



Time Path Path Number of Estimated December 2004

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

ILLINOIS, South

ILZ087-091>094

Gallatin - Hardin - Alexander - Pulaski - Massac

The Ohio River rose above flood stage along most of the Illinois shore. The flooding was minor as far downriver as the confluence

The Ohio River rose above flood stage along most of the Illinois shore. The flooding was minor as far downriver as the confluence with the Tennessee River at Paducah. Primarily bottomland fields and woodlands were affected in these areas. From Paducah to the confluence with the Mississippi River at Cairo, the flooding was moderate. Some river access roads, boat ramps, and park facilities near the river were under water. The flood crest was only two feet above flood stage at Shawneetown, and 7 feet above flood stage at Brookport, Grand Chain, and Cairo. Flood crest dates ranged from the 10th to the 17th.

ILZ075>078-080>094

Jefferson - Wayne - Edwards - Wabash - Perry - Franklin - Hamilton - White - Jackson - Williamson - Saline - Gallatin - Union - Johnson - Pope - Hardin - Alexander - Pulaski - Massac

22 0100CST 1 1 100K Winter Storm 23 0200CST



Photo taken near Joppa in Massac County, where an F-4 tornado occurred in May, 2003. Record-breaking snowfall prompted a state disaster declaration for much of southern Illinois. Photo courtesy of Gail Stubblefield and Beau Dodson.

A major winter storm dumped from 10 to 20 inches of snow across most of southern Illinois, clogging interstates and shutting down most businesses near the peak of the Christmas shopping season. The heaviest snowfall, from 14 to 20 inches, occurred along an axis from Anna (Union County) through Harrisburg (Saline County) to the lower Wabash Valley. Snowfall was not quite as heavy from Fairfield (in Wayne County) west across Mount Vernon to Du Quoin (Perry County), where amounts were mostly from 6 to 9 inches. On the north side of Anna in Union County, a man was killed and another man was injured when an awning on a VFW Post collapsed on them. The two men were standing under the 12-by-30 foot awning when it collapsed. The weight of the compacted snow, which fell several days earlier, caused the metal roof to totally collapse over the men. The other end of the awning remained partially standing. A crew of 15 to 20 rescuers took about 30 minutes to extricate the men. In Johnson County, the roof of a hardware store and a horse arena collapsed under the weight of the snow and ice. Portions of Interstates 57, 64, and 24 were extremely difficult to travel. Numerous abandoned vehicles and jack-knifed semis blocked portions of these highways, however, none were officially closed. Interstate 64 was closed at the Indiana state line. The near blizzard conditions stranded many interstate travelers in hotels, and some hotels on Interstates 64 and 57 were totally filled. State police took some stranded motorists to an emergency shelter at the Marion Senior Citizens Center, where at least 8 people spent the night. Gusty north winds from 15 to 25 MPH with a few gusts to 35 MPH caused blowing and drifting. The snow fell in two waves, the first during the late night and early morning, and the second from mid-afternoon through about midnight. The early morning burst produced an estimated 8 to 10 inches along an axis from Cape Girardeau, MO northeastward across Marion to Harrisburg. The second and more prolonged period of heavy snow dumped an additional 8 to 10 inches at Harrisburg. A state of emergency was declared in Gallatin and Edwards Counties, where non-essential travel was banned. There were reports of plows and other snow removal equipment stuck in drifts. Most travel, including that by police and other emergency workers, was done in four-wheel drive vehicles. Five-foot drifts in open, rural areas made roads impassable even to some off-road vehicles. Mail delivery was suspended in most areas for at least one day. For a few





Winter Storm

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ILLINOIS, South

days, many stores were out of certain items due to delayed deliveries. A state disaster declaration was issued for those counties generally from the Marion/Carbondale area east and south, including the Wabash Valley. Those areas received more snow than is normal for the entire winter. Specific preliminary snowfall reports from co-operative observers included: 14 inches at Anna, 13 inches at Carbondale and Shawneetown, 10 inches at Cairo, and 6 inches at Mount Vernon and Dix. Recovery efforts were slowed by gusty winds and bitterly cold arctic air, as low as 10 below zero on Christmas morning. M64LS

ILZ075>078-080>094

Jefferson - Wayne - Edwards - Wabash - Perry - Franklin - Hamilton - White - Jackson - Williamson - Saline - Gallatin - Union - Johnson - Pope - Hardin - Alexander - Pulaski - Massac

23 0000CST 1 0 Extreme Cold/Wind Chill 25 1200CST

Bitterly cold temperatures arrived in the wake of a paralyzing snowstorm. In Murphysboro, an 84-year-old woman died from hypothermia after venturing outdoors to locate her pet dog on the evening of December 22. The woman apparently became disoriented and collapsed from hypothermia. Although she was located about an hour after venturing outdoors from the assisted living facility, she was pronounced dead shortly after midnight on December 23. The low temperature on Christmas morning was 11 degrees below zero at Carbondale. Co-operative observers reported Christmas morning lows of 6 below at Grayville and 2 below zero at Cairo. Winds were light during the coldest weather, which reduced the wind chill hazard somewhat. F85OU

INDIANA, Southwest

INZ081>082-085>088

Gibson - Pike - Posey - Vanderburgh - Warrick - Spencer
22 0300CST 0
2000CST

Photo of State Route 168 about two miles west of Fort Branch, IN, where 20 inches of snow fell. Drifts were up to 5 feet. Photo courtesy of Charlie Kiesel. A new 24-hour snowfall record was set at Evansville. The official storm total of 22.3 inches paralyzed southwest Indiana.

A record-setting winter storm dumped from 17 to 22 inches of snow across southwest Indiana, closing interstates and shutting down most businesses near the peak of the Christmas shopping season. A 25-mile stretch of Interstate 64 from the Illinois state line to Evansville (the Interstate 164 exit) was closed for about 48 hours. The National Guard was mobilized to assist motorists along the interstate who were stranded in their vehicles overnight. About 100 motorists were transported to emergency shelters, including dozens taken to the Red Cross building in Evansville. Drifts up to 5 feet deep made many roads impassable. States of emergency were declared in Vanderburgh, Warrick, and Gibson Counties, where drivers were urged to stay off the roads. There were reports of plows and even a Humvee disabled in ditches and deep snow drifts. Most travel, including that by police and other emergency workers, was done in four-wheel drive vehicles. Two fatalities in Evansville were indirectly attributed to the snow. In both cases, elderly men suffered fatal heart attacks while shovelling snow. Mail delivery was suspended in most areas for at least one day. Gusty





December 2004 Time Local/ Path Length Path Number of Estimated Width Persons Damage INDIANA, Southwest north winds from 15 to 25 MPH caused blowing and drifting. There was a 3-hour lull in the snow during the early afternoon, otherwise visibility was frequently around one-quarter mile for over 24 hours. Snowfall rates averaged an inch per hour, with higher rates observed in thundersnow. The total of 22.3 inches measured at the Evansville Airport established a new 24-hour snowfall record. This single storm total resulted in the second snowiest December on record at Evansville, where records date back to 1897. Preliminary snowfall reports from co-operative observers included 18.5 inches at Boonville (Warrick County) and 16.7 inches at Stendal (Pike County). Recovery efforts were slowed by gusty winds and bitterly cold arctic air, as low as 10 below zero on INZ081>082-085>088 Gibson - Pike - Posey - Vanderburgh - Warrick - Spencer 0000CST **Extreme Cold/Wind Chill** 23 25 Bitterly cold temperatures arrived in the wake of a paralyzing snowstorm. The low temperature on Christmas morning was 11 degrees below zero at Evansville, which set a record for the date. This was the coldest temperature since January of 1994. It was four degrees shy of the coldest December temperature on record at Evansville, where records date back to 1897. **KENTUCKY**, Southwest KYZ021 Muhlenberg 1800CST 02 14 1800CST Minor flooding of the Green River occurred twice during the first half of the month. At the Paradise Fossil Plant near Drakesboro, where flood stage is 380 feet, the river crested at 381.3 feet on the 4th. The second crest was 385.3 feet on the 11th. Both crests resulted in flooding of primarily bottomland fields and woodlands. KYZ004>005-007 Ballard - Mccracken - Livingston 1200CST Flood Minor flooding of the Ohio River occurred, mostly from the confluence with the Tennessee River at Paducah south to the Mississippi River. Primarily bottomland fields and woodlands were flooded. A few parks and river access roads were flooded, including one state-maintained road, Kentucky 787 from mile post 0 to 1 in McCracken County. The river crested above flood stage twice at Paducah, where flood stage is 39 feet. The first crest was 42.2 feet on the 10th. The second crest was 41.8 feet on the 16th. The river barely rose above the 40-foot flood stage at Smithland, cresting at 40.1 feet on the 10th. KYZ001>002 Fulton - Hickman Minor flooding of the Mississippi River occurred. At New Madrid, Missouri, where flood stage is 34 feet, the river crested at 34.4 feet on the 12th. The flooding primarily affected bottomland fields and a few river access roads. Two state-maintained roads were closed: Kentucky 123 in Hickman County from mile post 14 to 16, and Kentucky 1354 in Fulton County from mile post 0 to 0.4. KYZ001>022 Fulton - Hickman - Carlisle - Ballard - Mccracken - Graves - Livingston - Marshall - Calloway - Crittenden - Lyon - Trigg -

Caldwell - Union - Webster - Hopkins - Christian - Henderson - Daviess - Mclean - Muhlenberg - Todd

0

Winter Storm

0300CST 0300CST





Time Path Path Number of Estimated December 2004

Local/ Length Width Persons Damage

Local (Miles) (Verds) Killed Injured Property Crops Character of Storm

KENTUCKY, Southwest



Collapsed greenhouses just off Interstate 24 in Paducah. The weight of a record-breaking snowfall proved too much for several structures across western Kentucky. The total snowfall of 14.2 inches at Paducah set a 24-hour snowfall record. Photo courtesy of Beau Dodson.

A record-setting winter storm dumped up to 18 inches of snow across western Kentucky, closing Interstate 24 and shutting down most businesses near the peak of the Christmas shopping season. The heaviest snowfall, from 12 to 18 inches, occurred along and north of a line from Paducah to Princeton (Caldwell County) to Greenville (Muhlenberg County). Closer to the Tennessee border, the precipitation was slower to change from sleet and freezing rain to snow, which greatly reduced snowfall amounts. From 3 to 9 inches of sleet and snow, along with up to a quarter inch of ice accumulation, was reported from Fulton and Murray, eastward across Hopkinsville, to Elkton. Where sleet and freezing rain lowered accumulations, travel conditions were no better than elsewhere. Travel was extremely difficult due to near-blizzard conditions. A 29-mile stretch of Interstate 24 was shut down in both directions after snow drifts made it impassable. The governor declared a state of emergency. The National Guard was mobilized to assist over 1,000 motorists who were stranded for as long as 24 hours along that stretch of highway, which extended from Trigg County across Caldwell and Lyon Counties. Other sections of the highway were closed for shorter periods of time. Hundreds of travelers were taken to shelters at area high schools and churches. Hotels were totally full from the Tennessee state line to the Kentucky Lake region. The gridlock on I-24 began when a semi overturned near Cadiz at mile marker 59. As vehicles waited for the wreck to be cleared, deepening snow drifts made the highway impassable, even to some plows and graders. State plowing was halted for hours in Fulton and Hickman Counties due to near blizzard conditions. Numerous vehicles were abandoned on roads across western Kentucky. Gusty north winds from 15 to 25 MPH with a few gusts to 35 MPH caused blowing and drifting of snow, with drifts up to 5 feet reported. The snow fell in two waves, the first during the early and mid morning hours, and the second from mid-afternoon through about midnight. The early morning heavy snow produced 4 inches at Paducah. The second and more prolonged period of heavy snow dumped an additional 10 inches at Paducah. The total of 14 inches set a new 24-hour snowfall record at Paducah, and it was more than the normal 10 inches for the entire winter. Most travel, including that by police and other emergency workers, was done in four-wheel drive vehicles. Five-foot drifts in open, rural areas made roads impassable even to some off-road vehicles. National Guard humvees were used for emergency purposes. Mail delivery was suspended in most areas for at least one day. The weight of the snow caused several roofs to collapse, including that of a furniture store in Paducah, a lumber company in Benton, and two commercial buildings in Owensboro. At a marina on Kentucky Lake, a 50-foot dock collapsed due to the weight of the snow and ice, damaging or destroying some of the 46 boats sheltered there. One fatality was indirectly attributed to the storm. A 64-year-old man died of a heart attack while shovelling snow at his home in the community of Folsomdale in Graves County. The Owensboro and Paducah Airports were closed for about a day. Isolated power outages occurred, primarily in areas that received the most sleet and ice, from Muhlenberg County to Christian, Todd, and Trigg Counties. Around 1,000 homes were without power in Todd County. For a few days, many stores were out of certain items due to delayed deliveries. Preliminary snow depth reports from co-operative observers included: 16 inches at Owensboro, 10 inches on the north side of Mayfield and at Dawson Springs, 6 inches at Canton (Trigg County), and 3 inches at Hopkinsville. Recovery efforts were slowed by gusty winds and bitterly cold arctic air, as low as 8 below zero on Christmas morning.





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KENTUCKY, Southwest

KYZ001>022

Fulton - Hickman - Carlisle - Ballard - Mccracken - Graves - Livingston - Marshall - Calloway - Crittenden - Lyon - Trigg - Caldwell - Union - Webster - Hopkins - Christian - Henderson - Daviess - Mclean - Muhlenberg - Todd

23 0000CST 25 1200CST 0 25K

Extreme Cold/Wind Chill

Bitterly cold temperatures arrived in the wake of a paralyzing snowstorm. This arctic outbreak resulted in burst pipes, dead car batteries, and many inconveniences. Two pipes burst in the Lyon County courthouse, flooding the building with three inches of water. Two water main breaks were reported in Dawson Springs, a small town near the Hopkins and Caldwell County line. A record low temperature of 8 degrees below zero was set at Paducah on Christmas morning. This was the coldest temperature at Paducah since January of 1994. The Henderson co-operative observer measured a low of 12 below zero on Christmas. Winds were light during the coldest weather, reducing the wind chill hazard somewhat.

MISSOURI, Southeast

MOZ114

New Madrid

11 1300CST

0

Flood

Minor flooding of the Mississippi River occurred below the confluence with the Ohio River. At New Madrid, where flood stage is 34 feet, the river crested at 34.4 feet on the 12th. The flooding primarily affected bottomland fields and a few river access roads

MOZ076-086>087-100-107>112-114 Perry - Bollinger - Cape Girardeau - Wayne - Carter - Ripley - Butler - Stoddard - Scott - Mississippi - New Madrid

22 0200CST 23 0100CST) (

Winter Sto

A major winter storm dumped from 6 to 14 inches of snow across most of southeast Missouri, closing interstates and shutting down most businesses near the peak of the Christmas shopping season. The axis of heaviest snowfall, from 10 to 14 inches, occurred from Poplar Bluff east to Cape Girardeau and Sikeston. South of a Sikeston to Poplar Bluff line, the precipitation was slow to change from a mixture of rain and sleet to snow, which reduced amounts there to 5 to 8 inches. In Mississippi County, which received about a foot, the sheriff department reported most of their vehicles were disabled in snow drifts. The ramps at the junction of Interstates 55 and 57 were blocked by vehicles. I-55 was reportedly closed for a time in Scott and New Madrid Counties. At least two dozen motorists were sheltered at a fire station in Portageville. Gusty north winds from 15 to 25 MPH caused blowing and drifting. The snow fell in two waves, the first during the late night and early morning hours, and the other from mid-afternoon through about midnight. The early morning burst produced an estimated 4 inches of snow at Cape Girardeau. The second and more prolonged period of heavy snow dumped an additional estimated 10 inches at Cape Girardeau. Preliminary snowfall reports from co-operative observers included: 6 inches at Doniphan and Perryville (both located on the northern and western fringe of the heavy snow shield) and 10 inches at Marble Hill. Recovery efforts were slowed by gusty winds and bitterly cold arctic air, as low as 10 below zero on Christmas morning.

MOZ076-086>087-100-107>112-114 Perry - Bollinger - Cape Girardeau - Wayne - Carter - Ripley - Butler - Stoddard - Scott - Mississippi - New Madrid

23 0000CST 25 1200CST 0 0

Extreme Cold/Wind Chill

Bitterly cold temperatures arrived in the wake of a paralyzing snowstorm. The low temperature on Christmas morning was 10 below zero at the Cape Girardeau airport, located south of the city along the Scott/Cape Girardeau County line. A co-operative observer in downtown Cape Girardeau reported a low of 4 above zero. At Poplar Bluff, a low of 4 below zero occurred at the airport east of town. The Poplar Bluff co-operative observer recorded a low of 1 above zero. Co-operative observers reported a low of 8 below zero in Doniphan (Ripley County) and 0 in New Madrid.