

## Storm Data and Unusual Weather Phenomena - August 2016

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

**FRANKLIN COUNTY --- THOMPSONVILLE [37.92, -88.77], 1.8 WSW ODUM SPUR [38.06, -88.78], 0.1 NE ODUM SPUR [38.07, -88.75], 1.6 E THOMPSONVILLE [37.92, -88.74]**

08/03/16 08:30 CST	0	Flood (due to Heavy Rain)
08/03/16 09:30 CST	0	Source: Emergency Manager

State Highway 14 and a secondary road near Thompsonville were covered by water in spots.

**GALLATIN COUNTY --- 4.0 S JUNCTION [37.66, -88.23], 2.0 E JUNCTION [37.72, -88.19], JUNCTION [37.72, -88.23], 2.0 W JUNCTION [37.72, -88.27]**

08/03/16 08:40 CST	0	Flood (due to Heavy Rain)
08/03/16 09:25 CST	0	Source: Trained Spotter

A trained spotter reported nearly 1.5 inches in 30 minutes. There was minor street flooding.

**Clusters of thunderstorms occurred near a weak stationary front that extended from central Missouri southeast across the southern tip of Illinois and western Kentucky. The storms were disorganized due to weak winds aloft. However, locally heavy rain and isolated flooding accompanied the strongest storms.**

**(IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z085) WILLIAMSON, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z088) UNION, (IL-Z089) JOHNSON, (IL-Z090) POPE, (IL-Z091) HARDIN, (IL-Z092) ALEXANDER, (IL-Z093) PULASKI, (IL-Z094) MASSAC**

08/04/16 12:00 CST	1	0	Heat
08/05/16 18:00 CST	0		

Direct Fatalities: M43OU

**South of the Interstate 64 corridor, afternoon heat indices peaked from 105 to 114 degrees on the afternoons of the 4th and 5th. In Benton in Franklin County, a 43-year-old man died after working outdoors in the heat. The man was found unresponsive indoors, and he was pronounced dead that evening at a local hospital. The coroner reported evidence of a heat stroke. The highest heat indices occurred on the afternoon of the 5th, when the heat index peaked at 114 degrees at Metropolis, 112 at Cairo, and 107 at Harrisburg. Actual air temperatures reached the lower to mid 90's. Hot and very humid air built up under a subtropical 500 mb ridge that was centered over the southern states and extended north through the mid Mississippi Valley.**

**MASSAC COUNTY --- 1.1 NNW METROPOLIS MUNI ARPT [37.19, -88.76], 0.9 WSW METROPOLIS MUNI ARPT [37.17, -88.76], 0.3 SW METROPOLIS [37.15, -88.73], 2.0 E METROPOLIS [37.14, -88.69], 2.2 E METROPOLIS MUNI ARPT [37.18, -88.71]**

08/05/16 16:04 CST	0	Flash Flood (due to Heavy Rain)
08/05/16 17:15 CST	0	Source: Public

Flooded viaducts and water-covered streets were reported in Metropolis. Near the Metropolis airport, the intersection of County Roads 13 and 900E was covered in water.

**ALEXANDER COUNTY --- 0.7 N THEBES JCT [37.21, -89.45], 1.0 ENE THEBES [37.23, -89.45], 3.0 E GALE [37.25, -89.40], 2.6 WNW DISWOOD [37.24, -89.37]**

08/05/16 16:15 CST	0	Flash Flood (due to Heavy Rain)
08/05/16 17:15 CST	0	Source: COOP Observer

A secondary road was flooded east of Thebes.

**Several large clusters of thunderstorms developed ahead of a cold front as it moved south into southern Illinois during the heat of the afternoon. Winds aloft were rather weak. However, the storms moved into a corridor of very moist and unstable air with surface dew points from 75 to 80. Local flash flooding resulted from the tropical moisture and weak steering winds.**

**WILLIAMSON COUNTY --- 1.3 SW CARTERVILLE [37.74, -89.10], 1.1 S (MWA)MARION WLLMSON [37.73, -89.02], 0.2 NE ENERGY [37.77, -89.03], 1.5 NNW CARTERVILLE [37.77, -89.09]**

08/13/16 08:22 CST	0	Flash Flood (due to Heavy Rain)
08/13/16 14:00 CST	0	Source: Broadcast Media

Some roads were closed in and near Carterville and Crainville. A Carterville city street just north of Illinois Route 13 was under six inches of water. A manhole cover popped off, and water was filling up yards. A television station in Carterville measured 4.11 inches from midnight through 7:30 P.M. CST.

## Storm Data and Unusual Weather Phenomena - August 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>HAMILTON COUNTY --- GARRISON [38.25, -88.52], 1.9 W GARRISON [38.25, -88.56], 0.7 E PIOPOLIS [38.18, -88.56], 1.4 WNW MC LEANSBRO MORS ARP [38.18, -88.53]</b>				
	08/13/16 10:15 CST		0	Flood (due to Heavy Rain)
	08/13/16 12:15 CST		0	Source: Law Enforcement
Two to four inches of water covered Route 242 in the northern portion of the county, about ten miles north of Mcleansboro.				
<b>JACKSON COUNTY --- 2.7 E BOSKYDELL [37.67, -89.17], 2.5 E CARBONDALE [37.73, -89.17], 1.9 ENE CARBONDALE [37.73, -89.19], 1.4 E BOSKYDELL [37.67, -89.19]</b>				
	08/13/16 10:15 CST		0	Flash Flood (due to Heavy Rain)
	08/13/16 14:00 CST		0	Source: Trained Spotter
A trained spotter reported 1.5 feet of water over a secondary road south of Carbondale leading to Giant City State Park. A rainfall amount of 3.49 inches was measured at a nearby fire station between midnight and 6:45 P.M. CST.				
<b>UNION COUNTY --- WOLF LAKE [37.50, -89.43], ALDRIDGE [37.55, -89.47], 1.5 N ALTO PASS [37.59, -89.33], 5.0 N COBDEN [37.60, -89.25], COBDEN [37.53, -89.25]</b>				
	08/13/16 11:02 CST		25K	Flash Flood (due to Heavy Rain)
	08/13/16 18:15 CST		0	Source: Law Enforcement
Just north of Alto Pass, a small bridge across Cave Creek was washed out. The bridge was on a dead-end street off Highway 127. Road crews were dispatched to several flooded roads around the area. A 24-hour rainfall amount of 7.9 inches was reported at Cobden, and just over 5 inches fell at Wolf Lake within 8 hours.				
<b>PERRY COUNTY --- TAMAROA [38.13, -89.23], 2.0 NNE DU QUOIN [38.05, -89.22], 2.0 E PINCKNEYVILLE [38.08, -89.34], 4.0 NE PINCKNEYVILLE [38.12, -89.33]</b>				
	08/13/16 14:50 CST		0	Flash Flood (due to Heavy Rain)
	08/13/16 18:00 CST		0	Source: 911 Call Center
U.S. Route 51 was closed just south of Tamaroa due to flooding. Water was covering Illinois Route 154 just west of U.S. Highway 51.				
<b>JEFFERSON COUNTY --- 1.6 ENE MARCOE [38.28, -88.94], 2.5 NNW BAKERVILLE [38.28, -88.93], 2.1 SW MT VERNON [38.30, -88.93], 2.1 NE MARCOE [38.29, -88.95]</b>				
	08/13/16 15:27 CST		0	Flash Flood (due to Heavy Rain)
	08/13/16 18:00 CST		0	Source: Social Media
Water was flowing across Highway 148 near the Interstate 57 overpass, making conditions dangerous. A co-operative observer at Waltonville measured 3.79 inches just prior to the start of the flooding. A U.S. Army Corps of Engineers site near Rend Lake recorded a 24-hour total of 6.23 inches.				
<b>PERRY COUNTY --- ST JOHNS [38.03, -89.25], 0.3 E HOLDEN [38.05, -89.24], 4.8 ENE DU QUOIN [38.04, -89.15], 4.4 E DU QUOIN [38.03, -89.15]</b>				
	08/14/16 21:15 CST		0	Flood (due to Heavy Rain)
	08/14/16 22:45 CST		0	Source: Law Enforcement
Water was over a secondary road near St. Johns. A co-operative observer near Pinckneyville measured a 72-hour rainfall total of 6.57 inches.				
<b>WILLIAMSON COUNTY --- 1.8 ESE SPILLERTOWN [37.76, -88.89], 2.3 SW PITTSBURG [37.75, -88.88], 2.2 ENE MARION [37.74, -88.89], 1.0 NE MARION [37.74, -88.92]</b>				
	08/14/16 21:20 CST		0	Flash Flood (due to Heavy Rain)
	08/15/16 00:30 CST		0	Source: Broadcast Media
The intersection of two county roads just northeast of Marion was under swiftly moving water. Water was bubbling out of the top of a sewer and spilling out of ditches in Marion. An observer near Carterville measured a two-day storm total of 6.5 inches.				
<b>FRANKLIN COUNTY --- 2.0 SE WEST FRANKFORT [37.88, -88.89], 0.8 WSW DEERING CITY [37.92, -88.89], 0.5 ESE CLEBURNE [37.93, -89.04], 2.0 S ZEIGLER [37.87, -89.05]</b>				
	08/14/16 22:00 CST		5K	Flash Flood (due to Heavy Rain)
	08/15/16 00:30 CST		0	Source: Emergency Manager
A motorist was stranded in three to four feet of water at an intersection in West Frankfort. Public bystanders rescued the motorist. Numerous streets were closed in the city. A Cocorahs (Community Collaborative Rain, Hail, and Snow Network) observer in West Frankfort measured a three-day rainfall total of 7.90 inches. Ditches were overflowing onto Route 149 east of Zeigler.				

## Storm Data and Unusual Weather Phenomena - August 2016

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<b>HAMILTON COUNTY --- 1.8 WSW DALE [37.99, -88.51], 0.5 SW DALE [37.99, -88.49], 1.9 SW MC LEANSBRO MORS ARP [38.16, -88.52], 2.1 SE PIOPOLIS [38.16, -88.55], 5.0 SW MC LEANSBORO [38.05, -88.59]</b>				
	08/15/16 05:17 CST		4K	Flash Flood (due to Heavy Rain)
	08/15/16 07:30 CST		0	Source: Emergency Manager
Several people were rescued from a flooded vehicle on a rural road four miles southwest of Mcleansboro. Just north of Dale, a large amount of water was crossing Illinois Route 142 and County Road 700N. There was also a large amount of water crossing Illinois Route 242 north of Mcleansboro near County Road 1800N.				
<b>JEFFERSON COUNTY --- 0.9 NE WALTONVILLE [38.23, -89.04], 0.5 N WALTONVILLE [38.23, -89.05], 3.4 N WALTONVILLE [38.27, -89.06], 3.1 W MARCOE [38.27, -89.03]</b>				
	08/15/16 09:27 CST		0	Flood (due to Heavy Rain)
	08/15/16 14:00 CST		0	Source: Public
A tributary creek of the Big Muddy River flooded a rural road just north of Waltonville. The road was impassable due to one to two feet of water across it. The storm total rainfall since August 13 was 10.15 inches at a location a few miles east of Waltonville.				
<b>HAMILTON COUNTY --- DALE [38.00, -88.48], 1.6 NNW FEAKEYVILLE [38.00, -88.41], 1.8 SSW FEAKEYVILLE [37.96, -88.41], BROUGHTON [37.93, -88.45]</b>				
	08/15/16 19:22 CST		0	Flood (due to Heavy Rain)
	08/16/16 02:00 CST		0	Source: Law Enforcement
Rising floodwaters along the north fork of the Saline River closed County Road 500N about three miles east of Illinois Route 142.				
<b>ALEXANDER COUNTY --- CAIRO [37.00, -89.18], 0.8 NE CAIRO [37.01, -89.17], 1.2 E CAIRO [37.00, -89.16], 1.0 ESE CAIRO [36.99, -89.16]</b>				
	08/17/16 06:00 CST		0	Flood (due to Heavy Rain)
	08/17/16 08:00 CST		0	Source: 911 Call Center
U.S. Highway 51 was flooded in a few places in Cairo.				
<b>MASSAC COUNTY --- 1.1 E METROPOLIS [37.15, -88.71], 1.7 NE METROPOLIS [37.17, -88.71], 1.0 E METROPOLIS MUNI ARPT [37.18, -88.73], 0.8 N METROPOLIS [37.16, -88.73]</b>				
	08/17/16 07:12 CST		2K	Flash Flood (due to Heavy Rain)
	08/17/16 09:00 CST		0	Source: Public
A railroad viaduct was flooded in Metropolis. A vehicle became partially submerged in the floodwater and was towed out. Portions of County Road 1 were flooded in and near the city of Metropolis. Water was over numerous other streets and intersections in the city.				
<b>A series of thunderstorm complexes over a period of several days resulted in locally significant flash flooding. A cold front stalled across the Lower Ohio and Mid-Mississippi Valleys, where tropical moisture was already in place. Precipitable water values from 2.25 to 2.5 inches were common. A sub-tropical low pressure system that produced torrential rains along the Gulf of Mexico coast then turned north, eventually getting pulled northeast across Missouri along the stalled cold front. This low brought copious amounts of moisture. Showers and isolated thunderstorms brought torrential downpours between the 13th and 17th. Rainfall amounts during this time ranged up to 5 to 10 inches from the Marion/Carbondale area north to Mount Vernon and west to the Missouri state line.</b>				
<b>WAYNE COUNTY --- WAYNE CITY [38.35, -88.58], 1.1 ENE WAYNE CITY [38.36, -88.56], 3.1 S SIMS [38.32, -88.52], 3.8 WNW BARNHILL [38.29, -88.44], 4.2 E MAYBERRY [38.28, -88.47], 2.4 N MAYBERRY [38.31, -88.56]</b>				
	08/15/16 12:00 CST		0	Flood (due to Heavy Rain)
	08/18/16 19:00 CST		0	Source: River/Stream Gage
Moderate flooding occurred along the Skillet Fork River. There was considerable flooding of low-lying fields and woodlands. At the Wayne City gage, the river crested at 19.19 feet on the 17th. Flood stage is 15 feet.				
<b>JACKSON COUNTY --- 1.5 W MT CARBON [37.75, -89.36], 0.3 SE MT CARBON [37.75, -89.33], 0.5 NNE MT CARBON [37.76, -89.33], 1.0 SE MURPHYSBORO [37.76, -89.32], 0.5 E HARRISON [37.78, -89.32]</b>				
	08/17/16 02:00 CST		0	Flood (due to Heavy Rain)
	08/25/16 18:00 CST		0	Source: River/Stream Gage
Moderate flooding occurred on the Big Muddy River. There was considerable flooding of low-lying woods and fields. Parts of a city park were flooded. The river crested at 29.70 feet at the Murphysboro gage. Flood stage is 22 feet.				
<b>FRANKLIN COUNTY --- 2.0 ENE BUCKNER [37.99, -88.99], 1.4 W BENTON MUNI ARPT [38.00, -88.95], 0.2 NNW PLUMFIELD [37.88, -89.00], 1.2 SSE ZEIGLER [37.88, -89.05]</b>				

## Storm Data and Unusual Weather Phenomena - August 2016

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	08/17/16 09:00 CST		0	Flood (due to Heavy Rain)
	08/21/16 15:00 CST		0	Source: River/Stream Gage

Minor flooding occurred on the Big Muddy River. Low-lying woods and fields near the river were inundated.

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### WHITE COUNTY --- CARMi [38.08, -88.17], 1.8 ESE BROWNSVILLE [38.02, -88.22], 3.2 N HERALD [38.02, -88.17], 1.5 SSE CARMi MUNI ARPT [38.08, -88.14]

	08/19/16 05:00 CST		0	Flood (due to Heavy Rain)
	08/28/16 21:00 CST		0	Source: River/Stream Gage

Minor flooding occurred on the Little Wabash River. A few county roads were inundated. Some low-lying fields and woodlands near the river were underwater.

**Several rounds of thunderstorms over a five-day period produced heavy rainfall across southern Illinois. Minor to moderate flooding occurred along the small rivers, such as the Big Muddy and Little Wabash Rivers.**

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## INDIANA, Southwest

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### POSEY COUNTY --- 0.7 N MT VERNON [37.94, -87.90], 0.7 WNW MT VERNON [37.94, -87.91], 0.6 SW MT VERNON [37.92, -87.91], 0.5 E MT VERNON [37.93, -87.89], 0.4 ESE MT VERNON ARPT [37.93, -87.87], 0.6 NNE MT VERNON ARPT [37.94, -87.88]

	08/10/16 12:20 CST		75K	Flash Flood (due to Heavy Rain)
	08/10/16 14:00 CST		0	Source: Trained Spotter

Flash flooding of several streets was reported in town. One water rescue was conducted on a flooded county road. The Mount Vernon community center sustained water damage from flooding. At Mount Vernon High School, major flooding submerged vehicles in the parking lot up to the steering wheel. Water was pumped out of at least one flooded building at the high school. Two trained spotters located on the north and northeast sides of town measured 4.18 and 4.23 inches, respectively, in just over an hour.

**Slow-moving thunderstorms produced isolated but significant flash flooding in Mount Vernon. The storms occurred in a tropical air mass under weak mid-level winds.**

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### VANDERBURGH COUNTY --- 3.9 SE EVANSVILLE [37.94, -87.50]

	08/14/16 21:21 CST		15K	Thunderstorm Wind (EG 61 kt)
	08/14/16 21:21 CST		0	Source: Emergency Manager

Several tree limbs and a couple small trees were broken, along with some downed power lines. A wooden fence was partially blown down. Some lawn furniture and a trampoline were blown around. Some shingles were blown off a house. The damage occurred on the northwest corner of the interchange of Interstate 69 and Green River Road.

**Numerous thunderstorms occurred along a stationary front that extended from central Indiana southwest across the Lower Ohio River Valley. The storms were fed by a moist southerly wind flow, which averaged around 20 knots at 850 mb. The storms were embedded in southwest mid-level flow ahead of a 500 mb shortwave trough over the southern Plains. One of the storms produced a microburst in the Evansville area.**

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### PIKE COUNTY --- PETERSBURG [38.50, -87.28], 1.5 E BOWMAN [38.50, -87.32], 1.6 WNW PETERSBURG [38.51, -87.31], 1.7 NNE PETERSBURG [38.52, -87.26]

	08/16/16 13:00 EST		0	Flood (due to Heavy Rain)
	08/20/16 10:00 EST		0	Source: River/Stream Gage

Minor flooding occurred on the White River. Some low agricultural land and low oil fields were flooded.

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### GIBSON COUNTY --- HAZLETON [38.48, -87.53], 1.1 WNW HAZLETON [38.49, -87.55], 1.5 NNE HAZLETON [38.50, -87.52], 1.8 NE HAZLETON [38.50, -87.51]

	08/17/16 08:00 CST		0	Flood (due to Heavy Rain)
	08/20/16 18:00 CST		0	Source: River/Stream Gage

Minor flooding occurred on the White River. Some low-lying fields and woodlands were underwater, as well as a few local roads.

**Rainfall of 6 to more than 8 inches in southern Indiana from the 13th through the 15th caused lowland river flooding along portions of the White River in southwest Indiana. August 2016 was the wettest August of record for many areas of Indiana.**

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### GIBSON COUNTY --- OAKLAND CITY [38.33, -87.35], 1.8 ESE OAKLAND CITY [38.32, -87.32]

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	08/28/16 19:35 CST		10K	Thunderstorm Wind (EG 65 kt)
	08/28/16 19:41 CST		0	Source: Emergency Manager

A microburst struck the Oakland City area with peak winds estimated near 75 mph. In Oakland City, only some small tree limbs were down. The heaviest damage was in and near the New Lake campground southeast of Oakland City, where large tree limbs were down. Some camper awnings, tents, antennas, and other light objects were damaged. Corn was blown down in fields between New Lake and Oakland City. The path length was just under three miles, and the path width was 2800 yards.

**Small clusters of thunderstorms moved northwest in a very moist southeast wind flow around high pressure over the Upper Ohio Valley. An isolated microburst occurred in Gibson County.**

### KENTUCKY, Southwest

#### MCCRACKEN COUNTY --- 0.9 ENE MAXON [37.09, -88.72]

08/01/16 13:16 CST	10K	Thunderstorm Wind (EG 56 kt)
08/01/16 13:16 CST	0	Source: Broadcast Media

Several trees were blown down. One tree landed on a house, causing minor damage. The damage occurred just south of Kentucky Highway 305 and west of Highway 998, west of the Paducah city limits.

#### LIVINGSTON COUNTY --- LEDBETTER [37.05, -88.48]

08/01/16 13:39 CST	10K	Thunderstorm Wind (EG 56 kt)
08/01/16 13:39 CST	0	Source: Emergency Manager

Several trees were blown down. One tree fell on a church, damaging part of the building.

#### MCCRACKEN COUNTY --- PADUCAH [37.08, -88.63], REIDLAND [37.02, -88.53], ST JOHNS [36.97, -88.68], 3.0 W LONE OAK [37.03, -88.72]

08/01/16 14:18 CST	30K	Flash Flood (due to Heavy Rain)
08/01/16 16:15 CST	0	Source: NWS Employee

Flash flooding of portions of U.S. Highway 45 was reported in Paducah. A county road in the Lone Oak area was washed out, leaving a large hole in the roadway. Water was reported over several roads. The National Weather Service office in Paducah measured 2.43 inches of rain in 50 minutes.

#### GRAVES COUNTY --- 1.2 N SYMSONIA [36.94, -88.52], 1.4 NE SYMSONIA [36.94, -88.50], 0.8 NE SYMSONIA [36.93, -88.51], 0.7 NNW SYMSONIA [36.93, -88.52]

08/01/16 14:21 CST	30K	Flash Flood (due to Heavy Rain)
08/01/16 16:00 CST	0	Source: Public

A secondary road was washed out just north of Symsonia. A culvert was washed out, leaving a deep channel at least 10 feet deep.

#### MARSHALL COUNTY --- GILBERTSVILLE [37.02, -88.28], 2.0 E TATUMSVILLE [36.93, -88.26], 1.0 N DRAFFENVILLE [36.93, -88.33], 2.0 W CALVERT CITY [37.03, -88.39]

08/01/16 14:25 CST	0	Flash Flood (due to Heavy Rain)
08/01/16 16:15 CST	0	Source: Emergency Manager

Six inches of water was reported over U.S. Highway 62 near the Purchase Parkway. Water was over a county road several miles south of Gilbertsville.

**A cluster of thunderstorms developed along a stationary front that was draped along the Ohio River from southwest Indiana to the southern tip of Illinois. The storms occurred in a hot and humid air mass during the heat of the afternoon. Winds aloft averaged around 20 knots from the west to northwest. A couple of storms produced wind damage, and isolated flooding occurred.**

#### TODD COUNTY --- 3.0 W ALLEGRE [36.93, -87.27]

08/03/16 13:15 CST	1K	Thunderstorm Wind (EG 52 kt)
08/03/16 13:15 CST	0	Source: State Official

A tree was down over a road near the Christian County line.

#### TODD COUNTY --- 3.0 W ALLEGRE [36.93, -87.27], 3.7 SSW KIRKMANSVILLE [36.97, -87.27], 3.0 NNW ALLEGRE [36.97, -87.23], 0.2 SE ALLEGRE [36.93, -87.22]

08/03/16 13:15 CST	0	Flood (due to Heavy Rain)
08/03/16 13:45 CST	0	Source: 911 Call Center

## Storm Data and Unusual Weather Phenomena - August 2016

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Water was over several roads.

Clusters of thunderstorms occurred near a weak stationary front that extended from central Missouri southeast across the southern tip of Illinois and western Kentucky. The storms were disorganized due to weak winds aloft. However, locally heavy rain and an isolated pulse of damaging winds accompanied the strongest storms.

(KY-Z001) FULTON, (KY-Z002) HICKMAN, (KY-Z003) CARLISLE, (KY-Z004) BALLARD, (KY-Z005) MCCRACKEN, (KY-Z006) GRAVES, (KY-Z007) LIVINGSTON, (KY-Z008) MARSHALL, (KY-Z009) CALLOWAY, (KY-Z010) CRITTENDEN, (KY-Z011) LYON, (KY-Z012) TRIGG, (KY-Z013) CALDWELL, (KY-Z014) UNION, (KY-Z015) WEBSTER, (KY-Z016) HOPKINS, (KY-Z017) CHRISTIAN, (KY-Z018) HENDERSON, (KY-Z019) DAVIESS, (KY-Z020) MCLEAN, (KY-Z021) MUHLENBERG, (KY-Z022) TODD

08/05/16 12:00 CST	0	Heat
08/05/16 18:00 CST	0	

Afternoon heat indices peaked from 105 to 114 degrees across western Kentucky. Specific peak heat index readings included 113 degrees at Paducah, 112 at Owensboro, and 109 degrees at Madisonville and Hopkinsville. Actual air temperatures reached the lower to mid 90's. Hot and very humid air built up under a subtropical 500 mb ridge that was centered over the southern states and extended north through the mid Mississippi Valley.

**DAVIESS COUNTY --- 4.8 SE RED HILL [37.58, -86.98], 4.6 SE RED HILL [37.58, -86.99], 4.2 SE RED HILL [37.58, -87.00], 4.4 SE RED HILL [37.58, -86.99]**

08/05/16 14:00 CST	0	Flash Flood (due to Heavy Rain)
08/05/16 15:00 CST	0	Source: Trained Spotter

Flash flooding of the north fork of Barnett Creek sent water rushing over a secondary road near where it intersects U.S. Highway 231.

**MUHLENBERG COUNTY --- GREENVILLE [37.20, -87.18], 2.0 NNE GREENVILLE [37.23, -87.17]**

08/05/16 14:00 CST	15K	Thunderstorm Wind (EG 56 kt)
08/05/16 14:00 CST	0	Source: 911 Call Center

Trees and power lines were blown down in Greenville. Several large limbs were down on U.S. Highway 62 between Powderly and Greenville.

**TODD COUNTY --- 1.0 NW HADENSVILLE [36.68, -87.14], HADENSVILLE [36.67, -87.13]**

08/05/16 15:21 CST	4K	Thunderstorm Wind (EG 52 kt)
08/05/16 15:21 CST	0	Source: Emergency Manager

A couple of trees and limbs were blown down.

**BALLARD COUNTY --- LA CENTER [37.07, -88.98], KEVIL [37.08, -88.90]**

08/05/16 16:03 CST	14K	Thunderstorm Wind (EG 52 kt)
08/05/16 16:05 CST	0	Source: Public

A large tree fell through a home in La Center. Tree limbs were down in Kevil.

**MCCRACKEN COUNTY --- 2.0 SW WEST PADUCAH [37.06, -88.78], WEST PADUCAH [37.08, -88.75]**

08/05/16 16:07 CST	7K	Thunderstorm Wind (EG 52 kt)
08/05/16 16:12 CST	0	Source: 911 Call Center

In West Paducah, a large tree was down on a house. A couple miles southwest of West Paducah, a tree was down on a road.

**MCCRACKEN COUNTY --- 0.8 NNE RAGLAND [37.18, -88.89], 1.4 SE WOODVILLE [37.09, -88.86], 0.5 SSW (PAH)BARKLEY ARPT PA [37.06, -88.77], 2.6 NNE GRAHAMVILLE [37.14, -88.77]**

08/05/16 16:25 CST	0	Flash Flood (due to Heavy Rain)
08/05/16 17:30 CST	0	Source: Public

Water was over Highway 358 in many places between West Paducah and the Ballard County line. Water was over portions of several other roads, including Highway 1564 near the Ballard County line.

**BALLARD COUNTY --- 1.6 N WICKLIFFE [36.99, -89.08], 1.7 NNE WICKLIFFE [36.99, -89.07], 1.3 SSW GUM CORNERS [37.00, -89.06], 1.6 SW GUM CORNERS [37.00, -89.07]**

08/05/16 16:40 CST	0	Flash Flood (due to Heavy Rain)
08/05/16 17:30 CST	0	Source: COOP Observer

U.S. Highway 60 was flooded along a small creek between Wickliffe and La Center.

## Storm Data and Unusual Weather Phenomena - August 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<p>Several large clusters of thunderstorms developed ahead of a cold front as it moved south into southern Illinois during the heat of the afternoon. Winds aloft were rather weak. However, the storms moved into a corridor of very moist and unstable air with surface dew points from 75 to 80. As low-level lapse rates steepened considerably in the afternoon, strong outflow wind gusts occurred with some multi-cell storm clusters. Local flash flooding resulted from the tropical moisture and weak steering winds.</p>				
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MARSHALL COUNTY --- BENTON [36.87, -88.35], 1.1 N DOGTOWN [36.87, -88.32], 0.7 SW DOGTOWN [36.84, -88.33], 2.4 SW BENTON [36.84, -88.38]	08/06/16 12:15 CST		0	Flash Flood (due to Heavy Rain)
	08/06/16 13:15 CST		0	Source: Broadcast Media

A small creek in Benton rose rapidly while small children were playing in it. Three small children were playing in Town Creek when a sudden torrent of water swept them away. A passerby rescued them from the floodwaters. One of the children was hanging from a branch, and the other two were swept further down the creek. No injuries were reported.

Numerous small thunderstorm cells developed during the heat of the afternoon along a weak stationary front over western Kentucky. One small cell moved slowly over the city of Benton, causing flash flooding of Town Creek.

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BALLARD COUNTY --- LA CENTER [37.07, -88.98], KEVIL [37.08, -88.90], BANDANA [37.15, -88.95], 1.6 ENE OSCAR [37.14, -89.00]	08/17/16 06:00 CST		40K	Flash Flood (due to Heavy Rain)
	08/17/16 09:00 CST		0	Source: Emergency Manager

Numerous roads were covered with up to a foot of water. Multiple vehicles were stranded in the rising water, mostly north of Kevil through the Bandana area. There was a report of over six inches of rain near Bandana during the morning storm. The rain gage overflowed, so the exact amount was undetermined.

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MCCRACKEN COUNTY --- 1.8 NW ROSSINGTON [37.17, -88.85], WOODVILLE [37.10, -88.88], 2.5 S ROSSINGTON [37.11, -88.84], 1.6 ENE ROSSINGTON [37.16, -88.80]	08/17/16 07:07 CST		5K	Flash Flood (due to Heavy Rain)
	08/17/16 09:00 CST		0	Source: Broadcast Media

Kentucky Highway 358 was flooded in several locations. At least one vehicle became stranded in the floodwaters. Numerous other secondary roads were difficult to travel or impassable. The affected area was mainly near the Ballard County line.

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DAVISS COUNTY --- 0.9 ENE OWENSBORO [37.78, -87.11], 1.6 E PETTIT [37.68, -87.09], 0.8 W ROME [37.72, -87.20], 2.0 W (OWB)OWENSBORO ARPT [37.75, -87.21]	08/17/16 08:30 CST		0	Flash Flood (due to Heavy Rain)
	08/17/16 10:30 CST		0	Source: Trained Spotter

Portions of several roads were closed due to high water. One to two feet of standing water was over portions of a few residential streets. Most of the flooded roads were near the Owensboro airport and the southern edge of Owensboro.

A small but slow-moving thunderstorm complex resulted in localized flash flooding in a few counties bordering the Ohio River. A sub-tropical low pressure system that produced torrential rains along the Gulf of Mexico coast turned north, eventually getting pulled northeast across Missouri and Illinois along a stalled cold front. This low brought copious amounts of moisture.

### MISSOURI, Southeast

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BUTLER COUNTY --- 3.3 W POPLAR BLUFF [36.75, -90.46], 3.8 N HARVIELL [36.72, -90.46], 2.0 SSW POPLAR BLUFF [36.73, -90.42], 0.9 W POPLAR BLUFF [36.75, -90.42]	08/01/16 16:55 CST		4K	Flash Flood (due to Heavy Rain)
	08/01/16 17:45 CST		0	Source: Emergency Manager

A vehicle was submerged in water on County Road 4681. All occupants were rescued safely. Some other county roads were also impassable.

A cluster of thunderstorms developed along a stationary front that was draped from the southern tip of Illinois westward across southeast Missouri. The storms occurred in a hot and humid air mass during the heat of the afternoon. Winds aloft averaged around 20 knots from the west to northwest. Very heavy rain and isolated flash flooding accompanied the storms.

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(MO-Z086) BOLLINGER, (MO-Z087) CAPE GIRARDEAU, (MO-Z100) WAYNE, (MO-Z107) CARTER, (MO-Z108) RIPLEY, (MO-Z109) BUTLER, (MO-Z110) STODDARD, (MO-Z111) SCOTT, (MO-Z112) MISSISSIPPI, (MO-Z114) NEW MADRID	08/04/16 12:00 CST		0	Heat
	08/05/16 18:00 CST		0	

## Storm Data and Unusual Weather Phenomena - August 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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Over most of southeast Missouri south and southwest of Perryville, afternoon heat indices peaked from 105 to 114 degrees on the afternoons of the 4th and the 5th. The highest heat indices occurred on the afternoon of the 5th, when the heat index peaked at 110 degrees at Cape Girardeau and 114 at Poplar Bluff. Actual air temperatures reached the lower to mid 90's. Hot and very humid air built up under a subtropical 500 mb ridge that was centered over the southern states and extended north through the mid Mississippi Valley.

**CAPE GIRARDEAU COUNTY --- 2.0 S CAPE GIRARDEAU [37.27, -89.53], 4.0 SW CAPE GIRARDEAU [37.26, -89.58], 4.0 NW CAPE GIRARDEAU [37.34, -89.58], 3.0 NE CAPE GIRARDEAU [37.33, -89.49], CAPE GIRARDEAU [37.30, -89.53]**

08/05/16 15:50 CST	20K	Flash Flood (due to Heavy Rain)
08/05/16 17:15 CST	0	Source: Law Enforcement

Numerous streets were flooded and impassable in the city of Cape Girardeau. There were several water rescues of stranded motorists.

**BOLLINGER COUNTY --- 2.8 WSW SCOPUS [37.39, -89.98], SCOPUS [37.40, -89.93], 2.0 NW SCOPUS [37.42, -89.96], 2.2 NE HURRICANE [37.44, -89.99], 1.4 NNW HURRICANE [37.44, -90.03]**

08/05/16 16:15 CST	0	Flash Flood (due to Heavy Rain)
08/05/16 17:15 CST	0	Source: Emergency Manager

Portions of Highway M were flooded. Around an inch of rain fell in 20 minutes in Marble Hill.

Several large clusters of thunderstorms developed ahead of a cold front as it moved south into southeast Missouri during the heat of the afternoon. Winds aloft were rather weak. However, the storms moved into a corridor of very moist and unstable air with surface dew points from 75 to 80. Local flash flooding resulted from the tropical moisture and weak steering winds.

**CAPE GIRARDEAU COUNTY --- 2.0 E JACKSON [37.38, -89.63], 2.0 S JACKSON [37.35, -89.67], 2.0 W JACKSON [37.38, -89.71], 2.0 N JACKSON [37.41, -89.67]**

08/13/16 14:30 CST	0	Flash Flood (due to Heavy Rain)
08/13/16 18:30 CST	0	Source: Public

Hubble Creek was out of its banks and over at least one road in Jackson. A trained spotter in Jackson measured 4.5 inches of rain in about 4 hours in the morning. Additional heavy rain fell in the afternoon. A 24-hour total measurement of 7.60 inches was observed along the Mississippi River east of Jackson.

**RIPLEY COUNTY --- 4.0 WSW BRIAR [36.63, -91.04], 4.0 NW BRIAR [36.69, -91.02], 1.0 NNW BRIAR [36.66, -90.98], 1.0 SSW BRIAR [36.64, -90.98]**

08/13/16 15:37 CST	0	Flash Flood (due to Heavy Rain)
08/13/16 19:00 CST	0	Source: Trained Spotter

Low water crossings were flooded west of Briar.

**CARTER COUNTY --- ELLSINORE [36.93, -90.75], VAN BUREN [37.00, -91.02], FREMONT [36.95, -91.17], 5.0 W GRANDIN [36.83, -90.92], GRANDIN [36.83, -90.83]**

08/14/16 13:00 CST	0	Flood (due to Heavy Rain)
08/15/16 15:00 CST	0	Source: Department of Highways

Widespread flooding of low-lying areas was reported due to several rounds of thunderstorms over the previous few days. Numerous low water crossings and secondary roads were underwater. A lane of Route Z near Chilton was closed due to flooding. K Highway was closed. A trained spotter near Ellsinore measured a storm-total rainfall of 17.56 inches from the early morning of August 12th to the early morning of August 16th. The majority of the rain fell on on the 13th and 14th.

**CAPE GIRARDEAU COUNTY --- 2.8 WSW MILLERSVILLE [37.42, -89.85], 2.9 SSW KURREVILLE [37.43, -89.86], 2.5 SSW KURREVILLE [37.44, -89.85], 2.4 WSW MILLERSVILLE [37.42, -89.84], CAPE GIRARDEAU [37.30, -89.53], 0.7 ESE GULF JCT [37.27, -89.54]**

08/14/16 19:15 CST	0	Flood (due to Heavy Rain)
08/15/16 04:00 CST	0	Source: Broadcast Media

County Road 352 was flooded along Little Whitewater Creek near Millersville. In Cape Girardeau, numerous roads were covered with several inches of water.

**RIPLEY COUNTY --- NAYLOR [36.58, -90.60], GATEWOOD [36.58, -91.10], 7.0 WNW DONIPHAN [36.66, -90.94], 7.0 ENE DONIPHAN [36.66, -90.70]**

08/14/16 19:30 CST	0	Flood (due to Heavy Rain)
08/15/16 11:00 CST	0	Source: 911 Call Center

Numerous roads were flooded around the county, including NN Highway on the Carter County line.

**BOLLINGER COUNTY --- 4.5 E MAYFIELD [37.45, -89.87], 2.1 E MAYFIELD [37.45, -89.91], 2.3 NW GRISHAM [37.40, -90.13], GIPSY [37.17, -90.18], 1.9 ENE DRUM [37.19, -89.87]**

## Storm Data and Unusual Weather Phenomena - August 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	08/14/16 20:54 CST		0	Flood (due to Heavy Rain)
	08/15/16 12:00 CST		0	Source: Broadcast Media

Considerable flooding of low-lying areas was reported as a result of several rounds of thunderstorms over the past few days. Several roads were covered by water. Northeast of Scopus, County Road 368 was flooded along Little Whitewater Creek. Near Grassy, one lane of Route H was closed due to flooding. The co-operative observer in Marble Hill measured 8.0 inches for the 72 hours ending on the afternoon of the 15th.

**BUTLER COUNTY --- 1.8 SSE HILLARD [36.80, -90.41], 5.2 W QULIN [36.59, -90.36], 1.9 E QULIN [36.60, -90.24], 2.2 NNE POPLR BLFF FLDS ARPT [36.80, -90.31]**

08/14/16 21:00 CST	1	0.15M	Flood (due to Heavy Rain)
08/17/16 22:00 CST		50K	Source: River/Stream Gage

Moderate flooding occurred along the Black River, resulting in one fatality and some flooded homes. Several homes were evacuated, and there was considerable flooding of streets and highways. In Poplar Bluff, portions of several streets were flooded with several feet of water, mainly those streets with river frontage. A city riverside park was flooded. Southeast of Poplar Bluff in a rural area, individuals were evacuated from a home on County Road 611, and homes on County Road 608 were threatened. Just east of Poplar Bluff, a water rescue of a flooded home was conducted near the intersection of Missouri Highway B and County Road 559. Flooding of farmland was rather extensive south and southeast of Poplar Bluff. Floodwater from the river eventually shut down Highway 53 near the Black River bridge between Qulin and Poplar Bluff. The flooding was exacerbated by a levee breach at County Road 202 near Qulin. A 44-year-old woman was possibly attempting to find an alternate route around the flooding when her car became submerged on County Road 647 near Highway 53. The incident occurred on the night of the 16th. The vehicle and its deceased occupant were located on the afternoon of the 19th. At the Poplar Bluff river gage, the river crested at 20.28 feet on the afternoon of the 16th. Flood stage is 16 feet.

Direct Fatalities: F44VE

**WAYNE COUNTY --- SILVA [37.17, -90.52], 2.1 E SILVA [37.17, -90.48], 3.4 NNE SILVA [37.22, -90.50], 2.9 N SILVA [37.21, -90.52]**

08/15/16 06:00 CST		0	Flood (due to Heavy Rain)
08/16/16 23:00 CST		0	Source: River/Stream Gage

Minor flooding of the St. Francis River occurred near Patterson. Low-lying areas were inundated, including some riverside campgrounds and wooded areas.

**WAYNE COUNTY --- 1.7 W WILLIAMSVILLE [36.97, -90.58], 1.7 SW WILLIAMSVILLE [36.96, -90.58], 3.9 W WILLIAMSVILLE [36.97, -90.62], 2.5 W WILLIAMSVILLE [36.98, -90.60]**

08/15/16 09:00 CST		0	Flood (due to Heavy Rain)
08/15/16 18:00 CST		0	Source: Department of Highways

Considerable flooding of low-lying areas was reported as a result of several rounds of thunderstorms over the past few days. Missouri State Route 49 was closed near Williamsville due to flooding. The co-operative observer at Williamsville measured 15.53 inches over the four-day period ending early on the morning of the 16th.

**RIPLEY COUNTY --- 2.6 WSW NAYLOR [36.56, -90.64], 2.7 ENE TORCH [36.55, -90.64], 0.7 W GLENN [36.52, -90.69], 1.1 WNW TORCH [36.53, -90.70], 3.1 WSW DONIPHAN [36.60, -90.87], 2.1 NNW HILL TOP [36.68, -90.81], 2.4 WNW FLATWOODS [36.69, -90.74]**

08/15/16 09:30 CST		0	Flood (due to Heavy Rain)
08/15/16 17:00 CST		0	Source: Department of Highways

There was considerable flooding of low-lying areas due to several rounds of thunderstorms over the previous few days. A lane of Route H near Naylor was closed due to flooding. A lane of Missouri Route 21 near Doniphan was closed due to flooding. A 72-hour rainfall total of 10.84 inches was reported at the U.S. Forest Service weather observation site near Doniphan.

**BUTLER COUNTY --- 1.4 SE HARVIELL [36.66, -90.45], 2.5 NNW PARKS [36.66, -90.58], 1.4 NNW STRINGTOWN [36.77, -90.59], 1.7 W HILLARD [36.83, -90.45], 2.5 NE HILLARD [36.86, -90.39], 0.7 NNW (P02)POPLAR BLUFF AR [36.78, -90.34]**

08/15/16 09:55 CST		20K	Flood (due to Heavy Rain)
08/16/16 13:00 CST		0	Source: NWS Employee

Widespread flooding of roads, creeks, and small rivers occurred as a result of several rounds of thunderstorms over the past few days. North of Poplar Bluff, a water rescue was conducted on County Road 540 off of Highway W. A vehicle was submerged on a bridge. The occupant escaped the vehicle, but the vehicle was left on the bridge. In southwest Butler County, the Little Black River was out of its banks and flooding fields along U.S. Highway 160. The river level was about two feet below the U.S. Highway 160 bridge. On Highway 158 east of Harviell at Cane Creek, a car drove around barricades and stalled. The occupants were rescued by the fire department. Southwest of Poplar Bluff, M Highway was closed at Cane Creek due to the creek being out of its banks. North of Poplar Bluff, Route W was closed due to flooding. A trained spotter north of Poplar Bluff off Highway W reported 10 inches over the previous 72 hours.

**SCOTT COUNTY --- SIKESTON [36.88, -89.58], 1.1 N SIKESTON [36.90, -89.58], DIEHLSTADT [36.97, -89.43], 2.8 SSW DIEHLSTADT [36.93, -89.45]**

## Storm Data and Unusual Weather Phenomena - August 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	08/17/16 05:55 CST		0	Flood (due to Heavy Rain)
	08/17/16 06:50 CST		0	Source: Law Enforcement

Portions of at least one Sikeston city street were under water. A two-hour storm total of 2.33 inches was reported near Diehlstadt by a trained spotter.

**A series of thunderstorm complexes over a period of several days resulted in locally significant flash flooding. A cold front stalled across the Lower Ohio and Mid-Mississippi Valleys, where tropical moisture was already in place. Precipitable water values from 2.25 to 2.5 inches were common. A sub-tropical low pressure system that produced torrential rains along the Gulf of Mexico coast then turned north, eventually getting pulled northeast across Missouri along the stalled cold front. This low brought copious amounts of moisture. Showers and isolated thunderstorms brought torrential downpours between the 13th and 17th. Rainfall amounts during this time ranged from 5 to 10 inches north and west of Cape Girardeau, including the Poplar Bluff and Perryville areas. There were isolated reports of 12 to 17 inches in the Ozark foothills, including Doniphan and Greenville.**