

# Tornados

Ingredients:



## Selection A

During a supercell, there is an updraft, a current of warm, moist air rising through the electrical storm, which gives the storm its long-living properties. Then, if the wind intensity varies correctly with height, the updraft begins to rotate in the mid-levels of the atmosphere. This rotating updraft is known as a mesocyclone.

Next, in order for a tornado to develop, a strong current of cool air must move downward from the back of the storm. This downward current, known as a rear-flank downdraft occurs due to the density of colder air in comparison to warm air, which causes cold air to sink as warm air rises. As the speed of the downdraft increases to speeds up to 100 miles per hour, a tornado forms between the rear-flank downdraft and the updraft.

## Selection B

A tornado is defined as a violently rotating column of air in contact with the ground and pendent from a cumulonimbus cloud.

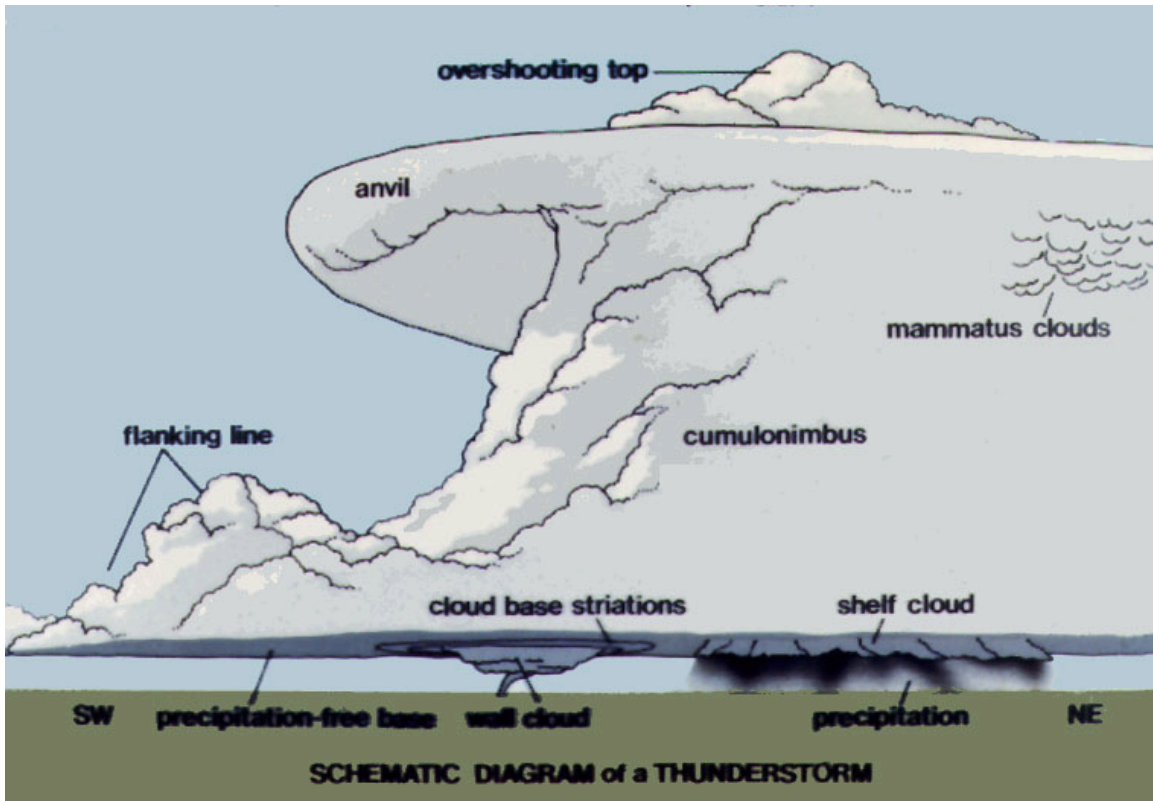


Notice the funnel, the cloud of dust forming around the funnel on the ground, and the circular nature of the cloud around the top of the funnel.

Squall lines- Multi-cellular storms forming along a cold front.

Supercell- A thunderstorm with a deep rotating updraft (mesocyclone). The major difference between supercell and multicell storms is the element of rotation in supercells.

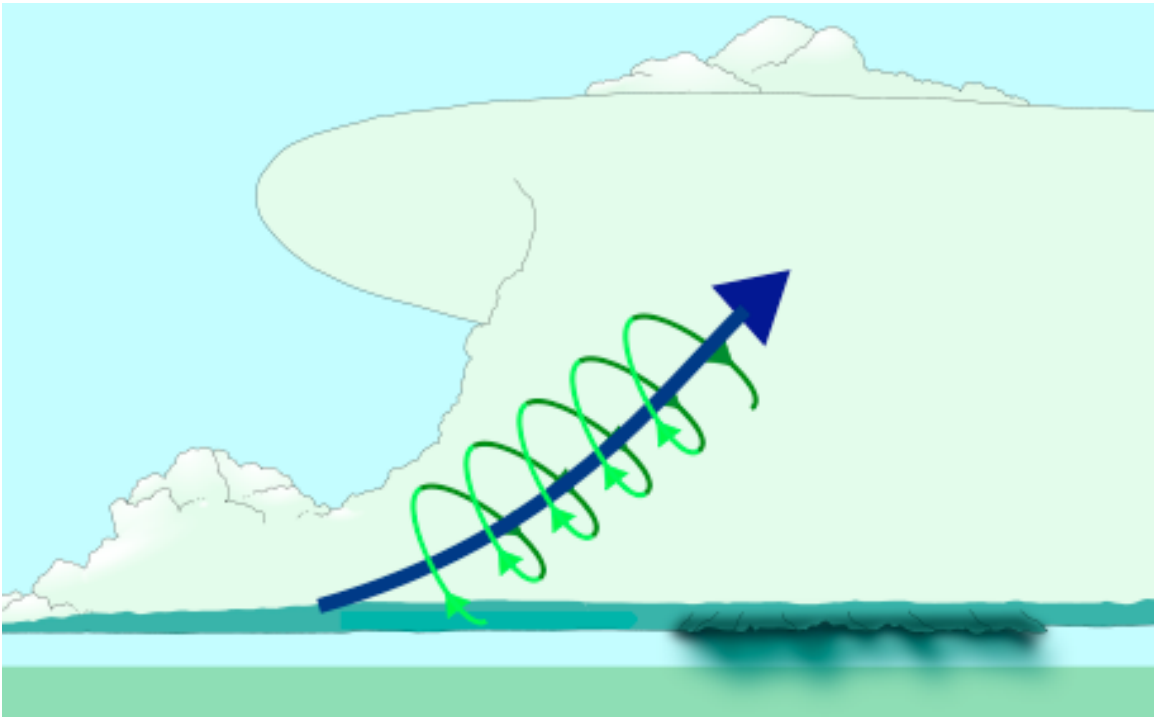
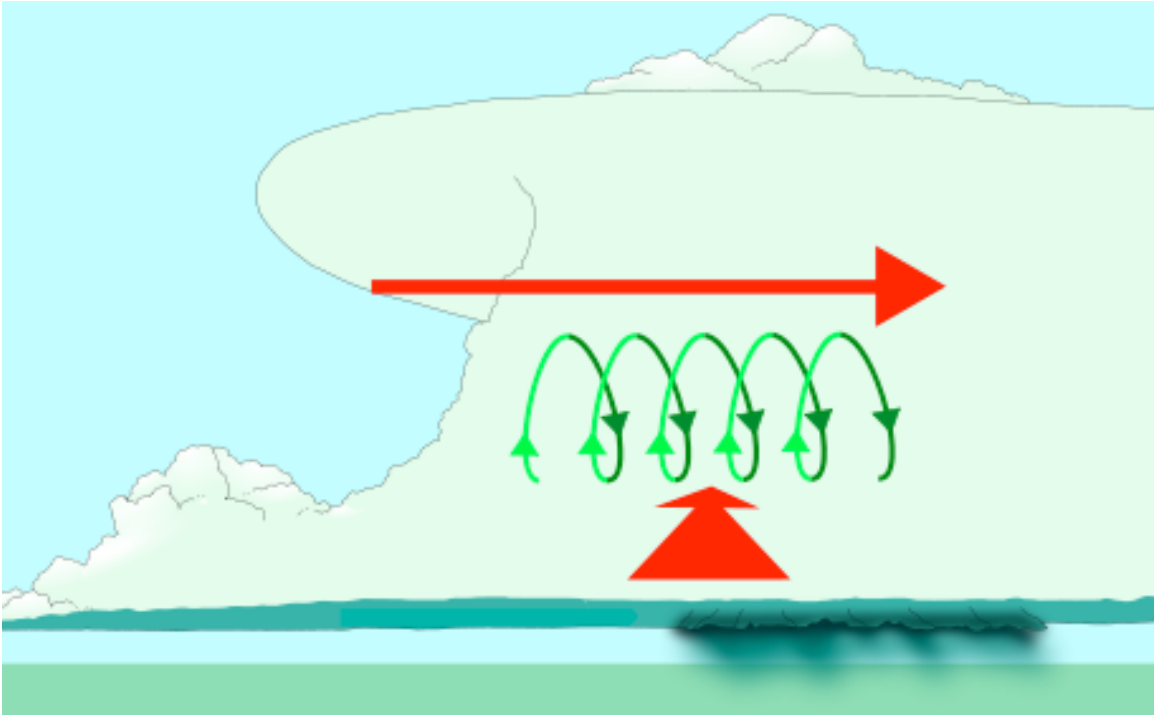
Wallclouds are the mothers of tornados and form from the mesocyclone of the parent storm.

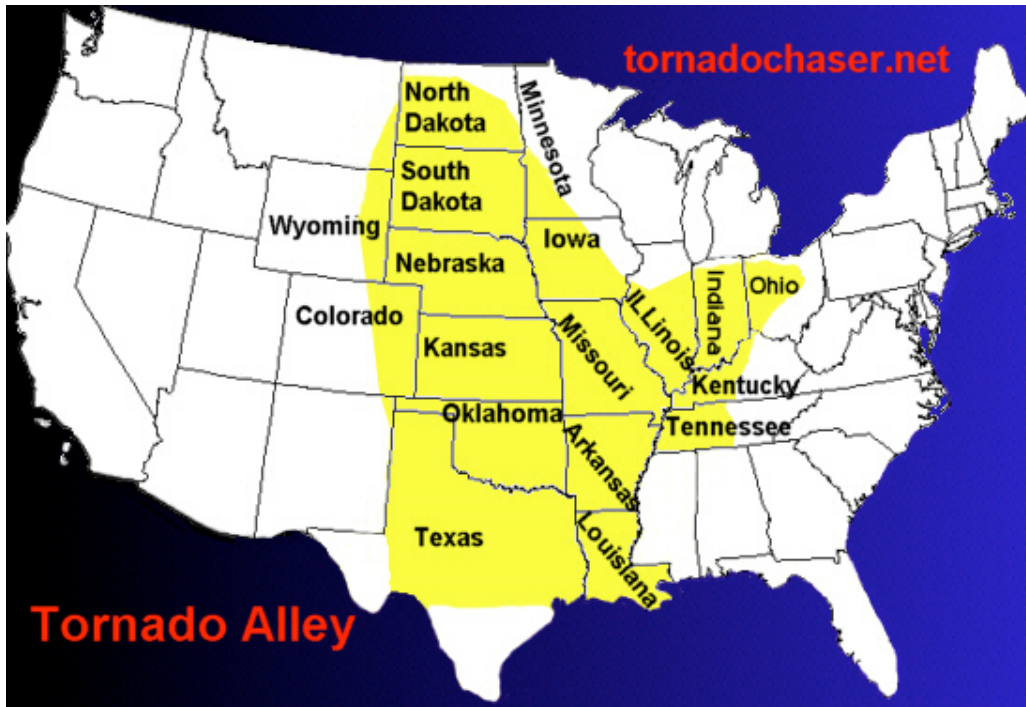


Warm up draft feeding storm. Cold down draft, signaled by rain.

Tornados most often occur between the down draft and the warm up draft.

Wind Shear and vertical up draft work together to create a spinning motion within storms.





You tube: Fire tornados, tornado football

Questions:

1. What 3 types of air are necessary for a tornado to occur?
2. Why is Central America “tornado alley” such a prime place for tornadoes to occur?
3. Between what types of air in a do tornados form?

Sources:

The internet, I take no credit for diagrams or research beyond organizing and gathering it all into one document. Thank you Google.