

AUGUST 1992
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NUMBER 8

STORM DATA

AND UNUSUAL WEATHER PHENOMENA
WITH LATE REPORTS AND CORRECTIONS



noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE / NATIONAL CLIMATIC DATA CENTER ASHEVILLE, N.C.

Cover: Hurricane Andrew struck southeast Florida on August 24 with an estimated maximum sustained (1 minute average) surface wind speed of 145 mph, gusts in excess of 175 mph, and a minimum central pressure of 922 millibars (27.23 inches). Andrew crossed Florida and went on to strike south-central Louisiana on August 26. See pages 8 through 34 for additional information. (Photo courtesy: Peter Dodge, Hurricane Research Division, NOAA/AOML, Miami, FL.)

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STORM DATA

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National Climatic Data Center

Editor: Grant W. Goodge

Publication Staff: William Angel, Greg Hammer, Jay Hollifield, and Sharon Weaver

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The Storm Data and Unusual Weather Phenomena narratives and Hurricane/Tropical Storm summaries are prepared by the National Weather Service. Monthly and annual statistics and summaries of tornado and lightning events resulting in deaths, injuries, and damage are compiled by cooperative efforts between the National Climatic Data Center and the National Severe Storms Forecast Center.

STORM DATA contains all confirmed information on storms available to our staff at the time of publication. However, due to difficulties inherent in the collection of this type of data, it is not all-inclusive. Late reports and corrections are printed in each edition.

Maps of the National Weather Service Forecast Zones which are used in the Storm Data and Unusual Weather Phenomena section will be printed in all editions.

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National Climatic Data Center
37 Battery Park Avenue
Asheville, NC 28801-2733
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The editor of STORM DATA solicits your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or unusual weather events (past or present). These could be for use in the "Outstanding Storms of the Month" or "Et Cetera" sections of STORM DATA. We request our subscribers or other interested persons to mail such items to:

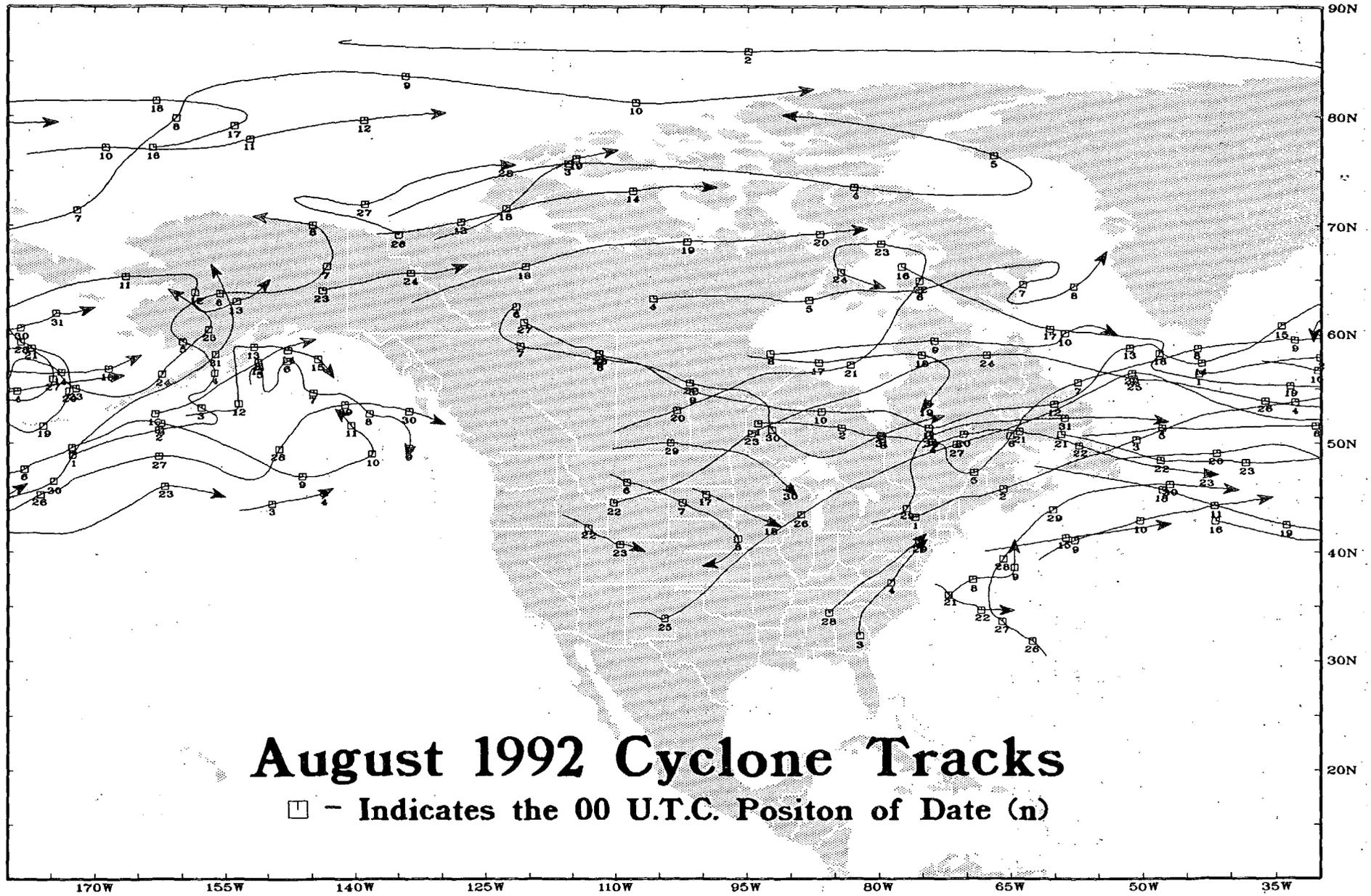
Grant W. Goodge
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Director,
National Climatic Data Center



CLIMATIC DATA OF THE MONTH

PRECIPITATION AND TEMPERATURE ANOMALIES - AUGUST 1992

Table 1 lists the 98-year temperature and precipitation rankings for the nine climatically homogeneous regions in the United States outlined below in Figure 1.

Areally averaged mean monthly temperatures across the nation ranked August 1992 as the second coolest August on record eclipsed only by August 1927. Due to an abnormally strong upper air flow pattern, a series of cool fronts pushed unusually far south for the month of August. This allowed 50% of the country to average much below normal for temperatures. Specifically, it was the second coolest August in 98 years in the East North Central, Central, and Southeast regions, and the coolest August on record in the Southern region. Meanwhile, the West experienced mean monthly temperatures as much as 5°F above normal. Mean monthly temperatures for most stations east of the Continental Divide, with the exceptions of southern Florida, northern Maine, and portions of Texas, were below normal. Departures approached -7°F in the Plains. In Alaska, temperatures were seasonable. The Hawaiian Islands recorded mean monthly temperatures as much as 2°F above normal.

Nationally, August 1992 was the 29th wettest August on record. The Southwest region logged its fourth wettest August in 98 years. Other areas that were unusually wet included parts of North Carolina and Louisiana where over 19 inches of rain fell during the month (partially due to Hurricane Andrew and its remnants). Too little precipitation was a problem in pockets of the East, West, Plains and the state of Texas. The hot and dry conditions of the West were perfect for the inception and continuation of forest fires. With the exceptions of central and northern Alaska, and a few stations in Hawaii, both states experienced above normal August precipitation.

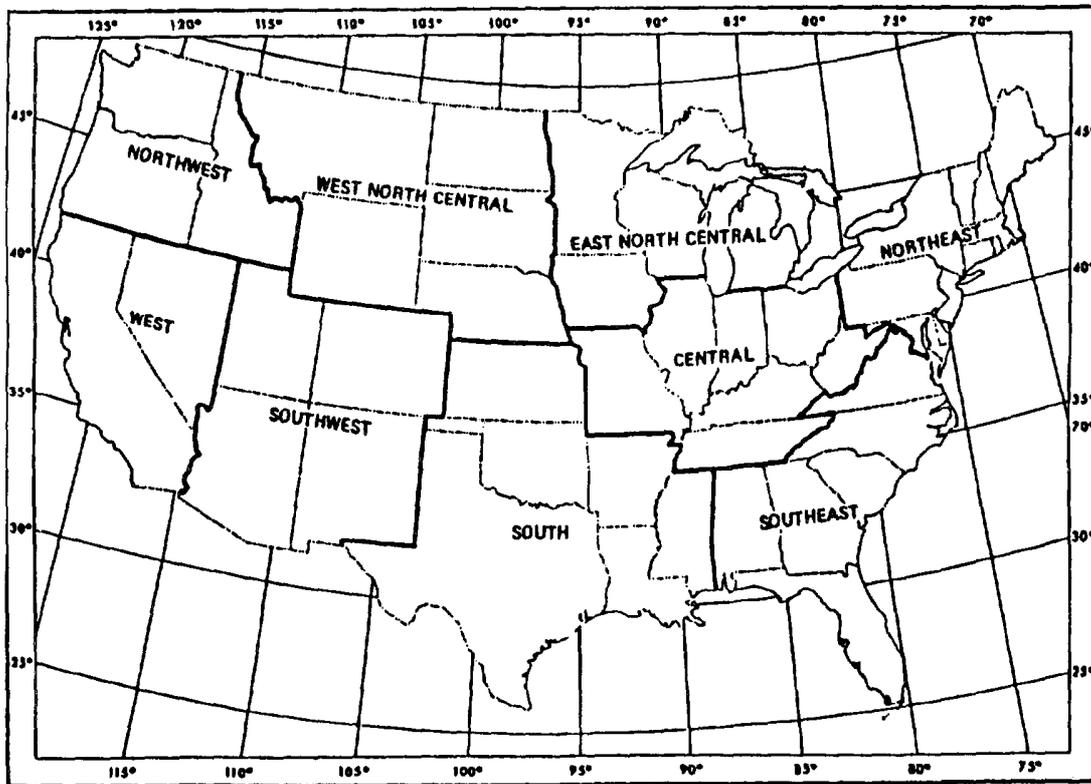
TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR AUGUST 1992, BASED ON THE PERIOD 1895-1992.

1 = DRIEST, 98 = WETTEST; 1 = COLDEST, 98 = HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
Northeast	33	21
East North Central	45	2
Central	21	2
Southeast	85	2
West North Central	59	8
South	64	1
Southwest	95	29
Northwest	49	71
West	65	87
National	70	2

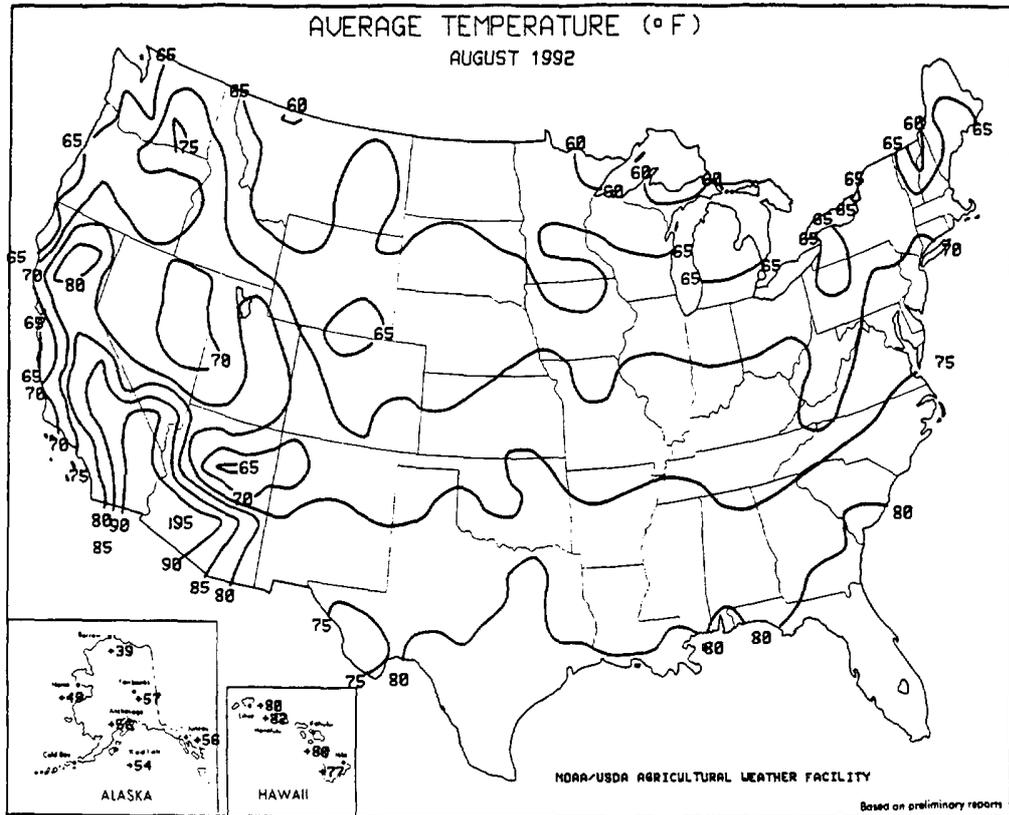
From National Climatic Data Center

Fig. 1



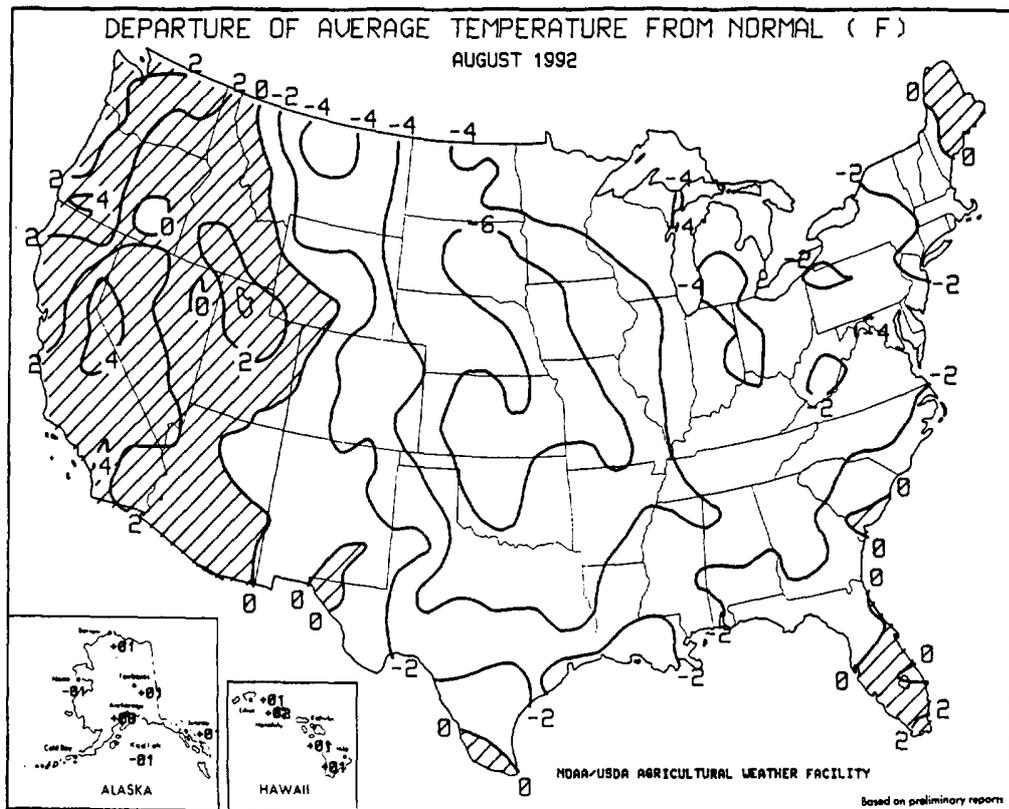
From National Climatic Data Center

Fig. 2

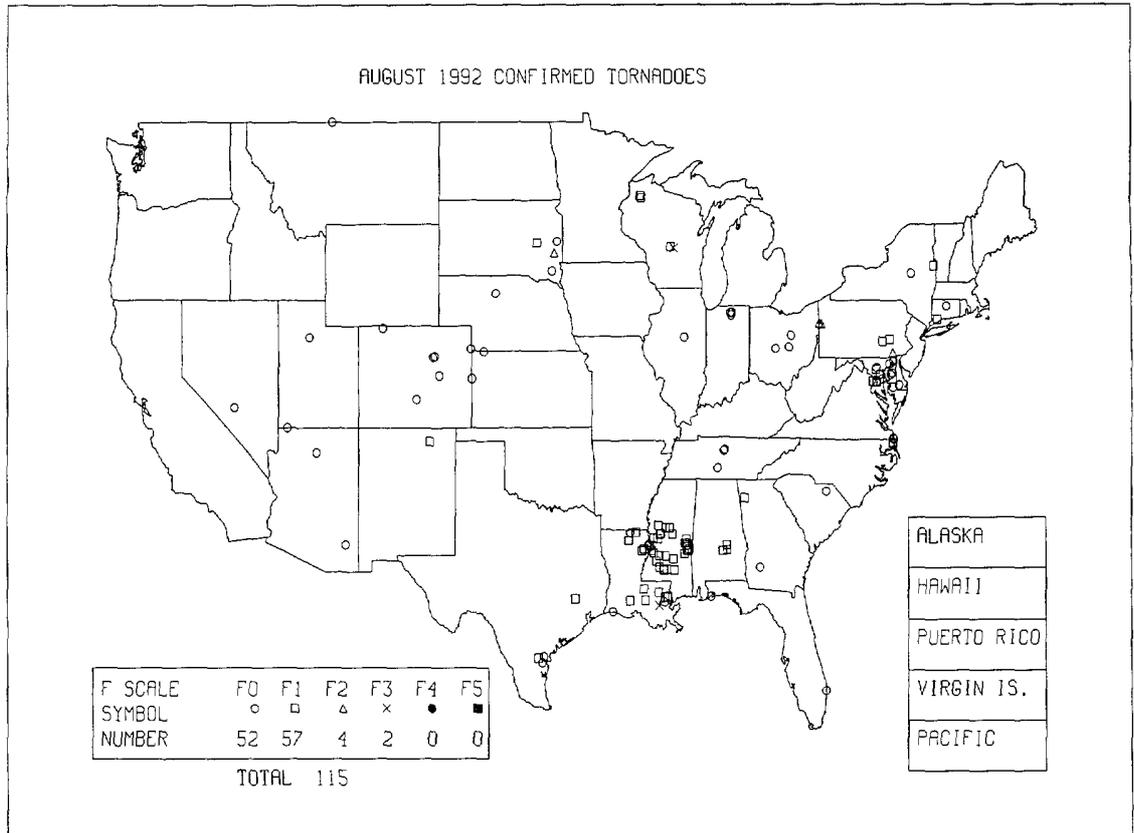


Reprinted from *Weekly Weather and Crop Bulletin* - September 9, 1992

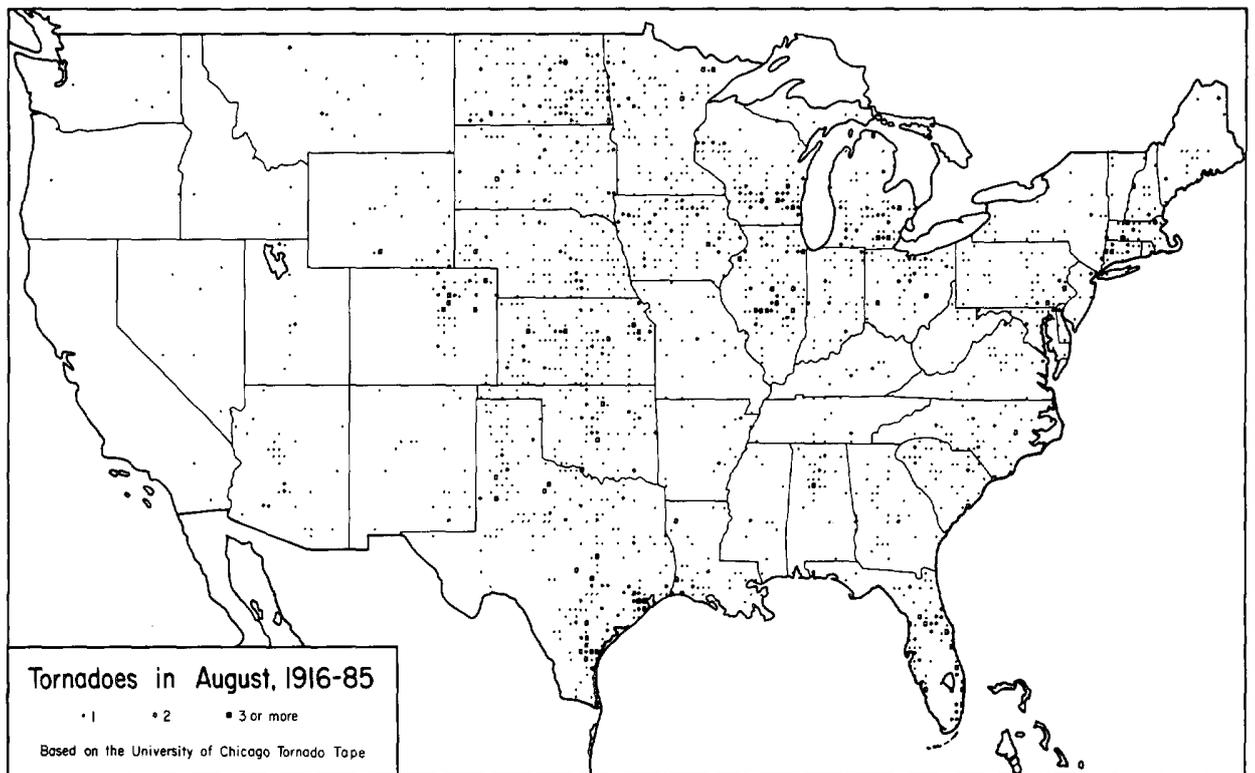
Fig. 3



Reprinted from *Weekly Weather and Crop Bulletin* - September 9, 1992



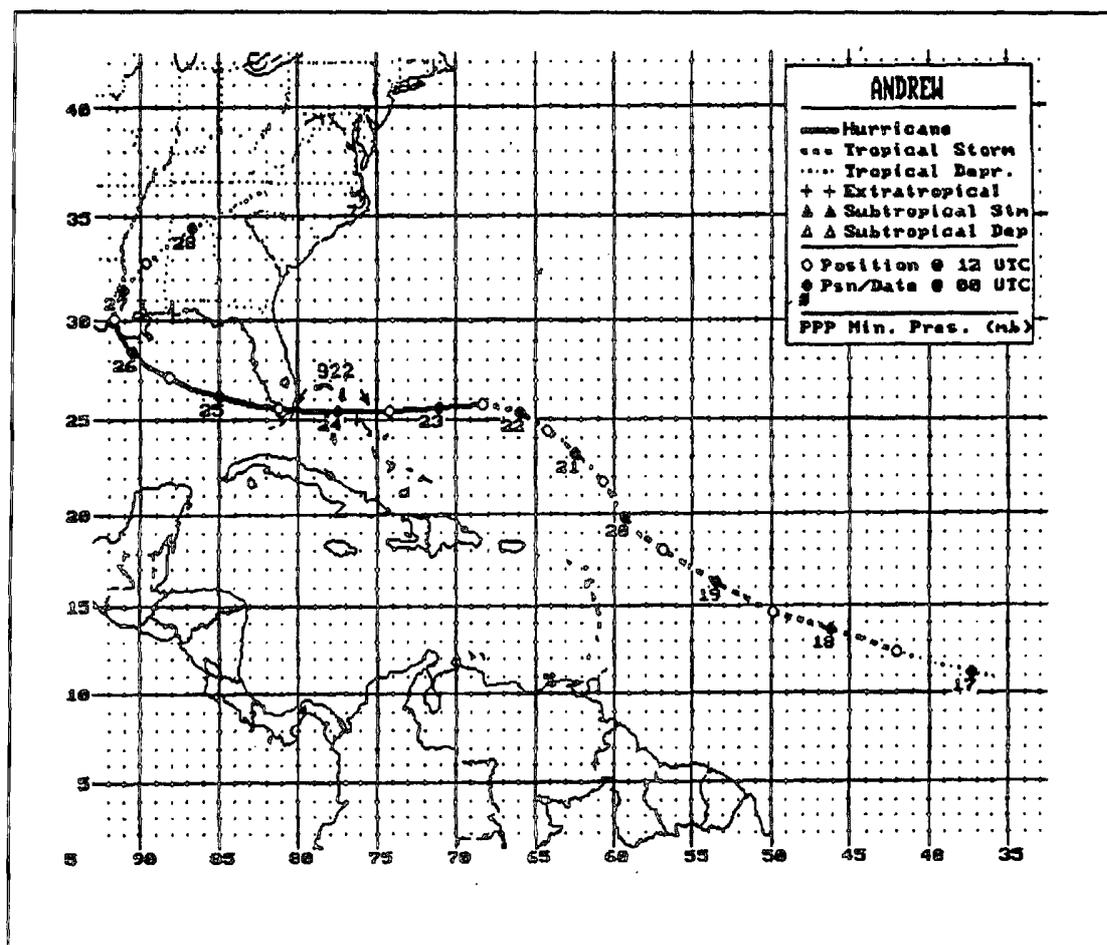
A total of 115 tornadoes were reported in August 1992. Two of the tornadoes reached F3 strength (winds of 158 - 206 mph) while all others were rated F2 or less in intensity. One of the F3 tornadoes struck Wisconsin and the other in Louisiana in connection with Hurricane Andrew. Andrew produced a total of 47 tornadoes (28 F0's, 18 F1's, and 1 F3). Two deaths and 49 injuries were attributed to these 47 tornadoes. Nationally, there were three deaths and 92 injuries.



OUTSTANDING STORMS OF THE MONTH

1. HURRICANE ANDREW STRIKES FLORIDA AND LOUISIANA

Andrew was a small but destructive hurricane that developed in the Cape Verde Islands and eventually brought devastation to the northern Bahamas, southern Florida, and south-central Louisiana in August 1992. With a minimum central pressure of 922 millibars (the third lowest pressure this century) at the time of landfall, and a maximum sustained (1 minute average) surface wind speed of 145 mph, Andrew was rated as a category 4 hurricane on the Saffir/Simpson Hurricane Scale. Andrew was the first category 4 hurricane to strike the United States since Hugo in 1989. Prior to Hugo, Camille, a category 5 hurricane in August 1969, was the last hurricane rated 4 or higher to strike the United States. Damage resulting from Andrew was extreme and extensive with losses estimated at \$20 - 25 billion, making Andrew the most expensive natural disaster in United States history! Twenty-one people were killed as a result of the storm (15 in FL, 6 in LA). Injuries were numerous and one-quarter million people were left homeless.

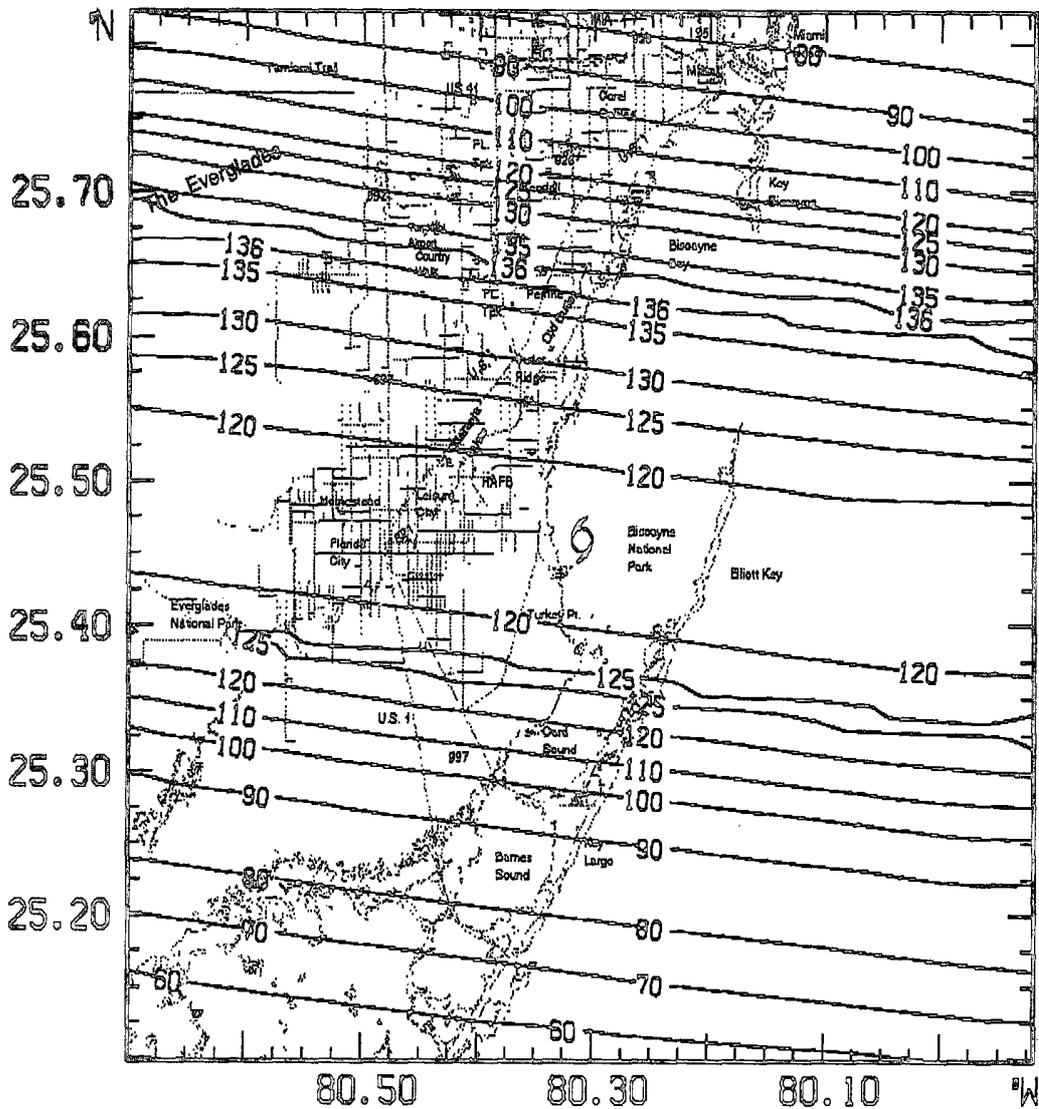


Best track positions for Hurricane Andrew.

A N D R E W H I G H L I G H T S

- August 14:** A tropical wave crossed the west coast of Africa.
- August 15:** The wave, moving westward at 20 knots, passed to the south of the Cape Verde Islands.
- August 16:** Convection became more organized. At 1800 UTC, the tropical wave was upgraded to a depression.
- August 17:** The depression intensified into Tropical Storm Andrew at 1200 UTC. Andrew continued to move quickly in a west-northwest direction, toward the Lesser Antilles.
- August 18-20:** Andrew continued to intensify as winds increased to 45 knots, then weakened due to strong wind shear. The wind shear was caused by a strong upper air system. With the forward speed decreased and directional change, the Lesser Antilles were spared.
- August 21:** Strong wind shear ends and the steering currents turn Andrew toward the west. Andrew accelerated to 16 knots and quickly intensified.
- August 22:** Andrew reached hurricane status during the morning. An "eye" formed later in the morning as further strengthening occurred.
- August 21-23:** Andrew became a category 4 hurricane with the central pressure at 922 millibars on the 23rd. The central pressure fell 92 millibars (mb) between 0000 UTC on the 21st and 1800 UTC on the 23rd. A pressure fall of 72 mb occurred during the last 36 hours of the period.
- August 22-24:** A strong high pressure system over the southeast coast of the United States, and a high pressure ridge into the southwestern Atlantic, just north of Andrew, dominated Andrew's course as it moved due west for two and half days.
- August 23:** Andrew, a category 4 hurricane, struck northern Eleuthera Island in the Bahamas at 2100 UTC with winds of 130 knots (about 150 mph). The hurricane directly caused three deaths on the North Eleuthera mainland. A huge storm surge at the Current (a settlement near the northern end of Eleuthera Island) reached an astonishing 23 feet! Damage in the Bahamas has been placed at \$0.25 billion. There were no tornadoes.
- August 24:** Early in the day, Andrew hit the southern Berry Islands in the Bahamas, and continued moving toward south Florida. Andrew weakened, pressure rose to 941 mb, when it passed over the Great Bahama Bank. It then quickly reintensified over the Straits of Florida before landfall. Andrew struck south Florida approximately 4:30 a.m. EDT with a central pressure of 922 mb, near Homestead Air Force Base. Maximum sustained surface wind speed is estimated at 125 knots (approx. 145 mph) with gusts to at least 150 knots (approx. 175 mph).
- Andrew continued to move westward over Florida. When Andrew exited Florida four hours later at Marco Island, it had weakened to a category 3 hurricane with a central pressure of about 950 mb.
- August 25:** Andrew reintensified (not to the extent before landfall in Florida) over the waters of the Gulf of Mexico. A gradual turn to the west-northwest took place with Andrew heading toward Louisiana.
- August 26:** As the steering currents changed, the forward speed of Andrew dropped to 8 knots. Still rated as a category 3 hurricane, Andrew struck a sparsely populated section of south-central Louisiana approximately 1:30 CDT, 20 nautical miles west-southwest of Morgan City.
- August 26-28:** Andrew weakened rapidly after landfall to tropical storm status in 10 hours and to tropical depression status 12 hours later. Andrew made a turn first toward the north and then northeastward and an increase in forward speed occurred. By midday of the 28th, the remains of Andrew merged with the frontal system over the mid-Atlantic states.

NOAA Hurricane Research Division Surface Wind Analysis
Hurricane Andrew
0500 EDT 24 August, 1992 data from 0030-0720 EDT

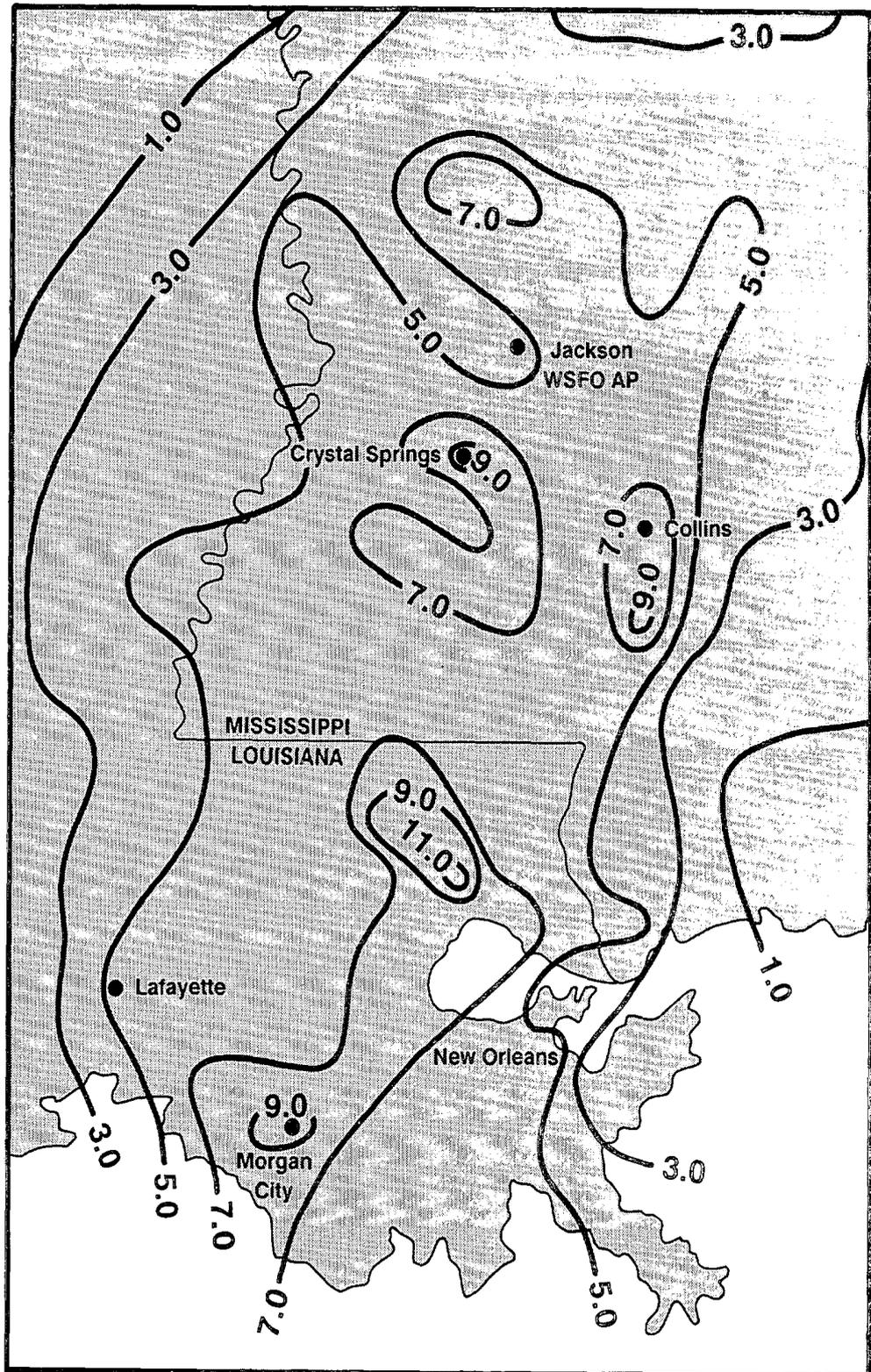


Swath of Maximum Sustained Surface Wind Speeds (mph)

Interpretation of the Above map: The wind swath represents contours of the highest sustained wind (a sustained wind is actually the average of lulls and gusts that occur over a 1 minute period) that would have been experienced at the map locations during Andrew. These winds represent open terrain exposure over land at the 10-meter level. Open terrain is similar to that of an airport runway. The lines over water are unrepresentative because those locations would have experienced even stronger winds due to less friction. The wind swath map DOES NOT represent a "snapshot" of the wind field at any instant of time. Analysis is based on surface measurements and Air Force reconnaissance winds adjusted to 10 meters with a boundary layer model.

Authors and suppliers of the above map: Mark Powell and Sam Houston, NOAA, Hurricane Research Division, AOML, Miami, Florida.

ANDREW RAINFALL OVER LOUISIANA AND MISSISSIPPI - AUGUST 25 - 28

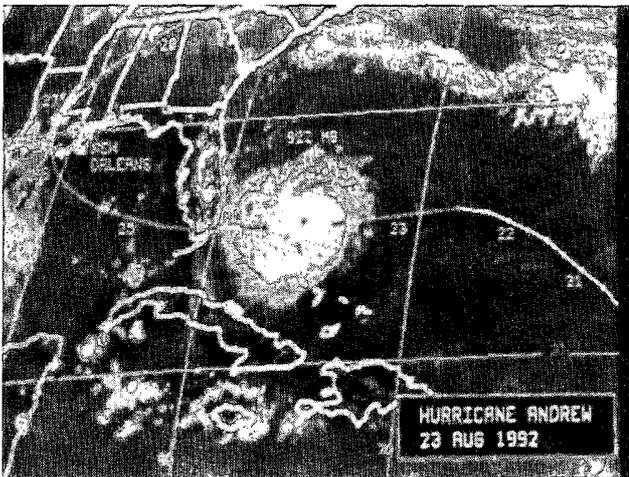
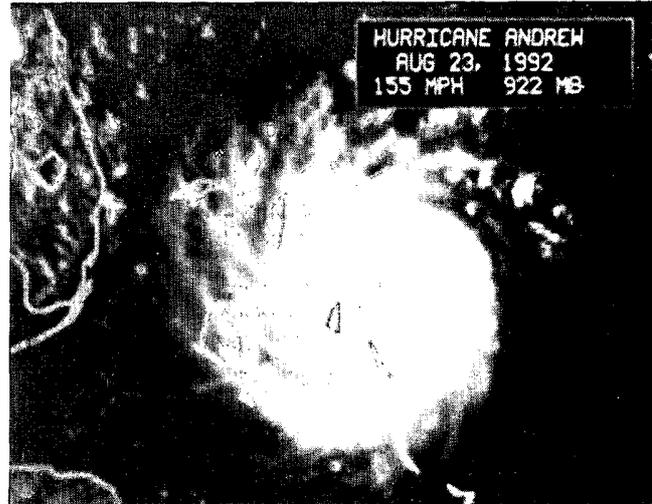


Above: Map based on Cooperative Observer data supplied to the National Climatic Data Center, Asheville, North Carolina.

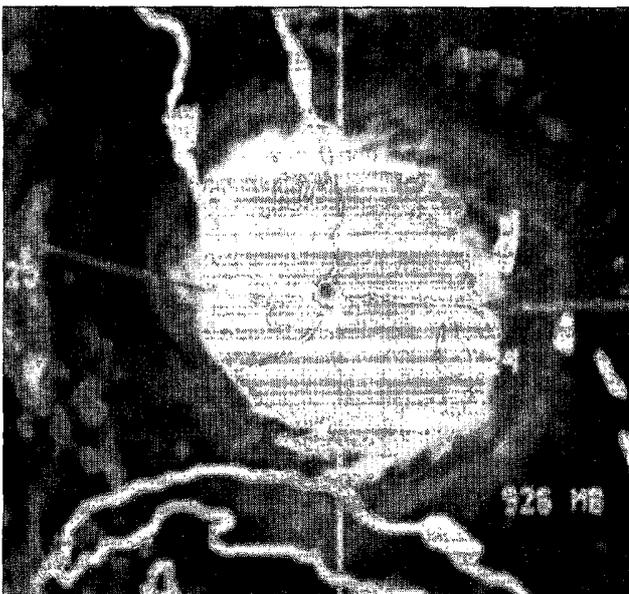
Note: Abbreviations used for the following pages:

NHC = National Hurricane Center; NESDIS = National Environmental Satellite, Data, and Information Service; NOAA DST = National Oceanic and Atmospheric Administration Disaster Survey Team.

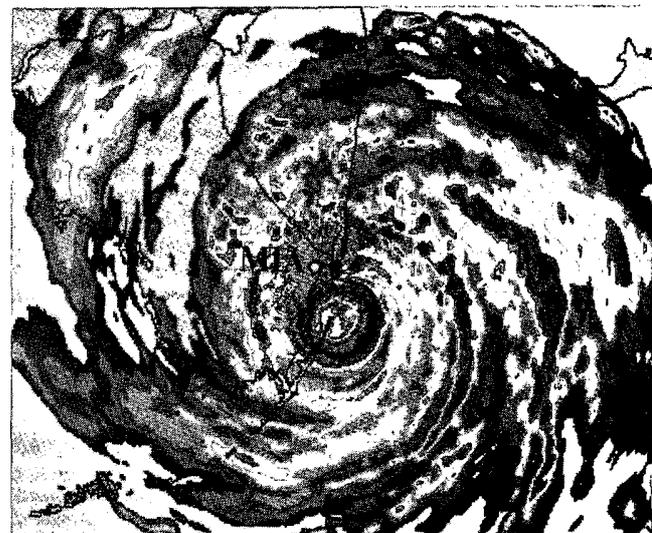
ANDREW'S LIFE CYCLE



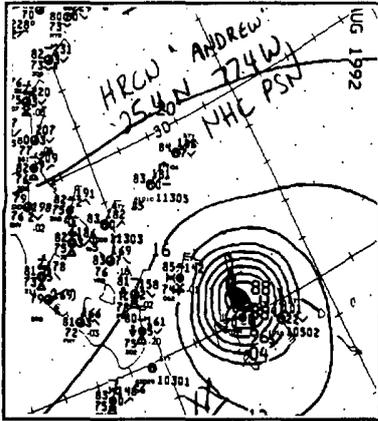
Above(left): Water vapor satellite image taken by METEOSAT 3 on August 19, 1992. The image depicts the presence of the upper level low north of Andrew. Also shown is the superimposed track of Andrew. **Above(right):** Visible satellite image taken by METEOSAT 3 during the period of Andrew's maximum intensity over the Bahamas on August 23, 1992. **Left:** Infrared satellite image of Andrew taken by METEOSAT 3 with Andrew's entire storm track superimposed. **Bottom(left):** Infrared satellite image taken by GOES 7 on August 24, 1992 showing Andrew at the time of landfall in Dade County, Florida. **Bottom(right):** Radar composite at the time of Andrew's landfall. (Photo courtesy: NESDIS and NHC)



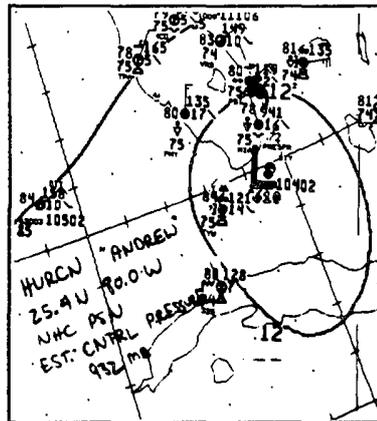
August 24, 1992



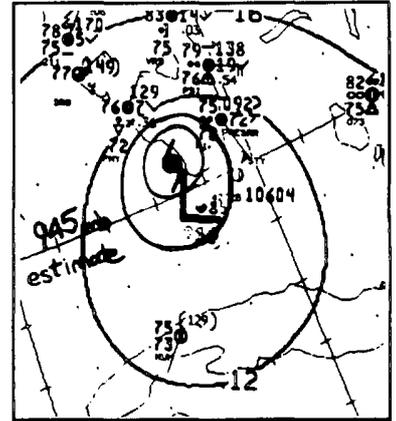
August 24, 1992



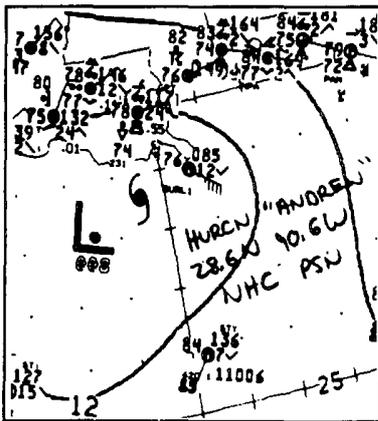
00Z MON AUGUST 24



09Z MON AUGUST 24

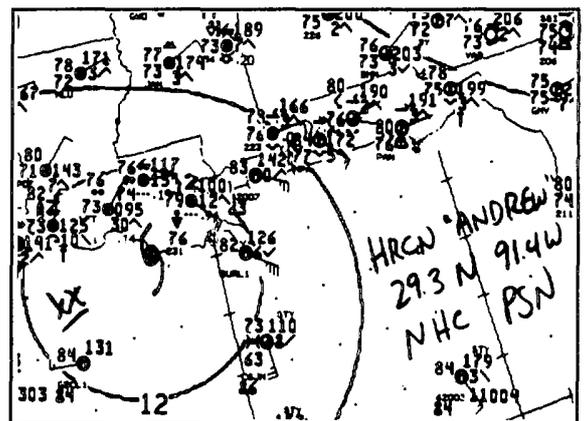


12Z MON AUGUST 24

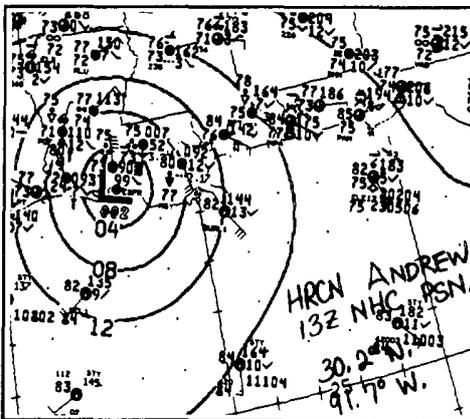


00Z WED AUGUST 26

Top(left): Hurricane Andrew east southeast of Miami.
 Top(center): Andrew one-half hour after landfall.
 Top(right): Andrew moves into the Gulf. Left and Right: Andrew south of the Louisiana coast.



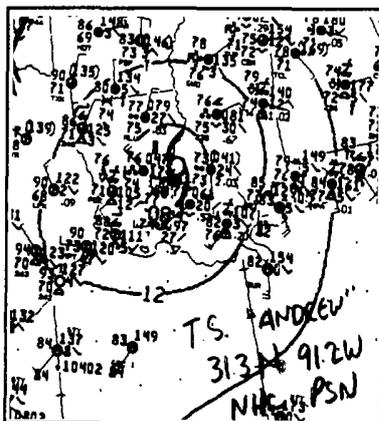
06Z WED AUGUST 26



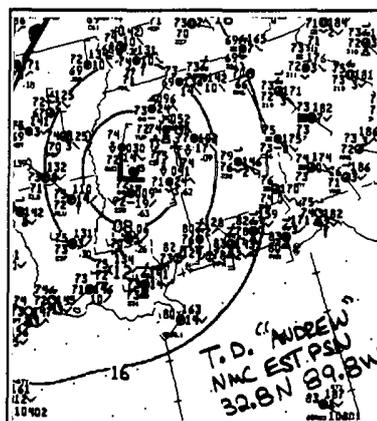
12Z WED AUGUST 26

Left: Andrew inland and weakening into a tropical storm, below (left). Below(middle): After continued weakening, Andrew became a tropical depression. The remnants of Andrew after merging with the frontal system over the mid-Atlantic States, below(right).

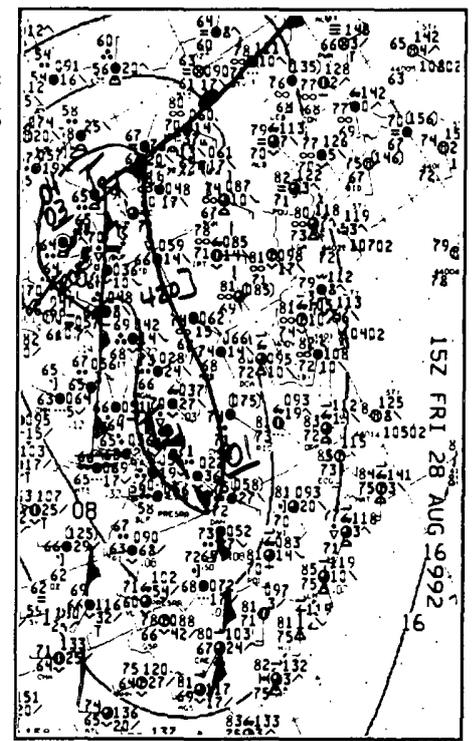
Maps provided by National Climatic Data Center.



00Z THU AUGUST 27



12Z THU AUGUST 27



15Z FRI AUGUST 28

SURFACE WEATHER REPORTS

PRESFR/PRESRR = PRESSURE FALLING/RISING RAPIDLY, PKWND 1461 20 = PEAKWIND FROM 140° AT 61 KNOTS OCCURRING 20 MINUTES AFTER THE HOUR, TRW+ = HEAVY THUNDERSHOWER, R+ = HEAVY RAIN, RW+ = HEAVY RAIN SHOWER, 941 = 941 MILLIBARS, E0470G100 = ESTIMATED WIND FROM 40° AT 70 KNOTS, GUSTING TO 100 KNOTS

MIAMI, FLORIDA - AUGUST 24, 1992 (Time below is in GMT, subtract 4 hours for EDT)

MIA SA 0755 14 SCT E30 BKN 140 OVC 2RW 004/78/75/E3640G60/954/PRESFR/

MIA SA 0850 10 SCT E30 OVC 2RW 941/78/75/E3655G80/935/PRESFR/

MIA SP 0923 10 SCT E30 OVC IRW+ E0470G100/953

MIA SA 0950 10 SCT E30 OVC 1/2RW+ 964/78/76/E1075G100/942 PRESRR LOWEST PRES 926 0900

MIA SA 1050 10 SCT E35 OVC 1/8RW+ 034/77/75/E1275G90/632 PRESRR

MIA SP 1117 10 SCT E35 OVC 35 OVC 3R E1470G80/974 PRESSRR

MIA SA 1152 10 SCT E30 SCT 80 OVC 4R- 092/75/72/E1660G70/981 PRESSRR

MIA SA 1250 13 SCT E30 BKN 80 OVC 4R- 106/75/73/E1045G70/984

MIA SA 1350 20 SCT E100 BKN 200 OVC 7RW- 107/76/74/E1225G40/989

BATON ROUGE, LOUISIANA - AUGUST 26, 1992 (Time below is in GMT, subtract 5 hours for CDT)

BTR SA COR 1154 M15 OVC IRF 007/75/73/1939G52/955/PK WND 1952/52/

BTR SA 1251 E15 OVC IR 988/75/74/1238G51/950/PK WND 1153 16

BTR SA 1355 M15 OVC IR+ 973/75/74/1235G51/945/PK WND 1259 25

BTR SP 1446 M12 OVC ITRW+ 1536G51/944/TB45 N-E MOVG NE

BTR SA 1454 M14 OVC ITRW+ 969/76/75/1440G55/944/TB45 N-E MOVG NE PK WND 1551 21/

BTR SA 1551 M11 OVC ITRW+ 976/75/75/1535G51/946/T NW-E MOVG E PK WND 1461 20

BTR SP 1602 M9 OVC 11/2R+ 1635G47/946/TE01 MOVD E

BTR SA COR 1651 M9 OVC 11/2R+ 991/75/74/1536G46/951/TE01 MOVD E R+ OCNLY R PK WND 1753 22

BTR SP 1746 M12 OVC 11/2R 1729G45/955/

Notice the different wind directions between Baton Rouge and Lafayette. Andrew passed between the stations!

LAFAYETTE, LOUISIANA - AUGUST 26, 1992 (Time below is in GMT, subtract 5 hours for CDT)

LFT SA 0850 M15 OVC 4R+ 017/75/73/0330G40/958/CIG RGD PKWND 0346/29/

LFT SA 0950 M20 OVC 5R+ 976/75/73/0240G52/946/PRESFR PKWND 32652/43

LFT SA 1050 M17 OVC 3R+ 932/75/73/0140G56/933/PRESFR PKWND 3656/45

LFT RS 1152 M20 OVC 11/2R+ 908/75/73/3646G60/926/CIG RGD PRESFR PKWND 3662/1057/

LFT SA 1250 E20 OVC 11/2R+ 905/75/73/E3640G54/925/95 WND E3555/25

LFT SA 1350 E20 OVC 11/2R-F 926/75/73/E3440G50/931/PRESRR PK WND E3450/45

LFT SP 1422 E13 OVC 3R-F E3338G48/935/PRESRR

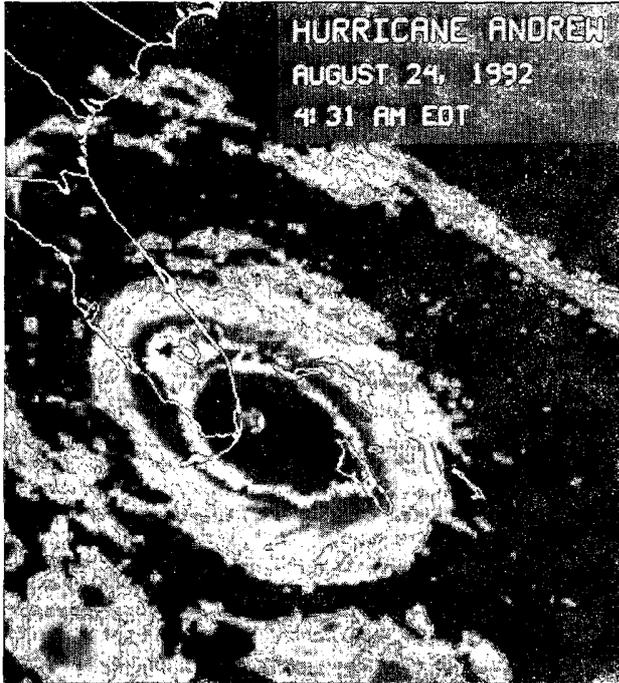
LFT SA 1450 E13 OVC 3R-F 956/74/73/E3340G52/940/ PRESRR/ PK WND 3354/35/

Three letter station identifier/type of report/cloud level (hundreds of feet) and amount of cloudiness/visibility (miles)/present weather/sea level pressure/temperature (°F)/dew point (°F)/wind direction and speed (degrees and knots)/altimeter (inches)/remarks

A. FLORIDA

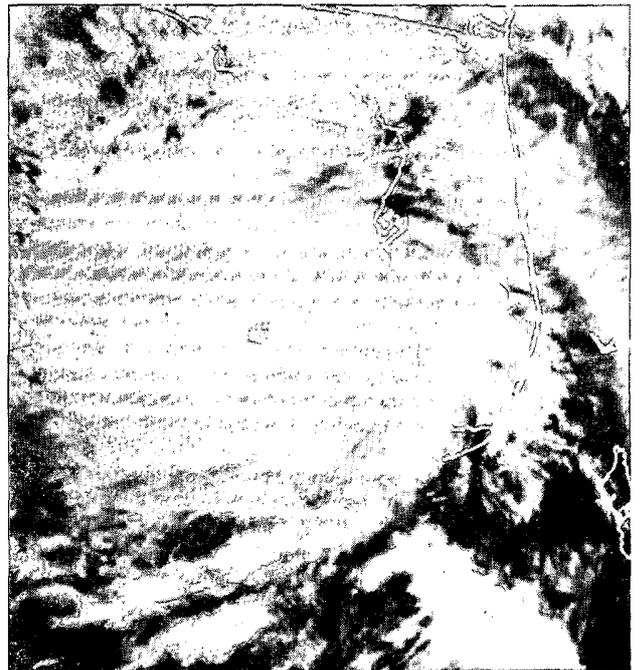
Andrew brought total destruction to parts of southern Florida. In all, property damage was estimated at more than \$25 billion and crop damage at least \$1 billion. Andrew destroyed at least 25,524 homes and damaged 101,241 other homes. Natural reefs of coral and other marine life, were very badly damaged. About 660,000 customers were without electrical power for periods that ranged from a few hours to several months.

A 16.9 foot storm tide (storm surge plus astronomical tide) was recorded near the Burger King World Headquarters, which is a record maximum for the southeast Florida peninsula. The maximum storm tide over the southwest coast was estimated at 5 to 7 feet. Maximum recorded rainfall totals in southeast Florida were in excess of 7 inches. There were no reports of tornadoes.



Infrared satellite imagery of Andrew taken by GOES-7 on August 24, 1992 at 0431 EDT. (Photo courtesy: Ralph E. Meiggs)

Visible satellite imagery of Andrew was taken by NOAA-11 on August 24, 1992 at 1640 EDT. (Photo courtesy: Ralph E. Meiggs)



ANDREW'S STORM SURGE IN FLORIDA

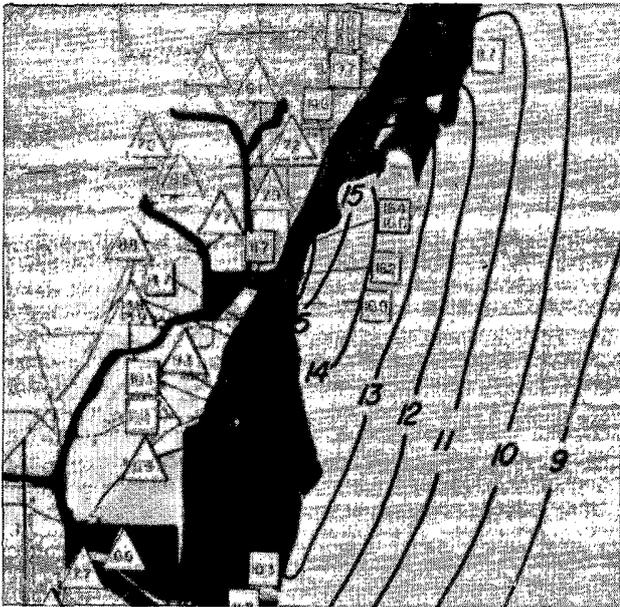


Before . . .

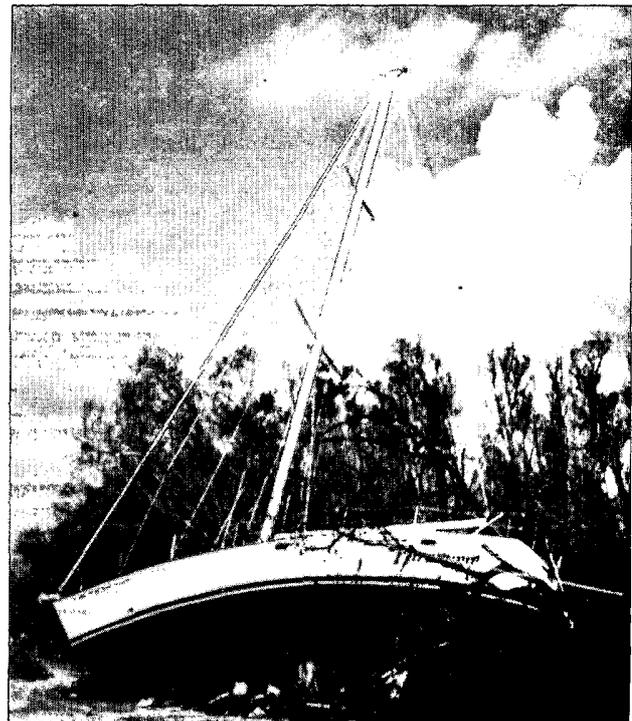


. . . After

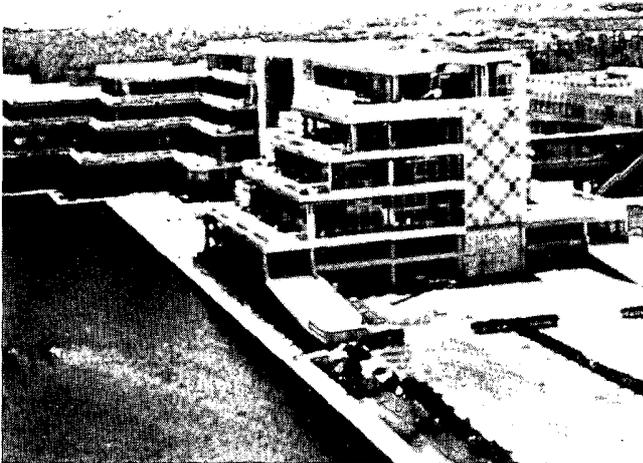
Above(left): Sewell Park before Andrew. **Above(right):** Sewell Park early morning of August 24. **Below:** The Gables-by-the-Sea marina located near Gables Estates where numerous boats were forced ashore by the 9 to 16 foot storm surge. Also note the downed trees. (Photo courtesy: NHC)



Above: An analysis of the maximum storm surge (feet) along the southeast Florida coast. A maximum storm tide of 16.9 feet, was recorded near the Burger King World Headquarters! (Photo courtesy: NHC - Brian Jarvinen) **Below:** Boat damage at Black Point Marina, Dade County. (Photo courtesy: NHC) **Right:** Sailboat stranded on a residential street in the Gables-by-the-Sea development of Coral Gables, Florida. (Photo courtesy: Roger Edwards, Kansas City, MO.)



DAMAGE FROM WINDS AND STORM SURGE



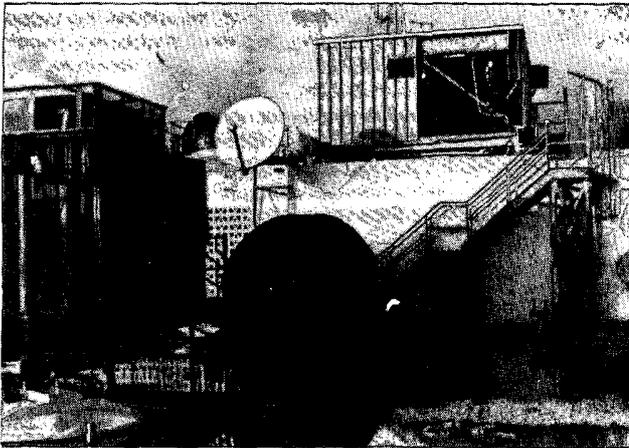
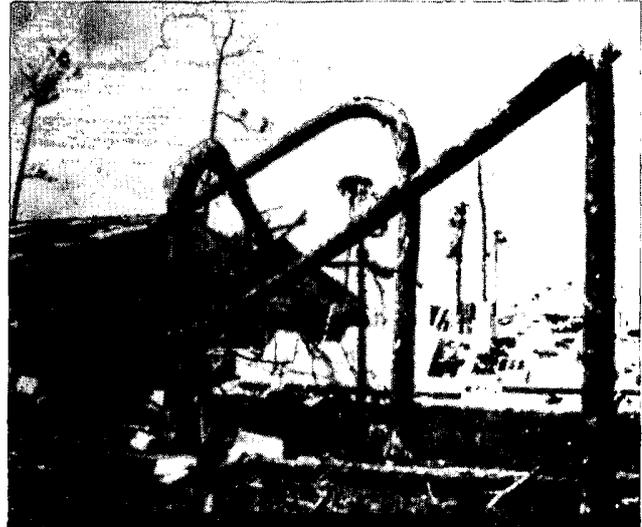
Top(left): Damaged vehicles at the Towers Condominium (Key Biscayne) adjacent to Cape Florida State Park. Note the flooded parking lot. *(Photo courtesy: Ralph Clark)* **Top(right):** The Seaward Explorer, an ocean-going tug, was forced ashore just south of the Deering Estate by the combination of wind and storm surge. **Above(left):** An aerial view of the World Headquarters for Burger King. Note the number of windows blown out by the strong winds. **Above(right):** Wind damage to the Chief Executive Office located on the top floor of the Burger King World Headquarters. **Below(left):** Water and wind damage to the main floor of the building. **Below(right):** Damage to homes in "Saga Bay" resulted from both the winds and storm surge. *(Photo courtesy: NHC)*



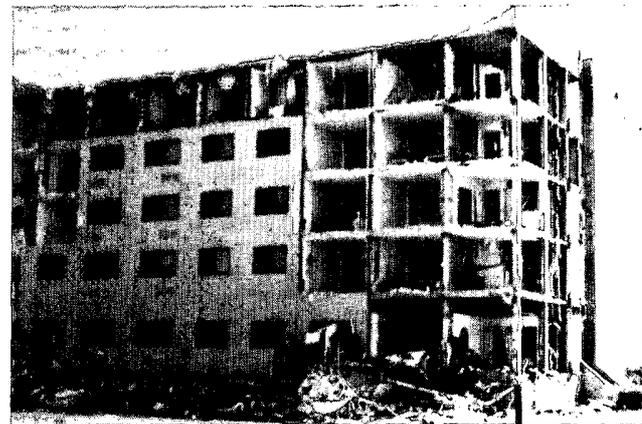
ANDREW'S POWERFUL WINDS INFLICT DAMAGE



Above: Winds still gusting to 50 mph bend the remaining trees at Coconut Grove after the passage of Hurricane Andrew. (Photo courtesy: Steve Wachholder)
Above(right): Broken pine trees in the Pinewoods Villa development indicate the different directions of the first and second winds. (Photo courtesy: Roger Edwards)



Above: A view of some of the wind damage to NHC's communications equipment atop the IRE Financial Building. The radar dome of the WSR-57 weather radar was blown off the highest structure seen at the center right of the photograph. (Photo courtesy: Roger Edwards)
Above(right): The Holiday Inn at Cutler Ridge, north of Homestead, suffered extensive wind damage with nearly every window blown out! (Photo courtesy: NHC)
Below(left): Outside wall almost completely removed from the east side of an apartment building in the Saga Bay development, near Cutler Ridge.
Below(right): Partial removal of the outside wall from the south (right) and west faces of the building. (Photo courtesy: Roger Edwards)



ANDREW'S WINDS PRODUCE AMAZING RESULTS



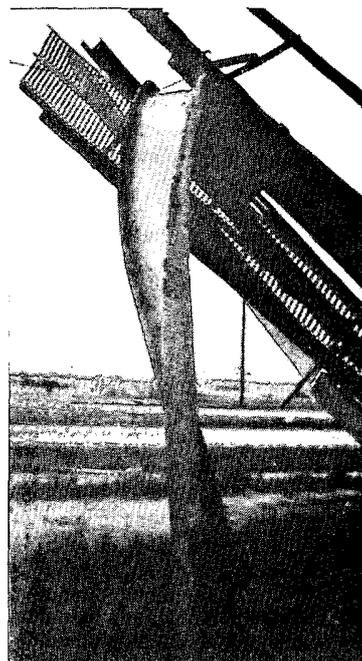
Top(left): Hurricane force winds blew this sailboat well inland. The photograph was taken south of Homestead Air Force Base. **Top(right):** The wind overturned the two cars in this garage, located west of



Whispering Pines. **Above:** Two cars lifted and moved by the wind. The cars had been parked next to the IRE Financial Building. **Right:** A royal palm tree in the Homestead area that was penetrated by a foreign object. The object was a 1 x 4 inch board which penetrated the tree about 40 feet above ground level. *(Photo courtesy: Roger Edwards)*



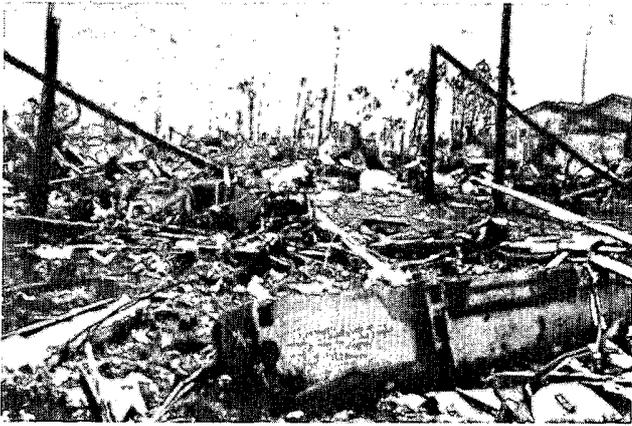
Right: An 18-inch wide structural I-beam bent and twisted in the Naranja community. *(Photo courtesy: Ralph Clark)* **Left:** Another royal palm tree near Homestead was pierced by a wind driven sheet of plywood. *(Photo courtesy: NHC)*



EXAMPLES OF WIND DAMAGE TO HOMES



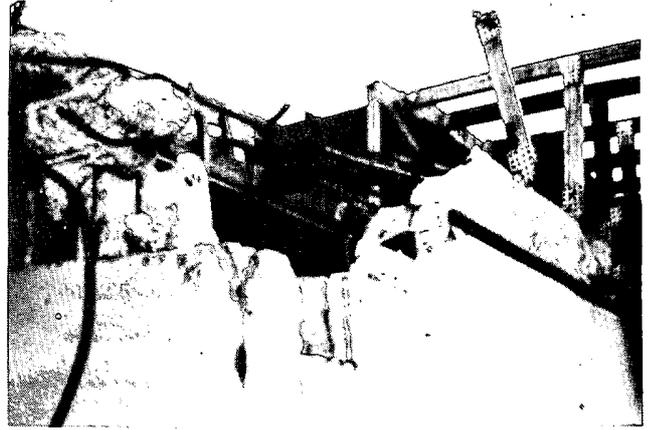
Above(left): This aerial view depicts the uneven damage pattern found in various wood structures in the Lakes By the Bay residential development. Above(right): A close-up view of a home in the development. The gable end of the roof failed during the storm. This was a frequent problem in homes of mixed wood and concrete block construction. (Photo courtesy: NHC)



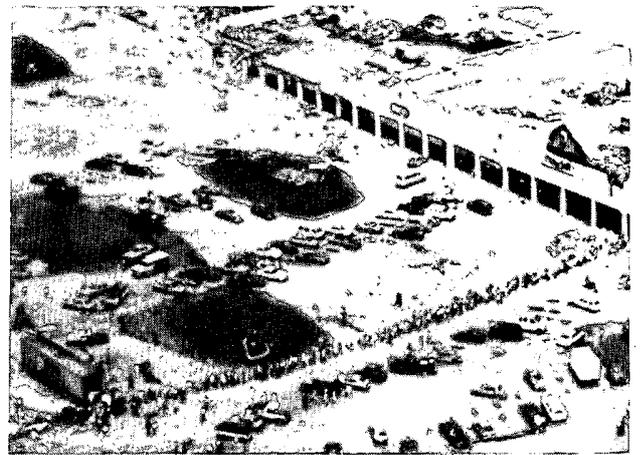
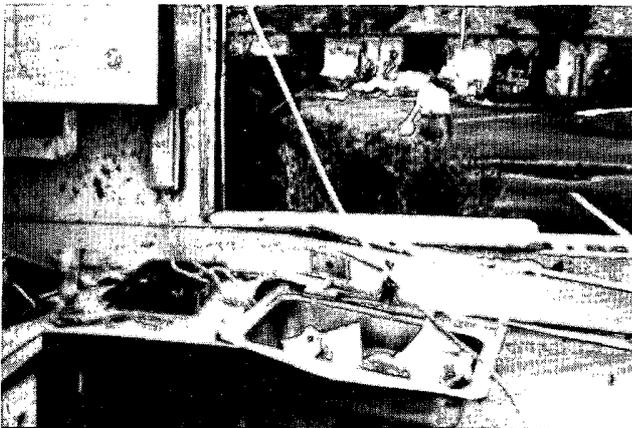
Above(left): Ground view of the devastation in the Pinewoods Villa. In the foreground are broken segments of a large tie beam. Above(right): Another ground level view in the Pinewoods Villa. (Photo courtesy: NHC)



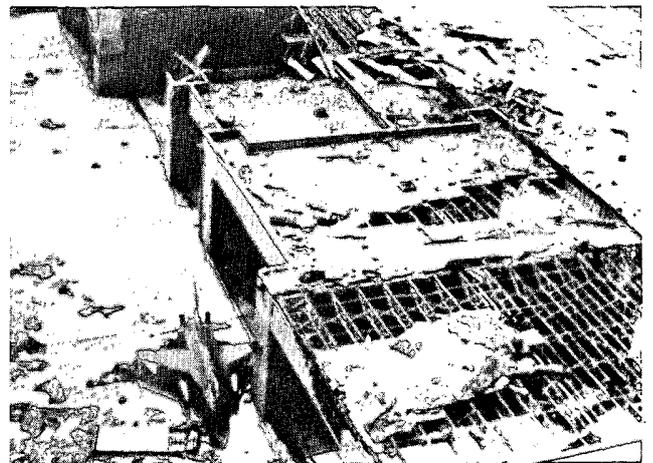
Above(left): Many roof trusses failed during the hurricane force winds. Above(right): These rustic shops were part of Gauley Square, a shopping area located north of Homestead. Both new and old buildings suffered significant damage. (Photo courtesy: NHC)



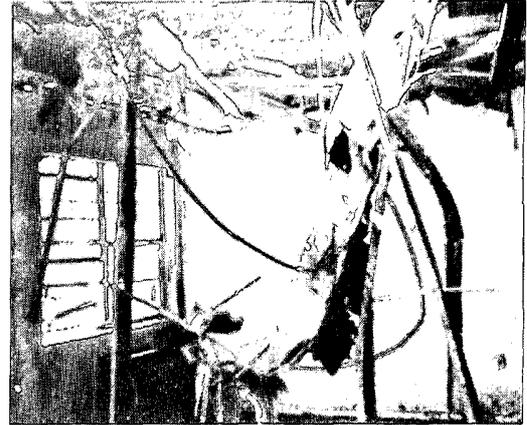
Above(left): Naranja Lakes homes were primarily concrete block and stucco (or CBS) construction. The force of Andrew's wind was strong enough to lift concrete tie beams and propel them into nearby structures. **Above(right):** This home in Naranja Lakes shows inadequate tie beam construction. Note that there were no vertical ties to the foundation. Many homes in Naranja Lakes lacked any vertical tie columns. *(Photo courtesy: NHC)*



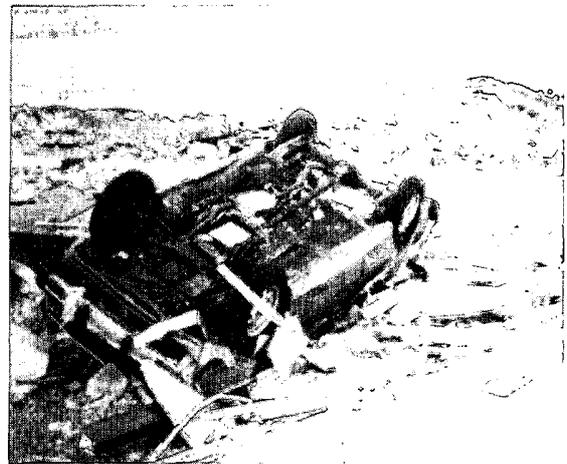
Above(left): The owner of this house, Mary Cowen, was killed during the storm. Amazingly the phone on the wall continued to work after the storm and served the neighborhood during the first few days following Andrew's passage. **Above(right):** People standing in long lines were a frequent sight throughout south Florida and Louisiana. This aerial photograph shows the Publix Supermarket in Homestead. Residents were standing in line awaiting rations of ice. *(Photo courtesy: NHC)*



Above(left): An aerial view of the remnants of a Levitz Furniture Warehouse and Showroom located along U.S. 1, west of the community of Whispering Pines. **Above(right):** Fortunately, most of the planes at Homestead Air Force Base had been flown out before the storm, however this F-16 fighter was under repair at the time and had to be left behind. *(Photo courtesy: NHC)*



Above(left): This aerial view of a section of Pinewoods Villa, a development located in Whispering Pines, shows an uneven damage pattern. Also note the roof damage to the building located in the center foreground. This damage resulted from a tie beam that was torn from a home 300 feet away and then dropped through the roof of the structure. **Above(right):** A view of the tie beam from inside the structure. This type of tie beam typically weighs at least 1,000 pounds! *(Photo courtesy: NHC)*



Above(left): An aerial view of a damage streak through Naranja Lakes, located between Cutler Ridge and Homestead. These damage streaks were evident throughout the hardest hit areas of south Florida. The streak in this photograph extends in to the distance from the center foreground. *(Photo courtesy: NHC)* **Above(right):** Extreme wind damage at a mobile home community in Homestead. The Homestead water tower, distant left in the photograph, became the major remaining landmark after the hurricane. *(Photo courtesy: Ralph Clark)*



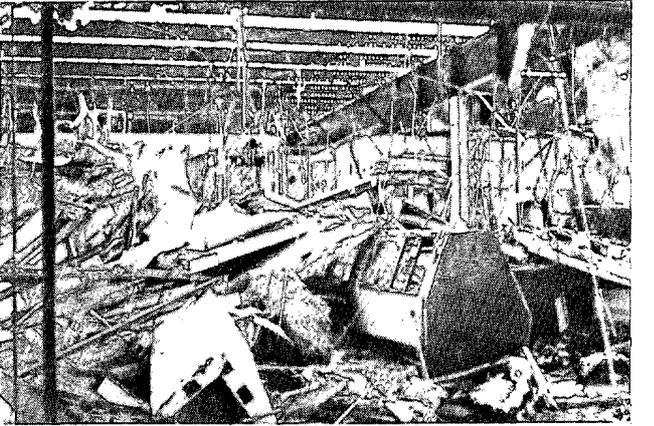
Above(left): Despite the devastation, some residents of Country Walk exhibited a sense of humor. **Above(right):** The roof structure of many homes in Country Walk development failed because of unsupported gables. *(Photo courtesy: NHC)*



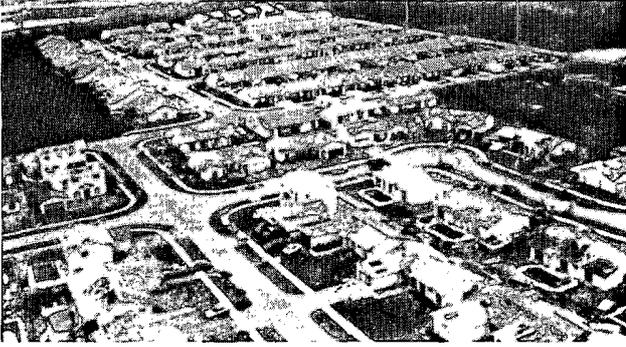
Above(left): An aerial view of the damage to the Dadeland Mobile Home Park. Above(right): A ground view of the same damage. *(Photo courtesy: NHC)*



Above(left): The frame is all that remains of this mobile home. This demonstrates the high risk to residents who must ride out severe wind storms in such a structure. Above(right): A damaged home in the Saga Bay development clearly shows the damage inflicted by high wind and heavy rain. Insulation is splattered across the bedroom walls. *(Photo courtesy: NHC)*



Above(left): Front view of the east (windward) face of a strip shopping center on the north side of Quail Roost Drive, near the Florida Turnpike. Winds flowing in through the broken plate glass windows, pushed the walls outward a sufficient distance to allow the pre-cast concrete roof to fall into the store. Above(right): View of the rubble inside a "Food Stop" convenience store, at the same shopping center. *(Photo courtesy: Roger Edwards)*



Above(left): This aerial view shows a large contrast in damage between neighboring developments. The development in the background sustained heavy damage while those in the foreground only experienced minor damage. Both were constructed of concrete block and stucco, however the integrity of construction was significantly different. Above(right): A closer view of the well built homes. Most of the homes lost shingles, but the walls remained intact. (Photo courtesy: NHC)

A SPECIAL THANKS

TO THE FOLLOWING PEOPLE FOR THEIR CONTRIBUTIONS TO THIS ISSUE OF *STORM DATA*

T. Theodore Fujita, Professor Emeritus, University of Chicago, Chicago, Illinois;

William H. Haggard, Certified Consulting Meteorologist, Climatological Consulting Corp., Asheville, North Carolina;

Linda Kremkau, Warning and Forecast Branch, National Weather Service Headquarters, Silver Spring, Maryland;

Roger Edwards, National Severe Storms Forecast Center/Severe Local Storms, Kansas City, Missouri;

Ralph Meiggs, National Climatic Data Center, Satellite Data Services Division, Camp Springs, Maryland;

Richard J. Pasch, National Hurricane Center, Miami, Florida;

Ralph Clark, Florida Department of Natural Resources, Division of Beaches and Shores, Tallahassee, Florida;

David Schmidt and A.J. Salem, U.S. Army Corps of Engineers, Jacksonville District,

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William Brown, National Climatic Data Center, Global Analysis Branch, Asheville, North Carolina;

Debbie Franklin and Jay Ziemianski, National Climatic Data Center, Customer Service Division, Asheville, North Carolina;

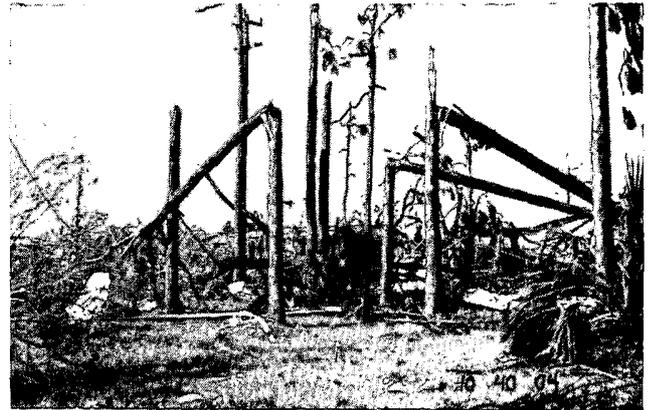
Shawn Harley, Warning Preparedness Meteorologist, and Albert Shipe, National Weather Service Forecast Office, Indianapolis, Indiana;

Jack 'Thunderhead' Corso, Harrison, New York.

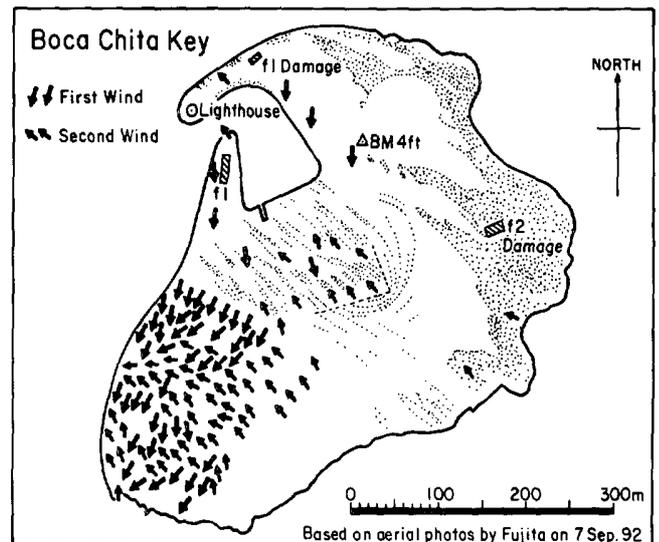
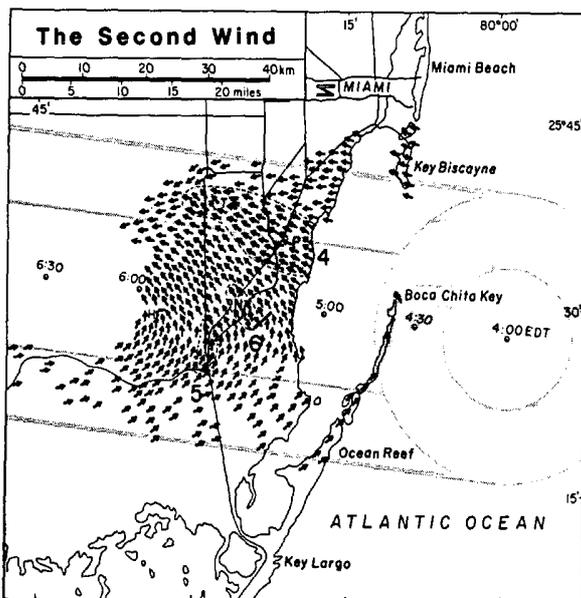
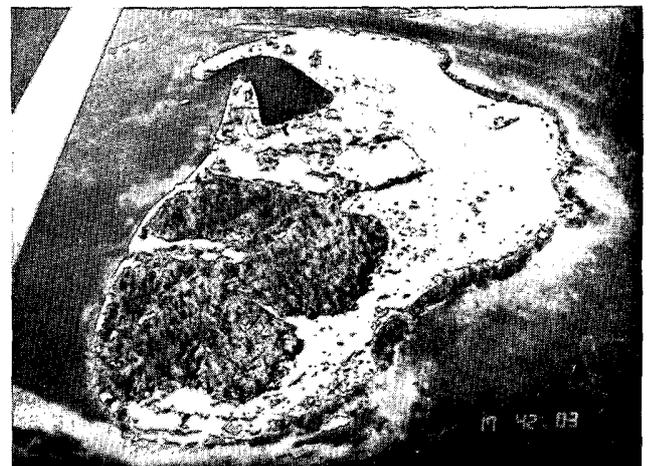
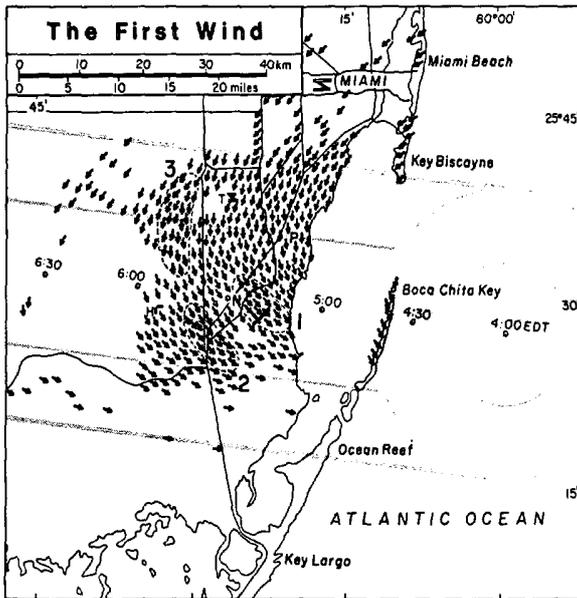
Damage Survey of Hurricane Andrew in South Florida by Ted Fujita

The vast areas of south Florida damaged by Hurricane Andrew on 24 August were mapped by Fujita based on his 500 high-resolution aerial photos and 1,500 9" X 9" vertical aerial photos purchased from Continental Aerial Survey, Pan American Survey and Aerial Cartographics of America.

Three scales of wind systems were isolated and studied in detail. They are (1) Overall hurricane, (2) Swath of high wind, and (3) Mini-swirl and microburst. The damage-causing peak winds of (2) and (3) were far stronger than ordinary peak gusts experienced along the path of Andrew.



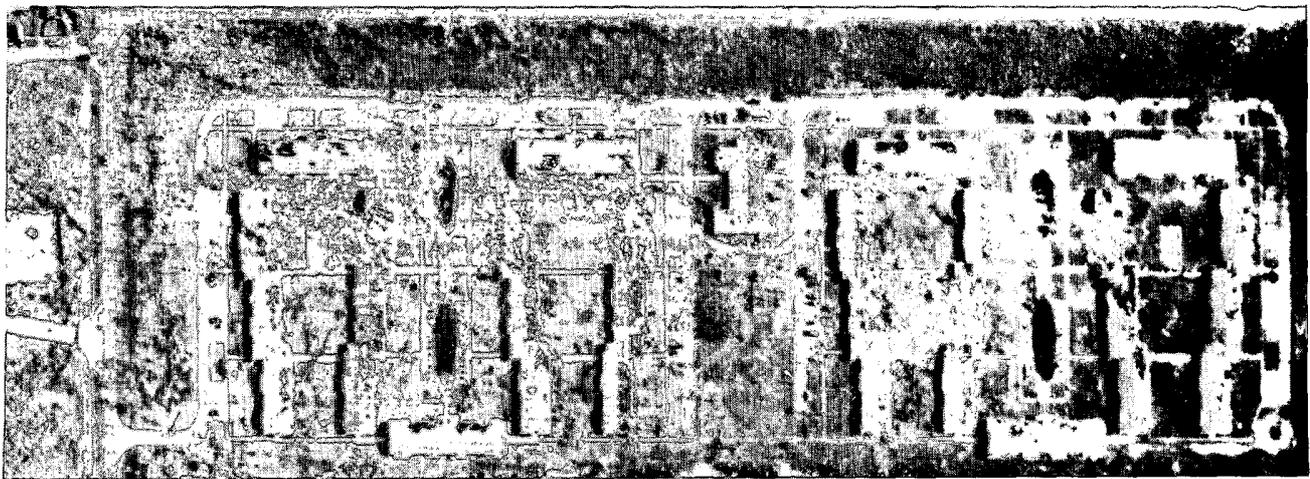
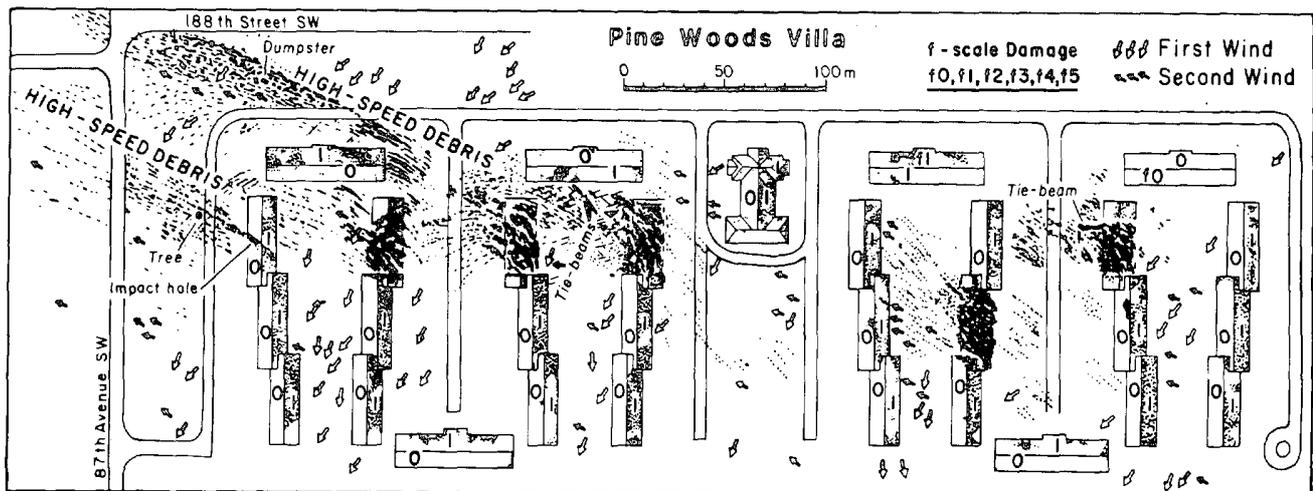
Typical damage of pine trees caused by the first and second winds. Numerous Australian pines were blown down by the first wind. Fujita photo 1040 EDT 9/9/92



Above: Direction of the first damaging wind occurring during the approach phase of Andrew. Below: Damage by the second wind, during the receding phase.

Above: Boca Chita Key, 2 to 3 miles north of the eye center, received the first storm fury. Fujita photo 1742 EDT 9/7/92. Below: Damage map showing the average direction of the first wind from 10° and the second wind from 125°.

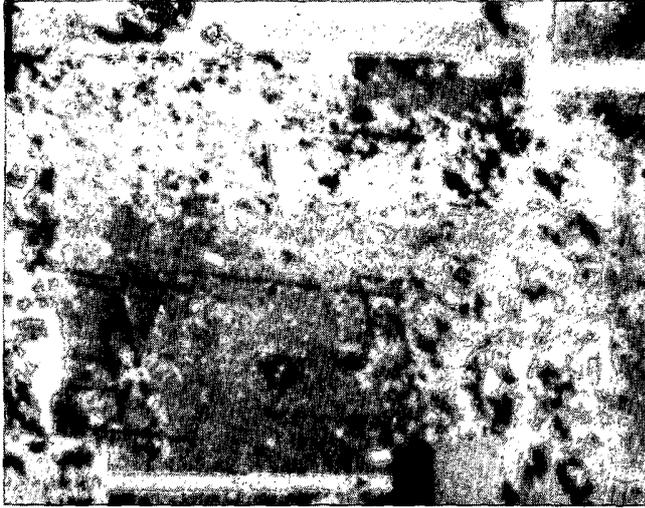
Mini-swirl Damage at Pine Woods Villa Southeast of 188 St and 87 Av SW



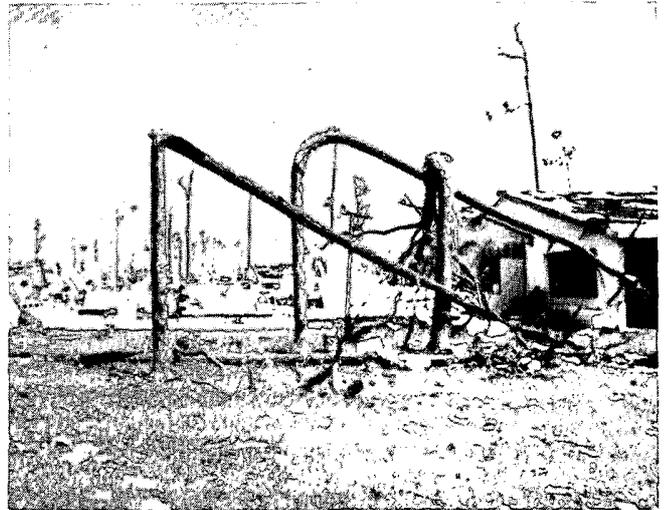
Above: Structural and tree damages at the Villa located inside the Tamiami Swath. Although trees were damaged by both first and second winds, the first wind did not cause structural damage, suggesting that the first wind was weaker than the second wind in the Tamiami Swath. The second wind caused the f1 damage to the east-side roofs while west-side roofs were not damaged (f0).
 Below: An enlarged view of a 9"X9" vertical photo taken by Continental Aerial Survey on 8/27/92.



Left: Aerial photo of a tie-beam (see map) blown off toward the west. Fujita photo 1245 EDT 9/14/92.
 Right: Ground view of the tie-beam reinforced with one-inch steel rods. Fujita photo 1649 EDT 9/15/92.



Left: Tie-beams at Pine Woods Villa (see map) blown apart by a mini-swirl. Continental Aerial Survey photo taken on 8/27/92. **Right:** Ground view of the tie-beams. Fujita photo 1109 EDT 9/9/92.



Left: A dumpster found inside the high-speed debris (see map). Some trees in this photo were blown down by both first and second winds. Fujita photo 1234 EDT 9/14/92. **Right:** Bi-directional tree damage seen near the dumpster site. Fujita photo 1109 EDT 9/9/92.

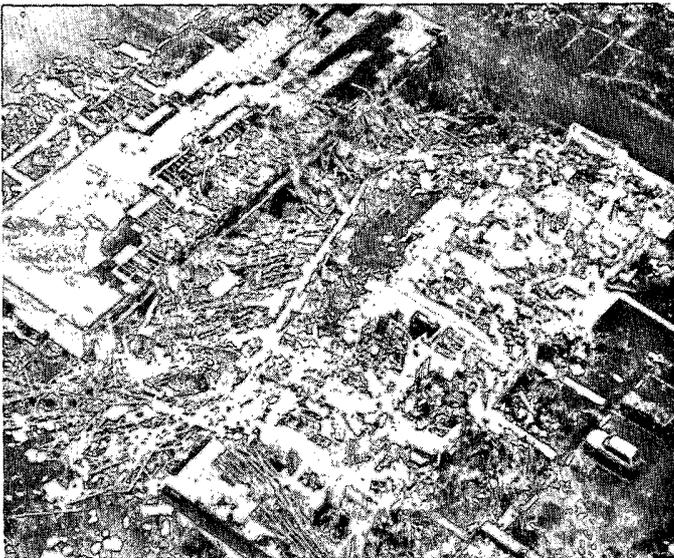


Left: An impact hole (see map) created by a falling tie-beam. Fujita photo 1245 EDT 9/14/92. A piece of flying plywood cut through the trunk of the tall pine tree shown at the lower left of the picture. **Center:** Drs. Robert Sheets and Peter Black examining the tree trunk. **Right:** A close-up view of the deep cut. Fujita photos 1057 EDT 9/9/92.

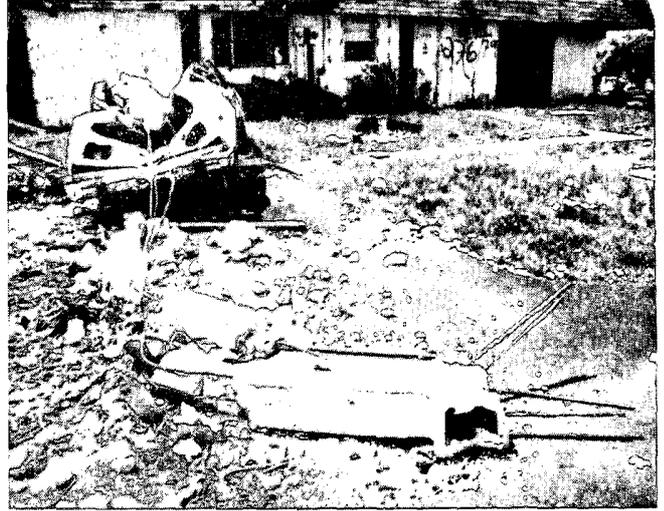
Condos at Naranja Lakes in Wind-parallel and Perpendicular Directions



Center of Andrew's eye passed directly over Naranja Lakes, resulting in a 180° shift of the first wind from NNW into the second wind from SSE. Many buildings oriented WSW-ENE (wind-perpendicular) direction received the f3 damage while those in the NNW-SSE (wind-parallel) direction were spared. Enlargement of a Continental Aerial Survey photo taken on 8/26/92.



Left: A Naranja Lakes condo oriented in the wind-perpendicular (broadside) direction. The roof was lifted into a vertical position and dropped upside-down after a 180° rotation. Connected and broken tie-beams weighing one ton per 20 ft are visible on the downwind side. Fujita photo 1253 EDT 9/14/92. **Right:** Mobile homes at Naranja Lake oriented by luck in the wind-parallel (streamline) direction. Fujita photo 0906 EDT 9/8/92.



Left: An f3 damage of Naranja Lakes condo caused by a mini-swirl that formed inside the second wind. Fujita photo 1253 EDT 9/14/92. **Right:** Pieces of a connected tie-beam which flew 150 feet (45m) from a Naranja Lakes condo in the second wind. Fujita photo 1246 EDT 9/10/92.



Left: A confusing stop sign at 82 Ave and 163 St SW in Cutler located near the north edge of the Tamiami Swath. Fujita photo 1024 EDT 9/16/92. **Right:** Triple junction of f-scale damages. An f4 damage at a trailer park (upper left), f2 at the lower-left subdivision, and f0 to f2 at the upper right subdivision. Relatively uniform peak winds (F-scale winds) expected at the junction caused a wide range of f-scale damages between f0 and f4. Fujita photos 0945 EDT 9/8/92. **Note that the Fujita Scales, now applied to both tornadoes and hurricanes, refer to the Fujita Wind Speed scale (F scale) and Damage scale (f scale), because an F-scale wind would cause different f-scale damages to different types of structures. See examples.**

FOLDING COLOR MAP OF HURRICANE ANDREW

This issue of STORM DATA includes the following four maps printed in multiple colors on a 15" x 21" folding sheet. These maps are:

1. Overall Damage Map of Andrew
2. Map of the first wind
3. Map of the second wind
4. Estimated winds at 10,000 ft altitude

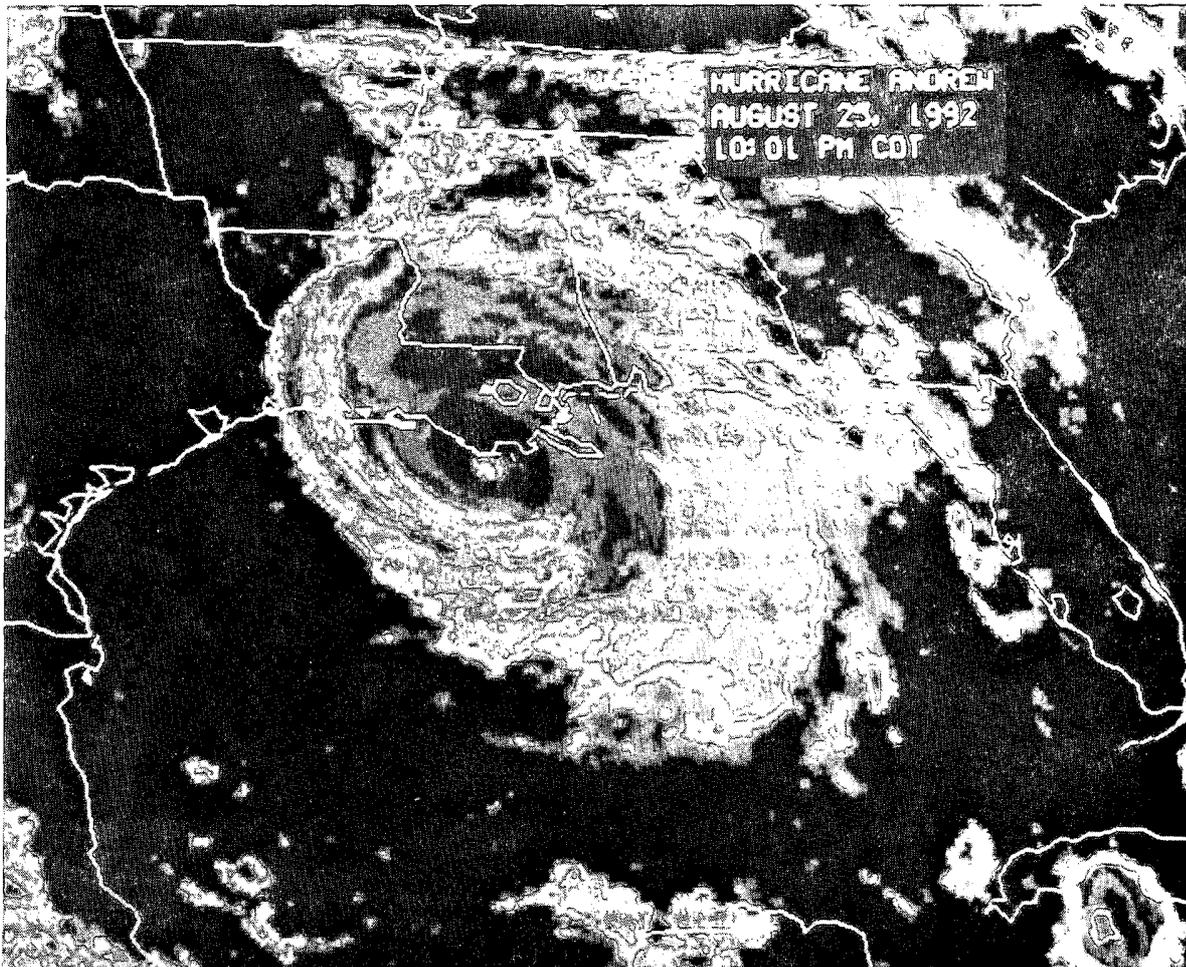
The research presented in this contributed paper by T. Theodore Fujita, of the University of Chicago, has been sponsored by NASA under Grant NAG8-886 and ONR under Grant N00014-91-J1136.

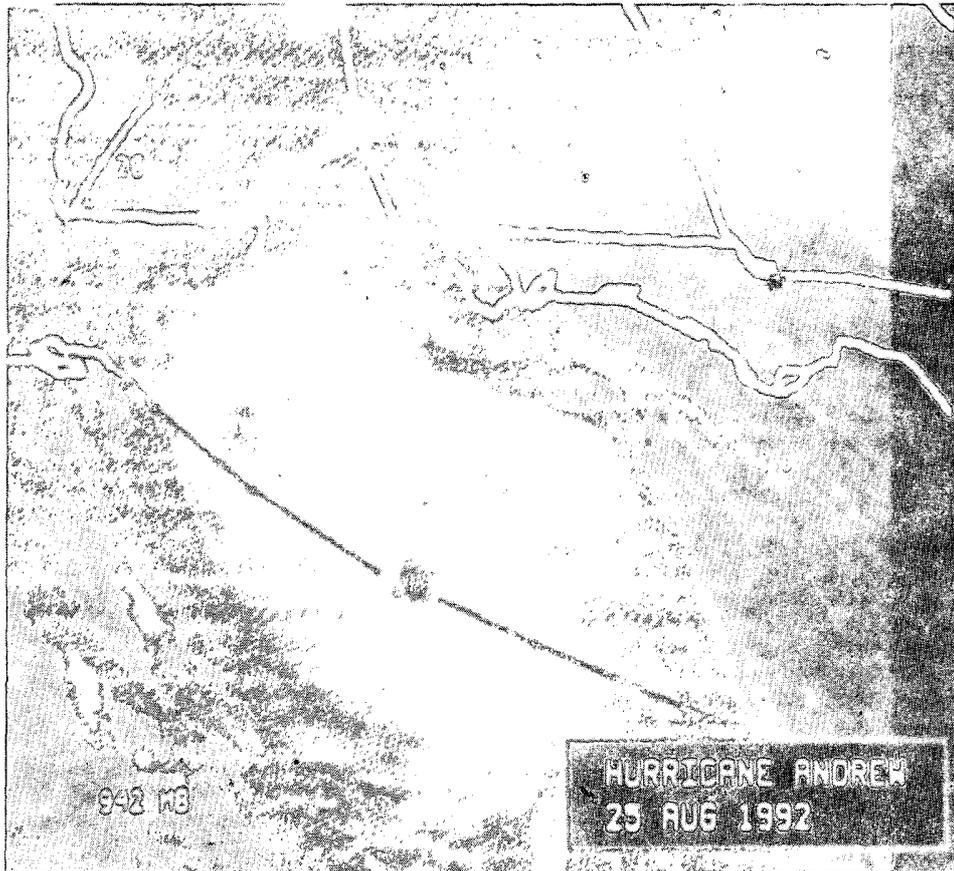
B. LOUISIANA

The center of Hurricane Andrew struck Louisiana 24 miles west-southwest of Morgan City at 0230 CST on August 26. Andrew was a weakening category 3 hurricane with estimated maximum sustained winds of 126 mph. Andrew weakened quickly as it moved inland. At 1200 CST, Andrew was downgraded to tropical storm status near Angola with sustained winds estimated at 60 mph. Due to a large scale evacuation of approximately 1.3 million people, deaths directly attributed to Hurricane Andrew were few. Six fishermen were killed in the Gulf of Mexico. Andrew produced 14 tornadoes. One on August 25 was F3 in strength and killed two people in the town of Reserve. Even in its weakened stage, Andrew still caused \$1.76 billion in damage.

Damage in Louisiana was extensive. A survey conducted by the American Red Cross showed 23,000 homes were damaged. Andrew caused an estimated \$1 billion damage to private property, \$289 million to agricultural interest with sugar and soybeans being hardest hit, \$266 million to the fishing industry. About 240 oil and gas platforms received a total of \$200 million in damage. The storm tide of at least 8 feet caused flooding from Lake Borgne westward through Vermillion Bay.

Infrared satellite imagery of Andrew taken by GOES-7 on August 25, 1992 at 2201 CDT. (Photo courtesy: Ralph E. Meiggs)





Above: A METEOSAT 3 satellite view of Hurricane Andrew. Andrew's track across the Gulf of Mexico and into Louisiana is superimposed over the satellite image. (Photo courtesy: NESDIS) Below: Radar composite view of Hurricane Andrew making landfall along the south-central Louisiana coast. (Photo courtesy: NHC)



ANDREW SPAWNS TORNADOES ON AUGUST 25



In southern Louisiana and Mississippi, tornadoes contributed to the damage of the hurricane. Fourteen tornadoes occurred in Louisiana and 27 in Mississippi. The only deaths from the tornadoes occurred in Louisiana, in the community of Reserve (30 miles west of New Orleans). The F3 tornado, first first touched down in La Place and moved into Reserve. It moved through an area of Reserve where individual mobile homes were located on residential lots. The track of the tornado was about 9 miles in length and a quarter of a mile in diameter. Pictured, **above(left)**, is damage to one of the mobile homes near the beginning of the most destructive portion of the tornado path. **Above(right)**: One Reserve resident fell victim to the tornado when a portion of his home collapsed. *(Photo courtesy: NOAA DST)*

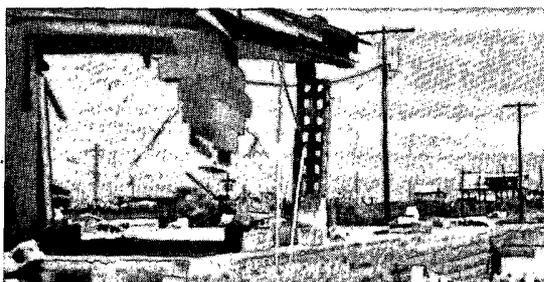
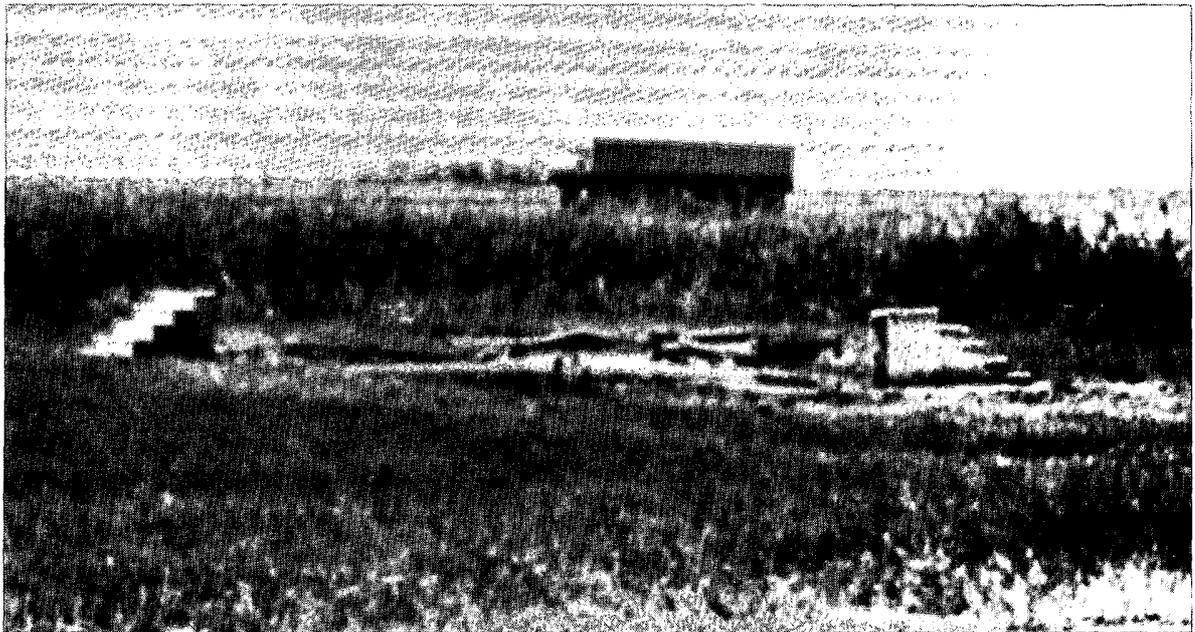


Above: Additional view of the damage in La Place. A total of 122 homes, 32 mobile homes, and 25 business were damaged or destroyed. **Left:** These Ironwood trees were literally snapped off and splintered by the force of the tornado. *(Photo courtesy: NOAA DST)*

TIDAL STORM SURGE DAMAGE

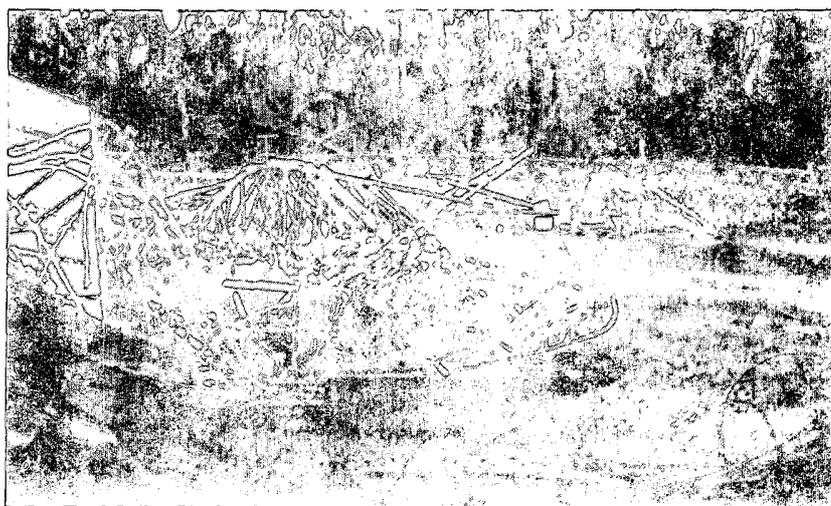
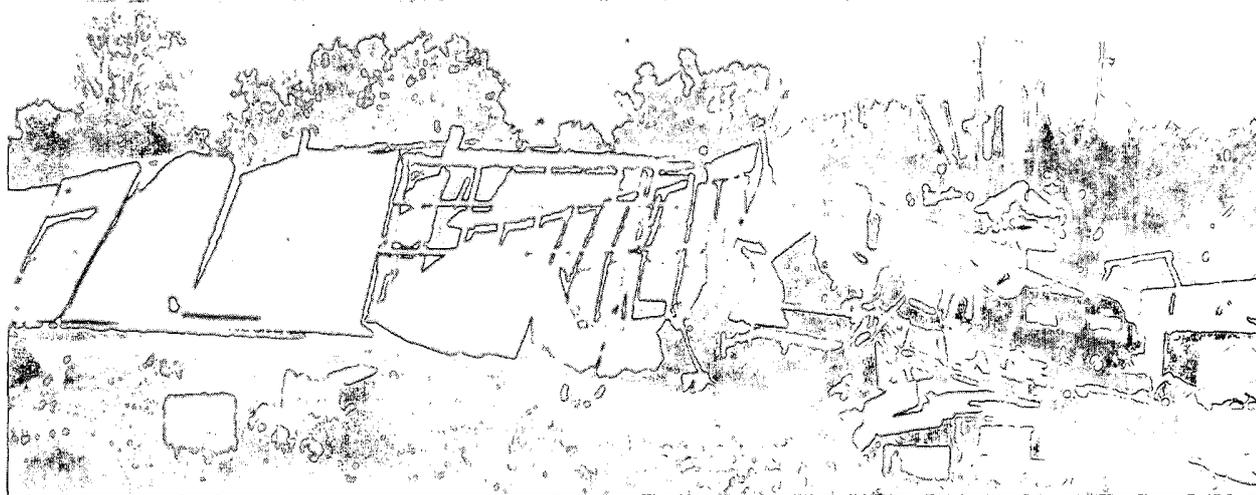
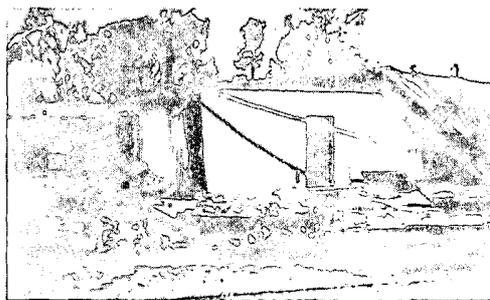
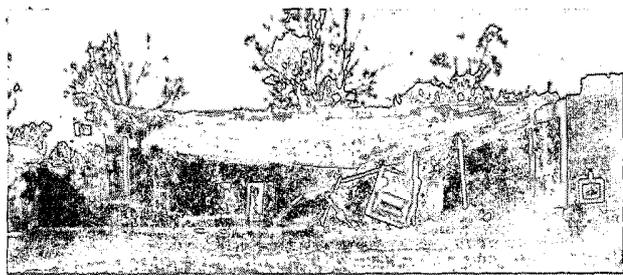


Left: The Louisiana Universities Marine Consortium (LUMCON) experienced a tidal surge of 5 to 7 feet. Note the silt and mud deposited by the storm surge. **Right:** The debris along Parish Highway 57, between the Cocodrie Petroleum Depot and LUMCON, was also left by the storm surge. Part of the debris had been originally strewn across the road surface before being cleared by highway crews. *(Photo courtesy: NOAA DST)*



Above: This photograph was taken several miles north of the Cocodrie Petroleum Depot. Notice the steps that once provided access to the house. The combined effects of the storm surge and wind pushed the structure from its foundations and deposited it in the marsh. The roof in the center background is the only portion of the house that is still visible. **Left:** Another view of the damage caused by the likely combination of wind and storm surge. *(Photo courtesy: NOAA DST)*

ANDREW DAMAGE IN LOUISIANA



Top(left): This grocery store located on the outskirts of Jenerette typifies the type of damage sustained by many structures across south Louisiana. Top(right): The remnants of a small church along Route 182 near Franklin, Louisiana. Above: Mobile home located along one of the many inlets and channels south of Dulac that did not fare well in Andrew's fury. Left: Remnants of a twisted and tangled radio tower, north of Garden City along U.S. Highway 90. Bottom(left and right): Numerous large trees were uprooted and fallen on houses along Parish Road 329, north of Avery. Fortunately, the residents were not at home when the trees fell. (Photo courtesy: NOAA DST)

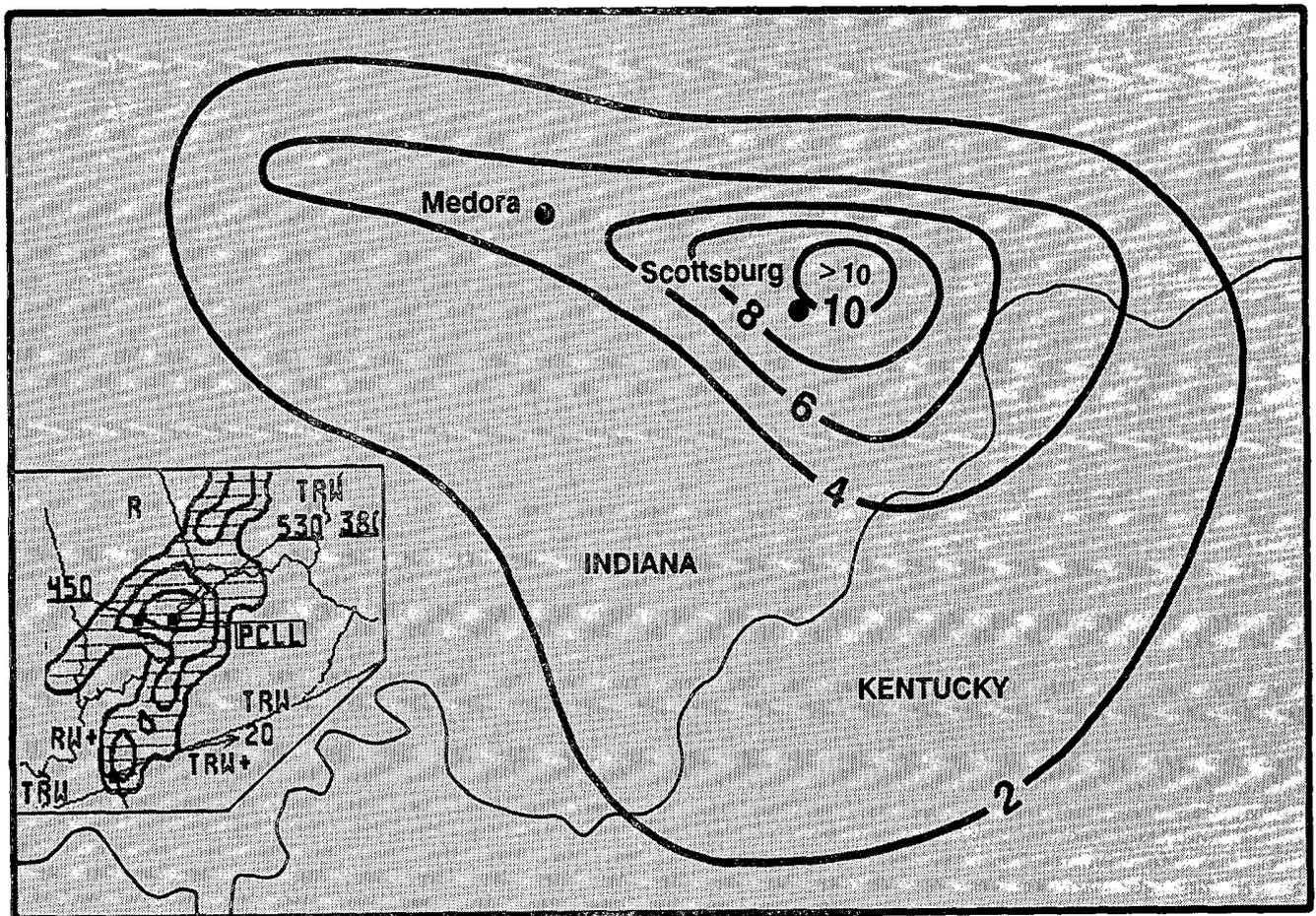


2. HEAVY RAINS IN INDIANA - AUGUST 8

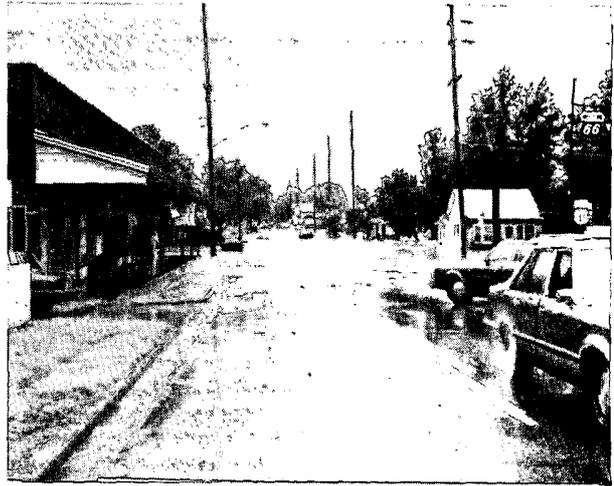
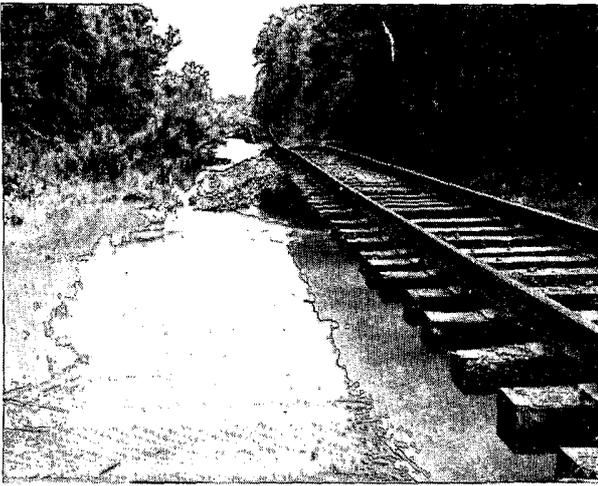
Heavy rains and flooding struck southern Indiana on August 8. Approximately 300 homes suffered moderate to major damage. Sixty-five miles of Conrail railroad tracks were washed out along with numerous state and county roads and bridges. Portions of Interstate 65 were covered by as much as four feet of water. People had to be rescued from roof tops in Henryville, Indiana.

Thunderstorms formed in a very moist atmosphere during the early morning of the 8th. These storms remained nearly stationary until mid-morning and slowly moved out of the affected area by 1:00 P.M. EST. Rainfall amounts of 3 to 13 inches fell in a six hour period. The area covered by the heavy rains include Lawrence, Jackson, Jennings, Jefferson, Washington, Clark, and Scott counties.

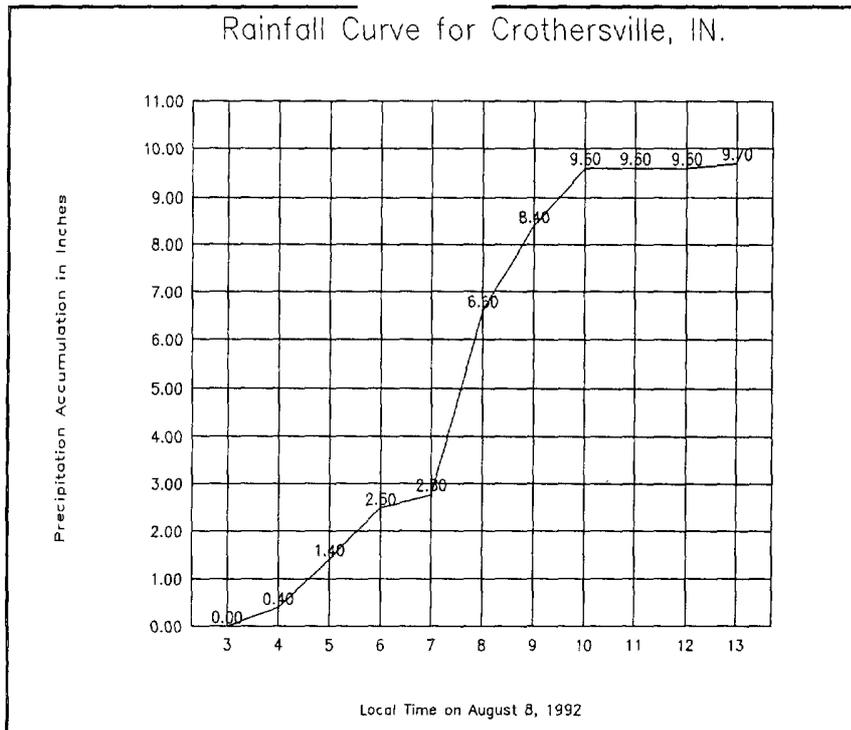
The expected 100-year rainfall for a six-hour period in southcentral and southeast Indiana is approximately 5.3 inches. Most of the affected area received twice that amount in the same period. This heavy rain event is the second greatest known event for a six-hour, 200 square mile area in the summer season for the states of Ohio, Michigan, Illinois, Kentucky, and Indiana. Flooding in Scott and northern Clark counties exceeded the 500-year flood level.



Above: Analysis of storm rainfall totals (inches) for August 8 - 9, 1992 based on NWS Cooperative Observer data supplied to National Climatic Data Center, Asheville, North Carolina. Time of the above radar insert valid for 1235 UTC on August 8, 1992.



Above(left): Conrail lines washed out by the flood in Scottsburg. Above(right): A view of flooding on U.S. 31 in Austin, Indiana. Floodwaters almost engulf the vehicles near Austin Middle School, below(left). Below(right): A flooded home in Austin during the heavy rain. (Photo courtesy: The Staff of Scott County Journal, the Chronicle, and the Giveway; Scottsburg, IN.)



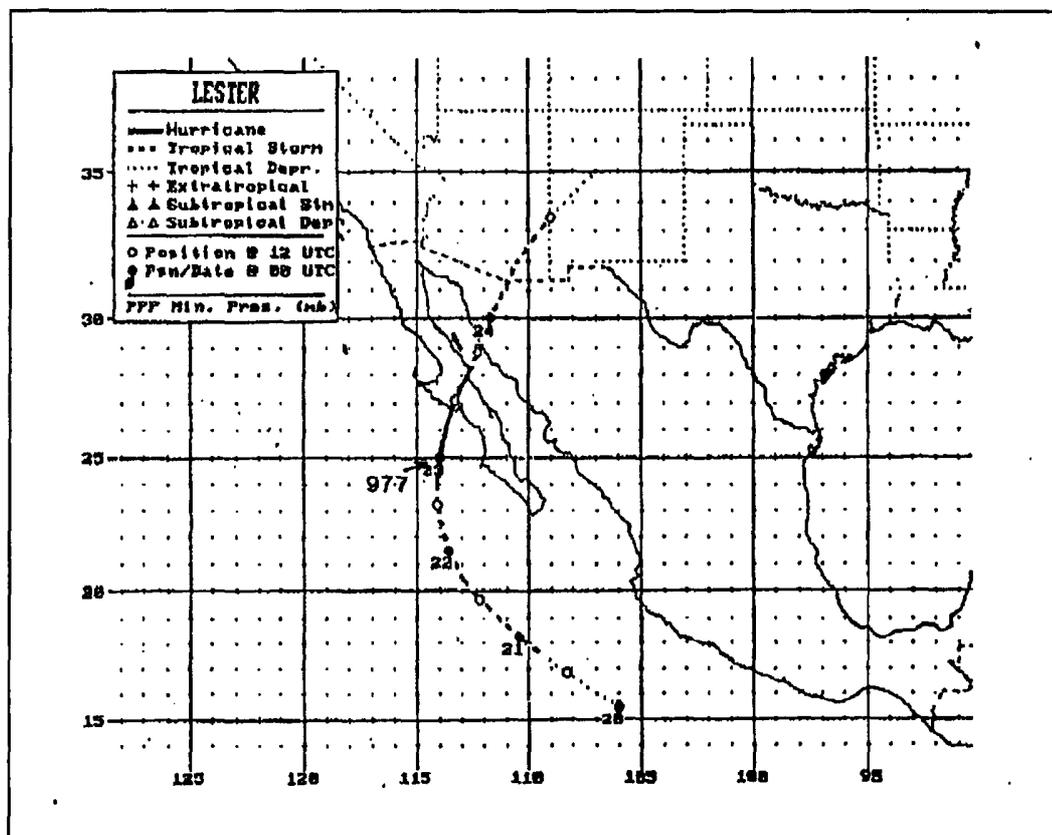
3. HURRICANE LESTER - AUGUST 20 - 24

Early on August 7, a weak tropical wave crossed the west coast of Africa and moved westward through the tropical Atlantic Ocean and the eastern Caribbean Sea. The wave split into two parts over the central Caribbean. As the northern portion dissipated over Cuba, the southern portion of the wave crossed Central America. The southern portion of wave entered the Pacific on August 16 and was showing signs of organization on August 19.

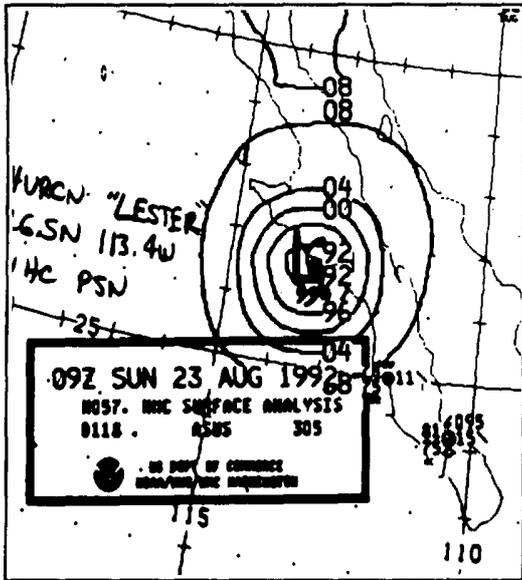
The tropical wave was upgraded to Tropical Depression Fourteen-E at 0000 UTC on the 20th while positioned about 240 nautical miles south-southwest of Manzanillo, Mexico. Tropical Depression Fourteen-E moved northwest at 13 knots and strengthened into Tropical Storm Lester 18 hours later. Lester then moved directly over Socorro Island near 0400 UTC on August 21.

Early on August 22, a trough of low pressure was moving toward the west coast of California and in response Lester turned and began to move northward. Lester continued to slowly strengthen and reached hurricane status 210 nautical miles west of La Paz, Mexico at 1800 UTC on August 22. The hurricane reached maximum intensity on the 23rd. Lester's maximum wind speed was estimated at 75 knots with minimum central pressure of 977 millibars. The trough then became quasi-stationary and Lester gradually turned toward the northeast. (See map below.) Lester first made landfall near Punta Abrejos, Baja California as a hurricane at 1000 UTC on the 23rd. After crossing the Gulf of California, Lester then made a *second* landfall near Isla Tiburon, Mexico at 2000 UTC on the 23rd as a tropical storm. According to satellite imagery and surface observations, Lester probably was a minimal tropical storm as far inland as Tucson, Arizona, but dissipated quickly in central New Mexico.

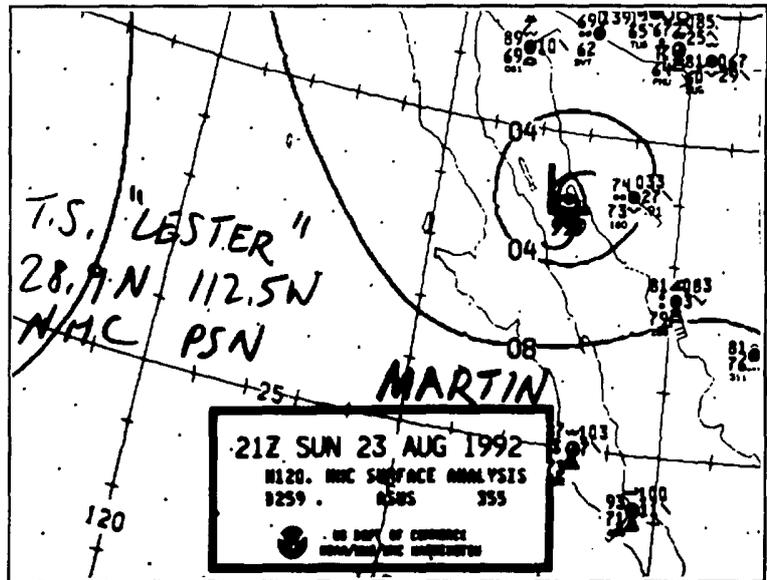
Lester left 5,000 people homeless, several communities in ruin west of Hermosillo, Mexico, and flooding in portions of Arizona and New Mexico. There were no reported deaths due to Lester.



Best track positions for Hurricane Lester.



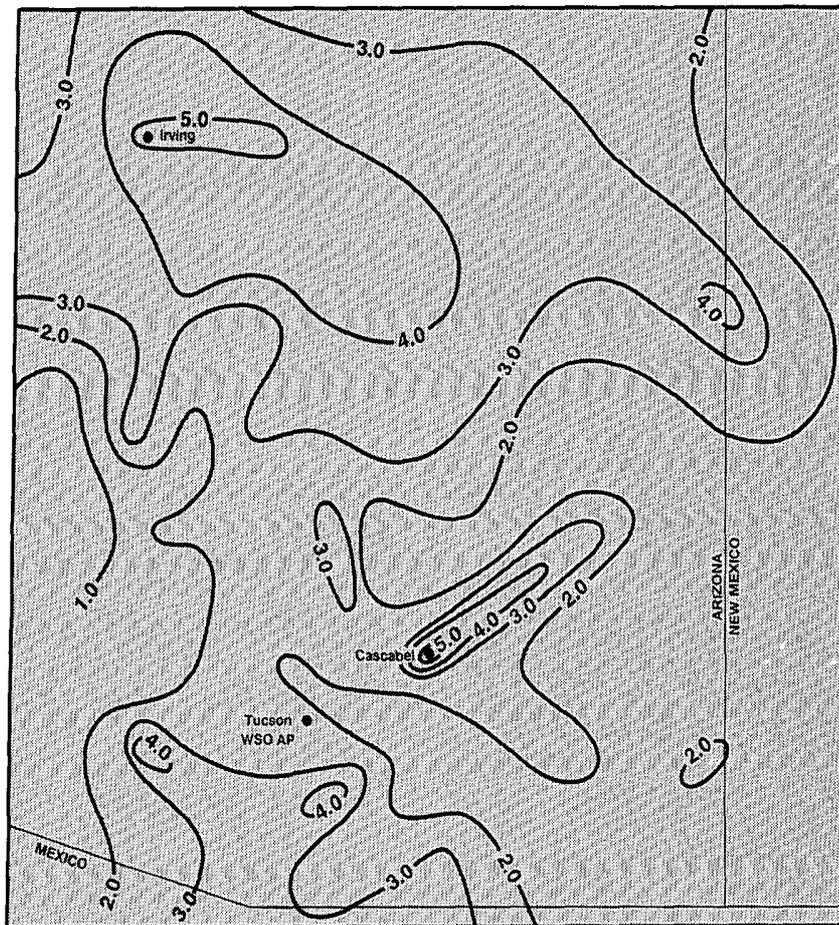
09Z SUN AUGUST 23



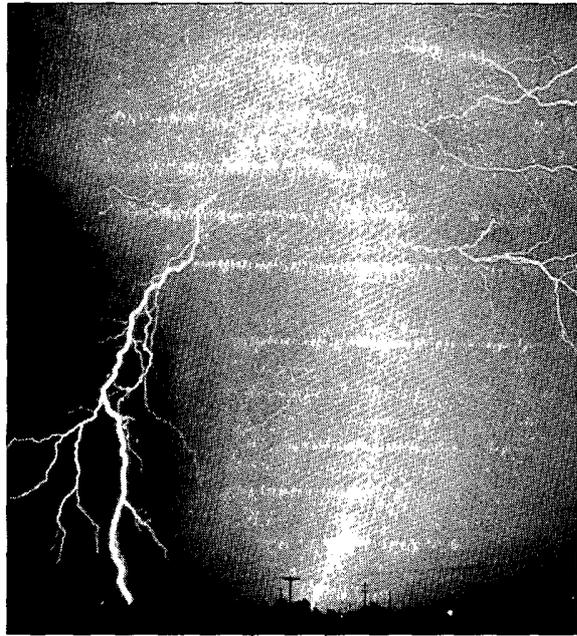
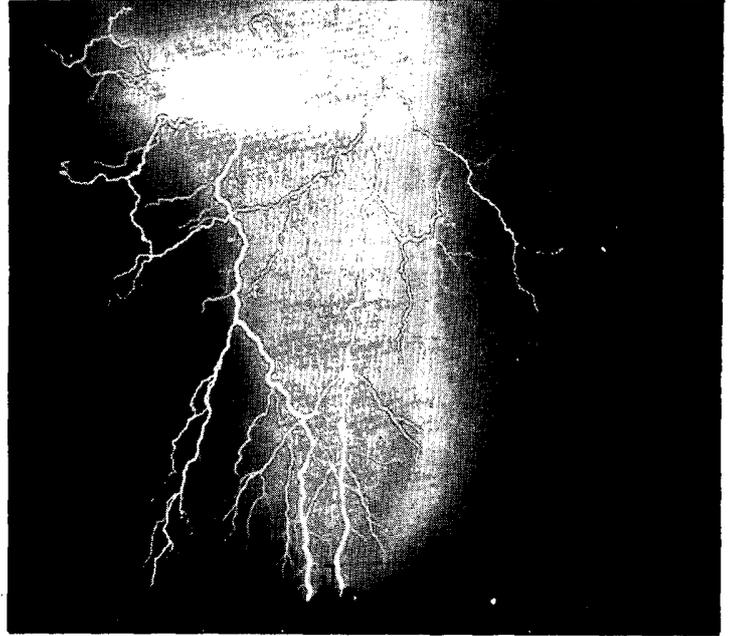
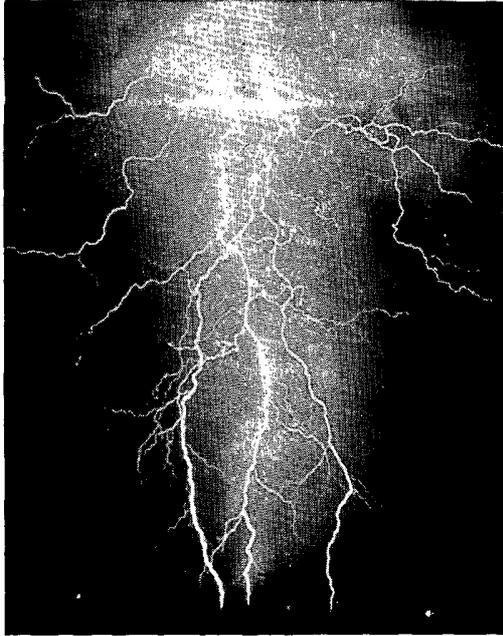
21Z SUN AUGUST 23

Above(left): Surface analysis of Hurricane Lester one hour before landfall near Punta Abreojos, Mexico. Above(right): Surface analysis of Tropical Storm Lester one hour after the second landfall, near Isla Tiburon, Mexico. (Maps provided by National Climatic Data Center.)

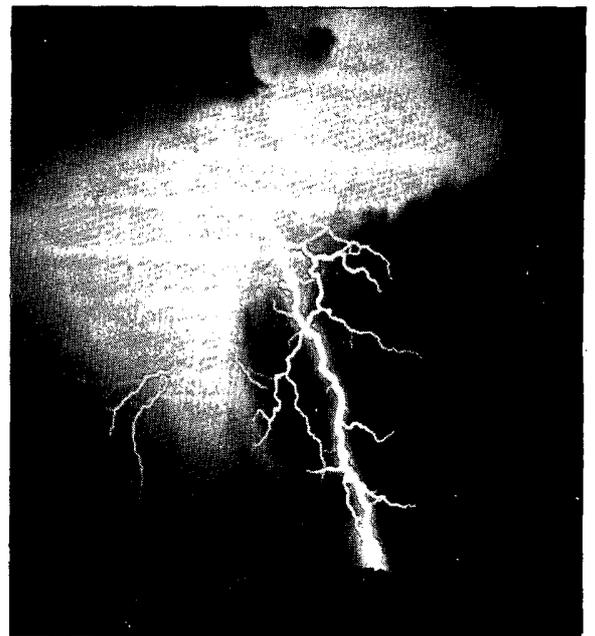
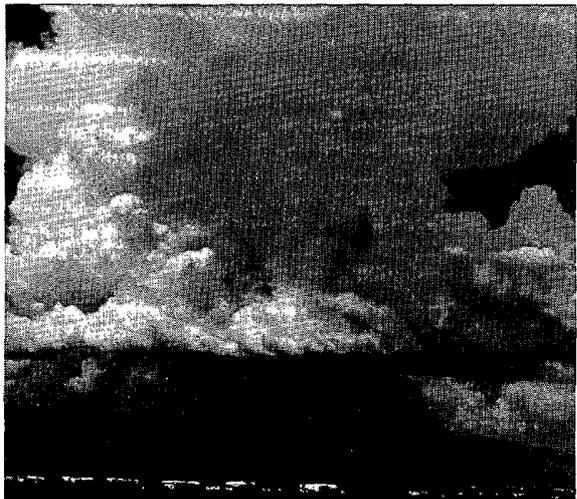
Below: Analysis of storm rainfall totals for August 22 - 24, 1992 based on NWS Cooperative Observer data supplied to National Climatic Data Center, Asheville, North Carolina.



4. LIGHTNING DISPLAYS OVER ARIZONA



Above(both) and Left: Cloud-to-ground lightning flash over San Simon, Arizona. Bottom(left): An orographic thunderstorm over the Catalina Mountains north of Tucson, Arizona. Bottom(right): An intense, single cloud-to-ground lightning flash over the Peloncillo Mountains, Arizona. Note the illumination of the rain shield behind each of the lightning displays. All photographs were taken on August 10, 1992. (Photo courtesy and ©: Jack 'Thunderhead' Corso, Harrison, New York.)



Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ALABAMA									
Calhoun County									
Piedmont	06	1900CST			0	0	5	?	Thunderstorm Winds
Anniston	06	1910CST			0	0	5	0	Flash Flood
Thunderstorm winds downed numerous trees and power lines in the Piedmont area. Also a number of homes were damaged by wind and falling trees. Urban flooding occurred in Anniston affecting several homes and businesses.									
Clay County	06	2230CST			1	0	5	0	Flash Flood
Thunderstorm rains produced flash flooding that washed out roads in four areas of the county. One of the roads was cut out leaving a gap 12 feet deep and 24 feet across. One man was killed when he drove his car into the gap which was hidden by water. (M28V)									
Mobile County									
15 SW Mobile	09	1518CST			0	0	0	0	Thunderstorm Winds
Thunderstorm winds downed trees and power lines along County Road 90 west of Saint Elmo.									
30 S Mobile	09	1607CST			0	0	0	0	Thunderstorm Winds (G56)
30 S Mobile	09	1607CST			0	0	?	?	Hail (1.00)
Thunderstorm winds gusted to 56 knots at the Dauphin Island Sea Lab. The thunderstorm also produced hail up to the size of quarters.									
Monroe County									
Peterman	09	1857CST			0	0	?	?	Thunderstorm Winds
Thunderstorm wind gusts, estimated at 60 mph, downed numerous trees and power lines in Peterman.									
Lamar County	10	0158CST			0	0	4	?	Thunderstorm Winds
Several trees and power lines were downed by thunderstorm winds. Also some structures sustained roof damage due to wind and falling trees.									
Pickens County	10	0535CST			0	0	3	3	Thunderstorm Winds
Thunderstorm winds tore an awning from a farm house, damaged a grain bin, and downed power lines.									
Lamar County	10	0630CST			0	0	5	0	Thunderstorm Winds
Countless trees and power lines were blown down by thunderstorm winds. Numerous structures in the Vernon vicinity sustained roof damage due to the winds and falling trees.									
Colbert County									
Leighton	10	1345CST			0	0	?	?	Hail (1.00)
A thunderstorm dropped 1.00-inch-diameter hail in Leighton.									
Baldwin County									
Elsanor	10	1515CST			0	0	?	?	Hail (1.75)
A severe thunderstorm produced marble- to golf ball-size hail in Elsanor.									
Dallas County									
Selma	10	1530CST			0	0	3	?	Thunderstorm Winds
Selma	10	1530CST			0	0	3	?	Lightning
Thunderstorm winds downed a tree that caused minor damage to a business in Selma. Lightning damaged telephone and electrical services, and caused a roof fire at a residence.									
Chambers County									
Lafayette	10	1720CST			0	0	0	0	Thunderstorm Winds
Numerous trees were blown down by thunderstorm winds in the Lafayette vicinity.									
Jefferson County									
7 N Birmingham	21	0730CST			0	0	?	1	Flash Flood

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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ALABAMA Cont'd

Heavy thunderstorm rain resulted in flash flooding in the Fultondale vicinity.

Montgomery County									
3 E Montgomery	26	1430CST			0	0	3	0	Thunderstorm Winds

Thunderstorm winds downed trees and destroyed a few sheds in the eastern portion of the city.

Elmore County									
Elmore	26	1500CST			0	0	4	0	Thunderstorm Winds
Wetumpka	26	1515CST			0	0	0	0	Thunderstorm Winds

Thunderstorm winds downed numerous trees, and destroyed several car ports and a tool shed in the Elmore community. Several limbs were also blown down in the Wetumpka vicinity.

Sumter County									
York	27	0303CST			0	0	?	?	Hail (0.75)
Countywide	27	0520CST			0	0	4	?	Thunderstorm Winds
Choctaw County									
Butler	27	0530CST			0	0	4	0	Thunderstorm Winds
Pickens County									
Aliceville	27	0600CST			0	0	4	0	Thunderstorm Winds
Marengo County									
Green County	27	0700CST			0	0	?	?	Thunderstorm Winds
Green County									
Pickens County	27	0710CST			0	0	?	?	Thunderstorm Winds
5 W Aliceville	27	0710CST			0	0	4	0	Thunderstorm Winds
Choctaw County									
Sumter County	27	0750CST			0	0	?	?	Thunderstorm Winds
Livingston	27	0750CST			0	0	5	0	Thunderstorm Winds
Hale County									
4 W Sawyerville	27	0800CST			0	0	?	?	Thunderstorm Winds
Lamar County									
0815CST	27	0815CST			0	0	4	0	Thunderstorm Winds
Montgomery County									
Pine Level	27	0915CST			0	0	?	?	Thunderstorm Winds
Tuscaloosa County									
Countywide	27	0916CST			0	0	?	?	Thunderstorm Winds
Windham Springs	27	0952CST			0	0	0	0	Thunderstorm Winds
Tuscaloosa	27	1000CST			0	0	?	?	Flash Flood
Jefferson County									
Hueytown	27	1010CST			0	0	?	?	Thunderstorm Winds
Bibb County									
Centreville	27	1030CST			0	0	3	?	Thunderstorm Winds
Tuscaloosa County									
Tuscaloosa	27	1045CST			0	0	?	?	Flash Flood
Jefferson County									
Hueytown	27	1050CST			0	0	?	?	Thunderstorm Winds
Shelby County									
1145CST	27	1145CST			0	0	4	?	Thunderstorm Winds
Lowndes County									
1145CST	27	1145CST			0	0	?	?	Thunderstorm Winds
Morgan County									
1145CST	27	1145CST			0	0	?	?	Thunderstorm Winds
Walker County									
Jasper	27	1200CST			0	0	?	?	Thunderstorm Winds
Franklin County									
Red Bay	27	1239CST			0	0	?	?	Thunderstorm Winds
Lawrence County									
1240CST	27	1240CST			0	0	?	?	Thunderstorm Winds

The remnants of Hurricane Andrew moved across the state from West Central Alabama, northeast to north of Birmingham, and continued northeast out of the state. Winds of 25 to 40 mph combined with thunderstorm winds produced widespread tree and power line damage across northern and central portions of the state. Many trees fell on buildings and automobiles. Thunderstorm winds blew roofs off homes in the Livingston and Cuba vicinities of Sumter County. Roofs were also blown from buildings in Lamar and Pickens Counties. A storage shed for the city of Livingston in Sumter County was destroyed. Rains of two to four inches in fell west-central Alabama during a 2-hour period and resulted in urban flooding in the city of Tuscaloosa.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

ALABAMA Cont'd

Montgomery County

11 SSE Montgomery 27 1240CST 0.3 50 0 0 4 ? Tornado (F1)

A small tornado touched down in the central portion of the county and damaged several houses, one barn, and downed trees and power lines.

Saint Clair County

Moody 27 1240CST 0 0 ? ? Thunderstorm Winds

Lowndes County

5 E Hayneville 27 1245CST 0.3 50 0 2 5 0 Tornado (F1)

A small tornado touched down in the eastern portion of the county and damaged six homes, destroyed one mobile home and damaged another. Two persons sustained minor injuries.

Morgan County

Hartselle 27 1248CST 0 0 ? ? Thunderstorm Winds

Blount and Mont-

gomery Counties 27 1250CST 0 0 ? ? Thunderstorm Winds

Elmore County

3 NE Montgomery
2 S Wetumpka 27 1302CST-
1315CST 5.0 50 0 1 5 0 Tornado (F1)

The tornado touched down near Brooks road northeast of Montgomery and moved northeast to approximately 2 miles south of Wetumpka in the Blue Ridge and Jasmine Hill area. The tornado destroyed two homes shortly after touching down, and heavily damaged 12 homes, two barns and injured one person along a 0.50-mile path before lifting briefly. The tornado touched down again in southwest Elmore County and continued moving northeast damaging six houses, one mobile home, and one vehicle before lifting.

Crenshaw County

27 1310CST 0 0 ? ? Thunderstorm Winds

Madison County

5 SE Huntsville 27 1315CST 0 0 ? ? Thunderstorm Winds

Elmore County

5 W Tallassee 27 1315CST 0 0 ? ? Thunderstorm Winds

Limestone County

27 1317CST 0 0 ? ? Thunderstorm Winds

Macon County

27 1320CST 0 0 3 0 Thunderstorm Winds

Lawrence County

Landersville 27 1322CST 0 0 ? ? Thunderstorm Winds

Pike County

Troy 27 1325CST 0 0 ? ? Thunderstorm Winds

Tallapoosa County

Alexander City 27 1340CST 0 0 ? ? Thunderstorm Winds

Lee County

Auburn 27 1350CST 0 0 ? ? Thunderstorm Winds

Macon County

Tuskegee 27 1400CST 0 0 ? ? Thunderstorm Winds

DeKalb County

Mentone 27 1435CST 0 0 ? ? Thunderstorm Winds

Chambers County

Lafayette 27 1510CST 0 0 ? ? Thunderstorm Winds

Lee County

Eastern Portion 27 1515CST 0 0 ? ? Thunderstorm Winds

Barbour County

27 1520CST 0 0 ? ? Thunderstorm Winds

Clay County

Millerville 27 1730CST 0 0 ? ? Thunderstorm Winds

Widespread tree and power line damage occurred as a result of strong thunderstorm winds from the remnants of Hurricane Andrew. One car was overturned by strong thunderstorm wind.

ARIZONA

Mohave County

Bullhead City 01 2005MST 0 0 2 0 Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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ARIZONA Cont'd

Winds peaked at 50 mph as thunderstorms moved across northwestern Arizona and eastern California. Power lines were downed and dense blowing dust moved through the area. Nearby Needles, California, had a gust of 78 mph.

Yavapai County Prescott

03	1545MST				0 0	6 0	Hail (1.75)
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Thunderstorms struck many areas of the county with hail and heavy rains. Considerable hail damage occurred at car dealerships in Prescott. Power outages resulted from lightning strikes.

LaPaz County Parker 12 S Parker 4 E Brenda 4 S Salome Parker

03	1830MST				0 0	4 0	Thunderstorm Winds
03	1900MST				0 0	4 4	Hail (?)
03	1900MST				0 0	3 0	Hail (1.75)
03	2020MST				0 0	4 0	Thunderstorm Winds
03	2030MST				0 0	0 0	Flash Flood

A large dust storm with winds estimated over 60 mph moved through the Parker area. Winds damaged some structures in McMullen Valley. About 17 power poles were downed off Shea Road. Frequent lightning and heavy rain accompanied the wind leaving customers without power. A mobile home was destroyed south of Salome. Highways were flooded between Parker and Quartzsite.

Yuma County Tacna

03	2030MST				0 0	3 0	Thunderstorm Winds
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Power outage from lines or poles down between Wellton and Tacna.

Dateland

04	1900MST				0 0	4 0	Thunderstorm Winds
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Strong winds damaged at least one house and uprooted trees.

Pima County Tucson Tucson

06	1725MST				0 0	4 0	Thunderstorm Winds (G53)
06	1900MST				0 0	3 0	Flash Flood

Downburst winds damaged aircraft at Davis-Monthan Air Force Base and downed a few power lines in South Tucson. Peak winds were 61 mph at Tucson Airport and 46 mph at Davis Monthan. The Pima County Sheriff's Office reported flooding of city streets after heavy rains. One spotter had 2.41 at Dodge and Fort Lowell. Motorists had to be rescued from cars that had stalled on flooded streets. Up to two inches of rain fell near Prince Road and Campbell, with 1.25 inches in 30 minutes.

Maricopa County Scottsdale Phoenix

06	2000MST				0 0	? 0	Flash Flood
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Numerous vehicles became stuck in flooded washes, streets and roads.

Pinal County Apache Junction

06	2240MST				0 0	? 0	Flash Flood
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About 0.51 inch of rain fell in 30 minutes resulting in street flooding.

Coconino County 40 SE Flagstaff 15 S Flagstaff

11	Afternoon				1 1	0 0	Lightning
11	Afternoon				1 0	0 0	Rock slide

Lightning struck some trees, killing a teenager and severely injuring his 51-year-old stepfather. A California boy was killed when rain-loosened rocks slid into Oak Creek Canyon north of Sedona. (M150) (M140)

Cochise County Benson Maricopa County Scottsdale Carefree Phoenix

11	Evening				0 0	? 0	Thunderstorm Winds
11	1845MST				0 0	4 0	Thunderstorm Winds
11	1900MST				0 0	4 0	Hail (0.75)
11	1927MST				0 0	3 0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ARIZONA Cont'd

Phoenix	11	1949MST			0	0	?	0	Flash Flood
Phoenix	11	1950MST			0	0	3	0	Thunderstorm Winds (G59)

Intense lightning, strong and gusty winds, and heavy rain moved through much of the metropolitan area. About 40,000 customers were left without power because of winds and lightning. Tree limbs were blown onto power lines. The strongest winds were measured at 68 mph near Interstate 10 and 107th. About 30 homes were struck by lightning, but no injuries were reported. Storm spotters reported extensive street flooding in Paradise Valley. Blowing dust reduced the visibility at times to 0.25 mile.

Yuma County Yuma	13	1820MST			0	0	?	0	Thunderstorm Winds
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Police reported several light poles and power poles down due to high winds. U.S. Highway 95 was closed for about 7 hours.

Yavapai County Cordes Lakes	15	1600MST			0	0	2	0	Thunderstorm Winds
Maricopa County 15 W Wickenburg	15	1800MST			0	0	2	0	Thunderstorm Winds

Thunderstorms moved southward through central Arizona with high winds and minor property damage. Areas to the west of Wickenburg were left without power for at least several hours.

80 W Phoenix	16	1555MST			0	0	3	0	Thunderstorm Winds
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More than two dozen power poles collapsed in a rural area.

Cochise County 10 N Willcox	17	1531MST	Short	10	0	0	4	0	Tornado (F0)
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Three mobile homes along Ft. Grant Road were destroyed by small tornado.

Maricopa County Carefree	17	1550MST			0	0	?	0	Thunderstorm Winds (G52)
Scottsdale Mesa	17	1856MST			0	0	4	0	Thunderstorm Winds

Winds were estimated between 55 and 60 mph at the Carefree Airport. Spotters witnessed the large microburst that hit Scottsdale and north Mesa. Trees were uprooted and many homes suffered roof damage. Power was out for many residents as 7 poles were knocked down near Power Road.

Pima County Tucson	17	Evening			0	1	4	0	Lightning
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A man was struck by lightning while working on his tractor-semitrailer. A bolt of lightning and fire also damaged a home on the east side.

Greenlee County Morenci	19	1527MST			0	0	3	0	Thunderstorm Winds
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A peak gust of 66 mph at Phelps Dodge. Total rainfall in a 1-hour period was 1.54 inches. A rockslide occurred on Route 666 north of Clifton.

Graham County Safford	19	1530MST			0	0	4	?	Thunderstorm Winds
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A large building under construction was damaged by winds.

Navajo County Whiteriver	19	1537MST			0	0	0	0	Hail (1.00)
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Yavapai County Lake Montezuma	19	1920MST			0	0	4	0	Thunderstorm Winds
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Emergency Services reported a roof was blown off a house.

Cochise County Tombstone	19	1930MST			0	0	3	?	Hail (1.75) Thunderstorm Winds (G52)
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARIZONA Cont'd									
Yavapai County Prescott Valley	20	1610MST			0	0	?	0	Hail (1.00)
									Several episodes of thunderstorms with large hail occurred for 45 minutes.
Graham County Safford	21	Afternoon			0	0	0	5	Hail (?)
									Over 1,000 acres of cotton damaged by hail.
Maricopa County Phoenix	22	All Day			0	0	5	?	Heavy Rain
									Widespread heavy rains developed in a very humid airmass and left many streets and highways under water. About one inch of rain fell in 30 minutes in New River and 1.25 inches in 30 minutes at Apache Junction. Wickenburg received almost 1.00 inch of rain in only 10 minutes during the evening. Numerous rescues were performed by Rural Metro Fire Department in Scottsdale. The Phoenix Fire Department made one of the most dramatic rescues. A driver was rescued from a submerged car at 35th Avenue and Pinnacle Peak Road after the car became trapped in floodwater.
Gila County 30 S Payson	22	1005MST			0	0	3	0	Flash Flood
									Some flooding was reported on the Beeline Highway between Payson and Mesa.
Graham County 10 NW Thatcher	22	Afternoon			0	0	0	6	Hail (?)
									Over 3,800 acres of cotton were damaged by hail.
Yavapai County Prescott	22	1950MST			0	0	4	0	Flash Flood
									Heavy rains soaked much of the county and flooded some streets and highways. Prescott Airport recorded 4.47 inches of rain for the week ending August 22nd.
Yuma County Yuma	22	2000MST			0	0	3	0	Thunderstorm Winds
									Winds knocked down a few power lines.
Gila County 10 S Globe	23	0250MST			0	0	0	0	Flash Flood
									Brief, heavy rains left widespread flooding in the county. One car was washed away due to flood waters. Total rainfall during the 3-day period through the 23rd included 6.10 inches in Globe and 6.06 inches in Sedona.
Maricopa County Phoenix	23	0400MST			0	0	5	?	Flash Flood
									Widespread and heavy rains generated ahead of Hurricane Lester caused rare August water releases from the Granite Reef Diversion Dam into the normally dry Salt River bed. Releases continued and forced the closure of many unbridged crossings along the Salt River. Peak releases of 17,500 cfs occurred at Granite Reef Dam. At least one death was indirectly related to the heavy flows in the Salt River. A 19-year-old man drowned on Monday night, the 24th as he attempted to cross the raging waters west of Phoenix.
LaPaz County Parker	23	0800MST			0	0	5	0	Flash Flood
									Up to 5.50 inches of rain fell from late Saturday into early Sunday. Long-time residents said this one the worst local natural disaster they could recall. Roads and streets were closed and a mobile home park had more than 2 feet of water standing several hours after the storm ended.
Coconino County Grand Canyon	26	Unknown			2	0	0	0	Flash Flood
									Two Air Force officers were killed by flash floods. Heavy rains were observed over much of northern Arizona on the 25th. Runoff from these rains was likely occurring into the 26th. (M240) (F260)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARIZONA Cont'd									
Yavapai County									
Prescott	30	1936MST			0	0	6	0	Hail (1.75)
Prescott Valley	30	1957MST			0	0	3	0	Hail (1.00)
46 NW Wickenburg	30	Evening			0	0	6	0	Flash Flood
Severe thunderstorms pelted hail on a large area around Prescott and the heavy rains washed out a large part of U.S. Highway 93. Traffic was rerouted around this closure for several days. Hail damaged about 50 aircraft at the Prescott Airport.									
Coconino County									
50 N Flagstaff	31	1242MST	10.0	20	0	0	0	0	Tornado (F0)
A pilot reported a tornado near the Little Colorado River.									
ARKANSAS									
Little River County									
1 S Foreman	02	1400CST			0	0	0	0	Hail (1.75)
Izard County									
Sylamore	02	1542CST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds blew down a few trees.									
Pineville	02	1542CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds downed several trees.									
Jackson County									
3 SE Elgin	02	1708CST			0	0	0	0	Hail (0.75)
Izard County									
	02	2230CST-							
	03	0100CST			0	0	5	0	Flash Flood
A number of county roads were flooded due to heavy rains. Much of the damage was limited to road washouts.									
Benton County									
1 W Bentonville	03	1340CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds downed several trees.									
Newton County									
Mt. Judea	03	1410CST			0	0	0	0	Hail (0.75)
Washington County									
2 SE Winslow	03	1430CST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds blew down a few trees.									
Searcy County									
Witts Spring	03	1430CST			0	0	0	0	Hail (1.00)
Carroll County									
2 S Eureka Springs	03	1445CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds knocked down several trees on Highway 23.									
Yell County									
Ola	03	1605CST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds downed several trees, power lines and phone lines.									
White County									
Bald Knob	03	1630CST			0	0	0	0	Hail (1.00)
Perry County									
Perryville	03	1641CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds knocked down several trees.									
Garland County									
Fountain Lake	03	1715CST			0	0	3	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Thunderstorm winds downed several trees and power lines.									
Saline County Benton	03	1730CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds knocked down some power lines.									
Prairie County 1 W Fairmount Slovak	03	1800CST			0	0	0	0	Thunderstorm Winds (G55)
	03	1800CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds blew down several trees and power lines.									
Jefferson County White Hall	03	1815CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds knocked down several trees and power lines.									
Arkansas County Stuttgart	03	1830CST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds knocked down a couple of trees.									
Lonoke County Carlisle	03	1830CST			0	0	3	0	Thunderstorm Winds
Several large trees were knocked down by thunderstorm winds.									
Jefferson County 5 NW Pine Bluff	03	1830CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds blew down several large trees.									
Monroe County Clarendon	03	1930CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds knocked down several trees and power lines.									
Franklin County Ozark	04 05	2300CST- 0230CST			0	0	5	0	Flash Flood
Heavy rains produced flash flooding in the city of Ozark. A number of bridges sustained damage. A car and a small van were swept into a stream. Several locations in the county received between four and six inches of rain.									
Fulton County Mammoth Spring	10	1720CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds knocked down several trees.									
Salem	10	1720CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds blew down several trees.									
Sharp County Ash Flat	10	1730CST			0	0	3	0	Thunderstorm Winds
Several trees and power lines were blown down.									
Stone County Pleasant Grove	10	1810CST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds knocked down power lines and caused damage to a mobile home.									
Izard County Mt. Pleasant	10	1811CST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds ripped the roof off a home and knocked down several trees.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARKANSAS Cont'd									
Stone County Mountain View	10	1825CST			0	0	5	0	Thunderstorm Winds
	Numerous trees were blwon down by thunderstorm winds. Several aircraft also sustained damage.								
Cleburne County 4 N Drasco	10	1825CST			0	0	3	0	Thunderstorm Winds
	Thunderstorm winds tore the roof off of a barn.								
10 SW Heber Springs	10	1830CST			0	0	4	0	Thunderstorm Winds (G61)
	Several homes received roof and chimney damage.								
Prim	10	1830CST			0	0	4	0	Thunderstorm Winds
	Several roofs were damaged by thunderstorm winds.								
Faulkner County Damascus	10	1900CST			0	0	0	0	Thunderstorm Winds (G52)
Chicot County Dermott	10	1900CST			0	0	4	0	Lightning
	A building and a storage shed were destroyed by a fire that was the result of lightning.								
White County Albion	10	1905CST			0	0	3	0	Thunderstorm Winds
	Thunderstorm winds downed several trees.								
Faulkner County Conway	10	1910CST			0	0	3	0	Thunderstorm Winds (G52)
	Thunderstorm winds blew down trees and power lines.								
Faulkner County Vilonia	10	1910CST			0	0	0	0	Thunderstorm Winds (G52)
Bradley County Hermitage	10	1930CST			0	0	3	0	Hail (1.75)
Hermitage	10	1945CST			0	0	3	0	Hail (1.75)
Hermitage	10	2000CST			0	0	3	0	Hail (1.75)
	Hail, up to the size of golf balls, fell for approximately 40 minutes. A number of homes and vehicles received damage.								
Pulaski County Jacksonville	10	1930CST			0	0	0	0	Thunderstorm Winds (G52)
Izard County Guion	10	1930CST			0	0	0	0	Hail (1.75)
Pulaski County Little Rock	10	1945CST			0	0	3	0	Thunderstorm Winds
	Thunderstorm winds blew down several trees and power lines.								
Lonoke County Lonoke	10	1954CST			0	0	3	0	Thunderstorm Winds
	Thunderstorm winds downed several power lines.								
8 NE Scott	10	2012CST			0	0	2	0	Thunderstorm Winds
	Thunderstorm winds knocked down a large tree.								
Baxter County Mountain Home	10	2035CST			0	0	2	0	Thunderstorm Winds
	Thunderstorm winds blew down a few trees.								

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARKANSAS Cont'd									
Jefferson County Altheimer	10	2045CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds knocked down several trees and power lines.
Pine Bluff	10	2045CST			0	0	3	0	Thunderstorm Winds
									Several trees and power lines were blown down.
Prairie County Hickory Plains	10	2045CST			0	0	3	0	Thunderstorm Winds
									Some trees and power lines were blown down.
Arkansas County DeWitt	10	2050CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds blew down several trees and power lines.
Marion County Yellville	10	2050CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds downed some power lines.
Boone County Lead Hill	10	2100CST			0	0	4	0	Thunderstorm Winds
									Thunderstorm winds knocked down numerous trees and power lines. Several roofs were also damaged and a boat dock was destroyed.
Harrison Omaha	10	2102CST			0	0	0	0	Thunderstorm Winds (G52)
	10	2105CST			0	0	3	0	Thunderstorm Winds
									Several trees and power lines were blown down.
Alpena	10	2105CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds blew down several trees and power lines.
Harrison	10	2105CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds knocked down some trees and power lines.
Searcy County Marshall	10	2115CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds blew down some power lines.
Stone County Rushing	10	2120CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds blew down several trees and power lines.
Carroll County Green Forest	10	2125CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds downed several trees and power lines.
Stone County Mountain View	10	2130CST			0	0	5	0	Lightning
									Lightning was the cause of a fire that destroyed a house. The house was a total loss. No injuries occurred.
Van Buren County Clinton	10	2130CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds knocked down several trees.
Newton County Jasper	10	2130CST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

ARKANSAS Cont'd

Thunderstorm winds knocked down numerous trees and power lines.

Logan County Blue Mountain	10	2140CST			0	0	0	0	Thunderstorm Winds (G58)
Johnson County 8 N Clarksville	10	2205CST			0	0	0	0	Thunderstorm Winds (G52)
Madison County Wesley	10	2208CST			0	0	2	0	Thunderstorm Winds

Thunderstorm winds downed a few trees.

Pope County Hector	10	2210CST			0	0	3	0	Thunderstorm Winds
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Thunderstorm winds downed some trees and power lines.

Conway County Cleveland	10	2210CST			0	0	2	0	Thunderstorm Winds
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Thunderstorm winds downed a few trees.

Madison County Huntsville	10	2215CST			0	0	4	0	Thunderstorm Winds
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Numerous trees and power lines were knocked down.

Hindsville	10	2215CST			0	0	4	0	Thunderstorm Winds
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Thunderstorm winds blew down numerous trees and power lines.

Benton County Centerton	10	2215CST			0	0	2	0	Thunderstorm Winds
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Thunderstorm winds blew down a few trees.

Conway County Springfield	10	2215CST			0	0	3	0	Thunderstorm Winds
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Thunderstorm winds downed several trees.

Washington County Springdale	10	2220CST			0	0	0	0	Thunderstorm Winds (G52)
Prairie Grove	10	2223CST			0	0	4	0	Thunderstorm Winds (G59)

Thunderstorm winds downed numerous trees and power lines.

Fayetteville	10	2223CST			0	0	2	0	Thunderstorm Winds
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Thunderstorm winds blew down a few trees.

Canehill	10	2230CST			0	0	4	0	Thunderstorm Winds
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Numerous trees and power lines were knocked down by thunderstorm winds.

West Fork	10	2235CST			0	0	0	0	Thunderstorm Winds (G52)
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Franklin County Cass	10	2235CST			0	0	4	0	Thunderstorm Winds
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Numerous trees were blown down by thunderstorm winds.

Washington County Farmington	10	2235CST			0	0	4	0	Thunderstorm Winds
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Thunderstorm winds blew down numerous trees and power lines.

Goshen	10	2245CST			0	0	4	0	Thunderstorm Winds
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Numerous trees and power lines were blown down.

Crawford County Rudy	10	2245CST			0	0	4	0	Thunderstorm Winds
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
ARKANSAS Cont'd									
			Thunderstorm winds downed numerous trees and power lines.						
2 N Alma	10	2250CST			0	0	4	0	Thunderstorm Winds
			Thunderstorm winds blew down a tree on top of a mobile home. Only minor damage occurred.						
Benton County Siloam Springs	10	2259CST			0	0	2	0	Thunderstorm Winds
			Thunderstorm winds blew down a few trees.						
Sebastian County Fort Smith	10	2301CST			0	0	0	0	Thunderstorm Winds (G54)
			Thunderstorm winds gusted to 62 mph at the Weather Service Office in Fort Smith.						
Greenwood Logan County Caulksville	10	2305CST			0	0	0	0	Thunderstorm Winds (G52)
	10	2310CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds blew down some power lines.						
Crawford County Van Buren	10	2310CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds knocked down several trees.						
Logan County Cove Lake	10	2315CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds knocked down several trees and power lines.						
Scott County Mansfield	10	2330CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds blew down some trees and power lines.						
Ouachita County Bearden	11	0015CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds blew down several trees.						
Howard County 2 W Baker Springs	11	0050CST			0	0	0	0	Hail (0.75)
2 W Baker Springs	11	0050CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds blew down several trees.						
10 SW Umpire	11	0055CST			0	0	3	0	Thunderstorm Winds
			Thunderstorm winds knocked down several trees.						
Sevier County King	11	0058CST			0	0	4	0	Thunderstorm Winds (G50)
			Thunderstorm winds downed numerous trees.						
Gillham	11	0058CST			0	0	4	0	Thunderstorm Winds (G50)
			Numerous trees were blown down by thunderstorm winds.						
Craighead County Jonesboro	23	0830CST			0	0	4	0	Lightning
			A vacant house sustained heavy damage from a fire that was caused by lightning.						

CALIFORNIA, Northern

None reported.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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CALIFORNIA, Southern

Imperial, Riverside,
San Bernardino,
San Diego Counties

01	0930PST				0 0	? 0	Flash Flood
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Thunderstorms along with local heavy rain and minor flooding, hit many mountain and desert areas. Three quarters of an inch of rain fell in less than a half an hour at Oak Glen in the San Bernardino Mountains. This occurred just before 1300PST.

San Bernardino County
Southeast

01	1745PST				0 0	? 0	Thunderstorm Winds (G78)
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Strong thunderstorms occurred along the California-Arizona border north of Parker and south of Bullhead City. At 1930 PST, Needles Airport reported a wind gust of 78 mph along with frequent lightning and half inch of rain.

South Central
Riverside County

03	1350PST				0 0	? 0	Flash Flood
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Heavy rains occurred in the San Jacinto Mountains with 1.07 inches falling in slightly over an hour at Camp Sherman. Some minor street flooding occurred in the Garner Valley and Beaumont areas.

Southeast San Bernardino,
Eastern Riverside
Counties

03	1748PST				0 0	? 0	Thunderstorm Winds (G60)
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Severe thunderstorms occurred along the Colorado River Valley, producing winds gusting to 60 mph in the Blythe area along with frequent lightning and brief heavy rains.

Northeast San Bernardino
County

05	1518PST				0 0	? 0	Flash Flood
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Strong thunderstorms produced two to three inches of rain, near Nipton road east of Mountain Pass. Some unimproved roads were washed out. No damage to structures, but mud and silt on roads.

Riverside, San Bernardino,
San Diego Counties

12	1250PST				0 0	? 0	Flash Flood
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Strong thunderstorms occurred in the mountains of southern California, producing heavy rains and some local flooding. Idyllwild, in the San Jacinto Mountains, had 1.09 inches of rain between 1200 PST and 1400 PST.

CAZALL

13- 20	All Day				2 60	0 ?	Heat Wave
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Temperatures well above normal and high humidity covered most of southern California. The heat wave was caused by a large area of high pressure over the Western United States. With the temperatures in the mid-90s at the Los Angeles Civic Center and high humidity, the temperature felt like 110 degrees. Death Valley had nine consecutive days over 120 degrees. Many inland valleys of Los Angeles had highs near 110 degrees. There were 60 reports of heat-related illnesses and two possible heat-related fatalities, at the Miramar Naval Air Show in San Diego on August 15th and August 16th.

Imperial, San Bernardino,
Riverside, Los Angeles,
San Diego, and Inyo
Counties

13	0915PST				0 0	? 0	Thunderstorm Flash Flood
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Severe thunderstorms struck many mountain and desert areas with very heavy rain, flash flooding, gusty winds, power outages, hail and frequent lightning occurring. Idyllwild reported 0.62 inches of rain in 30 minutes. Cucamonga reported 1.56 inches in about one and half hours. Big Bear Lake had 1.20 inches of rain. Mt. Palomar, in the mountains northeast of San Diego, had reported nearly six inches of rain from 1230 PST to 1500 PST. Almost four inches of rain fell at Mt. Laguna. These intense thunderstorms were part of a mesoscale convective system. Three mobile homes were overturned in the Calipatria-Niland area of Imperial County between 1430PST and 1530PST. Highway 86, near Westmorland and Brawley, was flooded. Death Valley Ranger Station reported flash flooding. Highway 190, in the Death Valley area, had some local flash flooding.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
CALIFORNIA, Southern Cont'd									
San Diego County	13	1340PST			0	0	?	0	Hail (0.75)
									Hail fell in the Mt. Palomar area.
Los Angeles and Orange Counties	13	1545PST			0	0	?	0	Thunderstorm Winds
									Gusty winds, caused by an outflow boundary moving from the mesoscale convective system, swept through Orange County and the Los Angeles Basin. Brief gusts of wind to 40 mph were reported in the San Fernando Valley and southeastern Orange County.
Riverside County	14	0917PST			0	0	?	0	Flash Flood
									Strong thunderstorms hit many mountain and desert areas. At 1505 PST, an intense thunderstorm hit the San Jacinto Mountains near Idyllwild. Heavy rain and local flooding was reported.
Eastern Imperial, Eastern Riverside Counties	22	1600PST			0	0	?	0	Flash Flood Thunderstorm Winds
									Blythe reported winds gusting to 45 mph accompanied by over 0.50 inch of rain in one hour and some minor street flooding.
Eastern Riverside, Southeast San Bernardino Counties	23	0950PST			0	0	?	0	Flash Flood
									The California Highway Patrol Office reported flash flooding in the Vidal Junction area near Blythe. Highways 95 and 62 were closed due to flooding and a van was washed off the road. Heavy thunderstorms in the Death Valley area caused some local flash flooding. At 1718 PST, park officials at Death Valley Ranger Station, reported flash flooding in the Immigrant Canyon and Wildrose area, south of Route 190.
Inyo, Eastern San Bernardino, Eastern Kern Counties	23	1300PST			0	0	?	0	Thunderstorm Flash Flooding
									Minor flash flooding was reported in the Furnace Creek area of Death Valley at 1645 PST.
CAZ019	30	1348PST			0	0	?	0	High Winds
									Strong winds of 25 to 45 mph were reported over the Antelope Valley in northern Los Angeles County.
Inyo, San Bernardino, Imperial, Riverside, and San Diego Counties	31	1335PST			0	0	?	0	Thunderstorm Flash Flood
									Strong thunderstorms hit many mountain and desert areas of southern California. Some minor flooding was reported in Beaumont where 0.40 inches of rain fell in six minutes and 1.29 inches fell in 35 minutes. Yucca Valley had local street flooding and Red Mountain had 0.90 inches of rain fall in 25 minutes.
COLORADO									
Adams County	01	1602MST			0	0	?	?	Funnel Cloud
18 NE Denver	01	1606MST-							
1.5 N Bennett to	01	1624MST	0.5	50	0	0	?	?	Tornado (F0)
1 N Bennett									
									Pilots reported a funnel cloud near the construction site of the new Denver International Airport. A few minutes later, a tornado was reported near Bennett by sheriff's deputies as well as by another pilot. The tornado remained on the ground for about 18 minutes before lifting.
Adams County Brighton	01	1845MST			0	0	?	?	Thunderstorm Winds (G52)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
COLORADO Cont'd									
8 NW Bennett to 7 W Watkins	01	1856MST			0	0	?	?	Thunderstorm Winds (G61)
	01	1905MST			0	0	?	?	Thunderstorm Winds (G61)
An National Weather Service automated mesonet station recorded a thunderstorm gust of 60 mph (52 knots) at Brighton. Spotters measured a thunderstorm gust of 70 mph (61 knots) northwest of Bennett. A spotter also measured a 70 mph (61 knots) gust west of Watkins.									
Arapahoe County 10 SE Denver	01	1900MST			0	1	?	?	Lightning
Adams County 10 NW Denver	01	1905MST			0	1	?	?	Lightning
Two people were struck by lightning in the Denver metropolitan area. The first, a 20-year-old male, sustained serious injuries when struck by lightning while jet skiing on Cherry Creek Reservoir. The second, a 50-year-old male, received only minor injuries when struck while golfing. Times are estimated.									
Moffat County 23 N Craig	02	1600MST	200*	25	0	0	4	?	Tornado (F0)
A tornado destroyed an airplane hanger north of Craig along Colorado Highway 13. The tornado picked up the 40 by 30 foot hanger, lifting it over 50 feet into the air and depositing it about 15 feet from its original position. A fiberglass boat was also destroyed. Damage was estimated at about \$6,000. There were no injuries.									
Eagle County Vail	02	1640MST			1	0	?	?	Lightning
A 38-year-old man was struck and killed by lightning while golfing. (M380)									
Boulder County Longmont	03	1725MST			0	0	?	?	Thunderstorm Winds (G50)
Adams County Brighton	03	1757MST			0	0	?	?	Thunderstorm Winds (G56)
14 NE Denver	03	1805MST			0	0	?	?	Thunderstorm Winds (G52)
An National Weather Service automated mesonet station reported thunderstorm gusts to 58 mph (50 knots) at Longmont. A 64 mph (56 knots) gust at Brighton was reported by a spotter. A second spotter reported a 60 mph (52 knots) gust near the construction site of the new Denver International Airport.									
Jefferson County Evergreen	03	1800MST			0	0	5	?	Lightning
Lightning started a fire at a church, causing over \$75,000 in damage. There were no injuries. Time given is estimated.									
Arapahoe County 10 SE Denver	05	1515MST			0	0	?	?	Funnel Cloud
10 SE Denver	05	1515MST			0	0	?	?	Funnel Cloud
A pilot reported two funnel clouds near Cherry Creek Reservoir. Both dissipated quickly.									
Douglas County 2 E Franktown	05	2032MST			0	0	?	?	Hail (0.75)
A National Center for Atmospheric Research spotter reported dime-size hail near Franktown.									
Phillips County 6 NW Amherst	06	1635MST			0	0	?	?	Hail (1.75)
Amherst	06	1644MST			0	0	?	?	Hail (1.00)
Spotters reported hail up to golf ball-size in and near Amherst.									
Morgan County Fort Morgan	10	0930MST			0	1	?	?	Lightning
A 48-year-old male was struck by lightning, receiving only minor injuries.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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COLORADO Cont'd

Prowers County

Lamar	10	1305MST			0 0	2 ?	Hail (1.50)
Lamar	10	1320MST			0 0	? ?	Hail (1.75)
Lamar	10	1330MST			0 0	? ?	Flash Flood

Thunderstorms produced hail up to golf ball-size in Lamar, breaking a few windows. Heavy rain (2.50 inches in 45 minutes) caused flooding in the center of town, requiring traffic to be diverted for several hours.

El Paso County

Palmer Lake	11	1420MST			0 0	? ?	Hail (1.00)
Black Forest	11	1515MST			0 0	? ?	Hail (0.75)

Hail was reported up to 1.00 inch in diameter at Palmer Lake. Dime-size hail fell on the north side of Black Forest.

Washington County

7 NNE Last Chance	11	1608MST			0 0	? ?	Hail (1.00)
11 NW Akron	11	1740MST			0 0	? ?	Hail (0.75)
1 S Woodrow	11	1755MST			0 0	? ?	Hail (0.75)

Spotters reported hail up to 1.00-inch diameter in Washington County.

Weld County

New Raymer	11	1753MST			0 0	? ?	Hail (1.50)
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Spotter reported walnut-size hail at New Raymer.

Morgan County

1 W Wiggins	11	1858MST			0 0	3 ?	Hail (1.75)
3 SW Wiggins	11	1900MST			0 0	? ?	Hail (1.75)

Golf ball size-hail fell around Wiggins, damaging shingles and breaking windows of houses and breaking tree branches.

Jefferson County

12 NNW Denver	11	2101MST			0 0	? ?	Hail (0.75)
12 NNW Denver	11	2107MST			0 0	? ?	Hail (0.75)

Two off-duty National Weather Service employees reported dime-size hail in Westminster.

Rio Grande County

30 NW Alamosa	13	1800MST			0 0	? ?	Funnel Cloud
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An off-duty National Weather Service employee sighted a brief funnel cloud.

Baca County

Pritchett	16	2055MST			0 0	? ?	Hail (1.75)
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Baca County Sheriff reported hail to golf ball-size in Pritchett.

Park County

Guffey	17	1515MST			0 0	? ?	Funnel Cloud
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Park County fire fighters reported a brief funnel cloud near the town of Guffey.

Teller County]

Cripple Creek	17	1520MST			0 0	? ?	Hail (0.75)
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Dime-size hail fell at Cripple Creek.

Elbert County

9 S Simla	17	1527MST	Short	Narrow	0 0	? ?	Tornado (F0)
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The Town Marshall in Simla reported a tornado south of Simla.

Custer County

San Isabel	17	1700MST			0 0	? ?	Hail (1.00)
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

COLORADO Cont'd

One-inch-diameter hail fell in San Isabel, piling up a few inches deep in areas.

Adams County
5 E Bennett

17	1801MST	Short	Narrow	0	0	?	?	Tornado (F0)
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Spotter reported a brief tornado between Bennett and Strasburg.

Yuma County

Laird

18	2230MST			0	0	5	?	Hail (2.75)
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Laird

18	2230MST	Short	Narrow	0	0	4	?	Tornado (F0)
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4 N Laird

18	2235MST			0	0	?	4	Hail (2.00)
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A powerful storm moved through the town of Laird, producing hail up to baseball size and a small tornado. The tornado struck and badly damaged a mobile home. No one was injured. The hail caused widespread damage to the small town. Windows were shattered on homes, automobiles lost windows and were severely dented, roofs of homes were damaged and trees were stripped of leaves and branches. Colorado Highway 34 had hail up to 6 inches deep and had to be plowed. Several small farms lost close to 100% of the crops still in the fields.

Arapahoe County
11 E Denver

21	1433MST			0	0	?	?	Funnel Cloud
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Observer at Buckley Air National Guard Base spotted a brief funnel cloud southwest of the base.

Morgan County

1 W Wiggins

21	1640MST			0	0	?	?	Hail (1.75)
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1 W Weldona

21	1650MST			0	0	?	4	Thunderstorm Winds
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Morgan County Sheriff reported golf ball-size hail near Wiggins. Strong thunderstorm winds and hail stripped corn fields near Weldona.

Weld County

7 N New Raymer

21	1700MST			0	0	?	?	Thunderstorm Winds (G52)
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Spotter reported a thunderstorm gust of 60 mph (52 knots) north of New Raymer.

Morgan County

16 N Fort Morgan

21	1810MST			0	0	?	?	Hail (0.75)
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Weld County

6 SW New Raymer

21	1820MST			0	0	3	?	Thunderstorm Winds
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Dime-size hail fell north of Fort Morgan. Thunderstorm winds damaged several out buildings and blew over a light weight shed.

Jefferson County

15 WSW Denver

24	1140MST- 1800MST			0	0	?	?	Flash Flood
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17 WSW Denver

24	1230MST- 1700MST			0	0	?	?	Flash Flood
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Denver County

7 SSW Denver

24	1230MST- 1930MST			0	0	?	?	Flash Flood
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2 NW Denver

24	1500MST- 2000MST			0	0	?	?	Flash Flood
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Heavy rains during the morning and afternoon caused flash flooding across parts of the Denver metropolitan area. Rainfall amounts of one to three inches fell, with the hardest hit areas being the southwestern and central parts of the business district. Bear Creek rose above bankfull early in the day near Idledale, with floodwaters moving into the southwest part of Denver by early afternoon. The confluence of Cherry Creek and the South Platte River in downtown Denver also went out of its banks. Mud and rock slides along Colorado Highway 74 west of Morrison were reported but apparently caused no injuries or damage. Rains let up late in the evening and floodwaters gradually receded.

Boulder County

10 SSW Estes
Park

30	1130MST			0	1	?	?	Lightning
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Property	Crops	Character of Storm
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COLORADO Cont'd

A 49-year-old male was seriously injured when struck by lightning while climbing Longs Peak in extreme northern Boulder County.

Custer County
1 SE West-
cliffe

30	1517MST	Short	Narrow	0	0	?	?	?	Tornado (F0)
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A tornado touched down briefly near Westcliffe.

Yuma County
Otis

31	1800MST- 2100MST			0	0	3	?	?	Flash Flood
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Heavy rain, up to three inches in some areas, produced flash flooding in Otis. Parts of Colorado Highway 61 were under water as were hangars at the Otis airport.

CONNECTICUT

Fairfield County
Easton

04	0615EST			0	0	?	0	0	Thunderstorm Winds
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Several trees were reported blown down.

Fairfield County
Trumbull

04	0615EST	0.2	10	0	0	2	0	0	Tornado (F1)
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Many trees were uprooted and branches torn off along the path of a small tornado that was confirmed by National Weather Service investigation. The tornado touched down on Sharon Street. No injuries or structural damage occurred.

New Haven County
Orange

04	0630EST			0	0	?	0	0	Thunderstorm Winds
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Several trees were blown down.

Hartford County
North Granby
East Hartford
East Hartford
East Hartford

04	1436EST			0	0	?	0	0	Hail (0.75)
04	1505EST			0	0	?	0	0	Thunderstorm Winds (G55)
04	1510EST			0	0	?	0	0	Hail (1.00)
04	1505EST- 1515EST	1.2	10	0	0	?	0	0	Tornado (F0)

Thunderstorms produced damaging wind, hail, and a small tornado. Numerous trees were snapped off 10 to 20 feet above the ground along the path of the tornado, which traveled about 6,500 feet and varied from 15 to 30 feet wide. There were reports of 1.00-inch-diameter hail very near the path of the tornado that occurred during the period of 1505 EST to 1515 EST. This event was confirmed by National Weather Service investigation.

Hartford County
East Hartford

04	1521EST			0	0	?	0	0	Thunderstorm Winds
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Many large trees were blown down.

Tolland County
Vernon
Vernon

04	1531EST			0	0	?	0	0	Hail (0.75)
04	1533EST			0	0	?	0	0	Thunderstorm Winds

Thunderstorm winds downed many large trees.

New Haven County
Wallingford

04	1725EST			0	0	?	0	0	Thunderstorm Winds
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Many large tree limbs were blown down.

Middlesex County
Haddam

09	1440EST			0	0	?	0	0	Hail (1.00)
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Hail measuring 1.00 inch in diameter, fell in a five block area.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm
					Killed	Injured	Property Crops

CONNECTICUT Cont'd

Fairfield County

Monroe	11	1417EST			0	0	?	0	Thunderstorm Winds
Monroe	11	1421EST			0	0	?	0	Hail (1.00)

A thunderstorm blew down trees and brought large hail to this community.

New Haven County

Hamden	11	1440EST			0	0	?	0	Thunderstorm Winds
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Trees were blown down by thunderstorm winds.

Fairfield County

Bridgeport	11	1525EST			0	0	4	0	Hail (1.00)
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Police reported car windows broken by large hail.

Windham County

Willimantic	11	1530EST			0	0	?	0	Thunderstorm Winds
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Many large trees and branches were blown down along Route 203 between Windham and Willimantic.

New London County

Niantic	11	1530EST			0	0	?	0	Hail (0.75)
Lebanon	11	1535EST			0	0	?	0	Thunderstorm Winds
Jewett City	11	1550EST			0	0	?	0	Hail (0.75)

Thunderstorms blew down some trees and brought large hail.

Fairfield County

Stratford	11	1555EST			0	0	?	0	Hail (0.75)
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Large hail occurred during a thunderstorm in Stratford.

Fairfield County

Bridgeport Stratford	11	1556EST- 1610EST			0	0	5	0	Thunderstorm Winds (G59)
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The National Weather Service Office in Stratford recorded a peak wind gust of 68 mph and 0.75-inch hail during a severe thunderstorm which blew down many trees in Stratford and Bridgeport. Up to 41,000 electric customers lost power.

Fairfield County

Bridgeport	11	1600EST			0	1	3	0	Lightning
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A bolt of lightning struck an apartment building and a child on the second floor received second degree burns when the lightning entered through a window. A fire broke out about 30 minutes later and engulfed the apartment in flames.

New Haven County

Milford	11	1600EST			0	0	?	0	Thunderstorm Winds
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The local police reported several trees down and power outages.

New London County

N Stonington	11	1625EST			0	0	4	0	Thunderstorm Winds
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Several large limbs were blown down which knocked down power lines.

DELAWARE

Sussex County

Greenwood	04	1600EST			0	0	0	0	Thunderstorm Winds
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Large trees were blown down.

Sussex County

Bridgeville

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
DELAWARE Cont'd									
Laurel	04	1700EST- 04 1730EST			0	0	0	0	Thunderstorm Winds
									Large trees and large limbs were downed.
New Castle County	11	1550EST			0	0	3	0	Thunderstorm Winds
									Fire officials reported trees and power lines downed in the northern part of the county.
Sussex County	15	0600EST- 15 1200EST			0	0	0	0	Coastal flood
									Persistent northeast winds in a tight pressure gradient north of a warm front brought heavy surf that caused beach and dune erosion.
Sussex County Milton Millsboro	17	1500EST- 17 1630EST			0	0	3	0	Flash flood
									State Police reported flooding of roadways in Milton and Millsboro, including a bridge overflowed.
Sussex County 1N Seaford	28	1720EST	0.2	20	0	0	0	0	Tornado (F0)
									Skywarn spotters reported a tornado.
Sussex County 1N Seaford	28	1720EST			0	0	0	0	Hail (1.00)
									Hail the size of quarters was reported by spotters.
New Castle County Odessa	28	1825EST			0	0	0	0	Thunderstorm Winds(G52)
									Skywarn spotter reported 60-mph (52 knot) winds.
FLORIDA									
Palm Beach County Wellington	01	1435EST			0	0	2	0	Thunderstorm Winds
									Strong thunderstorm winds uprooted several small trees and blew down a few traffic signs.
Monroe County 2 NE Key West	01	1915EST			0	0	0	0	Waterspouts
									A waterspout was sighted 2 miles northeast of Key West.
Desoto County 38 N Fort Myers	01	1525EST- 1535EST			0	0	0	0	Thunderstorm Winds Hail (0.88)
									Nickel-size hail fell briefly in northeast Arcadia. Several tree limbs were blown down.
Nassau County 8 NNE Jacksonville	01	1606EST			0	0	0	0	Hail (1.50)
									Marble to golf ball-size hail fell briefly 1.5 miles south of Yulee.
Hillsborough County 21 E Tampa	02	1500EST			0	0	5	0	Thunderstorm Winds
									Strong thunderstorm winds damaged carports and roofs on 18 mobile homes in Plant City.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
FLORIDA Cont'd									
DeSoto County 39 N Fort Myers	02	1535EST			0	0	0	0	Hail (0.88)
									Nickel-size hail fell in northeast Arcadia.
Seminole County 16 NE Orlando	02	1710EST			0	0	4	0	Thunderstorm Winds
									Severe thunderstorm winds downed trees and power lines in eastern Seminole County.
Monroe County 3 E Key West	03	1316EST			0	0	0	0	Funnel Cloud
									A funnel clouds was observed 3 miles east of Key West. It dissipated without touching down.
Volusia County 16 SW Daytona Beach	03	1800EST			0	0	3	0	Lightning
									Lightning struck the roof of a garage housing antiques starting a fire.
Brevard County 15 NNW Melbourne	04	1645EST			0	0	5	0	Thunderstorm Winds
									Severe thunderstorms winds blew down trees and power lines, destroyed a modular classroom at a school, and damaged roofs in Rockledge.
Brevard County 15 NNW Melbourne	04	1645EST			0	1	0	0	Lightning
									A man was struck by lightning and injured outside his home in Rockledge.
Jefferson County S Portion	04	1715EST			0	0	0	0	Thunderstorm Winds (51)
									Winds gusts of 59 mph was reported in southern Jefferson County. Tree limbs and power lines were downed.
Polk County Lakeland	05	1314EST			0	0	0	0	Thunderstorm Winds (63)
									A thunderstorm gust to 73 mph was recorded at the Lakeland Fire Department.
Hillsborough County 14 ESE Tampa	05	1323EST			0	0	0	0	Hail (0.75)
									Marble-size hail fell briefly in Brandon.
Polk County Lakeland	05	1330EST			0	0	4	0	Thunderstorm Winds
									Strong thunderstorm winds blew the roof off a building and damaged several cars. A downed tree fell on two houses.
Dade County Miami	06	1145EST			0	4	0	0	Lightning
									Lightning struck a cargo vessel being off loaded at the Port of Miami. Four stevedores in the cargo hold were slightly injured.
Monroe County 5 NNW Key West	06	1150EST			0	0	0	0	Waterspouts
									A waterspout was sighted 5 miles north northwest of Key West.
Collier County Naples	06	1320EST			0	0	2	0	Thunderstorm Winds
									Downburst winds blew down several trusses at a building under construction in Naples.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
FLORIDA Cont'd									
Sarasota County 34 NW Fort Myers	06	1410EST			0	1	2	0	Lightning
									Lightning struck a fireman as he fought a blaze caused by another strike. He was knocked unconscious for a short time.
Hillsborough County Tampa	06	1545EST			0	0	1	0	Thunderstorm Winds
									Thunderstorm winds downed trees which fell blocking an intersection in Tampa.
Sarasota County N Portion	06	1610EST			0	0	0	0	Hail (0.75)
									Marble-size hail was reported near the Sarasota-Bradenton Airport.
Hillsborough County Tampa	07	1520EST- 1530EST			0	0	0	0	Hail (1.00)
									Thunderstorm winds downed trees which fell blocking an intersection in Tampa.
Pinellas County 4 W St. Petersburg	07	1557EST			0	0	2	0	Hail (0.75) Thunderstorm Winds
									Marble-size hail fell and thunderstorm gusts blew tops off trees.
Hernando County 35 NNE Tampa	07	1615EST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds blew down trees and power lines in Brooksville.
Pasco County Monroe County 4 N Key West	07	1623EST			0	0	0	0	Thunderstorm Winds
	07	1630EST			0	0	0	0	Waterspouts
									A waterspout was sighted 4 miles north of Key West.
Pinellas County 15 WSW Tampa	07	1633EST			0	0	0	0	Hail (1.00)
									Quarter-size hail fell at Largo.
Taylor County 36 W Jacksonville	07	1840EST			0	0	0	0	Thunderstorm Winds
									Thunderstorm winds uprooted a tree which landed on a car.
Dade County Miami Beach	07	1900EST			1	0	0	0	Lightning
									A German tourist was struck by lightning and killed as he walked away from the beach. (M260)
Monroe County	07	0720EST			0	0	0	0	Waterspouts
									A waterspout was sighted just west of Bahia Honda State Park.
Monroe County 3 NE Key West	09	1238EST			0	0	0	0	Waterspouts
									A waterspout was sighted 3 miles northeast of Key West.
Hernando County 34 N Tampa	09	1840EST			0	0	0	0	Hail (0.75)
									Marble-size hail fell in Spring Hill.
Escambia County Pensacola	10	1500EST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
FLORIDA Cont'd									
Broward County 3 NNW Fort Lauderdale	15	1500EST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds blew roof panels from one house into a neighbor's pool in Cooper City.									
St. Johns County St. Augustine	17	1515EST			0	1	0	0	Lightning
Lightning struck a guard shack at the Grumman Aircraft Company. The guard in the shack was injured.									
Volusia County Daytona Beach	17	1926EST			0	0	0	0	Thunderstorm Winds (52)
A thunderstorm wind gust to 60 mph was recorded at the Daytona Beach Regional Airport.									
Monroe County 3 NW Key West	18	1457EST			0	0	0	0	Waterspout
A waterspout was sighted 3 miles northwest of Key West.									
Escambia County Pensacola	19	1230EST	short		0	0	2	0	Waterspout- Tornado (F0)
A waterspout moved ashore at west Pensacola pushing a boat onshore. It dissipated without doing more damage.									
Dade County 7 SW Miami	19	1115EST			0	1	0	0	Lightning
A 58-year-old golf course maintenance worker in a riding mower was struck by lightning and critically injured.									
Seminole County 11 NE Orlando	20	1834EST			0	0	0	0	Hail (0.75)
Marble-size hail fell briefly in Oviedo and Longwood.									
Monroe County Marathon	21	1155EST			0	0	0	0	Waterspouts
Several waterspouts were reported by the Coast Guard north of the Seven Mile Bridge along U.S. Hwy 1 in the Keys.									
Jackson County SW Portion	21	1300EST- 21 1330EST			0	0	5	0	Thunderstorm Winds
Strong downburst winds destroyed 1 mobile home and snapped off 24 trees.									
FLZ018-021 > 023 Broward, Collier, Dade, Monroe Counties	24	0325EST- 24 0900EST			15	?	9	9	Hurricane Andrew
Hurricane Andrew roared ashore in southern Dade County near Homestead and Florida City. The Category 4 hurricane caused widespread damage to homes and businesses, with many destroyed in south Dade. Numerous trees, power lines, light poles, etc were downed in many areas from Broward County on the north to Collier County on the west and to Dade County and the upper Keys on the south. Fifteen people were killed as a direct result of the storm, mostly from flying debris and collapsing roofs, walls, or falling furniture. Twenty-six others were killed indirectly as a result of storm damage while cleaning up debris. Debris came from an auto accidents related to non-functional traffic lights, across roadways and so forth. In all property damage was estimated to have exceeded \$25 billion, and crop damage was at least \$1 billion. The natural reef housing coral and other marine life was very badly damaged. Ocean Reef in the extreme upper Keys also suffered heavy damage. About 660,000 customers were without power for periods of from a few hours to several months. (M67P)(F12P)(M41P)(F67P)(M46P)(M32P)(M46P)(M49P)(F91P)(M62P)(M40P)(M30P)(M57P)(M74P)(M37P).									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
FLORIDA Cont'd									
Palm Beach County 11 SSE W Palm Beach	24	1530EST			0	0	0	0	Funnel Cloud
	The sheriff's department reported a funnel cloud over Boynton Beach. It dissipated without touching down.								
Wakulla County	24	1630EST			0	0	2	0	Thunderstorm Winds
	Strong thunderstorm winds blew down trees from Woodville to Panacea and also in Crawfordville.								
Santa Rosa County E Milton	27	1145EST			1	0	0	0	High winds
	A man logging in the Blackwater River Forest east of Milton was killed when strong winds snapped off the top of a rotted tree and it fell on him. (M410)								
Escambia County 17 NNW Pensacola	27	2200EST			0	0	2	0	Thunderstorm Winds
	Strong thunderstorm winds downed trees and power lines near Molino.								
Escambia County	27	2215EST			0	1	0	0	Lightning
	Lightning struck a phone box on which a taxi driver was leaning. He collapsed but regained consciousness and refused medical help.								
Santa Rosa County 10 SE Pensacola	27	2245EST			0	0	3	0	Thunderstorm Winds
	Thunderstorm winds blew over a long section of fence, uprooted several trees, and tipped over a picnic table.								
Monroe County Big Coppitt Key	29	1115EST			0	0	0	0	Waterspout
	A waterspout was sighted 10 miles northeast of Big Coppitt Key.								
Palm Beach County W Palm Beach	29	1430EST	short		0	0	3	0	Tornado (F0)
	A small tornado touched down briefly in a mall parking lot, uprooting trees, downing power lines, and ripping down signs.								
Monroe County Conch Key	29	1710EST			0	0	0	0	Waterspout
	A waterspout was sighted 1 mile southeast of Conch Key.								
Dade County Homestead	30	1350EST			1	0	0	0	Lightning
	A man unloading hurricane relief supplies was struck by lightning. He died three days later. (M550)								
Monroe County 2 NW Key West	31	1045EST			0	0	0	0	Waterspout
	A waterspout was sighted 2 miles northwest of Key West.								
GEORGIA									
Bryan County 8 S Ellabell	02	1818EST			0	0	?	?	Hail (1.00)
Ellabell	02	1830EST			0	0	?	?	Hail (1.75)
Effingham County Northern Portion	03	1900EST- 2300EST			0	0	4	?	Flash Flood

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

GEORGIA Cont'd

Heavy rainfall developed over northern Effingham County where an estimated three to five inches of rain fell during 2 hours. Serious flooding developed from Egypt to Shawnee to Kildare. Several county roads were washed out; others had as much as 2 feet of water over them.

Colquitt County

Hartsfield	04	1655EST			0	0	3	?	Lightning
Ellenton	04	1705EST			0	0	4	3	Lightning

Lightning struck a home in Hartsfield and caused minor damage. Lightning struck a tobacco barn and destroyed both the barn and the crop inside.

Chatham County

Savannah	05	1600CST			0	0	3	?	Lightning
Savannah	05	1600CST			0	0	3	?	Thunderstorm Winds

Many uprooted trees and limbs were downed over Savannah. Power lines were torn down and over 3,500 customers were left with service. Direct lightning strikes damaged electrical equipment at two co-located radio stations in Savannah.

Charlton County

Folkston	05	1910EST			0	0	?	?	Lightning
Countywide									
Folkston	05	1915EST			0	0	3	?	Thunderstorm Winds

Lightning strikes caused widespread power outages over Charlton County and at Folkston. Scattered trees and power lines were torn down by strong winds.

Houston County

Perry	07	1645EST			0	0	4	?	Lightning
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Lightning damaged the roof, electrical circuits, and deck of a house in Perry.

Hall County

Southern Portion	09	1400EST			0	0	3	?	Thunderstorm Winds
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A few trees and large limbs were blown down over southern Hall County along the Jackson County line. Power outages developed in the area when utility lines were torn down.

Wilkinson County

Gordon	09	1700EST			0	3	?	?	Lightning
McIntyre	09	1700EST			0	0	3	?	Thunderstorm Winds

Strong winds downed trees and limbs in McIntyre. Three people were struck by lightning while standing under a tree.

Jones County

7 SE Gray	09	1740EST			0	0	?	?	Hail (1.75)
7 SE Gray	09	1740EST			0	0	3	?	Thunderstorm Winds

Strong winds blew down trees and large hail fell southeast of Gray at the intersection of Georgia Highways 49 and 18. Power outages developed across the county due to lightning strikes.

Crawford County

Roberta	09	1755EST			0	0	3	?	Thunderstorm Winds
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Scattered trees were uprooted by the winds. Time is estimated.

Bibb County

Macon	09	1805EST			0	0	4	?	Thunderstorm Winds
Lizella	09	1805EST			0	0	4	?	Lightning

Houston County

Warner Robins	09	1805EST			0	0	4	?	Thunderstorm Winds
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Trees and power lines were blown down by strong winds. In Macon, a two-story steel frame of a building was heavily damaged and pushed off center by 3 feet.

At Lizella, a house was heavily damaged when lightning set it afire.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

GEORGIA Cont'd

Scattered large limbs, trees, and power lines were downed by strong winds across Smyrna. Utility interruptions occurred. A few homes were damaged by fallen trees.

Liberty County Sunbury

10	1800EST				0	0	2	?	Thunderstorm Winds
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A large tree was blown down onto power lines near Sunbury in southeastern Liberty County. Wind gusts were estimated to 50 mph.

Fayette County Fayetteville Fayetteville Peachtree City Peachtree City Fayetteville

10	1818EST				0	0	3	?	Lightning
10	1829EST				0	0	4	?	Lightning
10	1845EST				0	0	?	?	Hail (0.75)
10	1900EST				0	0	3	?	Thunderstorm Winds

Several large trees were uprooted by thunderstorm winds around Peachtree City and Fayetteville. Georgia Highway 74 was blocked by trees. Scattered power outages developed.

Lightning did minor damage to a house in Fayetteville at 1818 EST and extensive damage to another house at 1829EST. About 2,000 customers were left without power due to lightning and winds.

Worth County Isabella

10	1842EST	0.3	67		0	0	4	?	Thunderstorm Winds Small Hail
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A downburst wind event developed near Isabella and damaged roofs of several homes, seven trees, three power poles, and other properties along the damage path. Damage costs were estimated at about \$15,000.

Harris County Pine Mountain Valley

10	2015EST				0	0	3	?	Thunderstorm Winds
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Several large trees and limbs were downed by strong winds at Pine Mountain Valley. Scattered power outages developed.

Talbot County 7 NNW Talbotton Talbotton

10	2025EST				0	0	3	?	Thunderstorm Winds
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Several large trees and limbs were downed along Georgia Highway 36 and in Talbotton. Scattered outages developed after utility lines were downed.

Floyd County Rome Rome Rome

12	2100EST				0	0	3	?	Thunderstorm Winds
12	2100EST-				0	0	5	?	Flash Flood
13	0200EST				0	0	4	?	Flash Flood
13	0800EST- 0200EST				0	0	4	?	Flash Flood

Strong winds tore down tree limbs and pushed them onto lines. Lightning blew out fuses. Outages developed over Rome for about 1,800 customers.

Flash floods developed in Rome and inundated many homes, businesses, and roads. Residents were evacuated after their apartment homes were flooded. In some areas water rose to up to 3 feet. Several vehicles were damaged.

Muscogee County Columbus

13	1600EST- 1730EST				0	0	5	?	Flash Flood
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Flash floods developed over Columbus, especially over the downtown area. About 3.50 inches of rain fell at the Columbus Airport (CSG) between 1500 EST and 1700 EST. Extensive flooding developed over city streets and around small streams. Homes, businesses, and a recreational area were flooded. Several vehicles were damaged at a car dealership.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
GEORGIA Cont'd									
Richmond County Augusta	13	2030EST			0	0	4	?	Flash Flood
									Water covered several roads around Augusta around 2030 EST. A few homes were damaged when water rose to near 3 feet. Time is estimated.
Washington County Sandersville	13	2220EST			0	0	4	?	Flash Flood
									Flash floods developed over Sandersville near Georgia Highway 88. Several homes and a high school had water damages. Area streets and roads were damaged.
Sumter County Americus	14	0030EST			0	0	2	?	Thunderstorm Winds
									A tree was uprooted by winds in Americus and tore down power lines. Isolated outages resulted.
Fayette County Fayetteville Tyrone Peachtree City	16	1530EST			0	0	3	?	Thunderstorm Winds
									Scattered trees and power lines were downed as a strong thunderstorm moved across Fayette County. Power outages developed.
Glynn County Thalmann	16	1530EST			0	0	3	?	Thunderstorm Winds
									Several large trees were snapped by the winds. Power lines were torn down by the winds and the downed trees; outages developed. The exterior siding was blown off a mobile home.
Habersham County 2 E Clarkesville	17	1655EST			0	0	4	?	Thunderstorm Winds Small Hail
									A large tree was uprooted by strong winds and fell onto a house just east of Clarkesville.
Gwinnett County Lawrenceville	17	1830EST			0	0	4	?	Flash Flood
									Two houses were flooded in Lawrenceville after locally heavy rainfall developed over Lawrenceville. Water rose in one home to about 3 feet.
McDuffie County Northeastern Portion	17	2315EST			0	0	3	?	Thunderstorm Winds
Columbia County Western Portion	17	2315EST			0	0	3	?	Thunderstorm Winds
									Scattered trees were blown down from Georgia Highway 150 to Interstate 20 in northeastern McDuffie County and western Columbia County. Scattered power outages developed when utility lines were torn down.
Charlton County 3 E Folkston	18	1815EST			0	0	3	?	Thunderstorm Winds
									Strong winds damaged a transformer and power lines near Folkston. Scattered outages resulted.
Dougherty County Albany	19	1448EST- 1449EST	Short	10	0	0	3	?	Tornado (F0)
									A small tornado touched down briefly near the airport in Albany. Only a few trees were damaged before the tornado lifted at 1449 EST. The funnel cloud totally dissipated by 1450 EST.
Rabun County Eastern Portion	20	2015EST			0	0	4	?	Flash Flood
									After 4.36 inches of rainfall within a 3-hour period, water covered a bridge and damaged two roads in eastern Rabun County.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
GEORGIA Cont'd									
Richmond County Augusta	21	0005EST- 0300EST			0	0	?	?	Flash Flood
									Heavy rainfall over eastern Georgia caused localized flooding in Augusta. Stevens Creek flooded and several roads were closed due to flooding.
Fulton County 10 NW Atlanta	21	1615EST			0	0	4	?	Rainfall
									The entire roof of a manufacturing company collapsed due to the weight of rainfall that collected on the roof.
Tattnall County Glennville Glennville	21	1630EST			0	0	4	?	Flash Flood
	21	1630EST			0	0	3	?	Thunderstorm Winds
									Several homes had extensive damages due to flash floods. Scattered trees and limbs were blown down over Glennville.
Douglas County Lithia Springs	21	1650EST			0	0	5	?	Flash Flood
Cobb County Smyrna	21	1650EST			0	0	4	?	Flash Flood
Austell	21	1835EST			0	0	4	?	Flash Flood
Fulton County Atlanta	21	1835EST			0	0	5	?	Flash Flood
Sandy Springs									A few homes in Cobb County were flooded, along with several streets in Austell and Smyrna. In Douglas County, a car dealership sustained damages to 50 vehicles after water from Sweetwater Creek rose to the roofs. Flooding developed on Peachtree and Nancy Creeks in north Atlanta and pushed water into area homes. In Sandy Springs, flooding forced the evacuation of about 40 people from their condominium homes. A bridge was washed out and a few roads were damaged. Along some stretches of Interstate 285, water rose to 5 feet.
Rockdale County Conyers	21	2015EST			0	0	4	?	Flash Flood
									Several roads were closed after flood waters rose over Conyers and other sections of Rockdale County. Businesses, homes and vehicles were damaged by the waters.
Madison County Watsons Mill State Park	23	1140EST- 1600EST			0	0	?	?	Flash Flood
									The Watson Mill State Park was flooded by the South Fork Broad River after heavy rainfall persisted over Madison County at the Oglethorpe County line.
Lamar County Barnesville	24	1700EST			0	0	5	?	Lightning
									Two mobile homes were set afire by lightning near Barnesville just off U. S. Highway 41. Both homes were total losses.
Cobb County Austell	27	1330EST			0	0	?	?	Funnel Cloud
Coweta County Welcome	27	1410EST			0	0	?	?	Funnel Cloud
Douglas County 3 NE Douglasville	27	1428EST			0	0	?	?	Funnel Cloud
									A funnel cloud was sighted between Douglasville and Lithia Springs.
Paulding County 2.5 S Hiram	27	1500EST			0	0	3	?	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

GEORGIA Cont'd

Microburst winds lifted the roof off one mobile home about three miles south of Hiram on Georgia Highway 92.

5 S Hiram	27	1505EST			0	0	?	?	Funnel Cloud
5 S Hiram	27	1510EST			0	0	4	?	Thunderstorm Winds

A funnel cloud was sighted south of Hiram. Strong winds damaged a mobile home. A few trees and utility poles were snapped.

Bleckley County Cochran Countywide	27	1517EST			0	0	3	?	Thunderstorm Winds
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Scattered trees and power lines were downed by strong winds at Cochran and over Bleckley County. Scattered power outages resulted.

Twiggs County Southern Portion	27	1550EST			0	0	3	?	Thunderstorm Winds
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Scattered outages developed when winds tore down power lines and uprooted trees over southern Twiggs County.

Heard County Roosterville	27	1605EST			0	0	3	?	Thunderstorm Winds
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Carroll County Roopville Tyus	27	1610EST			0	0	4	?	Thunderstorm Winds
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Several large trees were uprooted or snapped by winds from Roosterville to around Tyus and Roopville. Several homes and barns were damaged in Carroll County; one mobile home was completely destroyed. About 2,000 residents lost power during the storm after power lines were torn down.

Coweta County 3 NNW Sargent	27	1615EST			0	0	3	?	Thunderstorm Winds
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Several pine trees were snapped by strong winds near the entrance of Plant Yates between Whitesburg and Sargent.

Wilkinson County	27	1615EST			0	0	3	?	Thunderstorm Winds
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Scattered outages developed when trees and power lines were torn down by strong winds over the county.

Crisp County 3 W Cordele	27	1615EST			0	0	3	?	Thunderstorm Winds
Southern Portion	27	1615EST			0	0	3	?	Thunderstorm Winds

Trees and power lines were downed around Cordele and over the southern portion of Crisp County by strong thunderstorm winds. Scattered outages resulted.

Oconee County	27	1615EST			0	0	3	?	Thunderstorm Winds
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Across Oconee County, strong winds downed trees and power lines. Outages resulted.

Heard County 10 N Franklin Ephesus	27	1620EST			0	0	3	?	Thunderstorm Winds
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A few trees were downed by strong winds near Georgia Highway 100. Around Ephesus, trees were downed and the winds tore part of the roofs off a mobile home and a barn. As much as 85 percent of the county lost electrical power during the storm.

Jones County 3 W Gray	27	1642EST			0	0	3	?	Thunderstorm Winds
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Scattered trees and power lines were torn down by strong winds just west of Gray. Outages resulted.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
GEORGIA Cont'd									
Muscogee County Columbus	27	1645EST			0	0	3	?	Thunderstorm Winds
	Several large tree limbs and power lines were torn down by strong winds over the eastern portion of Columbus. Scattered power outages developed.								
Troup County LaGrange	27	1650EST			0	0	3	?	Thunderstorm Winds
	Power lines and a few trees were downed by the winds near LaGrange.								
Pulaski County Hawkinsville 4 SE Hawkinsville	27	1650EST			0	0	3	?	Thunderstorm Winds
	Scattered trees and power lines were torn down by strong winds in Hawkinsville and along U.S. Highway 341. Scattered outages resulted.								
Harris County Waverly Hall	27	1655EST			0	0	3	?	Thunderstorm Winds
	Scattered trees were downed by strong winds.								
Chattahoochee County Cusseta	27	1707EST			0	0	2	?	Thunderstorm Winds
	Several large tree limbs were blown down around Cusseta.								
Harris County Hamilton Countywide	27	1715EST			0	0	3	?	Thunderstorm Winds
	Many large tree limbs and power lines were downed by strong winds over Harris County, mainly around Hamilton near Georgia Highway 116. Shingles were blown off a few roofs.								
Floyd County 2 E Rome	27	1725EST- 1735EST	1.0	50	0	0	5	?	Tornado (F1)
	A small tornado developed just east of Rome and moved over a generally rural area. The tornado snapped numerous trees about 12 feet above the ground and uprooted trees others along the path. Several houses and fences were damaged by trees. An office trailer was flipped by the winds and landed on four cars. Isolated power outages resulted.								
Crystal Springs Floyd Springs	27	1750EST			0	0	?	?	Funnel Cloud
	27	1750EST			0	0	2	?	Thunderstorm Winds
	A funnel cloud was sighted near the Chattooga County line just outside of Crystal springs near Georgia Highway 156. Scattered trees were damaged near Floyd Springs.								
Fulton County 2 E Roswell	27	1845EST			0	0	3	?	Thunderstorm Winds
	A few trees were uprooted just east of Roswell by strong winds.								
Paulding County Hiram	27	1900EST			0	0	3	?	Thunderstorm Winds
	Strong winds pushed a large tree onto a house and power lines in Hiram. Moderate damage occurred.								
Habersham County Tallulah Falls	27	1930EST			0	0	3	?	Thunderstorm Winds
	Scattered trees were uprooted and power lines were torn down by thunderstorm winds.								
Harris County 3 ESE Jones Crossroads	27	1943EST			0	0	?	?	Funnel Cloud

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops

GEORGIA Cont'd

A funnel cloud was sighted near Interstate 185.

Muscogee County Columbus

27	1947EST				0	0	4	?	Thunderstorm Winds (G50)
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High winds knocked down several large trees and many limbs around Columbus, mainly over the northern and eastern portions of the city. A building at the airport sustained moderate structural damage, along with several signs and billboards. Over the city, about 7,000 residents were without power for several hours.

Harris County Ellerslie Cataula

27	2002EST				0	0	3	?	Thunderstorm Winds
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High winds knocked down several large trees and limbs and caused numerous power outages over the southern portion of the county. Most of the damage occurred at Ellerslie and Cataula.

Meriwether County Pike County Western Portion

27	2010EST				0	0	3	?	Thunderstorm Winds
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27	2010EST				0	0	4	?	Thunderstorm Winds
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Scattered trees and power lines were downed over Meriwether County. Along Georgia Highway 18 between Molena and Concord, a macroburst snapped and uprooted trees. Along the path of the macroburst in western Pike County, some minor roof damage occurred. Most of the power outages occurred at Concord.

Spalding County Griffin

27	2052EST				0	0	3	?	Thunderstorm Winds
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Scattered trees and power lines were downed by strong winds around Griffin. Time is estimated.

Taylor County 1 N Reynolds Butler

27	2100EST				0	0	3	?	Thunderstorm Winds
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27	2130EST				0	0	3	?	Thunderstorm Winds
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Strong winds knocked down several large trees and limbs over the northeastern portion of the county around Reynolds and at Butler. Power outages developed when lines were torn down at Butler.

Marion County Buena Vista

27	2130EST				0	0	3	?	Thunderstorm Winds
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High winds knocked down a few large trees and limbs in Buena Vista. Scattered power outages developed.

IDAHO

IDZALL Entire State

01	0000MST-				0	0	?	8	Extreme Drought
31	2400MST				0	0	?	8	Extreme Drought

Most of the state received much below normal precipitation. Most of the rain gages in southwestern Idaho received no measurable rainfall. By the end of the month, virtually the entire state was in the extreme drought category of the Palmer Drought Index. Many Public lands were closed to livestock in order to prevent overgrazing and erosion. Moved livestock was fed more costly hay. End of August storage in the Boise River basin of southwest Idaho totaled just 4 percent of capacity. Wells were dug and electric pumps installed. Fossil fuel electricity was purchased by power companies and higher rates charged to consumers. Most forested areas were tinder dry from six successive years of drought. Dry forests and grasslands were ignited by lightning. Modest winds caused many of the hundreds of lightning fires to merge and explode into giant firestorms, particularly on days when the atmosphere was unstable.

Butte County 10 E Arco

01	1940MST				0	0	5	0	Microburst (G61)
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Five minutes of wind without rain, lightning, or hail, ripped the roof off of a chemical plant and office building, and turned over a trailer, as well as blowing over signs and lights at the Idaho National Engineering Laboratory. Officials announced that there were no radioactive releases due to the windstorm.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

IDAHO Cont'd

IDZ006 West Central Mountains	01	1100MST			0	0	6	5	Dry Heat Winds
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The County Line fire 75 miles northeast of Boise (on the boundary between the Boise and Challis National Forests) exploded to 3900 acres between 1100 MST and 2100 MST, creating a huge smoke column that drifted as far east as Wyoming. When the surface based temperature inversion broke at 1100 MST, the temperature rose to 84 degrees and the relative humidity dropped to 16 percent. The fire had been ignited by lightning on July 30th and expanded to 510 acres on July 31. Paul Werth, fire weather meteorologist assigned to the fire from the Boise National Weather Service Forecast Office, observed that the fire activity increased rapidly when the relative humidity dropped below 20 percent. A Haines Index of 6 on August 2nd indicated dry unstable air aloft and the fire expanded to 5300 acres during the afternoon. Some crowning occurred on August 3rd. The fire increased another 2000 acres on August 4th with the Haines Index again at 6 (the highest level of the index). Two smoke columns developed on August 4th, one over Cape Horn Creek and one over upper Fir Creek; the two columns appeared to begin to spiral together for a few minutes and then separate. Cooler temperatures and higher relative humidity moved in on the 5th and allowed the fire to be contained at 8310 acres on the 8th. We further observed that on days with a Haines Index of 5 or 6 that crowning and spotting resulted in large fire growth. The fire approached Highway #21 on August 2nd causing it to be closed to traffic between Lowman and Stanley.

IDZ007 South Central Mountain	03	1300MST			0	7	5	5	Dry Heat Winds
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Afternoon winds pushed the Black Ridge Complex of lightning fires from the 250 acre spread attained after ignition on the 2nd to 61,000 acres. Another 44,000 acres burned on the 4th. The fire spread was generally halted on the evening of the 5th at 146,000 acres. Burnouts and minor runs brought the total acreage burned to 179,275 by the time of control on August 8th. The fire complex was located in lava flow grasslands 15 miles south of Craters of the Moon National Monument. Several firefighters suffered dehydration in 105°F temperatures near lava beds.

IDZ006 West Central Mountains	03	1400MST			0	0	6	5	Dry Heat Winds
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Weather conditions caused the Cub Creek fire 20 miles north of Lowman in the Boise National Forest on the Middle Fork of the Salmon River to explode on August 3rd to 700 acres in rough rolling topography between 6600 and 8000 feet elevation. Flaming pine cones from the Cub Creek fire were carried one mile by fire convection and winds in association with a Haines Index of 6. When smoke from the Cub Creek fire drifted over the County Line fire on August 3rd, the temperature in the Cape Horn drainage dropped 6 fahrenheit degrees in 20 minutes around 1500MST which quickly diminished the fire activity in that drainage. A request was made for an air portable weather forecast office and meteorologist. The National Weather Service assigned fire weather meteorologist Michael Richmond of Missoula, Montana to the fire. He noted that although the relative humidity at night in the valley fire camp at an elevation of 6,650 feet would recover well with the early morning temperature inversions, that the slopes and ridges had very poor recoveries, sometimes to only 25 percent. Early morning minimum temperatures were in the 30s. The Cub Creek fire was ignited by lightning several days prior to the August 3rd blowup. Fire spread was much slower after August 5th with higher relative humidities. Fire containment at 2910 acres was achieved on the 8th, and control was effected on the 9th.

IDZ007 Sun Valley Area	03	1845MST			0	0	6	5	Dry Heat Winds
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Lightning ignited the Roe fire near Hailey and Bellevue at 2100MST on August 2nd in Croy Creek Canyon. The next day 25 mph winds expanded the fire from 20 to 5000 acres, swept over the ridgeline into the Wood Valley at 1845MST and jumped the Wood river at 0600MST on the 4th, having consumed 7500 acres and a home in Lee's Gulch. Winds on the 4th gusted at times to 40 mph and carried the fire over an additional 13,500 acres, destroying 2 homes, 2 barns, and 8 outbuildings. Low visibility caused by the smoke Hailey airport was closed. Six hundred firefighters backed up by 3 tanker aircraft and 4 helicopters made a stand to protect Hailey as the fire approached from the southwest out of Colorado Gulch. Governor Cecil Andrus declared a State of Extreme Emergency during the afternoon of the 4th, due to the fire threat at Hailey and elsewhere as 17 major wildfires and 20 minor wildlands fires were burning in Idaho. The Roe fire was stopped on August 5th at 21,000 acres.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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IDAHO Cont'd

IDZ010 East Central Mountains	04	0400MST-							
	08	0400MST			0	0	0	4	Summer Freeze
IDZ011 North Central Mountains	06	0400MST			0	0	0	3	Summer Freeze

Temperatures were at or just below freezing early mornings on the 4th, 5th, 6th, and 8th at Stanley which is located in a high basin meadow at 6,260 feet.

IDZ010 East Central Mountains	06	1300MST			0	0	6	5	Dry Heat Winds
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Fourteen of the fifteen major fires burning on this date in Idaho were approaching containment. The exception was the Horsefly fire located northwest of Salmon and just north of the historic mining community of Shoup. The Horsefly fire was ignited by lightning on July 31 in steep mountainous terrain of the Salmon National Forest. Several crews of firefighters were on the fire by August 2nd and kept the fire at less than a 1,000 acres. An upper air trough of low pressure, which seemed to be assisting the containment of the other fires, was associated with winds on the Horsefly fire, causing it to spread rapidly and alarmingly (for Shoup) to 2500 acres on the 6th; and spread to 3060 acres on the 7th. A Type-1 team had been requested on the 6th. Fire weather meteorologist Gary Bennett of the Boise National Weather Forecast Office was on the team and airlifted with his equipment to the fire. He quickly spotted the low level "jetstream" evident on the Boise and Spokane Rawinsonde observations and directed his initial wind forecasts accordingly. The Horsefly fire was contained at 3340 acres on the 9th as a predicted upper level ridge of high pressure with hot temperatures, lower relative humidities, and lighter winds moved over the fire.

IDZALL Statewide	11	1200MST-							
	15	1900MST			0	0	5	4	Dry lightning

Red Flag Warnings were issued daily for lightning without rain and low relative humidity as well as warm temperatures. However, most areas were without significant winds and forty some odd wildlands fires were contained and controlled on initial attack. Two exceptions were the 450-acre Porter Creek fire in northern Idaho which experienced wind on the 12th and 13th, and the 410-acre Looking Glass fire in northern Idaho which spotted out of control between Syringa and Kooskia on the 14th in unstable air. Both of the exception fires were contained utilizing Type-2 teams.

IDZALL Statewide	18	1200MST-							
	18	2200MST			0	0	?	?	Lightning

Some 80 mostly small fires were ignited by dry lightning.

IDZALL Statewide	19	0500MST-							
	19	2300MST			0	0	?	?	Lightning

Well over 100 mostly small fires were ignited by lightning.

IDZ006-010-001-005 W Central Mountains E Central Mountains Southwest Highlands Treasure Valley	19	1200MST-							
	19	1300MST			0	0	4	4	Winds

Winds increased to 10 to 15 mph with higher gusts near thunderstorms in response to an approaching upper level low pressure system moving into northwestern Washington. These winds were sufficient to cause some lightning fires, especially grass and brush fires of southwestern Idaho, to merge into 7 campaign size fires between 300 and 20,000 acres.

Elmore and Ada Counties	19	1300MST			0	0	5	5	Winds
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Lightning ignited several small fires in northern Elmore County just north of Mayfield. Diurnal winds varied by thunderstorm gustiness fanned the fires causing them to merge into a 6,000-acre bush fire. A home was lost on Chicken Creek. At least 26 head of cattle were killed and many

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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IDAHO Cont'd

calves injured. Outbuildings and ranch structures were lost as well as hay stacks and winter grazing. Easterly evening downslope winds carried the fires out of the Danskin Mountains across 14,000 additional acres to within 6 miles of Boise and it became known as the Foothills fire.

Twin Falls County Twin Falls FSS	19	1355MST			0	0	0	0	Microburst
Cassia County Burley FSS	19	1433MST			0	0	0	0	Thunderstorm Winds (G50)
Minidoka County Rupert	19	1500MST			0	0	3	0	Thunderstorm Winds

The Minidoka County Sheriff reported a severe thunderstorm just north of Rupert with visibility zero in blowing dust and at least one tree down.

Power County Pocatello Airport	19	1621MST			0	0	0	0	Microburst
Idaho County Kooskia 12 NE	19	1800MST			0	1	3	0	Twisting Wind

A helicopter pilot carrying a bucket of water at the end of a tether to the Lolo Creek fire stated that he was caught in a twisting wind that grabbed the helicopter and wouldn't let go for a couple of minutes, resulting in a hard forced landing. The incident started at about 700 to 800 feet above the intersection of a ridge with a draw.

IDZ008-011-006-010- 007-001-005	20	1200MST-			0	0	6	6	Winds
Central Mountains Southwest Highlands	20	2400MST							Dry Heat

Diurnal upslope winds assisted by sloping topography and very unstable air (the Haines Index was 6) created a huge smoke column over the Foothills fire which tapped into strong southwesterly winds at the 18,000 foot level. The ensuing firestorm consumed 80,000 acres of brushlands and some timber bringing the total acreage to 100,000 acres pushed the Foothills fire northeastward from the vicinity of Boise and Mayfield to the banks of the South Fork of the Boise River; about 300 firefighters were committed to the Foothills fire. Sixteen other major wildlands fires burned actively; the Windy Ridge fire near Hells Canyon in Adams County blew up to 5,000 acres forcing the evacuation of Cuprum.

Boise County 12 E Boise	21	1200MST-			0	0	7	8	Firestorm (G52)
	21	2400MST							

Winds pushed the Foothills fire steadily northeastward after approximately 1200 MST. The fire crossed the South Fork Boise River and advanced through timber to the Middle Fork Boise River. In the late afternoon a cold front moved over the fire and winds shifted to northwesterly. The shift in wind direction formed a new fire front out of the several miles long east flank of the fire which quickly consumed another 130,000 acres of mostly forested land, making the total size of the fire 232,000 acres, with approximately 500 fire fighters assigned. Ambient winds 20 to 30 mph gusted to 45 mph. Higher winds to 60 mph reported by fire personnel near the fire were probably caused by the fire. Turbulence and low visibility in smoke made air tanker aircraft retardant drops ineffective. The fire moved to within 2 miles of Prairie, where homeowners and volunteer fire brigades from neighboring communities successfully directed the fire around Prairie. The citizens of Prairie had already been fighting small fires for two weeks; when the orders came for all persons who didn't have equipment and ability to fight fires to evacuate, practically the entire community elected to stay. Cooler temperatures and higher relative humidities with less wind on the 22nd allowed firefighters to make a more direct assault on the fire. There were almost 3,000 men and women assigned to the fire by August 25th with 56 fire engines, 20 helicopters, 3 air tankers, 6 fixed-wing aircraft, and 13 bulldozers. The fire was divided into three zones for fire suppression purposes with three overhead teams; Gary Bennett and Paul Werth of the Boise National Weather Service Forecast Office provided on-site weather forecasting services as did Bruce Bauck, Fire Weather Meteorologist of the Pendleton, Oregon National Weather Service Office, and Steve Cuoco of the Denver, Colorado National Weather Service Forecast Office. The fire was declared out on September 9th at 257,600 acres after consuming 80 million board feet of timber. Many deer and elk were destroyed by the fire. The lower branches of the largest and oldest Ponderosa pine tree

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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IDAHO Cont'd

in Idaho standing 186 feet tall in Long Gulch caught fire, however, foresters believed that they had put out the flames in time for the tree to survive. The Foothills fire was the largest fire in the nation in 1992, and the largest forest fire in Idaho since 300,000 acres burned in 1919 on the North Fork of the Clearwater River near Cook Mountain. The cold front effect of creating a new fire front and firestorm, after pre-frontal southwesterly winds had formed a long flank, also occurred on the 161,000-acre Pete King fire in the Selway National Forest (present day Clearwater National Forest) east of Lowell on August 8, 1934. The most grueling days of Idaho's largest known fire, the Big Blowup firestorm of 1910 between Elk City and Wallace, also occurred on August 20-21.

IDZ008-011-006-010-007	21	1300MST-			0	0	5	6	Cold Front
Central Mountains	21	2100MST							

Fifteen major wildfires other than the Foothills fire burned approximately 24,000 acres mainly in rugged mountain country of the national forests. The Windy Ridge fire moved away from Cuprum and exhibited extreme fire behavior in expanding to 16,000 acres; Roger Buckman, Fire Weather Meteorologist of the National Weather Service Office in Wenatchee, Washington set up an air portable weather forecasting office at the Windy Ridge fire receiving meteorological forecast guidance charts via satellite. The Scott fire in the Nez Perce National Forest exploded to 5,000 acres in the steep hills and canyons on the north side of the Salmon River 45 miles south-southeast Grangeville; Mike Richmond, Fire Weather Meteorologist from the National Weather Service Office in Missoula, Montana provided on-site weather forecasting to the Scott fire personnel. The Wells fire of the Fairfield fire complex near Featherville (and down wind from the Foothills firestorm) grew to 1600 acres; Mike Johnson of Missoula was on site for weather forecasting duty by 1200MST of the 21st. The Warm Springs fire, 30 miles north of McCall rapidly expanded to 6400 acres. Brenda Graham, Fire Weather Meteorologist of the National Weather Service Forecast Office in Salt Lake City, Utah was flown to the Warm Springs fire. She observed that temperature inversion thermal belts would form in the steep, rugged canyons and that often it was not until somewhere between 1000MST and 1200MST that the inversion would break sufficiently to allow aircraft to operate safely in the vicinity of the fire. The French Creek fire doubled in size from 600 to 1200 acres. Carl Gorski, Fire Weather Meteorologist of the Boise National Weather Service Forecast Office was assigned to the French Creek Fire. He arrived at the fire at 1200MST on the 21st noting that an upper level jetstream had developed and moved over the fire providing extra lift for an unstable atmosphere, and that there was a lower level wind maximum of 25 mph at 9500 feet out of the southwest that morning; major fire runs and huge convective columns were observed on all fires with one column exhibiting a pileus ice crystal cap.

Canyon County	21	1400MST			0	0	0	0	Windshift
28 W Boise									

An off-duty National Weather Service forecaster reported winds shifting to the southwest 20 to 30 mph with blowing dust.

Latah County	21	1900PST-			0	0	0	0	Heavy Rain
Potlatch	22	1400PST							

Rain from thunderstorms totalled 2.27 inches.

Ada County	21	2040MST			0	0	0	0	Microburst
Garden City									

IDZ011-007	22	1200MST			0	0	5	5	Dry Heat Winds
Central Mountains	22	2000MST							

Most of Idaho's 19 major wildfires were less active due to cooler temperatures and higher relative humidities following a cold front passage on the 21st. Two exceptions were the Porcupine fire near the Gospel-Hump Wilderness which doubled in size from 3,000 acres to 6,000 acres, and the Trapper fire in the Sawtooth Mountains which blew-up from 800 acres to 9,000 acres.

IDZ006-011-010-007	23	0000MST-			0	0	0	0	Snow
Central Mountains	24	1200MST							

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

IDAHO Cont'd

Firecamps in mountain valleys reported 2 inches of snow and lookouts on mountain tops reported five to six inches. Snow showers occurred above 7,000 feet elevation during the day with rainshowers in the valleys.

IDZ006-007-010-012	23	0300MST-							
U. Snake Highlands	23	0600MST			0	0	0	5	Freeze
West, East, and South Central Mountains and Gem and Ada Counties									
Boise	24	0504MST			0	0	0	0	Record Cold

The coldest August low temperature at Boise in this century was set at 34°F. (Modern records date back to December 1, 1898). The old record was 37°F set on August 30, 1965 and tied on August 29, 1980. Lewiston tied their record low temperature for August of 41°F. The cold was associated with a closed 5560 meter 500MB low at 0500MST in southern Alberta with the axis of the trough extending southward across central Idaho. The 500MB heights over Idaho ranged from 5580 meters at the Canadian border to 5720 meters along the Nevada/Utah border. The associated 1000MB to 500MB height thicknesses were 180 meters less.

IDZALL except IDZ001

Statewide except	24	0000MST-							
Treasure Valley	26	1200MST			0	0	4	6	Freeze

Only the Treasure Valley escaped freezing temperatures on the 24th and 25th. On the 26th, The Magic Valley escaped freezing as well. The lowest temperatures recorded were in the Central Mountains where 16° to 19° were experienced each morning from Blaine County in the south to Idaho County in the north.

Ada County	25	0446MST							
Boise					0	0	0	0	Record Cold

The low temperature of 34°F tied the record low temperature for August set yesterday. The previous lowest temperature for August 25 was 41° set in 1954.

8 W Blackfoot	30	1400MST							
					0	1	4	0	Air Density

A single engine aircraft with pilot and four sky-diving passengers was unable to gain altitude on takeoff from a private airstrip near Thomas and crash landed. Earlier flights had been successful.

IDZ011	30	1400MST							
North Central Mountains					0	0	5	5	Winds

The Tomato Point fire was accidentally ignited by the inadvertent dropping of flaming "ping-pong" balls in connection with a burnout procedure on the Porcupine fire to the north. Erratic winds associated with a stationary cold front over the fire quickly carried the fire away from the Porcupine complex crews, so a Type-1 team was requested. Bruce Thoricht, Fire Weather Meteorologist of the Billings, Montana National Weather Service Office was on the team. He noted that the Salmon River Mountains greatly reduce the effects of the synoptic scale winds and that synoptic scale winds had to be 30 mph in order to overcome the diurnal upslope-downslope winds.

Lincoln County	31	1755MST							
Dietrich					0	0	0	0	Thunderstorm Winds

The sheriff was unable to confirm a tornado reported to a TV station.

ILLINOIS

Lake County	14	0600CST-							
Lake Michigan		0830CST	?	?	0	0	0	0	Waterspout

Several waterspouts were spotted over Lake Michigan near Zion and Waukegan at 0605 CST and near Winnetka at 0712 CST.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

ILLINOIS Cont'd

Henderson County Gladstone	25	1809CST			0	0	?	?	Thunderstorm Winds
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The Emergency Services Director for Henderson County reported trees and power lines downed by thunderstorm winds.

Champaign County Mahomet	26	1346CST			0	0	0	0	Hail (1.75)
McLean County Towanda	26	1433CST	0.1	10	0	0	0	?	Tornado (F0)

A brief tornado caused minor agricultural damage as reported by Mclean County Emergency Services Agency.

Saline County	27	0940CST			0	0	0	0	Flash Flood
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Heavy rain resulted in street flooding in Harrisburg. Police reported water covering Route 34, 1 mile east of Galatia.

INDIANA

Kosciusko County 3 SE Nappanee	03	1240EST	Short	5	0	0	3	0	Tornado (F0)
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A small tornado touched down briefly 1.5 miles south of County Road 13 in northwest Kosciusko County. There was some minor damage to a barn.

3 S Nappanee	03	1240EST			0	0	0	0	Funnel Cloud
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A funnel cloud was reported by the state police 3 miles south of Nappanee, just east of State Route 19.

Clunette	03	1258EST			0	0	0	0	Funnel Cloud
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A funnel cloud was reported by the sheriff at Clunette.

Elkhart County 4 N Nappanee	03	1300EST	Short	5	0	0	0	0	Tornado (F0)
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A small tornado touched down briefly at the junction of State Route 19 and State Route 119. There was no damage.

6 NE Nappanee	03	1315EST	Short	5	0	0	3	0	Tornado (F0)
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A small tornado touched down briefly at County Road 46 and County Road 11. There was some minor damage to a barn, and a buggy was turned over.

Kosciusko County	03	1354EST			0	0	0	0	Funnel Cloud
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A funnel cloud was reported by the sheriff northeast of Syracuse near U.S. Highway Route 6.

Clark, Floyd, Harrison, Jackson, Jefferson, Jennings, Lawrence, Scott, and Washington Counties	08	0700EST- 1400EST			1	0	7	7	Flash Flood
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Nearly stationary thunderstorms produced torrential rains over portions of south central and southeast Indiana during the morning, with three to thirteen inches of rain falling in a 6-hour period. Widespread flash flooding occurred in Scott, southwest Jefferson, extreme southern Jennings, central Lawrence, southern Jackson, northeast Washington, and northern Clark Counties.

Flood damages affected 339 homes and more than 20 businesses were extensively flooded. Thirty-two houses and mobile homes were completely destroyed or washed away. Over 200 people were evacuated. Conrail had 65 miles of railroad tracks washed out. Numerous roads were washed out and local bridges washed away. A landside, with boulders the size of cars closed a local road near Hanover. In Scott County, Interstate 65 was flooded by 4 feet of water from Stucker Fork. Local stream rises of 30 to 35 feet occurred in northern Clark and southwest Jefferson Counties. In Scott County, one man was swept away and drowned while attempting to wade across a flooded road east

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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INDIANA Cont'd

of Scottsburg.

An automated rain gauge at Crothersville in extreme southeastern Jackson County recorded a total of 9.70 inches of rain for this event. At this location, heavy rain began between 0330 EST and 0345 EST and continued until 0515 EST, with 2.50 inches of rain falling during this period. The rain stopped for a short period, with torrential rain beginning between 0600 EST and 0615 EST, and continuing until 0915 EST. An incredible rain amount of nearly seven inches fell in this 3-hour time span. During one 15-minute period 0.90 inches of rain was recorded. Near the end of the rain, 1.60 inches fell in 30 minutes. Another 0.30 inches of rain fell between 0930 EST and 1300 EST.

Rainfall of over ten inches was recorded near Deputy in western Jefferson County. In Scott County, up to thirteen inches of rain was reported. (M280)

**Jackson, Jefferson,
Jennings, Scott,
Washington, and
Lawrence Counties**

08	1400EST-						
10	1900EST			0	0	5	5
							Flood

Flash flooding that began the morning of August 8th, ended during the afternoon. However, the major channels of the Muscatatuck River filled quickly, and caused severe backwater flooding in Austin by evening. Extensive river flooding occurred along the Muscatatuck River in southern Jackson County. A U.S. Geological Survey gaging station on the headwaters of the Muscatatuck River near Deputy recorded a stream rise of over 29 feet in 13 hours.

**Green County
Owensburg**

27	1330EST			0	1	0	0	
							Lightning	

A man who was working on a truck in a garage was injured when he was struck by lightning.

**Perry County
3 S Doolittle
Mills**

30	1800EST			1	0	0	0	
							Lightning	

A man who was in a tree scouting for deer was killed when lightning hit the tree and knocked him to the ground. (M290)

IOWA

**O'Brien County
Sanborn**

07	0330CST			0	1	3	0	
							Lightning	

Thunderstorms moved across northwestern Iowa during the night. Lightning struck a house in Sanborn. One person was injured. The lightning blew the electrical outlets off of the walls in the house and blackened much of the outdoor siding.

**IAZ025-026-037-
049
Central Iowa**

07	1800CST-						
08	2100CST			0	0	4	4
							Flood

Although the weather pattern went back to a dry pattern during the month of August, one significant rainfall event caused some flooding. One to two inches of rain fell over north central and central Iowa on the 7th and 8th. Over two inches fell in the Iowa River basin just upstream of Marshalltown. This resulted in the river stage rising briefly above flood stage in Marshalltown.

**Grundy County
Reinbeck
Buchanan County
Rowley**

10	0738CST			0	0	4	3	
							Thunderstorm Winds (G50+)	
10	0755CST			0	0	3	3	
							Thunderstorm Winds (G50)	

Very humid and unstable air was over Iowa. Dew point temperatures were between 70 and 80 degrees in advance of an approaching cold front. A small line of intense thunderstorms developed along the cold front in northeast Iowa. Gust winds and small hail were common. A few trees were downed in Reinbeck by one of the stronger storms as the line moved through Grundy County. Another storm produced high winds in Buchanan County. Trees were downed in Rowley.

**Humboldt and
Mitchell Counties**

13	1315CST			0	0	0	0	
							Cold Air Funnel	

A cold pool of air aloft resulted in the formation of numerous cold air funnels over parts of north

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

IOWA Cont'd

-central Iowa. None of them ever touched down, and no other severe weather was reported.

Fayette County									
Oelwein	25	1300CST			0	0	4	4	Thunderstorm Winds (G59)
Maynard	25	1300CST			0	0	4	3	Thunderstorm Winds (G50+)
2 NE Arlington	25	1307CST			0	0	4	3	Thunderstorm Winds (G50+)
Elgin	25	1315CST			0	0	4	4	Thunderstorm Winds (G61)
Clayton County									
Elkader	25	1319CST			0	0	4	3	Thunderstorm Winds (G50+)
Farmersburg	25	1330CST			0	0	4	3	Thunderstorm Winds (G52)
Garnavillo	25	1330CST			0	0	4	3	Thunderstorm Winds (G50+)
McGregor	25	1402CST			0	0	4	3	Thunderstorm Winds (G56)
Marquette	25	1405CST			0	0	4	3	Thunderstorm Winds (G50+)
3 S McGregor	25	1410CST			0	0	3	3	Thunderstorm Winds (G50+)
Tama County									
Dysart	25	1415CST			0	0	4	3	Thunderstorm Winds (G52)
Davis County									
Drakesville	25	1606CST			0	0	5	4	Thunderstorm Winds (G75)
Jefferson County									
Abingdon	25	1620CST			0	0	4	3	Thunderstorm Winds (G52)
Dubuque County									
Dubuque Airport	25	1620CST			0	0	4	3	Thunderstorm Winds (G54)
Downtown Dubuque	25	1655CST			0	0	4	0	Thunderstorm Winds (G50+)

A very slow moving cold front was sinking southeast across Iowa. The reason for the slow movement was the blocking action of Hurricane Andrew. Moisture was in good supply, as the remains of Hurricane Lester were streaming over the state. Sunshine destabilized the atmosphere during the afternoon. As the cold front, with the contribution of a couple upper level weather systems, pushed into the unstable air, thunderstorms erupted. Most of the storms were below severe levels. The storms were of the pulse nature. Severe reports were scattered, and limited to wind damage. Many areas reported trees and power lines down. Early severe reports came in from Fayette County. Winds gusted to 68 mph in the Oelwein, causing damage in the city. Winds gusted to around 70 mph in the Elgin area, causing damage to out buildings around the city. Several cities in Clayton County reported damage, more than indicated in this report list. As the storm moved out of Clayton County, the last report of high winds came from south of McGregor. High winds were reported later from the Wisconsin side. The most significant damage occurred in Davis County at Drakesville. High winds ripped the roof off of a house there as one of the pulsing storms collapsed.

Floyd County Charles City

27	1230CST								Cold Air Funnel
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Unseasonably cold air aloft swept over Iowa during the day. Following the passage of an upper level weather system, solar heating resulted in a destabilization of the atmosphere. Scattered showers developed, and as it typical of this type of synoptic weather pattern cold air funnels were reported from some of them.

IAZ002 > 011-013 > 054-056 > 064-070 > 078-080 > 099- SDZ018-ILZ004- NEZ010

01	0000CST-								
31	2400CST			0	0	0	8		Cold Weather

All of Iowa

Temperatures for the month of August averaged 6 degrees below normal. It was the coldest August in 120 years. Coupled with the cold weather of the entire summer, the summer of 1992 went into the record books as the coldest summer since 1915, and the second coldest on record. The cold weather caused slow maturation of the corn and soybean crops. Reports indicated that approximately 5% of the crop was lost due to the cold. Bean pods were not filling properly and much of the corn had "beer bottle syndrome". Damage was in the \$150 to \$200 million range in corn, and \$100 to \$125 million in soybeans.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
KANSAS									
Seward County 25 NE Liberal	02	0041CST			0	0	0	0	Hail (0.75)
Rawlins County 3 SW Atwood	03	0530CST			0	0	3	0	Thunderstorm Winds (G55)
Russell County Russell Airport	03	0720CST			0	0	4	4	Thunderstorm Winds (G52)
Barton County Albert	03	0728CST			0	0	4	4	Thunderstorm Winds (G52)
Great Bend	03	0755CST			0	0	4	4	Thunderstorm Winds (G52)
Edwards County 10 N Kinsley	03	0755CST			0	0	0	0	Thunderstorm Winds (G50)
Pawnee County 3 N Belpre	03	0755CST			0	0	0	0	Thunderstorm Winds (G60)
Wind speeds of 60 knots and higher moved a 10,000-pound combine backwards 25 yards.									
Lincoln County 5 SW of Sylvan Grove	03	0803CST			0	0	4	4	Thunderstorm Winds (G52)
Severe thunderstorms caused high winds.									
Russell County Southern Side of Lak	03	0804CST			0	0	4	4	Thunderstorm Winds (G52)
Saline County Gypsum	03	0840CST- 1050CST			0	0	4	4	Flash Flood
Heavy rains caused some flash flooding in the Gypsum area.									
Reno County Haven	03	0915CST			0	0	2	0	Thunderstorm Winds (G52)
Thunderstorm winds estimated at 60 mph moved a combine in a field near Haven.									
Elk County Moline	03	1124CST			0	0	4	0	Thunderstorm Winds (G50+)
1 S Elk Falls	03	1125CST			0	0	4	0	Thunderstorm Winds (G50+)
9 N Howard	03	1125CST			0	0	3	0	Thunderstorm Winds (G50+)
Chautauqua County Hale	03	1130CST			0	0	3	0	Thunderstorm Winds (G50+)
Wilson County New Albany	03	1130CST			0	0	3	0	Thunderstorm Winds (G50+)
Montgomery County 9 W Independence	03	1145CST			0	0	4	0	Thunderstorm Winds (G50+)
Independence Airport	03	1148CST			0	0	4	0	Thunderstorm Winds (G65)
Coffeyville	03	1157CST			0	0	4	0	Thunderstorm Winds (G50+)

A line of thunderstorms intensified over Elk and Chautauqua Counties and produced damaging winds in some spots as they moved east toward Independence and Coffeyville. In Moline, trees were damaged and an electric pole was broken off; and tin was ripped from a hay barn southeast of town. Feed bins were blown over, trees uprooted and a power pole was knocked down south of Elk Falls. A pole barn was destroyed north of Howard. A mobile home had minor damage and a car was smashed when a large tree was uprooted at New Albany. Nearly 3.00 inches of rain flooded small creeks and closed several country roads south of Fredonia.

The worst and most concentrated damage was done in an area from west of Independence, southeast across the Independence Airport and into Coffeyville. Twelve barns were destroyed in that swath. Several grain bins were damaged, a camper trailer was rolled, several electric poles were downed, and several homes had roof damage. A wind gust was measured at 75 mph at the Independence Airport, and a hangar had several sheets of metal blown off.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

KANSAS Cont'd

Wilson County 5 S Fredonia	03	1230CST			0	0	4	4	Flash Flood
Cloud County Rice	04	1933CST			0	0	4	4	Hail (1.50)
Eastern Portion	04	1940CST- 2035CST			0	0	4	4	Flash Flood
Aurora	04	1949CST			0	0	4	4	Hail (1.50)
Aurora	04	1949CST			0	0	4	4	Thunderstorm Winds (G61)
Miltonvale	04	2005CST			0	0	4	4	Thunderstorm Winds (G61)
Clay County Clay Center	04	2010CST			0	0	4	4	Thunderstorm Winds (G52)
Ottawa County 5 W of Oak Hill	04	2020CST			0	0	4	4	Hail (1.00)

Heavy rains caused flash flooding in the Rice, Aurora and Miltonvale areas.

Decatur County 10 N Oberlin	04	2120CST			0	0	4	4	Hail (1.75)
4 E Oberlin	04	2133CST			0	0	4	4	Hail (1.75)
4 E Oberlin	04	2133CST			0	0	4	4	Thunderstorm Winds (G52)
Oberlin	04	2134CST			0	0	4	0	Hail (1.75)
4.2 N Oberlin	04	2147CST			0	0	5	4	Hail (2.75)
4.2 N Oberlin	04	2147CST			0	0	5	4	Thunderstorm Winds (G61)
Sheridan County Selden	04	2205CST			0	0	5	4	Hail (4.00)
Decatur County Dresden	04	2212CST			0	0	4	4	Hail (1.75)

The Decatur County fair sustained significant storm damage and had to be cancelled.

Sheridan County Hoxie	04	2230CST			0	0	4	0	Hail (0.75)
Gove County Gove	04	2300CST			0	0	5	3	Hail (4.00)

Softball-size hail broke windows and windshields in and around the city.

Grainfield	04	2310CST			0	0	4	4	Hail (1.75)
Thomas County Gem	04	2310CST			0	0	5	5	Hail (1.00)

The hailstorm lasted nearly 1 hour and did considerable damage.

Gove County 10 S Gove	04	2330CST			0	0	3	4	Hail (0.75)
9 NW Gove	04	2335CST			0	0	4	4	Thunderstorm Winds (G61)
Lane County 5 E Shields	04	2350CST			0	0	3	4	Hail (0.75)
Gove County 10 SE Gove	05	0001CST			0	0	3	3	Thunderstorm Winds (G52)
Ness County 15 SE Ness City	05	0005CST			0	0	3	3	Thunderstorm Winds (G52)
2 E Beeler	05	0030CST			0	0	3	3	Thunderstorm Winds (G52)
Grant County Ulysses	06	1920CST			0	0	0	0	Hail (1.00)
Stevens County 3 N Hugoton	06	1945CST			0	0	0	0	Thunderstorm Winds (G55)

A telephone pole was blown down.

4 N Hugoton	06	1945CST			0	0	0	0	Thunderstorm Winds (G65)
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A small barn was reported to be blown down.

Rawlins County 9 E Atwood	06	2128CST			0	0	3	4	Hail (0.75)
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
KANSAS Cont'd									
Decatur County 5 W Norcatur	06	2202CST			0	0	4	3	Thunderstorm Winds (G52)
The high winds caused cars and trucks to sway on highways in the area.									
Norton County Norton	06	2225CST			0	0	4	0	Thunderstorm Winds (G57)
Phillips County Prairie View	06	2312CST			0	0	4	3	Thunderstorm Winds (G57)
Phillipsburg	06	2320CST			0	0	4	0	Thunderstorm Winds (G61)
The high winds caused power outages and knocked tree limbs.									
Elk County 2 SE Fall River	08	0500CST			0	0	4	0	Lightnig
Lightning set two fires near Fall River. A home and pole barn burned to the ground. A hay truck, tractor and feed grinder were also lost in the barn fire.									
3 S Fall River	08	0500CST			0	0	4	0	Lightnig
Hamilton County Syracuse	08	1655CST			0	0	0	0	Hail (0.75)
Logan County 12 S Russell Springs	08	1903CST			0	0	4	4	Hail (1.75)
Scott County 2 S Scott Lake	08	2330CST			0	0	4	4	Hail (0.75)
2 S Scott Lake	08	2330CST			0	0	4	4	Thunderstorm Winds (G52)
Wallace County 3 NW to 1 W Weskan	10	1457CST- 1505CST	3.1	25	0	0	4	4	Tornado (F0)
A weak tornado moved across open country with damaged limited to some irrigation equipment and corn fields. The tornado moved toward the south and lifted north of the railroad tracks before hitting Weskan.									
Finney County 12 N Kalvesta	10	1755CST			0	0	0	0	Hail (1.00)
Lane County 3 NW Healy	10	1822CST			0	0	3	3	Hail (0.75)
3 NW Healy	10	1822CST			0	0	3	3	Thunderstorm Winds (G52)
Finney County Holcomb	10	1825CST			0	0	0	0	Hail (1.00)
Grant County Ulysses	10	1827CST			0	0	0	0	Hail (1.00)
Finney County 6 E Garden City	10	1834CST			0	0	0	0	Hail (0.75)
Garden City	10	1834CST			0	0	0	0	Hail (1.00)
Garden City	10	1834CST			0	0	0	0	Thunderstorm Winds (G61)
Grant County 4 SE Hickok	10	1900CST			0	0	0	0	Hail (1.00)
Haskell County 4 NW Satanta	10	1905CST			0	0	0	0	Thunderstorm Winds (G55)
Ford County Dodge City Airport	10	2047CST			0	0	0	0	Thunderstorm Winds (G55)
Cowley County Strother Field	11	0125CST			0	0	4	0	Thunderstorm Winds (G50+)
Strother Field	11	0150CST- 0400CST			0	0	4	0	Flash Flood

Thunderstorm winds overturned and damaged two small airplanes and downed a large tree at Strother Field. A deluge of nearly four inches of rain in about an hour resulted in pooling of water in a 300- by 50-yard area on the airstrip. The water was nearly 3 feet deep in places, and 1 to 2 inches of water flooded the airport terminal building.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

KANSAS Cont'd

**Kingman County
Kingman**

11	0240CST- 0400CST					0	0	3	0	Flash Flood
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Runoff from three inches of rain flooded and closed U.S. Highway 54 at four places west of Kingman.

**Sumner County
Perth**

11	0315CST					0	0	3	0	Flash Flood
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Runoff from rainfall of three to five inches flooded several county roads around Perth.

**Republic County
10 W of Bellevill**

13	1955CST					0	0	4	4	Hail (0.75)
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**Rawlins County
20 NW Atwood**

13	2005CST					0	0	0	0	Tornado (F0)
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A small and weak tornado dipped only briefly to the ground in open country with no damage reported.

18 NW Atwood

13	2012CST					0	0	0	0	Tornado (F0)
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The weak and small tornado dipped very briefly to the ground again in open country with no damage reported.

**Jewell County
1 E of Lovewell**

13	2142CST					0	0	4	4	Hail (0.75)
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Lovewell Lake

13	2145CST					0	0	4	4	Hail (1.00)
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Lovewell Lake

13	2145CST					0	0	4	4	Thunderstorm Winds (G56)
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**Republic County
Courtland**

13	2201CST					0	0	4	4	Hail (0.75)
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**Cloud County
Jamestown**

13	2222CST					0	0	4	4	Hail (0.75)
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Glasco

13	2240CST					0	0	4	4	Hail (0.75)
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Severe thunderstorms dropped large hail and caused high winds that damaged trees and broke windows at Lovewell Lake.

**Gove County
Western Portion**

31	1100CST- 01 0300CST					0	0	5	5	Flash Flood
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Heavy rains of up to nine inches caused flash flooding over the western half of Gove County mainly near the town of Orion with is west of Gove and south of Grinnel. The rains fell from late afternoon until around midnight causing creeks and streams in the area to overflow their banks and be as wide as 0.25 mile at times. The rains knocked out power and damaged summer fallow and ground terraces. Many longtime residents said it was the worst flooding they could remember.

KENTUCKY

Carroll County

08	0740EST- 1000EST					0	0	4	4	Flash Flood
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Several streets were flooded in Carrollton and a few small creeks, outside of town, flooded fields.

Christian County

08	0735CST					0	0	3	0	Thunderstorm Winds
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Hopkinsville

08	0740CST					0	0	2	0	Thunderstorm Winds
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Fairview

Thunderstorm winds downed trees and power lines in Hopkinsville, and tore limbs out of trees in Fairview.

Todd County

08	0815CST					0	0	3	0	Thunderstorm Winds
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Trees were uprooted by thunderstorm winds to the northeast of Sharon Grove in eastern Todd County.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
KENTUCKY Cont'd									
Trimble and Henry Counties	08	0835EST- 1135EST			0	0	5	4	Flash Flood
									Storms carrying heavy rain swept through the region, washing out roads, tearing out bridges and damaging crops. In Trimble County, two mobile homes were completely destroyed by high water.
Owen County	08	0900EST- 1030EST			0	0	4	0	Flash Flood
									Numerous creeks in the western portion of the county rose out of their banks, causing minor damage to property.
Jefferson, Shelby, and Oldham Counties	08	1030EST- 1230EST			1	0	5	4	Flash Flood
									Between three and five inches of rain falling in a short period of time, forced many creeks and streams out of their banks and flooded roads and underpasses. Fifty-one-year-old Willie Mae Marshall died when she tried to drive through high water under a viaduct in Louisville. In south Louisville about four city blocks reported as much as 4 feet of water in the streets. Many buildings in the area received damage from water. (F51V)
Shelby County	08	1145EST			1	0	0	0	Lightning
									Fourteen-year-old, Jeffery Wathern was struck and killed by lightning while hanging tobacco. (M14O)
Trigg County	08	1515CST			0	0	0	2	Hail (0.75)
									Hail was reported about 3 miles east of Cadiz. The hail destroyed some crops.
Muhlenberg County	09	1600CST			0	0	0	0	Flash Flood
									Two inches of rain from slow moving thunderstorms flooded low-lands and city streets in Greenville.
Fayette County	10	0730EST			0	0	0	0	Hail (1.00)
Trigg County	10	1250EST			0	0	0	0	Thunderstorm Winds
									Trees and power lines were blown down.
Caldwell County	10	1335CST			0	0	5	0	Flash Flood
									A record setting downpour dumped five inches of rain in an hour's time at Princeton. Roads were closed at several sites. In one area, residents were evacuated as water edged into their homes.
Todd County	10	1245CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm winds uprooted trees between Trenton and Guthrie.
Muhlenberg County	10	1450CST			0	0	0	0	Flash Flood
									Heavy rains flooded city streets in Central City and a few rural county roads.
Jessamine County	10	1550EST			0	0	3	0	Flash Flood Thunderstorm Winds
									Trees were blown down south of Lawrenceburg. Heavy rains flooded several creeks and streams.
Mercer County	10	1600EST			0	0	3	0	Thunderstorm Winds
									Several trees were blown down.
Gallatin and Grant Counties	10	1645EST			0	0	5	4	Thunderstorm Winds Flash Flood
									Damage to Gallatin County was confined to the eastern portion of the county. Trees and wires were downed in Glencoe. One tree fell on a house and another fell on a car. Several roads were closed by high water. In Grant County, trees were blown down throughout the county. One tree fell on the corner of a house and a pickup truck was also damaged by a downed tree. Several crops were destroyed by high wind.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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KENTUCKY Cont'd

Scott County	10	1730EST			0	0	3	0	Thunderstorm Winds
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Trees were blown down in Georgetown.

Jessamine County	10	1900EST			0	0	4	0	Flash Flood
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Heavy rains forced streams out of their banks and flooded several roads.

Pulaski County	14	2243EST			0	0	4	6	Thunderstorm Winds Hail (2.00)
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Strong thunderstorm winds destroyed a barn and damaged several homes in the western portion of the county. Many trees and power lines were blown down. Damage estimates to crops alone were around \$1.5 million. Many crops had leaves completely ripped off.

Bell County	14	2325EST			0	0	0	0	Hail (1.00)
Bell County	14	2331EST			0	0	4	0	Thunderstorm Winds

Kentucky State Police reported trees were blown down. One tree fell on a home just east of Pineville.

Laurel County	14	2340EST			0	0	4	0	Thunderstorm Winds
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Trees were blown down 6 miles south of London.

Rockcastle County	14	2345EST			0	0	3	0	Thunderstorm Winds
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Trees were blown down 5 miles west of Mt. Vernon.

Bell County	15	0000EST			0	0	3	0	Thunderstorm Winds
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Trees and power lines were blown down 8 miles west of Pineville.

Leslie County	15	0002EST			0	0	3	0	Thunderstorm Winds
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Trees were blown down throughout the county.

Harlan County	15	0005EST- 0015EST			0	0	2	0	Thunderstorm Winds
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Trees were blown down northeast of Harlan.

Greenup County	27	1630EST			0	0	2	0	Flash Flood
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Heavy rains flooded streets in the Raceland and Flatwoods areas.

LOUISIANA

Calcasieu Parish Lake Charles	01	1604CST			0	0	3	0	Thunderstorm Winds Lightning
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Lightning struck a Lake Charles home; the resulting fire caused about \$600 damage.

West Carroll Parish Darnell	06	0445CST			0	0	0	0	Thunderstorm Winds Hail (0.80)
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A thunderstorm produced nickle-size hail in Darnell.

Claiborne Parish 5 N Sharon 3 E Lisbon	10	1648CST			0	0	?	?	Thunderstorm Winds Hail (1.00)
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A thunderstorm blew down numerous trees 5 miles north of Sharon and produced 1.00-inch hail 3 miles east of Lisbon.

Union Parish 2 W Conway	10	1759CST			0	0	?	?	Thunderstorm Winds Hail (1.50)
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
LOUISIANA Cont'd									
10 N Farmerville	10	1810CST			0	0	?	?	Thunderstorm Winds (G50)
6 NE Farmerville	10	1830CST			0	0	?	?	Thunderstorm Winds Hail (1.00)
2 SW Litroe	10	1840CST			0	0	?	?	Thunderstorm Winds
Scattered thunderstorms drifting east downed numerous trees 10 miles north of Farmerville, and 2 miles southwest of Litroe. Hail measuring 1.00 to 1.50 inch in diameter hail was reported 2 miles west of Conway and 6 miles northeast of Farmerville.									
Caddo Parish Blanchard	10	1300CST			0	0	4	?	Thunderstorm Winds Lightning
Lightning struck an oil tank farm at the Phillips Petroleum Company pumping facility near Blanchard. It took firemen a half hour to extinguish the blaze. A fiberglass tank containing salt water and a metal tank containing oil exploded.									
Acadia Parish Rayne	10	1800CST	0.1	15	0	0	3	0	Tornado (F1)
A small tornado took the roof off from a mobile home near Rayne.									
Winn Parish Atlanta	11	0206CST			0	0	0	0	Thunderstorm Winds Hail (0.80)
A thunderstorm blew down several trees and produced nickle-size hail in Atlanta.									
Cameron Parish 1 N Cameron	11	1545CST	0.1	15	0	0	0	0	Tornado (F0)
The Cameron Parish Sheriff's Office reported a small tornado in open country just north of Cameron.									
Jefferson Parish West Lake Pontchartrain	13	0540CST			0	0	0	0	Waterspout
A waterspout was sighted near the Causeway Bridge near Metairie.									
LAZ008-009-010- 012-013-014	25 26 26 27	1600CST- 1200CST 1200CST- 2400CST			6	65	9	9	Hurricane Andrew Tropical Storm Andrew
St. John Baptist 2 E La Place to 4 NW Reserve	25	2010CST- 2020CST	9.0	150	2	32	7	6	Tornado (F3)
Iberville Parish Indian Village	26	0142CST	1.0	20	0	0	4	?	Tornado (F1)
St. Tammany 5 N Lacombe to 4 N Covington	26 26	0825CST- 0845CST	14.0	20	0	0	4	?	Tornado (F1)
Pointe Coupee Ventress	26	0927CST	1.0	20	0	0	3	?	Tornado (F1)
St. Tammany Mandeville	26	1430CST	1.0	20	0	0	3	?	Tornado (F1)
Morehouse Parish 1 W Beekman to Stevenson	26 26	1430CST- 1435CST	2.0	50	0	3	5	?	Tornado (F1)
Union Parish 1 W Marion	26	1500CST	0.5	20	0	0	0	?	Tornado (F0)
5 SW Point	26	1517CST	2.0	20	0	4	4	?	Tornado (F1)
Madison Parish 4 E Tallulah	26	1810CST	0.5	20	0	0	0	0	Tornado (F0)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
LOUISIANA Cont'd									
Tangipahoa 1 W Tickfaw to Loranger Madison Parish	26	1815CST	7.0	20	0	0	5	?	Tornado (F1)
4 SE Tallulah Mound	26	1900CST	0.5	20	0	0	0	0	Tornado (F0)
15 SW Tallulah Franklin Parish	26	1900CST	1.5	40	0	0	4	?	Tornado (F1)
10 E Winnsboro	26	1904CST	1.5	40	0	0	4	?	Tornado (F1)
	26	1920CST	1.5	40	0	0	0	?	Tornado (F1)

Hurricane Andrew made landfall about 24 miles west-southwest of Morgan City at 0230 CST Aug 26, 1992 as a weakening Saffir Simpson Category 3 hurricane with maximum estimated winds 126 mph near the eye. Andrew continued to lose strength rapidly as it moved inland. At 0600 CST, the center of Andrew was 12 miles east-southeast of Lafayette; highest winds were 96 mph (Saffir Simpson Category 1). Andrew was downgraded to a tropical storm about 1200 CST when its center was near Angola; estimated maximum winds were about 60 mph. During the 8-hour period prior to landfall, Andrew's circulation interacted with land causing it to rapidly lose strength. The 5- to 8-foot NVGD storm tide produced by Andrew during this period was partially due to the nearly parallel course Andrew took as it approached the central Louisiana coast. Andrew's most devastating effects were primarily felt in the following parishes: St. Mary, Iberia, St. Martin, Lafourche, Terrebonne, and St. John the Baptist. A survey conducted by the American Red Cross indicated that over 23,000 homes were damaged by Andrew. An estimated \$1 billion damage was done to private property. Agricultural losses were estimated to be about \$289 million; the most severely affected crops were sugar and soybeans. The fishing industry suffered a \$266 million loss when Andrew caused a massive fish kill. About 240 oil and gas platforms received about \$200 million in damages. Thus, even in its weakening stage, Hurricane Andrew produced about \$1.76 billion dollars in damages in Louisiana. Due to the large scale evacuation of an estimated 1.3 million people in southeastern and southcentral Louisiana, the deaths directly attributed to Hurricane Andrew were low. The bodies of six fishermen were recovered in the Gulf of Mexico by the Coast Guard about 5 days after Andrew made landfall. Andrew spawned 14 tornadoes; the majority of them were weak and brief in duration. A strong tornado produced on the outer edge of Andrew killed two people in Reserve during the evening of August 25, 1992. The number of homes, mobile homes, and apartments that were destroyed, or sustained major, minor damaged were obtained from the American Red Cross unless otherwise stated. A damage summary follows:

Gulf of Mexico: Two-hundred-forty oil and gas production platforms were damaged over an 85-mile-wide area off the central and southeast Louisiana coast according to the U.S. Mineral Management Service. Estimated losses amounted to \$200 million. The U.S. Coast Guard found the bodies of six crewmen from the fishing vessel Lucky Lee floating in the Gulf of Mexico about 5 days after Andrew made landfall. The Coast Guard rescued four people from the 65-foot Night Stalker that floundered in high seas and strong winds about 50 miles south of Houma around 1030 CST on August 25, 1992. (M26O) (M30O) (M32O) (M33O) (M44O) (M??O)

Mississippi River: Two ocean going freighters, the Formosa Three and the Probo Hawk, were run aground near Vacherie. Two towboats, the MV Harvison and the Jolly Jack, foundered and sank near St. Francisville while attempting to retrieve breakaway barges; 10 crewmen were rescued. The Mississippi Queen steamboat evacuated 250 passengers at Baton Rouge around 0900 CST on August 26, 1992 because it was having difficulty in remaining at its berth and due to break away barges in the Mississippi River.

Atchafalaya River Basin to Bayou Lafourche: An upwelling of bottom sediment rapidly depleted oxygen in these basins and along the shallow coastal waters of Terrebonne and Lafourche Parishes. An estimated 187 million freshwater fish were killed in the Atchafalaya River basin and along Bayou Lafourche. Nine million salt water fish and a large number of oysters were killed in the shallow coastal waters of Terrebonne and Lafourche Parishes. Total losses to the fish and wildlife industry were estimated to be \$266 million.

St. John the Baptist Parish: A strong tornado moving rapidly west on an intermittent 9-mile path through Laplace and Reserve between 2010 CST and 2020 CST, killed two people and injured 32. Both fatalities, a 2-year-old girl and a 63-year-old man, occurred in their Belle Pointe subdivision homes in Reserve. A joint damage survey conducted by the St. John the Baptist Office of Emergency Preparedness and National Weather Service indicated that 66 homes and 33 mobile homes were destroyed; 56 homes or mobile homes sustained moderate damage; and 130 homes or

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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LOUISIANA Cont'd

mobile homes had some minor damage. Twenty-five businesses were either destroyed or sustained moderate damage. This includes the River Parishes Hospital which had its roof damaged by the tornado and had to be evacuated. Seven public buildings including two schools were damaged. Estimated damages to homes and mobile homes were \$6,726,250; businesses, \$3,428,500; public buildings, \$1,957,500. Agricultural losses to the sugar crop were \$1 million, and \$100,000 to the soybean crop. (M63H) (F02H)

Lafourche Parish: A 5.6- to 6.2-foot NGVD storm tide washed away about 500 feet of LA1 below Leeville and about 75% of LA3090 (Port Fourchon Road). Estimated damages to Port Fourchon including rebuilding LA3090 were \$2,200,000. Approximately 20 homes and 32 mobile homes were destroyed; 154 homes and 66 mobile homes had moderate damage; 589 homes and 68 mobile homes received minor damage. The bulk of this damage was in the south part of the parish especially in the towns of Golden Meadow, Leeville and Port Fourchon. Nicholas State University in Thibodaux suffered a \$1 million loss when strong winds damaged 28 roofs which allowed wind driven rain to soak the interior of these buildings.

Terrebonne Parish: A 5- to 7-foot NGVD storm tide inundated the towns of Cocodrie, Pointe aux Chenes, Montegut, Dulac, and Chauvin. The Louisiana University Marine Consortium in Cocodrie was inundated by 5 feet of water; in addition, it sustained major wind damage when strong winds blew in heavy plate glass windows. The Grand Caillou and Montegut elementary schools were flooded by storm tides. Approximately 255 homes and 547 mobile homes were destroyed; 1,726 homes and 290 mobile homes sustained moderate damage. Strong winds did an estimated \$1 million damage to 201 bed L. J. Chabert Hospital in Houma when part of the roof was torn off and wind driven rain soaked the interior; 70 patients were evacuated. In addition, several businesses in Houma sustained heavy wind damage. Andrew caused an estimated \$350,000 to Terrebonne Parish schools; three schools needed major roof repairs. Forty percent of the Isles Dernieres barrier islands were destroyed by Andrew according to the Louisiana Geological Survey.

St. Mary Parish: A 7- to 8-foot NGVD storm tide flooded unprotected areas of this parish. Non National Weather Service standard anemometers at the Morgan City Steam Plant and at the Berwick Fire Station measured sustained winds of 96 mph with gusts between 112 to 124 mph around 0305 CST on August 26, 1992. Wind damage was most severe in Morgan City, Berwick, Patterson and Franklin areas; 477 homes and 890 mobile homes were destroyed; 1,394 homes and 634 mobile homes received major damage; 3,970 homes, 652 mobile homes, and 148 apartments sustained minor damage. In Morgan City, Fairview and Lakewood hospitals had major wind and rain water damage. The Franklin Foundation Hospital sustained an estimated \$350,000 in damage. Twenty-six St. Mary Parish schools were damaged for an estimated loss of \$2.6 million. Berwick High School that was being used as a last resort shelter for 2,000 people, lost its roof during the height of the hurricane. Louisiana Power and Light Company said that 102 miles of transmission lines and 300 electrical towers were blown down by Andrew between Morgan City and New Iberia. Total property damage was \$150 million.

Iberia Parish: A non National Weather Service anemometer in Jeanerette measured sustained winds of 80 mph with gusts to 90 mph. Damage consisted of 100 homes, 305 mobile homes, and 2 apartments were destroyed; 457 homes, 325 mobile homes, and 1,745 apartments sustained major damage; 2,767 homes, 539 mobile homes, and 220 apartments received minor damage. The towns of Jeanerette, New Iberia, and Loreauville received the bulk of the wind damage. Both the Jeanerette and New Iberia high schools which were being used to shelter 3,600 people lost their roofs during Andrew. Two people at the Jeanerette high school suffered heart attacks and were hospitalized in stable condition. While enroute to the hospital one of the heart attack victim's ambulance and its escorting firetruck became trapped on a road by strong winds and fallen trees for over an hour before they could be rescued by road crews. One of the trees hit the fire truck, injuring a fireman who was hospitalized. Damage consisted of \$125 million in property and \$200 million in sugar crop. A 33-year-old electrical utility worker was electrocuted around 1240 CST on September 3, 1992 in New Iberia.

St. Martin Parish: Fourteen homes and 27 mobile homes were destroyed; 47 homes, 52 mobile homes, and 9 apartments sustained major damage; 418 homes, 125 mobile homes, and 3 apartments received minor damage. Wind damage was concentrated in the towns of St. Martinville, Catahoula, Henderson, Coteau Holmes, and St. John. Eight businesses were destroyed and over 300 were damaged in this parish. \$600,000 loss occurred when the St. Martin Sugar Cooperative in St. John was destroyed. An automotive dealer in St. Martinville had four large plate glass windows and the entire front show room wall blown in. \$250,000 damage was done to 16 St. Martin parish schools.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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LOUISIANA Cont'd

Assumption Parish: Two homes and 4 mobile homes were destroyed; 6 homes and 20 mobile homes sustained major damage; 79 homes and 4 mobile homes received minor damage. The towns of Pierre Part, Napoleonville, Paincourtville, and Plattenville received the bulk of the wind damage.

Vermilion Parish: Fourteen homes, 27 mobile homes were destroyed; 47 homes, 58 mobile homes, and 9 apartments sustained major damage; 418 homes, 125 mobile homes, and 3 apartments received minor damage. Most of the wind damage occurred in the towns of Abbeville and Delcambre. Two schools sustained roof damage and a warehouse of the Vermilion Parish School system amounting to \$23,134 in damage. Property damage was estimated to be \$975,000.

Lafayette Parish: A National Weather Service standard anemometer measured sustained winds of 55 mph and gusts of 74 mph at the Lafayette airport between 0557 CST to 0652 CST on August 26, 1992. Nine homes and ten mobile homes were destroyed; 14 homes and 10 mobile homes sustained major damage; 43 homes and 13 mobile homes received minor damage. Most of the wind damage was confined to the towns of Lafayette, Broussard and Carencro. Sixty-two people received minor injuries from flying debris during the hurricane. There was one traffic fatality which occurred early on August 26, 1992 at a traffic intersection. Estimated property damages were \$17,250,000.

Iberville Parish: Nine homes and 22 mobile homes were destroyed; 55 homes, 27 mobile homes, and 2 apartments sustained major damage; 313 homes, 618 mobile homes, and 7 apartments received minor damage. Most of the wind damage was concentrated in the towns of White Castle and Bayou Goula. About \$100,000 damage was done to the parish public schools. The White Castle high school lost its roof. A small, brief tornado occurred in Indian Village around 0142 CST on August 26, 1992. Some \$2.7 million in property and \$10 million in crop damage occurred in this parish.

Ascension Parish: One home and two mobile homes were destroyed; 9 homes and 7 mobile homes received major damage; 88 homes, 10 mobile homes, and 10 apartments sustained minor damage. Most of the wind damage was concentrated in the Donaldsonville area. Louisiana Power and Light Company said strong winds toppled 11 steel electrical towers near Donaldsonville. About \$5 million damage was done to the sugar cane crop and \$700,000 damage was sustained by 35 businesses.

East Baton Rouge Parish: The National Weather Service Office at Baton Rouge measured 48 mph sustained winds with gusts of 70 mph between 1000 CST and 1030 CST on August 26, 1992. Eight homes, 2 mobile homes, and 13 apartments were destroyed; 62 homes, 2 mobile homes sustained major damage; 100 homes, 1 mobile home, and 4 apartments received minor damage. Most of the wind damage was concentrated in the Baton Rouge, Zachary areas. The Louisiana State University School of Music received about \$50,000 in damages when it lost its roof to strong winds. Estimated property damages were about \$700,000.

West Baton Rouge Parish: A non National Weather Service standard anemometer at Brusly Landing measured sustained winds at 96 mph. One home and 8 mobile homes were destroyed; 12 homes, 9 mobile homes, and a apartment received major damage; 112 homes, 18 mobile homes, and 5 apartments sustained minor damage. The majority of the wind damage was in the Brusly Landing, Addis areas. A 37-year-old Addis man was injured when he fell off his roof while attempting to make emergency repairs around 0700 CST on August 26, 1992.

Pointe Coupee Parish: Two homes and 8 mobile homes were destroyed; 17 homes; 10 mobile homes and 1 apartment sustained major damage; 119 homes, 16 mobile homes, and 23 apartments received minor damage. About 300 trees and 30 power poles were blown down. Most of the wind damage was concentrated in the New Roads, Livonia areas. Fifty businesses sustained damage. A small tornado occurred in Ventress around 0927 CST on August 26, 1992. Estimated property damage was about \$5 million.

Livingston Parish: Two homes and 6 mobile homes were destroyed; 4 homes and 3 mobile homes sustained major damage; 9 homes and 10 mobile homes received minor damage. Most of the wind damage was concentrated in the Denham Springs area. Four schools had minor roof damage. A 34-year-old Denham Springs man was electrocuted from a fallen wire while cleaning debris in his yard about 0900 CST August 29, 1992.

St. Helena Parish: One mobile home was destroyed; 3 homes and 2 mobile homes sustained major damage; 1 home received minor damage. Most of the wind damage occurred near Montpelier. About \$3 million damage was done to timber.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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LOUISIANA Cont'd

St. Tammany Parish: Two homes were destroyed; 7 homes and 1 mobile home sustained major damage; 10 homes received minor damage. Two fast-moving small tornadoes were spawned by Hurricane Andrew. The first tornado damaged several homes along an intermittent path that began 5 miles north of Lacombe and ended 4 miles north of Covington between 0825 CST and 0845 CST on August 26, 1992. The second tornado took off the roofs of several homes near Mandeville around 1430 CST. There was some storm tide flooding in Mandeville and Slidell. Several businesses near the Mandeville lakefront were flooded with up to a 1.5 feet of water; in addition, the Mandeville seawall was damaged by high waves. A few homes in the Palm Lake subdivision in south Slidell had some minor flood damage. A barge broke free from its moorings on the Tchefuncte River and was lodged against the Tchefuncte River draw bridge in Madisonville; fortunately, the bridge received only minor damage. Some \$1 million in property damage occurred in this parish.

Tangipahoa Parish: Newspaper accounts indicate that two mobile homes were destroyed, and three homes suffered major damage. The Tangipahoa Sheriff's Office reported a small, fast moving tornado was responsible for some of this damage along an intermittent path from Tickfaw to Loranger around 1815 CST on August 26, 1992; in addition, some 300 trees were blown down. Two people were injured when they drove into a large fallen tree in Hammond. A cafe lost its roof and a car wash was destroyed in Pontchatoula. Strong winds blew down a radio tower near Independence. Only a few homes were flooded in Tangipahoa Parish even though 10.00 to 11.00 inches of rain were reported in Hammond, Robert and Amite.

Plaquemines Parish: The National Weather Service automated C-Man Station at the Southwest Pass of the Mississippi River recorded sustained winds of 67 mph with gusts of 77 mph around 1600 CST on August 25, 1992. One home was destroyed; 6 homes and 1 mobile home sustained major damage; 2 mobile homes received minor damage. A 62-year-old man was killed in his vehicle near Empire while evacuating during the afternoon of August 24, 1992; 2 other people were injured in this accident.

St. Bernard Parish: One home and mobile home was destroyed; 1 home and 3 mobile homes sustained major damage; 4 homes and 1 mobile home received minor damage due to strong winds. A 6-foot NGVD storm tide flooded roads outside the federal hurricane protection levee.

Jefferson Parish: One home and 23 mobile homes were destroyed; 3 homes and 5 mobile homes sustained major damage; 17 homes and 8 mobile homes received minor damage. Most of this damage was confined to Grand Isle where the National Weather Service automated C-Man recorded sustained winds of 58 mph and gusts to 77 mph at 1600 CST on August 25, 1992.

St. Charles Parish: Five homes sustained major damage; 35 homes and 5 mobile homes received minor damage. Most of the wind damage was concentrated in the Luling and Hahnville areas.

Morehouse Parish: A brief tornado moving rapidly west from Beekman to Stevenson destroyed a mobile home, did major damage to another home, and minor damage to 6 homes around 1430 CST on August 26, 1992. Three people received minor injuries when the mobile home was destroyed near Beekman.

Union Parish: A tornado blew down a few trees just west of Marion around 1500 CST on August 26, 1992 according to police. A second tornado blew down some trees and rolled over a mobile home injuring four people 5 miles southwest of Point at 1517 CST

Madison Parish: Four brief tornadoes were reported in this parish. Two occurred in open country east and southeast of Tallulah. A tornado heavily damaged a barn, rolled over a farm tractor, and caused minor damage to four homes near Mound around 1900 CST on August 26, 1992. Another tornado did minor damage to two homes 15 miles southwest of Tallulah at 1904 CST

Franklin Parish: A tornado blew down many trees 10 miles east of Winnsboro at 1920 CST on August 26, 1992 according to the Franklin Parish Office of Emergency Preparedness.

MAINE

Aroostook County
Presque Isle

31	1242EST- 1348EST			0	0	?	0	Thunderstorm Winds
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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MAINE Cont'd

Several large trees in Aroostook County including one at the corner of Church and Dudley Streets were downed by high winds associated with thunderstorms that rolled through northern Maine during the early afternoon hours.

MARYLAND and DC

Prince Georges County Camp Springs	04	1400EST			0	0	0	0	Thunderstorm Winds (G60)
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A 60 knot wind gust were recorded at the National Meteorological Center in Camp Springs.

Prince Georges County 2E Fort Foote Village	04	1410EST	2.0	75	0	0	0	0	Tornado (F1)
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A weak tornado followed a 2 mile long W-E path from the bank of the Potomac River to 2E Fort Foote Village. Damage was confined to trees in heavily wooded areas.

Prince Georges County 1ESE Friendly	04	1415EST	0.1	10	0	0	4	0	Tornado (F0)
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Two flight instructors at Prince Georges Air Park airport (1ESE Friendly) saw a tornado that touched down briefly and damaged a hangar and an airplane.

Prince Georges County	04	1420EST			0	0	3	0	Thunderstorm Winds
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Calvert County	04	1425EST			0	0	3	0	Thunderstorm Winds
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In Prince Georges County: Numerous trees blown down at Fort Washington. About a dozen trees were blown down 1S Oxon Hill. Several downburst wind channels were seen, with numerous trees having 2-3 foot diameter trunkdownowns uprooted, in the heavily wooded Fort Foote Historical Site 1SW Fort Foote Village. Two houses on the edge of the woodland were slightly damaged by trees falling onto their roofs.

In Calvert County: numerous trees were downed, some falling onto power lines, resulting in power outages.

Anne Arundel County Deale Lothian	04	1445EST- 1450EST			0	0	4	0	Thunderstorm Winds (G62)
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Emergency Management Director's office reported many large oaks and other trees and power lines downed in the southern part of the county. Trees blocked a number of roadways. Spotters reported winds of 60-70 mph (62 knots).

Talbot County Tilghman Island Wittman	04	1520EST			0	0	3	0	Thunderstorm Winds
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The same thunderstorm that caused damage in Anne Arundel County moved eastward across the Chesapeake Bay and blew down trees across roads at Tilghman Island. At Wittman, large trees were felled, and a small boat was blown into a swimming pool.

Washington County	11	1330EST			0	0	0	0	Hail (0.75)
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Hail that was 3/4 inch size fell briefly in Hagerstown.

Cecil County Charlestown Perryville	11	1455EST			0	1	5	0	Lightning
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Lightning struck a summer home near Charlestown, destroying the building and its contents. Damage was estimated at \$75,000. An adjacent house was damaged by the heat from the fire; two boats in that house's yard were damaged when the heat melted their plastic covers. At Perryville, a man was apparently hit by lightning that came through a closed window and ignited furniture.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MARYLAND and DC Cont'd									
Anne Arundel County Baltimore/Washington International Airport	11	1500EST			0	1	0	0	Turbulence
A Boeing-747 made an emergency landing at Biltmore Washington International Airport due to turbulence near the airport; one person was injured in the turbulence.									
Montgomery County	11	1500EST			0	0	0	0	Thunderstorm Winds
EOC officials reportd trees downed at several places countywide.									
Baltimore County	11	1537EST			0	1	0	0	Lightning
A 17-year-old boy was injured when struck by lightning in a parking lot in the south part of the county.									
District of Columbia	11	1545EST			0	0	3	0	Thunderstorm Winds
Trees were blown down at more than 20 locations, mostly in NW, according to DC OEP officials. One tree fell onto several vehicles.									
Anne Arundel County	11	1615EST			0	0	0	0	Thunderstorm Winds
Trees and large limbs blown down at several places in the southern end of the county.									
Charles County Waldorf	11	1635EST			0	0	0	0	Thunderstorm Winds
Thunderstorm Windss knocked down several trees.									
St. Marys County Patuxent River Naval Air Station	11	1705EST			0	0	0	0	Funnel cloud
United States Navy weather observers saw a funnel cloud.									
Worcester County	15	0600EST- 1200EST			0	0	0	0	Coastal flood
Persistent NE winds in a tight pressure gradient north of a warm front brought heavy surf and moderate beach erosion to the barrier islands.									
Wicomico County Salisbury	27	1415EST- 1430EST			0	0	0	0	Thunderstorm Winds Hail (1.00)
A localized downburst over the SE part of the city blew down and uprooted trees and shrubs. Some trees had trunkknownowns 2-3 feet in diameter. One-inch hail also occurred. The report came from a TV meteorologist.									
Howard County 1SE Glenelg to 1W West Friendship	28	1600EST 1610EST	3.5	100	0	2	6	3	Tornado (F1)
A tornado, one of several spawned by intense thunderstorms from the remains of Hurricane Andrew, ran northward along an intermittent path through largely rural areas. Two people were slightly injured 2SSW West Friendship when a tree fell onto their house, collapsing the house. The tornado was at its widest (100 yards) and at its greatest intensity (F1) here. In the same area, several houses were damaged, some heavily; a recreational vehicle and its attached trailer were rolled over and destroyed; numerous trees were downed; and cornfields were flattened. Most of the tornado's damage was to trees. A small PCB spill resulted from a downed transformer.									
Howard County 2N West Friendship to Carroll County 2ENE Sykesville	28	1620EST- 1630EST	2.5	50	0	0	0	3	Tornado (F0)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MARYLAND and DC Cont'd

The same thunderstorm that caused the tornado further south in Howard County dropped a smaller tornado just north of I-70, through largely wooded areas in a path 20-50 yards wide. Damage was confined to trees and a few corn fields, and the tornadic nature of the storm was plainly evident. Two people sighted the tornado over cornfields.

Anne Arundel County
Fort George G.
Meade

28	1632EST	0.1	10	0	0	0	0	0	Tornado (F0)
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Amateur radio spotters reported a tornado at Fort Meade.

Anne Arundel County
7SW Annapolis

28	1615EST	0.1	5	0	0	0	0	0	Tornado (F0)
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Spotter reported a tornado 7SW Annapolis.

Baltimore County
Glenn Martin
Airport

28	1653EST			0	0	0	0	0	Thunderstorm Winds (G50)
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Baltimore County
Baltimore City,
Sparrows Point

28	1655EST			0	0	0	0	0	Waterspouts
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A waterspout was observed on the harbor in Baltimore City, and Toll-bridge personnel at the Francis Scott Key Bridge reported a waterspout near Sparrows Point a short while later. Apparently the same storm produced the waterspouts.

Dorchester County
6E Cambridge

28	1700EST	0.1	5	0	0	0	0	0	Tornado (F0)
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A tornado touched down briefly near Highway 50.

Anne Arundel County
Bay Ridge

28	1700EST			0	0	0	0	0	Thunderstorm Winds (G57)
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Winds of 57 knots recorded at the Thomas Point data buoy (near Bay Ridge). Radar indicated tornadic thunderstorms in the vicinity.

Wicomico County
Salisbury

28	1710EST			0	0	0	0	0	Thunderstorm Winds (G50)
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Queen Annes County
Centreville

28	1710EST	0.1	10	0	0	0	0	0	Tornado (F0)
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Spotter reported a tornado at Centreville.

Queen Annes County

28	1735EST	0.1	10	0	0	0	0	0	Tornado (F0)
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A tornado was sighted in the central part of the county.

Harford County
1SW Aberdeen

28	1755EST	0.1	5	0	0	0	0	0	Tornado (F0)
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Skywarn spotters observed a tornado briefly touching down in a rural area with no apparent damage.

Cecil County
Port Deposit

28	1755EST	0.1	5	0	0	0	0	0	Tornado (F0)
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Skywarn spotters saw another brief tornado touchdown in a largely rural area.

MASSACHUSETTS

Hampden County

Agawam	04	1430EST			0	0	?	0	Hail (0.75)
Longmeadow	04	1439EST			0	0	?	0	Hail (0.75)
Ludlow	04	1441EST			0	0	?	0	Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MASSACHUSETTS Cont'd

Franklin County Orange	04	1454EST			0	0	?	0	Thunderstorm Winds
Worcester County Athol	04	1510EST			0	0	?	0	Thunderstorm Winds
Westminster	04	1534EST			0	0	?	0	Thunderstorm Winds
Thunderstorm winds blew down trees and tree limbs and there were scattered reports of large hail.									
Berkshire County Dalton	04	1650EST			0	0	?	0	Thunderstorm Winds
Becket	04	1655EST			0	0	?	0	Thunderstorm Winds
Large limbs were blown down blocking roads.									
Worcester County Mendon	04	1805EST			0	0	?	0	Thunderstorm Winds
Thunderstorms moved east from the Connecticut River Valley accompanied by strong wind gusts. Scattered power outages occurred.									
Bristol County Westport	09	1400EST-			0	0	4	0	Flash Flood
New Bedford		1800EST							
Dartmouth									
Thunderstorms brought torrential rain to the New Bedford area. The city received a total of 7.28 inches, and much of that total fell in just four hours. Widespread street flooding, washouts, and basement flooding occurred. Up to 3 feet of water filled some streets as motorists scrambled out of their flooded cars and other residents bailed out cellars. Parts of Interstate 195 and its access ramps were closed in Dartmouth. Route 24 in Westport was severely flooded.									
Bristol County Acushnet	09	1755EST			0	0	4	0	Lightning
A two-story wood-frame cottage was struck by lightning resulting in an estimated \$40,000 damage to the structure.									
Barnstable County Sandwich	09	1800EST-			0	0	?	0	Flash Flood
Barnstable		2130EST							
Thunderstorms accompanied by torrential rain resulted in considerable street flooding on the Upper Cape. Numerous vehicles were disabled on the highway because of the flooding. Several streets had to be closed in each town affected including Exit 5 off the Mid-Cape Highway in West Barnstable.									
Berkshire County Dalton	27	1541EST			0	0	?	0	Hail (0.75)
A thunderstorm produced hail up to dime-size.									
MAZ006-010	28	1840EST-			0	0	?	0	High Winds
		2000EST							
High winds likely associated with a frontal passage knocked down a few trees in western Massachusetts.									
MAZ004-005	29	0000EST-			0	0	?	0	High Winds
		0500EST							
High winds occurred from the Connecticut Valley east into central Massachusetts. The wind blew down a few trees and branches causing scattered power outages and blocking a few roads.									
MICHIGAN									
Baraga County L'anse	09	2300EST			0	0	4	0	Lightning

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MICHIGAN Cont'd

A barge was destroyed because of a lightning caused fire.

Ontonagon County	09	2308EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm winds blew down trees and power lines in many areas. Numerous power outages were reported.

Baraga County Beaufort Lake	09	2310EST			0	0	0	0	Thunderstorm Winds
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Trees up to 16 inches in diameter were blown down over U.S. Highway 41.

Marquette County	09	2310EST			0	0	0	0	Thunderstorm Winds
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Strong thunderstorm winds blew down numerous large trees over County Road 607, 10 miles north of Lake Michigamme.

Iosco County Hale	10	1325EST			0	0	0	0	Hail (1.00)
15 W Tawas City	10	1425EST			0	0	0	0	Hail (0.75)
Huron County 2 S Harbor Beach	10	1640EST			0	0	0	0	Thunderstorm Winds

A tree was blown down by strong thunderstorm winds.

Harbor Beach	10	1655EST			0	0	0	0	Hail (0.75)
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Dime-size hail fell for about 5 minutes.

White Rock	10	1720EST			0	0	0	0	Hail (1.75)
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Hailstones up to golf ball-size were observed.

Tuscola County Deford	10	1740EST			0	0	0	0	Thunderstorm Winds
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A couple of large tree limbs were blown down.

St. Clair County 15 W Port Huron	10	1815EST			0	0	0	0	Hail (0.75)
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MINNESOTA

Sibley County Henderson	01	1515CST			0	0	?	?	Thunderstorm Winds Hail (0.75)
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Scott County 6 SW to 1 SW Belle Plaine	01	1520CST			0	0	?	?	Thunderstorm Winds Hail (0.75)
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Powerful thunderstorms developed rapidly over east-central portions of Minnesota. Producing strong downburst winds and 0.75-inch hail. Agricultural crops were severely damaged in a 2-mile-wide and 5-mile-long swath between Henderson and Belle Plaine. Eighty percent of soybean fields and 20 percent of the area corn crop was severely damaged.

Scott County Prior Lake	01	1527CST			0	0	?	?	Hail (1.75)
Kandiyohi County Spicer	01	1715CST			0	0	0	0	Hail (0.75)
Pennock	01	1724CST			0	0	?	?	Hail (1.25)
Green Lake	01	1730CST			0	0	1	?	Thunderstorm Winds
Stearns County Rockville	01	1739CST			0	0	?	?	Thunderstorm Winds
Meeker County Grove City	01	1750CST			0	0	0	0	Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>A line of thunderstorms moved through central sections of Minnesota producing strong winds and large hail. Little damage was reported.</p>									
Wright County Monticello	01	1810CST			0	0	?	?	Thunderstorm Winds
<p>A large tree fell due to the strong thunderstorm winds.</p>									
Kandiyohi County	01	1845CST			0	0	?	?	Thunderstorm Winds (G62)
<p>A wind gust to 71 mph was recorded at the airport in Willmar.</p>									
Mcleod County Hutchinson	01	1855CST			0	0	?	?	Thunderstorm Winds
<p>Large tree limbs were stripped from several of trees near Hutchinson.</p>									
Dakota County Lakeville	01	2007CST			0	0	?	?	Hail (1.00)
Roseau County 20 W Roseau	09	0540CST			0	0	?	?	Hail (0.75)
Roseau	09	0610CST			0	0	?	?	Hail (0.75)
Clearwater County Gonvick	09	0935CST			0	0	?	?	Hail (1.75)
Beltrami County Waskish	09	1115CST			0	0	?	?	Hail (0.75)
Koochiching County International Falls	09	1130CST			0	0	?	0	Lightning
<p>Lightning struck a transformer at the airport.</p>									
St. Louis County 15 N Ash Lake	09	1215CST			0	0	?	?	Thunderstorm Winds
<p>Strong thunderstorm winds downed many trees and power lines in the Kabetogama Lake resort area.</p>									
Hubbard County Park Rapids	09	1315CST			0	0	3	0	Lightning
<p>Lightning struck the roof of a home causing a small fire of less than \$5,000 in damage.</p>									
Lyon County 2 SW Marshall	09	1800CST			0	0	0	0	Funnel Cloud
Lincoln County 3 SE Arco	09	1805CST			0	0	0	0	Waterspout
<p>A funnel cloud developed near Dead Coon Lake and became a waterspout as it touched the surface of the lake before dissipating.</p>									
10 NW Lake Benton	09	1845CST			0	0	0	0	Funnel Cloud
2 N Tyler	09	1900CST			0	0	0	0	Funnel Cloud
<p>Thunderstorms developed over southwest sections of the state causing several funnel clouds and one waterspout. No damage was reported from the storms.</p>									
Kandiyohi County Eagle Lake	17	1325CST			0	0	0	0	Hail (0.75)
Nobles County 4 W Reading	17	1740CST			0	0	?	?	Hail (1.75)
<p>Hail up to golf ball-size was deposited 3 inches deep in a path that was 2 miles wide and 4 miles long across central portions of Nobles County. Approximately 400 acres of crops were destroyed.</p>									
Pennington County 0.5 W Thief River Falls	20	1600CST			0	0	0	0	Hail (0.75)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MINNESOTA Cont'd

Cass County Walker	20	2144CST- 2200CST			0	0	?	?	Thunderstorm Winds Hail (0.75)
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Strong thunderstorm winds downed several large tree limbs and hail damaged many cars in Walker.

MISSISSIPPI

George County Lucedale	03	1300CST			1	0	0	0	Lightning
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Four teenagers had been swimming and were on their way back to their car when lightning struck and knocked all of them to the ground. One of the boys did not get up. M140

Neshoba County Philadelphia	08	1440CST			0	0	0	0	Hail (0.75)
Tippah County Walnut	10	1150CST			0	0	2	0	Thunderstorm Winds

Several trees were uprooted.

Lafayette County Oxford	10	1235CST			0	0	3	0	Thunderstorm Winds
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A tree fell and damaged a porch and another tree was blown down across a powerline.

Harrison County Gulfport	10	1735CST			0	0	2	0	Thunderstorm Winds
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Several trees and powerlines were blown down.

Harrison County Lyman	10	1740CST			0	0	0	0	Hail (1.00)
Newton County 12 N Newton	10	1800CST			0	0	4	0	Thunderstorm Winds

A roof was blown off a barn and two trees were blown down.

Coahoma County Clarksdale	10	1937CST			0	0	2	0	Thunderstorm Winds
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Four trees were blown down. One tree fell on a car.

Lincoln County 2 E Bogue Chitto	10	1945CST			0	0	3	0	Thunderstorm Winds
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Fifteen trees were carried off or knocked down.

Bolivar County Duncan	10	2047CST			0	0	2	0	Thunderstorm Winds
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Several trees were blown down.

Issaquena County 5 N Fidler	10	2200CST			0	0	3	0	Thunderstorm Winds
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Tin was blown off of two buildings.

Issaquena County 4 SW Fidler	10	2215CST			0	0	3	0	Thunderstorm Winds
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Several powerlines were blown down by thunderstorm winds.

Lafayette County Oxford	24	1945CST			0	0	5	0	Flash Flood
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The city of Oxford had 4.36 inches of rain fall in one hour. Nearly every street in the city was flooded and water ran into several apartments causing extensive damage. Water ran into several

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured		Estimated Damage Property Crops		Character of Storm
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MISSISSIPPI Cont'd

basements of buildings at the University of Mississippi and caused some damage to computers.

MSZALL

26-27

Hurricane Andrew

Early on August 26 spiral bands from Hurricane Andrew, then located along the Louisiana coast, began to affect Mississippi. Andrew was downgraded to a Tropical Storm by the time it entered the extreme southwestern corner of Mississippi during the afternoon of August 26. Andrew moved northeast across Mississippi and was downgraded to a Tropical Depression shortly after entering the state. Andrew exited the northeastern corner of the state on the afternoon of August 27. During the 24 hour period, Andrew was responsible for 29 incidents of wind damage, many of which were caused by weak tornadoes. A 100-mile-wide band of rainfall between four and eight inches fell along the storm's track, with isolated totals of over nine inches recorded.

Walthall County	26	0625CST			0	0	3	0	Thunderstorm Winds
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Scattered trees were blown down throughout the county.

Pike County	26	0635CST			0	0	3	0	Thunderstorm Winds
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Scattered trees were blown down throughout the county.

Lincoln County	26	0635CST			0	0	3	0	Thunderstorm Winds
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Scattered trees were blown down throughout the county.

Lawrence County Topeka	26	0700CST	2.0	1	0	1	4	0	Tornado (F1)
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The tornado damaged a house and two mobile homes. Several trees were blown down.

Lawrence County 3 NW Topeka	26	0705CST	1.0	8	0	0	2	0	Tornado (F0)
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Several trees were blown down.

Lincoln County 3 S Brookhaven	26	0720CST	2.0	100	0	0	4	0	Tornado (F1)
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A tornado lifted the roof off of a house and blew down several trees.

MSZ10 and MSZ11	26	0800CST 2100CST			0	0	5	0	High Winds
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Tropical Storm Andrew caused widespread damage over the following counties: Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Jefferson-Davis, Lawrence, Lincoln, Marion, Pike, Simpson, Walthall, and Wilkinson. Strong winds as high as 65 mph at Natchez, in Adams County, blew down numerous trees and powerlines over much of Southwestern Mississippi. Several houses and buildings throughout this area received minor damage, mainly to roofs. Much of this area went without power for several days.

Lawrence County 3 NE Tilton	26	0825CST	1.5	100	0	0	3	0	Tornado (F0)
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Numerous trees were blown down.

Copiah County 3 W Bowerton	26	0826CST	2.0	150	0	0	3	0	Tornado (F0)
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Numerous trees were blown down.

Copiah County Hazelhurst	26	1015CST			0	0	2	0	Thunderstorm Winds
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A funnel cloud was reported over Hazelhurst but never touched down. High wind with this thunderstorm did blow down several trees in Hazelhurst.

Claiborne County 1 SE Rock Springs	26	1025CST	2.0	100	0	0	2	0	Tornado (F0)
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Several trees were blown down along the Natchez Trace Parkway.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MISSISSIPPI Cont'd

Warren County Yokena	26	1040CST	1.5	80	0	0	2	0	Tornado (F0)
Several trees were blown down.									
Leake County 2 SE Thomastown	26	1600CST	1.5	150	0	0	4	0	Tornado (F1)
The tornado lifted the roof and chimney off of a house, bent several road signs, and blew down a few pine trees.									
Copiah County 5 W Crystal Springs	26	1620CST	1.0	100	0	0	2	0	Tornado (F0)
Several trees were blown down.									
Kemper County 10 SW DeKalb	26	1625CST	1.0	100	0	0	4	0	Tornado (F1)
One mobile home was destroyed and numerous trees were blown down.									
Yazoo County Yazoo City	26	1627CST	1.0	100	0	0	2	0	Tornado (F0)
Numerous trees and limbs were blown down.									
Humphreys County Belzoni	26	1640CST	1.0	100	0	0	3	0	Tornado (F0)
Several trees and limbs were blown down. An awning was blown off of a building.									
Attala County 4 SW Possumneck	26	1700CST	2.0	150	0	0	3	0	Tornado (F0)
A tornado did minimal damage to a farm and blew down several trees.									
Holmes County Lexington	26	1700CST	1.5	100	0	0	4	0	Tornado (F0)
Several trees were blown down and two houses were damaged.									
Clarke County 2 W Middleton	26	1700CST	1.0	50	0	0	2	0	Tornado (F0)
Several trees and debris were scattered across a highway.									
Lauderdale County 10 SE Meridian	26	1735CST	2.0	150	0	2	5	0	Tornado (F1)
One mobile home was destroyed, five houses were damaged, and numerous trees and powerlines were blown down.									
Smith County 2 SW Mize	26	1840CST	2.0	150	0	0	3	0	Tornado (F0)
Lots of trees were blown down. The tops of several chicken houses were blown.									
Copiah, Hinds, Lawrence, Leake, Lincoln, Madison, Rankin, Scott, Simpson, Smith, and Warren Counties	26 27	2000CST- 0800CST			0	0	5	0	Flood

Heavy rainfall from Tropical Storm Andrew caused flooding across the following counties during the night of August 26 and the morning of August 27: Copiah, Hinds, Lawrence, Leake, Lincoln, Madison, Rankin, Scott, Simpson, Smith, and Warren. Most of the reported flooding was of low

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

MISSISSIPPI Cont'd

lying creeks overflowing their banks, low lying areas, and poor drainage areas. Many county roads were covered with water and were not passable. A bridge was washed out in Copiah County and another bridge was washed out in Lincoln County.

Yazoo County Satartia	26	2000CST	1.5	100	0	0	3	0	Tornado (F0)
									Many trees were blown down.
Simpson County	26	2010CST			0	0	3	0	Thunderstorm Winds
									Trees were blown down over many areas of the county.
Sharkey County 5 SW Spanish Fort	26	2020CST	2.0	100	0	0	3	0	Tornado (F0)
									Numerous trees were blown down.
Simpson County Harrisville	26	2030CST	2.0	150	0	0	2	0	Tornado (F0)
									Many trees were blown down.
Yazoo County 3 NE Yazoo City	26	2125CST	1.5	100	0	0	3	0	Tornado (F0)
									Numerous trees were blown down.
Clarke County 8 N Quitman	27	0110CST	1.0	100	0	0	2	0	Tornado (F0)
									Numerous trees were blown down.
Lauderdale County 10 NW Meridian	27	0140CST	1.0	100	0	0	2	0	Tornado (F0)
Lauderdale County 3 NW Meridian	27	0201CST	1.0	50	0	0	2	0	Tornado (F0)
									Several trees were blown down.
Clarke County 8 W Quitman	27	0220CST	1.0	50	0	0	2	0	Tornado (F0)
Lauderdale County 6 N Meridian	27	0240CST	1.0	100	0	0	2	0	Tornado (F0)
									Numerous trees were blown down.
Lauderdale County and Clarke County	27	0500CST			0	0	0	0	Flood
									Numerous streets and roads were under water, but no apparent damage was done.
Clay County West Point	27	1000CST			0	0	3	0	High Winds
									Winds of up to 50 mph uprooted several trees and knocked over a few powerlines in West point.
Prentiss County	27	1600CST			0	0	0	0	Flash Flood
									Many small streams and creeks flooded low lying areas. Some county roads were covered and had to be closed.
Lamar County 1 E Sumrall	27	1815CST	2.0	100	0	0	3	0	Tornado (F0)
									Numerous trees were blown down.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MISSOURI									
McDonald County Anderson	03	1320CST			0	0	2	0	Thunderstorm Winds (G52)
Newton County Neosho	03	1345CST			0	0	2	0	Thunderstorm Winds
			Power lines were downed by thunderstorm winds.						
Cedar County	05	0935CST- 1125CST			0	0	3	0	Flash Flood
Polk County	05	0935CST- 1125CST			0	0	3	0	Flash Flood
			In Polk County, several homes were evacuated because of high water. Four inches of rain fell at Stockton Dam. Low water bridges were impassable around Stockton.						
Madison County Fredricktown	08	1730CST			0	0	3	2	Thunderstorm Winds
Fredricktown	08	1910CST			0	0	3	0	Flash Flood
			The county sheriff dispatcher reported trees and power lines down. Flash flooding was reported later that evening with one creek overtopping a bridge.						
Pike County Bowling Green	10	0530CST- 0720CST			0	0	0	0	Flash Flood
			The county sheriff reported flash flooding over Highway 54 near Bowling Green.						
Marion County Hannibal	10	0530CST- 0800CST			0	0	2	0	Flash Flood
			The county sheriff reported street flooding.						
Ralls County 6 S New London	10	0615CST			0	0	0	0	Flash Flood
			Spencer Creek quickly rose out its banks flooding a county road.						
Howell County Caulfield	10	1736CST			0	0	2	0	Hail (0.75)
Franklin County Sullivan	10	1745CST			0	0	5	0	Thunderstorm Winds
			The Sullivan Police Department reported extensive roof damage to four homes. One home was damaged when two large trees fell through the living room. A large plate glass window was shattered at the public library. Other large trees and power lines were down over southern sections of the city, near the Franklin-Crawford County line.						
Crawford County Steeleville	10	1759CST			0	0	2	0	Thunderstorm Winds
Near Steeleville	10	1805CST			0	0	4	0	Thunderstorm Winds
			An 8- to 10-mile-wide swath of tree damage occurred from northeastern through southwestern parts of the county. The county sheriff reported trees downed over Highways 8, H, and Y.						
Phelps County St. James	10	1820CST			0	0	2	0	Thunderstorm Winds
Eastern Portion	10	1825CST			0	0	4	0	Thunderstorm Winds
			Several large trees were blown down in St. James. The Missouri Highway Patrol reported power lines down and numerous power outages across eastern Phelps County.						
Dent County Salem	10	1830CST			0	0	3	0	Thunderstorm Winds (G61)
Salem	10	1833CST			0	0	5	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MISSOURI Cont'd									
A large swath of tree damage was reported from northern through southern sections of county. Three businesses experienced plate glass window damage in Salem. Five vehicles were totally destroyed by fallen trees with four homes also receiving roof damage according to the Salem Police Department. The Missouri Highway Patrol reported a wind gust to 70 mph. The county sheriff also reported widespread power outages.									
Texas County Houston	10	1904CST			0	0	3	0	Thunderstorm Winds (G52)
Oregon County Thomasville	10	1904CST			0	0	2	0	Thunderstorm Winds
Several large trees were blown down.									
Howell County Willow Springs	10	1904CST			0	0	2	0	Thunderstorm Winds
Large trees were downed by thunderstorm winds.									
Texas County Houston	10	1915CST			0	0	3	0	Thunderstorm Winds (G61)
Summersville	10	1915CST			0	0	3	0	Thunderstorm Winds
Raymondville	10	1915CST			0	0	3	0	Thunderstorm Winds
Success	10	1915CST			0	0	3	0	Thunderstorm Winds
Numerous large trees were blown over.									
Shannon County Eminence	10	1920CST			0	0	3	0	Thunderstorm Winds
Winona	10	1920CST			0	0	3	0	Thunderstorm Winds
Large trees were blown down and State Road 106 was blocked from fallen trees near Eminence.									
Howell County West Plains	10	1940CST			0	0	5	0	Thunderstorm Winds
Part of a roof was blown off at the Rural Electric Cooperative 5 miles north of West Plains. In West Plains, plate glass windows were blown out or cracked by flying debris from four in-town businesses. The roof of Earl's International Truck Sales building was partially blown over onto the local police department parking lot. Five vehicles were completely destroyed by fallen trees.									
Oregon County Thomasville	10	1950CST			0	0	4	0	Thunderstorm Winds
An orchard was destroyed by thunderstorm winds in Thomasville.									
Greene County 10 SW Spring- field	10	2115CST			0	0	3	0	Thunderstorm Winds
Many trees were blown down and a car was blown off the road.									
Christian County Ozark	10	2120CST			0	0	3	0	Thunderstorm Winds (G52)
Large trees were blown over in Ozark.									
Adair County Kirksville	25	1610CST			0	0	3	0	Thunderstorm Winds
The Kirksville Police Department reported many large trees down near the center of town.									
Scotland County Memphis	25	1635CST			0	0	2	0	Thunderstorm Winds
Eastern Portion	25	1645CST			0	0	2	0	Thunderstorm Winds
The Missouri Highway Patrol reported large trees down.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
MONTANA									
Glacier County Cut Bank North	01	2215MST			0	0	4	5	Hail (1.75)
Toole County Shelby	01	2230MST			0	0	4	5	Hail (1.75)
Pondera County Ledger	01	2245MST			0	0	4	5	Hail (1.75)
A series of thunderstorms moved from north of Cut Bank to near Ledger. Crops were damaged over a wide area.									
Sweet Grass County Big Timber	02	1640MST			0	0	0	0	Hail (1.00)
Carbon County Joliet	02	1758MST			0	0	0	0	Hail (1.00)
Yellowstone County Laurel	02	1910MST			0	0	4	4	Thunderstorm Winds (G61)
Teton County Bynum Fairfield	02	1930MST			0	0	5	5	Hail (1.25) Thunderstorm Winds
Severe crop loss occurred in Bynum and Fairfield because of 1.25-inch hail and thunderstorm winds.									
Cascade County Great Falls	02	1950MST			0	0	3	5	Hail (1.25)
Minor damage occurred in Great Falls with lots of crop damage west of the city.									
Hill County Port of Wildhorse W of Havre	03	1715MST- 1730MST			0	0	4	5	Hail (2.75)
26 N Inverness	03	1830MST	?	?	0	0	3	4	Tornado (F0) Hail (1.75) Thunderstorm Winds
Crops were damaged and windows were knocked out of homes and vehicles.									
Garfield County Mosby	03	2200MST			0	0	4	4	Hail (1.75)
Valley County Port of Opheim	06	1430MST			0	0	0	3	Hail (1.00)
13 S Richland	06	1542MST			0	0	0	0	Hail (1.00)
Roosevelt County Poplar	06	1727MST			0	0	4	4	Hail (1.50)
Richland County Northwesterns Portion to Sioux Pass	06	1730MST			0	0	4	5	Hail (1.75)
Considerable amounts of crop damage occurred because of 1.75-inch hail.									
Lewis and Clark County Helena	19	1926MST			0	0	3	0	Thunderstorm Winds (G50)
MTZ003	19	2345MST			0	0	3	0	High Winds (G53)
A strong cold front moved through with a wind gust to 61 mph at Malmstrom Air Force Base. Minor damage occurred in town.									
Fergus County Eastern Portion Lewistown	21	2030MST			0	0	4	0	Thunderstorm Winds
	21	2100MST			0	0	4	4	Hail (1.50) Urban Flood
A strong thunderstorm dropped 1.66 inches of rain in about 1 hour with street and basement flooding. Wind damage was scattered around the area.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm
					Killed	Injured	Property
							Crops

MONTANA Cont'd

MTZ001,002,003, 004	22	0800MST-			0	0	4	6	Winter Storm
	23	1600MST							

Heavy snow along with cold and strong northerly winds covered most of the western third of the state. This was the earliest snow on record at many locations. Glacier Park and crops were especially hard hit. The wheat and barley in the golden triangle was damaged. Snowfall ranged from 1 foot or more across Glacier Park to between 2 and 6 inches over the plains. The total snowfall from the storm was more than 8 inches at Great Falls with 5 inches on the ground around noon on the 23rd.

MTZ007	23	1700MST			0	0	0	4	Heavy Snow
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Six inches of snow fell in Livingston overnight.

MTZALL	25	0600MST			0	0	0	5	Frost/Freeze
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A general frost and freeze was observed across the state. Wisdom reported the coldest reading with 11 degrees. Many record low temperatures were recorded. This was the fourth day in a row of record low temperatures at many sites. This ended the growing season at most stations making this the shortest growing season on record. Crop damage was extensive.

NEBRASKA

York County Henderson	02	0230CST			0	0	?	?	Thunderstorm Winds (G61)
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Winds estimated at 70 mph uprooted trees, which fell on and damaged houses.

Fillmore County Geneva	02	0350CST			0	0	?	?	Thunderstorm Winds (G61)
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Winds estimated to 70 mph caused major tree damage. Two cars, several roofs, and three power poles were damaged. A ferris wheel at a fairgrounds was overturned.

Chase County	03	Mid Afternoon			0	0	?	?	Flood
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The Nebraska State Patrol reported Frenchman Creek was running bankfull from the dam at Enders Reservoir in southwest Chase County to the junctions of Highways 6 and 25. From there, the creek was out of its banks to south of Culbertson where it drains into the Republican River. No damage was reported.

Lincoln County 7 NE North Platte	03	1837CST			0	0	4	?	Hail (1.75)
North Platte	03	1850CST			0	0	5	?	Hail (2.75)
									Thunderstorm Winds (G51)

A thunderstorm dropped golf ball-size hail in Hillcrest Estates about 7 miles north-northeast of North Platte. A number of cars were severely damaged, house windows were broken, and roofs were damaged. Baseball-size hail was reported in the Key Estates Mobile Home Park by a retired National Weather Service employee, where vehicles, windows, roofs, and siding were broken and damaged. At Lee Bird Field, dime-size hail fell and winds gusted to 59 mph.

Keya Paha County Springview to 2 S Springview	04	1000CST			0	0	5	5	Hail (1.75)
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Rock County Bassett	04	1031CST			0	0	3	?	Hail (1.75)
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25 SE Bassett	04	1109CST			0	0	5	?	Hail (0.75)
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12 SE Rose	04	1125CST			0	0	?	?	Hail (1.75)
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Garfield County 20 NNW to 6 SE Burwell	04	1145CST			0	0	?	6	Hail (1.75)
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Burwell	04	1220CST			0	0	5	?	Thunderstorm Winds
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A severe thunderstorm swept across north central Nebraska and produced large hail, which damaged roofs and broke windows. Crops also received some damage and the fairgrounds at Burwell had several buildings, a grandstand, and fences damaged.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NEBRASKA Cont'd									
Valley County Ord	04	1250CST			0	0	?	?	Hail (1.75) Thunderstorm Winds (G61)
									Golf ball-size hail completely covered the ground. Winds to 70 mph knocked down the main power line between Ord and Burwell and blew down tree limbs which knocked down power lines in town.
3 N North Loup	04	1312CST			0	0	?	?	Thunderstorm Winds Hail (0.50)
									A grain bin was destroyed by strong winds. Pea- to marble-size hail was 6 inches deep.
Greeley County Scotia	04	1315CST			0	0	?	?	Thunderstorm Winds (G61)
									Winds were estimated to 70 mph.
Sherman County 5 N Ashton	04	1330CST			0	0	?	?	Hail (1.00) Thunderstorm Winds (G61)
									Significant crop damage occurred, with crops in the northeast corner of the county a complete loss.
Greeley County Scotia	04	1330CST			0	0	?	?	Thunderstorm Winds
									Thunderstorm winds did considerable damage to corn, soybean and sorghum.
Howard County Elba	04	1354CST			0	0	?	?	Thunderstorm Winds (G56)
									Winds to 65 mph destroyed several grain bins.
Hall County Cairo	04	1405CST			0	0	?	?	Hail (0.75)
Grand Island	04	1430CST			0	0	?	?	Hail (0.75)
									Dime-size hail broke windows in houses.
Merrick County Murphy	04	1433CST			0	0	0	0	Funnel Cloud
									The public saw a funnel cloud that did not touch down.
Howard County Elba	04	1555CST			0	0	?	?	Thunderstorm Winds (G52)
									Winds exceeded 60 mph at Elba, where many trees were blown down, several grain bins were destroyed, and crops were damaged.
Howard County Danneborg	04	1600CST			0	0	?	?	Thunderstorm Winds
									Strong winds blew a 50-foot mobile home completely off of the highway.
Hall County Grand Island	04	1620CST			0	0	6	?	Thunderstorm Winds (G59)
					0	1	0	0	Lightning
									Winds to 68 mph broke tree limbs 14 to 15 inches in diameter, which fell on garages. A grain bin was blown away in northeast Grand Island and buildings at the fairgrounds were blown over. Four golfers were struck by lightning; one person was injured.
Howard County St. Paul	04	1647CST			0	0	?	?	Flash Flood
									Rainfall of 2.60 inches flooded many county roads.
Cherry County 35 S Valentine	04	1650CST	0.5	10	0	0	?	?	Tornado (F0) Hail (1.75)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NEBRASKA Cont'd									
	A tornado struck a ranch, where it tore a door off a shop and damaged its roof and downed several trees. The twister also jack-knifed a tractor, turned a windmill inside out, and broke off several power poles. Hail broke windows on the ranch house.								
Hamilton County Aurora	04	1700CST			0	0	?	?	Thunderstorm Winds
	Trees and limbs were blown down.								
Thomas County Thedford	04	1715CST- 1740CST			0	0	2	?	Hail (1.75)
	Hail, mostly dime sized, but also a few golf ball size, dented a few cars.								
Clay County Clay Center	04	1720CST			0	0	?	?	Thunderstorm Winds
	Large tree limbs were blown down.								
Fillmore County Geneva	04	1730CST			0	0	?	?	Thunderstorm Winds
	Winds did extreme damage to trees. Power poles were snapped and took down power lines. Houses and crops were damaged.								
Logan County 20 NW Stapleton 10 W Stapleton	04	1800CST			0	0	3	?	Hail (2.75)
	04	1820CST			0	0	3	?	Hail (0.75)
	Numerous golf ball- to baseball, with mostly dime-size hail damaged a few vehicles and destroyed field crops.								
Nuckolls County Nelson	04	1805CST			0	0	5	?	Flash Flood Thunderstorm Winds
	Winds damaged trees in Nelson and 2.40 inches of rain fell in 9 minutes and flooded roads in and west of Nelson. Damage to roads and bridges was estimated between \$150,000 and \$200,000.								
Custer County Callaway	04	1830CST			0	0	?	?	Hail (1.75)
	Callaway Fire Department reported golf ball-size hail, but no damage.								
McPhearson County 7 to 10 S Tryon	04	1843CST			0	0	3	?	Hail (1.75)
	Golf ball-size hail broke windows and damaged roofs on a ranch house and outbuildings.								
Howard County Elba	04	1900CST			0	0	?	?	Flash Flood
	Four inches of rain fell in Elba, flooding rivers, creeks, ditches, and lowlands.								
Thayer County Hebron	04	1910CST			0	0	5	?	Flash Flood Hail (0.75)
	Three-quarter-inch hail fell. Creeks and streams flooded roads and farmland with damage estimated at \$450,000.								
Lincoln County North Platte Wellfleet	04	1927CST			0	0	0	0	Hail (0.75)
	04	2005CST			0	0	0	0	Hail (0.75)
	Dime-size hail fell in the western edge of North Platte and in Wellfleet.								

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NEBRASKA Cont'd									
Dawson County Gothenburg	04	1930CST			0	0	?	?	Hail (1.75)
Hall County Grand Island	04	2000CST			0	0	?	?	Thunderstorm Winds
			Winds broke large (14- to 16-inch diameter) tree limbs.						
Hamilton County Aurora	04	2000CST			0	0	?	?	Flash Flood
			Water covered intersections and underpasses in town.						
Phillips	04	2010CST			0	0	?	?	Hail (1.50)
			Walnut-size hail fell.						
Frontier County Stockville	04	2020CST			0	0	0	0	Hail (0.75)
4 E Stockville					0	0	0	0	Thunderstorm Winds (G52) Hail (1.75)
			Sixty-mph winds and dime-size hail were reported in Stockville. Some tree limbs were blown down but no other damage occurred. Golf ball-size hail fell in open rangeland with no damage reported.						
Red Willow County McCook Indianola	04	2055CST			0	0	5	3	Hail (4.00) Thunderstorm Winds (56)
			Golf ball- to grapefruit-size hail fell in a 15- to 20-mile area near McCook to east of Indianola. Estimated wind gusts to 65 mph also caused extensive damage to small trees and large limbs. Windows, roofs, house siding, and vehicles had hail damage.						
Seward County Seward	04	2055CST			0	0	4	0	Thunderstorm Winds
			Thunderstorm winds tore off large sections of shingles from a restaurant, downed large trees and branches, and broke power poles.						
Phelps County Holdrege	04	2100CST			0	0	?	?	Thunderstorm Winds
			Many tree limbs were blown down.						
Harlan County Republican City	04	2115CST			0	0	?	?	Hail (0.75)
Clay County Sutton	04	2145CST			0	0	?	?	Flash Flood
			School Creek flooded and damaged roads and trees along its banks.						
Red Willow Marion	04	2145CST			0	0	4	?	Hail (2.75)
			Golf ball- to baseball-size hail fell in and around Marion. Numerous vehicles, house roofs, and siding were damaged.						
Perkins County Venango Grant	06 06	1658MST 1714MST			0 0	0 0	3 3	? ?	Hail (0.75) Thunderstorm Winds (52)
			Dime-size hail fell in and around Venango and dented a few cars. Sixty-mph winds broke large tree limbs off in Grant and a few limbs fell onto cars.						
Perkins County Madrid	06	1730MST			0	0	3	0	Thunderstorm Winds (52)
			Sixty-mph winds broke large trees limbs and damaged a roof.						

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEBRASKA Cont'd

Chase County 12 N Imperial	06	1730MST			0	0	0	?	Hail (0.75) Thunderstorm Winds (52)
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Winds to 60 mph and dime-size hail broke large tree limbs.

Hitchcock County Max	06	1945CST			0	0	0	0	Funnel Cloud
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Hitchcock County Sheriff's Office reported a brief funnel cloud.

Butler County 4 SW David City	07	0130CST			0	0	3	0	Thunderstorm Winds
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Thunderstorm winds destroyed a garage and caused an estimated \$5,000 damage.

Dixon County Concord	09	2245CST			0	0	?	?	Thunderstorm Winds (G61)
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Thunderstorm winds over 70 mph took off part of the roof of a cattle barn at the Dixon County fairgrounds, tossed camping trailers around, and downed trees.

Cedar County Wynot	09	2230CST			0	0	3	?	Thunderstorm Winds
Hartington	09	2255CST			0	0	?	?	Thunderstorm Winds (G52)
Hartington	09	2310CST			0	0	?	?	Hail (1.00)
Hartington	09	2325CST			0	0	2	?	Thunderstorm Winds (G63)

Wayne County Wayne	09	2330CST			0	0	?	?	Thunderstorm Winds
Carroll	09	2349CST			0	0	?	?	Thunderstorm Winds

Knox County Wausa	09	2340CST			0	0	?	?	Thunderstorm Winds
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Pierce County 2 E Osmond	09	2345CST			0	0	?	?	Thunderstorm Winds
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Cuming County Wisner	10	0018CST			0	0	?	?	Thunderstorm Winds
Wisner	10	0035CST			0	0	?	?	Thunderstorm Winds
Wisner	10	0054CST			0	0	?	5	Hail (0.75)

Wayne County 4 W Hoskins	10	0030CST			0	0	?	?	Thunderstorm Winds
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Pierce County 3 W Hoskins	10	0030CST			0	0	?	?	Thunderstorm Winds
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Madison County Norfolk	10	0035CST			0	0	?	?	Thunderstorm Winds
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Stanton County 3 NE Norfolk	10	0035CST			0	0	?	?	Thunderstorm Winds
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A severe thunderstorm swept south across northeastern Nebraska. Large hail damaged some crops. High winds damaged trees and knocked down power lines.

Antelope County Elgin to 5 S Elgin	13	1400CST- 1430CST			0	0	6	?	Hail (1.75)
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Boone County 5 N Petersburg E of Albion Nance Countyline	13	1430CST- 1540CST			0	0	?	6	Hail (1.75)
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A severe thunderstorm produced a 2- to 3-mile-wide path of hail damage from southern Antelope County south through Boone County. Hail depths of up to 5 inches were reported with sizes ranging from pea to golf ball. Damage to corn, soybean, and alfalfa crops was extensive. Estimated crop damage in Antelope and Boone Counties was in excess of \$4 million. Property damage also occurred in Petersburg.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NEBRASKA Cont'd									
Greeley County Greeley	13	1514CST			0	0	?	?	Hail (0.75)
									Large marble-size hail covered the ground, damaged crops and gardens, and broke windows in houses.
Greeley County Wolbach	13	1519CST			0	0	?	?	Hail (1.75)
Logan County 11 W Stapleton	13	1540CST			0	0	3	3	Hail (0.75)
Stapleton to 4 S Stapleton	13	1555CST			0	0	4	4	Hail (1.75)
									Nickel- to golf ball-size hail caused extensive damage to corn and alfalfa crops. Some cars were dented and house windows were broken.
Greeley County Wolbach	13	1630CST			0	0	?	?	Hail (1.75)
									Golf ball-size hail broke windows.
Lincoln County Brady	13	1645CST			0	0	0	0	Hail (0.75)
									Dime-size hail fell with no damage reported.
Lincoln County 15 N to 8 S North Platte	13	1656CST			0	0	5	5	Hail (1.75)
									Dime- to golf ball-size hail fell throughout the area. Numerous automobiles were dented and damaged; roofs, siding, and windows of houses were broken and damaged. Extensive damage occurred to corn and alfalfa fields. Damage to property and crops were both estimated over \$50,000.
Merrick County Palmer	13	1707CST			0	0	?	6	Hail (1.75)
									Golf ball-size hail damaged crops and broke windows. Crop damage around Palmer was estimated near \$2 million.
Merrick County Worms	13	1712CST			0	0	?	?	Hail (1.75)
									Golf ball-size hail destroyed crops, with soybean fields nearly totally destroyed. Hailstones remained on the ground until the next afternoon.
Hall County Doniphan	13	1715CST			0	0	?	?	Hail (1.00)
Hamilton County Hampton	13	1755CST			0	0	?	?	Hail (1.50)
Aurora	13	1800CST			0	0	?	?	Hail (1.75)
									Large hail caused severe crop damage from the Platte River through Aurora to south of Aurora.
Giltner	13	1800CST			0	0	?	?	Hail (1.75)
									Hail started as pea-size, but quickly increased to golf ball-size.
Lincoln County 8 W Wellfleet	13	1820CST			0	0	0	0	Hail (2.75)
									Baseball-size hail fell in open country with no damage reported.
Clay County Clay Center	13	1826CST			0	0	?	?	Hail (0.75)
Hall County Grand Island	13	1831CST			0	0	0	0	Funnel Cloud

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops

NEBRASKA Cont'd

A funnel cloud was spotted by weather service personnel just east of the airport, but did not touch down.

Greeley County Greeley	13	1832CST			0	0	?	?	Hail (0.75)
Frontier County 5 NW Maywood	13	1835CST			0	0	0	0	Hail (1.75)
Ping-Pong ball size hail fell in open country with no damage.									
Hall County 3 NE Grand Island	13	1940CST			0	0	?	?	Hail (1.00)
One-inch hail fell at the Grand Island Airport.									
Clay County 6 E Hastings	13	2026CST			0	0	?	?	Hail (1.75)
Inland	13	2030CST			0	0	?	?	Hail (0.75)
Clay Center	13	2030CST			0	0	?	?	Hail (1.75)
Glenville	13	2032CST			0	0	?	?	Thunderstorm Winds (G56)

Large marble-size hail was 2 to 3 inches deep in Inland. Winds to 65 mph downed power lines and trees in Glenville.

Nuckolls County Superior	13	2120CST			0	0	?	?	Hail (1.00) Thunderstorm Winds
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Hail stripped corn fields. Strong winds tipped over a stock trailer at the airport.

NEVADA

Lincoln County Pioche	05	1210PST			0	0	0	0	Flash Flood
A weather spotter in Pioche reported local flooding in town.									
Nye County 30 SE Tonopah	06	1135PST	?	?	0	0	0	0	Tornado (F0)
A tornado was spotted at the northern end of the Nevada Test Site.									
Clark County Searchlight	06	1202PST			0	0	0	0	Flash Flood
Heavy rains and flash floods were reported in Searchlight by a weather spotter. Over one inch of rain fell in 30 minutes.									
White Pine County Ely	06	1625PST- 06 1730PST			0	0	3	0	Flash Flood
Heavy rains closed several roads in and around Ely due to flooding and mudslides. A few homes in Ely and East Ely received some minor basement flooding.									
Nye County Pahrump	13	1330PST			0	0	0	0	Flash Flood
A weather spotter in Pahrump reported 0.75 inches of rain in 30 minutes.									
Douglas County 10 SE Minden	15	1525PST			0	0	0	0	Flash Flood
Heavy rains washed roads out in Risue Canyon.									
Lander County 25 S Battle Mtn.	15	1848PST			0	0	0	0	Flash Flood
The Lander County Sheriff,s Office reported flooding on Highway 305, south of Battle Mountain.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEVADA Cont'd

Humboldt County Denio	15	1858PST			0	0	0	0	Thunderstorm Winds (G52)
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A weather spotter in Denio reported a 60 mph wind gust from a thunderstorm.

Elko County 30 E Wells	16	1530PST			0	0	?	0	Hail (1.25)
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Several motorists reported 1.00- to 1.50-inch-diameter hail on Interstate 80, 30 miles east of Wells.

Esmeralda County Silverpeak	16	1801PST			0	0	0	0	Flash Flood
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The Deputy Sheriff in Silverpeak reported heavy rain with street flooding.

Esmeralda County Silverpeak	16	1940PST			0	0	0	0	Flash Flood
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Flash flooding was reported on State Route 265 east and west of Silverpeak and on the county road from Silverpeak to Goldfield.

Clark County 4 NE Boulder City	21	1415PST			0	0	0	0	Thunderstorm Winds (G65)
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A Park Service dispatcher reported a thunderstorm wind gust of 75 mph at the Lake Mead National Recreation Area.

Clark County 10 SE Boulder City	21	1805PST			0	0	0	0	Flash Flood
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Heavy rains produced flash flooding in the Lake Mead National Recreation Area.

Clark County Henderson	30	1128PST			0	0	0	0	Flash Flood
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Heavy rain and flooding were reported by the local police department in Henderson.

Clark County Henderson	30	1147PST			0	0	0	0	Thunderstorm Winds (G52)
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Lander County Battle Mountain	30	1745PST			0	0	3	0	Thunderstorm Winds (G55)
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The weather observer in Battle Mountain recorded a 63 mph wind gust. A few homes near the airport received some minor roof damage.

Clark County	30	1823PST			0	0	0	0	Flash Flood
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The Las Vegas Police Department reported flash flooding on State Highway 169 from Overton to Valley of Fire.

NEW HAMPSHIRE

Grafton County Lebanon Hanover	04	1515EST- 1535EST			0	0	?	0	Thunderstorm Winds
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The New Hampshire Department of Transportation reported trees and power lines were down in the western Lebanon area, some of which blocked Route 10. Also, the roadway was blocked by fallen trees at the Mary Hitchcock Medical Center in Hanover.

Hillsborough County Hollis	04	1600EST			0	0	4	0	Lightning
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Lightning struck and destroyed the communications equipment at the Hollis police station.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW JERSEY, Northern

Morris County Chatam	04	1617EST			0	0	?	0	Thunderstorm Winds
Bergen County Lyndhurst	04	1650EST			0	0	?	0	Thunderstorm Winds

A couple of thunderstorms that developed along a cold front generated strong enough winds to down several trees and power lines.

Sussex County Newton	09	1245EST			0	0	?	0	Flash Flood
Passaic County W Milford	09	1315EST			0	0	?	0	Flash Flood
Monmouth County Hazlet	09	1525EST			0	0	?	0	Flash Flood

Torrential rain generated by some isolated thunderstorms produced considerable flooding.

Hunterdon County 3 S White House Station Readington	11	1420EST			0	0	?	0	Thunderstorm Winds
Somerset County Somerville	11	1435EST			0	0	?	0	Thunderstorm Winds
Middlesex County E Brunswick	11	1445EST			0	0	?	0	Thunderstorm Winds
Monmouth County Cliffwood	11	1456EST			0	0	0	0	Funnel Cloud
Somerset County Hillsborough	11	1500EST			0	0	?	0	Thunderstorm Winds
Monmouth County Manalapan	11	1508EST			0	0	0	0	Hail (0.75)
Sea Bright	11	1515EST-			0	0	?	0	Thunderstorm Winds
Fair Haven		1535EST			0	0	?	0	Thunderstorm Winds
Matawan									
Atlantic High- lands	11	1531EST			0	0	?	0	Thunderstorm Winds
Manalapan	11	1537EST			0	0	?	0	Lightning

An assortment of severe weather accompanied some thunderstorms as they moved across northern New Jersey.

Bergen County Garfield	26	1534EST			0	0	?	0	Lightning
Fairlawn	26	1535EST			0	0	0	0	Flash Flood

Torrential rain and intense lightning produced some isolated problems for Bergen County. Several cars were stranded and people trapped when they attempted to cross flooded roadways.

Monmouth County Union Beach Keyport	28	1955EST- 2100EST			0	0	?	0	Flood
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Very high tides and torrential rain lead to considerable flooding along coastal sections of Monmouth County.

NEW JERSEY, Southern

Camden County 1.5 NE Gibbsboro	11	1521EST			0	0	?	0	Hail (0.75)
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Three quarter inch hail was reported.

Atlantic County Hammonton	11	1615EST			0	0	?	0	Thunderstorm Winds (G52)
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Thunderstorm wind gusts to 60 MPH were reported.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW JERSEY, Southern Cont'd

Cumberland County

Vineland	11	1625EST			0	0	3	0	Thunderstorm Winds
Bridgeton	11	1625EST			0	0	3	0	Thunderstorm Winds
Port Norris	11	1625EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts brought down utility lines and tree limbs. A utility pole was down in Vineland.

Camden County

Blackwood	26	1710EST			0	0	?	?	Hail (1.0)
Blackwood	26	1720EST			0	0	?	?	Hail (0.75)
Brooklawn	26	1736EST			0	0	?	?	Hail (1.0)
					0	0	?	0	Thunderstorm Winds (G65)

Thunderstorms dropped marble-to quarter-size hail in Blackwood at 1710 EST and 0.50 to 0.75 inch hail at 1720 EST. Quarter-size hail fell in Brooklawn and wind gusts were estimated at 70 to 80 MPH.

Cumberland County

Fortesque	28	1820EST			0	0	3	0	Thunderstorm Winds
Bridgeton	28	1825EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts brought large tree limbs down. At least one tree was down in Bridgeton.

NEW MEXICO

Bernalillo County

5 SW Albuquerque	02	1640MST			0	0	0	2	Hail (0.75)
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A National Weather Service cooperative observer in Albuquerque's South Valley reported that dime-size hail broke branches off apricot trees.

Hidalgo County

2 N Animas	08	2100MST-			0	0	3	0	Flash Flood
		2145MST			0	0	0	3	Hail (0.75)
2 N Animas	08	2130MST			0	0	3	0	Thunderstorm Winds
Lordsburg	08	2225MST			0	0	3	0	Thunderstorm Winds

Severe thunderstorms caused flash flooding and dumped hail near Animas. Several county roads were closed from 2100 MST to 2145 MST after about two inches of rain fell in the area. A National Weather Service cooperative observer reported dime-size hail at 2130 MST. The storms moved north into Lordsburg, where the police reported strong winds brought down power lines at 2225 MST.

Colfax County

Cimarron	10	1355MST-			0	0	4	0	Flash Flood
		1430MST							

Up to four inches of rain fell in Cimarron, washing railroad ties onto U.S. Highway 64, knocking out two culverts, and flooding at least one house.

Bernalillo County

Albuquerque	11	1600MST			0	0	4	0	Lightning
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Valencia County

Belen	11	1700MST-			0	0	4	0	Flash Flood
		2130MST			0	0	3	0	Hail (1.75)
Belen	11	1710MST			0	0	0	0	Thunderstorm Winds (G65)
1 SE Belen	11	1745MST			0	0	0	0	Thunderstorm Winds (G65)

Bernalillo County

Albuquerque	11	1800MST-			0	0	4	0	Flash Flood
		2200MST							

Socorro County

Socorro	11	1800MST-			0	0	4	0	Flash Flood
		2000MST							

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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NEW MEXICO Cont'd

Lightning struck a Taylor Ranch area house, causing a fire that was confined to the roof and attic. Shortly afterwards, thunderstorms with tropical moisture dumped very heavy rain in the Middle Rio Grande Valley, causing flash flooding in Albuquerque, Belen and Socorro. In Albuquerque, at least six vehicles were overcome by floodwaters (some almost completely submerged); their drivers and occupants had to be rescued. Several main streets were closed for a short time during the evening. At 2200 MST, after the rain had ended, two people had to be rescued from a flooded bridge at Kirtland Air Force Base. In Belen, four to five inches of rain caused two dozen vehicles to be stranded in water as deep as 3 to 4 feet. Several streets were closed and a least three homes were flooded. Golf ball-size hail was reported at 1710 MST, and a radio station's anemometer measured a 65 knot (75 mph) wind gust at 1745 MST. Up to 4 inches of rain fell in Socorro. Floodwaters stranded several vehicles, flooded several homes and a local jail.

Socorro County Socorro

12	1200MST				1	0	0	0	Lightning
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A 42-year-old New Mexico Tech professor was killed by lightning while walking near a dormitory on campus. This incident occurred on a day with very few thunderstorms in the state. Ironically, the victim's wife was employed at the school's lightning research lab. (M420)

Santa Fe County Edgewood

14	1715MST				0	1	0	0	Lightning
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A man was slightly injured after being struck by lightning while he was standing inside his home, next to a glass sliding door.

Curry County 4 NE Cannon Air Force Base

16	1908MST								Funnel Cloud
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A funnel cloud 4 miles northeast of Cannon Air Force Base was reported by the base weather observer.

Colfax County 6 NNW Springer 6 NNW Springer

17	1700MST	0.5	30		0	0	4	3	Tornado (F1)
17	1700MST				0	0	4	4	Hail (1.00)

A tornado northwest of Springer was on the ground for less than 15 minutes. It damaged the roofs of two homes and peeled the aluminum siding off one of them. A telephone pole was pulled out of the ground and trees were stripped of their leaves. Hail damaged buildings, broke windows, killed at least two cows, and shredded over 100 acres of alfalfa and oats.

Eddy County Carlsbad

21	1650MST				0	0	0	0	Thunderstorm Winds (G56)
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A gust to 56 knots (64 mph) was recorded in Carlsbad during a thunderstorm.

Hidalgo County

23	2130MST- 2300MST				0	0	0	0	Flash Flood
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Catron County

24	0015MST- 0115MST				0	0	3	0	Flash Flood
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A National Weather Service cooperative observer reported some arroyos flooded out of their banks east of Animas in Hidalgo County late on the 23rd. A few hours later, a rock/mudslide was reported on U.S. Highway 180, about 5 miles south of Luna in Catron County. Moisture from the remnants of Eastern Pacific Hurricane Lester helped trigger the flooding as it moved north through western New Mexico.

Lea County 15 SE Tatum

31	1212MST				0	0	0	0	Hail (0.75)
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A farmer reported dime-size hail southeast of Tatum, near the Texas state line.

Eddy County Carlsbad Airport Carlsbad Airport Carlsbad

31	1458MST				0	0	3	0	Thunderstorm Winds (G52)
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31	1500MST				0	2	4	0	Hail (2.50)
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31	1520MST- 1630MST				0	0	4	0	Flash Flood
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW MEXICO Cont'd

Carlsbad	31	1535MST			0	0	0	0	Hail (1.75)
1 NE Carlsbad	31	1610MST			0	0	0	0	Hail (0.75)

Afternoon thunderstorms dumped large hail and heavy rain in and around Carlsbad. A wind gust of 52 knots (60 mph) was recorded at the Carlsbad Airport at 1458 MST, breaking a few nearby billboards. Golf ball- to tennis ball-size hail fell at the airport, slightly injuring two people, and damaging numerous cars and at least one jet. In the city of Carlsbad, spotters reported large hail at 1535 MST and 1610 MST. Between three and four inches of rain fell in Carlsbad, flooding many streets and inundating stalled vehicles up to their hoods between 1520 MST and 1630 MST.

Valencia County	31	1623MST			0	0	0	0	Hail (1.75)
11 E Los Lunas	31	1623MST			0	0	0	0	Hail (1.00)
Los Lunas									

The Los Lunas police reported golf ball-size hail fell in Meadow Lake between 1615 MST and 1630 MST, and quarter-size hail in Los Lunas at the same time.

Roosevelt County	31	2300MST			0	0	0	0	Hail (0.75)
3 E Kenna	31	2310MST			0	0	0	0	Hail (1.25)
1 E Kenna									

An early morning thunderstorm became severe in southeast Roosevelt County. The Roosevelt County Sheriff's Office reported dime- to half-dollar-size hail fell east of Kenna.

NEW YORK, Central

Saratoga County	03	2140EST			0	0	3	0	Thunderstorm Winds
Clifton Park									

Thunderstorm winds downed trees in Clifton Park on August 3rd.

Saratoga County	04	1230EST			0	0	3	0	Thunderstorm Winds
Moreau	04	1230EST			0	0	3	0	Thunderstorm Winds
Schuylerville									
Washington County									
Hartford	04	1300EST	1.0	100	0	0	4	3	Tornado (F1)
Hartford	04	1300EST			0	0	0	3	Hail (0.75)
Herkimer County									
Lake Keyser	04	1305EST	0.2	10	0	0	4	0	Tornado (F0)
Dolgeville	04	1305EST			0	0	3	0	Thunderstorm Winds
Fulton County									
Oppenheim	04	1305EST			0	0	3	0	Thunderstorm Winds
Washington County									
Hebron	04	1320EST			0	0	3	0	Thunderstorm Winds
Granville	04	1325EST			0	0	3	0	Thunderstorm Winds
Granville	04	1325EST			0	0	0	0	Hail (0.75)
Albany County									
Ravena	04	1600EST			0	0	0	0	Hail (1.75)
Ulster County									
West Park	04	1605EST			0	0	3	0	Thunderstorm Winds
Rensselaer County									
East Greenbush	04	1615EST			0	0	3	0	Thunderstorm Winds
Columbia County									
Stuyvesant	04	1615EST			0	0	3	0	Thunderstorm Winds
Dutchess County									
Rhinebeck	04	1620EST			0	0	3	0	Thunderstorm Winds

Severe thunderstorms developed across eastern New York ahead of a cold front which moved southeast from the Saint Lawrence Valley on the morning of August 4th. The severe thunderstorms spawned two tornadoes, the first touched down in Hartford in Washington County and the second along Lake Keyser in Herkimer County. The tornado in Hartford took part of the roof off the Hartford Town Barn and uprooted or twisted off many trees some of which landed on homes. Crop damage also occurred in the area from the tornado and the hail which accompanied the storm. In Herkimer County a small, short-lived tornado downed trees and damaged homes and docks along the west shore of Lake Keyser. The remainder of the damage reported from the severe

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW YORK, Central Cont'd

thunderstorms consisted of downed trees, large tree limbs and powerlines.

Ulster County Phoenicia	09	1225EST			0	0	3	0	Thunderstorm Winds
Greene County Coxsackie	09	1554EST			0	0	3	0	Thunderstorm Winds
Dutchess County East Fishkill	09	1600EST			0	0	4	0	Thunderstorm Winds
Pawling	09	1600EST			0	0	4	0	Thunderstorm Winds
Holmes	09	1600EST			0	0	3	0	Thunderstorm Winds

A low pressure system in the eastern Great Lakes pushed a warm front into eastern New York on the morning of August 9th. Severe thunderstorms developed across portions of the area that afternoon with southern Dutchess County receiving the brunt of the damage. In East Fishkill, three homes were damaged when trees fell on powerlines attached to the homes and a chimney was also toppled from one of the homes. In Pawling and Holmes downed trees blocked roads, knocked out electricity, and toppled onto homes and cars.

Cortland County Cortlandville	11	0430EST			0	0	3	0	Thunderstorm Winds
Cortland	11	0430EST			0	0	4	0	Thunderstorm Winds

Severe thunderstorms developed out ahead of a cold front which moved through central New York during the early morning hours of August 11th. In Cortland County fallen trees, branches, and wires were reported in Cortland and Cortlandville. One home in Cortland sustained minor damage, but no one was injured.

Ulster County Kerhonkson	25	1345EST			0	0	3	0	Thunderstorm Winds
Saratoga County Schuylerville	25	1600EST			0	0	3	0	Thunderstorm Winds (G65)
Sullivan County Yulan	25	1610EST			0	0	3	0	Thunderstorm Winds

Thunderstorm winds downed trees in Kerhonkson and Schuylerville. In Yulan thunderstorm winds also downed trees and tree limbs.

Warren County Lake George	27	1400EST			0	0	2	0	Thunderstorm Winds
Montgomery County Palatine Bridge	27	1730EST			0	0	2	0	Thunderstorm Winds
Fulton County Ephratah	27	1750EST			0	0	3	0	Thunderstorm Winds
Caroga Lake	27	1815EST			0	0	3	0	Thunderstorm Winds

Severe thunderstorms developed in the Mohawk Valley ahead of a cold front which stalled in the Saint Lawrence Valley on August 27th.

Thunderstorm winds downed trees in Palatine Bridge, Ephratah and Caroga Lake as well as in the Village of Lake George.

Tioga County Campville	28	1915EST			0	0	3	0	Thunderstorm Winds
Cortland County Cortland	28	2015EST			0	0	4	0	Thunderstorm Winds
Homer	28	2025EST			0	0	3	0	Thunderstorm Winds
Broome County 7 SE Binghamton	28	2030EST			0	0	3	0	Thunderstorm Winds
Cortland County Cuyler	28	2045EST			0	0	3	0	Thunderstorm Winds
Marathon	28	2045EST			0	0	2	0	Thunderstorm Winds
NYZ010-018-019 Eastern Mohawk Valley, Catskills and Western	28	2100EST- 2200EST			0	0	3	0	High Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NEW YORK, Central Cont'd									
Adirondacks									
Chenango County									
Smithville	28	2115EST			0	0	3	0	Thunderstorm Winds
Flats									
Broome County									
Binghamton	28	2115EST			0	0	3	0	Thunderstorm Winds
Otsego County									
Schuyler Lake	28	2159EST			0	0	3	0	Thunderstorm Winds
Delaware County									
Andes	28	2200EST			0	0	3	0	Thunderstorm Winds
Herkimer County									
Dolgeville	28	2255EST			0	0	3	0	Thunderstorm Winds
Montgomery County									
Fonda	28	2320EST			0	0	3	0	Thunderstorm Winds
Schenectady County									
Glenville	29	0020EST			0	0	3	0	Thunderstorm Winds
Saratoga County									
Halfmoon	29	0040EST			0	0	3	0	Thunderstorm Winds
Albany County									
Selkirk	29	0045EST			0	0	3	0	Thunderstorm Winds
Cohoes	29	0045EST			0	0	3	0	Thunderstorm Winds
Rensselaer County									
Rensselaer	29	0053EST			0	0	4	0	Thunderstorm Winds
Melrose	29	0100EST			0	0	3	0	Thunderstorm Winds

Severe thunderstorms moved across parts of eastern New York during the evening of August 28th and during the early morning hours of August 29th. The severe thunderstorms developed ahead of a cold front which swept southeast across the region from the Saint Lawrence Valley. Damage was primarily confined to downed trees and powerlines. However, in the City of Rensselaer a 20- by 35-foot section of siding was blown off of the Amtrack Wheel Barn.

Schenectady County									
Schenectady	30	1545EST			0	0	3	0	Lightning

A lightning strike was to blame for a power outage that affected 4,200 customers on the afternoon of August 30th. The bolt of lightning knocked out transformers in the Front Street area.

NEW YORK, Coastal

Orange County									
Greenwood Lake	04	0430EST			0	0	4	0	Thunderstorm Winds
Rockland County									
Haverstraw	04	0523EST			0	0	0	0	Hail (1.00)
Mt. Ivy	04	0526EST			0	0	0	0	Hail (0.75)
Westchester County									
Montrose	04	0530EST			0	0	0	0	Thunderstorm Winds (G52)
Putnam County									
Lake Carmel	04	0531EST			0	1	?	0	Lightning
Queens County									
5 N LaGuardia Airport	04	1700EST			0	0	0	0	Waterspout

An unstable airmass ahead of a cold front produced a small but powerful group of thunderstorms across the area this morning. A microburst from one of these storms caused considerable damage in Greenwood Lake. In Lake Carmel, a woman was injured when struck by lightning while opening an umbrella. Later in the day the passage of the cold front generated a waterspout just north of LaGuardia Airport.

Orange County									
Unionville	09	1215EST			0	0	?	0	Lightning
Westchester County									
Scarsdale	09	1445EST			0	0	0	0	Hail (0.75)
Mamoroneck	09	1445EST			0	0	?	0	Flash Flood

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

NEW YORK, Coastal Cont'd

Torrential rain and hail was generated by a short line of thunderstorms that moved through during the early afternoon hours. In Unionville, a home was damaged when it was struck by lightning.

Orange County Middletown	11	1240EST			0	0	0	0	Hail (0.75)
Putnam County Mahopac	11	1330EST			0	1	?	0	Lightning
Rockland County Nanuet	11	1423EST			0	0	0	0	Hail (1.00)
Westchester County Countywide	11	1445EST			0	0	?	0	Thunderstorm Winds
N Salem	11	1445EST			0	0	?	0	Lightning
Richmond County	11	1455EST			0	0	0	0	Thunderstorm Winds (G52)
Rockland County New City	11	1519EST			0	0	?	0	Lightning
Nassau County	11	1540EST			0	0	?	0	Thunderstorm Winds
Suffolk County Huntington	11	1600EST			0	0	?	0	Thunderstorm Winds
Republic Airport	11	1610EST			0	0	0	0	Thunderstorm Winds (G55)
Northport	11	1620EST			0	0	0	0	Flash Flood
Bethpage	11	1625EST			0	1	0	0	Lightning
Bohemia	11	1629EST			0	0	0	0	Thunderstorm Winds (G55)
Countywide	11	1702EST- 1730EST			0	0	?	0	Thunderstorm Winds

Severe weather developed across the area in response to a cold front moving into very unstable air. Numerous trees and power lines were downed by strong winds. Hail was observed at several locations but no damage was reported. Torrential rain also caused some flooding problems in Northport as Main Street turned quickly into a rushing stream. Lightning was also quite intense with this system as several homes were substantially damaged after being struck. At the Bethpage Golf Course, a golfer was injured by a nearby lightning strike and in Mahopac, a man was struck as he mowed his lawn.

Westchester County New Rochelle Pelham	18	0000EST			0	0	?	0	Flash Flood
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Locally heavy rain of around two inches produced some quick flooding across Westchester county. Many cars were reported stranded as they attempted to cross flooded roadways.

Orange County West Point	28	2130EST			0	0	?	0	Thunderstorm Winds
Suffolk County N Babylon	28	2153EST			0	0	?	0	Thunderstorm Winds

A small low pressure area, the remnants of Hurricane Andrew, generated some isolated but damaging thunderstorms.

NEW YORK, Western

Oswego County	04	1120EST			0	0	4	0	Flash Flood
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Thunderstorms with heavy downpours moved across Oswego County. The grounds were already saturated from three to four inches of rain on the previous days. Numerous creeks and small streams overflowed their banks. Reports of roads being impassable due to flooding were received from across the county.

Niagara County Youngstown	04	1630EST			0	0	4	0	Hail (1.00)
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An isolated thunderstorm moved on shore from Lake Ontario producing one inch hail. The hail accumulated to near six inches deep in some spots.

Chautauqua County Ripley	08	1640EST			0	0	4	0	Hail (1.75)
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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NEW YORK, Western Cont'd

Cattaraugus County									
Little Valley	08	1753EST			0	0	4	0	Thunderstorm Winds
Humphrey	08	1825EST			0	0	4	0	Thunderstorm Winds
Ischua	08	1855EST			0	0	4	0	Thunderstorm Winds
Allegany County									
Cuba	08	1900EST			0	0	4	0	Thunderstorm Winds
Chautauqua County									
Jamestown	08	1915EST			0	0	4	0	Thunderstorm Winds
Fluvana	08	1922EST			0	0	4	0	Thunderstorm Winds
Cattaraugus County									
Portville	08	2000EST			0	0	4	0	Flash Flood
Allegany County									
Bolivar	08	2025EST			0	0	4	0	Thunderstorm Winds
Chautauqua County									
	08	2030EST			0	0	4	0	Flash Flood

Low pressure tracked east across the Upper Great Lakes and Southern Ontario bringing a southerly flow of warm, moist, unstable air to the region. The thunderstorms which developed not only produced torrential downpours but damaging winds and large hail. Downed trees, power lines and scattered power outages were reported across the area. The heavy rains, up to two inches in one hour, resulted in flash flooding in some places. In Jamestown, the water rose to near one foot deep and left six inches of mud upon receding.

Erie County									
Lancaster	10	2040EST			0	0	4	0	Thunderstorm Winds
Orleans County									
Carlton	10	2110EST			0	0	4	0	Hail (0.75)
Wayne County									
Williamson	10	2115EST			0	0	4	0	Thunderstorm Winds
Monroe County									
Webster	10	2120EST			0	0	4	0	Thunderstorm Winds
Gates	10	2125EST			0	0	4	0	Lightning
Jefferson County									
Adams	10	2159EST			0	0	4	0	Thunderstorm Winds
Wyoming County									
Gainseville	10	2340EST			0	0	4	0	Thunderstorm Winds

A cold front accompanied by severe thunderstorms crossed Western and Central New York during the late evening hours. The thunderstorms downed trees and power lines resulting in scattered power outages. In Williamson, the roof was ripped off a barn. A lightning strike ignited the roof of a home in Gates, Monroe County.

Steuben County									
Painted Post	28	1800EST			0	0	4	0	Thunderstorm Winds
Chemung County									
Elmira	28	1915EST			0	0	4	0	Thunderstorm Winds
Schuyler County									
Odessa	28	1930EST			0	0	4	0	Thunderstorm Winds
Tompkins County									
Dryden	28	1930EST			0	0	4	0	Thunderstorm Winds

Thunderstorms developed ahead of a cold front during the evening hours. The thunderstorm winds downed trees and wires which resulted in scattered power outages.

Cayuga County									
	28	2330EST			0	0	4	0	Flash Flood

Thunderstorms dumped heavy rains over already saturated ground producing flash floods. In Fairhaven, Crane Road was washed out. In Port Byron, small streams overflowed and drainage flooding was reported.

NORTH CAROLINA

Columbus County									
Cerro Gordo	04	1440EST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NORTH CAROLINA Cont'd									
Strong winds ripped the roof off a mobile home and destroyed a storage shed in this community 12 miles west of Whiteville. Damage was estimated at \$12,500.									
Wayne County Southern Portion	05	1735EST			0	0	0	0	Thunderstorm Winds
Greene County Snow Hill	05	1755EST			0	0	0	0	Hail (1.00)
Carteret County Over Atlantic Coastal Waters	06	1025EST			0	0	0	0	Waterspout
Vance County Henderson	09	1410EST			0	0	4	0	Lightning
Lightning and the resultant fire destroyed a storage building.									
Cumberland County Spring Lake	09	1740EST			0	0	4	0	Lightning
Lightning and resultant fires destroyed a mobile home and damaged a house.									
Brunswick County Shalotte	10	0200EST			0	0	5	0	Lightning
One home was destroyed by lightning and the resultant fire.									
Buncombe County Candler	11	1315EST			0	0	0	0	Thunderstorm Winds
Near Asheville	11	1745EST			0	0	0	0	Thunderstorm Winds
Alamance County 7 E Burlington	11	2200EST			0	0	0	0	Thunderstorm Winds
Guilford County 2 W Greensboro	11	2210EST			0	0	0	0	Thunderstorm Winds
Person County 8 W Roxboro	11	2220EST			0	0	0	5	Thunderstorm Winds
Wind blew trees and crops down near Olive Hill. Damage to the tobacco crop was estimated at \$100,000.									
Guilford County 10 NE Greensboro	11	2226EST			0	0	0	0	Thunderstorm Winds (G57) Hail (1.75)
Orange County White Cross	11	2228EST			0	0	0	0	Thunderstorm Winds
5 N Chapel Hill	11	2250EST			0	0	0	0	Thunderstorm Winds
Washington County 22 E Plymouth	12	1330EST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds downed trees and damaged roofs and buildings.									
Cleveland County Casar	12	1411EST			0	0	3	0	Thunderstorm Winds
Winds caused roof damage to several homes and a school and blew out windows at three businesses.									
Wilson County Western Portion	12	1420EST- 1445EST			0	0	0	0	Thunderstorm Winds Hail (0.75)
Lincoln County Denver	12	1451EST			0	0	0	0	Thunderstorm Winds
Cumberland County 5 S Fayetteville	12	1454EST			0	0	0	0	Thunderstorm Winds (G58)
Columbus County 17 S Whiteville	12	1515EST			0	0	3	0	Thunderstorm Winds
Part of a mobile home roof was blown off and a tree was blown down.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NORTH CAROLINA Cont'd									
Pitt County Ayden	12	1515EST			0	0	0	0	Thunderstorm Winds
Lincoln County 3 W Denver	12	1518EST			0	0	3	0	Thunderstorm Winds
Trees were blown down, one atop a mobile home, another on a house.									
Sampson County 4 E Garland	12	1530EST			0	0	0	0	Thunderstorm Winds
Wayne County Goldsboro	12	1530EST			0	0	4	0	Lightning
Lightning caused structural damage to three homes.									
Chatham County Harpers Crossroads	12	1535EST			0	0	0	0	Hail (0.75)
Duplin County Warsaw	12	1630EST			0	0	3	0	Lightning
Lightning caused structural damage to a house.									
Wake County 5 NE Rolesville	12	1630EST			0	0	2	0	Thunderstorm Winds
Thunderstorm winds ripped shutters off a house and downed large tree limbs.									
Franklin County Central	12	1715EST			0	0	0	0	Thunderstorm Winds
Dare County Manteo	13	2210EST			0	0	0	0	Thunderstorm Winds
Onslow County Richlands	14	1630EST			0	0	3	0	Thunderstorm Winds
A turkey house was destroyed by thunderstorm winds.									
Carteret County Bogue Sound	14	1844EST			0	0	0	0	Waterspout
Bladen County 5 N Rowan	15	0259EST			0	0	0	0	Thunderstorm Winds
Currituck County Bells Island 4 SE Currituck	15	0710EST	0.8	70	0	0	4	0	Tornado (F1)
Two small houses were destroyed, two mobile homes overturned, a store building was damaged, and trees broken off and uprooted.									
Knotts Island 10 NE Currituck	15	0720EST	0.5	30	0	0	3	0	Tornado (F0)
Windows were shattered in homes and at an elementary school, a shed was destroyed, and trees were broken off and twisted.									
Brunswick County 1 S Ocean Isle	15	0720EST			0	0	0	0	Waterspout
Eastern North Carolina	16- 28				0	0	6	6	Flood

A cold front stalled over eastern North Carolina August 12th and lingered for 8 days before moving out on August 20th. Tropical moisture flowing northward from the eastern Gulf of Mexico and off the Atlantic Ocean clashed with the front to produce between 8 and 15 inches of rain over a broad area in the coastal plain and coastal areas during the eight day period. This produced widespread flooding in Wayne, Wilson, Lenoir, Hertford, Bertie, Martin, Pitt, Pender, Duplin, Sampson, Bladen, and Columbus Counties. Many streams and creeks in the area experienced the worst flooding in over 40 years. However, there were no reports of injuries or deaths associated with the flooding.

Pender County reported the greatest amount of damages with 75 homes being flooded and damage estimated at about \$1 million. Duplin County had about \$100,000 of property damage, including

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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NORTH CAROLINA Cont'd

the drowning of about 12,000 chickens on one farm. In Hertford County, about 30 homes were flooded and Potecasi and Ahoskie Creeks had stage and discharge readings comparable to floods with 50- to 75-year recurrence intervals. On the 21st, the Northeast Cape Fear River at Chinquapin in Duplin County reached its highest level since July 1962 at 20.16 feet.

Numerous roads and bridges throughout the area were undermined by floodwaters. Agricultural producers were kept out of their fields for two weeks and fields of vegetables rotted because they could not be harvested and taken to market. Hardest hit crops were tobacco, cotton, and corn.

Buncombe County 4 NW Asheville

17	0730EST				0	0	4	0	Flash Flood
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Over two inches of rain in a short period of time over steep terrain in the Erwin Hills section northwest of Asheville flooded creeks and caused \$30,000 damage to nine homes, and one bridge was also damaged.

Macon County Southern Portion Transylvania County Henderson County Avery County

	27	1900EST			0	0	0	0	Thunderstorm Winds
	27	1900EST			0	0	4	0	Thunderstorm Winds
	27	1910EST			0	0	3	0	Thunderstorm Winds
	28	0000EST			0	0	0	0	Thunderstorm Winds

Remnants of Hurricane Andrew moved across the North Carolina mountains late on the 27th and early on the 28th. Associated thunderstorms produced high winds that knocked down trees and power lines at several locations in the mountains. Some of the trees fell atop houses, but no injuries had been reported.

Greene County Western Portion

	28	1410EST- 1430EST			0	0	0	0	Thunderstorm Winds
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Lenoir County 10 SW Kinston

	28	1455EST			0	0	0	0	Thunderstorm Winds
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Pitt County 6 E Greenville 10 S Greenville

	28	1501EST			0	0	3	0	Thunderstorm Winds (G65)
	28	1510EST			0	0	3	0	Thunderstorm Winds

In both locations, winds caused damage to structures and outbuildings.

Pasquotank County Elizabeth City

	28	1635EST			0	0	0	0	Thunderstorm Winds (G50)
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NORTH DAKOTA

Benson County 30 NW Oberon

	02	1710CST			?	?	?	?	Funnel Cloud
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Stutsman County Pingree

	06	1545CST			0	0	4	4	Hail (1.00)
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Bottineau County Lansford

	08	1827CST			0	0	0	0	Hail (0.75)
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Trail County Mayville

	22	2055CST			0	0	4	4	Thunderstorm Winds (G58)
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Wind gusts to 67 mph were measured in the Mayville and Portland area. The winds uprooted trees 3 feet in diameter, and branches 1 foot in diameter were broken off the trees. The tree damage was extensive in both towns. The winds also blew down power lines and a large barn.

Mountrail County 5 W Stanley

	28	2050CST			0	0	0	0	Thunderstorm Winds (G52)
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OHIO

Marion County Prospect

	02	1000EST-			0	0	1	2	Flood
	03	1400EST							

The Scioto River hovered at the flood stage of 9 feet.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
OHIO Cont'd									
Summit County Canton-Akron Arpt	03	2255EST			0	0	4	0	Thunderstorm Winds (G51)
Stark County North Canton	03	2315EST			0	0	4	0	Flash Flood
A thunderstorm produced both high winds and enough rain to cause street flooding.									
Trumbull County Lordstown	08	1710EST			0	0	4	0	Thunderstorm Winds
Ashtabula County Andover	08	1715EST			0	0	4	0	Thunderstorm Winds
Wayne County NE Sections	08	1715EST			0	0	4	0	Flash Flood
Thunderstorms downed trees and caused street flooding.									
Stark County North Canton	08	1730EST			1	0	0	0	Lightning
A man was fatally injured by lightning while working on a roof. (M310)									
Portage County Deerfield	08	1745EST			0	0	4	0	Flash Flood
Summit County Western Akron	08	1745EST			0	0	4	0	Flash Flood
Mahoning County 3 E Youngstown	08	1755EST			0	0	4	0	Thunderstorm Winds
Stark County County Wide	08	1800EST-			0	0	5	0	Flash Flood
Stark County County Wide	08	2030EST			0	0	4	0	Thunderstorm Winds
Stark County County Wide	08	1830EST			0	0	4	0	Thunderstorm Winds
Summit County County Wide	08	1845EST			0	0	4	0	Thunderstorm Winds
Thunderstorms caused street flooding at several locations, with the worst problems being in Stark County. The thunderstorms also felled trees at several locations.									
Licking County 2 E Saint Louisville	08	1845EST	0.2	30	0	0	4	0	Tornado (F0)
A small tornado destroyed trees and utility lines.									
Hamilton County County Wide	10	0655EST-			0	0	4	0	Flash Flood
Warren County County Wide	10	0845EST			0	0	4	0	Flash Flood
Clermont County County Wide	10	0730EST-			0	0	4	0	Flash Flood
Clinton County County Wide	10	0915EST			0	0	4	0	Flash Flood
Clinton County County Wide	10	0800EST-			0	0	4	0	Flash Flood
Clinton County County Wide	10	0900EST			0	0	4	0	Flash Flood
Clinton County County Wide	10	0800EST-			0	0	4	0	Flash Flood
Clinton County County Wide	10	0900EST			0	0	4	0	Flash Flood
Morning thunderstorms flooded roads.									
Geauga County County Wide	10	1755EST			0	0	5	0	Thunderstorm Winds
Geauga County County Wide	10	1800EST-			0	0	4	0	Flash Flood
Geauga County County Wide	10	2100EST			0	0	4	0	Flash Flood
Geauga County 3 S Burton	10	2108EST			0	0	4	0	Thunderstorm Winds
Cuyahoga County Seven Hills	10	2140EST			0	0	4	0	Thunderstorm Winds
Erie County County Wide	10	2250EST			0	0	4	0	Thunderstorm Winds
Portage County County Wide	10	2310EST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
OHIO Cont'd									
Lorain County Lorain Harbor	10	2330EST			0	0	4	0	Thunderstorm Winds (G53)
Cuyahoga County Downtown Cleveland	10	2348EST			0	1	5	0	Thunderstorm Winds (G65)
Columbiana County South Half	11 11	0000EST- 0200EST			0	0	5	0	Flash Flood
Thunderstorms brought both high winds and heavy rains. Tree damage and road flooding were widespread. Several structures suffered wind damage in Geauga County, a man was injured by a falling tree in Cleveland, and several roads in Columbiana County were at least partially washed out.									
Lorain County County Wide	26 26	1715EST- 1915EST			0	0	4	0	Flash Flood
Miami County Tipp City	26	2022EST			0	0	4	0	Thunderstorm Winds
Thunderstorms caused street flooding in Lorain County and destroyed trees in Miami County.									
Butler County 2 SE Hamilton	27	1300EST			0	0	4	0	Thunderstorm Winds
Lawrence County Portsmouth	27	1310EST			0	0	4	0	Thunderstorm Winds
Hamilton County Northern Half	27	1325EST			0	0	4	0	Thunderstorm Winds
Auglaize County 1 NE Wapakoneta	27	1352EST			0	0	3	5	Hail (2.75)
Butler County Hamilton-Fairfield	27	1508EST			0	0	4	0	Thunderstorm Winds
Thunderstorms downed trees and utility lines, and also produced large hail. About 2,000 acres of crops were nearly wiped out by hail in Auglaize County.									
Ashland County Loudonville	27	1519EST	Short	50	0	0	4	0	Tornado (F0)
A small tornado damaged trees, utility lines, and some structures.									
Hancock County 1 E Vanlue	27	1530EST			0	0	2	3	Hail (1.00)
Wyandot County Upper Sandusky-Nevada	27	1600EST			0	0	4	0	Thunderstorm Winds
Crawford County 7 W Chatfield	27	1618EST			0	0	3	0	Thunderstorm Winds
Thunderstorms damaged trees and utility lines in Crawford and Wyandot Counties, and produced quarter sized hail in Hancock County.									
Franklin County 15 NNW Columbus	27	1650EST	1.0	50	0	0	4	0	Tornado (F0)
A tornado tore down trees and utility lines, and damaged the roof of a business.									
Cuyahoga County County Wide	27 27	1715EST- 1815EST			0	0	5	0	Flash Flood
Lorain County County Wide	27	1715EST-			0	0	5	0	Flash Flood
Lorain County Penfield	27	1717EST			0	0	1	1	Hail (0.75)
Geauga County County Wide	27 28	2127EST- 0030EST			0	0	4	0	Flash Flood
Lake County County Wide	27 28	2127EST- 0030EST			0	0	4	0	Flash Flood
Thunderstorms caused considerable street flooding. Basement flooding also occurred in Cuyahoga and Lorain Counties. Dime sized hail was observed in Lorain County.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
OHIO Cont'd									
Erie County Sandusky	30	1049EST			0	0	1	0	Hail (0.75)
Lake County Painesville	30	1109EST			0	1	0	0	Lightning
Geauga County South Russel	30	1124EST			0	0	2	0	Hail (1.75)
Ashtabula County Jefferson	30	1128EST			0	0	1	0	Hail (0.75)
Cuyahoga County North Royalton	30	1130EST			0	0	2	0	Hail (0.75)
Summit County Brecksville	30	1130EST			0	0	2	0	Hail (1.00)
Geauga County 4 S Chardon	30	1139EST			0	0	2	1	Hail (1.75)
Portage County Kent	30	1230EST			0	0	2	0	Hail (1.75)

Thunderstorms produced dime to golfball sized hail at scattered spots in northeast Ohio. A 6 year old boy suffered minor injuries as he was struck by lightning while climbing a fence in Painesville.

OKLAHOMA

McClain County 6 W Purcell	01	1335CST			0	0	?	?	Thunderstorm Winds (G52)
Jefferson County 2 E Grady	01	1622CST			0	0	?	?	Thunderstorm Winds (G61)
Love County Simon	01	1630CST			0	0	?	?	Hail (0.75)
Alfalfa County 1 W Burlington	01	1705CST			0	0	?	?	Hail (1.00)
Atoka County Farris	01	1730CST			0	0	?	?	Hail (0.75)
Caddo County Carnegie	01	1735CST			0	0	?	?	Hail (0.75)
Pushmataha County Antlers	01	1745CST			0	0	?	?	Thunderstorm Winds
Woods County Alva	01	1755CST			0	0	?	?	Hail (0.75)
Kiowa County 6 E Mountain View	01	1830CST			0	0	?	?	Hail (1.75)
8 S to 2.8 E Mountain View	01	1900CST			0	0	?	?	Hail (0.75)
Washita County 3.5 S Cowden	01	1905CST			0	0	?	?	Hail (0.75)
Caddo County Carnegie	01	1905CST			0	0	?	?	Hail (0.75)
Woodward County Alabaster Caverns	01	2045CST			0	0	?	?	Hail (0.88)
8 N to 2 W Woodward	01	2140CST			0	0	?	?	Hail (1.50)
Boiling Springs State Park	01	2204CST			0	0	?	?	Hail (0.75)
Woodward	01	2225CST			0	0	?	?	Hail (1.00)

Severe thunderstorms were widely scattered across southeastern, central, southwestern, and northwestern Oklahoma. High winds from a severe thunderstorm downed trees at Antlers, and hail up to golf ball-size was reported.

Pittsburg County 3 S Savanna	02	1610CST			0	0	?	?	Hail (0.88)
2 NNE to 0.5 W Pittsburg	02	1610CST			0	0	?	?	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

OKLAHOMA Cont'd

1 E Kiowa Latimer County	02	1620CST			0	0	?	?	Thunderstorm Winds
Near Damon Atoka County	02	1625CST			0	0	?	?	Hail (0.75)
Farris Pushmataha County	02	1730CST			0	0	?	?	Hail (0.75)
Antlers	02	1745CST			0	0	?	?	Thunderstorm Winds

Isolated severe thunderstorms developed in Pittsburg and Latimer Counties of southeastern Oklahoma during the late afternoon of August 2nd. Damaging winds occurred in Pittsburg County in a northeast to southwest oriented path from 2 miles north of Pittsburg to 0.5 miles west of Pittsburg. In this area a storage building was overturned, an awning was blown off a mobile home, and a batting cage was blown down at Pittsburg High School. A barn also received substantial damage in this area, and three homes suffered minor shingle damage. Thunderstorm winds also downed trees and power lines and caused substantial damage to a barn just east of Kiowa. Large hail also accompanied the storms, with nickel-size hail 3 miles south of Savanna and dime-size hail near Damon.

Severe thunderstorm winds downed power lines in Antlers.

Nowata County S Coffeyville Ottawa County	03	1200CST			0	0	?	?	Thunderstorm Winds
Afton	03	1245CST			0	0	?	?	Thunderstorm Winds (G52)
Miami	03	1246CST			0	0	?	?	Thunderstorm Winds (G52)
Mayer County Adair	03	1258CST			0	0	?	?	Thunderstorm Winds (G52)
Delaware County Bernice	03	1300CST			0	0	?	?	Thunderstorm Winds
Tulsa County Owasso	03	1300CST			0	1	3	?	Lightning
Mayer County 6 SW Choteau	03	1340CST			0	0	?	?	Thunderstorm Winds (G59)

Severe thunderstorms moved across northwestern, central, and much of eastern Oklahoma during the afternoon of August 3rd producing damaging winds at several locations. Thunderstorm winds gusting to 60 mph downed numerous trees and power lines at Miami, and large tree limbs were blown down at South Coffeyville and Bernice. Thunderstorm winds gusted to 65 to 70 mph, 6 miles southwest of Choteau, with 60-mph winds at both Adair and Afton. In Owasso lightning struck a tree causing the tree to explode. A 16-year-old girl who was 30 feet away was injured by flying bark. The debris broke windows in front of the house.

Creek County Sapulpa	03	2328CST			0	0	?	?	Hail (0.88)
Noble County Lucien	03	2350CST			0	0	?	?	Thunderstorm Winds
Pawnee County Maramec	03	2358CST			0	0	?	?	Hail (0.88)
Garfield County Kremlin	04	0015CST			0	0	?	?	Hail (0.75)
Grant County 1 S Bison	04	0020CST			0	0	?	?	Hail (0.75)
Osage County 1 S Fairfax	04	0215CST			0	0	?	?	Hail (0.75)
Payne County Lake Carl Blackwell	04	0250CST			0	0	?	?	Flash Flood
Noble County Southwestern Portion	04	0300CST			0	0	?	?	Flash Flood

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

OKLAHOMA Cont'd

Garfield County Enid	04	0300CST- 0500CST			0	0	4	?	Flash Flood
Tulsa County Turley	04	0330CST			0	0	?	?	Hail (0.88)
Grant County 4 S 1 W Pond Creek	04	0400CST			0	0	?	?	Flash Flood
<p>Severe thunderstorms developed in north-central and northeastern Oklahoma during the late evening of August 3rd and early morning of August 4th. These storms produced dime- to nickel-size hail at Sapulpa, at Maramec, at Turley, and 1 mile south of Fairfax. Thunderstorm winds also downed a tree 1 mile south of Fairfax, and trees were downed in Lucien.</p> <p>The thunderstorms triggered a round of flash flooding across north-central and northwestern Oklahoma. High water at Lake Carl Blackwell topped the spillway and caused flash flooding downstream, mainly to roadways. In Southwestern Noble County, five to six inches of rain flooded streams. Portions of Highway 77 were flooded. A man who attempted to drive across a flooded roadway in Noble County was washed off the roadway and had to be rescued. In the area from Enid to Covington rainfall in excess of 3.50 inches of rain fell, washing out numerous culverts south of Enid Woodring Airport, and flooding the Garfield County Courthouse. Many homes and businesses reported flooding in Covington. South and west of Pond Creek, homes were reported isolated by the high water.</p>									
Roger Mills County 4 W Reydon	04	1810CST			0	0	?	?	Hail (1.00)
Pittsburg County 8 S McAlester	04	2010CST			0	0	?	?	Hail (1.75)
Pittsburg County 5 SW McAlester	04	2025CST			0	0	?	?	Hail (1.00)
Muskogee County 3 W Muskogee	04	2045CST			0	0	?	?	Hail (0.75)
Pittsburg County Near Savanna	04	2100CST			0	0	?	?	Hail (0.88)
Kingfisher County 14 SE Hennessey	04	2200CST			0	0	?	?	Hail (0.75)
Pittsburg County 4 N Bache	04	2217CST			0	0	?	?	Hail (0.75)
Lincoln County 10 W Tyrone	04	2222CST			0	0	?	?	Hail (1.00)
Lincoln County 1 N Chandler	04	2227CST			0	0	?	?	Hail (0.88)
Okfuskee County 2 E Okemah	04	2230CST			0	0	?	?	Hail (0.88)
Hughes County 6 S to 2 W Dustin	04	2230CST			0	0	?	?	Hail (1.50)
Hughes County 6 S 2 W Dustin	04	2230CST			0	0	?	?	Thunderstorm Winds
Lincoln County 11 N Chandler	04	2230CST			0	0	?	?	Hail (1.00)
Pittsburg County Bache	04	2255CST			0	0	?	?	Hail (1.75)
Pittsburg County 7 E McAlester	04	2300CST			0	0	?	?	Hail (2.75)
Pittsburg County Hartshorne	04	2315CST			0	0	?	?	Hail (1.75)
Haskell County Lequire	04	2340CST			0	0	?	?	Thunderstorm Winds (G52)
McIntosh County 3 W Eufala	05	0000CST			0	0	?	?	Hail (0.88)
Okfuskee County Weleetka	05	0000CST			0	0	?	?	Thunderstorm Winds (G52)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
OKLAHOMA Cont'd									
Lincoln County 4 S Chandler	05	0000CST			0	0	?	?	Hail (0.75)
Lincoln County Northeastern Portion	05	0130CST			0	0	?	?	Flash Flood
Okmulgee County Henryetta Dewar	05	0200CST- 1200CST			0	0	7	?	Flash Flood
Pawnee County 5 W Maramec	05	0230CST			0	0	?	?	Hail (0.75)
Kay County 7.5 W Tonkawa	05	0130CST			0	0	?	?	Hail (1.00)
Tulsa County S Tulsa	05	0230CST			0	0	?	?	Hail (0.88)
Payne County 5 E Glencoe	05	0245CST			0	0	?	?	Hail (1.00)
Kay County 3 SE Tonkawa	05	0300CST			0	0	?	?	Hail (1.25)
Tulsa County S Tulsa	05	0301CST			0	0	?	?	Hail (0.75)
Alfalfa County 4.8 W Burlington	05	0315CST			0	0	4	?	Thunderstorm Winds
Payne County 3 E 1.5 S Glencoe	05	0340CST			0	0	?	?	Hail (2.50)
Payne County 5 E Glencoe	05	0345CST			0	0	?	?	Hail (1.00)
Kay County Northwestern Portion	05	0415CST			0	0	?	?	Flash Flood
Major County Meno	05	0415CST			0	0	?	?	Thunderstorm Winds
Noble County 3 N Perry	05	0430CST			0	0	?	?	Flash Flood
Garfield County 3 N 1 W Drummond	05	0430CST			0	0	?	?	Thunderstorm Winds
Okfuskee County 3 W Okemah	05	0450CST			0	0	?	?	Thunderstorm Winds
Hughes County 5 N Lamar	05	0500CST			0	0	?	?	Thunderstorm Winds
Muskogee County Near Camp Gruber	05	0530CST			0	9	?	?	Lightning
Pittsburg County 7 S McAlester	05	0615CST			0	0	?	?	Thunderstorm Winds
Oklahoma County SW Oklahoma City	05	0615CST			0	0	?	?	Thunderstorm Winds
Pittsburg County	05	0641CST- 0900CST			0	0	?	?	Flash Flood
Okfuskee County	05	0815CST			0	0	?	?	Flash Flood

Severe thunderstorms developed across portions of northwestern, central, and eastern Oklahoma during the evening of August 4th and continued into the early morning of August 5th. Golf ball- to baseball-size hail was reported in several locations. Many other locations received dime- to quarter-size hail. Damaging winds also accompanied a few of the storms. Thunderstorm winds downed power lines 3 miles west of Okemah and gusted to 60 mph at Lequire, at Weleetka, and 7 miles south of McAlester. Thunderstorm winds blew a garage door off a house, and downed tree limbs and power lines west of Burlington. Thunderstorm winds downed trees in Hughes County south-southwest of Dustin, north-northwest of Drummond, and trees were downed in Oklahoma City at S.W. 15th and Pennsylvania Avenue. Nine military personnel near Camp Gruber were injured when their tent was struck by lightning, with three of the injured hospitalized for treatment of burns.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

OKLAHOMA Cont'd

Significant flash flooding was also reported in several locations. Flooding in Okmulgee County, mainly affecting the towns of Henryetta and Dewar. Rainfall of three to five inches fell over a large area, with an unofficial report of over eight inches near Henryetta. This excessive rainfall caused Coal Creek to overflow its banks around 0200 CST on the 5th. Water flooded Main Street in Henryetta to a depth of 7 feet. Roads and gas pipelines were damaged, and 150 homes in Henryetta and 50 homes in Dewar were flooded. Rescue operations began in the flooded area around 0230 CST. Twelve businesses were also affected by the floodwaters. No deaths or injuries occurred in Okmulgee County, but the City Manager of Henryetta estimated property damage to be several million dollars.

Highway 270 just west of McAlester had water flowing across it, and many streets in McAlester along with several county roads in Pittsburg County were covered by water. A total of 25 homes in Pittsburg County had water in them. Street flooding occurred in the town of Pawnee, and Black Bear Creek was out of its banks in western Pawnee County, causing flooding of rural areas. Several small creeks also were out of their banks in Okfuskee County, forcing the evacuation of a home 5 miles northwest of Okemah. Several county roads in Okfuske County were also flooded. Stream flooding was reported in the northeastern portion of Lincoln County. State Highway 11, 2.5 miles west of Interstate 35 was closed due to high water, as was Highway 77 at Black Creek 3 miles north of Perry.

Delaware County 8 NW Jay

06	1615CST	0	0	?	?	Thunderstorm Winds
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An isolated severe thunderstorm developed in Delaware County of northeast Oklahoma during the late afternoon of August 6th. This storm produced damaging winds which downed numerous tree limbs and damaged several outbuildings 8 miles northwest of Jay.

Seminole County Wewoka Hughes County Holdenville

06	1600CST	0	0	5	?	Flash Flood
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06	1705CST	0	0	?	?	Flash Flood
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Rainfall of 4.40 inches in 1.5 hours caused flooding to portions of Wewoka. A garage was swept away and a city bridge was undermined and collapsed. A city animal shelter was flooded, and dogs clinging to the tops of their cages had to be rescued. A man who drove across a roadway that was flooded had to be rescued as his truck was washed away. Also, heavy rainfall flooded roadways in Holdenville.

Ellis County

Gage	10 1729CST	0	0	?	?	Thunderstorm Winds (G50)
Gage	10 1729CST	0	0	?	?	Hail (0.88)
5 N 1 W Fargo	10 1845CST	0	0	?	?	Hail (0.88)

Woodward County 5 N 0.5 E Fargo

10	1830CST- 1845CST	0	0	?	?	Hail (0.75)
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Ottawa County

4 S Fairland	10 2217CST	0	0	?	?	Hail (0.75)
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Delaware County

West Siloam	10 2240CST	0	0	?	?	Thunderstorm Winds
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Springs

Cleora	10 2240CST	0	0	?	?	Thunderstorm Winds (G61)
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Leach

10	2255CST	0	0	?	?	Thunderstorm Winds (G70)
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Ottawa County

Fairland	10 2255CST	0	0	?	?	Thunderstorm Winds
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Craig County

1 SE Vinita	10 2300CST	0	0	?	?	Thunderstorm Winds
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Adair County

Stilwell	10 2300CST- 2330CST	0	0	?	?	Thunderstorm Winds
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Westville

10	2300CST- 2330CST	0	0	?	?	Thunderstorm Winds
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Mayes County

Near Salina	10 2310CST	0	0	?	?	Thunderstorm Winds (G70)
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
OKLAHOMA Cont'd									
Cherokee County Talequah	10	2320CST			0	0	?	?	Thunderstorm Winds (G52)
Nowata County 2 S Nowata Countyline	10	2345CST			0	0	?	?	Thunderstorm Winds
Rogers County Near Oologah	11	0010CST			0	0	?	?	Thunderstorm Winds
Washington County Ramona	11	0024CST			0	0	?	?	Thunderstorm Winds (G52)
Tulsa County 1 S Owasso	11	0035CST			0	0	?	?	Thunderstorm Winds (G52)
McIntosh County Eufala	11	0037CST			0	0	?	?	Thunderstorm Winds (G52)
Rogers County 1 SW Catoosa	11	0040CST			0	0	?	?	Thunderstorm Winds
Tulsa County 2 SW Catoosa	11	0040CST			0	0	?	?	Thunderstorm Winds
Osage County 7 NNE Barnsdall	11	0055CST			0	0	?	?	Thunderstorm Winds
Fairfax	11	0130CST			0	0	?	?	Thunderstorm Winds
Kay County Newkirk	11	0130CST			0	0	?	?	Thunderstorm Winds (G52)
Tonkawa	11	0150CST			0	0	?	?	Thunderstorm Winds
Blackwell	11	0150CST			0	0	3	?	Thunderstorm Winds
Ponca City	11	0200CST			0	0	3	?	Thunderstorm Winds
Noble County Perry	11	0220CST			0	0	?	?	Thunderstorm Winds
Payne County 5 N Stillwater	11	0219CST			0	0	?	?	Thunderstorm Winds (G52)
Garfield County Near Enid	11	0225CST			0	0	?	?	Thunderstorm Winds
N Enid	11	0300CST			0	0	5	?	Flash Flood

Severe thunderstorms moved across northern Oklahoma during the afternoon and evening of the 10th, and continued through the overnight hours of the 11th. The thunderstorm across northwestern Oklahoma produced large hail, but the storms across north-central and northeastern Oklahoma produced mostly strong and damaging winds. Thunderstorm winds gusted to 80 mph at Leach and near Rose, and wind gusts of 60 to 70 mph occurred at several other locations across eastern Oklahoma. Numerous trees and tree limbs were downed at Stilwell and Westville, and strong winds persisted for 30 minutes at both locations. Thunderstorm winds downed trees near Enid, at West Siloam Springs, Talequah, Fairland, Eufala, Ramona, and Cleora, with 4-inch-diameter limbs downed just southeast of Vinita. A downed tree blocked a road near Oologah. Power lines were downed at Talequah, and on the Tulsa/Rogers County line near Interstate 44 and 161st East Avenue southwest of Catoosa. Power poles were downed at Ramona and Perry. A severe thunderstorm downed trees and damaged the roof of a house in Ponca City. A severe thunderstorm downed trees and tore the awning off a building in Blackwell. Large trees were downed by the wind at the Woolaroc ranch 7 miles north-northeast of Barnsdall. Plate glass windows were blown out in Fairfax, and a porch was blown off a house in Cleora. Strong thunderstorm winds 2 miles south of Nowata downed several large trees, partially tore wooden roofs off several buildings, and tore a tin roof off of a barn.

Heavy rainfall from the thunderstorms caused flash flooding in Enid. Rainfall of 2.88 inches was reported in Enid, but up to four inches of rain just north of Enid. Street flooding was widespread around Enid. Part of the roof of an Enid meat company collapsed under the weight of the heavy rain on the roof. Much of the Enid Correctional Center was severely damaged by the flooding. In 10 minutes the ground below the facility went from being dry to under 6 feet of water. The center's kitchen and laundry area were wiped out, as was all first floor housing. Ice machines, freezers, washers, dryers, and lawn mowers were destroyed. Three vans were flooded, and inmate property was washed away. Four inmates who were trapped by the rapidly rising waters had to be rescued.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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OKLAHOMA Cont'd

Major County 5 N Bouse Junction	13	2315CST			0	0	?	?	Hail (0.88)
Woodward County 7 N 1 E Moore-land	13	2315CST			0	0	?	?	Hail (1.00)
Texas County Guymon	16	0100CST			0	0	4	?	Lightning

Lightning struck a mobile home, and set it on fire. Damage was estimated at \$6,000.

Texas County Western Portion	17	1800CST			0	0	?	?	Flash Flood
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Heavy rains flooded fields in western Texas County, and floodwaters partially closed State Highway 3 for several hours.

Major County 8 E Fairview	30	0840CST			0	0	?	?	Flash Flood
5 S Fairview	30	1145CST-1400CST			0	0	?	?	Flash Flood

Blaine County Northern Portion	30	1145CST			0	0	?	?	Flash Flood
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Heavy rainfall in Major County flooded a highway 8 miles east of Fairview. Rainfall of up to 7.60 inches flooded highway 58 south of Fairview. Extremely severe erosion of wheat fields was observed by the National Weather Service Service Hydrologist in northern Blaine County.

OREGON

None reported.

PENNSYLVANIA, Eastern

Susquehanna County Rush	04	1235EST			0	0	4	0	Thunderstorm Winds
Fairdale	04	1243EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts downed many large limbs and some trees at Rush. Trees were downed and marble-size hail fell at Fairdale. In Rush some of the trees came down on houses.

Luzerne County 1 W Drums	04	1400EST			0	0	3	0	Thunderstorm Winds
1 E Drums	04	1400EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts downed trees and utility lines.

Franklin County St. Thomas	11	1210EST			0	0	0	0	Funnel Cloud
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A funnel cloud was reported at St. Thomas.

Berks County 1 W Lenhartsville	11	1212EST			0	0	3	0	Thunderstorm Winds (G53)
2 NW Krumsville	11	1325EST			0	0	3	0	Thunderstorm Winds
Topton	11	1325EST			0	0	3	0	Thunderstorm Winds
1 E Kempton	11	1345EST			0	0	3	0	Thunderstorm Winds
2 E Krumsville	11	1345EST			0	0	3	0	Thunderstorm Winds (G53)
Womelsdorf	11	1345EST			0	0	4	0	Thunderstorm Winds
Mt. Penn	11	1353EST			0	0	5	0	Thunderstorm Winds (G62)
Maxatawny	11	1405EST			0	0	3	0	Thunderstorm Winds
Boyertown	11	1426EST			0	0	4	0	Thunderstorm Winds (G88)

Thunderstorm wind gusts downed trees, tree limbs and utility lines in all these locations. Winds were reported in excess of 60 MPH near Lenhartsville and east of Krumsville. Public officials reported wind gusts in excess of 70 MPH at Mt. Penn and were measured at over 100 MPH at

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm	
					Killed	Injured	Property	Crops

PENNSYLVANIA, Eastern Cont'd

Boyerstown by reliable instrumentation. In Mt. Penn 4 or 5 houses had at least part of the roof blown off and several porches were blown down. Pea-size hail fell at Maxatawny and some roofs were damaged in Boyertown. About 50 trees and parts of trees were downed and some roofs ripped up in Womelsdorf.

Lehigh County

Fogelsville	11	1240EST			0	0	3	0	Thunderstorm Winds
Coopersburg	11	1352EST			0	0	3	0	Thunderstorm Winds
Vera Cruz	11	1420EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts brought down large limbs and utility lines at Fogelsville and Vera Cruz. A couple of sheds were blown over at Vera Cruz and pea-size hail fell at Fogelsville. Pea-size hail also fell at Coopersburg where very strong winds brought down many limbs and utility lines. A least one tree was down in South Whitehall Township.

Schuylkill County

Ravine	11	1256EST			0	0	3	0	Thunderstorm Winds
2 S Auburn	11	1310EST			0	0	3	0	Thunderstorm Winds (G57)
Hometown	11	1345EST			0	0	3	0	Thunderstorm Winds (G53)
2 N St. Clair	11	1423EST			0	0	3	0	Thunderstorm Winds
					0	0	?	0	Hail (0.75)

Thunderstorm wind gusts brought down trees, limbs and utility lines at Hometown and near Auburn and St Clair. Large limbs and utility lines were down at Ravine. Dime-size hail fell near St. Clair. Winds were reported in excess of 65 MPH near Auburn and in excess of 60 MPH at Hometown.

Cumberland County

Enola	11	1300EST			0	0	3	0	Thunderstorm Winds
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A thunderstorm wind gust blew an automobile off I-81 and rolled it over. There also was some pea-size hail and wind gusts to 55 MPH east of Carlisle.

Lebanon County

Myerstown	11	1315EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts downed trees, utility lines and poles.

Dauphin County

1 N Harrisburg	11	1325EST			0	0	4	0	Thunderstorm Winds
1 E Harrisburg	11	1330EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts downed large trees on the north side of Harrisburg and one of them came down on a pick-up truck. A number of trees were down on the east side of Harrisburg.

Columbia County

Centralia	11	1325EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts downed trees, many large limbs and utility lines in Centralia and Aristes. There also were two houses damaged by lightning.

Luzerne County

Conyngham	11	1345EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts downed trees and utility lines. There also was one home damaged by lightning.

Montgomery County

1 NW Perkiomenville	11	1400EST			0	0	3	0	Thunderstorm Winds
Lansdale	11	1407EST			0	0	?	0	Thunderstorm Winds (G50)
1 NW Ambler	11	1428EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts downed trees and utility lines. A gust to 58 MPH was measured at Lansdale. Trees were also down in Abington, Hatboro, Horsham, Upper Dublin, Upper Moreland, Lower Moreland, North Wales, North Penn and Montgomery Township.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
PENNSYLVANIA, Eastern Cont'd									
Philadelphia County 3 NE of Northeast Philadelphia Airport	11	1430EST			0	0	3	0	Thunderstorm Winds (G87)
Philadelphia County 2 NW Tacony	11	1430EST			0	0	3	0	Thunderstorm Winds
A thunderstorm wind gust to 100 MPH was recorded. Many branches and some trees were down. There also was some street flooding. Trees were down northwest of Tacony with one down on a fence and one on an automobile.									
Susquehanna County Gibson	25	1605EST			0	0	?	0	Hail (1.0)
A thunderstorm dropped nickel-size hail. A heavy downpour caused some localized street flooding.									
Bucks County 1.5 E Tullytown	26	1645EST			0	0	3	0	Thunderstorm Winds
Fairless Hills	26	1700EST			0	0	3	0	Thunderstorm Winds
A thunderstorm microburst caused a damage path 1.5 miles long and 200 yards wide. Numerous trees were down and there was minor damage to buildings. Trees were snapped off in Fairless Hills.									
PAC-061 Huntingdon County	28	1550EST 1800EST			0	0	5	0	Flash Flood
One to two inches of rain in heavy downpours caused flash flooding. Near Huntingdon, Route 26 was flooded from 1550 to 1646 EST and the basement of a house and a department store were flooded around 1646 EST. Basements were flooded in McConnelltown around 1640 EST. At Rock Hill Furnace, a house collapsed when the basement was washed out between 1700 and 1800 EST.									
Huntingdon County Huntingdon	28	1645EST			0	0	3	0	Thunderstorm Winds
Thunderstorm wind gusts downed trees. Trees were also down at other scattered locations across the county.									
Franklin County 3 NW Amberson	28	1705EST			0	0	3	0	Thunderstorm Winds
Thunderstorm wind gusts downed trees in Doylesburg which is northwest of Amberson. There also was street flooding in the Chambersburg area and on south to Greencastle.									
Adams County Fairfield	28	1705EST			0	0	3	0	Thunderstorm Winds
York Springs	28	1710EST			0	0	3	0	Thunderstorm Winds
Thunderstorm wind gusts brought down large tree limbs.									
Centre County State College	28	1715EST			0	0	3	0	Thunderstorm Winds
Thunderstorm wind gusts downed trees and utility lines. Scattered trees were also down across the county.									
Mifflin County Lewistown	28	1715EST			0	0	3	0	Thunderstorm Winds
Thunderstorm wind gusts brought down trees, one on a moving vehicle on Route 322. There also was some street flooding. Scattered trees were also down across the county.									
Clinton County Renovo	28	1727EST			0	0	3	0	Thunderstorm Winds
Lock Haven	28	1740EST			0	0	3	0	Thunderstorm Winds
Thunderstorm wind gusts brought trees and utility lines down in Renovo and several trees and some limbs in Lock Haven. One tree was down on a road in Renovo at 1702 EST and at 1715 EST.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
PENNSYLVANIA, Eastern Cont'd									
A tree was down on railroad tracks in North Bend and a tree was down at Drury's Run and in Lockport. Some utility lines were down in Farwell.									
Cumberland County Mechanicsburg	28	1730EST			0	0	3	0	Thunderstorm Winds
	Thunderstorm wind gusts downed trees and utility lines. Scattered trees were also down across the county.								
York County York	28	1730EST			0	0	3	0	Thunderstorm Winds
Delta	28	1745EST			0	0	3	0	Thunderstorm Winds
	Thunderstorm wind gusts downed trees. Street flooding occurred just east of York between 1715 and 1745 EST.								
Lancaster County Elizabethtown	28	1757EST			0	0	3	0	Thunderstorm Winds
	Thunderstorm wind gusts downed trees and utility lines.								
Lebanon Ebanon County East Hanover	28	1810EST	1.0	150	0	0	5	0	Tornado (F1)
	The tornado had a total path length of at least 1.0 mile. There were two barns with roofs taken off and structural damage done. There was damage to a few homes including parts of roofs taken off and broken windows. One mobile home was moved about 4 to 5 feet off its foundation and several mobile homes sustained structural damage and/or had medium to large trees fall on them. Several sheds and awnings were either damaged or moved completely from their original sites. There were dozens of large trees snapped in half all along the path. A horse stable sustained major damage with one building completely demolished and other sustaining damage. Pieces of the demolished building were scattered about and some were wrapped around a few of the trees still standing. Another stable had a hole in the roof, probably from flying debris. Damage was estimated at nearly 392,000 dollars.								
Lycoming County Williamsport	28	1819EST			0	0	3	0	Thunderstorm Winds
2 SW Duboisstown	28	1835EST			0	0	3	0	Thunderstorm Winds
Cedar Run	28	1842EST			0	0	3	0	Thunderstorm Winds
Bodines	28	1850EST			0	0	3	0	Thunderstorm Winds
1 S Roaring Branch	28	1857EST			0	0	3	0	Thunderstorm Winds
	Thunderstorm wind gusts brought down trees in all these locations. Utility lines were also down in Williamsport and trees were down on wires in Cedar Run. The damage south of Roaring Branch, Tioga County was just across the county line in Lycoming County.								
Tioga County Mansfield	28	1819EST			0	0	3	0	Thunderstorm Winds
	Thunderstorm wind gusts brought trees down.								
Chester County Atglen	28	1820EST	2.0	100	0	3	5	0	Tornado (F2)
	The tornado moved in a north-northeast direction through the borough of Atglen and then into the nearby hills. One mobile home was completely blown apart. Three people in the mobile home were injured. Two of them received only minor injuries, but the third had several broken bones. Two automobiles were moved around and one of them was blown up against a tree. A shed was picked up and thrown into the side of a pickup truck. Several other homes along the path were damaged by falling trees or by windows being blown out. Many trees were down along the path, uprooted or broken off. Some utility poles were down either from the wind or falling trees. Falling trees and limbs also downed other wires. Damage was estimated at 250,000 dollars.								
Berks County Wolmsdorf	28	1830EST			0	0	4	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

PENNSYLVANIA, Eastern Cont'd

Thunderstorm wind gusts blew apart a pole barn scattering the lumber and contents. Part of the sign on a McDonalds Restaurant was ripped off. The corner of the roof was briefly lifted up on a supermarket leaving a hole in the ceiling. Just to the north in Marion Township, a barn and two sheds were damaged.

Berks County
2 ESE Strausstown 28 1850EST 2.0 18 0 0 5 0 Tornado (F1)

A tornado touched down and took the roof, some siding and the porch roof off a house. The roof flew through the air and crashed into a neighbor's house. Five homes along the road sustained severe damage and several barns were flattened. Trees were down all along the path.

Bradford County
Bentley Creek 28 1900EST 0 0 3 0 Thunderstorm Winds
Granville Summit 28 1900EST 0 0 3 0 Thunderstorm Winds
Sugar Run 28 2010EST 0 0 3 0 Thunderstorm Winds

Thunderstorm wind gusts brought down trees. A tree was down on wires at Alba, a tree was down on a road in Monroeton and a tree was down on a house in East Smithfield. A tree as also down in Ulster, Athens, Litchfield and Sheshequin.

Schuylkill County
3 NE Mahanoy City 28 1900EST 0 0 3 0 Thunderstorm Winds
3 SW Barnesville 28 1905EST 0 0 3 0 Thunderstorm Winds

Thunderstorm wind gusts brought down trees and large limbs. Utility lines were also down.

Luzerne County
Hazelton 28 1920EST 0 0 3 0 Thunderstorm Winds

Thunderstorm wind gusts brought down trees and limbs throughout the city.

Sullivan County
7 S Lopez 28 1925EST 0 0 3 0 Thunderstorm Winds

Thunderstorm wind gusts brought down numerous trees.

Columbia County
1 S Millville 28 1936EST 0 0 3 0 Thunderstorm Winds
1 N Bloomsburg

Thunderstorm wind gusts brought down utility lines and numerous trees between Millville and Bloomsburg.

Wyoming County
3 SW Kasson Brook 28 2000EST 0 0 3 0 Thunderstorm Winds

Thunderstorm wind gusts brought down trees.

Susquehanna County
Harford 28 2105EST 0 0 3 0 Thunderstorm Winds
Springville 28 2110EST 0 0 3 0 Thunderstorm Winds

Thunderstorm wind gusts brought down numerous trees and utility lines. Heavy rain accompanied the thunderstorms and there was some localized street flooding in Springville.

PENNSYLVANIA, Western

Crawford County
5 NW Titusville 03 1905EST 0 0 0 0 Thunderstorm Winds

Large trees fell along Route 8, northwest of Titusville.

Erie County 08 1525EST 1 0 0 0 Lightning

Lightning struck a boater on Presque Isle Bay near Litton Dock. The person died a short time later. M540

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
PENNSYLVANIA, Western Cont'd									
5 NE Erie	08	1535EST			0	0	0	0	Hail (0.75) Dime-size hail fell northeast of Erie.
5 NE Erie	08	1624EST			0	0	0	0	Thunderstorm Winds Large trees and power lines were blown down.
Crawford County 12 W Erie 14 NW Erie	08	1702EST			0	0	0	0	Thunderstorm Winds Numerous trees and power lines were knocked down in Linesville and Conneautville.
Meadville	08	1727EST			0	0	0	0	Thunderstorm Winds Many trees and power lines were blown down in Meadville.
Erie County 12 SE Erie	08	1800EST			0	0	0	0	Hail (0.75) Thunderstorm Winds Hail of 0.75-inch-diameter fell in Waterford. Many powerlines were also knocked down.
Mercer County 16 NW Mercer	08	1800EST			0	0	0	0	Thunderstorm Winds Large trees and power lines fell in Jamestown and Greenville.
Crawford County 13 W Meadville	08	1805EST			0	0	0	0	Flash Flood Flooding occurred along Route 19 in Linesville.
Lawrence County 9 NW New Castle	08	1808EST 1810EST	1.5	100	0	11	5	0	Tornado (F2) A tornado touched down in Pulaski Township on Coffee Run Road at 1808 EST and made a 200-foot-wide path of damage through trees. At Hillsville Road, more than 50 medium- to large-size trees were uprooted and broken. A 30 foot tall tree was ripped in half. At 1810 EST, six mobile homes were destroyed in Heritage Hills Mobile Home Park on Hillsville Road. Two of them were lifted off the ground and thrown into another one while another was overturned. The cost of the damages was \$300,000.
Erie County 30 SE Erie	08	1815EST			0	0	0	0	Hail (0.75) Thunderstorm Winds Dime-size hail and large limbs fell at Corry.
Crawford County 12 SW Meadville	08	1818EST			0	0	0	0	Flash Flood Street flooding occurred in Atlantic.
Lawrence County 4 N New Castle	08	1820EST- 1830EST	2.0	150	0	0	4	0	Tornado (F2) Three 30-40 foot tall trees were uprooted on Route 19 on Half Mile Road north of Clover. A tree three feet in diameter fell on a house located on Mercer Road at Graham-Fording Road in Neshannock Township. The house sustained only minor damages to the roof and the roof to the carport was lifted off. Approximately 146 large trees and ten smaller trees were uprooted and damaged along Graham-Fording Road. A tree falling on a garage caused it to cave in and the sides to buckle. Shingles were lifted from roofs and the top six feet of a chimney was blown from its foundation.
Crawford County 10 SE Meadville	08	1845EST			0	0	0	0	Flash Flood

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
PENNSYLVANIA, Western Cont'd									
									Flooding occurred in Cochranon.
10 SE Meadville	08	1915EST			0	0	0	0	Flash Flood Thunderstorm Winds
									Flooding made streets impassable in Jamestown. There were large limbs that had been broken off trees.
Venango County 5 N Oil City	08	1918EST			0	0	0	0	Hail (0.75) Thunderstorm Winds
									Dime-size hail and power lines fell near Oil City.
Oil City	08	1945EST			0	0	0	0	Flash Flood
									Roadways were flooded and small streams overflowed in Oil City and Rouseville.
Forest County 12 NE Toinesta	08	2000EST			0	0	0	0	Flash Flood
									Street flooding occurred in Kellettsville and Mayburg.
Beaver County 4 N Beaver 9 W Beaver 4 SE Beaver	08	2037EST			0	0	0	0	Flash Flood
									Flooding of roadways occurred in Brighton and Midland. There was a mudslide on Route 68 and Conway.
Westmoreland County Lower Burrell 21 NW Greensburg 8 E Greensburg	08	2210EST			0	0	0	0	Flash Flood Thunderstorm Winds
									The flooding of roads occurred in New Kensington and Latrobe. Trees fell in lower Burrell and LaTrobe.
Indiana County 13 SW Indiana	08	2212EST			0	0	0	0	Thunderstorm Winds
Indiana	08	2225EST			0	0	0	0	Flash Flood
17 SW Indiana	08	2225EST			0	0	0	0	Thunderstorm Winds
									Trees fell near Clarksburg and Tunnelton while the flooding of roads occurred in Indiana.
Beaver County 6 S Beaver Baden	08	2231EST			0	0	0	0	Flash Flood
									Creeks overflowed in Baden.
Fayette County 16 NE Uniontown	08	2235EST			0	0	0	0	Thunderstorm Winds
									Trees and power lines were blown down in Everson.
Clearfield County 6 SW Clearfield Curwensville	08	2250EST			0	0	0	0	Flash Flood Thunderstorm Winds
									Tannery Creek in Curwensville overflowed its banks. Trees were knocked down throughout the county.
Fayette County 12 NE Uniontown	08	2300EST			0	0	0	0	Flash Flood
									Flooding occurred at Indian Creek.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
PENNSYLVANIA, Western Cont'd									
Fayette County 3 SW Uniontown	08	2320EST			0	0	0	0	Flash Flood
	The flooding of roads occurred in Hopwood and North Union Township with some roads having three feet of water on them.								
Uniontown	08	2355EST			0	0	4	0	Flash Flood
	Major flooding of roads occurred in Uniontown and 60 basements were flooded. Two stores sustained property damage while motorists were trapped in their cars in as much as four feet of water. Flooding at Redtone Creek, Uniontown, North Union Township, and Hopwood lasted until 0430 EST. Dunbar Creek experienced minor flooding.								
Cambria County 9 SW Ebensburg	09	0030EST			0	0	0	0	Thunderstorm Winds
	A tree was knocked down in Jackson Township near Vinco.								
Clarion County 13 S Clarion	11	0040EST			0	0	0	0	Thunderstorm Winds
	Trees were knocked down in Rimersburg.								
13 S Clarion to 10 SW Clarion	11	0045EST			0	0	0	0	Flash Flood
	Roadways were flooded in Rimersburg and Sligo.								
Jefferson County	11	0050EST			0	0	0	0	Lightning Thunderstorm Winds
	A transformer was struck by lightning and knocked out of commission and power lines fell in Walston.								
13 SE Brookville	11	0100EST			0	0	0	0	Flash Flood
	Flooding occurred in Punxsutawney and on tributaries of Mahoning Creek.								
Beaver County 9 SE Beaver	11	0130EST			0	0	0	0	Thunderstorm Winds
	Trees and power lines were knocked down in Economy.								
Washington County 9 NW Washington	11	0745EST			0	0	?	0	Lightning
	A home in Hickory was struck by lightning.								
Westmoreland County 13 SE Greensburg	11	0800EST			0	0	2	0	Lightning
	A home in Donegal was struck by lightning causing four panels of aluminum siding to be knocked off.								
Greensburg	11	0830EST			0	1	0	0	Lightning
	A man was hit by lightning in Hempfield Township.								
Washington County 18 SE Washington	11	1000EST			0	0	?	0	Lightning
	Lightning sparked a fire in Centerville and destroyed a barn, as well as equipment and machinery inside.								
Fayette County 12 NE Uniontown	11	1040EST			0	1	0	0	Lightning
	A man was struck by lightning in South Connellsville.								

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
PENNSYLVANIA, Western Cont'd									
Somerset County 11 SW Somerset	11	1130EST			0	0	0	0	Thunderstorm Winds Trees were uprooted and a mobile home was moved off of its foundation in Casselman borough.
Fayette County 6 SE Uniontown	11	1200EST			0	0	0	0	Thunderstorm Winds Large tree limbs were knocked down in Chalk Hill.
Fayette County Uniontown 9 NE Uniontown	11	1245EST			0	0	0	0	Flash Flood The flooding of roadways and basements occurred in Uniontown and Dunbar.
Greene County 3 E Waynesburg	11	1245EST			0	0	0	0	Flash Flood Flooding occurred along Route 188, east of Waynesburg.
Westmoreland County 6 SW Greensburg	26	1448EST			0	0	0	0	Hail (0.75) Hail of 0.75-inch-diameter fell in New Stanton.
Bedford County	27	2015EST			0	0	0	0	Flash Flood Brush Creek overflowed its banks near Five Forks.
Crawford County Meadville	27	1920EST			0	0	0	0	Flash Flood Heavy pooling of water occurred on Route 322 west of Meadville.
Meadville	27	1930EST			0	0	0	0	Flash Flood Road flooding occurred at the intersection of Routes 322, 19, and 98 near Meadville and left two cars stranded.
22 E Meadville 10 E Meadville	27	2030EST			0	0	0	0	Flash Flood Road flooding occurred at Route 408, west of Titusville and west of Townville.
Meadville	28	1115EST			0	0	0	0	Flash Flood Roads and basements were flooded in Meadville.
Meadville	28	1215EST			0	0	0	0	Flash Flood Flooding occurred along Route 27, east of Meadville.
Warren County Warren	28	1330EST			0	0	0	0	Flash Flood Road and basement flooding occurred in Warren.
Venango County 11 N Franklin	28	1410EST			0	0	0	0	Flash Flood Flooding occurred along Route 427 near Bradleytown.
Clearfield County	28	1650EST			0	0	0	0	Thunderstorm Winds Trees were knocked down and power outages occurred throughout the county.
13 S Clearfield	28	1810EST			0	0	0	0	Thunderstorm Winds Flash Flood Several trees were knocked down in Madera and roads were flooded.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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PENNSYLVANIA, Western Cont'd

Erie County Erie	30	1225EST			0	1	0	0	Lightning
Lightning struck the ground near a woman at an Eat and Park restaurant in Erie. There was only one minor injury.									
Crawford County Meadville	30	1230EST			0	0	0	0	Hail (0.75) Thunderstorm Winds
Hail of 0.75-inch-diameter fell in Meadville and power lines were knocked down north of Meadville.									
Erie County 15 S Erie	30	1240EST			0	0	0	0	Hail (0.75)
Hail of 0.75-inch-diameter fell in Waterford.									
Crawford County 9 W Meadville	30	1241EST			0	0	?	0	Thunderstorm Winds Lightning
Power lines were knocked down at Brown Road at Conneaut Lake. Lightning struck a propane tank on a house.									
Warren County 7 E Warren	30	1305EST			0	0	0	0	Hail (0.75)
Hail of 0.75-inch-diameter fell at Kinzua Dam, east of Warren.									

RHODE ISLAND

Newport and Washington Counties	09	1600EST- 1900EST			0	0	4	0	Flash Flood
Thunderstorms accompanied by torrential rain affected the towns of Newport, Jamestown, Middletown and Little Compton. Widespread street flooding, washouts, and some basement flooding occurred with the worst conditions in Newport. Heavy flooding caused the closing of many streets including the bridge from Jamestown into Newport after many autos stalled just after leaving the bridge. The downpour turned Newport streets into a traffic nightmare after thousands of motorists leaving a weekend festival waited hours for the bridge to be reopened. A weather spotter in Adamsville reported 6.10 inches of rain in 4 hours and a daily total of 7.65 inches. Portsmouth recorded 5.20 inches and Hopkinton, 4.45 inches.									

SOUTH CAROLINA

Berkeley County Goose Creek Reservoir	02	1120EST			0	0	?	?	Hail (0.75)
Hail of 0.50- to 0.75-inch-diameter was reported.									
Horry County Surfside Beach	03	1435EST			0	0	2	0	Lightning
Lightning struck a corner piling of Surfside Pier, causing \$200 to \$300 in damage.									
Beaufort County Yemassee	03	2227EST			0	0	5	0	Lightning
Lightning caused a fire that destroyed a home after striking the porch. One firefighter was treated for smoke inhalation and released.									
Greenville County Greenville	04	1625EST			0	0	2	0	Thunderstorm Winds
A marginally severe thunderstorm crossed Greenville County on a path from Travelers Rest, across Greenville City, and to the east of Simpsonville. Although most conditions were favorable for									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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SOUTH CAROLINA Cont'd

severe weather, flow into the storm was from the north. The only severe weather reported was a few trees and power lines downed in Greenville City, along with a number of power outages.

Marion County 3 E Marion

04	2030EST				0 0	5 0	Thunderstorm Winds
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Thunderstorm winds damaged several mobile homes in the Wallace Park subdivision. A tree fell on one mobile home, part of a roof blew off of one mobile home, and one mobile home blew off its foundation and turned over. There were numerous trees blown onto and over U.S. Highway 501 near the subdivision.

Chesterfield County 4 SSW Patrick to 3.5 S Patrick

05	1605EST	0.8	25		0 0	4 0	Tornado (F0) Hail (1.75)
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A tornado, traveling from southwest to northeast, lifted a roof off an enclosed mobile home, damaging the mobile home itself. It also destroyed a tobacco barn and blew some shingles off another home. The storm was accompanied by golf ball-sized hail. There were at least ten witnesses to the storm.

Lancaster County 10 NE Lancaster

05	1654EST				0 0	? ?	Thunderstorm Winds Hail (1.75)
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Golf ball-sized hail and downed trees were reported by the Lancaster County Sheriff's Office.

Greenwood County Ware Shoals

11	1525EST				0 0	? ?	Hail (1.00)
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Large hail fell briefly at Ware Shoals. The storm dissipated quickly.

Spartanburg County Woodruff

12	1445EST				0 0	3 ?	Thunderstorm Winds
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A roof was lifted off a barn and a few trees were blown down.

Horry County Conway

12	1530EST				0 0	4 0	Lightning Hail (0.75) Thunderstorm Winds
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Lightning struck a home and caused minor fire damage in the attic and minor smoke damage to the rest of the house, located at 410 Paul Street. Hail of 0.75-inch-diameter was reported one mile east of Conway. Some tree damage occurred.

Marlboro County Bennettsville

14	AM				0 0	? 0	Urban Flood
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Heavy rains flooded streets in Bennettsville.

Oconee County Seneca

17	1835EST				0 0	? ?	Thunderstorm Winds
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A few trees and power lines were blown down. The storm started at Oakway and moved across southern Oconee County.

Oconee County Southern

22	1500EST				0 0	? ?	Flash Flood
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Minor flash flooding caused inundation of several bridges and roads for several hours.

Abbeville County Lowndesville

27	1840EST				0 0	? ?	Thunderstorm Winds
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Pickens County Six Mile

27	1900EST				0 0	? ?	Thunderstorm Winds
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Greenville County Southern

27	1930EST				0 0	? ?	Thunderstorm Winds
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

SOUTH CAROLINA Cont'd

Greenville	27	1940EST			0	0	0	0	Funnel Cloud
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Several bands of thunderstorms moved across northwestern South Carolina ahead of the remnants of Hurricane Andrew. Heavy rains fell in the mountains, totalling four to seven inches over 36 hours, but no substantial flooding occurred. The strongest band produced wind damage. This damage was most significant between Lowndesville and Lake Secession in Abbeville County. A motorist in Greenville observed a small, clearly defined funnel cloud as it passed over the city.

Berkeley County Countywide	28	0315EST			0	0	?	0	Thunderstorm Winds
Charleston County Countywide	28	0315EST			0	0	?	0	Thunderstorm Winds

Many large tree limbs fell and power outages occurred in both Berkeley and Charleston Counties.

SOUTH DAKOTA

Harding County Buffalo	01	1308MST			0	0	0	0	Thunderstorm Winds (G51)
Day County 5 E Pierpont	01	1533CST			0	0	1	1	Thunderstorm Winds (G56)
Brown County Tacoma Park	01	1535CST- 1540CST			0	0	1	2	Thunderstorm Winds (G56)
Walworth County Mobridge	01	1710CST- 1720CST			0	0	0	0	Thunderstorm Winds (G52)
E of Java to Edmunds County	01	1700CST- 1735CST			0	0	4	4	Hail (1.50) Thunderstorm Winds (G55)

Large hail and high winds caused extensive damage to a number of farms in a 5-mile-wide swath centered on U.S. Highway 12 to the southeast of Java. The hail destroyed crops, knocked out numerous windows, tore holes in siding, dented vehicles, and stripped trees.

Edmunds County Bowdle	01	1735CST- 1805CST			0	0	3	4	Hail (1.75) Thunderstorm Winds (G55)
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A violent hailstorm reduced crops to stubble, broke many windows, damaged siding, and tore bark off of trees. Most of the damage occurred west through south of Bowdle.

Spink County 5 NE Redfield	01	1803CST			0	0	1	2	Hail (1.00)
Roberts County 12 SW Sisseton	01	1832CST			0	0	0	1	Hail (0.75)
Brown County 10 NW Aberdeen	01	1839CST			0	0	0	1	Thunderstorm Winds (G52)
Aberdeen	01	1843CST			0	0	0	0	Thunderstorm Winds (G52)
Spink County Redfield	01	1852CST- 1910CST			0	0	0	2	Hail (0.75)
Brown and Spink Counties Mansfield	01	1900CST			0	0	1	1	Thunderstorm Winds (G61)

Some trees in excess of 10 inches in diameter were blown over.

Hand County 7 S Miller	01	1935CST			0	0	0	0	Thunderstorm Winds (G52)
Beadle County 15 SW Huron	01	2000CST			0	0	0	0	Thunderstorm Winds (G52)
7 S Cavour	01	2100CST	1.0	100	0	0	0	3	Tornado (F1)

A tornado caused damage to a cornfield.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

SOUTH DAKOTA Cont'd

Tripp County
1 S Winner
Lake and Moody
Counties
Southern Portion

04	1030CST				0	0	1	1	Hail (1.75)
06	2030CST- 2330CST				0	0	4	4	Flood

Heavy rains of three to seven inches inundated towns and farmland in the southern parts of Lake and Moody Counties. Basements were damaged by the flooding in Madison. Winds and lightning associated with the storm downed trees and knocked out power to about 250 customers mainly just south of Madison. The heavy rains caused Skunk Creek to rise to near bankfull downstream of Madison to Colton and Lyons. Also due to the rains the Big Sioux River came up to near bankfull with some above flood stage readings below Canton through August 10th.

Brookings County
E of Brookings
Near Aurora
Elkton

09	1825CST- 1845CST	0.1	10		0	0	0	0	Tornado (F0)
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Very brief touchdowns of a small tornado occurred with no damage reported. However tornado watching contributed to a two-car collision at an intersection.

Lake County
Chester

09	1900CST- 1920CST	3.0	250		0	0	6	2	Tornado (F2)
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A tornado tore through the heart of Chester causing considerable damage. Four businesses were destroyed, three others had major damage, and five had minor damage. An elevator and new grain bin were destroyed and another bin was heavily damaged. Most of the building housing the fire department was demolished. Many houses and vehicles sustained damage and large trees were uprooted or broken off. A steel beam pierced both a garage and a new car inside. The town had to be evacuated for 19 hours after the tornado damaged a 12,000 gallon ammonia tank releasing 4,000 gallons of the liquid gas into the air. Also a lumber yard was broken up by the tornado and numerous power lines were downed. One mile north of Chester a house was moved off its foundation causing the walls to lean inward and the adjacent garage was destroyed. To the south of Chester the tornado destroyed a new convenience store and two fuel tanks were blown more than 100 yards. The tornado also caused damage to a few farmsteads and cornfields near Chester.

Minnehaha County
Hartford

09	2105CST- 2115CST				0	0	1	2	Hail (0.75)
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In addition to hail, heavy rains resulted in lowland flooding between Hartford and Colton through 2200 CST.

Renner

09	2105CST				0	0	1	1	Thunderstorm Winds (G55)
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High winds downed some trees near Renner.

Turner County
Marion

09	2125CST				0	0	2	1	Thunderstorm Winds (G50)
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High winds caused some damage to windows and outdoor furniture.

Hurley
Viborg

09	2140CST- 2200CST	0.2	25		0	0	4	1	Tornado (F0) Thunderstorm Winds (G55)
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High winds damaged a grain elevator south of Hurley, blew over large trees damaging a vehicle in Viborg, and along with a small tornado, destroyed some farm buildings near Viborg.

Clay County
Wakonda
Meckling
Vermillion

09	2220CST- 2250CST				0	0	4	3	Thunderstorm Winds (G60)
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Thunderstorm winds blew over large trees, some on homes, buildings, and power lines. The high winds and heavy rains also damaged crops. Considerable lightning along with the high winds caused widespread power outages.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
SOUTH DAKOTA Cont'd									
Yankton County Volin	09	2215CST- 2315CST			0	0	2	2	Thunderstorm Winds (G50)
	Besides three inches of rain, thunderstorm winds blew down some large limbs.								
Hanson County 3 SW Emery	17	1900CST			0	0	2	4	Hailstorm
	Marble-sized hail and strong winds caused heavy damage to soybeans and some corn in an area one and a half mile by one mile affecting six farms. The hail also damaged the paint on some buildings in the area. Where the hail washed off the roads it resembled piles of snow, with the hail remaining over 14 hours after the storm.								
Walworth County 7 S Java	20	1910CST- 1930CST			0	0	1	4	Hailstorm
	Marble-sized hail caused heavy damage to crops in an area several miles long and 1.5 miles wide. Strong winds and heavy rain accompanied the hail.								
Sanborn County Woonsocket	21	1225CST			0	0	3	3	Hail (1.75)
	A strong thunderstorm brought marble to golf ball-size hail to the Woonsocket area causing crop damage and dimpling some vehicles. Heavy rains of two inches or more overflowed storm sewers and covered intersections and yards.								
Sully County Onida Onida	22 22	2100CST 2100CST			0 0	0 0	4 3	1 0	Thunderstorm Winds (G60) Lightning
	Downburst thunderstorm winds peeled the roof off a storage building, snapped power poles, ripped 6- to 8-inch branches off of some trees, and sucked at least two windows out of a mobile home. Also a lightning-caused fire destroyed a haystack.								
Entire State		Summer August			0	0	0	7	Unseasonable Cold
	The month of August contributed to one of the coolest summers on record in South Dakota. This resulted in estimated crop losses of \$38 million, especially east of the Missouri River and north of Interstate 90.								
TENNESSEE									
Grundy County Altamont	08	1430CST			0	0	5	0	Lightning
	A fire started by lightning destroyed a brick house.								
Palmer	09	1050CST			0	0	5	0	Lightning
	Lightning caused a fire that destroyed a house.								
Giles County Pulaski	09	1330CST			0	0	3	0	Thunderstorm Winds
	A large pecan tree fell damaging a roof, a boat and a porch. Other trees were knocked down as well.								
Marshall County Lewisburg	09	1400CST			0	0	2	0	Thunderstorm Winds (G35)
	Several small tree limbs and power lines were knocked down.								
Lewisburg	09	1415CST			0	0	3	0	Lightning
	One house was set on fire by lightning.								

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
TENNESSEE Cont'd									
Williamson County Brentwood	09	2200CST			0	0	4	0	Lightning
Three houses were damaged by fires started by lightning. One of those houses had severe damage to about 50 percent of the house.									
Rhea County N of Dayton	10	1315CST			0	0	2	0	Thunderstorm Winds
Several trees were blown down along Highway 27.									
Bledsoe County NE of Pikeville	10	1340CST			0	0	2	0	Thunderstorm Winds
Trees are downed along Mill Dam Road.									
Hamilton County Chattanooga	10	1445CST			0	0	2	0	Thunderstorm Winds
Several trees and power lines were knocked down.									
Sequatchie County Dunlap	10	1500CST			0	0	3	0	Lightning
Two houses were set on fire by lightning strikes.									
Coffee County Tullahoma	10	1512CST			0	0	3	0	Thunderstorm Winds
Winds that gusted to 35 mph ripped the awning off a gasoline station. Minor street flooding was also reported in the area.									
Tipton County Western Valley	10	1800CST			0	0	0	4	Flash Flood
Four inches of rain produced damage to a 250-acre cotton field.									
Grundy County Tracy City	10	2000CST			0	0	2	0	Lightning
A large tree was split near Highway 56.									
Blount County Maryville	11	1815CST			0	0	3	0	Lightning
One house caught fire as a tree which was struck by lightning fell on it.									
Cocke County Newport	13	0800CST			0	0	2	0	Thunderstorm Winds
A few tree limbs were knocked down.									
Newport	13	0815CST			0	0	2	0	Minor flooding
Several streets were flooded.									
Knox County Knoxville	21	1300CST			0	0	2	0	Flash Flood
Several roads were flooded.									
Giles County Bryson	27	1400CST			0	0	2	0	Thunderstorm Winds
A few trees were knocked down.									
Lincoln County Fayetteville	27	1400CST			0	0	2	0	Thunderstorm Winds
A few trees were knocked down.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
TENNESEE Cont'd									
Marshall County Lewisburg	27	1500CST	0.3	15	0	4	3	0	Tornado (F0)
	Four persons were injured as a mobile home was picked up by a tornado and spun several times.								
Maury County Santa Fe	27	1545CST			0	0	4	0	Thunderstorm Winds
	Part of a house roof and a barn roof was blown off. Another barn and several outbuildings were destroyed.								
Williamson County Peytonsville	27	1545CST			0	0	4	0	Thunderstorm Winds
	A mobile home was demolished. A roof and porch was ripped off a house.								
Cumberland County Crossville	27	1630CST			0	0	2	0	Thunderstorm Winds
	Several trees and power lines were knocked down.								
Williamson County 5 SE Franklin	27	1700CST			0	0	2	0	Thunderstorm Winds
	Several trees were blown down by thunderstorm winds.								
Davidson County Southwestern Portion	27	1700CST			0	0	2	0	Thunderstorm Winds
	Several trees and power lines were knocked down.								
Fentress County Eastern Portion	27	1735CST			0	0	2	0	Thunderstorm Winds
	A few trees were knocked down in the eastern portion of Fentress County.								
Wilson County Gladeville	27	1750CST	0.5	30	0	0	4	0	Tornado (F0)
	A tornado struck near Tucker's Crossroads. A double-wide mobile home lost most of its roof. A roof was blown off a barn and a livestock trailer was overturned.								
Davidson County Eastern Portion	27	1815CST			0	0	3	0	Thunderstorm Winds
	Numerous trees were knocked down by thunderstorm winds.								
Sumner County Hendersonville	27	1845CST			0	0	2	0	Thunderstorm Winds
	Some tree limbs were blown down.								
Wilson County 4 SW Lebanon	27	1850CST	0.3	15	0	0	4	0	Tornado (F0)
	A mobile home was knocked off its foundation. Some large trees were knocked down. Several outbuildings were destroyed. A steel girder was thrown about 200 yards.								
Sumner County Central Portion	27	1915CST			0	0	2	0	Thunderstorm Winds
	Thunderstorm winds downed several trees in Sumner County.								
Trousdale County Hartsville	27	1945CST			0	0	2	0	Thunderstorm Winds
	Several tree limbs were blown down by thunderstorm winds.								

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
TEXAS, Panhandle Cont'd									
5 N Amarillo Randall County	17	1820CST			0	0	3	0	Thunderstorm Winds (G56)
6 SE Amarillo Randall County	17	1842CST			0	0	4	0	Thunderstorm Winds (G69)
Canyon	17	1905CST			0	0	5	0	Thunderstorm Winds (G61)
2 S Canyon Swisher County	17	1930CST			0	0	3	0	Thunderstorm Winds (G52)
2 W Happy Castro County	17	1940CST			0	0	3	0	Thunderstorm Winds (G52)
Dimmitt	17	2000CST			0	0	2	0	Thunderstorm Winds (G52)

An area of thunderstorms developed in the central Texas Panhandle near Lake Meredith. The thunderstorms became severe and produced hail up to nickel-size along the lake. The hail was reported by the Fritch Fire Department. As the storms moved south, quarter-size hail fell in northern Amarillo. The storms produced downburst winds in the northern sections of Amarillo and some minor structural damage occurred. The damage reports were relayed by the KAMR television meteorologist. A strong macroburst developed just southeast of Amarillo around 1842 CST, blowing a wide-span roof off one structure and producing minor damage to other dwellings. A National Weather Service storm survey estimated winds near 80 mph with this downburst. The storms continued to produce downburst winds as they moved south. The KVII television meteorologist reported windmills blown over in Canyon, and a short time later, the Randall County Sheriff's Office estimated that 60 mph winds had blown over a small barn just south of Canyon. At 1940 CST, the Swisher County Sheriff's Office reported 60 mph winds had blown over small trees just west of Happy. The Castro County Sheriff's Office reported that 60 mph winds also blew over gas pumps in Dimmitt.

Parmer County
Friona to
8 S Friona

26	2350CST			0	0	5	0	Thunderstorm Winds (G55)
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A line of thunderstorms stretched across the western Texas Panhandle during the early morning hours. An intense thunderstorm produced a macroburst with damaging thunderstorm winds from Friona south to Hub. Friona police, emergency management officials and Southwestern Public Service officials confirmed that windows were broken in several homes, fences were blown down, and at least 40 power poles were snapped.

Castro County
12 NE Dimmitt
9 N Dimmitt
2 NW Dimmitt
Dimmitt

30	1658CST			0	0	0	0	Hail (1.00)
30	1836CST			0	0	0	0	Hail (0.75)
30	1935CST			0	0	0	0	Hail (0.88)
30	2000CST- 2100CST			0	0	0	0	Flash Flood

Slow moving thunderstorms became severe over Castro County. Hail with these storms ranged from dime- to quarter-size. All hail reports were received from the Castro County Sheriff's Office. The sheriff's office also reported widespread street flooding in Dimmitt. Two feet of water accumulated in some areas, with water reaching the headlights of some vehicles.

TEXAS, Northern

Tarrant County
Lake Worth
Village

01	1730CST			0	0	3	?	Thunderstorm Winds
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Strong winds uprooted large trees, and broke seven power poles. A portable building was blown over and mangled, and wooden fences were blown down.

Kaufman County
1 SW Terrell
Kemp

01	1835CST			0	0	5	?	Lightning
01	1845CST			0	0	2	?	Thunderstorm Winds

At 1 mile southwest of Terrell, lightning struck a television antenna, and the charge traveled through the electrical system of a house, starting fires in the attic and walls, which spread and totally engulfed the house in flames. At Kemp, strong winds blew the roof from an old garage.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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TEXAS, Northern Cont'd

Bowie County	02	1315CST-1430CST			0	0	?	?	Flash Flood
At Nash, heavy rains of more than two inches occurring in about 1 hour caused low area flooding. At Texarkana, some street flooding occurred.									

Hunt County Jardin	02	1400CST			0	0	?	?	Hail (0.75)
Freestone County Teague	02	1410CST			0	0	2	?	Thunderstorm Winds
10 NE Fairfield	02	1430CST			0	0	2	?	Thunderstorm Winds (G52)
At Teague, strong winds brought large tree limbs down. At 10 miles northeast of Fairfield, strong winds snapped 6-inch diameter trees.									

Collin County Princeton	02	1512CST			0	0	?	?	Hail (0.75)
Murphy	02	1547CST			0	0	?	?	Hail (0.88)
McLennan County 3 SE McGregor	02	1520CST			0	0	3	?	Thunderstorm Winds
Speegleville	02	1530CST			0	0	3	?	Thunderstorm Winds (G56)
At 3 miles southeast of McGregor, strong winds toppled six newly-erected, unanchored metal silos. At Speegleville, strong winds blew privacy fences down, bending steel fenceposts, and tree limbs were also blown down.									

Hood County 2 S Granbury	02	1545CST			0	0	3	?	Thunderstorm Winds
At Ports O' Call (2 miles south of Granbury), strong winds blew a satellite dish onto a pickup truck, ripped shingles from houses, and brought tree limbs down.									

Collin County Murphy	02	1545CST			0	0	?	?	Hail (0.88)
Grayson County Sherman	02	1622CST			0	0	?	?	Hail (0.75)
1 S Pottsboro	02	1634CST			0	0	?	?	Hail (0.75)
Dallas County Dallas	02	1625CST			0	0	?	?	Hail (0.75)
Garland	02	1655CST			0	0	3	?	Thunderstorm Winds
On the northern shore of White Rock Lake in Dallas, hail fell. In north Garland, downburst winds destroyed fences and uprooted trees.									

Denton County Krum	02	1650CST			0	0	?	?	Hail (0.88)
Denton	02	1651CST			0	0	?	?	Hail (1.00)
Krum	02	1653CST			0	0	?	?	Hail (1.75)
6 W Denton	02	1706CST			0	0	?	?	Hail (1.75)
Haskell County Rochester	02	1720CST			0	0	3	?	Thunderstorm Winds (G52)
Strong winds lifted a portion of roof from a cotton warehouse, and downed power poles.									

Collin County Frisco	02	1730CST			0	0	4	?	Thunderstorm Winds
Strong winds disconnected the arm from a grain elevator, and blew the roof from a barn. A travel trailer was lifted and mangled, and several trees and power lines were blown down.									

Jack County Maryetta	02	1730CST			0	0	2	?	Lightning
2 E Joplin	02	1730CST			0	0	2	?	Lightning
At Maryetta, lightning struck a tank battery, causing a small fire. At 2 miles east of Joplin, lightning struck a field, igniting a grass fire.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
TEXAS, Northern Cont'd									
Palo Pinto County									
10 W Graford	02	1730CST			0	0	3	?	Thunderstorm Winds
Santo	02	1810CST			0	0	2	?	Thunderstorm Winds (G56)
On the eastern shore of Possum Kingdom Lake (10 miles west of Graford), strong winds lifted shingles from houses. At Santo, strong winds blew large tree limbs down.									
Stephens County									
1 W Breckenridge	02	1740CST			0	0	2	?	Thunderstorm Winds
Caddo	02	1745CST			0	0	3	?	Thunderstorm Winds
At 1 mile west of Breckenridge, strong winds blew over a power pole. At Caddo, strong winds destroyed an abandoned brick building.									
Wise County									
Chico	02	1745CST			0	0	2	?	Thunderstorm Winds
Strong winds tore the roof of a 1000-seat tent, and caused several of its securing stakes to loosen.									
Parker County									
Whitt	02	1750CST			0	0	?	?	Hail (0.75)
Eastland County									
Ranger	02	1808CST			0	0	2	?	Thunderstorm Winds
Cisco	02	1822CST			0	0	?	?	Hail (0.75) and
Cisco					0	0	?	?	Thunderstorm Winds (G52)
At Ranger, strong winds broke a traffic guard arm at a railroad crossing.									
Erath County									
8 N Stephen-ville	02	1849CST			0	0	?	?	Thunderstorm Winds (G53)
Strong winds moved a railroad car along the tracks.									
Montague County									
Spanish Fort	02	1935CST			0	0	?	?	Hail (0.75)
Spanish Fort	02	1935CST			0	0	2	?	Thunderstorm Winds (G52)
Strong winds brought a few tree branches down.									
Shelby County									
Center	10	1715CST			0	0	5	?	Thunderstorm Winds
1 E Center	10	1720CST			0	0	3	?	Thunderstorm Winds
At Center, strong winds lifted the roof from a building, causing large sections of it to fall on four automobiles. Traffic lights were blown down, and numerous tree limbs were also downed. At 1 mile east of Center, several trees were blown down, blocking a farm-to-market road.									
Harrison County									
3 SW Scottsville	10	1925CST			0	0	?	?	Hail (0.88) and
2 SW Scottsville	10	1925CST			0	0	3	?	Thunderstorm Winds
2 N Elysian Fields	10	1930CST			0	0	3	?	Thunderstorm Winds
At 3 miles southwest of Scottsville, strong winds of 50 to 60 mph blew down several trees. At 2 miles north of Elysian Fields, thunderstorm winds uprooted trees.									
Shelby County									
Center	11	0335CST			0	0	3	?	Lightning
Lightning struck a transformer, disrupting the power supply.									
Hill County									
2 S Peoria	11	1400CST			0	0	3	?	Thunderstorm Winds
Strong winds lifted tin from a garage roof, and tore shingles from a house. A 30-foot windmill was toppled, and the trunk of a large tree was broken, falling upon power lines.									
Anderson County									
3 SE Elkhart	11	1430CST			0	0	3	?	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

TEXAS, Northern Cont'd

Strong winds brought power lines down.

Coryell County
2 SE Copperas
Cove

11	1430CST				0	0	4	?	Thunderstorm Winds
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Strong winds flattened the framework of a two-story house under construction, and sheathing was blown from another. The patio roof of a home was blown over the main roof, taking down the chimney, and causing part of the roof to collapse. Several trees were either uprooted or had their trunks snapped.

Bell County
Robert Gray
AAF

11	1431CST				0	0	3	?	Thunderstorm Winds (G66)
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Strong winds lifted a portion of the roof of the fire station, and blew windows out of the control tower.

Smith County
Tyler

12	1515CST- 1700CST				0	0	?	?	Flash Flood
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Heavy rains resulted in street flooding, causing numerous vehicles to stall, leaving motorists stranded. At one underpass, water was about 5 feet deep.

Wichita County
Electra

30	1500CST				0	0	3	?	Flash Flood
----	---------	--	--	--	---	---	---	---	-------------

As much as five inches of rain fell in Electra, flooding some rural roads and at least one house.

Eastland County
Eastland

31	2145CST- 2345CST				0	0	?	?	Flash Flood
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Heavy rains of estimated amounts between two and four inches resulted in street flooding. Water stood to a depth of 2 feet in places, flooding automobiles, and leaving motorists stranded.

TEXAS, Southern

Williamson County
2 W Jarrell

02	1620CST				?	?	?	?	Hail(0.88)
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A weather observer reported nickel-size hail west of Jarrell.

Montgomery County
10 W Conroe

02	1745CST	.01	10		?	4	?	?	Tornado (F1)
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A tornado tore the roof off a house near Lake Conroe.

Burleson County
5 E Caldwell

02	1930CST				?	?	3	?	Lightning
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Lightning struck two oil wells east of Caldwell, causing two fires.

Madison County
Madisonville

02	1935CST				?	?	4	3	Thunderstorm Winds
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Thunderstorm winds tore the roof off a mobile home near Madisonville. Some trees in the areas were damaged.

Harris County
Houston

09	1200CST				?	1	?	?	Lightning
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A man standing under a tree on a golf course was shocked when the tree was hit by lightning. (M25)

Brazoria County
Lake Jackson

13	1600CST				?	?	4	?	Lightning
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A fire started by lightning caused major damage to a house, in Lake Jackson.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

TEXAS, Southern Cont'd

Nueces County

Corpus Christi Bay	25	0900CST	.30	20	?	?	?	?	Waterspout
1 N W Robstown	25	0945CST	.40	20	?	?	?	?	Waterspout
1 N W Robstown	25	0955CST	.10	20	?	?	?	?	Tornado(F0)

A waterspout was reported over Corpus Christi Bay, a .25 mile from land. The Corpus Christi Police Department observed the vortex until it dissipated. A second waterspout was sighted northwest of Robstown about a half an hour after the first one. This waterspout moved on shore and dissipated without doing any damage.

San Patricio County

5 N Odem	25	0955CST	.05	20	?	?	?	?	Tornado (F0)
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A tornado briefly touched down near FM 1945 and County Road 35 north of Odem. No damage was reported in the area.

Jim Wells County

1 N Orange Grove	30	1815CST-			?	?	?	?	
	30	1828CST	.25	50	?	5	3	?	Tornado (F1)
Orange Grove	30	1830CST			?	?	4	?	Flash Flood

A tornado was reported by the Sheriff's Office north of Orange Grove. Two mobile homes had roof damage, a barns roof was blown off. Several trees in the areas were uprooted. In Orange Grove, six inches of rain were reported. A few cars were under water after the drivers tried to cross flooded roads.

Harris County

10 N Houston	31	1530CST			?	?	?	?	Thunderstorm Winds (G66)
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Wind gusts to 76 MPH were recorded at Houston Intercontinental Airport.

TEXAS, Western

Tom Green County

San Angelo	02	1415CST			0	0	2	0	Thunderstorm Winds (G58)
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Downburst winds gusted to 67 mph at the National Weather Service Office in San Angelo. Only minor damage resulted.

Stonewall County

Aspermont	03	0002CST			0	0	1	1	Hail (1.50)
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The Stonewall County Sheriff's Office reported hail slightly smaller than golf balls in Aspermont. No significant damage was noted.

Pecos County

9 W Iraan	12	2340CST-			0	0	2	2	
	13	0214CST			0	0	2	2	Flash Flood

Persistent heavy rains from slow-moving thunderstorms resulted in the closing of highways west of Iraan. Water up to 3 feet deep stranded a motorist on U.S. Highway 190.

Midland County

Midland	20	0232CST			0	0	3	2	Hail (0.75)
Midland	20	0232CST			0	0	4	2	Thunderstorm Winds (G61)

Dime-size hail accumulated to a depth of 3 inches in northeastern Midland. Winds estimated at 70 mph uprooted trees and damaged roofs and windows. Wind-driven hail killed more than 300 birds.

Ector County

Odessa	20	0355CST			0	0	5	1	Lightning
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Lightning struck the Champion Chemical plant in southeastern Odessa and triggered a series of explosions. The resulting chemical fire forced the evacuation of roughly 4,000 people. Although no one was injured by the lightning, 46 people were treated for inhalation of noxious fumes.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

TEXAS, Western Cont'd

Crane County Crane

26	1136CST-1258CST				0	0	2	2	Flash Flood
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The Crane County Sheriff's Office reported flash flooding in Crane. Several secondary roads were reported under water in the city.

Scurry County Snyder Snyder

30	1725CST				0	0	1	3	Hail (1.00)
30	1725CST				0	0	4	1	Thunderstorm Winds

The Scurry County Sheriff's Office reported quarter-size hail in and near Snyder. Minor crop damage resulted. Downburst winds which accompanied the storm downed power lines and tree limbs in Snyder.

Crane County 8 W Crane 6 W Crane 14 W Crane Crane Crane

31	2034CST				0	0	0	0	Hail (0.75)
31	2156CST				0	0	0	0	Hail (0.75)
31	2213CST				0	0	0	0	Hail (0.75)
31	2318CST-2359CST				0	0	2	0	Flash Flood
31	2321CST				0	0	0	0	Hail (0.88)

A series of thunderstorms moved across Crane County. The Crane Police Department observed dime-size hail in the central portion of the county. As the storms moved over Crane, nickel-size hail and flash flooding were reported. No significant damage resulted from the hail and flooding.

UTAH

Utah County Provo

04	1525MST				0	0	0	0	Thunderstorm Winds (G55)
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Thunderstorms developed over most of the state. Thunderstorms were high based, and produced microburst winds. A spotter reported a single gust to 63 mph. After this, gusts remained in the 45 to 55 mph range until the thunderstorm moved east and dissipated. There was no damage reported.

Box Elder County 26 W Tremonton

16	1845MST				0	0	0	0	Thunderstorm Winds (G56)
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A line of thunderstorms moved into northwestern Utah. A Utah Highway Patrol trooper reported sustained winds of 40 mph with gusts to 65 mph. Brief heavy rain also occurred with these thunderstorms. No significant damage was reported.

Tooele County 30 W Salt Lake City

16	2100MST	0.5	20		0	0	0	0	Funnel Cloud
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The same line of thunderstorms that caused the severe winds also produced a funnel cloud. This funnel cloud was spotted by a Salt Lake City resident who was driving west of the city. He was able to see the funnel cloud because of the frequent lightning. Because the funnel cloud occurred in a remote area, the amount of time it lasted can't be determined.

Salt Lake County Kearns

20	2312MST				0	0	0	0	Thunderstorm Winds (G55)
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A line of thunderstorms moved into northwestern Utah late on the 20th. This line produced gusty winds and little rainfall. The spotter reported only a single gust to 63 mph. Other gusts reported were in the 35 to 40 mph range. No damage was reported.

Utah County Provo

21	1513MST				0	0	3	0	Thunderstorm Winds (G66)
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High based thunderstorms produced very strong and gusty winds. These winds caused blowing dust which reduced visibilities to near zero in many areas. A spotter reported that a lot of small tree limbs had been blown off. Some power outages occurred as a result of these winds. There was only one peak gust to 76 mph. The gusts were in the 35 to 50 mph range after this gust.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

UTAH Cont'd

Salt Lake County
Sandy

21 1600MST 0 1 2 0 Lightning

Thunderstorms that were over the southeast portion of Salt Lake City produced frequent lightning. A cement truck was struck by lightning while the driver was in contact with the outside of the vehicle. The jolt threw the driver 20 to 30 feet into some bushes. He was knocked unconscious, but only received minor injuries. The cement truck did receive some minor damage.

Kane County

22 1900MST-
2030MST 0 4 0 0 Flash Flood

Tropical moisture combined with a cool upper trough to produce widespread showers and thunderstorms over most of Utah. The heaviest rainfall was in the eastern and southern portions with flash flooding occurring in extreme southern Utah. Warm Creek drainage near Big Water had 3 to 5 feet of water running through it. A nine-year-old girl was near the creek when the flooding began. She was taken a considerable distance downstream by the flood waters before she was found. She only received minor cuts and bruises. During the rescue attempt, two family members and a rescue worker also fell into the creek, and sustained minor injuries. No damage occurred as a result of the flooding.

Iron County
Cedar City

25 1050MST 0 0 0 0 Hail (0.75)

The combination of the jetstream, an upper level disturbance, and a surface boundary over southern Utah acted on a somewhat moist and unstable air mass. This produced numerous thunderstorms over this area. The large hail that occurred at the Cedar City Airport covered the ground to a depth of 1 inch. The airport also received 1.00 inch of rain in a 30-minute period beginning at 1037 MST. Several other reports from Iron County and adjoining Washington County had quarter- to half-inch hail and brief heavy rain. This hail covered the ground in a few areas. Only minor flooding was reported in both counties. Frequent lightning knocked out power to a large portion of northwest Washington County. However, no damage occurred as a result of the lightning. No major damage was caused by the hail, only the shredding of vegetation.

Iron County
Beryl

25 1600MST 0 0 0 0 Hail (1.00)

Additional thunderstorm activity was produced by the above combination of factors. Again the heaviest activity was in the southwestern portion of the state. Very heavy rain also occurred along with this large hail. Because this large hail occurred in a remote area, no major damage occurred, and was confined to the shredding of vegetation.

Salt Lake County
15 SW Salt Lake
City

30 1316MST 0.8 200 0 0 0 0 Tornado (F0)

15 W Salt Lake
City

30 1328MST 0.5 20 0 0 0 0 Waterspout

5 NE Salt Lake
City

30 1344MST 0.5 20 0 0 0 0 Funnel Cloud

Tooele County
Grantsville

30 1530MST 0.5 20 0 0 0 0 Funnel Cloud

A very moist air mass and diffluent flow aloft combined to cause widespread showers and thunderstorms over the entire state. Thunderstorms over the northwestern portion produced a tornado, a waterspout, and two funnel clouds. The tornado formed over the southwestern portion of the Salt Lake Valley. Several people including personnel at Weather Service Forecast Office in Salt Lake City saw this tornado. It stayed in an open field near West Kearns or approximately 15 miles southwest of the Salt Lake International Airport. It moved very little as it remained in this field. Spotter reports confirmed that the tornado had a very large width. When the tornado moved close to some power lines and poles, it only caused the lines to arc and briefly interrupt electricity to the area. No damage was done by the tornado. Even though this tornado was large in size, it was classified as a F0 because it caused no damage to power poles or structures it came close to. The tornado lasted 13 minutes.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

UTAH Cont'd

The waterspout was initially reported by a pilot while the first funnel cloud was spotted first by the public. The surface observer at the Salt Lake International Airport also saw these features. The last funnel cloud was reported by a state trooper. None of these features lasted very long or moved very much.

The thunderstorms that affected northwestern Utah also produced gusty winds, small hail, and brief heavy rainfall. The brief heavy rainfall did cause minor urban flooding.

Salt Lake County	31	1250MST- 1530MST			0	0	0	0	Flash Flood
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Widespread showers and thunderstorms again developed over most of the state. This was caused by an upper-level low acting on a very moist air mass. This produced very heavy rainfall in many areas along the Wasatch Front. The heaviest rainfall and urban flash flooding occurred in the southwestern portion of the county. No damage was reported.

Washington County 10 SE St. George	31	1310MST	0.3	20	0	0	0	0	Tornado (F0)
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Thunderstorms that had developed over the southwestern portion of the state produced a tornado. A pilot spotted this tornado along the Utah-Arizona border. The pilot reported that the tornado was only on the ground for a brief time. The Utah Highway Patrol in the area could not confirm the report. However, it was around a half hour before Weather Service Forecast Office in Salt Lake City was notified. There was no damage reported.

VERMONT

Rutland County Middletown Springs	04	1345EST			0	0	0	0	Hail (0.75)
Pawlet	04	1355EST			0	0	3	0	Thunderstorm Winds
Ira	04	1355EST			0	0	3	0	Thunderstorm Winds
Franklin County East Georgia	04	1445EST			0	0	6	4	Thunderstorm Winds
Chittenden County Milton	04	1445EST			0	0	4	0	Thunderstorm Winds
Fairfax	04	1450EST			0	0	5	4	Thunderstorm Winds

Severe thunderstorms moved into Vermont ahead of a cold front which moved southeast from the Saint Lawrence Valley on August 4th. Trees downed by thunderstorm winds and 0.75-inch hail were reported in Rutland County with a microburst resulting in extensive damage in Franklin County. In East Georgia and Fairfax, microburst winds of up to 100 mph caused extensive damage. In East Georgia the thunderstorm winds destroyed a barn, workshop, three-car garage, sugarhouse and took the roof off a home on a farm along Route 104A. Several vehicles were also heavily damaged and several other homes had their roofs removed just off of Route 104A along the Georgia/Fairfax Town Line. Trees (up to 5 feet in diameter and some well over a 100-years-old) were uprooted or blown down and crops in the area were destroyed with debris from the farm strewn over 10 acres of corn. Damage to the farm alone was estimated at over \$500,000. No injuries were reported as a result of the severe thunderstorms, however several cows at the farm had to be destroyed. Ironically a barn on the same farm was destroyed by thunderstorm winds 85 years earlier on August 8, 1907, killing 42 cows.

VIRGINIA

Caroline County	03	1715EST			0	0	0	0	Thunderstorm Winds
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Several trees were blown down.

Cumberland County	03	1730EST			0	0	0	0	Hail (1.00) Thunderstorm Winds
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Sheriff's Department reported quarter-size hail and several downed trees in the S part of the county.

Shenandoah County 2W Moores Store	04	1221EST			0	0	0	0	Thunderstorm Winds
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Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

VIRGINIA Cont'd

Sheriff's Department reported trees downed.									
Culpeper County	04	1304EST			0	0	0	0	Thunderstorm Winds
Trees were blown down.									
Fairfax County 2SW Franconia	04	1345EST-							
	04	1350EST	2.0	75	0	0	3	0	Tornado (F1)
A weak tornado traveled a 2-mile ESE path causing tree damage in several wooded areas. A few trees fell onto houses.									
Fairfax County Franconia, Burke Newington, and Hayfield	04	1345EST-							
	04	1400EST			0	1	4	0	Thunderstorm Winds (G62)
Spotters reported areas of downed trees in both places. Several power poles were snapped off in a row near Hayfield. A few houses were damaged at Franconia. Based on damage reports, winds were estimated at 70 mph (62 knots). A falling tree struck a car at Burke, but the driver was not seriously hurt. Another car was hit by falling trees.									
City of Alexandria	04	1405EST			0	0	5	0	Thunderstorm Winds (G70)
Spotters estimated winds 80 mph (70 knots). Three garages were heavily damaged and 20-30 trees were downed.									
City of Portsmouth Cradock	09	1610EST-							
	09	1625EST			0	0	3	0	Thunderstorm Winds
Trees and power lines downed at Cradock and several other parts of the city.									
Essex County	09	1705EST			0	0	0	0	Thunderstorm Winds
Trees downed in the extreme southern part of the county.									
Buckingham County INE Centenary	11	1430EST			0	0	3	0	Thunderstorm Winds
Trees and power lines were blown down.									
Rappahannock County	11	1425EST			0	0	3	0	Thunderstorm Winds
Fauquier County	11	1425EST			0	0	2	0	Thunderstorm Winds
Loudoun County	11	1450EST			0	0	3	0	Thunderstorm Winds (G52)
Trees reported blown down at numerous locations in these counties according to spotters and law-enforcement agencies. A spotter in Lovettsville estimated wind gusts to 60 mph (52 knots). Power lines were downed in southern Fauquier County.									
Loudoun County Leesburg	11	1520EST			0	0	0	0	Thunderstorm Winds
Thunderstorm winds knocked down trees in Leesburg.									
Fauquier County	11	1530EST			0	0	0	0	Thunderstorm Winds
Prince William County	11	1530EST			0	0	0	0	Thunderstorm Winds
Fairfax County	11	1530EST			0	0	0	0	Thunderstorm Winds
Arlington County	11	1545EST			0	0	0	0	Thunderstorm Winds
Power company officials and EOC Center reported downed trees at several locations in southern Fauquier County, south-eastern Prince William County, and southern Fairfax County.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
VIRGINIA Cont'd									
City of Alexandria	11	1600EST			0	0	5	0	Lightning
	Lightning struck an office building, tearing bricks and metal loose, and causing over \$40,000 damage to office computers and electronic alarm systems. No fire was reported.								
Nelson County	11	1700EST			0	0	0	5	Thunderstorm Winds
	Strong thunderstorm winds blew down trees in apple orchards. Hail of unspecified size severely damaged apple crops, bruising and puncturing the skins.								
Caroline County Alps	11	1800EST			0	0	5	0	Lightning
	A house was destroyed by a lightning-caused fire.								
Chesterfield County 4S Midlothian	11	1800EST			0	0	4	0	Thunderstorm Winds
	Trees were blown down in the Brandermill area (4S Midlothian). A large tree fell onto a house, damaging the roof and other parts of the house.								
Shenandoah County Quicksburg	12	1600EST			0	0	4	0	Thunderstorm Winds
	Trees were downed; one fell onto a house and a camper, damaging them.								
Dickenson County Clintwood	13	0500EST- 13 1000EST			0	0	4	0	Flood/Flash Flood
	Widespread flooding in Clintwood resulted in generally minor damage.								
City of Newport News Fort Eustis	13	1600EST			0	0	4	0	Thunderstorm Winds
	A thunderstorm downburst shattered more than 50 car windows and damaged outbuildings at the Fort Eustis Military Reservation.								
City of Virginia Beach 5E Munden	15	0750EST	0.3	25	0	0	0	0	Tornado (F0)
	A tornado that damaged a school and several homes on the North Carolina portion of Knotts Island lifted before it got to the state line; but City Police reported the storm touched back down on the Virginia side, the northern tip of the island (5E Munden), in a wooded area. No damage occurred to buildings. The tornado traveled in a NNE direction. Only the VA portion of the tornado track is included here; see North Carolina Storm Data for further information.								
City of Virginia Beach 3ENE Munden	15	0800EST			0	0	0	0	Funnel cloud
	Public reports of a funnel cloud receding into its parent thunderstorm cloud over the SW portion of Back Bay (3ENE Munden).								
City of Norfolk City of Hampton City of Suffolk City of Portsmouth Churchland	16	0700EST- 16 1100EST			0	0	5	0	Flood/Flash Flood
	Heavy rains falling onto waterlogged ground caused widespread flooding of low places and poor-drainage areas. Portsmouth police evacuated parts of the Churchland section of the city when 5 to 8 feet of water accumulated, inundating homes and apartments and rendering roadways impassable. In Suffolk, flood waters washed out portions of a road near a retirement home.								

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
VIRGINIA Cont'd									
Rockingham County									
City of Harrisonburg	26	1900EST-							
	26	2100EST			0	0	0	0	Flash Flood
Over 3 inches of rain in an hour caused street flooding in the county and in Harrisonburg. A power outage at Shenandoah Airport shut down the airport.									
Rappahannock County									
	28	1215EST			0	0	0	0	Thunderstorm Winds
Trees were blown down in the mountainous western part of the county, at about the 1,500-foot level, along United States Route 211.									
Loudoun County									
Wheatland	28	1443EST			0	0	0	0	Thunderstorm Winds (G52)
Ham radio spotters reported 50-60 mph winds (52 knots).									
Culpeper County									
Culpeper	28	1454EST			0	0	0	0	Hail (0.75)
City of Hampton									
Langley Air Force Base									
City of Portsmouth	28	1530EST			0	0	0	0	Thunderstorm Winds (G52)
Cradock									
Strong winds blew trees down in Hampton near Langley Air Force Base. A spotter in the Cradock section of Portsmouth recorded 60-mph winds (52 knots).									
City of Portsmouth									
Churchland	28	1543EST			0	0	0	0	Thunderstorm Winds
Many trees and large limbs were blown down.									
City of Norfolk									
S Island Bay	28	1548EST			0	0	0	0	Thunderstorm Winds (G55)
Bridge Tunnel									
A TV meteorologist reported winds over 58 mph (50 knots) in downtown Norfolk. Winds of 63 mph (55 knots) were recorded at the South Island of the Bay Bridge Tunnel.									
York County									
Yorktown	28	1550EST			0	0	0	0	Thunderstorm Winds
Spotters reported trees downed.									
City of Newport News									
Norfolk International Airport	28	1552EST			0	0	0	0	Thunderstorm Winds (G52)
City of Portsmouth									
	28	1603EST			0	0	3	0	Thunderstorm Winds
Trees were blown down across power lines in scattered areas.									
Northampton County									
Cheriton	28	1614EST			0	0	0	0	Thunderstorm Winds
Emergency dispatcher reported trees blown down.									
WASHINGTON									
Eastern Washington WAZ009	21	1400PDT- 1800PDT			1	2	4	0	Dust Storm

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

WASHINGTON Cont'd

Very dry, late summer conditions and north winds blowing to 30 mph combined to cause blowing dust which reduced visibilities to near zero at times. At 1650 PDT, a two-car collision occurred due to the reduced visibilities. Two men were injured in the accident and one was killed. (M79V)

WEST VIRGINIA

WVZ002-003-004-005 Western Lowlands	02	0600EST			0	0	0	0	Record Cold
Sunrise temperatures were in the lower 50s. The mountains had readings in the 40s.									
Berkeley County Martinsburg	03	2125EST			0	0	3	0	Thunderstorm Winds
Trees and power lines were blown down.									
Hancock County New Cumberland	11	0115EST			0	0	0	0	Thunderstorm Winds
Several trees were uprooted and large limbs broken.									
Ohio County Wheeling	11	0700EST			0	0	3	0	Lightning
Lightning struck a Methodist church tower. Large chunks of stone were dislodged, damaging the roof.									
Monongalia County Morgantown Morgantown	11	1235EST			0	0	0	0	Thunderstorm Winds
	11	1240EST			0	1	0	0	Lightning
Several trees were blown down. A 42-year-old woman was struck by lightning.									
Preston County 2 E Reedsville Reedsville	11	1245EST			0	0	0	0	Thunderstorm Winds
	11	1245EST			0	1	0	0	Lightning
Trees were fallen around the community of Kaness Creek. Lightning struck a woman in Reedsville.									
Tyler County Middlebourne	11	1300EST			0	0	4	0	Lightning
Lightning hit the courthouse, damaging phone and communication equipment.									
Jefferson County 1 SW Harpers Ferry	11	1415EST			0	0	0	0	Hail (0.75)
Shepherdstown	11	1415EST			0	0	0	0	Hail (0.75)
Preston County Newburg to Gladesville	11	1415EST-1515EST			0	0	3	0	Flash Flood
Three Forks Creek flooded. One vehicle was submerged and one garage damaged.									
Jefferson County Shepherdstown	11	1500EST			0	0	0	0	Hail (0.75)
Upshur County Rock Cave	11	1545EST			0	0	0	0	Hail (0.75)
Webster County 4 N Webster Springs	11	1640EST			0	0	2	0	Thunderstorm Winds
Several trees were down along Grassy Creek. Rainfall of 2.50 inches in 1 to 2 hours caused a few landslides, and several blocked roads.									
Nicholas County 2 SE Craigsville	11	1700EST			0	0	3	0	Lightning
Seven cows and eight calves were killed.									

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

WEST VIRGINIA Cont'd

Boone County

Foster Rock Creek Danville Madison Uneeda	11	1745EST- 2000EST			0	0	5	0	Flash Flood
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A cloudburst from thunderstorms dumped three to four inches of rain in less than 1 hour and half. Madison measured 3.60 inches of rain from 1700 to 1815EST. Small tributaries of the Little Coal River flooded, including Rock Creek and Pond Fork. Numerous secondary roads were washed out. One bridge near Foster was destroyed. Flooded basements, landslides, and broken gas lines were common. One landslide at Madison pushed a mobile home off its foundation. One diner in Madison had 6 feet of water in its basement. One woman who lived just outside Madison said, "I was standing in my house and the water just rushed in. I've never seen anything like it. The water just rose out of the creek".

Fayette County Fayetteville

14 15	2100EST- 0100EST			0	0	3	0	Flash Flood
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Basements were flooded and one family was evacuated. Landslides were also common in vicinity.

Boone County Southwest Portion

15	1530EST- 2230EST			0	0	4	0	Flash Flood
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Repetitive showers flooded small tributaries to Pond Fork and the Big Coal River. A fireman reported 2.50 inches of rain in 50 minutes. Roads and bridges were damaged. Two families were evacuated from along James Creek near Bald Knob at around 2130EST. Minor flooding was reported around Sylvester and Whitesville.

Kanawha County Eastern Portion

15	1630EST- 1800EST			0	0	3	0	Flash Flood
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The Left Fork of Kelly Creek surrounded homes around Mammoth. Jordan Creek near Falling Rock had a few residents trapped in their homes. Rescue units were dispatched in both cases.

Fayette County Jodie

15	1900EST- 2100EST			0	0	6	0	Flash Flood
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Rich Creek flooded. Three homes were destroyed. Two homes had major structural damage and 25 homes had minor damage. Route 60/3 was heavily damaged, including bridges. Private damage included two trucks, a car, and camper destroyed. Numerous outbuildings and their contents were lost. Three private vehicular bridges and 1 foot bridge were destroyed. Total damage, including roads, estimated at \$750,000.

Nicholas County Southwest Portion

15	1930EST- 2200EST			0	0	4	0	Flash Flood
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Many county roads were damaged by flooding streams. Mainly in the Swiss and Drennen region. No homes were reported damaged.

WVZALL

28	0500EST 1400EST			0	0	0	0	Rain
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The low pressure remnants of Hurricane Andrew lifted northeast along the Virginia border from Bluefield to Martinsburg. It combined with a cold front from the northwest to cause mainly beneficial rains. The heaviest rain was over the western lowlands, where 1.50 to 2.50 inches fell. Some urban and poor drainage flooding did occur in Morgantown.

Berkeley County 5 N Martinsburg

28	1530EST			0	0	0	0	Thunderstorm Winds
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Trees were blown down.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Locn/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
WISCONSIN									
Trempealeau County									
Whitehall	01	1650CST			0	0	?	?	Hail (1.00)
Whitehall	01	1650CST			0	0	?	?	Thunderstorm Winds
Jackson County									
Black River Falls	01	1700CST			0	0	?	?	Thunderstorm Winds
Adams County									
8 E New Rome	01	1750CST			0	0	?	?	Hail (1.00)
Monroe County									
Tomah	01	1810CST			0	0	?	?	Hail (1.00)
5 E Tomah	01	1815CST			0	0	?	?	Hail (1.50)
Waushara County									
Plainfield	01	1825CST			0	0	?	?	Hail (1.00)
Saxeville	01	1830CST			0	0	?	?	Hail (1.50)
West Bloomfield	01	1840CST			0	0	?	?	Thunderstorm Winds
Clark County									
Shortville	01	1845CST			0	0	4	0	Thunderstorm Winds
Juneau County									
Camp Douglas	01	1850CST			0	0	?	?	Hail (1.00)
2 S Finley	01	2010CST			0	0	?	?	Hail (1.00)
Winnebago County									
2 W Appleton	01	1857CST			0	0	?	?	Hail (1.75)
5 N Neenah	01	1900CST			0	0	?	?	Thunderstorm Winds
Neenah	01	1903CST			0	0	?	?	Thunderstorm Winds
Outagamie County									
Appleton	01	1906CST			0	0	?	?	Hail (1.00)
Darby	01	1911CST			0	0	?	?	Hail (1.00)
Kaukauna	01	1915CST			0	0	?	?	Hail (1.00)
Calumet County									
Chilton	01	1945CST			0	0	?	?	Thunderstorm Winds

Several severe thunderstorms deposited hail up to golf ball-size across the southern half of Wisconsin. A few thunderstorms produced strong winds which knocked down trees and power lines. An intense thunderstorm wind overturned a small mobile home near Shortville in Clark County, while a roof was blown off a barn near Neenah in Winnebago County.

Jackson County									
York	03	1500CST			0	0	?	?	Hail (1.00)
Kewaunee County									
Dykesville	03	1559CST			0	0	0	0	Funnel Clouds
Door County									
Brussels	03	1602CST			0	0	0	0	Funnel Clouds

A severe thunderstorm dropped hail up to 1.00 inch in diameter near York. Cold air funnels were sighted over parts of northeastern Wisconsin.

Sawyer County									
8 NW Hayward to 5 N Hayward	09	1925CST	4.0	100	0	0	?	?	Tornado (F1)
3 WNW Hayward	09	1930CST	0.5	35	0	0	?	?	Tornado (F1)
Hayward	09	1932CST			0	0	0	0	Funnel Cloud
Rusk County									
Tony	09	2130CST			0	0	?	?	Thunderstorm Winds
Oneida County									
Lake Tomahawk	09	2140CST			0	0	?	?	Thunderstorm Winds
Florence County									
Florence	10	0000CST			0	0	?	?	Thunderstorm Winds
Forest County									
Crandon	10	0000CST			0	0	?	?	Thunderstorm Winds
Wabeno	10	0020CST			0	0	?	?	Thunderstorm Winds
Monroe County									
Cashton	10	0430CST			0	0	?	?	Thunderstorm Winds

Several severe thunderstorms rumbled through northwestern and western Wisconsin producing gusty winds that knocked down many trees and power lines. A pair of small tornadoes touched down in

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

WISCONSIN Cont'd

northwestern Sawyer County near Hayward. The first tornado skipped along a 4-mile path from the Totogatic Flowage to just north of Nelson Lake. The second tornado touched down briefly just outside of Hayward. Damage from both tornadoes was confined to trees and power lines.

Lincoln County 5 W Merrill	11	1655CST			0	0	0	0	Funnel Cloud
Barron County Cameron	11	1800CST			0	0	5	?	Thunderstorm Winds
Intense winds from a severe thunderstorm blew the roof off a barn and tipped over a shed near Cameron in Barron County. A cold air funnel was detected near Merrill.									
Dane County Oregon	12	1355CST			0	0	0	0	Funnel Cloud
A cold air funnel developed over the Oregon area.									
Brown County Green Bay	13	0754CST			0	0	0	0	Funnel Cloud
Kewaunee County 1 E Kewaunee	13	0800CST			0	0	0	0	Waterspout
Fond du Lac County Fond du Lac	13	1055CST			0	0	0	0	Funnel Cloud
Cold air funnels were reported over eastern Wisconsin. A waterspout developed just off shore near Kewaunee.									
Kenosha County 1 E Kenosha	14	0530CST			0	0	0	0	Waterspout
Racine County 10 E Racine	14	0545CST			0	0	0	0	Waterspout
Milwaukee County 2 E Milwaukee	14	0705CST			0	0	0	0	Waterspout
Ozaukee County 1 E Port Washington	14	0800CST			0	0	0	0	Waterspout
Several waterspouts formed just off shore in southeastern Wisconsin over Lake Michigan.									
Sauk County Baraboo	25	1315CST			0	0	?	?	Thunderstorm Winds
Lake Delton	25	1320CST			0	0	?	?	Thunderstorm Winds (G56)
4 NW Reedsburg	25	1455CST			0	0	?	?	Thunderstorm Winds (G52)
Crawford County Prairie du Chien	25	1340CST			0	0	4	?	Thunderstorm Winds (G52)
Mt. Sterling	25	1350CST			0	0	4	?	Thunderstorm Winds
Kenosha County Paddock Lake	25	1340CST			0	0	?	?	Thunderstorm Winds
Richland County Basswood	25	1427CST			0	0	?	?	Thunderstorm Winds
Lafayette County 5 NE Belmont	25	1510CST			0	0	4	?	Thunderstorm Winds
Marquette County 5 NW Westfield	25	1536CST			0	0	?	?	Thunderstorm Winds
Waushara County Wautoma	25	1607CST			0	0	?	?	Thunderstorm Winds (G52)
Green Lake County Green Lake	25	1610CST			0	0	?	?	Thunderstorm Winds (G52)
Fond du Lac County Ripon	25	1610CST			0	0	?	?	Thunderstorm Winds
1 E Rosendale	25	1630CST			0	0	?	?	Thunderstorm Winds
Waupaca County Ogdensburg	25	1630CST			0	0	4	?	Thunderstorm Winds
Clintonville	25	1640CST			0	0	4	?	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

WISCONSIN Cont'd

Winnebago County									
Oshkosh	25	1630CST			0	0	4	?	Thunderstorm Winds (G52)
Neenah	25	1640CST			0	0	4	?	Thunderstorm Winds

Scattered severe thunderstorms downed trees and power lines across southern and eastern Wisconsin. Roofs were damaged by intense winds gusting to 60 mph in Prairie du Chien (Crawford County) and Oshkosh (Winnebago County).

Pierce County									
4 W Ellsworth	27	1320CST			0	0	0	0	Funnel Cloud

A cold air funnel was sighted near Ellsworth.

Washburn County									
Shell Lake	29	1513CST			0	0	?	?	Hail (1.00)
Chippewa County									
8 E Chippewa Falls	29	1623CST			0	0	0	0	Hail (0.75)
Holcombe	29	1630CST			0	0	0	0	Hail (0.88)
Buffalo County									
Mondovi	29	1630CST			0	0	?	?	Hail (0.75)
Eau Claire County									
Altoona	29	1705CST			0	0	0	0	Hail (0.75)
Eau Claire	29	1710CST			0	0	?	0	Thunderstorm Winds
Trempealeau County									
Osseo	29	1705CST			0	0	?	?	Hail (1.00)
Jackson County									
Hixton	29	1715CST			0	0	?	?	Hail (1.75)
Juneau County									
Mather	29	1810CST			0	0	?	?	Hail (0.75)
Camp Douglas	29	1815CST			0	0	?	?	Thunderstorm Winds
Camp Douglas	29	1815CST			0	0	?	?	Hail (1.00)
Adams County									
10 NW Adams	29	1839CST			0	0	?	?	Thunderstorm Winds (G52)
3.5E Big Flats	29	1900CST	5.0	100	0	0	4	?	Tornado (F1)
Waushara County									
2 N Coloma	29	1910CST-							
Wautoma		1955CST	28.0	800	1	30	7	5	Tornado (F3)
1 N Redgranite									
3 SE Poy Sippi									

A series of severe thunderstorms swept across west-central and central Wisconsin depositing hail up to golf ball-size and generating winds to 60 mph. A tornado set down east of Big Flats (Adams County) and skipped along a 5-mile path toppling trees and downing a 24- by 30-foot building. A killer tornado traveled along a 28-mile path in Waushara county from north of Coloma to Wautoma to north of Redgranite to southeast of Poy Sippi. The hardest hit area was just south of Wautoma where a woman was killed when her mobile home was hurled several hundred feet into a parking lot. In addition, 30 people were injured, several critically. The tornado caused over \$10 million in damage which included \$7.7 million damage to residences and businesses, \$1.8 million damage to public property, \$400,000 in timber losses to trees and \$215,000 in agricultural losses. All together 48 homes were destroyed, 95 sustained major damage and 289 received minor damage. Also, 28 businesses were damaged as well as a Senior Center and industrial building which employed handicap workers. Thousands of trees spread over 950 acres were toppled by the tornadic winds. (F66M)

WYOMING

Sweetwater County									
Rock Springs	03	1310MST			0	0	0	0	Thunderstorm Winds (G50)

Thunderstorms brought gusty winds with little reported damage to Rock Springs.

Albany County									
Laramie	03	1031MST			0	0	0	0	Thunderstorm Winds (G50)

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
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WYOMING Cont'd

Little or no damage occurred from thunderstorms during the afternoon in Laramie.

Carbon County
30 W Rawlins

03	1809MST								Funnel Cloud
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Two funnel clouds were reported by a pilot west of Rawlins during the early evening.

Teton County
Jackson

21	1505MST								Thunderstorm Winds (G51)
----	---------	--	--	--	--	--	--	--	--------------------------

A thunderstorm brought gusty winds to the Jackson Airport. There were no reports of damage.

Laramie County
16 NE Pine
Bluffs

31	1608MST								Hail (0.75)
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A thunderstorm brought hail to extreme eastern Laramie county late in the afternoon.

ALASKA, Northern

None reported.

ALASKA, Southern

Bristol Bay

02	0600ADT								Record Low Temperature
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Thirty-eight degrees was recorded at King Salmon. This temperature broke the old daily record of 40 degrees set in 1956.

Cook Inlet
Prince William
Sound

18	1700ADT								Volcanic Eruption
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At about 1700 ADT Mt. Spur, 80 miles west of Anchorage, erupted. Anywhere from 0.125 to 0.25 inch of ash fell over Anchorage during the evening. The ash plume crossed the northern portion of the Kenai Peninsula into Prince William Sound during the night. By 0500 ADT satellites indicated the plume extending over Prince William Sound and along the north gulf coast east to Cape Spencer and south into the Gulf of Alaska.

ALASKA, Southeastern

None reported.

HAWAII

None reported.

PACIFIC

28	1600GST			1	132	8	?		Typhoon Omar
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The most severe typhoon to strike Guam in 16 years moved westward across the island during the afternoon hours on August 28th accompanied by winds that gusted as high as 150 mph and rainfalls locally in excess of 10 inches. Severe property damage estimated near \$300 million occurred as 75 to 90 percent of the island's buildings received major damage. The only death reported was a man found in the rubble of his home in the northern town of Tamuning. About 132 people with the storm related injuries were treated at Guam Memorial Hospital. About 5,000 people out of a total population of 140,000 were homeless and spent time in shelters. Damage to crops was extensive.

PUERTO RICO

Mayaguez

04	1500AST			0	0	3	0		Urban Flooding
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Thunderstorms with heavy rain of around 2.00 inches fell in the municipality of Mayaguez. There were two landslides in Barrio Miradero, flooding of streets and a tree was knocked down over a car in the Mayaguez Zoo. Another tree fell over a house causing damages to the roof structure.

Storm Data and Unusual Weather Phenomena

August 1992

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

PUERTO RICO Cont'd

PRZ005	05	1600AST			0	0	3	0	Flash Flood
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Two to five inches of rain fell during the afternoon hours over the interior portion of the island. One creek overflowed near Bo. Borinquen, Caguas. Another creek that overflowed in Utuado eroded a contention wall along the State Road. Other incidents were minor landslides in Las Marias and Utuado, fallen trees in Ciales and urban flooding in nine urbanizations in Caguas.

Aguada	06	1500AST			0	0	3	3	Flash Flood Hail (0.75)
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Heavy rains in Aguada resulted in flash flooding across town. Both Rio Culebrinas and Rio Ingenio went out of their banks. There were downed trees and power lines along Road No. 2 and other adjacent streets. Due to strong winds, three residences lost their zinc roofs. Flooding along Desvio Sur made roads impassable. Dime-size hail was reported causing damage to plantain crops. Minor landslides along roads were also reported.

PRZ001	09	1500AST			0	0	2	0	Flash Flood
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Creek Camarones in Guaynabo overflowed due to heavy rains affecting one residence and the family had to be evacuated. Rio Canas also went out of its banks affecting Sector Torres. Road No. 1 was impassable due to standing water. There were also reports of minor landslides in Rio Piedras and Guaynabo.

San Juan	14	1400AST			0	0	2	0	Flash Flood
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A swollen creek in Cupey Rio Piedras near Road 844 swept a car against a road wall. Fortunately there were no injuries. Local flooding was also reported in Ocean Park and Bo. Obrero due to poor drainage.

U.S. VIRGIN ISLANDS

St. Thomas	03	1330AST			0	0	0	0	Waterspout
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A pilot reported a waterspout six miles west of St. Thomas airport.

St. Thomas	15	1140AST			0	0	0	0	Waterspout
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A small craft sighted a waterspout about nine miles northwest of St. Thomas airport.

St. Thomas	22	1105AST			0	0	0	0	Waterspout
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A waterspout was sighted by an aircraft between St. Thomas and Culebra.

STORM DAMAGE CATAGORIES

REFERENCE NOTES

1	Less than \$50	0/Blank	None reported.
2	\$50 to \$500	*	Miles instead of yards.
3	\$500 to \$5,000	**	Yards instead of miles.
4	\$5,000 to \$50,000	@	Includes heavy sleet storm.
5	\$50,000 to \$500,000	#	Freezing drizzle and freezing rain, commonly known as glaze.
6	\$500,000 to \$5 Million	≠	Report incomplete.
7	\$5 Million to \$50 Million	≠≠	Report not received.
8	\$50 Million to \$500 Million	o/c	Indicates Crop Damage amount is included in the value given for property damage.
9	\$500 Million to \$5 Billion		

When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

Definition of Fujita Tornado Scale (F scale)

(F0) Gale tornado (40-72 mph): Light damage
Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.

(F1) Moderate tornado (73-112 mph): Moderate damage
The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.

(F2) Significant tornado (113-157 mph): Considerable damage
Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.

(F3) Severe tornado (158-206 mph): Severe damage
Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.

(F4) Devastating tornado (207-260 mph): Devastating damage
Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.

(F5) Incredible tornado (261-318 mph): Incredible damage
Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.

(F6-F12) (319 mph to Mach 1, the speed of sound):
The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

(F0+F1) Weak Tornado
(F2+F3) Strong Tornado
(F4+F5) Violent Tornado

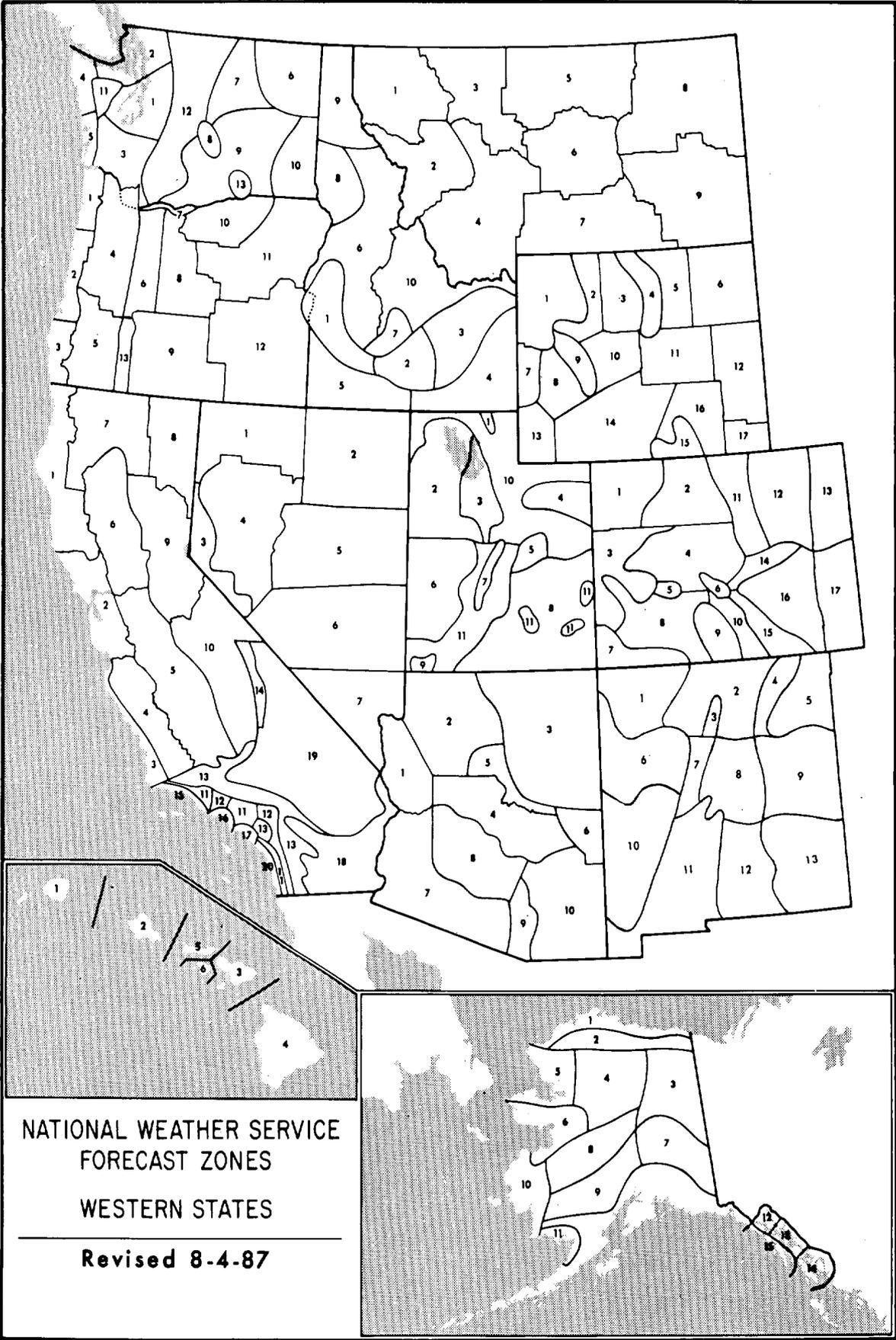


From J. Atmos. Sci., August 1981, p. 1517-1519

STORM SUMMARY

AUGUST 1992

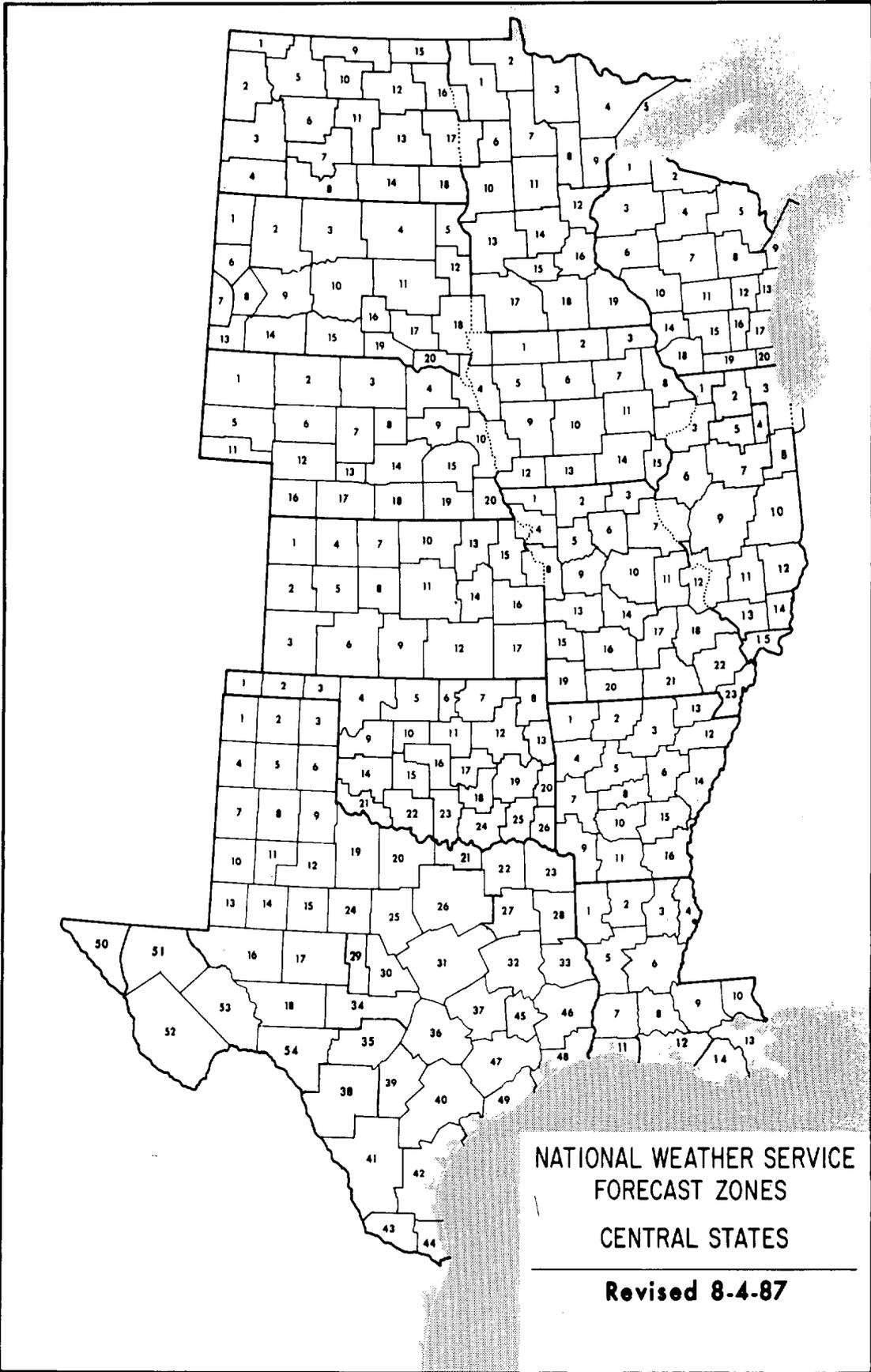
TYPE	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	IDAHO	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE
TORNADOES																											
Number	3	2			6	2	1	2	2		1	3		3		16		11				27		1	1	1	
Days	0	0			0	0	0	0	0		0	0		0		3		0			0		0	0	0	0	
Deaths	0	0			0	0	0	0	0		0	0		0		0		0			0		0	0	0	0	
Injuries	0	0			0	0	0	0	0		0	0		0		0		0			0		0	0	0	0	
Property Damage	0	0			0	0	0	0	0		0	0		0		0		0			0		0	0	0	0	
Crop Damage	0	0			0	0	0	0	0		0	0		0		0		0			0		0	0	0	0	
HAIL																											
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
THUNDERSTORM WINDS																											
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIGH WINDS																											
Deaths								1																			
Injuries								0																			
Property Damage								0																			
Crop Damage								0																			
LIGHTNING																											
Deaths	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FLASH FLOODS																											
Deaths	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FLOODS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
ICE STORMS #																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
HURRICANES AND TROPICAL STORMS																											
Deaths								15																			
Injuries								0																			
Property Damage								0																			
Crop Damage								0																			
ALL OTHERS																											
Deaths		1		3																							
Injuries		0		0																							
Property Damage		0		0																							
Crop Damage		0		0																							



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STORM DATA

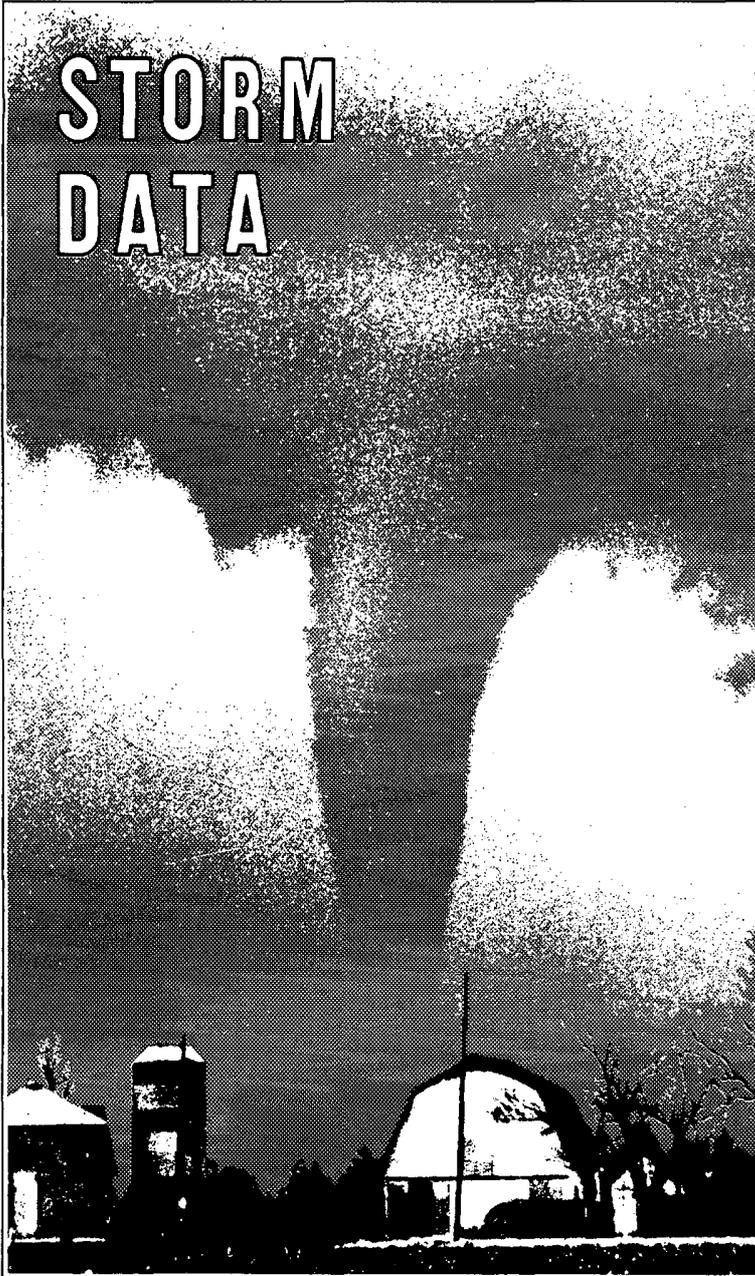


Photo courtesy: Larry Miller, Kansas Heritage Photography

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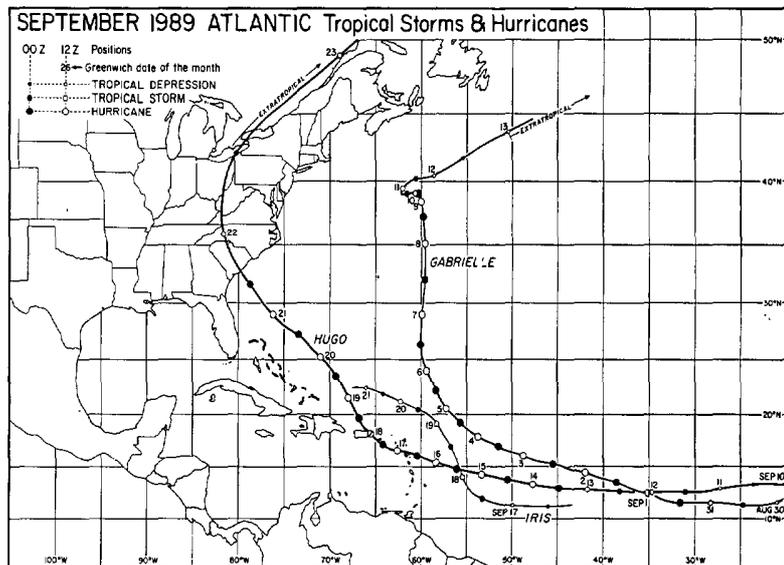
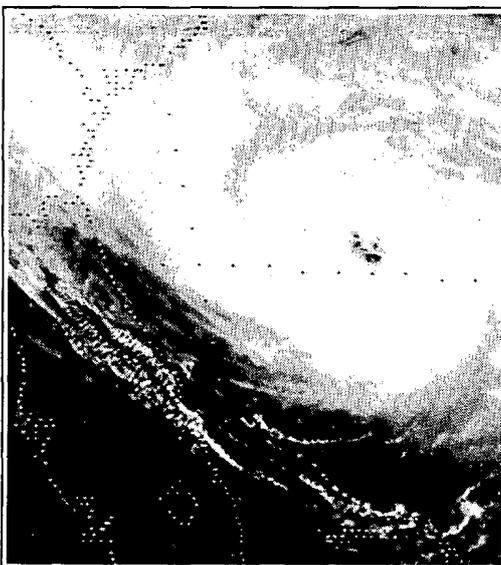
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HURRICANE HUGO, SEPTEMBER 10-22, 1989

Despite excellent warning lead times and excellent government and public response to the warnings, the fury of Hurricane Hugo took many by surprise and will undoubtedly haunt the memory of many Americans for years to come. Along with numerous deaths and injuries, HUGO brought large-scale devastation to much of the Carolinas, Puerto Rico, the Virgin Islands and other islands of the Caribbean, making it the costliest hurricane in U.S. history.

Over the course of slightly less than two weeks, HUGO followed a trajectory that was typical for an Atlantic Basin tropical system: originating near Africa in the vicinity of the Cape Verde Islands, traveling west across the tropical Atlantic to the Leeward Islands, turning northwest toward the U.S. coast until making landfall in the Carolinas, and once inland, turning northeast under the influence of the Westerlies and becoming extratropical while skirting the eastern U.S.-Canada border (see map below). The system originated from a cluster of thunderstorms that moved off the African coast on September 9th and organized into a tropical depression on the 10th just southeast of the Cape Verde Islands. The system moved west at 18 knots, attaining storm status on the 11th, and hurricane status on the 13th while located about 1100 nautical miles east of the Leeward Islands. HUGO gradually turned west-northwest and slowed in its translation as it headed for the Islands. While still several hundred miles east of the Islands on the 15th, the first reconnaissance aircraft reported HUGO as having a minimum central pressure of 918 mb and an estimated maximum surface wind of 140 knots. This turned out to be HUGO's maximum intensity.



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STORM DATA

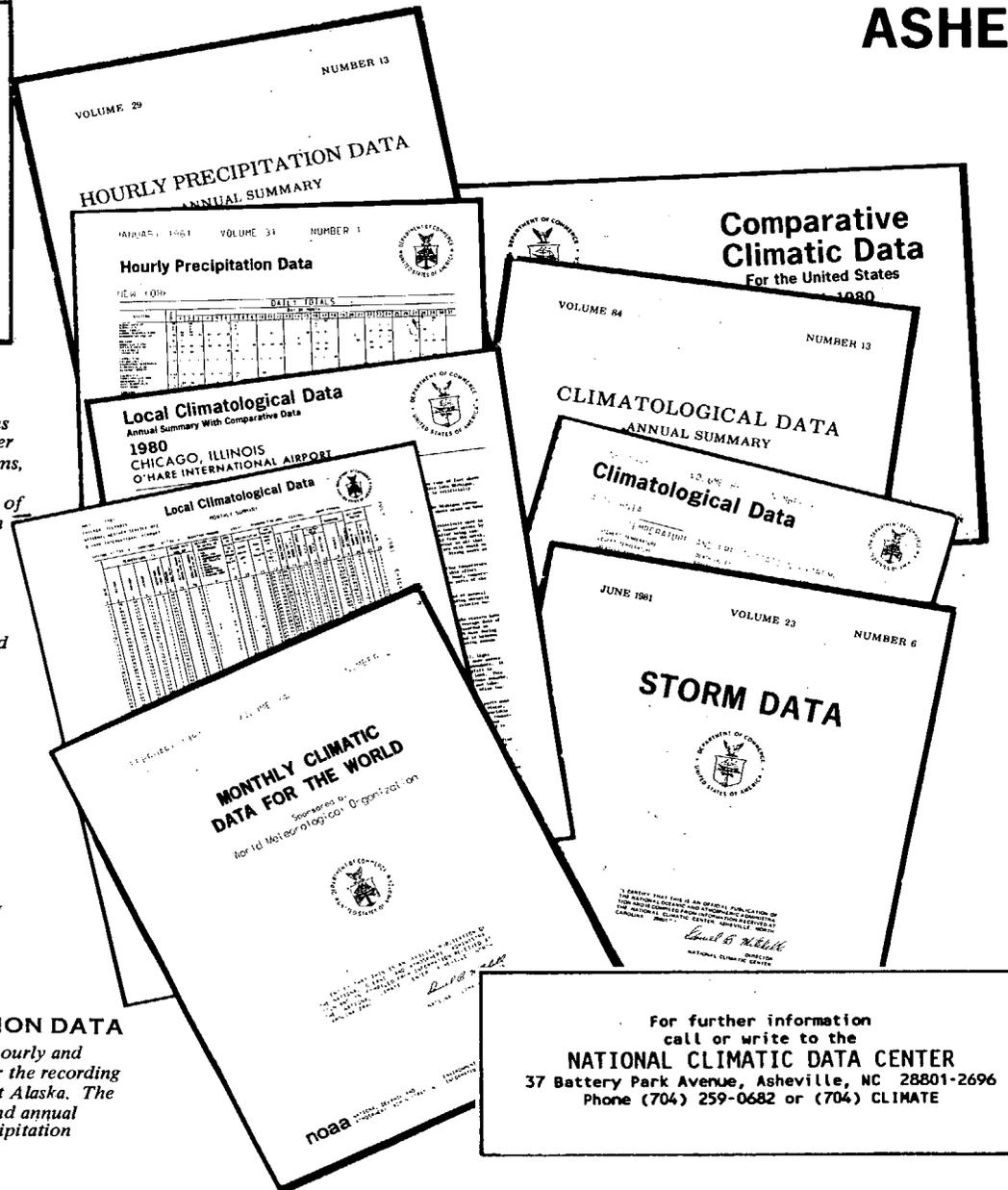
Monthly issue presents a chronological listing, by states, of occurrences of storms and unusual weather phenomena, together with data on the paths of individual storms, deaths, injuries, and estimated property damage, and a brief narrative description of each event. A new section in the bulletin entitled "OUTSTANDING STORMS OF THE MONTH" highlights severe weather and includes descriptive photographs of storms, their tracks, and analyzed maps. The December issue includes annual summaries of tornadoes and lightning and North Atlantic tropical cyclones.

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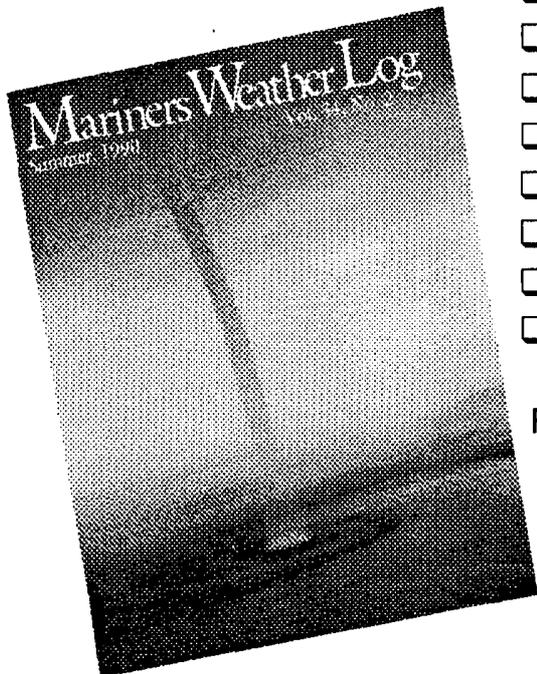
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