



CONFERENCE PROGRAM

International Conference on Monitoring of Glaciers and Glacial Lakes – Hazard Management, dedicated to “International Year of Glaciers’ Preservation, 2025”

Venue: Hyatt Regency, 26/1, Ismoili Somoni Prospekt, Dushanbe, Tajikistan

Conference presenting languages: Tajik, Russian and English



Dushanbe, 2024

CONFERENCE PROGRAM

DAY 1	
9:00-9:50	Registration of participants
10:00-10:40	Opening ceremony
10:45-12:00	Plenary session
12:00-13:00	Lunch
13:00-14:30	Sessions: 1A and 1B
14:30-15:00	Coffee break
15:00-16:00	Sessions: 2A and 2B
18:00	Welcoming dinner
DAY 2	
9:00-10:30	Sessions: 3A and 3B
10:30-10:50	Coffee break
10:50-12:00	Sessions: 4A and 4B
12:00-13:00	Lunch
13:00-14:30	Session C
14:30-14:50	Coffee break
15:00-16:00	Panel Discussion
16:00-17:00	Conference closing ceremony

Session A

Understanding the Process – Trigger, Mechanics of Debris-Flow Growth, Entrainment, Dynamics, and Impacts.

Advanced Methods and Tools for Debris Flow Prediction and Analysis: GIS and Remote Sensing.

Debris Flow Prediction: Advanced Methods for Natural Hazard Management.

Understanding Debris Flow Dynamics in a Changing Climate

Session B

Study of glaciers and glacial lake dynamics. Current state of the cryosphere, glaciers, snow cover, and water resources.

Complex Influences on Glacial and Snow Systems: Assessing the Effects of Environmental and Climatic Factors

Innovative Techniques and Modelling for Glacier Dynamics and Forecasting.

Best Practices on Mitigation Measures, Early Warning Systems, Early Prevention, and Interdisciplinary Approaches to Disaster Risk Reduction.

Session C

Glacier Dynamics and Glacier-Lake Outburst Floods (GLOF) Management.

Conference Program

DAY 1: August 26, 2024 (Monday)	
09:00-09:50	Registration and coffee break
Moderator:	Jamila Baidulloeva - Deputy Director of the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan
10:00-10:40	<i>Opening speech:</i> Abdullo Kurbonzoda - Director of the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan
	<i>Welcoming speech:</i> Sheralizoda Bahodur Ahmadjon - Chairman of the Committee for Environmental Protection under the Government of the Republic of Tajikistan
	<i>Welcoming speech:</i> Kobiljon Khushvakht - President of National Academy of Sciences, Tajikistan
	<i>Welcoming speech:</i> Salome Steib - Head of Swiss Cooperation Office in Dushanbe
	<i>Welcoming speech:</i> Qozidavlat Qoimdodov – Ambassador of Aga Khan Development Network in Tajikistan
10:45-11:50	PLENARY SESSION
Moderator:	Muzafar Shodmonov - Deputy Director of Panj River Basin Project of the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan
10:50-11:00	Topic: Melting of Glaciers: Challenges and Possible Solutions Jamila Baidulloeva - Deputy Director of the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan
11:00-11:10	Nazrialo Sheralizoda – Director of the Center for Glacier Research of the National Academy of Sciences of Tajikistan
11:10-11:20	Svetlana Jumaeva - Chief Specialist for Climate Change and Disaster Reduction, Swiss Cooperation Office
11:20-11:30	Topic: “Experience of Aga Khan Agency for habitat in Disaster Risk Management and Climate Change”. Tohir Sabzaliev – Head of Department, Operational Research and Technical, Aga Khan Agency for Habitat

11:40-11:40	<p>Topic: “The Role of the Branch of the International Fund for Saving the Aral Sea in the Development of Cooperation on Research and Protection of Glaciers”</p> <p>Mavlon Hokimalizoda – Director of the Branch of Executive Committee of the International Fund for Saving the Aral Sea in the Republic of Tajikistan</p>
11:50-12:00	Group Photo
12:00-13:00	Lunch
13:00-14:30	Session 1A: Hall Brussels “Understanding the Process – Trigger, Mechanics of Debris-Flow Growth, Entrainment, Dynamics, and Impacts”
Moderator 1A:	Jamila Baidulloeva - <i>Deputy Director of the Agency for Hydrometeorology under the Government of the Republic of Tajikistan.</i>
Themes:	Exploring the fundamental processes behind debris-flows, including their triggers, dynamics, and impact mechanisms. This session will focus on the physical and environmental factors that contribute to debris-flow formation and movement.
13:05-13:25	<ul style="list-style-type: none"> ○ Topic 1: “Rain-induced mudflows and the state of their forecasting in Kazakhstan.” Yafyazova Roza - <i>Head of the Department for Research of Mudflow Processes and Forecasting of Mudflows, RSE Kazhydromet, Almaty</i>
13:25-13:45	<ul style="list-style-type: none"> ○ Topic 2: “Establishment of an early warning system along mudflow-prone streams on the example of the Tembolayi Mudflow-Prone Channel” Saidov Mirzo – <i>Professor at Tajik National University (Dushanbe, Tajikistan).</i>
13:45-14:05	<ul style="list-style-type: none"> ○ Topic 3: “Understanding the process – trigger, mechanics of debris-flow growth, entrainment, dynamics, and impacts.” Akramov Ubaidullo – <i>Lecturer at Agrarian University of Tajikistan named after Shirinshoh Shohtemur.</i>
14:05-14:25	<ul style="list-style-type: none"> ○ Topic 4: “The result of studies of glacial lakes by specialists of the Center for Glacier Research and their partners” Hamidov Anvar – <i>Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan.</i>
13:00-14:30	Session 1B: Hall İstanbul “Study of Glaciers and Glacial Lake Dynamics. Current State of the Cryosphere, Glaciers, Snow Cover, and Water Resources”
Moderator 1B:	Muslim Azimshoev – <i>Disaster Risk Reduction Supervisor at Aga Khan Agency for Habitat, Tajikistan.</i>
Themes:	Examining the current state and dynamics of glaciers and glacial lakes, focusing on their morphological features and melting patterns. It aims to understand how changes in the cryosphere affect regional and global water cycles, ecosystems, and resource management.

13:05-13:25	<ul style="list-style-type: none"> ○ Topic 1: “Glacial lakes as a dynamic indicator of the interaction of climate, geology, and geodynamics.” Niyozov Anzor – <i>Leading Researcher of the Department of Geography and Remote Sensing of the National Academy of Sciences of Tajikistan.</i>
13:25-13:45	<ul style="list-style-type: none"> ○ Topic 2: “Monitoring of glaciers and glacial lakes - hazard management.” Turaev Tolib - <i>Head of the Kashkadarya Hydrometeorological Center Republic of Uzbekistan.</i>
13:45-14:05	<ul style="list-style-type: none"> ○ Topic 3: “Monitoring of glaciers and glacial lakes.” Muhammadrahim Yusufi – <i>Member of the Majlisi Namoyandagoni Majlisi Oly (Parliament) of Tajikistan.</i>
14:05-14:25	<ul style="list-style-type: none"> ○ Topic 4: “Investigating permafrost in Tajikistan: Geophysical measurements and InSAR” Tamara Mathys – <i>PhD student at the University of Fribourg (Switzerland).</i>
14:30-15:00	Coffee Break
15:00-16:00	Session 2A: Hall Brussels “Advanced Methods and Tools for Debris Flow Prediction and Analysis: GIS and Remote Sensing”.
Moderator 2A:	Hamidov Anvar – <i>Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan</i>
Themes:	The session focuses on will focus on the application of Geographic Information Systems (GIS) and Remote Sensing technologies for predicting and analyzing debris flows. These advanced tools can be used to identify areas at risk, monitor changes in land use and topography, and develop early warning systems to mitigate the impacts of debris flow events.
15:00-15:20	<ul style="list-style-type: none"> ○ Topic 1: “Remote Sensing and GIS for monitoring and management of hazards.” Mukesh Singh Boori – <i>Associate Professor of Environmental Sciences at the University of Central Asia.</i>
15:20-15:40	<ul style="list-style-type: none"> ○ Topic 2: “Monitoring, forecasting and prevention of dangerous hydro-meteorological phenomena in the Republic of Uzbekistan.” Mutavaliyev Mullahuja – <i>Head of the Namangan Hydrometeorological Center of the Republic of Uzbekistan.</i>
15:40-16:00	<ul style="list-style-type: none"> ○ Topic 3: “Dynamics of moraine-covered glaciers in the Vanj, Muksu, and Obihingob river basins using Remote Sensing method.” Davlyatova Adolat – <i>Scientific Worker at the Center for Research of Glaciers of the National Academy of Sciences of Tajikistan.</i>
15:00-16:00	Session 2B: Hall İstanbul “Complex Influences on Glacial and Snow Systems: Assessing the Effects of Environmental and Climatic Factors”.

Moderator 2B:	Pirmamadov Ubaidullo – <i>Supervisor, Geology unit, Aga Khan Agency for Habitat, Tajikistan</i>
Themes:	This session explores the complex interactions between glacial and snow systems and various environmental and climatic factors. Participants will discuss the impacts of climate change, temperature variations, precipitation patterns, and other influences on the behavior of glaciers and snowfields. The session will also delve into the implications of these changes for water resources, ecosystems, and human communities.
15:00-15:20	<ul style="list-style-type: none"> Topic 1: “The Impact of Climate Change on Glaciers and Glacier Lakes in Gunt River Basin.” Navruzshoev Hofiz – <i>Research Associate at Mountain Societies Research Institute (MSRI), University of Central Asia Graduate School of Development.</i>
15:20-15:40	<ul style="list-style-type: none"> Topic 2: “Modern Glaciation of the Western Pamirs in the Context of Climate Change.” Karamkhudoev Alim– <i>Head of the Department of Geography and Tourism of Khorog State University named after M. Nazarshoev.</i>
15:40-16:00	<ul style="list-style-type: none"> Topic 3: “The Condition of Glaciers in the Vanch River Basin Under Climate Change Conditions.” Davlatova Munzifa – <i>Scientific Worker at the Center for Research of Glaciers of the National Academy of Sciences of Tajikistan.</i>
18:00	Welcoming Dinner (Venue: <u>Bukhara Restaurant</u>)
DAY 2: August 27, 2024 (Tuesday)	
09:00-10:30	Session 3A: Hall Brussels “Debris Flow Prediction: Advanced Methods for Natural Hazard Management”
Moderator 3A:	Nazirzoda Kamoliddin - <i>Deputy Director of the Center for Research of Glaciers of the National Academy of Sciences of Tajikistan.</i>
Themes:	Session focuses on the application of advanced methods for predicting debris flows and their relevance in natural hazard management. Participants will discuss the latest techniques and tools used to assess the risk of debris flows, develop early warning systems, and implement mitigation strategies to protect communities and infrastructure from the devastating impacts of these events.
09:05-09:25	<ul style="list-style-type: none"> Topic 1: “Glaciological Changes as a Factor in Natural Disasters” Kabutov Khusrav - <i>Head of the Center for Research of Glaciers of the National Academy of Sciences of Tajikistan.</i>
09:25-09:45	<ul style="list-style-type: none"> Topic 2: “Flood in the Debed and Agstev river basins in May 2024: Monitoring and Forecasting” Amalya Misakyak – <i>Director of Hydrology Service of Armhydromet, Armenia.</i>

09:45-10:05	<ul style="list-style-type: none"> ○ Topic 3: “Assessments – application of innovative methods, modeling approaches, and tools for forecasting and modeling debris flow, including Glacial Lakes Outburst Flood (GLOF)” Silmonov Intizor – <i>DRR Analyst at the Aga Khan Agency for Habitat, Tajikistan.</i>
10:05-10:25	<ul style="list-style-type: none"> ○ Topic 4: “Debris Flow Prediction: Advanced Methods for Natural Hazard Management” Salikhboev Khurshed – <i>GIZ.</i>
09:00-10:30	Session 3B: Hall İstanbul “Innovative Techniques and Modelling for Glacier Dynamics and Forecasting”
Moderator 3B	Rahmonov Ramazon - <i>Head of the Center for the Study of Glaciers of the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan</i>
Themes:	This session explores innovative techniques and modeling approaches for studying glacier dynamics and forecasting. Participants will discuss the latest advancements in remote sensing, field measurements, and numerical modeling to better understand the behavior of glaciers, predict their future evolution, and assess the potential impacts of climate change on water resources, ecosystems, and human communities.
09:05-09:25	<ul style="list-style-type: none"> ○ Topic 1: “Towards sustainable cryosphere monitoring in Tajikistan.” Tomas Saks – <i>Senior Researcher at the University of Fribourg.</i>
09:25-09:45	<ul style="list-style-type: none"> ○ Topic 2: “Quantifying Contemporary and Future Risks of the Naturally Dammed Glacial Lake Rivakkul Using Geoinformatics Technique and Morphometric Indices” Khizer Zakir – <i>Master student of Digital Earth, Geoinformatics, and Geodata sciences at the University of South Brittany and University of Salzburg.</i>
09:45-10:05	<ul style="list-style-type: none"> ○ Topic 3: “Negative effects of melting glaciers and Climate Change on the tangible and intangible culture of communities” Alamshoev Qurboniddin – <i>Senior Research Fellow at Humanitarian Institute of National Academy of Sciences of the Republic Tajikistan named after B. Iskandarov</i>
10:05-10:25	<ul style="list-style-type: none"> ○ Topic 4: “Understanding the process – trigger, mechanics of Debris-flow growth, entrainment, dynamics, and impacts” Ghayrat Azizzoda – <i>Member of the Majlisi Namoyandagoni Majlisi Oly (Parliament) of Tajikistan</i>
10:30-10:50	Coffee Break
10:50-12:00	Session 4A: Hall Brussels “Understanding Debris Flow Dynamics in a Changing Climate”

Moderator 4A	Rahmonov Ramazon - <i>Head of the Center for the Study of Glaciers of the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan</i>
Themes:	Exploring the impacts of climate change on debris flow dynamics. Participants will discuss how factors such as rising temperatures, altered precipitation patterns, and changes in land use can influence the frequency, intensity, and location of debris flow events. The session will also discuss the implications of these changes for risk assessment, early warning systems, and mitigation strategies
10:55-11:15	<ul style="list-style-type: none"> ○ Topic 1: “Understanding the process – trigger, mechanics of Debris-flow growth.” Salimov Abdumajid – <i>Chief Specialist of the Department of Hydrogeology and Engineering Geology of the Main Department of Geology under the Government of the Republic of Tajikistan.</i>
11:15-11:35	<ul style="list-style-type: none"> ○ Topic 2: “The Impact of Climate Change on the Environment” Zubaida Shomamadova – <i>Lecturer at Khorog State University, named after M. Nazarshoev</i>
11:35-11:55	<ul style="list-style-type: none"> ○ Topic 3: “Emergency Planning and Response” Zaynura Olimnazarova – <i>Head Nurse at Aga Khan Medical Center, Khorog.</i>
10:50-12:00	Session 4B: Hall İstanbul “Best Practices on Mitigation Measures, Early Warning Systems, Early Prevention, and Interdisciplinary Approaches to Disaster Risk Reduction”
Moderator 4B:	Saidov Sattor - <i>Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan</i>
Themes:	This session focuses on best practices in disaster risk reduction, with a particular emphasis on mitigation measures, early warning systems, early prevention, and interdisciplinary approaches. Participants will discuss effective strategies for reducing the vulnerability of communities and infrastructure to natural hazards, including debris flows and glacial lake outburst floods.
10:55-11:15	<ul style="list-style-type: none"> ○ Topic 1: “Disaster Preparedness, Climate Change and Adaptation.” Sarafroz Mavlyanov – <i>Project Officer at ACTED (Dushanbe, Tajikistan)</i>
11:15-11:35	<ul style="list-style-type: none"> ○ Topic 2: “Impact of exogenic geological processes on the socioeconomic infrastructure of Khorog City, GBAO.” Elnazarov Sangin – <i>Head of the sector, representative office of the Main Department of Geology in Gorno-Badakhshan Autonomous Oblast, candidate of geological and mineralogical sciences, expert gemologist.</i>

11:35-11:55	<ul style="list-style-type: none"> ○ Topic 3: “Characteristics of Debris Flow Occurrence and AKAH's Experience in Developing Protection Methods Against Them in the Gorno-Badakhshan Autonomous Region (GBAO).” Ganjali Shafiev – <i>Consultant at Aga Khan Agency for Habitat, Tajikistan.</i>
12:00-13:00	Lunch
13:00-14:30	Session C: Hall Brussels “Glacier Dynamics and Glacier-Lake Outburst Floods (GLOF) Management”
Moderator C:	Mahmudov Stanislav - <i>Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan</i>
Themes:	This session focuses on glacier and the management of glacier-lake outburst floods (GLOFs). Participants will discuss the latest research on glacier behavior, including the factors that contribute to the formation and growth of glacial lakes. The session will also explore effective strategies for monitoring glacial lakes, assessing the risk of GLOFs, and implementing early warning systems and mitigation measures to protect communities and infrastructure downstream.
13:05-13:25	<ul style="list-style-type: none"> ○ Topic 1: “Disaster Preparedness, Climate Change and Adaptation.” Simon Allen – <i>Representative from Zurich University</i>
13:25-13:45	<ul style="list-style-type: none"> ○ Topic 2: “Monitoring Impacts and Fatalities of GLOFs and Snow Avalanches: Ongoing Efforts in the HMA.” Arnaud Ceisarman – <i>Senior Research Fellow/Assistant Director at Mountain Societies Research Institute (MSRI), University of Central Asia Graduate School of Development .</i>
13:45-14:05	<ul style="list-style-type: none"> ○ Topic 3: “Glacial mudflows from the Barylmas glacier and their connection with changes in meteorological parameters.” Shomamadov Alisho – <i>Senior Scientific Worker at the Center for Research of Glaciers of the National Academy of Sciences of Tajikistan.</i>
14:05-14:25	<ul style="list-style-type: none"> ○ Topic 4: “Monitoring of glacial lakes and glacial lake outburst floods in the territory of Tajikistan.” Jurabekov Tamlikho – <i>Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan.</i>
14:30-15:00	Coffee Break
15:00-16:00	Panel Discussion: “Enhancing Early Warning Systems and Mitigation Strategies. Data Integration for Disaster Management”.
Moderator:	Davlatbekov Fayzmamad – <i>Climate Change Supervisor at Aga Khan Agency for Habitat, Tajikistan.</i>
	<u>Discussion Points:</u>

	<ul style="list-style-type: none"> ○ Innovations in Early Warning Technologies: Examine the latest advancements in early warning systems for debris flows and glacial lake outburst floods (GLOFs), and how they can be applied in various regions. ○ Design and Implementation: Best practices for designing robust early warning systems and integrating them into existing hazard management frameworks. ○ Community Integration: Strategies for ensuring that early warning systems effectively reach and are understood by local communities. ○ Mitigation Measures: Effective mitigation strategies for reducing the impact of debris flows and GLOFs, including structural and non-structural measures ○ Case Studies: Review successful examples of early warning systems and mitigation measures, discussing what made them effective and how they can be replicated. ○ Data: Data collection, management, integration techniques, and real-time data utilization. <p><u>Participants:</u></p> <p>Speaker 1: Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of the Republic of Tajikistan.</p> <p>Speaker 2: Committee of Emergency Situations under the Government of the Republic of Tajikistan.</p> <p>Speaker 3: Mountain Societies Research Institute of the University of Central Asia.</p> <p>Speaker 4: Aga Khan Agency for Habitat, Tajikistan.</p> <p>Speaker 5: The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)</p>
<p>16:00-17:00</p>	<p style="text-align: center;">Conference Closing Ceremony:</p> <ul style="list-style-type: none"> ○ Drafting of the Final Document and Outcomes of the Conference ○ Summary of Key Findings and Conclusions ○ Discussion on Next Steps and Future Collaborations