

Ohio EMA Directors Conference 2014

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National Weather Service

Cleveland Ohio





Damage Characteristics

Downburst:

- ✔ Damaged items laying in one direction
- ✔ Damage is diverging
- ✔ Some items may be twisted!
- ✔ Damage tends to be “patchy” but damage paths may exist

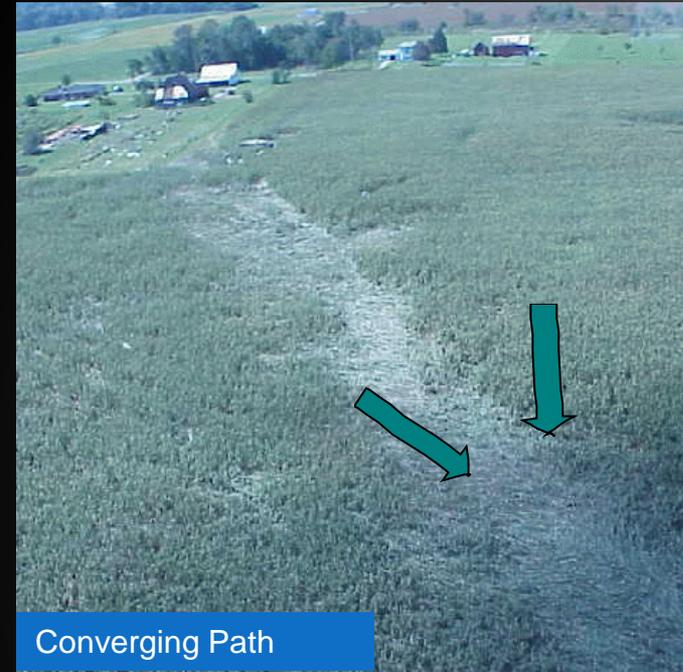


Tornado:

- ✔ Damage is laying in multi-directions
- ✔ Damage is converging along a line
- ✔ Items are tossed and thrown (Projectiles)
- ✔ Distinct path



Tornado



Converging Path



Stripped Branches



Multi-Direction Projectiles



Debris Lifted in High Objects a Distance Away



Visual Sighting

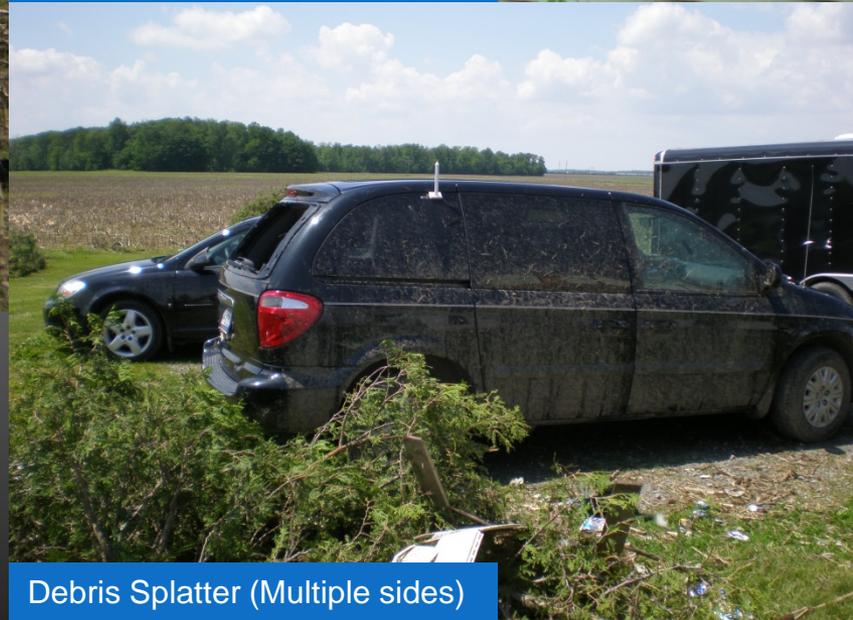
Tornado



Debris carried
"Considerable" distance

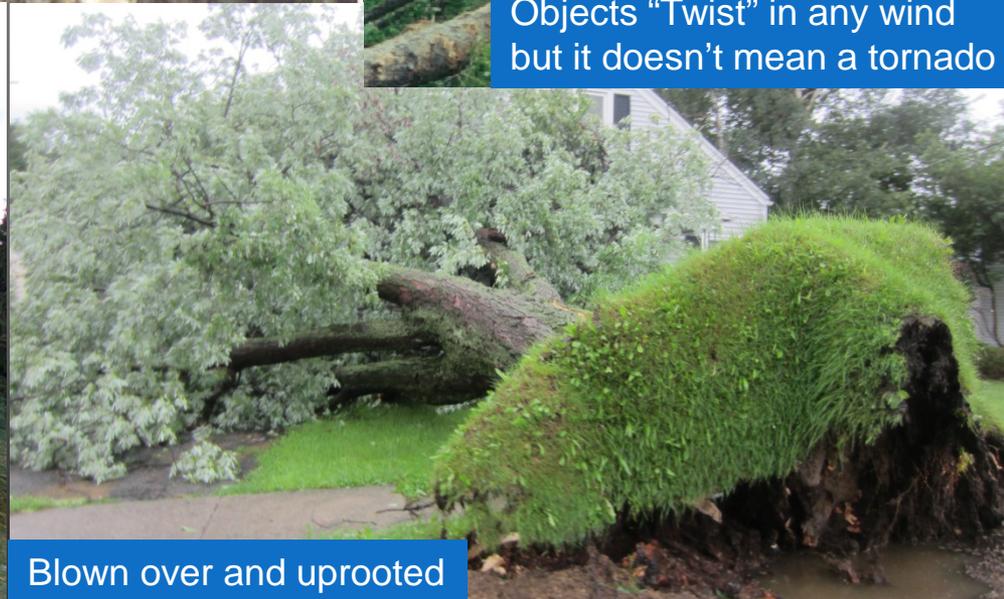
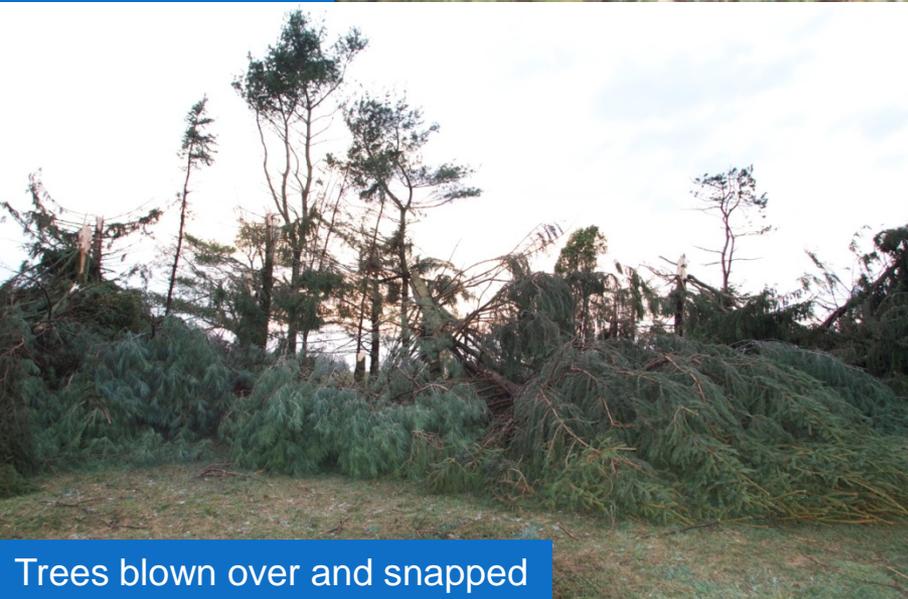
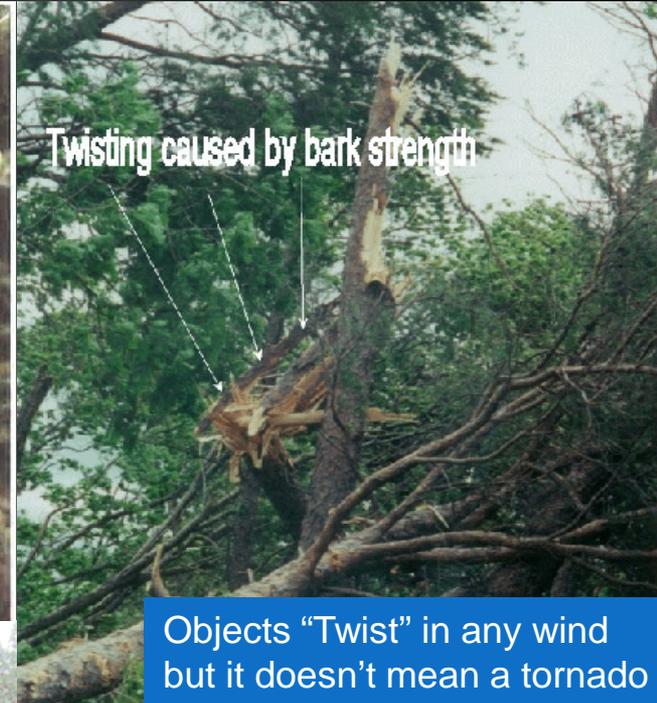


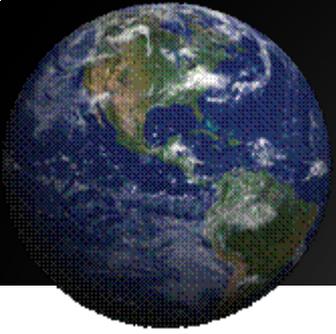
Debris Splatter (Multiple sides)



Debris Splatter (Multiple sides)

Downburst

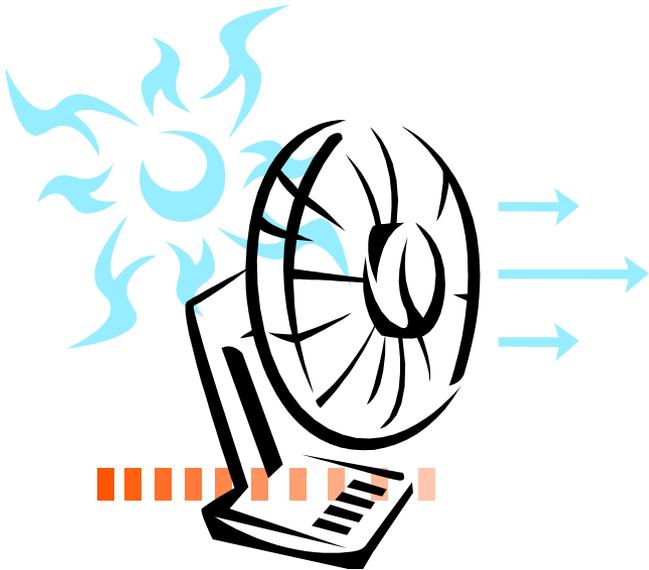




Damage Summary

Downburst

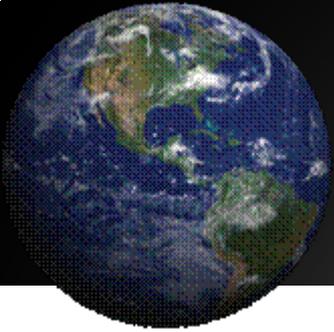
Damage is blown over



Tornado

Damage is blended





NWS Tornado Survey Online

NWS Damage Assessment Toolkit

<http://54.243.139.84/StormDamage/DamageViewer/>

Welcome to the National Weather Service

Choose Office ID

Select Office ID:

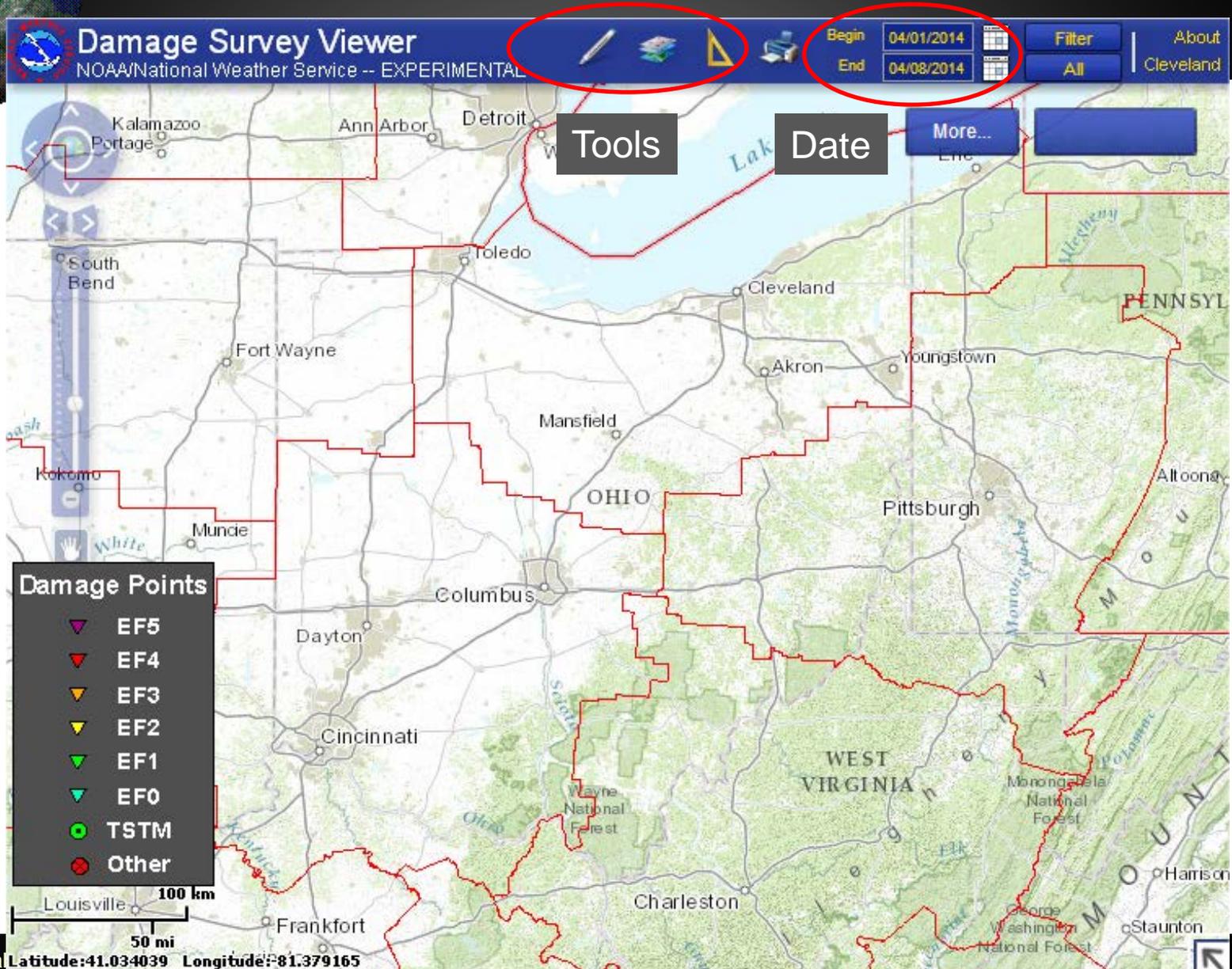
- Aberdeen
- Columbia
- Caribou
- Charleston, SC
- Cleveland
- Corpus Christi

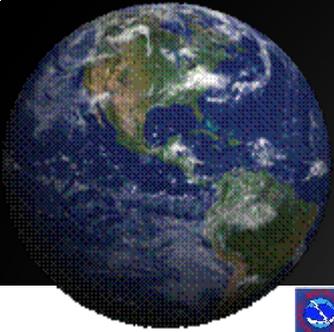
Continue



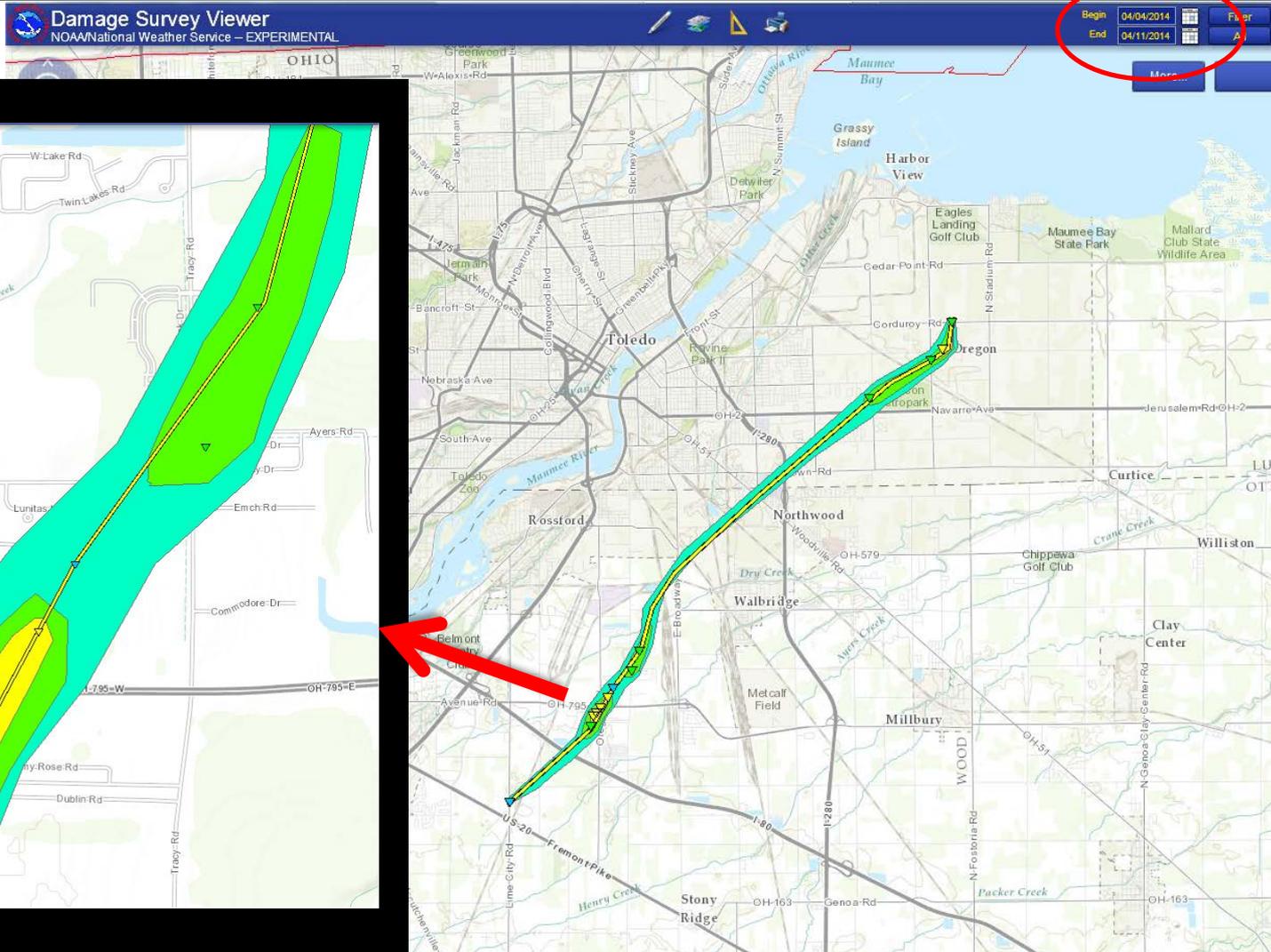


NWS Damage Assessment Toolkit





Damage Assessment Toolkit





Damage Assessment Toolkit

Survey Viewer

Weather Service - EXPERIMENTAL

Identify Toolbox

Damage Point

Latitude: 41.5658 Longitude: -83.535
 EF-Rating: EF2 Wind Speed: 120
 Damage Date: Sun Nov 17 2013 10:40:00 PM UTC
 Survey Date: Mon Nov 18 2013 12:01:00 PM UTC
 Damage Indicator: One- or Two-Family Residences (FR12)
 Degree of Damage: Large sections of roof structure removed; most walls remain standing
 Damage Direction: UNKNOWN
 Comments: None
 QC Flag Checked: Y

Damage Path

EF-Rating: EF2
 Storm Date: Sun Nov 17 2013 10:35:00 PM UTC
 EF Rating: EF2 Max Wind (mph): 120
 Start Point: Sun Nov 17 2013 10:35:00 PM UTC Lat: 41.54 Lon: -83.5673
 End Point: Thu Nov 21 2013 10:50:00 PM UTC Lat: 41.6807 Lon: -83.4216
 Path Length (m): 11.54 Path Width (yds): 200
 Fatalities: 0 Injuries: 0
 Comments: None
 Quality Controlled: Y

Damage Polygon

Storm Date: Sun Nov 17 2013 10:38:00 PM UTC
 EF-Rating: EF2
 Path Length: -99mi Path Width: -99yds
 Fatalities: 0 Injuries: 0
 Comments: None
 Quality Controlled: Y

Damage Polygon

Storm Date: Sun Nov 17 2013 10:35:00 PM UTC
 EF-Rating: EF0
 Path Length: 12mi Path Width: 200yds
 Fatalities: 0 Injuries: 0
 Comments: None
 Quality Controlled: Y

Damage Polygon

Storm Date: Sun Nov 17 2013 10:38:00 PM UTC
 EF-Rating: EF1

Damage Point

Latitude: 41.5658 Longitude: -83.535
 EF-Rating: EF2 Wind Speed: 120
 Damage Date: Sun Nov 17 2013 10:40:00 PM UTC
 Survey Date: Mon Nov 18 2013 12:01:00 PM UTC
 Damage Indicator: One- or Two-Family Residences (FR12)
 Degree of Damage: Large sections of roof structure removed; most walls remain standing
 Damage Direction: UNKNOWN
 Comments: None
 QC Flag Checked: Y

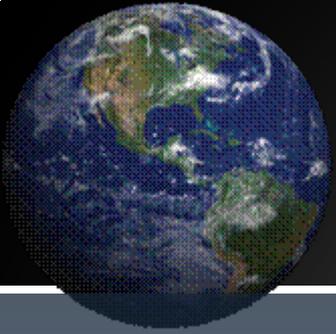


Damage Point



Zoom to

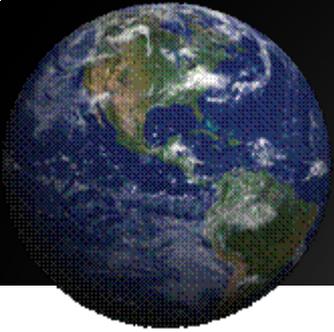




AMBASSADOR™
WRN
WEATHER-READY NATION

www.noaa.gov/wrn





Strengthening Partnerships

WRN Ambassador Initiative

- ✔ What organizations can be a part of and contribute toward building a Weather-Ready Nation?
 - ✔ All levels of government
 - ✔ Weather, Water, Climate Enterprise
 - ✔ Academia
 - ✔ Businesses & non-profits
- ✔ Formal recognition of organizations that work with NOAA toward building a Weather-Ready Nation
 - ✔ Promote WRN messages and themes
 - ✔ Engage with NOAA on potential collaborations
 - ✔ Share success stories
 - ✔ Serve as an “Example”



Visit: www.noaa.gov/wrn



Strengthening Partnerships

WRN Ambassador Initiative

www.noaa.gov/wrn

Weather-Ready Nation
National Oceanic and Atmospheric Administration

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About Weather-Ready Nation Ambassadors™

The Weather-Ready Nation Ambassador™ initiative is the National Oceanic and Atmospheric Administration's (NOAA) effort to formally recognize NOAA partners who are improving the nation's readiness, responsiveness, and overall resilience against extreme weather, water, and climate events. As a WRN Ambassador, partners commit to working with NOAA and other Ambassadors to strengthen national resilience against extreme weather. In effect, the WRN Ambassador initiative helps unify the efforts across government, non-profits, academia, and private industry toward making the nation more ready, responsive, and resilient against extreme environmental hazards. [Weather-Ready Nation \(WRN\)](#) is a strategic outcome where society's response should be equal to the risk from all extreme weather, water, and climate hazards.

The WRN Ambassador initiative is a:

- Unifying effort;
- Action-oriented;
- Inclusive; and
- Force multiplier (i.e., new partnerships lead to even more partnership opportunities).

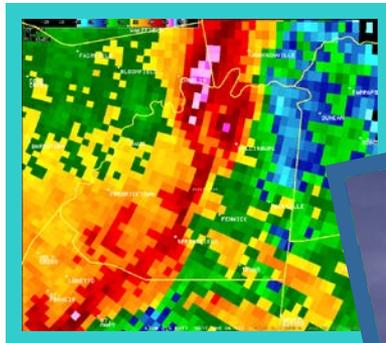
Information and Application



Decision Support Services

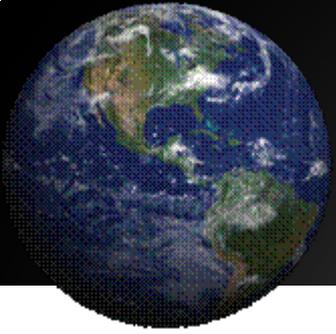
Build a Weather-Ready Nation

- Emails
- Webinars
- Conference Calls



Improve community emergency preparedness





Questions?

