

A database system of published volcanic hazard maps in Japan

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Before 1990, only two volcanic hazard maps of Hokkaido-Komatake (1984) and Tokachidake (1986) were completed and released. Serious disasters at Unzen eruptions in 1991 heightened people's attention to volcanic hazards. Local governments adjacent to active volcanoes were required to establish volcanic hazard programs for the residents, which was financed by a national project approved in 1992. Between 1992 and 1999, another 12 hazard maps were released. After the eruptions at Usu and Miyakejima in 2000, 14 more maps were completed within a period of three years.

Now, over 80 local governments have released 43 volcanic hazard maps on 28 active volcanoes and handbooks for evacuation information and basic knowledge on volcanology. However, the publications and the evacuation facilities are not equivalent in quality.

A picture-related database of volcanic hazard maps available on computers is being designed. With permission of local governments, the database includes 300-dpi-resolution digital images of whole published maps and the related handbooks. The purpose of this work is to offer common resources for practical use in volcanic hazard prevention among researchers, government officials, and other people concerned with this issue. For this purpose, the contents of both hazard maps and handbooks are summarized on our database system.