CISA & CoCoRaHS Citizen Science Condition Monitoring Project

What is the Citizen Science Condition Monitoring Project? CISA is working with volunteers throughout the Carolinas to participate in the Community Collaborative Rain, Hail & Snow network (CoCoRaHS). CISA invites you to participate in weather observations and condition monitoring in order to help improve understanding of drought and its impacts in the Carolinas. Citizen scientists can provide valuable information to help find ways to reduce impacts to plants, animals and other resources during periods of little or no rain.





What is CISA? CISA stands for "Carolinas Integrated Sciences & Assessments." Based at the University of South Carolina, Department of Geography, our research group works with communities and groups in North and South Carolina to improve understanding of drought impacts and find ways to better prepare for and cope with drought events. CISA also works with partners at the

North Carolina and South Carolina State Climate Offices, National Drought Mitigation Center (NDMC), the National Integrated Drought Information System (NIDIS), and the National Weather Service (NWS).



What is CoCoRaHS? The Community Collaborative, Rain, Hail and Snow Network, is a non-profit, community based network of volunteers who take daily precipitation measurements in their backyards or communities.

Why is CoCoRaHS important? Rain impacts our daily lives. Rain is important for the health of plants, animals and people and is best understood on a local level. CoCoRaHS is designed to provide quality, local rain data and educational resources to communities. As a CoCoRaHS observer, you will be collecting rain data that is useful to many different federal and state agencies and local organizations.

What is citizen science? Citizen science is local people helping to conduct scientific research. It is a way that what people know about their communities and local environments can improve the scientific research process.

What is condition monitoring? CoCoRaHS volunteers submit information about how rainfall, or lack of rain, influences their local environment. Local knowledge about your environment and how weather influences it can reveal much more than can be learned from just recording daily rainfall alone. Things to monitor might include your garden, birds or animals that you see in your area, water levels or water quality in a pond, stream, river or lake nearby, or local business activity. Condition monitoring helps to establish a baseline of information to compare when the weather begins to change. These changes might be seasonal or they might be caused by irregular weather patterns, such as too much or too little rain.



How can I get involved?

- Daily Precipitation Reporting: Once a day, you will record rain totals by reading your assigned rain gauge. This includes reporting "zeros" on days when there is no rain.
- Weekly Condition Monitoring: Once a week you will tell us about the conditions in your area such as the condition of local plants or water levels. Just like reporting "zeros" on days when there is no rain, we would like you to tell us if conditions are normal.



Who will use the information I collect? CoCoRaHS data is used by many different organizations and individuals in the community and throughout the country. All of the data that is collected is publicly available on the CoCoRaHS website. You can also view your condition monitoring reports on the condition monitoring web map found at <u>www.cisa.sc.edu/map</u>. This project will help gather data that are valuable in understanding local weather patterns, as well as the effects of precipitation on businesses, land, agriculture, animals, and human health. The data will be used to inform collaborative efforts between CISA and the National Drought Information System (NIDIS) as part of the NIDIS Carolinas Drought Early Warning System (DEWS).

What role will this project play in the NIDIS Carolinas Drought Early Warning System? Part of CISA's role in this project is to evaluate the usefulness and benefits of citizen science condition monitoring as it is incorporated into drought impact reporting for drought monitoring and response planning. As part of the evaluation process, we will ask volunteers to participate in follow-up surveys, interviews, or focus group discussions to help us as we evaluate the project. Findings from this project will also be used to inform other components of the DEWS program. You can learn more about this program at: https://www.drought.gov/drought/dews/coastal-carolinas.

Where can I find more information? You can find more information about all of the project partners at the websites below or by contacting the CISA team. Our contact information is at the bottom of the page.

CISA Website: www.cisa.sc.edu/CoCoRaHS.html CoCoRaHS Website: www.CoCoRaHS.org *NIDIS Website:* www.drought.gov *NDMC Website:* http://drought.unl.edu/

Contact Information

| For more information about the condition monitoring project contact: | State CoCoRaHS Coordinators: |
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