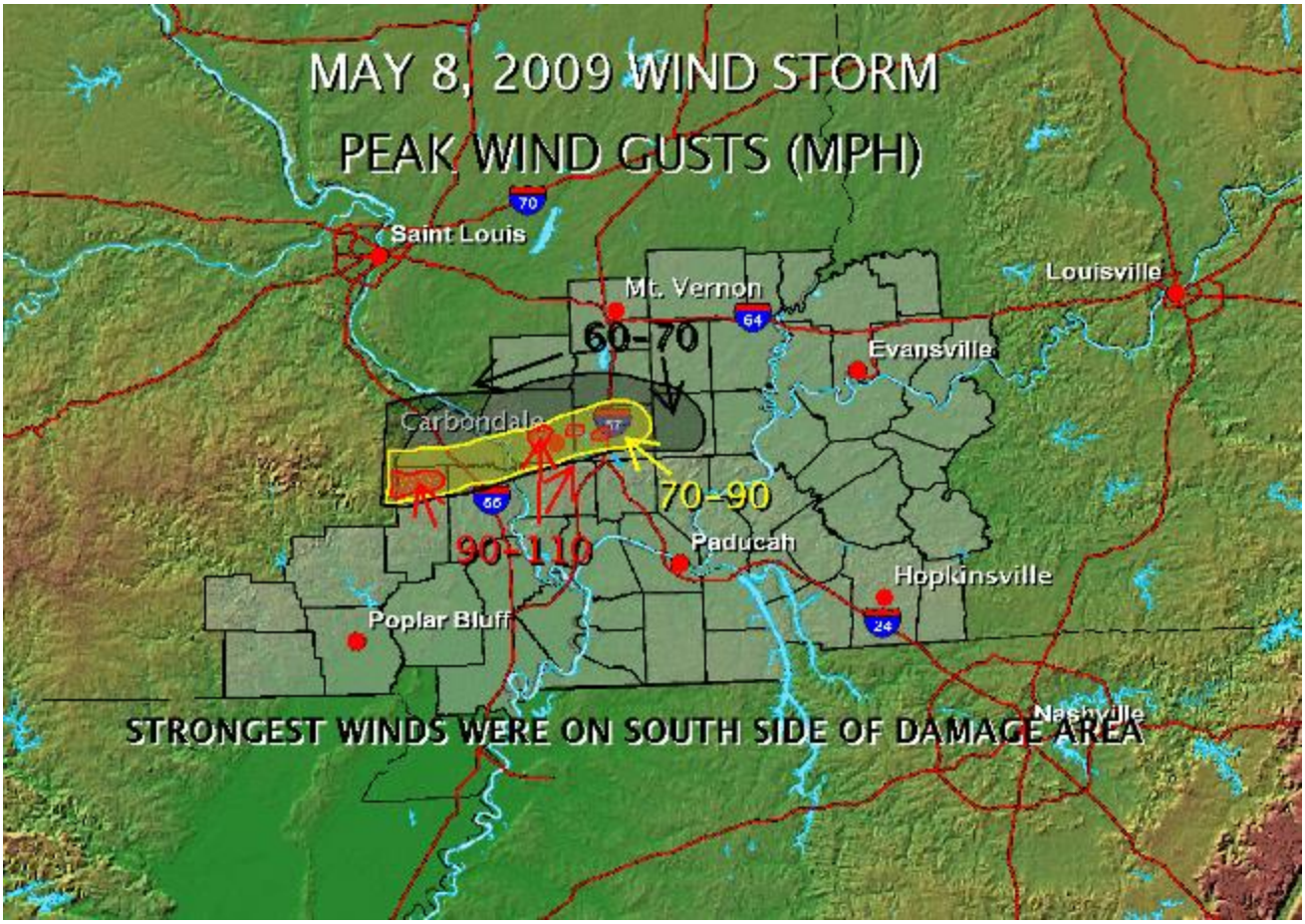
Southern Illinois Windstorm - May 8, 2009

On the night of May 8, 2009, widespread damaging winds from 70 to 90 mph raked a 20 to 30-mile wide corridor of through southern Illinois. Widespread power outages lasted for days, and over 10,000 structures were damaged in just Williamson County alone. This article contains information on the type of wind storm, radar images, photos, preliminary storm reports and damage survey results, and information regarding a comparable historical derecho in southern Illinois.



What was it?

First, we may want to start out with what it was not. It was not an inland hurricane, although it may have felt like one. A hurricane is tropical in nature; this system that we experienced was convective. It was not a large tornado. Although there were several small tornadoes embedded within the widespread damaging winds.

The storm system is classified as a ***Derecho***. If you want to learn more about derechos, there is a nice web site put together by the Storm Prediction Center. This derecho would probably be determined to be a progressive derecho.

This was not your typical derecho. Often on these types of systems in the northern hemisphere, a bookend vortex, or comma head develops on the north side of the system. The comma head usually acts like a large paddle wheel on a boat and helps to focus strong winds in behind the bowing squall line. A large portion of the damaging winds occurred on the southwest and southern end of the comma head. Although it is still under study, it appears that at least some of the tornadoes in this case occurred with the comma head. This is not

unusual; in fact research work in the 1980s documented a case of a derecho that moved through central Illinois in which tornadoes were associated with the comma head.

The system that moved through on May 8 had an *unusually large bookend vortex*. Numerical simulations completed in the early 1990s and some observational studies documented comma head vortices were on average 12 nm in diameter. The comma head on the May 8th storm was 30 to 40 nm in diameter. In fact, this is the largest bookend vortex that some experts have seen in their careers. This will be the subject of more in-depth research for years to come.

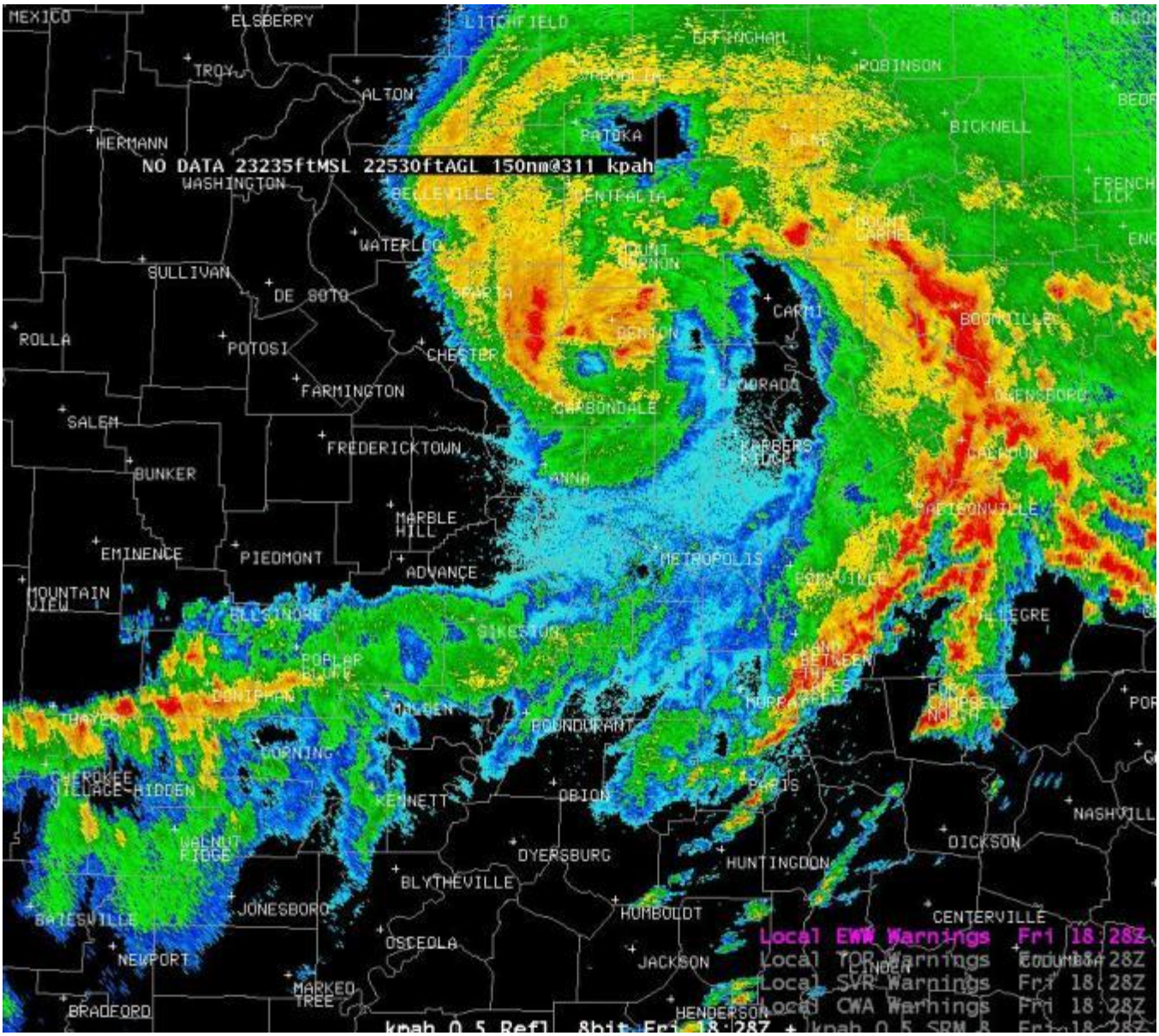
Overview

A widespread damaging wind event with isolated embedded tornadoes occurred in southern Illinois and parts of southeast Missouri on Friday, May 8. Peak wind gusts were measured ***over 80 mph*** at Marion and Carbondale, IL. The peak gust recorded by the automated system at the Carbondale airport was 81 mph before the system failed. An observer at the airport visually observed a separate anemometer located on the rooftop reach 106 mph. The automated system measured a sustained wind of 68 mph before failing.

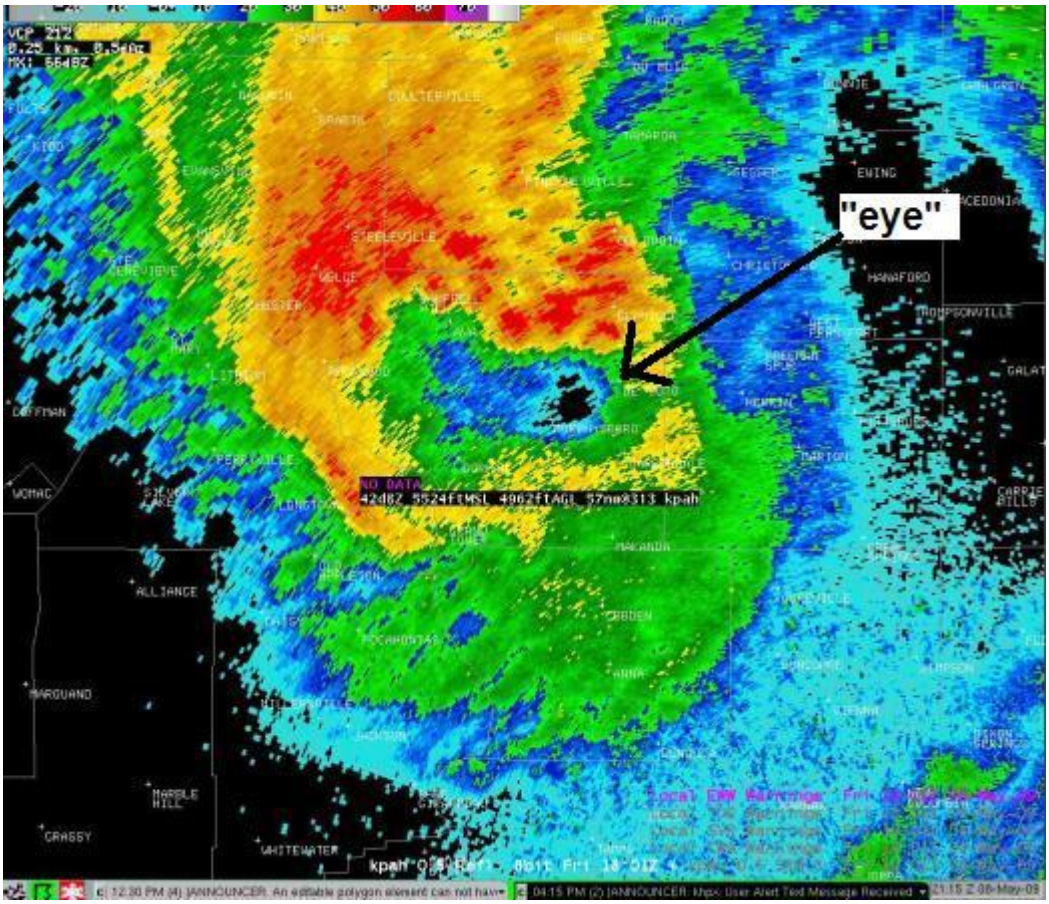
- ***Extensive tree and power line damage*** occurred in the Murphysboro, Carbondale, and Marion areas of southern Illinois and Perry and Bollinger Counties of southeast Missouri. Numerous structures were damaged in the Marion, Carbondale, and Murphysboro areas. While injuries were reported, an approximate count was not available. One fatality occurred in Jackson County when a tree fell on a home, causing an elderly man to fall to his death.
- State disaster declarations were granted for Jackson, Williamson, and Franklin Counties. Curfews and states of emergency were declared locally.
- The Williamson County airport near Marion reported a peak gust of 86 mph. There was extensive damage at the airport, including hangar buildings.
- Wind damage extended eastward into the Harrisburg area (Saline County). The system weakened before exiting southern Illinois.
- Damage surveys were conducted on Saturday, Monday, and Tuesday.
- The damaging winds were associated with the "comma head" of a bow echo. The comma head maintained unusually strong intensity after the bow echo began to dissipate.

Radar Images:

Radar image of the "eye" feature, which developed in the center of the comma head. The "eye" is visible as the light blue center surrounded by heavier echoes. This feature is located just north of Carbondale (near center of photo and due east of Farmington, MO). Image taken at 1:28 P.M. CDT.



Radar image of the "eye-like" center, taken at 12:57 P.M. The center was over Murphysboro in this image.



Storm Reports:

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PRELIMINARY LOCAL STORM REPORT...SUMMARY
NATIONAL WEATHER SERVICE PADUCAH KY
506 PM CDT FRI MAY 08 2009

..TIME...    ...EVENT...       ...CITY LOCATION...      ...LAT.LON...
..DATE...    ....MAG....       ..COUNTY LOCATION..ST..  ...SOURCE....
             ..REMARKS..

1025 AM      TSTM WND GST      5 E DONIPHAN             36.62N 90.73W
05/08/2009   E60.00 MPH        RIPLEY              MO   NWS EMPLOYEE

1029 AM      TSTM WND GST      DONIPHAN                 36.62N 90.82W
05/08/2009   M79.00 MPH        RIPLEY              MO   COUNTY OFFICIAL

1030 AM      TSTM WND DMG      DONIPHAN                 36.62N 90.82W
05/08/2009                     RIPLEY              MO   COUNTY OFFICIAL

             NUMEROUS TREES DOWN IN RIPLEY COUNTY. 2 MAIN BUILDINGS IN
             DOWNTOWN DONIPHAN LOST THEIR ROOFS. TIME ESTIMATED.
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1030 AM	TSTM WND DMG	DONIPHAN		36.62N 90.82W
05/08/2009		RIPLEY	MO	EMERGENCY MNGR

A TRAILER HAS A TREE THROUGH IT ON COUNTY HIGHWAY Y. NUMEROUS POWER OUTAGES

1050 AM	TSTM WND DMG	1 S POPLAR BLUFF		36.75N 90.41W
05/08/2009		BUTLER	MO	LAW ENFORCEMENT

*** 2 FATAL *** MISSOURI HIGHWAY PATROL REPORTED A TREE FELL ON A CAR...THE CAR CAUGHT ON FIRE AND 2 PEOPLE INSIDE WERE KILLED. LOCATION WAS ONE MILE SOUTH OF POPLAR BLUFF ON HIGHWAY 53. TIME APPROXIMATE.

1130 AM	TSTM WND DMG	DONGOLA		37.36N 89.16W
05/08/2009		UNION	IL	EMERGENCY MNGR

TRAILERS DAMAGED ON UNION/PULASKI COUNTY LINE. MANY TREES AND POWERLINES DOWN

1131 AM	FUNNEL CLOUD	PINCKNEYVILLE		38.08N 89.38W
05/08/2009		PERRY	IL	COUNTY OFFICIAL

COUNTY OFFICIAL REPORTED A FUNNEL CLOUD NEAR HWY 13 AND HWY 127...NEAR SHADY OAK ROAD. THE FUNNEL CLOUD HAS NOW LIFTED.

1137 AM	TORNADO	7 S PINCKNEYVILLE		37.98N 89.38W
05/08/2009		PERRY	IL	LAW ENFORCEMENT

TORNADO TOUCHED DOWN BRIEFLY AND WENT RIGHT BACK UP

1139 AM	HAIL	HERRIN		37.80N 89.03W
05/08/2009	E1.75 INCH	WILLIAMSON	IL	TRAINED SPOTTER
1144 AM	HAIL	HERRIN		37.80N 89.03W
05/08/2009	E1.75 INCH	WILLIAMSON	IL	EMERGENCY MNGR
1144 AM	HAIL	COLP		37.81N 89.08W
05/08/2009	E1.75 INCH	WILLIAMSON	IL	LAW ENFORCEMENT
1151 AM	TORNADO	1 S RADDLE		37.76N 89.59W
05/08/2009		JACKSON	IL	LAW ENFORCEMENT

TORNADO ON THE GROUND IN A FIELD ON INDIAN RIDGE ROAD

1201 PM	HEAVY RAIN	MARION		37.73N 88.94W
05/08/2009	E0.00 INCH	WILLIAMSON	IL	EMERGENCY MNGR

PONDING OF WATER THROUGHOUT MARION. VISIBILITY OF 1 BLOCK

AT TIMES DUE TO HEAVY RAIN

1202 PM	FLASH FLOOD	PINCKNEYVILLE		38.08N 89.38W
05/08/2009		PERRY	IL	TRAINED SPOTTER

WATER OVER ROADWAYS. THREE QUARTERS OF AN INCH OF RAINFALL IN LESS THAN THIRTY MINUTES.

1202 PM	FLASH FLOOD	MARION		37.73N 88.94W
05/08/2009		WILLIAMSON	IL	TRAINED SPOTTER

REPORTED PONDING OF ROADS ACROSS THE CITY. VISIBILITY WAS DOWN TO ONE BLOCK.

1223 PM	FLASH FLOOD	SESSER		38.09N 89.05W
05/08/2009		FRANKLIN	IL	TRAINED SPOTTER

WATER OVER ROADS IN TOWN.

1223 PM	FLASH FLOOD	DU QUOIN		38.00N 89.24W
05/08/2009		PERRY	IL	TRAINED SPOTTER

FLASH FLOODING ON US ROUTE 51 IN TOWN AND ON GREENSMARKET RD IN RURAL PERRY COUNTY.

1230 PM	TSTM WND DMG	MILLHEIM		37.62N 89.89W
05/08/2009		PERRY	MO	LAW ENFORCEMENT

MACHINE SHED DESTROYED

1235 PM	TSTM WND DMG	PATTON JUNCTION		37.46N 90.03W
05/08/2009		BOLLINGER	MO	EMERGENCY MNGR

A LOT OF STRUCTURAL DAMAGE NORTH AND SOUTH ALONG HIGHWAY 72. ALSO...NUMEROUS TREES AND POWER LINES DOWN

1250 PM	TSTM WND DMG	OAK RIDGE		37.50N 89.73W
05/08/2009		CAPE GIRARDEAU	MO	EMERGENCY MNGR

NUMEROUS TREES AND POWER LINES DOWN. EMA DEPUTY DIRECTORS HOME HAS PANELING BLOWN OFF WALL AND WINDOWS ARE BLOWN OUT.

1252 PM	TSTM WND DMG	GRAND TOWER		37.64N 89.50W
05/08/2009		JACKSON	IL	EMERGENCY MNGR
0100 PM	TSTM WND GST	GORHAM		37.72N 89.48W
05/08/2009	E70.00 MPH	JACKSON	IL	LAW ENFORCEMENT
0112 PM	TORNADO	ELKVILLE		37.91N 89.24W

05/08/2009 JACKSON IL EMERGENCY MNGR

TORNADO REPORTED ON GROUND BY SHERIFFS DEPARTMENT DEPUTIES.

0120 PM TSTM WND DMG GRAND TOWER 37.64N 89.50W
05/08/2009 JACKSON IL EMERGENCY MNGR

WIDESPREAD WIND DAMAGE. NUMEROUS TREES...POWERLINES AND SOME STRUCTURAL DAMAGE IN GRAND TOWER...MURPHYSBORO...VERGENNES AND GORHAM

0125 PM TSTM WND DMG CARBONDALE 37.72N 89.22W
05/08/2009 JACKSON IL EMERGENCY MNGR

MULTIPLE INJURIES. CARBONDALE VIRTUALLY IMPASSABLE DUE TO DEBRIS. WIDESPREAD STRUCTURAL DAMAGE. NUMEROUS TREES AND POWERLINES DOWN. ROOF COLLAPSE ON ONE SCHOOL.

0125 PM TSTM WND GST CARBONDALE 37.72N 89.22W
05/08/2009 M106 MPH JACKSON IL TRAINED SPOTTER

MEASURED AT CARBONDALE AIRPORT BY PRIVATE BACKUP ANEMOMETER.

0132 PM TSTM WND GST DU QUOIN 38.00N 89.24W
05/08/2009 E80.00 MPH PERRY IL TRAINED SPOTTER

TREES DOWN

0138 PM TSTM WND GST MARION 37.73N 88.94W
05/08/2009 E88.00 MPH WILLIAMSON IL AWOS

REPORTED AT WILLIAMSON COUNTY AIRPORT

0142 PM TSTM WND GST MARION 37.73N 88.94W
05/08/2009 E82.00 MPH WILLIAMSON IL TRAINED SPOTTER

STRUCTURAL DAMAGE TO ALL BUILDINGS AT THE WILLIAMSON COUNTY AIRPORT

0145 PM TSTM WND GST ZEIGLER 37.90N 89.05W
05/08/2009 E70.00 MPH FRANKLIN IL TRAINED SPOTTER

0147 PM TSTM WND GST CARTERVILLE 37.76N 89.08W
05/08/2009 E80.00 MPH WILLIAMSON IL BROADCAST MEDIA

TV STATION OFF THE AIR WITH STRUCTURAL AND ROOF DAMAGE. NUMEROUS TREES DOWN

0150 PM	TSTM WND GST	HOPKINSVILLE		36.85N 87.49W
05/08/2009	E75.00 MPH	CHRISTIAN	KY	TRAINED SPOTTER

AT WESTERN STATE HOSPITAL

0215 PM	TSTM WND DMG	GALATIA		37.84N 88.61W
05/08/2009		SALINE	IL	TRAINED SPOTTER

MANY TREES AND POWERLINES DOWN

0215 PM	TSTM WND GST	HARRISBURG		37.74N 88.55W
05/08/2009	E90.00 MPH	SALINE	IL	LAW ENFORCEMENT

0230 PM	FLASH FLOOD	GREENVILLE		37.21N 87.18W
05/08/2009		MUHLENBERG	KY	PUBLIC

THREE TO FOUR FEET OF WATER FLOODED A FARM AND HORSES HAD TO EVACUATED.

0230 PM	FLASH FLOOD	CALHOUN		37.54N 87.26W
05/08/2009		MCLEAN	KY	EMERGENCY MNGR

WATER OVER MANY ROADS ALONG HIGHWAY 136

0230 PM	FLASH FLOOD	CENTRAL CITY		37.30N 87.13W
05/08/2009		MUHLENBERG	KY	EMERGENCY MNGR

MANY ROADS FLOODED IN POWDERLY AND CENTRAL CITY

0230 PM	FLASH FLOOD	DU QUOIN		38.00N 89.24W
05/08/2009		PERRY	IL	EMERGENCY MNGR

MANY RURAL ROADS ARE CLOSED DUE TO HIGH WATER

0245 PM	FLASH FLOOD	BENTON		38.01N 88.92W
05/08/2009		FRANKLIN	IL	EMERGENCY MNGR

WIDESPREAD FLOODING ACROSS MANY COUNTY ROADS

0245 PM	FLASH FLOOD	MOUNT VERNON		38.32N 88.91W
05/08/2009		JEFFERSON	IL	DEPT OF HIGHWAYS

HIGH WATER ACROSS MANY COUNTY ROADS

0253 PM	TSTM WND DMG	HARRISBURG		37.74N 88.55W
05/08/2009		SALINE	IL	LAW ENFORCEMENT

NUMEROUS TREES AND POWER LINES DOWN IN HARRISBURG, ELDORADO, CARRIER MILLS, GALATIA AND RALEIGH. TREE FELL ON HOUSE AND STRUCK GAS METER...GAS LEAKING IN GALATIA.

ROOF BLOWN OFF BUILDING IN CARRIER MILLS AND STRUCK GAS METER...GAS LEAKING. TREE FELL ON PROPANE TANK IN STONEFORT...GAS LEAKING. SEMI BLOWN OVER ON IL 34 NEAR HARRISBURG AIRPORT. DEPUTY REPORTED ESTIMATED 90 MPH WINDS NEAR HARCO WITH DEBRIS IN THE AIR. IL 34 CLOSED IN NUMEROUS LOCATIONS.PORTIONS OF US45 CLOSED NEAR LEDFORD.

0300 PM	FLASH FLOOD	POSEYVILLE		38.17N 87.78W
05/08/2009		POSEY	IN	TRAINED SPOTTER

RUNNING WATER OVER MOST ROADWAYS

0315 PM	FLASH FLOOD	EVANSVILLE		37.98N 87.54W
05/08/2009		VANDERBURGH	IN	EMERGENCY MNGR

SEVERAL ROADS CLOSED WITH WATER RISING. WATER RESCUES ARE BEING PERFORMED

0414 PM	FLASH FLOOD	5 SE EVANSVILLE		37.93N 87.48W
05/08/2009		VANDERBURGH	IN	TRAINED SPOTTER

15 HOUR STORM TOTAL OF THREE INCHES AT ANGEL MOUNDS. THIS REULTED IN EXTENSIVE FLOODING AND WATER RESCUES.

Damage Surveys

Photo of a brief tornado touchdown just north of Royalton, IL (Franklin Co.), courtesy of Ryan Buckingham. Leaves were observed in the rotation. This was a brief EF-0 tornado.

PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE PADUCAH KY
434 PM CDT TUE MAY 12 2009

...DAMAGE SURVEY RESULTS FOR TORNADO EVENT IN SOUTHERN ILLINOIS...

THE FOLLOWING IS THE DAMAGE ASSESSMENT FOR A TORNADO THAT OCCURRED FRIDAY MAY 8TH 2009 IN SOUTHERN ILLINOIS...IN FRANKLIN AND WILLIAMSON COUNTIES.

* EVENT DATE - FRIDAY MAY 8 2009
* EVENT TIME - APPROXIMATELY 245 PM TO 250 PM CDT
* EVENT TYPE - ***EF1 TORNADO***
* EVENT LOCATION - FROM 2 MILES SOUTH OF THOMPSONVILLE TO 7 MILES NORTHEAST OF CRAB ORCHARD
* PEAK WIND - 90 MPH
* AVERAGE PATH WIDTH - 150 YARDS
* PATH LENGTH - 5 MILES
* INJURIES - NONE
* FATALITIES - NONE
* DISCUSSION/DAMAGE...A SWATH OF DOWNED TREES WAS FOUND IN RURAL AREAS

SURVEYORS...SHANKLIN/SPODEN

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MAP of Franklin/Williamson County Tornado

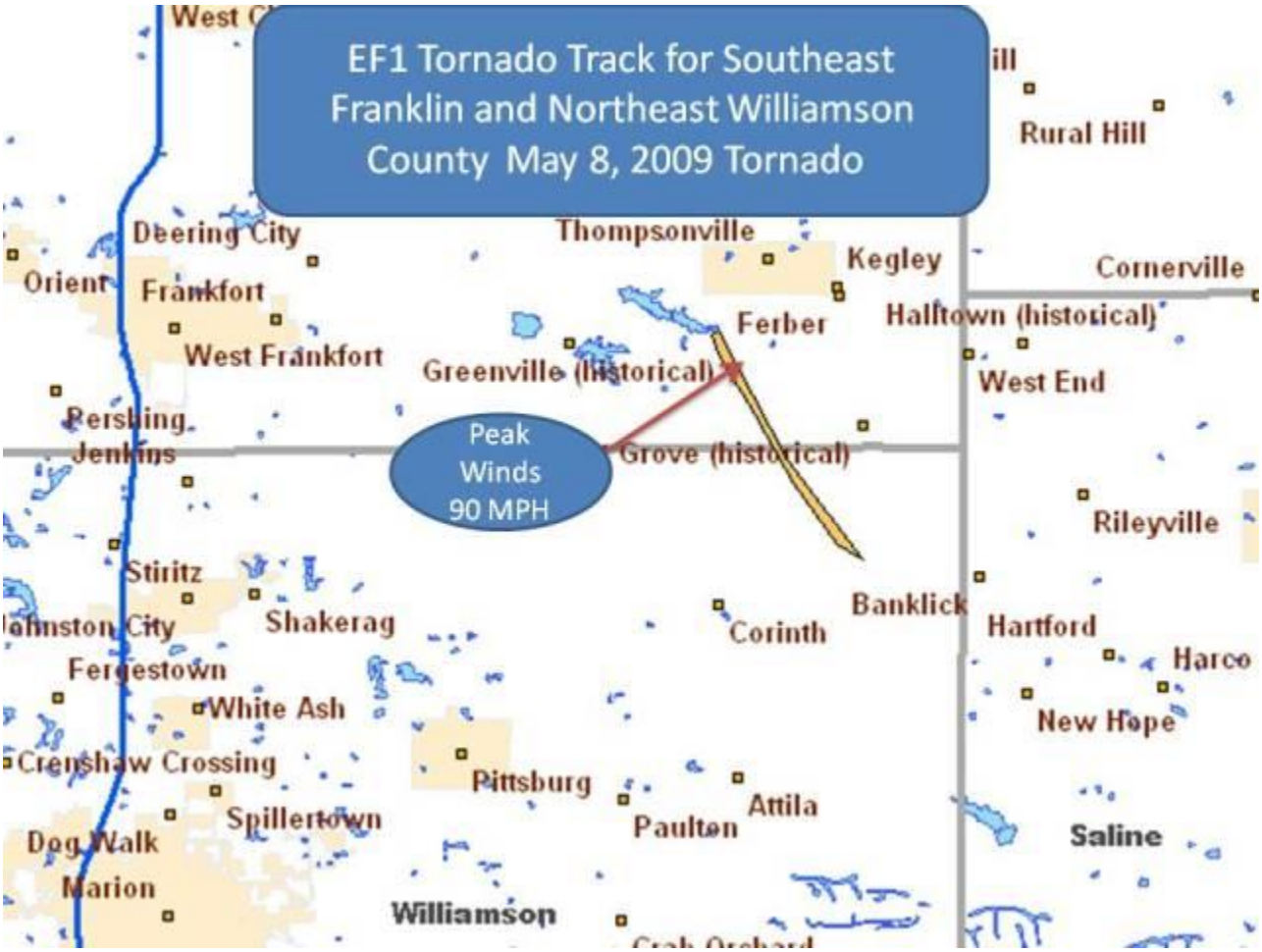

Photo of tree damage south of Thompsonville:

PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE PADUCAH KY
746 PM CDT SAT MAY 9 2009

...DAMAGE SURVEY RESULTS FOR A TORNADO TOUCHDOWN IN NORTHERN JACKSON COUNTY ILLINOIS ON MAY 8TH 2009...

THE FOLLOWING IS THE DAMAGE ASSESSMENT FOR A TORNADO TOUCHDOWN THAT OCCURRED FRIDAY MORNING...MAY 8TH 2009...IN NORTHERN JACKSON COUNTY ILLINOIS.

* EVENT DATE - FRIDAY MAY 8 2009
* EVENT TIME - APPROXIMATELY 11:30 AM CDT
* EVENT TYPE - ***EF1 TORNADO***
* EVENT LOCATION - NORTHERN JACKSON COUNTY...FROM 10 WSW DU QUOIN TO 7 WSW DU QUOIN...RIGHT ON THE JACKSON IL/PERRY IL COUNTY BORDER.
* PEAK WIND - 95 MPH
* AVERAGE PATH WIDTH - 100 YARDS
* PATH LENGTH - 3 MILES
* INJURIES - NONE
* FATALITIES - NONE
* DISCUSSION/DAMAGE - DOZENS OF LARGE TREES SNAPPED AND UPROOTED. STRUCTURAL DAMAGE TO TWO BARNS WITH METAL ROOF PANELS AND METAL DOORS BLOWN OFF. SHINGLES BLOWN OFF SEVERAL HOMES. SEVERAL POWER POLES BLOWN OVER, ONE SNAPPED OFF. MOST OF TORNADO PATH WAS THROUGH OPEN FIELDS.

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SURVEYORS...HOOPER/BLANCHARD

PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE PADUCAH KY
343 PM CDT MON MAY 11 2009

...DAMAGE SURVEY RESULTS FOR A TORNADO TOUCHDOWN IN NORTHERN PERRY COUNTY MISSOURI ON MAY 8TH 2009...

THE FOLLOWING IS THE DAMAGE ASSESSMENT FOR A TORNADO TOUCHDOWN THAT OCCURRED FRIDAY MORNING...MAY 8TH 2009...IN NORTHERN PERRY COUNTY MISSOURI.

* EVENT DATE - FRIDAY MAY 8 2009
* EVENT TIME - UNKNOWN...POSSIBLY 11:20 AM CDT BASED ON RADAR

* EVENT TYPE - ***EF0 TORNADO***
* EVENT LOCATION - NORTHERN PERRY COUNTY...FROM 2.2 MILES WEST OF MCBRIDE TO MCBRIDE
* PEAK WIND - 65 MPH
* AVERAGE PATH WIDTH - 50 YARDS
* PATH LENGTH - 2.2 MILES
* INJURIES - NONE
* FATALITIES - NONE
* DISCUSSION/DAMAGE... VIDEOTAPED BY PERSON AT THE PERRYVILLE AIRPORT AND SHOWN ON LOCAL MEDIA OUTLET. PATH VISIBLE IN WHEAT FIELD ALONG COUNTY ROAD 934. DOZENS OF TREES DOWN NEAR THE PATH...APPARENTLY DUE TO INFLOW WINDS. EYEWITNESS ACCOUNTS.

SURVEYORS...HOOPER/BLANCHARD

Photos

Straight-line winds along Route 13 in Marion/Carbondale area:

Numerous signs were damaged...

Many towers were bent...

Signs were blown out...

This gas station's canopy over the pumps was levelled...

Tree on house in Murphysboro...

Tree on house at Galatia, IL (photo from Saline Co. 911):

One of many utility poles down on Route 13 between Marion and Carbondale:

Traffic lights were out at major intersections along Route 13:

Mobile home heavily damaged in rural northeast Jackson County:

Trees down across Interstate 57 near the 60-mile marker in far northern Williamson County (photo courtesy Stephen Hagan):

Semis were overturned on Interstate 57 (photo courtesy of Stephen Hagan):

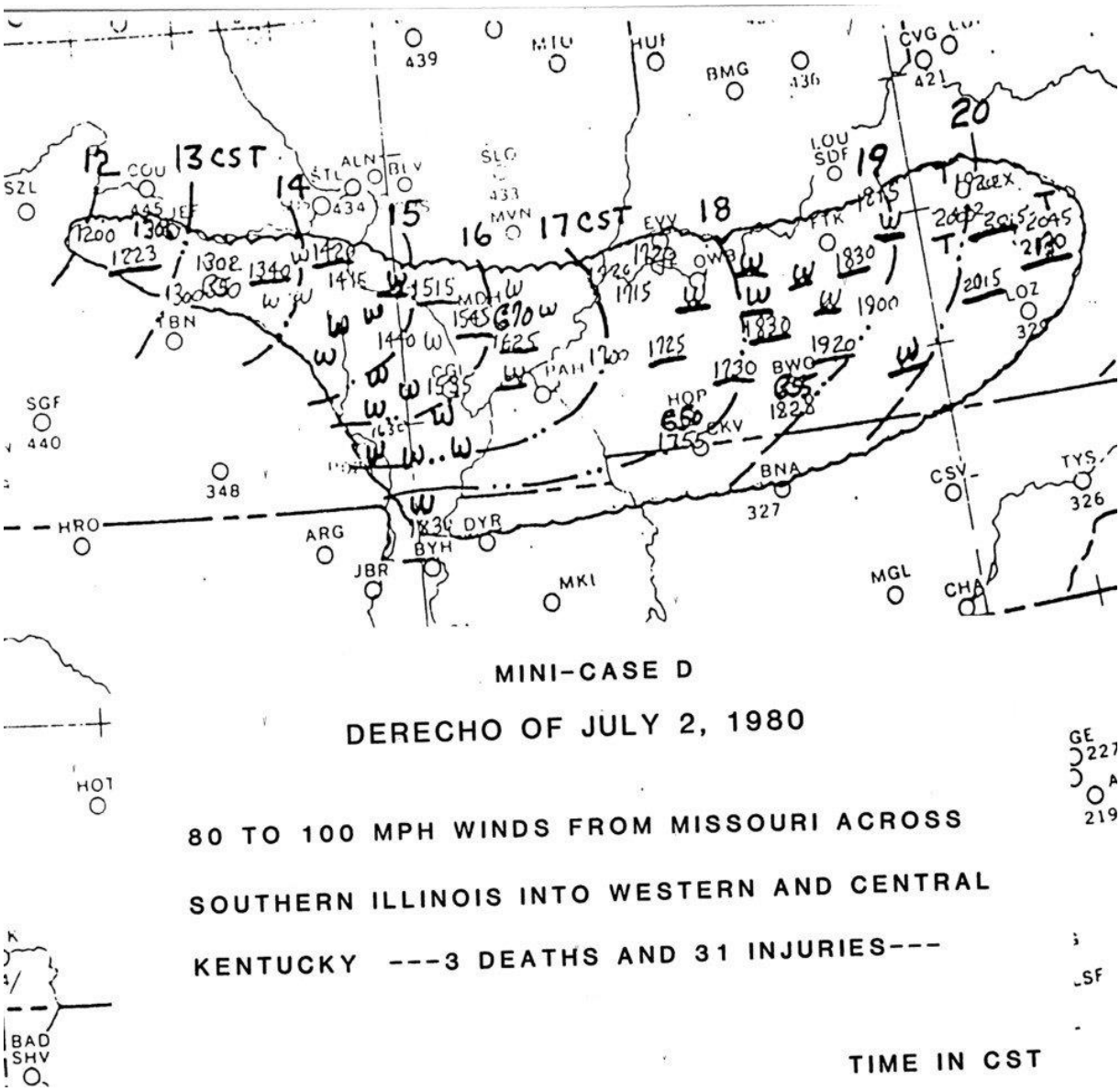
Building heavily damaged in Carrier Mills, IL (Saline County):

Home under construction blown down in southern Williamson County, south of Marion:

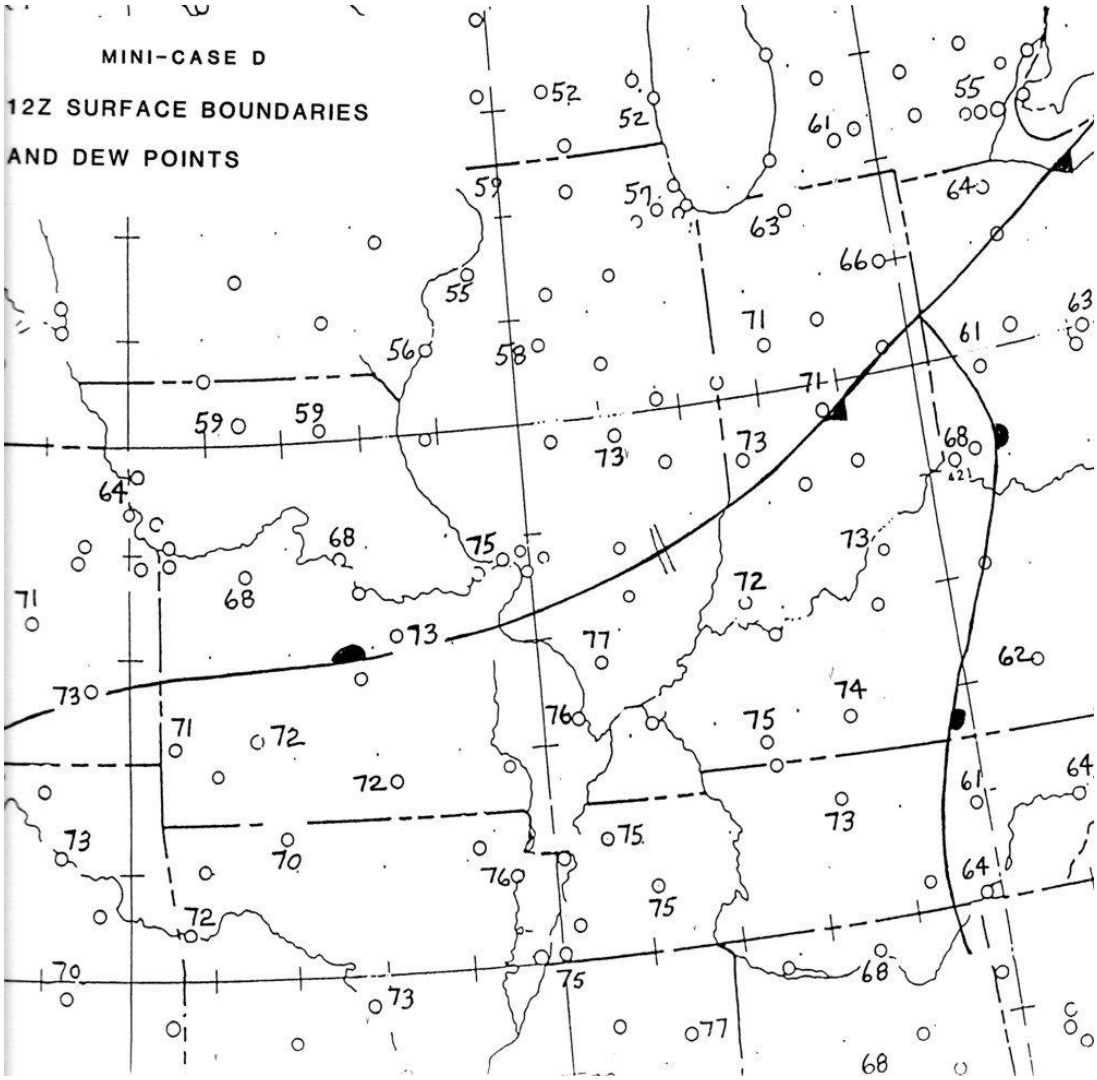
Historical Derechos in Southern Illinois

There have been windstorms similar to this in the past. On July 22, 1980, a similar windstorm moved through the region with damaging winds over 100 mph.This derecho was actually the storm system that sparked the study on these types of windstorms and where the term "derecho" originated.

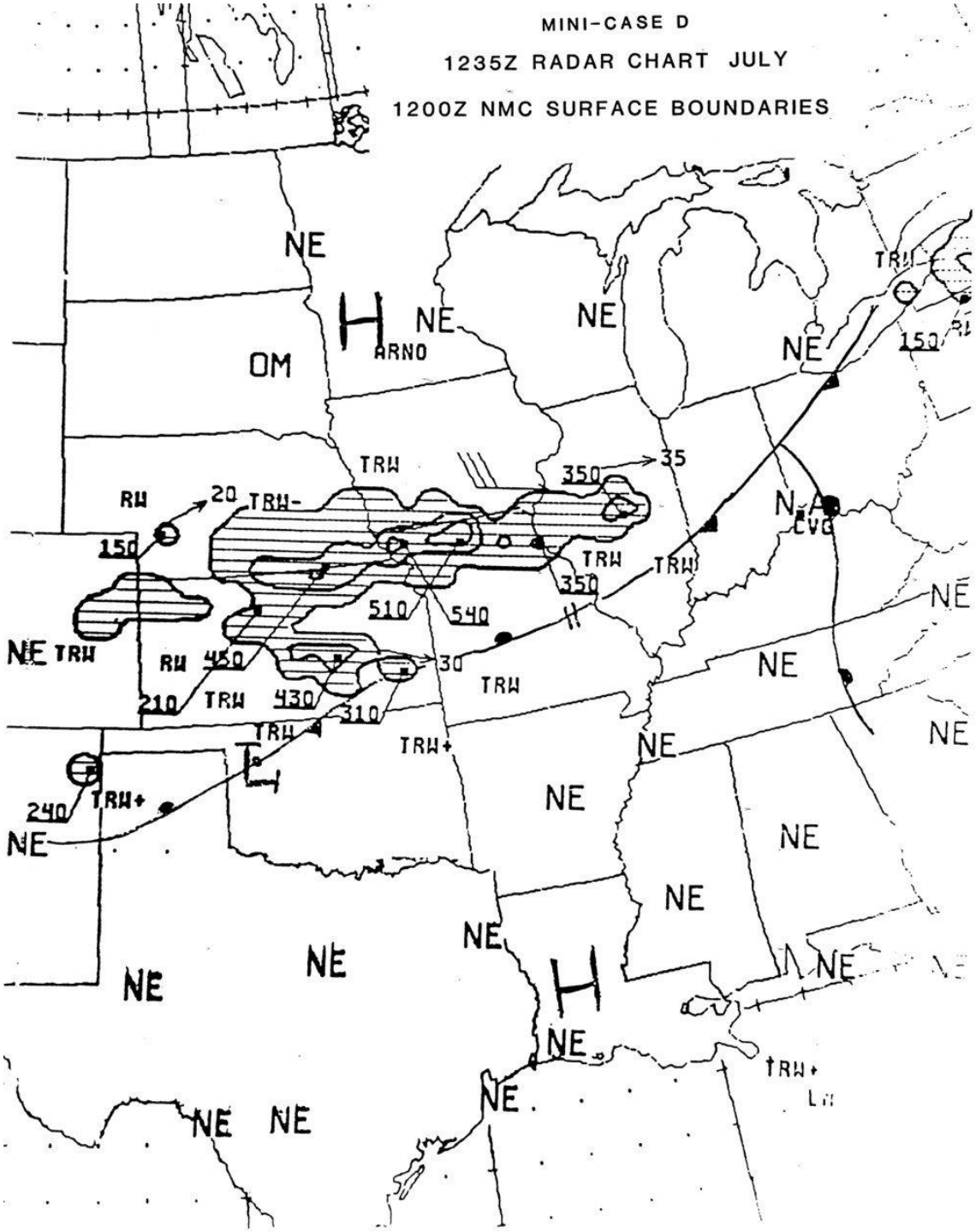
Below is a sketch of the location of the leading edge of the derecho. thanks for Bob Johns



The surface map looked like this...



The morning radar image...



Here are copies of storm data submitted from this storm

KENTUCKY

Adair Cy	2	9 PM EDT					4	4	Svr Tstm
	High winds caused severe damage along HWY 55 in the Glens Fork area. Sheds, barns, and trees were extensively damaged.								
Bell Cy	10	1PM EDT					5	3	Svr Tstm
	High winds and lightning caused considerable damage to the city of Pineville. Damage was estimated at $300,000. The National Guard was called up to help clean up the city.								
Boyd Cy	8	9:05PM EDT	800'	30	0	0	5		Tornado
	A tornado hit the town of Cattlettsburg extensively damaging 4 homes. A 12' boat was carried 2 miles.								
Boyle Cy	2	9:40PM EDT	3	300	0	0	4	4	Tornado
	A small tornado caused damage to barns, sheds, and trees. The worst damage was in the Perryville, Parksville, and Michellsville communities.								
Breckinridge & Grayson Cys	2	9PM EDT					5	4	Svr Tstm
	High winds caused extensive damage throughout the ROUGH RIVER region. Numerous boats were damaged. A few were sunk. A couple of mobile homes were turned over.								
Daviess Cy	2	6PM EDT				7	5	4	Svr Tstm
	High winds extensively damaged 20 campers near Diamond Lake 10 miles SW of Owensboro. Seven people in their campers were injured. Winds blew down a drive-in movie screen in Owensboro.								
Edmonson Cy	2	9PM EDT			1		4		Svr Tstm
	A 32 year old man was killed at Cave Hollow Bay when a tree blew down and fell on a mobile home.								
Estill Cy	2	11PM EDT					4	5	Svr Tstm
	High winds caused considerable damage to corn and tobacco thru the county. Many trees were blown down. Sheds, barns, and homes were damaged.								
Fayette & Scott Cys	2	8:55PM EDT	3	300	0	0	5	3	Tornado
	A small tornado passed thru Georgetown and then moved thru the area north of Lexington. The tornado hopped and skipped for 13 miles. The main damage was to a green house in the IRONWORKS ROAD area.								
Garrard Cy	2	11:15PM EDT					5	5	Svr Tstm
	High winds destroyed at least 3 barns and a silo. Other barns, farm equipment and homes were damaged.								
Grayson & Ohio Cys	2	9PM EDT				3	5	5	Svr Tstm
	High winds caused damage to crops, trees, and buildings. Two teenagers were hurt when a tree fell on them in Grayson Cy. A 62-year old woman was hurt when she was blown off her porch.								

KENTUCKY (continued)

Hardin, Hart, & LaRue Cys	2	9PM EDT				6	5	Svr Tstm
	High winds estimated at 100 mph caused widespread damage. Damage was very bad at Ft. Knox and Hodgenville when many trees were blown down. The KY Utilities estimated damage to their equipment at $875,000.							
Hopkins, Union & Henderson Cys	2	8PM EDT			2	6	5	Svr Tstm
	High winds estimated at 100 mph caused extensive damage to crops, barns, and homes. Damage in Union Cy was estimated at $500,000. A mobile home park in Henderson Cy was hard hit. Two people were injured when their mobile home was turned over.							
Jefferson Cy	4	10AM EDT				4		Svr Tstm
	Winds estimated at 60-80 mph took the roof off a large garage damaging cars and a snowmobile.							
Jefferson, Bullitt, Oldham, Shelby Cys	2	7:30-10:30PM EDT						Svr Tstm
	A massive hail storm moved thru north central KY producing hail storms as large as soft balls. At least 500 cars were seriously damaged. One green house in Jefferson Cy lost 50,000 panes of glass.							
Lawrence, Johnson, Martin, Floyd, & Pike Cys	12	7PM EDT			1	5	4	Svr Tstm
	Winds estimated at 100 mph caused extensive property damage thru these 5 counties. This was the same storm that originated at Columbus, Ohio. One home was destroyed by lightning. One man was struck by lightning and hospitalized.							
Madison Cy	2	9:30PM EDT				5	4	Svr Tstm
	High winds caused extensive damage to trees, barns, and trailers. A screen at the RICHMOND DRIVE-IN was badly damaged.							
Mercer, Woodford, and Jessamine Cys	2	9:30PM EDT	1	300	0	1	5	4	Tornado
	A tornado caused heavy damage to trees, barns, and homes. Many cars were damaged. One woman was injured when a tree fell on her car.							
Nelson Cy	2	8:30PM EDT			5	6	5	Svr Tstm
	The worst storm ever did extensive damage to Bardstown. Winds estimated at 100 mph caused damage of about 2 million dollars. The National Guard was called in to clean up the extensive damage. Five people received minor injuries.							
Powell Cy	2	10:30PM EDT	1	200	0	0	4	3	Tornado
	A tornado touched down 3/4 of a mile west of Clay City and moved eastward thru the city. Damage was light and consisted mostly of tree, shed, and barns being blown down. One mobile home was destroyed completely, but, amazingly, the 5 occupants were uninjured.							