

### The Hoosier Observer

Indiana CoCoRaHS Monthly e-newsletter

September 2025

TREND	STATISTIC	TOTAL
THE RE	TOTAL OBSERVERS REPORTING	604
<u> </u>	OBSERVERS WITH NO MISSING REPORTS	385
<b>A</b>	PERCENT OF TOTAL	64
<b>A</b>	AVERAGE DAILY REPORTS	492
	MAX # DAILY REPORTS AND DAY	544/13
	# DAYS WITH 400+ REPORTS	31
	# DAYS WITH 500+ REPORTS	9
	SIGNIFICANT WEATHER REPORTS	10
	CONDITION MONITORING REPORTS	48
5	EVAPOTRANSPIRATION REPORTS	218
<b>A</b>	NEW OBSERVERS	15

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.

## <u>Coordinator Update</u> *Andrew White, NWS Indianapolis*

We took a small step back in August, with numbers slightly below where they were last month. Given the recent dry weather, this isn't unusual, but we want to remind everyone how important it is to enter your zeroes each day. This really helps those who need a full month to use your data.

Another key item to help both the drought and weather communities is the condition monitoring reports. These reports are tracked and used to help guide the decision-making for the weekly drought updates that are created. If you've not done one and want more information, reach out to Andrew at andrew.j.white@noaa.gov, and he'd love to help.



We'd also like to recognize the 15 new Indiana observers (Benton, Brown, Carroll, Dearborn, Fulton, Hamilton [2], Hancock [2], Morgan, Porter, Shelby, Sullivan [2], Vanderburgh) that joined CoCoRaHS in the last month. Thanks for joining the team!

## Indiana's Precipitation Report Austin Pearson, Indiana State Climate Office

August 2025 is one of those months that will always stand out as one of the best for camping. I remember many cool, crisp mornings, comfortable days, and mild nights spent sitting by the campfire, enjoying S'mores and all the other goodies – it was pure perfection. Some of you might prefer the heat and humidity, but I'm just not a fan. No big deal, we can still be

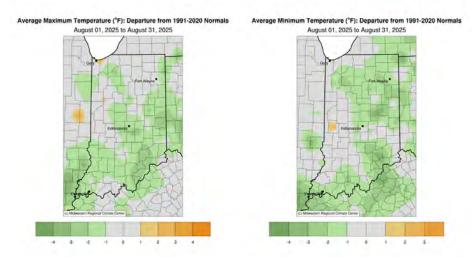


Figure 1: Left - August 2025 average maximum temperature represented as the departure from the 1991-2020 normal. Right - August 2025 average minimum temperature represented as the departure from the 1991-2020 normal.

Indiana's average August temperature of 71.7°F was 0.9°F below the 1991-2020 normal. More notably, Indiana's minimum temperature was 60.7°F, which is 1.1°F below normal for the month. Regional differences occurred across the state, with consistent cool pockets in the maximum and minimum temperatures (Figure 1). The cooler August actually kept us from breaking a minimum temperature record for the summer. June and July minimum temperatures averaged 65.3°F, which was 3.2°F above normal – the warmest minimum temperatures to start meteorological summer on record. Summer 2025 ended up with the fourth-warmest minimum temperature on record, tied with the summer of 2002. More on the summer in a later article.

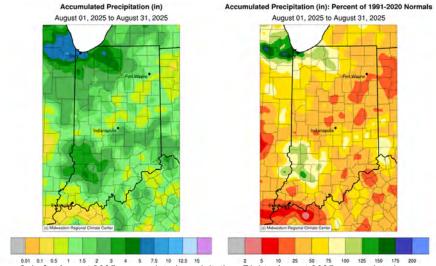


Figure 2: Left - August 2025 accumulated precipitation. Right - August 2025 accumulated precipitation represented as the percent of the 1991-2020 normal.

The cooler temperatures didn't come without a cost. Most of the state experienced precipitation totals that were less than 50 percent of normal (Figure 2). My poor rain CoCoRaHS gauge only recorded 0.64 inches for the month of August; however, there were 29 other stations with less precipitation than mine. Gas City 0.3 N, in Grant County, measured just 0.18 inches for the entire month, and close behind was Brownsburg 5.1 NNE (Hendricks County) with 0.19 inches. Drought signals were delayed somewhat due to the below-normal temperatures, which caused less evaporative demand. Although most of the state saw below-normal precipitation, some areas in northwestern Indiana and parts of southwestern Indiana received above-normal rainfall. Portions of Lake and Porter Counties observed precipitation that was between 125 and 175 percent of normal. Daviess County experienced stations with precipitation reaching up to 150 percent of normal for the month. However, the highest totals were in Porter County, with Portage 2.8 E and Portage 2.4 NNW receiving 7.40 inches and 7.23 inches, respectively. Statewide, the average precipitation was 1.98 inches, 1.62 inches below normal or 55 percent of normal.

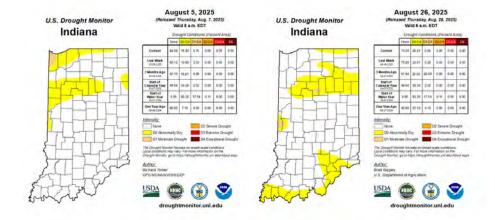


Figure 3: Left - August 5, 2025 US Drought Monitor. Right - August 26, 2025, US Drought Monitor.

August began with abnormally dry conditions (D0) in the northern part of the state and a small area of moderate drought (D1) in Lake County (Figure 1). D0 and D1 conditions in the far northwest improved due to localized, heavy rainfall. However, to the south and east, D0 conditions started to spread throughout the month. By the end of August, 26 percent of the state was in D0 or D1, up from 15 percent on August 5, according to the US Drought Monitor. This drier trend continued into mid-September as nearly 87 percent of the state was considered in D0 to severe drought (D2) in the September 16, 2025, US Drought Monitor (Figure 4). More on September's precipitation in October.

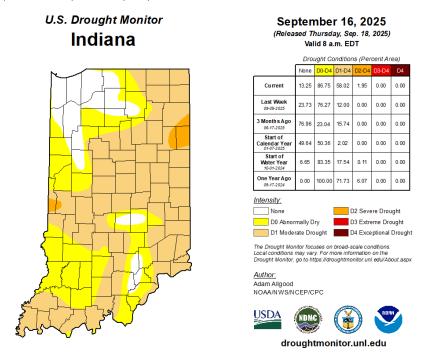


Figure 4: September 16, 2025, US Drought Monitor.

August 2025 Highest Precipitation Totals				
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Portage 2.8 E	Porter Co	7.40"		
Portage 2.4 NNW	Porter Co	7.23"		
Hammond 0.6 SSW	Lake Co	7.21"		
Gary 4.8 ENE	Lake Co	7.14"		
Gary 6.2 ENE	Lake Co	6.81"		
Lowest Precipitation Totals				
Gas City 0.3 N	Grant Co	0.18"		
Brownsburg 5.1 NNE	Hendricks Co	0.19"		
Jeffersonville 1.6 ESE	Clark Co	0.26"		
Indianapolis 12.6 NW	Marion Co	0.28"		
Newburgh 1.1 NNE	Warrick Co	0.34"		

Stations considered had 100% daily precipitation reports.

## Your Observations Make a Difference - Citizen Science at its Best Adapted from Steve Hilberg, CoCoRaHS Headquarters

We hope you enjoy and find value in participating in CoCoRaHS. It's interesting to observe how your rain or snow readings compare with others nearby, whether in your neighborhood, adjacent counties, or across the state, and how precipitation patterns change at your home from season to season and year to year. If these differences intrigue you, know that many others share the same curiosity.

CoCoRaHS is the largest source of daily precipitation observations in the United States. The data you submit each day is actively used by everyone, from neighbors tracking local rain totals to the National Weather Service.

Once you submit 100 daily reports, your observations become part of the official national climate archive at the National Centers for Environmental Information (NCEI). They are then distributed through the data feeds from NCEI, and can be readily accessed by users throughout the world. CoCoRaHS data is used in products developed and distributed by the Regional Climate Centers, State Climatologists, the National Weather Service and other NOAA agencies, USDA, USGS, and many others. Who knows, your measurements might even assist someone in conducting a climate or precipitation study 50 years from now!

# Thank you for all you do!

### A Late Observation - What to Do? Steve Hilberg, CoCoRaHS Headquarters

Your usual observation time is 7:00 a.m. Here are some situations you might face and how to deal with them.

This morning, thunderstorms were occurring at 7:00 a.m. You are able to safely make your observation at 8:30 a.m. What to do?

Enter the amount you measured using the Daily Report, BUT make sure to change your observation time from 7:00 a.m. to 8:30 a.m.

You overslept this morning (really overslept) and don't make your observation until 11:30 a.m. It rained overnight, and there were a few showers after 7:00 a.m. What to do?

Since your observation this day is more than four hours after your normal observation time, DO NOT submit a daily report for this day. Instead, wait until tomorrow morning and submit a Multi-Day Report to include this morning's amount and anything else that falls by 7:00 a.m. tomorrow morning.

When your daily observation is more than four hours later than your normal observation time, you should not submit a daily report for that day. Instead, wait until the next morning and submit a multi-day report for the two days. The reason for this is to keep observations "synchronized" with the normal morning-to-morning observation period. Since a later observation is likely to include accumulated precipitation for the hours after your normal observation time, it cannot be compared to observations for the morning of that day, and the observation for the next day will be lower than it should be because precipitation was included in the previous day's late observation.

When it is raining at observation time, some observers think that it is helpful to wait until the rain (or snow) stops so they can enter a "storm" total. Unless it is unsafe to do so, we want observers to make observations at their normal time whenever possible for the reason stated above. If you want to enter storm totals or intermediate amounts, use the Significant Weather Report.

## A Reminder about Dew - Don't be "Dewped" Steve Hilberg, CoCoRaHS Headquarters

Now that we are into fall, we'll have more days with warm afternoons and cool nights. Dew formation becomes more common, especially on those clear, cool nights. Some nights it just puts a haze on your car windshield and rain gauge, and other mornings you can soak your shoes walking ten feet through the grass. Dew accumulates on the outside and inside the funnel of your rain gauge, and if heavy enough, droplets of water will run down the funnel into the inner measuring tube. You might come out one morning with heavy dew and find a Trace, 0.01" or even 0.02" of water in your gauge. You're certain it didn't rain, so what to report?

Since dew is condensation (forms on the surface of an object) and not precipitation (falls from the sky), you do not report dew as Daily Precipitation. Don't report a Trace, either. Zero is the correct report. You can, however, mention heavy dew and what was in your gauge in the comments. Not sure whether or not it rained? If there was rain in the forecast, or you have other reasons to think it might have rained (clouds, overcast), you can enter the amount of water in the gauge as precipitation and include a note about the dew and uncertainty about rain. If you have the means and desire, you can also look online to see what radar is showing. Sometimes being an observer means you might need to do a little detective work!

#### 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 <a href="mailto:brochure">brochure</a> available for download, print, and distribution.



Once you have your new address, inform <u>us</u> 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 <a href="in-sco@purdue.edu">in-sco@purdue.edu</a> with your new email address so we can update our newsletter mailing list, which is maintained separately from the main CoCoRaHS database.

If you are interested in viewing past issues of The Hoosier Observer, visit the  $\frac{\text{Newsletter}}{\text{Archive}}$  located on the Indiana State Climate Office Website.

### Follow IN CoCoRaHS on Facebook!



Andrew White (andrew.j.white@noaa.gov)
Kyle Brown (kyle.brown@noaa.gov)
Beth Hall (bethhall@purdue.edu)
Austin Pearson (pearsona@purdue.edu)



Indiana State Climate Office