

The Catch

COCORAHS – A LULL IN THE ACTION

FORT COLLINS, CO — Wednesday, November 4, 2009

Greetings -- and a special welcome to all of you who have just recently joined the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS)

After weeks of very active weather, and incredible September and October rains over several states from Texas to South Carolina, we are now in a temporary lull with very little wet weather anywhere in the country. Only about 10% of us had any rain to report Tuesday morning, and most of that was light. The nationwide average precipitation for both yesterday and today was just 0.01" -- about as dry as it gets. We've also had 3 days in a row without appreciable snow anywhere in the country after more than a month of daily snows somewhere in the country.

Several of our new CoCoRaHS observers in Arkansas measured over 15" of rain in October, and some of northern Louisiana has received 2-month totals over 30". I didn't even add up some of the totals from northern GA, but they were also huge. No matter how you cut it, that's a lot of rain. Meanwhile our several hundred new volunteers from Arizona who have signed up during the past two months are anxiously waiting for El Nino to deliver the predicted "good chance for above average precipitation" this winter. There was some rain in parts of Arizona in September but in recent week rain has been a rare visitor to the Southwest.

It's even dry in the Pacific NW -- at least for the time being. My wife is visiting friends and family this week in Oregon and Washington. She called this evening to report she spent the day visiting Mt. St. Helens (remember May 18, 1980? I still have a small collection of ash from the eruption). By good fortune, she enjoyed complete sunshine there today. That is sure to change. In fact, CoCoRaHS participants in the NW portion of Washington State better prepare for a powerful storm later this week

with potential flooding. We'll appreciate your reports including special measurements of heavy precipitation.

What do we mean by "Intense Precipitation"?

Speaking of heavy rain, we've been inundated with questions about the "Intense Precipitation Report" and how to define intense precipitation. The "Intense Precipitation Report" is an optional but very helpful supplement report that was designed to give us all an easy way to report heavy precipitation (rain or snow) to help notify National Weather Service weather forecasters and hydrologists (river forecasters) and emergency managers of significant weather in progress. In retrospect, I think we should have chosen a different word than "Intense" since that implies extremely heavy rain or snow. In fact, we encourage you to use this report form to file a special report of any heavy precipitation that you think is significant. We may be changing the name of the report soon to make this more obvious.

We do not have one universal definition of "Intense Precipitation" that applies everywhere in the country. 0.10" in less than an hour is heavy rain for parts of Nevada or Arizona while in Florida and along the Gulf Coast you don't get excited unless it rains more than 2 to 3 inches per hour. Let me suggest that anytime it has rained more than 0.30" in the past 60 minutes, that can be considered heavy rain and may be worthy of reporting -- but you decide. Lighter rains that persist for several hours and accumulate to more than 2" in less than 24 hours may also be worth reporting this way. This report should also be used for reporting heavy snow (thanks to all you Colorado volunteers who reported heavy snow last week). Snowfall accumulation rates of 1" per hour or more are worthy of reporting. This form can also be used to report the onset of snow accumulation, since many accidents occur just as snow first begins to accumulate.

We can all view "Intense Precipitation Reports" at any time. Just click on "View Data" on the top of your CoCoRaHS webpage and select "Intense Precipitation Reports" from the menu. Select a date, a state, or view the entire country.

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

The "Intense Precipitation Report" is a supplemental report. You still need to submit your normal "Daily Precipitation Report"

Fog clarification

We managed to provide a foggy and confusing answer to the question about reporting moisture that is deposited on our gauges from fog. Let me try to explain this again, and hopefully I'll get it right this time. To be considered measurable precipitation, particles need to "fall" from clouds and "land" in our rain gauges. That is why dew that condenses on our gauges on clear, damp mornings is NOT considered precipitation. Fog is more complicated. Fog is composed of tiny cloud droplets suspended in the air. If they do not "fall" and if you cannot see and feel the particles descending towards the ground (and your gauge) then don't call it precipitation. However, if the cloud droplets combine to form slightly larger particles that do fall, this is called "drizzle". Drizzle is precipitation and should be measured and reported.

I realize there are many situations that are borderline. Many of the questions we've received have come from coastal California and Oregon where fog is common and vegetation skillfully harvest moisture from fog. When in doubt, report what is in your gauge and add comments to explain what you observed.

CoCoRaHS Survey Results

We're still analyzing data, but we've completed our first tabulation of results from our September survey. Over 7,500 of us made the effort to take this survey. This is an extraordinary response rate to a fairly long and time consuming (15 minutes or so) survey, and we are most appreciative. One thing we learned already is that the majority of us (and this includes me) are at least 55 years old. Nearly 40% of us (and this does not include me) are retired. Many of us try to help with other weather and data collection projects. Most of us feel we've learned a little by participating in CoCoRaHS -- mostly regarding the amazing local variability in precipitation.

Based on comments received, we see that we have many areas of potential improvement. That will be our goal for the coming year(s).

Based on the responses, it is clear that we have relatively few students and younger adults participating in CoCoRaHS. This is something we hope to improve on. Read on.

CoCoRaHS School Network

Are you a student -- or a teacher? Are you a school class participating together in CoCoRaHS? Are you a family taking measurements together and using this opportunity to teach a little science to your kids. Do you know a teacher that might like to get involved in CoCoRaHS? Do you home school some of your children and use CoCoRaHS as a "school" activity? If any of the above describes you, we want to hear from you and see what CoCoRaHS can do to provide more help and opportunities to learn about weather, climate and water. If you or someone you know is interested in becoming part of the CoCoRaHS School Network, please e-mail: noah@cocorahs.org with your contact information. We hope to develop several new opportunities in the coming year.

A bored puppy and some distraught chickens

Angel (the younger of our two Great Pyrenees) has been very good lately. She's taken a few unauthorized walks in the neighborhood when she found a gate ajar, but she has avoided the dogcatcher. A kind neighbor has helped retrieve her for us at least twice. Now our problem is "Lily of the Valley", our young Australian Sheppard. She's playful, lovable, energetic -- and easily bored. And that spells trouble. She has managed to find gloves, shoes, boots, kneeling pads, hard hats, "smart wool" socks (her absolute favorite) and other "possessions" that we didn't even know we had -- and when we are away she chews them up. Last week, before our big snow hit (yes, we really did get 21" of snow in October) a few of our laying hens managed to escape the chicken yard in search of a few of the last grasshoppers of the year. As best we can tell (and there were no human witnesses), Lily spent the afternoon trying to catch and play with the chickens. Lily had befriended one of our cats (Leo) and thought she could do the same with the chickens. Leo lets Lily pick him up and carry him around the yard -- licking and chewing on his ears and legs (the cat has no tail). Lily apparently tried to do the same with a chicken but it didn't work out well for any of us. We found a traumatized, wet, and somewhat defeathered chicken who had likely been played with for hours. Unfortunately the chicken did not survive. Now, with the recent trauma, the snow, and the late autumn darkness, egg production has dropped by 60%. Sigh.

Preparing for an uncertain future

The wonderful grant that we received in 2006 from the National Oceanic and Atmospheric Administration (NOAA) Office of Education to expand CoCoRaHS to 30 states (OK, we overshot by a few) is about over.

We have found a few smaller funding sources to help us into 2010, and we are working on several new ideas. I will be writing a few more proposals in the next few weeks in hopes of finding sponsors to support our small, hard-working staff. In the next few weeks we will also be circulating an invitation to help out. We're calling this fund-raiser "*Five for CoCoRaHS*". Details will be forthcoming.

Happy November

Good luck handling the annual transition to evening darkness. Best wishes. If you happen to be one of many on our mailing list who signed up for CoCoRaHS but have never gotten a gauge or set it up, it is not too late. It's not that hard and it's kind of fun (except on cold, dark, snowing mornings when we all question our sanity). Let us know and we can help you find your password and get started.

Sincerely,

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