



CISA

A NOAA RISA TEAM

July 2017

CISA & CoCoRaHS Condition Monitoring Newsletter

Dear CoCoRaHS Observer,

This month's newsletter includes:

- A Southeast Regional Climate Update
- An overview of the second CoCoRaHS Observer Survey
- A message from Amanda Farris about what was discussed at two recent conferences
- An article about the August 2017 total solar eclipse

As always, do not hesitate to reach out to us at cisa@sc.edu if you have any other questions or comments.

The CISA Team - Amanda, Ellie, Kirsten, Kerry and Meghan

SE Regional Climate Update

The NOAA National Centers for Environmental Information has released their overview of the [June 2017 United States climate](#). The following are some highlights from the report:

- The year-to-date average temperature was 3.4°F above average for the contiguous United States
- While the June average temperature was also higher than average, some areas in the Southeast region experienced

In This Issue

[SE Regional Climate Update](#)

[CoCoRaHS Observer Survey Results](#)

[Documenting Your Impact](#)

[Total Solar Eclipse](#)

Quick Links

[CISA Website](#)

[CoCoRaHS Condition Monitoring Webpage](#)

[Cuckoo for CoCoRaHS in the Carolinas Blog](#)

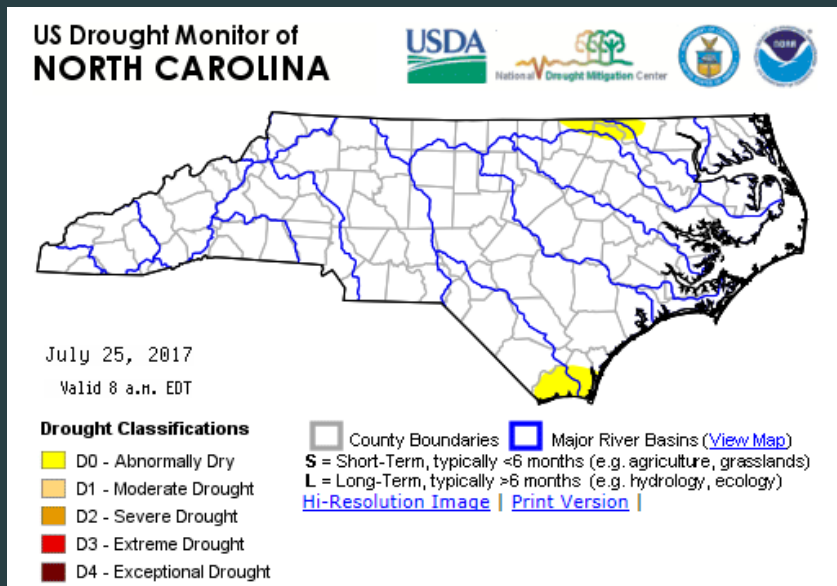
[Follow us on Twitter](#)

[Visit us on Facebook](#)

a cooler than normal month. The Carolinas were both mainly near average in their temperatures

- Across the country, the precipitation total for June was slightly higher than normal at 3.01 inches
- The Southeast region experienced significantly improved drought conditions throughout June, even though other regions of the United States remain in drought

For the second month in a row the [North Carolina Drought Management Advisory Council](#) is reporting that the state is under no drought advisories.



Map released by the North Carolina D.M.A.C. on July 25, 2017.

The [South Carolina Drought Response Committee](#) has not updated the drought status map since the time of release of our last newsletter. However, there has been significant drought recovery in the state over the last month. The South Carolina Drought Response Committee will meet next on August 11, 2017 to discuss updating the drought status in the state. This is the map of South Carolina released by the [United States Drought Monitor](#) on July 25, 2017.

U.S. Drought Monitor
South Carolina

July 25, 2017
(Released Thursday, Jul. 27, 2017)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	99.98	0.02	0.00	0.00	0.00	0.00
Last Week 07-18-2017	99.90	0.10	0.00	0.00	0.00	0.00
3 Months Ago 04-25-2017	32.96	67.04	18.56	1.70	0.00	0.00
Start of Calendar Year 01-01-2017	27.80	72.20	30.28	10.83	4.12	0.00
Start of Water Year 09-27-2016	73.62	26.38	14.28	1.45	0.00	0.00
One Year Ago 07-26-2016	85.18	34.84	24.76	11.04	1.69	0.00

Intensity:
 D0 Abnormally Dry D3 Extreme Drought
 D1 Moderate Drought D4 Exceptional Drought
 D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCEI/NOAA

Map released by the United States Drought Monitor on July 25, 2017.

With all of this precipitation occurring, don't forget to comment and report on wet conditions in your condition monitoring reports!

CoCoRaHS Observer Survey #2 Results

On June 13th, the 2nd of 3 surveys was circulated to CoCoRaHS observers in the Carolinas. The answers to these surveys helps the CISA team to ensure that reporting forms and tools are easy to use and beneficial and that information provided through the newsletter and other communications materials is relevant and informative. The second survey received 638 responses! The following is an overview of the answers that were submitted:

- 17% of respondents to the survey are submitting condition monitoring reports, and began submitting during or after October 2016 (the start of the new condition monitoring report form).
- The top reasons for volunteers not submitting reports were: they are only interested in submitting precipitation measurements, they were not aware of the option to submit condition monitoring reports, or they forget to report on a weekly basis.
- About 70% of observers reported that they continue to submit condition monitoring reports at the same frequency as when they first started. Only 4% of observers reported that they have increased their frequency of submitting condition monitoring reports.
- The most common reasons for reporting less frequently are forgetting to report and travelling away from the home.
- Among the observers who report the same amount, or

more often, the majority said that their interests in weather and the environment are closely related to condition monitoring. Others said that they appreciate being able to contribute to scientific knowledge, and some enjoy knowing that their reports are useful.

- Among observers who regularly read our outreach materials, the newsletter was more popular than the blog. Observers were less likely to use the Cuckoo for CoCoRaHS in the Carolinas blog for information.
- The information provided in the newsletter and blog are considered to be most helpful for: knowing about current weather and climate conditions in the Carolinas, understanding how the reports are use, knowing what information to provide for condition monitoring reports, and understanding how the information is beneficial.

If you have any questions about the surveys or the condition monitoring reporting process, feel free to contact us at cisa@sc.edu.

Documenting Your Impact: CISA presentations about condition monitoring at two recent conferences

By: Amanda Farris

Last month Kirsten Lackstrom and I attended the American Meteorological Society's 23rd Conference on Applied Climatology (AMS) and the first day of the annual meeting of the American Association of State Climatologists (AASC) in Asheville, NC. We enjoyed 3 days of great presentations and discussion with many of our colleagues who are working to provide usable and accessible climate data and information for a wide variety of users.

The one and only Nolan Doesken opened the AMS conference with a presentation entitled, "Is Climate Science Fun or What?" He gave a great account of his interest in climatology from a young age, which inspired his career. In fact, one of his college advisors actually suggested that the field of climate science was dead. He pursued his research despite this guidance and has enjoyed a successful 40+ year career doing exactly what he loves.

We also had the chance to sit down for lunch with Nolan and Henry Reges, the national CoCoRaHS coordinator, to discuss plans for the condition monitoring effort. The folks at the national office are helping those of us on the CISA team to develop a

condition monitoring training animation and to launch a national version of the web map. Be on the lookout for these new resources in early September!

We are also going to be working with the national office over the next year to evaluate communications and outreach efforts about condition monitoring in other parts of the country. We hope to learn more about the best ways to encourage observers to submit condition monitoring reports, in addition to their daily precipitation measurements.

Kirsten and I gave a presentation about the condition monitoring project on the final day of the AMS conference. We had a great turn out for the session and several good questions. These types of audiences are always interested to learn more about our engagement with observers, which has been, in our opinion, a critical part of the success of the project. We also included information about condition monitoring in a broader overview of the CISA program during the opening session of the AASC meeting. We find these types of presentations to be especially valuable in spreading the word about the availability of condition monitoring reports to the decision makers who can use the information for a variety of different reasons.

It was a great week in Asheville with beautiful weather and good networking opportunities with colleagues. We look forward to the next time we'll be able to share the work of dedicated Carolinas CoCoRaHS observers who support the condition monitoring project!

Total Solar Eclipse 2017

Coming up in the next month we will be treated to a rare astrological event: a full solar eclipse. On August 21st the path of totality for the eclipse will pass directly over many cities around the country, including Columbia, SC! We thought it would be helpful to provide you with some information on this event, including citizen science data collection programs.

A total solar eclipse occurs when the moon entirely covers the view of the sun. As this occurs, one can see the sun's corona, it's atmosphere, in the dark sky. There are other more common types of eclipses as well. An annular solar eclipse occurs when the moon's disk doesn't entirely block the sun's disk. A partial solar eclipse occurs when the moon's shadow is not centered on the earth during the eclipse. So, as you can tell, a total solar eclipse is kind of a big deal.



Image of a Total Solar Eclipse in Australia retrieved from: [NASA](#)

The first total solar eclipse, on record, occurred in November of 3340 BCE in Ireland. This was discovered when a set of spiral-shaped petroglyphs seemed to show the paths of the sun and moon during the eclipse. The last visible solar eclipse in the United States occurred in February of 1979. The last visible solar eclipse that reached from coast-to-coast was in June of 1918.

During a total solar eclipse, it is common for temperatures to drop and for animals to change their behaviors. Be sure to include in your condition monitoring report if you happen to notice any interesting changes in your area during the eclipse!

There are many citizen science projects being created for this day. [Here is a link](#) to some of these projects. NASA also has a [listing of projects](#) happening across the country. [Life Responds](#) is a noteworthy project looking to gather data from iNaturalist volunteers on animal and plant behaviors during the eclipse. They will be collecting data from points where there are varying degrees of eclipse cover in order to determine if there is a minimum threshold for a change in behaviors.

Feel free to contact us with any questions. You can read more information by visiting the [NASA Total Eclipse](#) webpage, the [Great American Eclipse](#) webpage, or even this [Carolina's Integrated Sciences & Assessments City of Columbia](#) webpage. If you are looking to attend an event for the eclipse, you can find listings for [Columbia, SC](#), [Charleston, SC](#), and [Andrews, NC](#) on their websites.

cisa@sc.edu | www.cisa.sc.edu

University of South Carolina
Department of Geography
709 Bull Street
Columbia, SC 29208