HOW MUCH SNOW DOES A COCORAHS GAUGE HOLD?

FORT COLLINS, CO — Friday, March 17, 2006

Meteorologists have been watching a developing storm system for several days now that could bring heavy snow to Colorado and possibly adjacent states as well as some much needed rain to Texas and Kansas.

The Big One -- March 17-20, 2003 in Colorado

This reminds me -- this is the 3rd anniversary of the beginning of the biggest snowstorm that I have ever experienced. From March 17-19, 2003 we received over 32" of snow here in Fort Collins with a remarkable water content in excess of 5.00" (remember all the damaged buildings and collapsed roofs?) CoCoRaHS had just gotten established during the past year along the Front Range, and hundreds of new observers did a great job reporting that snow. We had over 60" of new snow at several of our stations, and that storm single handedly took a huge chunk out of the drought that had cooked us in 2002.

Now look at your gauge and think about 60". Can our little 4" diameter gauges (that are 12" deep with the funnel and inner tube out) catch that moisture? The answer is NO. The gauge under most circumstances is full to the top (at least on one side) with as little as 6.0" of new snow. If a foot fell, then most certainly the snow would be falling out of the top of the gauge, and you would have to do a core sample to get a useful measurement of the water content.

IF YOU ARE EXPECTING A BIG SNOW, THEN SPECIAL PRECAUTIONS MAY BE NEEDED.

Make sure you have marked your snow board so you can find it under a deep snow.

Be prepared to go out and measure and empty the contents of your gauge as often as you need to to make sure it doesn't fill to the top and spill (It is really great to have an extra outer cylinder so you can just bring one in and set the others out. We do have a small supply of extra cylinders if you're interested. If you can splurge on the extra cost, it really makes measuring snow easier.)

If you anticipate a gigantic snow, such as our 2003 Colorado snowstorm, then extraordinary means may be required. Quite a few of you up in the foothills went out and got sections of 4" diameter stove pipe or 4" diameter PVC pipe (ideally, with a beveled edge like our gauges). This allowed catching and coring much deeper snow without hurting the CoCoRaHS gauge.

So keep a close eye on the forecast and if it snows a lot you will be prepared. Make sure you submit "observation notes" explaining any measurement

difficulties you may have made as well as important observations you may have noted.

Then, I strongly encourage you to check your data at least twice before submitting your data report. Then look at the CoCoRaHS maps of precipitation, New Snow and Total Depth of Snow and see how your data compare with your neighbors.

Thunderstorms?

Last week, Indiana and Missouri got clobbered. This time, T-storms are in the forecast for Colorado, Kansas, and Texas. Hail is a distinct possibility. So even if you don't have a hail pad ready, note when hail begins, ends, and all the other things we ask. Then fill out the "Hail Report" and send it is as soon as you can. Others will thank you.

Best wishes to all, and enjoy the beginnings of spring.

Nolan

P.S. We told you things would start getting interesting. March rarely is boring.