



Who Is The Citizen Scientist? What Have They Learned From Participating ?

Results from a CoCoRaHS (Community Collaborative Rain, Hail and Snow Network) Participant Survey

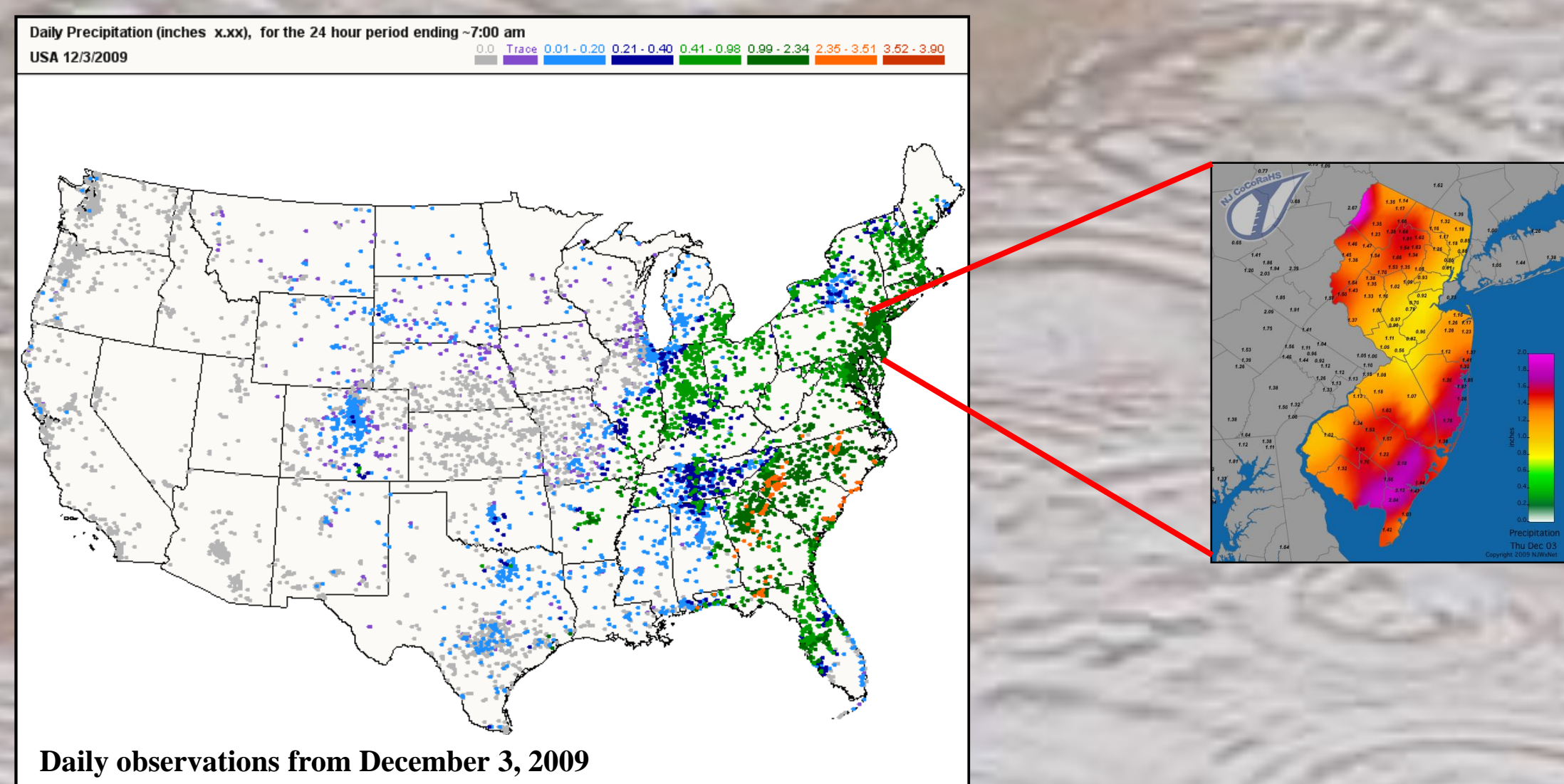
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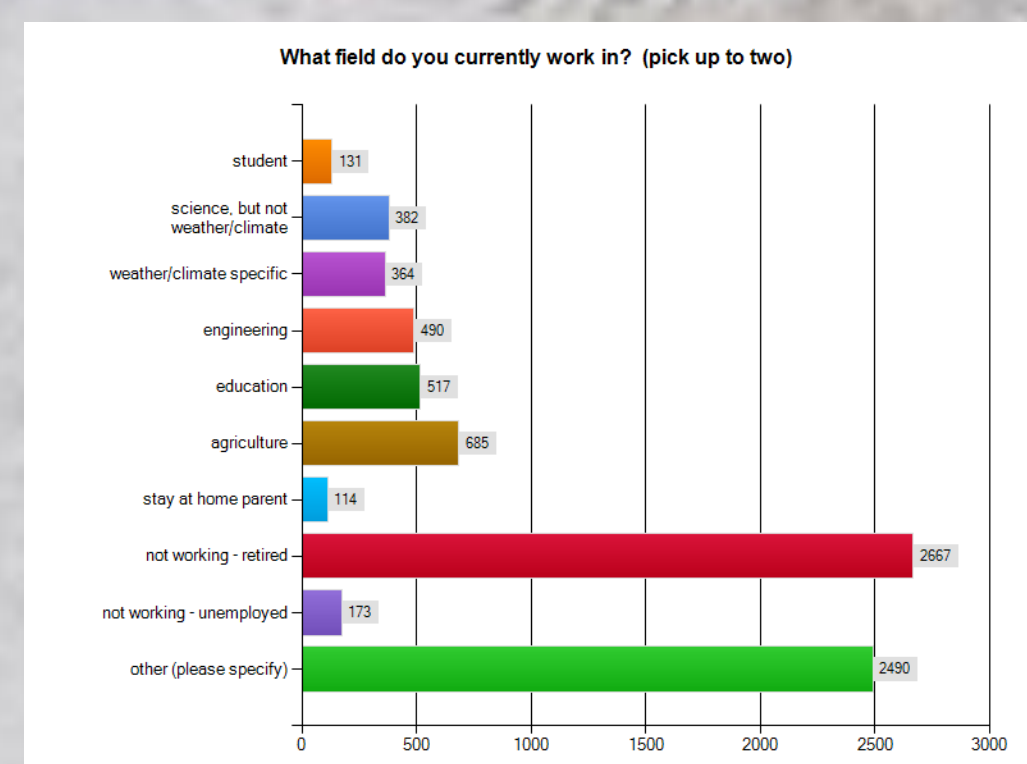
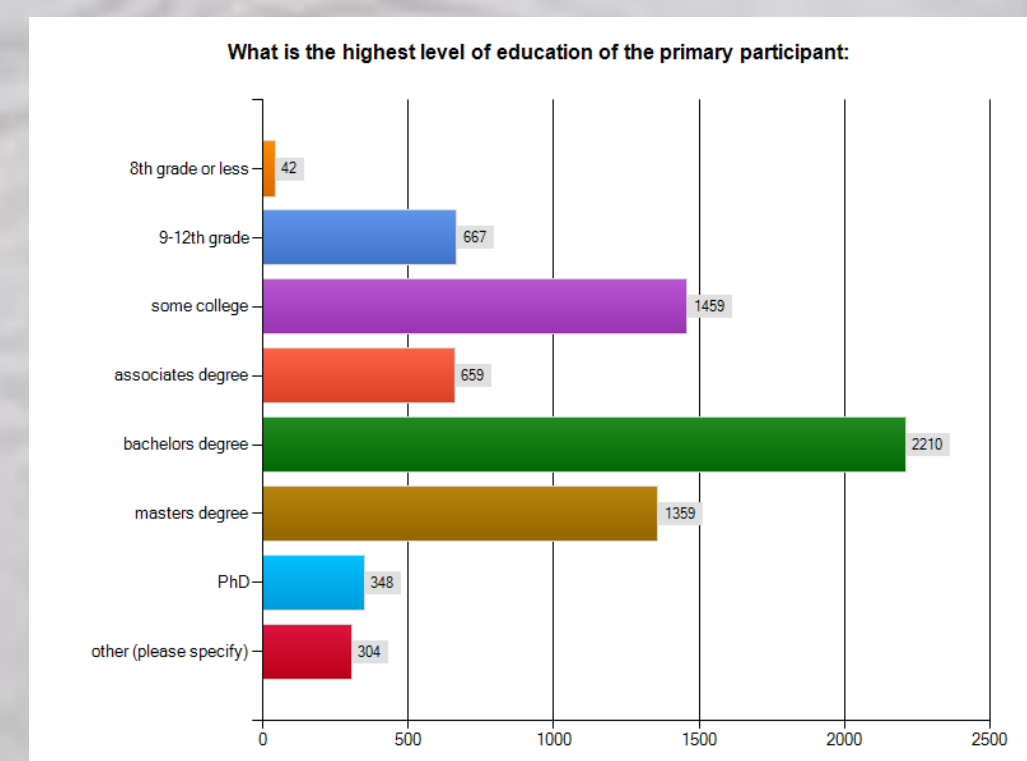
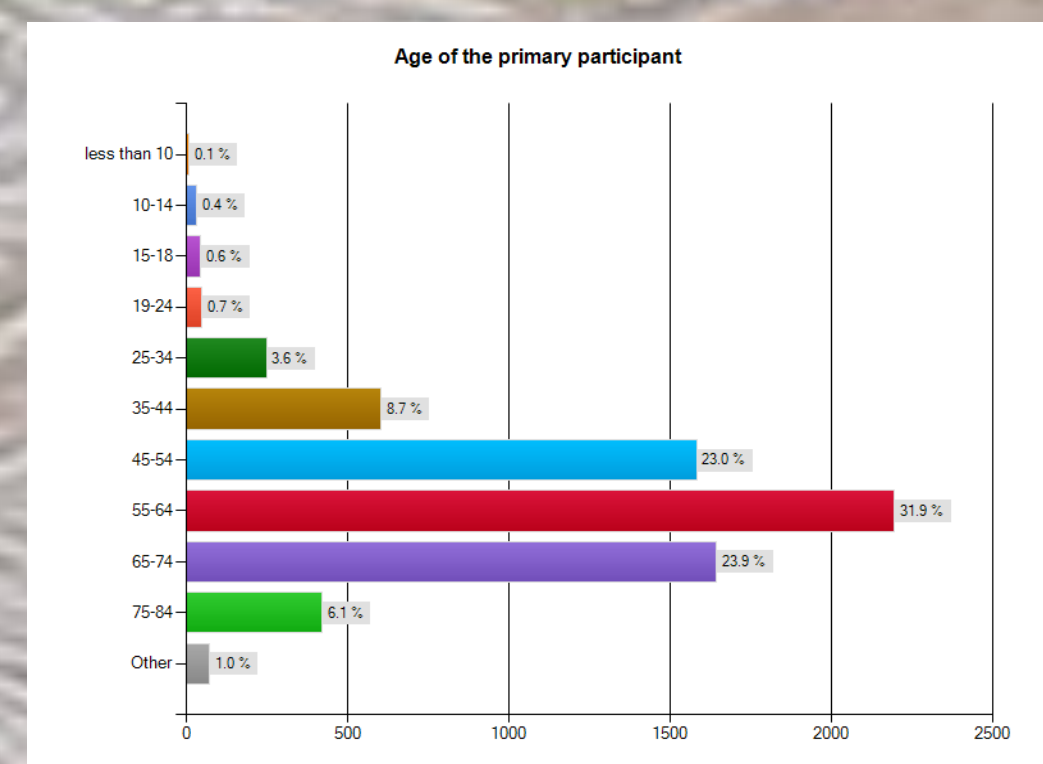
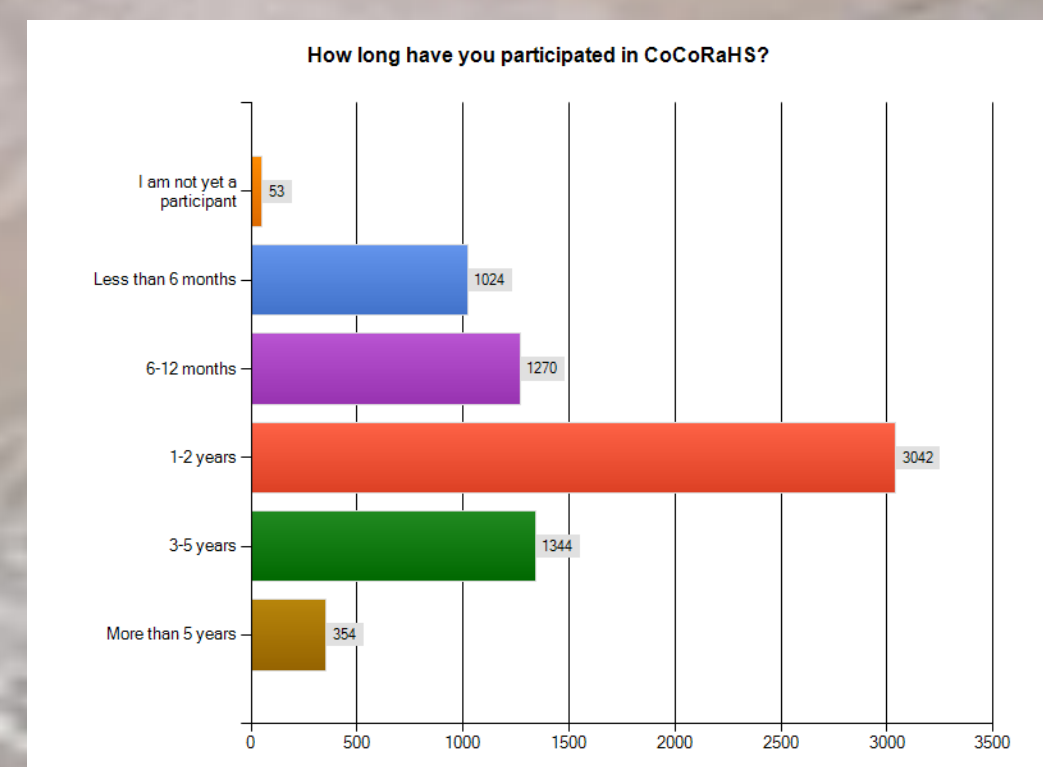
Abstract

CoCoRaHS is a "citizen science" project where volunteers of all ages have the opportunity to measure and report the amount and type of precipitation that falls in their backyard. CoCoRaHS began as a local community project in Fort Collins, Colorado, in 1998 following a devastating local flash flood the previous year. Starting with a few dozen volunteers in northern Colorado, CoCoRaHS has now expanded nationwide and has over 14,500 active volunteers (observers who reported at least once in the past year). Measurements taken using simple low-cost rain gauges and hail pads are made publicly available on the CoCoRaHS website: www.cocorahs.org. Data are of such high quality that National Weather Service offices and many other professional organizations are now using CoCoRaHS data routinely for monitoring, research and education.

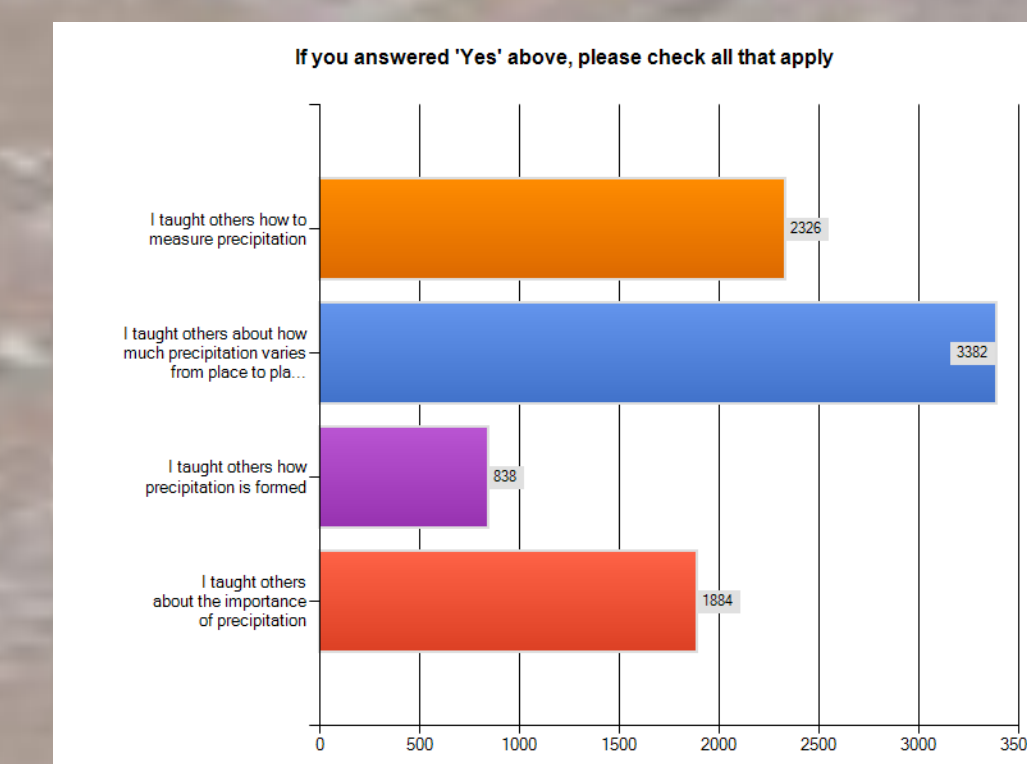
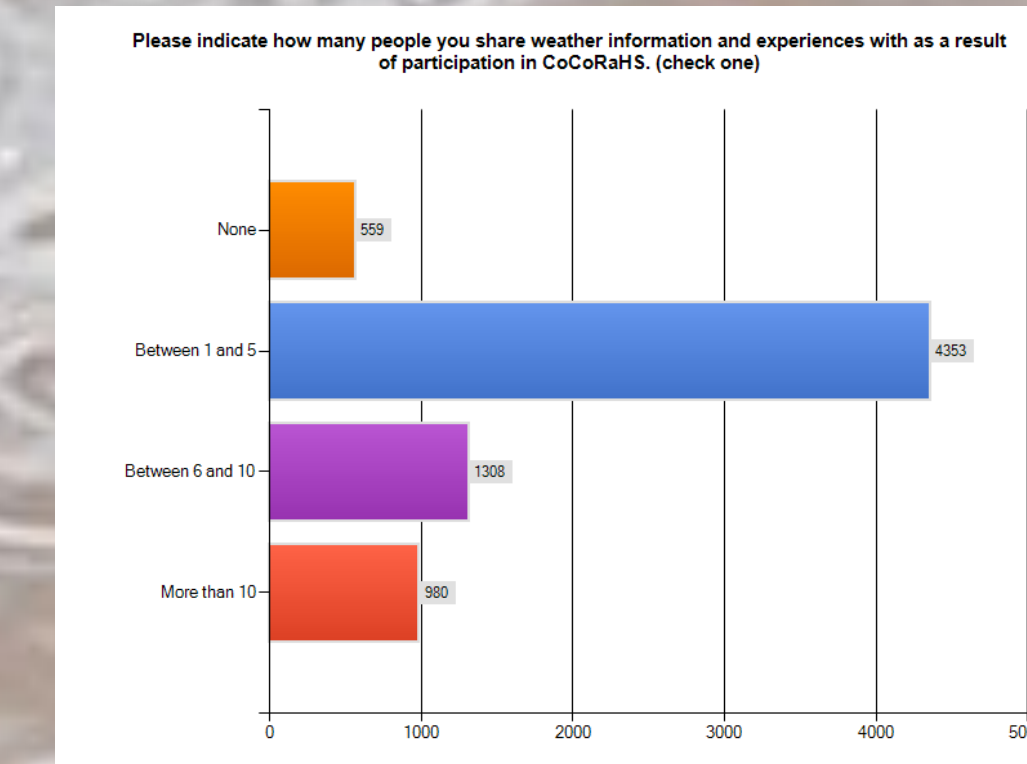
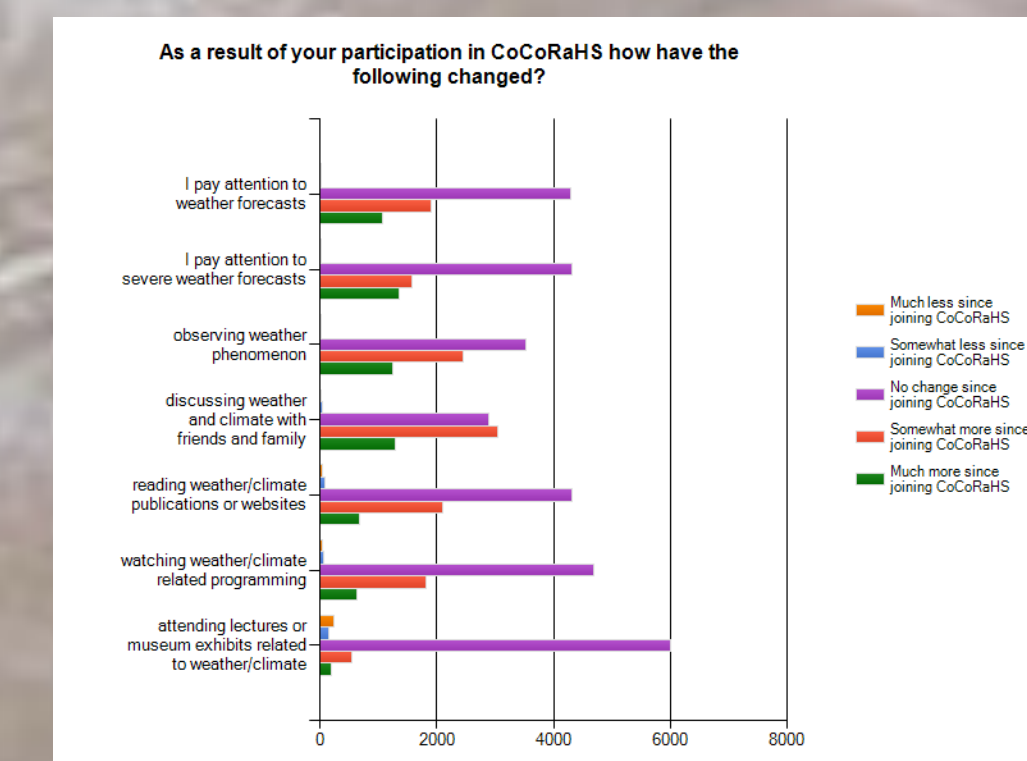
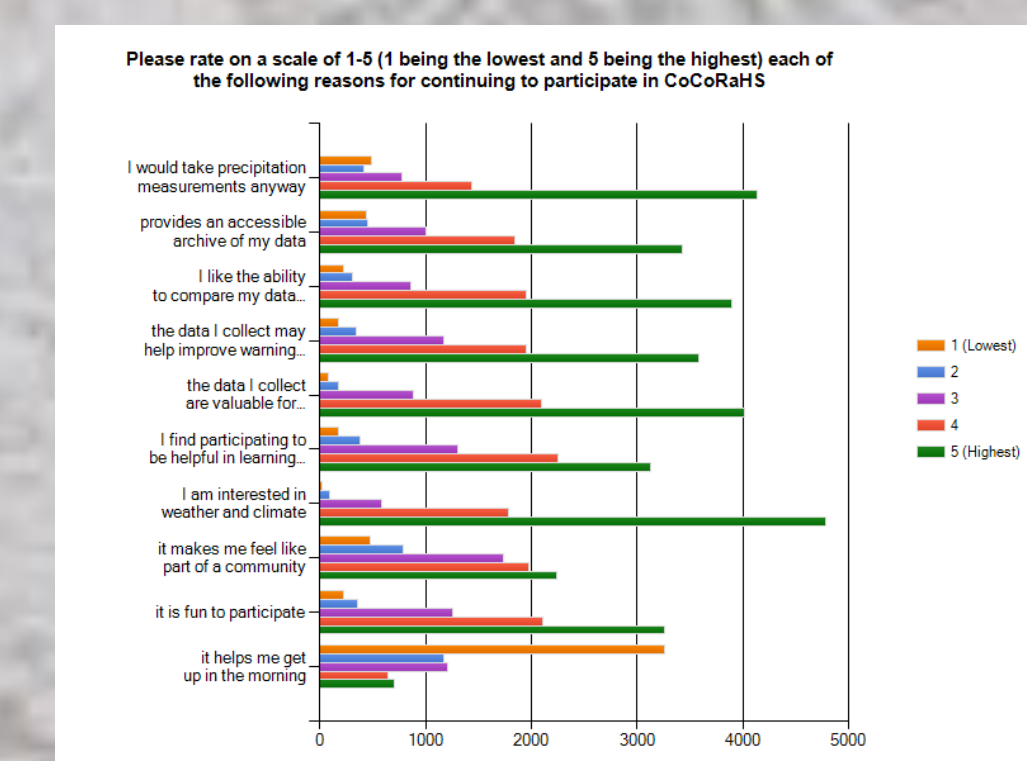
A comprehensive survey of CoCoRaHS participants was conducted during the fall of 2009 in order to uncover participant perceptions of numerous aspects of the CoCoRaHS program. This poster presents some of the early results from key categories of the survey including demographics, response rates, volunteer motivations, level and duration of participation, impact of participation, educational impacts, and educational resources.



Participant Demographics



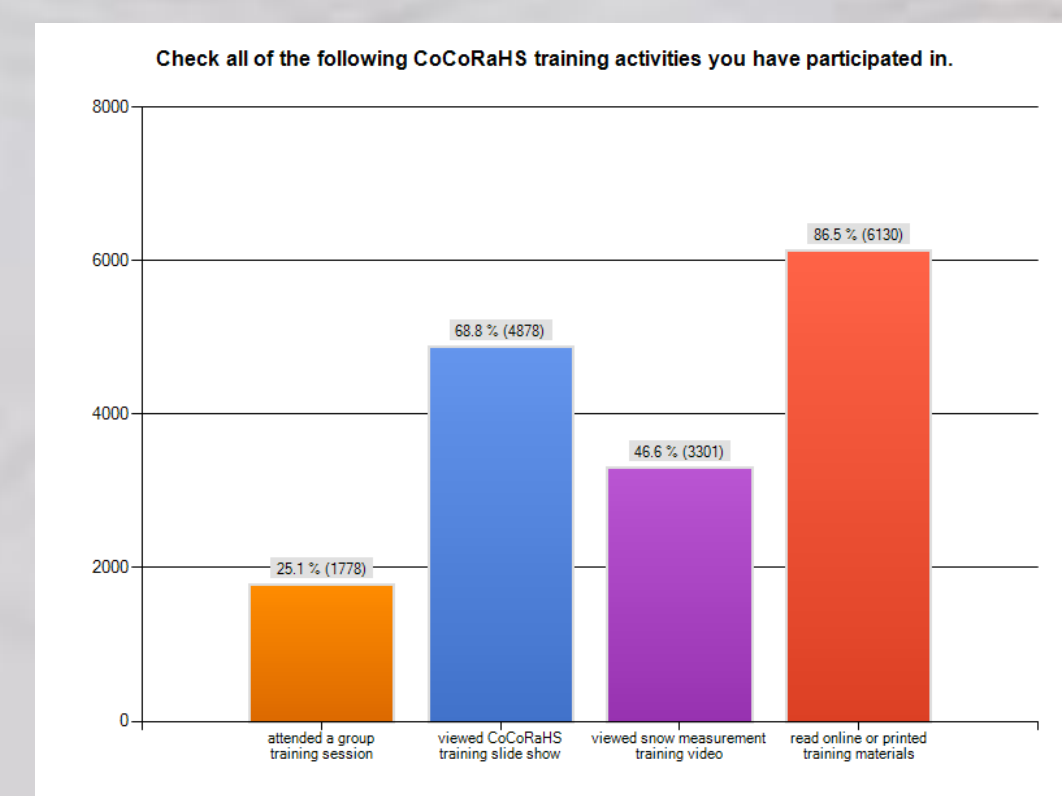
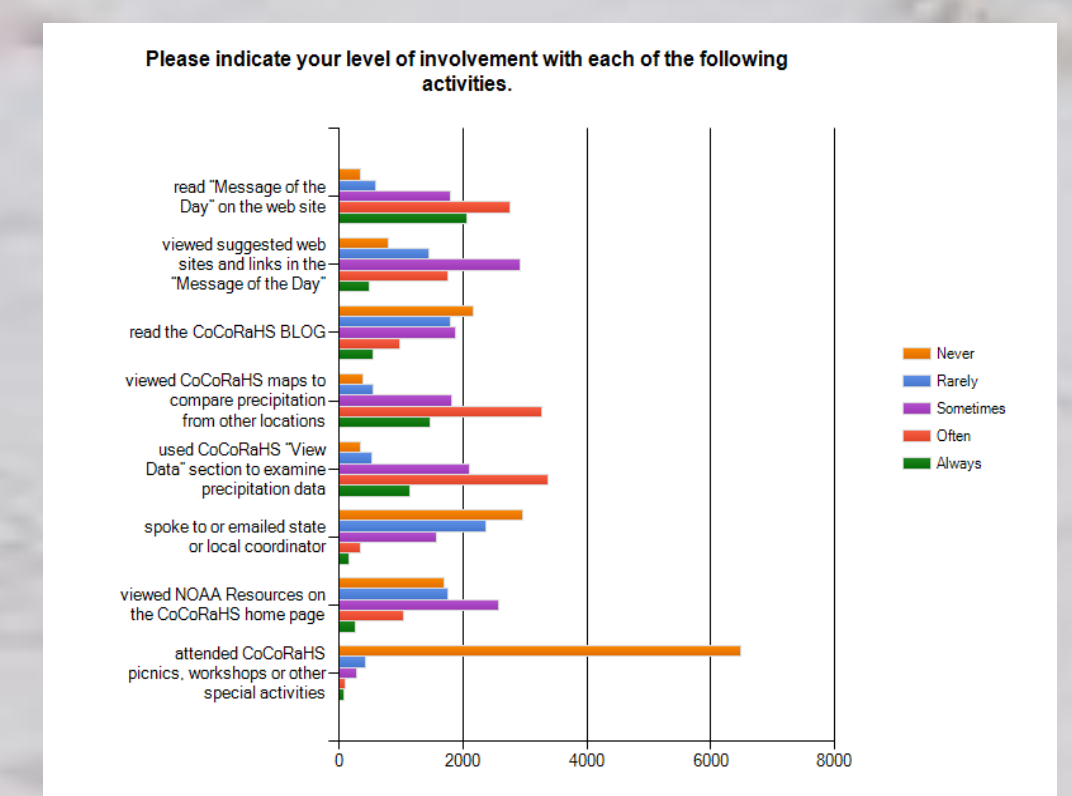
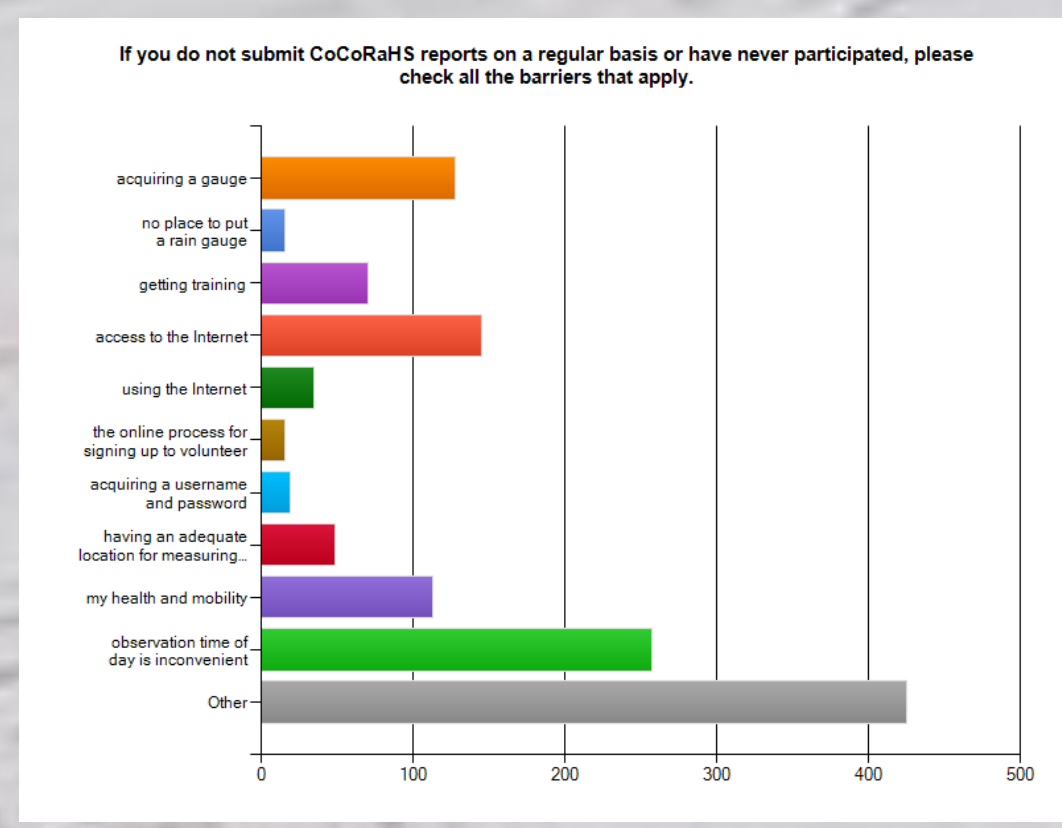
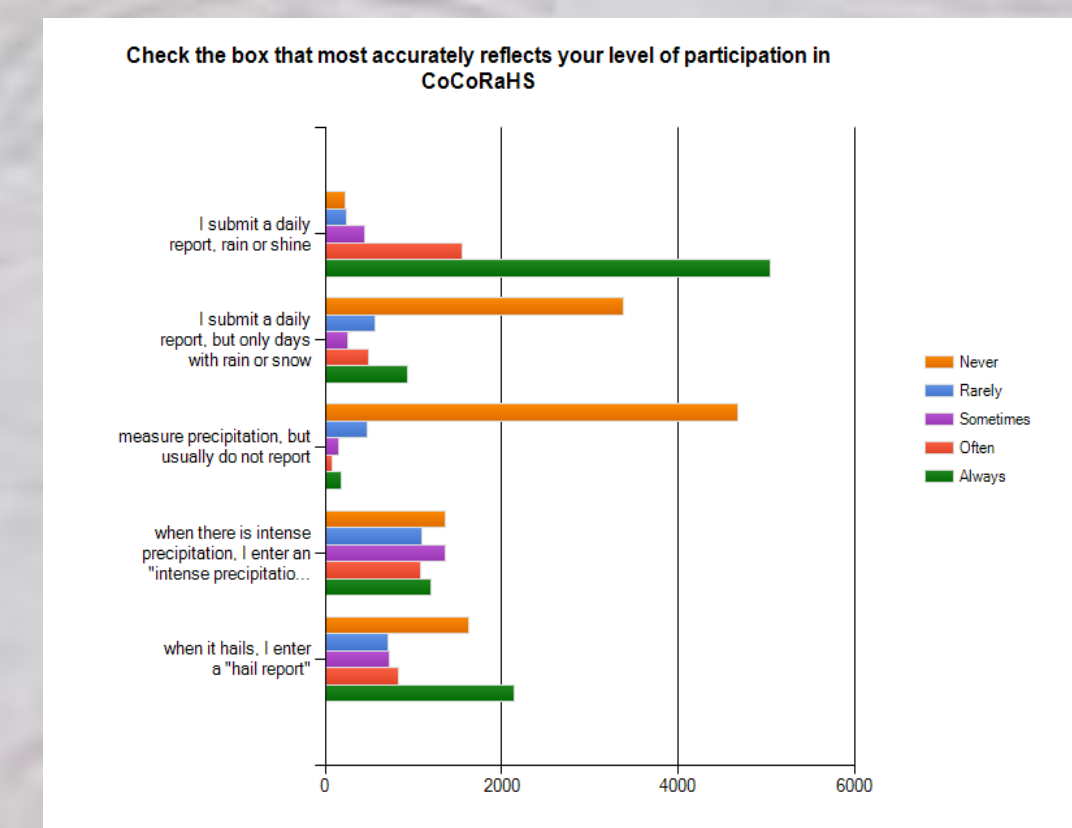
General Impacts from Participation



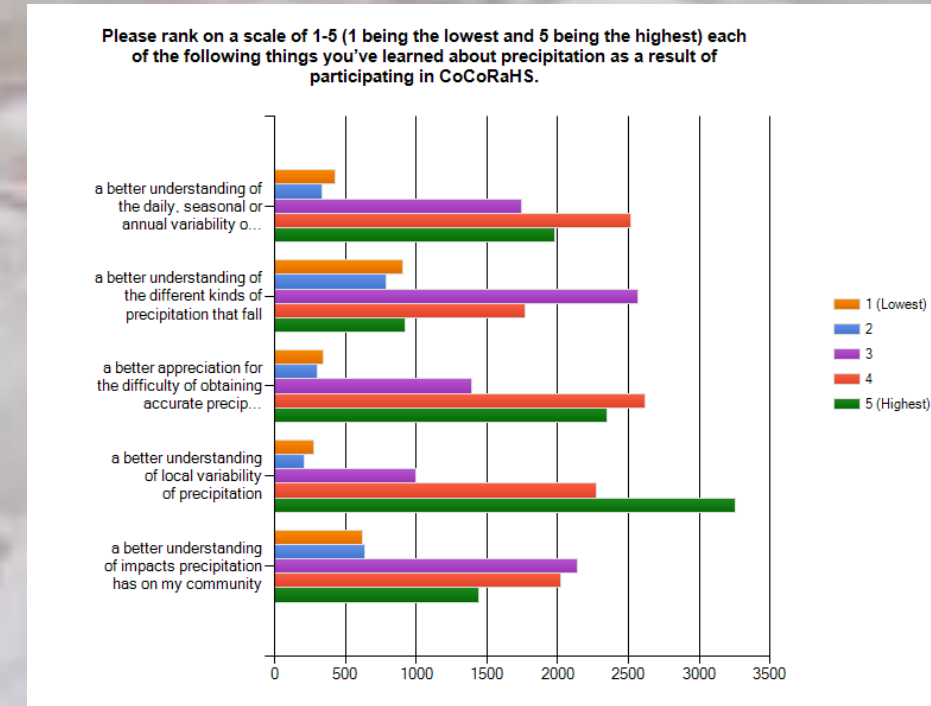
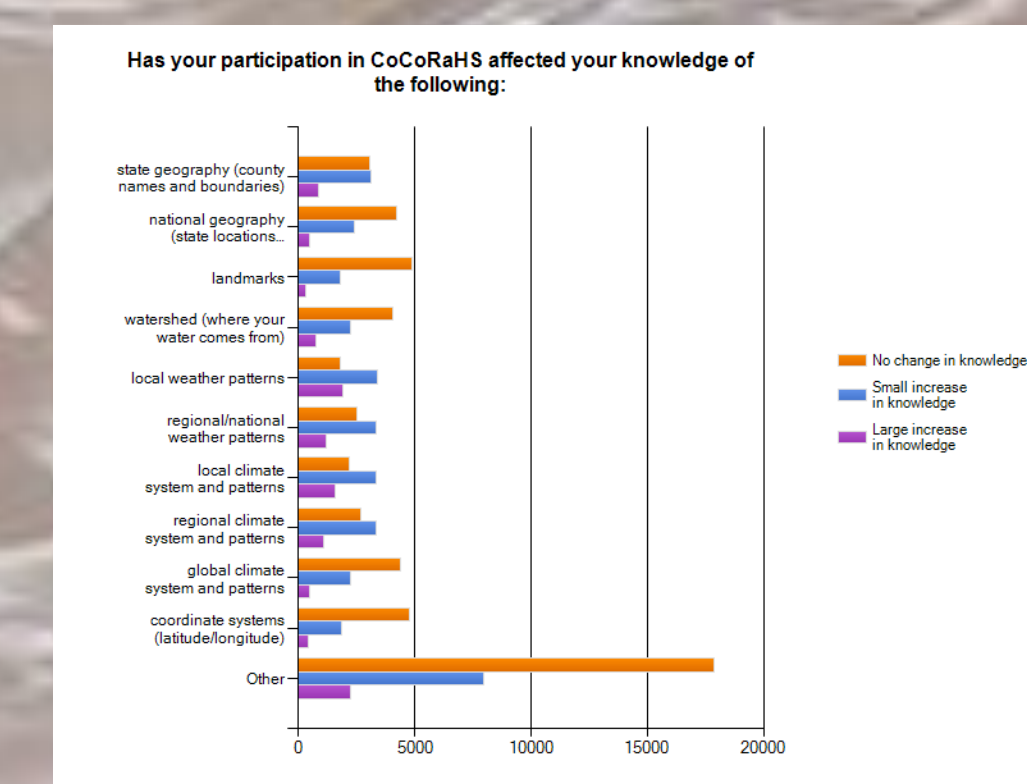
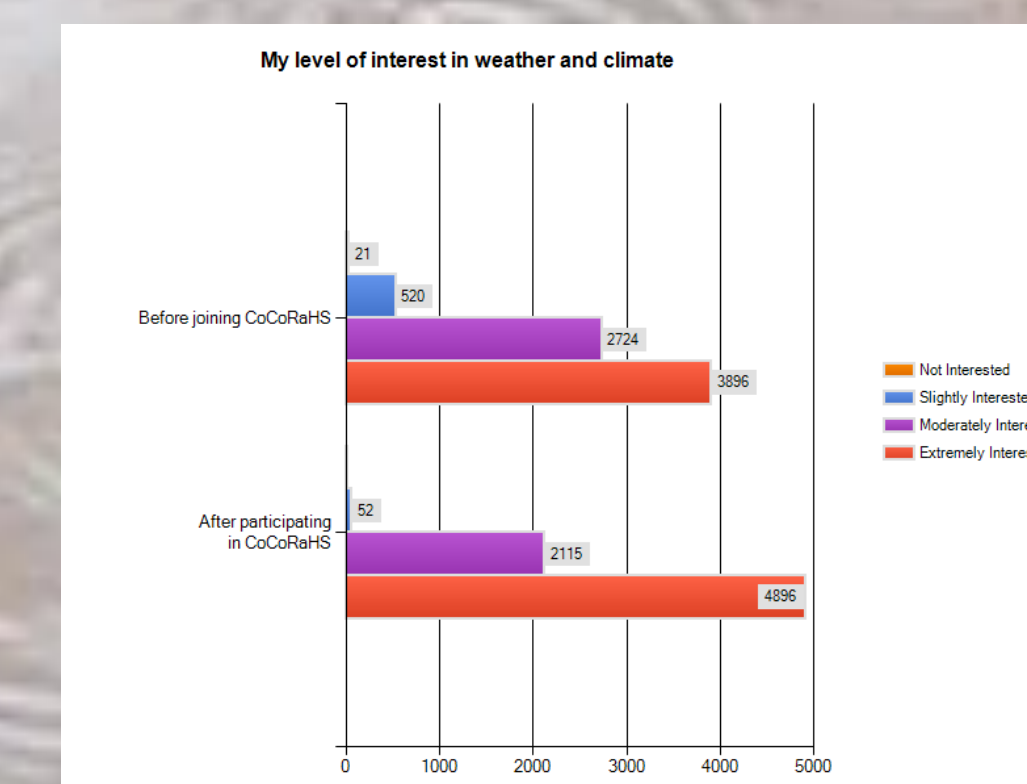
Highlights of Demographics

Of those who responded: Over 52% (3,684) CoCoRaHS stations are on rural sites, and of all the states, Colorado with 8.6% (606) and Texas with 8.2% (578) have the greatest number of observers. 42.9% (3,024) of the observers taking the survey have been participating for 1-2 years, 78.5% (5,565) are participating as individuals, 78.8% (5,420) are between ages 45-74 years, 85.7% (6,035) have attended some college if not more, 37.9% (2,667) are retired, and 97.1% (6,600) are Caucasian.

Levels of Participation



Educational Impacts from Participation



The Survey

We used a commercially available web survey tool to administer a survey containing 42 questions, combining Likert and open-ended responses, divided into five sections: levels of participation, general impacts from participation, educational impacts from participation, participant resources, and participant demographics. CoCoRaHS participants were notified by email and invited to participate. Participation in the survey was anonymous and non-compensatory.

The survey was open for 2 weeks in September 2009, where over 17,500 observers were invited to participate. Observers with active email addresses were provided with email reminders and website reminders to take the survey. By the end of the survey period over 7700 responses were received with 92.5% of those responses returned completed in their entirety.

Presented here are preliminary results from the survey. The preliminary findings are based on the responses of those who participated in the survey, and are not necessarily reflective of total population of CoCoRaHS observers. The next step will be to develop filters to further analyze the data and comments from the survey to further define the "citizen scientist" in general, and the CoCoRaHS observer more specifically.



Highlights of Levels of Participation

87.8% (6596) of CoCoRaHS observers either always (67.1%) or often (20.7%) submit daily reports rain or shine. Of the 930 respondents who said they did not submit reports on a daily basis 425 said that it was because they were too busy. Over 7,000 of the survey respondents have participated in some sort of CoCoRaHS training. The respondents prefer participating in the online aspects of CoCoRaHS such as "Message of the Day," and viewing daily maps and data. Over 2,200 respondents are also involved in the NWS Skywarn severe weather reporting, and are also involved in numerous additional citizen science projects such as bird counts, and water monitoring.

Participant Resources

