

The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

Volume 3, Number 10, July 2013



Dr. John Christy, Alabama State Climatologist

After more than two years of below normal rainfall (starting about July 2010), it seems the climate decided to make up for it in July. Several stations in both southeast and northwest Alabama reported more than 19 inches of rain during the month. The statewide average for our 26-station sample was almost double the normal rainfall for July: 9.14" for the sample average, against the July norm of 5.14".

If that average holds up in the official statewide measurements that come out later in August, it could make July 2013 one of the two or three wettest Julys in the state's climate record.

Six stations in our sample had their wettest July on record and one of those, Decatur, had both its wettest July and its wettest July day. Decatur's 11.11" for the month broke the July record of 10.89" set in 1958, while the 6.61 inches of rain that fell on Decatur on July 3 broke the single July day record of 4.65 inches set on July 16, 1950.

Stations in our sample with their wettest July on record were:

Station	July 2013	Previous record and date
Anniston	12.70"	12.21" 1975
Decatur	11.11"	10.89" 1958
Dothan	17.57"	12.73" 1948
Highland Home	16.30"	10.79" 1994
Scottsboro	8.57"	7.59" 1984
Talladega	9.17"	9.11" 1985

As is so often the case, wet weather is also cooler weather. The statewide average for our sample was a full three degrees F cooler than the July norm: 77.1° to 80.1° If that three degree chill holds up in the official record, it could make July 2013 the second coolest July on record. It would be second only to July 1967, when the statewide average temperature was a mild 76.1°.

The rain and cloudiness were so extensive in the first week of July that the official station at Huntsville saw 89 consecutive hours (i.e. almost 4 full days) below 80°F – a stretch that long not seen since

July 1979. I suspect the average Alabamian was able to save a little money on their electric bills this month by giving the A/C a rest.

We are still watching for hurricanes and other tropical systems that might bring even more rain and cool temperatures to the state.

- John Christy

Drought Monitor

U.S. Drought Monitor

Alabama

July 30, 2013
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week (07/23/2013 map)	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago (04/30/2013 map)	95.96	4.04	0.00	0.00	0.00	0.00
Start of Calendar Year (01/01/2013 map)	40.07	59.93	33.67	19.47	9.81	0.00
Start of Water Year (09/25/2012 map)	71.58	28.42	19.42	15.36	8.69	0.00
One Year Ago (07/24/2012 map)	11.81	88.19	56.64	28.82	14.47	1.67

Intensity:

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



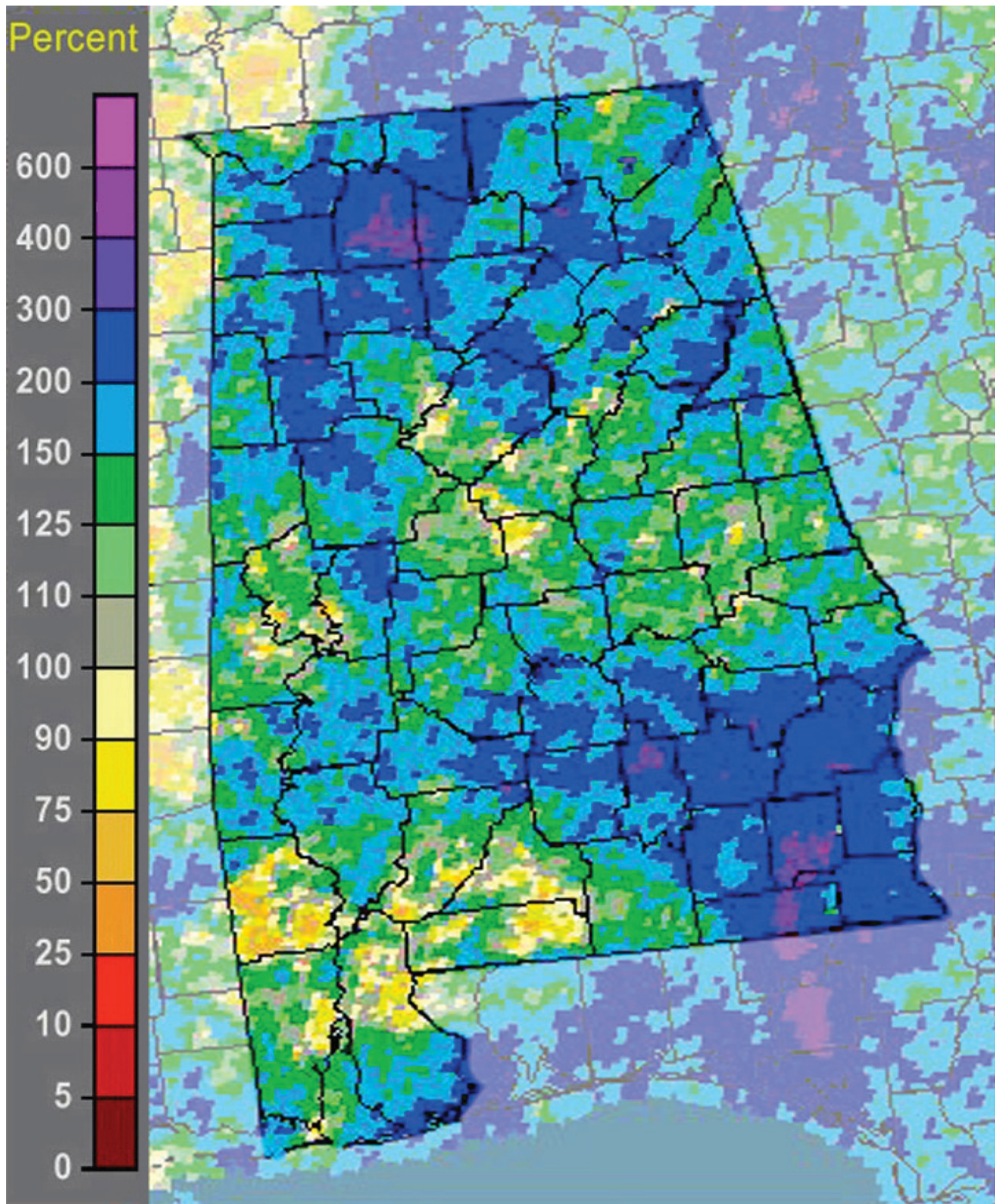
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



Released Thursday, August 1, 2013
Brian Fuchs, National Drought Mitigation Center

Percent of Normal Precipitation



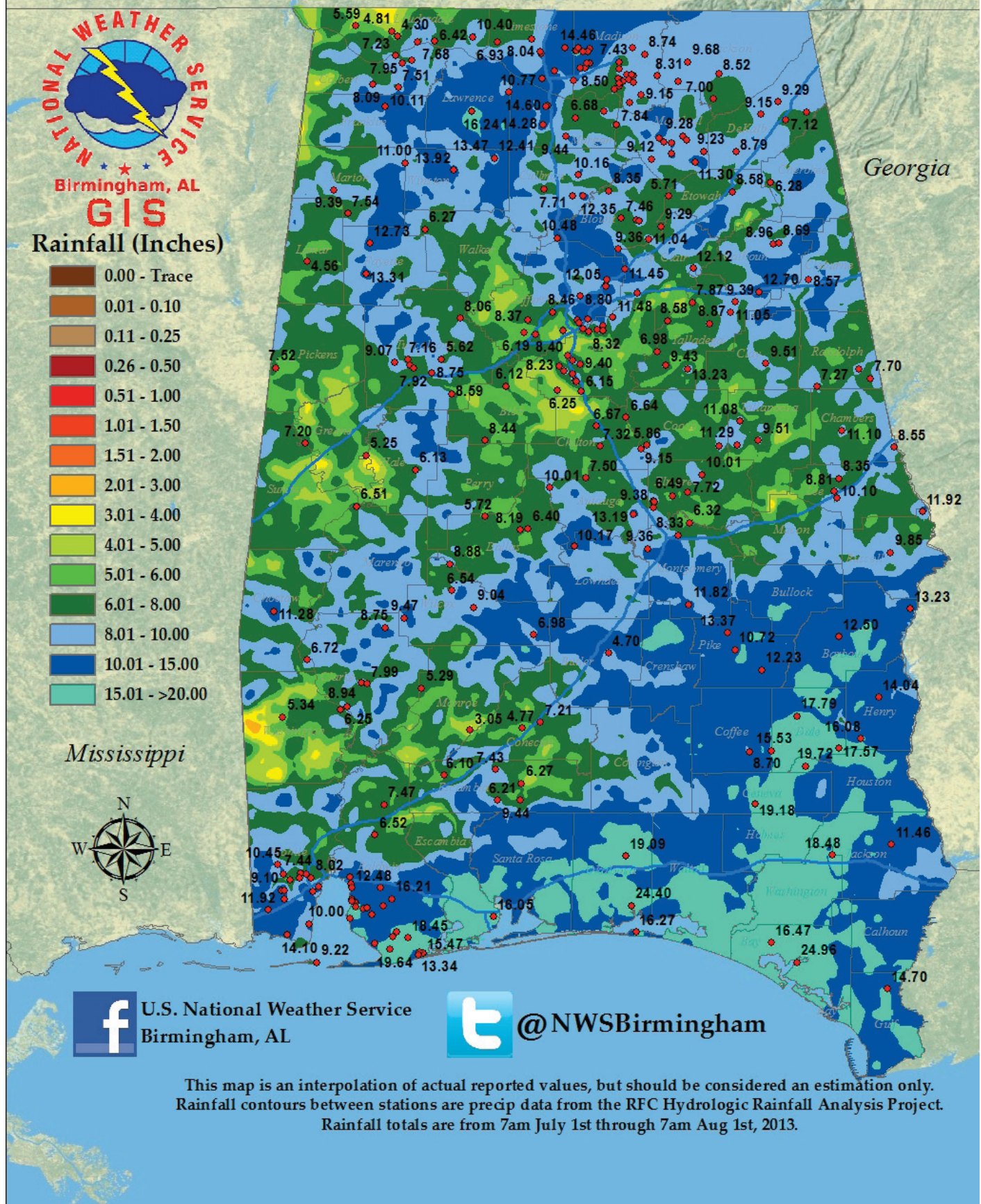
water.weather.com

July 2013 NWS percentage of normal precipitation

Multi-sensor precipitation estimate

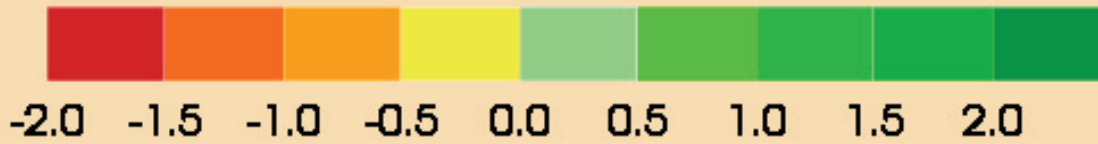
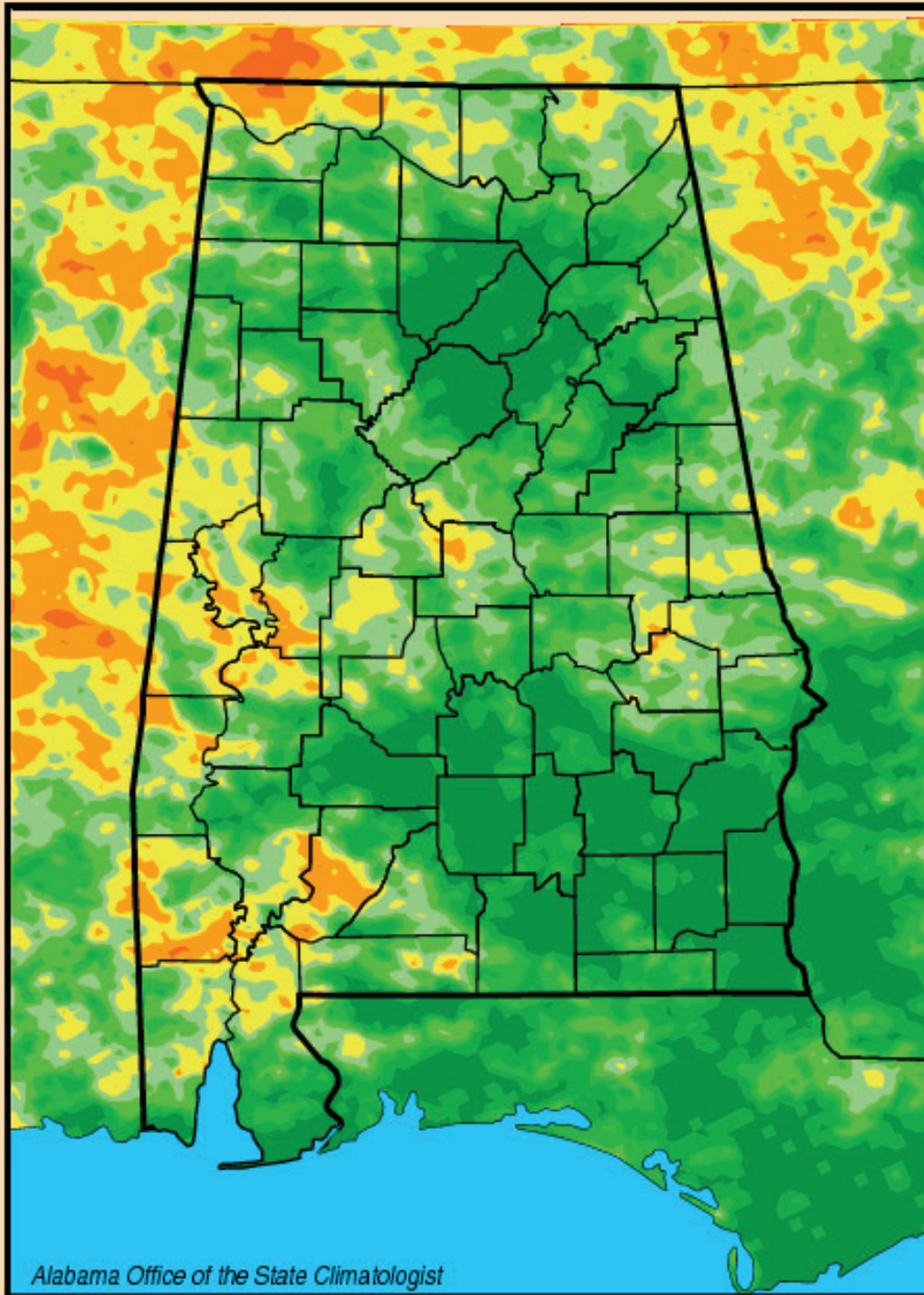
Total Rainfall - July 2013

Source: RFC Estimates, Co-Op Sites, ASOS Observations, and CoCoRaHS Observers
Created by the National Weather Service Forecast Office, Birmingham, Alabama



Lawn and Garden Moisture Index

Lawn-and-Garden Moisture Index for August 1, 2013



Alabama Monthly Climate Summaries

July 2013

	Station Began	July Mean July Norm	July Hi Temp Record Hi	July Low Temp Record Lo	Total Precip. Normal Prec.	Wettest July Driest July	Heaviest Day Record Day				
Anniston	2/1903	77.7°	93°	7/17/13	63°	7/30/13	*12.70"	12.21"	1975	3.00"	7/6/13
		80.1°	105°	7/13/80	50°	7/15/67	4.49"	0.79"	1983	5.13"	7/7/75
Auburn	1/1893	76.0°	90°	7/30/13	66°	7/30/13	6.54"	15.73"	1916	1.12"	7/3/13
		79.9°	108°	7/11/30	52°	7/15/67	5.37"	1.39"	1914	7.00"	7/10/48
Birmingham	1/1930	78.2°	93°	7/17/13	66°	7/26/13	8.80"	10.07"	1985	3.19"	7/21/13
		80.2°	107°	7/29/30	51°	7/15/67	5.09"	0.30"	1983	5.47"	7/27/85
Brewton	4/1977	76.5°	91.1°	7/30/13	65.6°	7/2/13	5.15"	19.08"	1975	1.51"	7/11/13
		80.1°	106°	7/24/52	51°	7/15/67	7.04"	1.66"	2000	7.88"	7/31/75
Calera	9/1900	78.1°	92°	7/17/13	66°	7/26/13	6.88"	18.52"	1916	1.89"	7/10/13
		79.3°	105°	7/7/77	50°	7/15/67	5.36"	0.42"	1983	7.00"	7/7/1916
Clanton	2/1893	76.0°	90.6°	7/7/13	62.4°	7/2/13	9.40"	13.97"	1971	1.27"	7/10/13
		79.2°	108°+	7/26/52	53°	7/15/67	5.76"	1.29"	1995	7.14"	7/4/40
Courtland		75.7°	91.6°	7/17/13	60.4°	7/13/13	9.81"	M		3.26"	7/4/13
		M	M		M		M	M		M	
Cullman	7/1907	74.6°	90.4°	7/17/13	57.9°	7/1/13	8.87"	M		4.10"	7/31/13
		M	M		M		4.44"	M		M	
Decatur	2/1880	77.7°	97°	7/17/13	61°	7/30/13	*11.11"	10.89"	1958	*6.61"	7/3/13
		80.5°	107°	7/12/1901	38°	7/8/34	4.22"	0.67"	1962	4.65"	7/16/50
Dothan	2/1902	79.1°	92°	7/30/13	69°	7/24/13	*17.57"	12.73"	1948	3.71"	7/3/13
		81.3°	103°	7/24/52	57°	7/5/1902	5.86"	2.12"	1903	6.73"	7/9/48
Fairhope	8/1917	77.4°	90.3°	7/17/13	65.5°	7/2/13	15.06"	28.58"	1997	6.17"	7/11/13
		81.5°	101°	7/16/80	59°	7/16/67	8.00"	0.82"	1983	14.52"	7/20/97
Gadsden	7/1893	76.7°	93°	7/17/13	61°	7/30/13	10.83"	13.41"	1985	2.24"	7/21/13
		79.8°	103°+	7/15/66	52°	7/11/63	4.47"	0.79"	1980	3.36"	7/9/58
Gainesville	6/1948	77.2°	91.3°	7/17/13	64.9°	7/1/13	7.05"	8.11"	1992	1.51"	7/4/13
		80.8°	105°+	7/15/80	55°	7/15/67	2.91"	0.37"	1990	4.12"	8/10/70
Greensboro	2/1890	76.8°	91.8°	7/30/13	64.4°	7/2/13	7.19"	11.03"	1985	1.75"	7/11/13
		81.9°	107°+	7/16/80	56°	7/23/47	5.38"	1.19"	2000	3.90"	7/18/36
Guntersville	12/1904	76.1°	90.6°	7/17/13	64.3°	7/30/13	10.81"	13.09"	1985	3.36"	7/31/13
		79.1°	106°	7/17/80	47°	7/1/70	4.28"	1.26"	1980	6.30"	7/9/46
Highland Home	3/1892	75.3°	89.8°	7/30/13	66.6°	7/18/13	*16.30"	10.79"	1994	2.24"	7/13/13
		79.6°	105°	7/15/80	54°	7/15/67	4.93"	1.19"	1978	3.15"	7/8/48
Huntsville	1/1959	78.2°	97°	7/17/13	62°	7/13/13	10.48"	14.81"	1967	4.64"	7/4/13
		79.5°	104°	7/14/66	53°	7/15/67	4.50"	0.79"	1983	4.81"	7/5/2001

Alabama Monthly Climate Summaries

July 2013

	Station Began	July Mean July Norm	July Hi Temp Record Hi	July Low Temp Record Lo	Total Precip. Normal Prec.	Wettest July Driest July	Heaviest Day Record Day
Mobile	3/1900	80.3°	93° 7/29/13	68° 7/2/13	9.10"	13.14" 1982	2.03" 7/6/13
		81.5°	104° 7/25/52	62°+ 7/16/67	6.54"	1.72" 1983	4.21" 7/18/69
Montgomery	6/1948	80.1°	95° 7/17/13	68° 7/26/13	9.36"	9.99" 1988	3.70" 7/22/13
		81.8°	105°+ 7/25/52	60° 7/1/50	5.31"	1.69" 2000	3.84" 7/14/73
Muscle Shoals	12/1940	75.6°	92.7° 7/17/13	60.2° 7/13/13	7.60"	14.40" 1975	2.38" 7/4/13
		80.2°	106°+ 6/29/52	53°+ 6/7/72	4.52"	0.92" 1977	5.60" 7/28/72
Russellville	9/1953	74.4°	91.0° 7/17/13	57.1° 7/13/13	10.19"	10.82" 1994	*4.30" 7/23/13
		78.0°	103° 7/18/80	45° 7/8/70	4.65"	1.27" 1978	3.10" 7/24/63
Scottsboro	10/1891	74.7°	92.0° 7/17/13	58.5° 7/30/13	*8.57"	7.59" 1984	1.94" 7/10/13
		78.6°	109° 7/13/30	49°+ 7/10/63	4.53"	1.32" 1980	3.43" 7/22/41
Selma	1/1895	76.7°	91.4° 7/17/13	64.4° 7/2/13	6.36"	8.45" 1994	2.03" 7/11/13
		81.5°	107°+ 7/14/80	57° 7/15/67	4.28"	1.11" 2000	3.96" 7/7/94
Talladega	2/1888	76.1°	90.6° 7/19/13	61.5° 7/30/13	*9.17"	9.11" 1985	*3.10" 7/23/13
		78.2°	107°+ 7/17/80	51°+ 7/6/72	4.75"	1.40" 1991	3.05" 7/8/58
Thomasville	9/1891	76.2°	90.6° 7/30/13	62.8° 7/2/13	11.08"	15.91" 1988	1.75" 7/10/13
		81.4°	107° 7/13/30	56° 7/15/67	6.05"	0.69" 2000	5.52" 7/6/88
Troy	6/1908	79.2°	94° 7/30/13	67° 7/26/13	13.37"	15.59" 1994	1.80" 7/3/13
		80.5°	107° 7/7/36	56° 7/15/67	5.80"	1.66" 2000	4.55" 7/1/64
Tuscaloosa	6/1948	79.7°	95° 7/17/13	65° 7/26/13	7.16"	12.27" 1997	2.10" 7/4/13
		81.8°	107° 7/24/52	54° 7/1/50	5.00"	0.72" 1970	4.57" 7/21/97
Valley Head	1/1893	73.6°	89.5° 7/17/13	56.3° 7/30/13	7.44"	11.74" 1976	2.08" 7/6/13
		76.2°	105°+ 7/29/52	45° 7/15/67	5.18"	0.94" 1987	4.52" 7/5/76
Statewide July 2013		77.1°	97° 2 stations	56.3° Valley Head	9.78"	28.58" Fairhope	3.21" Gadsden
July Norm		80.1°	109° Scottsboro	38° Decatur	5.14"	0.30" Birmingham	9.60" 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

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

July 2013

Normal

July

Precipitation*

	Ave. Total Precip.	# Stations
Autauga	10.34	3
Baldwin	11.36	28
Barbour	0.00	0
Bibb	6.63	1
Blount	9.61	7
Bullock	n.a.	0
Butler	n.a.	0
Calhoun	10.18	3
Chambers	8.55	1
Cherokee	8.02	1
Chilton	9.69	2
Choctaw	11.28	1
Clarke	8.18	2
Clay	n.a.	0
Cleburne	n.a.	0
Coffee	5.29	1
Colbert	6.89	8
Conecuh	n.a.	0
Coosa	8.41	2
Covington	n.a.	0
Crenshaw	n.a.	0
Cullman	7.19	5
Dale	16.95	2
Dallas	8.82	1
DeKalb	7.90	5
Elmore	8.75	7
Escambia	9.44	1
Etowah	8.58	1
Fayette	8.77	3
Franklin	n.a.	0
Geneva	n.a.	0
Greene	n.a.	0
Hale	n.a.	0
Henry	n.a.	0

	Ave. Total Precip.	# Stations
Houston	19.78	1
Jackson	8.35	6
Jefferson	9.71	12
Lamar	6.76	1
Lauderdale	5.99	14
Lawrence	10.77	1
Lee	5.95	5
Limestone	9.29	12
Lowndes	n.a.	0
Macon	11.67	1
Madison	9.20	62
Marengo	n.a.	0
Marion	7.54	1
Marshall	9.70	11
Mobile	8.87	20
Monroe	3.82	2
Montgomery	8.47	3
Morgan	11.45	8
Perry	n.a.	0
Pickens	n.a.	0
Pike	n.a.	0
Randolph	10.58	1
Russell	11.01	2
St. Clair	11.15	3
Shelby	8.96	21
Sumter	n.a.	0
Talladega	8.97	6
Tallapoosa	8.91	5
Tuscaloosa	6.93	4
Walker	5.47	1
Washington	6.25	1
Wilcox	9.38	2
Winston	13.70	2

Abbeville	6.14°
Alberta	5.00°
Alex City	5.14°
Aliceville	4.55°
Andalusia	6.47°
Ashland	5.64°
Athens	4.30°
Bay Minette	8.08°
Bessemer	5.25°
Billingsley	5.33°
Centreville WSMO	5.15°
Chatom	6.21°
Claiborne L&D	5.39°
Clayton	5.91°
Dauphin Isl.	6.43°
Elba	6.45°
Eufaula WR	5.14°
Evergreen	6.41°
Fayette	4.77°
Geneva 2	5.94°
Greenville	5.86°
Haleyville	4.94°
Hamilton 3S	4.67°
Heflin	4.82°
Hurtsboro	5.23°
Jasper	5.25°
Lafayette	5.52°
Livingston	5.76°
Melvin	5.94°
Milstead	5.19°
Moulton	4.47°
Oneonta	5.66°
Perryville	5.04°
Plantersville	5.18°
Rock Mills	5.12°
Rockford	5.82°
Sylacauga	5.13°
Union Springs	5.62°
Uniontown	5.11°
Vernon	5.29°
Warrior L&D	4.12°
Wetumpka	4.71°

*Southeast Regional Climate Center
www.serrc.com

New Local Climate Records¹

July 2013

Precipitation, Daily

	Period of Record	New Record	Previous Record	Previous Year					
3 July 2013									
ATHENS	72	0.47 in	0.41 in	1941	CODEN	56	3.01 in	1.87 in	1970
LOGAN MARTIN DAM	31	0.37 in	0.12 in	1989	FAIRHOPE 2 NE	95	6.76 in	2.27 in	2001
ROCK MILLS	75	3.15 in	1.20 in	1946	JONES BLUFF L&D	32	3.56 in	2.24 in	1982
SYLACAUGA 4 NE	63	1.52 in	1.17 in	1961	ROBERTSDALE	101	3.05 in	2.14 in	1999
4 July 2013					14 July 2013				
ATHENS	72	4.83 in	1.99 in	1995	ALEXANDER CITY	43	1.22 in	0.65 in	1970
CHILDERSBURG WTR PLT	56	1.21 in	0.84 in	1976	GENEVA NO 2	37	1.85 in	1.70 in	2004
GENEVA NO 2	37	2.75 in	2.29 in	1994	15 July 2013				
HOLT LOCK & DAM	32	0.67 in	0.52 in	1985	TROY MUNICIPAL AP	44	0.31 in	0.22 in	2011
MITCHELL DAM	76	2.05 in	2.03 in	1974	T'LOOSA OLIVER DAM	113	1.26 in	1.09 in	1941
MOULTON 2	56	1.59 in	0.62 in	1965	18 July 2013				
TROY MUNICIPAL AP	44	1.75 in	0.74 in	2005	BERRY 3 NW	73	0.72 in	0.08 in	2007
5 July 2013					WEST BLOCTON	73	1.47 in	0.90 in	1957
ABBEVILLE	65	2.18 in	1.90 in	1987	19 July 2013				
ADDISON	75	8.07 in	1.90 in	1950	MILLERS FERRY L&D	32	1.00 in	0.78 in	1993
ALICEVILLE L AND D	33	1.05 in	0.43 in	1997	20 July 2013				
BANKHEAD L&D	56	2.19 in	1.62 in	1998	TROY MUNICIPAL AP	44	1.38 in	0.45 in	2001
BELLE MINA 2 N	63	4.51 in	2.85 in	2009	21 July 2013				
BERRY 3 NW	73	3.41 in	1.61 in	1950	BESSEMER 3 WSW	36	0.90 in	0.79 in	1997
CLAYTON	84	2.17 in	2.11 in	1936	HEADLAND	63	1.66 in	1.55 in	1975
GAINESVILLE LOCK	65	1.70 in	1.16 in	2005	22 July 2013				
GENEVA NO 2	37	3.55 in	0.99 in	1983	CAHABA PUMP HOUSE	31	3.20 in	2.05 in	1982
HOLT LOCK & DAM	32	1.17 in	1.04 in	2003	GENEVA NO 2	37	1.15 in	1.12 in	1978
MOBILE DOWNTOWN AP	65	2.03 in	1.98 in	2003	MOULTON 2	56	1.87 in	1.37 in	1982
MOULTON 2	56	5.55 in	2.83 in	1991	23 July 2013				
RUSSELLVILLE NO 2	59	2.05 in	1.30 in	1991	CLAIBORNE L&D	60	0.92 in	0.74 in	1988
TUSCALOOSA ACFD	65	2.77 in	2.71 in	1988	MILLERS FERRY L&D	32	2.00 in	1.34 in	1996
6 July 2013					24 July 2013				
GADSDEN	60	1.50 in	1.40 in	2005	ABBEVILLE	65	1.73 in	1.63 in	2002
HALEYVILLE	111	4.00 in	1.67 in	1955	ADDISON	75	0.57 in	0.47 in	1938
JONES BLUFF L&D	32	1.48 in	1.11 in	2003	BANKHEAD L&D	56	1.85 in	1.20 in	1997
MOULTON 2	56	3.07 in	1.30 in	2012	CAHABA PUMP HOUSE	31	1.32 in	0.70 in	1985
T'LOOSA OLIVER DAM	113	1.90 in	1.08 in	1950	CLAYTON	84	2.07 in	2.00 in	1999
7 July 2013					GAINESVILLE LOCK	65	1.17 in	0.94 in	2008
JACKSONVILLE	65	3.83 in	2.91 in	1975	HAMILTON 3 S	51	2.02 in	1.45 in	1963
LOGAN MARTIN DAM	31	0.64 in	0.44 in	2009	HOLT LOCK & DAM	32	0.93 in	0.59 in	1990
WEISS DAM	31	1.55 in	1.20 in	2005	LOGAN MARTIN DAM	31	0.99 in	0.93 in	1990
8 July 2013					RUSSELLVILLE NO 2	59	4.15 in	3.10 in	1963
BERRY 3 NW	73	0.32 in	0.16 in	2010	SAND MT SUBSTATION	64	2.11 in	1.60 in	1998
9 July 2013					25 July 2013				
ALEXANDER CITY	43	0.92 in	0.58 in	1974	BERRY 3 NW	73	0.38 in	0.12 in	1950
WEISS DAM	31	0.39 in	0.32 in	2007	CLAYTON	84	1.63 in	1.45 in	1938
11 July 2013					LOGAN MARTIN DAM	31	0.61 in	0.43 in	1985
CAHABA PUMP HOUSE	31	3.80 in	2.85 in	2005	28 July 2013				
LAY DAM	76	2.09 in	1.17 in	1988	ALBERTA	72	1.60 in	1.54 in	1984
SAND MT SUBSTATION	64	1.88 in	1.13 in	1949	CODEN	56	3.90 in	2.71 in	1969
SCOTTSBORO	121	2.00 in	1.72 in	1913	COFFEEVILLE L&D	30	1.92 in	0.70 in	2008
12 July 2013					DAUPHIN ISLAND #2	37	2.22 in	0.75 in	2007
ALICEVILLE L AND D	33	2.10 in	1.83 in	1990	THOMASVILLE	121	1.92 in	1.53 in	1973

New Local Climate Records¹

July 2013

Precipitation, Wettest July Day on Record

	Period of Record	New Record	Previous Record	Previous Record Date
4 July 2013				
ATHENS	72	4.83 in	4.19 in	2008-07-31
5 July 2013				
ADDISON	75	8.07 in	3.23 in	1987-07-04
MOULTON 2	56	5.55 in	2.93 in	1985-07-27
BERRY 3 NW	73	3.41 in	3.15 in	2005-07-11
11 July 2013				
CAHABA PUMP HOUSE	31	3.80 in	3.75 in	1996-07-08
24 July 2013				
RUSSELLVILLE NO 2	59	4.15 in	3.10 in	1963-07-24

Minimum Low Temperature, Daily

	Period of Record	New Record	Previous Record	Previous Year
14 July 2013				
ENTERPRISE 4 W	41	64.9°F	66.9°F	1968
26 July 2013				
MOULTON 2	55	61.0°F	64.0°F	1990
BELLE MINA 2 N	62	61.0°F	61.0°F	2007
SAND MT SUBSTATION	63	62.1°F	62.1°F	2003
BESSEMER 3 WSW	36	64.0°F	64.9°F	1990
THORSBY EXP STATION	51	64.0°F	66.0°F	2003
TUSCALOOSA MUNI AP	48	64.9°F	66.0°F	1990
28 July 2013				
DAUPHIN ISLAND #2	35	73.0°F	73.9°F	2009
30 July 2013				
ROCK MILLS	57	60.1°F	61.0°F	1957
ENTERPRISE 4 W	39	63.0°F	64.0°F	1976

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

* This record differs from long-term data in the AOSC climate database:
http://nsssc.uah.edu/alclimate/climate/daily_climate_and_normals.php

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