



# National Weather Service

## Storm Data and Unusual Weather Phenomena



August 1997

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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### DISTRICT OF COLUMBIA

**DCZ001**                      **District Of Columbia**

<b>16</b>	<b>1100EST</b>								
<b>17</b>	<b>1600EST</b>				<b>1</b>	<b>25</b>			<b>Excessive Heat</b>

West winds circulating around a "Bermuda" high pressure system allowed temperatures to soar during the weekend of the 16th and 17th. Record maximum temperatures were achieved on both days. On the 16th, the previous record of 95 degrees was shattered as the mercury soared to 102. On the 17th, a brief shot of compressive warming allowed the temperature at Washington/National Airport (DCA) to soar to 105 - another record and the highest official reading in Washington since 1936. The quick warming was due to increasing west winds ahead of an approaching thunderstorm; the storm eventually lowered the temperature into the 70s.

Heat index values ranged from 105 to 110 each day, and did not fall below 90 in urbanized areas during the early morning hours of the 17th. Nonetheless, casualties were minimal as most residents remained in or near air-conditioned locations. Only one heat-related death was reported by the city Office of the Chief Medical Examiner. The body in question was badly decomposed; it was discovered at a residence with no air conditioning.

M?PH

**DCZ001**                      **District Of Columbia**

<b>20</b>	<b>0600EST</b>								
	<b>1700EST</b>				<b>0</b>	<b>0</b>	<b>3K</b>		<b>Heavy Rain</b>

A soaking rain put a dent into the summer drought on the 20th. The rain was the result of low pressure moving up the eastern seaboard. Rain totals across the metropolitan region ranged from 1 1/2 to 2 1/2 inches. Washington/National Airport recorded 2.02 inches. The combination of heavy rain and gusty winds knocked a few tree limbs into power lines; Potomac Electric Power Co. reported 6,000 customers were without electricity.

### MARYLAND, Central

**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**

<b>16</b>	<b>1100EST</b>								
<b>17</b>	<b>1500EST</b>				<b>1</b>	<b>50</b>			<b>Excessive Heat</b>

West winds circulating around a "Bermuda" high pressure system allowed temperatures to soar during the weekend of the 16th and 17th. Maximum temperatures were near or just above the century mark across most of northern and central Maryland east of the Allegheny Highlands both days. Heat index values ranged from 105 to 110 each day, but aside from several heat exhaustion cases, it appeared that at-risk residents remained in air conditioned locations. No heat-related deaths were reported by the state Office of the Chief Medical Examiner. However, one person perished from heat-induced cardiac arrest while attending a baseball game in downtown Baltimore during the middle of the afternoon on the 17th.

A record maximum was achieved at Baltimore/Washington International Airport (BWI) on the 16th (101 degrees), and the maximum temperature of 100 degrees on the 17th equalled an existing record. The heat wave was shattered by a strong cold front which was accompanied by strong to severe thunderstorms during the late afternoon and evening of the 17th.

M77OU

<b>Montgomery County</b>									
Brookeville	17	1515EST			0	0	265K		Lightning
<b>Anne Arundel County</b>									
2 E St Margarets	17	1605EST			0	2	25K		Lightning
<b>Montgomery County</b>									
Olney	17	1625EST 1637EST			0	0			Hail (0.88)
<b>Montgomery County</b>									
Olney to Ashton	17	1625EST 1635EST			0	0	10K		Thunderstorm Wind
<b>Washington County</b>									
Sharpsburg to Hagerstown	17	1725EST			0	0	5K		Thunderstorm Wind
<b>Montgomery County</b>									
Whites Ferry	17	1745EST			0	0	4K		Thunderstorm Wind
<b>Frederick County</b>									
Frederick	17	1755EST			0	0	12K		Thunderstorm Wind



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### MARYLAND, Central

<b>Carroll County</b>									
Winfield to Eldersburg	17	1820EST 1825EST			0	0	25K		Thunderstorm Wind (G60)
<b>Howard County</b>									
Columbia to Ellicott City	17	1840EST 1850EST			0	0	10K		Thunderstorm Wind
<b>Baltimore County</b>									
Countywide	17	1850EST 1900EST			0	0	20K		Thunderstorm Wind
<b>Anne Arundel County</b>									
Linthicum Hgts to Glen Burnie	17	1900EST			0	1	40K		Thunderstorm Wind
<b>Harford County</b>									
Jarrettsville	17	1925EST			0	0	5K		Thunderstorm Wind
<b>Anne Arundel County</b>									
Deale	17	2030EST			0	0	100K		Thunderstorm Wind (G75)

Clusters of strong to severe thunderstorms developed ahead of a strong cold front, one that put an end to a two-day period of oppressive heat and humidity. The most notable damage occurred along the western shore of the Chesapeake Bay during the middle of the evening, when a microburst containing estimated winds of up to 90 mph destroyed two barns, and lifted a gas station pump canopy off its moorings, in Deale.

The first event occurred in extreme northern Montgomery Co at around 4:15 PM, when a chapel at a religious summer camp was struck by lightning and burned to the ground. Thankfully, campers were gone for the summer - normally the chapel would be filled at that hour. About one hour later, lightning struck a 26-foot sailboat on the Chesapeake Bay just east of St Margarets, causing minor injuries to two men aboard. The same storm produced gusty winds which caused at least two other vessels to become distressed. One of the boats, an 18-footer, reportedly sank near Greenbury Point.

Another cell moved into northern Montgomery Co at around 5:30 PM, dropping 3/4 to 7/8 inch diameter hail and knocking down small trees and large limbs in the Olney/Ashton area.

During the early evening hours, thunderstorms became a bit more organized across northern Maryland. The line drifted south and east through the evening, producing frequent lightning, brief downpours, and several instances of damage. In eastern Washington Co, at least four trees fell onto local roads between Sharpsburg and Hagerstown. Soon after, numerous large limbs, some trees, and power lines were knocked down in the Whites Ferry area of Montgomery Co, as well as in portions of Frederick City.

Additional damage occurred across northern Maryland between 7:15 and 8 PM. In southern Carroll Co, a tree fell onto a house in Winfield. At least a dozen medium-sized tree limbs fell near Eldersburg, where an observer recorded a gust of 69 mph. In Baltimore Co, emergency management officials reported numerous trees, limbs, and power lines down, several blocking area roadways. Two trees were blown down in neighboring Harford Co; other trees and large limbs were blown down in eastern Howard Co from Columbia to Ellicott City.

Damage in Glen Burnie and the Linthicum area included at least 20 affected trees, a damaged shed and fence, and downed wires. a man was slightly injured when a large limb fell onto his automobile in Glen Burnie. Wind gusts at nearby BWI airport were as high as 53 mph. The heavy rain may have contributed to a three-car pile up in Glen Burnie, in which all 15 passengers sustained minor injuries. Excessive speed and hydroplaning were the likely culprits.

In all, over 30,000 Maryland residents were without power as a result of the storms, including 28,800 in the Baltimore Gas and Electric service area.

**MDZ009>011-013>014-016>018**

### **Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert**

20	0600EST 1700EST				0	0	3K		Heavy Rain
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A soaking rain put a dent into the summer drought. The precipitation was caused by a low pressure area moving up the eastern seaboard. Rainfall across central and eastern Maryland ranged from 1 1/2 to 2 1/2 inches. A daily precipitation record was set at BWI; 2.75 inches of rain fell. Washington/National Airport (DCA) recorded over 2 inches as well.

Two large sink holes opened up near Annapolis, a result of the combination of the heavy rain and recent sewer construction at a nearby neighborhood. High water blocked a couple of sections of Defense Highway outside of Annapolis. Several other roads in Anne Arundel Co reported high water, but were not closed.

The rain and accompanying gusty winds caused scattered power outages, including 6,000 in the Potomac Electric Power Co.



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### MARYLAND, Central

service area.

### VIRGINIA, North

VAZ025>031-037>042-050>057

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

<b>16</b>	<b>1100EST</b>								
<b>17</b>	<b>1500EST</b>			<b>0</b>	<b>50</b>				<b>Excessive Heat</b>

West winds circulating around a "Bermuda" high pressure system allowed temperatures to soar over the weekend of the 16th and 17th. Maximum temperatures surpassed the century mark across most of northern Virginia (except in the higher elevations) both days. Heat index values ranged from 105 to 110 each day, but aside from a few heat exhaustion cases, it appeared that at-risk residents remained in air conditioned locations. No heat-related deaths were reported by Virginia medical authorities.

A record high was achieved at Washington/Dulles Airport (VAZ042) on the 16th with a new maximum of 100 degrees. That temperature was matched on the 17th, before strong to severe thunderstorms moved through.

#### **Loudoun County**

<b>Sterling</b>	<b>17</b>	<b>1555EST</b>							
		<b>1600EST</b>		<b>0</b>	<b>0</b>	<b>15K</b>			<b>Thunderstorm Wind</b>

#### **Loudoun County**

<b>Sterling</b>	<b>17</b>	<b>1610EST</b>							
				<b>0</b>	<b>3</b>				<b>Lightning</b>

#### **Loudoun County**

<b>Sterling</b>	<b>17</b>	<b>1617EST</b>							
				<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G55)</b>

#### **Fairfax County**

<b>Herndon to Reston</b>	<b>17</b>	<b>1622EST</b>							
		<b>1634EST</b>		<b>0</b>	<b>0</b>	<b>300K</b>			<b>Thunderstorm Wind</b>

#### **Culpeper County**

<b>5 NE Culpeper</b>	<b>17</b>	<b>1700EST</b>							
				<b>0</b>	<b>0</b>	<b>10K</b>			<b>Thunderstorm Wind</b>

#### **Prince William County**

<b>Nokesville</b>	<b>17</b>	<b>1730EST</b>							
				<b>0</b>	<b>0</b>	<b>75K</b>			<b>Thunderstorm Wind</b>

#### **Prince William County**

<b>Dale City</b>	<b>17</b>	<b>2020EST</b>							
				<b>0</b>	<b>0</b>	<b>45K</b>			<b>Lightning</b>

Clusters of strong to severe thunderstorms developed in very unstable hot humid air during the afternoon and evening of the 17th. Some areas were hit repeatedly, while others received nary a drop of rain. The most severe storm of the day drifted across eastern Loudoun Co and into western Fairfax Co, causing hundreds of thousands of dollars damage to property and trees. The storm struck Sterling first, where an 800 lb. section of chimney was blown onto a low roof. Shortly thereafter, a 63 mph gust was recorded at Washington/Dulles International Airport (IAD).

The cell drifted into western Fairfax Co, producing widespread tree, limb, and wire damage in Herndon and Reston. Direct wind-related damage to homes included shingle, siding, and a couple of blown-out windows. However, falling trees and large limbs produced much more substantial damage. Four homes were temporarily condemned; an additional 24 homes sustained minor to moderate damage. One home lost a section of roof, and rain water damage to interior material (such as furniture) was extensive. At another home, a tree fell onto a fuel meter, causing a small leak. At least two vehicles were damaged by falling tree debris. Over 100 trees were damaged, and at least 20 roads were blocked immediately after the storm.

Lightning associated with the same cell struck the concourse at IAD, causing slight injuries to three airline food service personnel. The combination of lightning and wind left an estimated 23,000 customers in the Herndon and Reston area without power. Virginia Power reported a total of 31,000 customers were in the dark during the height of the storm.

Other severe storms developed as the entire area drifted south. In Culpeper Co, several large limbs blocked portions of local route 625 north of the city of Culpeper. A barn roof was lifted by winds in the Nokesville (Prince William Co) area; specifically at the intersection of state route 28 and Fitzwater. Several trees were uprooted, and some wires downed, as well.

Additional storms developed after sunset, adding to the localized rain totals and causing more damage. Lightning struck a home in Dale City, causing an attic fire. The repeating cells dumped a total of 3.32 inches of rain at IAD, while a storm spotter in nearby Sterling received less than 1.5 inches. The blinding rains may have contributed to an automobile accident in Herndon; six passengers suffered some degree of injury when their vehicle struck a tree.



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### VIRGINIA, North

<b>VAZ052&gt;053-055&gt;057</b>	<b>Prince William - Fairfax - Stafford - Spotsylvania - King George</b>								
	<b>20</b>	<b>0600EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Heavy Rain</b>
		<b>1700EST</b>							

A soaking rain put a dent into the summer drought on the 20th. The precipitation was caused by low pressure moving up the eastern seaboard. Rainfall across the Virginia suburbs of Washington, DC ranged from 1 1/2 to 2 inches. The combination of heavy rain with strong thunderstorms of three days prior may have contributed to two poplar trees falling onto the Capital Beltway in Tysons Corner (Fairfax Co) during the early morning commute. The downed trees caused a 10-mile backup to ensue on the southbound lanes. Virginia Power reported scattered outages during the event.

### WEST VIRGINIA, East

<b>WVZ051&gt;053</b>	<b>Morgan - Berkeley - Jefferson</b>								
	<b>16</b>	<b>1100EST</b>			<b>0</b>	<b>0</b>			<b>Excessive Heat</b>
	<b>17</b>	<b>1500EST</b>							

West winds circulating around a "Bermuda" high pressure system allowed temperatures to soar over the weekend of the 16th and 17th. Maximum temperatures were near or just above the century mark across the eastern panhandle of West Virginia. Heat index values ranged from 105 to 110 each day, but aside from several heat exhaustion cases, there were few problems. No heat-related deaths were reported.

Maximum temperatures at Martinsburg airport (WVZ052) were 101 degrees on the 16th and 100 on the 17th.

<b>Mineral County</b>									
<b>Elk Garden to Keyser</b>	<b>17</b>	<b>1555EST</b>			<b>0</b>	<b>0</b>	<b>12K</b>		<b>Thunderstorm Wind</b>

<b>Hampshire County</b>									
<b>Romney</b>	<b>17</b>	<b>1600EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind (G52)</b>

<b>Berkeley County</b>									
<b>Countywide</b>	<b>17</b>	<b>1655EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>

Clusters of strong to severe thunderstorms developed ahead of a strong cold front, one that put an abrupt end to a two-day period of oppressive heat and humidity. Scattered damage was reported across northeast West Virginia during the late afternoon of the 17th. Ten trees and large limbs were blocking roads in northern Mineral Co between Elk Garden, Fountain, and Keyser. In Romney, estimated winds of 60 to 65 mph blew down trees and large limbs. Scattered tree damage, including limbs that blocked roads, was reported in eastern Berkeley Co.