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



"Lahars risk maps for Turrialba and Rincon de la Vieja volcanoes, Costa Rica"

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Due to the fact that lahars are among the volcanic phenomena that most lives were claimed during the twentieth century, has made a recount of deaths attributed to lahars between 1586 and 2016, resulting in that at least 17% of deaths related to volcanic activity, have been the result of lahars. In this paper briefly describes the event that destroyed the village of Taras (Cartago, Costa Rica) in 1963 as a result of heavy precipitation that affected the Central Volcanic Range during the eruption of Irazú volcano. Using LAHARZ and based on a Digital Elevation Model AsterGdem (resolution 30 m), have been created lahar threat maps for the volcanoes of Costa Rica, as the first phase of a project that will let us to develop lahar risk maps for active volcanoes in Costa Rica. In the second phase of this project, we proceeded to relate the flooding models with different eruptive scenarios proposed by various authors for Turrialba and Rincon volcanoes and to locate works of strategic infrastructure in areas with the possibility of affectation by lahars, to finally deploy volcanic risk maps.