



# The Hoosier Observer

Indiana CoCoRaHS monthly e-newsletter

March 2024

## February 2024 Statistics

Total observers reporting	458
Observers with no missing reports	307
Percent of total	67
Average Daily Reports per Day	379
Max # of Daily Reports and Day	399/28
# Days with 375 Reports	22
# Days with 500 reports	0
Significant Weather Reports	25
Condition Monitoring Reports	24
E-T Reports	0

## March Coordinator Update

Our March recruitment season is off to a great start with over 30 stations recruited. We'd love to get another 20 by the end of the month, so reach out to your friends and neighbors!

We're also very happy to see that our percentage of observers with complete months of observations has been up over the last month with February seeing 67% of observers reaching that milestone. We really appreciate your efforts to ensure those days with zeros are caught.

We'd also like to recognize the

## February 2024 Precipitation

Austin Pearson, Climatologist, Indiana State Climate Office

The statewide total precipitation for February 2024 was 0.94 inches, which was 1.54 inches below normal or 38 percent of normal. The heaviest precipitation totals occurred in southern and southeastern Indiana with totals over 2 inches (Figure 1). Other areas received less than 1 inch for the entire month. Most of the state saw precipitation departures that were at least 1 inch below normal (Figure 2) or 50 percent of normal (see [precipitation percent of normal map](#)). CoCoRaHS station totals ranged from 0.18 to 2.31 inches in February.

See [February 2024's Highest and Lowest Precipitation Totals](#) for stations with no missing data.

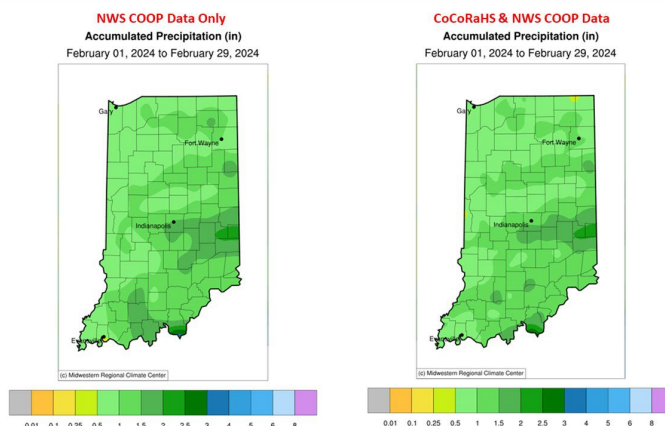


Figure 1: Left - Accumulated precipitation for February 2024 using NWS COOP Data only. Right - Accumulated precipitation for February 2024 using NWS COOP and CoCoRaHS Data. [Click for a larger image.](#)

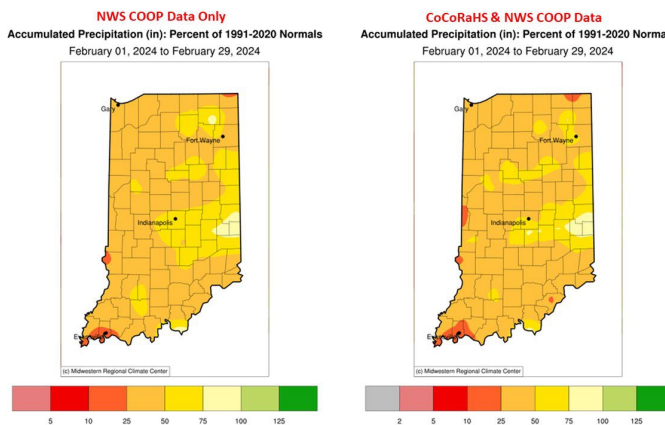


Figure 2: Left - February 2024 accumulated precipitation represented as the percent of 1991-2020 climatological average using NWS COOP Data only. Right - February 2024 accumulated precipitation represented as the percent of 1991-2020 climatological average using NWS COOP and CoCoRaHS Data. [Click for a larger image.](#) [Click the link for February 2024](#)

34 new Indiana observers (Allen[3], Boone, Clark[3], De Kalb, Delaware[2], Hancock, Hendricks, Johnson, Kosciusko, La Porte[3], Lake, Madison[3], Marion[4], Marshall, Morgan, Noble, Owen, Porter, Sullivan, Vanderburgh, Vermillion, Whitley) 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.

[departure from normal](#) map.

Snowfall continued below normal for most in the state. Heaviest snow totals occurred in central Indiana (Figure 3). FRANKFORT 0.9 SSE (Clinton Co.) recorded the highest snowfall total (6.6 inches) in February 2024. FRANKFORT 4.9 NNE (Clinton Co.) and ANDERSON 4.0 N (Madison Co.) measured 5.8 inches. Northern Indiana ran 2.5 to nearly 15 inches below normal in February.

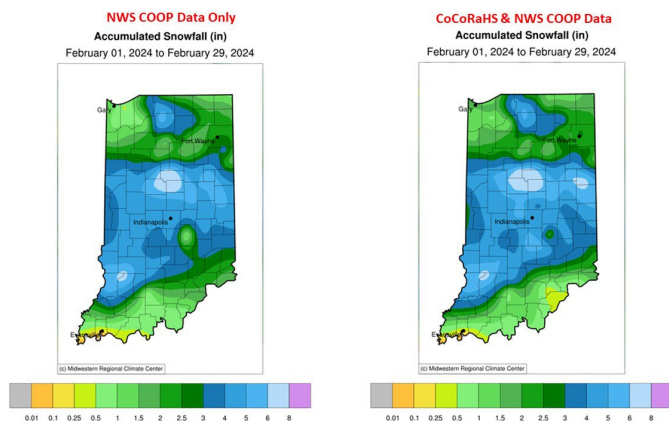


Figure 3: Left - February 2024 accumulated snowfall using NWS COOP Data only. Right - February 2024 accumulated snowfall using NWS COOP and CoCoRaHS data. Click links to see [Departure from Normal](#) and [Percent of Mean](#) snowfall maps.

## The Winter that Wasn't

Austin Pearson, Indiana State Climate Office

The 2023-2024 meteorological winter (December, January, and February) has concluded, but we only experienced a couple weeks of winter-like weather. The mean temperature was 35.8F, which was 5.3F above normal for the period (Figure 1). This was good for the second warmest winter since records began in 1895. The warmest winter on record was 1931-1932 with an average temperature of 37.4F, an astonishing 1.6F warmer than this winter. The Midwest had the warmest winter on record (32.7F), and it was the first time on record that the winter temperatures averaged above the freezing mark.

	Prcp $\updownarrow$	Prcp Normal $\updownarrow$	Prcp Dep $\updownarrow$	Prcp Norm % $\updownarrow$	Temp $\updownarrow$	Temp Normal $\updownarrow$	Temp Dep $\updownarrow$
Illinois	7.39	6.85	0.54	108	35.7	29.8	5.9
Indiana	8.26	8.44	-0.18	98	35.8	30.5	5.3
Iowa	3.83	3.52	0.31	109	30.7	22.9	7.9
Kentucky	11.30	12.03	-0.73	94	40.2	36.9	3.3
Michigan	5.25	5.92	-0.67	89	30.5	22.8	7.7
Minnesota	2.96	2.54	0.42	117	24.9	13.8	11.2
Missouri	6.72	6.88	-0.16	98	38.5	33.7	4.8
Ohio	8.01	8.35	-0.34	96	36.2	30.7	5.6
Wisconsin	3.10	3.87	-0.77	80	28.3	18.6	9.7
MRCC Region	5.85	5.97	-0.12	98	32.7	25.5	7.2

Figure 1: Winter (Dec - Feb) temperature and precipitation by state. Prcp = precipitation, Prcp Norm = 1981-2020 normal precipitation, Prcp Dep = departure from normal, Prcp Norm % = percent of normal precipitation, Temp = average temperature, Temp Norm = 1981-2020 normal temperature, Temp Dep = departure from normal

temperature.

Precipitation, totaling 8.26 inches, finished 0.18 inches below normal in Indiana. The Midwest winter precipitation finished 0.12 inches below normal. The bigger story was the lack of snowfall as the majority of the state ran 5-10 inches below normal for the winter (Figure 2). Northern Indiana had locations with snowfall that was 10-25 inches below normal.

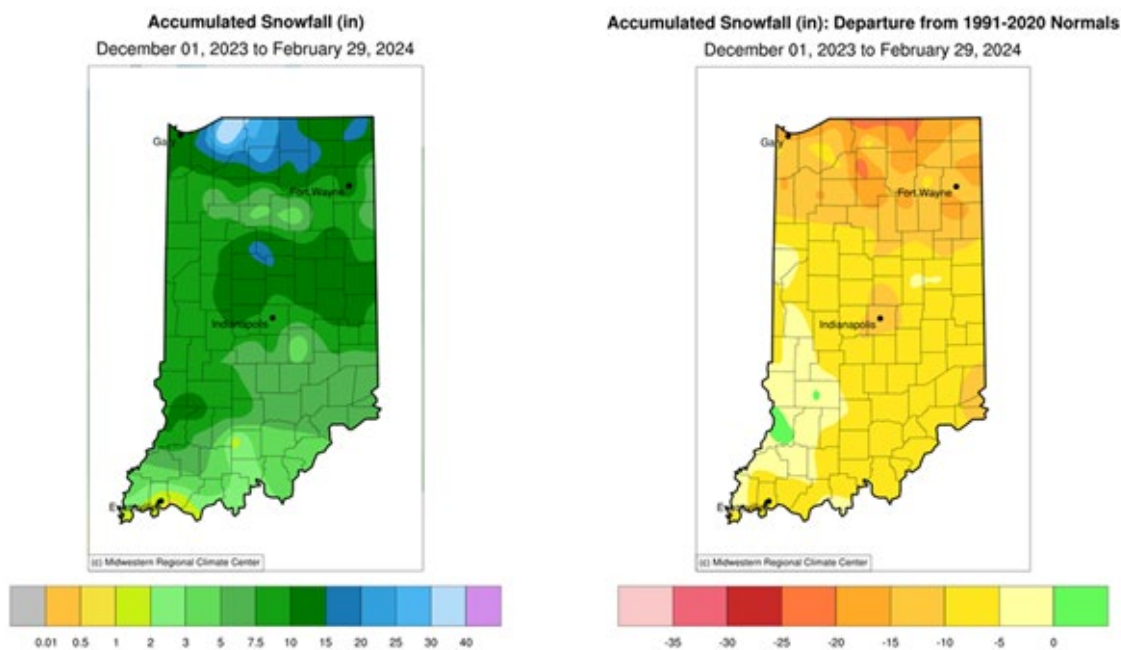


Figure 2: Left - Winter 2023-2024 accumulated snowfall. Right - Winter 2023-2024 precipitation represented as the departure from the 1981-2020 climatological average.

The Midwestern Regional Climate Center’s Accumulated Winter Season Severity Index objectively quantifies the relative severity of the winter season by accounting for the intensity and persistence of cold weather, the amount of snow, and the amount and persistence of snow on the ground. Most of the Midwest, like Indianapolis, experienced near record mild conditions this winter (Figure 3).

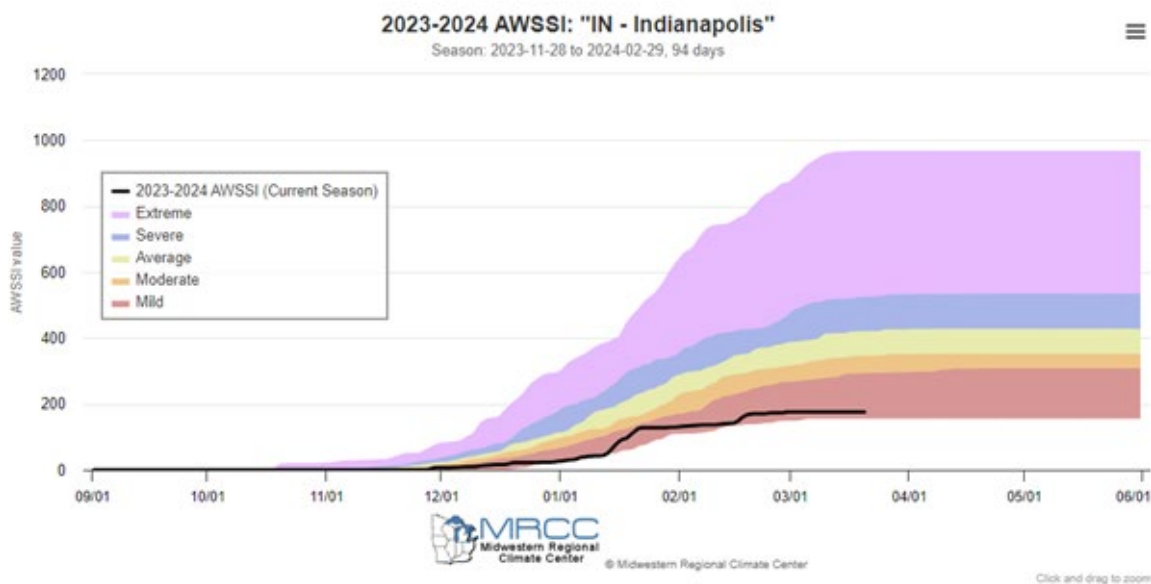


Figure 3: MRCC Accumulated Winter Season Severity Index for Winter 2023-2024 for Indianapolis, IN. This winter has been a near-record mild winter for Indianapolis.

At the beginning of the winter, over 44 percent of the state was in moderate drought. Drought

monitor conditions improved throughout the winter, as all that remained at winter's end was abnormally dry conditions in central and southern Indiana (Figure 4).

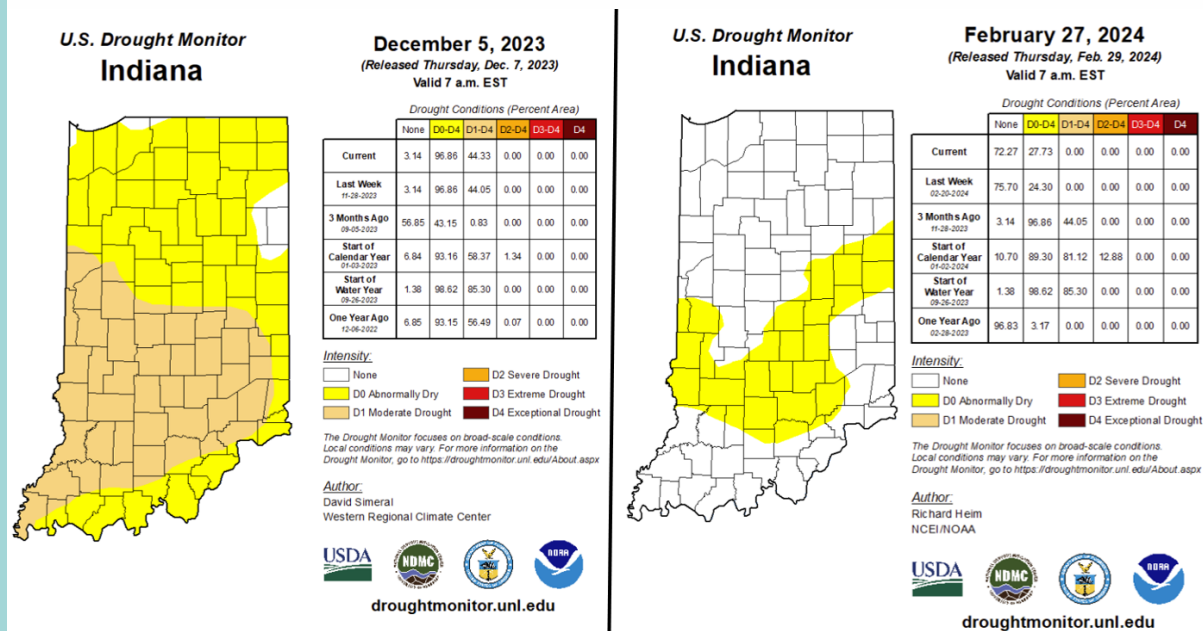


Figure 4: Left - US Drought Monitor from December 5, 2023. Right - US Drought Monitor from February 27, 2024.



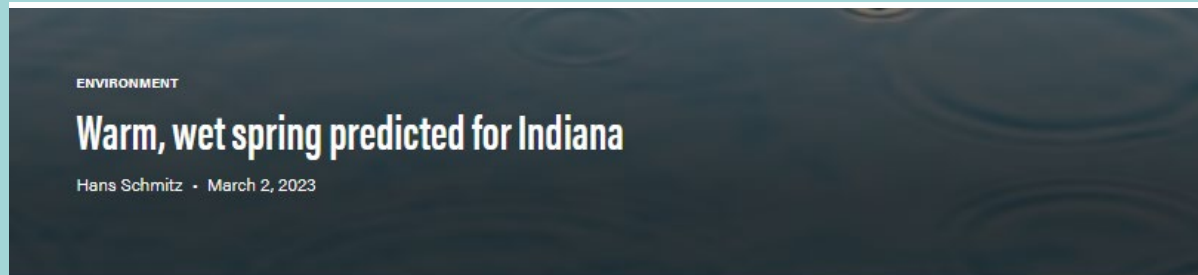
Watch Precipitation Absurdity Trailer by clicking the image above.

CoCoRaHS Precipitation Absurdity is our friendly recruiting contest to see who can recruit the most new volunteers during the 31 days of March. You will notice that the contest's name has changed in 2024, formerly March Madness. In order to not violate any copyright laws, we have decided to go in a new direction. This may sound absurd, but well it is. It's still the same contest, same cup, just a different name going forward. There is always a need for a greater number of observations, as the saying goes "**the rain doesn't fall the same on all**". Due to the variability

of precipitation, amounts measured can be quite different only a block or two away. Help fill in the gaps by recruiting a friend or relative during our contest. The more observations, the clearer the picture, the better the understanding of where it did and did not rain.

The contest is broken down into two categories: "**Traditional Count**" . . . the state that recruits the greatest number of new observers in March. The second category is "**Per Capita**" or population weighted . . . the state that recruits the greatest number of new observers per one million of it's total population. The winning state in each category receives the "**CoCoRaHS Cup**" to keep and exhibit for a year until next year's contest (*in the tradition of the NHL's Stanley Cup*). The cup usually travels around the state during the year, so check with your state coordinator for it's whereabouts at any certain time.

You may monitor current standings on the [CoCoRaHS Precipitation Absurdity 2024 Website](#). As of March 21, we're currently tied for 5th!



Much like the winter season, which has produced warm and relatively wet conditions across most of the state, the Climate Prediction Center is calling for continued above average temperatures and precipitation for Indiana this spring. [\[Read Full Article\]](#)

### [The Importance of CoCoRaHS Significant Weather Reports](#)

*Steve Hilberg, CoCoRaHS*

Now that we are moving well into the convective season (showers and thunderstorms)

Significant Weather Reports (SWRs) submitted by CoCoRaHS observers are a huge help to the National Weather Service. All SWRs are automatically routed to the local NWS office, and forecasters use these reports to monitor the progress of storms. Questions we get from time to time are "What is significant weather?" and "How often should I submit a Significant Weather report?". First, SWRs are supplementary reports and DO NOT replace your Daily Report nor should it be submitted in lieu of a Daily Report. The SWR is great for updating rainfall after your regular observation time. You should not be updating your daily report once it is submitted, except to make a correction or add additional information.

What is "significant weather"? In general, it is heavy rain (falling at a rate of an inch an hour or more), snow accumulations, high winds, icing from freezing rain, or flooding. However, you are not limited to this list - use your best judgment. How often should you report? You should report as often as needed to convey what is happening. Comments included with your SWR are very useful.

You may submit a SWR via the website. After you login, look in the left-hand menu under Enter My New Reports.



### [Hail Reports](#)

*Steve Hilberg, CoCoRaHS*

As you know "hail" is part of the CoCoRaHS name. Spring and early summer are prime time for hail, especially the large variety. We often see observers mention hail in their comments, but then forget to

submit a separate hail report. The CoCoRaHS hail database is the only one of its kind in the country. When you observe hail, please submit a hail report as soon as possible with as much information as you can provide (you can always go back and add to or edit your report later). As soon as you submit the hail report it is also transmitted to your local National Weather Service office. These reports are critical in severe weather situations and may be one of the triggers for a severe thunderstorm warning, for example. You can find the link to the hail report in the left hand menu once you log in on the web site. It is not available on the app.

### Enter My New Reports

- [Daily Precipitation](#)
- [Multi-Day Accumulation](#)
- **Hail**
- [Significant Weather](#)
- [Monthly Zeros](#)
- [Condition Monitoring Report](#)
- [Evapotranspiration](#)

### If You Move, or Change Your Email Address

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](mailto: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

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