

M O U N T A I N R E S E A R C H I N I T I A T I V E





Professor Maria Shahgedanova on behalf of the MRI network

Facilitating data provision in the TPRCC region

**The Mountain Research Initiative** 

www.mountainresearchinitiative.org

# THE MRI NETWORK



The MRI and its Coordination Office was proposed in 2000 by the then International Geosphere Biosphere Programme (**IGBP**) of the International Council for Science (ICSU), together with the International Human Dimensions Programme (**IHDP**) of the International Social Science Council and the FAO/UNEP/UNESCO/WMO/ICSU-sponsored Global Terrestrial Observation System (**GTOS**), in response to a need to ...

"...achieve an *integrated approach* for observing, modelling and investigating global change phenomena and processes *in mountain regions*, including the impacts of these changes and of human activities on mountain ecosystems".

The MRI is hosted by the **Centre for Development and Environment** (CDE) at the University of Bern and funded by the **Swiss Academy of Sciences (SCNAT)**.



Priority regions: Central Asia, Hindu Kush – Himalayas, Caucasus, East Africa, tropical and subtropical Andes

# MRI Expert Database

Search the MRI Expert Database



Dr. Carolina Adler Executive Director Mountain Research Initiative

Executive Director

https://www.mountainresearchinitiative.org/ find-an-expert

# **MRI** activities in TPRCC region

- Facilitation of long-term multi-disciplinary monitoring and data acquisition
  and provision
- Strengthening mountain resilience and adaptive capacity through the reduction of risks and improved mountain governance
- Capacity building and education
- Regional workshops: identification of network-level research issues, gaps in knowledge
- Funding research projects focusing on data acquisition and provision, reducing risks and strengthening resilience

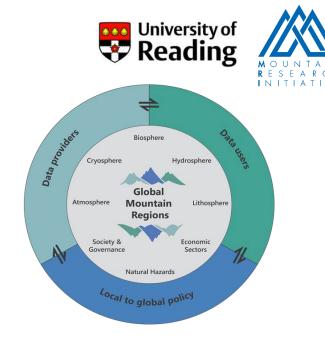
# 2023-24: Extreme events and risk assessments in TPRCC region

(https://geomountains.org/projects-impactstories/small-grants-projects/)

- Curation of Risk Data for High Mountain Asia (HiRISK)
- Central Asia Mountain Observatory Network (CAMON): Provision of data on GLOF and pluvial debris flows in Central Asia

### 2024-25

- Monitoring of glaciers in the Karakoram with special emphasis on water demand and management (STREAM)
- Risk assessment for hydropower projects from rock and/or ice avalanches in High Mountain Asia (REACH)
- Long-term monitoring of snow accumulation and related climate variables at a high-altitude cryospheric



# **Curation of Risk Data for High Mountain Asia**

# HiRISK @ https://hirisk.org/

**Expert Database** 

### **Risk Assessments**

**Risk data resources** 



**Technical Documents** 



Event	Year / Month	Language	Country 🗍	Туре	Report	*
PK1	2024 / 3	Urdu, English	Pakistan	Snow avalanche	Naran snow avalanche, Pakistan, March 2024	
NP1	2024 / 4	Nepali, English	Nepal	lce avalanche, GLOF	Birendra Lake ice avalanche, Nepal, April 2024	
PK2	2024 / 6	Burushaski, Urdu, English	Pakistan	GLOF	Dih GLOF, Pakistan, June 2024	
PK3	2024 / 8	Pashto, English	Pakistan	GLOF	Kumrat GLOF, Pakistan, August 2024	
IN1	2024 / 11	Hindi, English	India	Landslide	Kunwari Landslide, India, 2022 – 2024	

### Subscribe for reports: https://hirisk.org/risk-assessments/

- Consortium of universities in TPRCC region led by HUC
- Multi-hazard data an assessments
- Reports on individual events and annual reports for TPRCC region
- Views from TPRCC on using HiRISK platform for provision of data and adaptation are invited
- Contact: Dr Jacob Steiner (jakob.steiner@uni-graz.at)



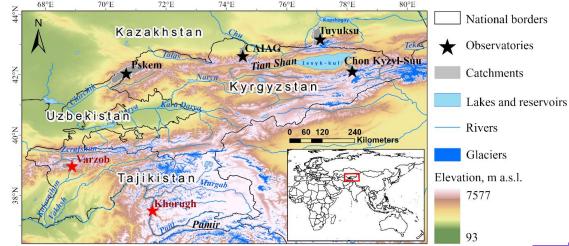
# **Central Asia Mountain Observatories Network** (CAMON)





GLOF Glacial

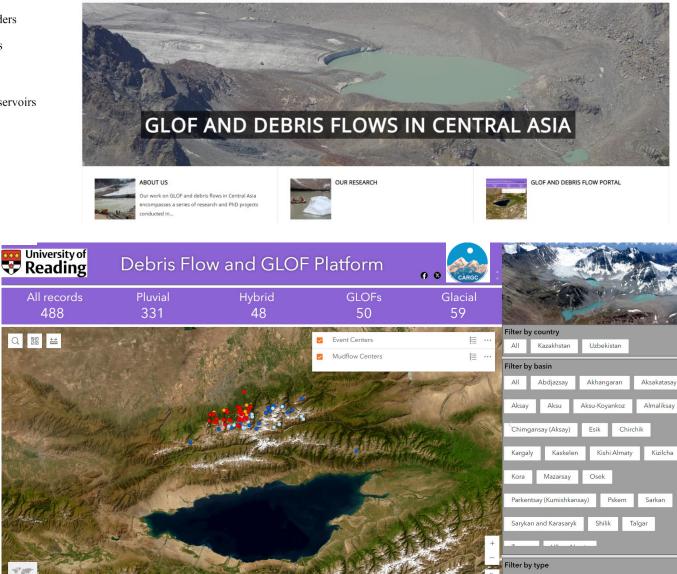
Hybrid



https://research.reading.ac.uk/centralasia-mountain-observatory/



https://research.reading.ac.uk/GLOF-predictingdebris-flow/

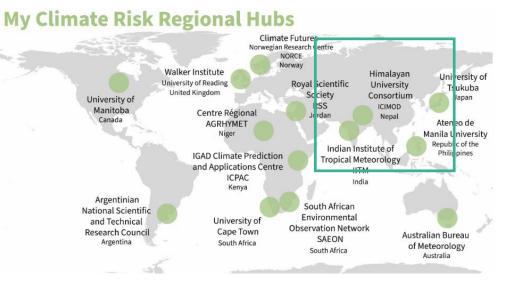


# **Collaborative efforts**





- MRI collaborates with multiple institutions worldwide
  > HUC and ICIMOD
  - Walker Institute for Climate System Research @ University of Reading: World Climate Research Programme activity 'My Climate Risk' (https://walker.reading.ac.uk/my-climate-risk/)



# **Forthcoming events**

- High-level Conference: International Year for Glaciers Preservation, Dushanbe, Tajikistan, June 2025. <u>https://www.un-glaciers.org/en</u>
  - Will TPRCC consider a side event?
- International Mountain Conference, September 2025, Innsbruck, Austria
  - Several sessions and workshops proposed by MRI. TPRCC participation and contributions are welcome.

# Thank you

# www.mountainresearchinitiative.org

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