

July 8, 2016 Midland, Texas Microburst:

National Weather Service Meteorologists conducted a storm survey for a microburst associated with a severe thunderstorm that affected portions of Midland, Texas around 7:50 pm CDT on July 8, 2016 (Figure 1).



Figure 1 – Area of greatest damage in Midland, Texas.

A microburst is a localized column of sinking air (downdraft) within a thunderstorm and is usually less than or equal to 2.5 miles in diameter. Microbursts can cause extensive damage at the surface, and in some instances, can be life-threatening.

The base reflectivity and base velocity radar images from KMAF during the microburst are shown in Figures 2 and 3.

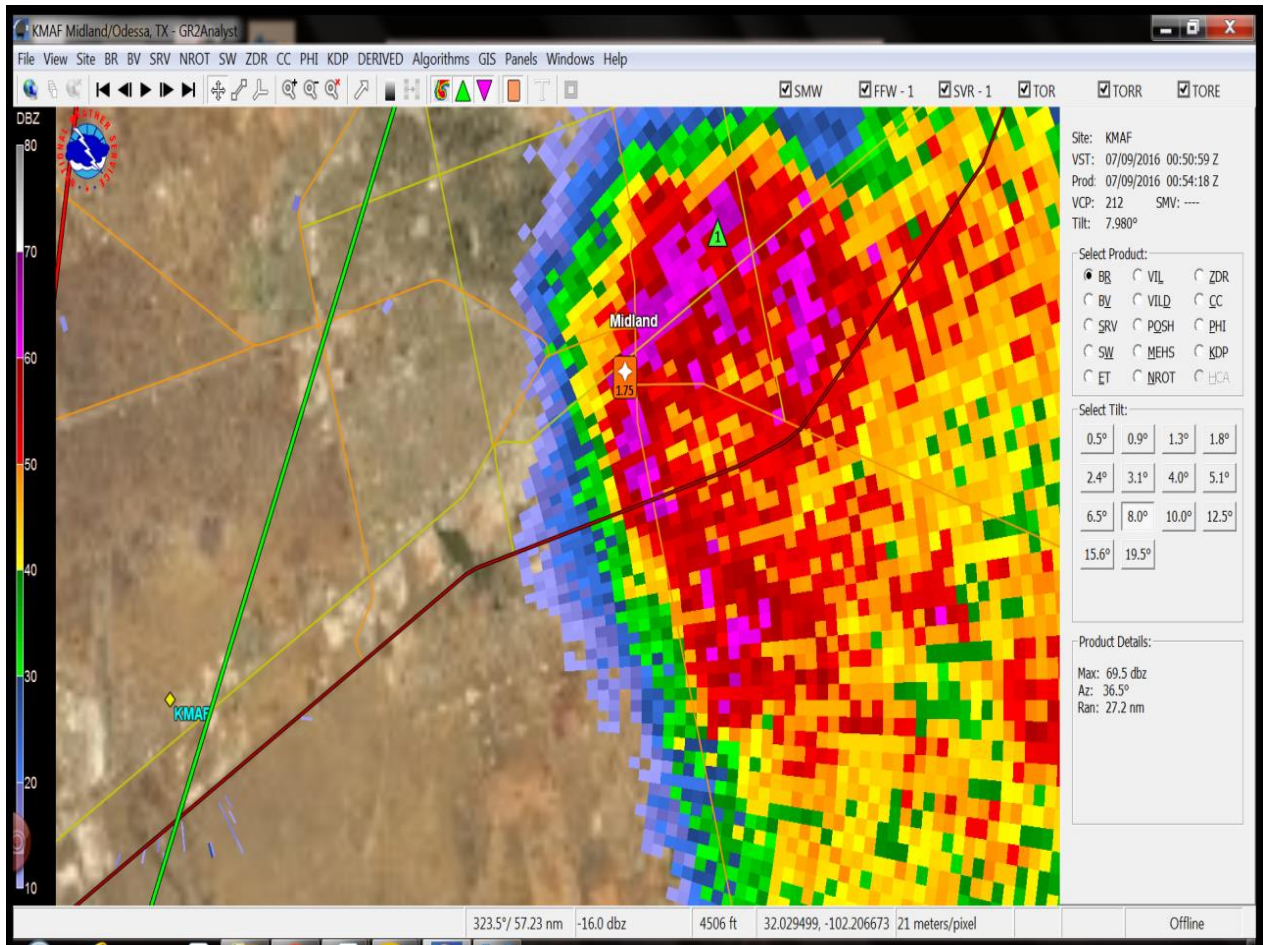


Figure 2 – Base Reflectivity Image at 7:50 PM CDT.

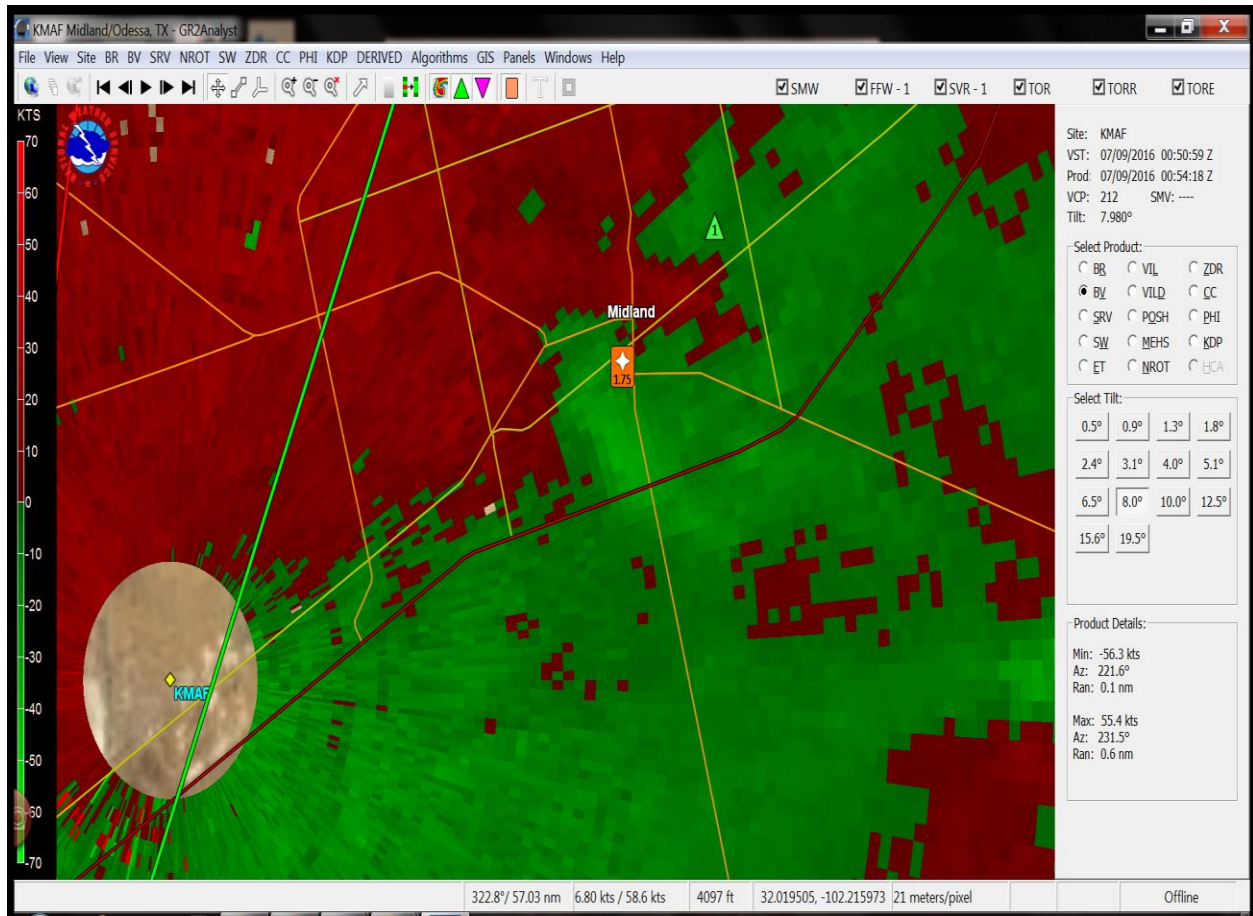


Figure 3 – Base Velocity Image at 7:50 PM CDT.

The KMAF Base Velocity image shows an area of convergence above the surface. The green color indicates inbound wind toward the radar(KMAF) whereas the red color indicates outbound wind away from the radar (KMAF). In Figure 3 the area of convergence is WSW of downtown Midland – the area with the greatest concentration of damage.

The American Red Cross Permian Basin performed a preliminary Damage Assessment on the morning of July 9, 2016. In addition to damage to a number of businesses along Wall Street; the American Red Cross assessed 92 homes in the highlighted area in Figure 1. Of the 92 homes assessed by the American Red Cross, 28 were found to have had damage from the Microburst.

Figures 4 thru 7 show the damage from the Microburst.



Figure 4 – Power poles snapped at the corner of Wall St and Powell St (Courtesy of Amber Hluchan) .



Figure 5 – Power poles snapped at the corner of Wall St and Powell St (Courtesy of Amber Hluchan).



Figure 6 – Wind damage (Courtesy of Amber Hluchan).



Figure 7 – Overturned camper (Courtesy of Amber Hluchan).

Based on the damage witnessed, the top wind speed was estimated to be between 80-100 mph.