

Central Indiana

January 2018

Climate Summary

Tied for 50th Coolest on Record at Indianapolis

Tied for 57th Driest on Record at Indianapolis

Tied for 47th Least Snowiest on Record at Indianapolis

Temperatures

2018 began on a bitterly cold note highlighted by the second coldest New Year's Day on record for Indianapolis and the coldest start to a year for the region in 90 years. Highs struggled to rise into the single digits after starting the year well below zero.

Temperatures would remain bitterly cold over much of the first week of the month with many locations unable to get above freezing until the 7th. Lows through this first week were often below zero. The average temperature for the first 6 days of the month at Indianapolis was a brutally cold 3.2°, marking the coldest start to a year through the first 6 days on record. The warmer temperatures on the 7th ended a 12 day stretch dating back to December 26 in Indianapolis where temperatures failed to rise above 20°, a new record.

Temperatures recovered to near normal levels from the 7th through the 9th, then briefly surged to well above normal levels on the 10th and 11th as highs rose into the upper 50s and largely removed the snowpack that had been built up in late December and the first week of January. Much colder air once again returned in the wake of a winter storm that brought a mixture of wintry precipitation to the area beginning late on the 11th and continuing into the 12th. High temperatures once again dropped back below freezing from the 13th through the 18th, with the coldest air coming on the 16th in the wake of a fresh snow cover as a renewed surge of Arctic air overspread the Ohio Valley. Highs were just in the single digits on the 16th, with subzero lows again impacting the region.

Beginning on the 19th, the dominant upper level trough which had enabled repeated shots of bitterly cold air to overspread the eastern U. S. since late December finally relaxed and would not return for the rest of the month. The result was near to occasionally above normal temperatures through the end of January with highs largely above freezing. Highs flirted with 60° on the 26th as gusty southwest winds brought much warmer air into central Indiana. Arguably, the best weather day of the entire month came just two days later on the 28th as temperatures rose during the afternoon into the 50s under bright, sunny skies and with little wind.

Indianapolis had subzero lows on 8 nights in January, matching 1994 and 2014 for the most subzero nights in January over the last 35 years. Indianapolis has now had 11 subzero nights so far in the 2017-2018 winter.

Site	January 2018 Avg Temp	January 2018 Difference from Normal	Highest Temperature	Lowest Temperature
Indianapolis	25.1	-3.0	58 on 11 and 26	-12 on 2
Lafayette	22.2	-4.3	59 on 11	-19 on 2
Muncie	26.4	-0.1	59 on 11	-10 on 1 and 2
Terre Haute	24.6	-3.6	60 on 11	-9 on 6 and 16
Bloomington	27.0	-2.4	60 on 11	-9 on 2 and 6
Shelbyville	25.8	-2.9	59 on 11	-14 on 2
Indy – Eagle Crk. (*)	24.9	-3.2	59 on 26	-12 on 2

(*) – High temperature and average temperature missing at Indy-Eagle Creek on 1/23 and 1/24.

At Indianapolis, there were 17 days with above normal average temperatures and 14 days with below normal average temperatures.

January 2018 was tied for the 50th coolest in the Indianapolis area since weather records began in 1871.

Precipitation

Monthly melted precipitation for January ranged from around an inch in northern Indiana to slightly over 4 inches in southwest Indiana. Precipitation was normal to below normal in much of the state with totals above normal in southwest Indiana and small portions of central and south central Indiana. Much of the northern half of the state received 1 to 2 inches while lake effect areas in extreme northern Indiana and most of southern Indiana received 2 to 4 inches of melted precipitation.

Rains and melting snow and ice brought brief lowland flooding along portions of rivers streams twice in January. The first occurrence was after the rains on the 11th and the second was following the rains on the 22nd. Minor ice jams flooding did occur on several streams.

As January ended, streams were receding and only trace amounts of snow remained in northern Indiana. The frost depth reached 12 inches in central Indiana on the 8th and 9th. Temperatures largely above normal since the 19th have completely thawed the ground.

Site	January 2018 Precipitation	January 2018 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	2.00	-0.66	0.49 on 11	3 days 4-6
Lafayette	1.21	-0.65	0.45 on 22	4 days 17-20
Muncie	1.24	-0.99	0.38 on 12	3 days 18-20
Terre Haute	1.21	-1.15	0.42 on 11	5 days 17-21
Bloomington	2.75	-0.56	0.73 on 11	3 days 4-6
Shelbyville	2.71	+0.32	1.01 on 11	2 days 1-2, 5-6, 18-19, 25-26 and 30-31
Indy – Eagle Crk.	1.83	-0.38	0.54 on 22	2 days 1-2, 5-6, 18-19, 25-26 and 30-31

January 2018 was tied for the 57th driest in the Indianapolis area since weather records began in 1871.

Snowfall and Wintry Precipitation

Monthly snowfall for January measured from 2 inches in portions of west central Indiana to more than 30 inches in LaPorte County in northwest Indiana. Monthly total of 8 to 24 inches were common in the lake effect areas of northern Indiana while the remainder of Indiana received between 2 and 8 inches of snow.

Monthly snowfall was below normal for most of central Indiana, normal to above normal in northern Indiana and above normal in southern Indiana. Much of the snow in northern Indiana was lake effect snow and fell from the 1st through the 8th. Winter disturbances from the 12th through the 16th brought much of January's snow to central and southern Indiana. A combination of freezing rain and snow caused significant impacts for much of central Indiana throughout the 12th as progressively colder air came into the region on the back side of a low pressure system.

A disruptive icy event occurred late on the evening of the 23rd into the morning of the 24th as a combination of freezing mist and drizzle combined to create a thin layer of black ice on numerous untreated roads with ground temperatures below freezing. Interestingly, precipitation amounts were a trace to a hundredth of an inch

Severe Weather

Scattered strong thunderstorms on the evening of the 22nd produced small hail and wind gusts peaking near 55 mph which knocked down a few trees.

For information on severe weather in other areas during January, visit the Storm Prediction Center “Severe Weather Event Summaries” website at <http://www.spc.noaa.gov/climo/online/>.

Miscellaneous

The maximum wind gust at Indianapolis International Airport was 41 mph out of the southwest on the afternoon of the 31st. Fog or haze was reported at Indianapolis on 17 days during the month, with dense fog occurring on 5 days. Freezing rain or drizzle was recorded on 5 days, ice pellets on 2 days and blowing snow on the 12th. Thunder was reported on just 1 day in January, the 22nd.

February 2018 Outlook

The official outlook for February 2018 from the Climate Prediction Center indicates a greater chance of below normal temperatures across much of central Indiana. At Indianapolis, the average temperature for the month is 32.1 degrees. There is a slightly greater chance for near to above normal precipitation for central Indiana as well. The average precipitation for February at Indianapolis is 2.32 inches, with 6.5 inches of snowfall.

Data prepared by the Indianapolis Forecast Office.