



THE SOUTH TEXAS REGIONAL COCORAHS NEWSLETTER

NWS
Corpus
Christi



Winter 2012 Edition

Welcome to the winter edition of the CoCoRaHS newsletter!

by Christina Barron

Quite the weather pattern, eh? Sometimes it still feels like Summer even though we're officially in Winter! But we've had some Fall and Winter temperatures over the past months, with a few good strong cold fronts that blew through the area. Lows dipped into the 40s to even 30s for the first time since last winter during mid-November. Temperatures even dropped into the mid 20s over areas in mid-to-late December as strong Arctic fronts moved in.

But even with some of these good, strong fronts, rain has been lacking lately. Moisture over the area just has not been able to rebound after these strong, fast moving fronts.

In this edition of the newsletter, we'll talk about the changes in the upcoming weather pattern with a recap of the Summer. Also, we'll talk about a new way to do SKYWARN training.



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The 2012 Active Hurricane Season

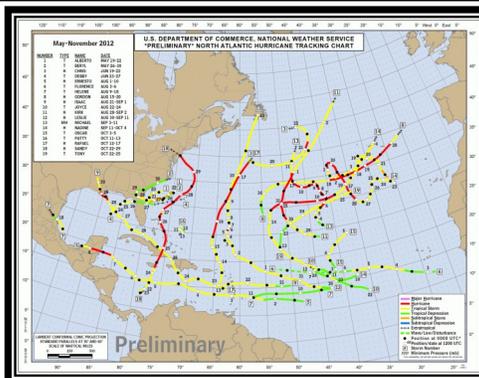
by Juan Alanis

The 2012 Atlantic Hurricane season came to a close November 30th, continuing a decades-long streak of very active hurricane seasons.

The 2012 season finished well above average with 19 named storms, 10 of which became hurricanes (winds > 73 mph), with one of those becoming a major hurricane (winds >110 mph). The climatologically average is 12 named storms in a season. Forecasters had predicted 9 to 15 named storms originally as an El Niño was expected to develop and suppress tropical development later in the season. The average season has 12 named storms, 6 hurricanes and 3 major hurricanes.

Despite the high number of storms, many stayed out at sea due to a persistent jet stream pattern over the eastern United States which helped to steer many storms away from land.

The hurricane season, of course, will likely be remembered for Sandy—the hurricane turned nor'easter/hurricane hybrid that devastated the New York-New Jersey areas with hurri-



Preliminary 2012 Atlantic Tropical Cyclone Tracks

cane force winds, with 131 fatalities and an estimated \$63 billion in damages. Sandy set numerous records including: highest storm surge at New York, lowest air pressure for New Jersey, and earliest blizzard for parts of the Appalachian Mountains. At the height of the storm, 8 million people were without power across the mid-Atlantic and Northeastern areas of the United States.

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Sandy is a reminder that it does not take a major hurricane to cause devastating damage. Officially, Sandy was not even a hurricane at landfall and was never a "major" hurricane at any point during its trek through the Caribbean and Atlantic.

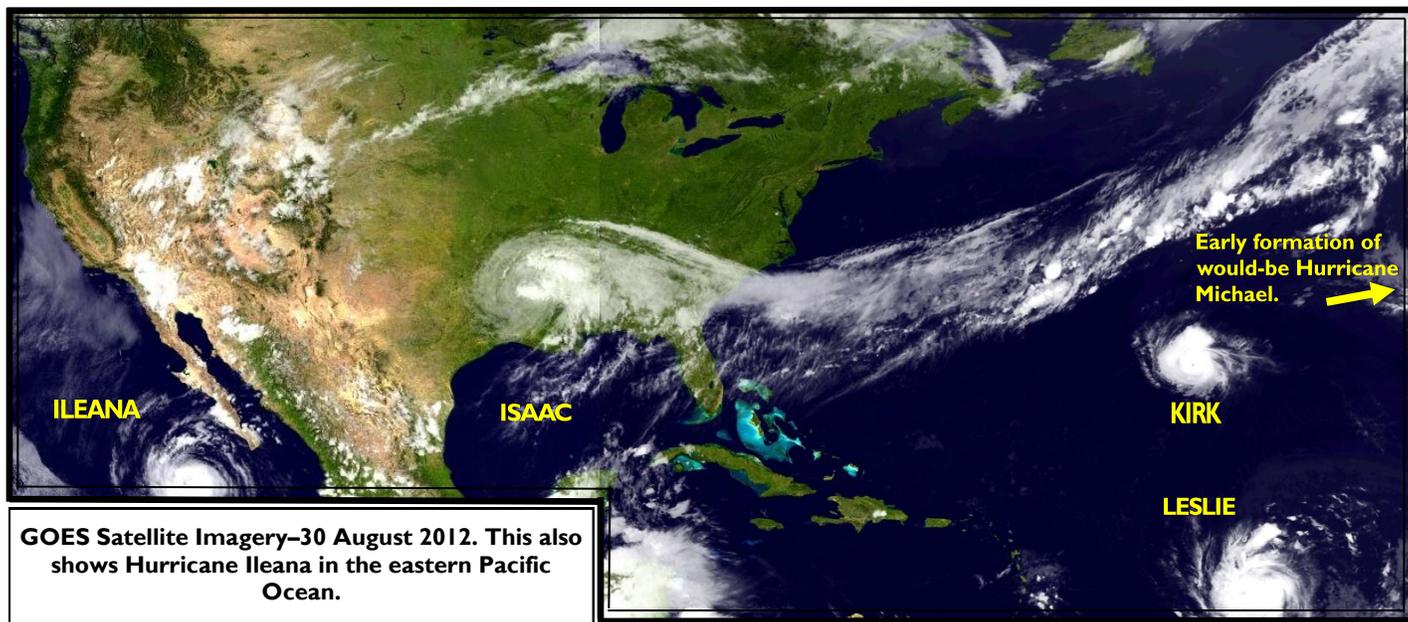
Isaac was the other significant hurricane of the season. Although not a major hurricane, Isaac is blamed for 42 deaths (9 in the U.S.) and an estimated 2.3 billion in damages as it crossed over the Caribbean islands of Hispaniola and Cuba before making a final landfall in Louisiana. Highest sustained winds for Isaac were 80 mph.

The only major hurricane for the 2012 season was Hurricane Michael, whose origin formed from a non-tropical weather system. A longwave trough, over eastern North America, spun off a mid- to upper-level shortwave disturbance on the 30th of August which began to slowly move southwestward. By the 1st of September, this disturbance began to organize then strengthened into a tropical depression by the 3rd well southwest of the Azores. Michael briefly reached major hurricane status on the 6th, with sustained winds of 115 mph. The overall track of Michael remained in the Atlantic. Mi-



GOES-East Satellite Imagery—28 October 2012
Hurricane Sandy one day prior to landfall.

chael is only the fifth major hurricane in the satellite era to develop from a disturbance of non-tropical origin.



GOES Satellite Imagery—30 August 2012. This also shows Hurricane Ileana in the eastern Pacific Ocean.

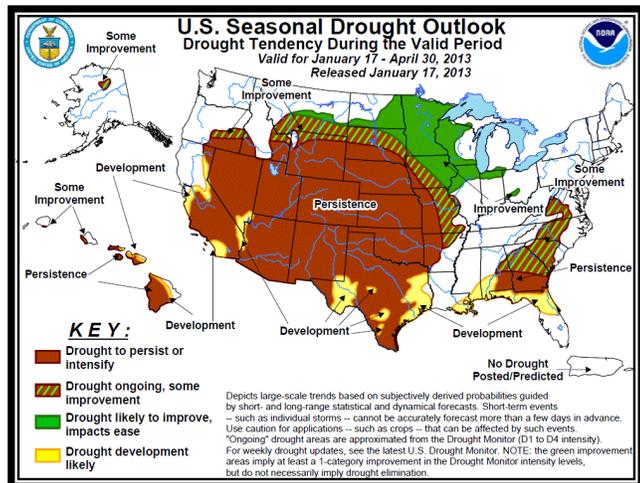
Drought Conditions To Persist

By Christina Barron

With La Niña conditions ending and El-Niño Southern Oscillation neutral (ENSO) and weak El-Niño conditions beginning to develop last summer, some recovery from this long-lasting drought were in sight. But Mother Nature made different plans.

ENSO is the naturally occurring weather phenomena that takes place over the Pacific Ocean. It involves the cooling and warming of Pacific waters west of Ecuador and Peru. During an El-Niño, sea surface temperatures experience a 0.5 degrees Celsius or greater of warmer than normal water temperatures. This warming of the ocean waters affects the atmospheric weather patterns, bringing wetter conditions across South Texas. Cooler water temperatures of 0.5 degrees C or less are experienced during a La Niña which typically leads to drier weather for South Texas. These slight half-a-degree temperature differences may seem minute, but when you consider that it takes more energy to cool a large area and depth of ocean water, these small differences can make a great impact.

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The U.S. Drought Monitor showing persistent and/or worsening drought conditions over much of the U.S.

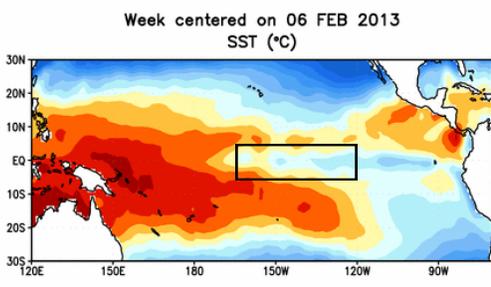
Summer 2012

Warming sea surface temperature anomalies were observed during the late summer and fall months of 2012. These positive anomalies trended warmer to near 0.5 C degrees above normal which were signs of the upcoming El Niño season. However, as the winter season began, the positive anomalies were just not that strong as previously forecasted and actually showed a slight regression. The new forecast is for a predominantly EN-SO-neutral pattern, where neither a strong La Nina or El Nino is present.

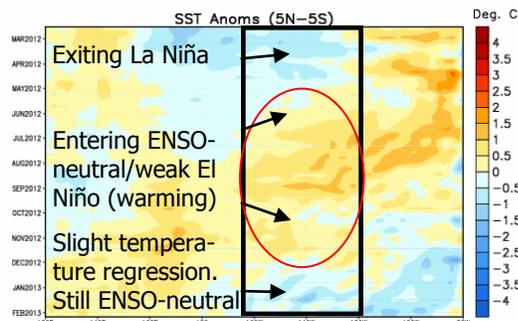
With no sure sign of relief in the drought any time soon with a higher chance for above normal temperatures and below normal rainfall, a persistent and drought-begetting-drought will likely lead to drought conditions worsening.

Due to the persistent drought, many locations across South Texas have maintained at least a Voluntary water restriction. Areas

around the Corpus Christi location are under Mandatory water restrictions, as the water shed remains extremely low. Additional information and updates on the drought can be found on the bi-weekly issued Drought Statements or by the Drought link on the bottom of the NWS Corpus Christi website.



(Left) Weekly observation of sea surface temperatures (SSTs). The area in the box is the region focused up when studying the temperature changes. (Right) Daily SSTs showing the progression of the weakening La Niña to ENSO-Neutral.



Observer Honors

by Juan Alanis

These observers have been truly "CuCu for CoCoRaHS." They have been active observers since the CoCoRaHS program started here in South Texas in September 2007. The National Weather Service greatly appreciates the dedication of these observers and the data they collect. A big "Thank You" to all!

These observers recently received "5 year" certificates and a letter of appreciation for their dedication to the CoCoRaHS program for the first 5 years of CoCoRaHS here in the Coastal Bend and South Texas.



ARANSAS COUNTY	
TX-AR-3	Carole & Gordon Goosney
CALHOUN COUNTY	
TX-CLH-1	John Gretchen
TX-CLH-2	Tommy Hargrove
TX-CLH-4	Kerry Hanselka
GOLIAD COUNTY	
TX-GD-3	Linda McCormick
TX-GD-4	Kathy Toerck
TX-GD-6	Robert Head
TX-GD-8	David Andrews

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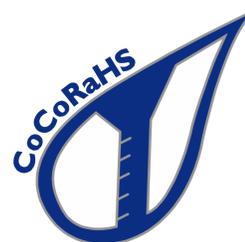
2012 Daily Reporters

by Juan Alanis

A big "THANK YOU" to the following observers, as well, for reporting everyday in 2012! Your data, rain and zero reports are greatly appreciated!

TX-GD-9	Darrell Hartman	TX-NU-17	Larry McNair
JIM WELLS COUNTY		REFUGIO COUNTY	
TX-JW-3	Bill Gunn	TX-RF-2	Dwight Mutschler
KLEBERG COUNTY		TX-RF-3	William Albert
TX-KL-2	Patricia Allison	VICTORIA COUNTY	
TX-KL-4	Larry Street	TX-VC-1	Katrin McDonough
LIVE OAK COUNTY		TX-VC-2	Billy Tindall
TX-LO-2	James Jungman	TX-VC-3	Morris Mareteck
TX-LO-5	Choke Canyon Dam North	TX-VC-4	David Tewes
NUECES COUNTY		TX-VC-6	Brent Baylor
TX-NU-9	James Ermis	WEBB COUNTY	
TX-NU-10	James Sautter	TX-WB-18/27	Jerry Lopez
TX-NU-11	Gilbert Gibbs	TX-WB-2	Consuelo Lopez
TX-NU-12	Harvey Buehrig	TX-WB-4	Antonio Rodriguez
TX-NU-13	Joseph Carr	TX-WB-5	Jim Fulgham
TX-NU-15	City of Corpus Christi	TX-WB-6	Sheila Glassford

TX-NU-4	Larry Street
TX-NU-7	William Pieri
TX-VC-4	David Tewes
TX-VC-22	Charles Mareth



SKYWARN Classes

by Christina Barron

What is SkyWarn? SkyWarn is a volunteer program comprised of nearly 290,000 trained severe weather spotters. SkyWarn spotters provide timely and accurate reports of severe weather to their local National Weather Service office. You'll learn what to look for when observing severe weather, as well as understand the development of severe thunderstorms, tornadoes and flash flooding.

How do I get involved?

Your local National Weather Service Office in Corpus Christi is extending an invitation for all of those interested in taking part in FREE SkyWarn training course. Courses are held **during the late winter/early spring** months before the peak of severe weather season.

NEW ONLINE Skywarn Live – Instructor Training Course

Attend a LIVE SKYWARN Storm Spotter training session from the comfort of your own home or office! A live instructor will guide you through a 60 minute class and answer any questions you may have along the way. These classes are free and open to the public.

ONLINE Skywarn Self – Paced Training Course

Busy schedule? Take the new online courses to cover the basics of becoming a Storm Spotter. Click on the link to the main website (linked below), review the courses and email your certificate to John Metz (linked below). It's that easy!

Check out the following link for upcoming courses in your area as well as for any additional information:

<http://www.srh.noaa.gov/crp/?n=skywarn>

If there are currently no classes being offered in your area and you would like to see what SkyWarn is all about, please email Jason Runyen (Jason.Runyen@noaa.gov) or John Metz (John.Metz@noaa.gov) and we can try to organize a course for your community.

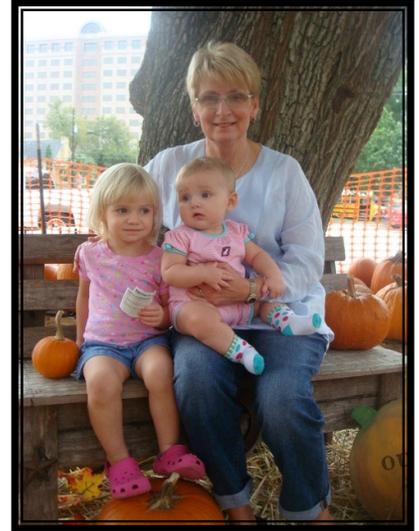


Observer Corner

by Kathy Toerck

Kathy Toerck has been a CoCoRaHS member for nearly 5 years. She lives in northwestern Goliad County in the town of Charco. In the Spring of this year, she had an unexpected 2 inch rainfall in Charco—which no one else in the Goliad had received that much rain. This prompted Bill Runyen, Texas State CoCoRaHS Coordinator, to call her the next day asking about the rainfall report. They started talking and he asked her to become the CoCoRaHS coordinator for Goliad County.

In May of this year, Kathy retired after 34 years in Education. Teaching 7th grade science gave her an opportunity to take her fascination for meteorology and share it with her students and community. About 12 years ago, she obtained a grant to put up a Weather Bug Station at Goliad Middle School. Her students wrote weather reports that were read daily during the morning announcements. Children would sign up weeks in advance to be the "Weather Man/Girl". Some of the reports were really funny as the kids would put their own twist on them. The community enjoyed the current weather conditions that could found on the school's webpage which contained a link to the Weather Bug station.



Kathy has lived in Goliad county for 32 years. Her husband, Rudy, is a retired High School principal. They have a small cattle operation that keeps them busy. They also have 3 grown children: Angela, Amanda and Trey. Their granddaughters, Kaylee and Riley, are two of the greatest blessings in their lives. Since her retirement, she has enjoyed spending time with her family, working in the yard and joining the Master Gardener program in Victoria.

CoCoRaHS Webinars

by Juan Alanis

Would you like to learn about the weather from the experts and talk to them? CoCoRaHS has started a new series about the weather titled "CoCoRaHS Weather Talk". The series consists of monthly web seminars (webinars) featuring engaging experts for the world of meteorology, climatology and related fields. These webinars are about 60 minutes in length and allow audience members to ask questions to the experts.

Webinar topics include climate change, hurricanes, air pollution, radar meteorology among many others. These CoCoRaHS Weather Talk webinars are free to everyone, all you need to do is register through the CoCoRaHS web site to participate.

Upcoming CoCoRaHS Webinar Schedule:

Thursday, February 7, 2013, 12PM CST

Educated Echoes: An Introduction to Dopplar and Dual-polarization Weather Radio

Pat Kennedy, CHILL Radar, Colorado State University
Fort Collins, CO

Thursday, March 7, 2013, 12PM CST

"I before E" Except in Drought

Mark Svoboda, National Drought Mitigation Center
Lincoln, NE

Thursday, April 11, 2013, 12PM CST

Forecasting the Ferocious: The How, What, Where and Why of Tornadoes

Greg Carbin, NOAA/Storm Prediction Center
Norman, OK

Thursday, May 9, 2013, 12PM CST

At the Cutting Edge: Harry Wexler and the Emergence of Atmospheric Science

Jim Fleming, Colby College
Waterville, ME

Future webinar topics and dates will be announced in future issues of the South Texas CoCoRaHS newsletter.





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426 Pinson Drive
Corpus Christi, TX 78406

Public Phone Line: (361) 289-0959 ext.1
Recorded Forecasts: (361) 289-1861
E-mail: christina.barron@noaa.gov

National Weather Service Mission Statement:

The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

Brief National Weather Service History:

The National Weather Service has its beginnings in the early history of the United States. Weather has always been important to the citizenry of this country, and this was especially true during the 17th and 18th centuries.

The beginning of the National Weather Service we know today started on February 9th, 1870, when President Ulysses S. Grant signed a joint resolution of Congress authorizing the Secretary of War to establish a national weather service.

ON THE WEB!

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

CoCoRaHS Tips

by Christina Barron

Going on vacation for a couple of days and it rains?...

...use "**Multi-Day Accumulation**" for your rainfall report when you come back. When you're out and it rains, your rainfall report is still important to the NWS. By not knowing the exact day of when it rained, the multi-day accumulation report comes in handy!

Significant weather?...

...use the "**Significant weather**" or "**Hail**" link under the "*Enter New Reports*" section. During severe weather events, things such as excessive rainfall, hail, flash flooding, wind damage, and, yes, even in South Texas, snowfall, are well appreciated in real-time. When you use one of the mentioned links above, it alarms the computers at the NWS to let us know that you have just witnessed significant weather.

Now remember, if weather conditions outside are too dangerous for you to take measurements, please, wait out the storm and do not go outside. Your safety means more to us.

Dirty rain gauge?...

...using some dish soap and a bottle brush can do the trick!

Weather Q&A

Do you have any questions about the weather that you would like answered? Your questions could lead to articles in the next issuance of the CoCoRaHS newsletter! If you do, send an email to christina.barron@noaa.gov.

If you would like to be featured in the Fall 2012 edition of the South Texas CoCoRaHS newsletter, please email Christina.Barron@noaa.gov. We would love to hear from observers of South Texas!