

The Catch

CLARITY TO THE SNOW MEASUREMENT CHALLENGE

FORT COLLINS, CO — Monday, April 11, 2005

Dear CoCoRaHS snow measurers:

By now, you are probably fed up of hearing from me and wish we could all do CoCoRaHS in south Florida where we would never have to worry about snow. But the message I received today may add clarity to the challenge we often face in reporting the most accurate measurement we can of the "Total Daily Precipitation" regardless of whether it fell as rain, snow, or something in between.

I would like to share with you this message from one of our many dedicated volunteers. Some day, our computer system may be programmed well enough that we can look at both the gauge catch and the snow core measurements independently and then determine, under any circumstance, which provides the best measurement of the precipitation that fell. But for now, you are the best judge of that and we are the ones that determine what number we put in the "Total Precipitation" data column.

I agree totally with what is described below and I suggest you read this and follow his lead.

Nolan -

On snow measurements, I have been using what I determined to be the most accurate as between the snow board core and the rain gage and have reported that as precipitation. For example, during the heavy part of this storm, my gage bridged over with snow before I could empty it, but I obtained an excellent snow core. For today's record, I had emptied the gage twice and took snow cores at the same time, so I added the totals for the separate measurements. In this case, I felt that the snow cores were the most accurate, and used those to enter as the precipitation measurement. For the first day of the storm, however, I did just the

opposite, because the storm started as rain, and the core did not record all of the precipitation.

I hope this is OK to do. I feel that the total daily precipitation is the most important and most used piece of data, and therefore, I use my judgment to best determine the actual precipitation, even if that sometimes comes from the snow core. I always include my reasoning in the notes.

Just for reference, in probably 8 or 9 out of 10 snow measurements I've taken my gage and my snow core measurements have been within 0.02 inches of each other. Even for this storm, my second of the two-part measurement for today, the snow-core was 0.92 inches and the gage was 0.87 inches. I believe that by using my judgment, I've been able to provide remarkably accurate snow measurements with regard to total precipitation.