TALGEST: A Multimedia Educational Website Showcasing Volcanic Awareness and Preparedness

John Carlo Infante | Janine V. Soriano

Ma. Corazon Fernando
Project Adviser

Mr. Wilson L. Yu II
Project Mentor

FEU INSTITUTE OF TECHNOLOGY

Ballistic Projectiles

Volcanic ballistic projectiles are centimeter to meter size pyroclasts, these are fragments of solid blocks or bomb material during the range of magmatic or phreatic explosive eruptions.

What are the effects of Ballistic projectiles?

The fragments of lava or solid rock, ranging from centimeters to several meters in diameter are erupted with high thermal energy.
Impacts from projectiles are amongst the most frequent causes of deadly volcanic incidents and the cause of thousands, millions and billions of pesos of damages to buildings, infrastracture and properties.
Ballistics are associated with all forms of explosive eruption but are considered major hazards of hydrothermal, phreatomagmatic and vulcanian eruptions.
Managing ballistic hazard and risk on active volcanoes, particularly those regularly visited can face considerable challenges.
It requires good information and alerts stratergies around risk mitigation, preparedness, recovery dependent on the state of the volcano (pre-, during and post-eruption).

Volcanic hazards directly associated with an eruption are:

- Lateral Blasts
- Volcanic Gas
- Lava flow
- Ballistic Projectiles
- Pyroclastic Density Currents (PDCs)
- Tephra falls or Ashfalls

Volcanic hazards indirectly associated with eruption are:

- Lahar or flooding
- Landslide or Debris avalanche
- Volcanic Tsunami
- Secondary explosions
- Subsidence and fissuring