



## The Hoosier Observer

Indiana CoCoRaHS monthly e-newsletter

December 2021

### November 2021 Statistics

Total observers reporting	522
Observers with no missing reports	308
Percent of total	59
Average Daily Reports per Day	412
Max # of Daily Reports and Day	499 / 13
Significant Weather Reports	4
Condition Monitoring Reports	29
E-T Reports	5
Max Daily Rainfall (County)	1.02" / (St. Joseph)

We'd like to thank everyone for another great month of observations. As we move into the winter season keep an eye out for those more tricky observations to take and let us know if you ever have any questions.

As always, we want to remind everyone the importance of going back and ensuring all of those zeroes get entered. We had more than 50 observers that missed having a complete month by just 1 report, and likely it was just a dry day that got missed for one reason or another. We never want you to estimate what fell, but those days when no rain fell can always get entered after the fact.

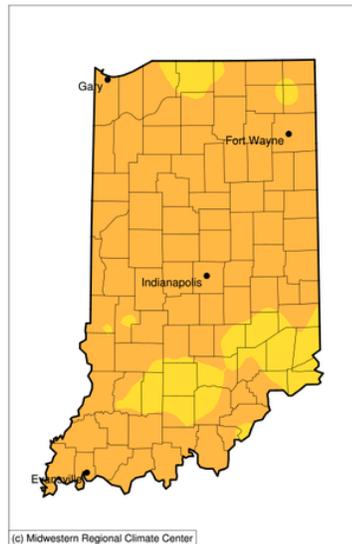
To the 8 new observers (Boone, Henry, Jackson[2], Knox, Marion [2], Montgomery), thanks for joining the team!

### November 2021 Precipitation in Indiana

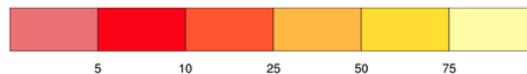
November was very dry in Indiana where the 2021 statewide precipitation for the month was only 1.07 inches – 2.01 inches *below* the 1991-2020 normals. The map shown illustrates the percentage of the 1991-2020 normal precipitation for November 2021 where the entire state received less precipitation than what has been normal (i.e., approximately average). Of the observers that provided data *every day*, the greatest precipitation total for the month was 2.58 inches at GRANGER 1.8 ENE (St. Joseph County), whereas the lowest monthly precipitation total was only 0.62 inches at GARY 4.8 ENE (Lake County). Of those with *complete monthly records*, the maximum 1-day total was 1.02 inches on November 15th at GRANGER 1.8 ESE (St. Joseph County).

#### Accumulated Precipitation (in): Percent of 1991-2020 Normals

November 01, 2021 to November 30, 2021



(c) Midwestern Regional Climate Center



Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 12/6/2021 8:41:12 AM CST

### Winter Precipitation Training

By Beth Hall

With the winter season right around the corner, questions about how to measure winter season precipitation become more common. While rainfall measurements may seem straightforward, precipitation observations of snowfall, snow depth, snow-water equivalent, freezing rain, etc., can get more complicated. There are a variety of [training videos](#) on the CoCoRaHS website that are relatively short and entertaining. In addition, the Indiana CoCoRaHS coordinators are planning to host 2 identical training webinars on Monday, December 13th (1-2:30 PM ET and 6-7:30 PM ET).

To register for a webinar, click on the links below.

CoCoRaHS Training: December 13, 2021 1:00 PM EST  
Click [HERE](#) to register for this one.

CoCoRaHS Training: December 13, 2021 6:00 PM EST  
Click [HERE](#) to register for this one.

### Prepping for Winter Observations

By Steve Hilberg

After a very warm and relatively dry fall, winter-like weather is going to be just around the corner.

Once it regularly stays below freezing at night we recommend that observers remove the inner measuring tube and funnel, leaving just the outer cylinder in place to collect precipitation, especially if precipitation is expected followed by freezing temperatures. If water accumulates in the inner tube and freezes, it could crack it and it will

have to be replaced. Removing the funnel allows snow to fall directly into the outer cylinder, after which it can be melted and measured. If you leave the funnel in the cylinder, snow will not be able to fall through the 1/4 inch opening into the cylinder and the cylinder will clog. Also, many observers find that having an extra outer cylinder is very handy not only during the winter, but also in the warm season. It's easy to swap out cylinders and bring one in for melting and measuring, even if it is still snowing. You can order an extra outer cylinder at [www.weatheryourway.com](http://www.weatheryourway.com). Most observers choose to leave the funnel and inner tube out the entire winter so they don't have to worry about making sure it gets brought inside before it freezes.

If you are measuring and reporting the depth of new snow it's a good idea to have a snowboard. You can make your own snowboard by cutting a piece of 1/2" to 3/4" plywood to a 16' X 24" rectangle (you can make it a little larger if you wish) and then painting it white. Place the snowboard by your rain gauge or in an area that is not subject to drifting. Be sure to mark it with a flag or a driveway reflector so you can locate it once snow has fallen. There's a snowboard to the right of the reflector in the photo below. If there was another inch of snow you would not be able to see and easily locate the snowboard with out something marking it.



### Gift Ideas for the CoCoRaHS Observer

by Steve Hilberg

If you are looking for gift ideas for a friend or family member who is a CoCoRaHS observer, or want some ideas for your wish list, we have a few. All of these can be purchased at [www.weatheryourway.com](http://www.weatheryourway.com), and there are lots of other weather-related items on their web site.

An extra outer cylinder is a good idea not only for winter measurements but measurements all year 'round. It's a lot easier to swap out cylinders if it's raining or snowing at observation time, then bring in the cylinder with precipitation inside to measure. Plus, you always have one handy in case one is damaged and can't be used.

For those who get into measuring snow, a snow measuring ruler, graduated in tenths of an inch is a great idea. It saves having to convert the eighth-inch measurements on a standard ruler into tenths.

CoCoRaHS wearing apparel is also available - t-shirts, sweat shirts, polo shirts, and caps - with the CoCoRaHS logo. Decals are also available.

Here is something to proudly identify their participation in CoCoRaHS. These plastic signs come in two sizes and have enough room at the bottom to add your station number with vinyl stick on letters and numerals.



### 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 is increased by their continuity at that 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 [andrew.j.white@noaa.gov](mailto:andrew.j.white@noaa.gov) 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.



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