

Storm Data and Unusual Weather Phenomena - September 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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IOWA, Southwest

HARRISON COUNTY --- 3.0 SE LITTLE SIOUX [41.77, -95.99]

09/09/16 11:45 CST	0	Thunderstorm Wind (EG 52 kt)
09/09/16 11:45 CST	0	Source: COOP Observer

The observed reported wind gusts to 60 mph and small hail with the line of thunderstorms.

A cold front moved southeast across western Iowa and eastern Nebraska during the day on September 9th. The front led to widespread thunderstorms across the area during the day. The majority of these storms were non-severe, but isolated strong winds were observed from a storm in west central Iowa.

MONONA COUNTY --- 2.2 WSW BLENCOE [41.92, -96.12]

09/15/16 17:05 CST	0	Hail (0.75 in)
09/15/16 17:05 CST	0	Source: Trained Spotter

MONONA COUNTY --- 0.9 SW BLENCOE [41.92, -96.09]

09/15/16 17:23 CST	0	Hail (1.50 in)
09/15/16 17:23 CST	0	Source: Public

FREMONT COUNTY --- 2.1 NW PAYNE [40.69, -95.78]

09/16/16 00:32 CST	0	Thunderstorm Wind (MG 55 kt)
09/16/16 00:32 CST	0	Source: Mesonet

Measured by a Iowa State department of transportation road weather sensor.

MONONA COUNTY --- BLENCOE [41.93, -96.08], 1.7 E BLENCOE [41.93, -96.05], 2.3 SE BLENCOE [41.90, -96.05], 1.6 S BLENCOE [41.91, -96.08]

09/16/16 08:27 CST	0	Flash Flood (due to Heavy Rain)
09/16/16 10:30 CST	0	Source: Emergency Manager

Heavy rainfall in excess of 5 inches led to water over a couple of county roadways.

As an upper level storm system moved into the northern Plains, a warm front retreated through eastern Nebraska and western Iowa during the afternoon. Unseasonably warm and humid air lifted into the region creating marginal instability by mid afternoon, but with the warm front in the area environmental shear was strong. Thunderstorms developed across northeast and east-central Nebraska by mid afternoon. Initially isolated supercells were the dominate mode with large hail the main threat. A small short-lived tornado did develop from one of the supercells in Washington County. Thunderstorms then moved into western Iowa as they continued to produce large hail. By mid evening the thunderstorms developed a common outflow in a west to east orientation and allowed for training, especially over northeast Nebraska. This continued regeneration of thunderstorms over the same area led to significant river and flash flooding over parts of the through the night.

NEBRASKA, East

DOUGLAS COUNTY --- 2.5 WSW BENNINGTON [41.35, -96.21]

09/15/16 15:14 CST	0	Hail (1.75 in)
09/15/16 15:14 CST	0	Source: COOP Observer

DOUGLAS COUNTY --- 2.5 WSW BENNINGTON [41.35, -96.21]

09/15/16 15:14 CST	0	Thunderstorm Wind (EG 50 kt)
09/15/16 15:14 CST	0	Source: COOP Observer

The observer noted wind gusts to near 60 mph. Some small tree branches were noted down in the area.

WASHINGTON COUNTY --- 0.5 E WASHINGTON [41.40, -96.21]

09/15/16 15:24 CST	0	Hail (1.75 in)
09/15/16 15:24 CST	0	Source: Trained Spotter

WASHINGTON COUNTY --- 0.7 S DE SOTO [41.49, -96.07]

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	09/15/16 15:50 CST		0	Hail (1.00 in)
	09/15/16 15:50 CST		0	Source: Broadcast Media
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WASHINGTON COUNTY --- 0.7 S FT CALHOUN [41.46, -96.03]				
	09/15/16 16:02 CST		0	Hail (1.50 in)
	09/15/16 16:02 CST		0	Source: Fire Department/Rescue
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STANTON COUNTY --- 10.4 S PILGER [41.87, -97.04]				
	09/15/16 16:05 CST		0	Hail (1.75 in)
	09/15/16 16:05 CST		0	Source: Emergency Manager
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DODGE COUNTY --- 0.5 W UEHLING [41.73, -96.51]				
	09/15/16 17:25 CST		0	Hail (1.00 in)
	09/15/16 17:25 CST		0	Source: Trained Spotter
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BURT COUNTY --- 1.0 W ARIZONA [41.82, -96.17]				
	09/15/16 17:47 CST		0	Hail (1.00 in)
	09/15/16 17:47 CST		0	Source: Public
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BURT COUNTY --- 3.2 ENE OAKLAND [41.84, -96.41], 1.3 N OAKLAND [41.85, -96.47], 0.4 SSE OAKLAND [41.82, -96.47], 2.7 ESE OAKLAND [41.82, -96.42]				
	09/15/16 18:32 CST		0	Flash Flood (due to Heavy Rain)
	09/15/16 20:32 CST		0	Source: Law Enforcement
<p>Law enforcement reported flooding of roadways in the area with at least 1 car stalled in the flood waters.</p>				
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CUMING COUNTY --- 0.3 NE BEEMER [41.93, -96.82], 0.6 ENE BEEMER [41.93, -96.81], 0.8 E BEEMER [41.93, -96.80], 0.5 ESE BEEMER [41.93, -96.81], 0.2 E BEEMER [41.93, -96.82]				
	09/15/16 18:34 CST		0	Flash Flood (due to Heavy Rain)
	09/15/16 20:34 CST		0	Source: Trained Spotter
<p>A spotter reported flash flooding in Beemer with at least 8 inches of water over some roadways in town at the time.</p>				
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STANTON COUNTY --- 10.0 SE STANTON [41.85, -97.09], 10.7 SSE STANTON [41.82, -97.12], 12.4 SE STANTON [41.81, -97.07], 11.1 SE STANTON [41.85, -97.06]				
	09/15/16 18:59 CST		0	Flash Flood (due to Heavy Rain)
	09/15/16 21:00 CST		0	Source: Emergency Manager
<p>Emergency management reported that water was flooding the eastbound lanes of Highway 32 and the roadway was closed.</p>				
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BURT COUNTY --- 0.5 E TEKAMAH [41.78, -96.22], 0.3 ESE TEKAMAH [41.78, -96.22], 0.4 NE TEKAMAH [41.78, -96.23], 0.7 NE TEKAMAH [41.79, -96.22], 0.8 ENE TEKAMAH [41.78, -96.21]				
	09/15/16 19:36 CST		0	Flash Flood (due to Heavy Rain)
	09/15/16 22:00 CST		0	Source: COOP Observer
<p>The local COOP observer indicated that water over roadways in town were reaching up to 2 feet deep.</p>				
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COLFAX COUNTY --- 0.5 E CLARKSON [41.72, -97.12]				
	09/15/16 19:45 CST		0	Hail (0.75 in)
	09/15/16 19:45 CST		0	Source: Trained Spotter
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STANTON COUNTY --- 15.6 SSE STANTON [41.75, -97.09]				
	09/15/16 19:47 CST		0	Hail (0.88 in)
	09/15/16 19:47 CST		0	Source: Trained Spotter
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WASHINGTON COUNTY --- 4.6 SW FT CALHOUN [41.43, -96.10], 4.6 SW FT CALHOUN [41.43, -96.10]				
	09/15/16 23:00 CST		0	Tornado (EF0, L: 0.06 mi , W: 10 yd)
	09/15/16 23:01 CST		0	Source: Storm Chaser

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A storm chaser captured video of a brief tornado touchdown . Some small branches and some debris were noted in the area, but no significant damage occurred.				

NEMAHA COUNTY --- 3.9 WNW BROCK [40.50, -96.02]

09/16/16 00:00 CST	0	Thunderstorm Wind (EG 52 kt)
09/16/16 00:00 CST	0	Source: Emergency Manager

Farm outbuilding and corn cribs were reported damaged.

OTOE COUNTY --- 0.9 NE NEBRASKA CITY ARPT [40.68, -95.86]

09/16/16 00:25 CST	0	Thunderstorm Wind (EG 52 kt)
09/16/16 00:25 CST	0	Source: Emergency Manager

A large tree was reported uprooted within the city of Nebraska City.

DODGE COUNTY --- 1.9 W SCRIBNER [41.67, -96.71], 2.0 NNW SCRIBNER ARPT [41.65, -96.64], 1.5 NNE SCRIBNER ARPT [41.64, -96.62], 1.3 NNW SCRIBNER ARPT [41.64, -96.64], 2.2 WSW SCRIBNER [41.66, -96.71]

09/16/16 01:40 CST	0	Flood (due to Heavy Rain)
09/16/16 18:10 CST	0	Source: River/Stream Gage

Heavy rainfall caused the Pebble Creek to rise into major flood near the town of Scribner. The flooding necessitated the closing of the flood gates that protect the town of Scribner, which also closes US Highway 275 through town. Outside of town significant low-land flooding was observed which closed numerous county roadways. The river crested at 22.35 ft before quickly falling on the 16t.

COLFAX COUNTY --- 6.8 N LEIGH [41.80, -97.24], 6.4 NNE HOWELLS [41.81, -96.96], 8.4 N ROGERS [41.59, -96.94], 7.4 SSE LEIGH [41.60, -97.17]

09/16/16 08:27 CST	0	Flash Flood (due to Heavy Rain)
09/16/16 10:30 CST	0	Source: Emergency Manager

The emergency manager indicated that in excess of 6 inches of rainfall had fallen over the northern half of the county. This had inundated many county roadways, damaged several bridges and culverts.

CUMING COUNTY --- 0.5 E BEEMER [41.93, -96.81], 5.4 NNW ALOYS [41.92, -96.70], 1.9 N WEST PT [41.86, -96.72], 4.4 S BEEMER [41.87, -96.81]

09/16/16 08:27 CST	0	Flash Flood (due to Heavy Rain)
09/16/16 10:27 CST	0	Source: Emergency Manager

The emergency manager indicated that 4 to 6 inches of rainfall had led to inundation of several county roads.

PLATTE COUNTY --- 1.6 NW PLATTE CENTER [41.55, -97.52], 1.2 WNW PLATTE CENTER [41.54, -97.52], 1.9 ENE PLATTE CENTER [41.54, -97.47], 2.1 NE PLATTE CENTER [41.55, -97.47]

09/16/16 08:27 CST	0	Flash Flood (due to Heavy Rain)
09/16/16 10:30 CST	0	Source: Emergency Manager

The emergency manager reported that heavy rainfall in excess of 4 inches led to flooding of Central Highway.

STANTON COUNTY --- 0.7 S PILGER [42.01, -97.05], 1.9 WSW PILGER [42.01, -97.08], 5.5 SSW PILGER [41.95, -97.10], 4.2 S PILGER [41.96, -97.05]

09/16/16 08:27 CST	0	Flash Flood (due to Heavy Rain)
09/16/16 09:30 CST	0	Source: Emergency Manager

The emergency manager reported that between 7 and 9 inches of rainfall fell around and south of the town of Pilger. This led to significant flash flooding inundating numerous county roadways, damaging or washing many of them out.

DODGE COUNTY --- 2.5 NW NICKERSON [41.55, -96.51], 1.3 N NICKERSON [41.55, -96.48], 1.7 NE NICKERSON [41.55, -96.46], 1.2 NE NICKERSON [41.54, -96.46], 2.4 WNW NICKERSON [41.55, -96.52]

09/16/16 22:46 CST	0	Flood (due to Heavy Rain)
09/17/16 12:04 CST	0	Source: River/Stream Gage

Heavy rainfall caused the Maple Creek to go into moderate flooding. This created significant low-land flooding of agricultural areas along both bands of the creek, also county roads north of Nickerson, and flooded the US Highway 275 bridge closing the highway. The creek crested at 14.38 before quickly falling on the 17th.

As an upper level storm system moved into the northern Plains, a warm front retreated through eastern Nebraska and western Iowa during the afternoon. Unseasonably warm and humid air lifted into the region creating marginal instability by mid afternoon, but with the warm front in the area environmental shear was strong. Thunderstorms developed across northeast and east-central Nebraska by mid afternoon. Initially isolated supercells were the dominate mode with large hail the main threat. A small short-lived tornado did develop

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from one of the supercells in Washington County. Thunderstorms then moved into western Iowa as they continued to produce large hail. By mid evening the thunderstorms developed a common outflow in a west to east orientation and allowed for training, especially over northeast Nebraska. This continued regeneration of thunderstorms over the same area led to significant river and flash flooding over parts of the through the night.