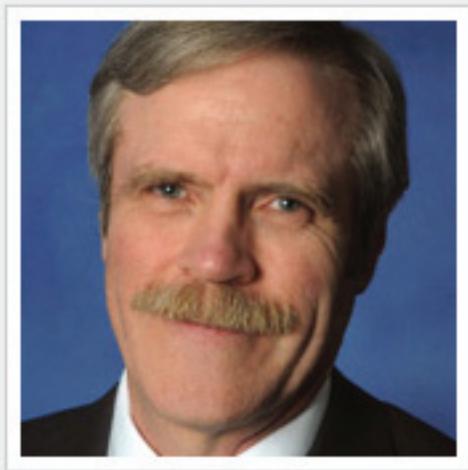


The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

Volume 3, Number 9, June 2013



Dr. John Christy, Alabama State Climatologist

As June drew to a close and July got underway, quite a bit of attention was focused out west. A flurry of record or near record high temperatures in Las Vegas, Death Valley and elsewhere in the western states occurred due to a stalled high-pressure system in an area that is already normally hot and dry.

Fortunately, we are on the cool side of that system, with relatively pleasant temperatures, occasional showers and the intermittent downpours. Rainfall in June was typical for summer: Spotty. Over small distances, total rainfall for the month could vary by as much as 100 percent.

At the Huntsville NWS airport, for instance, total rainfall for the month was only 2.21 inches. At my house, about 12 miles away, I saw 4.96 inches. That's just the nature of pop-up storms. I might get four or five inches in an afternoon and watch my yard wash down the street, while someone a few blocks away gets nothing. Often in summer, the upper air steering winds are simply stagnant, so storms grow and die without moving much.

Some of the data collected by CoCoRaHS volunteers in June backs that up. For instance, three gauges in Auburn reported 4.66, 4.69 and 6.04 inches, while a rain gauge in Tuskegee got 9.05. Volunteers in Pelham and Bessemer reported 4.33 and 4.63 inches in rain in June, while volunteers in Trussville saw 8.91, 9.1, 11.16 and 11.72 inches!

But my favorite example from June was three volunteers in and around Wetumpka. The three Wetumpka stations saw 4.38 inches in 30 reports, 8.12 inches in 30 reports, and 12.29 inches in eleven reports (evidently this last volunteer reported only when it rained – which reminds me to remind our CoCoRaHS volunteers to always file a report even if the total is zero!)

We are half way through the year now, and our 6-month rainfall totals around the state also reflect a wide range of reports. Anniston is 12.61 inches ahead of normal for the first six months of 2013, while Dothan is 10.48 inches below normal.

Cities around the state and their six-month rainfall totals — from wettest to driest — include:

Anniston	39.62" +12.61
Birmingham	39.17" +10.82
Shelby Co. AP	33.70" +5.24
Huntsville	31.33" +2.67

Montgomery	29.56" +2.05
Troy	29.11" +1.45
Muscle Shoals	29.24" +0.98
Mobile	32.65" -0.30
Tuscaloosa	27.64" -0.53
Dothan	17.48" -10.48

If you look at the actual rainfall amounts, that means there has been over 22" difference between the amount of rain that fell on Anniston and Dothan from January through June. Perhaps more surprising, there has been an 11.6" difference between Troy and Dothan, which are only 56 miles apart. By the end of the year, we shall see if Mother Nature balances these differences out.

- John Christy

Drought Monitor

U.S. Drought Monitor

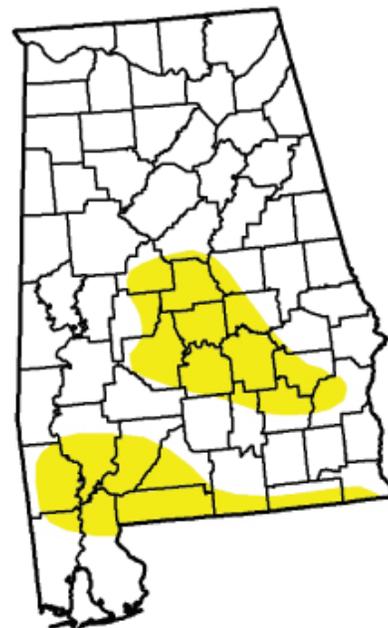
Alabama

June 25, 2013
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	77.70	22.30	0.00	0.00	0.00	0.00
Last Week (06/18/2013 map)	73.53	26.47	0.00	0.00	0.00	0.00
3 Months Ago (03/26/2013 map)	94.59	5.41	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 (06/19/2012 map)	42.59	57.41	26.43	17.55	12.58	1.06

Intensity:

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



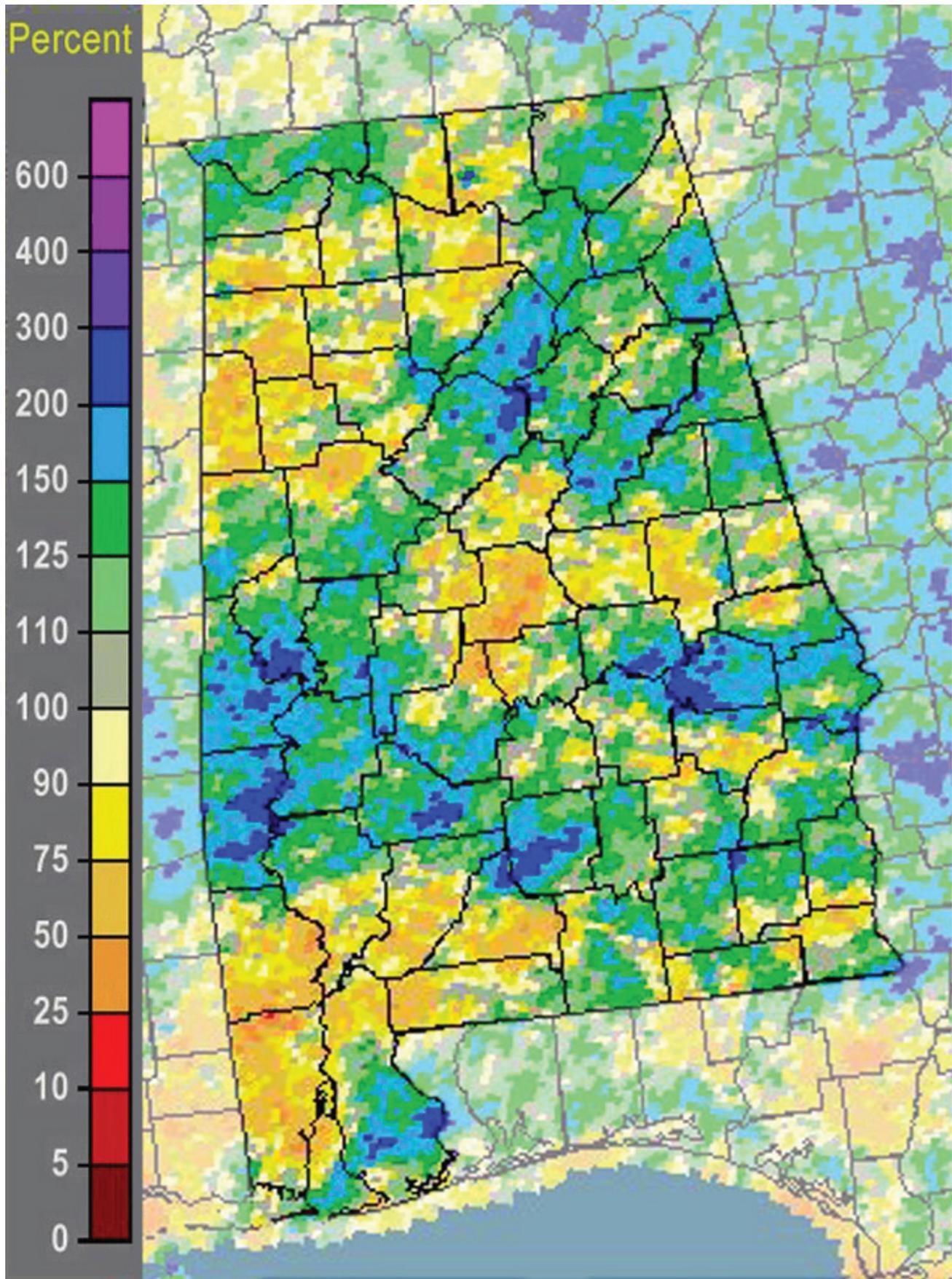
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu>

Released Thursday, June 27, 2013
Mark Svoboda, National Drought Mitigation Center

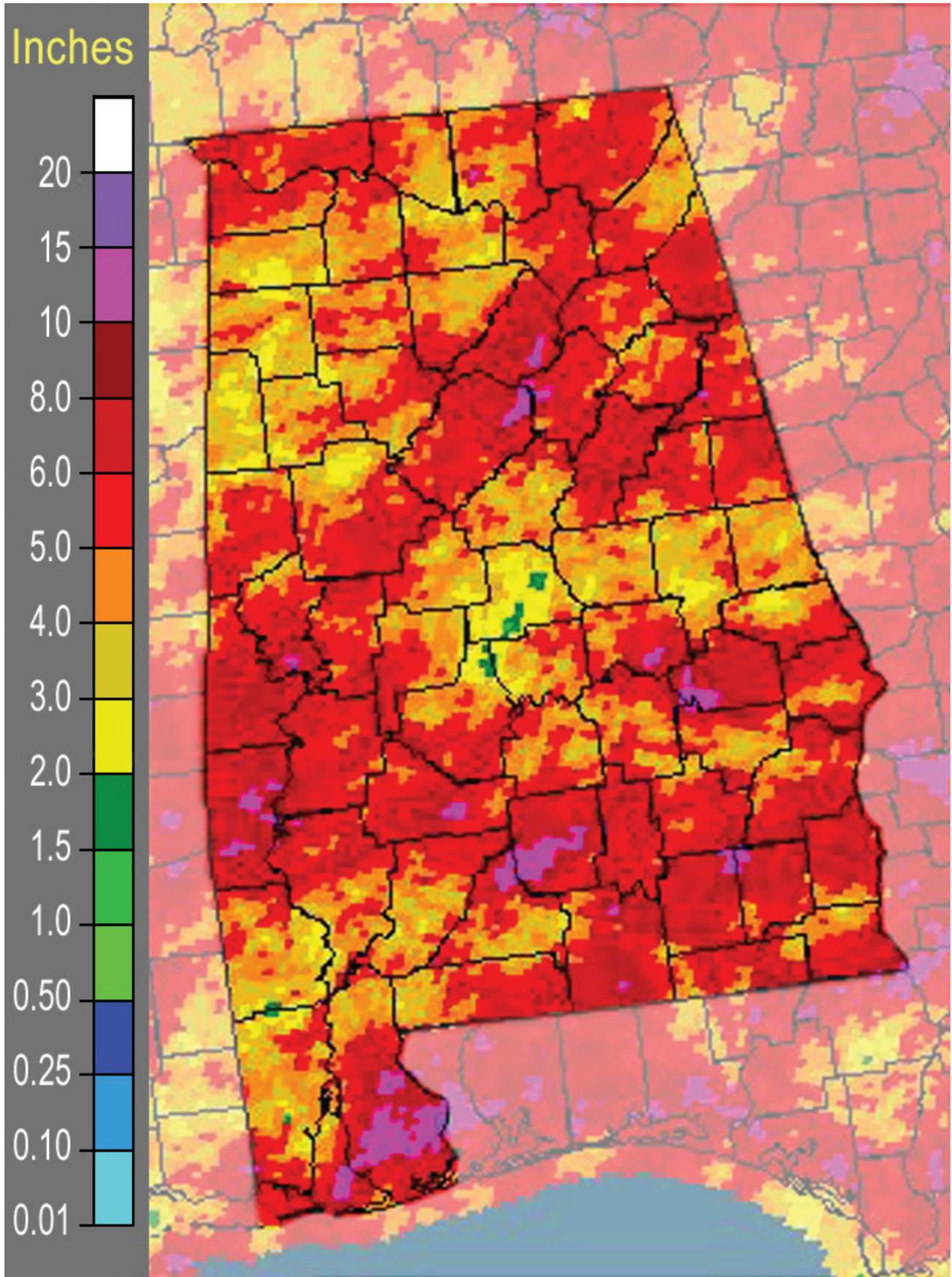
Percent of Normal Precipitation



water.weather.com

June 2013 NWS percentage of normal precipitation

Multi-sensor precipitation estimate

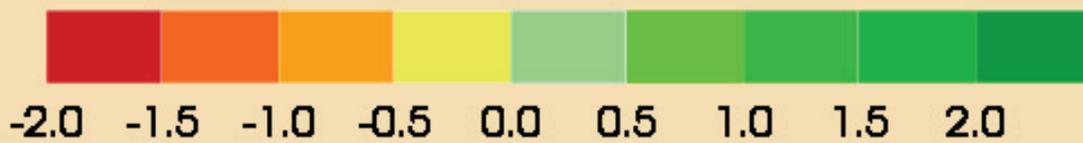
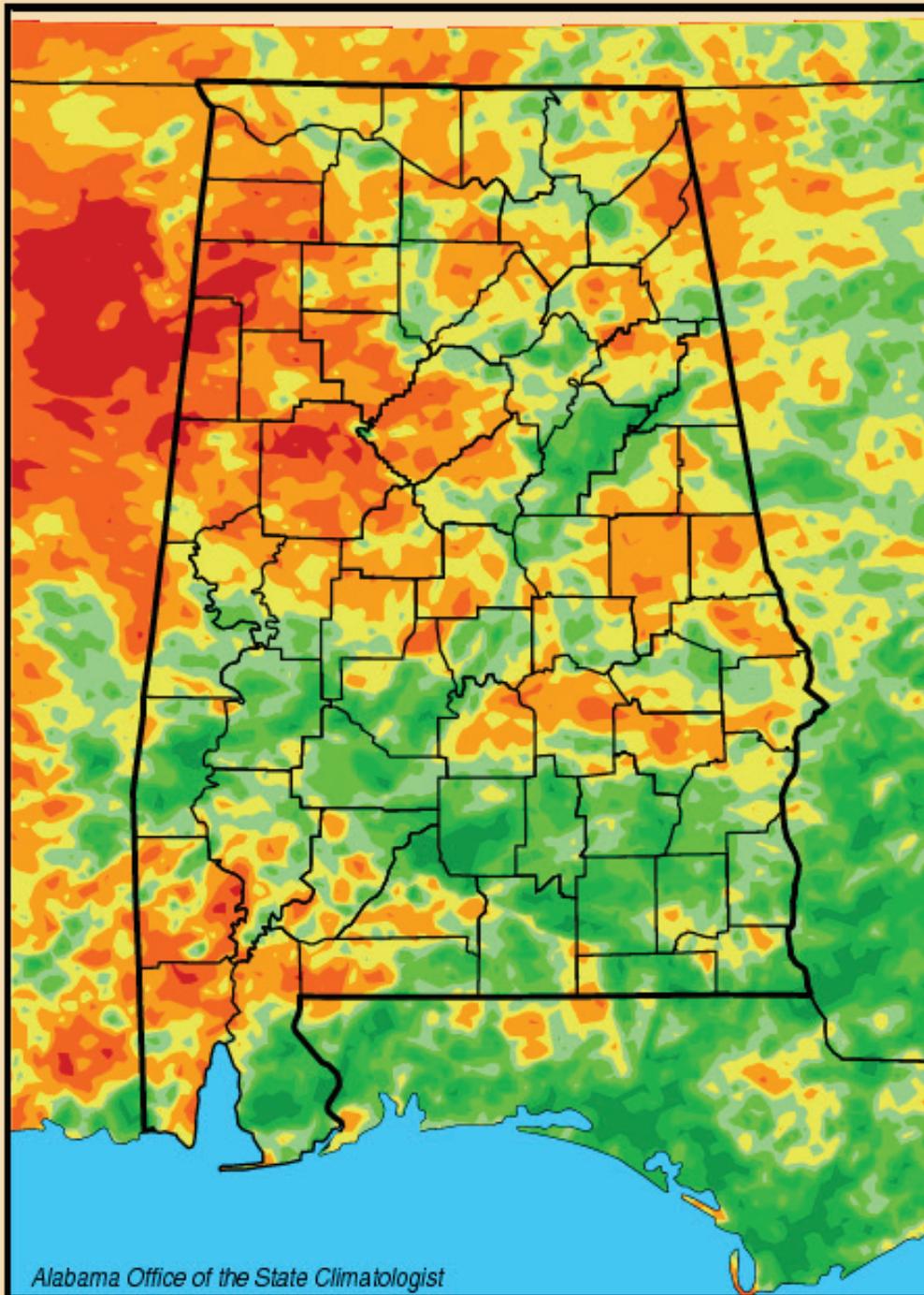


water.weather.gov

June 2013 NWS multi-sensor precipitation estimate

Lawn and Garden Moisture Index

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



Alabama Monthly Climate Summaries

Alabama Monthly Climate Summaries

June 2013

	Station Began	June Mean June Norm	June Hi Temp Record Hi	June Low Temp Record Lo	Total Precip. Normal Prec.	Wettest June Driest June	Heaviest Day Record Day
Anniston	2/1903	77.8°	92° 6/12/13	63° 6/15/13	6.69"	9.27" 1982	2.25" 6/24-25/13
		76.6°	102°+ 6/27/54	42° 6/1/72	4.14"	.00" 1988	3.60" 6/4/50
Auburn	1/1893	77.7°	91° 6/12/13	66° 6/22/13	2.67"	8.64" 1909	.52" 6/28/13
		78.3°	107° 6/19/33	39° 6/3/56	4.17"	.57" 1931	3.64" 6/5/28
Birmingham	1/1930	78.8°	94° 6/12/13	64° 6/15/13	8.66"	9.04" 1999	3.57" 6/4-5/13
		76.4°	106° 6/29/31	42° 6/1/66	3.78"	.79" 1988	3.85" 6/23/57
Brewton	4/1977	77.7°	93.2° 6/13/13	64.4° 6/8/13	6.07"	13.80" 1989	1.54" 6/2/13
		77.3°	109° 6/18/33	40° 6/3/56	5.97"	1.90" 1998	6.45" 6/3/70
Calera	9/1900	78.5°	92° 6/12;16/13	65° 6/15/13	4.70"	14.58" 2003	1.54" 6/18/13
		76.0°	103° 6/29/69	37° 6/1/66	4.15"	.06" 1902	5.04" 6/12/42
Clanton	2/1893	77.0°	93.2° 6/12/13	60.1° 6/15/13	2.91"	11.82" 1991	.72" 6/27/13
		76.0°	106° 6/19/36	42° 6/3/56	4.16"	.69" 1988	7.82" 6/26/91
Courtland		75.7°	92.7° 6/27/13	58.3° 6/4/13	5.87"	M	1.44" 6/17/13
		M	M	M	M	M	M
Cullman	7/1907	74.7°	91.9° 6/27/13	56.1° 6/15/13	2.78"	M	1.01" 6/10/13
		M	M	M	M	M	M
Decatur	2/1880	78.0°	96° 6/12/13	59° 6/4;15/13	3.39"	11.07" 1900	1.45" 6/17-18/13
		77.9°	108° 6/10/14	44° 6/3/56	3.58"	.20" 1931	3.06" 6/4/34
Dothan	2/1902	80.1°	96° 6/12/13	65° 6/8/13	4.59"	8.52" 1942	1.19" 6/17-18/13
		80.1°	104° 6/27/52	49° 6/3/56	4.31"	1.10" 1945	3.78" 6/22/49
Fairhope	8/1917	78.6°	90.5° 6/28/13	64.8° 6/6/13	8.48"	18.52" 1989	1.57" 6/10/13
		79.2°	100°+ 6/11/54	52° 6/1/84	5.94"	.71" 1977	7.80" 6/9/89
Gadsden	7/1893	73.5°	89.4° 6/12/13	56.8° 6/15/13	5.45"	10.30" 1994	1.35" 6/16/13
		75.8°	102° 6/27/54	42° 6/3/56	4.34"	.13" 1988	3.10" 6/25/99
Gainesville	6/1948	77.5°	94.8° 6/27/13	62.4° 6/15/13	5.02"	9.56" 1983	1.63" 6/28/13
		77.2°	101° 6/24/77	42° 6/1/84	4.07"	.61" 1988	3.49" 6/13/87
Greensboro	2/1890	77.2°	92.7° 6/27/13	61.5° 6/15/13	6.01"	10.25" 1999	1.21" 6/5/13
		78.9°	105°+ 6/29/54	41° 6/1/66	3.72"	.66" 1988	5.50" 6/3/70
Guntersville	12/1904	76.3°	91.6° 6/12/13	64.2° 6/15/13	5.85"	9.94" 1999	1.14" 6/17/13
		75.4°	103° 6/26/88	44° 6/4/56	3.85"	.19" 1988	4.20°+ 6/19/76
Highland Home	3/1892	76.5°	90.5° 6/28/13	63.3° 6/8/13	9.29"	12.90" 1983	2.06" 6/19/13
		76.9°	104°+ 6/7/85	45° 6/1/84	4.70"	1.22" 1971	4.30" 6/3/70
Huntsville	1/1959	78.9°	97° 6/12/13	60° 6/4/13	2.21"	14.99" 1989	1.02" 6/17-18/13
		76.5°	101° 6/29/69	45° 6/1/72	4.10"	.17" 1988	4.46" 6/14/69

Alabama Monthly Climate Summaries

June 2013

	Station Began	June Mean June Norm	June Hi Temp Record Hi	June Low Temp Record Lo	Total Precip. Normal Prec.	Wettest June Driest June	Heaviest Day Record Day
Mobile	3/1900	81.0° 79.3°	95° 6/28/13 102*+ 6/29/54	65° 6/6/13 49° 6/1/84	4.20* 5.01*	11.00* 1982 1.26* 1977	1.14* 6/18/13 6.08* 6/20/61
Montgomery	6/1948	81.1° 78.9°	96° 6/13/13 105° 6/28/54	65° 6/8/13 49*+ 6/1/84	3.85* 4.13*	14.44* 1989 .33* 1979	1.14* 6/5/13 3.91* 6/28/57
Muscle Shoals	12/1940	74.7° 76.5°	92.5° 6/12/13 104° 6/28/52	56.8° 6/4/13 44° 6/1/72	4.96* 4.90*	13.43* 1989 1.03* 1988	1.83* 6/17/13 5.60* 6/12/92
Russellville	9/1953	74.4° 73.7°	92.7° 6/27/13 102° 6/28/54	54.3° 6/4/13 36*+ 6/4/69	4.24* 4.23*	12.71* 1997 .50* 1988	1.08* 6/9/13 3.30* 6/8/94
Scottsboro	10/1891	74.2° 75.5°	91.4° 6/12/13 107*+ 6/29/31	56.3° 6/4/13 39° 6/3/56	5.78* 4.38*	9.08* 1989 .65* 1988	1.30* 6/10/13 3.72* 6/29/41
Selma	1/1895	77.8° 80.0°	94.3° 6/13/13 108° 6/28/54	61.5° 6/15/13 42° 6/1/84	4.13* 4.13*	10.32* 1989 .34* 1988	1.00* 6/24/13 3.65* 6/25/91
Talladega	2/1888	76.4° 77.0°	92.3° 6/12/13 102° 6/27/54	61.2° 6/15/13 39° 6/1/72	7.55* 4.64*	11.97* 1989 .32* 1988	2.54* 6/16/13 4.60* 6/22/97
Thomasville	9/1891	77.5° 78.7°	91.6° 6/28/13 108° 6/26/30	61° 6/15/13 46*+ 6/1/84	3.97* 4.92*	12.69* 1989 .93* 1988	1.17* 6/17/13 3.98* 6/29/43
Troy	6/1908	76.8° 77.5°	93° 6/28/13 105° 6/19/33	62.1° 6/8/13 43° 6/9/00	4.00* 4.78*	12.63* 1989 1.04* 1986	.88* 6/28/13 4.36* 6/4/70
Tuscaloosa	6/1948	79.8° 78.7°	96° 6/27/13 105° 6/28/52	63° 6/15/13 45° 6/3/56	5.68* 4.20*	11.98* 1989 1.22* 1988	1.72* 6/5/13 3.41* 6/18/63
Valley Head	1/1893	73.3° 72.2°	89.4° 6/12/13 101° 6/28/52	56.3° 6/4/13 35° 6/1/66	3.52* 4.33*	9.19* 1976 .54* 1988	1.05* 6/9/13 3.08* 6/10/61
Statewide June 2013		77.3°	97° Huntsville	54.3° Russellville	5.15°	18.52° Fairhope	3.21° Gadsden
June Norm		77.2°	109° Brewton	35° Valley Head	4.41°	0.00° Anniston	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

Volunteer Precipitation Reports

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

June 2013

	Ave. Total Precip.	# Stations
Autauga	4.98	3
Baldwin	7.47	29
Barbour	n.a.	0
Bibb	3.39	1
Blount	6.70	8
Bullock	n.a.	0
Butler	n.a.	0
Calhoun	5.41	3
Chambers	5.35	1
Cherokee	4.25	1
Chilton	3.12	2
Choctaw	5.50	1
Clarke	3.78	2
Clay	n.a.	0
Cleburne	n.a.	0
Coffee	4.18	1
Colbert	4.65	8
Conecuh	n.a.	0
Coosa	3.03	2
Covington	n.a.	0
Crenshaw	n.a.	0
Cullman	3.20	5
Dale	6.39	2
Dallas	5.34	1
DeKalb	3.95	5
Elmore	7.60	7
Escambia	4.92	1
Etowah	6.39	1
Fayette	3.94	2
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	7.79	1
Jackson	6.55	6
Jefferson	7.75	12
Lamar	2.26	1
Lauderdale	5.73	12
Lawrence	2.84	1
Lee	5.31	4
Limestone	4.65	13
Lowndes	n.a.	0
Macon	9.05	1
Madison	4.53	61
Marengo	n.a.	0
Marion	2.77	1
Marshall	5.22	12
Mobile	5.09	18
Monroe	3.50	2
Montgomery	5.25	4
Morgan	3.28	10
Perry	n.a.	0
Pickens	n.a.	0
Pike	n.a.	0
Randolph	6.65	1
Russell	5.85	2
St. Clair	4.73	4
Shelby	4.46	20
Sumter	n.a.	0
Talladega	7.57	6
Tallapoosa	2.81	6
Tuscaloosa	4.71	5
Walker	3.54	0
Washington	1.65	1
Wilcox	5.10	2
Winston	4.72	2

Normal

June

Precipitation*

Abbeville	4.81"
Alberta	3.76"
Alex City	3.85"
Aliceville	3.38"
Andalusia	4.92"
Ashland	4.42"
Athens	3.95"
Bay Minette	5.32"
Bessemer	3.89"
Billingsley.....	4.10"
Centreville WSMO.	4.06"
Chatom	4.62"
Claiborne L&D.....	4.39"
Clayton	4.26"
Dauphin Isl.	4.90"
Elba	4.74"
Eufaula WR.....	4.11"
Evergreen	5.06"
Fayette	4.68"
Geneva 2.....	4.98"
Greenville	4.39"
Haleyville	4.20"
Hamilton 3S	4.27"
Heflin	4.35"
Hurtsboro	3.36"
Jasper	4.14"
Lafayette	3.60"
Livingston	3.76"
Melvin	3.76"
Milstead	3.72"
Moulton	3.77"
Oneonta	4.17"
Perryville	4.02"
Plantersville	4.02"
Rock Mills	3.95"
Rockford	4.02"
Sylacauga	4.22"
Union Springs.....	4.33"
Uniontown	3.61"
Vernon	4.43"
Warrior L&D	3.33"
Wetumpka	4.08"

*Southeast Regional Climate Center
www.serrc.com

New Alabama Climate Records

New Local Climate Records¹

June 2013

Precipitation, Daily

	Period of Record	New Record	Previous Record	Previous Year																														
2 June 2013																																		
SYLACAUGA 4 NE	63	1.30 in	1.23 in	2010	ONEONTA	118	1.10 in	0.92 in	1995																									
WARRIOR LOCK & DAM	55	0.94 in	0.91 in	1974	14 June 2013																													
5 June 2013					BRUNDIDGE	82	1.50 in	1.31 in	2003																									
ATHENS	72	0.73 in	0.48 in	1999	17 June 2013																													
TALLAPOOSA WTR PLT	35	3.85 in	0.95 in	1998	ENTERPRISE 4 W	47	0.98 in	0.87 in	1991																									
TROY MUNICIPAL AP	44	1.15 in	0.61 in	2012	HIGHTOWER	71	1.22 in	1.00 in	1949																									
TUSCALOOSA ACFD	65	2.05 in	1.30 in	1997	LOGAN MARTIN DAM	31	2.01 in	0.23 in	1982																									
TUSCALOOSA MUNI AP	64	1.72 in	1.12 in	2000	SAND MT SUBSTATION	64	1.20 in	1.20 in	1997																									
6 June 2013					SCOTTSBORO	121	1.64 in	1.12 in	1951																									
ALBERTA	72	3.19 in	2.72 in	1997	18 June 2013																													
BANKHEAD LOCK & DAM	56	2.07 in	1.30 in	1998	BERRY 3 NW	73	1.73 in	0.35 in	2010																									
BERRY 3 NW	73	0.48 in	0.06 in	2010	CHILDERSBURG WTR PLT	56	1.98 in	1.27 in	2003																									
CAHABA PUMP HOUSE	31	2.37 in	1.20 in	1998	EVERGREEN	122	2.18 in	1.80 in	1927																									
DEMOPOLIS LOCK & DAM	61	2.68 in	2.30 in	1974	GUNTERSVILLE	108	2.04 in	1.77 in	1945																									
EVERGREEN	122	1.39 in	0.82 in	1998	JACKSONVILLE	64	1.33 in	1.09 in	1997																									
GENEVA NO 2	37	0.95 in	0.92 in	1994	MOULTON 2	56	1.72 in	1.27 in	2011																									
HOLT LOCK & DAM	32	3.28 in	1.26 in	1998	ROCK MILLS	75	2.05 in	0.94 in	1963																									
JACKSON	51	1.38 in	0.90 in	1974	RUSSELLVILLE NO 2	59	2.04 in	2.00 in	1989																									
JACKSONVILLE	64	0.87 in	0.65 in	1998	SAND MT SUBSTATION	64	1.70 in	1.07 in	1997																									
LOGAN MARTIN DAM	31	0.47 in	0.04 in	2010	SYLACAUGA 4 NE	63	2.57 in	2.15 in	2003																									
ONEONTA	118	3.31 in	2.65 in	1964	THOMASVILLE	121	1.30 in	1.00 in	1937																									
T'LOOSA OLIVER DAM	113	2.33 in	1.12 in	1964	WEISS DAM	31	1.28 in	0.35 in	2011																									
WADLEY	80	1.23 in	0.73 in	1959	19 June 2013																													
7 June 2013					ALBERTA	72	0.66 in	0.60 in	1985																									
JONES BLUFF L&D	32	1.12 in	0.79 in	2003	BERRY 3 NW	73	0.75 in	0.15 in	1949																									
WARRIOR LOCK & DAM	55	1.56 in	1.35 in	1965	ROBERTSDALE	101	2.30 in	1.44 in	1938																									
8 June 2013					24 June 2013																													
BERRY 3 NW	73	0.35 in	0.20 in	1941	ROBERTSDALE	101	7.25 in	2.39 in	1915																									
HOLT LOCK & DAM	32	0.70 in	0.57 in	1996	25 June 2013																													
LOGAN MARTIN DAM	31	0.57 in	0.20 in	1990	LAY DAM	76	1.24 in	1.20 in	1938																									
WEISS DAM	31	0.78 in	0.73 in	1985	28 June 2013																													
9 June 2013					TROY MUNICIPAL AP	44	1.50 in	0.39 in	2002																									
BESSEMER 3 WSW	36	1.40 in	0.69 in	2001	29 June 2013																													
DAUPHIN ISLAND #2	37	5.35 in	1.51 in	2012	ENTERPRISE 4 W	47	1.95 in	1.65 in	2011																									
10 June 2013					GAINESVILLE LOCK	65	1.57 in	1.54 in	1975																									
ADDISON	75	1.09 in	0.91 in	1950	GENEVA NO 2	37	2.29 in	1.62 in	2004																									
CAHABA PUMP HOUSE	31	1.08 in	0.50 in	1986	MILLERS FERRY L&D	32	1.00 in	0.99 in	1993																									
GADSDEN	60	1.65 in	1.20 in	2012	<h3>Precipitation, Wettest June Day on Record</h3> <table border="1"> <thead> <tr> <th></th> <th>Period of Record</th> <th>New Record</th> <th>Previous Record</th> <th>Previous Record Date</th> </tr> </thead> <tbody> <tr> <td colspan="5">6 June 2013</td> </tr> <tr> <td>HOLT LOCK & DAM</td> <td>32</td> <td>3.28 in</td> <td>3.27 in</td> <td>1987-06-04</td> </tr> <tr> <td colspan="5">9 June 2013</td> </tr> <tr> <td>DAUPHIN ISLAND #2</td> <td>37</td> <td>5.35 in</td> <td>3.68 in</td> <td>2012-06-10</td> </tr> </tbody> </table>						Period of Record	New Record	Previous Record	Previous Record Date	6 June 2013					HOLT LOCK & DAM	32	3.28 in	3.27 in	1987-06-04	9 June 2013					DAUPHIN ISLAND #2	37	5.35 in	3.68 in	2012-06-10
	Period of Record	New Record	Previous Record	Previous Record Date																														
6 June 2013																																		
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HOLT LOCK & DAM	32	1.07 in	0.49 in	1999																														
LOGAN MARTIN DAM	31	0.43 in	0.39 in	1992																														
OPELIKA	56	0.70 in	0.55 in	1957																														
ROBERTSDALE	101	4.74 in	2.40 in	1986																														
SAND MT SUBSTATION	64	1.20 in	1.01 in	1985																														
WALNUT GROVE	72	1.70 in	1.68 in	1952																														
WEISS DAM	31	0.45 in	0.18 in	1992																														
WETUMPKA	120	2.13 in	2.10 in	1910																														
11 June 2013																																		
COFFEEVILLE L&D	30	1.70 in	1.01 in	2012																														
JACKSONVILLE	64	0.64 in	0.62 in	1965																														

Alabama State Climatologist

John R. Christy

Alabama State Climatologist

The University of Alabama

in Huntsville

christy@nsstc.uah.edu

256-961-7763

Contact:

Phillip Gentry

UAHuntsville Communications

The University of Alabama in Huntsville

gentry@nsstc.uah.edu

256.961.7618

Bob Clymer

Assistant State Climatologist

The University of Alabama in Huntsville

bob.clymer@nsstc.uah.edu

256-961-7771

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