

A simulation model of sector collapse try to estimate for stability degree and collapse volume

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A sector collapse is one of the volcanic phenomena that is caused by a part of a volcano collapse or a lava dome. A debris by sector collapse become to a debris avalanche. A debris avalanche has potential occur disasters. So we must take a countermeasures of an antidisaster for decrease a disasters scale. For a countermeasures of an antidisaster of a sector collapse, it is important to estimate a probability by a sector collapse and a damaged districts by a debris avalanche. A great deal has been written about mechanisms of flow to debris avalanche, but very little has been stated about potential of sector collapse and a scale of collapse volume. This project develop a simulation program for sector collapse model and it is try to estimate for stability degree of volcano and a scale of collapse volume of a sector collapse. The simulation program reveals that expansion of volcano and decrease of rock intensity construction volcano become to decrease a stability degree volcano and to enlarge a collapse volume. On East Choukai horse-shoe shaped caldera, sector collapse simulation program has appear again potential for a sector collapse.