

The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

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Dr. John Christy, Alabama State Climatologist

First, let me quash the suggestion that CoCoRAHS rain gauges attract rain, although it might have seemed that way in August.

Just because the average of all the CoCoRAHS volunteer rain watchers' gauges across the state reported almost an inch of rain more than our 24-cities sample in August (4.90" vs. 3.86") doesn't give us a cause and effect relationship. It just reminds us that (A) summer weather in the south is usually a hit and miss kind of thing that is often difficult to track, and (B) Alabama needs more CoCoRAHS volunteers.

The August weather was ... spotty. The same weather system that stalled over Louisiana, dropping more than 20 inches of rain in a couple of days and causing horrible floods, also swirled some rain into Alabama. It wasn't generally enough to relieve the drought, even along the coastal areas.

Mobile and Brewton were more than 1½ inches below normal for August, although Fairhope and Dothan each got just over an inch more rain than normal.

Spotty.

Montgomery was the only station in our monthly survey to hit 100° in August, with an average temperature in August that was 3.8° warmer than normal. Selma, only 40 miles away, was a degree cooler than normal.

Generally speaking, rain brings lower temperatures, but Huntsville got 1.4" more rain in August than is normal, but saw temperatures that were 4.1° warmer than their August norms.

Spotty and quirky.

The short-term forecast for the first part of September shows little that is likely to reduce the effects of the ongoing drought, although we can hope.

Now, a quick pitch for CoCoRAHS — the Community Collaborative Rain, Hail & Snow Network. Using their official rain gauges, CoCoRAHS volunteers provide valuable information about daily precipitation. They help fill in the gaps between other official weather stations, including those operated by the National Weather Service, the FAA and others.

This information is used every day by the weather service to verify its radar estimates of rainfall across the state. It is especially helpful during times of flooding, when access to reliable and

accurate rainfall data is critical for emergency management agencies who need to know as soon as possible where rain fell, how much rain fell and where it is likely to flow.

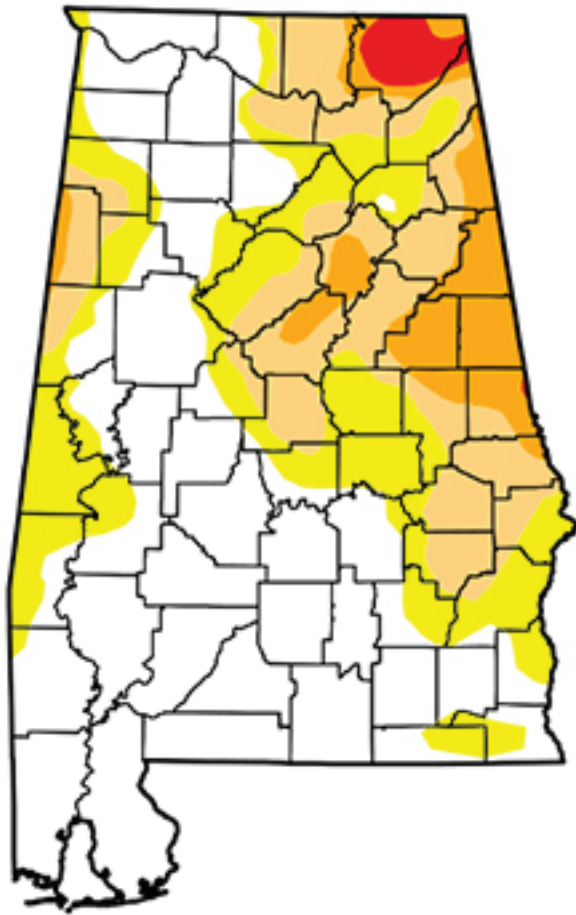
Alabama has 23 counties with no CoCoRAHS volunteers, and another 13 with only a single volunteer. That represents more than half of the state, which means we have some substantial gaps in our data. Rural volunteers and volunteers in locations at least a mile from an official NWS or FAA weather station are especially helpful, in part because our weather can be so very spotty.

The official CoCoRAHS rain gauge costs only \$30.50 and is available at <http://www.weatheryourway.com/cocorahs/index.html>. Joining and participating in CoCoRAHS costs only the commitment of a few minutes a day. Please check it out at CoCoRAHS.org.

- John Christy

U.S. Drought Monitor Alabama

August 30, 2016
(Released Thursday, Sep. 1, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	50.76	49.24	27.23	9.52	1.51	0.00
Last Week 023/2016	50.74	49.26	25.48	11.37	1.51	0.00
3 Months Ago 6/21/2016	51.71	48.29	26.84	7.55	0.00	0.00
Start of Calendar Year 12/01/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 02/01/2016	37.12	62.88	4.96	0.00	0.00	0.00
One Year Ago 8/31/2015	57.18	42.82	11.16	0.00	0.00	0.00

Intensity:

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

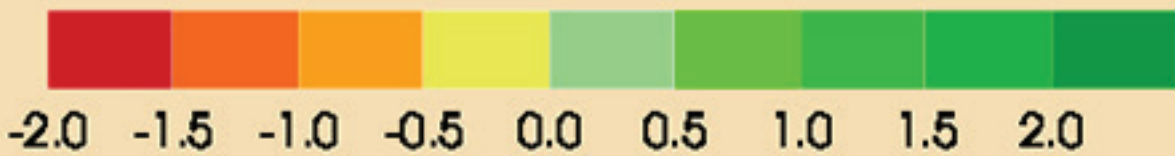
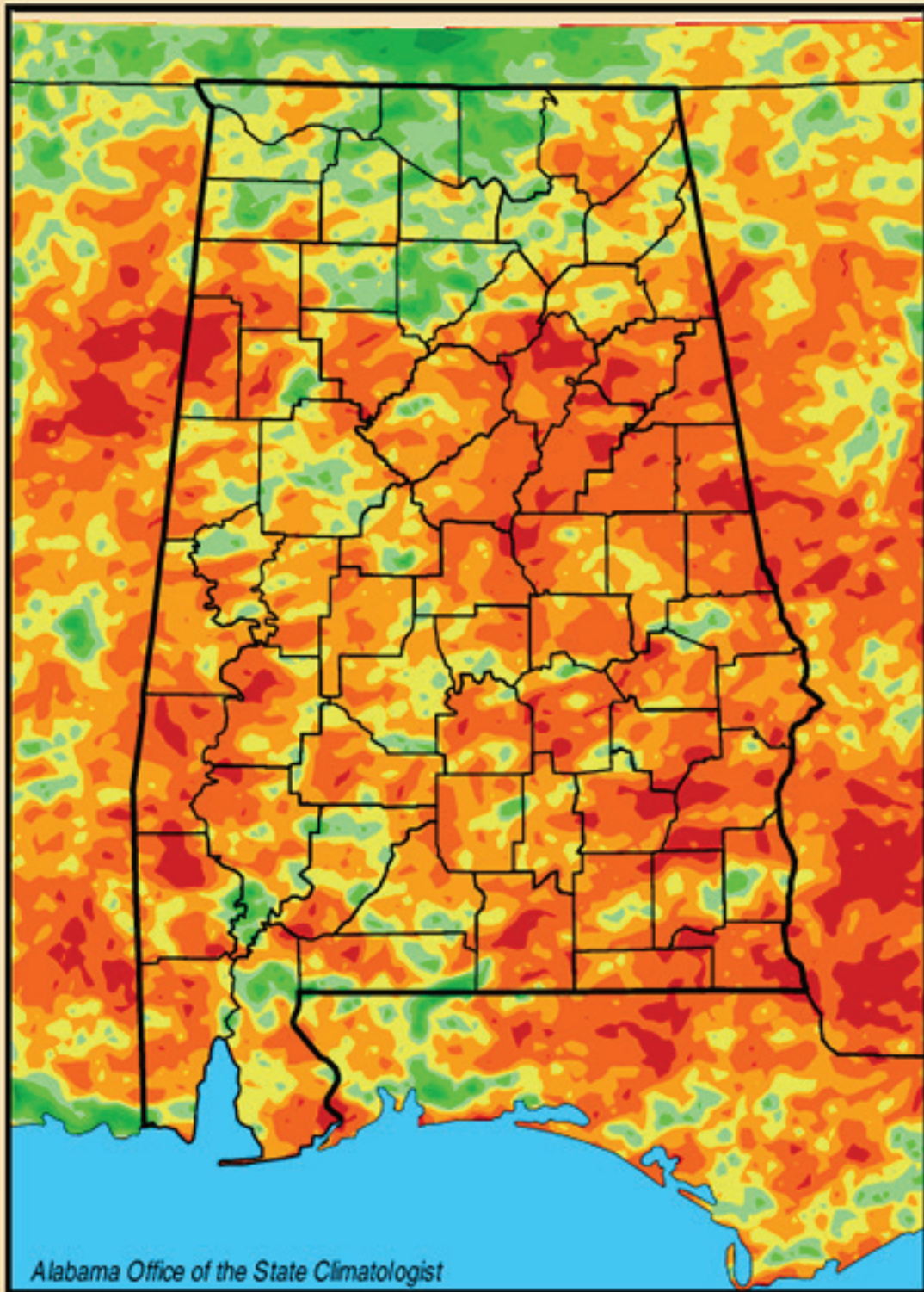
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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NCEI/NESDIS/NOAA



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

Lawn-and-Garden Moisture Index for September 1, 2016



Alabama Monthly Climate Summaries

August 2016

	Station Began	August Mean August Norm	August Hi Temp Record Hi	August Low Temp Record Low	Total Precip. Normal Prec.	Wettest August Driest August	Heaviest Day Record Day
Anniston	2/1903	82.6°	96° 8/7/16	70° 8/22/16	1.56"	7.54" 1974	0.94" 8/2/16
		79.5°	106° 8/21/83	50° 8/28/52	3.35"	0.50" 1983	5.57" 8/24/87
Auburn	1/1893	M#	M#	M#	M#	11.03" 1944	M#
		79.7°	106° 8/20/25	54° 8/29/68	4.29"	0.01" 1925	3.73" 8/17/39
Birmingham	1/1930	83.3°	97° 8/5/16	71° 8/23/16	2.52"	8.98" 1998	0.51" 8/20/16
		79.6°	104° 8/8/35	51° 8/31/46	3.48"	0.38" 1989	4.15" 8/2/41
Brewton	4/1977	78.8°	92.6° 8/6/16	69.0° 8/27/16	4.00"	14.69" 1977	1.05" 8/4/16
		79.7°	104°+ 8/13/54	53°+ 8/30/68	5.64"	1.67" 1980	7.20" 8/4/95
Calera	9/1900	82.7°	96° 8/6/16	71° 8/23/16	2.66"	15.00" 1939	0.61" 8/20/16
		78.4°	102° 8/10/56	50° 8/26/66	4.23"	0.33" 1998	5.70" 8/26/08
Clanton	2/1893	79.5°	94.5° 8/6/16	69.2° 8/28/16	3.01"	7.98" 1974	0.59" 8/1/16
		78.3°	105° 8/8/35	51° 8/24/57	3.73"	0.45" 1990	6.75" 8/26/70
Courtland		79.1°	94.2° 8/5/16	66.8° 8/23/16	6.98" M	M	2.05" 8/18/16
		M	M	M	M	M	M
Cullman	7/1907	77.9°	93.1° 8/26/16	64.5° 8/23/16	4.04" M	M	1.31" 8/2/16
		M	M	M	M	M	M
Decatur	2/1880	81.2°	97° 8/25/16	65° 8/23/16	6.35"	11.93" 1919	2.16" 8/8/16
		79.8°	107° 8/1/35	52° 8/26/17	3.61"	0.00" 1962	3.95" 8/22/80
Dothan	2/1902	82.6°	97° 8/23/16	69° 8/26/16	5.14"	20.85" 1939	1.14" 8/13/16
		81.2°	103° 8/26/38	43° 8/24/1902	4.81"	1.47" 1958	4.80" 8/10/31
Fairhope	8/1917	80.3°	92.7° 8/3/16	70.2° 8/27/16	7.28"	14.23" 1984	1.73" 8/12/16
		81.1°	102° 8/30/00	60°+ 8/30/92	6.22"	1.25" 1997	5.74" 8/2/84
Gadsden	7/1893	77.5°	92.9° 8/5/16	64.1° 8/23/16	2.78"	9.52" 1992	1.02" 8/19/16
		78.9°	105° 8/16/54	52°+ 8/12/67	3.65"	0.10" 1983	3.32" 8/6/80
Gainesville Lock	6/1948	80.5°	97.8° 8/6/16	70.0° 8/28/16	2.36"	8.11" 1992	0.50" 8/12/16
		80.3°	103°+ 8/30/00	55° 8/30/86	2.91"	0.37" 1990	4.12" 8/10/70
Greensboro	2/1890	79.8°	97.2° 8/4/16	69.2° 8/28/16	4.69"	7.01" 1993	0.65" 8/8/16
		81.3°	107° 8/26/43	55° 8/22/56	3.30"	1.16" 1989	4.22" 8/31/81
Highland Home	3/1892	79.0°	93.0° 8/6/16	69.0° 8/15/16	3.63"	8.28" 1984	0.92" 8/20/16
		79.0°	103° 8/9/54	56° 8/29/92	4.30"	0.89" 1997	3.65" 8/12/86
Huntsville	1/1959	83.0°	99° 8/5/16	68° 8/23/16	4.88"	9.81" 1986	1.27" 8/26/16
		78.9°	108° 8/8/30	50° 8/10/1954	3.42"	0.58" 1998	4.29" 8/10/86

Alabama Monthly Climate Summaries

August 2016

	Station Began	August Mean August Norm	August Hi Temp Record Hi	August Low Temp Record Lo	Total Precip. Normal Prec.	Wettest August Driest August	Heaviest Day Record Day
Mobile	3/1900	82.5°	95° 8/23/16	71° 8/5/16	4.59"	15.19" 1984	0.63" 8/12/16
		81.3°	105° 8/29/2000	57° 8/25/1891	6.20"	1.04" 1997	5.65" 8/1/84
Montgomery	6/1948	85.0°	100° 8/4/16	72° 8/15/16	2.47"	10.43" 1984	0.58" 8/1/16
		81.2°	104°+ 8/24/83	56° 8/29/92	3.63"	0.73" 1997	5.38" 8/2/84
Muscle Shoals	12/1940	81.8°	97° 8/26/16	67° 8/23/16	5.41"	6.78" 1979	1.47" 8/2/16
		79.1°	105°+ 8/16/54	53°+ 8/29/92	2.96"	0.15" 1990	3.43" 8/25/76
Russellville	9/1953	77.7°	92.5° 8/5/16	65.4° 8/30/16	3.30"	6.83" 1997	1.13" 8/8/16
		77.0°	103°+ 8/30/00	46°+ 8/29/87	2.97"	0.07" 1999	3.69" 8/16/85
Scottsboro	10/1891	78.7°	95.5° 8/16/16	63.3° 8/23/16	2.85"	7.70" 1985	1.45" 8/18/16
		77.7°	105°+ 8/16/54	46° 8/23/82	3.43"	0.74" 1999	4.39" 8/11/01
Selma	1/1895	80.0°	97.4° 8/2/16	68.5° 8/28/16	3.69"	8.84" 1984	0.65" 8/8/16
		81.0°	105°+ 8/30/54	57°+ 8/30/92	4.01"	0.71" 1990	5.35" 8/15/39
Talladega	2/1888	80.0°	96.0° 8/31/16	68.1° 8/23/16	2.43"	9.11" 1984	0.67" 8/2/16
		77.3°	103° 8/16/54	46° 8/23/50	3.52"	0.60" 1999	4.30" 8/11/82
Thomasville	9/1891	79.2°	95.9° 8/2/16	68.4° 8/16/16	5.97"	9.01" 1996	1.51" 8/21/16
		80.9°	105°+ 8/31/54	53° 8/22/56	3.88"	1.02" 1989	6.05" 8/14/39
Troy	6/1908	81.9°	96° 8/4/16	68° 8/27/16	3.35"	8.38" 1996	0.94" 8/13/16
		80.2°	106° 8/28/54	55° 8/31/46	3.56"	0.55" 1989	6.75" 8/31/61
Tuscaloosa	6/1948	82.9°	98° 8/2/16	70° 8/28/16	2.88"	8.84" 1970	0.58" 8/20/16
		81.2°	107° 8/10/07	53° 8/22/56	3.80"	0.57" 1953	2.87" 8/10/67
Valley Head	1/1893	76.9°	93.5° 8/5/16	62.6° 8/23/16	4.77"	6.68" 1981	2.17" 8/7/16
		75.3°	105° 8/16/54	46° 8/13/64	3.49"	0.58" 1983	3.61" 8/4/84
Statewide August 2015		80.73°	100° Montgomery	62.6° Valley Head	3.86"	20.85" Dothan	2.17" Valley Head
August Norm/Record		79.51°	108° Huntsville	43° Dothan	3.92"	0.00" Decatur	7.20" Brewton

M: Data is missing or not available

*New Record

#This data is missing this month due to an instrument malfunction

^ This record differs from long-term data in the AOSC climate database:

http://nsstc.uah.edu/alclimate/climate/daily_climate_and_normals.php

New Local Climate Records¹

August 2016

Precipitation, Daily

	New Record	Previous Year	Previous Record	Period of Record		New Record	Previous Record	Period of Record	
2 August 2016					11 August 2016				
ATHENS	1.54"	2000-08-02	0.33"	75	CLAIBORNE LOCK & DAM	1.05"	1992-08-11	0.98"	63
MOBILE DWNTN AIRPORT	2.64"	1960-08-02	2.18"	67	DAUPHIN ISLAND No. 2	4.30"	1978-08-11	1.50"	40
MUSCLE SHOALS	1.47"	1966-08-02	0.82"	75	ROBERTSDALE	2.71"	1947-08-11	2.58"	104
5 August 2016					17 August 2016				
EVERGREEN	2.98"	1927-08-05	2.00"	120	ALEXANDER CITY	1.68"	2003-08-17	1.40"	46
6 August 2016					18 August 2016				
WEST BLOCTON	2.05"	1992-08-06	1.83"	76	CARBON HILL 4 SE	1.40"	1957-08-18	1.18"	78
7 August 2016					19 August 2016				
MELVIN	1.10"	1941-08-07	0.95"	76	ATHENS	1.34"	2012-08-19	0.64"	75
8 August 2016					GADSDEN				
BILLINGSLEY	2.77"	1955-08-08	1.60"	77		2.22"	1990-08-19	1.85"	63
MATHEWS	1.47"	1964-08-08	0.97"	59	20 August 2016				
MELVIN	1.55"	1961-08-08	1.21"	76	JACKSONVILLE	0.83"	1975-08-20	0.47"	68
9 August 2016					RUSSELLVILLE No. 2				
DEMOPOLIS LOCK & DAM	1.67"	2014-08-09	1.50"	64		4.00"	1956-08-20	0.81"	62
GENEVA NUMBER 2	1.08"	1999-08-09	1.06"	40	21 August 2016				
WALNUT GROVE	0.88"	1973-08-09	0.65"	75	BILLINGSLEY	1.30"	2003-08-21	0.80"	77
10 August 2016					23 August 2016				
CLAIBORNE LOCK & DAM	2.15"	1998-08-10	1.52"	63	BAY MINETTE	1.75"	2006-08-23	1.69"	102
					GREENVILLE				
						1.35"	1921-08-23	1.32"	115
					26 August 2016				
					HUNTSVILLE AIRPORT	1.27"	1967-08-26	1.01"	57
					29 August 2016				
					EUFAULA WILDLIFE REF	0.45"	1986-08-29	0.23"	49

Maximum High Temperature, Daily

	New Record	Previous Hottest Day	Previous Record	Period of Record
31 August 2016				
HUNTSVILLE AIRPORT	97	1962-08-31	96	57

Minimum Low Temperature, Daily

	New Record	Previous Coldest Day	Previous Record	Period of Record
02 August 2016				
OPELIKA.....	57	1997-08-02	60	59

¹ <http://wf.ncdc.noaa.gov/extremes/records/>

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

August 2016

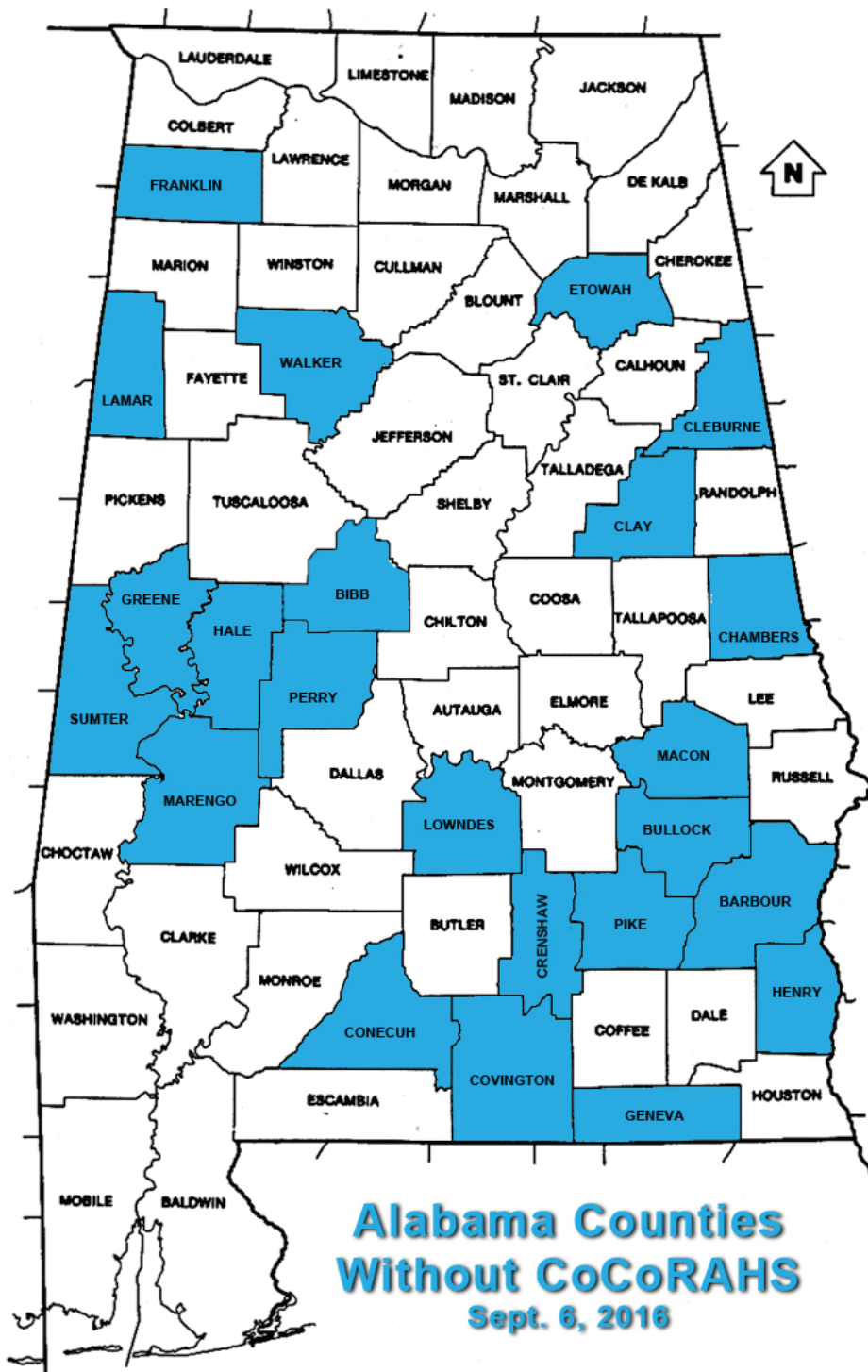
	Total Precip.	# Stations
Autauga	5.80	2
Baldwin	9.20	22
Barbour	n.a.	0
Bibb	n.a.	0
Blount	3.26	8
Bullock	n.a.	0
Butler	3.62	1
Calhoun	2.89	2
Chambers	n.a.	0
Cherokee	6.03	1
Chilton	3.20	2
Choctaw	5.47	1
Clarke	5.39	1
Clay	n.a.	0
Cleburne	n.a.	0
Coffee	6.87	1
Colbert	4.56	6
Conecuh	n.a.	0
Coosa	5.80	1
Covington	n.a.	0
Crenshaw	n.a.	0
Cullman	4.59	5
Dale	5.94	1
Dallas	4.74	1
DeKalb	4.66	3
Elmore	4.03	5
Escambia	7.70	1
Etowah	n.a.	0
Fayette	5.43	1
Franklin	n.a.	0
Geneva	n.a.	0
Greene	n.a.	0
Hale	n.a.	0
Henry	n.a.	0

	Total Precip.	# Stations
Houston	6.58	2
Jackson	2.70	8
Jefferson	3.65	13
Lamar	n.a.	0
Lauderdale	4.65	10
Lawrence	5.54	2
Lee	6.32	4
Limestone	6.83	10
Lowndes	n.a.	0
Macon	n.a.	0
Madison	4.79	41
Marengo	n.a.	0
Marion	2.97	1
Marshall	3.59	10
Mobile	7.74	14
Monroe	4.43	2
Montgomery	4.05	5
Morgan	4.88	5
Perry	n.a.	0
Pickens	2.14	1
Pike	n.a.	0
Randolph	2.70	2
Russell	5.15	2
St. Clair	2.79	6
Shelby	5.16	16
Sumter	n.a.	0
Talladega	3.85	4
Tallapoosa	5.69	3
Tuscaloosa	4.96	5
Walker	n.a.	0
Washington	5.45	1
Wilcox	6.02	2
Winston	3.65	2

Normal August Precipitation*

Abbeville	4.52"
Alberta	4.16"
Alex City	4.40"
Aliceville	3.32"
Andalusia	5.38"
Ashland	4.22"
Athens	3.33"
Bay Minette	6.60"
Bessemer	3.70"
Billingsley	4.30"
Centreville WSMO	4.49"
Chatom	4.76"
Claiborne L&D	4.28"
Clayton	4.53"
Dauphin Isl.	7.12"
Elba	4.70"
Eufaula WR	3.81"
Evergreen	4.73"
Fayette	4.71"
Geneva 2	5.07"
Greenville	4.86"
Haleyville	4.21"
Hamilton 3S	4.04"
Heflin	3.39"
Hurtsboro	3.78"
Jasper	3.53"
Lafayette	3.76"
Livingston	3.72"
Melvin	4.40"
Milstead	4.13"
Moulton	3.77"
Oneonta	4.08"
Perryville	3.53"
Plantersville	4.18"
Rock Mills	3.91"
Rockford	4.20"
Sylacauga	4.12"
Union Springs	4.64"
Uniontown	3.92"
Vernon	3.40"
Warrior L&D	3.82"
Wetumpka	4.47"

*Southeast Regional Climate Center
www.serc.com



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<http://nsstc.uah.edu/alclimatereport>