

June 23, 2017 Severe Weather Event in Southeast New Mexico and West Texas:

The National Weather Service in Midland conducted damage surveys at three locations impacted by severe thunderstorms during the afternoon and evening of Friday, June 23, 2017. Those three locations included Lea County, New Mexico around the City of Hobbs, the Midland, Texas area and Mitchell County along and near Interstate 20 between the communities of Colorado City and Loraine, Texas.

A combination of intense heat, an Upper Level Disturbance and a Cold Front moving south from the Texas Panhandle were the main ingredients for severe thunderstorm development. The main impacts from these severe thunderstorms were localized microburst winds and flash flooding. Figure 1 shows the Base Velocity imagery from KMAF radar. The arrow is pointing to estimated wind speeds greater than 70 mph over Midland, Texas. Figure 2 shows the Base Reflectivity from KMAF radar with severe thunderstorms east of Colorado City, Texas. Figure 3 shows observed peak wind gusts from across the area.

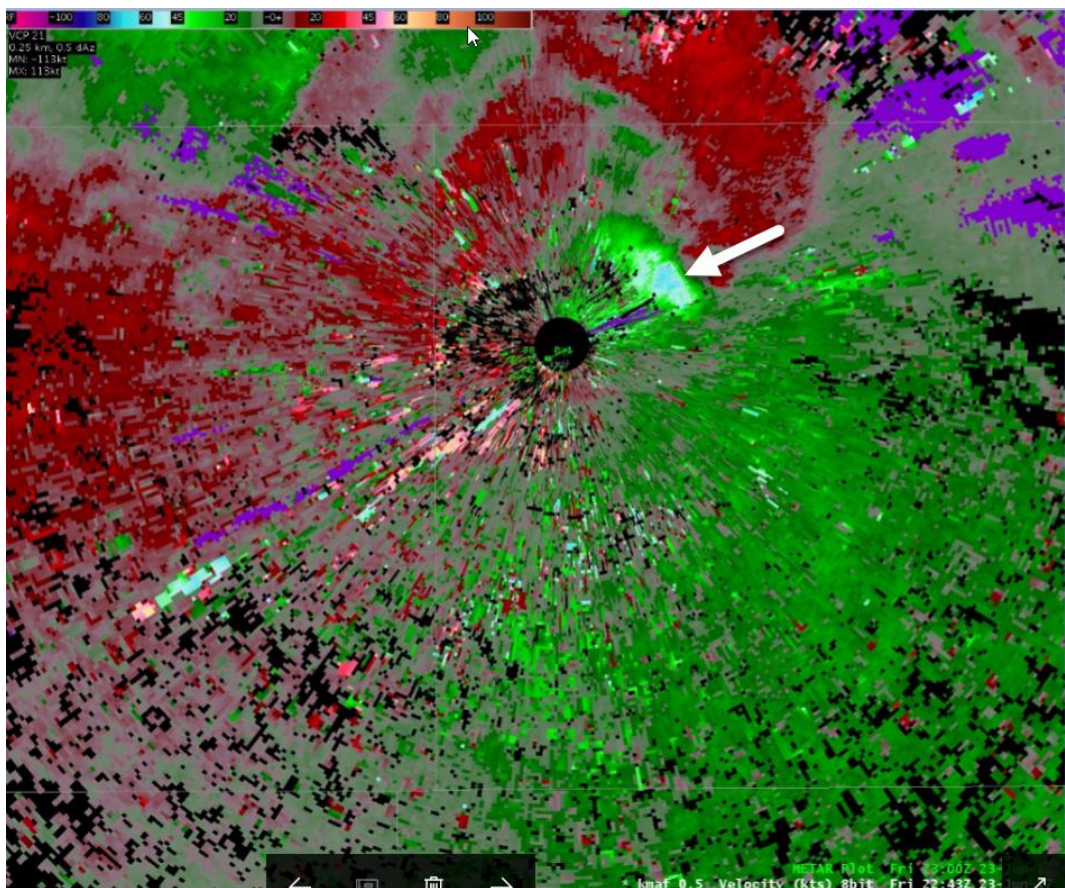


Figure 1 – Base velocity image from KMAF radar.

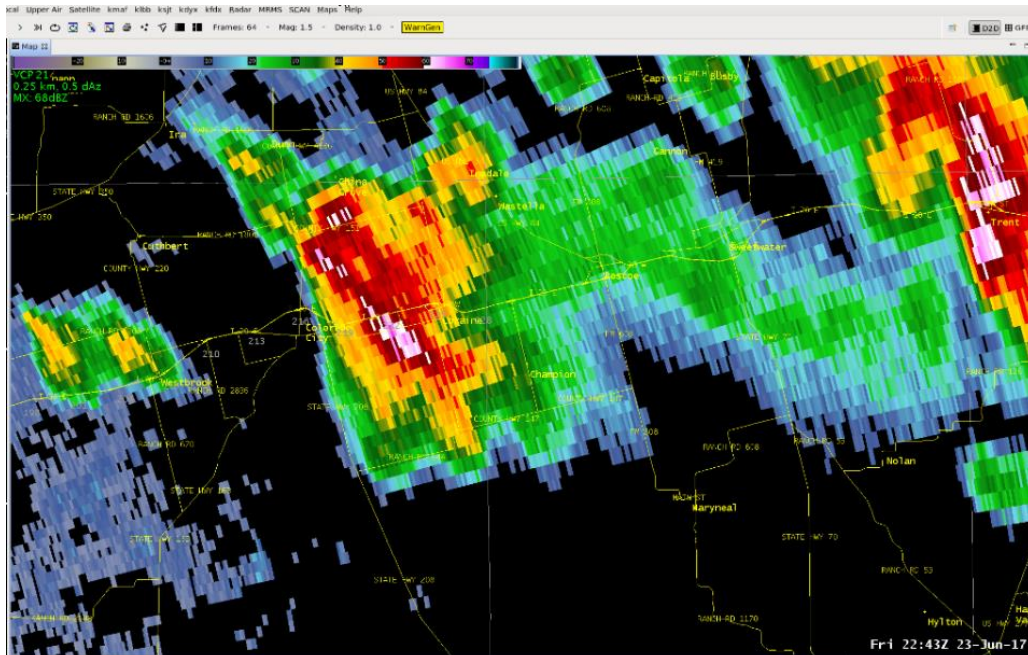


Figure 2 – Base Reflectivity image from KMAF radar.

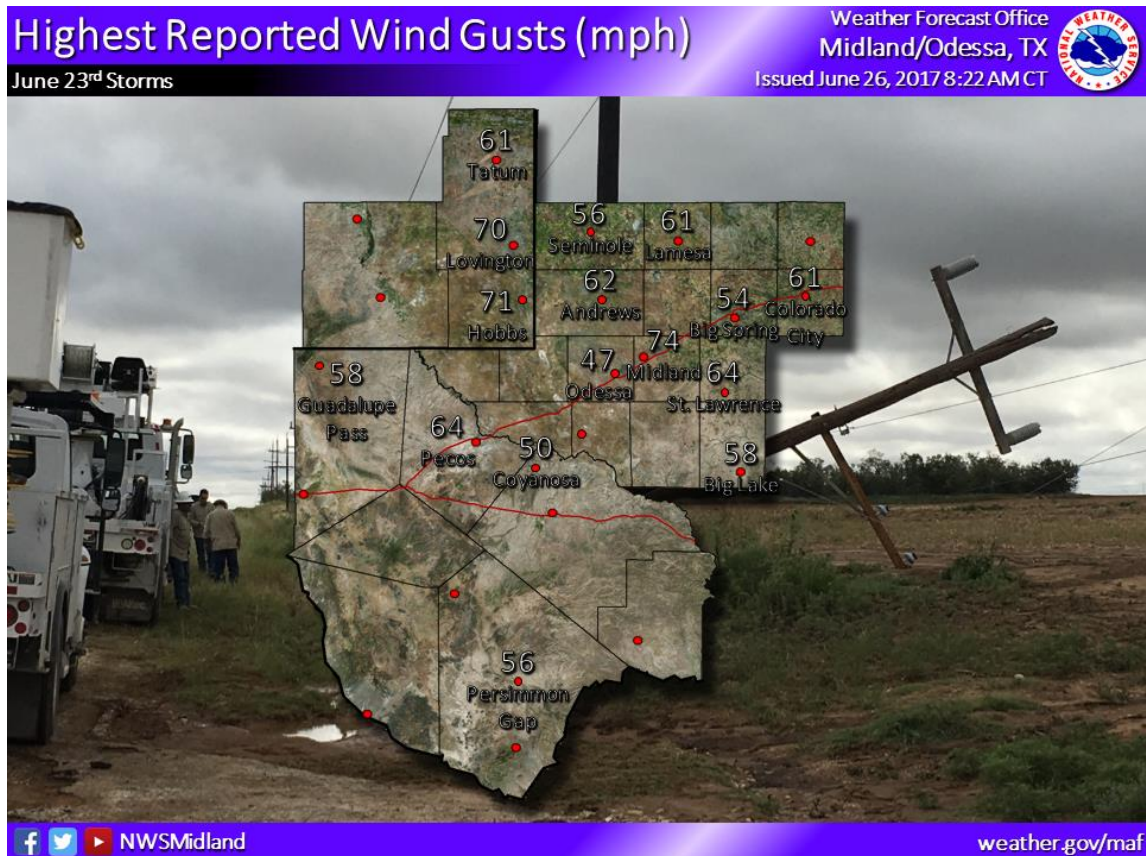


Figure 3 – Observed peak wind gusts from the severe thunderstorms.

Lea County near Hobbs, New Mexico:

Severe thunderstorms moved into Lea County during the mid afternoon of Friday, June 23rd. Even though there was not any known significant hail damage, hail was reported more than a foot deep at the corner of Millen and Lovington Highway in Hobbs. The survey team found wind damage at the Albertsons Grocery Store near West Bender Blvd and at New Mexico Junior College (Figure 4). Figures 5 and 6 shows pieces of HVAC equipment that were lifted off the roof of the Albertsons. Figure 7 shows damage to solar panels at New Mexico Junior College.

In summary, the National Weather Service storm survey team found evidence of wind speeds estimated at 85 mph in Hobbs, New Mexico.

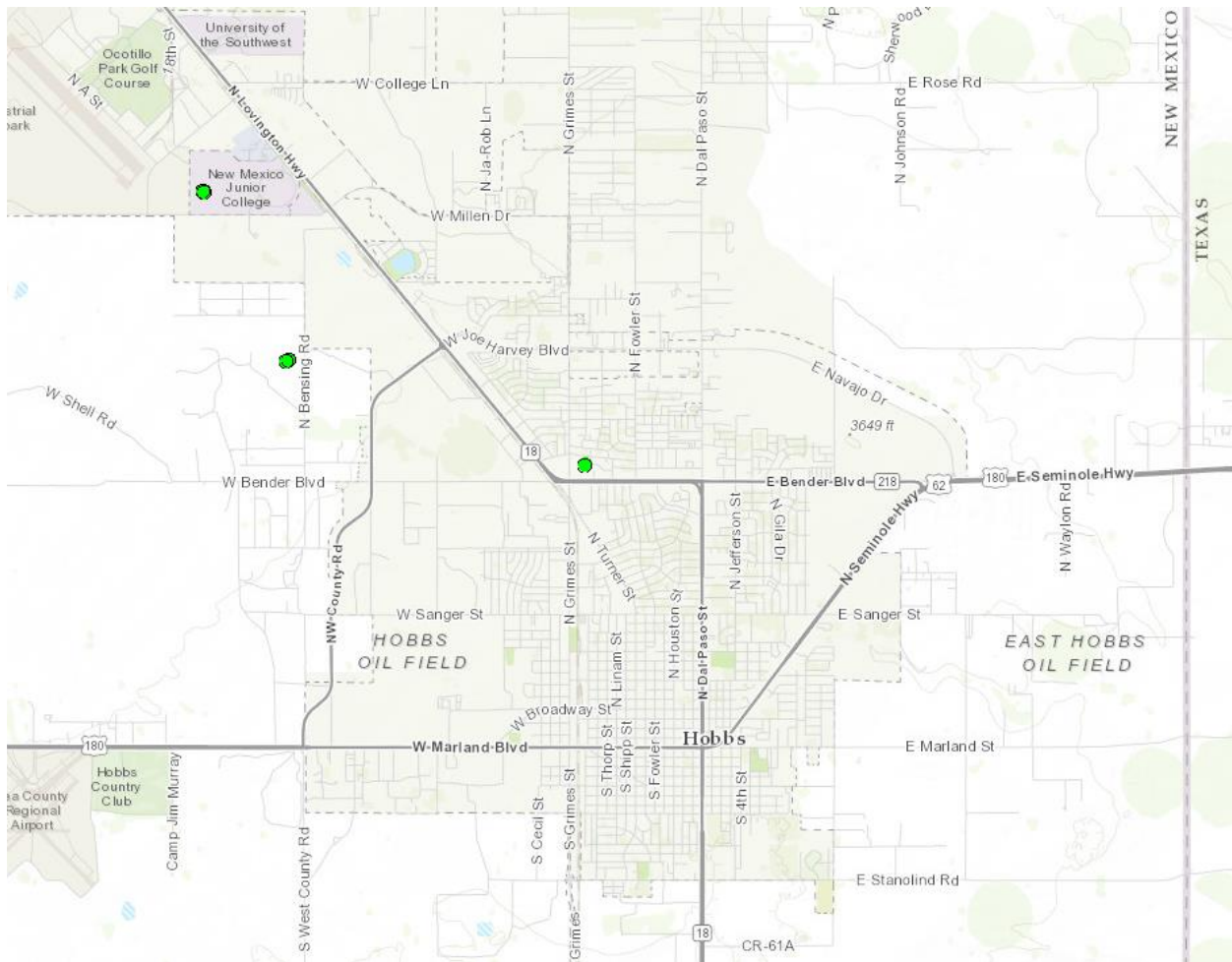


Figure 4 – Survey points in and near Hobbs, New Mexico.



Figure 5 – Pieces of HVAC equipment at Albertsons in Hobbs, New Mexico.



Figure 6 – Pieces of HVAC equipment at Albertsons in Hobbs, New Mexico.



Figure 7 – Damage to solar panels at New Mexico Junior College in Hobbs, New Mexico.

Midland, Texas:

Severe thunderstorms moved into Midland, Texas during the late afternoon of Friday, June 23rd. The survey team found the majority of the wind damage at Midland Air Park (where the AWOS recorded a 74 mph gust) and at Midland College (Figure 8). Figures 9 and 10 show a single engine private plane that was ripped from its tie down (3/4 inch cotton rope) and rolled an estimated 50 yards (scrape marks on the tarmac showed where the plane rolled). It is possible that the wind was channeled by the hangers at this location since there was not any other damage seen at Midland Air Park. Figure 11 shows a dorm at Midland College with its roof damaged. Figure 12 shows roof damage at a restaurant near TX-158 BR and W Louisiana Avenue. It is possible that the roof damage was accentuated by the overhanging design of the roofs and the wind direction.

In summary, the National Weather Service storm survey team found evidence of wind speeds estimated at 75 mph in Midland, Texas.

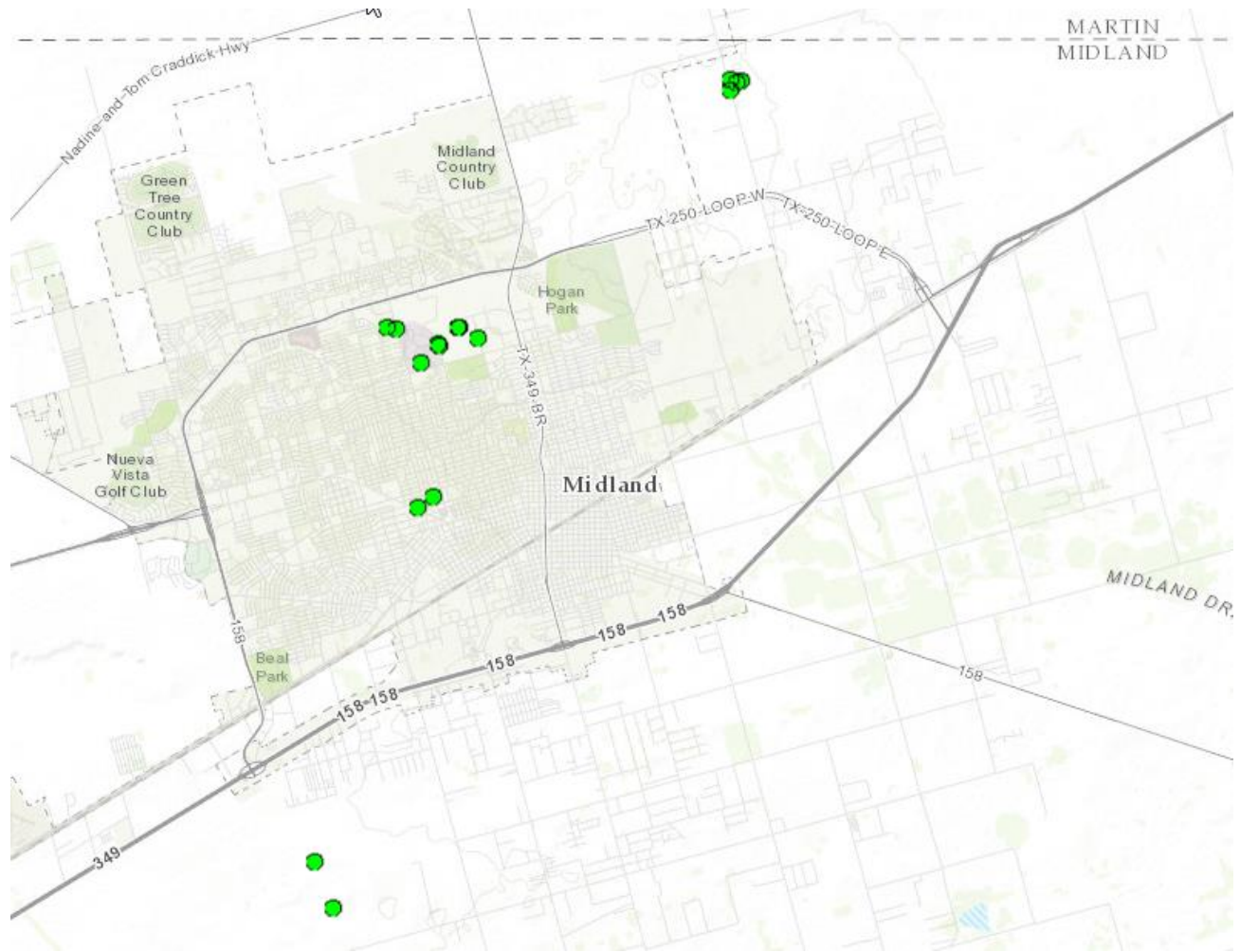


Figure 8 – Survey points in and near Midland, Texas.



Figure 9 – Overturned private plane at Midland Air Park in Midland, Texas.



Figure 10 – Overturned private plane at Midland Air Park in Midland, Texas.



Figure 11 – Dorm at Midland College with its roof damaged.



Figure 12 – Roof damage at a restaurant near TX-158 BR and W Louisiana Ave in Midland, Texas.

Mitchell County, Texas Train Derailment:

Thunderstorms moved southeastward out of Scurry County into the northern portions of Mitchell County just after 5 pm CDT Friday evening. These storms intensified, with a severe thunderstorm warning being issued at 5:22 pm CDT for the eastern half of Mitchell County, including the communities of Colorado City and Loraine. Power poles were reported down in Loraine at 5:35 pm CDT. A train derailment was reported 2 miles west southwest of Loraine at 5:43 pm CDT. The National Weather Service damage survey showed power pole damage along Interstate 20 near mile marker 224 (Figures 13 and 14). It is possible that other power poles had been fixed prior to the damage survey slight further east of this location. Power poles leaning indicate winds in the 85 mph range.

South of Interstate 20 along Lucas Road (County Road 412), was the location of a train derailment along an over-road bridge (Figures 15-17). Due to the lack of assessable roadways, the survey team was unable to gain complete access to the damage site. Thus it was not possible to determine whether flooding played a significant role in eroding the tracks. However, primary indications are that channeled severe winds likely approached 90 mph. Due to the elevated nature of the tracks at Lucas Road location, winds were able to get “underneath” the train. In addition, northerly winds normal to orientation of the train maximized the wind’s ability to displace the train.

Onsite workers noted that only a portion of the 58-car train was blown off the tracks, with the location near Lucas road being a key location for damage. While not assessable, workers also indicated that the train extended nearly ½ mile to the west of this location and also back towards the east. Even during the damage survey Saturday morning, flooded roadways still persisted in the area.

In summary, the National Weather Service storm survey team found evidence of wind speeds estimated as high as 85 to 90 mph in Mitchell County, Texas.

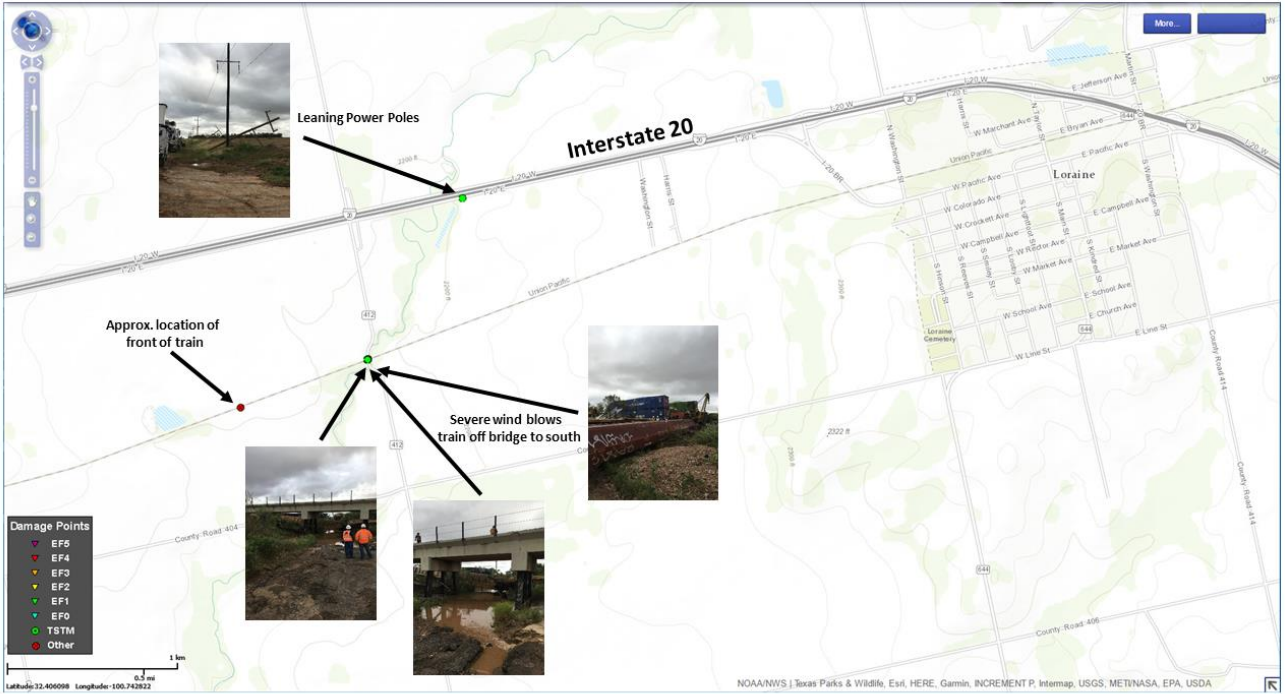


Figure 13 – Survey points in Mitchell County, Texas.



Figure 14 – Power pole damage along Interstate 20 near mile marker 224 in Mitchell County, Texas.



Figure 15 – Train derailment south of Interstate 20 along Lucas Road (County Road 412) in Mitchell County, Texas.



Figure 16 – Train derailment south of Interstate 20 along Lucas Road (County Road 412) in Mitchell County, Texas.



Figure 17 – Train derailment south of Interstate 20 along Lucas Road (County Road 412) in Mitchell County, Texas.