



The Hoosier Observer

Indiana CoCoRaHS monthly e-newsletter

January 2023

December 2022 Statistics

Total observers reporting	457
Observers with no missing reports	274
Percent of total	60
Average Daily Reports per Day	366
Max # of Daily Reports and Day	398 / 16
Significant Weather Reports	9
Condition Monitoring Reports	22
E-T Reports	0

We'd like to thank everyone for continuing to report through these winter months even if thankfully the extreme cold has been limited so far. With less observers able to report during the colder months it makes every report even more valuable.

With that being said, we've had an increase in reporting errors lately which often occurs during the colder months when there are more boxes to fill out in the daily reports, so please continue to be vigilant and double check your reports before submitting.

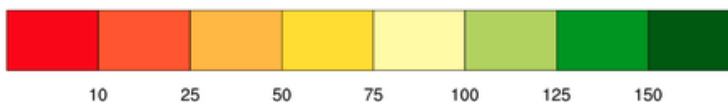
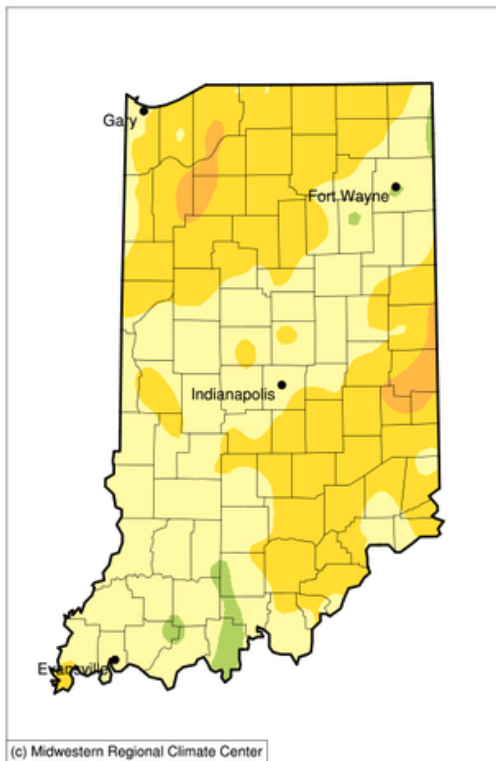
Finally, we'd also like to recognize the 6 new Indiana observers (Allen, Daviess, Jackson, Hendricks, Marion, and Vanderburgh counties) that joined CoCoRaHS in the last month. Thanks for joining the team!

December 2022 Precipitation in Indiana

December may be remembered for its incredibly cold and wet ending. For many, snow events brought a white Christmas, though snow was not deep throughout much of the state. When translated to liquid amounts and combined with rainfall however, December 2022 was still drier than what is normal (1991-2020) for Indiana. Averaged across the state, Indiana only received 2.20 inches of precipitation (all translated to liquid) which is 0.81 inches below the 1991-2020 normal amount. This caused abnormally dry and moderate drought conditions (as categorized by the U.S. Drought Monitor) to continue across the state with ongoing low stream and lake levels. The map shown illustrates the percentage of the 1991-2020 normal precipitation for December 2022 indicating where the monthly precipitation was above or below normal. Of the CoCoRaHS observers who provided data *every day*, the greatest precipitation total for the month was 5.23 inches at HOLLAND 0.2 W (Dubois County), whereas the lowest monthly precipitation total was only 1.09 inches at VALPARAISO 2.0 WSW (Porter County). Of those with *complete monthly records*, the maximum 1-day total was 1.46 inches on December 12th at FORT WAYNE 1.0 NE (Allen County).

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

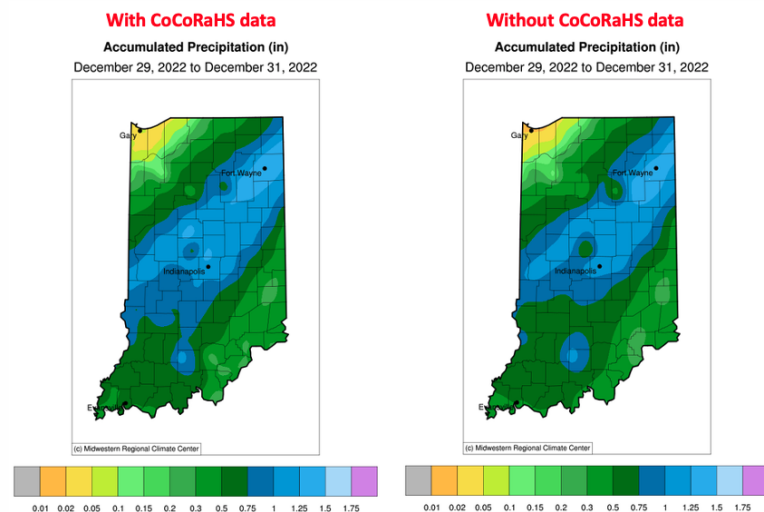
December 01, 2022 to December 31, 2022



Your Data Makes a Difference!

Check out the two maps below that show total precipitation amounts from December 29-31, 2022. The map on the left highlights the added

detail when your observations are included in the analysis. The map on the right does not include CoCoRaHS data. Pockets of higher rainfall amounts can be seen when CoCoRaHS data is included due to your efforts!



It Bears Repeating ... SWE is NOT Your Gauge Catch

By Steve Hilberg

Snow has been infrequent this winter, but that may be changing. One of the things CoCoRaHS is emphasizing this year is the difference between your Gauge Catch and New Snow Water Equivalent (SWE). You may be thinking "this looks really familiar" - and it should, since we've mentioned this before in previous issues.

Measurement of new snowfall, snowpack, and SWE are optional, but if observed it is important that these measurements are done and reported correctly. We find that many observers melt the snow in their rain gauge, report it as the Gauge Catch (correct), but then copy it into the New Snowfall SWE field on their report, thinking that they must be the same. They are not! This is a common error among many of our volunteers, but we are doing our best to get everyone out of the habit of re-entering their Gauge Catch into the Snowfall SWE field. These are separate physical measurements, and we do not want volunteers entering SWE unless they take a core from the snowboard or other flat surface, and then melt and measure it.

Our [Glossary of Terms](#) defines the 24-hour New Snow Water Equivalent as follows: The amount of water measured from melting a core of snow obtained from the snow on the ground at the depth of the 24-hour snowfall, measured to the nearest hundredth (0.01) of an inch

The Gauge Catch and the Snowfall SWE are often not the same value, even if the precipitation is all snow. An entry should be made in the Snowfall SWE field only if you take a snow core from your board or other flat surface, melt the core, and measure it. If you do not make an actual Snowfall SWE measurement from a snow core, please leave the Snowfall SWE value as NA.

If your measured Gauge Catch and measured 24-hour New Snowfall Water Equivalent do happen to be the same value, please include a comment with your observation along the lines of "Gauge catch and new snow SWE from core are the same". Otherwise, you may get an email to find out if a core was actually taken for the SWE.

The Importance of Significant Weather Reports

by Steve Hilberg

With snow likely to occur several more times this winter, 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, and in the winter, the progress of snow accumulations. 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 instead of a Daily Report. The SWR is great for updating rainfall or snowfall 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 of a half inch or more per hour, 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.

Unfortunately, the ability to enter SWRs is not yet available on the mobile apps, so you will have to go to the web site to submit one. After you login, look in the left-hand menu under Enter My New Reports.

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 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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