

Storm Data and Unusual Weather Phenomena - August 2015

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

FRANKLIN COUNTY --- BENTON [38.00, -88.92]

	08/04/15 14:37 CST		10K	Lightning
	08/04/15 14:37 CST		0	Source: Public

There were several reports of power outages caused by lightning.

PERRY COUNTY --- 1.5 SSW DU QUOIN [38.00, -89.24], 1.8 SSE DU QUOIN [38.00, -89.21], 1.3 NE DU QUOIN [38.03, -89.21], 0.3 SSW ST JOHNS [38.03, -89.25]

	08/04/15 15:10 CST		0	Flash Flood (due to Heavy Rain)
	08/04/15 16:15 CST		0	Source: Emergency Manager

Widespread street flooding slowed traffic through the city. Parts of U.S. Highway 51 in the downtown area of Du Quoin were under several inches of water. At least one vehicle stalled out on a residential side street.

Numerous thunderstorms developed along a corridor from southern Illinois across northwest Kentucky and southwest Indiana. The storms developed along and just ahead of a weak surface boundary as it drifted southward into a very unstable air mass over the Lower Ohio Valley. Intense lightning and locally very heavy rain accompanied the strongest storms.

GALLATIN COUNTY --- 2.0 S JUNCTION [37.69, -88.23]

	08/05/15 23:00 CST		0	Heavy Rain
	08/06/15 04:00 CST		0	Source: Trained Spotter

A trained spotter measured 2.25 inches of rain, most of which fell in five hours.

EDWARDS COUNTY --- 1.5 WSW WEST SALEM MUNI ARPT [38.52, -88.06]

	08/06/15 00:15 CST		0	Heavy Rain
	08/06/15 07:30 CST		0	Source: Law Enforcement

Water was over Illinois Highway 130 in the northern part of the county. The road was passable.

A nearly stationary area of heavy showers caused isolated minor flooding in the Wabash Valley. The rainfall was associated with a low pressure center that tracked slowly east across southern Illinois.

(IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z090) POPE, (IL-Z091) HARDIN, (IL-Z094) MASSAC

	08/08/15 02:00 CST		0	Dense Fog
	08/08/15 07:00 CST		0	

Widespread dense fog reduced visibility to one-quarter mile or less across southeast Illinois, mainly along and east of a line from Fairfield to Harrisburg to Metropolis. Surface high pressure over the region resulted in clear skies and light winds. With surface moisture left over from recent rainfall, widespread dense fog formed.

(IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z091) HARDIN

	08/23/15 03:00 CST		0	Dense Fog
	08/23/15 07:00 CST		0	

Dense fog reduced visibility to one-quarter mile or less across southeast Illinois, mainly along and east of a line from Fairfield to Harrisburg. The fog formed over ground that was moistened from rain the previous evening. A light south wind flow of humid air contributed to the fog.

INDIANA, Southwest

SPENCER COUNTY --- 1.0 SE EUREKA [37.87, -87.21]

	08/04/15 15:25 CST		5K	Thunderstorm Wind (EG 52 kt)
	08/04/15 15:25 CST		0	Source: Law Enforcement

Two large trees were blown down across South County Road 800 West.

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Numerous thunderstorms developed along a corridor from southern Illinois across northwest Kentucky and southwest Indiana. The storms developed along and just ahead of a weak surface boundary as it drifted southward into a very unstable air mass over the Lower Ohio Valley. Isolated wind damage accompanied the strongest storm.

(IN-Z081) GIBSON, (IN-Z082) PIKE, (IN-Z085) POSEY, (IN-Z086) VANDERBURGH, (IN-Z087) WARRICK, (IN-Z088) SPENCER				
	08/08/15 03:00 CST		0	Dense Fog
	08/08/15 07:00 CST		0	

Widespread dense fog reduced visibility to one-quarter mile or less across southwest Indiana. Surface high pressure over the region resulted in clear skies and light winds. With surface moisture left over from recent rainfall, widespread dense fog formed.

KENTUCKY, Southwest

CHRISTIAN COUNTY --- GRACEY [36.87, -87.65]

	08/05/15 07:00 CST		0	Heavy Rain
	08/05/15 09:25 CST		0	Source: Trained Spotter

A trained spotter reported minor street flooding. Within a three-hour period, the spotter measured 2.65 inches of rain.

TRIGG COUNTY --- CADIZ [36.87, -87.82], 3.6 NNE MAGGIE [36.78, -87.73]

	08/05/15 07:00 CST		0	Heavy Rain
	08/05/15 12:00 CST		0	Source: Mesonet

Over a five-hour period, the rainfall at a mesonet site on the Little River southeast of Cadiz was 3.27 inches. In and around Cadiz, flooding was reported in the usual problem spots.

TRIGG COUNTY --- ROCKCASTLE [36.90, -87.97]

	08/05/15 07:00 CST		0	Heavy Rain
	08/05/15 10:25 CST		0	Source: Trained Spotter

A trained spotter reported 3.5 inches of rain over a three and one-half hour period.

HOPKINS COUNTY --- 4.0 S MADISONVILLE [37.27, -87.50]

	08/05/15 08:25 CST		0	Heavy Rain
	08/05/15 09:25 CST		0	Source: Mesonet

The Kentucky mesonet site near Madisonville measured 1.03 inches of rain in 45 minutes.

TRIGG COUNTY --- CADIZ [36.87, -87.82]

	08/05/15 08:30 CST		10K	Lightning
	08/05/15 08:30 CST		0	Source: Newspaper

Lightning struck a substation near Cadiz, causing several circuits to go down. About 12,000 utility customers lost power for up to an hour. Power went out throughout all of Cadiz and parts of three other counties.

MCLEAN COUNTY --- CALHOUN [37.53, -87.27]

	08/05/15 09:30 CST		0	Heavy Rain
	08/05/15 12:00 CST		0	Source: Mesonet

The mesonet site on the Green River near Calhoun measured 1.86 inches within three hours.

A procession of thunderstorm complexes moved slowly eastward across southwest Kentucky. These storms occurred ahead of a slow-moving upper level disturbance that tracked from the central Plains to the Lower Missouri Valley. The storms were fed by a very moist southwest flow in the low levels of the atmosphere. Surface dew points were in the lower 70's. The intensity and duration of the storms resulted in locally very heavy rainfall from three to four inches in some places.

(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

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	08/08/15 01:00 CST		0	Dense Fog
	08/08/15 08:00 CST		0	

Widespread dense fog reduced visibility to one-quarter mile or less across most of western Kentucky, with the exception of the Mississippi River counties. Surface high pressure over the region resulted in clear skies and light winds. With surface moisture left over from recent rainfall, widespread dense fog formed.

WEBSTER COUNTY --- PROVIDENCE [37.40, -87.77]

	08/19/15 00:10 CST		0	Heavy Rain
	08/19/15 06:20 CST		0	Source: COOP Observer

The 24-hour total rainfall was 2.70 inches, which fell almost entirely in a six-hour window during the late night and early morning hours.

LYON COUNTY --- KUTTAWA [37.07, -88.12], EDDYVILLE [37.05, -88.07]

	08/19/15 11:00 CST		0	Heavy Rain
	08/19/15 11:45 CST		0	Source: Law Enforcement

Several roads across the county were covered with flowing water.

CALDWELL COUNTY --- 5.0 SSE DULANEY [37.04, -87.92]

	08/19/15 11:35 CST		8K	Thunderstorm Wind (EG 61 kt)
	08/19/15 11:35 CST		0	Source: Trained Spotter

Near the intersection of Highways 903 and 515, a microburst carved a path of downed trees about 250 yards long. Single trees were damaged up to three-quarters of a mile away from the damage path.

CALDWELL COUNTY --- 0.7 WSW PRINCETON [37.11, -87.88], 0.7 NW LAKEVIEW [37.14, -87.89], 1.7 NNE BAKERS [37.20, -88.02], 1.1 E FREDONIA [37.20, -88.05], 1.1 W CRIDER [37.15, -87.99]

	08/19/15 11:45 CST		3K	Flash Flood (due to Heavy Rain)
	08/19/15 13:30 CST		0	Source: Department of Highways

Water was over Kentucky Highway 91 in several places between the 17 and 21 mile markers. At one location, water was reported to be a foot deep with strong current. Brush and tree limbs swept along by the floodwaters clogged a culvert near the community of Crider.

Two rounds of thunderstorms occurred across parts of western Kentucky. The heaviest rainfall from both rounds extended from northern parts of the Kentucky Lake region to northern parts of the Pennyryle region. The first round during the early morning hours produced locally two to three inches of rain. Another round during the midday and early afternoon hours caused isolated flash flooding and a microburst. The first round of storms occurred in a warm, moist south wind flow ahead of a cold front that extended from the upper Mississippi Valley to the Ozarks. The second round of storms occurred along the cold front as it approached the Lower Ohio Valley.

(KY-Z010) CRITTENDEN, (KY-Z014) UNION

	08/23/15 03:00 CST		0	Dense Fog
	08/23/15 07:00 CST		0	

Dense fog reduced visibility to one-quarter mile or less across a small part of western Kentucky, mainly around Marion and Morganfield. The fog formed over ground that was moistened from rain the previous evening. A light south wind flow of humid air contributed to the fog.

TRIGG COUNTY --- 3.9 SW CADIZ [36.83, -87.87]

	08/30/15 14:00 CST		0	Heavy Rain
	08/30/15 15:00 CST		0	Source: Mesonet

The mesonet site near Cadiz measured 1.82 inches of rain in one hour.

An area of thunderstorms remained nearly stationary over parts of southwestern Kentucky. The storms occurred along a stationary 500 mb trough axis oriented from southwest to northeast across the Ohio Valley. The storms were fed by a moist low-level southwest wind flow around high pressure centered over the Carolina coast. Very heavy rainfall was the primary hazard.

MISSOURI, Southeast

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
CAPE GIRARDEAU COUNTY --- CAPE GIRARDEAU [37.30, -89.53], 2.9 ESE GULF JCT [37.25, -89.50], 1.4 S MARQUETTE [37.25, -89.57], 0.7 NNW GULF JCT [37.28, -89.56]				
	08/01/15 00:00 CST		0	Flood (due to Heavy Rain)
	08/01/15 12:30 CST		0	Source: River/Stream Gage

The Mississippi River finally dropped below flood stage at the Cape Girardeau river gage on the 1 st of August. The river went above flood stage on June 15. Major flooding occurred during this prolonged summer flood. There was only very minor flooding on the 1 st of August as the river fell below flood stage.

The very wet months of June and July transitioned to a more typical pattern by early August. This allowed Mississippi River flooding to come to an end.

RIPLEY COUNTY --- DONIPHAN [36.62, -90.82]				
	08/05/15 03:00 CST		0	Heavy Rain
	08/05/15 11:30 CST		0	Source: Mesonet

The mesonet station on the Current River near Doniphan measured 2.34 inches during the morning hours.

WAYNE COUNTY --- 2.4 NNE SILVA [37.20, -90.50]				
	08/05/15 04:00 CST		0	Heavy Rain
	08/05/15 12:00 CST		0	Source: Mesonet

The mesonet station on the St. Francis River near Patterson measured 2.10 inches during the morning hours.

WAYNE COUNTY --- WAPPAPELLO [36.93, -90.28]				
	08/05/15 04:00 CST		0	Heavy Rain
	08/05/15 12:00 CST		0	Source: Mesonet

The mesonet station at Lake Wappapello measured 2.56 inches during the morning hours.

A procession of thunderstorm complexes moved slowly eastward across extreme southeast Missouri. These storms occurred ahead of a slow-moving upper level disturbance that tracked from the central Plains to the Lower Missouri Valley. The storms were fed by a very moist southwest flow in the low levels of the atmosphere. Surface dew points were in the lower 70's. The intensity and duration of the storms resulted in locally very heavy rainfall from two to three inches in some places.

PERRY COUNTY --- 1.9 WNW LITHIUM [37.84, -89.91], 1.4 NNW LITHIUM [37.85, -89.89]				
	08/09/15 19:35 CST		8K	Thunderstorm Wind (EG 52 kt)
	08/09/15 19:35 CST		0	Source: Law Enforcement

Trees were blown down across County Roads 926 and 928.

A cluster of thunderstorms slowly intensified over central Missouri during the late afternoon hours. The intensifying thunderstorms then moved southeast, producing isolated wind damage during the evening as they encountered a more unstable environment. The storms developed ahead of a small disturbance in the upper levels of the atmosphere that tracked southeast from the Kansas City metro area.

CAPE GIRARDEAU COUNTY --- CAPE GIRARDEAU [37.30, -89.53]				
	08/22/15 16:20 CST		5K	Heavy Rain
	08/22/15 17:30 CST		0	Source: Newspaper

Torrential rain caused a street along the Mississippi River to become flooded . Several cars stalled in the floodwater. Police blocked the street for about 30 minutes. The side street was next to the river campus of Southeast Missouri State University.

An area of thunderstorms moved northeast from Arkansas, passing across southeast Missouri during the hottest and most unstable time of day. The storms occurred in advance of a weak 500 mb shortwave trough over western Missouri. A warm front lifting northeast across Arkansas provided additional support for the storms. Very heavy rain was the primary hazard with the storms.