

Central Indiana

June 2024 Preliminary Climate Summary

32nd Warmest June on record at Indianapolis (Tied)

22nd Driest June on record at Indianapolis

Temperatures

Site	June 2024 Average Temp	June 2024 Dep from Nml	Highest Temperature	Lowest Temperature
Indianapolis Int'l Airport	74.2	+1.7	93 on 17 th	44 on 11 th
Lafayette	72.6	+1.9	95 on 17 th , 22 th	38 on 11 th
Muncie	73.9	+0.6	94 on 17 th	45 on 11 th
Terre Haute	74.5	+1.8	96 on 16 th , 17 th	46 on 12 th
Bloomington	73.5	+1.5	94 on 17 th	40 on 11 th
Shelbyville	75.7	+2.5	96 on 17 th	45 on 11 th
Eagle Creek Airpark	74.7	+2.2	94 on 17 th	46 on 11 th

At Indianapolis, June 2024's daily average temperatures were above normal on 25 days, below normal on 8 days and at normal on 1 day.

Precipitation

Site	June 2024 Precipitation	June 2024 Dep from Nml	Wettest Day	Longest Dry Stretch
Indianapolis Intl	2.16	-2.79	0.61 on 29 th	7 days, 6 th -12 th
Lafayette	2.55	-2.01	0.80 on 29 th	4 days, 19 th -22 nd
Muncie	3.53	-1.28	0.75 on 5 th	3 days, 6 th -8 th , 10 th -12 th , 15 th -17 th , and 20 th -22 nd
Terre Haute	2.21	-2.43	0.71 on 23 rd	5 days, 18 th -22 nd
Bloomington	2.09	-3.00	0.52 on 4 th	8 days, 9 th -16 th
Shelbyville	2.19	-2.97	0.58 on 29 th	8 days, 15 th -22 nd
Eagle Creek Arpk	3.15	-1.91	1.13 on 29 th	7 days, 6 th -12 th

Following an at times very wet spring, Indianapolis recorded below normal precipitation for the first month since March 2024, albeit the third consecutive dry June.

Severe Weather

There were three main events that produced severe weather across central Indiana in June.

June 17th:

Hot and humid lower levels under weak vertical wind shear promoted a couple rounds of widely scattered afternoon and evening showers and pulse thunderstorms across the Midwest. A more organized cluster of convection tracked northward through southwestern Indiana during the early evening. Here the combination of very high downward CAPE values around 1200 J/kg and strong boundary layer lapse rates set the stage for wet microbursts, with this potential being realized by the few strongest storms whose updrafts approached 30,000 feet above ground level. Resulting damaging winds were confined to Vigo, Daviess and Martin Counties.

June 25th:

During the afternoon hours a complex of thunderstorms crossed into Indiana from Illinois. A widespread swath of 65 to 75 mph winds occurred from central Terre Haute as far south as Sullivan, with the southeastward path then continuing into Clay, Owen, Greene, and Brown counties before gradually beginning to weaken as it entered Lawrence and Jackson counties.

The southern side of Terre Haute saw numerous large trees and power poles snapped or uprooted with widespread property damage to cars and homes along with thousands of power outages. Clay City and Jasonville also were areas of more concentrated damage with additional trees downed. The Bloomington ASOS measured 78 mph which lined up with the town of Bloomington seeing the most significant damage from this event with a large swath of the town seeing widespread tree, power pole, and property damage.

Spotters later measured a 75 mph wind gust in far southern Brown county where additional tree damage was found but after this point the storm complex gradually weakened with the last damage noted in the Seymour area as the storm complex moved into an air mass that was more stable following weaker thunderstorms that occurred earlier in the afternoon. The storm complex exited south central Indiana at around 4:45 PM for a total event time of 2 hours between Terre Haute and Seymour.

June 29th:

Southwesterly surface winds ahead of an approaching cold front boosted dewpoints as high as 76 degrees at Terre Haute and Indianapolis airports, and 77 degrees at Shelbyville. Resulting CAPE of 2000-3000 J/kg initiated thunderstorms over east-central Illinois, which tracked eastward into west-central Indiana. This clustered matured into a bow echo that produced a measured 68 mph gust at Crawfordsville before downing trees across the Indianapolis Metro,

most notably the Beech Grove area. The storms were maintained by 20-30 kts of 0-3 km wind shear, with wind damage reported through Rush County where several large trees were downed. Anomalously high precipitable water values around 2.15 inches promoted isolated heavy rainfall of 2.00 to 2.30 inches from south of Crawfordsville to northern portions of the Indianapolis Metro, although antecedent abnormally dry conditions prevented any flooding.

For info on severe weather in other areas during June, visit the Storm Prediction Center “Severe Weather Event Summaries” website at spc.noaa.gov/climo/online

July 2024 Outlook

The official outlook for July 2024 from the Climate Prediction Center indicates slightly greater chances of above normal temperatures. The normal July temperature at Indianapolis is **75.8** degrees.

The outlook also indicates equal chances of above, below, or near normal precipitation for the region. The normal July precipitation at Indianapolis is **4.42”**.

*Data prepared by the Indianapolis Weather Forecast Office’s State Climate Team
Questions should be referred to nws.indianapolis@noaa.gov*