

## Construction of a new catalog of eruptive events during the last 10,000 years in Japan

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Geological Survey of Japan (GSJ), AIST is providing Database of Japanese Active Volcano on Web (<http://www.aist.go.jp/RIODB/db099/>) for public. The database is a part of Research Information Database of AIST. The Database of Japanese Active Volcano consists of three parts: Geological Map of Volcanoes in Japan, Detailed Data of Active Volcanoes in Japan and Catalog of Eruptive Events during the Last 10,000 years. In this presentation, we introduce the Catalog of Eruptive Events during the Last 10,000 years in Japan.

Understanding of eruptive history of active volcanoes is necessary for estimating volcanic hazard and predicting future eruptions. The definition of an active volcano in Japan is the volcano that has erupted for past 10,000 years and the volcano that has currently active emissions of fumarolic gas. A database or catalog that records orderly information of all eruptive events during the last 10,000 years is useful for the understanding of the short- and/or long-term state of volcanic activity in Japan. Eruptive history and events of active volcanoes have been compiled in the following catalogs: National Catalogue of the Active Volcanoes in Japan (third edition) published by Japan Meteorological Agency in 2005, Quaternary Volcanoes in Japan ([http://www.aist.go.jp/RIODB/strata/VOL\\_JP/index.htm](http://www.aist.go.jp/RIODB/strata/VOL_JP/index.htm)) by GSJ, and Catalog of Volcanic Eruptions during the Past 2,000 Years in Japan by Hayakawa (1994, 1999). However, these catalogs were insufficient in the number of eruptive events, age range and the quantity of information. The Catalog of Eruptive Events during the Last 10,000 years in Japan overcomes those weak points, contains more information and can offer more convenient information than those catalogs.

The information recorded in the Catalog of Eruptive Events during the Last 10,000 years in Japan is quoted from all available research articles, reports and abstracts of research meetings and conferences. The collected data are as follows: eruptive age, eruption type, eruptive deposit type, name of eruptive deposit, rock type, source vent, eruptive volume, etc. Information of literature about those data is also recorded in the catalog. Content of the catalog can be read using web browsers. The information can be displayed when a user selects a volcano from a distribution map or a list of active volcanoes or carries out a search. The search can be carried out from following terms: volcano name, region name, eruptive age, eruption type, eruptive deposit type, eruptive volume, and key words (arbitrary characters). There are three description forms in this catalog. They show detailed information of eruptive history in each volcano, each eruptive event, and each eruptive deposit, respectively.

This catalog enables everybody to get the information of eruptive history and eruption events of active volcanoes easily, and can provide the plain and standardized information using unification terms and units to public. Furthermore, we expect that statistical analyses of data from the catalog can reveal the regional difference of volcanic activity, the temporal and spatial variation of volcanic activity, the correlation between eruption and earthquake records, and the eruption frequency in each eruptive type.