



South Central Texas Climate Outlook

By Larry Hopper

After one of the wettest January-June periods Texas has ever seen, July through September has been very dry excluding the panhandle. Most of the region only received 1-3 inches of rain during this period, with isolated spots totaling above 4 inches while a few others were below a half inch. The biggest contrast occurred at Austin-Camp Mabry, which only had 2.24 inches of rain during its seventh driest July-September after receiving a record 39.14 inches of rain during the first half of the year. Therefore, a "flash drought" rapidly developed over parts of Texas following the wet spring that helped eliminate a multi-year drought, increasing drought conditions across Texas from under 1 percent at the end of July to over 38 percent by the end of September. Extreme drought (D3) conditions are currently covering most of Guadalupe and Wilson Counties and a larger area northeast of the Austin-San Antonio county warning area.

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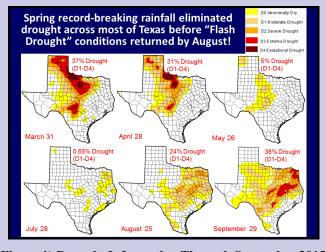
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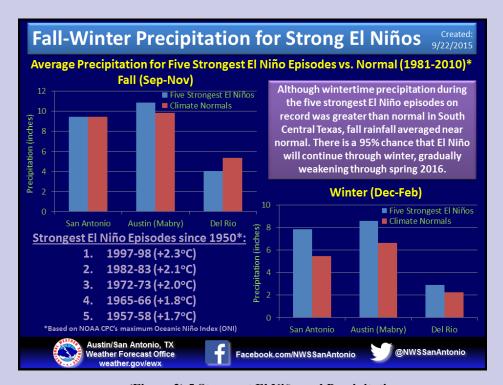


(Figure 1) Drought Information Through September 2015

Climate Outlook...

Fortunately, confidence is very high that drought conditions will begin to improve this fall, with complete elimination likely during winter as the strongest El Niño since at least 1997-1998 continues to persist. Past climate data from the five strongest El Niños since 1950 shows that rainfall during the fall months is typically close to normal, while winter precipitation has typically been 25-50% above normal. Thus, the Climate Prediction Center (CPC) is predicting wetter than normal conditions from now until April 2016 with their highest confidence for this winter and lowest confidence for spring because El Niño conditions will likely be weakening by then. CPC is predicting a 70% chance that this winter will be wetter than half of the winters during the 1981-2010 climate period and over a 50% chance of being one of the wettest third of those winters.

"The Climate
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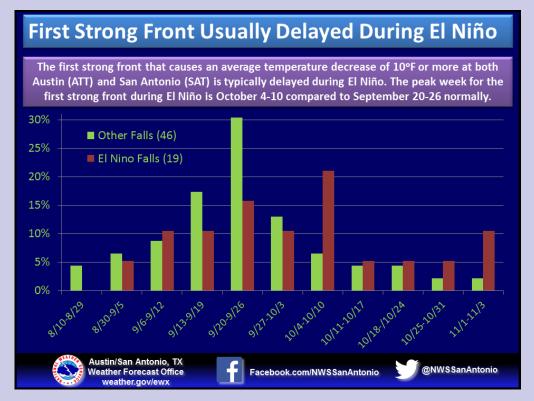


(Figure 2) 5 Strongest El Niño and Precipitation

Climate Outlook Continues...

Finally, South Central Texas has yet to experience its first strong front (that causes an average temperature drop of 10°F at Austin and San Antonio) of the fall season. Although this typically occurs during the second half of September with a median date of September 23, the first strong frontal passage during El Niño typically peaks a few weeks later in early October with a median date of October 1. In addition, there was only one weak front (causing an average temperature drop of 5-10oF at Austin and San Antonio) during August and none in September for the first time since 1955. There are many possible explanations for this, but the most likely one is that the northward displacement of the polar jet stream keeps cold polar air masses at bay longer than usual despite a more active southern jet stream. Thus, most of the northern United States is warmer than normal during El Niño, but the Gulf Coast states including Texas should be cooler than normal as greater cloud cover will likely result in considerably cooler than normal average daytime high temperatures.

"the first strong frontal passage during El Niño typically peaks a few weeks later in early October"



(Figure 3) First Strong Front During El Niño

Storm Data

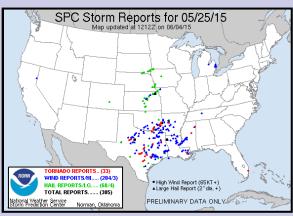
By Bob Fogarty

Storm Data and Unusual Weather Phenomena (Storm Data) is a publication of NOAA's National Centers for Environmental Information (NCEI). NCEI is the official keeper of weather records for the United States and one of the products they produce is Storm Data. The information in this publication comes from the 125 National Weather Service Weather Forecast Offices (WFOs) across the country and the U.S. overseas territories. Storm Data is, "a chronological listing, by state, of hurricanes, tornadoes, thunderstorms, hail, floods, drought conditions, lightning, high winds, snow, temperature extremes and other weather phenomena". The storm reports in it contain statistics on deaths, personal injuries, and damage estimates. This publication is the official source of this information from the National Weather Service.

The data are collected by the WFOs from storm spotters, or from storm damage surveys conducted by NWS employees. Spotters can be trained in our Skywarn Spotter Training, and range from members of the public, to government employees at all levels of government, to members of the media. Spotter reports usually are collected in one of two ways. The first, the way we prefer, is for people who experience reportable weather to call, share on social media, or email our office with the information. The other way is for us to contact people in places where we believe weather has occurred. This is a time consuming process for us since we have to find people in the area we think a storm hit.

After we get the storm information, we send out a local storm report (LSR). If the severe weather was a tornado, large hail, or damaging wind, the report can be viewed on the Storm Prediction Center's website at http://www.spc.noaa.gov. Here is a sample of the Storm Report map:

(Figure 4) May 2015 Storm Reports



"The data are collected by the WFOs from storm spotters, or from storm damage surveys conducted by NWS employees"

Storm Data Continues...



Storm Data Continues...

As you can see these data are preliminary. After the event we verify the information, and send it on to NCEI.

Why do we do this? One reason is to verify our forecasts and warnings to find out how well we're doing. Did we provide a warning of upcoming weather and how much time did we give the public to prepare? Did miss anything? Did we send out a false alarm? We use all this information to improve our service. A second use of Storm Data is to create a climatology of extreme weather. Climate includes when, where, and how much extreme weather occurs in a place and helps us answer questions like is South Central Texas really flash flood alley? We can find out how much flash flooding happens here as compared to other places. One other use of Storm Data is in research. When researchers try to determine why certain weather events happened or how to predict them in the future, they need a source of historical events to look at and Storm Data is where they turn. For example, from a paper in the journal Weather and Forecasting looking for a method to forecast severe size hail in the Northern and Central Plains, "Hail reports were obtained from the National Oceanic and Atmospheric Administration publication Storm Data...". This is routine for researchers

"Climate includes when, where, and how much extreme weather occurs in a place"

What does Storm Data look like? Here is an example from the May 2015 edition:

WILLIAMSON COUNTY --- 1.9 NW LIBERTY HILL [30.69, -97.94], 4.4 N LIBERTY HILL [30.73, -97.93]

05/23/15 20:22 CST 0 Tornado (EF1, L: 3.08 mi, W: 200 yd) 05/23/15 20:34 CST 0 Source: NWS Storm Survey

A NWS storm survey team found an EF-1 tornado initially touched down near County Road 201 just west of County Road 200. The tornado traveled to the north-northeast through the Indian Oaks and Carriage Oaks subdivisions before crossing County Road 200 and lifting near East Bear Creek Rd. Damage was primarily to large oak trees, but about 7 to 10 homes suffered damage mainly to roofs. The most substantial damage was a complete loss of a chimney. Also, a barn lost part of its roof. Peak winds were estimated at 100 mph.

This shows what we call an event, in this case a tornado report. The numbers in the event report are the date, time, number of fatalities, number of injuries, property damage cost, and crop damage cost. Also included, but not shown, is an episode summary which describes the overall weather pattern in which the event happened.

COOP is Next...



NWS Cooperative Observer Program

By Steve Smart

The National Weather Service (NWS) Cooperative Observer Program (Coop) is truly the Nation's weather and climate observing network of, by and for the people. More than 8,700 volunteers take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are truly representative of where people live, work and play.

In South Central Texas, we have hundredths of COOP observers that have collected weather information for years. And in this fall Texas Weather Wire edition, we are honoring those individuals for their dedicated efforts to make the Climate and other weather programs better.



Mr. Larry Rothbauer (left) of Hallettsville 2N received a 40 year length of service award on August 4, 2015. Mr. Rothbauer has been taking official observations for Hallettsville since May 1, 1975.

Mr. Clarence Fischer (right) of Fedor, TX receives a 10 year length of service awardon September 8 2015. Mr. Fischer has been taking official observations for Fedor



COOP Program Awards...



Larry Weiser (right) of Giddings, Texas accepts a 25 year length of service award presented by Steve Smart, Observing Program Leader from the Austin/San Antonio National Weather Service (NWS) office. Larry Weiser has been observing and reporting rainfall data for the National Weather Service officially since 10/1/1990.



Mr. John Taylor of Taylor 1NW received a 15 year LOS award. Mr. Taylor has been taking official weather observations since April 1, 2000.



Linda Harper (right) of Harper, Texas accepts a 10 year length of service award presented by Steve Smart, Observing Program Leader from the Austin/San Antonio National Weather Service (NWS) office. Linda Harper has been observing and reporting weather data for the National Weather Service officially since 9/1/2005.

If you are Interested on the COOP program or want to learn more about it; Check the following link:

http://www.nws.noaa.gov/om/coop/what-is

StormReady Supporter Continues...



StormReady Supporter

By Orlando Bermúdez

Businesses, schools, and other non-governmental entities often establish severe weather safety plans and actively take part and promote severe weather safety awareness activities. An entity that promotes the principles and guidelines of the StormReady program may be eligible to become a StormReady "Supporter." And that big step was taken by some Austin and San Antonio malls and premium outlets this summer and became StormReady Supporters.

Below is a list of malls and outlets from the cities of Austin and San Antonio that are now "StormReady Supporters"

Austin

- 1) Lakeline Mall
- 2) The Domain
- 3) Wolf Ranch Town Center
- 4) The Arboretum
- 5) Arbor Walk
- 6) Gateway
- 7) Barton Creek Square
- 8) Round Rock Premium Outlet
- 9) San Marcos Premium Outlet

San Antonio

- 1) Ingram Park Mall
- 2) Rolling Oaks Mall

Do you want to be part of the Weather-Ready Nation and become a StormReady Community, University or Supporter? I am going to make easy for you, check the link below:

http://www.stormready.noaa.gov/



Photo taken during the StormReady Supporter Ceremony at Lakeline Mall on August 18, 2015



Photo taken during the StormReady Supporter Ceremony at Ingram Park Mall on August 12, 2015

The CFC Kick-Off and Taco Day at the Office

By Orlando Bermúdez

The Combined Federal Campaign (CFC) is the only authorized solicitation of Federal employees in their workplaces on behalf of approved charitable organizations. The campaign begins generally from mid-September to mid December each year. We have been participating with this campaign for the past 5 years and this year is not the exception. We started the campaign with an ice cream day and set the office goal to collect 4,000 dollars in donations.



"Ice Cream Day at the Office"

"This is how we do in here"

"We has a great Time"





"Breakfast Tacos Day Selfie"

Courtesy of the ESA, ASA and ETS

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Texas Weather Wire

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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."



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YouTube: https://www.youtube.com/user/NWSSanAntonio

Austin/San Antonio National Weather Service Home Page

http://www.srh.noaa.gov/ewx/

Thank you for reading our newsletter!

• Are we expecting to see a wet and cooler 2016 winter?

Answers to this question and more will be included in the winter edition of the Texas Weather Wire

Have a great fall!