

## Storm Data and Unusual Weather Phenomena - March 2011

| Location   | Date/Time          | Deaths & Injuries | Property & Crop Dmg | Event Type and Details          |
|--|--------------------|-------------------|---------------------|---------------------------------|
| <b>KANSAS, Extreme Southeast</b>   |                    |                   |                     |                                 |
| <b>CRAWFORD COUNTY --- 4.4 E HEPLER [37.67, -94.89]</b>  |                    |                   |                     |                                 |
|  | 03/19/11 06:45 CST |                   | 0                   | Hail (0.75 in)                  |
|  | 03/19/11 06:46 CST |                   | 0                   | Source: Public                  |
| The public reported penny sized hail and it covered the ground.  |                    |                   |                     |                                 |
| <b>CHEROKEE COUNTY --- WEST MINERAL [37.28, -94.92]</b>  |                    |                   |                     |                                 |
|  | 03/19/11 11:09 CST |                   | 0                   | Hail (0.75 in)                  |
|  | 03/19/11 11:10 CST |                   | 0                   | Source: Public                  |
| The public reported mostly pea sized hail with some penny and dime sized hail mixed in.  |                    |                   |                     |                                 |
| <b>CHEROKEE COUNTY --- WEST MINERAL [37.28, -94.92]</b>  |                    |                   |                     |                                 |
|  | 03/19/11 11:09 CST |                   | 0                   | Hail (1.00 in)                  |
|  | 03/19/11 11:10 CST |                   | 0                   | Source: Emergency Manager       |
| <b>CRAWFORD COUNTY --- 3.8 SSE WALNUT [37.55, -95.05]</b>  |                    |                   |                     |                                 |
|  | 03/19/11 11:13 CST |                   | 0                   | Hail (0.88 in)                  |
|  | 03/19/11 11:14 CST |                   | 0                   | Source: COOP Observer           |
| A coop observer reported mostly pea sized hail with some nickel and penny sized hail mixed in.   |                    |                   |                     |                                 |
| <b>CRAWFORD COUNTY --- 0.9 NE FRONTENAC [37.46, -94.69]</b>  |                    |                   |                     |                                 |
|  | 03/19/11 11:58 CST |                   | 0                   | Hail (0.88 in)                  |
|  | 03/19/11 11:59 CST |                   | 0                   | Source: Public                  |
| The public reported mostly pea sized hail with some nickel and penny sized hail mixed in.  |                    |                   |                     |                                 |
| <b>BOURBON COUNTY --- 3.2 SSW EDWARD [37.73, -94.75]</b>   |                    |                   |                     |                                 |
|  | 03/19/11 12:19 CST |                   | 2K                  | Lightning                       |
|  | 03/19/11 12:20 CST |                   | 0                   | Source: Emergency Manager       |
| A vehicle was struck by lightning at the intersection of Highway 69 and Eagle Road.  |                    |                   |                     |                                 |
| <b>A shortwave moved across southeast Kansas and extreme western Missouri. It intersected a warm front lifting northward and produced a cluster of severe storms with large hail.</b>              |                    |                   |                     |                                 |
| <b>MISSOURI, Southwest</b>   |                    |                   |                     |                                 |
| <b>WRIGHT COUNTY --- 0.7 S MANSFIELD [37.11, -92.58], 0.7 S MANSFIELD [37.11, -92.58], 0.8 S MANSFIELD [37.11, -92.58], 0.8 S MANSFIELD [37.11, -92.58]</b>  |                    |                   |                     |                                 |
|  | 03/04/11 21:00 CST |                   | 0                   | Flash Flood (due to Heavy Rain) |
|  | 03/04/11 22:00 CST |                   | 0                   | Source: Amateur Radio           |
| Amateur radio reported street flooding in Mansfield.   |                    |                   |                     |                                 |
| <b>DOUGLAS COUNTY --- 2.6 W AVA MUNI MEML ARPT [36.97, -92.73], 2.4 W AVA MUNI MEML ARPT [36.97, -92.72], 2.5 W AVA MUNI MEML ARPT [36.96, -92.72], 2.6 W AVA MUNI MEML ARPT [36.96, -92.73]</b>   |                    |                   |                     |                                 |
|  | 03/04/11 21:05 CST |                   | 0                   | Flash Flood (due to Heavy Rain) |
|  | 03/04/11 22:05 CST |                   | 0                   | Source: Law Enforcement         |
| Law enforcement reported water of unknown depth covering and flowing over a low water crossing on Route Y at Cowskin Creek . Portions of Highway 14 west of Ava were also reported water covered . |                    |                   |                     |                                 |
| <b>WRIGHT COUNTY --- 1.2 ESE NORWOOD [37.11, -92.41], 1.3 ESE NORWOOD [37.11, -92.41], 1.3 ESE NORWOOD [37.11, -92.41], 1.2 ESE NORWOOD [37.11, -92.41]</b>  |                    |                   |                     |                                 |

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|  | 03/04/11 21:05 CST |                   | 0                   | Flash Flood (due to Heavy Rain) |
|  | 03/04/11 22:05 CST |                   | 0                   | Source: Amateur Radio           |
| Amateur radio reported two to three feet of water on the east side of Norwood which flooded a trailer park.  |                    |                   |                     |                                 |
| <hr/>  |                    |                   |                     |                                 |
| <b>WRIGHT COUNTY --- 1.4 NE MACOMB [37.12, -92.48], 1.6 NE MACOMB [37.12, -92.48], 1.7 NE MACOMB [37.12, -92.48], 1.6 NE MACOMB [37.12, -92.48]</b>  |                    |                   |                     |                                 |
|  | 03/04/11 21:05 CST |                   | 0                   | Flash Flood (due to Heavy Rain) |
|  | 03/04/11 22:05 CST |                   | 0                   | Source: Amateur Radio           |
| Amateur radio reported Highway 7 north of Macomb was flooded in several spots with water depth as much as 10 to 12 inches.   |                    |                   |                     |                                 |
| <hr/>  |                    |                   |                     |                                 |
| <b>DOUGLAS COUNTY --- 2.6 W AVA MUNI MEML ARPT [36.97, -92.73], 2.6 W AVA MUNI MEML ARPT [36.96, -92.73], 2.5 W AVA MUNI MEML ARPT [36.96, -92.72], 2.5 W AVA MUNI MEML ARPT [36.97, -92.72]</b> |                    |                   |                     |                                 |
|  | 03/04/11 22:15 CST |                   | 0                   | Flash Flood (due to Heavy Rain) |
|  | 03/04/11 23:15 CST |                   | 0                   | Source: Department of Highways  |
| Missouri Department of Transportation reported that Route Y at Cowskin Creek was closed due to flooding.   |                    |                   |                     |                                 |
| <b>A slow moving frontal boundary and associate upper level trough brought localized rainfall amounts of one to two inches across the southern Ozarks which lead to some localized flooding.</b> |                    |                   |                     |                                 |
| <hr/>  |                    |                   |                     |                                 |
| <b>NEWTON COUNTY --- 1.8 ENE SAGINAW [37.03, -94.45]</b>   |                    |                   |                     |                                 |
|  | 03/13/11 14:08 CST |                   | 0                   | Hail (1.00 in)                  |
|  | 03/13/11 14:10 CST |                   | 0                   | Source: Law Enforcement         |
| <hr/>  |                    |                   |                     |                                 |
| <b>JASPER COUNTY --- 1.8 NW SARCOXIE [37.09, -94.14]</b>   |                    |                   |                     |                                 |
|  | 03/13/11 14:40 CST |                   | 0                   | Hail (0.88 in)                  |
|  | 03/13/11 14:42 CST |                   | 0                   | Source: Law Enforcement         |
| <hr/>  |                    |                   |                     |                                 |
| <b>JASPER COUNTY --- 2.8 S REEDS [37.08, -94.17]</b>   |                    |                   |                     |                                 |
|  | 03/13/11 14:40 CST |                   | 0                   | Hail (0.88 in)                  |
|  | 03/13/11 14:42 CST |                   | 0                   | Source: Law Enforcement         |
| <hr/>  |                    |                   |                     |                                 |
| <b>JASPER COUNTY --- 0.6 W SARCOXIE [37.07, -94.13]</b>  |                    |                   |                     |                                 |
|  | 03/13/11 14:43 CST |                   | 0                   | Hail (0.75 in)                  |
|  | 03/13/11 14:45 CST |                   | 0                   | Source: Public                  |
| <hr/>  |                    |                   |                     |                                 |
| <b>LAWRENCE COUNTY --- 0.6 E MARIONVILLE [37.00, -93.64]</b>   |                    |                   |                     |                                 |
|  | 03/13/11 15:29 CST |                   | 0                   | Hail (1.75 in)                  |
|  | 03/13/11 15:30 CST |                   | 0                   | Source: Broadcast Media         |
| <hr/>  |                    |                   |                     |                                 |
| <b>CHRISTIAN COUNTY --- 0.6 E CLEVER [37.03, -93.47]</b>   |                    |                   |                     |                                 |
|  | 03/13/11 15:43 CST |                   | 0                   | Hail (0.88 in)                  |
|  | 03/13/11 15:45 CST |                   | 0                   | Source: Public                  |
| <hr/>  |                    |                   |                     |                                 |
| <b>CHRISTIAN COUNTY --- 0.9 NW BOAZ [37.03, -93.41]</b>  |                    |                   |                     |                                 |
|  | 03/13/11 16:00 CST |                   | 0                   | Hail (1.00 in)                  |
|  | 03/13/11 16:02 CST |                   | 0                   | Source: Public                  |
| <hr/>  |                    |                   |                     |                                 |
| <b>CHRISTIAN COUNTY --- 1.8 WSW OZARK AIRPARK ARPT [37.04, -93.26]</b>   |                    |                   |                     |                                 |
|  | 03/13/11 16:12 CST |                   | 0                   | Hail (0.75 in)                  |
|  | 03/13/11 16:14 CST |                   | 0                   | Source: Public                  |
| <hr/>  |                    |                   |                     |                                 |
| <b>CHRISTIAN COUNTY --- 0.6 E OZARK [37.02, -93.21]</b>  |                    |                   |                     |                                 |
|  | 03/13/11 16:13 CST |                   | 0                   | Hail (0.88 in)                  |
|  | 03/13/11 16:15 CST |                   | 0                   | Source: Trained Spotter         |
| <hr/>  |                    |                   |                     |                                 |
| <b>CHRISTIAN COUNTY --- 0.9 SE NIXA [37.04, -93.29]</b>  |                    |                   |                     |                                 |

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|   | 03/13/11 16:13 CST |                   | 0                   | Hail (0.75 in)                 |
|   | 03/13/11 16:15 CST |                   | 0                   | Source: Broadcast Media        |
| <hr/>   |                    |                   |                     |                                |
| <b>CHRISTIAN COUNTY --- 0.6 E OZARK [37.02, -93.21]</b>   |                    |                   |                     |                                |
|   | 03/13/11 16:15 CST |                   | 0                   | Hail (1.00 in)                 |
|   | 03/13/11 16:17 CST |                   | 0                   | Source: Public                 |
| Public reported one inch hail at Lamberts Restaurant.   |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>CHRISTIAN COUNTY --- 0.6 E OZARK [37.02, -93.21]</b>   |                    |                   |                     |                                |
|   | 03/13/11 16:17 CST |                   | 0                   | Hail (0.75 in)                 |
|   | 03/13/11 16:19 CST |                   | 0                   | Source: Amateur Radio          |
| <hr/>   |                    |                   |                     |                                |
| <b>WEBSTER COUNTY --- 0.6 E ROGERSVILLE [37.12, -93.06]</b>   |                    |                   |                     |                                |
|   | 03/13/11 16:39 CST |                   | 0                   | Hail (0.75 in)                 |
|   | 03/13/11 16:40 CST |                   | 0                   | Source: Fire Department/Rescue |
| A vigorous shortwave moving across the central plains region developed a broken line of severe storms which produced several reports of large hail across southwest Missouri. |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>WRIGHT COUNTY --- 1.4 N JERKTAIL [37.44, -92.45], 1.5 N JERKTAIL [37.44, -92.46], 1.4 NNW JERKTAIL [37.44, -92.46], 1.3 N JERKTAIL [37.44, -92.45]</b>                     |                    |                   |                     |                                |
|   | 03/14/11 06:10 CST |                   | 0                   | Flood (due to Heavy Rain)      |
|   | 03/14/11 07:10 CST |                   | 0                   | Source: Department of Highways |
| Missouri Department of Transportation reported Route Z in northern Wright County was closed due to flooding.  |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>DOUGLAS COUNTY --- 0.9 SW ANN [37.02, -92.21], 1.0 SW ANN [37.02, -92.22], 1.2 SW ANN [37.02, -92.22], 1.1 SW ANN [37.02, -92.21]</b>                                      |                    |                   |                     |                                |
|   | 03/14/11 07:10 CST |                   | 0                   | Flood (due to Heavy Rain)      |
|   | 03/14/11 08:10 CST |                   | 0                   | Source: Department of Highways |
| Missouri Department of Transportation reported Route EE in northeast Douglas County was closed due to flooding.   |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>MARIES COUNTY --- 2.6 ESE VIENNA [38.16, -91.91], 2.1 SE VIENNA [38.16, -91.92], 2.3 SE VIENNA [38.16, -91.92], 2.7 SE VIENNA [38.16, -91.91]</b>                          |                    |                   |                     |                                |
|   | 03/14/11 07:30 CST |                   | 0                   | Flood (due to Heavy Rain)      |
|   | 03/14/11 08:30 CST |                   | 0                   | Source: Emergency Manager      |
| Emergency manager reported numerous low water crossing were flooded across Maries County.   |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>POLK COUNTY --- 1.1 E GOODSON [37.70, -93.25], 1.1 ESE GOODSON [37.70, -93.25], 1.3 E GOODSON [37.70, -93.25], 1.3 E GOODSON [37.70, -93.25]</b>                           |                    |                   |                     |                                |
|   | 03/14/11 07:39 CST |                   | 0                   | Flood (due to Heavy Rain)      |
|   | 03/14/11 08:39 CST |                   | 0                   | Source: Department of Highways |
| Missouri Department of Transportation reported Route P in northeast Polk County was closed due to flooding.   |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>LACLEDE COUNTY --- 5.5 NE DOVE [37.83, -92.62], 5.6 NE DOVE [37.84, -92.63], 5.4 NE DOVE [37.83, -92.63], 5.4 NE DOVE [37.83, -92.63]</b>                                  |                    |                   |                     |                                |
|   | 03/14/11 07:51 CST |                   | 0                   | Flood (due to Heavy Rain)      |
|   | 03/14/11 08:51 CST |                   | 0                   | Source: Department of Highways |
| Missouri Department of Transportation reported Route BB in northern Laclede County was closed due to flooding.  |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>LACLEDE COUNTY --- 2.3 N HAZELGREEN [37.80, -92.43], 2.3 N HAZELGREEN [37.80, -92.43], 2.4 N HAZELGREEN [37.81, -92.43], 2.4 N HAZELGREEN [37.80, -92.43]</b>              |                    |                   |                     |                                |
|   | 03/14/11 07:53 CST |                   | 0                   | Flood (due to Heavy Rain)      |
|   | 03/14/11 08:53 CST |                   | 0                   | Source: Department of Highways |
| Missouri Department of Transportation reported Route FF in eastern Laclede County was closed due to flooding.   |                    |                   |                     |                                |
| <hr/>   |                    |                   |                     |                                |
| <b>CAMDEN COUNTY --- 2.6 WNW STOUTLAND [37.84, -92.56], 2.9 WNW STOUTLAND [37.84, -92.57], 3.0 WNW STOUTLAND [37.84, -92.57], 2.7 NW STOUTLAND [37.84, -92.56]</b>            |                    |                   |                     |                                |

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|---|--------------------|----------------------|------------------------|--------------------------------|
|   | 03/14/11 08:13 CST |                      | 0                      | Flood (due to Heavy Rain)      |
|   | 03/14/11 09:13 CST |                      | 0                      | Source: Department of Highways |
| Missouri Department of Transportation reported Route H in southern Camden County was closed due to flooding.  |                    |                      |                        |                                |
| <b>DOUGLAS COUNTY --- 3.9 E OLATHE [37.03, -92.46], 3.5 E OLATHE [37.03, -92.47], 3.6 E OLATHE [37.03, -92.47], 3.8 E OLATHE [37.03, -92.46]</b>                                      |                    |                      |                        |                                |
|   | 03/14/11 08:30 CST |                      | 0                      | Flood (due to Heavy Rain)      |
|   | 03/14/11 09:30 CST |                      | 0                      | Source: Department of Highways |
| Missouri Department of Transportation reported Route YY in northern Douglas County was closed due to flooding.  |                    |                      |                        |                                |
| <b>DALLAS COUNTY --- 3.7 NW BUFFALO [37.69, -93.15], 3.6 NW BUFFALO [37.69, -93.15], 3.4 NW BUFFALO [37.69, -93.14], 3.5 NW BUFFALO [37.69, -93.14]</b>                               |                    |                      |                        |                                |
|   | 03/14/11 08:52 CST |                      | 0                      | Flood (due to Heavy Rain)      |
|   | 03/14/11 09:52 CST |                      | 0                      | Source: Department of Highways |
| Missouri Department of Transportation reported Route C in western Dallas County was closed due to flooding.   |                    |                      |                        |                                |
| <b>A vigorous shortwave moving across the Ozarks produced thunderstorms with heavy rain which caused several reports of flooding.</b>   |                    |                      |                        |                                |
| <b>BARTON COUNTY --- 3.2 NNE MINDENMINES [37.52, -94.57]</b>  |                    |                      |                        |                                |
|   | 03/19/11 12:00 CST |                      | 0                      | Hail (0.75 in)                 |
|   | 03/19/11 12:01 CST |                      | 0                      | Source: Public                 |
| <b>JASPER COUNTY --- 0.6 E DUQUESNE [37.08, -94.46]</b>   |                    |                      |                        |                                |
|   | 03/19/11 13:00 CST |                      | 0                      | Hail (1.00 in)                 |
|   | 03/19/11 13:01 CST |                      | 0                      | Source: Emergency Manager      |
| <b>NEWTON COUNTY --- 5.0 W REDINGS MILL [37.03, -94.61]</b>   |                    |                      |                        |                                |
|   | 03/19/11 13:02 CST |                      | 0                      | Hail (0.75 in)                 |
|   | 03/19/11 13:03 CST |                      | 0                      | Source: Public                 |
| <b>DALLAS COUNTY --- 0.7 S OLIVE [37.44, -93.15]</b>  |                    |                      |                        |                                |
|   | 03/19/11 15:10 CST |                      | 0                      | Hail (0.88 in)                 |
|   | 03/19/11 15:11 CST |                      | 0                      | Source: Trained Spotter        |
| Trained spotter reported penny to nickel sized hail near the Greene and Dallas county line.   |                    |                      |                        |                                |
| <b>A shortwave moved across southeast Kansas and extreme western Missouri. It intersected a warm front lifting northward and produced a cluster of severe storms with large hail.</b> |                    |                      |                        |                                |
| <b>(MO-Z080) DALLAS, (MO-Z097) HOWELL, (MO-Z105) OZARK</b>  |                    |                      |                        |                                |
|   | 03/22/11 21:00 CST |                      | 0.51M                  | Wildfire                       |
|   | 03/23/11 23:00 CST |                      | 0                      |                                |
| <b>Several large wildfires developed due to very dry conditions and gusty winds.</b>  |                    |                      |                        |                                |
| <b>CHRISTIAN COUNTY --- 0.9 SE NIXA [37.04, -93.29]</b>   |                    |                      |                        |                                |
|   | 03/25/11 03:00 CST |                      | 0.25M                  | Lightning                      |
|   | 03/25/11 03:01 CST |                      | 0                      | Source: Broadcast Media        |
| KY3-TV reported a home completely destroyed by fire likely caused by a lightning strike.  |                    |                      |                        |                                |
| <b>A strong thunderstorm produced a destructive lightning strike which hit a house and completely burned it down.</b>   |                    |                      |                        |                                |
| <b>JASPER COUNTY --- 1.1 W DUENWEG [37.08, -94.44]</b>  |                    |                      |                        |                                |
|   | 03/26/11 04:43 CST |                      | 0                      | Hail (1.00 in)                 |
|   | 03/26/11 04:45 CST |                      | 0                      | Source: Emergency Manager      |
| Emergency manager reported quarter sized hail at the intersection of 20th Street and Kenser Road.   |                    |                      |                        |                                |

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|---|--------------------|-------------------|---------------------|--------------------------------|
| <hr/>   |                    |                   |                     |                                |
| <b>OZARK COUNTY --- 0.9 SW GAINESVILLE ARPT [36.61, -92.41]</b> |                    |                   |                     |                                |
|   | 03/26/11 07:31 CST |                   | 0                   | Hail (0.88 in)                 |
|   | 03/26/11 07:32 CST |                   | 0                   | Source: Public                 |
| <hr/>   |                    |                   |                     |                                |
| <b>OZARK COUNTY --- 0.9 SW GAINESVILLE ARPT [36.61, -92.41]</b> |                    |                   |                     |                                |
|   | 03/26/11 07:35 CST |                   | 0                   | Hail (0.88 in)                 |
|   | 03/26/11 07:36 CST |                   | 0                   | Source: Public                 |
| <hr/>   |                    |                   |                     |                                |
| <b>TANEY COUNTY --- FORSYTH [36.68, -93.12]</b>                 |                    |                   |                     |                                |
|   | 03/26/11 08:17 CST |                   | 0                   | Hail (0.75 in)                 |
|   | 03/26/11 08:18 CST |                   | 0                   | Source: Fire Department/Rescue |

Fire department reported dime to penny sized hail.

An upper level trough and associated surface low moved across the region which produced a cluster of severe thunderstorms with large hail.