Disaster Prevention Research Institute, Kyoto University

Address: Goka-Sho, Uji, Kyoto 611-0011, Japan
http://www.dpri.kyoto-u.ac.jp

Outline: In 1951, the Disaster Prevention Research Institute (DPRI) was established for research on mechanisms of natural hazards and mitigation of disasters. Since then, DPRI has been a leader in many aspects of natural disaster science, promoting interdisciplinary studies in collaboration with other universities and institutions in Japan. The current mission of DPRI is to study the mechanisms of natural hazards, establish integrated methodologies for disaster reduction based on natural and social sciences, and educate graduate students in science, engineering, and informatics. DPRI has five research divisions, six research centers, and a division of technical affairs. In addition, 15 laboratories and observatories located in western Japan conduct experimental studies and field observations on natural hazards. To promote integrated research projects, each division and center belongs to one of four research groups: 'Integrated Arts and Sciences for Disaster Reduction', 'Seismic and Volcanic Hazards', 'Geohazards', and 'Atmosphere-Hydrosphere Hazards'. DPRI provides the public with scientific results and knowledge on natural hazards and advises national and local governments on disaster prevention strategies.

Research Areas:

Integrated Arts and Sciences for Disaster Reduction Research : Disaster Risk Management, Disaster Risk Reduction, Urban Planning, Disaster Prevention Policies, Social Studies

Seismic and Volcanic Hazards Mitigation Research: Seismology, Earthquake Engineering, Structural Engineering, Volcanology, Earthquake Prediction

Geohazard Research: Geotechnology, Geology, Geophysics, Geomorphology, Hydrology, Soil Science, Liquefaction, Landslide, Slope Conservation

Atmosphere Hydrosphere Research: Metrology, Hydrology, Hydraulics, Oceanography, Flood Control, Water Resources, Coastal Engineering

Examples of Research Activities

Experiment for testing evacuations on underground stairs during flood innudations, conducted at the Ujigawa Open Laboratory (Figure 1). Seismic observations of earthquake are carried out to study the sources, seismic velocity structures, seismicity in southwest Japan (Figure 2). Field studies are an important part of DPRI activities. Figure 3 shows a large landslide from the 2008 Iwate Miyagi Inland Earthquake. There are many efforts to integrate multi-disciplinary research on natural disaster risk reduction. Figure 4 illustrates how disaster risk management and crisis management can be integrated by use of the concept of the disaster management cycle.

Figure 1. Experiments at the Ujigawa Open Laboratory of flood evacuations from underground facilities.

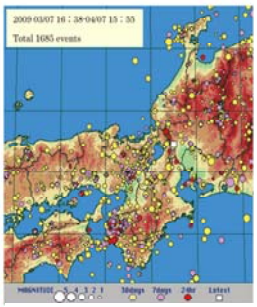

Figure 2. Recent seismic activity in southwest Japan.

Figure 3. Field Investigations of the Aratogawa landslide caused by the 2008 Iwate Miyagi Inland earthquake.

Figure 4. Relationships between Risk Management and Crisis Management in the Disaster Management Cycle.