month.

A cooler than normal period prevailed from May 8-18th, including some scattered late-season frost on the 9th and 10th. Following that, much warmer weather was common the remainder of the month, with highs in the lower 90s on the 23-24th and again on the 29-30th. Humid conditions kept lows in the upper 60s to lower 70s during this time.

WEATHER -- One to 3 inches of snow fell west of the Illinois River on March 19-20, with 3.9 inches reported at Altona, in northern Knox county. This was the last significant snow of the season, and was part of a storm system which deposited a large area of heavy snow from Oklahoma to Michigan.

Severe weather on April 4th and early on the 5th produced wind damage and nickel size hail in a swath from Fulton County southeast to I-70. Additional severe storms occurred later on the 5th and again on the 7th and 30th. Strong, non-thunderstorm winds on the 29th caused widespread wind gusts of 45 to 55 mph, with 60 mph gusts reported from Springfield to Danville.

Flash flooding occurred across areas along and west of the Illinois River on May 13, ahead of a slow moving warm front. Rainfall totals of 1 to 3 inches were common, with most of this falling in just a couple hours, resulting in numerous rural roads and small streams becoming inundated by flooding.

The first tornadoes of the season touched down in Edgar County on the 21st, near Hume and northeast of Metcalf, producing no damage. On the same day, thunderstorms produced 3 to 4 inches of rain in Marshall (Clark County) in about 90 minutes, flooding most roads in town.

Unseasonably hot and humid weather combined with outflow boundaries from severe weather the day before, to produce numerous slow moving thunderstorms on the 25th. Eastern parts of the city of Springfield received about 4.5 inches of rain in 90 minutes just before evening rush hour, with extensive flooding and up to 7 feet of water under viaducts. More than 200 vehicles were stranded, and almost 650 homes and businesses were damaged. Excessive rainfall also occurred northwest and northeast of Peoria, as well as near Winchester, producing 2 to 3 inches of rain in an hour.

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Summer Season (June through August):



Tornado near Yates City the evening of June 5. Photo by Scott Sims and Brad Emel.

Seasonal Averages:

- **Temperatures** -- Above normal.
- **Precipitation** -- Above normal.

TEMPERATURES -- Record warm low temperatures were established at several locations on June 5th and 12th, with lows only in the mid 70s. Temperatures averaged above normal across the region most of June, finally cooling off a bit for the last week. Lawrenceville reported 13 days in June with highs of at least 90 degrees.

Temperatures trended above normal again most of July, with several hot and humid days with highs in the lower to mid 90s, and heat index values over 100. Springfield observed a low temperature of only 79 degrees on the 23rd, setting a record warm low for the date. Lawrenceville had another 19 days of highs 90 or above.

While August was only a couple degrees above normal as a whole, it featured the worst of the heat for the summer. Lows were only in the mid to upper 70s on the 4th and 5th, and again from the 9-14th, while corresponding highs were in the mid to upper 90s and dewpoints well into the 70s. Flora reached 101 degrees on the 11th, Effingham and Newton reached 100 degrees on the 4th, and Rantoul reached 99 degrees on the 14th. Heat index values reached as high as 110 to 115 degrees south of I-70 during this period. Lawrenceville reported another 20 days of 90 or higher. The heat eased the second half of the month, and August finished with lows in the 40s and 50s.

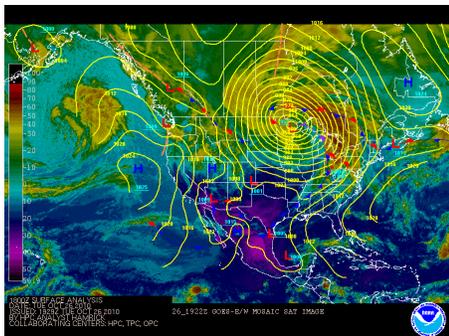
WEATHER -- The first part of June featured several significant severe weather episodes. Enhanced wind damage occurred in Fulton County on the 1st from Fairview to Farmington, with several machine sheds, garages, and outbuildings damaged or destroyed. Isolated severe weather occurred on the 3rd and 4th, but the worst of the severe weather was on the 5th. [Eight tornadoes affected central Illinois](#), primarily in an area bordered by Galesburg, Bloomington, and Clinton. The strongest of the tornadoes touched down near Yates City (Knox County) and moved through Elmwood (Peoria County), and was rated at EF-2 intensity with winds around 130 mph. Damage in Elmwood was estimated around \$85 million. This was the strongest tornado to affect Peoria County since July 1981, when an F-1 tornado touched down near Princeville. A second EF-2 tornado touched down near the Tazewell/Woodford County line and passed southeast of Metamora. Four tornadoes were reported in Peoria County, bringing its yearly total up to 5; only one had been reported the previous 10 years. One tornado occurred within the Peoria city limits, the first time since 1974 the city of Peoria was hit by a tornado. This particular tornado outbreak produced about a dozen other tornadoes in north central and northeast Illinois. Several additional severe weather episodes occurred during the month, typically blowing down trees and power lines, including a pair of derechos on June 18th, although the worst of the damage was further north in Illinois.

The weather pattern during June featured a persistent storm track, which brought numerous weather systems across the area. Several boundaries stalled over the area, and with the tropical airmass, heavy rains were common on several days. St. David (Fulton County) reported 13.75 inches of rain for the month. Record June rainfall totals included 13.24 inches at Galesburg, 10.79 inches at Lincoln, and 10.58 inches in Havana. The excessive rainfall resulted in the Illinois River cresting 11 feet above flood stage at Beardstown on the 29th. Overall for June, rainfall averaged 2 to 4 inches above normal across the area.

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An upper level disturbance interacted with a cold front to produce clusters of severe thunderstorms on the afternoon of July 19. **Downburst winds** affected portions of Christian, Shelby, and Moultrie Counties. Widespread damage was reported in Taylorville, Pana, and in an area from Kirksville through Sullivan. Winds were estimated to be from 80 to 100 mph. Later that night, widespread flash flooding occurred along and west of the Illinois River, with 8 inches of rain near Camden in Schuyler County, and 6 inches of rain reported at Astoria in Fulton County. Slow moving storms on the 28th also produced 4 to 5 inches of rain in less than a couple hours in several parts of west central Illinois.

Autumn Season (September through November):



This surface map shows the record-setting low pressure system over the upper Midwest on October 26.

Seasonal Averages:

- **Temperatures** -- Above normal.
- **Precipitation** -- Above normal west, below normal east.

TEMPERATURES -- Temperatures averaged near normal across the region in September, although was cooler than normal for the first third of the month. By the 5th, lows were in the 40s across much of east central Illinois, with a low of 42 degrees reported at Saybrook in McLean County. Highs in the 60s on the 10th set records for cool high temperatures. However, significantly warmer weather occurred from the 20-24th. Highs were in the lower to mid 90s much of this period, with 98 degrees at Lawrenceville on the 21st and 97 degrees at the Champaign airport.

In October, large daily swings in temperature were not unusual. Highs for the month averaged 2-3 degrees above normal, but average lows were below normal. On the 10th, highs in the mid to upper 80s were widespread, with Effingham reporting a 90 degree high. While some parts of central and eastern Illinois saw freezing temperatures early in the month, it took until late month for others. Peoria and Springfield observed their first freeze of the season on the 28th.

Despite a cooler than normal start to November, several days saw highs in the 70s, as the jet stream remained well to the north for a good part of the month. Record highs included 77 degrees at Urbana and 78 degrees at Charleston on the 11th, and 78 degrees at Effingham and Pana on the 12th. Temperatures averaged above normal west of I-55 during the month, and were near normal to the east.

WEATHER -- Severe weather during September was confined to the 2nd and 21st, producing isolated reports of large hail and damaging winds. One storm produced a microburst near Roanoke with winds clocked at 78 mph, downing 8 large 64,000 volt power lines and causing the entire town to be without power for nearly 16 hours.

An unusually intense storm system formed in late October, moving northeast through Minnesota, where it broke state records for low pressure. Even this far away, October record low pressures were observed at Peoria and Springfield on the 26th, with the pressure at Peoria falling to 28.98 inches. This system also resulted in strong gradient winds of 40 to 60 mph from late morning on the 26th through the 27th.

Precipitation amounts were greatly variable during the period. Much of central Illinois had at least twice as much rain as normal in September, although southeast Illinois only saw about half the normal total. Springfield reported 7.94 inches in September, its

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6th wettest September on record. October rainfall was generally less than half of normal over all of central and southeast Illinois. Drought conditions near the Indiana border began to intensify, as rain remained well below normal into mid November. However, rainfall from November 22-25 generally took care of the drought, with 2 to 5 inches widespread across east central and southeast Illinois.

Winter Season to Date (December 1-31):



Snowfall totals from December 3-4. [Click image to enlarge.](#)

Averages:

- **Temperatures** -- Below normal.
- **Precipitation** -- Below normal, except above normal from about Peoria northwest.

TEMPERATURES -- Aside from a brief mild spell on the 10th, and at the end of the month, much of December saw temperatures well below normal. Bitterly cold air spread across the area from the 12-14th, with lows near zero and highs only in the teens. Wind chills dropped to around 15 below zero across much of the area the morning of the 14th. However, abnormally mild weather prevailed the last few days of the year, with highs reaching the 50s and 60's in some areas on the 30th and 31st.

WEATHER -- Two major storm systems affected the area the first half of the month. The first one deposited heavy snow along and north of the I-74 corridor, with 8 to 9 inches reported around Champaign/Urbana and also from Minonk to Henry. The second system a week later first produced up to an inch of rain across eastern Illinois on the 11th, then brought widespread 1 to 4 inch snowfall that night into the 12th. As northwest winds gusted from 40 to 50 mph on the 12th, blizzard conditions developed in many areas, primarily along and north of I-74, while blowing snow elsewhere sharply reduced visibility. Overall during the month, snowfall along and north of the I-74 corridor averaged 12 to 20 inches. Snowfall totals included 20.4 inches in Champaign/Urbana (snowiest December on record), 19.2 inches in Peoria (2nd snowiest December), and 18.1 inches in Bloomington/Normal (3rd snowiest).

As the year came to a close, showers and thunderstorms moved across the area on the 30th and 31st. Some locations, primarily across the Illinois River Valley, received 2 to 4 inches of rain. Additionally, the strongest tornado of the year occurred on New Year's Eve, when an EF-3 strength tornado affected areas around Lake Petersburg, in Menard County.

Preliminary statistics for the 35-county Lincoln NWS coverage area:

- **Highest Temperature:** 101 degrees at Flora on August 4 and 10
- **Lowest Temperature:** 17 degrees below zero at Altona on January 10
- **Most Rain in 24 Hours:** 4.78 inches at Sullivan on July 20
- **Most Snow in 24 Hours:** 7.7 inches at Urbana on December 4
- **Most Rain in 1 Month:** 13.75 inches at St. David in June
- **Most Snow in 1 Month:** 20.4 inches at Urbana in December

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- **Reported Tornadoes:** 16. By EF-Scale intensity: EF0=10, EF1=3, EF2=4, EF3=1. By county: Peoria 5, Vermilion 3, Edgar 2, Knox 2. One each in Christian, De Witt, Logan, Marshall, Menard, Tazewell, and Woodford. (County total is higher than 16 due to border crossers.)