

2008 Climate Summary for Chicago

Month	Temperature				Precipitation			
	High	Low	Average	Departure	Total	Departure	Snow	Departure
January	32.0°	14.9°	23.5°	+1.5°	1.93"	+0.18"	12.7"	+1.4"
February	29.7°	16.4°	23.0°	-4.0°	3.53"	+1.90"	21.8"	+13.5"
March	42.5°	27.2°	34.9°	-2.4°	2.63"	-0.02"	7.9"	+1.9"
April	59.8°	39.1°	49.5°	+1.7°	2.72"	-0.96"	T	-1.6"
May	66.2°	44.8°	55.5°	-3.2°	4.10"	+0.72"	0.0"	0.0"
June	80.9°	60.7°	70.8°	+2.6°	4.18"	+0.55"	0.0"	0.0"
July	83.8°	64.2°	74.0°	+0.7°	4.76"	+1.25"	0.0"	0.0"
August	81.8°	63.6°	72.7°	+1.0°	3.73"	-0.89"	0.0"	0.0"
September	75.2°	57.1°	66.2°	+2.4°	13.63"	+10.36"	0.0"	0.0"
October	61.6°	43.7°	52.7°	+0.6°	2.07"	-0.64"	T"	-0.3"
November	46.3°	32.2°	39.3°	0.0°	1.81"	-1.20"	0.6"	-1.2"
December	31.5°	14.2°	22.9°	-4.5°	5.77"	+3.34"	21.9"	+13.2"
Total/Ave	57.6°	39.8°	48.7°	-0.4°	50.86"	+14.59"	64.9"	+26.9"

Yearly Extremes:

Highest Temperature:

- ❖ 94 on September 2nd

Lowest Temperature:

- ❖ -6 on December 21st

Most Precipitation in One Day:

- ❖ 6.64 inches on September 13th

Most Snowfall in One Day:

- ❖ 4.8 inches on March 21st and December 16th

Records set during 2008:

Temperatures:

Max:

- ❖ January 7th (65)
- ❖ December 27th (61t)

Min:

- ❖ April 29th (31t)

Highest Min:

- ❖ January 7th (51)

Lowest Max:

- ❖ None

Monthly:

- ❖ None

Seasonal:

- ❖ None

Yearly:

- ❖ None

Precipitation:

One Day Precipitation:

- ❖ February 17th (1.10")
- ❖ May 2nd (1.28")
- ❖ September 13th (6.64")
- ❖ December 9th (1.47")
- ❖ December 27th (1.74")

Monthly Precipitation:

- ❖ 8th Wettest February (3.53")
- ❖ 2nd Wettest September (13.63")
- ❖ 5th Wettest December (5.77")

Seasonal Precipitation:

- ❖ 9th Wettest Winter 2007-08 (8.95")

Yearly Precipitation:

- ❖ Wettest Year on Record (50.86")

One Day Snowfall:

- ❖ February 29th (1.0")
- ❖ April 28th (Tt)
- ❖ December 16th (4.8")

Monthly Snowfall:

- ❖ 5th Snowiest February (21.8")
- ❖ 7th Snowiest December (21.9")

Seasonal Snowfall:

- ❖ 6th Snowiest Winter 2007-08 (52.4")

Yearly:

- ❖ 7th Snowiest Snow Season 2007-08 (60.3")
- ❖ 4th Snowiest Annual Snowfall-2008 (64.9")

JANUARY

January 2008 will be one for the record books with the wild weather that occurred throughout the month. The first significant event that occurred was on the 7th when temperatures rose to 65 degrees, which broke the high temperature record, and only dropped to 51 degrees, which broke the highest minimum record. When the temperature reaches 65 degrees in January, there normally are thunderstorms that follow. This year was no exception as a line of thunderstorms developed out ahead of the cold front, with one of the storms turning tornadic across northern Boone and McHenry counties. As the line pushed eastward into the greater Chicagoland area, it stalled out across Livingston, LaSalle, Ford, and Iroquois counties in Illinois and across Benton, Jasper and Newton counties in Indiana. When it stalled out, it dumped 4 to 6 inches of rain across this region. Rivers had already been elevated due to snow melt from the previous warm spell and with grounds still frozen in areas, there was nowhere for the rain water to go, but straight into the rivers. Some locations along the Vermillion and Kankakee Rivers saw near record river levels, particularly in Pontiac and Watseka.

After a few minor snows and some cold spells, temperatures started rising on the 29th up to around 50 degrees. A strong cold front then came through during the night and by midnight the temperature dropped to 2 degrees, which makes it one of the top 5 largest temperature swings in Chicago's history. Following the cold front were near blizzard-like conditions. The month ended on a snowy note as a low pressure system tracked through southern Indiana and dropped about 8 to 12 inches of snow across the region. The warmest temperature of the month was the 65 degrees on the 7th, while the coldest temperature was -5 degrees on the 20th and 25th.

FEBRUARY

This February contributed another 20+ inches of snow to the already snowy winter season and left many people looking to the warmer spring months ahead. After the first week of the month, it was downhill from there with most of the rest of the month below normal for temperatures. Only 7 days out of the month recorded zero snowfall and only 5 recorded no precipitation at all. While the first week of the month had at or slightly above normal temperatures, extensive cloud cover prevailed until the 10th when the sun finally came out. With 21.8" falling in February, it put the month as the 5th snowiest February on record and the Climatological Winter (Dec/Jan/Feb) at 52.4" as the 6th snowiest on record. With 3.53" of precipitation, it was the 8th wettest February on record and the 9th wettest winter on record with 8.95" of precipitation. Two daily records were broken during the month; the first was on the 17th when 1.10" of precipitation fell while

the second record was on the 29th when 1.0" of snow fell. The warmest temperature of the month was on the 17th when it reached 47, while the coldest temperature was -4 on the 10th.

MARCH

March ended up being fairly quiet weather-wise. It will likely be remembered for what seemed to be an extension of winter where temperatures were rarely above normal and on the whole finished below normal temperature wise. Precipitation ended right around normal along with snowfall, most of which fell on the 21st. No records were broken throughout the month. The warmest temperature of the month was on the 31st when it reached 60, while the coldest temperature occurred on the 7th and 8th when it dipped down to 14.

APRIL

We had another fairly quiet month of weather across the Chicagoland area in April. While the average temperature for the month was almost 2 degrees above normal, at times we were still reminded of our cold winter as low temperatures frequently went below normal and there even was some late April snow on the 29th. There was only one day with severe weather across the region and that was on the 25th when hail was the main hazard. Temperatures dropped from 82 (highest of the month) on down to 44 degrees within a matter of hours that evening. The lowest temperature of the month was on the 2nd when it dipped to 28 degrees. Two records were tied during the month, the first being the Trace of snow on the 28th and the second being the low temperature of 31 on the 29th.

MAY

Add another quiet month onto the books as the weather pattern remained quiet...and somewhat on the cool side. Temperatures for the month ended up over three degrees below normal as 22 out of the 31 days were cooler than normal. Perhaps the most notable weather event was the Pneumonia front that came down along the western shore of Lake Michigan on the night of the 26th. Temperatures out ahead of this front were in the mid 70s and dropped into the mid 40s within an hour of passage...moreso along the lakeshore. The highest temperature for the month was 81 degrees which was reached on the 6th and 26th, while the coolest temperature was 38 degrees which occurred on the 4th and 10th. One record was broken on the 2nd when 1.28" of rain fell.

JUNE

The severe weather season officially took off during the month of June with multiple events throughout the month. The most noteworthy day was on the 7th when 8 confirmed tornadoes touched down across northern Illinois and northwest Indiana. These tornadoes ranged in severity from EF-0 to EF-2 and tracked from Livingston County northeastward through far northwest Kankakee County, central Will County, southern Cook County, and far northwestern Lake County Indiana. After this outbreak, there were quite a few more severe hail and wind events across the region. As for the climatology for the month, no records were

broken, but every monthly stat was higher than normal. The warmest day was on the 12th when the high reached 91 degrees, while the coldest temperature of the month was on the 19th when it dipped down to 52 degrees.

JULY

July was the month of the squall line as there were multiple episodes of severe weather. Damaging winds and large hail were the main culprits from these storms with no tornadoes reported throughout the month. Heavy rain was also an issue with all of these strong storms which caused the monthly rainfall amount to be over an inch above normal for July. Temperatures were near normal with the warmest days being the 15th and 16th when it hit 90, while the coldest day was the 4th when the mercury dropped to 52. No records were set throughout the month with any real heat waves to speak of.

AUGUST

The main weather story from August was the derecho that came through Chicago on the 4th. One of the more potent storm systems to come through the region in recent memory, this line of storms caused a swath of damage from north central Illinois all the way into northwest Indiana. Along this line of storms there were multiple rotations that spun up along it and led to brief tornadoes. The most destructive tornado went through Griffith, Indiana where multiple houses were damaged including a strip mall. The lightning with this storm was also quite substantial with over 40,000 cloud to ground lightning strikes reported between 5pm and 10pm. After this storm carved its path through the region, the weather went quiet and pleasant for the rest of the month with temperatures hovering near normal. Most of the month's rainfall came on the 1st and 4th with just light amounts the rest of the way. No records were broken throughout the month with the warmest temperature of 90 coming on the 31st and the coolest temperature of 56 degrees coming on the 30th.

SEPTEMBER

Rain, rain go away! September '08 will go into the record books as the second wettest September on record with over 13 inches of rain falling through the month. The month started out with a heavy rainfall on the 4th as the remnants of the tropical system Gustav tracked through the region. This left most of the region's top soil saturated for the second...more potent event. Rainfall started on the 12th as a frontal boundary stalled out across the region. The heaviest rain came on the 13th with almost all of northern Illinois and northwest Indiana receiving over 4 inches of rain, with some recording over 10 inches for the entire event. The 6.64" of rain that fell on the 13th at O'Hare was the calendar day greatest rainfall in the history of Chicago. Outside of the heavy rain, the month actually ended up being rather nice with temperatures being higher than normal. The first two days of the month reached 90 or higher, putting the yearly total at 3 above 90 degree days. The warmest temperature of the month was on the 2nd when it reached 94, while the coldest temperature was on the 10th and 30th when it dipped to 48.

OCTOBER

The weather pattern went back to being less active for October with rainfall being slightly less than normal and temperatures ending up right about normal. The second week of the month featured a warm spell where the highs climbed to about 20 degrees above normal. Received the first traces of snowfall toward the end of the month, but otherwise there wasn't much going on. The warmest day was on the 12th when the high temperature of 84 degrees tied the previous records from 1956 and 1960. Otherwise, no other records were broken this month. The coldest temperature occurred on the 28th and 30th when it dipped to 31 degrees.

NOVEMBER

Another quiet month on the books for most of the region for November, although a few lake effect snow storms affected northwest Indiana with the most notable one occurring on the 18th when about 10 inches of snow fell across Porter county. Another snow storm came through on the last day of the month that lasted into the first of December that dumped about 3 to 6 inches of snow across the region. Otherwise, the average temperature for the month was exactly normal, but precipitation and snow were both respectively about an inch below the norm. No records were broken during the month at O'Hare. The warmest temperature of the month was 73 on the 3rd while the coldest temperatures came on the 21st and 22nd when it dropped down to 17 degrees.

DECEMBER

The snow storm that started the month was a sign of things to come for the rest of the month. From the 1st on up until Christmas day, there were only 2 days where the average temperature for the day climbed above the normal...and one of those days was just 1 degree higher. Over this same period, there were 12 days where measureable snow fell at O'Hare and another 6 that reported a trace. Two more of these days reported rainfall, which means that there were only 4 days that did not receive some sort of precipitation from the 1st up until Christmas.

There were two notable rapid temperature drops during the month. The first came on the night of the 14th into the morning of the 15th when temperatures dropped from the low 50s down to the single digits within a matter of hours. The second drop came on the night of the 27th into the morning of the 28th when the temperature dropped from the low 60s into the mid 20s.

Perhaps the most notable storm system that came through was on the night of the 18th into the morning of the 19th when quick moving low pressure system tracked through the region. This left the region from about I-88 southward with major accumulations of sleet and freezing rain that knocked out power to thousands of people. Further to the north, about 8 to 10 inches of a wet, heavy snow fell along the Wisconsin border.

Cold air then came down across the region on the 21st with strong westerly winds that led to blizzard conditions and wind chills dropping to -30F and lower. Another system came through on the 23rd that dumped about 3 to 5 inches of snow across most of northern Illinois and Indiana.

After a brief lull in action on Christmas Day, conditions rapidly changed overnight into the morning on the 26th as a band of freezing rain coated the Chicagoland area with a tenth of an inch of glaze ice. This caused the shutdown of major interstates and the entire city of Lockport due to driving conditions being near impossible. At one point, 5 snow plows were reported being in the ditch at one time at the I-55/I-355 junction. Luckily, traffic was lighter than usual due to the holiday and temperatures rose through the morning allowing the ice to melt. Temperatures continued to rise through the day as warm air moved in with strong winds from the south. As this warm air mass moved in during the evening of the 26th, the 3 to 10 inch snow pack across the region began to rapidly erode in a scene that can be described as 'blizzard-like' conditions with the snow seemingly steaming from eroding so fast. This dense fog covered most of the region through the 27th when temperatures reached the 60s. With a quickly eroding snow pack and heavy rain, flooding became a concern with almost every river gage in northeast Illinois and northwest Indiana going into flood stage.

The three days post-Christmas included almost every type of hazard known to the Midwest with all of the following headlines active at one point or another, and sometimes all at the same time, during this period: Freezing Rain Advisory, Dense Fog Advisory, Wind Advisory, Flash Flood Watch, Flash Flood Warning, Severe Thunderstorm Warning, Tornado Watch, Flood Warning, and Gale Warning. All in all, it was a proper way to end a month that ends up being in the Top 5 wettest Decembers of all time and the Top 10 snowiest Decembers. Not to mention that the precipitation that accumulated in this month went on to put Chicago over the 50 inch mark for the year of 2008, which is the wettest on record dating back to 1871.

Needless to say that those temperatures for the month were below, while precipitation was over 3 inches above normal and snow totals being over 10 inches above the norm. The warmest temperature of the month came on the 27th when it reached 61, while the coldest temperature came on the 21st when the mercury dropped to -6. 4 records were broken during the month, with the first being on the 9th when 1.47 inches of precipitation fell, the second being on the 16th when 4.8 inches of snow fell, and the next two occur on the 27th with a record high being tied at 61 and 1.74 inches of precipitation falling.

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