Winter Storm

December 22-23, 2004

2004

Heavy snow early in the storm in Harrison County brings traffic to a crawl along Interstate 64 in southern Indiana.
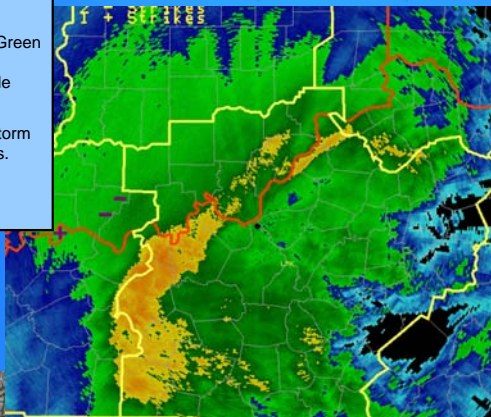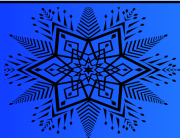*Courtesy of Randy West*

The joyful holiday season of 2004 was thrown awry when mother nature threw in a "large monkey wrench" just before Christmas. Winter Storm 2004 hammered the nation's heartland from the Great Lakes to the Texas Panhandle with heaping amounts of snow and ice. This historic event was the biggest winter phenomenon in the Louisville, Kentucky area since the February 1998 and January 1994 major snowstorms.

Winter Storm 2004 pounded the Ohio Valley with two heavy bursts of snow and ice separated by only a few hours. Snow fell in southern Indiana at rates approaching 4 inches per hour and totaling up to 30 inches in some areas. In parts of Louisville, up to 6 inches of sleet accumulated with 6-12 inches total of snow and sleet. In some locations across central Kentucky, solid ice layers up to 1-1.5 inches thick blanketed homes, trees, and roadways. Uncommon thunder-snow and thundersleet were observed during this extraordinary winter storm. To top it all off, bitter cold temperatures as low as -13°F greeted area residents Christmas morning. The December 2004 winter storm is one residents in the Ohio Valley will not soon forget!

Storm Impacts

• Very heavy snow accumulations and snow drifts up to 5 feet made travel extremely difficult and shut down interstates in parts of the Ohio River Valley: I-64 (3 days) and I-65 (12 hours).

• Areas of 1-1.5 inches of ice from Bowling Green to Bardstown caused power outages and tree/structural roof damage. 33,000 Louisville area homes were without power for 2 days.

• Local businesses felt the sting of Winter Storm 2004; some lost up to 80% of expected sales. Large communities saw profit losses up to $100,000.

Courtesy of Illinois State Water Survey

NWS Doppler radar reflectivity image showing a band of very heavy snow/sleet (yellow/orange) across parts of southern Indiana and central Kentucky. A few lightning strikes (+/-) were noted over southern Indiana (red line is Ohio River).
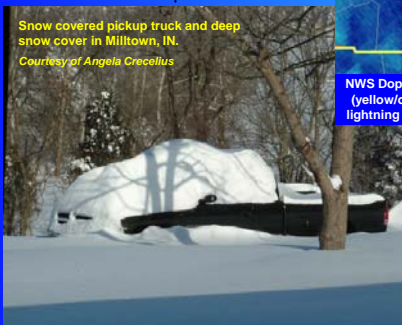

Large icicle at a home in southern Jefferson County, KY.
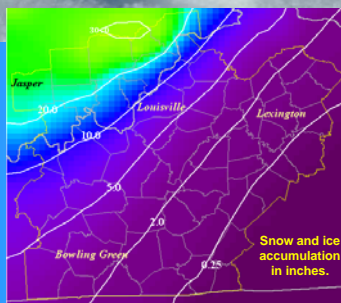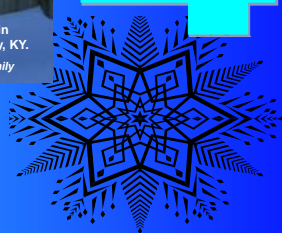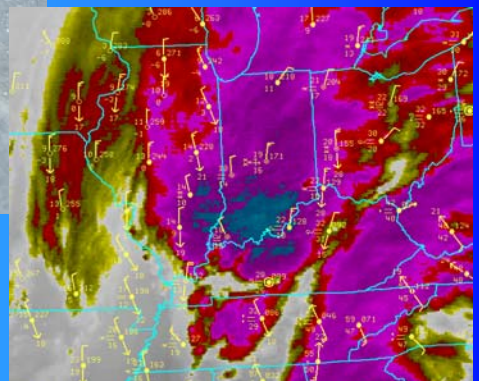*Courtesy of the Hoard Family*

Snow covered pickup truck and deep snow cover in Milltown, IN.
Courtesy of Angela Crecelius

Ruler showing 24 inches of snow at a location in southern Indiana.
Courtesy of Angela Crecelius

Storm Totals

County	State	Accumulation	Precipitation Type
Washington	IN	32 inches	Snow
Orange	IN	30 inches	Snow
Scott	IN	29 inches	Snow
Harrison	IN	20 inches	Snow
Hancock	KY	17-19 inches	Snow
Trimble	KY	12 inches	Snow
Henry	KY	9 inches	Snow/Sleet
Grayson	KY	6 inches	Snow/Sleet
Scott	KY	1/2+ inch	Ice
Harrison	KY	1/2+ inch	Ice
Mercer	KY	1/2+ inch	Ice

Snow and ice accumulation in inches.

Enhanced infrared satellite image showing deep-layered clouds (purple/blue) producing heavy snow and sleet over southern Indiana and central Kentucky. Surface observations plotted on top of the image indicated a strong cold front over eastern Kentucky and middle Tennessee with very cold air west of the front.