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## **Volcanic Hazard Map Of Nevado Del Ruiz Volcano 2015 (Third Version)**

**Julián Andrés Ceballos Hernández - Lilly Maritza Martínez Tabares - Carlos Andres Laverde - Ana Maria Garcia - Indira Zuluaga Mazo - Ricardo Méndez - Carlos Muñoz - Gloria Patricia Cortés - Marta Lucia Calvache - Bernardo Pulgarín**

<sup>1</sup>Servicio Geológico Colombiano

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Nevado del Ruiz Volcano (NRV) is a composite active volcano that was built by effusive and explosive activity. The mainly volcanic activity during the Holocene was explosive with eruptive columns over 20 km in height and a Volcanic Explosivity Index (VEI) between 3 and 4. A small eruption occurred on November 13th, 1985 (VEI=3) that produced pyroclastic density currents that generated the melting of the snow and ice of the glacial cap triggering lahars that flowed down the Rio Claro, Chinchiná, Gualí, Azufrado and Lagunilla rivers. The lahars destroyed the town of Armero and part of El Destierro, Rio Claro and La Primavera communities and some neighborhoods of Chinchiná, killing more than 25.000 people and producing the second volcanic disaster of the 20th century. A hazard map was made in record time and presented to the government and community on October 7th, 1985, despite of this effort, the beginning of basic monitoring and the warnings of a possible eruption, a complex disaster occurred and the risk management activities made during 11 months were not successful. The hazard map was updated in October 1986. The third version of NRV hazard map was done based in recent geological and stratigraphical studies, the current eruptive activity and computational simulations that let to improve the definition of the hazards zones. The active Arenas crater was taken as emission for future eruptions. According to the eruptive behavior, mainly explosive eruptions can occur generating ballistic projectiles, pyroclastic density currents, lahars and debris avalanches. All the areas affected by these phenomena were represented as high hazard zones, except the pyroclastic falls that were delimited as high, medium and low hazard zones. The new hazard map of NRV contributes to improve the risk management in Colombia, the land use planning and the social knowledge appropriation