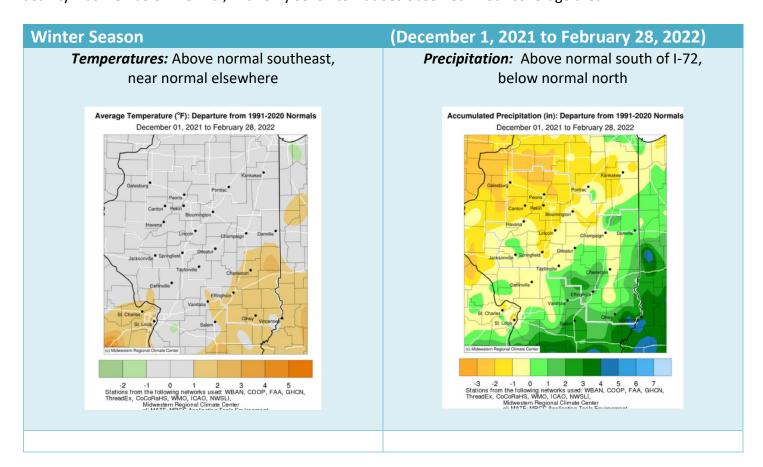


By: Chris Geelhart, Lead Meteorologist National Weather Service, Lincoln IL

La Niña conditions influenced the winter of 2021-22, and a rare 3rd consecutive La Niña winter pattern closed out the year as well. Temperatures for the year averaged close to yearly normal, although they leaned a little colder than normal over western Illinois. Precipitation was above normal in southeast Illinois and as far north as Springfield, but was as much as 6 to 8 inches below normal around Champaign and Danville. Tornado activity was well below normal, with only seven tornadoes observed in our coverage area.





Snowdrifts up to 6 feet high were seen near Stanford following an early February snowstorm. Photo by Patricia Becker.

Temperature Review:

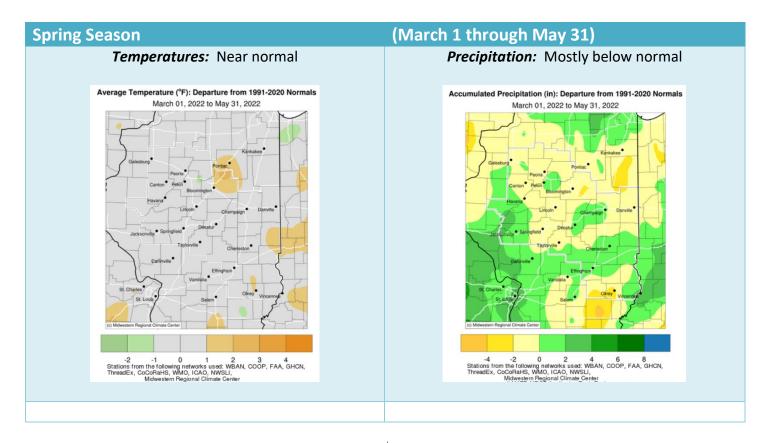
Meteorological winter was absent at the start, as temperatures in the 50s and 60s were common during December. The warmest day was on the 15th, when highs reached the 70s in western Illinois. It was one of the warmest Decembers on record, with temperatures averaging 7 to 10 degrees above normal. January reversed the trend and averaged 2 to 5 degrees below normal, including low temperatures below zero north of I-72 on the 6-7th. Frequent cold snaps in February also resulted in temperatures averaging 2 to 4 degrees below normal.

Weather Review:

The start of meteorological winter featured a large severe weather outbreak on December 10th. Locally, five EF2 strength tornadoes were reported, impacting areas northwest of Springfield, southwest of Shelbyville, and near Mattoon. The other main feature was the lack of snow, with Peoria not seeing its first measurable snow of the season until December 28th, and Springfield not until New Year's Day. However, 2022 started off with a winter storm across the northwest third of Illinois. Snow amounts of 4 to 8 inches were observed as far southeast as the Peoria metro area.

Two significant snowstorms impacted the region in February. A long-duration winter storm brought rain, freezing rain, sleet, and heavy snow to central and southeast Illinois between February 1-3rd. This paired with winds gusting up to 30 to 35 mph created blowing/drifting snow. Snowfall totals ranged from 8 to 15 inches within a swath situated between the Illinois River and I-70, with the highest total of 15 inches reported at Tolono in Champaign County. Ice amounts were brief for most, with the largest accumulations situated south of I-72 where one to three tenths of an inch were reported prior to the heavy snowfall.

Another storm system brought heavy snow to parts of central Illinois on the 17th. Snowfall amounts of greater than 6 inches were focused along and north of the I-72 corridor, with a swath of 8 to 10 inch totals along a Quincy to Bloomington/Normal line. Northerly wind gusts increased to 35 to 45 mph, creating considerable blowing and drifting snow. As a result, travel quickly became hazardous and several area roadways were closed. Stretches of both I-55 and I-74 were closed near Bloomington. In addition, an accident involving 19 semis and 9 cars/trucks resulted in 100 vehicles being backed up on southbound I-39 between Normal and Minonk, which closed the interstate for about 24 hours.





A shelf cloud moves across Lake Shelbyville on May 21. Photo courtesy of Paul Hadfield.

Temperature Review:

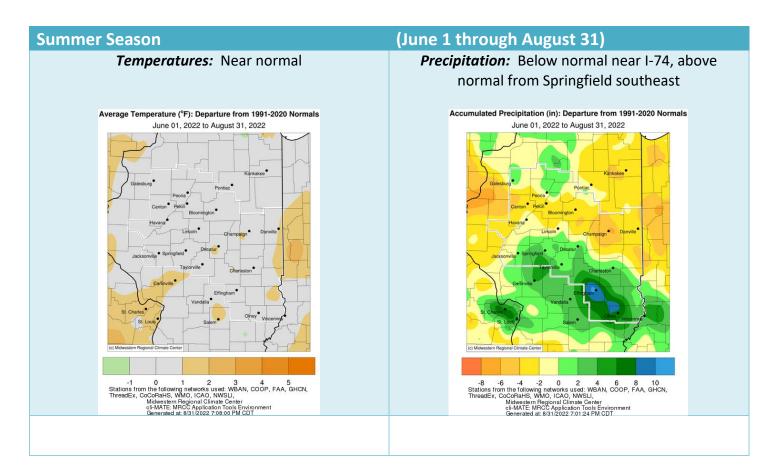
The season started off with temperatures 15 to 20 degrees above normal, before a cold snap from March 10-12th. However, additional warmer periods resulted in temperatures averaging above normal for the month. April averaged 2 to 4 degrees below normal, and freezes occurred in Peoria and Bloomington as late as the 26th. While May started off on the cool side, a significant warmup came from the 9-13th when temperatures jumped to 15 to 20 degrees above normal, highs soared into the 90s, and the heat index was as high as 100 to 105 degrees. Several temperature records were tied or broken during that period. High temperatures returned to the upper 80s or low 90s a few other times during the month, including Memorial Day weekend.

Weather Review:

A severe weather outbreak occurred across northern and central Illinois on March 5th. A weak tornado occurred in Mason County near Kilbourne, and wind gusts were measured at 68 mph in Decatur and 66 mph in Springfield.

Locations along and north of I-74 received a few tenths of snowfall during the early morning hours on April 9th. Normal snowfall values for most locations during April are a half inch or less.

Strong to severe thunderstorms occurred on April 24th, producing an EF-1 tornado near Sharpsburg in Christian County.





Drone footage shows damage to a farm field from a tornado near Beason on August 1. Photo from the Logan County EMA.

Temperature Review:

A heat wave occurred on June 13-16th, as high temperatures reached the mid to upper 90s. A temperature of 102 degrees was measured in Normal on the 14th. While July and August each featured a couple days of significant heat, temperatures were near normal.

Weather Review:

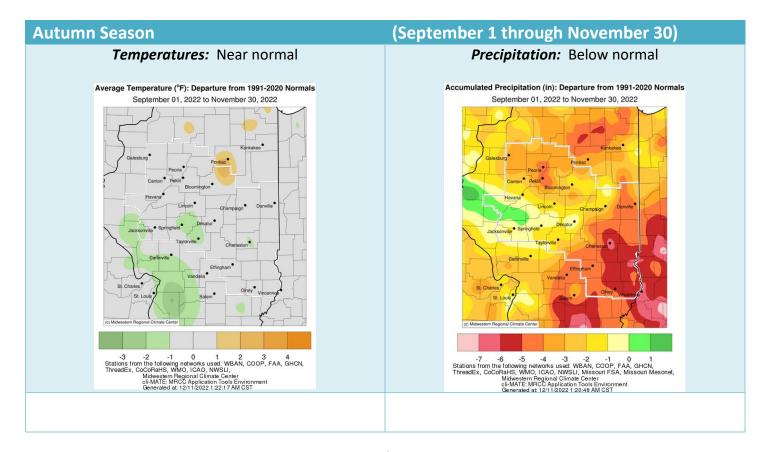
Two large thunderstorm clusters occurred during the morning of June 12th. One cluster impacted Champaign and Vermilion Counties, causing minor wind damage and dropping hail as large as ping pong balls. The second cluster formed further west and brought damaging wind gusts, large hail, and flash flooding to portions of Schuyler and Morgan Counties. Winds were estimated to be as high as 75 mph around Nortonville, in Morgan County.

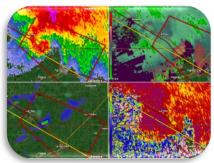
A large thunderstorm cluster produced significant wind damage and flash flooding on June 17th. The storms were focused along and southeast of a Rushville, to Springfield, to Robinson line. Numerous trees and power lines were blown down. In addition, very heavy rainfall of 3 to 5 inches along and south of a Jacksonville to Effingham line created pockets of flash flooding.

Severe thunderstorms developed during the afternoon of Independence Day in east central and northeast Illinois, producing a wind gust of 75 mph in Vermilion County near Henning.

Multiple rounds of severe weather and heavy rainfall occurred from August 1-3. An EF-1 tornado occurred in Beason on the 1st, and hail near Olney was as large as 2 inches in diameter. Moderate to occasionally heavy rainfall continued into the late-night hours. A nocturnal complex of strong to severe thunderstorms spread southeast from Iowa during the early morning hours of August 2 and brought multiple rounds of heavy rainfall. By the time rain ended later in the day on August 2, rainfall totals surpassed 5 to 7 inches in parts of southeast Illinois. The final round of storms and heavy rainfall spread into central Illinois during the afternoon hours of August 3. Damaging winds and small hail were observed across parts of the state with additional rainfall amounts of 1 to 3 inches that fell roughly between the Interstate 55 and 70 corridors. This helped alleviated some of the drought ridden areas across east central Illinois.

Severe thunderstorms around the Peoria metro area on August 20th produced numerous areas of hail from walnut to hen egg size, and as large as 3 inches in Washington, as well as rainfall of 4 to 5 inches.





A tornado near LeRoy shortly after midnight on September 19th roughly paralleled I-74. Radar image from 12:34 am as the tornado was about to lift.

Temperature Review:

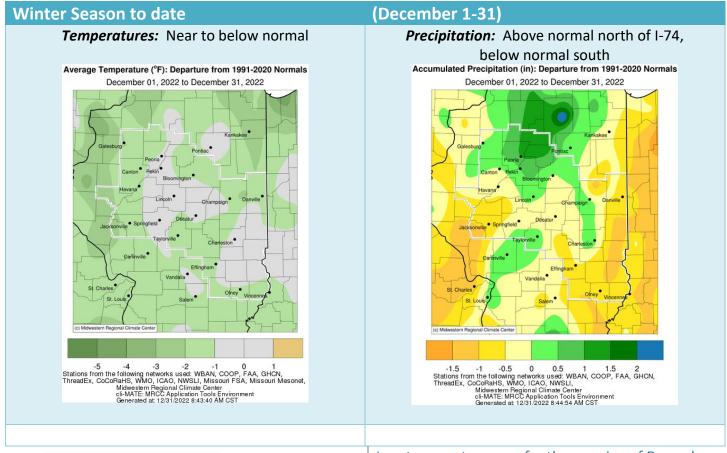
Temperatures averaged near normal across the region during the fall. One last surge of heat occurred as summer was ending, with widespread highs in the mid 90s on September 20th, and as high as 99 degrees northeast of Bloomington near Chenoa.

Weather Review:

With the La Niña pattern setting up once again, the associated typical dry fall was observed over most of the area. The driest conditions were in east central and southeast Illinois, where rainfall was 4 to 6 inches below normal.

Strong winds occurred on November 5th, when a High Wind Warning was in effect for portions of central Illinois. A gust of 68 mph was reported at Willard Airport near Champaign.

While the first flurries of the season occurred in mid October, more substantial snowfall held off until early on November 12th. Two to 5 inches of snow fell from near Tuscola southwest through Effingham, with amounts over 6" in the eastern St. Louis metro area.



Minimum Temperature \
24-Hour Period Ending the Morning of 12/23/202

44 to 45 to 50
44 to 45
35 to 40
35 to 40
35 to 40
35 to 40
35 to 50
35 to 40
35 to 50
35 to 40
35 to 50

Low temperature map for the morning of December 23, showing sub-zero values over most of the Midwest. Image courtesy of the Midwestern Regional Climate Center.

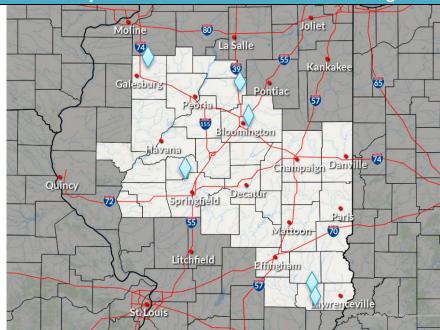
Temperature Review:

Up until the start of astronomical winter, temperatures were running well above normal across the region. Shortly before Christmas, a large Arctic air mass spread across much of the lower 48 states, bringing the coldest weather of the year to the region. The cold front dropped temperatures from the 30s and 40s into the single digits in just a few hours. Temperatures fell as low as 10 to 15 degrees below zero on the 23rd and 24th, with highs failing to reach zero in Peoria and Bloomington on the 23rd. Wind chills as low as 40 below zero were observed in a few areas of central Illinois, and wind gusts of 35 to 50 mph persisted for a couple days. After the Christmas holiday passed, temperatures rebounded significantly, and highs in the 60s were observed near and west of I-55 on the 29th; Peoria and Jacksonville each saw highs of 65 degrees.

Weather Review:

Snowfall amounts averaged 1 to 4 inches below normal across the region. The most impactful winter weather was on the 22-23rd with the Arctic air mass, when near blizzard conditions occurred in a few areas despite only receiving a couple inches of snow. Some blowing and drifting snow lingered into the 24th until the winds finally settled down.

Preliminary Statistics for the Lincoln NWS Coverage Area:



Highest Temperature:

102°F at Normal 4NNE (June 14)

Lowest Temperature:

-15°F at Altona (December 23)

Most Rain in 24 Hours:

6.93" at Dundas 1E (August 2)

Most Snow in 24 Hours:

14.0" at Minonk (February 2)

Most Rain in 1 Month:

11.81" at Olney 2NE (July)

Most Snow in 1 Month:

25.4" at Petersburg (February)

Reported Tornadoes: 7

By EF Strength: EF0=3, EF1=2. Two of unknown strength.

By County: Mason 2, McLean 2, Christian 1, Logan 1, Richland 1.