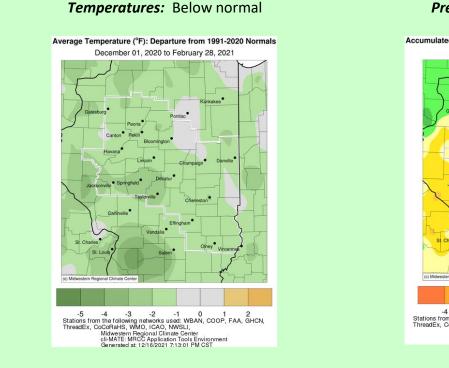


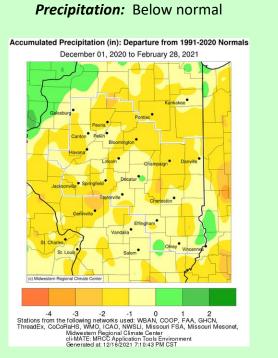
# 2021 Year in Review for Central and Southeast Illinois

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

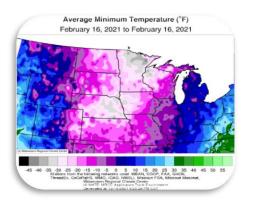
La Niña conditions influenced the start of 2021, and a renewed La Niña pattern closed out the year as well. Temperatures for the year averaged close to yearly normal, and were a degree or two above normal in a few areas. Precipitation was above normal, with amounts of 6 to 12 inches above normal in a number of areas north of I-70.







(December 1, 2020 to February 28, 2021)



Large parts of the "lower 48" were impacted by exceptionally cold weather during February. This is an example of the kind of low temperatures observed during the outbreak, with a large area below zero all the way down into Texas. Image from the Midwestern Regional Climate Center.

# **Temperature Review:**

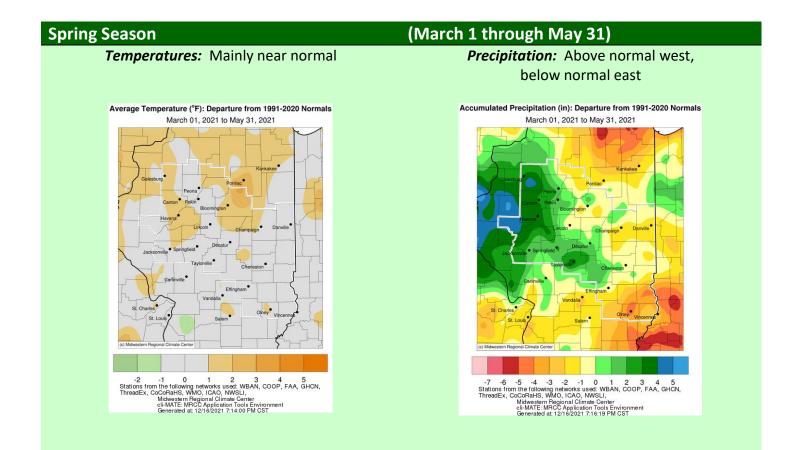
As is typical in a La Niña pattern, temperatures started the season off on the milder side, averaging about 3 to 5 degrees above normal for December. January also was mild, with only the 28<sup>th</sup> seeing low temperatures

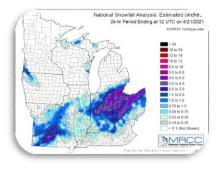
below zero. However, brutally cold weather impacted a large portion of the nation during February, with the period from the 6-19<sup>th</sup> the coldest. Daily average temperatures of 20 to 30 degrees below zero were common in our area during this stretch. On Valentine's Day, some areas of central Illinois struggled to even reach zero for high temperatures, and wind chills of 25 below to 30 below zero were reported. By the end of the month, highs had returned to the 50s, but monthly averages were still 8 to 12 degrees below normal.

#### Weather Review:

As meteorological winter started in December, snowfall was meager. Springfield reported only a trace of snow all month. However, a major winter storm affected central and northern Illinois on New Year's Eve into the start of 2021. Areas along and west of I-55 received a quarter to half inch of ice, causing tree damage and power outages. A couple days later, light snow of 2 to 5 inches occurred east of the Illinois River and north of I-70, but a small scale band of 5 to 10 inches of snow impacted portions of Macon, DeWitt, and Piatt Counties.

Compounding the extreme cold that affected the area during the middle of February, a winter storm brought a large area of 8 to 12 inches of snow in eastern Illinois from about I-57 east, extending into southeast Missouri. Danville reported 13 inches, while nearly a foot of snow fell around Champaign, Mattoon, and Olney.





A very late season snowfall brought measurable snow to portions of central Illinois on April 20<sup>th</sup>. Image courtesy of the Midwestern Regional Climate Center.

# Temperature Review:

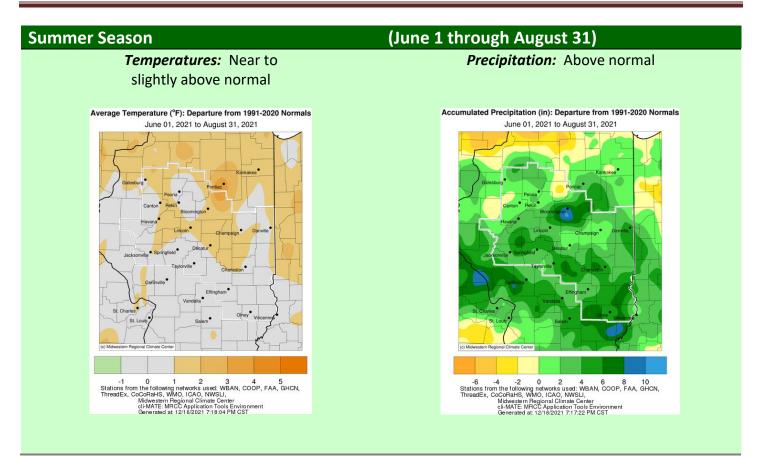
March averaged 4 to 6 degrees above normal across the region, with the warmer periods from the 7-11<sup>th</sup> and around the 22-23<sup>rd</sup>. While April saw 15 to 20 degrees above normal from the 4-7<sup>th</sup>, much of the second half of the month was significantly cooler. Freezing temperatures were observed on the 20-22<sup>nd</sup>. May started off with an extended period of below normal temperatures, but warmer weather on the 20-26<sup>th</sup> helped balance things out.

#### Weather Review:

The first severe weather of the season occurred on March 23, when a weak tornado impacted portions of Mason County. Additional severe storms occurred on the 27<sup>th</sup>.

A late season snowfall impacted a large area from northern Kansas into northern Ohio around April 20<sup>th</sup>. Some areas of east central Illinois received 1 to 2 inches of snow, with similar totals more isolated near Peoria and south of Galesburg.

Five brief tornadoes occurred on May 3, with four more observed on May 6. All were on the weak side.





Damage to Interstate 55 in southwest McLean County after rainfall of 8 to 10 inches caused severe flooding on Timber Creek on June 26. Photo by the Mt. Hope-Funks Grove Fire Dept.

#### **Temperature Review:**

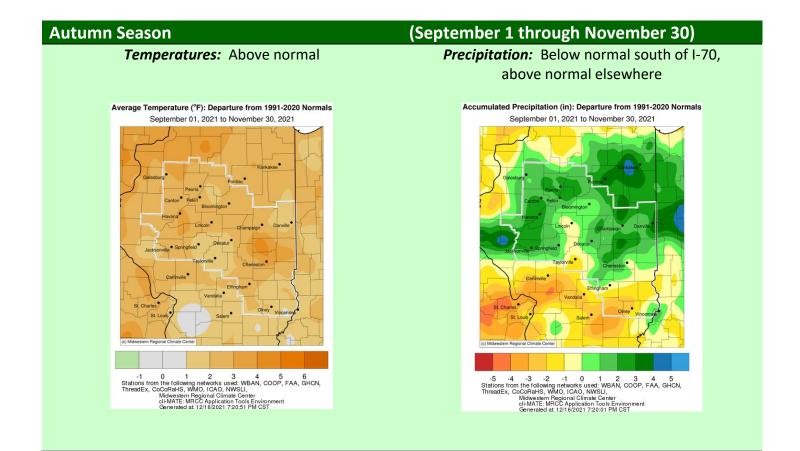
The first extended hot weather of the summer occurred on June 10-15<sup>th</sup> and again on the 18<sup>th</sup>, when temperatures reached into the 90s. Springfield reached 99 degrees on the 18<sup>th</sup>, its hottest temperature since reaching 104 degrees on July 6-7, 2012. Several days in July had temperatures moderated a bit due to thick smoke from western wildfires. The longest heatwave of the summer occurred during the last week of July, and heat index values reached 105 to 110 degrees on August 24-25. Overall, temperatures for the summer season averaged near to slightly above normal.

### Weather Review:

Strong to severe thunderstorms moved southeast across the area on June 18-19. Wind gusts were estimated around 80 to 90 mph in portions of southern Knox and northern Fulton Counties, and an <u>EF1 strength tornado</u> occurred in southern Knox County.

Two periods of heavy rain occurred on June 25-26. Between the two events, portions of southern McLean County reported from 6 to 11 inches of rain, with 10.71 inches measured on the southeast side of Bloomington. Significant flash flooding occurred, including damage to I-55 southwest of Bloomington, where a dive team was needed to rescue stranded motorists. Nearly 1600 homes and 75 businesses were damaged by the flooding, which caused over \$11 million in damage. Outside of the flooding, several weak tornadoes occurred in portions of Piatt, Macon, and Champaign Counties.

Five brief tornadoes occurred in portions of Morgan, Schuyler, and Cass Counties on July 10. Two were EF1 strength. Several cold air funnels were observed on July 12. While they typically remain aloft, one managed to touch down 2 miles west-northwest of Fisher, in Champaign County, damaging a farmstead. Toward the end of the month, weak tornadoes also occurred in portions of Cumberland and Crawford Counties.





Damage to a farm building from a tornado in Woodford County on October 11.

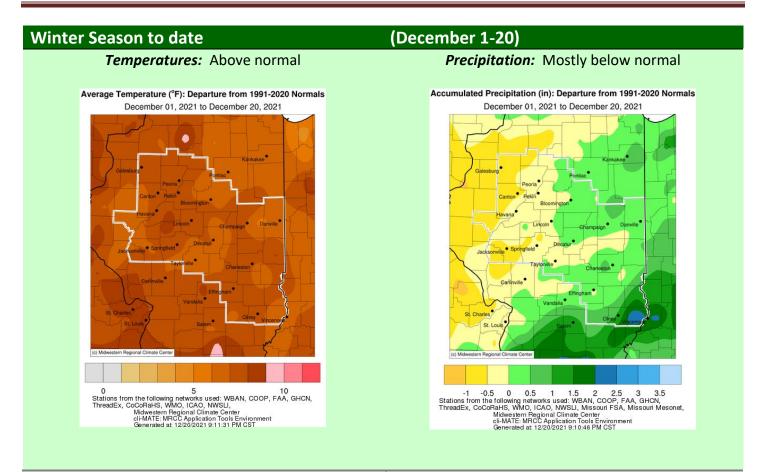
# **Temperature Review:**

Most of central and southeast Illinois averaged temperatures 2 to 4 degrees warmer than normal in September, and 4 to 8 degrees warmer than normal in October. However, November did bring some cooler trends. The extended warmth resulted in a longer than usual growing season, with the first freeze not occurring until early November in most locations.

#### **Weather Review:**

Dry weather prevailed over a large part of central and southeast Illinois during September, especially near the Illinois River where rainfall totals were 2 to 3 inches below normal. The exception was in east central Illinois, where rainfall of 1 to 3 inches above normal occurred. However, October was a very wet month, with rainfall totals in excess of 5 inches common. Peoria reported its second wettest October on record with a total of 9.68 inches, and its total of 3.98 inches on the 24<sup>th</sup> set an October 24-hour rainfall record. The drier conditions returned in November, when precipitation amounts were generally 1.5 to 2.5 inches below normal. The first flurries of the season occurred on November 12<sup>th</sup>.

Severe thunderstorms brought <u>four tornadoes on October 11<sup>th</sup></u>. One occurred just east of Jacksonville, and the others were north of Bloomington.





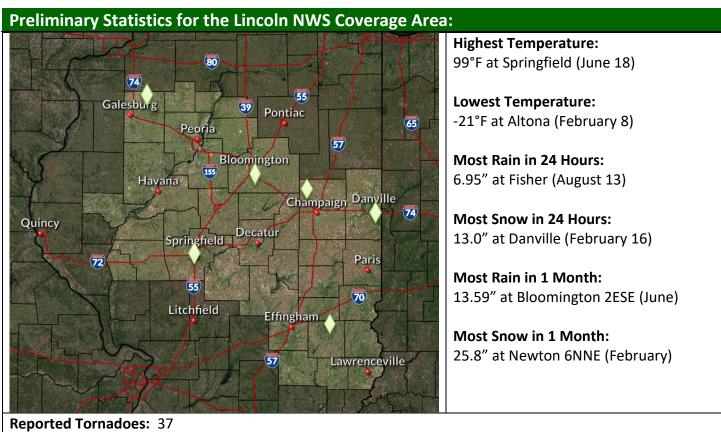
Drone footage of the December 10th EF2 tornado path, taken near Gays, in the southeast corner of Moultrie County. Image courtesy of Brad Emel.

# **Temperature Review:**

The start of meteorological winter was absent, as temperatures in the 50s and 60s were fairly common during the first half of the month. The warmest day was on the 15<sup>th</sup>, when highs reached the 70s in western Illinois.

#### Weather Review:

Some of the most active severe weather of the year occurred during the first half of December. On December 10, <u>four EF2 strength tornadoes were reported</u>, impacting areas northwest of Springfield, southwest of Shelbyville, and near Mattoon. This was part of a <u>large outbreak</u> that produced a tornado track of 165 miles in length from northeast Arkansas into central Kentucky.



By EF Strength: EF0=12, EF1=4, EF2=5. 16 of unknown strength.

*By County:* Cass 6, Sangamon 3, Woodford 3. Two each in Champaign, Clay, Coles, Effingham, Morgan, Piatt, and Shelby counties. One each in Christian, Crawford, Cumberland, Edgar, Knox, Logan, Macon, Mason, McLean, Menard, Moultrie, Richland, Schuyler, and Vermilion counties. (total is >37 due to border crossings)