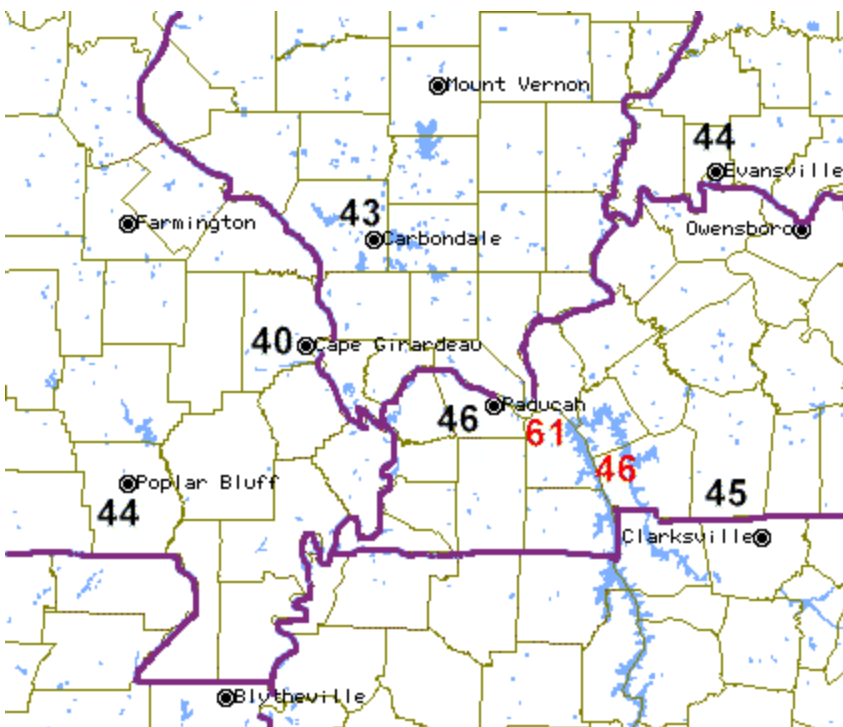


# February 24, 2001 Wind Event

Strong winds, gusting up to 60 MPH in a few spots, occurred during the evening hours. Some of the strong wind gusts were not related to thunderstorms. An intense low pressure system over the Plains states produced strong winds well outside of any thunderstorms. Some tree and power line damage occurred.

Peak wind gusts during the evening of February 24 are plotted on the map below. All plotted gusts were measured by wind equipment. Gusts plotted in black are official reports from FAA, NWS, or military observation sites. Gusts plotted in red are unofficial reports.



The peak wind gusts occurred at the following times:

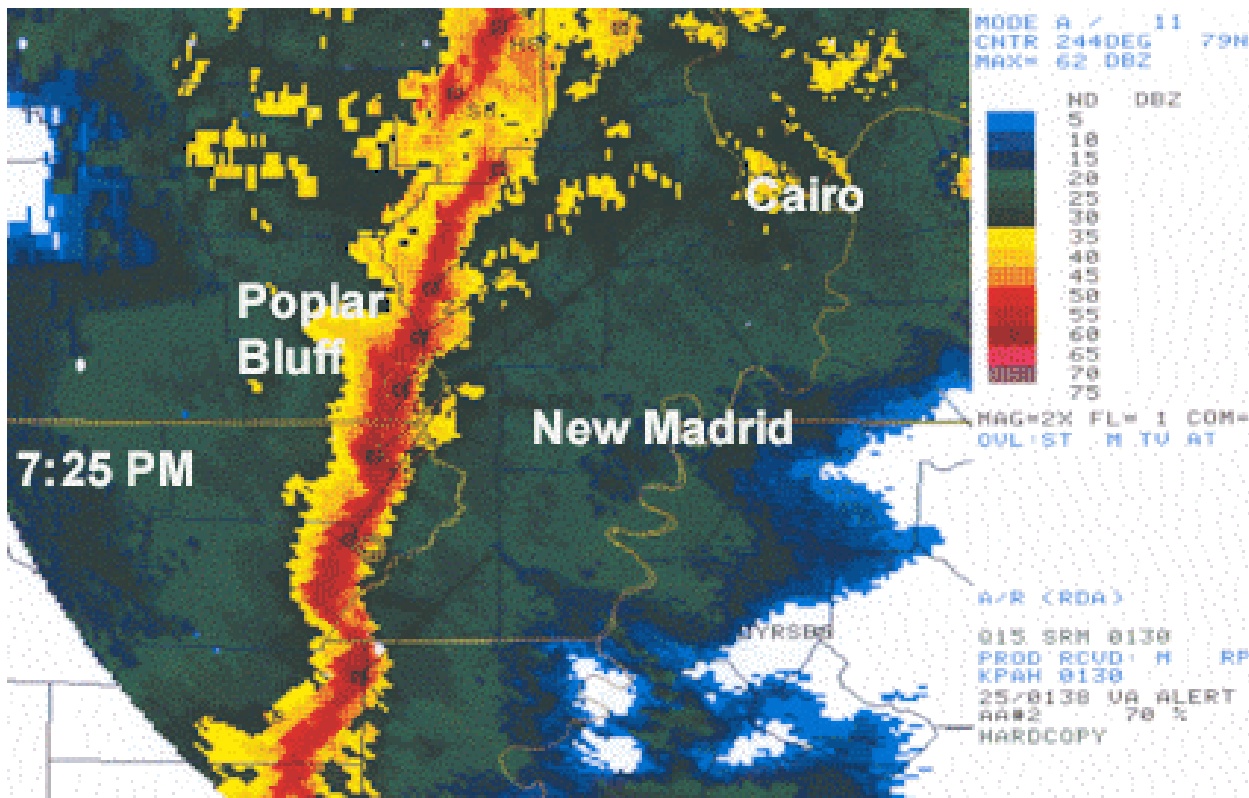
Cape Girardeau: 4:35 P.M., Poplar Bluff: 6:40 P.M., Carbondale: 5:28 P.M., Paducah: 8:58 P.M., Fort Campbell: 11:00 P.M., and Evansville: 11:15 P.M.

Some of these peak wind gusts, such as Evansville and Fort Campbell, were associated with thunderstorms. Others, such as Cape Girardeau, were not. The gust to 61 MPH at Calvert City, KY, was not related to thunderstorms. The Calvert City site is one of the highest points in Marshall County, KY.

A strong pressure gradient across the central United States caused southerly surface winds to increase to 20 to 35 MPH, with higher gusts. The strong pressure gradient was caused by a rapidly deepening low pressure center over the central Plains states.

Part of the reason for the gusty winds was the low pressure system well to the west. Winds were strong through the entire depth of the atmosphere. The Paducah National Weather Service doppler radar is capable of measuring winds through the entire depth of the troposphere. Between 8 and 9 P.M., the radar indicated south winds around 40 knots (45 to 50 MPH) at a height of 1000 feet above ground. These winds further increased to about 55 knots (60 to 70 MPH) at just 2000 feet above ground.

Gusts to 40 to 60 MPH were common due to the strong southerly wind flow with the Plains low pressure system. These southerly winds brought moist and unstable air northward from the Gulf of Mexico, which set the stage for thunderstorms. The most unstable air was along and south of a line from Cape Girardeau to Paducah to Madisonville, and this is where the damaging thunderstorm wind gusts were confined.



## Severe Weather Reports

Trees were downed by thunderstorm winds near Cape Girardeau, Missouri and Cadiz, Kentucky. Spotters estimated gusts from 60 to 70 MPH in southern Calloway County, Kentucky, where many trees were down. Gusts to 60 MPH were reported near Ullin, Illinois, which is about 10 to 15 miles northeast of Cairo. Some tree and power line damage was reported near Charleston, Missouri, and west of New Madrid. Gusts to 65 MPH were reported in Carlisle County, Kentucky, which is along the Mississippi River, southwest of Paducah. Just southwest of Paducah, there were reports of some tree damage. No major structural damage or injuries were reported across the region.

## ILLINOIS STORM REPORTS: (GUSTS IN KNOTS - i.e. Thunderstorm Wind (G52) = 60 mph)

<b>Alexander County</b> Countywide	24	2020CST	0	0	4K	Thunderstorm Wind
There were several reports of trees falling across roads						
<b>Pulaski County</b> Ullin to Mounds	24	2020CST 2030CST	0	0	3K	Thunderstorm Wind (G52)
A utility pole was snapped in Mounds. Gusts were estimated near 60 MPH at Ullin.						
<b>Union County</b> Countywide	24	2025CST	0	0	8K	Thunderstorm Wind
About a half dozen reports were received of trees falling on roads						
<b>Franklin County</b> Sesser	24	2030CST	0	0	10K	Thunderstorm Wind
About 15 power poles were knocked down along Route 154. The poles, which were 18 to 24 inches in diameter, were snapped off at 10 feet above ground level.						
<b>Massac County</b> Unionville	24	2100CST	0	0	3K	Thunderstorm Wind (G50)
Two power lines were blown down						
<b>Johnson County</b> .5 N Goreville to 5 ENE Goreville	24	2100CST	0	0	5K	Thunderstorm Wind
A transformer was damaged by wind on the north edge of Goreville, causing a power outage. At the Lake of Egypt Recreation Area, a tree was blown across the road.						

## KENTUCKY STORM REPORTS: (GUSTS IN KNOTS - i.e. Thunderstorm Wind (G50) = 58 mph)

<b>Hickman County</b> 10 SE Clinton	24	2020CST	0	0		Hail (0.88)
<b>Fulton County</b> Cayce	24	2025CST	0	0		Thunderstorm Wind (G50)
Some tree damage was reported.						
<b>Carlisle County</b> Arlington	24	2035CST 2045CST	0	0		Thunderstorm Wind (G56)
Wind gusts to 65 MPH persisted for 10 to 15 minutes at numerous locations across the county.						
<b>Ballard County</b> Wickliffe	24	2035CST	0	0	3K	Thunderstorm Wind (G52)
A few trees were blown down in the Wickliffe area.						
<b>Mccracken County</b> 3 S (Pah)Barkley Arpt P	24	2125CST	0	0	2K	Thunderstorm Wind (G50)
Large tree limbs and power lines were down.						
<b>Graves County</b> 1 S Sedalia	24	2130CST	0	0		Thunderstorm Wind (G50)
Large tree limbs were blown down on State Route 381.						
<b>Calloway County</b> Hazel to New Concord	24	2210CST 2215CST	0	0	15K	Thunderstorm Wind (G56)
A tree fell on a car near Hazel along Highway 641. Numerous trees were blown down in the New Concord area by winds estimated up to 70 MPH.						
<b>Trigg County</b> 4 N Cadiz	24	2226CST	0	0	3K	Thunderstorm Wind (G50)
Trees were blown down near Highway 274.						
<b>Christian County</b> 10 S Hopkinsville	24	2246CST	0	0	3K	Thunderstorm Wind (G50)
A few trees were down across the south part of the county.						
<b>Todd County</b> Guthrie	24	2300CST	0	0	3K	Thunderstorm Wind (G50)
A power pole and lines were blown down.						

## MISSOURI STORM REPORTS: (GUSTS IN KNOTS - i.e. Thunderstorm Wind (G50) = 58 mph)

<b>Carter County</b> Van Buren	24	1800CST	0	0	4K	Thunderstorm Wind (G50)
						Utility company personnel reported some tree and power line damage across the county
<b>New Madrid County</b> Marston to 3 N Matthews	24	2000CST	0	0	6K	Thunderstorm Wind
						Power lines were blown down at Marston. A few power poles were blown over between Matthews and Sikeston.
<b>Stoddard County</b> 5 WNW Dexter	24	2000CST	0	0		Urban/Sml Stream Fld
						A foot of water was over several spots on Route F between Aid and U.S. 60.
<b>Scott County</b> Blodgett	24	2006CST	0	0	2K	Thunderstorm Wind (G50)
						A three-inch pipe flagpole was knocked down in front of the fire station
<b>Stoddard County</b> Dexter	24	2006CST	0	0	5K	Thunderstorm Wind (G50)
						Trees and power lines were down across the southern part of the county.
<b>Mississippi County</b> Charleston	24	2019CST	0	0		Hail (0.75)
<b>Mississippi County</b> Charleston	24	2019CST	0	0		Thunderstorm Wind (G52)
						Winds were estimated around 60 MPH.
<b>Cape Girardeau County</b> Cape Girardeau	24	2030CST	0	0	3K	Thunderstorm Wind (G50)
						A couple of trees were down on Route 439.