Ground deformation associated with geothermal activity at Kuju Volcano

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Cooperative observation group of the universities constructed EDM network around Kuju Volcano after the phreatic explosion on October 11, 1995. We repeated EDM and expanded the its network step by step. The first stage of the volcanic activity characterized by intense steaming with ash from the new craters that were created by the explosion. However, it seems that the amount of the fumaroles is likely to be decreasing. Several earthquake swarms were detected in and around pre-existing fumarolic area in Kuju volcano and its vicinity after the phreatic explosion. We try to explain the ground deformation, the energy flux that was estimated by plume-rise method (Kagiyama, 1978) and seismic activity with a qualitative model noticing the behavior of the geothermal fluid.