



SOUTHERN CLIMATE *MONITOR*

JANUARY 2011 | VOLUME 1, ISSUE 1

IN THIS ISSUE:

Page 2 - Welcome to the Southern Climate Monitor!

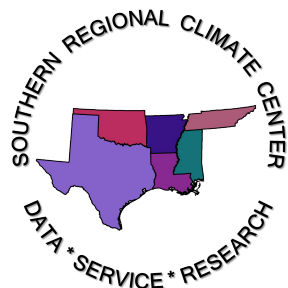
Page 3 - Southern U.S. Temperature Summary for January

Page 4 - Southern U.S. Precipitation Summary for January; Climate Perspective

Page 5 - Drought Update; Station Summaries Across the South

Page 6 - Southern Climate 101; Contact Us

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LSU



SCIPP
Southern Climate Impacts Planning Program



WELCOME TO THE SOUTHERN CLIMATE MONITOR!

James Hocker, Southern Climate Impacts Planning Program

On behalf of our team, I would like to welcome you to the inaugural issue of the new *Southern Climate Monitor*! The *Southern Climate Monitor* – or *Monitor* for short – is a new, experimental climate outreach publication focused specifically on the south central United States. Co-produced by regional climate programs specializing in data and research in the South, the *Monitor* will provide a blend of climate information and content on a monthly basis. Initially, this information will include summaries of recent climate conditions, recent summary data from across the region, and a monthly spotlight on a special topic such as a research project, an upcoming seasonal forecast, a special look back at an extreme climate event, or an educational focus on a particular climate phenomena. The intended audience of the *Monitor* are decision makers and persons in climate-sensitive professions – such as hazard mitigation planners, water planners, etc. – as well as anyone with a general interest in learning more about the region's weather and climate.

Who is creating the *Monitor*?

The *Monitor* is a partnership effort between several National Oceanic and Atmospheric Administration (NOAA) supported regional climate programs. Contributors to the *Monitor* include the Southern Regional Climate Center – an operational climate data and service provider based out of Louisiana State University – and the Southern Climate Impacts Planning Program, which is a climate research, tool development, and stakeholder engagement program based out of the University of Oklahoma and Louisiana State University.

What region will the *Monitor* focus on?

The *Monitor* will focus solely on the south central U.S. region of Oklahoma, Texas, Arkansas, Louisiana, Tennessee, and Mississippi. This region is a shared area of responsibility for the Southern Regional Climate Center as well as the Southern Climate Impacts Planning Program.

What is meant by “experimental” publication?

The value of data and information is best measured in its applicability and use. With that in mind, it is the goal of our team here at the *Monitor* to modify this monthly publication to best suit your information needs. Perhaps there is a set of information that you would like to see incorporated into the *Monitor* or conversely, a particular section you find less useful. In other words "experimental" implies that the *Monitor* is a constant work in progress and gives us the flexibility to alter the content to best accommodate your interests. This type of two-way improvement allows us to systematically improve the types of information and data we provide over time. Feel free to contact us at any time with suggestions; our contact information can be found on page 6.

More about the Southern Regional Climate Center (SRCC)

The SRCC is one of six NOAA regional climate centers established across the United States. The core mission of the SRCC is to collect, enhance, and deliver climate data and products to citizens and interests across the South. Furthermore, SRCC fulfills data requests, provides education and outreach, conducts applied climatological research, and develops new products and tools to deliver information.

More about the Southern Climate Impacts Planning Program (SCIPP)

SCIPP is one of eleven regional, university-based teams in the NOAA Regional Integrated Sciences and Assessments (RISA) program. As part of this network, SCIPP conducts a variety of integrated physical and social science research focusing on a variety of climate-related planning issues for the Southern U.S. including climate hazard planning, drought planning, and climate adaptation planning. The ultimate mission of the program is to increase the region's preparedness for future climate hazards.

TEMPERATURE SUMMARY

Luigi Romolo, Southern Regional Climate Center

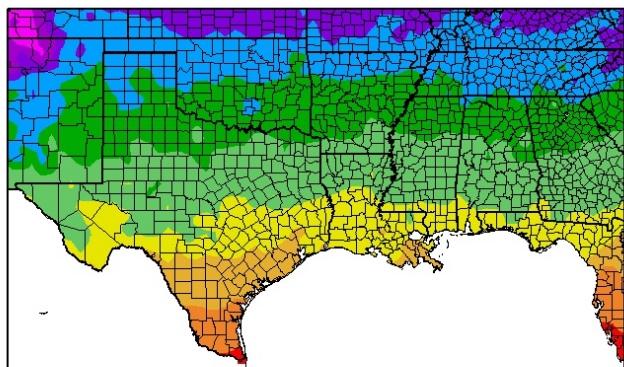
January temperatures in the Southern Region were consistently below normal by 0 to 4 degrees F (0 to 2.2 degrees C), with little spatial variation among temperature anomalies. The average temperatures for the six states were:

37.4 degrees F (3.0 degrees C) in Arkansas,
46.8 degrees F (8.2 degrees C) in Louisiana,
41.8 degrees F (5.4 degrees C) in Mississippi,
34.5 degrees F (34.5 degrees C) in Oklahoma,

34.1 degrees F (1.2 degrees C) in Tennessee, and
44.8 degrees F (7.1 degrees C) in Texas.

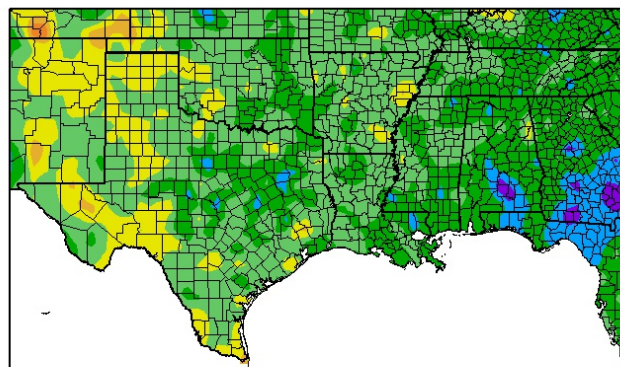
Although it was a generally cooler than normal month for the region, none of the state temperature values were close to setting records. The rankings for the above values ranged from the twenty-third coldest January on record (1895-2011) in Mississippi, to the the thirty-eighth coldest January on record (1895-2011) in Texas.

Temperature (F)
1/1/2011 – 1/31/2011



Generated 2/11/2011 at HPRCC using provisional data. Regional Climate Centers

Departure from Normal Temperature (F)
1/1/2011 – 1/31/2011



Generated 2/11/2011 at HPRCC using provisional data. Regional Climate Centers

Average temperatures (left) and departures from 1971-2000 normal average temperatures (right) for January 2011, across the South.

CLIMATE PERSPECTIVE

State	Temperature	Rank	Precipitation	Rank
Arkansas	37.4	28th Coldest	1.62	15th Driest
Louisiana	46.8	26th Coldest	4.71	54th Driest
Mississippi	41.8	23rd Coldest	4.33	46th Driest
Oklahoma	34.5	29th Coldest	0.29	8th Driest
Tennessee	34.1	25th Coldest	3.10	27th Driest
Texas	44.8	38th Coldest	1.55	61st Driest

State temperature and precipitation values and rankings for January 2011. Ranks are based on the National Climatic Data Center's Statewide, Regional and National Dataset over the period 1895-2011.

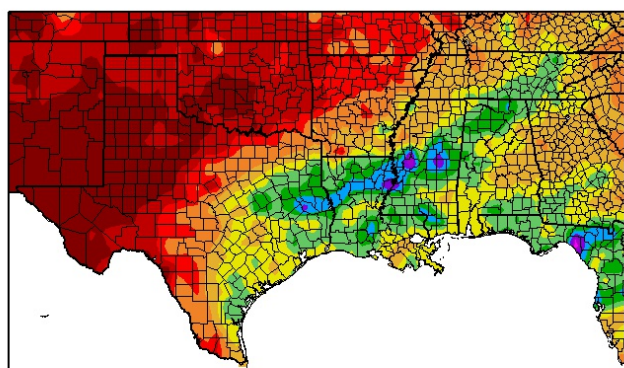
PRECIPITATION SUMMARY

Luigi Romolo, Southern Regional Climate Center

With the exception of southern Texas, much of the Southern Region experienced its fourth consecutive drier than normal month. The Southern Region continues to struggle through a strong drought, and little to no precipitation through much of the northwestern tier of the region did little to help that cause. The driest areas of the region included Oklahoma, the northern two thirds of Arkansas and much of north western Texas. The majority of stations in those regions received only a quarter of the precipitation that is normally expected in January. In fact dozens of stations reported no precipitation at all. In Arkansas, most stations received between 25 and 50 percent of normal precipitation. In total, Oklahoma averaged only 0.29 inches (7.37 mm) of precipitation for the month, making it the eighth driest January there on record (1895-2011). Arkansas

averaged 1.62 inches (41.15 mm) for the month, which was their fifteenth driest January on record (1895-2011). In Texas, the January average precipitation total was a near average value of 1.52 inches (38.61 mm). The state average is somewhat skewed by the fact that it was extremely dry in the northern half of the state, and quite wet in the southern half. Louisiana also had a near average month for precipitation. The state average precipitation total was 4.71 inches (119.63 mm), which is only slightly below average. In Mississippi, the state average precipitation total was 4.33 inches (109.98 mm), which like Louisiana, is a little on the dry side of average. Tennessee averaged 3.10 inches (78.74 mm), which was the twenty-seventh driest January on record (18-95-2010).

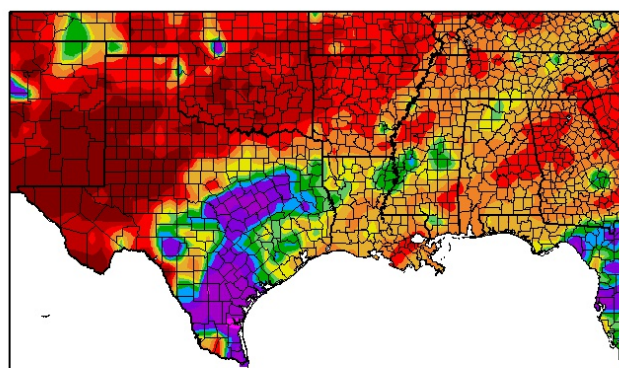
Precipitation (in)
1/1/2011 – 1/31/2011



Generated 2/11/2011 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)
1/1/2011 – 1/31/2011



Generated 2/11/2011 at HPRCC using provisional data.

Regional Climate Centers

Total precipitation values (left) and the percent of 1971-2000 normal precipitation totals (right) for January 2011.

DROUGHT CONDITIONS

Luigi Romolo, Southern Regional Climate Center

Drought conditions did not change much over the month of January in the Southern Region. Extremely dry conditions in the western Texas panhandle has led to a one category deterioration to severe drought. Similar dryness in western Mississippi has also led to the introduction of severe drought. Anomalously high

January precipitation totals in southern Texas has led to some improvements. For instance, much of the gulf coast in Texas is now drought free. There are still, however, some small pockets of moderate drought in the extreme southern tip of the state. Similar improvements also occurred in south central

Louisiana and central Mississippi. Based on the February 1 report of the United States Drought Monitor, 6.59% of the Southern Region is experiencing extreme drought, which is an improvement of 3.58% from December 2010. In addition, only 58.97% of the region is classified as moderate drought or worse. Last month, this value was 67.65%.

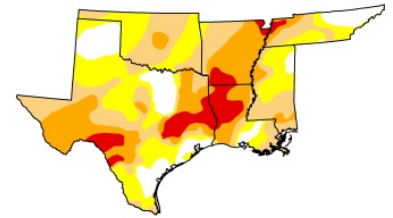
U.S. Drought Monitor

January 25, 2011

Valid 7 a.m. EST

South

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	13.45	86.55	59.16	30.84	8.46	0.00
Last Week (01/18/2011 map)	15.38	84.62	58.49	27.99	8.45	0.00
3 Months Ago (10/26/2010 map)	43.50	56.50	36.65	18.63	4.62	0.00
Start of Calendar Year (12/28/2010 map)	8.86	91.14	67.65	35.21	10.17	0.00
Start of Water Year (09/28/2010 map)	64.23	45.78	20.04	6.79	0.83	0.00
One Year Ago (01/19/2010 map)	86.83	13.18	3.01	1.03	0.00	0.00



Intensity:

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

(To the Right) Drought conditions in the Southern Region. Map is valid for January 2011. Image courtesy of the National Drought Mitigation Center.

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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



Released Thursday, January 27, 2011
R. Heim/L. Love-Brotak, NOAA/NESDIS/NCDC

STATION SUMMARIES ACROSS THE SOUTH

Station Name	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	%Norm
El Dorado, AR	51.5	31.5	41.5	-2.1	73.0	1/29	15.0	1/13	3.2	-1.7	65
Little Rock, AR	48.7	29.9	39.3	-0.8	77.0	1/29	13.0	1/13	0.9	-2.7	26
Baton Rouge, LA	59.3	37.6	48.5	-1.6	73.0	1/31	21.0	1/13	5.3	-0.9	85
New Orleans, LA	60.4	41.8	51.1	-1.5	73.0	1/18+	28.0	1/14+	4.1	-1.8	70
Shreveport, LA	53.7	35.3	44.5	-1.9	73.0	1/29+	20.0	1/13	4.4	-0.2	95
Greenwood, MS	50.0	30.8	40.4	-3.5	72.0	1/29	13.0	1/13	2.4	-2.8	46
Jackson, MS	53.9	33.9	43.9	-1.1	73.0	1/29	18.0	1/13	4.5	-1.2	79
Tupelo, MS	47.2	29.3	38.3	-2.1	75.0	1/29	7.0	1/13	2.6	-2.6	50
Oklahoma City, OK	49.4	22.6	36.0	-0.7	76.0	1/29+	9.0	1/13	0.1	-1.2	8
Ponca City, OK	44.5	18.2	31.3	-2.5	76.0	1/29	1.0	1/13+	0.1	-1.1	7
Tulsa, OK	46.0	22.2	34.1	-2.3	76.0	1/29	7.0	1/12	0.6	-1.0	36
Knoxville, TN	44.2	27.7	36.0	-1.7	68.0	1/30	12.0	1/14+	3.4	-1.2	75
Memphis, TN	46.9	30.8	38.9	-1.0	71.0	1/29	14.0	1/12	1.5	-2.8	35
Nashville, TN	42.9	25.8	34.4	-2.4	66.0	1/29	13.0	1/9	2.3	-1.7	58
Amarillo, TX	51.0	20.2	35.6	-0.2	72.0	1/29	2.0	1/11	0.1	-0.6	10
El Paso, TX	58.8	30.3	44.5	-0.6	73.0	1/19	20.0	1/2	0.0	-0.5	0
Dallas, TX	53.7	31.9	42.8	-1.3	75.0	1/29+	20.0	1/21	1.6	-0.3	84
Houston, TX	61.1	41.6	51.3	-0.5	75.0	1/29+	26.0	1/12	5.1	1.4	137
San Antonio, TX	61.4	39.6	50.5	0.2	80.0	1/30	27.0	1/21	2.7	1.0	160

Summary of temperature and precipitation information from around the region for January 2011. Data provided by the Applied Climate Information System. On this chart, "depart" is the average's departure from the normal average, and "% norm" is the percentage of rainfall received compared with normal amounts of rainfall. Plus signs in the dates column denote that the extremes were reached on multiple days. Blue-shaded boxes represents cooler than normal temperatures; red-shaded boxes denote warmer than normal temperatures; brown shades represent drier than normal conditions; and green shades denote wetter than normal conditions.

SOUTHERN CLIMATE 101

Have a question about Southern U.S. climate? Let us know and we may feature the answer in a future issue of the Monitor!

In future issues of the Monitor, we will select a user submitted climate question and provide a reply, to appear in this spot on the back page of the Monitor. Though any aspect of climate is fair game, we will give greatest consideration to questions pertaining to extreme weather & climate events, recent conditions, and climate-related issues relevant to the South Central U.S. - specifically the states of Oklahoma, Texas, Arkansas, Louisiana, Tennessee, and Mississippi. For instance, perhaps you recently experienced a significant winter storm and you were curious how rare it was from a historical perspective. Contact us at **monitor@southernclimate.org** and we will consider your question among all the others we receive. In the subject line of your message, please use "Southern Climate 101." We look forward to your submissions!

Have a climate question, but do not want it to be answered in a public forum? No problem! Feel free to contact us at one of the options listed below, and we will do our best to address your question.

CONTACT US

The *Monitor* is an experimental climate outreach and engagement product of the Southern Regional Climate Center and Southern Climate Impacts Planning Program. To provide feedback or suggestions to improve the content provided in the *Monitor*, please contact us at **monitor@southernclimate.org**. We look forward to hearing from you and tailoring the *Monitor* to better serve you. You can also find us online at **www.srcc.lsu.edu** and **www.southernclimate.org**.

For any questions pertaining to historical climate data across the states of Oklahoma, Texas, Arkansas, Louisiana, Mississippi, or Tennessee, please contact the Southern Regional Climate Center at 225-578-502. For questions or inquiries regarding research, experimental tool development, and engagement activities at the Southern Climate Impacts Planning Program, please contact us 405-325-7809 or 225-578-8374.

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