

National Weather Service – Central Illinois

Impact Based Warning Tags, Tornado Emergency Usage & Resulting Impact-based Decision Support

December 1, 2018 EF-3 Taylorville, IL Tornado



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WRN

Building a Weather-Ready Nation



Impact-Based Decision Support (IDSS)

- Between 1200 & 1300: Christian county EMA, Mike Crews called office, asking about weather and informing office about Taylorville Christmas Parade occurring at 5 pm. He was briefed about thunderstorms, possibly severe, may be occurring around time of parade.
- Shortly before 1600: Mike called for an update on storms, timing, and threats. Storms to the southwest, near Litchfield. Lightning would be a threat around parade time, even if storms did not reach them.



IDSS (cont)

- 1609: Called Mike to relay LSX issued Tornado Warning on storm in Montgomery county, moving northeast toward Christian county. Mike already cancelled parade due to lightning threat. Mike was also getting reports of a tornado on ground from Montgomery county spotters.
- 1621: Mike sounded outdoor warning sirens. Storm was not in Christian county yet.



Montgomery County Tornado



1635: West of Witt looking west.
Tornado between Litchfield & Raymond.
Montgomery county. Linda Kimbrel

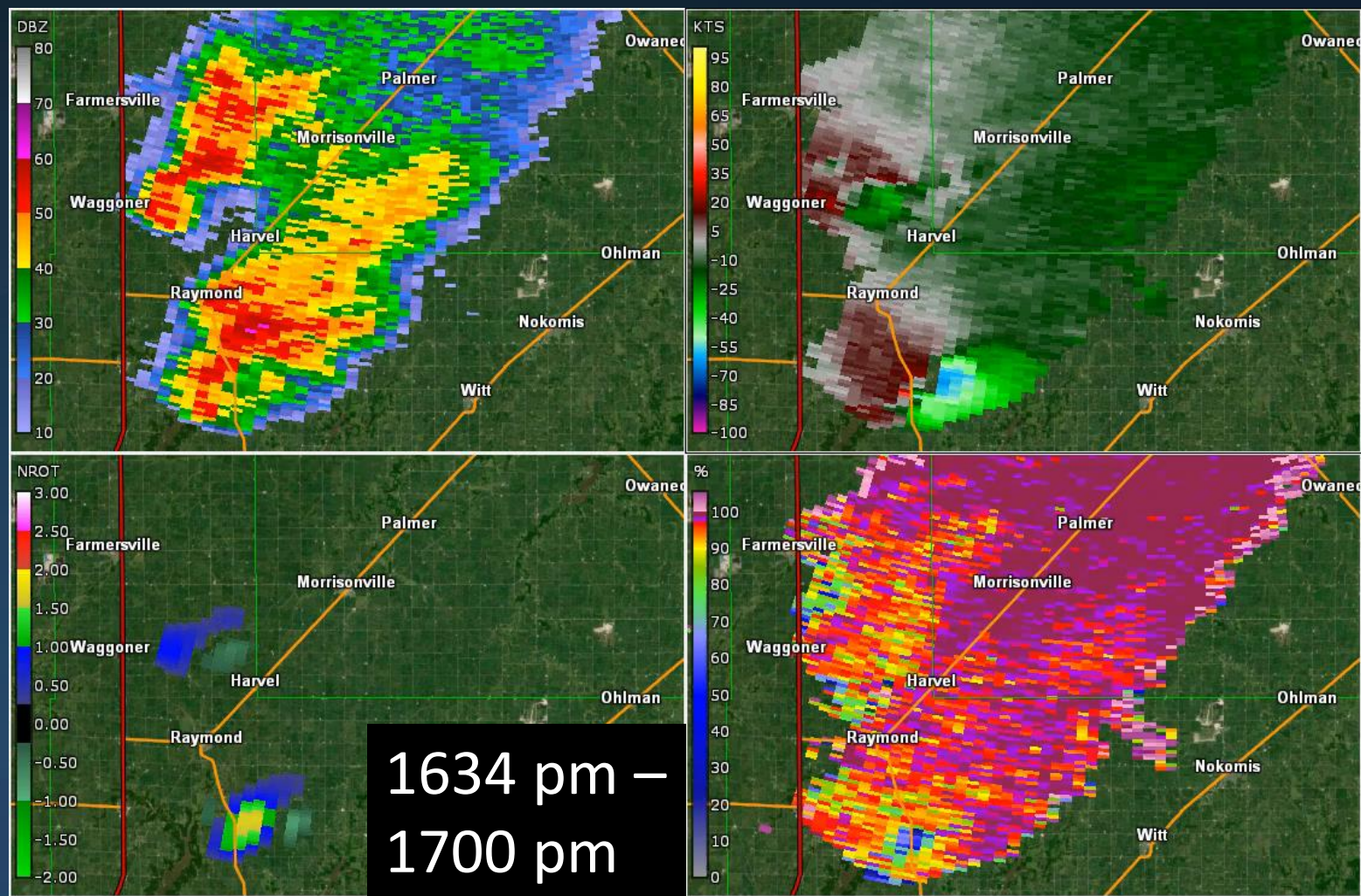


In Montgomery county near Litchfield. Tornado probably East-Northeast of Litchfield. Jeff Budd



Impact Based Warning (IBW) Tags

- 1639: First Tornado Warning issued for Christian county that included the city of Taylorville w/ **Radar Indicated** tag
 - Storm not in Christian county
 - Spotter report from Montgomery county of multivortex tornado on the ground, relayed via LSX
 - 2 Tornado Warned storms in Montgomery county headed for Christian county





IDSS (cont)

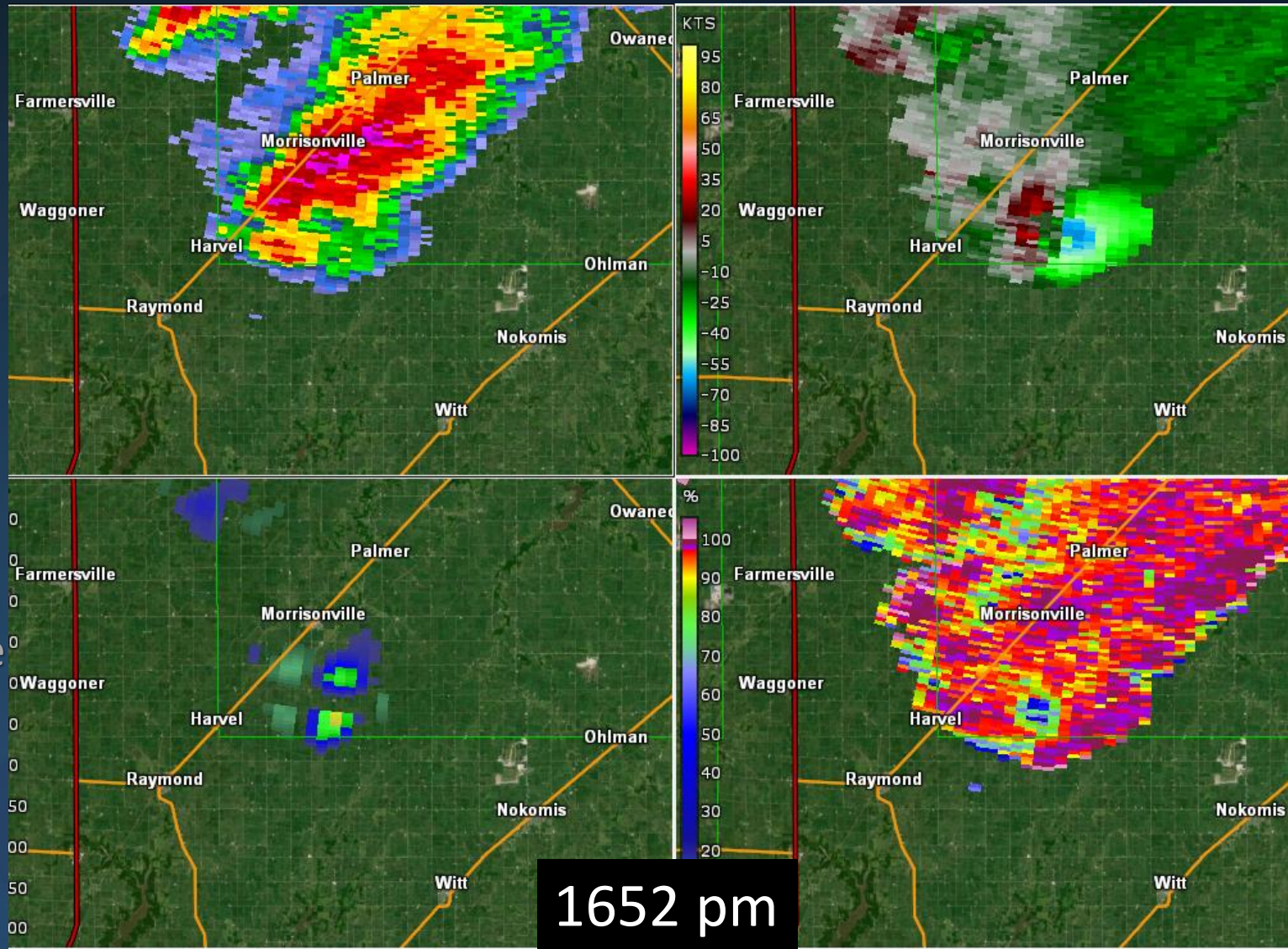
- 1644: Report from Christian county that tornado near Morrisonville.
- 1647: Report from Christian county of damage south of Morrisonville.



IBW Tags (cont)

- **1654:** Issued Severe Weather Statement w/ **Considerable Damage** tag

- Reports of a large/multivortex tornado on the ground in southwest Christian county near Morrisonville
- Report of damage south of Morrisonville
- TDS on radar for multiple volume scans & moderate to strong rotation





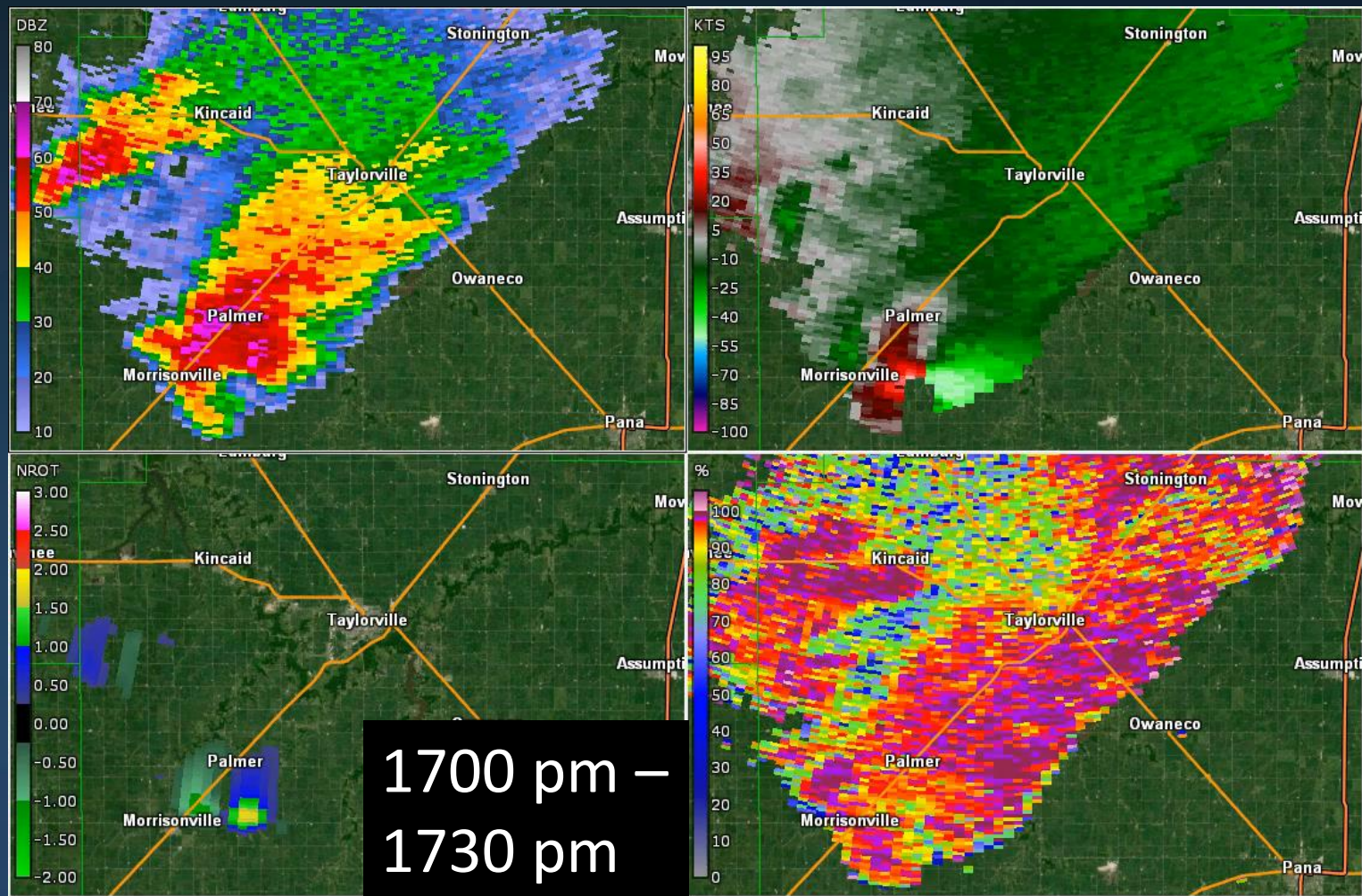
IDSS (cont)

- 1659: Mike called office for update. NWS said radar indicated tornado still on ground in southern Christian county, still heading for Taylorville.
- 1706: Spotter report of tornado on the ground 1 mile east of Palmer.
- 1708: Report from Christian county that tornado on the ground northeast of Palmer.



IBW Tags (cont)

- **1715:** New Tornado Warning issued as a **Tornado Emergency w/ Catastrophic** tag
 - Continued reports of a large and/or multivortex tornado on the ground
 - Storm was headed for the city of Taylorville
 - Continued radar signature of strong rotation & a TDS
 - Thought, even though parade was cancelled, people could still be out.





IDSS (cont)

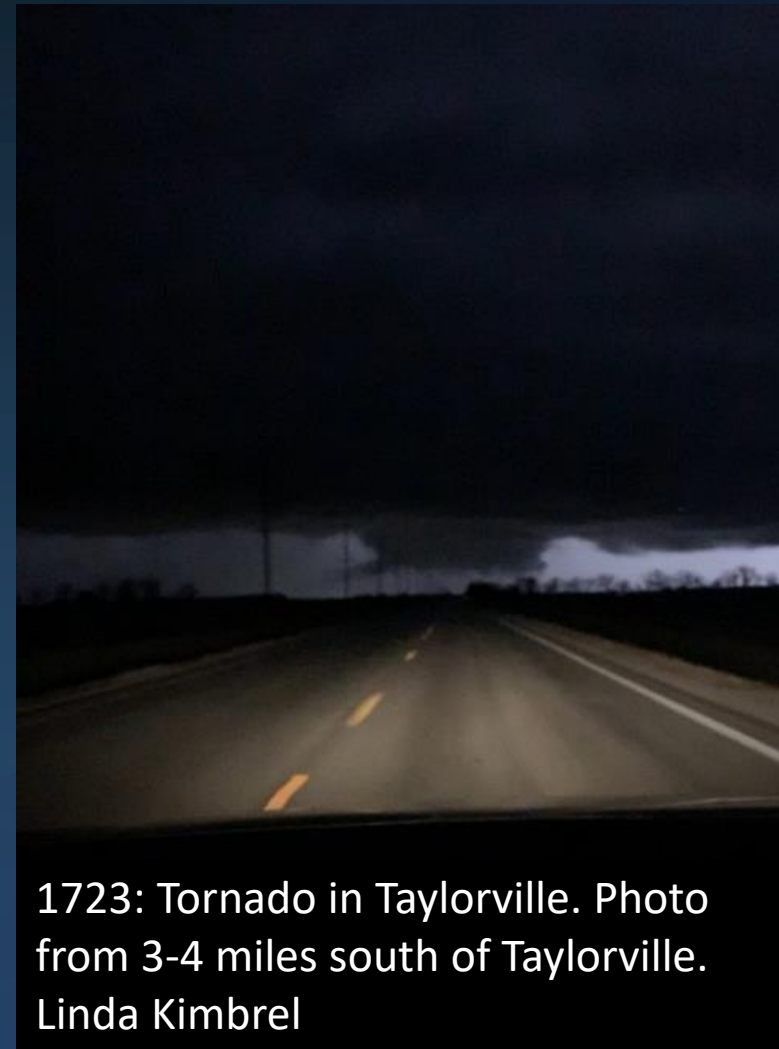
- 1715: Mike called office with report of tornado on ground 2 miles north of Palmer. He was told we were issuing a Tornado Emergency Warning for Taylorville.
- 1716: Mike sounded outdoor warning sirens a second time.
- 1721: Received spotter report that Hewittville/Taylorville hit by Tornado.



Christian County Tornado



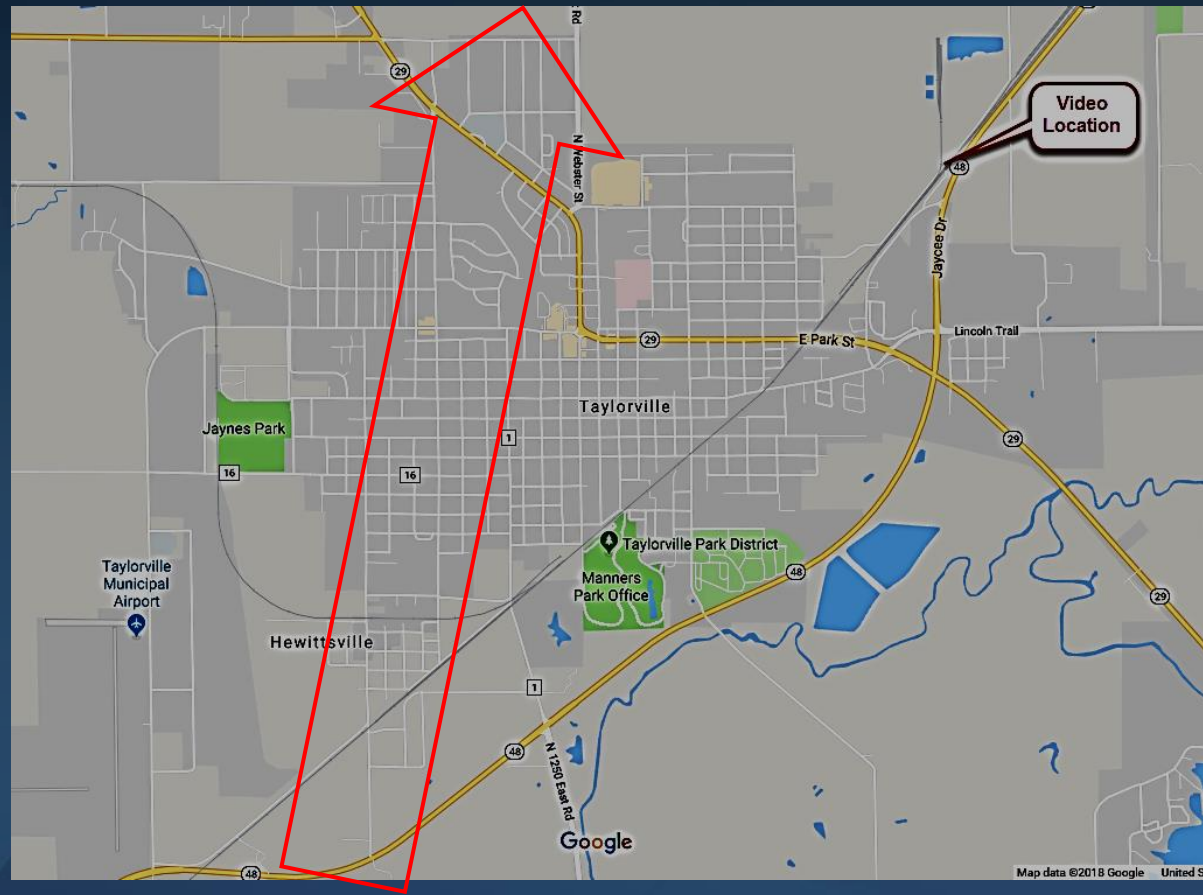
Located 10 miles south of Taylorville looking west toward Morrisonville; then northwest toward Palmer. Tornado is south of Taylorville. Robert Wolfe



1723: Tornado in Taylorville. Photo from 3-4 miles south of Taylorville. Linda Kimbrel



Tornado in Taylorville

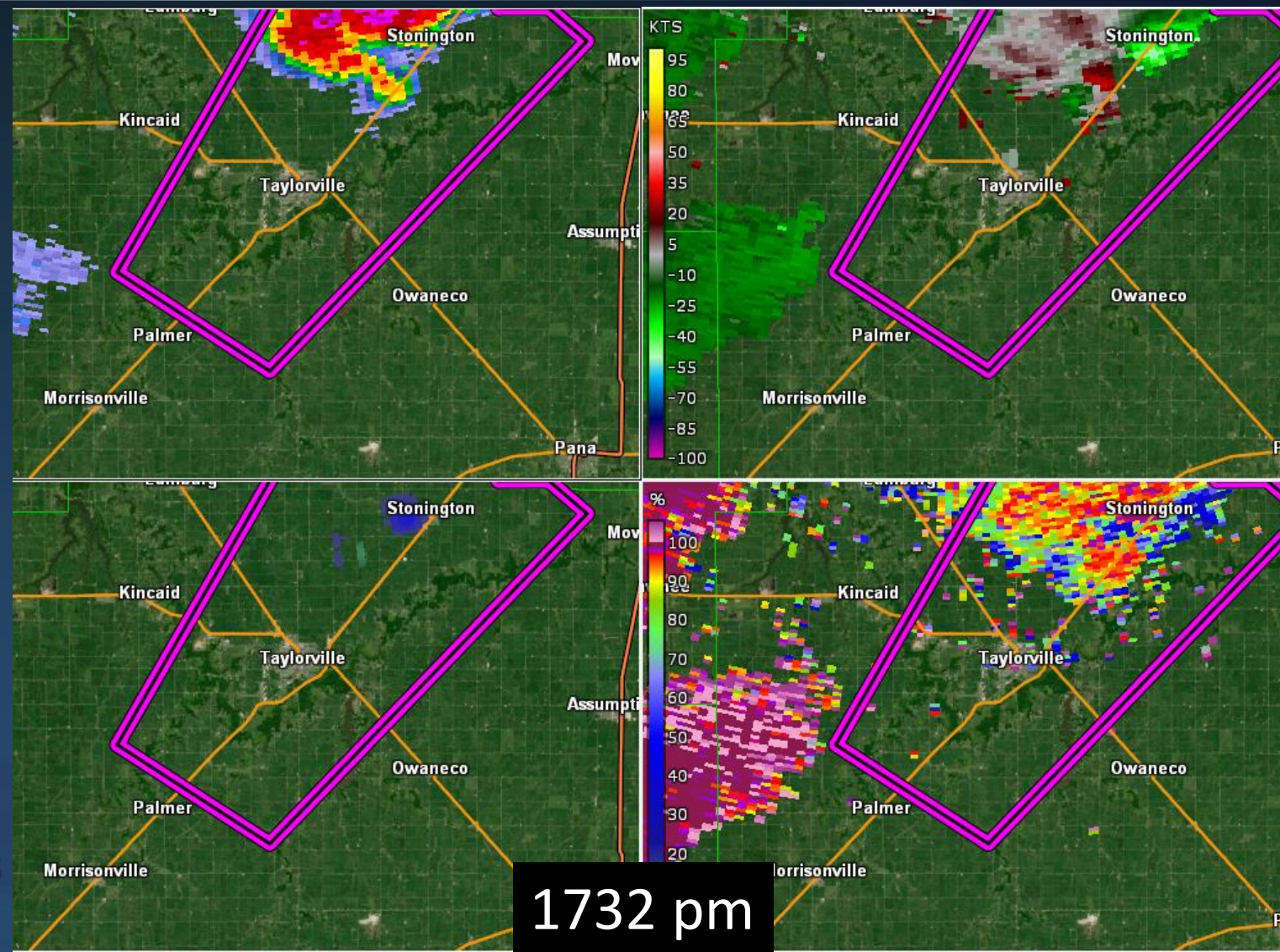




IBW Tags (cont)

- **1735:** Issued Severe Weather Statement to continue **Tornado Emergency**

- Storm was cycling with another area of developing rotation
 - **Headed northeast**
- New area of rotation was headed northeast toward Stonington, IL
 - **8 miles...or 10-15 mins away from Taylorville**
- Stopped receiving spotter reports after Taylorville was hit





IDSS (cont)

- 1744: Received report of major damage in Taylorville w/ people trapped in structures & under debris.



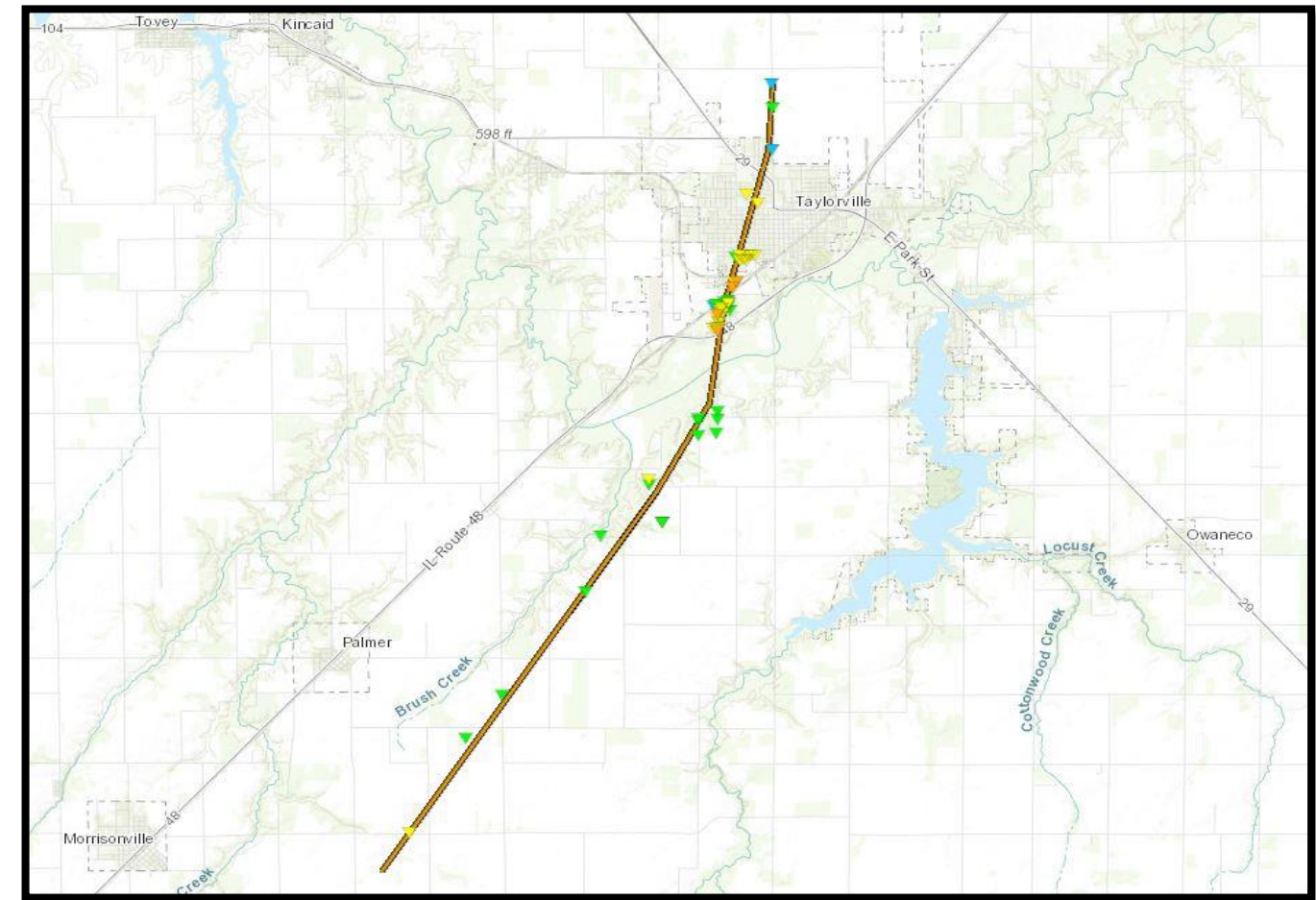
Preliminary Damage Survey Results



National Weather Service
Lincoln, Illinois

Taylorville Tornado Christian County

Date	12/1/2018
Time (CST)	5:01 - 5:25 pm
Start Location	3.1 mi. ESE of Morrisonville
End Location	1.8 mi. NNW of Taylorville
EF Rating/Winds	EF3 (155 mph)
Path Length	12.7 mi.
Max Width	1/2 mile
Injuries/Deaths	22 / 0





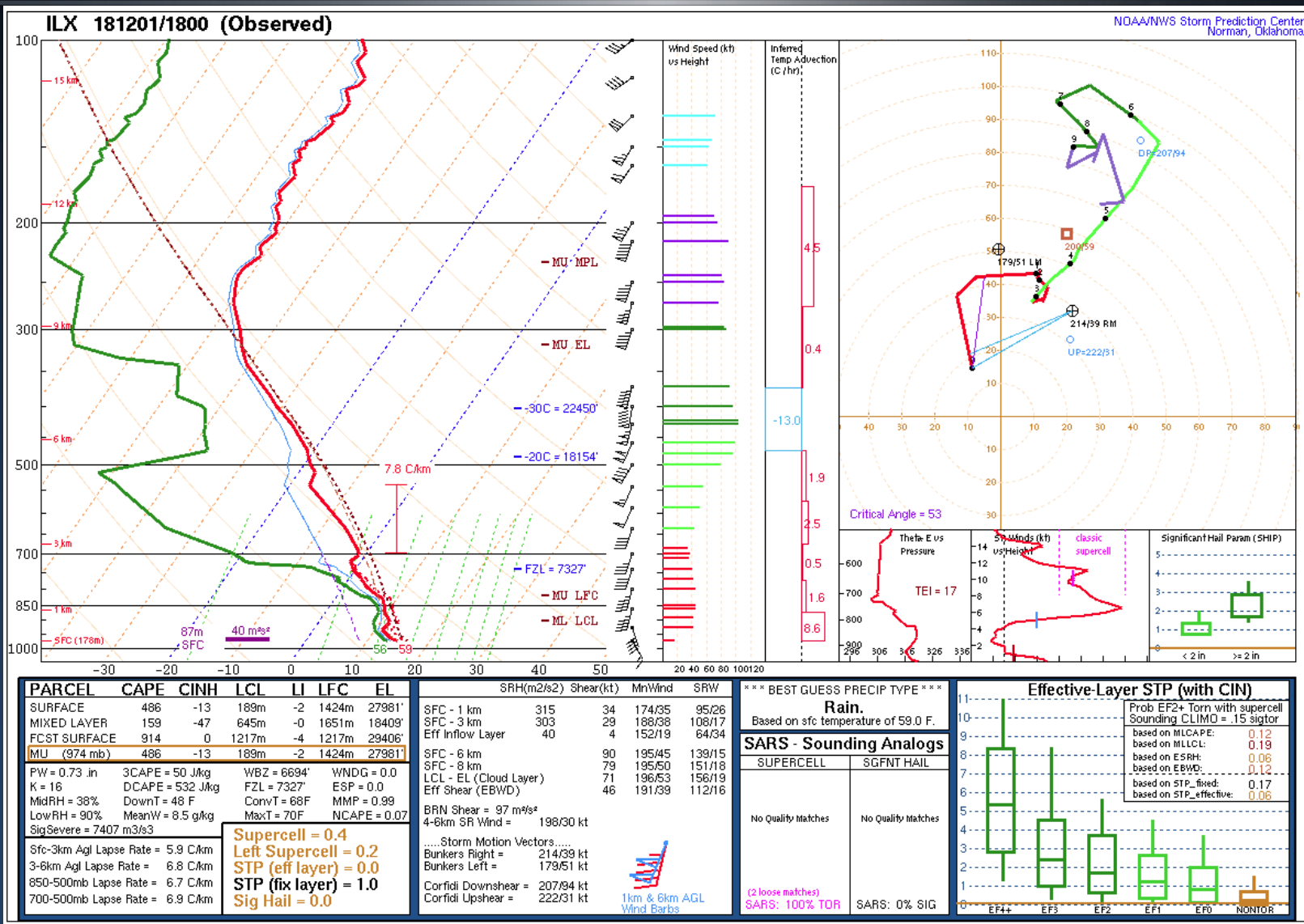
Why We Do What We Do

- “To be clear, **my decisions were heavily based on the conversations I had with the NWS Central Illinois office** leading up to the storm impact. **Having the NWS staff readily available to discuss the likely impact and timeline was crucial.** This was especially important as **hundreds of parade participants** were in place **one block away from** what ended up being the **tornado path.** In my view, the **entire decision support program** you have long promoted, **worked flawlessly.** It’s clear from all the positive feedback we have received since the December 1st tornado event, that other emergency managers, elected officials, media and the community at large share that belief.”

*Mike Crews, Christian County, IL Emergency Management Agency
Director/City of Taylorville Fire Chief.*

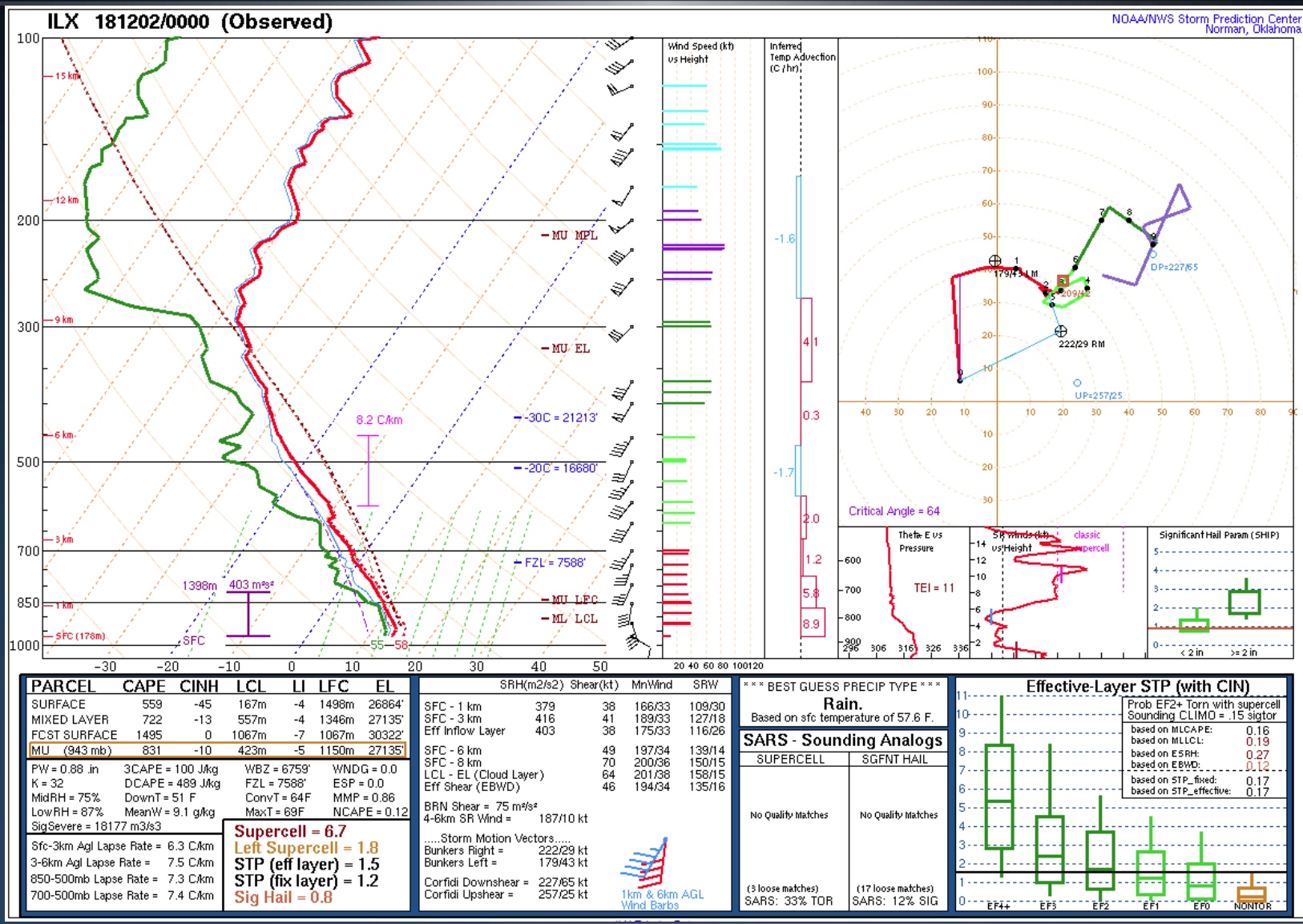


ILX UA Sounding 1/18z



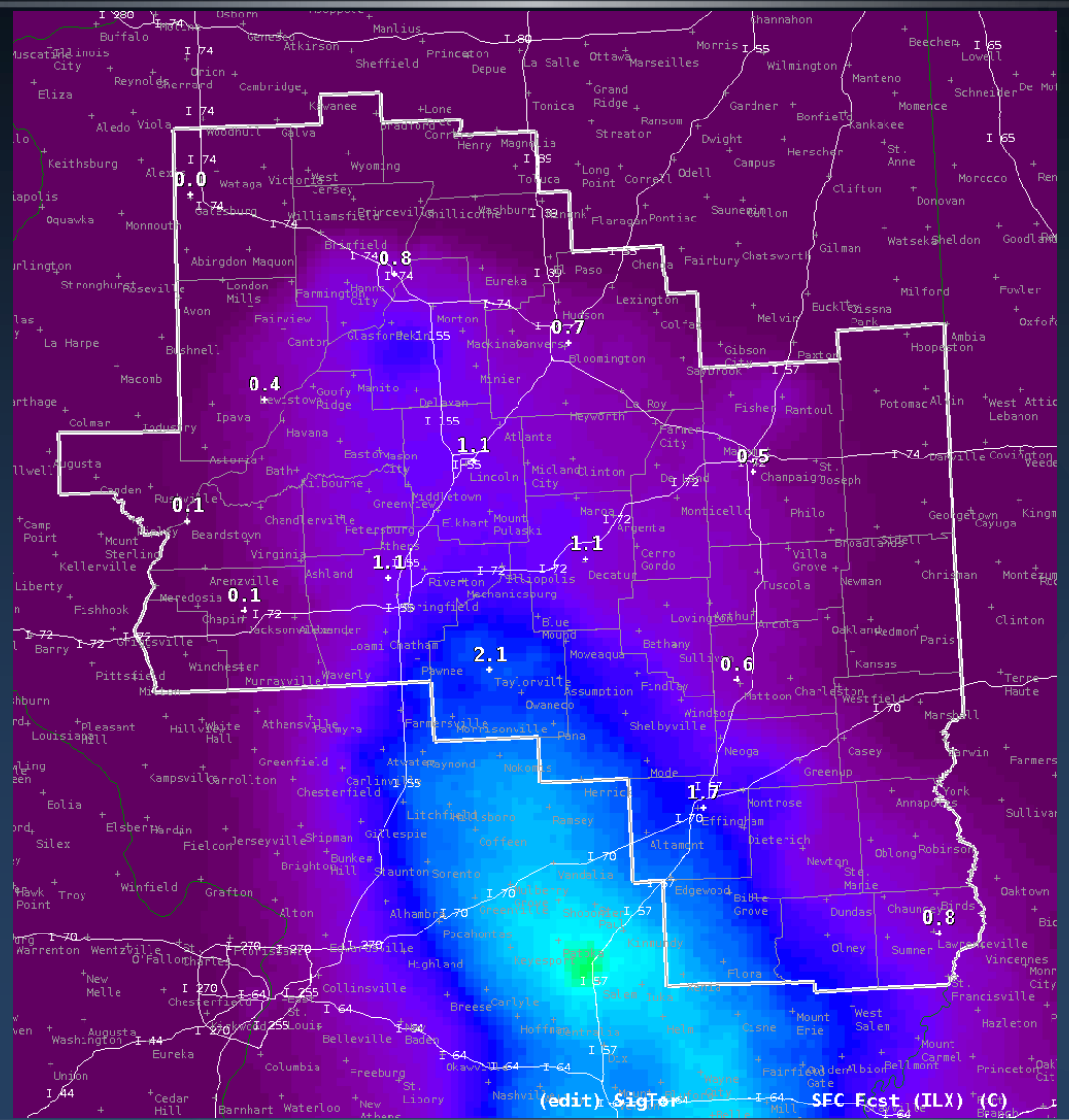


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Questions?