

The Catch

2006 ROCKY MOUNTAIN WEATHER AND CLIMATE WORKSHOP ANNOUNCEMENT

FORT COLLINS, CO — Wednesday, April 19, 2006

Greetings from Northern Colorado

It is remarkable to be able to watch spring unfold from the eyes and rain gauges of 1400 CoCoRaHS volunteers. Here in Fort Collins it is dry and dusty—only 0.03" of precipitation since March 22 and even less in a few other parts of eastern Colorado and central New Mexico. Eastern Kansas and Missouri have also been dry for this time of year with totals of only 0.30 to 1.50" since April 1. Stations in Maryland, Virginia and Pennsylvania are ticking along fairly close to average after their record dry March. Parts of Wyoming have picked good moisture and other parts have been dry. But our CoCoRaHS wet spot is clearly Indiana where April precipitation totals are generally 3-6" and that was on top of heavy rains in March. Many stations have reported more than 10" of rain since early March and no one can shut off the hose. Some Indiana stations have received more rain since March 5 than parts of Colorado, New Mexico and Wyoming get in an entire year.

So keep those rain gauge reports rolling!!

2006 Rocky Mountain Weather and Climate Workshop

I am pleased to announce a very special program for CoCoRaHS volunteers and National Weather Service weather observers and severe weather spotters!! The 2006 Rocky Mountain Weather and Climate Workshop—"Severe Weather in the Rockies"—will take place on Saturday, May 20, 2006 from 9AM-5PM at the National Oceanic and Atmospheric Administration (NOAA) and National Center for Atmospheric Research (NCAR) facilities in Boulder, Colorado. If you are looking for a very special meteorological experience and learning opportunity, I strongly encourage you to attend. Other friends and family members are welcome, but registration is required for everyone.

This year's program will include the Earth System Research Laboratory's "Science on a Sphere", a tour of the Space Environment Center (where

sunspots, solar flares, and many other aspects of the sun are continuously monitored), a tour of and weather briefing by the National Weather Service, plus talks such as "Summer Weather Hazards-Staying Safe", "Forecasting Convection with Weather Research and Forecasting Model (WRF)", "The Making of a Western Flash Flood" and "What Can We Learn by Observing the Atmosphere?".

Advanced registration is required to attend along with a fee of \$10 per adult and \$5 for children (12 and under). Due to the content of the workshops, we recommend that you do not bring very young children. Your admission includes a box lunch and beverage.

For more information click on the CoCoRaHS calendar page:

<http://www.cocorahs.org/Content.aspx?page=calendar>

where you can download a registration form to mail in, general information and the workshop program.

Space is limited to 115 attendees so send in your registration form and payment soon as tickets will go quickly! All registrations MUST be postmarked by Monday, May 8, 2006. We need the names of each and every attendee well in advance for security clearance at NOAA. Drivers licenses or other sources of official photo identification will be required when you arrive at the security gate at NOAA on May 20.

For further information, please contact: Henry Reges at hreges@atmos.colostate.edu or 970-491-1196.

Hail reports, hail pads and intense rain reports greatly appreciated

A few hail pads are now trickling in. I just checked "Search Hail Reports" which you can access by clicking "View Data" from the top of the homepage. We've already received 137 hail reports this year of which 14 reports indicated maximum hail stone diameters of 1.5" or greater. That's nasty, but your reports are very important. It doesn't matter if you have hail pads to set out, still submit a "Hail Report" after each hail storm and it will greatly help our research.

We've now received 62 Intense Precipitation reports this year, the most recent of which came from Terra Haute, IN at 2:18 this morning. I think that observer was not sleeping well.

Thanks for the Zeroes

Many of you ask "Do I have to report 0.00 on days that it does not rain?"

My answer is "No, you don't have to - - - but we REALLY appreciate it when you do. The thunderstorm season is now upon us, and it is possible for one location to get over an inch of rain while a nearby station gets nothing. From our point of view, both reports are equally valuable. And with the drought conditions continuing in parts of Colorado, Kansas, New Mexico and Texas, we are tracking the LACK of precipitation with just as much interest as the storms.

So if you can, please do report your zeroes. And remember, it is easy to go back later and fill in zeroes from past days.

Entering data from previous days

Yes, if you forget to enter or are away, you can always go back and fill in data for past days. You can even go back months or years in the past if you wish to fill in your data. Just remember to get the date correct and always report the amount for the 24 hours ending at or near 7 AM on the date indicated.

Time of observation

Our computer automatically fills in 7:00 AM as your time of observation, but if it is raining and you reported at an earlier or later time, please type in the time you actually read and emptied your gauge. The maps are most useful when we all check our gauges at the same time, but in a volunteer network that will not be possible. But as long as you report the actual time you checked your gauge, we can interpret the results.

What if you make a mistake?

Yes, you can always go back and correct an error. We strongly recommend you check your reports and then see how the data compares to others on the maps for your state or county. It is possible for each and every one of us to occasionally make an error—no matter how experienced we are.

Filling in gaps

There is nothing like a thunderstorm to convince us just how variable precipitation can be and how valuable our reports are. Our goal of eventually achieving a density of one or more CoCoRaHS stations per square mile may seem totally crazy -- until you see the actual rainfall patterns from summer convective storms. As we saw here in Fort Collins in 1997, it really is possible for one location to have 14"+ of rain while only 4 miles away less than 2" fell. You won't see those extremes every day, but you will always see local variations.

When you look at the CoCoRaHS precipitation maps for you state and county and you see gaps and open spaces on the maps -- those are locations where we do not know how much rain fell unless we find more volunteers. Yes, weather radar can provide useful estimates. Eventually, we will even have satellites estimating our rainfall. But without gauges on the ground to confirm or calibrate these estimates, we won't really know.

With this in mind, I recently learned of a new experimental precipitation analysis that is really neat to look at:

http://www.srh.noaa.gov/rfcshare/precip_analysis_new.php

Maps like this were only dreamed of just a few years ago, and now they are being created daily. Furthermore, they may already include CoCoRaHS data. Any CoCoRaHS daily report received prior to about 8 AM MDT could be used to help make these maps. So if you want your data included, report early.

We will be watching these maps closely this summer to see how well they represent "the truth". And while we never truly know "the truth", our CoCoRaHS measurements are about the best available data along with the data from the National Weather Service's Cooperative Observer network.

Watch Missouri and Nebraska

Today, there were 11 precipitation reports—not many for a state that size. But keep an eye on their maps. We are working with the Missouri State Climatologist and the Missouri Farm Service Agency and by mid May you may be seeing data from every county in the state.

Also, keep an eye on Nebraska. On April 17th, they learned that they are receiving a grant from the Nebraska Environmental Trust Fund to expand the Nebraska CoCoRaHS network (NeRAIN—Nebraska Rainfall Assessment and Information Network) to their entire state. They hope to have over 1000 participants by the end of this summer.

Weather Friends in Oklahoma

The next state in the cue to become a part of CoCoRaHS is Oklahoma. If you have friends or relatives there, give them a heads up.

Enough Already

Thanks for your continued interest in CoCoRaHS. Remember, if you can't stand getting our e-mails, just let us know and we will promptly remove you from the mailing list. And if you read all the way to the end in one sitting == Awesome!!

Best regards for a good spring! Send us some rain or snow here in eastern Colorado!!

Nolan Doesken