

The
Alabama
Climate Report

Brought to you by the Office of the Alabama Climatologist



NOVEMBER 2023



THE UNIVERSITY OF
ALABAMA IN HUNTSVILLE

Volume 15, Number 7 :: November 2023



The trend of drier and warmer conditions prevailed across Alabama for the month of November, marking the fifth consecutive month in this pattern. The state experienced 1.26 inches less rainfall than normal, totaling 2.59 inches. Statewide temperatures were 1.2°F warmer than the long-term average of 53.5°F.

November typically signals the transition from the drier fall season to the wetter winter pattern in Alabama. This shift toward a wetter pattern was particularly noticeable in the southern half of the state around mid-November, providing significant relief to the ongoing drought. While the northern half received some rain, it wasn't as substantial as the precipitation in the south. The driest area for November was in the northern half of the state at the COOP Oneonta station, recording 0.76 inches of rainfall with no missing observations. It's worth noting that three other stations (Gadsden Municipal Airport, Hodges Farm, and Cullman-NAHRC) recorded even less rainfall without missing observations; however, these observations appear to be in error based on rainfall measurements by nearby stations. In contrast, the wettest area was in the southern half of the state at the CoCoRaHS Grove Hill 6.1 SW station, recording 7.92 inches of rainfall.

Typically, when a fall month in Alabama is drier than normal, it tends to be cooler than normal due to the lack of warm tropical moisture. This, however, wasn't the case this November, as the state was 1.2°F warmer than normal. The Open Pond RAWS station in Conecuh National Forest and the Livingston-UWA station recorded the hottest spot of the month at 85°F on the 8th. In contrast, a RAWS station in DeSoto State Park recorded the coldest spot of the month at 16°F during a late-month cold snap. On the topic of cold temperatures, many areas throughout Alabama experienced their first freeze (29°F-32°F) and hard freeze (28°F or lower) of the season, aligning approximately with normal freeze/hard freeze dates. The only exceptions were certain areas along the Gulf Coast in Mobile and Baldwin counties.

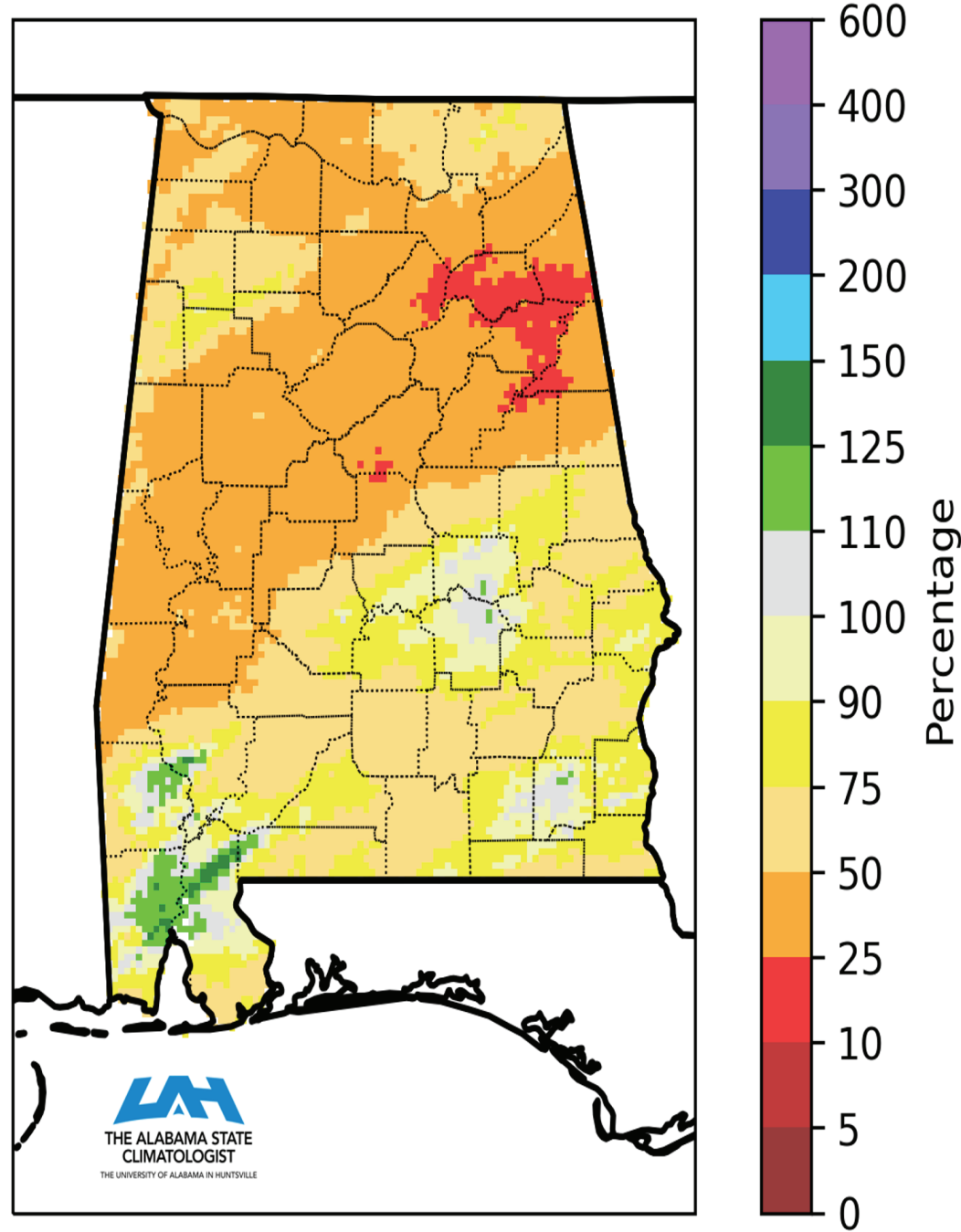
November wraps up the main growing season in Alabama. By the end of November, most major crops across the state have been harvested, according to the USDA crop progress report. The wet weather toward the end of the month slowed the last of the harvest, with cotton and peanuts wrapping up at 91% and 96% harvested, respectively. The welcomed rainfall also improved soil moisture conditions that allowed many farmers to plant their winter crops. Winter wheat is estimated to be nearly 90% planted, with nearly half now emerging. The fall drought was still seeing impacts in livestock and pastures.

With the conclusion of climatological fall (September, October, and November), let's look back at how Alabama fared this fall. Statewide, this fall was the 32nd warmest on record, with an average temperature of 65.3°F, which is 1.3°F warmer than normal. Precipitation-wise, this fall was the 15th driest fall on record, with 6.09 inches of precipitation, which is 4.37 inches drier than normal. It's worth noting that this fall experienced a rapid emergence of drought, often defined as a "flash drought", which has persisted until recently thanks to beneficial rainfall and cooler temperatures. Huntsville set a notable record this fall, marking its driest fall season on record with a mere 3.65 inches of rainfall, 7.65 inches drier than normal. While not a record but noteworthy, Birmingham recorded its 4th driest fall on record with 3.16 inches of

rainfall, 8.41 inches drier than normal, ranking behind only 1924 (2.51 inches), 1897 (2.55 inches), and 2016 (2.75 inches).

Monthly summaries are provided by Dr. Rob Junod, Lee Ellenburg and John Christy.

Precipitation Percent of Normal November 2023

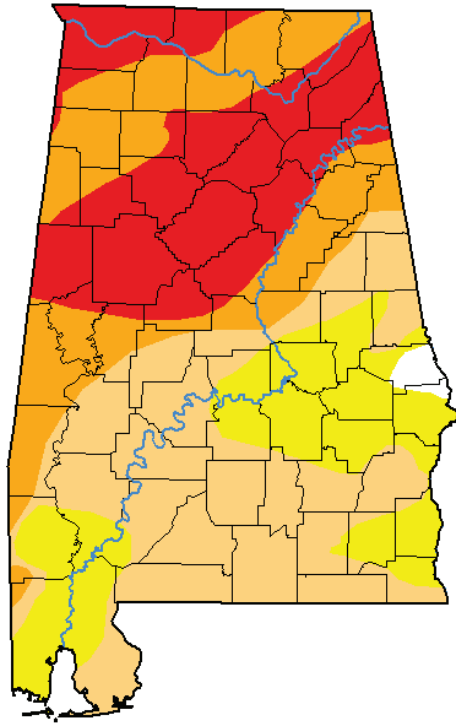


Data source: NCEP Stage IV Quantitative Precipitation Estimates

DROUGHT MONITOR

U.S. Drought Monitor Alabama

December 5, 2023
(Released Thursday, Dec. 7, 2023)
Valid 7 a.m. EST



Intensity:

-  None
-  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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

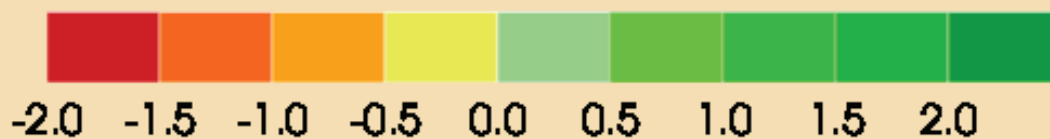
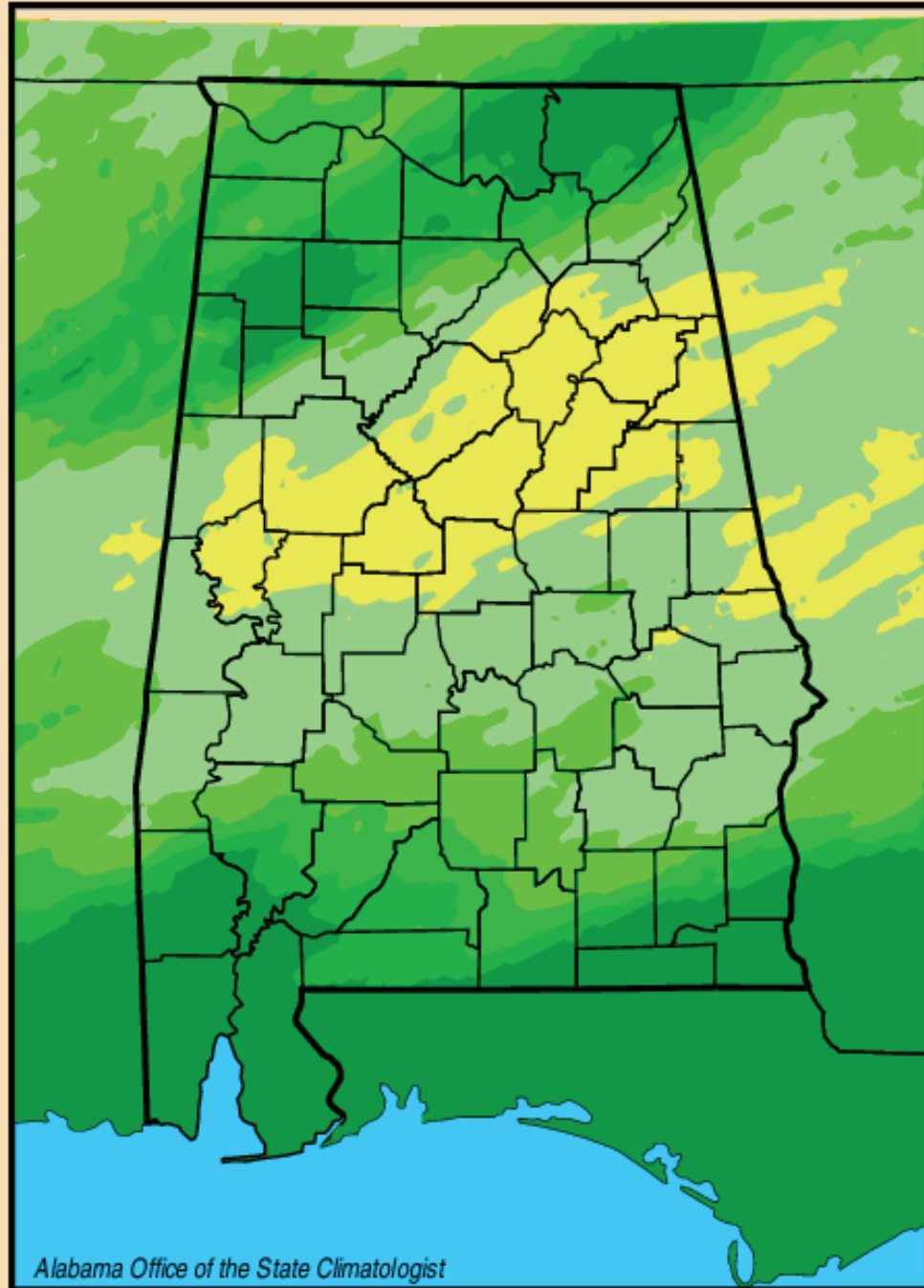
David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu

LAWN AND GARDEN

Lawn-and-Garden Moisture Index
for December 8, 2023



ALABAMA MONTHLY CLIMATE SUMMARIES

Alabama Monthly Climate Summaries						
November 2023						
	Nov. Mean Nov. Norm	Nov. High Temp Record High	Nov. Low Temp Record Low	Total Precip. Normal Precip.	Wettest Nov. Driest Nov.	Heaviest Day Record Day
Anniston	53.9 53.4 M	82 11/7/23 88 11/2/74 M	21 11/29/23 5 11/25/50 M	1.03" 4.20" M	10.32" 1992 1.03" 1980 17.77" 1948	.44" 11/21/23 3.21" 11/28/48 M
Auburn	53.4 55.3 53.1	90 11/1/35 82 11/7/23 85+ 11/1/00	9 11/25/50 24 11/29/23 5 11/25/50	3.47" .93" 4.63"	.23" 1924 9.66" 1986 1.67" 1981	7.05" 11/27/48 .44" 11/20/23 4.41" 11/27/83
Birmingham	56 56	80.9 11/7/23 89+ 11/1/61	27.5 11/29/23 15 11/28/38	3.91" 5.16"	13.01" 1989 1.20" 1993	1.17" 11/21/23 4.52" 11/8/89
Brewton	54.3 53	81 11/8/23 86 11/2/74	25 11/29/23 12 11/30/59	1.23" 3.69"	16.94" 1948 0.00" 1924	.51" 11/20/23 4.70" 11/12/29
Calera	52.9 53	79.7 11/9/23 88 11/1/35	24.5 11/29/23 8 11/25/50	2.16" 4.96"	17.37" 1986 .80" 1981	1.26" 11/21/23 5.50" 11/12/29
Clanton	51.9 M	81.9 11/8/23 M	22.8 11/29/23 M	2.15" M	M M	.98" 11/21/23 M
Courtland	51.4 M	80.5 11/8/23 M	19.7 11/29/23 M	2.54" M	M M	1.71" 11/21/23 M
Cullman (St. Bernard)	52.6 51	83 11/8/23 86 11/3/35	20 11/29/23 3 11/25/50	1.83" 3.69"	14.26" 1957 0.00" 1910	1.60" 11/20/23 3.97" 11/10/91
Decatur (Pryor Field)	58.3 58	83 11/6/23 88 11/5/46	30 11/29/23 17 11/25/50	4.00" 3.01"	10.29" 1930 .05" 1931	1.34" 11/21/23 4.50" 11/7/12
Dothan	58.4 59.5	80.8 11/9/23 91 11/2/71	29.3 11/29/23 21 11/25/50	3.59" 5.19"	12.03" 1997 .81 1981	1.40" 11/14/23 4.88" 11/2/95
Fairhope	51.1 51.8	78.2 11/7/23 87 11/1/00	19.3 11/29/23 14+ 11/25/70	1.43" 4.56"	8.97" 1982 1.30" 1981	1.05" 11/21/23 4.31" 11/28/73
Gadsden	53.9 53.6	83.2 11/8/23 87 11/1/61	27.1 11/29/23 17+ 11/30/76	2.23" 4.51"	10.24" 1986 .93" 1998	1.01" 11/20/23 3.58" 11/28/01
Gainesville Lock	54.5 55.7	81.2 11/8/23 98 11/7/40	27.1 11/29/23 12 11/25/50	2.11" 4.47"	14.70" 1986 .75" 1981	.85" 11/20/23 4.55" 11/12/29
Greensboro	M 51.3	M 85 11/12/89	M 7 11/30/79	M 4.45"	8.74" 1983 1.31" 1971	M 3.62" 11/19/48
Guntersville	56.2 56	78.9 11/7/23 88+ 11/1/84	32 11/29/23 10 11/25/50	3.85" 4.71"	11.87" 1997 .73" 1999	1.88" 11/21/23 3.2" 11/28/48
Highland Home	54 51.2	82 11/8/23 84+ 11/1/00	23 11/29/23 15+ 11/30/76	2.00" 5.22"	11.53" 1977 1.82" 1971	1.71" 11/20/23 3.33" 11/27/73
Huntsville	59.9 58.9	83 11/9/23 87+ 11/2/71	32 11/29/23 22 11/25/50	4.63" 5.41"	12.70" 1992 .85" 1981	2.04" 11/20/23 7.01" 11/6/75
Mobile	56.3 56.1	82 11/9/23 87+ 11/8/86	26 11/29/23 13 11/25/50	3.75" 4.53"	10.18" 1986 .51 1981	2.49" 11/20/23 8.16" 11/26/48
Montgomery	52.4 51.5	82.5 11/8/23 85 11/1/00	21.1 11/29/23 2 11/25/50	2.84" 5.09"	11.06" 1986 1.90" 1971	1.45" 11/21/23 3.65" 11/30/91
Muscle Shoals Airport	51.2 50.1	81 11/8/23 85+ 11/2/00	18.3 11/29/23 10+ 11/25/70	2.02" 5.08"	9.76" 1986 .84" 1971	.89" 11/21/23 3.80" 11/2/99
Russellville	50.8 50.2	81.5 11/8/23 85+ 11/2/00	18.4 11/29/23 1 11/25/50	2.52" 4.98"	11.43" 1977 1.52" 1971	2.14" 11/21/23 4.90" 11/17/27
Scottsboro	54 56.2	82.5 11/8/23 91 11/3/30	24.1 11/2/23 13 11/25/50	5.47" 4.32"	10.44" 1986 .53" 1981	3.87" 11/21/23 3.62" 11/27/48
Selma	52.6 51.4	81.2 11/7/23 86+ 11/2/74	20.8 11/29/23 5 11/25/50	.93" 4.59"	10.69" 1992 .66" 1981	.38" 11/21/23 3.31" 11/2/92
Talladega	53.9 56.3	79.8 11/8/23 90 11/4/35	26.3 11/2/23 14 11/25/50	6.43" 5.31"	11.26" 1986 .86" 1981	4.74" 11/21/23 3.8" 11/6/59
Thomasville	54.8 56.2	80 11/7/23 89 11/4/35	26.2 11/29/23 12 11/25/50	2.70" 4.44"	10.53" 1992 1.33" 1990	.92" 11/21/23 6.12" 11/8/43
Troy	54.9 55.3	83 11/8/23 87+ 11/3/00	26 11/29/23 10 11/25/50	2.07" 4.84"	10.04" 2000 .84" 1985	1.16" 11/20/23 3.67" 11/11/95
Tuscaloosa	50.6 48.5	79.4 11/7/23 84+ 11/3/74	17.4 11/29/23 -2 11/25/50	1.20" 5.00"	9.76" 1983 1.19" 1971	1.00" 11/21/23 4.06" 11/5/77
Valley Head						

NEW ALABAMA CLIMATE RECORDS

NO MONTHLY WEATHER RECORDS FOR NOVEMBER 2023

Highest Maximum Temperature Daily Record						
STATION	DATE	RECORD	PREV. DATE	PREV. RECORD	NUMBER OF YEARS	DIFFERENCE
HUNTSVILLE INTNL AIRPORT, AL US	11/6/23	79	11/6/15	79	64	0
MUSCLE SHOALS AIRPORT, AL US	11/6/23	82	11/6/08	78	82	4
ATHENS, AL US	11/7/23	81	11/7/22	81	31	0
GADSDEN, AL US	11/7/23	81	11/7/05	81	70	0
MOULTON 2, AL US	11/7/23	80	11/7/05	80	66	0
RUSSELLVILLE NUMBER 2, AL US	11/7/23	80	11/7/17	77	69	3
VERNON, AL US	11/7/23	81	11/7/17	79	66	2
HUNTSVILLE INTNL AIRPORT, AL US	11/7/23	82	11/7/22	82	64	0
MUSCLE SHOALS AIRPORT, AL US	11/7/23	83	11/7/22	82	82	1
MOULTON 2, AL US	11/8/23	83	11/8/05	83	66	0
ATHENS, AL US	11/9/23	82	11/9/06	79	31	3
MOULTON 2, AL US	11/9/23	82	11/9/05	82	66	0
MOBILE REGIONAL AIRPORT, AL US	11/9/23	83	11/9/20	83	75	0
MOULTON 2, AL US	11/10/23	82	11/10/02	81	66	1
THORSBY EXPERIMENTAL STATION, AL US	11/15/23	80	11/15/93	80	65	0
ATHENS, AL US	11/16/23	77	11/16/16	76	31	1
HUNTSVILLE INTNL AIRPORT, AL US	11/16/23	78	11/16/78	77	64	1
MOBILE DOWNTOWN AIRPORT, AL US	11/17/23	81	11/17/13	81	74	0
Highest Minimum Temperature Daily Record						
HAMILTON, AL US	11/18/23	58	11/18/03	58	61	0
HEFLIN, AL US	11/18/23	57	11/18/03	57	67	0
BAY MINETTE, AL US	11/21/23	68	11/21/34	68	108	0
HEFLIN, AL US	11/21/23	59	11/21/91	59	67	0
Lowest Maximum Temperature Daily Record						
MOBILE DOWNTOWN AIRPORT, AL US	11/1/23	61	11/1/14	61	74	0
HAMILTON, AL US	11/2/23	52	11/2/14	53	61	-1
JACKSON, AL US	11/24/23	53	11/24/94	53	39	0
Lowest Minimum Temperature Daily Record						
ATHENS, AL US	11/2/23	26	11/2/93	26	31	0
BANKHEAD LOCK AND DAM, AL US	11/2/23	26	11/2/14	29	66	-3
BELLE MINA 2 N, AL US	11/2/23	22	11/2/93	24	73	-2
CLANTON, AL US	11/2/23	26	11/2/30	26	129	0
CLAYTON, AL US	11/2/23	0	11/2/63	0	67	0
DEMOPOLIS LOCK AND DAM, AL US	11/2/23	30	11/2/63	30	71	0
GENEVA NUMBER 2, AL US	11/2/23	25	11/2/93	28	47	-3
GREENSBORO, AL US	11/2/23	28	11/2/63	30	131	-2
MARION JUNCTION 2 NE, AL US	11/2/23	26	11/2/93	26	73	0
MOULTON 2, AL US	11/2/23	21	11/2/14	26	66	-5
ONEONTA, AL US	11/2/23	25	11/2/63	26	128	-1
OPELIKA, AL US	11/2/23	26	11/2/63	30	66	-4
SELMA, AL US	11/2/23	29	11/2/93	29	126	0
HUNTSVILLE INTNL AIRPORT, AL US	11/2/23	25	11/2/63	28	64	-3
DOTHAN REGIONAL AIRPORT, AL US	11/2/23	33	11/2/93	33	53	0
MUSCLE SHOALS AIRPORT, AL US	11/2/23	22	11/2/54	25	82	-3
SYLACAUGA 4 NE, AL US	11/3/23	21	11/3/63	22	68	-1
Highest Precipitation Daily Record						
HEADLAND, AL US	11/11/23	0.87	11/11/98	0.82	73	0.05
GENEVA NUMBER 2, AL US	11/15/23	0.65	11/15/18	0.65	47	0.00
ADDISON, AL US	11/21/23	2.90	11/21/91	1.27	85	1.63
ATHENS, AL US	11/21/23	1.55	11/21/07	1.55	82	0.00
BILLINGSLEY, AL US	11/21/23	2.40	11/21/02	1.90	84	0.50
COFFEEVILLE LOCK AND DAM, AL US	11/21/23	3.00	11/21/92	2.42	40	0.58
JACKSON, AL US	11/21/23	3.40	11/21/62	1.93	61	1.47
MOULTON 2, AL US	11/21/23	2.02	11/21/77	1.73	66	0.29
WINFIELD 2 SW, AL US	11/21/23	3.25	11/21/73	2.49	100	0.76

CoCoRAHS

Community Collaborative Rain, Hail and Snow Network (CoCoRAHS)							
January 2022							
	Ave. Total Precip.	# Stations			Ave. Total Precip.	# Stations	
Autauga	2.41	2	Houston	5.24	2	Normal January Precipitation*	
Baldwin	2.43	31	Jackson	5.41	5	Abbeville	5.30
Barbour	4.04	1	Jefferson	4.33	20	Alberta	4.84
Bibb	n.a.	0	Lamar	1.20	1	Alex City	5.69
Blount	3.63	4	Lauderdale	5.33	12	Aliceville	5.30
Bullock	n.a.	0	Lawrence	5.47	4	Andalusia	5.17
Butler	3.31	1	Lee	4.34	5	Ashland	5.48
Calhoun	4.40	2	Limestone	6.13	8	Athens	6.06
Chambers	n.a.	0	Lowndes	n.a.	0	Bay Minette	5.43
Cherokee	n.a.	0	Macon	2.32	1	Bessemer	5.34
Chilton	5.46	1	Madison	6.20	23	Billingsly	4.98
Choctaw	3.11	1	Marengo	n.a.	0	Centreville WSMO	5.63
Clarke	5.28	3	Marion	4.99	1	Chatom	5.45
Clay	5.13	1	Marshall	5.25	11	Claiborne L&D	5.49
Cleburne	n.a.	0	Mobile	2.67	21	Clayton	4.91
Coffee	n.a.	0	Monroe	3.93	3	Dauphin Isl.	5.86
Colbert	6.34	6	Montgomery	5.61	4	Elba	5.08
Conecuh	n.a.	0	Morgan	5.54	6	Eufaula WR	5.20
Coosa	6.13	1	Perry	n.a.	0	Evergreen	5.55
Covington	3.29	1	Pickens	1.15	1	Fayette	5.75
Crenshaw	n.a.	0	Pike	n.a.	0	Geneva 2	6.43
Cullman	3.56	4	Randolph	3.22	1	Greenville	4.98
Dale	n.a.	0	Russell	2.40	2	Haleyville	5.79
Dallas	4.90	1	St. Clair	4.12	6	Hamilton 35	5.31
DeKalb	5.33	7	Shelby	4.44	15	Heflin	5.31
Elmore	5.92	4	Sumter	n.a.	0	Hurtsboro	4.89
Escambia	3.58	1	Talladega	4.11	4	Jasper	5.71
Etowah	3.36	3	Tallapoosa	4.11	1	Lafayette	5.19
Fayette	n.a.	0	Tuscaloosa	4.74	5	Livingston	4.77
Franklin	n.a.	0	Walker	5.17	1	Melvin	5.25
Geneva	n.a.	0	Washington	4.79	1	Milstead	4.85
Greene	n.a.	0	Wilcox	6.83	2	Moulton	5.03
Hale	n.a.	0	Winston	4.75	2	Oneonta	5.39
Henry	n.a.	0				Perryville	5.00
						Plantersville	5.26
						Rock Mills	5.39
						Rockford	5.54
						Sylacauga	5.14
						Union Springs	4.77
						Uniontown	4.99
						Vernon	5.95
						Warrior L&D	5.34
						Wetumpka	4.87



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