

Robert J. Ricks, Jr. (South MS regional coordinator)
62300 Airport Drive
Slidell, LA 70460
work: (985) 649-0357
home: (985) 249-5278
e-mail: robert.ricks@noaa.gov
robriicks86@hotmail.com



Southern Mississippi CoCoRaHS Newsletter September 2009

Rainfall and Hail Highlights

The wettest location in the entire Magnolia State was our very own **Vancleave 4.1 NNW (MS-JC-13)** with **12.07 inches** on 28 reports in August. A not too distant second was **Moss Point 2.5 SSW (MS-JC-10)** with **10.07 inches** on 29 reports. This single wettest day in Mississippi in August was also along the coast – at **Long Beach 0.8 SSE (MS-HR-12)**, where **3.32 inches** was reported on the 4th. The driest parts of the state were in the east and east-central sections mainly between Hattiesburg and Meridian, averaging between 1.20 to 2.50 inches for the month. **Liberty 10 WNW (MS-AM-2)** accumulated only **3.09 inches** on 29 reports for the driest location in the southern part of the state. No hail reports were noted in Mississippi during August.

State of the Network

In August, 111 stations filed 2871 observations in 31 days for an average of 92.6 reports per day. The busiest reporting day was August 12th with 96 observations for a statewide average of 0.28 inches of rainfall. The wettest average day was August 21st with 0.78 inches on 95 reports. Rainfall was reported on 28 out of 31 days across the state. Mississippi currently has 195 active members, with a reporting rate of 47.5%. In south Mississippi, membership still stands at 52.

Tropics Update

Since my last newsletter, the Atlantic Basin became active with five named systems, starting with Tropical Storm Ana on August 11th through Tropical Storm Erika now underway. The Gulf of Mexico experienced a short-lived stint with Tropical Storm Claudette that made landfall along the Florida Panhandle the evening of Sunday, August 16th. September 12th will mark the half-way point of a typical season along the Mississippi coast, so vigilance is still warranted for at least another month.

What is normal rainfall and why are we still in a drought situation?

August saw a relatively high frequency of some rain in many locations yet most days only had a few hundredths of an inch per event. An unseasonable cold front managed to move through the entire state towards the latter half of August with another frontal passage taking place on the closing days. This effectively shut down the daily rain cycle that would have been beneficial. At any one location, normal rainfall is usually determined by a 30 year period of record of a smoothed or ‘spline’ average of consecutive days. This differs from the actual mathematical average of each individual day’s rainfall totals divided by 30. During the usually wet month of August in south Mississippi, most locations would average (smoothed) about 0.17 inches per day. This may sound like a lot of rainfall each day, producing a monthly accumulation on average of about 5.35 inches. The problem with drought monitoring and mitigation is that during the summer months when the sun is at its highest passage in the sky, evaporation rates and evapotranspiration rates (the amount of water consumed by plants and trees) are also at their highest. Evaporation rates, as measured at several agricultural research centers around the state, can typically be about 0.20 – 0.25 inches per day. So even if an area is maintaining near normal rainfall accumulation, there can still be a net loss to the atmosphere due to evaporation and plant activity (not to mention routine industrial and human consumption). A drought is a cumulative process, taking several months to years to develop. To mitigate a drought, an area would have to average above normal rainfall for several months to years to establish a net surplus that offsets the loss components of the water cycle.

Perception may leave one to think that August may have been a wet month due to many days of the month receiving some rainfall. A closer look does reveal that most locations will have a net deficit for the month that will only serve to maintain or worsen the unusually dry to low grade drought conditions for yet another month or two. October is typically one of the driest months of the year in the Deep South, so not much hope is offered for drought relief anytime soon, barring a tropical system impacting the region. Your role in being a daily CoCoRaHS observer is vital and relevant for the nation's monitoring of drought conditions. I often read news articles from around the nation forwarded to my e-mail via a news clipping service that continues to mention or credit CoCoRaHS observations in their rainfall, drought, and weather related stories. A big THANK YOU for your service and volunteerism.

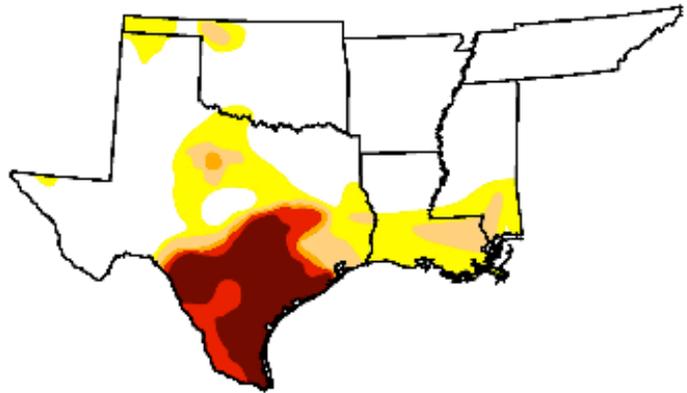
U.S. Drought Monitor

South

August 25, 2009
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	63.9	36.1	20.4	14.6	13.4	9.5
Last Week (08/18/2009 map)	64.5	35.5	20.7	15.0	13.5	9.2
3 Months Ago (06/02/2009 map)	61.9	38.1	22.9	14.3	8.4	3.3
Start of Calendar Year (01/06/2009 map)	54.4	45.6	18.0	8.0	4.6	2.1
Start of Water Year (10/07/2008 map)	73.3	26.7	17.3	10.7	2.9	0.0
One Year Ago (08/26/2008 map)	53.2	46.8	22.3	11.6	3.0	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 27, 2009
Author: Brad Rippey, U.S. Department of Agriculture

Keep those rainfall and hail reports coming!!!