

Alabama Climate Report

Vol. 1, No. 2

Alabama Office of State Climatologist

The University of Alabama in Huntsville

November 2010

We began November with the entire state of Alabama at some level of drought.

Drought designations for the state are generated each week by a team (which I coordinate) of folks who deal with the state's water resources. These include hydrologists at the four NWS offices which cover various portions of the state, industry representatives, and various state and federal officials responsible for water, wildlife, forests, fisheries, agriculture, etc. These recommendations are forwarded to the Drought Monitor team for inclusion in the weekly national report.

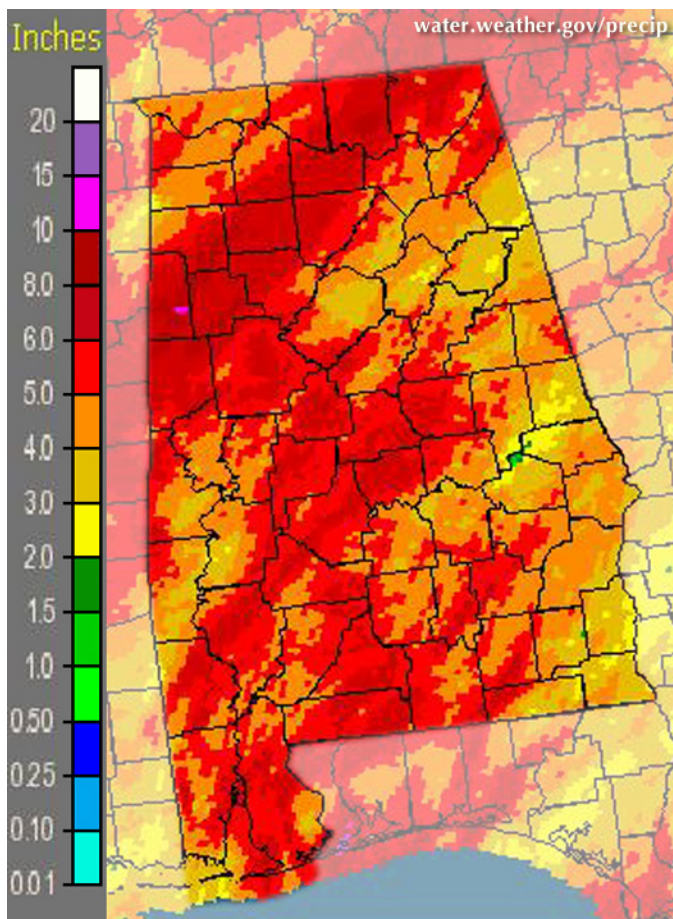
The drought designations of D0 to D4 are given in percentiles. In other words, they depict the percentage of time in recorded history that similar conditions have prevailed at this time of year.

D0 indicates that conditions are in the driest 30 percentile of past occurrences, or about once every 3 years. D1, D2, D3 and D4 represent the driest 20, 10, 5 and 2 percentiles respectively. In August 2007 when most of the state was designated D4, this meant a drought of that scale occurs on average less than once every 50 years (less than 2 % of the time).

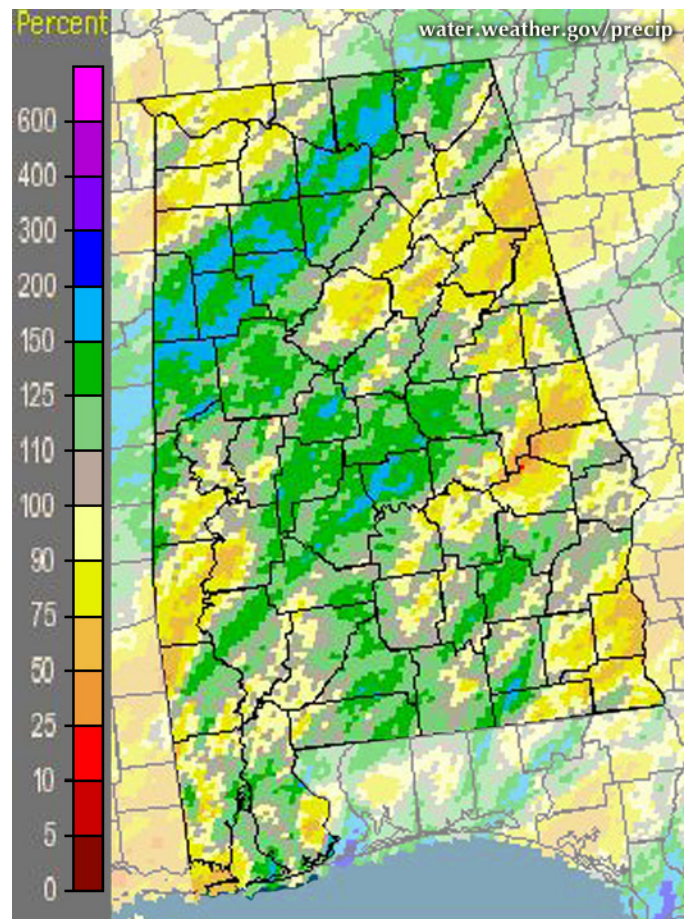
This November, two major weather fronts dropped copious amounts of rain on parts of the state, setting some records for heaviest totals for given days (see records map.)

I measured 4.90 inches of rain at my house from the storm on Nov. 29-30. For sharp-eyed residents looking outside late that evening, there were even some snowflakes to be seen. This heavy rain reduced the "D" levels in those areas, but did not eliminate the drought designations completely: More than 92 percent of the state remains drier than normal.

Continued on page 2



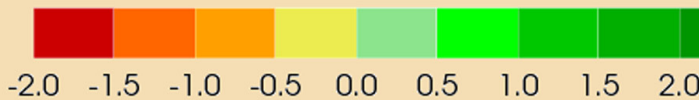
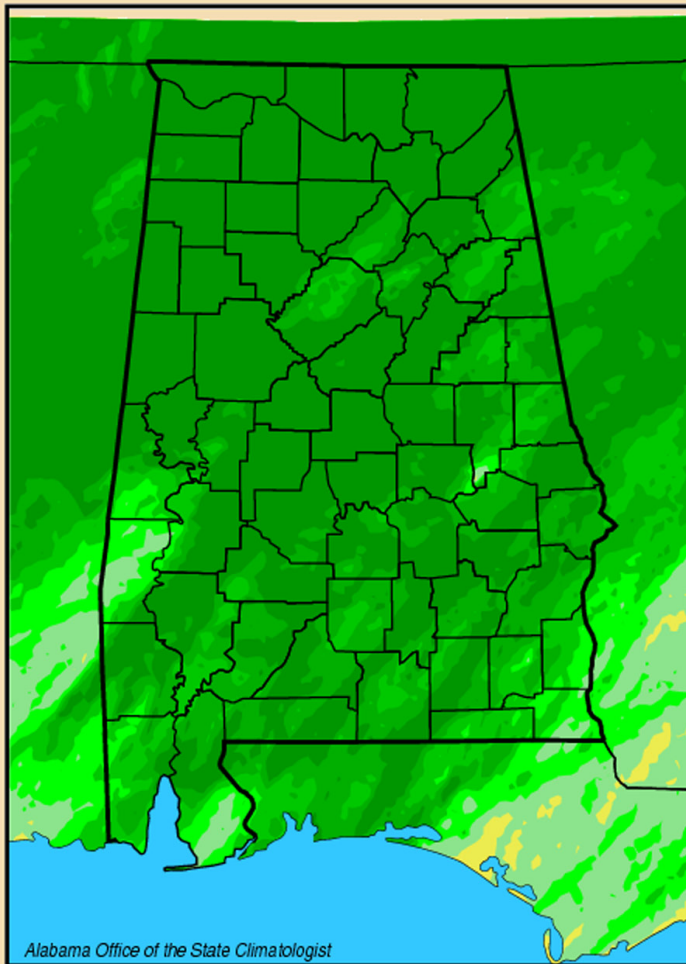
Nov. 2010 NWS multi-sensor precipitation estimate



Nov. 2010 NWS percentage of normal precipitation

The lawn-and-garden moisture index measures the capacity of current soil moisture to sustain healthy lawns and gardens. The index is computed by estimating how much precipitation in the past three weeks contributes to current soil moisture. That rainfall is compared to a "standard" amount of rainfall considered to be adequate for that time of year to sustain healthy lawns and gardens. The difference is the lawn-and-garden moisture index.

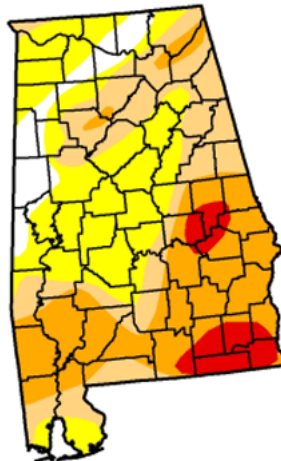
Lawn-and-Garden Moisture Index for December 1, 2010



	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.4	92.6	60.1	35.1	6.3	0.0
Last Week (11/23/2010 map)	0.0	100.0	64.2	36.3	6.3	0.0
3 Months Ago (09/07/2010 map)	42.2	57.8	17.6	0.0	0.0	0.0
Start of Calendar Year (01/05/2010 map)	100.0	0.0	0.0	0.0	0.0	0.0
Start of Water Year (10/05/2010 map)	3.7	96.3	66.3	25.7	4.4	0.0
One Year Ago (12/01/2009 map)	100.0	0.0	0.0	0.0	0.0	0.0

Intensity:

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



U.S. Drought Monitor

<http://drought.unl.edu/dm>



Released Thursday, December 2, 2010
Author: R. Tinker, CPC/NOAA

Some of the longer term (12 month) deficits are still large.

This is a good time to remind everyone that Alabama is part of the CoCoRaHS (Community Collaborative Rain, Hail & Snow Network) nationwide volunteer precipitation network.

<http://www.cocorahs.org/>

Click on the map for Alabama, then the county of interest to see the totals for any day.

About 600 of us in Alabama measure the rain every morning and enter the amounts on this easy-to-use website.

We can always use more observers, especially in counties where no one reports now (see CoCoRaHS table.) So, if you are interested, check out the website, buy a raingauge (about \$25) and join so the world can see how much rain or snow fell on your home.

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Alabama Monthly Climate Summaries

November 2010

	Nov. Mean Nov. Norm	Nov. Hi Temp Record Hi	Nov. Low Temp Record Lo	Total Precip. Normal Prec.	Wettest Nov. Driest Nov.	Heaviest Day Record Day
Anniston	54.0°	79° 11/11/10	27° 11/27/10	3.07"	10.32" 1992	1.41" 11/14-15/10
	53.4°	88° 11/2/74	5° 11/25/50	4.20"	1.03" 1980	3.21" 11/28/48
Auburn	56.1°	79° 11/10-11/10	30° 11/27/10	1.66"	17.77" 1948	0.91" 11/15/10
	53.4°	90° 11/1/35	9° 11/25/50	3.47"	0.23" 1924	7.05" 11/27/48
Birmingham	55.7°	79° 11/11/10	28° 11/27/10	4.82"	9.66" 1986	1.67" 11/15-16/10
	53.1°	85°+ 11/1/00	5° 11/25/50	4.63"	1.67" 1981	4.41" 11/27/83
Brewton	56.9°	80.4° 11/24/10	28° 11/28/10	5.03"	13.01" 1989	1.55" 11/15/10
	56.0°	89°+ 11/1/61	15° 11/28/38	5.16"	1.20" 1993	4.52" 11/8/89
Calera	54.7°	77° 11/11,22/10	28° 11/27/10	4.91"	16.94" 1948	2.09" 11/29-30/10
	53.0°	86° 11/2/74	12° 11/30/59	3.69"	0.00" 1924	4.70" 11/12/29
Clanton	53.0°	76.6° 11/11/10	27.7° 11/28/10	5.65"	17.37" 1986	1.89" 11/15/10
	53.0°	88° 11/1/35	8° 11/25/50	4.96"	0.80" 1981	5.50" 11/12/29
Courtland	50.9°	75.9° 11/11/10	26.2° 11/28/10	4.85"	M	1.50" 11/30/10
	M	M	M	M	M	M
Cullman	50.9°	76.3° 11/11/10	24.3° 11/27/10	5.45"	M	2.10" 11/30/10
	M	M	M	M	M	M
Decatur	51.9°	77° 11/11/10	25° 11/28/10	5.88"	14.26" 1957	2.44" 11/30/10
	51.0°	86° 11/3/35	3° 11/25/50	3.69"	0.00" 1910	3.97" 11/10/91
Dothan	58.1°	80° 11/10,25/10	31° 11/7/10	4.10"	10.29" 1930	1.64" 11/15-16/10
	58.0°	88° 11/5/46	17° 11/25/50	3.01"	0.05" 1931	4.50" 11/7/12
Fairhope	58.4°	80°.6 11/1/10	29.5° 11/28/10	5.84"	12.03" 1997	1.56" 11/15/10
	59.5°	91° 11/2/71	21° 11/25/50	5.19"	0.81" 1981	4.88" 11/2/95
Gadsden	50.0°	75.2° 11/11/10	24.8° 11/27-28/10	6.50"	8.97" 1982	2.46" 11/30/10
	51.8°	87° 11/1/00	14°+ 11/25/70	4.56"	1.30" 1981	4.31" 11/28/73
Gainesville	54.3°	77.5° 11/24/10	29.1° 11/27/10	5.41"	10.24" 1986	1.15" 11/15/10
	53.6°	87° 11/1/61	17°+ 11/30/76	4.51"	0.93" 1998	3.58" 11/28/01
Greensboro	55.1°	79.0° 11/1/10	27.9° 11/27/10	4.13"	14.70" 1986	1.50" 11/15/10
	55.7°	98° 11/7/40	12° 11/25/50	4.47"	0.75" 1981	4.55" 11/12/29
Guntersville	52.7°	74.7° 11/11/10	29.5° 11/27/10	5.98"	8.74" 1983	1.68" 11/16/10
	51.3°	85° 11/12/89	7° 11/30/79	4.45"	1.31" 1971	3.62" 11/19/48
Highland Home	57.6°	77.4° 11/22/10	30.2° 11/27/10	4.59"	11.87" 1997	2.17" 11/15/10
	56.0°	88°+ 11/1/84	10° 11/25/50	4.71"	0.73" 1999	3.20" 11/28/48
Huntsville	53.2°	80° 11/11/10	29° 11/27-28/10	7.69"	11.53" 1977	*4.23" 11/29-30/10
	51.2°	84°+ 11/1/00	15°+ 11/30/76	5.22"	1.82" 1971	3.33" 11/27/73

Alabama Monthly Climate Summaries

November 2010

	Nov. Mean Nov. Norm	Nov. Hi Temp Record Hi	Nov. Low Temp Record Lo	Total Precip. Normal Prec.	Wettest Nov. Driest Nov.	Heaviest Day Record Day
Mobile	60.5°	81° 11/01/10	33° 11/27/10	5.92"	12.70" 1992	2.24" 11/15/10
	58.9°	87°+ 11/2/71	22° 11/25/50	5.41"	0.85" 1981	7.01" 11/6/75
Montgomery	57.1°	81° 11/01,22/10	29° 11/28/10	3.36"	10.18" 1986	1.34" 11/15/10
	56.1°	87°+ 11/8/86	13° 11/25/50	4.53"	0.51" 1981	8.16" 11/26/48
Muscle Shoals	51.0°	77° 11/11/10	25.3° 11/26/10	5.82"	11.06" 1986	2.20" 11/30/10
	51.5°	85° 11/1/00	2° 11/25/50	5.09"	1.90" 1971	3.65" 11/30/91
Russellville	50.1°	75.4° 11/11/10	23.5° 11/28/10	5.54"	9.76" 1986	1.21" 11/30/10
	50.1°	85°+ 11/2/00	10°+ 11/25/70	5.08"	0.84" 1971	3.80" 11/2/99
Scottsboro	49.5°	76.8° 11/11/10	23.9° 11/27/10	6.07"	11.43" 1977	1.70" 11/30/10
	50.2°	85°+ 11/2/00	1° 11/25/50	4.98"	1.52" 1971	4.90" 11/17/27
Selma	54.9°	79.2° 11/1/10	27.5° 11/28/10	5.95"	10.44" 1986	3.02" 11/15/10
	56.2°	91° 11/3/30	13° 11/25/50	4.32"	0.53" 1981	3.62" 11/27/48
Talladega	52.5°	77° 11/11/10	26.2° 11/27/10	4.17"	10.69" 1992	1.52" 11/30/10
	51.4°	86°+ 11/2/74	5° 11/25/50	4.59"	0.66" 1981	3.31" 11/2/92
Thomasville	55.5°	81° 11/1/10	28° 11/27/10	7.31"	11.26" 1986	3.39" 11/30/10
	56.3°	90° 11/4/35	14° 11/25/50	5.31"	0.86" 1981	3.80" 11/6/59
Troy	55.2°	77.7° 11/25/10	27.9° 11/7/10	5.71"	10.53" 1992	2.65" 11/15/10
	56.2°	89° 11/4/35	12° 11/25/50	4.44"	1.33" 1990	6.12" 11/8/43
Tuscaloosa	56.1°	80° 11/01,11/10	28° 11/27/10	6.19"	10.04" 2000	1.48" 11/15-16/10
	55.3°	87°+ 11/3/00	10° 11/25/50	4.84"	0.84" 1985	3.67" 11/11/95
Valley Head	48.8°	74.7° 11/11/10	22.5° 11/27/10	6.71"	9.76" 1983	3.02" 11/30/10
	48.5°	84°+ 11/3/74	-2° 11/25/50	5.00"	1.19" 1971	4.06" 11/5/77
Statewide	54.23°	81° (3 stations)	22.5° Valley Head	5.31"		*4.23" Huntsville
	53.87°	98° Greensboro	-2° Valley Head	4.58"		7.05" Auburn

M: Data is missing or not available

*New Record

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

November 2010

	Ave. Total Precip.	# Stations
Autauga	4.04	4
Baldwin	5.88	30
Barbour	2.77	1
Bibb	6.57	2
Blount	4.99	7
Bullock	---	0
Butler	---	0
Calhoun	3.49	4
Chambers	4.27	1
Cherokee	7.21	1
Chilton	5.75	2
Choctaw	3.59	1
Clarke	4.89	2
Clay	---	0
Cleburne	---	0
Coffee	5.28	2
Colbert	6.13	7
Conecuh	---	0
Coosa	0.91	2
Covington	---	0
Crenshaw	---	0
Cullman	4.56	4
Dale	4.69	1
Dallas	7.08	1
DeKalb	5.53	4
Elmore	4.39	10
Escambia	5.81	1
Etowah	1.49	2
Fayette	7.09	3
Franklin	5.91	2
Geneva	---	0
Greene	---	0
Hale	0.55	1
Henry	3.11	2

	Ave. Total Precip.	# Stations
Houston	2.77	2
Jackson	5.71	7
Jefferson	5.72	12
Lamar	8.26	1
Lauderdale	5.38	18
Lawrence	6.47	2
Lee	3.79	5
Limestone	3.79	5
Lowndes	---	0
Macon	3.92	1
Madison	5.89"	67
Marengo	---	0
Marion	7.94"	1
Marshall	5.15"	12
Mobile	6.52"	19
Monroe	---	0
Montgomery	4.44"	3
Morgan	7.61"	10
Perry	---	0
Pickens	5.46"	1
Pike	---	0
Randolph	4.71"	3
Russell	3.79"	3
St. Clair	5.33"	4
Shelby	5.14"	19
Sumter	---	0
Talladega	4.41"	5
Tallapoosa	5.53"	9
Tuscaloosa	6.00"	4
Walker	5.33"	1
Washington	---	0
Wilcox	5.84"	2
Winston	8.07"	2

**Normal
November
Precipitation***

Abbeville	4.72"
Alex City	4.56"
Aliceville	5.42"
Bay Minette	5.18"
Centreville	4.73"
Coffeeville LD	5.07"
Dauphin Isl.	4.58"
Elba	4.79"
Eufaula	3.38"
Fayette	4.72"
Geneva	4.97"
Haleyville	5.72"
Hamilton	5.32"
Hurtsboro	4.40"
Jasper	4.69"
Lafayette	4.32"
Livingston	4.45"
Melvin	4.62"
Pine Apple	5.06"
Plantersville	4.48"
Rock Mills	4.60"
Rockford	4.59"
Sylacauga	4.75"
Union Springs ..	4.65"
Vernon	5.62"
Wetumpka	4.35"

*NOAA Climatological Annual
Summary, Alabama 2009

New Daily Local Climate Records

November 2010

Maximum High Temperature

	New Record	Previous Record	Previous Year	Period of Record
10 November 2010				
HEFLIN	81.0°F	79.0°F	1999	49
11 November 2010				
HEFLIN	84.0°F	80.0°F	2002	49
ASHLAND 3 ENE	80.0°F	79.0°F	2002	51
HUNTSVILLE INTL AP	80.0°F	79.0°F*	1989	52
12 November 2010				
HEFLIN	86.0°F	80.0°F	1975	47
13 November 2010				
HEFLIN	82.0°F	81.0°F	1978	49
23 November 2010				
HAMILTON 3 S	79.0°F	77.0°F	1999	48
RUSSELLVILLE #2	76.0°F	74.0°F	2003	55
MOULTON 2	75.0°F	73.0°F	2003	52
24 November 2010				
HEFLIN	79.0°F	74.0°F	1973	49
25 November 2010				
ATMORE	80.0°F	79.0°F	1985	47
MUSCLE SHOALS AP	75.0°F	74.0°F*	1987	69
26 November 2010				
HEFLIN	81.0°F	74.0°F	1990	49

Minimum Low Temperature

	New Record	Previous Record	Previous Year	Period of Record
7 November 2010				
LAFAYETTE 2 W	24.0°F	25.0°F	2007	61
8 November 2010				
CENTREVILLE 6 SW	27.0°F	28.0°F	1998	33
GENEVA #2	27.0°F	28.0°F	1984	34
28 November 2010				
GENEVA #2	27.0°F	29.0°F	2002	34

Precipitation

	New Record	Previous Record	Previous Year	Period of Record
3 November 2010				
MOBILE DOWNTOWN AP ...	1.85 in	0.50 in	1961	68
MOBILE RGNL AP	1.60 in	1.51 in	1995	110
VERNON	1.51 in	1.30 in	1982	72
4 November 2010				
MOULTON 2	1.25 in	0.72 in	1992	53
HAMILTON 3 S	0.72 in	0.71 in	1968	48
15 November 2010				
TROY MUNICIPAL AP	2.76 in	2.08 in	2006	41
ROCK MILLS	2.20 in	1.97 in	1976	72
MITCHELL DAM	1.71 in	1.46 in	2006	73
HIGHTOWER	1.25 in	1.16 in	1998	69
MATHEWS	0.74 in	0.73 in	1961	54
16 November 2010				
WALLACE 2 E	3.05 in	2.11 in	2006	69
UNIONTOWN	3.04 in	1.60 in	1918	117
SELMA	2.80 in	2.38 in	1930	115
GREENVILLE	2.48 in	2.20 in	2006	110
CENTREVILLE 6 SW	2.35 in	2.01 in	1986	35
WEST BLOCTON	2.05 in	1.95 in	1954	70
ENTERPRISE 2 W	1.90 in	0.78 in	2002	44
FAIRHOPE 2 NE	1.74 in	1.21 in	2006	93
BANKHEAD L&D	1.54 in	1.05 in	1958	53
HURTSBORO	1.46 in	0.52 in	1989	32
PINSON	1.46 in	0.94 in	2000	30
DAUPHIN IS #2	1.22 in	0.93 in	1977	35
WARRIOR L&D	0.98 in	0.97 in	1961	52
LAFAYETTE 2 W	0.86 in	0.32 in	1956	66
23 November 2010				
TROY MUNICIPAL AP	0.37 in	0.36 in	1998	41
30 November 2010				
BERRY 3 NW	4.50 in	0.68 in	2009	70
HUNTSVILLE INTL AP	3.93 in	1.95 in	1981	52
ADDISON	3.80 in	1.42 in	2001	72
CARBON HILL	3.34 in	1.86 in	1982	72
VERNON	3.00 in	1.20 in	2001	72
MOULTON 2	2.58 in	1.35 in	2004	53
BILLINGSLEY 3 NE	2.27 in	2.20 in	1997	71
BRIDGEPORT 5 NW	2.20 in	1.45 in	1931	114
ALICEVILLE L&D	1.83 in	1.16 in	2001	30
JASPER	1.81 in	1.40 in	2001	50
ATHENS	1.80 in	1.50 in	2004	69
WALNUT GROVE	1.52 in	1.10 in	2001	69
ONEONTA	1.32 in	1.07 in	1978	116
MATHEWS	1.31 in	1.25 in	1974	54
SAND MT SUBSTN	1.30 in	1.16 in	1974	61
FT PAYNE	1.29 in	1.08 in	2001	75
MONTGOMERY AP	1.20 in	1.18 in	1974	62

* This record differs from long-term (100+ year) data in the AOSC climate database:
http://nsstc.uah.edu/alclimate/climate/daily_climate_and_normals.php



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