

RAPID ANALYSIS AND SPATIALISATION OF RISK

RASOR COMMUNITY OF PRACTICE INAUGURAL MEETING



The RASOR Community of Practice Inaugural Meeting was held on 17 May, 2016 in Mestre, Italy, bringing together about 50 people from user organizations and the RASOR partnership. The RASOR Community of Practice meeting was both the "Final Conference" showcasing the results of the RASOR FP7 project and the inaugural face-to-face meeting of a dynamic group of users and practitioners who will maintain the RASOR platform over the coming months and years, develop it and serve as a resource basin for RASOR-based analysis in the coming years.

The meeting was extremely successful, with presentations form all case study areas, but also with presentations from "new users", who were offered a chance to present on new uses outside the FP7 project, building on the results of the project. These new users are typical of users who can be the nucleus of the RASOR Phase 2. Some examples of new users were UNOSAT and the FC's Joint Research Centre. who both prepared cases studies for the meeting. The Rapid Analysis and Spatialisation Of Risk (RASOR) project has come to an end, after 30 months of improving, during the Understanding Risk event organized by World Bank in Venice on 16-20 May. But, as RASOR Coordinator Roberto Rudari said, «this is not the end, but the true beginning of what we built in the last two years». RASOR is an open platform, with open data and models, useful to enable

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communities to perform multirisk analysis. For 30 months RASOR has been implemented by an international team that included also specialists from five Countries where case studies have been conducted.

«RASOR has been very useful and important for us», said David Telcy, from Haitian Centre National de l'Information Géo-Spatiale. «The platform allowed us to make a mock-up of different risks in Haiti, from cyclone to flood, from earthauake to tsunami. Haiti is particularly exposed to natural risk and RASOR is a tool that allows very deepened analysis. The most interesting thing in RASOR is that it helps to identify the vulnerability and the impact of a certain risk in a determined area. This is fundamental to come to the best decision to safeguard that particular area».

«Thanks to RASOR Project we now can better identify the risk and come to better decisions». said Sinta Kaniawati, General Manager from Unilever Indonesia Foundation and member of the National Platform for DRR in Indonesia. «Our wish is that RASOR Project could help stakeholders in all the World, not only the National Governments, but also local agencies up to community level. We hope RASOR will be uninterruptedly built so that it can be a powerful tool to enable many of us to come to better solutions to build a safer world».



R/SOR EC WORKSHOP IN BRUSSELS

On the 9th of June the RASOR project has call for a dedicated Workshop for the European Commission's DGs and programmes. The Workshop has the objective of showing EC DGs especially and people related with EC Work the achievement of the project that produced an advanced platform for Multi-hazard Risk Assessment strongly connected with the Copernicus services. The workshop is the perfect opportunity for disseminating the potential of the RASOR platform and connect it even more to the operations for the various programmes and initiatives supported or directly implemented by the European Commission. Will be hosted at REA premises or in another European Commission facility.

R/SOR @CUF



RASOR project has been invited to present at the 10th Copernicus User Forum in Brussels. The CUF is the Forum that drives from the perspective of the Member States and users the development and management of the Copernicus program in various fields from Emergency to Climate Services. The RASOR presentation was part of the Italian national contribution and focused on how RASOR can be a strong added value to the Italian National Collaborative Ground Segment in its extended version. The presentation was exceptionally received and made some crucial points that identify RASOR as a possible platform to speed up taking up of EO services through the Collaborative Ground Segment:

RASOR transforms advanced EO/non-EO products into Services for the final end user in an easy and usable way:

RASOR interacts with Services and and processors in an advanced way for scenarios implementation:

- RASOR creates added value products/services connecting models and data;
- RASOR provides an "expert" synthesis of Complex information;

RASOR is an incubator for innovative EO services and products where quantitative impact analysis of any kind is the final goal;

LIVING PLANET SYMPOSIUM 2016



The 2016 European Space Agency Living Planet Symposium followed the previous successful symposia held in Edinburgh (2013), Bergen (2010), Montreux (2007) and Salzburg (2004). The event was held in Prague, Czech Republic from 9-13 May 2016 and was organised in cooperation with the Ministry of Transport, Ministry of Environment and Ministry of Education, Youth and Sports of the Czech Republic and the local support from Charles University in Prague.

With some 3000 participants this has been the largest event in Earth Observation ever organised by ESA.

RASOR consortium participated to the Symposium with four contributions: besides a general presentation of the project, three different applications of the platform have been presented.

The first one presented Radar interferometry results with Sentinel-1 data in TOPSAR (IW) mode, using the DIAPASON Interferometric

processing software; the work presents how - in the framework of the RASOR Project - 19 Sentinel-1 images acquired over Santorini (Greece) were processed to generate ground motion maps of the caldera.

A second application example is at global scale, showing a downscaling methodology for exposure data to be consistent to high-resolution hazard layers. This methodology

has been successfully implemented in data poor context, such as Malawi, allowing for a complete flood risk assessment.

Finally, the Bandung (West Java) RASOR demonstration case has been presented to the ESA Living Planet audience, introducing the capabilities of the platform in the multi-hazard and multi-risk framework. Satellite SAR data provide information on ground deformation, needed to monitor and model the various sources of these hazards and to perform multi-hazard risk analysis. Here the RASOR consortium reported on the use of InSAR data from various satellites to provide crucial information for multihazard assessment, with the goal of presenting and to accurately mapping the urban subsidence.

Subsidence rates were projected into the future (2020, 2050 and 2100) to assess the impact of land subsidence on flood hazard for a number of rainfall scenarios. Results show that the flood hazard is increasing in specific areas, which is valuable information for spatial planning.