

OCTOBER 1995
VOLUME 37
NUMBER 10

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: This wall and building located in Panama City Beach was destroyed by Opal, a marginal Category 3 Hurricane (winds 111-130 mph) at landfall on October 4. Prior to making landfall, Opal was a Category 4 Hurricane (winds 131-155 mph) on the Saffir/Simpson Scale. Opal's minimum central pressure at landfall was 942 millibars (27.82 inches) with one-minute sustained winds of 100 knots (115 mph). Cover photo was taken on October 15. (*Photot courtesy: Ralph Clark, Department of Environmental Protection, Bureau of Beaches and Coastal Systems, Tallahassee, Florida.*)

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STORM DATA
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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.

Except for limited editing to correct grammatical errors, materials submitted are generally published as received.

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151 Patton Avenue
Asheville, NC 28801-5001
(704) 271-4800 or (704) CLIMATE

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
National Climatic Data Center
151 Patton Avenue
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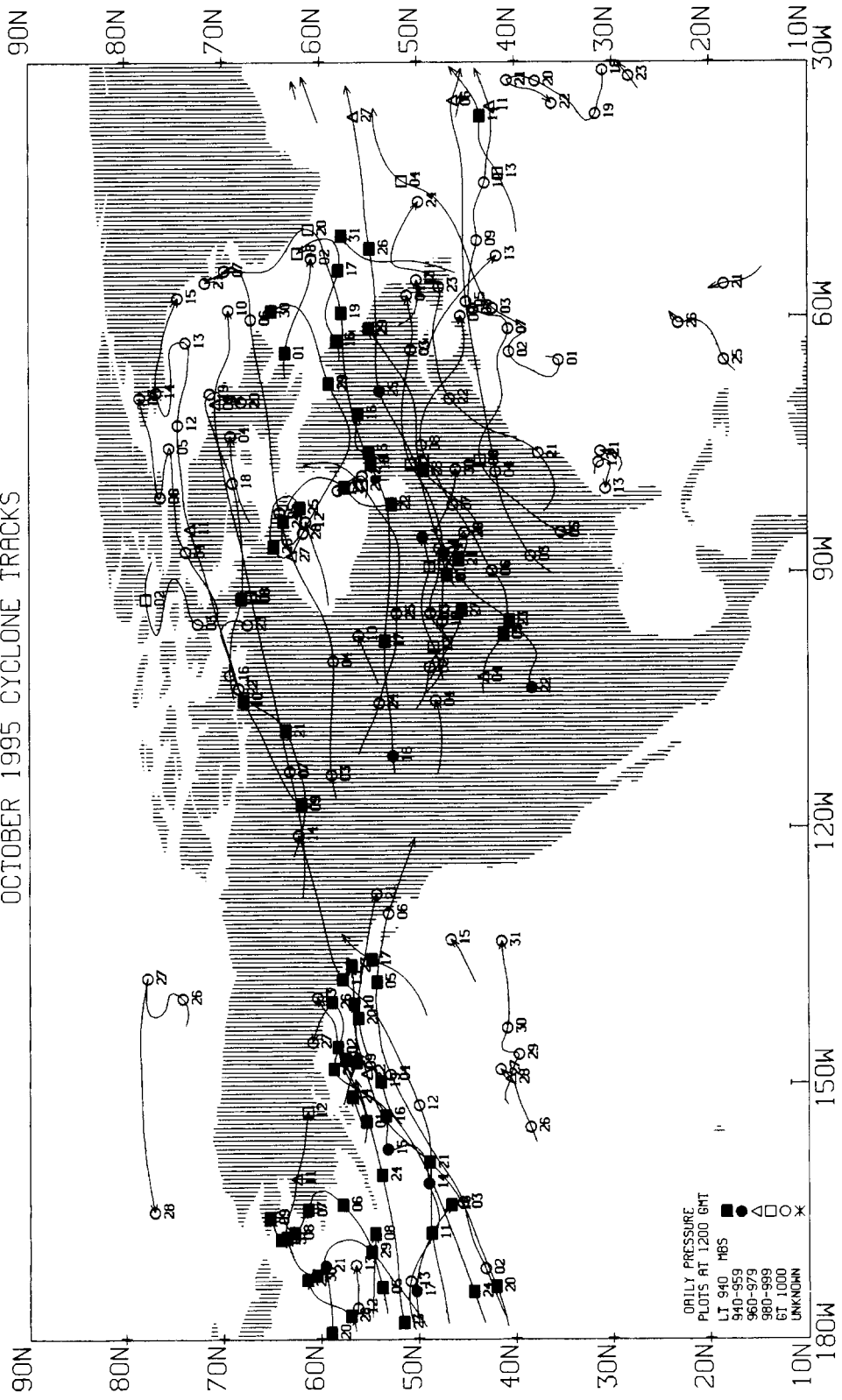
Any such items received by the editor will be for use in **STORM DATA** only. Any other use will be with the permission of the owner of said items. Materials submitted will be returned if requested in the original submission.

"I certify that this is an official publication of the National Oceanic and Atmospheric Administration and is compiled from information received at the National Climatic Data Center, Asheville, North Carolina 28801-2733."



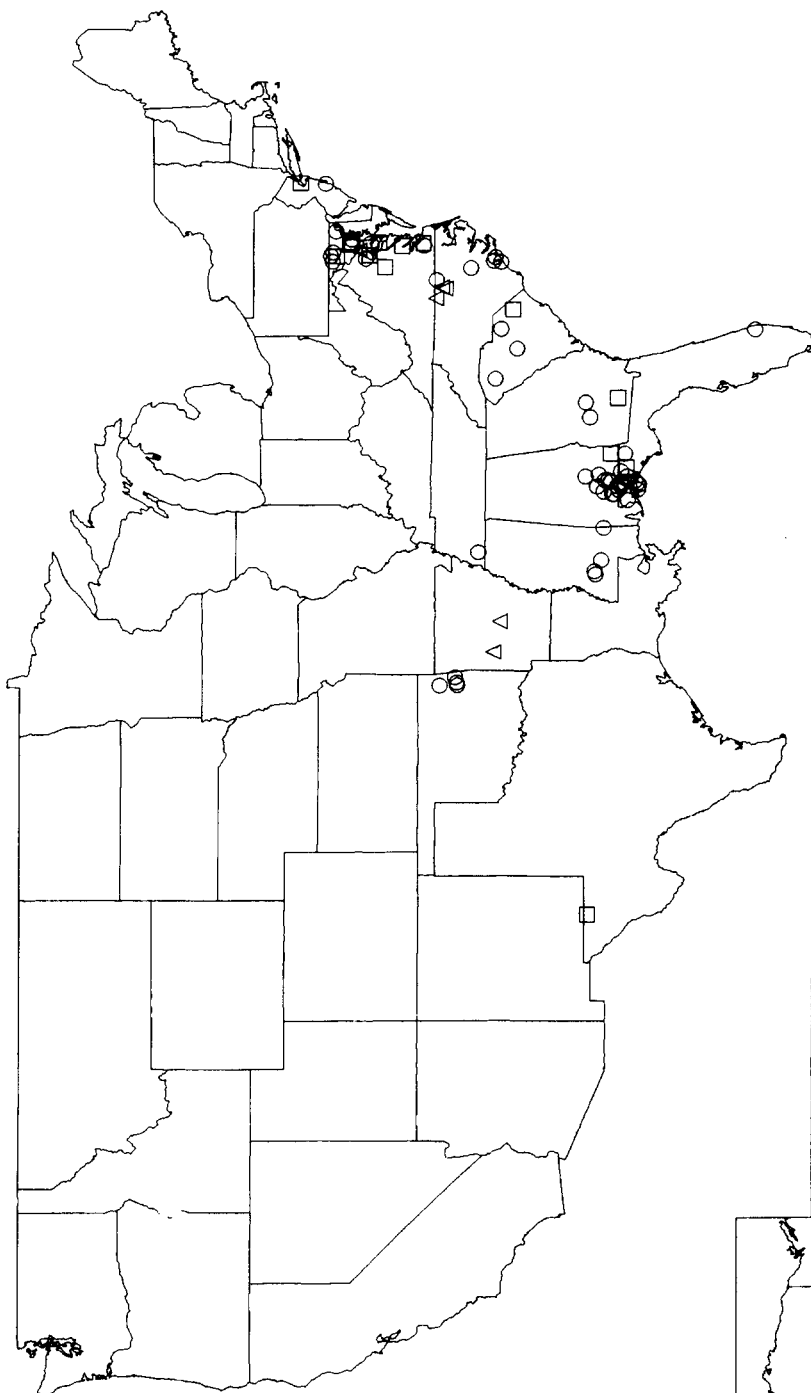
Director,
National Climatic Data Center

OCTOBER 1995 CYCLONE TRACKS



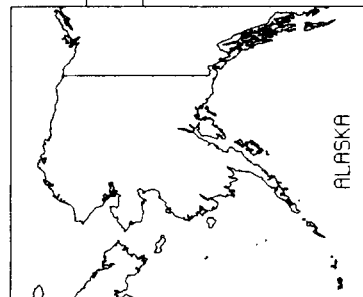
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OCTOBER 1995 CONFIRMED TORNADES

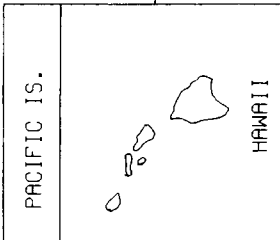


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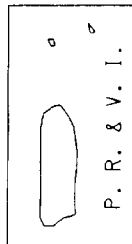
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ALASKA



PACIFIC IS.



P. R. & V. I.

OUTSTANDING STORMS OF THE MONTH

1. TROPICAL CYCLONES IN THE ATLANTIC OCEAN BASIN

A. HURRICANE OPAL - SEPTEMBER 27 - OCTOBER 6

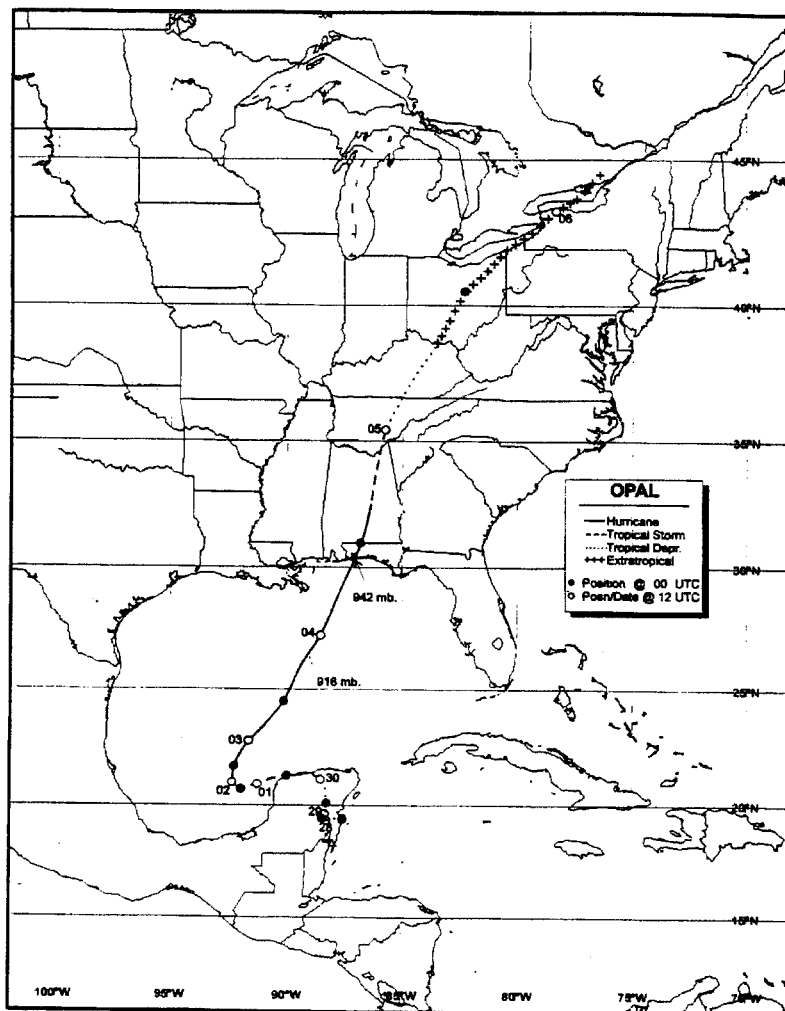
A tropical wave moved from the west coast of Africa on September 11 and moved westward across the Atlantic Ocean and into the western Caribbean Sea on September 23. The tropical wave merged with an area of low pressure in the vicinity of 15°North and 80°West. The system moved west-northwestward for the next several days. Deep convection increased near the center and the system became a tropical depression while located 70 miles south-southeast of Cozumel, Mexico at 1800 UTC on September 27. Steering currents were weak and the depression moved slowly over the Yucatan Peninsula for the next three days. After some intensification, the tropical depression became Tropical Storm Opal at 1200 UTC on September 30 while centered near the north-central coast of the Yucatan Peninsula. The tropical storm slowly strengthened and moved westward into the Bay of Campeche. Aircraft reports and satellite estimates suggested Opal reached hurricane status near 1200 UTC on October 2 while centered 150 miles west of Merida, Mexico. A large mid- to upper-level trough moving into the central United States began steering Hurricane Opal toward the north. On October 3 and 4th, the hurricane moved to the north-northeast then northeast and gradually accelerated. Rapid intensification occurred due to warm water temperatures of 28°C to 29°C (83°F - 85°F) beneath the hurricane's circulation. A large, well established upper-level anticyclone over the Gulf of Mexico also aided further intensification. With a pressure fall of 53 millibars (1.57 inches) in 24 hours and 42 millibars (1.24 inches) in 12 hours, Opal intensified into a Category 4 Hurricane (winds 131-155 mph) on the Saffir/Simpson Hurricane Scale on October 4. This is a very rapid rate of deepening, but it is not unprecedented. Several western North Pacific typhoons have deepened at an even faster rate. Opal reached maximum intensity with a minimum central pressure of 916 millibars (27.05 inches), and maximum sustained (1-minute average) surface winds estimated at 130 knots (150 mph) while centered about 250 nautical miles south-southwest of Pensacola, Florida at 1000 UTC on October 4. Weakening soon began, but Opal was a marginal Category 3 hurricane (winds 111-130 mph) as the center made landfall at Pensacola Beach, Florida near 2200 UTC on October 4. Cooler sea surface temperatures, increased upper-level westerlies, and the collapse of the inner eyewall likely caused the weakening. Opal was moving north-northeast near 20 knots (23 mph) at landfall. Opal's minimum central pressure at landfall was 942 millibars (27.82 inches) with maximum sustained (1-minute average) surface winds estimated at 100 knots (115 mph) in a narrow swath at the coast near the extreme eastern tip of Choctawhatchee Bay about midway between Destin and Panama City. Most of the coastal areas of the Florida panhandle experienced winds of a Category 1 (winds 74-95 mph) or 2 (winds 96-110 mph) hurricane. Extensive coastal damage was due primarily to the storm surge and associated waves. Opal weakened rapidly after moving inland, becoming a tropical storm over southern Alabama, and a tropical depression over southeastern Tennessee. The depression became extratropical as the system moved northeastward over the Ohio Valley and eastern Great Lakes into southwestern Quebec. Isolated tornadoes were reported from the Florida panhandle to the mid-Atlantic states. One tornado fatality occurred in Crestview, Florida, and another tornado injured several people and severely damaged a number of structures as it moved through Charles, Prince Georges, and Anne Arundel Counties in Maryland. (See map, page 6.)

Extensive damage from the storm surge occurred from southeastern Mobile Bay and Gulf Shores, Alabama, eastward through the Florida panhandle to Cedar Key, Florida. Still water marks inside of buildings and tide gage data indicated a storm surge of 5 to 14 feet above mean sea level. Water marks on the outside of buildings or debris lines on sand dunes within 200 feet of the Gulf of Mexico

shoreline generally ranged from 10 to 21 feet. Many structures in the combined storm surge and the breaking wave zone suffered major structural damage. Strong winds spread well inland, downing numerous trees and causing power outages to nearly 2 million people in Florida, Alabama, Georgia, and the Carolinas.

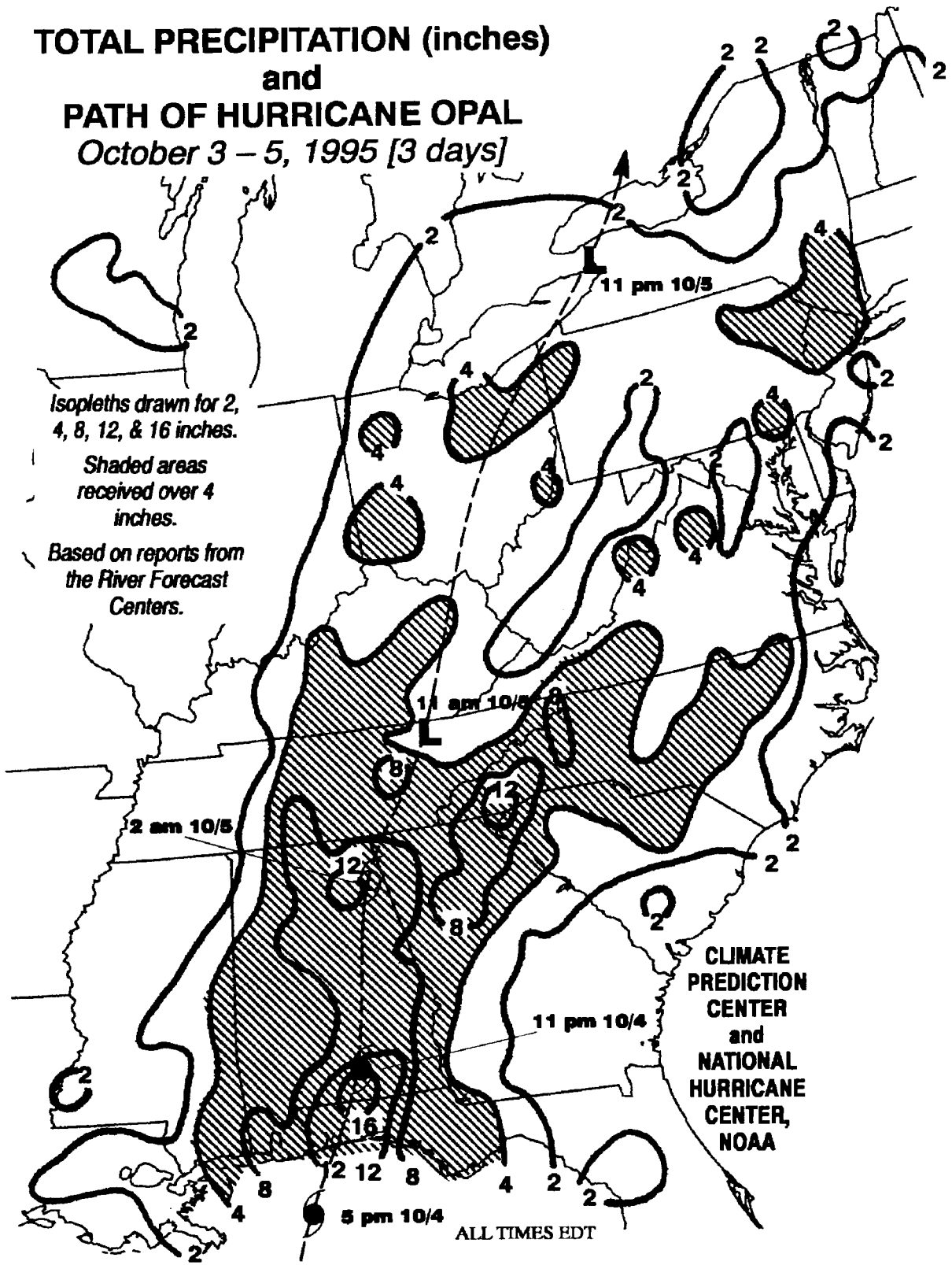
The combination of Opal and a frontal system resulted in heavy rains along the path of the hurricane. Rainfall totals ranged from 5 to 10 inches over portions of the Florida panhandle, Alabama, and Georgia. Rains in South Carolina averaged 2 to 4 inches, while in North Carolina, amounts of 3 to 5 inches were common. Highlands, North Carolina recorded 8.95 inches, and Robinson Creek, North Carolina recorded 9.89 inches. Further north, 1 to 4 inch totals occurred over portions of the northeastern United States from Maryland northward. (See map, page 7.)

Total number of deaths directly associated with Opal is 59. Flooding in Guatemala and Mexico killed 31 and injured 19 people, respectively. The United States had 9 deaths; Alabama - 2 deaths from a tree falling on a mobile home; Florida - 1 death from a tornado; Georgia - 5 deaths from falling trees; North Carolina - 1 death from a tree falling on a mobile home. There were no reported deaths due to storm surge flooding. A preliminary estimate of insured property damage for the United States is \$2.1 billion. A total damage estimate from Hurricane Opal could reach \$3 billion with the addition of uninsured property damage, flood claims, and the cost of cleanup.



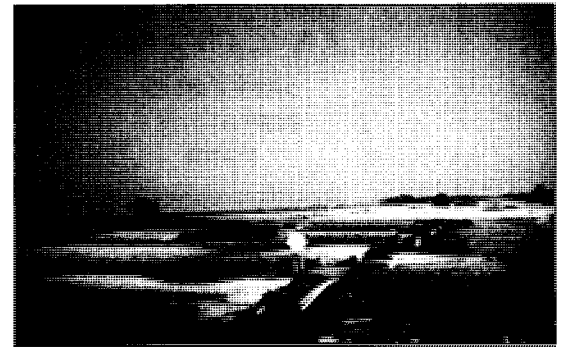
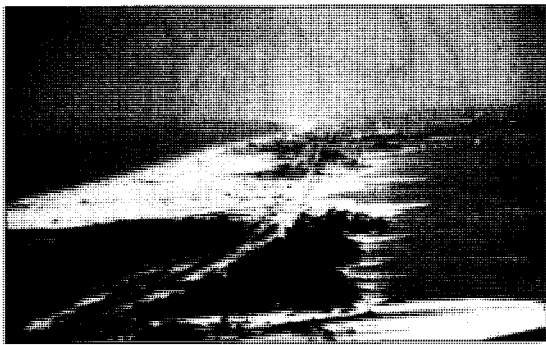
Map courtesy: National Hurricane Center

TOTAL PRECIPITATION (inches)
and
PATH OF HURRICANE OPAL
October 3 – 5, 1995 [3 days]

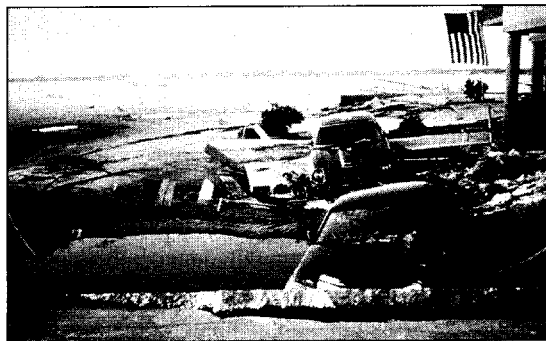
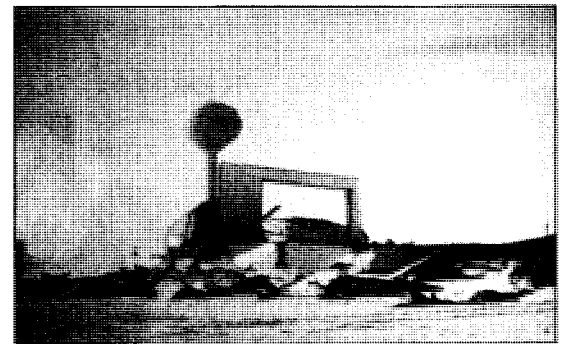




Above(left): An example of good and poor designs of condominiums on Ariola Drive in Pensacola Beach.
Above(right): A severely damaged sand dune at Pensacola Beach.



Highway 98 between Fort Walton Beach and Destin was destroyed by storm surge. **Above(left)** is an aerial view of highway 98 and **above(right)** is a close-up view of Highway 98.



Above(left): An example of beach and dune erosion at Fort Walton Beach. **Above:** Destroyed condominiums at Navarre Beach. **Left:** This house was swept into Santa Rosa Sound at Navarre Beach.

Materials provided by Ralph Clark, Department of Environmental Protection, Bureau of Beaches and Coastal Systems, Tallahassee, Florida.

On October 5, 1995, the remains of Hurricane Opal moved through the southern Appalachians, and like Hurricane Hugo in September 1989, brought some hurricane force wind gusts to the mountains despite the storms having travelled several hundred miles from the nearest shore.



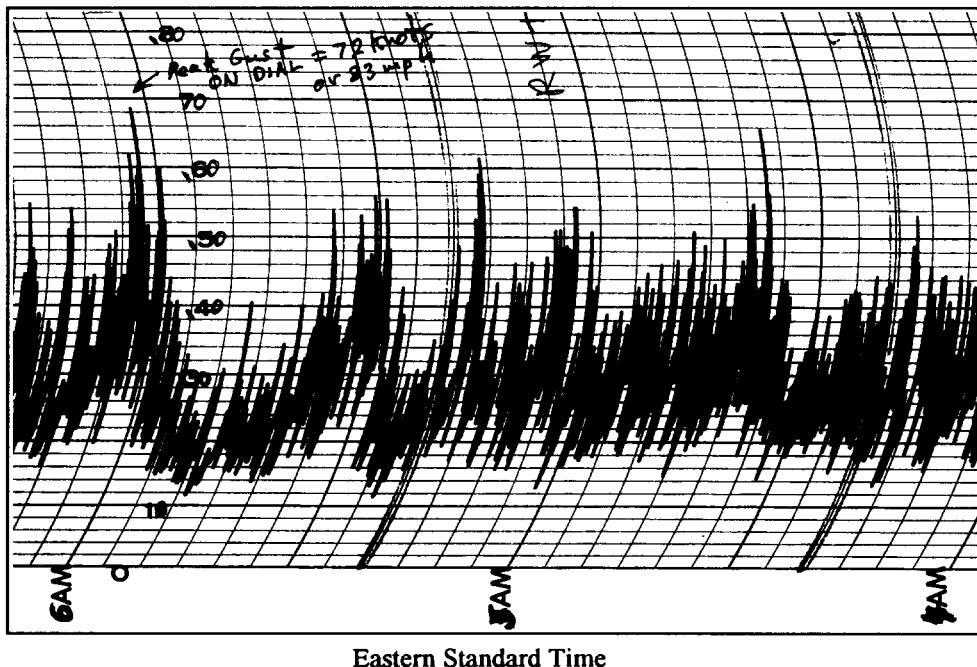
As the wind gust trace from Flat Top Mountain, N.C., (elevation 4320 ft.) shows **below**, there were several gusts that exceeded 60 knots (69 mph). The peak gust of 72 knots (83 mph) was observed at 06:03 EST on an accompanying dial indicator that is more responsive to short duration gusts. Damaging winds were also experienced in the lower elevations of the mountains as is indicated by the torn roofing on this barn, **left**, that was located ten miles southeast of Asheville in the Cane Creek Valley at 2200 feet elevation.

(Photo courtesy: Grant Goodge, NCDC, Asheville, N.C.)

TROPICAL STORM "OPAL"

FLAT TOP MNT., NC ELEV. 4320'

OCTOBER 5, 1995



Wind chart courtesy: Grant Goodge, NCDC, Asheville, N.C.

B. TROPICAL STORM PABLO - OCTOBER 4 - 8

Pablo originated from a tropical wave which moved from the west coast of Africa to the Atlantic Ocean on October 3. The wave became a tropical depression at 1800 UTC on the 4th while located about 600 nautical miles southwest of the Cape Verde Islands. As it moved westward at 15 to 20 knots (17-23 mph), slow strengthening occurred. Pablo became a tropical storm on the 5th. The tropical storm quickly moved west-northwest and then west across the tropical Atlantic under the influence of the easterlies. Pablo reached maximum intensity at 0600 UTC on the 6th with an estimated central minimum pressure of 994 millibars (29.35 inches) with a one-minute maximum sustained wind speed of 50 knots (58 mph). The storm's sustained winds remained near 45 knots (52 mph) until the 8th. On October 8, Pablo encountered very strong vertical wind shear and quickly dissipated while centered about 135 nautical miles east-southeast of Barbados. There were no deaths or damages attributed to Pablo.

C. HURRICANE ROXANNE - OCTOBER 7 - OCTOBER 21

A distinct tropical wave moved westward from the west coast of Africa on September 26. It moved into the western Caribbean early on October 7. With a broad well-established low- to mid-level cyclonic circulation, cloudiness and showers were prevalent between the Cayman Islands and Honduras. A slow westward moving upper-level trough located over the Windward Passage allowed the tropical wave to become a tropical depression just east of Nicaragua at 1800 UTC on October 7. Satellite images and surface observations indicated a steady intensification. The depression became Tropical Storm Roxanne at 0000 UTC on October 9 and reached hurricane status at 0600 UTC on October 10. The upper trough previously located over the Windward Passage became a cut-off low and moved west-southwest into Central America. This allowed the outflow to become established over the hurricane in all quadrants. Roxanne moved northward due to a weak trough over Florida and the eastern Gulf of Mexico. The trough moved eastward and was replaced by a high pressure system as the hurricane turned northwestward and then westward toward the Yucatan peninsula and intensified. Roxanne reached maximum intensity with 100 knot (115 mph) winds (1- minute average) and a minimum central pressure of 956 millibars (28.23 inches) about 2152 UTC just to the southeast of Cozumel, Mexico. The hurricane made landfall just north of Tulum, Mexico about 0200 UTC on October 11. Roxanne continued to move westward over the Yucatan peninsula and emerged over the Gulf of Campeche as a minimal hurricane, and then temporarily weakened into a tropical storm.

Once the center of circulation was completely over the waters, Roxanne regained hurricane status for the next 60 hours. Steering winds over the Bay of Campache were weak and Roxanne meandered in the area for almost a week. In the meantime, feeder bands of heavy rain showers and ocean waves of 15 to 20 feet were affecting the coastal areas from the State of Campache to Veracruz. Roxanne was pushed to move southward into the Mexican coastal area near Veracruz by an approaching strong cold front. The hurricane gradually weakened to a tropical storm and then into a tropical depression, and the remnants moved southwestward into Mexico. The coastal area of the State of Campache to Veracruz had previously been affected by Hurricane Opal two weeks earlier and it is difficult to separate damages from both storms. Best estimates place damage in the Yucatan peninsula at \$1.5 billion. Roxanne was responsible for 14 deaths.

D. TROPICAL STORM SEBASTIEN - OCTOBER 20 -25

Tropical Storm Sebastien originated from a tropical wave that moved westward across the Atlantic Ocean from October 13 through the 20th. On the 20th, deep convection became more concentrated about 350 nautical miles east of Barbados. Based on satellite analyses, it is estimated that the wave became a tropical depression at 1200 UTC on the 20th and a tropical storm at 0000 UTC on the 21st. For the next few days, Sebastien was embedded within the outer periphery of a large deep low-pressure system centered just northeast of Puerto Rico. The associated steering wind currents moved Sebastien toward the north-northwest at 15 knots (17 mph). A southwesterly wind shear (in the vertical dimension) precluded further significant development. Sebastien reached peak intensity of 55 knots (63 mph) at 1800 UTC on the 22nd northeast of the Leeward Islands. Sebastien began moving with the low-level flow toward the southwest on the 23rd. This movement brought Sebastien directly into the upper-level southwesterly wind shear and as a result Sebastien weakened to a tropical depression during the evening of the 23rd. Its dissipating low-level circulation was near the U.S. Virgin Islands 24 hours later with some remnant deep convection persisting well to the east. There were no reports of casualties or damages.

Storm Data and Unusual Weather Phenomena

October 1995

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, North Central

Jefferson County Birmingham

03 1300CST-1900CST ? ? **80K** ? **Flash Flood**

After a summer with very little rain, heavy rains brought flash flooding to Jefferson County. Storms with very heavy rain developed over central Alabama ahead of a cold front along the Mississippi River. Moist air flowed into the area as Hurricane Opal developed in the central Gulf of Mexico. Rainfall measured at the Birmingham airport reached 6.94 inches for the day with most of the rain falling during the mid-afternoon from 1300 to 1700 CST. Greatest flash flooding occurred in the area around the airport and just south of there where roads were closed due to high water in many low spots - water in some places between four and five feet deep. Birmingham police reported that 20 roads were closed due to high water at one point during the afternoon. The airport was shutdown in the evening due to water getting into the lower level of the terminal building forcing a power shutdown for safety reasons. Some businesses in Vestavia along Patton Creek had water in them. In Tarrant, a mobile home park was evacuated and several businesses affected when water got into those buildings. Sections of Ensley in Birmingham were affected with roads closed.

ALZ001>050

04 1200CST-05 1000CST 2 ? **0.1B 10M** **Hurricane Opal, High Winds**

Hurricane Opal moved ashore in the Florida Panhandle then moved north-northeast across the state of Alabama. Damage was extensive and no county in the state was spared some effect of the storm. Damage was the greatest in the eastern counties with damage decreasing from east-to-west across the state. Damage also decreased as you went north in the state. Damage varied with many trees, signs, and powerlines downed. At the worst, 2.6 million people in Alabama were without electricity, some for over a week. The center of the storm entered the state near the Covington/Escambia County line on the Florida border. It moved north-northeast with the center moving just west of the city of Montgomery, near the City of Talladega and near Fort Payne before exiting the state near the northeast tip. Primary damage came from strong wind which toppled trees and power lines and damaged signs. Mobile homes were damaged both by falling trees and by strong wind. Wind speeds varied across the state. The short table below indicates the highest reported gust recorded at the locations shown.

City	Wind Direction	Speed of Gust
Birmingham	NE	48 mph
Huntsville	N	55 mph
Anniston	NE	35 mph
Tuscaloosa	NW	46 mph
Columbus, GA	SSE	44 mph
Montgomery		
Dannelly Field	E	63 mph
Maxwell Air Force Base	SE	90 mph
Alabaster	Unavailable	49 mph
Ozark	SSE	98 mph
Dothan	SE	69 mph

Heavy rain also caused creeks and streams to swell to bankfull and beyond, however, there were very few reports of water flooding buildings. Water damage occurred to structures in many locations where wind or falling trees damaged roofs. Rainfall measurements made for a 24-hour period ending around 0700 CDT on October 5th included the following reports:

RIVER AND STATION STAGE (FEET)	FLOOD		ABOVE FLOOD STAGE (DATES)		CREST	
	FROM	TO	STAGE (FT)	DATE		
ALABAMA RIVER						
Montgomery	35	10/6 10/10	40.01	10/8 PM		
Selma	45	10/6 10/9	Est. 47-48	10/8		
Millers Ferry L&D (Lower)	66	10/6 10/11	70.67	10/10		
Claiborne L&D (Lower) 42	10/8	10/13 46.50		10/11		
BLACK WARRIOR RIVER						
Selden L&D (Lower)	90	10/6 10/7	90.74	10/7		
CATOMA CREEK						
U.S. 331 Bridge	20	10/6 10/7	21.80	10/7 AM		
COOSA RIVER						
Weiss Reservoir	564	10/5 10/11	566.86	10/8 AM		
Gadsden	511	10/5 10/8	512.68	10/5 AM		
Logan Martin Reservoir 465	10/5	10/12 472.52		10/7 AM		
TALLAPOOSA RIVER						
Wadley	13	10/6 10/8	14.82	10/6		
VILLAGE CREEK						
Avenue W - Ensley	10	10/5 10/6	11.98	10/5 AM		

Following table shows rainfall amounts by county:

Autauga County	
Billingsley	5.00
Bibb County	
Centreville COOP	3.92
Blount County	
Oneonta	4.35
Bullock County	
Union Springs	4.65
Calhoun County	
Anniston Airport	5.97
Chilton County	
Clanton	6.30

ALABAMA, North Central Cont'd

Colbert County	
Muscle Shoals	1.79
Coosa County	
Rockford	5.12

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Cullman County									
Hanceville				3.25					
Dallas County									
Selma				6.09					
De Kalb County									
Fort Payne				6.10					
Valley Head				6.02					
Etowah County									
Gadsden Water Plt				4.60					
Fayette County									
Fayette				1.80					
Franklin County									
Hodges				1.41					
Greene County									
Selden L&D				3.65					
Gainesville L&D				2.05					
Hale County									
Moundville				4.00					
Jackson County									
Bridgeport				3.96					
Jefferson County									
Birmingham Airport				3.79					
Pinson				2.92					
Lowndes County									
R.F. Henry L&D				3.57					
Madison County									
Huntsville				2.29					
Marengo County									
Demopolis L&D				4.16					
Marion County									
Hamilton				1.11					
Marshall County									
Boaz				5.05					
Montgomery County									
Montgomery				3.22					
Perry County									
Marion				1.93					
Uniontown				4.00					
Pickens County									
Aliceville				1.91					
Reform				1.93					
Bevill L&D				2.20					
Pike County									
Troy				3.13					
Shelby County									
Montevallo				2.85					
Oak Mtn State Park				4.38					
Helena				4.31					
Indian Springs				3.36					
Talladega County									
Sylacauga				6.05					
Tallapoosa County									
Alexander City				3.00					
Dadeville				4.84					
Walnut Hill 3W				6.26					
Tuscaloosa County									
Tuscaloosa Airport				3.34					
Oliver L&D				2.20					
Holt L&D				2.05					
Bankhead L&D				3.60					
Walker County									
Carbon Hill				2.75					
Jasper				3.08					
Sumiton				2.70					
Wilcox County									
Alberta				5.26					
Millers Ferry L&D				5.50					

ALABAMA, North Cental Cont'd

Winston County	
Haleyville	2.00

Two people were killed in Gadsden, Etowah County, when high wind toppled a massive oak tree onto their mobile home. Several other people were killed in the state but those deaths such as house fires and asphyxiation were not directly attributable to the weather. M35MH, F33MH

Damage figures are estimates from information obtained from the American Red Cross, Alabama Emergency Management Agency, and newspaper articles. Additional information on Hurricane Opal can be found under the heading for Southwats Alabama prepared by the National Weather Service Office in Mobile and under Southeast Alabama prepared by the National

Storm Data and Unusual Weather Phenomena

October 1995

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
Weather Service Office in Tallahassee, FL.									
Cullman County Jones Chapel	27	0750CST			?	?	?	?	Hail (0.75) Dime-size hail was reported at Jones Chapel in northwest Cullman County.
Tuscaloosa County Tuscaloosa	27	1135CST			?	?	10K	?	Lightning, Heavy Rain Lightning struck a house on Fair Oaks Lane knocking down the chimney and making holes in the roof but no fire was started. Heavy rain caused numerous incidents of street flooding. Time is approximate.
Tallapoosa County New Site	27	1449CST			?	?	15K	?	Thunderstorm Winds (G50) Thunderstorm wind that sounded like a freight train according to witnesses caused some property damage in the Simpson community just northeast of New Site in northeast Tallapoosa County. Trees were blown down a roof was taken off a barn, antennas were downed, shingles were taken off several roofs, and one porch was damaged.
Lee County Marvyn	27	1553CST			?	?	?	?	Hail (0.88) Nickel-size hail was reported at Marvyn in southern Lee County.
Jefferson County Birmingham	Month-long				?	?	?	?	Record Rainfall October 1995, was the wettest month on record at the official observing site at the Birmingham Airport. The total rainfall for the month of October was 11.79 inches breaking the old record of 10.95 set in 1934.
ALABAMA, Southeast									
ALZ065>069 Southeast Alabama	04-05				0	0	20m	10m	Hurricane Opal Hurricane Opal moved northward across south Alabama during the evening and early morning hours. Widespread minor damage occurred to homes and other structures with sporadic occurrences of more serious damage. Trees, many large, were downed causing damage to vehicles, buildings, as well as power and telephone lines. Over 90 percent of the region's electric customers lost power. Serious damage to the area's agriculture was reported including partial losses of cotton and peanut crops. Five thousand chickens were lost in one instance of damage to chicken houses. While not directly attributable to the storm's effects, three people lost their lives in traffic accidents and one was killed in a fire caused by candle usage during the power outage (Damage figures are estimated.)
Houston County Dothan	27	1420CST	.2	50	0	2	90K	0	Tornado (F1) A tornado downed trees and damaged two businesses. A person was injured at each business. (Length and width are estimated.)
ALABAMA, Southwest									
ALZ051>064 Southwest and South Alabama	03-04	1200CST-2400CST			0	0	48M	4M	Hurricane Opal Hurricane Opal moved through Northwest Florida at the Okaloosa and Santa Rosa County line into South Alabama near the Escambia and Covington County line on Wednesday evening around 1830 CST. Opal moved rapidly north northeast through Covington and Crenshaw Counties and into Montgomery County around 2115 CST. The Governor of Alabama ordered mandatory evacuation of Baldwin and Mobile Counties Wednesday morning October 4 at 0500 CST. It was estimated that 25,000 people evacuated Pleasure Island. Dauphin Island was also evacuated. Traffic on Interstate 65 was bumper to bumper past Montgomery from evacuees from Alabama and Northwest Florida. Most of the damage to the coastal counties was from storm surge. A storm surge of four to seven feet was estimated from Orange Beach to Dauphin Island. Some of the dunes between Orange Beach and Dauphin Island were eroded by the surge of water. As the center of Opal moved through Covington and Crenshaw Counties numerous trees and power lines were blown down. Several short lived tornadoes occurred mostly near and east of the center of the storm. More than 125 homes were destroyed with 150 homes suffering major damage. Preliminary damage estimates were \$48 million with half of that being from tree damage in the Conecuh National Forest. Preliminary crop damage loss was estimated at \$4 million. All of this year's pecan crop in Covington County was lost. Most of the damage in Southwest Alabama was generally along and east of Interstate 65. The highest wind speeds were estimated at 90 mph in Greenville. The greatest amount of rainfall was 8.1 inches in a twenty-four hour period in Evergreen. The lowest sea level pressure was 970 mb on Dauphin Island.
Covington County 10 NW Florida	03	1330CST			0	0	10K	0	Thunderstorm Winds Trees and power lines were blown down along Highway 55 northwest of Florida.
ALABAMA, Southwest Cont'd									
Covington County Gantt	03	1830CST-2030CST			0	0	5K	0	Flash Flood Heavy rains caused flooding of county road 86 near Gantt. The road was closed for about two hours due to the high water.
Covington County Beda	04	0910CST			0	0	5K	0	Thunderstorm Winds Several trees and power lines were blown down in the Conecuh National Forest along Highway 137 near Beda.
Escambia County Atmore	04	1120CST			0	0	5K	0	Thunderstorm Winds Several trees and power lines were blown down in Atmore.
Covington County Andalusia	04	1245CST	.1	25	0	0	10K	0	Tornado (F0) A tornado briefly touched down on U.S. Highway 12 between Andalusia and River Falls. Several trees and power lines were

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property - Crops	
								blown down.
Covington County 5 SW Andalusia	04	1730CST	.1	25	0	0	10K 0	Tornado (F0) A tornado briefly touched down along U.S. Highway 29 between Pleasant Home and Andalusia. Several trees and power lines were blown down.
Escambia County East	04	1730CST- 1800CST	.1	25	0	0	25K 0	Tornado (F0) Several short lived tornadoes were reported in the east part of the county near the center of Opal. Tornadoes briefly touched down in the Damascus area, in the Bradley area and along U.S. Highway 31 north of Brewton. Trees and power lines were blown down in all these areas.
Conecuh County Evergreen	04	1830CST	.1	25	0	0	10K 0	Tornado (F0) A tornado briefly touched down near Evergreen. Trees and power lines were blown down.
Butler County Georgiana	04	1850CST	.1	25	0	0	10K 0	Tornado (F0) A tornado briefly touched down near Georgiana. Trees and power lines were blown down.
Covington County Gantt Lake	04	1910CST	.1	25	0	0	10K 0	Tornado (F0) A tornado briefly touched down along U.S. Highway 29 around Gantt Lake. Several trees and power lines were blown down.
Crenshaw County Brantley	04	1930CST	.1	25	0	0	10K 0	Tornado (F0) A tornado briefly touched down near Brantley on U.S. Highway 29. Several trees and power lines were blown down.
Crenshaw County Saville	04	2000CST	.1	25	0	0	10K 0	Tornado (F0) A tornado briefly touched down along U.S. Highway 331 just east of Saville. Several trees and power lines were blown down.
Clarke County 10 W Grove Hill	27	1345CST			0	0	0 0	Hail (0.75) Dime-size hail was reported along U.S. Highway 84 west of Grove hill near the city of Zimco.
Wilcox County 5 North of Hybart	27	1430CST			0	0	2K 0	Thunderstorm Winds Trees and power lines were blown down along Highway 41 between Hybart and Dry Forks.
Washington County Millry	27	1805CST			0	0	2K 0	Thunderstorm Winds Trees and power lines were blown down in the city of Millry.
ARIZONA								
Pinal County Eloy	30	1400MST			0	0	? 0	Dust Storm Blowing dust from thunderstorm winds caused a three-car accident near mile post 209 on Interstate 10.
ARKANSAS, Central and North Central								
Boone County Bergman	02	1430CST			0	0	0 0	Hail (0.75)
Diamond City	02	1430CST			0	0	0 0	Hail (0.75)
Harrison	02	1430CST			0	0	0 0	Hail (0.75)
Polk County Hatfield	02	1440CST			0	0	? 0	Thunderstorm Winds Thunderstorm winds downed trees and power lines.
Searcy County St. Joe	02	1500CST			0	0	? 0	Thunderstorm Winds
ARKANSAS, Central and North Central Cont'd								
								Thunderstorm winds knocked down some trees along Highway 65.
Johnson County 2 W Clarksville	02	1530CST			0	0	? 0	Thunderstorm Winds Some trees were blown down.
Marion County Rea Valley	02	1539CST			0	0	0 0	Hail (0.75)
Pope County 4 N London	02	1615CST			0	0	? 0	Thunderstorm Winds Thunderstorm winds blew the roof off a barn and caused structural damage to another barn. Some trees were also knocked down.
Garland County Hot Springs	02	1635CST			0	0	? 0	Thunderstorm Winds (G60) Winds gusted to 69 mph at the Hot Springs Airport. Some tree limbs were also blown down.
Searcy County Marshall	02	1705CST			0	0	? 0	Thunderstorm Winds Thunderstorm winds blew down some power lines.
Saline County 5 S Ferndale	02	1720CST			0	0	0 0	Thunderstorm Winds (G52)
Van Buren County								

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Bee Branch	02	1730CST			0	0	?	0	Thunderstorm Winds
					Some power lines were blown down.				
Faulkner County Vilonia	02	1730CST			0	0	?	0	Thunderstorm Winds
					Several trees were knocked down.				
Mount Vernon	02	1735CST			0	0	?	0	Thunderstorm Winds
					Thunderstorm winds caused some roof damage and downed some trees.				
Pulaski County Little Rock	02	1740CST			0	0	?	0	Thunderstorm Winds
					Thunderstorm winds damaged the roof of a shopping center in Little Rock. Several windows were also blown out of stores.				
Little Rock	02	1800CST			0	0	?	0	Thunderstorm Winds
					Some trees were blown down in the western part of Little Rock. A house was damaged by a fallen tree.				
Jefferson County 8 NW Pine Bluff	02	1810CST			0	0	?	0	Thunderstorm Winds (G30)
					Thunderstorm winds knocked down some power lines at the Pine Bluff Arsenal.				
Lonoke County Furlow	02	1815CST			0	0	?	0	Thunderstorm Winds
					Thunderstorm winds blew down some large tree limbs. A mobile home was slightly damaged by falling limbs.				
White County Searcy	02	1900CST			0	0	?	0	Thunderstorm Winds
					Several trees were blown down.				
Fulton County 1 NW Viola	26	0545CST			0	0	0	0	Hail (0.75)
Hot Spring County Point Cedar	26	1230CST			0	0	0	0	Hail (0.75)
Saline County Avilla	26	1400CST			0	0	0	0	Hail (1.75)
Pulaski County Little Rock	26	1400CST			0	0	150K	0	Lightning
					Lightning struck a transmission tower at the 911 Operations Center in Little Rock. The lightning travelled into the building and knocked out a portion of the 911 computer system. The equipment was repaired a few days later. Damage was estimated at around \$150 thousand.				
Little Rock	26	1405CST			0	0	0	0	Hail (1.00)
Little Rock	26	1415CST			0	0	0	0	Hail (0.88)
Little Rock	26	1415CST			0	0	?	0	Thunderstorm Winds
					Thunderstorm winds damaged a metal building.				
Independence County 11 NE Batesville	26	2000CST			0	0	?	0	Lightning
					Lightning struck a house which resulted in a fire. The house was totally destroyed.				
Franklin County 6 E Cass	26	2030CST			0	0	0	0	Hail (1.00)
Johnson County Ozone	26	2100CST			0	0	0	0	Hail (1.00)
ARKANSAS, Central and North Central Cont'd									
Stone County Mountain View	26	2100CST			0	0	?	0	Lightning
					Lightning struck a barn in Mountain View. A fire resulted which totally destroyed the barn.				
Montgomery County Yell County 4 N Sims to Aly	26	2120CST- 2145CST	12.5	800	0	0	?	0	Tornado (F2)
					An F2 tornado touched down approximately four miles north of Sims in Montgomery County. The tornado travelled north eastward just over 12 miles, crossing into Yell County around 2130 CST, before lifting near the town of Aly in Yell County. The tornado moved through the Ouachita National Forest. Damage along the path of the tornado consisted of extensive timber damage.				
Newton County Lurton	26	2122CST			0	0	0	0	Hail (0.75)
Van Buren County Chimes	26	2126CST			0	0	0	0	Hail (1.00)
Montgomery County Story	26	2130CST			0	0	0	0	Hail (0.75)
Independence County 2 N Batesville	26	2135CST			0	0	0	0	Hail (1.75)
Searcy County Witts Spring	26	2200CST			0	0	?	0	Thunderstorm Winds (G56)
					A few trees were knocked down.				
Leslie	26	2200CST			0	0	?	0	Thunderstorm Winds (G56)
					Thunderstorm winds downed a few trees.				
Garland County									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Jessieville	26	2200CST			0	0	0	0	Hail (0.75)
Fountain Lake	26	2230CST			0	0	?	0	Thunderstorm Winds
Thunderstorm winds blew down a few trees.									
Jackson County	26	2205CST			0	0	?	0	Thunderstorm Winds
Swifton	Some trees were blown down.								
Pope County	26	2215CST			0	0	0	0	Hail (1.25)
Van Buren County	26	2240CST			0	0	0	0	Hail (0.75)
Shirley	26	2245CST			0	0	0	0	Hail (0.75)
Stone County	26	2300CST			0	0	?	0	Thunderstorm Winds
3 N Fox	Thunderstorm winds downed a few trees.								
Saline County	26	2300CST			0	0	?	0	Thunderstorm Winds
Nance	Thunderstorm winds downed a few trees.								
Hot Spring County	26	2300CST			0	0	?	0	Thunderstorm Winds
3 N Magnet Cove	Thunderstorm winds damaged a barn and house porch. Numerous trees and power lines were also blown down.								
Sharp County	26	2327CST			0	0	0	0	Hail (0.75)
Hardy	26	2345CST			0	0	?	0	Thunderstorm Winds
Franklin County	Several trees were knocked down.								
6 E Cass	26	2355CST			0	0	?	0	Thunderstorm Winds
Garland County	26	2355CST			0	0	?	0	Thunderstorm Winds
2 E Hot Springs	Thunderstorm winds downed some trees.								
Hot Spring County	27	0000CST			0	0	?	0	Thunderstorm Winds
1 E Magnet Cove	Thunderstorm winds damaged a mobile home and a couple of barns. Some trees were also twisted and knocked down.								
Jackson County	27	0015CST			0	0	?	0	Thunderstorm Winds (G61)
3 N Tuckerman	Thunderstorm winds gusted to 70 mph and blew down some trees.								
Newport	27	0020CST			0	0	?	0	Thunderstorm Winds
Trees and power lines were knocked down.									
Saline County	27	0022CST-			0	6	?	0	Tornado (F2)
Sardis	0024CST	0.5	50	0	6	?	0	0	Tornado (F2)
An F2 tornado touched down in the Sardis community and traveled approximately one-half mile before lifting. Several mobile homes were flipped over by the tornado. Altogether, six people residing in the mobile homes received minor injuries. Numerous trees and power lines were also blown down. Several outbuildings were also damaged or destroyed.									

ARKANSAS, Central and North Central Cont'd

Garland County	27	0030CST-			0	0	?	0	Flash Flood
Hot Springs	0230CST	Heavy rains resulted in flash flooding in parts of Hot Springs. Several streets in downtown Hot Springs were covered up to four feet of water at times.							
Lonoke County	27	0120CST			0	0	?	0	Thunderstorm Winds
6 NE England	Thunderstorm winds downed a few trees.								
Ward	27	0140CST			0	0	?	0	Thunderstorm Winds
A large tree was blown over onto a mobile home.									
Conway County	27	0120CST			0	0	?	0	Thunderstorm Winds
Center Ridge	Thunderstorm winds tore the roof off a barn.								
Faulkner County	27	0130CST			0	0	?	0	Thunderstorm Winds
Greenbrier	Thunderstorm winds blew the awning off a camper.								
Pulaski County	27	0226CST			0	0	0	0	Thunderstorm Winds (G50)
Jacksonville	Thunderstorm winds gusted to 58 mph at the Little Rock Air Force Base.								

ARKANSAS, Northwestern

Crawford County	02	1340CST			0	0	?	?	Hail (0.75)
Uniontown	02	1420CST			0	0	?	?	Hail (0.75)
8 N Mountainburg	A severe thunderstorm in Crawford County produced dime-size hail at Uniontown and eight miles north of Mountainburg.								
Benton County	26	1900CST			0	0	?	?	Hail (1.75)
5 N Rogers	26	1905CST			0	0	?	?	Hail (1.75)
Pea Ridge									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Rogers	26	1905CST			0	0	?	?	Hail (1.00)
Rogers	26	1913CST			0	0	?	?	Hail (1.00)
Bentonville	26	1935CST			0	0	?	?	Hail (4.00)
Carroll County 3.5 NW Eureka Springs	26	1945CST			0	0	?	?	Hail (0.75)
Washington County 5 SE Strickler	26	2000CST			0	0	?	?	Hail (0.75)
Crawford County 4 E Chester	26	2008CST			0	0	?	?	Hail (1.00)
Madison County St. Paul	26	2025CST			0	0	?	?	Hail (0.88)
Washington County Brentwood	26	2039CST			0	0	?	?	Hail (0.75)
Madison County 7 N St. Paul	26	2115CST			0	0	?	?	Thunderstorm Winds
Benton County 1 W Bentonville	26	2120CST			0	0	?	?	Thunderstorm Winds Hail (0.75)
Washington County Hindsville	26	2205CST			0	0	?	?	Thunderstorm Winds (G52)
Madison County 7 N St. Paul	26	2245CST			0	0	?	?	Thunderstorm Winds
Crawford County 8 N Mountainburg	26	2245CST			0	0	?	?	Hail (1.00)
Madison County St. Paul	26	2310CST			0	0	75K	?	Thunderstorm Winds Hail (1.00)
Crawford County 2 NE Alma	26	2330CST			0	0	?	?	Hail (0.75)
8 N Van Buren	26	2337CST			0	0	?	?	Thunderstorm Winds (G52) Hail (1.00)

Severe thunderstorms moved across northwest Arkansas during the evening of October 26th. Strong thunderstorm wind overturned a small outbuilding and downed trees just west of Bentonville, and strong winds caused roof and side panel damage to two outbuildings in St. Paul. Several large tree limbs were blown down during two separate storms seven miles north of St. Paul, and thunderstorm winds gusted to 60 mph in Hindsville and eight miles north of Van Buren. Large hail accompanied the storms. Hail up to four inches in diameter fell at Bentonville, and golf ball-size hail fell five miles north of Rogers and at Pea Ridge. Dime to quarter-size hail fell at numerous other locations in northwest Arkansas.

ARKANSAS, Eastern

Data not received.

ARKANSAS, Southeast

Data not received.

ARKANSAS, Southwest

None reported.

CALIFORNIA, Northwest

None reported.

CALIFORNIA, South Central

None reported.

CALIFORNIA, Western

None reported.

CALIFORNIA, West South Central

None reported.

COLORADO, Eastern

EAST CENTRAL COLORADO COZ090>092

05 0700MST-1700MST
0 0 ? ? High Winds (G56)
High winds damaged crops, power lines, and trees. Reported peak wind gust was 64 mph at Burlington.

EAST CENTRAL COLORADO COZ090-091

22 2000MST-
23 0900MST
0 0 ? ? Blizzard
Snowfall of two to nine inches was accompanied by winds of 50 to 55 mph which closed roads and schools and caused power outages. Visibility was one quarter mile or less for several hours. The snow was accompanied by thunder at times. Snowfall amounts included Yuma (2), Idalia (5), Stratton and Wray (6), and Joes (9).

COLORADO, Central

COZ010-034-035 Northern and Central Mountains

04 All Day
0 0 0 0 Heavy Snow
An early season snow storm moved into the northern and central mountains. Over a foot of new snow was reported at Fraser

Storm Data and Unusual Weather Phenomena

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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
and Dillon. In addition, Breckenridge reported eight to 10 inches while six to eight inches of new snow fell in the mountains above Aspen.									
COZ035-036-038-042									
>046-048>050									
Northeast Plains									
Northern Foothills									
Clear Creek County									
Squaw Mtn	05	0405MST			0	0	0	0	High Winds (G67)
Phillips County	05	0410MST			0	0	?	0	High Winds (G52)
Haxtun	05	0900MST- 1500MST			0	0	?	0	High Winds
Weld County									High winds estimated at 60 mph blew several large trees down in the city of Greeley. In two separate incidents, a parked car was crushed and a house damaged when trees fell on them. Also, several power lines were also knocked down by falling branches.
Greeley									
Nunn	05	0935MST			0	0	?	0	High Winds (G50)
Keenesburg	05	0955MST			0	0	?	0	High Winds (G52)
Adams County	05	1015MST			0	0	?	0	High Winds (G54)
1 N Strasburg	05	1159MST			0	0	?	0	High Winds (G53)
Logan County	05	1210MST			0	0	?	0	High Winds (G60)
15 NW Sterling	05	1245MST			0	0	?	0	High Winds (G54)
Morgan County	05	Afternoon			0	0	?	0	High Winds (G52)
Fort Morgan	05	Afternoon			0	0	?	0	High Winds (G70)
Fort Morgan	05	Afternoon			0	0	?	0	High Winds (G70)
Lincoln County	05	Afternoon			0	0	?	0	High Winds (G70)
10 N Limon	05	Afternoon			0	0	?	0	High Winds (G70)
Larimer County	05	Afternoon			0	0	?	0	High Winds (G70)
1 E Buckhorn	05	Afternoon			0	0	?	0	High Winds (G70)
Mountain	05	Afternoon			0	0	?	0	High Winds (G70)
COZ050									
Phillips County	19	1318MST			0	0	?	0	High Winds (G52)
Haxtun	19	1318MST			0	0	?	0	High Winds (G52)
COLORADO, Cental Cont'd									
COZ004-035-036-038-040>045									
Northern Mtns									
Front Range Foothills									
Palmer Divide									
Northeast Plains									
	22	0400MST-			0	0	?	?	Heavy Snow
	23	0300MST			0	0	?	?	Heavy Snow
A very potent winter storm system moved through Northern Colorado. Steamboat Springs in the Northern Mountains picked up 10 inches of snow. Across the Front Range Foothills and Palmer Divide, snow amounts ranged from four to eight inches. As the storm progressed into the Northeast Plains it strengthened. Strong northwesterly winds gusting from 35 to 45 mph were common. Snowfall totals generally ranged from three to six inches, however strong winds produced two to four foot drifts. The heaviest snow occurred from Southern Weld County around Greeley, to Northern Elbert County near Kiowa. Greeley, Sedalia, and Kiowa received eight inches of snow while Strasburg recorded 10 inches.									
COZ046>050									
Northeast Plains									
	22	2235MST-			0	0	?	?	Blizzard
	23	0400MST			0	0	?	?	Blizzard
Strong northerly winds continued to strengthen into the Northeastern Plains. Although snowfall accumulations generally ranged from three to six inches, peak wind gusts from 45 to 60 mph allowed for snow to drift as much as three to five feet deep. Visibilities were restricted to less than one-quarter mile. As a result, Interstate 70 was closed from Gun Club Road, just east of Denver, to the Kansas border.									
COZ073									
Pueblo County									
Pueblo	22	1100MST			0	0	?	0	High Winds (G52)
COZ076									
Otero County									
La Junta	22	2300MST			0	0	?	0	High Winds (G50)
COZ033>036-038-039									
Northern Mountains									
Front Range Foothills									
Larimer County									
Red Feather Lakes	26	0100MST			0	0	?	0	High Winds (G76)
Estes Park	26	0310MST			0	0	?	0	High Winds (G83)
2 N Estes Park	26	0330MST			0	0	?	0	High Winds (G96)
Boulder County									
Nederland	26	0345MST			0	0	?	0	High Winds (G87)
Winds gusting from 100 to 110 mph blew near Estes Park and into Nederland during the early morning hours. Several trees were blown down damaging powerlines and leaving 2,000 residents without electricity. A tree, two feet in diameter and estimated to be around 100-years-old, was blown down near Estes Park.									
Larimer County									
1 E Buckhorn Mtn	26	0400MST			0	0	?	0	High Winds (G65)
2 SW Loveland	26	0400MST			0	0	?	0	High Winds (G52)
2 N Estes Park	26	0431MST			0	0	?	0	High Winds (G98)
7 NE Virginia Dale	26	0500MST			0	0	?	0	High Winds (G55)

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Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
3 SE Estes Park	26	0515MST			0	0	?	0	High Winds (G71)
Livermore	26	0542MST			0	0	?	0	High Winds (G56)
Clear Creek County									
Squaw Mtn	26	Unknown			0	0	?	0	High Winds (G94)
Jefferson County									
Coal Creek Canyon	26	0545MST			0	0	?	0	High Winds (G61)
			Winds gusting at an estimated 70 mph blew through Coal Creek Canyon.						
Larimer County	26	0705MST			0	0	?	0	High Winds (G64)
9 SW Rustic			A satellite dish was uprooted and knocked off its concrete base.						
Weld County									
Hereford	26	0949MST			0	0	?	0	High Winds (G52)
Morgan County									
Fort Morgan	26	1135MST			0	0	?	0	High Winds (G50)
Larimer County									
Estes Park	26	1145MST			0	0	?	0	High Winds (G65)
Fort Collins	26	1150MST			0	0	?	0	High Winds (G65)
COZ067	26	1230MST-							
Teller County		1400MST			0	0	0	0	High Winds (G63)
Rampart Range									
Pikes Peak									
			Strong jet stream winds resulted in a wind gust of 63 knots near the 9,500 foot level west of the Air Force Academy in the Rampart Range.						
Weld County									
Nunn	26	1250MST			0	0	?	0	High Winds (G55)
Morgan County									
Fort Morgan	26	1305MST			0	0	?	0	High Winds (G52)
Fort Morgan	26	1405MST			0	0	?	0	High Winds (G54)
CONNECTICUT, Northeastern									
CTZ002>004	21	0900EST-1800EST			0	0	?	0	High Winds
			Strong southeast to south winds with gusts to 40 to 50 MPH knocked down numerous tree limbs and some trees causing scattered power outages. In Hartford, a huge piece of siding was ripped from a building and sent crashing to the street. Three cars were damaged in the street below but no one was injured. Portions of several streets in Hartford were blocked by fallen tree limbs. A total of 65,000 electric customers lost power statewide including about 23,950 who lost power in the Hartford, Bristol, New Britain and Southington. In addition, heavy rainfall resulted in urban street flooding in a few areas. Rainfall amounts of around two to 2.5 inches were reported. Some peak wind gusts included: 46 mph in Avon; 44 mph in Hartford; and 43 mph in Bristol.						
CTZ002>004	28	0500EST-0700EST			0	0	?	0	High Winds
Hartford County									
Bristol	28	0539EST			0	0	?	0	Thunderstorm Winds (G53)
Hartford County									
Hartford	28	0600EST			0	0	?	0	Thunderstorm Winds
			A squall line moved eastward across the area preceded by strong to gale force south winds. The actual passage of the squall line was accompanied by thunderstorms, some classified as severe when winds gusted to 50 knots or more. Some peak gusts included 61 mph at Bristol and 56 mph at Bradley International Airport in Windsor Locks.						
CONNECTICUT, Southern									
Fairfield County									
Fairfield									
Stamford									
Shelton	14	2145EST			0	0	?	0	Thunderstorm Winds
New Haven County									
Hamden	14	2245EST			0	0	?	0	Thunderstorm Winds
Middlesex County									
Old Saybrook	14	2348EST			0	0	?	0	Thunderstorm Winds
			A squall line moving through the area generated thunderstorms strong enough to down numerous trees and power lines. Heavy rains also accompanied these storms which in turn caused some road and highway flooding.						
New Haven County									
Countywide	21	1100EST			0	0	?	0	Thunderstorm Winds
			A squall line passing through the area generated thunderstorms that downed several trees and power lines. A few cars were damaged by these downed trees.						
New Haven County									
Cheshire	28	0500EST			0	0	0	0	Thunderstorm Winds (G55)
			A squall line passing through the area generated a wind gust of 55 knots.						
CONNECTICUT, Northwest									
Litchfield County									
Kent	14	2230EST			0	0	2K	0	Thunderstorm Winds
			A cold front crossed Western New England during the late evening hours of the 14th. An isolated severe thunderstorm downed trees in Kent.						
CTZ001	21	1415EST			0	0	0	0	High Winds 61
Litchfield County	21	1715EST-1900EST			0	0	10K	0	Flood
			An intense low pressure system tracked from the Upper Great Lakes northeast to James Bay Canada between Friday morning October 20th to Sunday morning October 22nd. The storm produced strong winds across Litchfield County during the afternoon of the 21st. A wind gust to 61 knots was reported in Torrington. Heavy rains also accompanied the storm with an average rainfall						

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
									of two to three inches across the region. Flooding rivers and streams caused roads to flood in Torrington.
Litchfield County	28	0500EST- 0800EST			0	0	20K	0	Flash Flood
Litchfield County	28 29	2000EST- 0700EST			0	0	?	0	Flood
									Thunderstorms produced nearly four inches of rain causing widespread road flooding in Kent and Salisbury in Litchfield County. Heavy rains across the entire region on the 28th caused the Housatonic River to reach its flood stage from the evening of the 28th to the morning hours of the 29th.
DELAWARE									
New Castle County 5 W Wilmington	21	0630EST			0	0	?	?	Thunderstorm Winds
									A severe thunderstorm caused wind damage to the Pike Creek Shopping Center in the Prices Corner area of New Castle County. Extensive roof damage occurred in the strip mall with Eckerd Drug, Buster Brown and Carousel Cards hit the hardest. In surrounding areas the severe thunderstorm caused slight wind damage to two buildings in the Goldey-Beacom College. Snapped and downed trees took down wires and caused power outages to about 4,000 persons.
New Castle County Northern	28	0400EST- 0900EST			0	0	?	?	Flood/Flash Flood
									Thunderstorms with heavy rain dropped between two and three inches of rain across New Castle County starting the evening of the 27th. This combined with recent heavy rains caused flooding of the Christina River the morning of the 28th. The river
DELAWARE, Cont'd									
									exceeded its flood stage of nine feet at 0400 EST the morning of the 28th, crested at 10.2 feet at 0600 EST and was back within bankfull at 0900 EST. No serious injuries or damage was reported.
DEZ001>0	04	Month Long			0	0	?	?	Unseasonably Wet
									Paradoxically October, normally the driest month of the year, started to break the back of the drought across Delaware. Rainfall was between 140 and 210 percent of normal with totals 1.5 to 3.5 inches above normal. It was the wettest October on record at the Greater Wilmington-New Castle Airport as 8.01 inches fell. Other monthly precipitation totals included 4.78 inches in Dover, 5.12 inches in Lewes, 6.0 inches in Georgetown and 7.44 inches in Yorklyn. The rain came too late to help farmers though. The Delaware Emergency Planning Board estimated farms in Kent and Sussex Counties suffered \$37 million in crop damage. On the other hand, the heavy rain helped to start alleviate the drought. The statewide ban on outdoor burning was lifted by the state fire marshal on the 12th. While the Delaware River Basin Commission drought warning remained in effect through month's end, no tightening of restrictions became necessary. On the 26th, the Governor's Drought Advisory Committee recommended the lifting of all drought restrictions effective November 6th.
FLORIDA, Northeastern									
St. Johns County 2 E St. Augustine 3 ENE St. Augustine	03	1045EST- 1105EST	1	10	0	0	0	0	Waterspout
Duval County Jacksonville	09	1050EST- 1530EST			0	0	5K	0	Flood
									Numerous street were flooded and blocked off in the downtown area.
Flagler County	11	1412EST- 1700EST			0	0	15K	0	Flood
									Roads were closed and barricaded through-out the county. Flooding occurred in downtown Bunnell near the city hall. Portions of SR-100 and Florida Park Road were closed with water more than one and one-half feet deep.
Marion County	11 12	2115EST- 1630EST			0	0	55K	0	Flood
									Heavy rains produced flooding along portions of Interstate 75 between SR-40 and SR-200. Flooding was mostly west and southwest of Ocala. Five sinkholes transformed Interstate 75 into a parking lot. Traffic was backed for more than five miles while cars were rerouted onto secondary road. The largest sinkhole was eight to 10 feet deep and around 15 feet in diameter. In Ocala more than 12 homes had water moving into them.
Duval County Jacksonville	14	2210EST- 2330EST			0	0	5K	0	Flood
									More than three feet of water halted traffic at Interstate 95 and Emerson, and at Phillips Highway and University Boulevard.
Marion County	14	1730EST- 2245EST			0	0	10K	0	Flood
									Rains returned to Marion County, and flooding closed SR-100/SW 75th Street, SR-475/2S of SR-200 and at 60th Avenue/52nd Street.
FLORIDA, East Central									
Martin County	17 18	1125EST- 1600EST			0	0	4M	9M	Flood
									An estimated 17 inches of rain fell in southeast Martin County producing widespread flooding. Two hundred and twenty five homes, and two schools received minor damage 25 homes had major damage and 15 homes were destroyed. Two dirt roads and the entire vegetable crop in the county were washed out. Citrus was not severely affected. Damage estimates were near \$3 million which included \$9 million in crop damage.
St. Lucie County	17	1500EST			0	0	4M	0	Flood
									In St. Lucie County where rainfall estimates were near 13 inches, 12 homes were flooded as were most of the major roadways

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Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<p>in the southern part of the county. County schools and many businesses were closed on the 18th as water receded. Total damage estimates were near \$4 million.</p>									
Brevard County Volusia County Orange County	20	1200EST			0	0	0	0	Urban/Small Stream Flood
<p>Persistent rain from August to October pushed accumulated rainfall for Brevard, Orange and Volusia Counties well above normal. The rain left many areas with flooded streets, fields and roadways. A few homes received minor flooding.</p>									
FLORIDA, Southern									
Monroe County 5 N EYW	01	1718EST			0	0	0	0	Waterspout
<p>National Weather Service personnel observed a waterspout five miles north of Key West International Airport. The waterspout dissipated in five minutes.</p>									
Monroe County 7 ESE EYW	02	0902EST			0	0	0	0	Waterspout
FLORIDA, Southern Cont'd									
<p>National Weather Service personnel observed a waterspout seven miles east southeast of Key West International Airport. The waterspout lasted six minutes.</p>									
Palm Beach County Delray Beach 10 SE PBI	02	1420EST			0	0	0	0	Waterspout
<p>A pilot reported a waterspout in the Atlantic off Delray Beach.</p>									
FLZ069-075-078 Lower Keys-Coastal Collier County	03 05	1200EST- 1200EST			0	0	4M	?	Hurricane Opal
<p>The outer fringes of Hurricane Opal caused tidal flooding and beach erosion from the lower Keys to Collier County. In Key West, major beach erosion, with estimated restoration costs of near \$3 million, occurred and streets in Old Town were inundated with sea water. In Collier County, near high tide on October 4, Everglades City Airport was under water and minor street flooding was reported in Naples and in the extreme south portion of the county. Minor beach erosion occurred in Collier County. Rainfall amounts up to seven inches caused relatively minor flooding in northeast Collier County but aggravated flooding which had continued since Tropical Storm Jerry in August.</p>									
Collier County Naples	04	1810EST			0	0	0	0	Thunderstorm Winds (G52)
<p>A thundersquall moved through the Naples area with wind gusts near 60 mph.</p>									
Collier County N Naples	14 17	1500EST- 0800EST			0	0	50K	37M	Flood
<p>Heavy rainfall caused several roads and a few residences to be flooded in northern sections of Naples. Tree farms and nurseries in north Naples suffered up to \$2 million in damage. Crop losses from this and earlier flooding are estimated at \$35 million.</p>									
Palm Beach, Hendry, Glades County	16 19	1200EST- 1200EST			0	0	3M	45M	Flood
<p>A stalled front across southeast Florida provided the focusing mechanism for excessive rainfall. The heaviest rain fell during the 24 hour period ending around midday Tuesday, October 17 in an area from northeast Palm Beach County through Hobe Sound in St. Lucie County and also near Clewiston in Hendry County. Storm total rainfall amounts averaged five to 10 inches with local amounts around 22 inches near Jupiter. The subsequent flooding caused evacuation to red cross shelters, closed schools and business for several days and caused residential flooding that lasted for more than a week. Around 1,000 residences were damaged. Highways, including Interstate 95 and Interstate 75, were flooded causing numerous vehicles to float or stall and a bridge across the Loxahatchee River was knocked out. Public property damage is estimated around \$10 million and private damage at \$43 million. Agricultural losses are estimated around \$45 million, including the deaths of nearly 10,000 cattle. The flooding caused contamination of water supplies and led to health concerns caused by insects, rodents and alligators. Record levels above 18 feet on Lake Okeechobee caused a few sand boils in the surrounding dike.</p>									
Palm Beach County Royal Palm Beach 15 NW PBI	17	0725EST	Short		0	0	10K	5K	Tornado F0
<p>A weak tornado briefly touched down in an orange grove near Seminole- Pratt Boulevard and 60 Street then and moved through a residential neighborhood doing minor damage to screens and awnings.</p>									
Monroe County Elbow Reef 5 E Key Largo	18	0810EST			0	0	0	0	Waterspout
<p>The public reported several waterspouts just south of Elbow Reef.</p>									
Dade County 15 S MIA 7 SW MIA	19	1150EST			0	0	0	0	Funnel Cloud
<p>An off-duty National Weather Service person sighted a funnel cloud near Cutler Ridge and the public reported a long-lasting funnel cloud in Westchester.</p>									
Dade County Elliott Key 25 SSE MIA	18	1000EST			0	0	0	0	Funnel Cloud
<p>Homestead Air Reserve Base observers sighted a funnel cloud just east of Elliott Key.</p>									
Dade County									

Storm Data and Unusual Weather Phenomena

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Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Property Damage	Crops	Character of Storm
S Dade 15 S MIA	21	1050EST			0	0	0	0	Funnel Cloud
A funnel cloud was sighted near the Saga Bay subdivision.									
Dade County 7 S Homestead 32 SSW MIA	21	1315EST			0	0	0	0	Funnel Cloud
Observers at Homestead Air Reserve Base sighted a funnel cloud seven miles south of the city of Homestead.									
FLORIDA, West Central									
Lee County 21 W Ft Myers 18 SW Ft Myers	02	1315EST- 1325EST	13	100	0	0	0	0	Waterspout
Numerous eyewitnesses observed a pencil-thin waterspout develop approximately 13 miles northwest of Tarpon Bay on Pine Island. The waterspout moved southeast and within four miles of Tarpon Bay where it temporarily dissipated. Within seconds and in the vicinity of the dissipated waterspout, two weaker funnels merged and formed one large waterspout before it lifted and dissipated as it neared Tarpon Bay.									
Sarasota County Englewood	04	1635EST- 1640EST			0	0	0	0	Thunderstorm Winds (G69)
A 79 mph wind gust was measured by a tide monitor in Englewood.									
Sarasota County S Venice	04	1700EST			0	0	0	0	Thunderstorm Winds (G58)
A 67 mph wind gust was measured by a tide monitor.									
Pinellas County	04	1730EST- 1800EST			0	0	2.5K	0	Thunderstorm Winds (G50)
Numerous power lines and large tree branches were downed by thunderstorm winds.									
FLZ039-042>043 -048>052-055>057 -060>062-065 West Central & Southwest Florida	04 05	0700EST- 0100EST			0	0	571K	0	Hurricane Opal
Hurricane Opal developed over the South Central Gulf of Mexico approximately 120 miles northwest of the Yucatan Peninsula. Opal underwent significant intensification as it moved rapidly northeast across the Gulf of Mexico before its center came ashore near Fort Walton Beach, Florida in the early evening of the 4th. Although the center of Opal passed hundreds of miles to the west of the West Central and Southwest Florida shoreline, flooding storm surges and tropical storm force winds were observed in these areas which caused sporadic damage. Storm surges of four to six feet were observed in Levy and Hernando counties with surges of two to four feet common from Tampa Bay south to Port Charlotte. Minor flooding to homes and roads along the immediate shorelines or near the mouth of rivers emptying into the Gulf of Mexico occurred from Levy County south to Charlotte County. In Levy County, a total of up to ten homes received minor water damage from storm surge at Yankeetown and Cedar Key. Total damage estimated was \$50 thousand in Levy County. In Citrus County, a couple of homes received minor water damage from storm surge along the Citrus River. Total damage estimated in Citrus County from storm surge was \$1,000. In Hernando county, 75 structures near the shore, mainly porches and sheds received minor water damage from storm surge. Total damage estimated in Hernando County from storm surge was \$60 thousand. In Pinellas County, a couple hundred homes and businesses received minor to moderate water damage from storm surge immediately along the intercoastal waterway from Sand Key south to St. Petersburg Beach. Total damage estimated from storm surge and wind in Pinellas County was \$400 thousand. In Hillsborough County, two to four foot storm surge caused minor flooding to several homes immediately along Bayshore Drive and Davis Island near Downtown Tampa. Total damage estimated from storm surge and wind in Hillsborough County was \$50 thousand. In Manatee County, up to five residences along the coast received minor flooding from storm surge. Total damage in Manatee County from storm surge estimated at \$10 thousand. Tropical storm force winds of up to 40 mph were common along the West coast of Florida from Levy County to Sarasota County during the 4th. The strongest one minute gust recorded was 49 mph at the Sunshine Skyway Bridge in St Petersburg at 1454 EST on the 4th. Nearly 5,000 residents in Pinellas and Pasco Counties were without power on the 4th due to numerous downed power lines from tropical storm force winds. The lowest pressure recorded in West Central Florida was 1001.6 millibars at Brooksville (BKV) in Hernando County at 1506 EST on the 4th. The greatest 24 hour rainfall immediately associated with Opal was 3.97 inches of rain recorded Tampa's International Airport on the 4th. Major beach erosion was reported along the beaches of Lee and Sarasota Counties, considerable beach erosion occurred in Pinellas County and minor erosion occurred in Manatee and Charlotte Counties.									
Hillsborough County Manatee County Sarasota County	05 05	0400EST- 0800EST			0	0	0	0	Urban/Small Stream Flood
Localized heavy downpours of three to five inches of rain in less than four hours caused minor flooding of streets and low-lying areas in the urbanized areas of Tampa, St. Petersburg, Sarasota and Bradenton.									
Lee County	05	1530EST- 2200EST			0	0	5M	0	Flood
An estimated ten to eighteen inches of intermittent heavy rain fell over a two week period over already saturated soils of flood prone areas of Lee County. The most extensive flooding occurred in Bonita Springs of southern Lee County. In Bonita Springs, the most devastated areas of flooding occurred in the Imperial Bonita Estates and Worthington subdivisions, the Manna Christian Mission RV and Jones Mobile Home Park and several migrant camps in extreme southern Lee County along Interstate 75 and Bonita Beach Road. The Imperial River Watershed, which includes the Oak and Leitner Creek tributaries, was the focus area in Bonita Springs for the most extensive flooding. Northwest to southeast sheetflow of water across Lee County into the Imperial River Watershed from the heavy rains forced									

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Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<p>evacuations of nearly 1,700 people in Bonita Spring from floodwaters that were nearly three feet deep. The Red Cross estimated the cost to feed and shelter the evacuated flood victims was \$875 thousand. The Federal Emergency Management Agency (FEMA) reported 991 flood damaged units in Bonita Springs. Of these reported, 391 homes, mobile homes and recreational vehicles were destroyed by the flood waters. Another 215 units received major damaged while an additional 385 units received minor damage from the flood waters. Estimated total damage from the floods, which included Red Cross and</p>									
FLORIDA, West Central Cont'd									
local government expenditures, was \$5 million.									
Hillsborough County Manatee County Sarasota County W. Charlotte County	06 06	0600EST- 0830EST			0	0	0	0	Urban/Small Stream Flood
Three to six inches of sporadic heavy rain caused localized flooding of streets and low-lying areas, primarily in the urbanized areas of Tampa, St. Petersburg, Sarasota and Bradenton.									
Pasco County New Port Richey	10	1500EST			0	1	0	0	Lightning
A 46-year-old male construction worker survived a direct lightning strike while locking a piece up a piece of metallic construction equipment. Injuries were minimal and the victim was conscious and alert after receiving medical attention.									
Hillsborough County Sarasota County Manatee County	31 31	1900EST- 2200EST			0	0	0	0	Urban/Small Stream Flood
Sporadic heavy rains produced a nearly 10 mile wide swath of estimated six to eight inch rainfall from Sarasota northeast across central Manatee County and into rural southeast Hillsborough County in less than six hours. Numerous streets in low-lying areas of Sarasota were flooded from the excessive rainfall.									
Sarasota County Manatee County	31 31	2200EST- 2400EST			0	0	0	0	Flood
An additional one to two inches of heavy rainfall in less than two hours caused several roads to wash out over northwest portions of Sarasota County and into central portions of Manatee County. The areas that incurred the most intense flooding were near Lake Manatee north to the Parrish Lake areas of Manatee County between Florida State Roads 62 and 64, east of Interstate 75, where several bridges and roads were closed due to high water.									
FLORIDA, Northwestern									
Walton County 3 N Glendale	04	1158CST	.1	20	0	0	10k	0	Tornado (F0)
A tornado briefly touched down destroying a mobile home and shed.									
Holmes County 1 W Ponce DeLeon Leonia	04	1145CST- 1158CST	12	50	0	0	10K	5K	Tornado (F1)
A tornado touched down just south of Highway 90 west of Ponce DeLeon and intermittently tracked to Leonia. Two buildings were damaged along with trees and power lines down near Ponce DeLeon and 200-300 pine trees were downed near Leonia.									
Jackson County Cottondale	04	1240CST	.1	20	0	0	0	0	Tornado (F0)
A tornado was reported by Jackson County Sheriff's Department.									
FLZ007>019-026>029- 034 Northwest Florida	04				0	0	1B	?	Hurricane Opal
Opal, the strongest Hurricane to hit the Florida Panhandle in 20 years, made landfall near Fort Walton Beach during the early evening. By far the greatest amount of damage occurred due to storm surge along the beaches of Walton, Bay, and Gulf Counties with a decreasing degree of storm surge damage in Franklin, Wakulla, Taylor and Dixie Counties. Inland areas from the Apalachicola river west received varying degrees of wind damage with the most significant damage in Walton, Bay, Washington and Holmes.									
High water marks, storm surge plus waves, were measured over 25 feet high along parts of the Walton county coast. In Panama City, the storm tide was measured by gage to a level of 6.92 feet while a gage in Apalachicola rose to 6.40 feet.									
In Walton County, hardest hit areas were Santa Rosa Beach and Sandestin where a reported 50 percent of homes were damaged or destroyed. Panama City Beach, in Bay County, reported about 25 percent of homes and businesses were a total loss. In easternmost Bay County, Mexico Beach suffered severe storm surge damage with a high percentage of beachfront buildings destroyed. Further east, Gulf County saw its worst damage along the St Joseph Peninsula and Cape San Blas where a large percentage of homes were damaged or destroyed.									
Franklin County escaped major damage with several businesses receiving minor flooding in Apalachicola. Out on St George island, Bruce State Park received serious damage to its beachfront access road and its buildings-causing the park to be closed for an extended period. Wakulla County endured flooding of several homes and businesses. Damage along the coastlines of Taylor and Dixie counties was confined to mainly minor flooding of low lying buildings along the waterfronts as well as some road damage. No confirmed deaths or injuries were directly attributable to the storm. One man was fatally injured in DeFuniak Springs when a tree fell on him as he was clearing debris from his yard. (Damage figure estimated.)									
Walton County Mossy Head	27	1400CST	.1	20	0	0	1K	0	Tornado (F0)
A funnel cloud was sighted over Eglin Air Force Base and touched down at Mossey Head doing roof damage to the a General Store.									

FLORIDA, Western Panhandle

FLZ001-002-003-004-
005-006

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
FLORIDA, Western Panhandle Cont'd									
Northwest Florida	03 04	1200CST- 2400CST			1	0	2.1b	5m	Hurricane Opal
Hurricane Opal moved across the Gulf of Mexico on October 3 and 4. The spiral bands started affecting the Northwest Florida area Tuesday and continued until the storm moved ashore Wednesday afternoon. The center of the storm moved ashore at almost the same location as Hurricane Erin did about two months before. The center of Opal (about five miles in diameter) was much smaller than Erin and was not as easily identifiable. Opal intensified to a category 4 hurricane early Wednesday morning and diminished to a category 3 at the time of landfall. Opal moved ashore near Navarre Beach at around 1600 CST. Opal moved rapidly through Northwest Florida during the afternoon and evening hours on Wednesday and moved into southwest Alabama near the Escambia-Covington County line. Most of the damage from Opal in Northwest Florida was from the devastating storm surge. In many places from Navarre Beach to Destin, some of the protecting dunes were washed away. Opal destroyed most of the homes that were facing the gulf from Navarre Beach to east of Destin. Preliminary damage estimates were \$2.1 billion dollars. Almost 300 homes were destroyed with another 1,000 homes suffering major damage. Crop damage was estimated at \$5 million dollars, mostly in northern Santa Rosa and northern Okaloosa Counties. It was estimated that \$50 million in damage was done to recreational boats. Almost 1,000 boats were damaged. In addition about 70 boats had been lost or sunk. Several tornadoes were reported with an elderly female dying in an F2 tornado near Crestview (see below on the 4th at 1130 CST). As Opal moved north, most of the damage was around and east of the center of the storm. Estimated sustained wind speeds were 115 mph as Opal moved ashore with the highest observed wind speeds at 83 mph gusting to 144 mph at Hurlburt Field in Mary Esther. Other wind speeds across Northwest Florida were 62 mph with gusts to 71 mph at Pensacola airport, 59 mph with gusts to 77 mph at Pensacola Naval Air Station and 80 mph with gusts to 115 mph at Eglin AFB in Valparaiso. Highest storm surges were 10 to 15 feet from Navarre Beach to east of Destin with eight to 12 feet on Santa Rosa Island from Fort Pickens to east of Pensacola Beach. The surge destroyed highway 399 that runs from Pensacola Beach to Navarre Beach. U.S. Highway 98 between Fort Walton Beach and Destin was also destroyed. Storm surges of six to eight feet were also observed in the inland bays from Pensacola to Choctawhatchee Bay. The most rainfall in Opal occurred at Ellyson Field where 15.45 inches fell on October 3 and 4. Lowest sea level pressure was 955 mb at Pensacola Naval Air Station.									
Okaloosa County Crestview	03	1245CST			0	0	5K	0	Thunderstorm Winds
Several trees and power lines were blown down north of Crestview.									
Okaloosa County Fort Walton Beach	03	1330 CST	.1	25	0	0	3K	0	Tornado (F0)
A tornado briefly touched down near the Fort Walton Beach medical center. Some trees were blown down.									
Okaloosa County Valparaiso	03	1340CST	.1	25	0	0	2K	0	Tornado (F0)
A tornado briefly touched down near Valparaiso blowing some trees down.									
Okaloosa County Fort Walton Beach	04	0900CST	.1	25	0	0	4K	0	Tornado (F0)
A tornado briefly touched down in Fort Walton Beach blowing down some trees and causing some minor roof damage to two homes.									
Santa Rosa County Navarre	04	0900CST	.1	25	0	0	3K	0	Tornado (F0)
A tornado briefly touched down in Navarre blowing some trees down.									
Santa Rosa County Navarre Beach	04	1000CST	.1	25	0	0	3K	0	Tornado (F0)
A tornado briefly touched down on Navarre Beach from a thunderstorm moving from the Gulf of Mexico. The tornado touched down briefly and blew some shingles from a couple of homes.									
Escambia County Molino	04	1045CST	.1	25	0	0	4K	0	Tornado (F0)
A tornado briefly touched down near Molino blowing some trees and power lines down.									
Okaloosa County Crestview	04	1130CST	1.8	170	1	3	300K	0	Tornado (F2)
A tornado touched down near Interstate 10 east of Crestview. The tornado then moved northwest across Okaloosa Lane and then across U.S. Highway 90 before dissipating near Highway 85. The tornado destroyed two homes and a church and severely damaged the late Bob Sikes Homestead and the Crestview High School's gymnasium. The two homes that were destroyed were along Okaloosa Lane. One home was on blocks on a concrete foundation, the home was completely destroyed and an elderly female who lived there was killed. The other home had the roof taken off and most of the insides of the home were destroyed. Three people were injured in this home and were saved when the wind blew them to the floor. The tornado was on the ground for almost two miles. F76PH									
Okaloosa County Fort Walton Beach	04	1625CST	.1	25	0	0	10K	0	Tornado (F0)
A tornado briefly touched down as Opal moved ashore causing damage east of the center in the Fort Walton Beach area. Several trees and power lines were blown down.									
Okaloosa-Santa Rosa Counties North part of Counties	04	1730CST	.1	25	0	0	10K	0	Tornado (F0)
Several trees and power lines were blown down and four homes had shingles blown off in the north parts of Santa Rosa and Okaloosa Counties around the center of Opal. Several brief touchdowns of tornados were observed in McLellan in Santa Rosa County and near Blackman and Oak Grove in Okaloosa County.									
FLORIDA, Western Panhandle Cont'd									
Okaloosa County 20 S Crestview	27	1252CST	.1	25	0	0	0	0	Tornado (F0)
A tornado briefly touched down near Duke Field which is on Highway 85 between Crestview and Niceville. No damage from the tornado was found.									

Storm Data and Unusual Weather Phenomena

October 1995

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

01>17 19>23
30>34 41>46
52>57 66>70
78>80 89>93
102>106 120
122 124

04	0100EST-								
06	1200EST				0	0	?	?	Flash Flood
04	1900EST-								
05	0600EST				8	7	75M	50M	Thunderstorm Winds

Hurricane Opal, which formed in the Gulf of Mexico, began threatening the Florida panhandle and Alabama on Tuesday October 3. At approximately 1645 EDT on Wednesday October 4, Hurricane Opal made landfall just west of Fort Walton Beach Florida and began a northward track through eastern Alabama, where it was downgraded to a Tropical Storm; and into Tennessee, where it was downgraded again to a Tropical Depression. As Opal tracked northward, thunderstorm winds knocked down close to ten thousand trees in more than 50 Georgia counties. More than four thousand trees were knocked down within the city of Atlanta alone. These trees fell across roads, and on power lines, homes, mobile homes, and automobiles. At least eight people died between Wednesday night (October 4) and Thursday morning (October 5), most of which were crushed either in their beds or automobiles. Another seven people reportedly died during the cleanup process when trees they were trying to remove fell on them. More than a half a dozen people were injured from falling trees in the early morning hours of October 5. Nearly half a million people (410,000) were without power initially after Opal moved through. Power crews from surrounding states helped to restore power to many, however several thousand residences remained without power through the weekend. There were more than 1200 power poles knocked down and almost 5,000 power lines snapped. An 80-foot gas was torn out of Interstate 285 between Roswell Road and the Glenridge Connector in Atlanta. Schools were closed Thursday and/or Friday throughout the cities of Atlanta, Marietta, and within Fulton, Coweta, Carroll and Douglas counties. Forty-seven of 101 schools were closed in DeKalb county. Four State parks were closed after Opal. Moccasin Creek Park, Black Rock Mountain, Vogel State Park, and Fort Mountain State Park. The Department of Transportation reported 273 damage sites statewide, most of which were downed traffic signals. Agricultural experts estimated that the state Pecan crop alone suffered more than \$5 million worth of damage. Flash flooding associated with Opal occurred mainly in metropolitan Atlanta and in northwest Georgia. Several rivers exceeded bankfull. The Oconee River at Penfield crested at 19 feet on the 6th, resulting in flooding between October 5th and October 9th. The Ocmulgee River at Macon exceeded bankfull on October 6th, crested near 23 feet on October 7th and returned to below bankfull on October 9th; in Abbeville, the Ocmulgee River flooded on October 13th, crested near 14-feet on the 14th and returned to bankfull on the 17th. Sweetwater Creek in Austell exceeded bankfull on October 5th, resulting in several flash flooding events through October 7th after cresting at 14 feet on the 6th. The Chattahoochee River near Whitesburg flooded on October 5th, and crested near 21 feet on the 6th before returning to bankfull on the 7th. The Etowah River in Canton exceeded bankfull for a few hours on October 6th, cresting near 17.5 feet. The Savannah River at Carlton Bridge flooded on October 5, and crested near 18 feet before dropping below floodstage on the 6th. M45V, M51V, M74P, F85P, F87P, M26V, F20M, M??V.

Carroll County
8 E Carrollton

27	1525EST				0	0	?	?	Thunderstorm Winds
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Thunderstorm winds uprooted two 15-inch diameter Oak trees, which were at least 40-feet tall, along Georgia State Highway 166 near Hulett.

Heard County
10 SW Franklin

27	1537EST				0	0	?	?	Thunderstorm Winds
----	---------	--	--	--	---	---	---	---	--------------------

Thunderstorm winds knocked over several 30-foot Pine trees near Georgia Highway 109 just north of Glenn.

Douglas County
5 W Douglasville

27	1537EST				0	0	?	?	Thunderstorm Winds
----	---------	--	--	--	---	---	---	---	--------------------

Thunderstorm winds knocked over two 18-inch diameter Oak trees which were 50-feet tall near Georgia Highway 78.

Troup County
Hoganville

27	1537EST				0	0	1K	?	Thunderstorm Winds
----	---------	--	--	--	---	---	----	---	--------------------

Thunderstorm winds knocked several trees down throughout northwest Troup County. Hoganville was in the hardest hit area.

Houston County
5 S Warner Robbins

27	1540EST				0	0	1K	0	Thunderstorm Winds
----	---------	--	--	--	---	---	----	---	--------------------

Thunderstorm winds knocked down seven or eight trees in the Banaire area.

Houston County
5 S Perry
Twiggs County
SE Jeffersonville
Bullard

27	1556EST				0	0	?	?	Hail (1.75)
----	---------	--	--	--	---	---	---	---	-------------

27	1630EST				0	0	2K	0	Thunderstorm Winds
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Thunderstorm winds knocked large trees down across Georgia Highway 80 near Jeffersonville, several fallen trees also. It snapped the main power line in the Bullard area.

Wilkinson County
S Irwinton

27	1700EST				0	0	1K	?	Thunderstorm Winds
----	---------	--	--	--	---	---	----	---	--------------------

The main power line to Gordon and McIntyre snapped due to thunderstorm winds.

Putnam County
10 N Eatonton

27	1710EST				0	0	?	?	Thunderstorm Winds
----	---------	--	--	--	---	---	---	---	--------------------

Thunderstorm winds knocked down numerous trees throughout the area.

GEORGIA, North and Central Cont'd

Upson County
Thomaston

27	1717EST				0	0	?	?	Thunderstorm Winds
----	---------	--	--	--	---	---	---	---	--------------------

Thunderstorm winds knocked several trees down on power lines along Wind Sweep Farm Road.

Putnam County
9 N Eatonton

27	1730EST				0	0	?	?	Thunderstorm Winds
----	---------	--	--	--	---	---	---	---	--------------------

Several trees were knocked down by thunderstorm winds.

Macon County
3 E Garden Valley
Laurens County
Dublin

27	1850EST				0	0	?	?	Hail (0.75)
27	2010EST				0	0	?	?	Hail (0.75)

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Crisp County 2 NE Warwick 4 E Arabi	27	2015EST-2030EST	10 328	0	6	50K	10K		Tornado (F0)
									A severe thunderstorm with an imbedded thunderstormcut a 10 mile path, damaging 30 to 40 structures and knocking over more than 1,000 trees. Two cars were also turned over and 40 to 50 acres of peanuts damaged.
Dodge County 3 W Rhine 1 SSE Rhine	27	2100EST	short	narrow	0	0	50K	?	Tornado (F0)
									A severe thunderstorm with an imbedded weak tornado which briefly touched down damaged three homes. One home was a mobil home which was damaged when atree fell on it, one was a permanent structure which sustained major damage when the porch and main support for the roof was ripped off, and one was a temporary structure which had it's tin roof pulled off.
GEORGIA, Northeast									
GAZ010-017>018-028									
Habersham County Various	04	0900EST			0	0	?	0	Flash Flood
	05	0225EST			0	0	?	0	Flash Flood
Hart County Various	04	1100EST			0	0	?	0	Flash Flood
Stephens County Various	04	0100EST			0	0	?	0	Flash Flood
Rabun County Various	05	0227EST			0	0	?	0	Flash Flood
	05	0952EST			0	0	?	0	Flash Flood
									Heavy rain associated with Opal causedsome flooding problems. Rainfall amounts typically ranged from four to six inches and closed roads and bridges were the result.
AZ010-017-018-021-028	05	0300EST-1400EST			0	0	5M	0	High Winds
									Winds gradually increased over northeast Georgia with the approach of Opal. The winds reached damaging levels during the early morning hours of October 5. Thedamage was most serious in Rabun County where numerous trees were blown down. The wind damage was described as being worse than the blizzard of 1993 and power was out for more than a week in some places. The wind reached sustained levels of 50 to 60 mph through mountain passes with higher gusts.
GEORGIA, East Central									
Columbia County 5 SW Appling	27	1542EST			0	0	0	0	Hail (0.75)
GEORGIA, Southeast									
Tattnall County Collins	27	2230EST			?	?	0	0	Hail (0.75)
Evans County Bellville	27	2315EST			?	?	0	0	Hail (0.75)
Bryan County Pembroke	28	0000EST			?	?	0	0	Hail (0.75)
									Trees and power lines down.
Echols County Needmore	28	0130EST			0	0	2K	0	Thunderstorm Winds
									Large oak trees were uprooted across Bethal Church Road.
GEORGIA, Lower									
GAZ121>131-142>148-155>161									
Southwest and South Central Georgia	04				?	?	?	?	Hurricane Opal
									The eastern fringes of Hurricane Opal caused mainly tree and power line damage especially across the westernmost counties.
Brooks County 5 S Quitman	28	0000EST			0	0	.5K	0	Thunderstorm Winds
									An out building was slammed against a house.
GEORGIA, Lower Cont'd									
Lanier County Teeterville	28	0130EST	.2	30	0	0	10K	0	Tornado (F1)
									A tornado touched down in Teeterville causing minor damage to a church, destroying a chicken house, knocking down many large trees one of which totaled a car. (Length and width estimated.)
GEORGIA, West Central									
GAZ089-090-102-120									
	04	1400EST-			?	?	1.0M	0.2M	Hurricane Opal, High Winds
	05	0600EST-							
									Hurricane Opal moved ashore in the extreme western panhandle of Florida and then tracked north-northeast through the state of Alabama. High wind and heavyrain occurred across West Central Georgia with a good deal of damage to trees, power lines, and signs. Heavy rains also occurred across West Central Georgia with some rural roads washed out by rapid runoff of heavy rain.
Muscogee County Columbus	27	1721EST			?	?	?	?	Thunderstorm Winds (G50), Hail

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property	Crops
<p>Three-quarter-inch hail was reported in the northern portion of Columbus. A house also sustained roof damage from thunderstorm wind.</p>								
IDAHO, Southwestern								
IDZ002								
25 W Rogerson	02	1800MST-						
	03	1000MST			0	0	0	0
IDZ004								Snow
Driggs	02	1800MST-						
	03	1100MST			0	0	0	0
IDZ005								Snow
Murphy Hot Spring	02	1800MST-						
	03	1000MST			0	0	0	0
<p>A cold front moved through Idaho. Four inches of snow fell 25 miles west of Rogerson, Driggs, and Ashton while one and a half inches of snow fell at Givens Hot Springs in Owyhee County. Snowfall delayed the potato harvest in eastern Idaho.</p>								
Owyhee County								
Givens Hot Spring	03	1400MST-						
	03	1500MST			0	0	0	0
<p>A severe thunderstorm moved through Givens Hot Springs in Owyhee county dropping three-quarter inch hail.</p>								
IDZ004								
Teton County	03	0900MST-						
	04	0900MST			0	0	0	0
IDZ012								Snow
Fremont County	03	0900MST-						
	04	0900MST			0	0	0	0
<p>Snowfall hit eastern Idaho. This storm system brought six inches of snow to Driggs and Teton in Teton County. In Fremont County, ten miles north of Island Park, two inches of snow fell.</p>								
IDZ003								
Madison County	08	0400MST-						
	08	1100MST			0	0	0	0
Bingham County	08	0400MST-						Dense Fog
	08	1100MST			0	0	0	0
<p>Dense fog reduced visibilities to less than a half of a mile throughout Madison County. In Bingham County, visibilities were reduced to twenty feet north of Blackfoot along Interstate 15 and west of Blackfoot on Highway 39.</p>								
IDZ001								
Ada County	18	0500MST-						
	18	1000MST			0	0	0	0
Canyon County	18	0500MST-						Dense Fog
	18	1000MST			0	0	0	0
<p>Visibilities were reduced to less than a quarter of a mile from ten miles southeast of Boise to the Oregon border in Canyon County.</p>								
IDZ003								
Rexburg	21	1200MST-						
	22	0900MST			0	0	0	0
Ashton	21	1200MST-						Snow
	22	0900MST			0	0	0	0
IDZ012								
Dubois	21	1200MST-						
	22	0900MST			0	0	0	0
Spencer	21	1200MST-						Snow
	22	0900MST			0	0	0	0
IDZ006								
Valley County	21	1200MST-						
	22	0900MST			0	0	0	0
<p>A cold front moved through the state producing snowfall at several locations. In the central mountains, Red River received six inches, four inches fell at Elk City, and Dixie received three inches. Rexburg, Dubois, Ashton, Pocatello, Stanley and Spencer all received one to two inches of snow.</p>								
IDAHO, Southwestern								
IDZ008								
Lewiston	31	0500PST-						
	31	0800PST			0	0	4	0
<p>Three rollover car accidents within a mile of each other occurred near the top of Lewiston Hill. These accidents were caused by dense fog and black ice. Other automobiles sliding off of Highway 95 were reported. No serious injuries were reported.</p>								
ILLINOIS, Northeast								
northern Illinois zones 003>006-008-010>014-019>023-032-033-039								
	24	1200CST-			2	0	0	0
	25	0800CST						
<p>Sustained winds of 20 to 30 mph with gusts to near 50 mph broketree limbs and caused scattered power outages throughout northern Illinois. The strongest wind gust recorded at O'Hare Airport in Chicago was 45 mph at 400 am CST. Two construction workers were killed when a cinder block wall collapsed at the construction site of a Boys and Girls Club in Chicago around 1245 pm CST. M63OU, M36OU.</p>								
ILLINOIS, Central								

Storm Data and Unusual Weather Phenomena

October 1995

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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None reported.

ILLINOIS, Southern

**Southern IL 04 0300-0700
ILZ075-080-081-082-084>094**

0 0 0 0 DENSE FOG
Dense early morning fog reduced visibility to less than 100 feet in spots. This created an extreme driving hazard for early morning drivers. A three-car accident near Gorville was blamed on the fog. Two people received minor injuries in the accident.

ILLINOIS, Southwestern

**Madison County
Glen Carbon**

27 1500CST 0 0 3K 0 High Winds
A large tree was blown down by gusty winds downing power lines and blocking Glen Crossing Road. The electricity also started a fire in the tree.

ILLINOIS, Northwest

Data not received.

INDIANA, Central

None reported.

INDIANA, Northwest

None reported.

INDIANA, Northeast

None reported.

INDIANA, Southeast

None reported.

INDIANA, South Central

None reported.

IOWA, Central

**Cerro Gordo County
Mason City Airport**

02 1553CST 0 0 0 0 Funnel Cloud
A low pressure and occluded front moved across Iowa during the afternoon hours. The upper level system was quite strong, though the surface was fairly weak. Thunderstorms developed during the afternoon hours just ahead of the occlusion. The storms were not severe, however one cell produced a funnel cloud briefly over the Mason City Airport.

IAZ004>007-015>017-023>028-033>039-044>050-057>062-070>075-081>086-092>097-Much of Iowa

23 1300CST 0 0 100K 0 High Winds
24 0700CST

IOWA, Central Cont'd

The seasons first winter type storm system moved through Iowa on the 23rd. The low pressure developed over Colorado, then moved across northern Kansas and tracked across western Iowa. The storm produced high winds as it intensified while moving through Iowa. Winds picked up in the late morning hours and continued to blow through the afternoon and night before tapering off the next morning. Winds were sustained 25 to 35 mph across the entire state with frequent gusts in the 45 to 50 mph range. Peak winds included a 52 mph wind gust at the Des Moines Airport, 51 mph at Ottumwa and over northwest Iowa at Sioux City. Damage was limited to mostly blowing debris and falling tree limbs. This caused some local power outages. Though damage was not great in any one area, the area affected by the high winds was large.

IOWA, Northwest

None reported.

IOWA, East Central and Southeast

Data not received.

IOWA, Southwestern

IAZ090

23 1600CST 0 0 30K 0 High Winds (G39)
A 40,000 pound mobile home was flipped off a transport truck by high winds one and one-half miles east of Sidney.

KANSAS, Northeastern

**KSZ025-102>105
Northeast Kansas
and East-Central
Kansas**

23 1100CST-23 2200CST 0 0 25K 0 High Winds
High Winds associated with an early season Winter Storm produced wind gusts as high as 50 to 70 mph. At least 10,000 people lost power as numerous power lines were blown down. In Atchison, a driver barely escaped injury as a large tree limb blew onto

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
his pick up truck. The truck was damaged but the driver was not injured. Winds gusted to 52 mph at Executive Airport in Johnson County and 51 mph at Stanely.									
KANSAS, Eastern									
Northeast									
Kansas County Z08>12-20>24-34> 40-54>56-58-59-	23	1000CST-1800CST			0	0	?	?	High Winds (G45)
Very strong gradient winds in the wake of a cold front gusted at times between 45 and 55 mph. A peak of 48 mph occurred at the National Weather Service in Topeka. Unofficial reports of 60 mph were also received. The winds knocked down numerous tree limbs, small trees, and road signs with isolated damage to some buildings or vehicles hit by fallen limbs or trees. Dofla estimates were unknown.									
KANSAS, Southeastern									
Cowley County									
Arkansas City	21	1041CST			0	0	.6K	0	High Winds
High winds ripped a large branch from a tree in the 100 block of North first Street and sent it crashing through the windshield of a car parked below.									
Saline County									
Salina	21	1225CST			0	0	?	0	High Winds
A large tree at 215 West Ellsworth was blown over onto a detached garage, causing considerable damage.									
Reno County									
Partridge	23	0700CST			0	0	?	0	High Winds
The high winds picked up one-quarter of a roof and flipped it over to the other side of the brick building that served as the gymnasium and elementary school.									
Butler County									
Augusta	23	1530CST			0	0	?	0	High winds
The health department's roof was peeled off from the west to east due to the gusty winds.									
KANSAS, Southwestern									
Pawnee County									
Larned 1 SW Larned KSZ030-031-043>046-061>066-074>081-084>090	04	1750CST			0	0	0	0	Hail (1.00)
	04	1755CST			0	0	0	0	Hail (0.88)
	05	0000CST-2000CST			0	3	200K	150K	High Winds
A northwest wind of 60 to 70 mph prevailed for an extended period as deep low pressure moved across the area. Numerous trees and roofs were damaged. A few large structures lost walls or roofs. Crop damage was to uncut milo. Some wheat had to be replanted due to erosion. A trash cart was blown out of a pickup and hit three people that were injured, but none seriously.									
KSZ030-031-043>046-061>066-074>081-084>090	05	0400CST-							
KANSAS, Southwestern Cont'd									
084>090		1900CST			0	0	0	80K	High Winds
The second high wind event of the month occurred with a northwest wind of 60 mph. Quite a few homes received roof damage. A larger building in Scott City was heavily damaged. Numerous trees received damage.									
KANSAS, Northwestern									
Northwest Kansas									
KSZ001>004-013>014-027>029-041-042	05	0700CST-1700CST			0	0	?	?	High Winds (G62)
High winds damaged crops, roofs, power lines, and trees. At least six high profile vehicles were blown off the roads. Reported peak wind gusts were 71 mph at BREWSTER, 69 mph at Oberlin, 68 mph at Goodland, 67 mph at Colby, 60 mph at Hill City, and 59 mph at Weskan.									
NORTHWEST KANSAS									
KSZ001>003-013-014	22	2100CST-							
	23	1200CST			0	0	?	?	Blizzard (G49)
Snowfall of two to eight inches was accompanied by winds 50 to 55 mph which caused drifts up to four feet. Roads and schools were closed. Thunder accompanied the storm. Visibility was one-quarter mile or less for several hours. The storm caused traffic accidents and minor power outages. Snowfall amounts were at Wood, McDonald, and Goodland (6), St. Francis (8). A peak wind of 65 mph was measured at KGCR Radio near Brewster during the storm.									
KANSAS, North Central									
KSZ005-006-017-018 North Central Kansas	23	0800CST-1400CST			0	0	10K	0	High Wind (G52)
High winds gusting to 60 mph buffeted north central Kansas. Several trees were uprooted and numerous tree limbs were downed. One of the tree limbs fell on top of an automobile in Gaylord causing considerable damage.									
KENTUCKY, Northern									
None reported.									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
KENTUCKY, Northeast									
KYZ101-102-103-104-105-107-119 Northeast	05	0200EST-1600EST			0	0	0	0	Heavy Rain
The low pressure remnants of Hurricane Opal passed through during the early afternoon. The storm was moving north fast, so only beneficial rains of one to two inches were observed. The barometric pressure dropped to near 29.2 inches, which is unusually low for the month. Yet, no significant wind damage occurred.									
KENTUCKY, Central									
Pulaski County	05	0200EDT-0800EDT			?	?	?	?	Gradient winds
Several trees were knocked down due to high winds and saturated soils brought on by the remnants of Hurricane Opal.									
Pulaski County	05	0700EDT			?	?	?	?	Flash Flood
Minor flooding reported across Kentucky Highway 80.									
Jefferson County	05	0600EDT-1500EDT			?	?	?	?	Flash Flood
Minor flooding reported across the county due to periods of heavy rainfall associated with the remnants of Hurricane Opal. Total rainfall across the county ranged from 2.4 inches at the Louisville International Airport to 3.5 inches at Fern Creek Road south of the Gene Snyder Freeway.									
Hardin County	05	0600EDT-1500EDT			?	?	?	?	Flash Flood
Several roads across the county were washed out due to heavy rains associated with the remnants of Hurricane Opal. No damage was reported however. Elizabethtown and the Fort Knox area had several roads closed.									
Monroe County	05	0800EDT			?	?	?	?	Flash Flood
Bridge washed out over Sulphur Creek, five miles southeast of Tompkinsville. This was due to heavy rainfall associated with the remnants of Hurricane Opal.									
Clay County	05	0200EDT-0800EDT			?	?	?	?	Gradient Winds
Several trees were downed due to high winds and saturated soils due to the remnants of Opal.									
Fayette County Lexington	20	0930EDT			?	?	?	?	Thunderstorm Winds
Several trees, power lines and traffic lights down due to thunderstorm winds.									
KENTUCKY, Southwestern									
Western KY KYZ001>013	04	0300EST-0700EST			0	0	0	0	DENSE FOG
Areas of very dense fog made travel hazardous for early morning drivers. Visibilities were below a quarter mile in the fog.									
LOUISIANA, Northwest									
Caddo Parish 8 N Greenwood	01	1645CST			0	0	0	0	Thunderstorm Winds
Winds knocked out several tree tops 12 to 14 inches in diameter.									
10 N Greenwood	01	1700CST			0	0	0	0	Thunderstorm Winds
Numerous reports of trees and power lines down blocking Louisiana Highway 169.									
5 W Shreveport	01	1700CST			0	0	0	0	Thunderstorm Winds
Waves of three to five feet produced by high winds overturned a 12 foot boat which dumped three individuals into the lake about 500 yards from shore. The three were rescued by Lake Patrol.									
Lincoln Parish 5 NW Dubach	27	1317CST			0	0	0	0	Hail (1.75)
Jackson Parish 1 S Quitman	27	1430CST			0	0	0	0	Hail (0.75)
Caddo Parish Bethany	27	1436CST			0	0	0	0	Hail (1.75)
Natchitoches Parish 2 NE Chestnut	27	1540CST			0	0	0	0	Thunderstorm Winds
Winds knocked down several trees across Louisiana Highway 9.									
Winn Parish 4 NE Winnfield	27	1620CST			0	0	0	0	Hail (0.75)
LOUISIANA, Northeast									
Tensas Parish 2 S St. Joseph	26	1830CST			0	0	25K	0	Thunderstorm Winds
The roof of a house was completely blown off.									
Madison Parish 2 E Tallulah	27	1300CST			0	0	0	0	Thunderstorm Winds (G65) Hail (1.75)
Tensas Parish 2 W St. Joseph	27	1430CST			0	0	250K	0	Thunderstorm Winds
A three thousand square foot house was nearly totally destroyed. Eight storage sheds had the roofs torn off.									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Tensas Parish Newellton	27	1645CST			0	0	0	0	Hail (1.75)
LOUISIANA, Southeast									
Southwest Louisiana LAZ038>040-056>070	04	0000CST- 2400CST			0	0	200K	?	Hurricane Opal
Hurricane Opal, a category 4 hurricane on the Saffir Simpson Scale, passed about 150 miles south of the mouth of the Mississippi River during the morning of October 4 as it was moving north northeast toward the western Florida Panhandle. The only significant wind damage occurred in extreme south Plaquemine Parish where winds were estimated around 60 mph with gusts to hurricane force, (74 mph), with wind damage reported to some mobile homes and roofs of a few other structures. Tropical storm force winds, 39 mph or greater, were reported in extreme south Lafourche and Jefferson Parishes, as well as extreme east St. Bernard Parish. Property damage cost estimated. Tides were generally two feet above normal in Lake Pontchartrain, and three to five feet above normal along the southeast Louisiana coast from Grand Isle eastward. Some low lying coast roads were flooded. Significant damage occurred on the barrier islands of southeast Louisiana. Approximately 10,000 people evacuated from the southern, or lower portions, of Plaquemine, St. Bernard, Lafourche, and Jefferson Parishes. The only significant gathering of persons in public shelters occurred in Plaquemine Parish where 1,600 people were placed in public shelters. Although no direct injuries occurred from the hurricane, an indirect injury is attributed to the hurricane in a freak accident. A Jefferson Parish employee was injured while attempting to lower a large flag on October 4th. A strong wind gust caught to the flag and turned it into a virtual sail. The employee, who was holding onto a rope attached to the flag was tossed high into the air, and suffered severe injuries when he fell back to the ground.									
LOUISIANA, Southwest									
Vernon Parish 8 SW Anacoco	26	1600CDT			0	0	0	0	Thunderstorm Winds
A tree was blown down at the intersection of Highway 111 and 392.									
Leesville Rapides Parish	26	1610CDT			0	0	0	0	Hail (0.75)
Melder Glenmora	27	1625CDT			0	0	0	0	Hail (1.25)
	27	1845CDT			0	0	0	0	Hail (1.25)
MAINE									
MEZ023-024-027	06	0300EST- 1100EST			0	0	?	0	High Winds
Heavy winds and rain associated with the remnants of Hurricane Opal brought down trees and knocked out power in coastal areas of southern Maine. Some beach erosion occurred in Saco. Strong winds ripped away boats from their moorings in the Midcoast towns of Camden and Rockland.									
MEZ015-016-018- 023-029	15	0100EST- 0700EST			0	0	?	0	High Winds
A vigorous cold front produced localized wind damage as it moved through southern and eastern Maine. Downed trees and power lines were reported in York, Hancock, and southern Penobscot Counties.									
MEZ007>030	21	0600EST- 0500EST			0	0	300K	0	High Winds
MEZ007>009-012>014- 018>021-023>025	21	1900EST- 0500EST			0	0	250K	0	Heavy Rain, Flood
MEZ012	22	0130EST- 0600EST			0	0	150K	0	River Flood
Strong pressure gradient ahead of an intense low pressure system and its approaching cold front brought destructive winds and copious amounts of Atlantic moisture to much of Maine. The high winds affected the southern two-thirds of the state, downing trees and cutting power to over 30,000 customers. From two to eight inches of rain fell over western Maine, mostly in a six hour period. This resulted in some lowland and urban street flooding. Orographic lifting produced the highest rainfall amounts in the White Mountains, resulting in small river and stream flooding. Several roads and footbridges were washed out. The Wild River, a small tributary of the Androscoggin River in southern Oxford County, experienced its highest stage on record.									
MEZ007-012	28	1800EST- 2300EST			0	0	?	0	River Flood
MEZ014-021	28	2300EST- 1500EST			0	0	?	0	River Flood
Heavy rains brought by an approaching frontal system caused water levels to exceed flood stage on the Swift River in Oxford County and on the Kennebec River in southern Somerset and Kennebec Counties. From three to five inches of rain fell on the already saturated watersheds of these two rivers. No major damage was reported.									
MARYLAND, Northeast									
Talbot County Countywide	27	2030EST			0	0	?	?	Thunderstorm Winds
Queen Anne's County Countywide	27	2050EST			0	0	?	?	Thunderstorm Winds
Caroline County Countywide	27	2105EST			0	0	?	?	Thunderstorm Winds
A squall line of severe thunderstorms moved from southwest to northeast across the Maryland eastern shore. The thunderstorms caused widely scattered reports of uprooted trees and downed power lines throughout the counties.									
MDZ008-012-015- 019-020	Month Long				0	0	?	?	Unseasonably Wet
Paradoxically October, normally the driest month of the year, started to break the back of the drought across the eastern shore. Rainfall was between 160 and 200 percent of normal with monthly totals between five and six inches. The 6.24 inches of rain that fell at the Baltimore-Washington International Airport was the 3rd wettest October in the last 25 years and the tenth wettest									

Storm Data and Unusual Weather Phenomena

October 1995

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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October since 1905. To the east, the 8.01 inches of rain that fell at the Greater Wilmington-New Castle Airport was the wettest October on record. The rain came too late to help farmers which had below normal crop yields.

MARYLAND, Central

Charles County Ironsides/Grayton

05 1935EST-1937EST **1.5** **100** **0** **0** **10K** **0** **Tornado(F1)**

A strong mesocyclone, generated from the remnants of Hurricane Opal, developed south of the Potomac River and raced northeast during the mid-evening. When it moved into Maryland, it spawned three tornadoes in Charles, Prince Georges, and Anne Arundel County. The first tornado tracked along State Route 425 between the towns of Ironsides and Grayton. Along its path, several trees were uprooted or snapped; two sheds were destroyed and two more sustained roof damage. Windows were blown out of a barn and several vehicles.

Prince Georges County Temple Hills

05 1959EST-2003EST **2.5** **200** **0** **3** **5M** **0** **Tornado(F2)**

The strongest tornado, containing estimated winds off 50 mph, caused substantial damage, and several injuries, at a Temple Hills neighborhood. Three persons sustained minor injuries requiring a short hospital stay; 17 others reported cuts and abrasions. In all, 100 homes suffered damage. Fifteen of the homes were damaged severely enough to be condemned; four homes lost their entire roofs. Numerous trees, several wide-girthed hardwoods, were uprooted, and 9,000 Potomac Electric Power customers were without power.

Anne Arundel County Odenton to Glen Burnie

05 2031EST-2039EST **6.0** **100** **0** **0** **250K** **0** **Tornado(F1)**

The third tornado associated with the parent mesocyclone touched down in residential Odenton (at F0), strengthened (to F1) as it continued through Severn, the weakened rapidly before lifting in south Glen Burnie. The tornado destroyed an aluminum

MARYLAND, Central Cont'd

carport, ripped shingles and siding from a nearby residence, and snapped silver maple trees in Odenton. The storm continued across state route 32, and strengthened as it entered Severn. At least 200 soft- and hardwood trees were snapped or uprooted along the west edge of the Severn Run Natural Forest. Pine trees fell onto homes northwest of the forest, but direct tornado damage to homes was not noted until the storm reached a relatively new development along Quarterfield Farms Road. Eleven homes suffered damage at the development, ranging from ripped siding and unhinged shingles to a bowed-in garage door frame. Several pine and oak trees were snapped or uprooted here as well. The tornado weakened while causing damage to a farm house, shed, and carport immediately north of the development, then caused minor tree and limb damage near state route 174 before dissipating. Baltimore Gas and Electric reported 2,600 customers without power in Anne Arundel County; the entire servicing district had 10,000 customers without power.

Anne Arundel County Arnold

05 2032EST **0.5** **50** **0** **0** **1K** **0** **Tornado(F0)**

A bow-echo, racing well east ahead of the Charles-Prince Georges-west Anne Arundel County mesocyclone, produced a short-lived gustnado/waterspout along the Magothy River in Arnold. Minor tree and structural damage was noted at two residences, while an automobile was turned around. The tornado lifted as a waterspout over the Magothy River.

St Mary's County White Point Beach

05 2057EST **.75** **75** **0** **0** **5K** **0** **Tornado(F1)**

A small tornado struck along the St Mary's County shoreline, snapping trees, shattering a residence's porch windows, and knocking down power lines.

Harford County Pylesville

05 2125EST **0** **0** **0** **0** **1K** **0** **Thunderstorm Winds**

Small trees were deposited along a local street near Pylesville. Other trees and power lines were reported down in Aberdeen. At the Bush River Yacht Club (southeast Harford County), two dinghies were damaged when a large oak tree fell on them. The tree had been weakened by the combination of strong gradient winds, thunderstorm winds, and heavy rains earlier on the 5th.

Anne Arundel County Crownsville, Arnold

14 1651EST-1657EST **3.8** **75** **0** **0** **60K** **0** **Tornado(F1)**

A tornado touched down just east of Crownsville, and skipped northeast along a 3.8 mile track, exiting Arnold along the Magothy River. The first segment began in the Sherwood Forest subdivision, where numerous trees were snapped or uprooted, and power lines were knocked down, in a 50-yard wide swath. The tornado lifted temporarily near the Severn River, then touched down again east of the Severn, causing additional tree damage in the Rugby Hall subdivision. Numerous limbs were noted along State Routes 2 and 648 as the tornado continued northeast. More tree tops were snapped at the Severna Park Golf Center. As the twister raced through the campus of Anne Arundel Community College, three building roofs sustained damage, one vehicle was flipped, and two others had windows blown out. Siding was stripped from a couple of homes in the College Hills subdivision just before the twister lifted a second time. The tornado touched down a third and final time in the Belvedere Heights subdivision, knocking down several trees, and one telephone wire, and causing minor damage to four homes, including one whose porch supports were bent. The twister tightened from 100 yards to 50 yards as it moved into the DreamPoint subdivision, knocking down tens of hardwood trees. After the twister crossed Forked Creek, it caused minor damage to sailboats at two private docks. The storm continued through the Elmstead Acres Community, knocking down more trees, twisting a tennis court fence, and causing minor damage to six more homes, primarily shingle, siding, gutter, and window shutters. A cupola was removed from a barn, and a residence's garage door was bowed out. The tornado exited into the Magothy River, where it dissipated.

Washington County 1 E Hagerstown

14 1658EST **0** **0** **0** **0** **0** **0** **Thunderstorm Winds (G51)**

An automated weather sensor recorded a wind gust of 60 mph.

Frederick County Ijamsville

14 1730EST **0** **0** **0** **0** **0** **0** **Thunderstorm Winds**

Several trees were snapped, including two-foot diameter oaks, and some siding was stripped off a home, near Ijamsville.

Calvert County Prince Frederick

14 1730EST **0** **0** **0** **0** **1K** **0** **Thunderstorm Winds**

Small trees and limbs were knocked down in central Calvert County near the towns of Prince Frederick and St. Leonard.

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed / Injured		Estimated Damage Property / Crops		Character of Storm
Carroll County 2 NW Westminster	14	1735EST	1.0	25	0	0	1K	0	Tornado(F0) A gustnado, associated with the leading edge of a strong cold front, touched down briefly at a farm near Frizzelburg, knocking large limbs off several trees.
Carroll County 2 ENE Westminster	14	1738EST			0	0	0	0	Thunderstorm Winds A gust front produced apparent straight-line wind damage to a couple of trees at a residence just east of Westminster.
Carroll County Manchester	14	1802EST			0	0	0	0	Thunderstorm Winds (G52) An automated weather sensor recorded a wind gust of 61 mph.
Frederick County Thurmont	21	0012EST	.62	75	0	0	7K	0	Tornado(F0) A gustnado touched down in a residential area of eastern Thurmont, uprooting 10 trees, causing substantial limb damage to 30 others, and producing minor damage at four homes. Structural damage was confined to removed shingles, gutters, and a piece of tin roof. Two basketball stanchions were bent at homes along the periphery of the track.
Frederick County 2 E Libertytown MARYLAND, Central Cont'd	21	0020EST	1.2	50	0	0	15K	0	Tornado(F1) A gustnado struck the Fox Ridge community east of Libertytown, causing minor structural damage at three homes, and more substantial damage at a fourth. The storm struck at the entrance to the neighborhood, snapping off limbs of Bradford pear trees. Shortly thereafter, the storm tore a small piece of siding off one home, and snapped off its television antenna. The residence next door had minor shingle damage to the home and a storage shed, and a woodpile was tossed. Heaviest damage was sustained at a residence at the bottom of a hill. A camper was removed from its anchoring legs and tossed six feet into an exterior wall of the residence, cracking the wall and causing minor damage to the interior. Numerous shingles were removed from the roof, and two adjacent hardwood trees were snapped one-quarter up from the trunk. The gustnado continued through farmland, then snapped the tops of several oak trees at a residence at the intersection of New Windsor Road (State Route 31) and Bessie Clemson Road before dissipating.
Carroll County Taneytown	21	0028EST	0.5	50	0	0	5K	0	Tornado(F0) The same line of thunderstorms which produced wind damage near Thurmont raced into northwestern Carroll County, depositing a short-lived gustnado which uprooted five large trees and caused minor damage to several residences.
Charles County La Plata	21	0255EST			0	0	0	0	Thunderstorm Winds (G50) An automated wind sensor recorded a gust of 58 mph.
Anne Arundel County Riviera Beach	21	0310EST			0	0	3K	0	Thunderstorm Winds Thunderstorm winds knocked down trees and power lines in the Riviera Beach vicinity.
Harford County Aberdeen	21	0408EST	0.5	50	0	0	30K	0	Tornado(F0) A gustnado touched down in the west portion of Aberdeen, damaging a roof at a local motel and blowing 2X4 wood pieces along the track. A two-ton step-van was overturned just northeast of the motel, and a dumpster was moved 70 feet southeast of the track. Numerous small branches were also blown down along the track.
St Marys County 15 NW Patuxent River	27	2000EST- 2002EST	0.5	50	0	0	0	0	Tornado(F0) A short lived tornado touched down along the St Mary's County shoreline northwest of Patuxent River Naval Air Station. Several eyewitnesses noted a funnel near the base shortly before touchdown (1958 EST). Power was temporarily knocked out in Hollywood, close to where the tornado apparently touched down. No damage was reported.
MARYLAND, Southern									
Wicomico County Waterview	21	0600EST			0	0	0	0	Thunderstorm Winds Trees and power lines down. Few trees fell onto homes. Few top of trees blown out.
Dorchester County nr Cambridge	27	2050EST			0	0	0	0	Thunderstorm Winds Large oak tree down. Tops of several pines trees ripped off.
MARYLAND, Western									
MDZ001 Garrett County	05	1200EST			0	0	1K	0	High Winds A large tree and large limbs along Route 495 near Bittinger were downed by high winds associated with the remnants of what was once Hurricane Opal.
DISTRICT OF COLUMBIA									
None reported.									
MASSACHUSETTS, Central and Eastern									
MAZ005	14- 15	2230EST- 0100EST			0	0	?	0	High Winds Gusty winds and briefly heavy rain accompanied a strong cold front as it passed eastward across the state. Winds gusting to 40 to 50 MPH with possibly a few higher gusts brought reports of several trees blown down in parts of Middlesex County in the

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
towns of Sudbury and Marlboro.							
MAZ020 Westport	15	1100EST	0	0	0	0	High waves Three people drowned and several others survived when their small boats capsized and broke up in seven foot seas just outside Westport Harbor. The official marine forecast predicted 20 to 30 knot west winds and seas of five to ten feet.
MAZ002>24	21	1000EST- 1900EST	0	0	?	0	High Winds
MAZ002>005	21	1000EST- 1900EST	0	0	0	0	Heavy Rain
Franklin County Shatuckville	21	1930EST- 2400EST	0	0	0	0	Flash Flood Strong southeast to south wind gusting from 40 to 50 mph knocked down numerous trees and some power lines across the

MASSACHUSETTS, Central and Eastern

state. Worcester Airport recorded a peak gust to 44 mph. Blue Hill Observatory in Milton recorded a peak gust to 58 mph at about 1400 local time. Two horses were killed when they were struck by a falling power line in Spencer. About 5,000 electric customers lost power in central Massachusetts. Heavy rainfall amounting to between two and four inches fell in the central part of the state while up to four to five inches was recorded in the Hampden, Hampshire and Franklin Counties. Some rainfall totals for the day included the following: Westboro, 2.50 inches; Gardner, 3.90 inches; Northboro, 3.80 inches; and Granville, a total of 4.56 inches. Many streets were flooded and more severe street flooding occurred where drains were blocked by fallen leaves. Small streams rose to bankfull and resulted in some minor flooding. In western Franklin County, the North River at Shatuckville, rose to 8.9 feet or about one foot over flood stage of eight feet.

MAZ002>019	28	0500EST- 0900EST			0	2	?	0	High winds
MAZ002-003- 008>011	28	0600EST- 0900EST			0	0	0	0	Heavy rain
Hampshire County Easthampton	28	0608EST			0	0	?	0	Thunderstorm Winds
Hampden County Chicopee, Westover Air Force Base	28	0610EST			0	0	?	0	Thunderstorm Winds (G52)
Hampden County East Longmeadow	28	0629EST			0	0	?	0	Thunderstorm Wind
Hampshire County North Amherst	28	0630EST			0	0	?	0	Thunderstorm Wind
Middlesex County West Townsend	28	0715EST			0	0	?	0	Thunderstorm Winds
Franklin County Orange	28	0720EST			0	0	?	0	Lightning
Worcester County Hubbardston	28	0730EST			0	0	?	0	Thunderstorm Winds
Middlesex County Groton, Westford	28	0741EST- 0745EST			0	0	?	0	Thunderstorm Winds
Norfolk County Quincy	28	0830EST			0	0	?	0	Thunderstorm Winds
Norfolk County Blue Hill, Milton	28	0832EST			0	0	?	0	Thunderstorm Winds
Suffolk County Boston, Logan Airport, Revere	28	0845EST			0	0	?	0	Thunderstorm Winds (G63)
Norfolk County Brookline	28	0850EST			0	0	?	0	Thunderstorm Winds
Middlesex County Winchester	28	0850EST			0	0	?	0	Thunderstorm Winds
Hampshire County Huntington	28	0930EST- 1130EST			0	0	0	0	Flash Flood A squall line moved eastward across the state preceded by strong to gale force south winds. Heavy rainfall occurred in Franklin, Hampshire, and Hampden Counties. Up to three inches of rain fell in towns along the eastern slopes of the Berkshires. Urban street flooding was reported in parts of Chicopee, Westfield, and Northampton. The west branch of the Westfield River rose to 9.8 feet or about one foot above flood stage of nine feet in Huntington during mid-morning. The actual passage of the squall line was accompanied by thunderstorms, some classified as severe when windgusted to 50 knots or more. Some peak gusts included 73 mph at the center marker at Logan International Airport in Boston; 71 mph at the Blue Hill Observatory in Milton; and 60 mph at Westover Air Force Base in Chicopee. In Boston, forty trees and branches were reported blown down. Trees were reported down in communities from the Connecticut Valley to the eastern part of the state. Falling trees and limbs knocked down power lines resulting in scattered power outages for several thousand electric customers. Two people were injured by a falling tree in Rehoboth near the Rhode Island state line. In Worcester, a row of trees was blown down near Indian Lake and downburst winds were suspected to have caused this type of tree damage. In Franklin County, at the Orange Industrial Park, in Orange, a lightning strike blew apart a tree, dug a 60-foot long trench, blew apart the base of a propane tank, and welded a garage door shut.

MASSACHUSETTS, Western

MAZ001	21	1200EST- 1800EST			0	0	30K	0	High Winds
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Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Berkshire County									
	21	1500EST-1900EST			0	0	20K	0	Flood
An intense low pressure system tracked from the upper Great Lakes northeast to James Bay Canada between Friday morning October 20th to Sunday morning October 22nd. This storm produced damaging winds across Berkshire County during the afternoon of the 21st. The damaging winds downed numerous trees across the county and caused power outages. Heavy rain also accompanied the storm with an average rainfall of two to three inches over Berkshire County. The heavy rains brought many small streams over their banks with widespread road flooding.									
MASSACHUSETTS, Western Cont'd									
Berkshire County									
	28	1030EST-1230EST			0	0	10K	0	Flood
Heavy rains caused small streams to flow out of their banks in parts of Berkshire County. Road flooding occurred in Otis and Becket.									
MICHIGAN, Central and Western Upper									
Iron County									
10 S Kenton	19	1008EDT			0	0	0	0	Hail (0.75)
Schoolcraft County									
Germfask	19	1200EDT			0	0	0	0	Hail (1.00)
Alger County									
Munising	19	1214EDT			0	0	0	0	Hail (0.75)
Luce County									
McMillan	19	1219EDT			0	0	2K	0	Hail (1.00)
A mobile home 3 SW of Mcmillan had minor hail damage.									
Luce County									
Newberry	19	1240EDT			0	0	0	0	Hail (0.75)
MIZ 002>004-009-010									
West Upper Michigan									
	20	1900EDT-210800EDT			0	0	?	0	Heavy Snow
A lake effect snow affected portions of West Upper Michigan. The heaviest snow was at Ironwood with 11 inches. An area of six to eight inches of snow occurred between Lanse, Sidnaw, Bruce Crossing and Marenisco. Several trees and power and power lines were downed causing numerous power outages.									
MICHIGAN, North Central									
None reported.									
MICHIGAN, Eastern UpperK									
None reported.									
MICHIGAN, Northern									
None reported.									
MICHIGAN, Western									
MIZ56-64-77									
Southwest Lower									
	23	2200EST-240600EST			0	0	2K	0	High Winds (G50)
Strong winds blew down trees and power lines, causing power outages for nearly 2,000 customers in Allegan and Ottawa Counties. A large tree limb fell on a car in Niles in Berrien County.									
MICHIGAN, Eastern									
Saint Clair									
Marine City	05	1600EST-2000EST			0	0	15K	0	High Winds
High winds associated with the remains of Hurricane Opal affected the area during the late afternoon and early evening on the 5th. Strong northeast winds destroyed a new 200 foot, two-story pole barn on the Marine City Highway in Marine City. The storm also cut power to several areas in Saint Clair county, resulting in some school closings. The maximum wind gust at Detroit Metro Airport was 38 mph, from the northeast.									
Wayne									
Garden City	05	2000EST-060000EST			0	0	0	0	River Flood
The remains of Hurricane Opal produced two to three inches of rain over the Middle Rouge River Basin from late afternoon through the evening on the 5th. As a result, the Middle Rouge River crested one foot over flood stage, which caused the Edward Hines Drive to be closed to traffic.									
Macomb									
Frasier	05	2200EST-060900EST			0	0	0	0	River Flood
Rainfall totals of two to three inches also fell across the Clinton River Basin late on the 5th, causing the Clinton River at Frasier to rise at a rate of over one foot per hour. The river crested about 1.5 feet above flood stage, causing a backup of sewers in some basements along the Red Run Drainage.									
Saint Clair									
Lakeport	20	1200EST			0	0	10K	0	Thunderstorm Winds
Strong thunderstorm winds knocked down two sections of 40,000 volt powerlines, resulting in a power loss to over 5,000 Detroit									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Edison customers. The winds also flattened a float at the Port Huron High School homecoming parade.									
MICHIGAN, Eastern Cont'd									
Wayne Ypsilanti	27	0604EST			0	0	2K	0	Lightning Lightning struck a house in Ypsilanti. The electrical charge went through the wiring of the house and blew a hole in a wall causing 2,000 dollars worth of damage.
MINNESOTA, Northeastern									
MNZ012-020-021-037 NE Minnesota	21	0330CST- 1500CST			0	0	?	0	Heavy Snow The first significant snowfall of the season brought up to six inches of snow to extreme northeast Minnesota. The six inch amounts occurred over the higher terrain away from Lake Superior, with one to four inches closer to the lake.
MNZ025-033-034 Central Minnesota	23	1200CST- 1800CST			0	0	?	0	Heavy Snow Up to four inches of wet, heavy snow, combined with strong winds, gusting over 40 mph resulted in several traffic accidents, power outages, and many downed trees.
MINNESOTA, Central and South Central									
MNZ041-042-047- 048-054>056-064 Portions of West Central	23- 24	0800CST- 0600CST			0	0	10M		HEAVY SNOW/ICE STORM Early season snowstorm deposited between 2 and 8 inches over portions of west central Minnesota. There was also 2 inches of ice buildup on power lines. The combination of wet snow, ice and strong winds resulted in numerous power outages. 400 to 500 power poles were broken or damaged. As many as 200 residences were still without power the following Thursday.
MINNESOTA, Southwest									
None reported.									
MISSISSIPPI, Northern									
DeSoto County Horn Lake	27	0215CST			0	0	5K	0	Thunderstorm Winds Several trees were blown down.
Tate County Arkabutla Coldwater	27	0330CST			0	0	5K	0	Thunderstorm Winds Several trees were knocked down.
MISSISSIPPI, Central									
Oktibbeha County Sturgis	27	1020CST			0	0	0	0	Hail (1.75)
Neshoba County 10 W Philadelphia	27	1253CST			0	0	0	0	Hail (0.75)
Warren County Vicksburg	27	1300CST			0	0	5K	0	Thunderstorm Winds Several trees and power lines were blown down throughout the city. A 50-foot section of a brick wall that was scheduled for demolition was blown down.
Neshoba County Philadelphia	27	1310CST			0	0	0	0	Hail (2.75)
Newton County Newton	27	1315CST			0	0	0	0	Hail (1.75)
Newton County 3 E Hickory	27	1330CST			0	0	0	0	Hail (1.75)
Lauderdale County Meridian	27	1345CST			0	0	0	0	Hail (1.75)
Kemper County Preston	27	1345CST			0	0	0	0	Hail (1.75)
Lincoln County Brookhaven	27	1429CST			0	0	500K	0	Hail (2.75) Numerous automobiles were damaged. Many windshields of automobiles were broken. Several houses had broken windows.
Lincoln County 5 N Brookhaven	27	1435CST	1	40	0	0	2K	0	Tornado (F0) Several trees were blown down by this weak tornado.
Jones County 2 E Moselle	27	1440CST			0	0	0	0	Hail (1.75)
Scott County 6 N Forest	27	1445CST			0	0	0	0	Hail (0.75)

MISSISSIPPI, Central Cont'd

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Lawrence County 3 W Monticello	27	1450CST			0	0	10K	0	Hail (2.75)
Several windshields of cars were broken out.									
Hinds County Jackson	27	1457CST			0	0	2K	0	Thunderstorm Winds
Numerous large tree limbs were blown down across the city. Several power lines were also blown down.									
Covington County Seminary	27	1550CST			0	0	0	0	Hail (1.75)
Jefferson Davis County 7 E Bassfield	27	1555CST			0	0	0	0	Thunderstorm Winds (G53) Hail (1.75)
Jefferson Davis County 7 E Bassfield	27	1555CST	2	100	0	0	2K	0	Tornado (F0)
This tornado was sighted by a volunteer spotter. The tornado did some damage to some trees, but did no structural damage.									
Warren County Vicksburg	27	1612CST			0	0	0	0	Hail (0.75)
Jones County 2 SW Moselle	27	1614CST			0	0	2K	0	Thunderstorm Winds (G56)
Numerous trees were blown down.									
Jones County Ellisville	27	1621CST			0	0	0	0	Hail (0.88)
Covington County 2 SE Sanford	27	1630CST			0	0	2K	0	Thunderstorm Winds
Several trees were blown down.									
Lincoln County 10 NE Brookhaven	27	1635CST	1	40	0	0	0	0	Tornado (F0)
This weak tornado touched down only briefly in an open field.									
Adams County Pine Ridge	27	1705CST			0	0	0	0	Hail (0.75)
Lamar County Purvis	27	1945CST			0	0	0	0	Hail (0.88)
MISSISSIPPI, Southeast									
Wayne County State Line	27	1645CST	.1	25	0	0	0	0	Tornado (F0)
A tornado briefly touched down along U.S. Highway 45 near State Line. No damage was found.									
Wayne County Waynesboro	27	1725CST			0	0	2K	0	Thunderstorm Winds
Trees and power lines were blown down around the city of Waynesboro.									
MISSISSIPPI, Southern									
Coastal Mississippi MSZ080>082	04 05	0200CST- 0200CST			0	1	75K	?	Hurricane Opal
As Hurricane Opal moved into the western Florida Panhandle, tropical storm force winds, 39 mph or higher, were reported along the Mississippi Gulf Coast during the afternoon and early evening of October 4th. Wind damage was generally confined to downed tree limbs, power lines, and signs. Property damage cost estimated. One minor injury was reported in Harrison County due to flying debris. The most significant rainfall occurred at Keesler Air Force Base in Biloxi where slightly more than 3. inches occurred.									
MISSOURI, Eastern									
Montgomery County Wellsville	10	1505CST			0	0	3K	0	Thunderstorm Winds
Thunderstorm winds downed seven power poles in Wellsville, causing power outages in a large part of the city.									
St. Louis County Jennings	26	2243CST			0	0	0	0	Thunderstorm Winds
St. Louis County Police reported power lines down in Jennings.									
St. Louis City St. Louis	26	2245CST			0	0	0	0	Thunderstorm Winds
Thunderstorm winds downed power lines in north St. Louis.									
MISSOURI, Southeastern									
Southeast MO MOZ076-086-087 -100-107>112-114	04	0300- 0700			0	0	0	0	DENSE FOG
Early morning dense fog created hazardous driving conditions. Visibilities were locally near zero.									
MISSOURI, Lower									
None reported.									
MISSOURI, Southwestern									
Hickory County Nemo	10	0740CST			?	?	0	0	Hail (1.00)

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Camden County Osage Beach Miller County St Elizabeth Maries County 2 N Vienna Miller County Iberia St Clair County Osceola Lowery Morgan County Laurie Miller County Eldon Camden County Camdenton Polk County Bolivar	10 10 10 10 10 27 27 27 27 27 27 27	1220CST 1220CST 1240CST 1250CST 1915CST 2000CST 2015CST 2030CST 2038CST 2040CST			?	?	0	0	Hail (1.75) Hail (0.75) Hail (1.00) Hail (0.75) Hail (1.75) Hail (1.00) Hail (0.75) Hail (0.75) Thunderstorm Winds (G52) Hail (0.88)
MISSOURI, Northwestern									
MOZ001-028-029-37-43 Kansas City Metro Area	23 23	1100CST- 2200CST			0	7	75K	0	High Winds
An early season Winter Storm moved across Iowa producing very strong winds over the Kansas City Metro area. Average wind speeds were 25 to 40 MPH with gusts to 50 to 65 MPH. There were numerous reports of downed trees and power lines. Near Interstate 435 and 63rd Street, winds damaged several buildings on a construction site injuring five workers. Two men were injured after being blown off a scaffold at a construction site along the 4100 block of Troost Road in Kansas City. Kansas City Power and Light also reported power outages from about 10,000 customers. Winds gusted to 65 mph at the National Weather Service at Pleasant Hill, 51 mph at Kansas City International Airport and 47 mph at Kansas City Municipal Airport.									
MONTANA									
MTZ003-006	04	0000MST- 1600MST			0	0	0	0	HEAVY SNOW
Both Neihart and Del Bonita reported six inches of snow.									
MTZ003	10	0600MST- 0900MST			0	0	?	0	HIGH WIND
Wind gusts of up to 90 mph were reported at Browning. A semi-truck near Browning was blown off the road. Choteau recorded sustained winds of 45-50 mph with gusts up to 75 mph.									
MTZ007	18	1400MST			0	0	?	0	HIGH WIND
Winds estimated at 55 mph blew down a sign in Laurel. The sign and trailer it was on weighed about 6000 pounds.									
MTZ003	18	0800MST- 1900MST			0	0	0	0	HEAVY SNOW
Six inches of snow fell at Del Bonita.									
MTZ007	19	0600MST- 1200MST			0	0	?	0	HIGH WIND
Sustained winds of 45 to 55 mph with gusts to 60 mph at Livingston caused several power outages.									
MTZ006-007	22	0000MST- 2300MST			0	0	0	0	HEAVY SNOW
Neihart in central Montana received 5 inches of snow while Mystic lake in the south central part of the state received 12 inches.									
MTZ007	29 31	1200MST- 1200MST			0	0	0	0	HEAVY SNOW
Heavy snows fell over parts of south central Montana over a two day period. Heavier totals included 8 inches at Red Lodge, 10 inches at Mystic Lake, and 11 inches at Nye.									
NEBRASKA, Extreme Northeast									
None reported.									
NEBRASKA, Eastern									
NEZ004-005-022>	04	1501CST-							
NEBRASKA, Eastern Cont'd									
025-035>038-056> 059-069>071	06	1106CST			0	0	300K	0	High Winds (G78)
Strong gradient winds developed over western Nebraska the afternoon of the 4th and strengthened on the 5th. Nearly 30 hours of sustained winds over 30 mph and gusts over 60 mph damaged roofs, uprooted trees, and caused several power outages in the Ogallala area. In North Platte, 10 hours of sustained winds over 30 mph and gusts to 68 mph caused similar damage in the area. An empty 60,000 bushel grain bin at Elsie collapsed due to wind gusts estimated to 90 mph.									
Otoe County Syracuse	08	0651CST			0	0	5K	0	Lightning
Lightning struck the Church of Christ causing damage to the roof peak and its interior.									
NEZ10	13	1045CST			0	2	0	0	High Winds (G39)
Two construction workers were taken to the hospital after high winds blew plywood decking onto them. They were working on a bridge north of Stuart.									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NEZ052	13	1700CST- 2100CST			0	0	5K	0	High Winds (G35)
NEZ051	19	1200CST- 1800CST			0	0	20K	0	High Winds (G35) Winds gusting to 40 mph tumbled walls under construction of a \$1.6 million civic center in Wahoo. Damage was done to two walls and an adjacent former high school building.
NEZ004-005-022> 025-035>038-056> 059-069>071	22	1915CST- 23 1600CST			0	0	0	0	Heavy Snow Six to 10 inches of heavy snow fell over portions of the Panhandle and much of central Nebraska. The heaviest snow fell in the vicinity of Theford in Thomas County. Gusty winds of 3 to 40 mph caused considerable drifting. Numerous roads were closed across western Nebraska. There were also numerous power outages reported.
NEZ006>009- 026>028	23	0000CST- 23 1000CST			0	0	0	0	Heavy Snow Heavy snow fell over much of north central Nebraska. Eight inches of snow fell at O'Neill, seven inches at Atkinson, and six inches at Ainsworth.
NEZ052-066-064	27	1100CST- 27 1700CST			0	0	15K	0	High Winds (G47) High winds gusting to 54 mph caused power outages over portions of eastern Nebraska and damage to a local business in Lincoln.
NEBRASKA, South Central									
Webster County 2 S Inavale	22	2045CST			0	0	0	0	Lightning
Fillmore County 6 NW Shickley	22	2130CST			0	0	0	0	Lightning
Clay County 1 SE Sutton	22	2200CST			0	0	0	0	Lightning
Nance County 7 W Fullerton	22	2215CST			0	0	0	0	Lightning Lightning ignited grass fires which consumed about 25 acres.
NEBRASKA, Extreme Southwest									
SOUTHWEST NEBRASKA									
NEZ079>081	05	0700CST- 1700CST			0	0	?	?	High Winds (G55) High winds damaged crops, power lines, and trees. Reported peak wind gust was 63 mph at McCook.
SOUTHWEST NEBRASKA									
NEZ079>081	22	2100CST- 23 1900CST			0	0	?	?	Blizzard High winds of 50 to 55 mph accompanied snow which closes roads and schools and caused minor power outages. Visibility was one-quarter mile or less for several hours. Snowfall amounts were Trenton (7), Stratton (5), Benkelman and Palisade (7), Haigler (6), and McCook (8).
NEBRASKA, Western									
NEZ019>021-054-055									
Southwest Panhandle	05	0400MST 05 1600MST			0	0	0	0	High Winds (G69) Strong winds gusted frequently over 58 mph. The strongest recorded gust was 79 mph, six miles north-northwest of Kimball at 0530 MST.
NEZ001>003-019>021- 054-055	22	0600MST 23 0900MST			0	0	50K	0	Winter Storm Heavy snow and strong winds caused near blizzard conditions over the Nebraska Panhandle. Snowfall ranged from four to eight inches, with eight inches reported at Crawford. In addition, winds gusted to around 50 mph frequently, causing near
NEBRASKA, Western Cont'd									
									zero visibilities. The winds and snow caused a two hour power outage in the morning of the 23rd on the west side of Chadron. Roads were closed from the afternoon of the 22nd to late morning on the 23rd over much of Kimball County. The result was a number of travelers stranded in Kimball.
NEVADA									
									None reported.
NEW HAMPSHIRE, Northern and Central									
NHZ001-002-005- 007-011	05	2315EST- 06 0700EST			0	1	?	0	High Winds Heavy winds and rain associated with the remnants of Hurricane Opal brought down trees and knocked out power in southwestern and northern New Hampshire. One man was injured in Marlborough when a large tree blew onto his moving pickup truck.
NHZ013	15	0115EST- 0145EST			0	0	?	0	High Winds A vigorous cold front produced localized wind damage as it moved through southeastern New Hampshire. The winds blew down

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Property Damage	Crops	Character of Storm
									many trees and power lines in Derry.
NHZALL	21	0400EST-							
	22	2300EST			0	0	200K	0	High Winds
NHZALL	21	1100EST-							
	22	0100EST			0	0	600K	0	Heavy Rain and Flood
NHZ003-005	21	2130EST-							
	23	0100EST			0	0	800K	0	River Flood
									Strong pressure gradient ahead of an intense low pressure system and its approaching cold front brought destructive winds and copious amounts of Atlantic moisture to New Hampshire. The high winds downed trees and cut power to 20,000 customers. However, the most destructive element was the two to 10 inches of rain, most of which fell in a seven hour period. The higher amounts occurred in mountainous terrain due to orographic enhancement. Major river flooding resulted along the Mad, Baker, and Pemigewasset Rivers in Grafton County. Several feet of water flooded residences, businesses, and roads along these rivers, forcing the evacuation of dozens of people. Lowland and local street flooding occurred elsewhere across the state.
NHZ003-005	28	1000EST-							
	29	0100EST			0	0	200K	0	River Flood
									Heavy rain associated with an approaching frontal system caused the Pemigewasset River and several of its tributaries to overflow in Grafton County. This area had suffered major flooding one week earlier, and the ground was still saturated when up to four inches of additional rainfall occurred. The flooding was less severe than the previous storm. However, 200 people had to be evacuated in Campton when raging waters breached a dam on the Mad River. Several roads were washed out. Minor flooding occurred at several other locations in New Hampshire.
NEW HAMPSHIRE, Southern									
NHZ011-012	06	0100EST-0700EST			0	1	?	0	High Winds
									Strong and gusty winds associated with the remnants of Hurricane Opal resulted in one injury and an unknown amount of property damage as trees and power lines were knocked down. A motorist received minor injuries while driving on Route 124 in Marlborough when a large tree fell on his pickup truck. Trees were reported blown down on Route 123 in Alstead and Marlow. Hardest hit communities were Stoddard and Fitzwilliam at opposite ends of Cheshire County but scattered power outages struck many communities and affected several thousand electric customers. A peak gust to 66 mph was reported from Jaffrey at about 0230 local time.
NHZ012 Nashua	08	0030EST			0	0	?	0	Downburst Winds
									Wind damage seemed to be confined to one neighborhood on one Nashua street. Residents said it sounded like a "run-away freight train" in the middle of a downpour. A large oak tree, about one hundred and fifty-years-old, was toppled and a large maple tree uprooted. The wind also knocked down a screen house and some stockade fencing. A large limb crashed down on a pickup truck causing an estimated \$6 thousand damage.
NHZ011-012	21	1200EST-2200EST			0	0	?	0	High Winds
									Strong southeast and south winds gusting up to 50 mph knocked down numerous tree limbs and some trees resulting in scattered power outages. Several thousand electric customers lost power, including 1,500 in Keene. There were scattered reports of property damage from falling trees and tree limbs.
NHZ011-012	28	0300EST-0900EST			0	0	?	0	Heavy rain
NHZ011-012	28	0600EST-1000EST			0	0	?	0	High winds
Cheshire County Westmoreland, Chesterfield, Walpole	28	0600EST-1100EST			0	0	?	0	Flash flood
									A strong squall line moved eastward across the area bringing heavy rain, strong winds, and scattered flash floods. Up to several thousand electric customers lost power when wind gusts to 40 to 50 mph knocked down trees and tree limbs. Heavy
NEW HAMPSHIRE, Southern									
									rainfall turned the Mill Brook into a raging stream and the strong current damaged a cement bridge, closing a local road in Westmoreland. Several dirt roads and driveways were washed out. Sections of several roads were washed out in Chesterfield and Walpole. Street flooding was reported in several other nearby towns, including Marlow, Hinsdale, Jaffrey, and Keene. The flooding was a result of rainfall that totalled two to four inches in about a six hour period.
NEW JERSEY, Northeastern									
Hudson County Passaic County Passaic	14	1900EST			0	0	0	0	Urban Flood
Patterson Bergen County Ridgewood	14	2045EST			0	0	?	0	Thunderstorm Winds
Essex County Orange	14	2045EST			0	0	?	0	Thunderstorm Winds
	14	2100EST			0	0	?	0	Thunderstorm Winds
									A squall line moving through the area generated thunderstorms strong enough to down numerous trees and power lines. Heavy rains also accompanied these storms which in turn caused some road and highway flooding in Hudson County.
Passaic County Clifton Little Falls	21	0950EST			0	0	?	0	Thunderstorm Winds
Bergen County Countywide	21	0951EST			0	0	?	0	Thunderstorm Winds
Bergen County Hudson County	21	1000EST			0	0	0	0	Urban Flood

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Countywide	21	1035EST			0	0	?	0	Thunderstorm Winds
Essex County	21	1037EST			0	0	?	0	Thunderstorm Winds
Countywide									A squall line generated thunderstorms that downed several trees and power lines. A few cars were damaged by these downed trees. Heavy rain also caused some roadways to flood across Bergen County.
Bergen County	28	0500EST			0	0	0	0	Urban Flood
Passaic County	28	0500EST			0	0	0	0	Urban Flood
Bergen County	28	0615EST-1515EST			0	0	?	0	Flood
Lodi									A squall line passing through the area generated some very heavy rains. Rainfall ranged for the most part between one and one-half and two and one-half inches although some locally higher amounts were reported. The rains and its associated runoff caused the Saddle River at Lodi to rise slightly above flood stage. There was also widespread flooding of roadways throughout northeastern New Jersey.
NEW JERSEY, Southern and Northwestern									
Warren County	05	2355EST			0	0	?	?	Thunderstorm Winds
Belvidere	06	0010EST			0	0	?	?	Thunderstorm Winds
Countywide									A severe thunderstorm uprooted trees near Belvidere. Severe thunderstorms downed trees and wires in scattered parts of the county including State Route 57 near the Tricounty Firehouse. Downed wires caused power outages in Hackettstown and Mansfield Township. These thunderstorms were part of the remnants of Hurricane Opal.
Hunterdon County	06	0010EST			0	0	?	?	Thunderstorm Winds
Anthony									A severe thunderstorm toppled trees in the extreme northern part of the county in Lebanon Township.
Morris County	06	0130EST-0330EST			0	0	?	?	Flood/Flash Flood
Countywide									Thunderstorms with heavy rain, averaging around 3.5 inches countywide, caused flooding of small streams and roadway including United States Route 46. The heavy rain was the result of the remnants of Hurricane Opal and represented the first significant dent in the drought that has affected northern New Jersey since September 1994. Storm totals included 6.69 inches in Waywayanda, 5.31 in Hackettstown, 4.51 inches in Oak Ridge, 4.20 inches in Clinton and 4.10 inches in Pequannock.
Camden County	14	1930EST-1940EST			0	0	?	?	Thunderstorm Winds
Western									Severe thunderstorms uprooted trees in Camden and its adjacent townships.
Warren County	14	1945EST			0	1	?	?	Thunderstorm Winds
Finesville									Trees were uprooted in Pohatcong Township. One fell on a truck on County Road 627 and trapped and injured the driver.
Hunterdon County	14	1950EST			0	0	?	?	Thunderstorm Winds
Countywide									A squall line of severe thunderstorms downed trees and wires throughout the county.
Burlington County	14	2000EST-2030EST			0	0	?	?	Thunderstorm Winds
Western									Severe thunderstorms pulled down large limbs throughout Western Burlington County. Some took down power lines with
NEW JERSEY, Southern and Northwestern Cont'd									
									them. Hardest hit municipalities included Burlington City, Riverton and Willingboro.
Morris County	14	2005EST			0	0	?	?	Thunderstorm Winds
New Vernon									A severe thunderstorm tore down large limbs in Harding Township. It also took down electrical wires, one that triggered a fire.
Mercer County	14	2015EST			0	0	?	?	Thunderstorm Winds
Countywide									Severe thunderstorms pulled wires down throughout the county. A large tree was uprooted in West Windsor. A tree was set on fire by downed wires in Ewing.
Somerset County	14	2020EST			0	0	?	?	Thunderstorm Winds
Countywide									A severe thunderstorm pulled down trees and wires in the county. It also took down several poles within Bernard Township.
Morris County	14	2020EST			0	0	?	?	Thunderstorm Winds
Netcong									A severe thunderstorm pulled down wires in Netcong.
Middlesex County	14	2030EST			0	0	?	?	Thunderstorm Winds
Monmouth Jct									Damaging winds tore down fences in South Brunswick.
Ocean County	14	2100EST			0	0	?	?	Thunderstorm Winds
Countywide									Severe thunderstorms pulled down wires throughout the county.
Cape May County	14	2130EST			0	0	?	?	Thunderstorm Winds
Sea Isle City									A severe thunderstorm overturned boats and knocked down several utility poles in Sea Isle City.

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Monmouth County Southeast Half	21	1000EST-1015EST			0	0	?	?	Thunderstorm Winds Severe thunderstorms uprooted trees and downed power lines in most townships in the southeast half of Monmouth County. Hardest hit were Englishtown, Colts Neck, Freehold and Howell Township (A tree fell on a house.). In Ocean Grove, the wind broke a support beam and caused the collapse of the vacant Queen Hotel. The over 100-year-old hotel was undergoing renovation.
Hunterdon County Califon Warren County Countywide	21	1020EST			0	0	?	?	Thunderstorm Winds
	21	1030EST-1045EST			0	0	?	?	Thunderstorm Winds A severe thunderstorm knocked down trees and wires in Califon. Downed limbs and trees took wires with them and caused power outages to 3,500 homes in Hunterdon and neighboring Warren County.
Morris County Northeast	21	1100EST			0	0	?	?	Thunderstorm Winds Severe thunderstorms pulled down numerous large limbs and caused power outages in northeast Morris County, especially just north of Morristown.
Ocean County Forked River 4 N Toms River	21	1115EST	.2	33	0	0	?	?	Tornado (F0)
	21	1130EST			0	0	?	?	Thunderstorm Winds A weak (F0 on the Fujita Scale) tornado briefly touched in Forked River along Palm Beach Drive. The tornado tore a roof from one house and uprooted several trees. No serious injuries were reported. A little farther north, the same thunderstorm uprooted several trees in Dover Township, one damaging a house and swept a mobile home from its foundation in the Homestead Run Mobile Home Park.
Hunterdon County	21	1515EST-1845EST			0	0	?	?	Flood/Flash Flood Thunderstorms with heavy rain (3.9 inches in Clinton, 3.75 inches in Flemington) produced minor flooding along the South Branch of the Raritan River in Flemington. Roads near the river were closed. Small stream flooding also forced the closure of several roads in Frenchtown.
Cape May County Ocean City	28	0320EST			0	0	?	?	Thunderstorm Winds A severe thunderstorm uprooted several trees in Ocean City.
Somerset County	28	0330EST-0530EST			0	0	?	?	Flood/Flash Flood Heavy rains of around two inches (2.19 inches reported in Bridgewater.) caused minor flooding of a couple of streams in Somerset County. Peters Brook near Raritan reached its flood stage of seven feet at 0330 EST and crested at 7.9 feet at 0400 EST. It was within bankfull at 530 am EST. Royce Brook near Belle Mead exceeded its flood stage of 4.5 feet for an hour between 0330 and 0430 EST. It crested at 4.6 feet at 0400 EST.

NEW JERSEY, Southern and Northwestern Cont'd

Atlantic County 3 E Devonshire	28	0345EST			0	0	?	?	Thunderstorm Winds A severe thunderstorm uprooted trees and downed wires in Egg Harbor Township. A couple of trees fell on and damaged two cars.
Ocean County Northern Half	28	0405EST-0415EST			0	0	?	?	Thunderstorm Winds Severe thunderstorms caused wind damage in several townships in the northern half of Ocean County. Beachwood, Jackson, Lakewood, Pine Beach, Point Pleasant and Toms River all reported downed trees and wires.
Monmouth County Freehold	28	0410EST			0	0	?	?	Thunderstorm Winds A severe thunderstorm uprooted several trees and caused a building collapse in Freehold.
Somerset County	28	0630EST-1230EST			0	0	?	?	Flood/Flash Flood Heavy rains of around two inches (2.19 inches reported in Bridgewater.) caused minor flooding along the north branch of the Raritan River. At South Branch, the river reached its flood stage of seven feet at 0630 EST, crested at 7.9 feet at 1000 EST and was within bankfull at 1230 pm EST.
NJZ001-007>010-012>026		Month Long			0	0	?	?	Unseasonably Wet and Warm Paradoxically October, normally the driest month of the year, started to break the back of the drought across New Jersey. Rainfall was between 167 and 290 percent of normal with totals two to six inches above normal. Hunterdon and Warren Counties were the wettest counties averaging 9.5 inches for the month. It was the fourth wettest October on record at the Atlantic City International Airport in Pomona where 5.16 inches fell. Nearby it was also the 4th wettest October on record at Philadelphia International Airport (5.99 inches) and the 2nd wettest October on record at the Lehigh Valley International Airport (7.49 inches). Other monthly totals from around the state included 5.57 inches in Hainesville, 6.86 inches in Mount Holly, 9.64 inches in Stewartsville, 11.01 inches in Oak Ridge, 12.43 inches in Hackettstown and 12.46 inches in Parsippany. While the Delaware River Basin Commission drought warning remained in effect through month's end, no tightening of restrictions became necessary. It was also an unseasonably warm October. The mean temperature of 58.8 degrees at the Atlantic City International Airport in Pomona was the tenth warmest October on record. On the boardwalk within Atlantic City, the mean temperature of 62.2 degrees was the 2nd warmest October on record. In nearby Philadelphia, the monthly mean of 61.4 degrees, was 5.0 degrees above normal and just missed being one of the ten warmest Octobers on record.

NEW MEXICO, Central and Northern

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
NMZ005-	22	1000MST- 1400MST			0	0	?	?	High Winds (G54)
NMZ001-008-	22	1000MST- 1400MST			0	0	?	?	Winds
NMZ002>007-009> 018	22	1100MST- 1700MST			0	0	?	?	Winds (G45)
NMZ019>021-026> 029	22	1200MST- 1900MST			0	0	?	?	Winds (G42)
An upper level storm system combined with a strong cold front to produce an extended period of gusty winds across much of New Mexico. Nearly all sections of the state had sustained winds of 25 to 35 mph with gusts of 35 to 50 mph lasting from mid-morning through early evening. Las Vegas was blasted by gusts to 62 mph for nearly four hours.									
NMZ032-	04	1200MST- 1500MST			0	0	?	?	Winds
Gusty winds felled several antennas and tree limbs onto power lines causing at least four transformer explosions and grass fires in Las Cruces.									
NMZ022>025-030> 032	22	1100MST- 1800MST			0	0	?	?	Winds (G40)
NEW MEXICO, Southeast									
Eddy County 5 N Artesia	01	2300MST			0	0	0	0	Hail (1.75)
A severe thunderstorm over the Cottonwood area struck with marble to golf ball-size hail.									
Eddy County Loving	02	0113MST			0	0	0	0	Hail (0.75)
The Loving Police Department reported dime-size hail.									
Lea County Jal	02	1200MST			0	0	0	0	Hail (0.75)
The Jal Police Department reported dime-size hail in a storm characterized by very heavy rains and small hail.									
NEW YORK, Coastal									
Rockland County New City	14	2110EST			0	0	?	0	Thunderstorm Winds
Putnam County Mahopac	14	2115EST			0	0	?	0	Thunderstorm Winds
NEW YORK, Coastal Cont'd									
Westchester County Ossining	14	2115EST			0	0	?	0	Thunderstorm Winds (G51)
Westchester County Somers	14	2125EST			0	0	?	0	Thunderstorm Winds
Nassau County Bellmore	14	2130EST			0	0	?	0	Thunderstorm Winds
Nassau County Roslyn	14	2145EST			0	0	?	0	Thunderstorm Winds
A squall line moving through the area generated thunderstorms strong enough to down numerous trees and power lines. Heavy rains also accompanied these storms.									
Orange County Monroe	21	0929EST			0	0	?	0	Thunderstorm Winds
Orange County	21	1000EST			0	0	0	0	Urban Flood
Rockland County	21	1015EST			0	0	0	0	Urban Flood
Suffolk County Countywide	21	1030EST			0	0	?	0	Thunderstorm Winds
New York County New York City	21	1105EST			0	0	?	0	Thunderstorm Winds
New York County	21	1105EST			0	0	?	0	Urban Flood
Queens County	21	1115EST			0	0	0	0	Urban Flood
Suffolk County Countywide	21	1155EST			0	0	?	0	Thunderstorm Winds
A squall line passing through the area generated thunderstorms that downed several trees and power lines. A few cars were damaged by these downed trees. Street and highway flooding was also observed in several counties.									
Orange County Countywide	21	1500EST			0	0	?	0	Thunderstorm Winds
Rockland County Countywide	21	1500EST			0	0	?	0	Thunderstorm Winds
Westchester County Countywide	21	1505EST			0	0	?	0	Thunderstorm Winds
Suffolk County Mastic Beach	21	1525EST			0	0	?	0	Thunderstorm Winds
Suffolk County Wading River	21	1530EST			0	0	?	0	Thunderstorm Winds
A cold front passing through the area downed several trees and power lines.									
Richmond County New Dorp Beach to Midland Beach	28	0345EST- 0400EST	1.6	70	0	0	.5M	0	Tornado (F1)

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Kings County Bay Ridge	28	0410EST			0	0	?	0	Thunderstorm Winds
Westchester County Yonkers	28	0430EST			0	0	?	0	Thunderstorm Winds
Rockland County	28	0415EST			0	0	0	0	Urban Flood
Westchester County	28	0415EST			0	0	0	0	Urban Flood
Putnam County	28	0415EST			0	0	0	0	Urban Flood
Rockland County Suffern	28	0600EST			0	0	?	0	Flood
Westchester County Elmsford	28	0600EST			0	0	?	0	Flood
<p>A squall line passing through the area gave rise to a variety of severe weather. The most significant was a tornado that ripped through a small area of eastern Staten Island. Numerous trees were downed during its passage. Numerous homes and a few cars were significantly damaged. Heavy rains were also produced by this squall line. Several inches of rain caused the Mahwah River at Suffern to rise slightly above flood stage. Flooding occurred along the Saw Mill River at Elmsford. There was also some widespread flooding of roadways throughout the area.</p>									
NEW YORK, Eastern									
NYZ037	05	2200EST-			0	0	20K	0	High Winds
	06	0500EST							
NYZ041	05	2300EST-			0	0	20K	0	High Winds
	06	0600EST							
<p>The remnants of Hurricane Opal brought heavy rains and strong winds to parts of Central and Eastern New York. In Oneida County, the high winds downed trees and wires in New York Mills, Waterville, Sylvan Beach, North Bay, Lee Center, Rome, McConnellsville and Verona. In Saratoga County a large tree limb was downed in Saratoga Springs which damaged four cars.</p>									
Dutchess County									
Wappingers Falls	14	2115EST			0	0	2K	0	Thunderstorm Winds
Lagrangeville	14	2115EST			0	0	2K	0	Thunderstorm Winds
<p>A cold front crossed Eastern New York during the evening hours of the 14th. Isolated severe thunderstorms downed trees in a few locations across Dutchess County.</p>									
NEW YORK, Eastern Cont'd									
NYZ056	20	1815EST			0	0	2K	0	High Winds
NYZ037	20	1900EST			0	0	5K	0	High Winds
<p>A strong low pressure system over the Great Lakes brought gusty winds to Central New York on the afternoon of the 20th into the early morning of the 21st. High winds brought down a tree and telephone wires in Endwell in Broome County and damaged the metal roof of a house in Vienna in Oneida County. Some trees and wires were also downed in the northwest part of Oneida County.</p>									
NYZ058	21	0200EST-0800EST			0	0	20K	0	High Winds
NYZ044	21	0400EST-0500EST			0	0	10K	0	High Winds
NYZ060-061	21	0700EST-0900EST			0	0	30K	0	High Winds
NYZ065-066	21	0700EST-1200EST			0	0	70K	0	High Winds
NYZ053-054	21	1030EST-1200EST			0	0	10K	0	High Winds
NYZ33	21	1100EST-1500EST			0	0	20K	0	High Winds
NYZ063-064	21	1100EST-1300EST			0	0	20K	0	High Winds
NYZ047	21	1100EST-1500EST			0	0	15K	0	High Winds
NYZ041-050	21	1100EST-1500EST			0	0	10K	0	High Winds
Greene County Hunter	21	1210EST			0	0	5K	0	Thunderstorm Winds
Ulster County	21	1245EST-2000EST			0	0	50K	0	Flood
Montgomery County Amsterdam	21	1300EST			0	0	8K	0	Thunderstorm Winds
Countywide	21	1315EST			0	0	15K	0	Thunderstorm Winds
Fulton County Northville	21	1315EST			0	0	8K	0	Thunderstorm Winds
Broadalbin	21	1315EST			0	0	8K	0	Thunderstorm Winds
Schenectady County Duanesburg	21	1320EST			0	0	15K	0	Thunderstorm Winds
Greene County	21	1330EST-1530EST			0	0	20K	0	Flash Flood
Albany County	21	1400EST-2000EST			0	0	20K	0	Flood
Rensselaer County Stephentown	21	1430EST			0	0	5K	0	Thunderstorm Winds
Saratoga County Providence	21	1500EST			0	0	5K	0	Thunderstorm Winds
Greene County	21	1500EST-1800EST			0	0	2M	0	Flash Flood
Schenectady County	21	1500EST-							

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Fulton County	21	1700EST-1500EST			0	0	10K	0	Flash Flood
Montgomery County	21	1800EST-1500EST			0	0	30K	0	Flash Flood
Dutchess County	21	1700EST-1500EST			0	0	20K	0	Flash Flood
Greene County	21	1900EST-1500EST			0	0	20K	0	Flood
Warren County	21	1515EST-2000EST			0	0	1M	0	Flood
Schoharie County	21	1600EST-2120EST			0	0	10K	0	Flood
Herkimer County	21	1740EST-2100EST			0	0	10K	0	Flood
Hamilton County	21	1800EST-2300EST			0	0	20K	0	Flood
Saratoga County	22	1800EST-2300EST			0	0	100K	0	Flood
Herkimer County	22	0600EST-1300EST			0	0	20K	0	Flood
Herkimer County	22	1200EST-1700EST			0	0	30K	0	Flood

An intense low pressure system tracked from the upper Great Lakes northeast to James Bay Canada between Friday morning October 20th to Sunday morning October 22nd. This system produced damaging winds, floods and severe thunderstorms across much of Eastern New York from Saturday morning through Sunday morning. Widespread damaging winds occurred from Saturday morning through evening across the Mid Hudson Valley, the Eastern Catskills and in the Adirondacks. In Dutchess County 6,000 customers were left without power. Severe thunderstorms developed during the afternoon of the 21st. The storms downed trees and power lines in Greene, Montgomery, Fulton, Schenectady, Rensselaer and Saratoga Counties. Rainfall averaged two to three inches across the region with the Catskills measuring between five to eight inches in the new

NEW YORK, Eastern Cont'd

southeast facing mountains. Rainfall in the Adirondacks averaged four inches. Greene County declared a state of emergency Saturday afternoon due to flooding. Flash floods occurred on the East Kill Creek, Kaaterskill Creek and Catskill Creek in Greene County. Many other small streams flooded in Greene county. The overall flooding produced 28 road closures and four bridges were heavily damaged in the towns of Hunter, Lexington and Jewett. Homes were evacuated in Palenville due to flooding of the Kaaterskill Creek. Along the Catskill Creek 31 boats broke loose from three marinas near Catskill then floated into the Hudson River before being retrieved. In Ulster County a state of emergency was declared in the towns of Shandaken, Kingston and Saugerties due to flooding. The Esopus Creek caused extensive flooding in Phoenicia and several roads were damaged or washed out throughout Ulster County. In Schenectady County many small streams overflowed their banks and widespread street flooding was reported in Rotterdam. In Fulton County flooding was reported in Perth, Broadalbin and Stratford due to small streams quickly overflowing their banks. Street flooding was reported in Gloversville and Johnstown. In Montgomery County flooding occurred in Amsterdam. In Dutchess County Route 3 was reduced to one lane due to a mud slide from flooding. In Albany County a bridge was washed out in the town of Rensselaerville. In Hamilton County many roads were washed out and ten hunting parties were stranded in the Moose River Recreational area. In Warren County flooding occurred in Glens Falls and Bolton. In Herkimer County flooding occurred in Dolgeville due to the East Canada Creek. Flooding along the Hudson River in Saratoga County caused three barges to be torn loose from their moorings. Minor flooding was also reported along the Hudson river at the Stillwater Flats. In Herkimer County moderate flooding occurred along the Moose River.

Dutchess County	28	0535EST-0800EST			0	0	10K	0	Flash Flood
Heavy rains produced flash floods across several streams in Dutchess County which caused mudslides and flooded roads in Stormville and Amenia.									

Areawide monthlong 0 0 0 ? **Drought**
 On October 13, the New York State Drought Task force decided to continue the status quo with the drought watch and warning areas in spite of the rains from Hurricane Opal that fell during the first week of October. Governor Pataki requested USDA disaster aid to farmers in Broome, Chenango, Schoharie, Fulton, Montgomery, Oneida, Rensselaer, Washington, Cortland Saratoga and Albany Counties. Considerably more rain came to the region during the latter part of October. When the Task Force met on November 15, all drought watches and warning were canceled.

NEW YORK, Central

Tioga County Newark Valley	21	0415EST			0	0	15K	0	Thunderstorm Winds
An isolated severe thunderstorm downed large trees and wires, and blew the top off an old barn.									
Chemung County	21	0930EST-1430EST			0	0	3K	0	Flash Flood
A rapidly deepening low pressure system over the Great Lakes brought heavy rains to parts of Central New York. Three to four inches of rain fell across Chemung County, causing the Sing-Sing Creek in Big Flats to rise out of its banks. Sections of State Route 64 were closed due to flooding. In Bath, a parking lot was covered by more than a foot of water.									

NEW YORK, Western

Niagara County Lockport Niagara Falls	05	1925EST			0	0	15K	0	High Winds
	05	2130EST			0	0	5K	0	High Winds
The remnants of Hurricane Opal passed just to the west of Buffalo on the 5th and 6th. Two to three inches of rain fell over much of the area with isolated amounts of near four inches over parts of the Western Southern Tier. Sustained winds were estimated between 35 and 40 mph, but the easterly winds (in contrast to the prevailing southwest direction) did down some trees and power lines.									

Allegany County

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Canaseraga	20	1500EST			0	0	15K	0	High Winds
Chautauqua County	20	1700EST			0	0	10K	0	High Winds
Mayville	20	1800EST			0	0	5K	0	High Winds
Cattaraugus County	20	1930EST			0	0	20K	0	High Winds
Franklinville	A cold front accompanied by strong winds crossed the region on the 20th. Winds estimated as high as 45 mph knocked down trees and power lines. In Canaseraga, a mobile home was damaged by a falling tree. Heavy rains also fell over parts of Chautauqua County resulting in street flooding near Ripley.								
Erie County	20	1930EST			0	0	20K	0	High Winds
Hamburg	A cold front accompanied by strong winds crossed the region on the 20th. Winds estimated as high as 45 mph knocked down trees and power lines. In Canaseraga, a mobile home was damaged by a falling tree. Heavy rains also fell over parts of Chautauqua County resulting in street flooding near Ripley.								
Lewis County	22	0854EST			0	0	10K	0	Flood
Kosterville	22	0925EST			0	0	15K	0	Flood
Castorland	22	1450EST			0	0	10K	0	Flood
Turin	Heavy rains fell across the Eastern Lake Ontario Counties causing the Black and Moose Rivers to overflow their banks. There was also some road and lowland flooding along "The Flats" area of the Black River in central Lewis County.								
NEW YORK, Northern									
ESSEX CO	21	1800EDT-			0	0	2M	0	FLOOD
	22	0800EDT							
NEW YORK, Noerthern Cont'd									
CLINTON CO	21	2000EDT-			0	0	500K	0	FLOOD
	22	0800EDT							
A storm system moved across the GreatLakes region Saturday (Oct 21, 1995) and into Canada thereafter. The associated strong cold front moved across northern NY and Vermont Saturday night. Heavy rains moved across Vermont and northern NY on Saturday afternoon and evening (Oct 21, 1995). A few of the heaviest rainfall reported in northern NY were 3.70 inches in Riverview (Clinton County, NY) and 3.39 inches in Ellenburg Depot (Clinton County, NY).									
ST LAWRENCE CO	20				0	0	0K	0	RECORD WARMTH
The high temperature in Massena, NY (St. Lawrence County) reached 78 degrees on October 20, 1995 breaking the old high temperature record.									
NORTH CAROLINA, North Coastal									
Bertie County	28	0150EST			0	0	0	0	Thunderstorm Winds
10 NNW Windsor	Scattered trees and large limbs down.								
NORTH CAROLINA, Central Coastal									
Greene County	05	1140EST	0.2	25	0	0	4	0	Tornado (F0)
Snow Hill	A tornado touched down on Highway 258 just south of Highway 58 in Snow Hill. A steel storage building was knocked over along with power lines.								
Duplin County	28	0055EST			0	0	0	0	Thunderstorm Winds
Warsaw	28	0120EST			0	0	0	0	Thunderstorm Winds
Pitt County	28	0115EST	0.3	25	0	0	3	0	Tornado (F0)
Greenville	28	0130EST	0.5	40	0	0	4	0	Tornado (F0)
Onslow County	28	0135EST	0.2	25	0	0	2	0	Tornado (F0)
2 W Sneads Ferry	28	0142EST			0	0	0	0	Thunderstorm Winds (G74)
Camp Lejeune	28	0155EST			0	0	4	0	Thunderstorm Winds
Hubert	28	0155EST			0	0	0	0	Thunderstorm Winds (G55)
Swansboro	28	0148EST			0	1	3	0	Thunderstorm Winds
Carteret County	Strong thunderstorms moved across the Crystal Coast early in the morning of the 28th spawning several tornadoes and downbursts. In Sneads Ferry the roof of a mobile home was peeled off and two football field light poles were downed. One inch hail was reported. A tornado at the Marine's Camp Lejeune downed several large oak trees and damaged 35 military vehicles. At Bogue Field downburst winds picked up 150 feet of runway matting and through it across a field. A tractor-semitrailer was overturned by strong winds on Highway 70 in Havelock.								
Bogue	28	0155EST			0	0	4	0	Thunderstorm Winds
Newport	28	0155EST			0	0	0	0	Thunderstorm Winds (G55)
Craven County	28	0148EST			0	1	3	0	Thunderstorm Winds
Havelock	Strong thunderstorms moved across the Crystal Coast early in the morning of the 28th spawning several tornadoes and downbursts. In Sneads Ferry the roof of a mobile home was peeled off and two football field light poles were downed. One inch hail was reported. A tornado at the Marine's Camp Lejeune downed several large oak trees and damaged 35 military vehicles. At Bogue Field downburst winds picked up 150 feet of runway matting and through it across a field. A tractor-semitrailer was overturned by strong winds on Highway 70 in Havelock.								
NORTH CAROLINA, South Coastal									
Robeson County	05	0600EST			?	?	3K	?	Thunderstorm Winds (G50)
3 SW Lumberton	Large tree limbs were downed, damaging a shed.								
Columbus County	28	0000EST			?	?	?	?	Thunderstorm Winds (G50)
Chadbourn	A large tree was downed.								
Columbus County	28	0000EST			?	?	?	?	Thunderstorm Winds (G55)
Lake Waccamaw	Many trees were downed, largest diameter 12 inches.								
Bladen County	28	0030EST			?	?	15K	?	Thunderstorm Winds (G60)
Elizabethtown	Trees were downed onto power lines.								

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
New Hanover County 5 N Wilmington	28	0100EST			?	?	?	?	Thunderstorm Winds (G60) Trees were downed, blocking Highway 117.
Pender County Scotts Hill	28	0115EST			?	?	5K	?	Thunderstorm Winds (G50) Trees downed and display booths at fair were blown 20-30 yards at Poplar Grove Plantation.
NORTH CAROLINA, Central									
Mecklenburg County Charlotte	04	0915EST			0	0	0	0	Flash Flood Flash Flooding was reported in several locations of Charlotte. The areas include Providence Road between Windover and Sharon Amity and Carmel Road between Fairview and Qual Hallow Road.
Wake	04	1015EST-1315EST			0	0	0	0	Flash Flood Rainfall amounts of two to four inches produced widespread flooding of major roads in the county.
NORTH CAROLINA, Central Cont'd									
Moore County Southern Pines	04	1115EST-1315EST			0	0	0	0	Flash Flood Widespread flooding of major roadways was reported. Up to two feet of water on roadways.
Lincoln County Lincolnton	04	1220EST			0	0	0	0	Flash Flood Flooding occurred on Highway 27 on the west side of town and was also reported on Reepville Road and near the city water plant where the South Fork River came out of its banks.
Mecklenburg County Charlotte	04	1250EST			0	0	0	0	Flash Flood Brier Creek came out of its banks at the intersection Providence and Randolph.
Stanly County SW Albemarle	04	1557EST-1800EST			0	0	0	0	Flash Flood Flooding was reported on Highway 24 and 27, 138 South, and in the city of Albemarle.
Cabarrus County Countywide	04	1530EST			0	0	0	0	Flash Flood Numerous roads were underwater due to very heavy rains. The Little Creek came out of its banks flooding several location including the Stallings Bridge Road in Harrisburg and Pharr Mill Road at Little Creek.
Wake County Raleigh	04	1546EST-1845EST			0	0	0	0	Flash Flood Wake County Sheriff's Department reported several roads under water in the eastern and northern sections of Raleigh. Crabtree Creek in Raleigh rose above flood stage closing some streets.
Johnson County Clayton	04	1546EST-2145EST			0	0	0	0	Flash Flood Flooding was reported near Clayton on Highways 70 and 42.
Nash County Spring Hope	04	1758EST-2100EST			0	0	0	0	Flash Flood County Sheriff reported State Roads 1306 and 1145 flooded.
Johnston County 5 N Smithfield	05	0900EST-1045EST			0	0	0	0	Flash Flood Flooding was reported in northern Johnston County. Several roads were closed due to flooding.
Sampson	05	0900EST			0	0	14K	0	Thunderstorm Winds Sampson County Emergency Management director report strong wind damaged several farm buildings and blew the roof of an unoccupied farm house at the Oates farm located on Preacher Henry Road.
Johnston County NE	05	0900EST			0	0	0	0	Thunderstorm Winds Several trees blown down on S.R 1544.
Wayne County 10 SW Goldsboro	05	0905EST		0	0	0	1K	0	Thunderstorm Winds Slight damage was reported to old tobacco barn near the Sampson County line.
Wake County SRN	05	0900EST-1045EST			0	0	0	0	Flash Flood Wake County Sheriff's Office reported several roads in southern section of the county under water. Old Stage Road, one mile north of the Johnston County line, was closed due to flood waters eroding away the shoulder of the roadway and undercutting the pavement.
Franklin County Louisburg	05	1900EST			0	0	25K	0	Thunderstorm Winds Trees fell on a house on North Main Street.
Guilford County Julian	27	1610EST			0	0	0	0	Hail (1.50)

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October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
									Golf ball-size hail reported.
Guilford County Julian	27	1615EST			0	0	0	0	Thunderstorm Winds Wide swath of wind damage to trees and power lines in Julian. Major power outages reported.
Person County 5 N Roxboro	27	1615EST			0	0	0	0	Thunderstorm Winds Numerous trees blown down. Barn roof blown off.
Guilford County Greensboro	27	1625EST			0	0	0	0	Hail (1.00)
NORTH CAROLINA, Central Cont'd									
Orange County Hillsborough	27	1715EST			0	0	0	0	Hail (0.75)
Person County Mayo Lake	27	1720EST	4	75	0	0	250K	0	Tornado (F2) A tornado touched down on SR 1514. A home was destroyed and two others were significantly damaged on U.S. 501 North. Many trees and power lines were downed. Three mobile homes destroyed.
Durham County Durham	27	1730EST			0	0	25K	0	Thunderstorm Winds Trees fell on a house and numerous power lines down due to trees falling on lines.
Granville County Corinth	27	1810EST	2	75	0	0	250K	0	Tornado (F2) A tornado touched in the community of Corinth. Numerous large trees were downed and a new home lost its roof. Numerous barns and farm outbuildings were destroyed. At the intersection of Highway 96 and SR 1643, a home was damaged when a large tree was blown onto the home and the roof was lifted off. Numerous 100-year-old trees were twisted and snapped. A truck and cement outbuilding were also destroyed.
Vance County 4 W Henderson	27	1835EST	3	50	0	0	10M	0	Tornado (F2) A tornado first touched down 4 W of Henderson near Interstate 85. The storm moved north and crossed Interstate 85. Sporadic damage occurred to mostly pine trees around the RuinCreek Road area until the storm hit the Camperland business sales lot. Here, 25 RV's and five Uhauls were destroyed. The roof of the business was blown off. A few blocks away a medical clinic was destroyed. For several blocks down the road, there was damage to roofs of a department store, grocery, hospital, and shopping center.
Warren County Wise	27	1850EST	1	50	0	0	10K	0	Tornado (F0) A steeple was blown off a church in the Wise community. Numerous trees were damaged and twisted within a few blocks of the church.
Durham County Durham	27	2100EST			0	0	0	0	Thunderstorm Winds Trees were downed in and around the city of Durham.
NORTH CAROLINA, Southwestern									
NCAZ033>034-049-055-062>065-									
Avery County Various	05	0700EST-0855EST			0	0	?	0	Flash Flood
Burke County Various	05	1042EST			0	0	?	0	Flash Flood
Caldwell County Northern	05	0600EST			0	0	?	0	Flash Flood
Henderson County Northern	05	0329EST			0	0	?	0	Flash Flood
Henderson County Various	05	0845EST			0	0	?	0	Flash Flood
Jackson County Cashiers	05	0200EST			0	0	?	0	Flash Flood
Jackson County Various	05	0845EST			0	0	?	0	Flash Flood
Macon County Various	05	0100EST			0	0	?	0	Flash Flood
Transylvania County Various	04	0900EST			0	0	?	0	Flash Flood
	05	0300EST			0	0	?	0	Flash Flood
Yancey County Various	05	0600EST			0	0	?	0	Flash Flood Heavy rain associated with Opal caused some flooding problems. Rainfall amounts typically ranged from four to six inches and closed roads and bridges were the result. The most serious flooding apparently occurred in Avery County where evacuations were required and propane tanks were floating in the Banner Elk River.
NCZ033>034-048>054-058>059-062-064>065-067									
	05	0300EST-1400EST			2	10	15M	0	High Winds Winds gradually increased over Northeast Georgia with the approach of Opal. The winds reached damaging levels during the early morning hours of October 5. The damage was most serious in Rabun County where numerous trees were blown down. The wind damage was described as worse than the blizzard of 1993 and power was out for more than a week in some places.

Storm Data and Unusual Weather Phenomena

October 1995

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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The wind reached sustained levels of 50 to 60 mph through mountain passes with higher gusts. Two people were killed as a result of the wind damage. A man in Candler, Buncombe County, NC, was killed when a tree crushed his mobile home. Another man was killed near Marshall, Madison County, NC, when a tree was blown onto him while he was helping cut other trees out of the roadway. About 10 people were injured in Macon, Madison, and Buncombe Counties, NC, by wind blown debris and falling trees. (M60MH) (M44UT)

NORTH CAROLINA, Extreme Southwestern

None reported.

NORTH CAROLINA, Northwestern and North Central

Northwest Zones 001>003-018>019-

05	0530EST-1400EST	0	0	200K	?	?	?	High Winds
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Watauga County Countywide

05	0630EST-1100EST	0	0	350K	?	?	?	Flash Flood
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Ashe County Countywide

05	0730EST-1130EST	0	0	250K	?	?	?	Flash Flood
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Wilkes County W and N Portion

05	0800EST-1100EST	0	0	175K	?	?	?	Flash Flood
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Alleghany County Countywide

05	0800EST-1200EST	0	0	?	?	?	?	Flash Flood
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High winds and flooding rains associated with the remnants of Opal moved through northwest North Carolina during the morning and early afternoon on the 5th. Ashe, Watauga and Wilkes Counties were declared disaster areas. High winds between 35 and 50 mph with some gusts to near 60 mph downed numerous trees, large branches and power lines and knocked out power in some areas. The vast majority of the wind damage occurred at elevations above 2,000 feet. Some roads were blocked for a time by downed trees. A few homes were damaged by the wind from falling trees or tree limbs. In Boone, a mobile home and a nearby carport were destroyed and a car and a house were damaged by the high winds. Heavy rains from the remnants of Opal flooded numerous creeks, roads and bridges, damaged roads, washed out bridges, stranded motorists, flooded a house and resulted in some mud slides in Ashe, Alleghany, Watauga and Wilkes Counties. Minor flood damage occurred at some schools. Damage to roads and bridges in Watauga County was estimated at \$260 thousand.

North Dakota

Data not received.

OHIO, Northern

OHZ001>014-017>023-027>033-036>038-047 Northern Ohio

05	0900EST-2300EST	0	0	80K	?	?	?	Strong Winds
05	0900EST-2300EST	0	0	0	0	0	0	Heavy Rain

The remnants of hurricane Opal passed across northeast Ohio and caused wind gusts up to 45 mph and sustained winds of 20 to 30 mph all across northern Ohio. Although not considered a high wind event by National Weather Service criteria, the prolonged period of strong winds brought down a few trees, scattered tree limbs, and some power lines. Several automobiles were damaged by falling trees or limbs. Crops were damaged from the strong winds. A number of farms reported fields of corn blown over and ripe apples and other fruit being stripped from trees. The actual crop damage estimate was unknown. Heavy rain accompanied the storm. Rainfall of 3.4 inches in less than 24 hours was measured at Mansfield and most areas averaged 1.5 to 2.5 inches during the same period. Flooding was localized and not significant since very dry conditions preceded the storm.

Lake Erie Ohio Waters

05	0900EST-0600EST	0	0	200K	0	0	0	Storm Force Winds
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The remnants of Hurricane Opal passed over the eastern end of Lake Erie Thursday night (5th/6th). Sustained northeast winds ahead of the storm reached 45 knots all across the lake with gusts to 60 knots producing waves of 10 to 14 feet. Water levels on the western basin rose three to four feet above the recent average. Minor to moderate beach and shore erosion occurred in many areas, especially the western end of the lake. Localized flooding occurred in communities with low lying areas along the lake. Several boat docks were damaged and several boats in dock were unknown. As the storm moved northeast Thursday night and winds switched to southwest the water levels in the western basin fell to three to four feet below recent averages and several boats were grounded.

Lake Erie Ohio waters from Cleveland to Fairport Harbor

07	1910EST	0	0	0	0	0	0	Waterspouts
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Several waterspouts were reported. They remained over the water and no damage was reported.

OHZ009>014-019>023-020>023-033 Northeast Ohio

20	1230EST-1700EST	0	0	70K	0	0	0	High Winds
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High winds accompanied the passage of a cold front. Wind gusts of 55 to 65 mph were common. Trees and large limbs were downed in a number of locations. Several vehicles were reported damaged from falling trees and limbs, and some power lines were downed.

OHZ001>014-017>023-027>033-036>038-047 Northern Ohio

24	0600EST-1200EST	0	0	25K	0	0	0	Strong Winds
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Wind gusts of 50 mph affected much of northern Ohio. While not exceeding National Weather Service criteria for a high wind event, several trees and limbs were downed along with some power lines. At least one car was damaged from a downed tree limb.

OHIO, Eastern

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
OHZ057 Muskingum County	05	1630EST			0	0	2K	0	High Winds A large tree was uprooted in Zanesville by the wind and it took down some power lines as if fell. There were also downed limbs scattered throughout the county.
OHZ040 Carroll County	05	1700EST			0	0	1K	0	High Winds Several large limbs were downed in Perrysville as theremnants of what was once Hurricane Opal moved north through east-central Ohio.
OHZ039 Tuscarawas County	05	1700EST			0	0	1K	0	High Winds A few small trees were downed by high winds.
OHZ041 Columbiana County	05	1720EST			0	0	6K	0	High Winds Several large limbs were downed. Onelarge limb fell on a house in Salem and caused damage to the siding and minor structural damage. The limb also brought down some power lines.
OHZ040 Carroll County	20	1500EST- 1600EST			0	0	1K	0	High Winds A few trees were downed in and near Carrollton by high winds ahead of an intense frontal system.
OHZ049 Harrison County	20	1500EST			0	0	1K	0	High Winds Several large limbs were downed by high winds throughout the county.
OHZ068 Noble County	20	1500EST			0	0	1K	0	High Winds High winds fell a tree across a road in Summerfield and a few large branches were also downed.
OHZ039 Tuscarawas County	20	1530EST			0	0	1K	0	High Winds Several large limbs were downed across the southern part of the county.
OHZ069 Monroe County	20	1600EST			0	0	1K	0	High Winds High winds downed a few power lines across the county.
OHIO, Southeast									
OHZ066-067- 075-076-083- 084-085-086- 087 Southeast	05	0400EST- 1600EST			0	0	0	0	Heavy Rain The low pressure remnants of Hurricane Opal passed through during the early afternoon. The storm was moving fast, so only beneficial rains of .5 to 1.5 inches were observed. Wind gusts were mostly in the 25 to 35 mph range. Barometer reading reached near 29.2 inches.
OHIO, Southwestern									
Warren County Maineville	05	0800EST- 1000EST			0	0	3K	0	Flood Heavy rains from the remnants of Hurricane Opal caused minor flooding of low lying areas, including the Maineville Elementary School cafeteria.
Montgomery County Countywide	05	1100EST- 1530EST			0	0	1K	0	Flood The remnants of Hurricane Opal dropped heavy rains resulting in minor flooding of low lying areas. Water was reported across a couple of county roads. One basement was also flooded.
Darke County Countywide	05	1300EST- 1630EST			0	0	1K	0	Flood The remnants of Hurricane Opal brought between two and three inches of rain in less than four hours. This caused minor flooding of poor drainage areas and flooded two county roads.
OHZ042- West Central	05	1330EST- 1500EST			0	0	3K	0	High Winds Strong winds associated with the remnants of Hurricane Opal downed numerous trees and a few power lines.
OHZ072-077>080- Southwest	20	0900EST- 1015EST			0	0	3K	0	High Winds Strong winds associated with a fastmoving cold front caused several trees and power lines to be downed. At Cowan Lake State Park (OHZ072) several camper awnings were destroyed or damaged.
OHIO, Southwestern Cont'd									
OHZ077-080- Southern	27	0530EST- 0630EST			0	0	3K	0	High Winds Strong winds behind a cold front downed trees, some into power lines. Some trees also fell across roadways.

Storm Data and Unusual Weather Phenomena

October 1995

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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OHIO, Northwestern

None reported.

OKLAHOMA, Northeastern

McIntosh County

Vernon 02 0742CST 0 0 ? ? Hail (0.75)
 1 S Eufaula 02 0835CST 0 0 ? ? Hail (0.75)

Haskell County

Keota 02 0940CST 0 0 ? ? Hail (0.75)

Isolated severe thunderstorms developed in eastern Oklahoma during the morning of October 2nd and produced dime-size hail at Vernon, just south of Eufaula, and at Keota.

Sequoyah County

Akins 02 1315CST 0 0 ? ? Hail (0.75)

Le Flore County

2 S Hodgen 02 1410CST 0 0 ? ? Hail (0.75)

Isolated severe thunderstorms redeveloped in extreme eastern Oklahoma during the afternoon of October 2nd and produced dime-size hail at Akins and two miles south of Hodgen.

Maves County

3 SW Spavinaw 26 1740CST 0.1 30 0 0 ? ? Tornado (F0)

Spavinaw 26 1743CST 0 0 ? ? Hail (1.25)

NR Langley 26 1744CST 0 0 ? ? Hail (0.88)

Wagoner County

Okay 26 1746CST 0 0 ? ? Hail (1.75)

Delaware County

3.5 W Jay 26 1758CST 0 0 ? ? Hail (1.00)

Muskogee County

Fort Gibson 26 1800CST 0 0 ? ? Hail (1.00)

Cherokee County

10 SW Tahlequah 26 1810CST 0 0 ? ? Thunderstorm Winds

Delaware County

Jay 26 1815CST 0 0 ? ? Hail (1.00)

Cherokee County

8 SW Tahlequah 26 1816CST- 0 0 ? ? Tornado (F0)

6 SW Tahlequah 1820CST 2 75 0 0 200K ? Tornado (F0)

5 S Tahlequah 26 1843CST 0.1 30 0 0 ? ? Tornado (F0)

Adair County

7 WNW Stilwell 26 1846CST- 0 0 30K ? Tornado (F0)

4 NW Stilwell 1852CST 3 75 0 0 6K ? Thunderstorm Winds

9 W Stilwell 26 1900CST 0 0 ? ? Thunderstorm Winds

4 NE Stilwell 26 1910CST 0 0 ? ? Thunderstorm Winds

Delaware County

3 NW Jay 26 2020CST 0 0 ? ? Hail (1.00)

Jay 26 2028CST 0 0 ? ? Hail (0.75)

Sequoyah County

Akins 26 2315CST 0 0 ? ? Hail (0.75)

Severe thunderstorms developed in northeast Oklahoma during the early evening of October 26th and continued throughout the evening. The storms produced a total of four tornadoes, as well as large hail and damaging winds. The first tornado touched down briefly three miles southwest of Spavinaw at 1740 CST. No damage occurred with this F0 tornado.

The second tornado touched down eight miles southwest of Tahlequah in the small community of Woodall at 1816 CST. The tornado moved east for two miles before lifting six miles southwest of Tahlequah at 1820 CST. Considerable damage occurred in and near Woodall from both the tornado and a strong rear flank downdraft. Eighteen homes, four mobile homes, and two businesses were damaged, mainly from downed trees, and numerous barns were destroyed. Total damage was estimated at \$200 thousand. The tornado track was just north of State Highway 62, with the damage along and just south of State Highway 62 being from the rear flank downdraft. The tornado was 75-yards wide and was rated F0.

The third tornado touched down briefly in an open field five miles south of Tahlequah at 1843 CST. No damage occurred with this F0 tornado. The fourth tornado touched down seven miles west northwest of Stilwell at 1846 CST. The tornado moved east and was on the ground intermittently for three miles before lifting four miles northwest of Stilwell at 1852 CST. One mobile home was damaged by the tornado when a tree fell onto it, and several homes received minor damage from downed trees. Considerable tree damage was caused by rear flank downdraft winds along the tornado's track. The tornado was 75-yards wide and was rated F0.

Strong straight-line winds blew the roofs off two homes and downed several trees and power lines nine miles west of Stilwell, and trees were also blown down 10 miles southwest of Tahlequah and four miles northeast of Stilwell. Large hail accompanied the storms. Golf ball-size hail fell at Okay, half-dollar-size hail fell at Spavinaw, and dime to quarter-size hail covered the ground at Fort Gibson. Dime to quarter-size hail also fell at several other locations in northeast Oklahoma.

OKLAHOMA, Extreme Southeast

McCurtain County

Eagletown 02 1505CST 0 0 0 0 Thunderstorm Winds
 High winds downed several tree limbs causing power line damage.

OKLAHOMA, Panhandle

Beckham County

Erick 0 0550CST 0 0 ? ? Hail (0.88)

Harmon County

5 E Hollis (OK Mesonet) 02 0625CST 0 0 ? ? Thunderstorm Wind (G69)

Hughes County

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
1 SW Atwood Jackson County 3 S Altus (OK Mesonet)	02	0650CST			0	0	?	?	Hail (0.88)
Hughes County 5 WSW Lamar Caddo County Cement Logan County Cimarron City Cleveland County Moore	02	0650CST- 0700CST			0	0	?	?	Thunderstorm Winds (G54)
	02	0710CST			0	0	?	?	Hail (0.75)
	02	0732CST			0	0	?	?	Hail (0.88)
	02	0800CST			0	0	?	?	Hail (0.75)
	02	0839CST			0	0	3	?	Lightning
<p>Morning thunderstorms produced hail as large as nickels in Erick in Beckham County, one mile southwest of Atwood in Hughes County, and in Cement in Caddo County. Severe thunderstorm winds reached 79 mph at the Oklahoma Mesonet site five miles east of Hollis in Harmon County. In Moore in Cleveland County, lightning struck the steeple of a church at 21st Street and Janeway, igniting a fire. The fire was extinguished by the fire department and damage was limited mainly to one room and some smoke damage.</p>									
Bryan County Calera Pushmataha County 8 NE Moyers	02	1150CST			0	0	3	?	Thunderstorm Winds
	02	1315CST			0	0	?	?	Hail (0.88)
<p>Mid-day severe thunderstorms in southeast Oklahoma produced hail as large as nickels eight miles east of Moyers in Pushmataha County. In Calera in Bryan County, severe thunderstorm winds uprooted a two-foot pecan tree and blew it over onto a car and storage shed.</p>									
Seminole County Seminole Pontotoc County 2 SE Ada	25	0550CST			0	0	?	?	Hail (1.00)
	25	0600CST			0	0	?	?	Lightning
<p>Dime to nickel-size hail covered the ground in Seminole in Seminole County, with some hailstones reaching the size of quarters. In Pontotoc County a woman was struck by lightning while driving on SH 3 two miles southeast of Ada. The lightning melted the antenna rod and put a large dent in the roof. The woman reported feeling only a sore throat and slight headache after the incident.</p>									
OKLAHOMA, Western, Central, and Southeastern									
None reported.									
OREGON									
None reported.									
PENNSYLVANIA, Northwest									
PAZ001>003 Northwest Pennsylvania	1 5	0000EST- 1200EST			0	0	0	?	Drought
<p>Drought continued from September and late season crops suffered from the lack of rain. Estimates of late season crop losses averaged from 20 to 50 percent with the total dollar loss amount unknown. A number of residential water wells went or remained dry and local and state officials restricted water use and open burning in some areas.</p>									
PAZ001>003 Northwest Pennsylvania	5 6 5 6	1200EST- 0400EST 1200EST- 0100EST			0	0	20K	?	Strong Winds
					0	0	0	0	Heavy Rain
<p>The remnants of Hurricane Opal passed over northwest Pennsylvania on Thursday night (5th/6th) and caused wind gusts up to 50 mph and sustained winds of 20 to 30 mph. Although not considered a high wind event by National Weather Service criteria, the prolonged period of strong winds brought down trees and limbs along with some power lines. At least one automobile was damaged by a downed tree in the City of Erie. Crops were damaged from the wind. Several farms reported fields of corn blown down and apples and other fruit being stripped from trees. The actual crop damage estimate was unknown. Heavy rains accompanied the storm and averaged 1.5 to 2.5 inches. Flooding was localized and not significant since drought conditions preceded the storm.</p>									
PENNSYLVANIA, Northwest Cont'd									
PAZ001>003 Northwest Pennsylvania	20 20	1430EST- 1900EST			0	0	15K	0	High Winds
<p>High winds accompanied the passage of a cold front. Wind gusts of 55 to 65 mph were common. Trees and large limbs were downed in a number of locations and some power lines were downed.</p>									
PENNSYLVANIA, Northeast									
Lackawanna County Scranton Pike County Lackawaxen	14 14	1830EST 1925EST			0	0	20K	0	Thunderstorm Winds
					0	0	10K	0	Thunderstorm Winds
<p>Isolated severe thunderstorms developed in Northeast Pennsylvania ahead of a strong cold front. Thunderstorm winds downed large trees onto houses in Scranton. In Lackawaxen, a three-foot diameter tree fell onto the Zane Grey House and Museum. The tree cracked the main support beam and heavily damaged several gables. Other trees in the area were uprooted or severely damaged.</p>									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Bradford County	21	0930EST-							
	21	1430EST	0	0	4K	0			Flash Flood
A rapidly deepening low pressure system over the Great Lakes brought heavy rains to parts of Northeast Pennsylvania. Three to four inches of rain fell across Bradford County, causing Sugar Creek to rise out of its banks. Some flooding was also reported in Rome.									
PENNSYLVANIA, Eastern									
Chester County	05	2230EST			0	0	?	?	Thunderstorm Winds
Countywide									
Montgomery County	05	2310EST-							
Countywide	05	2330EST			0	0	?	?	Thunderstorm Winds
A squall line of severe thunderstorms associated with the remnants of Hurricane Opal uprooted trees in scattered areas throughout each county.									
Philadelphia County	14	1910EST			0	0	?	?	Thunderstorm Winds (G55)
Philadelphia Intl Airport									
Lehigh County	14	1918EST			0	0	?	?	Thunderstorm Winds (G55)
ABE/Lehigh Valley Intl Airport									
Besides the 63 mph wind gust at the Lehigh Valley International Airport, damaging winds around Allentown caused about 3,700 homes to lose power.									
Philadelphia County	14	1920EST-							
Philadelphia	14	1945EST			0	0	?	?	Thunderstorm Winds
A severe thunderstorm uprooted nine trees throughout the city.									
Northampton County	14	1935EST			0	0	?	?	Thunderstorm Winds
Bethlehem	14	1940EST			0	0	?	?	Thunderstorm Winds
2 S Glendon									
Severe thunderstorms tore down large limbs in Bethlehem and caused power outages to about 1,800 customers. Trees were uprooted in Williams Township, some blocking Pennsylvania State Route 611.									
Bucks County	14	1945EST			0	0	?	?	Thunderstorm Winds
Yardley									
A severe thunderstorm downed trees and wires in Yardley.									
Lehigh County	21	0330EST			0	0	?	?	Thunderstorm Winds
Countywide									
Severe thunderstorms downed trees and electrical lines throughout the county and caused 8,000 homes to lose power.									
Chester County	21	0600EST			0	0	?	?	Thunderstorm Winds
London Grove									
Severe thunderstorms uprooted numerous trees and downed power lines in London Grove. Larger properties were losing around ten trees per plot. Siding was also ripped from homes. About 1,300 homes lost power.									
Chester County	21	1010EST-							
Countywide	21	1300EST			0	0	?	?	Flood/Flash Flood
Thunderstorms with heavy downpours (Around two inches of rain fell within a three hour period.) caused flooding of small streams throughout the county, especially in Valley Township. Storm totals for the day included 2.72 inches in Honeybrook, 2.50 inches in Glenmoore and 2.03 inches in Downingtown. No serious injuries or damage were reported.									
Northampton County	21	1015EST-							
Southeast	21	1315EST			0	0	?	?	Flood/Flash Flood
Thunderstorms with heavy rain caused flooding in the southeast part of the county. Storm totals of around three inches fell. A mud slide closed Shimersville Road for 90 minutes. Small stream flooding forced the closure of Pennsylvania State Route									
PENNSYLVANIA, Eastern Cont'd									
611 in Forks Township.									
Monroe and	21	1030EST-							
Carbon Counties	21	1600EST			0	0	?	?	Flood/Flash Flood
Thunderstorms with torrential downpours caused small stream flooding in Carbon and Monroe Counties. Storm event totals included 4.90 inches in Tobyhanna, 4.77 inches in Stoddartsville, 4.65 inches in Log Tavern Pond, 4.10 inches in Promised Land, 3.99 inches in Jundale, 3.84 inches in Tannersville and 3.67 inches in Lehigh. Most of this rain fell between 0600 and 1200 EST. No serious damage or injuries were reported.									
PAZ054-055-060>									
062-067>071									
Month Long									
Paradoxically October, normally the driest month of the year, started to break the back of the drought across Eastern Pennsylvania. Rainfall was between 200 and 275 percent of normal with totals three to six inches above normal. It was the 4th wettest October on record at Philadelphia International Airport where 5.99 inches fell. The 7.49 inches of rain that fell at the Lehigh Valley International Airport was the 2nd wettest October on record. While the drought emergency for eastern Pennsylvania and the Delaware River Basin Commission drought warning remained in effect through month's end, no tightening of restrictions became necessary. It was also an unseasonably warm October. The mean temperature of 61.4 degrees at Philadelphia International Airport, was 5.0 degrees above normal and just missed being one of the ten warmest Octobers on record.									
PENNSYLVANIA, Central									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
PAZ033- Somerset County Somerset	05	1230EST			0	0	0	0	High Winds
									Several trees down.
PAZ024- Cambria County Ebensburg Johnstown	05	1342EST			0	0	0	0	High Winds
	05	1455EST			0	0	0	0	High Winds
									Trees down on Route 219 near Ebensburg and several trees blown down around Johnstown.
Perry County New Buffalo	05	2040EST			0	0	0	0	Thunderstorm Wind
									Thunderstorms from the remains of Hurricane Opal took down trees in New Buffalo and blew siding off a home in Elliotsburg.
Snyder County Middleburg	05	2055EST			0	0	0	0	Thunderstorm Wind
									Thunderstorm winds from the remnants of Hurricane Opal took down trees in Middleburg and Selinsgrove.
Adams County Gettysburg	05	2130EST			0	0	0	0	Thunderstorm Wind
									A shed was blown down by strong winds.
York County East York	05	2200EST			0	0	0	0	Thunderstorm Wind
									Winds downed tree limbs and power lines in East York and other scattered areas of eastern York County.
Northumberland County 4 W. Danville	14	1735EST			0	0	0	0	Thunderstorm Wind
									Winds took down trees on power lines between Danville and Northumberland.
Snyder County Selinsgrove	14	1735EST			0	0	0	0	Thunderstorm Wind
									Trees were blown down along route 15 just south of Selinsgrove.
Dauphin County Millersville	14	1745EST			0	0	0	0	Thunderstorm Wind
									Winds damaged several sheds and downed some trees in Millersville.
Schuylkill County Cressona and Schuylkill Haven	14	1750EST			0	0	0	0	Thunderstorm Wind
									Several old trees were blown down causing damage to fences and lawns. Damage was reported on North Berne Street in schuylkill Haven and on Thomas Street in Cressona.
PAZ004- Warren County Garland	20	1815EST-			0	0	0	0	High Winds
	20	1920EST			0	0	0	0	Numerous trees down county wide. Tree on house in Garland.
PENNSYLVANIA, Central Cont'd									
PAZ065- York County Dillsburg	21	0100EST			0	0	0	0	High Winds
									Roof blown off barn roof.
PAZ064- Adams County York Spring	21	0100EST			0	0	0	0	High Winds
									Wind damage to house.
Clearfield County Clearfield and Oscela Mills	21	0200EST- 0600EST			0	0	0	0	Flood/Flash Flood
									Street and small stream flooding occurred in Clearfield. Basement flooding in Oscela Mills and roads flooded in Clearfield Borough.
PAZ053- Columbia County Benton Township	21	0230EST			0	0	14K	0	High Winds
									Roof damage to barn.
Centre County Countywide	21	0500EST- 1000EST			0	0	0	0	Flood/Flash Flood
									Roads and small streams flooded across the county.
Clinton County									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Countywide	21	0500EST-1000EST			0	0	0	0	Flood/Flash Flood
									Roads and small streams flooded across the county.
Huntingdon County Countywide	21	0500EST-2300EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county. Aughwick creek over its banks.
Juniata County Countywide	21	0500EST-1200EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county.
Lancaster County Countywide	21	0500EST-1800EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county. About 30 roads closed, mainly across the northwest part of the county. Little chickies creek and Chickies creek above flood stage.
Lebanon County Countywide	21	0500EST-1800EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county.
Lycoming County Countywide	21	0500EST-1500EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county.
Mifflin County Countywide	21	0500EST-1200EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county.
Potter County Countywide	21	0500EST-1200EST			0	0	0	0	Flood/Flash Flood
									Roads flooded and small streams went out of their banks across the county.
Tioga County Countywide	21	0500EST-1500EST			0	0	0	0	Flood/Flash Flood
									Roads flooded and small streams went out of their banks across the county.
York County Countywide	21	0500EST-1800EST			0	0	0	0	Flood/Flash Flood
PENNSYLVANIA, Central Cont'd									Roads flooded and small streams went out of their banks across the county. Many roads flooded, including South Salem Church Rd., Freysville Rd., North Sherman St., Rte. 624, and East Berlin Rd. Prince Trailer Park in Hallam flooded.
Dauphin County Countywide	21	0700EST-1500EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county. Several roads flooded, including Cameron and MaClay streets, Derry St., Grayson Rd, and Rte. 441.
Montour County Countywide	21	0700EST-2100EST			0	0	0	0	Flood/Flash Flood
									Roads flooded and small streams went out of their banks across the county.
Northumberland County Countywide	21	0700EST-1500EST			0	0	0	0	Flood/Flash Flood
									Roads flooded and small streams went out of their banks across the county.
Perry County Countywide	21	0700EST-1500EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county.
Schuylkill County Countywide	21	0700EST-1500EST			0	0	0	0	Flood/Flash Flood
									Basements were flooded along with roads and small streams across the county.
Snyder County Countywide	21	0700EST-1500EST			0	0	0	0	Flood/Flash Flood
									Roads flooded and small streams went out of their banks across the county.
Union County Countywide	21	0700EST-1500EST			0	0	0	0	Flood/Flash Flood

Storm Data and Unusual Weather Phenomena

October 1995

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
Basements were flooded along with roads and small streams across the county.									
PAZ004-006-010>012-017>019-024>028-033>037-041>042-045>046-049>053-056>059-063>066		Monthlong							Wet Weather
After a dry summer and early fall, October was warm and wet across central Pennsylvania. Widespread heavy rain fell across the region on the 20th. Amounts ranged from 1.12 in Warren County, 2 to 4 inches across much of the area, to 6.47 inches in Schuylkill County. Rainfall for the month was well above normal. Amounts for the month ranged from 4.6 inches across the Laurel Highlands to 9.1 inches in Shuylkill County. The average temperature in Harrisburg was 5.7 degrees above normal for the month. The heavy rain helped ease the Drought conditions.									
PENNSYLVANIA, Western									
PAZ014 Butler County	05	1400EST-1700EST			0	0	3K	0	High Winds
Scattered wind damage to trees and power lines occurred across western Pennsylvania on October 5th as remnants of what was once Hurricane Opal passed north through the area. The first report of damage in western Pennsylvania was in Butler County where large trees and branches were downed by high winds throughout the county. A High Wind Watch had been posted for much of the area during the afternoon of October 4th and was upgraded to a High Wind Warning for wind gusts in excess of 60 mph across the entire area in the early morning hours of the 5th, about 12 hours before the storm struck.									
PAZ032 Fayette County	05	1500EST			0	0	1K	0	High Winds
A large tree and some large limbs were downed by high winds near Scottdale.									
PAZ020-021-029-030 Allegheny County Beaver County Washington County Westmoreland County	05	1500EST-1700EST			0	0	5K	0	High Winds (G57)
Isolated power outages occurred due to downed power lines and large tree limbs falling across power lines across the area. The highest measured wind gust was 56 mph at Beaver County Airport at 1540EST. Some wind gusts were estimated around 65 mph. A few trees also fell.									
PAZ007 Mercer County	05	1540EST			0	0	1K	0	High Winds
A large tree and some branches were downed by high winds in Stoneboro.									
Clarion County	20	1330EST			0	0	1K	0	High Winds
Fairly widespread damaging winds ahead of an intense frontal system downed numerous trees and power lines across western									
PENNSYLVANIA, Western									
Pennsylvania during the afternoon and evening hours. A High Wind Warning was in effect for the entire area from 1320 2100EST. The first report of damage was downed trees in Clarion County near Lickingville.									
PAZ007 Mercer County	20	1330EST-1700EST			0	0	8K	0	High Winds
Numerous reports of trees and limbs downed by high winds across the county. Power lines were also downed.									
PAZ023 Indiana County	20	1345EST			0	0	2K	0	High Winds
A couple of trees and a few power lines were downed by high winds in Cavode.									
PAZ008 Venango County	20	1400EST-1415EST			0	0	2K	0	High Winds
Power lines were downed near Oil City and a few trees fell in Polk.									
PAZ013 Lawrence County	20	1400EST-1600EST			0	0	3K	0	High Winds
Several trees, large branches, and some power lines were downed in and near New Castle. At 1410 EST a spotter reported a wind gust to 45 mph in southern Lawrence County.									
PAZ021 Allegheny County	20	1400EST			0	0	1K	0	High Winds
A tree and large limbs were downed by high winds two miles east of Kenmawr. Prior to the report the wind gusted to 47 mph at 1330EST in downtown Pittsburgh and to 48 mph at Pittsburgh International Airport at 1346 EST.									
PAZ030 Westmoreland County	20	1400EST-1630EST			0	0	1K	0	High Winds
A few trees were reported downed throughout the county.									
PAZ020 Beaver County	20	1420EST-1445EST			0	0	3K	0	High Winds
Large branches and power lines were downed by high winds in New Brighton. Trees were downed one mile southwest of Aliquippa and a few large limbs were downed in Monaca.									
PAZ032 Fayette County	20	1530EST-1630EST			0	0	3K	0	High Winds

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Numerous trees and large limbs were downed across the county, especially in Uniontown and Connellsville.									
PAZ029 Washington County	20	1630EST-1730EST			0	0	2K	0	High Winds
Trees and power lines were downed by high winds in Eighty Four.									
PAZ016 Jefferson County	20	1930EST-2000EST			0	0	5K	0	High Winds
Several trees were downed across the county. Power lines were downed near Brockway and siding was torn from the side of a house near Brookville.									
RHODE ISLAND									
RIZALL	21	1000EST-1900EST			0	0	?	0	High Winds
Strong southeast to south winds with gusts from 40 to 60 mph knocked down numerous tree limbs and some trees causing scattered power outages. Power outages affected up to 13,400 electric customers statewide but most were repaired by 2000 local time. A peak wind gust to 57 mph was reported from Tiverton about 1500 and a peak gust to 48 mph was recorded at T.F. Green State Airport in Warwick around 1730. Along the coast, a number of small craft broke their moorings but no serious damage occurred. Heavy rain resulted in some minor street flooding. Rainfall totals varied widely from around one inch in the Providence area up to 2.60 inches recorded in Cumberland.									
RIZALL	28	0500EST-0800EST			0	0	?	0	High Winds
A squall line moved eastward across the state preceded by gale force south winds. The actual passage of the squall line was accompanied by thunderstorms with wind gusts to 40 to 50 mph. Scattered power outages were reported.									
SOUTH CAROLINA, North Coastal									
Williamsburg County Cades	05	0530EST			?	?	3K	?	Thunderstorm Winds (G50)
Cooperative observer reported large tree limbs down causing roof damage.									
Florence County 2 E Florence	05	1704EST			?	?	?	?	Thunderstorm Winds (G50)
Airport weather observer reported gust.									
SOUTH CAROLINA, North Coastal Cont'd									
Marion County 1 W Marion	27	2305EST	3	40	?	?	100K	?	Tornado(F1)
A tornado touched down in west Marion in the Pine Lake area, moved through English Park area to U.S. Highway 501. Downed trees caused additional property damage and downed power lines. No injuries.									
Marion County Marion	27	2315EST			?	?	?	?	Hail (0.75)
Marion County Marion	27	2320EST			?	?	5K	?	Thunderstorm Winds (G55)
Trees 12 inch diameter and large limbs broke and downed power lines.									
SOUTH CAROLINA, South Coastal									
Jasper County Southern Half	05	0143EST			?	?	0	0	Thunderstorm Winds
Numerous trees down.									
Colleton County 2 SE Walterboro	05	0215EST			?	?	0	0	Thunderstorm Winds
Trees down.									
Beaufort County Ladys Island	05	0240EST			?	?	0	0	Thunderstorm Winds
Trees and limbs down.									
Beaufort County Countywide	05	0255EST			?	?	0	0	Thunderstorm Winds
Trees and power lines down.									
Dorchester County Summerville	05	0300EST			?	?	0	0	Thunderstorm Winds
Power lines down.									
Charleston County James Island	05	0310EST			?	?	0	0	Thunderstorm Winds
Trees were knocked down.									
Berkeley County Jedburg	05	0311EST			?	?	0	0	Thunderstorm Winds
Trees were knocked down.									
Charleston County Ravenel	05	0449EST			?	?	0	0	Thunderstorm Winds
Large limbs and power lines down.									
Charleston County Charleston	05	0459EST			?	?	0	0	Thunderstorm Winds
Seventy-six mph gust reported by Harbor Pilot at Columbus St. terminal.									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Berkeley County Eastern Third	05	0504EST			?	?	0	0	Thunderstorm Winds
Trees were knocked down.									
Charleston County Wadmalaw Island	05	0719EST			?	?	0	0	Thunderstorm Winds
Trees were knocked down.									
Charleston County Mt. Pleasant	05	0750EST			?	?	0	0	Thunderstorm Winds
Trees were knocked down.									
Berkeley County Southern Half	05	0757EST			?	?	0	0	Thunderstorm Winds
Trees were knocked down. The remnants of Tropical Storm Opal moved across South Carolina the morning of October 5, 1995. Opal produced numerous thunderstorm over the coast and coastal plains. Many of these thunderstorms caused wind damage as reflected above. Tropical Storm Opal also caused a 48-foot trawler, Katie Patrice, to be beached on Fripp Island in Beaufort County.									

SOUTH CAROLINA, Central

Chesterfield County 4 NNE McBee	05	0440EST	.1	50	0	0	0	0	Tornado
Orangeburg County Orangeburg	05	0500EST			0	0	10K	0	Thunderstorm Winds
Calhoun County St. Matthews	05	0515EST			0	0	?	?	Flood
Chesterfield County Cheraw	05	1500EST			0	0	?	?	Flood
The remnants of Hurricane Opal moved rapidly north across South Carolina on the night of the fourth and during the day on the fifth. One storm associated with Opal produced an F0 tornado in Chesterfield County which took down two groves									

SOUTH CAROLINA, Central Cont'd

of trees in the Carolina Sandhill National Wildlife Refuge. Trees were blown down in Orangeburg, one fell onto a car and totaled it. Locally heavy rains also produced minor low-land flooding on the Congaree River near St. Matthews and along the Great Pee Dee River near Cheraw.

Edgefield County 5 SW Trenton	27	1557EST			0	0	0	0	Hail (0.75)
Saluda County Ridge Spring	27	1630EST			0	0	0	0	Hail (0.75)
Lexington County Batesburg	27	1650EST			0	0	?	0	Thunderstorm Wind 50
Lexington County Gilbert	27	1650EST			0	0	0	0	Hail (0.75)
Lexington County 3 N Lexington	27	1710EST			0	0	?	0	Thunderstorm Winds
Richland County 2 E Irmo	27	1725EST			0	0	0	0	Hail (0.75)
Richland County 3 NNW Columbia	27	1740EST			0	0	0	0	Hail (1.00)
Richland County 3 NNW Columbia	27	1745EST	.1	50	0	0	0	0	Tornado F0
A strong cold front produced a short squall line of storms that dumped large hail over the midlands of South Carolina and the Central Savannah River area of Georgia. An F0 tornado also developed just northwest of Columbia which took down some trees. Wind damage in Lexington blew down large signs, power lines, and trees near Lake Murray.									

SOUTH CAROLINA, Northwestern

SCZ007-001-004 Spartanburg County Oconee County	04	1030EST-0200EST			0	0	0	15K	9K	Urban Flood Flash Flood
Heavy rain associated with Opal caused some flooding problems. Rainfall amounts typically ranged from four to six inches and closed roads and bridges were the result.										
SCZ001-003-004	05	0300EST-1400EST			0	0	0	0	0	High Winds
Winds gradually increased over the Western Carolinas and Northeast Georgia with the approach of Opal. The wind reached damaging levels during the early morning hours.										
SCZ006 Greenville County 3 SW Simpsonville	05	0235EST-0238EST	3	0.25	0	0	75K	0	0	Tornado (F0)
A tornado developed from an intense rain band associated with Opal. A number of trees and power lines were blown down onto vehicles and structures. A couple of campers and a boat were destroyed and some minor damage was reported to homes.										
SCZ009-012-019 York County Just East Clover	27	1521EST			0	0	15K	0	0	Thunderstorm Winds, Hail (1.75)
York County Lake Wylie	27	1530EST			0	0	15K	0	0	Thunderstorm Winds
Greenwood County 3 N Greenwood	27	1820EST			0	0	?	0	0	Hail (0.75)
Laurens County Near Mountville	27	1830EST			0	0	5K	0	0	Thunderstorm Winds

Storm Data and Unusual Weather Phenomena

October 1995

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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Severe Thunderstorms caused some damage as they moved quickly across the South Carolina upstate. The wind blew the roof off of a mobile home west of Lake Wylie in York County, blew the roof off a barn and damaged outbuildings around Lake Wylie, and caused large hail along the storm track. Damaging winds blew the roof partway off a building near Mountville.

SOUTH DAKOTA, Central and Northern

Stanley County
8 W Ft Pierre

05	1420CST	?	?	?	0	?	0	Rain
----	---------	---	---	---	---	---	---	-------------

A Hayes man was killed and three others were injured in a two vehicle accident that occurred eight miles west of Fort Pierre on U.S. Highway 14-34. As one vehicle was passing a van and a tractor-semitrailer, the rain and the water spray from the semi-truck restricted visibility resulting in a head-on collision.

SDZ007-008-011-018-
021-037-048-051

Central and Northeast

23	0200CST-	0	0	1.7M	?	?	?	Heavy Snow and Strong Winds
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A major fall storm hit Central and Northeast South Dakota and dropped from four inches to one foot of wet snow. The heavy wet snow combined with strong winds gusting up to 50 mph snapped several thousand power poles and downed hundreds of miles of line in the counties of Buffalo, Hand, Spink, Roberts and Grant. In Day and Lyman Counties, a few poles were downed with some short lived power outages. Marshall County had no reports of damage or power outages. Several thousand people were left without power for several hours up to several days. Power was not restored to some people until the fourth of November. Portions of Interstate 90 and Interstate 29 were closed from the evening of the 23rd until the morning of the 24th leaving hundreds of motorists stranded. There were also numerous school delays and closings. Many trees and some crops were also damaged as a result of the weight of the snow and high winds. Some snowfall amounts include, four inches 9 NNE Reliance, at Doland, and 4N 2E Victor, five inches 10 SE Stephan and at Sisseton, six inches 7S Ree Heights and at Eden, eight inches at Waubay and Grenville, and 12 inches at Summit and Milbank. This was the third damaging storm

SOUTH DAKOTA, Central and Northern Cont'd

to the rural electric cooperatives this year and has been called the worst natural disaster in the history of the rural electrics. Total damage estimate for the state rural electrics was \$9.5 million.

SOUTH DAKOTA, Southeast

SDZ062-
Minnehaha County

20	0300CST- 1600CST	0	0	0	?	?	?	High Winds
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Winds over 40 mph at times cause undetermined crop damage. The damage was mainly to corn, as ears were knocked off of stalks.

SDZ019>023-038>040-
050-052>055-057>061-
063>065-068-

South Central and East Central

23	0100CST- 2300CST	1	1	10M	?	?	?	Heavy Snow
----	---------------------	---	---	-----	---	---	---	-------------------

Widespread wet snow accumulated six to 12 inches. The snow caused record damage to power lines and poles, hitting rural areas the hardest. Over 9,000 poles were downed and over 25 thousand people lost power. Some were without power for over two weeks following the storm, and additional damage occurred due to the loss of power for refrigeration and other appliances. Total damage in South Dakota to the rural electric systems was estimated at \$9.5 million. Extensive tree damage also occurred; thousands of trees and limbs broke under the weight of the heavy wet snow. Some damage to buildings occurred from falling trees and limbs. In Mitchell, a tree limb felled an electrical pole, starting a fire which destroyed a house. The snow caused vehicles to slide into ditches and some accidents, including a fatal collision near Tripp. The heavy snow and accompanying strong winds caused undetermined damage to unharvested crops, mainly corn and soybeans. F43VE

Brookings County
Volga

23	0745CST	0	0	.01M	0	?	?	Lightning
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Lightning struck a house and an adjoining tree. The tree hit the roof of the house, causing damage, and the lightning burned out all the wiring in the house.

SOUTH DAKOTA, Western

SDZ024&028

04	?	?	?	?	?	?	?	SNOW (3.00-5.00)
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Three to five inches of snow fell over the northern Black Hills.

SDZ024

19	?	?	?	?	?	?	?	SNOW (1.00-2.00)
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The northern Black Hills received one to two inches of snow.

SDZ024-029

22- 23	?	?	?	?	?	?	?	SNOW (1.00-14.00)
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The northern Black Hills experienced snow falls of 11 to 14 inches; while across the southern Black Hills amounts ranged from one to three inches.

SDZ024-029

29- 30	?	?	?	?	?	?	?	SNOW (1.00-6.00)
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The southern Black Hills received three to six inches of snow, while the northern Black Hills measured one to three inches.

TENNESSEE, Eastern

TNZ036-039>044-
067>074-083>087-
099>102

05	0030EST- 1530EST	0	0	2M	0	?	?	High Winds
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A large part of East Tennessee experienced high winds from the remnants of Hurricane Opal. Wind speeds at the higher elevations of the Appalachians were measured at 70 mph while 40-50 mph gusts were common at the lower elevations. Trees and power lines were down over much of the region. The greatest damage occurred in Hamilton County where damage was estimated in excess of \$1 million. Over 20 thousand homes were without power as a result of the storm. Over 70 miles of the Appalachian Trail was closed due to trees being down.

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Hamilton County Countywide	05	1200EST- 1800EST			0	0	20K	0	Flood
Rains from the remnants of Hurricane Opal caused widespread flooding countywide. A circus was left stranded at a campground and had to be evacuated. A number of residences and businesses were also surrounded by water and occupants had to be evacuated.									
TENNESSEE, Central									
TN2062 Countywide	05	0530CST- 0830CST			0	1	20K	0	Freezing Drizzle
Freezing drizzle occurred during the early morning rush hour and caused at least 10 car accidents countywide mainly on bridges and overpasses. The only accident with an injury occurred on State Route 96 East (Lascassas Highway). The driver's 1978 Jeep slid on a bridge and overturned.									
Hickman County Lyles	27	0215CST			0	0	0.1K	0	Thunderstorm Winds
Local electric company reported power lines down.									
Decatur County Decaturville	27	0220CST			0	0	0.1K	0	Hail (1.75)
Local sheriff's department reported golf ball-size hail.									
TENNESSEE, Western									
Tipton County Drummonds	26	2210CST			0	0	1K	0	Hail (0.75)
Shelby County Memphis	26	2216CST- 2250CST			0	0	.05M	0	Hail (1.75)
Numerous reports of hail occurred across the city of Memphis. The hail produced holes in several roofs and downed some tree limbs.									
Gibson County Brazil	26	2223CST			0	0	2K	0	Hail (1.75)
Gibson County Trenton	26	2230CST			0	0	2K	0	Hail (1.00)
Gibson County Dyer	26	2230CST			0	0	.02M	0	Lightning
A house was damaged by a fire started by light trees and power lines were blown down.									
Poinsett County Marked Tree	27	0213CST			0	0	.02M	0	Thunderstorm Winds
One house was damaged. Several windows were blown out. Some plastic tanks were blown over. A few trees were knocked down as well.									
Mississippi County 5 S Osceola	27	0245CST			0	0	.01M	0	Thunderstorm Winds
An abandoned 500-foot tall commercial television tower collapsed due to thunderstorm winds.									
TEXAS, North Panhandle									
None reported.									
TEXAS, South Panhandle									
Garza County 2 SE Justiceburg	31	1640CST			0	0	?	?	Hail (1.00)
Nolan County Roscoe	31	1640CST			0	0	?	?	Hail (0.75)
Coke County 7 N Robert Lee	31	1715CST			0	0	?	?	Hail (0.75)
6 SW Blackwell	31	1723CST			0	0	?	?	Hail (1.75)
5 NW Robert Lee	31	1725CST			0	0	?	?	Funnel Cloud
Kent County Clairemont	31	1730CST			0	0	?	?	Hail (1.75)
Jayton	31	1742CST			0	0	0	?	Hail (0.88)
Coke County Robert Lee	31	1745CST			0	0	0	?	Thunderstorm Winds (G52)
Sterling County 7 NW Sterling City	31	1750CST			0	0	0	?	Hail (0.75)
Spotters reported quarter-size hail in southeast Garza County. A radio station reported dime-size hail near Robert Lee. The public reported golf ball-size hail southwest of Blackwell. An Abilene television station's spotters reported golf ball-size hail in Clairemont and nickel-size hail in Jayton.									
TEXAS, North Central									
Hardeman County Quanah	02	0700CST			0	0	?	?	Thunderstorm Winds (G52)
Knox County Gilliland	02	0759CST			0	0	?	?	Hail (0.88)
Morning thunderstorms produced hail as large as nickels in Gilliland in Knox County and severe thunderstorm winds up to 60 mph in Quanah in Hardeman County.									
TEXAS, North									
Leon County									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Centerville	31	1810CST			0	0	0	0	Thunderstorm Winds
Several trees were blown down by high winds.									
Haskell County Rochester	31	2116CST			0	0	0	0	Flash Flood
Several streets were flooded in the city.									
6 NW Haskell	31	2224CST			0	0	0	0	Flash Flood
Farm-to-Market Road 2407 was closed due to high water.									
Throckmorton County Throckmorton	31	2210CST			0	0	0	0	Hail (0.75)
TEXAS, Northeast									
Smith County Tyler	01	1600CST			0	2	0	0	Lightning
Two people struck and injured by lightning were hospitalized.									
TEXAS, Northeast Cont'd									
Wood County 7 E Winnsboro	01	1810CST			0	0	0	0	Thunderstorm Winds
High winds caused extensive tree damage.									
Camp County Leesburg	01	1812CST			0	0	0	0	Thunderstorm Winds
A tree was blown down by high winds.									
Franklin County 3 NW Scroggins	01	1815CST			0	0	0	0	Hail (1.50)
	01	1815CST			0	0	0	0	Thunderstorm Winds
Trees were blown down by high winds.									
Titus County Mount Pleasant	01	1840CST			0	0	20K	0	Thunderstorm Winds
A tree was blown down onto two cars, crushing them.									
TEXAS, Southeast									
None reported.									
TEXAS, Central Southeast									
Burleson County	31	1900CST			0	0	10K	0	Hail (1.75)
	31	1950CST			0	0	10K	0	Hail (1.50)
TEXAS, South									
Kenedy County Willacy County Cameron County	01	2200CDT-			0	0	?	0	Beach Flood
	04	0800CDT							
Breaking swell from Hurricane Opal caused water to spill across at the usual wash-over points damaging several vehicles.									
Kenedy County Willacy County Cameron County	12	2200CDT-			0	0	?	0	Beach Flood
	14	0800CDT							
Breaking swell from Hurricane Roxanne caused water to spill across at the usual wash-over points.									
TEXAS, South Central									
Wilson County Floresville	02	1745CST			0	0	0	0	Funnel
Nueces County San Patricio County Kleberg County Aransas County	29-				0	0	?	?	Flood
	30								
A record-breaking heavy rain event occurred across much of South Texas during the final days of October 1995. A cold front pushed through the Corpus Christi area during the early morning hours on the 28th and became nearly stationary across the region on the 29th-30th. The frontal system became the focus for a developing overrunning situation which allowed for the continued development of heavy rain and embedded thunderstorms. The National Weather Service office in Corpus Christi recorded 7.92 inches of rain which was the greatest one-day rainfall total for the month of October. Additional reports across the area ranged from 8.76 inches at Padre Island to 12.20 inches in Aransas Pass.									
Bastrop County Cedar Creek	31	1720CST			0	0	?	?	Hail (1.00)
Cedar Creek	31	1735CST			0	0	?	?	Hail (1.75)
Val Verde County Nr Del Rio	31	1725CST			0	0	?	?	Hail (1.50)
The hail increased from pea-sized at 1719 CST to 1.25 inch at 1725 CST.									
Val Verde County N of Del Rio	31	1800CST			0	0	0	0	Funnel
NE of Del Rio	31	1802CST			0	0	0	0	Funnel
Funnels observed briefly by National Weather Service employee.									
Lee County									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Giddings Val Verde County	31	1800CST			0	0	?	?	Hail (0.75)
Laughlin A.F.B. Medina County	31	1946CST			0	0	0	0	Hail (0.75)
Hondo	31	2350CST			0	0	?	?	Thunderstorm Winds
Trees were blown over by thunderstorm winds.									
TEXAS, West									
Brewster County Alpine	01	1713CST			0	0	3M	0	Hail (2.00)
An HP supercell moving to the southeast through northern Brewster County pummelled much of Alpine with large hail and									
TEXAS, West Cont'd									
high winds. The west and northwest sides of the city were hardest hit with windows knocked out of numerous houses, and about 200 homes having the paint blasted off the exterior walls. Many cars were damaged in the storm as well. The hail was two inches deep in some parts of town. During the storm a wind gust was measured at 56 mph. Total property damage was estimated at about \$3 million.									
Culberson County 5 ENE Pine Springs 8 E Pine Springs	02	1057MST			0	0	0	0	Funnel Cloud
	02	1120MST- 1124MST	0.5	60	0	0	0	0	Tornado (F1)
A supercell just south of the New Mexico border first produced a funnel cloud just east of the boundary of Guadalupe Mountains National Park. A ranger from the park later reported a tornado east of the park as the storm moved slowly to the east-southeast.									
Andrews County 25 SW Andrews	02	1318CST			0	0	0	0	Hail (0.75)
Winkler County 21 NE Kermit	02	1318CST			0	0	0	0	Hail (0.75)
Ector County Goldsmith	02	1342CST			0	0	10K	0	Thunderstorm Winds
Odessa	02	1414CST			0	0	0	0	Hail (0.75)
The Andrews County Sheriff's office reported three-quarter inch hail along the Andrews/Winkler County line along Stat Highway 115. As the storm progressed eastward it formed into an accelerating line that moved into Ector County. As the line of storms approached Goldsmith, a bow echo formed, with the resulting winds destroying a metal shed. As the line continued moving to the southeast, it broke up with an intensifying cell dropping three-quarter inch hail in Odessa.									
Reeves County 3 W Pecos	02	1455CST			0	0	0	0	Hail (0.75)
A radio station reported three-quarter inch hail from a storm moving southeastward along the Pecos River.									
Pecos County Imperial	31	1420CST			0	0	0	0	Hail (1.75)
Ward County 3 SE Grandfalls	31	1425CST			0	0	0	0	Hail (0.75)
Crane County 17 WNW Crane	31	1435CST			0	0	0	0	Hail (0.75)
Terrell County 10 N Dryden	31	1440CST			0	0	0	0	Hail (1.75)
Crane County 8 WSW Crane	31	1455CST			0	0	10K	0	Hail (1.75)
Terrell County 23 NNE Dryden	31	1458CST			0	0	0	0	Hail (0.75)
Crane County Crane	31	1505CST			0	0	170K	0	Hail (1.75)
Crane	31	1505CST			0	0	10K	0	Thunderstorm Winds
Upton County 20 N McCamey	31	1524CST			0	0	0	0	Hail (2.75)
A thunderstorm that developed over northwestern Pecos County became severe as it approached the Pecos River from the southwest, dropping golf ball-size hail on Imperial and three-quarters inch hail in the southeast corner of Ward County. As the storm crossed the Pecos River it showed signs of becoming a supercell and began to turn right of its previous path. In Crane County, large hail was reported all during its path. In the city of Crane, golf ball-size hail was reported and strong winds blew the roof off the Big Deal Burrito Restaurant. Three miles east of the city, power lines were blown down. Baseball-size hail was reported in extreme western Upton County as the storm continued to the east. The storm then continued across open country into Reagan County where no further reports were received.									
As the supercell was moving through Crane County, a storm in the northern part of the state of Coahuila, Mexico split, with the left-mover racing northward across the Rio Grande into southcentral Terrell County. A ranch north of Dryden reported golf ball-size hail as the storm continued to the north. Later along the path, three-quarters inch hail was reported at a natural gas plant.									
Terrell County 15 NE Sanderson	31	1609CST			0	0	0	0	Hail (1.50)
Report from a ranch. Storm moved to the east across southern portions of the county.									
Upton County McCamey	31	1648CST			0	0	0	0	Hail (1.00)
From the storms already present, a line began to form in a north-northeast to south-southwest orientation. One cell was briefly severe as one inch diameter hail fell at McCamey.									
UTAH									
UTZ-002-	03	1710MST-			0	0	0	0	High Winds
	04	0400MST			0	0	0	0	
Pre frontal wind gusts to 63 and 89 mph were recorded at Knolls. Stiff winds east of Wendover reduced visibilities to 50 at times.									
UTZ-003-010-	22	0500MST-							

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
	22	1700MST			0	0	0	0	Heavy Snow
	Lake effect snows dropped 15-22 inches at Alta, seven inches in Springville, South Jordan, and five inches in North Orem.								
VERMONT, North and Central									
LAMOILLE CO	15	0015EDT-0600EDT			0	0	5K	0	FLOOD
WASHINGTON CO	15	0015EDT-0600EDT			0	0	5K	0	FLOOD
CHITTENDEN CO	14	2330EDT-0600EDT			0	0	5K	0	FLOOD
	A storm system moved across southern Canada on Saturday (Oct 14, 1995) and Sunday (Oct 15, 1995). A strong cold front moved across northern NY late Saturday afternoon and evening and then continued east across Vermont Saturday night. Heaviest rain fell along the western slopes of Vermont's Green Mountains with over 2 inches. The mill Brook in West Bofon (Chittenden County, VT) overflowed its banks late Saturday night and early Sunday. Flooding was also reported in Belvidere Center (Lamoille County, VT). Field flooding was reported along the Lamoille River in Johnson, VT (Lamoille County). Heaviest rainfall reports were 3.65 inches on top of Mt.Mansfield and 2.66 inches in Pleasant Valley (both locations in Lamoille County).								
ADDISON CO	21	2230EDT-0200EDT			0	0	20K	0	FLOOD
	A storm system moved across the GreatLakes region Saturday (Oct 21, 1995) and into Canada thereafter. The associated strong cold front moved across northern NY and Vermont Saturday night. Strong gusty winds preceded and accompanied this front as areas of low pressure moving north along the front enhancing rainfall rates. The strongest winds were along the western slopes of Vermont's Green Mountains. A wind gust to 74 mph was reported in Pleasant Valley (Lamoille County Vermont) Friday evening (Oct20, 1995). Burlington, Vermont (Chittenden County) reported a wind gust to 51 mph Saturday morning (Oct 21, 1995). Numerous reports of trees and power lines down were received from the Vermont Counties of Lamoille, Addison, Chittenden, Orleans and Windsor late Friday night through Saturday night. In addition, heavy rains moved across Vermont and northern NY on Saturday afternoon and evening (Oct 21, 1995). A few of the heaviest rainfall report in Vermont was Cavendish (Windsor County) with 3.48 inches. Flooding was reported in Addison County Vermont in Granville (White River) and along portions of the New Haven River late Saturday night around 1030 PM EDT into early Sunday morning. Extensive flooding was reported across across northern NY in both Clinton County beginning at 6 PM EDT Oct 21 and Essex County beginning at 8 PM EDT Oct 21 continuing through 8 AM EDT SUNDAY. Numerous road washouts with road closures and local state of emergencies declared. There was an extensive mud slide on Whiteface Mountain. Extensive debris was reported floating down the West Branch of the Ausable River in Essex County NY.								
CHITTENDEN CO	28	0800EST-1200EST			0	0	0K	0	FLOOD
ADDISON CO	28	0800EST-1200EST			0	0	0K	0	FLOOD
	A high pressure system over the Canadian Maritimes combined with a storm system which moved from the Great Lakes region Friday (Oct 27, 1995) into southern Canada Friday Night and Saturday (Oct 28, 1995) to produce gusty winds. The associated cold front moved across northern NY and Vermont during Saturday and was preceded and accompanied by gusty winds and heavy rain. In Vermont, the heaviest rainfall reports were 1.70 inches in Worcester (Washington County) and 1.69 inches in Springfield (Windsor County). A few rivers reached bankfull, but only minor field flooding was reported between 8 AM EDT and 12 noon on Oct 28. Both the New Haven and Middlebury Rivers in Addison County, Vermont and the Huntington River in Chittenden County experienced field flooding with no damage.								
VERMONT, Southern									
VTZ003-004-007-009-011	05	2200EST-1500EST			0	0	135K	0	High Winds
	A complex area of low pressure which was the remnants of Hurricane Opal moved across Western and Northern New York late Thursday night (October 5) and Friday morning (October 6). The storm system then continued moving northeast into Southern Canada. Damaging winds occurred across parts of Central and Northern Vermont but especially along the western slopes of the Green Mountains. Damaging winds downed trees and power lines across Essex, Orleans, Addison, Caledonia and Rutland Counties. In Essex County damage occurred in Canaan and Concord. In Addison County damage occurred in Bristol Village, Ripton, Goshen, Addison and Leicester. Damage was also reported in Caledonia County in Groton, in Rutland County in Clarendon and Chittenden and in Orleans County in Derby Center.								
VTZ003-005>009-011-012-014	20	2000EST-							
Windham County	21	2200EST-1500EST			0	0	130K	0	High Winds
Bennington County	21	1700EST-2000EST			0	0	10K	0	Flood
	21	1700EST-2000EST			0	0	30K	0	Flood
	An intense low pressure system tracked from the upper Great Lakes northeast to James Bay Canada between Friday morning October 20th to Sunday morning October 22nd. This system produced damaging winds across much of Vermont from Friday evening through Saturday evening. Wind damage was reported in every county except for Essex, Bennington Franklin and Grand Isle County. The damaging winds brought down many trees and wires causing numerous power outages. The strongest winds were along the western slopes of the Green Mountains from Eastern Rutland County north to Eastern Chittenden County. Heavy rains also occurred with this storm system with a general rainfall of two to three inches across Southern Vermont, in Windham County flooding occurred in West Dover as the Deerfield Creek overflowed its banks. In Bennington County flooding occurred in Sunderland and Manchester as the Batten Kill River flooded.								
VERMONT, Southern Cont'd									
Windham County	28	0915EST-1100EST			0	0	10K	0	Flood
	Heavy rains produced flooding in Bellows Falls in Windham County.								

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
VIRGINIA, Northern									
VAZ021	05	1200EST-1500EST			0	0	?	?	High Winds
VAZ026	05	1200EST-1600EST			0	0	5K	?	High Winds
VAZ025	05	1200EST-1600EST			0	0	5K	?	High Winds
VAZ027	05	1300EST-1600EST			0	0	?	5K	High Winds
VAZ029	05	1400EST-1600EST			0	0	?	5K	High Winds
VAZ030	05	1400EST-1600EST			0	0	?	5K	High Winds
VAZ028	05	1400EST-1600EST			0	0	5K	?	High Winds
Sustained winds of 40 mph, with gusts in excess of 60 mph, blew down several trees at higher elevations (mainly above 2,000 feet) in the Shenandoah Valley and along the Allegheny Plateau. The winds were associated with the remains of Hurricane Opal, which was accelerating through the lower Ohio Valley during the afternoon of the 5th. In Waynesboro (VAZ025), a canopy over a service station was ripped off, causing \$1,500 in damage; in addition, some power lines were knocked down in the area. In S. Winchester (VAZ028), an estimated 2,000 customers were without power after a feeder lockout (7200 Volt) was knocked out. In Elkton (VAZ026), downed trees and lines contributed to power loss for 600 customers. The National Park Service reported dozens of trees blown down along Skyline Drive in Page and Warren Counties (VAZ029>030).									
Madison County Graves Mountain	05	1630EST-1700EST			0	0	15K	?	Flash Flood
Greene County Dyke	05	1715EST-1730EST			0	0	0	0	Flash Flood
Heavy showers associated with the remains of Hurricane Opal fell on areas that sustained heavy damage from the late June floods, producing minor flash flooding. In Greene County, near Dyke, an estimated three inches of rain fell in three hours pushing streams out of their banks, flooding several low-water bridges. In Madison County, an estimated five inches of rain fell on Graves Mountain, washing out a rebuilt bridge which was previously destroyed by the June floods.									
Prince William County Dale City	14	1542EST	.75	40	0	0	10K	0	Tornado(F0)
A pre-frontal squall line spawned a gustnado in a Dale City subdivision, uprooting or snapping tens of trees. Structural damage to homes was very minor, with the exception of homes which sustained damage from fallen large limbs. Small hail was also reported, an one resident claimed to see a funnel cloud.									
Nelson County	20	2045EST-2200EST			0	0	5K	0	Flash Flood
Rockingham County E portion	20	2100EST-2200EST			0	0	0	0	Flash Flood
Augusta County E portion	20	2130EST-2230EST			0	0	10K	0	Flash Flood
Warren County	20	2230EST-2330EST			0	0	0	0	Flash Flood
Page County	20	2230EST-2330EST			0	0	0	0	Flash Flood
Shenandoah County	20-21	2330EST-0130EST			0	0	1K	0	Flash Flood
Madison County	20-21	2330EST-0030EST			0	0	25K	0	Flash Flood
Heavy rains caused by upslope flow of deep tropical moisture produced flash flooding in the northern Shenandoah Valley during the late evening of the 20th. Notable rainfall totals were 6.98 inches at Devil's Knob (Nelson County), and 6.14 to 6.23 at Skyland and Big Meadows (Page County). Unconfirmed reports indicated isolated totals of between eight and nine inches. Rainfall totals over the central and northern Shenandoah Valley generally ranged from four to six inches. Moderate flooding forced evacuations in eastern Augusta County. In Waynesboro, 15 streets were closed to traffic, E. Main Street was cut-off, and several basements were flooded. In Mount Jackson (Shenandoah County), a couple was forced to evacuate a campground as their tent filled with water. In Madison County, a rebuilt bridge previously destroyed by the June 27th flood was washed away once again, cutting off the Middle River subdivision in the northeast portion of the county. Several roads were closed in Nelson County, and minor street flooding was reported in portions of Page and Warren Counties.									
Frederick County	20	2222EST			0	0	0	0	Thunderstorm Winds (G51)
A gust of 61 mph was reported in a thunderstorm as it passed through western Frederick County.									
Fairfax County Burke	21	0355EST			0	0	300K	0	Lightning
The cold front which produced flash flooding during the late evening of the 20th induced thunderstorms east of the mountains.									
VIRGINIA, Northern Cont'd									
One lightning strike hit a fast food restaurant in Burke, setting it ablaze and destroying it. Damage was estimated to be at least \$300 thousand.									
Spotsylvania County Partlow	27	1715EST-1720EST	2.75	100	0	0	100K	10K	Tornado(F1)
The third in a series of strong cold fronts interacting with unstable tropical air masses produced a broken line of mesocyclonic showers and thunderstorms. One intense cell deposited a strong F1 tornado in extreme southeastern Spotsylvania County just									

Storm Data and Unusual Weather Phenomena

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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
southeast of Partlow. Seven homes received minor damage, in the form of trimming, shingles, and siding; another was moved off it's foundation. In addition, eight sheds were destroyed, with projectiles from the sheds shattering a minivan window and penetrating to the interior wall of one home. Other property damage included a flipped camper and destruction of an unoccupied mobile home. Hundreds of trees were snapped or uprooted along the path, most in a densely wooded area near the end of the track.									
Rappahannock County Sperryville	28	1235EST			0	0	0	0	Thunderstorm Winds (G52)
	Thin but intense lines of thunderstorms moved through the northern Virginia piedmont region, causing winds in excess of 50 mph and pea-size hail between 1050 EST and 1530 EST. The only severe weather reported occurred in Sperryville. No damage was associated with the wind gust.								
VIRGINIA, Eastern									
Sussex County near Waverly	05	1220EST			0	0	0	0	Thunderstorm Winds
	Several trees down.								
Surry County	05	1235EST			0	0	0	0	Thunderstorm Winds
	Trees down along Routes 627 and 616.								
King, Queen County 2 SE West Point Shacklefords	05	1320EST	3	150	0	0	\$170K	0	Tornado (F1)
	Tornado made a discontinuous path in an area from near the West Point/King and Queen County Airport northeastward to near Shacklefords. Most significant damage occurred at the airport where four planes were overturned. Two were heavily damaged, and two were destroyed. Major damage was inflicted to the airport hangar. The tornado moved northeastward across rural/heavily wooded areas causing damage to the tops of trees, downing a few power lines and downing a few trees in the Shacklefords area before lifting.								
Isle of Wight County 3 SW Isle of Wight CH	05	1350EST	.1m	50	0	0	\$10K	0	Tornado (F0)
	Brief tornado touchdown uprooted a large oak tree and several cedar/pine trees, and tore roof off of garage.								
Isle of Wight County 4 ESE Isle of Wight CH	05	1357EST	.2m	100	0	0	\$10K	0	Tornado (F0/F1)
	Tornado touched down briefly in a wooded/farm area. Outbuildings damaged, trees tops blown out, several trees down. Damage occurred just north of Burnt Mills Lake.								
Mecklenburg County 2 E Chase City	27	1715EST			0	0	0	0	Hail (0.75)
	Mothball to dime-size hail.								
Mecklenburg County Skipwith	27	1758EST			0	0	0	0	Hail (0.75)
	Public report of dime-size hail.								
Goochland County nr Georges Tavern	27	1750EST			0	0	0	0	Thunderstorm Winds
	Numerous large limbs down.								
Mecklenburg County Chase City	27	1800EST			0	0	0	0	Hail (1.00)
	Dime to quarter-size hail reported by electric cooperative.								
Mecklenburg County 4 W Chase City	27	1800EST			0	0	0	0	Thunderstorm Winds
	Several trees down in vicinity of Highway 92.								
Hanover County 2 SE Montpelier	27	1800EST			0	0	0	0	Thunderstorm Winds
	Large limbs down near the intersection of Routes 33/54.								
Lunenburg County just W of C.H.	27	1804EST			0	0	0	0	Thunderstorm Winds
	Trees down across Route 49.								
Lunenburg County Victoria	27	1825EST			0	0	0	0	Hail (1.00)
VIRGINIA, Eastern Cont'd									
	Dime to quarter-size hail.								
Mecklenburg County South Hill	27	1830EST			0	0	0	0	Thunderstorm Winds
	Large tree blown down onto power lines. Approximately 550 customers without power.								
Nottoway County Blackstone	27	1845EST- 1850EST			0 0	0 0	0 0	0 0	Hail (1.50) Thunderstorm Winds
	Ping pong ball-size hail fell for about one minute. Tops of several trees were broken off. Three trees blown down onto power lines. Five hundred to 750 customers were without power.								
Louisa County	27	1845EST			0	0	0	0	Thunderstorm Winds
	Trees down.								

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Chesterfield County Bon Air	27	1845EST-1855EST			0	0	0	0	Thunderstorm Winds Several trees down. Numerous power lines down. Four thousand people were without power.
Nottoway County nr Crewe	27	1850EST			0	0	0	0	Thunderstorm Winds Two trees down onto Highway 460; one tree down onto Route 40.
Henrico County Richmond City	27	1855EST			0	0	0	0	Thunderstorm Winds Trees uprooted onto car, house and power lines.
Henrico County WRN portion	27	1900EST			0	0	0	0	Thunderstorm Winds Tree and large branches down west and northwest of the University of Richmond.
Hanover County Mechanicsville	27	1910EST			0	0	0	0	Thunderstorm Winds Two trees down on Highway 360 East.
Henrico County 2-3 NW of RIC Airport	27	1915EST			0	0	0	0	Thunderstorm Winds Tree and several large branches down.
Westmoreland County Potomac Mills	27	1920EST			0	0	0	0	Thunderstorm Winds Large oak tree knocked down onto power lines by thunderstorm winds.
Hanover County Hanover	27	1920EST			0	0	0	0	Thunderstorm Winds Two trees down near Sandy Valley Road and SR 634.
Hanover County Ashland	27	1925EST			0	0	0	0	Thunderstorm Winds Several trees and large limbs down, also in the Black Creek area.
Brunswick County nr Lawrenceville	27	1930EST			0	0	0	0	Thunderstorm Winds Three trees uprooted onto SR 642
VIRGINIA, Central									
Southwest West-Central Central Virginia Zones 007-009>020- 022>024- 032>035-	05	0730EST-1600EST			0	0	20K	?	High Winds
Grayson County Countywide	05	0800EST-1200EST			0	0	?	?	Flash Flood
Carroll County Wrn Portion	05	0800EST-1215EST			0	0	3K	?	Flash Flood

High winds and heavy rain associated with the remnants of Opal moved through southwest, west-central and portions of central Virginia on the 5th. Heavy rain from the remnants of Opal resulted in the flooding of several creeks and roads in Grayson and western Carroll Counties and a minor mud slide in Grayson County. Several roads were closed in Grayson County and a vehicle was swept off a road by flood waters six miles southwest of Fancy Gap in Carroll County. High winds between 35 and 45 mph with some gusts to near 55 mph downed numerous trees, large branches and power lines and knocked out power in some locations across southwest, west-central and portions of central Virginia. Most of the wind damage occurred at elevations above 2,000 feet. Some trees fell across roads which blocked traffic. A few traffic accidents occurred as a result of fallen trees on roadways. In Carroll County, a concrete block wall was knocked down by high winds at a grocery store that was under construction in Hillsville.

VIRGINIA, Southwestern

None reported.

VIRGINIA, Northwestern

None reported.

WASHINGTON

Pierce County Tacoma

05 1500PST 0 0 10K 0 **Lightning**
Lightning struck a fir tree and caused damage to it and to irrigation pipes running along the tree. It also knocked out six clocks that run the irrigation system.

WAZ-001>003

25 1700PST 0 0 30K 0 **High Winds (G68)**
The highest winds were reported in Bellingham, with winds gusting to 78 mph. About 8,000 customers had power outages. Whidbey Island Naval Air Station had gusts to 50 mph and a few damaged houses. Another house, near Olympia, was damaged when a tree fell through the roof.

WEST VIRGINIA, Northern

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
WVZ023 Preston County	05	1200EST			0	0	1K	0	High Winds
Large limbs were downed by high wind across the county as thremnants of what was once Hurricane Opal moved north through the area.									
WVZ041 Tucker County	05	1230EST			0	0	1K	0	High Winds
An 18-inch-diameter tree was downed by high wind in Parsons. A few large limbs were also downed.									
WVZ004 Marshall County	05	1640EST			0	0	1K	0	High Winds
Large limbs were downed on Route 250 near Moundsville.									
WVZ003 Ohio County	20	1700EST			0	0	1K	0	High Winds
A tree and some large branches were downed by high winds ahead of an intense frontal system in Wheeling.									
WVZ002 Brooke County	20	1711EST			0	0	1K	0	High Winds
A few trees were downed near Follansbee.									
WVZ004 Marshall County	20	1730EST			0	0	1K	0	High Winds
A tree and some large branches were downed by high winds in Moundsville.									
WEST VIRGINIA, Eastern									
WVZ048	05	1300EST-1500EST			0	0	?	?	High Winds
WVZ049	05	1300EST-1500EST			0	0	?	?	High Winds
WVZ054	05	1300EST-1500EST			0	0	?	?	High Winds
High gradient winds associated with the remans of Hurricane Opal knocked down trees along the higher peaks of the Allegheny Front in western Pendleton (WVZ054), Grant(WVZ048), and Mineral (WVZ049) Counties.									
WEST VIRGINIA, Southeastern									
Southeast Zones 042>045-	05	1030EST-1600EST			0	0	2K	?	High Winds
High winds associated with the remnants of Opal moved through southeast West Virginia on the 5th. High winds between 35 and 45 mph with some gusk to near 55 mph downed numerous trees, large branches and power lines and ripped shingles off of the roof of homes. The vast majority of damage occurred at elevations above 2,000 feet.									
WEST VIRGINIA, Western									
WVZ005-006-007-008-009-010-011-013-014-015-016-017-018-019-020-024-025-026-027-028-029-030-031-032-033-034-035-036-037-038-039-040-046-047	05	0500EST-1600EST			0	0	0	0	Heavy Rain
The remnants of Hurricane Opal passed just west of the region during the afternoon. Its fast movement allowed for onyl beneficial rains of .5 to 1.5 inches. Despite winds of only 20 to 30 mph, Huntington's pressure of 29.25 inches was the lowest barometer reading on record for any October. Charleston's pressure of 29.26 inches was also a record low for the month fo October. Some schools were dismissed early as a precaution.									
WISCONSIN, Northwest									
WIZ002>004-007>009 NW Wisconsin	21	0330CST-1130CST			0	0	?	0	Heavy Snow
Twelve inches of lake-effectsnow fell in the Hurley areas. Three to seven inches of lake-effect snow fell elsewhere in the Lake Superior snow belt of Northwest Wisconsin. The heavy snow area extended about 20 miles inland from the shore.									
WISCONSIN, Southeast									
Winnebago County Oshkosh	02	2223CST			0	0	?	?	Lightning
Lightning struck a home on the south side of Oshkosh, resulting in a fire which caused major damage to the second-floor ceiling and the roof.									
WIZ071- Southeast Wisconsin	10	1300CST			0	9	0	0	High Winds
Strong gradient winds blew over a cow shæter just northwest of Waterford. Nine children were injured when the shelter toppled on them.									
WIZ001>072- Statewide	12	1400CST-1700CST			0	0	0	0	Record Warmth
Unseasonable warmth under full sunshine allowed temperatures to reach record levels in the 80s across Wisconsin.									
Columbia County Portage	19	1340CST			0	0	?	0	Lightning
Ozaukee County 3 NE of Fredonia	19	1530CST			0	0	53K	5K	Lightning
A thunderstorm's lightning bolt hit a substation in Portage (Columbia County), temporarily shutting down electrical service to									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
630 customers. Another thunderstorm's lightning struck a barn northeast of Fredonia (Ozaukee County). A delayed fire eventually burned this barn down, and destroyed a stored hay crop. The fire killed 26 cows which were inside the barn.									
WIZ005- Northcentral Wisconsin	21	0400CST- 1130CST			0	0	?	0	Heavy Snow
An early season heavy lake-effect snow squall extended well downstream into northcentral Wisconsin. Five to seven inches of snow fell in Vilas County. Phelps had the highest total with seven inches, while both Eagle River and Boulder Junction picked up five inches. Some tree branches broke due to the weight of the snow. Accumulations of two to four inches were noted further south in Vilas, Oneida, and Taylor counties.									
WIZ064>066-071-072- Southeast Wisconsin	23	1600CST- 2000CST			0	0	?	0	High Winds
Oneida County 7 N Three Lakes	23	1800CST			0	0	?	0	Lightning
High winds toppled large trees and power lines in scattered locations of Jefferson, Waukesha, Milwaukee, Racine, and Kenosha Counties.									
Columbia County Pardeeville	27	1520CST			0	0	?	0	Lightning
An isolated thunderstorm's lightning struck a large tree. One of the large split pieces hit a nearby home with such force that it pushed the home slightly off its base. Several of the homes windows were shattered and its electrical wiring sustained damage.									
WISCONSIN, Western									
None reported.									
WYOMING									
WYZ001 Northwest Corner	03	2000MST- 04 0900MST			0	0	0	0	Heavy Snow
Three to nine inches of snow fell in Yellowstone National Park.									
WYZ014-023- 025-061>066 South Central	04	0800MST- 04 1600MST			0	0	0	0	Heavy Snow
Three to seven inches of snow fell in south central Wyoming, with five to ten inches in the Snowy and Laramie ranges.									
WYZ067-070 Southeast Plains	05	0000MST 05 0700MST			0	0	0	0	High Winds (G57)
Strong winds gusted between 58 and 66 mph over the southeast plains. The strongest gust recorded was 66 mph, ten miles south-southwest of Torrington.									
WYZ001 Northwest Corner	07	0400MST- 1600MST			0	0	0	0	Heavy Snow
Four to eight inches of snow fell over Yellowstone National Park. The largest amount was ten inches at Craig Pass.									
WYOMING Cont'd									
WYZ010 Northwest Fremont County	17	2200MST- 18 1100MST			0	0	0	0	Heavy Snow
Eight inches of snow fell at Brooks Lake in extreme northwest Fremont County.									
WYZ061 Carbon County	18	1147MST- 18 1837MST			0	0	0	0	High Winds
Rawlins had sustained winds from 40 to 45 mph with gusts to 55 mph.									
WYZ001>006-008>015- 017-022>025-050>070 All Except the Southwest Corner	21	2200MST- 23 0900MST			0	0	.1M	0	Winter Storm
Heavy snow and strong winds caused blizzard conditions over much of Wyoming. Snowfall amounts ranged from four inches at Rock Springs and Gillette to seventeen inches at Casper Mountain. Generally, six to ten inches of snowfall was common. Winds gusted to 55 mph and caused blizzard conditions with drifts up to five feet deep. Reported drifts of two to four feet were common. Many roads were closed from the 22nd to the afternoon of the 23rd due to drifting and near zero visibilities. Many travelers were stranded across the state until the 23rd and a number of hunters had to be rescued. Power was out for a time in various places, due to downed power lines from the heavy snow and strong winds.									
WYZ061-WYZ070 South Central and Southeast	26	0300MST- 26 1400MST			0	0	8K	0	High Winds (G63)
Strong winds occurred over south central and southeast Wyoming. Winds frequently gusted over 58 mph, with the highest gusts being 72 mph, ten miles south of Wheatland at 0609 MST and eight miles southeast of Wheatland at 0820 MST. The strong winds blew over several tractor-semitrailers at the Guernsey Exit on Interstate 25 at 0630 MST.									
WYZ001-002 Northwest Corner	28	2200MST							

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Property Damage	Crops	Character of Storm
	29	1000MST			0	0	0	0	Heavy Snow Heavy snow fell over Yellowstone National Park and the northwest part of the Absaroka Range. Snowfall of four to eight inches was common, with eight inches reported at Sunlight Basin and near the northeast entrance to Yellowstone National Park.
WYZ002>004-015-050>060									
Northern Wyoming	31	0800MST			0	0	0	0	Heavy Snow Heavy snow fell over parts of northern Wyoming. The greatest amounts reported were eleven inches at Lusk and six inches at Cody.
	31	1700MST			0	0	0	0	Heavy Snow
ALASKA, Northern									
AKZ024-AKZ005	29	1600AST-			0	0	0	0	High Wind/Blizzard A strong weather front moving northeast over the Bering Sea produced winds sustained 40 mph with gusts from 50 to 55 mph, reported at Tin City on the Bering Strait Coast, and Gambell and Savoonga on Saint Lawrence Island. Kotzebue and locations to the north in Zone 5 received near blizzard condition and sustained winds to 40 mph for several hours.
	30	1600AST			0	0	0	0	High Wind/Blizzard
AKZ006	30	0000AST-1500AST			0	0	0	0	Coastal Flood A strong weather front and circulation system moving northeast in the Bering Sea produced a storm surge across Norton Sound as well as nearby coastal areas. Only damage reported was at Nome: minor beach erosion in low-lying areas, some minor property damage affecting three to four residences. Water was underneath one very low-lying house on stilts, but not in the house.
ALASKA, Southern									
Middleton Island Dutch Harbor	01-02				0	0	?	?	High Winds A 975 mb low located south of Cold Bay Saturday, continued to move east northeast through the Gulf of Alaska, weakening to 987 mbs just southeast of Middleton Island at 10 am Monday (10/2). Wind gusted to 44 mph both days at Middleton Island and to 45 mph at Dutch Harbor on Sunday (10/1).
Aleutians Ak Peninsula Southwest Coast	04-06				0	0	?	?	High Winds A moderate 986 mb low moved across the northwest Pacific to 180 miles south of Shemya early Wednesday (10/4), continuing northeast into western Bristol Bay where it began to weaken late Friday (10/6). On Wednesday, winds gusted to 56 mph at Shemya. On Thursday winds reached 41 mph at Adak, 53 mph at Cold Bay, 50 mph at Port Heiden and 40 mph at Mekoryuk (on Nunivak Island). On Friday, behind the low, winds reached 45 mph at Dutch Harbor.
Central N Gulf Coast	07				0	0	?	?	High Winds
ALASKA, Southern Cont'd									
									A frontal low developed 450 miles south southwest of Kodiak early Friday (10/6) then moved to 90 miles south of Middleton Island as a 978 mb center early Saturday (10/7). The low then began to slowly weaken and move eastward, dissipating just onshore of Cape Yakataga Sunday morning (10/8). Winds with this system reached 54 mph at Middleton Island and 43 mph at Seal Island in Prince William Sound.
Aleutians	06-10				0	0	?	?	High Winds An intense 967 mb low off the southern tip of Kamchatka at 10 am Friday (10/6) moved into Bristol Bay where it began to dissipate at 1600 Sunday (10/8). Another 980 mb low developed just southeast of Kodiak on the front and looped slowly east southeastward, weakening 200 miles south of Yakutat at 10pm Monday (10/9). Winds reached 65 mph at Shemya on Friday, 50 mph at Adak on Saturday, 45 mph at Dutch Harbor on Friday, 41 mph at Saint Paul on Monday, 38 mph at Cold Bay on Monday and Tuesday and 39 mph at Port Heiden on Tuesday.
Kodiak Island Alaska Peninsula	15-16				0	0	?	?	High Winds A complex 994 mb low 330 miles south of Sand Point looped counterclockwise, ending up as a 995 mb center 360 miles south of Kodiak early Monday (10/16). The low then continued to drift counterclockwise, weakening to a 995 mb center near Kodiak early Wednesday (10/18). Winds reached 40 mph in gusts at Kodiak and 44 mph at Sitkinak Island (off the southwest coast of Kodiak Island) on both Sunday (10/15) and Monday (10/16). Gusts got up to 39 mph at Port Heiden along the Alaska Peninsula on Sunday.
Aleutians	16-18				0	0	?	?	High Winds A moderate 988 mb low moved off the Kamchatka south coast to about 90 miles southwest of Attu early Monday (10/16). The low then headed east southeast into the north Pacific...450 miles south of Dutch Harbor...early Wednesday (10/18). Wind gusts reached 43 mph at Shemya on Monday and 48 mph at both Adak and Dutch Harbor on Wednesday.
Alaska Peninsula Kodiak Island Central N Gulf Coast	18-20				0	0	?	?	High Winds A complex North Pacific low deepened to 968 mbs 300 miles south of Kodiak at 10 pm Wednesday (10/18). Part of the low moved to 120 miles east of Kodiak at 10 am Thursday (10/19). The low then looped eastward and began to weaken to 988 mbs 240 miles south of Cape Yakataga Friday morning. Wind gusts on Thursday reached 67 mph at Middleton Island, 45 mph at Sitkinak Island (just southwest of Kodiak Island), and 44 mph at both Cold Bay and Kodiak.
Alaska Peninsula Kodiak Island									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
Middleton Island	20-22				0	0	?	?	High Winds
									A deepening low moved north northeast to 400 miles south of King Salmon Saturday (10/21) morning. The low intensified to a 971 mb center and moved to 360 miles south of Seward early Sunday (10/22) then turned eastward and began to weaken. Wind gusts reached 48 mph at Cold Bay on Saturday and Sunday, 68 mph at Sitkinak Island on Saturday, 53 mph at Kodiak on Saturday, 56 mph at Middleton Island on Sunday and 45 mph at Dutch Harbor on Saturday.
Western Aleutians	22				0	0	?	?	High Winds
									A moderate low 240 miles south southwest of Amchitka early Sunday (10/22) curved northwest and deepened to a 967 mb center 150 miles south of Shemya. This storm brought wind gusts of 47 mph to Shemya and 40 mph to Adak.
Central Gulf Coast	22-23				0	0	?	?	High Winds
									A moderate weather front moved northward through the Gulf of Alaska, making landfall along the central North Gulf Coast Saturday. Winds reached 61 mph at Middleton Island, 48 mph at Cordova and 58 mph at Seal Island.
Ak Peninsula Kodiak Island Middleton Island	24-25				0	0	?	?	High Winds
									A complex 971 mb low deepened 60 miles east of Kodiak Tuesday (10/24). The low then began to weaken and drift eastward through the Gulf of Alaska Wednesday. The arctic front, draped around the low, crossed Kodiak Island very early Wednesday. Strong northwest winds developed over exposed areas after the arctic frontal passage. Winds ahead of the low were also gusty, especially at Middleton Island. On Tuesday, winds reached 45 mph at Cold Bay, 48 mph at Cape Newenham, 50 mph at Middleton Island, 48 mph at Cordova and 50 mph at Seal Island in Prince William Sound. Wind gusts reached 46 mph at Sand Point on both Tuesday and Wednesday, 46 mph at Port Heiden on Wednesday, 67 mph at Sitkinak and 50 mph at Kodiak on Wednesday. Wind gusts over 70 mph were reported in the Barren Island area between Kodiak and the Kenai Peninsula.
Southern Alaska	26-31				0	0	50K	?	High Winds, Coastal flooding
									A 978 mb low moved northeastward into the extreme Western Aleutians late Thursday (10/26). The low deepened to a 972 mb center 240 miles north northeast of Shemya late Friday (10/27) then moved to 120 miles southwest of Saint Matthew Island early Saturday (10/28). The low remained nearly stationary, dissipating late Saturday as an intensifying frontal low in the North Pacific moved northeast to 120 miles south of Saint Paul early Sunday (10/29) then to 120 miles north northwest of Saint Paul Island as an intense 958mb center Sunday afternoon (10/29). The low remained nearly stationary and slowly weakened to 982 mbs late Monday (10/30). The frontal system associated with this intense storm drifted

ALASKA, Southern Cont'd

east...extending from the southwest Alaska Range through Kodiak Island and southeastward at 9pm Monday (10/30). The low caused local coastal flooding along the southwest Alaskan coast Sunday. Maximum wind observations at selected sites were: Shemya 10/26 52 mph. From the 28 - 30th maximum winds each day ranged from 41 - 44 mph. Adak 10/27...55 mph. 10/29...44 mph. 10/30...40 mph. Saint Paul 10/29...55 mph. Cold Bay 10/27...48 mph. 10/28...59 mph. 10/29...86 mph. Wind damage. New modular home had about one third of the roof blown off, two hanger doors were blown out, plywood building located at the city's new water house was demolished, several houses had siding or roofing torn off. Due to the construction projects, materials were laying about and debris was flying...causing minor damage to several automobiles and trucks. A tug in the bay could not maintain steering in the wind and had to cut the barge in tow loose. They picked the barge off the beach during high tide on the afternoon of the 29th, with no damage to the barge or its contents. False Pass 10/28-29...Midnight wind south 70 mph with "much higher gusts" lasted through morning (10/29). By 0900 winds had "begun to lay down". Few skiffs blown around. King Cove...10/28-29...South and southeast wind gusts "in the 60s (mph)". Harbor was closed at 1800 10/28 based on forecast received from NWS Cold Bay at 1700. All boats headed to Deer Island to hide and wait out incoming storm. Docks were reopened at 1500 10/29 when winds shifted southwest and diminished less than 20 mph. Sand Point 10/27...40 mph. 10/28...50 mph. 10/29...58 mph Nelson Lagoon...10/28-29...Wind reached 60mph+ during the morning of 10/29. Wind and high tide from 1330 to 1500 washed all material from under the new boat ramp (concrete) rendering the ramp unusable. Damage estimated \$250,000, primarily due to transportation coasts. The staging area will also need new gravel and some construction work. Akutan (school) 10/29...79 mph at about 0500. Port Heiden 10/28...47 mph. 10/29...67 mph. Cape Newenham 10/29...70 mph. Togiak 10/29...73 mph. Wind damage and minor coastal flooding (slough backup). Saint Paul 10/29...55 mph. 10/30...40 mph. Egegik 10/29...60 mph. Dillingham 10/29...62 mph. King Salmon 10/28...43 mph. 10/29...48 mph. Iliamna 10/29...52 mph. 10/30...40 mph. Sitkinak 10/29...41 mph. Kodiak 10/30...45 mph. Bethel 10/29...55 mph. Minor damage to planes. Tides 5 1/2 to 6 feet above mean high tide. Mekoryuk (Nunivak Island) 10/27...53 mph. 10/28...50 mph. 10/29...62 mph. 10/30...48 mph. Hooper Bay 10/27...53 mph. 10/28...50 mph. 10/29...62 mph. 10/30...48 mph. Wind damage and minor coastal flood damage. Aniak 10/29...45 mph. Sleetmute 10/29...41 mph. Sparrevohn Air Force Base 10/29...56 mph. Farewell Lakes 10/28...47 mph. 10/29...62 mph. 10/30...50 mph. Saint Mary's 10/29...53 mph. Middleton Island 10/30 and 31...48 mph. Quinhagak (pronounced Quinahak)...Wind gusts 80+ mph. Airplane totaled. Tin roofs damaged. Chevak (near Hooper Bay)...High water backed up on rivers and sloughs. Estimated wind gusts 60+ mph. Tin blown off roofs and one house slid (blown off) foundation. Toksook Bay...Tides well above normal (5-6 feet Saturday and 6-7 feet Sunday night). Wind gusts up to 70 mph observed

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property	Crops	Character of Storm
<p>Sunday. Resident reported "The bay was 'raging' with 25 foot waves...and that there had never been this high tide and wave in the bay." 18 foot Lund boat with 55 hp engine was flipped. Wooden herring fishing boat was damaged by wind driven ice. Another Lund was destroyed at the "base of the cliff".</p>									
ALASKA, Southeastern									
Data not received.									
HAWAII									
Maui HIZ003 Hawaii HIZ004	21-23		0	0	0	0	0	0	High Winds
High winds hit the volcano summits of Maui and Hawaii. Winds to 55 mph were reported on Haleakala, Maui, and to 75 mph on Mauna Kea, Hawaii.									
PACIFIC									
None reported.									
PUERTO RICO									
Utuaado	01	1624AST			0	0	0	0	Heavy Rain
Heavy rains caused a landslide at Barrio Rio Abajo, Road 10, km. 63.2.									
Culebra	09	1130AST			0	0	0	0	Hail (0.25)
A pilot reported hail in a thunderstorm near Culebra.									
Culebra	09	1134AST			0	0	0	0	Waterspouts
A pilot reported three waterspouts within four miles of Culebra.									
Toa Alta	10	1500AST			0	0	5K	0	Urban Flood
Civil Defense reported some flooded houses in Toa Alta.									
PUERTO RICO Cont'd									
Lares	16	1625AST			0	0	2K	0	Urban Flood
Two houses were reported flooded in the town of Lares at the Guajataca sector.									
Moca	16	1600AST			0	0	1K	0	Thunderstorm Winds
A ham radio operator reported uprooted trees, a downed antenna and a loosened tin roof at Barrio Capa.									
San Sebastian	16	1625AST			0	0	2K	0	Heavy Rain
Several houses at the Juncal #111 sector were affected by the rains.									
San Sebastian	16	PM			0	0	0	0	Thunderstorm Winds
Uprooted trees were reported at the El Pepino urbanization.									
Juana Diaz	20	1857AST			0	0	0	0	River Flood
River Rio Guayo was reported out of its banks at Barrio Jacaguas, Road P.R. 580.									
Santa Isabel	20	1850AST			0	0	0	0	River Flood
River Rio Coamo was reported out of its banks at Barrio LLaves. Road P.R. 545 was reported impassable since the bridge at Davia sector was underwater.									
PRZ005-	21	PM			0	0	0	0	Heavy Rain
Localized flooding of small streams, roads and streets was reported in Aguas Buenas, Barranquitas, Caguas, Cidra, Comerio, Corozal, Morovis and Narrowanjito.									
Arecibo	24	2315AST			0	0	0	0	Urban Flood
Camuy	24	2315AST			0	0	2K	0	Urban Flood
Hatillo	24	2315AST			0	0	0	0	Urban Flood
Lares	24	2315AST			0	0	0	0	Urban Flood
Manati	24	2315AST			0	0	0	0	Urban Flood
Camuy	24	2315AST			0	0	0	0	Thunderstorm Winds
Low lying areas and streets were reported flooded. Knocked down trees and a flooded house were reported in Camuy.									
Humacao	25	PM			0	0	0	0	Hail (0.25)
Las Piedras	25	PM			0	0	0	0	Hail (0.25)
Naguabo	25	PM			0	0	0	0	Hail (0.25)
A radio station reported hail.									
Guaynabo	26	1420AST			0	0	0	0	Hail (0.25)
Civil Defense reported pea-size.									
Guaynabo	26	1618AST			0	0	2K	0	Urban Flood
A residence was reported flooded with mud and water at Urbanization Melloce, Tejas St. R-32.									
Vega Baja	26	1550AST			0	0	0	0	Urban Flood
The patio of a house was reported flooded at Barrio Almirante Sur, Road 160. It was a poorly drained and low lying area.									
San Juan	26	1545AST			0	0	0	0	Urban Flood
Escorial Street in Puerto Nuevo was reported flooded due to poor drainage and clogged sewers.									
Guaynabo	26	1425AST			0	0	0	0	Urban Flood
Flooding of low lying areas at Barrio Cano Tollen due to poor drainage.									
Guaynabo	26	1540AST			0	0	0	0	Flash Flood
A small stream went out of its banks flooding a house patio at Los Alamos housing project.									
Guaynabo	26	1535AST			0	0	0	0	Thunderstorm Winds
A downed tree was reported at Camino Alejandrino Road, km 16.									

Storm Data and Unusual Weather Phenomena

October 1995

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
Rio Piedras	26	1535AST			0	0	0	0	Thunderstorm Winds
			A downed power line was reported at the Monacillos sector, John Correa St. km 3.4.						
Guaynabo	27	1350AST			0	0	0	0	Urban Flood
			Martinez Nadal Avenue was reported impassable.						
Comerio	28	1415AST			0	0	0	0	Thunderstorm Winds
			Downed power poles and lines were reported along Road 775, km. 6.5.						
Comerio	28	1415AST			0	0	5K	0	Urban Flood
			Civil Defense reported flooded houses.						
Cayey	28	1415AST			0	0	2K	0	Urban Flood
			Civil Defense reported a flooded residence in Cayey.						
PRZ005-	28	1434AST			0	0	0	0	Landslides
			Landslides were reported in Cayey, Coamo, and Toa Alta.						
VIRGIN ISLANDS									
St. Croix	13	1545AST			0	0	0	0	Waterspouts
			A pilot reported three waterspouts northwest of St. Croix moving west.						
St. Croix	26	1400AST			0	0	0	0	Waterspout
			A pilot reported a waterspout near St. Croix.						

STORM DAMAGE CATAGORIES

REFERENCE NOTES

- 1 Less than \$50
- 2 \$50 to \$500
- 3 \$500 to \$5,000
- 4 \$5,000 to \$50,000
- 5 \$50,000 to \$500,000
- 6 \$500,000 to \$5 Million
- 7 \$5 Million to \$50 Million
- 8 \$50 Million to \$500 Million
- 9 \$500 Million to \$5 Billion

- O/Blank None reported.
- * Miles instead of yards.
- ** Yards instead of miles.
- @ Includes heavy sleet storm.
- # Freezing drizzle and freezing rain, commonly known as glaze.
- ≠ Report incomplete.
- ≠≠ Report not received.
- o/c Indicates Crop Damage amount is included in the value given for property damage.

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.

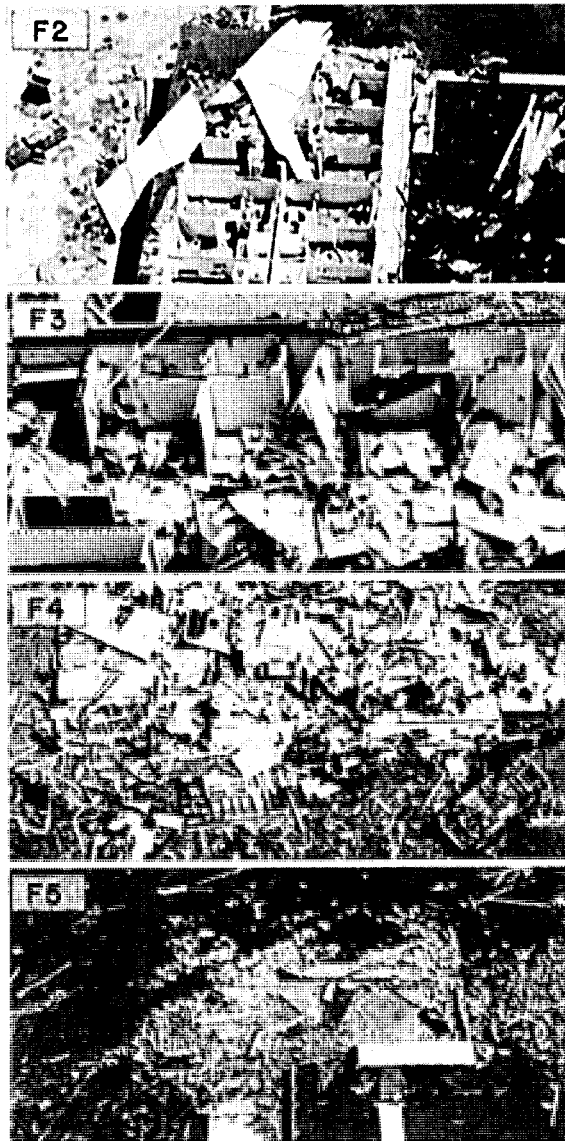
(F3) Severe tornado (158-206 mph): Severe damage
Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.

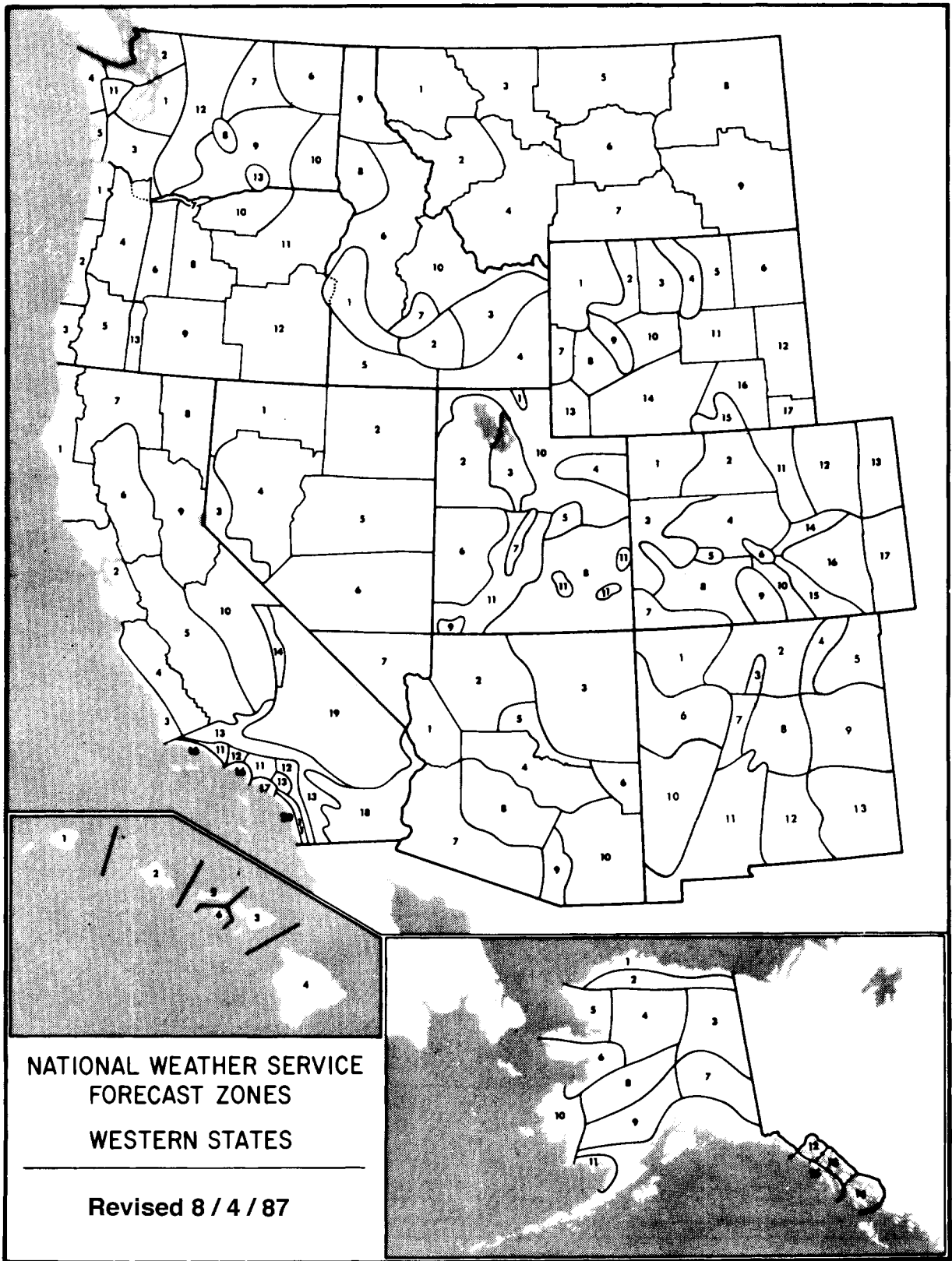
(F4) Devastating tornado (207-260 mph): Devastating damage
Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.

(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
-

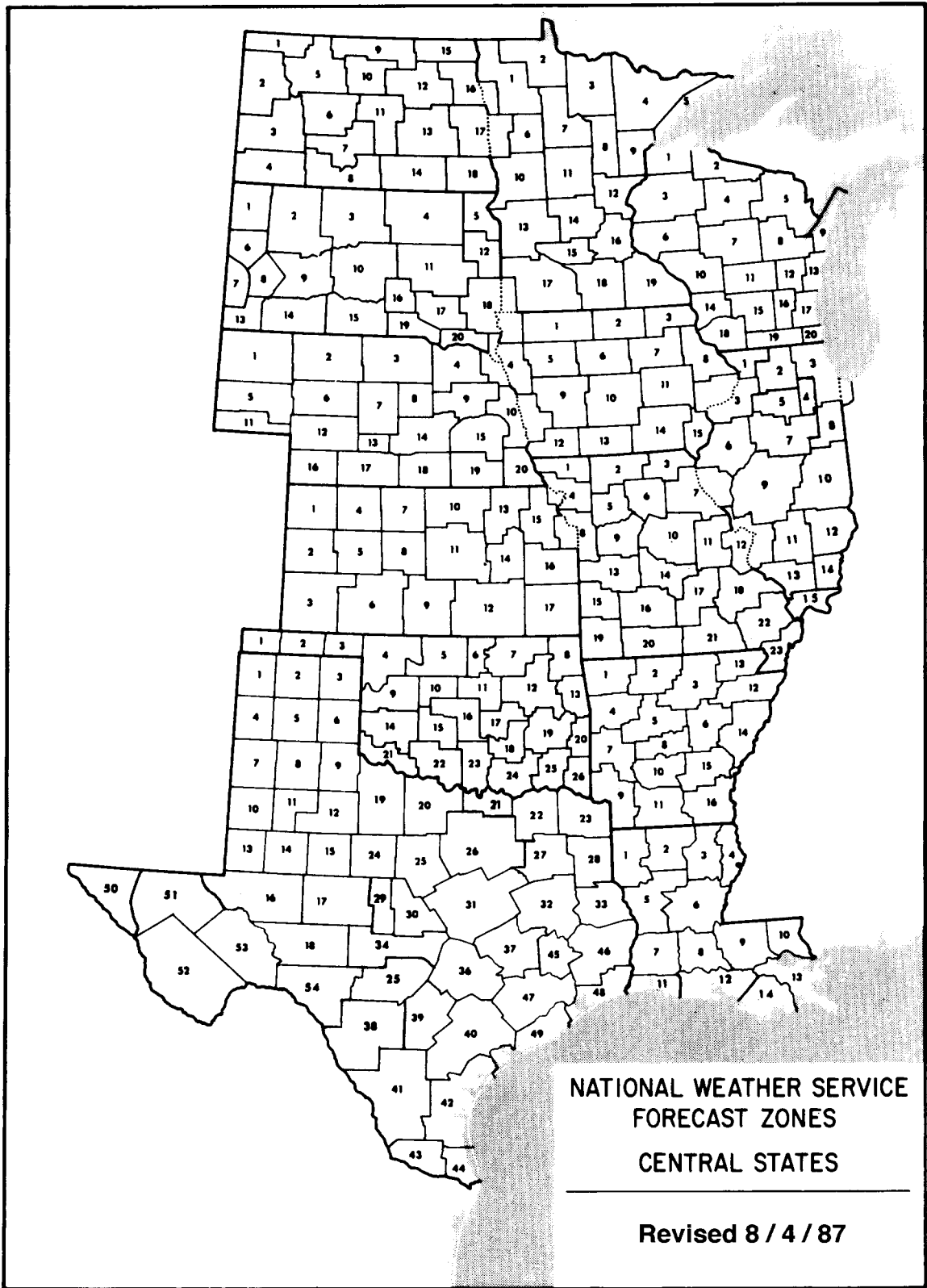




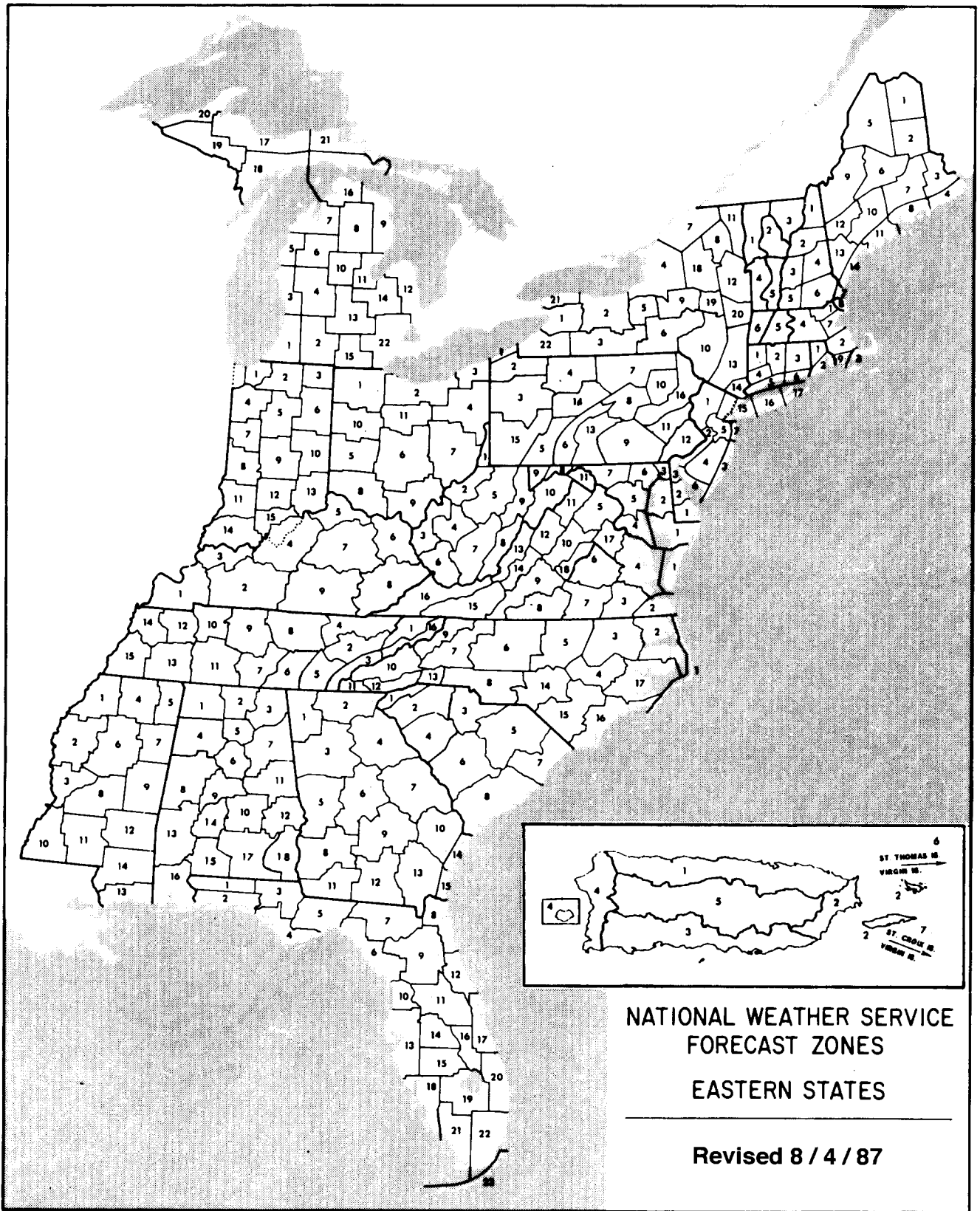
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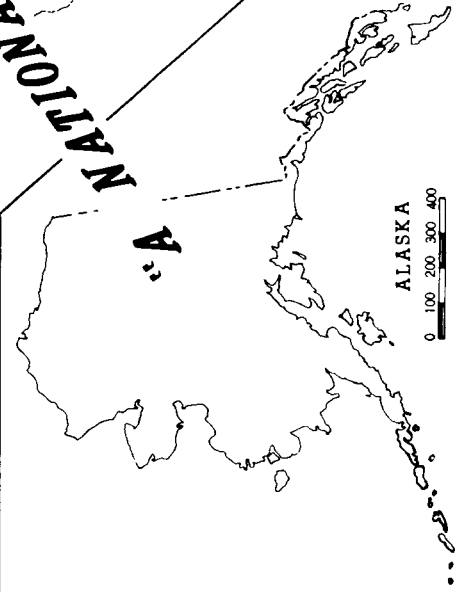
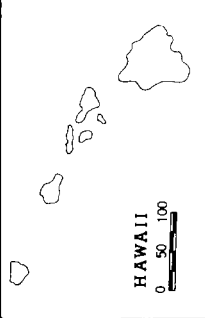
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The Annual issue contains monthly and annual averages of temperature, precipitation, temperature extremes, freeze data, soil temperatures, evaporation, and a recap of monthly cooling degree days.

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