

Storm Data and Unusual Weather Phenomena - August 2021

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
NORTH DAKOTA, Central and West				
(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				
	08/01/21 00:00 CST		0	Drought
	08/31/21 23:59 CST		0	
<p>August continued with D3 to D4 drought over most of western and central North Dakota, for at least part of the month. Parts of counties had more significant rain and saw the drought severity lessen to D2. There were three counties where the entire county lessened in severity to D2, Divide, LaMoure and Dickey. Parts of some counties saw the drought severity lessen to D1. By the end of the month rains came to central North Dakota, resulting in the area of D4 drought in that area shrinking in coverage. Over far western North Dakota, some areas saw a worsening of drought conditions, with much of Golden Valley County being introduced into a D4 designation. Refer to the U.S. Drought Monitor for details.</p>				
WELLS COUNTY --- 1.4 W FESSENDEN [47.65, -99.65]				
	08/09/21 16:29 CST		0	Hail (1.75 in)
	08/09/21 16:31 CST		0	Source: Public
WELLS COUNTY --- 0.9 W FESSENDEN [47.65, -99.64]				
	08/09/21 16:40 CST		0.30M	Hail (2.75 in)
	08/09/21 16:43 CST		0	Source: Law Enforcement
Multiple vehicles and roofs were damaged.				
WELLS COUNTY --- 5.1 SW BOWDON [47.42, -99.65]				
	08/09/21 16:53 CST		0	Hail (2.50 in)
	08/09/21 16:56 CST		0	Source: Public
WELLS COUNTY --- 1.2 SE HEATON [47.47, -99.51]				
	08/09/21 16:56 CST		0	Hail (1.75 in)
	08/09/21 16:59 CST		0	Source: Trained Spotter
WELLS COUNTY --- 0.5 W BOWDON [47.47, -99.58]				
	08/09/21 16:57 CST		0.25M	Hail (3.00 in)
	08/09/21 17:00 CST		0	Source: Public
Vehicles were totaled and roofs damaged.				
MCHENRY COUNTY --- 4.4 NE NORFOLK [48.02, -100.24]				
	08/09/21 17:02 CST		0	Hail (1.25 in)
	08/09/21 17:10 CST		0	Source: Trained Spotter
FOSTER COUNTY --- BARLOW [47.57, -99.15]				
	08/09/21 17:25 CST		0	Hail (1.25 in)
	08/09/21 17:28 CST		0	Source: Public
FOSTER COUNTY --- 5.1 WNW GRACE CITY [47.58, -98.92]				
	08/09/21 18:00 CST		0	Hail (1.75 in)
	08/09/21 18:05 CST		0	Source: Public
FOSTER COUNTY --- 5.7 NNW BORDULAC [47.46, -99.00]				
	08/09/21 18:35 CST		0	Hail (1.00 in)
	08/09/21 18:39 CST		0	Source: Trained Spotter

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LA MOURE COUNTY --- 1.7 NW ADRIAN [46.62, -98.57]				
	08/09/21 18:53 CST		0	Hail (1.00 in)
	08/09/21 18:59 CST		0	Source: Trained Spotter
FOSTER COUNTY --- 2.8 W MC HENRY [47.58, -98.66]				
	08/09/21 19:08 CST		0	Hail (1.25 in)
	08/09/21 19:14 CST		0	Source: Trained Spotter
FOSTER COUNTY --- 4.0 ESE MC HENRY [47.56, -98.52]				
	08/09/21 19:23 CST		0	Hail (1.00 in)
	08/09/21 19:26 CST		0	Source: Public
<p>Thunderstorms developed along a surface trough over north-central North Dakota into the James River Valley region. Some of these storms produced very large hail in an environment of elevated instability and strong deep layer shear. The largest hail was produced by an intense thunderstorm that moved through eastern Wells County, resulting in baseball size hail in the city of Fessenden, and three inch diameter hail to the east of Bowdon.</p>				
SIOUX COUNTY --- 9.1 N SELFRIDGE [46.16, -100.90]				
	08/19/21 20:30 MST		0	Thunderstorm Wind (MG 60 kt)
	08/19/21 20:33 MST		0	Source: RAWS
<p>Thunderstorms moved into North Dakota from South Dakota ahead of an approaching short-wave trough and cold front. One storm produced wind gusts of 69 mph in Sioux County.</p>				
WELLS COUNTY --- 1.4 W HARVEY [47.77, -99.93]				
	08/22/21 15:17 CST		0	Hail (1.75 in)
	08/22/21 15:19 CST		0	Source: Public
FOSTER COUNTY --- 2.3 SSE BARLOW [47.54, -99.13]				
	08/22/21 17:00 CST		0	Hail (1.50 in)
	08/22/21 17:03 CST		0	Source: Public
FOSTER COUNTY --- 3.3 SE BARLOW [47.53, -99.11]				
	08/22/21 17:00 CST		0	Hail (1.75 in)
	08/22/21 17:03 CST		0	Source: Public
<p>Thunderstorms developed in the vicinity of a warm front affiliated with a low pressure system lifting through central North Dakota. A few of these storms became severe, producing golf ball size hail over parts of Wells and Foster counties.</p>				
DICKEY COUNTY --- 0.4 WNW ELLENDALE [46.00, -98.53]				
	08/23/21 23:38 CST		15K	Thunderstorm Wind (EG 56 kt)
	08/23/21 23:46 CST		0	Source: Emergency Manager
<p>Some limbs were blown off a few trees, and an old tree blew over and damaged a power pole.</p> <p>Thunderstorms moved through the southern James River Valley as an upper level short-wave trough and affiliated surface low moved over the region. While most of the severe weather remained over South Dakota, one thunderstorm produced severe wind gusts estimated at 65 mph over the Ellendale area in Dickey County.</p>				
MOUNTRAIL COUNTY --- 1.5 NNE WABEK DIFFLEY ARPT [47.87, -101.96]				
	08/24/21 05:18 CST		0	Hail (0.88 in)
	08/24/21 05:23 CST		20K	Source: Public
<p>Some canola was shelled out. Soybean leaves were damaged and some pods were knocked off plants.</p>				
WARD COUNTY --- 5.5 N SOUTH PRAIRIE [48.13, -101.30]				
	08/24/21 06:24 CST		0	Hail (1.25 in)
	08/24/21 06:27 CST		0	Source: Public
<p>Thunderstorms developed during the early morning hours over northwest North Dakota as an upper level short-wave trough and affiliated surface low moved through the region. One storm became severe, producing half-dollar size hail south of Minot in Ward</p>				

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County.				
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ADAMS COUNTY --- HETTINGER ARPT [46.02, -102.65]				
	08/26/21 01:06 MST		0	Thunderstorm Wind (MG 52 kt)
	08/26/21 01:09 MST		0	Source: ASOS
<p>A short wave-trough moving through the region resulted in thunderstorms developing mainly over western South Dakota, but a few storms developed over far southwest North Dakota in an area of elevated instability. One storm became severe, producing a 60 mph wind gust at the Hettinger Airport in Adams County.</p>				
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MCKENZIE COUNTY --- 1.4 N WATFORD CITY [47.82, -103.28]				
	08/27/21 16:36 MST		7K	Hail (1.00 in)
	08/27/21 16:39 MST		0	Source: Public
<p>A pickup truck was damaged by the hail.</p>				
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WILLIAMS COUNTY --- 3.5 N ALAMO [48.63, -103.47]				
	08/27/21 17:40 CST		0	Hail (1.50 in)
	08/27/21 17:43 CST		0	Source: Public
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MOUNTRAIL COUNTY --- 7.7 S SANISH [47.87, -102.60]				
	08/27/21 18:38 CST		0	Thunderstorm Wind (EG 52 kt)
	08/27/21 18:41 CST		0	Source: Fire Department/Rescue
<p>Thunderstorm wind gusts were estimated by fire department personnel.</p>				
<p>A frontal boundary moving through the region led to thunderstorms developing in an area of marginal instability but strong deep layer shear. A few storms became severe. The largest reported hail was the size of a ping pong ball, which fell in Williams County near Alamo. The strongest reported thunderstorm wind gust was estimated at 60 mph, which occurred in Mountrail County.</p>				
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OLIVER COUNTY --- 14.1 WNW HANNOVER [47.17, -101.72]				
	08/30/21 10:00 CST		2K	Thunderstorm Wind (EG 52 kt)
	08/30/21 10:03 CST		0	Source: Public
<p>An unattached porch was tipped over.</p>				
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OLIVER COUNTY --- 9.9 W HANNOVER [47.11, -101.64]				
	08/30/21 11:14 CST		0	Hail (1.50 in)
	08/30/21 11:17 CST		0	Source: Public
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OLIVER COUNTY --- 8.9 W HANNOVER [47.12, -101.62], 14.6 W HANNOVER [47.14, -101.74], 15.2 WNW HANNOVER [47.22, -101.72], 8.9 NW HANNOVER [47.21, -101.57]				
	08/30/21 11:15 CST		35K	Flash Flood (due to Heavy Rain)
	08/30/21 13:15 CST		0	Source: Broadcast Media
<p>Over four inches of rain falling from a slow moving thunderstorm led to flash flooding. Rural roads had water flowing over them, washing gravel away and making them impassable.</p>				
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MERCER COUNTY --- 2.8 W HAZEN [47.30, -101.69]				
	08/30/21 12:30 CST		0	Hail (1.50 in)
	08/30/21 12:33 CST		0	Source: Public
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MORTON COUNTY --- 6.2 N NEW SALEM [46.94, -101.41]				
	08/30/21 12:40 CST		0	Hail (2.00 in)
	08/30/21 12:43 CST		0	Source: Public
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MERCER COUNTY --- 2.9 NNE BEULAH [47.31, -101.76]				
	08/30/21 12:45 CST		7K	Hail (1.75 in)
	08/30/21 12:48 CST		0	Source: Public

A pickup truck was damaged.

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MORTON COUNTY --- 4.3 ENE NEW SALEM [46.88, -101.34]				
	08/30/21 13:11 CST		0	Hail (1.75 in)
	08/30/21 13:14 CST		0	Source: Trained Spotter
MORTON COUNTY --- 2.1 NNE JUDSON [46.86, -101.26]				
	08/30/21 13:24 CST		0	Hail (1.00 in)
	08/30/21 13:26 CST		0	Source: Public
MORTON COUNTY --- 3.1 WNW JUDSON [46.85, -101.33], 2.5 WNW JUDSON [46.84, -101.32]				
	08/30/21 13:25 CST		0.20M	Hail (2.75 in)
	08/30/21 13:29 CST		0	Source: Fire Department/Rescue
Multiple homes in the area were heavily damaged, which included broken windows and destroyed siding. In addition, a few campers were also damaged.				
GRANT COUNTY --- 11.8 NNE LARK [46.61, -101.31]				
	08/30/21 14:51 MST		0	Hail (2.00 in)
	08/30/21 14:55 MST		0	Source: Public
MCLEAN COUNTY --- 4.8 NNW EMMET [47.71, -101.70]				
	08/30/21 15:00 CST		20K	Hail (1.25 in)
	08/30/21 15:04 CST		50K	Source: Trained Spotter
Multiple vehicles were damaged. A canola crop was severely damaged.				
MORTON COUNTY --- 9.9 S SWEET BRIAR [46.69, -101.14]				
	08/30/21 15:05 CST		0	Hail (2.25 in)
	08/30/21 15:10 CST		50K	Source: Public
A soybean crop was destroyed.				
HETTINGER COUNTY --- 4.4 NNE REGENT [46.48, -102.52]				
	08/30/21 15:11 MST		0	Hail (2.75 in)
	08/30/21 15:14 MST		0	Source: Trained Spotter
MORTON COUNTY --- 0.8 SE GLEN ULLIN [46.81, -101.82]				
	08/30/21 15:18 CST		0	Hail (1.00 in)
	08/30/21 15:22 CST		0	Source: Public
MORTON COUNTY --- 6.2 SSE GLEN ULLIN [46.74, -101.77]				
	08/30/21 15:50 CST		0	Hail (1.75 in)
	08/30/21 15:54 CST		0	Source: Trained Spotter
HETTINGER COUNTY --- 7.1 SSE REGENT [46.33, -102.47], 2.8 S MOTT MUNI ARPT [46.31, -102.33]				
	08/30/21 15:53 MST		35K	Hail (3.00 in)
	08/30/21 16:00 MST		0	Source: Public
Vehicles were severely damaged, which included broken windshields.				
MORTON COUNTY --- 11.8 ESE ALMONT [46.65, -101.28]				
	08/30/21 15:55 CST		0	Hail (2.00 in)
	08/30/21 15:58 CST		0	Source: Public
MORTON COUNTY --- 11.1 S JUDSON [46.67, -101.26]				
	08/30/21 16:30 CST		0	Hail (1.75 in)
	08/30/21 16:33 CST		0	Source: Trained Spotter
MORTON COUNTY --- 3.5 N FLASHER [46.50, -101.23]				

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	08/30/21 16:34 CST		0	Hail (1.75 in)
	08/30/21 16:37 CST		0	Source: Public

ADAMS COUNTY --- 8.4 N HAYNES [46.09, -102.50], 3.3 ESE HAYNES [45.96, -102.40]

08/30/21 16:50 MST	0.35M	Hail (3.00 in)
08/30/21 17:20 MST	0.40M	Source: Public

A long lived supercell thunderstorm produced a path of destruction near Haynes . At one farm, large hail punched many holes through the metal roofs on pole barns and also into a hot-tub cover. Five vehicles were substantially damaged. Windows were broken on pole barns, and an exhaust vent for a pole barn furnace was busted off. To the south-southeast the destruction continued, with very large hail continuing to fall. In addition, strong thunderstorm winds accompanied the hail, shredding a field of lush eight foot tall corn, which was considered some of the nicest in the county, down to knee high.

MORTON COUNTY --- 5.2 E FLASHER [46.45, -101.12]

08/30/21 16:50 CST	50K	Thunderstorm Wind (EG 70 kt)
08/30/21 16:58 CST	0	Source: Fire Department/Rescue

A semi-truck and trailer were blown over by thunderstorm winds. The very strong winds continued for a few minutes after the truck blew over.

MCLEAN COUNTY --- 7.0 SW EMMET [47.59, -101.77]

08/30/21 16:55 CST	0	Hail (1.00 in)
08/30/21 16:58 CST	0	Source: Public

MORTON COUNTY --- 5.0 NNE FLASHER [46.52, -101.19], 5.3 NE FLASHER [46.51, -101.16]

08/30/21 17:05 CST	0.40M	Hail (2.75 in)
08/30/21 17:15 CST	0.75M	Source: Trained Spotter

Very large hail combined with wind gusts to cause extensive damage . At one farmstead, all windows were broken out of the north side of two homes. Steel siding was dented on one home, and vinyl siding was destroyed on the other. Five vehicles had their windows broken. Crops were flattened and trees were stripped of leaves. Other farmsteads in the area also had broken windows in their homes, and destroyed crops.

A few thunderstorms developed during the late morning hours over central North Dakota where southerly low level flow increased instability, and deep layer shear was elevated. Initially, a nearly stationary supercell developed over Oliver County. The storm produced large hail and damaging wind gusts, along with torrential rain that led to flash flooding and damaging gravel roads. The storm eventually started moving to the south-southeast, continuing to produce severe weather in its path. Substantial damage occurred in Morton County north and east of the city of Flasher where hail up to the size of baseballs and wind gusts estimated to 80 mph severely damaged homes and vehicles, and overturned a semi-truck. Additional storms developed in the area. One intense supercell thunderstorm moved through Hettinger and Adams counties producing three inch diameter hail that destroyed crops and greatly damaged buildings and vehicles.