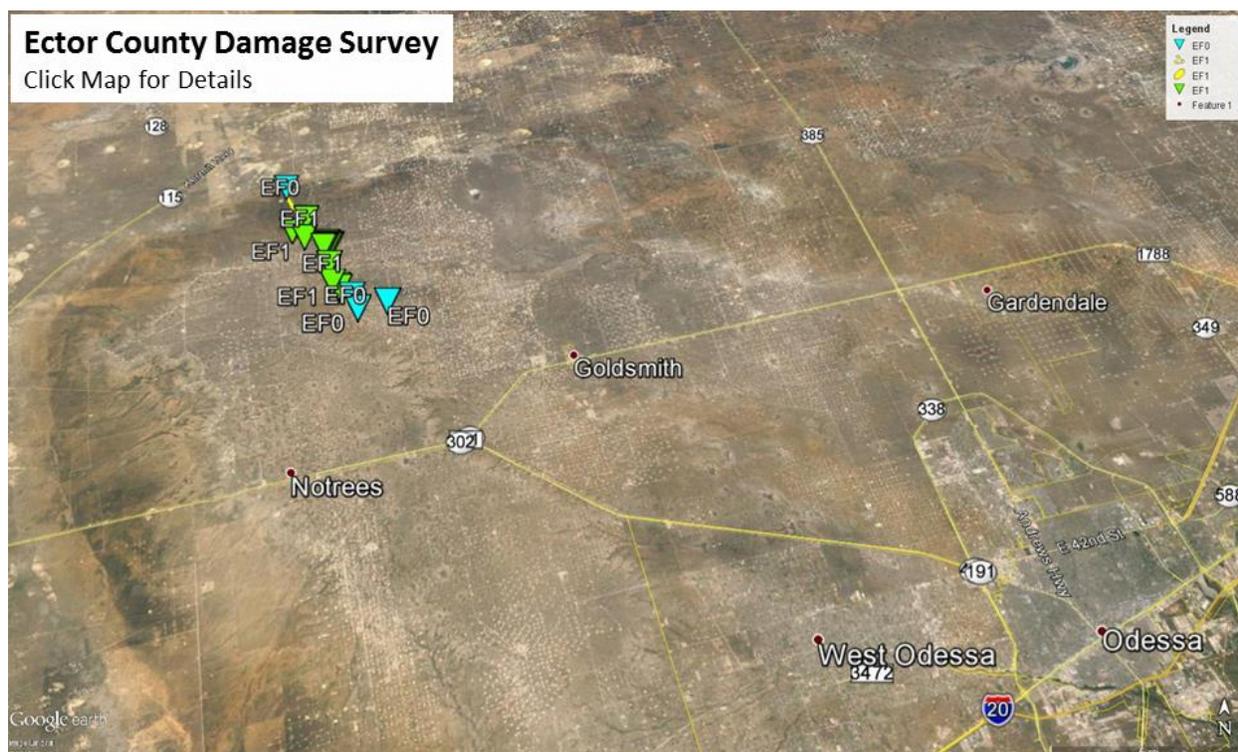
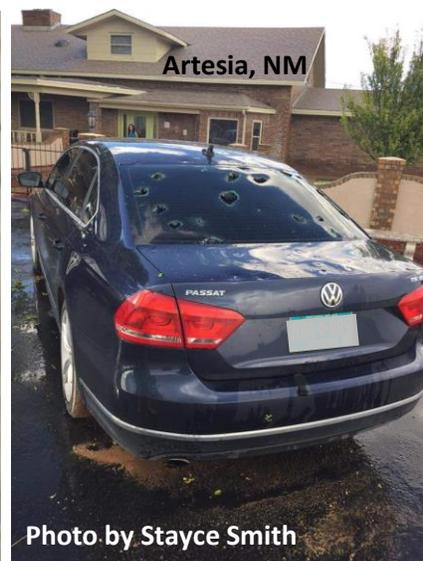


September 17, 2016 Severe Weather Event



Numerous severe thunderstorms containing large hail, damaging winds and tornadoes developed across the area Saturday afternoon and evening, September 17, 2016. Even though severe weather is more common in the spring across southeast New Mexico and West Texas, it can happen anytime.

On September 19, 2016 meteorologists from the National Weather Service in Midland conducted a damage survey over portions of Andrews and Ector counties for damage caused by a tornado Saturday evening. We have gathered several eyewitness accounts, pictures and video from that evening along with our damage survey, to

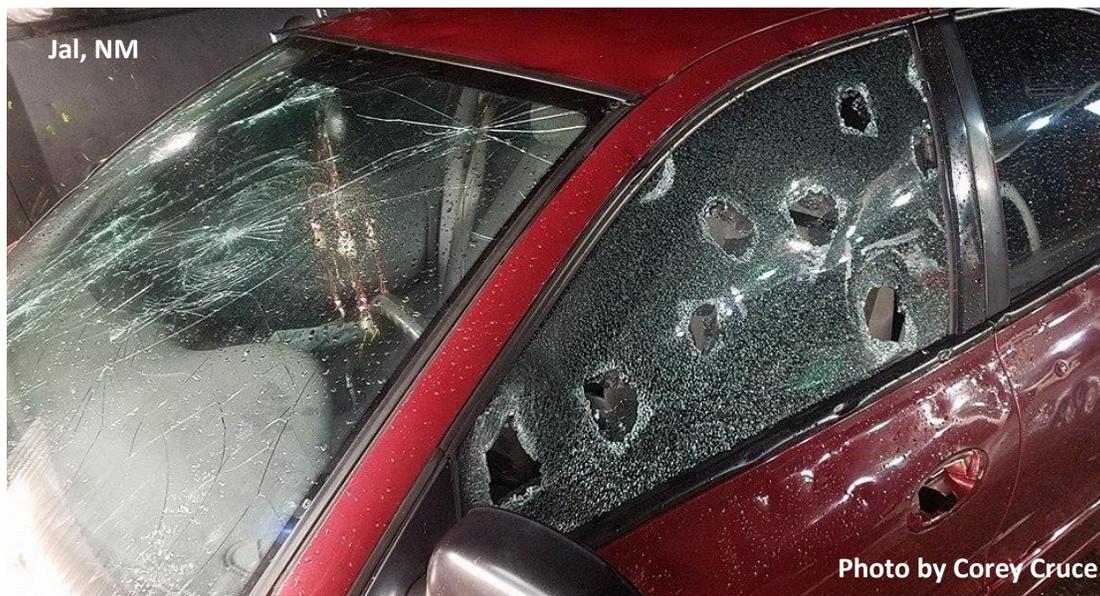


construct this write-up.

This write-up will center on two supercell thunderstorms that caused extensive hail and tornado damage. The first thunderstorm we will focus on developed over Chaves County, south-southwest of Roswell, New Mexico around 1:30 PM CDT. This storm slowly evolved into an intense supercell and moved into Eddy County around 4:20 PM CDT. About 5 PM CDT, the storm reached Artesia and went on to produce tennis ball and baseball size hail across the city. Two individuals were injured by hail and widespread damage occurred to cars and homes in the area.



The supercell then continued to track southeast across Eddy County eventually producing a weak tornado approximately 17 miles north-northeast of Carlsbad, NM. Eyewitness reports from a storm spotter in the area indicate the tornado began around 5:50 PM CDT and lasted only a few minutes. This tornado, rated an EF-0, touched down in open fields causing little to no damage.



The supercell next moved into Lea County continuing to move southeast. Due to the long track and severe consistency of this storm, warnings were issued well in advance. For example, a severe thunderstorm warning was issued for Jal, NM at 8:15 PM CDT and the storm reached the city around 8:30 PM CDT. This gave residents of Jal about 15 minutes to prepare for this powerful storm. Major hail and wind damage to homes and cars were reported throughout the city of Jal. This supercell eventually moved into Texas and continued to produce large hail across Winkler and Ector Counties before dissipating around 11 PM CDT.



Looking NW from Ratliff Stadium in Odessa, TX

Photo by Kale Steed

Another thunderstorm developed around 5:05 PM CDT over Lea County between Jal and Eunice, New Mexico. This storm formed along a stationary boundary that stretched from Artesia southeast to Odessa and then to Big Lake. By 5:45 PM CDT the storm became severe and split into two cells. The “left mover” shifted northeast producing large hail between Hobbs, NM and Seminole, TX before dissipating over northern Gaines County around 7:45 PM CDT.

The “right mover” quickly turned east as it moved into Andrews County at 6 PM CDT. This storm rapidly evolved into a strong supercell and began moving southeast after latching onto the above mentioned boundary. This supercell began to form a hook echo at 6:30 PM CDT as it moved toward Highway 115 in southwest Andrews County. Eyewitness reports from storm



Looking NW from FM 181

Photo by Erin Bagwell

chasers and spotters in the area indicate that the initial tornado began at 7:13 PM CDT near the intersection of Andrews, Winkler and Ector Counties. Videos taken of the tornado show it touching down and lifting several times before eventually staying on the ground for several minutes over far northwest portions of Ector County. This tornado was very photogenic and could be seen up to 30 miles away! Video and



Looking NW from FM 181

Photo by Tyler Hudson

pictures were taken of the tornado from Ratliff Stadium and other portions of northern Odessa. The tornado moved south-southeastward across open fields of rural Ector County



Photo by Patrick Roberts

just west of FM 181. The damage assessment team looked at several different indicators to determine tornado intensity. The tornado snapped several electrical power poles and overturned a tank battery along its path. These damage indicators suggest EF1 intensity with wind speeds estimated at 90 to 105 mph.

Near the end of the life cycle of the EF1 tornado, a weak anticyclonic circulation developed on the forward flank of the supercell around 7:25 PM CDT (about 4 miles northwest of Goldsmith on FM 181). This circulation moved southwest to the west of FM 181 and dissipated around 7:35 PM CDT. Storm chasers and spotters identified this funnel looking north from Goldsmith around 7:30 PM CDT. There was no evidence of damage or reports of the funnel cloud touching down.



Dissipating EF1 Tornado

Anticyclonic Funnel

Photo by Tyler Hudson

Luckily the tornadoes dissipated as the supercell moved southeast into Goldsmith, but unfortunately large hail occurred throughout the city. This hail severely damaged numerous homes and cars.

In summary, severe thunderstorms produced large hail, damaging winds and tornadoes across parts of southeast New Mexico and West Texas. One supercell produced an EF1 tornado with winds up to 105 mph. Remember, severe weather can occur anywhere and anytime of year across our

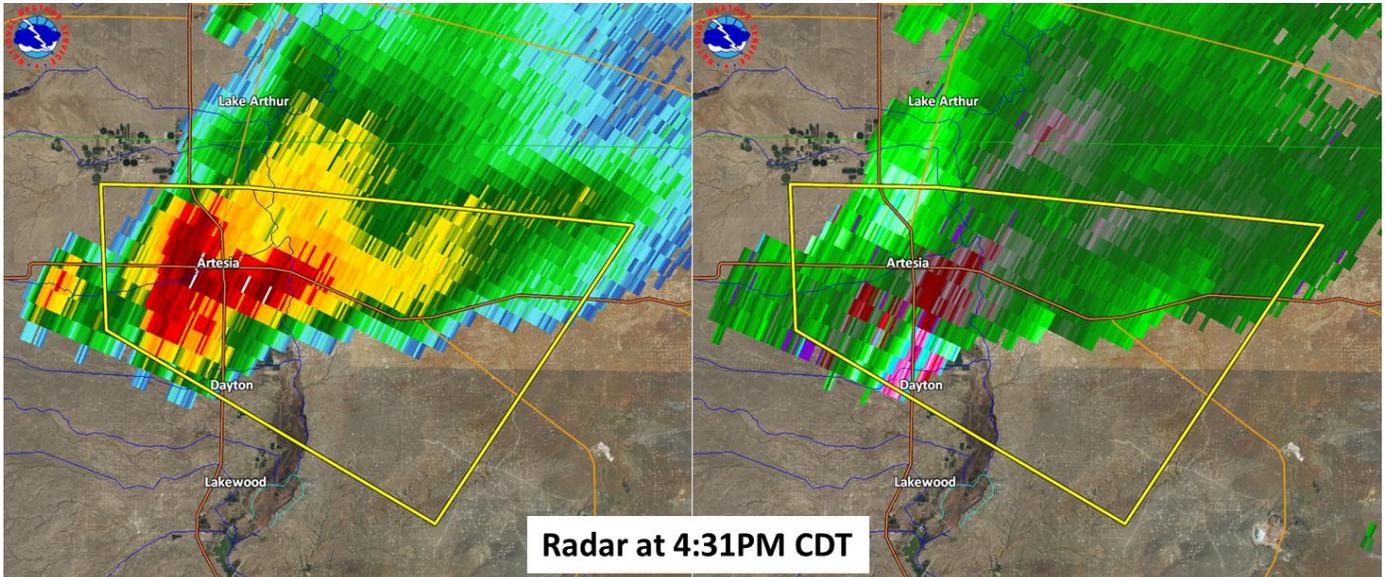


Goldsmith hail damage

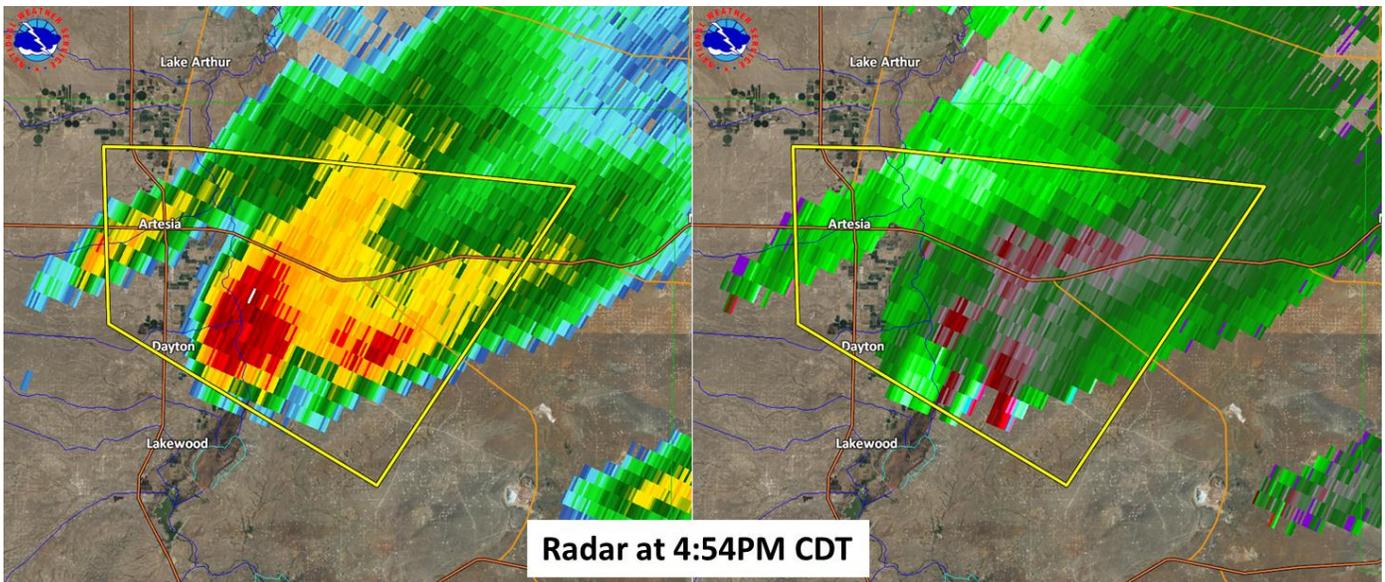
area. Always have multiple ways to receive weather information, especially if you are outdoors.

We would like to thank Zane Greenwood (Texas DPS), Rickey George (Ector Co EMC) and everyone who sent in pictures and video that helped us complete our damage survey.

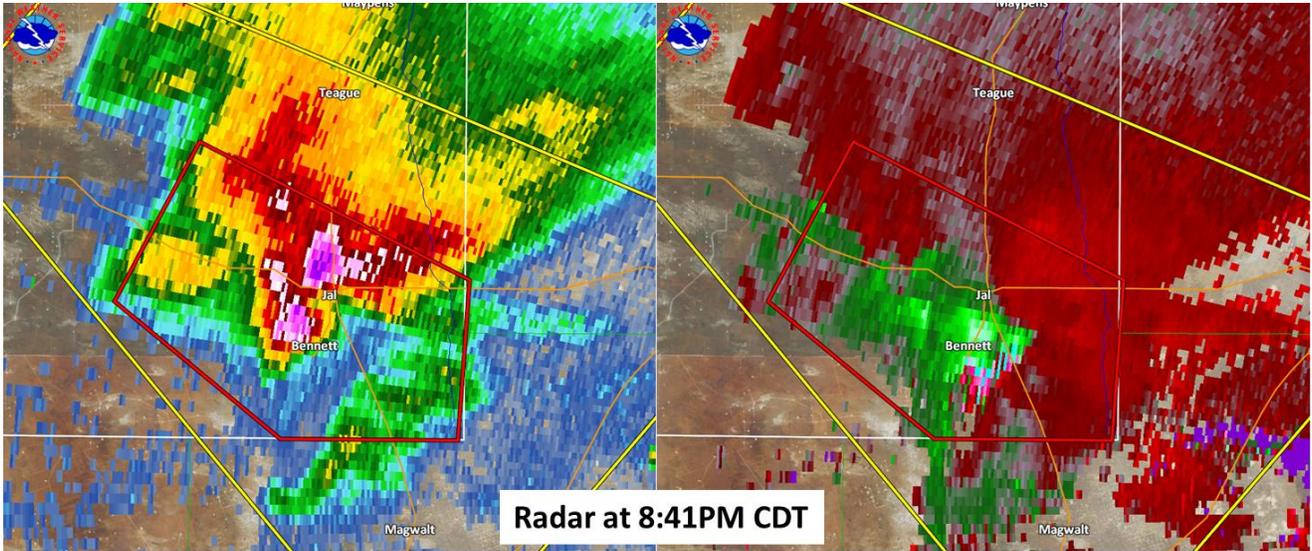
Radar Images from the event



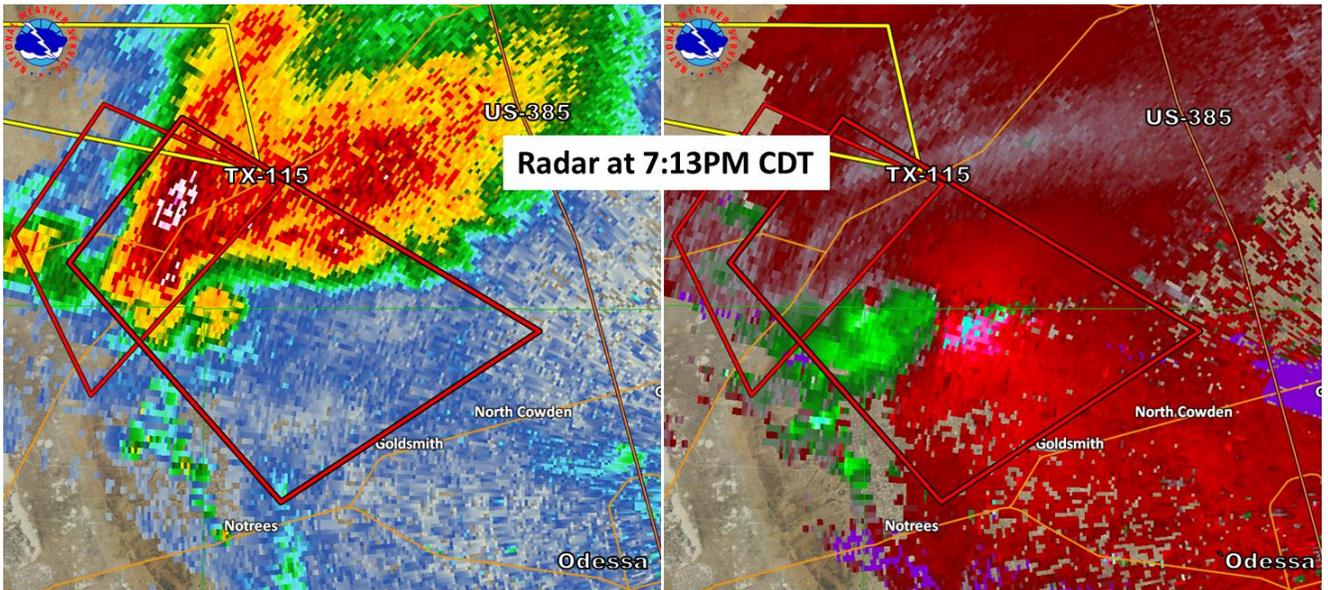
Artesia, NM Hailstorm.



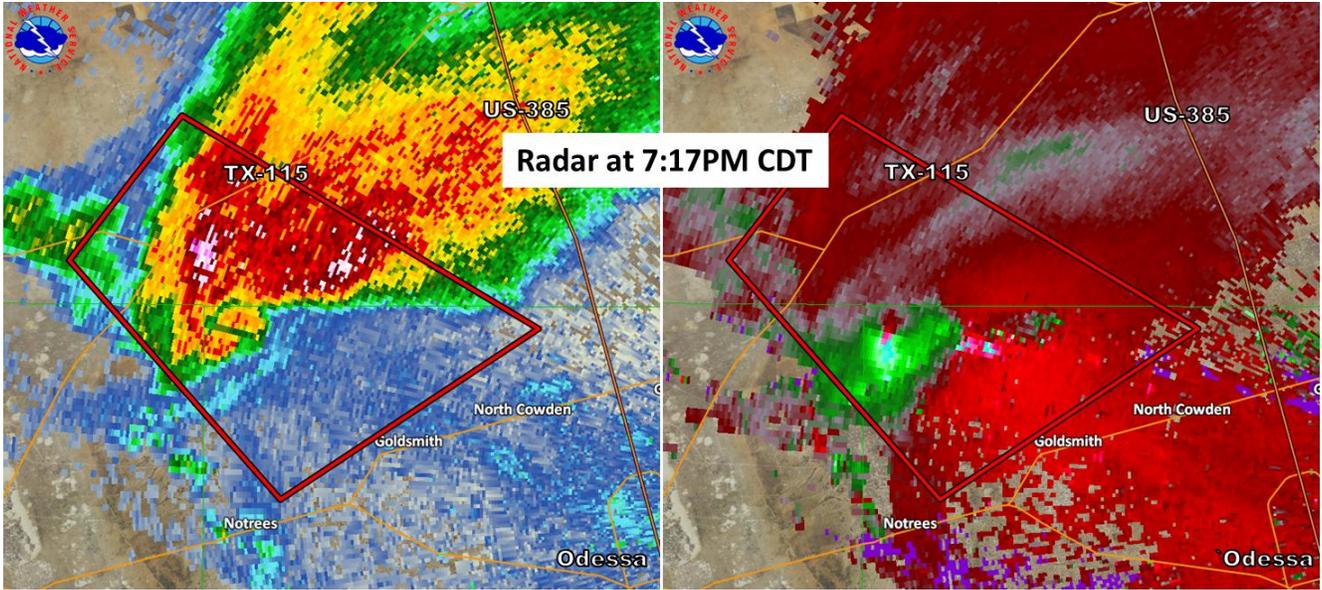
Tornado 17 mi NNE of Carlsbad, NM.



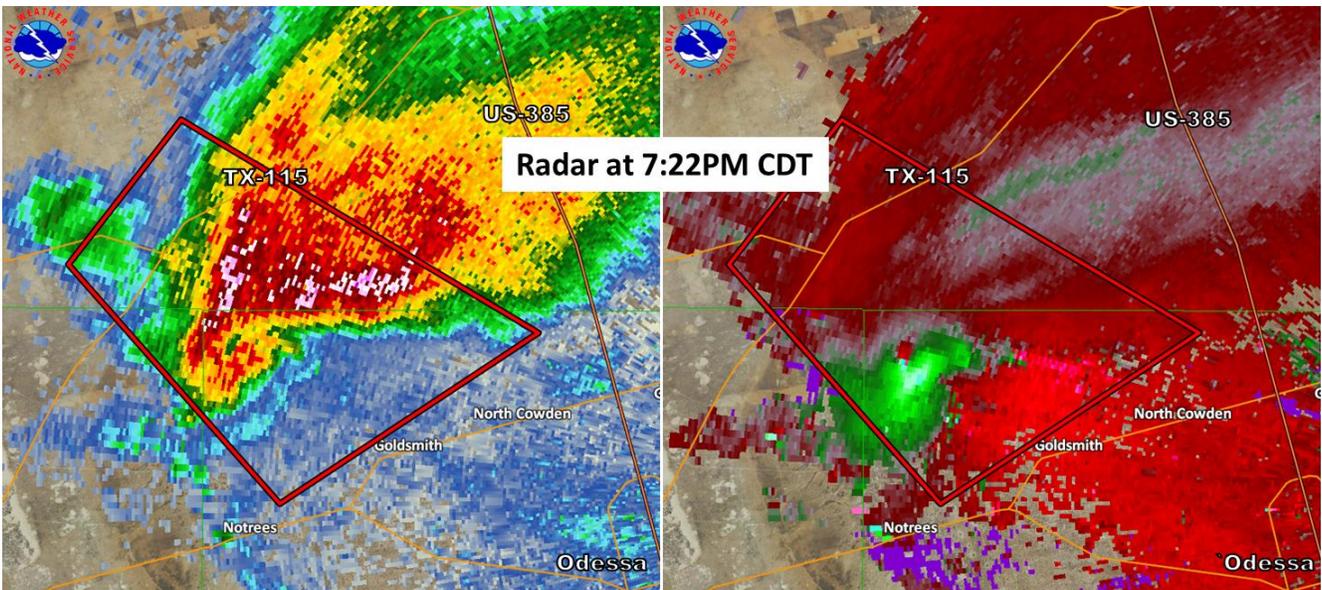
Jal, NM Hailstorm.



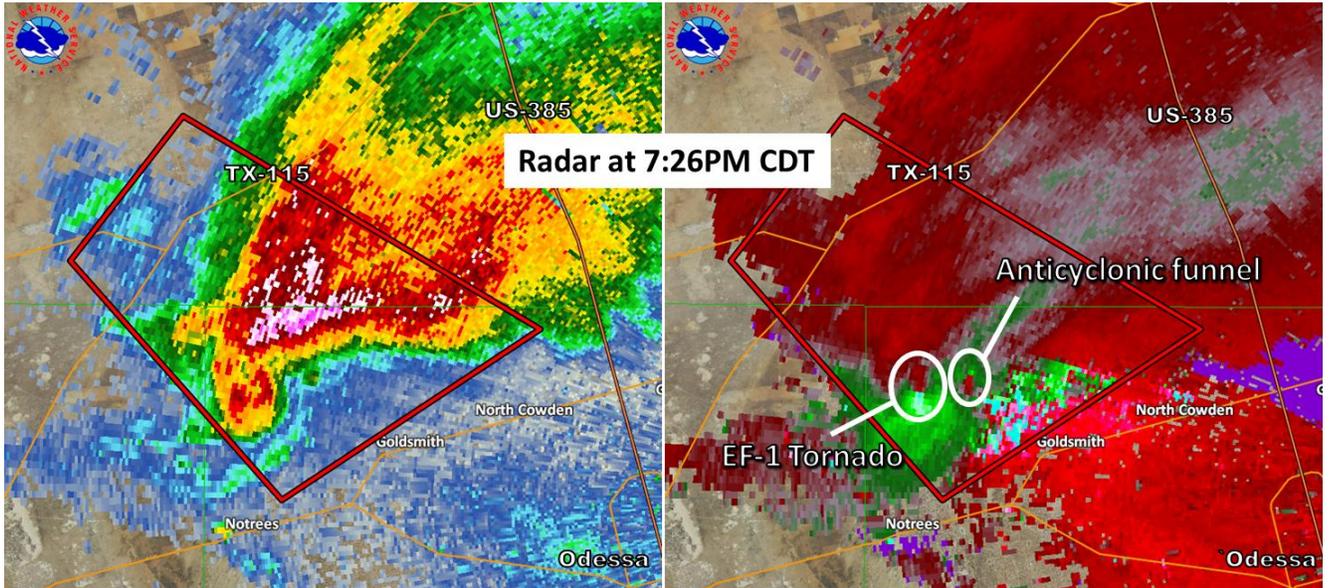
EF-1 Tornado.



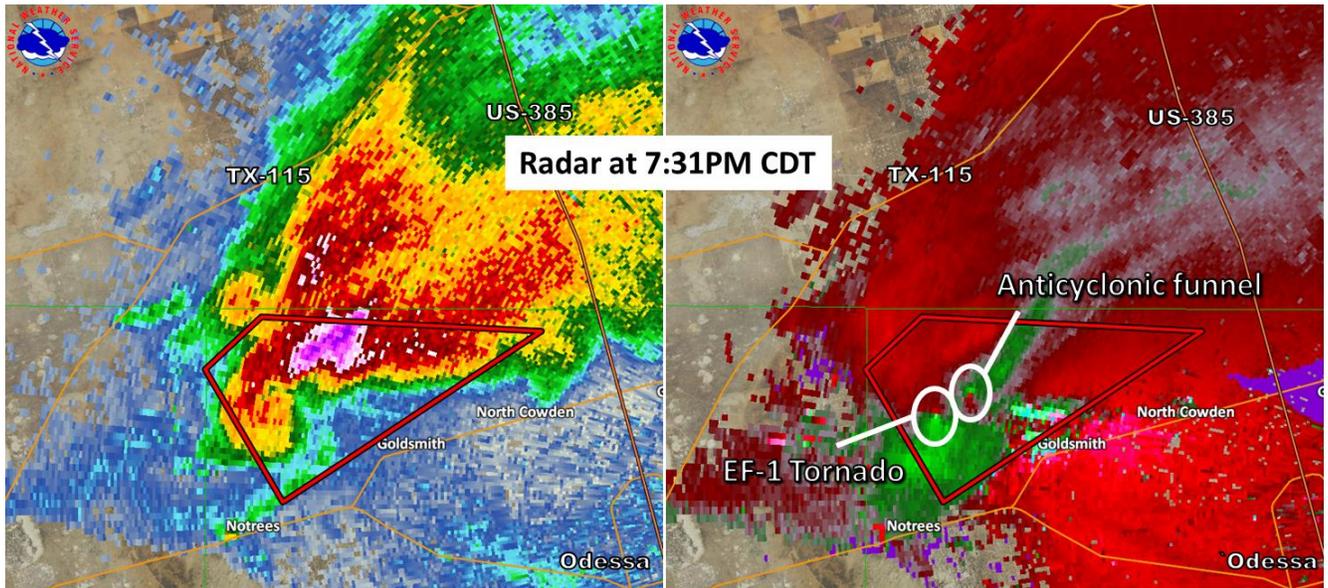
EF-1 Tornado.



EF-1 Tornado.



EF-1 Tornado with Anticyclonic funnel.



EF-1 Tornado.