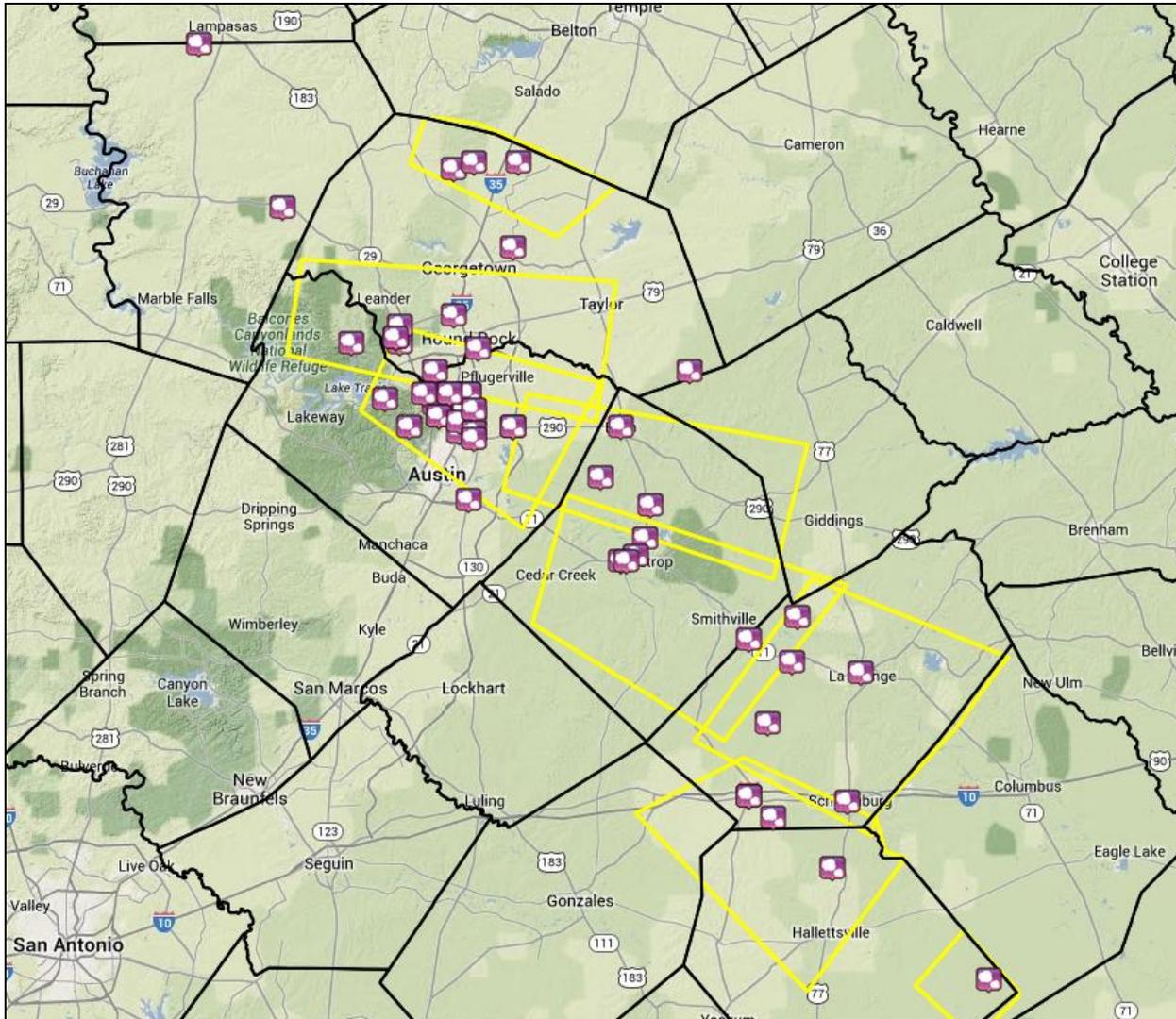


# March 28, 2014 – Dryline Hail Event



**Austin -  
San Antonio  
Weather  
Forecast  
Office**

# Synoptic Set Up - Synopsis

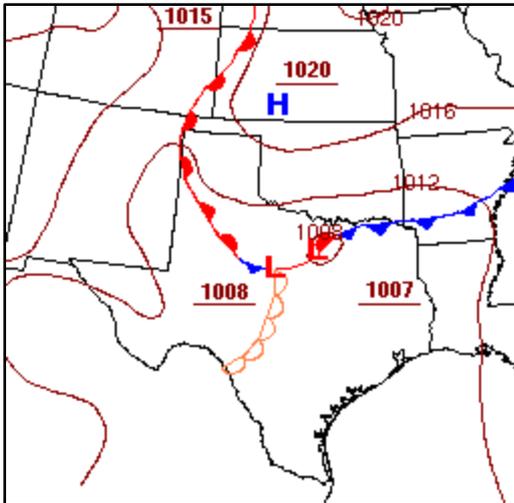
A springtime pattern with moist air in place over South Central Texas and a dryline out in West Texas set up on March 28<sup>th</sup>.

The dryline divided the warm and moist air with dewpoints in the 60s to the east, and dry air with dewpoints in the 30s to the west.

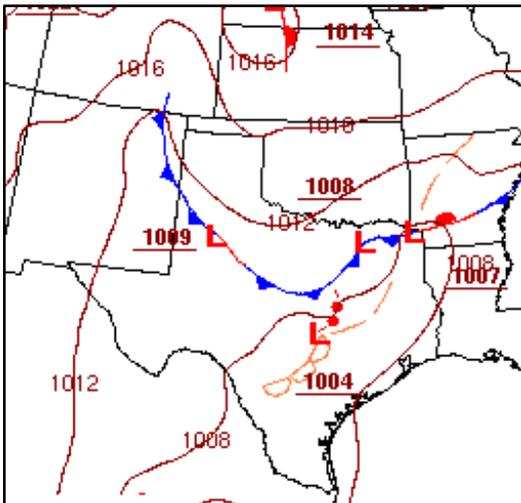
Around noon, breaks in the clouds over the I-35 corridor allowed the sun to warm surface temperatures. This warm air helped to trigger thunderstorms.

Storms began to the north of the area in Lampasas and Comanche counties and then slowly developed southward toward the Austin area.

As the dryline and storms moved east they moved into areas with large Convective Available Potential Energy (CAPE) which helped the storms updrafts grow and lift the hail aloft so that it could grow. We received multiple reports of 1.75" inch hail.

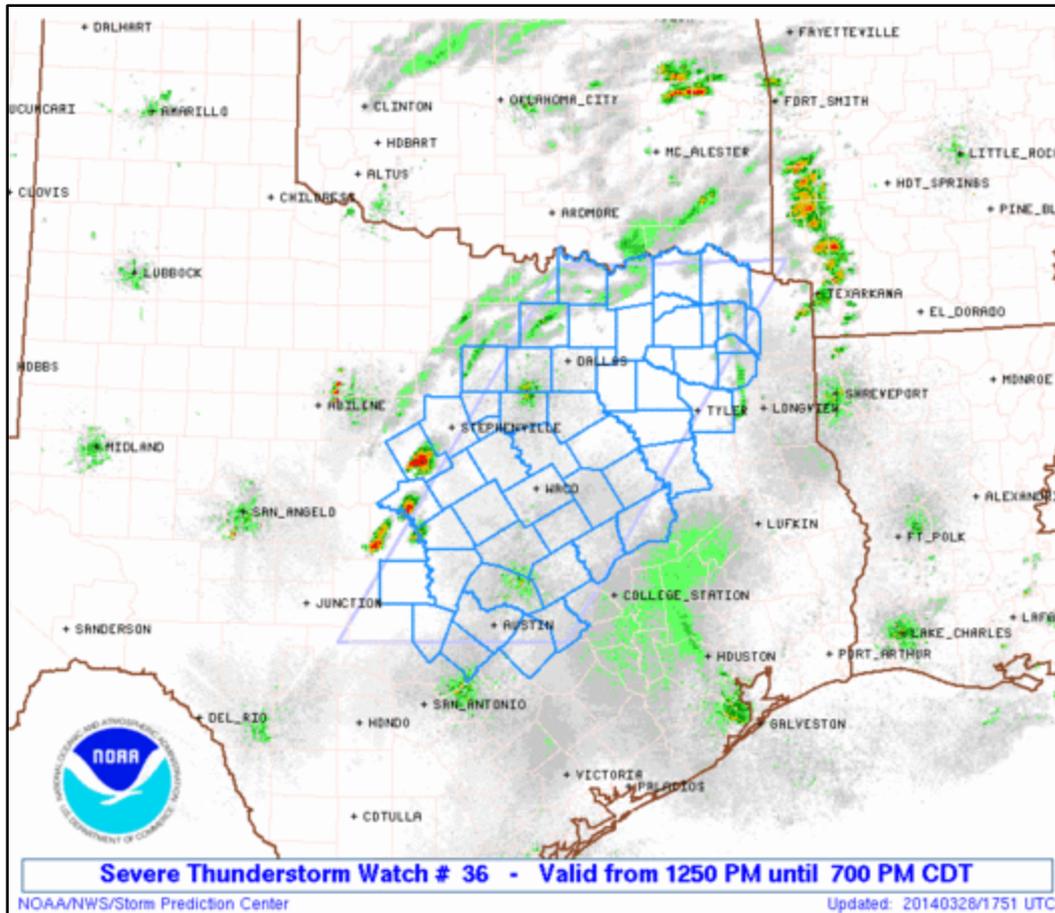


1PM/18Z Weather Prediction Center Surface Analysis



4PM/21Z Weather Prediction Center Surface Analysis

# Severe Thunderstorm Watch



Issued by Storm Prediction Center in Norman, OK

Initially issued for Bastrop, Blanco, Burnet, Hays, Lee, Llano, Travis, and Williamson Counties in South Central Texas.

Caldwell and Fayette Counties were added to the Watch at 5:14pm

Primary Threats Included:

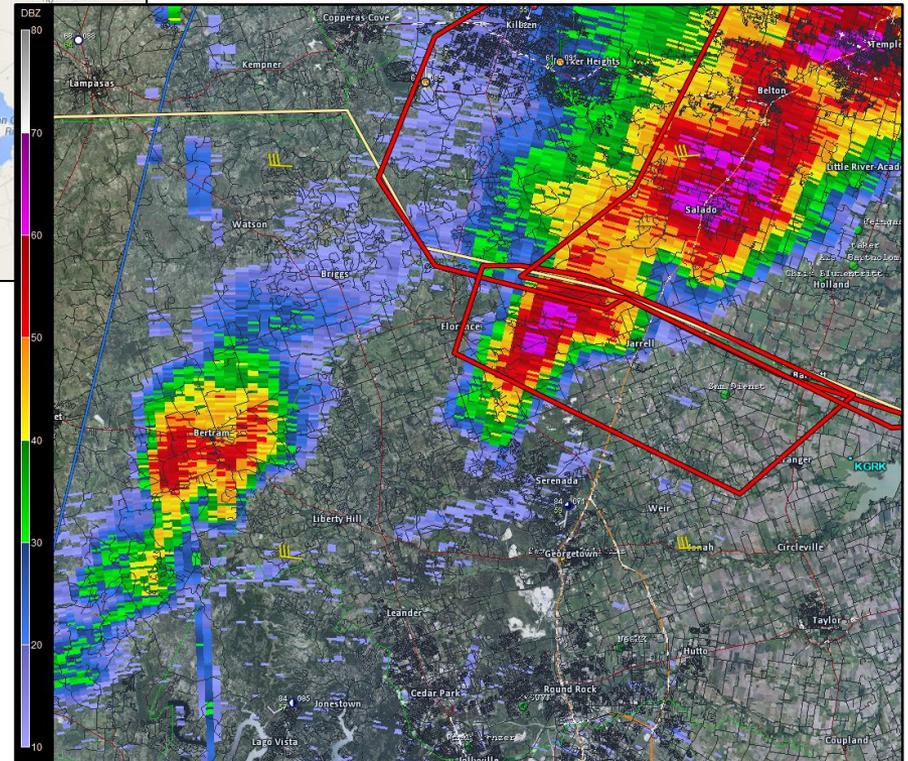
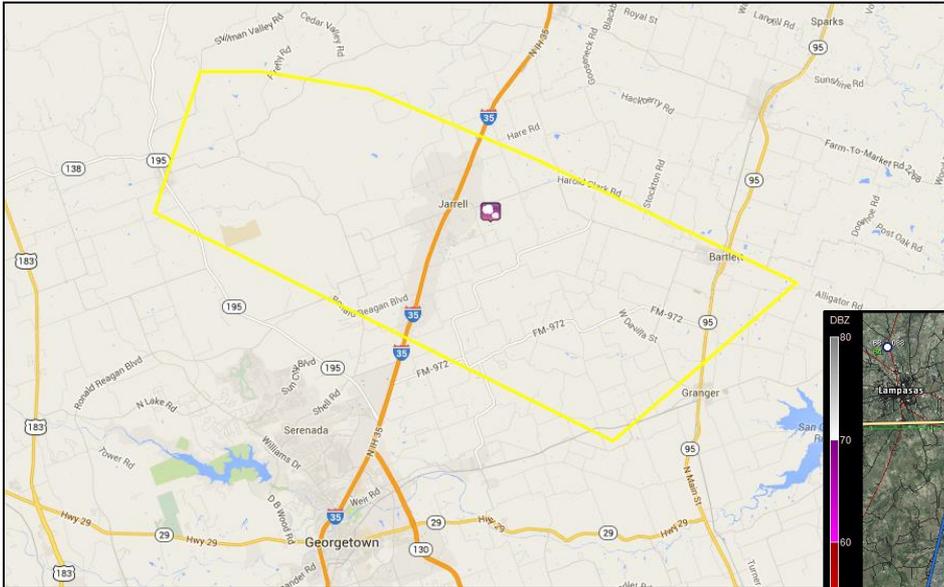
- Large Hail to 3" in diameter
- Damaging wind gusts to 70mph
- A few tornados possible.

Hazard	Tornadoes	EF2+ Tornadoes	Severe Wind	65 kt+ Wind	Severe Hail	2"+ Hail
Likelihood	Low	Very Low	Moderate	Low	High	High

# Severe Thunderstorm Warning #1

North Central Williamson

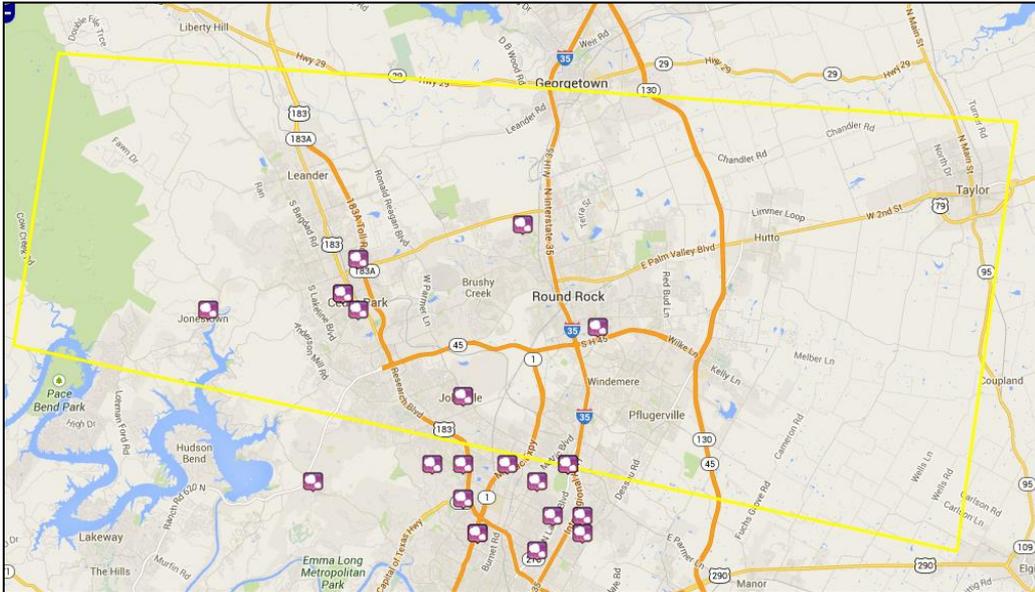
3:37pm – 4:15pm



## Reports:

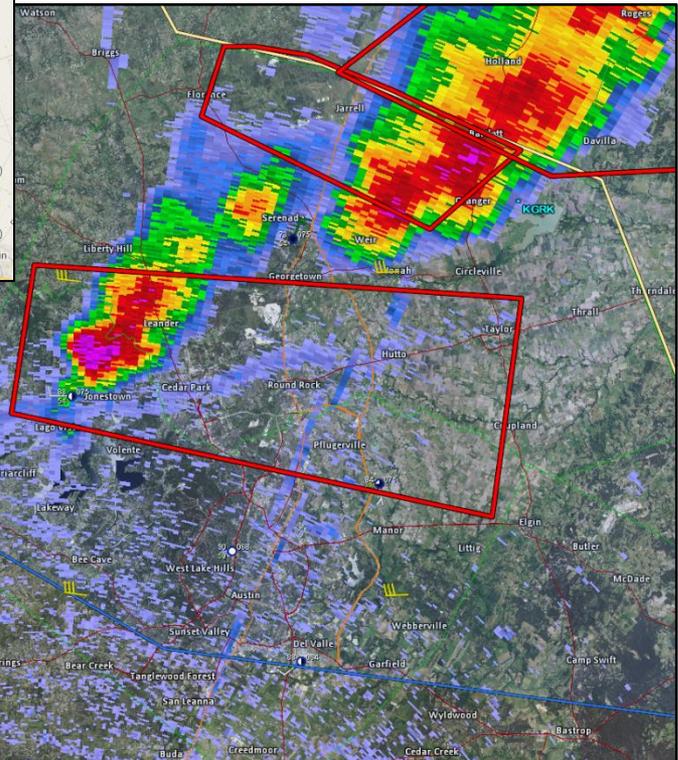
- 3:49pm...1.75" Hail...1 E Jarrell

# Severe Thunderstorm Warning #2



Southern Williamson  
Northern Travis

4:02pm – 4:45pm



## Reports:

- 4:10pm...0.25" Hail...1 SE Cedar Park
- 4:15pm...0.25" Hail...Cedar Park
- 4:15pm...0.50" Hail...3 NW Round Rock
- 4:15pm...0.75" Hail...2 NNW Windemere
- 4:16pm...0.70" Hail...Jonestown
- 4:21pm...1.75" Hail...1 NE Cedar Park
- 4:22pm...1.50" Hail...Cedar Park
- 4:30pm...1.75" Hail...Jollyville
- 4:41pm...0.50" Hail...3 S Wells Branch

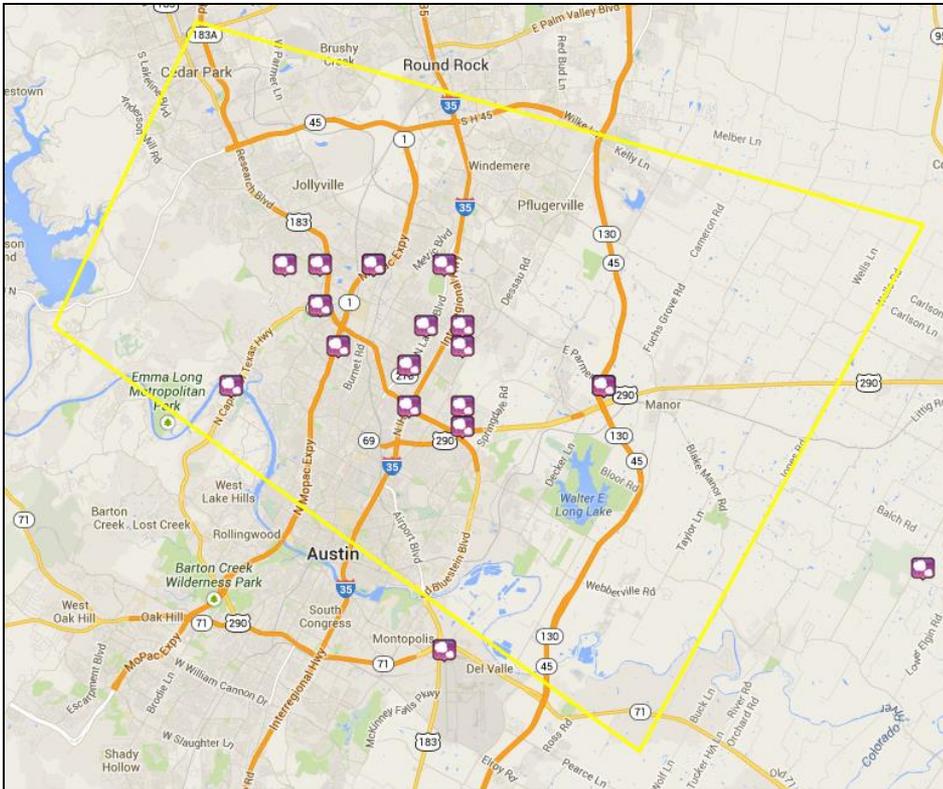
# Severe Thunderstorm Warning #3

East Central Travis  
Extreme South Central Williamson

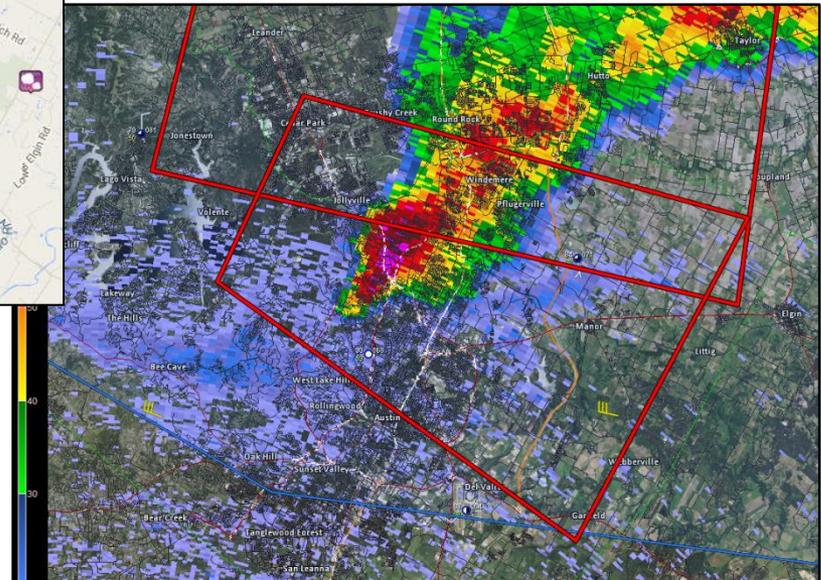
4:33pm – 5:15pm

Selected Storm Reports:

- 4:33pm...1.00" Hail...6 N Austin
- 4:36pm...0.50" Hail...3 SW Wells Branch
- 4:42pm...1.75" Hail...4 NE Austin



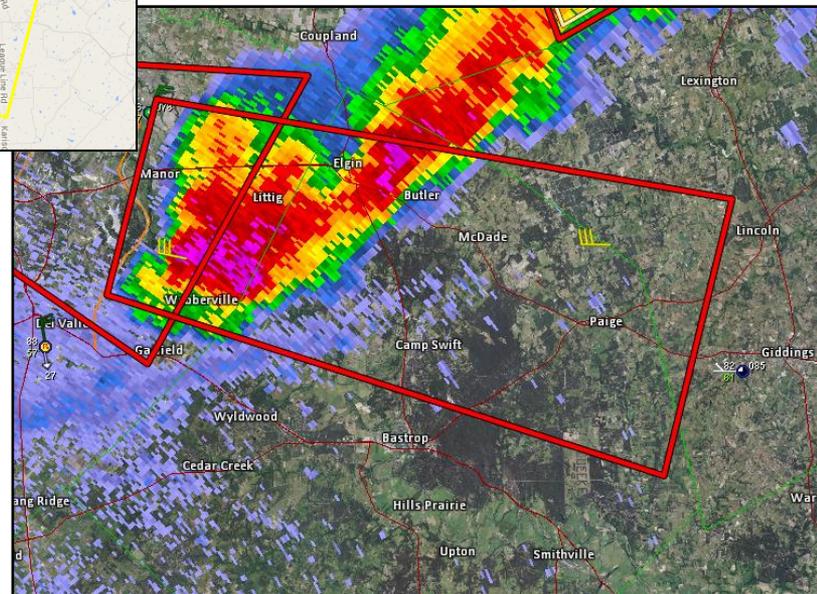
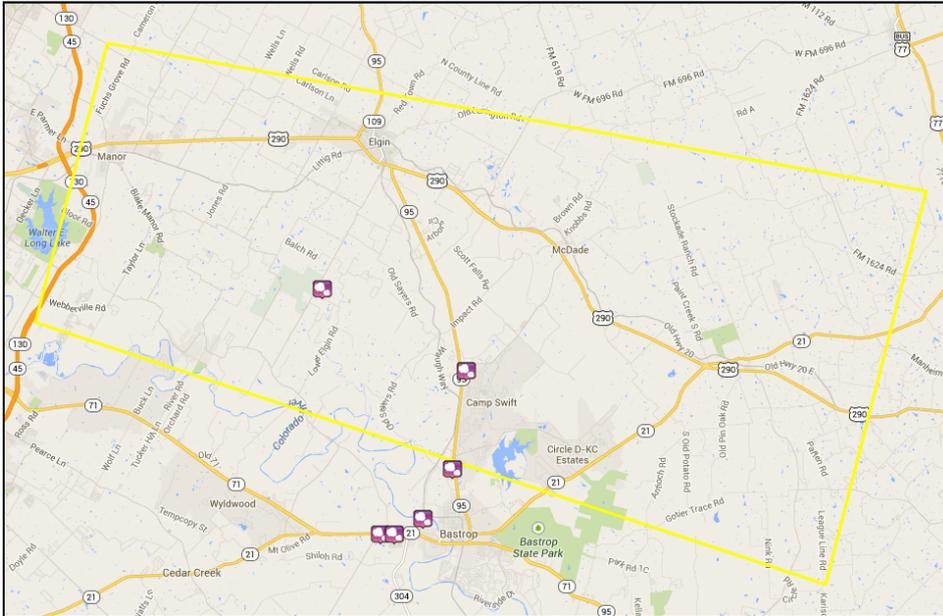
- 4:44pm...1.75" Hail...5 NE Austin
- 4:45pm...1.75" Hail...2 W Manor
- 4:45pm...1.00" Hail...5 ENE Austin
- 4:48pm...0.70" Hail...3 SW Wells Branch
- 4:52pm...1.00" Hail...5 ENE Austin



# Severe Thunderstorm Warning #4

Northern Bastrop  
Central Lee  
East Central Travis

5:06pm – 5:45pm



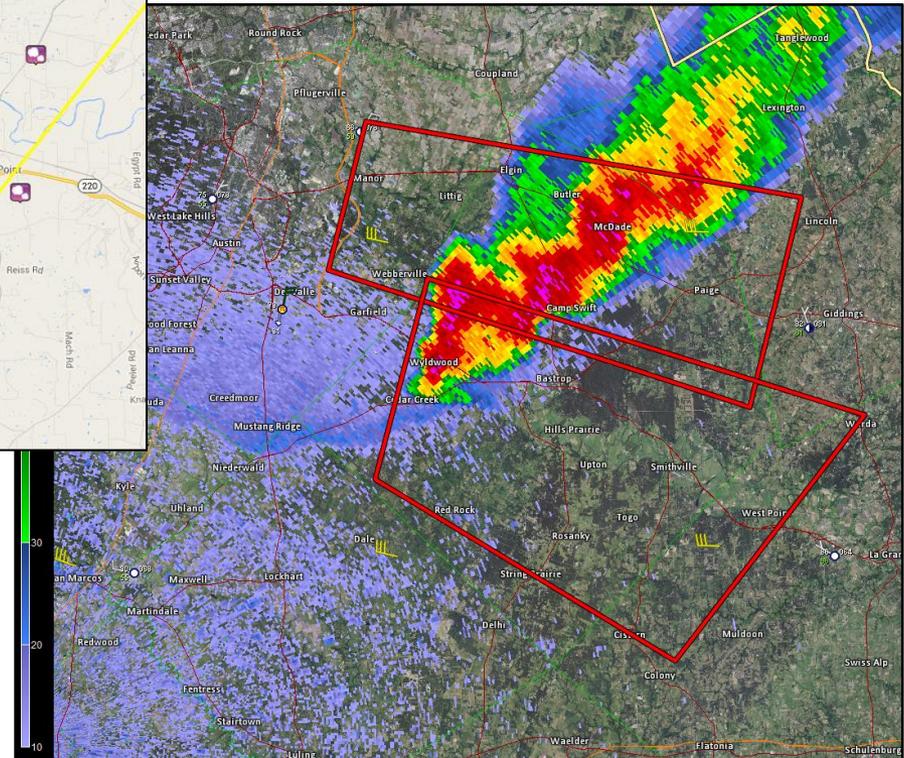
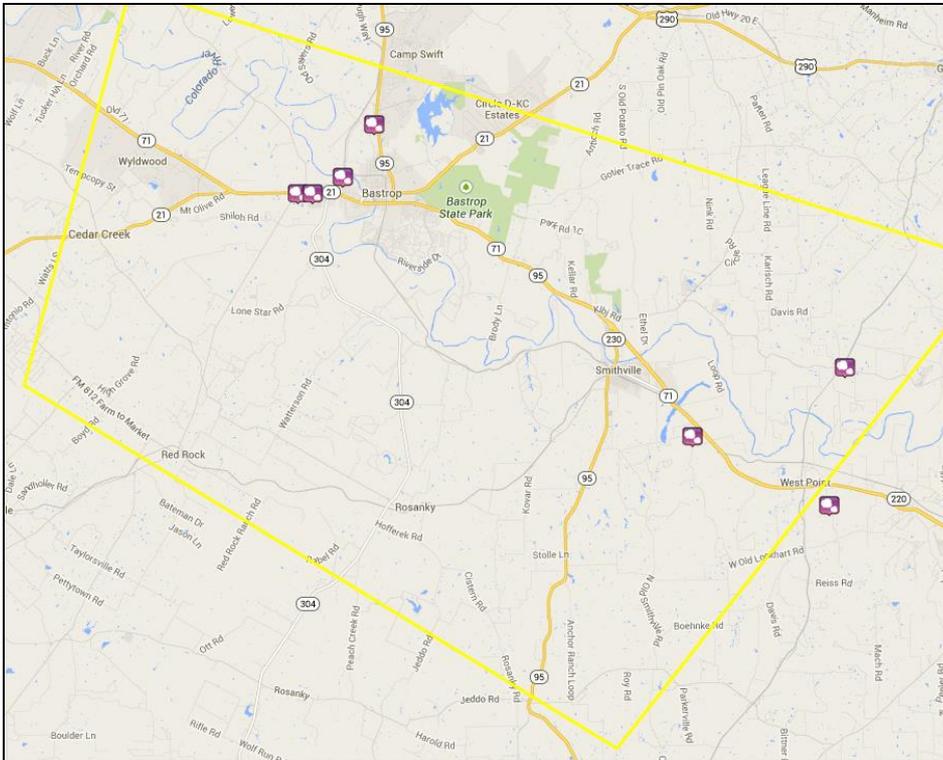
## Reports:

- 5:15pm...1.75" Hail...7 SSW Elgin
- 5:20pm...0.75" Hail...2 NW Camp Swift

# Severe Thunderstorm Warning #5

Southern Bastrop  
Western Fayette  
Extreme South Central Lee

5:23pm – 6:15pm



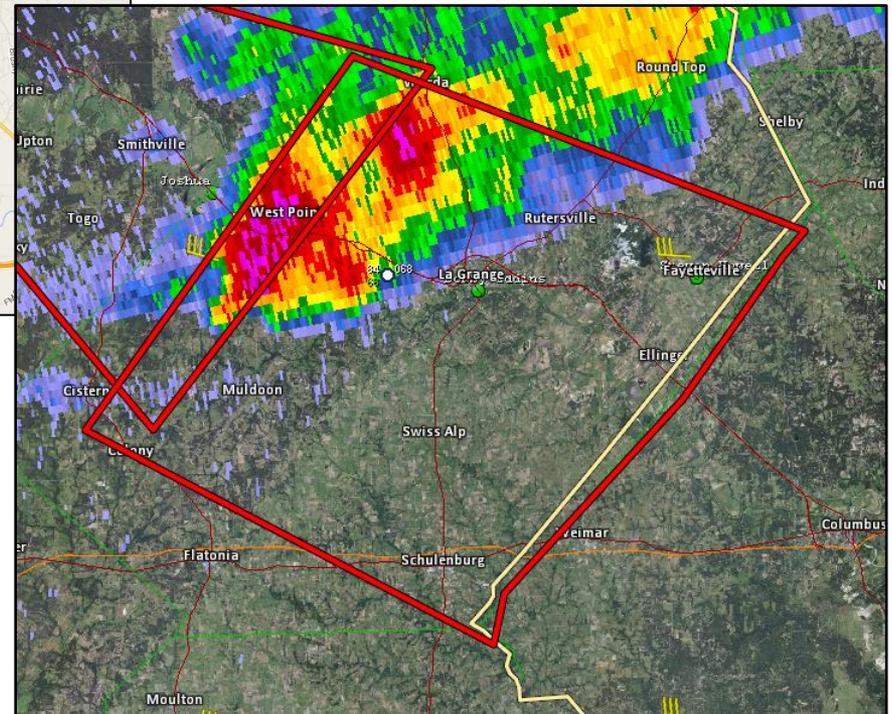
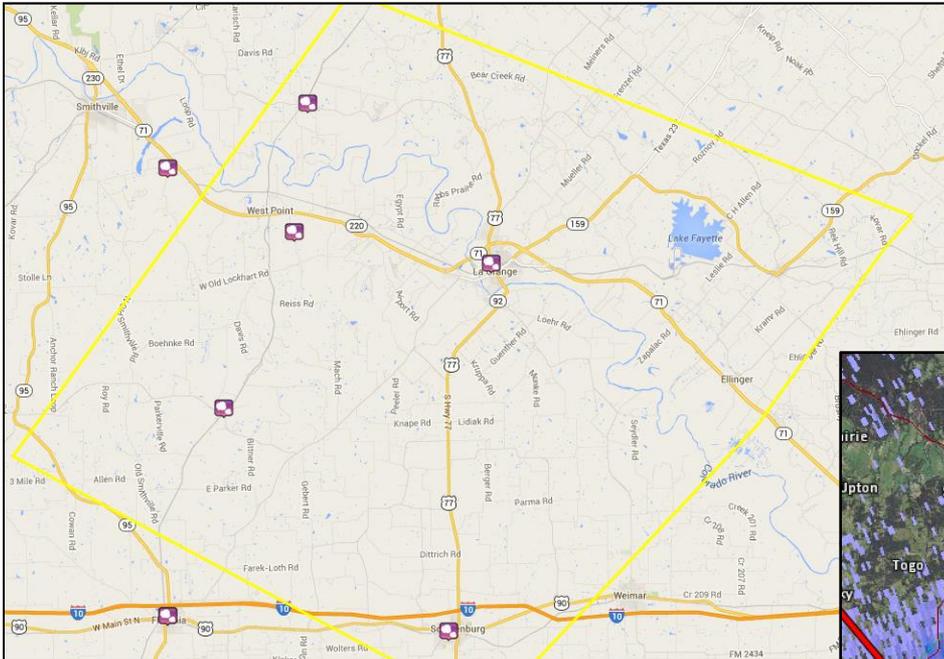
## Reports:

- 5:25pm...1.00" Hail...3 NNW Bastrop
- 5:30pm...1.00" Hail...2 W Bastrop
- 5:33pm...1.75" Hail...4 W Bastrop
- 6:09pm...1.00" Hail...9 E Smithville
- 6:09pm...1.25" Hail... 4 SE Smithville

# Severe Thunderstorm Warning #6

Fayette County  
Extreme North Central Lavaca  
Extreme South Central Lee

6:09pm – 7:00pm



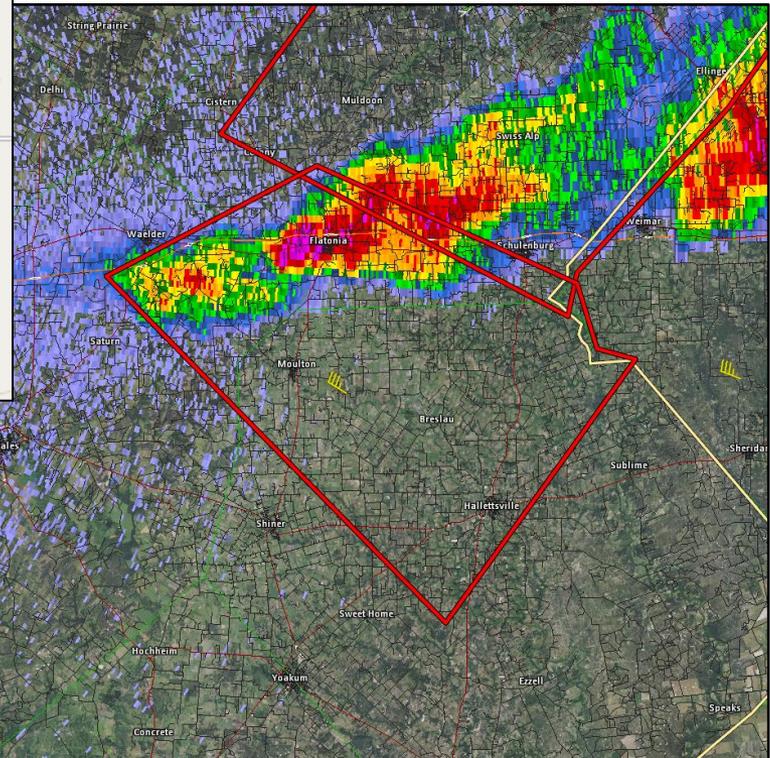
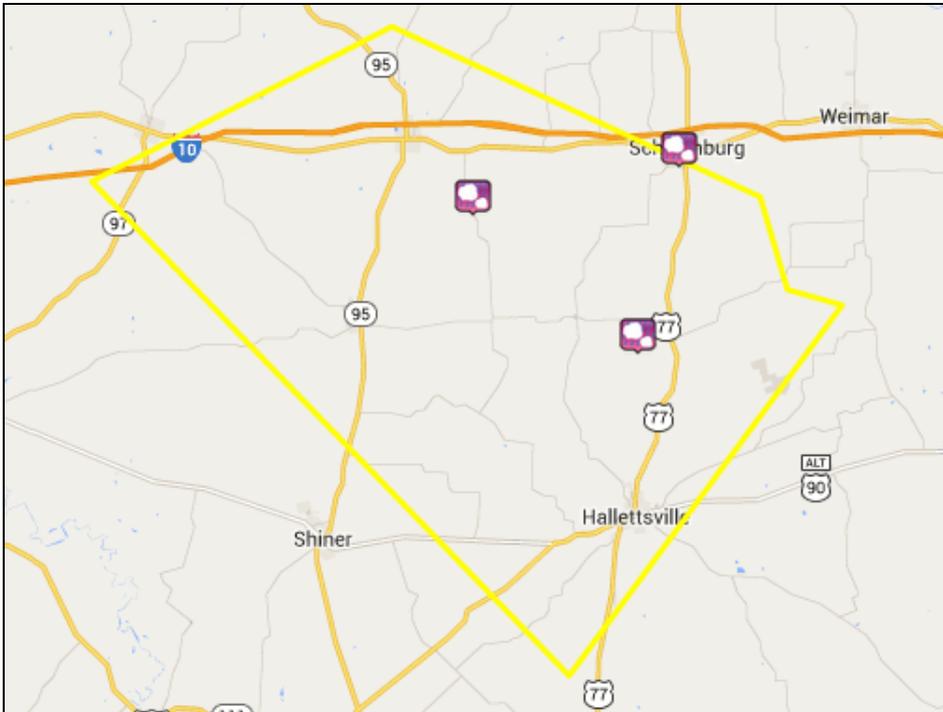
## Reports:

- 6:09pm...1.00" Hail...9 E Smithville
- 6:12pm...0.88" Hail... 8 NNE Muldoon
- 6:29pm...0.25" Hail...La Grange
- 6:30pm...0.25" Hail...Muldoon
- 6:48pm...0.25" Hail...Schulenburg

# Severe Thunderstorm Warning #7

Southwestern Fayette  
Northeastern Gonzales  
Northwestern Lavaca

6:44pm – 7:30pm



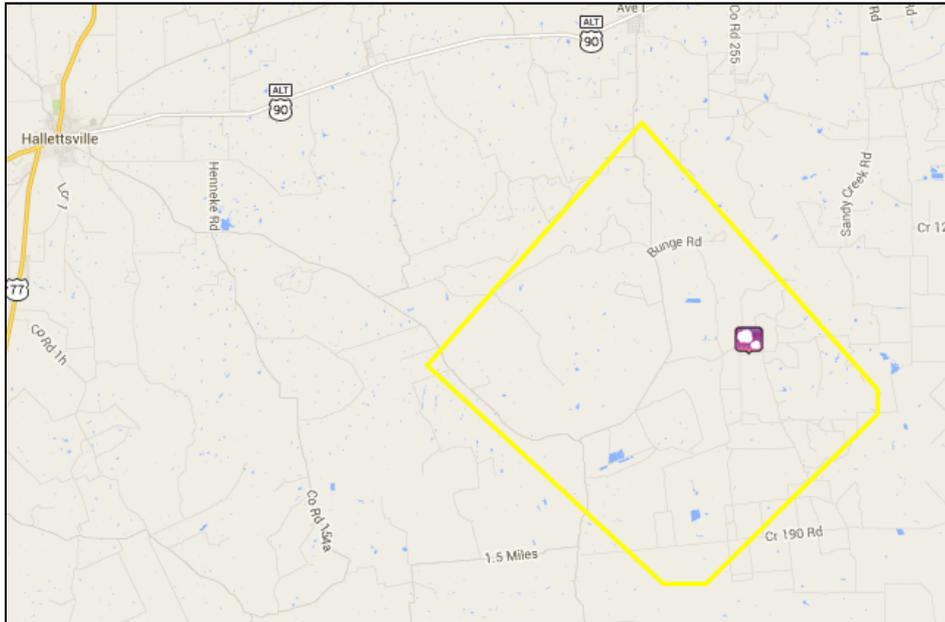
## Reports:

- 6:50pm...1.00" Hail...4 SE Flatonia
- 7:10pm...0.50" Hail...8 N Hallettsville

# Severe Thunderstorm Warning #8

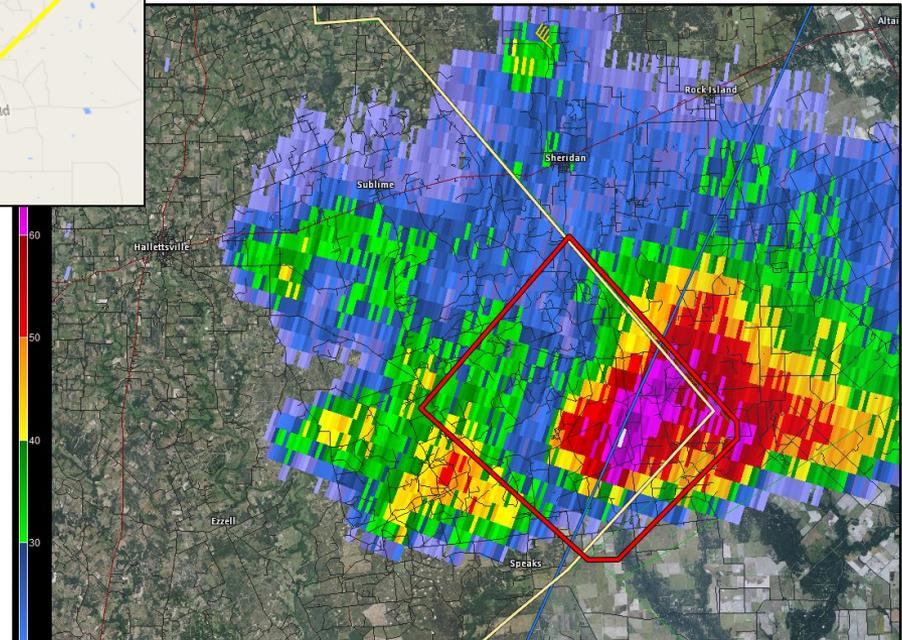
East Central Lavaca

7:42pm – 8:00pm



Reports:

- 7:42pm...1.00" Hail...9 NE Speaks



# All Hail Reports / Pictures

0235 PM HAIL 17 NE TOW 31.03N 98.23W  
03/28/2014 E1.00 INCH BURNET TX TRAINED SPOTTER

0235 PM HAIL 5 ESE FLORENCE 30.81N 97.71W  
03/28/2014 E0.25 INCH WILLIAMSON TX LAW ENFORCEMENT

0330 PM HAIL BERTRAM 30.74N 98.06W  
03/28/2014 E0.50 INCH BURNET TX PUBLIC

0335 PM HAIL 4 W JARRELL 30.82N 97.67W  
03/28/2014 E1.25 INCH WILLIAMSON TX COCORAHS

0349 PM HAIL 1 E JARRELL 30.82N 97.58W  
03/28/2014 E1.75 INCH WILLIAMSON TX LAW ENFORCEMENT

0405 PM HAIL WEIR 30.67N 97.59W  
03/28/2014 E1.00 INCH WILLIAMSON TX TRAINED SPOTTER

0410 PM HAIL 1 SE CEDAR PARK 30.50N 97.82W  
03/28/2014 E0.25 INCH WILLIAMSON TX PUBLIC

0415 PM HAIL CEDAR PARK 30.51N 97.83W  
03/28/2014 E0.25 INCH WILLIAMSON TX TRAINED SPOTTER

0415 PM HAIL 2 NNW WINDEMERE 30.49N 97.66W  
03/28/2014 E0.75 INCH WILLIAMSON TX TRAINED SPOTTER

0415 PM HAIL 3 NW ROUND ROCK 30.55N 97.71W  
03/28/2014 E0.50 INCH WILLIAMSON TX TRAINED SPOTTER

0415 PM HAIL 5 SW ANDERSON MILL 30.40N 97.85W  
03/28/2014 E1.25 INCH TRAVIS TX TRAINED SPOTTER

0416 PM HAIL JONESTOWN 30.50N 97.92W  
03/28/2014 E0.70 INCH TRAVIS TX PUBLIC



Photo Credit:  
Brenda C.  
Jarrell, TX



Photo  
Credit:  
Nancy H.  
Jarrell, TX

# All Hail Reports / Pictures

0421 PM HAIL 1 NE CEDAR PARK 30.53N 97.82W  
03/28/2014 E1.75 INCH WILLIAMSON TX EMERGENCY MNGR

0422 PM HAIL CEDAR PARK 30.51N 97.83W  
03/28/2014 E1.50 INCH WILLIAMSON TX TRAINED SPOTTER

0430 PM HAIL JOLLYVILLE 30.45N 97.75W  
03/28/2014 E1.75 INCH WILLIAMSON TX TRAINED SPOTTER

0430 PM HAIL 3 S WELLS BRANCH 30.41N 97.68W  
03/28/2014 E0.25 INCH TRAVIS TX TRAINED SPOTTER

0430 PM HAIL 4 N AUSTIN 30.37N 97.74W  
03/28/2014 E1.00 INCH TRAVIS TX TRAINED SPOTTER

0430 PM HAIL 4 SSW WELLS BRANCH 30.40N 97.70W  
03/28/2014 E1.00 INCH TRAVIS TX PUBLIC

0433 PM HAIL 3 S JOLLYVILLE 30.41N 97.75W  
03/28/2014 E0.75 INCH TRAVIS TX PUBLIC

## HALF TO THREE QUARTER INCH HAIL

0433 PM HAIL 6 N AUSTIN 30.39N 97.75W  
03/28/2014 M1.00 INCH TRAVIS TX TRAINED SPOTTER

0434 PM HAIL 5 S WELLS BRANCH 30.37N 97.67W  
03/28/2014 E0.75 INCH TRAVIS TX TRAINED SPOTTER

0435 PM HAIL 4 NW AUSTIN 30.35N 97.80W  
03/28/2014 M1.00 INCH TRAVIS TX PUBLIC

## 1 INCH HAIL AT SPICEWOOD SPRINGS AND MOPAC



Photo Credit: Monica H. // Dime Size Hail in Cedar Park, TX



Photo Credit: Nikki C.  
Hail near Metric & Mopac in Austin

# All Hail Reports / Pictures

0435 PM HAIL 3 SSW JOLLYVILLE 30.41N 97.77W  
03/28/2014 M1.00 INCH TRAVIS TX CO-OP OBSERVER

HAIL STONES RANGING FROM PEA SIZE TO ONE INCH OCCURRING  
ON AND OFF FOR MORE THAN FIVE MINUTES

0436 PM HAIL 3 SW WELLS BRANCH 30.41N 97.72W  
03/28/2014 E0.50 INCH TRAVIS TX PUBLIC

0438 PM HAIL 4 N AUSTIN 30.37N 97.74W  
03/28/2014 E1.00 INCH TRAVIS TX PUBLIC

NICKEL TO QUARTER SIZE HAIL

0440 PM HAIL 4 S WELLS BRANCH 30.38N 97.69W  
03/28/2014 E0.75 INCH TRAVIS TX TRAINED SPOTTER

0441 PM HAIL 3 S WELLS BRANCH 30.41N 97.68W  
03/28/2014 E0.50 INCH TRAVIS TX TRAINED SPOTTER

0442 PM HAIL 4 NE AUSTIN 30.34N 97.70W  
03/28/2014 E1.75 INCH TRAVIS TX STORM CHASER

0444 PM HAIL 5 NE AUSTIN 30.36N 97.70W  
03/28/2014 E1.75 INCH TRAVIS TX TRAINED SPOTTER

0445 PM HAIL 5 ENE AUSTIN 30.34N 97.67W  
03/28/2014 E1.00 INCH TRAVIS TX TRAINED SPOTTER

0445 PM HAIL 2 W MANOR 30.35N 97.59W  
03/28/2014 M1.75 INCH TRAVIS TX TRAINED SPOTTER

REPORTED BY TRAINED SPOTTERS

0445 PM HAIL 7 NE AUSTIN 30.38N 97.67W  
03/28/2014 M1.00 INCH TRAVIS TX TRAINED SPOTTER



Photo Credit: James G.  
Hail two miles west of Manor, TX

# All Hail Reports / Pictures

0445 PM HAIL 2 W MANOR 30.35N 97.59W  
03/28/2014 E1.75 INCH TRAVIS TX TRAINED SPOTTER

0448 PM HAIL 3 SW WELLS BRANCH 30.41N 97.72W  
03/28/2014 E0.70 INCH TRAVIS TX TRAINED SPOTTER

0452 PM HAIL 5 ENE AUSTIN 30.33N 97.67W  
03/28/2014 E1.00 INCH TRAVIS TX TRAINED SPOTTER

0503 PM HAIL ELGIN 30.35N 97.37W  
03/28/2014 E1.75 INCH BASTROP TX EMERGENCY MNGR

## ELGIN HIGH SCHOOL

0508 PM HAIL 11 SSE THRALL 30.45N 97.23W  
03/28/2014 E0.50 INCH WILLIAMSON TX TRAINED SPOTTER

## PEA TO HALF INCH HAIL

0515 PM HAIL 7 SSW ELGIN 30.26N 97.41W  
03/28/2014 E1.75 INCH BASTROP TX EMERGENCY MNGR

0520 PM HAIL 2 NW CAMP SWIFT 30.21N 97.31W  
03/28/2014 E0.75 INCH BASTROP TX EMERGENCY MNGR

0525 PM HAIL 3 NNW BASTROP 30.15N 97.32W  
03/28/2014 E1.00 INCH BASTROP TX PUBLIC

0530 PM HAIL 2 W BASTROP 30.12N 97.34W  
03/28/2014 E1.00 INCH BASTROP TX TRAINED SPOTTER

0533 PM HAIL 4 W BASTROP 30.11N 97.37W  
03/28/2014 M1.75 INCH BASTROP TX TRAINED SPOTTER

0535 PM HAIL 4 W BASTROP 30.11N 97.36W  
03/28/2014 E1.75 INCH BASTROP TX EMERGENCY MNGR



Photo Credit: Steve L. // Bastrop, TX



Photo Credit: James R. // Near Elgin, TX

# All Hail Reports / Pictures

0609 PM HAIL 4 SE SMITHVILLE 29.97N 97.11W  
03/28/2014 M1.25 INCH FAYETTE TX TRAINED SPOTTER

0609 PM HAIL 9 E SMITHVILLE 30.01N 97.01W  
03/28/2014 M1.00 INCH FAYETTE TX TRAINED SPOTTER

MOST HAILSTONES RANGED FROM ONE HALF TO THREE QUARTERS  
OF AN INCH

0612 PM HAIL 8 NNE MULDOON 29.93N 97.02W  
03/28/2014 E0.88 INCH FAYETTE TX PUBLIC

0629 PM HAIL LA GRANGE 29.91N 96.88W  
03/28/2014 E0.25 INCH FAYETTE TX PUBLIC

0630 PM HAIL MULDOON 29.82N 97.07W  
03/28/2014 E0.25 INCH FAYETTE TX PUBLIC

0640 PM HAIL FLATONIA 29.69N 97.11W  
03/28/2014 E1.00 INCH FAYETTE TX PUBLIC

0643 PM HAIL FLATONIA 29.69N 97.11W  
03/28/2014 E0.70 INCH FAYETTE TX PUBLIC

0648 PM HAIL SCHULENBURG 29.68N 96.91W  
03/28/2014 E0.25 INCH FAYETTE TX PUBLIC

0650 PM HAIL 4 SE FLATONIA 29.65N 97.06W  
03/28/2014 E1.00 INCH FAYETTE TX CO-OP OBSERVER

0710 PM HAIL 8 N HALLETTSVILLE 29.56N 96.94W  
03/28/2014 E0.50 INCH LAVACA TX COCORAHS

0742 PM HAIL 9 NE SPEAKS 29.36N 96.62W  
03/28/2014 E1.00 INCH LAVACA TX PUBLIC

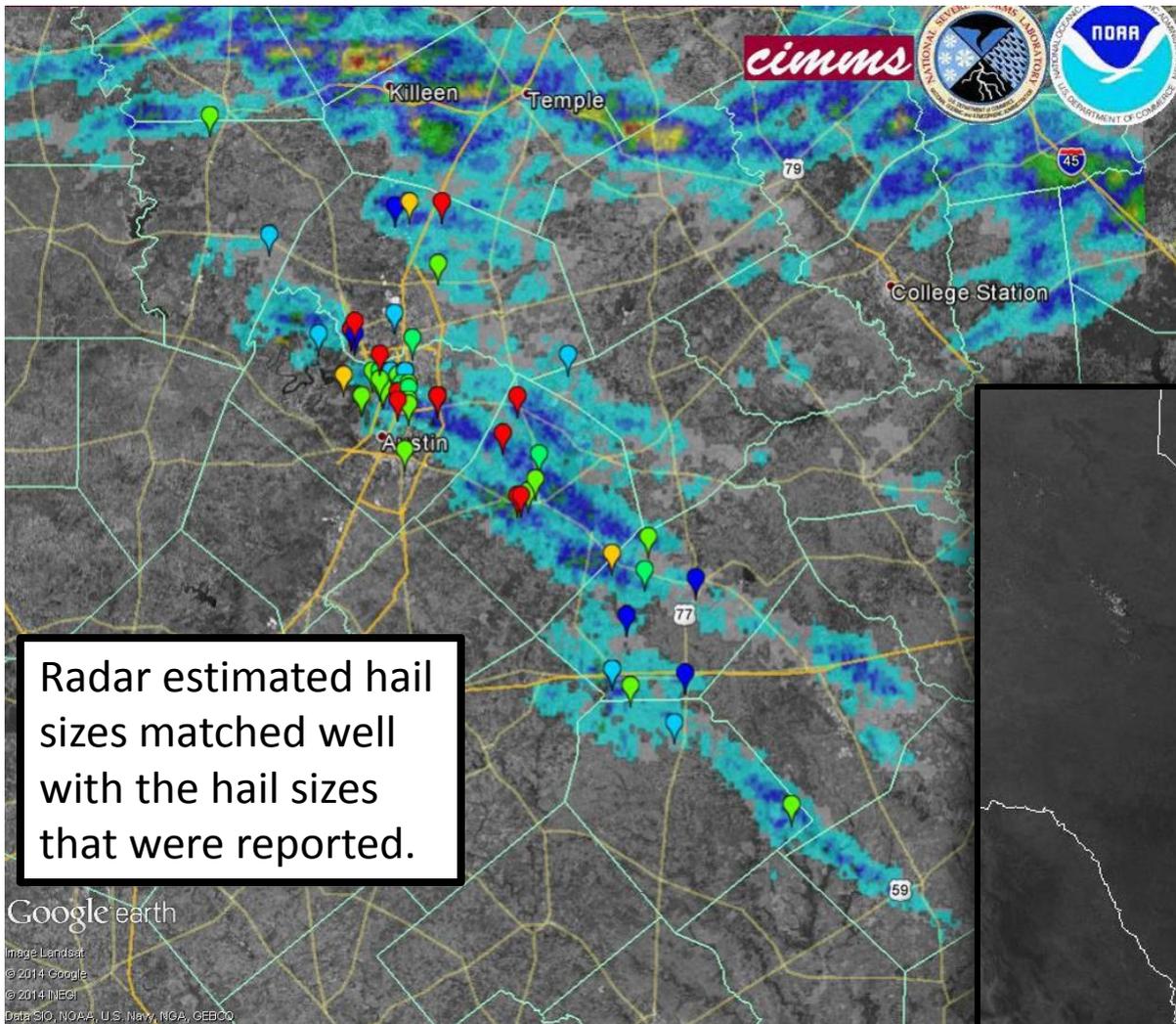


Photo Credit: Martin C. // Pea Size Hail in Muldoon, TX

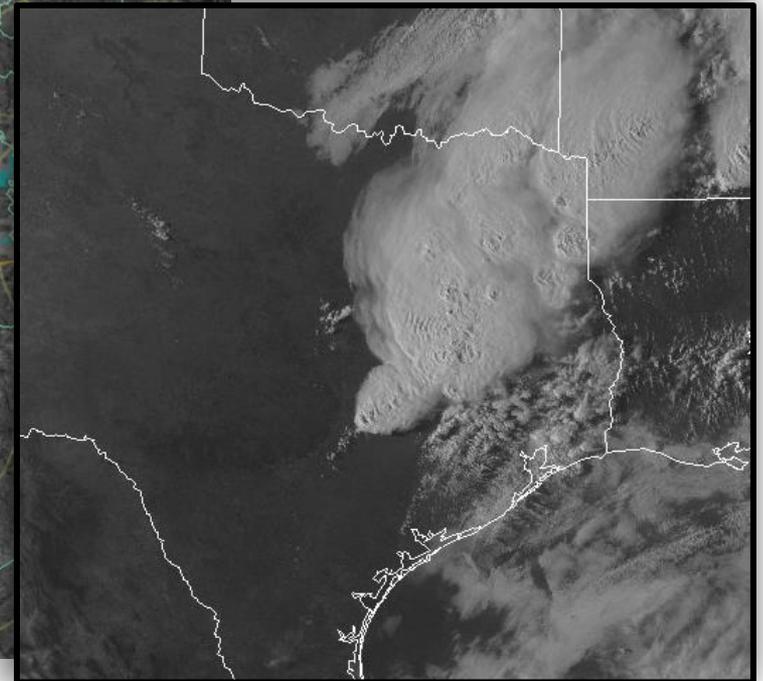


Photo Credit: Lora C. // Looking S from La Grange, TX

# Radar Hail Estimates & Satellite



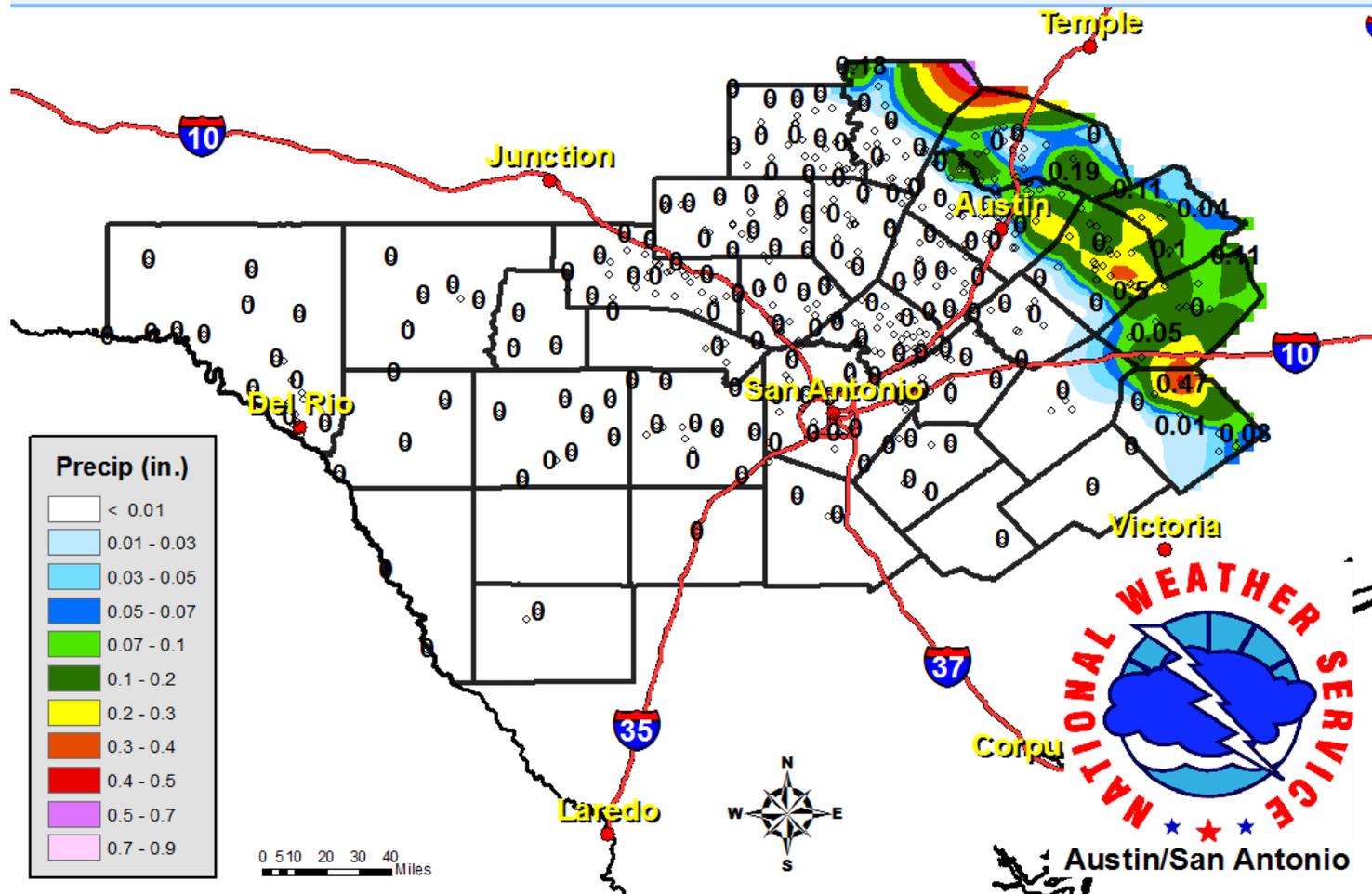
Visible Satellite Image from 5:31pm





# Total Rainfall

## 24Hr Rainfall Ending 7AM March 29, 2014



# Social Media



Photo Credit: Martin C. Storm arriving in Muldoon, TX



Austin/San Antonio, TX  
Weather Forecast Office  
[weather.gov/ewx](http://weather.gov/ewx)



US National Weather  
Service Austin-San  
Antonio, Texas



@NWSSanAntonio