



National Weather Service Des Moines



May 11, 2014 Storm Survey for Guthrie, Dallas, and Boone Counties

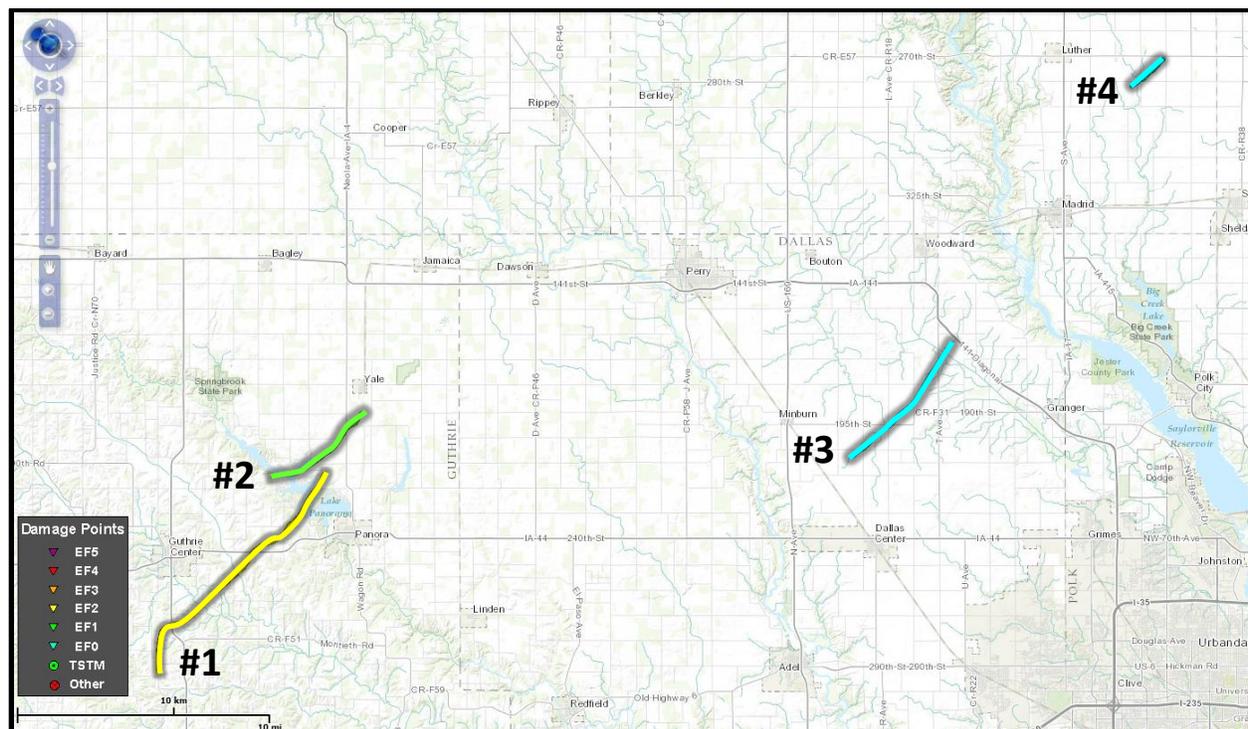
Overview:

A line of severe thunderstorms tracked across central Iowa late in the evening of May 11, 2014, bringing with it damaging winds, torrential rainfall, a number of tornadoes, and large hail. Across central Iowa, the storm complex dropped four tornadoes. The strongest of these tornadoes formed south of Guthrie Center and quickly tracked northeast across Lake Panorama, where it briefly produced EF-2 damage. A second tornado formed on the north end of Lake Panorama and damaged a number of homes along the shore before dissipating south of Yale. A third tornado formed north of Dallas Center and tracked across farmland and a fourth tornado touched down in SE Boone County and damaged a farmstead.

Event Facts:

Number of Tornadoes across North Central Iowa: 4

EF-0 Tornadoes: 2 EF-1 Tornadoes: 1 EF-2 Tornadoes: 1



Tornado 1: 4.5 miles S of Guthrie Center

This tornado formed 4.5 miles south of Guthrie Center and tracked northeastward, producing EF-0 to EF-1 damage east of Guthrie Center. The narrow tornado then strengthened as it reached Lake Panorama, where it briefly reached low EF-2 intensity and damaged several homes and condos, along with dozens of trees. The tornado was overtaken by downdraft winds and dissipated shortly after crossing Lake Panorama.

Tornado Strength: EF-2

Estimated Time: 9:43pm to 9:58pm CDT

Event Location: 4.5 miles S of Guthrie Center to 2.6 miles NW of Panora

Peak Wind Speed: 115 mph

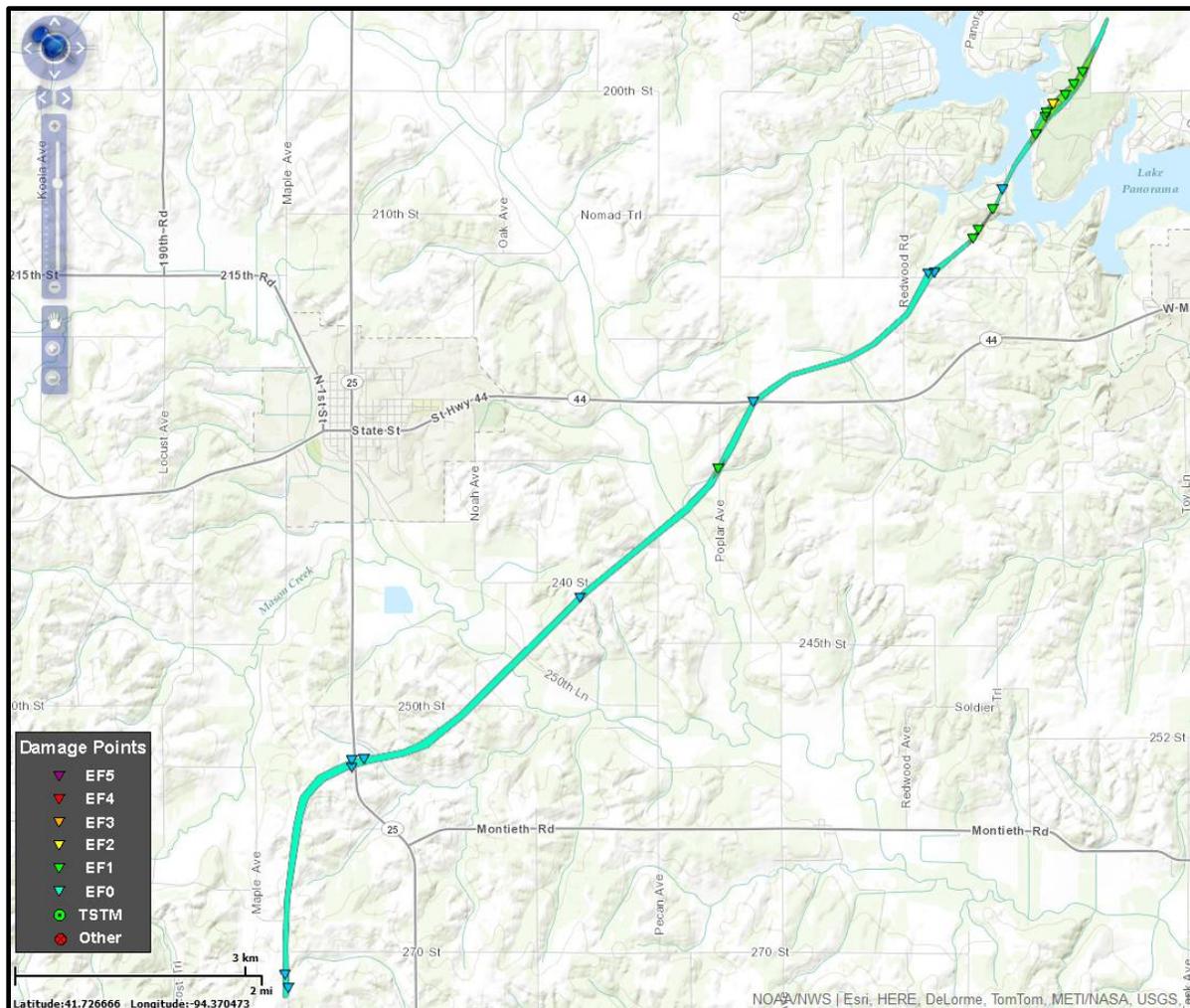
Path Length: 10.98 miles

Average Path Width: 100 yards

Injuries: 0

Fatalities: 0

Tornado 1 Path Map:



Tornado 1 Damage Photos:



A row of condos on the east side of Lake Panorama had their roofs and second story walls removed. The tornado was rated at a low end EF-2 at this location.



A partially destroyed barn early on in the track of the tornado south of Guthrie Center.

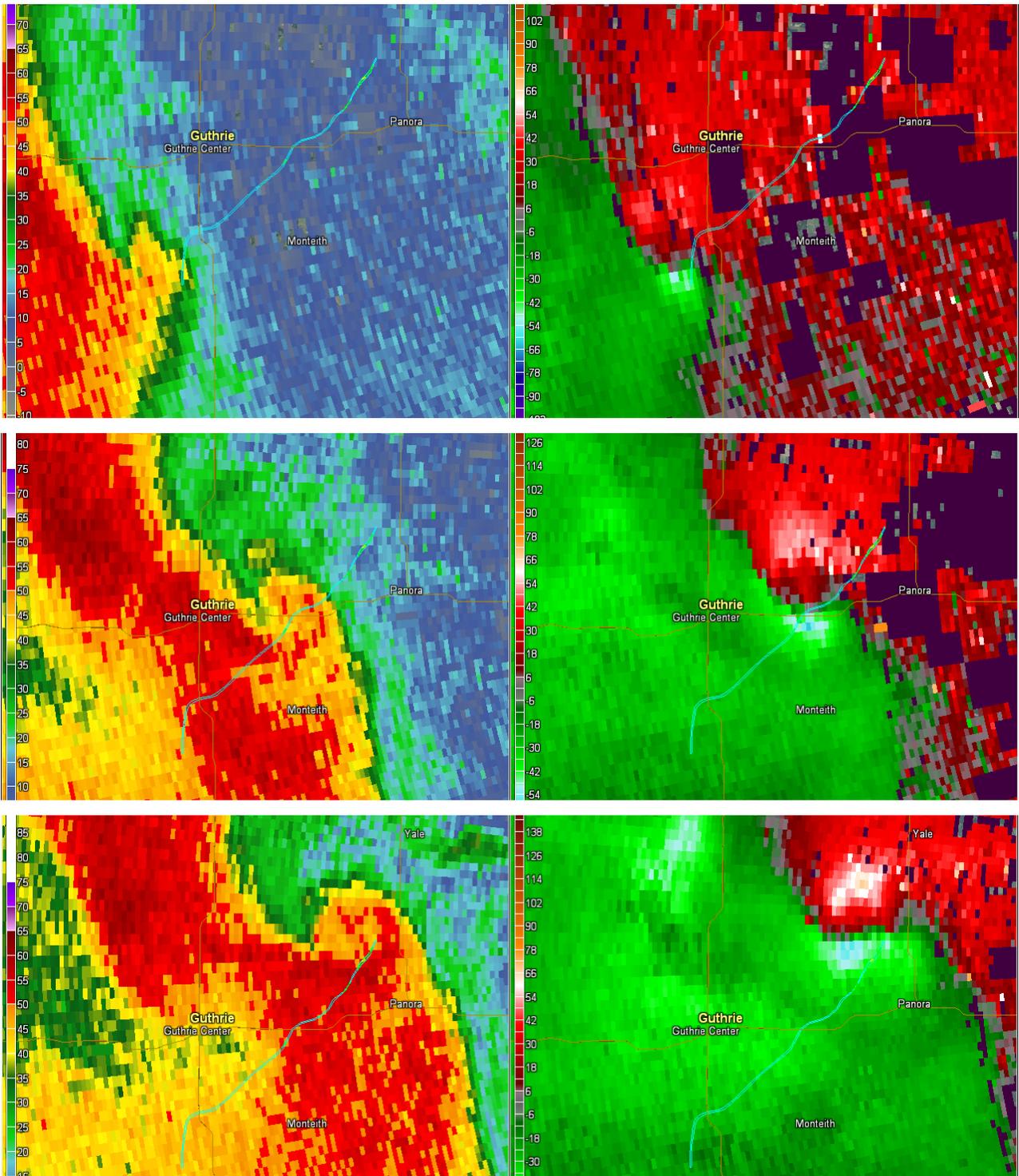


Trees downed at the Lake Panorama National Golf Course. Photo Courtesy of John McLaughlin, Iowa Helicopter. Used with Permission.



Aerial photo of the EF-2 damage to the condos. Photo Courtesy of John McLaughlin, Iowa Helicopter. Used with Permission.

Tornado 1 Radar Images:



A sequence of images from the Des Moines WSR-88D radar during the life of the tornado. The path of the tornado is overlaid for comparison. Left image is base reflectivity and the right image is storm-relative velocity. Times are 9:43pm CDT, 9:53pm CDT, and 9:57pm CDT.

Tornado 2: 3.8 miles NW of Panora

As Tornado #1 was crossing Lake Panorama, a second tornado took shape a couple of miles further north on the west side of the lake. This tornado quickly strengthened to an EF1 and damaged a number of properties along the lake. The tornado then turned to the northeast and eventually dissipated a mile south of Yale as downdraft winds overtook the vortex.

Tornado Strength: EF-1

Estimated Time: 9:56pm to 10:03pm CDT

Event Location: 3.8 miles NW of Panora to 1.2 miles S of Yale

Peak Wind Speed: 100 mph

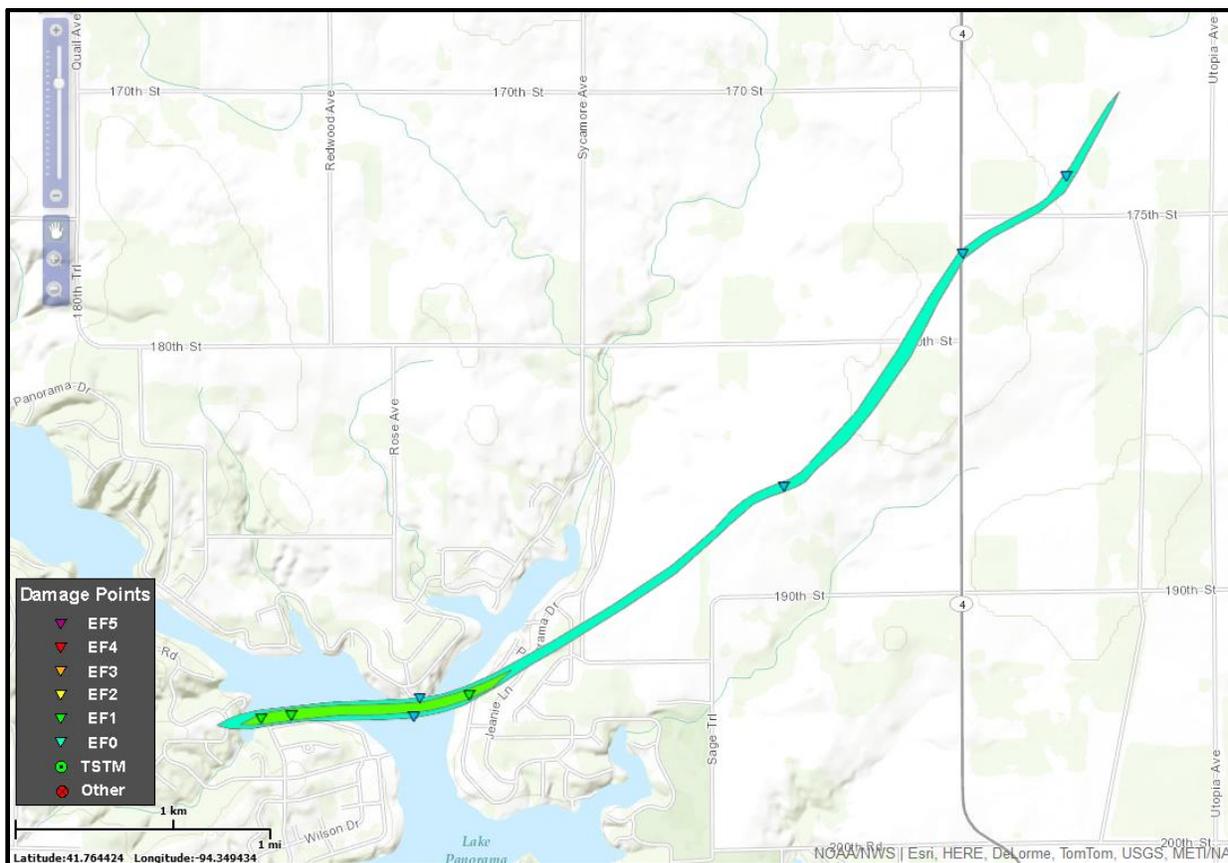
Path Length: 4.57 miles

Average Path Width: 110 yards

Injuries: 0

Fatalities: 0

Tornado 2 Path Map:



Tornado 2 Damage Photos:

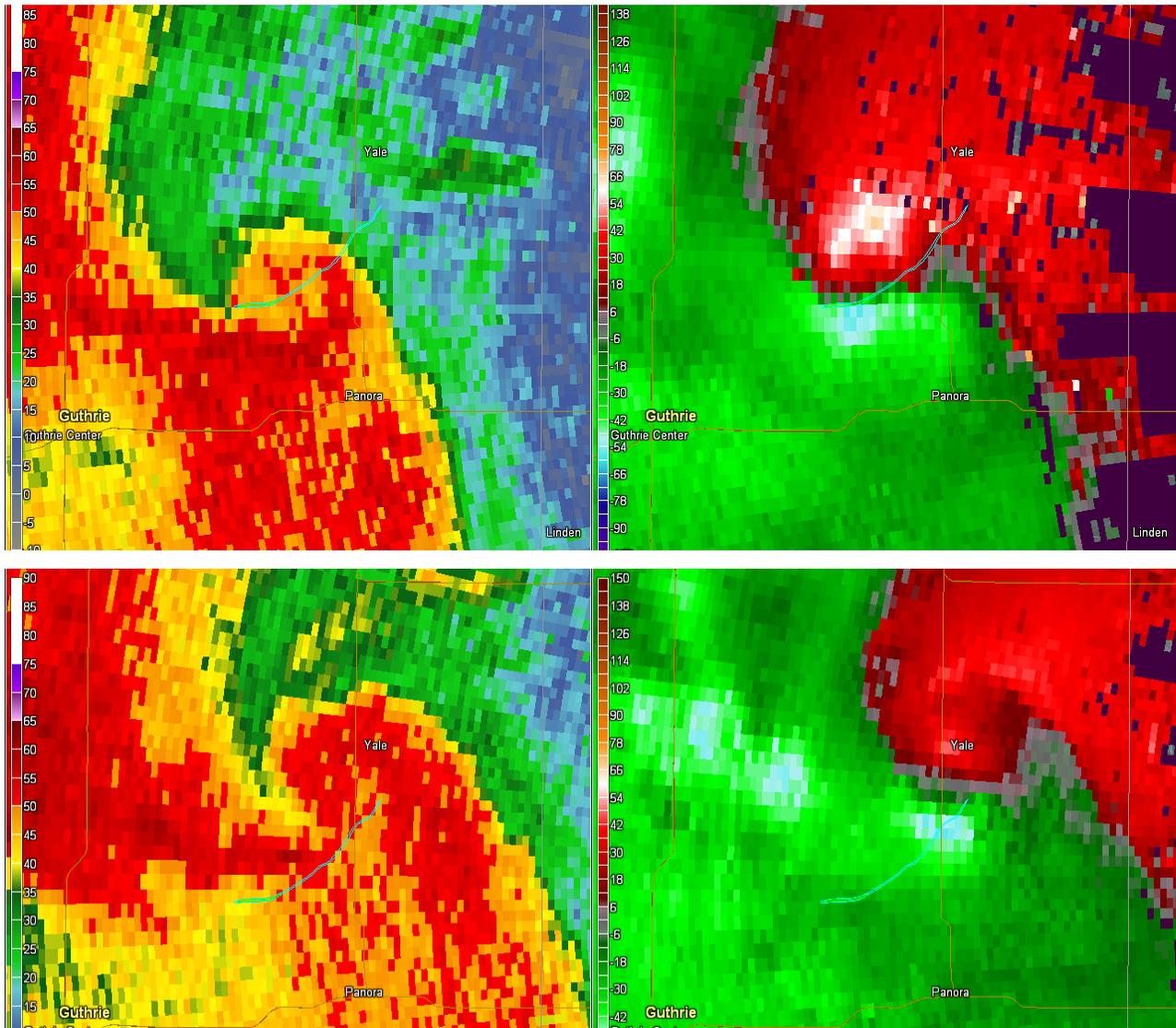


Many trees were uprooted along the tornado's path.



A falling tree crushed a car in a driveway.

Tornado 2 Radar Images:



A sequence of images from the Des Moines WSR-88D radar during the life of the tornado. The path of the tornado is overlaid for comparison. Left image is base reflectivity and the right image is storm-relative velocity. Times are 9:57pm CDT and 10:02pm CDT.

Tornado 3: 3.5 miles NNW of Dallas Center

A combination of radar imagery, a ground survey, and aerial photography revealed that a third tornado touched down in rural Dallas County north of Dallas Center and tracked northeastward for 6 miles. This tornado was accompanied by strong RFD winds and damage was confined to farm outbuildings. A special thanks to John McLaughlin for aerial photos of this track.

Tornado Strength: EF-0

Estimated Time: 10:21pm to 10:27pm CDT

Event Location: 3.5 miles NNW of Dallas Center to 4.8 miles NW of Granger

Peak Wind Speed: 85 mph

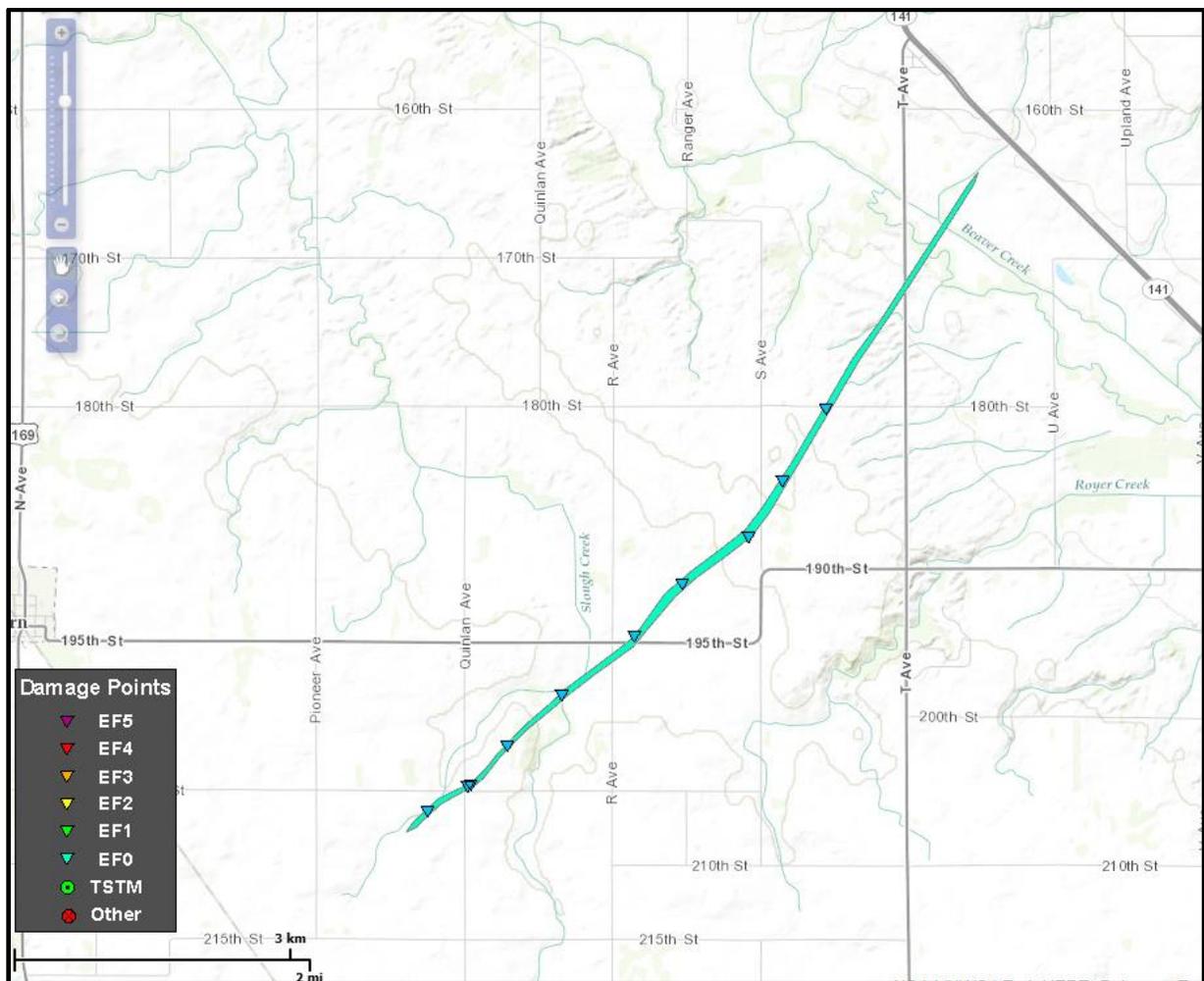
Path Length: 6.0 miles

Average Path Width: 100 yards

Injuries: 0

Fatalities: 0

Tornado 3 Path Map:



Tornado 3 Damage Photos:

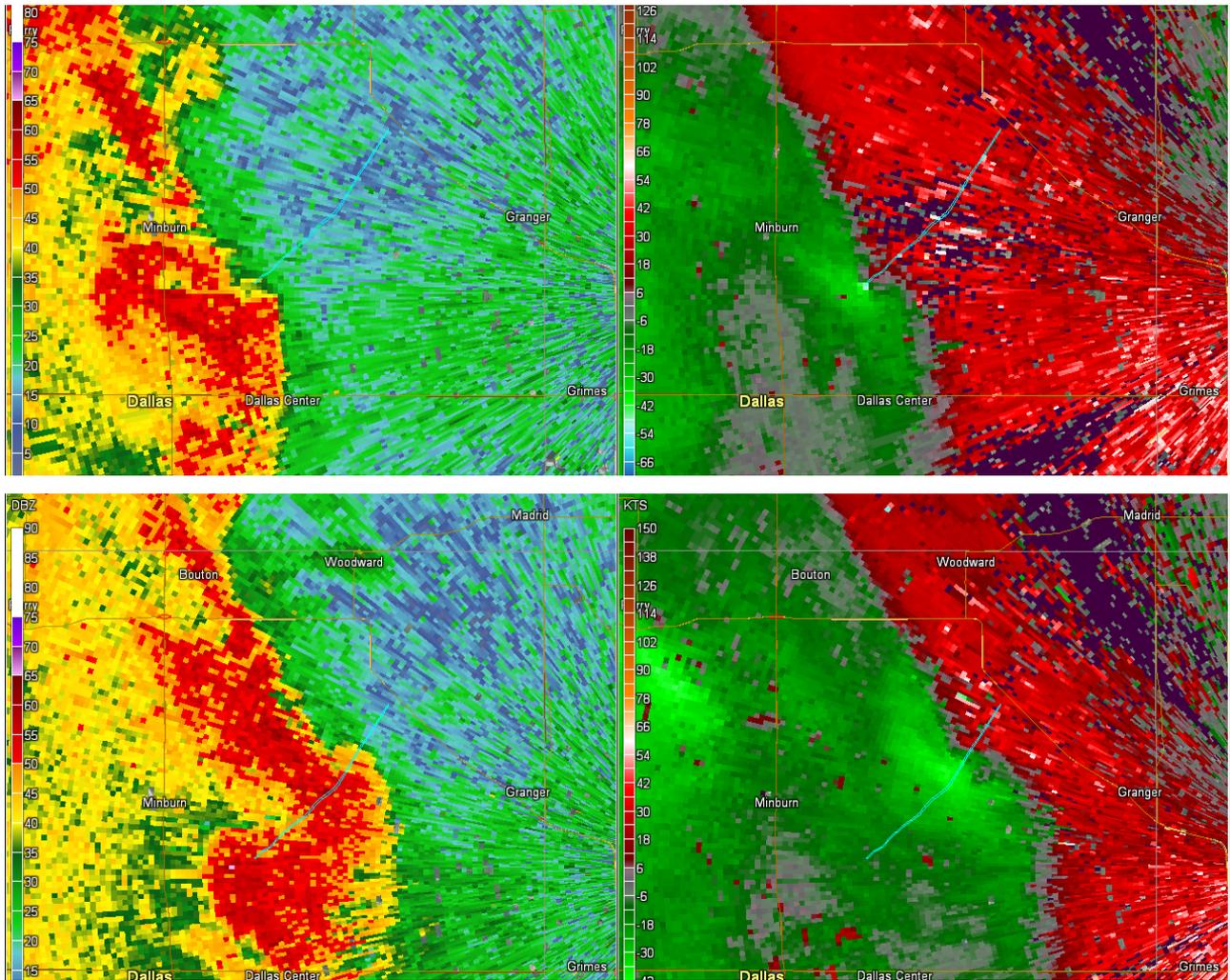


Farm buildings damaged by the tornado.



Scouring of the field northeast of Dallas Center denotes the track of the tornado. Photo Courtesy of John McLaughlin, Iowa Helicopter. Used with Permission.

Tornado 3 Radar Images:



A sequence of images from the Des Moines WSR-88D radar during the life of the tornado. The path of the tornado is overlaid for comparison. Left image is base reflectivity and the right image is storm-relative velocity. Times are 10:21pm CDT and 10:25pm CDT.

Tornado 4: 3.0 miles SE of Luther

This brief tornado formed in rural southeast Boone County and damaged a shelterbelt and farmstead. Damage at the farmstead was confined to trees, with damage to structures coming from falling tree debris.

Tornado Strength: EF-0

Estimated Time: 10:44pm to 10:46pm CDT

Event Location: 3.0 miles SE of Luther to 1.7 miles SW of Napier

Peak Wind Speed: 85 mph

Path Length: 1.71 miles

Average Path Width: 100 yards

Injuries: 0

Fatalities: 0

Tornado 4 Path Map:



Tornado 4 Damage Photos:

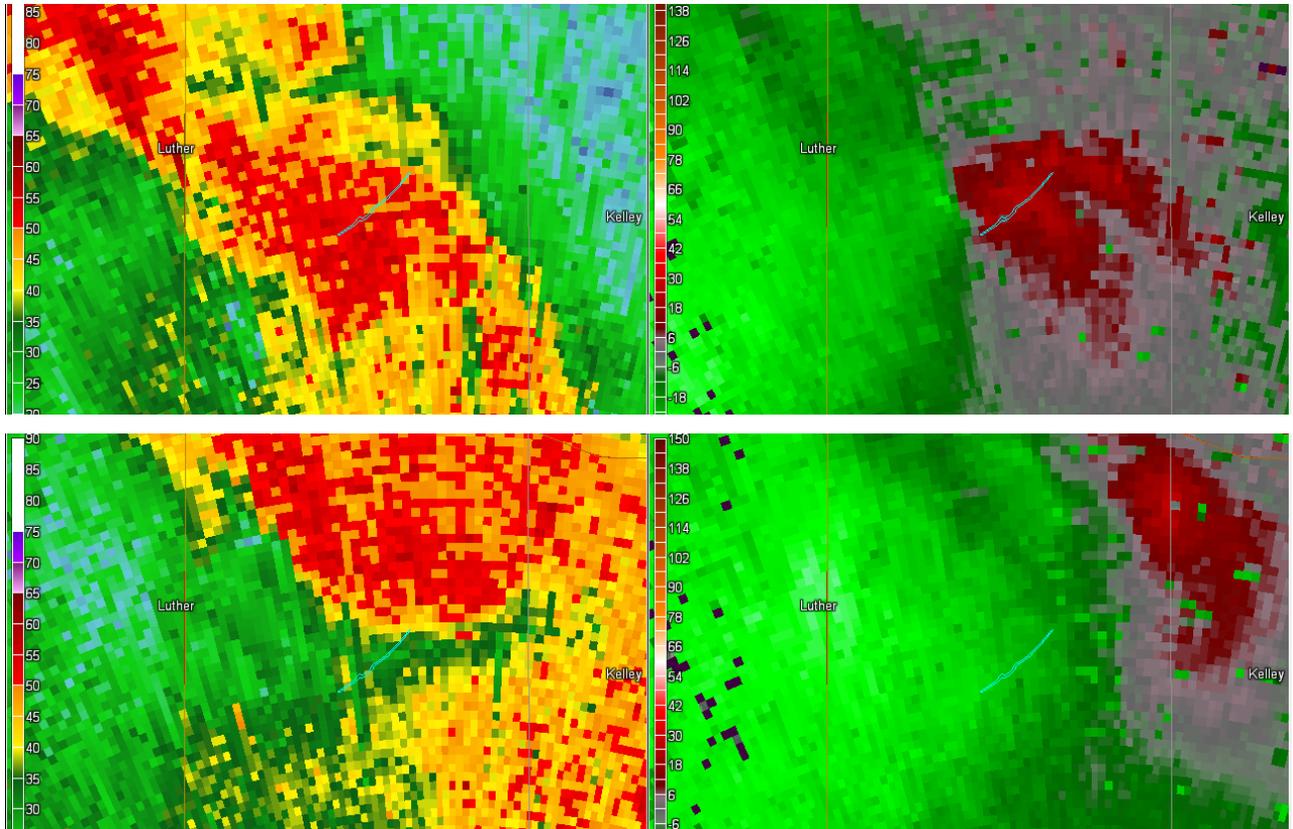


Tree damage at the farmstead from the tornado.



Scouring of the field denotes the track of the tornado. Photo Courtesy of John McLaughlin, Iowa Helicopter. Used with Permission.

Tornado 4 Radar Images:



A sequence of images from the Des Moines WSR-88D radar during the life of the tornado. The path of the tornado is overlaid for comparison. Left image is base reflectivity and the right image is storm-relative velocity. Times are 10:44pm CDT and 10:49pm CDT.
