

Florida CoCoRaHS

The Community Collaborative Rain, Hail & Snow Network

*Volunteers working together
to measure precipitation.*

The End of 'Summer'

The last days of summer are upon (most) of us, as we scramble to enjoy the time before Labor Day weekend – which stands as the unofficial end of summer.

It's been an interesting few weeks, with some records being broken due to extreme weather. Here's a quick recap of what's happened in the world of weather since the last newsletter.

Record Breaking Hail: Nolan sent out an email to all of the observers, explaining the story of the nearly 2 lb piece of hail that was recovered from a severe storm in South Dakota. If you'd like to see more information about the event, follow the link:

<http://www.crh.noaa.gov/abr/?n=stormdamagetemplate>

Record Breaking Temperatures: Every state along the eastern seaboard (Maine to Florida) experienced one of their Top 10 warmest Julys on record. Delaware and Rhode Island had their hottest Julys ever. Numerous daily records were broken across the U.S. Here in Florida, we had over 80 daily records of maximum and minimum that were tied or broken in July.

'Unusual' Tornadoes: On July 25th, an EF-1 tornado touching down in The Bronx. This is only the second tornado reported in The Bronx since records began in 1950. Another rare tornado was observed on the 26th in Sheridan County, Montana. An EF-3 carved an 18-mile track through the state, unfortunately, killing two people. This was only the third EF-3 tornado in the state, and the deadliest tornado in Montana since 1923.

Quick Stats

1008	# of registered FL observers
476	# of active FL observers
11,878	# of reports submitted by FL observers during 7/10
7/1/10	Date with the greatest # of FL reports submitted during 7/10 (409 reports)
5.82"	Highest reported daily rainfall from FL CoCoRaHS observers during 7/10 (FL-PN-18 on 7/1)



Because every drop counts!



July Rains

Rainfall totals in July were below normal in most areas around the state, except in the extreme southeast and the Keys. Pensacola (3.70 in) was more than four inches below normal (Table 1). However, localized heavy rain produced record daily amounts (Table 5). In particular, daily totals of 2.51” at Fort Lauderdale on the 4th and 4.03” at Apalachicola on the 5th broke records in existence since 1922 and 1940, respectively.

Table 1. July precipitation totals and departure from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	3.70	-4.32
Tallahassee	7.79	-0.25
Jacksonville	3.98	-1.99
Orlando	4.26	-2.89
Tampa	6.08	-0.41
Miami	7.36	1.57
Key West	6.00	2.73

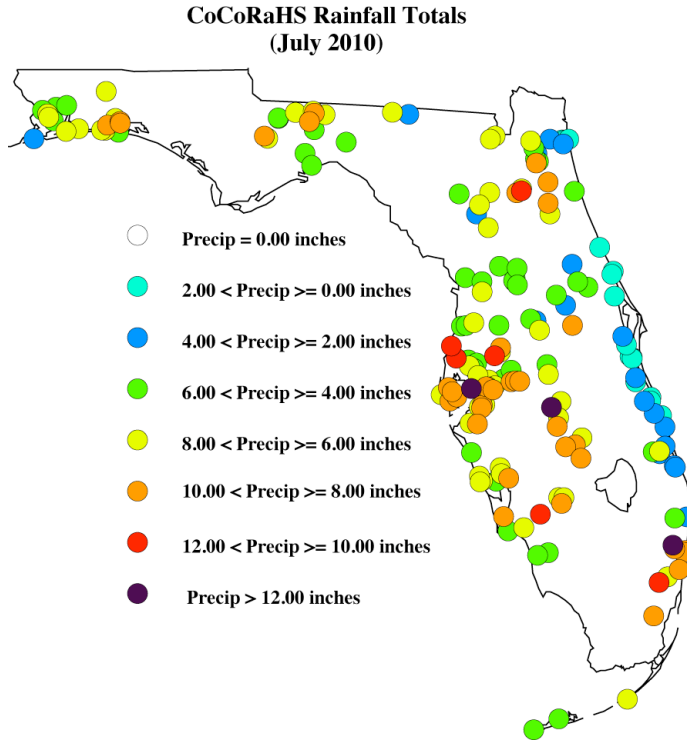
Table 2. Daily rainfall records (inches) set during July (compiled from NWS records).

Date	Station	Amount	Previous Record
2	Naples	2.58	2.46 in 1975
3	Apalachicola	2.29	2.00 in 2003
4	Fort Lauderdale	2.51	1.40 in 1922
5	Apalachicola	4.03	2.50 in 1940
5	Fort Lauderdale	1.82	0.85 in 1959
11	Gainesville	3.16	1.50 in 1974
25	Sarasota	2.38	2.10 in 1945



July CoCoRaHS Totals

Here are the rainfall totals for July from some select CoCoRaHS stations across the state.



Current State of the Drought

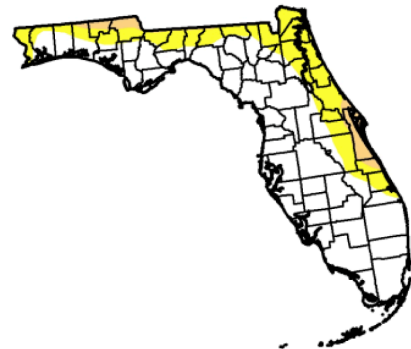
Since the July newsletter, below normal rainfall amounts have been observed in parts of the state. The National Drought Monitor placed almost 30% of Florida in the abnormally dry category, with moderate drought conditions listed in Brevard, Volusia and Indian River counties along the east coast, and portions of Holmes and Jackson counties in the Panhandle. The CoCoRaHS rainfall totals from July (see above image) show the below normal rainfall observed along the east coast from Jacksonville to Stuart.

U.S. Drought Monitor Florida

August 10, 2010
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	71.1	28.9	5.0	0.0	0.0	0.0
Last Week (08/03/2010 map)	88.1	11.9	2.0	0.0	0.0	0.0
3 Months Ago (05/18/2010 map)	100.0	0.0	0.0	0.0	0.0	0.0
Start of Calendar Year (01/01/2010 map)	97.3	2.7	0.0	0.0	0.0	0.0
Start of Water Year (10/06/2009 map)	100.0	0.0	0.0	0.0	0.0	0.0
One Year Ago (08/11/2009 map)	94.6	5.4	0.0	0.0	0.0	0.0



Intensity:

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

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

<http://drought.unl.edu/dm>



Released Thursday, August 12, 2010

Author: Brian Fuchs, National Drought Mitigation Center



Weather Term: Pulse Storms

Florida is known for its summertime thunderstorms. Like clockwork, familiar rumbles of thunder can be heard in the late afternoon hours- just about the same time most of us are about to head home for the day. Most of these thunderstorms are not severe, however, some can produce severe weather and usually last for 20-30 minutes. These thunderstorms are known as pulse storms, or pulse severe storms. Pulse storms can include strong winds, hail, heavy rainfall and occasionally weak tornadoes. These storms are quite random and rapid in their formation, which makes them difficult to predict.

On August 4th, a pulse severe storm formed in Hillsborough County and impacted the Tampa Bay area. The National Weather Service office in Ruskin has a very detailed write up about the event on their web-page, that includes images from the radar.

<http://www.srh.noaa.gov/images/tbw/TopNews/PDF/PulseSevereStorm.pdf>



The same day, I was at the National Weather Service office in Tallahassee, when a pulse severe storm formed along the sea breeze front and headed for campus (the NWS office is co-located with the Department of Meteorology at Florida State University). To the left is a picture of the storm that one of their forecasters was able to take with his cell phone.



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Have Questions?

If at any time you have questions about CoCoRaHS, reading your rain gauge, or finding a location to setup your rain gauge, please feel to contact a CoCoRaHS Coordinator. We are lucky enough to have regional support from National Weather Service offices across the state, as well as county/local help from several CoCoRaHS volunteers. You can find all of the contact information for the CoCoRaHS Coordinators at:

http://www.cocorahs.org/Content.aspx?page=coord_FL

Take care,
Melissa