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'Understanding volcanoes and society: the key for risk mitigation'



[Acquisition, storage, processing and display] “The 4 key elements for sustenance Volcanic Monitoring”

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The two essential functions of the “Red Nacional de Vigilancia Volcánica, RNVV” are: (1) generation and dissemination of geological knowledge associated with active volcanoes, and (2) instrumental monitoring of these volcanoes. This makes essential to have systems that allow for volcanic monitoring work 24/7, which requires a technological infrastructure capable of providing the guarantees necessary for the acquisition, storage, processing and display continuous real-time data of the different types of disciplines installed around the volcanic centers (seismic, geodetic, geochemical, and visual surveillance). The objective of this work is to present an overview of the experience of the Department of Systems at RNVV, composed by lines of infrastructure, development and support based on the operation and management of a Data Center, as well as the design and implementation of an Acquisition Network with the characteristics of high availability, redundancy, Technology Integration, Security and Scalability, together with tools for data processing and display, a cross-platform design, evolving according to new technologies, which is currently being used by the group of analysts and professionals in the scientific areas of the Observatory.