

# GEO Mountains Task Group 3.4



*Develop educational, training materials and capacity building activities related to the drivers, processes, and impacts of environmental, ecological, and societal change in mountains*

**Meeting #1, 8 February 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



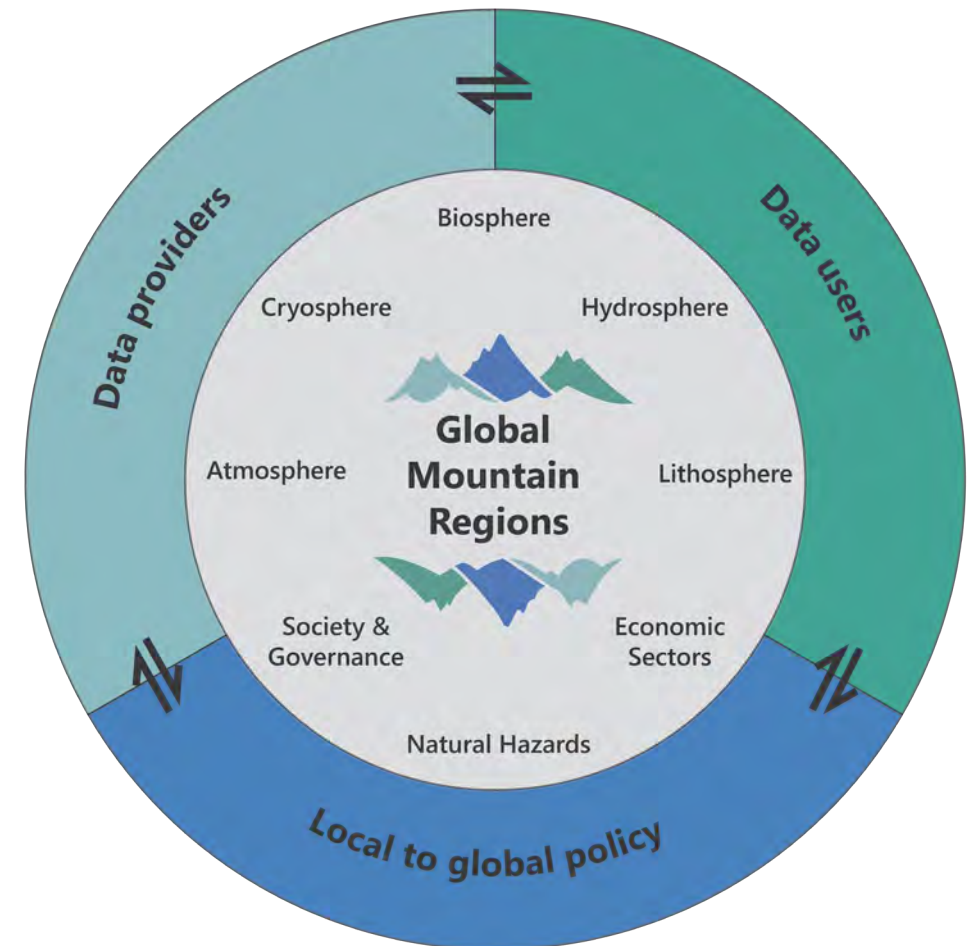
# GEO Mountains: an introduction

## *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 Task Group Objectives

- ❑ Lead and coordinate the development of education, training, and capacity building activities within the scope of GEO Mountains
- ❑ Geographic emphasis on (but not limited to) the focal regions of the Adaptation at Altitude programme (including Central Asia)



## Related efforts

- ❑ Submit resources to the GEO Mountains In Situ and General Inventories (to ensure a rich and comprehensive foundation of data) – *Task Groups 1.1a and 1.1b*
- ❑ Contribute “Knowledge Packages” via GEO Mountains to the [GEO Knowledge Hub](#) (transparent, reproducible, and extendable science for practical / policy applications) – *Task Group 1.4*

# Existing resources



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Mountains 101 content aligns with parts of the Alberta curriculum for Science 7, 8, 9, 10, and 20.

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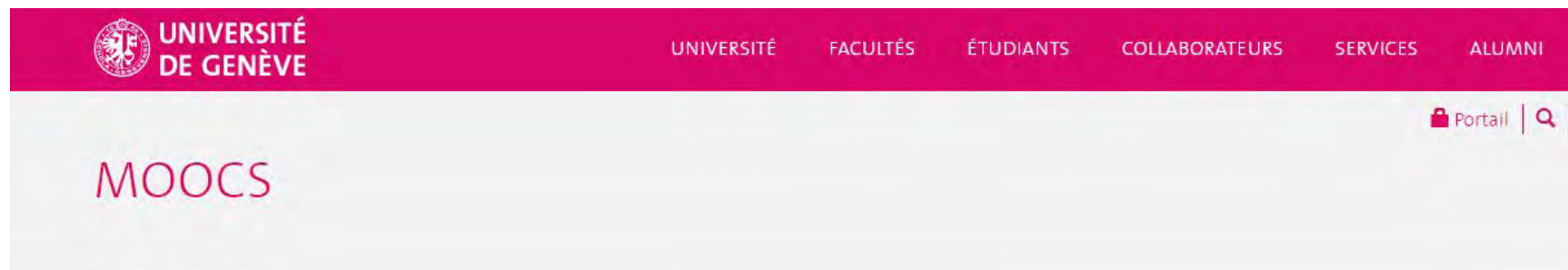
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### Get a certificate

Pay a modest fee to receive a certificate of completion at the end of the course. .

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# Existing resources



## COURS OUVERTS



Join the course

Mountains are recognized as particularly sensitive physical environments where intense and rapid changes have in the past, and may increasingly in the future, place pressure on their resource base.

In this context, a team of roughly 100 experts worked from 2008 to 2013 for the European ACOWA project



### Instructors



Martin Beniston



Markus Stoffel

### Coordinators

Victorine Castex, Marjorie Perroud, Stéphanie Piffeteau

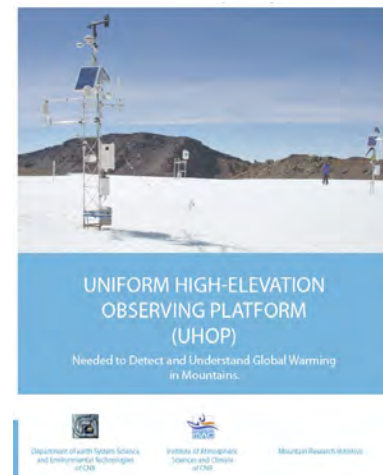
### Department

**INSTITUTE FOR ENVIRONMENTAL  
SCIENCES**

- ❑ As a first step, we should create a “Training” page on the GEO Mountains website and provide links to these external resources
- ❑ To be added to by the outputs of this TG!

## Ideas so far

- ❑ **GEO Mountains Summer School** lead by CNR at an observatory in the Gran Paradiso National Park (mountain Earth system science, but focusing on data use and integration for modelling applications, plus potentially a module on paleodata) – late June 2023 (not yet fixed)
- ❑ **Online video series** (e.g. starting with using open-source software / tools, e.g. QGIS, GDAL, to clip global datasets in the GEO Mountains General Inventory to mountainous / other AOIs)
- ❑ Workshops (ideally in person, but potentially also online video recordings) on **met station installation and maintenance**, in collaboration with the MRI's MOs and EDCC Working Groups



## Ideas so far, cont.

- “Hackathons” whereby, for example:
  - Existing datasets are combined to provide decision-support information to local environmental managers or other authorities, assessment exercises, and/or policy frameworks (e.g. UNFCCC, Sendai, UN Agenda 2030 / SDGs).
  - Efforts to communicate the implications of recent scientific studies to local stakeholders
  
- Others?

## Next steps

Who is willing to help develop a plan / programme? covering:

- Topics / content to focus on (substantiating the need)
  - Target audience(s), e.g. students, practitioners, policy-makers?
  - Format(s): Virtual, summer / winter schools, etc.
  - When and where: some initial activities this year, becoming more substantial and regular during the period 2023-2025?
- 
- AOB?

**Many thanks for your interest and contributions!**

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