

The April 23rd, 2019 Midland, TX Hailstorm

On the evening of April 23rd, 2019, severe thunderstorms developed along and behind a frontal boundary which stalled across Interstate 20 (Figure 1). One storm in particular strengthened in southern Midland County and moved into the city of Midland dropping large hail up to baseball size. The hail damaged numerous vehicles, homes, and other structures, especially on the south and west side of the city.

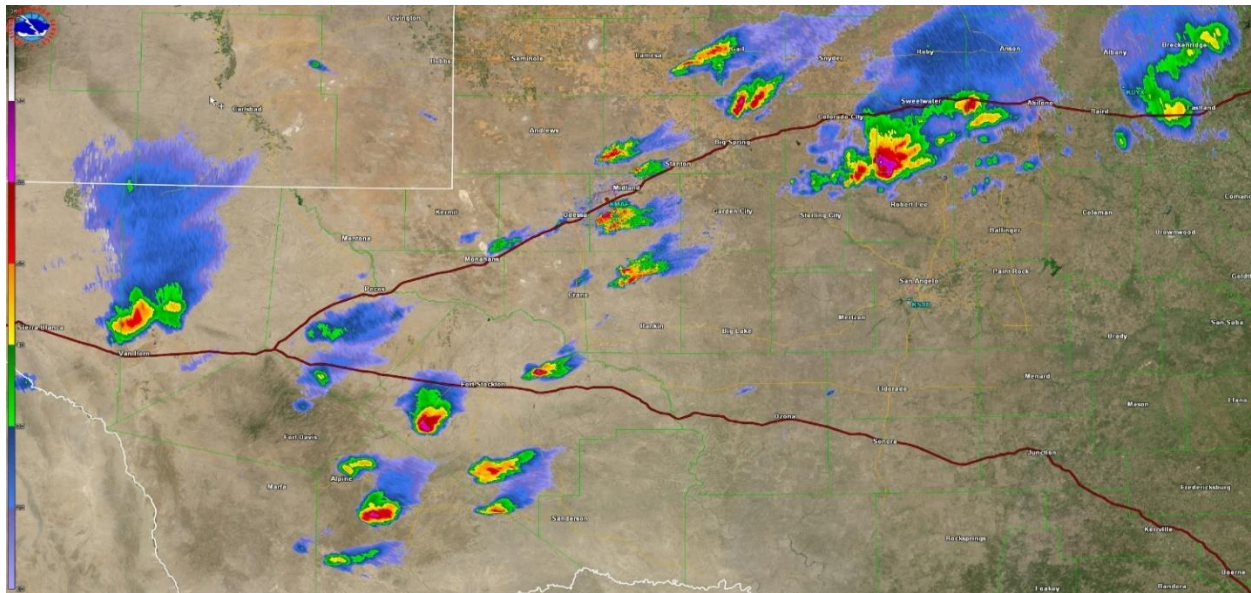


Figure 1. KMAF 0.5 deg reflectivity at 6:34PM CDT.

The storm initially formed south of Interstate 20 and moved directly over Midland International Airport (Figure 2). The first report of large hail occurred at NWS Midland/Odessa around 6:45PM CDT when wind driven hail up to golf ball size damaged vehicles in the parking lot.



Figure 2. Storm approaching NWS Midland/Odessa taken from tower camera.

The storm continued to track northeast into the west side of Midland where it did most of its damage along West Loop 250. A Midland RockHound's baseball game was ongoing at Security Bank Ball Park where onlookers had to seek shelter under the rafters as hail stones up to baseball size fell from the storm (Figure 3).



Figure 3. Hail stones covering infield of Security Bank Ballpark in Midland, TX, photo courtesy of RockHounds ground crew.

As the storm moved into northwest Midland, it maintained strength as noted by radar reflectivity in Figure 4. The red and purple colors indicate areas of highest reflectivity where the largest hailstones are present within the storm itself.

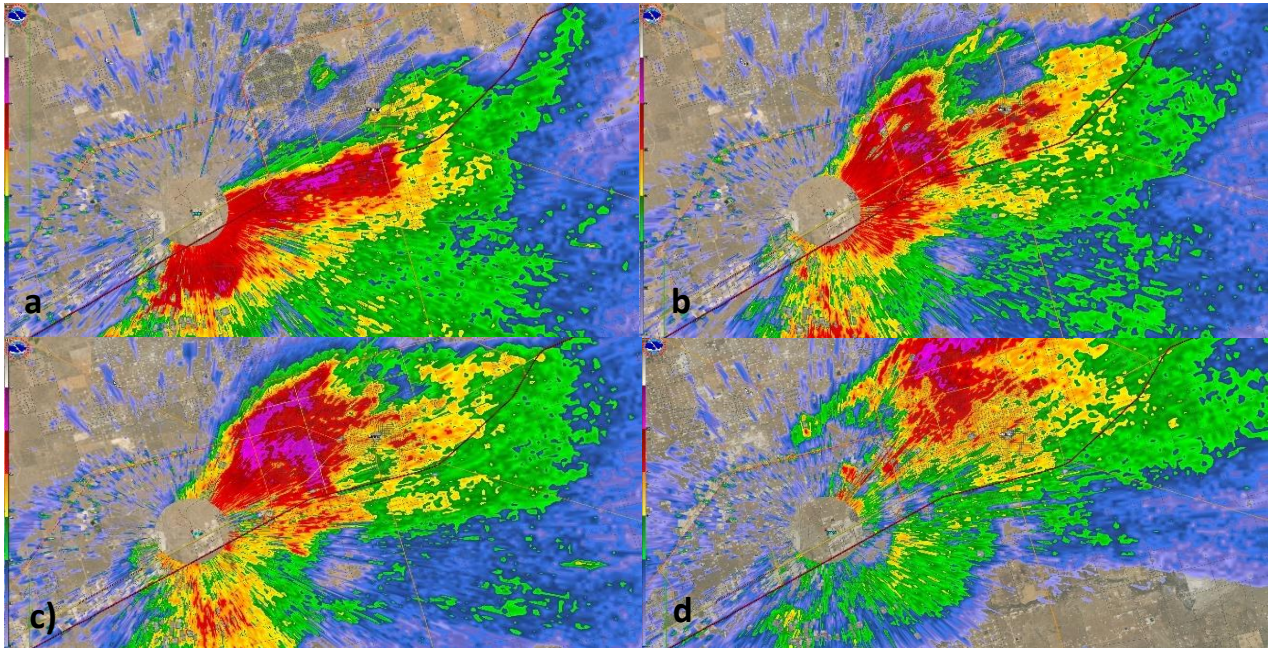


Figure 4. KMAF 0.5 deg reflectivity at, a) 6:45PM CDT, b) 6:50PM CDT, c) 6:52PM CDT, d) 7:00PM CDT (empty circle denotes radar site).

More large hail stones near 2.00" in diameter were reported from the north side of Midland, near Midland Airpark, which caused serious damage to vehicles (Figure 5).



Figure 5. a) Car window busted out at Toyota of Midland, photo courtesy of Payton Ray, b) Large hail stones collected at Legends Park neighborhood, photo courtesy of Rebecca Gray, c) Mounds of hail near downtown midland, photo courtesy of Beth Ann.

Hail sizes of 1.00" to 1.50" were observed as far east as Fairgrounds road and as far south as Midland Memorial Hospital (Figure 6). The storm finally exited the city around 7:05PM CDT.

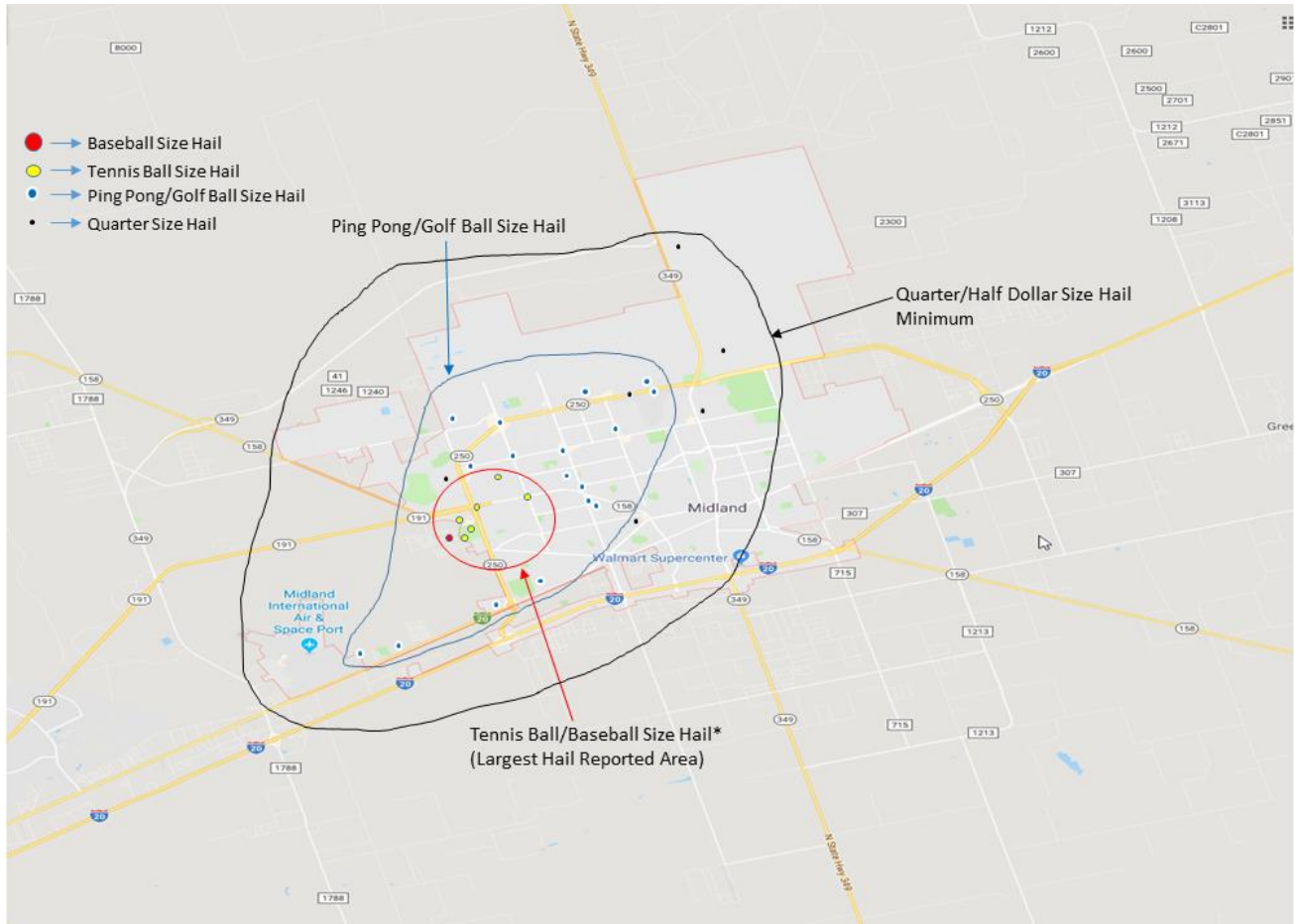


Figure 6. Hail swath map with local severe hail reports.

Other notable storms on this day included a supercell in Reeves County that produced golf ball size hail in Toyah, TX (Figure 7) and a large hail producing storm that impacted a trailer park in Coyanosa, TX.



Figure 7. Supercell thunderstorm near Toyah, TX, photo courtesy of Chance Redmon.