

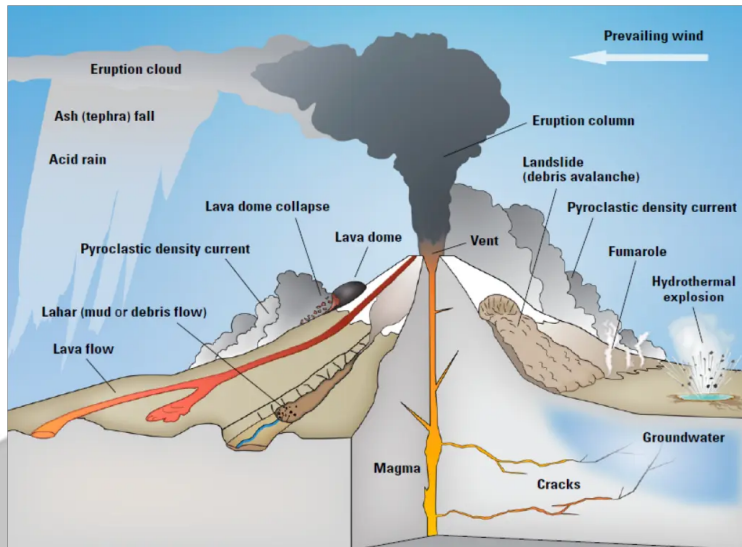


Eruption of Mount Ibu

Source: TH

Indonesia's Mount Ibu erupted **1,079 times in January 2025**, with significant **ash columns** rising between **0.3 km to 4 km**.

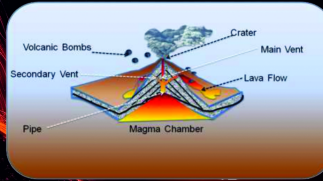
- Mount Ibu is a **stratovolcano** located on the **island of Halmahera** in Indonesia's **North Maluku province**.



- A **stratovolcano, or composite volcano**, has a **steep, conical profile** formed by **layers of lava, ash, and volcanic debris**.
- It is typically found at **convergent plate boundaries** and **subduction zones**.
- **Mount Vesuvius (Italy)**, **Mount Fuji (Japan)**, **Mt Krakatoa (Indonesia)** are examples of stratovolcanoes.
- **Mount Lewotobi Laki-Laki**, a twin-peaked volcano, and **Mount Ruang** in Indonesia **erupted multiple times**, prompting mass evacuations.
- Indonesia lies along the **Pacific Ring of Fire**, known for frequent **volcanic and seismic activity**, making it vulnerable to eruptions.

VOLCANOES

A volcano is a vent or a fissure in the crust from which lava (molten rock), ash, gases, rock fragments erupt from a magma chamber below the surface



Types: On basis of -

Periodicity of Eruption:

- Active volcano: Recently Erupted
- Dormant Volcano: Potential for eruption, no imminent signs
- Extinct: No recent eruptions, low possibility in future

Nature of Eruption:

- Hawaiian: Calmest types (low gaseous content)
- Strombolian: Formation of large gas bubbles in magma
- Vulcanian: More explosive
- Plinian eruptions: Magma's volatile gases rise via a narrow conduit
- Icelandic: Often build lava plateaus

Shape of Volcanoes:

- Shield volcanoes: Composed of basaltic lava, low slope
- Cone volcanoes (Cinder Cones): Most abundant
- Composite cones (stratovolcanoes): Formed by layers of diverse materials.

Volcanic Features:

Extrusive :

- Crater: Cone-shaped vent for magma
- Caldera: Large, crater-like depression
- Volcanic Plateaus: Levelled areas from fissure eruptions

Intrusive:

- Batholiths: Central core of a volcanic mountain.
- Dyke: Vertical intrusion cutting across country rock bedding.
- Sills: Tabular intrusions along sedimentary bedding.
- Laccoliths: Magma injection along horizontal sedimentary bedding.

Minor:

- Geysers: Underground water above 100°C, powered by magma, results in powerful eruptions with steam and diluted minerals.
- Hot Springs: Heated water flows quietly along fault zones

Distribution of Volcanoes:

- Subduction zones (Circum Pacific Belt)
- Divergence zones (Mid Atlantic Ridge)
- Intra-plate oceanic volcanism (Hawaiian chain)
- Mid-continental belt and volcanoes in Mediterranean region

Volcanoes in India:

- No volcanoes in Himalayas
- Barren Island (Only active volcano)

Products of Volcanic Eruption:

- Gases: H, C, O, S, N, CH₄, NH₃
- Solid: Pyroclastic materials
- Liquid: Lava



Read More: [Volcanism](#)

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