

Storm Data and Unusual Weather Phenomena - November 2019

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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ATLANTIC NORTH

CHESAPEAKE BAY DRUM PT TO SMITH PT VA COUNTY --- PATUXENT RIVER ASOS (KNAK) [38.29, -76.41]				
	11/01/19 00:09 EST		0	Marine Thunderstorm Wind (MG 36 kt)
	11/01/19 00:09 EST		0	Source: ASOS

A wind gust of 36 knots was reported at Patuxent River.

CHESAPEAKE BAY DRUM PT TO SMITH PT VA COUNTY --- LOWER HOOPERS ISLAND (HPR) [38.26, -76.18]				
	11/01/19 00:13 EST		0	Marine Thunderstorm Wind (MG 36 kt)
	11/01/19 00:28 EST		0	Source: Buoy

A strong cold front passed through during the evening of the 31st into the early morning of the 1st. A southerly flow led to warm and humid conditions ahead of the boundary, which caused an unstable atmosphere. The instability along with the cold front caused showers and isolated thunderstorms, some of which were able to mix down strong winds from aloft.

DISTRICT OF COLUMBIA

DISTRICT OF COLUMBIA COUNTY --- 1.4 E TENLEYTOWN [38.95, -77.04], 1.3 E TENLEYTOWN [38.95, -77.05], 1.3 NNE MOUNT PLEASANT [38.95, -77.05], 1.3 NNE MOUNT PLEASANT [38.95, -77.04]				
	11/01/19 02:15 EST		0	Flood (due to Heavy Rain)
	11/01/19 02:15 EST		0	Source: River/Stream Gage

Water reached several portions of the Valley Trail between picnic areas 7 and 10 in Rock Creek Park.

A strong cold front passed through the area on the 31st of October. Strong southerly winds ushered in plenty of moisture ahead of the boundary, and the moisture combined with a strong wind field to produce locally heavy rainfall. Streams and rivers flooded into the morning of the first.

MARYLAND, Central

MONTGOMERY COUNTY --- 0.7 NNW UNITY [39.24, -77.06], 0.6 NW UNITY [39.24, -77.06], 0.6 NNW UNITY [39.24, -77.06], 0.7 NNW UNITY [39.24, -77.06]				
	11/01/19 00:40 EST		0	Flood (due to Heavy Rain)
	11/01/19 04:13 EST		0	Source: River/Stream Gage

The parking lot for the Patuxent River State Park at Maryland Route 97 begins to flood.

HOWARD COUNTY --- 4.0 S SAVAGE [39.07, -76.84], 3.0 S SAVAGE [39.09, -76.83], 2.9 S SAVAGE [39.09, -76.83], 3.9 S SAVAGE [39.07, -76.84]				
	11/01/19 02:24 EST		0	Flood (due to Heavy Rain)
	11/01/19 03:03 EST		0	Source: River/Stream Gage

The riverside trails flooded. Water also approached fields of of Bald Eagle Drive. Water approached Brock Bridge Road.

CARROLL COUNTY --- 6.3 E EMMITSBURG [39.70, -77.21], 6.0 E EMMITSBURG [39.70, -77.22], 6.0 E EMMITSBURG [39.70, -77.22], 6.2 E EMMITSBURG [39.70, -77.21]				
	11/01/19 04:11 EST		0	Flood (due to Heavy Rain)
	11/01/19 06:43 EST		0	Source: River/Stream Gage

Baptist Road near Bridgeport begins to flood.

A strong cold front passed through the area on the 31st of October. Strong southerly winds ushered in plenty of moisture ahead of the boundary, and the moisture combined with a strong wind field to produce locally heavy rainfall. Streams and rivers flooded into the morning of the first.

(MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z006) NORTHERN BALTIMORE, (MD-Z011) SOUTHERN BALTIMORE, (MD-Z013) PRINCE GEORGES, (MD-Z014) ANNE ARUNDEL, (MD-Z016) CHARLES, (MD-Z017) ST. MARY'S, (MD-Z018) CALVERT, (MD-Z503) NORTHWEST MONTGOMERY, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY, (MD-Z505) NORTHWEST HOWARD, (MD-Z506) CENTRAL AND SOUTHEAST

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
HOWARD, (MD-Z507) NORTHWEST HARFORD, (MD-Z508) SOUTHEAST HARFORD				
	11/02/19 01:00 EST		0	Frost/Freeze
	11/03/19 08:00 EST		0	

High pressure overhead caused radiational cooling on the morning of the 2nd and 3rd. Temperatures dropped to between 28 and 32 degrees on the morning of the 2nd across many locations, and temperatures dropped to similar values over southern Maryland on the 3rd when the growing season was still in effect.

(MD-Z014) ANNE ARUNDEL, (MD-Z017) ST. MARY'S				
	11/18/19 21:00 EST		0	Coastal Flood
	11/19/19 07:00 EST		0	

Low pressure offshore allowed water to pile up in the mouth of the Bay. That water eventually surged north, causing moderate flooding at Annapolis.

(MD-Z501) EXTREME WESTERN ALLEGANY, (MD-Z502) CENTRAL AND EASTERN ALLEGANY				
	11/27/19 18:00 EST		0	High Wind (MAX 52 kt)
	11/28/19 09:29 EST		0	

Low pressure intensified to the northeast and high pressure approached from the Midwest. A strong pressure gradient between these systems led to high winds across the higher elevations in western Maryland. Wind gusts around 60 mph occurred.

VIRGINIA, North

MADISON COUNTY --- 1.6 NE LOCUST DALE [38.34, -78.11], 2.4 E LOCUST DALE [38.33, -78.09], 2.8 E LOCUST DALE [38.33, -78.08], 2.0 ENE LOCUST DALE [38.34, -78.10]				
	11/01/19 00:22 EST		0	Flood (due to Heavy Rain)
	11/01/19 03:12 EST		0	Source: River/Stream Gage

Water covered a portion of Route 721 (Robinson River Road). Agricultural flooding also occurred nearby.

PRINCE WILLIAM COUNTY --- 1.5 NNW YORKSHIRE [38.80, -77.44], 0.2 W YORKSHIRE [38.78, -77.43], 0.3 SE YORKSHIRE [38.78, -77.43], 1.3 N YORKSHIRE [38.80, -77.43]				
	11/01/19 05:26 EST		0	Flood (due to Heavy Rain)
	11/01/19 07:10 EST		0	Source: River/Stream Gage

Water covered backyards in the Yorkshire area. Portions of the trail system along Bull Run in the vicinity of Yorkshire were also flooded.

A strong cold front passed through the area on the 31st of October. Strong southerly winds ushered in plenty of moisture ahead of the boundary, and the moisture combined with a strong wind field to produce locally heavy rainfall. Streams and rivers flooded into the morning of the first.

(VA-Z036) NELSON, (VA-Z037) ALBEMARLE, (VA-Z052) PRINCE WILLIAM, (VA-Z053) FAIRFAX, (VA-Z054) ARLINGTON, (VA-Z055) STAFFORD, (VA-Z056) SPOTSYLVANIA, (VA-Z057) KING GEORGE, (VA-Z505) WESTERN LOUDOUN, (VA-Z506) EASTERN LOUDOUN				
	11/02/19 01:00 EST		0	Frost/Freeze
	11/02/19 08:00 EST		0	

High pressure overhead caused radiational cooling on the morning of the 2nd. Temperatures dropped to between 28 and 32 degrees early in the morning where the growing season was still in effect across portions of northern and central Virginia.

(VA-Z025) AUGUSTA, (VA-Z026) ROCKINGHAM, (VA-Z027) SHENANDOAH, (VA-Z029) PAGE, (VA-Z030) WARREN, (VA-Z507) NORTHERN VIRGINIA BLUE RIDGE, (VA-Z508) CENTRAL VIRGINIA BLUE RIDGE				
	11/17/19 03:00 EST		0.50M	Winter Weather
	11/17/19 10:00 EST		0	

Moisture from the Atlantic ocean overran surface colder air in place, resulting in some freezing drizzle and light freezing rain. Ice amounts ranged from a trace to a couple hundredths of an inch over the Blue Ridge Mountains into portions of the Shenandoah Valley in Virginia.

(VA-Z025) AUGUSTA, (VA-Z026) ROCKINGHAM, (VA-Z027) SHENANDOAH, (VA-Z029) PAGE, (VA-Z504) EASTERN HIGHLAND				
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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	11/19/19 02:49 EST		0	Dense Fog
	11/19/19 09:00 EST		0	

High pressure caused radiational cooling over the central Shenandoah Valley into the Potomac Highlands. This led to the development of fog underneath the nocturnal inversion. Visibility was around one-quarter mile.

(VA-Z507) NORTHERN VIRGINIA BLUE RIDGE, (VA-Z508) CENTRAL VIRGINIA BLUE RIDGE

	11/23/19 18:00 EST		0	Winter Weather
	11/23/19 23:00 EST		0	

Rain fell across most areas, but there was a layer of cold air aloft that caused freezing rain over the Blue Ridge Mountains. Ice amounts ranged from a trace to around one tenth of an inch.

(VA-Z025) AUGUSTA, (VA-Z026) ROCKINGHAM, (VA-Z027) SHENANDOAH, (VA-Z028) FREDERICK, (VA-Z503) WESTERN HIGHLAND, (VA-Z504) EASTERN HIGHLAND, (VA-Z507) NORTHERN VIRGINIA BLUE RIDGE, (VA-Z508) CENTRAL VIRGINIA BLUE RIDGE

	11/27/19 18:00 EST		0	High Wind (MAX 58 kt)
	11/28/19 09:29 EST		0	

Low pressure intensified to the northeast and high pressure approached from the Midwest. A strong pressure gradient between these systems led to high winds across the higher elevations in the Blue Ridge Mountains and Potomac Highlands of Virginia. Wind gusts around 60 mph occurred.

WEST VIRGINIA, East

(WV-Z501) WESTERN GRANT

	11/12/19 06:00 EST		0	Winter Weather
	11/12/19 23:00 EST		0	

Cold air moving over the mountains caused some snow to develop along and west of the Allegheny Front. Two to three inches of snow fell in western Grant County.

(WV-Z050) HAMPSHIRE, (WV-Z051) MORGAN, (WV-Z052) BERKELEY, (WV-Z055) HARDY, (WV-Z501) WESTERN GRANT, (WV-Z502) EASTERN GRANT, (WV-Z503) WESTERN MINERAL, (WV-Z504) EASTERN MINERAL, (WV-Z505) WESTERN PENDLETON, (WV-Z506) EASTERN PENDLETON

	11/27/19 18:00 EST		0	High Wind (MAX 63 kt)
	11/28/19 09:29 EST		0	

Low pressure intensified to the northeast and high pressure approached from the Midwest. A strong pressure gradient between these systems led to high winds across portions of eastern West Virginia. Wind gusts around 60 mph occurred.