

## **STORM IS A DUD IN NORTHERN COLORADO BUT BRINGS A FLOOD IN SW MISSOURI**

FORT COLLINS, CO — Wednesday, April 26, 2006

### **Good morning, CoCoRaisins!!**

It is 24 degrees F this AM here in Fort Collins, and our blossoming apple trees are not too happy. I'm not too happy either, because a nice spring storm passed over northern Colorado this week—dropped our temperatures by 50 degrees and FORGOT to drop the anticipated rain and snow. I measured only 0.08" of moisture and a trace of snow since Sunday -- bringing my April total to 0.12". Even the robins are still thirsty.

After a month of very dry weather and much above average temperatures, that little shower didn't even settle the dust. Fortunately the mountains got more snow, and that's where most of our water supplies come from. But I like spring rains and those wonderful smells and colors that go with it.

Meanwhile, SE Kansas and SW Missouri got rain—real rain. Pennsylvania, MD and VA also got a weekend soaking. Our new observer in Nevada, MO reported a whopping 6.91" of rain from storms Sunday night. With CoCoRaHS observers all the way from Jackson, WY and Deming, NM to Baltimore and Philadelphia (which I can still scarcely believe), the contrast we see in climate and storm patterns is nothing short of amazing. I just want a little bit of that moisture here since this is supposed to be our wet season, Please??

### **Eyes on CoCoRaHS Data**

As you enter your reports, beware that a lot of people are using our maps and reports. I learned that on Monday, USA Today used CoCoRaHS to describe the surprise hail storm that rattled parts of Denver Sunday evening (lots of hail but nearly no rain). Several National Weather Service and private meteorologists from parts of the country have contacted me about CoCoRaHS already this week. We are doing this for enjoyment and learning, but our accurate (hopefully) measurements of rainfall, hail and snow are important to our country—for agriculture, for transportation, for commerce, for recreation and much more.

**Have you not started yet??**

Are you one of the hundreds that have signed up for CoCoRaHS but have not started reporting yet? Do you have a CoCoRaHS rain gauge but it's still in the box or in your garage? Have you not figured out the best place to put your gauge yet so you've decided to wait for divine inspiration? Do you still need a rain gauge??

PLEASE DON'T WAIT. We need you! Even if you don't have a perfect spot to put your gauge, put it out somewhere and get started. Measuring rain is NOT HARD and only takes a couple of minutes per day. It's just NOT A BIG DEAL, so get started!

In most states and counties we have state or local volunteer coordinators available to help.

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

Just check this list of volunteer coordinators and get some help. If you still need a rain gauge, contact your coordinator or send us an e-mail.

We hope everyone is using the high capacity 4"-diameter gauge that we recommend/require—it is very accurate and compares very favorably with National Weather Service standard rain gauges (which are also approved for CoCoRaHS). Many other gauges, like the myriad of electronic rain gauges that are available, are good and fun to use but they do not provide the year-round reliability and uniformity that we need in a scientific project like this.

So get your gauge out and START REPORTING!

### **Some ways to get our attention :-)**

Data quality is very important to CoCoRaHS. I look at the state maps and data reports every day. We also have volunteers who check your reports every day to catch and correct obvious errors.

Here are some of the common errors that catch our attention and give us headaches.

-- Reports of precipitation to the nearest whole inch -- 1.00, 2.00, 3.00, 4.00" etc. Remember, there is less than a 1 in 100 chance that nature will produce exactly an inch of rain at a time. So if you report 3.00" and you don't enter any remarks about heavy rain, street flooding, etc, there is a good chance that we will doubt your report and we'll be contacting you.

-- Reports of precipitation on the wrong day—Many of us go back and enter our data days or even weeks after the fact. We sometimes forget what day it fell and

what day it should be reported (the 24-hours ending at 7 AM), so check and double check when entering older data.

-- Multi-day rainfall accumulations that are entered as daily precipitation reports. If you are gone for the weekend or on a trip or vacation, it's OK to leave the gauge out and report an accumulated total when you get back. We have a special form specific for entering precipitation that accumulated over a period of days. Please do not enter accumulated values on the "Daily Precipitation form"!

-- Lot's of snow but little precipitation. There is still some confusion in the ranks about "precipitation" and "snowfall". When I see a report of 4.5" of new snow but only T or 0.01" of precipitation for that day, we've got problems. Remember, precipitation is both the amount of rain that fell AND/OR the amount of water content in snow or ice that fell.

The water content of snow can vary greatly from a dense, wet snow to a fluffy, light snow, but anytime you've had over a half an inch of snow, it's mostly likely had water content of at least 0.01" water. So always check that your precipitation to snowfall ratios make sense. And YES, it is still snowing in parts of Colorado and Wyoming here in late April.

-- Lot's of precipitation, but little snow. Sometimes in our haste we put the accumulation of new snow and enter that as the precipitation amount. When I see a report of 2.00" precipitation when we've just had a small snow, I know that it means someone has entered their snowfall in the wrong spot.

-- Decimal Point Errors. Remember, the CoCoRaHS rain gauge collects rain over a 4"-diameter collection area and then concentrates it into a much smaller, calibrated measurement tube. This way we are able to resolve each 0.01" (one-hundredth of an inch). But sometimes we get excited and see what looks like 2" or rain in our new gauge. In reality, it is only 0.20". This is a BIG booboo! So please keep track of the decimal point.

### **Where you put your rain gauge matters**

As our trees are leafing out and our storms are powering up, keep in mind that our measurements are only as good as the location of our gauge. Few of us have perfect locations for our gauges—protected from strong winds while also open and free of obstructions (a challenging combination, for sure). Keep in mind that if your gauge is near your house, you can actually get considerable amounts of splash from your roof during very heavy rains with large raindrops. Storms accompanied by very strong winds can wreak havoc on any measurements. So keep a good eye on your gauge, make sure it's mounted level, and is neither blocked by obstacles or getting extra rainwater from roofs, gutters or railings. When in doubt, always add some remarks in the notes section of your report. These really help.

## **Have you been to a CoCoRaHS training session or on-line training?**

If you have not attended a training session, or gone through the training materials on our website, please do. Most questions about how to measure and report rain, hail and snow are answered!!

## **Rocky Mountain Weather and Climate Workshop**

Registrations are coming in fast, but we still have room for about 50 more people in Boulder, CO on May 20. So please send in your registration by May 8th to reserve a spot. For more details, check the "Calendar" on the CoCoRaHS homepage. For any of you who attend from outside of Colorado, we'll figure out some sort of prize to reward you. :-)

## **Conclusion—at last**

I try to be brief, but I nearly always fail. Thanks so much for joining and sticking with CoCoRaHS. As you can see from our maps, reports, and archived data, we really are accomplishing much and making a difference. Whether or not you are still sending in rain reports, we do appreciate you.

Spring greetings,

*Nolan Doesken*