



National Weather Service

Storm Data and Unusual Weather Phenomena



December 2004

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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OHIO, North

OHZ007-009>012-014 **Ottawa - Erie - Lorain - Cuyahoga - Lake - Ashtabula**
01 **0700EST** **0** **0** **180K** **High Wind (MG56)**
1100EST

An area of low pressure moved east across Lake Erie during the morning hours of December 1st. Strong westerly winds occurred behind this low and caused damage along the south shore of Lake Erie. A peak wind gust of 64 mph was measured on South Bass Island (Ottawa County) around 8 a.m. Many trees were downed in Ottawa, Erie, Lorain, Cuyahoga, Lake and Ashtabula Counties. Scattered power outages were also reported in these counties. Damage was done at a water tower construction site in Lake County

OHZ003-006>009-017>018-027 **Lucas - Wood - Ottawa - Sandusky - Erie - Hancock - Seneca - Wyandot**
07 **1200EST** **0** **0** **95K** **Strong Wind (EG43)**
1600EST

An area of strong low pressure moved northeast across Michigan and into Ontario on December 7th. Wind gusts of 40 to 50 mph occurred to the east of the low as it moved through the region. These gusts downed a few trees throughout northwestern Ohio. Scattered power outages were also reported.

OHZ010>014-019>023-028>033-036>038-047 **Lorain - Cuyahoga - Lake - Geauga - Ashtabula - Huron - Medina - Summit - Portage - Trumbull - Crawford - Richland - Ashland - Wayne - Stark - Mahoning - Marion - Morrow - Holmes - Knox**
07 **1215EST** **0** **0** **380K** **High Wind (MG57)**
1600EST

An area of strong low pressure moved northeast across Michigan and into Ontario on December 7th. Strong winds occurred to the east of the low as it moved through the region. A line of weak showers developed to the west of Interstate 71 during the late afternoon hours and then raced east across northeastern Ohio. Gusty winds associated with this line were responsible for most of the damage that occurred. A peak gust of 66 mph was measured at Burke Lakefront Airport (Cuyahoga County) at 443 p.m. Hundreds of trees were downed across the area and many power outages were reported. A home in Huron County was heavily damaged by a fallen tree.

OHZ011>014-022 **Cuyahoga - Lake - Geauga - Ashtabula - Portage**
13 **0600EST** **0** **0** **1.1M** **Winter Storm**
14 **2200EST**

A strong cold front moved east across northeastern Ohio late on December 12th. Cold west winds blowing across Lake Erie behind the front caused lake effect snow bands to develop during the early morning hours of the 13th. The snow first fell in Ashtabula and Geauga Counties. As winds became more northwesterly, intense snow bands developed and shifted west over the Cleveland Metro area just in time for the afternoon rush hour. Snowfall rates in excess of an inch per hour were reported from late afternoon through early evening. Six inches of snow accumulated at Cleveland Hopkins International Airport by 6 p.m. Periods of heavy snow continued through the morning hours of the 14th. The activity gradually weakened and shifted east during the afternoon. Northwest winds gusting to as high as 30 mph accompanied the snow and created near zero visibilities at times. Snowfall accumulations for the event were generally between one and two feet from eastern Cuyahoga County eastward across Geauga County and into Ashtabula County. Between 8 and 12 inches of snow was reported over western Cuyahoga, northern Portage and Lake Counties. Officially 9.9 inches of snow was measured at Cleveland Hopkins. Peak totals for the storm included: 15.7 inches at Pepper Pike (Cuyahoga County); 12.3 inches at Madison (Lake County); 28.5 inches Hambden Township (Gauga County); 29.5 inches at Hartsgrove (Ashtabula County) and 13 inches at Aurora (Portage County). Drifts several feet deep were reported. Travel was severely hampered during this event and hundreds of accidents occurred.

OHZ011>014-020>022 **Cuyahoga - Lake - Geauga - Ashtabula - Medina - Summit - Portage**
19 **0200EST** **0** **0** **1.1M** **Winter Storm**
2200EST



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OHIO, North

A strong cold front moved east across northern Ohio early on December 19th. Light rain falling in advance of this front quickly changed to snow during the early morning hours as colder air filtered into the region. The snow intensified around daybreak as winds became northerly across Lake Erie. Bands of heavy lake effect snow then persisted through sunset as temperatures fell into the single digits. This activity eventually tapered off to flurries late in the evening. Snowfall accumulations during this event were generally 8 to 12 inches over most of Cuyahoga, Geauga, Lake and Ashtabula Counties and across the northern halves of Medina, Portage and Summit Counties. Some of the higher totals included: 12.0 inches at Pepper Pike (Cuyahoga County); 12 inches at Thompson (Gauga County) and 13 inches at Hartsgrove (Ashtabula County). Northerly winds gusting to as high as 30 mph combined with the snow to cause near zero visibilities and much blowing and drifting. Treacherous driving conditions and hundreds of accidents were reported.

OHZ009>011-018>020-027>030-036>037

Erie - Lorain - Cuyahoga - Seneca - Huron - Medina - Wyandot - Crawford - Richland - Ashland - Marion - Morrow

22	0700EST	0	0	54.9M	Winter Storm
23	1200EST				

A record setting winter storm affected northern Ohio on December 22nd and 23rd. The impact and damage caused by this storm has been compared to the Blizzard of January 1978. Low pressure developed over eastern Texas early on the 22nd and then moved quickly northeast. The low eventually tracked across eastern Ohio during the morning hours of the 23rd after dumping nearly two feet of snow on portions of Ohio. The snow began around daybreak on the 22nd and then intensified around midday. Heavy snow with visibilities of a quarter mile or less then persisted into the early morning hours of the 23rd. Snowfall rates much of this time ranged from one to two inches per hour. Winds increased significantly during the evening hours of the 22nd as northerly winds developed on the backside of the low. Gusts to 30 mph caused significant blowing and drifting and near blizzard conditions from Marion County northeastward into Erie and Huron Counties. Drifts several feet deep were reported. Temperatures warmed slightly during the early morning hours of the 23rd as the low moved into southeast Ohio. This caused the snow to first mix with, and then change completely to freezing rain. This change occurred at Mansfield just before 3 a.m. and at Cleveland around 4 a.m. The heaviest freezing rain fell along and west of Interstate 71 between these two cities with over one half inch of ice accumulation over much of this corridor. Snowfall totals ranged from 12 to 18 inches from Marion and Morrow Counties northeast to Erie, Lorain and Cuyahoga Counties. Within that area, there was a narrow band of even heavier snow with greater than 18 inches of accumulation from northern Morrow County across Richland County and into Ashland County. Officially, 23.0 inches of snow was measured at Mansfield Lahm Airport (Richland County) establishing a new all time record snowfall. In addition, 0.57 inches of freezing rain was measured at that location. At Cleveland Hopkins International Airport (Cuyahoga County) a total of 15.5 inches of snow fell along 0.58 inches of freezing rain. The freezing rain significantly compacted the snow and official measurements made by cooperative observers around daybreak likely underestimated the actual snowfall. Had measurements been taken around midnight, reported accumulations would have likely been several inches higher at most locations. The wet and very heavy snow made travel nearly impossible across northern Ohio. Hundreds of accidents were reported and holiday travel for many was not possible. Numerous power outages as a result of the freezing rain were reported. The outages were most widespread in southern portions of Ashland and Richland Counties where some areas were without power for several days. The weight of the heavy snow damaged the roofs of dozens of homes and buildings, several of which had complete roof failures. It took several days for road crews to completely clean up after this event. Damage and clean up costs for this storm were historic with only the Blizzard of 1978 having more financial impact.



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OHIO, North

OHZ031>032-038-047 Wayne - Stark - Holmes - Knox

	22	0900EST			0	0	19.3M		Winter Storm
	23	1100EST							

A record setting winter storm affected northern Ohio on December 22nd and 23rd and dumped both heavy snow and freezing rain on Knox, Holmes, Wayne and Stark Counties. The impact and damage caused by this storm has been compared to the Blizzard of January 1978. Low pressure developed over eastern Texas early on the 22nd and then moved quickly northeast. The low eventually tracked across eastern Ohio during the morning hours of the 23rd after dumping nearly two feet of snow on portions of Ohio. The snow began around daybreak on the 22nd and then intensified during the afternoon. During the evening, warmer air spread into the area as the low approached from the southwest. This caused the snow to first mix with, and then change completely to freezing rain. Moderate to heavy freezing rain then continued through the early morning hours of the 23rd. The freezing rain lightened around daybreak and then changed back to light snow as colder air advected into the area behind the low. The precipitation finally tapered to flurries around midday on the 23rd. One half to as much as one inch of ice accumulated on area roads and power lines. Widespread power outages were reported especially in Knox, Holmes and southern Wayne Counties. It took over a week for power to be restored to all areas. Snow accumulations for the event ranged from 10 to 12 inches in northwestern Wayne County to 4 to 8 inches in Knox and southern Holmes Counties. Travel during this event was nearly impossible due to the ice accumulation and downed trees and power lines. Hundreds of accidents were reported. It took many days for road and power company crews to completely clean up after this event. Damage and clean up costs for this storm were historic with only the Blizzard of 1978 having more financial impact.

OHZ003-006>008-017 Lucas - Wood - Ottawa - Sandusky - Hancock

	22	1000EST			0	0	8.1M		Winter Storm
	23	1200EST							

A potent winter storm affected northwestern Ohio on December 22nd and 23rd. Low pressure developed over eastern Texas early on the 22nd and then moved quickly northeast. The low eventually tracked across eastern Ohio during the morning hours of the 23rd after dumping nearly two feet of snow on portions of Ohio. The snow began in the Findlay area around mid morning on the 22nd and spread north into the Toledo area during the evening. The snow intensified during the late evening hours with heavy snow then continuing through daybreak on the 23rd. Snowfall rates of around an inch per hour occurred during the early morning hours of the 23rd with visibilities less than one quarter mile at times. Northerly winds behind the low increased during the evening hours of the 22nd and this caused much blowing and drifting as well. Drifts two to three feet deep were common. Snowfall totals for this event ranged from 12 to 15 inches in southern Hancock and eastern Sandusky Counties to 7 to 10 inches in far western Lucas County. Accumulations a little further east in north-central Ohio were nearly two feet at some spots. Officially, 7.9 inches of snow fell at Toledo Express Airport (Lucas County). Travel was nearly impossible during the peak of this event. Hundreds of accidents occurred and it took several days for road crews to clean up after this event.

OHZ012>014-021>023-033 Lake - Geauga - Ashtabula - Summit - Portage - Trumbull - Mahoning

	22	1100EST			0	0	10.2M		Winter Storm
	23	1500EST							

A potent winter storm affected northern Ohio on December 22nd and 23rd. Low pressure developed over eastern Texas early on the 22nd and then moved quickly northeast. The low eventually tracked across eastern Ohio during the morning hours of the 23rd after dumping nearly two feet of snow on portions of Ohio. The snow began in northeastern Ohio late on the morning of the 22nd and then intensified during the afternoon. Visibilities during the evening hours were near zero at times. After midnight, warmer air moved into the area and caused the snow to first mix with, and then change completely to freezing rain. Temperatures briefly climbed above freezing around daybreak on the 23rd causing the freezing rain to change to rain. Colder air working in behind the low changed the rain back to light snow later in the morning. Periods of snow then persisted through the middle portion of the afternoon. Snowfall accumulations ranged from 12 to 16 inches over Lake, Geauga and northern Ashtabula Counties, and 4 to 6



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OHIO, North

inches in southern Mahoning County. In addition, most of the area saw at least a quarter inch of ice accumulation with as much as one half inch of ice over most of Mahoning and southern Trumbull Counties. Scattered power outages resulted from the ice accumulation. Travel during this event was very treacherous with hundreds of accidents reported. It took several days for road and power company crews to completely clean up after this event. Damage and clean up costs for this storm were in the millions.

PENNSYLVANIA, Northwest

PAZ001>002

Northern Erie - Southern Erie

01	0900EST 1200EST	0	0	55K	High Wind (MG52)
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An area of low pressure moved east across Lake Erie during the morning hours of December 1st. Strong westerly winds occurred behind this low and caused damage along the south shore of Lake Erie. A peak wind gust of 60 mph was measured at the Walnut on South Bass Island (Ottawa County) around 8 a.m. Many trees were downed across Erie County.

PAZ001>003

Northern Erie - Southern Erie - Crawford

07	1600EST 1900EST	0	0	55K	High Wind (EG50)
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An area of strong low pressure moved northeast across Michigan and into Ontario on December 7th. A line of weak showers developed over northern Ohio in association with the low and then raced east into northwestern Pennsylvania during the early evening hours of the 7th. Gusty winds associated with this line downed many trees in Erie and Crawford Counties. A few outages were also reported.

PAZ001>003

Northern Erie - Southern Erie - Crawford

13 14	0100EST 0600EST	0	0	550K	Heavy Snow
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A strong cold front moved east across northwestern Pennsylvania during the early morning hours of December 13th. Cold west winds blowing across Lake Erie behind the front caused lake effect snow bands to develop along the south shore of the lake during the predawn hours of the 13th. The snow intensified after daybreak with snowfall rates greater than an inch per hour through the early afternoon hours. Winds became more northwesterly during the afternoon and this shifted the heavier bands of snow inland across southern Erie County and northern Crawford County. This activity then persisted through the morning of the 14th with snowfall rates at times greater than an inch per hour. West to northwest winds gusting to as high 30 mph combined with the snow to create near zero visibilities at times. Snowfall totals for the event ranged from 12 to 15 inches along the lakeshore to more than two feet inland of the lake. Peak totals for the storm were; 27.4 inches at Franklin Center (Erie County) and 27 inches at Conneautville (Crawford County). Officially, 13.6 inches of snow fell at Erie International Airport. Drifts several feet deep were also reported. Travel during this event was severely hampered and hundreds of accidents occurred.

PAZ001>003

Northern Erie - Southern Erie - Crawford

22 23	0900EST 1500EST	0	0	2.6M	Winter Storm
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A potent winter storm affected western Pennsylvania on December 22nd and 23rd. Low pressure developed over eastern Texas early on the 22nd and then moved quickly northeast. The low eventually tracked across eastern Ohio during the morning hours of the 23rd after dumping heavy snow and freezing rain on Erie and Crawford Counties. The snow began in these counties during the morning of the 22nd and intensified around midday. Moderate to heavy snow with snowfall rates of half an inch to an inch per hour then continued until around midnight on the 23rd. After midnight, warmer air moved into the area and caused the snow to first mix with, and then change completely to freezing rain. Temperatures briefly climbed above freezing around daybreak on the 23rd causing the freezing rain to change to rain. As the low moved east, colder air advected in changing the rain back to light snow late in the morning. Periods of light snow then persisted through the middle portion of the afternoon. Snowfall accumulations ranged from 6 to 9 inches in northern Erie County to 4 to 6 inches in far southern Crawford County. In addition, between one quarter and one half inch of freezing rain fell on most of Erie and Crawford Counties. Officially, 7.9 inches of snow and one half inch of freezing rain were measured at Erie International Airport. Scattered power outages resulted from the ice accumulation. Travel during this event was very treacherous with dozens of accidents reported. Damage and clean up costs for this storm were considerable.