



Integration of data and products acquired by different sources into a National Geo-information Center in Bulgaria

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The NATIONAL GEO-INFORMATION CENTER (NGIC) is a newly established scientific infrastructure for cooperation and integration of human resources and informational products and data from monitoring networks and observatories, and their complex broad-based analysis. It is a part of the National road map for scientific infrastructure (2017-2023), adopted by the Council of Ministers of Bulgaria. The partners joined in the research consortium are four institutes working in the field of Earth observation: the National Institute of Geophysics, Geodesy and Geography (NIGGG), the National Institute of Meteorology and Hydrology (NIMH), the Institute of Oceanology (IO), the Geological Institute (GI), and two institutes competent in ICT: the Institute of Mathematics and Informatics (IMI) and the Institute of Information and Communication Technologies (ICT). We started working to develop a multiparametric database containing information acquired by different sources and disciplines such as geophysics, geology, seismology, geodesy, oceanology, climatology, soil science, etc. The main goal of the project is to improve the coordination and capacity of the existing scientific infrastructures to integrate the primary results, and to benefit from their joint analysis to assess, predict and prevent natural and anthropogenic risks and disasters.

Integration of geo-datasets is proved to be a valuable tool to support a more effective decision-making for disaster prevention and risk reduction. Besides the real-time access of governmental institutions and local authorities to the data of the National Geo-information Center, it is envisaged to train personnel to develop efficient and effective plans for prevention, thus protecting the population from major damages caused by natural disasters and industrial accidents.

Last but not least, the newly developed scientific infrastructure NGIC intends to join the European networks and projects for development of the Earth sciences, such as EPOS (European Plate Observing System), DANUBIUS (Danube International Centre for Advanced Studies for River-Delta-Sea Systems), ICOS (Unraveling Earth's greenhouse gas balance with measurements) and ACTRIS (Aerosols, Clouds, and Trace gases Research Infrastructure Network).

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