

TYPHOON YAGI

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Context:

Millions of people in Southeast Asia continue to struggle with torrential rains, floods, and landslides triggered by Typhoon Yagi — the strongest tropical cyclone Asia has seen this year and the second most powerful storm in the world so far this year after Hurricane Beryl.

Background:

While Typhoon Yagi has severely impacted multiple countries, including the Philippines, China, Laos, Myanmar, and Thailand, it has hit Vietnam the hardest, where the death toll stands at around 233.

Key takeaways:

1. Tropical cyclones form over warm ocean waters near the equator. When the warm, moist air from the ocean surface rises upward, a lower air pressure area is formed below. Air from surrounding areas with higher air pressure rushes into this low pressure area, eventually rising, after it also becomes warm and moist.
2. As warm, moist air rises, it cools down, and the water in the air forms clouds and thunderstorms. This whole system of clouds and winds gains strength and momentum using the ocean's heat, and the water that evaporates from its surface.
3. Typhoon Yagi started as a tropical storm in the western Philippine Sea on September 1. It made landfall in the Philippines the next day and started to weaken.
4. However, due to unusually warm waters in the South China Sea, the storm intensified again. By September 4, it strengthened into a strong typhoon with Category 3 winds.
5. The next day, it became a Category 5 typhoon with peak maximum sustained winds of 260 kmph.
6. The category of a tropical cyclone is determined by its sustained wind speed, as measured by the Saffir-Simpson Hurricane Wind Scale. It is classified into five categories — Category 1 to Category 5. While Category 1 tropical cyclones bring winds of 119 to 153 kmph, Category 5 tropical cyclones, which are the strongest, have winds of 252 kmph or higher. Storms that reach Category 3 and higher are considered major tropical cyclones due to their potential to inflict significant damage.

Additional information: What is the difference between a hurricane and a typhoon?

1. Hurricanes and typhoons are the same weather phenomenon: tropical cyclones.
2. A tropical cyclone is a generic term used by meteorologists to describe a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has closed, low-level circulation.
3. The weakest tropical cyclones are called tropical depressions. If a depression intensifies such that its maximum sustained winds reach 63 kmph, the tropical cyclone becomes a tropical

storm. Once a tropical cyclone reaches maximum sustained winds of 119 kmph or higher, it is then classified as a hurricane, typhoon, or tropical cyclone, depending upon where the storm originates in the world.

4. In the North Atlantic, central North Pacific, and eastern North Pacific, the term hurricane is used. The same type of disturbance in the Northwest Pacific is called a typhoon.
5. Meanwhile, in the South Pacific and Indian Ocean, the generic term tropical cyclone is used, regardless of the strength of the wind associated with the weather system.

Dr. Shivakumar's



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