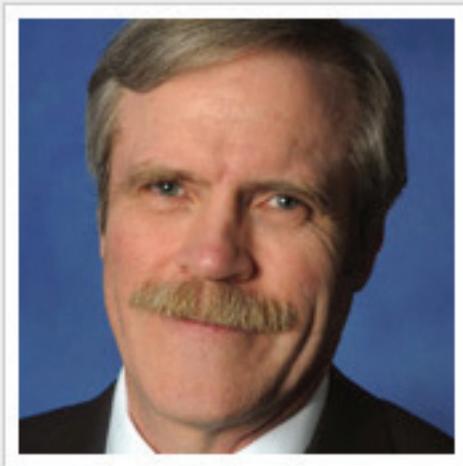


The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

Volume 7, Number 5, February 2017



Dr. John Christy, Alabama State Climatologist

For most of Alabama, it has been a long time since we saw a February this warm. If you look at the climate record, however, that's hardly surprising: With the exception of 1990 (and now 2017), the 13 warmest Februaries on record in Alabama all happened at least 55 years ago. (13 because there is a tie for 12th.)

The February just past is the warmest on the Southeast Regional Climate Center's 81-year climate record for both Huntsville and Montgomery. Huntsville's average temperature (53.1°) was more than a full degree Fahrenheit warmer than the second warmest February (1990 at 51.9°), while Montgomery's 59.4° was one tenth of a degree warmer than the previous warmest February in 1957.

It was also the second warmest February on record in both Mobile (61.4°) and Birmingham (55.4°).

It will be several days before the official statewide numbers come in, but early reports indicate February 2017 should slide easily into the state's top five warmest Februaries.

But what (if anything) does that mean in terms of forecasting for the coming spring?

Generally speaking, absolutely nothing.

There is no apparent correlation between a warm winter and the spring weather that follows. We are no more likely to get March snow after a warm February than we are after a cold one. Violent weather is typically the result of short-term weather systems, rather than those that linger for weeks or months at a time.

One effect of the warm dry month-and-a-half, however, is the way it warmed the soil and advanced the emergence of vegetation about three weeks ahead of schedule.

Two major consequences are (1) an increased vulnerability to freeze damage, and (2) the diversion of soil moisture from supporting stream flows to supporting plant growth. Indeed, we are seeing stream flows in some cases near all time lows in north Alabama. And a freeze in March is usually a good bet, especially in the north end of the state. Frost damage to plants and crops is much more likely when February or March is unusually warm. Remember April 2007 and the Easter Freeze after a very warm March?

Which brings us to March. While Alabama recorded two tornadoes in February and 21 in January (21!), March is generally considered the start of the four-month peak tornado season for the state.

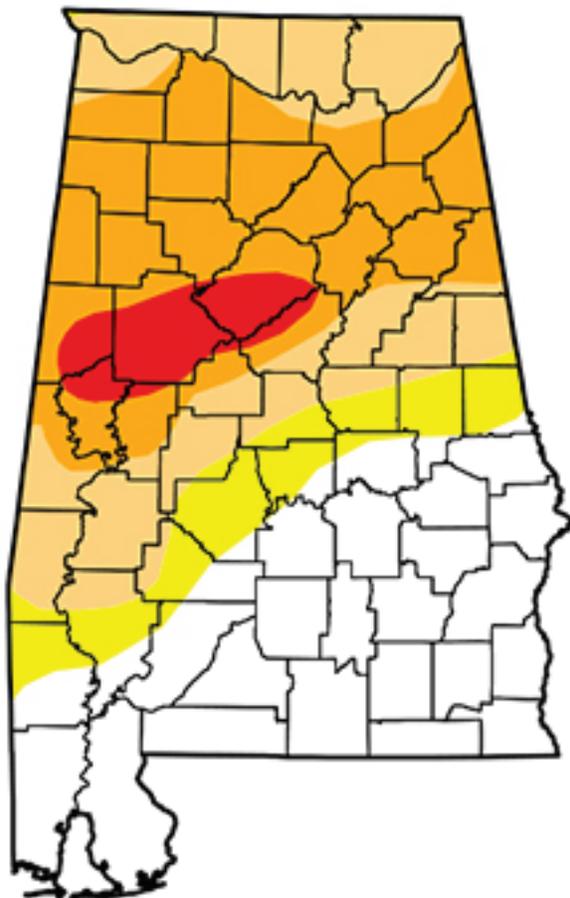
While the April 2011 tornado outbreak remains fresh in our memories, the state's deadliest tornado event was the storm system that hit the Southeast on March 21-22, 1932. While tornadoes from that system were reported from Mississippi to South Carolina (and as far north as Illinois), Alabama was the hardest hit, with 268 deaths and another 1,849 reported injured.

Unfortunately, March pops up again and again in Alabama's tornado history: March 18, 1899, with 40 killed. March 21, 1913, with 27 killed. March 18, 1920, with 17 fatalities. March 27, 1932 — less than a week after the deadly outbreak — with six additional deaths. Palm Sunday 1994, with 22 fatalities. And so forth.

This past weekend was the tax holiday for emergency preparations, and that's a good thing. But whether you save eight or nine percent or not, now is a critical time for weather preparation and awareness. History and science give us all the warnings we need, but it means nothing if we don't make a plan and prepare for the worst.

- John Christy

U.S. Drought Monitor Alabama



February 28, 2017

(Released Thursday, Mar. 2, 2017)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	36.64	63.36	53.63	31.96	5.21	0.00
Last Week 2/21/2017	30.39	69.61	58.66	35.28	5.21	0.00
3 Months Ago 11/29/2016	0.00	100.00	100.00	100.00	96.51	32.75
Start of Calendar Year 1/3/2017	22.97	77.03	66.12	48.58	23.32	0.00
Start of Water Year 9/27/2016	17.15	82.85	47.12	17.94	6.36	0.00
One Year Ago 3/1/2016	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

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

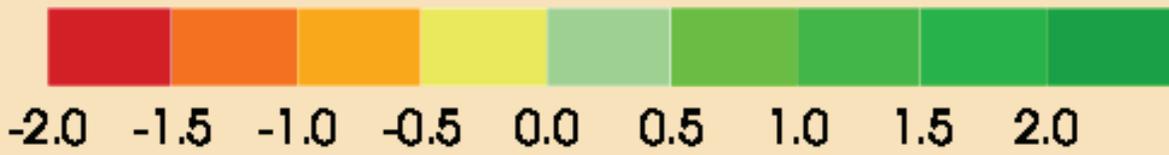
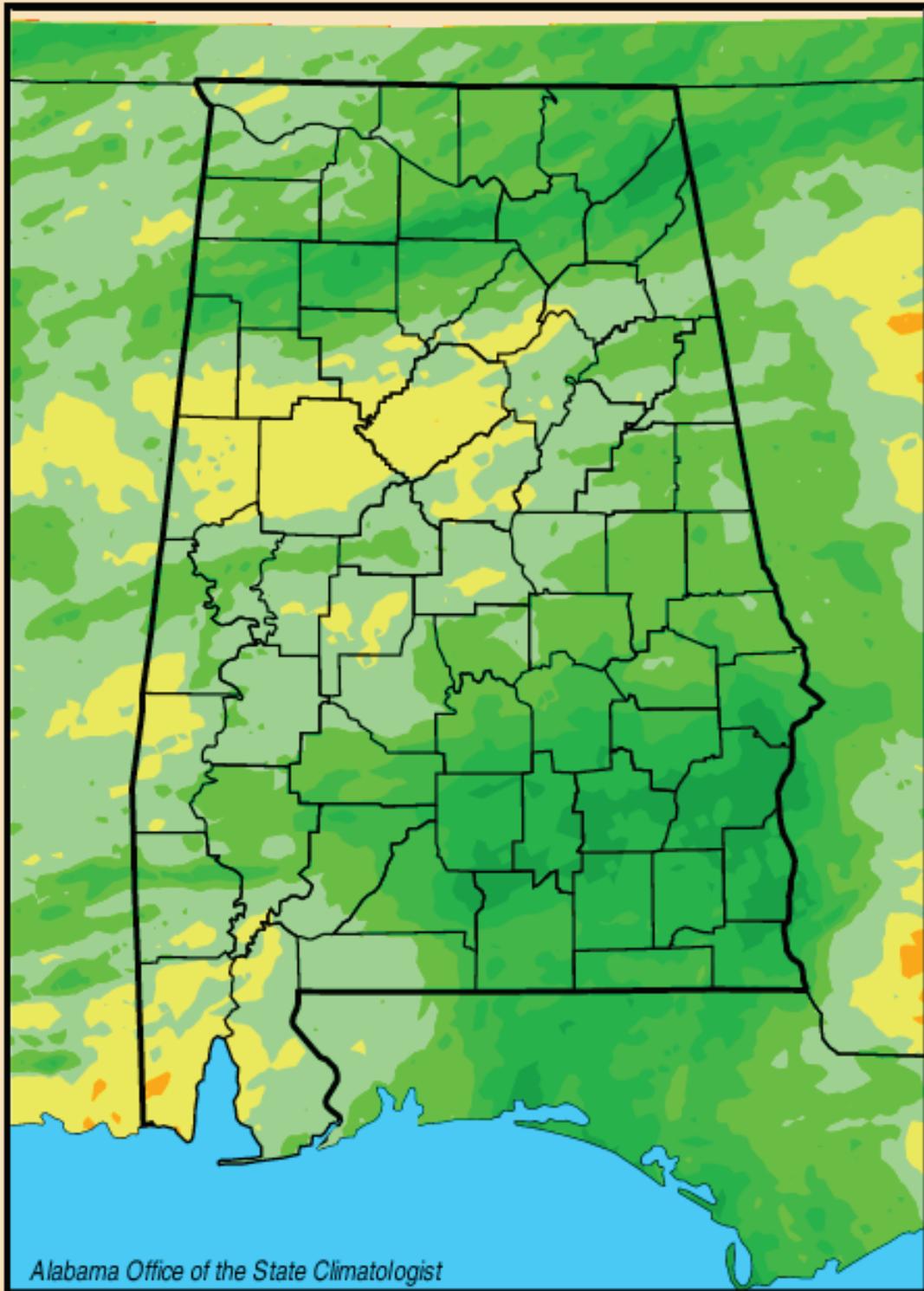
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCEI/NOAA



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

Lawn-and-Garden Moisture Index for March 2, 2017



Alabama Monthly Climate Summaries

February 2017

	Station Began	Feb. Mean Feb. Norm	Feb. Hi Temp Record Hi	Feb. Low Temp Record Low	Total Precip. Normal Prec.	Wettest Feb. Driest Feb.	Heaviest Day Record Day
Anniston	2/1903	54.4°	81° 2/24/17	29° 2/4/17	2.97"	8.99" 1990	0.82" 2/7/17
		47.3°	84°+ 2/23/96	4° 2/17/58	4.80"	1.19" 1978	3.40" 2/2/82
Auburn	1/1893	56.8°	79° 2/24/17	30° 2/4/17	4.12"	17.61" 1961	1.40" 2/21/17
		49.9°	82° 2/14/62	7° 2/3/17	5.27"	1.50" 1943	7.83" 2/25/61
Birmingham	1/1930	55.4°	81° 2/24/17	24° 2/4/17	2.95"	9.28" 1971	0.97" 2/7/17
		46.8°	83°+ 2/23/96	3° 2/17/58	4.21"	1.31" 1978	5.46" 2/21/61
Brewton	4/1977	58.2°	80.1° 2/12/17	31.1° 2/4/17	2.91"	12.19" 1982	1.39" 2/21/17
		51.0°	87° 2/13/62	11°+ 2/4/70	5.67"	1.45" 1980	8.18" 2/11/81
Calera	9/1900	55.9°	81° 2/24/17	31° 2/4/17	4.16"	15.62" 1961	1.28" 2/7/17
		46.5°	85° 2/13/62	4° 2/10/79	5.32"	0.61" 1968	5.55" 2/3/36
Clanton	2/1893	55.2°	79.9° 2/24/17	29.7° 2/4/17	3.54"	8.99" 1990	1.50" 2/7/17
		46.6°	84° 2/14/62	5° 2/5/96	5.48"	2.27" 2000	4.87" 2/4/36
Courtland		52.2°	78.2° 2/24/17	19.6° 2/4/17	2.42"	M	0.42" 2/28/17
		M	M	M	M	M	M
Cullman	7/1907	51.9°	77.7° 2/24/17	22.2° 2/4/17	3.54"	M	0.80" 2/28/17
		M	M	M	M	M	M
Decatur	2/1880	51.5°	78° 2/24/17	23° 2/4/17	2.76"	12.16" 1939	1.19" 2/28/17
		44.2°	83° 2/14/62	-12° 2/13/1899	4.88"	0.79" 1968	3.86" 2/1/51
Dothan	2/1902	60.3°	82° 2/28/17	33° 2/4/17	5.11"	10.36" 1939	1.65" 2/21/17
		53.5°	84° 2/25/44	12° 2/3/51	4.80"	0.93" 1951	4.26" 2/9/37
Fairhope	8/1917	59.6°	78.2° 2/19/17	34.4° 2/17/17	3.14"	11.61" 1983	1.86" 2/7/17
		53.1°	87° 2/19/82	3° 2/3/51	5.47"	0.82" 1999	8.61" 2/11/81
Gadsden	7/1893	51.0°	75.8° 2/24/17	22.2° 2/4/17	2.69"	10.12" 1990	0.46" 2/15/17
		44.1°	82° 2/13/62	1° 2/1/66	4.91"	0.71" 1978	4.75" 2/21/61
Gainesville Lock	6/1948	55.7°	78.8° 2/24/17	29.3° 2/4/17	3.84"	11.00" 1983	1.10" 2/5/17
		47.2°	87° 2/14/62	9°+ 2/6/96	4.99"	1.55" 2000	5.36" 2/16/90
Greensboro	2/1890	56.3°	78.5° 2/24/17	28.7° 2/4/17	3.94"	12.72" 1990	2.30" 2/7/17
		50.0°	87° 2/13/62	7° 2/4/96	5.37"	1.64" 2000	5.18" 2/21/61
Highland Home	3/1892	57.9°	78.5° 2/24/17	29.2° 2/4/17	4.68"	10.78" 1975	1.40" 2/21/17
		49.4°	86° 2/19/56	7°+ 2/6/96	5.35"	1.20" 1980	5.33" 2/17/75
Huntsville	1/1959	53.4°	81° 2/24/17	23° 2/4/17	2.47"	10.14" 1994	1.19" 2/28/17
		43.8°	83° 2/23/96	1° 2/4/96	4.70"	0.59" 1978	4.04" 2/10/94

Alabama Monthly Climate Summaries

February 2016

	Station Began	Feb. Mean Feb. Norm	Feb. Hi Temp Record Hi	Feb. Low Temp Record Lo	Total Precip. Normal Prec.	Wettest Feb. Driest Feb.	Heaviest Day Record Day
Mobile	3/1900	61.4°	83° 2/19/17	34° 2/4/17	1.28"	11.89" 1983	0.62" 2/7/17
		53.5°	84° 2/13/62	11°+ 2/5/96	5.10"	1.09" 1999	5.37" 2/10/81
Montgomery	6/1948	59.4°	83° 2/24/17	32° 2/4/17	3.53"	9.87" 1982	1.15" 2/7/17
		50.5°	85° 2/13/62	10°+ 2/5/96	5.45"	1.11" 1999	5.54" 2/24/61
Muscle Shoals	12/1940	53.4°	81° 2/24/17	24° 2/4/17	2.52"	10.74" 1991	0.75" 2/6/17
		44.6°	83° 2/13/62	-2° 2/18/58	4.46"	0.51" 1978	5.03" 2/12/48
Russellville	9/1953	52.3°	78.3° 2/24/17	17.7° 2/4/17	2.63"	11.28" 1989	0.78" 2/28/17
		42.5°	84° 2/24/96	-12°+ 2/19/58	4.81"	0.98" 1972	6.75" 2/19/91
Scottsboro	10/1891	50.3°	79.1° 2/24/17	24.2° 2/4/17	3.62"	9.60" 1990	1.57" 2/28/17
		43.0°	82° 2/15/89	-8° 2/1/66	5.22"	0.77" 1978	4.10" 2/16/95
Selma	1/1895	56.0°	80.3° 2/24/17	25.5° 2/4/17	3.30"	9.97" 1982	1.46" 2/7/17
		50.5°	85° 2/27/62	9° 2/3/51	4.87"	1.54" 2000	5.31" 2/3/82
Talladega	2/1888	53.8°	80.3° 2/24/17	23.4° 2/4/17	3.29"	10.37" 1983	0.95" 2/7/17
		44.9°	84°+ 2/26/77	2° 2/18/58	5.11"	1.20" 1978	4.51" 2/21/61
Thomasville	9/1891	57.2°	80.3° 2/12/17	30.4° 2/16/17	3.00"	14.37" 1929	0.96" 2/7/17
		49.9°	86° 2/10/32	-5° 2/13/1899	5.25"	1.27" 2000	7.15" 2/11/1897
Troy	6/1908	57.7°	81° 2/24/17	30° 2/16/17	5.19"	10.87" 1975	1.68" 2/7/17
		50.3°	85°+ 2/17/01	10°+ 2/6/96	4.83"	0.93" 2000	5.60" 1/11/81
Tuscaloosa	6/1948	55.3°	81° 2/24/17	26° 2/4/17	4.01"	12.70" 1983	1.43" 2/7/17
		49.8°	86° 2/13/62	5° 2/2/51	5.07"	1.73" 1978	5.44" 1/21/61
Valley Head	1/1893	51.4°	77.2° 2/24/17	24.0° 2/10/17	4.28"	14.73" 1990	1.52" 2/28/17
		40.6°	80° 2/14/62	-12°+ 1/19/58	5.62"	0.74" 1978	7.39" 2/16/90
Statewide Feb. 2015		55.59° /	83° 2 stations	17.7° Russellville	3.44"	17.61" Auburn	2.30" Greensboro
Feb. Norm		47.74° /	87° 4 stations	-12°+ 2 stations	5.08"	0.51" M. Shoals	8.61" Fairhope

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

February 2017

Maximum High Temperature, Daily

	New Record	Previous Hottest Day	Previous Record	Period of Record					
03 February 2017					BREWTON 3 ENE	79	1997-02-21	78	40
DAUPHIN ISLAND No 2	72	1989-02-03	71	41	CHATOM	83	1981-02-21	81	67
08 February 2017					DAUPHIN ISLAND No 2	73	2016-02-21	71	41
EUFULA WILDLIFE REF	76	1999-02-08	73	50	ENTERPRISE 2 W	80	1997-02-21	78	51
09 February 2017					JACKSON	82	2014-02-21	80	33
DAUPHIN ISLAND No 2	72	2009-02-09	69	41	JASPER	77	1997-02-21	76	56
GAINESVILLE LOCK	78	1999-02-09	76	59	MARION JUNCTION 2 NE	79	2011-02-21	78	67
10 February 2017					VERNON	80	2014-02-21	79	60
VERNON	76	2001-02-10	75	60	22 February 2017				
11 February 2017					JACKSON	82	1996-02-22	81	33
FT BENNING LAWSON FD	79	1965-02-11	78	68	VERNON	79	2014-02-22	78	60
12 February 2017					23 February 2017				
HUNTSVILLE INT'L APRT	75	1961-02-12	74	58	FT BENNING LAWSON FD	79	2012-02-23	78	68
MOBILE DT AIRPORT	81	1962-02-12	79	68	24 February 2017				
MOBILE REG'L AIRPORT	81	1976-02-12	78	69	BESSEMER 3 WSW	79	2000-02-24	78	40
MONTGOMERY AIRPORT	79	2000-02-12	77	69	DAUPHIN ISLAND No 2	72	2006-02-24	71	41
13 February 2017					GADSDEN	80	1996-02-24	79	64
DAUPHIN ISLAND No 2	74	2009-02-13	72	41	ROCK MILLS	79	1992-02-24	76	75
GENEVA NUMBER 2	80	2000-02-13	78	41	HUNTSVILLE INT'L AIRPT	81	2000-02-24	77	58
HAMILTON 3 S	79	1962-02-13	78	55	FT BENNING LAWSON FD	83	2011-02-24	78	68
HEADLAND	81	1952-02-13	80	67	ANNISTON METRO AIRPT	81	1982-02-24	78	114
JACKSON	82	2001-02-13	76	33	BIRMINGHAM AIRPORT	81	1930-02-24	78	87
14 February 2017					MONTGOMERY AIRPORT	83	2011-02-24	79	69
ENTERPRISE 2 W	76	1977-02-14	74	51	M. SHOALS REG'L AIRPT	81	2000-02-24	77	76
VERNON	77	1961-02-14	76	60	TUSCALOOSA MUNI APT	81	2011-02-24	78	69
19 February 2017					25 February 2017				
MOBILE REG'L AIRPORT	83	2011-02-19	80	69	BELLE MINA	78	2000-02-25	77	67
20 February 2017					CLAYTON	82	1985-02-25	80	61
ATMORE	81	1984-02-20	79	77	ENTERPRISE 2 W	80	2012-02-25	78	51
BAY MINETTE	81	1932-02-20	80	102	HAMILTON 3 S	82	2000-02-25	80	55
CHATOM	81	2011-02-20	80	67	JASPER	79	2000-02-25	78	56
HAMILTON 3 S	78	1986-02-20	77	55	SAND MT SUBSTATION	77	2000-02-25	74	67
JACKSON	80	2014-02-20	79	33	SCOTTSBORO	80	1982-02-25	76	125
ROBERTSDALE	81	2011-02-20	78	93	SYLACAUGA 4 NE	80	1972-02-25	79	62
VERNON	78	2011-02-20	77	60	VERNON	79	2011-02-25	77	60
MOBILE DT AIRPORT	76	1952-02-20	75	68	FT BENNING LAWSON FD	83	1956-02-25	77	68
21 February 2017					28 February 2017				
ATMORE	82	1945-02-21	81	77	DAUPHIN ISLAND No 2	76	1996-02-28	74	41

¹ ncdc.noaa.gov/cdo-web/datatools/records

New Local Climate Records¹

February 2017

Precipitation, Daily

	New Record	Previous Year	Previous Record	Period of Record
06 February 2017				
ALICEVILLE LAND D	2.13	1983-02-06	1.99	37
07 February 2017				
TALLAPOOSA WATER PLT	2.10	1979-02-07	1.71	39
TUSCALOOSA MUNI AIRPT	1.43	1974-02-07	0.68	69
08 February 2017				
ASHLAND	1.21	1997-02-08	1.12	77
BANKHEAD LOCK & DAM	1.30	1997-02-08	0.95	60
CENTREVILLE 2.9 SW	1.17	1997-02-08	0.95	42
CHATOM	1.78	1973-02-08	0.69	67
CHILDERSBURG WTR PLT	1.14	2005-02-08	0.96	60
CLAIBORNE LOCK & DAM	2.30	2013-02-08	1.23	64
COFFEEVILLE L&D	0.95	2013-02-08	0.77	34
DAUPHIN ISLAND No 2	4.04	1986-02-08	0.97	41
ENTERPRISE 2 W	1.68	2013-02-08	1.64	51
EUFAULA WILDLIFE REF	1.65	2013-02-08	1.47	50
EVERGREEN	1.76	1933-02-08	1.52	121
GREENVILLE	1.80	1901-02-08	1.45	116
HOLT LOCK AND DAM	1.68	1997-02-08	1.19	36
JACKSON	1.14	2013-02-08	0.92	55
MILLERS FERRY L&D	0.43	1997-02-08	0.30	36
PINE APPLE	1.75	2013-02-08	0.81	49
PLANTERSVILLE 2 SSE	2.47	1948-02-08	2.12	77
ROBERTSDALE	1.57	2013-02-08	0.99	105
VERNON	0.45	1961-02-08	0.44	79
WARRIOR LOCK AND DAM	1.65	1997-02-08	1.24	59
22 February 2017				
CLAYTON	1.88	1997-02-22	1.75	88
28 February 2017				
JACKSON	1.75	1995-02-28	1.51	55

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

February 2017

	Total Precip.	# Stations
Autauga	3.68	2
Baldwin	3.14	23
Barbour	n.a.	0
Bibb	n.a.	0
Blount	3.42	8
Bullock	n.a.	0
Butler	4.82	1
Calhoun	4.59	2
Chambers	n.a.	0
Cherokee	n.a.	0
Chilton	3.77	2
Choctaw	2.23	1
Clarke	2.28	1
Clay	n.a.	0
Cleburne	n.a.	0
Coffee	4.24	1
Colbert	2.70	6
Conecuh	1.82	1
Coosa	3.63	2
Covington	n.a.	0
Crenshaw	n.a.	0
Cullman	3.16	4
Dale	4.07	1
Dallas	3.57	1
DeKalb	4.15	4
Elmore	3.52	5
Escambia	3.16	1
Etowah	n.a.	0
Fayette	3.35	3
Franklin	n.a.	0
Geneva	n.a.	0
Greene	n.a.	0
Hale	n.a.	0
Henry	n.a.	0

	Total Precip.	# Stations
Houston	4.32	1
Jackson	3.81	7
Jefferson	2.91	15
Lamar	n.a.	0
Lauderdale	2.15	10
Lawrence	2.74	2
Lee	3.46	4
Limestone	2.93	9
Lowndes	n.a.	0
Macon	2.95	1
Madison	3.06	39
Marengo	n.a.	0
Marion	4.14	1
Marshall	3.48	9
Mobile	1.76	13
Monroe	3.40	2
Montgomery	4.47	4
Morgan	3.53	6
Perry	n.a.	0
Pickens	4.71	1
Pike	n.a.	0
Randolph	3.84	2
Russell	3.80	2
St. Clair	3.36	5
Shelby	4.05	17
Sumter	n.a.	0
Talladega	3.84	4
Tallapoosa	4.38	2
Tuscaloosa	4.08	5
Walker	0.90	1
Washington	3.94	1
Wilcox	3.07	2
Winston	4.15	2

Normal February

Precipitation*

Abbeville	5.12"
Alberta	5.06"
Alex City	5.12"
Aliceville	5.18"
Andalusia	5.09"
Ashland	5.63"
Athens	5.51"
Bay Minette	5.18"
Bessemer	4.85"
Billingsley	5.24"
Centreville WSMO	5.42"
Chatom	5.66"
Claiborne L&D	4.95"
Clayton	4.73"
Dauphin Isl.	5.37"
Elba	5.19"
Eufaula WR	4.36"
Evergreen	5.57"
Fayette	5.75"
Geneva 2	5.32"
Greenville	5.32"
Haleyville	5.36"
Hamilton 3S	5.77"
Heflin	5.62"
Hurtsboro	4.52"
Jasper	5.18"
Lafayette	5.55"
Livingston	5.07"
Melvin	5.20"
Milstead	5.14"
Moulton	4.71"
Oneonta	5.23"
Perryville	4.97"
Plantersville	5.34"
Rock Mills	5.24"
Rockford	5.64"
Sylacauga	5.15"
Union Springs	5.19"
Uniontown	4.88"
Vernon	5.40"
Warrior L&D	5.16"
Wetumpka	5.30"

*Southeast Regional Climate Center
www.serrc.com

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>