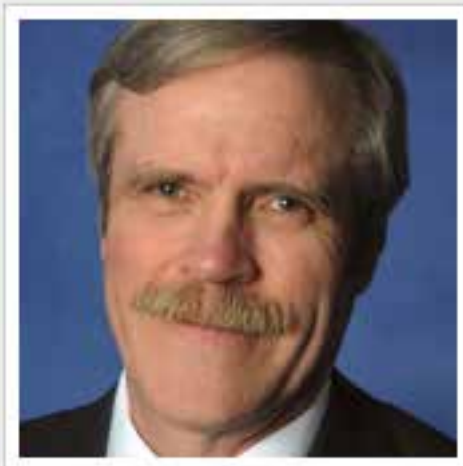


The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

Volume 7, Number 10, July 2017



Dr. John Christy, Alabama State Climatologist

July wasn't especially remarkable. No station in Alabama reported a daily high temperature record, and only two — Greensboro and Lawson Field — set daily record lows.

In our statewide sample, July was a bit cooler than normal and somewhat drier than normal, although that is an average and we know those can be misleading. Scottsboro got 7.88" of rain, which sets that station's record for July, while three of the 27 stations in our sample got less than 3" for the month. Valley Head — which isn't all that far from Scottsboro — reported only 2.22" of rain in July.

This month, however, is the tenth anniversary of the hottest month in the Alabama climate record. The average temperature for August 2007 was an uncomfortable 84.4° F. That's a full degree warmer than the two months tied for second: August 1954 and September 1930.

But the average temperature doesn't tell the full story of how uncomfortable and hot August 2007 really was. You get that only by looking at the daily high temperatures. And it was baking.

At least 18 stations statewide hit 100° or hotter for a minimum of 13 days that August. The average high for the Montgomery area and Wetumpka was 99.2° and 99.0°, respectively. That included 15 days with high temps of 100° or more.

That wasn't the worst of it. High temps in Hamilton averaged 100.0° that month, including a high of 109°. Pinson, in Jefferson County, and Belle Mina, in southern Limestone County, each averaged a high of 100.1° for the month, and each recorded a monthly high of 107°. Twice.

Belle Mina might have gotten the worst of it, with daily highs hitting at least 100° on 20 days in August, including a stretch of 16 days in a row.

The heat took a toll, with at least 13 deaths in the state blamed on the heat.

When you look at those highs, however, you wouldn't expect to see such a low statewide average, only 84.4°. That was because low temperatures that month weren't that much warmer than seasonal norms.

With daytime highs averaging 100.1°, Pinson's days were 11.4° hotter than normal that August.

But the average low for the month was 71.4°, which was only 4.3° warmer than normal.

Poor Belle Mina, which averaged highs 9.3° warmer than its August norms, was only 0.9° warmer than normal at night, with an average low that was a pleasant 64.4°!

Nights in Wetumpka were actually cooler than normal for the month, with an average low of 68.7° compared to the normal low of 70.4°.

That kind of a temperature swing is most often seen in deserts, where 30° and 40° daily temperature swings aren't uncommon. No one is going to mistake Alabama for a desert, but the air that month was dry enough to let the nights cool.

Water vapor is the 800-pound gorilla of greenhouse gases, and water vapor is something Alabama usually has in abundance. That normally keeps our nighttime temperatures from dropping as much as they do in the desert.

But August 2007 was the 15th driest August in the state's climate record. It was part of a severe drought that started earlier in the year and continued into 2008. The dry air allowed a somewhat larger than normal swing in temps, and kept temperatures from being more miserable than they already were.

There's nothing to indicate we're going to see anything like that this August, but it's still a good idea to be prepared.

- John Christy

U.S. Drought Monitor Alabama

July 25, 2017
(Released Thursday, Jul. 27, 2017)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	99.95	0.05	0.00	0.00	0.00	0.00
Last Week 07-18-2017	99.95	0.05	0.00	0.00	0.00	0.00
3 Months Ago 04-26-2017	13.28	86.72	38.65	2.67	0.00	0.00
Start of Calendar Year 01-03-2017	22.97	77.03	68.12	48.58	23.32	0.00
Start of Water Year 09-27-2016	17.15	82.85	47.12	17.94	6.36	0.00
One Year Ago 07-26-2016	38.09	61.91	40.31	11.95	2.78	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.

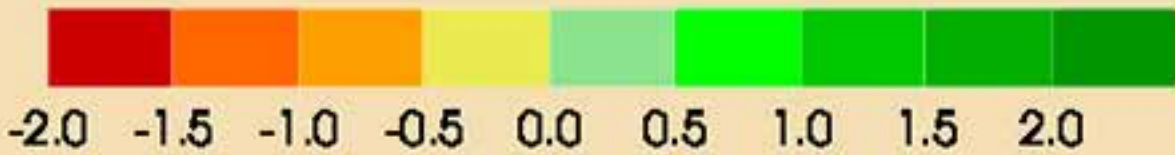
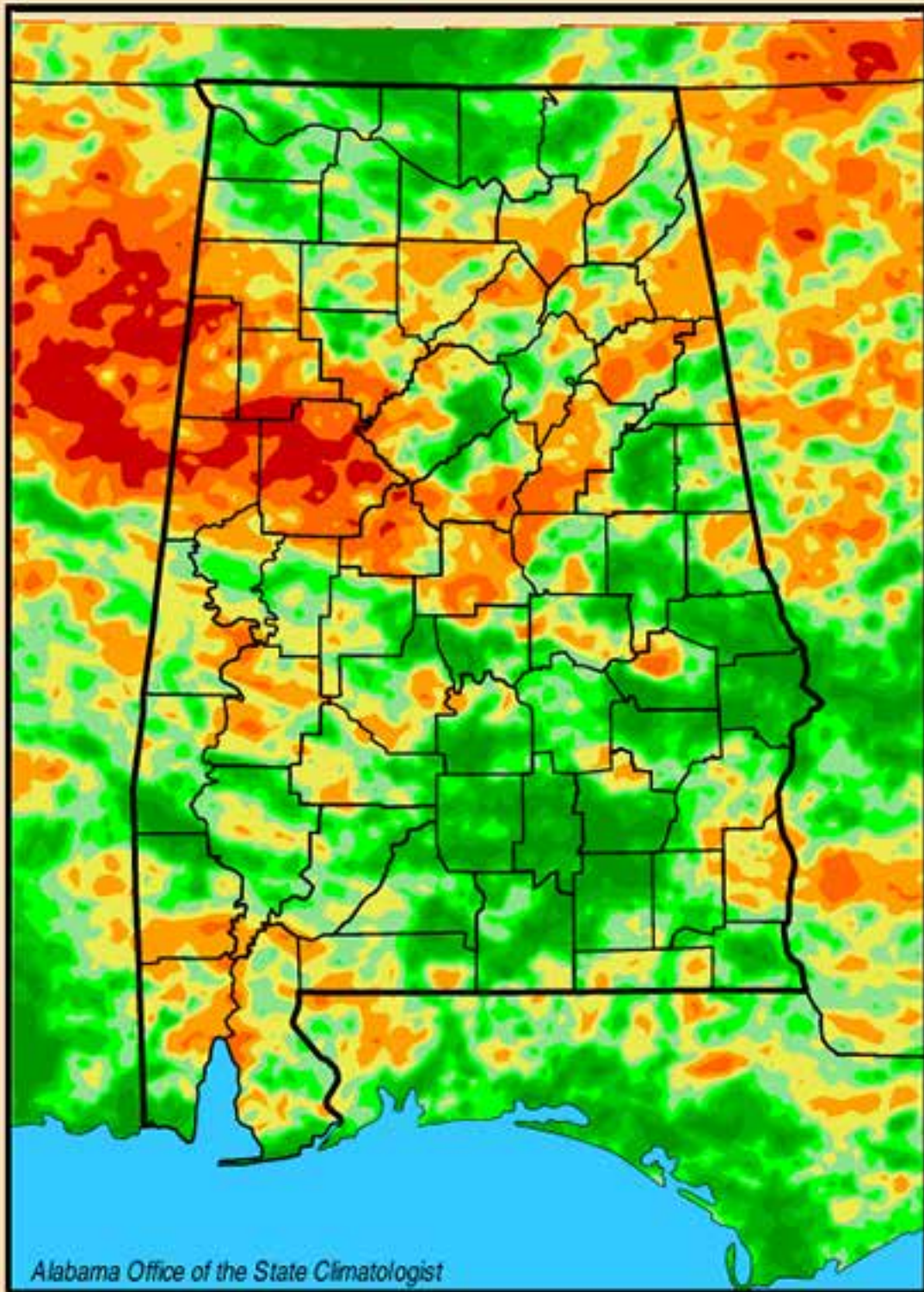
Author:

Richard Heim
NCEI/NOAA



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

Lawn-and-Garden Moisture Index for August 1, 2017



Alabama Monthly Climate Summaries

July 2017

	Station Began	July Mean July Norm	July Hi Temp Record Hi	July Low Temp Record Low	Total Precip. Normal Prec.	Wettest July Driest July	Heaviest Day Record Day
Anniston	2/1903	80.6°	96° 7/21/17	66° 7/31/17	4.94"	12.21" 1975	1.09" 7/25/17
		80.1°	105° 7/13/80	50° 7/15/67	4.49"	0.79" 1983	5.13" 7/7/75
Auburn	1/1893	80.8°	94° 7/21/17	66° 7/31/17	4.99"	15.73" 1916	2.00" 7/25/17
		79.9°	108° 7/11/30	52° 7/15/67	5.37"	1.39" 1914	7.00" 7/10/48
Birmingham	1/1930	81.8°	96° 7/21/17	66° 7/30/17	9.49"	10.07" 1985	3.64" 7/24/17
		80.2°	107° 7/29/30	51° 7/15/67	5.09"	0.30" 1983	5.47" 7/27/85
Brewton	4/1977	78.6°	92.9° 7/27/17	66.5° 7/31/17	3.23"	19.08" 1975	1.04" 7/25/17
		80.1°	106° 7/24/52	51° 7/15/67	7.04"	1.66" 2000	7.88" 7/31/75
Calera	9/1900	81.9°	95° 7/21/17	69° 7/30/17	2.57"	18.52" 1916	1.42" 7/16/17
		79.3°	105° 7/7/77	50° 7/15/67	5.36"	0.42" 1983	7.00" 7/7/1916
Clanton	2/1893	78.6°	92.9° 7/21/17	62.7° 7/31/17	3.13"	13.97" 1971	1.04" 7/17/17
		79.2°	108°+ 7/26/52	53° 7/15/67	5.76"	1.29" 1995	7.14" 7/4/40
Courtland		79.5°	94.5° 7/26/17	63° 7/31/17	5.75"	M	1.76" 7/8/17
		M	M	M	M	M	M
Cullman	7/1907	77.2°	92.9° 7/21/17	60.9° 7/10/17	4.36"	M	1.29" 7/15/17
		M	M	M	4.44"	M	M
Decatur	2/1880	80.2°	95° 7/22/17	62° 7/10/17	5.66"	10.89" 1958	2.76" 7/28/17
		80.5°	107° 7/12/1901	38° 7/8/34	4.22"	0.67" 1962	4.65" 7/16/50
Dothan	2/1902	82.4°	96° 7/20/17	67° 7/31/17	3.55"	12.73" 1948	1.04" 7/8/17
		81.3°	103° 7/24/52	57° 7/5/1902	5.86"	2.12" 1903	6.73" 7/9/48
Fairhope	8/1917	80.2°	93.6° 7/20/17	66.3° 7/31/17	2.91"	13.41" 1985	0.71" 7/22/17
		81.5°	101° 7/16/80	59° 7/16/67	8.00"	0.82" 1983	14.52" 7/20/97
Gadsden	7/1893	76.0°	90.2° 7/21/17	60.2° 7/31/17	6.32"	13.41" 1985	2.30" 7/15/17
		79.8°	103°+ 7/15/66	52° 7/11/63	4.47"	0.79" 1980	3.36" 7/9/58
Gainesville Lock	6/1948	79.8°	93.6° 7/21/17	66.5° 7/30/17	4.42"	8.11" 1992	0.87" 7/28/17
		80.8°	105°+ 7/15/80	55° 7/15/67	2.91"	0.37" 1990	4.12" 8/10/70
Greensboro	2/1890	79.2°	92.4° 7/14/17	65.7° 7/30/17	4.68"	11.03" 1985	1.79" 7/16/17
		81.9°	107°+ 7/16/80	56° 7/23/47	5.38"	1.19" 2000	3.90" 7/18/36
Highland Home	3/1892	78.1°	92.3° 7/21/17	67.1° 7/31/17	7.34"	10.79" 1994	2.12" 7/29/17
		79.6°	105° 7/15/80	54° 7/15/67	4.93"	1.19" 1978	3.15" 7/8/48
Huntsville	1/1959	82.1°	98° 7/19/17	65° 7/31/17	6.84"	14.81" 1967	2.69" 7/4/17
		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 2017

	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	82.2°	96° 7/20/17	70° 7/31/17	3.32"	13.14" 1982	0.78" 7/27/17
		81.5°	104° 7/25/52	62°+ 7/16/87	6.54"	1.72" 1983	4.21" 7/18/89
Montgomery	6/1948	83.8°	98° 7/21/17	69° 7/31/17	4.50"	9.99" 1988	1.24" 7/21/17
		81.8°	105°+ 7/25/52	60° 7/1/50	5.31"	1.69" 2000	3.84" 7/14/73
Muscle Shoals	12/1940	82.1°	99° 7/21/17	63° 7/31/17	4.56"	14.40" 1975	1.22" 7/6/17
		80.2°	106°+ 6/29/52	53°+ 6/7/72	4.52"	0.92" 1977	5.60" 7/28/72
Russellville	9/1953	77.5°	92.3° 7/27/17	58.9° 7/30/17	5.86"	10.82" 1994	2.14" 7/28/17
		78.0°	103° 7/18/80	45° 7/8/70	4.65"	1.27" 1978	3.10" 7/24/83
Scottsboro	10/1891	77.1°	93.7° 7/21/17	62.6° 7/31/17	*7.88"	7.59" 1984	2.64" 7/4/17
		78.6°	109° 7/13/30	49°+ 7/10/83	4.53"	1.32" 1980	3.43" 7/22/41
Selma	1/1895	79.5°	93.8° 7/20/17	65.9° 7/30/17	5.87"	8.45" 1994	1.71" 7/1/17
		81.5°	107°+ 7/14/80	57° 7/15/87	4.28"	1.11" 2000	3.96" 7/7/94
Talladega	2/1888	78.4°	93.1° 7/21/17	63.7° 7/31/17	3.34"	9.11" 1985	0.98" 7/25/17
		78.2°	107°+ 7/17/80	51°+ 7/8/72	4.75"	1.40" 1991	3.05" 7/8/58
Thomasville	9/1891	78.7°	92.2° 7/27/17	65.7° 7/30/17	3.46"	15.91" 1988	1.81" 7/29/17
		81.4°	107° 7/13/30	56° 7/15/87	6.05"	0.69" 2000	5.52" 7/6/88
Troy	6/1908	80.6°	95° 7/20/17	66° 7/31/17	4.87"	15.59" 1994	1.77" 7/29/17
		80.5°	107° 7/7/36	56° 7/15/87	5.80"	1.66" 2000	4.55" 7/1/84
Tuscaloosa	6/1948	82.2°	96° 7/21/17	67° 7/30/17	3.41"	12.27" 1997	2.45" 7/15/17
		81.8°	107° 7/24/52	54° 7/1/50	5.00"	0.72" 1970	4.57" 7/21/97
Valley Head	1/1893	74.8°	90.5° 7/21/17	59.3° 7/10/17	2.22"	11.74" 1976	0.54" 7/28/17
		76.2°	105°+ 7/29/52	45° 7/15/87	5.18"	0.94" 1987	4.52" 7/5/76
Statewide July 2017		79.79° /	99° M. Shoals	58.9° Russellville	4.76"	19.08" Brewton	4.73" Brewton
July Norm		80.14° /	109° Scottsboro	38° Decatur	5.17"	0.30" Birmingham	7.82" Clanton

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 2017

	Total Precip.	# Stations
Autauga	5.95	2
Baldwin	6.19	27
Barbour	n.a.	0
Bibb	n.a.	0
Blount	7.66	7
Bullock	n.a.	0
Butler	8.21	1
Calhoun	4.85	2
Chambers	n.a.	0
Cherokee	n.a.	0
Chilton	4.24	1
Choctaw	7.25	1
Clarke	7.13	1
Clay	n.a.	0
Cleburne	n.a.	0
Coffee	5.04	1
Colbert	5.36	5
Conecuh	6.15	2
Coosa	6.81	2
Covington	n.a.	0
Crenshaw	n.a.	0
Cullman	4.31	5
Dale	6.84	1
Dallas	7.95	1
DeKalb	6.51	5
Elmore	5.28	5
Escambia	5.10	1
Etowah	n.a.	0
Fayette	4.39	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	3.06	2
Jackson	9.65	6
Jefferson	8.50	15
Lamar	n.a.	0
Lauderdale	5.07	10
Lawrence	3.44	2
Lee	4.30	2
Limestone	6.99	7
Lowndes	n.a.	0
Macon	1.91	1
Madison	7.46	22
Marengo	n.a.	0
Marion	2.85	1
Marshall	6.61	10
Mobile	7.30	14
Monroe	5.82	2
Montgomery	5.75	4
Morgan	7.06	5
Perry	n.a.	0
Pickens	2.66	1
Pike	n.a.	0
Randolph	6.94	2
Russell	8.40	2
St. Clair	6.01	5
Shelby	6.20	16
Sumter	n.a.	0
Talladega	4.33	4
Tallapoosa	6.79	2
Tuscaloosa	3.83	5
Walker	n.a.	0
Washington	8.86	1
Wilcox	6.92	2
Winston	3.46	2

Normal July Precipitation*

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.serc.com

New Local Climate Records¹

July 2017

Precipitation, Daily

	New Record	Previous Year	Previous Record	Period of Record
01 July 2017				
BANKHEAD LOCK & DAM	1.70	1965-07-01	0.67	60
JASPER	2.83	2005-07-01	1.57	56
02 July 2017				
COFFEEVILLE LOCK & DAM	1.06	1984-07-02	1.05	34
SELMA	2.05	1959-07-02	1.91	122
04 July 2017				
SCOTTSBORO	3.12	1931-07-04	2.50	125
05 July 2017				
RUSSELLVILLE No. 2	2.31	2013-07-05	2.05	63
08 July 2017				
FAIRHOPE 2 NE	4.46	1968-07-08	2.81	99
09 July 2017				
COFFEEVILLE LOCK & DAM	0.51	1999-07-09	0.48	34
GENEVA NUMBER 2	1.55	1990-07-09	0.72	41
12 July 2017				
CAHABA PUMP HOUSE	2.20	1999-07-12	0.95	35
15 July 2017				
BESSEMER 3 WSW	1.98	1996-07-15	1.27	40
TALLADEGA	1.90	1979-07-15	1.25	129
17 July 2017				
ATMORE	1.97	2009-07-17	1.60	77
18 July 2017				
ALICEVILLE L AND D	0.88	1990-07-18	0.29	37
CAHABA PUMP HOUSE	0.48	2010-07-18	0.42	35
THORSBY EXP. STATION	2.34	1997-07-18	1.01	59
24 July 2017				
SCOTTSBORO	1.52	1905-07-24	0.80	125
BIRMINGHAM AIRPORT	3.64	1996-07-24	1.39	87
26 July 2017				
FT BENNING LAWSON FLD	3.01	1996-07-26	0.68	68
27 July 2017				
HALEYVILLE	1.65	1998-07-27	1.45	114
MOBILE D'TOWN AIRPORT	0.72	2013-07-27	0.60	68
28 July 2017				
ATHENS	1.90	1992-07-28	0.54	76
GENEVA NUMBER 2	0.56	1980-07-28	0.49	41
HUNTSVILLE INT'L AIRPORT	2.34	1972-07-28	1.87	58
29 July 2017				
PINE APPLE	1.46	2009-07-29	1.39	49
30 July 2017				
JACKSON	1.83	1962-07-30	1.52	55

Minimum Low Temperature, Daily

	New Record	Previous Coldest Day	Previous Record	Period of Record
30 July 2017				
GREENSBORO	55	2014-07-30	57	125
31 July 2017				
FT BENNING LAWSON FLD....	64	2013-07-31	68	68

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

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