

## Eruptive risk assessment in the whole of Japan

# Ken-ichi Arai[1]; Yusuke Suzuki[1]; Tatsuro Chiba[1]; Masahiro Yoshimura[2]; Takayuki Watanabe[2]; Nobuo Marukusu[2]

[1] Asia Air Survey; [2] Non-Life Insurance Rating Organization of Japan

At present, we assessed eruptive risk in the region of Kyusyu, Japan on a trial basis.

We have used a digital model of the topography, the simple methods for eruptive risk assessment and some assumptions of the way in which the eruption disasters in forthcoming decades will develop to create a map of the eruptive hazards from all active volcanoes in whole Japan.

Mapping on the basis of many geological informations, paper of natural hazards and some assumptions:

- 1) subject of study hazard: vent area, tephra fall, ballistics, lava flow, pyroclastic flow, surge, gases and others
- 2) target for the geological and historical eruption data: last 1000years
- 3) Topographic model: 1km mesh (except for vent area)

The volcanoes chosen for test case study were Kyushu region's 11 active volcanoes ( Tsurumidake and Garandake, Yufudake, Kujusan, Asosan, Unzendake, Kirishimayama, Yonemaru and Sumiyoshiike, Wakamiko, Sakurajima, Ikeda and Yamagawa, Kaimondake).

If it refuses, this report has not sugges some idea to forecast volcanic activity and urgency of eruptive disaster.