March 9th to March 10th, 2013 Severe Weather Event

A fast moving Mid to High Level Low moved out of the Central Rockies to the Central Plains on Saturday, March 9th, leaving a larger scale Mid to High Level Trough over Northern Mexico and the Southwest U.S. The left front quadrant of the jet stream moved into Central Texas, creating more unstable environmental conditions above the surface to the top of the Troposphere in the afternoon and evening. Afternoon heating over the Edwards Plateau and Rio Grande Plains weakened the capping inversion and allowed isolated thunderstorms early Saturday evening to form over the Edwards Plateau. As the dry line moved eastward from the Edwards Plateau in the evening, this formed a broken line of thunderstorms over the Edwards Plateau and Western Hill Country to near Highway 90. The broken line of thunderstorms moved east across South Central Texas Saturday night to early Sunday morning March 10th. The storms arrived at the I35 corridor around Midnight to 2 AM. Large hail accompanied the stronger thunderstorms, with the size of the hail varying from pea size to 1.75 inches. Preliminary local storm reports from March 9th to 10th at the end of this summary show the size of the hail. The thunderstorms produced wind gusts to near 35 to 50 mph. As the storms moved to the east part of South Central Texas after 3 AM, the cap strengthened, creating more stable conditions and causing decreasing coverage of thunderstorms.

A 500 HPA chart of the disturbance at 10 PM Saturday Night March 9th, 2013 is shown below.
Radar Pictures of the Event from 10 PM CST March 9th to 6 AM CDT March 10th follow.

March 9th at 10 PM CST

March 9th at 11 PM CST
March 10th at 12 Midnight CST

March 10th at 100 AM CST
March 10th at 130 AM CST

March 10th at 300 AM CDT (Central Standard Time Changed to Central Daylight Time)
Several Water Vapor Satellite Pictures of the Event from 901 PM CST March 9th to 601 AM CDT March 10th follow.

901 PM CST March 9th

101 AM CST March 10th
Rainfall amounts across South Central Texas varied from little or no rain over the south to southwest part of the area to steadily increasing rainfall amounts over the Hill Country to adjacent parts of Central Texas. Rainfall amounts across the Hill Country and South Central Texas are listed below. These rainfall amounts come from Cocorahs rainfall reports and from local airport reporting sites.

<table>
<thead>
<tr>
<th>Location</th>
<th>Rainfall Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAYLOR 8.5 SE</td>
<td>1.85</td>
</tr>
<tr>
<td>LLANO 9.2 NNW</td>
<td>1.55</td>
</tr>
<tr>
<td>AUSTIN 12.7 NNW</td>
<td>1.54</td>
</tr>
<tr>
<td>BURNET 10.6 NW</td>
<td>1.47</td>
</tr>
<tr>
<td>JOHNSON CITY 0.7 NNW</td>
<td>1.45</td>
</tr>
<tr>
<td>FREDERICKSBURG 1.8 NE</td>
<td>1.30</td>
</tr>
<tr>
<td>HORSESHOE BAY 2.7 S</td>
<td>1.30</td>
</tr>
<tr>
<td>CANYON LAKE 2.5 W</td>
<td>1.28</td>
</tr>
<tr>
<td>SAN MARCOS 2.9 WNW</td>
<td>1.22</td>
</tr>
<tr>
<td>ROUND ROCK 1.0 S</td>
<td>1.15</td>
</tr>
<tr>
<td>BULVERDE 5.5 ENE</td>
<td>1.10</td>
</tr>
<tr>
<td>NEW BRAUNFELS 7.4 N</td>
<td>1.07</td>
</tr>
<tr>
<td>BUCHANAN DAM 7.4 NNE</td>
<td>1.06</td>
</tr>
<tr>
<td>ROCKSPRINGS 6.2 NNE</td>
<td>1.06</td>
</tr>
<tr>
<td>JARRELL 4.4 W</td>
<td>1.05</td>
</tr>
<tr>
<td>ELGIN 0.9 NW</td>
<td>1.04</td>
</tr>
<tr>
<td>AUSTIN BERGSTROM INTL AIRPORT</td>
<td>1.01</td>
</tr>
<tr>
<td>GEORGETOWN 4.5 SSE</td>
<td>1.00</td>
</tr>
<tr>
<td>AUSTIN MABRY</td>
<td>0.87</td>
</tr>
<tr>
<td>SAN ANTONIO INTL AIRPORT</td>
<td>0.74</td>
</tr>
</tbody>
</table>
The graphic below shows rainfall for a 24 hour period ending at 7 AM on Sunday, March 10th.
The list below shows preliminary local storm reports from the March 9th and 10th, 2013.

<table>
<thead>
<tr>
<th>TIME</th>
<th>EVENT</th>
<th>CITY LOCATION</th>
<th>COUNTY LOCATION</th>
<th>LAT.LON</th>
<th>SOURCE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0706 PM</td>
<td>HAIL</td>
<td>3 WSW HARPER</td>
<td>GILLESPIE</td>
<td>30.28N</td>
<td>99.30W</td>
<td>PEA SIZE HAIL NEAR FM479</td>
</tr>
<tr>
<td>0719 PM</td>
<td>HAIL</td>
<td>6 SW HARPER</td>
<td>KERR</td>
<td>30.24N</td>
<td>99.32W</td>
<td>GOLFBALL SIZE HAIL</td>
</tr>
<tr>
<td>0733 PM</td>
<td>HAIL</td>
<td>1 W HARPER</td>
<td>GILLESPIE</td>
<td>30.30N</td>
<td>99.27W</td>
<td>MARBLE SIZE HAIL</td>
</tr>
<tr>
<td>0806 PM</td>
<td>HAIL</td>
<td>4 W FREDERICKSBURG</td>
<td>GILLESPIE</td>
<td>30.27N</td>
<td>98.94W</td>
<td>DIME SIZE HAIL ON HIGHWAY 290.</td>
</tr>
<tr>
<td>0930 PM</td>
<td>HAIL</td>
<td>2 N HARPER</td>
<td>GILLESPIE</td>
<td>30.33N</td>
<td>99.25W</td>
<td>GOLFBALL SIZE HAIL</td>
</tr>
<tr>
<td>0935 PM</td>
<td>HAIL</td>
<td>13 NE HARPER</td>
<td>GILLESPIE</td>
<td>30.43N</td>
<td>99.10W</td>
<td>HALF INCH HAIL AND VERY STRONG WINDS.</td>
</tr>
<tr>
<td>0940 PM</td>
<td>HAIL</td>
<td>9 WSW ROCKSPRINGS</td>
<td>EDWARDS</td>
<td>29.97N</td>
<td>100.34W</td>
<td>PEA SIZE HAIL AND ABOUT THREE QUARTERS OF AN INCH OF RAIN SO FAR.</td>
</tr>
</tbody>
</table>
0943 PM HAIL 10 NE ROCKSPRINGS 30.12N 100.09W
03/09/2013 E0.50 INCH EDWARDS TX CO-OP OBSERVER

HALF INCH HAIL.

0945 PM HAIL 2 S ROCKSPRINGS 29.99N 100.21W
03/09/2013 E0.50 INCH EDWARDS TX LAW ENFORCEMENT

HALF INCH HAIL AND HEAVY RAINS.

0945 PM HAIL 12 ENE ROCKSPRINGS 30.08N 100.03W
03/09/2013 E1.50 INCH EDWARDS TX COCORAHS

1016 PM HAIL 8 W INGRAM 30.08N 99.37W
03/09/2013 E0.50 INCH KERR TX COCORAHS

PEA TO HALF INCH SIZE HAIL

1020 PM HAIL 10 NNE ROCKSPRINGS 30.14N 100.14W
03/09/2013 E1.25 INCH EDWARDS TX PUBLIC

1046 PM HAIL 5 NNW UVALDE 29.28N 99.82W
03/09/2013 E0.50 INCH UVALDE TX LAW ENFORCEMENT

HALF INCH HAIL OFF OF HIGHWAY 55.

1110 PM HAIL KERRVILLE 30.04N 99.14W
03/09/2013 M0.25 INCH KERR TX BROADCAST MEDIA

PEA SIZE HAIL.

1126 PM HAIL 1 S SABINAL 29.31N 99.47W
03/09/2013 M1.00 INCH UVALDE TX NWS EMPLOYEE

MARBLE TO QUARTER SIZE HAIL

1130 PM HAIL UTOPIA 29.62N 99.53W
03/09/2013 E0.75 INCH UVALDE TX COCORAHS

1145 PM HAIL UTOPIA 29.62N 99.53W
03/09/2013 M0.70 INCH UVALDE TX CO-OP OBSERVER

DIME SIZE HAIL IN UTOPIA

1151 PM HAIL D’HANIS 29.33N 99.28W
03/09/2013 M1.00 INCH MEDINA TX EMERGENCY MNGR

DIME TO QUARTER SIZE HAIL
1159 PM  HAIL  HONDO  29.36N  99.16W  
03/09/2013  E0.70 INCH  MEDINA  TX  EMERGENCY MNGR  

MARBLE TO DIME SIZE HAIL

1230 AM  HAIL  LAKEHILLS  29.60N  98.94W  
03/10/2013  M1.00 INCH  BANDERA  TX  TRAINED SPOTTER  

PEA TO QUARTER SIZE HAIL

1236 AM  HAIL  2 WSW GREY FOREST  29.60N  98.71W  
03/10/2013  M0.70 INCH  BEXAR  TX  CO-OP OBSERVER  

HALF INCH TO DIME SIZE HAIL

1240 AM  HAIL  HELOTES  29.57N  98.69W  
03/10/2013  E1.00 INCH  BEXAR  TX  PUBLIC  

NICKEL TO QUARTER SIZE HAIL

1255 AM  HAIL  HELOTES  29.57N  98.69W  
03/10/2013  M0.70 INCH  BEXAR  TX  TRAINED SPOTTER  

PEA TO DIME SIZE HAIL

0107 AM  HAIL  HOLLYWOOD PARK  29.60N  98.48W  
03/10/2013  M0.50 INCH  BEXAR  TX  TRAINED SPOTTER  

PEA TO HALF INCH SIZE HAIL

0109 AM  HAIL  SHAVANO PARK  29.58N  98.56W  
03/10/2013  E0.50 INCH  BEXAR  TX  TRAINED SPOTTER  

PEA TO HALF INCH SIZE HAIL

0109 AM  HAIL  5 N SAN ANTONIO  29.53N  98.51W  
03/10/2013  M1.00 INCH  BEXAR  TX  PUBLIC  

PENNY TO QUARTER SIZE HAIL

0111 AM  HAIL  1 E LEON VALLEY  29.50N  98.60W  
03/10/2013  M0.50 INCH  BEXAR  TX  PUBLIC  

PEA TO HALF INCH SIZE HAIL
0113 AM HAIL 7 NE SAN ANTONIO 29.53N 98.42W
03/10/2013 E0.50 INCH BEXAR TX PUBLIC

PEA TO HALF INCH SIZE HAIL

0118 AM HAIL 8 N SAN ANTONIO 29.57N 98.51W
03/10/2013 M1.25 INCH BEXAR TX ASOS

HAIL INCH AND A QUARTER SIZE AND WIND GUSTS TO 44 MPH.

0120 AM HAIL 8 NNE SAN ANTONIO 29.56N 98.45W
03/10/2013 M0.50 INCH BEXAR TX CO-OP OBSERVER

PEA TO HALF INCH SIZE HAIL

0120 AM TSTM WND GST LIVE OAK 29.55N 98.34W
03/10/2013 E50 MPH BEXAR TX PUBLIC

PEA TO HALF INCH SIZE HAIL AND WIND GUSTS TO 50 MPH.

0140 AM HAIL 1 ENE MCQUEENEY 29.60N 98.03W
03/10/2013 E0.25 INCH GUADALUPE TX COCORAHS

PEA SIZE TO NOT QUITE HALF INCH SIZE HAIL

0156 AM HAIL 5 NE SEGUN 29.63N 97.91W
03/10/2013 M1.00 INCH GUADALUPE TX AMATEUR RADIO

DIME TO QUARTER SIZE HAIL