

Central Indiana

July 2020

Climate Summary

Tied for 24th Warmest on record at Indianapolis

44th Wettest July on record at Indianapolis

Temperatures

July would be a hot month across central Indiana, with many locations rising above 90° on 10 to 15 days during the month. The first 10 days of July saw the most sustained heat through the entire month, with nearly every day at or above 90° in the low to mid 90s. With a humid airmass as well, low temperatures fell only into the low to mid 70s through the period. Temperatures would slip back into the 80s beginning on the 10th with the passage of a cold front. An additional cold front that produced severe weather on the afternoon and evening of the 11th would reinforce the cooler temperatures, keeping daytime highs largely in the 80s through the 17th. The coolest overnight lows would occur during this stretch as well, dropping into the upper 50s and lower 60s.

The rest of the month would see a return to a warmer and more humid airmass, but higher heat would be largely held in check to the west of the region. Mid 80s to lower 90s were common from the 18th through the 25th with lows predominantly in the mid and upper 60s. A return to much more humid conditions arrived on the last weekend of the month as highs rose into the lower 90s. The final day of the month to produce 90°+ temperatures occurred on the 27th in advance of a strong cold front that passed during the afternoon and evening and produced severe weather across the region. The coolest day of the month would come just a few days later on the 30th, as persistent clouds and showers kept many areas in the 70s.

Average temperatures for the month generally ran 3 to 5° above normal with many locations experiencing their warmest July since 2012. Indianapolis would rise to 90° or higher on 11 days during the month, the third consecutive year with at least 10 days in July at or above 90°.

Site	July 2020 Avg Temp	July 2020 Difference from Normal	Highest Temperature	Lowest Temperature
Indianapolis	78.4	+3.0	94 on 5 and 8	61 on 13
Lafayette	78.0	+3.4	95 on 8 and 26	59 on 13
Muncie	78.0	+3.6	93 on 4 and 6	60 on 14
Terre Haute	77.5	+2.5	94 on 5 and 8	59 on 13 and 14
Bloomington	78.0	+4.1	96 on 5	60 on 14 and 15
Shelbyville	79.0	+4.9	95 on 8	61 on 13 and 14
Indy – Eagle Crk.	78.0	+2.8	93 on 6 and 8	62 on 13

At Indianapolis, there were 25 days with above normal average temperatures, 3 days with below normal average temperatures and 3 day with normal average temperatures.

July 2020 was tied for the 24th warmest in the Indianapolis area since 1871.

Precipitation

The month of July was generally wetter than normal for much of the state with portions of southwestern Indiana receiving 2 to 6 inches of rain higher than normal. Portions of northern Indiana on the other hand ended the month at 1 to 2 inches below normal. Some locations in western and southern Indiana saw over 10 inches of rain while points only a county away saw less than 4 which characterized the spotty nature of precipitation through the month.

The first week of the month was hot and dry for much of central Indiana with most of the state receiving less than an inch of rain outside of the Indianapolis area which had over 2 inches in spots from the 6th to the 7th. A more widespread rain and severe weather event on the 11th brought several inches of rain to western and southwestern parts of the state.

Isolated to scattered rain and storms continued through the middle of the month before the pattern became more active from the 19th through the 22nd. Rain occurred in several waves during this time period with the initial round of rain on the 19th and 20th. The only flash flooding event of the month for central Indiana occurred in Sullivan County where estimates of 4 to 6 inches of rain fell in just a few hours and led to road closures across the county due to rapidly rising water. Rain and storms continued into the 21st and 22nd, impacting much of the rest of the state as well along with periods of severe weather. Generally dry conditions returned on the 23rd through the 26th. Rain and storms accompanied a cold front on the 27th, impacting counties across eastern Indiana which up to this point had not received as much rain as much of the rest of the state.

Overall, total rainfall amounts varied from 2 to 8 inches across the state with some locally higher and lower amounts. Most of the state spent the month highlighted in the US Drought Monitor with D0 (Abnormally Dry) at the beginning of the month and spotty locations of D1 (Moderate Drought) popping up by the 2nd week of the month. No river forecast points reached flood stage in July, but several smaller gages reached flood stage during the month in periods of locally heavy rain. On average, rivers and streams were near normal for this time of the year with some lower than normal locations in north central Indiana where the least amount of rain fell. The addition of heavier rainfall by the end of the month led to improvements in the Drought Monitor with just D0 focused primarily over northern parts of the state by early August.

Site	July 2020 Precipitation	July 2020 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	4.90	+0.35	1.01 on 6	4 days 23-26
Lafayette	2.81	-1.16	0.59 on 27	5 days 1-5
Muncie	3.32	-1.06	1.11 on 27	5 days 1-5
Terre Haute	6.91	+2.12	1.59 on 11	6 days 1-6
Bloomington	4.79	-0.10	1.39 on 30	6 days 1-6
Shelbyville	4.13	-0.58	1.17 on 30	3 days 1-3 and 24-26
Indy – Eagle Crk.	3.05	-1.21	0.84 on 30	4 days 1-4 and 23-26

July 2020 was the 44th wettest July in the Indianapolis area since weather records began in 1871.

Severe Weather

The biggest severe weather event of the month occurred from the late afternoon of the 11th through the early morning of the 12th as a series of thunderstorms complexes produced severe weather across the region. A line of thunderstorms dropped southeast across central Indiana during the late afternoon and evening, downing trees and power lines along with a few occurrences of large hail as well. A second storm complex impacted the western portions of the area late in the evening of the 11th into the early morning of the 12th with additional wind damage occurring.

Thunderstorms producing damaging winds again impacted central Indiana on the afternoon and evening of the 21st and 27th. Strong winds caused large metal doors to blow away at the Toyota plant near Lafayette with the storms on the 21st. A building under construction near Brownsburg was toppled by strong winds, causing 3 injuries and a fatality.

Additional scattered severe storms occurred on the 7th, 8th and 19th.

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

Miscellaneous

The maximum wind gust at the Indianapolis International Airport was 52 mph on two separate days when thunderstorms were in the Indianapolis metro area: from the east on the afternoon of the 7th and from the west on the afternoon of the 27th. Fog or haze was reported at Indianapolis on 16 days this month with dense fog occurring on the 17th and 28th. Thunder was reported at Indianapolis on 13 days in July.

August 2020 Outlook

The official outlook for August 2020 from the Climate Prediction Center indicates a greater chance of near to below normal temperatures across central Indiana. At Indianapolis, the average temperature for the month is 74.2 degrees. The outlook also suggests a greater chance for near to above normal precipitation during the month. The average precipitation for August at Indianapolis is 3.13”.

Data prepared by the Indianapolis Forecast Office.