

There are two volcanic islands named Jeju and Ulleung which are located on the south sea and the east sea of Korea, respectively. Recent age dating data for each island represents about 5 KA for the last eruptions. Also Jeju Island has historical record that described eruptions in 1002 and 1007, A.D. The Global Volcanism Program of the Smithsonian institute classified these islands as active volcanoes. Furthermore, recent studies show that there are magma systems beneath the islands. Therefore, we simulated volcanic hazards for these islands such as pyroclastic density currents, lahars, and lava flows based on scenarios for volcanic hazard mapping. TITAN2D, Laharz\_py numerical simulation programs were used for PDCs and Lahar simulations. In addition, we developed and applied a lava flow simulation program named PNU\_Lava. Simulation results are projected on the maps with basic information about volcanic hazards is explained with easy descriptions for public who are not familiar with volcanic hazard. These are the first mapped for volcanic hazards in South Korea in order to assess volcanic hazards of these islands and make a database for volcanic hazard assessment.

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