

The Catch

COCORAHS UPDATE—MONSOON, DROUGHT

FORT COLLINS, CO — Saturday, September 2, 2006

CoCoRaHS Folks:

I'm way over due for sending out a CoCoRaHS update. Weather has been very entertaining of late and there has been much to write about – but just not enough time. I will try to be brief, but don't set your hopes too high.

Welcome newcomers!

We have been adding new observers to CoCoRaHS at a rapid pace. Applications to join the project are coming in at a rate of around 20-30 per week this summer but over 50 applications came in just this week alone. I'm not exactly sure what's happening at Valparaiso Univ. in northwest Indiana, but it must be good as our local coordinator there signed up about 25 new volunteers this week. Awesome!! And many have started reporting already.

This (current as of last Tuesday) is how many people have signed up for CoCoRaHS since the project started in 1998.

Colorado	3383 (yes, we had a head start)
District of Columbia	5
Indiana	283
Kansas	272
Maryland	191
Missouri	309
New Mexico	446
Oklahoma	49 (newest addition to CoCoRaHS)
Pennsylvania	126
Texas	54 (sleeping giant -- watch out for this one)
Virginia	103
Wyoming	270

In addition, Nebraska runs its own website at:
<http://dnrdata.dnr.ne.gov/NeRAIN/index.asp?&>

They are reaching the 1000 mark for volunteers!!

Welcome, all of you. On any given day, any of us could be the wettest in the country, and your report could be a life saver for others.

BY THE WAY, THE WETTEST COCORAHS REPORT TODAY WAS 9.60" FROM ONE OF OUR OBSERVERS IN SOUTHERN MARYLAND—THANKS TO "ERNESTO" Wow!! That's a fine way to try to end a drought.

Do you have questions about CoCoRaHS -- such as how to set up your station, how to get the proper rain gauge, how to report data, etc?? Please ask!!

Since there are so many newcomers, and some of you have not attended training sessions, you may have unanswered questions. If you look at the CoCoRaHS website, you'll find most of the answers. Otherwise please feel free to send us an e-mail at: info@cocorahs.org

I will send out project updates every few weeks via this e-mail list and I'll try to anticipate questions. In particular, we'll be sending out reminders soon on how to measure snow. Also, most states and many counties in CoCoRaHS have local volunteer coordinators. They are there to help you.

CoCoRaHS Staff

When CoCoRaHS was started here in Colorado after the Fort Collins flood of 1997, our staff consisted of a few high school student helpers and some volunteers. But a generous grant from the National Science Foundation in late 2002 helped us expand to surrounding states and hire a couple of staff positions. I already have a full time job, so I really rely on these people to keep CoCoRaHS ticking. Henry Reges (hreges@atmos.colostate.edu) works fulltime for CoCoRaHS and is our National Coordinator. Julian Turner (julian@lamar.colostate.edu) is our web developer and manages the database and "customer service". Jenn Rudolph (coco@atmos.colostate.edu) is our newest addition to the CoCoRaHS team. She is a Colorado State University student and is our "Station Administrator" keeping track of all of your stations, e-mail addresses, station names, numbers and locations (latitudes and longitudes). Steve Jewel, a recent high school graduate here in Fort Collins, has been heading up our hail pad analysis center where all the hail stone dents are counted and the data assembled (see his handiwork at: <http://www.cocorahs.org/ViewData/ListDaysWithHail.aspx>)

In addition, each participating state outside of Colorado has one or more "State Coordinators" that oversee the project in their states – helping recruit, train, and equip new volunteers. We have a growing number of local citizens taking

leadership roles as “County Coordinators” where they take care of recruiting, training, and volunteer moral building within their own community or county. Whenever you look at our CoCoRaHS precipitation maps and see a large concentration of active volunteers, most likely it’s because there is an active volunteer coordinator there.

You can help!!

The success of any volunteer organization comes from the energy of its’ volunteers. If you would like to help bolster CoCoRaHS in your own community, consider becoming a “County Coordinator”.

Now Let’s Talk Weather -- have you been watching New Mexico??

For months we talked about drought (and we still are for some areas). New Mexico was the center of drought concern as recently as early summer. The North American monsoon circulation began delivering tropical/subtropical air masses into New Mexico beginning in late June. It has been stormy and wet ever since. While New Mexico storms are spotty and localized, most areas have had a wet summer. I counted 31 CoCoRaHS volunteers that have had over 10” of rain in New Mexico since July 1. The Cloudcroft area east of Alamogordo (in the mountains east of White Sands National Monument) was wettest with a few totals exceeding 20” for the past 2 months. Even on the desert floor in and near Alamogordo, 6 – 10” of rain has been common. By comparison, the wettest CoCoRaHS station in Maryland for the same period was 9.52” in Elkton (extreme northeast corner of the state). Areas of Maryland and Virginia close to Washington D.C. have had less than 5” (and in some cases less than 3”) of rain since the big floods in late June -- prior to Tropical Storm “Ernesto’s” visit this week.

Meanwhile, Back on the Ranch

And if you want to talk about dry, try this. Several areas of Wyoming have had less than 1 inch of rain since June 1. Riverton, Lander, Cody, Powell and Pinedale have all been on the short end of the rain stick. The driest of all CoCoRaHS weather stations are in Washakie County in north central Wyoming where faithful observers in Worland and near Ten Sleep (you have to visit sometime) are still below 0.25” for the entire summer. Now that’s scary dry.

In my own gauge, things are a bit better now. Storms a week ago dropped a whopping half inch in my gauge. That, on top of the 0.80 that fell two weeks ago gave me a total of 1.40” for the month of August and over 6” for the year. But our official National Weather Service Cooperative station on the Colorado State

University main campus was skirted again, and is still less than 5" and 40% of average. For the year -- BAD.

Hail info for Boeing -- Aircraft scientist needs some help

Nearly every month, we get interesting requests from people in many lines of work who find out about CoCoRaHS. The data we help collect help answer some important questions. Here is the latest. Please read and reply to him if you can help.

"My name is Kevin Housen and I work at the Boeing Company in Seattle. I am interested in how strong natural hailstones. The strength of hailstones affects how much damage they do when they strike aircraft that are parked on the ground at an airport. One way to estimate the strength of hailstones is to observe their behavior when they strike a hard surface, such as pavement. That is, do they bounce, do they shatter, or just "splat"? I have seen many instances of small hailstones (centimeter size and smaller) bouncing off hard surfaces, but I'm particularly interested in the behavior of larger stones. I'm hoping that some of the volunteers in the CoCoRaHS project could relay some of their observational experience in how large hailstones behave on impact. I would be especially grateful if anyone has any video they would share.

Thanks very much!"

Kevin Housen, Ph.D.

Associate Technical Fellow

MS 2T-50, The Boeing Co., P.O. Box 3999, Seattle, WA 98124

206-544-5415 voice 206-544-5438 FAX

kevin.r.housen@boeing.com

<http://shockphysics.ds.boeing.com>

If any of you have information to send to Dr. Housen, please cc me at Nolan@atmos.colostate.edu I'm curious, too. Despite watching storms all my life, I've never seen stones larger than 1" in diameter -- some of those stones bounced, some shattered, and the rest went "splat".

Importance of accumulated reports

Many of you have been kind enough to send in reports of total accumulated precipitation for periods when you have been away from home. This is excellent and helpful information.

REMEMBER that we have a special data entry report form specifically for this purpose. It's called the 'Multi Day Accumulation' report. Please use this report to enter your accumulated values. Make sure you enter the date of the first day

AFTER your last report for the beginning of your accumulation period. If you enter your accumulation as a regular daily report, it may show up on the daily map as a big total when no one else around you had rain. But if it is entered as an "Accumulation" it will not appear on the daily maps, but will be added into your station totals.

<http://www.cocorahs.org/Admin/MyDataEntry/MultiDayPrecipReport.aspx>

Changing seasons

After one of our hottest summers in history here in northern Colorado, I am warming my hands over the computer this AM and wearing a thick sweat shirt. The daylight is getting shorter each day at a rapid rate. The seasons are changing and we can't stop it. We've had no reports of snow yet, but some of our mountain observers have sent photos of the first dustings of snow on the higher peaks of the Rocky Mountains. The hurricane activity some of you are experiencing is also an indicator of the changes -- not to mention the calendar.

What this means is that the nature of our weather is changing now. The appearance of the clouds is changing. There are more flatter clouds and fewer giant cumulonimbus -- and more dreary days in parts of the country. Precipitation patterns will get a bit more uniform -- although as we've seen, there is no such thing as uniform precipitation. That's why CoCoRaHS is so important.

And SNOW won't be far away. This is a good time to start preparing for winter -- both at your home or farm or business, but also at your weather station. Between now and November, take a few minutes to review the instructions for measuring snow, or if you have a high-speed internet connection you can watch our snow measurement training video

<http://www.cocorahs.org/media/video/measuringsnow/default.aspx>

It's not exactly academy award material -- but for us weather watchers, it's not too bad.

CoCoRaHS in El Salvador

Thank you so much!! We ended up receiving nearly \$400 in donations to support the effort to launch CoCoRaHS in a portion of El Salvador. Precipitation data will help explain variable ground water levels and well production and hopefully lead to some improved water availability for local citizens. "Engineers without Borders" found out about CoCoRaHS at a presentation here in Colorado and are working with local citizens and Peace Corps volunteers to help get the project

started. We have not received any data reports yet, but some gauges were delivered in August, and we hope to begin seeing some data soon.

Picnics

Loveland Picnic – September 7, 2006, at Kroh Park beginning at 5 PM.

Last call to sign up for the 2006 CoCoRaHS volunteer appreciation picnic in Loveland, Colorado. If you are a volunteer in or near Loveland, please RSVP as soon as you possible to Chris Knoetgen at: knoetgen@ucar.edu

The annual gala “Fort Collins” picnic for volunteers in northern Colorado and southern Wyoming is also coming up soon -- Saturday, October 7. Please RSVP to hreges@atmos.colostate.edu or call 970-491-1196 by October 3rd.

Have a party!!

“Community” is an important part of CoCoRaHS. This is a big country. We have thousands of volunteers and there is no way we can all get together at the same time. But it’s great fun when folks who share an interest in weather can get together, share stories and experiences and gain knowledge. If you live in an area where there are a reasonable number of CoCoRaHS volunteers, think about organizing a picnic or some other social gathering where you can get acquainted. Just a good old-fashioned “potluck dinner” can be a great idea. If you plan it, we’ll help promote it.

Did you read every word?

I’m always curious if anyone actually reads these messages, especially when they are so ridiculously long like this one. If you read this far, please send me a message confirming. nolan@atmos.colostate.edu

Have a good September, if you possibly can.

Nolan Doesken
Colorado Climate Center
Dept. of Atmospheric Science
Colorado State University