

**International Conference “Data Intensive System Analysis for Geohazard Studies”
July 2016, Sochi region, Russia**

Geohazard complex studying and assessment of vulnerability and risks are among the key elements of the sustainable development of the modern highly-urbanized society. The IUGG support will help to elaborate a holistic system analysis approach, including modelling and observations, for detection and analysis of extreme conditions in different kinds of geophysical systems.

The Conference will be focused on modern problems and aspects of studying of hazards in geophysical systems. Within the Conference program it is intended to discuss the problems of development, implementation and maintenance of methods and instruments for monitoring of geophysical systems' dynamics; observation, detection, and modeling of geophysical extremes. Another key issue to be discussed is evolution of natural systems towards extreme conditions and assessment of global and local scale hazardous phenomena. Special emphasis will be made on hazards in the Earth's electro-magnetic environment and modern terrestrial and space systems of geomagnetic observations. The current problems and hazards in the Arctic region will also be discussed.

With the incredible increase of data flow in geosciences the problem of its analysis and interpretation becomes pivotal. Relevant analysis of geoscience data requires development and implementation of new methods and approaches. The Conference participants will discuss the current challenges in geoscience data processing and analysis using pattern recognition, statistical and other methods relevant to large data processing, applications of geodatabases and geoinformatics. Among other topics it is planned to discuss the problems of safety of mining and underground construction.