# The Hoosier Observer

**Indiana CoCoRaHS monthly e-newsletter**

**August 2025**


*The trend section in the graphic above compares this month's data to the same month from the previous year. A change of 10 or more is necessary for a trend arrow to be displayed as either pointing up or down. If the change is less than 10, a white dash is used to indicate that the data is similar to that of the previous year.*

## Coordinator Update

***Andrew White, NWS Indianapolis***

July set a record for the greatest number of 500 report days in a month, with 12. We'd like to thank all of you who helped us reach that goal, but also encourage those who only report on days of precipitation. We had 621 stations that reported, but our greatest one-day total was only 530 stations.

On that note, we also came close to seeing our first month with an average of 500 daily reports. If just a few more folks had entered their zeroes or caught a day they accidentally missed, we could have reached that new milestone. Let's all work together in August to see if we can reach those new heights!

We'd also like to recognize the 13 new Indiana observers (Allen [3], Blackford, De Kalb, Kosciusko, Marion, Miami, Newton, Owen, Porter, Tippecanoe, Warren) that joined CoCoRaHS in the last month. Thanks for joining the team!

## Indiana's Precipitation Report

***Austin Pearson, Indiana State Climate Office***

Indiana’s July 2025 precipitation totaled 5.42 inches, which was 1.13 inches above normal or 126 percent of normal. The temperature was higher than usual throughout the state, with July reaching 3.3°F above the 1991-2020 climatological average. The statewide average minimum temperature was 67.8°F, which is 4.1°F above normal. This also marks the second-warmest

minimum temperature on record for July (1895-2025), just 0.2°F lower than the record set in 2011.

Indiana's July 2025 rainfall showcased typical summer convection, with highly variable rainfall across the state (Figure 1). Total precipitation ranged from about 3 to over 10 inches in different areas, reflecting numerous heavy downpours separated by more moderate rain. This patchy pattern is common for summer, caused by thunderstorms that deliver intense rain to some regions while leaving others drier. New Salisbury 1.2 WNW (Harrison County) topped the precipitation charts with 12.23 inches in July. Meanwhile, Hope 5.2 NW in Bartholomew County recorded a total of 1.76 inches of rain in July, the lowest in the state. The percent-of-normal map further highlights this variability, showing areas of above-normal and below-normal rainfall spread throughout Indiana. Portions of northern, central, and southern regions received significantly more rain than the July normal, with some areas reaching up to 200 percent of normal rainfall. Near these areas of heavy rainfall, there were also patches with below-normal precipitation, which is quite common during the summertime.

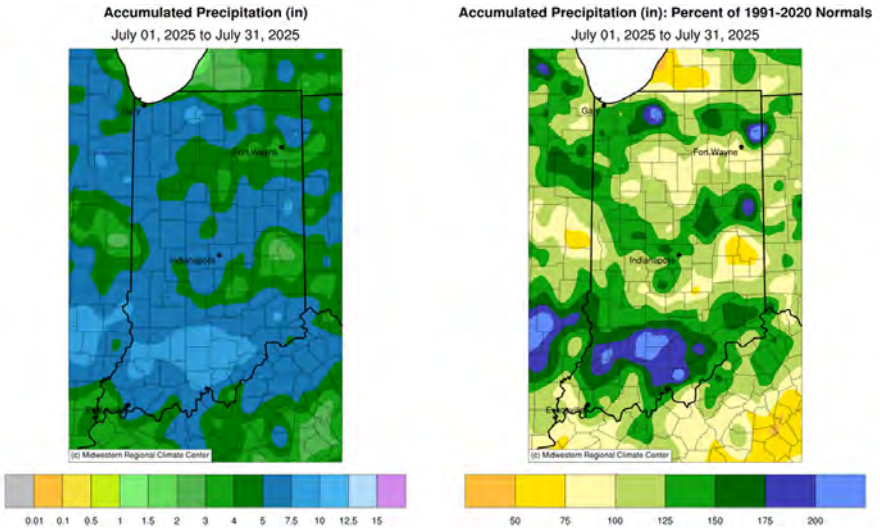



*Figure 1: Left - Accumulated precipitation from July 1-31, 2025. Right - Accumulated precipitation from July 1-31, 2025, represented as the percent of the 1991-2020 climatological average.*

Drought conditions in Indiana showed improvement through July, thanks to sporadic yet impactful rainfall throughout the month (Figure 2). At the beginning of July, about 25% of the state, mainly in northern counties, was classified as abnormally dry (D0) or in moderate drought (D1). By the end of the month, D0 areas decreased to less than 20%, and D1 dropped to only 3%.

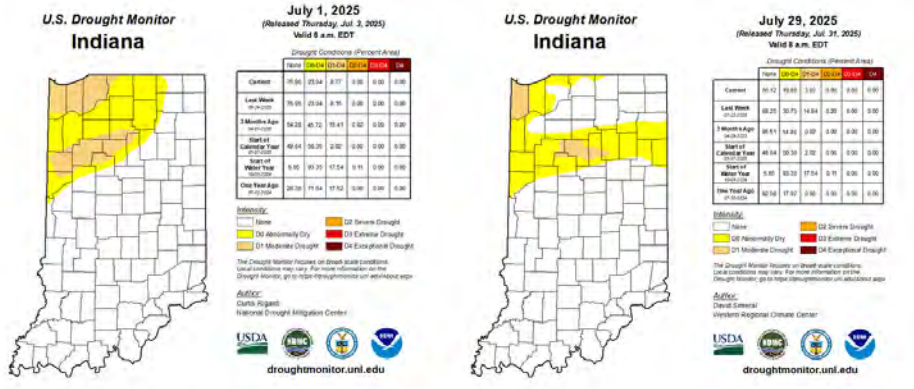
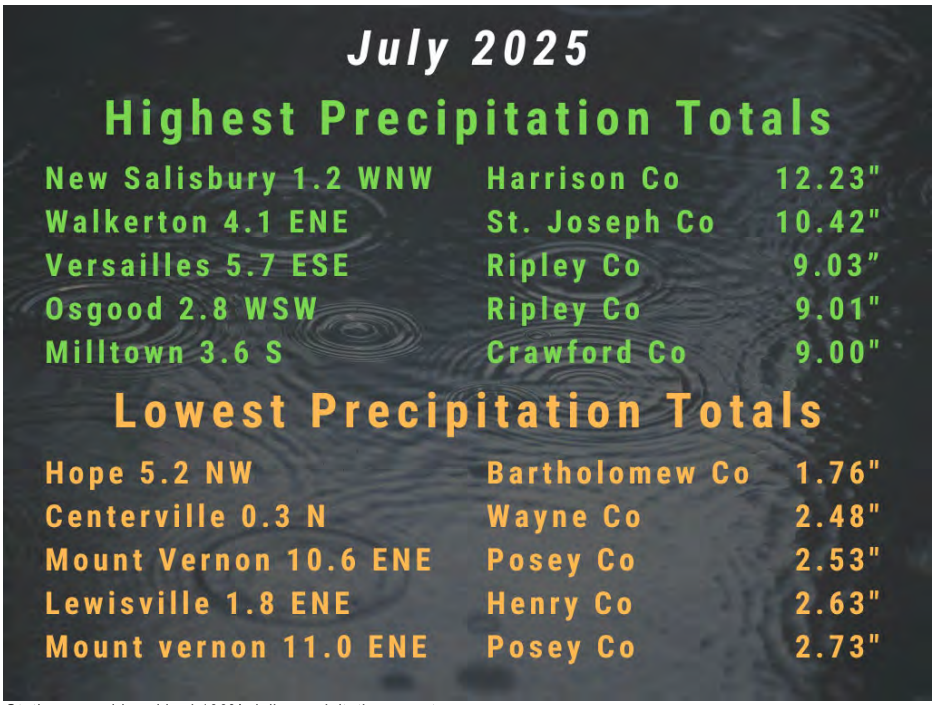



*Figure 2: Left - June 3, 2025 US Drought Monitor. Right - June 24, 2025 US Drought Monitor*




*Stations considered had 100% daily precipitation reports.*

## Will 90°F Return: A History of Late-Season Heat in Indiana

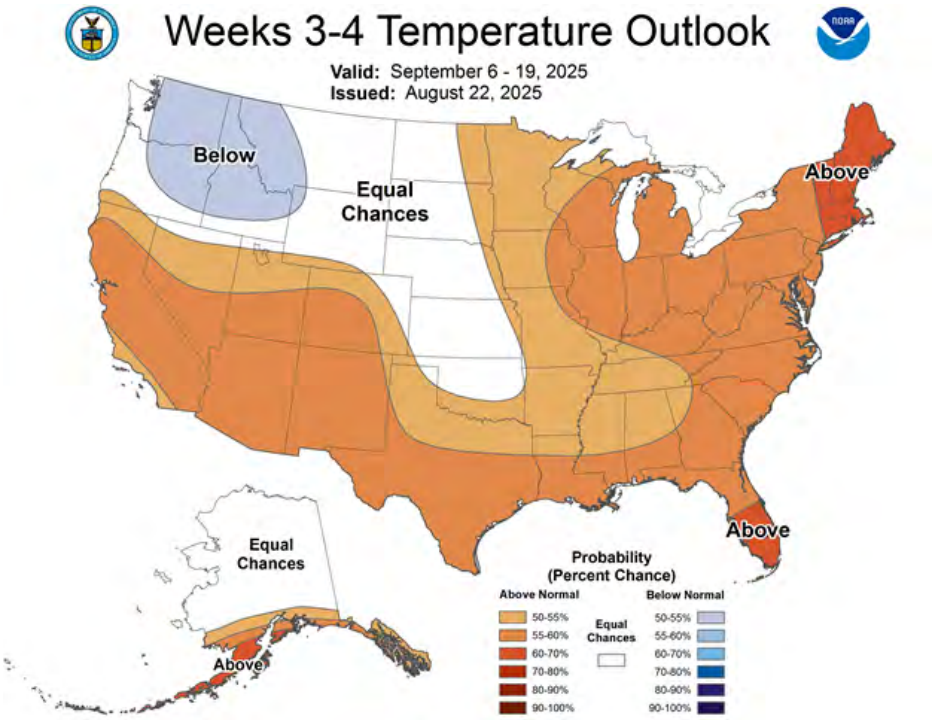
***Jacob Dolinger, Indiana State Climate Office***

Cooler temperatures are here to stay, for now. Low temperatures have bottomed out in the low to mid-50s across northern Indiana in recent days, with isolated pockets of temperatures in the 40s. That's 5-10°F below normal for low temperatures across the northern half of the state. High temperatures have also been below normal, with highs staying in the 70s just in time for Labor Day Weekend, despite normal high temperatures for much of the state usually still in the low 80s.

That's welcome news for anyone who has struggled with what has been one of Indiana's most humid summers on record. In Lafayette, the dew point temperatures rose to 75°F or above for 122 hours so far this year, the fifth most of any summer since dew point observations began in 1996. In Terre Haute, dew point temperatures at or above 75°F were observed for 464 hours—the most of any summer since records began there in 1996. The reason 75°F is chosen as a benchmark is that it is when humidity is considered oppressive.

So, after this summer of humidity, it's worth getting a little excited about fall weather. Some folks may be wondering, though: is that all? What's the chance of more summer heat? It's certainly not unheard of. While oppressive dew points become considerably less likely in September and October, the actual air temperature can rise well into the 80s and even 90s in early Autumn.  Indianapolis observed 90°F+ temperatures on September 19 and September 21, 2024—just in time for the astronomical Fall. In 2019, temperatures rose to 92°F from September 30 to October 2 in Indianapolis. Even as far north as South Bend, temperatures at or above 90°F have been observed in September in 18 of the past 25 years, and once in October in 2019. It's essential to note that many of these 90°F observations in September have occurred right around or just after the Autumnal Equinox (usually September 22), which leaves plenty of time this year for such heat to occur.

Even with all of these historical data in mind, just because the temperature doesn't reach 90°F doesn't mean it won't feel hot heading through September and October. The threshold that constitutes above normal temperatures—aka "heat"—changes heading into the Fall. Since normal high temperatures in the state fall below 80°F for much of September, it only takes a few days of temperatures a few degrees above 80°F and a dew point temperature around 70°F for it to feel summery. For the folks hoping for a final stretch of summery weather, you may be in luck: the National Weather Service's Climate Prediction Center (CPC) has a likely chance of above normal temperatures from September 6-19.




**Use Caution When Entering a Series of Observations**

***Steve Hilberg, CoCoRaHS Headquarters***

One of the most common errors we encounter in the data is when observers enter two or more observations simultaneously. We tend to see these when observers go back to enter data; they might not have had a chance to enter the data at the time the observations were made, which is usually at the end of the month. Data entered late (that is, not on the day of the observation) is the most common source of errors in our quality control process.

Frequently, observations are switched when entered, resulting in yesterday's amount being entered for today and today's amount being entered for yesterday's date. For example:

| Date | Actual Observation | Entered Observation |
|---|---|---|
| 30-Jul | 0.45 | 0.00 |
| 31-Jul | 0.00 | 0.45 |

They usually stand out clearly when compared to the nearest observations on the map. Another tool we use to check data is the Quantitative Precipitation Estimate produced by the NWS. This estimates precipitation based on radar and rain gauge data. Between these two, we are usually fairly confident in most cases when identifying "transposed" observations.

I think some of these occur because of the way we record the observations, i.e., when writing them down, observation dates are in ascending date order (7/30, 7/31). The first impulse is to enter the first observation on your list on the first Daily Precip report form when you log in. Remember, when entering observations, today's date is the default date that appears in the input form. Be sure to enter the correct observation for today. Then, select "My Data" in the top-line menu, then "Enter My New Reports," and choose "Daily Precipitation." Change the date in the form to yesterday's date, enter yesterday's observation, and so on. Ensure the date on the observation form matches the date of the measurement.

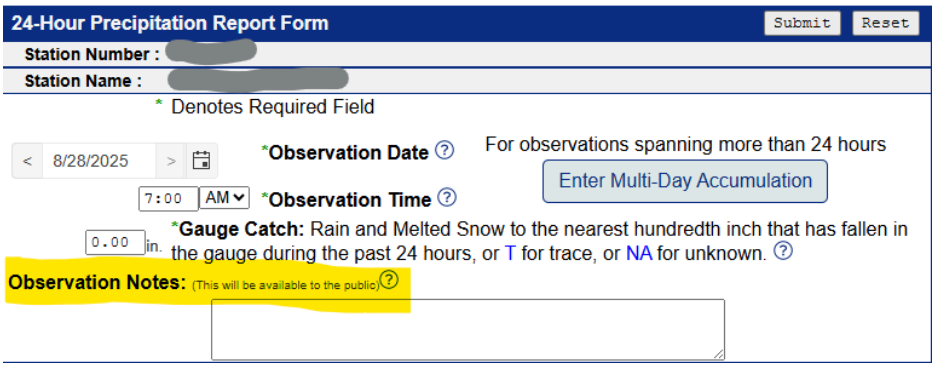
In a similar vein, observers who enter several days of observations will often enter an observation for the wrong date. This sometimes is because they write down the amount for the day it occurred, rather than the date it was measured, and then forget to correct for this. The bottom line is to be cautious when entering observations for two or more days simultaneously. Check your observations after they are entered. The easiest way to compare is to look at the observations for the same date in your county using the View Data menu, or examine the maps for each day. Periodically review your data using the CoCoRaHS Data

Explorer. Many errors can be avoided by checking your observation confirmation each day after it is entered. It's a good habit to get into.

## Tell Us About It in the Observation Notes

***Steve Hilberg, CoCoRaHS Headquarters***

Comments about your observation, the current weather, or any other information that may help interpret your daily observations are encouraged. Some observers include comments about the progress of their gardens, or the flow in a nearby creek, or anything else that may be of interest.  Information that helps explain your observation is especially of interest. For example, "Yes, I really measured 3.00 this morning. It came from a thunderstorm last evening" tells us more than you had three inches of rain. It informs us that the decimal is not misplaced (in case there is a question based on surrounding reports), when it rained, and that it was a thunderstorm - all important information. So, don't be shy about including comments. Mobile app users - you can include comments as well! Simply click on the "Optional notes" field on your screen and start typing, or use voice-to-text to dictate your notes. And yes, we do read them. Once in a while, an observer will "test" us by asking a question or stating something like "I bet no one is reading this."  They may have been surprised to get an email from me or one of the other coordinators in response! If you would like to see what type of comments are typically entered, click on View Data in the top menu and then select Daily Comments Reports below on the page.




## Use Care When Entering a Series of Observations - Check and Check Again!

***Steve Hilberg, CoCoRaHS Headquarters***

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The bottom line is to be careful when entering observations for two or more days at the same time and check your observations after they are entered. The easiest way to compare is to look at observations for the same date in your county using the View Data menu, or look at the maps for each day.

Periodically review your data using the CoCoRaHS Data Explorer. Many errors can be avoided by checking your observation confirmation each day after it is entered. It's a good habit to get into.

## If You Move, or Change Your Email Address

If you're moving to a new home and want to keep participating in CoCoRaHS, please let us know as soon as possible. Your observations are tied to a specific location, so we want to make sure that your new observations are correctly associated with your new address. Observations are most valuable when they are consistent at one location, so you might also suggest to the new owner or tenant of your current home that they consider joining CoCoRaHS. We have a **brochure** available for download, print, and distribution.

Once you have your new address, inform **us** so we can close your old station and set up a new one at your new location. Please avoid signing up for CoCoRaHS again yourself. Once

we've set up your new station, you can start entering observations from your new location. If you're moving to a different state, we can connect you with the state coordinator there to help you get started.

If you change your email address, please update your record in the CoCoRaHS database by logging in, selecting "My Account" from the top menu, and clicking "Edit" in the "My Information" section. Make your updates and click "Save."

Also, send a quick message to **in-sco@purdue.edu** with your new email address so we can update our newsletter mailing list, which is maintained separately from the main CoCoRaHS database.

**CoCoRaHS Newsletter Archive**

If you are interested in viewing past issues of The Hoosier Observer, visit the **Newsletter Archive** located on the Indiana State Climate Office Website.

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