

Storm Data and Unusual Weather Phenomena - May 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
MINNESOTA, Central and South Central				
FARIBAULT COUNTY --- 4.4 E MINNESOTA LAKE [43.84, -93.76], 4.8 E MINNESOTA LAKE [43.84, -93.75]				
	05/25/18 13:40 CST		0	Tornado (EF0, L: 0.41 mi , W: 20 yd)
	05/25/18 13:43 CST		0	Source: Law Enforcement

A landspout tornado moved across an open field and was filmed on video. It did not hit anything.

A series of thunderstorms developed Friday afternoon along a cold front, amidst a moisture rich air mass. Another area of storms developed across the eastern Dakotas, and raced eastward across central, and southern Minnesota. The storms along the front produced a weak landspout tornado near Minnesota Lake. Other storms produced marginal severe hail in the northwest part of the Twin Cities, with larger hail, up to golf ball size, west of Albert Lea.

MINNESOTA, Southeast

FILLMORE COUNTY --- 2.8 SSW BRISTOL [43.51, -92.20], 2.5 SSW BRISTOL [43.52, -92.20]				
	05/30/18 18:40 CST		8K	Tornado (EF0, L: 0.46 mi , W: 8 yd)
	05/30/18 18:43 CST		0	Source: Emergency Manager

A small, short-lived tornado touched down northwest of Granger and traveled northeast for about a half mile. The tornado damaged a shed near the intersection of County Road 30 and 225th Avenue.

A small, short-lived tornado touched down northwest of Granger (Fillmore County) during the early evening of May 30th. The only damaged produced by the tornado was to a shed.

Storm Data and Unusual Weather Phenomena - June 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
MINNESOTA, Northwest				
NORMAN COUNTY --- 0.7 S RANUM [47.46, -96.13], 1.0 SSE RANUM [47.46, -96.12]				
	06/28/18 13:51 CST		0	Tornado (EF1, L: 1.00 mi , W: 150 yd)
	06/28/18 13:54 CST		0	Source: NWS Storm Survey

A large tree was snapped and fell to the north, while a nearby power pole was snapped and fell to the east. No field scarring was noted. Peak winds were estimated at 105 mph.

Around the noon hour of Thursday, June 28th, an east to west stationary boundary was located across southern North Dakota into central Minnesota. It was warm and muggy, with temperatures in the 80s and dew points in the low 70s along the boundary. Thunderstorms tracking from west to east along highway 2 became severe over the Grand Forks-East Grand Forks area just after the noon hour CDT, dropping heavy rain and large hail. During the afternoon, other storms flared up, mainly between highways 2 and 200.

NORMAN COUNTY --- 0.5 E TWIN VLY [47.27, -96.26], 1.5 NE TWIN VLY [47.29, -96.25]				
	06/29/18 03:48 CST		0	Tornado (EF1, L: 1.21 mi , W: 150 yd)
	06/29/18 03:50 CST		0	Source: Emergency Manager

This tornado was likely wrapped in downburst winds and heavy rain. Large trees were broken down and flung in various directions, but mainly to the northeast and east. Metal roofing was torn off a shed. Peak winds were estimated at 90 mph.

POLK COUNTY --- 2.3 NW WINGER [47.55, -96.02], 2.0 ESE FOSSTON [47.56, -95.69]				
	06/29/18 03:54 CST		6.50M	Tornado (EF2, L: 15.38 mi , W: 400 yd)
	06/29/18 04:09 CST		0.50M	Source: NWS Storm Survey

This tornado was likely wrapped in downburst winds and heavy rain for most of its path. It tracked nearly due east at about 60 mph, for at least 15 miles. It tore down trees in shelterbelts and tore roofing off of a couple of homes and farm buildings. It tore down 11 miles, or more than 50 high voltage towers, and snapped wooden power poles at cross roads along its path. Peak winds were estimated at 120 mph.

POLK COUNTY --- 2.3 SSE ERSKINE [47.64, -96.00], 1.4 NW MC INTOSH [47.64, -95.92]				
	06/29/18 03:56 CST		0	Tornado (EF1, L: 2.50 mi , W: 250 yd)
	06/29/18 03:59 CST		0	Source: NWS Storm Survey

This tornado, which was partially wrapped in downburst winds and heavy rain, snapped various trees at a farmstead. After crossing highway 2 roughly two miles east-southeast of the highway 59 intersection, it blew in a large west facing overhead door on a shop and blew out the back wall. Peak winds were estimated at 100 mph.

The early morning hours of Friday, June 29th, remained warm and muggy. Just after midnight, temperatures were still in the 70s with dew points around 70. A line of thunderstorms moved into the Devils Lake area around 2 am CDT. This line of storms had several bowing segments, which are indicative of strong winds. The most obvious bowing segment between highway 2 and Interstate 94, where the most amount of damage occurred. The main bowing segment exited into north central Minnesota around 6 am CDT. Well behind the bowing thunderstorm complex, a mesoscale convective vortex (MCV) formed, and produced another round of widespread damaging winds.

MINNESOTA, Southwest

LINCOLN COUNTY --- 3.2 NE ARCO [44.41, -96.15], 3.6 NE ARCO [44.41, -96.15]				
	06/24/18 14:51 CST		0	Tornado (EF0, L: 0.38 mi , W: 50 yd)
	06/24/18 14:52 CST		0	Source: Public

Widely photographed tornado briefly touched down in an open field for less than a minute.

Numerous outflow boundaries from overnight convection re-fired across southwest Minnesota around mid afternoon as diurnal heating weakened the cap and increased MLCAPE to around 2000 J/kg. The leading edge of larger-scale lift began to move in late afternoon with jet streak punching toward central Nebraska ahead of a deep western U.S. trough, but overall deep-layer shear remained quite weak with right-moving and mean storm motion vector magnitudes at 10 knots or less northwest Iowa.

Storm Data and Unusual Weather Phenomena - July 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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MINNESOTA, Central and South Central

MARTIN COUNTY --- 2.1 WNW CEYLON [43.54, -94.67], 2.3 WNW CEYLON [43.54, -94.67]				
	07/19/18 11:45 CST		0	Tornado (EF0, L: 0.21 mi , W: 10 yd)
	07/19/18 11:56 CST		0	Source: Law Enforcement

The local police officer video taped a tornado between Susan Lake, and Fish Lake, west of Ceylon. The tornado was estimated to be 10 yards wide and slowly moved west-northwest. Most of the damage was to a row of trees between the lakes.

A line of thunderstorms developed late Thursday morning across south central Minnesota. These storms developed along a very apparent west to east wind shift line. Several funnel clouds were reported along this line. One of the stronger storms had enough strength to develop a weak tornado west of Ceylon, Minnesota. The tornado was recorded on video from a local sheriff as it slowly moved across an open farm field. Most of the damage was associated with a row of trees before it dissipated.

MINNESOTA, Northwest

BELTRAMI COUNTY --- 1.2 NE BEMIDJI [47.49, -94.88]				
	07/04/18 05:18 CST		0.25M	Tornado (EF1, L: 0.70 mi , W: 200 yd)
	07/04/18 05:18 CST		0	Source: NWS Storm Survey

The tornado occurred west of Bemidji State University. A garage was lifted off its foundation, trees were snapped or uprooted, and several roofs were damaged. Projectiles damaged many windows in the area. Flying debris damaged light poles and street signs in the area.

During the early morning hours of July 4th, surface low pressure had set up over north central South Dakota, with an east-to-west warm front extending eastward from the low along the North Dakota/South Dakota border into west central Minnesota. Temperatures across eastern North Dakota and the northwest quarter of Minnesota ranged in the 70s with dew points in the upper 60s to low 70s. The mid level winds (500mb) were from the south-southwest. A bowing line of thunderstorms, stretching from south of Rugby to the North Dakota/South Dakota border moved into portions of the southwest Devils Lake region just after 130 am CDT. Following the mid level wind flow, the storms tracked to the east-northeast, reaching the Red River Valley around 4 am CDT. At this point, the bowing line of storms stretched from southern Manitoba down into northeast South Dakota. This bowing line of storms tracked through the northwest quarter of Minnesota in the 4 to 6 am CDT time frame, so these storms were moving quite quickly. Most of the storms had exited the Baudette to Park Rapids corridor by 7 am CDT. These storms produced widespread damaging winds.

BELTRAMI COUNTY --- 2.3 W PONEMAH [48.02, -94.98], 1.0 NW PONEMAH [48.03, -94.95]				
	07/11/18 20:12 CST		20K	Tornado (EF0, L: 1.75 mi , W: 250 yd)
	07/11/18 20:15 CST		0	Source: Law Enforcement

Reports of this tornado, along with video, were posted to social media. The tornado touched down just off the shore, over Lower Red Lake. It moved on shore roughly two miles west of Ponemah and continued to track to the east-northeast, for another mile or so, before dissipating. Large poplar and ash tree limbs were broken down along this path. Peak winds were estimated at 80 mph.

BELTRAMI COUNTY --- 4.2 ENE PONEMAH [48.05, -94.85], 5.1 ENE PONEMAH [48.06, -94.83]				
	07/11/18 20:24 CST		20K	Tornado (EF1, L: 2.00 mi , W: 400 yd)
	07/11/18 20:28 CST		0	Source: NWS Storm Survey

This tornado touched down and tracked along and across the Bureau of Indian Affairs (BIA) 25 road for about two miles, to near the south shore of the Lower Red Lake. Trees were torn up quite violently and debris was spread across nearly a mile of BIA25. Peak winds were estimated at 100 mph.

BELTRAMI COUNTY --- 3.3 WNW SAUM [47.99, -94.75], 4.0 N SAUM [48.04, -94.68]				
	07/11/18 20:31 CST		0.10M	Tornado (EF1, L: 5.00 mi , W: 400 yd)
	07/11/18 20:42 CST		4K	Source: NWS Storm Survey

Reports of this tornado, along with video, were posted to social media, showing contact and an eastward track beginning over open water on Lower Red Lake. The tornado tracked onshore about four miles north-northwest of Battle River, and continued on an intermittent east-northeast track for nearly five miles, crossing Beltrami County 23 about four miles north of Saum. Large poplar and pine trees were snapped or uprooted along the damage path. Peak winds were estimated at 100 mph.

A cold front moved into the northwest quarter of Minnesota during the evening of the 11th into the early morning hours of the 12th. Ahead of this cold front, temperatures over the northwest quarter of Minnesota during the early evening of the 11th ranged well into the 80s, with dew points in the middle 70s, so it was very warm and muggy. Thunderstorms broke out along the front, producing funnel clouds, tornadoes, large hail, and damaging wind gusts.

Storm Data and Unusual Weather Phenomena - July 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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Storm Data and Unusual Weather Phenomena - August 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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MINNESOTA, Central and South Central

KANDIYOHI COUNTY --- 0.9 NNE ATWATER [45.14, -94.79], 2.2 ENE ATWATER [45.14, -94.76]

08/03/18 17:34 CST	0.10M	Tornado (EF0, L: 1.61 mi , W: 300 yd)
08/03/18 17:36 CST	0	Source: NWS Storm Survey

A NWS storm survey indicated an EF0 Tornado began near Atwater and tracked east for 1.6 miles along Highway 12, and entered Meeker County. Multiple trees and power lines were blown down in the city of Atwater. Some of the trees landed on houses and caused structural damage.

MEEKER COUNTY --- 2.9 WSW GROVE CITY [45.14, -94.76], 2.3 NW LITCHFIELD [45.15, -94.56]

08/03/18 17:36 CST	0.10M	Tornado (EF0, L: 9.48 mi , W: 300 yd)
08/03/18 17:45 CST	0	Source: NWS Storm Survey

This is the continuation of the same EF0 tornado that tracked across Kandiyohi county, and entered Meeker county. This tornado tracked an additional 9.5 miles east along Highway 12, through Grove City, to just northwest of Litchfield. Pockets of tree damage, an overturned trailer, and some other minor structural damage to sheds and pole barns resulted. Straight line wind damage, mostly to trees, was found south of the tornado track and Highway 12. Maximum winds were estimated at 80 mph, with a width of 300 yards.

A line of storms that developed across South Dakota, moved eastward into west central, central and east central Minnesota during the late afternoon, and evening hours. Several bow echo segments were indicated on radar, with one producing a tornado between Atwater and Grove City. A few trees and power lines were blown down as this line of storms continued to move eastward across Minnesota.

There were numerous measured wind gusts in the range of 45 to 55 mph as these storms moved across the state, including 55 mph at the St. Paul airport, 53 mph near Starbuck, and Granite Falls, 51 mph near Clearwater, 49 mph near Clara City, 48 mph at the Minneapolis, St. Paul International Airport, and 47 mph at the Madison airport.

RICE COUNTY --- 1.2 ESE NERSTRAND [44.34, -93.05], 1.6 ESE NERSTRAND [44.34, -93.04]

08/27/18 16:17 CST	0	Tornado (EF0, L: 0.48 mi , W: 100 yd)
08/27/18 16:18 CST	0	Source: NWS Storm Survey

A storm survey determined that a tornado hit a farm east of Nerstrand. Several trees were downed, and a shed was destroyed. The wind also blew down a power pole, landing on a barn which then caught on fire. The tornado may have started southwest of Nerstrand, but it was impossible to determine from the damage pattern. Maximum winds were estimated at around 70 mph.

GOODHUE COUNTY --- 5.3 NW KENYON [44.34, -93.04], 4.8 SSE DENNISON [44.35, -93.01]

08/27/18 16:18 CST	0	Tornado (EF0, L: 1.80 mi , W: 100 yd)
08/27/18 16:21 CST	0	Source: NWS Storm Survey

A storm survey determined that a tornado started just east of Nerstrand MN (in Rice County) and continued into Goodhue County, where it dissipated. It damaged trees and crops.

GOODHUE COUNTY --- 1.4 WSW VASA [44.49, -92.75], 0.9 NE VASA [44.51, -92.71]

08/27/18 16:37 CST	0.30M	Tornado (EF0, L: 2.19 mi , W: 150 yd)
08/27/18 16:42 CST	0	Source: NWS Storm Survey

A tornado touched down just west of a farm, where a definite path was evident in the corn field. It took the tin roof off of much of a turkey barn. An empty grain bin was blown several hundred yards. The southern half of a large machine shed was collapsed. Two windows were blown in at a nearby school, which also had a small portion of its roof torn back. Numerous trees were broken.

The afternoon of Monday, August, 27th, several complexes of storms moved across South Dakota, Nebraska, northwest Iowa, and into western and southern Minnesota. The complex of storms in South Dakota produced large hail in west central Minnesota, or mainly around the communities of Glenwood, Alexandria, and Sauk Centre. A more pronounced area of storms that developed in northeast Nebraska, and into northwest Iowa, moved east-northeast into south central Minnesota. Several reports of wind damage occurred around Welcome, Truman and Northrop. These storms became more organized as they moved just south of the Twin Cities Metro area where two tornadoes formed between Faribault and Red Wing. These clusters of storms developed into a bow echo as it raced northeast into west central Wisconsin.

MINNESOTA, Northwest

NORMAN COUNTY --- 1.2 SE SUNDAHL [47.46, -96.18], 3.5 NE RANUM [47.50, -96.07]

Storm Data and Unusual Weather Phenomena - August 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	08/26/18 22:30 CST		0	Tornado (EF1, L: 5.83 mi , W: 300 yd)
	08/26/18 22:36 CST		0	Source: NWS Storm Survey

This tornado touched down roughly 9 miles southwest of Winger, in Norman County. The tornado was likely wrapped in downburst winds and rain and it damaged numerous barns, sheds, and outbuildings along its path. The tornado crossed into Polk County, eventually ending about 4 miles northwest of Fosston at 1149 pm CDT.

POLK COUNTY --- 2.8 E RINDAL [47.50, -96.07], 4.0 NW FOSSTON [47.61, -95.79]

08/26/18 22:36 CST	0	Tornado (EF1, L: 15.11 mi , W: 300 yd)
08/26/18 22:49 CST	0	Source: NWS Storm Survey

This tornado began in Norman County at 1130 pm CDT. As it crossed into Polk County, it continued to damage numerous barns, sheds, and outbuildings along its path and was likely wrapped in downburst winds and rain. The tornado hit the town of Winger, where it damaged hundreds of trees, damaged the siding and roofs on many homes, and destroyed several grain bins.

POLK COUNTY --- 3.1 NNE FASSTON [47.62, -95.72], 5.6 E OLGA [47.67, -95.23]

08/26/18 22:51 CST	0	Tornado (EF1, L: 8.63 mi , W: 200 yd)
08/26/18 22:58 CST	0	Source: NWS Storm Survey

This tornado tracked intermittently from 3 miles north-northeast of Fosston to 9 miles north-northeast of Leonard (in Clearwater County), a total of about 26 miles. Hundreds of trees were damaged, uprooted, or snapped along the track. Numerous cabins, farm outbuildings, houses, campers, boats, and crops were also damaged. The tornado was likely wrapped in downburst winds and rain at times.

CLEARWATER COUNTY --- 1.2 SW PINE LAKE [47.67, -95.55], 8.5 NNE LEONARD [47.77, -95.23]

08/26/18 22:58 CST	0	Tornado (EF1, L: 16.40 mi , W: 200 yd)
08/26/18 23:12 CST	0	Source: NWS Storm Survey

This storm began 3 miles north-northeast of Fosston (in Polk County) at 1151 pm CDT. This tornado tracked intermittently from 3 miles north-northeast of Fosston to 9 miles north-northeast of Leonard (in Clearwater County), a total of about 26 miles. Hundreds of trees were damaged, uprooted, or snapped along the track. Numerous cabins, farm outbuildings, houses, campers, boats, and crops were also damaged. The tornado was likely wrapped in downburst winds and rain at times.

BELTRAMI COUNTY --- 2.1 SSE WASKISH MUNI ARPT [48.12, -94.51]

08/26/18 23:50 CST	0	Tornado (EF1, L: 1.00 mi , W: 150 yd)
08/26/18 23:52 CST	0	Source: Emergency Manager

Numerous trees were blown down along a narrow track in the Red Lake State Forest, some falling across highway 72. Some of the trees appeared to have been snapped and thrown onto the road. Peak winds were estimated at 90 mph.

Thunderstorms flared up across southern Cass County (North Dakota) on the afternoon of August 26th, dropping some large hail. After a several hour break, another storm intensified and dropped large hail over north central Becker and southern Mahnommen counties in Minnesota. Then after 8 pm CDT, a line of storms from north central North Dakota spread into the Devils Lake region. These storms produced damaging wind gusts. After 9 pm CDT, another line of storms formed ahead of the Devils Lake line, and these also tracked to the east. This line brought hail and damaging wind gusts to the Valley City and Grand Forks areas. Eventually, both lines of storms moved into the central and northern Red River Valley, then progressed into northwest Minnesota. As they did, they continued to produce damaging winds. Within the lines, several long track tornadoes also formed. Both of these occurred from the northeast corner of Norman County up toward the Lower Red Lake in Minnesota. Quite a bit of tree damage resulted along this track.

Storm Data and Unusual Weather Phenomena - September 2018

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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MINNESOTA, Central and South Central

MARTIN COUNTY --- 0.2 SW GRANADA [43.70, -94.35], 5.1 E GRANADA [43.71, -94.25]

09/20/18 16:52 CST	1.50M	Tornado (EF1, L: 5.30 mi , W: 220 yd)
09/20/18 16:57 CST	0	Source: NWS Storm Survey

A NWS Storm survey confirmed an EF1 tornado developed just west of the City of Granada, and tracked eastward for 5.3 miles as it moved into Faribault County. The average width was 220 yards and damaged several homes in Granada, before moving across farmland to the east. Numerous large trees were uprooted or blown down. The damage in Granada was consistent with EF1 damage as large sections of roof structures were removed, and one house was shifted from its foundation. Highest winds were estimated at 105 mph.

FARIBAULT COUNTY --- 1.6 S HUNTLEY [43.71, -94.25], 1.9 SE HUNTLEY [43.71, -94.22]

09/20/18 16:57 CST	0	Tornado (EF0, L: 1.18 mi , W: 70 yd)
09/20/18 16:59 CST	0	Source: NWS Storm Survey

This is the continuation of the Martin County tornado that continued into Faribault County before dissipating in a field approximately 1.2 miles east of the county line. Most of the damage was associated with downed trees and power lines. Maximum width was 70 yards with an EF0 rating based on damage.

BLUE EARTH COUNTY --- 0.5 SSE GARDEN CITY [44.04, -94.17], 1.2 E GARDEN CITY [44.05, -94.15]

09/20/18 16:58 CST	0	Tornado (EF0, L: 1.15 mi , W: 70 yd)
09/20/18 17:00 CST	0	Source: NWS Storm Survey

A NWS storm survey concluded that an EF0 tornado, with maximum winds of 70 mph, and a width of 70 yards, touched down in a field near Garden City. This tornado tracked 1.2 miles northeast through a farmstead and fairground, before dissipating in a corn field northeast of town. Most of the damage was associated with trees blown down, and a flattened corn fields.

BLUE EARTH COUNTY --- 1.1 NNW RAPIDAN [44.12, -94.08], 1.3 NNE RAPIDAN [44.12, -94.06]

09/20/18 17:04 CST	50K	Tornado (EF0, L: 0.84 mi , W: 70 yd)
09/20/18 17:05 CST	0	Source: NWS Storm Survey

A NWS storm survey, plus video from a drone, concluded that an EF0 tornado touched down north of Rapidan, and moved east for approximately a mile. Damage was confined to a field, and two homes. The main damage was to a home that had a tree fall on its roof.

WASECA COUNTY --- 0.8 NNE SMITHS MILL [44.14, -93.76], 6.5 NE JANESVILLE [44.19, -93.64]

09/20/18 17:19 CST	0	Tornado (EF1, L: 7.13 mi , W: 440 yd)
09/20/18 17:25 CST	1	Source: NWS Storm Survey

A National Weather Service storm survey concluded that an EF1 tornado tracked 7.1 miles from near the Blue Earth, Waseca county line, northwest of Janesville, then over Lake Elysian, before lifting near the Le Sueur, Waseca county line. Tornado damage was consistent with EF1 damage with winds up to 105 mph, and a maximum path width of 440 yards. Shortly after touchdown, it hit a home and removed its roof and destroyed the garage. A man in the garage was blown into the yard and suffered a minor injury, but did not require hospitalization. Other damage was confined to trees, outbuildings, and homes. There was also isolated damage on the south side of the tornado track due to severe inflow. Damage was confined to large trees and outbuildings on east side of Lake Elysian.

WASECA COUNTY --- 4.2 SE ALMA CITY [43.99, -93.66], 4.6 NE OTISCO [44.02, -93.45]

09/20/18 17:20 CST	0	Tornado (EF1, L: 10.88 mi , W: 300 yd)
09/20/18 17:30 CST	0	Source: NWS Storm Survey

A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked 10.9 miles from 4 miles north of Waldorf, then dissipated southeast of Waseca. Tornado damage was consistent with EF1 damage with winds up to 100 mph, and a maximum path width of 300 yards. Damage was confined to trees, but a silo was also damaged.

WASECA COUNTY --- 4.3 NW WASECA MUNI ARPT [44.12, -93.60], 4.2 NNW WASECA MUNI ARPT [44.12, -93.59]

09/20/18 17:20 CST	0	Tornado (EF0, L: 0.73 mi , W: 20 yd)
09/20/18 17:21 CST	0	Source: NWS Storm Survey

High resolution satellite data and ground surveys confirmed a narrow track through corn east of Janesville. Maximum width was 20 yards with estimated wind damage of 70 mph.

WASECA COUNTY --- 6.2 NE JANESVILLE [44.18, -93.63], 7.6 NE JANESVILLE [44.20, -93.61]

09/20/18 17:25 CST	0	Tornado (EF0, L: 1.42 mi , W: 125 yd)
09/20/18 17:26 CST	0	Source: NWS Storm Survey

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<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF0 tornado tracked 1.4 miles from southwest of Reeds Lake, then northeast to the Waseca, Le Sueur county line. Tornado damage was consistent with EF0 damage with winds up to 75 mph, and a maximum path width of 125 yards.</p>				
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LE SUEUR COUNTY --- 2.6 SW WATERVILLE [44.20, -93.61], 3.2 NE WATERVILLE [44.25, -93.53]				
	09/20/18 17:26 CST	0		Tornado (EF1, L: 5.75 mi , W: 330 yd)
	09/20/18 17:32 CST	0		Source: NWS Storm Survey
<p>This is a continuation path of the tornado that crossed the Waseca, Le Sueur county line southwest of Waterville.</p>				
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked an additional 5.8 miles from southwest of Waterville, then through the northwest corner of Waterville, or between Lake Tetonka and Upper Sakatah Lake, before lifting on the south side of Horseshoe Lake. Tornado damage was consistent with EF1 damage with winds up to 90 mph, and a maximum path width of 330 yards. Damage along the path occurred to homes, outbuildings, and large trees.</p>				
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WASECA COUNTY --- 1.1 E WASECA [44.08, -93.48], 4.9 ENE WASECA [44.10, -93.41]				
	09/20/18 17:28 CST	0		Tornado (EF0, L: 3.91 mi , W: 250 yd)
	09/20/18 17:31 CST	0		Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF0 tornado started east of Waseca, and tracked northeast for 3.9 miles until moving into Steele County. This tornado tracked mainly through corn and soy bean fields, and occasionally damaging a few power lines and power poles. The damage was consistent with EF0 damage with maximum wind speeds of 85 mph and a width of 250 yards.</p>				
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RICE COUNTY --- 1.4 S MORRISTOWN [44.21, -93.45], 1.4 N WARSAW [44.27, -93.40]				
	09/20/18 17:31 CST	0		Tornado (EF2, L: 4.94 mi , W: 300 yd)
	09/20/18 17:36 CST	0		Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone, fixed wing aircraft, and satellite data, concluded that an EF2 tornado tracked nearly 5 miles from southwest of Morristown, north-northeast to just west and north of Cannon Lake before lifting.</p>				
<p>Tornado damage was consistent with EF2 damage with winds up to 130 mph, and a maximum path width of 300 yards. The worst damage occurred on the southeast side of Morristown.</p>				
<p>On the southeast side of Morristown, several family homes had large sections of roof structure removed, and a few had all their exterior walls collapsed. Only small interior rooms were intact. The remainder of the tornadic track was consistent with uprooted trees, power lines, corn and soy bean field damage, and outbuildings.</p>				
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STEELE COUNTY --- 2.1 NW MERIDEN [44.10, -93.41], 1.9 WNW CLINTON FALLS [44.16, -93.28]				
	09/20/18 17:31 CST	0		Tornado (EF1, L: 7.22 mi , W: 350 yd)
	09/20/18 17:37 CST	0		Source: NWS Storm Survey
<p>This is the continued tornado track from the Waseca County tornado that moved an additional 7.2 miles through northwest Steele County. A storm survey, and high resolution satellite imagery indicated the tornado tracked mainly through corn and soy bean fields, and occasionally damaged a few sheds and outbuildings southwest of Medford. The worst damage was to a silo and grain bin which were destroyed by the tornado. This damage was consistent with EF1 damage with maximum wind speeds of 100 mph and a width of 350 yards.</p>				
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RICE COUNTY --- 1.7 NNE MORRISTOWN [44.25, -93.44], 0.7 NE FARIBAULT ARPT [44.34, -93.31]				
	09/20/18 17:35 CST	0		Tornado (EF1, L: 8.57 mi , W: 440 yd)
	09/20/18 17:44 CST	0		Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado started north of Morristown. It moved northeast to the intersection of Cedar Lake Blvd, and Fairbanks Avenue, and continued moving northeast across the southeast part of Roberds Lake. It lifted just north of the Faribault airport after being on the ground for nearly 8.6 miles.</p>				
<p>The damage was consistent with EF1 damage with maximum wind speeds of 95 mph and a width of 440 yards. Damage was significant along this path with the worst damage along the south and east sides of Roberds Lake. Areal footage and pictures concluded that hundred of trees, up to 3 feet in diameter, were uprooted or blown down onto houses on the east side of the lake from this tornado. Many of these large trees landed on homes and nearly split them in half.</p>				
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STEELE COUNTY --- 2.8 ESE MERIDEN [44.06, -93.33], 2.0 NW HAVANA [44.09, -93.17]				
	09/20/18 17:35 CST	0		Tornado (EF1, L: 8.12 mi , W: 300 yd)
	09/20/18 17:42 CST	0		Source: NWS Storm Survey

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado started west of Owatonna, and tracked 6.5 miles across the southern and eastern portions of the town, before lifting east of the Brooktree Golf Course. The damage was consistent with EF1 damage with maximum wind speeds of 90 mph and a width of 300 yards. An outbuilding and silo were damaged near the start of the tornado track, with numerous large trees uprooted or blown down in the city of Owatonna. In addition to the tornado damage, severe straight-line winds from inflow of the tornado caused numerous large blown down trees and power poles on the south side of the track.</p>				
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RICE COUNTY --- 2.2 SW FARIBAULT ARPT [44.30, -93.34], 0.9 ENE FARIBAULT ARPT [44.33, -93.30]				
	09/20/18 17:37 CST		0	Tornado (EF2, L: 2.95 mi , W: 600 yd)
	09/20/18 17:40 CST		0	Source: NWS Storm Survey
<p>A NWS storm survey, plus aerial pictures and satellite imagery, concluded that an EF2 tornado started southwest of the Faribault airport, near the intersection of 195th Street West and Cedar Lake Blvd, and tracked 3.0 miles northeast. It destroyed parts of the Faribault airport before lifting just north of the airport grounds. Numerous hangers were either damaged or destroyed.</p> <p>The 125 mph winds were estimated based on a well built hanger destroyed and blown off its foundation. Footings were also ripped from its frame. Local officials estimated that 80 airplanes were damaged or destroyed at the airport. Some of the debris was blown across the highway on the north side of the airport.</p> <p>There was also damage on the southeast side of the tornado track which was consistent with downburst and inflow winds. These winds were estimated up to 85 mph.</p>				
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RICE COUNTY --- 2.1 W FARIBAULT ARPT [44.33, -93.36], 0.7 NW FARIBAULT ARPT [44.34, -93.33]				
	09/20/18 17:40 CST		0	Tornado (EF1, L: 1.57 mi , W: 150 yd)
	09/20/18 17:42 CST		0	Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked 1.6 miles across the north side of Roberds Lake. Damage was consistent with maximum winds of 95 mph. Most of the damage was associated with large trees uprooted and partial roofs loss.</p>				
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RICE COUNTY --- 7.3 SSE FARIBAULT [44.20, -93.24], 4.4 SSW NERSTRAND [44.30, -93.12]				
	09/20/18 17:40 CST		0	Tornado (EF1, L: 9.06 mi , W: 500 yd)
	09/20/18 17:47 CST		0	Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked 9.1 miles from northeast of Medford, near the Rice, Steele County line, then northeast to just north of Highway 60 before lifting in a corn field.</p> <p>This tornado tracked mainly through corn and soy bean fields, but several homes, silos and grain bins were damaged, or destroyed along the tornado's path. The damage was consistent with EF1 damage with maximum wind speeds of 105 mph and a width of 500 yards.</p>				
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RICE COUNTY --- 2.7 WNW CANNON CITY [44.35, -93.27], 3.8 SSE DUNDAS [44.38, -93.18]				
	09/20/18 17:44 CST		0	Tornado (EF1, L: 4.66 mi , W: 440 yd)
	09/20/18 17:48 CST		0	Source: NWS Storm Survey
<p>A NWS storm survey, plus drone footage, concluded that an EF1 tornado started approximately 2.4 miles north of the city of Faribault, and tracked northeast for 4.6 miles before lifting just east of the Cannon River Wilderness Area. All of the damage was associated with uprooted or blown down large trees along the Cannon River. The maximum wind speeds were 95 mph and a path width of 440 yards.</p>				
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RICE COUNTY --- 4.8 NW MOLAND [44.25, -93.13], 3.7 SSE NERSTRAND [44.30, -93.04]				
	09/20/18 17:44 CST		0	Tornado (EF1, L: 5.80 mi , W: 300 yd)
	09/20/18 17:50 CST		0	Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked 5.8 miles from southeast of Ruskin, then northeast to the Goodhue, Rice county line. This tornado tracked mainly through corn and soy bean fields, and occasionally damaging a few sheds and outbuildings. The damage was consistent with EF1 damage with maximum wind speeds of 100 mph and a width of 300 yards.</p>				
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RICE COUNTY --- 2.5 NNE FARIBAULT ARPT [44.36, -93.30], 1.6 SSE DUNDAS [44.41, -93.21]				
	09/20/18 17:45 CST		0	Tornado (EF1, L: 5.75 mi , W: 440 yd)
	09/20/18 17:50 CST		0	Source: NWS Storm Survey
<p>A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked for 5.8 miles, from near the intersection of 150th Street West, and Bagley Ave, or 2.6 miles north of the Faribault airport, northeast to just south of Dundas.</p> <p>This tornado tracked mainly through corn and soy bean fields, and occasionally damaging a power pole. One electrical transmission line was blown down near the end of the tornado track which is consistent of 90 mph wind gusts. The largest path width was 440 yards.</p>				

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
RICE COUNTY --- 4.1 WSW DUNDAS [44.40, -93.29], 1.5 E DUNDAS [44.43, -93.19]				
	09/20/18 17:46 CST		0	Tornado (EF0, L: 5.53 mi , W: 75 yd)
	09/20/18 17:51 CST		0	Source: NWS Storm Survey
A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF0 tornado tracked 5.5 miles from the intersection of I-35 and 130th Street West, northeast to the city of Dundas. This tornado started with damage to a billboard on I-35 with uprooted pine trees, then mainly damage to corn and soy bean fields, and it ended with several large trees uprooted in Dundas. The damage was consistent with EF0 damage with maximum wind speeds of 75 mph and a width of 75 yards.				
GOODHUE COUNTY --- 3.3 WNW KENYON [44.30, -93.04], 3.0 NW KENYON [44.31, -93.02]				
	09/20/18 17:50 CST		0	Tornado (EF1, L: 1.37 mi , W: 100 yd)
	09/20/18 17:51 CST		0	Source: NWS Storm Survey
This is the continued tornado track from the Rice County tornado that moved an additional 1.4 miles northeast into Goodhue County. A storm survey, and high resolution satellite imagery, concluded that damage was associated with flattened corn and soy bean fields, and a loss of a silo's roof panel. The damage is consistent with EF1 damage with winds up to 90 mph, and a width of 100 yards.				
RICE COUNTY --- 4.4 SSE NORTHFIELD [44.41, -93.13], 1.7 NNW DENNISON [44.44, -93.04]				
	09/20/18 17:52 CST		0	Tornado (EF1, L: 4.73 mi , W: 550 yd)
	09/20/18 17:56 CST		0	Source: NWS Storm Survey
A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF1 tornado tracked 4.7 miles from southeast of Owatonna, east-northeast across mainly corn and soy bean fields before moving into Goodhue County, north of Dennison. However, near the intersection of 110th Street East, and Jacobs Ave, a barn that was a restaurant and event venue was destroyed. It was called the Red Barn and was completely blown off its foundation. The damage was consistent with EF1 damage with maximum wind speeds of 105 mph and a width of 550 yards.				
GOODHUE COUNTY --- 0.9 S BOMBAY [44.27, -92.90], 3.0 W ZUMBROTA [44.30, -92.73]				
	09/20/18 17:56 CST		50K	Tornado (EF0, L: 8.72 mi , W: 250 yd)
	09/20/18 18:05 CST		0	Source: NWS Storm Survey
A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF0 tornado tracked east of Kenyon, then northeast for 8.2 miles before lifting west of Zumbrota. This tornado tracked mainly through corn and soy bean fields, and occasionally damaged a few sheds and outbuildings. The damage was consistent with EF0 damage with maximum wind speeds of 75 mph and a width of 250 yards.				
GOODHUE COUNTY --- 1.7 NNW DENNISON [44.44, -93.04], 1.7 SSW STANTON CARLETON ARP [44.45, -93.03]				
	09/20/18 17:56 CST		0	Tornado (EF1, L: 0.58 mi , W: 75 yd)
	09/20/18 17:57 CST		0	Source: NWS Storm Survey
This is the continued tornado track from the Rice County tornado that moved an additional 0.6 miles northeast into Goodhue County. A storm survey, and drone footage, concluded that damage was associated with uprooted trees along the Rice, Goodhue county line, with a flattened corn field to the northeast of the uprooted trees. The damage was consistent with EF1 damage with maximum wind speeds of 90 mph and a width of 100 yards.				
GOODHUE COUNTY --- 3.1 SSW CANNON FALLS [44.48, -92.92], 1.3 S CANNON FALLS [44.50, -92.90]				
	09/20/18 18:01 CST		0	Tornado (EF1, L: 1.86 mi , W: 440 yd)
	09/20/18 18:03 CST		0	Source: NWS Storm Survey
A NWS storm survey, plus drone footage, concluded that an EF1 tornado tracked 1.9 miles which started 3 miles south of Cannon Falls, crossed over Highway 52, and lifted just south of downtown Cannon Falls. This tornado damaged a warehouse building, numerous large trees, homes, and a cemetery. The damage was consistent with EF1 damage with maximum wind speeds of 95 mph and a width of 440 yards. There was other damage to the north of the tornado track which was consistent with downburst winds.				
DAKOTA COUNTY --- 2.6 ENE RANDOLPH [44.54, -92.97], 4.4 S NEW TRIER [44.54, -92.92]				
	09/20/18 18:02 CST		0	Tornado (EF0, L: 2.48 mi , W: 70 yd)
	09/20/18 18:04 CST		0	Source: NWS Storm Survey
A NWS storm survey, plus drone and satellite footage, concluded that an EF0 tornado tracked 2.5 miles from east of Randolph, to the Goodhue County line, north of Highway 29. Most of the damage was associated with corn and soy bean fields flatten. Maximum width was 70 yards with estimated wind damage of 70 mph.				
DAKOTA COUNTY --- 2.5 WSW NEW TRIER [44.58, -92.97], 2.3 E NEW TRIER [44.60, -92.88]				
	09/20/18 18:04 CST		0	Tornado (EF0, L: 4.61 mi , W: 220 yd)
	09/20/18 18:08 CST		0	Source: NWS Storm Survey

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF0 tornado tracked 4.6 miles from south of Hampton, then east-northeast before it lifted 2 miles east of New Trier. This tornado tracked mainly through corn and soy bean fields, and occasionally damaging a few sheds and outbuildings. The damage was consistent with EF0 damage with maximum wind speeds of 75 mph and a width of 220 yards.				
GOODHUE COUNTY --- 1.5 NW CANNON FALLS [44.54, -92.92], 1.1 NNW CANNON FALLS [44.54, -92.90]				
	09/20/18 18:04 CST		15K	Tornado (EF0, L: 0.71 mi , W: 70 yd)
	09/20/18 18:05 CST		0	Source: NWS Storm Survey

This is the continued tornado track from the Dakota County tornado that moved an additional 0.7 miles east into Goodhue County. A storm survey concluded that EF0 damage occurred to a warehouse building in northern Goodhue County.

GOODHUE COUNTY --- 2.6 NNE ZUMBROTA [44.34, -92.65], 1.5 W BELLECHESTER [44.37, -92.55]				
	09/20/18 18:09 CST		50K	Tornado (EF0, L: 5.41 mi , W: 150 yd)
	09/20/18 18:12 CST		0	Source: NWS Storm Survey

A NWS storm survey, plus areal footage of drone and satellite data, concluded that an EF0 tornado started north of Zumbrota, and tracked northeast for 5.4 miles until moving into Wabasha County, southwest of Bellechester. This tornado tracked mainly through corn and soy bean fields, and occasionally damaging a few sheds and outbuildings. The damage was consistent with EF0 damage with maximum wind speeds of 85 mph and a width of 150 yards.

GOODHUE COUNTY --- 1.0 W BELLECHESTER [44.37, -92.54], 0.7 W BELLECHESTER [44.37, -92.53]				
	09/20/18 18:13 CST		0	Tornado (EF0, L: 0.28 mi , W: 25 yd)
	09/20/18 18:14 CST		0	Source: NWS Storm Survey

This is the continuation of the Goodhue-Wabasha County tornado that tracked briefly into Wabasha County, before moving back into Goodhue County, and dissipated approximately 3/4 of a mile west of Bellechester. Areal footage of drone, satellite data and a storm survey, indicated EF0 damage in a corn field.

GOODHUE COUNTY --- 5.3 NNE WELCH [44.64, -92.68], 6.9 NW RED WING [44.64, -92.63]				
	09/20/18 18:16 CST		5K	Tornado (EF0, L: 2.60 mi , W: 100 yd)
	09/20/18 18:18 CST		0	Source: NWS Storm Survey

A NWS storm survey concluded that an EF0 tornado tracked eastward for 2.6 miles across the Mississippi River Valley, to the Wisconsin state line. The tornado tracked only one quarter of a mile north of the Treasure Island Resort and Casino. Damage was confined to uprooted trees and an outbuilding. The tornado continued into Pierce County Wisconsin.

A violent outbreak of significant straight line winds, downburst winds, and multiple tornadoes occurred during the afternoon and early evening across southern Minnesota.

During the afternoon of Thursday, September 20th, a warm front lifted northward across far southern Minnesota. By the late afternoon, the warm front lied from just south of the Minnesota River, northeast to around the city of Wabasha.

Several thunderstorms developed in southwest Minnesota, and northwest Iowa. These storms moved into far southern Minnesota and quickly intensified and raced off to the east-northeast along, and north of this warm front.

Damage reports started to come into the office around 4 PM CST in Martin County, with multiple reports of significant damage from south of Mankato, to Waseca, then northeast through Waterville, Morristown, Owatonna, Faribault, Northfield, Cannon Falls, and Red Wing before moving into west central Wisconsin.

A long, and several day storm survey indicated at least XX confirmed tornadoes occurred in a widespread area of damaging winds from Martin County, northeast into west central Wisconsin.

The most destruction part of the storm occurred around Waterville, Morristown, Owatonna, Faribault and Cannon Falls. These cities all reported homes, buildings and warehouses either damaged or destroyed.

Hundreds of large, mature trees were uprooted or snapped along this path of destruction, including numerous trees up to 4 feet in diameter. In addition to the trees, structural damage was widespread including the Faribault airport where 80 planes were either damaged or destroyed as hangers were blown off their foundation.

The towns of Waterville and Faribault had the most homes damaged which was associated with EF2 tornado damage.

Two miles west of the Faribault airport, a resort area on Roberds Lake had upwords of 75 percent of the trees uprooted or blown down on the east side of the lake. Some of the trees landed on homes and split them in half.

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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House in Granada damaged by tornado

MINNESOTA, Southeast

FILLMORE COUNTY --- 1.8 NNE RUSHFORD VLG [43.84, -91.79], 1.9 NNE RUSHFORD VLG [43.85, -91.79]

09/04/18 20:05 CST	2K	Tornado (EF1, L: 0.20 mi , W: 50 yd)
09/04/18 20:06 CST	0	Source: NWS Storm Survey

A NWS Storm Survey found that an EF-1 tornado started in far northern Fillmore County northwest of Rushford near the intersection of County Highway 27 and 431st Avenue. The tornado only produced some very minor damage before moving into Winona County.

WINONA COUNTY --- 3.7 SW HART [43.85, -91.79], 2.1 NNW HART [43.91, -91.74]

09/04/18 20:06 CST	5K	Tornado (EF1, L: 4.94 mi , W: 50 yd)
09/04/18 20:12 CST	0	Source: NWS Storm Survey

A NWS Storm Survey found that an EF-1 tornado that started in Fillmore County, entered Winona County southwest of Hart near County Highway 25. The tornado then traveled northeast across rural areas before ending along State Highway 43 between Hart and Interstate 90. The tornado had an intermittent damage path with only some minor damage to one home and some trees.

An EF-1 tornado moved across rural portions of far northeast Fillmore County into southwest Winona County. The tornado started northwest of Rushford (Fillmore County) and was on the ground for about 5 minutes causing minor damage to a house and trees. Several rounds of thunderstorms moved across the area dumping heavy rain. The heavy caused street flooding to occur in Rochester (Olmsted County) with cars becoming trapped in the flood waters.

WABASHA COUNTY --- 1.5 W BELLECHESTER [44.37, -92.55], 1.0 W BELLECHESTER [44.37, -92.54]

09/20/18 18:12 CST	0	Tornado (EF0, L: 0.53 mi , W: 50 yd)
09/20/18 18:13 CST	5K	Source: NWS Storm Survey

This the continuation of a tornado that began in Goodhue County. A NWS Storm Survey team found that the tornado moved briefly across the far northwest corner of Wabasha County north of Mazeppa before moving back into Goodhue County. Damage was limited to crops.

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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A line of thunderstorms moved across southeast Minnesota during the evening of September 20th. These storms produced a tornado that briefly moved across the far northwest corner of Wabasha County north of Mazeppa. The storms also occasionally produced some damaging winds with trees blown down west of West Concord (Dodge County) and in Lake City (Wabasha County).