

SEVERE THUNDERSTORM REPORTING REFERENCES

CLOUD IDENTIFICATION REFERENCE



Shelf Cloud (A)

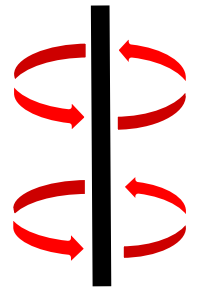
- A horizontal, shelf-like cloud on the leading edge of the thunderstorm
- Signals the approach of the downdraft, which includes heavy rain, gusty winds, and sometimes hail
- **ID Tip:** Slopes *away* from the rain
- **Beware:** Shelf clouds can appear to touch the ground, and can look different when 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).



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.

Rotation about
a vertical axis

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.)

PLEASE REPORT THE FOLLOWING IMMEDIATELY TO THE NWS

REMEMBER: TIME, EVENT, LOCATION

Wind damage	- Large healthy limbs, structural damage, or trees uprooted
Hail	- Compare to coins or sports balls; report the largest stone!
Flooding	- Water rising rapidly, flowing over roads, flooded buildings
Rotation	- Wall clouds, funnel clouds, and tornadoes
Snow	- In an open area away from fences or drifts; amount of snow (inches to the nearest tenth, take an average if necessary), impacts from snow
Ice accretion	- Take an average of the thickest/thinnest ice, report amounts to nearest 0.1"

Icy Branch

$$\frac{7}{8} + \frac{3}{8} = \frac{10}{8}$$

$$\frac{10}{8} \div 2 = \frac{5}{8}$$

Report ≈ 0.6 "
(Answer is 0.625 but it's rounded to the nearest tenth)

Snow Measurement Tips

#1
Tip

- Choose an open area where blowing and drifting snow is minimized

#2
Tip

- Measure where snow accumulates evenly with little to no melting
- Measure at eye level with ruler

#3
Tip

- If snow is blowing/drifting:
 - Take many measurements in different locations
 - Average measurements together

HOW TO SUBMIT A STORM REPORT TO NWS JACKSON, KENTUCKY

Toll Free: 606-666-8000

Online Website - <https://weather.gov/crh/stormreports?sid=jkl>

Twitter - @NWSJacksonKY

Facebook - www.facebook.com/NWSJacksonKY

Amateur Radio - WX4JKL

E-mail - w-jkl.webmaster@noaa.gov

spotternetwork.org, cocorahs.org, mping.nssl.noaa.gov



NWS JKL

www.weather.gov/jkl

Skywarn™ page

<https://www.weather.gov/jkl/spotter>