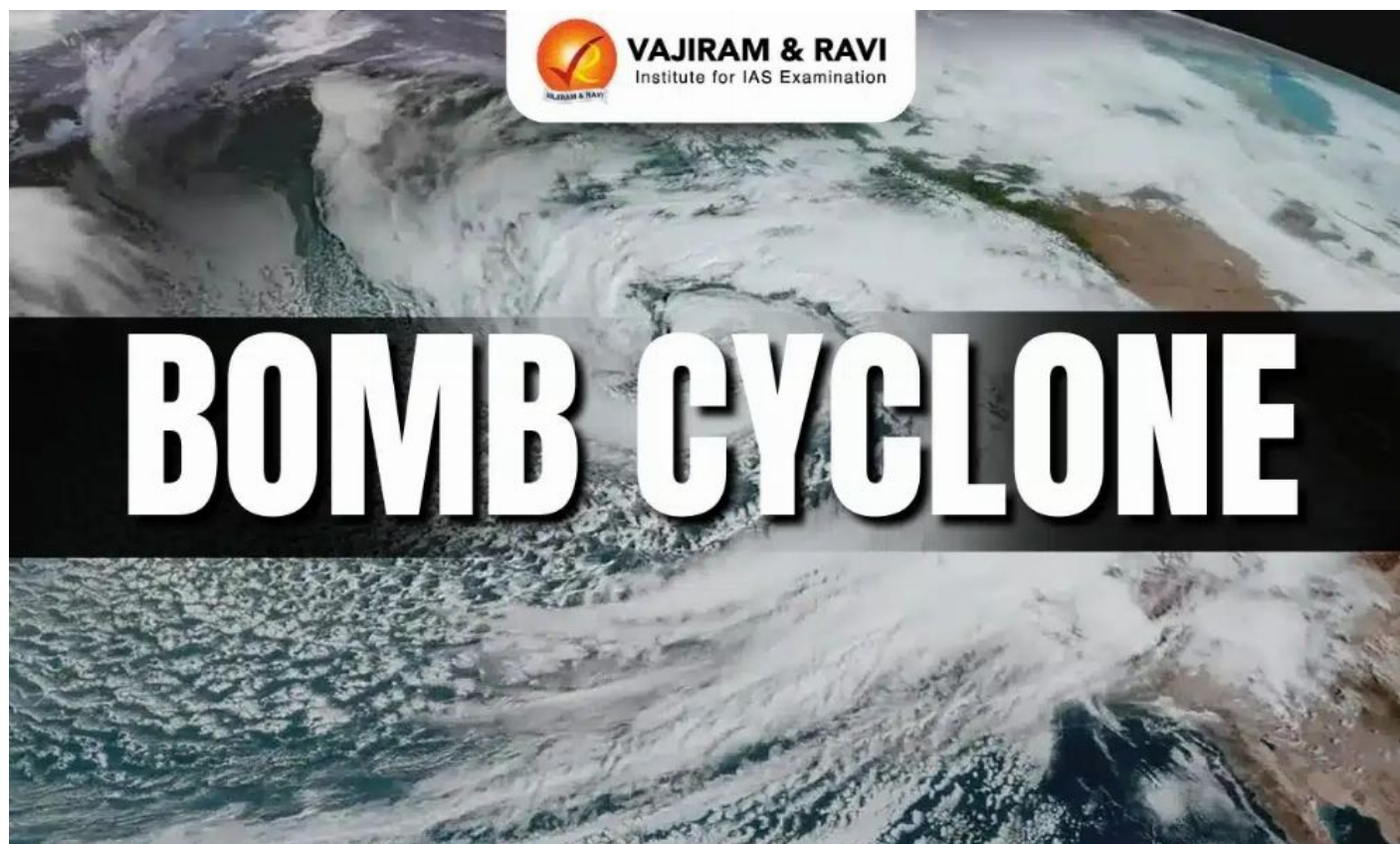


Bomb Cyclone

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Bomb Cyclone Latest News

A powerful “bomb cyclone” barreled across the northern United States recently, triggering severe winter weather in the Midwest and the East Coast.

About Bomb Cyclone

- It is a **large midlatitude storm** resulting from **explosive cyclogenesis** (or, informally, **bombogenesis**), a type of **accelerated extratropical cyclone** development in which **surface pressure falls substantially over a 24-hour** period.
- **In structure**, a bomb cyclone is **indistinguishable from any other intense midlatitude storm**.
 - The **center** of the storm is a **low-pressure cell** (or cyclone) that **draws winds** near the surface **inward**.
- However, a bomb cyclone is set apart by its **rapid rate of intensification**. The **intensification required** to classify as “bombogenesis” **varies by latitude**.
 - For example, **at 60 degrees latitude**, the requirement is **24 millibars in 24 hours**.

- **Around 40 degrees latitude**, a storm only **has to intensify by 17.8 millibars** in 24 hours.
- Bomb cyclones are often associated with atmospheric rivers and **typically form in winter when cold and warm air masses collide**.
- The **four most active regions** where extra-tropical explosive cyclogenesis occurs in the world are
 - the **Northwest Pacific**,
 - the **North Atlantic**,
 - the **Southwest Pacific**, and
 - the **South Atlantic**
- The **precipitation** associated with a bomb cyclone is **intense**, ranging from **heavy downpours to strong thunderstorms to blizzards** and **heavy snowfalls**, along with strong winds.

Source: IE

Source: <https://vajiramandravi.com/current-affairs/what-is-bomb-cyclone/>

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