

An experiment has been conducted to test a mobile application to estimate building damage from a tsunami at Kesennuma City (2016/7/20)

Theme : Building Damage Estimation, Evacuation Drill Tool, Experiment, Mobile Application
 Location: Kesennuma City, Miyagi Prefecture

On July 20, 2016, there was an experiment related to two mobile applications developed for disaster risk reduction at Kesennuma City. It is a mobile application for estimating the building damage from a tsunami. It is a research collaboration of the International Research Institute of Disaster Science (IRIDeS), Tokyo Institute of Technology, and University College London.

Assoc.Prof. Anawat Suppasri, Research Associate Yoshi Abe, and Researcher Dr. Natt Leelawat conducted the experiment to the developed application to compare the estimated results of the first application at the real sites in Kesennuma City. This application's input parameters include the location of the building, the number of floors, structural materials, and the function of the buildings while the output parameters include the estimated damage level, the collapsed probability, and the collapsed probability with debris consideration.

In addition, Assoc.Prof. Anawat Suppasri, Research Associate Yoshi Abe, Technical Assistant Seiichi Kumagai, and Researcher Dr. Natt Leelawat also discussed with the former head and the current officer of the Crisis Management Division of Kesennuma City regarding the prototype design of the next mobile application. It is an application to identify and inform the user the inundation depth at the current location. It can be used as the evacuation drill tool. The prototype included the data of Kesennuma City.

The opinion and feedbacks from the discussions will be taken into account for the implementation phase of the mobile application.



Mobile application experiment tested at the affected area of the 2011 Great East Japan Tsunami



Mobile application experiment with the real inundation depth evidence



Meeting with the former head of the Crisis Management Division



Meeting with the officer of the Crisis Management Division