

Nine Tornadoes Across the Area

May 31st, 2013

Overview

A total of nine tornadoes were surveyed by the National Weather Service in St. Louis. The two tornadoes that were rated EF3 were associated with the most intense circulation that was located on the leading edge of the line of severe thunderstorms that affected the St. Louis metropolitan area, from St. Charles County, Missouri to Madison County, Illinois. Several other circulations were responsible for seven weaker tornadoes in Montgomery, Franklin, Jefferson Counties in Missouri and Macoupin and Montgomery Counties in Illinois. Many locations outside of the tornado tracks saw extensive wind damage from straight line winds up to 100 mph.

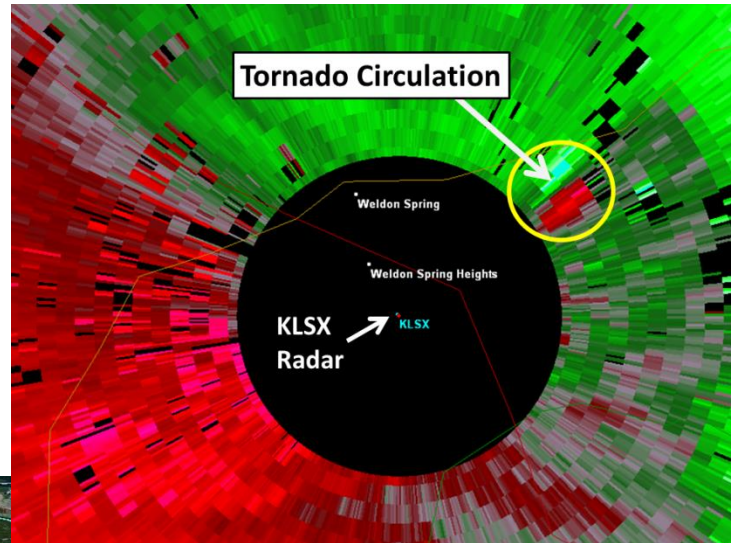
EF3 Tornado (St. Charles County to St. Louis City)

The tornado started about 4 miles southwest of Weldon Spring, in southern St. Charles County, and moved east, northeast through Harvester, Earth City, Bridgeton, Ferguson, Bellefontaine Neighbors, and finally ending at the northern extremity of St. Louis City. The worst damage was found in southern St. Charles County along Haversham Drive, where only interior walls were left standing on three homes. The Hollywood Casino had a building where most of the roof and siding were torn off. The Spectrum Brands building sustained extensive roof and wall damage in Earth City. The Point 70 building, also in Earth City, sustained extensive window damage. Numerous trees fell on homes in Berkeley and Ferguson, with the tree damage continuing to the northern extremity of St. Louis City.

BEGIN TIME/LOCATION: 5/31/13...0750 PM
4 MILES SW OF WELDON SPRING...MISSOURI (LAT 38.6867 LONG -90.7498)

END TIME/LOCATION: 5/31/13...0825 PM
EXTREME NORTHERN ST. LOUIS CITY...MISSOURI (LAT 38.7732 LONG -90.1763)

MAXIMUM ESTIMATED WIND SPEED: 150 MPH (EF3)
PATH LENGTH: 32.5 MILES
PATH WIDTH: 1 MILE (ST. LOUIS COUNTY) INJURIES: 2
MINOR



Annotated WSR-88D Radar Image showing the tornado passed very close to the Weather Forecast Office.



EF3 Tornado South Roxana

DISCUSSION/DAMAGE: THE TORNADO BEGAN ABOUT 5 MILES SWEST OF ROXANA ILLINOIS...IN EXTREME NORTHEAST SAINT LOUIS COUNTY...AND THEN PROCEEDED EAST-NORTHEAST ACROSS THE MISSISSIPPI RIVER INTO MADISON COUNTY ILLINOIS THROUGH THE COMMUNITY OF SOUTH ROXANA. THE HEAVIEST DAMAGE WAS FOUND AT AN INDUSTRIAL-WAREHOUSE BUILDING NEAR A LANDFILL IN SOUTH ROXANNA.

MAXIMUM EF-SCALE RATING: EF-3

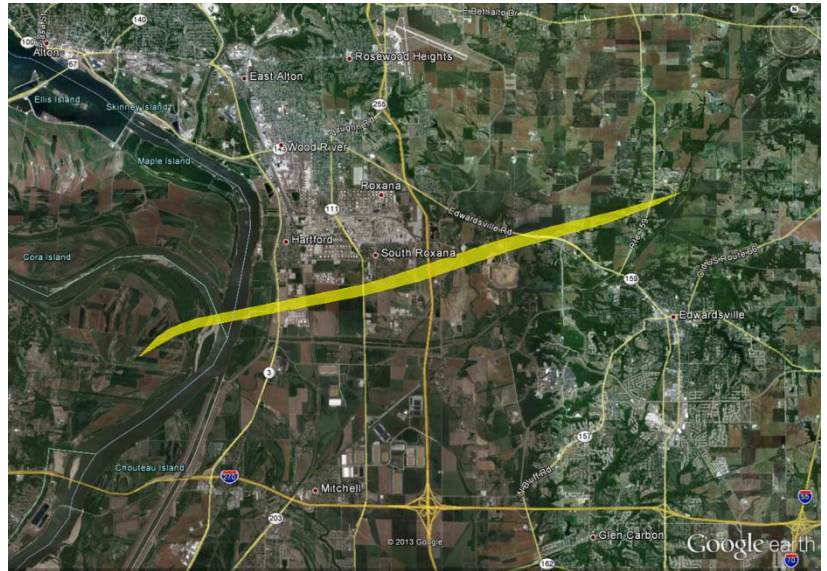
FATALITIES: ZERO

INJURIES: ZERO

BEGIN TIME/LOCATION: 5/31/2013...827 PM CDT
LAT 38.8009 LONG -90.1493

END TIME/LOCATION: 5/31/2013...837 PM CDT
LAT 38.8441 LONG -89.9602

MAXIMUM ESTIMATED WIND SPEED: 160 MPH
PATH LENGTH: 10.8 MILES
MAXIMUM PATH WIDTH: 150 YARDS



EF2 Tornado Gillespie (Macoupin County, Illinois)

DISCUSSION/DAMAGE: THE TORNADO BEGAN ON THE WEST SIDE OF GILLESPIE AND THEN PROCEEDED TO TRAVEL NORTHEAST BEFORE ENDING JUST TO THE NORTHEAST OF GILLESPIE. THERE WAS EXTENSIVE DAMAGE TO TREES AND ROOFS ALONG A WEST SOUTHWEST TO EAST NORTHEAST PATH THROUGH THE TOWN. THE WORST DAMAGE WAS TO A SCHOOL GYMNASIUM.

MAXIMUM EF-SCALE RATING: EF-2

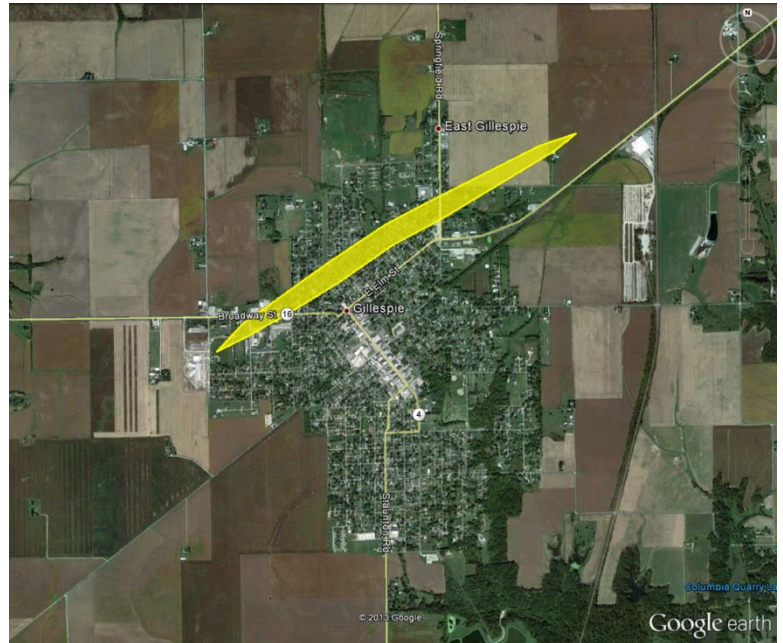
FATALITIES: ZERO

INJURIES: ZERO

BEGIN TIME/LOCATION: 5/31/2013...849 PM CDT
LAT 39.1287 LONG -89.8272

END TIME/LOCATION: 5/31/2013...852 PM CDT
LAT 39.1399 LONG -89.8039

MAXIMUM ESTIMATED WIND SPEED: 115 MPH
PATH LENGTH: 0.9 MILES
MAXIMUM PATH WIDTH: 150 YARDS



EF1 Tornado Waggoner (Macoupin and Montgomery Counties, Illinois)

NATIONAL WEATHER SERVICE PERSONNEL SURVEYED DAMAGE SOUTHWEST OF WAGGONER ILLINOIS IN MONTGOMERY COUNTY AND DETERMINED THAT A WEAK TORNADO OCCURRED OVER THIS AREA.

THE TORNADO INITIALLY TOUCHED DOWN 0.5 MILES SOUTH OF THE INTERSECTION OF COUNTY ROAD 100 EAST AND 2200 NORTH OR 3.5 MILES SOUTH-SOUTHWEST OF WAGGONER ILLINOIS. SEVERAL LARGE TREE LIMBS 6 TO 10 INCHES IN DIAMETER WERE BLOWN DOWN BY THE TORNADO. THE TORNADO PATH AT THIS LOCATION WAS 30 YARDS WIDE. THE TORNADO TRAVELED NORTHEAST AND DAMAGED ONE BARN AND A FEW OUTBUILDINGS ON COUNTY ROAD 2300N AND 1.5 MILES WEST OF INTERSTATE 55. THE ROOF OF TWO OUTBUILDINGS WERE UPLIFTED AND TOSSED 100 TO 150 YARDS TO THE NORTHEAST. ANOTHER OUTBUILDING WAS SEVERELY DAMAGED ON COALFIELD ROAD AND 0.5 MILES WEST OF I55. DAMAGE INTENSITY WAS RATED EF1. DEBRIS FROM THIS MACHINE SHED WAS TOSSED ACROSS A CORN FIELD AND ACROSS I55. THE TORNADO THEN DAMAGED A THIRD FARMSTEAD ON COUNTY ROAD 2500N APPROXIMATELY A QUARTER OF A MILE EAST OF I55. WINDOWS WERE BLOWN INWARD ON A TWO STORY FARM HOME AND TWO MACHINE SHEDS WERE SEVERLY DAMAGED. THE DAMAGE INTENSITY WAS RATED EF1 AND DAMAGE WAS 40 YARDS WIDE. THE TORNADO CONTINUED TO MOVE NORTHEAST AND DOWNED LARGE BRANCHES 6 TO 10 INCHES IN DIAMETER ON EAST WAGGONER ROAD 2.0 MILES EAST OF WAGGONER ILLINOIS. THE TORNADO DISSIPATED FROM THIS POINT.

MAXIMUM EF-SCALE RATING: EF-1

FATALITIES: NONE

INJURIES: NONE

BEGIN TIME/LOCATION: 05/31/2013...902 PM
3.5 MILES SSW WAGGONER IL
LAT 39.3309 LONG -89.6815

END TIME/LOCATION: 05/31/2013...0906 PM
1.6 MILES ESE WAGGONER IL
LAT 39.3705 LONG -89.6204

MAXIMUM ESTIMATED WIND SPEED: 90-100 MPH

PATH LENGTH: 4.3 MILES
MAXIMUM PATH WIDTH: 50 YARDS



Two EF1 Tornadoes (Franklin and Jefferson Counties, Missouri)

TWO TORNADO TRACKS WERE FOUND ACROSS PORTIONS OF JEFFERSON COUNTY AND FRANKLIN COUNTY. THERE WERE ALSO POCKETS OF STRAIGHT LINE WIND DAMAGE NEAR THE TRACKS OF BOTH TORNADOES.

...DAMAGE SURVEY RESULTS FOR JEFFERSON COUNTY MISSOURI...

MAXIMUM EF-SCALE RATING: EF-1

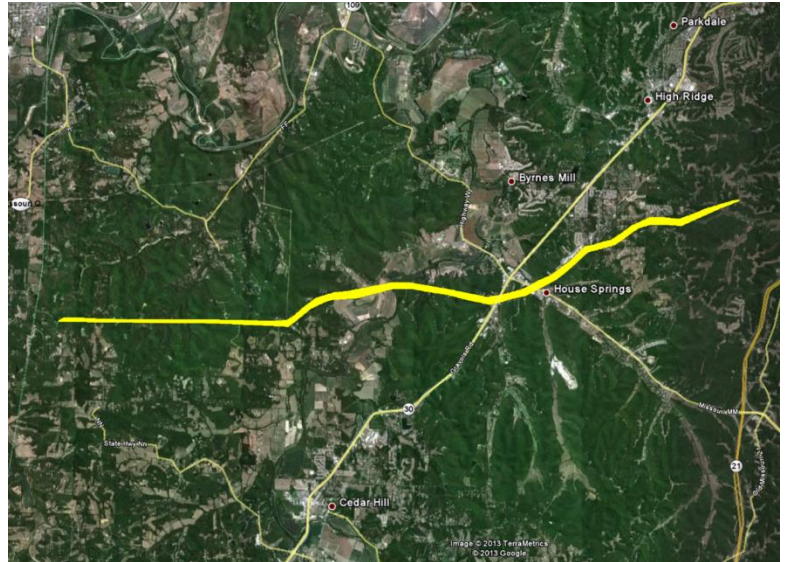
FATALITIES: 0

INJURIES: 0

BEGIN TIME/LOCATION: 05/31/2013...801 PM
3 MILES SE CATAWISSA
LAT 38.4013 LONG -90.7322

END TIME/LOCATION: 05/31/2013...818 PM
2.7 MILES E BYRNES MILL
LAT 38.4328 LONG -90.5064

MAXIMUM ESTIMATED WIND SPEED: 100 MPH
PATH LENGTH: 12.5 MILES
MAXIMUM PATH WIDTH: 200 YARDS



DISCUSSION/DAMAGE: THE TORNADO BEGAN IN EXTREME WESTERN JEFFERSON COUNTY NEAR HIGHWAY NN AND APKE ROAD. IT MOVED TO THE EAST AND MOST OF THE DAMAGE CONSISTED OF SNAPPED AND DOWNED TREES AND BROKEN TREE LIMBS. IN THE BYRNES MILL AREA SEVERAL MOBILE HOMES WERE DAMAGED FROM FALLEN TREES. IN SCOTSDALE...SEVERAL SCHOOL BUILDINGS AT OUR LADY QUEEN OF PEACE CHURCH SUFFERED MINOR DAMAGE. THE TORNADO ENDED WEST OF RUSTIC TRAILS DRIVE AROUND 2.7 MILES EAST OF BYRNES MILL.

...DAMAGE SURVEY RESULTS FOR FRANKLIN COUNTY...

MAXIMUM EF-SCALE RATING: EF-1

FATALITIES: 0

INJURIES: 0

BEGIN TIME/LOCATION: 05/31/2013...737 PM
3.5 MILES SW UNION
LAT 38.4095 LONG -91.0509

END TIME/LOCATION: 05/31/2013...750 PM
3.4 MILES SW ROBERTSVILLE
LAT 38.3918 LONG -90.8679

MAXIMUM ESTIMATED WIND SPEED: 105 MPH
PATH LENGTH: 10.2 MILES
MAXIMUM PATH WIDTH: 550 YARDS



DISCUSSION/DAMAGE: THE TORNADO BEGAN JUST WEST OF HIGHWAY UU AROUND 3.5 MILES SOUTHWEST OF UNION. MOST OF THE DAMAGE CONSISTED OF NAPPED AND DOWNED TREES AND BROKEN TREE LIMBS. FIVE HOMES LOCATED ALONG INDIAN PRAIRIE LANE BETWEEN UNION AND ST CLAIR SUFFERED MINOR ROOF DAMAGE. THE TORNADO ENDED TO THE SOUTH OF THE MERAMEC TERRACE ROAD AND INDIAN ACRES ROAD INTERSECTION...AROUND 3.4 MILES SOUTHWEST OF ROBERTSVILLE.

Three EF0 Tornadoes (Montgomery County, Missouri)

TORNADO #1

MAXIMUM EF-SCALE RATING: EF-0

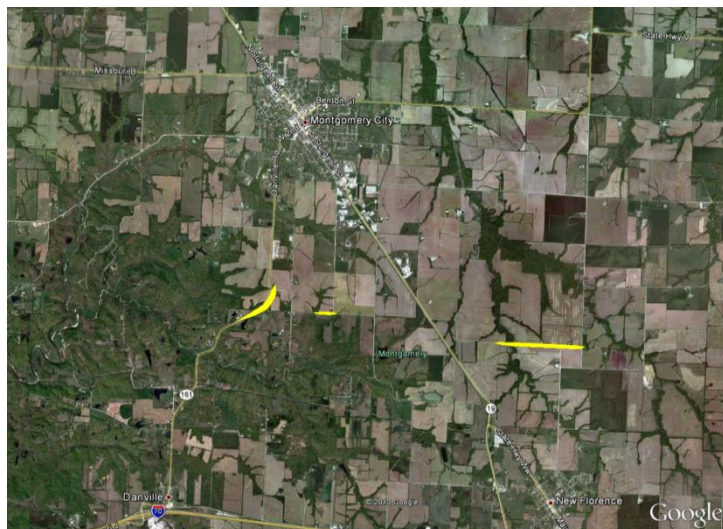
FATALITIES: 0

INJURIES: 0

BEGIN TIME/LOCATION: 05/31/2013...620 PM CDT
LAT 38.943 LONG -91.519

END TIME/LOCATION: 05/31/2013...621 PM CDT
LAT 38.938 LONG -91.512

MAXIMUM ESTIMATED WIND SPEED: 75 MPH
PATH LENGTH: 0.5 MILES
MAXIMUM PATH WIDTH: 30 YARDS



DISCUSSION/DAMAGE: A WEAK TORNADO BRIEFLY TOUCHDOWN ALONG HIGHWAY 161 FROM 2.5 MILES SOUTH SOUTHWEST TO TWO MILES SOUTH SOUTHWEST OF MONTGOMERY CITY. MUCH OF THE DAMAGE WAS CONFINED TO TREE DAMAGE. ONE LARGE TREE SNAPPED ABOUT A THIRD OF THE WAY FROM THE BASE AND FELL ONTO A PARKED SCHOOL BUS. NO ONE WAS INSIDE THE BUS. BEFORE THE TORNADO LIFTED THREE POWER POLLS WERE BENT ABOUT 40 DEGREES TO THE NORTHEAST.

TORNADO #2

MAXIMUM EF-SCALE RATING: EF-0

FATALITIES: 0

INJURIES: 0

BEGIN TIME/LOCATION: 05/31/2013...621 PM CDT
LAT 38.944 LONG -91.502

END TIME/LOCATION: 05/31/2013...622 PM CDT
LAT 38.944 LONG -91.498

MAXIMUM ESTIMATED WIND SPEED: 75 MPH
PATH LENGTH: 0.2 MILES
MAXIMUM PATH WIDTH: 30 YARDS

DISCUSSION/DAMAGE: A WEAK TORNADO BRIEFLY TOUCHDOWN ABOUT TWO MILES SOUTH OF MONTGOMERY CITY. MUCH OF THE DAMAGE WAS CONFINED TO TREE DAMAGE. BEFORE LIFTING AND DISSIPATING...THE ROOF OF AN OLD MACHINE SHED WAS PEELED OFF TO THE SOUTH.

Three EF0 Tornadoes (Montgomery County, Missouri)

TORNADO #3

MAXIMUM EF-SCALE RATING: EF-0

FATALITIES: 0

INJURIES: 0

BEGIN TIME/LOCATION: 05/31/2013...628 PM CDT

LAT 38.939 LONG-91.460

END TIME/LOCATION: 05/31/2013...630 PM CDT

LAT 38.938 LONG-91.442

MAXIMUM ESTIMATED WIND SPEED: 80 MPH

PATH LENGTH: 1.0 MILES

MAXIMUM PATH WIDTH: 40 YARDS

DISCUSSION/DAMAGE: A WEAK TORNADO TOUCHED DOWN 2.0 MILES NORTH NORTHWEST OF NEW FLORENCE. MUCH OF THE DAMAGE WAS CONFINED TO DOWNED TREES. THE TORNADO TRAVELED TO THE EAST FOR ABOUT A MILE. AT THIS LOCATION A HOME SUSTAINED SIDING AND SOFFIT DAMAGE. ALSO A LARGE TREE WAS UPROOTED IN THE BACKYARD. THEN THE TORNADO LIFTED AND DISSIPATED.

Please note that while the severe weather data presented in this event synopsis has been quality controlled, it is still considered unofficial. Official reports & statistics for severe weather events can be found in the **Storm Data** publication (<http://www.ncdc.noaa.gov/IPS/sd/sd.html>) or **Storm Events Database** (<http://www.ncdc.noaa.gov/stormevents/>), available from the National Centers for Environmental Information (NCEI) web page [formerly the National Climate Data Center (NCDC)].

More detailed tornado track information can be accessed using the National Weather Service Damage Assessment Toolkit for all tornadoes beginning in 2012. <https://apps.dat.noaa.gov/StormDamage/DamageViewer/>

Any questions regarding this event review should be address to w-lsx.webmaster@noaa.gov