

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|-----------|-------------------|---------------------|------------------------|
|----------|-----------|-------------------|---------------------|------------------------|

NORTH DAKOTA, Central and West

BURLEIGH COUNTY --- 36.6 WNW WILTON [47.43, -101.48], 28.3 N WILTON [47.58, -100.78], 47.2 S MOFFIT [46.00, -100.37], 50.4 SSW MOFFIT [46.02, -100.73]

| | | | |
|--|--------------------|---|---------------------------------------|
| | 07/01/11 00:00 CST | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

MCLEAN COUNTY --- 7.1 SW RIVERDALE [47.43, -101.48], 7.0 NE TURTLE LAKE [47.58, -100.78], 83.4 SSE WILTON [46.00, -100.37], 79.5 S WILTON [46.02, -100.73]

| | | | |
|--|--------------------|---|---------------------------------------|
| | 07/01/11 00:00 CST | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

MERCER COUNTY --- 6.2 S PICK CITY [47.43, -101.48], 32.4 E PICK CITY [47.58, -100.78], 103.0 SSE STANTON [46.00, -100.37], 95.0 SSE STANTON [46.02, -100.73]

| | | | |
|--|--------------------|---|---------------------------------------|
| | 07/01/11 00:00 CST | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

MORTON COUNTY --- 40.2 N NEW SALEM [47.43, -101.48], 52.1 N MANDAN [47.58, -100.78], 37.3 SSE FT RICE [46.00, -100.37], 26.6 SSE BREIEN [46.02, -100.73]

| | | | |
|--|--------------------|---|---------------------------------------|
| | 07/01/11 00:00 CST | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

OLIVER COUNTY --- 17.5 NW FT CLARK [47.43, -101.48], 26.8 NNE HENSLER [47.58, -100.78], 79.5 SSE PRICE [46.00, -100.37], 74.0 S PRICE [46.02, -100.73]

| | | | |
|--|--------------------|---|---------------------------------------|
| | 07/01/11 00:00 CST | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

SIoux COUNTY --- 78.7 NNW SOLEN [47.43, -101.48], 82.2 N SOLEN [47.58, -100.78], 13.6 ESE FT YATES [46.00, -100.37], 6.3 SW FT YATES [46.02, -100.73]

| | | | |
|--|--------------------|---|---------------------------------------|
| | 07/01/11 00:00 MST | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 MST | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

This was part of historic flooding in North Dakota with statewide costs estimated around 1.5 billion dollars. Flooding was the result of significant winter snows and significant spring rains, not only in North Dakota but in Montana as well. Rocky Mountain snowpack was four to six times normal. Flooding was along the Missouri River from the Garrison Dam to the South Dakota border. Dams were overwhelmed by the amount of water. Flooding included river, ground, and overland types. Estimated damages were in the hundreds of millions of dollars and that is not all inclusive. There was a significant loss to agriculture by not being able to plant. A tremendous flood fight was waged against the river, and that cost is not included here. Storm Data cannot reflect the scope of this event. Information is what was available at the time of this writing. Refer to newspaper articles and other federal, state, and local sources for detailed information.

Here are some facts about the flooding in North Dakota provided by North Dakota Emergency Management. The total estimated flood cost was around \$1.5 billion. Individual and housing assistance was \$323 million; small business \$248 million; home and business reconstruction \$452 million; public response, recovery, and mitigation \$480 million; disaster unemployment for 866 claims was \$2.3 million; and the public finance authority disaster loan program approved \$56.6 million. Public infrastructure costs were \$320 million. Of the state's 53 counties, 48 were impacted, along with three tribal nations.

The Missouri River was in flood in every state in the United States of America that it runs through. This was a multi-state disaster.

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|---------------------------------------|
| DUNN COUNTY --- 62.6 WNW KILLDEER [47.75, -103.99], 23.2 N WERNER [47.70, -102.38], 58.8 N WERNER [48.21, -102.27], 79.5 NW KILLDEER [48.17, -104.00] | | | | |
| | 07/01/11 00:00 MST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 MST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

| | | | | |
|--|--------------------|--|---|---------------------------------------|
| MCKENZIE COUNTY --- 7.2 SSE FAIRVIEW [47.75, -103.99], 14.0 E MANDAREE [47.70, -102.38], 29.3 ENE CHARLSON [48.21, -102.27], 22.1 N FAIRVIEW [48.17, -104.00] | | | | |
| | 07/01/11 00:00 MST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 MST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

| | | | | |
|--|--------------------|--|---|---------------------------------------|
| MOUNTRAIL COUNTY --- 67.7 WSW SANISH [47.75, -103.99], 19.7 SW PARSHALL ARPT [47.70, -102.38], 3.9 NE BELDEN ARPT [48.21, -102.27], 58.4 WSW WHITE EARTH [48.17, -104.00] | | | | |
| | 07/01/11 00:00 CST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

| | | | | |
|--|--------------------|--|---|---------------------------------------|
| WILLIAMS COUNTY --- 17.3 S BUFORD [47.75, -103.99], 54.6 SSE TIOGA [47.70, -102.38], 33.0 ESE TIOGA [48.21, -102.27], 9.8 NW TRENTON [48.17, -104.00] | | | | |
| | 07/01/11 00:00 CST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

This was part of historic flooding in North Dakota with statewide costs estimated around 1.5 billion dollars. Flooding was the result of significant winter snows and significant spring rains, not only in North Dakota but in Montana as well. Rocky Mountain snowpack was four to six times normal. Flooding was along the Missouri River from the Montana border to Garrison Dam. Dams were overwhelmed by the amount of water. Flooding included river, ground, and overland types. Oil wells were shuttered. Estimated damages were around \$400,000 and that is not all inclusive. There was a significant loss to agriculture by not being able to plant. A tremendous flood fight was waged against the river, and that cost is not included here. Storm Data cannot reflect the scope of this event. Information is what was available at the time of this writing. Refer to newspaper articles and other federal, state, and local sources for detailed information.

Here are some facts about the flooding in North Dakota provided by North Dakota Emergency Management. The total estimated flood cost was around \$1.5 billion. Individual and housing assistance was \$323 million; small business \$248 million; home and business reconstruction \$452 million; public response, recovery, and mitigation \$480 million; disaster unemployment for 866 claims was \$2.3 million; and the public finance authority disaster loan program approved \$56.6 million. Public infrastructure costs were \$320 million. Of the state's 53 counties, 48 were impacted, along with three tribal nations.

The Missouri River was in flood in every state in the United States of America that it runs through. This was a multi-state disaster.

| | | | | |
|---|--------------------|--|---|---------------------------------------|
| BOTTINEAU COUNTY --- 44.5 W ANTLER [48.98, -102.25], 36.1 SSW LANSFORD [48.18, -101.77], 29.1 S WILLOW CITY [48.18, -100.34], 3.5 WSW WILLOW CITY [48.58, -100.35], 4.9 N LANDA [48.97, -100.90] | | | | |
| | 07/01/11 00:00 CST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

| | | | | |
|--|--------------------|--|---|---------------------------------------|
| MCHENRY COUNTY --- 67.8 NW DEERING [48.98, -102.25], 36.4 WSW DEERING [48.18, -101.77], 12.1 SSE TOWNER [48.18, -100.34], 12.7 ENE BANTRY [48.58, -100.35], 28.2 NNW UPHAM [48.97, -100.90] | | | | |
| | 07/01/11 00:00 CST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

| | | | | |
|--|--------------------|--|---|---------------------------------------|
| RENVILLE COUNTY --- 26.1 NW TOLLEY [48.98, -102.25], 31.6 SSW GRANO [48.18, -101.77], 46.7 ESE GLENBURN [48.18, -100.34], 40.0 E GLENBURN [48.58, -100.35], 30.3 ENE LORAINE [48.97, -100.90] | | | | |
| | 07/01/11 00:00 CST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | | 0 | Source: Other Federal Agency |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|----------------------|------------------------|---------------------------------------|
| See the event episode narrative for details. | | | | |
| WARD COUNTY --- 20.8 N NIOBE [48.98, -102.25], 9.8 S BERTHOLD [48.18, -101.77], 33.5 ENE SAWYER [48.18, -100.34], 36.4 ENE WOLSETH [48.58, -100.35], 37.3 NNE WOLSETH [48.97, -100.90] | | | | |
| | 07/01/11 00:00 CST | | 0 | Flood (due to Heavy Rain / Snow Melt) |
| | 07/31/11 23:59 CST | | 0 | Source: Other Federal Agency |

See the event episode narrative for details.

This was part of historic flooding in North Dakota with statewide costs estimated around 1.5 billion dollars. Flooding was the result of significant winter snows and significant spring rains, not only in North Dakota but in Saskatchewan, Canada, as well. Flooding was along the Souris (Mouse) River from where it enters the United States from Saskatchewan, Canada, to where it crosses into Manitoba, Canada. Dams were overwhelmed by the amount of water. Flooding included river, ground, and overland types. Estimated damages were many hundreds of millions of dollars, and that is not all inclusive. There was a significant loss to agriculture by not being able to plant. A tremendous flood fight was waged against the river, and that cost is not included here. Storm Data cannot reflect the scope of this event. Information is what was available at the time of this writing. Refer to newspaper articles and other federal, state, and local sources for detailed information.

Here are some facts about the flooding in North Dakota provided by North Dakota Emergency Management. The total estimated flood cost was around \$1.5 billion. Individual and housing assistance was \$323 million; small business \$248 million; home and business reconstruction \$452 million; public response, recovery, and mitigation \$480 million; disaster unemployment for 866 claims was \$2.3 million; and the public finance authority disaster loan program approved \$56.6 million. Public infrastructure costs were \$320 million. Of the state's 53 counties, 48 were impacted, along with three tribal nations.

| | | | | |
|---|--------------------|--|---|-------------------------|
| DIVIDE COUNTY --- 4.9 SW NOONAN [48.84, -103.09] | | | | |
| | 07/02/11 23:00 CST | | 0 | Hail (1.00 in) |
| | 07/02/11 23:04 CST | | 0 | Source: Trained Spotter |

Scattered thunderstorms, which developed over eastern Montana, pushed into west central and northwestern North Dakota during the mid to late evening hours of July 2nd as a surface boundary advected eastward. Several severe thunderstorm warnings were issued. One report of large hail was received.

| | | | | |
|--|--------------------|--|---|-------------------------|
| KIDDER COUNTY --- 15.1 SSE STEELE [46.65, -99.77] | | | | |
| | 07/08/11 06:00 CST | | 0 | Heavy Rain |
| | 07/08/11 20:00 CST | | 0 | Source: Trained Spotter |

Heavy rainfall of 4.6 inches was reported 10 miles north of Napoleon. This was a 14 hour rain total.

| | | | | |
|---|--------------------|--|---|--------------------------------------|
| DUNN COUNTY --- 7.4 SW EMERSON [47.11, -102.77], 6.0 SW EMERSON [47.11, -102.73] | | | | |
| | 07/08/11 15:35 MST | | 0 | Tornado (EF0, L: 1.93 mi , W: 25 yd) |
| | 07/08/11 15:40 MST | | 0 | Source: Public |

Multiple public reports of a tornado were called in to the Dickinson 911 dispatch center. This tornado occurred south of Manning in the open country of Dunn County. No damage was reported. The same thunderstorm complex that produced this tornado in Dunn County produced tornadoes later in Mercer County. See Mercer County tornado entries.

| | | | | |
|--|--------------------|--|---|-----------------------|
| MORTON COUNTY --- 4.8 NW NEW SALEM [46.90, -101.49] | | | | |
| | 07/08/11 16:00 CST | | 0 | Hail (0.75 in) |
| | 07/08/11 16:06 CST | | 0 | Source: COOP Observer |

| | | | | |
|---|--------------------|--|---|--------------------------------------|
| MERCER COUNTY --- 2.4 WNW GOLDEN VLY [47.29, -102.12], 2.1 NNE GOLDEN VLY [47.31, -102.06] | | | | |
| | 07/08/11 16:43 CST | | 0 | Tornado (EF0, L: 3.13 mi , W: 40 yd) |
| | 07/08/11 16:48 CST | | 0 | Source: COOP Observer |

This tornado occurred in open country northwest of the town of Golden Valley, in Mercer County. No damage was reported. The same thunderstorm complex that produced this tornado in Mercer County produced one earlier, south of Manning in Dunn County, and one later, also in Mercer County, near Beulah. See Dunn County and other Mercer County tornado entries.

| | | | | |
|---|--------------------|--|---|--------------------------------------|
| MERCER COUNTY --- 1.0 WNW BEULAH [47.28, -101.80], 3.0 NNE BEULAH [47.31, -101.76] | | | | |
| | 07/08/11 17:02 CST | | 0 | Tornado (EF0, L: 3.16 mi , W: 30 yd) |
| | 07/08/11 17:07 CST | | 0 | Source: Law Enforcement |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|----------------------|------------------------|--------------------------------------|
| <p>This tornado was reported by law enforcement. It moved near Beulah, Mercer County, just to the west and north of the city. No damage was reported. The same thunderstorm complex that produced this tornado in Mercer County produced one earlier northwest of Golden Valley, Mercer County, and one before that south of Manning in Dunn County. See Dunn County and other Mercer County tornado entries.</p> | | | | |
| <hr/> | | | | |
| STUTSMAN COUNTY --- 5.9 SW PINGREE [47.11, -99.01] | | | | |
| | 07/08/11 17:35 CST | | 0 | Funnel Cloud |
| | 07/08/11 17:38 CST | | 0 | Source: Public |
| <p>A public report of funnel clouds appearing then quickly disappearing was received.</p> | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- 7.5 SSW FT RICE [46.42, -100.64] | | | | |
| | 07/08/11 17:38 CST | | 0 | Tornado (EF0, L: 0.01 mi , W: 15 yd) |
| | 07/08/11 17:38 CST | | 0 | Source: Public |
| <p>A tornado touched the ground near the Cannon Ball River and quickly lifted. It was on the ground for less than one minute. No damage was reported with this tornado.</p> | | | | |
| <hr/> | | | | |
| STUTSMAN COUNTY --- 5.9 SW EDMUNDS [47.19, -99.06] | | | | |
| | 07/08/11 17:43 CST | | 0 | Hail (1.00 in) |
| | 07/08/11 17:47 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| MCLEAN COUNTY --- GARRISON [47.65, -101.42] | | | | |
| | 07/08/11 17:45 CST | | 50K | Lightning |
| | 07/08/11 17:45 CST | | 0 | Source: Newspaper |
| <p>Lightning struck the roof of a house at rural Garrison and started a fire. Damage was significant. The time, location, and damage value are estimated as these details were not provided in the article.</p> | | | | |
| <hr/> | | | | |
| STUTSMAN COUNTY --- 8.0 E WOODWORTH [47.14, -99.13] | | | | |
| | 07/08/11 17:45 CST | | 0 | Hail (1.00 in) |
| | 07/08/11 17:48 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| STUTSMAN COUNTY --- 7.4 WSW PINGREE [47.12, -99.06] | | | | |
| | 07/08/11 17:46 CST | | 0 | Hail (1.50 in) |
| | 07/08/11 17:49 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| MCLEAN COUNTY --- 1.5 NNW UNDERWOOD [47.47, -101.14], 1.4 N UNDERWOOD [47.47, -101.14] | | | | |
| | 07/08/11 17:59 CST | | 0 | Tornado (EF0, L: 0.23 mi , W: 30 yd) |
| | 07/08/11 18:00 CST | | 0 | Source: Public |
| <p>A brief tornado touched down near Underwood but did not impact any structures. No damage was reported with this tornado.</p> | | | | |
| <hr/> | | | | |
| EMMONS COUNTY --- 4.5 NW HAZELTON [46.53, -100.34] | | | | |
| | 07/08/11 18:30 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/08/11 18:37 CST | | 0 | Source: COOP Observer |
| <p>A severe thunderstorm wind gust estimated at 60 miles per hour was reported.</p> | | | | |
| <hr/> | | | | |
| STUTSMAN COUNTY --- 4.8 WSW WOODWORTH [47.13, -99.40], 6.9 SSE COURTENAY [47.12, -98.53], 7.0 NNE COURTENAY [47.32, -98.54], 13.1 NNW WOODWORTH [47.33, -99.40] | | | | |
| | 07/08/11 19:00 CST | | 0.50M | Flash Flood (due to Heavy Rain) |
| | 07/08/11 23:00 CST | | 0 | Source: Law Enforcement |
| <p>Local area law enforcement reported deep water over Highway 36 west of Pingree. Railroad tracks between Pingree and Woodworth were washed out in several locations.</p> | | | | |
| <hr/> | | | | |
| MCHEMRY COUNTY --- 4.6 W BANTRY [48.50, -100.70] | | | | |
| | 07/08/11 19:20 CST | | 0 | Heavy Rain |
| | 07/08/11 21:20 CST | | 0 | Source: Mesonet |
| <p>Heavy rainfall of 2.5 inches over a two hour period was reported.</p> | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|----------------------|------------------------|--------------------------------------|
| MCHEMRY COUNTY --- 0.5 W NORWICH [48.25, -100.99] | | | | |
| | 07/08/11 19:30 CST | | 0 | Heavy Rain |
| | 07/08/11 21:30 CST | | 0 | Source: Public |
| Heavy rainfall of 2.25 inches over a two hour period was reported near Norwich. | | | | |
| LOGAN COUNTY --- 0.7 N NAPOLEON [46.51, -99.77], 0.8 NNE NAPOLEON [46.51, -99.76] | | | | |
| | 07/08/11 19:35 CST | | 0 | Tornado (EF0, L: 0.26 mi , W: 30 yd) |
| | 07/08/11 19:36 CST | | 0 | Source: Public |
| A brief tornado touchdown occurred near Napoleon. No structures were impacted, and no damage was reported with this tornado. | | | | |
| EMMONS COUNTY --- 5.5 S KINTYRE [46.47, -99.96] | | | | |
| | 07/08/11 19:39 CST | | 0 | Heavy Rain |
| | 07/08/11 21:39 CST | | 0 | Source: COOP Observer |
| Heavy rainfall of 2.3 inches over a two hour period was reported. | | | | |
| MCINTOSH COUNTY --- 0.8 NW WISHEK [46.26, -99.56] | | | | |
| | 07/08/11 21:02 CST | | 25K | Thunderstorm Wind (EG 70 kt) |
| | 07/08/11 21:07 CST | | 0 | Source: Law Enforcement |
| Strong thunderstorm winds resulted in several large trees and numerous branches blown down in Wishek. | | | | |
| <p>Tornado Watch number 611 was issued in the early afternoon in anticipation of an increasing threat for thunderstorms across west and central North Dakota for the afternoon and evening hours of July 8th. Destabilization occurred behind a northward advecting warm front, where storms eventually developed across the south. Veering low level winds in the warm sector also created an environment conducive for tornado development. Numerous severe weather warnings were issued. Six tornadoes occurred during this event and all were rated EF0 as there were no damage reports.</p> | | | | |
| HETTINGER COUNTY --- 14.5 N BURT [46.58, -102.18] | | | | |
| | 07/10/11 08:45 MST | | 0 | Hail (1.00 in) |
| | 07/10/11 08:50 MST | | 0 | Source: Mesonet |
| STARK COUNTY --- 5.6 S GLADSTONE [46.79, -102.57] | | | | |
| | 07/10/11 09:15 MST | | 0 | Hail (2.00 in) |
| | 07/10/11 09:20 MST | | 0 | Source: Public |
| The hail size was estimated by a photo provided by broadcast media. No damage was reported with this large hail. | | | | |
| GRANT COUNTY --- 18.7 N ELGIN MUNI ARPT [46.67, -101.83] | | | | |
| | 07/10/11 09:30 MST | | 0 | Hail (2.00 in) |
| | 07/10/11 09:35 MST | | 0 | Source: Public |
| Mostly pea size hail with a few larger hail stones. | | | | |
| MORTON COUNTY --- 5.6 SSE GLEN ULLIN [46.75, -101.77] | | | | |
| | 07/10/11 10:30 CST | | 0 | Hail (2.00 in) |
| | 07/10/11 10:36 CST | | 0 | Source: Trained Spotter |
| MORTON COUNTY --- 5.6 SSE GLEN ULLIN [46.75, -101.77] | | | | |
| | 07/10/11 10:50 CST | | 0 | Hail (1.75 in) |
| | 07/10/11 10:55 CST | | 0 | Source: Trained Spotter |
| MORTON COUNTY --- 8.6 W ALMONT [46.71, -101.68] | | | | |
| | 07/10/11 11:02 CST | | 0 | Hail (1.00 in) |
| | 07/10/11 11:07 CST | | 0 | Source: Trained Spotter |
| MORTON COUNTY --- 4.9 S MANDAN MUNI ARPT [46.70, -100.89] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|----------------------|------------------------|------------------------------|
| | 07/10/11 11:10 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/10/11 11:25 CST | | 0 | Source: Trained Spotter |
| The strong winds lasted 15 minutes. | | | | |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 4.3 SE (BIS)BISMARCK MUNI A [46.74, -100.68] | 07/10/11 11:21 CST | | 0 | Hail (0.75 in) |
| | 07/10/11 11:21 CST | | 0 | Source: NWS Employee |
| <hr/> | | | | |
| SIOUX COUNTY --- 11.5 WNW SELFRIDGE [46.11, -101.14] | 07/10/11 11:50 MST | | 0 | Hail (1.75 in) |
| | 07/10/11 11:57 MST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| MORTON COUNTY --- 8.4 S SWEET BRIAR [46.71, -101.21] | 07/10/11 12:14 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/10/11 12:19 CST | | 0 | Source: Public |
| Estimated winds of 60 miles per hour was reported by the public. | | | | |
| <hr/> | | | | |
| SIOUX COUNTY --- 0.7 N FT YATES [46.09, -100.63] | 07/10/11 12:33 MST | | 0 | Hail (1.00 in) |
| | 07/10/11 12:39 MST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| SIOUX COUNTY --- 0.7 N FT YATES [46.09, -100.63] | 07/10/11 12:33 MST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/10/11 12:39 MST | | 0 | Source: Trained Spotter |
| One inch in diameter hail was also reported. | | | | |
| <hr/> | | | | |
| SIOUX COUNTY --- 2.1 S FT YATES [46.05, -100.63] | 07/10/11 12:40 MST | | 0 | Hail (2.00 in) |
| | 07/10/11 12:49 MST | | 0 | Source: Public |
| <hr/> | | | | |
| MORTON COUNTY --- 2.5 NE ST ANTHONY [46.65, -100.89] | 07/10/11 12:43 CST | | 0 | Hail (1.00 in) |
| | 07/10/11 12:53 CST | | 0 | Source: COOP Observer |
| <hr/> | | | | |
| MORTON COUNTY --- HUFF [46.62, -100.65] | 07/10/11 12:45 CST | | 20K | Thunderstorm Wind (EG 65 kt) |
| | 07/10/11 12:50 CST | | 0 | Source: Law Enforcement |
| Strong thunderstorm winds uprooted two foot in diameter oak trees near Huff. | | | | |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 2.1 SSW (BIS)BISMARCK MUNI A [46.75, -100.76] | 07/10/11 12:50 CST | | 0.15M | Hail (1.25 in) |
| | 07/10/11 13:05 CST | | 0 | Source: NWS Employee |
| About a dozen homes in Falconer Estates subdivision had roof and gutter damage from the large hail. | | | | |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 4.3 SE (BIS)BISMARCK MUNI A [46.74, -100.68] | 07/10/11 12:52 CST | | 0 | Thunderstorm Wind (EG 65 kt) |
| | 07/10/11 12:59 CST | | 0 | Source: NWS Employee |
| Penny size hail accompanied the strong winds. | | | | |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 4.2 SE (BIS)BISMARCK MUNI A [46.73, -100.70] | 07/10/11 12:53 CST | | 0 | Hail (1.00 in) |
| | 07/10/11 12:59 CST | | 0 | Source: NWS Employee |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 3.5 SW MOFFIT [46.65, -100.34], 2.3 S MOFFIT [46.65, -100.27] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|-------------------|---------------------|---------------------------------------|
| | 07/10/11 13:14 CST | | 0.25M | Thunderstorm Wind (EG 83 kt) |
| | 07/10/11 13:24 CST | | 0 | Source: NWS Storm Survey |
| Double poled wood transmission lines were snapped in half. A heavy ranch sign with three foot long concrete anchors was ripped out of the ground. A camper was flipped off of the highway and tossed over a tree row 25 yards from the road. | | | | |
| EMMONS COUNTY --- HAZELTON [46.48, -100.28] | | | | |
| | 07/10/11 13:15 CST | | 0.15M | Thunderstorm Wind (MG 83 kt) |
| | 07/10/11 13:28 CST | | 0 | Source: NWS Storm Survey |
| Winds were measured with a home anemometer near Hazelton. Extensive tree damage occurred in Hazelton, with three to six inch in diameter branches blown off of trees. A gas station on the west side of Hazelton sustained damage to the canopy over the gas pumps. | | | | |
| EMMONS COUNTY --- 5.8 NNE HAZELTON ARPT [46.56, -100.23] | | | | |
| | 07/10/11 13:24 CST | | 25K | Thunderstorm Wind (EG 61 kt) |
| | 07/10/11 13:29 CST | | 0 | Source: NWS Storm Survey |
| Minor wind damage occurred at a farmstead. Shingles were blown off of a trailer home, and a small building was blown over. | | | | |
| EMMONS COUNTY --- 1.6 ESE BRADDOCK [46.56, -100.05] | | | | |
| | 07/10/11 13:33 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/10/11 13:38 CST | | 0 | Source: NWS Storm Survey |
| Strong thunderstorm winds occurred two miles east of Braddock. | | | | |
| LOGAN COUNTY --- 0.7 N NAPOLEON [46.51, -99.77] | | | | |
| | 07/10/11 13:35 CST | | 50K | Thunderstorm Wind (EG 74 kt) |
| | 07/10/11 13:40 CST | | 0 | Source: NWS Storm Survey |
| Strong thunderstorm winds damaged several empty grain bins. | | | | |
| LOGAN COUNTY --- 6.9 S NAPOLEON [46.40, -99.79], 3.8 E BURNSTAD [46.38, -99.54] | | | | |
| | 07/10/11 13:40 CST | | 0.45M | Tornado (EF2, L: 11.98 mi , W: 50 yd) |
| | 07/10/11 13:59 CST | | 0 | Source: NWS Storm Survey |
| A National Weather Service storm survey confirmed that an EF2 tornado on the Enhanced Fujita Scale touched down around seven miles south southwest of Napoleon, then moved east southeast before lifting four miles east of Burnstad. No fewer than three farmsteads were damaged along the path of the tornado. The worst damage occurred seven miles south southwest of Napoleon, where the tornado picked up and threw an 18 thousand bushel grain bin 250 yards, and also destroyed 1,800 feet of shelter belt trees near 100 feet tall. East southeast of this farmstead, the tornado lifted and rolled a ten ton grain bin three quarters of one mile to another farmstead, where it impacted and damaged a barn. The damage corresponded to EF2 on the Enhanced Fujita Scale. From that it was determined that wind speeds with this tornado were around 120 miles per hour. | | | | |
| MCINTOSH COUNTY --- 1.0 W ASHLEY [46.03, -99.39], 1.1 SW ASHLEY [46.02, -99.38] | | | | |
| | 07/10/11 14:34 CST | | 0 | Tornado (EF0, L: 0.93 mi , W: 20 yd) |
| | 07/10/11 14:39 CST | | 0 | Source: Law Enforcement |
| A tornado touched down in a field near Ashley. No damage was reported with this tornado. | | | | |
| DICKEY COUNTY --- 10.5 W MERRICOURT [46.21, -98.97] | | | | |
| | 07/10/11 14:40 CST | | 15K | Thunderstorm Wind (EG 70 kt) |
| | 07/10/11 14:49 CST | | 0 | Source: Mesonet |
| Strong thunderstorm winds blew over a grain bin. | | | | |
| DICKEY COUNTY --- 9.8 NW MERRICOURT [46.28, -98.92], 3.8 ESE OAKES [46.12, -98.00] | | | | |
| | 07/10/11 14:40 CST | | 1.25M | Thunderstorm Wind (EG 109 kt) |
| | 07/10/11 15:50 CST | | 1M | Source: NWS Storm Survey |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|-----------|-------------------|---------------------|------------------------|
| A National Weather Service Storm Survey was conducted across Dickey County. Widespread mature hardwood trees were snapped or uprooted along a 45 mile long and 4 mile wide damage swath, along with thousands of acres of crop damage due to wind driven hail. Several communities along the damage path also had severe wind damage. Near Merricourt, damage was observed to a home and to several farm vehicles. In Monango, extensive tree damage was observed, including a large hardwood tree with the diameter of 22 inches. A pole barn and two grain bins were destroyed two miles south of Fullerton, along with several large trees snapped or uprooted. Around Oakes, numerous buildings sustained heavy damage, along with the destruction of a 200 foot radio station tower. Damage across Dickey County was extensive. | | | | |

| | | | | |
|---|--------------------|--|-----|--------------------------------------|
| DICKEY COUNTY --- 6.0 NW MERRICOURT [46.26, -98.84], 5.5 NW MERRICOURT [46.26, -98.83] | 07/10/11 14:48 CST | | 75K | Tornado (EF1, L: 0.49 mi , W: 25 yd) |
| | 07/10/11 14:50 CST | | 0 | Source: NWS Storm Survey |

A National Weather Service storm survey confirmed that an EF1 tornado on the Enhanced Fujita Scale briefly touched down five miles northwest of Merricourt. There was an eye witness to the tornado. A pole barn was damaged along with numerous trees snapped. The damage corresponded to low end EF1 on the Enhanced Fujita Scale. From that it was determined that wind speeds were on the order of 90 miles per hour.

| | | | | |
|--|--------------------|--|-------|---------------------------|
| DICKEY COUNTY --- 6.1 W FORBES [45.94, -98.90], 8.8 WNW MERRICOURT [46.26, -98.91], 4.5 NNE GLOVER [46.29, -98.08], 6.9 SE LUDDEN [45.94, -98.01] | 07/10/11 15:00 CST | | 0.50M | Flood (due to Heavy Rain) |
| | 07/10/11 23:00 CST | | 0 | Source: Emergency Manager |

Persistent thunderstorms with heavy rain over a long period of time brought widespread flooding to many county and township roads across Dickey County.

| | | | | |
|--|--------------------|--|---|------------------------------|
| LA MOURE COUNTY --- 8.6 W EDGELEY [46.36, -98.88] | 07/10/11 15:02 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/10/11 15:06 CST | | 0 | Source: Law Enforcement |

Small hail accompanied the strong winds.

| | | | | |
|--|--------------------|--|---|--------------------------------------|
| DICKEY COUNTY --- 0.5 W MONANGO [46.17, -98.59], 0.2 SW MONANGO [46.17, -98.58] | 07/10/11 15:04 CST | | 0 | Tornado (EF0, L: 0.38 mi , W: 25 yd) |
| | 07/10/11 15:06 CST | | 0 | Source: Trained Spotter |

A trained weather spotter reported a tornado on the ground near Monango. Very strong straight line winds were also reported. Damage was associated with the straight line winds. The tornado was reported in the open country with no damage attributed to it.

| | | | | |
|--|--------------------|--|----|------------------------------|
| MCINTOSH COUNTY --- 12.1 ESE ASHLEY [45.96, -99.14] | 07/10/11 15:09 CST | | 7K | Thunderstorm Wind (EG 52 kt) |
| | 07/10/11 15:13 CST | | 0 | Source: Trained Spotter |

Strong thunderstorm winds blew shingles off of a roof.

| | | | | |
|--|--------------------|--|-----|------------------------------|
| LA MOURE COUNTY --- 5.8 W EDGELEY [46.36, -98.82] | 07/10/11 15:30 CST | | 25K | Thunderstorm Wind (EG 70 kt) |
| | 07/10/11 15:30 CST | | 0 | Source: Storm Chaser |

Strong thunderstorm winds blew grain bins over.

| | | | | |
|---|--------------------|--|-----|------------------------------|
| DICKEY COUNTY --- 0.8 NW FULLERTON [46.18, -98.43] | 07/10/11 15:31 CST | | 25K | Thunderstorm Wind (EG 70 kt) |
| | 07/10/11 15:31 CST | | 0 | Source: Trained Spotter |

Strong thunderstorm winds blew numerous tree branches down.

| | | | | |
|--|--------------------|--|-----|------------------------------|
| DICKEY COUNTY --- 0.5 E ELLENDALE [46.00, -98.51] | 07/10/11 15:35 CST | | 15K | Thunderstorm Wind (EG 70 kt) |
| | 07/10/11 15:35 CST | | 0 | Source: Amateur Radio |

Strong thunderstorm winds resulted in roof damage.

| | | | | |
|---|--|--|--|--|
| DICKEY COUNTY --- 3.1 SSW GLOVER [46.19, -98.16], 3.2 SSW GLOVER [46.19, -98.16] | | | | |
|---|--|--|--|--|

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|--------------------|-------------------|---------------------|--------------------------------------|
| | 07/10/11 15:35 CST | | 0 | Tornado (EF0, L: 0.14 mi , W: 20 yd) |
| | 07/10/11 15:36 CST | | 0 | Source: Public |

A visual confirmation of a brief tornado touchdown was received. The tornado was reported to have touched down in open fields northwest of Oakes, with no damage attributed to it.

DICKEY COUNTY --- 0.7 N LUDDEN [46.01, -98.13]

| | | |
|--------------------|-----|------------------------------|
| 07/10/11 15:42 CST | 50K | Thunderstorm Wind (EG 70 kt) |
| 07/10/11 15:42 CST | 0 | Source: Amateur Radio |

Strong thunderstorm winds resulted in numerous trees and branches blown down around Ludden.

A strong upper level jet streak moving into the region triggered scattered elevated thunderstorm activity during the late morning hours of July 10th over southwest North Dakota. Large hail up to two inches in diameter was reported with these storms. As the aerial coverage of storms became more widespread, Severe Thunderstorm Watch number 616 was issued. Once the storms advected to the east into south central and southeast North Dakota during the afternoon, they became rooted in the boundary layer and became much more intense necessitating the issuance of Tornado Watch number 617. Considerable veering winds with height, strong instability, and favorable deep layer shear produced a favorable environment for very large hail, damaging winds, and isolated tornadoes.

Multiple severe thunderstorm warnings and several tornado warnings were issued during this event. Numerous reports of large hail and destructive thunderstorm winds were received. After in depth investigation including two separate storm damage surveys, it was concluded that four confirmed tornadoes occurred during this event, including EF2 tornado damage seven miles south of Napoleon.

MCKENZIE COUNTY --- GRASSY BUTTE [47.40, -103.25]

| | | |
|--------------------|---|------------------------------|
| 07/14/11 22:50 MST | 0 | Thunderstorm Wind (EG 52 kt) |
| 07/14/11 22:55 MST | 0 | Source: Trained Spotter |

A report of strong winds was received.

DUNN COUNTY --- 1.7 SE HALLIDAY [47.33, -102.31]

| | | |
|--------------------|---|------------------------------|
| 07/14/11 23:45 MST | 0 | Thunderstorm Wind (EG 56 kt) |
| 07/14/11 23:45 MST | 0 | Source: Law Enforcement |

Heavy rain accompanied the strong winds.

FOSTER COUNTY --- CARRINGTON ARPT [47.45, -99.15]

| | | |
|--------------------|---|------------------------------|
| 07/15/11 00:05 CST | 0 | Thunderstorm Wind (MG 52 kt) |
| 07/15/11 00:11 CST | 0 | Source: AWOS |

FOSTER COUNTY --- 0.7 NNW CARRINGTON ARPT [47.46, -99.15], 1.7 NE CARRINGTON [47.47, -99.10], 1.7 ESE CARRINGTON [47.44, -99.10], 1.0 SSW CARRINGTON ARPT [47.44, -99.16]

| | | |
|--------------------|-----|---------------------------------|
| 07/15/11 00:23 CST | 70K | Flash Flood (due to Heavy Rain) |
| 07/15/11 05:00 CST | 0 | Source: Law Enforcement |

Very heavy rain resulted in water over one foot deep in parts of Carrington. Surrounding areas had water running over low water crossings. Basement flooding occurred. Two to Four inches of rain fell in this area. There were no specific reports of amounts around Carrington, however, to the south, in Stutsman County, there were several reports of around three inches of rain.

MCCLEAN COUNTY --- GARRISON [47.65, -101.42]

| | | |
|--------------------|---|-------------------------|
| 07/15/11 01:43 CST | 0 | Hail (0.88 in) |
| 07/15/11 01:48 CST | 0 | Source: Law Enforcement |

STUTSMAN COUNTY --- 2.0 NW COURTENAY [47.24, -98.60], 4.4 SSE COURTENAY [47.16, -98.54], 7.7 E PINGREE [47.18, -98.76], 1.5 WNW KENSAL [47.31, -98.76]

| | | |
|--------------------|-----|---------------------------------|
| 07/15/11 02:30 CST | 10K | Flash Flood (due to Heavy Rain) |
| 07/15/11 05:30 CST | 0 | Source: Public |

Very heavy rain resulted in flash flooding in this area. Water from runoff was one to two feet deep, especially in lower lying areas. Ground truth reports of 2.50 to three inches were received from the Kensal to Wimbledon area. There were no reports of damage to buildings. Repairs were needed to some minor roads.

Severe Thunderstorm Watch number 645 was issued during the mid evening of the 14th for much of west and portions of central North Dakota in anticipation of stronger storms over eastern Montana advecting east into North Dakota through the early morning hours of the

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|----------------------|------------------------|------------------------------|
| <p>15th. Earlier, Tornado Watch number 644 was in effect, although storms failed to develop. Several severe thunderstorm warnings were issued, with two reports of strong thunderstorm winds and one report of large hail received.</p> <p>In addition, storms developed east of the watch area over east central North Dakota in response to an intensifying low level jet. One report of a severe thunderstorm wind gust was received. The main impact from these storms over the northern James River Basin was heavy rain and flash flooding.</p> | | | | |
| <hr/> | | | | |
| MCKENZIE COUNTY --- 24.8 WNW GRASSY BUTTE [47.47, -103.77] | | | | |
| | 07/15/11 22:10 MST | | 10K | Thunderstorm Wind (EG 56 kt) |
| | 07/15/11 22:20 MST | | 0 | Source: COOP Observer |
| <p>Strong thunderstorm winds blew down several trees.</p> | | | | |
| <hr/> | | | | |
| MOUNTRAIL COUNTY --- 0.5 W STANLEY [48.32, -102.39] | | | | |
| | 07/16/11 00:21 CST | | 5K | Thunderstorm Wind (MG 54 kt) |
| | 07/16/11 00:31 CST | | 0 | Source: AWOS |
| <p>A tree that was two and one half feet in diameter, and 30 feet tall, was snapped.</p> | | | | |
| <hr/> | | | | |
| MCLEAN COUNTY --- 7.0 N EMMET [47.75, -101.67] | | | | |
| | 07/16/11 00:59 CST | | 0 | Thunderstorm Wind (MG 50 kt) |
| | 07/16/11 01:09 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| MCKENZIE COUNTY --- 0.7 S GRASSY BUTTE [47.39, -103.25] | | | | |
| | 07/16/11 02:13 MST | | 0 | Hail (0.88 in) |
| | 07/16/11 02:13 MST | | 0 | Source: COOP Observer |
| <hr/> | | | | |
| MERCER COUNTY --- 0.7 S BEULAH [47.26, -101.78] | | | | |
| | 07/16/11 05:55 CST | | 0 | Hail (1.75 in) |
| | 07/16/11 06:10 CST | | 0 | Source: Law Enforcement |
| <hr/> | | | | |
| MERCER COUNTY --- 1.6 WNW BEULAH [47.28, -101.81] | | | | |
| | 07/16/11 05:55 CST | | 0 | Hail (1.75 in) |
| | 07/16/11 06:10 CST | | 0.10M | Source: COOP Observer |
| <p>Hail size ranged from ping pong ball to golfball sized. Strong winds up to 60 miles per hour accompanied the hail. The wind driven hail resulted in area crop damage.</p> | | | | |
| <hr/> | | | | |
| MERCER COUNTY --- 2.0 NW BEULAH [47.29, -101.81] | | | | |
| | 07/16/11 05:55 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/16/11 06:10 CST | | 0 | Source: COOP Observer |
| <p>Large hail accompanied the strong winds.</p> | | | | |
| <hr/> | | | | |
| MERCER COUNTY --- 1.6 WNW BEULAH [47.28, -101.81] | | | | |
| | 07/16/11 06:00 CST | | 0 | Hail (1.00 in) |
| | 07/16/11 06:09 CST | | 0 | Source: COOP Observer |
| <hr/> | | | | |
| MERCER COUNTY --- 0.8 SW HAZEN [47.29, -101.64] | | | | |
| | 07/16/11 06:16 CST | | 0 | Hail (0.88 in) |
| | 07/16/11 06:20 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| MERCER COUNTY --- 0.8 SE HAZEN [47.29, -101.62] | | | | |
| | 07/16/11 06:24 CST | | 0 | Thunderstorm Wind (MG 62 kt) |
| | 07/16/11 06:36 CST | | 0 | Source: AWOS |
| <hr/> | | | | |
| MCLEAN COUNTY --- 1.2 SE WILTON [47.16, -100.78] | | | | |
| | 07/16/11 07:30 CST | | 0 | Hail (0.88 in) |
| | 07/16/11 07:36 CST | | 0 | Source: Trained Spotter |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|-------------------|---------------------|--------------------------------------|
| MCLEAN COUNTY --- 1.2 SE WILTON [47.16, -100.78] | | | | |
| | 07/16/11 07:32 CST | | 0 | Hail (1.00 in) |
| | 07/16/11 07:39 CST | | 0 | Source: Public |
| BURLEIGH COUNTY --- 0.7 N REGAN [47.16, -100.53] | | | | |
| | 07/16/11 07:40 CST | | 0 | Hail (1.00 in) |
| | 07/16/11 07:46 CST | | 0 | Source: Trained Spotter |
| MCLEAN COUNTY --- 0.8 NW WASHBURN [47.29, -101.03] | | | | |
| | 07/16/11 07:55 CST | | 0 | Hail (1.00 in) |
| | 07/16/11 08:02 CST | | 0 | Source: Trained Spotter |
| BURLEIGH COUNTY --- 0.7 N WING [47.14, -100.28] | | | | |
| | 07/16/11 08:00 CST | | 0 | Hail (0.88 in) |
| | 07/16/11 08:06 CST | | 0 | Source: Trained Spotter |
| <p>Two rounds of storms occurred during this event. The first round started in the late evening of the 15th and lasted about two hours. Thunderstorms over eastern Montana moved into west central North Dakota before midnight.</p> <p>The second round of storms started around five in the morning central time on the 16th and continued past daybreak. These storms rapidly intensified before sunrise as a nocturnal low level jet combined with strong instability and favorable deep layer wind shear.</p> | | | | |
| <p>(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</p> | | | | |
| | 07/16/11 11:00 CST | | 0.70M | Excessive Heat |
| | 07/19/11 21:00 CST | | 0 | |
| <p>Upper level high pressure centered over the Central Plains, coupled with persistent low pressure over the Rockies, brought a prolonged period of above seasonal temperatures and high humidity to west and central North Dakota. Daytime temperatures in the 90s combined with the high humidity to produce heat index values well over 100 degrees for many locations for several days. Heat index values topped out between 110 and 120 degrees, not a common thing in North Dakota.</p> <p>Although no human life was lost and no injuries were reported, there were livestock losses associated with the heat. It is estimated that up to 700 head of cattle died from the heat wave. Estimated at near 1,000 dollars per head, monetary damages are estimated at near 700,000 dollars. A detailed breakdown by county was not available so the losses were all assigned to one county in southwest North Dakota, Slope.</p> | | | | |
| BURLEIGH COUNTY --- 8.5 N REGAN [47.27, -100.53], 12.5 N REGAN [47.33, -100.51] | | | | |
| | 07/16/11 16:35 CST | | 10K | Tornado (EF1, L: 4.05 mi , W: 50 yd) |
| | 07/16/11 16:46 CST | | 0 | Source: Law Enforcement |
| <p>This tornado crossed from Burleigh into Sheridan County. It was reported by a North Dakota Game Warden and also by professional storm chasers. It was in open country with no buildings impacted, however, large trees were uprooted and snapped, including one that was two and a half feet in diameter. The tornado damage corresponded to EF1 on the Enhanced Fujita Scale and from that it was determined that wind speeds with the tornado were on the order of 100 miles per hour. This tornado crossed into Sheridan County. See the entry for Sheridan County.</p> | | | | |
| SHERIDAN COUNTY --- 10.2 SSE PICKARDVILLE [47.33, -100.51], 8.5 SSE PICKARDVILLE [47.36, -100.50] | | | | |
| | 07/16/11 16:46 CST | | 0 | Tornado (EF1, L: 2.13 mi , W: 50 yd) |
| | 07/16/11 16:51 CST | | 0 | Source: Law Enforcement |
| <p>This tornado crossed from Burleigh into Sheridan County. It was reported by a North Dakota Game Warden and also by professional storm chasers. It was in open country with no buildings impacted, however, large trees were uprooted and snapped, including one that was two and a half feet in diameter. That occurred in Burleigh County, which resulted in the EF1 rating. The tornado weakened and lifted in Sheridan County with no damage reported. The tornado damage, from Burleigh County, corresponded to EF1 on the Enhanced Fujita Scale and from that it was determined that wind speeds with the tornado were on the order of 100 miles per hour. This tornado crossed into Sheridan County from Burleigh. See the entry for Burleigh County.</p> | | | | |
| WELLS COUNTY --- 9.1 SSW BOWDON [47.35, -99.65], 9.0 S HEATON [47.35, -99.53] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|--------------------|-------------------|---------------------|--------------------------------------|
| | 07/16/11 18:31 CST | | 0 | Tornado (EF0, L: 5.62 mi , W: 30 yd) |
| | 07/16/11 18:45 CST | | 0 | Source: Storm Chaser |

This tornado touched down in the open country. There were no reports of damage associated with this tornado.

| WELLS COUNTY --- 5.4 S BOWDON [47.39, -99.58], 5.6 S BOWDON [47.39, -99.55] | | | | |
|--|--------------------|--|---|--------------------------------------|
| | 07/16/11 18:38 CST | | 0 | Tornado (EF0, L: 1.17 mi , W: 30 yd) |
| | 07/16/11 18:41 CST | | 0 | Source: Newspaper |

This tornado touched down in the open country. There were no reports of damage associated with this tornado.

| FOSTER COUNTY --- 3.5 S MC HENRY [47.53, -98.59] | | | | |
|---|--------------------|--|---|-------------------------|
| | 07/16/11 19:41 CST | | 0 | Funnel Cloud |
| | 07/16/11 19:41 CST | | 0 | Source: Trained Spotter |

| KIDDER COUNTY --- 13.0 NNE LAKE WILLIAMS [47.31, -99.52] | | | | |
|---|--------------------|--|---|----------------|
| | 07/16/11 20:30 CST | | 0 | Funnel Cloud |
| | 07/16/11 20:30 CST | | 0 | Source: Public |

| EMMONS COUNTY --- 7.8 ESE LINTON [46.25, -100.07], 9.6 E LINTON MUNI ARPT [46.24, -100.03] | | | | |
|---|--------------------|--|-----|--------------------------------------|
| | 07/16/11 20:47 CST | | 30K | Tornado (EF0, L: 1.86 mi , W: 30 yd) |
| | 07/16/11 20:51 CST | | 50K | Source: Law Enforcement |

This tornado touched down in the open country. Although there were no reports of structural damage associated with this tornado, there were reports of shelterbelt tree and crop damage at two farmsteads. Tree damage corresponded to high end EF0 on the Enhanced Fujita Scale and from that it was determined that wind speeds were around 85 miles per hour.

| WELLS COUNTY --- 3.6 SSW SYKESTON [47.42, -99.40], 1.2 ESE SYKESTON [47.46, -99.36], 6.8 E SYKESTON [47.46, -99.23], 5.5 SE SYKESTON [47.42, -99.28] | | | | |
|---|--------------------|--|-----|---------------------------------|
| | 07/16/11 21:07 CST | | 50K | Flash Flood (due to Heavy Rain) |
| | 07/17/11 00:15 CST | | 0 | Source: Emergency Manager |

Very heavy rain, estimated at near seven inches peak based on radar, fell over southeast Wells County. Roads in the area were flooded and damaged.

Tornado Watch number 649 was issued in the late afternoon of July 16th in anticipation of supercell thunderstorm development. A weak surface trough and low level convergence zone combined with a very unstable air mass with CAPE up to 4,000 Joules per Kilogram over south central North Dakota. This environment proved sufficient for tornadoes to develop.

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|-----------|-------------------|---------------------|------------------------|
|----------|-----------|-------------------|---------------------|------------------------|



Tornado photo taken along the Burleigh and Sheridan County line on July 16, 2011. Courtesy of Jackie Lundstrom, a North Dakota Game Warden.

WARD COUNTY --- 9.0 NE RYDER [48.01, -101.53]

| | | |
|--------------------|---|----------------|
| 07/17/11 08:48 CST | 0 | Hail (1.75 in) |
| 07/17/11 08:53 CST | 0 | Source: Public |

WARD COUNTY --- 6.4 SSW SURREY [48.14, -101.16]

| | | |
|--------------------|---|----------------|
| 07/17/11 09:10 CST | 0 | Hail (2.50 in) |
| 07/17/11 09:18 CST | 0 | Source: Public |

There were no reports of damage associated with the large hail.

WARD COUNTY --- 10.0 SW SAWYER [47.98, -101.20]

| | | |
|--------------------|---|------------------------------|
| 07/17/11 09:11 CST | 0 | Thunderstorm Wind (MG 56 kt) |
| 07/17/11 09:16 CST | 0 | Source: Amateur Radio |

WARD COUNTY --- 4.2 S SAWYER [48.02, -101.05]

| | | |
|--------------------|---|----------------|
| 07/17/11 09:25 CST | 0 | Hail (2.50 in) |
| 07/17/11 09:35 CST | 0 | Source: Public |

There were no reports of damage associated with the large hail.

MCHENRY COUNTY --- 2.8 S VELVA [48.03, -100.93]

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|--------------------|-------------------|---------------------|------------------------|
| | 07/17/11 09:38 CST | | 0.15M | Hail (2.75 in) |
| | 07/17/11 09:44 CST | | 0.25M | Source: Public |

The large hail caused damage to area crops. The hail also damaged windows, siding, and vehicles. The damage amount is estimated.

MCHENRY COUNTY --- 0.5 W VOLTAIRE [48.02, -100.84]

| | | |
|--------------------|---|----------------|
| 07/17/11 09:40 CST | 0 | Hail (1.75 in) |
| 07/17/11 09:47 CST | 0 | Source: Public |

MCHENRY COUNTY --- 0.5 E BERGEN [48.00, -100.71]

| | | |
|--------------------|---|----------------|
| 07/17/11 09:50 CST | 0 | Hail (1.75 in) |
| 07/17/11 09:56 CST | 0 | Source: Public |

MCHENRY COUNTY --- 0.5 W BALFOUR [47.95, -100.54]

| | | |
|--------------------|---|----------------|
| 07/17/11 09:56 CST | 0 | Hail (2.75 in) |
| 07/17/11 10:10 CST | 0 | Source: Public |

There were no reports of damage associated with the large hail. Strong winds accompanied the large hail.

MCHENRY COUNTY --- BALFOUR [47.95, -100.53]

| | | |
|--------------------|---|------------------------------|
| 07/17/11 09:56 CST | 0 | Thunderstorm Wind (EG 52 kt) |
| 07/17/11 10:01 CST | 0 | Source: Public |

Large hail accompanied the strong winds.

MCHENRY COUNTY --- 0.5 W BALFOUR [47.95, -100.54]

| | | |
|--------------------|---|----------------|
| 07/17/11 10:06 CST | 0 | Hail (2.75 in) |
| 07/17/11 10:11 CST | 0 | Source: Public |

There were no reports of damage associated with the large hail.

WELLS COUNTY --- 2.3 NNE HARVEY ARPT [47.83, -99.91], 2.3 NNE HARVEY ARPT [47.83, -99.91]

| | | |
|--------------------|---|--------------------------------------|
| 07/17/11 10:48 CST | 0 | Tornado (EF0, L: 0.04 mi , W: 20 yd) |
| 07/17/11 10:49 CST | 0 | Source: Public |

This tornado touched down in the open country. There were no impacts to structures and so no reports of damage.

WELLS COUNTY --- 3.7 NNW HEIMDAL [47.85, -99.65]

| | | |
|--------------------|---|----------------|
| 07/17/11 11:18 CST | 0 | Hail (0.88 in) |
| 07/17/11 11:24 CST | 0 | Source: Public |

WELLS COUNTY --- 1.9 W HEIMDAL [47.80, -99.66]

| | | |
|--------------------|---|----------------|
| 07/17/11 11:22 CST | 0 | Hail (1.75 in) |
| 07/17/11 11:28 CST | 0 | Source: Public |

WELLS COUNTY --- 1.6 WSW HEIMDAL [47.79, -99.65]

| | | |
|--------------------|---|-------------------------|
| 07/17/11 11:28 CST | 0 | Hail (1.75 in) |
| 07/17/11 11:34 CST | 0 | Source: Trained Spotter |

WELLS COUNTY --- 0.9 W BREMEN [47.75, -99.39]

| | | |
|--------------------|---|----------------|
| 07/17/11 11:45 CST | 0 | Hail (1.75 in) |
| 07/17/11 11:54 CST | 0 | Source: Public |

FOSTER COUNTY --- 2.0 W JUANITA [47.50, -98.72], 0.8 SW JUANITA [47.49, -98.69]

| | | |
|--------------------|---|--------------------------------------|
| 07/17/11 12:42 CST | 0 | Tornado (EF0, L: 1.46 mi , W: 30 yd) |
| 07/17/11 12:45 CST | 0 | Source: Storm Chaser |

This tornado touched down in the open country. There were no impacts to structures and so no reports of damage.

FOSTER COUNTY --- 6.4 SSE GLENFIELD [47.36, -98.54], 6.4 SSE GLENFIELD [47.36, -98.54]

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|--------------------|-------------------|---------------------|--------------------------------------|
| | 07/17/11 13:28 CST | | 0 | Tornado (EF0, L: 0.02 mi , W: 20 yd) |
| | 07/17/11 13:29 CST | | 0 | Source: Public |

This tornado touched down in the open country. There were no impacts to structures and so no reports of damage.

KIDDER COUNTY --- 4.9 N CRYSTAL SPGS [46.95, -99.48]

| | | |
|--------------------|---|----------------|
| 07/17/11 14:50 CST | 0 | Funnel Cloud |
| 07/17/11 14:50 CST | 0 | Source: Public |

STUTSMAN COUNTY --- 4.7 NW MEDINA [46.92, -99.38]

| | | |
|--------------------|---|------------------------------|
| 07/17/11 15:07 CST | 0 | Thunderstorm Wind (EG 52 kt) |
| 07/17/11 15:14 CST | 0 | Source: Trained Spotter |

Rotation was observed with this storm.

STUTSMAN COUNTY --- 0.5 W MILLARTON [46.67, -98.76]

| | | |
|--------------------|---|----------------|
| 07/17/11 15:22 CST | 0 | Hail (2.00 in) |
| 07/17/11 15:28 CST | 0 | Source: Public |

There were no reports of damage associated with the large hail.

STUTSMAN COUNTY --- 0.5 W WINDSOR [46.90, -99.04]

| | | |
|--------------------|---|------------------------------|
| 07/17/11 15:34 CST | 0 | Thunderstorm Wind (EG 52 kt) |
| 07/17/11 15:41 CST | 0 | Source: Law Enforcement |

Very heavy rain and pea size hail accompanied the strong thunderstorm winds.

STUTSMAN COUNTY --- 5.6 NW SYDNEY [46.79, -98.85]

| | | |
|--------------------|---|-------------------------|
| 07/17/11 16:10 CST | 0 | Hail (1.75 in) |
| 07/17/11 16:15 CST | 0 | Source: Law Enforcement |

STUTSMAN COUNTY --- 0.5 W MILLARTON [46.67, -98.76]

| | | |
|--------------------|---|----------------|
| 07/17/11 16:22 CST | 0 | Hail (2.00 in) |
| 07/17/11 16:28 CST | 0 | Source: Public |

There were no reports of damage associated with the large hail.

LA MOURE COUNTY --- 6.3 SE NORTONVILLE [46.49, -98.63], 6.0 SSE BERLIN [46.30, -98.43]

| | | | |
|--------------------|---|-------|--|
| 07/17/11 16:57 CST | | 0.50M | Tornado (EF3, L: 16.18 mi , W: 880 yd) |
| 07/17/11 17:37 CST | 1 | 0.25M | Source: NWS Storm Survey |

A National Weather Service storm survey confirmed that an EF3 tornado touched down around seven miles southeast of Nortonville, then moved southeast before lifting six miles south southeast of Berlin. This was a long tracked tornado across parts of Russell, Wano, Henrietta, and Badger townships. Damage was observed all along the tornado path, with no fewer than five farmsteads impacted, some very severely. One injury occurred where a farm home was damaged beyond repair. There were no deaths. The worst damage consisted of a farm house completely destroyed, outbuildings completely destroyed, a vehicle tossed up to one half mile away from its original location and almost unrecognizable as a motor vehicle, and a significant number of very large hard and soft wood trees both snapped and uprooted. The violent nature of tornadoes was evidenced by the twisted and mangled trees. In one case farm animals were killed. The tornado damage corresponded to EF3 on the Enhanced Fujita Scale. From that it was determined that wind speeds were on the order of 165 miles per hour.

LA MOURE COUNTY --- 7.1 NW BERLIN [46.45, -98.59], 2.8 S BERLIN [46.34, -98.47]

| | | | |
|--------------------|--|-----|-------------------------|
| 07/17/11 17:05 CST | | 20K | Hail (2.75 in) |
| 07/17/11 17:35 CST | | 20K | Source: Law Enforcement |

Hail as large as hockey pucks fell along the path of the supercell thunderstorm and EF3 tornado that moved through LaMoure County. See the EF3 tornado entry for LaMoure County.

LA MOURE COUNTY --- 3.5 S GRAND RAPIDS [46.40, -98.37]

| | | |
|--------------------|---|----------------------|
| 07/17/11 17:18 CST | 0 | Hail (2.00 in) |
| 07/17/11 17:24 CST | 0 | Source: Storm Chaser |

There were no reports of damage associated with the large hail.

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|--------------------------------------|
| LA MOURE COUNTY --- 0.8 NE LA MOURE [46.36, -98.29] | | | | |
| | 07/17/11 17:29 CST | | 5K | Lightning |
| | 07/17/11 17:29 CST | | 0 | Source: Emergency Manager |
| A lightning strike caused damage to a building in LaMoure. | | | | |
| LA MOURE COUNTY --- 0.8 NE LA MOURE [46.36, -98.29] | | | | |
| | 07/17/11 17:29 CST | | 0 | Hail (1.00 in) |
| | 07/17/11 17:34 CST | | 0 | Source: Emergency Manager |
| DICKEY COUNTY --- 4.9 N FULLERTON [46.24, -98.43] | | | | |
| | 07/17/11 17:42 CST | | 0 | Funnel Cloud |
| | 07/17/11 17:42 CST | | 0 | Source: Storm Chaser |
| DICKEY COUNTY --- 3.4 WNW OAKES [46.14, -98.15] | | | | |
| | 07/17/11 17:45 CST | | 0 | Funnel Cloud |
| | 07/17/11 17:45 CST | | 0 | Source: Law Enforcement |
| DICKEY COUNTY --- 2.8 N FULLERTON [46.21, -98.43], 2.8 N FULLERTON [46.21, -98.43] | | | | |
| | 07/17/11 18:06 CST | | 0 | Tornado (EF0, L: 0.05 mi , W: 25 yd) |
| | 07/17/11 18:07 CST | | 0 | Source: Emergency Manager |
| This tornado touched down in the open country. There were no impacts to structures and so no reports of damage. This was the same storm complex that produced the EF3 tornado earlier in Lamoure County. | | | | |
| DICKEY COUNTY --- 0.8 NW MERRICOURT [46.21, -98.76] | | | | |
| | 07/17/11 18:18 CST | | 15K | Thunderstorm Wind (EG 61 kt) |
| | 07/17/11 18:24 CST | | 0 | Source: Broadcast Media |
| Evergreen trees were snapped in the city of Merricourt. | | | | |
| <p>A prolonged severe weather event materialized July 17th with an extremely unstable atmosphere present and supportive mid level dynamics. The first wave of storms occurred from the mid morning through the early afternoon hours as a short wave mid level impulse crested the central plains upper ridge across North Dakota. Storms intensified ahead of this feature, prompting the issuance of several severe thunderstorm and tornado warnings. Numerous reports of large hail and severe thunderstorm wind gusts were received. In addition, 3 confirmed tornadoes occurred with this first wave.</p> <p>The second wave occurred from the mid afternoon through the mid evening hours. This mainly consisted of one supercell thunderstorm. Severe weather reports included very large hail, strong winds, and two confirmed tornadoes. This included an EF3 tornado in Lamoure County.</p> | | | | |
| ADAMS COUNTY --- 16.8 E HAYNES [45.97, -102.12] | | | | |
| | 07/18/11 17:57 MST | | 10K | Hail (1.75 in) |
| | 07/18/11 18:00 MST | | 40K | Source: COOP Observer |
| There was damage to crops and vehicles. | | | | |
| SIOUX COUNTY --- 49.9 W SELFRIDGE [46.04, -101.97] | | | | |
| | 07/18/11 18:30 MST | | 0 | Hail (1.00 in) |
| | 07/18/11 18:34 MST | | 0 | Source: Trained Spotter |
| <p>An isolated supercell thunderstorm tracked along the North Dakota and South Dakota border over far southwest and far south central North Dakota during the early evening of July 18th. This storm formed north of a surface warm front over South Dakota and ahead of a mid level impulse near southeast Montana. Several severe thunderstorm and tornado warnings were issued for this storm. Two reports of large hail were received.</p> | | | | |
| GOLDEN VALLEY COUNTY --- 14.8 ESE GOLVA [46.65, -103.69] | | | | |
| | 07/19/11 16:37 MST | | 0 | Hail (0.88 in) |
| | 07/19/11 16:43 MST | | 0 | Source: Law Enforcement |
| A cluster of diurnal thunderstorms moving into southwest North Dakota prompted the issuance of several severe thunderstorm | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|--------------------------------------|
| warnings. One report of large hail was received. | | | | |
| <hr/> | | | | |
| MCLEAN COUNTY --- 7.8 ENE ROSEGLLEN [47.80, -101.68] | 07/20/11 04:05 CST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 07/20/11 04:11 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| MCLEAN COUNTY --- MAX [47.82, -101.30] | 07/20/11 04:17 CST | | 0 | Hail (1.00 in) |
| | 07/20/11 04:20 CST | | 0 | Source: Public |
| <hr/> | | | | |
| MCLEAN COUNTY --- MAX [47.82, -101.30] | 07/20/11 04:17 CST | | 0.10M | Thunderstorm Wind (EG 55 kt) |
| | 07/20/11 04:28 CST | | 0 | Source: Public |
| <hr/> | | | | |
| Large hail accompanied the strong winds with damage to roofs and windows. Trees in Max were damaged. | | | | |
| <hr/> | | | | |
| PIERCE COUNTY --- 5.0 NW BALTA [48.22, -100.11] | 07/20/11 05:45 CST | | 30K | Thunderstorm Wind (EG 61 kt) |
| | 07/20/11 05:53 CST | | 0 | Source: Public |
| <hr/> | | | | |
| The strong thunderstorm winds blew down box elder trees and bent a flagpole. | | | | |
| <hr/> | | | | |
| PIERCE COUNTY --- 0.9 W RUGBY [48.37, -100.00] | 07/20/11 05:50 CST | | 35K | Thunderstorm Wind (MG 59 kt) |
| | 07/20/11 06:03 CST | | 0 | Source: AWOS |
| <hr/> | | | | |
| Tree branches were blown down throughout the city of Rugby. | | | | |
| <hr/> | | | | |
| PIERCE COUNTY --- 3.0 E RUGBY [48.37, -99.91], 8.0 SSW RUGBY [48.26, -100.05] | 07/20/11 05:50 CST | | 75K | Thunderstorm Wind (EG 70 kt) |
| | 07/20/11 06:10 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| Several reports of high wind and damage were received from the Rugby area. Trees were uprooted, including a 60 foot tall spruce, numerous branches were broken, and a large shop was damaged around five miles south of Rugby. There was a tornado within the high wind area. See the tornado entry for Pierce County. | | | | |
| <hr/> | | | | |
| PIERCE COUNTY --- 4.9 S RUGBY [48.30, -100.00], 4.1 S RUGBY [48.31, -99.98] | 07/20/11 05:50 CST | | 0.33M | Tornado (EF1, L: 1.25 mi , W: 50 yd) |
| | 07/20/11 05:55 CST | | 0.15M | Source: Law Enforcement |
| <hr/> | | | | |
| A brief tornado touched down five miles south of Rugby on the leading edge of a linear severe thunderstorm. This tornado was within a larger area of straight line thunderstorm winds which also caused damage. Several buildings sustained damage or were destroyed by this tornado, along with trees, and three power poles were snapped along North Dakota Highway 3 where the tornado crossed. A semi truck was picked up along Highway 3 and thrown into the ditch. There were no injuries or deaths reported with this tornado. The tornado damage corresponded to EF1 on the Enhanced Fujita Scale. From that it was determined that wind speeds with this tornado were on the order of 100 miles per hour. | | | | |
| <hr/> | | | | |
| Early morning thunderstorms developed and intensified across north central into northeastern North Dakota in response to a strengthening low level jet and in advance of a strong surface cold front. Storms initially were elevated with several reports of strong thunderstorm wind gusts. A bowing structure developed with one confirmed tornado on the leading edge of the storm near Rugby. Additional reports of strong winds followed the tornado, with the storms eventually moving east out of the Bismarck County Warning Area. | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- ALMONT [46.73, -101.50] | 07/22/11 17:37 CST | | 0 | Hail (1.00 in) |
| | 07/22/11 17:45 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| GOLDEN VALLEY COUNTY --- BEACH [46.92, -104.00] | 07/22/11 17:40 MST | | 0 | Thunderstorm Wind (MG 57 kt) |
| | 07/22/11 17:46 MST | | 0 | Source: COOP Observer |
| <hr/> | | | | |
| MORTON COUNTY --- 7.7 SSW ALMONT [46.63, -101.57], 7.5 SSW ALMONT [46.63, -101.57] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|--------------------|-------------------|---------------------|--------------------------------------|
| | 07/22/11 17:40 CST | | 0 | Tornado (EF0, L: 0.17 mi , W: 20 yd) |
| | 07/22/11 17:41 CST | | 0 | Source: Public |

This tornado touched down in the open country. There were no reports of damage associated with this tornado.

MCKENZIE COUNTY --- 0.7 S GRASSY BUTTE [47.39, -103.25]

| | | |
|--------------------|---|-----------------------|
| 07/22/11 18:00 MST | 0 | Heavy Rain |
| 07/22/11 18:30 MST | 0 | Source: COOP Observer |

A heavy rainfall report of 1.13 inches in one half hour was received.

MCKENZIE COUNTY --- 13.8 N GRASSY BUTTE [47.60, -103.26]

| | | |
|--------------------|---|-------------------------|
| 07/22/11 18:00 MST | 0 | Heavy Rain |
| 07/22/11 18:30 MST | 0 | Source: Trained Spotter |

A heavy rainfall report of 1.3 inches in one half hour was received.

MCKENZIE COUNTY --- 13.1 N GRASSY BUTTE [47.59, -103.26], 13.1 N GRASSY BUTTE [47.59, -103.25]

| | | |
|--------------------|-------|--------------------------------------|
| 07/22/11 18:23 MST | 0.10M | Tornado (EF0, L: 0.45 mi , W: 30 yd) |
| 07/22/11 18:24 MST | 0 | Source: Law Enforcement |

A brief tornado occurred and resulted in a traffic accident with injuries (indirect). A local newspaper article stated that a semi truck hit a downed power line which cut into the cab of the truck. The line then snapped, sending it into a parked vehicle. The semi truck then collided with a third vehicle. Two people were injured (indirect) during this accident. This chain of events occurred after the tornado had passed, leaving the downed line in its wake. The tornado damage to the power line corresponded to EF0 on the Enhanced Fujita Scale.

SLOPE COUNTY --- 3.3 W AMIDON [46.48, -103.39]

| | | |
|--------------------|----|------------------------------|
| 07/22/11 18:30 MST | 5K | Thunderstorm Wind (EG 52 kt) |
| 07/22/11 18:35 MST | 0 | Source: Public |

Several tree branches were blown off from the strong winds.

MCKENZIE COUNTY --- 1.6 ENE GRASSY BUTTE [47.41, -103.22]

| | | |
|--------------------|---|------------------------------|
| 07/22/11 18:31 MST | 0 | Thunderstorm Wind (EG 52 kt) |
| 07/22/11 18:36 MST | 0 | Source: COOP Observer |

A report of 60 mile per hour winds was received.

STARK COUNTY --- 0.5 SSW BELFIELD [46.87, -103.20], 0.5 SSW BELFIELD [46.87, -103.20]

| | | |
|--------------------|---|--------------------------------------|
| 07/22/11 18:35 MST | 0 | Tornado (EF0, L: 0.09 mi , W: 30 yd) |
| 07/22/11 18:36 MST | 0 | Source: Trained Spotter |

This tornado touched down just to the south of Belfield. There were no reports of damage associated with this short lived tornado.

DUNN COUNTY --- 0.9 E KILLDEER [47.37, -102.75]

| | | |
|--------------------|---|------------------------------|
| 07/22/11 18:39 MST | 0 | Thunderstorm Wind (MG 51 kt) |
| 07/22/11 18:45 MST | 0 | Source: COOP Observer |

DUNN COUNTY --- 6.2 N WERNER [47.46, -102.47]

| | | |
|--------------------|---|-----------------|
| 07/22/11 18:53 MST | 0 | Heavy Rain |
| 07/22/11 19:53 MST | 0 | Source: Mesonet |

A heavy rainfall report of 2.45 inches in one hour was received.

BILLINGS COUNTY --- 0.8 SE MEDORA [46.91, -103.52], 0.5 NW MEDORA [46.93, -103.54], 1.2 WSW MEDORA [46.92, -103.55], 1.3 S MEDORA [46.90, -103.53]

| | | |
|--------------------|-----|---------------------------------|
| 07/22/11 19:05 MST | 25K | Flash Flood (due to Heavy Rain) |
| 07/22/11 22:30 MST | 0 | Source: Law Enforcement |

Up to four inches of very heavy rainfall resulted in the camp grounds at Medora being flash flooded.

BOWMAN COUNTY --- 17.1 SW RHAME [46.06, -103.91]

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|--------------------------------------|
| | 07/22/11 19:05 MST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/22/11 19:10 MST | | 0 | Source: Trained Spotter |
| Strong thunderstorm winds occurred over southwest Bowman County. | | | | |
| STARK COUNTY --- 12.5 SSW SOUTH HEART [46.70, -103.09], 12.5 SSW SOUTH HEART [46.69, -103.06] | | | | |
| | 07/22/11 19:05 MST | | 0 | Tornado (EF0, L: 1.53 mi , W: 30 yd) |
| | 07/22/11 19:10 MST | | 0 | Source: Fire Department/Rescue |
| This tornado touched down in the open country. There were no reports of damage associated with this tornado. | | | | |
| BOWMAN COUNTY --- RHAME [46.23, -103.65] | | | | |
| | 07/22/11 19:12 MST | | 0 | Hail (0.75 in) |
| | 07/22/11 19:12 MST | | 0 | Source: Mesonet |
| DUNN COUNTY --- 2.8 S MARSHALL [47.09, -102.33] | | | | |
| | 07/22/11 19:14 MST | | 0 | Hail (0.75 in) |
| | 07/22/11 19:17 MST | | 0 | Source: Mesonet |
| DUNN COUNTY --- 19.5 N WERNER [47.65, -102.52], 19.4 N KILLDEER [47.65, -102.75], 2.3 NNE KILLDEER [47.40, -102.75], 3.1 NW WERNER [47.40, -102.52] | | | | |
| | 07/22/11 19:15 MST | | 10K | Flash Flood (due to Heavy Rain) |
| | 07/22/11 23:00 MST | | 0 | Source: Trained Spotter |
| There were two reports of very heavy rain from northern Dunn County. One was 1.24 inches in 25 minutes about 10 miles northeast of Dunn Center and the other was 1.50 inches in 45 minutes from about 6 miles north-northeast of Killdeer. Reports of flash flooding of low lying and poor drainage areas were received. Damage was not significant. | | | | |
| SLOPE COUNTY --- 15.8 E MARMARTH [46.31, -103.57] | | | | |
| | 07/22/11 19:28 MST | | 0 | Funnel Cloud |
| | 07/22/11 19:28 MST | | 0 | Source: County Official |
| HETTINGER COUNTY --- 1.2 NW NEW ENGLAND [46.54, -102.87] | | | | |
| | 07/22/11 19:56 MST | | 30K | Thunderstorm Wind (EG 56 kt) |
| | 07/22/11 20:00 MST | | 0 | Source: COOP Observer |
| The strong winds uprooted some trees in New England. | | | | |
| HETTINGER COUNTY --- 0.5 W REGENT [46.42, -102.56] | | | | |
| | 07/22/11 20:01 MST | | 0 | Hail (1.00 in) |
| | 07/22/11 20:06 MST | | 0 | Source: Trained Spotter |
| MERCER COUNTY --- 11.8 N ZAP [47.45, -101.92] | | | | |
| | 07/22/11 20:10 CST | | 0 | Heavy Rain |
| | 07/22/11 20:40 CST | | 0 | Source: Mesonet |
| A heavy rainfall report of 1.8 inches in one half hour was received. | | | | |
| MERCER COUNTY --- 0.7 N ZAP [47.29, -101.92] | | | | |
| | 07/22/11 20:30 CST | | 0 | Hail (1.25 in) |
| | 07/22/11 20:35 CST | | 0 | Source: Trained Spotter |
| MERCER COUNTY --- 11.8 N ZAP [47.45, -101.92] | | | | |
| | 07/22/11 20:40 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/22/11 20:45 CST | | 0 | Source: Mesonet |
| Heavy rain accompanied the strong winds. | | | | |
| MERCER COUNTY --- 11.8 N ZAP [47.45, -101.92] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|-------------------|---------------------|--------------------------------------|
| | 07/22/11 20:40 CST | | 0 | Hail (1.25 in) |
| | 07/22/11 20:46 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| MORTON COUNTY --- 11.9 NE GLEN ULLIN [46.94, -101.65], 11.6 WNW NEW SALEM [46.94, -101.63] | | | | |
| | 07/22/11 21:10 CST | | 0 | Tornado (EF0, L: 0.98 mi , W: 20 yd) |
| | 07/22/11 21:12 CST | | 0 | Source: Trained Spotter |
| This tornado touched down in the open country. There were no reports of damage associated with this tornado. | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- 5.1 ENE SWEET BRIAR [46.87, -101.09] | | | | |
| | 07/22/11 21:45 CST | | 0 | Hail (1.00 in) |
| | 07/22/11 21:48 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| MORTON COUNTY --- 5.1 ENE SWEET BRIAR [46.87, -101.09] | | | | |
| | 07/22/11 21:45 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/22/11 21:50 CST | | 0 | Source: Trained Spotter |
| A report of strong thunderstorm winds was received. | | | | |
| <hr/> | | | | |
| MERCER COUNTY --- 0.8 NE PICK CITY [47.53, -101.46] | | | | |
| | 07/22/11 21:54 CST | | 50K | Thunderstorm Wind (EG 61 kt) |
| | 07/22/11 21:59 CST | | 0 | Source: Public |
| The strong winds flipped over campers. | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89] | | | | |
| | 07/22/11 21:54 CST | | 0 | Thunderstorm Wind (MG 55 kt) |
| | 07/22/11 21:56 CST | | 0 | Source: AWOS |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 1.7 SW BISMARCK [46.78, -100.79] | | | | |
| | 07/22/11 22:01 CST | | 15K | Thunderstorm Wind (EG 56 kt) |
| | 07/22/11 22:06 CST | | 0 | Source: Trained Spotter |
| Large tree branches were blown down. | | | | |
| <hr/> | | | | |
| MOUNTRAIL COUNTY --- 0.5 W NEW TOWN [47.98, -102.49], 0.5 N NEW TOWN [47.99, -102.48], 0.6 E NEW TOWN [47.98, -102.47], 0.3 SSW NEW TOWN [47.98, -102.48] | | | | |
| | 07/22/11 22:03 CST | | 20K | Flash Flood (due to Heavy Rain) |
| | 07/23/11 01:15 CST | | 0 | Source: Law Enforcement |
| Very heavy rain resulted in an estimated one foot of water on Main Street in New Town. Water was in yards of homes and in some cases where there was no curbing the water was up against the homes. | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89] | | | | |
| | 07/22/11 22:06 CST | | 0 | Hail (1.00 in) |
| | 07/22/11 22:13 CST | | 0 | Source: Law Enforcement |
| <hr/> | | | | |
| MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89] | | | | |
| | 07/22/11 22:10 CST | | 0 | Hail (1.00 in) |
| | 07/22/11 22:14 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89] | | | | |
| | 07/22/11 22:13 CST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 07/22/11 22:15 CST | | 0 | Source: AWOS |
| <hr/> | | | | |
| EMMONS COUNTY --- 11.8 W LINTON [46.25, -100.47] | | | | |
| | 07/22/11 22:50 CST | | 35K | Thunderstorm Wind (EG 61 kt) |
| | 07/22/11 22:57 CST | | 0 | Source: Newspaper |

The strong thunderstorm winds destroyed a cabin at Beaver Bay.

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|---------------------------------|
| HETTINGER COUNTY --- 3.8 E REGENT [46.42, -102.47] | | | | |
| | 07/22/11 23:00 MST | | 0 | Hail (1.00 in) |
| | 07/22/11 23:05 MST | | 0 | Source: CoCoRaHS |
| MCINTOSH COUNTY --- 9.7 N ZEELAND [46.11, -99.83], 9.4 SW WISHEK [46.17, -99.71] | | | | |
| | 07/22/11 23:30 CST | | 65K | Thunderstorm Wind (EG 70 kt) |
| | 07/22/11 23:45 CST | | 0 | Source: Law Enforcement |
| Strong thunderstorm winds occurred north of Zeeland. A quonset and pole barn were destroyed, shingle and siding damage was sustained to a home, and two trees were blown down. | | | | |
| MCINTOSH COUNTY --- 15.0 W ASHLEY [46.03, -99.68] | | | | |
| | 07/22/11 23:50 CST | | 75K | Thunderstorm Wind (EG 70 kt) |
| | 07/23/11 00:10 CST | | 0 | Source: Newspaper |
| Strong thunderstorm winds resulted in damage to buildings on a farmstead, and damage to hay bales. | | | | |
| STUTSMAN COUNTY --- 1.0 NNW WOODWORTH [47.16, -99.31], 3.9 WNW WOODWORTH [47.16, -99.38], 11.0 NNW WOODWORTH [47.30, -99.38], 11.3 WNW EDMUNDS [47.30, -99.20] | | | | |
| | 07/23/11 00:15 CST | | 25K | Flash Flood (due to Heavy Rain) |
| | 07/23/11 04:00 CST | | 0 | Source: COOP Observer |
| Some roads under water from the very heavy rainfall. | | | | |
| <p>A severe thunderstorm outbreak materialized over west and south central North Dakota in the late afternoon and evening hours of July 22nd, lasting into the early morning hours of the 23rd. Tornado watch numbers 673, 674, and 675 were in effect for this event. A tornadic storm developed over south central North Dakota along a surface warm front. Much of the severe weather for this event originated over eastern Montana associated with a strong upper level jet streak. This activity pushed into western North Dakota, and tracked eastward throughout the evening. The severe weather event resulted in large hail, high winds, tornadoes, and flash floods.</p> | | | | |
| (ND-Z001) DIVIDE, (ND-Z002) BURKE, (ND-Z003) RENVILLE, (ND-Z009) WILLIAMS, (ND-Z010) MOUNTRAIL, (ND-Z011) WARD | | | | |
| | 07/22/11 22:55 CST | | 0 | High Wind (MAX 35 kt) |
| | 07/23/11 02:00 CST | | 0 | |
| High winds continued for a few hours in the wake of convection that had moved through northwest North Dakota. The wake low produced sustained winds around 40 mph with gusts as high as 55 mph after the thunderstorms had moved east. | | | | |
| SLOPE COUNTY --- 16.8 E AMIDON [46.51, -102.97] | | | | |
| | 07/24/11 12:55 MST | | 0 | Hail (1.75 in) |
| | 07/24/11 13:00 MST | | 0 | Source: Trained Spotter |
| The majority of the hail was the size of nickels, with a few larger stones. | | | | |
| HETTINGER COUNTY --- 1.2 NW NEW ENGLAND [46.54, -102.87] | | | | |
| | 07/24/11 12:56 MST | | 0 | Hail (1.00 in) |
| | 07/24/11 13:01 MST | | 0 | Source: Law Enforcement |
| HETTINGER COUNTY --- 1.2 NW NEW ENGLAND [46.54, -102.87] | | | | |
| | 07/24/11 12:56 MST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 07/24/11 13:01 MST | | 0 | Source: Law Enforcement |
| Large hail accompanied the strong winds. | | | | |
| FOSTER COUNTY --- 3.5 S MC HENRY [47.53, -98.59] | | | | |
| | 07/24/11 13:44 CST | | 0 | Hail (0.88 in) |
| | 07/24/11 13:48 CST | | 0 | Source: Trained Spotter |
| MORTON COUNTY --- 6.1 E HEBRON [46.90, -101.90] | | | | |
| | 07/24/11 14:10 CST | | 0 | Hail (2.50 in) |
| | 07/24/11 14:15 CST | | 0 | Source: Public |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|----------------------|------------------------|------------------------------|
| There were no damage reports associated with the large hail. | | | | |
| MORTON COUNTY --- 7.7 NNE GLEN ULLIN [46.92, -101.76] | | | | |
| | 07/24/11 14:22 CST | 0 | | Hail (1.00 in) |
| | 07/24/11 14:26 CST | 0 | | Source: Trained Spotter |
| MORTON COUNTY --- 6.0 ENE GLEN ULLIN [46.85, -101.71] | | | | |
| | 07/24/11 14:29 CST | 0 | | Hail (2.00 in) |
| | 07/24/11 14:34 CST | 0 | | Source: Public |
| There were no damage reports associated with the large hail. | | | | |
| MORTON COUNTY --- 6.0 NNE GLEN ULLIN [46.90, -101.78] | | | | |
| | 07/24/11 14:33 CST | 0 | | Thunderstorm Wind (EG 52 kt) |
| | 07/24/11 14:38 CST | 0 | | Source: Law Enforcement |
| Very heavy rain accompanied the strong winds. | | | | |
| KIDDER COUNTY --- 5.2 SSW PETTIBONE [47.05, -99.56] | | | | |
| | 07/24/11 14:40 CST | 0 | | Hail (1.25 in) |
| | 07/24/11 14:45 CST | 0 | | Source: Trained Spotter |
| MORTON COUNTY --- 4.8 NW NEW SALEM [46.90, -101.49] | | | | |
| | 07/24/11 14:50 CST | 0 | | Hail (1.00 in) |
| | 07/24/11 14:56 CST | 0 | | Source: Trained Spotter |
| OLIVER COUNTY --- CENTER [47.12, -101.30] | | | | |
| | 07/24/11 14:53 CST | 0 | | Hail (0.75 in) |
| | 07/24/11 14:57 CST | 0 | | Source: Trained Spotter |
| OLIVER COUNTY --- CENTER [47.12, -101.30] | | | | |
| | 07/24/11 14:54 CST | 0 | | Hail (0.88 in) |
| | 07/24/11 14:59 CST | 0 | | Source: Law Enforcement |
| BURLEIGH COUNTY --- 7.0 NW DRISCOLL [46.93, -100.22] | | | | |
| | 07/24/11 15:05 CST | 0 | | Hail (1.00 in) |
| | 07/24/11 15:10 CST | 0 | | Source: Trained Spotter |
| MORTON COUNTY --- 4.6 SSW JUDSON [46.77, -101.31] | | | | |
| | 07/24/11 15:12 CST | 0 | | Thunderstorm Wind (EG 56 kt) |
| | 07/24/11 15:17 CST | 0 | | Source: Public |
| Small hail accompanied the strong winds. | | | | |
| MORTON COUNTY --- 6.4 SSE SWEET BRIAR [46.75, -101.11] | | | | |
| | 07/24/11 15:26 CST | 0 | | Hail (0.75 in) |
| | 07/24/11 15:30 CST | 0 | | Source: Trained Spotter |
| STUTSMAN COUNTY --- 0.7 N CLEVELAND [46.89, -99.12] | | | | |
| | 07/24/11 15:26 CST | 0 | | Hail (0.75 in) |
| | 07/24/11 15:29 CST | 0 | | Source: Trained Spotter |
| KIDDER COUNTY --- 1.2 NE STEELE MUNI ARPT [46.86, -99.96] | | | | |
| | 07/24/11 15:30 CST | 0 | | Hail (0.75 in) |
| | 07/24/11 15:34 CST | 0 | | Source: Trained Spotter |
| KIDDER COUNTY --- 0.8 SE STEELE MUNI ARPT [46.84, -99.97] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|---|--------------------|----------------------|------------------------|------------------------------|
| | 07/24/11 15:36 CST | | 0 | Hail (0.75 in) |
| | 07/24/11 15:40 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| KIDDER COUNTY --- 8.0 SSW TAPPEN [46.76, -99.67] | | | | |
| | 07/24/11 15:57 CST | | 0 | Hail (1.00 in) |
| | 07/24/11 15:59 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| LA MOURE COUNTY --- 1.7 SE ADRIAN [46.58, -98.53] | | | | |
| | 07/24/11 16:20 CST | | 0 | Hail (2.00 in) |
| | 07/24/11 16:25 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| KIDDER COUNTY --- 10.8 NNW TUTTLE [47.29, -100.08] | | | | |
| | 07/24/11 16:30 CST | | 0 | Hail (1.00 in) |
| | 07/24/11 16:34 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| FOSTER COUNTY --- 4.7 NW CARRINGTON ARPT [47.49, -99.23] | | | | |
| | 07/24/11 17:05 CST | | 0 | Hail (1.75 in) |
| | 07/24/11 17:13 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 0.8 NW BISMARCK [46.81, -100.78] | | | | |
| | 07/24/11 17:31 CST | | 0 | Hail (0.75 in) |
| | 07/24/11 17:35 CST | | 0 | Source: Public |
| <hr/> | | | | |
| FOSTER COUNTY --- 0.8 SE GRACE CITY [47.54, -98.81] | | | | |
| | 07/24/11 17:33 CST | | 0 | Hail (1.75 in) |
| | 07/24/11 17:38 CST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| <p>A midlevel short wave impulse combined with a weak surface boundary to trigger afternoon thunderstorms over southwest and south central North Dakota. Strong afternoon heating resulted in rather robust convective development with storms quickly reaching severe thresholds after they initialized. Severe Thunderstorm Watch number 681 was issued for this event.</p> | | | | |
| <hr/> | | | | |
| MOUNTRAIL COUNTY --- 3.3 NNW STANLEY [48.36, -102.42] | | | | |
| | 07/26/11 09:00 CST | | 0 | Heavy Rain |
| | 07/26/11 16:00 CST | | 0 | Source: COOP Observer |
| <hr/> | | | | |
| <p>A rainfall total of 2.01 inches was reported.</p> | | | | |
| <hr/> | | | | |
| DICKEY COUNTY --- 0.8 SE FULLERTON [46.16, -98.41] | | | | |
| | 07/26/11 18:30 CST | | 0 | Heavy Rain |
| | 07/26/11 19:30 CST | | 0 | Source: COOP Observer |
| <hr/> | | | | |
| <p>A heavy rain amount of 2.7 inches falling in one hour was reported. There was no report of flooding.</p> | | | | |
| <hr/> | | | | |
| DICKEY COUNTY --- 0.7 N LUDDEN [46.01, -98.13] | | | | |
| | 07/26/11 18:50 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/26/11 18:55 CST | | 0 | Source: Emergency Manager |
| <hr/> | | | | |
| <p>The strong winds blew down several tree branches.</p> | | | | |
| <p>An extensive area of low clouds which persisted well into the afternoon prevented a much larger outbreak of severe weather from occurring over west and central North Dakota during the afternoon and evening of July 26th. Only one report of a severe thunderstorm wind gust was received. Severe Thunderstorm Watch number 688 and Tornado Watch number 689 were in effect for this event.</p> | | | | |
| <hr/> | | | | |
| WILLIAMS COUNTY --- 0.5 W EPPING [48.28, -103.36] | | | | |
| | 07/26/11 09:02 CST | | 0 | Hail (0.88 in) |
| | 07/26/11 09:12 CST | | 0 | Source: Public |
| <hr/> | | | | |
| WILLIAMS COUNTY --- (ISN)SLOULIN FLD WIL [48.18, -103.65] | | | | |
| | 07/26/11 09:53 CST | | 0 | Hail (1.00 in) |
| | 07/26/11 09:57 CST | | 0 | Source: Public |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|------------------------------|
| A late morning thunderstorm over Williams County produced large hail. | | | | |
| WARD COUNTY --- 0.8 SSW BERTHOLD [48.31, -101.74] | | | | |
| | 07/28/11 13:20 CST | | 0 | Hail (0.88 in) |
| | 07/28/11 13:25 CST | | 0 | Source: Public |
| WARD COUNTY --- BURLINGTON [48.28, -101.42] | | | | |
| | 07/28/11 13:28 CST | | 0 | Hail (0.75 in) |
| | 07/28/11 13:32 CST | | 0 | Source: Public |
| A strong thunderstorm over Ward County in north central North Dakota produced large hail. | | | | |
| GRANT COUNTY --- ELGIN [46.40, -101.85] | | | | |
| | 07/29/11 07:30 MST | | 0 | Hail (1.00 in) |
| | 07/29/11 07:45 MST | | 0 | Source: Trained Spotter |
| SLOPE COUNTY --- 1.2 SW MARMARTH [46.29, -103.92] | | | | |
| | 07/29/11 17:36 MST | | 0 | Hail (1.75 in) |
| | 07/29/11 17:43 MST | | 0 | Source: Law Enforcement |
| BOWMAN COUNTY --- 10.0 W RHAME [46.23, -103.86] | | | | |
| | 07/29/11 17:50 MST | | 0 | Hail (2.50 in) |
| | 07/29/11 18:00 MST | | 0 | Source: Emergency Manager |
| There were no damage reports received. | | | | |
| SLOPE COUNTY --- 6.8 ENE MARMARTH [46.34, -103.77] | | | | |
| | 07/29/11 17:52 MST | | 0 | Hail (0.75 in) |
| | 07/29/11 17:56 MST | | 0 | Source: Emergency Manager |
| GOLDEN VALLEY COUNTY --- TROTTERS [47.32, -103.92] | | | | |
| | 07/29/11 20:00 MST | | 0 | Hail (1.00 in) |
| | 07/29/11 20:15 MST | | 0 | Source: COOP Observer |
| GOLDEN VALLEY COUNTY --- 15.1 NNE SENTINEL BUTTE [47.12, -103.70] | | | | |
| | 07/29/11 21:12 MST | | 0 | Hail (1.50 in) |
| | 07/29/11 21:17 MST | | 0 | Source: Mesonet |
| GOLDEN VALLEY COUNTY --- 20.0 NE BEACH [47.12, -103.70] | | | | |
| | 07/29/11 21:12 MST | | 0 | Thunderstorm Wind (EG 61 kt) |
| | 07/29/11 21:17 MST | | 0 | Source: Mesonet |
| Large hail accompanied the strong winds. | | | | |
| MOUNTRAIL COUNTY --- 0.5 W STANLEY [48.32, -102.39] | | | | |
| | 07/29/11 21:42 CST | | 8K | Thunderstorm Wind (EG 61 kt) |
| | 07/29/11 21:49 CST | | 0 | Source: Emergency Manager |
| The strong winds destroyed a baseball dugout and snapped a ten inch in diameter tree. | | | | |
| MOUNTRAIL COUNTY --- PARSHALL [47.97, -102.13] | | | | |
| | 07/29/11 21:45 CST | | 8K | Thunderstorm Wind (EG 52 kt) |
| | 07/29/11 21:49 CST | | 0 | Source: Public |
| The strong winds lasted a few minutes. | | | | |
| BURLEIGH COUNTY --- 5.8 SSE DRISCOLL [46.77, -100.09] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|---------------------------------|
| | 07/29/11 22:00 CST | | 0 | Heavy Rain |
| | 07/30/11 04:00 CST | | 0 | Source: COOP Observer |
| Waves of thunderstorms moved through with a storm total rainfall measured at 3.5 inches. | | | | |
| BURLEIGH COUNTY --- 5.0 E BISMARCK [46.80, -100.66] | | | | |
| | 07/29/11 22:16 CST | | 0 | Hail (1.00 in) |
| | 07/29/11 22:21 CST | | 0 | Source: Public |
| KIDDER COUNTY --- 7.9 SW TUTTLE [47.07, -100.10] | | | | |
| | 07/29/11 23:25 CST | | 0 | Hail (1.00 in) |
| | 07/29/11 23:29 CST | | 0 | Source: Trained Spotter |
| STUTSMAN COUNTY --- 10.0 NNW WOODWORTH [47.28, -99.38] | | | | |
| | 07/29/11 23:30 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/29/11 23:50 CST | | 0 | Source: Trained Spotter |
| Strong winds gusted multiple times during this time period. | | | | |
| WELLS COUNTY --- 2.0 S HARVEY [47.74, -99.90] | | | | |
| | 07/29/11 23:45 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/29/11 23:52 CST | | 0 | Source: Trained Spotter |
| Strong winds were reported. | | | | |
| BURLEIGH COUNTY --- 8.0 N BISMARCK [46.91, -100.74] | | | | |
| | 07/30/11 02:00 CST | | 0.19M | Lightning |
| | 07/30/11 02:00 CST | | 0 | Source: Newspaper |
| A lightning strike to a rural north Bismarck home caused a fire that destroyed the home several hours later. | | | | |
| MORTON COUNTY --- 6.5 ENE SWEET BRIAR [46.86, -101.05] | | | | |
| | 07/30/11 02:05 CST | | 0 | Hail (1.00 in) |
| | 07/30/11 02:10 CST | | 0 | Source: Public |
| MORTON COUNTY --- 7.6 NE SWEET BRIAR [46.91, -101.07] | | | | |
| | 07/30/11 02:10 CST | | 25K | Hail (2.50 in) |
| | 07/30/11 02:18 CST | | 0 | Source: Public |
| The large hail dented cars. | | | | |
| WARD COUNTY --- MINOT [48.23, -101.28] | | | | |
| | 07/30/11 02:17 CST | | 0 | Hail (1.00 in) |
| | 07/30/11 02:21 CST | | 0 | Source: Law Enforcement |
| BURLEIGH COUNTY --- 2.5 NW BISMARCK [46.82, -100.81], 2.5 NE BISMARCK [46.83, -100.74], 1.8 ENE (BIS)BISMARCK MUNI A [46.79, -100.72], 2.3 SW BISMARCK [46.78, -100.81] | | | | |
| | 07/30/11 02:45 CST | | 50K | Flash Flood (due to Heavy Rain) |
| | 07/30/11 06:00 CST | | 0 | Source: Mesonet |
| Multiple reports were received from across Bismarck of water up to 18 inches deep flowing over roads. Mainly the flash flooding was in low lying and poor drainage areas of the city. In some cases water washed up to the foundation of homes and into window wells. Rain amounts were around two inches. | | | | |
| BURLEIGH COUNTY --- 0.8 SW STERLING [46.81, -100.29] | | | | |
| | 07/30/11 03:00 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 07/30/11 03:10 CST | | 0 | Source: Trained Spotter |
| The strong winds lasted a few minutes. | | | | |
| LOGAN COUNTY --- 9.6 E NAPOLEON [46.52, -99.57] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|--|--------------------|-------------------|---------------------|------------------------------|
| | 07/30/11 03:09 CST | | 0 | Hail (1.75 in) |
| | 07/30/11 03:22 CST | | 0 | Source: Mesonet |
| <hr/> | | | | |
| DICKEY COUNTY --- 8.0 ESE ELLENDALE [45.96, -98.37] | | | | |
| | 07/30/11 05:20 CST | | 0 | Hail (1.50 in) |
| | 07/30/11 05:29 CST | | 0 | Source: Public |
| <hr/> | | | | |
| LA MOURE COUNTY --- 15.0 W LA MOURE [46.35, -98.61], LA MOURE [46.35, -98.30] | | | | |
| | 07/30/11 05:30 CST | | 80K | Thunderstorm Wind (EG 74 kt) |
| | 07/30/11 05:45 CST | | 0 | Source: Emergency Manager |
| <p>Extensive tree damage was reported in the city of Lamoure. The strong thunderstorm winds also blew the tin roof off of a building.</p> <p>Two waves of severe weather struck west and central North Dakota from the evening of the 29th through the early morning hours of the 30th.</p> <p>The first wave of storms occurred along a surface warm front over the south and along a cool front across the north during the evening hours to just after midnight central time. Several severe thunderstorm warnings were issued, with multiple reports of large hail and strong winds received. Severe Thunderstorm Watch number 702 was in effect for this period.</p> <p>The second wave of storms occurred along the cool front as it moved south into south central and southeast North Dakota, with support from a short wave trough and a strengthening low level jet. Several severe thunderstorm warnings were issued, with reports of large hail, strong winds, and heavy rain received.</p> | | | | |
| <hr/> | | | | |
| ADAMS COUNTY --- 6.2 S REEDER [46.03, -102.94] | | | | |
| | 07/31/11 18:55 MST | | 0 | Hail (2.00 in) |
| | 07/31/11 19:00 MST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| SIOUX COUNTY --- 49.9 W SELFRIDGE [46.04, -101.97] | | | | |
| | 07/31/11 19:15 MST | | 15K | Thunderstorm Wind (EG 70 kt) |
| | 07/31/11 19:25 MST | | 0 | Source: Trained Spotter |
| <p>The very strong winds tore a small deck off of a house.</p> | | | | |
| <hr/> | | | | |
| ADAMS COUNTY --- 14.7 NNE BUCYRUS [46.26, -102.64] | | | | |
| | 07/31/11 19:20 MST | | 0 | Hail (0.75 in) |
| | 07/31/11 19:25 MST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| HETTINGER COUNTY --- 5.3 W MOTT [46.37, -102.43] | | | | |
| | 07/31/11 19:44 MST | | 0 | Hail (1.00 in) |
| | 07/31/11 19:52 MST | | 0 | Source: Trained Spotter |
| <hr/> | | | | |
| GRANT COUNTY --- 13.3 SSE NEW LEIPZIG [46.19, -101.85], CARSON [46.42, -101.57] | | | | |
| | 07/31/11 19:45 MST | | 0.50M | Thunderstorm Wind (EG 70 kt) |
| | 07/31/11 20:15 MST | | 0 | Source: Emergency Manager |
| <p>Large trees were blown down in the city of Carson. Structural damage also occurred to many local buildings in the city of Carson and surrounding farmsteads.</p> | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- 5.1 ENE SWEET BRIAR [46.87, -101.09] | | | | |
| | 07/31/11 21:43 CST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 07/31/11 21:51 CST | | 0 | Source: Amateur Radio |
| <hr/> | | | | |
| BURLEIGH COUNTY --- 7.7 NNW BISMARCK [46.90, -100.84] | | | | |
| | 07/31/11 21:45 CST | | 35K | Thunderstorm Wind (EG 61 kt) |
| | 07/31/11 21:56 CST | | 0 | Source: NWS Employee |
| <p>The strong thunderstorm winds snapped off two four inch in diameter trees. An 8,000 pound fifth wheel camper was flipped over and destroyed.</p> | | | | |
| <hr/> | | | | |
| MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89] | | | | |

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|--------------------|-------------------|---------------------|------------------------------|
| | 07/31/11 21:55 CST | | 25K | Thunderstorm Wind (EG 61 kt) |
| | 07/31/11 22:22 CST | | 0 | Source: Amateur Radio |

Heavy rain accompanied the strong winds. Trees were downed in Mandan.

BURLEIGH COUNTY --- (BIS)BISMARCK MUNI A [46.78, -100.75]

| | | |
|--------------------|-------|------------------------------|
| 07/31/11 21:56 CST | 0.20K | Thunderstorm Wind (MG 59 kt) |
| 07/31/11 22:24 CST | 0 | Source: ASOS |

This was the peak wind, 68 mph, measured at the National Weather Service ASOS at the Bismarck Airport during this severe thunderstorm. The wind gusted at or above 60 mph for 20 minutes. A small tree was snapped at the National Weather Service Office. Pea size hail accompanied the storm through Bismarck.

MORTON COUNTY --- 0.5 E MANDAN [46.83, -100.89], 1.4 E MANDAN [46.83, -100.87], 1.4 E MANDAN [46.83, -100.87], 0.6 ESE MANDAN [46.83, -100.89]

| | | |
|--------------------|----|---------------------------------|
| 07/31/11 22:04 CST | 5K | Flash Flood (due to Heavy Rain) |
| 07/31/11 23:59 CST | 0 | Source: NWS Employee |

Very heavy rain was creating flash flood conditions in Mandan.

BURLEIGH COUNTY --- 7.2 N BISMARCK [46.90, -100.77], 1.7 ENE BISMARCK [46.81, -100.74]

| | | |
|--------------------|-----|------------------------------|
| 07/31/11 22:10 CST | 35K | Thunderstorm Wind (EG 74 kt) |
| 07/31/11 22:22 CST | 0 | Source: NWS Employee |

Winds were also estimated this high by law enforcement and Amateur Radio Operators. A trampoline was picked up by the strong winds and thrown into the side of a home in rural north Bismarck. Two 65 foot tall trees were snapped. Power flashes were occurring with the storm.

BURLEIGH COUNTY --- 7.1 N BISMARCK [46.90, -100.79]

| | | |
|--------------------|---|------------------------------|
| 07/31/11 22:18 CST | 0 | Thunderstorm Wind (MG 68 kt) |
| 07/31/11 22:23 CST | 0 | Source: Mesonet |

BURLEIGH COUNTY --- 0.7 NW (BIS)BISMARCK MUNI A [46.79, -100.76], 0.9 ESE BISMARCK [46.80, -100.75], 1.1 WSW BISMARCK [46.80, -100.79], 1.4 SW BISMARCK [46.79, -100.79], 0.9 WNW (BIS)BISMARCK MUNI A [46.78, -100.77]

| | | |
|--------------------|----|---------------------------------|
| 07/31/11 22:33 CST | 5K | Flash Flood (due to Heavy Rain) |
| 07/31/11 23:59 CST | 0 | Source: Amateur Radio |

Numerous roads were reported to have over one foot of water on them.

BURLEIGH COUNTY --- 0.8 SW STERLING [46.81, -100.29], 6.9 S ARENA [47.03, -100.16]

| | | |
|--------------------|-----|------------------------------|
| 07/31/11 22:35 CST | 40K | Thunderstorm Wind (EG 70 kt) |
| 07/31/11 22:53 CST | 0 | Source: Trained Spotter |

The strong winds resulted in extensive tree damage throughout the town of Sterling.

MCLEAN COUNTY --- COLEHARBOR [47.55, -101.22]

| | | |
|--------------------|---|------------------------------|
| 07/31/11 22:52 CST | 0 | Thunderstorm Wind (MG 52 kt) |
| 07/31/11 22:57 CST | 0 | Source: Mesonet |

FOSTER COUNTY --- 5.0 SE CARRINGTON [47.40, -99.05]

| | | |
|--------------------|----|------------------------------|
| 07/31/11 23:54 CST | 5K | Thunderstorm Wind (EG 61 kt) |
| 07/31/11 23:59 CST | 0 | Source: Broadcast Media |

The strong winds blew down trees near Carrington.

Tornado Watch Number 706 and Severe Thunderstorm Watch Number 707 were in effect for this event.

A strong capping inversion initially prevented storms from developing across North Dakota. Eventually, severe storms over northwest South Dakota continued to propagate northeast into far southwest and south central North Dakota during the mid to late evening as a surface warm front lifted north. These storms continued east and north into the early morning hours of August 1st, with additional development across the south central and southeast as a result of a strengthening low level jet. Most significant was the strong wind duration with these storms.

See the August 1 Storm Data entries.

Storm Data and Unusual Weather Phenomena - July 2011

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|-----------|----------------------|------------------------|------------------------|
|----------|-----------|----------------------|------------------------|------------------------|