



The Hoosier Observer

Indiana CoCoRaHS monthly e-newsletter

September 2023

August 2023 Statistics

Total observers reporting	579
Observers with no missing reports	360
Percent of total	62
Average Daily Reports per Day	464
Max # of Daily Reports and Day	503/16
Significant Weather Reports	17
Condition Monitoring Reports	55
E-T Reports	208

September Coordinator Update

It's been another great month for CoCoRaHS reports across the state with our best months of the year. We also were able to tack on another two 500 report days this month which is fantastic! We've still got quite a few observers that only report when it rains and we'd love to see those zeroes entered!

As we end the water year we'd like folks to take a look at their water year summary which can be by finding your station within the link here: [CoCoRaHS WYS Reports](#). Now's a great time to go back and check on those random missing reports that may have slipped under the rug.

We'd also like to recognize the five new Indiana observers (Elkhart, LaGrange, Lake,

August 2023 Precipitation

The statewide total precipitation for August 2023 was 3.76 inches, which was 0.16 inches above normal or 104 percent of normal. Heavy precipitation was hyper localized as some spots in western, central, and southwestern Indiana received more than five inches of rain this month (Figure 1). These locations experienced more than 150 percent of normal precipitation (Figure 2). Other areas were not as lucky as they received less than 75 percent of normal precipitation. Northeast Indiana had locations that measured less than 50 percent of normal precipitation.

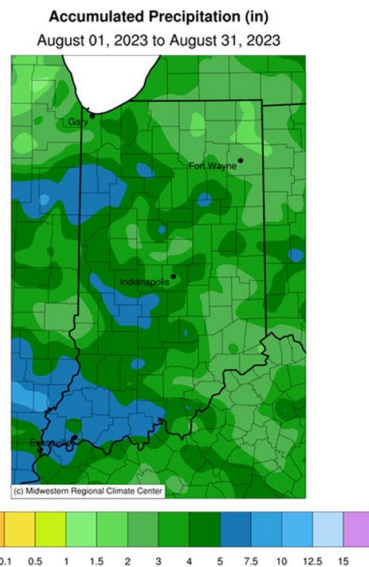


Figure 1: August 2023 precipitation.

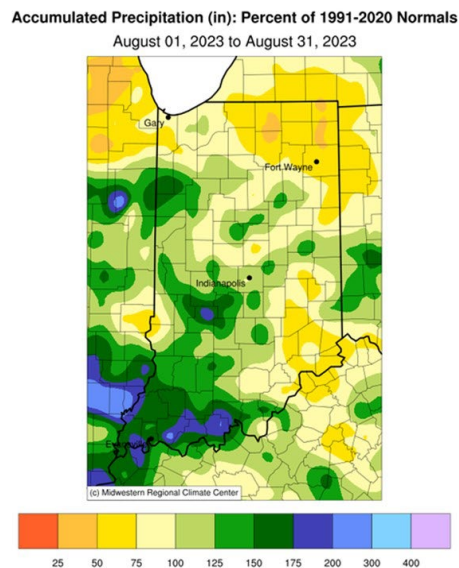


Figure 2: August 2023 precipitation represented as the

Marion, Monroe [2]) that joined CoCoRaHS in the last month. Thanks for joining the team!

Archived Newsletters

If you are ever interested in viewing past issues of *The Hoosier Observer*, visit the [State Newsletter Archive](#) on the CoCoRaHS website and scroll down to Indiana. You may also access other state newsletters from this website as well.

departure from 1991-2020 normal.

Data from stations that had 100% reporting for August were as follows: The highest precipitation total in Indiana (7.68 inches) was measured at HOLLAND 0.2 W, located in Dubois County. GOSPORT 4.0 WSW, located in Owen County, measured the second most precipitation, 7.42 inches. MOUNT AYR 1.6 NNE (Newton County) measured 4.58 inches on August 6, which was the highest single day total in the state.

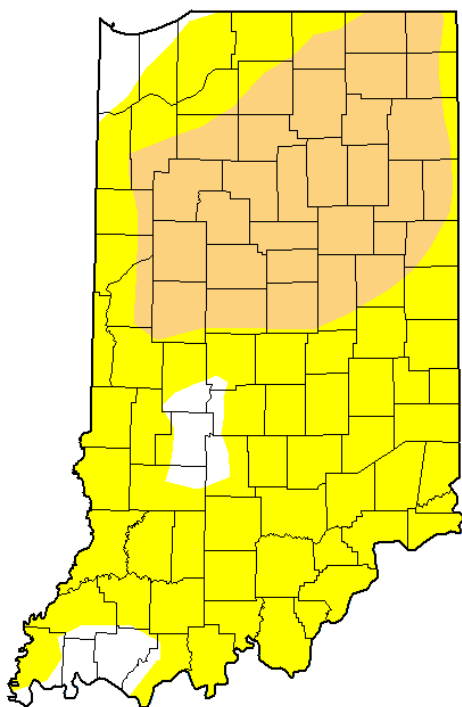
SOUTH BEND 5.9 W, located in St. Joseph County, measured 0.88 inches, which was the lowest precipitation total in the state. ANGOLA 6.2 NW, located in Steuben County, measured 1.34 inches, which was the second lowest observation in the state for August 2023.

How dry will we get?

By: Beth Hall

Our dry spell continues. Sure, there's been a few passing showers, but Indiana is quickly seeing impacts magnify from the lack of rain. The latest U.S. Drought Monitor map shows the expansion of *Abnormally Dry* (D0) condition across most of the state (Figure 1). The very few counties not *Abnormally Dry* or in *Moderate Drought* (D1) are drying out but have yet to show the impacts the rest of the state has seen.

**U.S. Drought Monitor
Indiana**



September 19, 2023

(Released Thursday, Sep. 21, 2023)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	6.82	93.18	32.80	0.00	0.00	0.00
Last Week <small>09-12-2023</small>	36.48	63.52	4.14	0.00	0.00	0.00
3 Months Ago <small>06-20-2023</small>	2.35	97.65	52.83	10.65	0.00	0.00
Start of Calendar Year <small>01-03-2023</small>	6.84	93.16	58.37	1.34	0.00	0.00
Start of Water Year <small>09-27-2022</small>	80.92	19.08	0.00	0.00	0.00	0.00
One Year Ago <small>09-20-2022</small>	82.95	17.05	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

Figure 1: US Drought Monitor conditions for data collected through Tuesday, September 19, 2023.

This may change by next week with very little rain in the forecast between now and this coming Tuesday. Northeast Indiana has experienced the worst impacts so far with most of that region now designated in *Moderate Drought* (D1). Precipitation forecast over the next 7 days (through September 29th) has Indiana dry through the week as amounts are currently forecasted below 0.10" (Figure 2). This will certainly help alleviate short-term impacts, but we may need more rain over the next few weeks to increase pond and creek levels to normal values for this time of year and see vegetation that is normally healthy in late September start to recover from this moisture deficit stress. Unfortunately, the 6-to-14-day precipitation outlook is favoring below-normal precipitation amounts over this period (through October 4th) with greater probabilities of drier-than-normal conditions near the end of that period.

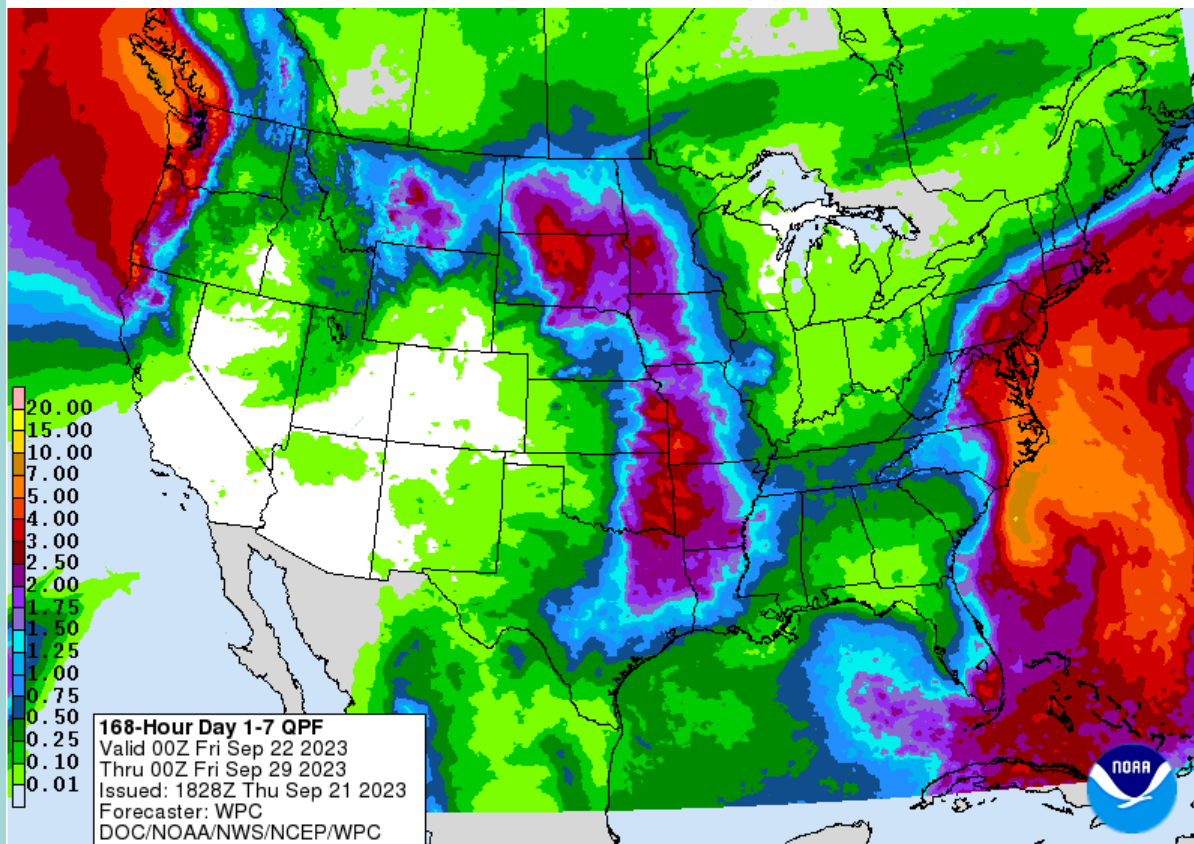


Figure 2: Seven-day total precipitation forecasted for the period from September 22-29, 2023. The small amount forecasted for Indiana is likely to fall after September 24th.

Temperatures have felt more fall-like this past week which means people are thinking more and more about mums and pulling out those Halloween decorations. I briefly considered putting out the Halloween lights at my house this past weekend, but my husband talked me out of it. Hey, at least I wasn't wanting to put out Christmas decorations! These fall-like temperatures are favored to shift to above-normal temperatures for this time of year over the next 6 to 14 days. Like the precipitation outlooks, the higher-than-normal temperature probabilities are highest near the end of this upcoming 2-week period. As modified growing degree-day temperature accumulations continue to slow down, Figures 3 and 4 show that since April 15th, Indiana ranges between 2400 (northern Indiana) and 3400 (southern Indiana) unit. This is slightly below normal across most of the state.

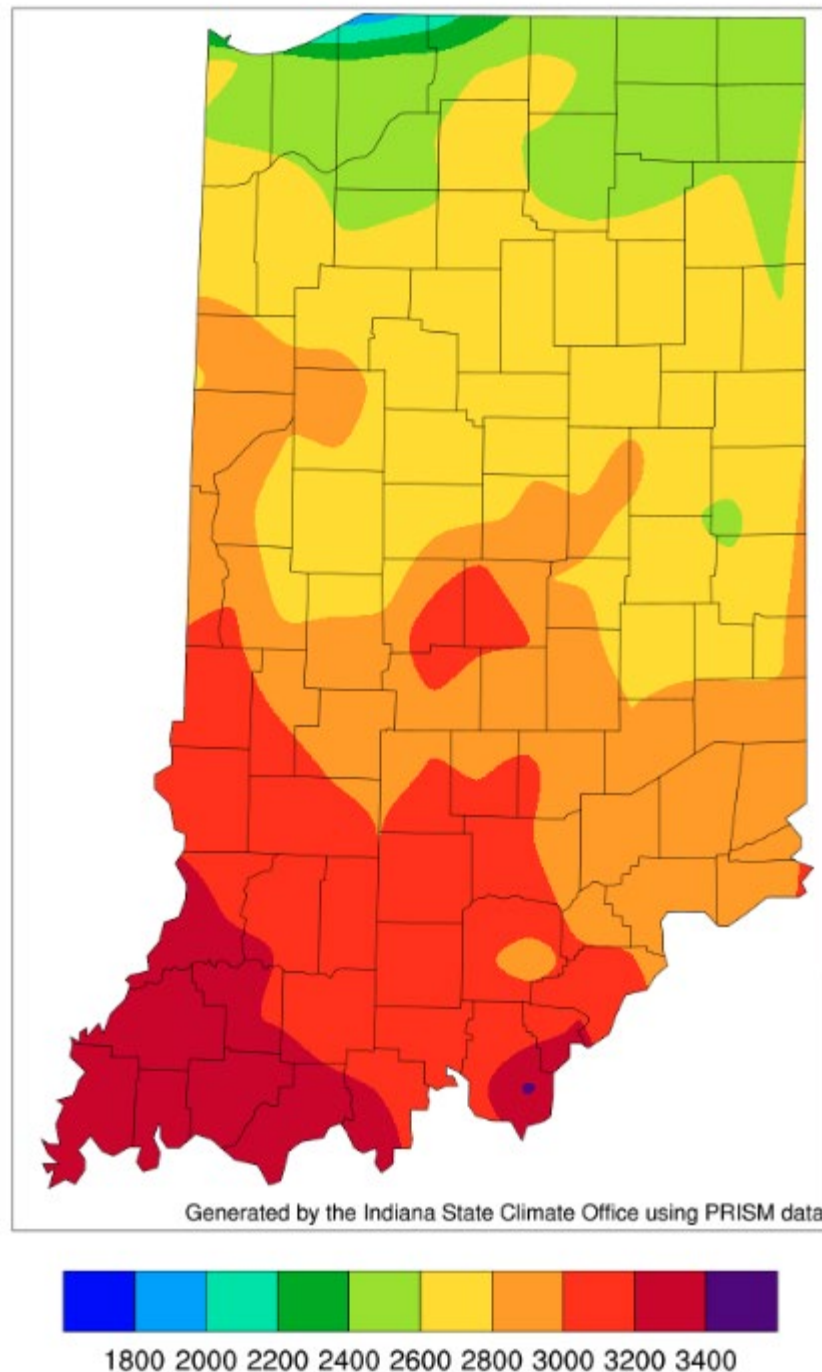


Figure 3: Modified growing degree day (50F/86F) accumulation from April 15-September 20, 2023.

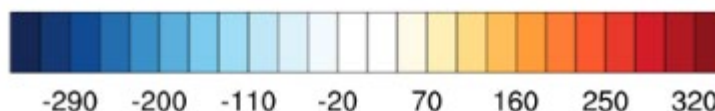
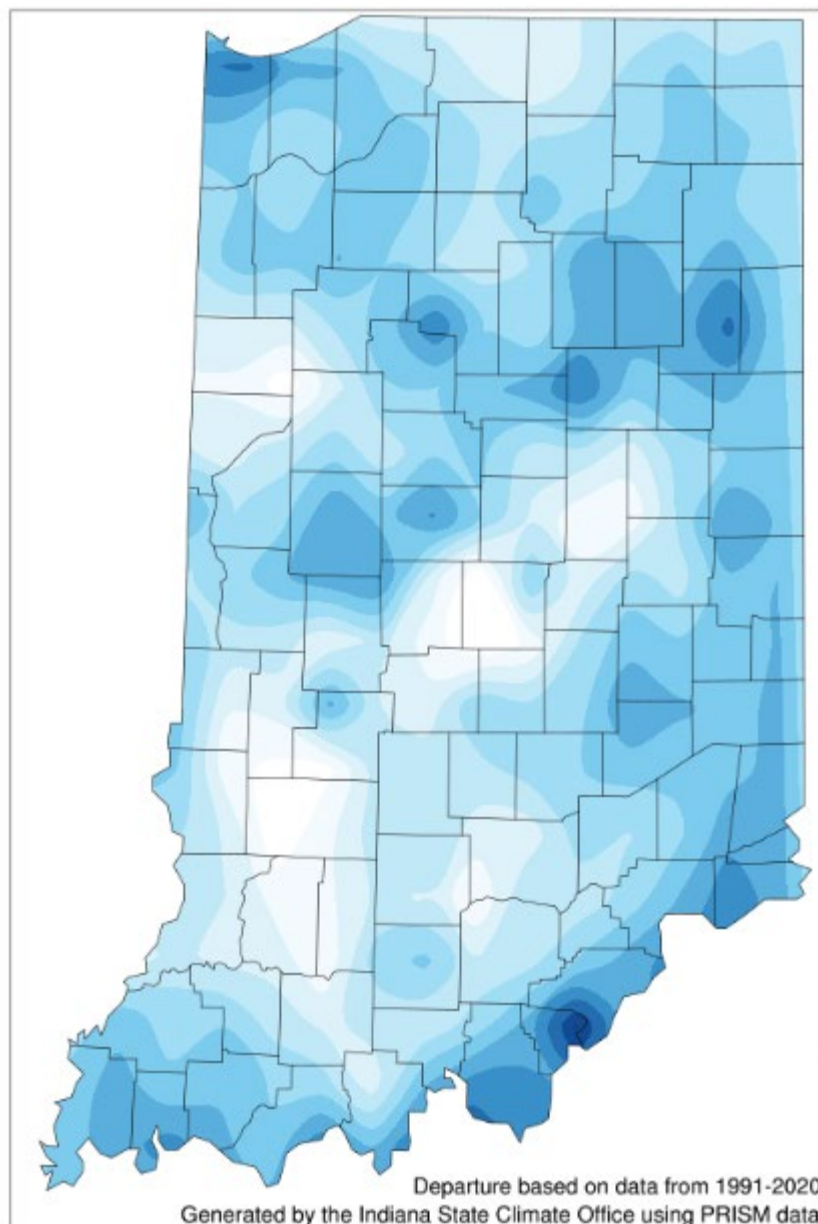


Figure 4: Modified growing degree day (50F/86F) accumulation from April 15-September 20, 2023, represented as the departure from the 1991-2020 climatological average.

Check Your Observation After Submitting

By Steve Hilberg

A lot of errors can be avoided if observers would take a moment or two after submitting their observation to check it quickly. Both the web site and the mobile app display your observation after it is submitted. Take a look at that before you close out the web page or the app. We have all done it or will do it at some time or another - you mean to type 0.05 and instead type 0.50 or 5.00. If not caught right away, the much higher or lower values, as the case may be, stand out like beacons on the the map. If you enter something by mistake and submit it, you can edit it. You can edit any of your reports by logging in on the web site and then selecting LIST/EDIT MY REPORTS. Click on the pencil icon next to the report you need to edit, and go from there. On the mobile app you can edit reports through the History option.

When You Change an Observation to "NA"

By Steve Hilberg

There are times when you may change your daily observation or multi-day observation to "NA". One of these would be when you mistakenly entered a multi-day total using the Daily Report Form and not the Multi-Day Accumulation form. In order to enter the multi-day report, the daily report(s) must be first set to NA. If there is one or more daily reports not NA in the multi-day range you are trying to enter an observation for, you will get an error. If you set any daily report to NA in order to submit a multi-day, please email and let us know your station number and the date of the daily report(s) with the NA. It will have to be deleted from the database so that there are not two entries for the same date. If for some reason you change a multi-day report to NA because it was entered in error, let us know that as well. It will need to be deleted from the database. If you have any questions about this, send us an email.

Can Your CoCoRaHS Station Be Considered for a State Record?

By Steve Hilberg

Are your observing practices and rain gauge siting "record worthy"? It may seem unlikely, but CoCoRaHS stations can be under consideration when there are potential monthly or annual precipitation records to be broken. The density of CoCoRaHS stations means setting a monthly record is not out of the question. We've had one or two close calls here in Indiana in past years. In many months, a CoCoRaHS station has had the largest total in the state. CoCoRaHS stations can be considered for records, along with the U.S. Cooperative network stations, because we have a standard and NWS-approved rain gauge, established observing practices, and training. Any potential record is carefully evaluated before it is officially designated a record. A few years ago I wrote about and reproduced a Twitter thread from the National Centers for Environmental Information (NCEI) that outlined the process of verifying a state record in Virginia in 2018. A CoCoRaHS station was one of three being evaluated for the record. You can read about it in this [CoCoRaHS Blog post](#).

If You Move, or Change Your Email Address

By Steve Hilberg

If you are moving to a new home and want to continue to participate in CoCoRaHS, please let us know as soon as possible. Your observations are tied to a specific location, so we don't want observations from your new location associated with your previous location. The value of the observations are increased by their continuity at a location, so consider suggesting to the buyer or new tenant of your home that they participate in CoCoRaHS! We have a brochure that you can download, print and give to them.

When you know your new address, let us know. When you are ready, we will close your old station and open a new station at your new address (DO NOT sign up for CoCoRaHS again). Once that's done, you can enter observations from your new location. If you are moving to a different state, we can help you get in touch with that state coordinator so you can get started there.

Let us know if you change your email address so that your record is up to date. You can update your email address in the CoCoRaHS database yourself by logging in and clicking on My Account in the top line menu. Click on Edit in the My Information box. Make any corrections, then click save.

Please also send a message to in-sco@purdue.edu with the email change as well so we can update your address on our newsletter mailing list. This list is maintained separately from the main CoCoRaHS database.

Indiana CoCoRaHS Coordinators



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