



National Weather Service

Storm Data and Unusual Weather Phenomena



August 2001

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

DISTRICT OF COLUMBIA

DCZ001

District Of Columbia

06	0800EST				0	0	
10	2000EST						Excessive Heat

High pressure brought ample sunshine and warm southerly winds to the region between the 6th and the 10th. Afternoon temperatures soared into the 90s each day and dew points in the 60s pushed heat indices to between 98 and 112 degrees. At Washington Reagan National Airport, high temperatures recorded between the 6th and the 10th were 91, 95, 97, 97, and 96 degrees. In addition, overnight heat indices did not drop below 80 degrees on the 9th and 10th because the mercury never fell below the upper 70s. A "code red" alert was issued by environment officials in the Washington D.C. metropolitan area on August 8th and 9th due to bad air quality.

District Of Columbia

Countywide

10	1430EST				0	0	
	1515EST						Flash Flood

Rhode Island Avenue was inundated with water

A thunderstorm with very heavy rainfall moved through the District between 3 and 5 PM EDT. Downpours flooded a number of roads in Northeast D.C. including Rhode Island Avenue. A total of 2.68 inches of rain was recorded at Dupont Circle.

District Of Columbia

Countywide

11	1530EST				0	2	6M	
	1730EST							Flash Flood

Over 3000 homes and businesses and almost 50 government buildings were damaged after 6 inches of rain fell in less than 3 hours.

Showers and thunderstorms with very heavy downpours formed over the District for the 2nd straight day around 3 PM EDT and remained near stationary over all but far Southeast D.C. through 6 PM. These storms dumped between 5 and 7 inches of rain in less than three hours which caused the worst flash flooding the city had experienced since 1944. Damages to public and private property totaled around \$6 million and the city was given a Presidential Major Disaster Declaration. The hardest hit areas were along Rhode Island Avenue between 2nd and 5th Streets NE and along U Street between 11th and 14th Streets. Over 3300 homes and private businesses requested assistance for flood damage. Few victims that reported damage to their homes had flood insurance and 90% were low income. Over 8000 customers in a 35-block area around Dupont Circle lost power for more than 24 hours. Numerous residents reported damage when sewers backed up into their homes and businesses through toilets and sinks. The American Red Cross served nearly 45,000 meals to flood victims and housed 6 displaced families.

The city government noted significant flood damage to 30 schools, 6 hospitals, 7 libraries, Rock Creek Park, countless roads, and much of the 130-year-old sewer infrastructure. Water seeping into wires in the sewer system cause manhole covers to explode. A sewer line in a parking lot near the intersection of MacArthur Boulevard and 48th Place NW ruptured, opening a 20-foot-wide and 25-foot-deep sinkhole which swallowed an unoccupied car. A series of pumping stations were damaged from ingestion of flood debris. Several motorists were stranded by high water. Areas along Rock Creek saw mud slides and more than two dozen downed trees. Rock Creek Parkway was closed by debris between Virginia and Cathedral Avenue. A car on Broad Branch Road stalled in flood waters from Rock Creek. A man and his pregnant wife were partially swept downstream while trying to exit the vehicle. Both people were rescued by another motorist and were treated for minor injuries. The bridges across Broad Branch Road and Beech Drive NW were damaged by rushing water. A mudslide on Macomb Street NW pushed a house 12 feet off its foundation. The Metro subway system received \$1 million damage to rolling stock and escalators as a result of flooding in underground stations. Two stations which had flooding on the mezzanine and platform levels had to remain closed until the flood waters receded. A rain gauge at Quebec Street NW with a capacity of 7.25 inches overflowed during the 3 hour deluge. Additional rainfall totals included 6.24 inches at Dupont Circle, 5.53 inches a mile from Dupont Circle, and 5.36 inches at Dalecarlia Reservoir.



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MARYLAND, Central

Allegany County

Southwest Portion	03	1546EST 1830EST			0	0			Flash Flood
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Several roads were closed by flooding after George's Creek and other waterways overflowed.

An area of thunderstorms with very heavy rainfall and frequent lightning remained stationary over southwest Allegany County between 4 and 7 PM EDT on the 3rd. Radar estimated that three inches of rain fell along Dan's Mountain near the border of Grant County. This caused George's Creek to overflow its banks and flood Old Route 936 between Midland and Shaft. Property between Midland and Shaft was also damaged by a "wave of water" that cascaded down Dan's Mountain. The most concentrated area of flooding was in the community of National where several roads were closed

Allegany County

West Portion	04	1300EST 1530EST			0	0			Heavy Rain
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Thunderstorms with heavy rainfall moved through the western portion of Allegany County between 2 and 5 PM EDT on the 4th. Heavy rain the day before had saturated the soil and weakened the root support of trees. When heavy rain fell again on the 4th, a few trees were pushed over onto roads in the Claresville area. Runoff also washed debris onto roads in the Vale Summit and Claresville areas.

MDZ002>007-009>011-013>014-016>018

Allegany - Washington - Frederick - Carroll - Northern Baltimore - Harford - Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert

06 10		1300EST 2000EST			3	0			Excessive Heat
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High pressure brought ample sunshine and warm southerly winds to the region between the 6th and 10th. Afternoon temperatures soared into the 90s and dew points in the 60s pushed heat indices to between 98 and 112 degrees. At Baltimore/Washington International Airport a high temperature of 98 degrees was reported on the 9th and 10th. A high temperature of 96 degrees was recorded on the 7th and 97 degrees was recorded on the 8th. At the Inner Harbor of Baltimore, a high temperature of 101 degrees was recorded on the 9th and a high of 99 degrees was recorded on the 7th, 8th, and 10th. Overnight lows in the heat island of downtown Baltimore only dropped into the lower 80s on the 9th and 10th. In Hagerstown, the high temperature on the 7th and 9th was 96 degrees and on the 8th was 95 degrees. A "code red" alert was issued by environment officials in the Washington D.C. and Baltimore metropolitan area on August 8th and 9th due to bad air quality. Medical professionals reported treating several people for heat related illnesses during the period. Nine people were transported to hospitals for heat related injuries in Harford County. Eight people were treated for heat illness in Calvert County. In Anne Arundel County, five people required medical attention. Three people died from heat exhaustion in their un-air-conditioned Baltimore City homes on the 9th. The victims were two males ages 50 and 75 and one female age 75. M50PH, M75PH, F75PH

Prince George'S County

North Portion	10	1445EST 1500EST			0	0	3K		Thunderstorm Wind
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Trees and wires were downed.

Calvert County

Countywide	10	1730EST			0	0	5K		Thunderstorm Wind
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Several trees were downed.

Charles County

5 E La Plata	10	1745EST			0	0	2K		Thunderstorm Wind
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Trees were downed onto Route 6.



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MARYLAND, Central

St. Mary'S County

Lexington Park	10	1800EST			0	0	10K		Thunderstorm Wind
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Trees were downed and structures received minor damage.

Thunderstorms with high winds moved through south central Maryland between 3:30 and 7:00 PM EDT. In Prince George's County, trees and wires were downed in Landover and Mt. Rainier. In the Glen Dale and Bowie areas, dozens of trees were downed, houses were damaged, and heavy objects were thrown about. Rainfall reports included 2.60 inches in Oxen Hill and 2.09 inches in Landover. In Charles County, trees were downed along Route 6 five miles east of La Plata. In Calvert County, several trees were downed. In St. Mary's County, a downburst of wind hit the Essex Drive area of Lexington Park. A boat was pushed at a 45 degree angle and the boat cover was never found. A privacy fence was knocked down and several trees and large limbs were downed in the vicinity. One home had a portion of siding ripped off. A wind gust of 40 MPH was recorded in Hollywood and a wind gust of 47 MPH was reported in Oraville. Countywide, two sheds and three homes were hit by lightning.

Harford County Countywide

	11	1345EST 1500EST			0	0			Flash Flood
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Several roads including Route 7 were flooded

Harford County 4 E Edgewood

	11	1345EST			0	0	120K		Thunderstorm Wind
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A downburst estimated between 60 and 70 MPH downed several trees and damaged the Flying Point Marina.

Harford County 4 E Edgewood

	11	1345EST			0	0			Waterspout
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A microburst spawned a small waterspout on the Bush River.

Harford County Bel Air

	11	1400EST			0	1			Lightning
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A man was struck by lightning while climbing a ladder in his attic.

Montgomery County Countywide

	11	1515EST 1730EST			0	0			Flash Flood
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Several roads were flooded after streams overflowed.

Howard County Clarksville

	11	1538EST			0	0	100K		Lightning
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A home was damaged by lightning.

Howard County Countywide

	11	1545EST 1730EST			0	0			Flash Flood
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Several roads were closed by flooding and heavy rainfall downed trees.

On the afternoon of the 11th, thunderstorms with very heavy rainfall, frequent lightning, and damaging winds moved across north central Maryland. In Harford County, a downburst estimated between 60 and 70 MPH downed trees, damaged homes, and destroyed buildings at a marina about 4 miles east of Edgewood. The most concentrated area of damage was along the Bush River between Flying Point and Aberdeen Proving Grounds. Over 30 trees were downed in Flying Point Park. At the Flying Point Marina, a large pole barn was downed resulting in \$100,000 damage. Small trees were downed and gutters were damaged just west of the park in the Harbor Oaks subdivision. A person on Flying Point Road observed a 6 foot wide waterspout moving west across the Bush River toward Flying Point during the height of the storm. Across from Flying Point on the other side of the river, numerous trees were downed in the Bush River Manor subdivision. Fifteen mobile homes in this community suffered damage from flying debris like metal supports from porches and pieces of skirting. One metal support rammed into a cinder support block under a trailer and pushed it out of alignment.

The damage path continued south across Boyer Road to the Sod Run Wastewater Treatment Plant where roofing and flashing was ripped off a building. Airborne gravel and debris knocked out windows on several vehicles. Next to the plant, a cornfield was flattened, trees were downed, and a fence was blown over. Nearby on Aberdeen Proving Grounds, about 100 trees were downed and 75 trees were snapped north of Romney Creek. A wind gauge about a mile south of the downed trees recorded a gust of 40 MPH.



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					Killed	Injured	Property	Crops	

MARYLAND, Central

The downburst apparently originated between the water treatment plant and Perryman Road. Heavy rainfall flooded roads in the Riverside, Edgewood, and Belcamp areas. Route 7 was closed when 4 feet of water covered the road. Several motorists were caught in rapidly rising water in Edgewood. A total of 4.65 inches of rain was recorded in Fallston and 2.7 inches was reported in Bel Air. A man climbing a ladder in his attic was struck by lightning in Bel Air. He felt the bolt enter his left hand then he slid down the ladder and called for help. He was treated for injuries to his palm, arm, shoulder, and chest.

In Howard County, high water closed Route 29 at the intersection of Route 216. Six additional roads in the Elkridge area were closed by flooding. Heavy rainfall downed trees onto three roads in the Ellicott City and Lisbon areas. In Clarksville, a home sustained \$100,000 damage from a lightning fire. A total of 2.54 inches of rain was recorded in Ellicott City. In Montgomery County, rainfall totals included 4.68 inches in Gaithersburg, 3.22 inches in Bethesda, 2.63 inches in Glenmont, and 2.60 inches in Rockville. In Gaithersburg, a large store was evacuated after excessive rainfall collected on its roof. A stream and wetland area flooded onto Clopper Road near I-270. Trees were downed along Rock Creek after it overflowed. Motorists were rescued from cars stalled in high water in several spots including Little Falls Parkway, River Road, Connecticut Avenue, and Beach Drive. Lightning struck a home in Gaithersburg causing minor damage. In Prince George's County, four people were killed in weather related traffic accidents.

St. Mary'S County

Countywide

12	0700EST 2000EST				0	0			Heavy Rain
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Showers and thunderstorms with heavy rainfall moved across St. Mary's County between 8 AM and 11 AM and again between 6 PM and 9 PM EDT on the 12th. Rainfall totals from both events included 3.02 inches at Patuxent River Naval Station and 2.68 inches in Hollywood.

St. Mary'S County

Hollywood

23	2000EST 2100EST				0	0	3K		Thunderstorm Wind
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Trees were downed and siding was removed from a shed.

A thunderstorm with high winds moved across St. Mary's County around 9 PM on the 23rd. At the intersection of Route 245 and Moran Road in Hollywood, trees were downed. Nearby, lawn furniture was blown around and aluminum siding was ripped off a shed. A wind gust of 48 MPH was recorded in Tall Timbers.

Harford County

Havre De Grace

27	1600EST 1800EST				0	0			Heavy Rain
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Several roads were flooded.

St. Mary'S County

Point Lookout

27	1630EST				0	0	5K		Thunderstorm Wind
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Trees were downed in Point Lookout State Park.

Harford County

1 NW Havre De Grace

27	1700EST				0	0	60K		Lightning
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A home was damaged by lightning.

A thunderstorm with winds in excess of 55 MPH moved across the extreme south portion of St. Mary's County between 5 and 6 PM EDT on the 27th. Trees were downed in Point Lookout State Park. A wind sensor at Point Lookout recorded a wind gust of 48 MPH. Another thunderstorm with heavy rainfall and frequent lightning moved through Harford County between 5 and 7 PM EDT. In Havre de Grace, Lewis Lane, Revolution Street, Juniata Street, Bloomsburg Avenue, Water Street, Concord Street, and Girard Street were flooded. In the Grace Harbor subdivision, a home was struck by lightning and the ensuing fire caused \$60,000 damage.

Anne Arundel County

South Portion

30	1200EST 1800EST				0	0			Heavy Rain
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Anne Arundel County

Pasadena

30	1215EST				0	0	80K		Lightning
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Lightning struck 9 buildings across the county and caused a 2 alarm house fire in Pasadena



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MARYLAND, Central

Anne Arundel County

North Portion	30	1300EST 1830EST			0	0			Flash Flood
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Numerous roads and basements were flooded.

Anne Arundel County

2 SE Linthicum Hgts	30	1700EST 1800EST			0	0	8K		Thunderstorm Wind
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Fifteen trees and power lines were downed in Linthicum.

Howard County

Columbia	30	1702EST 1707EST			0	0			Hail(1.00)
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Marble to quarter sized hail was reported.

Anne Arundel County

Baltimore Washington	30	1724EST			0	0			Lightning
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Lightning damaged a runway and the main radar tower at BWI

Prince George'S County

Bowie	30	1730EST			0	1			Lightning
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A 16-year-old boy was injured by lightning. A house caught fire after being hit by lightning.

Howard County

Southeast Portion	30	1800EST 1900EST			0	0			Flash Flood
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Route 1 and other roads were flooded in Elkridge after a tributary of the Patapsco River overflowed.

Charles County

Hughesville	30	1810EST			0	0	2K		Thunderstorm Wind
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Trees and power lines were downed.

Charles County

Countywide	30	1900EST 2000EST			0	0			Flash Flood
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Roads and basements were flooded in Hughesville.

Thunderstorms with very heavy rainfall, frequent lightning, and damaging winds moved through Central Maryland during the afternoon and early evening of the 30th. In Howard County, the Patapsco River overflowed sending water rushing down onto Route 1 in Elkridge. The highway remained closed for several hours and some cars became stalled in the high water. A total of 3.4 inches of rain was recorded in Elkridge and 2.53 inches of this total fell in one hour. Marble to quarter sized hail was reported in Columbia. In Prince George's County, a 16-year-old boy was struck by lightning in the Bowie area. He was treated for non-life threatening injuries. A home in Bowie on Pond Meadow Lane caught fire after being hit by lightning. In Calvert County, two homes were hit by lightning in Dunkirk and a corn field was flattened. Up to 3 inches of rain reportedly fell in only one hour. In Charles County, flooding was reported in Hughesville. Trees and power lines were downed countywide.

In Anne Arundel County, storms with heavy downpours sat over the northern portion of the county during the afternoon and caused extensive flooding. Several roads were closed after creeks and streams overflowed. The southbound lanes of Ritchie Highway were closed after Cypress Creek overflowed. Flooding was also reported on Fort Smallwood Road, Rock Hill Road, and Forest Drive. Seven basements were flooded. An observer in Riviera Beach recorded 2 inches of rainfall in only 30 minutes. An observer in Annapolis reported 0.70 inches of rain in only 10 minutes. By early evening, these storms affected the entire county and contained frequent lightning and damaging winds. Officials reported 15 downed trees and power lines in the Linthicum area. Nine buildings were struck by lightning. One bolt started a two alarm fire at a home in Pasedena which resulted in \$80,000 damage. Lightning also caused damage at Baltimore/Washington International Airport. A series of strikes over a 10 minute period burned two holes in Runway 1028 and damaged the airport's main radar tower. Rainfall totals included 5.53 inches in Riviera Beach, 4.24 inches at Baltimore/Washington International Airport, 3.44 inches in Millersville, and 3.00 inches in Odenton. Around 20,000 customers lost power across the county as a direct result of the storms.



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VIRGINIA, North

Page County

Countywide	04	0000EST 0300EST			0	0			Heavy Rain
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Warren County

Countywide	04	0030EST 0300EST			0	0			Flash Flood
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Happy Creek overflowed onto a bridge in Front Royal.

An area of thunderstorms with very heavy rainfall remained nearly stationary over Page and Warren Counties between 1 and 4 AM EDT on the 4th. Rainfall totals included 3.12 inches on Hogback Mountain, 2.77 inches at Rocky Branch, and 2.71 inches in Ida. In Front Royal, Happy Creek overflowed its banks and submerged the 8th Street bridge. Nearby roads were also flooded.

VAZ025>031-036>042-050>057

Augusta - Rockingham - Shenandoah - Frederick - Page - Warren - Clarke - Nelson - Albemarle - Greene - Madison - Rappahannock - Fauquier - Loudoun - Orange - Culpeper - Prince William - Fairfax - Arlington - Stafford - Spotsylvania - King George

06 10	0800EST 2000EST				0	0			Excessive Heat
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High pressure brought ample sunshine and warm southerly winds to the region between the 6th and the 10th. Afternoon temperatures soared into the 90s each day and dew points in the 60s pushed heat indices to between 98 and 112 degrees. At Washington Reagan National Airport, high temperatures recorded on the 6th through the 10th were 91, 95, 97, 97, and 96 degrees. At Dulles International Airport, high temperatures from the 6th to the 10th were 93, 94, 96, 97, and 96 degrees. In Charlottesville, high temperatures from the 6th to the 10th were 90, 93, 94, 95, and 94 degrees. A "code red" alert was issued by environment officials in the Washington D.C. metropolitan area on August 8th and 9th due to bad air quality. Medical professionals reported treating several people for heat related illnesses during the period. Victims included 4 marines training at Quantico Marine Base in Prince William County and nearly 400 people attending a Civil War re-enactment just north of Leesburg in Loudoun County.

Fauquier County

New Baltimore	10	1525EST			0	0			Hail(1.50)
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Quarter to walnut sized hail damaged siding.

Fauquier County

New Baltimore to 2 NE New Baltimore	10	1525EST 1530EST			0	0	100K		Thunderstorm Wind (G61)
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Trees and utility poles were downed and several structures were damaged by winds estimated at 70 MPH.

Fauquier County

Warrenton	10	1525EST			0	0	2K		Thunderstorm Wind
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Large trees and power lines were downed onto roads.

Prince William County

3 SW Haymarket to Gainesville	10	1530EST 1540EST			0	0	20K		Thunderstorm Wind
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Trees and power lines were downed and a mobile home was overturned.

Manassas (C)

Manassas	10	1550EST			0	0	1K		Thunderstorm Wind
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Two trees were downed.

Stafford County

3 NE Falmouth	10	1624EST			0	0	2K		Thunderstorm Wind
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Trees were downed near the intersection of Route 17 and Interstate 95.

Thunderstorms with winds as high as 70 MPH moved through Fauquier, Prince William, and Stafford Counties between 4:00 and 5:30 PM EDT on the 10th. In Fauquier County, a downburst of wind estimated at 70 MPH hit the New Baltimore area. At least 70 trees up to 6 feet in diameter were downed onto roads and property from New Baltimore to the Prince William County line. The hardest hit area was near the intersection of Route 600 and 29/55. One tree fell onto a car when a driver was waiting for officials to



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VIRGINIA, North

clear Beverly's Mill Road. A historic home on Route 29 sustained damage to columns holding up a portico and eaves when a large tree fell onto the structure. A chicken house behind the home was lifted and thrown onto a pickup truck. Horse trailers on the property were overturned and an outhouse was destroyed. Hail between 1 and 1.5 inches in diameter (quarter to walnut size) left pockmarks in siding on a garage. Two cars parked at a restaurant on Route 29 were crushed by fallen trees. A nursery reported significant damage to inventory from winds and hail. In Prince William County, high winds from the downburst in New Baltimore moved across the far western portion of the county. Large trees and wires were downed in the Haymarket area. A trailer was flipped over and trees were downed in Gainesboro. Two trees were also downed in Manassas. In Stafford County, a pilot noticed downed trees in a downburst pattern near the Route 17 and Interstate 95 intersection about 5 miles north of Fredericksburg.

Fairfax (C)									
Countywide	11	1430EST 1700EST			0	0			Heavy Rain
Falls Church (C)									
Countywide	11	1430EST 1700EST			0	0			Heavy Rain
Madison County									
Countywide	11	1430EST 1700EST			0	0			Heavy Rain
Manassas Park (C)									
Countywide	11	1430EST 1700EST			0	0			Heavy Rain
Prince William County									
Countywide	11	1430EST 1700EST			0	0			Heavy Rain
Fairfax County									
Countywide	11	1520EST 1730EST			0	0	155K		Flash Flood
									Four homes and two cars were damaged by flood waters.
Arlington County									
Countywide	11	1530EST 1730EST			0	0			Flash Flood
									Over 5 inches of rain flooded roads.
Culpeper County									
Countywide	11	1530EST 1700EST			0	0			Flash Flood
									Roads were closed by high water.
Culpeper County									
Culpeper	11	1530EST			0	0	5K		Lightning
									A chimney was damaged by lightning
Fauquier County									
Countywide	11	1530EST 1700EST			0	0			Flash Flood
									Six roads were closed by floodwaters
Loudoun County									
Countywide	11	1540EST 1900EST			0	0			Flash Flood
									Motorists were stranded in high water in Sterling and a bridge was flooded in Leesburg.
Manassas (C)									
Countywide	11	1600EST 1730EST			0	0			Flash Flood
									Roads were flooded.
Prince William County									
Woodbridge	11	1615EST			0	0			Lightning
									Ball lightning entered through a closed window and dissipated on the 2nd story of a home.
Fairfax County									
Centreville	11	1650EST			0	0	713K		Lightning



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					Killed	Injured	Property	Crops

VIRGINIA, North

A lightning fire destroyed a house and two cars.

Frederick County Countywide

	11	1715EST 1900EST			0	0			Flash Flood
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Roads were flooded.

Winchester (C) Countywide

	11	1715EST 1900EST			0	0			Flash Flood
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Three to four inches of rain closed several roads.

Clarke County Countywide

	11	1745EST 1900EST			0	0			Flash Flood
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Over 5 inches of rain flooded roads.

Showers and thunderstorms with very heavy rainfall and frequent lightning moved across Northern Virginia during the afternoon of the 11th. Over 20,000 customers across Northern Virginia lost power as a direct result of the storms. In Frederick County, streets were flooded by 3 to 4 inches of rain which fell in less than 2 hours. Several streets had to be closed in Winchester when Abrams Creek and Town Run rapidly rose. Wilkens Lake overflowed and water cascaded down South Pleasant Valley Road. A total of 2.4 inches fell in Winchester in one hour and 3.11 inches accumulated by the end of the storm. A mud slide closed Greenwood Road and an abandoned house in the Greenwood area collapsed. In Clarke County, roads were flooded by heavy downpours. D.G. Cooley Elementary School reported damage from leaky ceilings after rainwater seeped through a re-roofing project. A total of 5.13 inches was recorded at Mt. Weather. In Loudoun County, high water stranded motorists in Sterling. The bridge at Lawson Road in Leesburg was impassible after a stream overflowed its banks. In Ashburn, 2.60 inches of rain fell in only 50 minutes. An observer in Unison reported 1.02 inches in only 17 minutes. Totals across the county included 3.47 inches in Bluemont, 3.26 inches Ashburn, and 2.61 inches in Lincoln.

In Fairfax County, water covered roads in the city of Fairfax. In McLean, four houses were flooded and two cars were submerged by flood waters. Also in McLean, a car and a dumpster were washed downstream after Pimmit Run overflowed. Portions of Route 29, Fairfax County Parkway, and the Dulles Toll Road were underwater. Sixteen motorists had to be rescued from their cars after they became stranded in high water. Trees were downed by rapidly rising water along the George Washington Parkway. In Vienna, a historic home built in 1859 sustained \$5000 damage after flood waters crashed through a basement window. In only one hour 3.65 inches of rain fell in Vienna and 3.50 inches fell in Centreville. A spotter in Reston reported 2.62 inches in only 30 minutes. Rainfall totals included 4.60 inches in Reston, 4.16 inches in Centreville, 3.75 inches in Herndon, and 2.59 inches in Great Falls. In Centreville, a lightning fire destroyed a home and two cars on Grey Post Court. In Fauquier County, six roads were closed by flood waters. In Culpeper County, roads were flooded by heavy downpours. A total of 5 inches was recorded in Catalpa. Lightning damaged the chimney of the county administration building in Culpeper. In Madison County, rainfall totals included 3.80 inches in Madison, 3.67 inches at the intersection of Robinson River and Route 29, and 2.29 inches in Hood.

In Arlington County, heavy rainfall washed out a culvert and created a sinkhole. Trees were downed along streams when the waterways overflowed their banks. Flooded roads and downed power lines were reported in North Arlington where a total of 5.50 inches of rain was recorded. In Falls Church, a total of 3.05 inches of rain fell in 2 to 3 hours. Red Cross Headquarters was damaged when water flooded a portion of the building. In Prince William County, side roads were flooded by heavy downpours in Manassas. In addition, a rare sighting of ball lightning was reported by a resident of the Woodmont subdivision near Woodbridge. A woman heard a loud crack outside her 2nd story bedroom window and immediately looked out. She noticed all of the lights on her next door neighbor's home flashing on and immediately off but knew no one was home at the time. Immediately after walking away from the window, she noted a brilliant sphere of light "like the sun" enter the room through the closed window. The sphere moved very rapidly in a straight line toward her ceiling fan where it dissipated with a deafening "cannon shot explosion". Her lights never flickered and no damage was reported.



National Weather Service

Storm Data and Unusual Weather Phenomena



August 2001

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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VIRGINIA, North

Greene County

Standardsville	12	1500EST			0	0	30K		Thunderstorm Wind
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A shed, car, home, and several trees were damaged.

Harrisonburg (C)

Harrisonburg	12	1625EST 1830EST			0	0			Heavy Rain
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Harrisonburg (C)

Harrisonburg	12	1625EST			0	0	2K		Thunderstorm Wind
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Trees were downed.

Madison County

Countywide	12	1700EST 1830EST			0	0			Flash Flood
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Up to 5 inches of rain flooded roads.

Madison County

Madison	12	1700EST			0	0	5K		Thunderstorm Wind
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Many trees were downed.

Greene County

Countywide	12	1800EST 1900EST			0	0			Flash Flood
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Roads and bridges were closed by high water.

Rockingham County

East Portion	12	1800EST 1900EST			0	0			Flash Flood
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Roads were flooded.

Thunderstorms with heavy rainfall and high winds moved across Rockingham, Greene, and Madison County between 4 and 8 PM EDT on the 12th. In Rockingham County, trees were downed in Harrisonburg. Heavy rainfall flooded roads in Elkton and elsewhere across the eastern portion of the county. Lighting started a house fire near Bridgewater. In Greene County, winds in excess of 55 MPH caused property damage on Middle River Road in Standardsville. At Echo Valley Farm, several trees were downed and a wood and tin shed was destroyed. Airborne wood from the shed crashed through a kitchen window and the windshield of a car. Heavy rainfall flooded roads and bridges countywide. In Madison County, many trees were downed and power and phone services were interrupted. Up to 5 inches of rain flooded roads. A total of 2.90 inches of rain was reported at Big Meadows on Skyline Drive.

Greene County

4 S Standardsville to 2 NE Ruckersville	23	1730EST			0	0	2K		Thunderstorm Wind
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Several trees were downed.

Culpeper County

Reva to 3 SE Reva	23	1810EST			0	0	2K		Thunderstorm Wind
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Trees were downed in the Reva and Merrimac areas.

Thunderstorms with winds in excess of 55 MPH and dangerous lightning moved across Greene and Culpeper County between 6:15 and 7:30 PM EDT on the 23rd. In Culpeper County, trees were downed in the Merrimac and Reva areas. Two lightning house fires were reported countywide. In Greene County, trees were downed southeast of Standardsville. Road crews had to clear trees and power lines from Route 33 east of Route 29, Route 633 (Amicus Road), Route 743, and 610.

King George County

Dahlgren	27	1425EST			0	0	10K		Thunderstorm Wind
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Several trees were damaged and shingles were blown off buildings.

A thunderstorm with winds in excess of 55 MPH developed over western King George County and pushed east to the Potomac



National Weather Service

Storm Data and Unusual Weather Phenomena



August 2001

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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VIRGINIA, North

River between 3:15 and 3:30 PM EDT on the 27th. A square mile area along the river on the grounds of the Naval Surface Warfare Center suffered damage from high winds. At least 20 to 30 trees lost branches over 1 foot in diameter. Four large trees were downed and a few others were snapped. In addition, a few homes on base lost shingles.

Waynesboro (C)
Waynesboro

29 1450EST **0** **0** **Hail(1.00)**

Dime to quarter sized hail fell.

Waynesboro (C)
Waynesboro

29 1450EST **0** **0** **20K** **Thunderstorm Wind**

Several trees and 15 power lines were downed.

Augusta County
East Portion

29 1506EST **0** **0** **0.50K** **Thunderstorm Wind**

A power line was downed onto Old Whitebridge Road.

Albemarle County
West Portion

29 1543EST **0** **0** **0.50K** **Thunderstorm Wind**

A tree was downed near the Nelson County line.

A thunderstorm with large hail, frequent lightning, and damaging winds moved through the Central Piedmont between 3:30 and 5:00 PM EDT on the 29th. In Augusta County, dime to quarter sized hail fell in Waynesboro. Several trees and 15 power lines were also downed in Waynesboro. One tree fell onto a car on Ivy Road. Marble sized hail covered the ground in Madrid. A power line was downed and hail fell on Old Whitebridge Road in the eastern part of the county. Several lightning fires were also reported, including a mulch fire on Porterfield Lane near Dooms. In far western Albemarle County, a tree was downed near the Nelson County line. In Nelson County, power outages and heavy rainfall were reported in the Afton Mountain area.

Orange County
2 S Orange

30 1500EST **0** **0** **Hail(0.75)**

Pea to dime sized hail fell.

Orange County
2 S Orange

30 1500EST **0** **0** **7.2K** **5K** **Thunderstorm Wind (G52)^M**

A 59 MPH wind gust downed trees and power lines and damaged buildings and crops.

Charlottesville (C)
Charlottesville

30 1518EST **0** **0** **Hail(0.75)**

Dime sized hail fell near the University of Virginia

Rockingham County
Countywide

30 1530EST **0** **0** **Heavy Rain**

Basements were flooded.

Fairfax County
Countywide

30 1600EST **0** **0** **Heavy Rain**

Flooding was reported on Routes 66 and 7.

Rockingham County
Elkton

30 1600EST **0** **0** **2K** **Thunderstorm Wind**

Power lines were downed.

Stafford County
2 N Mountain View

30 1615EST **0** **0** **2K** **Thunderstorm Wind**

Several pine trees were downed on Augustine Golf Course.

Fairfax County
Reston

30 1622EST **0** **0** **Hail(0.75)**

Dime sized hail was reported.



National Weather Service

Storm Data and Unusual Weather Phenomena



August 2001

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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VIRGINIA, North

Fauquier County
4 N Remington

30	1645EST				2	0	1K		Lightning
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Two farmhands in a three-sided metal calf feeding pen were killed by lightning. M21BU, M27BU

Thunderstorms with deadly lightning, damaging winds, large hail, and heavy rainfall moved through the northern half of Virginia between 3:30 and 6:30 PM EDT on the 30th. In Orange County, winds measured at 59 MPH downed several trees and power lines about 2 miles south of Orange. The Northern Piedmont Research Center reported damage to a trailer which was hit by two downed trees. Agricultural damage included flattened corn and soybean crops, leaves plastered on barns, and two dump truck loads of downed trees and branches. Pea to dime sized hail also fell. Nearby, two large garage doors on a farm implement shop were damaged and another large garage door was bent. A tin roof near an overhang was rolled up into a ball. Just east of Orange, a large tree was downed onto Route 20 directly in the path of a car. The car was unable to stop in time to avoid hitting the tree. A second car ran into the first car immediately after it hit the tree. One minor injury was reported. In Stafford County, high winds downed several pine trees on Augustine Golf Course about 2 miles north of Mountain View.

In Rockingham County, power lines were downed in Elkton. Basements were reportedly flooded by heavy downpours. In Albemarle County, dime sized hail was reported 3 miles north of the University of Virginia in Charlottesville. In Fauquier County, two farmhands at Cool Lawn Farms about 4 miles north of Remington were killed by lightning. The 21 and 27 year old men were feeding a calf in a three-sided covered metal pen which was 25 feet from a high-tension electric tower. The bolt scorched one man's upper body and was believed to have ricocheted to the other who was feeding a calf. The calf was also killed. In Fairfax County, pea to dime sized hail fell in Reston. Flooding was reported on Route 66 and on Route 7 at the intersection of Baron Cameron Road (Route 606).

WEST VIRGINIA, East

Grant County
Countywide

04	1428EST				0	0			Flash Flood
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Flooding was reported on Route 42.

Morgan County
Countywide

04	1500EST				0	0			Heavy Rain
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A rock slide was reported on Route 9.

Slow moving thunderstorms with heavy rainfall crossed the eastern panhandle between 3 and 7 PM EDT on the 4th. In Grant County, radar estimated over 2 inches of rain fell near Patterson and Lunice Creeks between Moorfield and Petersburg in only 90 minutes. Fast moving water downed a tree onto Patterson Creek. Flooding was reported on Morgantown Road (Route 42). In Morgan County, nearly 2 inches of rain fell in 90 minutes. A rock and mud slide was reported on Route 9 one half mile west of Berkeley Springs.

WVZ048>053-055

Grant - Mineral - Hampshire - Morgan - Berkeley - Jefferson - Hardy

06	0800EST				0	0			Excessive Heat
10	2000EST								

High pressure brought ample sunshine and warm southerly winds to the region between the 6th and the 10th. Afternoon temperatures soared into the 90s and dew points in the 60s pushed heat indices to between 95 and 108 degrees. The hottest days were the 8th and 9th and when several areas recorded temperatures in the mid 90s and heat indices between 100 and 108 degrees. Martinsburg reported a high temperature of 94 degrees both days.



National Weather Service

Storm Data and Unusual Weather Phenomena



August 2001

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

WEST VIRGINIA, East

Hampshire County

Countywide	11	1800EST 1930EST			0	0			Flash Flood
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Route 50 was flooded at the intersection of Route 259.

A thunderstorm with heavy rainfall flooded roads in Hampshire County during the afternoon of the 11th. Route 50 was closed by flood waters at the intersection of Route 259.

Hardy County

Countywide	19	1800EST			0	0	0.50K		Thunderstorm Wind
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A tree was downed across a road.

A thunderstorm with wind gusts in excess of 55 MPH downed a tree onto a road in Hardy County around 7 PM EDT on the 19th.