

Constructing and utilizing digitized volcanic hazardmap database

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National Research Institute for Earth Science and Disaster Resilience (NIED) has published “Volcanic Hazard Maps of Japan –Second Edition” recording whole volcanic hazard maps or hazard mitigation plans of 40 active volcanoes issued from 1983 to 2013. After that, volcanic hazardmaps are required under law to be prepared in each volcanic area in Japan since the 2014 eruption of Ontake volcano. NIED has been compiling and digitizing volcanic hazard information published by each Volcano Disaster Management Council established for 50 continuously monitored volcanoes in Japan. In this presentation, we report the progress of the project and examples of utilization for the digitized data.

Each digitized volcanic hazard information, with shapefile format, are converted into image data such as tile data in order to be useful on WebGIS as a layer. We are preparing online map to show easier the hazard information to residents or tourists in the volcanic area. The map will be expected as a promotion tool to the residents regarding volcanic disaster since calm period as well as a hazard map available online in emergencies, and it should be available to anytime, anyone and anywhere. Additionally we try to make tool analysing how many disasters have been possible to occur at each area where is divided into a several mesh over a target volcanic area on the map, applying Kubo et al.(2003). It may help users can recognize volcanic risks having possibility to occur at the place they are (or will be) by the information of each mesh.

We will welcome for discussion about how the way of effective expression of volcanic hazard information toward the target people or utilization of the information materials.

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