SEVERE THUNDERSTORM REPORTING REFERENCES

CLOUD IDENTIFICATION REFERENCE

Shelf Cloud (A)

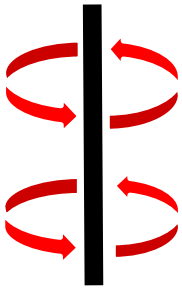
- A horizontal, shelf-like cloud on the leading edge of the thunderstorm
- Signals the approach of the downdraft, which includes heavy rain, gusty winds, and sometimes hail
- ID Tip: Slopes *away* from the rain
- Beware: Shelf clouds can appear to touch the ground, and can look different when viewing from the side
- Can rotate about a HORIZONTAL axis
- No need to report to the NWS

Wall Cloud (B)

- A ROTATING lowering from a T-storm updraft base. Often precedes a funnel cloud and tornado.
- Rotation must be about a VERTICAL axis
- ID Tip: Slopes down and *towards* the rain

Funnel Cloud (C)

- A VIOLENTLY ROTATING column of air that is NOT in contact with the ground
- Rotation must be about a VERTICAL axis
- ID Tip: Rapidly rotating cloud edges look smooth (versus ragged).



Rotation about a vertical axis

Tornado (D)

- A VIOLENTLY ROTATING column of air in contact with the ground
- Rotation must be about a VERTICAL axis
- ID Tip: Rapidly rotating cloud edges look smooth (versus ragged). To see if it is contact with the ground, look for debris or dust circulating at the surface.

SCUD (E)

- Harmless, ragged looking clouds that do NOT rotate
- Can move up and down, may look turbulent. May look like they are touching the ground
- Responsible for a majority of false funnel cloud and tornado reports
- ID Tip: Edges of the cloud look ragged (instead of smooth like rapidly rotating clouds).

Wind Speed Estimation Chart

25-31 mph	Large tree branches moving. Wires whistle.
32-38 mph	Whole trees moving. Some difficulty when walking into the wind.
39-46 mph	Small branches or twigs break off. Cars veer when driving.
47-54 mph	Slight structural damage (shingles blown off). Large branches break off.
55-63 mph	Structural damage (parts of roofs blown off). Trees uprooted or snapped off.
64-73 mph	Widespread structural damage (whole roof removed, walls blown in, etc.)

Hail Size Estimation Chart

Note: Images not to scale

Please report the following immediately to the NWS

Remember: Time, Event, Location

Wind damage	–Large healthy limbs, structural damage, or trees uprooted
Hail	–Any size! Report the size of the largest stone!
Flooding	–Water rising rapidly, flowing over roads, flooding buildings
Rotation	–Wall clouds, funnel clouds, and tornadoes

NWS Northern Indiana Contact Info

Submit via Internet - **https://inws.ncep.noaa.gov/report/**
Twitter - **@nwsiwx**
Facebook - **www.facebook.com/NWSNorthernIndiana**
e-mail – **nws.northernindiana@noaa.gov**
Amateur Radio -**WX9IWX**
mobile.weather.gov
Spotternetwork.org, Cocorahs.org, mping.nssl.noaa.gov
Locally arranged communications methods

Complete List of Options

https://www.weather.gov/crh/stormreports?sid=iwx

NWS IWX	Skywarn™ page
www.weather.gov/iwx	www.weather.gov/iwx/iwxskywarn