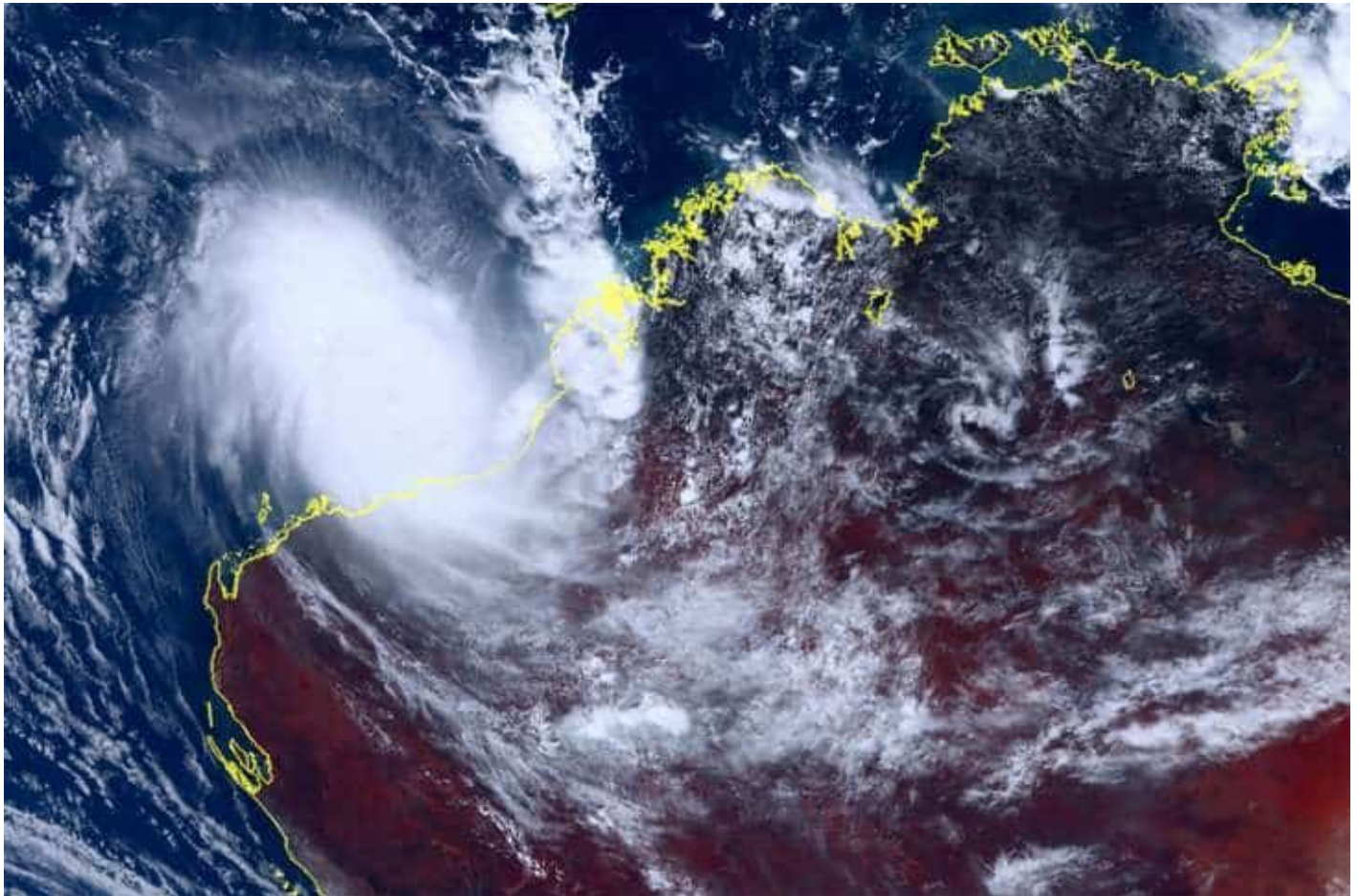


Cyclone Mocha

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About Cyclone Mocha:

- It is a **tropical cyclone** formed **over the southern Bay of Bengal**.
- The cyclone's **name 'Mocha' is suggested by Yemen** and was named after the Red Sea port city, which is known to have introduced coffee to the world.
- **How a Tropical Cyclone Formed?**
 - A tropical cyclone is **formed only over warm ocean waters near the equator**.
 - Warm, **moist air rises up** and away from the ocean surface, **creating an area of low pressure**.
 - It **causes the air from surrounding areas with higher pressure to move towards the low-pressure area**.
 - This leads to the **warming up of air** and **causes it to rise above**.
 - **As the air rises & cools**, the **water in the air forms clouds**.
 - This **complete system of clouds and wind spins & grows**, along with the ocean's heat.
 - As the wind rotation speed increases, **an eye gets formed in the middle**.

- **Characteristics of a Tropical Cyclone:**

- The **centre of a cyclone is very calm** and clear with **very low air pressure**.
- The **average speed is 120 kmph**.
- They have **closed isobars** which **leads to greater velocity**. Isobars are imaginary lines on a weather map that connect locations with equal atmospheric pressure.
- They **develop over oceans and seas only**.
- They **move from east to west** under the **influence of trade winds**.
- They are **seasonal in nature**.

- **How are Cyclones Classified?** Cyclones are classified **on the basis of wind** speed by the **Indian Meteorological Department (IMD)**:

- **Depression:** Wind speeds of between **31-49 km/h**
- **Deep Depression:** Between **50-61 km/h**
- **Cyclonic Storm:** Between **62-88 km/h**
- **Severe Cyclonic Storm:** Between **89-117 Km/h**
- **Very Severe Cyclonic Storm:** Between **118-166 Km/h**
- **Extremely Severe Cyclonic Storm:** Between **166-221 Km/h**
- **Super Cyclonic Storm:** Above **222 Km/h**

Q1) What is a Tropical Cyclone?

A tropical cyclone is a rapid rotating storm originating over tropical oceans from where it draws the energy to develop. It has a low pressure centre and clouds spiraling towards the eyewall surrounding the “eye”, the central part of the system where the weather is normally calm and free of clouds. Its diameter is typically around 200 to 500 km, but can reach 1000 km.

Source: [Cyclone Mocha to intensify into severe cyclonic storm; IMD issues warning](#)

Source: <https://vajiramandravi.com/current-affairs/cyclone-mocha/>

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