

Storm Data and Unusual Weather Phenomena - December 2015

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

TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- COBB POINT [38.25, -76.83]				
	12/24/15 15:12 EST		0	Marine Thunderstorm Wind (EG 34 kt)
	12/24/15 15:22 EST		0	Source: Mesonet

COB reported gusts between 31 and 34 knots.

TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- RACCOON POINT [38.14, -75.79]				
	12/24/15 17:09 EST		0	Marine Thunderstorm Wind (EG 34 kt)
	12/24/15 17:09 EST		0	Source: Mesonet

RAC reported gusts between 31 and 34 knots.

Scattered showers with gusty winds moved across the Bay as a warm front lifted north.

MARYLAND, Central

(MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z013) PRINCE GEORGES, (MD-Z014) ANNE ARUNDEL, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY				
	12/01/15 02:54 EST		0	Dense Fog
	12/02/15 17:39 EST		0	

High pressure slowly retreated to the north during the day, leaving a cold air wedge over central Maryland. While a surface warm front lagged at the surface, low level jet pushed warm front aloft to the north, resulting in a stable air mass that trapped moisture in the valleys of central Maryland and northern Virginia, leading to fog development.

(MD-Z004) FREDERICK, (MD-Z014) ANNE ARUNDEL				
	12/06/15 02:10 EST		0	Dense Fog
	12/06/15 10:50 EST		0	

High pressure over the region produced light winds and clear skies, leading to patchy radiational dense fog.

(MD-Z004) FREDERICK				
	12/09/15 06:54 EST		0	Dense Fog
	12/09/15 22:56 EST		0	

High pressure settling off the Carolina coast resulted in light return flow over the region, increasing moisture levels. Strong subsidence inversion limited any mixing, allowing the fog to persist well into the day in the valleys.

(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z011) SOUTHERN BALTIMORE, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY, (MD-Z508) SOUTHEAST HARFORD				
	12/10/15 02:40 EST		0	Dense Fog
	12/10/15 10:35 EST		0	

High pressure over the region led to light winds. A wedge of clearing skies extending from central Maryland down into central Virginia combining with the light winds and low dew point depressions produced areas of dense fog.

(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL				
	12/17/15 02:15 EST		0	Dense Fog
	12/17/15 22:08 EST		0	

Ahead of an approaching cold front, low level moisture pooling in the wake of a rain event from passing low pressure combining with light winds led to the development of dense fog.

(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z011) SOUTHERN BALTIMORE, (MD-Z014) ANNE ARUNDEL				
	12/22/15 17:58 EST		0	Dense Fog
	12/23/15 12:40 EST		0	

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Saturated grounds from rain during the day combining with light winds and clearing skies led to the development of dense fog.

BALTIMORE COUNTY --- 1.4 WSW WHITE MARSH [39.38, -76.45], 1.5 W WHITE MARSH [39.38, -76.46], 1.6 W WHITE MARSH [39.38, -76.46], 1.7 WSW WHITE MARSH [39.37, -76.46], 1.5 WSW WHITE MARSH [39.37, -76.46]

	12/23/15 18:53 EST	0	Flash Flood (due to Heavy Rain)
	12/24/15 20:00 EST	0	Source: River/Stream Gage

The river gauge at White Marsh on Whitemarsh Run reached a flood stage of 10 feet. It peaked at 11.21 feet at 19:30 EST. Water began to cover parking lots near the stream, particularly near Town Center Court.

BALTIMORE COUNTY --- 1.7 SSW LUTZ HILL [39.30, -76.53], 1.7 SSW LUTZ HILL [39.30, -76.53], 1.7 SSW LUTZ HILL [39.30, -76.53], 1.7 SSW LUTZ HILL [39.30, -76.53]

	12/23/15 18:53 EST	0	Flash Flood (due to Heavy Rain)
	12/23/15 20:00 EST	0	Source: Emergency Manager

A swift water rescue took place at North Point Boulevard and Kane Avenue.

A warm front moved through the Mid-Atlantic region. Well above normal temperatures occurred across the region while moisture streamed in from the south. Heavy rain led to localized flash flooding in Northeast Maryland.

(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z014) ANNE ARUNDEL, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY

	12/24/15 19:44 EST	0	Dense Fog
	12/25/15 23:59 EST	0	

Saturated low levels from multiple rounds of heavy rain combining with overnight low level inversion led to widespread development of fog, with areas of dense fog.

BALTIMORE COUNTY --- 1.5 WSW WHITE MARSH [39.37, -76.46], 1.6 WSW WHITE MARSH [39.37, -76.46], 1.5 W WHITE MARSH [39.38, -76.46], 1.4 WSW WHITE MARSH [39.38, -76.45]

	12/25/15 17:57 EST	0	Flash Flood (due to Heavy Rain)
	12/25/15 19:50 EST	0	Source: River/Stream Gage

The river gauge at Whitemarsh on Whitemarsh Run reached flood stage of 10 feet. It peaked at 11.38 feet at 18:45 EST. Water began to cover parking lots near the stream, particularly near Town Center Court.

MONTGOMERY COUNTY --- 0.5 E DAWSONVILLE [39.13, -77.34], 1.2 NW DARNESTOWN [39.11, -77.31], 1.4 NNW DARNESTOWN [39.12, -77.31], 0.8 ENE DAWSONVILLE [39.13, -77.34]

	12/25/15 18:53 EST	0	Flash Flood (due to Heavy Rain)
	12/25/15 20:11 EST	0	Source: River/Stream Gage

The river gauge at Dawsonville at Seneca Creek reached a flood stage of 7.5 feet. It peaked at 7.75 feet at 19:25 EST. Portions of the Seneca Creek Greenway were flooded and a small portion of Berryville Road west of Darnestown began to flood.

A warm front moved through the Mid-Atlantic region and showers and thunderstorms led to very heavy rain capable of flooding across Central Maryland.

(MD-Z004) FREDERICK, (MD-Z005) CARROLL

	12/26/15 19:54 EST	0	Dense Fog
	12/27/15 19:54 EST	0	

Warming aloft led to low level inversion developing overnight, trapping residual low level moisture from the previous days multiple rounds of rain. This led to the development fog, with patches of dense fog.

(MD-Z501) EXTREME WESTERN ALLEGANY

	12/28/15 19:00 EST	0	Winter Weather
	12/29/15 04:00 EST	0	

A cold front sank south across the region during the day, quickly returning during the overnight hours as a warm front. A shallow layer of cold air trapped in isolated spots of western Maryland led to the development the freezing drizzle as the front moved north.

(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z014) ANNE ARUNDEL

Storm Data and Unusual Weather Phenomena - December 2015

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	12/29/15 19:15 EST		0	Dense Fog
	12/30/15 23:59 EST		0	

Moist low levels combining with light winds and clearing skies north of a warm frontal boundary resulted in widespread fog with areas of dense fog.

(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY

	12/30/15 21:39 EST		0	Dense Fog
	12/31/15 04:20 EST		0	

Subsidence inversion trapping low level moisture led to the development of dense fog.

VIRGINIA, North

(VA-Z030) WARREN, (VA-Z052) PRINCE WILLIAM, (VA-Z053) FAIRFAX, (VA-Z054) ARLINGTON, (VA-Z502) SOUTHERN FAUQUIER, (VA-Z506) EASTERN LOUDOUN

	12/01/15 19:58 EST		0	Dense Fog
	12/02/15 11:45 EST		0	

Low level moisture remained trapped at the surface as a warm front slowly lifted north, resulting in patches of dense fog.

(VA-Z025) AUGUSTA, (VA-Z029) PAGE

	12/08/15 00:00 EST		0	Dense Fog
	12/08/15 10:15 EST		0	

High pressure overhead produced light winds and clear skies, leading to radiational fog development in the valleys.

(VA-Z029) PAGE, (VA-Z037) ALBEMARLE, (VA-Z050) ORANGE, (VA-Z051) CULPEPER, (VA-Z053) FAIRFAX, (VA-Z055) STAFFORD, (VA-Z502) SOUTHERN FAUQUIER

	12/09/15 05:15 EST		0	Dense Fog
	12/09/15 21:30 EST		0	

High pressure settling off the Carolina coast resulted in light return flow over the region, increasing moisture levels. Strong subsidence inversion limited any mixing, allowing the fog to persist well into the day.

(VA-Z028) FREDERICK, (VA-Z051) CULPEPER, (VA-Z053) FAIRFAX, (VA-Z055) STAFFORD, (VA-Z502) SOUTHERN FAUQUIER, (VA-Z506) EASTERN LOUDOUN

	12/09/15 20:55 EST		0	Dense Fog
	12/10/15 08:55 EST		0	

High pressure over the region led to light winds. A wedge of clearing skies extending from central Maryland down into central Virginia combining with the light winds and low dew point depressions produced areas of dense fog.

(VA-Z027) SHENANDOAH, (VA-Z037) ALBEMARLE, (VA-Z050) ORANGE, (VA-Z051) CULPEPER, (VA-Z502) SOUTHERN FAUQUIER

	12/17/15 18:53 EST		0	Dense Fog
	12/18/15 02:35 EST		0	

Ahead of an approaching cold front, low level moisture pooling in the wake of a rain event from passing low pressure combining with light winds led to the development of dense fog.

(VA-Z028) FREDERICK, (VA-Z037) ALBEMARLE, (VA-Z050) ORANGE, (VA-Z054) ARLINGTON, (VA-Z055) STAFFORD, (VA-Z506) EASTERN LOUDOUN

	12/22/15 21:55 EST		0	Dense Fog
	12/23/15 09:56 EST		0	

Saturated grounds from rain during the day combining with light winds and clearing skies led to the development of dense fog.

(VA-Z030) WARREN

	12/23/15 16:35 EST		0	Dense Fog
	12/23/15 21:55 EST		0	

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Continual moisture advection in the wake of a warm frontal passage led to saturated low levels in the valleys, with dense fog developing.

ALEXANDRIA (C) COUNTY --- 1.7 SSE ALEXANDRIA [38.80, -77.07], 1.8 SSE ALEXANDRIA [38.80, -77.07], 1.6 SSE ALEXANDRIA [38.80, -77.07], 1.6 SSE ALEXANDRIA [38.80, -77.07]

12/23/15 17:34 EST	0	Flood (due to Heavy Rain)
12/23/15 18:40 EST	0	Source: River/Stream Gage

The river gauge at Huntington Park at Cameron Run reached a flood stage of 5.5 feet. It peaked at 5.97 feet at 18:20 EST. Water began to cover undeveloped land within Huntington Park.

A warm front moved through the Mid-Atlantic region. Well above normal temperatures occurred across the region while moisture streamed in from the south. Heavy rain led to localized flash flooding across the Baltimore and Washington DC metros.

(VA-Z025) AUGUSTA, (VA-Z027) SHENANDOAH, (VA-Z028) FREDERICK, (VA-Z029) PAGE, (VA-Z030) WARREN, (VA-Z050) ORANGE, (VA-Z051) CULPEPER, (VA-Z052) PRINCE WILLIAM, (VA-Z053) FAIRFAX, (VA-Z054) ARLINGTON, (VA-Z055) STAFFORD, (VA-Z502) SOUTHERN FAUQUIER, (VA-Z506) EASTERN LOUDOUN

12/25/15 00:15 EST	0	Dense Fog
12/25/15 22:55 EST	0	

Saturated low levels from multiple rounds of heavy rain combining with overnight low level inversion led to widespread development of fog, with areas of dense fog.

(VA-Z025) AUGUSTA, (VA-Z028) FREDERICK, (VA-Z029) PAGE, (VA-Z030) WARREN, (VA-Z037) ALBEMARLE, (VA-Z050) ORANGE, (VA-Z051) CULPEPER, (VA-Z053) FAIRFAX, (VA-Z502) SOUTHERN FAUQUIER, (VA-Z506) EASTERN LOUDOUN

12/29/15 20:35 EST	0	Dense Fog
12/30/15 12:15 EST	0	

Moist low levels combining with light winds and clearing skies north of a warm frontal boundary resulted in widespread fog with areas of dense fog.

(VA-Z027) SHENANDOAH, (VA-Z029) PAGE, (VA-Z030) WARREN, (VA-Z037) ALBEMARLE, (VA-Z050) ORANGE, (VA-Z055) STAFFORD, (VA-Z502) SOUTHERN FAUQUIER

12/31/15 00:53 EST	0	Dense Fog
12/31/15 10:55 EST	0	

Subsidence inversion trapping low level moisture led to the development of dense fog.

WEST VIRGINIA, East

(WV-Z052) BERKELEY

12/02/15 00:53 EST	0	Dense Fog
12/02/15 05:30 EST	0	

Low level moisture remained trapped at the surface as a warm front slowly lifted north, resulting in patches of dense fog.

(WV-Z052) BERKELEY

12/06/15 07:35 EST	0	Dense Fog
12/06/15 11:29 EST	0	

High pressure over the region produced light winds and clear skies, leading to patchy radiational dense fog.

(WV-Z502) EASTERN GRANT, (WV-Z504) EASTERN MINERAL

12/09/15 03:19 EST	0	Dense Fog
12/09/15 13:00 EST	0	

High pressure settling off the Carolina coast resulted in light return flow over the region, increasing moisture levels. Strong subsidence inversion limited any mixing, allowing the fog to persist well into the day in the valleys.

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
(WV-Z052) BERKELEY, (WV-Z504) EASTERN MINERAL				
	12/10/15 04:31 EST	0		Dense Fog
	12/10/15 11:29 EST	0		
High pressure over the region led to light winds. A wedge of clearing skies extending from central Maryland down into central Virginia combining with the light winds and low dew point depressions produced areas of dense fog.				
(WV-Z052) BERKELEY, (WV-Z504) EASTERN MINERAL				
	12/22/15 20:23 EST	0		Dense Fog
	12/23/15 09:15 EST	0		
Saturated grounds from rain during the day combining with light winds and clearing skies led to the development of dense fog.				
(WV-Z504) EASTERN MINERAL				
	12/23/15 20:20 EST	0		Dense Fog
	12/24/15 05:41 EST	0		
Continual moisture advection in the wake of a warm frontal passage led to saturated low levels in the valleys, with dense fog developing.				
(WV-Z052) BERKELEY, (WV-Z502) EASTERN GRANT, (WV-Z504) EASTERN MINERAL				
	12/25/15 00:15 EST	0		Dense Fog
	12/25/15 12:25 EST	0		
Saturated low levels from multiple rounds of heavy rain combining with overnight low level inversion led to widespread development of fog, with areas of dense fog.				
(WV-Z502) EASTERN GRANT, (WV-Z504) EASTERN MINERAL				
	12/27/15 02:09 EST	0		Dense Fog
	12/27/15 11:50 EST	0		
Warming aloft led to low level inversion developing overnight, trapping residual low level moisture from the previous days multiple rounds of rain. This led to the development fog, with patches of dense fog.				
(WV-Z503) WESTERN MINERAL				
	12/28/15 19:00 EST	0		Winter Weather
	12/29/15 04:00 EST	0		
A cold front sank south across the region during the day, quickly returning during the overnight hours as a warm front. A shallow layer of cold air trapped in isolated spots of western Mineral County led to the development the freezing drizzle as the front moved north.				
(WV-Z052) BERKELEY, (WV-Z502) EASTERN GRANT				
	12/29/15 19:48 EST	0		Dense Fog
	12/30/15 10:15 EST	0		
Moist low levels combining with light winds and clearing skies north of a warm frontal boundary resulted in widespread fog with areas of dense fog.				
(WV-Z052) BERKELEY				
	12/31/15 00:15 EST	0		Dense Fog
	12/31/15 03:07 EST	0		
Subsidence inversion trapping low level moisture led to the development of dense fog.				