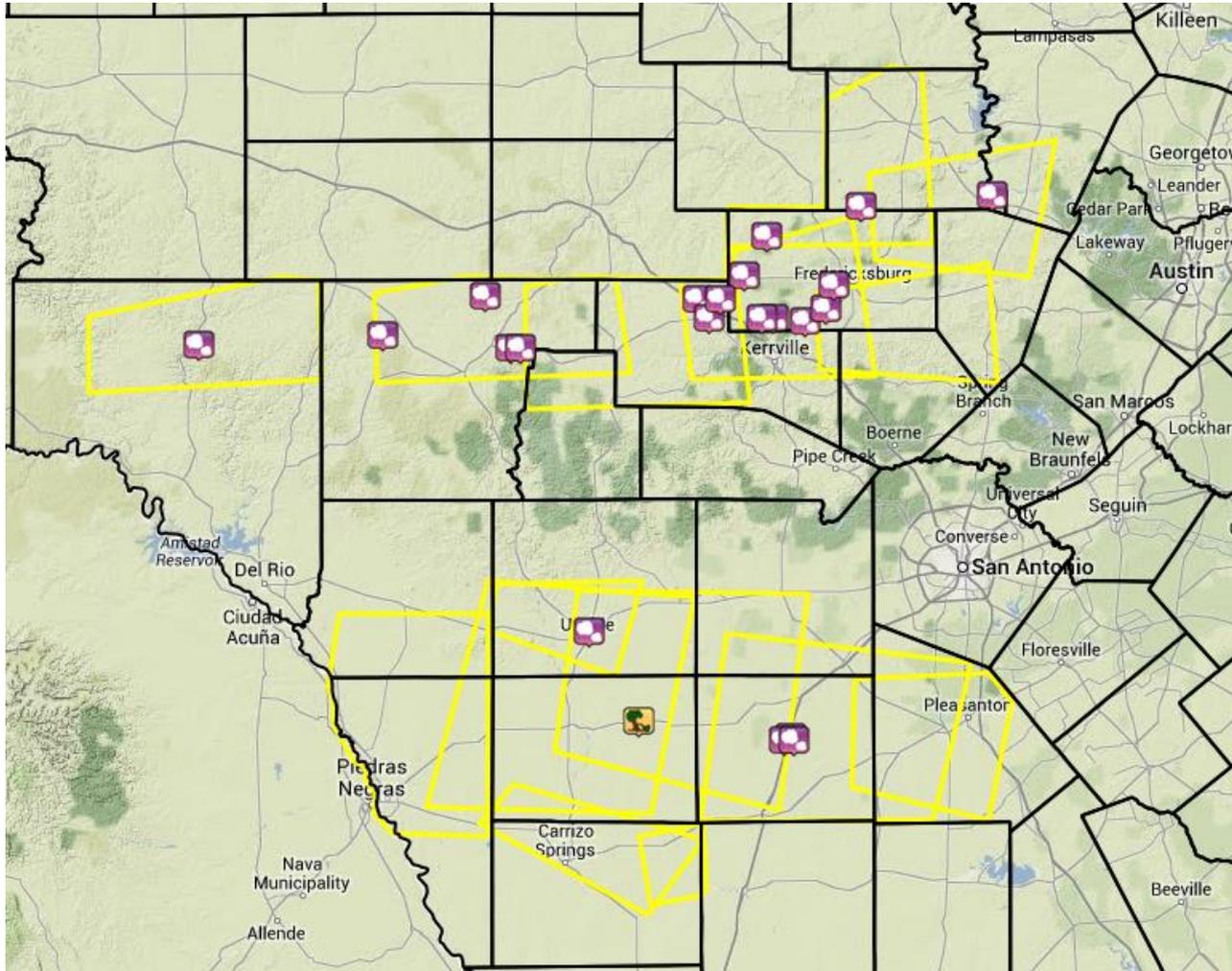


April 3rd & 4th – Severe Storms



**Austin -
San Antonio
Weather
Forecast
Office**

Updated: 4/5/14 2:00pm

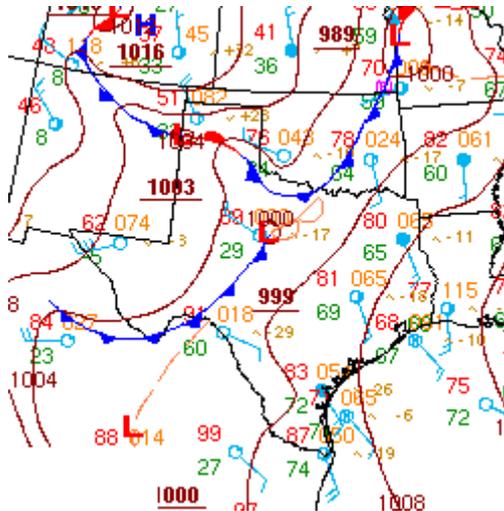
Synoptic Set Up - Summary

A similar pattern to the March 28th Hail event set up on April 3rd. Moist air was in place over South Central Texas with a dryline over West Texas, and a cold front and Low Pressure System over North Texas.

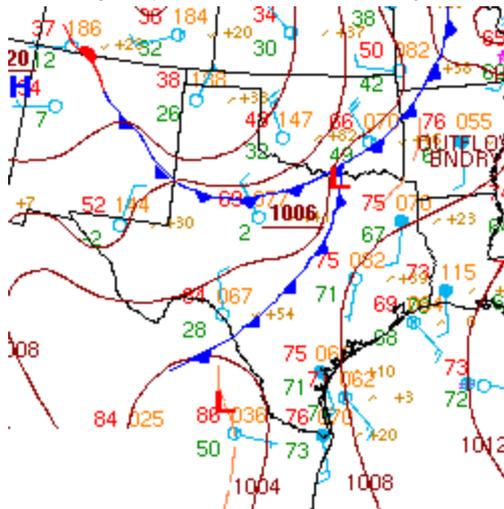
Dewpoints, which signify how much moisture is in the air, were in the 70s ahead of the dryline/cold front, and in the 20s behind it.

The “cap” (see next slide) was expected to hold and thunderstorms were only expected east of I-35. Due to surface heating the “cap” ended up breaking over far West Texas leading to thunderstorms along the dryline. The first few storms moved across the Northern Hill Country from 4:30pm-9:30pm on the 3rd. All of the storms died off with the loss of daytime heating.

Around 11:00pm, a complex of storms developed rapidly along the Rio Grande SW of Uvalde. These storms along the cold front moved east and finally weakened between 3 and 4 am on the 4th south and west of San Antonio.



4pm (4/3/14) Surface Map



10pm (4/3/14) Surface Map

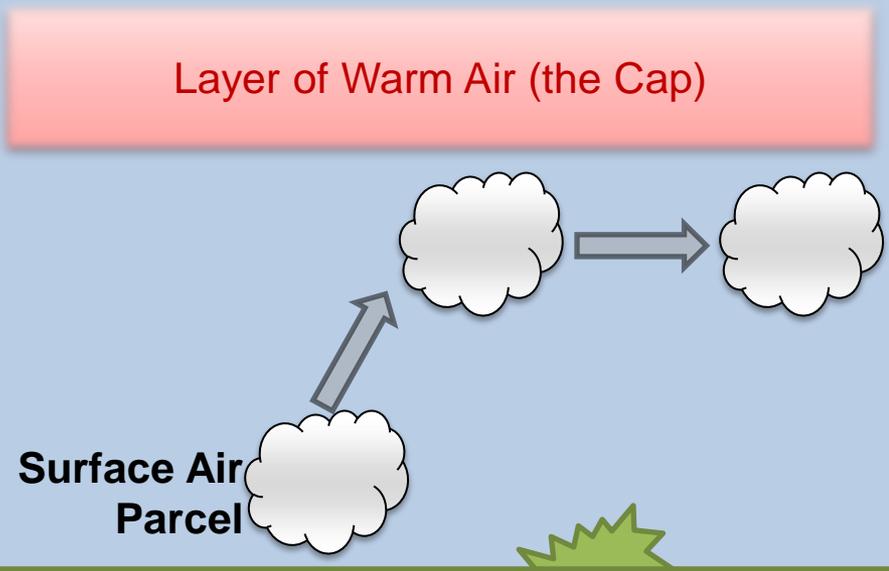
- 1. Daytime heating causes pockets of air (parcels) near the ground to rise.
- 2. These parcels of air cool as they rise, but as long as the parcels are warmer than the air around them, they will continue to rise.
- 3. If the parcels rise high enough, they cool to the point of condensation, leading to showers and thunderstorms.



If the parcels hit a layer of warm air aloft (the Cap) they stop rising because the air around them is warmer.

This means the parcels cannot rise and cool enough for water vapor to condense and form thunderstorms.

The warm layer “caps off” the atmosphere.



The Atmospheric “Cap”



Austin/
San Antonio
Forecast Office

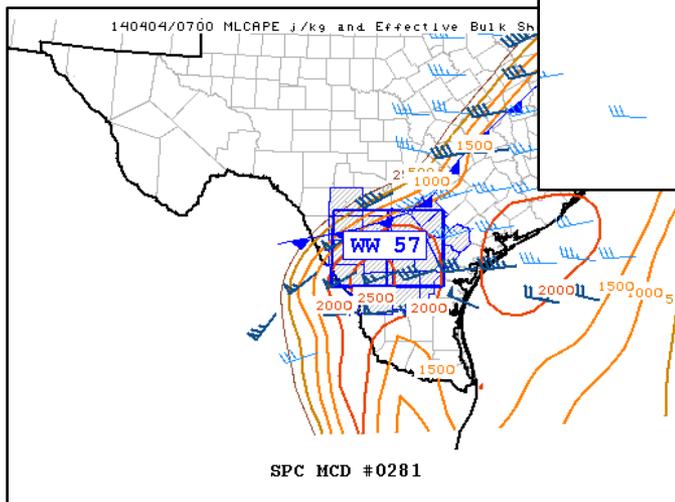
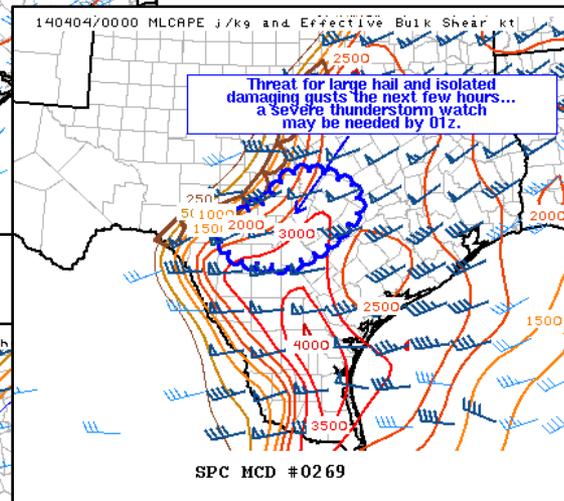
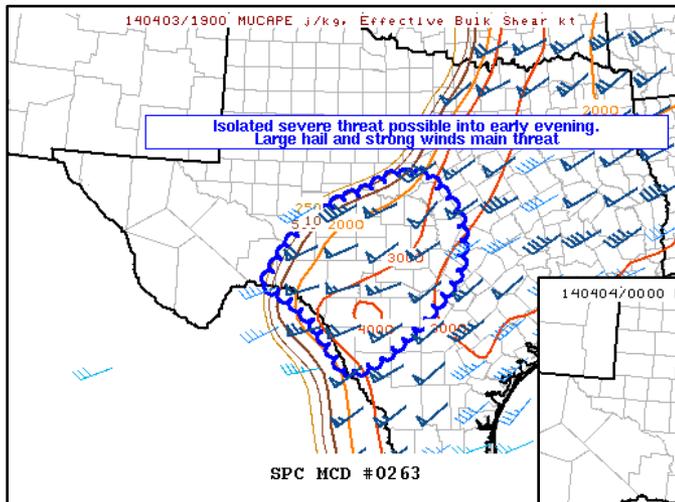
SPC Mesoscale Discussions (MCDs)

Issued by Storm Prediction Center in Norman, OK

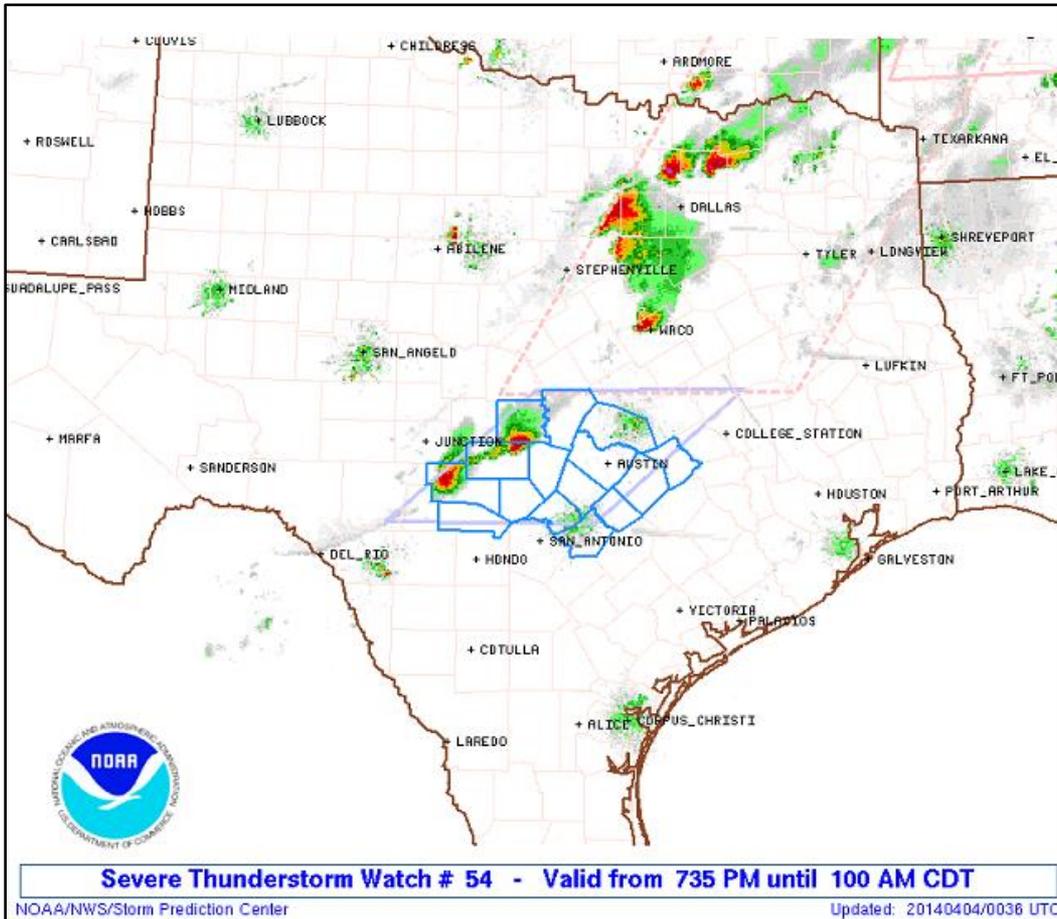
Typically issued prior to Watches or to update Watches

3 Issued for our area: MCD #263 (2:30pm), #269 (7:18pm), and #281 (2:58am 4/4/14)

They all highlighted the possibility for large hail and damaging winds with the storms that were forming along the dryline in the afternoon and along the cold front overnight. MCD #269 preceded Severe Thunderstorm Watch #54, and MCD #281 updated Severe Thunderstorm Watch #57.



Severe Thunderstorm Watch #54



Issued by Storm Prediction Center in Norman, OK

From 7:35pm to 1:00am
(canceled at 9:41pm)

Issued for the Hill Country and counties north of I-10 and east of I-35.

Primary Threats Included:

- Large Hail to 2" in diameter
- Damaging wind gusts to 70mph

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

Severe Thunderstorm Watch #57

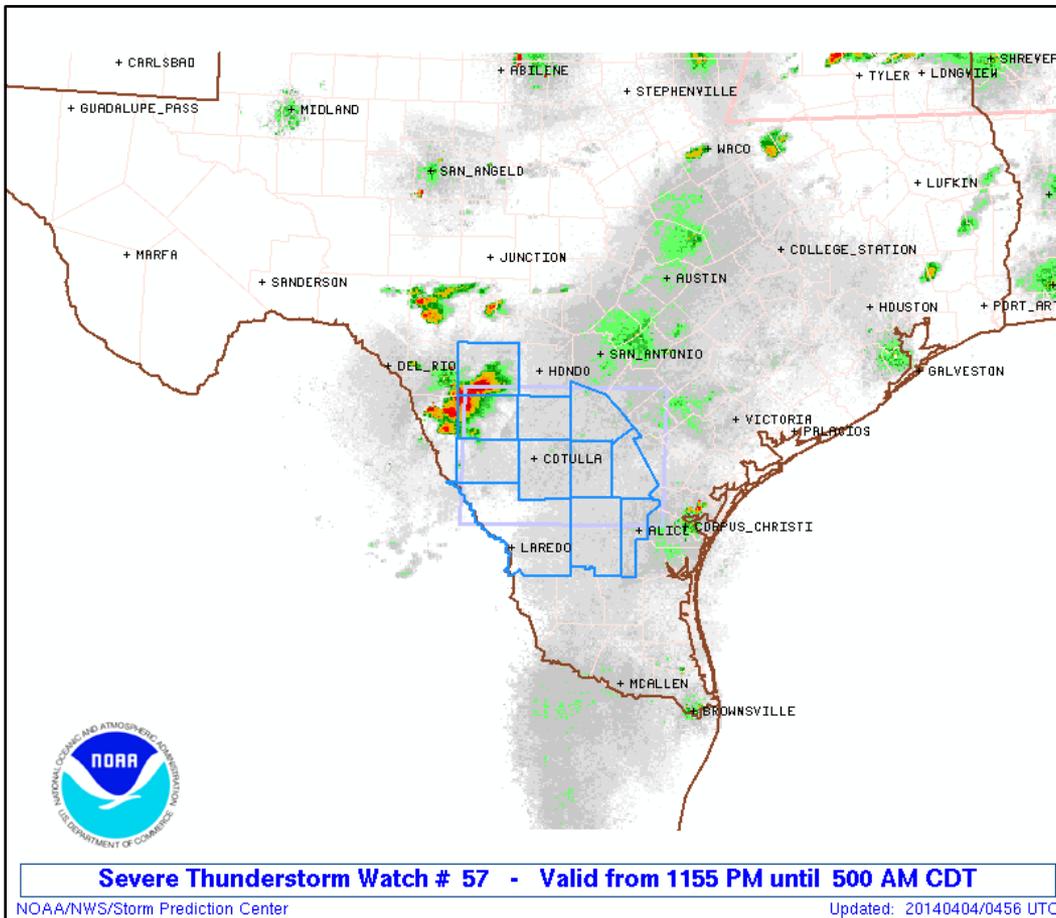
Issued by Storm Prediction Center in Norman, OK

From 11:55pm to 5:00am

Issued for Uvalde, Zavala, Dimmit, Frio and Atascosa counties

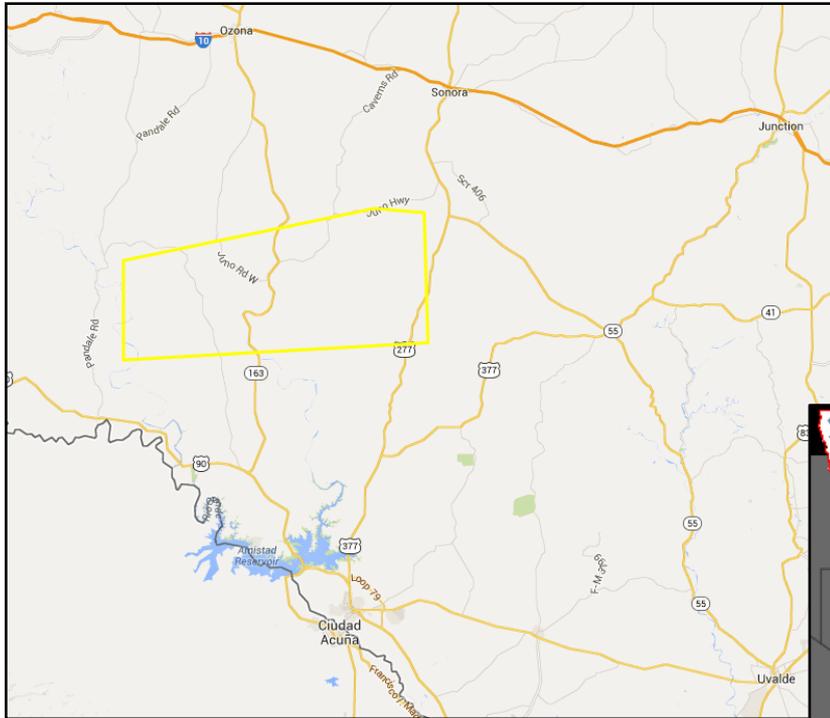
Primary Threats Included:

- Large Hail to 2" in diameter
- Damaging wind gusts to 70mph



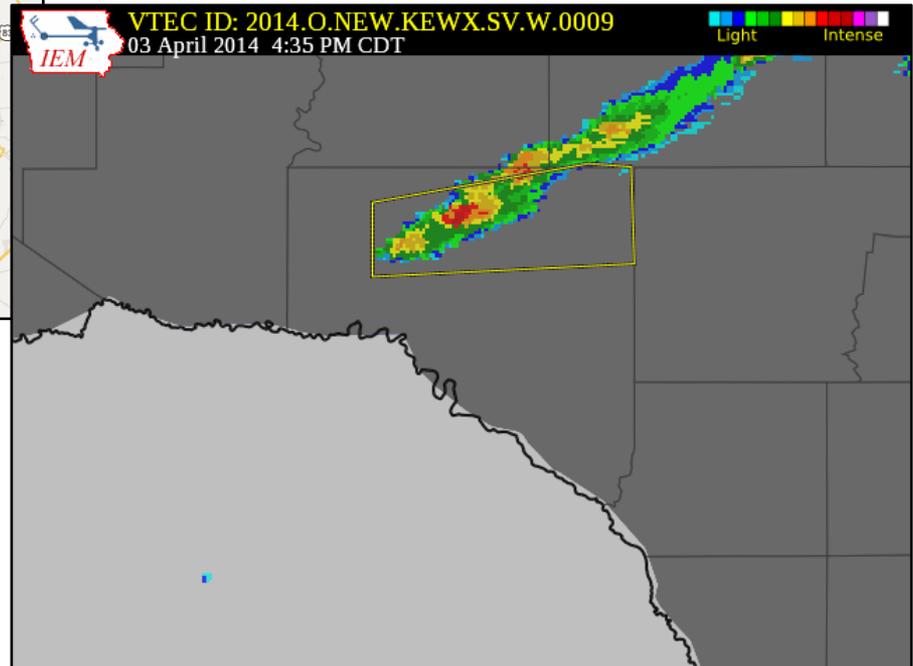
Hazard	Tornadoes	EF2+ Tornadoes	Severe Wind	65 kt+ Wind	Severe Hail	2"+ Hail
Likelihood	Very Low	Very Low	Low	Low	Moderate	Moderate

Severe Thunderstorm Warning #9



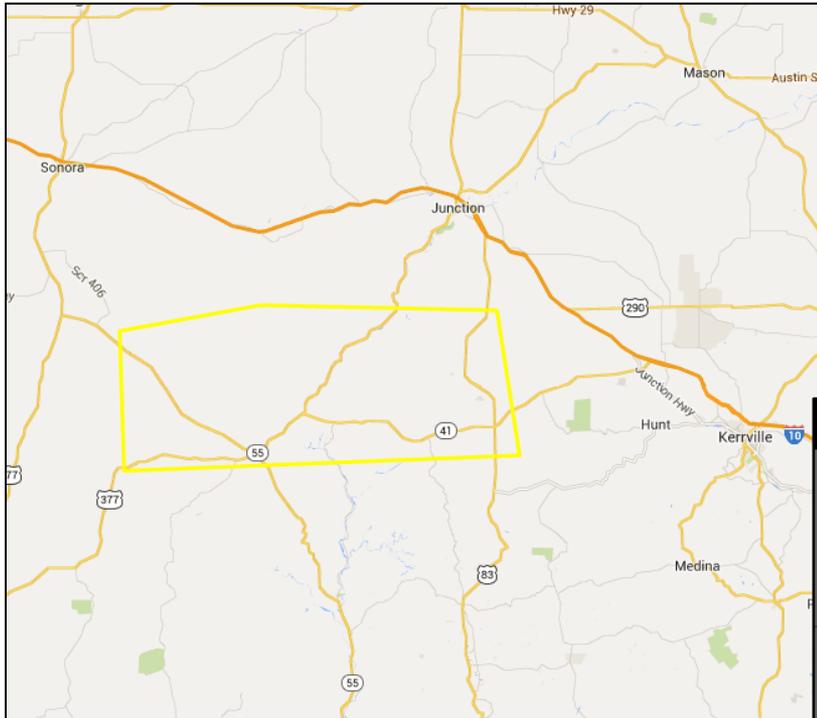
Val Verde County

4:35pm – 5:15pm



Reports:

Severe Thunderstorm Warning #10



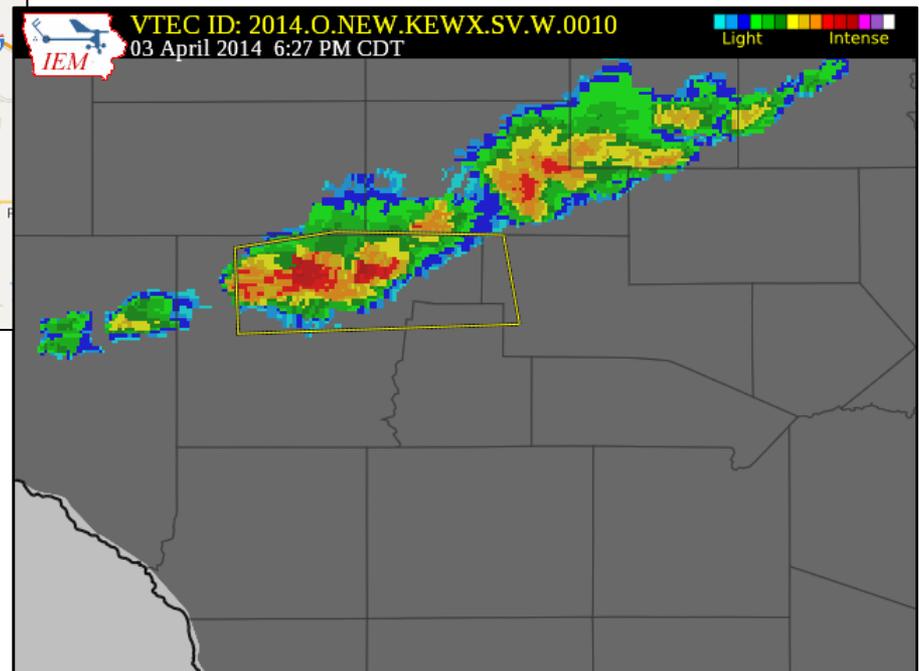
Northern Edwards, Northwestern
Kerr, and North Central Real
Counties

6:27pm – 7:15pm

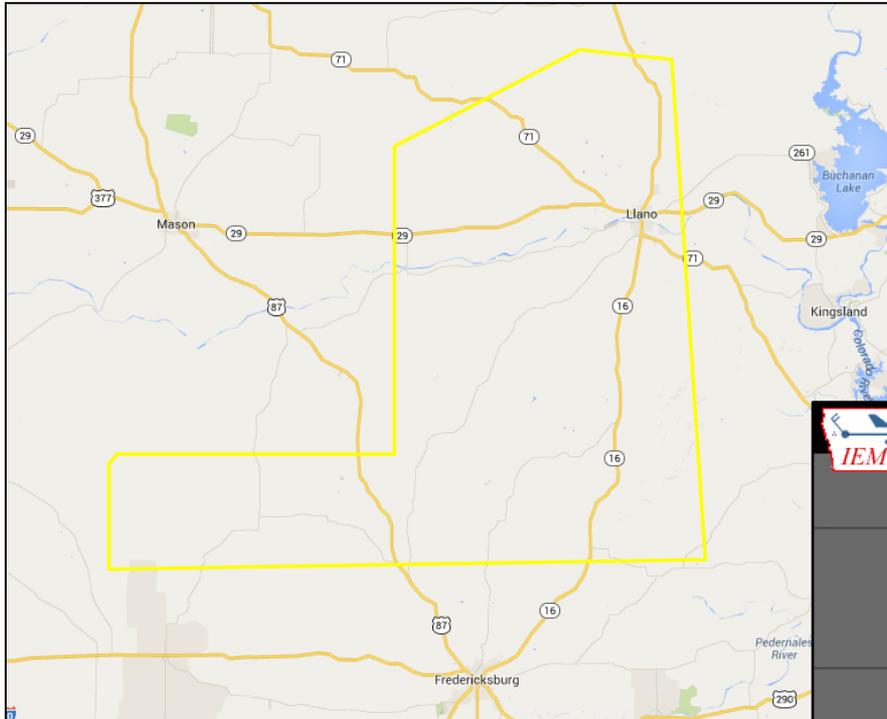
Reports:

6:45pm...1.75" Hail...12 ENE Rocksprings

6:48pm...0.25" Hail...11 ENE Rocksprings



Severe Thunderstorm Warning #11

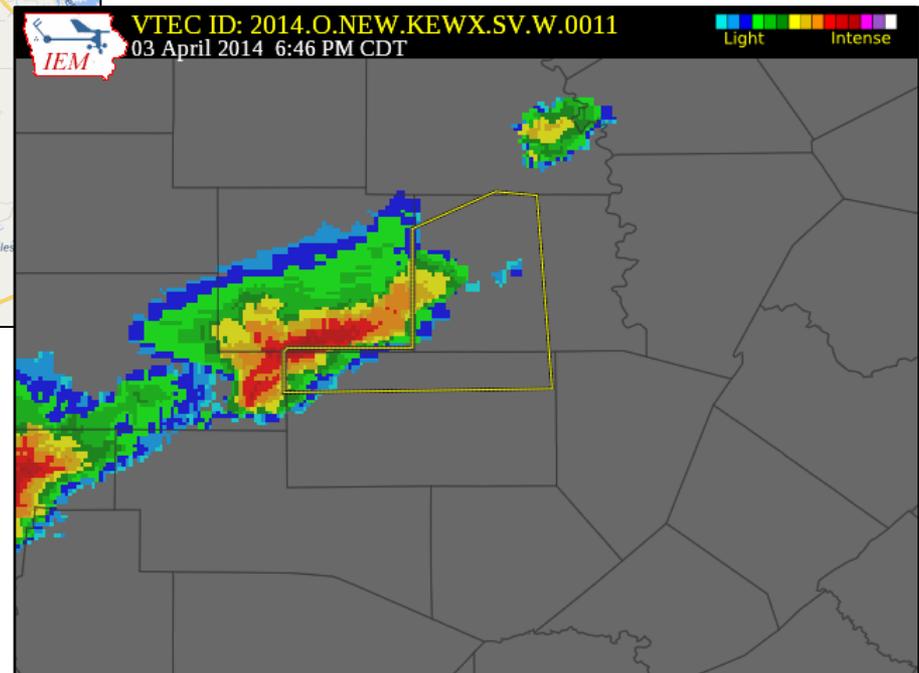


Northern Gillespie and Western
Llano Counties

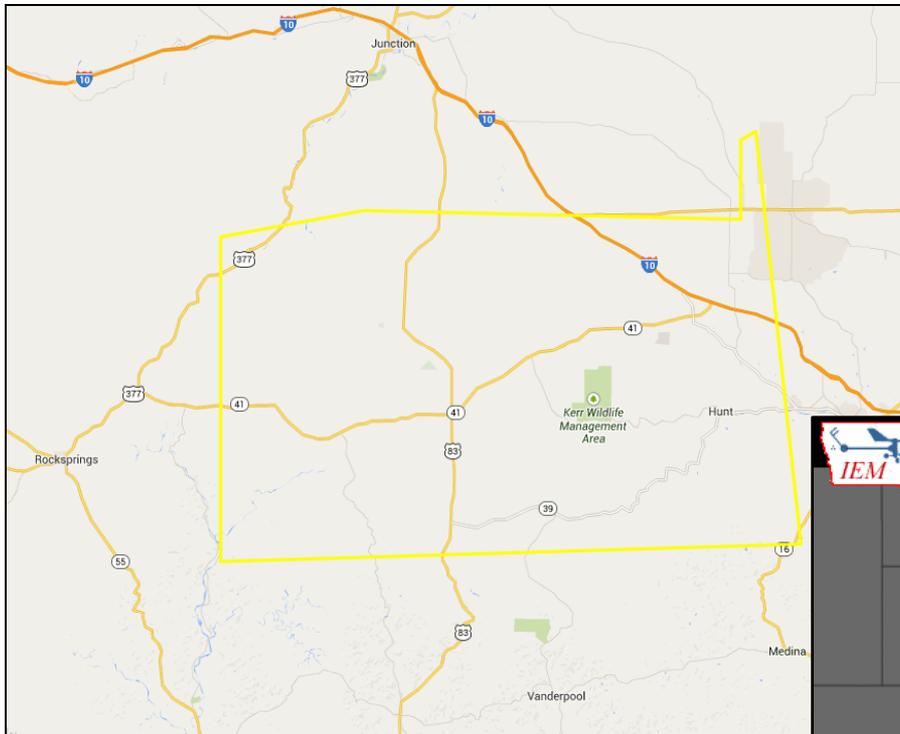
6:46pm – 7:30pm

Reports:

7:12pm...0.75" Hail...10 NNE Harper
7:15pm...0.88" Hail...Enchanted Rock
State Park



Severe Thunderstorm Warning #12



Northeastern Edwards, Extreme
Southwestern Gillespie, Western
Kerr, and Northern Real Counties

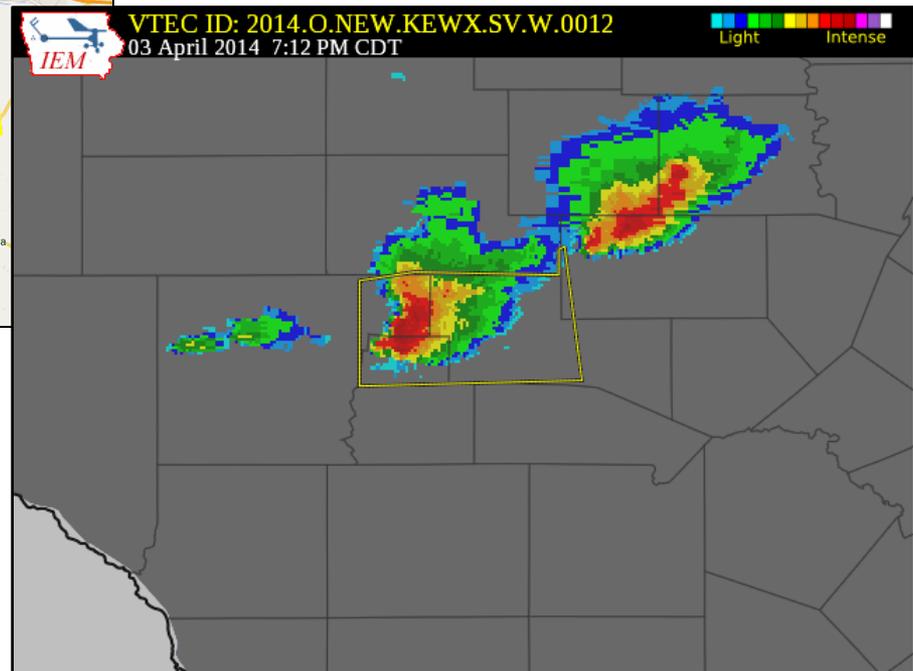
7:12pm – 8:00pm

Reports:

7:40pm...0.50" Hail...15 NW Ingram

7:48pm...0.50" Hail...Mountain Home

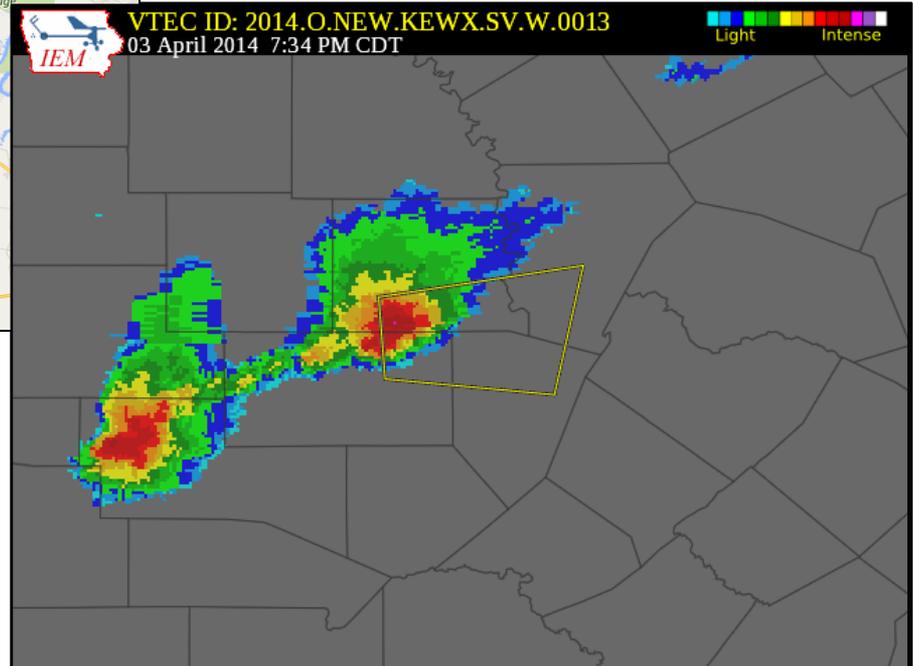
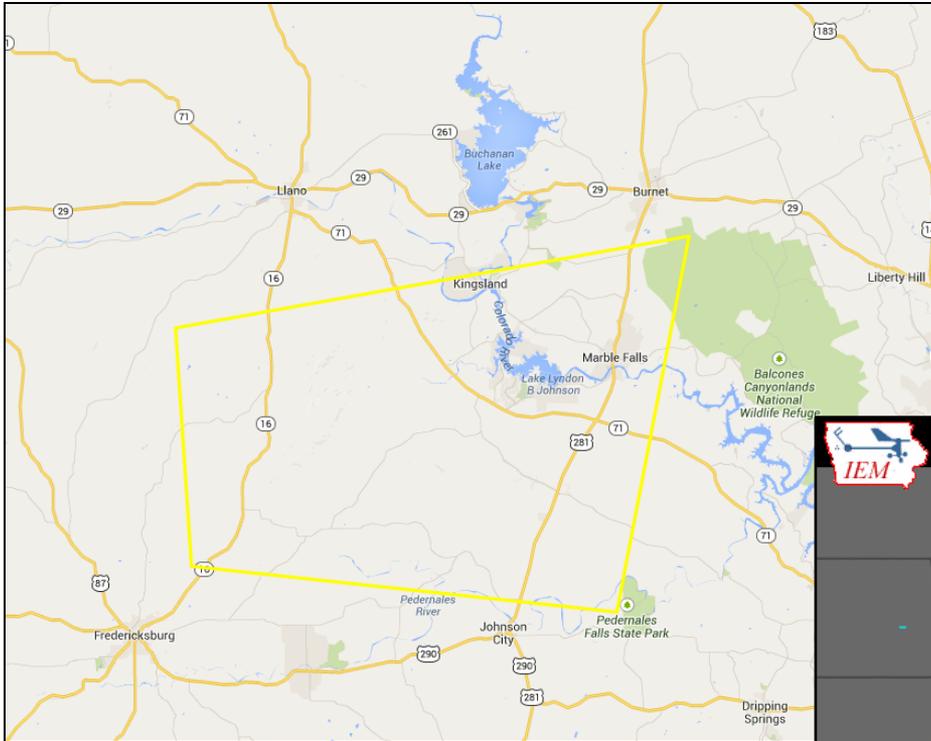
8:00pm...0.25" Hail...7 SW Harper



Severe Thunderstorm Warning #13

Northern Blanco, Southwestern Burnet, Northeastern Gillespie, Southeastern Llano Counties

7:34pm – 8:15pm

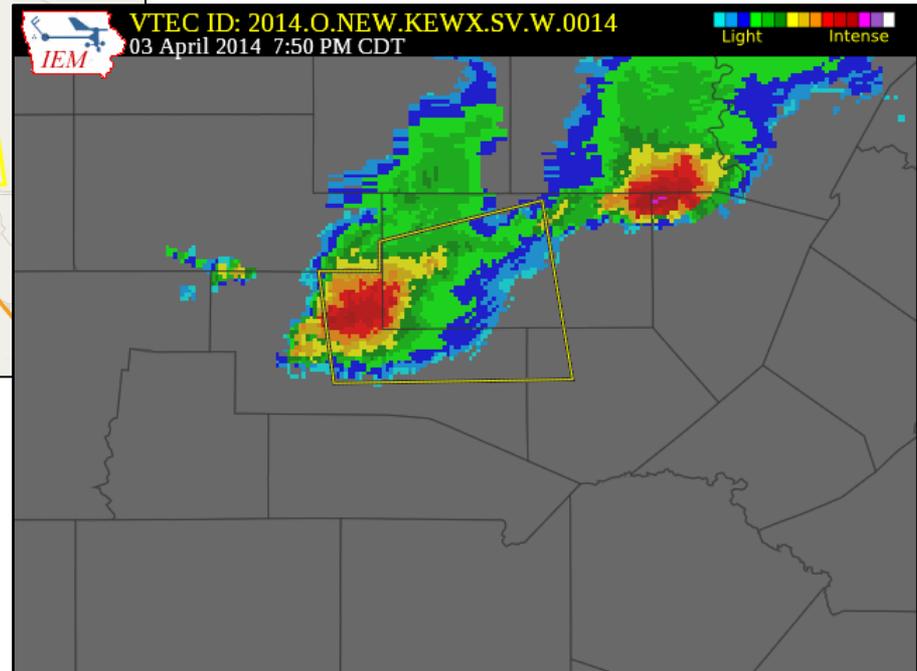
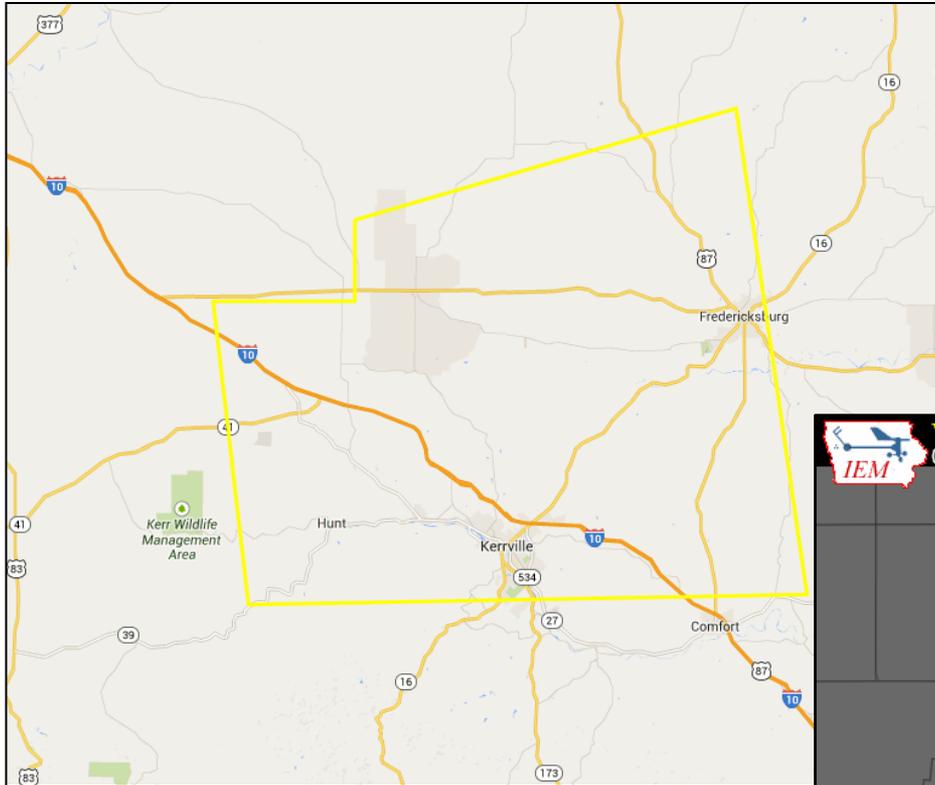


Reports:
8:00pm...0.25" Hail...3 W Horseshoe Bay

Severe Thunderstorm Warning #14

Western Gillespie, Northwestern Kendall, Northeastern Kerr Counties

7:50pm – 8:30pm



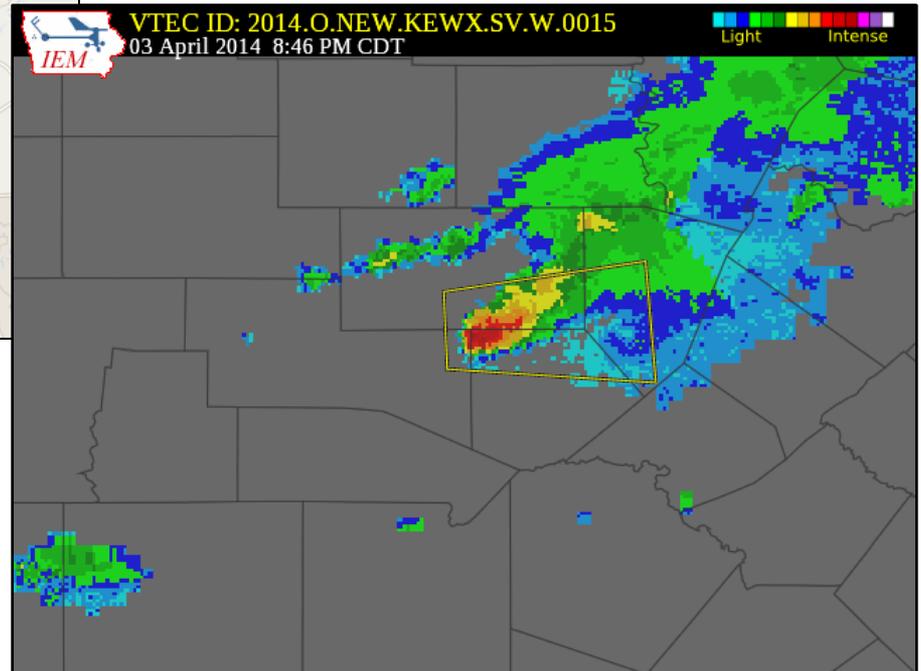
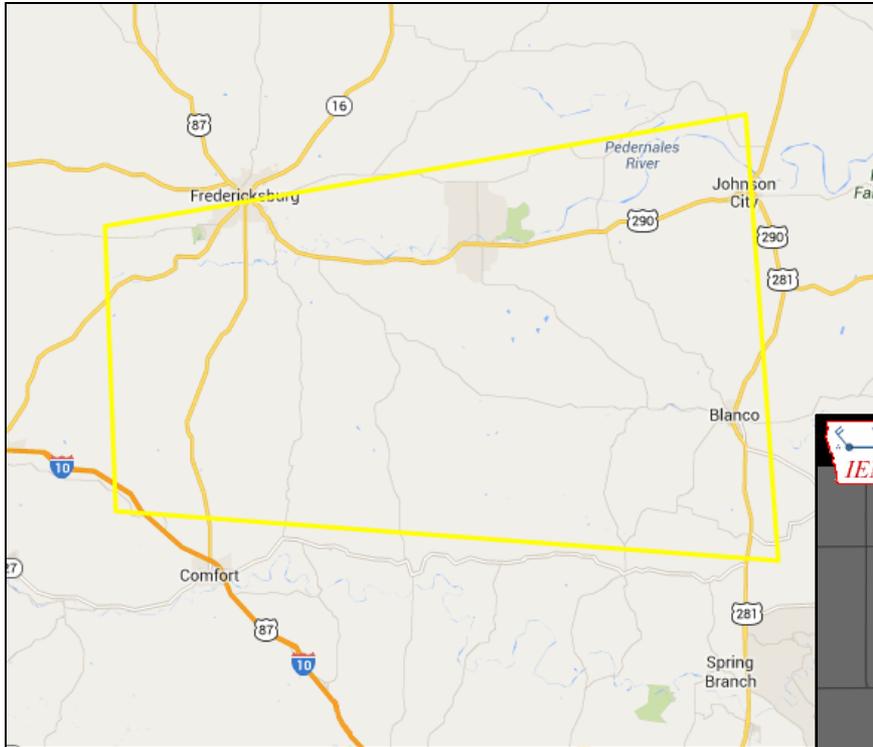
Select Reports:

- 8:00pm...0.25" Hail...10 SSE Harper
- 8:12pm...0.50" Hail...8 NE Ingram
- 8:15pm...0.25" Hail...10 NE Kerrville
- 8:20pm...0.50" Hail...8 SW Fredericksburg

Severe Thunderstorm Warning #15

Southwestern Blanco,
Southeastern Gillespie, Northern
Kendall, East Central Kerr Counties

8:46pm – 9:30pm

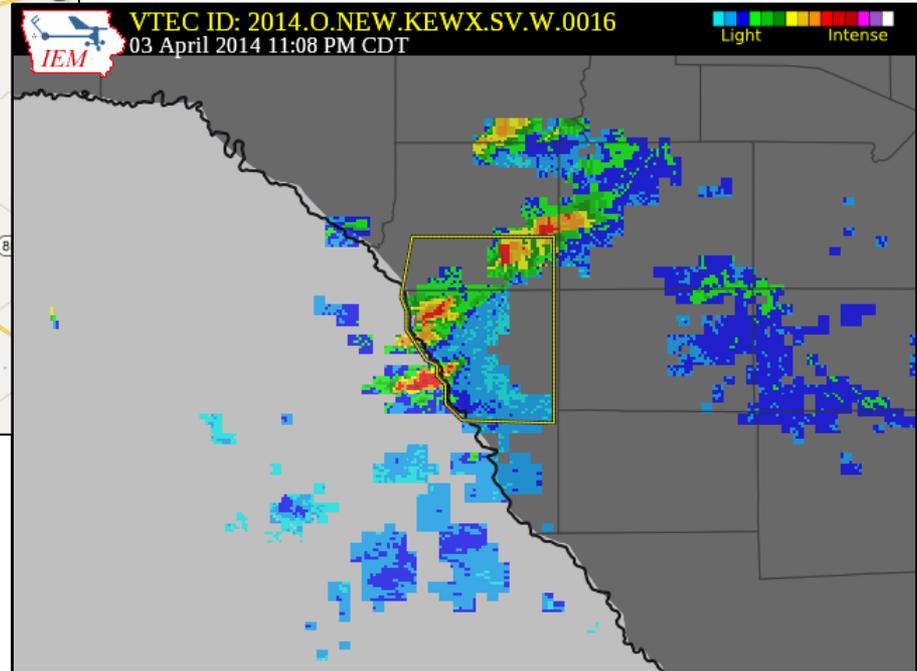
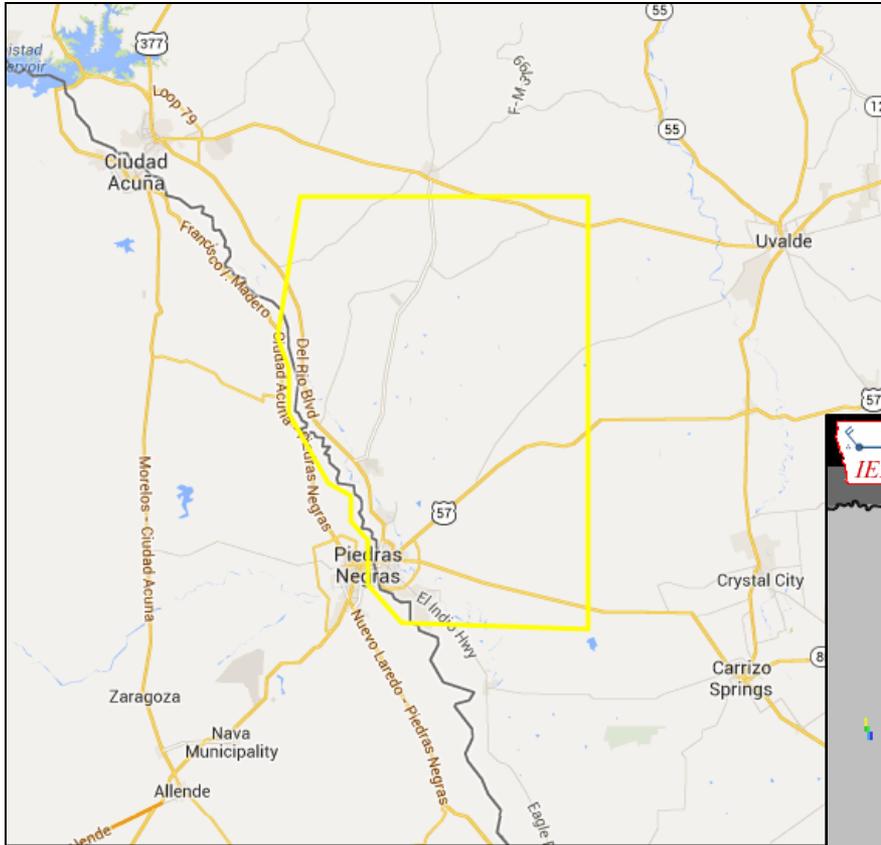


Reports:

Severe Thunderstorm Warning #16

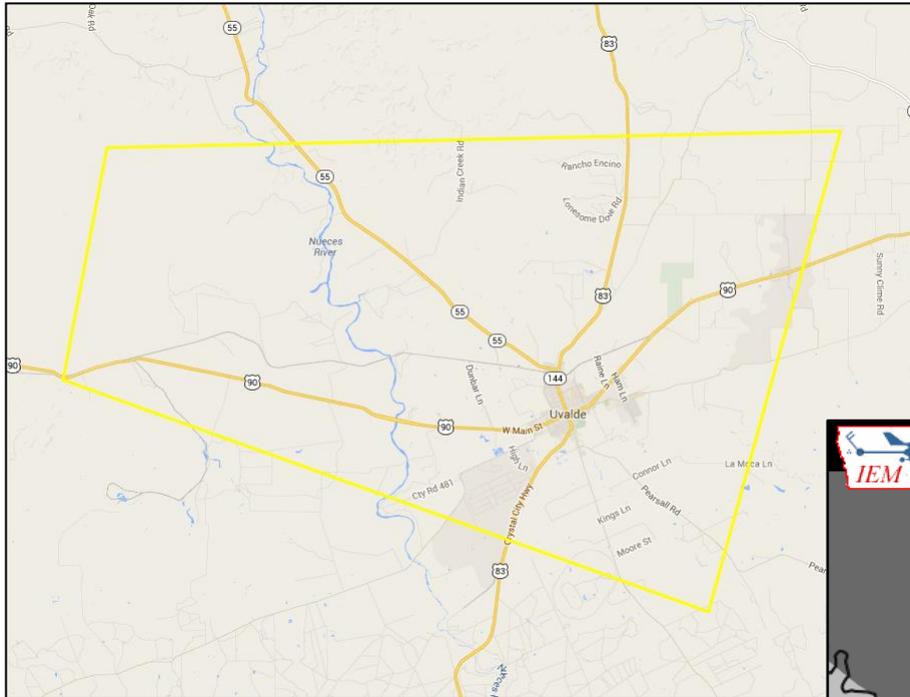
Southern Kinney and Northern
Maverick Counties

11:08pm (4/3/14) – 12:00am (4/4/14)



Reports:

Severe Thunderstorm Warning #17

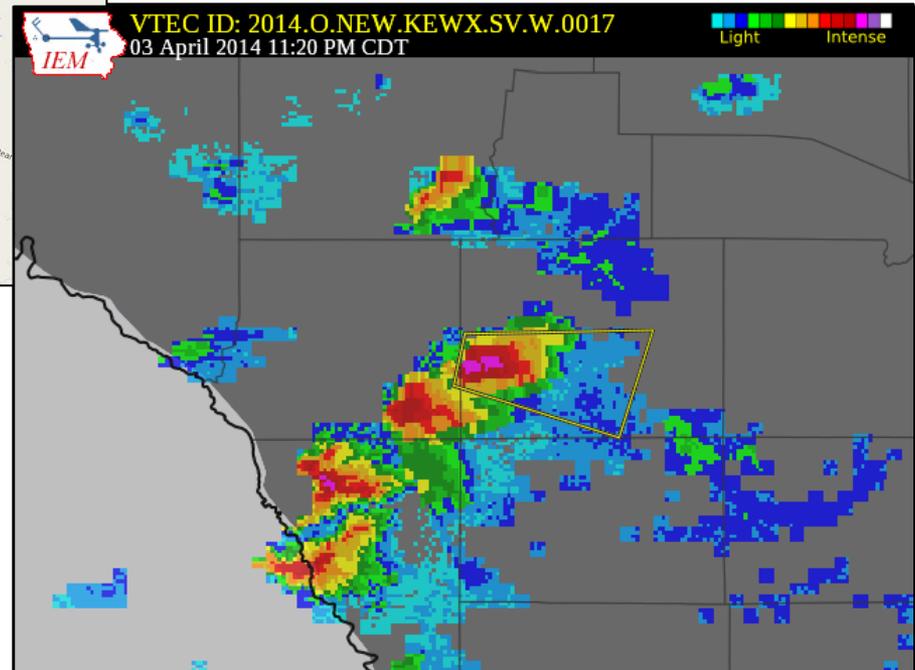


Extreme East Central Kinney and
Southwestern Uvalde Counties

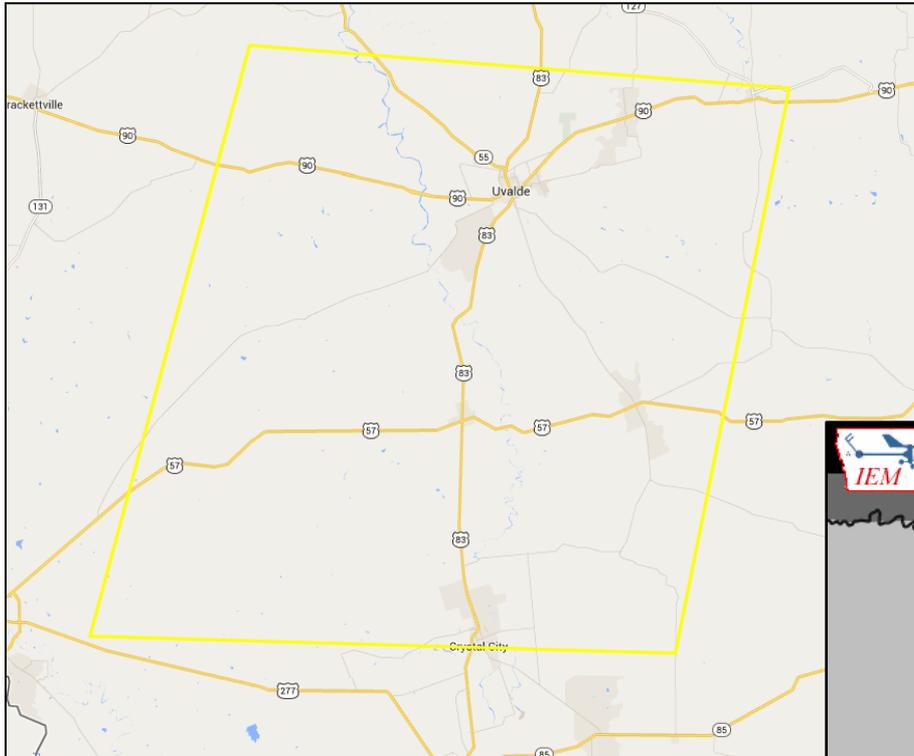
11:20pm (4/3/14) – 12:00am (4/4/14)

Reports:

11:55pm...1.75" Hail...Uvalde

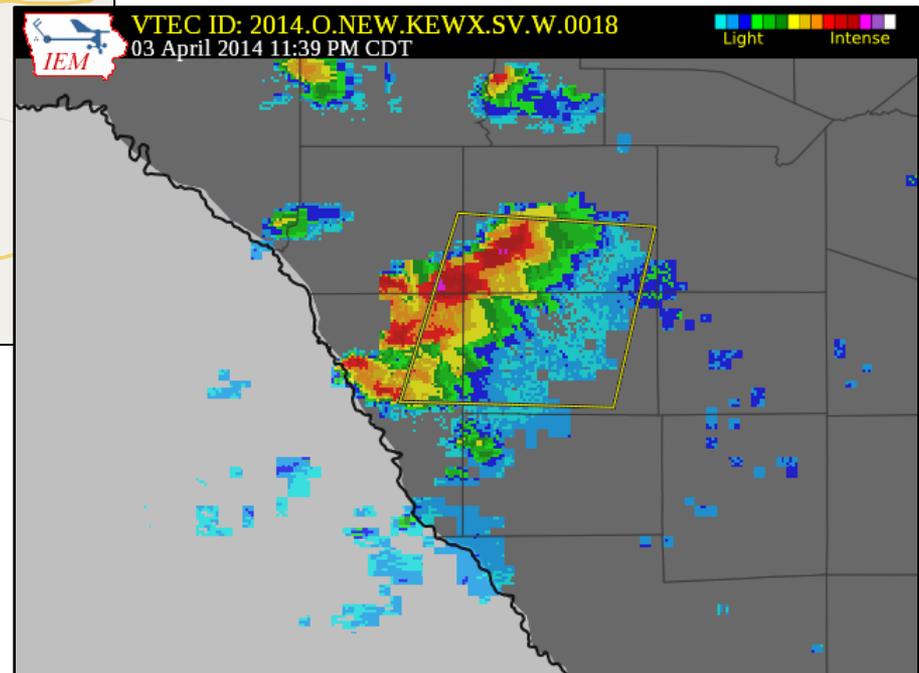


Severe Thunderstorm Warning #18



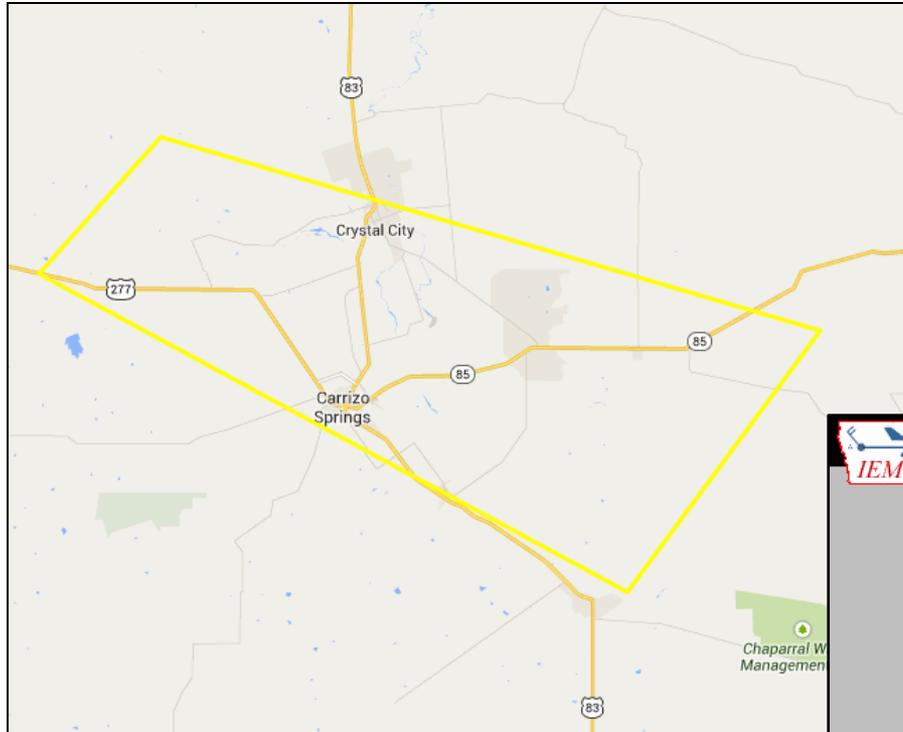
Southeastern Kinney, Maverick,
Southern Uvalde, and Zavala Counties

11:39pm (4/3/14) – 12:30am (4/4/14)



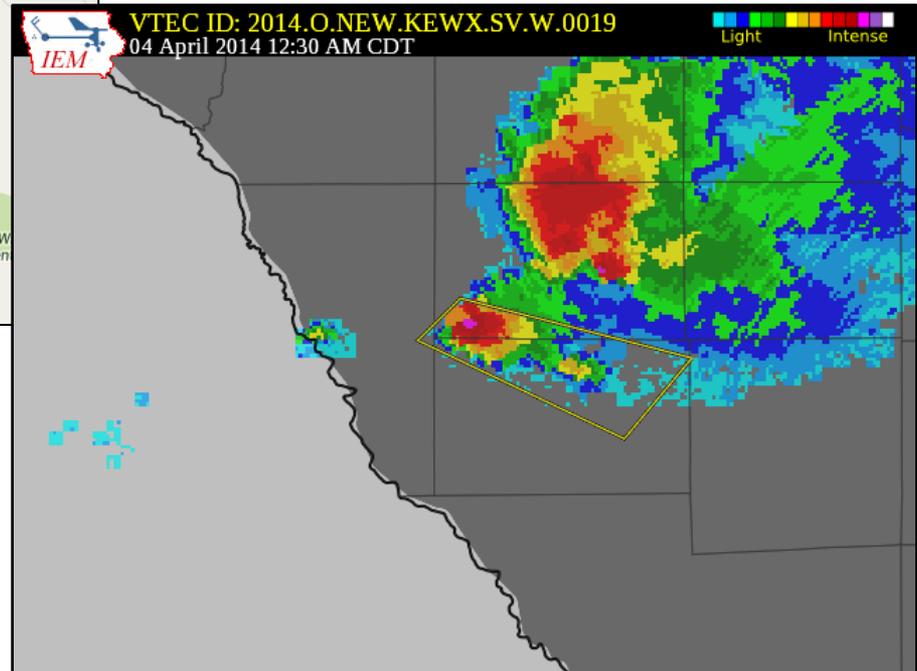
Reports:

Severe Thunderstorm Warning #19



Northern Dimmit, Maverick, and
Southwestern Zavala Counties

12:30am (4/4/14) – 1:15am

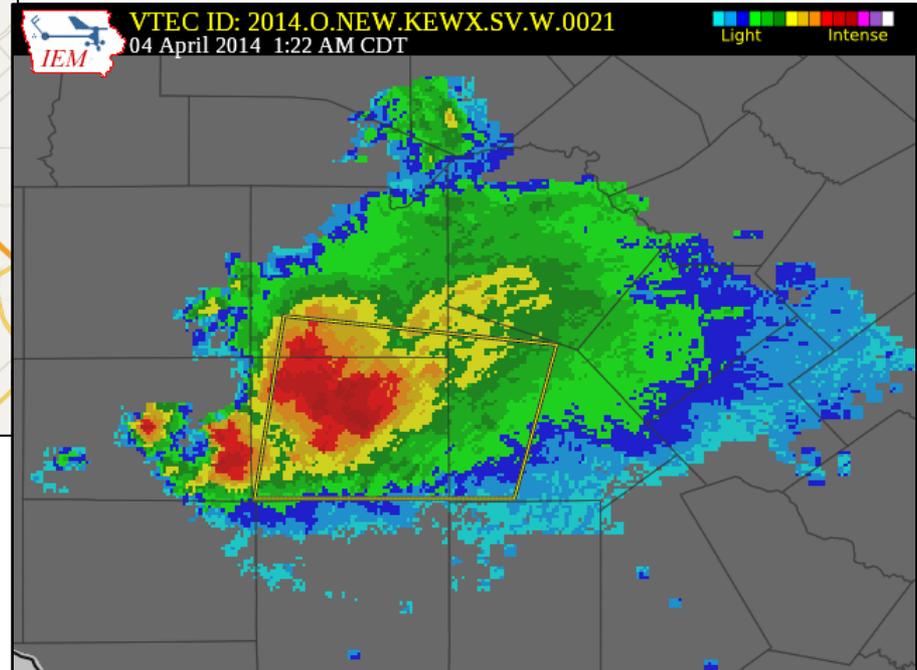
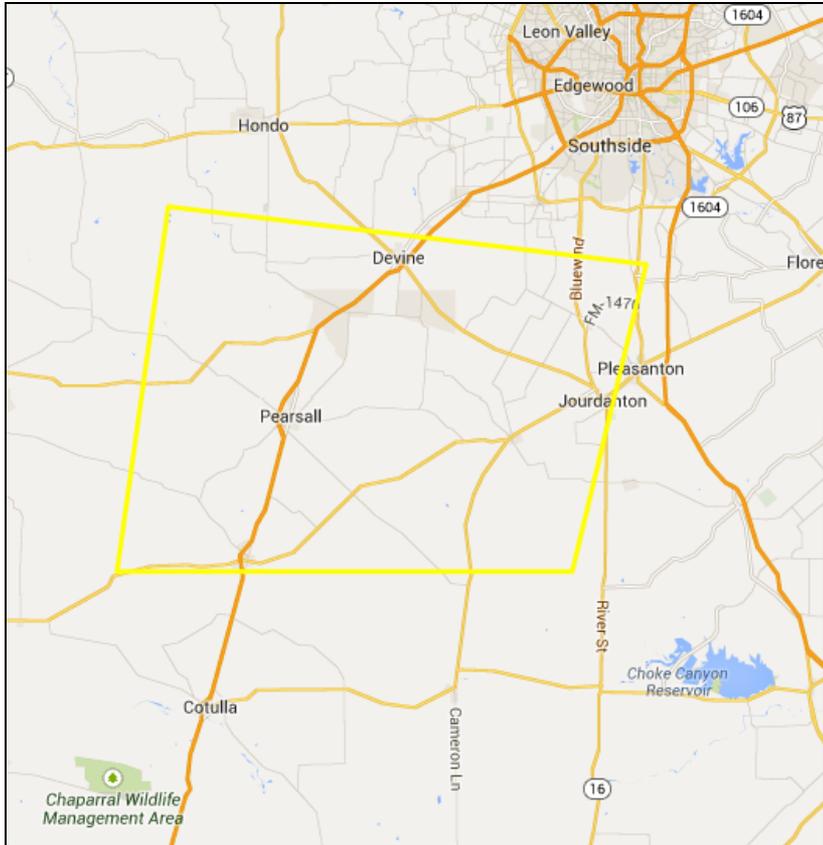


Reports:

Severe Thunderstorm Warning #21

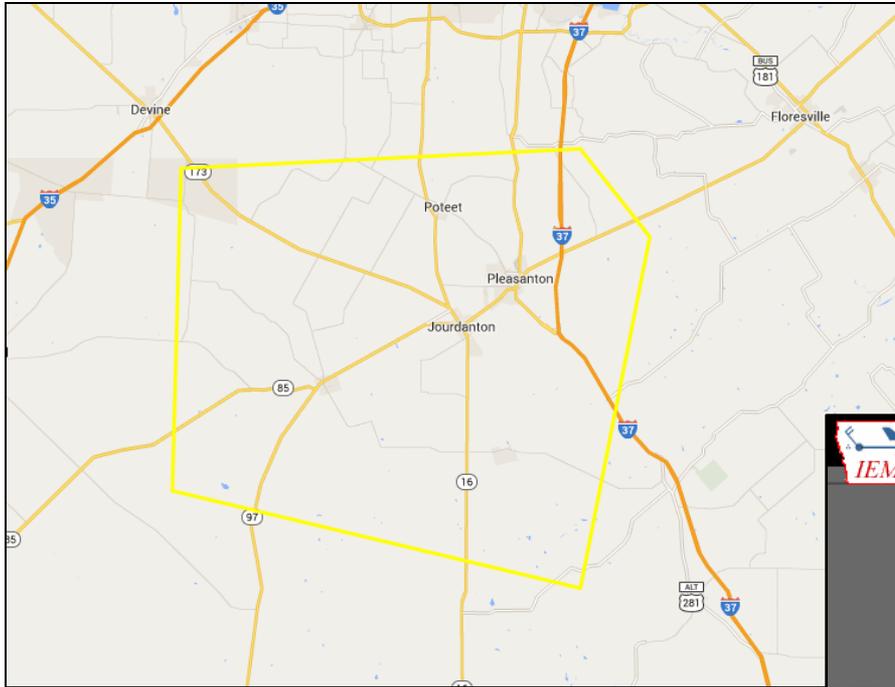
Western Atascosa, Frio, and Southern Medina Counties

1:22am – 1:30am



Reports:

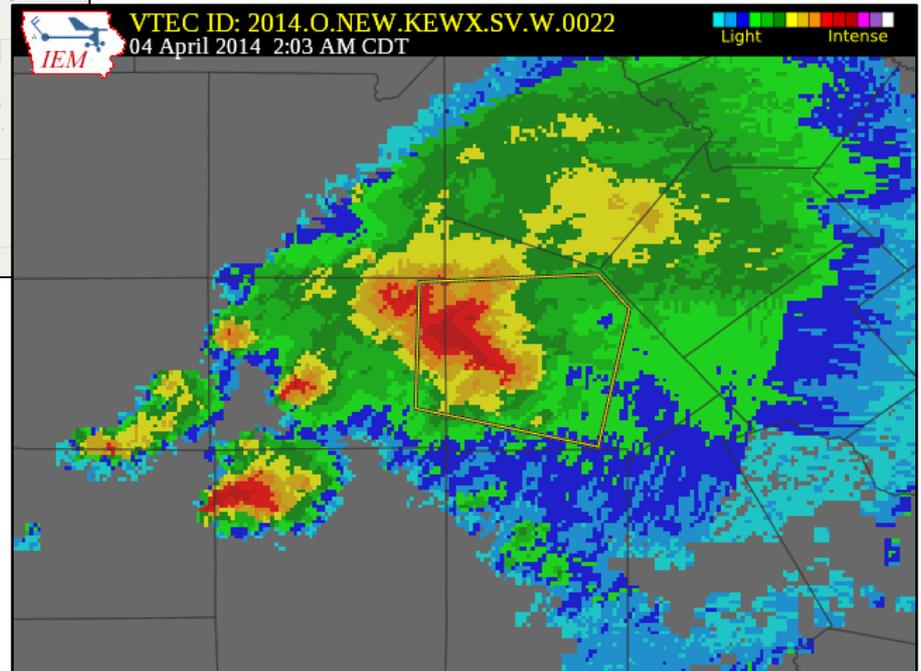
Severe Thunderstorm Warning #22



Atascosa and Northeastern Frio
Counties

2:03am – 2:45am

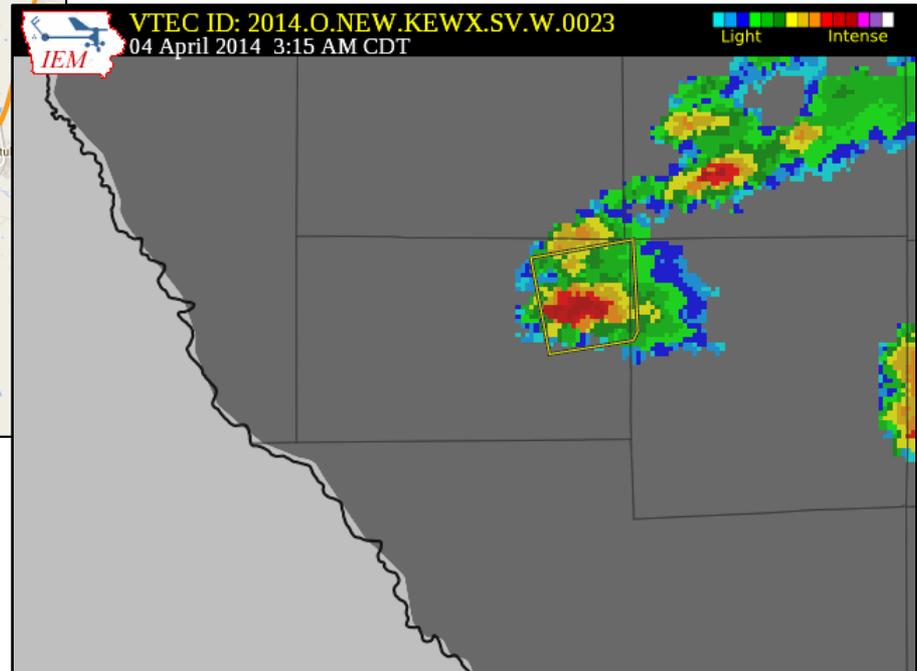
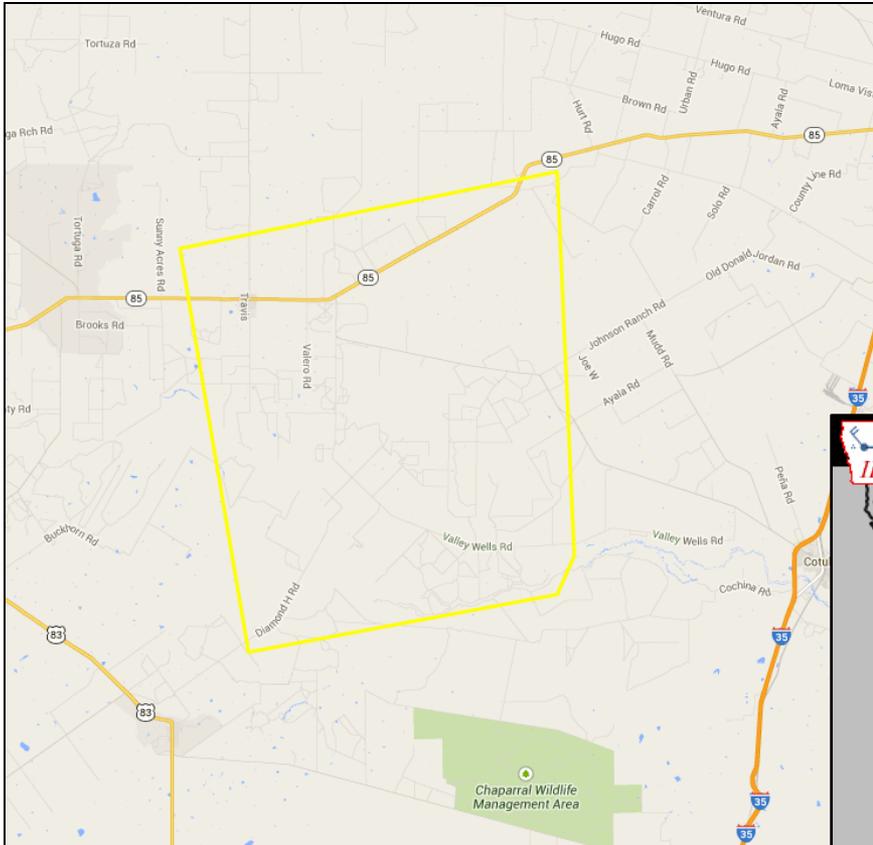
Reports:



Severe Thunderstorm Warning #23

Northeastern Dimmit County

3:15am – 4:00am



Reports:

All Reports

0530 PM HAIL 4 S JUNO 30.09N 101.12W
04/03/2014 E0.25 INCH VAL VERDE TX PUBLIC

0625 PM HAIL 16 NNE ROCKSPRINGS 30.24N 100.14W
04/03/2014 E1.00 INCH EDWARDS TX PUBLIC

0645 PM HAIL 12 ENE ROCKSPRINGS 30.08N 100.02W
04/03/2014 E1.75 INCH EDWARDS TX PUBLIC

0648 PM HAIL 11 ENE ROCKSPRINGS 30.08N 100.05W
04/03/2014 E0.25 INCH EDWARDS TX COCORAHS

0712 PM HAIL 10 NNE HARPER 30.42N 99.17W
04/03/2014 E0.25 INCH GILLESPIE TX PUBLIC

0715 PM HAIL ENCHANTED ROCK STATE PA 30.51N 98.85W
04/03/2014 E0.88 INCH LLANO TX FIRE DEPT/RESCUE

0740 PM HAIL 15 NW INGRAM 30.23N 99.41W
04/03/2014 E0.50 INCH KERR TX COCORAHS

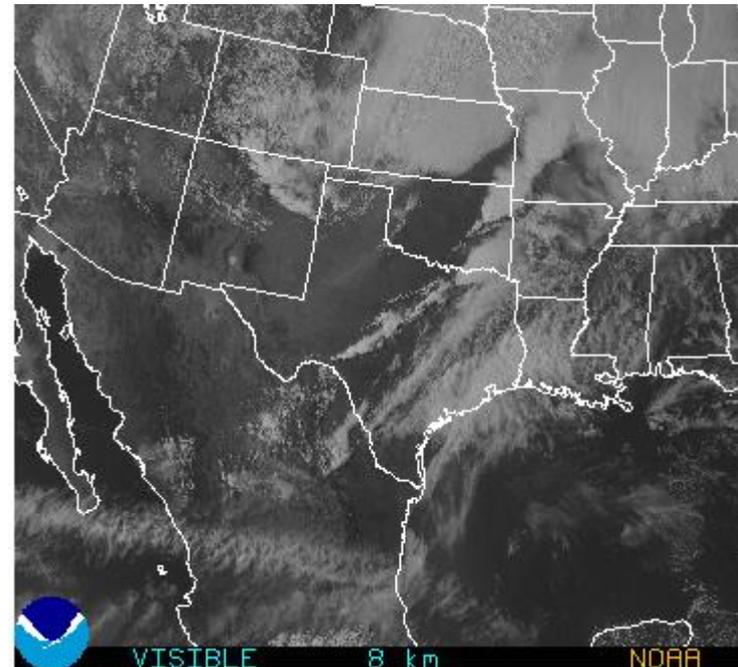
0748 PM HAIL MOUNTAIN HOME 30.17N 99.37W
04/03/2014 E0.50 INCH KERR TX PUBLIC

PEA TO HALF INCH SIZE HAIL

0800 PM HAIL 3 W HORSESHOE BAY 30.54N 98.40W
04/03/2014 M0.25 INCH LLANO TX COCORAHS

0800 PM HAIL 10 SSE HARPER 30.17N 99.19W
04/03/2014 M0.25 INCH GILLESPIE TX COCORAHS

0800 PM HAIL 7 SW HARPER 30.23N 99.33W
04/03/2014 M0.25 INCH KERR TX COCORAHS



4:45pm Visible Satellite showing storms forming along the dryline in West Texas.

All Reports

0805 PM HAIL HARPER 30.30N 99.25W
04/03/2014 E0.50 INCH GILLESPIE TX CO-OP OBSERVER

0812 PM HAIL 8 NE INGRAM 30.17N 99.15W
04/03/2014 E0.50 INCH GILLESPIE TX PUBLIC

PEA TO HALF INCH SIZE HAIL

0815 PM HAIL 10 NE KERRVILLE 30.16N 99.04W
04/03/2014 E0.25 INCH GILLESPIE TX TRAINED SPOTTER

0820 PM HAIL 8 SW FREDERICKSBURG 30.20N 98.97W
04/03/2014 E0.50 INCH GILLESPIE TX TRAINED SPOTTER

PEA TO HALF INCH SIZE HAIL

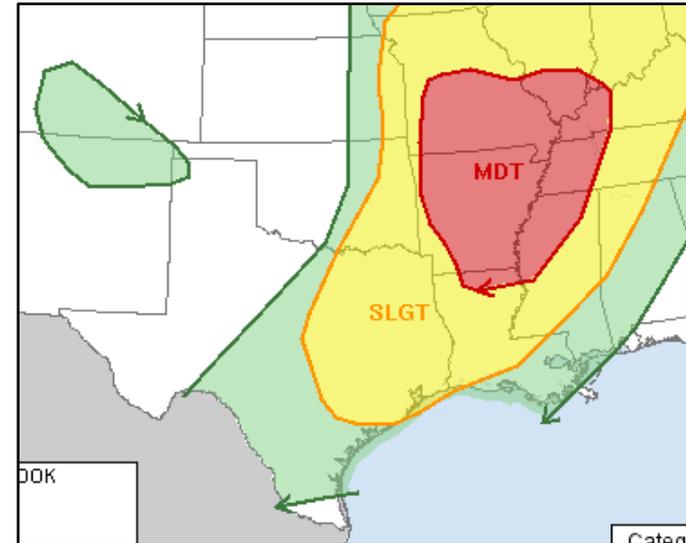
0822 PM HAIL 4 W FREDERICKSBURG 30.27N 98.94W
04/03/2014 E0.25 INCH GILLESPIE TX PUBLIC

1127 PM TSTM WND DMG BATESVILLE 28.95N 99.61W
04/03/2014 ZAVALA TX NEWSPAPER

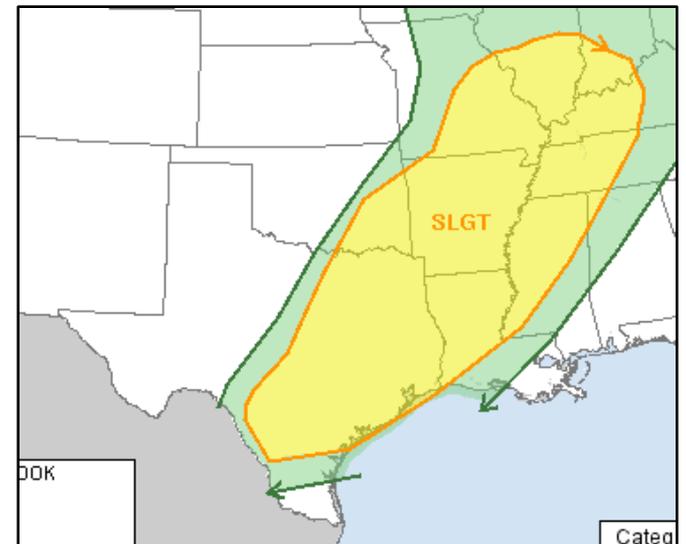
MEDIA VIDEO DEPICTED WIND DAMAGE TO TREES...
POWERLINES... ROOFS... AND IRRIGATION EQUIPMENT IN
AND NEAR BATESVILLE. TIME ESTIMATED FROM RADAR.

1155 PM HAIL UVALDE 29.22N 99.78W
04/03/2014 E1.75 INCH UVALDE TX PUBLIC

QUARTER TO GOLFBALL SIZE HAIL AROUND THE TOWN OF
UVALDE. REPORT GATHERED VIA TWITTER.



3pm 4/3/14 SPC Severe Weather Outlook:
Showing our eastern counties in a slight risk



8pm 4/3/14 SPC Severe Weather Outlook:
Showing much of our area in slight risk

All Reports

1200 AM HAIL 18 WNW ROCKSPRINGS 30.12N 100.49W
04/04/2014 M0.50 INCH EDWARDS TX COCORAHS

0110 AM HAIL 1 N PEARSALL 28.90N 99.09W
04/04/2014 E1.50 INCH FRIO TX PUBLIC

QUARTER AND PING PONG BALL SIZED HAIL

0110 AM HAIL 1 W PEARSALL 28.89N 99.11W
04/04/2014 E1.75 INCH FRIO TX PUBLIC

GOLFBALL HAIL REPORT GATHERED VIA TWITTER. TIME
ESTIMATED VIA RADAR.

0125 AM HAIL 1 E PEARSALL 28.89N 99.08W
04/04/2014 E0.88 INCH FRIO TX PUBLIC

MARBLE TO NICKEL SIZE HAIL BETWEEN 100 AM AND 130
AM. REPORT GATHERED VIA TWITTER.



12:15am Infrared
Satellite showing
storms forming in
the Rio Grande
Valley.

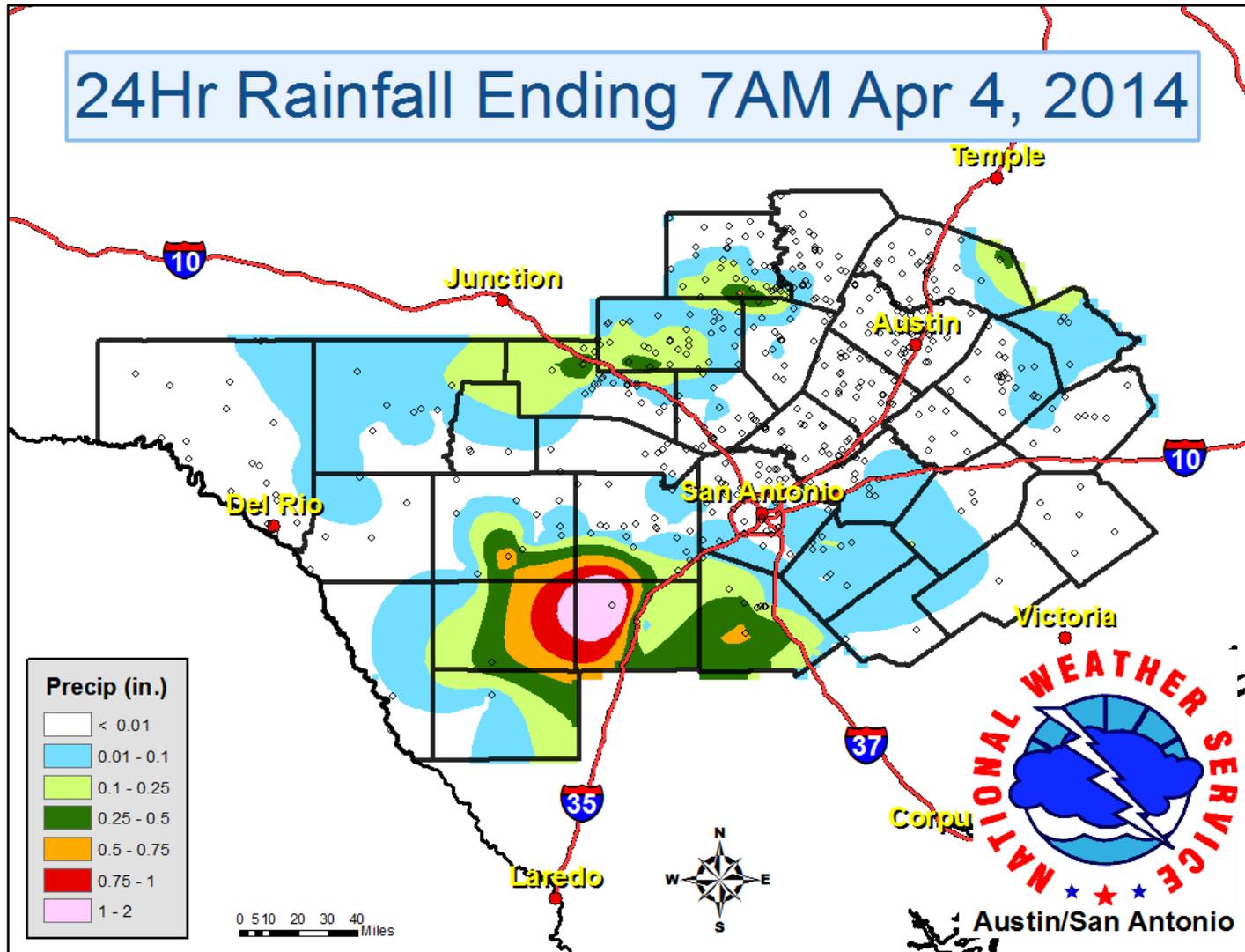
**We are still collecting
storm reports! If you
received hail/wind on
April 3rd or 4th you can
submit the report
through our website:
weather.gov/Austin**

Submit Storm
Report

Submit Storm
Report

Total Rainfall

24Hr Rainfall Ending 7AM Apr 4, 2014



Social Media



View of the Val Verde Storms from Acuna Photo Credit: Chuy Gomez



Austin/San Antonio, TX
Weather Forecast Office
weather.gov/ewx



US National Weather
Service Austin-San
Antonio, Texas



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