



National Weather Service

Storm Data and Unusual Weather Phenomena



December 1998

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

01 0000EST
31 2359EST

0 0

Drought

This was the sixth month in a row that drought conditions were seen across the Washington D.C. area. Persistent high pressure over the Southeast U.S. forced most precipitation producing low pressure systems to steer north of the region. In addition, record high temperatures baked the region during the first week of the month. Only 1.74 inches of precipitation fell at Washington Reagan National Airport in December, 1.38 inches below normal. In the past 127 years, only one other July through December on record (1930) received less precipitation than the last half of 1998. The 6 month total at the airport was only 7.45 inches, 12.82 inches below normal.

DCZ001

District Of Columbia

23 1400EST
24 0400EST

0 0

Winter Weather

A cold front swept across the Washington D.C. area on the 22nd of December, ushering in sub-freezing air that set the stage for a mixed bag of precipitation the following day. On the 23rd, a weak upper level disturbance from the Gulf States moved quickly across the Mid Atlantic region, dropping 0.4 inches of snow and a thin layer of ice and sleet at Washington Reagan National Airport. The combination of mixed precipitation, holiday travellers, and the first snowstorm of the season for drivers led to many traffic accidents. Law enforcement officials reported 70 collisions across the metropolitan area during the evening rush hour on the 23rd, and icy conditions on many bridges and roads. The 14th Street bridge across the Potomac River had to be temporarily shut down during the storm to be de-iced, causing a significant traffic delay.

DCZ001

District Of Columbia

30 1015EST

0 0

Strong Wind

A vigorous area of low pressure moved over Pennsylvania on the 30th, creating windy conditions across the Washington D.C. area during the morning. At 10:15 AM, a wind gust of 44 MPH was recorded at Washington Reagan National Airport. The gusty winds knocked a large limb down onto Connecticut Avenue, one of the busiest thoroughfares in the city. The limb blocked traffic in both directions between Bradley Boulevard and East West Highway for over 30 minutes until road crews could remove it.

MARYLAND, Central

**MDZ002>004-006-
009>011-013>014-
016>018**

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

01 0000EST
31 2359EST

0 0

Drought

This was the sixth month in a row that drought conditions were seen across Central and Northern Maryland. Persistent high pressure over the Southeast U.S. forced most precipitation producing low pressure systems to steer north of the region. In addition, record high temperatures baked the region during the first week of the month. Only 1.27 inches of precipitation fell at the Baltimore/Washington International Airport (BWI) in Anne Arundel County during December, 2.14 inches below normal. In the past 127 years, only one other July through December on record (1930) received less precipitation than the last half of 1998. The 6 month total at BWI Airport was only 7.06 inches, 13.66 inches below normal. The Maryland Science Center in Baltimore reported a monthly total of 1.34 inches. Other monthly precipitation totals from affected counties included 0.6 inches in Allegany, 0.7 in Washington, 0.8 in Howard, 1.1 in Carroll and Frederick, 1.8 in Charles, and 2.2 in Prince Georges.

Water reserves were greatly affected by the persistent drought. The Washington Suburban Sanitary Commission reported Patuxent River water reservoirs, major water storage for Montgomery and Prince Georges County, averaged 10 to 12 feet below normal during the month. Stream flows on all rivers within the Potomac and Shenandoah river basins averaged 85% below normal. The North Branch of the Potomac River at Cumberland in Allegany County was near record low flow. The Georges Creek in Allegany County which feeds into the Potomac River remained dry for a second straight month, forcing 2000 households and businesses to continue receiving water from a temporary pipeline linked to the Frostburg flow. The Maryland Department of Environment declared a drought warning on December 16th, citing South Central Maryland as the driest area in the state. A statewide ban on open burning remained in effect across the entire state through mid month because of extreme fire danger. The ban remained in effect across Washington, Frederick, and Allegany Counties through the end of December.

MDZ009>011-013>014

Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel

23 1500EST
24 0400EST

0 0

Winter Weather

A cold front with northwest winds gusting to 40 MPH swept across Maryland on the 22nd of December. These winds were blamed for temporary power outages for 4,200 customers across Central Maryland, including the Prince Georges Hospital Center. This front also ushered in sub-freezing air that set the stage for a mixed bag of precipitation the following day. On the 23rd, a weak upper level disturbance from the Gulf States moved quickly across the Mid Atlantic region, dropping between 1 and 3 inches of snow, in addition to a thin layer of ice and sleet. Baltimore/Washington International Airport (BWI) in Anne Arundel County received 3.0 inches. The combination of mixed precipitation, holiday travellers, and the first snowstorm of the season for drivers led to many traffic accidents. Interstate 95 through Central Maryland and especially near Baltimore was referred to as a "sheet of



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MARYLAND, Central

ice" during the evening rush hour of the 23rd. Law enforcement officials reported 90 accidents causing 4 injuries and 70 disabled vehicles in Baltimore County. Flight delays were also reported at BWI Airport. The Washington D.C. metropolitan area saw 70 accidents during evening rush hour on the 23rd. Interstate 97 south of Baltimore was shut down for 40 minutes early on the 24th because of a jackknifed tractor trailer. The wintry mix remained on the ground through December 25th, giving the region a rare "white Christmas".

MDZ006>007-011-014

Northern Baltimore - Harford - Southern Baltimore - Anne Arundel

30	0900EST	0	0	7K	Strong Wind
	1200EST				

A vigorous area of low pressure moved over Pennsylvania on the 30th, creating windy conditions across Central and Northern Maryland. Wind gusts up to 45 MPH were common during the morning. These winds knocked down tree limbs, and some of the limbs fell onto power lines. At the height of the wind event up to 14,000 customers across Central Maryland were without power. In Davidsonville (Anne Arundel County), where winds gusted up to 46 mph, a tree limb downed on Route 424 knocked out power to 7,700. The community of Pasadena (Anne Arundel County) reported 1,689 customers without power. Strong winds blew a traffic light down onto a car in Pikesville (Baltimore County). In addition, wind gusts blew water from the Conowingo Dam along the Susquehanna River near Port Deposit (Harford/Cecil County Line) onto nearby streets, requiring salt trucks to treat the affected roads.

VIRGINIA, North

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

01	0000EST	0	0	Drought
31	2359EST			

This was the sixth month in a row that drought conditions were seen across Northern Virginia. Persistent high pressure over the Southeast U.S. forced most precipitation producing low pressure systems to steer north of the region. In addition, record high temperatures baked the region during the first week of the month. Only 1.74 inches of precipitation fell at Washington Reagan National Airport in Arlington County during December, 1.38 inches below normal. In the past 127 years, only one other July through December on record (1930) received less precipitation than the last half of 1998. The 6 month total at the airport was only 7.45 inches, 12.82 inches below normal. Similarly, 1.53 inches of precipitation fell at Dulles Airport in Loudoun County during December, 1.69 inches below normal. The 6 month precipitation total at Dulles Airport was only 7.27 inches, 13.24 inches below normal. Other monthly precipitation totals from area counties included 0.8 inches in Frederick, 1.2 inches in Clarke, 1.4 inches in Orange, Warren and Loudoun, 1.5 inches in Shenandoah, 1.6 inches in Fauquier and the city of Fredericksburg, 1.7 inches in Culpeper, 1.9 inches in Rockingham, 2.0 inches in Rappahannock and Fairfax, 2.2 inches in Augusta, and 3.1 inches in Madison.

The Ni Reservoir, main water supply in Spotsylvania County, remained at a record low level through the month. Mandatory water restrictions continued across the county for the fifth straight month, and on the 8th, county businesses were banned from using water outdoors. Many community wells ran dry in rural Spotsylvania County, Rappahannock County and near Hopkins in Orange County. Many other communities across Northern Virginia instituted voluntary water restrictions during the month, including Loudoun and Fairfax Counties. Goose Creek Reservoir in Loudoun County was partially drained into Beaverdam Creek Reservoir to keep the main water storage site for Loudoun and Fairfax Counties full. The Hirst Reservoir near Purcellville in Loudoun County dropped 6 feet below normal by mid month, and Lake Manassas was 8 feet below normal during December. The Thornton River near Sperryville in Rappahannock County ran dry, and stream flow on all rivers within the Potomac, Shenandoah, and Rappahannock river basins were 85% below normal during December. The Palmer Index rated Northern Virginia in a severe to extreme drought, and the Governor declared a state of emergency across Virginia on December 1st due to the dry weather and resulting extreme fire danger. An open burning ban continued across Virginia through December 10th.

VAZ028>031-037>042-050>056

Frederick - Page - Warren - Clarke - Albemarle - Greene - Madison - Rappahannock - Fauquier - Loudoun - Orange - Culpeper - Prince William - Fairfax - Arlington - Stafford - Spotsylvania

23	1200EST	0	0	Winter Weather
24	0400EST			

A cold front swept across Virginia on the 22nd of December, ushering in sub-freezing air that set the stage for a mixed bag of precipitation the following day. On the 23rd, a weak upper level disturbance from the Gulf States moved quickly across the Mid Atlantic region, dropping between a trace and 2 inches of snow across Northern Virginia, in addition to a thin layer of ice and sleet. The combination of mixed precipitation, holiday travellers, and the first snowstorm of the season for drivers led to many traffic accidents. Law enforcement officials reported 70 accidents during the evening rush hour on the 23rd around Washington D. C. In Fairfax County, a tanker truck slid into a ditch in Centreville, leading to a hazardous materials spill and an 11 hour road closure. Interstate 81 was also treacherous, especially between Stephens City and Winchester in Frederick County. A tractor trailer tipped over on the I-81 ramp to U.S. Route 50, closing it from 3 to 11 PM, and two people were injured in a crash at the I-81 Millwood Pike bridge. The westbound lanes of Interstate 64 had to be shut down for two hours in Albemarle County after a tractor trailer wrecked east of Afton and over 50 other accidents lined the highway. A 25 car pileup was reported on U.S. 29 just south of Greene/Albemarle County line. State Route 3 and 208 had to be closed for a short time due to multiple accidents. A 74 year old man was killed in a car accident on the 23rd at 5:45 PM on State Route 208 in Spotsylvania County after his vehicle hit ice and flipped over.



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VIRGINIA, North

Snowfall totals included 0.4 inches at Washington Reagan National Airport (Arlington County), 0.5 inches in Augusta, Rockingham, and Rappahannock Counties, 0.6 inches at Dulles International Airport (Eastern Loudoun County), 0.7 inches in Orange County, 1.0 inches in Frederick, Clarke, Madison and Albemarle County, 1.3 inches in Western Loudoun County, and 1.7 inches in Fauquier County. In addition, many locations received a coating of freezing rain and sleet. This thin layer of ice knocked out power for up to 12 hours for 100 customers in Albemarle County early on the 24th. The wintry mix remained on the ground through December 25th, giving the region a rare "white Christmas".

WEST VIRGINIA, East

WVZ048>055

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

01 0000EST
31 2359EST

0 0

Drought

This was the sixth month in a row that drought conditions were seen across the Eastern Panhandle of West Virginia. Persistent high pressure over the Southeast U.S. forced most precipitation producing low pressure systems to steer north of the region. In addition, record high temperatures baked the region during the first week of the month. Monthly precipitation totals from counties in the region included 0.6 inches in Hampshire, 0.7 inches in Mineral, 0.8 inches in Morgan, 0.9 inches in Hardy, 1.0 inches in Pendleton, and 1.3 inches in Grant and Jefferson. Average precipitation for the month of December is around 3 inches. Most locations received less than half of their normal precipitation from July through December. A ban on open burning continued through mid December in Berkeley, Grant, Hampshire, Jefferson, Mineral, Morgan, and Pendleton Counties due to extreme fire danger.

WVZ048>049

Grant - Mineral

31 0400EST
1100EST

0 0

Winter Weather

A weak upper level disturbance moved across the Appalachian foothills early on December 31st, producing light to moderate snowfall. Between 4:00 and 11:00 AM, this system dropped between a trace and 4.5 inches of snow across the Eastern Panhandle of West Virginia, with the largest amounts across higher elevations of Grant and Mineral Counties. Snowfall totals from this region included Petersburg at 4.2 inches, Bayard at 4.0 inches, and Keyser at 3.5 inches.