

# How to Effectively Storm Chase part 1

Kim, CO; 2021

**Anthony Yattoni**

# About me

- Chased in: IL, MO, IA, MN, ND, SD, NE, KS, OK, TX, CO, NM
- Chasing for about four years
- Seen a few tornadoes
- Likes long drives
- This country is beautiful

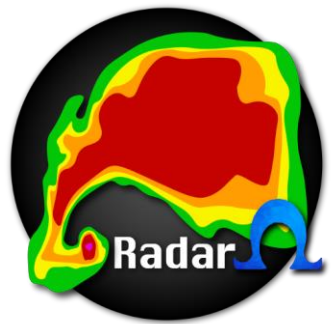
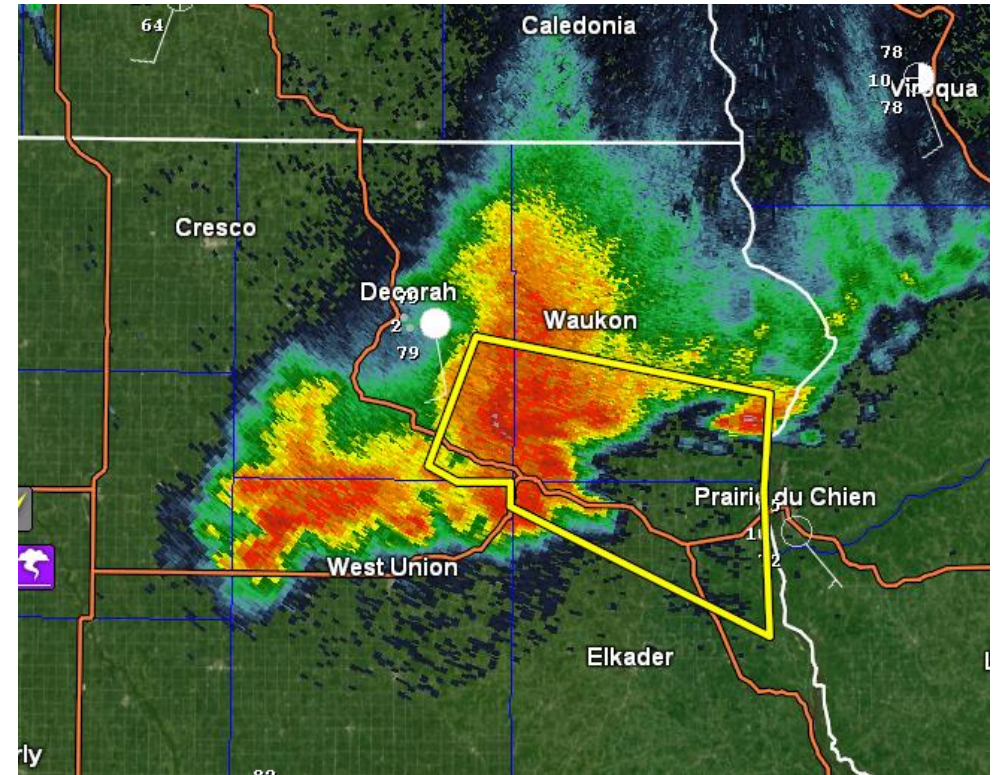


# Before Chase

- Reliable Car (good gas milage)
- Cell phone  
(<https://fcc.maps.arcgis.com/apps/webappviewer/index.html?id=6c1b2e73d9d749cdb7bc88a0d1bdd25b>)
- Laptop
  - Radar
    - GR, RadarScope, RadarOmega
- People
  - More the merrier
- \$\$\$
- Attend a Spotter Safety Class by the NWS (Must)



# Radar








# Radar $\Omega$

# New to Storm Chasing, Start Here!

- Begin to look at the Storm Prediction Center Outlooks
  - <https://www.spc.noaa.gov/products/outlook/day1otlk.html>
- Marginal = lower risk & High = high risk (very rare)
- READ DISCUSSION

## Understanding Severe Thunderstorm Risk Categories

THUNDERSTORMS (no label)	1 - MARGINAL (MRGL)	2 - SLIGHT (SLGT)	3 - ENHANCED (ENH)	4 - MODERATE (MDT)	5 - HIGH (HIGH)
No severe* thunderstorms expected	Isolated severe thunderstorms possible	Scattered severe storms possible	Numerous severe storms possible	Widespread severe storms likely	Widespread severe storms expected
Lightning/flooding threats exist with <u>all</u> thunderstorms	Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible	More persistent and/or widespread, a few intense	Long-lived, widespread and intense	Long-lived, very widespread and particularly intense
					

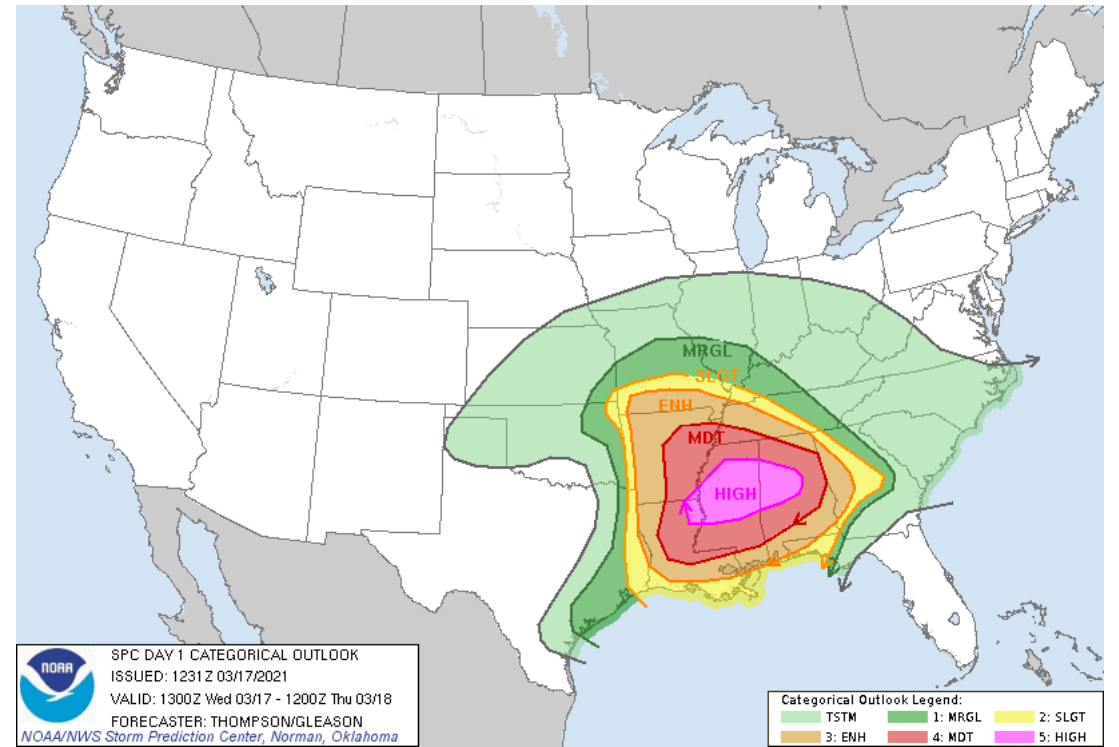
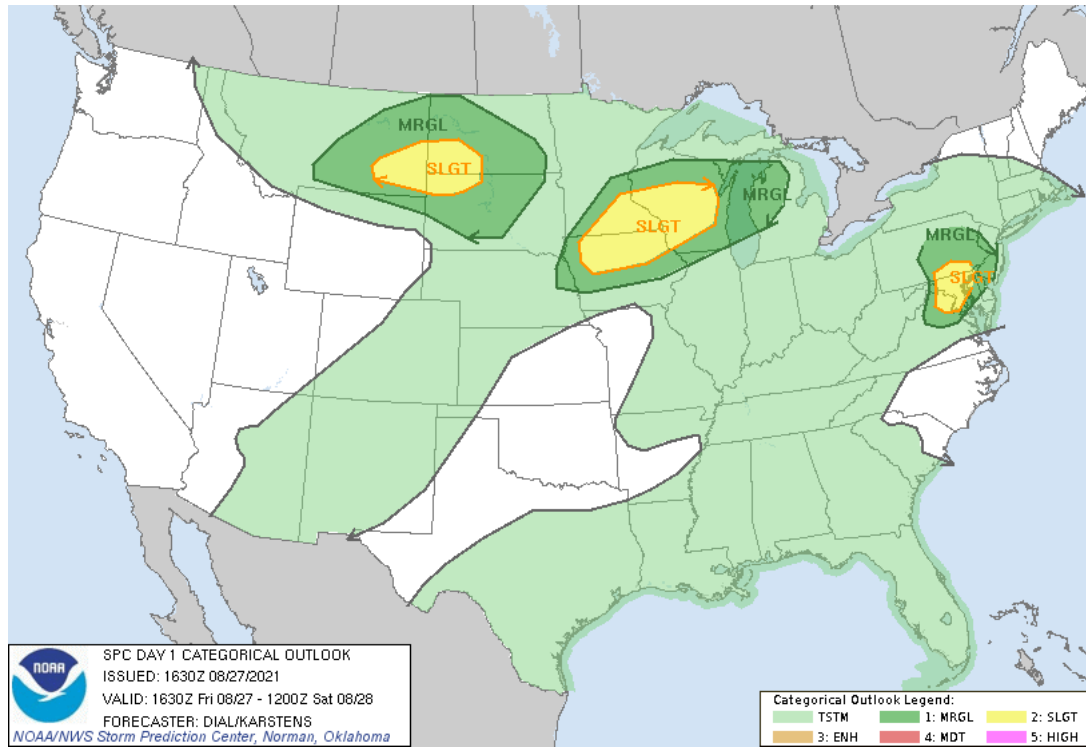
\* NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.



National Weather Service  
[www.spc.noaa.gov](http://www.spc.noaa.gov)



# Risk Examples



# Begin to look at models

- Choose between:
  - <https://weather.cod.edu/forecast/>
  - <https://www.pivotalweather.com/model.php>
- GFS/NAM/EURO
  - Not as high of resolution but still provide crucial information
- CAMS (Convection Allowing Models)
  - HRRR, NAM3K, & other experimental models
  - Higher Resolution



# Now what?

- You've looked at models and noticed something you like
  - I will go over in detail in what to look for in models in my next presentation
- Choose your target location
  - May not make it to target location in one day
  - Likely will stay in hotel night before





# Day of Chase

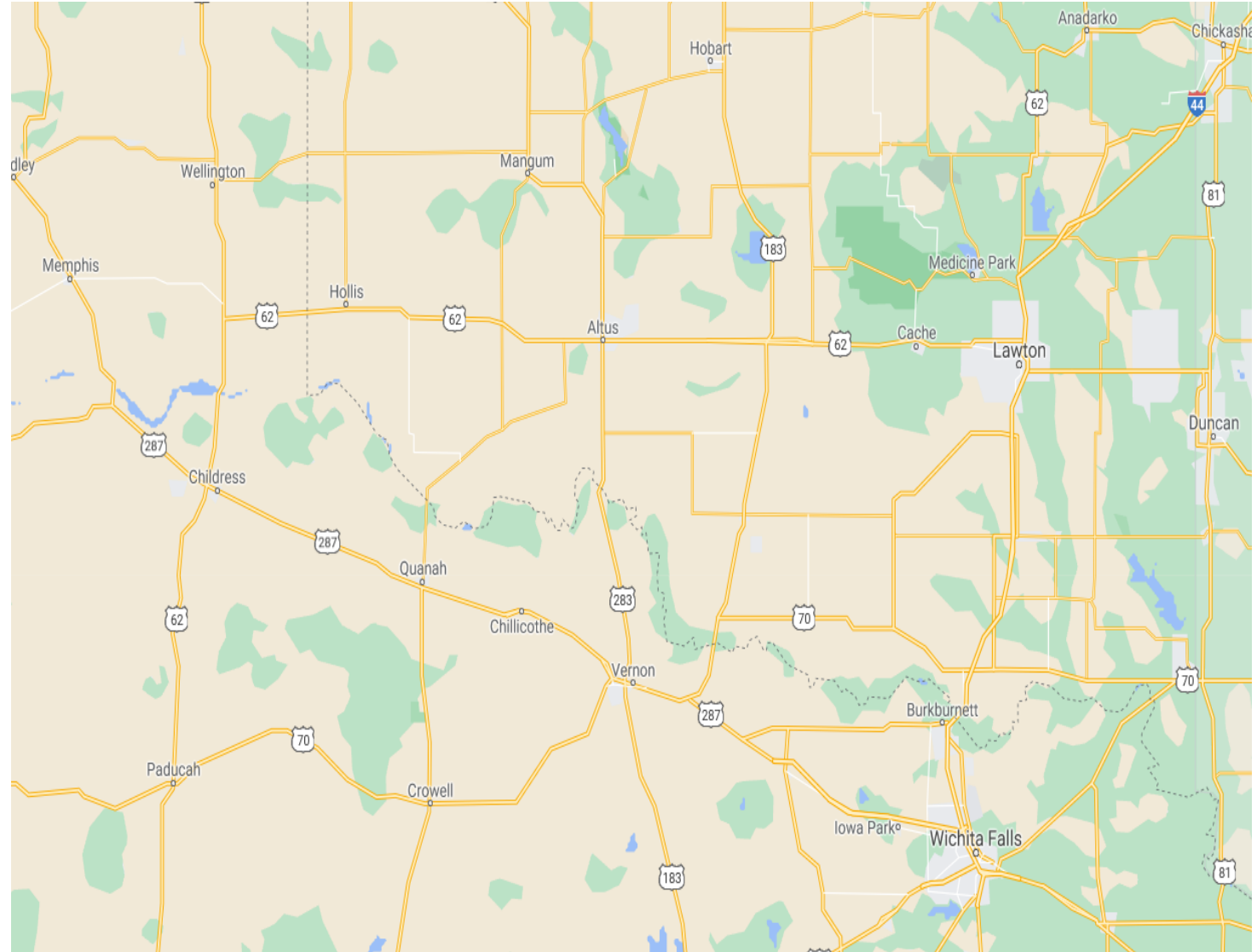
- Wake up and begin to check models
  - SPC outlooks
  - Mesoscale Analysis
  - Satellite Imagery
  - Surface Observations
  - Local Radiosondes
  - Local NWS Discussion
  - Check Models
    - Ingredient Forecasting



**Anthony Yattoni**

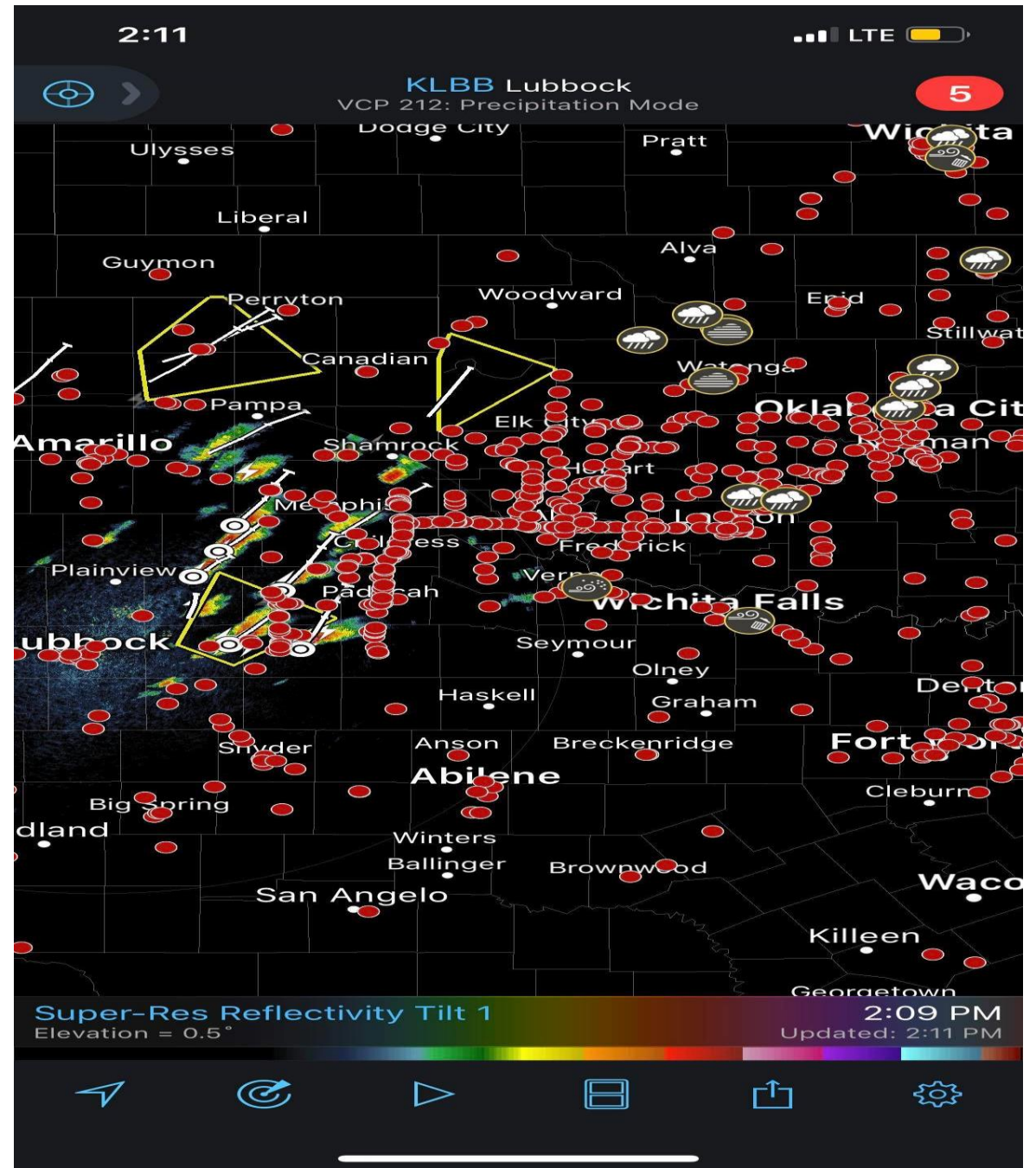
# KNOW YOUR LOCATION

- Once you have chosen your location, **STUDY IT**
- Some roads only have one bridge crossing to get E/W
  - Crucial information when trying to chase storm
- Check the cell phone data map to see if your carrier will be good/bad
- Check local Native American information if up north
  - COVID



# Chaser Convergence

- High Risk Day = mega chasers
- If driving, watch only the road
  - Multiple rear-ends in the image
- Be courteous
  - Slow down
  - Don't pass in no pass zones
- Some chasers will not chase high risk days due to traffic





# Know your storm (HP, LP, MCS)

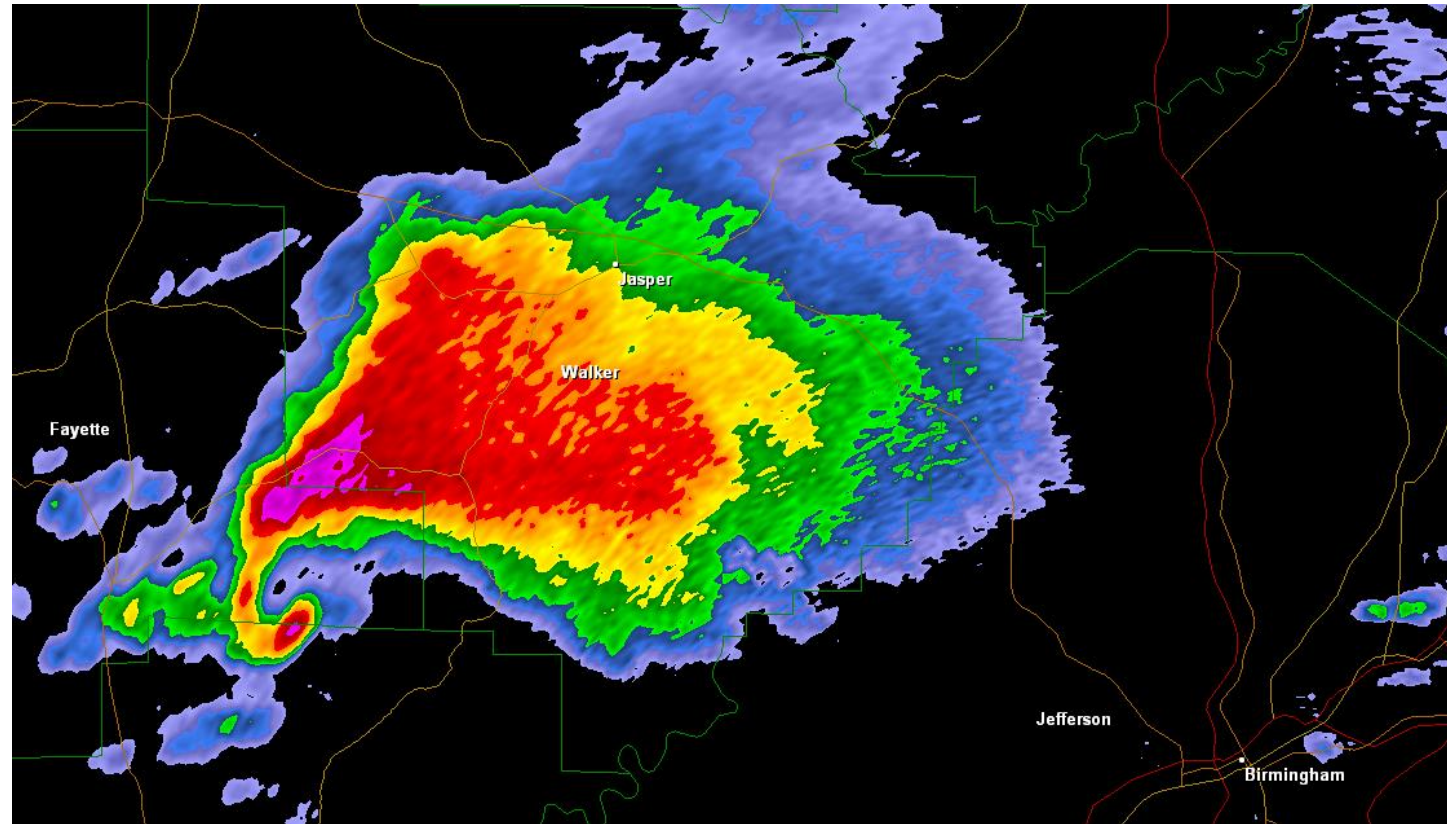


<https://www.silverliningtours.com/may-16th-sudan-texas-tornadic-supercell/>  
<https://twitter.com/markokorosecnet/status/1162091762736934912>  
<https://weatherpix.photoshelter.com/image/I0000rqvp8.aP9hU>



# You found your storm, congrats!!

- You have found a mothership supercell!
- You might be wondering why am I not seeing anything?
- SE side of storm
  - Shields rain
  - Allows to see wallcloud/tornado
- MUST know storm direction
- HAVE AN ESCAPE ROUTE
- If you do not know storm direction...



# Serious Injury or Death



<https://weather.com/storms/tornado/news/tornado-hunt-team-takes-direct-hit-tornado-20130531>

<https://www.pinterest.com/pin/452471093821260118/>

# Submit Storm Reports

- <https://www.youtube.com/watch?v=oEYQ-9zNIsU>
- Twitter
  - Location and time of report, especially road number
- Spotter Network
  - Relays information directly to NWS personell
    - Radarscope, RadarOmega
- Hail and rotating walls, funnels, tornadoes are easiest to report
- Report damage
- Last resort 911

# Advice

- Find a mentor to teach you
  - Most chasers (myself included) love to help other chasers
- Youtube!
  - <https://www.youtube.com/watch?v=bq0-QXXtOro&list=PLEPbXzUhtcEo5M2pRDDOkODOjfvGqXHP4>
  - Plenty of advice from seasoned chasers!
- Do not be afraid to jump in
- Follow everyone on Twitter!
- If you are successful, you just might capture some great stuff...





**Anthony Yattoni**





**Anthony Yattoni**





**Anthony Yattoni**





Anthony Yattoni





**Anthony Yattoni**



**Anthony Yattoni**





**Anthony Yattoni**



**Anthony Yattoni**



**Anthony Yattoni**











**Anthony Yattoni**