

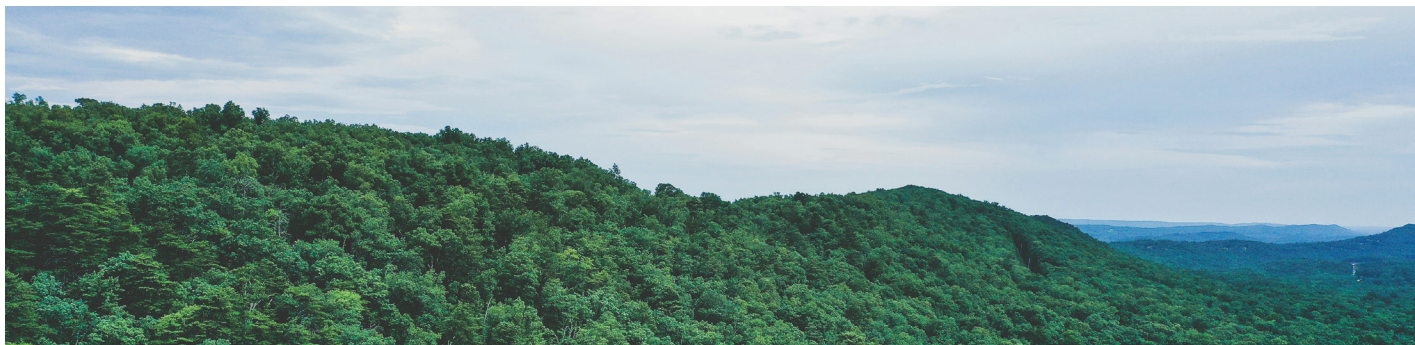
The
Alabama
Climate Report

Brought to you by the Office of the Alabama Climatologist

FEBRUARY 2024



Volume 15, Number 10 :: February 2024



February presented quite the disparity in terms of rainfall. Areas around Montgomery and Auburn experienced well above normal rainfall, with numerous stations recording more than 6 inches of rainfall. On the other hand, areas in southwest Alabama were drier than normal, with many stations recording less than 2 inches of rainfall for the month of February.

As stated earlier, areas around Montgomery and Auburn endured a wet February, with a few stations recording above 9 inches of rainfall, peaking at 10.74 inches at a station in Mathews. However, the majority of the state was drier than normal, particularly areas in southwest Alabama. A station in Atmore recorded the driest location of the month with only a meager 0.42 inches of rainfall, with no missing observations. While there was quite the difference in rainfall across the state, as a whole, Alabama recorded slightly drier than normal conditions at 0.81 inches above normal.

Unlike rainfall, the temperature was generally warmer than normal. February's monthly average temperature was 4.4°F warmer than the long-term average of 48°F. Much of Alabama recorded unseasonably warm temperatures from the 25th through the 28th, with many stations reporting daily average temperature departures of 15 degrees or more above normal. The Mobile Downtown Airport station recorded the warmest location of the month at 85°F on the 28th. In contrast, February's coldest location was a tie between Gadsden Municipal Airport station and the Russellville 4 SSE station at 19°F on the 19th.

February saw a slight hiccup in our march toward normal conditions after a very dry fall and early winter. Abnormal dryness crept back in South Alabama. See Figure 2 for the Drought Monitors representation of conditions as of Feb 27.

With the conclusion of climatological winter (December, January, and February), let's take a look back at how Alabama fared this winter. Statewide, this winter was the 49th warmest winter on record, with an average temperature of 48.1°F, which is 1.6°F warmer than normal. From a precipitation perspective, this winter was the 58th wettest on record, with 15.77 inches of rainfall, which is 0.25 inches wetter than normal. Snow was observed during only one event this winter, from the 15th to the 17th of January in northern Alabama, with three stations reporting 6 inches or greater of snowfall. The peak snowfall total for winter 2023-2024 was reported by a CoCoRaHS observer in Florence at 7 inches. However, the bigger story with this winter weather event, as mentioned in last month's Alabama climate report, was the combination of ice/sleet/snow that accumulated and didn't melt for about a week, given the very cold air that lingered throughout the week.

March marks the beginning of climatological spring and the peak months of the severe weather season (March, April, and May) for Alabama. Thus, it is crucial to have a severe weather plan and to be prepared.

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

Precipitation Percent of Normal February 2024

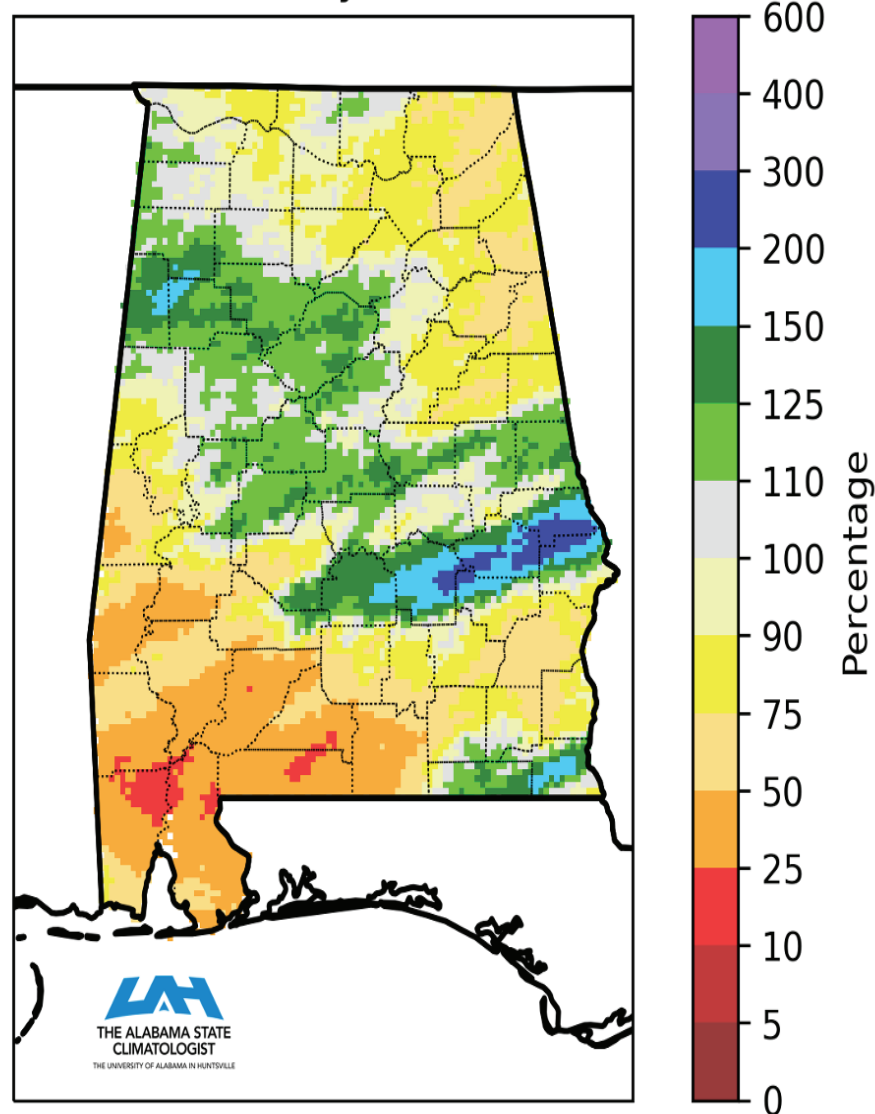
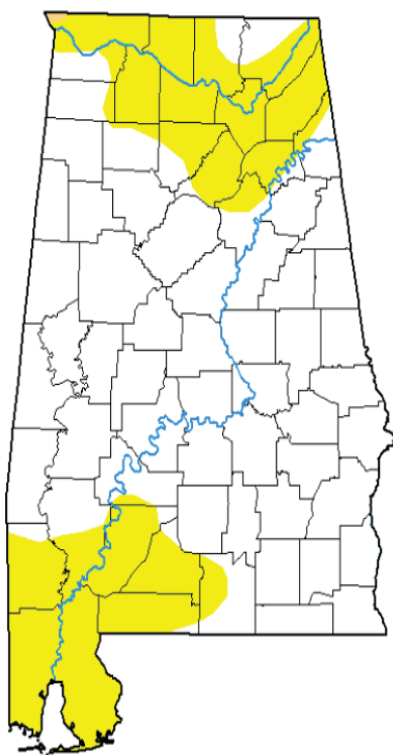


Figure 1.

Data source: NCEP Stage IV Quantitative Precipitation Estimates

U.S. Drought Monitor Alabama



February 27, 2024

(Released Thursday, Feb. 29, 2024)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	70.80	29.20	0.09	0.00	0.00	0.00
Last Week 02-20-2024	83.67	16.33	0.09	0.00	0.00	0.00
3 Months Ago 11-28-2023	0.84	99.16	88.41	56.27	33.19	0.00
Start of Calendar Year 01-02-2024	0.90	99.10	78.97	44.62	12.61	0.00
Start of Water Year 09-26-2023	21.58	78.42	30.60	16.04	2.30	0.00
One Year Ago 02-28-2023	96.93	3.07	0.00	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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:

Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

Figure 2.

U.S Drought Monitor conditions valid February 27, 2024

February 2024



Temperature Summary

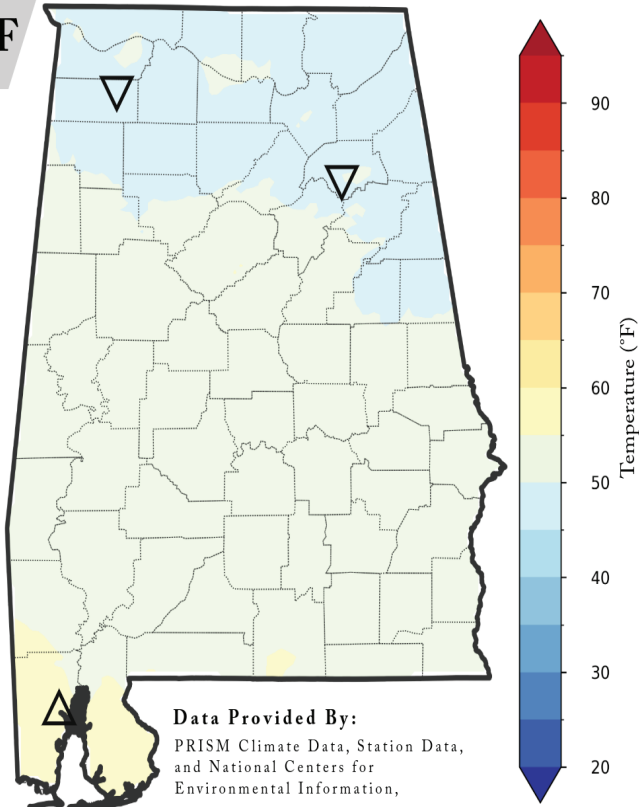
Monthly Average Temperature for February 2024

Preliminary Statewide
Average Temperature **52.4°F**

4.4°F Above the Average

△ HOTTEST SITE
**Mobile Downtown
Airport**
85°F on Feb 28

▽ COLDEST SITES
**Gadsden
Municipal Airport
&
Russellville 4 SSE**
19°F on Feb 19



Historical Perspective: 21st Warmest February Since 1895

Coldest on record

37.4°F

1895

Hottest on record

58.0°F

2024

2018

The Alabama Office of the State Climatologist is Hosted at the University of Alabama in Huntsville



February 2024



Precipitation Summary

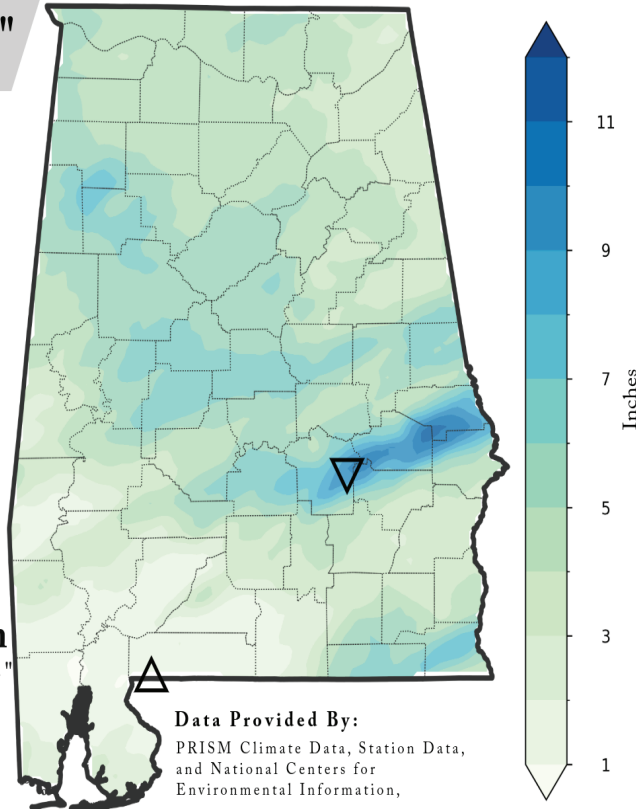
Monthly Total Precipitation for February 2024

Preliminary Statewide
Total Precipitation **4.37"**

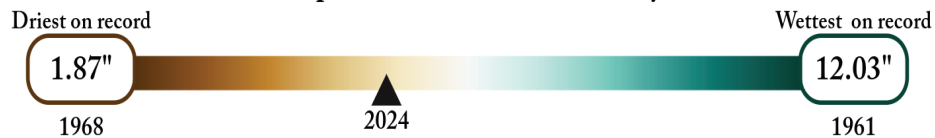
0.81" Below the Average

△ DRIEST SITE
Atmore Station
Total Precipitation: 0.42"

▽ WETTEST SITE
Mathews Station
Total Precipitation: 10.74"



Historical Perspective: 52nd Driest February Since 1895



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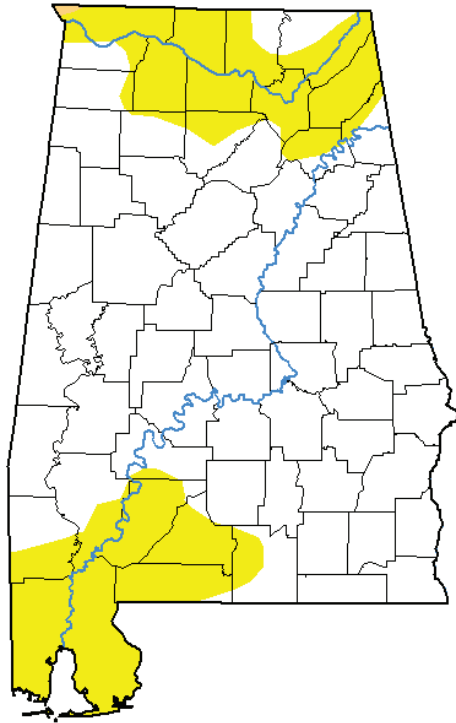
DROUGHT MONITOR

U.S. Drought Monitor Alabama







March 5, 2024

(Released Thursday, Mar. 7, 2024)

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:

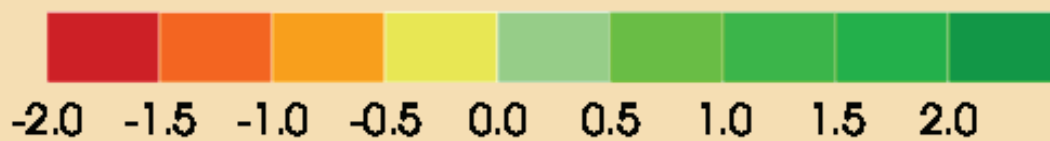
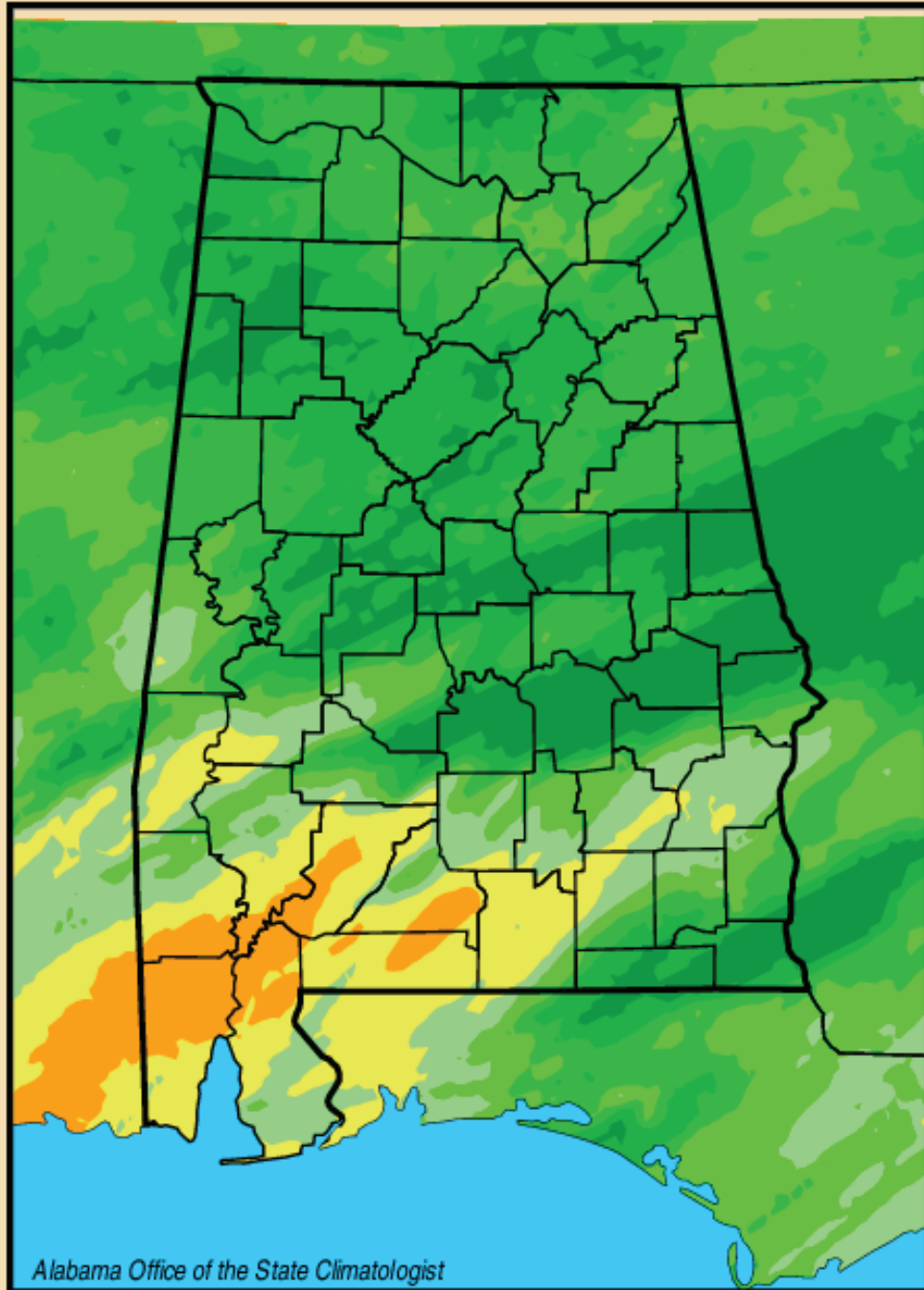
Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

LAWN AND GARDEN

Lawn-and-Garden Moisture Index
for February 23, 2024



ALABAMA MONTHLY CLIMATE SUMMARIES

Alabama Monthly Climate Summaries						
February 2024						
	Feb. Mean Feb. Norm	Feb. High Temp Record High	Feb. Low Temp Record Low	Total Precip. Normal Precip.	Wettest Feb. Driest Feb.	Heaviest Day Record Day
Anniston	51.5	77 2/27/24	24 2/19/24	3.70"	8.99" 1990	1.86" 2/11/24
	47.3	84+ 2/23/96	4 2/17/58	4.80"	1.19" 1978	3.40" 2/2/82
Auburn	M	M	M	M	17.61" 1961	M
	49.9	82 2/14/62	7 2/3/17	5.27"	1.50" 1943	7.83" 2/25/61
Birmingham	53.4	76 2/26/24	25 2/19/24	4.89"	9.28" 1971	2.46" 2/11/24
	46.8	83+ 2/23/96	3 2/17/58	4.21"	1.31" 1978	5.46" 2/21/61
Brewton	53.8	80 2/28/24	27.2 2/19/24	1.23"	12.55" 1991	.63" 2/4/24
	51	87 2/13/62	11+ 2/4/70	5.67"	1.45" 1980	8.18" 2/11/81
Calera	53.2	77 2/27/24	28 2/19/24	5.72"	15.62" 1961	3.04" 2/11/24
	46.5	85 2/13/62	4 2/10/79	5.32"	.61" 1968	5.55" 2/3/36
Clanton	52	78 2/28/24	25.3 2/19/24	7.52"	13.48" 1972	2.53" 2/11/24
	46.6	84 2/14/62	5 2/5/96	5.48"	2.27" 2000	4.87" 2/4/36
Courtland	50.2	76 2/27/24	22.6 2/18/24	4.68"	M	1.46" 2/10/24
	M	M	M	M	M	M
Cullman (St. Bernard)	51.3	73.8 2/26/24	25.4 2/1/24	4.32"	M	1.52" 2/11/24
	M	M	M	M	M	M
Decatur (Pryor Field)	50.6	76 2/27/24	23 2/19/24	4.52"	12.16" 1939	1.53" 2/10/24
	44.2	83 2/14/62	-12 2/13/1899	4.88"	.79" 1968	3.86" 2/1/51
Dothan	55.7	83 2/28/24	33 2/19/24	4.13"	10.36" 1939	2.21" 2/11/24
	53.5	84 2/25/44	12 2/3/51	4.80"	.93" 1951	4.26" 2/9/37
Fairhope	55.6	76.5 2/28/24	28.1 2/19/24	2.23"	16.33" 1998	1.00" 2/4/24
	53.1	87 2/19/82	3 2/3/51	5.47"	.82" 1999	8.61" 2/11/81
Gadsden	48.8	71.4 2/27/24	23.2 2/19/24	.09"	9.01" 1996	.04" 2/4/24
	44.1	82 2/13/62	1 2/1/66	4.91"	.71" 1978	4.75" 2/21/61
Gainesville Lock	53.4	78.2 2/27/24	25.6 2/19/24	3.57"	11.00" 1983	1.86" 2/11/24
	47.2	87 2/14/62	9+ 2/6/96	4.99"	1.55" 2000	5.36" 2/16/90
Greensboro	54	78.9 2/27/24	27.9 2/19/24	5.28"	12.72" 1990	1.91" 2/4/24
	50	87 2/13/62	7 2/4/96	5.37"	1.64" 2000	5.18" 2/21/61
Guntersville	M	M	M	M	10.84" 1990	M
	43.5	82 2/13/62	-2 2/17/58	5.01"	.39" 1978	5.57" 2/11/94
Highland Home	55.1	77.2 2/28/24	32.8 2/18/24	5.08"	10.78" 1975	2.65" 2/4/24
	49.4	86 2/19/56	7+ 2/6/96	5.35"	1.20" 1980	5.33" 2/17/75
Huntsville	51.2	76 2/27/24	25 2/18/24	4.07"	10.14" 1994	1.87" 2/10/24
	43.8	83 2/23/96	1 2/4/96	4.70"	.59" 1978	4.04" 2/10/94
Mobile	57.5	82 2/28/24	29 2/19/24	2.01"	11.89" 1983	.97" 2/4/24
	53.5	84 2/13/62	11+ 2/5/96	5.10"	1.09" 1999	5.37" 2/10/81
Montgomery	54.1	79 2/28/24	26 2/19/24	6.53"	9.87" 1982	4.24" 2/11/24
	50.5	85 2/13/62	10+ 2/5/96	5.45"	1.11" 1999	5.54" 2/24/61
Muscle Shoals Airport	52.1	78 2/27/24	24 2/19/24	4.87"	10.74" 1991	2.26" 2/10/24
	44.6	83 2/13/62	-2 2/18/58	4.46"	.51" 1978	5.03" 2/12/48
Russellville	49.6	75.4 2/27/24	19.2 2/19/24	4.39"	11.28" 1989	1.54" 2/10/24
	42.5	84 2/24/96	-12+ 2/19/58	4.81"	.98" 1972	6.75" 2/19/91
Scottsboro	48.2	74.8 2/26/24	20.8 2/19/24	3.96"	9.60" 1990	1.69" 2/11/24
	43	82 2/15/89	-8 2/1/66	5.22"	.77" 1978	4.10" 2/16/95
Selma	52.6	79.6 2/28/24	22 2/19/24	4.43"	9.97" 1982	1.78" 2/4/24
	50.5	85 2/27/62	9 2/3/51	4.87"	1.54" 2000	5.31" 2/3/82
Talladega	50.9	77.1 2/27/24	22.1 2/19/24	3.13"	14.37" 1929	1.10" 2/12/24
	44.9	84+ 2/26/77	2 2/18/58	5.11"	1.20" 1978	4.51" 2/21/61
Thomasville	53.3	77.6 2/28/24	25.7 2/19/24	3.76"	14.37" 1929	2.06" 2/11/24
	49.9	86 2/10/32	-5 2/13/1899	5.25"	1.27" 2000	7.15" 2/11/1897
Troy	56.3	84 2/28/24	28 2/19/24	3.95"	10.87" 1975	2.45" 2/4/24
	50.3	85+ 2/17/01	10+ 2/6/96	4.83"	.93" 2000	5.60" 1/11/81
Tuscaloosa	53.9	79 2/28/24	25 2/19/24	5.27"	15.49" 2020	2.17" 2/4/24
	49.8	86 2/13/62	5 2/2/51	5.07"	1.73" 1978	5.44" 1/21/61
Valley Head	47.9	71.8 2/27/24	20 2/19/24	3.97"	14.73" 1990	1.41" 2/11/24
	40.6	80 2/14/62	-12+ 1/19/58	5.62"	.74" 1978	7.39" 2/16/90

NEW ALABAMA CLIMATE RECORDS

Highest Precipitation for One Day Monthly Record						
STATION	DATE	RECORD	PREV. DATE	PREV. RECORD	NUMBER OF YEARS	DIFFERENCE
ALEXANDER CITY, AL US	2/12/24	4.91	2/11/81	3.5	54	1.41
Highest Maximum Temperature Daily Record						
MOBILE DOWNTOWN AIRPORT, AL US	2/23/24	81	2/23/22	78	75	3
BREWTON 3 ENE, AL US	2/29/24	81	2/29/88	75	47	6
DEMOPOLIS LOCK AND DAM, AL US	2/29/24	80	2/29/80	78	72	2
GENEVA NUMBER 2, AL US	2/29/24	82	2/29/80	75	48	7
GUNTERSVILLE, AL US	2/29/24	73	2/29/76	72	114	1
Highest Minimum Temperature Daily Record						
BESSEMER 3 WSW, AL US	2/10/24	61	2/10/99	56	47	5
WINFIELD 2 SW, AL US	2/10/24	54	2/10/90	52	48	2
BESSEMER 3 WSW, AL US	2/11/24	57	2/11/99	54	47	3
CLAYTON, AL US	2/11/24	59	2/11/66	56	68	3
DEMOPOLIS LOCK AND DAM, AL US	2/11/24	62	2/11/99	61	72	1
GADSDEN, AL US	2/11/24	56	2/11/18	56	71	0
HAMILTON, AL US	2/11/24	57	2/11/09	57	62	0
HEFLIN, AL US	2/11/24	58	2/11/18	53	68	5
JACKSON, AL US	2/11/24	63	2/11/18	62	40	1
SYLACAUGA 4 NE, AL US	2/11/24	60	2/11/66	56	69	4
MOBILE REGIONAL AIRPORT, AL US	2/11/24	67	2/11/65	66	76	1
FAYETTE, AL US	2/12/24	54	2/12/00	52	115	2
GENEVA NUMBER 2, AL US	2/12/24	65	2/12/20	64	48	1
GREENSBORO, AL US	2/12/24	60	2/12/50	60	132	0
HEFLIN, AL US	2/12/24	56	2/12/84	50	68	6
JACKSON, AL US	2/12/24	61	2/12/84	59	40	2
SYLACAUGA 4 NE, AL US	2/12/24	56	2/12/17	56	69	0
ATHENS, AL US	2/27/24	60	2/27/21	57	32	3
HUNTSVILLE INTNL AIRPORT, AL US	2/27/24	61	2/27/21	60	65	1
MUSCLE SHOALS AIRPORT, AL US	2/27/24	64	2/27/21	63	83	1
DEMOPOLIS LOCK AND DAM, AL US	2/28/24	62	2/28/96	59	72	3
FAYETTE, AL US	2/28/24	61	2/28/48	60	115	1
HAMILTON, AL US	2/28/24	61	2/28/11	57	62	4
HAMILTON, AL US	2/29/24	48	2/29/12	41	62	7

NEW ALABAMA CLIMATE RECORDS

Highest Precipitation Daily Record						
BESSEMER 3 WSW, AL US	2/4/24	2.02	2/4/18	2.02	47	0
DOTHAN REGIONAL AIRPORT, AL US	2/4/24	1.76	2/4/11	1.24	54	0.52
MONTGOMERY AIRPORT, AL US	2/4/24	2.07	2/4/11	1.66	76	0.41
CLAYTON, AL US	2/5/24	2	2/5/56	1.5	95	0.5
FAYETTE, AL US	2/5/24	2.39	2/5/58	1.9	115	0.49
GENEVA NUMBER 2, AL US	2/5/24	2	2/5/10	2	48	0
HEADLAND, AL US	2/5/24	1.4	2/5/10	1.28	74	0.12
BESSEMER 3 WSW, AL US	2/11/24	1.91	2/11/20	1.35	47	0.56
BIRMINGHAM AIRPORT, AL US	2/11/24	1.61	2/11/67	1.11	94	0.5
MONTGOMERY AIRPORT, AL US	2/11/24	2.94	2/11/13	2.25	76	0.69
TUSCALOOSA AIRPORT ASOS, AL US	2/11/24	1.75	2/11/20	1.45	76	0.3
ALEXANDER CITY, AL US	2/12/24	4.91	2/12/75	1.61	54	3.3
BANKHEAD LOCK AND DAM, AL US	2/12/24	1.73	2/12/65	1.57	67	0.16
BESSEMER 3 WSW, AL US	2/12/24	1.57	2/12/19	0.92	47	0.65
BILLINGSLEY, AL US	2/12/24	3.51	2/12/04	1.5	85	2.01
CAHABA PUMP HOUSE, AL US	2/12/24	1.95	2/12/23	1.36	42	0.59
COFFEEVILLE LOCK AND DAM, AL US	2/12/24	3	2/12/13	1.73	41	1.27
DEMOPOLIS LOCK AND DAM, AL US	2/12/24	2.7	2/12/04	1.9	72	0.8
FORT PAYNE, AL US	2/12/24	2.03	2/12/48	1.65	88	0.38
GAINESVILLE LOCK, AL US	2/12/24	1.75	2/12/23	1.75	76	0
HEFLIN, AL US	2/12/24	1.89	2/12/84	1.68	68	0.21
HOLT LOCK AND DAM, AL US	2/12/24	2.04	2/12/23	1.07	43	0.97
JACKSONVILLE, AL US	2/12/24	1.37	2/12/18	1.15	76	0.22
OPELIKA, AL US	2/12/24	4	2/12/14	1.4	67	2.6
SELMA, AL US	2/12/24	1.82	2/12/05	1.78	129	0.04
TUSCALOOSA OLIVER DAM, AL US	2/12/24	1.73	2/12/65	1.53	124	0.2
WALNUT GROVE, AL US	2/12/24	1.46	2/12/65	1.22	83	0.24
WARRIOR LOCK AND DAM, AL US	2/12/24	2.73	2/12/65	1.91	66	0.82
WETUMPKA, AL US	2/12/24	2.51	2/12/00	2.4	130	0.11
GENEVA NUMBER 2, AL US	2/13/24	1.85	2/13/82	1.79	48	0.06
ALEXANDER CITY, AL US	2/29/24	0.17	2/29/96	0.11	54	0.06
BEVILL LOCK AND DAM, AL US	2/29/24	0.28	2/29/12	0.2	44	0.08
HANCEVILLE, AL US	2/29/24	0.15	2/29/12	0.14	38	0.01
HOLT LOCK AND DAM, AL US	2/29/24	0.3	2/29/12	0.08	43	0.22

CoCoRAHS

Community Collaborative Rain, Hail and Snow Network (CoCoRAHS)							
February 2024							
	Ave. Total Precip.	# Stations		Ave. Total Precip.	# Stations	Normal February Precipitation*	
Autauga	5.71	1	Houston	7.40	2	Abbeville	5.12
Baldwin	2.88	35	Jackson	4.28	6	Alberta	5.06
Barbour	3.37	2	Jefferson	5.45	17	Alex City	5.12
Bibb	n.a.	0	Lamar	5.86	1	Aliceville	5.18
Blount	5.77	6	Lauderdale	4.93	8	Andalusia	5.09
Bullock	n.a.	0	Lawrence	5.94	3	Ashland	5.63
Butler	2.69	1	Lee	7.91	5	Athens	5.51
Calhoun	4.93	2	Limestone	5.04	8	Bay Minette	5.18
Chambers	n.a.	0	Lowndes	n.a.	0	Bessemer	4.85
Cherokee	n.a.	0	Macon	n.a.	0	Billingsly	5.24
Chilton	6.01	1	Madison	4.90	26	Centreville WSMO	5.42
Choctaw	3.76	1	Marengo	n.a.	0	Chatom	5.66
Clarke	4.58	2	Marion	7.77	1	Claiborne L&D	4.95
Clay	4.48	1	Marshall	4.68	10	Clayton	4.73
Cleburne	n.a.	0	Mobile	2.53	24	Dauphin Isl.	5.37
Coffee	n.a.	0	Monroe	1.76	4	Elba	5.19
Colbert	6.02	5	Montgomery	6.61	4	Eufaula WR	4.36
Conecuh	n.a.	0	Morgan	5.18	9	Evergreen	5.57
Coosa	n.a.	0	Perry	n.a.	0	Fayette	5.75
Covington	1.47	1	Pickens	n.a.	0	Geneva 2	5.32
Crenshaw	n.a.	0	Pike	n.a.	0	Greenville	5.32
Cullman	5.42	3	Randolph	4.76	2	Haleyville	5.36
Dale	n.a.	0	Russell	4.19	1	Hamilton 3S	5.77
Dallas	4.37	1	St. Clair	5.15	6	Heflin	5.62
DeKalb	4.45	7	Shelby	5.97	18	Hurtsboro	4.52
Elmore	4.74	4	Sumter	n.a.	0	Jasper	5.18
Escambia	1.31	2	Talladega	4.81	2	Lafayette	5.55
Etowah	5.89	2	Tallapoosa	5.85	2	Livingston	5.07
Fayette	4.81	2	Tuscaloosa	6.16	6	Melvin	5.20
Franklin	n.a.	0	Walker	6.70	2	Milstead	5.14
Geneva	5.97	1	Washington	3.24	1	Moulton	4.71
Greene	n.a.	0	Wilcox	5.61	2	Oneonta	5.23
Hale	n.a.	0	Winston	5.84	3	Perryville	4.97
Henry	n.a.	0				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



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