Western Kentucky Hailstorms and Tornado on April 20, 2003 (Easter Sunday)

Severe thunderstorms affected parts of western Kentucky and southwest Indiana during the afternoon and evening of April 20. Severe Thunderstorm Watches 138 and 139 were issued for those areas between 12:20 and 2:00 P.M. The storms formed ahead of a cold front as afternoon sunshine warmed temperatures to near 80 degrees. The atmosphere was quite humid, with dew points in the middle 60's.

Large hail photo above was taken on north side of Murray, Kentucky, courtesy of Shawn Dunnaway.

Many occurrences of dime to quarter size hail were reported. There were three particularly significant hailstorms and one tornado.

- **Around 3:40 P.M., a tornado rated F-1 intensity occurred near Crofton in Christian County, Kentucky. Several barns were destroyed, windows were blown out of businesses, and roofs of homes were damaged. There were numerous large trees uprooted. Golf-ball size hail accompanied the damaging winds. A damage photo and radar images of the storm are shown below. A Tornado Warning was issued for Christian County. The storm maintained strong tornadic signatures as it continued east across extreme southern Muhlenberg County, and a Tornado Warning was later issued for that county.**

...PRELIMINARY STORM DAMAGE ASSESSMENT FOR CHRISTIAN COUNTY STORM NEAR CROFTON KENTUCKY...

A STORM DAMAGE SURVEY TEAM WAS DISPATCHED TO THE AREA NEAR CROFTON KENTUCKY TO HELP DETERMINE THE EXACT CAUSE AND DEGREE OF THE DAMAGE RECEIVED IN THE AREA FROM THE PREVIOUS NIGHT'S STORM. THE FOLLOWING REPRESENTS PRELIMINARY INFORMATION...AS THIS INVESTIGATION IS ONGOING.

* EVENT DATE: 20 APR 2003

* EVENT TYPE: F1 TORNADO...AND STRAIGHT LINE THUNDERSTORM GUSTS.

* ESTIMATED MAX WIND SPEED:

    TORNADO: 80 MPH
    STRAIGHT LINE GUSTS: RANGING FROM 55 TO 70 MPH.

* ESTIMATED TOUCHDOWN TIME OF TORNADO: APPROXIMATELY 339 PM CST

* TORNADO DAMAGE AREA: APPROXIMATELY 50 YARDS WIDE AND 150 YARDS LONG. TORNADO DAMAGE WAS CONFINED TO A HEAVILY WOODED AREA APPROXIMATELY 1/2 MILE WEST OF CROFTON ON HWY 1348 JUST NORTH OF THE JUNCTION WITH HWY 800.

* WIND GUST DAMAGE AREA: DAMAGE FROM STRAIGHT LINE WINDS WAS FOUND IN A BROAD CORRIDOR THROUGH THE CITY OF CROFTON PAST AND ON BOTH SIDES OF THE TORNADO DAMAGE AREA. THIS PHENOMENON IS KNOWN AS A FLANKING GUST PATTERN AND IS COMMONLY FOUND IN SEVERE STORMS CONTAINING TORNADOES. DAMAGE WAS MORE COMMON ON THE WEST SIDE OF TOWN FROM POOLE MILL ROAD NEAR HIGHWAY 800 TO JUST PAST HWY 41 AND OLD MADISONVILLE ROAD.

* DAMAGE: NUMEROUS TREES WERE UPROOTED AND PUSHED OVER ONTO NEARBY NON RESIDENCE STRUCTURES SUCH AS FENCES. COUNTY EMERGENCY MANAGEMENT OFFICIALS REPORT THAT TWO BARNS WERE DAMAGED AND A LARGE PLATE GLASS WINDOW WAS BROKEN IN A STORE.

* DAMAGE COST: TBD

* INJURIES: NONE

* FATALITIES: NONE

* IT SHOULD BE NOTED THAT THE TORNADO DISSIPATED BEFORE IT REACHED CROFTON ITSELF...AND DAMAGE THAT IS SEEN IN THE CITY WAS DUE TO THE THUNDERSTORM GUSTS THAT OCCURRED AFTER THE TORNADO EVENT.

FURTHER INFORMATION WILL BE PROVIDED AS IT BECOMES AVAILABLE.

Pictures of the F1 tornado damage:

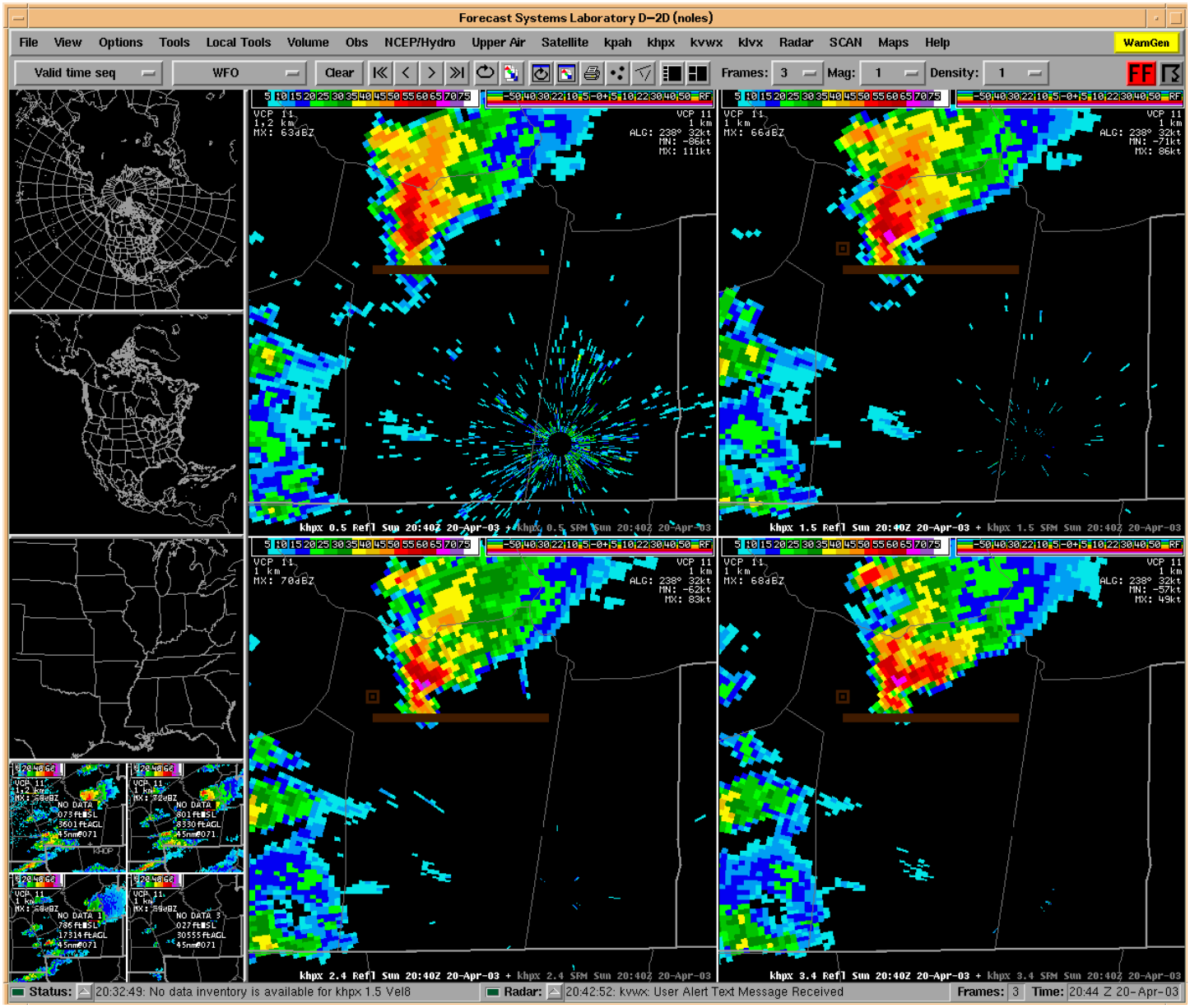





- **The second major event occurred in Murray, Kentucky between 5 and 5:15 P.M. Hail up to the size of golf balls covered the ground in parts of Murray.**
- **At about 5:10 P.M., a severe storm crossed Henderson County, Kentucky, producing large hail. Quarter size hail fell in Henderson, with larger hail likely in southern Henderson County. Strong rotation was indicated within the storm, and a Tornado Warning was issued for Henderson County.**
- **Shortly after 6:30 P.M., parts of Daviess County and the city of Owensboro, Kentucky were struck by a hailstorm. Hailstones were reportedly up to 2 inches in diameter, which is slightly bigger than golf balls. The following photos of hail damage are courtesy of Richard Payne, director of Daviess County Emergency Management. The photos were taken near Stanley, Kentucky, which is just northwest of Owensboro.**

RADAR IMAGE OF THE CROFTON, KY STORM

This is a "4-panel" image, showing the same storm at four different elevation angles of the radar beam. The horizontal brown bar that passes near the southern edge of the storm is for reference, and is not part of the radar display. The hook-shaped appendage on the southern side of the storm, indicative of very strong rotation, is unmistakable, especially in the bottom two panels. The time stamp on this image from the Fort Campbell / Hopkinsville radar is 3:40 P.M. CDT (2040 GMT).



RADAR IMAGE OF THE SAME STORM as it crossed Muhlenberg County

The hook-shaped appendage on the southern side of the storm, indicative of very strong rotation, is unmistakable, especially in the bottom two panels