The intense winter storm and subsequent frigid temperatures of January 16-19, 1994 brought record-breaking snowfall across the northern half of Kentucky and southern Indiana, blanketing much of the area in well over a foot of snow. A few locations received more than 20 inches! During the evening of the 16th, freezing rain fell, but changed to heavy snow around midnight in Louisville, and continued until the morning of the 17th. In less than 12 hours, snowfall ranged from one to two feet in a narrow band across northern Kentucky, with isolated amounts up to two feet east of Louisville. The city of Louisville itself received 15.9 inches, which set a record.

At the storm’s height, a relatively rare phenomenon called thunder-snow occurred (embedded within the yellow color in the 3:47 am EST radar image at right). In such events, snow falls heavily. Cloud-to-ground lightning strikes often do not occur, but lightning flashes do, along with muffled rumbles of thunder through the heavy snow.

Follow the storm, a bitterly cold Arctic air mass surged out of Canada. Both Indiana and Kentucky set new records for lowest observed temperatures. Indiana reached -36°F, breaking its record by one degree. Kentucky’s old record of -34°F was shattered in Shelbyville (Shelby County) at -37°F. The deep, fresh snow cover contributed to the frigid temperatures.

FROZEN
January 16-19, 1994

STORM IMPACTS

- Kentucky Governor shut down five interstate highways in Kentucky for five days
- Hundreds of vehicles stranded along highways
- Two deaths in Kentucky from the storm
- 42,000 customers without power for an entire week

- "It took almost a week for the city and state to clear roads and for life to return to normal."
  - Larry Dunn, Flight Dispatcher (UPS)

- "If you’re in Louisville, you’re stuck, unless you’ve got skis."
  - Charles Bogart, DES

- Counties (46) in Kentucky declared federal disaster areas.

Frigid temperatures plagued Louisville and the Ohio River.

A thick blanket of heavy snow snarled traffic on highways.

The storm affected flight operations at United Parcel Service in Louisville. A UPS plane is de-iced, surrounded by mounds of snow.

NWS Louisville student volunteer: Hilarie Hahus, Purdue University