



Mountain Observatories Working Group

MRI Working Group Fact Sheet
(Updated 23 June 2020)

The MRI Working Group builds on the [Global Network of Mountain Observatories \(GNOMO\)](#), which was established in 2015 to create a network that would generate comparable data on mountain social-ecological systems – from climate and hydrology to ecology and human use and governance. The Mountain Observatories Working Group aims to facilitate the development of a network of mountain super-sites where observations will be conducted at multi-thematic scale. These super-sites will also work as 'hubs' for regional monitoring.

Key Working Group Details

This Working Group was created in 2017 and is in its second phase (2020-2021).

Working Group Lead:

[Maria Shahgedanova](#), University of Reading, UK

A full member list can be found in the appendix.

Outputs and achievements to date:

Upcoming

Planned Activities and Outputs for 2020-2021:

- A review paper exploring the availability and good practice of multi-disciplinary monitoring in the mountains and highlighting areas (both geographical and thematic) for improvement of the integrated monitoring is planned for publication in 2020.
- A series of regional workshops on mountain observatories. First regional workshop is planned to take place in Central-Asia in the autumn 2020 – *Due to Covid-19, this event is postponed. New dates to be confirmed soon.*

Latest News

MOUNTAIN OBSERVATORIES WORKING GROUP REPRESENTED MRI AT THE INTERNATIONAL MOUNTAIN CONFERENCE 2019 (30 September 2019)

Members of the working group Represented MRI at the International Mountain Conference 2019, Innsbruck, Austria, delivering presentations, posters and participating in a range of sessions.

[Read more here.](#)

GEO-GNOME WORKSHOP ON ESSENTIAL CLIMATE VARIABLES FOR MOUNTAINS (30 September 2019)

The working group lead Maria Shahgedanova participated and presented plans of the Mountain Observatories Working Group at the GEO-GNOME 'Essential Climate Variables for Observations in Mountains'

[Read more here.](#)

Project Background

The MRI's work on the development of a network of Mountain Observatories (MO) commenced in 2014 at an MRI-led meeting in Reno, USA, where key themes of the initiative were identified and development of the MO community was initiated. This work continued in 2015 when a workshop 'Global Network for Observations and Information on Mountain Environments (GEO-GNOME)' was held in Crested Butte, USA, bringing together a multidisciplinary international community of experts (including MRI SLC members) and practitioners running or aspiring to run MO and representatives of organisations whose experience and expertise were potentially beneficial for the development of MO. The main outcomes from this meeting were: (i) definition of MO and of a desirable range of data to be collected; (ii) a global database of MO providing details of monitoring programmes and data availability; (iii) preliminary gap thematic and geographical gap analyses; and (iv) an agreement on the design and partial implementation of a platform for MO data exchange.

A preliminary version of the global database is now available below and will be expanded further. A brief review of gaps in [predominantly meteorological and hydrological] observations in the mountains and technologies helping to fill these gaps was published by Strachan et al. (2016) summarising discussions at the GEO-GNOME meetings. More recently, MRI SLC members focused on more broad, multi-thematic monitoring, examining approaches and practices employed by the established observatories and networks in order to facilitate knowledge transfer to emerging observatories, with emphasis on the developing world.

The Mountain Observatories Project works in close collaboration with the [MRI Elevation Dependent Climate Change Group](#).

Project Aims

The project aims to facilitate the development of a network of mountain super-sites where observations will be conducted at multi-thematic scale. These super-sites will also work as 'hubs' for regional monitoring.

To support this development, at Stage 1 of the project, the team will develop a position paper on Mountain Observatories which seeks to: (i) provide examples of the current state of environmental monitoring in the mountains, available networks, and products in relation to achieving the Sustainable Development Goals (SDG); (ii) assess challenges with the implementation of such holistic approach; (iii) discuss successful examples of the existing mountain observing systems (individual observatories or networks) operating at various scales; and (iv) propose the principles and ways in which a successful and sustainable network of mountain observatories / supersites can be developed.

At Stage 2, the team will aim to facilitate the implementation of multi-thematic monitoring by conducting regional workshops at the emerging multi-thematic sites, bringing together experts from the well-established observatories and academics and practitioners running the identified emerging sites.

How to join

As community-led activities, these Working Groups are open to anyone from the [MRI members](#) to participate and contribute to the Working Group's work plan. **Early career researchers (typically up to 5 years since attaining a postgraduate degree), women, and researchers and practitioners from developing countries and less represented mountain regions are particularly encouraged to join and participate.** Please contact the Working Group lead to seek information to join:

[Maria Shahgedanova](#), University of Reading, UK

Map of Observatories

[Follow this link to view the map of Observatories on the working group homepage.](#)

APPENDIX

Members of the MRI Mountain Observatories Working Group (*as of 23.6.2020*):

[Maria Shahgedanova](#), University of Reading, UK
Aster Gebrekirstos, World Agroforestry Centre, Kenya
Ricardo Grau, National University of Tucumán, Argentina
Christian Huggel, University of Zürich, Switzerland
Robert Marchant, University of York, UK
Veerle Vanacker, University Catholique de Louvain, Belgium
Mathias Vuille, University at Albany - State University of New York, USA
Rolf Weingartner, University of Bern, Switzerland