

## Glossary - Volcanoes

**Active volcano / volcán activo:** A volcano that is currently erupting, or has erupted during recorded history.

**Ash / La ceniza:** Fragments less than 2 millimeters (about 1/8 inch) in diameter of lava or rock blasted into the air by volcanic explosions.

**Atmosphere / la atmósfera:** The mixture of gases, aerosols, solid particles, and water vapor that envelops the Earth.

**Biosphere / la biosfera:** The realm of all living things.

**Crater / el cráter:** A steep-sided, usually circular depression formed by either explosion or collapse at a volcanic vent.

**Cinder cone / cono de ceniza:** A steep-sided volcano formed by the explosive eruption of cinders that form around a vent. Cinders are lava fragments about 1 centimeter (about ½ inch) in diameter.

**Crust / la corteza:** The Earth's outermost layer.

**Contour lines / curva de nivel:** Parallel lines used on topographic maps to show the shape and elevation of the land. They connect points of equal elevation.

**Cryosphere / criosfera:** The ice and snow on the Earth's surface, such as glaciers; sea, lake, and river ice; snow; and permafrost.

**Dome | domo:** A steep-sided mass of viscous (doughy) lava extruded from a volcanic vent (often circular in plain view) and spiny, rounded, or flat on top. Its surface is often rough and blocky as a result of fragmentation of the cooler, outer crust during growth of the dome.

**Dormant volcano / volcán inactivo:** An active volcano that is in repose (quiescence) but is expected to erupt in the future.

**Earthquake | terremoto:** An earthquake is a sudden, rapid shaking of the Earth caused by the release of energy stored in rocks. This energy can be built up and stored for many years and then released in seconds or minutes.

**Extinct volcano / volcán extinto:** A volcano that is not expected to erupt again.

**Fumarole / fumarola:** An opening in or near a volcano through which hot sulfurous gases emerge.

**Geosphere / geosfera:** The nonliving parts of the Earth: the lithosphere, the atmosphere, the cryosphere, and the hydrosphere.

**Harmonic tremor / temblor armónico:** Continuous rhythmic earthquakes in the Earth's upper lithosphere that can be detected by seismographs. Harmonic tremors often precede or accompany volcanic eruptions.

**Hot spot / Punto Caliente:** An area in the middle of a lithospheric plate where magma rises from the mantle and erupts at the Earth's surface. Volcanoes sometimes occur above a hot spot.

**Hydrosphere | hidrósfera:** The water that covers 71 percent of the Earth's surface as oceans, lakes, rivers, and streams. The hydrosphere also includes ground water, water that circulates below the Earth's surface in the upper part of the lithosphere.

**Lava | lava:** The term used for magma once it has erupted onto the Earth's surface.

**Lithosphere | litosfera:** The Earth's hard, outermost shell. It comprises the crust and the upper part of the mantle and is divided into a mosaic of 16 major slabs, or plates.

**Lithospheric plates | placa litosférica:** A series of rigid slabs (16 major ones at present) that make up the Earth's outer shell. These plates float on top of a softer, more plastic layer in the Earth's mantle. (Also called tectonic plates.)

**Magma | magma:** Molten rock containing liquids, crystals, and dissolved gases that forms within the upper part of the Earth's mantle and crust. When erupted onto the Earth's surface, it is called lava.

**Mantle | manto:** The zone of the earth below the crust and above the core. It is 2,900 kilometers (1,740 miles) thick.

**Mudflow | lluvia de lodo:** A flowing mixture of water and debris (intermediate between a volcanic avalanche and a water flood) that forms on the slopes of a volcano. Sometimes called a debris flow or lahar, a term from Indonesia where volcanic mudflows are a major hazard.

**Seismograph | seismograph:** A scientific instrument that detects and records vibrations (seismic waves) produced by earthquakes.

**Shield volcano | volcán de escudo:** A volcano that resembles an inverted warrior's shield. It has long gentle slopes produced by multiple eruptions of fluid lava flows.

**Stratovolcano | volcán estratificado:** A steep-sided volcano built by lava flows and tephra deposits. (Also called composite volcano.)

**Subduction zone | zona de subducción:** The place where two lithospheric plates come together, one riding over the other. Most volcanoes on land occur parallel to and inland from the boundary between the two plates.

**Tephra | tefra:** Solid material of all sizes explosively ejected from a volcano into the atmosphere.

**Topographic map | mapa topográfico:** A map that uses contour lines to represent the three-dimensional features of a landscape on a two-dimensional surface.

**Vent | abertura:** The opening at the Earth's surface through which volcanic materials (lava, tephra, and gases) erupt. Vents can be at a volcano's summit or on its slopes; they can be circular (craters) or linear (fissures).

**Volcano | volcán:** A vent (opening) in the Earth's surface through which magma erupts; it is also the landform that is constructed by the eruptive material.

**Volcanologist | vulcanologista:** A scientist who studies volcanoes.

**Volcanic avalanche | avalanche volcánica:** A large, chaotic mass of soil, rock, and volcanic debris moving swiftly down the slopes of a volcano. Volcanic avalanches can also occur without an eruption as a result of an earthquake; heavy rainfall; or unstable soil, rock, and volcanic debris. (Also called debris avalanche.)

Definitions courtesy of: <http://egsc.usgs.gov/isb//pubs/teachers-packets/volcanoes/index.html>  
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