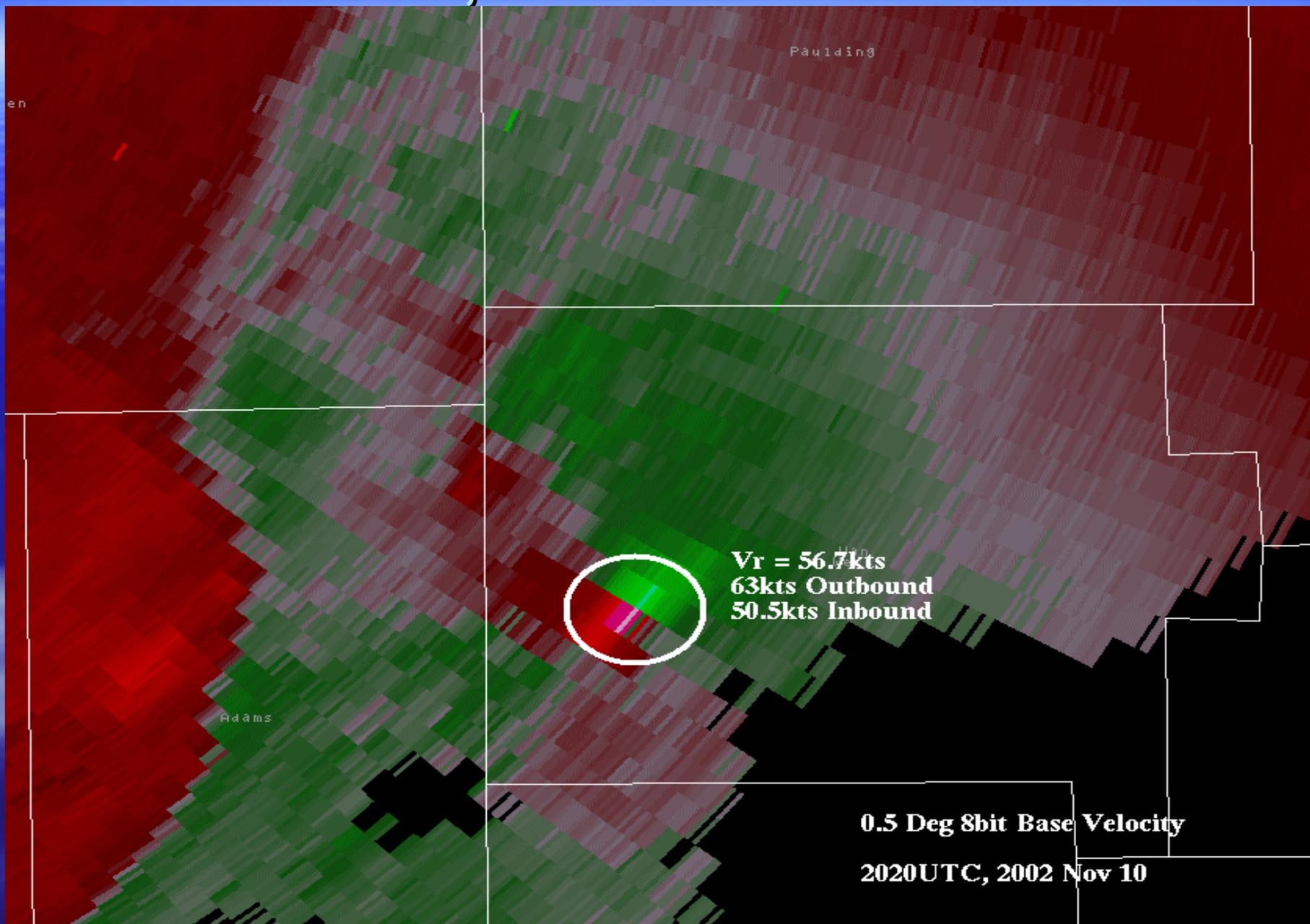


# WSR-88D Operations WFO Northern Indiana

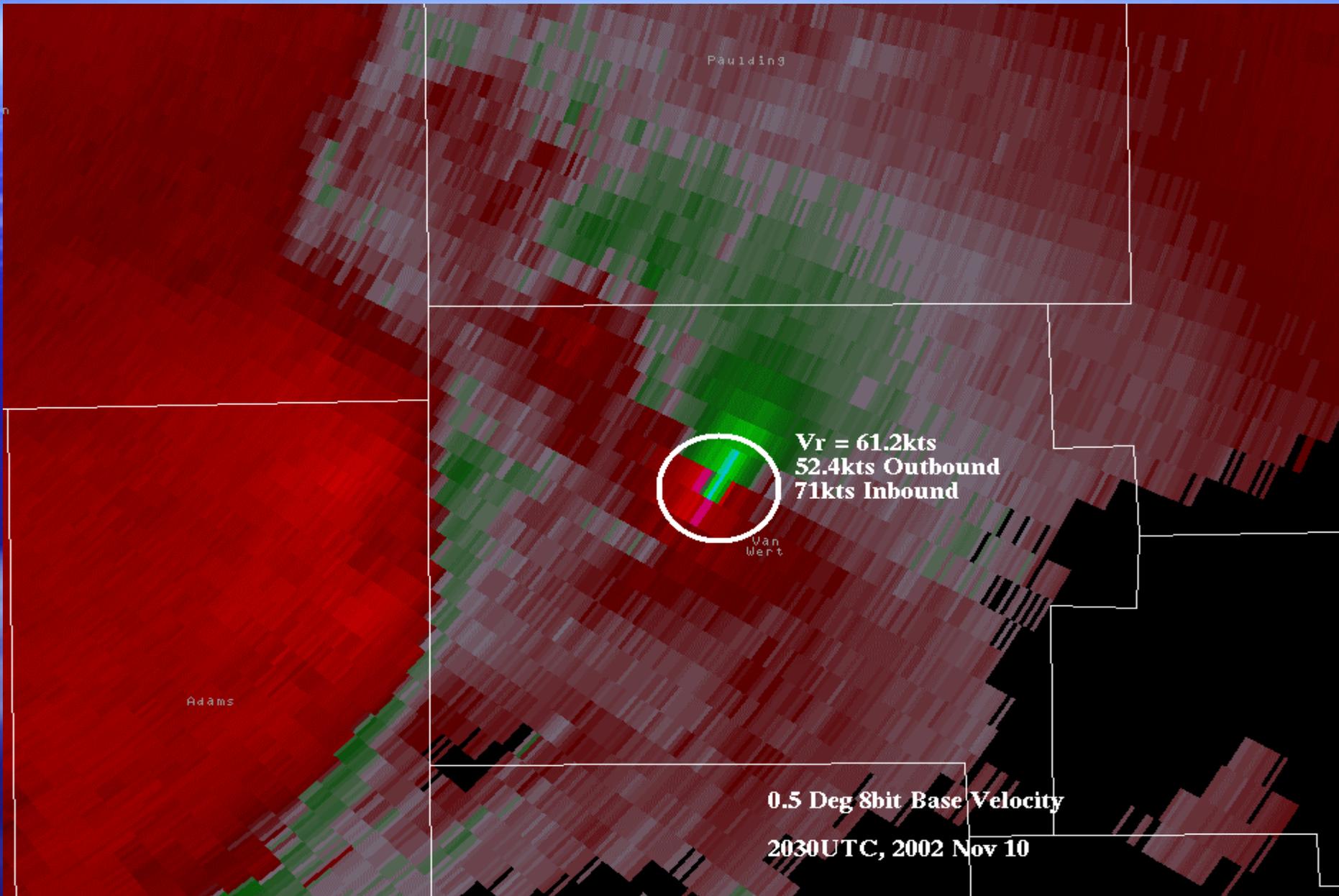
# What Works...What Doesn't

- 8-Bit Data by far best improvement
- 8-bit velocity particularly beneficial
  - really emphasizes areas of damaging wind potential in squall lines/bow echoes
  - Greater detail in meso circulations

# November 10, 2002 Van Wert Tornado

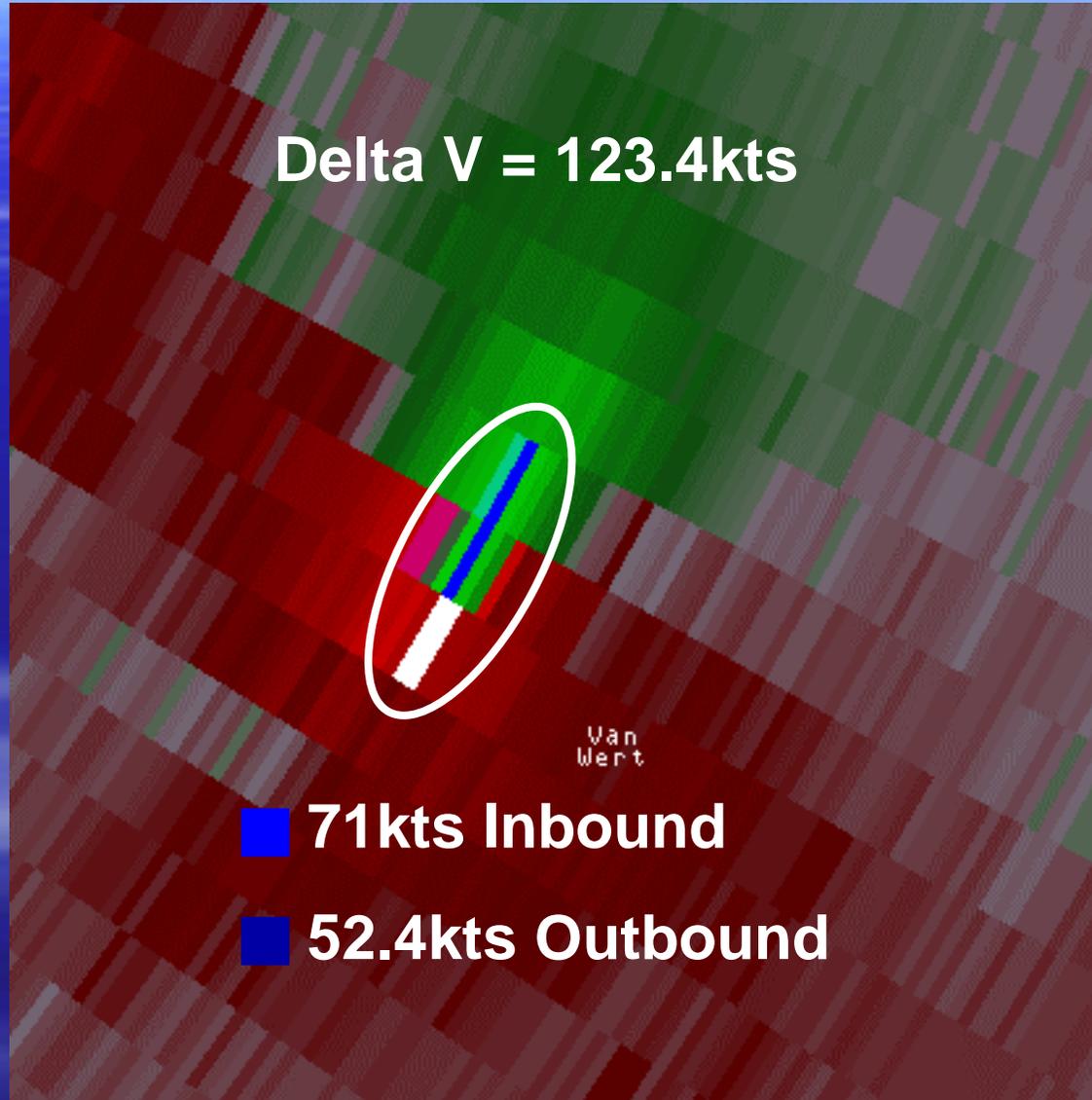


# November 10, 2002 Van Wert Tornado

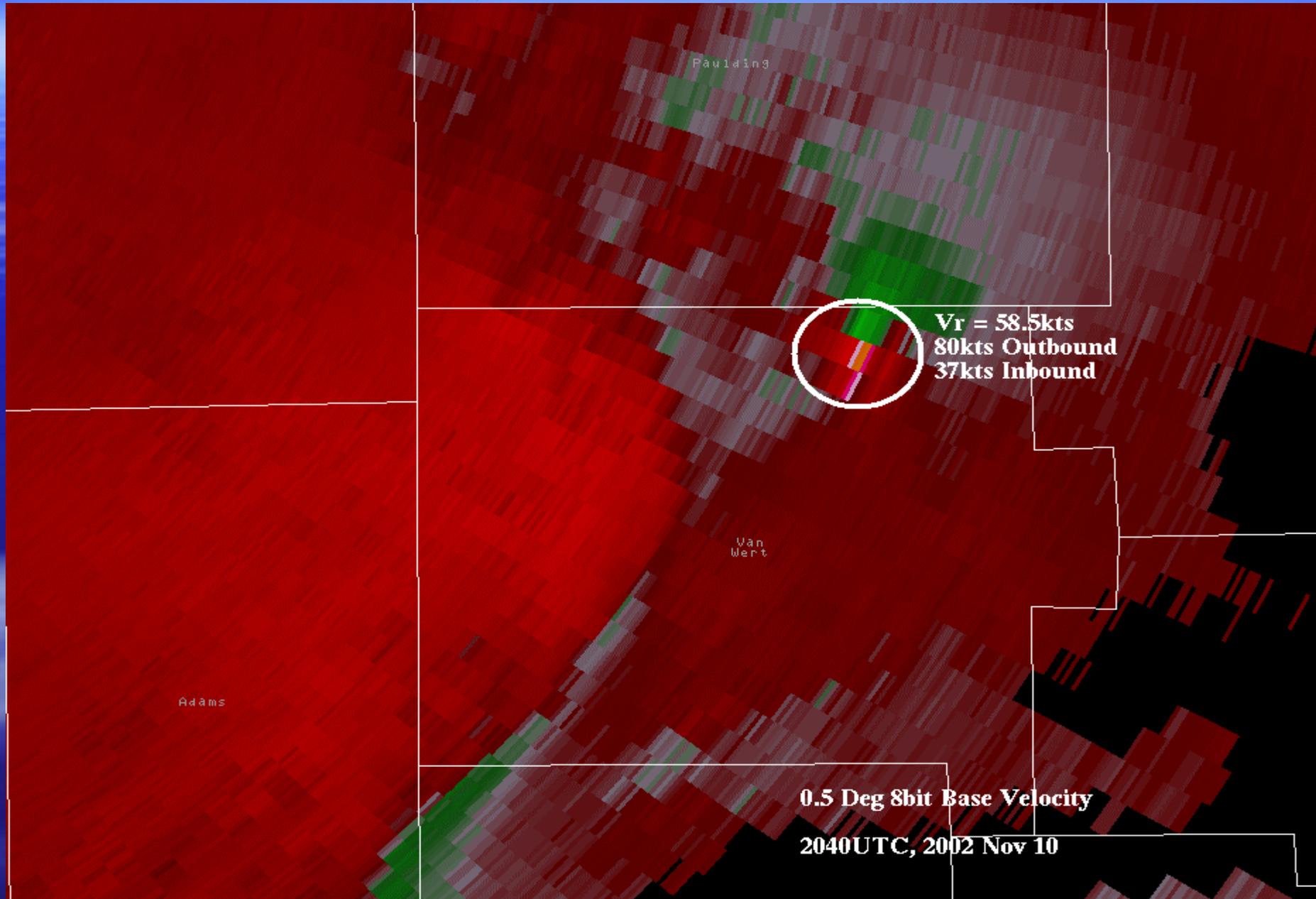


# 8-Bit Base Velocity

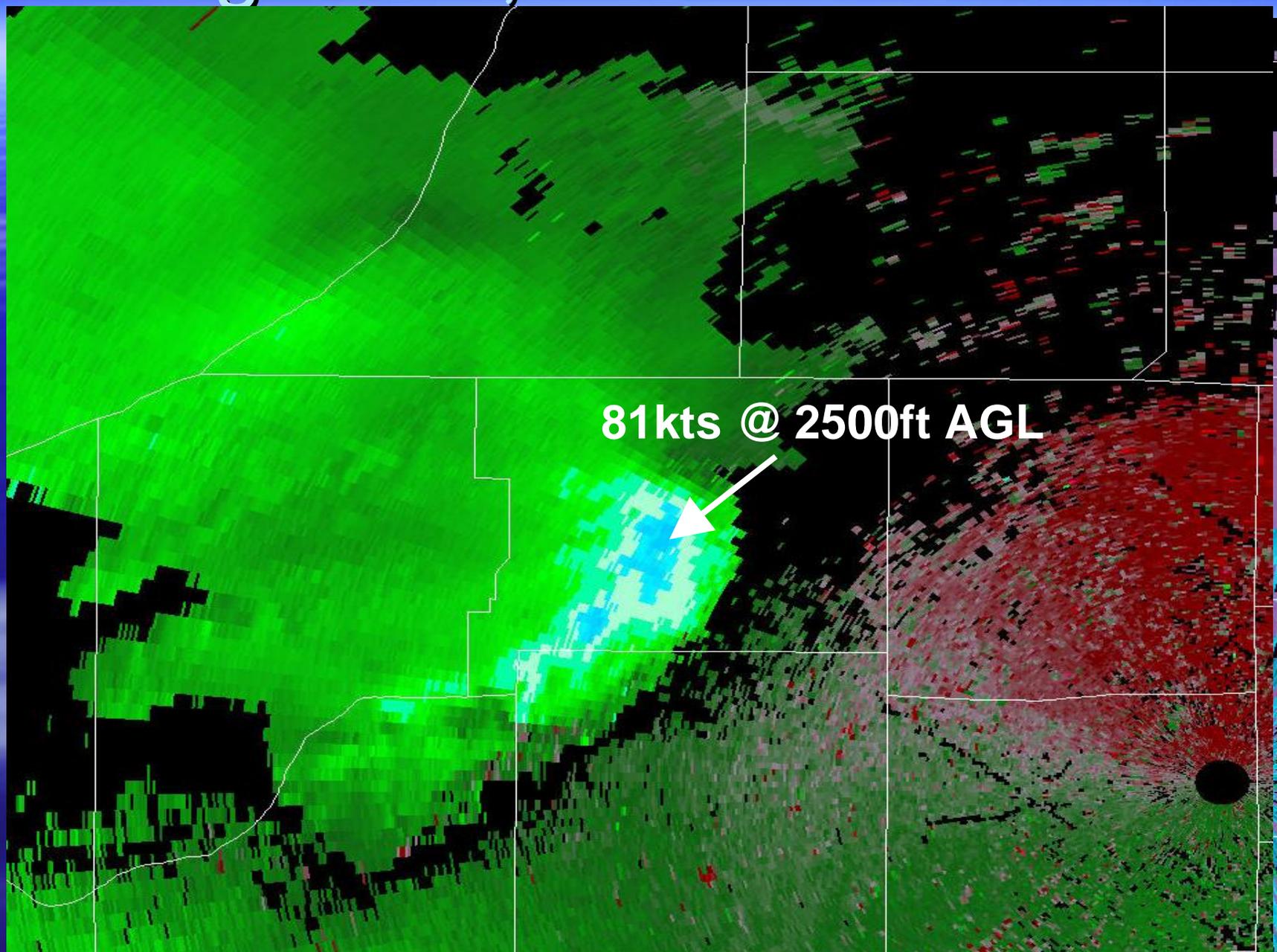
## Tornado Producing F4 Damage



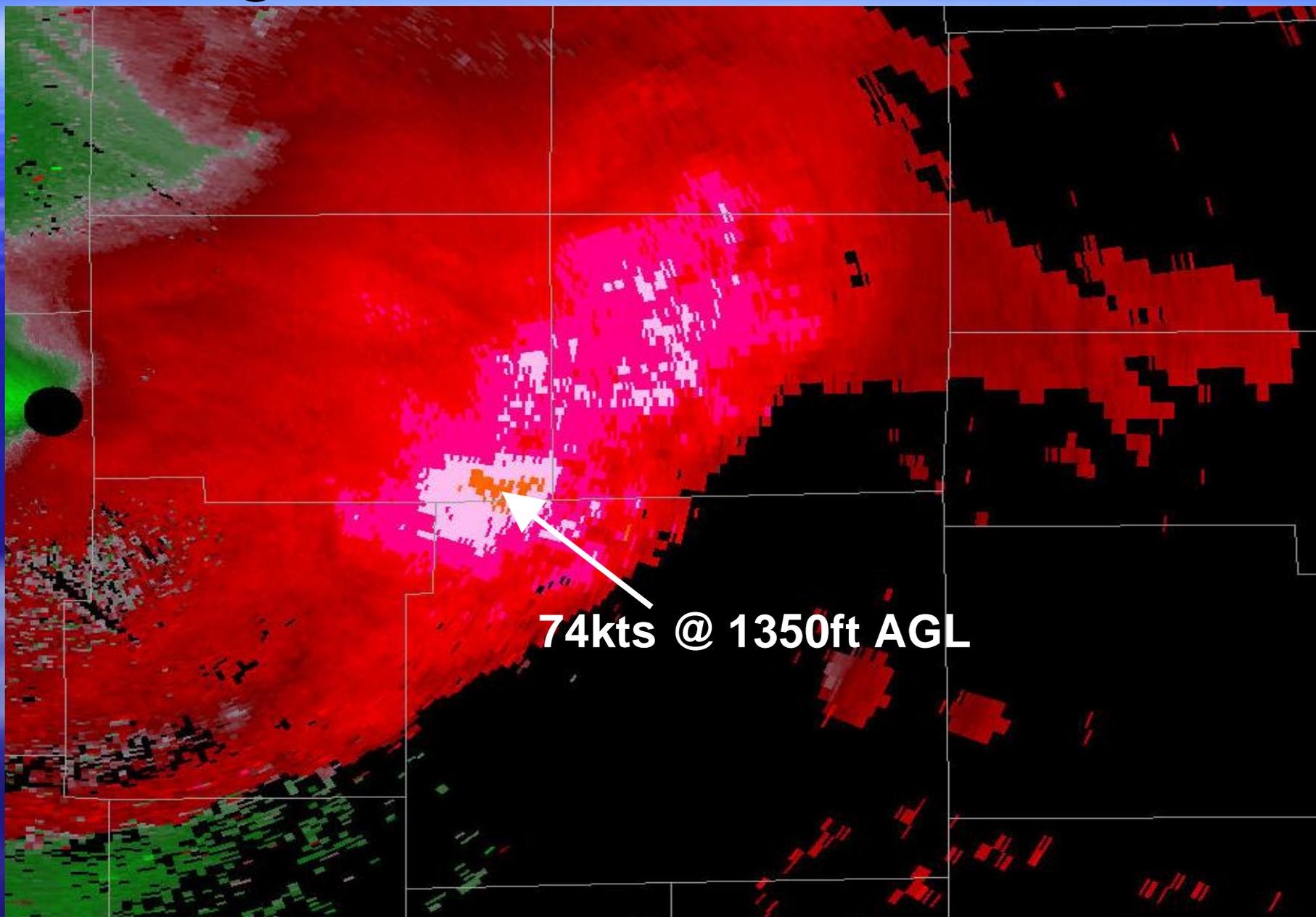
# November 10, 2002 Van Wert Tornado



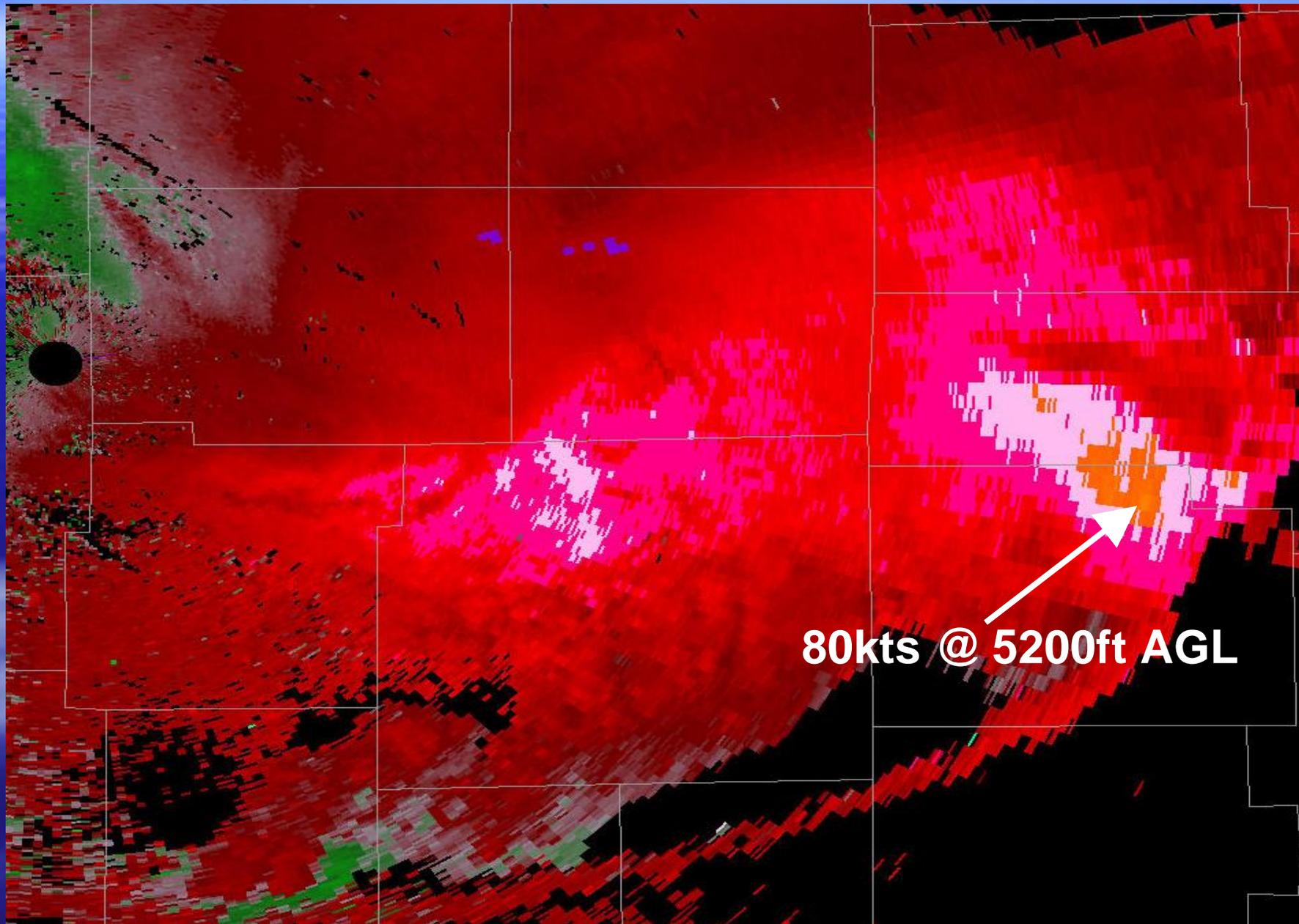
# August 26, 2003 Wind Event



# August 26, 2003 Wind Event



# August 23, 2003 Wind Event



# What Works...What Doesn't

- Algorithms and SCAN least beneficial
  - General consensus is that FAR too large on MDA and TVS algorithms
  - TVS identification w/o MESO constraint has resulted in too many false alarms.

# What Works...What Doesn't

- SCAN has better performance now with linux workstations but left such a “bad taste” with forecasters initially that few use it
  - Best utility likely with meso-analyst desk not radar/warning met
- New VCP's
  - 121 very favorable reviews...extra slices at lower elevations has good utility on days where wind and/or tornadoes are main threat
  - 12 not so favorable...too much load shedding

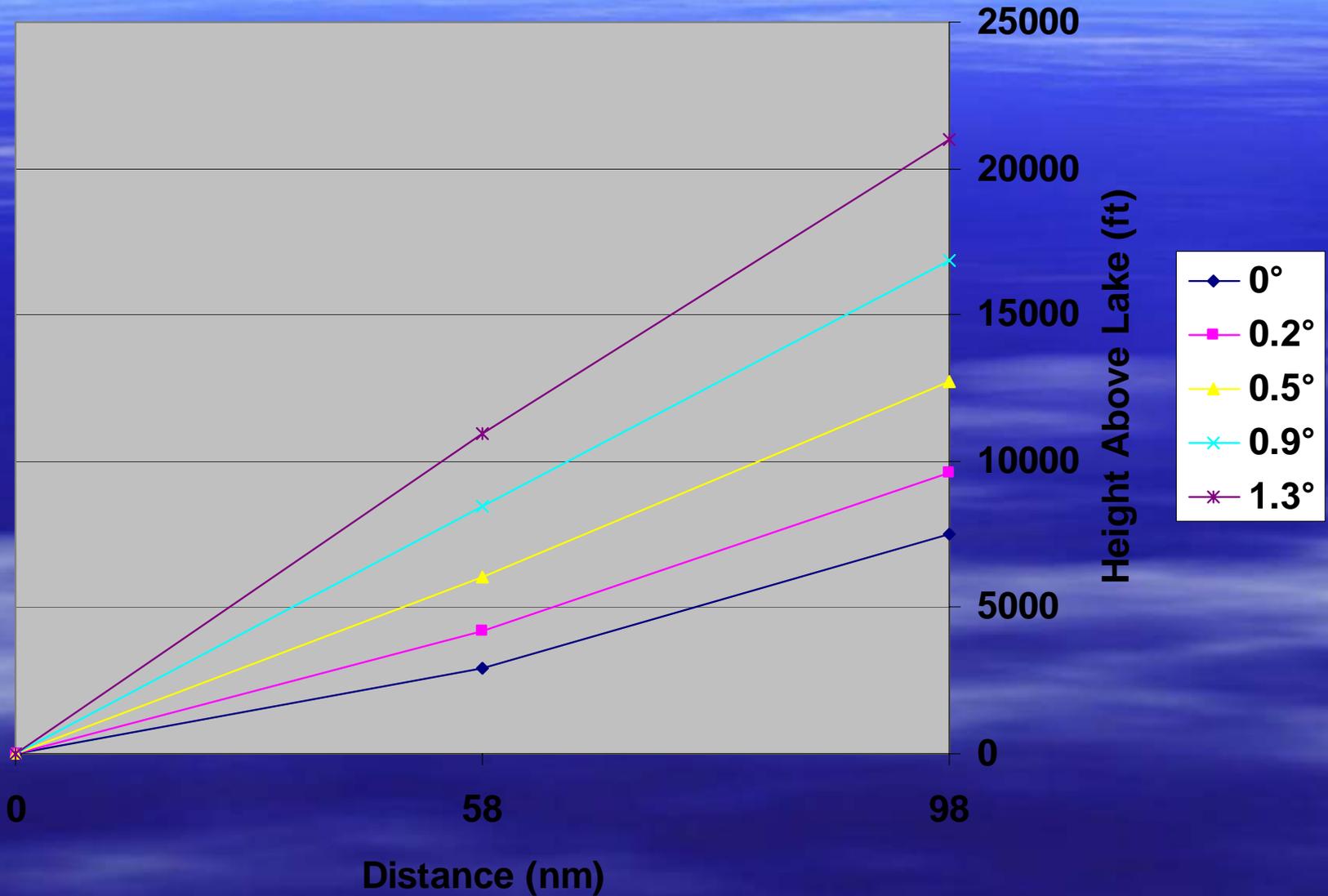
# What we would like...wish list

- Overall...more time/money/effort continued at getting us high quality base data, less resources spent on algorithms
- Cross-sections available in 8-bit data
- Time/height plots that are available in RADS on WATADS...rotational velocity etc.

# What we would like...wish list

- <0.5 Degree elevation scan
  - Detecting lake-effect snow bands
    - Better view of developing bands out over the lake
    - Pick up on mid-lake vortices
    - Could be part of a new “snow” VCP
  - Better view of convective storms at perimeter of our CWA

# KIWX WSR-88D Beam Propagation



# Wish list and other questions

- WDSII...still an unfunded budget item?
- STI Plus...Forecast storm structure and intensity along with position
- Dual polarization, phased array radar, filler radars on cell towers?
- Valparaiso University radar project

# From WNDU in South Bend

- Projects storm structure and intensity



# Conclusion

- Forecaster's like the improved base data
  - Hi-res 8bit data best improvement by far
  - Anything that will add to this and at the same time anything that improves data quality
    - Mitigate range folding and dealiasing
- ORPG Build 5 and Build 6 have provided good training material and overviews of what's new/different/changed...keep it coming!