

Natural Disasters: Tornadoes

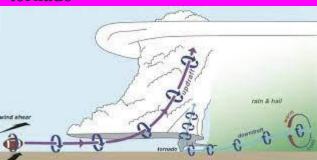
By; Shahaad J and Kennedy H



What are Tornadoes/ How are they caused

Tornadoes Are the process in which violent winds blows warm, moist air near the ground and cooler, dry air above, and wind shear, which is characterized by a change in wind speed or direction with height. In warm, humid, unstable air near and ahead of cold fronts, intense thunderstorms give rise to tornadoes. Such thunderstorms have the potential to produce devastating winds and huge hail. Major outbreaks can happen when springtime storm systems produce broad, persistent zones that encourage tornado development.

- supercells form when air becomes very unstable and wind speed and directions are different at different altitudes
- Wind at ground level then blows in one direction and the wind higher up in the atmosphere blows at a different angle
- A tube of airforms (Wind shear)
- an updraft occurs which switches the direction up, turning it into a tornado



How do tornadoes affect the Earths system?

Tornadoes affect the earth's system in many ways, for instance...

- the food chain is impacted by the death of the animals. creatures are capable of killing other creatures since they depend on them for food and energy to survive.
- Farms can be destroyed by tornadoes, leaving people without food.
- Water and soil contamination may occur after tornadoes. They have the ability to plow across wide expanses of forest, damaging trees and habitat for wildlife and creating opportunities for invasive species to spread.
- Lots of homes, jobs buildings etc are destroyed causing humans to have to rebuild.





Sources:

- *Tornado Basics- severe weather 101*. (n.d.). NSSL national severe storms laboratory. NSSL national severe storms laboratory
- National Oceanic and Atmospheric Administration. (n.d.). Weather.gov.
- YouTube. (2020). What Causes a Tornado? YouTube. Retrieved October 17, 2023, from https://www.youtube.com/watch?v=LT7yRMLAkCY
- Khan Academy. (n.d.). *Global wind patterns (video)*. Khan Academy. https://www.khanacademy.org/science/ap-college-environmental-science/x0b0e430a38ebd23f:earth-systems-and-resources/x0b0e430a38ebd23f:earths-air-and-water/v/global-wind-patterns