



National Weather Service Des Moines



May 17, 2015 Storm Survey for Clarke, Madison, and Dallas Counties

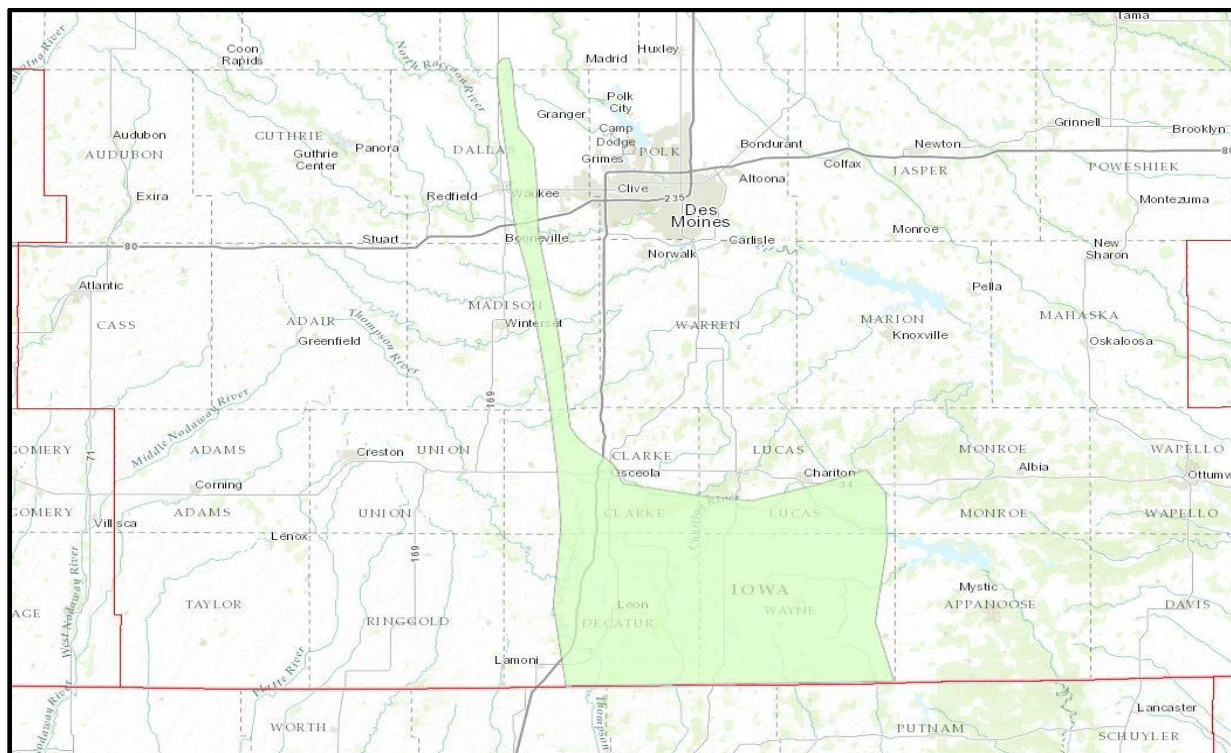
Overview:

A broad-scale mesoscale convective vortex (MCV) moved across south central and central Iowa early Sunday morning May 17, 2015. Along the track of the MCV, the circulation produced a broad swath of damaging straight line thunderstorm from Decatur to Boone County. These winds resulted in the derailment of a Burlington Northern Sante Fe train with over 80 railcars being blown off the tracks 4.0 miles west of Osceola. Other tree and structural damage occurred to outbuildings in the same area. Winds across this region are estimated to average 60 to 70 mph with higher embedded gusts of 70 mph to 80 mph.

The large MCV then progressed nearly due north producing other straight line wind damage along a line from west of Truro to west of St. Charles north toward Adel, Bouton, and into Boone County. Several farm structures were damaged and trees uprooted. Winds in this area reached around 70 mph at times in the hardest hit areas.

Wind Damage Path:

Wind damage occurred from near the Iowa Missouri border north to Boone County.



Straight Line Wind Damage near Osceola:



Over 80 railcars from a Burlington Northern train were blown off the tracks just northwest of Osceola on 180th Avenue in Clark County by straight lined winds. Winds estimated at 70 to 80 mph at this location. Other damage to farm outbuildings and trees occurred at this location.

Straight Line Wind Damage Southwest of Truro:



A sheet metal building was damaged. Winds estimated at 60 to 70 mph at this location. Additionally a farm irrigation center pivot was damaged nearby.

Straight Line Wind Damage Southwest of St. Charles:



A trailer was overturned and damaged at this location. Winds estimated at 70 mph at this location.

Straight Line Wind Damage Northwest of Patterson:



A car was flipped and building and tree damage occurred at this location. Winds estimated at 70 to 75 mph at this location.

Straight Line Wind Damage Southeast of Adel:



Tree damage occurred in an open field southeast of Adel. Winds estimated at 70 mph at this location.
