



The Hoosier Observer  
Indiana CoCoRaHS monthly e-newsletter

March 2023

February 2023 Statistics

Total observers reporting	457
Observers with no missing reports	288
Percent of total	63
Average Daily Reports per Day	364
Max # of Daily Reports and Day	396/23
Significant Weather Reports	5
Condition Monitoring Reports	15
E-T Reports	0

March Madness for CoCoRaHS continues. We've had a great turnout so far for Indiana and we'd like to welcome all those that opened up a station so far this month. We'd also like to encourage each of you to find one friend or family member to invite to join.

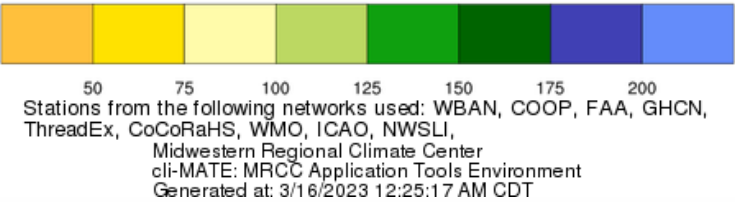
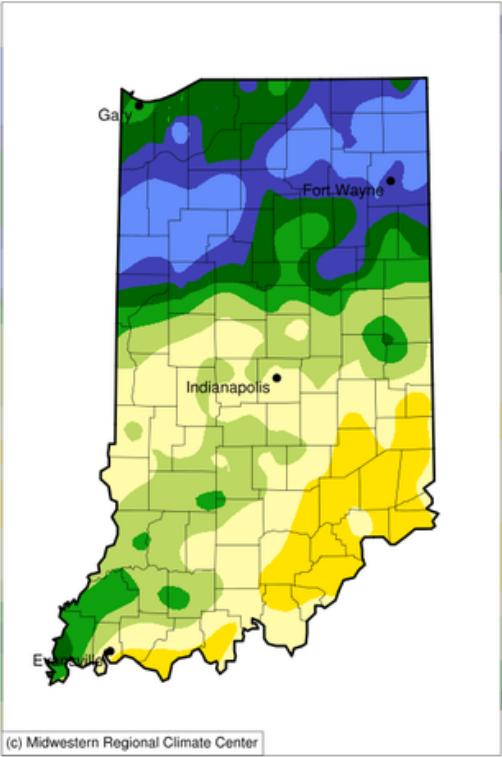
Warmer weather will be arriving in the coming weeks with the frequency of sub-freezing nights dropping off. If you've taken the winter off, we encourage you to get back into the swing of things so we can get back to where we were last year with over 400 reports a day.

Finally we'd also like to recognize the 31 new Indiana observers (Allen (2), Carroll, De Kalb (2), Delaware, Dubois, Elkhart, Hamilton, Hancock, Howard, Jasper, Marion, Montgomery, Noble (4), Owen, Porter (2), Posey, Ripley, Rush, Shelby (2), Spencer, St. Joseph, Sullivan, Vanderburgh, and Whitley counties) that joined CoCoRaHS in the last month. Thanks for joining the team!

February 2023 Precipitation in Indiana

Statewide February 2023 precipitation ran 0.9 inches above normal. There were regional differences, however. As indicated in the Accumulated Precipitation: Percent of 1991-2020 Normals map (shown), northern Indiana was wettest receiving more than 125 percent of normal precipitation. Southern and southeastern Indiana observed between 50-100 percent of normal precipitation. Most notably, snowfall was well below normal as the state ranged from 2 to 12 inches below normal from south to north. Precipitation data from stations that had 100% reporting for February are as follows. The highest precipitation total in Indiana (6.06") was measured at ANGOLA 8.7 ESE, located in Steuben County. Of the 6.06", 2.84 inches was recorded February 23. INDIANAPOLIS 8.2 N, located in Marion County, measured the least amount of precipitation (1.56") for February. CROWN POINT 1.1 N (Lake County) measured 3.3 inches of snow on February 17.

Accumulated Precipitation (in): Percent of 1991-2020 Normals  
February 01, 2023 to February 28, 2023



Archived Newsletters

If you are ever interested in viewing past issues of *The Hoosier Observer*, go to the [CoCoRaHS.org](http://CoCoRaHS.org) home page and then find "State Newsletters" among links within the left-side Resources list.

**Fifth Warmest February on Record, Windy, and Drought Recovery**

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

It's official. Indiana had the fifth warmest February on record (dating back to 1895) with an average temperature of 38.3°F (6.9°F above normal) and 3°F behind the all-time record set in 2017 (41.3°F) (Table 1). Accompanied with the warm temperatures, February was an exceptionally windy month. The state contended with several storm events causing the windy conditions. Indianapolis recorded 17 days where wind gusts were greater than or equal to 30 mph, 6 days greater than or equal to 40 mph, and two days with winds in excess of 50 mph. February 9<sup>th</sup> had a 54-mph wind gust and February 27 observed a 56-mph wind gust.

**Ranked Listing of State & Climate Division Data  
Temperature  
Indiana Statewide  
February values listed in decreasing order (129 years, 1895 to 2023).**

Rank	Year *	Avg.	Normal	Dep.
1	2017	41.3	31.4	9.9
2	1998	39.4	31.4	8.0
3	1930	38.9	31.4	7.5
4	1954	38.5	31.4	7.1
5	2023 *	38.3	31.4	6.9
6	1976	37.5	31.4	6.1
7	1938	37.3	31.4	5.9
7	1932	37.3	31.4	5.9
9	1992	37.0	31.4	5.6
9	1927	37.0	31.4	5.6
11	2000	36.7	31.4	5.3

*Table 1: Top 11 ranked Indiana temperatures over the past 29 years.*

February precipitation has continued to chip away at precipitation deficits as the state average precipitation was 3.18", which was 0.9 inches above normal. Since March 1, 2023, Indiana precipitation averaged 2.46", which is 179 percent of normal (Table 2). Improvements to river stream flows, soil moisture, and drought indices allowed for removal of all US Drought Monitor Categories on March 9<sup>th</sup>, which is the first time being drought category free since May 17, 2022.

Climate Division Data by State between Two Dates  
From Midwestern Regional Climate Center

Indiana  
3/ 1/2023 to 3/13/2023

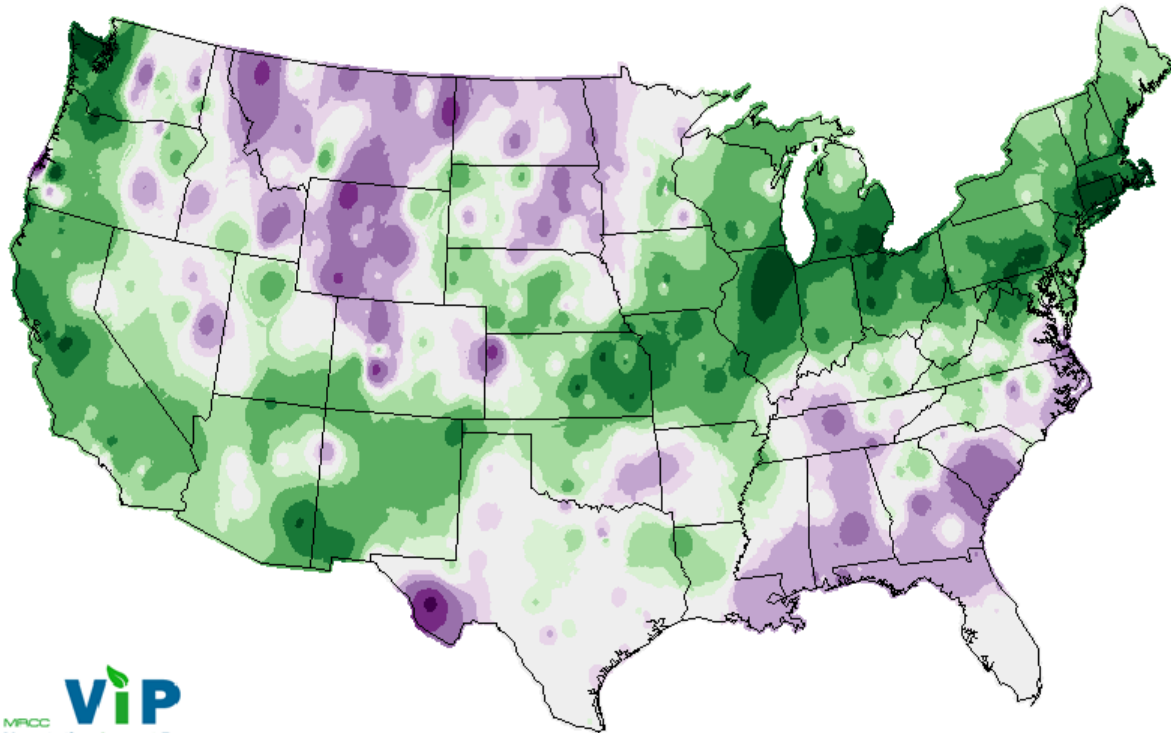
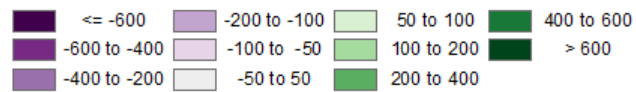
cd	Temperature			prcp	Precipitation		
	temp	norm	dev		norm	dev	percent
1	38.5	35.4	3.2	1.76	1.25	0.51	141
2	38.1	34.7	3.4	1.93	1.14	0.79	169
3	38.0	34.1	3.8	1.87	1.09	0.78	172
4	41.9	37.5	4.4	2.44	1.42	1.01	171
5	42.4	37.0	5.4	2.43	1.35	1.08	180
6	41.8	36.1	5.7	2.45	1.28	1.18	192
7	46.6	41.9	4.7	3.23	1.58	1.65	205
8	46.9	41.5	5.5	3.12	1.62	1.50	192
9	45.7	40.3	5.4	2.81	1.59	1.22	177
State	42.3	37.7	4.6	2.46	1.37	1.09	179

Table 2: Indiana climate division and state temperature, normal temperature, temperature departure from normal, precipitation, normal precipitation, precipitation departure from normal, and percent of mean precipitation for March 2023.

March 1-13<sup>th</sup> temperatures have continued to run above normal as the state average was 4.6°F above the 1991-2020 normal (Table 2). Tied to this, temperatures have been in the sweet spot for chilling hours to accumulate this winter and are running above normal across most of the state (see map shown). This means that many of our perennial crops have reached the number of hours exposed to temperatures within an ideal range during dormancy. Given some bud-break in southern Indiana, freeze potential still lingers and may result in crop damage.

## Chilling Hours Departures (1986/87 - 2015/16 Average)

10/1/2022 through 3/13/2023



Minimum temperature forecasts are projecting low to mid 20s for much of the state over the coming week. The national Climate Prediction Center has higher confidence in below-normal temperatures through March 23 returning to near normal for the final week of the month. If you missed the Indiana State Climate Office's [spring outlook](#), be sure to check it out.

## Back to Basics - Observation Time

By Steve Hilberg

When you signed up for CoCoRaHS you selected an observation time. This is the time that automatically appears in the Observation Time field on the Daily Report form, and for the many of us this is 7:00 a.m. The time is automatically entered into the field as a convenience since we assume that's when you will regularly take your observation. However, if for some reason you make your observation at an earlier or later time other than the "standard" time you chose, be sure to enter that actual observation time in the Observation Time field. This is especially important when we have rain occurring at the time of observation. A difference of 30 minutes could make a big difference between what you measure and what surrounding stations measured 30 minutes earlier. So if your observation time is more than 5 minutes either side of your chosen time, enter the actual observation time in the field. Also, the observation time is the time you make your measurement, NOT the time you enter it on the web. For example, if you make your measurement at 7:00 a.m. but don't enter it on the web until 3:00 p.m., your observation time remains as 7:00 a.m. It is important that your observation time be as consistent as possible from one day to the next. Do not change observation time each day, for example, 8:00 a.m. one day, 2:00 p.m. the next day, and 11:00 a.m. the following day. If the default observation time you chose is not convenient for you, contact me or CoCoRaHS headquarters to have it changed to another time that will work better for you. The rainfall you report each morning is the total that has accumulated since the previous day's observation. The total is reported on the day of the observation, not necessarily the day the rain fell. For example, let's say you had 1.23 inches rain on the afternoon of March 21st, and your next regular observation is the morning of March 22nd. Your observation for the morning of March 22nd would be 1.23 inches, representing all of the rain that fell since your last regular observation (the morning of March 21st). It would be helpful if you noted when the rain fell in your comments.



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