

Overview

A severe thunderstorm moved across parts of southwest and southern St. Louis County during the afternoon hours of August 24th, 2007, producing damaging downburst winds (including microbursts) over this region. Some of the hardest hit areas extended from just east of the downtown Kirkwood area through Oakland and areas eastward to Shrewsbury, Missouri. The damage east of Kirkwood occurred just after 3:00 PM CDT. Some trees and numerous large tree limbs damaged homes and vehicles over this area. Note the damage map outlines some of the areas hardest hit by the damaging winds. Surface winds were estimated between 65 to 75 mph.

Additional microburst damage was found west southwest of Davisville, Missouri (southeastern Crawford County). Medium to large tree limbs fell in this area. The damage across southeastern Crawford County occurred at approximately 4:40 PM CDT. In Illinois over west-central Clinton County, roofs from two machine sheds were partially uplifted. Medium-sized tree limbs were down along with a few large trees that were uprooted. Corn was partially to completely flattened over several farm fields. The wind damage over Clinton County began between approximately 3:15 to 3:20 PM CDT.

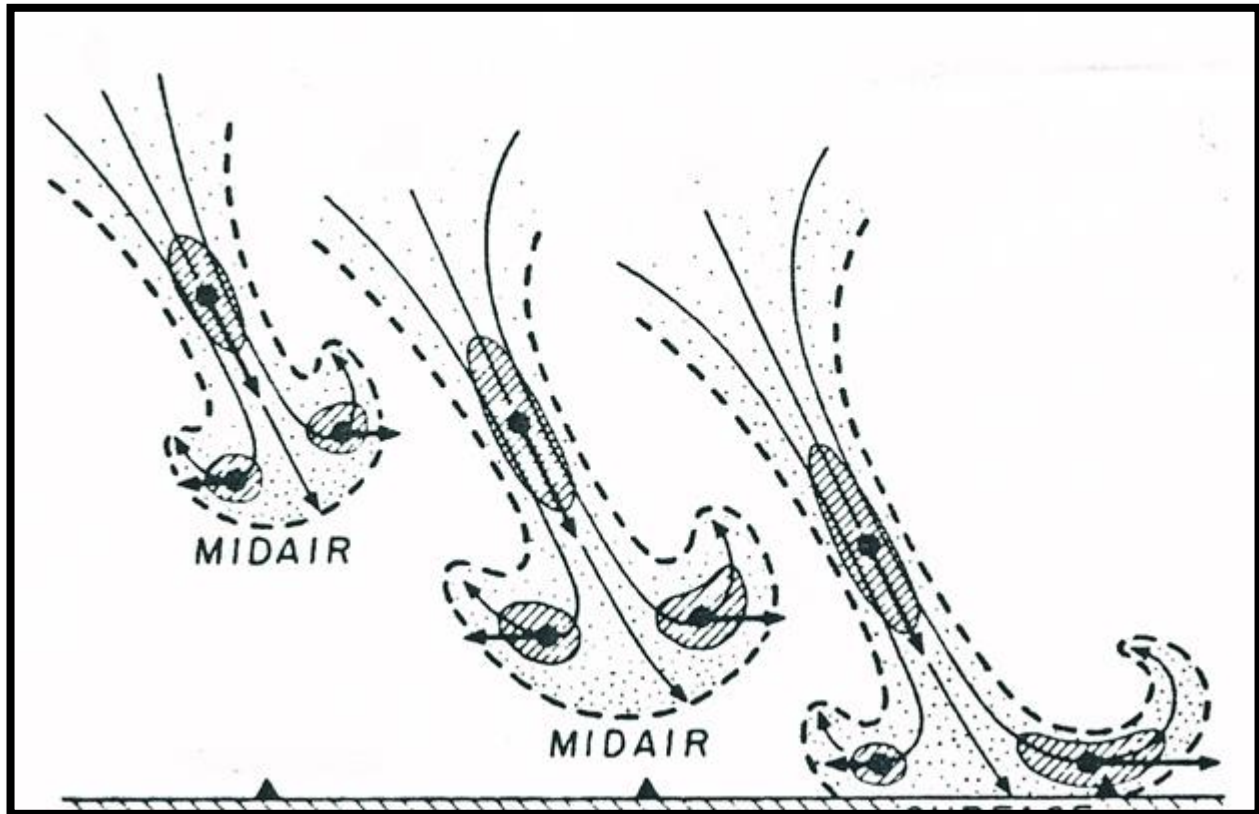
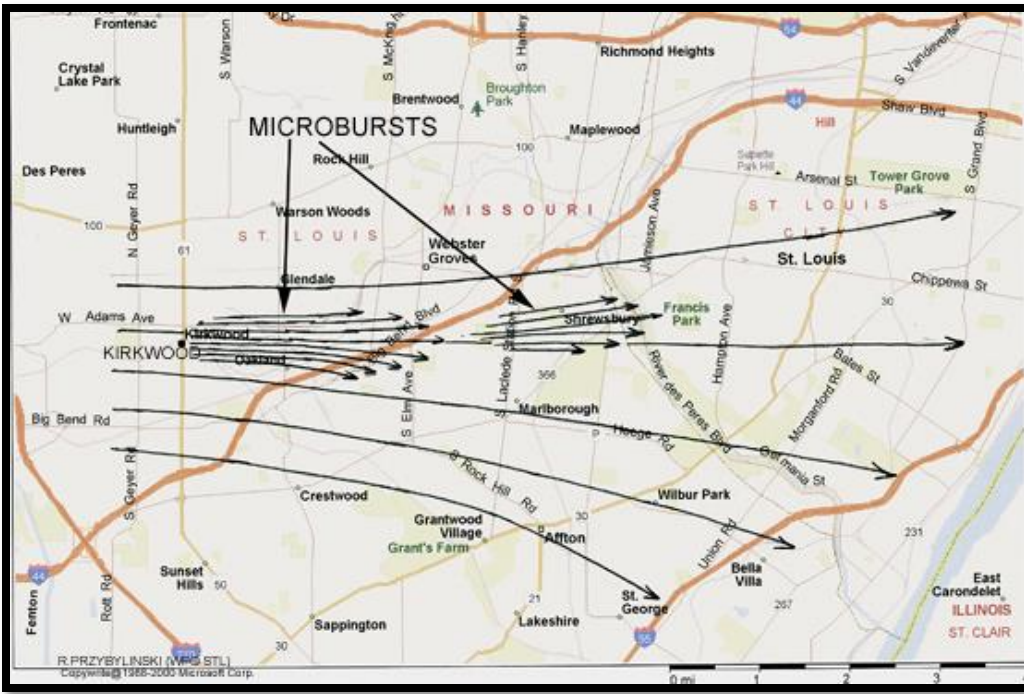
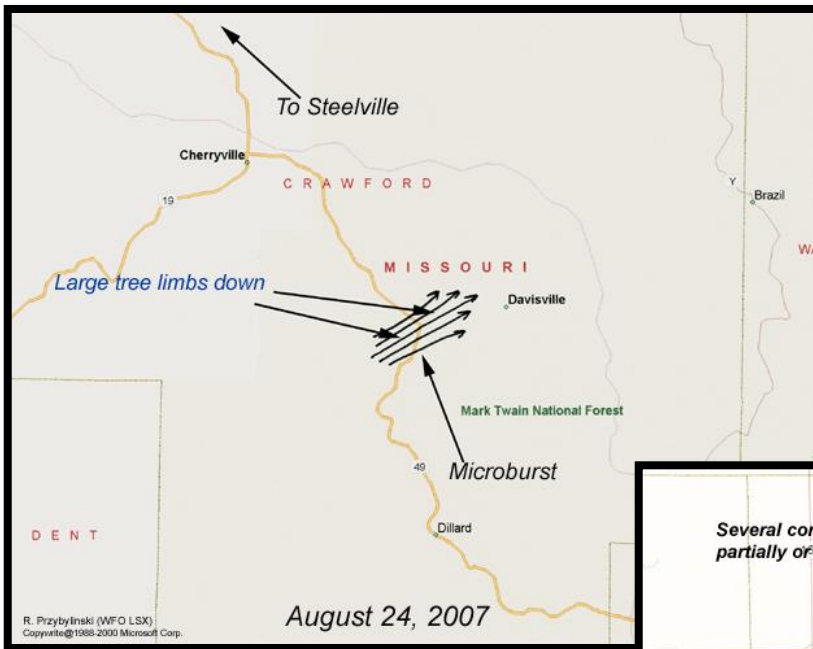


Image shows how intense thunderstorm winds descend to the surface with time (descending microburst). (Courtesy Fujita 1977)

Damage Maps

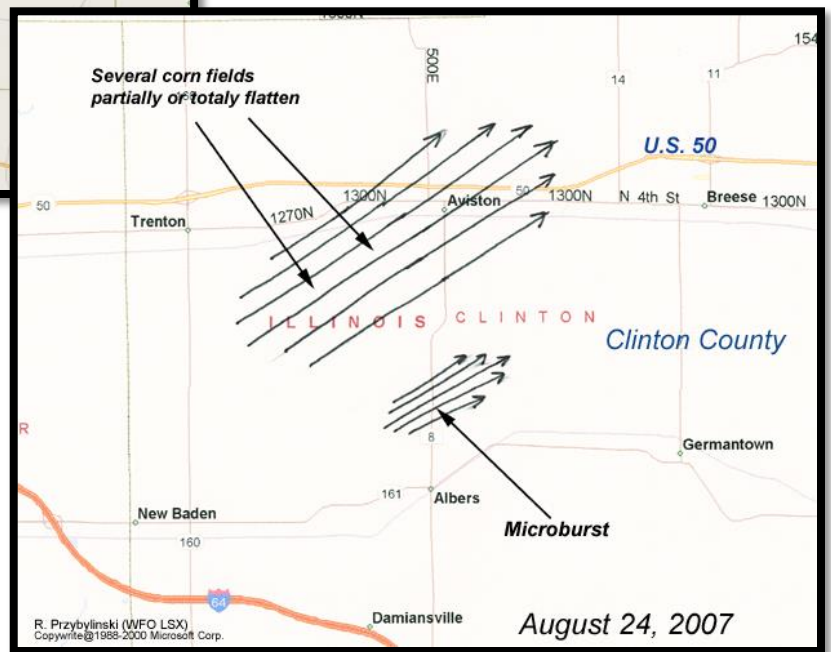


Damage map of the August 24th, 2007 damaging wind event over St. Louis County.



Damage map of microburst over southern Crawford County on August 24th, 2007.

Damage map of microburst over Clinton County on August 24th, 2007.



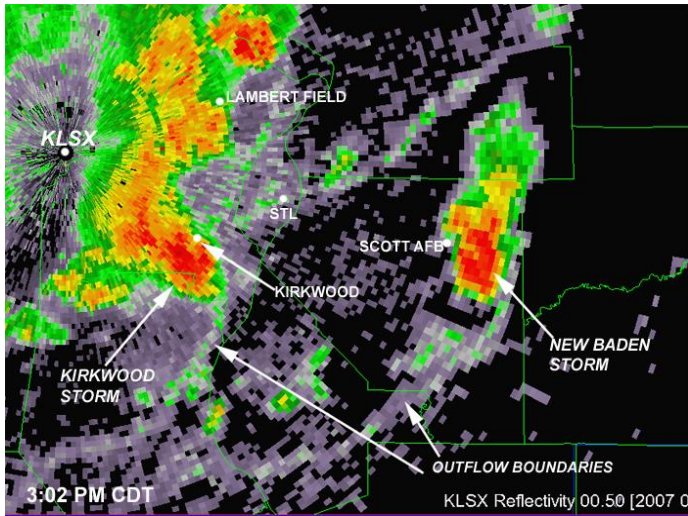
August 24, 2007

Damage Pictures

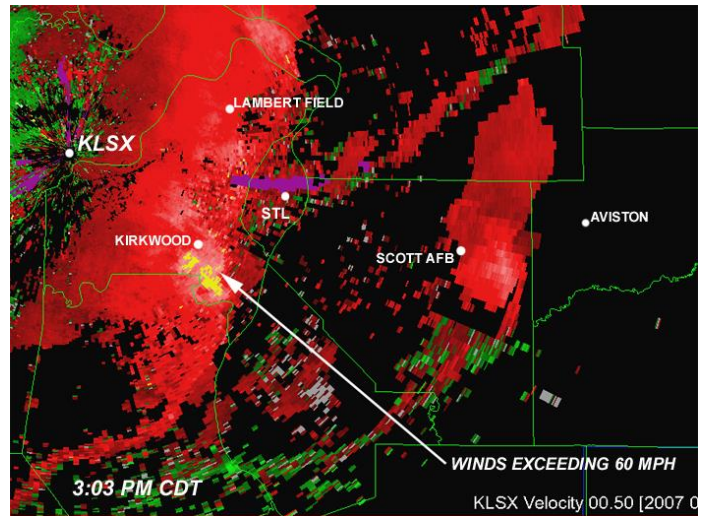


Radar Data

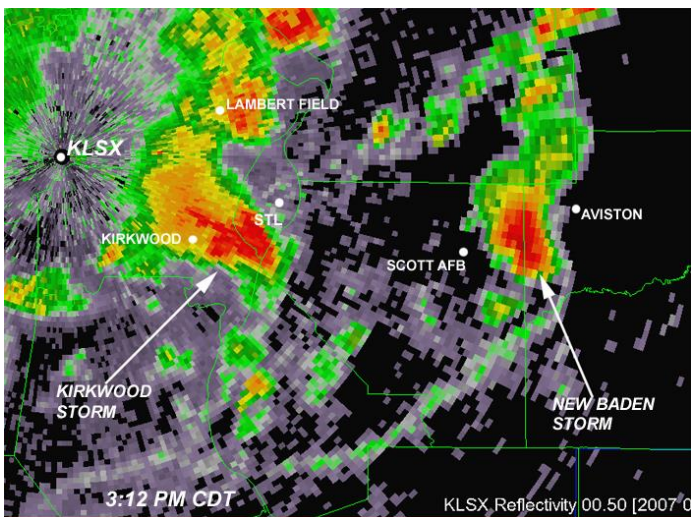
Radar reflectivity image for 3:02 PM CDT showing the Kirkwood and New Baden severe storms. Outflow boundaries signify the storm's leading edge of cool gusty winds.



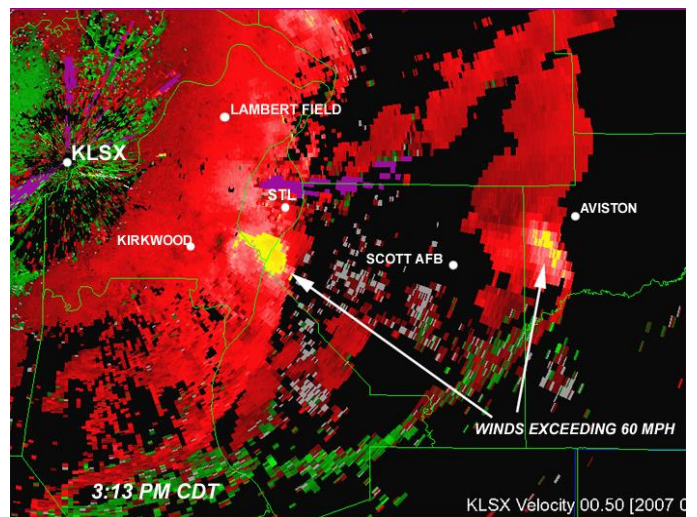
Doppler base velocity data for 3:03 PM CDT. Note the local high wind speeds with each storm.



Reflectivity image for 3:12 PM CDT.



Doppler base velocity image for 3:13 PM CDT.



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