



THE SOUTH TEXAS REGIONAL COCORAHS NEWSLETTER

NWS
Corpus
Christi



Fall 2011 Edition

Welcome to the fall edition of the CoCoRaHS newsletter!

by Christina Barron

In South Texas, when it rains, it pours. And when it doesn't, well, we end up in drought. Usually, a week or two with no significant rainfall will not be considered a drought, but when you look at months and months of below normal rainfall, drought is more than likely going to occur.

This year has already been one of the driest years on record with strong blocking high pressure systems bringing drier

weather, along with another weather phenomenon known as, La Nina.

This edition of the CoCoRaHS newsletter will explain what has been going on with the weather, as well as what describe what it exactly means to be in a La Nina season. We'll talk about what we can expect for the rest of the fall and winter seasons, and how you, as an observer, can help the NWS in providing better timely forecasts and services.

Outlook for Rain Not Good

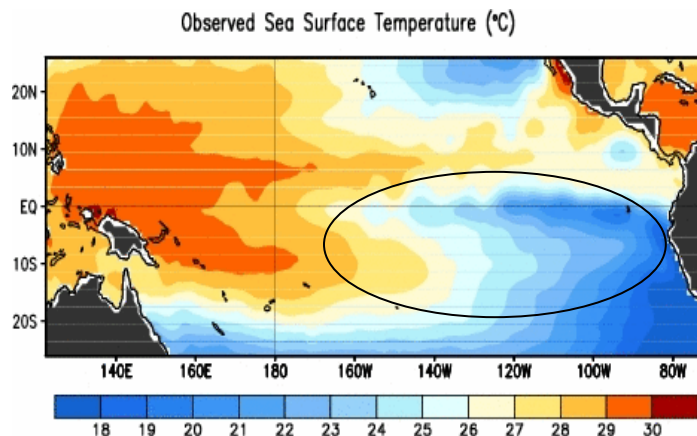
by Juan Alanis

It's been a very dry year for all of the South Texas region, and unfortunately, the long range forecasts are not looking very good. Forecasters from NOAA's Climate Prediction Center says "La Nina" has re-emerged in the tropical waters of the equatorial Pacific Ocean.

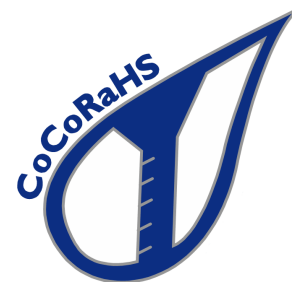
La Nina occurs when the eastern Pacific Ocean waters are cooler than normal. Typically, La Nina brings much drier conditions to the southern United States and much wetter conditions to the Pacific Northwest and Ohio Valley regions.

Forecasters predict La Nina will continue to strengthen into the com-

ing winter season. In fact, the CPC has upgraded the La Nina Watch to a La Nina Advisory, which means La Nina conditions are already being observed.



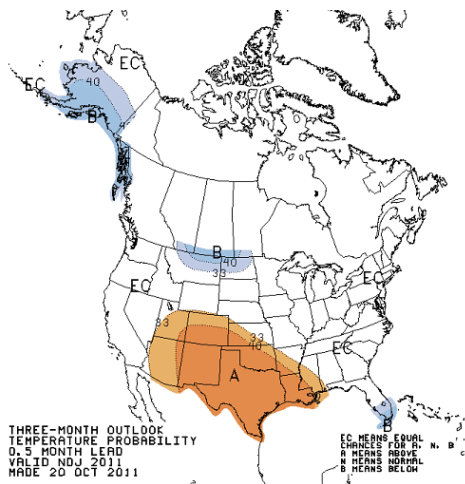
The 7-day Averaged Sea Surface Temperatures across the equatorial Pacific waters centering October 19, 2011. Cooling water temperatures across the eastern Pacific gives evidence to La Nina conditions occurring.



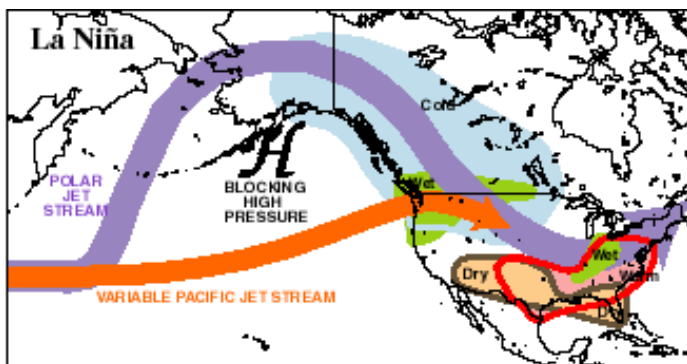
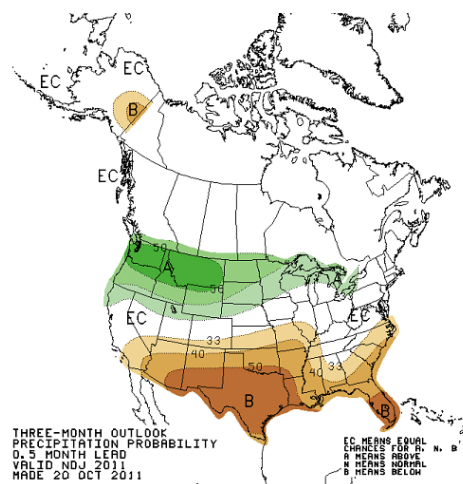
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For South Texas and the coastal bend, the outlooks, based on the La Nina conditions present, show temperatures will have a more likely chance to continue to run above normal through the end of this year and into 2012. Precipitation-wise, outlooks show rainfall to have a more likely chance to run well below the normal for the remainder of this year and into the spring of 2012.



Typical La Nina years bring drier and warmer weather to South Texas during the winter months. Generally, the polar jet stream, which helps bring weather systems to the area, is shifted further north, keeping most of the wetter and cooler weather out of South Texas. This makes the occurrence of weather systems in our area rare, but not impossible.

CoCoRaHS and National Weather Service on Facebook

by Juan Alanis, Jr

Social Media networks are now a great way to stay in contact with fellow CoCoRaHS observers and coordinators as well as the National Weather Service. Your Corpus Christi National Weather Service office, as are most NWS offices, are now on Facebook. Simply log onto Facebook and search for "US National Weather Service Corpus Christi". Forecasts, climate updates, interesting pictures, links to weather stories and sites are just a few things you will find on the NWS facebook site. You can even post your comments to the NWS. Log on today!

And CoCoRaHS observers throughout the Coastal Bend and South Texas region....a Facebook page has been created for you too. Log onto Facebook and search for "South Texas CoCoRaHS". This page is a great way for observers to connect with each other as well as to CoCoRaHS coordinators. News from headquarters, as well as weather updates, rain

totals, pictures and links to weather data and stories will also be posted on this site. It is your site...spread the word that it is available and let's make it great.

South Texas CoCoRaHS can also be followed on twitter as well at www.twitter.com/cocorahsstm



www.facebook.com/US.NationalWeatherServiceCorpusChristi.gov



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.

Please check out the following link for upcoming courses in your area: <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), Matt Grantham (Matthew.Grantham@noaa.gov) or John Metz (John.Metz@noaa.gov) and we can try to organize a course for your community.

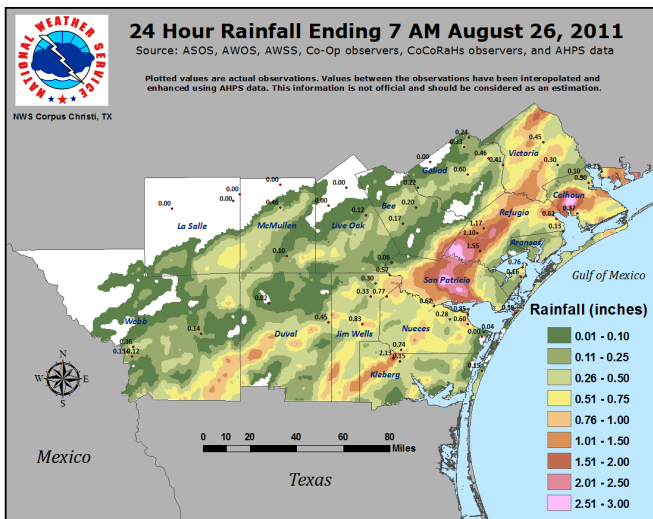
Severe Storms in August

by Christina Barron

For the most part, South Texas remained hot and dry through the month of August due to a stubborn area of high pressure in the upper atmospheric levels. The amount of instability and atmospheric moisture across the area is prime for shower and thunderstorms to form, however we mainly lack the forcing, or vertical lift, to help get things started. One form of vertical lift that our area experiences daily is the sea breeze. The sea breeze acts as a local frontal boundary that is developed between the thermal difference of the cool water temperatures and warm land. But sometimes the sea breeze isn't strong

enough, and our area needs a bit more lift to allow for convection.

On August 25th, additional forcing came in the form of an upper level disturbance that moved from Southeast Texas westward towards South Texas. Enough forcing combined with an extremely moist, unstable atmosphere allowed for severe thunderstorms to develop. These storms began around 1pm around Calhoun and Victoria counties and moved westward towards La Salle and Webb Counties by the evening. Strong winds and heavy rain were observed throughout the event, with one account of a tornado southeast of Port Lavaca. Many locations received beneficial rain, however, others saw nothing. Here is a graphical representation of rainfall amounts reported for the event as well as some local CoCoRaHS reports:



Local CoCoRaHS observer reports	
TX-RF-3	1.55"
TX-RF-8	1.28"
TX-VC-17	1.16"
TX-SP-13	1.06"
TX-SP-10	1.01"



Importance of Zero Reports and Other Observations

by Juan Alanis, Jr.

During this time of drought across South Texas, your reports of zero and drought observations are more important than ever. Submitting your "zero" reports provides meteorologists and researchers with the proof that no rain fell.

Now, your observations can help meteorologists and researchers better understand how the drought is impacting your community. The National Drought Mitigation Center (NDMC) is giving CoCoRaHS observers the opportunity to tell them about the impacts of the current drought. What information is wanted? Anything that is drought related, including wildfires, heat related deaths, high demand for energy, agricultural losses and even recreation (low lake levels) can be

reported to the NDMC. When you see any kind of drought impact, we encourage you to file a "Drought Impact Report" through your CoCoRaHS account. Simply login in and then click on "drought impact report" on the left. Your information will help researchers better understand the severity of the current drought and be better able to compare to previous droughts.



1. Choose "Drought Impact Report" from the "Enter My New Reports" panel.



Photo courtesy of Robert Burns from Texas AgriLife Extension Service

2. Enter the timing and description of the impact.

Description

Please provide a description of how drought is affecting you, your livelihood, your activities, etc. *

Our Farm ponds are almost empty. Corn crop amounts to a few withered stalks. Has rained less than an inch in the past two months. Normal waterfowl have not arrived this summer, must have taken a wetter route.

My Data Entry : Drought Impact Report Form

Drought Impact Report Form Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

The significance of drought is tied directly to the impacts that it causes. Identifying and documenting impacts as they first appear and as they continue is essential for comprehensive drought monitoring. Please refer to the [CoCoRaHS training slide show](#) for reporting drought impacts.

* indicates required field

Duration

Drought is a gradual, slow-moving phenomenon. The start date is an approximation. End dates are not required.

Start Date

2/10/2010

End Date

← Leave end date blank if impact is still ongoing.

Report Categories

Please check any and all categories that apply to the report you are submitting. For more information on categories of drought impacts and reports, please click on the blue help icon.

If an amount of money is associated with the impact, please consider providing that information in the box to the right of the category. Including a dollar amount means you agree to allow it to be used as a summary statistic.

<input checked="" type="checkbox"/> Agriculture	\$ 150,000
<input type="checkbox"/> Business And Industry	\$
<input type="checkbox"/> Energy	\$
<input type="checkbox"/> Fire	\$
<input checked="" type="checkbox"/> Plants And Wildlife	\$ 20,000
<input type="checkbox"/> Relief Response	\$
<input type="checkbox"/> Society And Public Health	\$
<input type="checkbox"/> Tourism And Recreation	\$
<input checked="" type="checkbox"/> Water Supply And Quality	\$ 47,000

Submit Data Reset

3. Click "Submit Data".

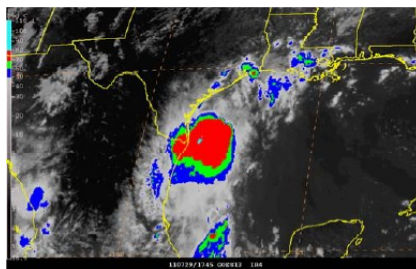


Tropical Storm Don

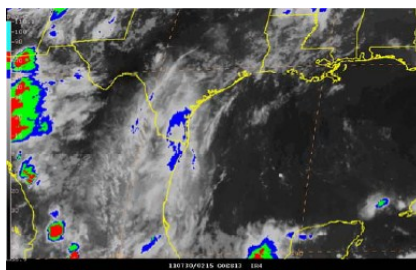
by Juan Alanis, Jr.

The storm everyone was waiting for to bring relief from the heat and drought...turned into a huge disappointment. Tropical Storm Don was a result of a tropical wave off the African coast. A closed circulation finally formed late afternoon on July 27th as the system entered the southern Gulf of Mexico. As TS Don moved across the Gulf of Mexico over the next several days, the system struggled to intensify due to some wind shear and dry atmospheric air. Despite it's disorganization, the system was predicted to bring 2 to 4 inches of rain across much of drought stricken south Texas, however this did not happen.

It has been deemed likely that the quick dissipation of Don was the combination of wind shear it encountered as it neared the coast, as well as the entrainment of dry air from drought-



Above: Enhanced infrared imagery of Tropical Storm Don moving northwest towards South Texas around 1:00 pm, July 29, 2011. Below: T.S. Don dissipating right along the coast around 9:00 pm July 29, 2011.



stricken areas in Mexico and southern Texas. The storm (or what was left of it) made landfall on the evening of July 29th near Baffin Bay, bringing some rain to the eastern portions of the Rio Grande Valley, however none to the Corpus Christi and Laredo areas as originally forecast. On radar and surface observations, little indication was shown that a tropical system had just made landfall.

Don died so fast, that even forecasters from the National Hurricane Center in Miami were baffled and commented in one their advisories, "The cyclone literally evaporated over Texas about as fast as I have every seen without mountains involved." Tropical Storm Don peak winds were 50mph and lowest pressure was 998 mb or 29.47 inches, though much weaker upon landfall.

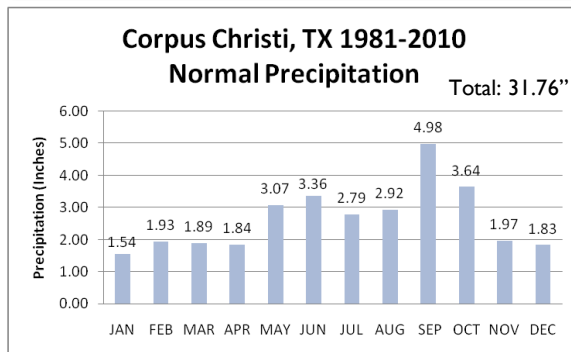
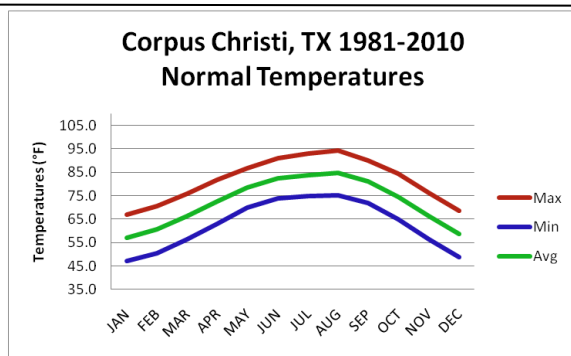
The New 1981-2010 Climate Normals

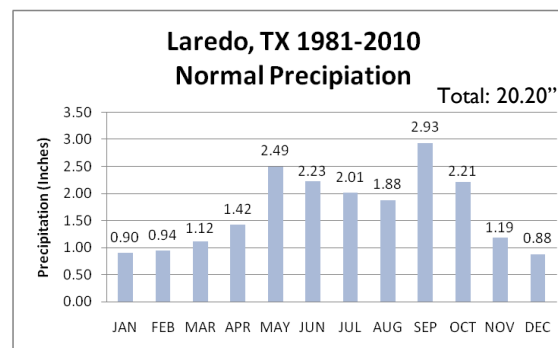
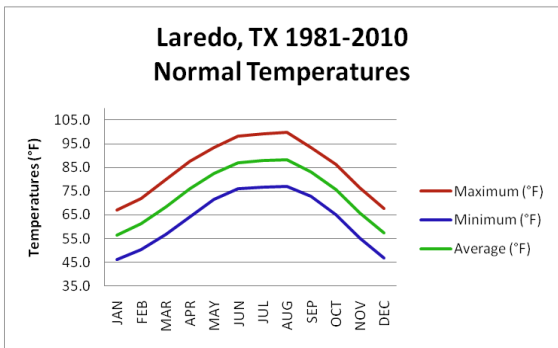
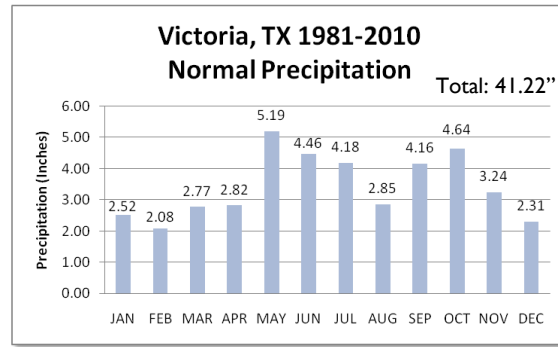
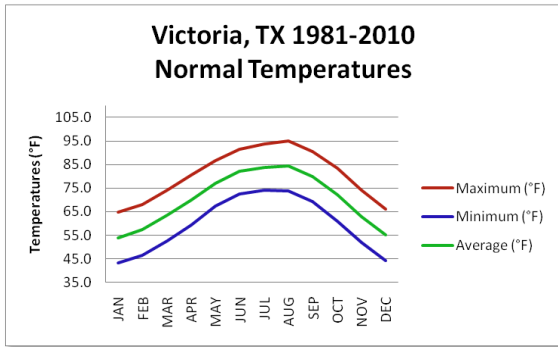
by Christina Barron

The conclusion of the year 2010 resulted in the newly calculated 30-Year Normals produced by the National Climatic Data Center (NCDC), ranging from 1981 to 2010. With the loss of the cooler 1970s decade, there has been noted a slightly warmer 30-year normals due to an averaged ~1.5 Fahrenheit degrees warmer 2000s. Over the 30 year period, this warmer decade calculated to ~0.5 F° increase to the new normals from the previous normals.

Normals are not designed to be scientific measurements of climate change. Although, there has been a measured increase in temperatures signifying an indeed warmer climate with the newly added decade, additional factors come into the equation such as possible station moves, changes in methodology, changes in instrumentation, etc., that are not reflective of real changes in the underlying climate signal.

Here are graphs for the three South Texas climate stations. Note that the normals used for the Laredo site come from a nearby cooperative station of quality controlled data. The Corpus Christi and Victoria normals come from the quality controlled data from instrumentation located at the respective airports.





Drought Information Statements

by Christina Barron

We talked about the prediction of a dry and warmer winter season due in part with La Nina conditions resurfacing. In addition, we talked about how important it is to continue to report 0.00" rainfall and, if possible, report any drought impacts you may be experiencing on the CoCoRaHS website. All of this information and other pertinent information dealing with the drought is constantly being looked at by the NWS. Here at NWS Corpus Christi, we take this information and issue a product known as the Drought Information Statement.

The Drought Statement informs the public of how the past two weeks, the future two weeks, as well as the next couple of months will likely impact the drought status across the area. Since the weather is an imperfect science, forecasts greater than a week can easily change. That's why the statement is always updated to give the latest status on the drought at least every 2 weeks. If major changes happen in the forecast or drought status, the drought statement may be issued earlier.

Information listed, but not limited to, include: Drought Impacts, Burn Bans, Water Restrictions, Agricultural and Soil Moisture Conditions, Crop and Weather Reports,

Fire Danger Hazards, River and Hydrologic Conditions, Climate Summary and Precipitation/Temperature Outlooks.

To check out these statements, log-on to the NWS Corpus Christi website @ www.weather.gov/CorpusChristi
 -Scroll to the bottom of the page
 -Click on the Drought icon

Additional websites linking to the Drought Monitor, Climate Prediction Center, and other informative sites can be found on this page as well.

Drought Information Statement
 Issued by NWS Corpus Christi, TX

Home | Current Version | Previous Version | Graphics & Text | Print | Product List | Glossary Off
 Versions: 1 2 3 4 5

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DROUGHT INFORMATION STATEMENT
 NATIONAL WEATHER SERVICE CORPUS CHRISTI TX
 806 PM CDT FRI NOV 4 2011

...RAINS NOT WIDESPREAD NOR SUFFICIENT ENOUGH TO AFFECT [DROUGHT](#)



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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 Spring 2012 edition of the South Texas CoCoRaHS newsletter, please email Christina.Barron@noaa.gov. We would love to hear from observers of South Texas!