



TEXAS CoCoRaHS OBSERVER

Fall 2015



"Because every drop counts, as do all Zeros."

Welcome to the Texas CoCoRaHS Observer newsletter.

The purpose of this newsletter is to keep observers informed of the latest news, events and happenings related to the CoCoRaHS program here in Texas, as well as news about the latest weather patterns affecting each region of Texas.

If you have questions, comments or suggestions, feel free to contact us via the emails listed on the back page.

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Key ingredients combine to flood Central Texas, twice

The later half of October became very active across much of the state, including Central Texas which was hit with heavy rains two weekends in a row, with the rains of October 30th causing severe flash flooding across Travis and Hays counties, areas which already had been hit by major flooding in May.

On October 24th and 25th, an upper level trough of low pressure combined with a cold front and copious moisture to produce heavy rainfall across much of south central Texas. The heaviest rainfall totals were generally along and east of the Interstate 35 corridor, where 4 to 6 inches of rain was common. A couple of the highest totals included 14.45 inches near Fayetteville and 11.81 inches near Anderson Mill in Travis County.

One week later, on October 30th and 31st, a warm front combined with an upper level trough and abundant moisture to produce heavy rainfall and severe weather across much of south central Texas on October 30-31st. A preliminary damage survey has confirmed 4 tornadoes across the region during these two days, including two EF-2 tornadoes during daybreak hours at Floresville and Geronimo.

The Floresville tornado produced substantial roof damage to homes and businesses along US Highway 181, including at Floresville High School, which saw significant damage to a two-story classroom building. The tornado also threw a camper onto the top of a local hotel.

The Geronimo tornado completely destroyed 5 homes with about

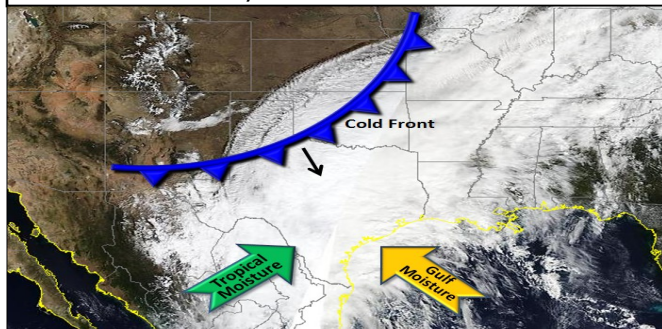
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Flooding in Buda, Texas on Friday 30 October 2015.
Photo: Christina Martinez (via KVUE-TV)

Rain Totals Oct 20th through October 31st

TX-TV-30	Anderson Mill 2.2 S	17.77"
TX-TV-135	Creedmoor 1.5 NNW	21.43"
TX-TV-218	Onion Creek 3.2 ENE	21.07"
TX-TV-256	Tanglewood Forest 1.1 S	25.15"
TX-HYS-1	San Marcos 5.8N	21.44"
TX-HYS-91	Wimberley 4.6 WNW	22.46"
TX-HRR-139	Cloverleaf 1.7 W	20.03"
TX-HRR-119	W. Univ. Place 0.4 WNW	18.20"
TX-BST-36	Bastrop 1.0 WNW	21.54"
TX-BST-97	Elgin 4.3 E	19.84"
TX-BEL-16	Temple 4.7 S	20.55"
TX-CML-37	Canyon Lake 2.8 N	20.89"



Abundant moisture from Gulf of Mexico, combined with tropical moisture from Hurricane Patricia in the Pacific and a cold front resulted in widespread heavy rain across central, south and east Texas.

Front, Tropics cause heavy rains across South Texas

A number of factors came together to produce a heavy rain event across South Texas on October 24. Abundant gulf moisture was already in place as deep on-shore flow had been occurring for several days, pulling in very moist gulf air. Additionally, Hurricane Patricia made landfall along the Pacific Mexican coast on the 23rd...and its remnant moisture quickly pushed across Mexico and into South Texas. The third ingredient was a cold front dropping down through the central U.S. The combination of all these elements were ideal for widespread heavy rain.

The event started in the early morning hours of October 24th as scattered showers and thunderstorms developed to the

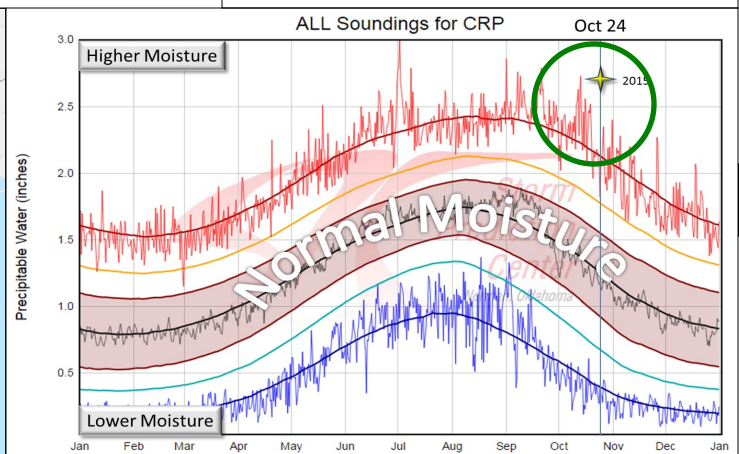
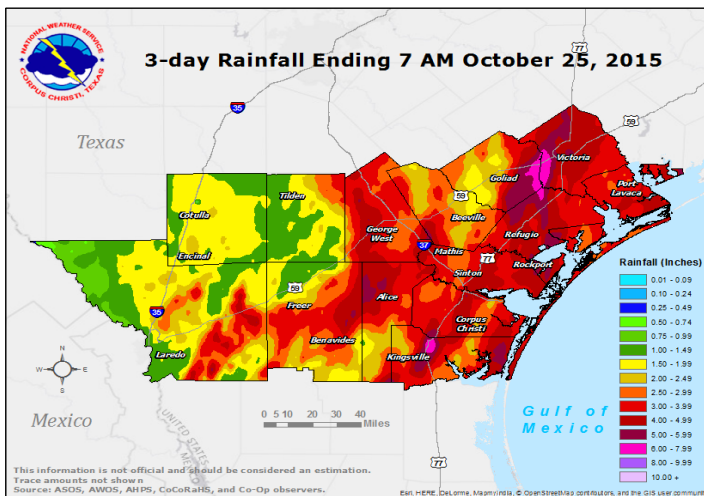
south and moved north through South Texas. As had been well forecast by model guidance, during the morning hours, the rain filled in and covered all of South Texas. The sheer amount of moisture in the atmosphere led to a large number of showers and thunderstorms capable of producing torrential rains. In fact, the moisture level, measured by instruments attached to weather balloons and reported as precipitable water (the amount of water vapor suspended in a column of air), topped out at 2.70 inches on this day, shattering an old record for the day, and narrowly missing a record for the entire month.

By mid-day, a boundary from the north was entering the area and producing strong wind gusts as it accelerated down the Rio Grande Plains. A few strong storms were reported

across the area, but the main story was the rainfall. Overall, 3 to 7 inches of rain fell across the region. The ground was relatively dry due to the limited rain over the prior couple of months, which helped to alleviate some flash flooding issues. Some flash flooding did occur in Laredo due to the terrain and rainfall rates. Other flash flooding occurred further east in Duval, Jim Wells, Kleberg and Nueces counties.

As the system progressed, a low pressure center strengthened just off the Texas coast, producing very strong winds Saturday night. Gale force winds were experienced in marine areas with gusts to 40-50 miles per hour in coastal counties.

Left: 3-day rain totals ending on Oct. 25th
Below: Image showing amount of precipitable water in atmosphere, with Oct 24th's 2.70 inches (circled) one of the highest readings of the year.



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20 other homes damaged.

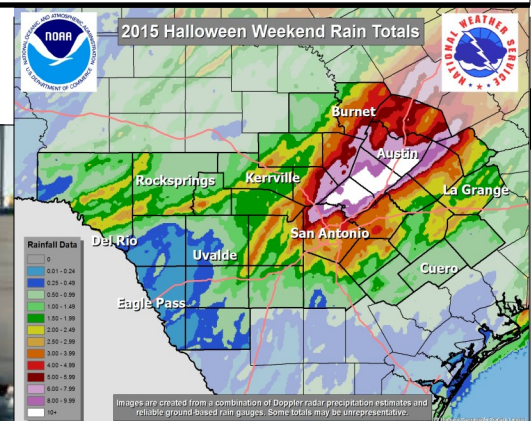
The heavy rains that fell on already saturated soils, led to major flash flooding in areas of southern Travis County as well as in areas of Hays and Comal Counties. The heaviest rain totals included 18.46 inches in Buda, 15.63 inches in San Marcos and 15.50 inches at the US 183 Onion Creek overpass near Austin-Bergstrom International Airport.

Flood waters over a foot deep flooded the base of the air traffic control tower at the Austin airport, causing extensive damage to the radar room and other equipment.

A mobile tower was used for several weeks, causing delays for passengers at the Austin airport.



Temporary air traffic control "tower" used at Austin airport after flooding damaged control tower on October 30th.



Rainfall totals from Halloween weekend. Purple and white colors depict the heaviest rainfall amounts.

Wet fall season across Abilene-San Angelo region

The fall season started off very dry across the Abilene-San Angelo region, but finished very wet.

September rainfall totals were well below normal across all of the region. For most of the area where the monthly precipitation was less than 25 percent of normal (red color areas), the monthly rainfall was less than one-half inch. Only at a few locations across Irion, northern Crockett, and Throckmorton counties was the September precipitation above normal. The highest monthly precipitation of more than 3 inches (not shown) occurred in small parts of Irion and Crockett Counties.

Temperatures averaged well-above normal in September. The daily average temperatures were above normal for the entire month at San Angelo, and for all except one day at Abilene. San Angelo finished with the 4th warmest September on record, while Abilene tied for the 8th warmest ever.

The weather pattern changed in October and brought three rain events to help alleviate the drought conditions. The first was on Oct 8th and 9th,, the second on Oct. 22nd to 24th and another rain event on Halloween Weekend.

For much of the Big Country and for the area southeast of a Brownwood to Christoval to Ozona line, October rainfall totals were in the range of 4-8 inches. These monthly amounts were well-above normal. A few pockets within these areas received over 8 inches of rainfall. October rainfall was below normal across some of the area from western Crockett County across much of Irion into Tom Green, Coke and Runnels Counties. The monthly rainfall was also below normal at a few locations across the northwestern Big Country. Abilene finished with 8.17 inches of rain, which was the 4th wettest October ever.

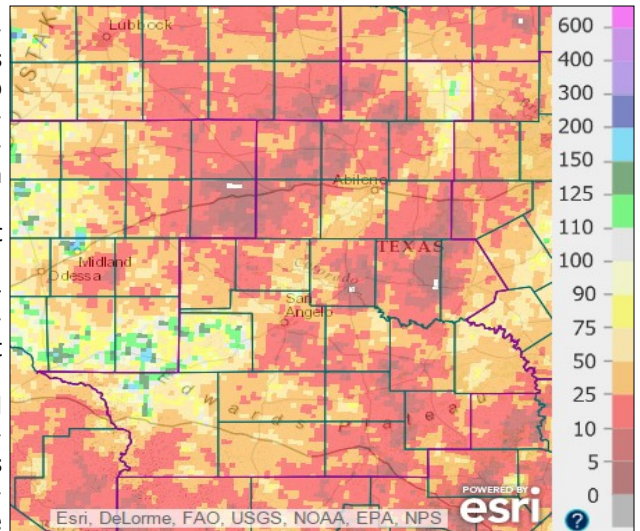
The rains helped put out a wildfire in western Schleicher County, which burned approximately 2,250 acres.

The wetter pattern continued during the month of November. Precipitation for November was well-above normal across most of the northern half of west-central Texas, across parts of the Concho Valley and Heartland, and in a small part of the Northwest Hill Country. Monthly precipitation amounts (not shown) were in the range of 3-6 (with locally higher totals) inches across these areas.

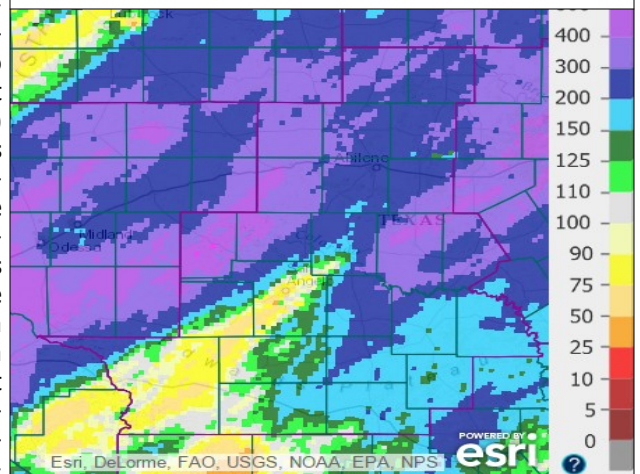
November precipitation was below normal across much of Crockett County into southeastern Irion and southwestern Tom Green Counties. Monthly precipitation amounts were less than 1 inch across parts of that area.

The monthly precipitation amounts were influenced largely by a significant rain event November 26-29.

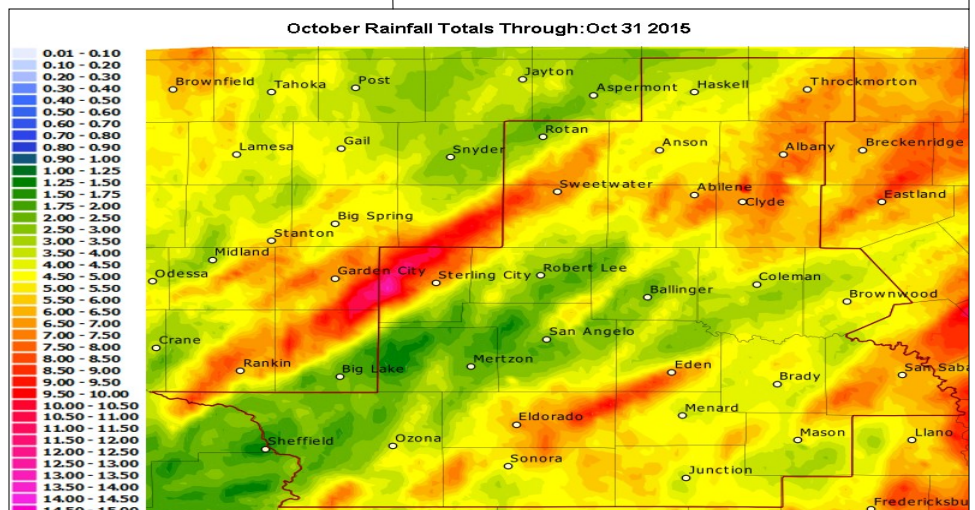
With an upper level storm system over the western U.S., several disturbances entered Texas with the southwest flow aloft, ahead of the main system. As a result, several rounds of rain showers occurred on November 26-29, with a few thunderstorms on November 26-27. Rainfall was moderate to heavy at times. The highest rainfall amounts (5-7 inches) occurred in a band across northern Coleman, southeastern Callahan, and extreme northern Brown Counties. Rainfall of 3-5 inches occurred across much of the Big Country, northwestern Concho Valley and northern Heartland. Much of the rest of west-central Texas received 1-3 inches of rainfall. Less than 1 inch of rainfall occurred across much of the Northern Edwards Plateau, north to Mertzon and San Angelo.



Above: Percent of September precipitation across West Central Texas, with many areas receiving less than 25% of their normal rainfall.



Above: Percent of normal November precipitation across West-Central Texas region, with many areas receiving at least 200% of normal.



Tropics, front create ice storm across Panhandle

Thanksgiving day started warm with afternoon highs peaking in the lower to middle 70s for most of the South Plains and Rolling Plains. However, the weather took a drastic turn toward the colder side as a front plunged southward during the late afternoon and evening hours. Temperatures tumbled into the 30s by late evening, with sub-freezing temperatures invading the southwest Texas Panhandle and northern South Plains.

The combination of Gulf of Mexico moisture streaming in from the south, eastern Pacific Ocean moisture racing in from the southwest, a storm system gathering across the Great Basin and lift with the cold front resulted in scattered showers and thunderstorms development on Thanksgiving. Initially, most of the activity was across the Texas Panhandle, though showers blossomed further south through the overnight hours. Strong southwesterly flow aloft kept temperatures above freezing several thousand feet above the ground even as the mercury dipped below the freezing mark at ground level. This resulted in a change over from rain to freezing rain as the cold air built in on gusty northerly winds at ground level. The freezing rain even mixed with sleet at times as the cold air deepened, though the warm air aloft never completely gave way. A few spots even saw a little snow briefly mix in, though

accumulations were minimal.

Freezing line continued southward on Friday, with temperatures over the remainder of the South Plains and Rolling Plains dropping below the 32 degree mark. Periods of frozen precipitation continued Friday and Friday night and into Saturday as relatively warm and moist air was repeatedly lifted over the cold low-level air, where temperatures were stuck in the 20s and lower 30s. In addition, a little bit of high level moisture also streamed into the system from Hurricane Sandra, a category 4 storm in the eastern Pacific.

Sandra weakened just as fast as it developed with its remnants moving into the Mexican coast November 28th. Although Sandra did contribute a little high level moisture to the region, the bulk of the moisture in West Texas came from the Gulf of Mexico and a fetch of Pacific moisture carried by a strong sub-tropical jet located north of the hurricane.

The near record moisture levels for late November also contributed to heavy rain for much of North Texas, SE Oklahoma and western Arkansas, where some spots recorded a half foot to a foot of rain. This rain resulted in extensive flooding and also contributed to several deaths.

Here in West Texas, the prolonged stretch of freezing rain, sleet and freezing drizzle did result in significant accumulations of ice, particularly on elevated surfaces including trees, grasses, power lines, bridges and overpasses. The weight of the ice did dam-



Frozen rain gauge in southwest Lubbock during late November ice storm

-age some vegetation and knock out power in spots. The slick conditions also contributed to a number of vehicle accidents. Luckily, though, where temperatures stayed within a few degrees of the freezing mark, roughly from Lubbock south and eastward, surface roads stayed mostly wet which helped to mitigate the overall impacts.

Over the courses of the Thanksgiving weekend, total liquid precipitation ranged from a tenth to quarter inch near the Texas/New Mexico line to over two inches across the southern Rolling Plains. The Lubbock airport officially recorded 0.70 inches.



Ice accumulations at Caprock Canyons State Park, Nov 28th



Ice on vehicle in SW Lubbock.

Rains bust drought in North Texas

It was a dry start to the fall season across North Texas, so dry in fact that about 90% of the NWS Fort Worth office forecast zone was in at least a "D2" or Severe Drought as of October 22nd. The month of October wiped out the drought conditions that were plaguing the region just three weeks earlier.

As of November 5th, almost all of the NWS Ft. Worth office forecast zone was drought free, with the exception of the far southeastern counties, such as Milam, Robertson and Leon, which were classified as either "abnormally dry" or as "moderate drought". Lamar County in the far north-east of the region was classified as "abnormally dry."

With the heavy rains at the end of October and earlier in the year....many stations have set new all time rainfall records, including Athens with 71.89" (old record 58.34"), Corsicana with 72.77", (old record 61.50" and Cleburne with 66.29" (old record 55.94") and there was still one month left in the year to add to these record totals.

Mother Nature finally brought welcome relief to the region from October 22nd to the 25th as abundant moisture from the Gulf of Mexico combined with moisture from Hurricane Patricia in the Pacific as well as a cold front to bring heavy rainfall.

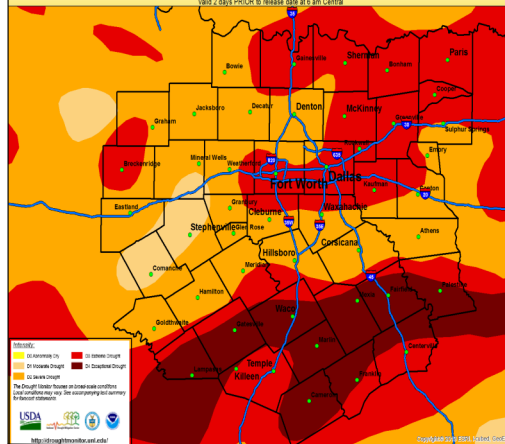
Over the four day period, DFW received 7.54 inches of rain, the Waco airport 11.65" and Co-CoRaHS Observer at Waco 1.4 S receiving 14.48."

After a short dry period, Halloween weekend brought more rain across the region, including another 4 to 6 inches for many areas of McLennan County, 5 to 7 inches across Bell County and an additional 2 to 4 inches across the DFW Metroplex.

The heavy rains to end

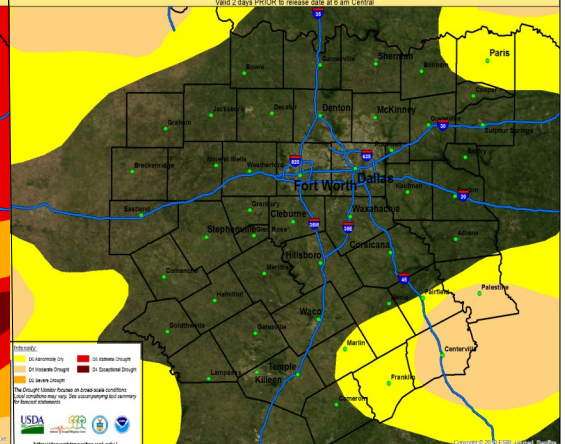
U.S. Drought Monitor - NWS Ft. Worth Forecast Area

Released: Thursday, October 22, 2015
Valid 2 days PRIOR to release date at 6 am Central



U.S. Drought Monitor - NWS Ft. Worth Forecast Area

Released: Thursday, November 05, 2015
Valid 2 days PRIOR to release date at 6 am Central



The north Texas drought, before (left) and after (right) the rains at end of October.

November tornado outbreak in northern Panhandle

A complex weather system set up and caused a outbreak of tornadoes across the northern Texas Panhandle during mid November.

The strongest ones were two that developed south of Pampa and took very similar storm tracks, just southeast of the town, and were rated EF-3.

Numerous other storm reports came in that day as well reporting hail up to the size of golf balls.

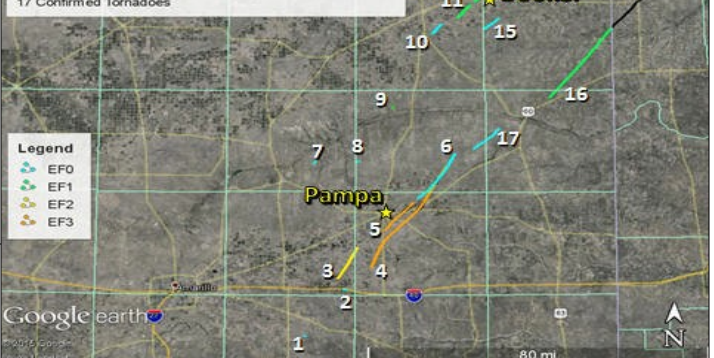
A jet streak moved eastward across northern Mexico into southwestern Texas concurrent with an intense mid-level trough that was progressing eastward from the four corners into the southern-central high plains.

A surface low developed over the central high plains and slowly migrated eastward while a pacific cold front surged southward. Gulf moisture was being transported via low level flow bringing dew points into the 50s and lower 60s. Strong shear and veering winds profiles in the exit region of an approaching mid-level speed max supported supercell development.

17 tornadoes were confirmed across the northern Texas panhandle as well as Oklahoma, with 9 of these having tracks.

November 16th Tornado Outbreak

Preliminary Tornado Tracks and Ratings
17 Confirmed Tornadoes



At right: Map and ratings of confirmed tornadoes on November 16, 2015



Damage in Pampa, Texas caused by an EF-3 tornado



Tornado south of Pampa looking from the north, NW of Groom, TX

Heavy Rains flood Rio Grande Valley later half of October

While the remnants of a tropical storm were not a factor, the atmosphere "exploded" into action on the day prior to Halloween, dumping buckets of rain on the City of Brownsville, mainly from downtown east toward the Port, and including all of the neighborhoods in Southmost, which took the brunt of the torrents. City-wide, 4 to 7 inches fell, with highest totals in the more densely populated sections of town where poor drainage is more of an issue as well. The heaviest rainfall, four to six inches, fell in a two to three hour window between 11 AM and 2 PM. Flooding rapidly ensued, transitioning from nuisance to more life-threatening in less than an hour; by noon, feet of water were inundating some roads and by 2 PM up to 5 feet covered one of the most prone areas of town – the "Four Corners" area where State Road 4 (International Blvd.) intersects State Road 48 (Boca Chica Blvd./Padre Island Highway). Neighborhood roads in Southmost were inundated with two to three feet of water, and dozens of homes and businesses flooded due to a combination of high water that filtered

into homes and vehicles that created waves of water which surged into them. At Brownsville/South Padre Island International Airport, the 6.5 inches that fell with the storms was the most rapid accumulation since 6.48 inches fell with a tropical feed of moisture on September 19, 2010. For the day, the 6.55 inches fell just behind Hurricane Dolly's 6.68 inches, and the value ranked 3rd highest daily total all-time in October, dating back to 1878, but was the highest total to occur without the aid of a tropical cyclone (depression, storm, or hurricane). For some, particularly downtown, the total on October 30th nearly mirrored those from August 31, 2015.

WILLACY COUNTY:

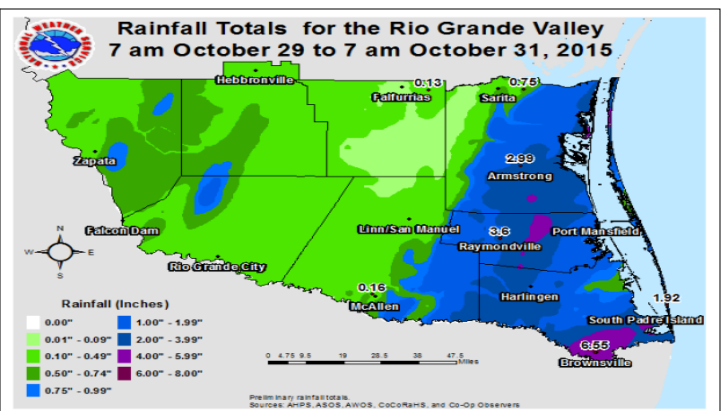
By the afternoon of October 30th, rural, agricultural central Willacy County had to wonder what they had done to deserve such a cruel fate. After a three-day slam (October 22 to 24) that left up to 14 inches of rain, two early morning small tornado producing storms (with their own locally heavy rain) were followed by the north-

thern end of the Brownsville deluge by mid to late morning on the 30th. Radar and observations indicated another 2 to 4+ inches fell over *the same areas*, raising water levels once again. Pity San Perlita (below). Following several days of dry weather between the 25th and 28th finally drained the majority of water, the still-saturated soil and full drainage ditches and pipes quickly overflowed that afternoon; high water of 1 to 3 feet covered many streets and surrounded more than a dozen buildings. The American Red Cross, along with the Salvation Army, had already opened a shelter after the initial events a week earlier.

In total, an estimated, preliminary monthly rain total of 14 to 18 inches, perhaps 20 inches in some locations, gave Willacy County an October to remember; combined with the pockets of 10+ inches from southeast Hidalgo through northwest Cameron, as well as around Brownsville, rainfall for the Lower and Mid Valley likely exceeded benchmark recent Octobers in 1997 and 2002.



Adams Street, Downtown Brownsville (credit: Brownsville Herald) October 30, 2015



Barry Goldsmith on "Lake San Perlita", Willacy County October 31, 2015

Brownsville flooding: Boca Chica Blvd at Security Dr (top) and in downtown along Adams Street on Oct 30th, 2015

Top: 2 day rain totals from Oct 29th to Oct 31, 2015
Bottom: Flooding in San Perlita in Willacy County

CoCoRaHS Tips and Training Section

The observer training section in this edition will cover some very important reminders on reporting, an important tip on keeping birds away from your gauge, making sure to inform CoCoRaHS if you move to a different address and location, and some other useful and important information.

A great tip on keeping birds from making your gauge a perch:

Here is a great tip submitted by husband and wife CoCoRaHS observers "Valerie and John".

Those of us that measure precipitation for CoCoRaHS are often frustrated to find birds think the gauge is an ideal perch. Not only are their "deposits" annoying to clean, they can clog the gauge funnel hole and mess-up the collection measurements.

A two-fold measure works best to prevent this problem. Birds generally prefer the highest perch in an area, so a taller alternate perch offered a few yards away is more attractive (figure 1). When that alone doesn't work, it's time for Jake the Fake Snake & Friends to stand guard (figure 2). Jake and his associates are available at the local Dollar Store for...a dollar apiece. Jake is positioned so that he moves a bit in the wind, but does not obstruct the gauge funnel in any way. I do shift him around a bit from time to time. Hopefully this saves someone else scrubbing out their gauge daily!

Entering Daily Zeros on the Daily Report Form:

Please remember to send in your daily report on days without rainfall as this data is just as important as rain amounts on days of precipitation. This data gives your station a complete data set for the month and the year. CoCoRaHS daily reports of zero precipitation are the single largest source of data for the US Drought Monitor Maps. So remember just because your gauge read zero doesn't

mean that value is worth zero. Please report those days of zero rain and a clear picture of drought conditions in your area is available for mapping.



Figure 1: Higher perch to right of gauge (circled)



Figure 2: Snakes guarding rain gauge against

Please report when you move:

If you move from your current address and location to a different address and location please report the new address to CoCoRaHS Headquarters so a new station location can be made for mapping. This is important so data is not being reported for your old address and will be accurate for your new location. Just go to coco-rahs.org or send an e-mail to info@coco-rahs.org.

Misc. Information:

The CoCoRaHS State Coordinator is now booking speaking engagements for 2016. If any organizations or groups would like a speaker for an event or organizational meeting please send an email to the following address: texas.coco-rahs@austin.rr.com

If you are a CoCoRaHS observer and a member of Master Gardeners, Master Naturalist's, Skywarn, or any other weather related organizations please mention to that organization about getting some of its members in CoCoRaHS and possibly having a speaker at their meetings.

Training Section: Reporting Rainfall Correctly



Is Your Rainfall Report for One Day, or is it for Multiple Days?

It is important not only to read your rain gauge correctly, but to report correctly as well. If you have an amount that has accumulated in the gauge over a period of two or more days (like over a weekend), you must report this using the Multi-Day Accumulation report, NOT the Daily report.

For many observers reporting precipitation for multiple days is an infrequent occurrence, and we forget that these amounts are entered differently than the daily report. The Daily Report form (the one that appears after you log in) is ONLY for an amount collected for a one-day period. If you are reporting an amount collected for a period of two or more days, then use the Multi-Day Precipitation form on the web site. This form is for reporting an accumulation of precipitation over two or more days where you did not take daily observations. In other words, for any given date, you should report precipitation using either the Daily Precipitation Report or the Multi-Day Precipitation Report form.

Here are two examples which will clarify how to report precipitation for multiple days.

Example 1

After your observation on May 31, you head out for a long weekend. You return late on June 3. On the morning of June 4 you check your rain gauge and find 0.75 inches of rain in the tube. How do you report this?



Log on to the CoCoRaHS web site as usual. IGNORE the Daily Report screen that pops up. Instead select Multi-Day Accumulation in the menu

On the form, enter the first day of accumulation. In this case it is 6/1, the day after your last report (May 31). You emptied the rain gauge on 6/4. Enter the time you emptied the rain gauge, then enter the amount that you measured in the field labeled "Multi Day Precipitation (in inches)". In this case, you would enter 0.75. Click on Submit Data and you are done.

Don't enter a multi-day amount using the Daily Report Form!

Entry: Daily Precipitation Report Form

Enter My New Reports

Station Number: IL-CP-1
Station Name: Homer 2.0 N

6/4/2015 7:00 AM

Observation: Rain and Multi-Day Accumulation

Observation Notes: (This will be visible to the public)

Multi Day Precipitation (in inches), or T for trace, or NA for unknown: 0.75 in

Total Depth of Snow on Ground (in inches):

Core Precipitation (in inches):

Notes: Rain fell over weekend while we were gone.

Click Submit Data when done.

Submit Data

Example 2

One weekend you take your daily observations but for a variety of reasons are not able to get access to the computer to enter your observations into the CoCoRaHS web site. You have the following observations:

6/1 0.01"
6/2 0.00"
6/3 0.50"
6/4 0.25"

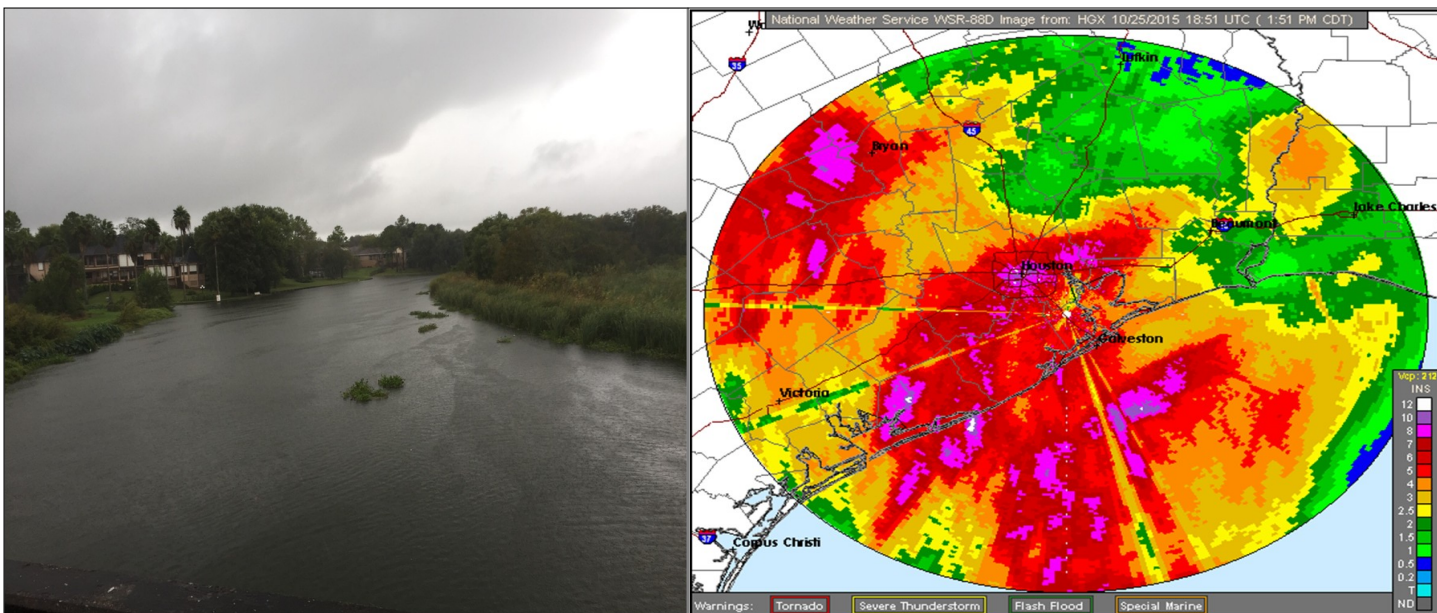
You are able to enter your data on June 4. How do you report this?

DO NOT use the Multi-Day Precipitation form. That is only used for entering one measurement that represents an accumulation over a period of two or more days, not for multiple daily reports.

DO use the Daily Precipitation report form. When the form appears on the screen, change the date to 6/1, enter the observation, and click the Submit Data button. Then, click on Daily Precipitation under Enter My New Reports, change the date to 6/2 and enter that observation and click the Submit Data button. Repeat for the last two observations.

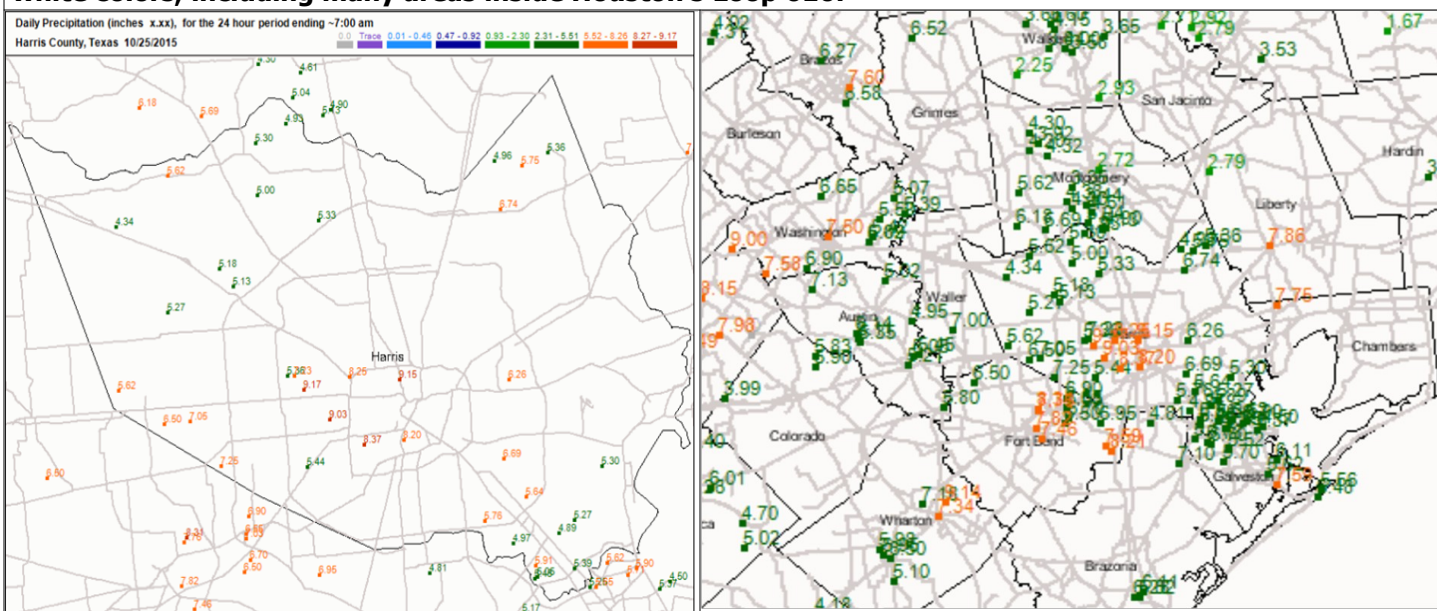
Late October deluge in Houston-Galveston area

A strong upper level storm system combined with the remains of eastern Pacific Hurricane Patricia and a developing surface low off the middle and upper Texas coast to produce a moderate to heavy rainfall event for the region on the 24th and the 25th. Record moisture levels were observed on the Brownsville sounding on the evening of the 24th for late October. Prior to the start of this rainfall event the region had endured over a month without rainfall. Rainfall began early in the afternoon of the 24th and lasted to the morning hours of the 25th. Rainfall rates were generally less than 1.0-2.0 inches per hour for the entire event, but the rainfall was consistent for 12-14 hours allowing totals to add up over time.



Top: Heavy rainfall moving into southern Harris County in the afternoon hours on October 24

Right: Radar estimated total rainfall for October 24 to October 25. Heaviest rainfall in the purple and white colors, including many areas inside Houston's Loop 610.



Left: Harris County CoCoRaHS rainfall reports on the morning of October 25:

Right: CoCoRaHS Houston/Galveston region rainfall reports on the morning of October 25

Tornadoes and Floods hit Harris County on Halloween

A second strong upper level storm system in a week fueled by high moisture levels produced a band of excessive rainfall and flooding across portions of Harris County on October 31. Thunderstorms rapidly developed shortly after midnight on the 31st over Matagorda and Fort Bend Counties and moved into Harris County around 1:00 a.m. The thunderstorms trained or moved over the same areas between 1:00 a.m. and 4:00 a.m. with significant rainfall occurring over the southwest and south-central portions of Harris County into the east-central part of the county. Several tornadoes touched down in the region, causing damage in several communities. And at least one neighborhood in East Houston saw extensive flooding inside of homes. Two people died from flooding in the area. Below is a listing of tornadoes in the region with this system and photos of flooding on the east side of Houston.

October 31 Tornadoes:

Angleton Tornado:

Rated EF 0 (65-85mph) with a path length of nearly a mile and 40 yard wide. The tornado touched down in a subdivision and terminated at Brazos Mall with fences and trees knocked down in a subdivision SW of the mall and portions of the mall roof damaged.

Danbury Tornado:

Rated EF 1 (86-110mph) with a damage path of 3.7 miles and 50 yards wide. A farm house was severely damaged and 3 trailers at an RV park were flipped over.

Alvin Tornado:

*** 2 injured***

Rated EF 0 (65-85mph) with a damage path of nearly 1 mile and 30 yards wide. The tornado tracked through a mobile home park and damaged 15 to 20 trailer homes. 2 persons were injured with the tornado overturned their trailer as they slept.

Friendswood Tornado:

Rated EF 2 (111-135mph) with a damage path of 3 miles and width of 50 yards. Extensive tree damage resulted along the entire damage path with 30 homes suffering minor damage to roofs and windows (mainly EF 1 rating). 1 homes received EF 2 damage on Chester Dr where the entire roof was torn off.

Pasadena/La Porte Tornado:

Rated EF 2 (111-135mph) with a damage path of 2.25 miles and 150 yards wide. The tornado began near Genoa Red Bluff and Red Bluff in Pasadena and end near Spencer HWY and Myrtle Creek. There was extensive damage along the track with an industrial building and school suffering low end EF 2 damage. Several homes lost portions of their roofs with at least one

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Figure 1: Flooding at interchange of Beltway 8 and I-10 in east Houston on October 31st.



Figure 2: Apartment flooding along Autumnwood Drive east of Houston north of I-10:



Figure 3 (right): House flooding along Centerwood Drive east of Houston north of I-10

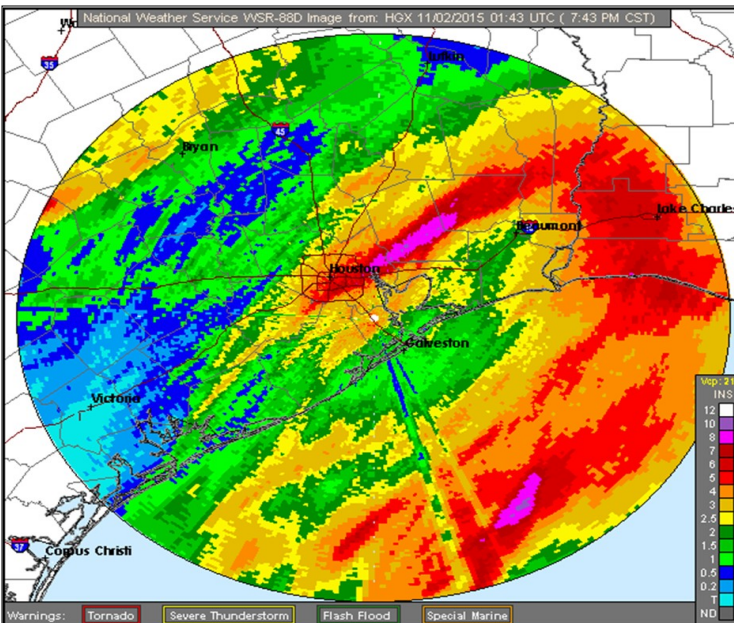
CONTINUED FROM PAGE 10—>house having the entire roof removed and portion of an exterior brick wall.

Rio Villa/Barrett Tornado:

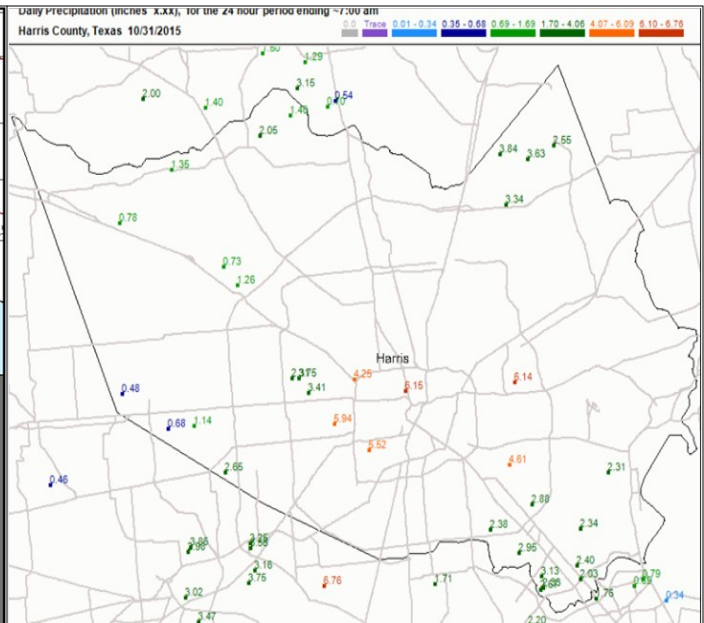
Rated EF 0 (65-85mph) with a damage path of $1/3^{\text{rd}}$ of a mile and 50 yards wide. This tornado touched down in the Rio Villa subdivision on the San Jacinto River where several homes had roof damage and many trees were snapped midway above the ground. The tornado continued NE across the river and into the Barrett area where damage was mainly to trees and power lines. One mobile home was overturned and destroyed.

Liverpool Tornado:

Rated EF 0 (65-85mph) with a damage path of 0.92 miles and 40 yards wide. The tornado touched down in a field south of town and damaged a cattle handling area. It tracked into town and did mostly minor damage to trees and structures. The tornado apparently lifted north of town



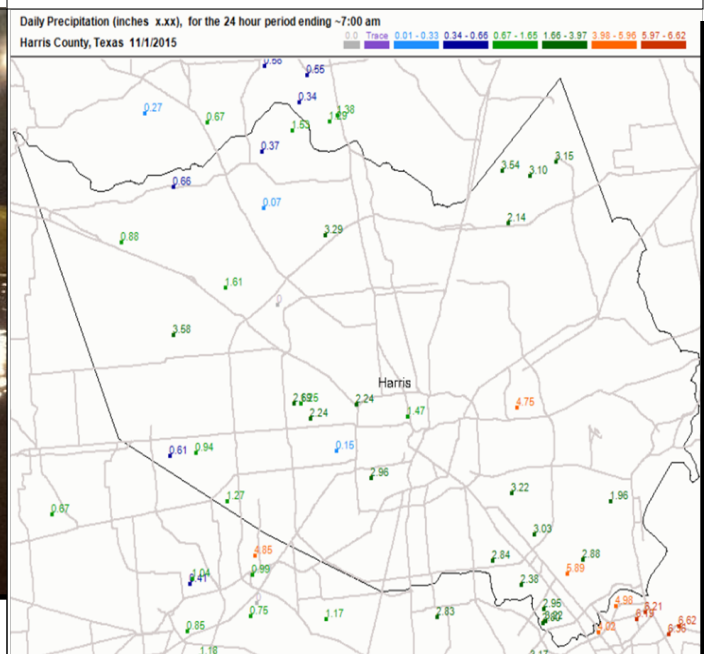
Radar estimated rainfall totals across southeast Texas for October 31st. Heaviest rains fell from central areas of Houston northeast to Liberty.



24 hour rainfall totals from Harris County CoCoRaHS observers, ending at 7:00am on October 31st (top) and November 1st (bottom).



Flooding at the intersection of Glemont and S. Rice



Houston-Galveston Region Fall 2015 Rain and Climate Summary

<u>Fall 2015 CoCoRaHS Houston/Galveston Region Rainfall</u>									
County Rainfall Average and County Station Rainfall Maximum Total in inches per month									
County	September			October			November		Fall Total
	AVG.	MAX.		AVG.	MAX.		AVG.	MAX.	3-Month Rain Total
Austin	3.93	5.79		9.14	10.62		3.44	4.09	16.51
Brazoria	7.53	12.46		10.17	12.40		2.82	3.84	20.52
Chambers *	5.38 *			17.40 *			5.54 *		NA *
Colorado	2.20	4.19		10.23	12.71		3.60	4.19	16.03
Fort Bend	5.87	7.86		12.54	16.32		3.16	3.85	21.57
Galveston	7.44	10.77		13.79	16.12		4.14	5.64	25.37
Harris	5.65	9.61		12.86	20.11		3.68	5.12	22.19
Jackson	2.18	3.10		5.54	7.44		4.87 *		12.59
Liberty	3.05	3.62		8.59	8.99		4.75 *		16.39
Matagorda	No data	"		No data	"		2.25 *		NA
Montgomery	2.58	5.21		7.58	9.63		4.42	5.76	14.58
Polk	2.40	5.35		6.03	8.05		6.40	7.04	14.83
San Jacinto	1.95	1.98		5.02	5.38		6.32	6.51	13.29
Waller	3.06	4.45		8.22	9.95		4.06 *		15.34
Wharton	3.79	5.27		9.05	9.70		2.34	2.70	15.18
Region Totals	4.12	12.46		9.04	20.11		4.12	7.04	17.28
Note: * = Only one station reported									
Rainfall of several NWS first order sites in the region									
	September			October			November		3-Month Rain Total
Hou. Bush	2.59			13.05			3.80		19.44
College Sta.	1.74			8.81			5.00		15.55
Galveston	11.13			9.80			5.52		26.45
Hou. Hobby	4.47			13.04			3.07		20.58
Dickinson FO	6.93			13.81			5.45		26.19
Conroe	1.78			6.63			5.14		13.55
Tomball	3.23			8.18			3.84		15.25
Sugarland	5.79			11.73			2.80		20.32
Station avg.'s	4.71			10.63			4.33		19.67

September:

The northern areas of the region had below rainfall with above normal temperatures for most of the month. This kept this part of the region in drought conditions all month. The central areas had more rainfall with some parts near normal while others received slightly more rainfall than normal. Temperatures in the central parts of the region were near normal with some of the drier parts in the central areas slightly above normal. The southern parts of the region and costal counties had much above rainfall and above normal temperatures. Brazoria, Galveston, and Harris counties had the highest average rainfall by CoCoRaHS observers for the month.

October:

From October 1st -22nd most of the region received very little to no rainfall. Mostly clear days prevailed during this time. Temperatures during this time were much above normal region wide and daily high readings were in the low to mid 90's on many days in the middle of the month. Rainfall for the region as a whole can be summarized as two big events on the 24th - 25th with the second event on the 31st which made for much above normal rainfall for all counties except for San Jacinto County. Severe weather and flooding were common during both events and more information is available in articles (Pages 9 –11) talking about these events and the details of areas affected.

November:

November was mostly a quiet month with some very nice weather early in the month with warm daytime highs and mild nights. Partly cloudy days were most common with highs in the mid 70's to low 80's on about 15 days of the month region wide. Temperatures over most of the region averaged out slightly above normal with some fairly cool days and nights at the end of the month balancing out the higher temperature from earlier in the month. On the nights of the 22nd and 23rd most of the region had lows in the low to mid 30's. The exception was the southern and eastern portions of the region which had much above normal temperatures due to very warm night time lows early in the month. Rainfall over most of region was near normal with the heavier rain days being on the 17th (mainly over the western and northern areas) and at the end of the month region wide.

September-November 2015 Rainfall Totals

NWS EL PASO REGION

TX-EP-16	El Paso 6.0 N	4.58"
TX-EP-17	El Paso 3.3 ENE	5.47"
TX-EP-31	(Mexico) Ciudad Juarez 1.8 NE	1.95"
TX-EP-37	Socorro 3.5 NW	4.46"
TX-EP-40	El Paso 10.7 E	4.13"
TX-EP-44	El Paso 3.8 SSW	4.00"
TX-EP-47	FMSP McKelligon	3.00"
TX-EP-49	FMSP Tom Mays	2.50"
TX-EP-53	UTEP EHS	1.30"
TX-EP-55	El Paso 6.2 W	3.77"
TX-EP-64	El Paso 2.3 SSW	3.53"
TX-EP-70	El Paso 11.2 WNW	1.59"
TX-EP-75	El Paso 1.7 W	3.19"
TX-EP-88	Anthony 1.0 ENE	3.50"
TX-EP-92	Horizon City 1.9 NNW	2.52"
TX-EP-111	El Paso 6.9 WNW	3.11"
TX-HDS-4	Allamore 4.2 SW	5.17"
TX-HDS-9	Dell City 1.4 SW	4.61"
TX-HDS-24	Frenchman Canyon	7.66"
TX-HDS-25	Acala 2.4 NW	3.10"
TX-HDS-29	Dean Walker Ranch	5.82"

NWS MIDLAND-ODESSA REGION

TX-MDL-6	Midland 3.0 WSW	8.92"
TX-MDL-10	Midland 1.7 NW	9.78"
TX-MDL-18	Midland 12.1 S	8.60"
TX-MDL-25	Odessa 4.8 ENE	7.72"
TX-MDL-28	Midland 0.8 SE	8.35"
TX-MDL-33	Midland 2.1 W	8.61"
TX-MDL-37	Midland 25.7 SE	6.90"
TX-EC-2	Odessa 8.3 WSW	6.77"
TX-PS-1	Marfa 1.0 NNE	3.79"
TX-BRS-1	Alpine 7.9 SE	5.89"
TX-BRS-11	Terlingua 3.4 NNW	2.56"
TX-BRS-18	Terlingua 11.1 NE	2.43"
TX-BRS-21	Alpine 0.7 WSW	8.31"
TX-BRS-23	Alpine 49.6 SSE	2.80"
TX-PC-2	Iraan 11.0 WSW	4.71"
TX-PC-11	McCamey 10.5 S	7.46"
TX-CLB-3	Van Horn 6.0 ENE	6.37"
TX-GN-1	Seminole 0.7 W	9.75"
TX-HWR-3	Big Spring 1.5 E	4.25"
TX-JD-5	Fort Davis 1.7 SSE	8.47"
TX-TL-1	Dryden 17.7 NE	5.00"

NWS RIO GRANDE VALLEY REGION

TX-CMR-1	Rancho Viejo 0.7 E	11.23"
TX-CMR-6	Brownsville 1.0 N	9.59"
TX-CMR-8	Brownsville 6.4 SE	16.06"
TX-CMR-12	Harlingen 2.6 ESE	13.37"
TX-CMR-16	Brownsville 3.5 N	12.20"
TX-CMR-21	Los Fresnos 0.3 NE	10.90"
TX-CMR-23	Brownsville 1.9 ESE	21.81"
TX-CMR-35	Rio Hondo 9.4 NE	13.29"
TX-CMR-43	Brownsville 4.1 ENE	23.56"
TX-CMR-51	Brownsville 0.1 SSE	15.97"
TX-CMR-61	Brownsville 6.4 WNW	12.80"
TX-CMR-70	San Benito 0.6 SSE	16.52"
TX-CMR-90	Brownsville 1.5 WNW	14.08"
TX-CMR-85	Harlingen 0.4 N	13.80"
TX-CMR-93	Harlingen 4.4 W	16.08"
TX-CMR-96	San Benito 6.3 ENE	10.85"
TX-CMR-97	Rio Hondo 7.9 E	10.97"
TX-CMR-99	San Benito 5.4 SSE	11.78"
TX-HDL-5	La Joya 11.1 N	6.85"
TX-HDL-9	Mission 1.9 ENE	10.89"
TX-HDL-19	Mission 4.3 WSW	12.85"
TX-HDL-21	McAllen 2.4 NE	9.43"
TX-HDL-32	Linn 8.4 WNW	11.76"
TX-ST-1	Rio Grande City 2.8 W	4.14"
TX-ST-2	Rio Grande City 17.7 NE	4.55"
TX-ST-3	Rio Grande City 13.8 NNW	3.40"
TX-BRK-3	Falfurrias 8.9 SSW	5.69"
TX-BKK-4	Falfurrias 6.2 E	10.18"
TX-BKK-5	Falfurrias 0.4 WNW	6.60"

NWS AMARILLO REGION

TX-DL-1	Texline 0.3 WNW	6.10"
TX-DL-3	Dalhart 8.1 W	6.59"
TX-DL-6	Texline 0.1 NW	6.99"
TX-DS-3	Vega 12.5 SE	8.97"
TX-GY-3	Pampa 3.1 N	4.63"
TX-HMP-1	Briscoe 8.1 NNE	6.36"
TX-PT-4	Amarillo 5.3 E	4.89"
TX-PT-10	Amarillo 5.0 W	5.59"
TX-RD-5	Amarillo 6.5 WSW	6.66"
TX-RD-6	Canyon 0.2 SSW	6.98"
TX-RD-14	Amarillo 4.5 SE	4.64"
TX-RD-22	Canyon 1.9 WNW	6.93"
TX-RD-24	Amarillo 13.6 WSW	6.57"
TX-RD-25	Amarillo 4.8 WSW	6.32"
TX-SR-1	Stratford 0.5 ESE	7.57"

NWS LUBBOCK REGION

TX-BRC-2	Caprock Canyon Hdqs	6.36"
TX-CHD-3	Childress 0.4 WNW	6.73"
TX-DK-1	Dickens 2.3 SW	9.03"
TX-FL-2	South Plains 2.0 ENE	5.05"
TX-HLE-9	Abernathy 0.2 NNE	7.65"
TX-HCK-3	Roundup 0.4 SW	7.69"
TX-HCK-4	Anton 5.3 SSE	7.48"
TX-LB-1	Littlefield 5.9 S	6.32"
TX-LK-1	Woodrow 2.8 W	6.58"
TX-LK-6	Lubbock 6.1 SW	7.13"
TX-LK-7	Lubbock 6.7 SW	7.35"
TX-LK-14	Lubbock 5.3 SSW	7.46"
TX-LK-19	Shallowater 0.4 ESE	7.95"
TX-LK-21	Lubbock 3.1 S	6.51"
TX-LK-22	Lubbock Int'l Airport	4.48"
TX-LK-24	Ransom Canyon 0.4 ENE	5.27"
TX-LK-33	Lubbock 2.9 NW	7.16"
TX-LK-46	Shallowater 1.2 SSE	8.16"
TX-LK-48	Lubbock 13.2 N	6.48"
TX-LK-51	Slide 0.6 SSW	7.26"
TX-LK-56	Lubbock 3.8 WSW	6.94"
TX-LK-59	Wolfforth 4.6 S	8.15"
TX-LK-64	Lubbock 3.5 W	7.93"
TX-LK-74	Lubbock 7.2 S	7.30"
TX-YK-1	Denver City 0.2 E	8.86"

NWS NORMAN REGION (TX SITES ONLY)

TX-AC-8	Archer City 3.1 N	11.38"
TX-FD-1	Crowell 10.5 E	7.25"
TX-HRD-2	Quanah 0.1 NW	6.41"
TX-KX-1	Truscott 2.7 NW	7.30"
TX-KX-2	Benjamin 0.2 SE	6.45"
TX-WT-8	Wichita Falls 2.2 S	10.45"
TX-WT-13	Wichita Falls 3.4 SSW	12.75"
TX-WT-14	Kadane Corner 1.0 SSW	10.28"
TX-WT-15	Wichita Falls 7.2 WSW	11.26"

NWS SAN ANGELO REGION

TX-BRN-2	Brownwood 6.7 ENE	11.82"
TX-CLN-1	Cisco 10.5 NW	12.76"
TX-CLN-5	Cross Plains 6.5 WNW	15.09"
TX-CLN-7	Clyde 3.2 W	12.01"
TX-CLM-3	Coleman 14.7 NNW	10.01"
TX-CNC-1	Eden 2.5 SSW	11.75"
TX-CRK-3	Ozona 26.8 SW	4.50"
TX-CRK-12	Ozona 20.9 SSW	7.61"
TX-CRK-16	Ozona 20.3 SSW	6.71"
TX-CRK-24	Ozona 19.6 S	5.15"
TX-FS-6	Hamlin 7.3 WSW	8.97"
TX-JO-3	Stamford 0.2 ESE	9.19"
TX-JO-4	Stamford 2.4 E	9.46"
TX-JO-5	Abilene 13.0 NNW	9.94"
TX-JO-9	Merkel 8.5 ENE	12.60"
TX-KM-2	Junction 11.6 ENE	8.97"
TX-MSN-6	Mason 17.3 ESE	10.47"
TX-MSN-8	Mason 0.4 W	9.39"
TX-MSN-9	Mason 8.3 W	9.54"
TX-MCC-9	Brady 8.1 NNE	8.28"
TX-SS-1	San Saba 7.3 ENE	12.88"

TX-SS-3	San Saba 1.5 E	11.55"
TX-SF-6	Albany 7.2 NW	12.07"
TX-SF-7	Albany 11.9 WNW	11.09"
TX-SF-11	Albany 6.8 SE	14.92"
TX-SF-13	Moran 7.3 N	14.50"
TX-SE-1	Sterling City 0.7 NE	14.91"
TX-SU-10	Sonora 0.8 ESE	6.26"
TX-TG-5	Knickerbocker 3.2 SW	4.89"
TX-TG-11	San Angelo 3.8 W	5.64"
TX-TG-16	San Angelo 2.2 WSW	4.92"
TX-TG-28	San Angelo 5.6 SSW	4.69"
TX-TG-31	San Angelo 3.9 SW	5.21"
TX-TG-34	San Angelo 5.5 SSW	4.84"
TX-TG-38	Miles 6.5 SSE	5.89"
TX-TG-47	San Angelo 5.3 WSW	5.46"
TX-TY-5	Merkel 5.8 SW	13.36"
TX-TY-7	Abilene 3.3 SW	11.30"
TX-TY-9	Abilene 7.3 SSW	12.36"
TX-TY-13	Abilene 7.8 SSE	13.66"
TX-TY-18	Abilene 5.8 SSW	12.65"

NWS SHREVEPORT REGION (NE TEXAS)

TX-AG-1	Lufkin 7.0 W	15.70"
TX-AG-2	Zavalla 2.0 ESE	14.46"
TX-AG-3	Lufkin 3.0 SW	14.72"
TX-BWE-1	De Kalb 0.1 SSW	18.33"
TX-CHK-1	Bullard 3.7 E	7.48"
TX-GG-5	Longview 3.4 NE	23.72"
TX-GG-8	Longview 2.7 NW	19.79"
TX-HRS-2	Hallsville 5.5 N	20.43"
TX-HRS-4	Waskom 4.4 S	15.80"
TX-HRS-12	Marshall 9.7 SE	18.05"
TX-HRS-13	Marshall 7.1 SSE	17.62"
TX-MRN-2	Jefferson 15.4 ESE	15.19"
TX-NC-4	Etoile 0.9 SW	9.17"
TX-NC-5	Nacogdoches 9.5 NE	17.68"
TX-NC-7	Nacogdoches Arbor Oak	16.43"
TX-PN-3	Gary City 3.8 W	16.73"
TX-RR-1	Detroit 14.9 N	19.17"
TX-RS-1	Henderson 6.1 NW	12.51"
TX-RS-4	Henderson 6.9 WNW	14.28"
TX-RS-8	Henderson 7.0 SSW	13.34"
TX-SB-1	Hemphill 8.6 E	22.95"
TX-SM-4	Tyler 4.1 SSW	22.06"
TX-SM-11	Tyler 8.1 ENE	23.30"
TX-SM-16	Whitehouse 1.2 SW	24.70"
TX-SM-18	Tyler 3.8 WSW	21.32"
TX-UP-8	Big Sandy 3.9 E	24.08"
TX-WD-2	Winnsboro 0.7 SSW	23.48"
TX-WD-4	Quitman 6.9 N	24.04"
TX-WD-5	Mineola 1.6 E	23.42"

NWS LAKE CHARLES REGION (SE TEXAS ONLY)

TX-HRN-1	Lumberton 1.2 WNW	31.30"
TX-HRN-2	Kountze 10.6 SSW	27.14"
TX-JS-2	Jasper 6.7 W	20.70"
TX-JS-3	Kirbyville 1.5 SE	23.17"
TX-JJ-5	Beaumont 1.1 ENE	24.05"
TX-JJ-7	Beaumont 1.8 SW	20.69"
TX-JJ-9	Beaumont 3.3 SW	21.74"
TX-JJ-11	Beaumont 4.6 S	22.70"
TX-NW-2	Burkeville 11.2 NNE	21.24"
TX-OR-1	Bridge City 1.3 NW	29.11"
TX-OR-4	Orange 2.1 SE	21.90"

NWS CORPUS CHRISTI REGION

TX-AR-5	Rockport 0.6 N	14.43"
TX-AR-6	Rockport 3.0 NNW	13.37"
TX-AR-7	Rockport 1.3 WSW	12.01"
TX-AR-8	Aransas Pass 6.1 NNW	11.70"
TX-BEE-17	Normanna 0.5 ENE	12.18"
TX-BEE-18	Beeville 9.0 S	7.83"
TX-CLH-9	Seadrift 0.6 E	8.52"
TX-CLH-15	Seadrift 4.9 ENE	7.77"
TX-DV-1	Hebbbronville 13.6 E	6.27"
TX-DV-7	San Diego 0.7 SW	5.70"
TX-DV-9	Realitos 0.7 SW	5.45"

September-November 2015 Rainfall Totals

TX-GD-3	Goliad 2.4 SE	9.70"	TX-BEL-25	Killeen 2.9 SSW	18.40"	TX-FA-1	Marlin 0.9 ESE	19.29"
TX-GD-4	Goliad 14.5 WNW	10.33"	TX-BEL-27	Troy 3.1 SE	22.38"	TX-FA-6	Lott 7.2 WSW	19.04"
TX-GD12	Goliad 11.5 N	10.98"	TX-BEL-28	Temple 4.7 W	20.28"	TX-FN-2	Ravenna 1.7 SE	24.46"
TX-GD-15	Weser 1.9 NW	7.00"	TX-BEL-37	Salado 1.0 WSW	4.74"	TX-FT-1	Oakwood 4.2 NE	12.95"
TX-GD-19	Goliad 10.9 NE	9.75"	TX-BEL-38	Belton 6.4 S	17.89"	TX-GA-5	Van Alstyne 0.2 E	23.02"
TX-GD-22	Victoria 15.0 WSW	11.18"	TX-BEL-39	Temple 6.2 NNE	20.71"	TX-GA-7	Denison 0.8 ENE	22.33"
TX-GD-27	Goliad 6.5 WNW	11.89"	TX-BEL-40	Belton 1.6 W	20.26"	TX-GA-10	Sadler 3.2 N	21.76"
TX-GD-28	Goliad 10.4 NE	10.46"	TX-BEL-43	Belton 4.4 WNW	24.06"	TX-GA-15	Gordonville 3.3 NNW	22.68"
TX-JW-3	Orange Grove 8.1 WNW	9.04"	TX-BSQ-2	Kopperl 5.2 WNW	21.98"	TX-GA-16	Pottsboro 0.8 NW	21.19"
TX-JW-5	Orange Grove 4.3 SW	9.34"	TX-BSQ-3	Kopperl 6.7 NW	23.38"	TX-GA-19	Sherman 3.6 NW	21.16"
TX-KL-2	Kingsville 6.5 SSE	11.57"	TX-BSQ-4	Meridian 12.3 WSW	20.14"	TX-GA-20	Sherman 5.1 WSW	20.90"
TX-KL-11	Kingsville 0.6 E	11.08"	TX-CLL-8	Plano 2.4 WSW	23.12"	TX-HND-3	Payne Springs 0.2 N	18.62"
TX-LS-4	Artesia Wells 1.1 W	8.09"	TX-CLL-11	McKinney 3.1 SW	23.39"	TX-HND-5	Athens 10.1 SSW	12.17"
TX-LS-5	Cotulla 1.6 NE	4.78"	TX-CLL-13	Celina 7.3 NE	22.10"	TX-HLL-1	Aquilla 1.3 NNE	5.84"
TX-LS-9	Cotulla 9.7 NNE	7.15"	TX-CLL-18	Plano 5.3 W	21.80"	TX-HDD-2	Granbury 3.5 NNW	15.33"
TX-LO-5	Choke Canyon Dam N	7.99"	TX-CLL-20	Lowry Crossing 0.3 SSE	23.78"	TX-HDD-6	Granbury 3.9 SSW	15.82"
TX-LO-9	George West 2.7 NNW	7.40"	TX-CLL-30	Anna 3.7 SSW	24.72"	TX-HPK-1	Cumby 5.6 SSE	22.39"
TX-LO-11	George West 2.9 E	7.08"	TX-CLL-33	Richardson 2.2 NW	25.37"	TX-HPK-2	Cumby 1.5 N	25.91"
TX-LO-12	George West 8.0 NE	8.58"	TX-CLL-40	Frisco 1.9 N	22.46"	TX-JC-2	Perrin 3.0 ENE	17.43"
TX-LO-14	Sandia 5.1 NNW	9.22"	TX-CLL-44	Murphy 0.9 SSW	26.01"	TX-JN-2	Burleson 1.1 NW	21.20"
TX-LO-16	George West 11.3 S	6.14"	TX-CLL-45	McKinney 7.3 NE	26.02"	TX-JN-12	Joshua 5.2 WSW	21.62"
TX-MCM-4	Tilden 16.0 NNW	7.10"	TX-CLL-57	Anna 0.3 SW	25.07"	TX-JN-14	Cleburne 0.9 SSE	25.35"
TX-MCM-5	Cross 1.7 NNW	4.99"	TX-CLL-60	Lavon 0.7 NNW	24.65"	TX-JN-16	Cleburne 5.8 E	21.70"
TX-NU-4	Corpus Christi 8.0 WNW	9.72"	TX-CLL-63	Wylie 0.9 S	23.70"	TX-JN-18	Burleson 0.7 W	27.76"
TX-NU-7	Corpus Christi 9.0 SSE	10.35"	TX-CLL-67	Princeton 2.0 SSE	24.08"	TX-JN-19	Cleburne 4.8 NNE	26.05"
TX-NU-9	Corpus Christi 6.4 WSW	13.43"	TX-CLL-68	Wylie 1.6 SSE	23.99"	TX-KF-10	Terrell 8.2 SSW	19.27"
TX-NU-10	Flour Bluff 1.6 SW	11.89"	TX-CLL-69	Sachse 1.0 NE	22.23"	TX-KF-11	Kaufmann 2.9 S	14.94"
TX-NU-12	Orange Grove 4.5 SE	10.27"	TX-CMN-3	Comanche 12.2 NW	11.93"	TX-KF-12	Terrell 1.8 NW	26.15"
TX-NU-13	Bishop 0.4 ENE	9.74"	TX-CMN-6	Gustine 9.8 E	17.49"	TX-KF-16	Grays Prairie 4.6 S	17.02"
TX-NU-15	Corpus Christi 9.1 NW	8.00"	TX-CRL-3	Kempner 6.7 ENE	25.54"	TX-KF-17	Kaufman 2.4 ESE	15.49"
TX-NU-38	Corpus Christi 4.8 W	10.03"	TX-CRL-4	Gatesville 12.0 SE	19.22"	TX-KF-20	Cottonwood 1.3 NE	19.52"
TX-NU-40	Corpus Christi 6.5 WSW	14.49"	TX-DA-3	Univ Park 3.1 WNW	27.06"	TX-LM-2	Paris 4.5 NNE	21.70"
TX-NU-45	Corpus Christi 6.7 WSW	13.13"	TX-DA-4	Rowlett 2.3 NW	24.67"	TX-LP-2	Lampasas 2.7 ENE	16.58"
TX-NU-52	Corpus Christi 4.8 SSE	10.78"	TX-DA-13	Dallas 7.2 SW	28.28"	TX-LT-2	Mexia 9.4 SSE	15.08"
TX-NU-56	Corpus Christi 4.0 S	9.35"	TX-DA-16	Duncanville 1.7 NNW	27.08"	TX-LT-4	Mexia 5.9 S	14.43"
TX-NU-57	Corpus Christi 7.2 WSW	13.01"	TX-DA-17	Mesquite 5.1 NW	21.57"	TX-LT-5	Thorton 4.0 SE	13.17"
TX-NU-61	Corpus Christi 6.9 SE	10.65"	TX-DA-35	Richardson 2.4 WSW	27.11"	TX-MCL-1	Waco 6.8 NW	16.66"
TX-RF-2	Austwell 0.3 ESE	11.72"	TX-DA-48	Dallas 2.1 NNE	23.11"	TX-MCL-7	Lorena 5.5 NW	22.17"
TX-RF-5	Austwell 0.2 ESE	9.38"	TX-DA-50	Cedar Hill 1.4 N	23.85"	TX-MCL-12	Crawford 7.5 ENE	13.73"
TX-RF-8	Refugio 1.0 NNW	9.82"	TX-DA-52	Mesquite 2.4 W	22.96"	TX-MCL-14	Waco 1.9 SW	24.80"
TX-SP-18	Portland 1.3 NW	9.38"	TX-DA-53	Dallas 2.7 WNW	26.75"	TX-MCL-17	China Spring 2.9 NNW	20.86"
TX-SP-22	Ingleside 0.6 W	11.91"	TX-DA-58	Garland 2.6 S	23.40"	TX-MCL-18	Lorena 5.2 NW	22.10"
TX-VC-4	Victoria 1.3 E	14.51"	TX-DA-63	DeSoto 2.2 ENE	24.47"	TX-MCL-21	Waco 1.3 NNW	21.65"
TX-VC-17	Victoria 2.1 NNW	12.68"	TX-DA-65	Garland 3.6 NNW	25.46"	TX-MCL-26	Waco 7.7 ESE	19.28"
TX-VC-20	Victoria 9.7 ESE	18.17"	TX-DA-69	Mesquite 3.7 N	24.56"	TX-MCL-33	Waco 3.1 SSW	20.55"
TX-VC-21	Victoria 14.0 SW	11.80"	TX-DA-70	Mesquite 2.3 N	21.89"	TX-MCL-35	Waco 3.3 SE	20.71"
TX-VC-22	Victoria 12.1 W	10.34"	TX-DA-72	Sachse 0.8 S	23.06"	TX-MLM-1	Thorndale 8.8 N	17.34"
TX-VC-26	Victoria 3.8 NW	12.91"	TX-DA-73	Sachse 0.4 NE	22.84"	TX-MLM-9	Rockdale 4.2 NNE	17.35"
TX-VC-27	Victoria 0.4 NNW	14.92"	TX-DN-1	Shady Shores 3.9 N	23.27"	TX-MLM-10	Thorndale 4.7 E	15.24"
TX-VC-29	Victoria 9.5 WSW	15.22"	TX-DN-3	Sanger 5.4 NW	20.36"	TX-MLM-12	Cameron 5.7 NW	18.26"
TX-VC-34	Victoria 6.4 SSW	13.03"	TX-DN-8	Flower Mound 2.3 NE	20.96"	TX-MLM-16	Milano 4.3 SE	12.00"
TX-VC-35	Victoria 2.7 NNW	8.15"	TX-DN-9	Celina 4.4 WSW	21.20"	TX-MLM-18	Gause 2.8 NNW	17.14"
TX-VC-37	Inez 1.1 SSE	10.52"	TX-DN-15	Sanger 1.8 WSW	19.18"	TX-MLS-2	Mullin 3.9 WSW	10.60"
TX-VC-39	Victoria 0.4 SE	16.16"	TX-DN-21	Lincoln Park 0.8 ENE	21.08"	TX-NV-3	Kerens 3.4 NW	31.74"
TX-VC-44	Victoria 1.2 NNE	12.75"	TX-DN-32	Oak Point 1.4 NNW	21.65"	TX-NV-4	Powell 1.0 SW	37.78"
TX-WB-2	Laredo 1.8 SSE	5.58"	TX-DN-36	Roanoke 1.6 W	20.75"	TX-NV-5	Blooming Grove 2.4 SW	26.15"
TX-WB-4	Las Tiendas Ranch	6.53"	TX-DN-37	Carrollton 2.0 NNE	21.73"	TX-NV-6	Corsicana 4.3 WSW	36.47"
TX-WB-6	Laredo 2.4 S	4.08"	TX-DN-43	Argyle 1.6 NNW	22.69"	TX-PP-2	Graford 8.1 ENE	18.76"
TX-WB-9	El Cenizo 8.8 E	3.22"	TX-DN-44	Flower Mound 1.4 SSE	26.77"	TX-PR-5	Dennis 1.4 SW	16.51"
TX-WB-12	Laredo 1.8 N	3.45"	TX-DN-49	Southlake 3.2 NNW	24.07"	TX-PR-11	Aledo 2.9 SW	19.70"
TX-WB-22	Laredo 23.7 NE	5.98"	TX-ES-2	Cisco 4.1 N	13.71"	TX-PR-18	Aledo 1.8 SSW	20.70"
TX-WB-23	Freer 29.5 WSW	8.00"	TX-EL-6	Red Oak 2.0 SSE	23.72"	TX-PR-19	Weatherford 5.7 NNW	17.34"
TX-WB-27	Laredo 2.0 NNE	7.21"	TX-EL-7	Pecan Hill 2.7 WSW	23.48"	TX-RN-2	Point 3.7 ESE	25.75"
TX-WB-38	Laredo Centeno Elem	4.12"	TX-EL-10	Ovilla 2.6 S	25.27"	TX-RK-6	Rockwall 3.1 SSW	17.63"
TX-WB-48	Laredo 3.7 SSE	4.10"	TX-EL-13	Maypearl 0.6 WSW	23.16"	TX-RK-9	Rockwall 3.1 NNW	24.86"
			TX-EL-14	Oak Leaf 0.8 WSW	23.60"	TX-RK-10	Rockwall 1.6 NNE	23.29"
			TX-EL-18	Midlothian 5.2 SE	24.42"	TX-SO-3	Glen Rose 5.1 SSW	20.44"
			TX-EL-19	Ovilla 1.2 SSE	22.38"	TX-TN-23	Grapevine 3.6 SW	14.57"
			TX-EL-22	Ennis 11.6 NNE	12.41"	TX-TN-25	Blue Mound 2.3 ENE	22.83"
			TX-EL-24	Waxahachie 1.2 ESE	21.32"	TX-TN-39	Fort Worth 5.4 SSW	20.86"
			TX-EL-25	Midlothian 5.2 SSW	24.45"	TX-TN-55	Fort Worth 11.8 NW	20.64"
			TX-EL-29	Ennis 10.0 NE	19.93"	TX-TN-56	Benbrook 0.6 E	22.27"
			TX-EL-34	Midlothian 2.8 E	22.00"	TX-TN-57	Benbrook 2.1 N	19.67"
			TX-EL-37	Midlothian 6.2 S	23.35"	TX-TN-61	Mansfield 2.6 NNE	23.91"
			TX-ER-1	Stephenville 1.2 NW	14.24"	TX-TN-62	N. Richland Hills 1.9 NE	24.05"
			TX-ER-4	Stephenville 2.6 NNW	13.95"	TX-TN-70	Hurst 0.8 W	23.46"
			TX-ER-5	Bluff Dale 3.7 SSE	15.41"	TX-TN-74	Richland Hills 0.5 W	23.33"

NWS DALLAS-FT. WORTH REGION

TX-AN-6	Palestine 3.9 WNW	12.90"
TX-BEL-1	Temple 8.5 SE	21.87"
TX-BEL-5	Harker Heights 1.7 NW	21.80"
TX-BEL-8	Belton 3.9 N	24.87"
TX-BEL-9	Belton 5.4 NW	24.54"
TX-BEL-10	Salado 1.5 S	17.34"
TX-BEL-16	Temple 4.7 S	30.48"
TX-BEL-21	Temple 8.1 SE	23.61"
TX-BEL-23	Belton 0.4 E	20.67"
TX-BEL-24	Belton 2.3 NNW	21.06"

September-November 2015 Rainfall Totals

NWS DALLAS-FT. WORTH REGION (CONT)

TX-TN-87	Eagle Mountain 2.4 SSW	19.15"
TX-TN-92	Bedford 0.6 NNE	22.82"
TX-TN-102	Fort Worth 4.0 SW	21.07"
TX-TN-106	Haslet 2.2 S	20.31"
TX-TN-109	Kennedale 0.6 SE	24.25"
TX-TN-115	Haslet 3.7 WNW	18.31"
TX-TN-125	Arlington 3.8 NNE	24.13"
TX-VZ-2	Canton 4.6 SSW	24.54"
TX-VZ-9	Van 2.4 WNW	22.00"
TX-VZ-11	Ben Wheeler 3.9 ESE	23.99"
TX-VZ-19	Van 1.3 W	21.24"
TX-VZ-21	Canton 6.1 N	22.49"
TX-VZ-28	Wills Point 4.4 NNW	22.79"
TX-TV-30	Murchinson 7.7 NNE	27.60"
TX-WS-13	Paradise 6.6 SW	21.26"
TX-WS-15	Runaway Bay 0.7 SSW	17.73"
TX-WS-16	Decatur 4.1 W	20.24"

NWS AUSTIN/SAN ANTONIO REGION

TX-AT-1	Poteet 4.1 ENE	11.24"
TX-AT-21	Jourdanton 5.2 NNW	9.06"
TX-AT-26	Poteet 4.9 W	8.66"
TX-BST-7	Bastrop 1.2 N	14.61"
TX-BST-17	Wylldwood 8.3 SSW	13.96"
TX-BST-19	Bastrop 7.2 N	19.34"
TX-BST-32	Red Rock 5.0 ESE	13.60"
TX-BST-35	Bastrop 5.7 SW	14.54"
TX-BST-36	Bastrop 1.0 WNW	24.37"
TX-BST-41	Cedar Creek 4.1 NE	15.86"
TX-BST-43	Dale 7.6 N	15.23"
TX-BST-49	McDade 4.6 SSW	19.21"
TX-BST-51	Bastrop 5.2 SE	13.46"
TX-BST-58	Cedar Creek 5.9 N	18.79"
TX-BST-61	Bastrop 7.6 N	18.44"
TX-BST-68	Bastrop 2.1 SSW	14.10"
TX-BST-69	Cedar Creek 1.0 ENE	15.22"
TX-BST-72	Elgin 2.8 NNE	18.28"
TX-BST-83	Paige 4.6 SW	15.84"
TX-BST-85	Smithville 7.2 SW	19.19"
TX-BST-89	Circle D KC Estates	12.46"
TX-BST-90	Red Rock 1.2 N	12.57"
TX-BST-92	Elgin 0.3 NE	18.69"
TX-BST-94	Cedar Creek 5.3 SW	14.35"
TX-BST-95	Elgin 3.8 ENE	21.26"
TX-BST-99	Bastrop 5.8 NE	17.72"
TX-BST-105	Cedar Creek 1.3 ENE	13.16"
TX-BST-107	Cedar Creek 5.6 ESE	15.71"
TX-BND-2	Vanderpool 1.4 SE	10.62"
TX-BND-13	Pipe Creek 3.0 NW	10.69"
TX-BND-22	Bandera 8.6 NNW	7.50"
TX-BND-29	Bandera 4.7 NE	12.19"
TX-BND-33	Bandera 6.4 N	12.27"
TX-BND-41	Bandera 4.0 NNW	9.74"
TX-BND-44	Pipe Creek 3.5 NNW	11.30"
TX-BND-48	Pipe Creek 2.7 S	10.71"
TX-BXR-8	Hollywood Park 4.7 E	11.39"
TX-BXR-11	Hill Country VII 1.2 SE	12.92"
TX-BXR-14	Helotes 1.0 ENE	15.62"
TX-BXR-15	Lackland AFB 3.5 SSE	12.64"
TX-BXR-27	Scenic Oaks 0.8 SW	17.19"
TX-BXR-28	Leon Valley 1.6 N	13.41"
TX-BXR-58	Hollywood Park 3.3 ENE	13.70"
TX-BXR-95	Helotes 3.7 SSE	11.65"
TX-BXR-129	Timberwood Park 3.0 S	16.49"
TX-BXR-130	Kirby 0.2 WNW	12.57"
TX-BXR-133	Windcrest 0.3 NNE	12.27"
TX-BXR-134	Marion 6.3 SW	9.87"
TX-BXR-135	Terrell Hills 1.0 NE	11.01"
TX-BXR-136	Lackland AFB 7.8 WNW	11.65"
TX-BXR-138	Leon Valley 2.8 W	9.57"
TX-BXR-146	Fair Oaks Rnch 0.4 WSW	18.72"
TX-BXR-180	Leon Springs 2.6 N	17.56"
TX-BXR-184	San Antonio 8.0 WNW	12.86"
TX-BXR-188	San Antonio 5.1 W	14.92"
TX-BXR-192	Helotes 2.4 NNW	17.45"
TX-BXR-205	Converse 1.6 NW	12.57"
TX-BXR-215	Hollywood Park 4.5 NE	13.46"

TX-BXR-221	Selma 3.9 WNW	12.55"
TX-BXR-253	Castle Hills 1.9 NE	11.31"
TX-BXR-269	Leon Valley 2.7 WSW	13.81"
TX-BXR-291	Converse 1.8 S	11.99"
TX-BXR-298	Castroville 7.09 NE	11.40"
TX-BXR-300	Windcrest 1.7 E	10.59"
TX-BXR-303	San Antonio 10.9 WNW	11.70"
TX-BXR-304	Cross Mountain 2.1 N	16.42"
TX-BXR-310	San Antonio 13.0 W	11.87"
TX-BXR-313	Elmendorf 0.8 NNE	11.44"
TX-BXR-323	Helotes 1.9 SSW	12.72"
TX-BLC-10	Johnson City 2.2 N	12.66"
TX-BLC-11	Blanco 8.8 ENE	14.31"
TX-BLC-12	Blanco 1.8 ESE	16.26"
TX-BLC-20	Johnson City 7.9 WNW	13.51"
TX-BLC-23	Blanco 7.2 SE	15.99"
TX-BRT-2	Marble Falls 2.7 SE	14.45"
TX-BRT-5	Marble Falls 0.7 NW	13.79"
TX-BRT-17	Burnet 4.2 W	14.52"
TX-BRT-31	Marble Falls 5.8 NNW	15.40"
TX-BRT-34	Marble Falls 3.4 NW	15.83"
TX-BRT-40	Burnet 6.1 WNW	14.90"
TX-BRT-46	Spicewood 2.6 ESE	16.57"
TX-BRT-53	Granite Shoals 1.6 E	13.22"
TX-BRT-54	Marble Falls 0.4 W	14.93"
TX-BRT-56	Bertram 9.1 SSW	14.87"
TX-BRT-62	Spicewood 2.5 ENE	15.76"
TX-BRT-69	Meadowlakes 0.4 NNE	11.80"
TX-CLD-13	Lockhart 5.2 S	11.90"
TX-CLD-15	Maxwell 1.5 NE	11.56"
TX-CLD-18	Dale 7.3 SE	13.21"
TX-CLD-27	Lockhart 4.3 NW	11.26"
TX-CLD-30	Luling 4.4 NNW	10.77"
TX-CML-3	New Braunfels 3.1 WNW	16.48"
TX-CML-4	New Braunfels 2.4 SSW	10.30"
TX-CML-6	Spring Branch 5.6 SSE	18.95"
TX-CML-11	Timberwood Park 7.7 ENE	15.57"
TX-CML-12	Canyon Lake 2.5 W	21.22"
TX-CML-24	Bulverde 4.3 ESE	16.81"
TX-CML-29	New Braunfels 5.9 NW	19.88"
TX-CML-35	New Braunfels 5.5 WNW	17.66"
TX-CML-37	Canyon Lake 2.8 N	25.50"
TX-CML-48	Canyon Lake 8.1 NW	18.90"
TX-CML-95	Bulverde 4.2 ENE	16.15"
TX-CML-115	New Braunfels 1.5 NNW	12.92"
TX-CML-128	New Braunfels 10.0 W	16.98"
TX-CML-135	New Braunfels 1.5 NNW	13.37"
TX-CML-147	Garden Ridge 3.7 NW	14.66"
TX-CML-148	New Braunfels 9.9 WNW	19.99"
TX-DW-5	Cuero 7.3 SSW	8.89"
TX-DW-7	Yoakum 6.2 WNW	12.26"
TX-DW-12	Cuero 2.5 ESE	12.95"
TX-DM-2	Carrizo Springs 3.0 NNE	6.90"
TX-ED-2	Rocksprings 5.4 NW	9.33"
TX-ED-12	Rocksprings 8.5 WSW	10.00"
TX-ED-22	Rocksprings 11.8 ENE	10.58"
TX-ED-24	Rocksprings 18.4 WNW	8.39"
TX-FY-1	Smithville 6.6 SE	15.76"
TX-FY-3	LaGrange 10.2 NW	12.31"
TX-FY-33	Fayetteville 1.0 SW	19.82"
TX-FY-36	LaGrange 4.5 SW	18.58"
TX-FY-37	Muldoon 4.4 SE	7.09"
TX-FY-47	West Point 0.8 NE	16.90"
TX-FR-10	Pearsall 21.1 WNW	15.47"
TX-GS-15	Stonewall 2.3 ENE	12.65"
TX-GS-18	Fredericksburg 12.2 W	11.18"
TX-GS-22	Fredericksburg 1.3 SW	9.04"
TX-GS-25	Willow City 4.3 W	12.88"
TX-GS-26	Fredericksburg 11.4 NE	14.45"
TX-GS-28	Willow City 4.2 W	13.74"
TX-GS-33	Fredericksburg 8.3 SSW	10.62"
TX-GS-37	Fredericksburg 0.5 SW	9.48"
TX-GZ-10	Gonzales 4.5 SSE	17.97"
TX-GZ-21	Gonzales 4.4 NNW	13.03"
TX-GZ-25	Gonzales 0.6 S	13.91"
TX-GP-14	New Berlin 6.7 SE	7.51"
TX-GP-16	Kingsbury 0.5 S	9.23"
TX-GP-29	Schertz 2.2 N	11.90"

TX-GP-62	New Braunfels 2.4 S	9.69"
TX-GP-64	Seguin 7.6 N	7.63"
TX-GP-79	Staples 1.2 NW	9.46"
TX-GP-91	Cibola 0.5 NW	11.84"
TX-GP-93	New Braunfels 5.4 ESE	8.37"
TX-GP-99	Seguin 2.7 ESE	8.77"
TX-HYS-1	San Marcos 5.8 N	27.16"
TX-HYS-3	Wimberley 4.4 E	21.15"
TX-HYS-7	Dripping Springs 4.3 E	14.38"
TX-HYS-17	Dripping Springs 8.4 W	15.26"
TX-HYS-19	San Marcos 2.9 WNW	21.70"
TX-HYS-28	Manchaca 2.1 ENE	23.93"
TX-HYS-49	Dripping Springs 6.2 WSW	18.42"
TX-HYS-53	Dripping Springs 4.1 SSW	21.91"
TX-HYS-54	Wimberley 5.2 WNW	16.76"
TX-HYS-55	Mountain City 6.7 WNW	20.69"
TX-HYS-56	Driftwood 2.8 NNW	14.65"
TX-HYS-60	Driftwood 5.0 S	18.54"
TX-HYS-61	San Marcos 8.1 W	25.47"
TX-HYS-63	Dripping Springs 1.7 NW	19.23"
TX-HYS-65	San Marcos 6.3 WSW	19.17"
TX-HYS-74	San Marcos 1.8 SSW	14.24"
TX-HYS-88	Dripping Springs 3.8 ESE	15.68"
TX-HYS-91	Wimberley 4.6 WNW	32.22"
TX-HYS-113	Woodcreek 0.5 SSW	20.75"
TX-HYS-117	Kyle 7.8 ENE	24.82"
TX-HYS-124	San Marcos 2.3 WNW	19.59"
TX-HYS-128	Kyle 2.8 SSW	25.13"
TX-HYS-131	Buda 0.7 SW	24.08"
TX-HYS-133	Wimberley 3.6 ENE	20.80"
TX-KS-3	Karnes City 12.6 WSW	8.65"
TX-KS-9	Gillett 1.6 WNW	10.26"
TX-KN-2	Boerne 4.3 NE	15.25"
TX-KN-4	Boerne 5.1 NNW	11.50"
TX-KN-5	Kendalia 5.2 SSW	16.27"
TX-KN-8	Fair Oaks Ranch 2.2 NNW	17.14"
TX-KN-10	Boerne 6.0 WSW	12.09"
TX-KN-12	Boerne 4.0 WSW	16.53"
TX-KN-15	Kendalia 5.4 S	16.53"
TX-KN-18	Comfort 11.5 ENE	13.40"
TX-KN-28	Boerne 8.5 NNW	12.72"
TX-KN-42	Boerne 5.2 ENE	18.22"
TX-KN-50	Sisterdale 1.7 SE	14.05"
TX-KN-60	Boerne 8.4 ENE	17.29"
TX-KN-61	Boerne 12.4 N	12.62"
TX-KN-66	Comfort 7.0 ENE	11.71"
TX-KN-99	Pipe Creek 5.5 NNE	10.60"
TX-KR-3	Ingram 4.4 NW	9.80"
TX-KR-20	Kerrville 1.1 SSW	9.08"
TX-KR-30	Ingram 10.2 NW	10.53"
TX-KR-50	Ingram 3.1 NW	11.12"
TX-KR-52	Center Point 2.2 NNE	10.04"
TX-KR-54	Center Point 0.5 SE	10.18"
TX-KR-57	Ingram 3.8 W	12.00"
TX-KR-63	Kerrville 4.8 WSW	10.37"
TX-KR-65	Comfort 4.4 W	9.36"
TX-KR-78	Kerrville 0.9 N	9.34"
TX-KR-79	Kerrville 6.3 SW	8.07"
TX-LV-2	Hallettsville 17.1 SE	11.78"
TX-LV-4	Shiner 1.9 E	13.48"
TX-LV-5	Hallettsville 13.4 SE	14.07"
TX-LV-20	Yoakum 6.2 NNE	12.05"
TX-LV-21	Hallettsville 8.0 SSE	13.48"
TX-LV-26	Shiner 4.1 NE	17.17"
TX-LV-27	Moulton 6.9 SE	11.97"
TX-LE-12	Lexington 2.7 SSE	21.27"
TX-LE-13	Lexington 3.8 SW	21.79"
TX-LE-15	Lexington 2.3 SSW	20.32"
TX-LL-7	Horseshoe Bay 2.7 S	13.40"
TX-LL-23	Kingsland 0.5 S	13.14"
TX-LL-26	Llano 0.5 ESE	10.31"
TX-MDN-2	Castroville 7.0 NNE	11.65"
TX-MDN-3	Hondo 8.7 E	7.95"
TX-MDN-11	Castroville 0.3 WNW	10.04"
TX-MDN-18	Hondo 8.8 E	7.61"
TX-MDN-21	D'Hanis 3.5 WSW	14.07"
TX-MDN-22	Hondo 6.9 SSE	7.70"

September-November 2015 Rainfall Totals

TX-MDN-24	Hondo 8.7 ENE	8.09"	TX-UV-29	Knippa 1.8 NW	12.80"	BRYAN/COLLEGE STATION REGION	
TX-MDN-27	Mico 5.0 E	7.96"	TX-UV-30	Sabinal 0.5 NNE	10.90"	TX-BRZ-77	Bryan 2.9 ESE 15.58"
TX-MDN-31	Devine 6.7 NNE	6.78"	TX-VV-3	Del Rio 5.7 NW	8.80"	TX-BRZ-88	Bryan 3.5 NNW 14.38"
TX-MDN-41	D'Hanis 2.4 NNE	12.36"	TX-VV-9	Comstock 29.7 NW	5.03"	TX-BRZ-92	College Station 1.6 S 15.01"
TX-MDN-44	Natalia 5.4 SSE	7.85"	TX-VV-14	Langtry 10.6 W	5.01"	TX-HST-3	Crockett 1.8 NNE 12.58"
TX-RL-8	Leakey 1.5 ENE	8.32"	TX-VV-15	Comstock 8.5 WNW	6.92"	TX-TT-3	Trinity 5.1 NW 16.48"
TX-RL-16	Leakey 14.0 NW	9.99"	TX-VV-16	Del Rio 7.8 NNW	8.07"	TX-WK-3	Huntsville 11.5 SW 17.00"
TX-RL-17	Camp Wood 6.5 NE	11.06"	TX-WM-1	Georgetown 1.2 W	16.81"	TX-WK-5	Huntsville 2.8 WSW 17.14"
TX-TV-1	Austin 10.0 NNW	18.35"	TX-WM-8	Taylor 0.9 NNW	15.11"	TX-WK-12	Huntsville 3.6 NNW 17.77"
TX-TV-9	West Lake Hills 2.4 NNW 20.41"		TX-WM-16	Cedar Park 2.7 SSW	16.63"	TX-WK-13	Huntsville 4.8 NNW 18.38"
TX-TV-14	Austin 2.9 NW	18.72"	TX-WM-22	Liberty Hill 0.6 NNW	17.81"	TX-WK-15	Dodge 1.6 S 15.41"
TX-TV-21	Jonestown 2.6 E	15.96"	TX-WM-26	Georgetown 4.7 NNE	17.01"	TX-WK-18	Huntsville 1.3 SSE 15.10"
TX-TV-27	Leander 1.9 WSW	13.97"	TX-WM-35	Bertram 6.4 ESE	14.56"	TX-WK-21	Riverside 2.0 WNW 16.52"
TX-TV-30	Anderson Mill 2.2 S	23.10"	TX-WM-39	Round Rock 1.0 S	20.33"	TX-WA-1	Burton 6.9 SSW 17.94"
TX-TV-34	Sunset Valley 0.7 SE	20.10"	TX-WM-41	Cedar Park 1.0 ESE	20.56"	TX-WA-3	Hempstead 10.0 NNW 15.21"
TX-TV-35	Pflugerville 0.6 ENE	17.95"	TX-WM-44	Jollyville 1.2 WNW	22.43"	TX-WA-5	Brenham 7.2 SW 17.61"
TX-TV-43	Pflugerville 2.6 N	18.62"	TX-WM-46	Brushy Creek 2.4 SW	18.69"	TX-WA-6	Brenham 8.0 E 14.54"
TX-TV-44	Austin 1.0 N	17.18"	TX-WM-55	Anderson Mill 1.1 ENE	20.40"	TX-WA-9	Chappell Hill 1.0 NW 14.45"
TX-TV-47	Austin 4.7 E (Jordan Pk)	16.59"	TX-WM-58	Andice 1.6 SW	15.52"	TX-WA-10	Chappell Hill 1.8 N 13.68"
TX-TV-49	Wells Branch 4.2 S	17.41"	TX-WM-61	Anderson Mill 1.4 NW	18.16"	TX-WA-12	Washington 3.1 SSW 12.87"
TX-TV-52	Oak Hill 1.1 WSW	17.39"	TX-WM-64	Cedar Park 1.7 S	18.68"	TX-WA-14	Washington 8.6 SSW 12.34"
TX-TV-53	Austin 4.2 NW	17.33"	TX-WM-68	Georgetown 4.5 SSE	19.73"	TX-WA-15	Carmine 3.1 WNW 20.85"
TX-TV-59	Tanglewood Forest 0.6 NE 20.93"		TX-WM-71	Georgetown 5.8 SE	16.79"	TX-WA-17	Brenham 9.9 N 17.01"
TX-TV-60	Tanglewood Forest 3.5 NW 16.87"		TX-WM-74	Georgetown 3.0 ESE	18.90"		
TX-TV-68	Jollyville 1.6 SSE	20.51"	TX-WM-98	Cedar Park 3.0 S	16.90"		
TX-TV-87	Austin 3.9 NNE	20.16"	TX-WM-102	Round Rock 3.4 E	14.62"		
TX-TV-96	Tanglewood Forest 2.9 E 18.99"		TX-WM-110	Liberty Hill 4.3 ENE	18.44"		
TX-TV-99	Bee Cave 2.5 ENE	16.32"	TX-WM-113	Jarrell 4.4 W	14.50"		
TX-TV-117	Austin 5.9 NW	20.70"	TX-WM-115	Georgetown 7.4 WSW	15.42"		
TX-TV-118	Austin 4.5 ENE	16.47"	TX-WM-118	Brushy Creek 2.3 SW	18.38"		
TX-TV-122	Austin 5.6 WSW	18.98"	TX-WM-119	Bartlett 5.0 W	17.77"		
TX-TV-125	Manor 5.5 SSE	23.59"	TX-WM-129	Thrall 7.9 SSE	19.39"		
TX-TV-135	Creedmoor 1.5 NNW	24.59"	TX-WM-142	Leander 3.4 NNE	17.71"		
TX-TV-141	Lago Vista 1.5 SW	13.88"	TX-WM-149	Coupland 6.5 ESE	20.19"		
TX-TV-149	Austin 2.9 NNW	16.67"	TX-WM-161	Taylor 2.4 S	14.98"		
TX-TV-163	Pflugerville 2.5 NNE	16.50"	TX-WM-162	Liberty Hill 1.2 N	16.06"		
TX-TV-164	Austin 4.1 SW	21.18"	TX-WM-166	Cedar Park 2.4 WNW	16.28"		
TX-TV-165	Austin 5.7 SSW	20.73"	TX-WM-168	Cedar Park 1.3 S	16.37"		
TX-TV-171	Austin 3.7 SSW	18.92"	TX-WM-175	Georgetown 6.7 NW	15.61"		
TX-TV-175	San Leanna 0.1 SSE	23.73"	TX-WM-183	Georgetown 6.6 NW	13.61"		
TX-TV-176	Austin 2.4 N (Allandale)	16.94"	TX-WM-195	Round Rock 1.6 WSW	16.22"		
TX-TV-195	Austin 3.6 SW	19.25"	TX-WM-201	Georgetown 6.1 NW	13.62"		
TX-TV-200	Lakeway 3.5 ENE	13.05"	TX-WM-202	Georgetown 1.4 SE	16.74"		
TX-TV-208	Pflugerville 3.3 E	17.34"	TX-WM-203	Georgetown 5.3 NNW	14.84"		
TX-TV-218	Onion Creek 3.2 ENE	25.70"	TX-WM-208	Round Rock 4.6 E	15.84"		
TX-TV-219	Austin 7.9 N	19.73"	TX-WO-5	Floresville 8.1 NNW	9.82"		
TX-TV-228	Austin 9.8 WSW	19.30"	TX-WO-10	Elmendorf 5.6 ENE	11.40"		
TX-TV-236	Austin 9.2 NNE	17.73"	TX-WO-14	St. Hedwig 4.9 S	9.67"		
TX-TV-238	Austin 5.5 SSE	17.70"	TX-WO-30	Adkins 6.4 SSE	9.29"		
TX-TV-242	Austin 5.5 N	18.61"	TX-WO-39	Floresville 9.4 NW	13.94"		
TX-TV-255	Austin 9.0 SW	17.75"	TX-WO-45	La Vernia 3.6 SSW	10.27"		
TX-TV-256	Tanglewood Forest 1.1 S 30.44"		TX-ZV-15	Crystal City 0.5 ESE	8.76"		
TX-TV-267	Pflugerville 2.2 ENE	16.37"	TX-ZV-17	Crystal City 0.5 S	9.06"		
TX-TV-268	Tanglewood Forest 0.5 SSW 19.73		TX-ZV-18	Crystal City 0.8 SW	7.68"		
TX-UV-17	Utopia 2.0 W	13.99"	TX-ZV-19	Crystal City 0.7 WNW	8.95"		
TX-UV-19	Camp Wood 5.02 SSE	10.49"	TX-ZV-20	Crystal City 9.2 E	8.42"		

Rainfall totals include data from 7:00AM September 1st, 2015 and ending at approximately 7:00AM December 1st, 2015.

NOTE: due to the large number of CoCoRaHS stations in Texas, not all are included in this report. However....all reports are greatly appreciated and used by the National Weather Service.

FIVEFORCOCORAHHS
DONATE five dollars
 Now thru January 7th
 "YEAR-END" FUNDRAISER

At the end of each year we hold an on-line fundraiser providing the opportunity to make a donation to the CoCoRaHS Network. There is certainly no obligation to give as you already help out immensely by taking your daily observations, but many CoCoRaHS volunteers have also offered to help financially and this makes a big difference. 100% of these gifts go directly to support CoCoRaHS activities and supplement any outside funding (grants, etc.) that we receive. Donations help support web development, training, outreach and supplies. Your giving goes a long way to help sustain the network throughout the year and provide opportunities for the future. We greatly thank you! www.cocorahs.org



Texas CoCoRaHS Observer

The official newsletter of Texas CoCoRaHS

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