

Radar LOG

| Radar Unit: _

| Site coords (i,j,k) | Mission Type: | Operator(s): |

| UTC Date: 22
March 2022

Lat (dec. degs) 33.213134	Long (dec. degs) -88.570110	Alt (m) 78	Orientation (deg) 25.1	Clutter scan performed? Y
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Radar Ops Time (UTC)

Note beginning (B) and end (E) times of ops; list periods of down (D) time along with reason for failure, and other problems.

Started Radar: 1549 UTC

SR1 is 41.8 km at 150° from SR2.
Had communication with SR1 radar team that resulted in a gap before starting last set of R60s. No SR2 radar issues.

Azimuth shifted by 14 degrees CCW at 2056 UTC.

Last radar scan (birdbath) started at 2247 UTC.

Scan Strategy Notes

List scan type and time period used (chronological order); note nature and time scan mods were made (if any)

VSE-CLRT: 1549-1658 UTC

Initially no clutter filter. Then changed to clutter filter of 3. Also did 0.25 microsec pulse initially with and without filter and then 1 microsec pulse with filter.

Tested R20,40,60 from around 1710 to 1749 UTC.

VSE-SURV: 1750-1847 UTC

R60s from 1850 to 1940 UTC.

R40s from 1940 to 1956 UTC.

R20s from 1956 to 2056 UTC.

R40s from 2056 to 2208 UTC. Gap of about 10 minutes.

R60 from 2218 to 2244 UTC.

Birdbaths at 2244 UTC to end of ops.

Meteorological Notes

Describe general storm structure and evolution; note position and time of significant features and events; document fine lines (gust fronts, bores, other), peak Z_e , max echo tops, and height of first echo. Record time of significant sfc weather (peak wind gust, etc.)

Supercell formed ahead of broadly tornado-warned qlcs system. Initially, the qlcs did not have anything more than straight line winds. The isolated cell had a decent mesocyclone and was eventually tornado warned. As the cell merged with the line, a tornado was reported. Preliminary reports had EF3 damage. Meanwhile a qlcs tornado formed along the northern end of the bowed line segment and was long-lived. It appears to have dissipated before striking West Point, MS.

A new line of quasi-isolated, qlcs-ish cells formed ahead of the previous band. This line produced numerous mesovortices that were spaced about 25 km apart. Many of these circulations came very close to the radars in the network. SR1 team bailed out as a verified tornadic cell was approaching their site. The radar got stuck in the mud. But the crew left in the scout vehicle.

Only minor damage was reported with the second set of vortices. Also, the vortices were better defined aloft than at the lowest elevation angle. May have been hybrid circulations associated with weak mesocyclones at mid-levels.

Radar Images

Insert images that illustrate the general character of the event

