FALL 2024 Review

of Weather Conditions Experienced in Central Indiana

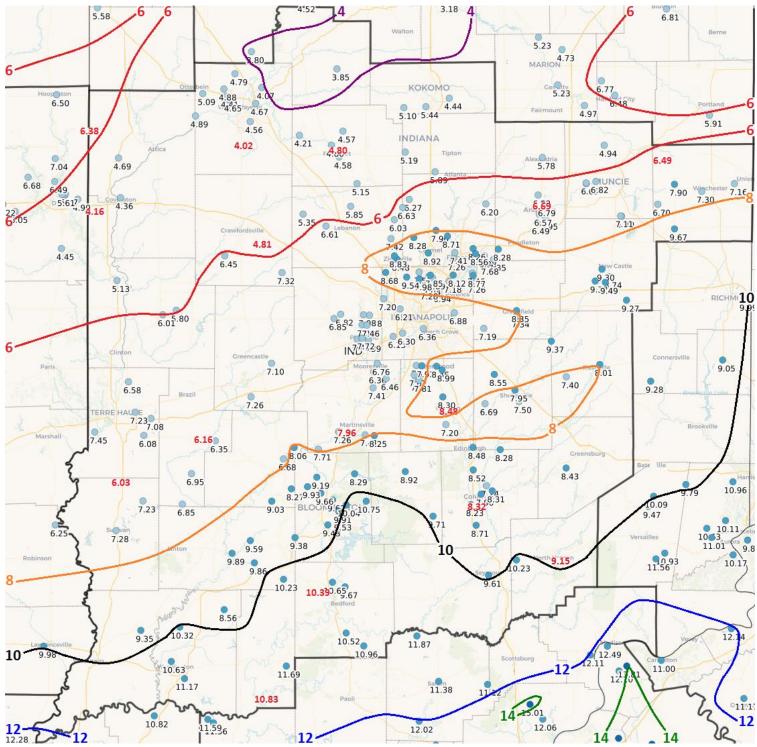
3rd Warmest on record at Indianapolis^{} 31st Driest on record at Indianapolis

FALL 2024 Temperature Data for Central Indiana Sites

	FALL 2024	FALL Season	Difference	
Station	Average	Normal Temp	From	
	Temperature		Normal	
Indianapolis Int'l Airport	59.6	55.6	+4.0	
Lafayette	57.8	53.5	+4.3	
Bloomington	59.0	55.1	+3.9	
Muncie	58.2	55.6	+2.6	
Terre Haute	59.0	54.9	+4.1	
Shelbyville	60.3	55.9	+4.4	
Eagle Creek Airpark	59.7	55.5	+4.2	

FALL 2024 Temperature Extremes Across Central Indiana

Station	Highest Temperature	Lowest Temperature
Indianapolis Int'l Airport	<mark>94</mark> on 9/21	14 on 11/30
Lafayette	93 on 9/21	13 on 11/30
Bloomington	92 on 9/21	17 on 11/30
Muncie	<mark>94</mark> on 9/21	16 on 11/30
Terre Haute	93 on 9/20, 9/21	16 on 11/30
Shelbyville	96 on 9/21	17 on 11/30
Indianapolis Eagle Creek AP	<mark>94</mark> on 9/21	16 on 11/30



September – November 2024 Total Precipitation, Through the Evening of 11/30 As Reported By Central Indiana CoCoRaHS & COOP Observers

For the period 1200 AM EDT 9/1/2024 -to- 1200 AM EST 12/1/2024, data is unofficial**

Fall precipitation ranged from near-record dry northeast of Lafayette (3.00-4.00") to slightly above normal values (that were more than three times readings from Carroll County) south of US-50. A wetter November improved Indianapolis' to 62% of normal.

Site	FALL 2024 Precipitation	FALL Season Normal Precip	Difference From	Greatest Daily
	Frecipitation		Normal	Precipitation
Indianapolis Int'l Airport	6.04	9.81	-3.77	1.07 on 9/27
Lafayette	4.30	8.37	-4.07	0.52 on 9/24
Bloomington	9.22	11.03	-1.81	1.44 on 9/27
Muncie	5.54	9.28	-3.74	0.80 on 9/22
Terre Haute	6.07	9.42	-3.35	1.19 on 11/5
Shelbyville	6.91	9.95	-3.04	1.60 on 9/27
Eagle Creek Airpark	6.70	9.07	-2.37	1.35 on 9/27

FALL 2024 Precipitation Data for Central IN Sites

Fall 2024 Severe Weather

SEPTEMBER 2024 continued November 2024's trend of sporadic/ isolated severe weather before Post-Tropical Storm Helene's more widespread strong to severe winds on the 27th. Thunderstorms on the 6th produced isolated microbursts over southeastern central Indiana, with property and crop damage in west-central Jennings County. Much needed downpours from the 20th's scattered evening storms also included damaging winds in Indian Heights (Howard Co.) and a few Marion County neighborhoods. A very brief **EFO landspout** tornado on the 22nd, amid rather benign showers, caused superficial damage to a pole barn in Yorktown (Delaware Co.).

Through the 27th's daytime, Helene followed a curved track while weakening, plowing across the Southeast from near Atlanta, GA, through central Kentucky and into far southwestern Indiana. Monthly record low barometric pressure readings occurred across nearly all of Georgia, Tennessee and Kentucky, and into southern Indiana. Over portions of the local region, resultant, steadily increasing gradient winds reached severe magnitude within a 3-hour early evening period. Trees and poles were uprooted or snapped in at least 12 of central Indiana's 39 counties, with a focus up the I-65 corridor in a broadening swath up to the northern Indianapolis Metro Area. Trees were downed into homes in Boone, Marion, and Putnam County where one person was injured. Severe gusts were recorded in Bartholomew and Owen Counties, as well as at Indianapolis where a sustained wind of 47 mph was observed, and the peak gust of 68 mph was one of the highest in the airport's 50-year wind record. Evansville, IN measured a minimum sea level pressure of 29.19", setting a state-wide record for the month of September. Indianapolis' 29.32" minimum fell short of the city's September record (29.32" from 9/25/1941).

OCTOBER 2024's near-record-setting driest first 30 days brought a complete lack of severe weather, which was in contrast to an otherwise active year across central Indiana, with 31 severe weather episodes since late February that included 12 tornadoes.

Instead, Moderate Drought (D1) expanded southward through October, encompassing most areas north and west of the Indianapolis Metro by the October 22nd U.S. Drought Monitor Update. By the October 29th update, D1 had advanced to all but far southern and far eastern central Indiana, while Severe Drought (D2) had expanded southward into ten of the region's northern counties – including all areas northwest of Frankfort and north of Muncie.

NOVEMBER 2024's weather events were free of any severe events, despite the return to slightly above normal precipitation. However, for the calendar year, the state of Indiana has now tallied **57 tornadoes** - the **2nd-greatest total** since records began in 1950.

Widespread Severe Drought (D2) across Indiana's northern third to start the month, included all of Carroll County and portions of 8 other northern counties. Several much-needed rain events lead to an overall improvement in drought conditions, with D2 shrinking to only include most or all of Carroll and Tippecanoe Counties and only small portions of five others by month's end.

For info on severe weather in other areas during the FALL season, visit the Storm Prediction Center "Severe Weather Event Summaries" website at <u>spc.noaa.gov/climo/online</u>

Indianapolis Fall 2024 Monthly Data

INDIANAPOLIS SEPTEMBER 2024 SUMMARY

	Average Temp Precipitation		Highs ≥ 70°	Lows ≤ 40°
September 2024	70.9	1.52	28	0
Normal September	67.8	3.14	25	1
Diff from Normal	+3.1	-1.62	+3	-1

SEPTEMBER 2024 All-Time Ranks... Precipitation: 20th Driest (Tied) Temperature: 22nd Warmest (Tied)

INDIANAPOLIS OCTOBER 2024 SUMMARY

	Average Temp	Precipitation	Snowfall	Highs ≥ 70°	Lows ≤ 40°
October 2024	60.0	0.60	Т	22	7
Normal October	55.5	3.22	0.1	11	11
Diff from Normal	+4.5	-2.62	-0.1	+11	-4

OCTOBER 2024 All-Time Ranks... Precipitation: 8th Driest Temperature: 18th Warmest (Tied)

INDIANAPOLIS NOVEMBER 2024 SUMMARY

	Average Temp	Precipitation	Snowfall	Highs ≥ 70°	Lows ≤ 40°
November 2024	47.9	3.92	3.3	4	15
Normal November	43.3	3.45	0.8	2	22
Diff from Normal	+4.6	+0.47	+2.5	+2	-7

NOVEMBER 2024 All-Time Ranks... Precipitation: 42nd Wettest Temperature: 12th Warmest Snowfall: 14th Snowiest (Tied)

INDIANAPOLIS FALL 2024 SUMMARY

	Average Temp	Precipitation	Snowfall	Highs ≥ 70°	Lows ≤ 40°
FALL 2024	59.6	6.04	3.3	54	22
Normal FALL	55.6	9.81	0.9	38	34
Diff from Normal	+4.0	-3.77	+2.4	+16	-12

FALL 2024 All-Time Ranks... Precipitation: 31th Driest Temperature: 3rd Warmest Snowfall: 16th Snowiest (Tied)

Winter 2024 Outlook for Central Indiana

The official outlook for the 2024 Winter season (December-February) from the Climate Prediction Center, indicates equal chances of above, below, or near normal temperatures for northwestern counties, and slightly greater chances for above normal temperatures for the rest of the region.

The outlook also indicates slightly greater chances of above normal precipitation across all of central Indiana.

At Indianapolis, the normal winter temperature is **31.5°F**. The normal winter precipitation and snowfall are **8.47**" and **21.2**", respectively.

Data prepared by the NWS Indianapolis Weather Forecast Office's Indiana State Climate Team Questions should be referred to <u>w-ind.webmaster@noaa.gov</u>