

The Catch

COCORAHS – A JANUARY THAW OR CHILL, DEPENDING

FORT COLLINS, CO — Thursday, January 22, 2009

Hello CoCoRaHS participants, friends and family,

I am long overdue for a letter. While some of you (even Florida) have been freezing cold, here in northern Colorado we've had an amazing January thaw. Today may be our 7th straight day with high temperatures reaching the 60s, and we even hit 70F a couple days ago -- nice, but almost scary. Not bad for an elevation almost 5280 feet (above sea level). (Note: at this same time many of our higher mountain valleys have been very cold. The clear, and very dry air allows for rapid radiational cooling and cold air trapping of the heavier, denser, cold air. I understand that Salt Lake City and other valleys of the Great Basin have also been experiencing these inversions.)

Since I last wrote, the stormy weather in the Pacific NW finally calmed down and the floodwaters have subsided. Floods also developed and subsided in parts of the Midwest. Drought has continued to worsen in Texas and California. Then there was the wild cold wave up over Alaska (our Alaska volunteers had great comments on the cold in late December and early January) that spilled southward last week. And snow -- there has been snow and persisting snow cover across much of the northern states from eastern Washington State to Indiana and on to PA and NJ. It's winter!!

I need to be brief today since I have morning meetings in Denver. Our Water Availability Task Force, which assesses weather conditions and prospects for current and future water supplies, is meeting for the first time in 6 months.

I'll just outline a few key things

1) Welcome to all of our new observers who have signed up in recent weeks. If you have questions about getting set up and started, just let us know.

2) As usual, the number of CoCoRaHS volunteers measuring and reporting each day drops in December and January. It's cold and dark and sometimes way too icy this time of year, so I understand completely. But now we're a month past the winter solstice and finally the mornings will begin to be a bit brighter (you may even be able to see your gauge at 7 AM :-). Hopefully as the days grow longer more of us can get back into measuring and reporting. Others of us can get started for the first time. We had been up to as much as 7000 volunteer reports per day before dropping off to only about 5500 in late December. By March, I hope we can be back up to 7000 and headed even higher as Ohio (Ground Hog Day launch) and Massachusetts (March 1) join our team.

3) If you love weather stuff, and have the time, don't forget to look at the CoCoRaHS blog. Chris Spears, one of our dedicated volunteers, has been doing an amazing job blogging this winter and sharing his love of weather and climate. <http://cocorahs.blogspot.com/>

4) A reminder to those of you who report your precipitation, or are thinking about it. Your data are IMPORTANT and are being used everyday -- even your reports of ZERO precipitation (and there have been a lot of zeros lately as we've been in a national precipitation lull the last few days). We know that reporting seems less exciting when there has been no rain or snow, but ZERO is valuable information, so please report if you can. Remember our "Monthly Zeros" reporting form that makes it easy to go back anytime during the month (or past months) to fill in 0.0 for the dry days.

<http://www.cocorahs.org/Admin/MyDataEntry/MonthlyZerosReport.aspx>

5) We know that much of the country does not get much snow. If you received no snowfall and the total depth of snow on the ground is zero, remember to type in 0.0. The computer inserts NA (not available) as a default, but we prefer to know for sure. By the way, a big "Thank You" to our North Carolina observers -- and some in SC and GA -- who did a great job reporting your recent snow storm.

6) CoCoRaHS made a splash in Phoenix. Thanks to the generosity of the Salt River Project (water and electricity supplier for the Phoenix , AZ area) we were able to attend this year's American Meteorological Society's annual meeting and WeatherFest at the Phoenix Convention Center last week. The CoCoRaHS "Water Balloon Toss" was a huge hit with hundreds

of children and grownups aiming balloons at CoCoRaHS rain gauges on January 11. Only one person got more than 1.00" of "rain" to land in the gauge. She was our 2009 WeatherFest Champion and received a new CoCoRaHS gauge. Thanks to all the great volunteers who helped make this event so successful.

7) We have added a feature on the CoCoRaHS website -- "Data Analysis". This is where we'll be highlighting some of the research and data summaries produced using our data.

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

We are about to add our latest analysis. We have been curious how often it rains/snows across the country and what the most common reported values are. Not surprisingly, the most common values are 0.00 and T which account for 2/3 of all our daily entries. (by the way, there were over 2,000,000 daily precipitation reports submitted in 2008!!!!!!)

The next most common amount is 0.01" followed by 0.02", 0.03" etc in the shape of a very nice non-linear curve (would make you statisticians happy). But then came the surprises. Certain digits like 0 and 5 were reported much more often than adjacent numbers. The heavier the rain amount, the more likely it would be reported to the nearest 0.10 or 0.05". Then at amounts over 1" the favorite numbers become 0.25, 0.50, and definitely 2.00, 3.00, etc. We found this very interesting. It made me wonder if people are remembering to pour the contents of the large outer cylinder into the inner tube for large rain amounts, or if perhaps for simplicity the content of the large cylinder is just being approximated. Anyway, we found these results fascinating and instructional -- and we'll be posting them very soon.

If you have conducted any interesting data analysis utilizing the CoCoRaHS data, let us know. We may be able to display some of these results with our "Data Analysis"

8) Alaska. Alaska is a huge state, with wild and variable weather. We don't talk about it much, but we actually have several dozen CoCoRaHS volunteers there including several schools in remote areas trying hard to make good measurements -- sometimes in the total dark. I just want to say "Thanks" to our Alaska team, some of whom have recently survived a very long stretch of subzero temperatures.

9) The farm -- we've had a few issues with the horses such as an eye injury and some minor colic (if there is such a thing). When it warmed up we were able to get the barn cleaned and a new composting pile built.

It's already "cooking" at about 135 degrees. Compost is a way of life around here. The egg production from the chickens has increased a bit, and now the geese are beginning to get real feisty (we have to watch our back sides). I guess it's already that time of year.

10) Before I hit the road, I just wanted to say "Thanks" to all of you who chose to make financial donations this past month. We raised nearly \$10,000 to help sustain the CoCoRaHS network!! We've also had some productive meetings with some potential funders who are using CoCoRaHS data to help monitor and study drought and floods. Thanks very much. This is a team effort in every way!

Best wishes, and thanks for being a part of CoCoRaHS

Nolan (from Colorado)