

Storm Data and Unusual Weather Phenomena - July 2007

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
NORTH DAKOTA, Central and West				
SIOUX COUNTY				
20.0 W SELFRIDGE	07/01/07 16:55 MST		0	Hail (1.25 in)
	07/01/07 17:01 MST		0	46.03N, 101.347W
MORTON COUNTY				
14.0 S MANDAN	07/01/07 19:10 CST		0	Thunderstorm Wind (MG 55 kt)
	07/01/07 19:18 CST		0	46.6276N, 100.9W
BURLEIGH COUNTY				
8.0 SSW MENOKE	07/01/07 19:15 CST		40K	Thunderstorm Wind (EG 65 kt)
	07/01/07 19:22 CST		0	46.7132N, 100.585W
Damage to outbuildings on a farm. Mainly some roof damage with one metal building collapsed.				
GRANT COUNTY				
CARSON	07/01/07 19:36 MST		0	Hail (1.75 in)
	07/01/07 19:38 MST		0	46.42N, 101.57W
MORTON COUNTY				
6.0 W MANDAN	07/01/07 20:19 CST		0	Hail (1.75 in)
	07/01/07 20:25 CST		0	46.83N, 101.027W
MORTON COUNTY				
3.0 N MANDAN	07/01/07 20:25 CST		0	Hail (1.50 in)
	07/01/07 20:45 CST		0	46.8734N, 100.9W
MORTON COUNTY				
10.0 NW MANDAN	07/01/07 20:40 CST		0	Hail (1.75 in)
	07/01/07 20:51 CST		0	46.9322N, 101.05W
MORTON COUNTY				
7.0 S ALMONT	07/01/07 20:50 CST		0	Hail (1.75 in)
	07/01/07 20:59 CST		0	46.6288N, 101.5W
In the late afternoon of Sunday July 1st, Tornado Watch 470 was issued for all of west and central North Dakota in anticipation of severe thunderstorms developing in an area of sustained warm air advection northeast of a stationary surface low in western South Dakota. Numerous severe thunderstorm warnings and two tornado warnings were issued.				
WILLIAMS COUNTY				
GRENORA	07/02/07 17:06 CST		0	Hail (1.00 in)
	07/02/07 17:20 CST		0	48.62N, 103.93W
WILLIAMS COUNTY				
SPRING BROOK	07/02/07 22:50 CST		0	Hail (0.88 in)
	07/02/07 22:58 CST		0	48.25N, 103.47W
GOLDEN VALLEY COUNTY				
10.0 NE SENTINEL BUTTE	07/02/07 23:27 MST		15K	Thunderstorm Wind (EG 70 kt)
	07/02/07 23:38 MST		0	47.0222N, 103.68W
Siding blown off building.				
DUNN COUNTY				
HALLIDAY	07/02/07 23:40 MST		0	Thunderstorm Wind (MG 61 kt)
	07/02/07 23:42 MST		0	47.35N, 102.33W
MERCER COUNTY				

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
0.8 SE PICK CITY	07/03/07 00:15 MST		0	Thunderstorm Wind (EG 52 kt)
3.0 E HAZEN	07/03/07 00:44 MST		0	47.5115N, 101.457W ~ 47.3N, 101.566W

MCLEAN COUNTY

9.7 S RAUB	07/03/07 00:50 CST		35K	Thunderstorm Wind (EG 61 kt)
	07/03/07 01:01 CST		0	47.6098N, 102.05W

Winds collapsed a cabin being constructed at the Indian Hills Recreation Area.

MOUNTRAIL COUNTY

0.5 E PLAZA	07/03/07 00:52 CST		0	Thunderstorm Wind (EG 52 kt)
	07/03/07 01:04 CST		0	48.03N, 101.96W

WARD COUNTY

21.0 S MINOT	07/03/07 01:10 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/03/07 01:20 CST		0	47.9264N, 101.28W

Winds snapped electrical wire at spotter's home.

MCHENRY COUNTY

KIEF	07/03/07 02:13 CST		0	Thunderstorm Wind (EG 52 kt)
	07/03/07 02:23 CST		0	47.85N, 100.52W

MCHENRY COUNTY

DRAKE	07/03/07 02:27 CST		0	Hail (0.75 in)
	07/03/07 02:33 CST		0	47.92N, 100.37W

In the mid afternoon hours of Monday July 2nd, Tornado Watch 473 was issued in anticipation of severe thunderstorms developing ahead of an incoming short wave impulse and along a stalled boundary over northwest North Dakota. Later that evening, Severe Thunderstorm Watch 475 was issued over much of west and central North Dakota as a MCS (Mesoscale Convective System) developed in eastern Montana and approached western North Dakota. Severe Thunderstorm Watch 476 was then issued early Tuesday morning of the 3rd to include the remainder of west and central North Dakota as the bowing linear MCS continued to move across the state. Numerous severe thunderstorm warnings were issued during this period. A few reports of large hail and several reports of severe thunderstorm wind gusts were received during the evening hours of the 2nd through the early morning hours of the 3rd.

GRANT COUNTY

NEW LEIPZIG	07/04/07 16:33 MST		0	Hail (0.75 in)
	07/04/07 16:45 MST		0	46.37N, 101.95W

GRANT COUNTY

NEW LEIPZIG	07/04/07 16:40 MST		65K	Thunderstorm Wind (EG 60 kt)
	07/04/07 16:47 MST		0	46.37N, 101.95W

Newspaper reports New Leipzig sustained damage from storm. Several large trees uprooted along with some damage to homes.

GRANT COUNTY

6.0 S ELGIN	07/04/07 16:46 MST		20K	Hail (1.50 in)
	07/04/07 16:52 MST		0.25M	46.3133N, 101.85W

Newspaper reports farmstead sustained damage from storm 6 miles south of Elgin. Major crop damage from hail and winds, trees broken/uprooted, and hail damage to home.

GRANT COUNTY

25.0 S CARSON	07/04/07 17:16 MST		30K	Thunderstorm Wind (EG 65 kt)
	07/04/07 17:24 MST		0.15M	46.0586N, 101.57W

Newspaper reports farmstead sustained damage from storm 25 miles south of Carson. Crop damage from hail and winds and several grain bins ripped apart.

In the late afternoon and early evening hours of July 4th, a severe thunderstorm developed and moved over south central North Dakota. Two counties were under a severe thunderstorm warning during the early evening. One report of large hail and one report of a severe thunderstorm wind gust were received over Grant county.

GOLDEN VALLEY COUNTY

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GOLVA	07/09/07 14:35 MST		0	Thunderstorm Wind (EG 52 kt)
	07/09/07 14:45 MST		0	46.73N, 103.98W
Accompanied by pea size hail and very heavy rain.				
SLOPE COUNTY				
12.0 S AMIDON	07/09/07 14:40 MST		0	Hail (0.75 in)
	07/09/07 14:48 MST		0	46.3065N, 103.32W
GOLDEN VALLEY COUNTY				
11.9 SE GOLVA	07/09/07 14:45 MST		7K	Thunderstorm Wind (MG 56 kt)
	07/09/07 14:55 MST		0	46.6083N, 103.803W
Accompanied by nickel size hail 0.88 inch diameter and very heavy rain. Damage to siding.				
SLOPE COUNTY				
20.0 SE AMIDON	07/09/07 15:10 MST		5K	Hail (2.00 in)
	07/09/07 15:25 MST		0	46.2756N, 103.024W
The ground was white with hail at conclusion. Minor damage to buildings.				
BOWMAN COUNTY				
6.0 W RHAME	07/09/07 15:20 MST		0	Hail (0.88 in)
	07/09/07 15:35 MST		0	46.23N, 103.775W ~ 46.23N, 103.65W
ADAMS COUNTY				
5.0 N HETTINGER	07/09/07 15:35 MST		0	Hail (2.00 in)
	07/09/07 15:44 MST		0	46.0723N, 102.63W
BOWMAN COUNTY				
20.0 SW BOWMAN	07/09/07 15:35 MST		0	Hail (1.00 in)
	07/09/07 15:45 MST		0	45.9756N, 103.695W
ADAMS COUNTY				
15.0 ENE HAYNES	07/09/07 16:15 MST		0	Hail (1.00 in)
	07/09/07 16:30 MST		10K	46.053N, 102.182W
Hail ranged from penny to quarter size. Minor crop damage.				
ADAMS COUNTY				
23.0 E HETTINGER	07/09/07 16:49 MST		0	Thunderstorm Wind (MG 63 kt)
	07/09/07 16:59 MST		0	46N, 102.151W
Automatic Weather Data Network (AWDN) observation.				
MOUNTRAIL COUNTY				
STANLEY	07/09/07 17:30 CST		40K	Thunderstorm Wind (MG 57 kt)
	07/09/07 17:42 CST		0	48.32N, 102.38W
Spotter reports several trees down in the city of Stanley. Largest tree was approximately 16 inches in diameter. Two flag poles also broken off.				
MCLEAN COUNTY				
1.0 SE RAUB	07/09/07 18:05 CST		0	Hail (1.50 in)
	07/09/07 18:50 CST		0.25M	47.7398N, 102.035W ~ 47.5922N, 101.65W
NWS storm survey completed for the tornado in Mclean County produced from the same supercell thunderstorm, revealed a path of crop destruction from near Raub to just south of Emmet. In some cases crop destruction looked to be 100 percent. The storm also produced a tornado and high thunderstorm wind of around 70 mph.				
WARD COUNTY				
CARPIO	07/09/07 18:10 CST		0	Thunderstorm Wind (EG 52 kt)
	07/09/07 18:20 CST		0	48.45N, 101.75W

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MCLEAN COUNTY				
12.0 S ROSEGLLEN	07/09/07 18:25 CST		80K	Tornado (EF1, L: 1.50 mi , W: 60 yd)
13.5 S ROSEGLLEN	07/09/07 18:34 CST	4	0.15M	47.5765N, 101.83W ~ 47.5548N, 101.83W
<p>NWS storm survey was completed for this event. An EF1 tornado was confirmed to have occurred on the Fort Berthold Reservation of Mclean County starting from 6 miles south of White Shield and ending 8 miles south-southeast of White Shield. The path was about 1 1/2 miles long. One manufactured home was rolled and badly damaged near the beginning of the path. It had three occupants, one adult male and one adult female approximately in their 30's, and one four year old child. All three had minor injuries. A pickup truck at this location was totally destroyed as the home rolled onto it and the truck acted as a stop. Another manufactured home was completely destroyed about one mile from the first. It had one adult male occupant, age 53, who was seriously injured and hospitalized. There was also significant damage to crops in the area, with 100 percent crop loss in some fields caused by wind driven hail up to 1.5 inches in diameter. Wind speed estimated 105 mph.</p>				
SIOUX COUNTY				
10.0 S SOLEN	07/09/07 18:30 MST		75K	Thunderstorm Wind (EG 83 kt)
	07/09/07 18:40 MST		3K	46.2854N, 100.53W
<p>NWS storm survey completed for this event. Damage to outbuildings, grain bins, horse trailer, picnic benches, empty oil type drums, and other items on the farm. Storm survey determined the damage was caused by high thunderstorm wind gusts and not a tornado. Location 10 miles south and 1 east of Solen.</p>				
WARD COUNTY				
7.6 S SOUTH PRAIRIE	07/09/07 18:35 CST		0	Thunderstorm Wind (EG 67 kt)
	07/09/07 18:45 CST		0	47.9398N, 101.3W
<p>No damage reported.</p>				
WARD COUNTY				
9.8 E DOUGLAS	07/09/07 18:45 CST		0	Thunderstorm Wind (EG 67 kt)
	07/09/07 18:50 CST		0	47.85N, 101.29W
<p>No damage reported.</p>				
MCLEAN COUNTY				
13.0 NW GARRISON	07/09/07 19:16 CST		0	Thunderstorm Wind (MG 62 kt)
	07/09/07 19:20 CST		0	47.7829N, 101.618W
EMMONS COUNTY				
4.0 W HAGUE	07/09/07 20:50 CST		0	Hail (0.75 in)
	07/09/07 21:00 CST		0	46.03N, 100.063W
EMMONS COUNTY				
WESTFIELD	07/09/07 20:55 CST		0	Hail (1.75 in)
	07/09/07 21:05 CST		0	46.03N, 100.2W
<p>In the early afternoon of July 9th, Severe Thunderstorm Watch 497 was issued in anticipation of severe thunderstorms developing along and ahead of a strong short wave trough and associated surface low/cold front over western North Dakota. Later in the afternoon, Severe Thunderstorm Watch 502 was issued to include all of central North Dakota as the short wave trough and cold front advanced eastward. Numerous severe thunderstorm warnings and several tornado warnings were issued. Several reports of large hail, numerous reports of severe thunderstorm wind gusts, and 1 confirmed tornado report were received during the late afternoon and evening hours.</p>				
ROLETTE COUNTY				
DUNSEITH	07/13/07 16:30 CST		3K	Thunderstorm Wind (EG 52 kt)
	07/13/07 16:35 CST		0	48.82N, 100.05W
<p>Large tree down onto power lines.</p>				
PIERCE COUNTY				
RUGBY	07/13/07 17:21 CST		0	Thunderstorm Wind (MG 59 kt)
	07/13/07 17:33 CST		0	48.37N, 99.98W
<p>Public report in Rugby also reported peak winds of around 70 mph during this time.</p>				
<p>In the late afternoon and early evening hours of July 13th, a severe thunderstorm developed and moved across parts of north central</p>				

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North Dakota. One severe thunderstorm warning was issued during the early evening. Reports of severe thunderstorm wind gusts were received across Rolette and Pierce counties.				
FOSTER COUNTY				
4.0 NW GRACE CITY	07/15/07 19:50 CST		0	Hail (0.88 in)
	07/15/07 19:55 CST		0	47.5909N, 98.8806W
FOSTER COUNTY				
1.0 SSW GRACE CITY	07/15/07 19:51 CST		0	Hail (1.00 in)
	07/15/07 19:58 CST		0	47.5366N, 98.8282W
STUTSMAN COUNTY				
9.0 NNW SPIRITWOOD	07/15/07 20:45 CST		0	Hail (0.88 in)
	07/15/07 20:51 CST		0	47.0502N, 98.573W
STUTSMAN COUNTY				
2.0 WNW ELDRIDGE	07/15/07 20:50 CST		0	Hail (0.88 in)
	07/15/07 20:57 CST		0	46.9111N, 98.8691W
LA MOURE COUNTY				
10.0 NNE EDGELEY	07/15/07 21:15 CST		0.20M	Thunderstorm Wind (EG 78 kt)
5.0 SSE EDGELEY	07/15/07 21:45 CST		0.10M	46.5036N, 98.6197W ~ 46.3032N, 98.6599W
Three towers were downed along a 115-kilovolt line owned by the Western Area Power Administration. Power failed at 10:18 PM CDT. Newspaper read a variety of hail, wind, and tornado damage in LaMoure County. See other LaMoure County StormData entries for the evening of July 15, 2007, to include hail, wind, and tornado.				
LA MOURE COUNTY				
8.0 N EDGELEY	07/15/07 21:30 CST		0.50M	Tornado (EF1, L: 1.00 mi , W: 80 yd)
7.0 N EDGELEY	07/15/07 21:35 CST		0.10M	46.4857N, 98.7W ~ 46.4712N, 98.7W
Estimated speed 105 mph. Damage on a farm 7 miles north of Edgeley. Farm outbuildings damaged and one machine shed destroyed. Equipment damaged including grain trucks, tractors, and combines. The farm house was not damaged and no one was killed or injured. The National Weather Service learned of the event through newspaper articles. The articles read that an insurance agent and the LaMoure County Sheriff assessed the event to be a tornado. See other LaMoure County StormData entries for the evening of July 15, 2007, to include hail, wind, and tornado.				
LA MOURE COUNTY				
2.0 N EDGELEY	07/15/07 21:35 CST		20K	Hail (1.75 in)
EDGELEY	07/15/07 21:40 CST		0	46.3989N, 98.7W ~ 46.37N, 98.7W
Damage to siding and windows. See other LaMoure County StormData entries for the evening of July 15, 2007, to include hail, wind, and tornado.				
DICKEY COUNTY				
5.0 NE MERRICOURT	07/15/07 21:45 CST		0.25M	Thunderstorm Wind (EG 83 kt)
4.0 S ELLENDALE	07/15/07 22:25 CST		0.50M	46.2511N, 98.6761W ~ 45.9422N, 98.52W
Combined severe thunderstorm winds and hail as large as half dollars (1.25 inch diameter) resulted in very significant crop damage through Dickey County. Damage extended from near the Lamoure County line northeast of Merricourt, through Dickey County, into Brown County, South Dakota. Dickey County Emergency Management reported an average 4 mile wide hail swath in the vicinity of Highway 281 with nearly 100 percent crop damage in some areas. At 1100 PM CDT an estimated 95 mph wind 1 mile west of Monango damaged many outbuildings on a hog farm. Some buildings were significantly damaged at the farm. This same storm crossed into Brown County, South Dakota, and did extensive damage there. See the StormData entry from the Aberdeen National Weather Service office.				
DICKEY COUNTY				
3.0 W ELLENDALE	07/15/07 22:05 CST		0	Hail (0.88 in)
	07/15/07 22:12 CST		0	46N, 98.5824W
In the late afternoon of Sunday July 15th, Severe Thunderstorm Watch 521 was issued in anticipation of severe thunderstorms developing in the vicinity of a stalled surface front over eastern North Dakota, and downstream from an embedded mid level vorticity maximum over southern Manitoba. Three severe thunderstorm warnings and one tornado warning were issued. Reports of large hail, severe thunderstorm wind gusts, and a tornado, were received as a supercell thunderstorm raced through Foster, Stutsman, LaMoure, and Dickey counties, and into South Dakota.				

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BILLINGS COUNTY				
5.5 S MEDORA	07/17/07 16:50 MST		1.50K	Thunderstorm Wind (EG 61 kt)
	07/17/07 16:57 MST		0	46.8398N, 103.53W
Multiple tree limbs down.				
In the late afternoon of Tuesday July 17th, scattered severe thunderstorms developed over southwest North Dakota. Several severe thunderstorm warnings were issued during the late afternoon and early evening hours. One report of a severe thunderstorm wind gust was received from Billings County.				
STARK COUNTY				
12.0 S DICKINSON	07/18/07 04:15 MST		50K	Flash Flood (due to Heavy Rain)
	07/18/07 06:15 MST		0	46.7065N, 102.78W
Ditches and creeks were full to overflowing from 3 to 5 inches of rain in the area. Water was running nearly a foot deep over some county roads.				
Very heavy rainfall of 3 to 5 inches from thunderstorms resulted in a flash flood in Stark County, south of Dickinson.				
WILLIAMS COUNTY				
WILLISTON ARPT	07/23/07 03:18 CST		0.75M	Thunderstorm Wind (EG 82 kt)
	07/23/07 03:21 CST		0	48.18N, 103.63W
ASOS at the Williston, North Dakota Airport recorded a 65 knot (75 mph) wind gust at 4:18 a.m. CDT Monday, July 23rd. Williams County Emergency Manager indicated that nearly all of the damage was confined to the airport property. The city of Williston had no more damage than some small tree limbs broken. Many buildings on the airport property were damaged, along with several aircraft. Specifically, major damage occurred to three aircraft hangars, minor damage to three airplane storage buildings, and damage to two single engine aircraft and one twin engine aircraft. An electrical line was also damaged, support beams on buildings were buckled, and parts of roofs were blown off. A helicopter was pushed 50 feet and turned 90 degrees. With the damage confined to such a small area (the airport property), and a small area of the airport (less than 1/2 mile) it was determined that this event was a microburst. Based on the damage it was determined that the highest wind likely missed the ASOS and was on the order of 82 knots (94 mph), estimated.				
A severe thunderstorm produced a microburst at the Williston, North Dakota airport. Significant damage occurred on the airport property with nothing more than a few tree limbs down in the city.				
RENVILLE COUNTY				
NORMA	07/31/07 17:15 CST		0.35M	Hail (1.25 in)
2.0 N TOLLEY	07/31/07 17:35 CST		1.40M	48.7N, 101.77W ~ 48.7589N, 101.82W
Storm accompanied by 60 mph wind gusts. Extensive crop damage to thousands of acres of various crops. Thirteen different farms had crop damage. Some crops were completely destroyed. Damage also to siding and windows on farm buildings. Newspaper article read that the total damage could amount to several million dollars.				
RENVILLE COUNTY				
5.0 W MOHALL	07/31/07 17:55 CST		0.10M	Hail (1.00 in)
2.0 SE LORAINE	07/31/07 18:15 CST		0.30M	48.77N, 101.61W ~ 48.8496N, 101.519W
Crop and building damage on 7 farms in northeast Renville County. Large hail and wind gusts 60 mph.				
BOTTINEAU COUNTY				
2.0 NE LANSFORD	07/31/07 18:15 CST		80K	Thunderstorm Wind (EG 74 kt)
	07/31/07 18:25 CST		0	48.6505N, 101.339W
One quonset was torn from its foundation and thrown into a second quonset. Tree branches were broken and some trees uprooted. A grain bin was blown into a diesel fuel storage tank, breaking the valve and resulting in 2000 gallons of spilled fuel. Emergency Manager indicated that the damage was consistent with high wind and not a tornado.				
WARD COUNTY				
DES LACS	07/31/07 18:15 CST		0	Hail (1.75 in)
	07/31/07 18:20 CST		0	48.25N, 101.57W
Hail up to golf ball size lasted for 5 minutes. Most stones much smaller.				
WARD COUNTY				
DES LACS	07/31/07 18:29 CST		0	Hail (1.00 in)
1.0 W MINOT	07/31/07 18:50 CST		0	48.25N, 101.57W ~ 48.23N, 101.302W

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No damage reported. Multiple reports.

BOTTINEAU COUNTY

6.0 ENE NEWBURG	07/31/07 19:13 CST		40K	Thunderstorm Wind (EG 70 kt)
	07/31/07 19:23 CST		0	48.7532N, 100.799W

One foot diameter trees down. Knocked over and damaged a grain bin and auger.

ROLETTE COUNTY

2.0 N DUNSEITH	07/31/07 20:10 CST		0.50K	Thunderstorm Wind (EG 52 kt)
	07/31/07 20:16 CST		0	48.8489N, 100.05W

Small tree limbs broken.

On the evening of Tuesday, July 31st, severe thunderstorms developed over north central North Dakota. Several severe thunderstorm warnings were issued. Several reports of large hail and severe thunderstorm wind gusts were received. The storms produced both hail and wind and resulted in major crop loss.