



Sangay Volcano: Ecuador

Why in News

Recently, Ecuador's **Sangay volcano** erupted.

Key Points

▪ About Sangay Volcano:



- Sangay volcano is one of the **highest active volcanoes in the world** and one of **Ecuador's most active ones**.
- Sangay is the southernmost **stratovolcano** (a volcano built up of **alternate layers of lava and ash**) in the northern volcanic zone of the Andes. It is 5230 m high.
 - The Andes is the **longest above water mountain range in the world** and boasts some of the highest peaks.
 - **Sangay National Park** is located in the central part of Ecuador on the Andes mountains' eastern side. It is a **world heritage site**.

▪ Eruptions:

- The **earliest** report of a historical eruption was in **1628**. More or less continuous eruptions were reported from 1728 until 1916, and again from 1934 to the present. Sangay **has had frequent eruptions in historic times**, mostly of **strombolian type**.

▪ Other Major Volcanoes of Ecuador:

- Ecuador, part of the **Pacific Rim's "Ring of Fire"** region, has eight volcanoes such as

Cotopaxi (5,897m), **Cayambe** (5,790m), **Pichincha** (4,784m) etc. in its territory.

Volcanic Eruptions

▪ About:

- Volcanic eruptions happen when **lava and gas are discharged from a volcanic vent**.
- The most common consequences of this are population movements as large numbers of people are often forced to flee the moving lava flow.

▪ Types: Volcanic activity and volcanic areas are commonly divided into **six major types**:

◦ Icelandic:

- It is characterized by **effusions of molten basaltic lava** that flow from long, parallel fissures. Such outpourings **often build lava plateaus**.

◦ Hawaiian:

- It is **similar to the Icelandic variety**. In this case, however, fluid lava flows from a volcano's summit and **radial fissures** to form shield volcanoes, which are quite large and **have gentle slopes**.

◦ Strombolian:

- These involve **moderate bursts of expanding gases** that eject clots of incandescent lava in cyclical or nearly **continuous small eruptions**.
- Because of such small frequent outbursts, **Stromboli volcano**, located on Stromboli Island off the northeast coast of **Italy**, has been called the "**lighthouse of the Mediterranean**."

◦ Vulcanian:

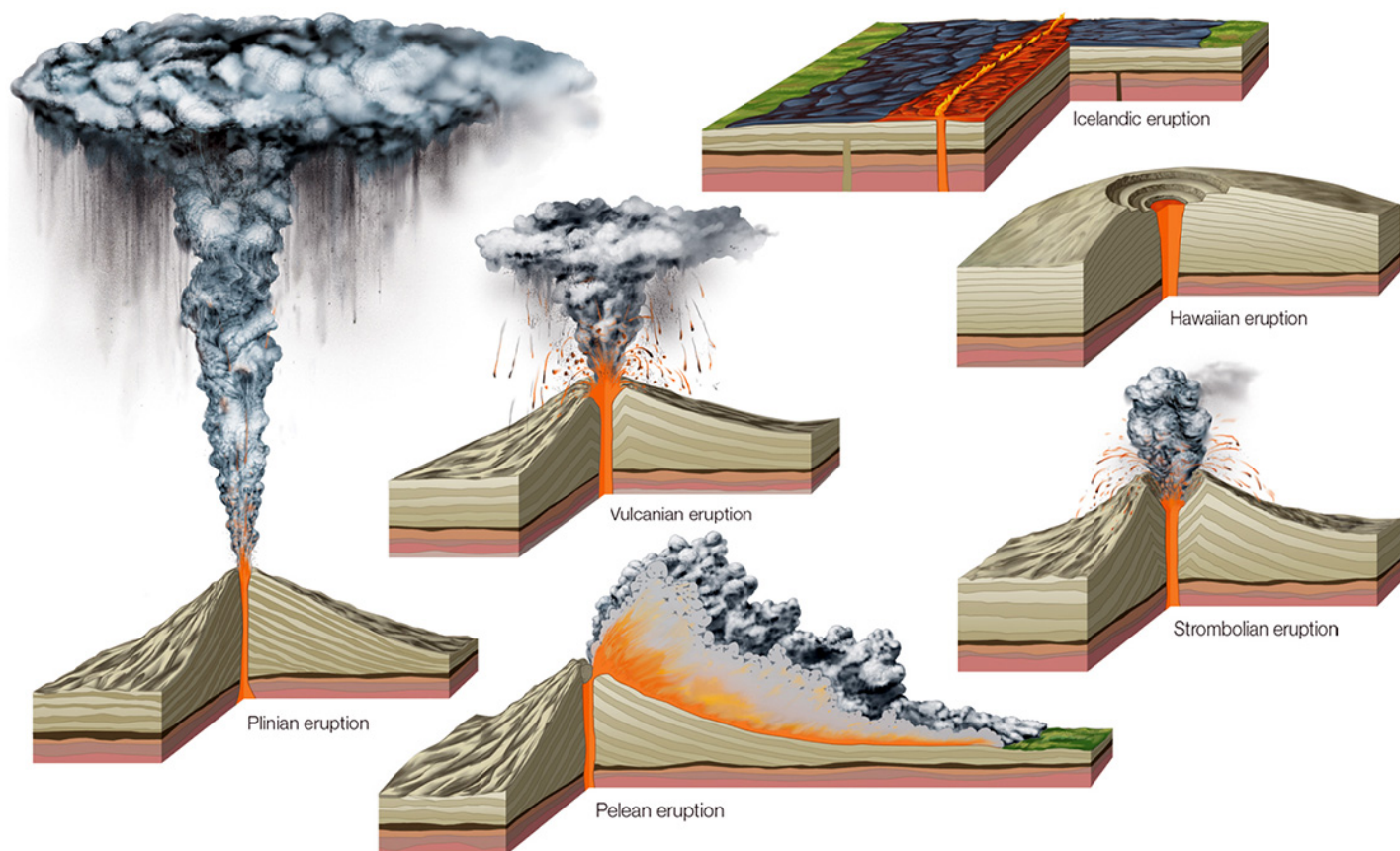
- It is named for **Vulcano Island** near Stromboli, generally involving **moderate explosions of gas laden with volcanic ash**. This mixture forms dark, turbulent eruption clouds that rapidly ascend and expand in convoluted shapes.

◦ Pelean:

- It is associated with explosive outbursts that generate **pyroclastic flows**, dense mixtures of **hot volcanic fragments and gas**.
- The **fluidized slurries** produced by these eruptions are heavier than air but are of low viscosity and pour down valleys and slopes at great velocities. As a result, they are **extremely destructive**.

◦ Plinian:

- This type is an **intensely violent kind of volcanic eruption**. In this type of eruption, gases boiling out of gas-rich magma generate enormous and nearly continuous jetting blasts that core out the magma conduit and rip it apart.
- The uprushing gases and volcanic fragments **resemble a gigantic rocket blast directed vertically upward**. Plinian **eruption clouds can rise into the stratosphere** and are sometimes continuously produced for several hours.
- **Lightning strikes** caused by a buildup of static electricity are common close to Plinian ash clouds, adding one more element of terror to the eruption.



Source:IE

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