

# Tornadoes

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## What is it?

A tornado is a narrow, violently rotating column of air that extends from the base of a thunderstorm to the ground. Because wind is invisible, it is hard to see a tornado unless it forms a condensation funnel made up of water droplets, dust and debris. Tornadoes are the most violent of all atmospheric storms.



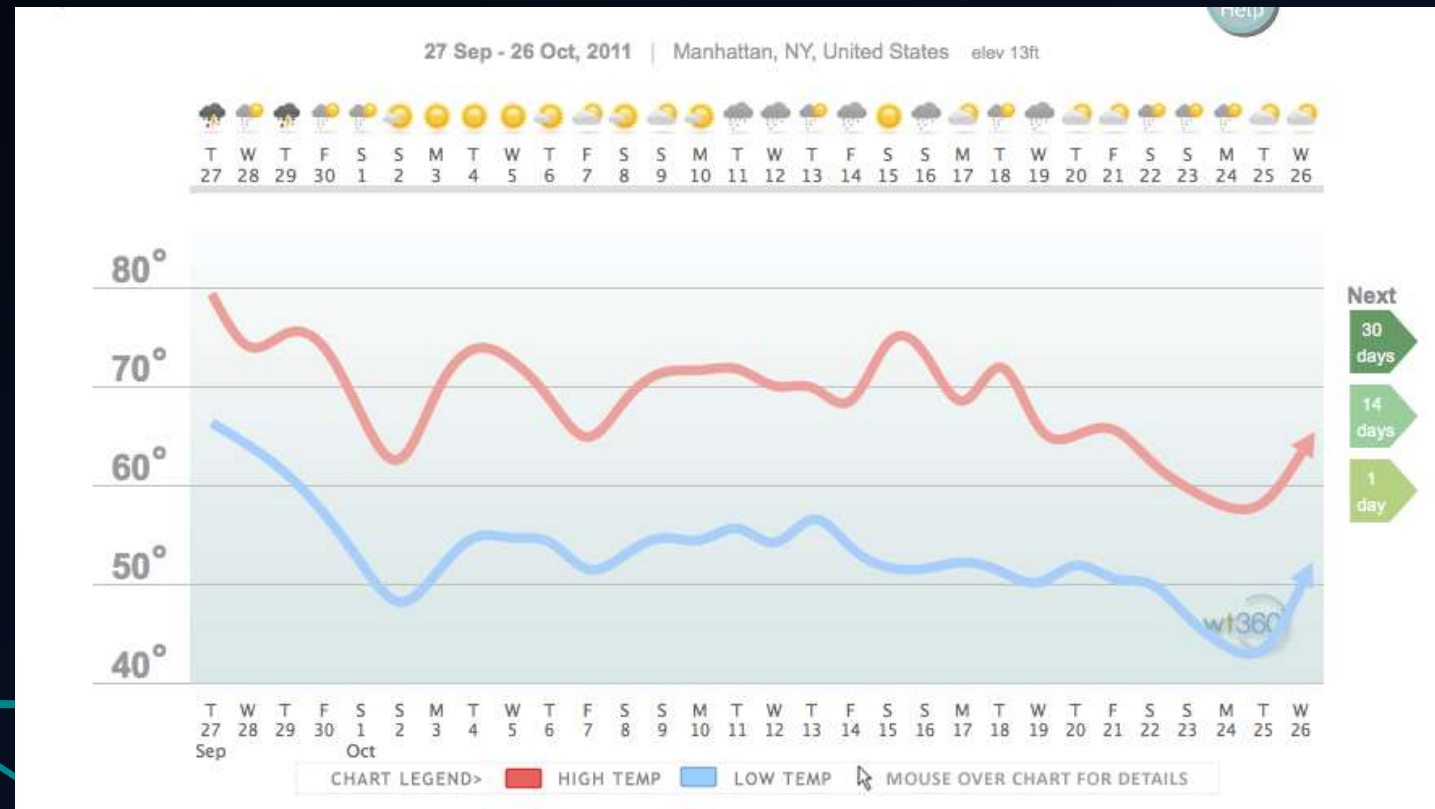
# What causes it?

THE INTENSE SPINNING OF A **TORNADO** IS PARTLY THE RESULT OF THE UPDRAFTS AND DOWNDRAFTS IN THE THUNDERSTORM (**CAUSED** BY THE UNSTABLE AIR) INTERACTING WITH THE WIND SHEAR, RESULTING IN A TILTING OF THE WIND SHEAR TO FORM AN UPRIGHT **TORNADO** VORTEX.



# What prediction tool are used to predict this event?

ACCORDING TO THE US DEPARTMENT OF ENERGY, THE MAIN EQUIPMENT USED TO PREDICT TORNADOES IS THE DOPPLER RADAR SYSTEM. DOPPLER RADAR CAN MEASURE WIND VELOCITY, DIRECTION OF THE WIND INSIDE THE STORM AND THE PREDICTED RAINFALL.  
WHAT EQUIPMENT IS USED TO PREDICT TORNADOES? | REFERENCE.COM



# Where does this mostly occur?

Tornadoes most frequently occur in the United States, which sees about 1,000 per year. The tornadoes usually occur in the southeastern state of Florida or in "Tornado Alley", the central part of the country (Midwest) where most of the violent tornadoes occur. Canada is a distant second with about 100 per year



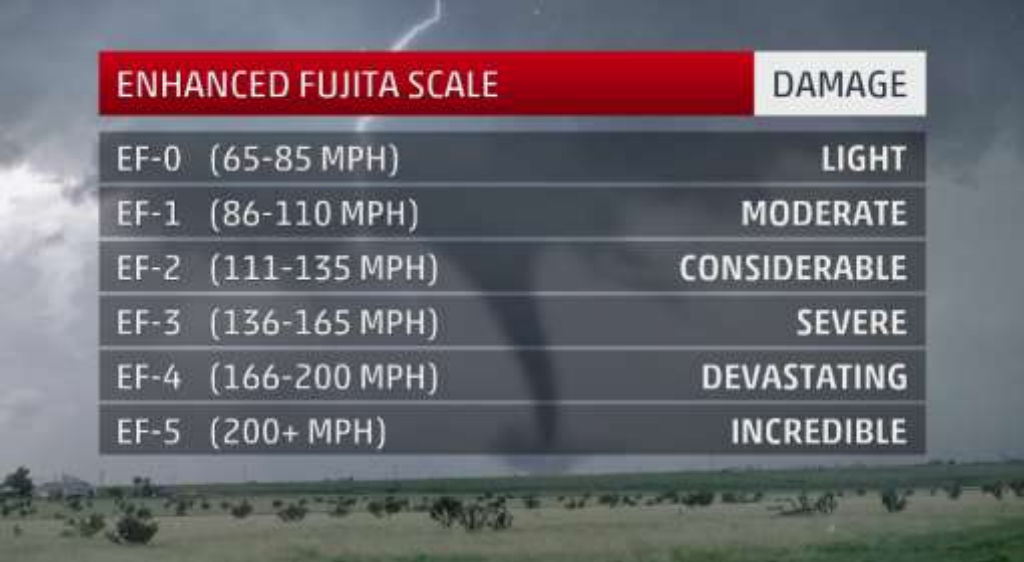
# What are the effects

**Impact of tornadoes.** Like all natural disasters such as hurricanes, earthquakes, floods and others, they end up with massive destruction to homes, property, infrastructure and cause many deaths as well. Each year, about 60 people are killed by **tornadoes**, mostly from airborne debris.



# How is the impact measured?

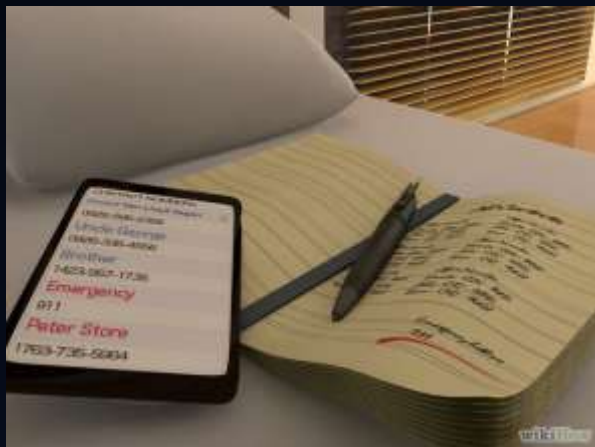
- In 1971, Fujita published a paper called “Proposed Characterization of Tornadoes and Hurricanes by Area and Intensity.” Using data gathered by a NASA-funded three-year study of tornadoes, Fujita’s paper laid out the basis of the “F” scale: estimating the peak wind speed of a severe storm by categorizing the damage it leaves behind. Road surfaces peeled off and trailer homes.



ENHANCED FUJITA SCALE		DAMAGE
EF-0	(65-85 MPH)	LIGHT
EF-1	(86-110 MPH)	MODERATE
EF-2	(111-135 MPH)	CONSIDERABLE
EF-3	(136-165 MPH)	SEVERE
EF-4	(166-200 MPH)	DEVASTATING
EF-5	(200+ MPH)	INCREDIBLE

# How to prepare for a tornado?

- 1. Inform your children about tornadoes, so they will know some of the signs, and will stay alert. 2. Never go outside during a tornado to witness or calculate the distance of the tornado from your current location. Doing this may put yourself and/or others in serious danger. 3. If you have time, close blinds and curtains to help keep glass from flying into your house. 4. Keep an eye out for fast moving clouds, especially rotating cloud formations. Often, tornadoes.





## Sources

- [openhazards.com](http://openhazards.com)
- [answers.com](http://answers.com)
- [www.wikihow.com](http://www.wikihow.com)



**SOURCES**