

Studies on volcanic indigenous regions: a challenge between monitoring and geothermal resource projects in Chiles - Cerro Negro volcanoes, Colombia

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Chiles and Cerro Negro are two active volcanoes located in the Colombian - Ecuadorian border. In the 1980's, this area was recognized as promising in feasibility studies for geothermal resources. At the end of the 1990s, the Ecuadorian government promoted the study of these geothermal areas, but the need of integration between the two countries to continue with the investigation without distinction of the borders was clear. The integration began to materialize in a project from a Colombian company that planned to start studies in the area of these volcanoes, with socialization with the communities. In the area of those volcanoes, a binational network was installed, due to a seismic crisis on 2013 and its maximum daily peak on October 22, 2014, with 8246 events right after the occurrence of a 5.6 magnitude earthquake, which was registered on October 20. In this case, the articulation of volcanic risk management and the proposal of resource prospects, not only has happened, but the attempt to advance in studies of geothermal resources, have hindered and sabotaged the activities and infrastructure of the volcanic monitoring. As a result, the risk management activities have been clearly affected due to the perception of a small group of the community, which holds responsible for the volcanic crisis and the activities of the geothermal studies. In addition, these indigenous communities have other perceptions about geothermal exploration, which include thinking that this will end with their water resources, or that such projects will displace them from their territory. Efforts to change the perception of what is the meaning of these seismic crises would continue to being carried out with communities living in the region, in order to protect first at all, the volcanic activity monitoring.