

# Resilience against Disasters using Remote Sensing and Geoinformation Technologies for Rapid Mapping and Information Dissemination (RAPIDMAP)

\*Kohei Cho<sup>1</sup>, Emmanuel Baltsavias<sup>2</sup>, Fabio Remondino<sup>3</sup>, Uwe Soergel<sup>4</sup>,  
Hiroyuki Wakabayashi<sup>5</sup>

<sup>1</sup>Tokai University,

4-1-1 Kitakaname Hiratsuka, Kanagawa 259-1292, Japan, cho@yoyogi.ycc.u-tokai.ac.jp

<sup>2</sup>ETH Zurich(ETH),

Wolfgang-Pauli-Str. 15, CH-8093, Zurich, Switzerland, manos@geod.baug.ethz.ch

<sup>3</sup>Fondazione Bruno Kessler(FBK),

via Sommarive 18, 38123, Trento, Italy, remondino@fbk.eu

<sup>4</sup>Leibniz Universität Hannover(LUH),

Nienburgerstrasse 1, 30167 Hannover, Germany, soergel@ipi.uni-hannover.de

<sup>5</sup>Nihon University,

1 Nakagawara, Tokusada, Tamuramachi, Koriyama, Fukushima, Japan,

waka@cs.ce.nihon-u.ac.jp

*Abstract:* Remote Sensing (RS) and Geographic Information System (GIS) are powerful technologies for collecting useful information on the damages of disasters in short period of time. However, since many different types of RS data are available, imagery co-registration, information integration and feature extraction need reliable and advanced methodologies. In our project, namely RAPIDMAP, the partners are developing practical ways to integrate RS data tools in near real time and allow users to use those data soon after the disasters by means of WebGIS tools. This will help not only decision makers but also end-users in the disaster area. The key components of this project are:

- (1) Near real time monitoring with satellites as well as Unmanned Airborne Vehicles (UAV).
- (2) Co-registration of various images as well as maps coming from different sources.
- (3) Data fusion and change detection using optical sensor data and active microwave sensor data.
- (4) Decision Support System (DSS) development based on WebGIS technologies.

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**Keyword :** WebGIS, UAV, data fusion, DSS, SAR