



The Hoosier Observer

Indiana CoCoRaHS monthly e-newsletter

December 2019

November Statistics

Total observers reporting	393
Observers with no missing reports	184
Percent of total	47
Average Daily Reports per Day	288
Max # of Daily Reports and Day	322/01
Significant Weather Reports	2
Condition Monitoring Reports	25
E-T Reports	1
Max Daily Rainfall (County)	2.75" (Orange)

Winter was off to an early start in November with the 15th coldest November on record for Indianapolis. The northern portions of the state saw below-normal precipitation with 1.5 to 2 inches. Across southern Indiana, 4 to 6 inches was common.

We continue to encourage observers to report their precipitation into the winter, even if you don't want to measure snowfall. The number of reports has decreased compared to last month and we want to see if we can improve those numbers for December

For those interested in getting a refresher on how to measure snow for CoCoRaHS, please see the following web page.

<https://www.cocorahs.org/Content.aspx?page=snow>

We also wish to acknowledge the 5 new observers that joined CoCoRaHS in November. Thanks

November Precipitation in Indiana

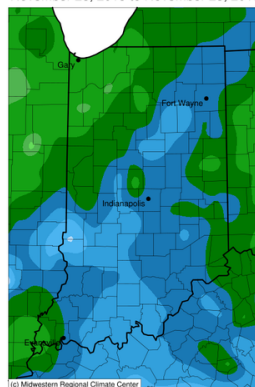
The November 2019 statewide precipitation was 2.60 inches, 1.02 inches below the 1981-2010 average. In the southern third of the state precipitation ranged from 100 percent to 130 percent of normal with the wettest counties in the southern part of the state. Precipitation was below normal across the northern two-thirds of the state with amounts as low as 50 percent of the climatological mean for northwestern counties. Of the observers that provided data for every day, 1 observer (Kentland 0.3 ENE [Newton County]) saw only 0.87 inches for the month! The highest November total was observed in Orange county (Paoli 1.6 SSE) with 8.81 inches. This observer had the highest monthly total for two months in a row! A boat may be needed soon!

Your CoCoRaHS Observations Matter!

A monthly tradition has been to show how the inclusion of your observations make a difference when understanding where precipitation occurred across the state. Note the 2 maps below for a rain even that occurred near the end of November. The map that includes your observations shows much more detail on the amount of rainfall that fell across the state. Without CoCoRaHS observations, interpolations of precipitation between observing sites imply more (or sometimes less) has fallen than in actuality. Groups like the National Weather Service and Emergency Management count on this additional detail when providing impact assessments and determining forecasts.

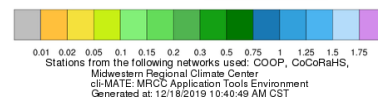
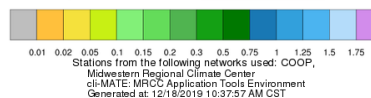
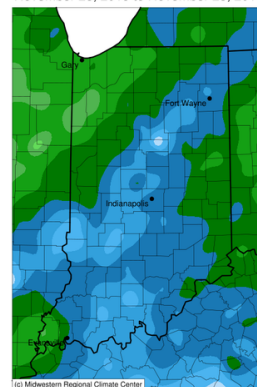
Only using observations from the NWS COOP Network

Accumulated Precipitation (in)
November 26, 2019 to November 28, 2019



Observations that include CoCoRaHS data

Accumulated Precipitation (in)
November 26, 2019 to November 28, 2019



Snow Measurement Reminders

No way around it, winter is here. If you are not measuring snow, just be sure to melt what's in your rain gauge and report that as your precipitation. If you are measuring snow, that same instruction applies, but there is more. Your snowfall is the maximum accumulation in the 24 hours preceding observation time measured on a snowboard or other flat, level surface. If we have a long duration storm, you can measure snow more frequently for the purposes of submitting a Significant Weather Report or sending in your observation to the National Weather Service. However, DO NOT clear your snowboard after these measurements! The snowboard is cleared only after your regular daily observation.

The water equivalent (SWE) of the new snow measurement is NOT the amount you melt in your gauge. I see a lot of observers just copy their gauge amount into the SWE field. SWE is a separate measurement, made by taking a core of snow from the snowboard or wherever you measured your new snowfall, then melting that core. The melted amount is the snow water equivalent and should be entered in the Water Equivalent of New Snow field. If you do not take and measure a snow core, leave the SWE field "NA".

There's no question snowfall measurement is a little more involved and sometimes much more challenging than just measuring rain. Please take time to review the training materials (slide show, animations, etc.) on the CoCoRaHS web site so you're prepared for situations that may occur. Of course, feel free to drop me a line any time you have questions about any measurement or report.

A lot of users rely on CoCoRaHS snowfall measurements, so thanks to all of you who are able and willing to make these important observations. For more information or help on how to measure snow, please check out the [online training slide shows](#).

CoCoRaHS Observer Sign



Gift Ideas for the CoCoRaHS Observer

If you are looking for last minute gift ideas for yourself or a friend or family member who is a CoCoRaHS observer, we have a few ideas. All of these can be purchased at 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. Give the CoCoRaHS observer in your life 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.

Dear CoCoRaHS ...

Where to place my snowboard -- Should I place my snowboard in a sunny location (where it could melt right away) or in a shaded location (where the snow might stick around)? -- Never Snow Bored

Dear Never Snow Bored: What a great question! If this is the snowboard used to make new snowfall measurements, then it shouldn't matter too much because observers should try to measure the snow when it stops falling - before any melting or settling occurs and NOT wait until the next regular observation time. It is then reported at the next regular observation time. For observations pertaining to total snow depth, the board should be in a representative area and ideally several locations should be used that could then be averaged into a single value. Since the snow board is white, it should not absorb radiant energy and warm up too fast to melt the snow if placed in a sunny location.

Frozen to the stand -- The outer tube of my rain gauge tends to get frozen to the plastic support bracket. What can I do? -- Not a Frozen Fan

Dear Not a Frozen Fan: Try applying a lubricant to the grooves of the support bracket, such as Vaseline or WD-40.

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 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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