

## Storm Data and Unusual Weather Phenomena - January 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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### NORTH DAKOTA, Central and West

(ND-Z002) BURKE, (ND-Z003) RENVILLE, (ND-Z004) BOTTINEAU, (ND-Z005) ROLETTE, (ND-Z010) MOUNTRAIL, (ND-Z011) WARD, (ND-Z012) MCHENRY, (ND-Z013) PIERCE

01/02/09 13:00 CST	0	Heavy Snow
01/03/09 04:00 CST	0	

An area of low pressure moving east into the central plains developed a band of moderate to heavy snow across portions of northwest and north central North Dakota beginning Friday afternoon, January 2nd, lasting into the early morning hours of Saturday, January 3rd. In addition to around six inches of snow accumulation across this area, gusty east to northeasterly winds of 20 to 35 mph created areas of significant blowing and drifting snow, which prompted the issuance of no travel advisories by law enforcement Friday night into Saturday morning.

(ND-Z017) MCKENZIE, (ND-Z032) BILLINGS, (ND-Z033) STARK, (ND-Z034) MORTON, (ND-Z041) HETTINGER, (ND-Z042) GRANT

01/08/09 08:00 CST	0	Winter Storm
01/09/09 18:00 CST	0	

(ND-Z031) GOLDEN VALLEY, (ND-Z040) SLOPE, (ND-Z043) BOWMAN, (ND-Z044) ADAMS, (ND-Z045) SIOUX

01/08/09 10:00 CST	0	Winter Weather
01/09/09 12:00 CST	0	

(ND-Z001) DIVIDE, (ND-Z002) BURKE, (ND-Z003) RENVILLE, (ND-Z004) BOTTINEAU, (ND-Z009) WILLIAMS, (ND-Z010) MOUNTRAIL, (ND-Z011) WARD, (ND-Z012) MCHENRY, (ND-Z013) PIERCE, (ND-Z018) DUNN, (ND-Z019) MERCER, (ND-Z020) OLIVER, (ND-Z021) MCLEAN, (ND-Z022) SHERIDAN, (ND-Z023) WELLS, (ND-Z025) FOSTER, (ND-Z035) BURLEIGH, (ND-Z036) KIDDER

01/08/09 12:00 CST	0	Heavy Snow
01/09/09 18:00 CST	0	

A strong winter storm system brought moderate to heavy snow, areas of freezing rain, and considerable blowing and drifting snow to much of west and central North Dakota from early morning Thursday, January 8th, through Friday afternoon, January 9th. This significant storm resulted in numerous no travel advisories being issued by law enforcement throughout the event due to freezing precipitation, heavy snow accumulations, and blowing and drifting snow blocking roadways.

A strong low pressure system developing in north central Montana early Thursday pushed southeast into the western Dakotas by Thursday night. Ahead of this storm system, a mixture of freezing rain and ice pellets resulted in the warm sector of the surface low across southwest and south central portions of the state Thursday afternoon and evening, resulting in several no travel advisories being issued by law enforcement due to ice covered roadways. Reported freezing rain accumulations through Thursday afternoon and evening ranged from a tenth to near one quarter of an inch.

As the surface low progressed southeast Thursday night, precipitation turned to all snow north to south as colder air wrapped into the storm system, and winds increased. A moderate to heavy band of snow developed from northwest North Dakota into central portions of the state Thursday night, before gradually dissipating Friday. In addition, considerable blowing and drifting snow developed due to the strong winds Thursday night into Friday afternoon, resulting in numerous blocked roads. Total snow accumulations by Friday evening ranged from two to three inches on the perimeter of the heavy snow band to near ten inches within the center.

(ND-Z001) DIVIDE, (ND-Z002) BURKE, (ND-Z003) RENVILLE, (ND-Z004) BOTTINEAU, (ND-Z005) ROLETTE, (ND-Z009) WILLIAMS, (ND-Z010) MOUNTRAIL, (ND-Z011) WARD, (ND-Z012) MCHENRY, (ND-Z013) PIERCE, (ND-Z017) MCKENZIE, (ND-Z018) DUNN, (ND-Z019) MERCER, (ND-Z020) OLIVER, (ND-Z021) MCLEAN, (ND-Z022) SHERIDAN, (ND-Z023) WELLS, (ND-Z025) FOSTER, (ND-Z031) GOLDEN VALLEY, (ND-Z032) BILLINGS, (ND-Z033) STARK, (ND-Z034) MORTON, (ND-Z035) BURLEIGH, (ND-Z036) KIDDER, (ND-Z037) STUTSMAN, (ND-Z040) SLOPE, (ND-Z041) HETTINGER, (ND-Z042) GRANT, (ND-Z043) BOWMAN, (ND-Z044) ADAMS, (ND-Z045) SIOUX, (ND-Z046) EMMONS, (ND-Z047) LOGAN, (ND-Z048) LA MOURE, (ND-Z050) MCINTOSH, (ND-Z051) DICKEY

01/11/09 18:00 CST	0	Blizzard
01/12/09 12:00 CST	0	

A significant winter storm impacted all of western and central North Dakota beginning Sunday evening, January 11th, and lasting through the morning hours of Monday, January 12th. A blizzard warning was posted well in advance of this storm, with the warning lead time around twenty hours. The blizzard warning encompassed the entire National Weather Service Bismarck County Warning Area, 36 counties, all of which had a blizzard.

Periods of light to moderate snow and blizzard conditions, very strong winds creating significant blowing and drifting snow and near zero visibilities, forced numerous road closures and the issuance of no travel advisories by law enforcement officials throughout the event. Conditions improved northwest to southeast later Monday morning as snow ended and the strong winds subsided.

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Strong surface low pressure developed across the high plains of Alberta during the day Sunday, then moved rapidly southeast across western and central North Dakota Sunday evening through early Monday morning. Isentropic upglide ahead of the surface low resulted in a band of light to moderate snow developing Sunday afternoon and evening west to east, with anywhere from one to five inches of snow being reported by Monday morning. The heaviest snow (three to five inches) fell from far northwest North Dakota through much of central North Dakota and into the James River Valley area.

As this intense Alberta Clipper moved across the state Sunday night, strong northwest winds developed. Wind speeds were 25 to 45 mph sustained with gusts of 40 to near 60 mph for several hours. The strong winds combined with falling snow and abundant loose snow already on the ground to create a widespread and prolonged blizzard.

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(ND-Z017) MCKENZIE, (ND-Z018) DUNN, (ND-Z031) GOLDEN VALLEY, (ND-Z032) BILLINGS, (ND-Z033) STARK, (ND-Z041) HETTINGER	01/13/09 19:00 CST	0	0	Blizzard
	01/13/09 23:00 CST	0	0	

A departing Alberta Clipper brought very strong northwest winds of 25 to 45 mph across portions of west central and southwestern North Dakota during the evening hours of Tuesday, January 13th. Blizzard conditions quickly developed due to falling snow and existing loose snow cover, reducing visibilities to zero and prompting the issuance of no travel advisories. Conditions improved later on Tuesday evening as the strong winds subsided.

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(ND-Z001) DIVIDE, (ND-Z002) BURKE, (ND-Z003) RENVILLE, (ND-Z004) BOTTINEAU, (ND-Z005) ROLETTE, (ND-Z009) WILLIAMS, (ND-Z010) MOUNTRAIL, (ND-Z011) WARD, (ND-Z012) MCHENRY, (ND-Z013) PIERCE, (ND-Z017) MCKENZIE, (ND-Z018) DUNN, (ND-Z019) MERCER, (ND-Z020) OLIVER, (ND-Z021) MCLEAN, (ND-Z022) SHERIDAN, (ND-Z023) WELLS, (ND-Z025) FOSTER, (ND-Z031) GOLDEN VALLEY, (ND-Z032) BILLINGS, (ND-Z033) STARK, (ND-Z034) MORTON, (ND-Z035) BURLEIGH, (ND-Z036) KIDDER, (ND-Z037) STUTSMAN, (ND-Z040) SLOPE, (ND-Z041) HETTINGER, (ND-Z042) GRANT, (ND-Z043) BOWMAN, (ND-Z044) ADAMS, (ND-Z045) SIOUX, (ND-Z046) EMMONS, (ND-Z047) LOGAN, (ND-Z048) LA MOURE, (ND-Z050) MCINTOSH, (ND-Z051) DICKEY	01/16/09 12:00 CST	0	0	Winter Weather
	01/18/09 18:00 CST	0	0	

Significant travel problems developed due to blowing and drifting snow through the entire weekend of Friday, January 16th, through Sunday, January 18th. Surface low pressure to the east and high pressure to the west kept a strong pressure gradient in place across the state for much of the weekend. North to northwest winds of 15 to 30 mph with a few higher gusts were common Friday, Saturday, and Sunday. Due to these winds and daytime temperatures near freezing, blowing and drifting snow developed resulting in low visibilities and snow sticking to roadways. Law enforcement, Department of Transportation officials, and media reported numerous accidents and rollovers on North Dakota highways due to the icy roadway conditions throughout the weekend.

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	01/31/09 17:00 CST	0	0	

Low pressure moved through Saskatchewan and Manitoba, Canada, on January 30 and 31. The cold front associated with the low moved into northwest North Dakota Saturday morning, January 31, with high winds. It moved through the central part of the state that afternoon. Winds were sustained over 40 mph across the north and central. The highest wind gust was measured at 60 mph in Ward County.