

Education and outreach for the reduction of volcanic disaster -activities at Unzen Volcano

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In order to reduce volcanic disasters, the understanding of volcanoes and volcanic eruptions is essential. In addition, the effort to pass on the lessons of volcanic disasters to younger generations is also very important. Unzen Volcano in the Shimabara peninsula, western Kyushu, Japan erupted in 1990, and the eruptive activity lasted for about 4.5 years. The residents on the foot of the volcano suffered from the volcanic disasters such as frequent pyroclastic flows and debris flows during the eruption. We introduce the education and outreach activities for the reduction of volcanic disaster, which has been continued in the Unzen volcanic area after the eruption.

In Shimabara city and Minami-shimabara city, the activities to keep on telling about the menace of the natural disaster and pass the record of what they learned to future generations have been conducted. In these activities, the citizens who experienced the disaster have played important roll as volunteer storytellers. June 3, when the pyroclastic flow killed 43 people, is the Praying Day; the students have activities to learn about the disaster. September 15, when the Onokoba elementary school was destroyed by pyroclastic flow, is the Onokoba Memorial Day; the students give presentations in order not to forget the disaster.

On the other hand, the activities are conducted to understand volcanoes and to share the knowledge of coexistence with volcanism. The instruction book and DVD about volcanoes and volcanic disasters have been produced in cooperation with school teachers and researchers, and have been used in a class at elementary school. Mt. Unzen Disaster Memorial Hall and Kyushu University have cooperatively opened Kitchen Volcanology Laboratory, in which the participants understand the volcanic phenomena through the experiments using familiar materials such as foods. They also provide a program: Parent and Child Hiking in the school summer holidays, in which children climb Unzen Volcano with their families under the guidance of researchers.

Besides the activities above, the Institute of Seismology and Volcanology, Kyushu University has carried out the field trip to the lava dome (Heisei Shinzan) in every year after the last eruption. People from local governments, fire station, police, self-defense force, the press, etc. attend the field trip, and share the understanding of the current condition of the volcano and the risk awareness. The cooperation with the researchers and these organizations is necessary for the effective transmission of volcanic information and emergency management during the eruption. This field trip is useful not only for the outreach but also to build a relationship of mutual trust.

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