

Alabama Climate Report

Vol. 1, No. 1

Alabama Office of State Climatologist

The University of Alabama in Huntsville

October 2010

With this report, the Alabama Office of the State Climatologist begins a new informational bulletin describing Alabama's climate of the past month.

Many climate requests made to our office deal with questions about how hot, cold, wet and/or dry the past month has been, so most of what you will see concerns temperature and rainfall.

For example, as shown in these maps, October 2010 was on the dry side statewide until late in the month when some areas in the northern two thirds of the state received heavy rain.

With the maps and tables shown

in this report, we hope to answer most of those "hot, cold, wet and/or dry" questions. We will also point out record events for the month to let you know where these occurrences fit in the long record of Alabama's climate.

The official state archive of Alabama climate records is housed in the Earth System Science Center here at the University of Alabama in Huntsville. I have some spotty records that date to the early 19th century, but the more continuous records don't begin until around 1890. So, when we talk about records for the major stations, we generally have over 100 years of

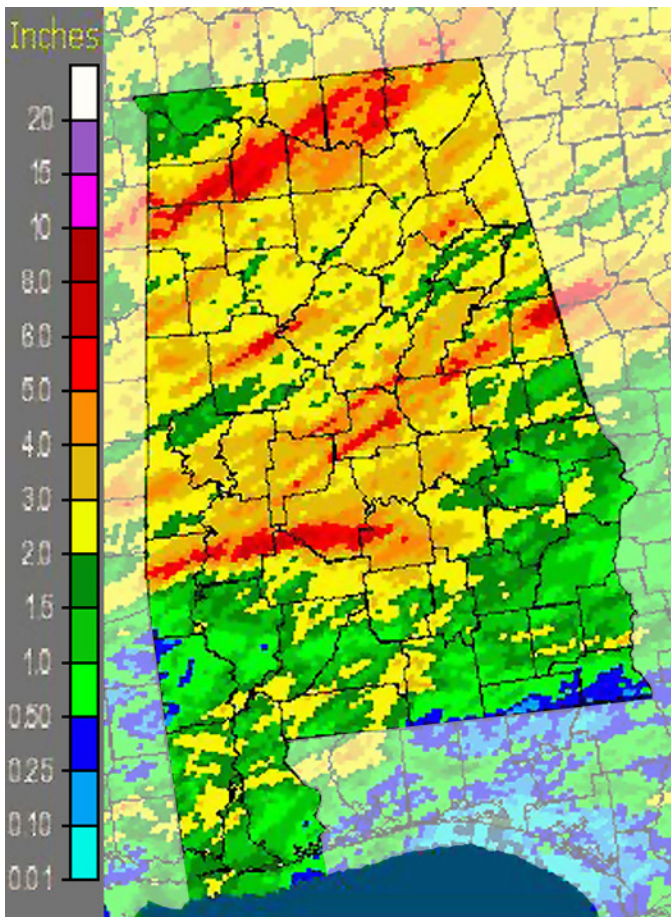
observations, most taken by faithful volunteers through the years.

From time to time we will include stories of past events that made a real impact on the state; stories for example of extreme heat (1925), extreme cold (1966), blizzards (1993), drought (1840), tornadoes (1974) and hurricanes (1979).

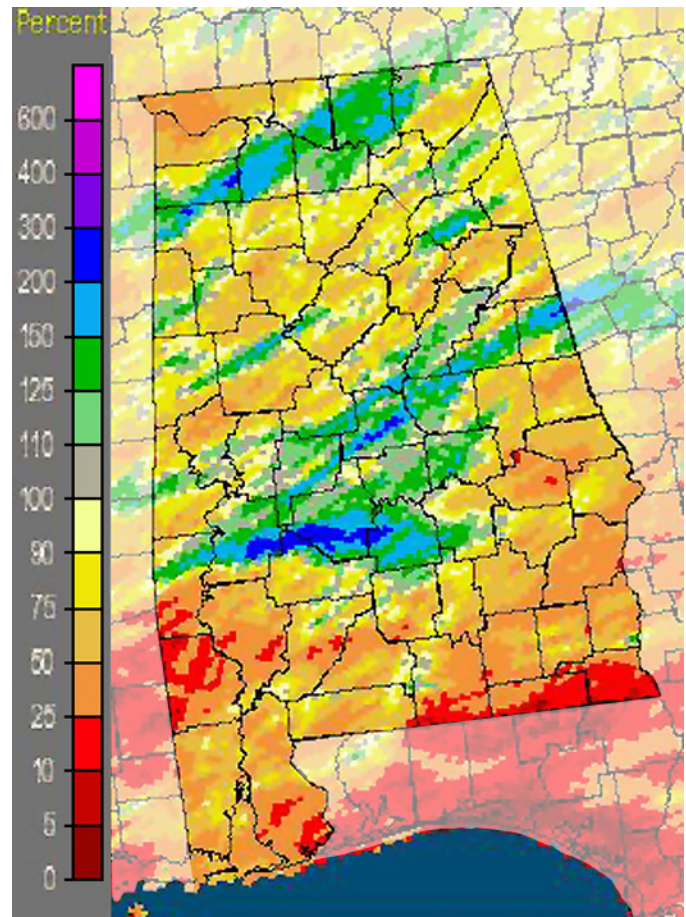
This is the first issue of the Alabama Climate Report, and we expect to enhance the content as time goes on.

We would love to hear from you if there is a particular climate product that you would like to see added or a

Continued on page 2



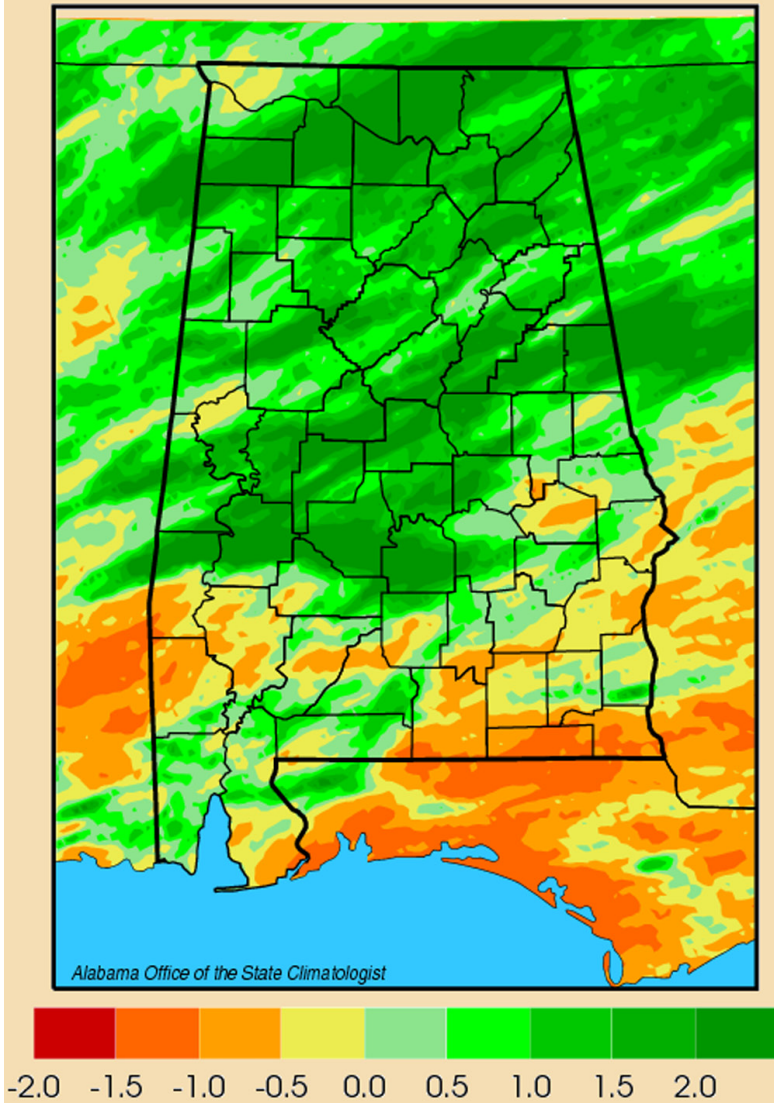
Oct. 2010 NWS multi-sensor precipitation estimate



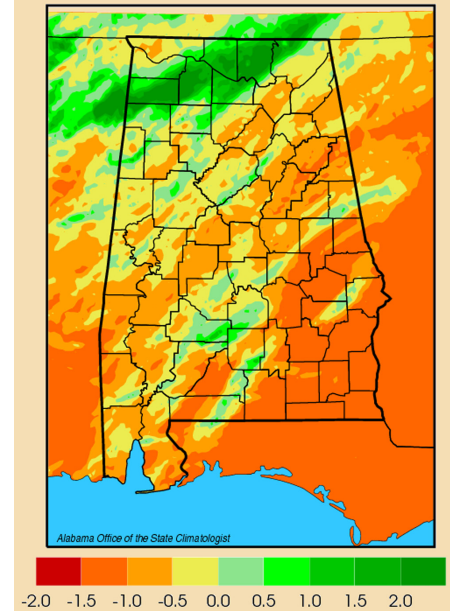
Oct. 2010 NWS percentage of 'normal' precipitation

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 October 31, 2010



Lawn-and-Garden Moisture Index for October 25, 2010



What a difference a week makes
 A cold front that swept through the state in late October brought with it enough rain to take most of the state out of a short-term moisture deficit. Despite that, 100 percent of the state is under drought conditions, including more than 12 percent that has D3 or extreme drought conditions.

short study of some historical event that has raised your curiosity.

Welcome to the Alabama Climate Report. If you know of anyone who would like to receive this report, please let us know.

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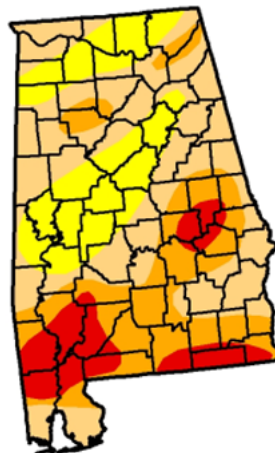
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	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.0	100.0	77.7	35.7	12.4	0.0
Last Week (10/26/2010 map)	0.0	100.0	93.1	44.6	12.0	0.0
3 Months Ago (08/10/2010 map)	32.2	67.8	25.8	0.0	0.0	0.0
Start of Calendar Year (01/05/2010 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 (11/03/2009 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, November 4, 2010
 Author: Mark Svoboda, National Drought Mitigation Center

Alabama Monthly Climate Summaries

October 2010

	Oct. Mean Oct. Norm	Oct. Hi Temp Record Hi	Oct. Low Temp Record Lo	Total Precip. Normal Prec.	Wettest Oct. Driest Oct.	Heaviest Day Record Day
Anniston	63.4°	90° 10/10/10	36° 10/15/10	3.26"	9.35" 1995	2.78" 10/27-28/10
	62.9°	99° 10/05/54	22° 10/30/52	2.87"	0.15" 1978	3.96" 10/8/77
Auburn	66.6°	88° 10/26/10	45° 10/4/10	1.28"	M	0.56" 10/27/10
	62.5°	94°+ 10/6/54	27° 10/28/57	3.40"	M	M
Birmingham	65.2°	90° 10/9-10/10	39° 10/5/10	3.70"	11.9" 1995	2.29" 10/26-27/10
	62.9°	94° 10/06/54	27° 10/28/57	3.23"	0.07" 1991	6.94" 10/3/95
Brewton	65.1°	89° 10/10/10	39° 10/15/10	1.26"	14.95" 1995	0.68" 10/24/10
	64.5°	97°+ 10/5/54	21° 10/30/52	3.09"	0.05" 1998	7.5" 10/5/1995
Calera	64.7°	89° 10/9-10/10	38° 10/30/10	2.96"	M	1.45" 10/27-28/10
	M°	M	M	4.16"	M	M
Clanton	63°	90° 10/10/10	36° 10/10/10	6.55"	10.32" 1995	3.69" 10/27/10
	62°	98° 10/6/54	24° 10/29/57	3.14"	0.00" 1978	6.30" 10/5/95
Courtland	60.5°	87° 10/11/10	32° 10/30/10	5.45"	M	2.32 10/24/10
	M	M	M	M	M	M
Cullman	60.1°	87° 10/11/10	32° 10/30/10	2.81"	10.21" 1995	1.30" 10/26/10
	M	M	M	M	0.33" 2000	M
Decatur	61.1°	89° 10/11/10	31° 10/30/10	5.07"	M	3.31" 10/24-25/10
	M	M	M	M	M	M
Dothan	68.5°	90° 10/8-9/10	42° 10/15/10	0.78"	M	0.43" 10/28/10
	M	95° 10/01/33	29° 10/29/08	3.25"	M	M
Fairhope	65.4°	M	M	1.50"	13.08" 1995	0.87" 10/28/10
	67.9°	93° 10/5/1954	33° 10/21/1989	3.57"	0.00" 1978	7.37" 10/5/1995
Gadsden	60.3°	86° 10/11/10	34° 10/6/10	3.14"	9.00" 1995	1.31" 10/24/10
	61.8°	96° 10/5/1954	23° 10/30/1954	2.95"	0.24" 1978	4.98" 10/26/1997
Gainesville	63.3°	88° 10/26/10	36° 10/30/10	1.92"	8.83" 1985	0.91" 10/27/10
	63.5°	94° 10/1/1981	30° 10/29/2001	3.15"	0.03" 1987	3.86" 10/25/1977
Greensboro	63.8°	85° 10/30/10	90° 10/10/10	2.62"	10.00" 1995	0.93" 10/27/10
	65.3°	100° 10/6/54	24° 10/26/1965	3.37"	0.20" 1987	4.42" 10/21/1959
Guntersville	62.7°	83° 10/26/10	40° 10/30/10	3.47"	7.65" 1977	2.55" 10/26/10
	61.1°	95° 10/5/1954	26° 10/28/1957	3.06"	0.03" 1991	4.00" 10/10/1934
Highland Home	67.3°	87° 10/9-10/10	44° 10/5/10	2.54"	12.13" 1995	1.05" 10/28/10
	64.9°	94° 10/6/1954	29° 10/16/1987	2.67"	0.00" 1973	6.10" 10/1/1965
Huntsville	62.8°	89° 10/9/10	34° 10/30/10	5.06"	12.06" 1975	3.54" 10/24-25/10
	61.3°	96° 10/8/1911	23° 10/30/1963	3.54"	0.01" 2000	4.86" 10/7/1975

Alabama Monthly Climate Summaries

October 2010

	Oct. Mean Oct. Norm	Oct. Hi Temp Record Hi	Oct. Low Temp Record Lo	Total Precip. Normal Prec.	Wettest Oct. Driest Oct.	Heaviest Day Record Day
Mobile	68.4°	91° 10/9/10	41° 10/15/10	4.08"	13.2" 1985	2.25" 10/24-25/10
	67.7°	95° 10/2/1904	30° 10/31/1993	3.25"	0.00" 1978	4.99" 10/29/1985
Montgomery	66.7°	91° 10/10/10	39° 10/30/10	2.57"	7.60" 1995	1.39" 10/27-28/10
	65.4°	100° 10/6/54	26° 10/30/1952	2.58"	0.01" 1978	4.02" 10/4/1964
Muscle Shoals	61°	87° 10/11/10	31° 10/30/10	1.62"	8.25" 1984	0.91" 10/24-25/10
	61.5°	94° 10/12/63	25° 10/27/1961	1.97"	0.00" 2000	3.24" 10/24/86
Russellville	58.9°	86° 10/11/10	28° 10/30/10	5.55"	8.68" 1984	2.90 10/24/10
	59.6°	93° 10/6/54	19° 10/28/61	3.43"	0.16" 2000	3.33" 10/29/70
Scottsboro	58.0°	87° 10/11/10	31° 10/30/10	2.59"	10.99" 1984	0.91" 10/25/10
	60.0°	96° 10/5/54	20° 10/26/68	3.61"	0.36" 1991	4.70" 10/26/97
Selma	64.1°	90° 10/10/10	36° 10/06/10	4.70"	9.24" 1995	2.41" 10/27/10
	65.8°	100° 10/6/1954	27° 10/30/1952	2.59"	0.06" 2000	6.09" 10/5/95
Talladega	62.3°	88° 10/11/10	35° 10/30/10	2.89"	11.01" 1995	1.78" 10/27/10
	60.3°	99° 10/5/1954	23° 10/25/1965	3.36"	0.02" 1978	5.51" 10/5/95
Thomasville	64.7°	91° 10/10/10	35° 10/30/10	1.83"	10.41" 1997	0.94" 10/24/10
	65.7°	100° 10/7/1954	29° 10/31/1993	2.90"	0.03" 1987	5.80" 10/31/67
Troy	63.8°	87° 10/27/10	39° 10/5/10	1.95"	12.19" 1995	1.22" 10/28/10
	64.9°	103° 10/5/1954	28° 10/24/1937	2.84"	0.06" 1987	6.50 10/4/95
Tuscaloosa	65.0°	91° 10/9-10-10	36° 10/30/10	2.12"	9.11" 1995	1.16" 10/24-25/10
	65.0°	98° 10/04/54	23° 10/30/1952	3.47"	0.12" 1987	5.73" 10/25/1977
Valley Head	57.3°	85° 10/11/10	31° 10/30/10	3.92"	9.91" 1995	2.51" 10/26/10
	57.9°	93° 10/5/54	19° 10/27/1961	3.29"	0.10" 1991	6.02" 10/5/95
Statewide	63.44°	91° (4 stations)	28.6° Russellville	2.97"		3.69" Clanton
	63.23°	103° Troy	19° Valley Head & Russellville	3.15"		

*New Record

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS)

October 2010

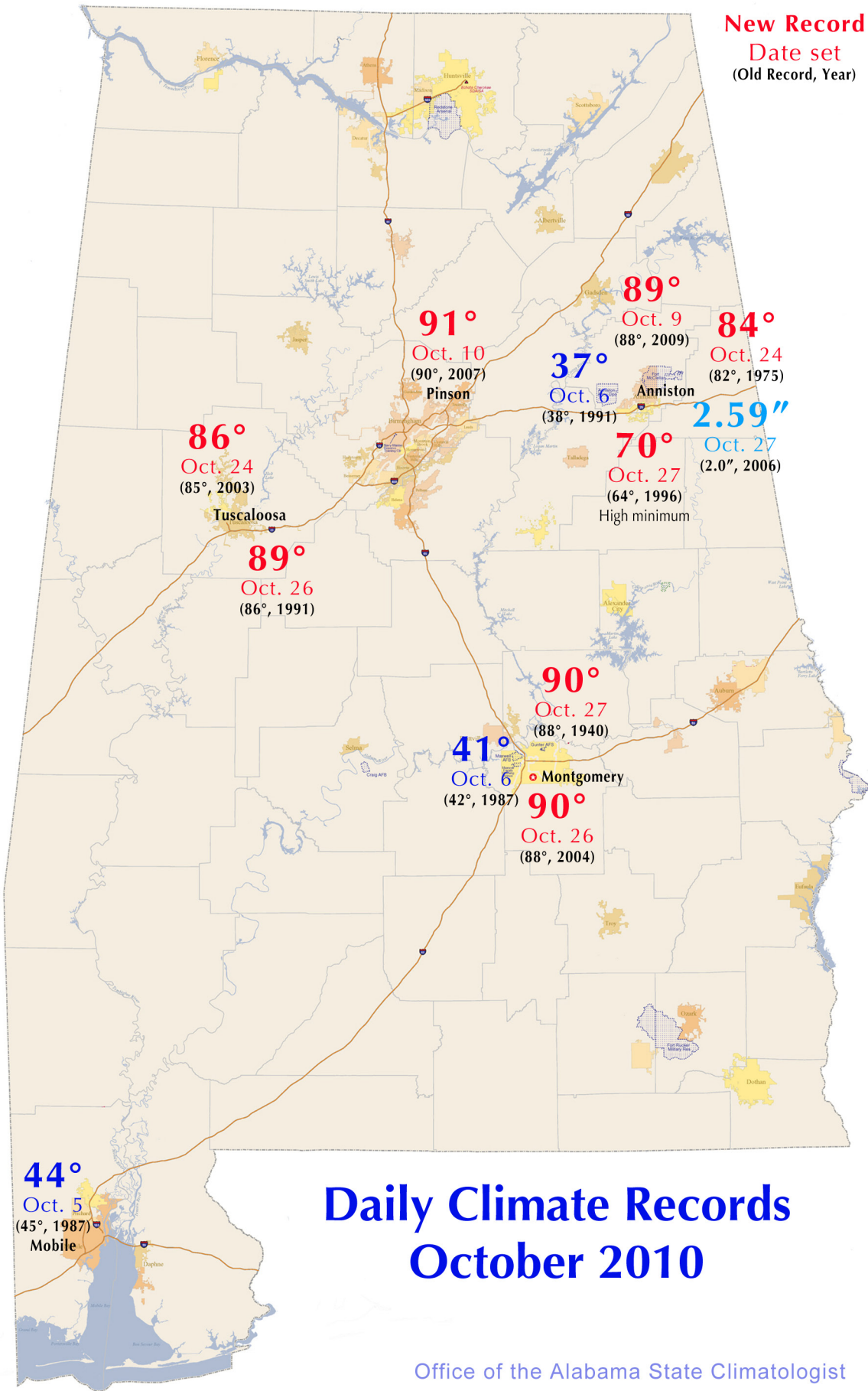
	Ave. Total Precip.	# Stations
Autauga	2.96"	4
Baldwin	1.29"	31
Barbour	1.02"	1
Bibb	2.27"	2
Blount	3.30"	6
Bullock	---	0
Butler	---	0
Calhoun	3.21"	2
Chambers	1.74"	1
Cherokee	2.95"	1
Chilton	4.75"	2
Choctaw	1.43"	1
Clarke	1.04"	2
Clay	---	0
Cleburne	---	0
Coffee	2.00"	2
Colbert	2.59"	7
Conecuh	---	0
Coosa	---	0
Covington	---	0
Crenshaw	---	0
Cullman	3.34"	4
Dale	2.60"	1
Dallas	3.50"	1
DeKalb	3.39"	4
Elmore	3.46"	10
Escambia	2.62"	1
Etowah	3.93"	1
Fayette	3.06"	2
Franklin	4.97"	2
Geneva	---	0
Greene	---	0
Hale	0.80"	1
Henry	0.55"	2

	Ave. Total Precip.	# Stations
Houston	0.68"	2
Jackson	4.08"	7
Jefferson	3.03"	10
Lamar	3.63"	1
Lauderdale	1.89"	16
Lawrence	5.81"	2
Lee	1.01"	4
Limestone	5.31"	15
Lowndes	---	0
Macon	0.56"	1
Madison	5.05"	62
Marengo	---	0
Marion	2.03"	1
Marshall	3.40"	12
Mobile	2.79"	17
Monroe	---	0
Montgomery	1.90"	3
Morgan	4.56"	10
Perry	---	0
Pickens	3.39"	1
Pike	---	0
Randolph	4.26"	3
Russell	1.57"	3
St. Clair	3.19"	5
Shelby	3.52"	17
Sumter	---	0
Talladega	3.79"	5
Tallapoosa	3.33"	9
Tuscaloosa	2.02"	4
Walker	2.24"	1
Washington	---	0
Wilcox	1.96"	2
Winston	2.07"	2

**Normal
October
Precipitation***

Abbeville	2.41"
Alex City	2.84"
Aliceville	3.44"
Bay Minette	3.08"
Centreville	3.32"
Coffeeville LD	3.04"
Dauphin Isl.	3.61"
Elba	3.12"
Eufaula	2.93"
Fayette	3.48"
Geneva	3.01"
Haleyville	3.63"
Hamilton	3.39"
Hurtsboro	2.96"
Jasper	3.63"
Lafayette	2.70"
Livingston	3.60"
Melvin	3.31"
Pine Apple	3.02"
Plantersville	2.81"
Rock Mills	2.69"
Rockford	2.67"
Sylacauga	3.00"
Union Springs	2.93"
Vernon	3.43"
Wetumpka	2.73"

*NOAA Climatological Annual Summary, Alabama 2009



Daily Climate Records October 2010

Office of the Alabama State Climatologist