Storm Data and Unusual Weather Phenomena - December 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details

ALABAMA, Central

(AL-Z037) TALLAPOOSA, (AL-Z038) CHAMBERS, (AL-Z043) ELMORE, (AL-Z045) MACON, (AL-Z047) LEE

	12/01/10 00:00 CST	0	Drought
	12/31/10 23:59 CST	0	

With below normal precipitation during the month of December, ongoing drought conditions persisted across a portion of Central Alabama through the month of December. The hardest hit area continues to be portions of eastern Alabama, from extreme eastern Elmore county and extreme northern Macon county northeastward across portions of Lee, Tallapoosa, and Chambers counties, where Extreme (D3) drought conditions were identified by the U.S. Drought Monitor.

(AL-Z029) RANDOLPH, (AL-Z036) COOSA, (AL-Z037) TALLAPOOSA, (AL-Z038) CHAMBERS, (AL-Z043) ELMORE, (AL-Z044) MONTGOMERY, (AL-Z045) MACON, (AL-Z047) LEE, (AL-Z049) PIKE, (AL-Z050) BARBOUR

	12/01/10 00:00 CST	0	Drought
	12/31/10 23:59 CST	0	

With below normal precipitation during the month of December, ongoing drought conditions persisted across a portion of Central Alabama through the month of December. Severe (D2) drought, as identified by the U.S. Drought Monitor, persisted across portions of eastern Alabama, from extreme southern Randolph county and Tallapoosa county southward to eastern Elmore, northeastern Montgomery and southeastern Pike, and locations east of these areas.

(AL-Z044) MONTGOMERY

	12/01/10 00:00 CST	0	Drought
	12/07/10 06:00 CST	0	

Several inches of precipitation fell across portions of Central Alabama over the first week of December. According to the U.S. Drought Monitor, this allowed for slight improvement in drought conditions across a few localized areas. Extreme (D3) drought conditions improved to severe (D2) conditions across Montgomery county.

(AL-Z028) CLAY, (AL-Z042) LOWNDES

	12/01/10 00:00 CST	0	Drought
	12/07/10 06:00 CST	0	

Several inches of precipitation fell across portions of Central Alabama over the first week of December. According to the U.S. Drought Monitor, this allowed for slight improvement in drought conditions across a few localized areas. Severe (D2) drought conditions improved to Moderate (D1) or better drought conditions across Clay and Lowndes counties.

(AL-Z011) MARION, (AL-Z012) LAMAR, (AL-Z013) FAYETTE, (AL-Z014) WINSTON, (AL-Z017) BLOUNT, (AL-Z018) ETOWAH, (AL-Z019) CALHOUN, (AL-Z020) CHEROKEE, (AL-Z022) PICKENS, (AL-Z023) TUSCALOOSA, (AL-Z024) JEFFERSON, (AL-Z025) SHELBY, (AL-Z026) ST. CLAIR, (AL-Z027) TALLADEGA, (AL-Z029) RANDOLPH, (AL-Z035) CHILTON, (AL-Z036) COOSA, (AL-Z038) CHAMBERS, (AL-Z040) DALLAS, (AL-Z041) AUTAUGA, (AL-Z043) ELMORE, (AL-Z044) MONTGOMERY, (AL-Z046) BULLOCK, (AL-Z047) LEE, (AL-Z048) RUSSELL, (AL-Z049) PIKE

	12/15/10 05:00 CST	0	Winter Weather
	12/15/10 16:30 CST	0	

Moisture increased ahead of a weak storm system on Wednesday, December 15, 2010, across Central Alabama. Temperatures near or below freezing at the surface resulted in widespread freezing rain and sleet beginning around sunrise and lasting through most of the day. Although precipitation was light, ice quickly accumulated on area roadways, causing hazardous driving conditions, numerous vehicle accidents, and road closures.

Hazardous driving conditions due to ice on the roadway persisted well after precipitation moved out of the area, with many counties maintaining road closures for extended periods of time.

(AL-Z011) MARION, (AL-Z012) LAMAR, (AL-Z014) WINSTON, (AL-Z017) BLOUNT, (AL-Z018) ETOWAH, (AL-Z019) CALHOUN, (AL-Z020) CHEROKEE, (AL-Z021) CLEBURNE, (AL-Z026) ST. CLAIR, (AL-Z027) TALLADEGA, (AL-Z028) CLAY, (AL-Z029) RANDOLPH

	12/25/10 04:00 CST	0	Heavy Snow
	12/25/10 19:00 CST	0	

A surface low in the northern Gulf of Mexico along with an upper level disturbance moving southeastward from the Great Plains contributed to heavy snowfall on Christmas Day in Alabama, resulting in the first White Christmas for much of the area. Precipitation began during the early morning hours in northwest Central Alabama and spread eastward through the day. Many locations saw precipitation begin as rain and change over to snow. In some places, this change over was brief. In others, warm ground conditions caused snowfall to melt on contact, preventing significant accumulation. Snowfall totals ranged from a trace as far south as Troy to 4.00

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inches in several locations across north Central Alabama. In many locations, snowfall up to 1.5 inches accumulated on grassy surfaces, not causing any inconvenience to travel or threat to life or property.

(AL-Z014) WINSTON, (AL-Z017) BLOUNT, (AL-Z018) ETOWAH, (AL-Z019) CALHOUN, (AL-Z020) CHEROKEE, (AL-Z021) CLEBURNE, (AL-Z023) TUSCALOOSA, (AL-Z024) JEFFERSON, (AL-Z025) SHELBY, (AL-Z026) ST. CLAIR, (AL-Z027) TALLADEGA, (AL-Z028) CLAY, (AL-Z029) RANDOLPH, (AL-Z037) TALLAPOOSA

12/26/10 02:00 CST	0	Winter Weather
12/26/10 15:00 CST	0	

As a strong upper low moved across the area, flurries and bands of light snowfall developed during the early morning hours on December 26th, affecting much of Central Alabama through the day. Flurries as far south as Troy, one inch accumulations across northwest Central Alabama, and a dusting at many locations in between were reported. Gusty northwesterly winds combined with the light snowfall to bring visibilities down to around one mile at times.

Roadways were slick from the Christmas Day snowfall. As the additional light snowfall combined with temperatures near or below freezing, travel conditions remained hazardous. Travel was discouraged across much of the area. With below freezing temperatures, snow remained on the ground for several days in parts of north Central Alabama.

ALABAMA, North

(AL-Z008) MARSHALL, (AL-Z009) JACKSON, (AL-Z010) DEKALB, (AL-Z016) CULLMAN

12/01/10 00:00 CST	0	Drought
12/07/10 06:00 CST	0	

Severe drought (D2) conditions continued into early December in portions of Cullman, DeKalb, Jackson and Marshall Counties. These condtions were alleviated by multiple heavy rain events in late November.

(AL-Z006) MADISON, (AL-Z007) MORGAN, (AL-Z009) JACKSON, (AL-Z010) DEKALB, (AL-Z016) CULLMAN

12/12/10 08:01 CST	0	Winter Weather
12/13/10 13:00 CST	0	

Snow showers produced light accumulations on the 12th following the passage of a strong Arctic cold front. Temperatures remained in the 20s all day with periodic snow showers. Favored areas for accumulation were on the Cumberland Plateau, including Sand and Lookout Mountains, and along Brindley Mountain south of the Tennessee River. In fact, lake effect snow occurred in portions of southern Madison, eastern Morgan and Cullman Counties due to a steady northwest fetch of wind off of Lake Wheeler on the Tennessee River. Up to 2 inches of snow fell in portions of northeastern Morgan County near Union Hill and Morgan City on top of the mountain. Up to 2 inches was also reported in Hollytree in Jackson County, with an inch or less on top of Lookout and Sand Mountains in DeKalb, Jackson and Marshall Counties. Up to 1 inch fell on Brindley Mountain in northeastern portions of Cullman County due to lake effect snow during the morning hours of the 13th.

(AL-Z001) LAUDERDALE, (AL-Z002) COLBERT, (AL-Z003) FRANKLIN, (AL-Z004) LAWRENCE, (AL-Z005) LIMESTONE, (AL-Z006) MADISON, (AL-Z007) MORGAN, (AL-Z008) MARSHALL, (AL-Z009) JACKSON, (AL-Z010) DEKALB, (AL-Z016) CULLMAN

12/15/10 07:00 CST	0	Winter Weather
12/15/10 18:00 CST	0	

A wintry mix of sleet and freezing rain developed during the morning hours as warm air aloft over-topped sub-freezing temperatures at ground-level. Ice accumulations of up to a tenth of an inch were reported, especially across northeastern Alabama. Several local roads were closed on elevated surfaces and mountainous terrain. Warmer temperatures spread into northwest Alabama during the late afternoon and early evening hours improving road conditions. Dramatically, temperatures climbed into the 50s during the overnight hours in northwest and north central Alabama. Conditions improved more slowly across northeast Alabama during the early morning of the 16th.

(AL-Z001) LAUDERDALE, (AL-Z002) COLBERT, (AL-Z003) FRANKLIN, (AL-Z004) LAWRENCE, (AL-Z005) LIMESTONE, (AL-Z006) MADISON, (AL-Z007) MORGAN, (AL-Z008) MARSHALL, (AL-Z009) JACKSON, (AL-Z010) DEKALB, (AL-Z016) CULLMAN

12/25/10 03:00 CST	0	Heavy Snow
12/25/10 15:00 CST	0	

A low pressure system tracked east across the northern Gulf of Mexico producing a swath of snow across the Tennessee Valley on Christmas Day 2010. For Huntsville, this event resulted in a record snowfall for December 25th, and was the second "White Christmas" on record. The previous one was in 1989 when 0.3 inches of snow fell.

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A mixture of rain and snow began in northwest and north central Alabama between 3 and 5AM CST, and between 5 and 7AM in northeast Alabama. The mixture rapidly changed to all snow and became moderate to heavy at times during the morning hours. Visibility fell to 1/4 to 1/2 mile at times, with snowfall accumulating at a rate of one half to one inch per hour in some areas. All told, snowfall amounts of 2 to 4 inches on average occurred, with a few locations in the higher elevations of northeast Alabama receiving between 4 and 7 inches. Many locations in valley areas remained just above 32 degrees much of the day, thus roadways were mainly wet and slushy through the day. However, the higher elevations remained below freezing which resulted in hazardous driving conditions. As colder air filtered into the region during the overnight hours, additional snow showers developed as an upper level low dropped southeast across the region. This system produced an additional dusting to up to one inch of snowfall.

(AL-Z001) LAUDERDALE, (AL-Z003) FRANKLIN, (AL-Z004) LAWRENCE, (AL-Z005) LIMESTONE, (AL-Z006) MADISON, (AL-Z007) MORGAN, (AL-Z008) MARSHALL, (AL-Z009) JACKSON, (AL-Z010) DEKALB, (AL-Z016) CULLMAN

	12/26/10 01:00 CST	0	Winter Weather
	12/26/10 19:00 CST	0	

Narrow bands of snow showers and flurries redeveloped after midnight of the 26th as a strong upper upper level low dropped southeast through the Tennessee Valley. Most of the snowfall remained light, but periodic bursts of moderate to snow were reported which reduced visibility to around 3/4 mile, but in most cases ranged from 2-5 miles. New snowfall accumulations ranged from a little over a dusting up to one inch.

New daily record snowfall totals were set at Huntsville (0.3 inches) and Muscle Shoals (1.0 inches).

Already slick road conditions due to re-freezing of wet roads from the previous day's snowfall became even more slick, especially during the morning hours. Temperatures struggled to reach 30 degrees, with higher elevations even colder. Some sunshine broke through for a period during the afternoon between intermittent snow showers and flurries. This melted the snow on roadways, but also produced wet roads which would re-freeze into icy patches again during the evening and nighttime of the 26th.

ALABAMA, Southeast

(AL-Z065) COFFEE, (AL-Z066) DALE, (AL-Z067) HENRY, (AL-Z068) GENEVA, (AL-Z069) HOUSTON

	12/01/10 00:00 EST	0	Drought
	12/31/10 23:59 EST	0	

The extreme drought (D3), which developed across Geneva and Houston counties on October 19th and expanded into Coffee, Dale, and Henry counties on November 9th, was downgraded to a severe drought (D2) on December 7th. This severe drought (D2), which developed in mid September, continued through all of December and into January.

ALABAMA, Southwest

MOBILE COUNTY --- 1.0 ENE THEODORE [30.56, -88.15]

	12/11/10 23:30 CST	5K	Thunderstorm Wind (EG 52 kt)
	12/11/10 23:33 CST	0	Source: Fire Department/Rescue

Winds estimated at 60 mph caused minor roof damage to an apartment building on Cary Hamilton Road.

BALDWIN COUNTY --- 1.0 E DAPHNE [30.60, -87.88]

	12/11/10 23:40 CST	10K	Thunderstorm Wind (EG 52 kt)
	12/11/10 23:43 CST	0	Source: Law Enforcement

Winds estimated at 60 mph downed trees down and caused damage to cars and buses at Daphne Middle School.

A line of thunderstorms produced damage across southwest Alabama.