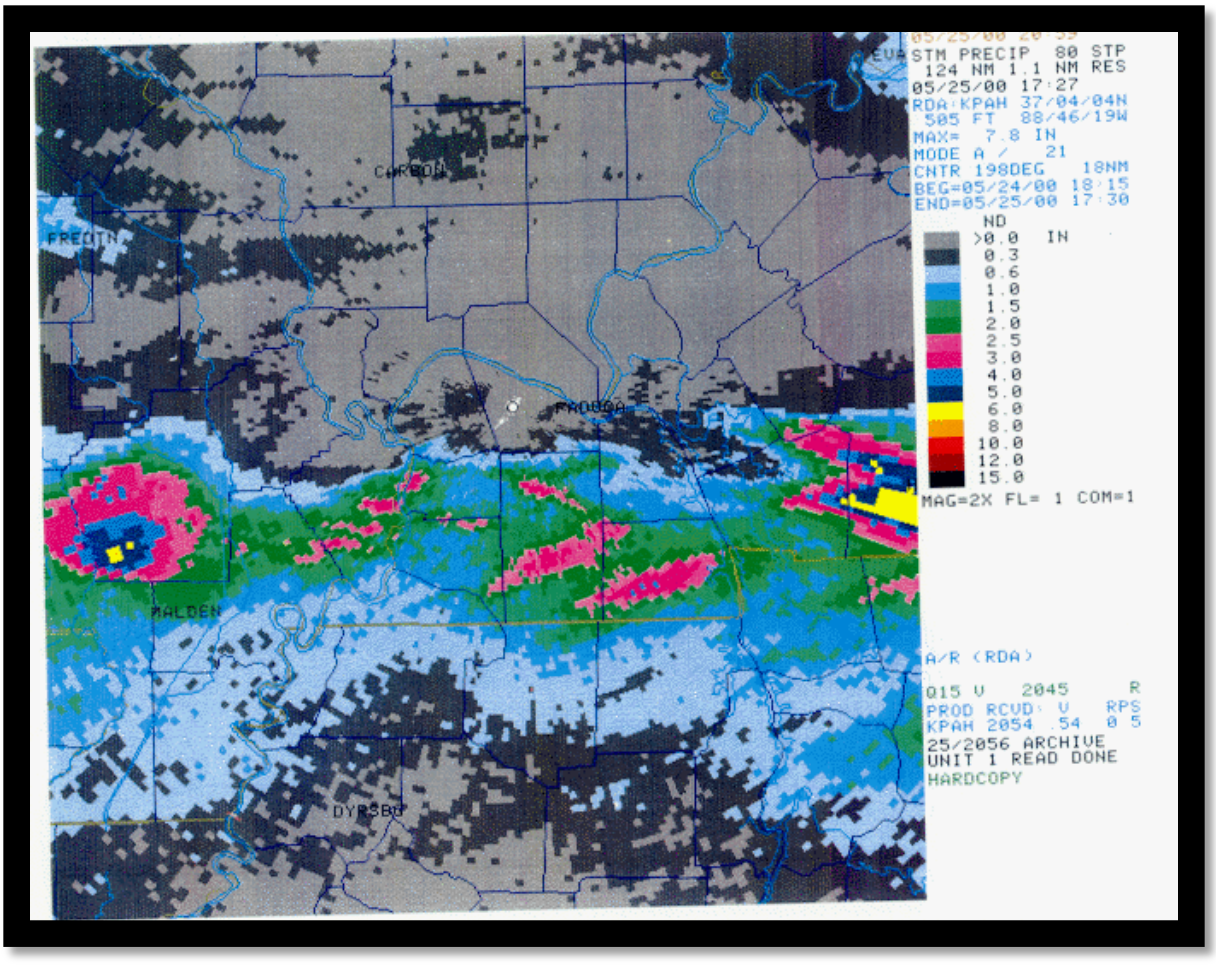
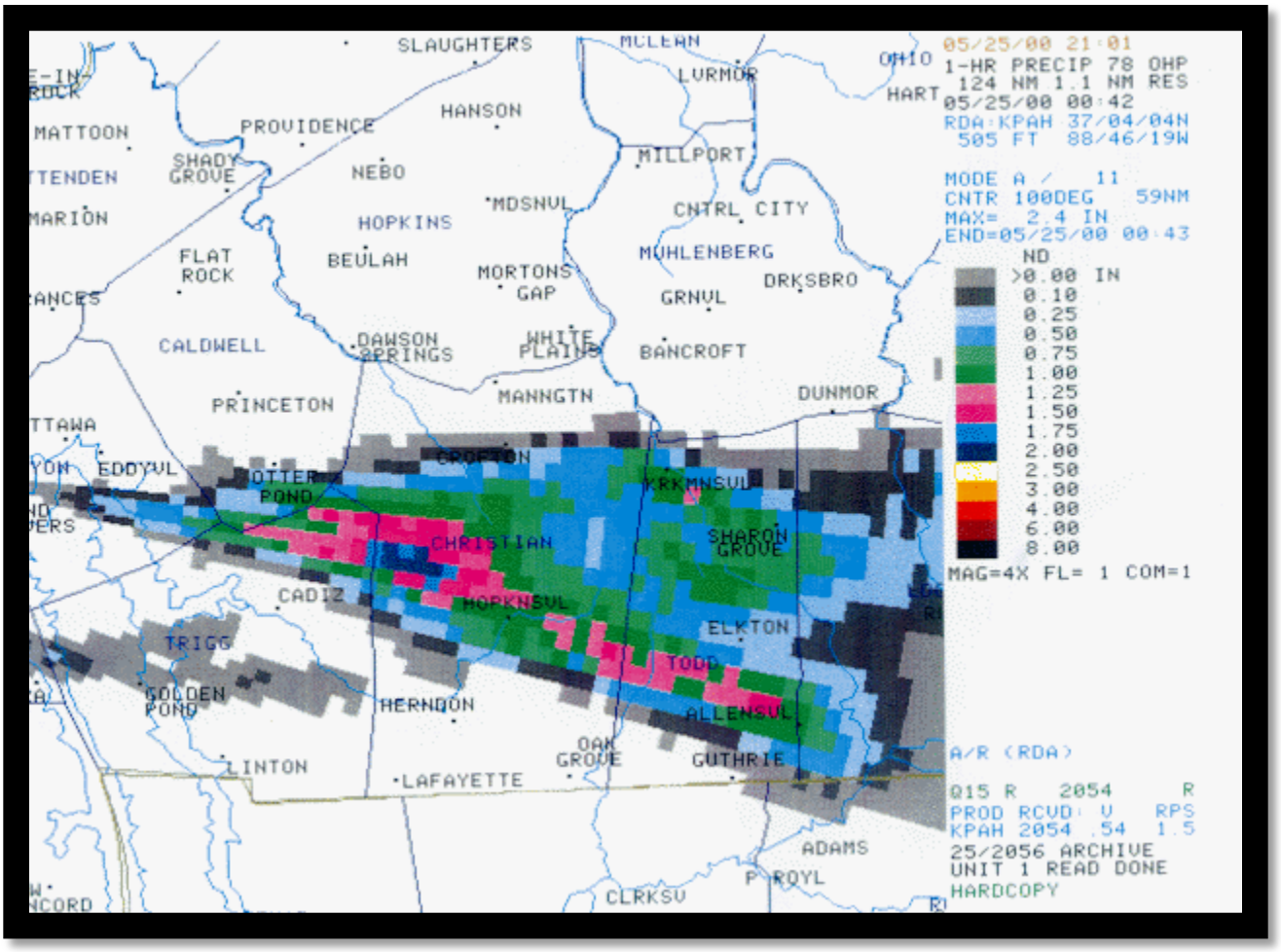
Storms of May 24, 2000

Overview: The same front that produced severe storms on the evening of May 23 became nearly stationary along the Ohio River into southeast Missouri on the 24th. Atmospheric conditions during the evening of the 24th were similar to the previous day. The atmosphere was warm, humid, and very unstable. Wind profiles were somewhat weaker than the previous day, with mid level winds northwest around 40 knots. Closer to the surface, the flow was much weaker, with southwest to west winds only around 10 knots. Although not quite as favorable as the previous day, there was still some potential for tornadoes, and the Storm Prediction Center issued Tornado Watch Number 342 for western Kentucky and parts of southern Illinois at 5:50 P.M. This was later followed by Severe Thunderstorm Watch Number 344 for southeast Missouri, issued at 7:05 P.M.

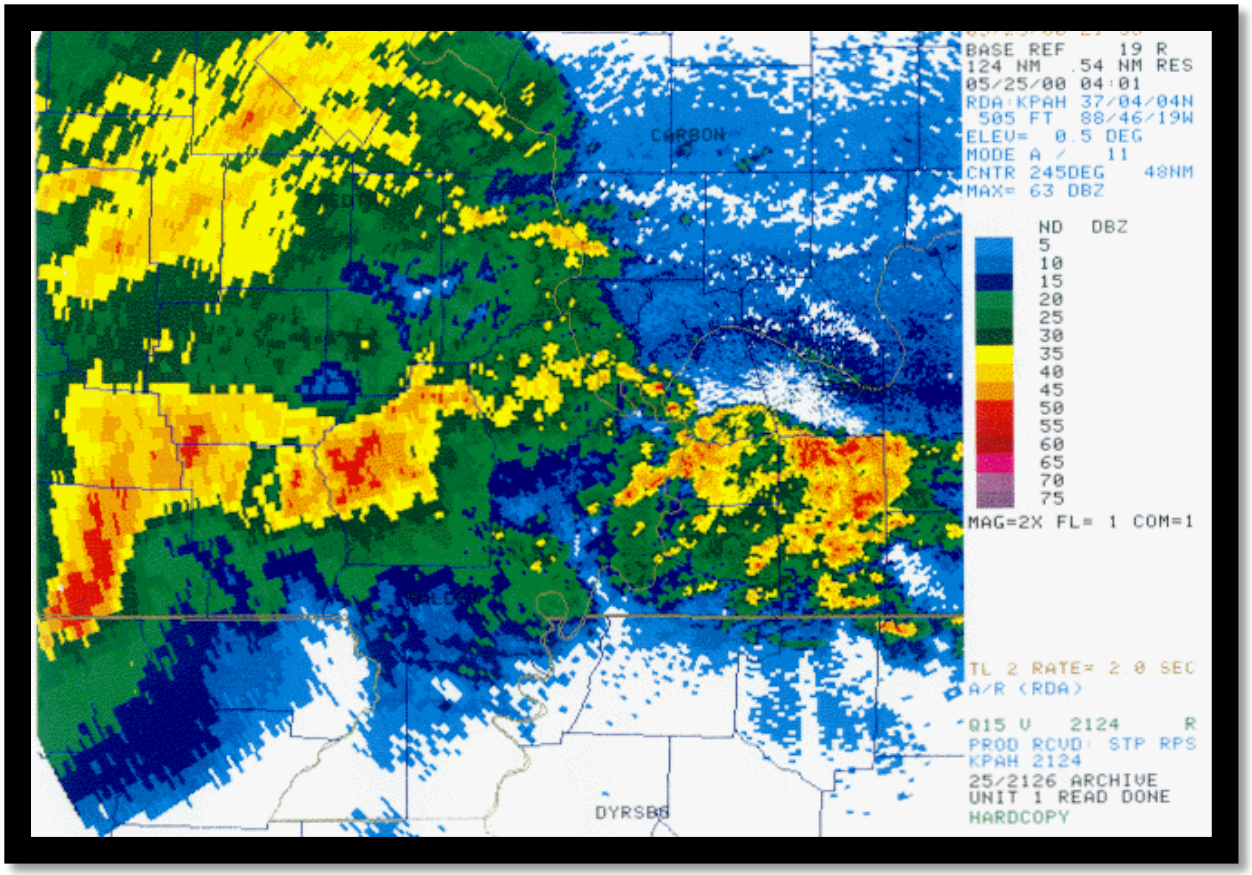
Radar Images and Storm Evolution: Thunderstorms developed all along the cold front during the early evening. The storms moved slowly eastward along the front for hours. As a result, some locations along the front got multiple bursts of heavy rain, and a Flash Flood Watch was issued for much of west Kentucky and southeast Missouri. The radar image below is a radar-estimated "Storm Total Precipitation" product. Although hail can contaminate the accuracy of the radar-estimated rainfall amounts, they are still useful for flash flood forecasting. Notice the east-west orientation of the heavy rainfall amounts, which corresponds closely to the location of the cold front. The yellow shading in the Hopkinsville area (far right edge) denotes estimates over 6 inches. A television station in Hopkinsville reported measuring 10 inches. There were numerous reports of flooded roads in Christian County, including Hopkinsville.

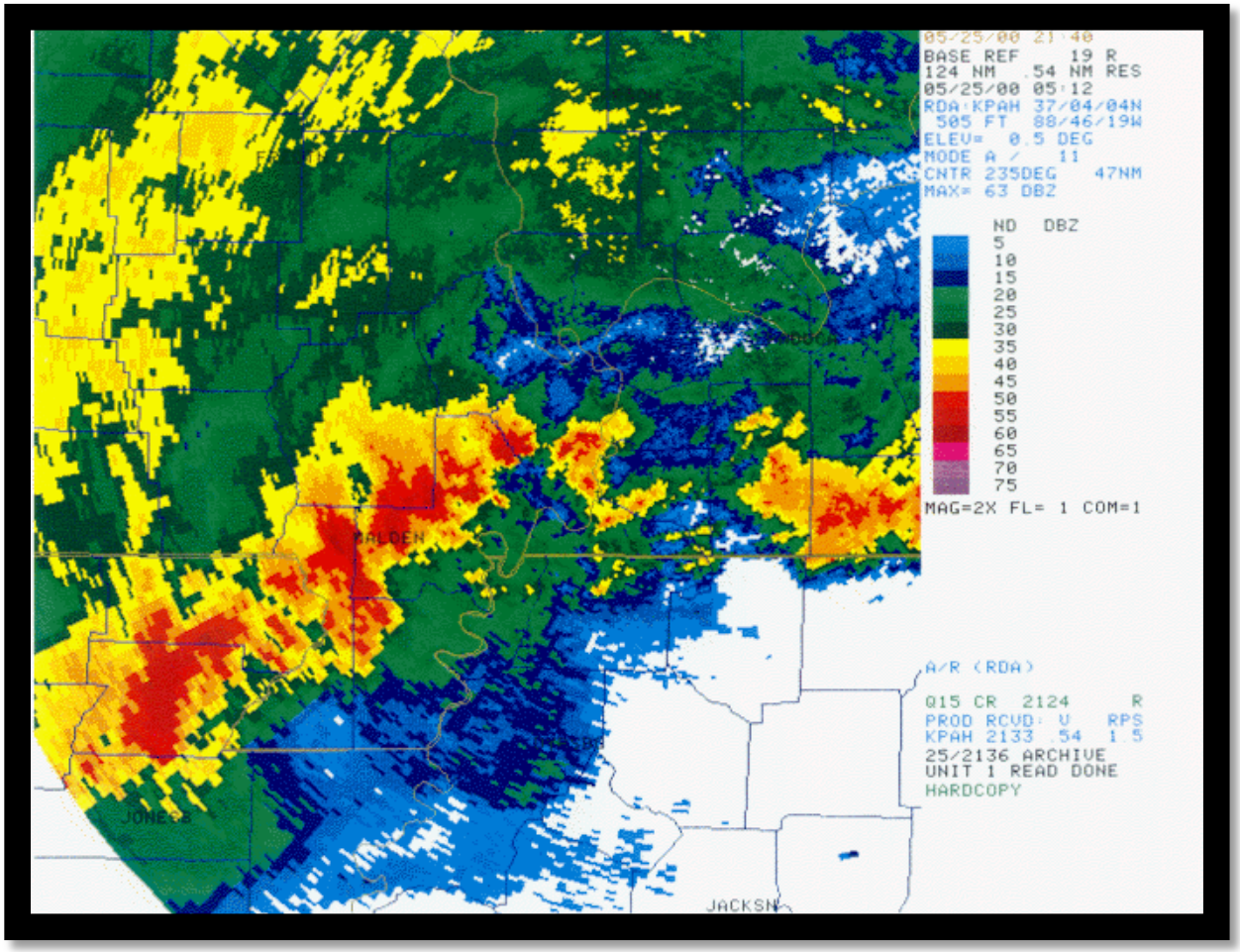


The radar can also produce hourly rainfall estimates. The image below is the one-hour rainfall estimate from 6:42 to 7:42 P.M. Again, hail likely contaminated the estimates, but this product showed where there was the potential for flash flooding. The scale on the right side of the chart indicates up to 2 inches of rain per hour in west central Christian County, about 10 miles west-northwest of Hopkinsville.



During the course of the evening, hail up to golf ball size was reported, and there were widely scattered reports of wind damage. The most significant and long-lived wind event occurred over extreme southeast Missouri. A severe thunderstorm complex tracked east along the Arkansas border, passing through Ripley County around 11 P.M. and reaching New Madrid County shortly after midnight. Numerous trees were down in Ripley County, winds of 60 to 70 MPH were reported in southwest Butler County, and there was some roof damage along with downed trees and power lines in southwest New Madrid County. The first radar image below indicates the storms as they swept through Ripley County, and the second shows them over New Madrid County.


CARBON
DYRSBG
BASE REF 19 R
124 NM .54 NM RES
05/25/00 04:01
RDA:KPAH 37/04/04N
505 FT 88/46/19W
ELEV= 0.5 DEG
MODE A / 11
CNTR 245DEG 48NM
MAX= 63 DBZ
ND DBZ
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
MAG=2X FL= 1 COM=1
TL 2 RATE= 2.0 SEC
A/R (RDA)
Q15 V 2124 R
PROD RCVD: STP RPS
KPAH 2124
25/2126 ARCHIVE
UNIT 1 READ DONE
HARDCOPY


05/25/00 21:40
BASE REF 19 R
124 NM .54 NM RES
05/25/00 05:12
RDA:KPAH 37/04/04N
505 FT 88/46/19W
ELEV= 0.5 DEG
MODE A / 11
CNTR 235DEG 47NM
MAX= 63 DBZ
ND DBZ
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
MAG=2X FL= 1 COM=1
A/R (RDA)
Q15 CR 2124 R
PROD RCVD: V RPS
KPAH 2133 .54 1.5
25/2136 ARCHIVE
UNIT 1 READ DONE
HARDCOPY
JACKSN

KENTUCKY:

Muhlenberg County
Bremen 24 1650CST 0 0 **Hail (1.00)**

Christian County
3 W Hopkinsville 24 1735CST 0 0 2K **Thunderstorm Wind**
A few trees were down.

Trigg County
2 E Rockcastle 24 1740CST 0 0 **Hail (1.75)**

Trigg County
2 E Rockcastle 24 1740CST 0 0 4K **Thunderstorm Wind**
Large trees were blown down.

Todd County
1 N Elkton 24 1754CST 0 0 **Hail (0.75)**

Trigg County
Cerulean 24 1840CST 0 0 **Flash Flood**
2220CST

Todd County
Trenton 24 1845CST 0 0 **Flash Flood**
2220CST

Thunderstorms repeatedly developed over northeast Trigg County and moved southeast across the Hopkinsville area and then southern Todd County. Storms followed this track for a few hours, producing excessive rainfall totals of locally over 5 inches. A Hopkinsville television station measured 6.5 inches of rain in only three hours. Widespread street flooding occurred in Hopkinsville, slowing or stopping traffic. A vehicle was reported floating down 9th Street. Numerous roads were closed across Christian and Todd Counties. A co-operative observer in northeast Trigg County reported over an inch of rain in less than 20 minutes.

Christian County
Gracey to 24 1835CST 0 0 **Funnel Cloud**
3 NW Herndon 1841CST

A funnel cloud moved southeast from the Trigg County line across western Christian County. The funnel cloud was observed from Gracey to Herndon in Christian County. The most significant feature of this storm was flash-flood producing rain.

Todd County
3 N Allegre 24 1839CST 0 0 **Hail (1.75)**

Christian County
Julien 24 1900CST 0 0 **Lightning**
Lightning was the indirect cause of a house fire that killed 3 children and their father. The fire was sparked by an unattended candle which was being used because of a power outage.

Graves County
Folsomdale 24 2125CST 0 0 5K **Thunderstorm Wind**
Several trees were down across Highways 408, 849, and Meridian Road.

Calloway County
Murray 24 2248CST 0 0 3K **Thunderstorm Wind**
Power lines were blown down.

Calloway County
Murray 24 2310CST 0 0 **Flash Flood**
25 0240CST

Christian County
Central Portion 24 2335CST 0 0 **Flash Flood**
25 0245CST

Trigg County
Countywide 24 2340CST 0 0 **Flash Flood**
25 0245CST

Calloway County Emergency Management reported water over several major roads across the city of Murray. Five people were rescued by emergency personnel from cars that stalled in flooded streets. A few basements were flooded. The Murray-Calloway County hospital annex, which is a flood-prone location, experienced some flooding. In Murray, the bridge over Spring Creek Oaks washed out. Parts of Christian and Trigg Counties that were already water-logged from storms earlier in the night received an estimated additional inch or so.

MISSOURI:

Wayne County

Lodi	**24**	**0718CST** **0720CST**	**0**	**0**		**Funnel Cloud**

Emergency managers observed a funnel cloud in the Lodi area, which at times extended more than halfway to the ground

Carter County

5 SW Van Buren	**24**	**2000CST**	**0**	**0**	**3K**	**Thunderstorm Wind**

A few trees were down along B Highway.

Stoddard County

1.5 W Dexter to 1 W Bernie	**24**	**2028CST** **2034CST**	**0**	**0**		**Hail (1.75)**

Golf ball size hail fell near 1.5 miles west of Dexter, and dime-size hail fell just west of Bernie

Ripley County

Countywide	**24**	**2200CST** **2230CST**	**0**	**0**	**100K**	**Thunderstorm Wind**

A line of severe thunderstorms with damaging winds crossed Ripley County, causing widespread damage to trees and power lines. A house just off JJ Highway received severe damage. Much of the roof was blown off, and windows and doors were blown in. Utility crews worked to repair about 20 damaged major power lines. Electricity was not fully restored for days. Numerous trees were

Butler County

Neelyville	**24**	**2230CST** **2237CST**	**0**	**0**		**Thunderstorm Wind (G55)**

The line of severe thunderstorms that moved east across Ripley County produced 60 to 70 MPH winds in southwest Butler County

Stoddard County

Countywide	**24** **25**	**2249CST** **0200CST**	**0**	**0**		**Flash Flood**

Radar indicated very heavy rainfall, up to 2 inches per hour. Persistent thunderstorms continually tracked from west to east along a stationary front. There were a number of roads that had water over them. Radar estimated storm totals of up to 6 inches of rain over parts of the county. Heavy rain was indirectly responsible for a fatal vehicle accident on Highway 25 one mile south of Bloomfield. A 51-year-old man lost control of his car on wet pavement and overturned.

New Madrid County

Gideon to Portageville	**24**	**2310CST** **2340CST**	**0**	**0**	**30K**	**Thunderstorm Wind**

A line of severe thunderstorms produced damaging straight-line winds, mainly over southern parts of the county. At Boekerton, a roof was blown off a house, a barn was blown down, and there were several trees and power lines down. Power lines were down at Gideon, causing some extended power outages that lasted into the next day. A couple of trees were down at Portageville.