

GEO Mountains Task Group 2.4



Develop a novel, global-scale spatial dataset (or datasets) related to mountain socio-economics

Meeting #1, 25 January 2022



Housekeeping



- Kindly mute yourselves when not speaking
- Please “raise your hand” to request the floor
- The meeting is being recorded
- Brief notes will be circulated afterwards



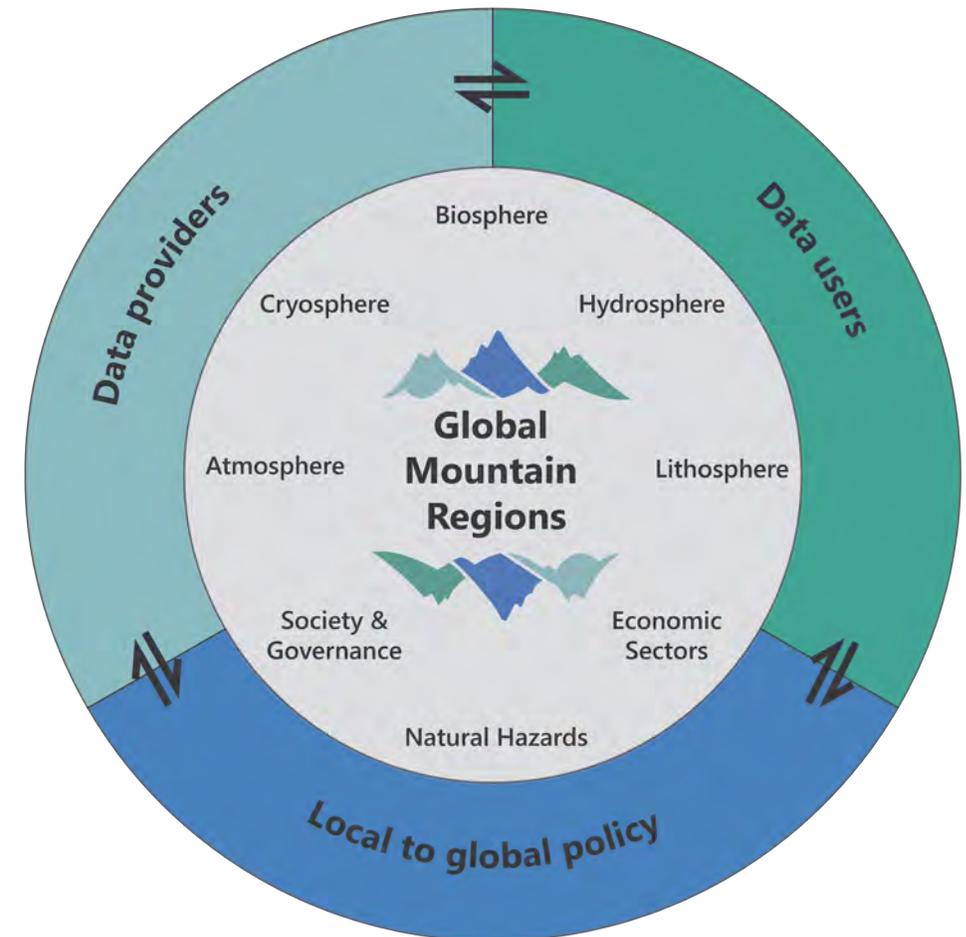
GEO Mountains: an introduction

The Global Network for Observations and Information in Mountain Environments

An Initiative of the Group on Earth Observations (GEO) co-lead by the Mountain Research Initiative (MRI) & the National Research Council of Italy

Objectives:

- ❑ To identify and satisfy the data and information needs of a diverse range stakeholders operating in the mountain sphere
- ❑ To improve monitoring and understanding of mountain processes and phenomena, especially under change
- ❑ To build, connect, and communicate with the community of mountain researchers, practitioners, and policy makers
- ❑ To develop collective reporting capacity that responds to pre-identified assessment and policy needs



Task Groups



Number	Description	Number of participants
1.1a	Develop, maintain, and share a list of relevant datasets	31
1.1b	Develop and maintain a list of interdisciplinary in situ mountain observational infrastructure and associated datasets	20
1.2	Contribute to our series of regional workshops / consultations into data portal requirements and main data needs / gaps	24
1.4	Contribute Knowledge Packages via GEO Mountains to the GEO Knowledge Hub	20
2.1	Analyse the extent to which data from mountain observatories are freely available, and which measurement protocols are followed	14
2.2	Contribute to the MRI's existing Mountain Observatories (MOs) and Elevation Dependent Climate Change (EDCC) Working Groups	24
2.3	Contribute to a GEO Mountains workshop to identify Essential Mountain Societal / Socio-Economic Variables	34
2.4	Develop a global spatial dataset related to mountain socio-economics	20
2.5	Establish links with the paleoscience community to help ensure that paleodata pertaining to mountains are discoverable, accessible, and usable	8
3.4	Develop educational, training, and capacity development materials related to the drivers, processes, and impacts of environmental, ecological, and societal change in mountains	27
3.5	Identify areas in which / how existing resources can be applied to respond to pre-identified policy needs	28

Main TG objective and scope

- ❑ To develop a novel spatial layer (or set of layers) pertaining to the **socio-economics of mountain regions** (perhaps combined in an index or indices)
 - ❑ Most likely will involve integrating existing data layers, rather than developing entirely new products (although that is also possible too)
- ❑ Extent should be **global**, but spatial resolution should also be sufficiently high to capture important local-scale variability driven by e.g. complex topography and other “mountain-specificities”
- ❑ Should **help to fill key data gaps** in the quest to characterize the current nature of, and reliably project future aspects of, complex integrated mountain socio-ecological systems (i.e. impacts of biophysical change on human populations and societies, and *vice versa*)
- ❑ Possible themes to consider include population and demographics, buildings and infrastructure (including exposure to natural hazards), transport, health, education, agriculture / food systems, economy / GDP, industry, energy production, (re)insurance, etc.

Related activities

- Will be informed by a workshop that will seek to identify Essential Mountain Societal / Socio-Economic Variables (Task Group 2.3):
 - What are the most important variables?*
 - What are the most critical data gaps?*
- Recent GEO Mountains paper on human populations in the world's mountains over recent decades: spatio-temporal patterns and potential controls (see [here](#) for a brief summary)
- Others?

Expected outcomes

- Provision of all datasets generated for use by the community of mountain researchers, practitioners, and policy makers
- Publication of an article presenting and/or exploiting the dataset by the Task Group in a high-impact peer-reviewed journal

Practicalities

- We are looking for an individual or a small group to **volunteer lead this task**
- Some funding may be available from GEO Mountains to support the TG lead / leaders / members in the execution of specific sub-tasks (e.g. literature review, developing a proposal for the dataset, carrying out the work / data processing, leading the write up)
- Possibility to hold a hybrid meeting to continue progress on this task around the margins of the International Mountain Conference 2022 (Innsbruck), if that would be convenient?

Discussion

Questions, comments, ideas?

Next steps?



Many thanks for your interest and contributions!

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