



Discovering Volcanoes in the Azores - A Field Trip

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The Azores islands are located in the North Atlantic Ocean near a triple junction, between the African, Eurasian and North American plates, at about 1500 km from the European continent and 3900 km from the North America east coast. It is formed by nine volcanic islands and a few islets dispersed along a 600 km NW-SE direction axis. The complex geological and geodynamic setting of the Azores explains its significant seismic and volcanic activity, including eruptions and degassing processes. Important landslides triggered either by earthquakes, volcanic eruptions, extreme meteorological conditions and/or coastal erosion processes frequently affect the islands, and tsunamis related with earthquakes and landslides were reported to have occurred in the past.

The national curriculum for the school subject of Biology and Geology sees the Azores as a laboratory for the earth sciences and many topics revolve around it. For these reasons, we organised a field trip to the island of São Miguel, with pupils of the 11th grade who live in the Portuguese mainland, in a region that is geologically very different. During the six days of this trip, we attended training sessions in the Centre for Volcanology and Geological Risks Assessment (CVARG) of the Azores University. This multidisciplinary research unit organises activities around the prediction and prevention of disasters and natural hazards in the fields of volcanology and correlated phenomena, including volcanic eruptions, earthquakes, volcanic fumes, air pollution and water contaminants, landslides, floods and tsunamis, among others. The pupils explored volcanic calderas, lava caves, fumaroles and hot springs. They also collected and analysed extremophile bacteria that live in local hot springs.