

The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist

Volume 4, Number 5, February 2014



Dr. John Christy, Alabama State Climatologist

Welcome to national Severe Weather Preparedness Week.

Unfortunately, Alabama had its first 2014 brush of destructive weather on Feb. 20, just one week after our most recent round of snow. As many as five tornadoes dropped onto the state that night, causing widespread damage to buildings, property and trees in Lauderdale, Limestone and DeKalb counties.

The storm system also dumped up to five inches on rain across its front, while straight-line wind gusts of more than 50 mph were widespread. A gust of 71 mph was reported at the Huntsville International Airport.

It would not have seemed a likely time for a weather system of that kind to sweep the state, coming as it did so soon on the heels of a major winter weather event. Widespread snow from Feb. 11 to 13 led to accumulations over 10 inches in some areas, although much of that snow scarcely lasted through the morning of Feb. 14.

Statewide, the southeastern quarter of Alabama was slightly warmer than average in February while the rest of the state was cooler than normal, especially in the most northern tier of counties. For the winter as a whole, all major stations reported a colder than average season, with the western and northern sections experiencing the largest departures from average.

February 2014

Temperature departures
from seasonal norms

Huntsville	-2.8°
Muscle Shoals	-1.9°
Birmingham	-1.7°
Tuscaloosa	-1.1°
Mobile	-0.9°
Dothan	+0.4°
Montgomery	+0.7°
Troy	+1.3°

Winter 2013-14 (Dec.-Feb.)

Temperature departures
from seasonal norms

Huntsville	-3.3°
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Mobile	-2.9°
Birmingham	-2.8°
Muscle Shoals	-2.2°
Tuscaloosa	-2.2°
Montgomery	-1.1°
Dothan	-0.8°
Troy	-0.8°

But cold or snow or not, we live in an area prone to frequent outbreaks of thunderous weather. While most storms generate nothing more noteworthy than a little rain and thunder, we should be prepared for those storms that do much worse.

This March 27 is the 20th anniversary of the Palm Sunday outbreak of tornadoes that killed 42 people and injured 320 others between Alabama and the Carolinas, including the 20 people who died and 90 who were injured when an EF-3 tornado hit the Goshen United Methodist Church in Cherokee County, Ala.

Next month will be the 40th anniversary of the April 3, 1974, tornado super outbreak that generated ten tornadoes in Alabama, including three EF-5 tornadoes. Seventy-seven people in the state were killed and hundreds were injured. Much of downtown Guin was quite literally swept off the map, down to the foundations.

Of course, we don't have to go back that far to make the point that while Alabama gets tornadoes during every month of the year, March is the real beginning of the peak tornado season. That includes March 2013, when ten people were injured by two tornadoes on March 18.

Alabamian's first line of defense in tornado awareness is provided by our National Weather Service offices. When it comes to severe weather, it is good to know that a NOAA weather forecaster has his or her eyeballs on all of the weather information, 24/7, in your county. Four NWS offices serve the state (see map) as they keep track of everything in their "County Warning Areas" or CWAs. Each works closely with adjacent NWS offices to issue watches and warnings because severe storms don't stop at county lines.

Alabama is also served well by a multitude of broadcast meteorologists, who provide real-time explanations and updates of unfolding events to keep us informed. Serving many of these on-air weather warners are private companies, such as Huntsville's Baron Services, who develop state-of-the-art products to give broadcasters high-value visuals of unfolding situations.

With severe weather season upon us, that's why this is a good time to take a few moments to review your own severe weather plans. Identify your safest shelter. Put together an emergency kit, with supplies to last at least three days. Some good information about how to be weather prepared is available online at ready.gov.

- John Christy

U.S. Drought Monitor Alabama

February 25, 2014
(Released Thursday, Feb. 27, 2014)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	90.20	9.80	0.00	0.00	0.00	0.00
Last Week 2/19/2014	88.98	11.02	0.00	0.00	0.00	0.00
3 Months Ago 11/26/2013	77.20	22.80	0.63	0.00	0.00	0.00
Start of Calendar Year 12/01/2013	97.35	2.65	0.00	0.00	0.00	0.00
Start of Water Year 10/1/2013	96.85	3.15	0.00	0.00	0.00	0.00
One Year Ago 2/26/2013	88.56	11.44	1.63	0.00	0.00	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:
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U.S. Department of Agriculture



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

Alabama Monthly Climate Summaries

Feb. 2014

	Station Began	Feb. Mean Feb. Norm	Feb. Hi Temp Record Hi	Feb. Low Temp Record Low	Total Precip. Normal Prec.	Wettest Feb. Driest Feb.	Heaviest Day Record Day
Anniston	2/1903	46.4°	73° 2/22/14	22° 2/27/14	3.95"	8.99" 1990	0.76" 2/12/14
		47.3°	84°+ 2/23/96	4° 2/17/58	4.80"	1.19" 1978	3.40" 2/2/82
Auburn	1/1893	48.2°	73° 2/20/14	25° 2/27/14	4.79"	17.61" 1961	1.10" 2/21/14
		49.9°	82° 2/14/62	7° 2/3/17	5.27"	1.50" 1943	7.83" 2/25/61
Birmingham	1/1930	46.0°	72° 2/23/14	20° 2/27/14	5.37"	9.28" 1971	1.07" 2/2/14
		46.8°	83°+ 2/23/96	3° 2/17/58	4.21"	1.31" 1978	5.46" 2/21/61
Brewton	4/1977	51.4°	77.7° 2/19/14	24.1° 2/28/14	5.52"	12.19" 1982	1.38" 2/12/14
		51.0°	87° 2/13/62	11°+ 2/4/70	5.67"	1.45" 1980	8.18" 2/11/81
Calera	9/1900	48.2°	74 2/20/14	24° 2/27/14	5.60"	15.62" 1961	0.96" 2/4/14
		46.5°	85° 2/13/62	4° 2/10/79	5.32"	0.61" 1968	5.55" 2/3/36
Clanton	2/1893	46.5°	74.2° 2/19/14	22.7° 2/28/14	4.24"	10.22" 1998	1.21" 2/12/14
		46.6°	84° 2/14/62	5° 2/5/96	5.48"	2.27" 2000	4.87" 2/4/36
Courtland		41.4°	74.2° 2/20/14	16.6° 2/27/14	5.46"	M	1.43" 2/2/14
		M	M	M	M	M	M
Cullman	7/1907	42.4°	71.8° 2/20/14	14.4° 2/27/14	5.65"	M	1.97" 2/2/14
		M	M	M	M	M	M
Decatur	2/1880	41.6°	74° 2/20/14	16° 2/27/14	4.34"	12.16" 1939	1.57" 2/20/14
		44.2°	83° 2/14/62	-12° 2/13/1899	4.88"	0.79" 1968	3.86" 2/1/51
Dothan	2/1902	53.4°	81° 2/20/14	29° 2/28/14	4.80"	10.36" 1939	2.23" 2/12/14
		53.5°	84° 2/25/44	12° 2/3/51	4.80"	0.93" 1951	4.26" 2/9/37
Fairhope	8/1917	M	M	M	M	11.61" 1983	M
		53.1°	87° 2/19/82	3° 2/3/51	5.47"	0.82" 1999	8.61" 2/11/81
Gadsden	7/1893	41.5°	68.3° 2/23/14	18.2° 2/27/14	5.08"	10.12" 1990	1.22" 2/2/14
		44.1°	82° 2/13/62	1° 2/1/66	4.91"	0.71" 1978	4.75" 2/21/61
Gainesville Lock	6/1948	46.4°	81.0° 2/20/14	22.4° 2/27/14	6.11"	11.00" 1983	1.31" 2/2/14
		47.2°	87° 2/14/62	9°+ 2/6/96	4.99"	1.55" 2000	5.36" 2/16/90
Greensboro	2/1890	47°	80.6° 2/20/14	21.8° 2/27/14	5.72"	12.72" 1990	0.99" 2/21/14
		50°	87° 2/13/62	7° 2/4/96	5.37"	1.64" 2000	5.18" 2/21/61
Highland Home	3/1892	50.5°	75.9° 2/19/14	25.8° 2/27/14	6.56"	10.78" 1975	1.40" 2/12/14
		49.4°	86° 2/19/56	7°+ 2/6/96	5.35"	1.20" 1980	5.33" 2/17/75
Huntsville	1/1959	42.9°	73° 2/20/14	19° 2/27/14	6.57"	10.14" 1994	2.14" 2/20/14
		43.8°	83° 2/23/96	1° 2/4/96	4.70"	0.59" 1978	4.04" 2/10/94

Alabama Monthly Climate Summaries

Feb. 2013

	Station Began	Feb. Mean Feb. Norm	Feb. Hi Temp Record Hi	Feb. Low Temp Record Lo	Total Precip. Normal Prec.	Wettest Feb. Driest Feb.	Heaviest Day Record Day
Mobile	3/1900	52.9°	77° 2/19/14	27° 2/7/14	4.20"	11.89* 1983	1.37" 2/21/14
		53.5°	84° 2/13/62	11°+ 2/5/96	5.10"	1.09* 1999	5.37" 2/10/81
Montgomery	6/1948	51.2°	80° 2/19/14	24° 2/28/14	5.15"	9.87* 1982	1.31" 2/12/14
		50.5°	85° 2/13/62	10°+ 2/5/96	5.45"	1.11* 1999	5.54" 2/24/61
Muscle Shoals	12/1940	43.3°	77° 2/20/14	18° 2/27/14	4.00"	10.74* 1991	1.48" 2/2/14
		44.6°	83° 2/13/62	-2° 2/18/58	4.46"	0.51* 1978	5.03" 2/12/48
Russellville	9/1953	41.5°	74.1° 2/20/14	13.1° 2/27/14	5.22"	11.28* 1989	1.48" 2/2/14
		42.5°	84° 2/24/96	-12°+ 2/19/58	4.81"	0.98* 1972	6.75" 2/19/91
Scottsboro	10/1891	41.6°	70.9° 2/20/14	15.7° 2/27/14	5.98"	9.60* 1990	1.55" 2/2/14
		43.0°	82° 2/15/89	-8° 2/1/66	5.22"	0.77* 1978	4.10" 2/16/95
Selma	1/1895	48.7°	78.3° 2/19/14	22.1° 2/28/14	4.40"	9.97* 1982	0.90" 2/12/14
		50.5°	85° 2/27/62	9° 2/3/51	4.87"	1.54* 2000	5.31" 2/3/82
Talladega	2/1888	45.2°	73.0° 2/2/14	19.5° 2/27/14	4.72"	10.37* 1983	1.10" 2/21/14
		44.9°	84°+ 2/26/77	2° 2/18/58	5.11"	1.20* 1978	4.51" 2/21/61
Thomasville	9/1891	48.5°	79.4° 2/20/14	22.6° 2/28/14	6.16"	14.37* 1929	1.30" 2/4/14
		49.9°	86° 2/10/32	-5° 2/13/1899	5.25"	1.27* 2000	7.15" 2/11/1897
Troy	6/1908	51.2°	81° 2/20/14	23° 2/28/14	5.86"	10.87* 1975	1.40" 2/12/14
		50.3°	85°+ 2/17/01	10°+ 2/6/96	4.83"	0.93* 2000	5.60" 1/11/81
Tuscaloosa	6/1948	47.6°	81° 2/20/14	23° 2/27/14	5.63"	12.70* 1983	1.19" 2/2/14
		49.8°	86° 2/13/62	5° 2/2/51	5.07"	1.73* 1978	5.44" 1/21/61
Valley Head	1/1893	41.2°	69.3° 2/23/14	13.2° 2/27/14	5.41"	14.73* 1990	1.36" 2/2/14
		40.6°	80° 2/14/62	-12°+ 1/19/58	5.62"	0.74* 1978	7.39" 2/16/90
Statewide Feb. 2013		46.8°	81° 4 stations	13.1° Russellville	5.22"	17.61* Auburn	2.23* Dothan
Feb. Norm		47.5°	87° 4 stations	-12° 3 stations	5.06"	0.59* Huntsville	8.61* Fairhope

M: Data is missing or not available

*New Record

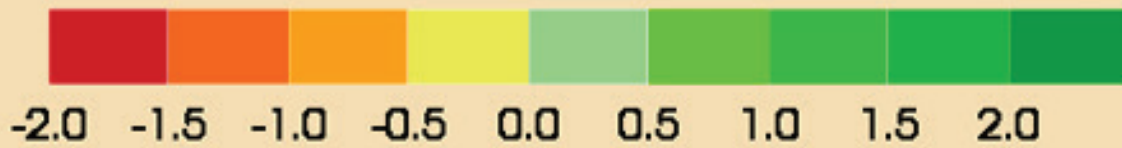
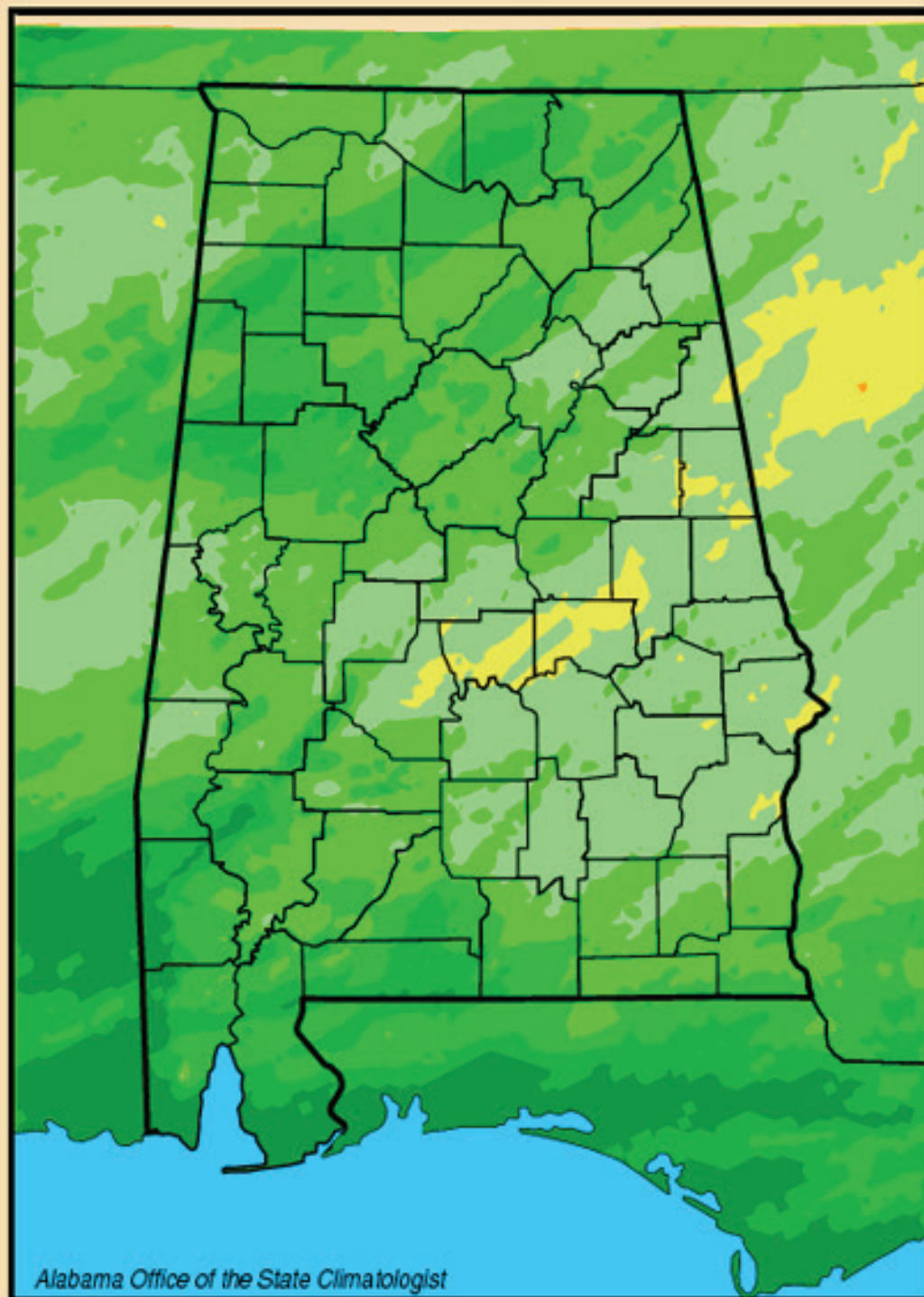
#This data is missing this month due to an instrument malfunction

^ This record differs from long-term data in the AOSC climate database:

http://nsstc.uah.edu/alclimate/climate/daily_climate_and_normals.php



Lawn-and-Garden Moisture Index for March 3, 2014



Total Precipitation - February 2014

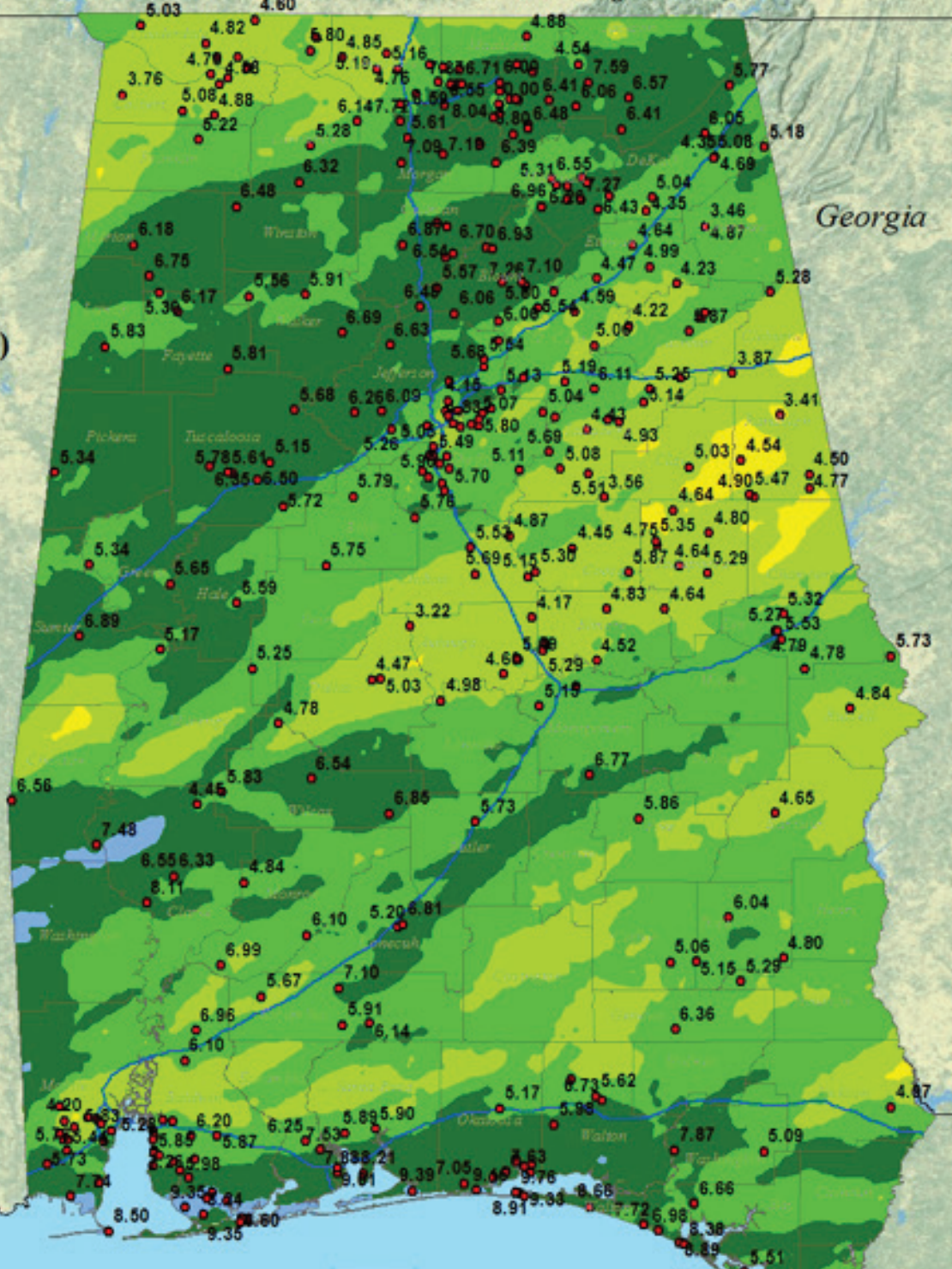
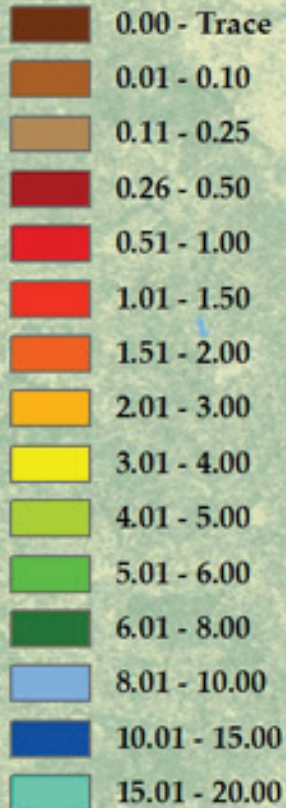
Source: Co-Op Sites, ASOS Observations, CoCoRaHS Observers, and RFC Estimates
Created by the National Weather Service Forecast Office, Birmingham, Alabama



Birmingham, AL

GIS

Rainfall (Inches)

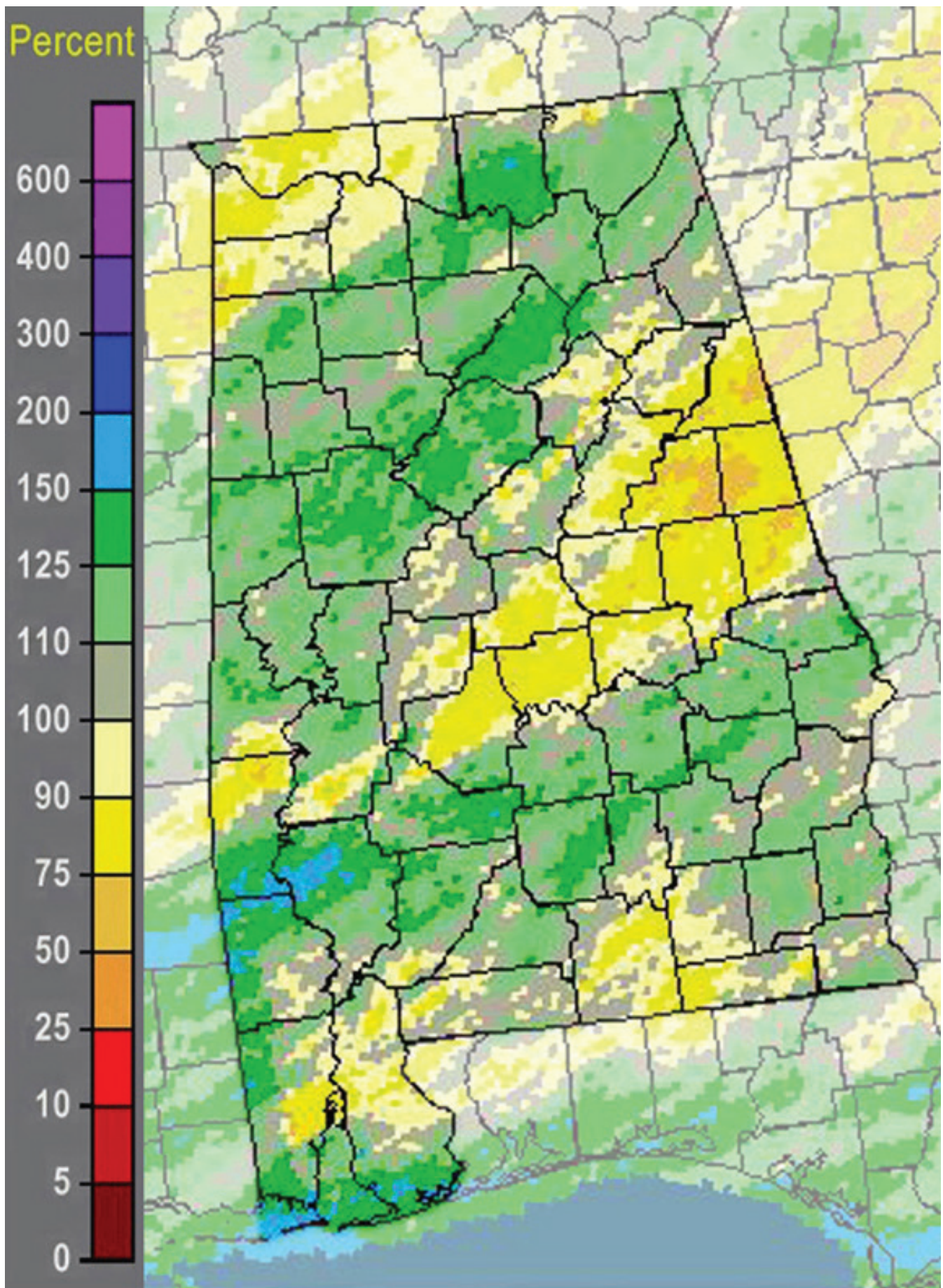


U.S. National Weather Service
Birmingham Alabama



@NWSBirmingham
#bmxwx

This map is an interpolation of actual reported values combined with RFC estimates and should be considered as an estimation only.
Precip totals are from 7am Feb. 1st through 7am Mar. 1st, 2014.



water.weather.gov

Feb. 2014 NWS percentage of normal precipitation

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