



STORM COURIER

Significant Weather Events of 2011

By Jon Jelsema - Meteorologist

The 2011 calendar year was a weather roller coaster ride of sorts, featuring a number of unusual and extreme weather events across southern South Carolina and southeast Georgia. The events in combination with day to day forecasting operations, kept Meteorologists at the National Weather Service (NWS) office in Charleston, South Carolina busy issuing a plethora of weather related watches, warnings and advisories.

Winter 2010/2011

Low country residents will certainly remember the cold arctic grip which was placed on the southeast United States during the winter months of December, January and February. In fact, the months of December and January went down in the history books as the second coldest on record at both the Charleston and Savannah International airports. The average temperature for the two month period was 43.7 degrees at the Charleston airport, finishing second to the 1939-1940 period where the average temperature for two month period was 42.9 degrees. At the Savannah airport, the average temperature for the same two month period was 44.4 degrees, just shy of the 1917-1918 stretch where the temperature averaged 44.3 degrees. In addition to the

cold start to the year, much of southern South Carolina and southeast Georgia experienced a significant ice storm on the 10th of January. An area of low pressure off the southeast coast spread rain into the region which froze on contact with the ground due to the presence of a cold dense airmass as a result of high pressure in the lee of the Appalachians. Most locations away from the immediate coast received a thin glaze of ice accumulation, while areas further inland along and west of a Moncks Corner to Walterboro to Metter line received 0.50 to 1.00 inches of ice accumulation. The ice storm had a tremendous impact on the area, causing numerous power outages, closures of roads and bridges, and numerous traffic accidents. The grip of old man winter was released somewhat during the month of February, with average temperatures 2.9 degrees above normal for the month at the Savannah airport and 4.1 degrees above normal for the month at the Charleston airport.

Spring 2011

The warming trend which was observed in February continued into spring. March, April and May all recorded average temperatures which were above climatology at the Charleston and Savannah airports. The warmer weather, as is usually the case,



brought with it the beginning to severe weather season across the southeast United States. The first significant severe weather event of the season occurred on March 26th, when two tornadoes, one an EF0 and another an EF1, touched down in Bulloch county. The two tornadoes carved paths between the towns of Rocky Ford and Portal, resulting in significant damage to several mobile homes and snapping or uprooting hundreds of trees. Quickly on the heels of the Tornado event, the first widespread severe weather event of the season occurred the very next day, March 27th, 2011, when numerous reports of large hail (golf ball to tennis ball size) and some isolated reports of wind damage were received. Severe weather season continued in early April when a strong cold front swept through the region on April 5th. The cold front

Inside this issue:

2011 Hurricane Season / NWS and Social Media...	3
Your New Years Resolution: Bookmark our website...	4
Meteorologists of the future at NWS Charleston...	4
Science Corner: The Naming of Clouds...	5-6
The NWS Weather Ready Nation Initiative...	7
Hurricane Hunter Aircraft Showcased n Savannah...	8
NWS On-Site Support / Drought Conditions...	9

Special points of interest:

- Hurricane Season mainly quiet for U.S.
- Website full of information for your weather needs.
- Summer scholarships awarded to college students
- How clouds received names.
- A nation prepared to respond to and recover from disasters.
- Hurricane Awareness Tour makes a stop in Savannah, GA.
- NWS Charleston represented in Australia?

Signifcant Weather Events of 2011 continued...



Tornado Damage which occurred April 16th near St. Stephen, South Carolina.

“Summer 2011 will go down in the record books as the warmest in recorded history at both the Charleston and Savannah airports”



Sweltering Heat affected the southeast United States during the summer of 2011.

led to the development of a line of severe thunderstorms which produced widespread wind damage including numerous downed trees and power lines across southern South Carolina and southeast Georgia. On the 16th of April, an approaching cold front moving into a moist unstable environment resulted in the touchdown of a Tornado near St. Stephen, South Carolina. The Tornado formed over Lake Moultrie, came onshore just south of the town of Russellville and tracked just south of the town of St. Stephen before lifting. A church was completely demolished, several homes were damaged or destroyed and hundreds of trees were snapped off or uprooted. Another significant severe weather event occurred across Charleston and Berkeley counties on May 10th. Numerous reports of golf ball size hail were received, with hail the size of baseballs falling on the Isle of Palms. The spring months also featured a less frequent occurrence, when warm, dry and windy conditions resulted in the development of several large wildfires. The Windy Fire which occurred near McClellanville, SC burned nearly 2600 acres and destroyed 16 non-residential structures over the 3 day period beginning March 23rd and ending on March 25th. The Sand Ridge Fire burned nearly 1250 acres just west of Dorchester, SC on the 23rd and 24th of March. Finally, the Elim Church Road Fire occurred near Ludowici, GA and burned over 4000

acres of land and destroyed 10 structures, 3 of which were occupied homes, between March 24th and March 31st. The fires which occurred over southern South Carolina and southeast Georgia were so large that they were clearly visible in satellite imagery.

Summer 2011

Heat and humidity returned to the South Carolina and Georgia low country over the summer months of June, July and August, along with the typical development of afternoon and evening showers and thunderstorms. The heat experienced across the region was quite unusual. In fact, summer 2011 will go down in the record books as the warmest in recorded history, with the average temperatures at both the Charleston and Savannah airports rounding out at 83.4 degrees and 84.0 degrees respectively. Another rather remarkable record was established at the Savannah airport, where the mercury rose to 90 degrees or above for a record 56 consecutive days beginning on May 20th and ending on July 15th. This broke the previous record of 44 consecutive 90+ degree days which occurred back in 1993. There was one stretch of days in particular where the combination of heat and humidity was unbearable to most individuals. The period of August 3rd through 9th saw daily heat index values climb above 105 degrees, and as high as 120 degrees in a few locations. Despite the historic heat, the thunderstorm activity was quite typical of the summer months, and kept NWS forecasters busy watching the radar and as-

sessing storm severity on most days. Numerous severe weather events impacted the area, with these events featuring sporadic reports of wind damage such as downed trees and power lines, large hail, and flash flooding. One severe weather event which stands out in particular occurred over the two day period of August 8th and 9th, following the extremely hot episode mentioned earlier. Widespread reports of severe weather were received from across southern South Carolina and southeast Georgia of trees and power lines down as well as structural damage to several homes and businesses. Another event that many residents will remember was a visit from an infrequent guest on August 26th. This uninvited visitor was Hurricane Irene. Although the worst impacts from the Hurricane were felt across the Mid-Atlantic and Northeast States, Tropical Storm conditions did impact portions of coastal South Carolina. Winds as high as 50 mph, power outages from downed trees and power lines, elevated surf as high as 10 to 12 feet and minor salt water flooding, impacted portions of southern South Carolina and southeast Georgia as Irene passed by roughly 300 miles east of Charleston, SC.

Fall 2011

Quieter conditions prevailed through the fall months of September, October and November following the typically active yet unusually hot summer time period. The fall months did feature several severe weather

Significant Weather Events 2011 continued...

events where wind damage and hail were reported. Additionally, there were several strong wind events which occurred in advance of strong cold fronts that resulted in sporadic reports of downed trees and power lines.

Following a rather inactive fall period, the winter months began drastically different than the previous year, with average temperatures running above seasonal levels. The average tem-

perature in December 2011 was 54.9 degrees at the Charleston airport, which was 4.1 degrees above normal and a shocking 12.2 degrees milder than December 2010. The story was similar at the Savannah airport, where the average temperature in December 2011 was 55.8 degrees, 4.1 degrees above normal and a remarkable 12.1 degrees warmer than December 2010. For a more thorough review of several of the more significant weather events which im-

pacted the low country in 2011, visit:

<http://www.erh.noaa.gov/chs//events.shtml>

Throughout 2011, a total of 299 Severe Thunderstorm Warnings, 10 Tornado Warnings, 172 Special Marine Warnings, 10 Flash Flood Warnings and a host of other warning and advisory products were issued by the Charleston, SC NWS Forecast Office.

Hurricane Season - Mostly Quiet for the U.S.

By Robert Bright - Meteorologist

It was another busy Atlantic Hurricane season in 2011 with 19 tropical storms, the third highest total since records began in 1851. However, only 7 of these systems became hurricanes, with 3 of these becoming major hurricanes (Category 3, 4, or 5 on the Saffir-Simpson Hurricane Wind Scale. Hurricane Irene (Category 1) was the only Hurricane to make landfall in the United States, the first since Hurricane Ike in 2008. This marks a record sixth straight season in which no major Hurricanes have made landfall in the United States. An average season produces 11 Tropical Storms, 6 Hurricanes and 2 major Hurricanes.

As expected by the National Oceanic and Atmospheric Administration (NOAA), some of the more favorable factors for an active season included the El Niño Southern Oscillation (ENSO) being in a neu-

tral/La Niña phase and exceptionally warm ocean temperatures. However, despite the unusual number of tropical storms, the weather patterns through the summer and fall were such that most systems were steered away from the United States. This included high pressure over the East Coast, which kept the region mainly warmer and drier than normal. Hurricane Irene was the only tropical system to impact the southern South Carolina/northern Georgia coast, mainly in the form of beach erosion.

For more information on the 2011 Atlantic hurricane season, check out the National Hurricane Center's [website](http://www.nhc.noaa.gov). For a local tropical cyclone climatology, check out http://weather.gov/chs/tropical/hurrstats_web.shtml.



Visible Satellite Image of Hurricane Irene as the storm passed by off the southeast U.S. coast..

“If you’re on Facebook be sure to “Like” our page”

NWS Charleston and Social Media

By Jonathan Lamb - Meteorologist

If you're on Facebook, be sure to "Like" our page so you get informed about local weather stories, outreach events, and more. We also occasionally post interesting radar/satellite images and weather photos.

The best part is that it's interactive. You can post your own photos, videos, or messages, or comment on our posts.

We are also participating in an experimental Twitter service. We occasionally post short snippets about weather or climate, and you can send us your severe weather reports via the @NWSCharlestonSC tag.

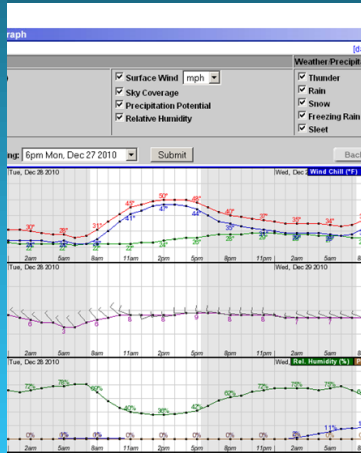
Find our pages by clicking on the links at the top of our website:

<http://www.weather.gov/chs>

The screenshot shows the NWS Charleston website interface. At the top, there are social media icons for Facebook and Twitter, and a link to 'View a Severe Weather Report?'. Below this is a 'Top News' section with a list of recent articles: 'A Look Back at the January 10, 2011 Snow Storms', 'National Hurricane Center Welcomes Your Comments About Storm Surge', '2011 Climate Summary: Charleston | Savannah', and 'NOAA's Extreme Weather Webpage'. The main content area features a 'Point and Click Forecast Map' with a map of the Southeastern United States showing weather patterns. To the right of the map is a 'Description | Help' section with links for 'Read/Write warnings & advisories', 'Special Weather Statements', and 'Hazardous Weather Outlook'. The bottom of the page indicates the last map update was on Mon, Jan. 9, 2012 at 12:15:12 pm EDT.

Your New Years Resolution: Bookmark Our Website!

By Robert Bright - Meteorologist



“One of the most popular sections on our website is the climate web page”

Maybe you have an event planned over the next 7 days and need the weather forecast. Maybe your son or daughter is doing a school project and needs the high and low temperatures for the last year. Maybe you are wondering if the upcoming summer is more likely to be warmer or cooler than normal. Well, answers to all of these questions and more can be found on our website: <http://weather.gov/chs>. Don't forget to bookmark us!

Starting on our home page you will find a map which you can click on if you want a forecast for a particular location. Any watches, warnings, advisories or statements that are in effect for hazardous weather will also be highlighted on the map. Since there are numerous ways to access and display the forecast, a “One Stop Forecast” web page (under

“Forecasts” on the left menu) was developed to assist you. You are encouraged to try each of these display tools to see which one best suits your needs.

Besides the “one stop forecast” page, the left menu contains links to obtain information such as current conditions/hazards, climate data, weather safety (including our SKYWARN spotter page), significant local weather events and frequently asked questions (FAQ). There is also a new science and technology page that highlights local forecast challenges along with the technology we utilize every day. Furthermore, many of our office programs have their own web pages where you can find links to observations, forecasts and other pertinent information. Examples include Aviation, Fire Weather, Hydrology, Marine, and

Tropical. One of the most popular sections of our website is the climate web page, which can be accessed by clicking on “Local” below “Climate” on the left menu. Besides viewing climate outlooks from the Climate Prediction Center under the “Climate Prediction” tab you can also obtain past climate data for many locations across southern South Carolina and southeast Georgia by selecting the “NOWData” tab.

If you have any questions and/or comments while surfing our website do not hesitate to contact us. You can send an email to chs.webmaster@noaa.gov and we will respond as soon as possible. A short online survey can also be accessed near the bottom of the left menu.

Meteorologists of the Future at NWS Charleston

By Frank Alsheimer - Science and Operations Officer

While we have the best of the best here at the National Weather Service Forecast office in Charleston, we will not all be working forever. Therefore, it is important that we introduce the brightest meteorology students to the discipline of our field. The Earnest F. Hollings Undergraduate Scholarship Program allows us to do just that.

The Holling's scholarship program is designed to, among other things, increase undergraduate training in atmospheric sciences and recruit and prepare students for public service careers with

the National Oceanic and Atmospheric Administration (NOAA). The program has a rigorous application process that weighs academic performance, experience, leadership, student essays, and academic or professional references.

Since 2007, we have hosted several students for a 9 week training program during the summer that involves both participation in an operational NWS setting and completion of a research project. The students have come from a variety of higher education institutions, including the University of

Oklahoma, Central Michigan University, University of Missouri, and Pennsylvania State University. At the end of the 9 weeks, the students travel to Silver Spring, MD to make a presentation at NOAA headquarters. Some of the students continue working on their projects after the internship is complete and present the results at conferences for the American Meteorological Society (AMS) and the National Weather Association (NWA), with some of the presentations of results garnering coveted awards at those conferences.



Science Corner: The Naming of Clouds

By Peter Mohlin - Meteorologist

How Do Clouds Form?

Clouds develop when rising air is cooled to its condensation or dew point. Once the air cools enough, the invisible water vapor present in the air will condense to form the visible liquid water drops. This is similar to moisture that develops on the outside of a glass of ice water.

While some clouds such as fog will form due to evaporation, most clouds that occur will be the result of rising air. This ascent of air usually develops from the following processes:

- From vertical instability or convection, due to unequal heating of the ground.
- From undulating (or wavelike) motions at an inversion surface.
- From orographic lifting due to mountains.
- Forced lifting by a front.

The Origin of Naming Clouds

While an untold number of people observed, painted, sketched or wrote about clouds before the early 19th century, it took until 1802 for someone to classify or name them.

In December of that year, a meeting of a small society of the Askesians met in London. (Askesian is derived from the Greek word, *askesis*, which means self-discipline, searches after knowledge or intellectual exercise.) Each member of the society was required to prepare and read a scientific paper to the other members. That evening it was the turn of a 30 year pharmacist (not a meteorologist) to read his paper. It was an essay called "On the Modification of Clouds". (In our modern language, modification means classification.)

The paper proposed that clouds have many shapes, but only a few basic forms, and that they can change from one form to another. The essay was so well received that it was thereafter soon published, and would later be reprinted in various journals and encyclopedias. Even today, more than 200 years later we are still using the essence of this classification of clouds.

Who Was This Man Who Named the Clouds?

He has been called "The Godfather of Clouds" or



Painting of Luke Howard, the man credited for naming clouds.

"The Man Who Named the Clouds". But this Englishman was actually named Luke Howard. He was born in London on November 28, 1772. Educated at Burford in Oxfordshire, he later became apprenticed to a retail chemist in Stockport. From there he would become a London businessman that developed a firm that manufactured pharmaceutical chemicals. It was in London that Luke Howard became friends with William Allen, another pharmacist, who decided in March of 1796 to establish the Askesian Society. It was at one of their meetings almost 6 years later that Luke Howard who said that "meteorology is my real penchant", would present his paper on the naming of clouds. Little did anyone probably know at the time that his paper would have such a major effect on the world of meteorology.



Sketches of clouds by Luke Howard

Science Corner: Atmospheric Optics Continued...



The Cloud Classifications

Howard indicated that there are three basic cloud types. Utilizing his knowledge of Latin he came up with the following categories for clouds:

- Cumulus (Latin for heap), which he described as “convex or conical heap, increasing upward from a horizontal base”.
- Stratus (Latin for layer), which he described as “a widely extended, continuous, horizontal sheet, increasing from below”.
- Cirrus (Latin for curl of hair), which he described as “parallel, flexuous, or diverging fibres, extensible in any and all directions”.

For the systems of clouds from which rain falls, he gave the name Nimbus (Latin for rain).



Later that century, Luke Howard’s cloud classifications were extended to include the types of clouds that are still in use throughout the world today. These 10 cloud types or genera are:

- Cirrus
- Cirrocumulus
- Cirrostratus
- Altocumulus
- Altostratus
- Nimbostratus
- Stratocumulus
- Stratus
- Cumulus
- Cumulonimbus

These can then be further broken into 14 different species, 9 different varieties, 6 different supplementary features and 3 different accessory clouds

Other Notable Achievements of Luke Howard

- Published “The Climate of London” (1818, with the second edition in 1830)
- Published “The Seven Lectures on Meteorology” (1837)
- Published “A Cycle of Eighteen Years in the Seasons of Britain” (1842)
- Published “Barometrographia” (1847)
- Elected a Fellow of the Royal Society for his contributions to meteorology (1821)
- Joined the British (now Royal) Meteorology Society (1850)

Luke Howard was 92 when he passed away on March 21, 1864. Even though he was untrained in meteorology, thanks to his passion for the observation of clouds, we know what each type of cloud is called when we see them in the sky.

At his funeral, his son said “A beautiful sunset was a real and intense delight to him; he would stand at the window, change his position, go out of doors and watch it to the last lingering ray”. Certainly a wonderful tribute to “The Man Who Named the Clouds”!

The NWS Weather Ready Nation Initiative

By Ron Morales - Warning Coordination Meteorologist

The National Weather Service Moves Toward a more "Weather-Ready" Nation

NOAA's National Weather Service has launched a comprehensive initiative to build a more "Weather-Ready" nation to make America safer by saving more lives and protecting livelihoods as communities across the country become increasingly vulnerable to severe weather events, such as tornado outbreaks, intense heat waves, flooding, active Hurricane seasons, and solar storms that threaten electrical and communication systems. This initiative comes on the heels of a record breaking year for weather related disasters. In 2011, there were 12 such disasters that resulted in at least one billion dollars of damage each, which broke the previous record of 9 in 2008. Some of the record breaking events in 2011 included the historic spring tornado outbreaks across the east and southeast U.S., Hurricane Irene, which impacted much of the U.S. east coast, wild fires across Texas, and major flooding across the Ohio River Valley region.

In order to move toward a more weather-ready national, the National Weather Service, in partnership with other government agencies, researchers, and the private sector, is focusing on the following initiatives:

- Improved precision of weather and water forecasts and effective communication of risk to local authorities;
- Improved weather decision support services with new initiatives such as the development of mobile-ready emergency response specialist teams;
- Innovative science and technological solutions such as the nationwide implementation of Dual Pol radar technology, Integrated Water Resources Science and Services, and the Joint Polar Satellite System;
- Strengthening joint partnerships to enhance community preparedness;
- Working with weather enterprise partners and the emergency management community to enhance safety and economic output and effectively manage environmental resources.

The National Weather Service has also established nine separate innovative, community-based test projects across the country, ranging in focus from emergency response to ecological forecasting, to enhance the agency's preparedness efforts to better address the impacts of extreme weather. Some of these pilot projects have already been launched, and it is ex-



pected that the remaining sites will be launched within a year or so at strategic locations across the Gulf Coast, South and Mid-Atlantic regions of the country.

"Severe weather represents a very real threat to public safety that requires additional robust action," said Dr. John "Jack" Hayes, director of NOAA's National Weather Service. *"The increasing impacts of natural disasters, as seen this year (2011), are a stark reminder of the lives and livelihoods at risk."* Overall, the key to the success of the Weather-Ready initiative for the National Weather Service will be to sustain weather support and data for high-impact services, continue evolving into an agile, progressive organization within a challenging budget environment, while helping to foster a culture of innovation across the agency.

For more information about the National Weather Service's Weather-Ready Nation efforts, please visit: <http://www.nws.noaa.gov/com/weatherreadynation/>



National Weather Service

Building a Weather-Ready Nation



NOAA's Hurricane Hunter Aircraft Showcased in Savannah, GA

By Ron Morales - Warning Coordination Meteorologist



NOAA's Hurricane Hunter Aircraft Showcased in Savannah, GA

On May 5, 2011, the National Oceanographic and Atmospheric Administration's (NOAA's) Hurricane Hunter aircraft, formally known as the WP-3D Orion, made a stop at the Savannah International Airport, in Savannah, GA. The stop at Savannah, GA was part of an annual national outreach program called the Hurricane Awareness Tour (HAT), which has been lead by NOAA for nearly 30 years. The HAT alternates each spring between the east coast and Gulf coast of the United States. The tour for 2011 began on May 2 in eastern Massachusetts, and ended in southeast Florida on May 6.

The NOAA WP-3D Orion turboprop aircraft is used primarily by scientists on research missions to study various elements of a hurricane, flying through the eye of the storm several times each flight. The crew collects and transmits data by satellite directly to the National Hurricane Center so that forecasters can analyze and predict changes to the hurricane's path and strength. For more information about the Hurricane Hunter aircraft, please see the following links:

<http://www.nhc.noaa.gov/hunters.shtml>



<http://www.aoc.noaa.gov/>.

The primary goal of the HAT at Savannah was to provide guided tours inside NOAA's Hurricane Hunter WP-3D Orion aircraft for students in the 4th to 6th grade levels. However, due to space and time limitations on the aircraft, only schools that were first to respond to our invitation were selected to attend the HAT, which translated to nearly 600 students from surrounding public, private, and home schools. The general public was also given an opportunity to tour the plane in the afternoon after the student tours were completed.

In addition to touring the Hurricane Hunter aircraft, other activities were provided for the attendees to visit while at the event. One was the viewing of a short video created by our office on hurricane awareness and preparedness, along with booths and displays provided by various event partners. Another was a tour of the static display area, where emergency response vehicles, various types of aircraft, and a mobile wave tank were on display. Some of the partners that teamed up with our office for this event included: the Savannah Salvation Army and Red Cross, the Savannah Airport, Savannah Fire/Police and Rescue, Civil Air Patrol, local Savannah area HAM Radio volunteers, Chatham and Bryan county Emergency Management Agencies, Signature Flight, and the Georgia Department of Natural Resources, and Gray's Reef National Marine Sanctuary. We were especially grateful for our partnership with the Savannah Airport and for their willingness to host the event, the Salvation Army and the local Sam's Club for providing food, snacks and beverages, and the Chatham County Emergency Management Agency for helping to organize the event.

If you couldn't attend the event in person, it was covered extensively by T.V. and print media, including the Weather Channel out of Atlanta, GA. Many VIPs were also in attendance at the stop in Savannah including: the director and forecasters from the National Hurricane Center, the director of the Georgia Emergency Management Agency (GEMA), the director of the Savannah International Airport, the planning and policy director of the U.S. Army Corps of Engineers (USGS), the deputy regional director of FEMA region IV, and the crew of NOAA's Hurricane Hunter aircraft. I have personally been involved with several HAT events in the past, and this one clearly was the best organized and most successful that I have had the privilege to be a part of. This success would not have been possible without the outstanding efforts from every member of our local staff, and the contributions from our many partners listed above. Thank you all for a job well done!

National Weather Service Charleston On-Site Incident Support

By Jon Jelsema - Meteorologist

Each year numerous incidents ranging from wildfires to hazardous materials disasters to devastating acts of nature occur across the country and the world. The incidents which occur will vary in size, but can be large enough to require oversight by Incident Management teams which help communities respond to and recover from these disasters.

The National Weather Service (NWS) plays a key role in the response and recovery efforts remotely and occasionally on-site, helping to ensure the safety of all assigned incident personnel. The larger incidents often require the assistance of NWS Incident Meteorologists (IMETs) to respond to and recover from the disaster at hand. IMETs are specially trained Meteorologists that integrate into the Incident Management Team and provide weather forecasts as well as weather alerts

and updates to ensure the safety of all incident personnel.

This year the NWS office in Charleston, SC dispatched IMETs John Quagliariello and Jon Jelsema to support the suppression efforts of the large wildfires in the southeast United States on 5 separate occasions for a total of 59 days. The IMETs were dispatched to the southeast Georgia wildfires which many residents may remember sent periodic episodes of smoke, poor air quality and reduced visibility into southern South Carolina and southeast Georgia during the spring and summer months. The wildfires that the IMETs supported in 2011 included the Race Pond Fire which burned 21,000 acres, the Sweat Farm Again Fire which consumed 19,725 acres, the Elim Church Road Fire which burned 4,035 acres, and the Honey Prairie Fire which burned 309,200

acres of land and has continued to burn into early 2012.

NWS Charleston, SC IMET support continued in early 2012 when IMET John Quagliariello was dispatched in early January for a month long assignment to assist our Southern Hemisphere partners in Australia. John's assignment is part of an International exchange program familiarizing a select group of Meteorologists from each country with each other's operations in order to enable quick assistance in the event of a long campaign fire or busy fire season in either country. He was assigned to work for the Australian Bureau of Meteorology in the city of Adelaide, Australia where his duties included working the Fire Weather desk in the office's Severe Weather Unit. A more thorough description detailing John's assignment can be expected in the 2013 Office Newsletter.



“He was assigned to work for the Australian Bureau of Meteorology in the city of Adelaide, Australia”

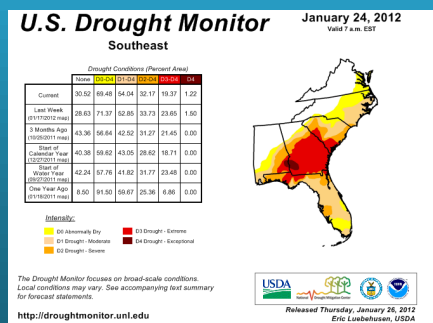


Severe to Extreme Drought Conditions across SC and GA

By Jonathan Lamb - Meteorologist

2011 was a year for the record books regarding the lack of precipitation. The Charleston Airport received a total of 37.01" of precipitation which was 14.02" below normal. This made 2011 the sixth driest year on record. At the Savannah Airport, the total for the year was 34.61" which was 13.35" below normal. Savannah had the seventh driest year on record. The U.S. Drought Monitor has maintained much of southeast Georgia and southern South Carolina in Severe

to Extreme drought status for the last nine months. Streams and rivers have been at near-record low levels since the summer. Only six River Flood Warnings were issued by our office in 2011, all of which were during the late winter and spring months. Unfortunately, the drought will probably continue for the foreseeable future. The latest three-month outlook from the Climate Prediction Center indicates a 40-50% chance for below-normal rainfall through April 2012.



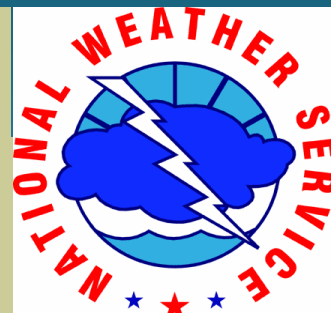
Mission: "Protection of Life and Property and Enhancement of the National Economy"



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We're on the Web!
www.weather.gov/chs

Your Report Makes a Difference!

Whenever severe weather strikes, remember, as a trained weather spotter ***we want to hear from you!***

If you measure or estimate winds of 50 mph or greater, observe trees and/or power lines down, structures damaged, hail (any size), flooding (water running across the road, ditches overflowing, creeks/streams out of their banks), tornadoes, funnel

clouds or waterspouts, pick up the phone and give us a call. In addition, if you see or hear of any injuries, fatalities, or damage from lightning, give us a call.

Your valuable reports help us confirm what we're detecting on radar, and could make a life-or-death difference for the people in the next town or in the next county in the path of the severe storm that just went over your home.

*When in doubt, **please call us!***

You can reach us by calling the toll free number which we provided to you during the spotter training session you attended.

You can also leave a report on our severe weather answering machine: 1-888-383-2024.

For Forecast and Current Conditions call: 1-843-744-0303.