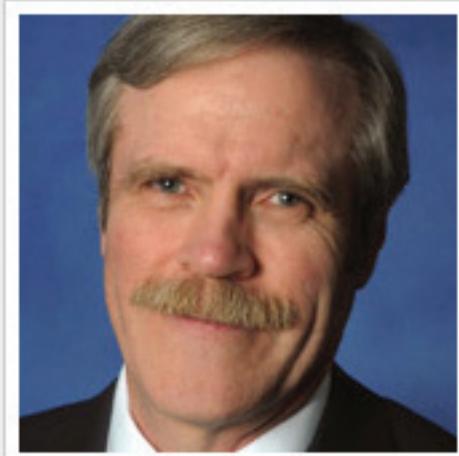


# The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

Volume 6, Number 5, February 2016



Dr. John Christy, Alabama State Climatologist

We can't really say March is the beginning of tornado season in Alabama, because tornado season in Alabama never really stops. For instance, the state saw 20 tornadoes in February, including an EF3.

What we can say is March and April usually are the peak months of the state's tornado season, which lasts year round. Sort of like soccer.

And, like the soccer goalkeeper, we need to be prepared and we need to stay constantly vigilant. If you don't have a storm plan and a storm kit, now is the best time to get them. Know where to go and what to do in case of severe weather. Get a weather radio. Download weather warning phone apps.

If you live in north Alabama within about 100 miles of the Huntsville International Airport, you might also keep an eye on the highways during the next two months if severe weather threatens. UAH is the operations base for a major study of severe weather, especially how and why tornadoes form and either weaken or strengthen.

VORTEX Southeast is bringing to the state dozens of scientists and students from as far away as Oklahoma, Texas and Massachusetts to try to learn more about the differences between well-studied tornadoes in the Great Plains and less-well-studied tornadoes in the southeastern states. UAH and these other institutions will be taking their mobile research instruments (Doppler radars and such) on the road to probe storm systems as they pass over the state.

We want to know more about the science of tornadoes, such as whether the rise and fall of the local terrain can cause a tornado to get more powerful, or the effects of surface roughness, such as where a smooth lake sits next to hillsides covered in trees.

We also want to know more about how to improve the tornado warning system so people will be more likely to protect themselves and their families when a tornado warning is issued. We want to know why some people ignore warnings and don't seek shelter. This is the first time a major study of severe weather has included this kind of social science aspect.

So if you see our UAH trucks or instruments from UMass or Purdue or the National Severe Storms Lab in Oklahoma on the road from now through April, it isn't that the upcoming storm is so unique that storm chasers from around the country are flocking to north Alabama. No, it's just part of VORTEX-SE.

February would have been a good month to start this project. The state had three major storm systems move through, with statewide rainfall (according to our sample) about an inch above normal for the month.

More than 60 individual daily rainfall records were set in February, including some stations that were repeats. Three daily records were set at both the Cahaba Pump House and the Coffeeville Lock and Dam. If you look at just the days when records were set, Cahaba got 6.71 inches of rain in three days, while Coffeeville L&D got almost eight inches of rain over only three days, including 3.5" on Feb. 3.

So keep a weather eye on the weather, make sure you and your family are prepared for whatever weather we might see, and be safe.

- John Christy

## U.S. Drought Monitor Alabama



March 1, 2016

(Released Thursday, Mar. 3, 2016)

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 3/2/2016	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 12/1/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 1/1/2016	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/29/2015	37.12	62.88	4.86	0.00	0.00	0.00
One Year Ago 3/3/2015	44.39	55.61	14.67	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.

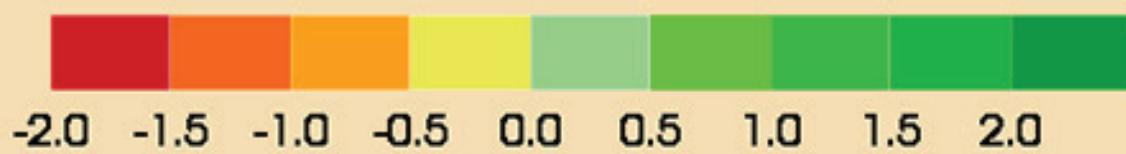
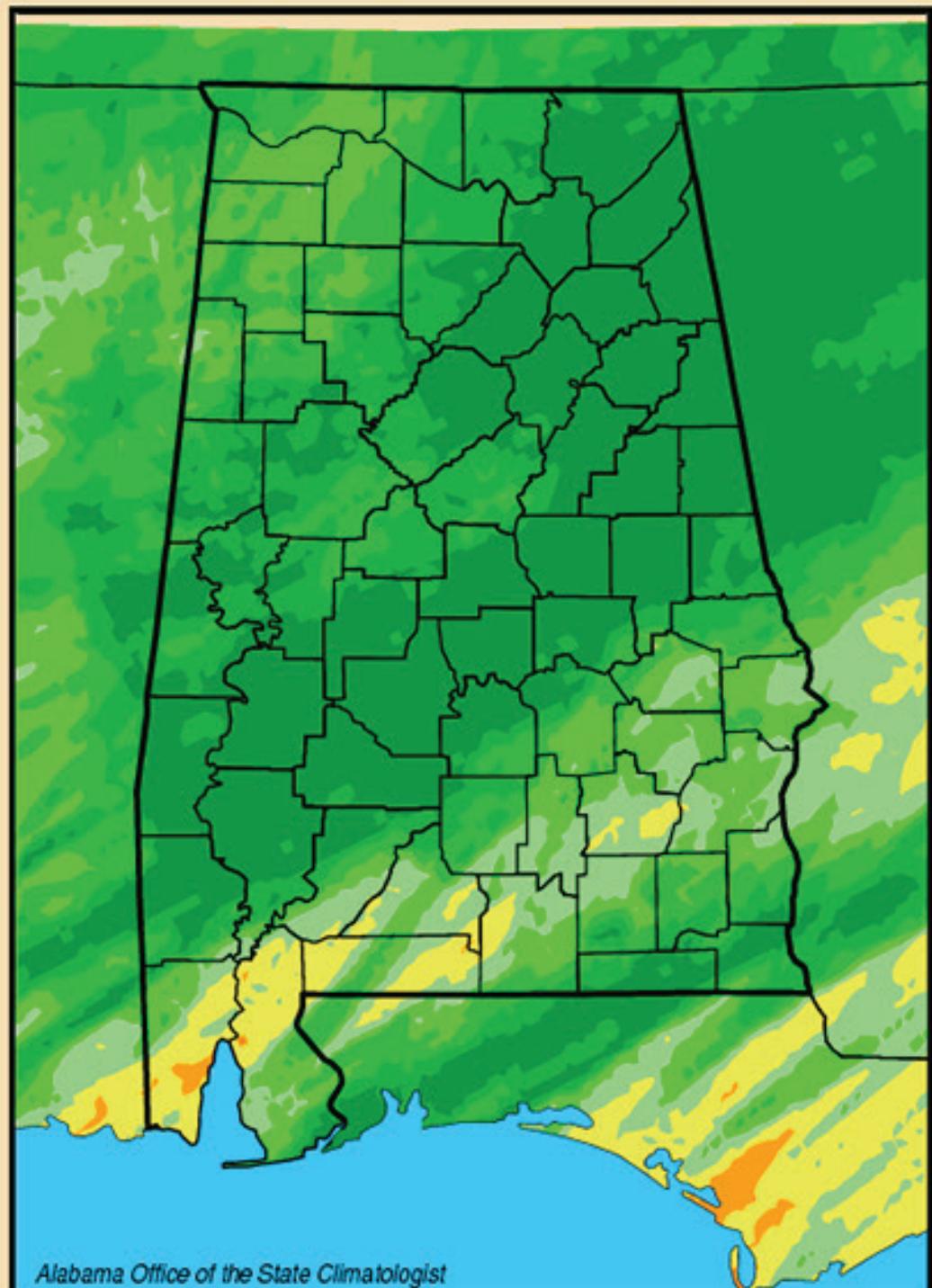
### Author:

David Miskus  
NOAA/NWS/NCEP/CPC



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

## Lawn-and-Garden Moisture Index for March 2, 2016



## Alabama Monthly Climate Summaries

February 2016

		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	48.8° 47.3°	77° 2/2/16 84°+ 2/23/96	21° 2/10/16 4° 2/17/58	5.65" 8.99" 4.80" 1.19"	1990 1978	1.87" 3.40" 2/23/16 2/2/82	
		49.7° 49.9°	74° 2/2/16 82° 2/14/62	23° 2/10/16 7° 2/3/17	4.38" 17.81" 5.27" 1.50"	1981 1943	1.49" 7.83" 2/3/16 2/25/81	
Birmingham	1/1930	50.2° 46.8°	77° 2/2/16 83°+ 2/23/96	23° 2/10/16 3° 2/17/58	7.46" 9.28" 4.21" 1.31"	1971 1978	3.05" 5.46" 2/2-3/16 2/21/81	
		52.0° 51.0°	75.6° 2/21/16 87° 2/13/62	24.4° 2/10/16 11°+ 2/4/70	3.78" 12.19" 5.67" 1.45"	1982 1980	1.77" 8.18" 2/15/16 2/11/81	
Calera	9/1900	51.0° 46.5°	76° 2/2/16 85° 2/13/62	23° 2/10/16 4° 2/10/79	7.57" 15.62" 5.32" 0.61"	1981 1968	3.27" 5.55" 2/2/16 2/3/36	
		49.0° 46.6°	76.6° 2/2/16 84° 2/14/62	22.4° 2/10/16 5° 2/5/96	6.82" 8.99" 5.48" 2.27"	1990 2000	2.53" 4.87" 2/23/16 2/4/36	
Courtland		45.5° M	72.5° 2/2/16 M	20° 2/10/16 M	5.31" M M M		2.37" M 2/2/16 M	
		45.6° M	75.7° 2/2/16 M	18.3° 2/10/16 M	5.85" M M M		2.69" M 2/15/16 M	
Decatur	2/1880	44.9° 44.2°	74° 2/2/16 83° 2/14/62	20° 2/10/16 -12° 2/13/1899	6.25" 12.16" 4.88" 0.79"	1939 1968	2.09" 3.86" 2/14/16 2/1/51	
		53.6° 53.5°	79° 2/23/16 84° 2/25/44	26° 2/10/16 12° 2/3/51	6.56" 10.36" 4.80" 0.93"	1939 1951	3.39" 4.26" 2/3-4/16 2/9/37	
Fairhope	8/1917	54.0° 53.1°	74.5° 2/20/16 87° 2/19/82	24.1° 2/10/16 3° 2/3/51	4.15" 11.61" 5.47" 0.82"	1983 1999	1.41" 8.61" 2/15/16 2/11/81	
		44.5° 44.1°	73.1° 2/2/16 82° 2/13/62	16.8° 2/10/16 1° 2/1/66	9.14" 10.12" 4.91" 0.71"	1990 1978	2.47" 4.75" 2/23/16 2/21/81	
Gainesville Lock	6/1948	50.3° 47.2°	76.1° 2/1/16 87° 2/14/62	24.6° 2/10/16 9°+ 2/6/96	6.15" 11.00" 4.99" 1.55"	1983 2000	2.10" 5.36" 2/22/16 2/16/90	
		50.1° 50.0°	75.2° 2/1/2016 87° 2/13/62	23.4° 2/10/16 7° 2/4/96	6.52" 12.72" 5.37" 1.64"	1990 2000	1.85" 5.18" 2/3/16 2/21/81	
Greensboro	2/1890	51.4° 49.4°	75.5° 2/2/2016 86° 2/19/56	23.3° 2/10/16 7°+ 2/6/96	3.13" 10.78" 5.35" 1.20"	1975 1980	1.25" 5.33" 2/3/16 2/17/75	
		46.9° 43.8°	77° 2/2/16 83° 2/23/96	20° 2/10/16 1° 2/4/96	6.38" 10.14" 4.70" 0.59"	1994 1978	2.25" 4.04" 2/2-3/16 2/10/94	

## Alabama Monthly Climate Summaries

February 2016

	Station	Feb. Mean Began	Feb. Mean 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	54.6°	53.5°	76° 2/20/16	26° 2/10/16	3.16" 5.10"	11.89" 1.09"	1.48" 5.37"
		53.5°	52.5°	84° 2/13/62	11°+ 2/5/96	5.41" 5.45"	9.87" 1.11"	2/15/16 2/10/81
Montgomery	6/1948	53.1°	50.5°	78° 2/2/16	24° 2/10/16	5.41" 5.45"	9.87" 1.11"	2.20" 5.54"
		50.5°	48.5°	85° 2/13/62	10°+ 2/5/96	5.45"	1.11"	2/22/16 2/24/81
Muscle Shoals	12/1940	46.8°	44.6°	73° 2/29/16	19° 2/10/16	3.48" 4.46"	10.74" 0.51"	1.17" 5.03"
		44.6°	42.5°	83° 2/13/62	-2° 2/18/58	4.46"	0.51"	2/14/16 2/12/48
Russellville	9/1953	45.1°	42.5°	71° 2/2/16	14.3° 2/10/16	4.52" 4.81"	11.28" 0.98"	1.83" 6.75"
		42.5°	40.5°	84° 2/24/96	-12°+ 2/19/58	4.81"	0.98"	2/2/16 2/19/91
Scottsboro	10/1891	44.8°	43.0°	77° 2/2/16	20.8° 2/10/16	7.13" 5.22"	9.60" 0.77"	2.01" 4.10"
		43.0°	41.0°	82° 2/15/89	-8° 2/1/66	5.22"	0.77"	2/15/16 2/16/95
Selma	1/1895	49.8°	50.5°	75.3° 2/2/16	22.4° 2/10/16	8.49" 4.87"	9.97" 1.54"	3.05" 5.31"
		50.5°	51.0°	85° 2/27/62	9° 2/3/51	4.87"	1.54"	2/3/16 2/3/82
Talladega	2/1888	47.8°	44.9°	77.3° 2/2/16	22.6° 2/10/16	8.19" 5.11"	10.37" 1.20"	2.50" 4.51"
		44.9°	42.0°	84°+ 2/26/77	2° 2/18/58	5.11"	1.20"	2/22/16 2/21/81
Thomasville	9/1891	50.9°	49.9°	73.7° 2/1/16	21.5° 2/10/16	10.67" 5.25"	14.37" 1.27"	4.07" 7.15"
		49.9°	48.0°	86° 2/10/32	-5° 2/13/1899	5.25"	1.27"	2/23/16 2/11/1897
Troy	6/1908	53.0°	50.3°	78° 2/2/16	25° 2/10/16	3.45" 4.83"	10.87" 0.93"	1.81" 5.60"
		50.3°	48.0°	85°+ 2/17/01	10°+ 2/6/96	4.83"	0.93"	2/2/16 1/11/81
Tuscaloosa	6/1948	50.2°	49.8°	76° 2/2/16	20° 2/10/16	5.46" 5.07"	12.70" 1.73"	1.72" 5.44"
		49.8°	48.5°	86° 2/13/62	5° 2/2/51	5.07"	1.73"	2/15/16 1/21/81
Valley Head	1/1893	43.3°	40.6°	74.2° 2/2/16	18.8° 2/10/16	9.78" 5.62"	14.73" 0.74"	2.26" 7.39"
		40.6°	38.0°	80° 2/14/62	-12°+ 1/19/58	5.62"	0.74"	2/23/16 2/16/90
Statewide Feb. 2015		49.43°	/	79° Dothan	11.3° Russellville	6.15"	17.81" Auburn	4.07" Thomasville
Feb. Norm		47.74°	/	87° 4 stations	- 12°+ 2 stations	5.08"	0.51" Muscle Shoals	8.61" Fairhope

M: Data is missing or not available

"New Record

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

<sup>a</sup> This record differs from long-term data in the AOSC climate database:

[http://nssic.uah.edu/alcimate/climate/daily\\_climate\\_and\\_normals.php](http://nssic.uah.edu/alcimate/climate/daily_climate_and_normals.php)

# New Local Climate Records<sup>1</sup>

February 2016

## Precipitation, Daily

	New Record	Previous Year	Previous Record	Period of Record	17 February 2016				
<b>02 February 2016</b>					<b>HEFLIN</b>	1.54	1995-02-17	1.28	60
ATHENS	1.90	1996-02-02	1.35	75	<b>BILLINGSLEY</b>	1.47	2015-02-22	1.24	77
BIRMINGHAM AIRPORT	2.12	1982-02-02	2.02	86	<b>MONTGOMERY AIRPRT</b>	1.96	2013-02-22	1.49	68
GREENSBORO	3.80	1936-02-02	2.50	124	<b>ROCK MILLS</b>	1.95	1962-02-22	1.80	78
HALEYVILLE	2.00	1974-02-02	1.78	113	<b>23 February 2016</b>				
ALICEVILLE L & D	2.18	1988-02-03	1.48	36	ALEXANDER CITY	2.53	2015-02-23	1.26	46
CAHABA PUMP HOUSE	2.95	1982-02-03	2.60	34	BILLINGSLEY	1.98	2013-02-23	1.55	77
CHATOM	3.21	2005-02-03	1.80	66	CLAIBORNE L&D	2.15	1991-02-23	1.27	63
COFFEEVILLE L&D	3.50	1998-02-03	1.04	33	CLANTON	2.45	1928-02-23	1.13	121
FORT PAYNE	2.66	2014-02-03	2.12	80	COFFEEVILLE L&D	2.40	2013-02-23	1.24	33
GADSDEN	3.00	1957-02-03	1.74	63	DEMOPOLIS L&D	1.80	2013-02-23	1.35	64
HAMILTON 3 S	4.00	2014-02-03	2.07	54	GAINESVILLE LOCK	2.16	1994-02-23	0.90	68
MELVIN	2.39	1957-02-03	2.23	76	GUNTERSVILLE	1.17	2006-02-23	1.12	111
MOULTON 2	3.33	1998-02-03	2.76	59	JORDAN DAM	2.56	2015-02-23	1.15	79
ONEONTA	2.46	1998-02-03	2.06	121	LAY DAM	1.42	2008-02-23	1.40	79
ROCK MILLS	1.23	1963-02-03	1.03	78	MELVIN	4.04	1950-02-23	0.93	76
SAND MT SUBSTATION	2.64	2014-02-03	2.21	67	MILLERS FERRY L&D	2.04	2008-02-23	1.03	35
SCOTTSBORO	2.94	2014-02-03	2.46	124	MITCHELL DAM	3.26	2015-02-23	1.33	79
VERNON	3.10	1939-02-03	2.92	78	PLANTERSVILLE	2.53	2013-02-23	1.81	76
WEST BLOCTON	3.20	1982-02-03	2.82	76	SELMA	3.25	2013-02-23	1.76	121
<b>04 February 2016</b>					UNIONTOWN	2.40	1961-02-23	1.83	121
CLAYTON	2.49	1936-02-04	2.01	87	WARRIOR LOCK & DAM	1.80	2013-02-23	1.25	58
ENTERPRISE 2 W	1.83	1998-02-04	1.01	50	<b>24 February 2016</b>				
GENEVA NUMBER 2	3.74	1995-02-04	0.80	40	ADDISON	1.33	2005-02-24	0.55	78
<b>15 February 2016</b>					ALICEVILLE L&D	0.89	1985-02-24	0.76	36
ATHENS	1.94	2003-02-15	1.33	75	BOAZ	3.00	1977-02-24	2.39	78
GADSDEN	2.50	1987-02-15	1.95	63	CAHABA PUMP HOUSE	1.81	2005-02-24	0.97	34
<b>16 February 2016</b>					COFFEEVILLE L&D	2.05	2004-02-24	1.30	33
CAHABA PUMP HOUSE	1.95	1993-02-16	1.05	34	GENEVA NUMBER 2	4.85	1979-02-24	4.02	40
GREENVILLE	2.64	1909-02-16	2.43	115	HOLT LOCK AND DAM	1.26	1985-02-24	1.12	35
JACKSON	2.30	1990-02-16	2.10	54	JACKSON	3.43	1979-02-24	2.81	54
JASPER	2.05	1975-02-16	1.83	55	JACKSONVILLE	3.20	1977-02-24	1.65	68
					MILLERS FERRY L&D	2.20	2004-02-24	0.98	35
					SAND MT SUBSTATION	2.73	1977-02-24	2.03	67
					SYLACAUGA 4 NE	2.45	2005-02-24	1.93	61
					TALLADEGA	2.50	1977-02-24	2.44	128

## Maximum High Temperature, Daily

	New Record	Previous Hottest Day	Previous Record	Period of Record
<b>02 February 2016</b>				
GADSDEN	77	1990-02-02	71	63
HUNTSVILLE INTL ARPRT	77	1990-02-02	73	57
<b>03 February 2016</b>				
BELLE MINA	74	1989-02-03	73	66
SAND MT SUBSTATION	74	1962-02-03	71	66

## Minimum Low Temperature, Daily

	New Record	Previous Year	Previous Record	Period of Record
<b>10 February 2016</b>				
JACKSON	.....	24	1987-02-10	26
<b>11 February 2016</b>				
JACKSON	.....	23	2007-02-11	27
				32

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

## Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

February 2015

	Ave. Total Precip.	# Stations
Autauga	7.24	2
Baldwin	3.91	23
Barbour	n.a.	0
Bibb	n.a.	0
Blount	7.22	9
Bullock	n.a.	0
Butler	n.a.	0
Calhoun	8.42	2
Chambers	n.a.	0
Cherokee	10.66	1
Chilton	5.43	2
Choctaw	7.48	1
Clarke	8.74	1
Clay	n.a.	0
Cleburne	n.a.	0
Coffee	5.39	1
Colbert	3.03	6
Conecuh	n.a.	0
Coosa	7.91	1
Covington	n.a.	0
Crenshaw	n.a.	0
Cullman	6.30	4
Dale	5.34	1
Dallas	8.69	1
DeKalb	9.08	3
Elmore	5.84	8
Escambia	4.29	1
Etowah	7.68	1
Fayette	6.40	1
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	8.05	1
Jackson	7.69	7
Jefferson	7.10	14
Lamar	n.a.	0
Lauderdale	4.23	10
Lawrence	6.78	2
Lee	4.56	3
Limestone	6.61	11
Lowndes	n.a.	0
Macon	n.a.	0
Madison	6.50	44
Marengo	n.a.	0
Marion	5.73	1
Marshall	6.93	11
Mobile	2.90	13
Monroe	3.08	2
Montgomery	4.51	3
Morgan	6.63	5
Perry	n.a.	0
Pickens	4.04	1
Pike	n.a.	0
Randolph	6.61	2
Russell	4.60	2
St. Clair	8.87	5
Shelby	7.08	18
Sumter	n.a.	0
Talladega	6.98	4
Tallapoosa	6.48	4
Tuscaloosa	5.42	4
Walker	3.91	1
Washington	7.68	1
Wilcox	9.21	2
Winston	6.49	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.serc.com](http://www.serc.com)

# Alabama Climate Report Climate Extremes

Hottest - Coldest

Statewide Average Temperature

[http://www.sercc.com/climateinfo/monthly\\_seasonal.html](http://www.sercc.com/climateinfo/monthly_seasonal.html)

Record begins in 1895

# Alabama Climate Report Climate Extremes

Wettest - Driest

Statewide Average Precipitation

[http://www.sercc.com/climateinfo/monthly\\_seasonal.html](http://www.sercc.com/climateinfo/monthly_seasonal.html)

Record begins in 1895

# January

Hottest	1.	1950	58.9°
	2.	1937	57.0°
	3.	1974	55.0°
	4.	1907	53.6°
	5.	1949	52.7°
	6.	1952	52.4°
	7.	1932	51.9°
	8.	1916	51.8°
	9.	1933	51.4°
	10.	1913	51.2°
	11.	2006	51.1°
	12.	1923	50.9°
		AVG	45.0°

**47. 2015 43.5°**

12.	1961	39.2°	
11.	1963	39.1°	
10.	1905	38.6°	
9.	1948	38.5°	
8.	1970	38.0°	
7.	1979	37.8°	
6.	1918	37.4°	
5.	2014	37.3°	
4.	1985	37.2°	
3.	1978	35.6°	
2.	1977	33.3°	
Coldest	1.	1940	32.1°

Wettest	1.	1936	11.49"
	2.	1925	10.08"
	3.	1947	9.97"
	4.	1937	9.10"
	5.	1972	8.52"
	6.	1990	8.44"
	7.	1946	8.37"
	8.	1974	8.20"
	9.	1998	8.14"
	10.	1926	7.96"
	11.	1999	7.94"
	12.	1979	7.68"
		AVG	5.06"

**52. 2015 4.35"**

12.	1935	2.76"	
11.	1941	2.72"	
10.	2014	2.70"	
9.	1956	2.68"	
8.	2003	2.33"	
7.	1907	2.21"	
6.	1914	2.14"	
5.	1986	2.13"	
4.	1909	2.05"	
3.	1928	1.52"	
2.	1981	1.33"	
Driest	1.	1927	1.27"

**Alabama State Climatologist**  
John R. Christy  
**Alabama State Climatologist**  
The University of Alabama  
in Huntsville  
[christy@nsstc.uah.edu](mailto:christy@nsstc.uah.edu)  
256-961-7763

Contact:

Phillip Gentry  
UAHuntsville Communications  
The University of Alabama in Huntsville  
[gentry@nsstc.uah.edu](mailto:gentry@nsstc.uah.edu)  
256.961.7618

Bob Clymer  
Assistant State Climatologist  
The University of Alabama in Huntsville  
[bob.clymer@nsstc.uah.edu](mailto:bob.clymer@nsstc.uah.edu)  
256-961-7771

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