



CISA

A NOAA RISA TEAM

October 2018

CISA & CoCoRaHS Condition Monitoring Newsletter



This month's newsletter articles:

- [A Spookily Steamy, Creepily Crawly, Happy Halloween](#)
- NASA "Adopt a Pixel" Citizen Science Project
- A Southeast Regional Climate Update
- Observer Spotlight

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

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A Spookily Steamy, Creepily Crawly, Happy Halloween



Normally in the Holiday Climatology section, we review the averages and the extremes for that holiday. However, this fall has been anything but normal. With the record-breaking rainfall and temperatures this fall, it's as if the goblins and ghouls of All Hallows Eve have decided to play a few extra pranks on us this year.

Just like the classic Halloween creatures of movies and stories, the majority of the terrible temperatures came at night. The North Carolina Climate Office reports that "minimum temperatures were an average of 7 to 10 degrees above normal and ranked as the warmest ever in September for almost the entire state [of North Carolina]." Based on these temperatures, you may want to carry a cooler while Trick-or-Treating or face the scariest prospect of all....melted chocolate!

While water is certainly useful if you are trying to melt a Wicked Witch, we received plenty of rain from Hurricane Florence. According to the Southeast Regional Climate Center, rainfall from Florence probably broke both Carolinas' state records. A station near Elizabethtown, NC recorded 35.93 inches of rain and a station near Loris, SC recorded 23.63 inches of rain. For Wilmington, NC, September was their wettest month dating back to 1871. Many areas impacted by the hurricane received rainfall above the 1000-year return period. This means that there is a 0.1% chance of that level of rainfall happening in any given year, if that's not scary, I'm not sure I know what is.

Historically, the warmest Halloween in the Carolinas occurred in Southport, NC with a high of 90°F and a low of 69°F. The coldest Halloween in the Carolinas occurred in Mount Mitchell, NC with a high of 22°F and a low of 10°F. The highest precipitation for South Carolina was 5.43 inches in Blackville while the highest for North Carolina was 7.05 inches in Morehead City. However, it has been a creepily crazy autumn and we may be in for more record-breaking weather on Halloween.

Be sure to report and feel free to send photos to CISA@sc.edu.

NASA "Adopt a Pixel" Citizen Science Project



Starting this month, you can be part of a project to create more detailed satellite-based global maps of land cover by sharing photos of the world around you in a new NASA citizen science project.

The project is a part of [GLOBE Observer](#), a citizen science program that lets you contribute meaningful data to NASA and the science community. The GLOBE Observer app, introduced in 2016, includes a new "Land Cover: Adopt a Pixel" module that enables citizen scientists to photograph with their smartphones the landscape, identify the kinds of land cover they see (trees, grass, etc.), and then match their observations to satellite data. Users can also share their knowledge of the land and how it has changed. "Adopt a Pixel" is designed to fill in details of the landscape that are too small for global land-mapping satellites to see. Learn More [HERE](#).

Southeast Regional Climate Update

The Southeast Regional Climate Center ([SERCC](#)) released its [September 2018 Climate Report](#) for the Southeast Region.

Report Highlights:

Temperature: Temperatures were much warmer than normal across most of the Southeast in September. Temperature departures ranged from slightly cooler than normal in a small portion of the Florida Everglades to more than 8 degrees F (4.4 degrees C) warmer than normal in western Virginia and North Carolina.

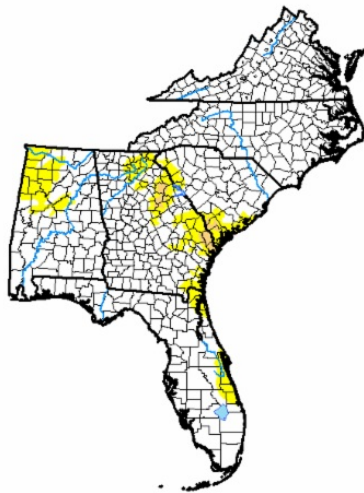
Precipitation: Precipitation across the Southeast in September was highly variable. This was due to the presence of a dominating high pressure system that suppressed convective showers in the central part of the region and two tropical systems that brought record-breaking rainfall along the paths of the storms. Drier than normal conditions were observed in most of Georgia and the Florida Panhandle, with the driest areas found along the East Coast, especially in northeast Florida and the South Carolina coast south of Charleston. Monthly precipitation totals in the areas not affected by the tropical storms ranged from 70 to less than 25 percent of normal.

Drought: Dry conditions in areas of the Southeast that were not affected by tropical storms led to the development of moderate drought (D1) in northern Alabama, central Georgia and southern South Carolina during the month. Many agricultural producers noted that crop development came to a virtual standstill due to the dry conditions, with soybeans, cotton, and pecans all suffering from losses in yield due to lack of moisture, stressing the plants. Peanut farmers noted that it was so dry they could not even dig up peanuts to do maturity checks and observed that the ground was so hard that it would be difficult to dig the peanuts when they were ready.

The [National Drought Monitor](#) was updated on October 18, 2018. Overall in the Southeast, 0.99% of the area was Moderately Dry (D1) and 10.94% of the area was Abnormally Dry (D0).

**U.S. Drought Monitor
Southeast**

October 16, 2018
(Released Thursday, Oct. 18, 2018)
Valid 8 a.m. EDT



Intensity:

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

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

Author:

Eric Luebbehusen
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

The [North Carolina Drought Management Advisory Council](#) updated their drought status as of October 18, 2018. There are currently 0 counties under drought conditions.

**US Drought Monitor of
NORTH CAROLINA**



October 16, 2018
Valid 8 a.m. EDT

Drought Classifications

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

County Boundaries Major River Basins ([View Map](#))
S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
L = Long-Term, typically >6 months (e.g. hydrology, ecology)
[Hi-Resolution Image](#) | [Print Version](#) |

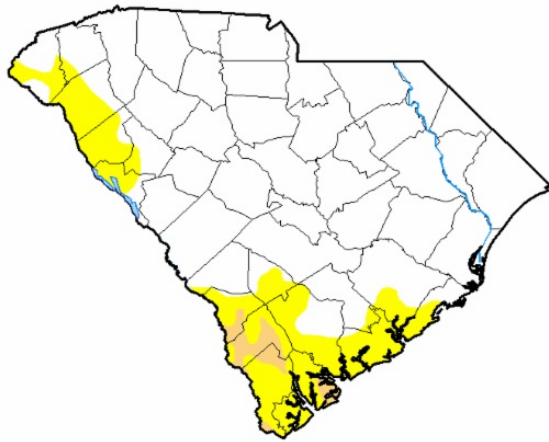
Released: October 18, 2018

No drought advisories are currently issued in North Carolina.

The October 18, 2018 [National Drought Monitor](#) map shows 16.66% of South Carolina as abnormally dry (D0) and 2.05% as moderately dry (D1).

U.S. Drought Monitor
South Carolina

October 16, 2018
(Released Thursday, Oct. 18, 2018)
Valid 8 a.m. EDT



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The [South Carolina Drought Response Committee](#) last met on May 29, 2018.

Remember, condition monitoring reports provide crucial data regardless of drought status. Consistency is key when it comes to being a great CoCoRaHS observer. CoCoRaHS condition monitoring reports help detect the early signs of drought, so remember to keep reporting!

Feel free to contact us with any questions.

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