



Current trends in satellite based emergency mapping – the need for harmonisation

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During the past years, the availability and use of satellite image data to support disaster management and humanitarian relief organisations has largely increased. The automation and data processing techniques are greatly improving as well as the capacity in accessing and processing satellite imagery in getting better globally. More and more global activities via the internet and through global organisations like the United Nations or the International Charter Space and Major Disaster engage in the topic, while at the same time, more and more national or local centres engage rapid mapping operations and activities. In order to make even more effective use of this very positive increase of capacity, for the sake of operational provision of analysis results, for fast validation of satellite derived damage assessments, for better cooperation in the joint inter agency generation of rapid mapping products and for general scientific use, rapid mapping results in general need to be better harmonized, if not even standardized.

In this presentation, experiences from various years of rapid mapping gained by the DLR Center for satellite based Crisis Information (ZKI) within the context of the national activities, the International Charter Space and Major Disasters, GMES/Copernicus etc. are reported. Furthermore, an overview on how automation, quality assurance and optimization can be achieved through standard operation procedures within a rapid mapping workflow is given. Building on this long term rapid mapping experience, and building on the DLR initiative to set in pace an “International Working Group on Satellite Based Emergency Mapping” current trends in rapid mapping are discussed and thoughts on how the sharing of rapid mapping information can be optimized by harmonizing analysis results and data structures are presented. Such an harmonization of analysis procedures, nomenclatures and representations of data as well as meta data are the basis to better cooperate within the global rapid mapping community throughout local/national, regional/supranational and global scales