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CV

Francesco Gaetani is Scientific and Technical Officer at GEO Secretariat where he supports the operational implementation of GEOSS, the Global Earth Observations System of Systems.

After graduating in Civil Environmental Engineering from the University of Genova, he gained a PhD in Automatics and Computer Science at the Politecnico di Torino in 2003.

Since then, he has been full-time researcher at CIMA, a public research center for the study and the operational implementation of technical solutions for Disasters Risk reduction and Management.

Main research interests focus on natural risk assessment, forecasting and mitigation.

Over the last 15 years has been actively involved in relevant National programs, as well as European (GMES) and International research and operational projects, whose common objective was the design, development and operational implementation of systems capable to assess and to anticipate the effects that (observed and forecasted) meteorological variables have on the magnitude and endurance of weather related extreme events.

His most recent research concerned the development of integrated systems for Early Warning and resource relocation for flooding and wildfire risks.

Author of more than 40 papers published on international conference proceedings and refereed journals.

In 2010 he was appointed by the Italian Space Agency to serve on the Secretariat of GEO as expert for the Disasters Area and the Global Urban Observations Task.

Natural Disaster Mitigation and Earth observations (EO): a GEO perspective

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Risk prevention, preparedness, and mitigation measures are the keys to success in disaster risk reduction. Earth observations (EO) can make a difference to reduce costs and technical efforts required to achieve these challenging goals. Satellite imagery, combined with all available in-situ data, make it possible to dramatically improve the management of risk in all phases of a disaster (before, during and after).

This vision was captured in the Global Earth Observations System of Systems (GEOSS) 10-Year Implementation Plan, whose implementation will bring a more timely dissemination of information through better coordinated systems for monitoring, predicting, assessing risk, early warning, mitigating, and responding to hazards at local, national, regional, and global levels.

The presentation provides an overview of key drivers as well as technical and scientific trends in the Societal Benefit Areas of Disasters and Water (including Flood and Droughts) of GEOSS, being developed by the Group on Earth Observations (GEO).

Specific emphasis will be given to the activities carried out by GEO in the South Asian Region by analyzing the role of EO in achieving the related GEOSS Strategic targets, through activities of the GEO 2012-2015 Work Plan.

Keywords

Earth observations, disaster risk reduction, regional coordination, interoperability, data access