



VOLRISKMAC: Strengthening R & D & I capacities for the monitoring of volcanic activity in Macaronesia

Pedro A. Hernández (1,2,3), Luca D'Auria (1,2), Nemesio M. Pérez (1,2,3), Rita Silva Marques (4), Catarina Silva (5), Susana Prada (6), Sonia Silva (7), and Sonia Calvari (8)

(1) Instituto Volcanológico de Canarias (INVOLCAN), Puerto de la Cruz, Tenerife, Canary Islands, Spain (phdez@iter.es), (2) Instituto Tecnológico y de Energías Renovables (ITER), Granadilla de Abona, Tenerife, Canary Islands, Spain, (3) Agencia Insular de la Energía de Tenerife (AIET), Granadilla de Abona, Tenerife, Canary Islands, Spain, (4) Centro de Informação e Vigilância Sismovulcânica dos Açores (CIVISA), 9501-801 Ponta Delgada, Sao Miguel, Azores, Portugal, (5) Instituto de Investigação em Vulcanologia e Avaliação de Riscos (IVAR), 9501-801 Ponta Delgada, Sao Miguel, Azores, Portugal, (6) Institute of Forestry and Nature Conservation (IP-RAM), 9064-506 Funchal, Madeira, Portugal, (7) Institute of Forestry and Nature Conservation (IP-RAM), 9064-506 Funchal, Madeira, Portugal, (8) Istituto Nazionale di Geofisica e Vulcanologia (INGV), Osservatorio Etneo - Sezione di Catania, 95125 Catania, Italy

VOLRISKMAC: Strengthening R&D&I capacities for the monitoring of volcanic activity in Macaronesia, is a project financed by the Cooperation Program INTERREG V-A Spain-Portugal MAC (Madeira-Azores-Canaries) 2014-2020. This Program is the main instrument available to the outermost regions of Spain and Portugal to offer an effective response to the common challenges they face in terms of innovation, competitiveness, internationalization and sustainable development.

The main objective of the project VOLRISKMAC is to strengthen capacities for the monitoring of volcanic activity, with the aim of improving the early warning system for volcanic eruptions and earthquake crisis, as well as the management of volcanic crises in Macaronesia. The volcanic risk in Macaronesia is now bigger than 50 years ago due to greater population and socio-economic development in the region exposed to the hazards associated with the volcanic phenomenon. As this development will continue over the next few years, volcanic risk in the region will be higher in 2050 than it is today. Therefore, it is very important to strengthen all capacities to contribute to the reduction of volcanic risk in the region, especially when this is the natural risk flag of this region and differentiating it from the rest of mainland Spain and Portugal.

Within the framework of this project, the recommendations for the reduction of volcanic risk established by the scientific community and international policy will be applied through the IAVCEI and UNESCO, respectively. Surveillance and management of the volcanic emergency are the most useful actions to contribute to the reduction of volcanic risk in densely populated areas such as Macaronesia.

Specific objectives of VOLRISKMAC are (i) Strengthen permanent instrumental networks (continuous mode) to improve volcanic monitoring programs in Macaronesia; (ii) Strengthen non-continuous geophysical, geochemical and geodetic programs to improve volcanic monitoring programs in Macaronesia and (iii) Strengthen crisis management and response capacity for volcanic natural disasters and associated hazards in Macaronesia.

The geographical area of intervention of this project will be the archipelagos of Macaronesia: Azores, Madeira, Canarias and Cape Verde. In the Canarian archipelago, activities will be carried out in Tenerife, La Palma, Lanzarote and El Hierro. In Cape Verde, these activities will focus mainly on the island of Fogo. In Azores it will be developed on the island of Sao Miguel.