

## A Development of Realtime Volcano Information System on The Internet

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### 1. Purposes

The concern about volcanic activity is increasing these days so that the 2000 eruption of Mt.Usu Volcano and Miyakejima Volcano are represented. In order to decrease the damage of a disaster, as well as the prompt action at the time of damages happened. Public presentation of prior observation data and enlightenment of natural disasters for general residents is indispensable, and has been an important subject production of communication system. Thus, NIED, to exhibit the observation data collected at the observing stations near the volcano on real time, and to demonstrate volcanic activities, the public information system on the Internet has been developed.

### 2. Necessary The System

At present, the websites that present volcanic observation data, are open by research organizations etc.. And, a few website in Japan services the volcanic activity information for the public.

### 3. Needs Investigation

We did an assessment about volcano observation data exhibition. An enforcement period is in October, 2000 - November, and a recovery rate is as high as 55.7%. It is inferred that they have much interests in the public presentation of volcano information, when the 2000 eruption Mt.Usu and Miyake Volcanoes continued. As a result of questionnaire count, Disaster prevention sections and The science education teacher need volcanic basic knowledge and a volcanic observation principle, and The Volcanological Society of Japan's members are asking for flexible public presentation of observation data.

Based on the result of a questionnaire and the necessary for the above-mentioned system, the following systems were developed.

- \* Real-time public presentation of observation data
- \* A user is a data perusal period arbitrarily
- \* Public presentation of data useful to general residents and researcher both

### 4. About This System

The special features of this system are real time and interactively about observation data displayed. Thus, the application which is automatic extracts the data, possible by extracting data of various time slices such as a time unit, a day unit.

### 5. About Contents

As static contents, the volcano glossary was created for general residents. A volcano term can be read by easy operation, which is user, only clicks a term. As dynamic contents, there are earthquake waveform, inclination change, and inclination change vector figure. In addition, users also including the past observation data are able to specify and display arbitrary periods.

### 6. For The Future

This website has the feature which is not existing in the existing volcano information opening.

- \* The real time exhibition earthquake waveform and inclination change
- \* A user can read data of arbitrary periods, using by the application
- \* Public exhibition of data useful to general residents and researcher both

This system is due to be exhibited from April, 2002. In the future, the portal site, which can provide each researcher with useful volcano information, is aimed at general residents.