NWS Surveys Damage from October 27, 2010, Tornadoes

The National Weather Service confirms that five tornadoes touched down in north central North Carolina on Wednesday, October 27, 2010. Two supercell thunderstorms produced 5 tornadoes across Person, Orange, Granville and Vance counties (Fig. 1) during the afternoon and evening. Below are details on each tornado, include tracks and a few damage photos.

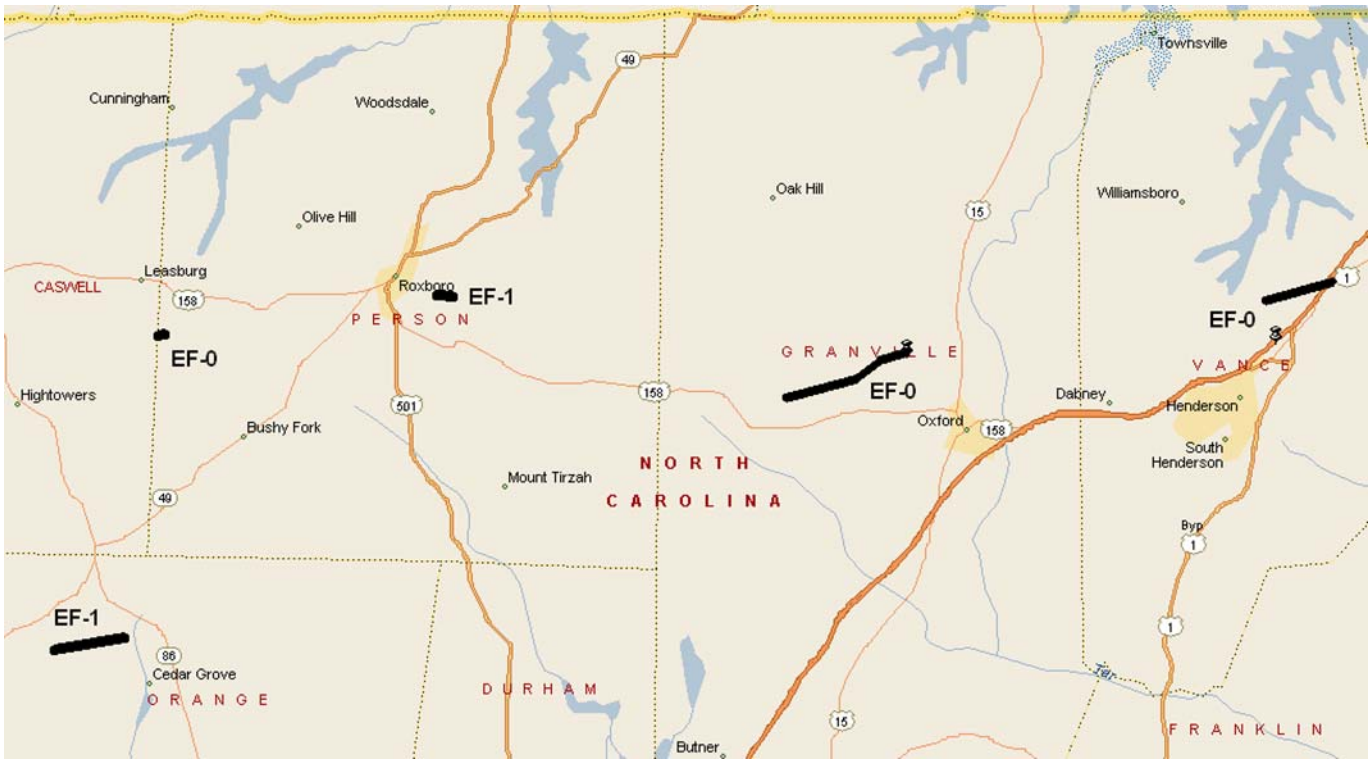

Figure 1: 10/28/10 tornado tracks

For reference, the Enhanced Fujita (EF) scale classifies tornadoes into the following categories:

EF0...wind speeds 65 to 85 mph.
EF1...wind speeds 86 to 110 mph.
EF2...wind speeds 111 to 135 mph.
EF3...wind speeds 136 to 165 mph.
EF4...wind speeds 166 to 200 mph.
EF5...wind speeds greater than 200 mph.

Note: the information in this document is preliminary and subject to change pending final review of the event(s) and publication in NWS Storm Data.

A summary of each individual tornado including maps, damage details and pictures can be found on the following pages.

Tornado #1 (fig. 2):

...EF-0 TORNADO CONFIRMED NEAR ROXBORO LAKE IN WESTERN PERSON COUNTY NORTH CAROLINA...

LOCATION...ROXBORO LAKE IN WESTERN PERSON COUNTY NORTH CAROLINA
DATE...10/27/2010
ESTIMATED TIME... 358 PM EDT
MAXIMUM EF-SCALE RATING... EF-0
ESTIMATED MAXIMUM WIND SPEED... 75 TO 80 MPH
MAXIMUM PATH WIDTH... 50 YARDS
PATH LENGTH... 200 YARDS
BEGINNING LAT/LON... 36.37N / 79.15W
ENDING LAT/LON... 36.37N / 79.14W
* FATALITIES...NONE
* INJURIES...NONE

...SUMMARY...
The National Weather Service in Raleigh NC has confirmed a tornado near Roxboro Lake in western Person County North Carolina on 10/27/2010.

Numerous trees were snapped off and uprooted in a small area along Gordonton Road south of U.S. Highway 158 near Roxboro Lake.

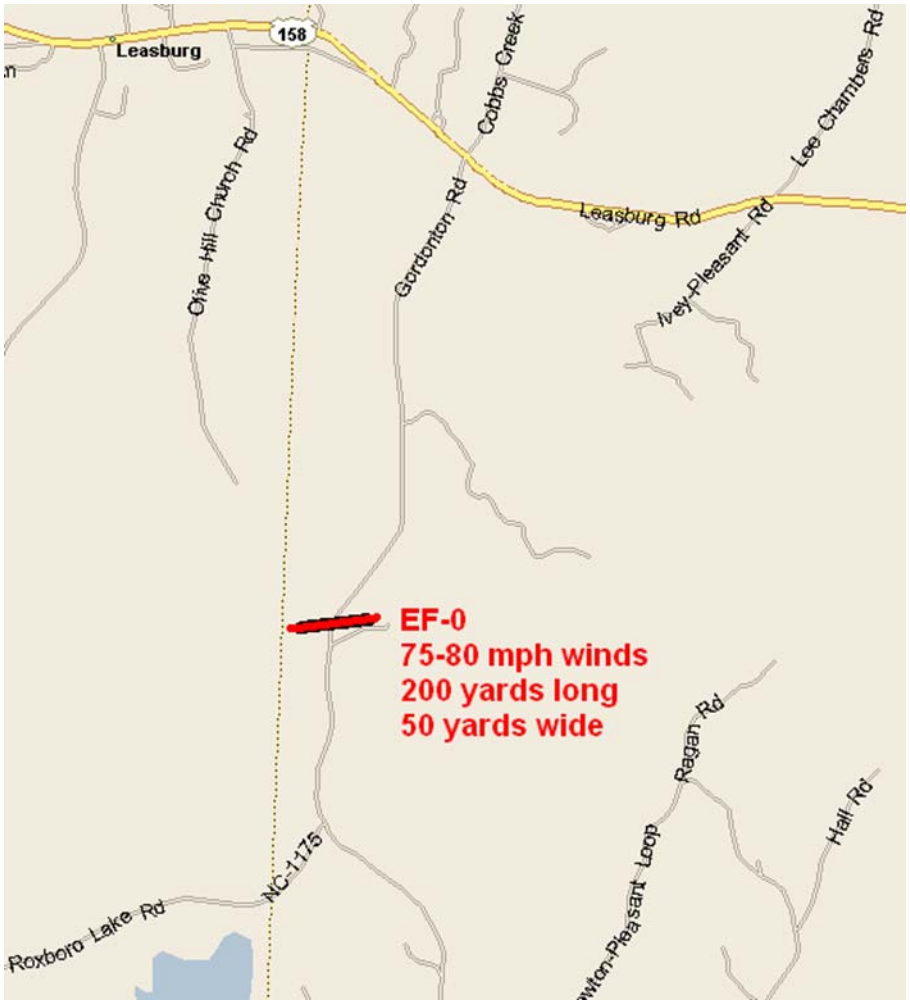

Figure 2: EF-0 tornado track in western Person County

Tornado #2 (fig. 3):

...EF-1 TORNADO CONFIRMED NEAR ROXBORO IN PERSON COUNTY NORTH CAROLINA...

LOCATION...ROXBORO IN PERSON COUNTY NORTH CAROLINA
DATE...10/27/2010
ESTIMATED TIME... 413 PM EDT
MAXIMUM EF-SCALE RATING... EF-1 ESTIMATED
MAXIMUM WIND SPEED... 86 TO 90 MPH
MAXIMUM PATH WIDTH... 50 YARDS
PATH LENGTH... 0.5 MILES
BEGINNING LAT/LON...36.39N / 78.95W
ENDING LAT/LON...36.39N / 78.94W
* FATALITIES...NONE
* INJURIES...NONE

...SUMMARY...
The National Weather Service in Raleigh NC has confirmed a tornado near Roxboro in person county North Carolina on 10/27/2010.

A supercell thunderstorm produced a short lived EF-1 tornado which produced significant damage to a double wide modular home along apple tree lane near Allensville road. The modular home was shifted up to 40 feet off of its foundation and sustained significant structural damage...with 50 percent of the roof destroyed. One individual was inside of the modular home at the time of the tornado and was not injured. Nearby modular homes sustained minor damage to the roof and siding. Numerous trees were either snapped off or uprooted at this location. Winds were estimated to be between 86 to 90 mph.

The tornado tracked eastward and across a wooded area before crossing Ruff Davis road... Where several trees were snapped off and downed in different directions. The tornado lifted as it moved into another wooded area east of Ruff Davis road.

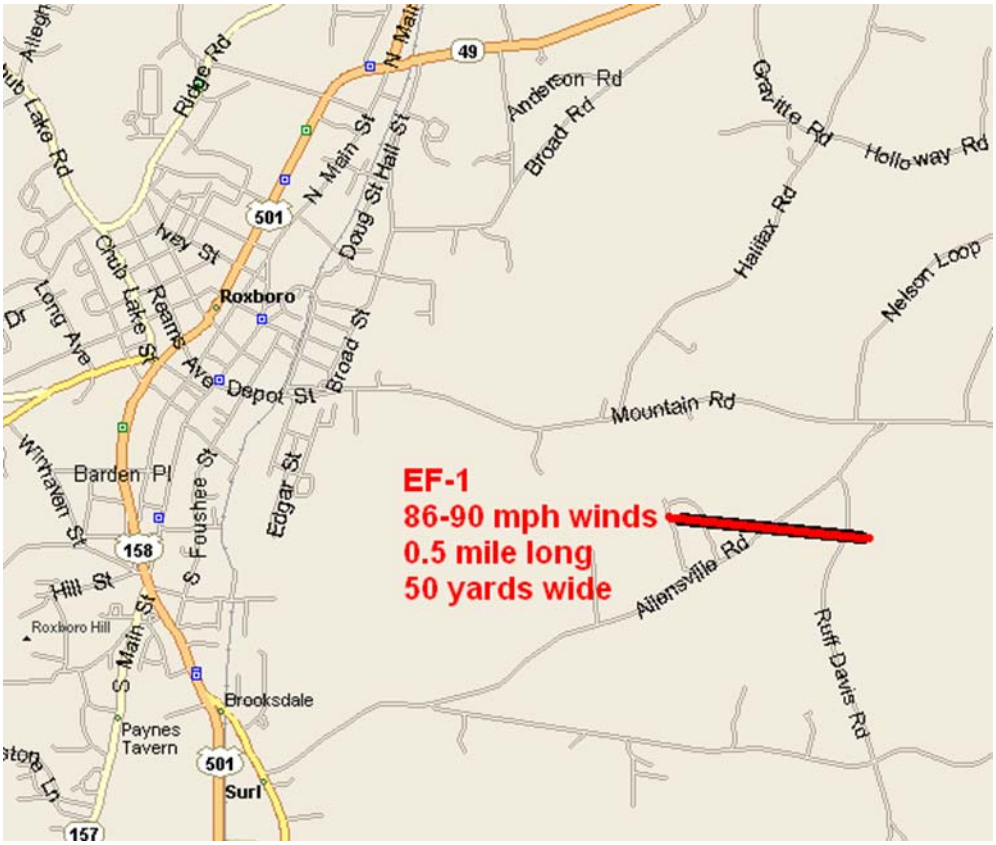

Figure 3: EF-1 tornado near Roxboro on Apple Tree Lane

Figure 4: Double-wide mobile home blown off foundation on Apple Tree Lane (Tornado #2)

Figure 5: Damage to home on Apple Tree Lane (Tornado #2)

Tornado #3 (fig. 6):

...EF-1 TORNADO CONFIRMED NEAR CARR IN ORANGE COUNTY NORTH CAROLINA...

LOCATION...CARR IN ORANGE COUNTY NORTH CAROLINA
DATE...10/27/2010
ESTIMATED TIME...530 PM EDT
MAXIMUM EF-SCALE RATING...EF1
ESTIMATED MAXIMUM WIND SPEED...95 MPH
MAXIMUM PATH WIDTH...50 YARDS
PATH LENGTH...2.5 MILES
BEGINNING LAT/LON...36.19 / 79.22W
ENDING LAT/LON...36.20 / 79.17W
* FATALITIES...0
* INJURIES...0

...SUMMARY...
The National Weather Service in Raleigh NC has confirmed a tornado near Carr in Orange County North Carolina on 10/27/2010.

A supercell thunderstorm produced a series of tornadoes across portions of Orange... Granville... and Vance counties in central North Carolina. The first of which produced EF-1 damage with winds between 90 to 95 mph along Carr Store Road near Allie Mae Road in northern Orange County. At this location a church sustained significant damage...with two walls made of cinder blocks blown down. Numerous hard and soft wood trees were also snapped off and uprooted at this location.

The tornado continued to track east northeast and damaged two homes along Pentecost Road. Both homes sustained roof damage...including a partially collapsed chimney. Two individuals were home at the time of the tornado and were not injured. Numerous trees where snapped off and uprooted at this location as well. Winds were estimated to range from 86 to 90 mph.

The tornado weakened as it continued to track east north-east across Mcdade Store Road and Efland-Cedar Grove Road... before lifting. Numerous trees were either damaged or downed during this area.

Figure 6: EF-1 tornado in northern Orange County near Carr

Figure 7: Church damaged near Carr from EF-1 tornado (Tornado #3)

Figure 8: Wall blown out of a church near Carr (Tornado #3)

Tornado #4 (fig. 9):

...EF-0 TORNADO CONFIRMED NEAR BEREA IN GRANVILLE COUNTY NORTH CAROLINA...

LOCATION...JUST EAST OF BEREA IN GRANVILLE COUNTY NORTH CAROLINA
DATE...10/27/2010
ESTIMATED TIME...615 AM EDT
MAXIMUM EF-SCALE RATING...EF-0
ESTIMATED MAXIMUM WIND SPEED...80-85 MPH
MAXIMUM PATH WIDTH...100 YARDS
PATH LENGTH...5.25 MILES
BEGINNING LAT/LON...36.33N / 78.71W
ENDING LAT/LON...36.35N / 78.63N
* FATALITIES...NONE
* INJURIES...NONE

...SUMMARY...
The National Weather Service in Raleigh NC has confirmed an ef-0 tornado just east of Berea in Granville County North Carolina on 10/27/2010.

A supercell thunderstorm moving northeast across orange and person counties had already produced a tornado near Cedar Grove in northern Orange County. This same storm produced a second tornado which touched down just east of Berea in Granville County. This EF-0 tornado tracked over 5 miles with a path width near 100 yards and winds of 80 to 85 mph. The touched down north of Highway 158 near the intersection of Bob Daniel Road and Hebron Road. Numerous trees were uprooted and shingles were blown off houses. The tornado continued moving east-northeast partially removing the roof from a house on Hebron Road and destroying 2 sheds at 1657 Elam Currin Road. A neighbor on Elam Currin Road stated he heard the warning on NOAA Weather Radio before the tornado struck and took cover with his wife in an interior hallway.

The tornado then crossed Pine Town Road where more minor damage to tin roofing and shingles was noted before crossing Graham-Hobgood Road. Numerous outbuildings were severely damaged along Joe Pruitt Road near its intersection with Graham-Hobgood Road. At least 2 outbuildings were destroyed and as many as 4 others suffered substantial damage. A single wide mobile home was shifted about 2 feet...however...the tie downs and anchors held which kept the trailer from overturning. Winds in this area were rated around 80 to 85 mph based on the noted damage. The tornado then turned a little more to the northeast... crossing Bodie Currin Road causing minor roof damage to a residence at 2543 Bodie Currin Road. Numerous trees were blown down in this area and other homes suffered shingle and siding damage. The tornado then crossed Highway 96 lifting off the ground near the intersection of Cornwall Road and Sterl Carrington Road.

All residents interviewed were aware of the tornado warnings via television and radio. Special thanks to Granville County Emergency Management and local residents for assisting with the tornado survey.

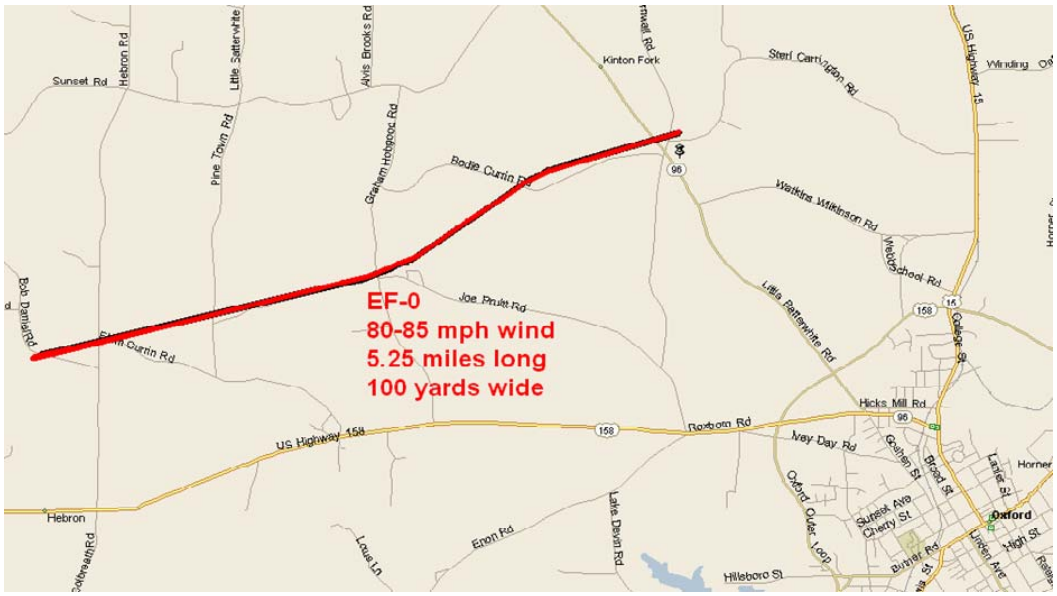

Figure 9: EF-0 tornado in Granville County east of Berea

Figure 10: Damaged barn on Joe Pruitt Road (Tornado #4)

Figure 11: Shed destroyed on Elam Currin Road (Tornado #4)

Tornado #5 (fig. 12):

...EF-0 TORNADO CONFIRMED JUST WEST OF MIDDLEBURG IN VANCE COUNTY NORTH CAROLINA...

LOCATION...JUST WEST OF MIDDLEBURG IN VANCE COUNTY NORTH CAROLINA
DATE...10/27/2010
ESTIMATED TIME...650 PM EDT
MAXIMUM EF SCALE RATING...EF-0
ESTIMATED MAXIMUM WIND SPEED...75-80 MPH
MAXIMUM PATH WIDTH...50 YARDS
PATH LENGTH...2.75 MILES
BEGINNING LAT/LON...36.38N / 78.38W
ENDING LAT/LON...36.39N / 78.33W
* FATALITIES...NONE
* INJURIES...NONE

...SUMMARY...
The National Weather Service in Raleigh NC has confirmed an EF-0 tornado just west of Middleburg in Vance County North Carolina on 10/27/2010.

A supercell thunderstorm moving northeast across Orange...Person and Granville counties had already produced a tornado near Cedar Grove in Orange County and a second tornado near Berea in Granville county. The same storm produced a third tornado north of Henderson and just west of Middleburg. This EF-0 tornado...which was the weakest of the three...tracked near 3 miles with a path width of 50 yards and winds of 75 to 80 mph.

The tornado initially touched down on Coopers Grove Road blowing limbs out of trees and causing minor damage to a couple of sheds and outbuildings. The tornado tracked east-northeast crossing Satterwhite Point Road blowing down and snapping numerous trees. Some minor damage to 2 homes occurred along with some damage to an above ground pool. The tornado then crossed Mabry Mill Road causing extensive damage to trees which blocked Mabry Mill Road damaging the guardrails. As the tornado continued east it crossed Interstate 85 and caused some minor awning and roof damage to the Snackers BP gas station at exit 220. The tornado then lifted off the ground after striking the gas station.

Nearly all residents interviewed were aware of the tornado warnings via television...radio and scanners. Special thanks to Vance County Emergency Management and local residents for assisting with the tornado survey.

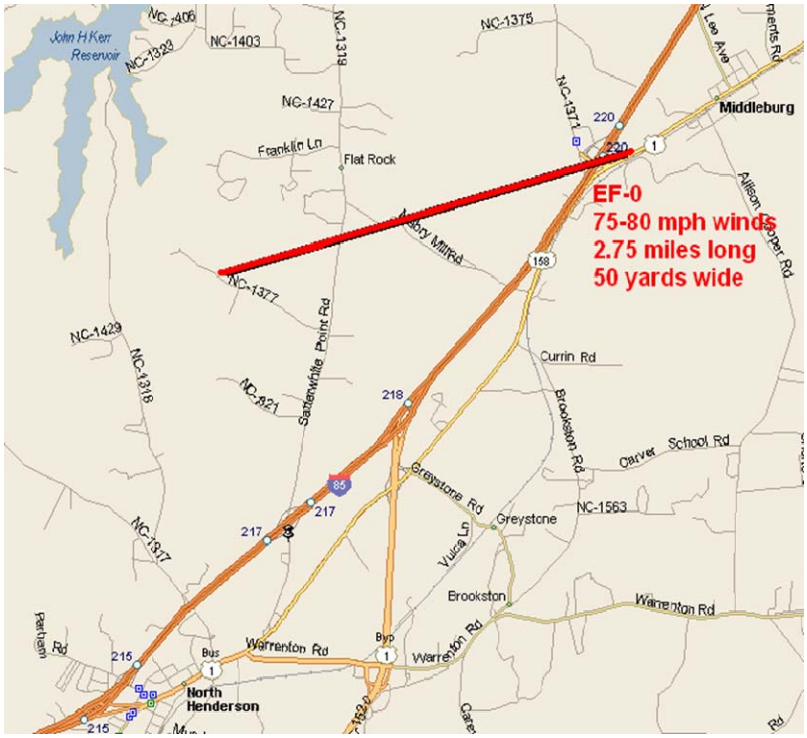

Figure 12: EF-0 tornado in Vance County near Middleburg (Tornado #5)