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October 3, 2013
OPERATIONS AND SERVICES
PUBLIC WEATHER SERVICES, NWSPD 10-5
WFO STATEMENTS, SUMMARIES, TABLE PRODUCTS SPECIFICATION, NWSI 10-501
PUBLIC INFORMATION STATEMENTS FOR DAMAGE SURVEYS

**NOTICE:** This publication is available at: <a href="http://www.nws.noaa.gov/directives/">http://www.nws.noaa.gov/directives/</a>.

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Teri Schwein Date

Acting Regional Director

# NWS CRS 10-501 October 3, 2013

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- 1. <u>Purpose</u>. The purpose of this supplement is to provide Central Region (CR) guidance for CR field offices issuing Public Information Statements (PNS) to document and disseminate U.S. National Weather Service (NWS) storm damage survey information on tornadic, thunderstorm wind (straight-line) or other weather related events. The PNS format in this supplement will provide data users easy to read, concise and consistent summaries of NWS storm damage survey details. Specific product examples for both tornadic, downburst and other weather related events are shown in Appendix A.
- 2. <u>Background</u>. Storm damage surveys conducted by local NWS Weather Forecast Offices (WFOs) are part of Post-Storm Data Acquisition (PSDA) activities. These activities include the acquisition and assembly of highly perishable data necessary for accurate post-event analysis. It requires the rapid deployment of trained teams following the event to gather damage evidence (e.g. storm debris damage patterns), that can be used to accurately identify and describe the event. Storm damage surveys are conducted by WFOs as resources permit.

## 3. Public Information Statement (product category PNS).

- 3.1 <u>Description</u>. The Public Information Statement (PNS) is an event driven, alphanumeric product, used to distribute information regarding weather related events, including storm damage surveys, public education, NWS service changes, limitations or interruptions, and special guidelines for interpreting NWS data. The PNS is used by a wide variety of data users such as the public, emergency managers, media, academia and other governmental entities.
- 3.2 <u>Mission Connection</u>. Information gained from storm damage surveys and relayed via the PNS product enables the NWS to increase the knowledge of extreme events, determine how to better use existing equipment, improve NWS warning programs, and provide accurate storm damage information and EF-Scale ratings to wide variety of partners and users.

Storm damage survey information, found in PNS products, often becomes the basis for entry into the official NOAA *Storm Data* publication which documents the occurrence of storms and other significant weather phenomena having sufficient intensity to cause loss of life, injuries, significant property damage, and/or disruption to commerce across the United States.

## 3.3 <u>Issuance Guidelines</u>.

- 3.3.1 <u>Creation Software</u>. WFOs should use the Graphical Forecast Editor (GFE), or other reliable software, to issue PNSs.
- 3.3.2 <u>Issuance Criteria</u>. A PNS for storm damage surveys should be issued whenever a NWS CR storm damage survey team confirms a tornadic, thunderstorm wind or other event(s). WFOs will use the format in this supplement to disseminate damage survey information in PNS products. WFOs are encouraged to issue PNSs frequently as key facts are gathered to meet the timesensitive data needs of internal and external customers and partners.

- 3.3.3 <u>Issuance Time</u>. PNSs are non-scheduled, event-driven products.
- 3.3.4 <u>Valid Time</u>. PNSs are valid from time of issuance until the expiration time.
- 3.3.5 <u>Product Expiration Time</u>. The PNS product expiration time may be up to 72 hours after the time of issuance.
- 3.4 <u>Technical Description</u>.
- 3.4.1 UGC Type. PNSs will use the Zone (Z) code of the UGC.
- 3.4.2 Mass News Disseminator Broadcast Line. None required.
- 3.4.3 <u>Mass News Disseminator Header (MND)</u>. WFOs will use "**PUBLIC INFORMATION STATEMENT**" in the MND Dissemination Header.
- 3.4.4 <u>Headline</u>. WFOs will highlight the PNS for storm damage surveys with one or more headline (s). The headline will begin and end with three periods ". . ." The headline should include NWS damage survey, event date, event type and update number.
- a. <u>Examples</u>:
  - (1) Tornadoes
- ... NWS DAMAGE SURVEY FOR 04/01/13 TORNADO EVENT ...
- ... NWS DAMAGE SURVEY FOR 04/01/13 TORNADO EVENT UPDATE 1 ...
- ... NWS DAMAGE SURVEY FOR 04/01/13 TORNADO EVENT UPDATE 4 ...
  - (2) <u>Thunderstorm Wind</u>
- ... NWS DAMAGE SURVEY FOR 04/01/13 THUNDERSTORM WIND EVENT ...
- . . . NWS DAMAGE SURVEY FOR 04/01/13 THUNDERSTORM WIND EVENT UPDATE 1 . . .
- . . . NWS DAMAGE SURVEY FOR 04/01/13 THUNDERSTORM WIND EVENT UPDATE 3 . . .
- 3.4.5 <u>Content</u>. Storm damage survey results will be described in PNS products using tabular data and free form text paragraphs in non-technical terms.
- 3.4.6 <u>Format</u>. Following the Headline(s), the PNS for storm damage surveys may contain up to six parts within the product body in the following order.

#### .UPDATE...

The Update section is optional and should briefly describe the events that are being updated.

#### .OVERVIEW...

The Overview section is <u>optional</u> and should briefly describe the event causative factor, general geographic location, event date(s) of the tornado, thunderstorm wind or other events, and general findings. Information pertaining to storm survey scheduling may be included in the Overview.

## .TORNADO #... or .THUNDERSTORM WIND #... or .OTHER EVENT #

For product consistency, most entries in the "Tornado", "Thunderstorm Wind" (e.g. derecho, downburst, macroburst, microburst, heatburst, etc.) or "Other Event" (e.g. gradient wind), tabular sections are <u>mandatory</u> and provide specific information regarding event ratings, fatalities / injuries (if known and confirmed), the begin/end times and dates of the event in local time, and the begin/end points of the event related to geographic locations (AZRAN to city/town using 16 point compass/statute miles).

To enhance event location accuracy, WFOs will include the Decimal Degree LAT / LON begin/end points of the event (up to the fourth decimal point).

For product consistency, do not delete or modify components within Tornado, Thunderstorm Wind or Other Event tabular sections of the PNS product. Order of events is at local discretion. Tabular data that is unavailable will be noted as "PENDING". Mandatory tabular data entries will follow established reporting protocols found in NWSI 10-1605 (Storm Data Preparation).

#### **SURVEY SUMMARY:**

The Survey Summary section is <u>optional</u> and allows WFOs to add specific and detailed information about tornadic (rotational wind) or thunderstorm wind (straight-line) events (e.g. derechos, downbursts, macrobursts, microbursts, heatbursts) and other non-thunderstorm wind events (e.g. gradient) that have been observed in storm damage surveys. Specific details on event locations, border crossers (events that cross regional, state, county or CWA borders), damages, fatalities/injuries, storm track shifts, ratings or other pertinent details regarding the event may be described. Inclusion of fatality causative factors (mobile home, vehicle) is encouraged if known.

#### **EF SCALE:**

Inclusion of the EF-Scale section will be included. The EF-Scale number, corresponding tornado class (weak, strong, violent) and wind speed ranges will be provided.

## **NOTE:**

A sentence denoting the preliminary nature of the damage survey PNS will be included.

# 3.4.6.1 PNS Format – Tornado Damage Survey

NOUS4X cccc ddhhmm **PNSccc** STZ001-002-003-ddhhmm-PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE CITY STATE Time am/pm time zone day mon dd yyyy ... HEADLINE ... (MANDATORY)  $\dots 2^{ND}$  HEADLINE  $\dots$ (OPTIONAL) .UPDATE... (OPTIONAL) .OVERVIEW... (OPTIONAL) .TORNADO (#) ... or .(reference) TORNADO... (MANDATORY) EF SCALE RATING: EF-x (where x = 0-5) (MANDATORY) (xx-xxx MPH) **ESTIMATED PEAK WIND:** (MANDATORY) PATH LENGTH /STATUTE/: (xx.x MILES) (MANDATORY) PATH WIDTH /MAXIMUM/: (xxx YARDS or MILES) (MANDATORY) FATALITIES: (x) (MANDATORY) **INJURIES:** (x) (MANDATORY) (mon dd yyyy) (MANDATORY) START DATE: START TIME: (time am/pm time zone) (MANDATORY) (azran to city/town / county/parish / st) START LOCATION: (MANDATORY) START LAT/LON: (xx.xxxx / -xx.xxxx)(MANDATORY) END DATE: (mon dd yyyy) (MANDATORY) END TIME: (time am/pm time zone) (MANDATORY) END LOCATION: (azran to city/town / county/parish / st) (MANDATORY) (xx.xxxx / -xx.xxxx)END LAT/LON: (MANDATORY) SURVEY SUMMARY: (OPTIONAL) **EF SCALE:** (MANDATORY) NOTE: (MANDATORY) INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT /S/ AND PUBLICATION IN NWS STORM DATA. \$\$ FORECASTER NAME/NUMBER (OPTIONAL)

Figure 1. Public Information Statement – Tornado Damage Survey Format

# 3.4.6.2 PNS Format – Thunderstorm Wind Damage Survey

NOUS4X cccc ddhhmm

**PNSccc** 

STZ001-002-003-ddhhmm-

PUBLIC INFORMATION STATEMENT

NATIONAL WEATHER SERVICE CITY STATE

time am/pm time zone day mon dd yyyy

 $\begin{array}{ccc} ... \textbf{HEADLINE} ... \\ ... 2^{\text{ND}} \text{ HEADLINE} ... \\ \end{array}$ 

.OVERVIEW... (OPTIONAL)

.THUNDERSTORM WIND\_(#) ... or .(reference)\_THUNDERSTORM WIND... (MANDATORY)

PEAK WIND /E/ or /M/: (xx-xxx MPH) (MANDATORY)

PATH LENGTH /STATUTE/: (xx.x MILES) (MANDATORY)
PATH WIDTH /MAXIMUM/: (xxx YARDS or MILES) (MANDATORY)
FATALITIES: (x) (MANDATORY)
INJURIES: (x) (MANDATORY)

START DATE: (mon dd yyyy) (MANDATORY)

START TIME: (time am/pm time zone) (MANDATORY)

START LOCATION: (azran to city/town / county/parish / st) (MANDATORY)
START LAT/LON: (xx.xxxx / -xx.xxxx) (MANDATORY)

END DATE: (mon dd yyyy) (MANDATORY

END TIME: (time am/pm time zone) (MANDATORY)

END LOCATION: (azran to city/town / county/parish / st) (MANDATORY)
END LAT/LON: (xx.xxxx / -xx.xxxx) (MANDATORY)

SURVEY SUMMARY: (OPTIONAL)

NOTE: (MANDATORY)

INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT /S/ AND PUBLICATION IN NWS STORM DATA.

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FORECASTER NAME/NUMBER

(OPTIONAL)

Figure 2. Public Information Statement – Thunderstorm Wind Damage Survey Format

3.5 <u>Updates, Amendments and Corrections</u>. PNSs should be updated as needed. WFOs will correct PNS products for format and grammatical errors.

# **APPENDIX A – Product Examples**

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<sup>1. &</sup>lt;u>Introduction</u>. This appendix provides examples of utilizing the PNS product to document information derived from U.S. National Weather Service Damage Surveys.

## 2. Tornado Damage Survey (Single)

PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE WICHITA KS 445 PM CDT MON APR 2 2012

...NWS DAMAGE SURVEY FOR 04/01/12 TORNADO EVENT...

.OVERVIEW...

MULTIPLE TORNADOES WERE SPAWNED BY A FAST MOVING COLD FRONT ACROSS KANSAS SUNDAY AFTERNOON /04/01/12/. NWS SURVEY TEAMS CONFIRMED FIVE SEPARATE TORNADOES ACROSS SOUTHEAST KS LATE IN THE AFTERNOON. ADDITIONAL UPDATES FOR THIS EVENT ARE LIKELY AS ONGOING TORNADO DAMAGE SURVEYS ARE PROJECTED TO BE COMPLETED ON TUESDAY.

#### .OAKLAWN TORNADO...

EF SCALE RATING: EF-3

ESTIMATED PEAK WIND: 150–160 MPH PATH LENGTH /STATUTE/: 13.0 MILES PATH WIDTH /MAXIMUM/: 440 YARDS

FATALITIES: 0 INJURIES: 15

START DATE: APRIL 01...2012 START TIME: 3:35 PM CDT

START LOCATION: 3 WSW HAYSVILLE / SEDGWICK COUNTY / KS

START LAT/LON: 37.5832 / -97.4013

END DATE: APRIL 01...2012 END TIME: 5:29 PM CDT

END LOCATION: 2 SW CASSODAY/ BUTLER / KS

END LAT/LON: 37.9610 / -96.7014

SURVEY SUMMARY: U.S. NATIONAL WEATHER SERVICE METEOROLOGISTS SURVEYED LONG TRACK TORNADO DAMAGE THAT ORIGINATED NEAR HAYSVILLE KANSAS AND ENDED SOUTHWEST OF CASSODAY KANSAS AND FOUND IT CONSISTENT WITH EF-3 TORNADO DAMAGE WITH ESTIMATED WINDS BETWEEN 150 AND 160 MPH.

INITIAL EF-0 DAMAGE...MAINLY TO MOBILE HOMES AND TREES...OCCURRED ALONG HIGHWAY 42 SOUTHWEST OF HAYSVILLE.

THE TORNADO REACHED ITS MAXIMUM INTENSITY OF EF-3 AFTER CROSSING INTERSTATE 35 IN THE OAKLAWN AREA OF SOUTHEAST WICHITA. THE MAXIMUM PATH WIDTH WAS ONE QUARTER MILE. AT LEAST TEN WELL CONSTRUCTED SINGLE FAMILY HOMES HAD MOST OF THEIR EXTERIOR WALLS COLLAPSE WHILE AT LEAST FIVE MOBILE HOMES WERE COMPLETELY DESTROYED TO THE FRAME RAILS. 15 INJURIES OCCURRED WHEN THE TORNADO STRUCK AND BLEW OUT THE WINDOWS OF A CHURCH DURING AFTERNOON SERVICE ALONG HIGHWAY 54 NORTHEAST OF EL DORADO. THE TORNADO CONTINUED NORTHEAST ACROSS RURAL COUNTRYSIDE WHERE IT GRADUAL WEAKENED AND LIFTED WEST OF CASSODAY ALONG HIGHWAY 177.

EF SCALE: THE ENHANCED FUJITA SCALE CLASSIFIES TORNADOES INTO THE FOLLOWING CATEGORIES.

EF0 . . . WEAK . . . . . 65 TO 85 MPH
EF1 . . . WEAK . . . . . 86 TO 110 MPH
EF2 . . . STRONG . . . . 111 TO 135 MPH
EF3 . . . STRONG . . . . 136 TO 165 MPH
EF4 . . . VIOLENT . . . 166 TO 200 MPH
EF5 . . . VIOLENT . . . > 200 MPH

NOTE: INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT AND PUBLICATION IN NWS STORM DATA.

# 3. <u>Tornado Damage Survey (Multiple)</u>

PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE LITTLE ROCK AR 515 PM CDT THU APR 12 2012

...NWS DAMAGE SURVEY FOR 04/11/12 TORNADO EVENT - UPDATE 2...

.UPDATE...

THE EF RATING FOR TORNADO 1 UPGRADED. PATH WIDTH FOR TORNADO 2 MODIFIED.

.OVERVIEW...

A STRONG UPPER LEVEL LOW PRESSURE SYSTEM TRIGGERED TORNADO TOUCHDOWNS ACROSS PORTIONS OF SOUTHEAST ARKANSAS LATE WEDNESDAY AFTERNOON. NWS SURVEY TEAMS CONFIRMED THREE SEPARATE TORNADOES ACROSS SE ARKANSAS BY LATE THIS AFTERNOON. TORNADO SUMMARIES NOTED BELOW ARE RANKED HIGHEST TO LOWEST BY EF-RATING. A FINAL UPDATE WITH DETAILED TORNADO SUMMARY INFORMATION WILL BE PROVIDED FRIDAY AFTERNOON.

## .TORNADO 1...

EF SCALE RATING: EF-2

ESTIMATED PEAK WIND: 120–130 MPH PATH LENGTH /STATUTE/: 44.2 MILES PATH WIDTH /MAXIMUM/: 440 YARDS

FATALITIES: 4
INJURIES: 11

START DATE: APRIL 11...2012 START TIME: 5:03 PM CDT

START LOCATION: 3 N CAMDEN / OUACHITA COUNTY / AR

START LAT/LON: 33.6145 / -92.8638

END DATE: APRIL 11...2012 END TIME: 6:02 PM CDT

END LOCATION: 3 NE RISON / CLEVELAND COUNTY / AR

END LAT/LON: 33.9872 / -92.1418

### .TORNADO 2...

EF SCALE RATING: EF-1

ESTIMATED PEAK WIND: 90–100 MPH PATH LENGTH /STATUTE/: 19.0 MILES PATH WIDTH /MAXIMUM/: 220 YARDS

FATALITIES: 0 INJURIES: 4

START DATE: APRIL 11...2012 START TIME: 5:18 PM CDT

START LOCATION: 4 SSE ARKADELPHIA / CLARK COUNTY / AR

START LAT/LON: 34.1008 / -93.0715

END DATE: APRIL 11...2012 END TIME: 5:43 PM CDT

END LOCATION: ROLLA / HOT SPRING COUNTY / AR

END LAT/LON: 34.2082 / -92.7307

.TORNADO 3...

EF SCALE RATING: EF-0

ESTIMATED PEAK WIND: 70–80 MPH PATH LENGTH /STATUTE/: 2.7 MILES PATH WIDTH /MAXIMUM/: 55 YARDS

FATALITIES: 0 INJURIES: 1

START DATE: APRIL 11...2012 START TIME: 5:03 PM CDT

START LOCATION: MONTICELLO / DREW COUNTY / AR

START LAT/LON: 33.6248 / -91.7938

END DATE: APRIL 11...2012 END TIME: 5:29 PM CDT

END LOCATION: 2.7 NE MONTICELLO / DREW COUNTY / AR

END LAT/LON: 33.6572 / -91.7205

EF SCALE: THE ENHANCED FUJITA SCALE CLASSIFIES TORNADOES INTO THE FOLLOWING CATEGORIES.

EF0 . . . WEAK . . . . . 65 TO 85 MPH
EF1 . . . WEAK . . . . . 86 TO 110 MPH
EF2 . . . STRONG . . . . 111 TO 135 MPH
EF3 . . . STRONG . . . . 136 TO 165 MPH
EF4 . . . VIOLENT . . . 166 TO 200 MPH
EF5 . . . VIOLENT . . . > 200 MPH

NOTE: INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT /S/ AND PUBLICATION IN NWS STORM DATA.

## 4. <u>Downburst Damage Survey</u>

PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE MEMPHIS TN 355 PM CDT TUE APR 17 2012

...NWS DAMAGE SURVEY FOR 04/16/12 THUNDERSTORM WIND EVENT...

.OVERVIEW...

A SEVERE THUNDERSTORM CAUSED A LONG TRACK DOWNBURST ACROSS RURAL PORTIONS OF WESTERN TENNESSEE BETWEEN JACKSON AND LEXINGTON EARLY MONDAY AFTERNOON. NWS SURVEY TEAMS CONFIRMED SIGNIFICANT STRAIGHT LINE WIND DAMAGE FROM THE DOWNBURST OVER MULTIPLE LOCATIONS ALONG ITS TRACK. ADDITIONAL UPDATES FOR THIS EVENT ARE LIKELY AS ONGOING DOWNBURST DAMAGE SURVEYS ARE PROJECTED TO BE COMPLETED ON WEDNESDAY.

## .THUNDERSTORM WIND 1...

PEAK WIND /ESTIMATED/: 80–100 MPH PATH LENGTH /STATUTE/: 21.5 MILES PATH WIDTH /MAXIMUM/: 1760 YARDS

FATALITIES: 0 INJURIES: 8

START DATE: APRIL 16...2012 START TIME: 2:08 PM CDT

START LOCATION: 4 SE JACKSON / MADISON COUNTY / TN

START LAT/LON: 35.6003 / -88.7914

END DATE: APRIL 16...2012 END TIME: 5:29 PM CDT

END LOCATION: LEXINGTON / HENDERSON COUNTY / TN

END LAT/LON: 35.6624 / -88.4002

SURVEY SUMMARY: U.S. NATIONAL WEATHER SERVICE METEOROLOGISTS SURVEYED LONG TRACK THUNDERSTORM WIND DAMAGE...OTHERWISE KNOWN AS A DOWNBURST...THAT ORIGINATED SOUTHEAST OF JACKSON TENNESSEE AND ENDED IN LEXINGTON TENNESSEE. THE DAMAGE PATH WAS UP TO ONE MILE WIDE AT TIMES BUT GENERALLY AVERAGED LESS THAN ONE HALF MILE IN WIDTH. MAXIMUM DOWNBURST WINDS...BASED ON HOME...BARN AND TREE

DAMAGE...WAS ESTIMATED BETWEEN 80 AND 100 MPH. MOST OF THE DOWNBURST DAMAGE OCCURRED ALONG STATE ROAD 198 SOUTHEAST OF JACKSON. A DOZEN MOBILE HOMES... NUMEROUS SHEDS AND A FEW BARNS INCURRED MAJOR STRUCTURAL DAMAGE. EIGHT INJURIES OCCURRED IN FOUR SEPARATE MOBILE HOMES ALONG STATE ROAD 198 DUE TO WIND BLOWN DEBRIS. FOUR OF THE EIGHT INJURIES OCCURRED WHEN TWO MOBILE HOMES ALONG STATE ROAD 198 WERE ROLLED OVER 100 FEET FROM THEIR ORIGINAL LOCATION. DAMAGE FROM THE DOWNBURST BECAME SPORADIC AND NOMINAL AS IT DISSIPATED NEAR HENDERSON...TENNESSEE.

NOTE: INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT AND PUBLICATION IN NWS STORM DATA.

# 5. Other (Gradient Winds) Damage Survey

PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE NASHVILLE TN 415 PM CDT TUE APR 17 2012

...NWS DAMAGE SURVEY FOR 04/16/12 GRADIENT WIND EVENT...

.OVERVIEW...

NON-THUNDERSTORM...GRADIENT STRAIGHT LINE WINDS...OCCURRED FOLLOWING THE PASSAGE OF A LINE OF SEVERE THUNDERSTORMS ACROSS MIDDLE TENNESSEE...BETWEEN NASHVILLE AND COOKEVILLE...LATE MONDAY AFTERNOON. NWS SURVEY TEAMS CONFIRMED MINOR DAMAGE FROM THE GRADIENT WIND EVENT MAINLY ALONG THE INTERSTATE 40 CORRIDOR.

#### .MIDDLE TENNESSEE GRADIENT WINDS...

PEAK WIND /ESTIMATED/: 40–50 MPH PATH LENGTH /STATUTE/: 75.0 MILES PATH WIDTH /MAXIMUM/: PENDING

FATALITIES: 0 INJURIES: 0

START DATE: APRIL 16...2012 START TIME: 4:15 PM CDT

START LOCATION: NASHVILLE / DAVIDSON COUNTY / TN

START LAT/LON: 36.1205 / -86.6824

END DATE: APRIL 16...2012 END TIME: 8:15 PM CDT

END LOCATION: COOKVILLE / PUTNAM COUNTY / TN

END LAT/LON: 35.9615 / -85.0802

SURVEY SUMMARY: U.S. NATIONAL WEATHER SERVICE METEOROLOGISTS SURVEYED NON-THUNDERSTORM...STRAIGHT LINE WIND DAMAGE...REFERRED TO AS GRADIENT WIND...WHICH FOLLOWED THE PASSAGE OF A LINE OF SEVERE THUNDERSTORMS ACROSS MIDDLE TENNESSEE DURING THE LATE AFTERNOON HOURS OF 04/16/12. THE GRADIENT WIND DAMAGE OCCURRED MAINLY ALONG THE INTERSTATE 40 CORRIDOR FROM NASHVILLE...EAST TO COOKVILLE... TENNESSEE. GRADIENT WINDS OF 40 TO 50 MPH PERSISTED FOR UP TO FOUR HOURS ALONG THE INTERSTATE 40 CORRIDOR OVER MIDDLE TENNESSEE.

DAMAGE FROM THE GRADIENT WIND EVENT WAS MINOR AND CONFINED TO MAINLY MOBILE HOMES...SHEDS...HIGHWAY BILLBOARDS AND VARIOUS SIZED DOWNED TREE BRANCHES.

NOTE: INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT AND PUBLICATION IN NWS STORM DATA.

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## 6. <u>Multi Event Damage Survey</u>

PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE DES MOINES IA 415 PM CDT TUE APR 17 2013

...NWS DAMAGE SURVEY FOR 04/16/13 TORNADO AND GRADIENT WIND EVENT...

.TORNADO 1...

EF SCALE RATING: EF-1

ESTIMATED PEAK WIND: 120–130 MPH PATH LENGTH /STATUTE/: 26 MILES PATH WIDTH /MAXIMUM/: 440 YARDS

FATALITIES: 0 INJURIES: 11

START DATE: APRIL 16...2013 START TIME: 5:03 PM CDT

START LOCATION: CEDAR RAPIDS/ LINN COUNTY / IA

START LAT/LON: 42.0083 / -91.6439

END DATE: APRIL 16...2013 END TIME: 6:02 PM CDT

END LOCATION: IOWA CITY / JOHNSON COUNTY / IA

END LAT/LON: 41.6611 / -91.5300

EF SCALE: THE ENHANCED FUJITA SCALE CLASSIFIES TORNADOES INTO THE FOLLOWING CATEGORIES.

EF0... WEAK...... 65 TO 85 MPH
EF1... WEAK...... 86 TO 110 MPH
EF2... STRONG.... 111 TO 135 MPH
EF3... STRONG.... 136 TO 165 MPH
EF4... VIOLENT... 166 TO 200 MPH
EF5... VIOLENT... > 200 MPH

## .MIDDLE IOWA GRADIENT WINDS...

PEAK WIND /ESTIMATED/: 50–60 MPH PATH LENGTH /STATUTE/: 75.0 MILES PATH WIDTH /MAXIMUM/: PENDING

FATALITIES: 0 INJURIES: 0

START DATE: APRIL 16...2013 START TIME: 4:15 PM CDT

START LOCATION: SIOUX CITY / WOODBURY COUNTY / IA

START LAT/LON: 42.5000 / -96.4000

END DATE: APRIL 16...2013 END TIME: 8:15 PM CDT

END LOCATION: STORM LAKE / BUENA VISTA COUNTY / IA

END LAT/LON: 42.6411 / -95.2094

NOTE: INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT AND PUBLICATION IN NWS STORM DATA.