

## GLOMOS INTERNATIONAL CONFERENCE

Bolzano/Bozen, 17-19 October 2018

### Cross-sectional working group & Earth Observation / Monitoring, Geomatic, ICT

Workshop Moderators:

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Mountain social-ecological systems are amongst the most vulnerable regions in the world with respect to **natural hazards**, impact of **climate change** or pressure on sensitive ecosystems. Most of the **key economic activities** in the mountains (**tourism, agriculture, forestry, hydropower & mining**) depend on the rich **natural resources** of mountains and, in consequence, on **reliable and timely information** on the state of these resources and related risks. However, mountains are **data scarce regions**. Until now, consistent and harmonized transnational environmental monitoring systems are missing for many mountain regions.

With the European Earth Observation (EO) Program **COPERNICUS** and others like the American **Landsat** program, a wealth of high resolution satellite data and value-added products has been recently made available with an **open access policy**. Those data and derived products are explicitly designed to support regional authorities in:

- **managing natural resources** such as snow, water, agriculture or forestry;
- **managing risks** related to natural hazards such as landslides or floods;
- **monitoring and understanding the impacts of climate change** to be able to adapt properly.

However, most of regional or local authorities in mountain regions **do not yet apply such data**. Data access and use is technical demanding, products are not yet designed for end-users and interpretation requires further expertise.

In this cross-sectional working group, we want to further analyse where the gaps are, omitting the uptake of EO and Geo-IT products and see how we can fill them in order to face the challenges in the precious mountain regions equipped with the best possible information at hand.

During the workshop we plan to attend all other main thematic working group discussions in order to understand for each field of expertise, what is required and how we can contribute to those needs. Experts in the field of Geo-IT and EO are warmly welcome to support this undertaking by distributing themselves after the initial meeting to the other groups and come together by the end of the workshop to gather and summarize the findings.

Key points to be addressed:

- *How useful are supra-national Geodata initiatives and their thematic platforms such as GEO/GEOSS/GeoGnome, Copernicus, GMES4Africa for risk management in mountain environments?*
- *For risk management at the local scale, which technologies are key? EO, in-situ, drones etc. What information do we need to solve the concrete and real problem?*
- *What are best practice stories where EO and GEO-IT improved monitoring and management of risk in mountain regions? Where are the bottlenecks?*