

Satellite-based Emergency Mapping Guidelines

Priority for Actions 2 and 4:

Towards harmonized response information products derived from satellite data



Application field: The objective of these guidelines is to help support an effective exchange of satellite-based emergency mapping efforts leading to improved possibilities for cooperation amongst involved Emergency Mapping Organisations. This will facilitate the convergence of the mapping procedures and the thematic content across production teams in multiple response organisations, especially in the early response phases of disaster events.

Methodology available / workflow: The guidelines provide a framework to facilitate the emergency mapping community to better cooperate during emergency response. To achieve this, the IWG-SEM conducts the following activities:

- a. Define fundamental principles
- b. Establish a procedure for interactions and sharing of data, analysis and mapping results
- c. Organize mapping products, templates and dissemination policies
- d. Anticipate problems of uncertainty in communication
- e. Commit to assurance of capacity and qualification
- f. Prepare a glossary for emergency mapping vocabulary

Key results: The general guidelines are available as revised version 1. The second part of the guidelines focuses on geo-information/map production related to specific disaster types using a common document structure to be applied to the different disaster types. Presently, guidelines for flood mapping are included and those for earthquake damage assessment are in preparation.

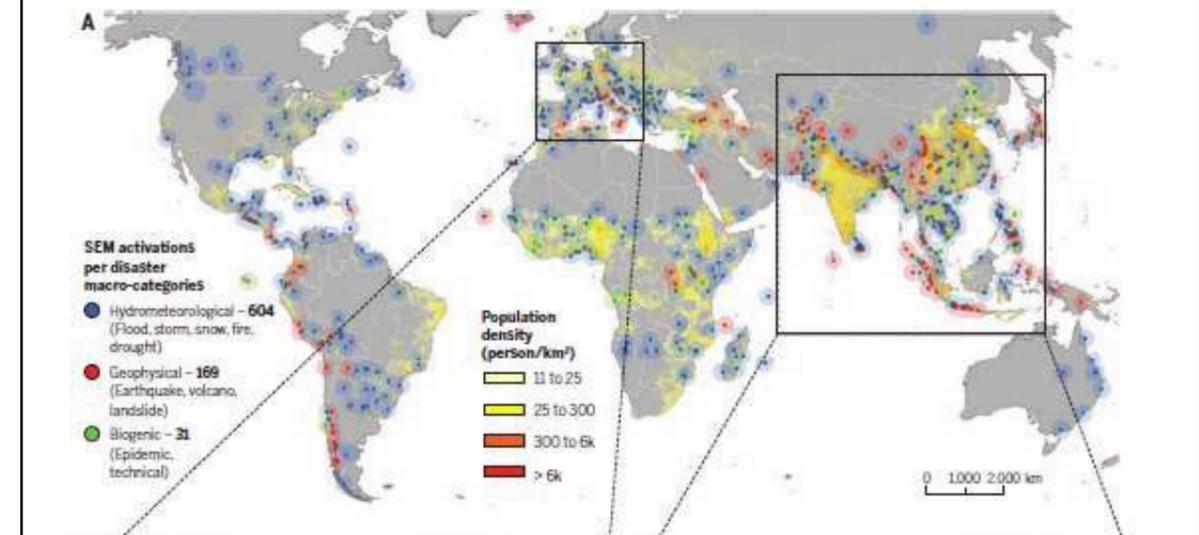
Innovative impact: By enabling easier exchange, merging and quality checking of individual data/information layers generated by more than one Emergency Mapping Organisation, the final objective of enhancing coordination and community effectiveness can be achieved among those willing to engage.

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Application status: Guideline

The guidelines are an on-going effort, will be reviewed/updated periodically, in order to integrate new best practices and evolutions in technology and end-user needs. The IWG-SEM chair has the responsibility to initiate the review, by agreement of the Working Group.

Area of Application: Global



The production and the maintenance of the guidelines is reliant on a joint effort by the members of the International Working Group on Satellite-based Emergency Mapping (IWGSEM), a voluntary group of organizations involved in satellite based emergency mapping. It was founded to improve cooperation, communication and professional standards among the global network of satellite based emergency mapping providers. The chairperson of the group is nominated for a term of one year and is responsible for organizing the monthly telecons and bi-annual meetings. The current chair is from the Department of Geoinformatics, Z_GIS University of Salzburg / Spatial Services Ltd, Austria.

Access to the Guidelines Version 1.0 (2015) : www.iwg-sem.org

A related scientific publication: Voigt S., Giulio-Tonolo F., Lyons J., Kucera J., Jones B., Schneiderhan T., Platzeck G., Kaku K., Kumar Hazarika M., Czarán L., Li S., Pedersen W., Kadiri J. G., Proy C., Muthike D. M., Bequignon J., Guha-Sapir D. (2016): Global trends in satellite-based emergency mapping. *Science* 353 (6296), 247-252. [doi: 10.1126/science.aad8728]

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