VOLCANOES OF AEOLIAN ISLANDS

Summary

The Aeolian Islands archipelago lies along an active volcanic arc located ca. 35 km north of Sicily. It comprises 7 volcanic islands and 9 seamounts. Subduction-related volcanic activity has additionally been controlled by the local tectonic regime. Magmatism has occurred during the Cenozoic from 1.3 Ma (western seamounts) until the present (Stromboli island). There is a variation in structural development and geochemical features of the volcanic products between the islands. Due to the possibility of direct observation of the eruptions on two islands during the last two centuries, volcanologists have distinguished two types of eruption. The terms vulcanian and strombolian eruption type were taken from the names of Vulcano and Stromboli islands, respectively. Volcanic hazards on the archipelago exist but their effects are restricted to the inhabitants of isolated islands. However, due to the increasing number of tourists visiting the Aeolian Islands every year, the number of potential deaths and injuries may be larger than during eruptions in the 20th century. The potentially most hazardous geological event is landslide that may form on the western slope of Stromboli. This can led to the formation of high tsunami waves which could destroy the coastal areas of neighbouring islands and continental Italy. The picturesque scenery of the Aeolian Islands makes the archipelago an attractive place for tourists. One of the main attractions is the possibility of watching usually mild, safe and frequent eruptions of Stromboli. From ancient times, fertile volcanic soils and some volcanic products (obsidian, pumice) have given local citizens profits from trade in the Mediterranean area.