

Implementation Research and Education System Center for Reducing Disaster Risk (IRESC), Kumamoto University

2-39-1, Kurokami, Chuo-ku, Kumamoto, Japan
<http://iresc.kumamoto-u.ac.jp/>



Outline

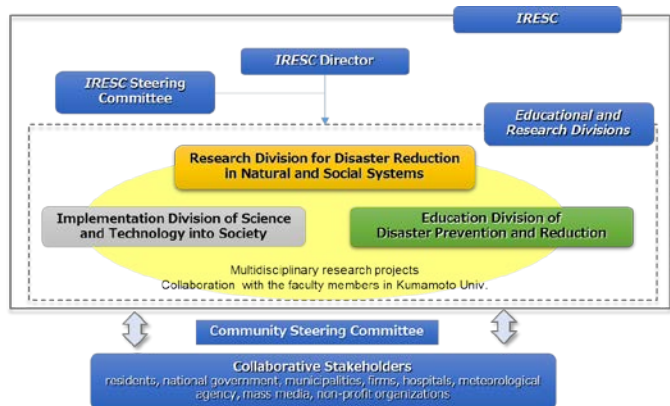
The *IRESC* promotes a wide range of educational and research activities for disaster-reduction-oriented society that can respond promptly and flexibly to disasters. Our activities extend from the academic circle of universities to the 'field campus' of local communities. They intend to link the universities' research innovation with the implementation of their achievements in society seamlessly as social-knowledge technology. In addition, they aim at nurturing human resources that will contribute to the establishment of robust and resilient social systems against disasters.

Organization

The *IRESC* consists of three divisions;

- 1) Research Division for Disaster Reduction in Natural and Social Systems
- 2) Implementation Division of Science and Technology into Society
- 3) Education Division for Disaster Prevention and Reduction

Each division works closely together and promotes research, education and implementation activities to make our society more disaster-reduction-oriented. The *IRESC* also sets up Community Steering Committee to promote dialogue and carry out activities with local residents, firms, NPOs, national/local governments, and educational institutions including elementary schools.



Research Division for Disaster Reduction in Natural and Social Systems

- Natural Environmental Change Research Group: Disaster History, Geo-environmental Change, Aero & Aquatic Environmental Change
- Complex Disaster Research Group: Disaster Mechanism, Disaster Risk Communication, Integrated Disaster Prevention Planning
- Regional Safety Research Group: Infrastructure & Facility Design, Risk Management, Disaster Information Communication

Implementation Division of Science and Technology into Society

- Developing proto-type models for social implementation / Practical experiment on Field Campus
- Promoting personnel exchanges and cooperation with national / local governments & firms through the joint research system of Kumamoto University
- Strengthening cooperation with stakeholders within the University including Center for Policy Studies and Local Communities

Education Division for Disaster Prevention and Reduction

- Developing educational programs & materials in collaboration with elementary / junior-high schools
- Deployment of proto-type model for risk communication / Practical experiments on Field Campus
- Exchanging faculty & students with international disaster research institutes (Exchange Agreement)

Education and Research Activities

The IRESC implements the Case Station – Field Campus (CASiFiCA) System, which regards the Center as a research and education core (Case Station) monitoring local communities continuously, and the communities as sites or fields for practical research and education (Field Campus). This system develops a supporting nexus between the university and the communities, and this nexus enables the IRESC to smoothly return research achievements to society and to receive feedback from local residents and government administrative staff by their teaching to university students. Furthermore, the combination of university and communities provides opportunities for both to consider how the faculty, local residents and administrative staff should cooperate. The IRESC will nurture leaders to support disaster-reduction-oriented society through this system.

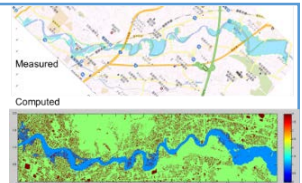
Research Survey on Disaster Damage and Residents' Evacuation

We are conducting surveys on flood and landslide damage caused by the unprecedented downpours in Northern Kyushu in 2012 as well as questionnaire research on the residents' evacuation behaviors, etc.



Flood Simulations

We analyze and clarify characteristics of flood disaster and damage by time-series data obtained from the flood simulation tests.



Education for Disaster Protection and Reduction

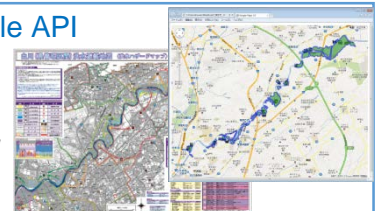
We promote diffusion and education on environmental characteristics and conceivable natural disasters for each area as well as response/preventive measures in daily life against the disasters, for local residents, administrative staff, children, students and teachers.



Compiling a Database of Flooded Area and Photographs Using Google API

We share the location of flooded areas and photos right after disasters on Google Map.

Comparing to the existing flood hazard map (Source from: Website of Crisis Management and Disaster Prevention Office, General Affairs Bureau, Kumamoto City).



Practical Workshops for Reducing Damage from Disasters

We conduct workshops to increase awareness for disaster reduction and early evacuation for communities in Kumamoto Prefecture. This project aims to establish management strategies to implement the elements of social technology into local communities.



Leaders-Fostering Program for Disaster Risk Reduction Community

Program for Promoting Inter-University Collaborative Education by MEXT, started from 2012

This program aims to establish the "Center of Community (COC): the Base for the Creation of Disaster Reduction Local Community" which contributes actively to the local community by continuously fostering leaders who find and deal with problems related to a disaster-reduction-oriented society, in cooperation with Prefectural University of Kumamoto, Kumamoto Gakuen University, and Kumamoto Health Science University. In this program, we develop Community Collaborative Learning Programs utilizing Field Campus to produce the leaders.



Opening Seminar of the IRESC (March 5, 2013)