

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>NORTH DAKOTA, Central and West</b>				
<b>GOLDEN VALLEY COUNTY --- 1.2 NE BEACH [46.93, -103.98]</b>				
	07/02/17 16:34 MST	0		Thunderstorm Wind (MG 52 kt)
	07/02/17 16:44 MST	0		Source: AWOS
Thunderstorms developed over western North Dakota and western Montana in the late afternoon and early evening in an area of modest instability and marginal shear. One storm became severe as it entered Golden Valley County from Montana, and produced 60 mph wind gusts.				
<b>BURLEIGH COUNTY --- 5.8 NNW BISMARCK [46.88, -100.81]</b>				
	07/04/17 16:39 CST	0		Hail (0.88 in)
	07/04/17 16:42 CST	0		Source: Public
<b>BURLEIGH COUNTY --- 6.5 NNE BISMARCK [46.89, -100.73]</b>				
	07/04/17 16:42 CST	0		Hail (1.00 in)
	07/04/17 16:45 CST	0		Source: Trained Spotter
<b>BURLEIGH COUNTY --- 4.2 N BISMARCK [46.86, -100.77]</b>				
	07/04/17 17:10 CST	0		Hail (0.75 in)
	07/04/17 17:13 CST	0		Source: COOP Observer
<b>BURLEIGH COUNTY --- 2.0 NE STERLING [46.84, -100.25]</b>				
	07/04/17 17:41 CST	0		Thunderstorm Wind (MG 50 kt)
	07/04/17 17:43 CST	0		Source: Mesonet
A weak warm front lifted through the area and interacted with strong instability over south central North Dakota. Isolated severe weather developed, with reported hail up to one inch in diameter and thunderstorm wind gusts up to 58 mph.				
<b>HETTINGER COUNTY --- 0.8 SW MOTT [46.37, -102.33]</b>				
	07/05/17 14:30 MST	0		Hail (1.00 in)
	07/05/17 14:34 MST	0		Source: Public
<b>ADAMS COUNTY --- 14.9 NE HAYNES [46.13, -102.26]</b>				
	07/05/17 14:50 MST	0		Hail (0.75 in)
	07/05/17 14:53 MST	0		Source: Trained Spotter
<b>GRANT COUNTY --- 2.1 S ELGIN [46.37, -101.85]</b>				
	07/05/17 15:10 MST	0		Thunderstorm Wind (EG 52 kt)
	07/05/17 15:14 MST	0		Source: Public
Thunderstorm wind gust speeds were estimated by the public.				
<b>GRANT COUNTY --- 0.5 E ELGIN [46.40, -101.84]</b>				
	07/05/17 15:20 MST	0		Hail (1.00 in)
	07/05/17 15:23 MST	0		Source: Public
<b>EMMONS COUNTY --- 0.8 NE STRASBURG [46.14, -100.16]</b>				
	07/05/17 18:05 CST	0		Thunderstorm Wind (EG 52 kt)
	07/05/17 18:08 CST	0		Source: Law Enforcement
A sheriff deputy estimated thunderstorm wind gusts of at least 60 mph.				
<b>KIDDER COUNTY --- 2.0 WSW PETTIBONE [47.11, -99.56]</b>				
	07/05/17 21:36 CST	0		Hail (1.00 in)
	07/05/17 21:39 CST	0		Source: Trained Spotter
<b>STUTSMAN COUNTY --- 5.3 NW MEDINA [46.94, -99.37]</b>				

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/05/17 22:00 CST		0	Hail (0.88 in)
	07/05/17 22:03 CST		0	Source: Trained Spotter
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<b>STUTSMAN COUNTY --- 1.4 N MEDINA [46.90, -99.30]</b>				
	07/05/17 22:10 CST		0	Hail (0.75 in)
	07/05/17 22:13 CST		0	Source: Public
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<b>BOTTINEAU COUNTY --- WESTHOPE [48.92, -101.02]</b>				
	07/05/17 22:42 CST		0	Hail (1.00 in)
	07/05/17 22:45 CST		0	Source: Public
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<b>BOTTINEAU COUNTY --- 0.7 S WESTHOPE [48.91, -101.02]</b>				
	07/05/17 22:45 CST		0	Hail (1.25 in)
	07/05/17 22:48 CST		0	Source: Public
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<b>BOTTINEAU COUNTY --- 0.7 S WESTHOPE [48.91, -101.02]</b>				
	07/05/17 22:50 CST		0	Hail (1.75 in)
	07/05/17 22:53 CST		0	Source: Public
<hr/>				
<b>BOTTINEAU COUNTY --- 0.7 S WESTHOPE [48.91, -101.02]</b>				
	07/05/17 23:20 CST		0	Hail (1.75 in)
	07/05/17 23:23 CST		0	Source: Public
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<b>BOTTINEAU COUNTY --- 3.5 N KRAMER [48.75, -100.71]</b>				
	07/05/17 23:28 CST		0	Hail (1.00 in)
	07/05/17 23:31 CST		0	Source: Public
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<b>MCHENRY COUNTY --- 0.7 S BERWICK [48.36, -100.25]</b>				
	07/06/17 00:12 CST		0	Hail (1.00 in)
	07/06/17 00:15 CST		0	Source: Public
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<b>MCHENRY COUNTY --- 1.5 NNW TOWNER [48.37, -100.41]</b>				
	07/06/17 00:24 CST		0	Hail (1.00 in)
	07/06/17 00:27 CST		0	Source: Public
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<b>MCHENRY COUNTY --- 2.0 NE TOWNER [48.37, -100.37]</b>				
	07/06/17 00:30 CST		0	Hail (1.00 in)
	07/06/17 00:37 CST		0	Source: COOP Observer
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<b>PIERCE COUNTY --- 4.6 NW SELZ [47.89, -99.96]</b>				
	07/06/17 01:35 CST		0	Hail (1.00 in)
	07/06/17 01:38 CST		0	Source: Trained Spotter
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<b>PIERCE COUNTY --- 1.2 NW SELZ [47.86, -99.90]</b>				
	07/06/17 01:45 CST		0	Hail (1.00 in)
	07/06/17 01:49 CST		0	Source: Trained Spotter
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<b>BOWMAN COUNTY --- 0.5 W RHAME [46.23, -103.66]</b>				
	07/10/17 17:04 MST		0	Hail (1.00 in)
	07/10/17 17:08 MST		0	Source: Public
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<b>SLOPE COUNTY --- 10.1 SSE AMIDON [46.34, -103.26]</b>				

Thunderstorms developed over southwest North Dakota as a surface boundary interacted with elevated instability, with some storms becoming severe. As the storms moved and developed east, greater instability was encountered causing a shift to primarily large hail over central North Dakota. The strongest reported thunderstorm wind gusts of around 60 mph occurred in Grant and Emmons counties. The largest reported hail was golf ball size, and fell in Bottineau County.

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/10/17 17:34 MST		25K	Hail (1.75 in)
	07/10/17 17:39 MST		0	Source: Public
The large hail broke windows in a home. Tree damage was also reported.				
<b>Thunderstorms developed over and near southwest North Dakota in an environment with moderate instability and enhanced deep layer shear. Two thunderstorms became severe. The largest hail was golf ball size, and fell in Slope County causing damage to a home.</b>				
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<b>WILLIAMS COUNTY --- 0.8 NNW WILLISTON [48.16, -103.63]</b>				
	07/11/17 13:59 CST		15K	Thunderstorm Wind (EG 61 kt)
	07/11/17 14:08 CST		0	Source: Emergency Manager
Elm trees in a park were knocked over by the thunderstorm wind gusts. Minor damage occurred to a tin roof on a structure where some panels lifted off.				
<b>Thunderstorms formed along a cold front that pushed into northwest North Dakota in the afternoon. One storm became severe and produced 70 mph winds in the Williston area, resulting in some tree and roof damage.</b>				
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<b>MCHENRY COUNTY --- 4.2 S NORWICH [48.19, -100.99]</b>				
	07/14/17 15:20 CST		0	Hail (1.75 in)
	07/14/17 15:23 CST		0	Source: Public
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<b>MERCER COUNTY --- 13.7 NNW HAZEN [47.47, -101.78]</b>				
	07/14/17 15:55 CST		0	Hail (1.50 in)
	07/14/17 16:03 CST		0	Source: Public
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<b>MCHENRY COUNTY --- 2.0 WNW KONGSBERG [47.86, -100.84]</b>				
	07/14/17 16:11 CST		0	Hail (1.00 in)
	07/14/17 16:15 CST		0	Source: Public
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<b>MCLEAN COUNTY --- 6.7 SE WASHBURN [47.20, -100.94]</b>				
	07/14/17 16:58 CST		0	Thunderstorm Wind (EG 56 kt)
	07/14/17 17:02 CST		0	Source: Trained Spotter
A trained spotter estimated thunderstorm wind gusts of 65 mph.				
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<b>OLIVER COUNTY --- 6.2 SSE CENTER [47.04, -101.24]</b>				
	07/14/17 17:07 CST		0	Thunderstorm Wind (MG 50 kt)
	07/14/17 17:10 CST		0	Source: Mesonet
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<b>MORTON COUNTY --- 0.5 E MANDAN MUNI ARPT [46.77, -100.89]</b>				
	07/14/17 17:58 CST		0	Thunderstorm Wind (MG 60 kt)
	07/14/17 18:03 CST		0	Source: AWOS
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<b>MORTON COUNTY --- 1.5 NNW MANDAN MUNI ARPT [46.79, -100.91]</b>				
	07/14/17 18:00 CST		0	Thunderstorm Wind (EG 52 kt)
	07/14/17 18:03 CST		0	Source: Trained Spotter
A trained spotter estimated thunderstorm wind gusts of 60 mph.				
<b>A cold front pushed into western and central North Dakota where elevated instability and a dry lower atmosphere were noted. Severe thunderstorms developed with strong wind gusts and large hail. The largest hail report was golf ball size in McHenry County, and the strongest thunderstorm wind gust report was 69 mph in Morton County.</b>				
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<b>MCLEAN COUNTY --- 0.7 N GARRISON [47.66, -101.42]</b>				
	07/16/17 21:00 CST		0	Thunderstorm Wind (MG 50 kt)
	07/16/17 21:04 CST		0	Source: ASOS
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<b>MCHENRY COUNTY --- 0.7 S KARLSRUHE [48.09, -100.62]</b>				
	07/16/17 23:50 CST		15K	Thunderstorm Wind (EG 61 kt)
	07/16/17 23:55 CST		0	Source: Public

Large tree branches were broken down throughout the city of Karlsruhe.

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>Short-lived thunderstorms developed over the area in the evening and overnight hours. Two storms became severe producing strong wind gusts, with one producing extensive tree damage in Karlsruhe.</b>				
<b>EMMONS COUNTY --- 0.8 NE STRASBURG [46.14, -100.16]</b>				
	07/18/17 02:45 CST		15K	Thunderstorm Wind (EG 56 kt)
	07/18/17 02:50 CST		0	Source: Trained Spotter
Several large tree branches broke in the city of Strasburg. A pay-loader had to be used to remove some branches.				
<b>A broad area of thunderstorms formed over southern North Dakota during the early morning hours. One storm became severe and produced damaging wind gusts in Emmons County.</b>				
<b>GRANT COUNTY --- 9.7 W SHIELDS [46.21, -101.33]</b>				
	07/19/17 05:10 MST		0	Hail (1.00 in)
	07/19/17 05:15 MST		0	Source: Trained Spotter
<b>ROLETTE COUNTY --- 1.4 W ST JOHN [48.95, -99.71]</b>				
	07/19/17 07:30 CST		0	Hail (1.75 in)
	07/19/17 07:34 CST		0	Source: Public
<b>HETTINGER COUNTY --- 16.0 N BURT [46.60, -102.11]</b>				
	07/19/17 08:05 MST		0	Hail (1.00 in)
	07/19/17 08:08 MST		0	Source: Public
<b>ROLETTE COUNTY --- 1.6 ESE ROLETTE [48.66, -99.80], 1.8 ESE ROLETTE [48.66, -99.79]</b>				
	07/19/17 08:35 CST		0	Tornado (EF0, L: 0.26 mi , W: 25 yd)
	07/19/17 08:36 CST		0	Source: Law Enforcement
A Rolette County Deputy witnessed a tornado touching down approximately one mile east of the city of Rolette . The tornado lasted about one minute and caused no damage. It was rated EF0.				
<b>A strong low level jet combined with strong instability and shear to produce severe thunderstorms during the morning hours. Two distinct areas of thunderstorms developed with the first one tracking over southern North Dakota, and the second one over far north central North Dakota. The main threat from the southern storms was large hail, while the northern storms produced golf ball sized hail along with a short lived tornado in Rolette County.</b>				
<b>MCKENZIE COUNTY --- 11.4 SSW RAWSON [47.67, -103.65]</b>				
	07/20/17 13:50 MST		0	Hail (1.00 in)
	07/20/17 13:52 MST		0	Source: Public
<b>MCKENZIE COUNTY --- 10.1 SSW RAWSON [47.68, -103.61]</b>				
	07/20/17 13:54 MST		0	Hail (1.00 in)
	07/20/17 13:56 MST		0	Source: Public
<b>MCKENZIE COUNTY --- 9.8 S WATFORD CITY [47.66, -103.24]</b>				
	07/20/17 14:19 MST		0	Hail (1.50 in)
	07/20/17 14:22 MST		0	Source: Public
<b>MCKENZIE COUNTY --- 9.7 S WATFORD CITY [47.66, -103.28]</b>				
	07/20/17 14:24 MST		0	Hail (1.25 in)
	07/20/17 14:27 MST		0	Source: Public
<b>SLOPE COUNTY --- 19.4 WNW AMIDON [46.56, -103.71]</b>				
	07/20/17 14:30 MST		0	Hail (1.00 in)
	07/20/17 14:35 MST		0	Source: Trained Spotter
<b>SLOPE COUNTY --- 10.0 W AMIDON [46.48, -103.53]</b>				
	07/20/17 14:47 MST		0.40M	Thunderstorm Wind (EG 80 kt)
	07/20/17 14:52 MST		0	Source: Emergency Manager

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
A hopper style grain bin was destroyed at a ranch. Electrical poles in the area were snapped.				
<b>SLOPE COUNTY --- 19.4 WNW AMIDON [46.56, -103.71]</b>				
	07/20/17 15:05 MST		0	Hail (1.00 in)
	07/20/17 15:09 MST		0	Source: Trained Spotter
<b>DUNN COUNTY --- 0.8 NW HALLIDAY [47.36, -102.34]</b>				
	07/20/17 15:23 MST		0.28M	Thunderstorm Wind (EG 80 kt)
	07/20/17 15:32 MST		0	Source: Law Enforcement
Multiple power poles were snapped in and around the community of Halliday.				
<b>SLOPE COUNTY --- 5.6 SW AMIDON [46.42, -103.40]</b>				
	07/20/17 15:26 MST		90K	Thunderstorm Wind (EG 70 kt)
	07/20/17 15:32 MST		0	Source: Emergency Manager
Two outbuildings on a farm were toppled. Windows on the home were broken.				
<b>STARK COUNTY --- 2.4 W DICKINSON [46.88, -102.83]</b>				
	07/20/17 15:26 MST		0	Hail (1.00 in)
	07/20/17 15:29 MST		0	Source: Public
<b>BOWMAN COUNTY --- 4.0 SW RHAME [46.19, -103.71]</b>				
	07/20/17 15:34 MST		0.10M	Thunderstorm Wind (EG 78 kt)
	07/20/17 15:41 MST		0	Source: Emergency Manager
A barn was destroyed with the debris completely removed from the original site.				
<b>DUNN COUNTY --- 0.8 NW HALLIDAY [47.36, -102.34]</b>				
	07/20/17 15:34 MST		0	Hail (1.00 in)
	07/20/17 15:39 MST		0	Source: Public
<b>SLOPE COUNTY --- 10.4 SSW AMIDON [46.35, -103.43]</b>				
	07/20/17 15:34 MST		80K	Thunderstorm Wind (EG 70 kt)
	07/20/17 15:40 MST		0	Source: Emergency Manager
A barn collapsed at a ranch, and animals were trapped inside.				
<b>BOWMAN COUNTY --- 5.0 WNW RHAME [46.25, -103.75]</b>				
	07/20/17 15:39 MST		2K	Thunderstorm Wind (EG 52 kt)
	07/20/17 15:44 MST		0	Source: Trained Spotter
A motorcycle was knocked over and a flag was torn up.				
<b>STARK COUNTY --- 0.5 W DICKINSON [46.88, -102.79]</b>				
	07/20/17 15:42 MST		0	Hail (1.75 in)
	07/20/17 15:45 MST		0	Source: State Official
<b>BOWMAN COUNTY --- 0.5 W GRIFFIN [46.22, -103.54]</b>				
	07/20/17 16:07 MST		0.25M	Thunderstorm Wind (EG 80 kt)
	07/20/17 16:12 MST		0	Source: Emergency Manager
Power lines were down near Griffin.				
<b>SLOPE COUNTY --- 14.8 SE AMIDON [46.31, -103.13]</b>				
	07/20/17 16:07 MST		75K	Thunderstorm Wind (EG 70 kt)
	07/20/17 16:12 MST		0	Source: Broadcast Media
Four grain grain bins were damaged by the thunderstorm winds.				

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<b>BOWMAN COUNTY --- 3.4 W BUFFALO SPGS [46.17, -103.30]</b>				
	07/20/17 16:20 MST		0	Thunderstorm Wind (MG 63 kt)
	07/20/17 16:24 MST		0	Source: Mesonet
<b>ADAMS COUNTY --- HETTINGER ARPT [46.02, -102.65]</b>				
	07/20/17 16:53 MST		0	Thunderstorm Wind (MG 50 kt)
	07/20/17 16:55 MST		0	Source: ASOS
<b>GRANT COUNTY --- 0.8 NE NEW LEIPZIG [46.38, -101.94]</b>				
	07/20/17 17:30 MST		0	Thunderstorm Wind (EG 52 kt)
	07/20/17 17:33 MST		0	Source: Trained Spotter
A trained spotter estimated 60 mph thunderstorm wind gusts.				
<b>GRANT COUNTY --- 0.7 N ELGIN [46.41, -101.85]</b>				
	07/20/17 17:35 MST		75K	Thunderstorm Wind (EG 65 kt)
	07/20/17 17:42 MST		0	Source: Trained Spotter
Shingles were blown off about one-quarter of a roof on a home. Some plywood was also stripped from the roof. Multiple branches were down around the city of Elgin.				
<b>A surface low deepened over southeastern Montana which led to moisture increasing over the Dakotas. Strong instability developed in conjunction with enhanced deep layer shear. Initial storms developed as a short wave slid into the area in the afternoon, with storms continuing well into the evening as a low level jet strengthened over the region. One notable complex of supercell thunderstorms moved through southwest into far south central North Dakota in the evening producing a swath of damage from strong winds estimated as high as 95 mph. Electric Cooperatives in western North Dakota reported in excess of 60 poles damaged, along with transmission lines. Damage was around \$1.5 million.</b>				
<b>WELLS COUNTY --- 0.9 W CHASELEY [47.45, -99.82]</b>				
	07/21/17 13:25 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/21/17 13:30 CST		0	Source: Public
Several large branches were blown down in Chaseley.				
<b>WELLS COUNTY --- 2.1 NNW CATHAY [47.58, -99.41]</b>				
	07/21/17 13:30 CST		0	Hail (0.75 in)
	07/21/17 13:33 CST		0	Source: Trained Spotter
<b>FOSTER COUNTY --- JUANITA [47.50, -98.68]</b>				
	07/21/17 14:18 CST		0.15M	Thunderstorm Wind (MG 64 kt)
	07/21/17 14:23 CST		0.10M	Source: Law Enforcement
Measured wind gusts to 74 mph combined with quarter size hail to cause widespread damage in the Juanita area. One foot diameter trees were broken down. Wind driven hail caused damage to windows, vehicles, and siding. A grain truck was knocked over, and a door was torn off a quonset hut. Crops were damaged, with some corn flattened. Other reports of wind included estimates as high as 85 mph.				
<b>FOSTER COUNTY --- 0.7 N GLENFIELD [47.46, -98.57]</b>				
	07/21/17 14:22 CST		75K	Thunderstorm Wind (EG 78 kt)
	07/21/17 14:26 CST		20K	Source: Law Enforcement
Multiple power lines and trees were down. A tractor-trailer truck was blown over.				
<b>GRANT COUNTY --- 10.2 WSW SHIELDS [46.18, -101.33]</b>				
	07/21/17 17:00 MST		0	Hail (1.00 in)
	07/21/17 17:03 MST		0	Source: Public
<b>BURKE COUNTY --- 1.5 NNW NORTHGATE [49.00, -102.28]</b>				
	07/21/17 18:18 CST		0	Hail (1.00 in)
	07/21/17 18:22 CST		0	Source: Public

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<b>EMMONS COUNTY --- 7.1 NNW HAGUE [46.13, -100.01]</b>				
	07/21/17 18:30 CST	0		Hail (1.75 in)
	07/21/17 18:35 CST	0		Source: Public
<b>RENVILLE COUNTY --- 3.9 WNW LORAINE [48.89, -101.63]</b>				
	07/21/17 19:00 CST	0		Hail (2.75 in)
	07/21/17 19:05 CST	0		Source: Public
<b>RENVILLE COUNTY --- 0.9 W LORAINE [48.87, -101.57]</b>				
	07/21/17 19:05 CST	0		Hail (1.00 in)
	07/21/17 19:08 CST	0		Source: Public
<b>MCLEAN COUNTY --- 0.7 S MAX [47.81, -101.30]</b>				
	07/21/17 19:07 CST	0		Hail (1.00 in)
	07/21/17 19:10 CST	0		Source: Public
<b>RENVILLE COUNTY --- 0.7 S LORAINE [48.86, -101.55]</b>				
	07/21/17 19:08 CST	0		Hail (1.75 in)
	07/21/17 19:12 CST	0		Source: Storm Chaser
<b>LOGAN COUNTY --- 12.4 N LEHR [46.46, -99.35]</b>				
	07/21/17 19:32 CST	0		Hail (1.75 in)
	07/21/17 19:35 CST	0		Source: Public
<b>BOTTINEAU COUNTY --- 0.5 E RENVILLE [48.77, -101.29]</b>				
	07/21/17 19:37 CST	0		Hail (0.88 in)
	07/21/17 19:40 CST	0		Source: Public
<b>MCLEAN COUNTY --- 0.8 NW WASHBURN [47.29, -101.03]</b>				
	07/21/17 19:38 CST	0		Hail (1.00 in)
	07/21/17 19:42 CST	0		Source: Public
<b>BOTTINEAU COUNTY --- 5.5 N MAXBASS [48.80, -101.14]</b>				
	07/21/17 19:40 CST	0		Hail (1.75 in)
	07/21/17 19:43 CST	0		Source: Trained Spotter
<b>BOTTINEAU COUNTY --- 0.8 NNW MAXBASS [48.73, -101.14]</b>				
	07/21/17 19:48 CST	0		Hail (1.00 in)
	07/21/17 19:51 CST	0		Source: Public
<b>OLIVER COUNTY --- 3.9 WSW SANGER [47.15, -101.07], 3.9 SW SANGER [47.15, -101.07]</b>				
	07/21/17 19:50 CST	0		Tornado (EF0, L: 0.17 mi , W: 25 yd)
	07/21/17 19:55 CST	0		Source: Public
There were numerous reports of this tornado over a rural area of eastern Oliver County. It was visible from Bismarck and Mandan. No damage occurred and so the tornado was rated EF0.				
<b>BOTTINEAU COUNTY --- 0.8 SSE NEWBURG [48.71, -100.91]</b>				
	07/21/17 20:00 CST	0		Hail (1.75 in)
	07/21/17 20:03 CST	0		Source: Public
<b>BOTTINEAU COUNTY --- 0.8 SSW KRAMER [48.69, -100.71]</b>				
	07/21/17 20:24 CST	0		Hail (1.00 in)
	07/21/17 20:27 CST	0		Source: Trained Spotter
<b>BOTTINEAU COUNTY --- 0.7 S KRAMER [48.69, -100.70]</b>				

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/21/17 20:27 CST		0	Hail (1.75 in)
	07/21/17 20:30 CST		0	Source: Public
<hr/>				
<b>DICKEY COUNTY --- 1.5 SSW MERRICOURT [46.18, -98.76]</b>				
	07/21/17 20:55 CST		0	Thunderstorm Wind (EG 52 kt)
	07/21/17 20:59 CST		0	Source: Public
Thunderstorm wind gusts were estimated by the public.				
<hr/>				
<b>DICKEY COUNTY --- 1.6 WNW MERRICOURT [46.21, -98.78]</b>				
	07/21/17 21:00 CST		0	Hail (1.50 in)
	07/21/17 21:04 CST		0	Source: Public
<hr/>				
<b>DICKEY COUNTY --- 2.8 S MERRICOURT [46.16, -98.74]</b>				
	07/21/17 21:00 CST		0	Hail (1.25 in)
	07/21/17 21:03 CST		0	Source: Trained Spotter
<hr/>				
<b>MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89]</b>				
	07/21/17 21:10 CST		0.25M	Hail (2.75 in)
	07/21/17 21:25 CST		0	Source: Trained Spotter
Large hail fell over a broad swath of the city of Mandan, with the largest hail reported near the baseball field on 3rd Street SW.				
<hr/>				
<b>MCHENRY COUNTY --- 0.5 W TOWNER [48.35, -100.41]</b>				
	07/21/17 21:16 CST		0	Hail (1.00 in)
	07/21/17 21:19 CST		0	Source: Public
<hr/>				
<b>MCHENRY COUNTY --- 2.0 NE TOWNER [48.37, -100.37]</b>				
	07/21/17 21:16 CST		0	Hail (1.00 in)
	07/21/17 21:19 CST		0	Source: COOP Observer
<hr/>				
<b>BURLEIGH COUNTY --- 1.7 NW BISMARCK [46.82, -100.79]</b>				
	07/21/17 21:25 CST		0	Hail (1.75 in)
	07/21/17 21:29 CST		0	Source: Public
<hr/>				
<b>PIERCE COUNTY --- 4.6 SW RUGBY [48.33, -100.06]</b>				
	07/21/17 21:30 CST		0	Funnel Cloud
	07/21/17 21:33 CST		0	Source: Trained Spotter
A brief funnel cloud was reported.				
<hr/>				
<b>BURLEIGH COUNTY --- 0.8 SW (BIS)BISMARCK MUNI A [46.77, -100.76]</b>				
	07/21/17 21:40 CST		0	Hail (0.88 in)
	07/21/17 21:44 CST		0	Source: NWS Employee
<hr/>				
<b>PIERCE COUNTY --- 4.4 SSW RUGBY [48.31, -100.01]</b>				
	07/21/17 21:51 CST		0	Hail (1.00 in)
	07/21/17 21:54 CST		0	Source: Public
<hr/>				
<b>LA MOURE COUNTY --- VERONA [46.37, -98.07]</b>				
	07/21/17 22:10 CST		0	Hail (1.00 in)
	07/21/17 22:13 CST		0	Source: Public
<hr/>				
<b>EMMONS COUNTY --- 0.7 N HAZELTON [46.49, -100.28]</b>				
	07/21/17 22:22 CST		5K	Thunderstorm Wind (EG 52 kt)
	07/21/17 22:25 CST		0	Source: Trained Spotter

Some large branches broke down in Hazelton.

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>EMMONS COUNTY --- 5.5 S BRADDOCK [46.49, -100.09]</b>				
	07/21/17 22:36 CST		8K	Thunderstorm Wind (EG 61 kt)
	07/21/17 22:40 CST		0	Source: Public
Many tree branches were broken down.				
<b>LOGAN COUNTY --- 7.5 WSW NAPOLEON [46.45, -99.91]</b>				
	07/21/17 22:45 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/21/17 22:48 CST		0	Source: Public
Tree branches were broken down.				
<b>BURLEIGH COUNTY --- 1.9 E MOFFIT [46.68, -100.24]</b>				
	07/21/17 22:47 CST		0	Thunderstorm Wind (MG 56 kt)
	07/21/17 22:49 CST		0	Source: Mesonet
<p>A humid air mass lifted into the area ahead of surface low pressure that was situated over far western North Dakota in the morning into the early afternoon. Two rounds of severe weather developed. The first round, in the early to mid-afternoon, occurred as an upper level short wave trough passed through the area, with severe thunderstorms developing over the upper James River Valley. Damaging wind gusts were the primary concern with these storms. Later in the afternoon a surface trough affiliated with the surface low served as the focus for thunderstorm development, gradually moving east in the evening. The strongest wind gusts, estimated around 90 mph, occurred in Foster County, while the largest hail was reported to be baseball size and fell in Renville and Morton counties. A tornado also developed in Oliver County but produced no damage, though was visible from far distances, including the Bismarck area, due to the higher base of the thunderstorm.</p>				
<b>BOTTINEAU COUNTY --- 0.8 NNW ANTLER [48.98, -101.28]</b>				
	07/24/17 19:59 CST		0	Hail (1.00 in)
	07/24/17 20:04 CST		0	Source: Trained Spotter
<b>WARD COUNTY --- 1.1 NW MINOT [48.24, -101.30]</b>				
	07/24/17 21:36 CST		0	Hail (1.25 in)
	07/24/17 21:40 CST		0	Source: Trained Spotter
<b>WARD COUNTY --- 1.1 NW MINOT [48.24, -101.30]</b>				
	07/24/17 21:41 CST		0	Hail (0.75 in)
	07/24/17 21:44 CST		0	Source: Public
<b>WARD COUNTY --- 1.1 NW MINOT [48.24, -101.30]</b>				
	07/24/17 21:48 CST		0	Hail (1.00 in)
	07/24/17 21:51 CST		0	Source: Public
<b>BOTTINEAU COUNTY --- 2.8 SE ROTH [48.92, -100.56]</b>				
	07/24/17 22:53 CST		0	Hail (1.50 in)
	07/24/17 22:56 CST		0	Source: Law Enforcement
Severe thunderstorms formed along a cold front that moved through northern portions of North Dakota in the late evening hours. Large hail was the result.				
<b>MCKENZIE COUNTY --- 9.8 S WATFORD CITY [47.66, -103.32]</b>				
	07/29/17 13:49 MST		0	Thunderstorm Wind (MG 54 kt)
	07/29/17 13:52 MST		0	Source: Mesonet
<b>RENVILLE COUNTY --- 12.6 NNW TOLLEY [48.90, -101.92]</b>				
	07/29/17 15:36 CST		1K	Thunderstorm Wind (EG 61 kt)
	07/29/17 15:39 CST		0	Source: Trained Spotter
A 12-inch diameter ash tree trunk split.				
<b>MOUNTRAIL COUNTY --- 8.3 S MANITOU [48.21, -102.62]</b>				

## Storm Data and Unusual Weather Phenomena - July 2017

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/29/17 17:15 CST		0	Hail (1.00 in)
	07/29/17 17:17 CST		0	Source: Public

**WILLIAMS COUNTY --- 0.5 W GRENORA [48.62, -103.94]**

	07/29/17 17:59 CST		0	Funnel Cloud
	07/29/17 18:01 CST		0	Source: Law Enforcement

A short-lived funnel cloud was reported.

**Thunderstorms formed along a weak frontal boundary in an environment of favorable deep layer shear and instability. A few storms became severe with large hail and strong wind gusts.**

**HETTINGER COUNTY --- 9.7 N BURT [46.51, -102.13]**

	07/31/17 13:15 MST		0	Hail (0.88 in)
	07/31/17 13:18 MST		0	Source: Public

**HETTINGER COUNTY --- 11.3 NNE BURT [46.53, -102.10]**

	07/31/17 13:30 MST		0	Hail (1.50 in)
	07/31/17 13:33 MST		20K	Source: Public

Barley crops were damaged by the hail.

**HETTINGER COUNTY --- 3.2 NW BURT [46.40, -102.20]**

	07/31/17 13:55 MST		0	Hail (1.00 in)
	07/31/17 13:59 MST		0	Source: Public

**BURLEIGH COUNTY --- 5.9 NW FT LINCOLN [46.88, -100.69]**

	07/31/17 17:11 CST		0	Hail (1.25 in)
	07/31/17 17:14 CST		0	Source: Public

**BURLEIGH COUNTY --- 3.1 NNE BISMARCK [46.84, -100.74]**

	07/31/17 17:35 CST		0	Hail (1.00 in)
	07/31/17 17:38 CST		0	Source: Trained Spotter

**Thunderstorms developed along a cold front in an environment with enhanced instability and modest deep layer shear. Some thunderstorms became severe producing large hail.**