



Waterspout

[Source: IE](#)

Why in News?

Recently, a **luxury yacht sank** after being struck **by a violent storm off the coast of Sicily, Italy**. Experts believe the storm may have been a **waterspout**, which is a **tornado-like phenomenon that forms over water**.

What is a Waterspout?

▪ About:

- A waterspout is a **rotating column of air and mist that forms over a body of water**. It is **less intense than tornadoes** and usually persists for about 5-10 minutes.
- On average, a waterspout has a **diameter of approximately 165 feet** and **wind speeds reaching 100 kilometers per hour**.

▪ Types of Waterspouts:

- **Tornadic Waterspouts:** They are tornadoes that either develop over water or move from land to water.
 - As per [National Oceanic and Atmospheric Administration \(NOAA\)](#), they are **linked to severe thunderstorms** and are often **accompanied by strong winds, rough seas, large hail, and frequent dangerous lightning**.
 - Tornadic waterspouts can be significant in size and **capable of causing substantial destruction**.
- **Fair-Weather Waterspouts:** This type of waterspouts are far more common and **form exclusively over water**.
 - They develop during calm weather conditions and are typically smaller and **less dangerous than tornadic waterspouts**.

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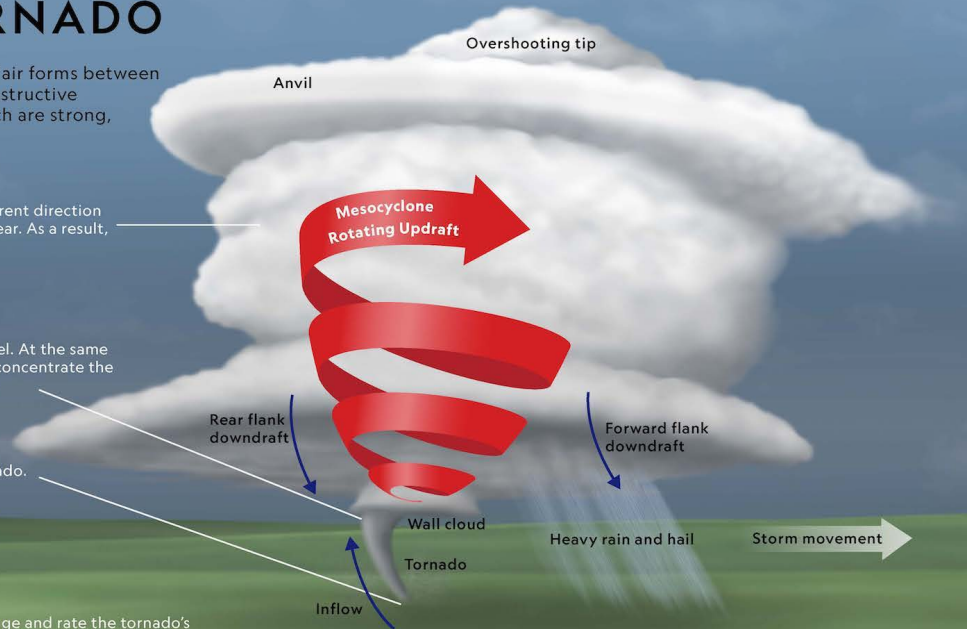
INSIDE A TORNADO

A tornado occurs when a rotating column of air forms between thunderclouds and the ground. The most destructive tornadoes usually arise from supercells, which are strong, rotating thunderstorms.

Winds at higher altitudes move faster and in a different direction than winds at lower altitudes. This is called wind shear. As a result, the storm will begin to tilt and rotate.

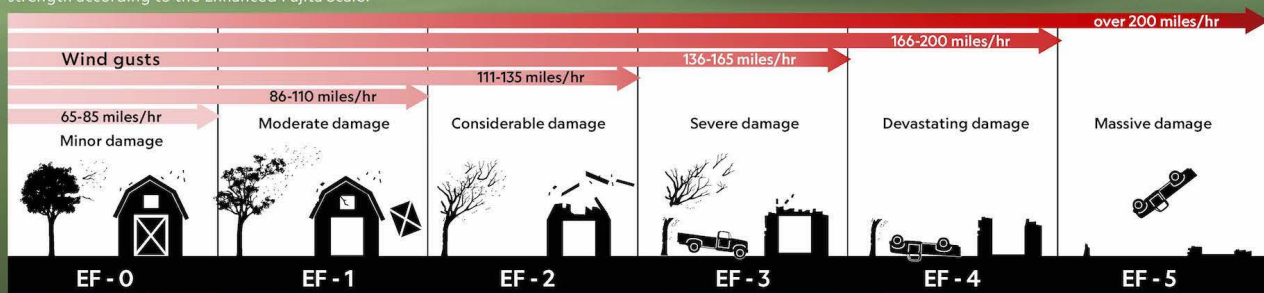
Warm, wet air gets pulled upward and forms a funnel. At the same time, cooler air falls toward the ground. This helps concentrate the funnel's rotation and brings it closer to the ground.

If the funnel reaches the ground, it becomes a tornado. Scientists don't know why some funnels reach the ground and others don't.



Tornado Categories

After a tornado has hit, experts assess the damage and rate the tornado's strength according to the Enhanced Fujita Scale.



Cyclones are given different names in different regions of the world:

- **Typhoons:** In the China Sea and Pacific Ocean
- **Hurricanes:** In the West Indian islands in the Caribbean Sea and Atlantic Ocean
- **Tornadoes:** In the Guinea lands of West Africa and southern USA
- **Willy-willies:** In north-western Australia
- **Tropical cyclones:** In the Indian Ocean

Sicily

- Sicily is the largest island in the **Mediterranean Sea**, located off the **southern Italian peninsula**.
- It is **part of an autonomous region of Italy**, along with the Egadi, Lipari, Pelagie, and Panteleria islands.
- The **capital of Sicily is Palermo**, which is also the largest city on the island.



UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. "Each day is more or less the same, the morning is clear and bright with a sea breeze; as the Sun climbs high in the sky, heat mounts up, dark clouds form, then rain comes with thunder and lightning. But rain is soon over." (2015)

Which of the following regions is described in the above passage?

- (a) Savannah
- (b) Equatorial
- (c) Monsoon
- (d) Mediterranean

Ans: (b)