Six Tornadoes on May 24, 2017

Andy Hatzos

NWS Wilmington Ohio

2018 Great Lakes Operational Meteorology Workshop

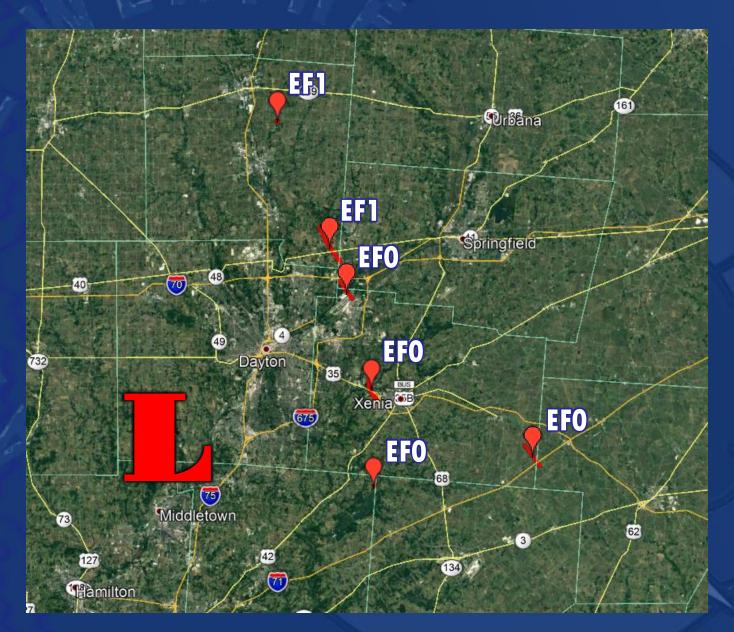
Never Trust a Surface Low in May!!!

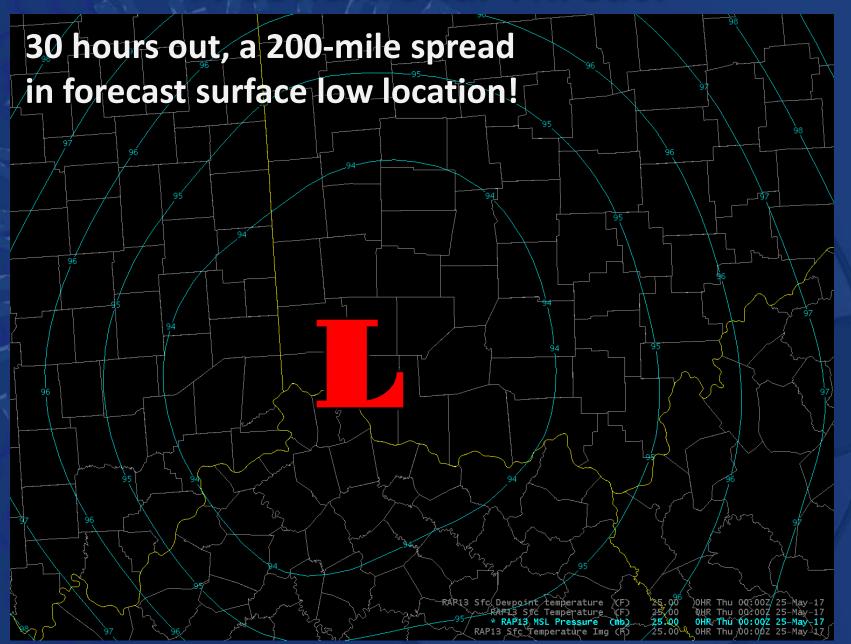
Andy Hatzos

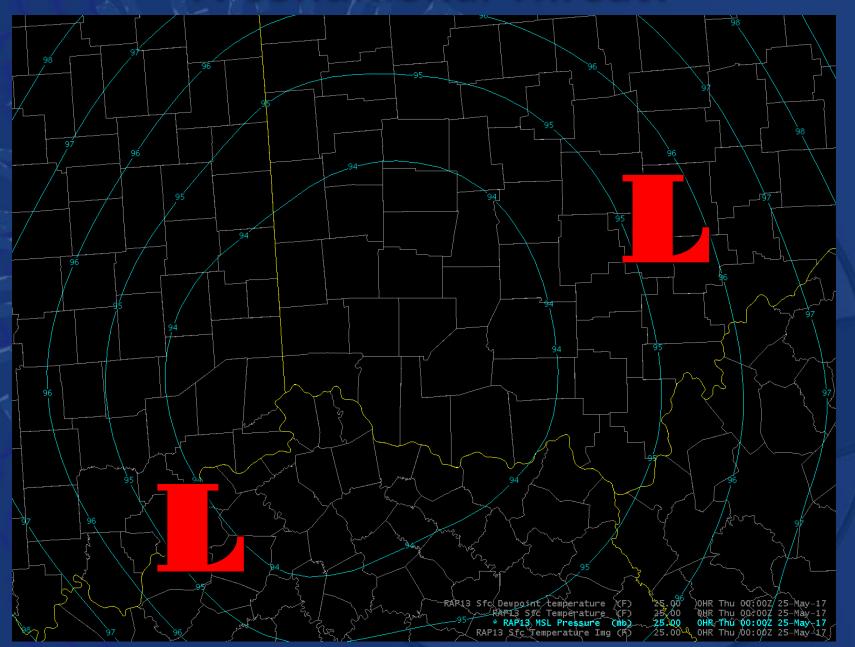
NWS Wilmington Ohio

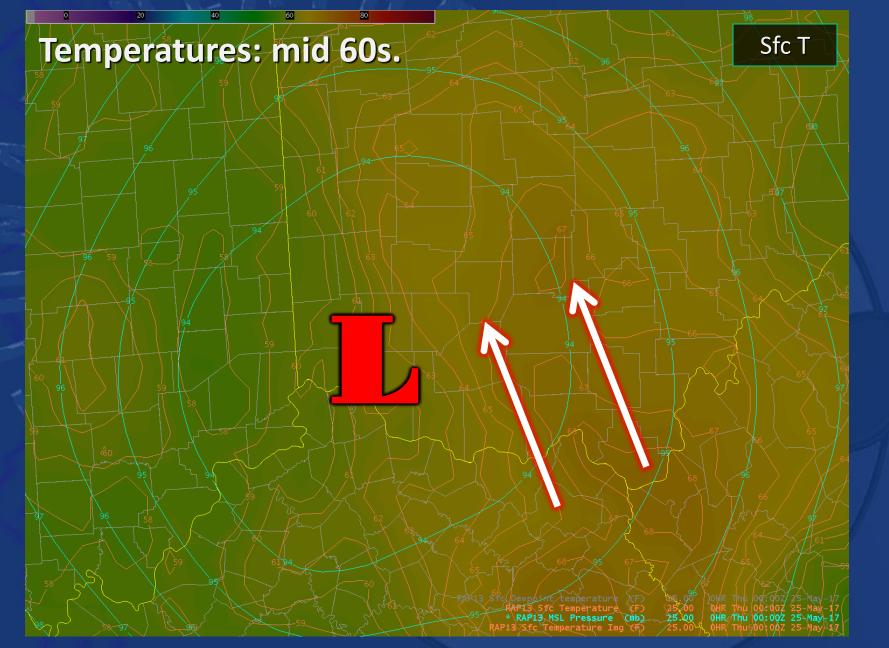
2018 Great Lakes Operational Meteorology Workshop

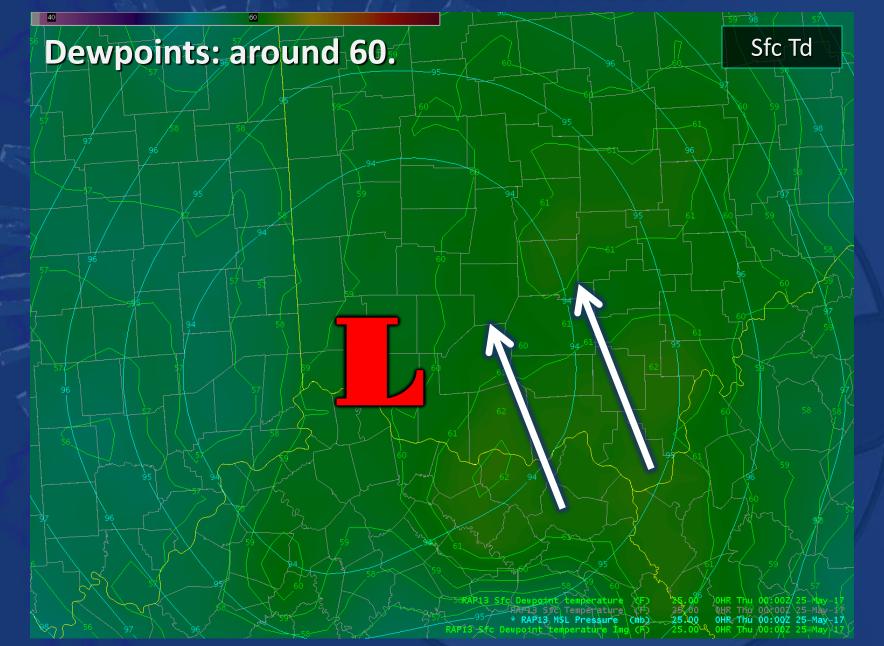
What happened?

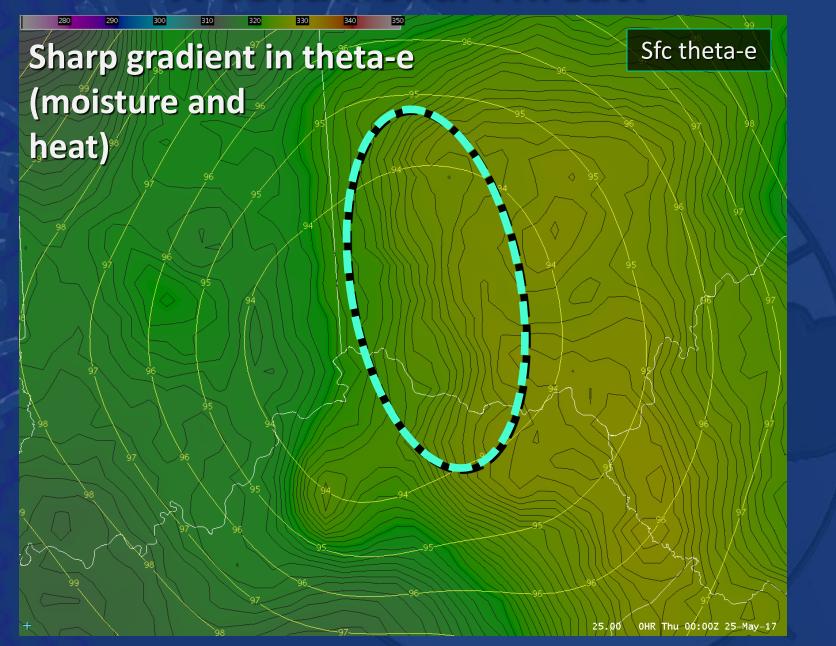


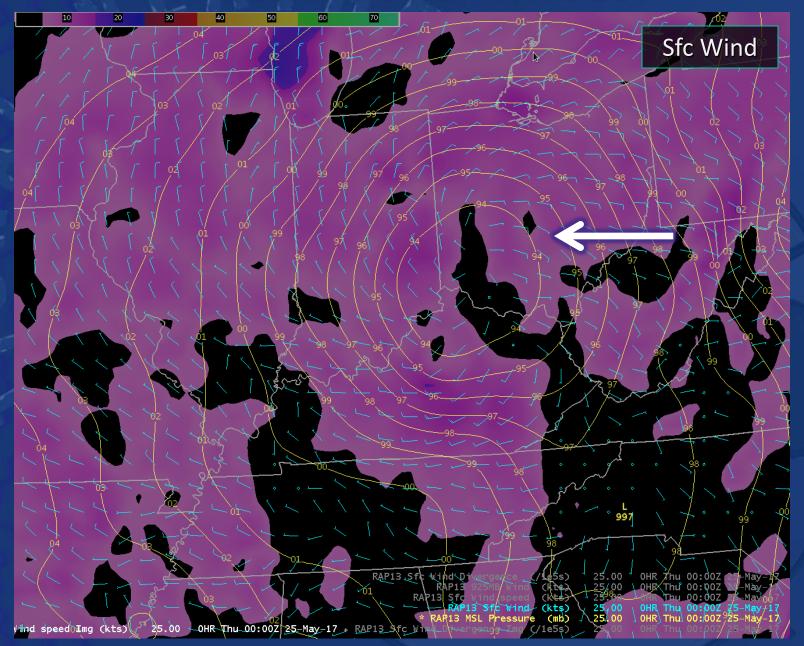


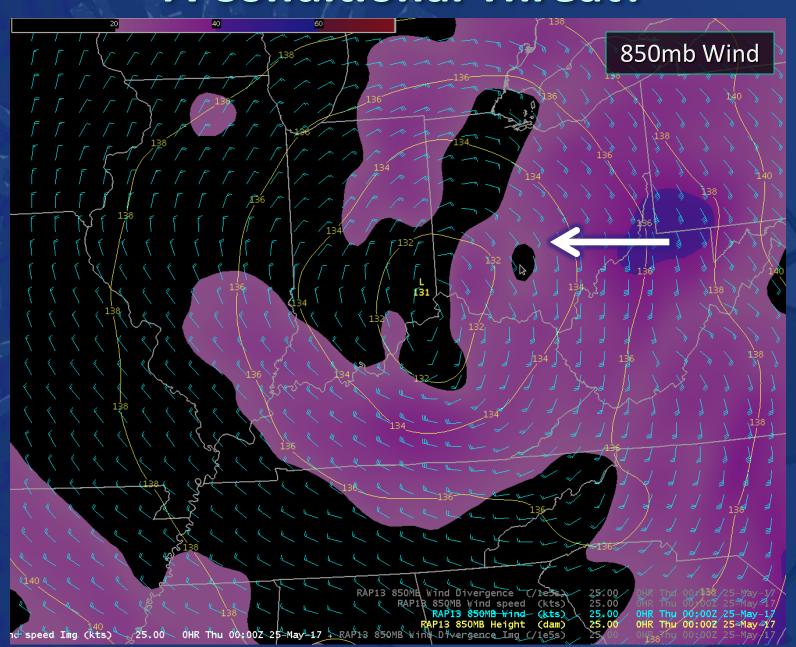


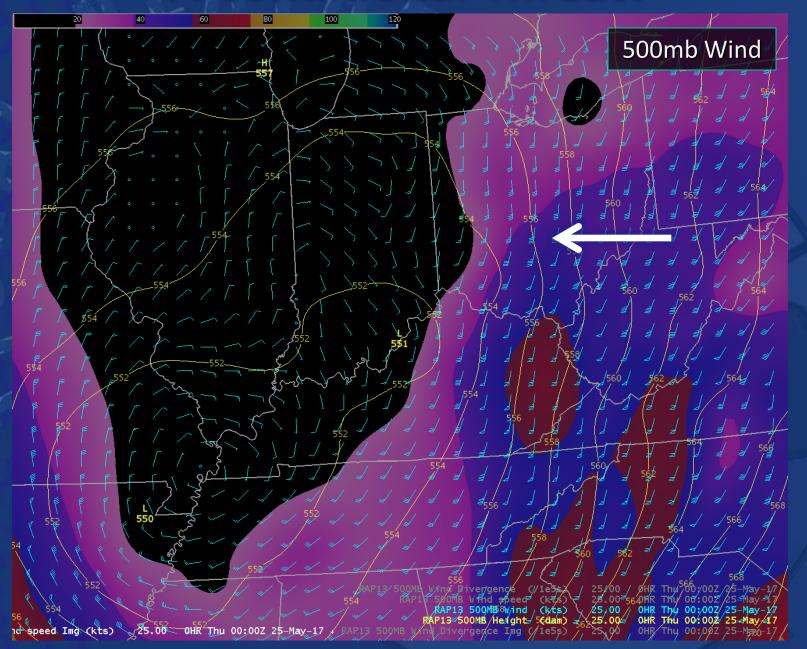


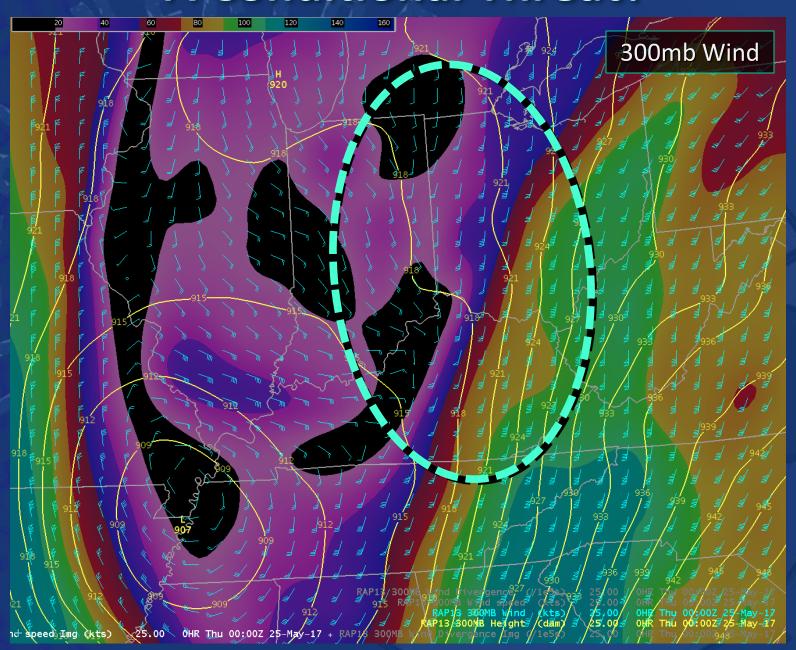












As Confidence Increases...

May 24, 2017

9:53 AM

Partner Email: A few storms may become severe with the main threat being damaging winds and isolated tornadoes.

May 24, 2017

3:38 PM

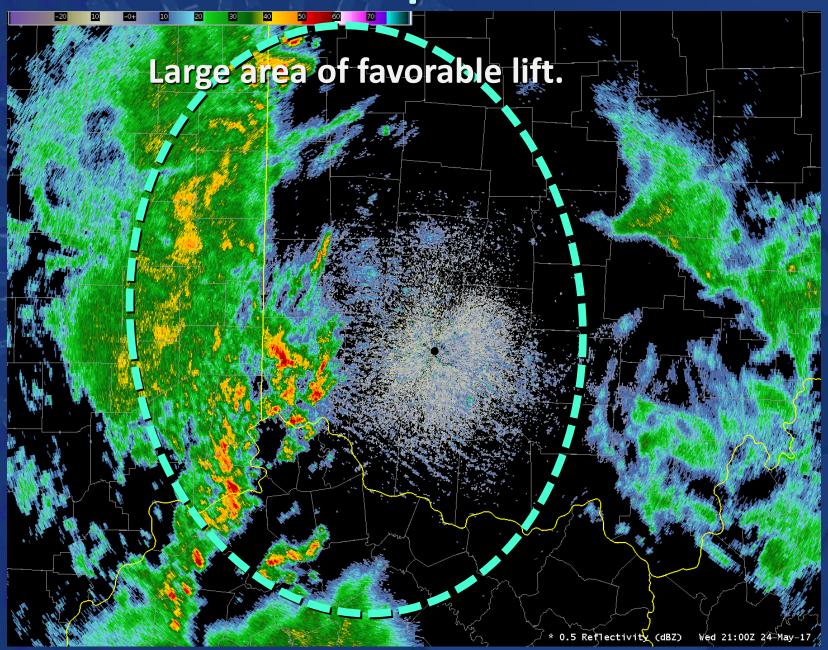
HWO: With low LCLs cannot rule out some tornado potential through the early evening hours.

May 24, 2017

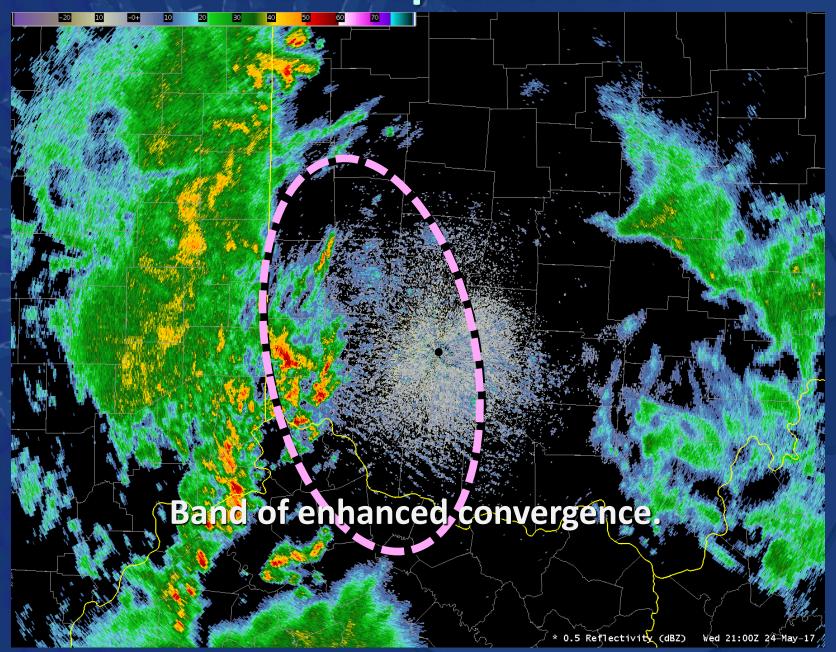
6:30 PM

Hi guys!

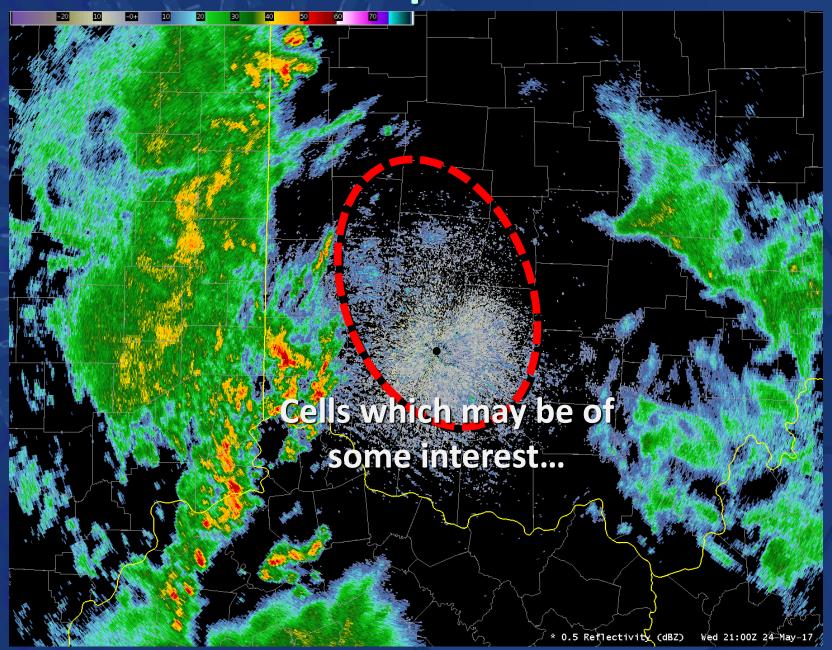
Radar Loop Overview



Radar Loop Overview

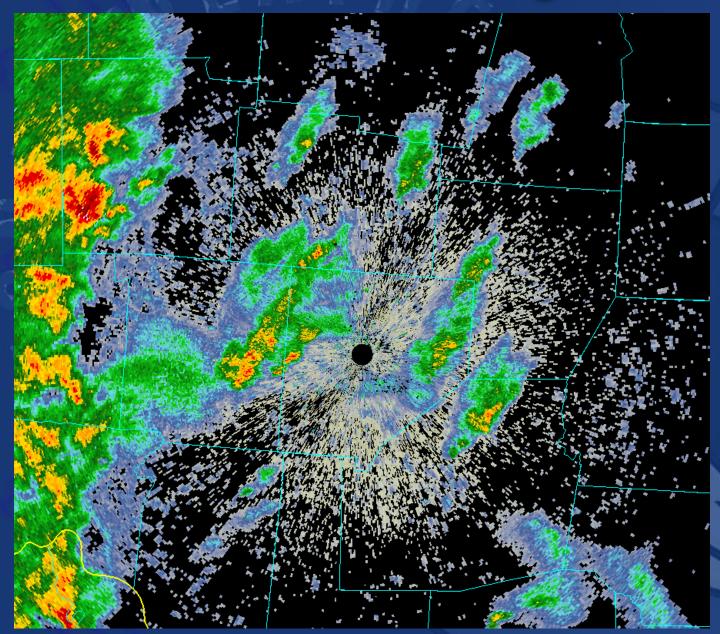


Radar Loop Overview



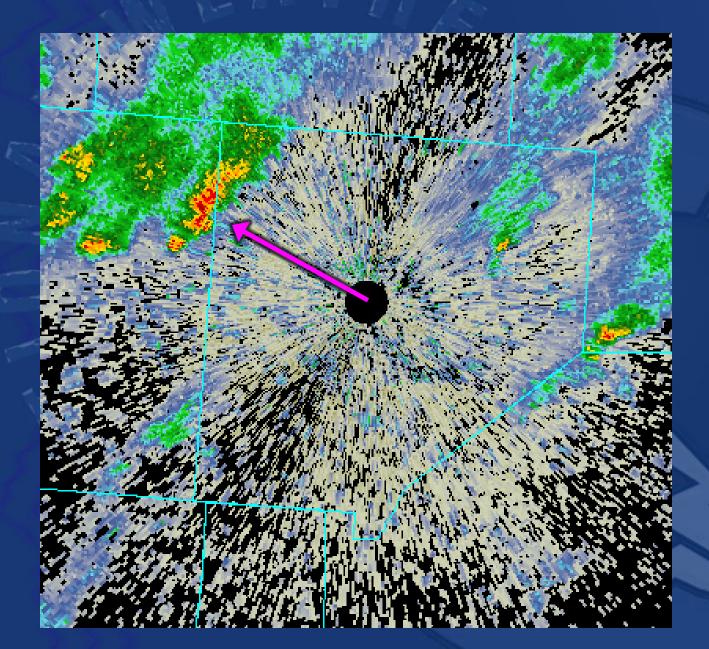
Sounding!

May 24, 2017 **7:11 PM**



A Look Outside...

May 24, 2017 **7:27 PM**



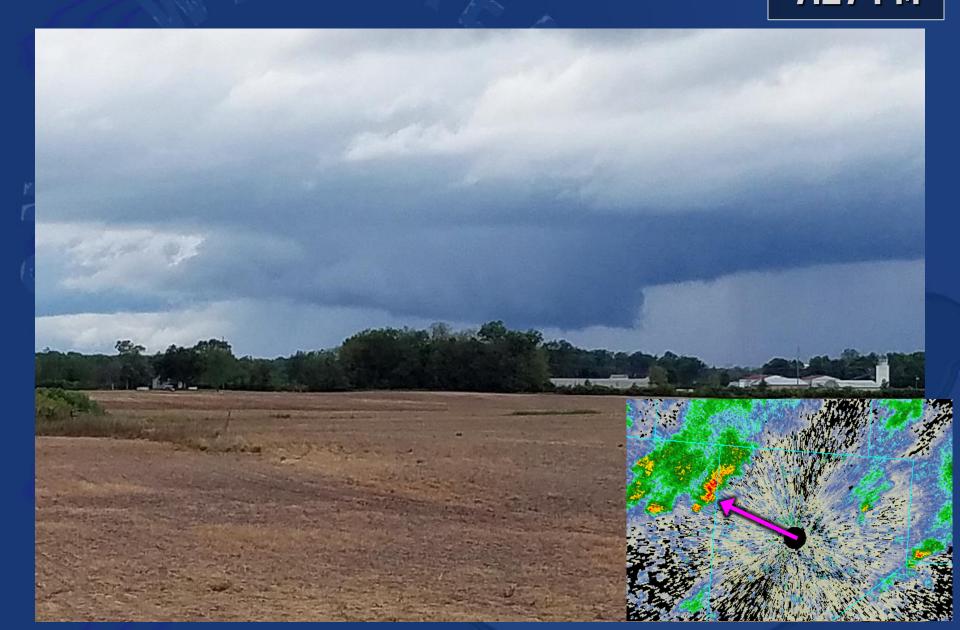
A Look Outside...

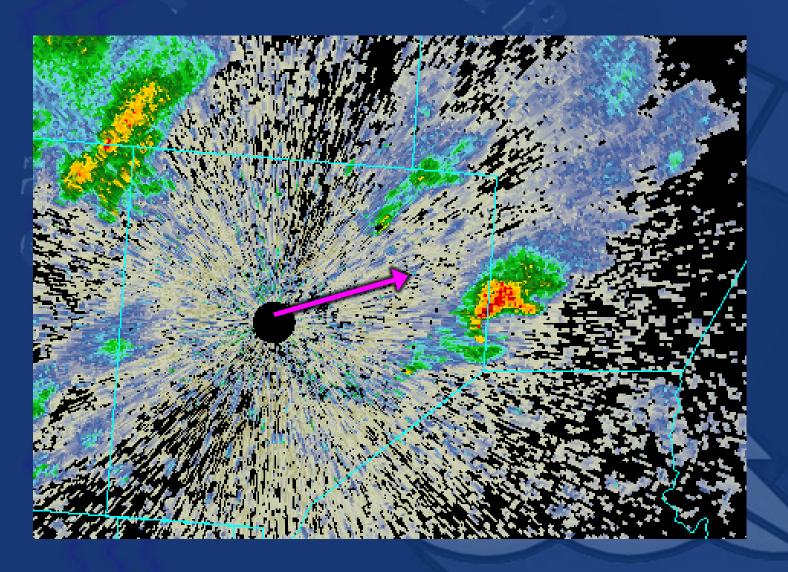
May 24, 2017 **7:27 PM**



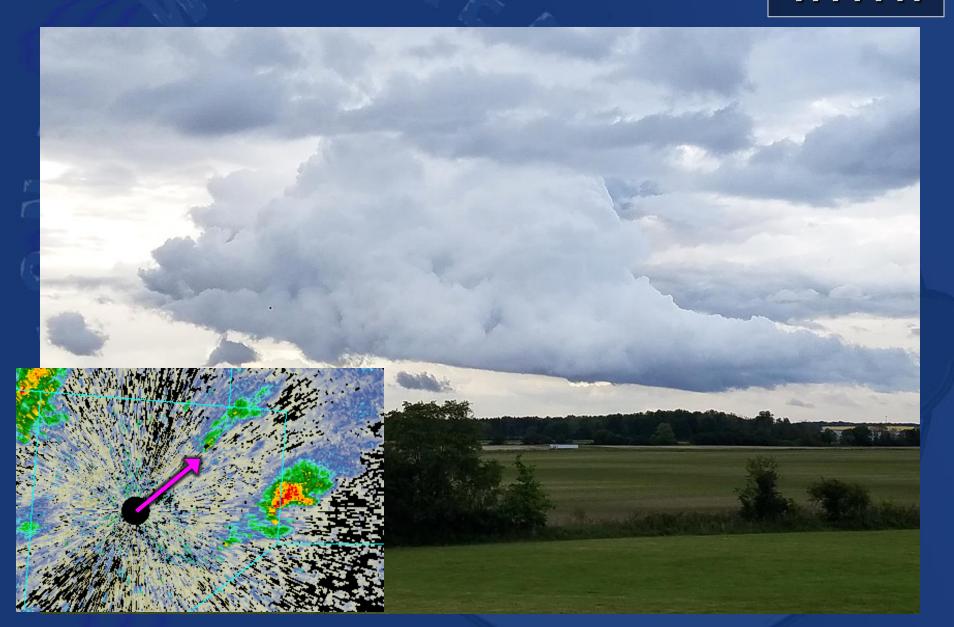
A Look Outside...

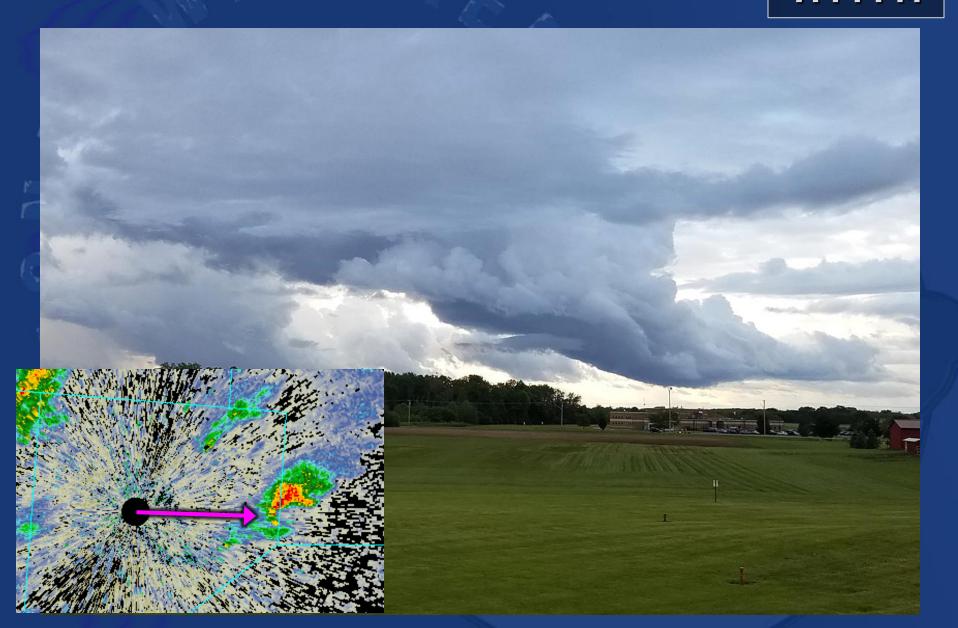
May 24, 2017 **7:27 PM**

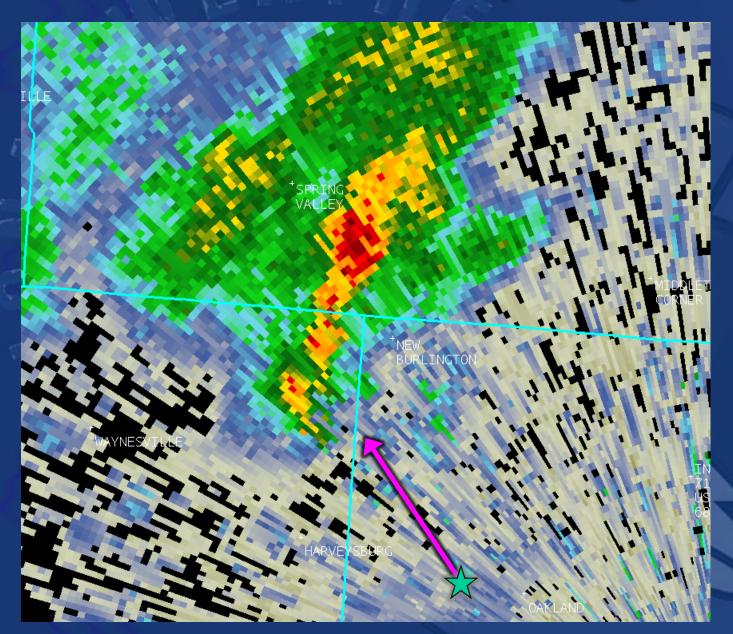






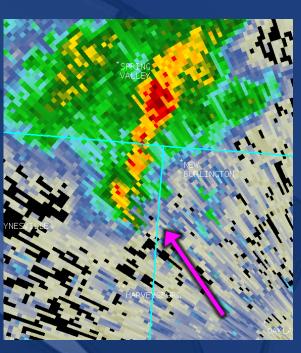


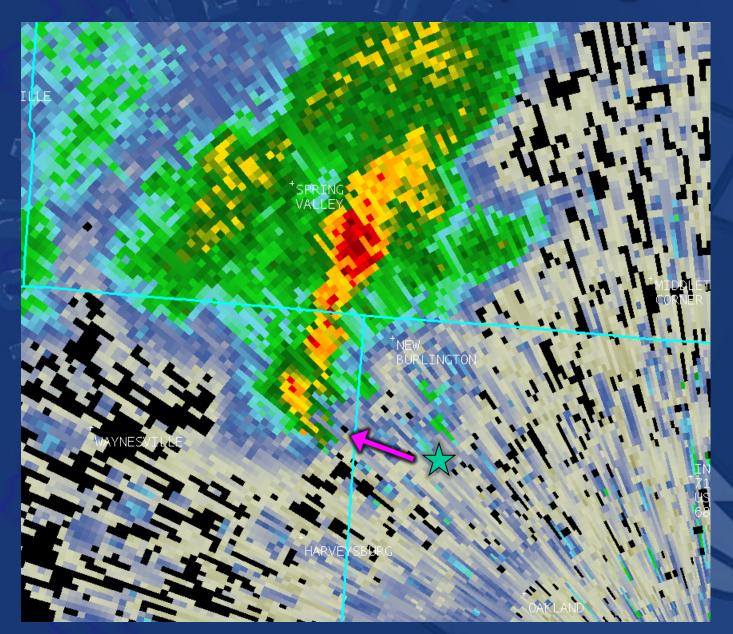




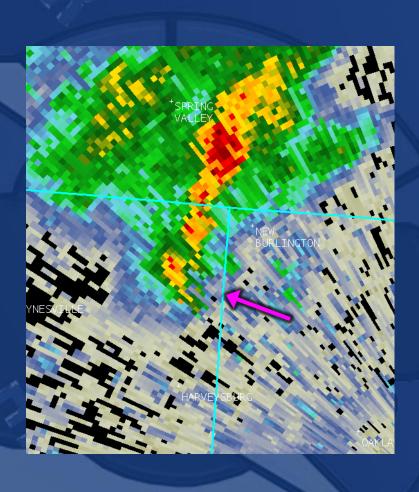








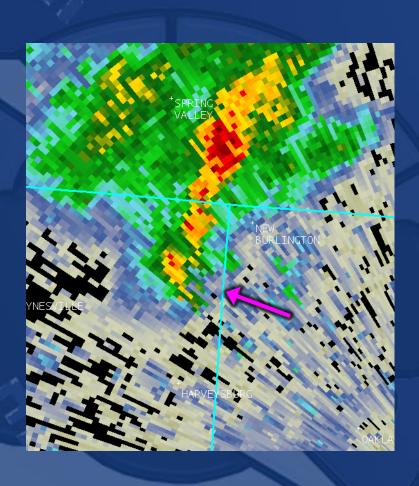




May 24, 2017



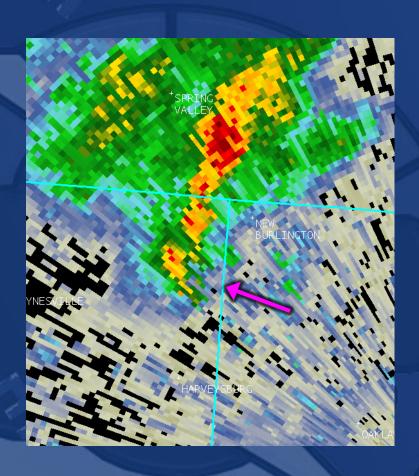




May 24, 2017

7:47 PM

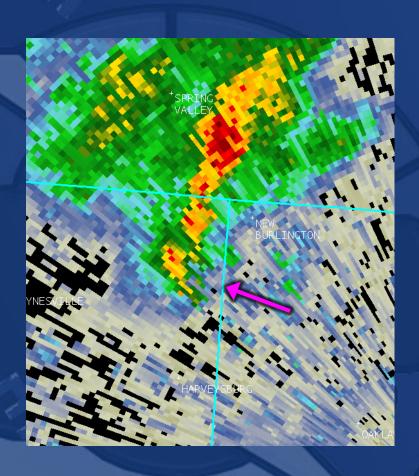




May 24, 2017

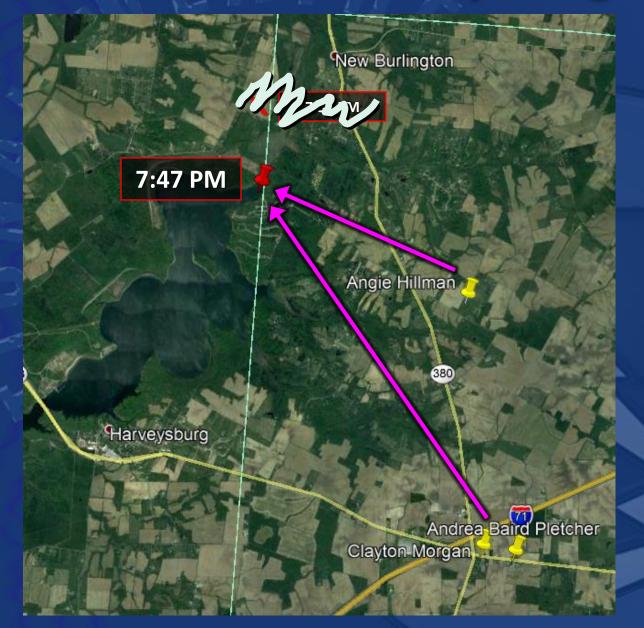
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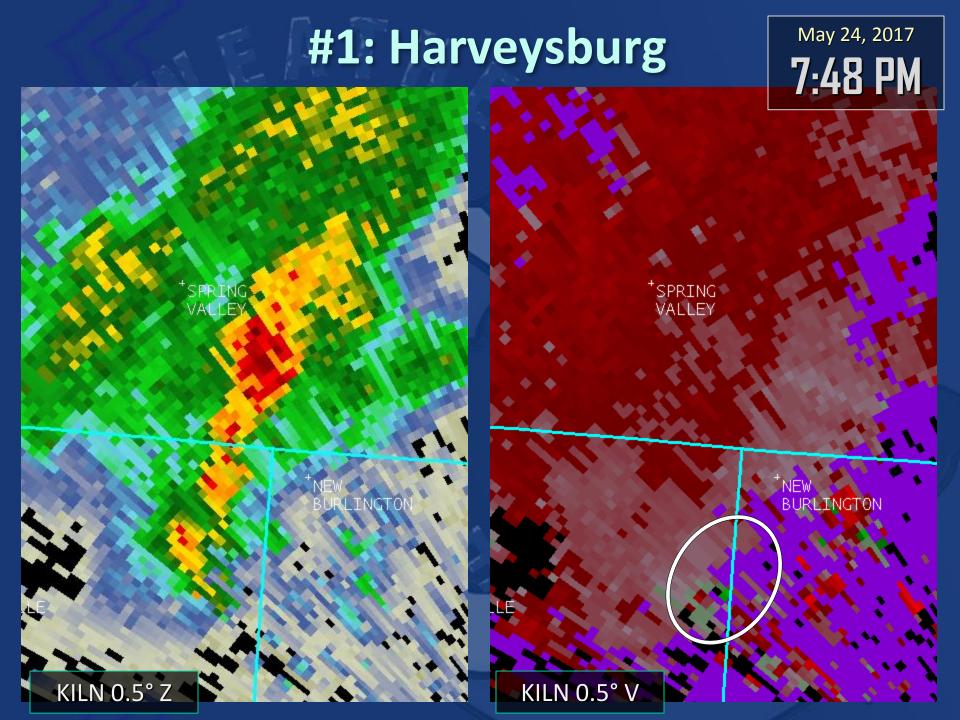




May 24, 2017

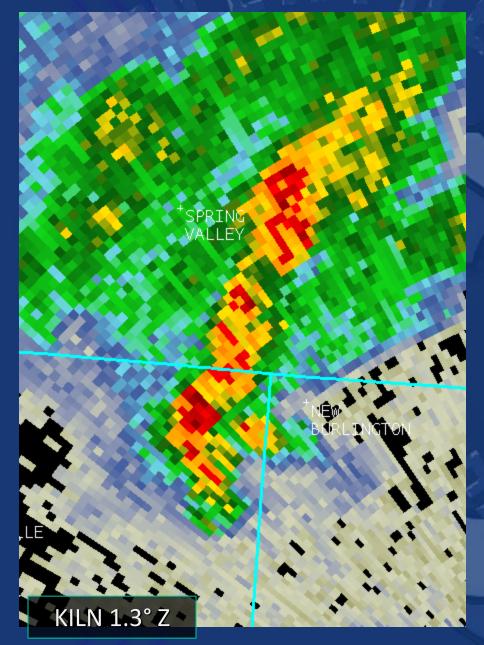
7:47 PM

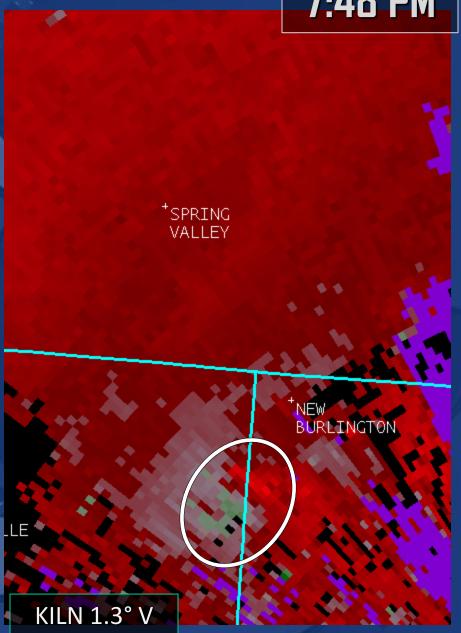


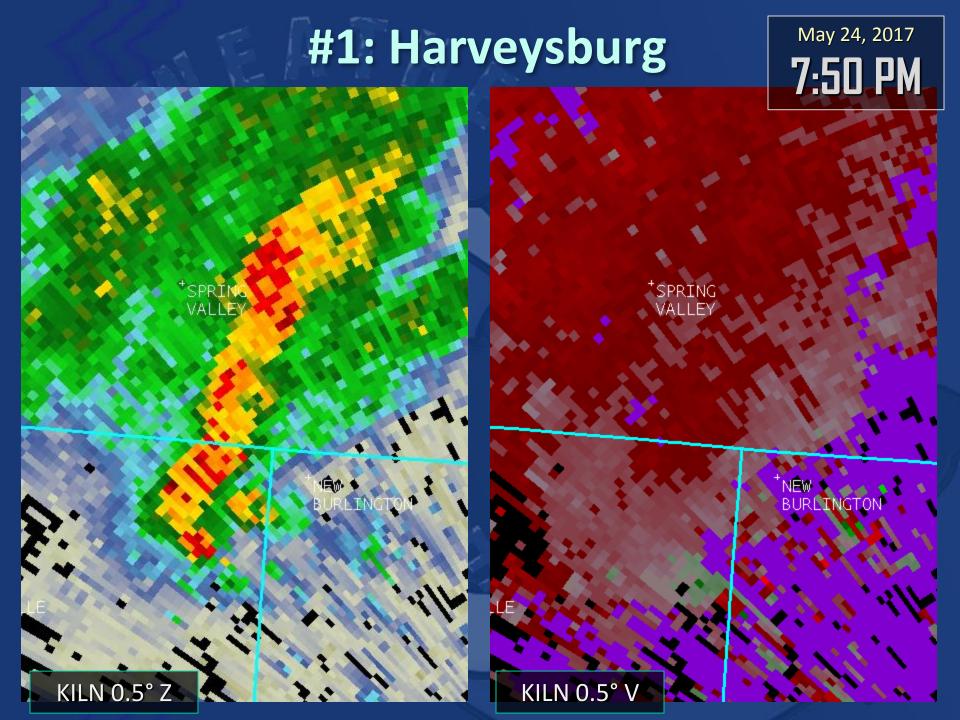


May 24, 2017

7:48 PM

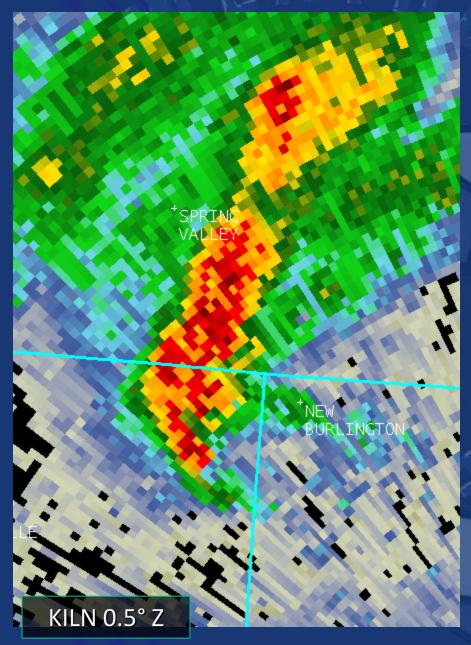


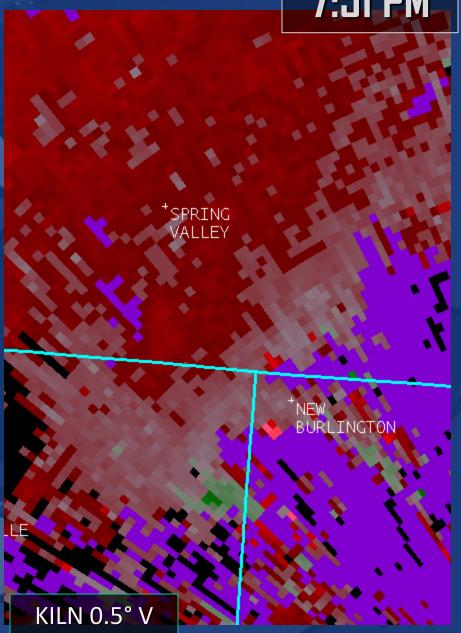


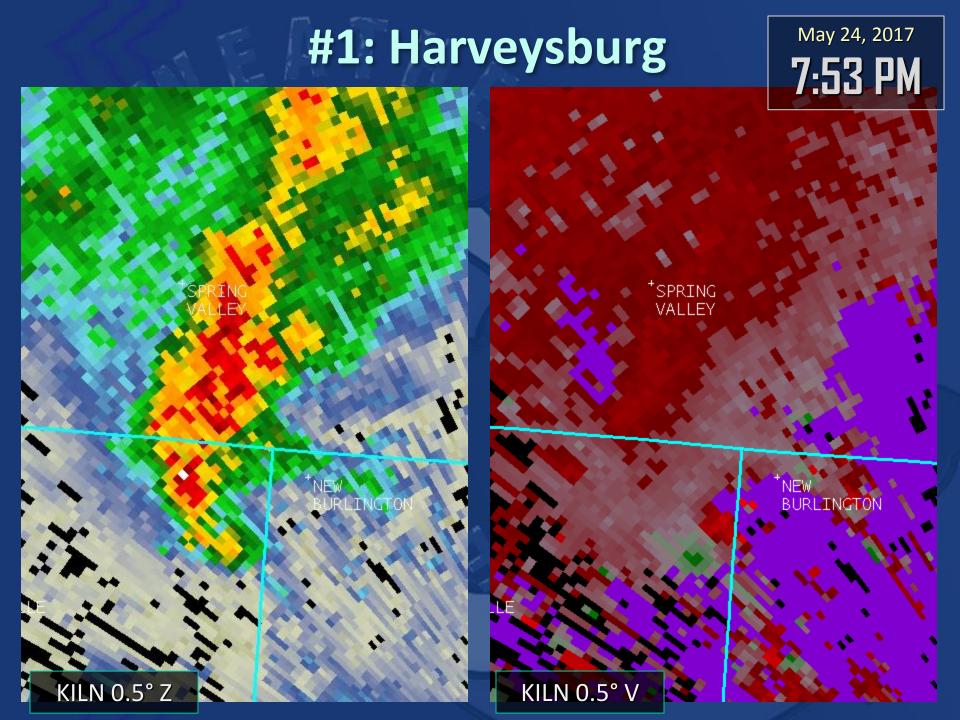


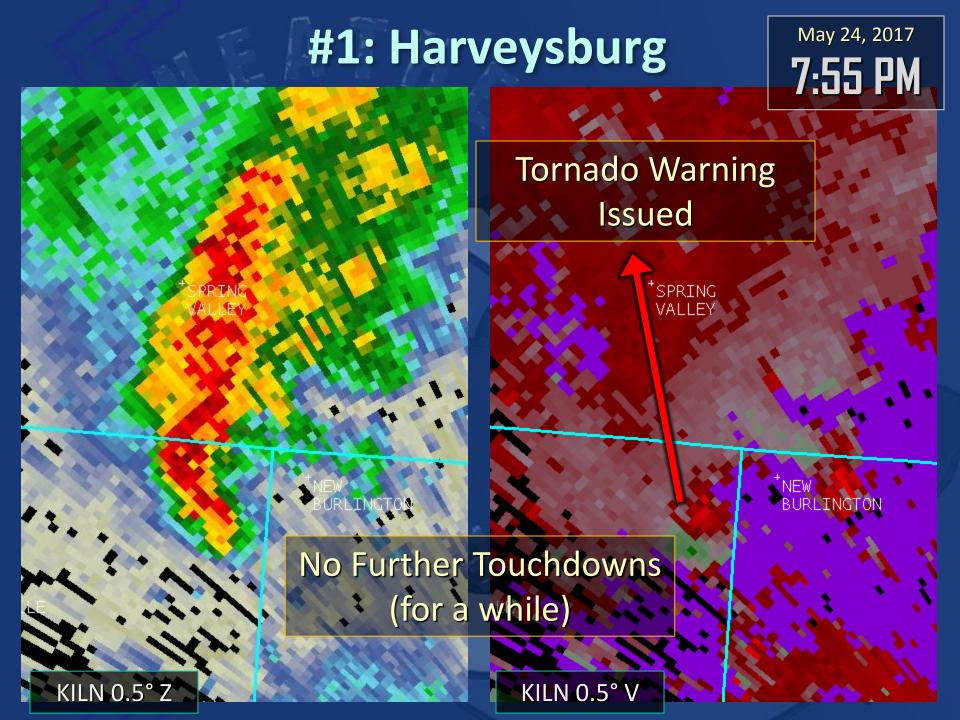
May 24, 2017

7:51 PM

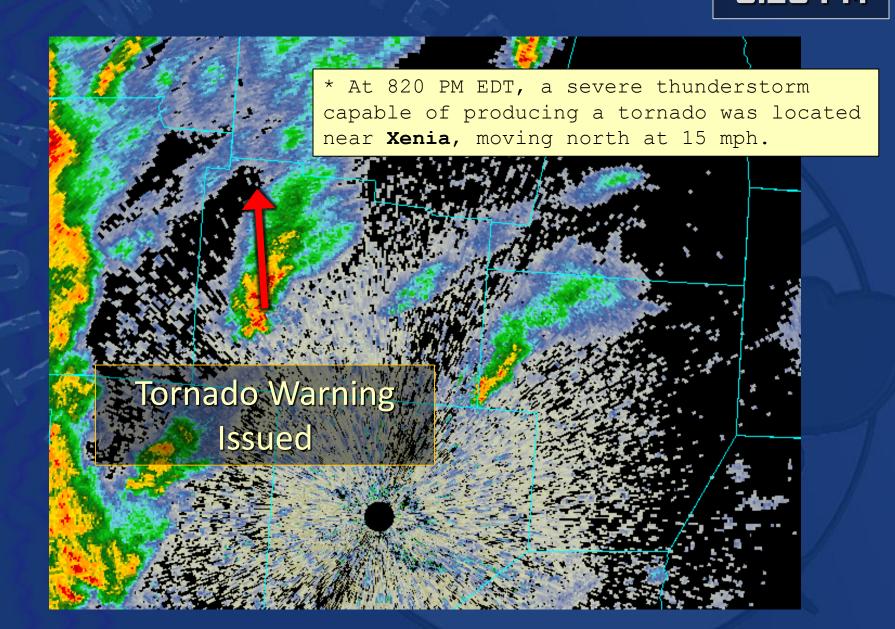




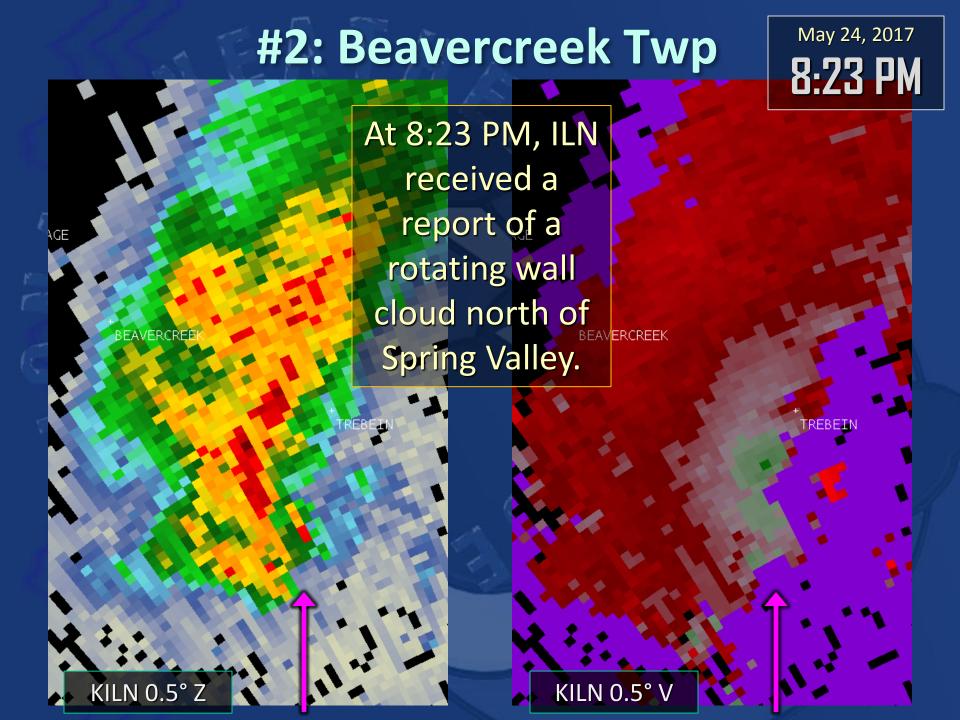




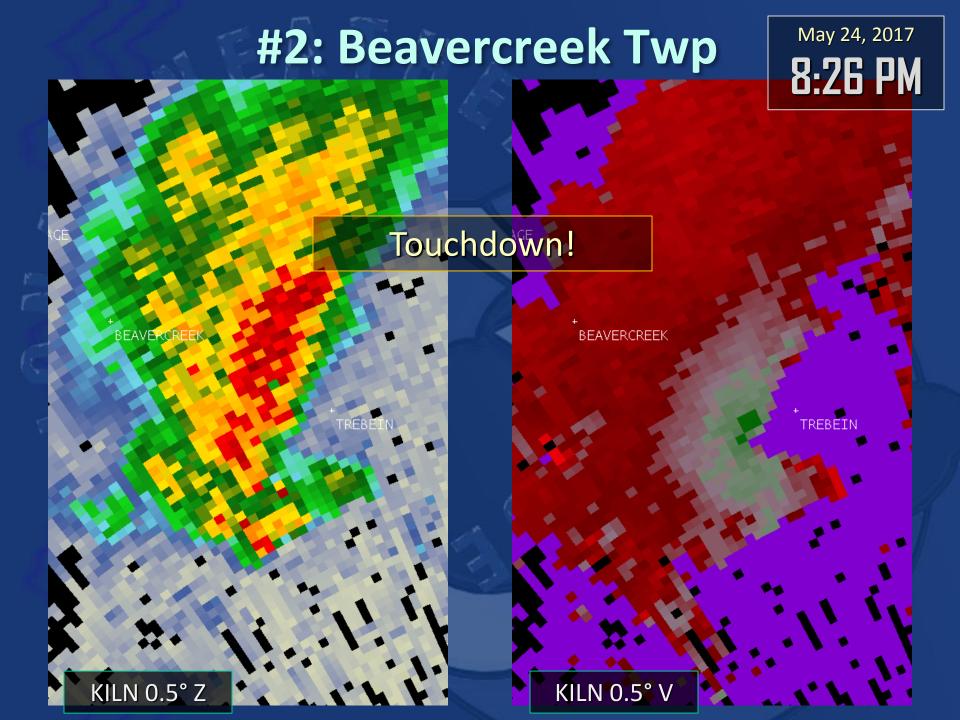
May 24, 2017 **8:20 PM**

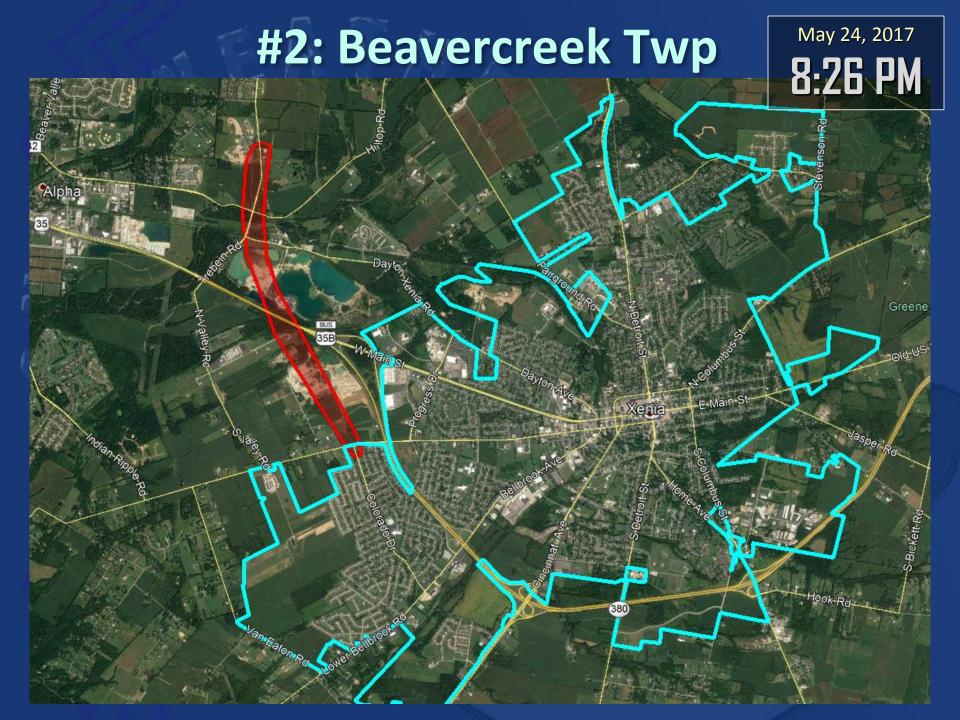


#2: Beavercreek Twp May 24, 2017 8:21 PM BEAVERCREE BEAVERCREEK KILN 0.5° Z KILN 0.5° V



#2: Beavercreek Twp May 24, 2017 8:25 PM BEAVERCREEK BEAVERCREEK TREBEIN KILN 0.5° Z KILN 0.5° V

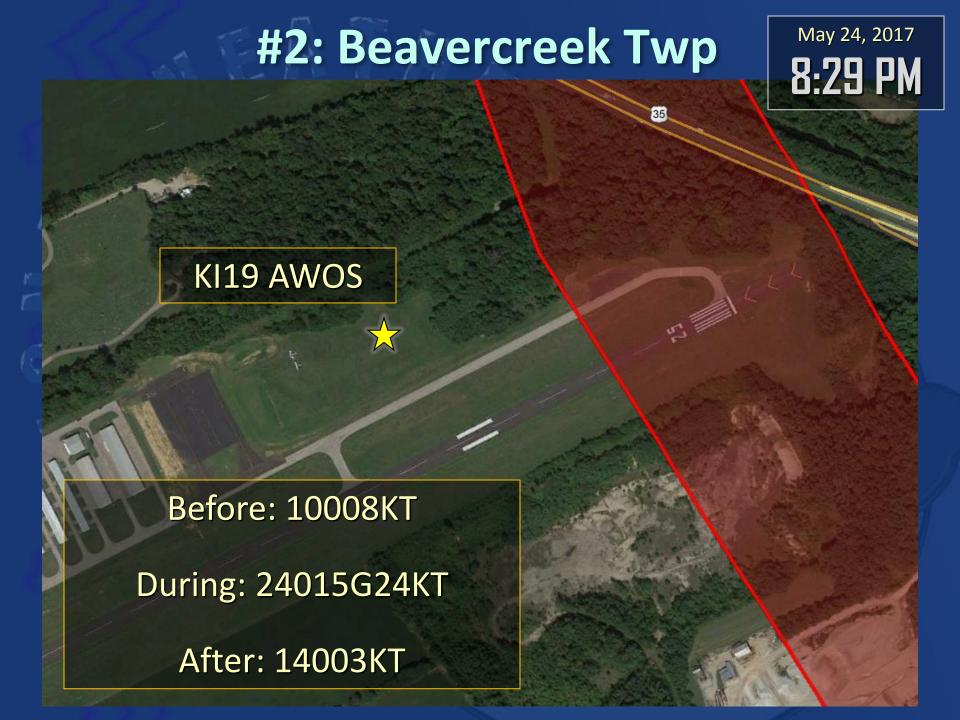




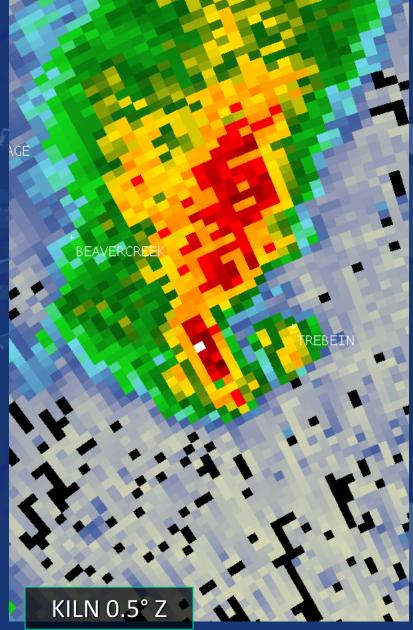
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May 24, 2017 **8:26 PM**





May 24, 2017 **8:30 PM**





#2: Beavercreek Twp May 24, 2017 8:30 PM PAGE BEAVERCREE REBEIN

May 24, 2017 **8:30 PM**



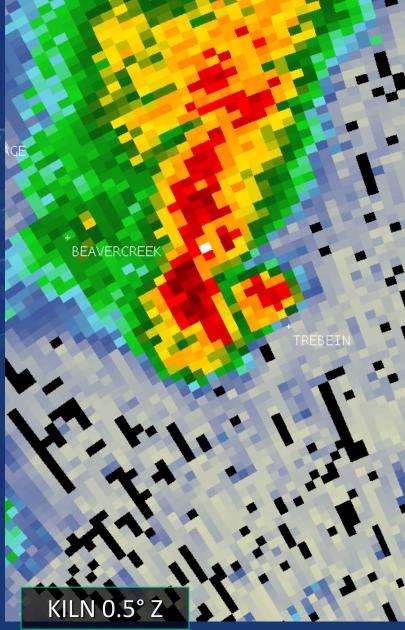
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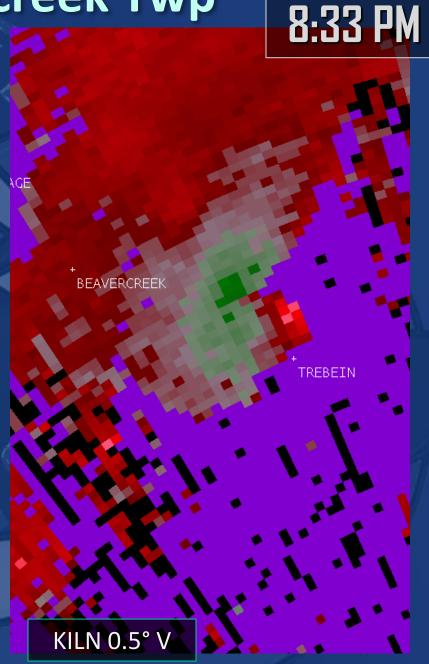
May 24, 2017 **8:30 PM**





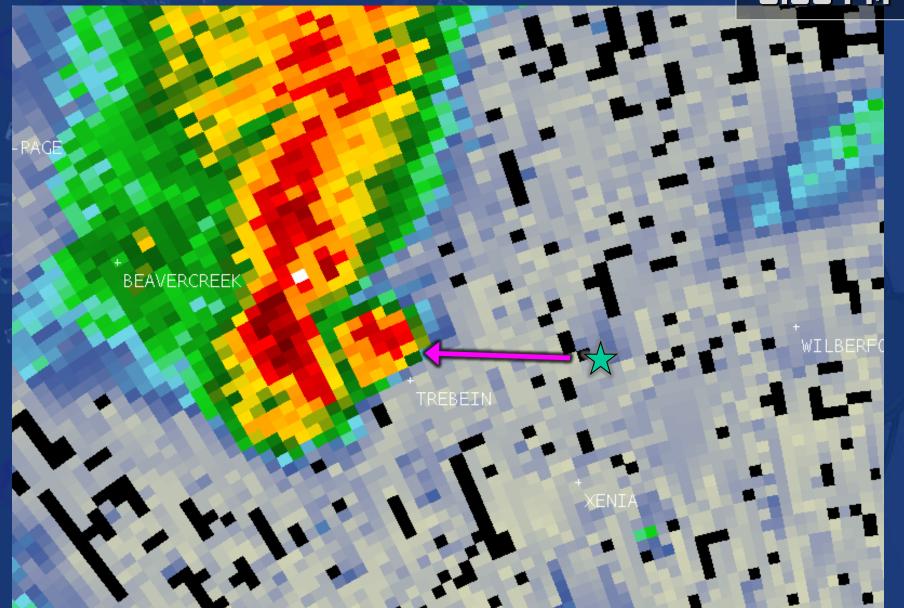
May 24, 2017





May 24, 2017

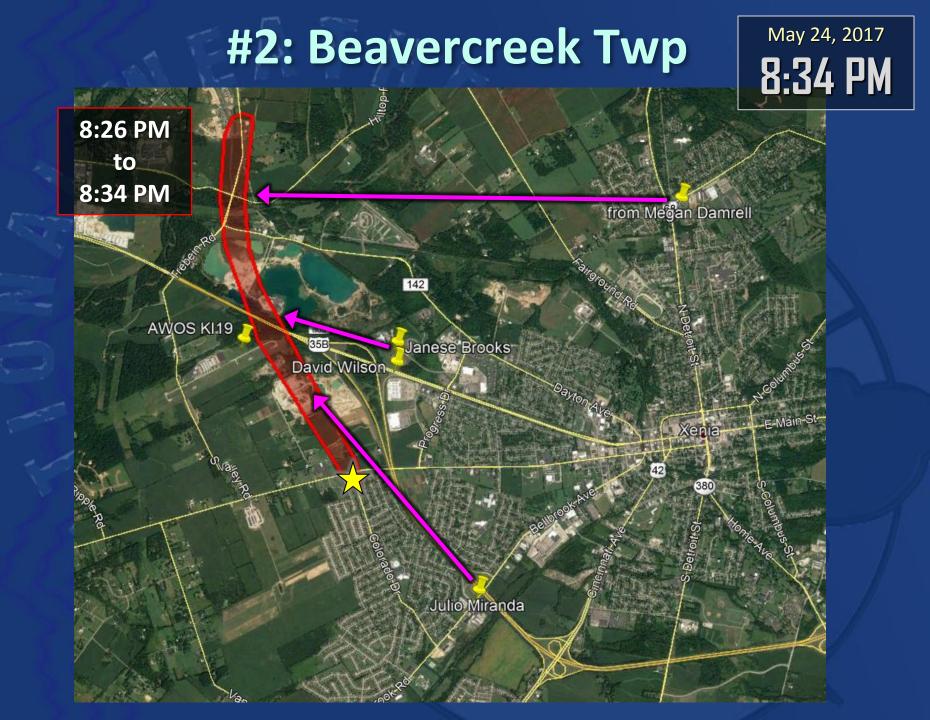
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May 24, 2017

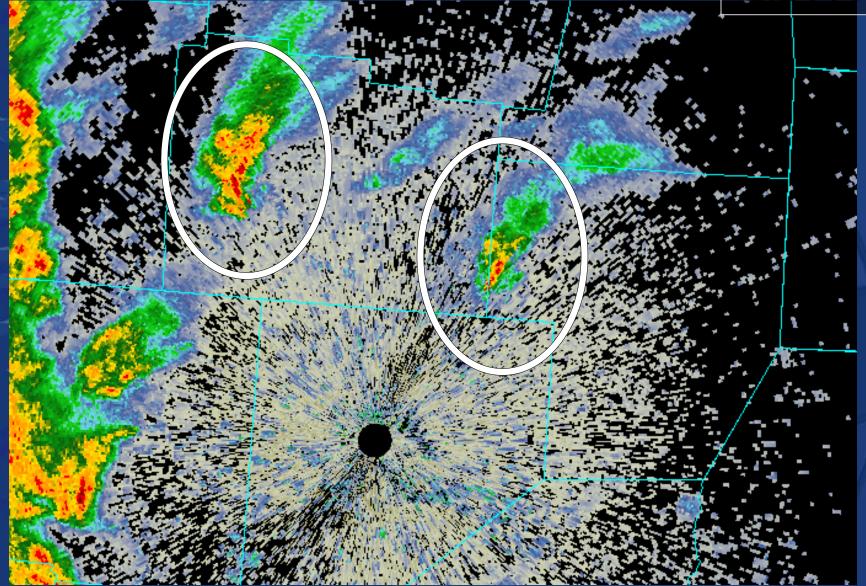
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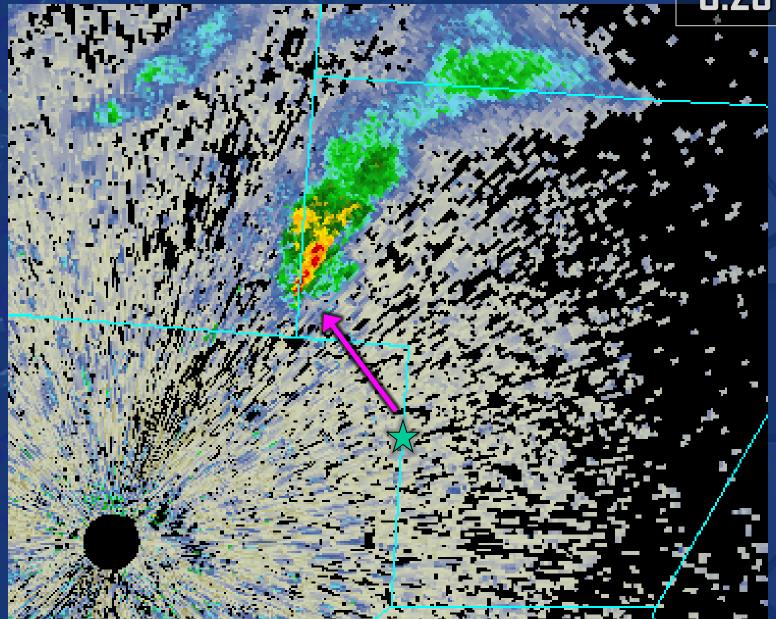
May 24, 2017

8:24 PM



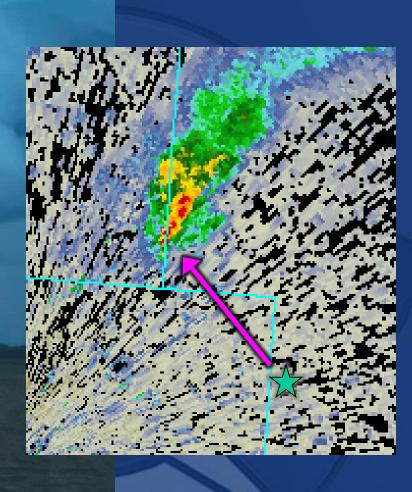
May 24, 2017

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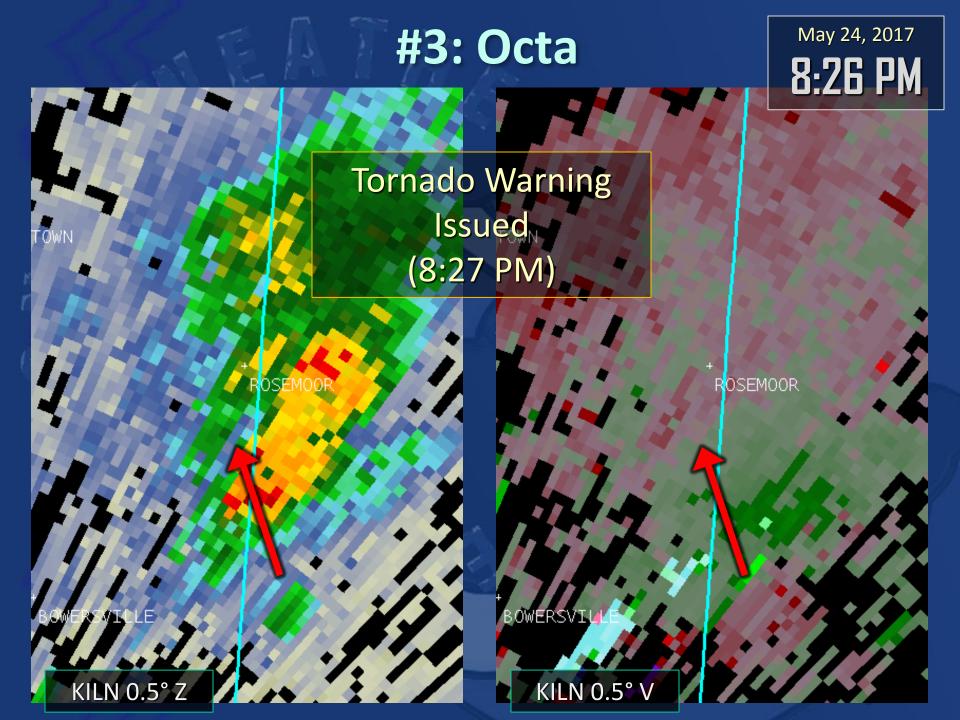


May 24, 2017

8:25 PM

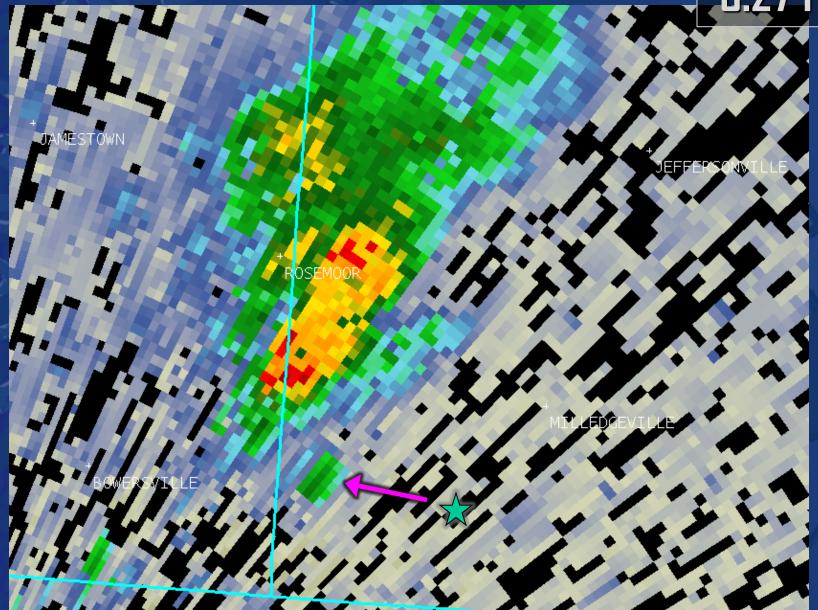


Jeff Myers, NWS OHRFC



May 24, 2017

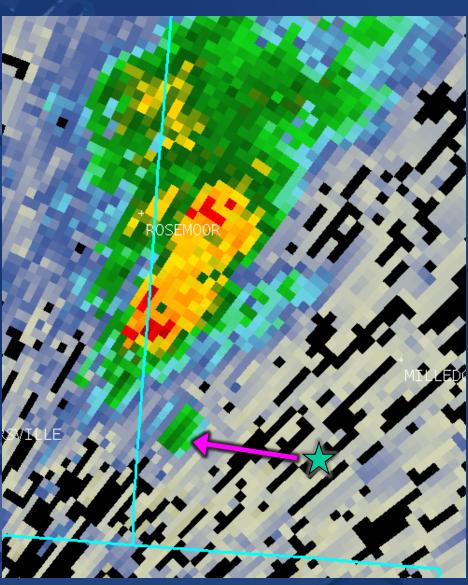
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May 24, 2017

8:27 PM

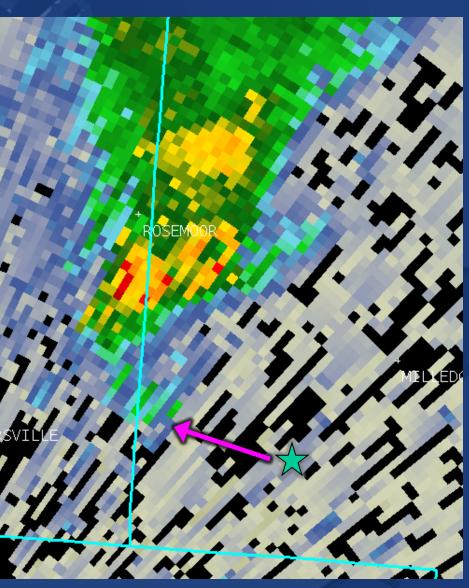




May 24, 2017

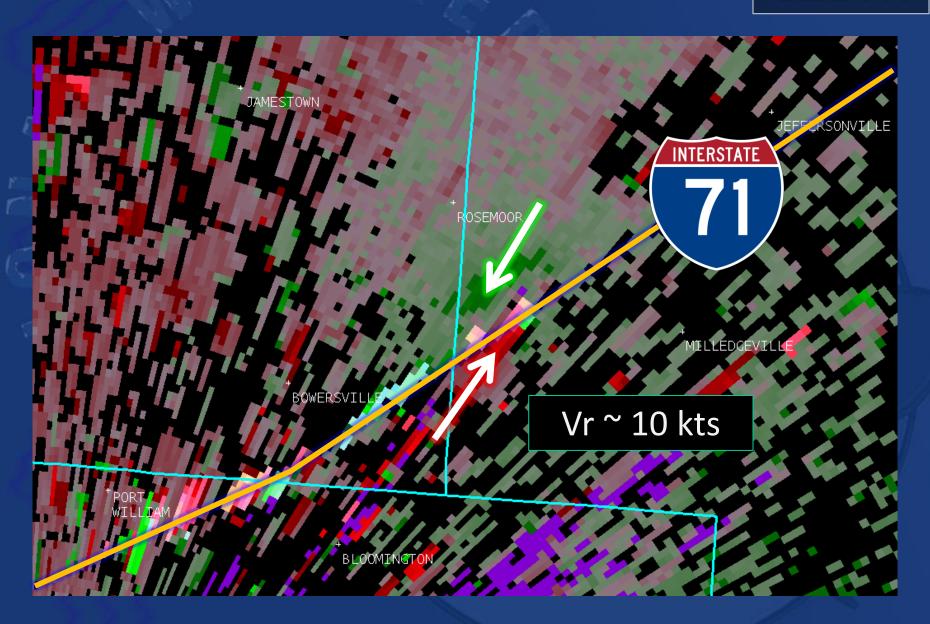
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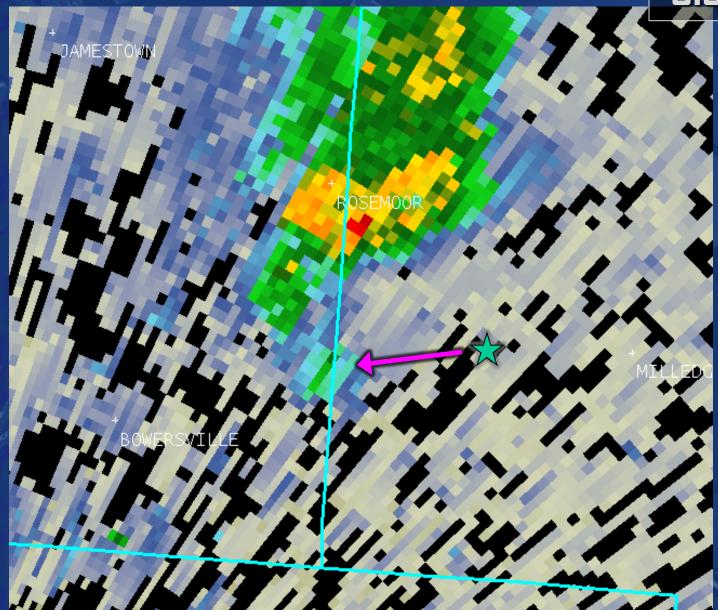


May 24, 2017

8:28 PM



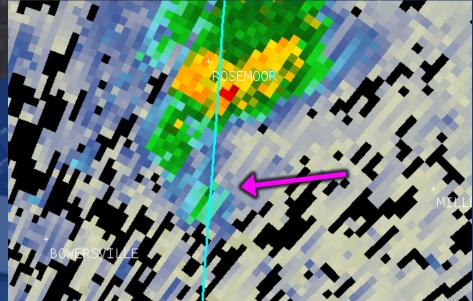
May 24, 2017

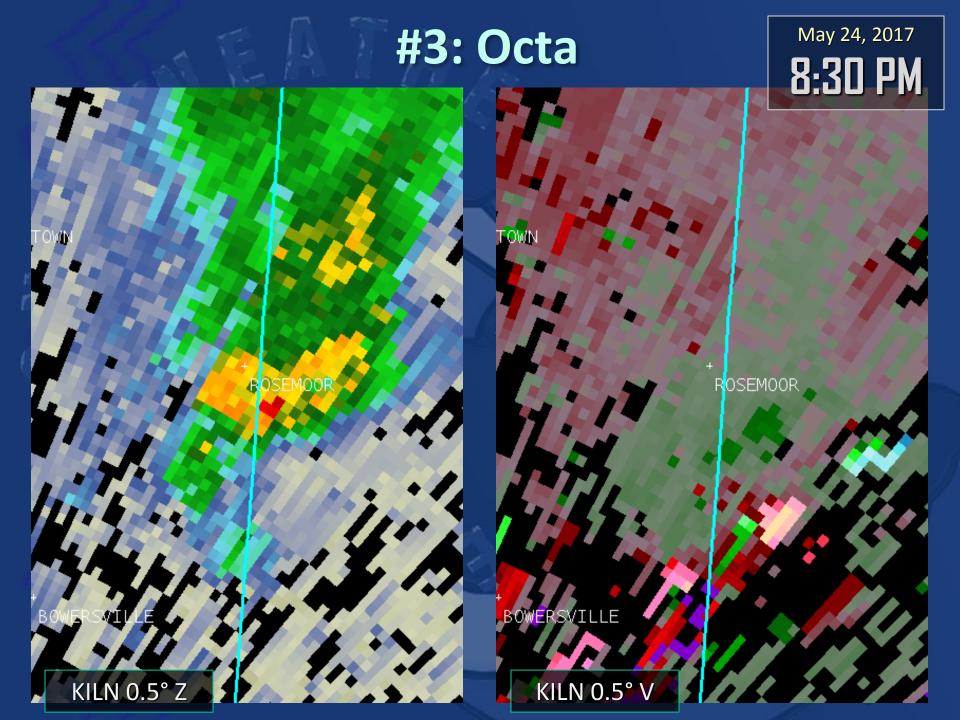


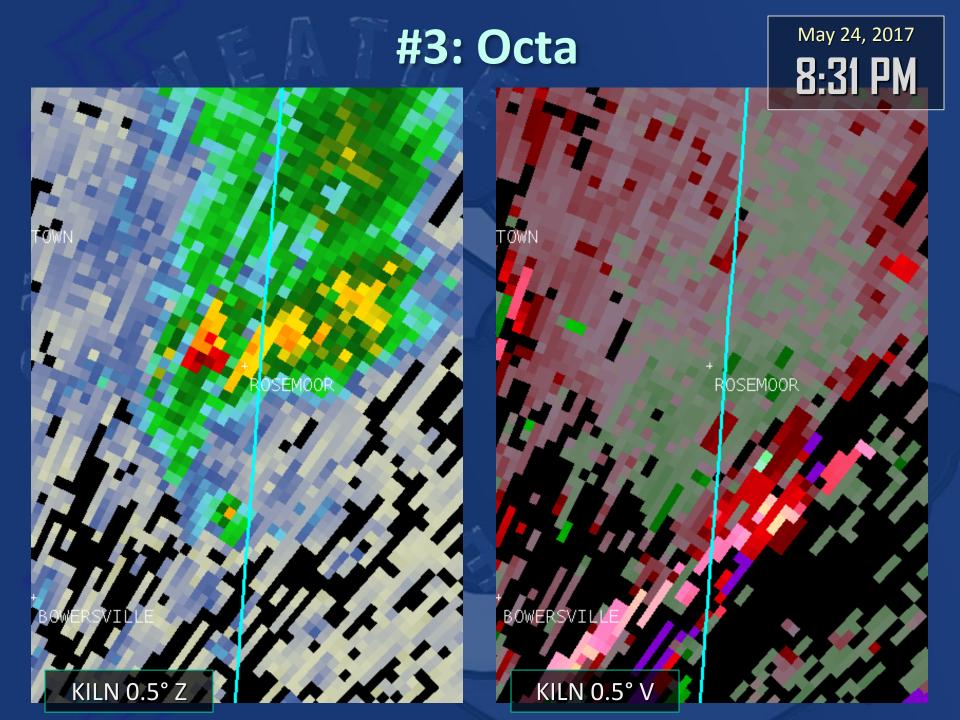
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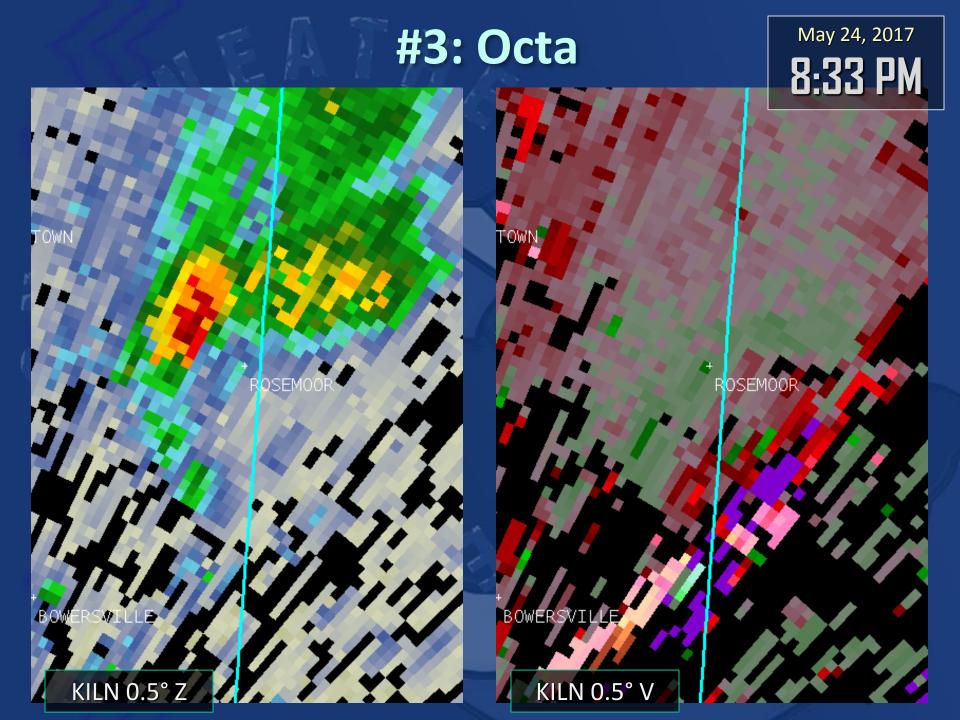
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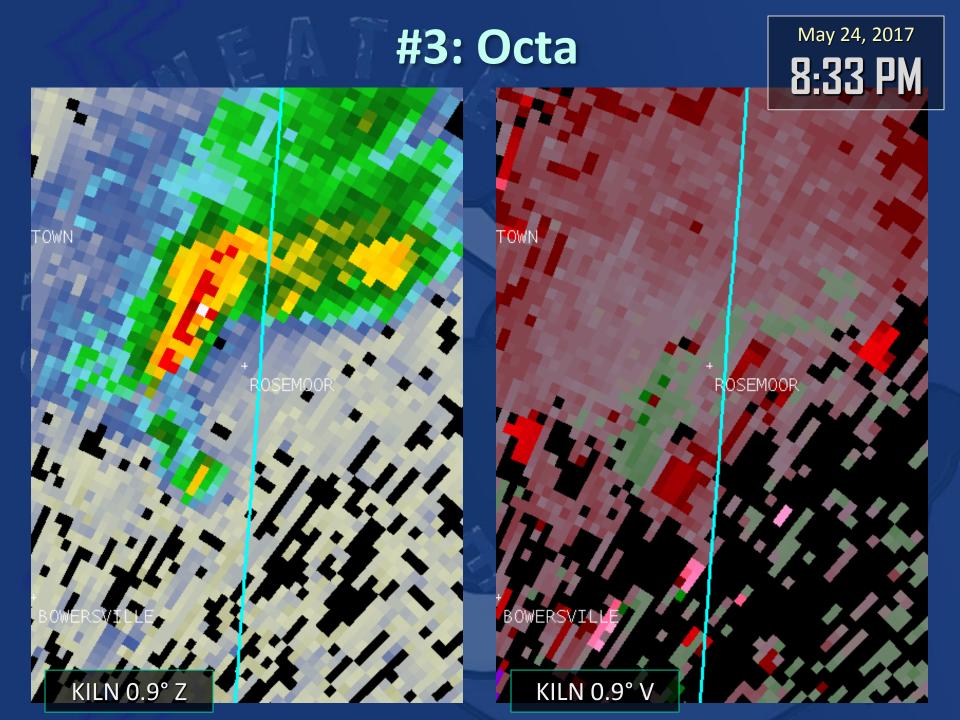






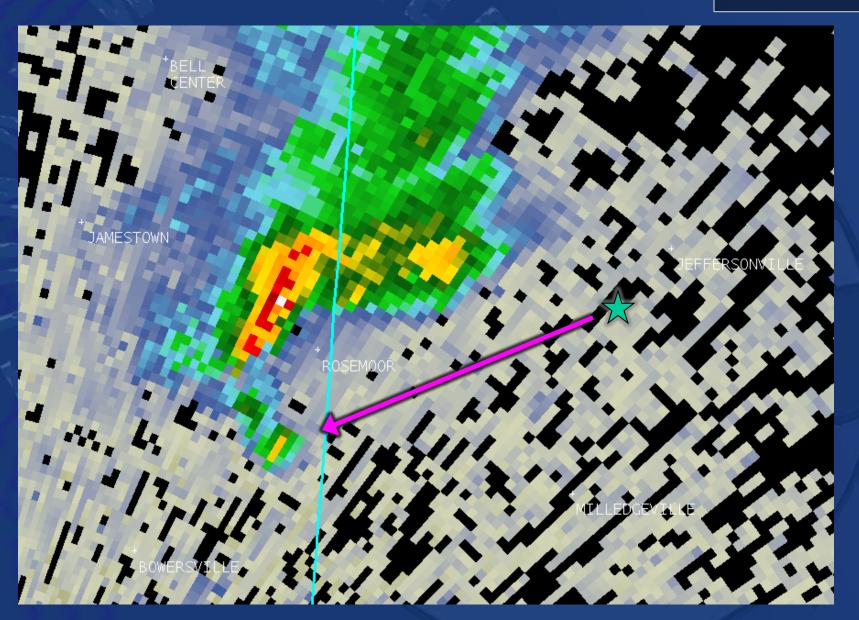






May 24, 2017 **O_99 NM**

8:33 PM



May 24, 2017

8:33 PM







This tornado has terrble pad level. Im betting on Vanny Woodhead #GritWeek2017



8:33 PM - 24 May 2017

332 Retweets **3,531** Likes

















May 24, 2017 8:33 PM



Follow

Alright here we go #GritWeek17 **#StormChasers**



8:47 PM - 24 May 2017

149 Retweets **1,390** Likes













May 24, 2017

8:33 PM



May 24, 2017



Following

Replying to @PFTCommenter

Can you please provide an approximate location for this photo and what direction you were looking? Thanks!

9:03 PM - 24 May 2017

17 Retweets 151 Likes



















Follow

Ohio. Looking up at sky

NWS Wilmington OH @ @NWSILN

Replying to @PFTCommenter

Can you please provide an approximate location for this photo and what direction you were looking? Thanks!

9:05 PM - 24 May 2017

923 Retweets **6,704** Likes



















May 24, 2017



Reliable Sources

Think

Profit

Newtube

Entertainment









ESPN ends Barstool Sports talk show after just one episode



by Frank Pallotta @frankpallotta

(L) October 23, 2017: 5:13 PM ET













"Barstool Van Talk" -- which included original shorts, interviews, and took place in a van named Vanny Woodhead -- had courted controversy for ESPN since the network announced the show earlier this month. This was due to its association with Barstool Sports, a sports site known for its **bawdy and offensive sports commentary.**



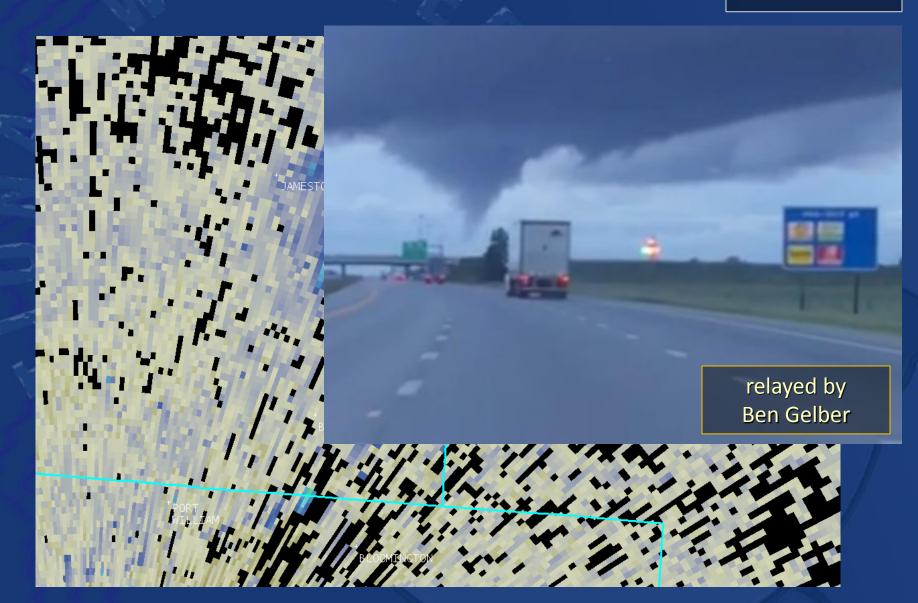
Not an EF2

(on the Fajita Scale)

(or any other scale)

May 24, 2017

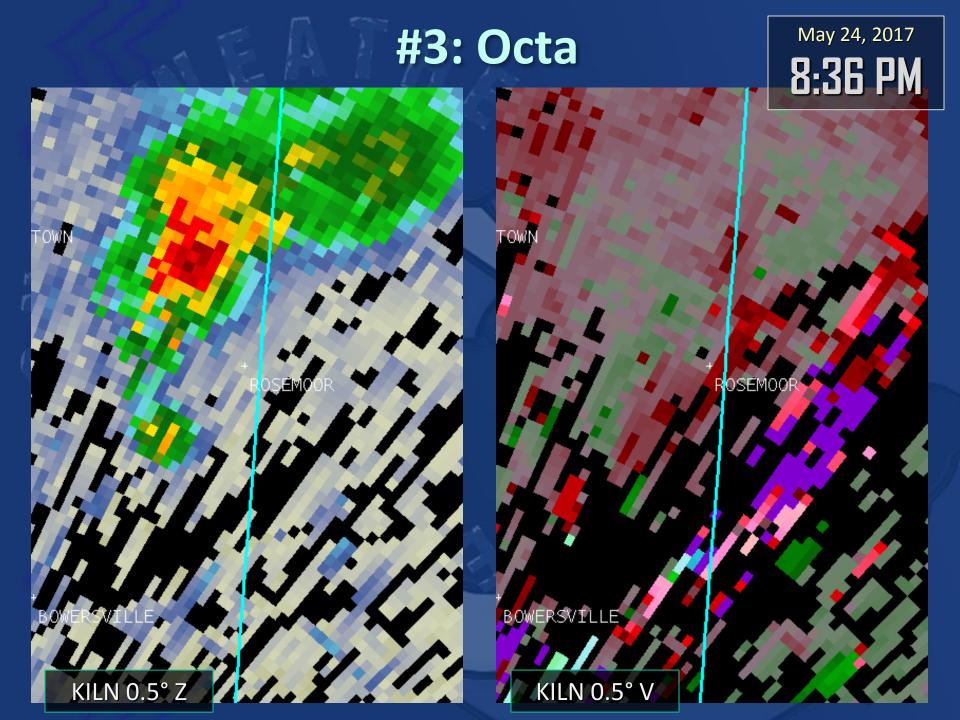
B:33 PM



May 24, 2017

8:33 PM



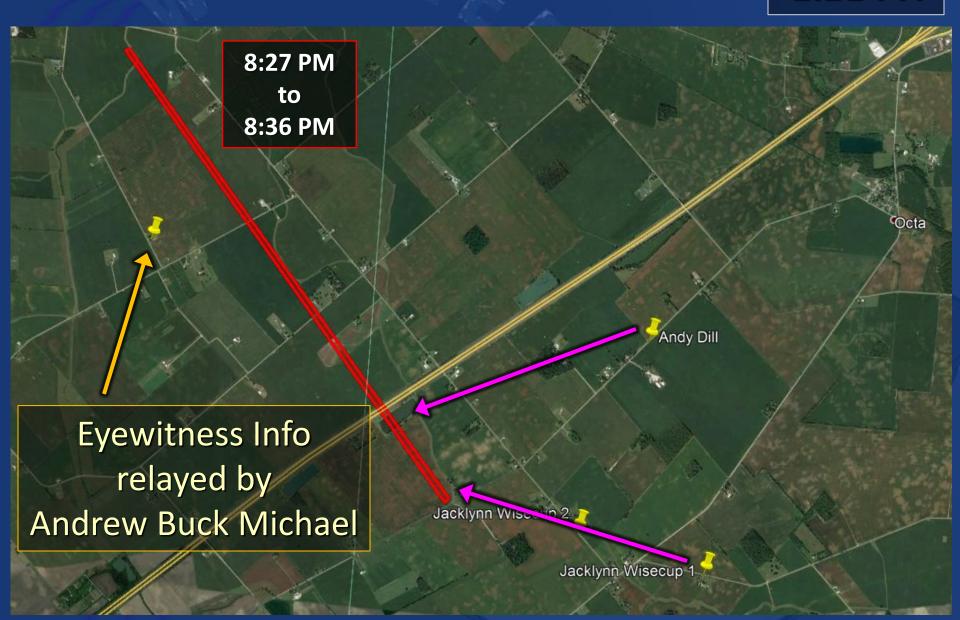


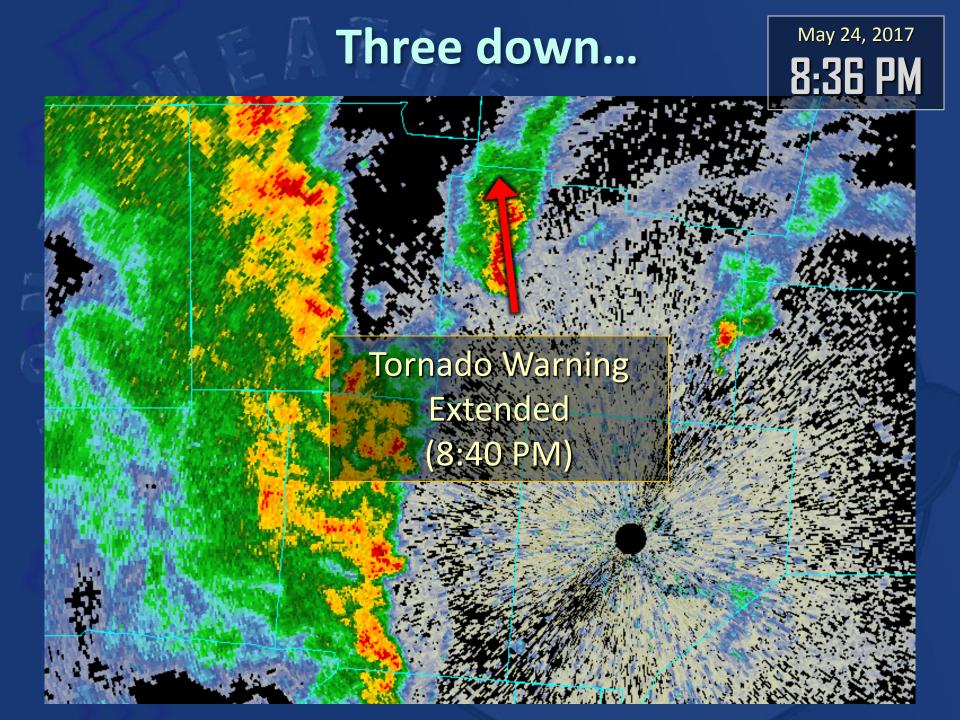
May 24, 2017 **8:36 PM**



May 24, 2017

8:36 PM





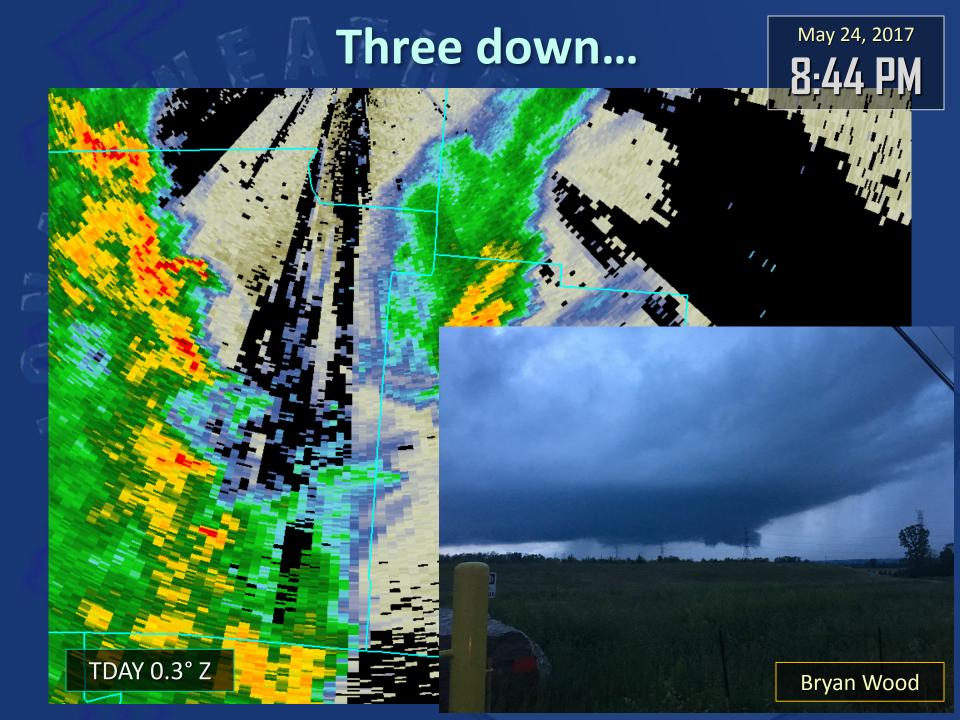
Three down... May 24, 2017 8:42 PM Three down...

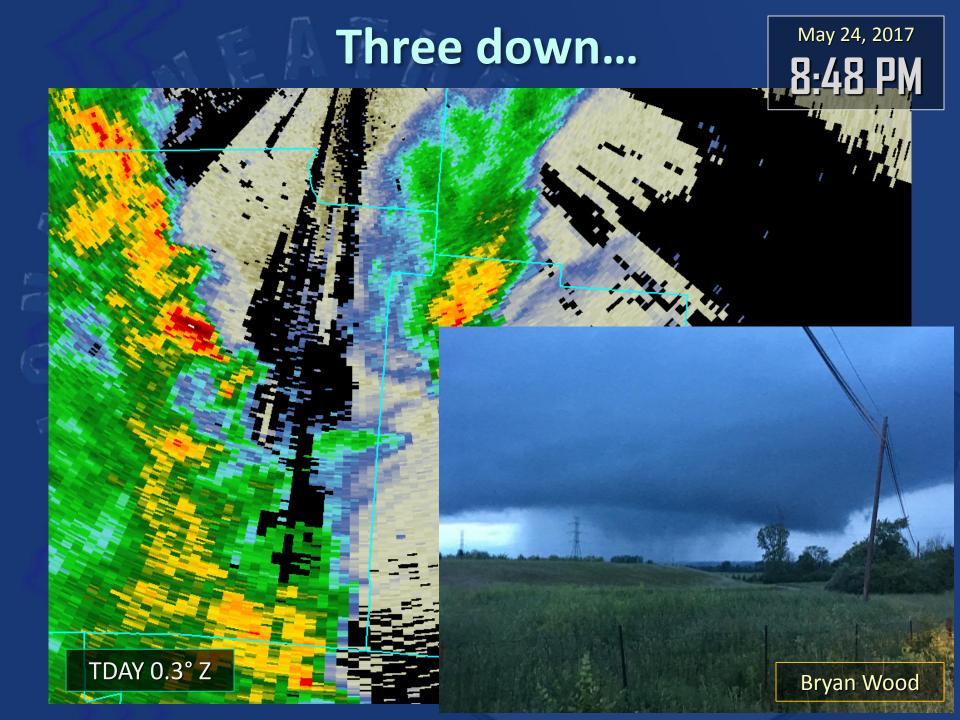
May 24, 2017

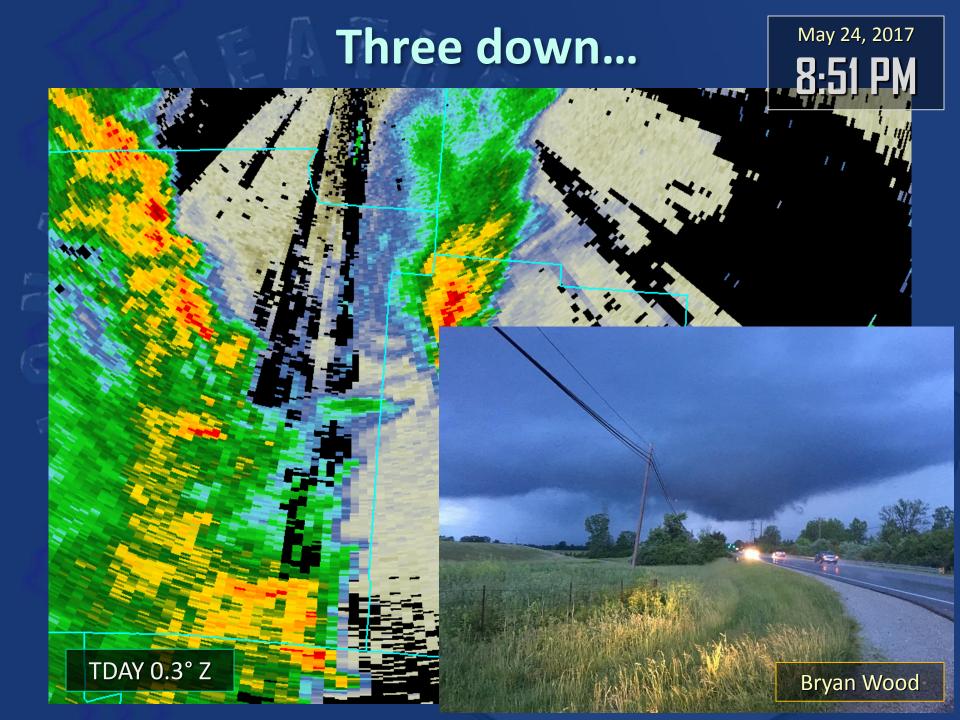
8:46 PM

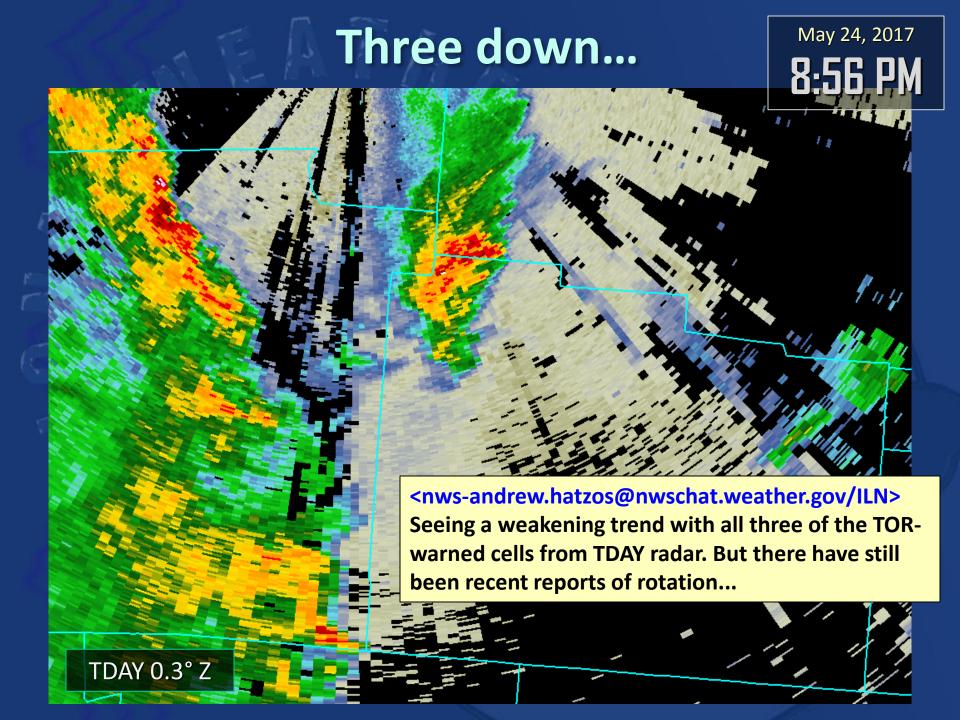
Radar data are temporarily unavailable for this location.

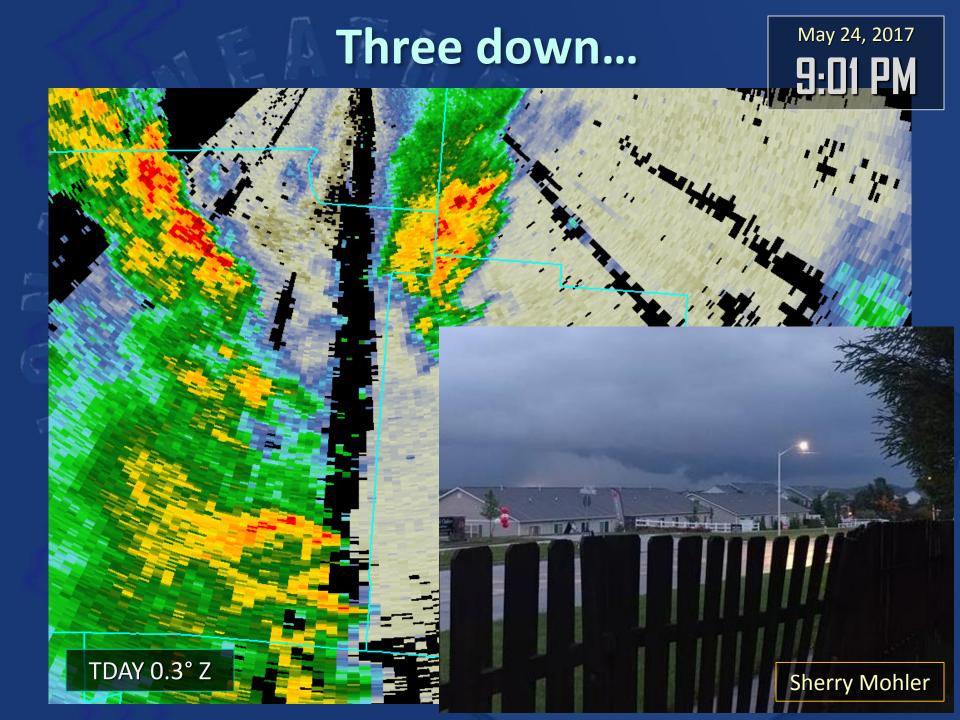
For additional information, please see the latest *Radar Status Message* link (above right).



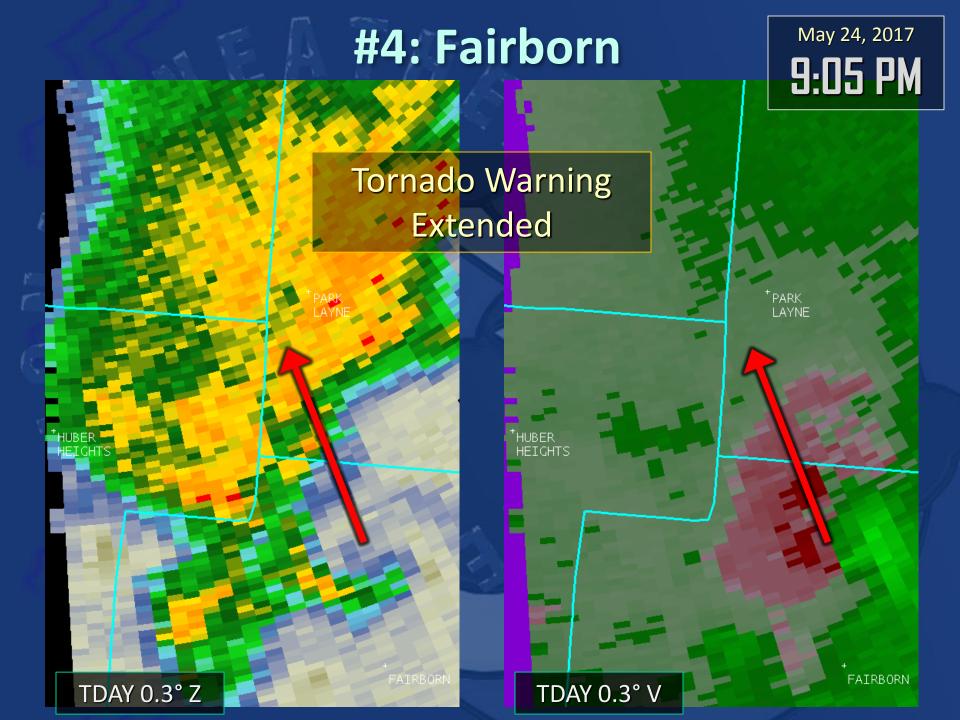


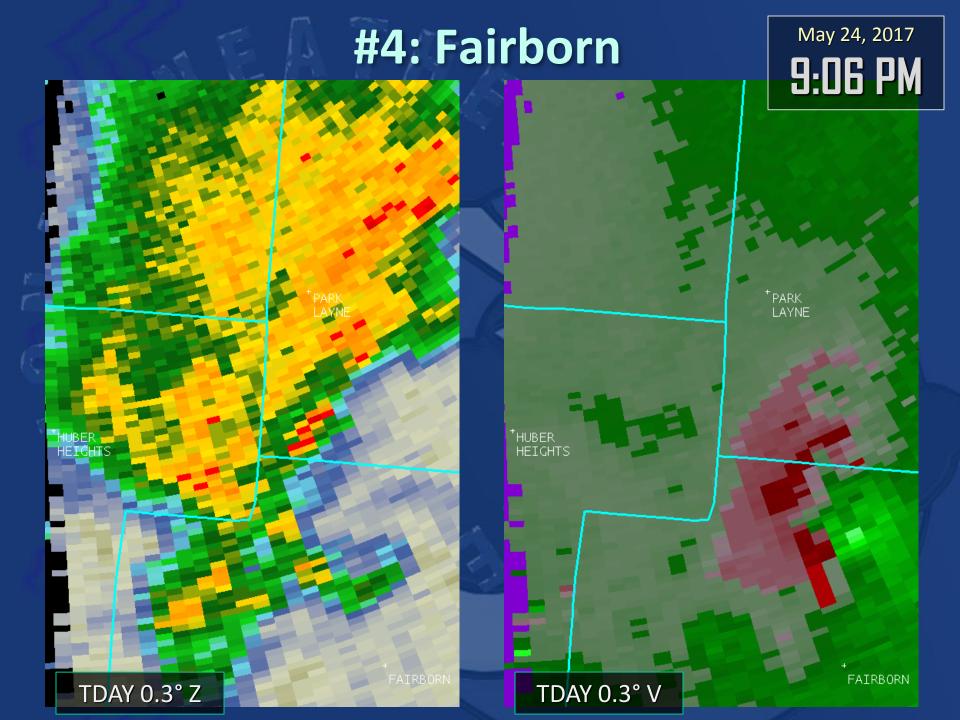


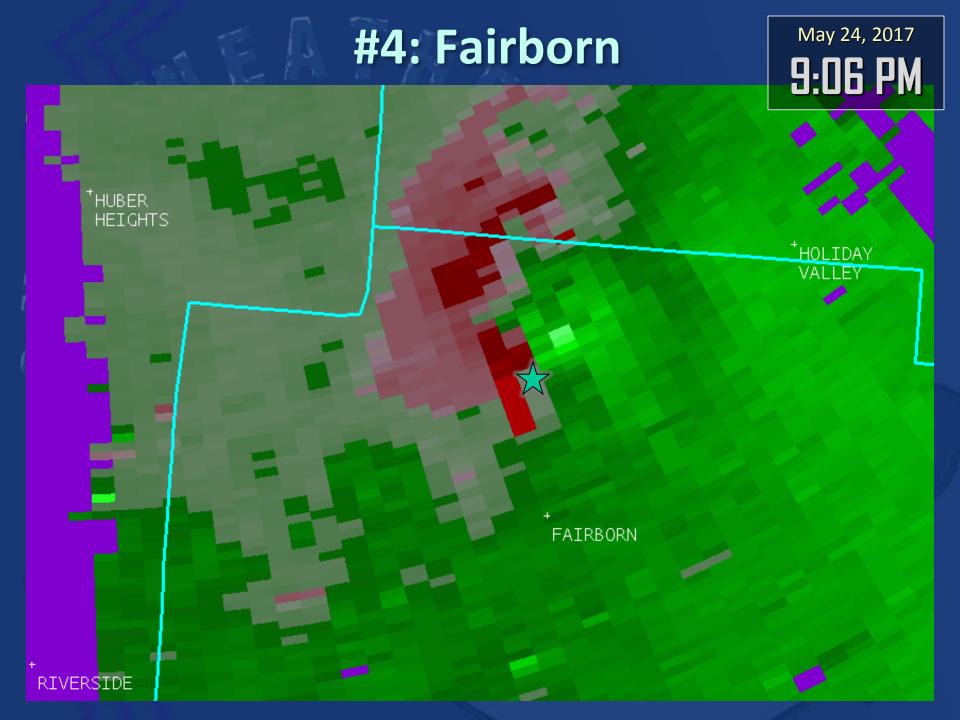








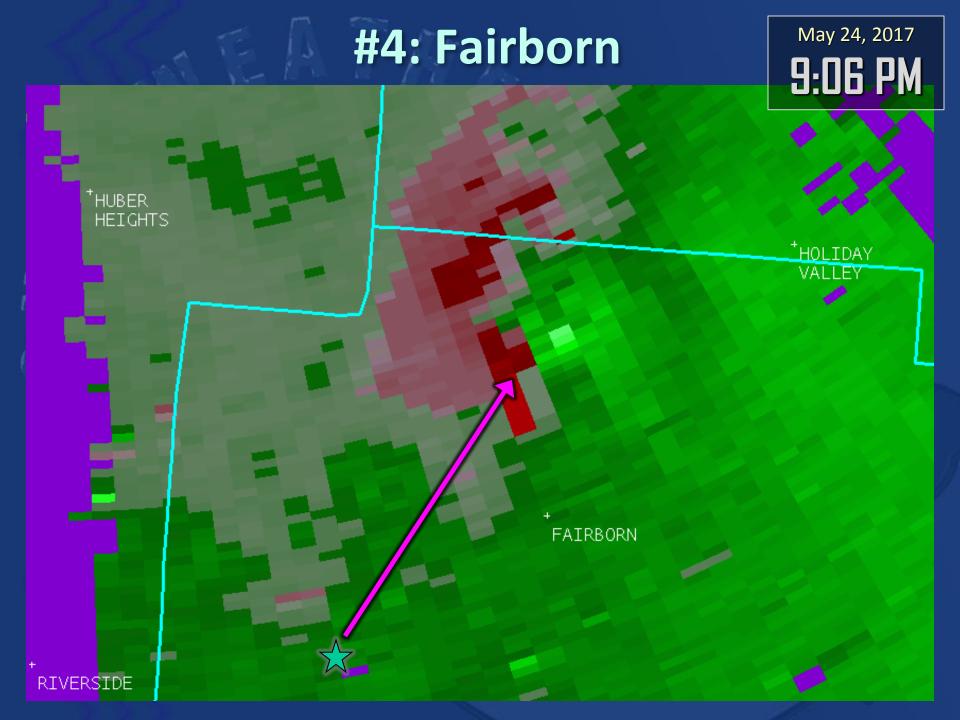




May 24, 2017 **9:06 PM**

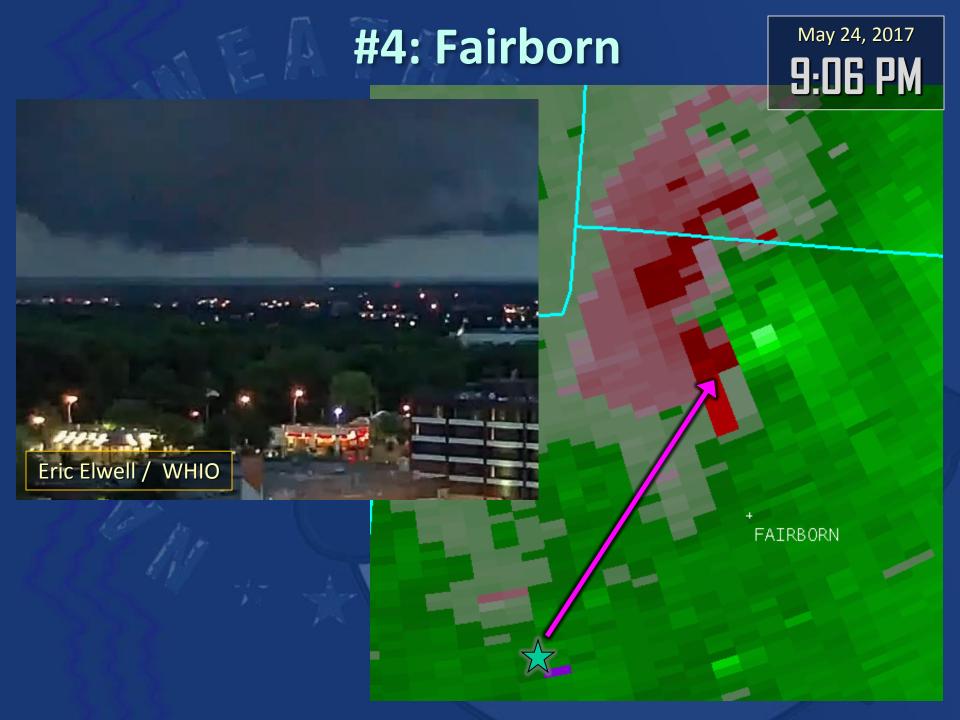


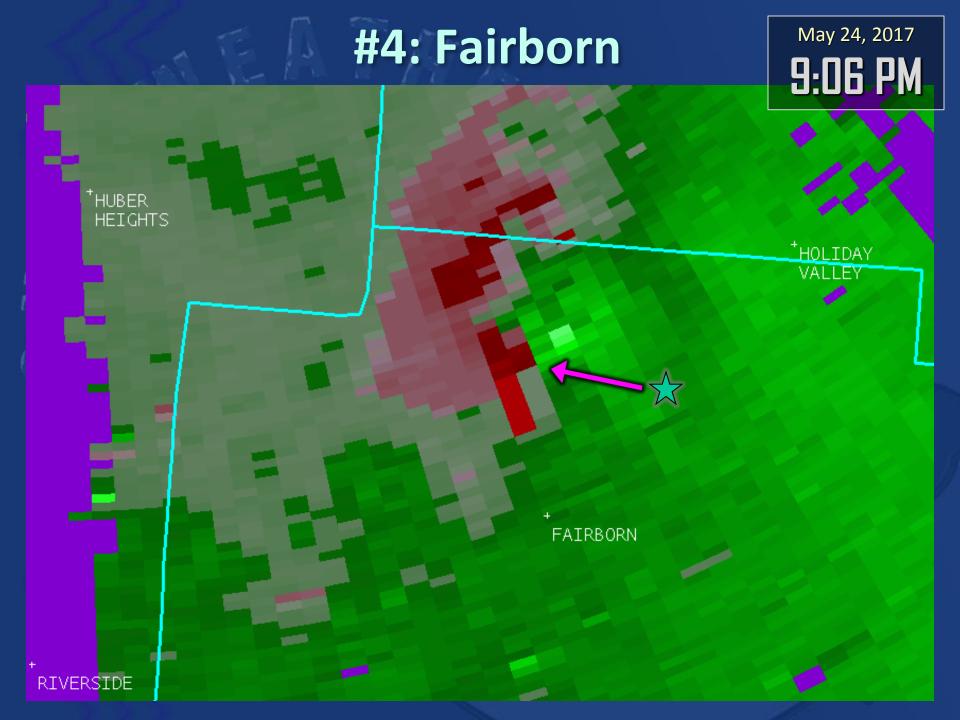




May 24, 2017 **9:06 PM**







May 24, 2017

9:06 PM

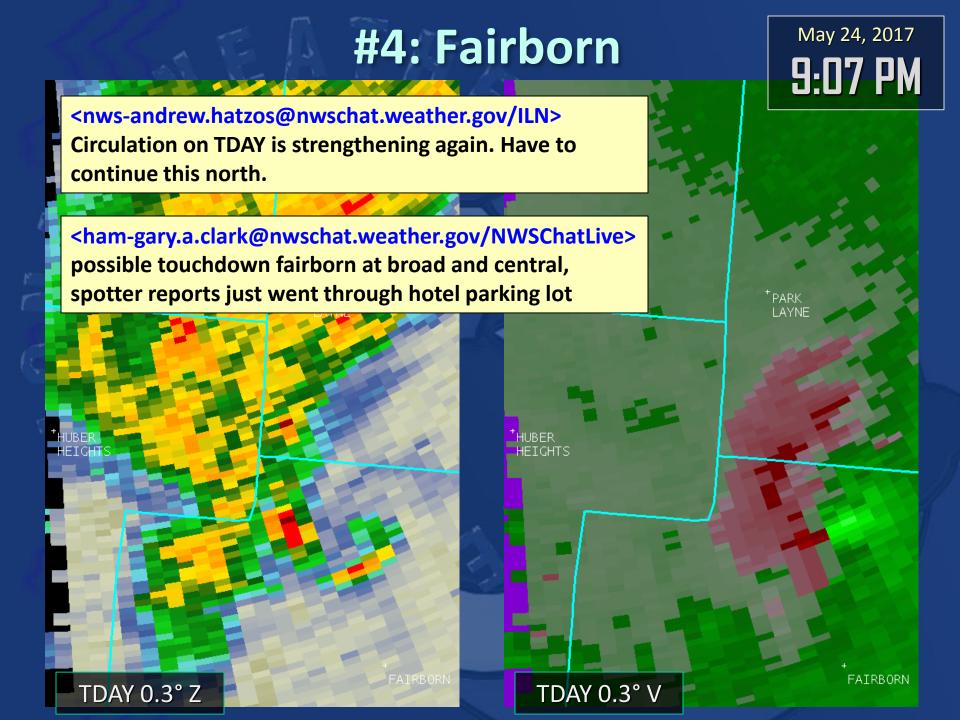


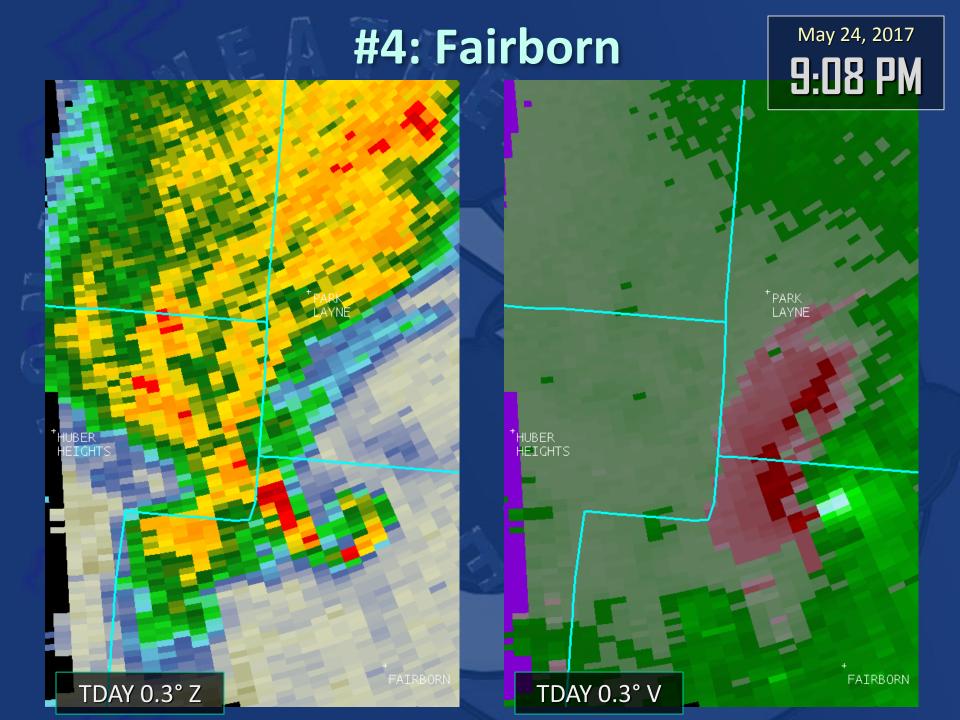


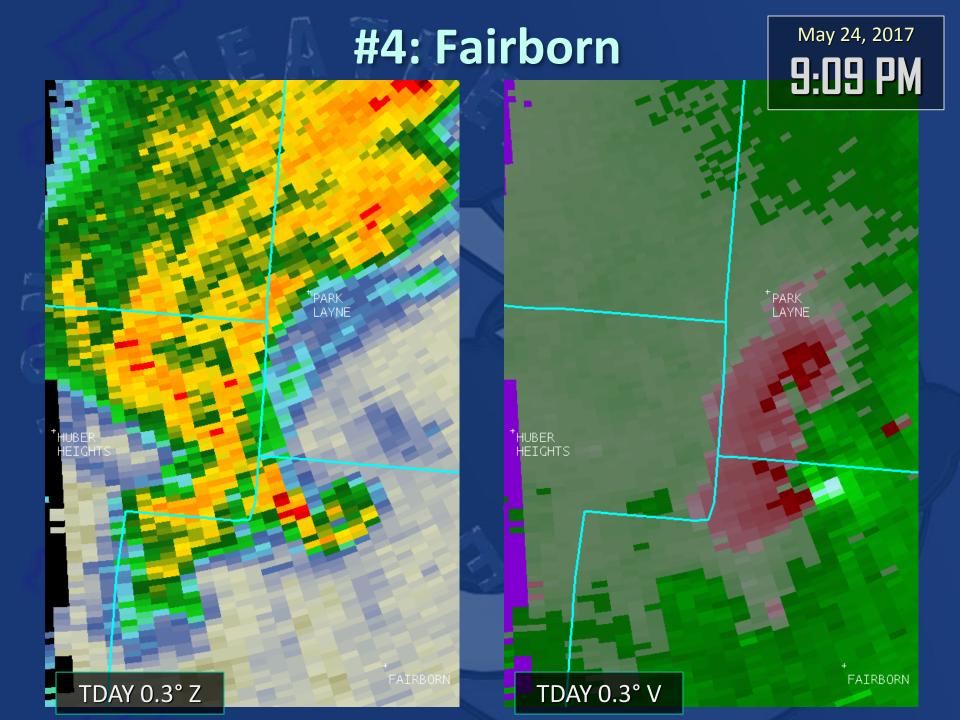
May 24, 2017

9:06 PM

Jessica Dunn via Bryan Wood





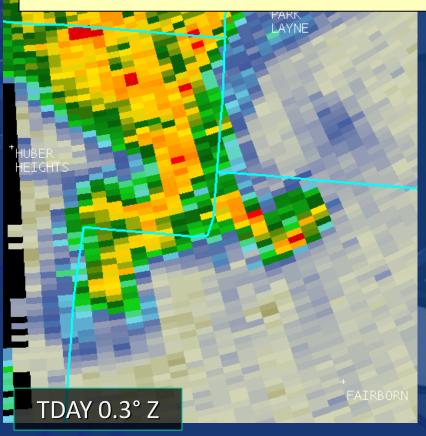


May 24, 2017 **9:10 PM**

<nws-andrew.hatzos@nwschat.weather.gov/ILN>
TDAY has a 40knot rotational velocity just about

to cross the line into Clark County.

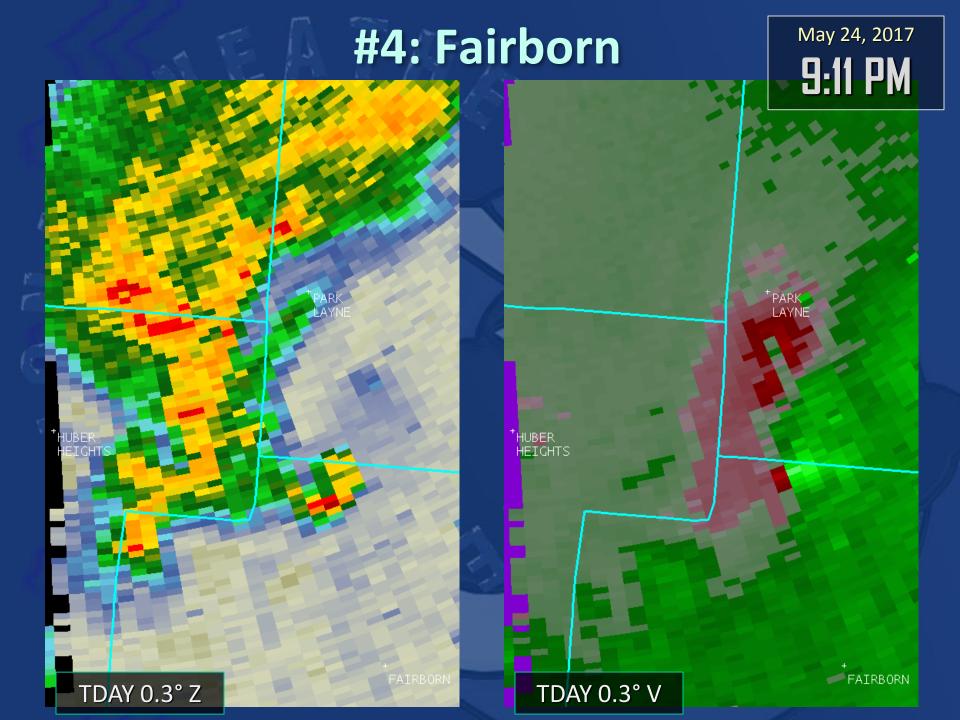
...radar indicated a severe thunderstorm likely producing a tornado...

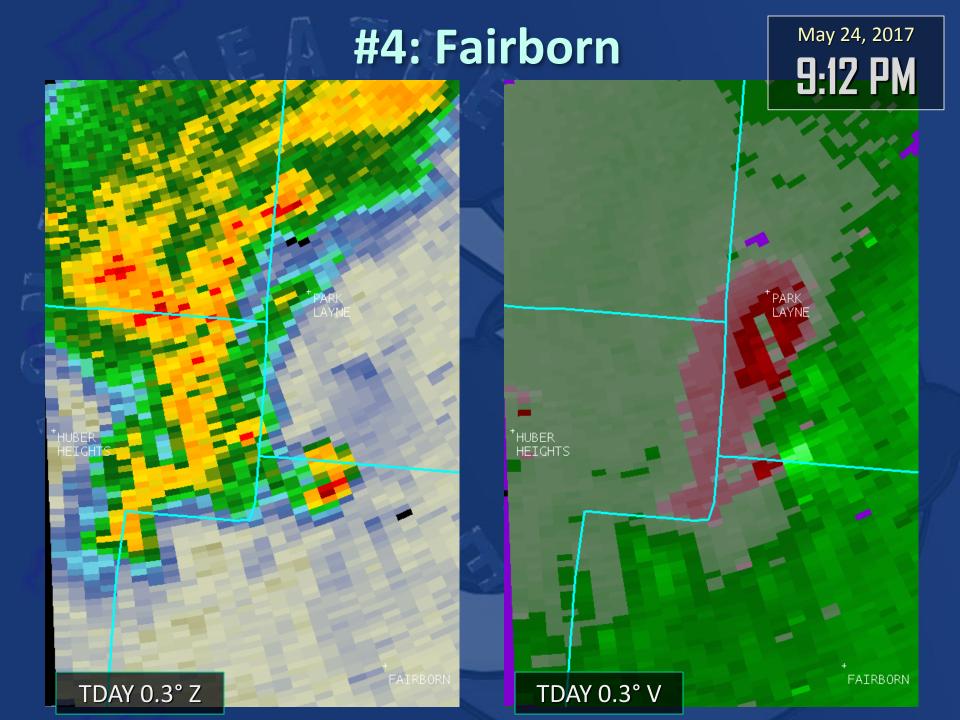


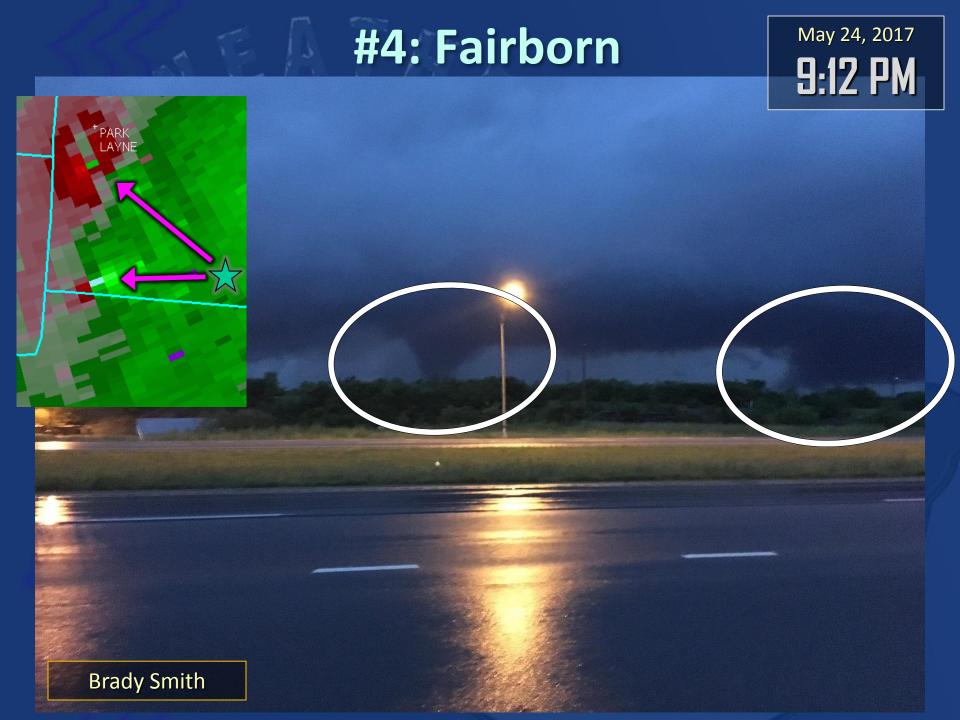
HUBER HEIGHTS

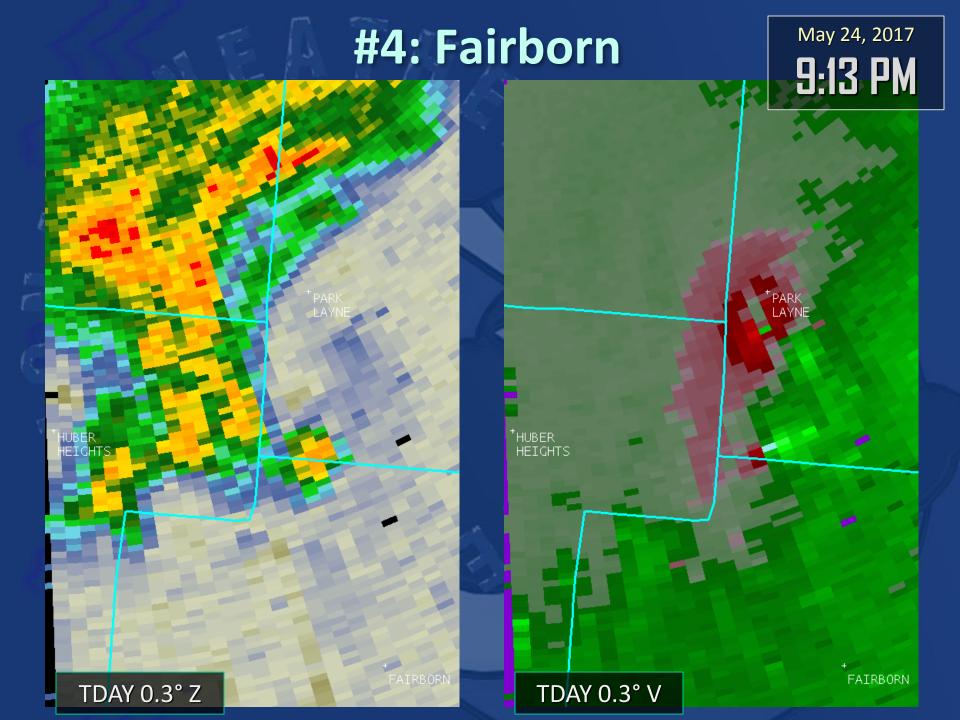
TDAY 0.3° V

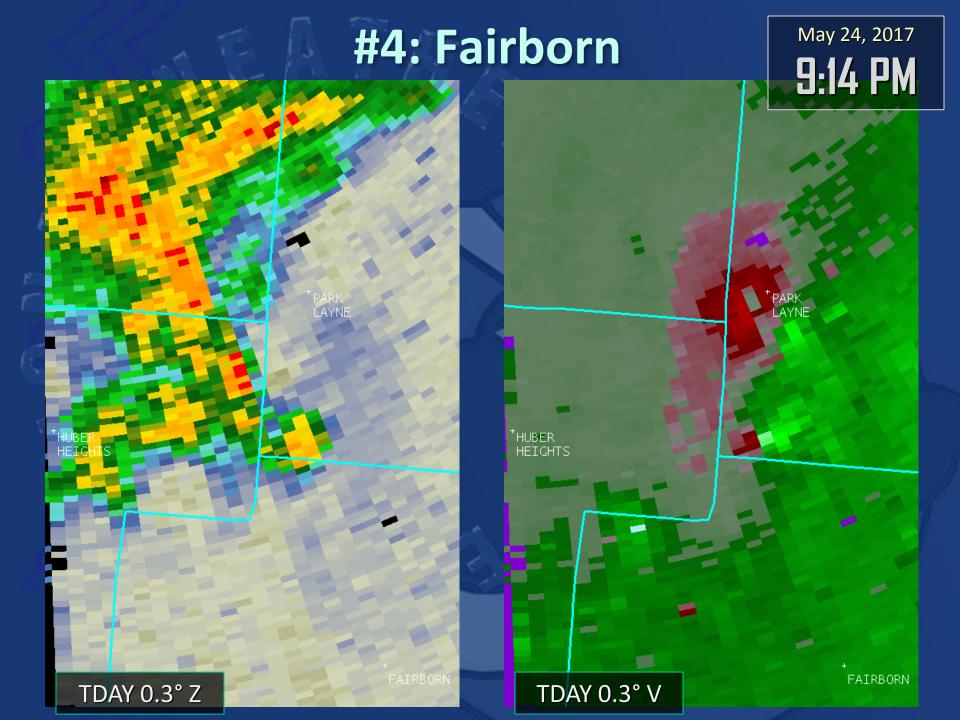
FAIRBORN

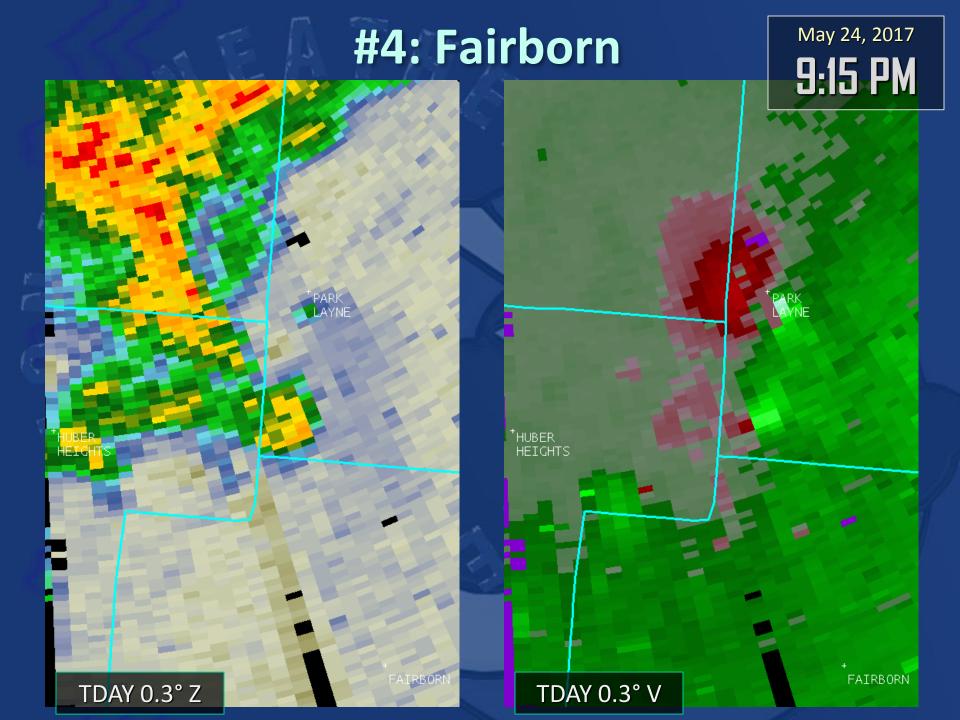


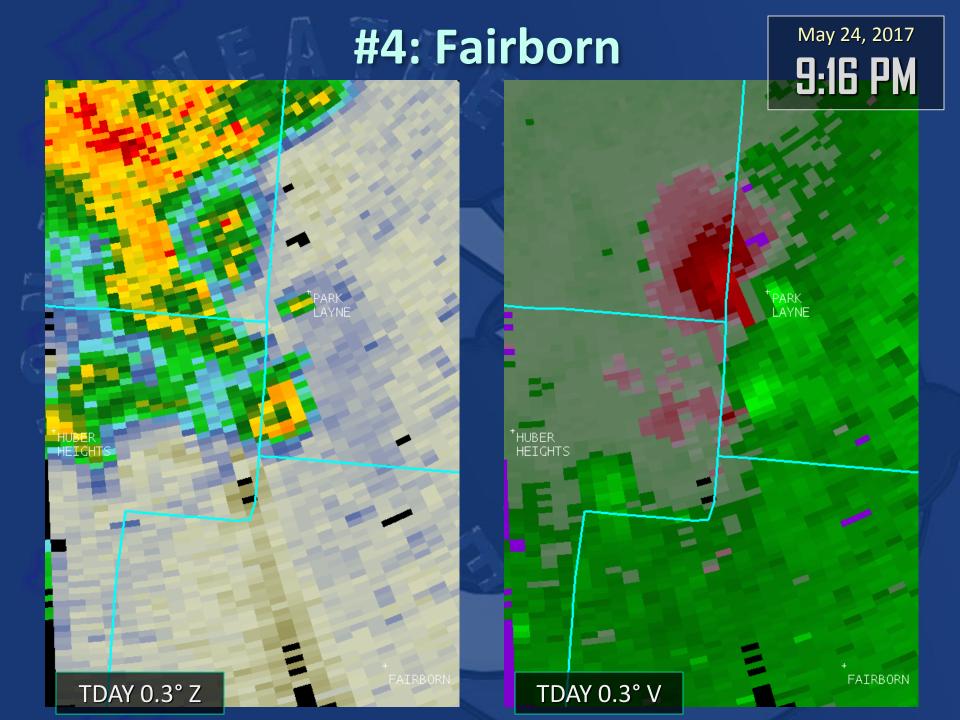


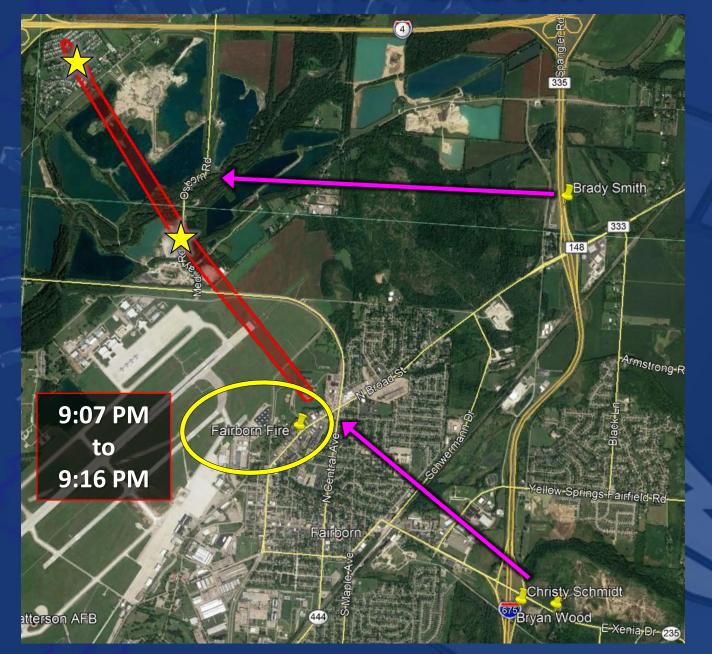










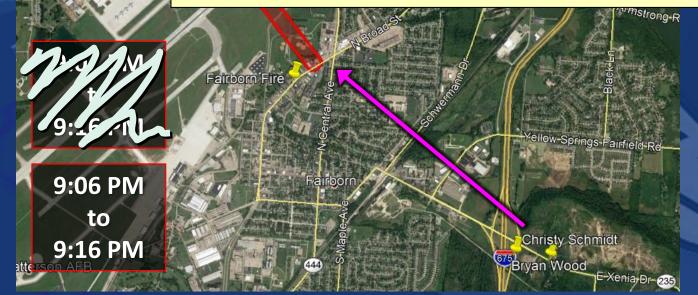


May 24, 2017

9:16 PM



METAR KFFO 250118Z 10005KT 10SM VCTS -SHRA BKN017 OVC024 17/17 A2934 RMK A02A **TORNADO 3 NE MOV N** SLP935

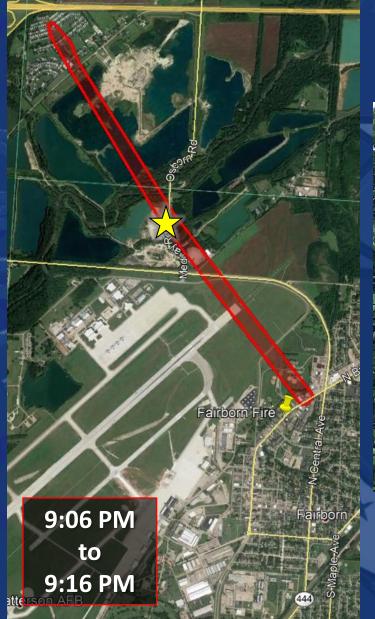


May 24, 2017



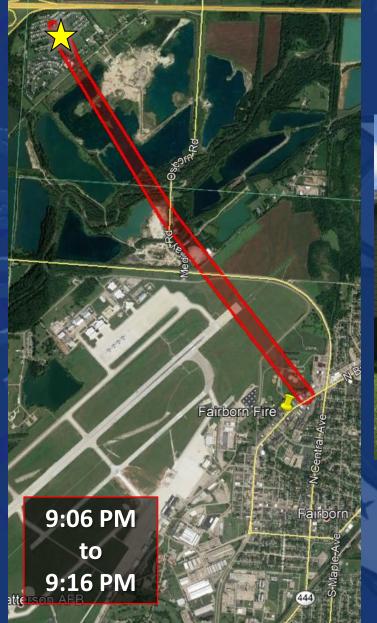


May 24, 2017

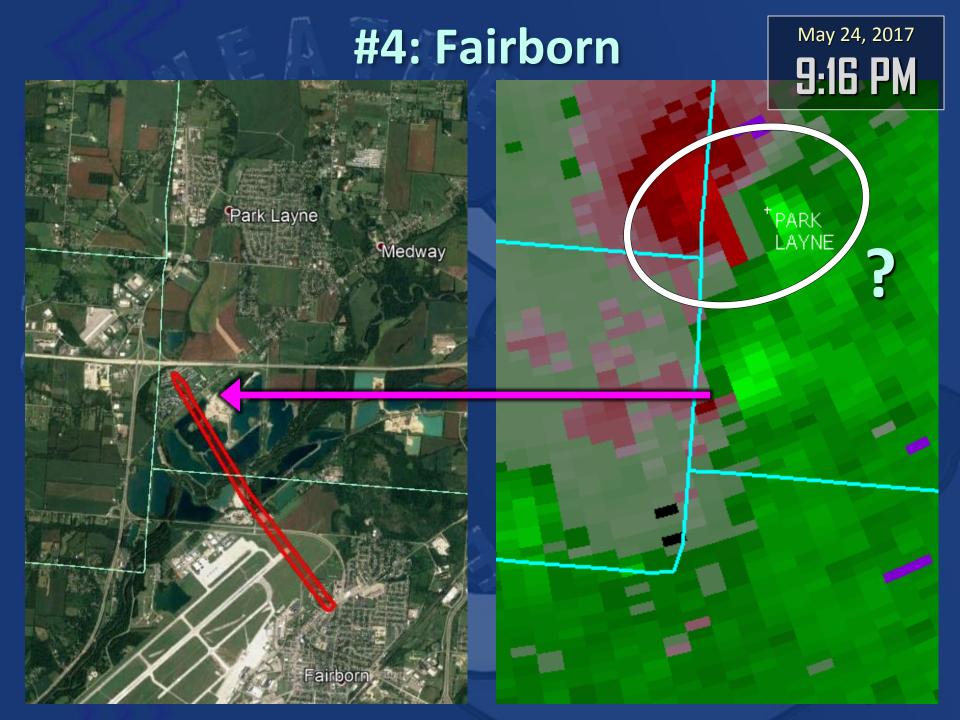




May 24, 2017















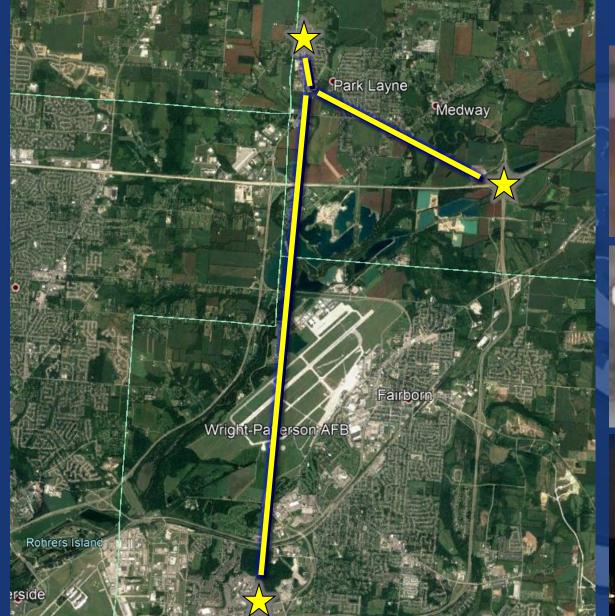
May 24, 2017











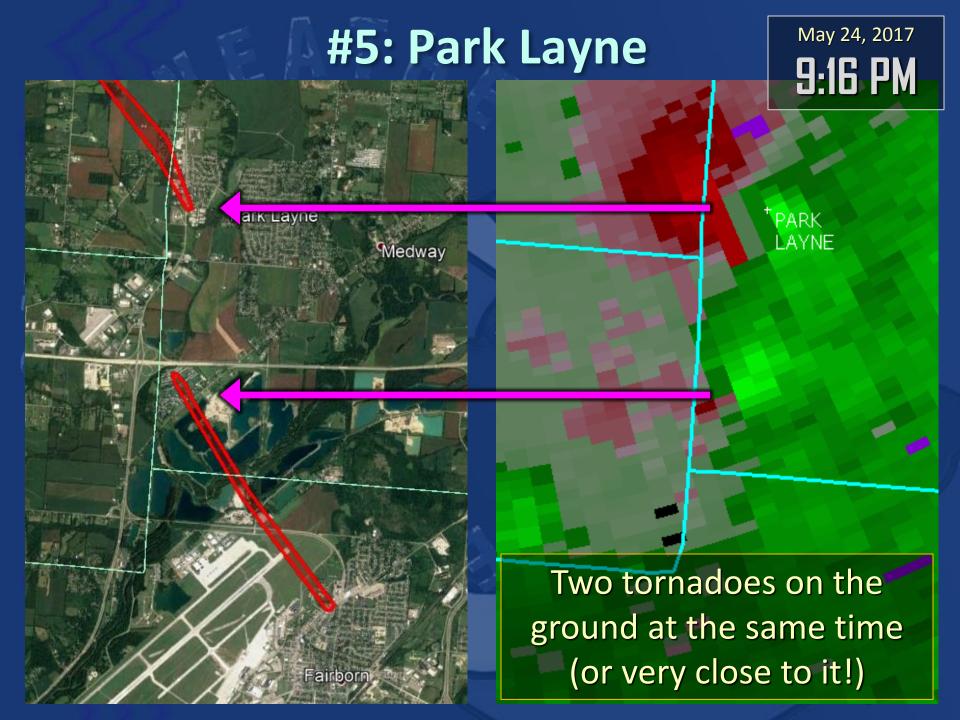


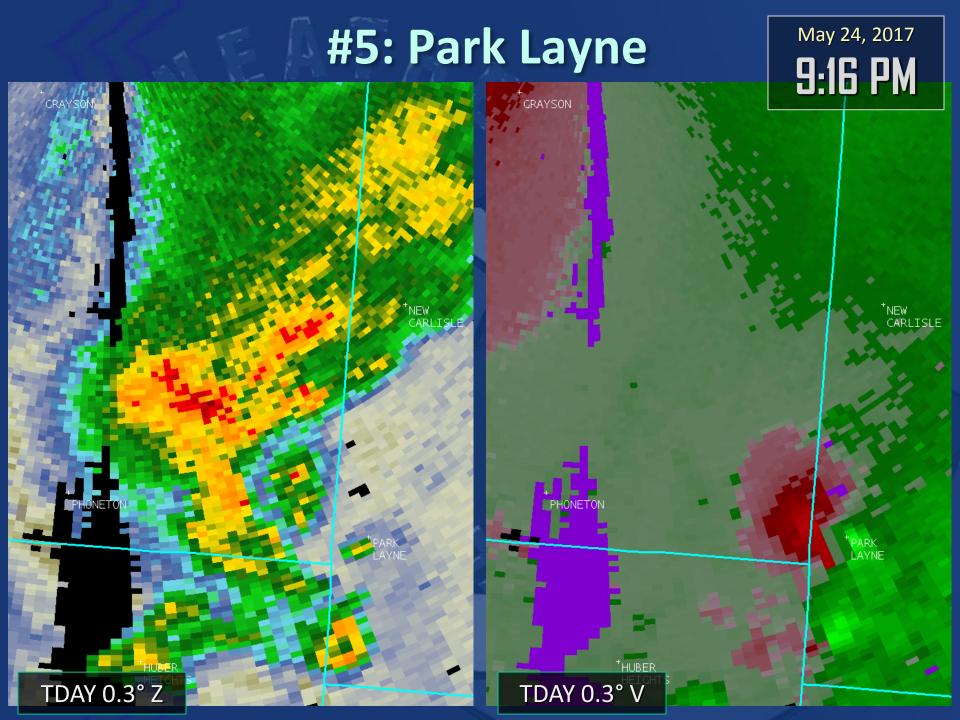


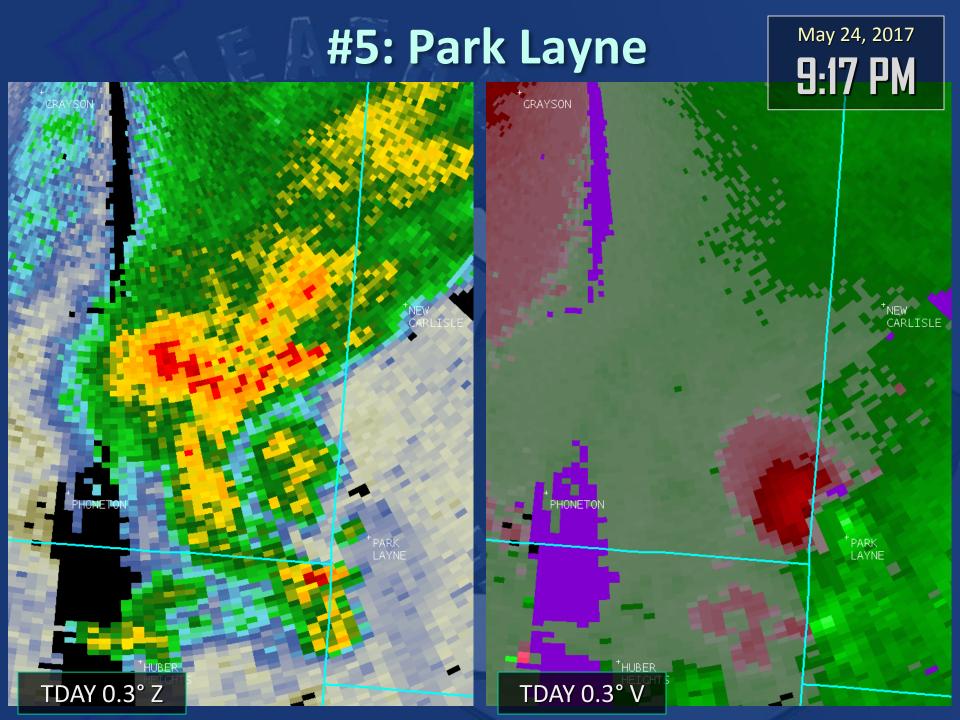


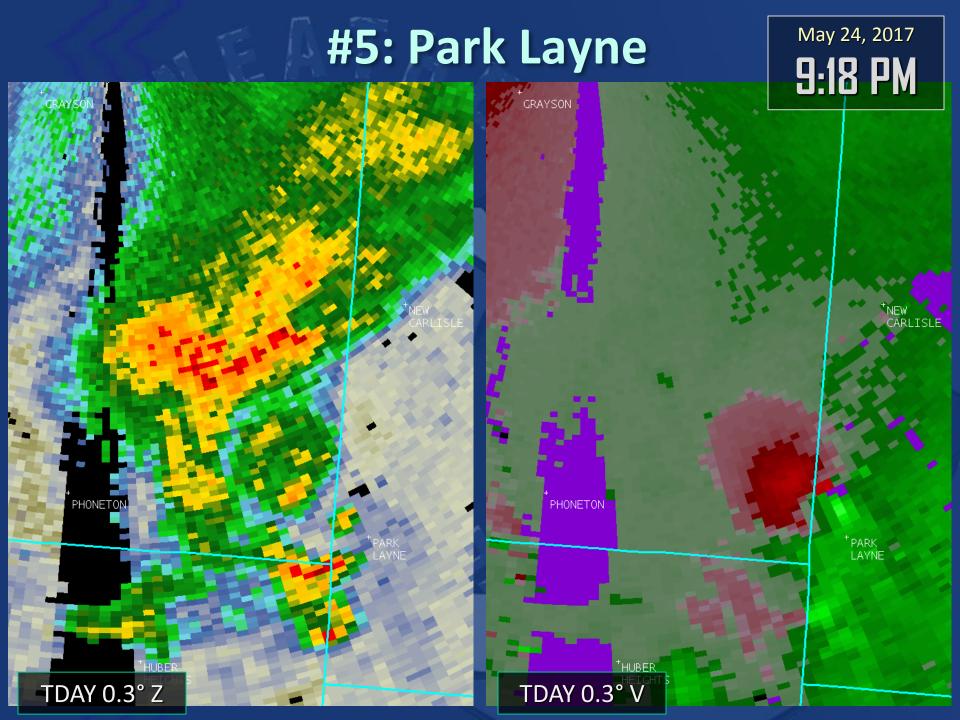


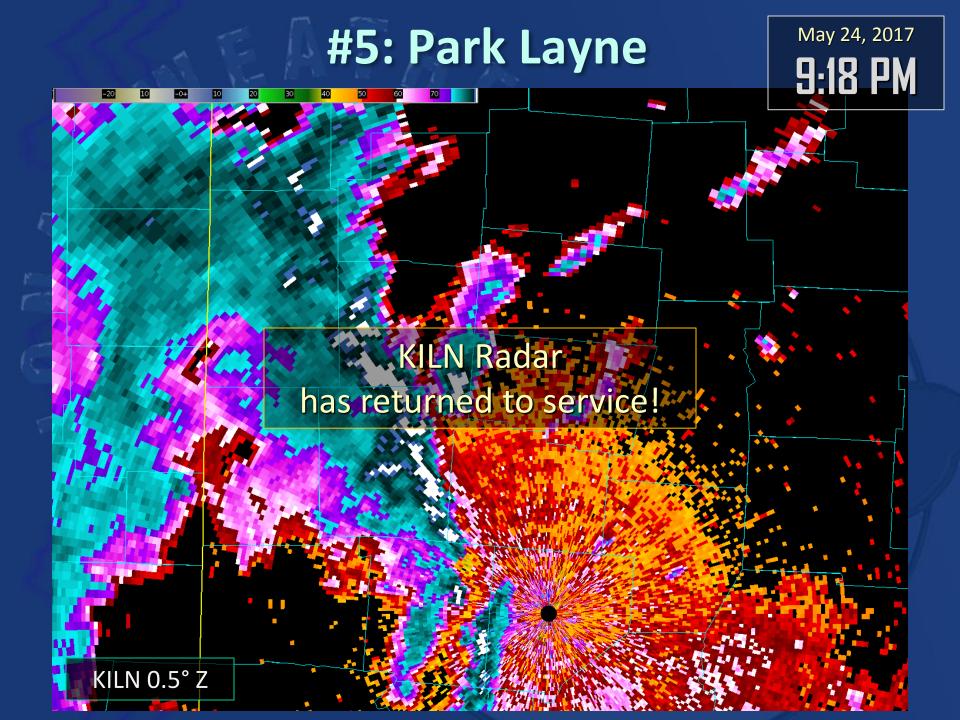




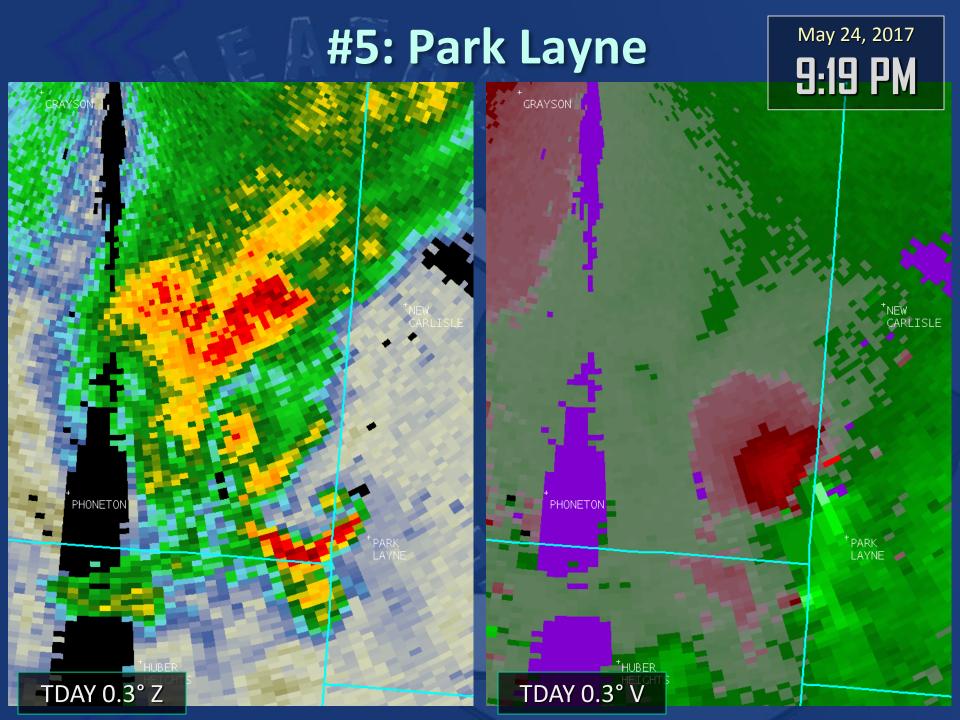


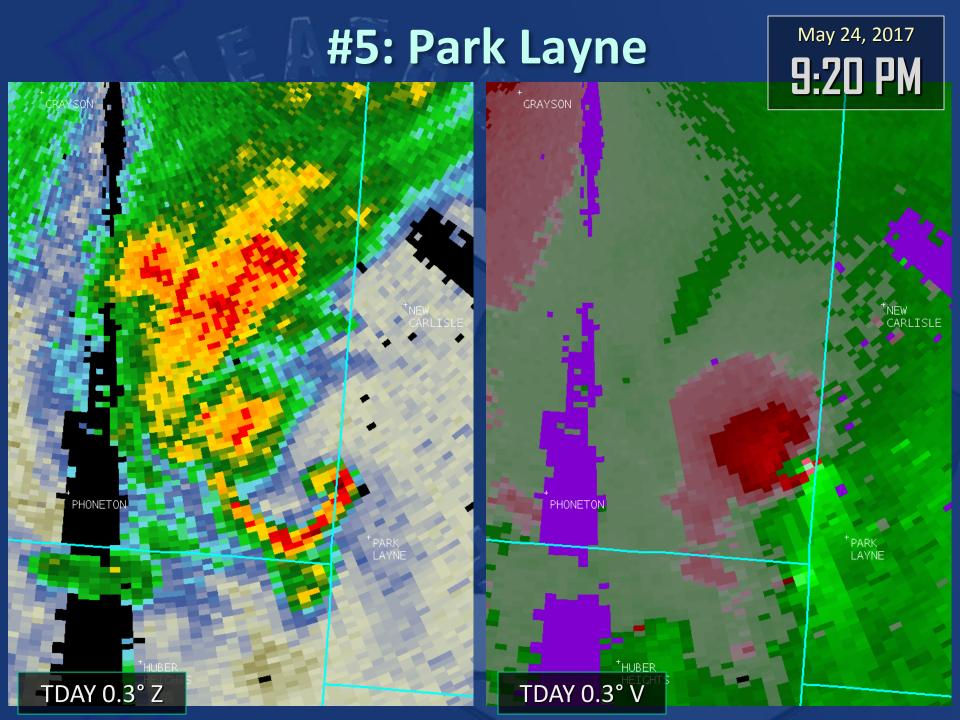


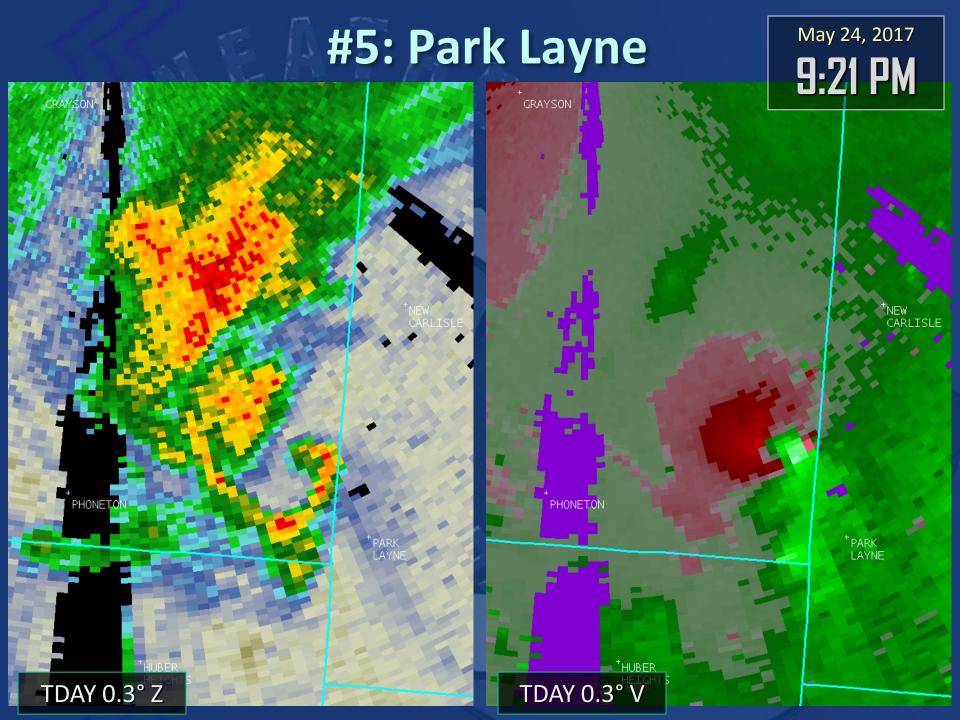


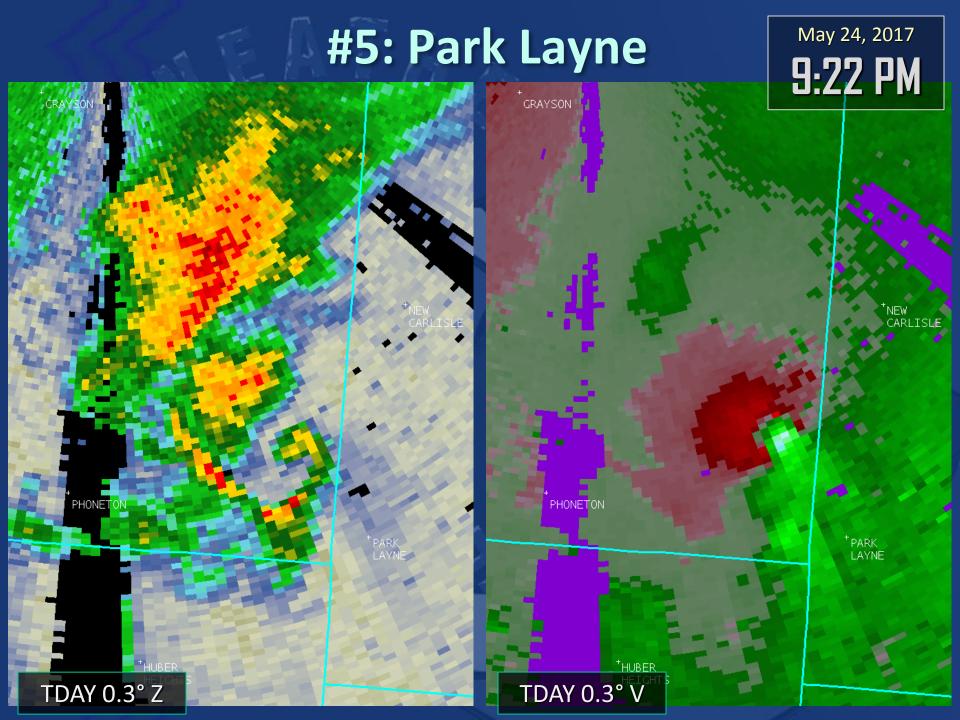


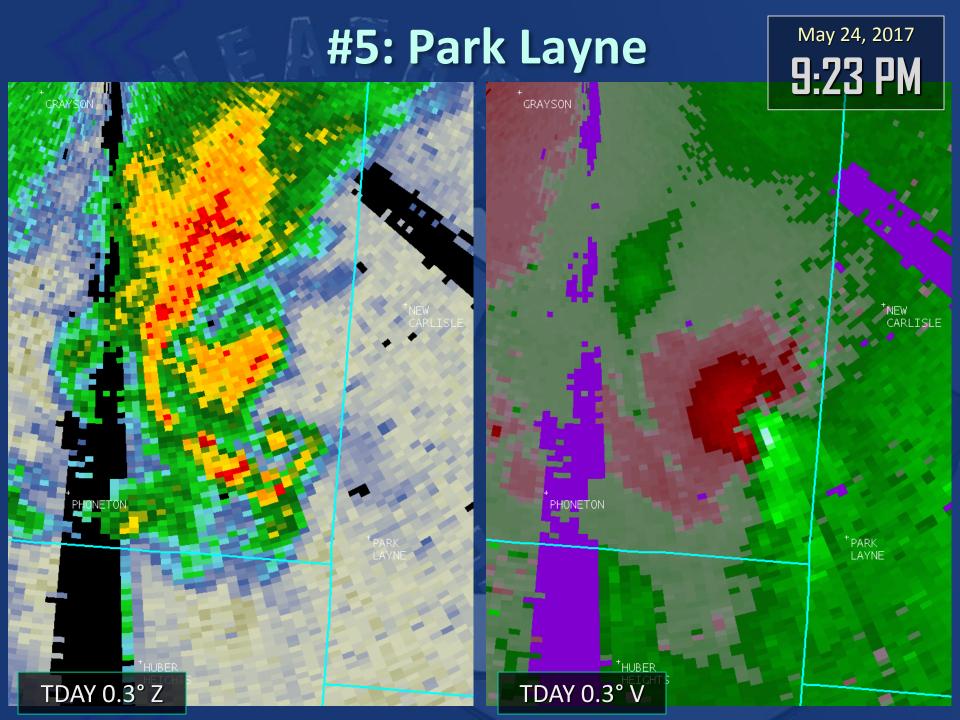


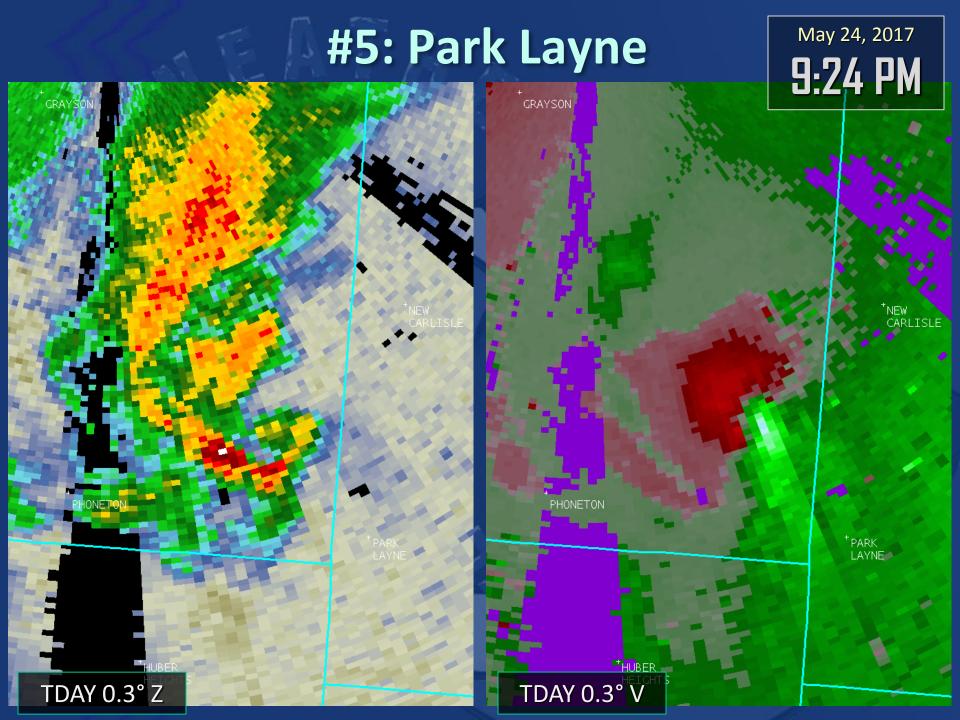


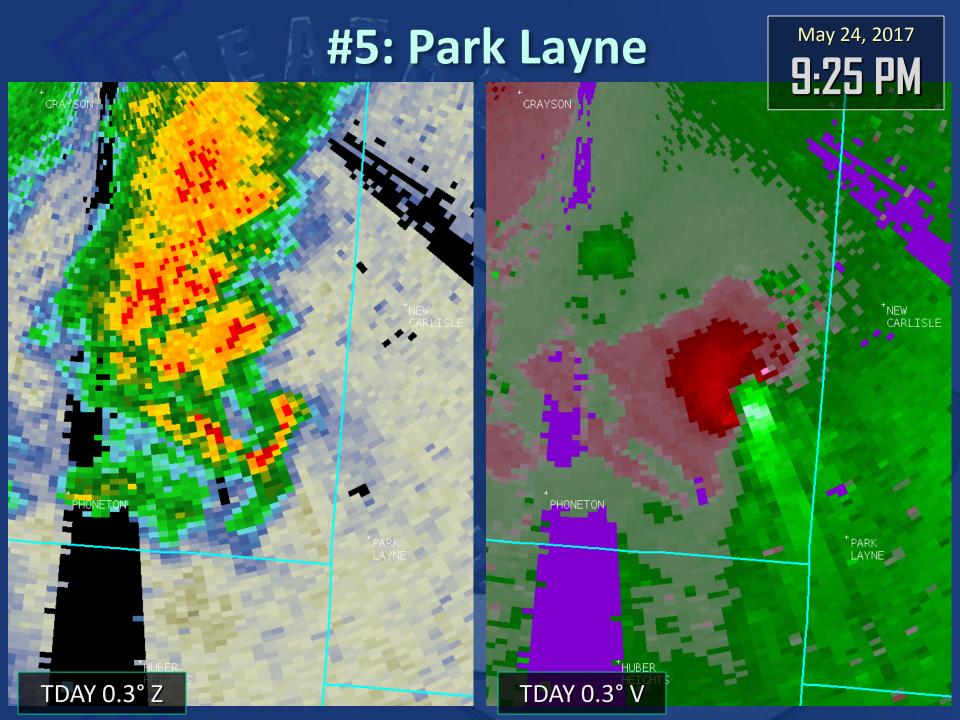


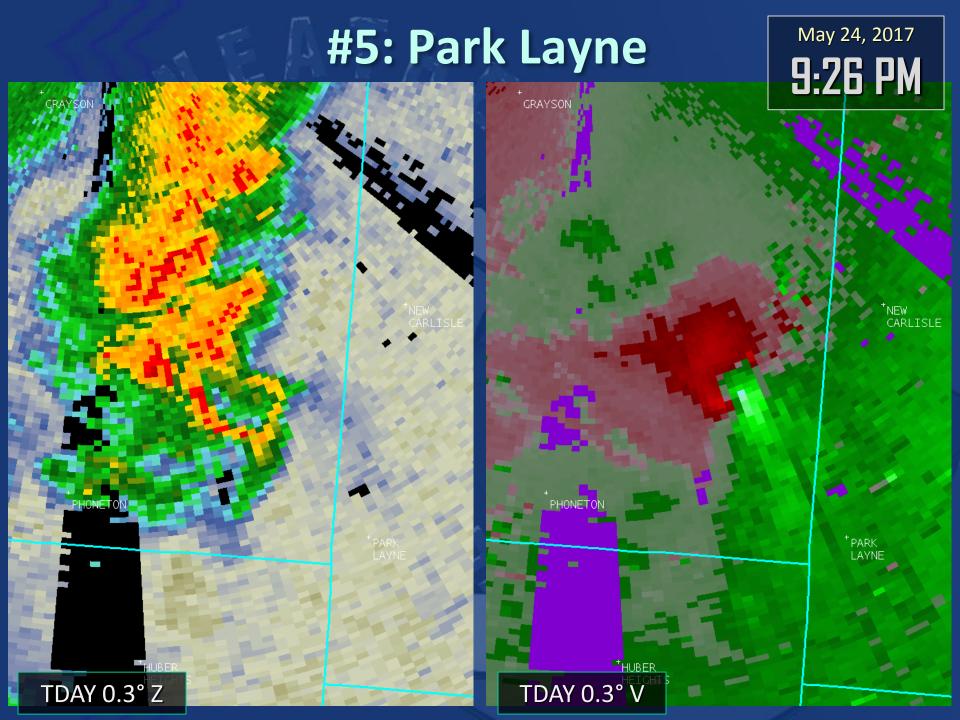


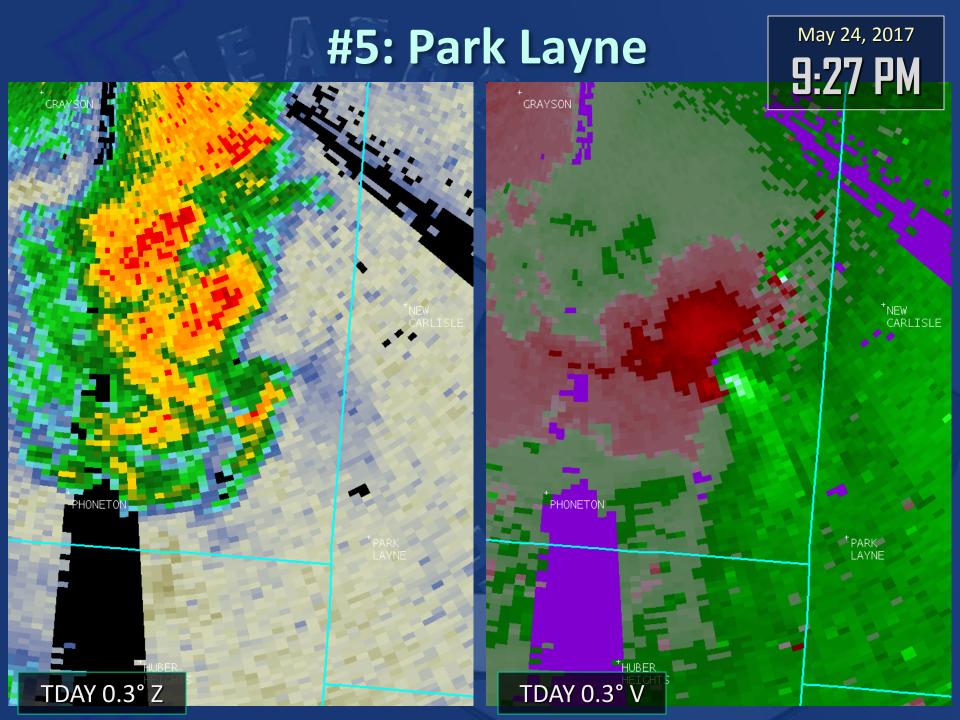


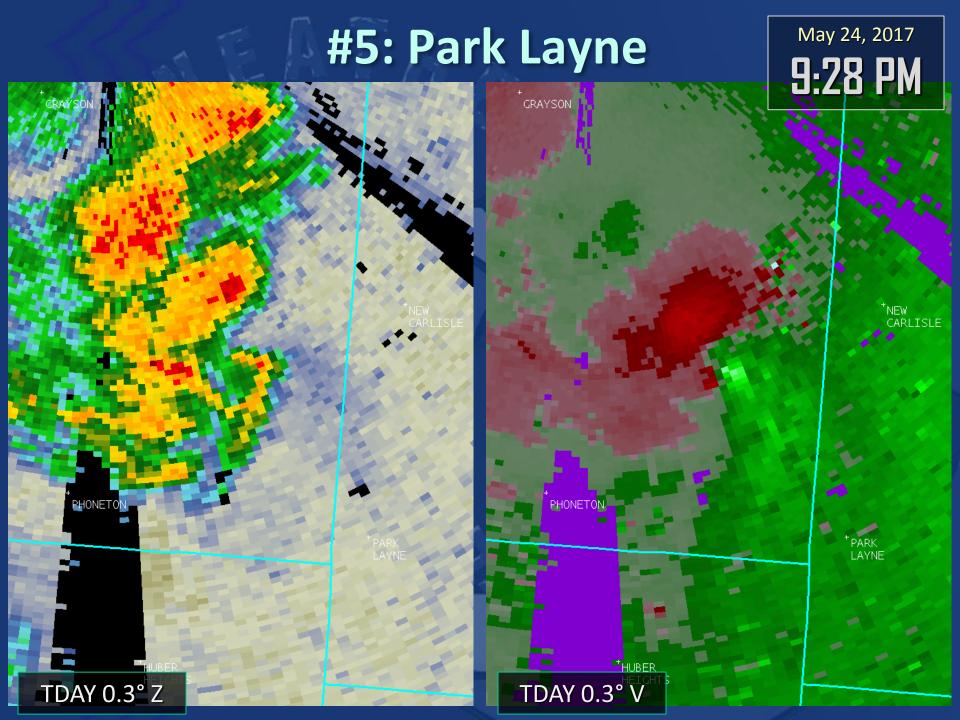


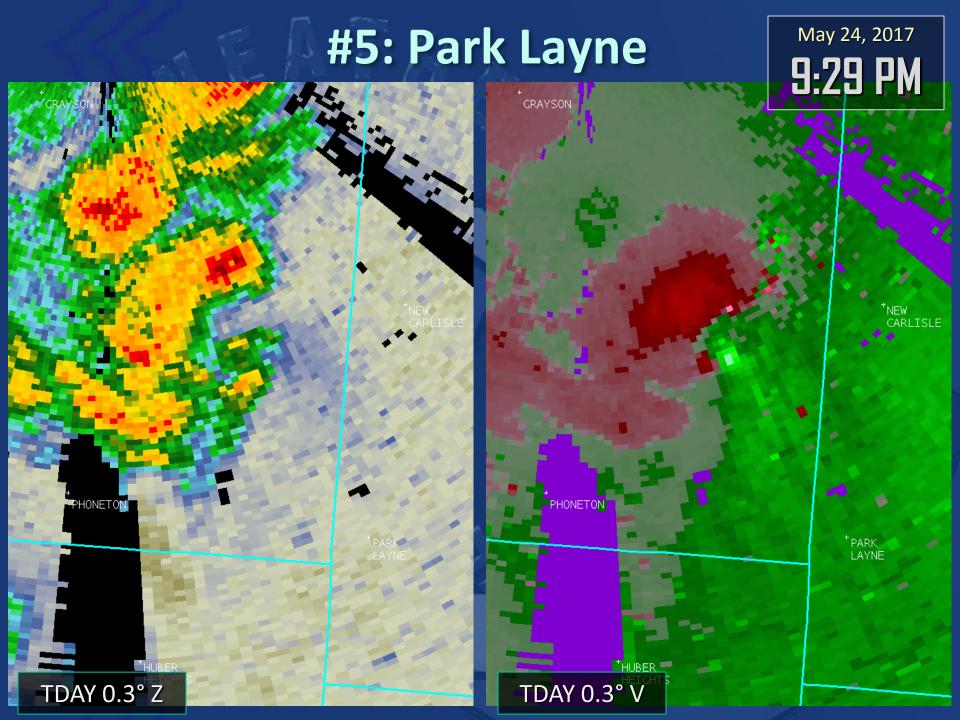


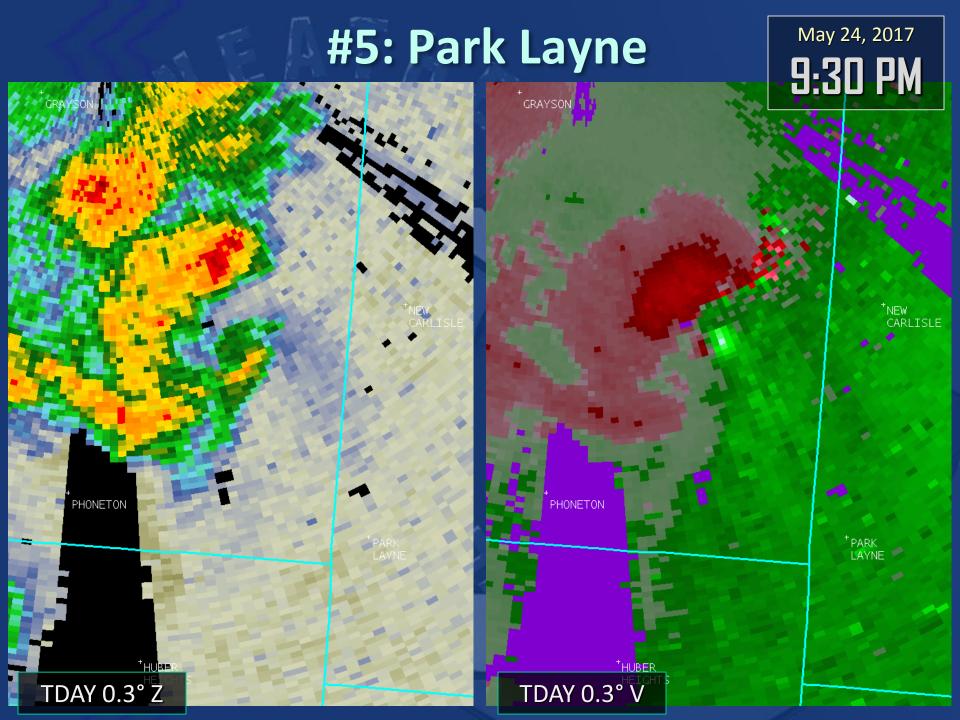


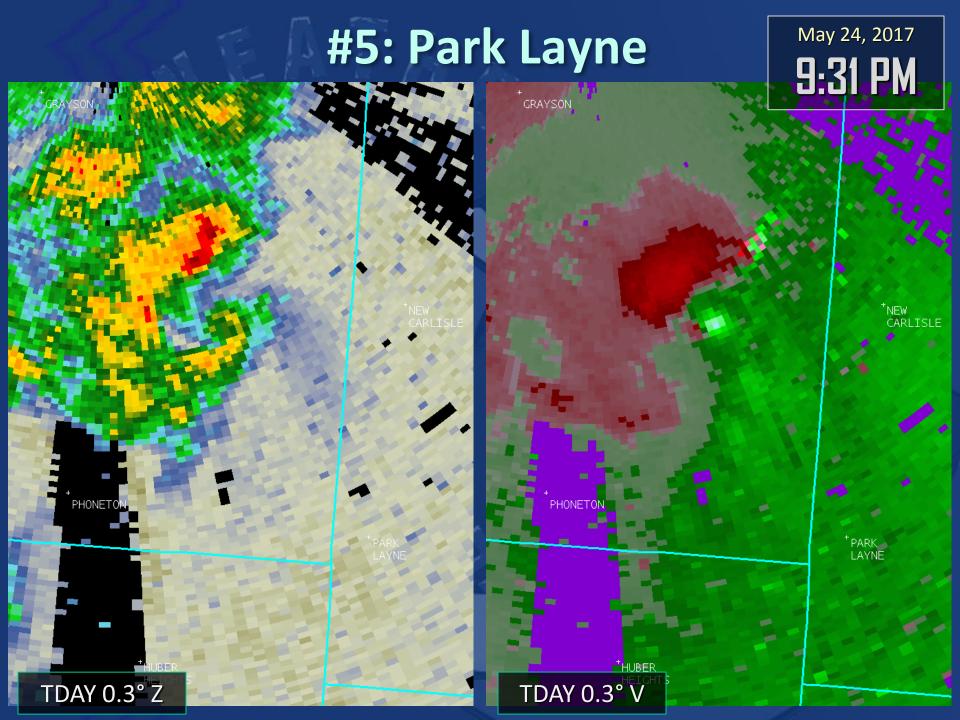


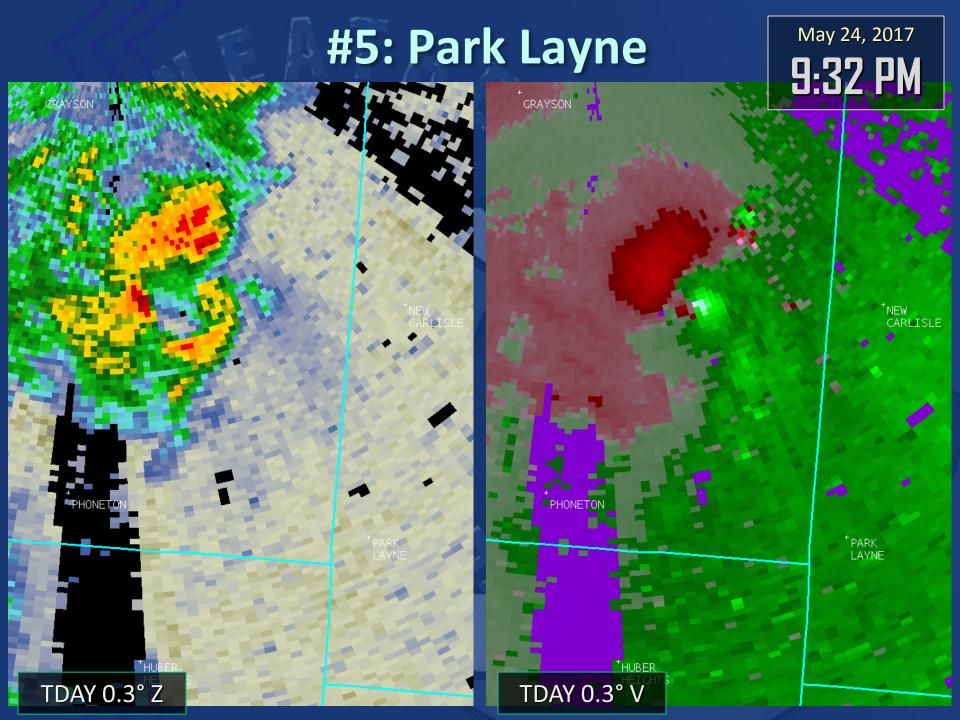












#5: Park Layne

May 24, 2017

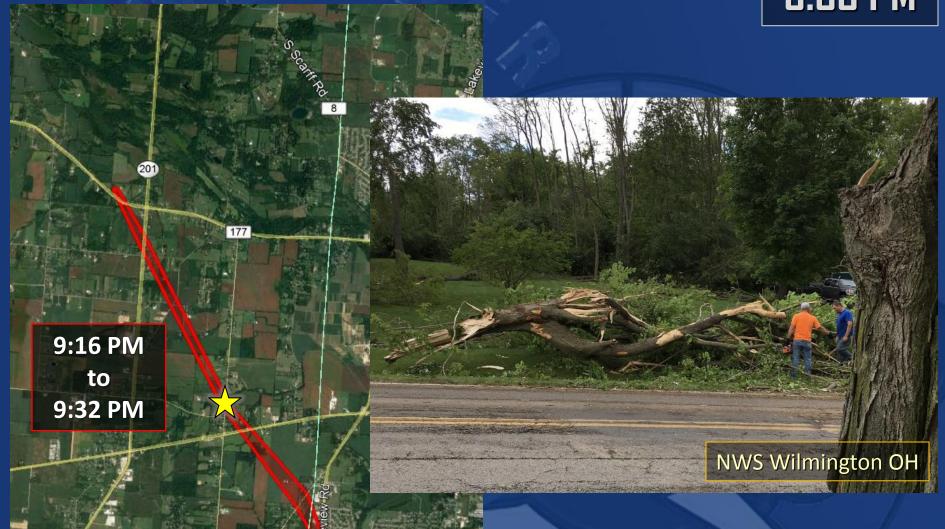
9:36 PM



#5: Park Layne

May 24, 2017

9:36 PM



yer Dr

S Palmer Rd

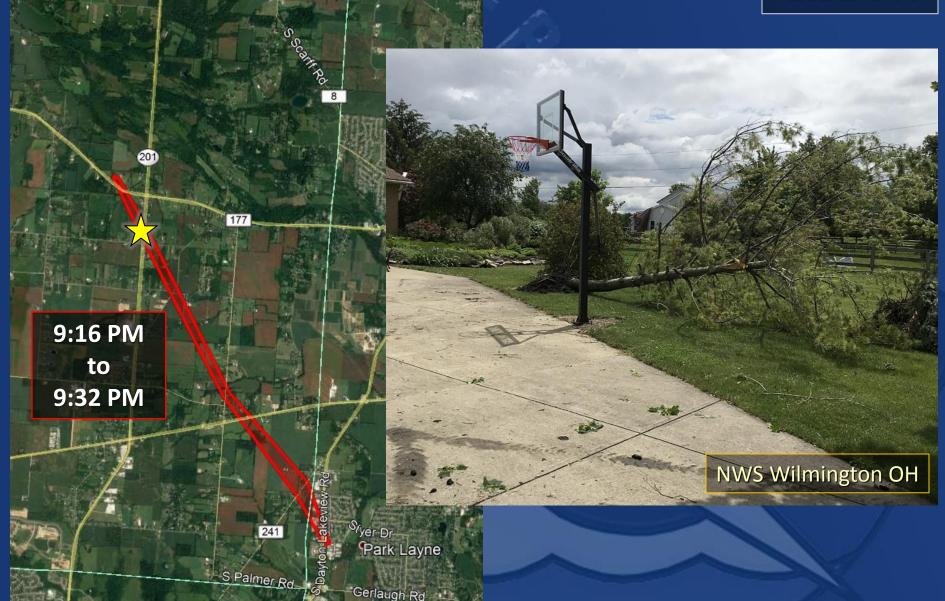
Park Layne

Gerlaugh Rd

#5: Park Layne

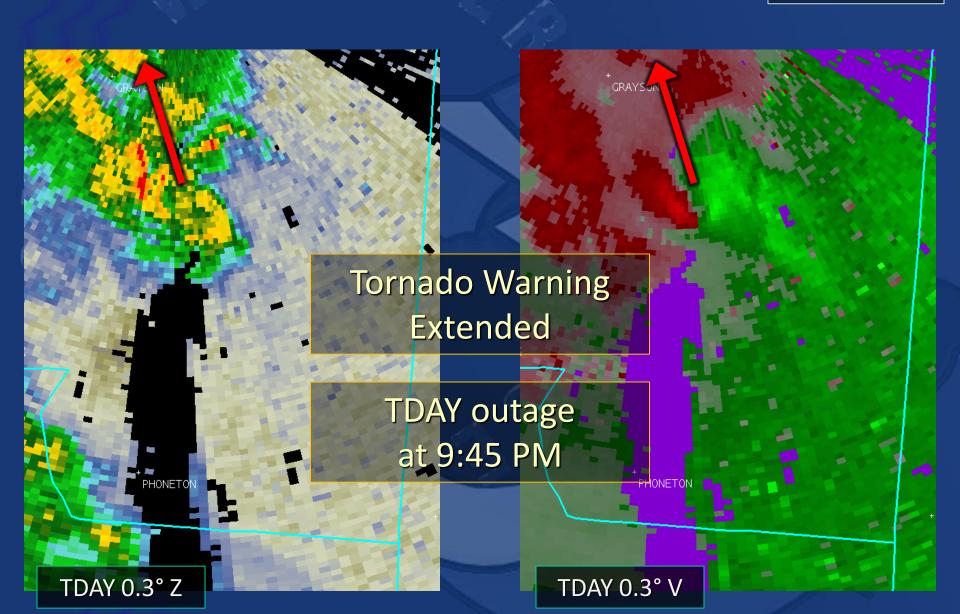
May 24, 2017

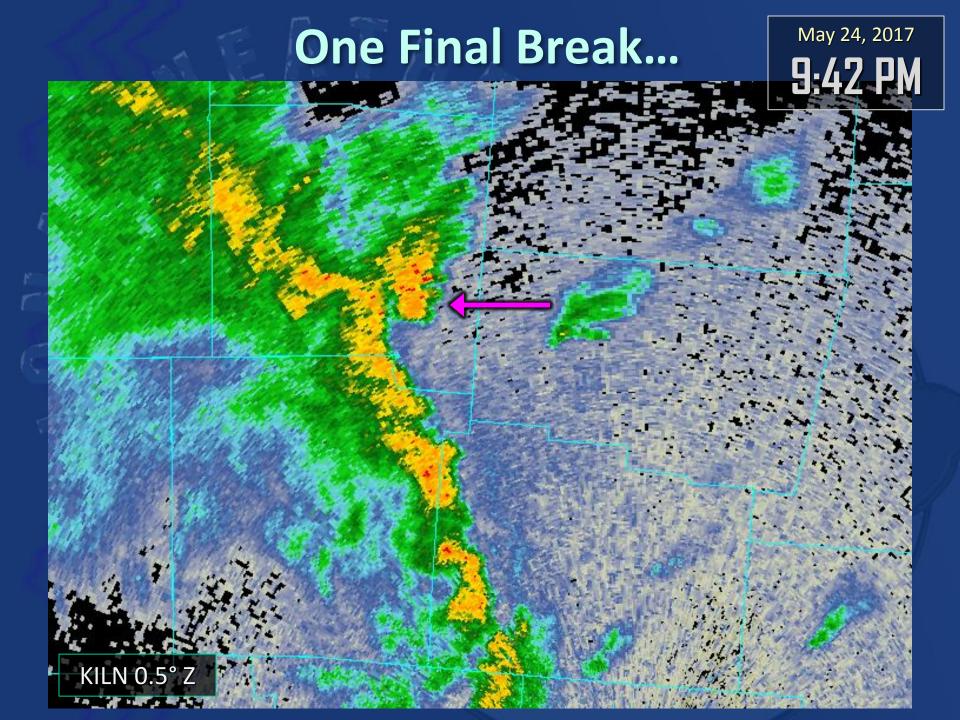
9:36 PM

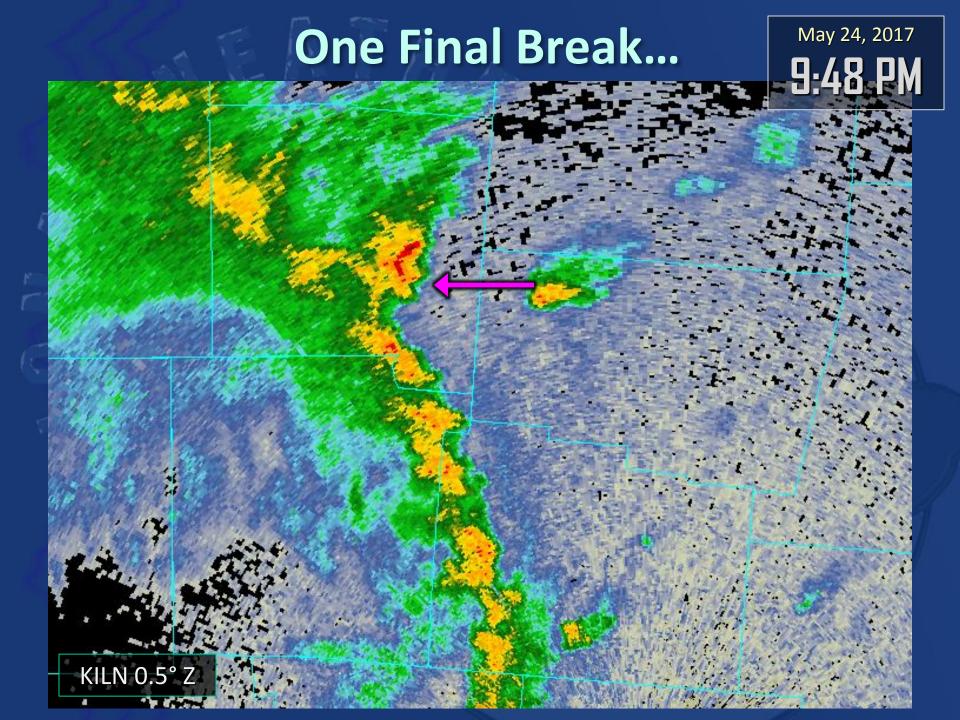


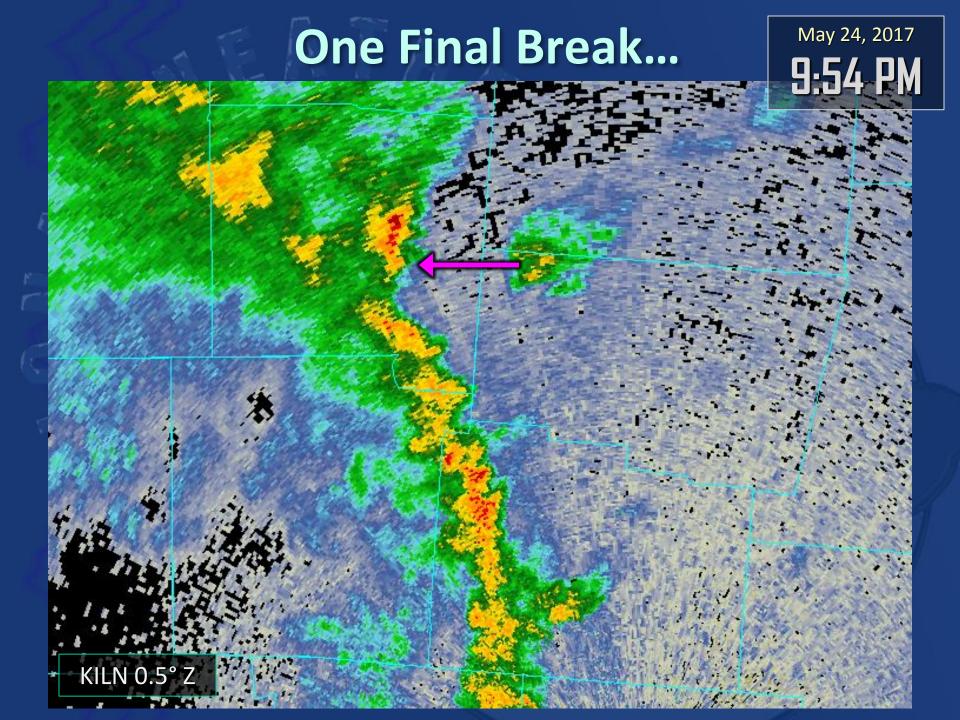
One Final Break...

May 24, 2017 **9:40 PM**





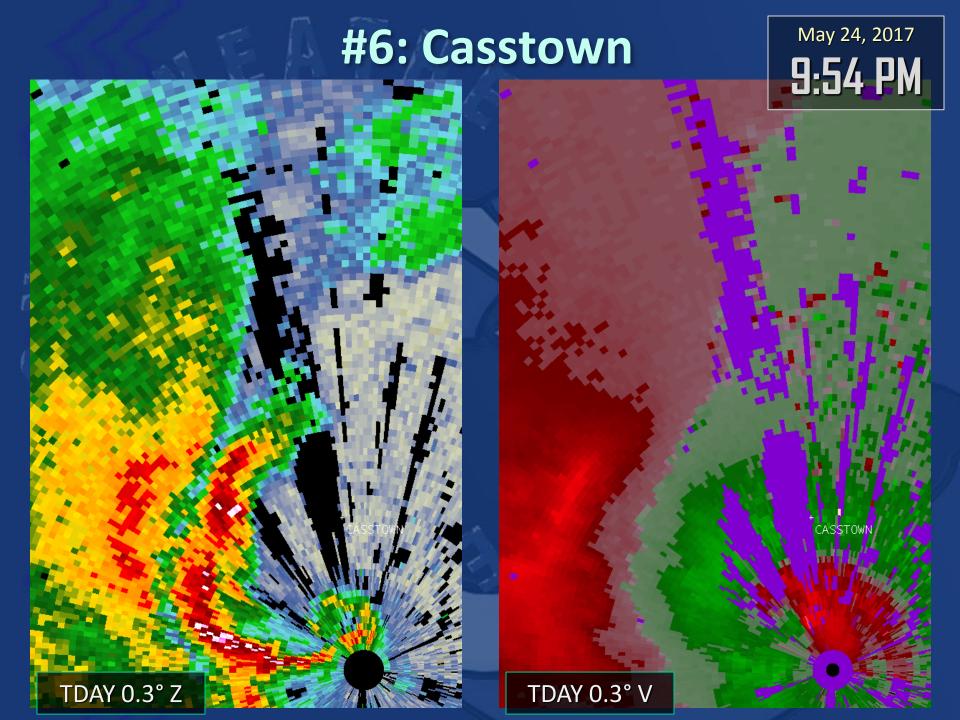


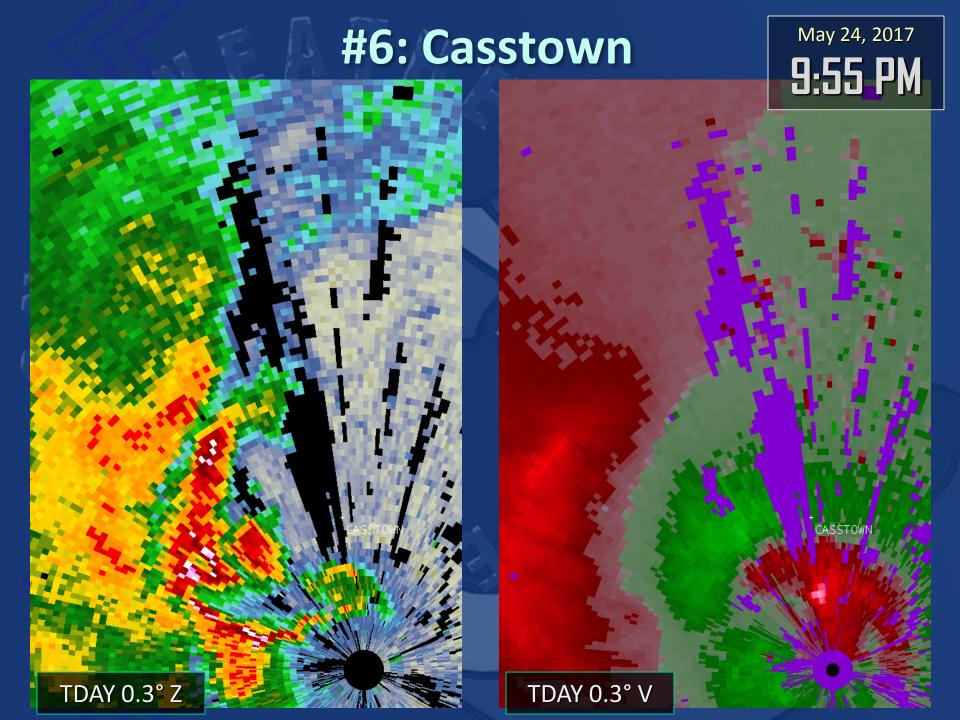


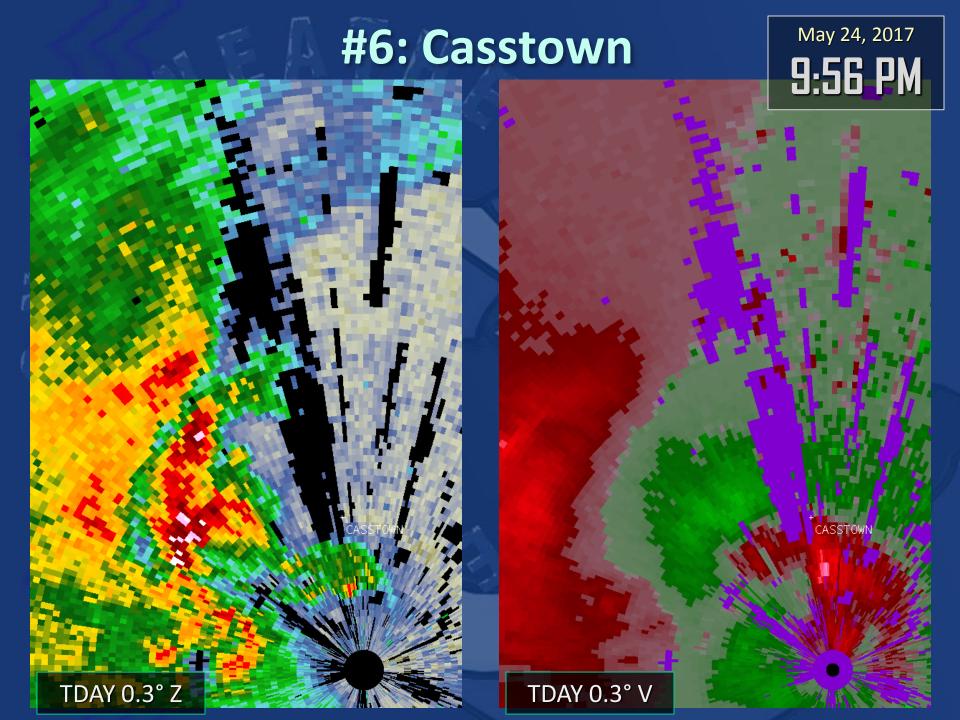
#6: Casstown

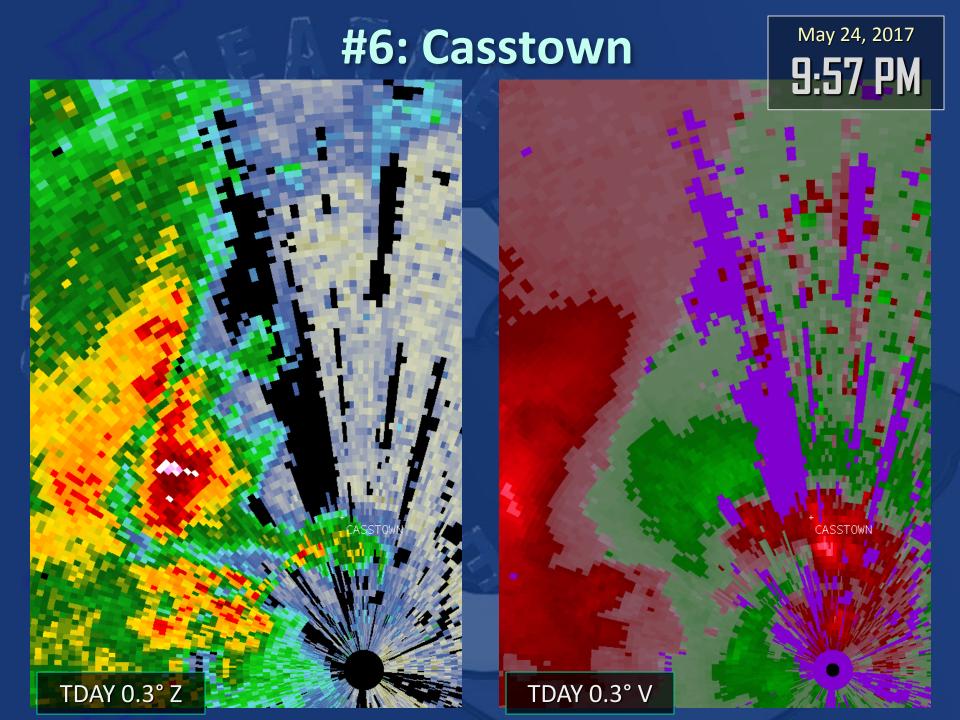
May 24, 2017 **9:54 PM**

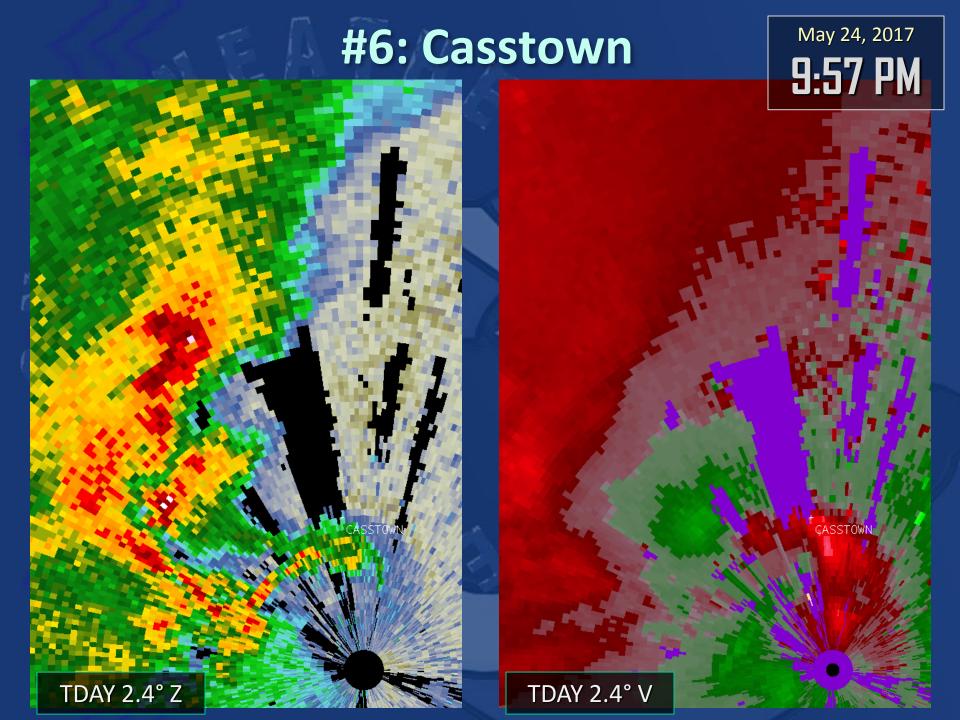
TDAY returns to service at 9:54 PM

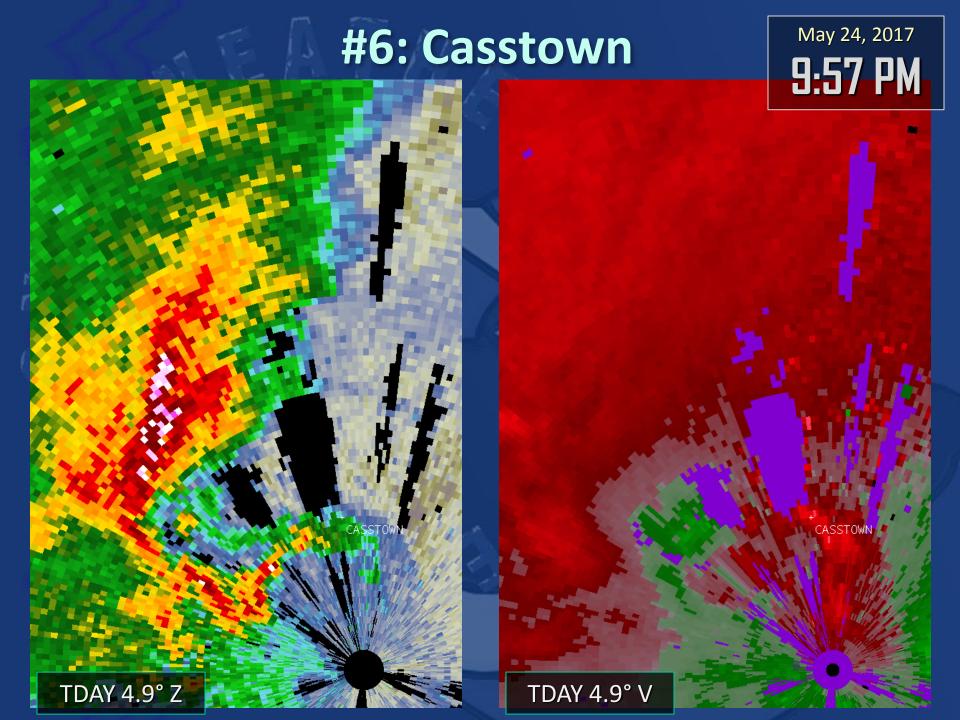


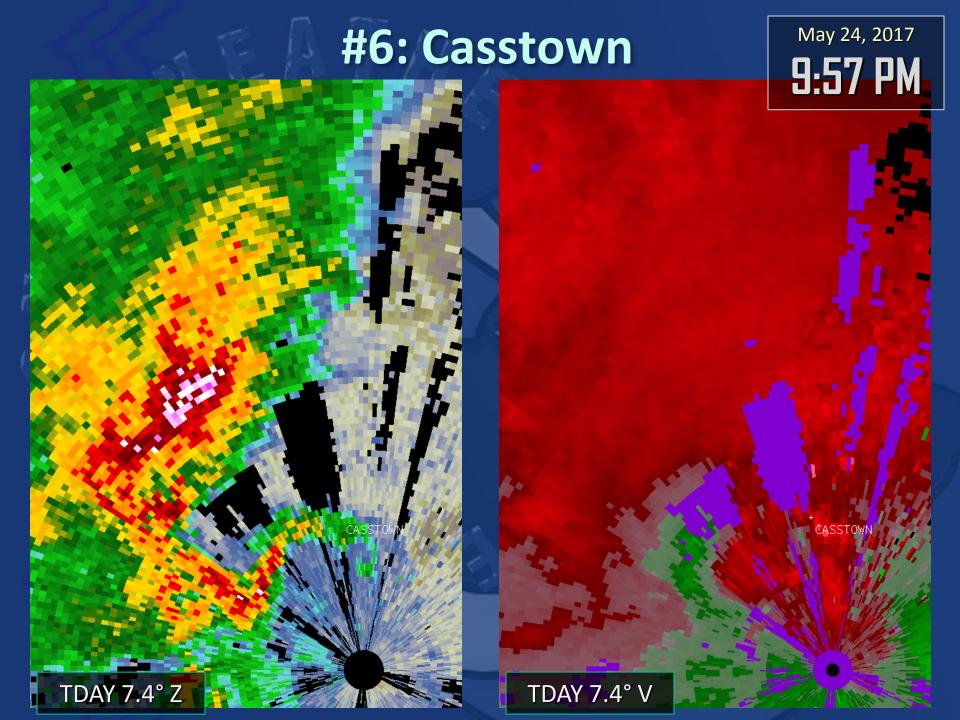


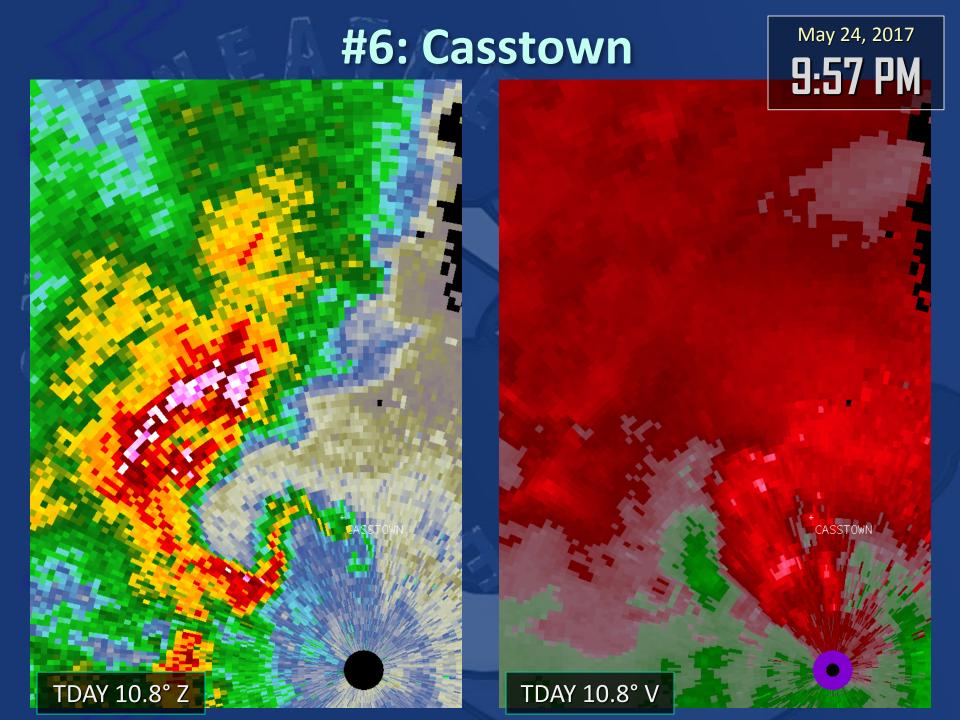


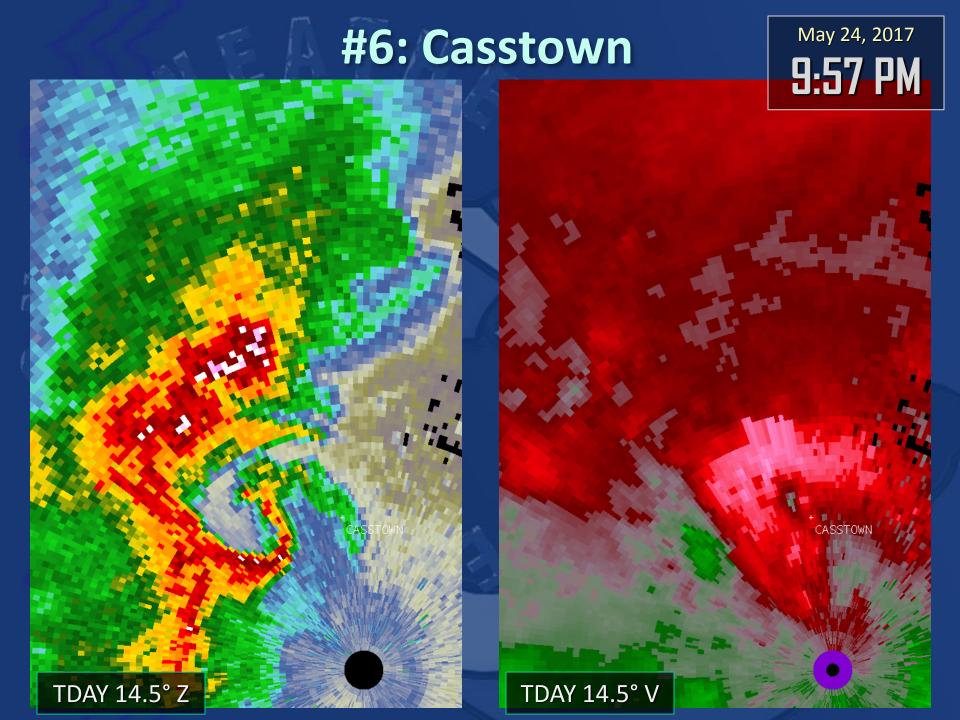


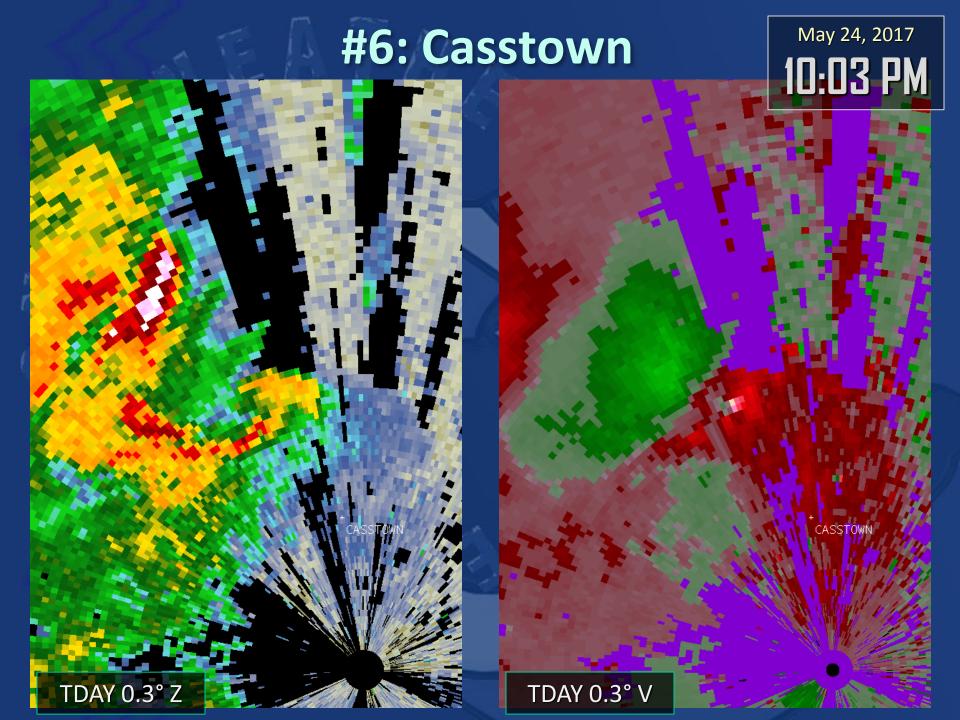






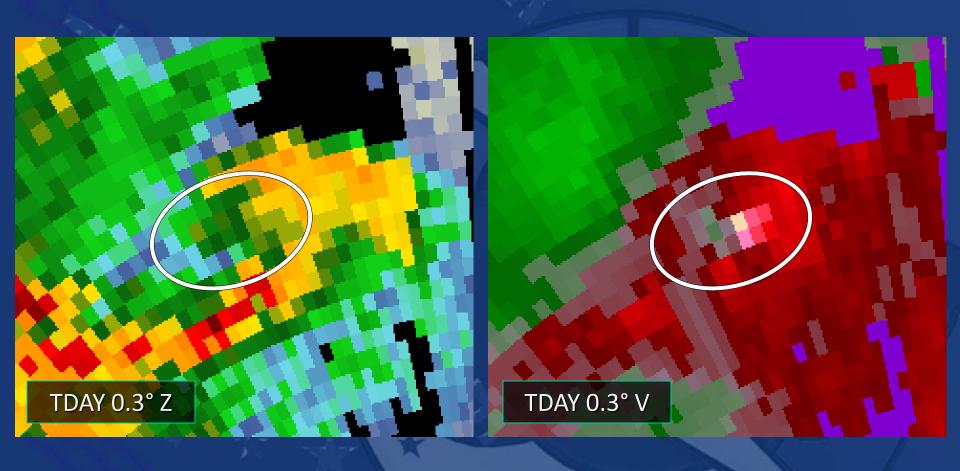






#6: Casstown

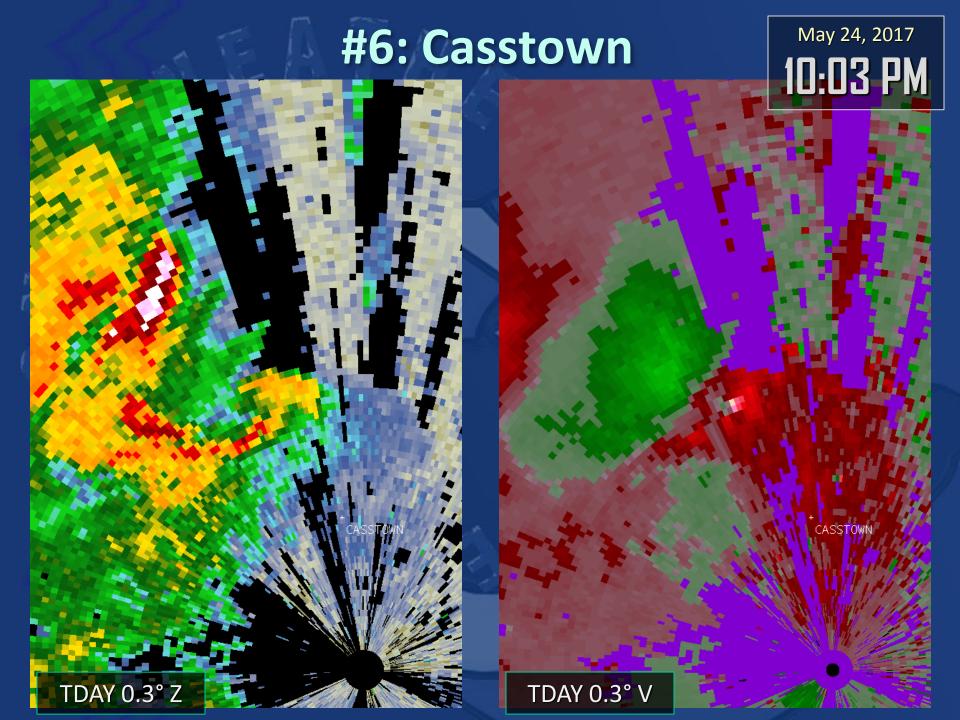
May 24, 2017 10:03 PM

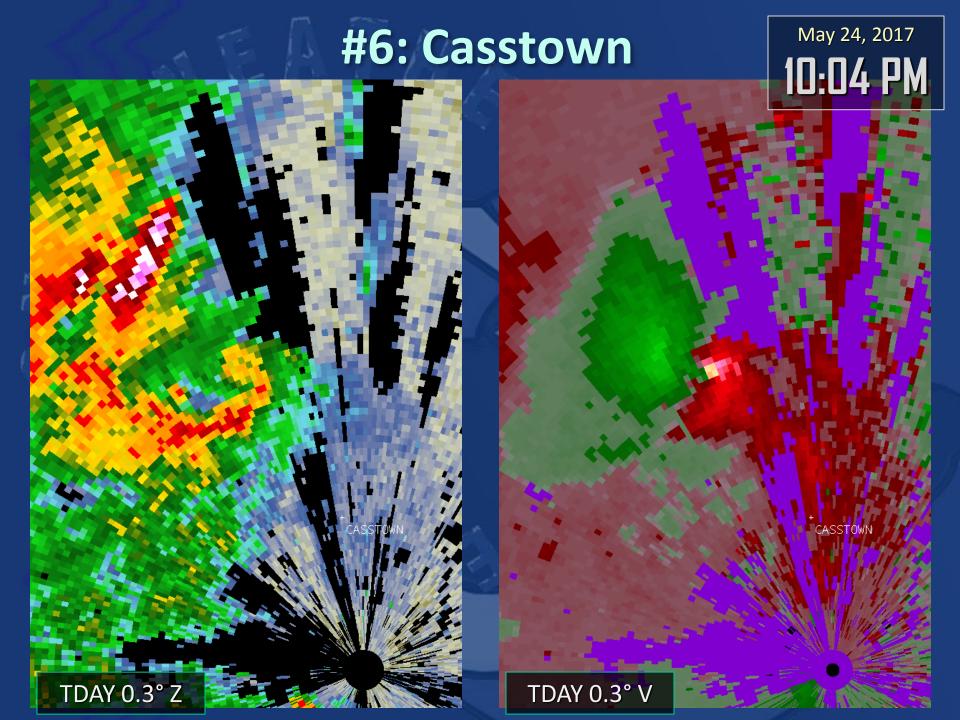


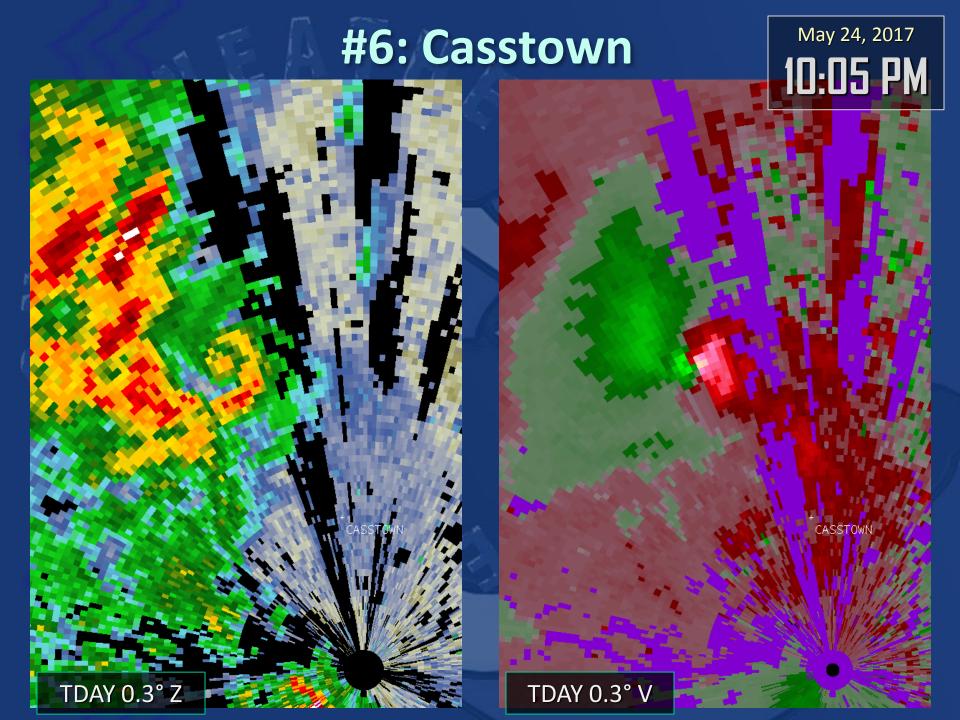
#6: Casstown

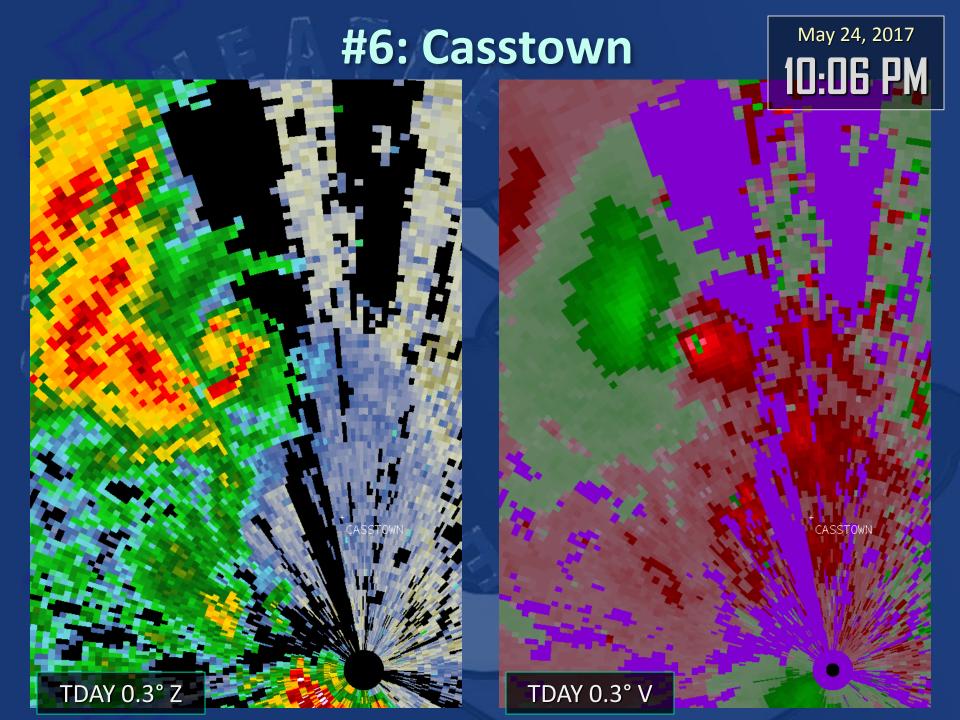
May 24, 2017 **10:03 PM**

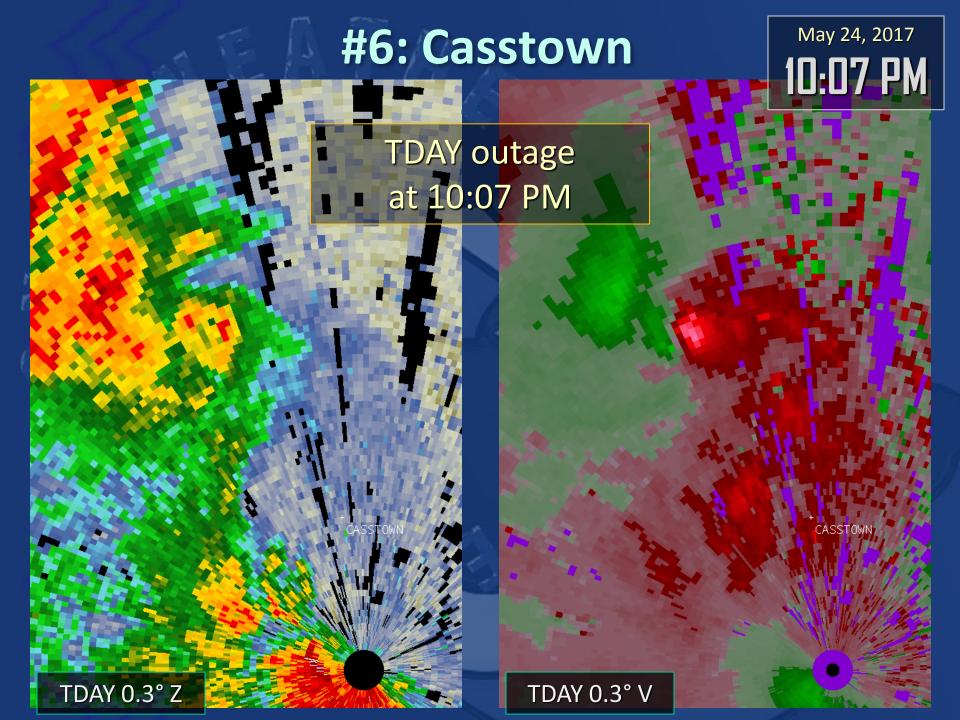
#6: Casstown May 24, 2017 10:03 PM David Baxter III

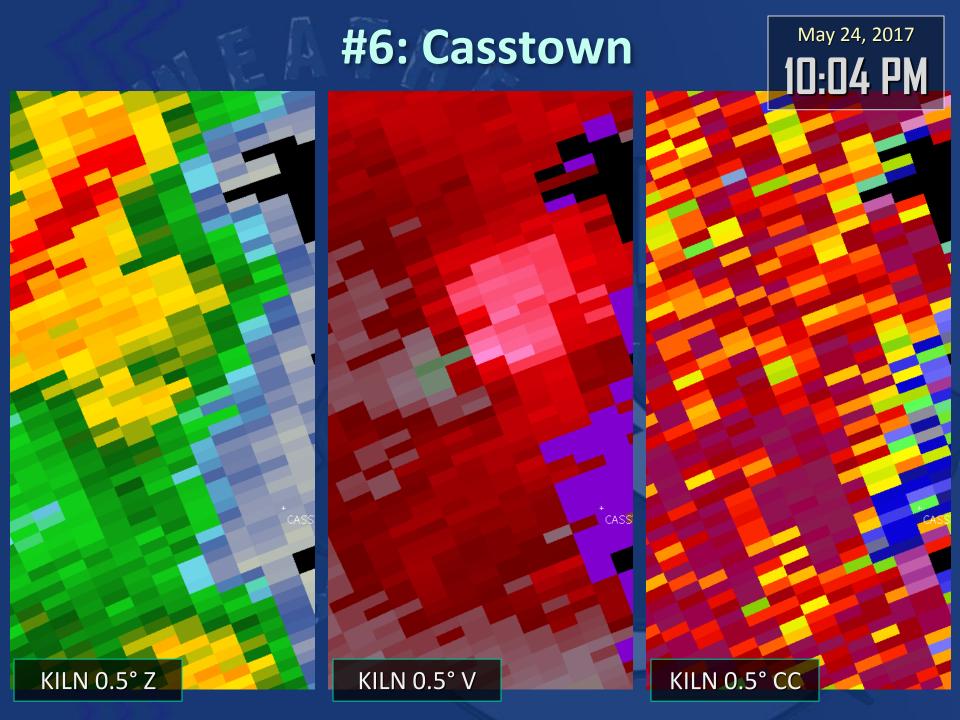




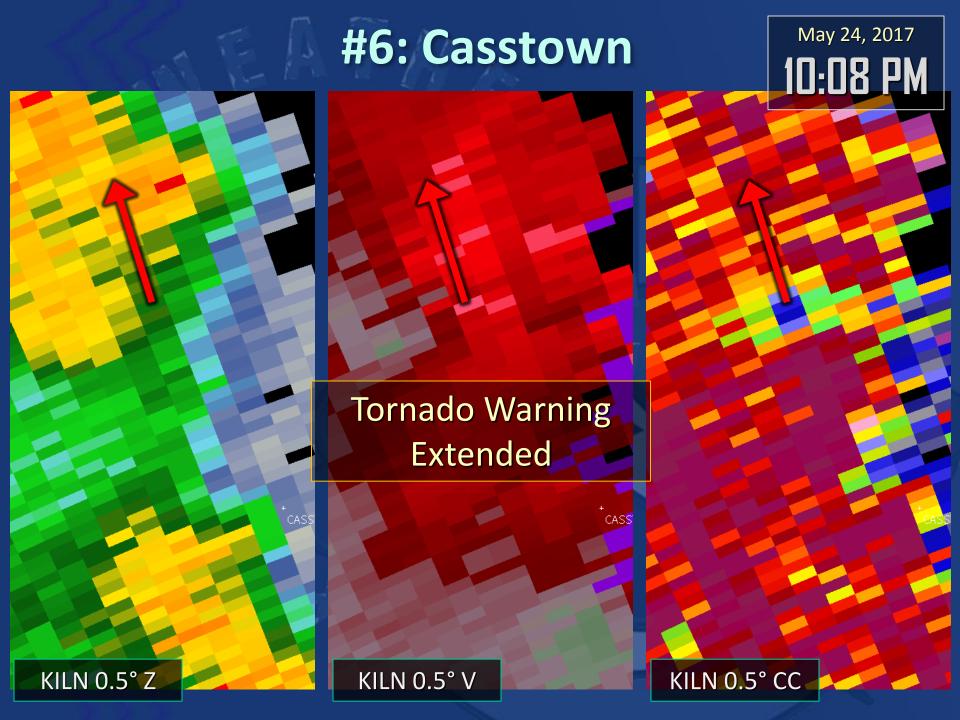








May 24, 2017 #6: Casstown 10:06 PM KILN 0.5° Z KILN 0.5° CC KILN 0.5° V













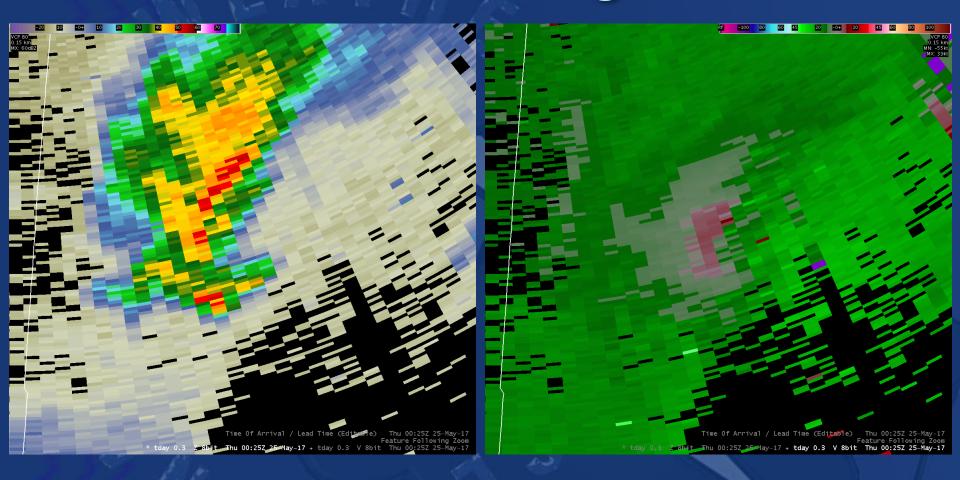


May 24, 2017

10:10 PM

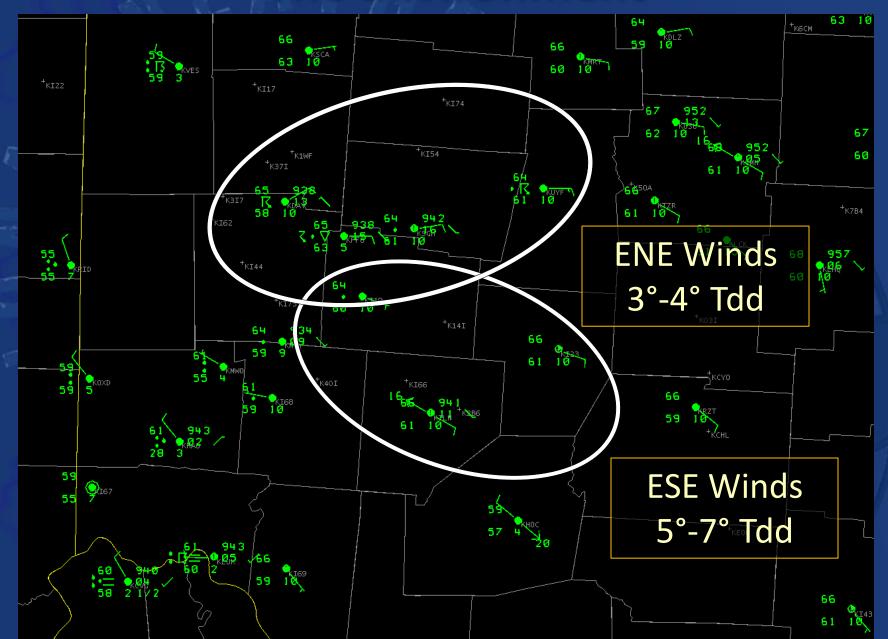
The End!

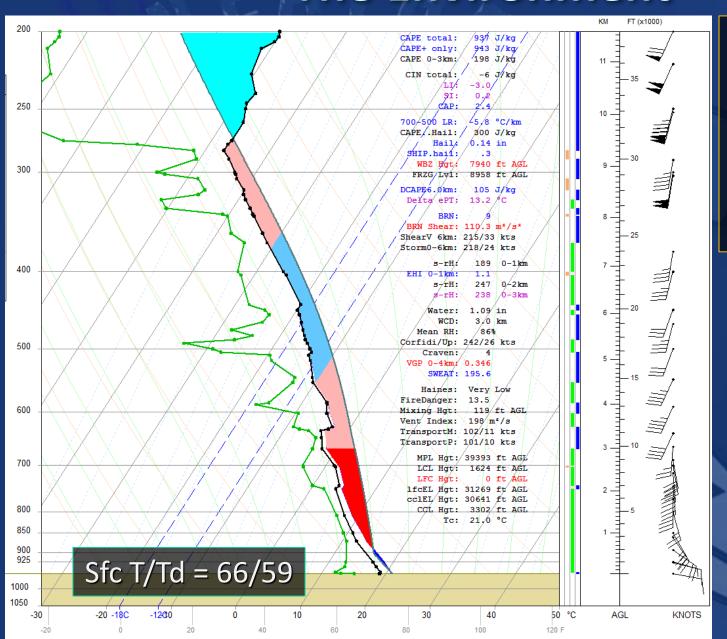
Feature-Following Zoom



This supercell produced 5 tornadoes (3 shown here)

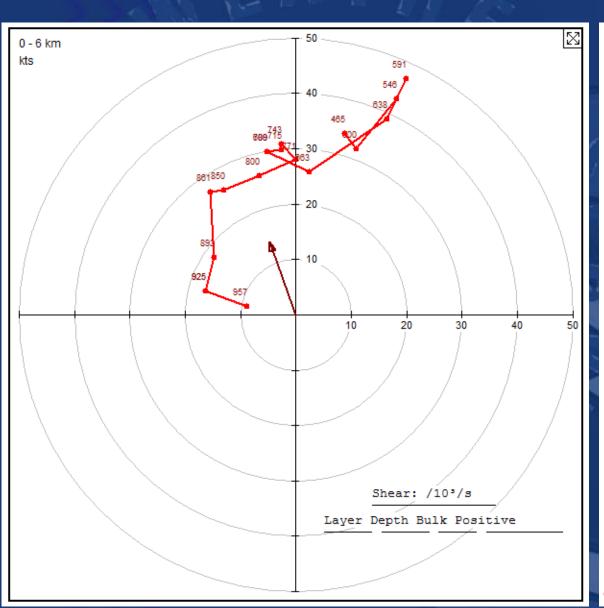
Tornado-warned from 8:20 PM to 10:29 PM

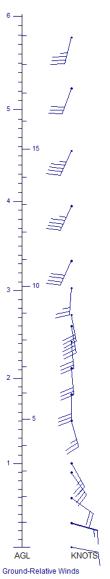




CAPE 937 J/kg

0-3km CAPE 198 J/kg





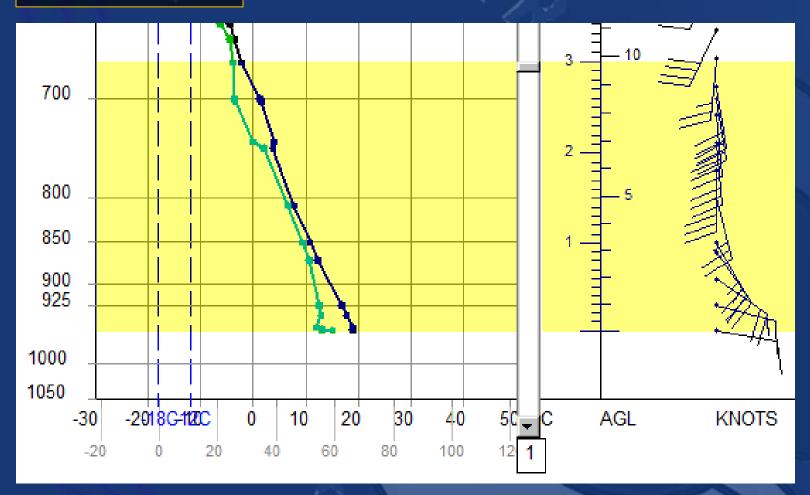
CAPE 937 J/kg

0-3km CAPE 198 J/kg

0-1km SRH 72 m²/s²

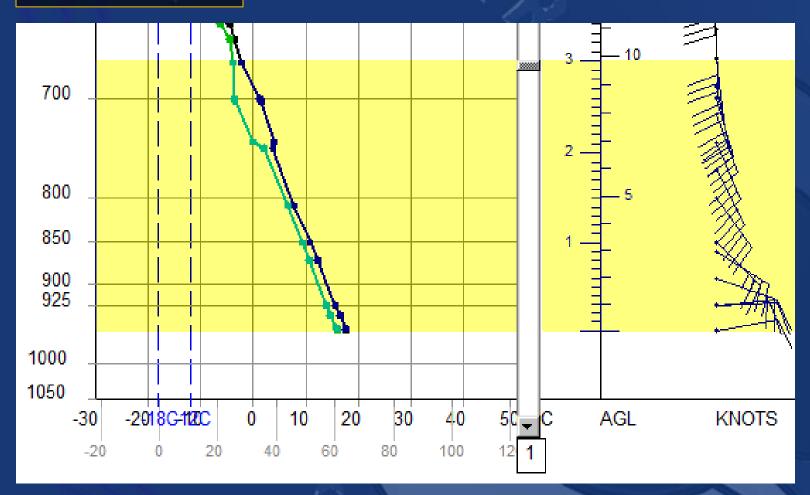
0-3km SRH 99 m²/s²

0-3km Layer

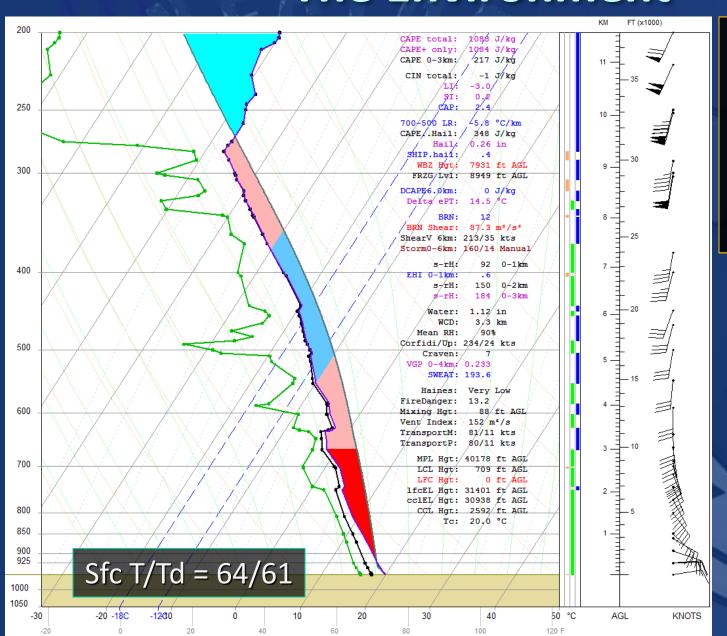


Original sounding

0-3km Layer

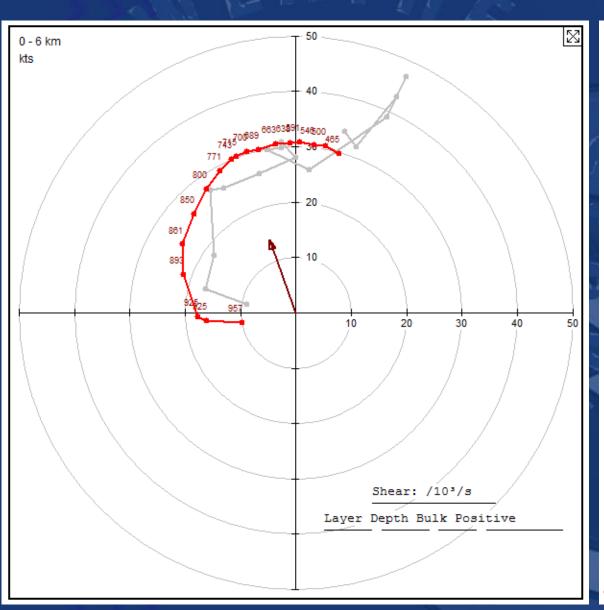


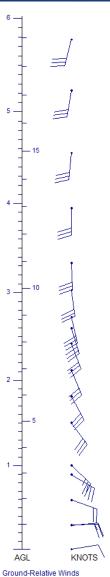
Modified sounding



CAPE 19373J/kg

0-3km CAPE 198 J/kg



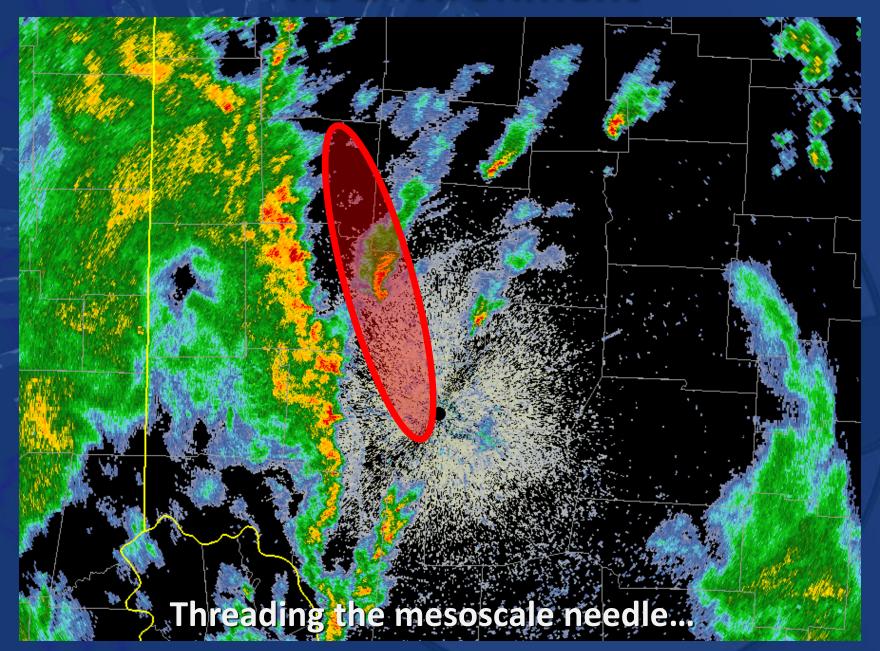


CAPE 1083 J/kg

0-3km CAPE 237 J/kg

0-1km SRH 92 m²/s²

0-3km SRH 1994m²/s²²



• When is the last time ILN had a tornado moving from southeast to northwest?

The National Weather Service in Wilmington has issued a

- * Tornado Warning for... Central Miami County in west central Ohio...
- * Until 1015 PM EDT.
- * At 938 PM EDT, a severe thunderstorm likely producing a tornado was located 5 miles east of Tipp City, moving northwest at 20 mph.

HAZARD...Tornado.

SOURCE... Radar indicated rotation.

* Locations impacted include...
Troy, Tipp City, Casstown, Grayson and Farrington.

This includes I-75 in Ohio between mile markers 69 and 79.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

TAKE COVER NOW! Move to a basement or an interior room on the lowest floor of a sturdy building. Avoid windows. If you are outdoors, in a mobile home, or in a vehicle, move to the closest substantial shelter and protect yourself from flying debris.

To report severe weather, go to our website at weather.gov/iln and submit your report via social media, when you can do so safely.

8 8

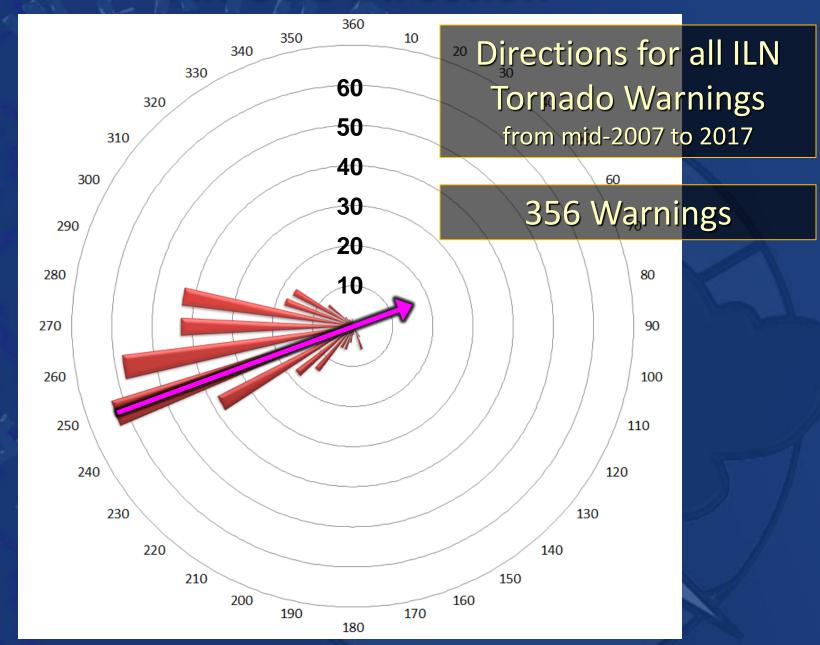
LAT...LON 3994 8408 3994 8412 3999 8424 4003 8427 4012 8424 4012 8417 4010 8412 3999 8408 TIME...MOT...LOC 0138Z 146DEG 17KT 3997 8411

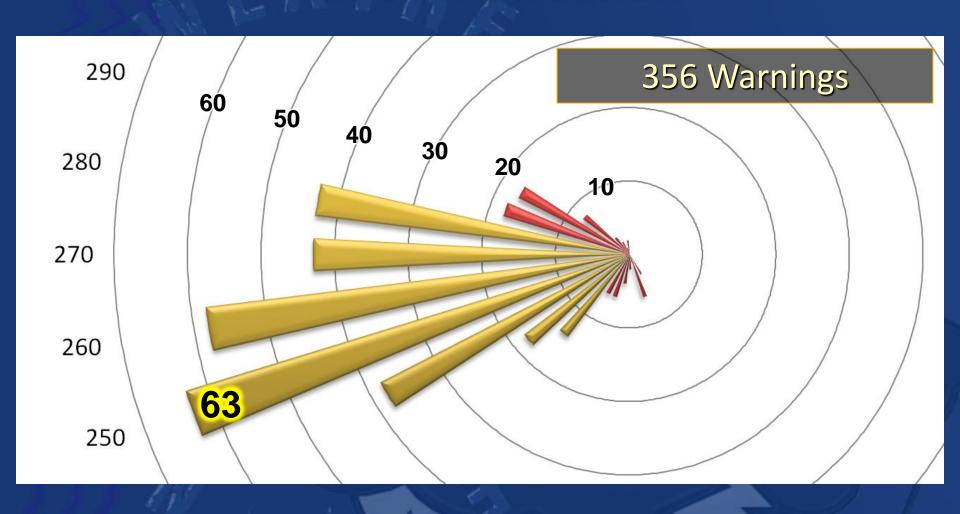
TORNADO...RADAR INDICATED HAIL...0.00IN

\$\$

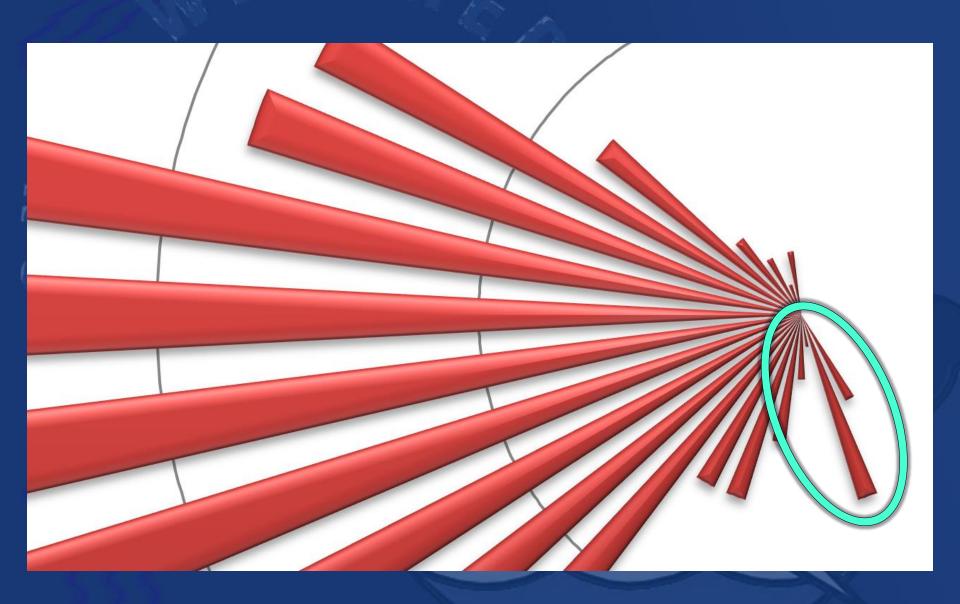
Hatzos

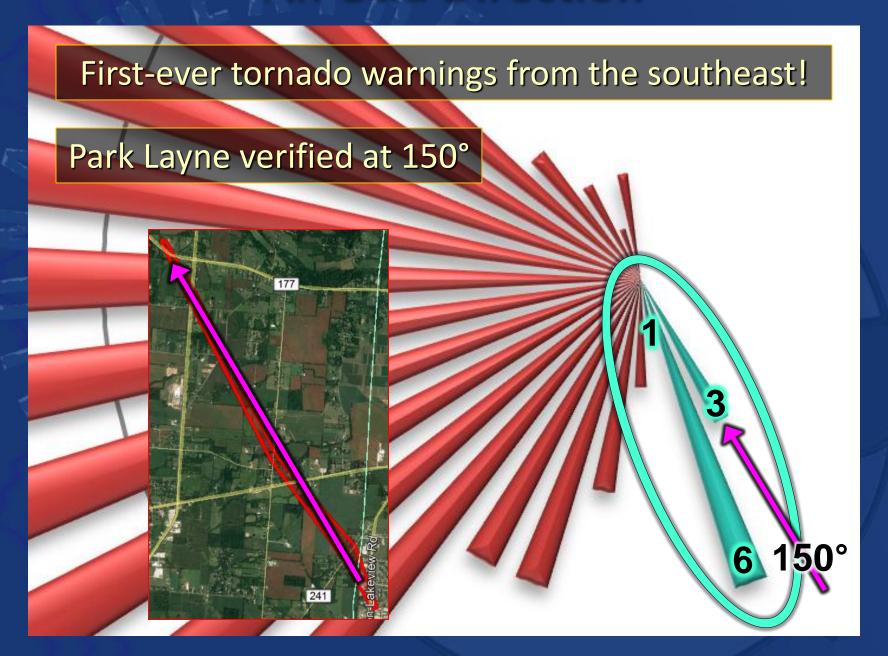
TIME...MOT...LOC 0138Z 146DEG 17KT 3997 8411





78% of all Tornado Warnings were out of the SW, WSW, or W





A Policy Adjustment

- Can we make a tornado confirmation on pictures/video alone?
- Yep!
- What rating to assign with no damage to survey?

EF-Unknown

Thank you!

Andy Hatzos
@thegreatzo
NWS Wilmington Ohio
@NWSILN