

# The Catch



NOLAN DOESKEN'S BI-MONTHLY COCORAHS E-MAIL MESSAGE

Greetings and a belated "Happy New Year" to all of you rain gauge watchers.

If you're a CoCoRaHS "old-timer" your familiar with our "Water Year" tradition, but all of you who are new this year may be a bit confused. Welcome, by the way, to all who have just signed up recently to help us measure and report precipitation.

Here at CoCoRaHS, we use a "Water Year" definition for tracking precipitation. Our annual calendar starts on October 1 and ends September 30. So we just said "farewell" to the 2013 Water Year and "Hello" to the new 2014 Water Year -- so hence, my greeting. We're also aligned, for better or worse, with the federal "fiscal year" That's a whole other story . . . .

Why use the water year? The water year definition is useful because it tracks important aspects of annual vegetation and hydrologic cycles. October 1 marks the approximate end of the annual growing season and the beginning of the new snow accumulation season up in the mountains (especially here in the West). As we start October, day length is rapidly shortening, and evaporation from soil and water surfaces slows down. Accumulation of snow in the high mountains gradually begins (not so gradual this year -- if you happen to live in the South Dakota Black Hills -- Wow!).

October is the beginning of our accumulation and recharge season. Then when next spring comes, the snow will melt, rivers and streams may surge, and the new growing season will begin with a renewed uptick in evapotranspiration. The marvelous cycle continues.

Sure, we have a very large country with a great deal of climate diversity. But the approximate cycles hold true everywhere here in the mid latitudes of the Northern Hemisphere.

## **Water Year Summary Reports**

A CoCoRaHS tradition is to celebrate the New Year by reviewing the past year's statistics and compiling end-of-year summaries. Many of you have already done this. Thanks very much to everyone who has already reviewed and compiled your data.

The CoCoRaHS computer system also does this for us. You'll find all the summaries for every station in the country (and Canada) by clicking "View Data" at the top of the CoCoRaHS webpage and scrolling down halfway on our large menu of data options and summaries.

<http://www.cocorahs.org/WaterYearSummary/>

To quickly view the complete summary for your own station, just click "[My Account](#)" at the top of the page. You have to be logged in with your CoCoRaHS username and password for that to show up. We now have summaries for each of the past 4 years posted. They include monthly statistical tabulations as well as day by day listings and data graphs. Please take a look. There is a lot of great information to view, study and share.

### **Review your data**

This is the ideal time to review your data for the past year. You may find that you accidentally missed a few days or typed a number in wrong. ( HmMMM -- I just checked my station CO-LR-273 and I noticed I somehow missed 4 random days back in February. I sure hope I have them written down somewhere )

You can go back at any time to enter past data or correct errors. Remember the "[Monthly Zeros](#)" report to go back and quickly fill in all the zeros for the days when no precipitation fell.

The Water Year Summary Reports do not automatically update after you correct and fill in your data. However, near the end of October we'll reprocess all the data for the whole country and the "final" summaries will be posted. So try to complete your data review before the end of this month. And if you happen to find more than 365 days reported for your station -- that means that you entered "multiday reports" that overlapped your daily reports. Let us know and we can get those fixed and show you how to avoid those in the future.

If you do find errors or omissions for your stations from past years, you can edit the daily data for past years, too. However, we only update older water year summaries once per year.

Thanks SO MUCH for helping monitor the precipitation across our amazing land.

### **That reminds me -- the CoCoRaHS PRISM Climate Portal**

You'll notice, even if you are brand new to CoCoRaHS, that when you view the "Monthly" or "Accumulated" precipitation charts, a line showing the "Average Precipitation" for your station appears. How do we know (or think we know) a 1981-2010 30-year average for your location if you've only been taking measurements for a few weeks, months or

years?

We work closely with the [PRISM Climate Group](#) at Oregon State University. They specialize in analyzing and mapping climate data. Using available historic precipitation data and relying on the long-term data resources from the National Weather Service and the USDA's Natural Resources Conservation Service, they have developed techniques for estimating monthly and annual precipitation all the way back to the 1890s. These are "modeled data" and not actual measurements. The more historic weather station in the vicinity of where you live, the more likely their estimates will be good for your location, but by all means give it a look. It's quite amazing, and we're very pleased to partner with them. Data from CoCoRaHS stations like yours are now used in producing their monthly nation-wide maps. So when you view their beautiful maps, you are helping to make them accurate.

To view the CoCoRaHS PRISM Climate Portal, just click "[My Account](#)" when you're logged into CoCoRaHS. If you've forgotten your login, just click "Login" and then "Find my login Information" If it still doesn't work, write to [info@cocorahs.org](mailto:info@cocorahs.org)

### **CoCoRaHS Water Balance charts**

We haven't mentioned this for awhile, but several dozen CoCoRaHS volunteers across the country are helping measure the "water balance". This is accomplished by using the CoCoRaHS rain gauges to measure what's coming down, and then a special "Atmometer" or "Evapotranspiration" (ET) gauge to approximate what is going back up from the ground into the atmosphere. By combining the rainfall and the ET, we get a sense of our water balance. When there is more rain than ET, then soil moisture will be recharging and runoff may be swelling our streams and rivers. When ET is greater than precipitation, then the soils will be drying out and rivers and streams around us may gradually decline.

When you have a few minutes, please take a look

<http://www.cocorahs.org/ViewData/StationWaterBalanceChart.aspx>

I just played around with some stations here in Colorado and the contrast between last year (bad drought) and this year (better rains and September flood) is really impressive for the stations that have fairly complete data. Tracking the water balance really makes sense.

We'll be looking for sponsors to help cover the ~\$230 cost of these ET gauges, but if you have an ideal open location and an extreme interest in helping track the water balance next year (2014) please contact Zach at [info@cocorahs.org](mailto:info@cocorahs.org) We would eventually love to see several ET stations spread across every state.

### **Special Webinar this week on "Weather Instruments"**

On October 17th (Thursday) our next Wx Talk Webinar will be held and this time we're featuring our first international expert, Stephen Burt from Reading in the UK. Stephen has been observing the weather for decades and testing and comparing all sorts of

weather instruments. He's recently written a comprehensive, understandable and very affordable book about weather observations. CoCoRaHS is mentioned in the book!

This may be our best attended webinar yet. Please join us

<https://www3.gotomeeting.com/register/146348366>

If you can't make it for the live broadcast, it will be recorded for later viewing. Most of our webinars are available for viewing on our YouTube channel

<http://www.youtube.com/cocorahs/>

### **Weather Modification??**

Looking ahead, the next webinar will be Wednesday, November 6, 2013 at 11AM MST and the subject will be:

"Weather Modification: Does the seeding of clouds enhance precipitation? An old question revisited."

Our guest expert will be Bart Geets from the University of Wyoming. I hope you can join us then, too.

### **Weather update -- Some wild and some tranquil.**

Some of us have enjoyed tranquil and almost boring autumn weather while some other areas have been pounded hard these past few weeks. While the tropics have been fairly quiet for this time of year, it's been a different story here over the U.S.

After the floods in Colorado and New Mexico in mid September, there has been one storm after another across various parts of the country. First it was Kansas, Indiana and Texas. Then came that late September onslaught in the Pacific NW with 5" to as much as 14" of rain in CoCoRaHS rain gauges the last 3 few days of September and the first of October. Southeast Nebraska took a quick 4 -8" of rain Oct 2-3.

We can't forget the early October blizzard that thumped western South Dakota and adjacent portions of N. Dakota, SE Montana, NE Wyoming and NW Kansas. High winds and very wet snow combined to block travel, knock out electricity and communications and was responsible for the death of thousands of cattle. That was a true monster blizzard for so early in the season and folks there are still recovering.

Then it was parts of the Ohio River Valley taking it on the chin with 5" to over 7" rainfall totals in parts of Kentucky and southern Indiana during the first week of October

Most recently it was Delaware, northern Maryland, southern New Jersey and south central Pennsylvania with day after day of relentless rains totaling as much as 10 inches late last week, much of that coming in two days.

And now the action has shifted to Texas. Sunday morning (Oct 13) it was Travis County, Texas (Austin area) where several CoCoRaHS observers woke up to 8-12" of rain overnight. This morning (Oct 14) we're seeing even more big reports from south Texas.

## **Colorado Flood Recovery**

We're still recovering from the crazy floods of September 11-16th here in Colorado. Many roads have reopened, but other areas are still cut off. We have a long way to go to get fully back to normal.

We continue to gather, compile and verify rainfall data as we work to complete a comprehensive report on the rainfall that caused that flood. CoCoRaHS data have been invaluable in piecing together a storm analysis. We've put this website together to share some of our analysis and findings. We'll continue to update this as we complete our storm report later this fall.

<http://coflood2013.colostate.edu/>

## **Are you ready for heavy rain or snow?**

Maybe it won't be this year, but eventually all of us could get hit by a huge storm. Will you be ready? It's not that easy getting an accurate measurement of really heavy rainfall or snow. But by thinking ahead and doing some training and practice, you can be ready. We've recently added training animations for [measuring very heavy rains](#) and for [tough and challenging snow and ice situations](#). They are brief and funny, so be prepared and give it a try.

## **Adding "Comments" / "Observation Notes"**

The recent storms have shown, once again, just how important it is to add comments/observation notes to your daily precipitation reports. I can't overstate how useful your notes can be. They tell us a great deal about weather conditions, when storm events begin and end, impacts and damage, your own experiences and any issues you may have had with taking your rainfall report.

We covet your comments, especially when you're facing challenging weather. Currently only about 20% of us type in any comments with our reports, so please be encouraged to do so.

But one hint. The "Comments" section is not the place to leave notes about taking vacation or being unable to read your gauge for awhile. That's best for a direct e-mail to us and to your state CoCoRaHS volunteer coordinator.

## **"Comments" We could use some help reading.**

BTW, One of our CoCoRaHS unsung heroes died of cancer last year. She was one of our volunteer "Comments readers" who would read all the comments every day and compile a brief report to us so that no important message would ever be missed. We really, really miss her and have not found a comparable replacement.

Right now we're looking for some volunteer "CoCoRaHS comments readers" It would be best to have a team of 7 or 8 "comments readers" to share this important task. If this honestly sounds like FUN to you, and if you can spare a couple of hours once or twice a week, please let me know. [Send me an e-mail if you're very interested](#). Be sure to put "Help with CoCoRaHS Comments" in the subject line so it doesn't get lost in my inbox. Don't expect an immediate response, but I'll get back to you as soon as I can.

## **So close to 12,000 reports**

In any given month over 15,000 of us are submitting data. But we don't all report every

day. Thousands more have CoCoRaHS rain gauges but don't send in reports yet. We did a campaign back in June to hit 12,000 reports in a day. We did well but fell a couple hundred short. I looked again recently and we're up to over 11,900 reports for 9/12/2013. As more people go back to fill in their reports for the 2913 Water Year, we're sure to pass this important threshold. 12,000 is a lot of rain gauges, and we appreciate it greatly!

### **Canada**

You may have noticed that the number of rain gauge reports north of the Canadian border have been increasing lately. Canada joined the CoCoRaHS effort up in Manitoba two years ago, but more recently added Saskatchewan, Ontario and their Atlantic Provinces (including Newfoundland) to the network. Weather doesn't care a bit about our political borders so this is great that we'll be tracking storms up north.

### **Getting ready for winter**

Harsh winter-like weather has already struck a few parts of the country. There are a few things you should think about in terms of CoCoRaHS preparations for winter.

- 1) Make sure your rain gauge is clean. It only takes a leaf or two to clog the funnel.
- 2) If snow, sleet or freezing precipitation (freezing rain) are possible or predicted, remove the funnel and inner cylinder from your gauge and bring them indoors. Have a ruler ready for measuring the new snow on your snow measurement surface.
- 3) Having a second gauge, or at least a second outer cylinder, really helps make winter measurement easier. You can just switch out gauges each time you need to take a measurement and then do your water content measurement in the warmth and comfort of your home.
- 4) If you are new to CoCoRaHS or feeling a little rusty about how to measure snow and ice, please review the instructions. We have all sorts of materials -- [written step-by-step instructions](#), [slide shows](#), [videos](#), webinars and a whole string of entertaining short "animations". Some of our coordinators across the country hold special training sessions, too. So just be ready when that magic snow moment (or dreaded, depending on your point of view) arrives.

### **A walk in the rain (recent farm story).**

It seems we can never go longer than a few weeks at a time without some sort of animal challenges around our little farm. We had one stormy night last week, and that was the evening my wife had just returned from the feed store. She had stocked up on supplies for the dogs, cats, horses and fowl. She was getting the two-wheeled cart to load the bags of feed on when she got distracted by a phone call. A wind gust apparently blew open the not-quite-latched gate. That was the beginning of our unscheduled walk in the rain.

I was still at the office working late when Kathy called to let me know our dogs were gone. I got myself home as soon as I could, put on my raincoat, grabbed a flashlight (batteries nearly worn out of course and no replacements handy) and headed out. Kathy rounded up some neighbors and we all fanned out in different directions calling out "Lily, Come! Terra, Come!" but to no avail. In the first half hour we covered most accessible

areas within a radius of about a half mile. It could have been a pleasant experience, as the sound and smell of rain on freshly fallen fragrant autumn leaves is rich and triggered many fond memories from my youth. But the fear of finding injured dogs on the side of the road, or finding nothing at all took away from any potential enjoyment.

About that time our son (lives next door) called with good news. He had just seen the "lost dog: text message on his phone on his way home from a night class at the local community college. The dogs absolutely adore him so he had a hunch they might have taken advantage of a moment of freedom to come looking for him. Sure enough, after an evening joy-run to who knows where, they found their way back to his house and were looking for affection. When I got the call that the dogs were found, I still was about a half mile from home. That last mile walk in the rain was the best yet -- and when we were reunited with the dogs, all they seemed to say was "Where have you been?"

Thanks, everyone, and glad you're a part of CoCoRaHS. Keep up the good work.

Sincerely,

Nolan Doesken  
Colorado State University

[follow on Twitter](#) | [friend on Facebook](#) | [forward to a friend](#)

*Copyright © 2013 CoCoRaHS, All rights reserved.*

[unsubscribe from this list](#) | [update subscription preferences](#)