#### October 1

 1890: The U.S. Weather Bureau was established by an act of Congress, and assigned as part of the Department of Agriculture. Weather observations and forecasts were previously issued by the Army Signal Service.

### October 2

 1922: Strong southerly winds brought very warm air from the Gulf region into Illinois. Rockford reached 91 degrees, the all-time warmest temperature recorded during the month of October. The heat wave across the region persisted through the 5<sup>th</sup>.

# October 3

- 1954: A late-season heat wave was found across central Illinois. Champaign's high temperature
  of 93 degrees established a record for the month of October. Springfield reported a high
  temperature of 93 degrees, also setting a monthly record, which was tied on the same date in
  2006.
- 2000: A small area of very strong thunderstorms developed in west central Illinois during the early evening hours, and moved into north central Illinois. A predominate gust front developed ahead of these storms, which brought considerable winds across La Salle County. State Police estimated the winds to be 90 mph, maintaining that strength as the gust front moved across the county. Near Oglesby, a semi-tractor trailer was overturned on Interstate 39, and several secondary roads leading to Starved Rock State Park were closed due to downed trees and power lines. Near Ottawa, a \$100,000 machine shed was destroyed.

### October 4

- 1941: A 4.74 inch deluge of rain marked Springfield's wettest October day on record. Records in Springfield date back to 1879.
- 1991: Severe thunderstorms moved across parts of central and northern Illinois. A tornado touched down south of Hopedale, in Tazewell County, damaging several homes and other buildings. A brief tornado touchdown was also reported at Carlock, in McLean County, but no damage was reported. The severe storms also produced winds in excess of 60 mph, causing damage to trees, power lines, and buildings in many locations.

# October 5

 1981: High winds across central Illinois produced gusts to 94 mph in Bloomington, 80 mph in Petersburg, and 63 mph in Champaign. Scattered damage occurred to homes, trees, and farm buildings.

### October 6

• 1963: Chicago established its record October high temperature, as warm southerly winds caused the mercury to reach 94 degrees.

# October 7

1996: Severe thunderstorms moved across the central third of Illinois during the late afternoon
and evening. The storms downed trees, with only minor damage. A tornado touched down just
north of Neoga in Cumberland County, causing damage to a used car lot, truck stop, and 5
houses. One person in a tractor-trailer was slightly injured when the truck was blown over.

# October 8

 1871: Drought prevailed across the Midwest during the summer and fall. Chicago only recorded an inch of rain between July and October. The tinder-dry conditions and strong winds over 30 mph fanned a small fire, which eventually turned into a major 3-day firestorm in Chicago. Nearly three square miles of the city were destroyed by the fire, which killed 300 people and left 90,000 homeless.

#### October 9

1943: During World War II, weather reports were censored in the U.S., because of the belief that
they could "aid the enemy" in the event of an invasion. Even if there was 2 feet of snow on the
ground, which everyone could see, newspaper and radio reports were not allowed to mention the
snow.

#### October 10

• 1969: Thunderstorm rainfall of 3.62 inches led to Peoria's wettest October day on record.

Normal for the entire month is 2.65 inches. The thunderstorm also produced a tornado along the Tazewell/Woodford County border east of Morton, damaging the roof on a house.

#### October 11

Eighty-one cooperative weather reporting stations in Illinois were established before 1900. Of
these, the oldest organized reporting system was at Fort Dearborn, in present-day Chicago,
where records began in 1832. However, in Elgin, military surgeons took occasional observations
as early as 1824. Some of the earliest reporting stations in central Illinois included Athens (1843)
and Jacksonville (1849).

#### October 12

- 1987: Sixteen cities in the central U.S. reported record lows for the date. In Illinois, records were set at Rockford and Springfield, both of with reported a low of 24 degrees.
- 2006: Springfield saw a few flurries late in the evening, its first snowfall on record for October 12.
   It was also the 5<sup>th</sup> earliest snowfall on record, and the earliest to occur since October 8, 1944.

### October 13

- 2001: Late in the afternoon and evening, thunderstorms with torrential rainfall occurred across
  the western Chicago suburbs. The heaviest rainfall occurred across DuPage, northern Will, and
  northwest Cook Counties, where 4 to 5 inches of rain fell. Two to 3 feet of standing water was on
  the streets of downtown Wheaton, widespread flooding occurred in Plainfield and Bolingbrook,
  and some areas were flooded for days.
- 2014: An outbreak of severe weather in the middle and lower Mississippi Valley produced tornadoes as far north as central Illinois. One tornado was on the ground for 10 miles in Shelby and Macon Counties, producing EF2-strength damage along the county line northeast of Moweaqua. A second tornado briefly touched down just south of the Decatur airport, and a third remained in open areas of northeast Macon County.

# October 14

- 1966: A late-season tornado moved across Brown County in west central Illinois, passing along
  the east edge of Mount Sterling. Major damage resulted to a 30 square block area of the town.
  Nearly all the buildings at the Brown County Fairgrounds were destroyed, and 10 nearby homes
  suffered major damage. Numerous cars and buses were badly damaged. Debris fell for several
  miles after the tornado lifted.
- 2017: Heavy rain occurred over northern Illinois, with a 2 day total from the 14-15<sup>th</sup> of 4 to 8 inches from near La Salle to Chicago. The highest amount was 9.30 inches at Burr Ridge, with 8.16 inches at Lisle and almost 8 inches at Naperville. Chicago's total of 4.19 inches on the 14<sup>th</sup> set a calendar day record for October, and was the highest calendar day total in 6 years.

### October 15

- 1870: Chicago's first official weather station was established downtown, at 181 W. Washington St. The records of this station were lost about a year later, during the Great Chicago Fire.
- 1897: Peoria recorded a high temperature of 90 degrees. This set a record for the date, and was the latest in the year that a 90 degree temperature has been recorded.

# October 16

• 1941: Record precipitation fell across parts of central Illinois during the month. Springfield finished with a total of 13.39 inches, while Jacksonville had 12.20 inches, Peoria 10.80 inches, and Decatur 10.64 inches.

#### October 17

• Over the years, people have believed that behavior patterns of certain plants and animals can predict the severity of a coming winter. These patterns actually depend more on past and present events, rather than future events.

#### October 18

• 1925: October of 1925 was a cold month across central Illinois. Average temperatures of 43.4 degrees in Peoria, 45.2 degrees in Champaign, 46 degrees in Springfield, and 46.5 degrees in Decatur are all records for the coldest October in each city.

#### October 19

1989: A record breaking early-season snowfall occurred across extreme eastern Illinois.
One to 3 inches of snow fell from the northern Chicago suburbs southward through
Champaign and as far south as Newton, in Jasper County. O'Hare Airport in Chicago
reported 3.8 inches of snow, setting a record for the earliest snowfall of 1 inch or more.
Further south, a snowfall of 0.3 inches in Springfield marked its earliest measurable snow
on record, while Peoria recorded 0.4 inches.

# October 20

• Indian Summer is defined as a mid to late autumn period of abnormally warm weather. For a late-season warm spell to really be considered "Indian Summer", it should follow at least one killing frost, and preferably a substantial period of chilly weather. Traditional Indian Summer weather is characterized by sunny, calm, mild days and clear, cool nights, with haze or smoke in the air.

#### October 21

• 1983: Records for 24-hour October rainfall were recorded at Decatur, with 4.09 inches, and at Champaign, with 3.72 inches.

### October 22

• Frost occurs when the surface temperature cools to the dew point temperature, and both are at or below 32 degrees. Water vapor in the air turns directly into ice, without becoming a liquid first, producing visible ice crystals on surfaces. Freezes occur when the air temperature (measured about 6 feet off the ground) falls below 32 degrees; temperatures of 28 degrees or colder are considered to be a hard freeze.

# October 23

Clouds were not formally named and classified until the early 19<sup>th</sup> century. Clouds were classified using Latin words to describe how the clouds appear to a ground observer.
 The initial classification had four basic cloud types; this was expanded in 1887 to also account for the height of the clouds above the ground, or their vertical appearance. This system of grouping cloud types is still in use today.

#### October 24

• 2001: Severe thunderstorms affected central Illinois, primarily between I-55 and the Indiana border. A tornado touched down on the southwest side of Monticello and moved northeast, causing \$2.2 million damage. A second tornado touched down around I-57 and I-74 near Champaign, causing \$500,000 damage. Wind gusts of 60 to 70 mph were common with these storms, and hail as large as golf balls fell in Decatur.

# October 25

 1856: A tornado in Schuyler County touched down during the early evening, destroying most of the town of Littleton. One person was killed, and 15 injured.

# October 26

2010: An historic fall storm system affected the central U.S. on the 25<sup>th</sup> and 26<sup>th</sup>. Record low barometric pressures for October were set at Peoria (28.98 inches) and Springfield (29.03 inches). The parent low's central pressure of 28.21 inches over Minnesota was one of the deepest low pressure systems observed in the contiguous United States, outside of a hurricane.

#### October 27

 Atmospheric pressure is measured with a device known as a barometer. The standard barometer consists of a long glass tube, one end closed and the other end inserted in a dish of mercury. The weight of the atmosphere pushes down on the dish, causing the mercury to rise or fall in the tube. Typically, the height of the mercury in the tube will range from 29 to 31 inches; this is where the term "inches of mercury" comes from when relating barometric pressure.

#### October 28

On occasion, the Northern Lights are visible in Illinois. It used to be said that these lights were reflections from the polar ice fields, or they were lights from demons' lanterns as they search for lost souls. The Northern Lights are actually caused by high-energy particles from the Sun entering the Earth's atmosphere. These particles collide with air molecules, causing them to vibrate. When the molecules stop vibrating, they sometimes produce visible light. Northern Lights can be colored green, violet, red, or white.

# October 29

- 1925: An autumn storm system brought 1.8 inches of snow to Springfield. This is the most snow on record for a 24-hour period in October.
- 1996: A fast moving squall line producing wind gusts of 50 to 80 mph across parts of northern and central Illinois. The storms downed power lines and trees, which in turn damaged buildings that they fell on. The highest wind gusts were recorded in northeastern Illinois, with a reading of 80 mph at McHenry and 79 mph at Carpentersville.

# October 30

- 1925: Record cold temperatures were found across central Illinois. Lows of 7 degrees in Peoria, 12 degrees in Decatur, and 13 degrees in Springfield and Champaign, stand as records for the month of October.
- 2012: The powerful storm known as Hurricane Sandy, which came ashore in New Jersey
  at the end of October, impacted areas as far west as Illinois. Wind gusts in east central
  Illinois were as high as 40 mph on this date.

#### October 31

 1926: The month of October 1926 closed out with 2.8 inches of snow being observed in Springfield. This currently stands as the October record for the city. Normal snowfall for October is only a trace.