



SEVERE WEATHER NET TRAINING

Lewis Thompson, W5IFQ

AEC TCARES

22 MAR 2011

Scenario

- Supercell Thunderstorm in Travis County



What to Report (Severe)

- **First – County Name and exact location**
 - “I am in Bastrop County, 5 miles west of Bastrop along highway 71”
- **Funnel Clouds/Tornadoes**
 - Time first noticed? Can you still see it?
 - Touching ground? (Dust or debris visible?)
 - Direction of motion?
 - Damage or injuries? (details & location when asked)
- **Flooding/Flash Flooding**
 - How much rain and current intensity?
 - Start time and duration of heaviest rain?
 - Water crossings flooded/closed?
 - Small streams/creeks overflowing their banks?
 - Underpasses flooded?
 - Evacuation needed?
- **Strong Winds/Wind Damage**
 - How long and direction?
 - Wind speed? (Beaufort Scale) > 50 knots (58 mph)
 - Dust/Sand blowing? (visibility?)
 - Damage or injuries? (details when asked)
 - Major trees/permanent signage or power lines down
 - Roof damage
 - Structure damage to permanent or mobile homes

What to Report (Severe)

- **Thunderstorms & Hail**

- How long ago did you hear thunder?
- What direction is thunderstorm moving?
- Is there hail? > penny size – report $\frac{3}{4}$ inch or greater
- Rain intensity? (inches/hour) >.30 inches/hour
- Wind? (speed and direction) > 50 knots
- Lightning or wind damage? (See Wind criteria)

- **Snowfall/Ice (freezing drizzle or rain, sleet, snow)**

- Begin?
- Accumulate on trees, power lines, bridges/roadways?
- Travel becoming difficult?
- Weight of ice severely bending/sagging trees/power lines?
- Power outage?

HAIL

Report the largest size stone you see

Compare to common objects



Dime/Penny	0.75 inches
Nickel	0.88 inches
Quarter	1.00 inches
Half Dollar	1.25 inches
Ping Pong Ball	1.50 inches
Golf Ball	1.75 inches
Hen Egg	2.00 inches
Tennis Ball	2.50 inches
Baseball	2.75 inches
Tea Cup	3.00 inches
Grapefruit	4.00 inches
Softball	4.50 inches

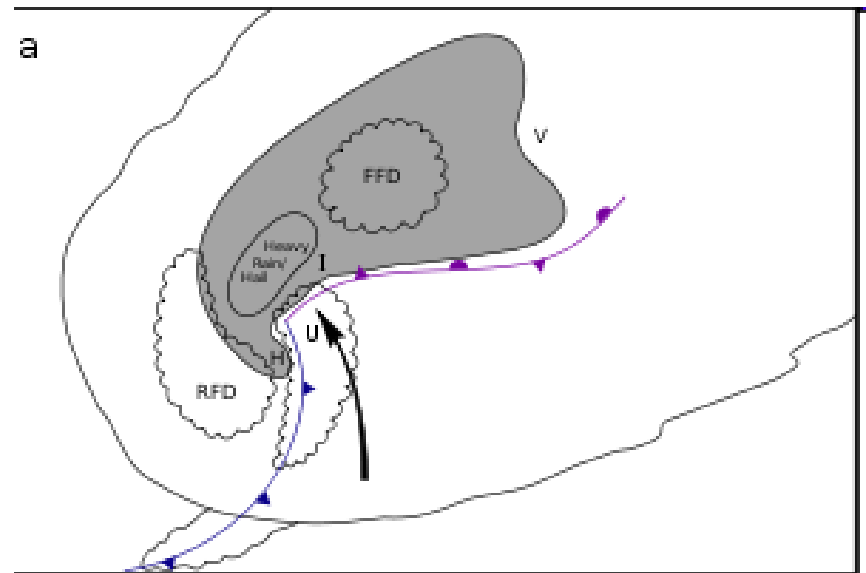
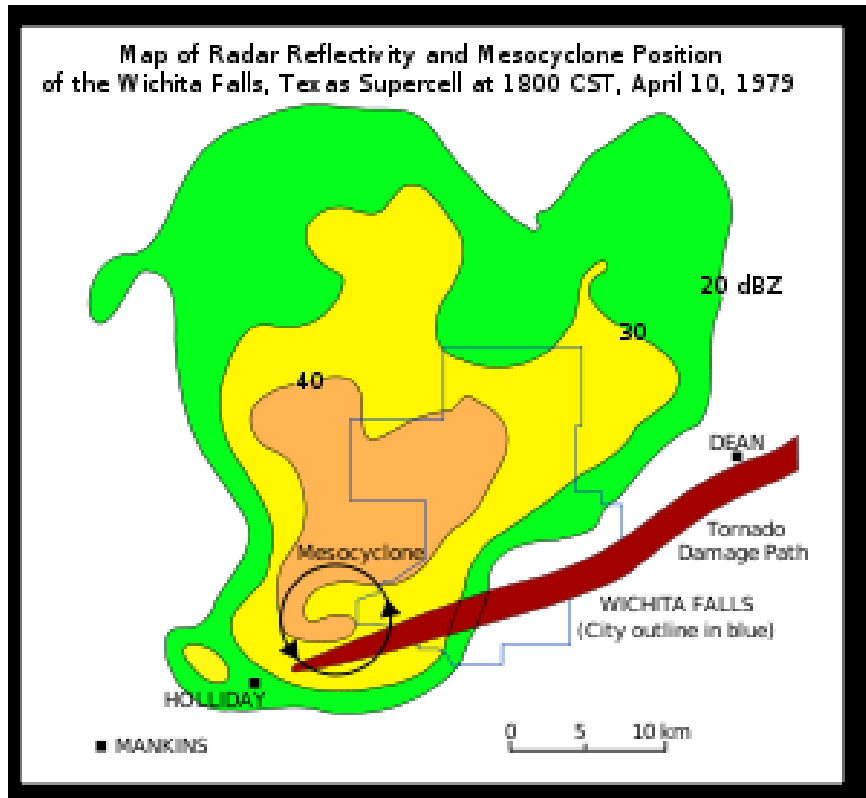
Hail Reporting



Rain Reports

- **Light** – 0.01 in/hr, .01 inch in 6 minutes. Drops can be individually seen.
- **Moderate** – 0.11 to 0.30 in/hr. .01 to .03 inches in 6 minutes.² Spray observed above hard surfaces.
- **Heavy** - > 0.30 in/hr or > .03 in in 6 minutes. Rain in “sheets”. Heavy spray above hard surfaces.

Mesocyclone Radar Image



Wall Cloud

- Always associated with high winds
- If rotating, tornado possible
- Should always be reported!



Shelf Cloud



- **No Rotation**
- **Tornadoes rare**
- **Severe straight line winds possible.**

Heavy Rain



Creek Flooding



Flooding Damage



Wind Damage



Wall Cloud

- Always associated with high winds
- If rotating, tornado possible
- Should always be reported!



Funnel Cloud



- Not touching ground
- No debris or dust visible



Funnel cloud (with surface debris)



Tornado



- Funnel cloud touching ground
- Debris or dust visible at base



Tornado Damage

