

The Catch

COCORAHS -- TROPICAL STORMS, FLOODS, DROUGHT AND A HINT OF AUTUMN

FORT COLLINS, CO — Saturday, September 3, 2011

Greetings rain gauge readers plus friends and family,

For the second weekend in a row, a tropical storm is lashing parts of the country. And for the second week in a row, it is the heavy rains that will likely be the biggest troublemaker (as well as a very effective drought breaker). Unfortunately, the storm is no longer aimed at Texas where drought conditions remain extreme and widespread.

Hats off to all of you who braved the winds and rain last weekend up the East Coast into New England in order to measure and report your rainfall. Even with widespread power outages in many areas, most of you managed to get your reports sent in. Other reports have continued to trickle in after power was restored. We had over 260 "Significant Weather Reports" last weekend to help track rainfall hour by hour during the storm. That was a huge help. Please remember to make use of the "Significant Weather Report" optional reports. That kind of information is so helpful to the National Weather Service, emergency managers, media and the public.

We're planning to put together an animated rainfall map of Hurricane/Tropical Storm Irene to show the evolution of rainfall patterns and the bands and regions where rainfall exceeded 6", 10" and even 15 inches in a few spots. We'll hopefully have that ready to post on the CoCoRaHS website in a few days. There have been tropical storms in the past that brought heavier local rainfall, but this storm was particularly effective in dropping heavy rainfall rates simultaneously over entire large and small watersheds for as much as 24 or more straight hours -- thus contributing to the extreme flooding that developed.

Depending on what happens with Tropical Storm Lee, we may want to do a similar analysis for that storm. Already, we have some CoCoRaHS

volunteers in Louisiana and Mississippi who have gotten well over 8" of rain and the storm is still spinning over those same areas.

A big welcome!

Yes, welcome to all of you who are recent additions to the CoCoRaHS (Community Collaborative Rain, Hail and Snow) Network. It has been several weeks since I last wrote and several hundred new volunteers have signed up during that period. Whether you are in a rural or urban area or somewhere in between, your rainfall observations will help us all do a better job of tracking and mapping precipitation patterns. Thank you, and if you haven't already, please get your rain gauge set up as soon as you can.

Did I say "Frost"?

Yes, I noticed several "Frost" comments in the CoCoRaHS reports today from some inland areas of the northwestern states. There are a few frost advisories out for Wyoming tonight. After all the hot weather so much of the country has had, frost seems unthinkable. But it is September and it is that time of the year. Snow won't be that far behind.

Transition

It's a few weeks until the autumnal equinox, but there is a change in the air. The sun is rising later and setting sooner. The temperatures now begin to drop a little quicker during the evenings. Also, for many parts of the country you'll begin to notice a tendency for the clouds to become more horizontal (more stratiform) and less vertical (cumuliform). This is especially true later in Sept and October. Mid and high clouds (alto--- and cirro---) may begin moving faster as the summer doldrums come to an end and the mid latitude "westerlies" become more established. Also, with changes in humidity and sun angle, you may even notice the color of the sky will begin to change. Many people love the autumn season. Enjoy it as best you can.

It's OK to speak up

You may have noticed the text box on the daily precipitation entry form labeled "Observation Notes". I strongly encourage you to use this and type in a few notes describing interesting weather, sudden changes,

temperatures and winds (if you also keep track of them) or anything else that needs to be said about the daily weather and the impact it may have caused. For example, here's a comment sent in by a Hunterdon County New Jersey volunteer last weekend:

"Overcast with moderately heavy rain and light wind. I believe this one day rain total is a new record for this location. Ground around rain gauge is soggy and saturated. Both sump pumps working overtime. Now is when I remember those little things I forgot to tend to before the storm. Keeping my fingers crossed."

There were dozens more, and all very helpful. You can read comments from any day, any state, any county or the entire country simply by clicking "View Data" from the top of any CoCoRaHS webpage and then select "Daily Comments Reports" from the CoCoRaHS data reports menu.

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

Even if it's just to report a "Clear Day", your comments help tell the weather story. I've been surprised by how many people have had really heavy rains (3" or more) and not mentioned a thing in their comments. I'd be babbling on and on . . . :-). So I strongly encourage you to jot down (type in) a few notes. Just pretend this is your own weather journal that you can come back to any time you want to recall what was going on that day.

Challenge 10,000!

Let's try again. We've had several days this spring and summer when over 9500 of us all filed daily precipitation reports. But we've never made it to 10,000 reports on a single day. Let's rise to the challenge for the week of Sept 19–23. Put it on your calendar and make sure you report each day that week rain or shine. It may take some rain in Texas to stir our many Texas observers there who have given up on rain gauge reading during their drought. Our Californian volunteers will need to rise to the occasion since they will still be in their normal summer dry season. But if we all pull together we can do it. I'll send a reminder as we get closer. If you're new to CoCoRaHS or have never gotten started, this would be a great time to begin. If you've forgotten your password, just click "Login" and then select "Find my login information". You'll get an e-mail shortly with your username and password and you'll be set to begin.

Has your primary e-mail address changed?

If so, send a note to info@cocorahs.org with your new address and we'll change it for you and make sure you're still on the CoCoRaHS list.

Great vacation, but a rough landing

We just got back from a two-week driving vacation to Upper Michigan where our family has vacationed for several generations. The weather was awesome and we were fortunate to have cool weather coming and going across Nebraska, Iowa, Illinois and Indiana on the way there and across Wisconsin, Iowa, Nebraska and eastern Colorado on the way back. We enjoyed a great Upper Peninsula (UP) thunderstorm with crashing thunder rolling across the waters of the Great Lakes and the most UP hail I had ever seen -- totally clear hail bouncing 4 feet in the air (they don't normally get much hail there). But soon it cleared and refreshing weather returned. In two weeks, I don't think the temperature ever got over 82F. Also, we drove within a few miles of more than 200 CoCoRaHS rain gauges coming and going. I wish I could have stopped to visit. We enjoyed time with friends and family, did some maintenance projects on the old family "cottage" and missed out on the DC earthquake and most of the Hurricane Irene hubbub. We were refreshed when we got back late Tuesday even though the temperature was up in the mid 90s the next day.. Here we found it bone dry (only 0.07" of rain while we were gone and the hottest and 4th driest August in the 123 years we've collected data at our official Fort Collins weather station) but all the animals were well and happy to see us. I swear, the new puppy had doubled in size while we were gone. The grasshoppers also seemed glad to see us as they were running out of other food sources. The pasture and garden were pretty much bare, and the hoppers had stripped one of our hedges and the leaves from one of our apple trees. But it's OK, we weren't very invested in gardening this year. The next evening my wife had the sad experience of having her favorite horse collapse and die right beside her while out doing barnyard chores. It was a real bummer, but the horse was old (about 28) and had lived a good life. We were just glad we were home and that our farm-sitter didn't have to deal with that.

Thanks

Once again, thanks for your collective efforts to observe, measure, report and help map and track our ever-varying, always interesting and sometimes extreme precipitation patterns. We appreciate your help very much.

Best to all,

Nolan Doesken
Colorado State University