



Cities on Volcanoes 9
November 20-25, 2016
Puerto Varas, Chile

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



Chiles and Cerro Negro Volcanoes, A Seismic Crisis That Represents A Challenge In Disaster Risk Management For Colombia And Ecuador

Diego Mauricio Gómez Martínez¹, Marta Lucía Calvache Velasco¹, Mario Ruiz²

¹Servicio Geológico Colombiano

²Instituto Geofísico, Escuela Politécnica Nacional

Keywords: risk management, volcanoes, binational, seismic crisis, UNGRD, SGR

The region around Chiles and Cerro volcanoes experienced a dramatic increase in seismic activity since August 2013. Given the concerns of authorities and indigenous communities in the area and in consultation with them, the Colombian Geological Survey (SGC) through the Volcanological and Seismological Pasto Observatory (OVSP) and the Geophysical Institute of the Polytechnic School of Ecuador (IGEPN), installed a telemetered seismic and deformation network for monitoring this activity. Due to these volcanoes are share territorially with Ecuador, monitoring their activity and evaluating its hazards is a joint responsibility for the SGC (Colombia) and IGEPN (Ecuador). They must be highly coordinated and communicated with the Offices for Risk Disaster Management of the two countries, looking for communities to receive similar timely information and that contingency plans arising from a probable reactivation of any of these volcanic centers, are the most uniform as possible for the two countries. There are factors that difficult the normal process. Region predominantly indigenous with their own World view regarding these phenomena; different handling of the two countries on volcanic activity and alert levels; joint decision between the two technical institutes in terms of assessment of the activity, unambiguously, which may demand more time, delaying the information to be provided to decision makers and finally, laws and restrictions that each country has in its border areas. This process undoubtedly, represents a major challenge in risk disaster management, being perhaps one of the few cases in the world involving the interaction of authorities and communities of two neighboring countries united by a common hazard, in this case the volcanic.