

# The Catch

## COCORAHS CATCH – NE DRIES OUT, CA GETS WET

FORT COLLINS, CO — Tuesday, November 11, 2008

Good evening, CoCoRaHS snow lovers and snow haters and undecideds.

Since early October, different parts of the country have been taking turns seeing the snow fly. It's only November 11th, but in the past few weeks we've already seen a big snow in Montana, a blizzard in the Dakotas, a nasty storm in Kansas and Nebraska, snow in the Great Lakes states, a storm in the Sierras, and significant early snow from the Mid Atlantic into northern New York (actually, all the way down to western North Carolina). Last night, parts of eastern Colorado got between 2 and 10 inches of snow while all we got here was a brief sprinkle of rain. Drat! This is just the beginning. (I know -- all you folks in the South are chuckling :-))

For many of us, this is the first or second year for measuring and reporting snow. It's tricky and sloppy, but with practice we'll all be collecting great data.

There aren't many sources for the public, the media and meteorologists to go to for good snow data, so you can be sure that people will be paying close attention to CoCoRaHS this winter.

Here are a few tips for each of the entries we make on the CoCoRaHS "Daily Precipitation Report Form"

### **"Rain and Melted Snow"**

That is the water content of the precipitation that has fallen in your gauge -- rain, snow, freezing rain, sleet or any combination. You'll need to remove the funnel and inner cylinder if frozen precipitation is expected. Otherwise, the funnel clogs up and the snow spills out (bummer)! Then, you will need to MELT the snow and ice that collected in the gauge so you can pour that water and measure the content in the inner cylinder (just like rain). A quick way is to add a known amount of warm water to melt the snow -- AND REMEMBER to subtract that amount from the total to get

the correct reading. Some people use their microwave -- but I've seen a few melting gauges.

Another way to measure is to WEIGH your rain gauge outer cylinder. In an upcoming message I will describe how to use a good kitchen scales to accurately measure the water content and avoid the fuss of melting.

### **"Observation Notes"**

It adds to the value of your observations if you can describe briefly the weather conditions you've observed. If your snow observation is problematic, just describe it in your notes. Here is an example from an observer in South Dakota last week: *"Bad blizzard in progress. Emptied gauge at noon on Wednesday before precipitation turned to snow, had .27" then. Got all our pickups stuck. Power out and on generators. Snow depth an estimate only. Drifts are so variable it's hard to know what is average."* Here's another from eastern Colorado this morning: *"This is one of the only times we have had no wind, yet, and could get a really good measurement."*

### **"Depth of new snow in inches to the nearest tenth"**

This is the amount of snow and/or ice pellets that fell and accumulated during the past 24 hours. Remember to report the maximum accumulation of new snow that was observed prior to melting or settling. That may require doing a quick measurement during or immediately after the snow ends and not waiting until the next morning since the snow might melt or settle overnight. If all the snow melts as it hits the ground and never accumulates, then report T.

REMEMBER, our computer automatically enters 0.0 for your daily snow amount since most days of the year are ZERO. If you had snow PLEASE type in your new snow amount and don't leave the 0.0. I hate seeing zeros on the map when I knew it snowed. If it snowed but you did not measure it, then please type in NA (for "not available").

### **"Melted value from core to the nearest hundredth"**

This is a helpful but optional field. If you are concerned that the amount of moisture in the gauge was too low due to wind or other factors reducing your gauge catch, then collect a core sample of the new snow Melt (or weigh) the sample to measure the water content. It is fascinating to see that the moisture collected from the core measurement can differ from what was in your gauge -- and sometimes by a lot.

### **"Depth of total snow in inches to the nearest half inch"**

The total depth of snow is how much is still on the ground at your scheduled daily observation time. This can be new snow, old snow, or a combination of both. For example, if there was an inch of old snow on the ground yesterday, then it snowed 3" new, but that snow settled to just 2" by your regular observation, then your total depth would be 3". Keep in mind that your total depth will likely be different than your New Snow unless a new snow has just fallen on previously bare ground.

REMEMBER, our computer automatically enters NA for your total snow depth. So if there is any snow on the ground be sure to type in the amount to the nearest half inch (or whole inch if that's easier). If there is some snow remaining on the ground, but more than half the ground is bare, then type in T.

### **"Melted value from core to the nearest hundredth"**

This last data entry field is optional but very useful, especially to hydrologists. It is the water content of the new and old snow remaining on the ground. This is the amount of water that would soak into the ground or run off into streams and rivers if it were to melt. Take a core sample of the "total snow" in a representative location, and either melt it or weigh it to obtain the water content.

OK, thanks for listening. For further instructions go the CoCoRaHS website: [www.cocorahs.org](http://www.cocorahs.org) and you will find a training video, a slide show and written instructions to help you. If that doesn't help, then please contact your CoCoRaHS local coordinator and ask.

Please make use of the CoCoRaHS website to view maps and reports of recent and past snow events so that you can see all the great data that you and our other volunteers are helping to collect. We can all learn a lot by examining our data and comparing to others in our areas.

If you are new to CoCoRaHS and need help getting started, please let us know.

So let it snow! We have two very large, and very white dogs that just can't wait.

Nolan