IAHS 2025
October 05 - 10, 2025
Indian Institute of Technology Roorkee, India

PROGRAMME

XIIth Scientific Assembly of International Association of Hydrological Sciences (IAHS 2025)

October 05-10, 2025

Organized by

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Program at a Glance

SCIENTIFIC PROGRAM						
Timing	**Sunday, October 5**	**Monday, October 6**	**Tuesday, October 7**	**Wednesday, October 8**	**Thursday, October 9**	**Friday, October 10**
09.00 – 10.30		**1.1 Opening Ceremony** (from 08.30)	2.1 Oral+ForumOral	3.1 Oral+ForumOral	4.1 Stockholm Water Prize Laureates Session (from 08.45)	5.1 Oral+ForumOral
10.30 – 11.00		Chai break				
11.00 – 12.30		1.2 Oral+ForumOral	2.2 Oral+ForumOral	3.2 Oral+ForumOral	4.2 Oral+ForumOral	5.2 Poster
12.30 – 13.30		Lunch break				
13.30 – 15.00		1.3 Oral+ForumOral	2.3 Oral+ForumOral	3.3 Oral+ForumOral	4.3 Oral+ForumOral	5.3 Oral
15.00 – 15.30	Registration	Chai break				
15.30 – 16.30		1.4 Oral+ForumOral	2.4 Oral+ForumOral	3.4 Poster	4.4 Oral+ForumOral	**5.4 Closing Ceremony**
16.30 – 18.00		1.5 Poster	2.5 Poster	3.5 IAHS AWARDs (from 16.00)	4.5 Poster	
SOCIAL EVENTS						
18.00 – 19.00	Ice Breaking Food & Drinks	*Sports Events	Science for Solution PANEL SESSION (from 17.00)		Cultural Event	Visit to Haridwar (from 17.30)
			IAHS Agora (from 18.00)	Gala Dinner (from 18.30)		
19.00 – 22.00			Buffet Dinner			

Sports: Yoga, Frisbee, Football, Swimming, Lawn Tennis\Basketball\Lawn Tennis\Squash\Badminton

 # Lunch break (on Monday for SYSTA Awardees)

Preface

The XIIth International Association of Hydrological Sciences (IAHS) Scientific Assembly is set to make a grand return to India after a remarkable gap of 16 years. Scheduled to take place from Oct 5 to Oct 10, 2025, the Assembly will be hosted in the historic city of Roorkee, which is renowned for its pioneering contributions to hydrological research, cutting-edge water resource management education, and its proximity to critical Himalayan watersheds. Roorkee's legacy as the site of India's oldest engineering institution, now IIT Roorkee, further underscores its status as a global leader in hydrological studies. This is an exciting milestone for India's hydrological community, as the last IAHS Assembly held in the country was in 2008, in Hyderabad.

The IAHS Scientific Assembly, established in 1922, has served as a pivotal platform for advancing the science of hydrology globally. With a mission to promote the study of water resources and their sustainable management, the Assembly facilitates collaboration among hydrologists, geoscientists, and policymakers. Over the decades, it has become a hub for presenting groundbreaking research, exchanging ideas, and shaping the future of water science. Its periodic gatherings have consistently addressed pressing water-related challenges, making significant contributions to global hydrological knowledge and practices.

The 2008 IAHS Scientific Assembly in Hyderabad was organized by the National Geophysical Research Institute (NGRI) in collaboration with the Indian Association of Hydrologists (IAH). Their efforts brought together experts from across the globe, fostering important discussions on water resource challenges and hydrological advancements. Proper acknowledgment of these contributions highlights the significant role of Indian institutions in advancing hydrological sciences.

The 2008 Assembly in Hyderabad was a landmark event that brought together researchers, scientists, and policymakers to address pressing challenges in water resources and hydrology. It provided a platform to discuss innovative solutions and collaborative opportunities, leaving a lasting impact on global hydrological studies. Sixteen years later, the XIIth IAHS Scientific Assembly in Roorkee promises to build on that legacy, addressing contemporary challenges such as increasing water scarcity, the impact of hydro-climatic extremes, innovative approaches to water resource management, and the integration of hydrological sciences with climate adaptation strategies.

Roorkee, home to the prestigious Indian Institute of Technology (IIT) Roorkee, NIH Roorkee, IRI Roorkee, and CBRI Roorkee, is renowned for its contributions to hydrological research and education. With its strategic location near the Himalayan watersheds and a vibrant community of researchers, Roorkee is an ideal venue for such a global event. The Assembly will be jointly organized by IIT Roorkee, NIH Roorkee, IRI Roorkee, and CBRI Roorkee, showcasing the region's collective expertise in hydrology and related fields.

Director's Message

Prof. K.K. Pant, Director, IIT Roorkee.

Dear Participants,

It is my great honour to welcome you to the XIIth Scientific Assembly of the International Association of Hydrological Sciences (IAHS) 2025. This distinguished gathering unites more than 750 participants from 49 countries, representing the very best of global scientific exchange in our shared mission to understand and safeguard the world's water resources.

As the host, the Indian Institute of Technology Roorkee (IIT Roorkee) is privileged to extend its legacy as one of India's foremost centres of excellence in science, technology, and education. With a history spanning over 175 years, IIT Roorkee has been at the forefront of water research and teaching, shaping generations of hydrologists, engineers, and policymakers who continue to lead initiatives worldwide. The Institute is proud to house Asia's first Department of Hydrology and remains a recognized hub for innovation, capacity building, and policy-relevant research in water sciences.

This Assembly, with its unique plenary-only format, embodies our commitment to inclusive and impactful dialogue. Every contribution receives full visibility, with a special focus on empowering young and early-career researchers. In collaboration with the National Institute of Hydrology, the Irrigation Research Institute, and the Central Building Research Institute, we are proud to host this vibrant platform for interdisciplinary exchange.

Water lies at the centre of humanity's most pressing challenges, from climate resilience and disaster risk reduction to sustainable management and equitable access. Meeting these challenges demands collaborative science, shared knowledge, and global solidarity. I am confident that this Assembly will inspire new ideas, enduring partnerships, and transformative innovations that extend well beyond these six days, contributing meaningfully to both hydrology and society as a whole.

On behalf of IIT Roorkee, I extend a warm welcome to each of you and wish you an intellectually stimulating, collaborative, and memorable experience at IAHS 2025.

With best regards,
Prof. K. K. Pant
Director, Indian Institute of Technology Roorkee

President's Welcome

Dr. Salvatore Grimaldi, University of Tuscia, Italy.

Dear Participants,

It is a great pleasure and a true honor to welcome you to the XII Scientific Assembly of the International Association of Hydrological Sciences (IAHS). This Assembly represents the most important gathering of our global hydrological community, a moment to share knowledge, exchange ideas, and strengthen collaborations across continents. IAHS is unique among scientific associations: it is fully dedicated to hydrological sciences, with a proud history spanning more than a century. As one of the eight associations forming the International Union of Geodesy and Geophysics (IUGG), IAHS plays a key role in advancing hydrology worldwide. Our work is carried out in close partnership with leading international organizations, including the World Meteorological Organization and the UNESCO Intergovernmental Hydrological Programme, reflecting our commitment to linking science, policy, and practice. A core mission of IAHS is to foster inclusivity and collaboration in hydrological research.

This principle is at the heart of our third Decade initiative, HELPING – *Hydrology Engaging Local People IN One Global world* launched in 2023. The initiative emphasizes the crucial role of local knowledge in addressing global water challenges, highlighting that solutions to complex hydrological problems emerge most effectively when global science engages with local communities. Every two years, the IAHS Scientific Assembly convenes in a different country, providing opportunities to connect with diverse hydrological communities. It is a tradition that allows us to learn not only from research but also from the perspectives of local experts and practitioners. This year, we are delighted to return to India, sixteen years after our Assembly in Hyderabad, and to experience the warm hospitality of Roorkee and the Indian Institute of Technology.

I would like to extend my sincere thanks to the Local Organizing Committee, the IAHS Management Team, and all the volunteers whose dedication has made this Assembly possible. Most importantly, I encourage all participants especially early-career researchers to take full advantage of this unique opportunity: attend the plenary, ask questions, network with peers and senior colleagues, and engage actively in the many discussions that will shape the future of hydrology.

I wish you a stimulating, inspiring, and enjoyable week in Roorkee, confident that this Assembly will offer experiences and connections that will enrich your scientific journey and strengthen our global hydrological community.

With best regards,
Dr. Salvatore Grimaldi, University of Tuscia, Italy
President IAHS

Chairperson's Message

Prof. Sumit Sen, Head, Dept. of Hydrology, IITR.

Dear Colleagues and Friends,

It is my privilege to welcome you to the XIIth Scientific Assembly of IAHS 2025 at the Indian Institute of Technology Roorkee. The Department of Hydrology, IIT Roorkee, has a distinguished legacy as the first of its kind in a developing country, established in 1972 with support from the Government of India and UNESCO. Since then, it has evolved into a unique academic center solely devoted to hydrological sciences in India, nurturing global capacity building through education, training, and pioneering research. With ten dedicated faculty members, advanced laboratories, a meteorological observatory, and a model watershed, the Department has consistently advanced knowledge in surface water, groundwater, watershed management, climate change, and hydroinformatics. Over the past five decades, it has trained hydrologists from Asia, Africa, and beyond, and contributed significantly to global scientific and policy discourses in water.

Hosting IAHS 2025 is both an honor and a milestone for the Department. It reflects our alignment with IAHS's mission of advancing hydrological science worldwide and underscores the Department's role as a hub for knowledge exchange and innovation. Bringing together 627 participants from 49 countries and nearly 400 institutions, this Assembly offers us an unparalleled platform to showcase India's leadership in hydrology, strengthen global collaborations, and inspire the next generation of researchers.

As we celebrate this convergence of minds, we look forward to dialogue that addresses pressing challenges—climate resilience, sustainable water management, and equitable access. For the Department of Hydrology, this Assembly is not just a moment of pride, but also a springboard toward shaping future directions in research, education, and global partnerships.

On behalf of the Department of Hydrology, I warmly welcome you all. May this Assembly deepen our shared commitment to hydrology and generate ideas that will guide water science and stewardship for decades to come

With warm regards,
Prof. Sumit Sen
Chairperson, IAHS 2025
Head, Department of Hydrology
Indian Institute of Technology Roorkee

About IAHS

The International Association of Hydrological Sciences (IAHS) is a non-profit, non-governmental scientific association that promotes hydrology and related sciences worldwide. With over 12,000 members in more than 150 countries, IAHS represents the largest international community of hydrologists. Legally registered in the United Kingdom as a charity (IAHS Ltd), the Association operates under the umbrella of the International Union of Geodesy and Geophysics (IUGG) and the International Science Council (ISC).

Founded in 1922 in Rome during the General Assembly of IUGG, IAHS was established to recognize hydrology as a scientific discipline and to promote its advancement at the international level. Since then, it has grown into the oldest global community of hydrological scientists, dedicated to fostering scientific collaboration, knowledge exchange, and interdisciplinary approaches to understanding water. Over the past century, IAHS has been instrumental in organizing conferences and workshops, producing influential scientific publications, and launching initiatives that have shaped the field of hydrology.

IAHS's **vision**is to enable inclusive scientific knowledge exchange in hydrology for sustainable development in a changing world. Its **mission** is to collectively advance and promote hydrological sciences worldwide, contributing to the interdisciplinary understanding of water-cycle processes, the sustainable use of water resources, and the mitigation of water-related risks. Central to this mission is a long-standing commitment to equality, diversity, and inclusion—regardless of geographic origin, ethnicity, language, culture, career stage, gender identity, or ability.

The Association has also been proactive in establishing task forces and committees that address emerging challenges and strengthen community engagement. For example, the Early Career Committee, founded in 2017, ensures that the next generation of hydrologists is fully integrated into IAHS activities. The Committee for Africa, launched in 2018, works to enhance the participation of African scientists, foster mentorship, and promote connections between the African hydrological community and the global stage.

Aligned with the principles of the ISC, IAHS supports the right of all people to engage in scientific enquiry, benefit from advances in science and technology, and freely exchange knowledge. This philosophy is reflected in its contributions to international frameworks such as the UNESCO Recommendation on Open Science, which emphasizes the importance of openness and cooperation in addressing global scientific challenges.

Today, IAHS continues to embody more than a century of international scientific collaboration. Through its assemblies, scientific commissions, publications, and initiatives, it serves as a vital platform for advancing hydrology, strengthening international networks, and ensuring that scientific knowledge contributes to sustainable solutions for water-related challenges worldwide.

IAHS 2025 Scientific Committee

President		
Salvatore Grimaldi, Italy		
Secretary General		
Jean-Marie Kileshye Onema, South Africa		
Vice-President		
Christophe Cudennec, France	Archana Sarkar, India	Fuqiang Tian, China
IAHS Treasurer		
Konstantinos Soulis, Greece		
Chair IAHS Ltd		
Kate Heal, UK		
IAHS Executive Secretary		
Claire Lupton, UK		
IAHS Communications Officer Secretary		
Tarryn Payne, UK		

HSJ Editorial Team
HSJ Editor-in-Chief
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Konstantinos Soulis, Greece
Riddhi Singh, India
HSJ Editorial Manager
Lottie Rundall, UK

HSJ Submission & Review Coordinator
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Sujata Kulkarni, India
Khosro Morovati, China
Christina Orieschnig, France
Rim Ouchani, Tunisia
Santosh Palmate, USA

IAHS International Commissions

- **International Commission on Continental Erosion (ICCE)**
  President: Sergey Chalov, Russia
- **International Commission on Coupled Land-Atmosphere Systems (ICCLAS)**
  President: Christopher White, UK
- **International Commission on Groundwater (ICGW)**
  President: Michelle Newcomer, USA
- **International Commission on Human-Water Feedbacks (ICHWF)**
  President: Heidi Kreibich, Germany
- **International Commission on Remote Sensing (ICRS)**
  President: Maria Jose Polo Gomez, Spain
- **International Commission on Statistical Hydrology (ICSH)**
  President: Krzysztof Kochanek, Poland
- **International Commission on Snow and Ice Hydrology (ICSIH)**
  President: James McPhee, USA/Chile
- **International Commission on Surface Water (ICSW)**
  President: Alain Dezetter, France

- **International Commission on Tracers (ICT)**
  President: Maki Tsujimura, Japan

- **International Commission on Water Quality (ICWQ)**
  President: Dedi Liu, China

- **International Commission on Water Resources Systems (ICWRS)**
  President: Pedro Chaffe, Brazil

IAHS Working Groups

- **MOXXI (Measurements and Observations in the XXIst century)**
  Chair: Salvatore Manfreda, Italy

- **CANDHY (Citizen AND Hydrology)**
  Chair: Wouter Buytaert, UK

- **History of Hydrology**
  Chair: Keith Beven, UK

- **UPH (Unsolved Problems in Hydrology)**
  Chair: Gunter Bloschl, Austria

HELPING Decade Team

- **Chair Thom Bogaard Germany**

  Theme 1 Leader Justin Sheffield UK

  Theme 2 Leader Ana Mijic UK

  Theme 3 Leader Adeyemi Olusola Canada

About IIT Roorkee & Department of Hydrology

Indian Institute of Technology - Roorkee is among the foremost of institutes of national importance in higher technological education and in engineering, basic and applied research. Since its establishment, the Institute has played a vital role in providing the technical manpower and know-how to the country and in pursuit of research. The Institute ranks amongst the best technological institutions in the world and has contributed to all sectors of technological development. It has also been considered a trend-setter in the area of education and research in the field of science, technology, and engineering. The Institute had celebrated its Sesquicentennial in October 1996 and now completed more than 175 years of its existence. It was converted to IIT on September 21, 2001 by an Ordinance issued by the Government of India declared it as the nation's seventh Indian Institute of Technology, an "Institution of National Importance". The Institute offers Bachelor's Degree courses in 10 disciplines of Engineering and Architecture and Postgraduate's Degree in 55 disciplines of Engineering, Applied Science, Architecture and planning. The Institute has facility for doctoral work in all Departments and Research Centres.

The Department of Hydrology is one of the 23 academic departments of the Indian Institute of Technology Roorkee. The Department came into existence with the inception of the International Post Graduate Course in Hydrology in 1972, being the first such a program in a developing country. The courses, offered by the Department are presently sponsored by the Government of India and UNESCO. The Department has ten dedicated full-time faculty members having specializations in surface water hydrology (Floods, Droughts), water resources systems, watershed management, Geo-hydrology, groundwater geophysics, stochastic hydrology, hydro-informatics, environmental hydrology, atmospheric physics, climate change, etc.

Local Organizing Committee

Patron				
Prof. K.K. Pant, Director, IIT Roorkee				
Co-Patron				
Dr. Y.R.S. Rao, Director, NIH Roorkee	Prof. P.K. Ramancharla, Director, CSIR – CBRI Roorkee	Er. Sudir Kumar, Director, IRI Roorkee	Prof. P. Rajendra Prasad, Andhra University	Dr. Virendra Tiwari, CSIR - NEIST
Chairperson				
Prof. Sumit Sen, Head, Department of Hydrology, IIT Roorkee				
Convener				
Prof. D.S. Arya, Department of Hydrology, IIT Roorkee				
Prof. Ankit Agarwal, Department of Hydrology, IIT Roorkee				
Organizing Secretaries				
Prof. Manoj K. Jain, Department of Hydrology, IIT Roorkee				
Prof. Brijesh K. Yadav, Department of Hydrology, IIT Roorkee				
Prof. Ashutosh Sharma, Department of Hydrology, IIT Roorkee				
Treasurers				
Prof. Bhaskar J. Deka, Department of Hydrology, IIT Roorkee				
Prof. Nitin Khandelwal, Department of Hydrology, IIT Roorkee				
Members (coordinating institute)				
Dr. Y.R.S. Rao, NIH Roorkee				
Dr. Archana Sarkar, NIH Roorkee				
Dr. Anindya Pain, CBRI Roorkee				
Er. Ajay Kumar, IRI Roorkee				
Single Point of Contact (SPOC)				
Prof. K.S. Kasiviswanathan, WRDM, IIT Roorkee				
Prof. Abhishek, CED, IIT Roorkee				
Prof. Pallavi Chattopadhyay, ESD, IIT Roorkee				

Scientific Program

IAHS Commissions

1. Continental Erosion (ICCE)
2. Coupled Land-Atmosphere Systems (ICCLAS)
3. Groundwater (ICGW)
4. Human-Water Feedbacks (ICHWF)
5. Remote Sensing (ICRS)
6. Statistical Hydrology (ICSH)
7. Snow and Ice Hydrology (ICSIH)
8. Surface Water (ICSW)
9. Tracers (ICT)
10. Water Quality (ICWQ)
11. Water Resource Systems (ICWRS)

IAHS Initiatives

12. The 23 Unsolved Problems in Hydrology (UPH)
13. Measurements and Observations in the XXI century (MOXXI)
14. Citizen and Hydrology (CANDHY)
15. History of Hydrology

HELPING Themes for Science-Based Solutions

16. Science for Solution-Global and Local Interactions (HELPING theme 1)
17. Science for Solution-Holistic Solutions for Water Security (HELPING theme 2)
18. Science for Solution-Cross-Cutting Goals (HELPING theme 3)

Contributions Types

Participants at the XIIth IAHS Scientific Assembly 2025 can present their research through the following contribution types, designed to maximize engagement and knowledge sharing:

1. Plenary Oral
   Share key findings and scientific perspectives in a 15-minute oral presentation with a 10-minute dedicated discussion.

2. Forum Oral
   In the forum oral, the author shall introduce research through a brief 1-minute flash presentation in the plenary room.

3. Forum Oral with Poster
   Forum oral with poster allows you to present your research through a brief 1-minute flash presentation in the plenary room and a traditional poster presentation.

4. Forum Oral with Poster and Video-Interview
   Forum oral with poster and video interview combine a brief 1-minute flash presentation in the plenary room, traditional poster, and 3-minute video interview. The video will be posted on the IAHS YouTube channel.

5. Poster with Video-Interview
   Poster and 3-minute video interview enable the author to present research by traditional poster and supplement it with a video interview shared online.

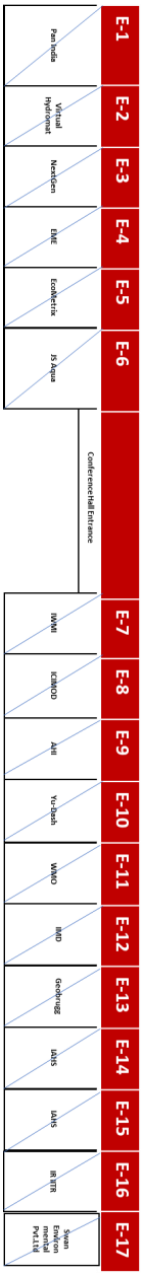
6. Poster
   Display your work through a traditional poster in designated poster spaces.

Detailed Program

Exhibitor Showcase

Exhibitions are running in parallel supporting the theme and showcasing the technologies, latest developments, and available solutions in the water sector. The conference provides a unique opportunity for sponsoring organizations to promote their products/ services to the focused international and national audiences/ stakeholders besides having an excellent opportunity to interact with engineers/ scientists/ academicians/ managers in the water sector.

Booth	Exhibitor	Exclusive Showcase Time (IST)
E-1	Pan India Consultants Pvt. Ltd.	Wednesday, Oct 8, 2025 10:35- 10:45
E-2	Virtual Hydromet	Tuesday, Oct 7, 2025 10:45- 10:55
E-3	NexGen Roorkee Industries	Wednesday, Oct 8, 2025 10:45- 10:55
E-4	Electro Mechanical Enterprises (EME)	Wednesday, Oct 8, 2025 15:05- 15:15
E-5	Ecometrix Consultants	Thursday, Oct 9, 2025 10:35- 10:45
E-6	JS Aquaritin Global Pvt. Ltd.	Tuesday, Oct 7, 2025 10:35- 10:45
E-7	International Water Management Institute (IWMI)	Monday, Oct 6, 2025 15:05- 15:15
E-8	International Centre for Integrated Mountain Development (ICIMOD)	Tuesday, Oct 7, 2025 15:15- 15:25
E-9	Association of Hydrologists of India (AHI)	Monday, Oct 6, 2025 15:15- 15:25
E-10	YuDash Systems Pvt. Ltd.	Tuesday, Oct 7, 2025 15:05- 15:15
E-11	World Meteorological Organization (WMO)	Wednesday, Oct 8, 2025 15:15- 15:25
E-12	India Meteorological Department	Thursday, Oct 9, 2025 15:05- 15:15
E-13	Geobrugg	Thursday, Oct 9, 2025 10:45- 10:55
E-14	Hydrological Sciences Journal	Monday, Oct 6, 2025 10:35- 10:55
E-15	Hydrological Sciences Journal	Monday, Oct 6, 2025 10:35- 10:55
E-16	International Relations Office, IIT Roorkee	Thursday, Oct 9, 2025 15:15- 15:25
E-17	M/s. Swan Environmental Pvt. Ltd	Friday, Oct 10,2025 10:35- 10:45



Session: 1.2 | October 06, 2025, 11:00–12:30

ICRS **IAHS25_ABS_G6750**	Unleashing the Power of Emerging Datasets for More Reliable Hydrologic Models *Prof. Latif Kalin, Auburn University, United States*
ICRS **IAHS25_ABS_X3911**	Investigating lower-than-expected urban flood peaks through field investigation remote sensing and machine learning *Dr. Ione Loots, University of Pretoria, South Africa*
ICRS **IAHS25_ABS_T5935**	A study of hydrological extremes from space *Prof. Venkataraman Lakshmi, University of Virginia, United States*
ICRS **IAHS25_ABS_R6168**	The Application and Assessment of Satellite based remotely sensed Rainfall Data in the ACRU Hydrological Model: Case study in selected catchments in South Africa *Ms. Kershani Chetty, University of KwaZulu-Natal, South Africa*
ICRS **IAHS25_ABS_T1360**	Seasonal Variations in Water Resources Vegetation Health and Turbidity along the Yamuna River Mathura: A Geospatial Analysis *Dr. Dharmendra Kumar Singh, Sanskriti University, India*
ICRS **IAHS25_ABS_B4822**	Land Use Land Cover Classification of an Urban Watershed Using Machine Learning Algorithms *Mr. Mohammad Imran Shaik, National Institute of Technology - Andhra Pradesh, India*
ICRS **IAHS25_ABS_Q6020**	Utility of contextual remote sensing models for mapping evapotranspiration over large areas *Prof. Eswar Rajasekaran, IIT Bombay, India*
ICRS **IAHS25_ABS_M2037**	Burnt Area Mapping and Greenhouse Gases Emissions Monitoring in Agricultural Landscape *Mr. Ayush Kumar, IIT Roorkee, India*
ICRS **IAHS25_ABS_N7823**	GPU accelerated GUI for flood mapping from SAR data *Mr. Nirdesh Kumar Sharma, IIT Delhi, India*
ICRS **IAHS25_ABS_O4714**	Water Extent and Water Level Dynamics of a Tropical Large Hydropower Reservoir for Sustainable Water Management *Ms. Archita Mallick, IIT Roorkee, India*
ICRS **IAHS25_ABS_E5891**	A rapid assessment of Water Hyacinth mapping in India *Mr. Arpan Dawn, National Institute of Technology - Durgapur, India*
ICRS **IAHS25_ABS_M3582**	Recent progress and future opportunities in monitoring evapotranspiration from High Resolution Thermal InfraRed Remote Sensing in the context of the TRISHNA LSTM and SBG satellite missions *Dr. Gilles Boulet, CESBIO (Toulouse University, CNRS, CNES, IRD, INRAE) & Indo-French Cell for Water Sciences, Indian Institute of Science, India*
ICRS **IAHS25_ABS_L4587**	Detection of Flood Areas Using SENTINEL Radar Imagery in Urban Environments for Strengthening Flood Early Warning Systems in Abidjan *Mr. Adou Adou Kouassi Dore Berenger, Université Felix-Houphouët-Boigny /Université de Montpellier, Cote d'Ivoire*
ICRS **IAHS25_ABS_M5620**	Remote Sensing for Efficient Irrigation: Monitoring Reservoirs with Sentinel Data

	Mr. Federico Campos, Universidad Tecnologica del Uruguay (UTEC), Uruguay
ICRS **IAHS25_ABS_C1713**	Unveiling Methane Concentration Patterns over Wastewater Treatment Plants in Indian Cities Using NDCI and Sentinel-5P TROPOMI Data (2019-2024) *Mr. Ravi Kant, IIT Roorkee, India*
ICRS **IAHS25_ABS_H2436**	Soil Loss Estimation of watershed in eastern Himalayan region of Sikkim *Mr. Ankit Verma, Acharya Narendra Deva University of Agriculture and Technology, India*
ICRS **IAHS25_ABS_M6997**	Monitoring of wheat crop and its phenology pattern using UAV Multispectral data *Mr. Adwait, Shiv Nadar Institute of Eminence, India*
ICRS **IAHS25_ABS_Y7268**	Multi-Hazard Disaster Risk Assessment Using Google Earth Engine: An Integrated Approach for Climate Resilience *Ms. Jahanvi Bhagora, Nirma University, India*
ICRS **IAHS25_ABS_M2786**	GIS-Integrated Hydro-Geo mechanical Framework for Predicting Soil Piping-Induced Subsidence in Lateritic Terrains *Ms. Shruthi Johnson, College of Engineering Trivandrum, India*
ICRS **IAHS25_ABS_Q3486**	Flood Extent Delineation: Combining Unconventional Remote Sensing and Geospatial Technology with HAND Hydrogeomorphic Approach *Mr. Rajeev Ranjan, IIT Delhi, India*
ICRS **IAHS25_ABS_X6613**	A change in the peak timing of Indian summer monsoon rainfall due to a shifting climate: observational evidence *Dr. Kandula V. Subrahmanyam, National Remote Sensing Centre (NRSC) ISRO, India*
ICRS **IAHS25_ABS_C5422**	Identifying groundwater drought risks in major agricultural regions of China: A combined perspective of GRACE- and ground-based observations and modeling *Prof. Yanjun Shen, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, China*
ICRS **IAHS25_ABS_G4872**	Mapping and assessing the impacts of crop-weed competition in neglected and underutilized crops *Dr. Maqsooda Mahomed, University of KwaZulu-Natal, South Africa*

Session: 1.3 | October 06, 2025, 13:30–15:00

ICWQ **IAHS25_ABS_O3391**	Carbon export from wastewater treatment effluents in the Mississippi River Basin *Prof. Y. Jun Xu, Louisiana State University, United States*
ICWQ **IAHS25_ABS_V1817**	Understanding the hydrological drivers of global human health risks - a call to the international hydrological community to co-create solutions at the Water and Health Nexus *Prof. Stefan Krause, University of Birmingham, United Kingdom*
ICWQ **IAHS25_ABS_W3049**	How important are calibration strategies for large scale water quality modeling? *Dr. Alena Bartosova, Swedish Meteorological and Hydrological Institute (SMHI), Sweden*
ICWQ **IAHS25_ABS_P7579**	Revealing climate-induced patterns in crop yields and the water-energy-food-carbon nexus: insights from the Pearl River Basin *Prof. Xiaohong Chen, Sun Yat-sen University, China*
ICWQ **IAHS25_ABS_D8089**	Post Monsoon Water Quality Assessment of Water Sources of Bhopal City Using Artificial Intelligence and Machine Learning Tools: A New Insight *Prof. Prashant Pandey, Lakshmi Narain College of Technology, India*
ICWQ **IAHS25_ABS_D6376**	Hydro geochemistry Enrichment Mechanism and Health Risk Assessment of Groundwater Fluoride in Karaga District of the Northern Region Ghana *Prof. Emmanuel Daanoba Sunkari, Sir Padampat Singhania University, India*
ICWQ **IAHS25_ABS_X4527**	A Comprehensive Groundwater Assessment in parts of Chhota Nagpur Gneissic Complex: Evaluating Groundwater Potential, Hydro geochemistry, and Public Health Risks *Dr. Dev Sen Gupta, Banaras Hindu University, India*
ICWQ **IAHS25_ABS_Y7311**	Unraveling Agricultural Non-Point Source Pollution in the Hindon River Basin: A SWAT+ Model Approach *Mr. Vivek Tiwari, IIT Roorkee, India*
ICWQ **IAHS25_ABS_A2552**	WISE: a watershed-scale carbon budget calculator *Prof. Junzhi Liu, Lanzhou University, China*
ICWQ **IAHS25_ABS_G4967**	Sand-Gravel Mining Impacts on Water Quality in an Alluvial River with Tributary Intervention: A case study of Thoubal-Itok River system Manipur, India *Dr. Romeji Ngangbam, National Institute of Technology - Manipur, India*
ICWQ **IAHS25_ABS_L8584**	Remote Sensing-Based Assessment of Turbidity and Chlorophyll Variations in the Ganga-Yamuna Rivers Sangam During the Kumbh Mela 2025 *Dr. Hemant Raheja, IIT Roorkee, India*
ICWQ **IAHS25_ABS_C2873**	Understanding the roles of climate change land use and land cover change and water diversion project in modulating water- and carbon-use efficiency in Han River Basin *Prof. Dedi Liu, Wuhan University, China*
ICWQ **IAHS25_ABS_A9832**	The Impact of Abattoir Effluent on the Quality of Ogun River in Kara Market, Southwest Nigeria Dr. Amidu Owolabi Ayeni, University of Lagos, Nigeria

ICWQ **IAHS25_ABS_U1665**	Adverse Impacts of Climate-Induced Global Changes on Water Quality, Security and Availability in India: Necessary Mitigation Measures and Appropriate Adaptation Strategies Needed *Prof. Bhaskara Rao Mulam, Rajiv Gandhi University of Knowledge Technologies, India*
ICWQ **IAHS25_ABS_N7605**	Comprehensive Water Management: Quality Monitoring Fate Assessment and Nano-enabled Remediation for Sustainable Solutions *Prof. Nitin Khandelwal, IIT Roorkee, India*
ICWQ **IAHS25_ABS_A9368**	Evaluating Water Quality of the Ganga River: Integrating Satellite Data and In-Situ Measurements *Mr. Abhay Masiwal, Indian Institute of Remote Sensing (IIRS), India*
ICWQ **IAHS25_ABS_E2314**	Anthropogenic changes of heatwave-extreme precipitation events have emerged from the natural climate variability *Prof. Jie Chen, Wuhan University, China*
ICWQ **IAHS25_ABS_U9413**	Hydro-Chemical Characterization of Middle Zarafshan River Basin Using Geospatial Technology *Ms. Shakhnoza Shavkatovna Khudoyarova, Samarkand State University, Uzbekistan*
ICWQ **IAHS25_ABS_D7421**	Study on the Effect of Underlying Surface Changes on Runoff Generation in the Urbanized Watershed *Dr. Yunqiu Jiang, Zhengzhou Univercity, China*
ICWQ **IAHS25_ABS_J2439**	Complex Network-based Analysis of Water Quality Dynamics in the Mississippi River *Ms. Harshal Ashokrao Parate, IIT Bombay, India*
ICWQ **IAHS25_ABS_Y4289**	Groundwater in Flux: A comprehensive analysis of Water Quality in the Gomati River Basin *Ms. Shivani Gupta, University of Allahabad, India*
ICWQ **IAHS25_ABS_K2994**	Fate of organo-arsenic compounds in the environment *Mr. Spandan Naskar, IIT Roorkee, India*
ICWQ **IAHS25_ABS_F9890**	Identifying and overcoming limitations of open-source surface water quality datasets of India *Dr. Bihu Suchetana, IIT Roorkee, India*

Session: 1.4 | October 06, 2025, 15:30–16:30

CANDHY **IAHS25_ABS_V1321**	Stakeholder-driven assessment of watershed management strategies for agriculture and ecological sustainability: A case study in the lower Apalachicola-Chattahoochee-Flint (ACF) River Basin *Prof. Puneet Srivastava, University of Maryland, United States*
CANDHY **IAHS25_ABS_H5871**	Identifying potential sources of debris flow: Relooking flash floods from a novel perspective *Dr. Arkaprabha Sarkar, National Institute of Disaster Management, India*
CANDHY **IAHS25_ABS_C9367**	Experiences of citizen science and co-creation in soil hydrology and health within the activities of the Italian chapter of the LOESS project *Dr. Marco Peli, University of Brescia, Italy*
HELPING theme 2 **IAHS25_ABS_S6353**	Optimization of Crop Patterns at a Regional Scale Using Metaheuristics Algorithms *Ms. Ankita Kumari, IIT (ISM) Dhanbad, India*
UPH **IAHS25_ABS_G4039**	Quantifying the Influence of Land-Use/Cover and Geomorphic Changes on Extreme Runoff: Implications for Infrastructure Planning *Dr. Sanjaykumar Madhusudan Yadav, Sardar Vallabhbhai National Institute of Technology (SVNIT), India*
UPH **IAHS25_ABS_S7763**	Hydrological functioning of Oak and Pine forested catchments: Water availability and fluxes *Mr. Denzil Daniel, IIT Roorkee, India*
HELPING theme 2 **IAHS25_ABS_D8697**	Leveraging Web GIS for a Systematic Review on Applications of InVEST Models in Ecosystem Services and Water Security Management *Ms. Prathibha Prakash, IIT Roorkee, India*
UPH **IAHS25_ABS_N5232**	Integrated Climate-Health Analysis: Assessing Public and Occupational Health Impacts of the 2018 Kerala Floods in the Greater Pamba River Basin India *Mrs. Arathy Nair G.R., TKM College of Engineering Kollam, India*
UPH **IAHS25_ABS_M9540**	Impact of reservoir storage on upstream-downstream drought propagation in a semi-arid catchment in India *Mr. Ajay Gupta, IIT Roorkee & University of Birmingham, India*
UPH **IAHS25_ABS_V9389**	Geo-spatial model for real time forecast of extreme flood in the basin of river Mahanadi in the State of Odisha India *Prof. Vijay Kumar Dwivedi, National Institute of Technology - Durgapur, India*
UPH **IAHS25_ABS_D6743**	Transforming Indonesia's Water Allocation and Rights Governance: Clarifying Political Actors' Perspectives on Contestations *Mr. Aditya Riski Taufani, IHE Delft, Netherlands*
HELPING theme 2 **IAHS25_ABS_P1339**	HyPeak: A science-policy network to promote sustainable hydropeaking *Prof. Gabriele Chiogna, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany*
UPH **IAHS25_ABS_R1001**	Harnessing Kalman Filter to Reduce Uncertainties in Evapotranspiration and Achieve Water Budget Closure at Global Scale *Mr. Shubham Goswami, IISc Bangalore, India*
UPH **IAHS25_ABS_W1324**	Nonlinear Covariate-based Framework for Non-stationary Flood Frequency Analysis in the Context of Climate Change

	Prof. Vinnarasi Rajendran, IIT Roorkee, India
HELPING theme 2 **IAHS25_ABS_F6381**	Detecting changes in the onset of monsoons in Sri Lanka *Dr. Nilupul Gunasekara, General Sir John Kotelawala Defence Universiy, Sri Lanka*
UPH **IAHS25_ABS_W4296**	Analysis of clusters of Hydrological Extremes in the Amazon River Basin *Mr. Manish Kumar, IHE Delft - Institute for Water Education, India*
HELPING theme 2 **IAHS25_ABS_P5650**	Informing the trenches: Rainfall simulation experiments in Himalayas to Hydrologically inform Water Conservation Structure designs *Dr. Ashvath Singh Kunadi, Aalto University, Finland*
HELPING theme 2 **IAHS25_ABS_Y8571**	A Comparative Study of Climate and Drought Resilience in Distinct Indian Catchments *Ms. Akriti Singh, IIT Roorkee, India*
UPH **IAHS25_ABS_I8848**	Assumption hunting: To what extent are global irrigation models supported by empirical information? *Mr. Seth Nathaniel Linga, University of Birmingham, United Kingdom*
UPH **IAHS25_ABS_B9226**	Coupling of a Mechanistic Soil Hydrological Model and a Dynamic Vegetation Growth Model *Ms. Sruthi Surendran, IIT Palakkad, India*
UPH **IAHS25_ABS_T1157**	Hydrological compartments in hillslope catchments: A Case Study of Kaddam reservoir catchment *Mr. Vamshi Raj Raj Mala, IIT Hyderabad & Irrigation and CAD Department Telangana, India*
HELPING theme 2 **IAHS25_ABS_H1226**	Use Artificial Intelligence to Improve Water Demand Forecasting: Bridging Data Models and Uncertainty *Dr. Zhenxing Zhang, University of Illinois at Urbana-Champaign, United States*
UPH **IAHS25_ABS_I9230**	Advancing Soil Hydraulic Property Estimation at Spatial Scales Through Data-Driven Approach using Canopy Variables as Proxies *Ms. Aswathi V.K., National Centre for Earth Science Studies, India*
UPH **IAHS25_ABS_Y1032**	SW-NE mass-flux heterogeneity linked with runoff subsurface recharge and contamination in the Lower Chambal Basin *Mr. Faisal Imam Umrani, IGNOU, India*
UPH **IAHS25_ABS_D5763**	Climate Change Effects on the Kimani Catchment: Implications for the Usangu Wetland *Dr. Augustina Clara Alexander, University of Dar Es Salaam, Tanzania*
UPH **IAHS25_ABS_I8237**	Building Climate Resilience: An Interdisciplinary Approach to Uncertainty Analysis of Extreme Events in South Africa *Dr. Djanna Koubodana Houteta, Climate System Analysis Group University of Cape Town, South Africa*

Session: 1.5 | October 06, 2025, 16:30–18:00

ICRS **IAHS25_ABS_M3940**	Atmospheric Moisture Budget and Its variability over the Indian Subcontinent *Mr. Ranjan Kumar, IIT Kharagpur, India*
ICRS **IAHS25_ABS_H8524**	Climatic shift and human activities have resulted in a loss of 40 Gt water storage from the Helmand River basin over the last two decades *Dr. Bramha Dutt Vishwakarma, IISc Bangalore, India*
ICRS **IAHS25_ABS_J2678**	Satellite- based Flood detection in Arid regions using Sentinel-1 Synthetic Aperture RADAR *Mr. Shagun Garg, University of Cambridge, United Kingdom*
ICRS **IAHS25_ABS_J3669**	A New Approach for Enhancing Reservoir Surface Water Mapping Using SAR-Assisted Correction of Cloud-Contaminated Optical Scenes *Mr. Sparsh Shekhar, IIT Bombay, India*
ICRS **IAHS25_ABS_E8891**	Deep Learning based Quantitative Precipitation Estimation using Dual-Polarization Remote Sensing Radar over Widely Varying Climate Zones *Mr. EunYeol Kim, Colorado State University, United States*
ICRS **IAHS25_ABS_S8142**	Mapping Irrigation Quantities in Indian Rice Fields Using MODIS and GPM Datasets *Mr. Mukund Narayanan, IIT Roorkee, India*
ICRS **IAHS25_ABS_W5707**	Evaluating the Performance of Satellite-Derived Precipitation and Reanalysis-Based Potential Evapotranspiration in Streamflow Estimation Across Diverse Climatic Zones *Mrs. Greeshma B. Nair, IIT Bombay, India*
ICRS **IAHS25_ABS_D9283**	Exploring Differences in Soil Moisture Selection Maps: A Comparison of Triple Collocation and Mutual Information Methods Across Climates and Land Covers *Mrs. Diksha Gupta, IIT Delhi, India*
ICRS **IAHS25_ABS_R3115**	Integrating Multi-Temporal Optical and SAR Data for Large-Scale Flood Monitoring in a Monsoonal River Basin: A Case Study from Northern India *Mr. Shobhit Singh, IIT Kanpur, India*
ICRS **IAHS25_ABS_X3756**	Identification of Groundwater Potential Zone in Lower Gangetic plain *Ms. Srijita Ghosh, IIT Madras, India*
ICRS **IAHS25_ABS_W3180**	Evaluation of error components in SM2RAIN precipitation products over an Indian coastal state *Dr. Yellamelli Ramji Satyaji Rao, National Institute of Hydrology - Roorkee, India*
ICRS **IAHS25_ABS_G7193**	Hydrogeological Controls on Land Subsidence in the Central Ganga Basin: A Case Study from Lucknow *Mr. Shivprasad Panditrao More, CSIR-North East Institute of Science and Technology, India*
ICRS **IAHS25_ABS_L2341**	Assessment of Terrestrial Water Storage Distribution of the Ganges River Basin of India using GRACE, GLDAS, and TRMM *Dr. Anirban Mukhopadhyay, Kazimierz Wielki University, India*

ICRS **IAHS25_ABS_S7726**	Groundwater potential zones mapping for Natural Springs: A Geospatial and AHP-Based Study in Manadunga Village, Champawat District, Uttarakhand *Mr. Rohan Singh Bhakuni, PASS Foundation, India*
ICRS **IAHS25_ABS_P5046**	Sediment transport modelling in a mining impacted ephemeral Himalayan River *Ms. Moumita Akuria, IIT Kanpur, India*
ICRS **IAHS25_ABS_C3592**	Evaluating Large-Scale Recycling of Treated Municipal Wastewater to Address Water Scarcity in Karnataka's Arid Regions Using Earth Observation *Dr. Ashish Kumar, Ashoka Trust for Research in Ecology and the Environment (ATREE), India*
ICRS **IAHS25_ABS_Q1968**	Flood inundation mapping and damage assessment: A comparison between Sentinel-1 derived flood extent and large-scale hydrological model derived extent *Dr. Gaurav Tripathi, IIT Bombay, India*
ICRS **IAHS25_ABS_L2422**	Beyond Visible Rivers: Integration of RCM SAR Imagery and Machine Learning for Streamflow Estimation in Remote and Data Limited Riverine Systems *Prof. Tirupati Bolisetti, University of Windsor, Canada*
ICRS **IAHS25_ABS_J5797**	Permafrost Dynamics in Himachal Pradesh using Integrated PS and SBAS InSAR Approach *Mr. Ajay Kumar, IIT Bombay, India*
ICRS **IAHS25_ABS_R6168**	The Application and Assessment of Satellite based remotely sensed Rainfall Data in the ACRU Hydrological Model: Case study in selected catchments in South Africa *Ms. Kershani Chetty, University of KwaZulu-Natal, South Africa*
ICRS **IAHS25_ABS_M2037**	Burnt Area Mapping and Greenhouse Gases Emissions Monitoring in Agricultural Landscape *Mr. Ayush Kumar, IIT Roorkee, India*
ICRS **IAHS25_ABS_E5891**	A rapid assessment of Water Hyacinth mapping in India *Mr. Arpan Dawn, National Institute of Technology - Durgapur, India*
ICRS **IAHS25_ABS_H2436**	Soil Loss Estimation of watershed in eastern Himalayan region of Sikkim *Mr. Ankit Verma, Acharya Narendra Deva University of Agriculture and Technology, India*
ICRS **IAHS25_ABS_Q3486**	Flood Extent Delineation: Combining Unconventional Remote Sensing and Geospatial Technology with HAND Hydrogeomorphic Approach *Mr. Rajeev Ranjan, IIT Delhi, India*
ICRS **IAHS25_ABS_G4872**	Mapping and assessing the impacts of crop-weed competition in neglected and underutilized crops *Dr. Maqsooda Mahomed, University of KwaZulu-Natal, South Africa*
ICRS **IAHS25_ABS_O7943**	Performance Assessment of IMERG Precipitation Estimates Using MESONET Data in Mumbai *Mr. Yashraj Nagraj Upase, IIT Hyderabad, India*

ICRS **IAHS25_ABS_M7277**	A Comparative Analysis of Advanced Machine Learning Techniques for Accurate Groundwater Potential Zone Mapping in Haryana, India *Mr. Shubham Bhagat, Indian Institute of Science Education and Research Mohali, India*
ICRS **IAHS25_ABS_M3814**	Machine Learning for Multi-Hazard Susceptibility in Kenya: Integrating Earth Observation and Reported Events *Ms. Sneha Kour, Birla Institute of Technology Mesra, India*
ICRS **IAHS25_ABS_D2349**	Insights into the Agricultural Drought Assessment: A Case Study from Odisha Using Google Earth Engine *Ms. Anuva Chowdhury, Birla Institute of Technology Mesra, India*
ICRS **IAHS25_ABS_Q6020**	Utility of contextual remote sensing models for mapping evapotranspiration over large areas *Prof. Eswar Rajasekaran, IIT Bombay, India*
ICRS **IAHS25_ABS_O4714**	Water Extent and Water Level Dynamics of a Tropical Large Hydropower Reservoir for Sustainable Water Management *Ms. Archita Mallick, IIT Roorkee, India*
ICRS **IAHS25_ABS_M6997**	Monitoring of wheat crop and its phenology pattern using UAV Multispectral data *Mr. Adwait , Shiv Nadar Institute of Eminence, India*
ICRS **IAHS25_ABS_L9020**	Machine Learning-Integrated InSAR Analysis for Land Deformation Study in Jodhpur City Using Sentinel-1 SAR and GRACE TWS Data *Mr. Surender Pal, National Institute of Hydrology - Roorkee, India*
ICRS **IAHS25_ABS_E8385**	Enhancing soil moisture and vegetation optical depth retrievals through improved surface roughness parameterization for the upcoming CIMR satellite mission *Ms. Debolina Mondal, IIT Bombay, India*
ICRS **IAHS25_ABS_P9325**	Estimation of Evapotranspiration Using the S-SEBI Model and Landsat-9 Data over Asan Barrage *Ms. Ayushi Bhati, Indian Institute of Remote Sensing (IIRS), India*
ICRS **IAHS25_ABS_M3582**	Recent progress and future opportunities in monitoring evapotranspiration from High Resolution Thermal InfraRed Remote Sensing in the context of the TRISHNA LSTM and SBG satellite missions *Dr. Gilles Boulet, CESBIO (Toulouse University, CNRS, CNES, IRD, INRAE) & Indo-French Cell for Water Sciences, Indian Institute of Science, India*
ICRS **IAHS25_ABS_C1713**	Unveiling Methane Concentration Patterns over Wastewater Treatment Plants in Indian Cities Using NDCI and Sentinel-5P TROPOMI Data (2019-2024) *Mr. Ravi Kant, IIT Roorkee, India*
ICRS **IAHS25_ABS_B6410**	Estimating river bathymetry from spaceborne LiDAR data and curve-fitting method *Mr. Pankaj Ramji Dhote, Indian Institute of Remote Sensing (IIRS), India*
ICWQ **IAHS25_ABS_S1352**	Water quality assessment of shallow oxbows in the Jaldhaka Floodplain India *Mr. Dinabandhu Barman, Presidency University Kolkata, India*

ICWQ **IAHS25_ABS_G6270**	Analyzing the Correlation Between Total Suspended Solids (TSS) and Turbidity in the Kemena River Basin (2018-2022) *Ms. Yusra Shabir, University Putra Malaysia, Malaysia*
ICWQ **IAHS25_ABS_L8332**	A Chaotic Dynamic Approach for Prediction of Dissolved Oxygen *Ms. Sakshi Dnyaneshwar Dhumale, IIT Bombay, India*
ICWQ **IAHS25_ABS_S8441**	Increasing wastewater pressure on rivers in New Moscow area *Ms. Uliana Romanova, M. V. Lomonosov Moscow State University, Russian Federation*
ICHWF **IAHS25_ABS_H5798**	Controlling the Atreyee by Impoundment Structures in Bangladesh and India *Dr. Chalantika Laha Salui, Rani Birla Girls' College, India*
ICWQ **IAHS25_ABS_T1963**	Accessing and controlling irrigation water quality: A smart bioremediation approach *Mr. Ashish Madhukar Jadhav, ICAR - Indian Institute of Water Management, India*
ICWQ **IAHS25_ABS_J3615**	Assessing the Impact of Water Quality Parameters on Food Security in the Vietnamese Mekong Delta *Ms. Sreejita Banerjee, Asian Institute of Technology, Thailand*
ICWQ **IAHS25_ABS_H5015**	Interconnected Carbon Systems: Dissolved Organic and Inorganic Carbon in River and Groundwater of a Delta *Prof. Elango Lakshmanan, IIT Madras, India*
ICWQ **IAHS25_ABS_C2873**	Understanding the roles of climate change land use and land cover change and water diversion project in modulating water- and carbon-use efficiency in Han River Basin *Prof. Dedi Liu, Wuhan University, China*
ICWQ **IAHS25_ABS_F9890**	Identifying and overcoming limitations of open-source surface water quality datasets of India *Dr. Bihu Suchetana, IIT Roorkee, India*
ICWQ **IAHS25_ABS_N7605**	Comprehensive Water Management: Quality Monitoring Fate Assessment and Nano-enabled Remediation for Sustainable Solutions *Prof. Nitin Khandelwal, IIT Roorkee, India*
ICWQ **IAHS25_ABS_E2314**	Anthropogenic changes of heatwave-extreme precipitation events have emerged from the natural climate variability *Prof. Jie Chen, Wuhan University, China*
ICWQ **IAHS25_ABS_W6469**	Emerging organic compounds in surface and groundwater reflect the urban dynamics in sub-Saharan cities *Mr. Boris Djieugoue, University of Douala, Cameroon*
ICWQ **IAHS25_ABS_D8089**	Post Monsoon Water Quality Assessment of Water Sources of Bhopal City Using Artificial Intelligence and Machine Learning Tools: A New Insight *Prof. Prashant Pandey, Lakshmi Narain College of Technology, India*
ICWQ **IAHS25_ABS_U9413**	Hydro-Chemical Characterization of Middle Zarafshan River Basin Using Geospatial Technology *Ms. Shakhnoza Shavkatovna Khudoyarova, Samarkand State University, Uzbekistan*

ICWQ **IAHS25_ABS_A2552**	WISE: a watershed-scale carbon budget calculator *Prof. Junzhi Liu, Lanzhou University, China*
ICWQ **IAHS25_ABS_A9368**	Evaluating Water Quality of the Ganga River: Integrating Satellite Data and In-Situ Measurements *Mr. Abhay Masiwal, Indian Institute of Remote Sensing (IIRS), India*
ICWQ **IAHS25_ABS_K2994**	Fate of organo-arsenic compounds in the environment *Mr. Spandan Naskar, IIT Roorkee, India*
ICWQ **IAHS25_ABS_A5687**	Arsenic Contamination and its Health Ramification in a village of Buxar District Bihar *Mr. Asrarul Haque Jeelani, Jamia Millia Islamia, India*
CANDHY **IAHS25_ABS_E8203**	A Novel High-Resolution Flood Hazard Model for India: Integrating Reanalysis Data with Hydrodynamic Simulations *Mr. Hrishikesh Singh, IIT Roorkee, India*
CANDHY **IAHS25_ABS_A8802**	Integrating knowledge systems in flood-risk modelling for sustainable solid waste management and flood resilience in urban informal settlements in KwaZulu-Natal, South Africa *Dr. Katelyn Johnson, Stellenbosch University, South Africa*
CANDHY **IAHS25_ABS_R3169**	Distributed databases for data sovereignty in hydrological citizen sciences *Mr. Julien Jean Malard Adam, IRD, France*
CANDHY **IAHS25_ABS_B9679**	Optimal siting of multipurpose artificial reservoirs with a participatory multi-criteria decision making *Prof. Fabio Castelli, University of Florence, Italy*
ICWQ **IAHS25_ABS_O2241**	Impact of agro-industrial expansion on heavy metal contamination in water resources of a poorly gauged basin *Mr. Prabhat Dwivedi, IIT Roorkee, India*
CANDHY **IAHS25_ABS_H5871**	Identifying potential sources of debris flow: Relooking flash floods from a novel perspective *Dr. Arkaprabha Sarkar, National Institute of Disaster Management, India*
CANDHY **IAHS25_ABS_C9367**	Experiences of citizen science and co-creation in soil hydrology and health within the activities of the Italian chapter of the LOESS project *Dr. Marco Peli, University of Brescia, Italy*
ICWQ **IAHS25_ABS_R7669**	Adsorption and Release Behaviour of Herbicide 2 4-Dichlorophenoxyacetic Acid by High Surface Area Polymeric Adsorbent *Ms. Tanya Gupta, IIT Roorkee, India*
ICRS **IAHS25_ABS_T1544**	Spatial prediction of groundwater spring potential mapping using hybrid ML and DL techniques and metaheuristic optimization in the Himalayan region *Mr. Praveen Kumar, IIT Roorkee, India*
ICRS **IAHS25_ABS_G1983**	Fields on fire: remote sensing and data-driven modelling reveal impacts of crop residue burning on soil nutrients *Ms. Jayantifull Hoojon, IIT Roorkee, India*
HELPING theme 2 **IAHS25_ABS_R2371**	Long term river discharge simulation by an integrated hydrologic model in Kyusyu Island Japan *Dr. Kazuaki Yorozu, Disaster Prevention Research Institute, Japan*

HELPING theme 2 **IAHS25_ABS_Y7324**	Carrying Capacity: Concept and Estimation for Basin Scale *Mr. Suraj Damaji Gudale, BAIF Organization, India*
HELPING theme 2 **IAHS25_ABS_Y2274**	Global River Basin Classification Framework Based on Water Security Metrics *Ms. T.R. Sreeshna, IIT Delhi, India*
HELPING theme 2 **IAHS25_ABS_D8697**	Leveraging Web GIS for a Systematic Review on Applications of InVEST Models in Ecosystem Services and Water Security Management *Ms. Prathibha Prakash, IIT Roorkee, India*
HELPING theme 2 **IAHS25_ABS_P1339**	HyPeak: A science-policy network to promote sustainable hydropeaking *Prof. Gabriele Chiogna, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany*
HELPING theme 2 **IAHS25_ABS_S6353**	Optimization of Crop Patterns at a Regional Scale Using Metaheuristics Algorithms *Ms. Ankita Kumari, IIT (ISM) Dhanbad, India*
HELPING theme 2 **IAHS25_ABS_F6381**	Detecting changes in the onset of monsoons in Sri Lanka *Dr. Nilupul Gunasekara, General Sir John Kotelawala Defence University, Sri Lanka*
HELPING theme 2 **IAHS25_ABS_S1055**	Building resilience to urban floods through nature based solutions *Dr. Priyanka Jamwal, Ashoka Trust for Research in Ecology and the Environment (ATREE), India*
HELPING theme 2 **IAHS25_ABS_P5650**	Informing the trenches: Rainfall simulation experiments in Himalayas to Hydrologically inform Water Conservation Structure designs *Dr. Ashvath Singh Kunadi, Aalto University, Finland*
UPH **IAHS25_ABS_N6820**	Linking Hydrological data uncertainty and equitable procedures in water reallocation planning in South Africa *Mr. Sinetemba Xoxo, Rhodes University, South Africa*
UPH **IAHS25_ABS_Y9410**	Quantifying Uncertainty from Different Sources in Hydrological Modeling for the Himalayan Alaknanda River Basin *Mr. Chander Kant, IIT Roorkee, India*
UPH **IAHS25_ABS_V4800**	A Machine Learning-Enabled Socio-Economic Vulnerability Assessment Integrated with the Synxflow Flood Modeling Framework *Mrs. Jagriti Jain, IIT Roorkee, India*
UPH **IAHS25_ABS_D5763**	Climate Change Effects on the Kimani Catchment: Implications for the Usangu Wetland *Dr. Augustina Clara Alexander, University of Dar Es Salaam, Tanzania*
UPH **IAHS25_ABS_M9540**	Impact of reservoir storage on upstream-downstream drought propagation in a semi-arid catchment in India *Mr. Ajay Gupta, IIT Roorkee & University of Birmingham, India*
UPH **IAHS25_ABS_R1001**	Harnessing Kalman Filter to Reduce Uncertainties in Evapotranspiration and Achieve Water Budget Closure at Global Scale *Mr. Shubham Goswami, IISc Bangalore, India*
UPH **IAHS25_ABS_W1324**	Nonlinear Covariate-based Framework for Non-stationary Flood Frequency Analysis in the Context of Climate Change *Prof. Vinnarasi Rajendran, IIT Roorkee, India*

UPH **IAHS25_ABS_I8848**	Assumption hunting: To what extent are global irrigation models supported by empirical information? *Mr. Seth Nathaniel Linga, University of Birmingham, United Kingdom*
UPH **IAHS25_ABS_X3660**	Network-scale sediment connectivity using the D-CASCADE model in a tropical river basin *Mr. Vivek Kumar Bind, IIT Gandhinagar, India*
UPH **IAHS25_ABS_B9226**	Coupling of a Mechanistic Soil Hydrological Model and a Dynamic Vegetation Growth Model *Ms. Sruthi Surendran, IIT Palakkad, India*
UPH **IAHS25_ABS_T1157**	Hydrological compartments in hillslope catchments: A Case Study of Kaddam reservoir catchment *Mr. Vamshi Raj Raj Mala, IIT Hyderabad & Irrigation and CAD Department Telangana, India*
UPH **IAHS25_ABS_I8237**	Building Climate Resilience: An Interdisciplinary Approach to Uncertainty Analysis of Extreme Events in South Africa *Dr. Djanna Koubodana Houteta, Climate System Analysis Group University of Cape Town, South Africa*
UPH **IAHS25_ABS_S7763**	Hydrological functioning of Oak and Pine forested catchments: Water availability and fluxes *Mr. Denzil Daniel, IIT Roorkee, India*
UPH **IAHS25_ABS_W4296**	Analysis of clusters of Hydrological Extremes in the Amazon River Basin *Mr. Manish Kumar, IHE Delft - Institute for Water Education, India*
UPH **IAHS25_ABS_R8950**	Thirst and Thrust: A Critical Review of Water-Driven Migration and Urban Dynamics Globally and in the Indian Himalayan Region *Ms. Sakshi Goyal, IIT Roorkee, India*
HELPING theme 2 **IAHS25_ABS_F3932**	Modelling Water-Energy-Food Nexus Dynamics for Integrated Resource Management *Mr. Aditya Narayan Sharma, IIT Bombay, India*
ICRS **IAHS25_ABS_O5716**	Evaluation of Remote Sensing-based ET products in a Semi-arid River basin of Rajasthan India *Ms. Vamika Sharma, National Institute of Hydrology - Roorkee, India*
ICRS **IAHS25_ABS_L9868**	Reconstruction of Satellite Soil Moisture Series using Physical Processes *Dr. Jhilam Sinha, IIT Roorkee, India*
HELPING theme 2 **IAHS25_ABS_X9118**	Seasonal drought impact-based forecasting of crop yield in India *Ms. Anastasiya Shyrokaya, Uppsala University, Sweden*
HELPING theme 2 **IAHS25_ABS_I7473**	RESTART'in: Understanding the similarities and differences in flood and drought processes and management at varying spatial and temporal scales in India and the Netherlands *Dr. Joao Nunes, Wageningen University and Research, Netherlands*
HELPING theme 2 **IAHS25_ABS_X5685**	Strengthening Desertification Policies through Participatory Approaches and Local Knowledge in Water Management *Dr. Rodolfo Nobrega, University of Bristol, United Kingdom*

UPH **IAHS25_ABS_M2182**	Investigating Groundwater Fluxes Across Coastal Boundaries: A Numerical Study of Submarine Groundwater Discharge Under Tidal Forcing and Density-Driven Flow *Ms. Shruti Jain, IIT Delhi, India*
UPH **IAHS25_ABS_I6479**	Evaluation of Infiltration Processes to Reduce Uncertainties in the HEC-HMS Model for Poorly Gauged Watersheds *Prof. Marina Batalini De Macedo, Federal University of Itajuba, Brazil*
ICWQ **IAHS25_ABS_B3640**	Assessing the Impact of Physiochemical parameters on micro-plastic movement through Porous media *Ms. Anjali Bhagwat, National Institute of Hydrology - Roorkee, India*
ICWQ **IAHS25_ABS_S5641**	Isotopic and Geochemical Characterization of Water Contamination in and Around an Abandoned Mine in the Northern Singrauli Coalfield India *Mr. Raju Rai, Banaras Hindu University, India*
ICWQ **IAHS25_ABS_V7398**	Waste to Worth: Eco-friendly remediation for removal of synthetic dyes pharmaceuticals and toxic metals using carbonaceous absorbents derived from sewage sludge waste *Ms. Akanksha Foujdar, IIT Roorkee, India*
ICWQ **IAHS25_ABS_A9225**	HyEco: An Integrated Hydrodynamic-Ecological Model to Quantify Human Health Risks from Contaminated Floodwaters in Climate-Sensitive Urban Megacities *Mr. Rahul Deopa, IIT Roorkee, India*

Session: 2.1 | October 07, 2025, 9:00–10:30

ICSH **IAHS25_ABS_E1677**	Correcting Biases in the Wind Simulations of Climate Models: Improving Drought, Extremes, and Spatial Coherence *Dr. Cilcia Kusumastuti, Petra Christian University, Indonesia*
ICSH **IAHS25_ABS_C2483**	Physics-based Assessment of Pluvial Flood Hazard and Exposure from Hourly Rainfall Extremes Preconditioned by Heatwaves *Prof. Poulomi Ganguli, IIT Kharagpur, India*
ICSH **IAHS25_ABS_A9129**	Robust estimation of present and future flood quantiles and extreme event attribution based on a non-stationary climate-informed weather generator *Dr. Sergiy Vorogushyn, GFZ Helmholtz Centre for Geosciences, Germany*
ICSH **IAHS25_ABS_A3599**	Towards achieving reliable probabilistic hydrological predictions at the hourly scale *Dr. Cristina Prieto, IHCantabria, Spain*
ICSH **IAHS25_ABS_F3784**	Deciphering Historical Rainfall Patterns in the Indian Ganga Basin: Drivers, Dynamics, and Implications *Mr. Amit Kumar Maurya, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSH **IAHS25_ABS_T7640**	A physics-informed Graph Neural Network Framework for Post-processing Ensemble streamflow simulations in a river network *Ms. Anagha P., IIT Delhi, India*
ICSH **IAHS25_ABS_I9896**	High-Resolution CMIP6 Downscaled Precipitation and Temperature Dataset Over South Asia *Ms. Neharika Bhattarai, IIT Delhi, India*
ICSH **IAHS25_ABS_G2403**	Teleconnection-informed frequency analysis of rainfall extremes *Dr. Andrea Magnini, University of Bologna, Italy*
ICSH **IAHS25_ABS_G1792**	Insurance as a tool to manage the flooding risk *Prof. Giorgio Roth, Università di Genova, Italy*
ICSH **IAHS25_ABS_A3838**	Resolving Data scarcity: A cluster-based rainfall regionalization of Kerala India *Mrs. Meera G. Mohan, TKM College of Engineering Kollam, India*
ICSH **IAHS25_ABS_L6982**	Application of Polynomial Chaos Expansion method for hydrological model uncertainty *Prof. Tirupati Bolisetti, University of Windsor, Canada*
ICSH **IAHS25_ABS_X7533**	Morphometric Analysis and Hydrological Modeling of the Meenachil River Basin Using Digital Elevation Models (DEMs) *Mr. P. Mukundhan, Mar Baselios College of Engineering and Technology, India*
ICSH **IAHS25_ABS_T4889**	Statistical Flood Frequency Analysis of the Beas River: Evaluating Extreme Flood Events in a Himalayan Basin *Dr. Mahesh Patel, Dr BR Ambedkar National Institute of Technology Jalandhar, India*
ICSH **IAHS25_ABS_J7528**	Quantifying Multivariate Streamflow Drought Hazards in Large River Basins Accounting Onset Seasonality and Event Magnitude *Ms. Aparna Raut, IIT Kharagpur, India*
ICSH **IAHS25_ABS_O6697**	Performance Evaluation of TIGGE Precipitation Datasets and Post-Processing Techniques for Enhanced Flood Forecasting Accuracy

	Mr. Anant Patel, SVNIT Surat, India
ICSH **IAHS25_ABS_H7736**	Evaluation of the performance of satellite-based rainfall products in the South-East of the Congo Basin in Lubumbashi region *Dr. Benjamin Kitambo, University of Lubumbashi, Democratic Republic of The Congo*
ICSH **IAHS25_ABS_R8145**	Evaluation of different precipitation data over the Pamba River basin Kerala *Ms. Geethika Moorthy, IIT Roorkee, India*
ICSH **IAHS25_ABS_S7280**	False Nearest Neighbour: A Chaos-Based Dimensionality Analysis of Hydrometeorological Variables in the Lower Columbia River basin *Ms. Injila Hamid, IIT Bombay, India*
ICSH **IAHS25_ABS_J5057**	A Channel Network Morphology-based Perspective on Discharge-Basin Area Scaling *Mr. Akshay Kadu, IIT Bombay, India*
ICSH **IAHS25_ABS_T7088**	Towards improved flood risk management in Cote d'Ivoire: digitization of pluviographs and incorporation of rainfall non-stationarity *Mr. Kouadio Aime Kouassi, Université Nangui Abrogoua, Cote d'Ivoire*
ICSH **IAHS25_ABS_W1775**	Detecting trends in extreme long duration rainfall data in KwaZulu-Natal, South Africa *Mr. Demian Vusimusi Mukansi, University of KwaZulu-Natal, South Africa*
ICSH **IAHS25_ABS_K5160**	Multivariate analysis of extreme space-time rainfall events based on raingauge data *Prof. Fabio Castelli, University of Florence, Italy*
ICSH **IAHS25_ABS_A2486**	Integrated Flood Characterization and Index Development in the Narmada Basin *Dr. Somil Swarnkar, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSH **IAHS25_ABS_W5998**	Statistical Characterization of Upstream Flooding Patterns Induced by Culvert Capacity Exceedance *Dr. Berina Mina Kilicarslan, New York University, United States*

Session: 2.2 | October 07, 2025, 11:00–12:30

ICSH **IAHS25_ABS_L1659**	Interpolation and simulation of precipitation in space and time using a combination of traditional observations and crowdsourced data *Prof. Andras Bardossy, Institute for Modelling Hydraulic and Environmental Systems (IWS) University of Stuttgart, Germany*
ICSH **IAHS25_ABS_S3426**	Exceptional Flood Events: A Comparison of Spatial Counterfactuals Perfect Storms and Stochastic Simulation Approaches *Prof. Bruno Merz, GFZ Helmholtz Centre for Geosciences, Germany*
ICSH **IAHS25_ABS_G7367**	Beyond Historical Records: Using Counterfactual Scenarios to Improve Flood Risk Management *Dr. Paul Voit, University of Potsdam, Germany*
ICSH **IAHS25_ABS_C9651**	Ensemble Streamflow Data Assimilation in the Indian Subcontinent using vector-based Hydrodynamic Model and Novel Localization Techniques *Mr. Ved Prakash, IIT Delhi, India*
ICSH **IAHS25_ABS_V6256**	Surface Urban Heat Island in Indian Cities and Its Correlation with Urbanization *Mr. Saeed Soleimani, IIT Bombay, India*
ICSH **IAHS25_ABS_K8478**	A Bayesian Copula-Based Integrated Drought Index (IDI) for Holistic Drought Monitoring in India *Mr. Usman Aliakbar Mohseni, IIT Roorkee, India*
ICSH **IAHS25_ABS_X8330**	Exploring Spatial Drought/Flood Synchronization Across India in a Multidimensional Framework *Mr. Sidhan V.V., IIT Delhi, India*
ICSH **IAHS25_ABS_J6319**	Advancing Flood Forecasting and Early Warning Systems Through Multivariate Frequency Analysis *Mr. Ankush Choudhary, IIT Roorkee, India*
ICSH **IAHS25_ABS_X2853**	Regional Calibration of a Lumped Hourly Hydrological Model Using a Decision-Tree Approach *Ms. Giuditta Smerilli, University of Bologna, Italy*
ICSH **IAHS25_ABS_W4687**	Index based approach for the assessment of spatiotemporal variability of extreme climatic conditions using GCMS for the Mahanadi River Basin *Ms. Manita Bishnoi, IIT Roorkee, India*
ICSH **IAHS25_ABS_T8926**	Rainfall Forecasting using Deep-Learning based LSTM Model *Mr. Subhashis Chowdhury, IIT Bombay, India*
ICSH **IAHS25_ABS_T1759**	A framework for the safe-fail design of urban stormwater management infrastructure for flood mitigation under changing climate *Dr. Rohith A.N., IIT Delhi, India*
ICSH **IAHS25_ABS_H1643**	A Comparative Study of Kalman Filters and Machine Learning Models for Predicting Groundwater Levels in Relation to Rainfall *Mr. K.V. Sumith, Sir M. Visvesvaraya Institute of Technology, India*
ICSH **IAHS25_ABS_X7547**	Partitioning hydrologic uncertainty into model parameter contributions and their association with catchment attributes *Dr. Arpita Mondal, IIT Bombay, India*
ICSH **IAHS25_ABS_N8578**	Dynamic Assessment of Delhi's Urban Heat Island Considering the Urban Sprawl Over the Past Two Decades

	Ms. Aakanksha Agrawal, IIT Roorkee, India
ICSH **IAHS25_ABS_K2201**	Climate-Informed Model for Forecasting Flood Quantiles in Indian Catchments *Mr. Abinesh Ganapathy, IIT Roorkee, India*
ICSH **IAHS25_ABS_G3850**	GEV Annual Maximum Precipitation Quantile with Regional Shape Parameter *Prof. Dirceu Silveira Reis Jr, University of Brasilia, Brazil*
ICSH **IAHS25_ABS_B3154**	A rainfall runoff database for improving the flood forecasting: The Case Study of the Crati River Basin - the Tech4You Project *Dr. Stefania Camici, Research Institute for Geo-Hydrological Protection, Italy*
ICSH **IAHS25_ABS_K2495**	Incorporating Non-Stationarity in Design Flood Estimation Guidance *Ms. Deepali Rawat, IIT Roorkee, India*
ICSH **IAHS25_ABS_H8518**	Comparative Analysis of the compounding effects of zero and extreme rainfall events with extreme temperatures in the southern peninsula of India *Ms. Nithya R.L., National Institute of Technology - Calicut, India*
ICSH **IAHS25_ABS_P6944**	A Copula-Based Approach for Estimating Temporal Probability of Landslides using Hydrometeorological factors *Mrs. Shamla D.S., TKM College of Engineering, India*
ICSH **IAHS25_ABS_R7819**	Assessing Future Dam Breach Risks and Safer Hydropower Solutions in the Himalayan River Basins: A Case Study of Tamakoshi Basin *Dr. Zainab Khan, Aligarh Muslim University, India*

Session: 2.3 | October 07, 2025, 13:30–15:00

HELPING theme 1 **IAHS25_ABS_B5630**	Global-Scale Uncertainties in Hydrologic Modeling: The Role of Precipitation and Temperature Forcings *Prof. Guoiang Tang, Wuhan University, China*
HELPING theme 1 **IAHS25_ABS_U9118**	A global dataset of near-natural basins for climate change detection - ROBIN *Mr. Stephen Turner, UK Centre for Ecology & Hydrology, United Kingdom*
HELPING theme 3 **IAHS25_ABS_F2067**	Co-creating Water Knowledge: A community perspective for the IAHS HELPING Decade *Dr. Giulio Castelli, University of Florence, Italy*
HELPING theme 1 **IAHS25_ABS_X3930**	CAMELS-IND: hydrometeorological time series and catchment attributes for 472 catchments in Peninsular India *Prof. Ashutosh Sharma, IIT Roorkee, India*
HELPING theme 1 **IAHS25_ABS_X8092**	Research on Intelligent Monitoring and Sensing of Water Resources in Inland River Source Areas *Prof. Hailong Liu, University of Electronic Science and Technology of China, China*
HELPING theme 1 **IAHS25_ABS_B6709**	Establishing an operational Flood Early Warning System in Zambia *Dr. Suman Kumar Padhee, International Water Management Institute, India*
HELPING theme 1 **IAHS25_ABS_R7416**	Assessing the Impacts of Landscape Change on Riverine Ecosystem Services in the Upper Beas Catchment *Mr. Prakhar Sharma, IIT Roorkee, India*
HELPING theme 1 **IAHS25_ABS_Q3103**	Global Assessment of the Ecohydrology of the World's Water Towers *Prof. Giovanny Mosquera, Pontificia Universidad Católica del Perú (PUCP), Peru*
HELPING theme 1 **IAHS25_ABS_F5409**	Integrated simulation server for the Aral Sea Ecological Restoration Solution *Prof. Tie Liu, Zhejiang University of Technology, China*
HELPING theme 1 **IAHS25_ABS_D5991**	Vegetation Response to Soil Moisture Drought: Regional Variations and Contrasts Across Different Descriptors *Mr. Amitesh Gupta, IIT Bombay, India*
HELPING theme 1 **IAHS25_ABS_J6579**	Investigation of Characteristics Drivers And Predictability of Compound Dry and Hot Extremes *Prof. Ankit Agarwal, IIT Roorkee, India*
HELPING theme 1 **IAHS25_ABS_P3799**	Landholders leverage over moisture flows and forest resilience in South America *Dr. Chandrakant Singh, Chalmers University of Technology, Sweden*
HELPING theme 1 **IAHS25_ABS_S2772**	When rivers dry out: an intermittency analysis for Central Europe *Prof. Eva Paton, Technical University of Berlin, Germany*
HELPING theme 1 **IAHS25_ABS_B4930**	CASCADE-3C: Collaborative Climate Change Risk and Adaptation *Prof. Jamil Alexandre Ayach Anache, University of Sao Paulo, Brazil*
HELPING theme 1 **IAHS25_ABS_G4215**	Deep Learning-Based Approach for Daily Streamflow Prediction in Watersheds with Aggregated and Intermittent Observations *Mr. Nikunj K. Mangukiya, IIT Roorkee, India*
HELPING theme 1	Optimizing raingarden performance with smart low-cost sensor networks

IAHS25_ABS_J8732	*Dr. Carola Marella, University of Brescia, Italy*
HELPING theme 1 **IAHS25_ABS_S1355**	Balancing Productivity and Climate Impact: Quantifying the Climate-Smart Potential of Irrigation Practices *Dr. Shashank Kumar Anand, Texas A&M University, United States*
HELPING theme 3 **IAHS25_ABS_H4634**	Participatory pseudo-quantification of the effects of citizen-led adaptation on household flood risk in Tamale Ghana *Dr. Ben Christopher Howard, Imperial College London, United Kingdom*
HELPING theme 3 **IAHS25_ABS_T3934**	How Can the IAHS' Digital Water Globe Enhance Research Visibility and Improve Network Connectivity in a Society Under Transformation? *Prof. Eduardo Mario Mendiondo, University of Sao Paulo, Brazil*
HELPING theme 3 **IAHS25_ABS_X7284**	Science Communication in HELPING - A Community Perspective on Common Challenges and Best-Practice Solutions *Dr. Christina Anna Orieschnig, Institut de Recherche pour le Développement, France*
HELPING theme 3 **IAHS25_ABS_L6450**	A Framework for Assessing Water Resource Vulnerability and Coping Capacity *Prof. Amir AghaKouchak, University of California, United States*
HELPING theme 3 **IAHS25_ABS_W6250**	Engaging agronomists in hydrology or hydrologists in agronomy? *Dr. Rafael Ignacio Navas, CENUR - Litoral Norte, Uruguay*
HELPING theme 3 **IAHS25_ABS_T2101**	Fair Water - management of floods and droughts through collaboration and co-creation *Prof. Berit Arheimer, Swedish Meteorological and Hydrological institute (SMHI), Sweden*

Session: 2.4 | October 07, 2025, 15:30–16:30

ICWRS **IAHS25_ABS_F9692**	Optimization of operational cycle for energy maximization in pumped storage hydropower plants *Mr. Pattabiraman Balasundaram, IIT Roorkee, India*
ICWRS **IAHS25_ABS_X8966**	Effect of different nitrogen treatments on chlorophyll content and yield of wheat crop *Ms. Apoorva Yadav, Shiv Nadar University, India*
ICWRS **IAHS25_ABS_B1979**	Water Supply-Demand Gap in Dura City, Palestine: Challenges and Recommendations *Dr. Hamzah Faquseh, University of Brescia, Italy*
ICWRS **IAHS25_ABS_F3390**	Drivers of the seasonal slow-flow variability in a mountainous catchment *Mr. Sanjay Kumar, IIT Roorkee, India*
ICWRS **IAHS25_ABS_N2085**	Regional Analysis of Drought Characteristics Using Meteorological Drought Indices across India *Ms. Pranita Joshi, IIT Roorkee, India*
ICWRS **IAHS25_ABS_H6526**	On the need for capturing historical trend of crop yield in crop models for efficient estimation of crop water use *Mr. Aniruddha Saha, IIT Roorkee, India*
ICWRS **IAHS25_ABS_I1068**	Forest Fire Dynamics in Himachal Pradesh: Spatiotemporal Patterns and Driving Factors (2000-2024) *Ms. Nisha Jindwal, IIT Mandi, India*
ICWRS **IAHS25_ABS_C1620**	Adapting Water Resource Management to Climate Change in the Alpine Region of South Tyrol Italy *Dr. Giacomo Bertoldi, Eurac Research, Italy*
ICWRS **IAHS25_ABS_B7888**	Complex governance finance and natural resource considerations on 'going off grid' for Rhodes University South Africa *Dr. Jane Louise Tanner, Rhodes University, South Africa*
ICWRS **IAHS25_ABS_W4151**	Climate change and water resources capacity development in Africa under the SASSCAL and WASCAL doctoral programmes *Dr. Luna Bharati, International Center for Water Resources and Global Change, Germany*
ICWRS **IAHS25_ABS_M9363**	State of Art of Ecohydrology Research in the Indian Subcontinent: A Review *Mr. Pankaj Verma, IIT Mandi, India*
ICWRS **IAHS25_ABS_Q4852**	Strengthening Global Hydrological Research - Outcomes of the WMO Research Board Task Team on Hydrology Research *Dr. Ilias Pechlivanidis, Swedish Meteorological and Hydrological Institute (SMHI), Sweden*
ICWRS **IAHS25_ABS_W6265**	Progress on artificial eco-environmental water supplement in recent 20 years in China *Prof. Chunfeng Hao, China Institute of Water Resources and Hydropower Research, China*
ICWRS **IAHS25_ABS_I7541**	Clustering Catchments by Low Flow Behavior: An Unsupervised Learning Approach *Mr. Nishant Saxena, IIT Roorkee, India*

ICWRS **IAHS25_ABS_O9210**	Advancing the Quantification of Water Resources using Coupled Hydrological model - Water Accounting Approach *Ms. Pooja Patle, IIT Roorkee, India*
ICWRS **IAHS25_ABS_A6676**	Seamless short to long term forecasting of inflow into lake Baikal: development and online assessment *Dr. Vsevolod Moreido, Water Problems Insitute of the Russian Academy of Sciences, Russian Federation*
ICWRS **IAHS25_ABS_X9929**	Length scale and energy distribution through grid-induced turbulence in pulsating flow case *Dr. Pankaj Kumar Raushan, IIT Bombay, India*
ICWRS **IAHS25_ABS_T7213**	An Open-Source Tool for Generating Hourly Synthetic Streamflow Series in Ungauged Basins Using Regional Flow-Duration Curves *Mr. Alan Spadoni, University of Bologna, Italy*
ICWRS **IAHS25_ABS_V9616**	From Climate Shifts to Flood Changes: Data Based and Modelling Approaches *Prof. Alberto Viglione, Politecnico di Torino, Italy*

Session: 2.5 | October 07, 2025, 16:30–18:00

ICSH **IAHS25_ABS_R6780**	Change in probable maximum precipitation in a changing climate over the Upper Indus Basin *Mr. Aman Kumar, IIT Roorkee, India*
ICSH **IAHS25_ABS_S4427**	Evaluating the Performance of Uni- and Multivariate Bias Correction Techniques: Challenges in Preserving Temporal and Dependence Structures *Mr. Sachidanand Sharma, IIT Roorkee, India*
ICSH **IAHS25_ABS_W4198**	Streamflow drought indices in the Morava River basin - an update *Dr. Ondrej Ledvinka, Czech Hydrometeorological Institute, Czech Republic*
ICSH **IAHS25_ABS_H2231**	A novel approach to detect changes in the variability of the hydro-climatic record in the wettest state Meghalaya India *Mr. Chingka Kalai, IIT Roorkee, India*
ICSH **IAHS25_ABS_Q2530**	Assessing Rainfall Seasonality Regimes in India's East Coastal Region during 1953-2022 *Dr. Yellamelli Ramji Satyaji Rao, National Institute of Hydrology - Roorkee, India*
ICSH **IAHS25_ABS_X7709**	Enhancing smallholder sociohydrological predictions at plot scale by novel data assimilation of high-resolution soil moisture and biomass data *Mr. Mario Alberto Ponce Pacheco, Delft University of Technology, Netherlands*
ICSH **IAHS25_ABS_H4489**	Development of new framework on wavelet-based time-scale dependent sensitivity analysis of hydrological models *Ms. Sai Suswara Vaddadi, IIT Hyderabad, India*
ICSH **IAHS25_ABS_P2172**	Unravelling the Spatiotemporal Variability of Soil Moisture and Soil Temperature Across India (1961-2023): Insights from ERA5 Reanalysis Data *Mr. Sai Bargav Reddy Muskula, IIT Roorkee, India*
ICSH **IAHS25_ABS_X6071**	Identifying threats to protection goals in intermittent rivers *Prof. Krzysztof Kochanek, Warsaw University of Technology, Poland*
ICSH **IAHS25_ABS_T3535**	Regularized calibration of conceptual hydrological models *Dr. Saket Pande, Delft University of Technology, Netherlands*
ICSH **IAHS25_ABS_X4332**	Joint probability modelling of flood variables for the design flood estimation in South Africa *Mr. Sandile Sifiso Dladla, University of KwaZulu natal and University of Free State, South Africa*
ICSH **IAHS25_ABS_I3297**	Assessing the Effectiveness of Agricultural Drought Indices: A Multiplex Networks Perspective *Mr. Kasi Venkatesh, IIT Bombay, India*
ICSH **IAHS25_ABS_Q3503**	Apprehending total water storage components of GRACE using temporal decomposition for the Ganga basin *Ms. Snehil Dubey, IIT Hyderabad, India*
ICSH **IAHS25_ABS_S1860**	Recurrence Analysis of Streamflows of Krishna River Basin *Ms. Susan Mariam Rajesh, TKM College of Engineering, India*
ICSH **IAHS25_ABS_Y3460**	Evaluating the Water Availability Status in Jammu and Kashmir using Statistical Hydrological Approach

	Mr. Dheeraj Mohan Gururani, IIT Jammu, India
ICSH **IAHS25_ABS_C3401**	Multi-Model Evaluation of Sub-Seasonal Rainfall and Temperature Forecasts in India: Implications for Drought Prediction *Ms. Paushali Deb, IIT Bombay, India*
ICSH **IAHS25_ABS_D1655**	Enhancing Hyperlocal Extreme Rainfall forecasts for Mumbai *Ms. Puja Tripathy, IIT Bombay, India*
ICSH **IAHS25_ABS_C5624**	Optimal satellite based precipitation datasets for extreme precipitation analysis in Meghalaya: a comprehensive study on dataset selection and spatio-temporal trends *Dr. Pushpendra K. Singh, Sardar Vallabhbhai Patel University of Agriculture & Technology Meerut, India*
ICSH **IAHS25_ABS_H7546**	High-Flow Sediment Transport Alterations Due to Damming in the Godavari River Basin *Ms. Anubhuti Singh, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSH **IAHS25_ABS_D8041**	Estimating Vulnerability to Compound Dry and Hot Extremes in the Madhya Pradesh: A District-Level Perspective *Mr. Chaitanya Raj, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSH **IAHS25_ABS_Y4009**	Vine Copula based Multivariant Flood risk Assessment on Beas River Basin *Mr. Saran Raaj, IIT Mandi, India*
ICSH **IAHS25_ABS_W7845**	Understanding hydrodynamics of three spring clusters in Leh region of Ladakh Union Territory *Mr. Aamir Jan Farooq, GB Pant National Institute of Himalayan Environment, India*
ICSH **IAHS25_ABS_B2850**	From Uncertainty to Reliability: Validating and Merging Soil Moisture Data in India *Ms. Upasana Jha, IIT Hyderabad, India*
ICSH **IAHS25_ABS_V6913**	Suspended Sediment Load Estimation of the Godavari River Basin Using Tree-based Machine Learning Algorithms *Mr. Soumya Kundu, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSH **IAHS25_ABS_C8114**	Transforming Flash Drought Forecasting: Evaluating Custom AI and Time Series Foundation Models *Mr. Ashish Pathania, IIT Mandi, India*
ICSH **IAHS25_ABS_V1384**	Characterizing Rainfall Thresholds for Landslide Early Warning in the Indian Himalayas *Mr. Salil Sharma, IIT Mandi, India*
ICSH **IAHS25_ABS_H7883**	Assessing the Transition from Meteorological to Hydrological Extremes: A Circular Statistics Analysis of Drought and Flood Dynamics in the Mahanadi Basin *Mr. Mayank Tyagi, IIT Roorkee, India*

ICSH **IAHS25_ABS_X1402**	Risk of Extreme Precipitation on Dam Infrastructure under changing climate over India *Mr. Mayank Tiwari, IIT Jodhpur, India*
ICSH **IAHS25_ABS_N7045**	Prediction of Temperature and Precipitation in Narmada River Basin Using GUI Matlab Tools *Mr. Ravikant Kumar, Maulana Azad National Institute of Technology Bhopal, India*
ICSH **IAHS25_ABS_R4769**	Spatio -temporal Analysis of Monsoon Rainfall patterns in the Pennaiyar Basin using a Bayesian Hidden Markov Model *Mr. Nagesh Mishra, IIT Madras, India*
ICSH **IAHS25_ABS_W7222**	Assessing Compound Dry and Hot Events in Indian Smart Cities: Historical Trends and Future Projections under +2°C and +4°C Climate Change Scenarios *Ms. Vaishnavi Sahu, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSH **IAHS25_ABS_H7446**	Development of Intensity-Duration-Frequency Curves for Urban Infrastructure Design using Sub-Daily Disaggregated Rainfall Data *Ms. Saraswati Harivenu Nair, IIT Delhi, India*
ICSH **IAHS25_ABS_L1799**	Climate change Impacts North Indian Region using CMIP6 Model outputs *Prof. Shashikanth Kulkarni, University College of Engineering Osmania University, India*
ICSH **IAHS25_ABS_H3517**	Does River Basin Morphology Reflect Landscape Evolution? *Ms. Saba Shakeel Raina, IIT Bombay, India*
ICSH **IAHS25_ABS_S4246**	Improving Hershfield method-based Probable Maximum Precipitation estimates with the use of Peaks over threshold series *Ms. Jaya Bhatt, IISc Bangalore, India*
ICSH **IAHS25_ABS_D1383**	Narrowing at-site flood frequency analysis using simulations from the continental AWRA-L landscape model *Dr. Julien Lerat, CSIRO, Australia*
ICSH **IAHS25_ABS_U4512**	Efficacy of Change Point Tests in Identifying Non-stationarity Conditions in Hydrological Time Series *Prof. Priyank J. Sharma, IIT Indore, India*
ICSH **IAHS25_ABS_I9896**	High-Resolution CMIP6 Downscaled Precipitation and Temperature Dataset Over South Asia *Ms. Neharika Bhattarai, IIT Delhi, India*
ICSH **IAHS25_ABS_G2403**	Teleconnection-informed frequency analysis of rainfall extremes *Dr. Andrea Magnini, University of Bologna, Italy*
ICSH **IAHS25_ABS_G1792**	Insurance as a tool to manage the flooding risk *Prof. Giorgio Roth, Università di Genova, Italy*
ICSH **IAHS25_ABS_R8145**	Evaluation of different precipitation data over the Pamba River basin, Kerala *Ms. Geethika Moorthy, IIT Roorkee, India*
ICSH **IAHS25_ABS_W5998**	Statistical Characterization of Upstream Flooding Patterns Induced by Culvert Capacity Exceedance

	Dr. Berina Mina Kilicarslan, New York University, United States
ICSH **IAHS25_ABS_C9651**	Ensemble Streamflow Data Assimilation in the Indian Subcontinent using vector-based Hydrodynamic Model and Novel Localization Techniques *Mr. Ved Prakash, IIT Delhi, India*
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ICSH **IAHS25_ABS_X7547**	Partitioning hydrologic uncertainty into model parameter contributions and their association with catchment attributes *Dr. Arpita Mondal, IIT Bombay, India*
ICSH **IAHS25_ABS_G3850**	GEV Annual Maximum Precipitation Quantile with Regional Shape Parameter *Prof. Dirceu Silveira Reis Jr, University of Brasilia, Brazil*
ICSH **IAHS25_ABS_B3154**	A rainfall runoff database for improving the flood forecasting: The Case Study of the Crati River Basin - the Tech4You Project *Dr. Stefania Camici, Research Institute for Geo-Hydrological Protection, Italy*
ICSH **IAHS25_ABS_F7029**	Exploring Coincidental Compound Extremes in Pan-Himalayan River Basins under Changing Climate *Ms. Achala Singh, IIT Indore, India*
ICSH **IAHS25_ABS_T7640**	A physics-informed Graph Neural Network Framework for Post-processing Ensemble streamflow simulations in a river network *Ms. Anagha P., IIT Delhi, India*
ICSH **IAHS25_ABS_L6982**	Application of Polynomial Chaos Expansion method for hydrological model uncertainty *Prof. Tirupati Bolisetti, University of Windsor, Canada*
ICSH **IAHS25_ABS_J7528**	Quantifying Multivariate Streamflow Drought Hazards in Large River Basins Accounting Onset Seasonality and Event Magnitude *Ms. Aparna Raut, IIT Kharagpur, India*
ICSH **IAHS25_ABS_H7736**	Evaluation of the performance of satellite-based rainfall products in the South-East of the Congo Basin in Lubumbashi region *Dr. Benjamin Kitambo, University of Lubumbashi, Democratic Republic of The Congo*
ICSH **IAHS25_ABS_J5057**	A Channel Network Morphology-based Perspective on Discharge-Basin Area Scaling *Mr. Akshay Kadu, IIT Bombay, India*
ICSH **IAHS25_ABS_W1775**	Detecting trends in extreme long duration rainfall data in KwaZulu-Natal South Africa *Mr. Demian Vusimusi Mukansi, University of KwaZulu-Natal, South Africa*
ICSH **IAHS25_ABS_V6256**	Surface Urban Heat Island in Indian Cities and Its Correlation with Urbanization *Mr. Saeed Soleimani, IIT Bombay, India*
ICSH **IAHS25_ABS_K8478**	A Bayesian Copula-Based Integrated Drought Index (IDI) for Holistic Drought Monitoring in India *Mr. Usman Aliakbar Mohseni, IIT Roorkee, India*

ICSH **IAHS25_ABS_T8926**	Rainfall Forecasting using Deep-Learning based LSTM Model *Mr. Subhashis Chowdhury, IIT Bombay, India*
ICSH **IAHS25_ABS_A9129**	Robust estimation of present and future flood quantiles and extreme event attribution based on a non-stationary climate-informed weather generator *Dr. Sergiy Vorogushyn, GFZ Helmholtz Centre for Geosciences, Germany*
ICSH **IAHS25_ABS_K2495**	Incorporating Non-Stationarity in Design Flood Estimation Guidance *Ms. Deepali Rawat, IIT Roorkee, India*
ICSH **IAHS25_ABS_H8518**	Comparative Analysis of the compounding effects of zero and extreme rainfall events with extreme temperatures in the southern peninsula of India *Ms. Nithya R.L., National Institute of Technology - Calicut, India*
ICSH **IAHS25_ABS_B4465**	Have heat and cold waves intensified over Central India in the recent period? *Mr. Vikas Sudam Gore, IIT Indore, India*
ICSH **IAHS25_ABS_N8595**	Exploring the Linkages between Heatwaves and Droughts in the Upper Chambal Basin *Mr. Harshvardhan Solanki, IIT Indore, India*
ICSH **IAHS25_ABS_Q2742**	Filling Intermittent and Continuous Discharge Data Gaps: A Comparative Evaluation of Imputation Methods *Prof. Priyank J. Sharma, IIT Indore, India*
ICSH **IAHS25_ABS_K5160**	Multivariate analysis of extreme space-time rainfall events based on raingauge data *Prof. Fabio Castelli, University of Florence, Italy*
ICSH **IAHS25_ABS_X2853**	Regional Calibration of a Lumped Hourly Hydrological Model Using a Decision-Tree Approach *Ms. Giuditta Smerilli, University of Bologna, Italy*
ICSH **IAHS25_ABS_R7819**	Assessing Future Dam Breach Risks and Safer Hydropower Solutions in the Himalayan River Basins: A Case Study of Tamakoshi Basin *Dr. Zainab Khan, Aligarh Muslim University, India*
ICSH **IAHS25_ABS_K2201**	Climate-Informed Model for Forecasting Flood Quantiles in Indian Catchments *Mr. Abinesh Ganapathy, IIT Roorkee, India*
HELPING theme 1 **IAHS25_ABS_W9423**	The Coupled Root-Soil Interactions Modeling: A Gateway to Resolving Hydro-biological Complexities of the Land Surface *Prof. Yi Luo, Institute of Geographic Sciences and Natural Resources Research Chinese Academy of Sciences, China*
HELPING theme 1 **IAHS25_ABS_K5452**	Assessing the role of spatial variability in climate forcing on soil moisture simulated using a hyper-resolution land surface model at the farm scale *Mr. Vishnu U. Krishnan, IIT Bombay, India*
HELPING theme 1 **IAHS25_ABS_N4484**	Implementing deficit irrigation systems - differences and similarities across world regions *Dr. Niels Schuetze, TU Dresden, Germany*
HELPING theme 1 **IAHS25_ABS_G2583**	Statistical methods and climate models jointly analyze the impact of climate change in large river basins

	Prof. Tie Liu, Zhejiang University of Technology, China
HELPING theme 3 **IAHS25_ABS_P9148**	Water solutions in the Anthropocene IAHS's third scientific decade. Keeping the pace *Prof. Thom Bogaard, Delft University of Technology, Netherlands*
HELPING theme 3 **IAHS25_ABS_A9513**	Pluralizing water epistemologies: the need for a decolonised water representation *Dr. Giulio Castelli, University of Florence, Italy*
HELPING theme 3 **IAHS25_ABS_O7542**	Indian Climate Information Explorer (INCLINE): A Unified Platform for Climate Data Visualization and Download for Indian subcontinent *Mr. Siddik Barbhuiya, IIT Mandi, India*
HELPING theme 3 **IAHS25_ABS_M8479**	What do we need to know? Ten questions about climate and water challenges in Berlin-Brandenburg *Dr. Pedro Henrique Lima Alencar, Technische Universität Berlin, Germany*
HELPING theme 3 **IAHS25_ABS_Q6225**	Using collaborative Agent-Based Modelling (ABM) to enhance decision making in agricultural water use *Dr. David Gwapedza, University of Namibia, Namibia*
HELPING theme 3 **IAHS25_ABS_H4634**	Participatory pseudo-quantification of the effects of citizen-led adaptation on household flood risk in Tamale Ghana *Dr. Ben Christopher Howard, Imperial College London, United Kingdom*
HELPING theme 3 **IAHS25_ABS_T3934**	How Can the IAHS' Digital Water Globe Enhance Research Visibility and Improve Network Connectivity in a Society Under Transformation? *Prof. Eduardo Mario Mendiondo, University of Sao Paulo, Brazil*
HELPING theme 3 **IAHS25_ABS_T2101**	Fair Water - management of floods and droughts through collaboration and co-creation *Prof. Berit Arheimer, Swedish Meteorological and Hydrological Institute (SMHI), Sweden*
HELPING theme 3 **IAHS25_ABS_X7284**	Science Communication in HELPING - A Community Perspective on Common Challenges and Best-Practice Solutions *Dr. Christina Anna Orieschnig, Institut de Recherche pour le Développement, France*
HELPING theme 1 **IAHS25_ABS_Y9599**	Multiple-Scale Variation and Driving Factors of Snow/Ice Melting Floods in Yarkant River Basin Karakoram Mountains *Mr. Weian Si, University of Chinese Academy of Sciences, China*
HELPING theme 1 **IAHS25_ABS_D6839**	Decadal Predictability of Indian Summer Monsoon Rainfall: Influence of SST patterns across distinct oceanic regions *Dr. Junaid Dar, IIT Bombay, India*
HELPING theme 1 **IAHS25_ABS_N9920**	Analysis of the compound impact of antecedent dry periods and rainstorm events on urban diffuse pollution and resulting surface water pollution *Prof. Eva Paton, Technical University of Berlin, Germany*
HELPING theme 1 **IAHS25_ABS_G7241**	Linking hydrology with grassland dynamics for sustainable management of the tiger habitat in Terai Arc Landscape Nepal *Prof. Thom Bogaard, Delft University of Technology, Netherlands*
HELPING theme 1 **IAHS25_ABS_E2053**	How to deeply communicate with hydrological changes-DEEPHY examples

	Prof. Suxia Liu, Institute of Geographic Sciences and Natural Resources Research Chinese Academy of Sciences, China
HELPING theme 1 **IAHS25_ABS_S2772**	When rivers dry out: an intermittency analysis for Central Europe *Prof. Eva Paton, Technical University of Berlin, Germany*
HELPING theme 1 **IAHS25_ABS_R7416**	Assessing the Impacts of Landscape Change on Riverine Ecosystem Services in the Upper Beas Catchment *Mr. Prakhar Sharma, IIT Roorkee, India*
HELPING theme 1 **IAHS25_ABS_G4215**	Deep Learning-Based Approach for Daily Streamflow Prediction in Watersheds With Aggregated and Intermittent Observations *Mr. Nikunj K. Mangukiya, IIT Roorkee, India*
HELPING theme 1 **IAHS25_ABS_P3799**	Landholders leverage over moisture flows and forest resilience in South America *Dr. Chandrakant Singh, Chalmers University of Technology, Sweden*
HELPING theme 1 **IAHS25_ABS_B4930**	CASCADE-3C: Collaborative Climate Change Risk and Adaptation *Prof. Jamil Alexandre Ayach Anache, University of Sao Paulo, Brazil*
HELPING theme 1 **IAHS25_ABS_J8732**	Optimizing raingarden performance with smart low-cost sensor networks *Dr. Carola Marella, University of Brescia, Italy*
ICSH **IAHS25_ABS_P6544**	Spatio-temporal Assessment of Meteorological Droughts in Central India: Historical Trends and Emerging Patterns *Mr. Ruchir Patidar, National Institute of Hydrology - Roorkee, India*
ICSH **IAHS25_ABS_O7412**	Downscaling of Satellite Soil Moisture for field scale predictions *Mr. Usman Hyder Patoo, IIT Bombay, India*
ICSH **IAHS25_ABS_O1824**	Enhancing Large-Scale Flood Modeling through Satellite Data Integra on: The RESCUE_SAT Project *Dr. Elena Volpi, Roma Tre University, Italy*
HELPING theme 2 **IAHS25_ABS_P5122**	Quantum Dots and their Nanocomposites applications for Environmental Applications *Dr. Vatsala Cilamkoti, IIT Roorkee, India*
ICSH **IAHS25_ABS_A7993**	A High-Resolution Daily Precipitation Dataset of Statistically Downscaled CMIP6 models over South Asia *Mr. Joyjit Mandal, IIT Roorkee, India*
ICSH **IAHS25_ABS_H9280**	Accounting for the Harmattan in Seasonal Precipitation Forecasting: A Statistical Analysis of Climatic Variability in Northern Benin *Dr. Djigbo Felicien Badou, Université Nationale d'Agriculture, Benin*

Session: 3.1 | October 08, 2025, 9:00–10:30

ICSW **IAHS25_ABS_Y1967**	Wasted Years: Evaluating the time-effectiveness of top-down versus bottom-up approaches during development of an operational flood forecast model for Denmark *Dr. Conrad Brendel, Swedish Meteorological and Hydrological Institute (SMHI), Sweden*
ICSW **IAHS25_ABS_S9767**	Hydrologic drought-to-flood transitions in India *Dr. Pankaj Dey, IIT Roorkee, India*
ICSW **IAHS25_ABS_J8058**	PASSing the Test: Improving Hydrological Modelling for Brazil's Ungauged Catchments *Prof. Ralf Merz, Helmholtz Centre for Environmental Research UFZ, Germany*
ICSW **IAHS25_ABS_Q5290**	Evaluating the spatiotemporal variations in the streamflow drought characteristics in the Godavari River Basin *Ms. Meghomala Ghosal, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSW **IAHS25_ABS_L8960**	Impact of human activities on altering flood characteristics in the Godavari River Basin *Mr. Shreejit Pandey, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSW **IAHS25_ABS_K3682**	Hydrological validation of Satellite Precipitation Products in Upper Beas basin *Ms. Anusha Somisetty, IIT Roorkee, India*
ICSW **IAHS25_ABS_S9669**	Development and Evaluation of Impact-Based Flood Forecasting in India *Mr. Ali Mashhadi, UK Centre for Ecology & Hydrology (UKCEH), United Kingdom*
ICSW **IAHS25_ABS_F6627**	Impact of Prescribed Burn on Suspended Sediment Concentration and Discharge: Learning from California's Oak Woodland *Prof. Aliva Nanda, IIT Mandi, India*
ICSW **IAHS25_ABS_D3683**	Reconstruction of historical flow duration curves using reanalysis data *Dr. Soumyaranjan Sahoo, National Institute of Hydrology - Roorkee, India*
ICSW **IAHS25_ABS_S8116**	Can Blended Models Offer a Better Approach to Streamflow Prediction? A large sample study *Mr. Daneti Arun Sourya, IIT Hyderabad, India*
ICSW **IAHS25_ABS_Y5888**	How does a higher density of small water reservoirs affect catchment hydrology? *Dr. Vaclav David, Czech Technical University in Prague, Czech Republic*
ICSW **IAHS25_ABS_T3590**	Assessing the Temporal-Spatial Stability of Cross-Section Mean Flow Velocity in Small and Large Rivers *Dr. Tommaso Moramarco, Research Institute for Geo-Hydrological Protection, Italy*
ICSW **IAHS25_ABS_T9434**	Declining Water Storage in Small and Medium Inland Waterbodies of Chennai: Implications for Mitigating Flood Risks *Mr. Ankit Sharma, IIT Roorkee, India*
ICSW **IAHS25_ABS_G5316**	Performance Evaluation of Seven Combination Techniques Applied on Nine Rainfall-Runoff Models for Water-Availability Assessment

	Prof. Monomoy Goswami, Central Institute of Technology Kokrajhar, India
ICSW **IAHS25**_ABS_W9049	Time of Concentration: A Key Parameter for Urban Drainage System Modeling and Flood Management *Dr. Deepak Singh Bisht, National Institute of Hydrology - Roorkee, India*
ICSW **IAHS25_ABS_B1672**	The inflow of river waters into the seas of the Russian Arctic and its long-term and intra-annual natural and anthropogenic changes *Dr. Dmitry Magritskii, Lomonosov Moscow State University, Russian Federation*
ICSW **IAHS25_ABS_O9156**	Cascading Hazards of a Wildfire in the Tropical Rwenzori Mountains *Ms. Martha Day, Imperial College London, United Kingdom*
ICSW **IAHS25_ABS_I5160**	Water security indicators on a climate change scenario and implications for sustainable surface water management *Mr. Pedro Silva, University of Sao Paulo, Brazil*
ICSW **IAHS25_ABS_Q9520**	A review on instrumentations for hydrological measurements: Current status and way forward *Mr. Vijaya Lakshmanan S., IIT Roorkee, India*
ICSW **IAHS25_ABS_K3599**	Development of A Novel Approach for Studying Landslides Under Current and Future Rainfall Conditions *Mr. Mani Kanta Malla, IIT Roorkee, India*
ICSW **IAHS25_ABS_A5244**	Understanding the impact of urban heat island effect on precipitation patterns in an urban microclimate *Mr. Ashish Mishra, IIT Roorkee, India*
ICSW **IAHS25_ABS_H7404**	Interannual Rainfall Variability of Indian River Basins: Long-term Stability and Emerging Climate Teleconnections *Dr. Ashwini Arvind Ranade, National Institute of Hydrology - Roorkee, India*
ICSW **IAHS25_ABS_L9034**	Development of Urban Flood Inundation and Hazards Maps using Hydrodynamic Modelling and Geospatial Techniques *Prof. Gopal M. Naik, Osmania University, India*

Session: 3.2 | October 08, 2025, 11:00–12:30

ICSW **IAHS25_ABS_E1024**	Impact of peatland restoration in Boreal Conditions: A Hydrological Perspective *Prof. Hannu Marttila, University of Oulu, Finland*
ICSW **IAHS25_ABS_F6321**	Complexity and Connectivity in Hydrology *Prof. Bellie Sivakumar, IIT Bombay, India*
ICSW **IAHS25_ABS_S3604**	River basin trajectories under global change: earth observations and participatory hydrological modelling in the Senegal river basin *Dr. Andrew Ogilvie, French Research Institute for Sustainable Development (IRD), France*
ICSW **IAHS25_ABS_Y8185**	Using Ensemble Machine Learning to Analyze Climate Change Impacts on Hydropower Inflows in West Africa *Mr. Franck Herve Akaffou, Jean Lorougnon Guédé University, Cote d'Ivoire*
ICSW **IAHS25_ABS_X9372**	The identification of critical zones in Southern Kerala River basins employing combined clustering and prioritization strategies *Ms. Athira R., College of Engineering Trivandrum, India*
ICSW **IAHS25_ABS_F6774**	A hydro-signature integrated physics-informed machine learning (HS-PIML) framework for enhancing streamflow predictions across diverse catchments *Mr. Ritesh Yewnath Moon, University of Birmingham, United Kingdom*
ICSW **IAHS25_ABS_Y6963**	Remote Sensing based Systematic Wetland Improvement and Management (SWIM) Protocol: A Nature-Based Solution for Disaster Risk Reduction in Bihar India *Dr. Channarayapattana Narasimhamurthy Prabhu, Bihar Mausam Sewa Kendra, India*
ICSW **IAHS25_ABS_G8369**	Rainwater Harvesting Potential Zone Mapping in Urban Areas Using GIS Remote Sensing and AHP: A Case Study of Hyderabad City *Dr. Shaik Rehana, International Institute of Information Technology Hyderabad, India*
ICSW **IAHS25_ABS_N5514**	Climate Change impacts on freshwater quantity and quality in Canada *Prof. Ram Yerubandi, Environment and Climate Change Canada, Canada*
ICSW **IAHS25_ABS_V2968**	Analysis of asymmetric behavior of storm runoff components in a tropical experimental catchment *Mr. Rajat Kumar Sharma, NCESS, Ministry of Earth Sciences, India*
ICSW **IAHS25_ABS_O4976**	Climate change impact assessment on the hydrological response of the Tawa basin for sustainable water management *Ms. Pragya Badika, IIT Roorkee, India*
ICSW **IAHS25_ABS_W3290**	Changes in runoff response to rainfall along forest degradation gradients in the Lesser Himalaya of NW India *Dr. Nuzhat Ul Qayoom Qazi, Himalayan Ecosystem Services Trust, India*
ICSW **IAHS25_ABS_W1278**	Blending Subseasonal-to-Seasonal Hydrological Predictions from Multiple Forecasting Systems *Dr. Burak Bulut, UK Centre for Ecology and Hydrology, United Kingdom*
ICSW **IAHS25_ABS_F3652**	Urban hydrology challenges and solutions: insights from the Birmingham Urban River Observatory

	Prof. David M. Hannah, University of Birmingham, United Kingdom
ICSW **IAHS25_ABS_V9526**	Quantifying water balance dynamics and associated uncertainties in an irrigated catchment using open-source gridded datasets and hydrological modelling with improved process representation: case of Hindon River Basin India *Mr. Raul Mendoza, Wageningen University & Research, Netherlands*
ICSW **IAHS25_ABS_Q4924**	Hydrological Modeling of Extreme Floods in Mountain Permafrost Regions: A Case Study of Magadan Oblast Russia *Mrs. Oksana Zhunusova, State Hydrological Institute, Russian Federation*
ICSW **IAHS25_ABS_O8976**	A Comprehensive Framework for Modeling Releases in a Cascading Reservoir System *Ms. Sruthakeerthi P., IIT Roorkee, India*
ICSW **IAHS25_ABS_R3591**	Comparison of Flash Droughts and Conventional Droughts in Madhya Pradesh Using the SPEI Index *Ms. Upasana Jha, IIT Hyderabad, India*
ICSW **IAHS25_ABS_M4544**	Enhancing streamflow simulation of the SWAT model using parameter regionalization and high-resolution remote sensing data *Mr. Bhabesh Das, IIT Roorkee, India*
ICSW **IAHS25_ABS_L7853**	Trends in Urban Flooding with Rapidly Expanding Impervious Area *Mr. Arkadip Mallik, IIT Delhi, India*
ICSW **IAHS25_ABS_I9774**	Investigation of Open-Source LULC Datasets for Watershed Hydrology Simulation *Mr. Prashant, IIT Roorkee, India*
ICSW **IAHS25_ABS_P3782**	Assessing Extreme Flood Inundations in Brahmani-Baitarani Delta under Future Climate Change Scenarios with BiLSTM and HEC-RAS 2D Models *Dr. Bhabagrahi Sahoo, IIT Kharagpur, India*
ICSW **IAHS25_ABS_U6566**	Enhancing weather radar estimates of heavy rainfall for near real time landslide and flash flood EWS in Thailand *Prof. Thom Bogaard, Delft University of Technology, Netherlands*
ICSW **IAHS25_ABS_P7530**	Does MC-LSTM model improve the reliability of streamflow prediction in human-influenced watersheds in India? *Mr. Gopeshwar Sahu, IIT Roorkee, India*

Session: 3.3 | October 08, 2025, 13:30–15:00

ICSW **IAHS25_ABS_B7276**	Research on Ensemble Probabilistic Flood Forecasting Based on Runoff and Rainfall Knowledge-Guided Deep Learning *Dr. Chengshuai Liu, Zhengzhou University, China*
ICSIH **IAHS25_ABS_O3974**	Reconstruction of the South Lhonak Lake Glacial Lake Outburst Flood (GLOF) in Sikkim Himalaya India *Dr. Vishal Singh, National Institute of Hydrology - Roorkee, India*
ICSIH **IAHS25_ABS_X5929**	Strengthening GLOF Risk Mitigation in India: Challenges and Strategies *Dr. Gagandeep Singh, National Institute of Disaster Management, India*
ICSW **IAHS25_ABS_Q9988**	Integration of non-linear conceptual reservoirs without tears using the QuaSoARe method *Dr. Julien Lerat, CSIRO, Australia*
ICSW **IAHS25_ABS_Y1464**	A simple calibration-free Dynamic Budyko model for streamflow prediction in data scarce regions *Dr. Prashant Sandipan Istalkar, IIT Bombay, India*
ICSW **IAHS25_ABS_E1845**	Satellite-based Surface water mapping using combined Optical and SAR *Mr. Shagun Garg, University of Cambridge, United Kingdom*
ICSW **IAHS25_ABS_W8237**	Sustainable Solutions for Stormwater Management in Urban Environments *Mr. Arup Babu, IIT Delhi, India*
ICSW **IAHS25_ABS_F1055**	Assessing the Role of Wetlands as Nature-Based Solution in Flood Mitigation in Delhi-NCR *Mr. Anish Aryal, IIT Delhi, India*
ICSW **IAHS25_ABS_F9104**	Assessment of Climatic and Anthropogenic Activities Impact on Streamflow Response of the Anandapur Subasin using SWAT Model *Ms. Shaheen Shaheen, IIT Bhubaneshwar, India*
ICSW **IAHS25_ABS_O2539**	Regionalising high-mountain wetland hydrological behaviour in the Tropical Andes *Mr. Anthony C. Ross, Imperial College London, United Kingdom*
ICSW **IAHS25_ABS_R6357**	Performance Evaluation of the Variable Parameter McCarthy-Muskingum Method and the Kinematic Wave Method for Overland Flow Simulation *Dr. Ravindra Vitthal Kale, National Institute of Hydrology - Roorkee, India*
ICSW **IAHS25_ABS_O7099**	Spatiotemporal Characterization of Hydro-Meteorological Disasters in Indian Himalaya: An MCDM based Prioritization Approach for Disaster Resilience *Dr. Pankaj Kumar, GBPUAT Pant Nagar, India*
ICSIH **IAHS25_ABS_M9227**	Arctic Climate Variability and Its Influence on Seasonal Snow Dynamics in the Hindu Kush Himalayas *Mr. Anant Dikshit, IIT Roorkee, India*
ICSIH **IAHS25_ABS_A2441**	Impact of snow land data assimilation on hydrological processes in Community Land Model version 5 with SWEML *Mr. Jungho Seo, Yonsei University, Republic of Korea*
HELPING theme 2 **IAHS25_ABS_Y2274**	Global River Basin Classification Framework Based on Water Security Metrics *Ms. T.R. Sreeshna, IIT Delhi, India*

ICSIH **IAHS25_ABS_I2525**	Analysing the hydrological response of the Glaciated Gangotri Basin under dry wet and normal precipitation years *Dr. Manish Kumar Nema, National Institute of Hydrology - Roorkee, India*
ICSIH **IAHS25_ABS_U6726**	Long-term Snow Cover Dynamics in the Indian North-Western Himalayas using Multi-Sensor Satellite Data *Ms. Sakshi Tripathi, IIT Roorkee, India*
ICSIH **IAHS25_ABS_J6735**	Giant Aufeis in the Northeast of Russia according to the historical data of 1958 and satellite images of 1973-2021 *Dr. Olga Makarieva, St. Petersburg State University, Russian Federation*
ICSIH **IAHS25_ABS_F8214**	Impact of Spring Sea Ice Variability in the Barents-Kara Region on the Indian Summer Monsoon Rainfall *Dr. Divya Sardana, IIT Roorkee, India*
ICSIH **IAHS25_ABS_I4513**	Spatial and temporal variability of snow in Himalayan Mountains Catchment *Mr. Ayush Bharti, IIT Mandi, India*
ICSIH **IAHS25_ABS_F9059**	Evolving snow drought impacts on the hydrological behavior of headwater catchments in the Andes Cordillera *Dr. James McPhee, University of Chile, Chile*
ICSIH **IAHS25_ABS_S2981**	Co-Creating Water Knowledge for Climate Resilience: Understanding Precipitation Shifts and Their Impacts in South Asia and China *Dr. Dhiraj Pradhananga, Tribhuvan University/ The Small Earth Nepal, Nepal*
ICSH **IAHS25_ABS_Q2742**	Filling Intermittent and Continuous Discharge Data Gaps: A Comparative Evaluation of Imputation Methods *Prof. Priyank J. Sharma, IIT Indore, India*

Session: 3.4 | October 08, 2025, 15:30–16:30

ICSW **IAHS25_ABS_B7634**	Runoff and water regime of Russian rivers under climate change conditions *Prof. Natalia Frolova, Lomonosov Moscow State University, Russia*
ICSW **IAHS25_ABS_B6142**	Multy-year spatio-temporal changes of water temperatures and river heat flux in rivers of Russian permafrost zone: patterns and drivers *Mr. Alexander Nikolaevich Vasilenko, Lomonosov Moscow State University, Russia*
ICSW **IAHS25_ABS_K4287**	Impact of Climate Change on Hydrology and Extreme Events in the Mahanadi River Basin: A SWAT+ Approach *Mr. Debasish Mishra, IIT Roorkee, India*
ICSW **IAHS25_ABS_H6669**	Prediction of Monthly Rainfall Using Classification and Regression Tree (Cart) Model for Semi-Arid Region Chhattisgarh India *Mrs. Jugdambe Sharma, IIT (ISM) Dhanbad, India*
ICSW **IAHS25_ABS_U2273**	Complexity of Historical and Future Rainfall Dynamics in India under Climate Change: A Nonlinear Dynamic Dimensionality Approach *Dr. Deepthi B., KSCSTE, India*
ICSW **IAHS25_ABS_R1607**	An integrated framework for quantifying flood risk at Ramsar wetlands *Mr. Shivukumar Rakkasagi, IIT Indore, India*
ICSW **IAHS25_ABS_I2135**	A Study on Flooding Characteristics of Pallikaranai Marshland Chennai *Mr. Shubham Shaurabh, National Institute of Hydrology - Patna, India*
ICSW **IAHS25_ABS_N8305**	Representation of Hydrological Processes in an Agricultural Watershed Using the SWAT+ Model. A case study in Central Cote d'Ivoire West Africa *Mr. JeanYves Konan Nguessan, University Jean Lorougnon GUEDE, Cote d'Ivoire*
ICSW **IAHS25_ABS_L8056**	Projected Hydrological Drought Characteristics and trends over the Pra River Basin Ghana *Mr. Martin Addi, Ghana Space Science and Technology Institute, Ghana*
ICSW **IAHS25_ABS_A9784**	Streamflow Estimation in the Upper Narmada Watershed: Evaluating the Efficacy of Transformer Models *Mr. Siddik Barbhuiya, IIT Mandi, India*
ICCLAS **IAHS25_ABS_X5046**	Evaluation of Surface Flux Equilibrium model for evapotranspiration estimation *Ms. Ghazar Muzaffar, IIT Kanpur, India*
ICSW **IAHS25_ABS_J9378**	Improving Hydrological Simulation Using Satellite-Based Rainfall Data *Ms. Aiswarya S.L., IIT Roorkee, India*
ICSW **IAHS25_ABS_X1389**	Surface hydrology based hydro-meteorological thresholds for early warning of rainfall-induced landslides *Mr. Sudhanshu Dixit, IIT Roorkee, India*
ICSW **IAHS25_ABS_T3767**	Assessing Ensemble Medium-Range Weather Forecasts for Streamflow Prediction in a Southern Asian River Basin *Ms. Ayushi Dharmeshbhai Panchal, Sardar Vallabhbhai National Institute of Technology, India*
ICSW **IAHS25_ABS_W4115**	Assessment of Wildfire Impacts on Water Balance Using the SWAT Model *Dr. Alejandra Stehr, Universidad de Concepción, Chile*
ICSW **IAHS25_ABS_K8809**	Unveiling hydrological dynamics in data-scarce regions: experiences from the Ethiopian Rift Valley Lakes Basin *Mr. Ayenew Ayalew, Kiel University, Germany*

ICSW **IAHS25_ABS_S7923**	Comparative Study of Shallow Water Model (SWM) and Zero-Inertia Model (ZIM) for Flood Simulation in a Simplified Urban Catchment *Ms. Pakhi Priyam, IIT Delhi, India*
ICSW **IAHS25_ABS_L6053**	Development of a pre-computed surface water flood scenario catalogue using CARTINO 2D *Mr. Akshay Kowlesser, Universite Gustave Eiffel, France*
ICSW **IAHS25_ABS_G6508**	A Coupled Hydrological-Hydraulic Model for Urban Flood Simulation for the City of Hyderabad India *Mr. Swagatam Bora, IIT Hyderabad, India*
ICSW **IAHS25_ABS_I8433**	Improving peak flow estimation using an iterative channel routing approach *Mr. Ekant Sarkar, IIT Bombay, India*
ICSW **IAHS25_ABS_I5078**	Analytical Derivation of Richards' Equation and its Coupling with SCS-CN Concept for Efficacious Irrigation Scheduling *Mr. Damodar Sharma, IIT Roorkee, India*
ICSW **IAHS25_ABS_O8382**	Flood Risk Mapping for The Isipingo River Catchment Kwazulu-Natal: Enhancing Resilience Through Hydraulic Modelling *Mr. Nicholas Byaruhanga, Univerity of Kwazulu Natal, South Africa*
ICSW **IAHS25_ABS_W3870**	Processes and water balance over the last 60 years in the Chari-Logone sub-basins Lake Chad basin *Dr. Abdallah Mahamat Nour, University of N'Djamena, Chad*
ICSW **IAHS25_ABS_Y7981**	Enhancing River Discharge Observations: A Comparative Study of Current Meter and ADCP Methods using Rating Curves in Himalayan Rivers *Mr. Abhishek Kumar, IIT Roorkee, India*
ICSW **IAHS25_ABS_O9584**	Improving Evapotranspiration Resolution with Attention U-Net Downscaling *Mr. Shailesh Kumar Jha, IIT Mandi, India*
ICSW **IAHS25_ABS_R8650**	Performance Evaluation of the Lumped Hydrological Model for Streamflow Simulation Across Indian Subcontinent (ISC) *Ms. Vidushi Sharma, IIT Mandi, India*
ICSW **IAHS25_ABS_M9345**	Integrating Drought Monitoring and Crop Modelling for Enhanced Resilience in India *Dr. Suman Kumar Padhee, International Water Management Institute, India*
ICSW **IAHS25_ABS_X7890**	A River's Burden: Interplay Between Microplastics and Heavy Metals and Their Ecotoxicological Consequences *Mrs. Shalini Shalini, Gurukul Kangri deemed to be University, India*
ICSW **IAHS25_ABS_V2069**	Insights into the relations among natural flow water abstractions and e-flow from a distributed hydrologic modeling approach *Prof. Fabio Castelli, University of Florence, Italy*
ICSW **IAHS25_ABS_G2236**	A non-Newtonian approach to model 2023 Sikkim Glacial Lake Outburst Flood *Mr. Abinesh Ganapathy, IIT Roorkee, India*
ICSW **IAHS25_ABS_Q5290**	Evaluating the spatiotemporal variations in the streamflow drought characteristics in the Godavari River Basin *Ms. Meghomala Ghosal, Indian Institute of Science Education and Research (IISER) Bhopal, India*
ICSW **IAHS25_ABS_L8960**	Impact of human activities on altering flood characteristics in the Godavari River Basin

	Mr. Shreejit Pandey, Indian Institute of Science Education and Research (IISER) Bhopal, India
ICSW **IAHS25_ABS_O4976**	Climate change impact assessment on the hydrological response of the Tawa basin for sustainable water management *Ms. Pragya Badika, IIT Roorkee, India*
ICSW **IAHS25_ABS_Q4924**	Hydrological Modeling of Extreme Floods in Mountain Permafrost Regions: A Case Study of Magadan Oblast Russia *Mrs. Oksana Zhunusova, State Hydrological Institute, Russia*
ICSW **IAHS25_ABS_U6566**	Enhancing weather radar estimates of heavy rainfall for near real time landslide and flash flood EWS in Thailand *Prof. Thom Bogaard, Delft University of Technology, Netherlands*
ICSW **IAHS25_ABS_F1055**	Assessing the Role of Wetlands as Nature-Based Solution in Flood Mitigation in Delhi-NCR *Mr. Anish Aryal, IIT Delhi, India*
ICSW **IAHS25_ABS_O2539**	Regionalising high-mountain wetland hydrological behaviour in the Tropical Andes *Mr. Anthony C. Ross, Imperial College London, United Kingdom*
ICSW **IAHS25_ABS_T9434**	Declining Water Storage in Small and Medium Inland Waterbodies of Chennai: Implications for Mitigating Flood Risks *Mr. Ankit Sharma, IIT Roorkee, India*
ICSW **IAHS25_ABS_B1672**	The inflow of river waters into the seas of the Russian Arctic and its long-term and intra-annual natural and anthropogenic changes *Dr. Dmitry Magritskii, Lomonosov Moscow State University, Russia*
ICSW **IAHS25_ABS_Q9520**	A review on instrumentations for hydrological measurements: Current status and way forward *Mr. Vijaya Lakshmanan S., IIT Roorkee, India*
ICSW **IAHS25_ABS_G8369**	Rainwater Harvesting Potential Zone Mapping in Urban Areas Using GIS Remote Sensing and AHP: A Case Study of Hyderabad City *Dr. Shaik Rehana, International Institute of Information Technology Hyderabad, India*
ICSW **IAHS25_ABS_W1278**	Blending Subseasonal-to-Seasonal Hydrological Predictions from Multiple Forecasting Systems *Dr. Burak Bulut, UK Centre for Ecology & Hydrology (UKCEH), United Kingdom*
ICSW **IAHS25_ABS_V9526**	Quantifying water balance dynamics and associated uncertainties in an irrigated catchment using open-source gridded datasets and hydrological modelling with improved process representation: case of Hindon River Basin, India *Mr. Raul Mendoza, Wageningen University & Research, Netherlands*
ICSW **IAHS25_ABS_M4544**	Enhancing streamflow simulation of the SWAT model using parameter regionalization and high-resolution remote sensing data *Mr. Bhabesh Das, IIT Roorkee, India*
ICSW **IAHS25_ABS_I9774**	Investigation of Open-Source LULC Datasets for Watershed Hydrology Simulation *Mr. Prashant, IIT Roorkee, India*
ICSW **IAHS25_ABS_P3782**	Assessing Extreme Flood Inundations in Brahmani-Baitarani Delta under Future Climate Change Scenarios with BiLSTM and HEC-RAS 2D Models *Dr. Bhabagrahi Sahoo, IIT Kharagpur, India*

ICSW **IAHS25_ABS_Q9988**	Integration of non-linear conceptual reservoirs without tears using the QuaSoARe method *Dr. Julien Lerat, CSIRO, Australia*
ICSW **IAHS25_ABS_S9669**	Development and Evaluation of Impact-Based Flood Forecasting in India *Mr. Ali Mashhadi, UK Centre for Ecology & Hydrology (UKCEH), United Kingdom*
ICSW **IAHS25_ABS_O9156**	Cascading Hazards of a Wildfire in the Tropical Rwenzori Mountains *Ms. Martha Day, Imperial College London, United Kingdom*
ICSW **IAHS25_ABS_D3683**	Reconstruction of historical flow duration curves using reanalysis data *Dr. Soumyaranjan Sahoo, National Institute of Hydrology - Roorkee, India*
ICSW **IAHS25_ABS_S8116**	Can Blended Models Offer a Better Approach to Streamflow Prediction? A large sample study *Mr. Daneti Arun Sourya, IIT Hyderabad, India*
ICSW **IAHS25_ABS_N5514**	Climate Change impacts on freshwater quantity and quality in Canada *Prof. Ram Yerubandi, Environment and Climate Change, Canada*
ICSW **IAHS25_ABS_F3652**	Urban hydrology challenges and solutions: insights from the Birmingham Urban River Observatory *Prof. David M. Hannah, University of Birmingham, United Kingdom*
ICSIH **IAHS25_ABS_W5834**	Development of a New Model Platform to Represent Forest Snow Interactions Using Relative Canopy Structure Metrics *Dr. C. David Moeser, U.S. Geological Survey, United States*
ICSIH **IAHS25_ABS_W7191**	Glacier meltwater has limited contributions to the annual runoff in the major rivers draining the Tibetan Plateau *Dr. Yi Nan, Tsinghua University, China*
ICSIH **IAHS25_ABS_L1269**	Assessing the Impact of Forest Disturbances on Snowpack Dynamics: A Multi-Model Intercomparison *Dr. John Mohd Wani, University of Trento, Italy*
ICSIH **IAHS25_ABS_C7582**	Physics-based simulation of long-term hydrological changes at high-elevation alpine catchments with varying glaciations in central Europe since 1850 *Prof. Gabriele Chiogna, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany*
ICSIH **IAHS25_ABS_H9651**	Assimilation of multichannel passive microwave data for improved estimates of snow microstructure *Dr. Mel Sandells, Northumbria University, United Kingdom*
ICSIH **IAHS25_ABS_K6090**	Study on Soil Moisture Redistribution during Freezing Processes under Pressure *Dr. Dayan Wang, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China*
ICSIH **IAHS25_ABS_V8136**	Advancing Non-Contact River Flow Measurements: Winter Flow Assessment Using LSPIV and Ice-Covered Channel Analysis *Dr. Adeyemi Oludapo Olusola, York University, Canada*
ICWRS **IAHS25_ABS_L6709**	Temporal dynamics of soil moisture in global land areas: A Complex Network-Based Approach *Mrs. Anagha Prabhakar, IIT Bombay, India*
ICWRS **IAHS25_ABS_M3260**	Drought Characteristics Risk and Vulnerability in Peninsular India: Use of a Complex Network Approach *Ms. Devika Chandrababu Salini, IIT Bombay, India*
ICWRS **IAHS25_ABS_I4661**	Future Water Availability in Mountainous Regions: Integrating Hydro-Meteorological Extremes and Water Resource Components

	Mr. Prem Prakash, IIT Jammu, India
ICWRS **IAHS25_ABS_D4282**	Integrated Modeling Framework for Managing Flood Risk in Hydropower Dams under Uncertain Inflows *Dr. Dipsikha Devi, The University of Alabama, United States*
ICWRS **IAHS25_ABS_T1921**	Drivers of inter-event variability of recession flow characteristics *Mr. Owees Rashid, IIT Kanpur, India*
ICWRS **IAHS25_ABS_V9528**	Hydrology of Coastal Wetlands: A Case Study from the Point Calimere Ramsar Site in a Semi-arid Zone on the Southeast Coast of India *Prof. Erinjery Joseph James, Karunya Institute of Technology, India*
ICWRS **IAHS25_ABS_C6662**	Projecting Flood Risk and Socio-Economic Exposure in a Large River Basin under various Global Warming Level *Mr. Rishi Gupta, IIT Jammu, India*
ICWRS **IAHS25_ABS_V3901**	Optimizing Seepage Control and Stability in Earth Dams: A Comprehensive Review of Toe Drains and Horizontal Drains *Mr. Subodh Shrivastava, IIT (ISM) Dhanbad, India*
ICWRS **IAHS25_ABS_P3089**	Enhancing the SWAT+ Reservoir Simulation Using Simulated Annealing Optimization in the Cedar Creek Watershed *Mr. Sreeraj Sreenivas, IIT Palakkad, India*
ICWRS **IAHS25_ABS_R1985**	A Novel Framework for Identifying the Homogenous Rainfall Regions Over the Indian Subcontinent *Mr. Siva Sai Syam Nandikanti, IIT Hyderabad, India*
ICWRS **IAHS25_ABS_Y9988**	Impact of IDF curve parameterization on design of rainwater detention basins *Dr. Dan Rosbjerg, Technical University of Denmark, Denmark*
ICWRS **IAHS25_ABS_R2796**	Data driven Hydrological Modelling for Sustainable Water management in an Educational Campus *Dr. Dawn Emil Sebastian, Indian Institute for Human Settlements, India*
ICWRS **IAHS25_ABS_R6722**	Changes in water balance and thermal regime of the Mozhaysk Reservoir (Moscow region Russia) in XXI century *Ms. Maria Tereshina, Lomonosov Moscow State University, Russia*
ICWRS **IAHS25_ABS_P6627**	Identifying Adaptive Management Strategies for Water Resource Systems Under Changing Climatic Conditions *Mr. Akshay Sunil, IIT Bombay, India*
ICWRS **IAHS25_ABS_I3446**	Projected flash drought evolution across Europe under different emission scenarios *Mr. Devvrat Yadav, CZU Prague, Czech Republic*
ICWRS **IAHS25_ABS_V3262**	Assessing the Global Energy Demand for Irrigation *Dr. Davide Danilo Chiarelli, Politecnico di Milano, Italy*
ICWRS **IAHS25_ABS_T8762**	Development of an Integrated Flood Risk Information System for the Jonkershoek Region Western Cape *Dr. Daniel Kibirige, University of Cape Town, South Africa*
ICWRS **IAHS25_ABS_A6262**	Unveiling the Dynamics of Green and Blue Water Footprint for Indian Agriculture: A High-Resolution Spatio-Temporal analysis *Mrs. Meena Sakthivel Pandian, IIT Roorkee, India*
ICWRS **IAHS25_ABS_M7871**	Hydrological Simulation of Forest Fire Impacts in the Kosi River Watershed Uttarakhand India *Dr. Biswajit Das, IIT Roorkee, India*
ICWRS **IAHS25_ABS_V2488**	Quantifying Changes in Multi-sectoral Trade-offs for a Large Multipurpose Reservoir under Changing Climatic and Socio-economic Conditions

	Mr. Muhammed Rashid, IIT Bombay, India
ICWRS **IAHS25_ABS_A7792**	Leak Characterization Framework in Pressurized Single Water Pipelines of Smart Water Systems using Fluid Transients *Ms. Dasari Navya, IIT Kharagpur, India*
ICWRS **IAHS25_ABS_F3880**	Inclined wall jets - A comprehensive review *Mr. Md Shaheer Ali, IIT Roorkee, India*
ICSW **IAHS25_ABS_M6925**	Heavy Metal Pollution in Surface Water Bodies of Uttarakhand *Dr. Mamta Bhandari, IIT Roorkee, India*
ICSW **IAHS25_ABS_L5899**	Assessment of impact of Land use/Land cover changes on temporal dynamics of wetland watershed using remote sensing technique: A case study of Sonbeel wetland watershed *Dr. Briti Sundar Sil, National Institute of Technology - Silchar, India*
ICSW **IAHS25_ABS_R5171**	Dry-to-wet abrupt transitions and the changes in these with global warming *Dr. Pallavi Goswami, Monash University, Australia*
ICSW **IAHS25_ABS_P7256**	A SWMM-Based Framework for Evaluating Functional and Structural Failures in Urban Drainage Systems *Prof. Mitthan Kansal, IIT Roorkee, India*
ICSW **IAHS25_ABS_A3857**	Process-based Classification of River Floods Using Explainable Machine Learning in Monsoon-Dominated Catchments of India *Mr. Vaibhav Tripathi, IIT Roorkee, India*
ICRS **IAHS25_ABS_D4635**	Assessment of the impacts of land cover change and fragmentation in Loktak wetlandscape: A remote sensing approach *Ms. Ajusree V.K., IIT Kanpur, India*
ICRS **IAHS25_ABS_O3282**	Spatio-temporal dynamics of riverine islands over multi-decadal timescales of the Lower Ganga River (India): Insights from remote sensing datasets *Ms. Atmika Ray, IIT Kanpur, India*
ICRS **IAHS25_ABS_X6100**	Enhancing Field-Scale Evapotranspiration Mapping with Gap-Filled and Downscaled LST: A Machine Learning Approach over India *Mr. Rahul Harod, IIT Bombay, India*
ICRS **IAHS25_ABS_F2655**	Integrating vegetation index-based evapotranspiration disaggregation and crop water balance model for farm-scale vineyard irrigation estimation *Mrs. Sangeetharani M., IIT Bombay, India*
ICSIH **IAHS25_ABS_W6721**	Cryospheric melt and streamflow dynamics in High Mountain Asia (HMA): Insights from stable water isotopes *Prof. Ghulam Jeelani, University of Kashmir, India*
ICWRS **IAHS25_ABS_R6205**	Modeling Irrigation Water Needs Through a Hydrological Digital Twin *Prof. Giuseppe Formetta, University of Trento, Italy*
ICWRS **IAHS25_ABS_K9623**	Geographically Weighted Regression to assess Water Ecosystem Services for Blue-Green Infrastructure development *Mr. Gabriel Silva, University of Sao Paulo, Brazil*
ICWRS **IAHS25_ABS_H9264**	Assessment of the current state of water resources in southern Uzbekistan under the influence of intensive water use and climate change *Dr. Muhtor Gafarovich Nasirov, Samarkand State University, Uzbekistan*
ICSW **IAHS25_ABS_S6012**	Enhancing flood forecasting system in India to support healthcare and strengthen community resilience *Dr. Shasha Han, University of Birmingham, United Kingdom*

ICSW **IAHS25_ABS_N1888**	Developing a national scale drought modelling and forecasting framework for Scotland *Dr. Shaini Naha, The James Hutton Institute, United Kingdom*
ICSW **IAHS25_ABS_P2897**	Performance Evaluation of ANN for Rainfall Runoff modelling in the Sher Basin Using CAMELS-INDIA data *Mr. Alok Singh, Maulana Azad National Institute of Technology, India*

Session: 4.2 | October 09, 2025, 11:00–12:30

ICT **IAHS25_ABS_W2378**	Groundwater flow system in Tokyo Metropolitan City area Japan *Prof. Maki Tsujimura, University of Tsukuba, Japan*
MOXXI **IAHS25_ABS_X1730**	Low-Cost Hydrometry Techniques: A comparative assessment of Lidar- and Radar-Based non-contact hydrometry in mountainous rivers *Prof. Sumit Sen, IIT Roorkee, India*
History of Hydrology **IAHS25_ABS_N5722**	On Ancestral Art of Making Dams: Transforming Science into Engaged People *Prof. Eduardo Mario Mendiondo, University of Sao Paulo, Brazil*
ICT **IAHS25_ABS_A9395**	Nano-enhanced bioremediation: a new sustainable solution for emerging contaminants *Mr. Saurabh Kumar, IIT Roorkee, India*
ICT **IAHS25_ABS_W7960**	Sulfur and oxygen isotopes in rivers of Northeastern India: Source partitioning in coal mining areas *Mr. Vivek Kumar, North-Eastern Hill University, India*
ICT **IAHS25_ABS_C1200**	Characterization of groundwater in high bedrock mountains: insights from isotopic and chemical tracers *Prof. Tianming Huang, Chinese Academy of Sciences, China*
ICT **IAHS25_ABS_Y7963**	Rainfall-runoff Processes in a Vegetated Alpine Headwater Catchment in Northern Alps Japan *Ms. Mayu Fujino, University of Tsukuba, Japan*
ICT **IAHS25_ABS_W5449**	Groundwater and Surface Water Cycle System in the Klang and Langat River Watersheds, Malaysia *Mr. Taiga Suzuki, Universtiy of Tsukuba, Japan*
ICT **IAHS25_ABS_U1949**	Tracing hydrological processes using d18O-d mixing approach: Estimating snowmelt contribution in river water of Kameng catchment, Northeastern Himalaya *Ms. Madhusmita Nanda, IIT Guwahati, India*
ICT **IAHS25_ABS_Q1371**	Seasonal Variations in Nitrogen Loading Processes in Tropical Land Use at the Langat River Basin Malaysia *Ms. Mayu Ogiya, Shinshu University, Japan*
MOXXI **IAHS25_ABS_N3286**	Demystifying Water Logging and Groundwater Recharge in Marathwada: Hydrologic Impact Evaluation of Recharge Pits *Mr. Lakshmikantha N.R., WELL Labs, India*
MOXXI **IAHS25_ABS_O5325**	Addressing data gaps in coastal tidal observations using a hybrid GIS and physics-informed neural network *Mr. Anas A., National Institute of Technology - Calicut, India*
MOXXI **IAHS25_ABS_W2941**	Automated riverbank monitoring system: Integration of image-based technologies for erosion and discharge assessment *Dr. Laszlo Bertalan, University of Debrecen, Hungary*
MOXXI **IAHS25_ABS_N4907**	Facing environmental threats in Mediterranean agro-ecosystems: The contribution of the Alento critical zone observatory. *Prof. Nunzio Romano, University of Naples Federico II, Italy*
MOXXI **IAHS25_ABS_F3263**	Advancing river monitoring using image-based techniques: challenges and opportunities *Prof. Salvatore Manfreda, University of Naples Federico II, Italy*
MOXXI **IAHS25_ABS_T3651**	A Cost-Effective Probe for Monitoring Flux Rates at Sediment-Water Interface *Mr. P. Kedarnath Reddy, IIT Roorkee, India*

MOXXI **IAHS25_ABS_E8957**	Identification of convective precipitation events through lightning data in a Mediterranean area *Prof. Leonardo Valerio Noto, University of Palermo, Italy*
MOXXI **IAHS25_ABS_E8266**	Enhancing Hydrological Observations for Sustainable Water Management: A Focus on ISMN *Dr. Tunde Olarinoye, International Centre for Water Resources and Global Change, Germany*
History of Hydrology **IAHS25_ABS_D8802**	Bringing out the logical error in the development of kinematic wave equation *Prof. Muthiah Perumal, IIT Roorkee, India*
ICSH **IAHS25_ABS_B4465**	Have heat and cold waves intensified over Central India in the recent period? *Mr. Vikas Sudam Gore, IIT Indore, India*
ICSH **IAHS25_ABS_N8595**	Exploring the Linkages between Heatwaves and Droughts in the Upper Chambal Basin *Mr. Harshvardhan Solanki, IIT Indore, India*
ICSH **IAHS25_ABS_F7029**	Exploring Coincidental Compound Extremes in Pan-Himalayan River Basins under Changing Climate *Ms. Achala Singh, IIT Indore, India*

Session: 4.3 | October 09, 2025, 13:30–15:00

ICGW **IAHS25_ABS_N3288**	Probabilistic groundwater flood maps for improved risk assessment *Dr. Beatrice Richieri, Friedrich-Alexander-University, Germany*
ICGW **IAHS25_ABS_T6439**	Advancing Hydrogeochemical Modeling and Sustainable Water Resource Management: Insights into Pyrite Oxidation Contaminant Transport and Urban Stormwater Systems *Dr. Gautam Roy, IIT Bombay, India*
ICGW **IAHS25_ABS_D5433**	Submarine Groundwater Discharge: A Hidden Water Pathway *Dr. Jeenu Mathai, National Centre for Earth Science Studies, India*
ICGW **IAHS25_ABS_W9319**	Assessing potential of crop switching to check groundwater depletion in North-West India *Mr. Divyam Garg, IIT Roorkee, India*
ICGW **IAHS25_ABS_T3348**	Unveiling the Drivers of Groundwater Resilience: Hydrogeology and Aridity *Mr. Akhil J., IIT Delhi, India*
ICGW **IAHS25_ABS_E5219**	Groundwater potential zone identification in a coastal region using AHP and ML technique *Ms. Shubhshree Panda, National Institute of Technology - Rourkela, India*
ICGW **IAHS25_ABS_P4217**	Assessing Data-Based Global Groundwater Use for Irrigation in CLM5: Hotspots and Sustainability Implications *Mr. Manas Ranjan Panda, Yonsei University, Republic of Korea*
ICGW **IAHS25_ABS_I6640**	Coupled hydrological modeling with SWAT-MODFLOW using heliborne data in the Ankasandra watershed Karnataka India *Dr. Ajaykumar Venkatarao, CSIR-National Geophysical Research Institute, India*
ICGW **IAHS25_ABS_C5609**	Modelling colloid-facilitated contaminant transport in unsaturated porous media *Ms. Geetanjali Ahirwal, Maulana Azad National Institute of Technology, India*
ICGW **IAHS25_ABS_K4680**	Prediction of Nitrate Concentration throughout California USA using Machine Learning Model *Ms. Anisha Das, IIT Ropar, India*
ICGW **IAHS25_ABS_J5422**	Groundwater Storage Estimation in Uttar Pradesh by GRACE/GRACE-FO using Geospatial technology and Google Earth Engine *Mr. Swarnim Maurya, University of Allahabad, India*
ICGW **IAHS25_ABS_P6845**	Hydrogeochemical evaluation of groundwater resources around Raichur Thermal Power Plant Karnataka India with emphasis on fluoride and nitrate contamination *Ms. Yeshwini Dyagala, CSIR-NGRI, India*
ICGW **IAHS25_ABS_U3229**	Spring Water Mass Quantification Through End Members mixing Employing Biogeochemical Tracers in Southern Western Ghats, Kerala, India *Dr. Utpal Majee, National Centre for Earth Science Studies, India*
ICGW **IAHS25_ABS_L3156**	Spatiotemporally Non-Stationary Evolution of Groundwater Levels in Poyang Lake Basin Driven by Meteorological and Hydrological Factors *Prof. Chengpeng Lu, Hohai Univerisity, China*
ICGW **IAHS25_ABS_C9672**	Estimation of aquifer recharge of the semi-arid Konya Closed Basin in Türkiye under climate change *Prof. Nadim Kamel Copty, Bogazici University, Turkey*

ICGW **IAHS25_ABS_A4544**	Groundwater remediation through engineered injection-extraction systems: The effect of random perturbations on mixing enhancement *Ms. Carla Feistner, GeoZenrum Nordbayern, Germany*
ICGW **IAHS25_ABS_A4116**	Assessment of hydrogeochemical characteristics and seawater Intrusion using geostatistical techniques: A case study from Eastern Coastal Aquifer Odisha India *Ms. Smruti Pragyan Parija, Ravenshaw University, India*
ICGW **IAHS25_ABS_R1662**	Health Risk Assessment and Contaminant Monitoring of Groundwater in the Khetri Copper Mining Region *Ms. Bhavya Swami, IIT Roorkee, India*
ICGW **IAHS25_ABS_G2541**	Groundwater Quality Degradation from a Closed Landfill: The Persistent Threat of Antibiotic Resistance Genes *Mrs. Amala Jaison, College of Engineering Trivandrum, India*
ICGW **IAHS25_ABS_Y7252**	Machine learning-based prediction of groundwater salinization across Indian States *Ms. Ankita Manekar, IIT Kharagpur, India*
ICGW **IAHS25_ABS_K3036**	Integration of Machine Learning Approach with Hydro-Geochemistry for Groundwater Quality Assessment and Contamination Mapping in Kishangarh, Rajasthan, India *Mr. Manish Kumar, IIT (ISM) Dhanbad, India*
ICGW **IAHS25_ABS_L5282**	Geochemical and isotopic characterization of geothermal fluids in the West Coast Geothermal Province, India *Mr. Prasenjit Das, National Centre for Earth Science Studies, India*
ICGW **IAHS25_ABS_N3273**	Characterization of Hydrogeological Attributes for Springsheds with Groundwater Aquifers using Hybrid Geospatial-AHP-Fuzzy Logic Techniques *Dr. Romeji Ngangbam, National Institute of Technology - Manipur, India*

Session: 4.4 | October 09, 2025, 15:30–16:30

ICGW **IAHS25_ABS_K8911**	Recharging Tradition Ensuring the Future: The Impact of Minor Irrigation Tank Rehabilitation on Groundwater in Andhra Pradesh *Mr. Shubham Goswami, IISc Bangalore, India*
ICGW **IAHS25_ABS_G6145**	Effects of groundwater transient boundary conditions generated by anthropogenic factors on mixing enhancement: Laboratory and model-based evidence *Ms. Francesca Ziliotto, Technical University of Munich (TUM), Germany*
ICGW **IAHS25_ABS_B8698**	An integrated approach to determine the groundwater recharge in the coastal regions of North-eastern Odisha, India *Ms. Subhashree Biswal, Ravenshaw University, India*
ICGW **IAHS25_ABS_A5325**	Assessment of Groundwater Dynamics in Agro-Climatic Zone of Eastern India using Data-driven approaches *Mr. Gaurav Dumoga, IIT Bombay, India*
ICGW **IAHS25_ABS_D7083**	Understanding Aquifer Dynamics of Springs in the Tawi River Catchment Jammu & Kashmir UT Western Himalayas *Dr. Bhargabnanda Dass, National Institute of Hydrology - Roorkee, India*
ICGW **IAHS25_ABS_A2730**	Chlorinated solvents in UK Groundwater: A Data-Driven Analysis of Long-Term Trends and Occurence Prediction *Ms. Nouha Samlani, Teesside University, United Kingdom*
HELPING theme 3 **IAHS25_ABS_Q6225**	Using collaborative Agent-Based Modelling (ABM) to enhance decision making in agricultural water use *Dr. David Gwapedza, University of Namibia, Namibia*
HELPING theme 3 **IAHS25_ABS_M8479**	What do we need to know? Ten questions about climate and water challenges in Berlin-Brandenburg *Dr. Pedro Henrique Lima Alencar, Technische Universite Berlin, Germany*
ICRS **IAHS25_ABS_L9020**	Machine Learning-Integrated InSAR Analysis for Land Deformation Study in Jodhpur City Using Sentinel-1 SAR and GRACE TWS Data *Mr. Surender Pal, National Institute of Hydrology - Roorkee, India*
ICRS **IAHS25_ABS_E8385**	Enhancing soil moisture and vegetation optical depth retrievals through improved surface roughness parameterization for the upcoming CIMR satellite mission *Ms. Debolina Mondal, IIT Bombay, India*
ICRS **IAHS25_ABS_I6750**	Assessing the Impact of Wildfires on Soil and Water Quality Using Hyperspectral Remote Sensing and Field Analysis *Mr. Pankaj Patidar, IIT Roorkee, India*
ICRS **IAHS25_ABS_O7943**	Performance Assessment of IMERG Precipitation Estimates Using MESONET Data in Mumbai *Mr. Yashraj Nagraj Upase, IIT Hyderabad, India*
ICRS **IAHS25_ABS_P9325**	Estimation of Evapotranspiration Using the S-SEBI Model and Landsat-9 Data over Asan Barrage *Ms. Ayushi Bhati, Indian Institute of Remote Sensing (IIRS), India*
ICRS **IAHS25_ABS_J1018**	HydroSecure Dashboard: Advancing Climate Resilience through Flood and Drought Monitoring and Management in Africa *Dr. Giriraj Amarnath, International Water Management Institute (IWMI), Sri Lanka*
ICRS **IAHS25_ABS_M7277**	A Comparative Analysis of Advanced Machine Learning Techniques for Accurate Groundwater Potential Zone Mapping in Haryana India *Mr. Shubham Bhagat, Indian Institute of Science Education and Research (IISER) Mohali, India*

ICRS **IAHS25_ABS_W7088**	Spatio-Temporal Investigation of Precipitation Variability and Extreme Rainfall in the Cauvery Basin, Tamil Nadu, India Using CMIP6 data *Dr. Saravanan Subbarayan, National Institute of Technology - Tiruchirappalli, India*
ICRS **IAHS25_ABS_B6410**	Estimating river bathymetry from spaceborne LiDAR data and curve-fitting method *Mr. Pankaj Ramji Dhote, Indian Institute of Remote Sensing (IIRS), India*
ICRS **IAHS25_ABS_M3814**	Machine Learning for Multi-Hazard Susceptibility in Kenya: Integrating Earth Observation and Reported Events *Ms. Sneha Kour, Birla Institute of Technology Mesra, India*
ICRS **IAHS25_ABS_D2349**	Insights into the Agricultural Drought Assessment: A Case Study from Odisha Using Google Earth Engine *Ms. Anuva Chowdhury, Birla Institute of Technology Mesra, India*
ICSIH **IAHS25_ABS_R7668**	Seasonal Shifts in Snowpack Dynamics and Their Response to Climate Change in the Swiss Alps *Ms. Fatemeh Zakeri, University of Lausanne, Switzerland*
ICWQ **IAHS25_ABS_A5687**	Arsenic Contamination and its Health Ramification in a village of Buxar District Bihar *Mr. Asrarul Haque Jeelani, Jamia Millia Islamia, India*
ICWQ **IAHS25_ABS_X1946**	Hydrological and water quality impacts of climate variability and land-use change: A case study of the Muda River Catchment *Dr. Siti Nurhidayu Abu Bakar, Universiti Putra Malaysia, Malaysia*
ICWQ **IAHS25_ABS_W6469**	Emerging organic compounds in surface and groundwater reflect the urban dynamics in sub-Saharan cities *Mr. Boris Djieugoue, Universite de Douala, Cameroon*
ICWQ **IAHS25_ABS_N6326**	Water quality monitoring and risk assessment for Indian Coastal Ramsar Wetlands *Mr. Vijay Jain, IIT Indore, India*
ICGW **IAHS25_ABS_H6606**	Hydropeaking affects groundwater flow and transport processes: a multiple spatial and temporal analysis *Dr. Monica Basilio Hazas, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany*
HELPING theme 2 **IAHS25_ABS_S1055**	Building resilience to urban floods through nature based solutions *Dr. Priyanka Jamwal, Ashoka Trust for Research in Ecology and the Environment (ATREE), India*

Session: 4.5 | October 09, 2025, 16:30–18:00

ICT **IAHS25_ABS_I5603**	Role of strike-slip faults in regional groundwater flow systems revealed by a multi-tracer approach *Dr. Koichi Sakakibara, Shinshu University, Japan*
ICT **IAHS25_ABS_C1200**	Characterization of groundwater in high bedrock mountains: insights from isotopic and chemical tracers *Prof. Tianming Huang, Chinese Academy of Sciences, China*
ICT **IAHS25_ABS_W5449**	Groundwater and Surface Water Cycle System in the Klang and Langat River Watersheds, Malaysia *Mr. Taiga Suzuki, Universtiy of Tsukuba, Japan*
ICT **IAHS25_ABS_Q1371**	Seasonal Variations in Nitrogen Loading Processes in Tropical Land Use at the Langat River Basin, Malaysia *Ms. Mayu Ogiya, Shinshu University, Japan*
ICT **IAHS25_ABS_Y7963**	Rainfall-runoff Processes in a Vegetated Alpine Headwater Catchment in Northern Alps, Japan *Ms. Mayu Fujino, University of Tsukuba, Japan*
ICT **IAHS25_ABS_W7960**	Sulfur and oxygen isotopes in rivers of Northeastern India: Source partitioning in coal mining areas *Mr. Vivek Kumar, North-Eastern Hill University, India*
MOXXI **IAHS25_ABS_W2445**	The role of efficient soil and water monitoring schemes for the design and implementation of agricultural policies protecting the environment and securing farmers' income *Dr. Konstantinos X Soulis, Agricultural University of Athens, Greece*
MOXXI **IAHS25_ABS_W2941**	Automated riverbank monitoring system: Integration of image-based technologies for erosion and discharge assessment *Dr. Laszlo Bertalan, University of Debrecen, Hungary*
MOXXI **IAHS25_ABS_E8957**	Identification of convective precipitation events through lightning data in a Mediterranean area *Prof. Leonardo Valerio Noto, University of Palermo, Italy*
MOXXI **IAHS25_ABS_O5325**	Addressing data gaps in coastal tidal observations using a hybrid GIS and Physics-Informed Neural Network *Mr. Anas A., National Institute of Technology - Calicut, India*
MOXXI **IAHS25_ABS_N4907**	Facing environmental threats in Mediterranean agro-ecosystems: The contribution of the Alento critical zone observatory *Prof. Nunzio Romano, University of Naples Federico II, Italy*
MOXXI **IAHS25_ABS_T3651**	A Cost-Effective Probe for Monitoring Flux Rates at Sediment-Water Interface *Mr. P. Kedarnath Reddy, IIT Roorkee, India*
MOXXI **IAHS25_ABS_E8266**	Enhancing Hydrological Observations for Sustainable Water Management: A Focus on ISMN *Dr. Tunde Olarinoye, International Centre for Water Resources and Global Change, Germany*
MOXXI **IAHS25_ABS_N3286**	Demystifying Water Logging and Groundwater Recharge in Marathwada: Hydrologic Impact Evaluation of Recharge Pits *Mr. Lakshmikantha N.R., WELL Labs, India*
History of Hydrology **IAHS25_ABS_F9936**	Development of runoff generation models in the former USSR and Russia: a historical overview *Prof. Alexander Gelfan, Lomonosov Moscow State University, Russia*
History of Hydrology **IAHS25_ABS_F3281**	Hydro-history of Lebanon from antiquity to modern times *Dr. Mohammad Merheb, Institut Agro Rennes Angers, France*

History of Hydrology **IAHS25_ABS_D8802**	Bringing out the logical error in the development of kinematic wave equation *Prof. Muthiah Perumal, IIT Roorkee, India*
ICGW **IAHS25_ABS_U6573**	Modelling of Groundwater Aquifer under MAR *Mr. Vedant Jha, IIT Roorkee, India*
ICGW **IAHS25_ABS_P8789**	Water from Everest: Using a Mixed-methods Approach to Understand Alternative Potable Water Groundwater Zones and Resource Management Techniques Using Indigenous Knowledge *Ms. Chasalin T. Cobb, Ball State University, United States*
ICGW **IAHS25_ABS_V5259**	Fluoride Mobilization in Groundwater: Role of Lithology and Weathering in Pali District, Rajasthan, India *Dr. Ajit Kumar Behera, National Institute of Hydrology - Roorkee, India*
ICGW **IAHS25_ABS_R1659**	Fate and transport of pharmaceuticals and personal care products from Delhi NCR surface waters into the subsurface *Mrs. Smriti Gupta, IIT Roorkee, India*
ICGW **IAHS25_ABS_L1923**	Prediction of Groundwater Fluoride Contamination Based on Machine Learning Techniques in the Arid Region of Rajasthan *Dr. Sushindra Kumar Gupta, National Institute of Hydrology - Roorkee, India*
ICGW **IAHS25_ABS_E3050**	Sequential Gaussian Mixtures for Transient Hydraulic Tomography Inversion in Fractured Aquifers: A Laboratory Study *Mr. Prem Chand Muraharirao, IIT Hyderabad, India*
ICGW **IAHS25_ABS_X5755**	Machine Learning Approaches for Groundwater Forecasting in the Eastern Mitidja Aquifer, North Algeria *Ms. Fatima Kastali, The National School of Hydraulics (ENSH), Algeria*
ICGW **IAHS25_ABS_D5594**	Large-scale landslides influenced by saline water plume intrusion - An example of the Okimi landslide in Central Japan *Dr. Naoki Watanabe, Niigata Univerdity, Japan*
ICGW **IAHS25_ABS_B6830**	Design of a cost-effective pressure plate apparatus for measuring pressure-saturation relationship in a range of plant-available soil moisture *Mr. Adhitya C.U., IIT Kanpur, India*
ICGW **IAHS25_ABS_X3223**	Comprehending Managed Aquifer Recharge (MAR) dynamics using high resolution hydro-geophysical methods in granitic terrain, Southern India *Mr. Sagar Phadnis, CSIR-National Geophysical Research Institute, Hyderabad, India*
ICGW **IAHS25_ABS_R3619**	Groundwater Quality Assessment Using MCDM Models in Nadia, West Bengal *Mr. Samparka Sengupta, Adamas University, India*
ICGW **IAHS25_ABS_D5229**	Impact of model selection on groundwater level time series modelling for drought monitoring *Dr. Jose David Henao Casas, Vrije Universiteit Amsterdam, Netherlands*
ICGW **IAHS25_ABS_H9153**	Rapid Land Use Changes Driving Groundwater Dynamics in Tropical Coastal Regions: Hydrochemical and Remote Sensing Insights *Mrs. Ananya Muduli, IIT Roorkee, India*
ICGW **IAHS25_ABS_A1413**	Trace metal anomalies in groundwater of hard aquifer of Northern Odisha: Sources Governance and its health impacts *Ms. Gargi Singh, Ravenshaw University, India*

ICGW **IAHS25_ABS_E4665**	Hydrochemical characteristics of groundwaters by multivariate analysisthe from Takisaka Landslide, Japan *Ms. Rika Kiyose, Niigata University, Japan*
ICGW **IAHS25_ABS_T3348**	Unveiling the Drivers of Groundwater Resilience: Hydrogeology and Aridity *Mr. Akhil J., IIT Delhi, India*
ICGW **IAHS25_ABS_P4217**	Assessing Data-Based Global Groundwater Use for Irrigation in CLM5: Hotspots and Sustainability Implications *Mr. Manas Ranjan Panda, Yonsei University, Republic of Korea*
ICGW **IAHS25_ABS_K4680**	Prediction of Nitrate Concentration throughout California USA using Machine Learning Model *Ms. Anisha Das, IIT Ropar, India*
ICGW **IAHS25_ABS_C9672**	Estimation of aquifer recharge of the semi-arid Konya Closed Basin in Türkiye under climate change *Prof. Nadim Kamel Copty, Bogazici University, Turkey*
ICGW **IAHS25_ABS_A4116**	Assessment of hydrogeochemical characteristics and seawater Intrusion using geostatistical techniques: A case study from Eastern Coastal Aquifer, Odisha, India *Ms. Smruti Pragyan Parija, Ravenshaw University, India*
ICGW **IAHS25_ABS_Y7252**	Machine learning-based prediction of groundwater salinization across Indian States *Ms. Ankita Manekar, IIT Kharagpur, India*
ICGW **IAHS25_ABS_B8698**	An integrated approach to determine the groundwater recharge in the coastal regions of North-eastern Odisha, India *Ms. Subhashree Biswal, Ravenshaw University, India*
ICGW **IAHS25_ABS_W9319**	Assessing potential of crop switching to check groundwater depletion in North-West India *Mr. Divyam Garg, IIT Roorkee, India*
ICGW **IAHS25_ABS_U3229**	Spring Water Mass Quantification Through End Members mixing Employing Biogeochemical Tracers in Southern Western Ghats, Kerala, India *Dr. Utpal Majee, National Centre for Earth Science Studies, India*
ICGW **IAHS25_ABS_L3156**	Spatiotemporally Non-Stationary Evolution of Groundwater Levels in Poyang Lake Basin Driven by Meteorological and Hydrological Factors *Prof. Chengpeng Lu, Hohai Univerisity, China*
ICGW **IAHS25_ABS_A4544**	Groundwater remediation through engineered injection-extraction systems: The effect of random perturbations on mixing enhancement *Ms. Carla Feistner, GeoZenrum Nordbayern, Germany*
ICGW **IAHS25_ABS_R1662**	Health Risk Assessment and Contaminant Monitoring of Groundwater in the Khetri Copper Mining Region *Ms. Bhavya Swami, IIT Roorkee, India*
ICGW **IAHS25_ABS_G6145**	Effects of groundwater transient boundary conditions generated by anthropogenic factors on mixing enhancement: Laboratory and model-based evidence *Ms. Francesca Ziliotto, Technical University of Munich (TUM), Germany*
ICGW **IAHS25_ABS_A5325**	Assessment of Groundwater Dynamics in Agro-Climatic Zone of Eastern India using Data-driven approaches *Mr. Gaurav Dumoga, IIT Bombay, India*

ICGW **IAHS25_ABS_J5422**	Groundwater Storage Estimation in Uttar Pradesh by GRACE/GRACE-FO using Geospatial technology and Google Earth Engine *Mr. Swarnim Maurya, University of Allahabad, India*
ICGW **IAHS25_ABS_A2730**	Chlorinated solvents in UK Groundwater: A Data-Driven Analysis of Long-Term Trends and Occurence Prediction *Ms. Nouha Samlani, Teesside University, United Kingdom*
ICT **IAHS25_ABS_F4054**	Water Vapour Isotopes and controlling factors at Roorkee, Uttarakhand, India *Dr. Gopal Krishan, National Institute of Hydrology - Roorkee, India*
ICT **IAHS25_ABS_B9048**	Groundwater Age Distribution and Isotopic Characteristics in the Arid Kachchh Region, Western India *Dr. Amit Pandey, National Institute of Hydrology - Prayagraj, India*
ICGW **IAHS25_ABS_S9210**	Assessing Coastal Groundwater Vulnerability Using the DPASTIC Model: A GIS-Based Modification of DRASTIC in Tropical Coastal Regions *Mrs. Ananya Muduli, IIT Roorkee, India*
ICGW **IAHS25_ABS_N2414**	Microplastic concentrations in groundwater - A worldwide assessment *Dr. Uwe Schneidewind, University of Birmingham, United Kingdom*
ICGW **IAHS25_ABS_B6465**	Leveraging water quality data to reduce uncertainty in mountain aquifer modeling *Dr. Mariaines Di Dato, University of Trento, Italy*
ICGW **IAHS25_ABS_B9214**	Emerging trends in terrestrial water storage of the global key hotspot regions *Mr. Roniki Anjaneyulu, IIT Roorkee, India*
MOXXI **IAHS25_ABS_T5538**	Wildfire mapping in dry deciduous forests of southern West Bengal and measurement of soil physicochemical changes for Forest Beat-level management *Mr. Kunal Mallick, Presidency University, India*
ICGW **IAHS25_ABS_F5601**	Assessing the Porous-media clogging by Micro-plastics contaminated filtrate media *Ms. Anjali Bhagwat, National Institute of Hydrology - Roorkee, India*
ICGW **IAHS25_ABS_K8040**	Quantifying geogenic and anthropogenic contribution to groundwater pollution using APCS-MLR receptor model *Mr. Darshan Malviya, IIT Roorkee, India*
ICGW **IAHS25_ABS_Q7023**	A DPSIR approach to arsenic and other geogenic contaminants in global groundwater *Dr. Poulomee Coomar, National Centre for Earth Sciences Studies Trivandrum, India*
ICGW **IAHS25_ABS_P7560**	Identifying Groundwater Storage Potential Zonation in an Arid Cratonic Region *Mr. Ravi Shankar Dubey, IIT Roorkee, India*
ICGW **IAHS25_ABS_I8431**	Spatio-Temporal Variation of Groundwater Isotopes and Monsoonal Recharge Studies associated with extreme climatic events in Chalakudy Basin Southern Western Ghats, India *Ms. Resmi R., National Centre For Earth Science Studies, India*
ICGW **IAHS25_ABS_H3702**	Assessing Groundwater Vulnerability in the Sundarban Aquifers using Geochemical Analysis *Ms. Prakrity Majumder, IIT Kharagpur, India*

ICWQ **IAHS25_ABS_B7254**	SMARTWATER High Frequency Monitoring of Water Quality from an Urban River *Dr. Liam Kelleher, University of Birmingham, United Kingdom*
History of Hydrology **IAHS25_ABS_E8884**	Rediscovering Probability and Statistics: Robert E. Horton's Forgotten Contributions *Dr. Solomon Vimal, Geothara, United States*
ICWRS **IAHS25_ABS_X5498**	Curating water resources knowledge in Lebanon: a path to support Water Security *Dr. Mohammad Merheb, Institut Agro Rennes Angers, France*
ICWRS **IAHS25_ABS_P9340**	Evaluation of the Empirical Area Reduction Method for Singur and Raiwada Reservoirs of India *Dr. Umesh Kumar Singh, National Institute of Hydrology - Roorkee, India*
ICWRS **IAHS25_ABS_T8483**	The opportunities and risks of water resource development and intensifying agriculture across Australia's northern rangelands *Dr. Cuan Petheram, CSIRO, Australia*
ICWRS **IAHS25_ABS_F8290**	Future-Ready Water Systems: Science-Based Approaches for Climate Resilience and Sustainable Development *Dr. Giriraj Amarnath, International Water Management Institute (IWMI), Sri Lanka*
ICWRS **IAHS25_ABS_A8673**	Exploring the Impacts of Hydropeaking on Riverine Ecosystems in India *Ms. Anushruti Kukreja, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany*
ICWRS **IAHS25_ABS_U2566**	Enhancing Drought Resilience Through Interconnected Reservoir Systems A Case Study of Sardinia's Flumendosa Basin *Mr. Avijit Majhi, University of Cagliari, Italy*
ICWRS **IAHS25_ABS_K8409**	Improving farm-scale decision making on blue-green water management practices in the Vidarbha region of Maharashtra *Ms. Ruth Linnaea Cahill, Delft University of Technology, Netherlands*
ICWRS **IAHS25_ABS_D5072**	An Ensemble Flood Forecasting System for India *Mr. Priyam Deka, IIT Delhi, India*
ICWRS **IAHS25_ABS_I1068**	Forest Fire Dynamics in Himachal Pradesh: Spatiotemporal Patterns and Driving Factors (2000-2024) *Ms. Nisha Jindwal, IIT Mandi, India*
ICWRS **IAHS25_ABS_W6265**	Progress on artificial eco-environmental water supplement in recent 20 years in China *Prof. Chunfeng Hao, China Institute of Water Resources and Hydropower Research, China*
ICWRS **IAHS25_ABS_A6676**	Seamless short to long term forecasting of inflow into lake Baikal: development and online assessment *Dr. Vsevolod Moreido, Water Problems Insitute of the Russian Academy of Sciences, Russia*
ICWRS **IAHS25_ABS_V9616**	From Climate Shifts to Flood Changes: Data Based and Modelling Approaches *Prof. Alberto Viglione, Politecnico di Torino, Italy*
ICWRS **IAHS25_ABS_Q8057**	Extreme floods and droughts in the Gambia River Basin at Gouloumbou: Impacts of climate change and the resilience of ecosystems and populations *Dr. Anastasie Mendy, Universite Cheikh Anta Diop de Dakar, Senegal*
ICWRS **IAHS25_ABS_F9692**	Optimization of operational cycle for energy maximization in pumped storage hydropower plants

	Mr. Pattabiraman Balasundaram, IIT Roorkee, India
ICWRS **IAHS25_ABS_X8966**	Effect of different nitrogen treatments on chlorophyll content and yield of wheat crop *Ms. Apoorva Yadav, Shiv Nadar University, India*
ICWRS **IAHS25_ABS_H6526**	On the need for capturing historical trend of crop yield in crop models for efficient estimation of crop water use *Mr. Aniruddha Saha, IIT Roorkee, India*
ICWRS **IAHS25_ABS_B7888**	Complex governance finance and natural resource considerations on 'going off grid' for Rhodes University South Africa *Dr. Jane Louise Tanner, Rhodes University, South Africa*
ICWRS **IAHS25_ABS_I7541**	Clustering Catchments by Low Flow Behavior: An Unsupervised Learning Approach *Mr. Nishant Saxena, IIT Roorkee, India*
ICWRS **IAHS25_ABS_C1620**	Adapting Water Resource Management to Climate Change in the Alpine Region of South Tyrol Italy *Dr. Giacomo Bertoldi, Eurac Research, Italy*
ICWRS **IAHS25_ABS_T7213**	An Open-Source Tool for Generating Hourly Synthetic Streamflow Series in Ungauged Basins Using Regional Flow-Duration Curves *Mr. Alan Spadoni, University of Bologna, Italy*
ICWRS **IAHS25_ABS_W4151**	Climate change and water resources capacity development in Africa under the SASSCAL and WASCAL doctoral programmes *Dr. Luna Bharati, International Center for Water Resources and Global Change, Germany*
ICWRS **IAHS25_ABS_Q8375**	Multi-Scale Drought Analysis and Forecasting in the Western Ghats: A Case Study of the Kallada River Basin Kerala *Ms. Drisiya J., IIT Palakkad, India*
ICWRS **IAHS25_ABS_M5248**	Comparative Analysis of Machine Learning Models for Crop Water Requirement Prediction *Ms. Mrunalini Dinkar Humbare, Kerala Agricultural University, India*
ICWRS **IAHS25_ABS_D4038**	Decoding Drought in North Brabant Netherlands: A spatially distributed analysis of drought types and their transition *Prof. Reynold Chow, Wageningen University, Netherlands*
ICGW **IAHS25_ABS_C3355**	Science-Based Site Suitability Analysis for Groundwater Recharge: A Case Study of Chittharagi Sub-watershed Karnataka India *Mr. Vivek Patil, Visvesvaraya Technological University Belagavi, India*
ICWQ **IAHS25_ABS_SG001**	Expansion of urbanisation Impact on lakes and groundwater in greater Hyderabad region – Telangana South India *Swapna Gedela, Acharya Nagarjuna University - Andhra Pradesh, India*
ICWRS **IAHS25_ABS_AT001**	Decision Support System for Water Resource Management *Dr. Akash Tiwari, IIT (BHU) Varanasi, India*
HELPING theme 2 **IAHS25_ABS_S1055**	Building resilience to urban floods through nature based solutions *Dr. Priyanka Jamwal, Ashoka Trust for Research in Ecology and the Environment (ATREE), India*

Session: 5.1 | October 10, 2025, 9:00–10:30

ICHWF **IAHS25_ABS_A8945**	Integrating Reservoir Management into Hydrological Modeling: Advancing Streamflow Simulations in South Asia's Major River Basins *Mr. Prateek Sharma, IIT Delhi, India*
ICHWF **IAHS25_ABS_R9739**	Understanding the Spatial Patterns of Himalayan Ecosystem Services and their Valuations using a Systematic Literature Review and Meta-Analysis *Mr. Prakhar Sharma, IIT Roorkee, India*
ICHWF **IAHS25_ABS_W7880**	Understanding the failure risk of Dual-Dam System and its downstream impact: A Case Study of Tuirial Reservoir *Mr. Shivendra Jaiswal, IIT Roorkee, India*
ICHWF **IAHS25_ABS_C9124**	Bridge constructions and riverscape dynamics in geo-spatial lens *Dr. Mery Biswas, Presidency University, India*
ICHWF **IAHS25_ABS_W6388**	Using Agent-Based Modeling to understand changing floodplain dynamics in Indian context *Ms. Apoorva Singh, IIT Delhi, India*
ICHWF **IAHS25_ABS_H7076**	Geospatial Assessment of Cocoa-Driven Nature Loss and Water Consumption in the Pra Basin in Ghana *Dr. Moctar Dembele, International Water Management Institute (IWMI), Ghana*
ICHWF **IAHS25_ABS_X8144**	Simulating human-water feedbacks for climate extreme resilience in the Dutch context *Dr. Jose David Henao Casas, Vrije Universiteit Amsterdam, Netherlands*
ICHWF **IAHS25_ABS_C3245**	Deciphering the roles of climate and land-use changes on water resources in India *Mr. Shivansh Tiwary, IIT Bombay, India*
ICWRS **IAHS25_ABS_A8673**	Exploring the Impacts of Hydropeaking on Riverine Ecosystems in India *Ms. Anushruti Kukreja, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany*
ICWRS **IAHS25_ABS_U2566**	Enhancing Drought Resilience Through Interconnected Reservoir Systems, A Case Study of Sardinia's Flumendosa Basin *Mr. Avijit Majhi, University of Cagliari, Italy*
ICWRS **IAHS25_ABS_Q8057**	Extreme floods and droughts in the Gambia River Basin at Gouloumbou: Impacts of climate change and the resilience of ecosystems and populations *Dr. Anastasie Mendy, Université Cheikh Anta Diop de Dakar, Senegal*
ICCE **IAHS25_ABS_J3780**	Using Cs-137 measurements to detect changes in sedimentation rates in a floodplain area of northern Norway. Preliminary results of a field sampling campaign *Prof. Paolo Porto, University Mediterranea of Reggio Calabria, Italy*
ICCE **IAHS25_ABS_R3864**	Integrated catchment-scale sediment transport model *Dr. Vsevolod Moreido, Water Problems Insitute of the Russian Academy of Sciences, Russia*
ICCE **IAHS25_ABS_B7402**	Enabling large-scale soil erosion assessments: exploring the potential of Earth Observation and Artificial Intelligence *Dr. Melissa Latella, CMCC Foundation -- Euro-Mediterranean Center on Climate Change, Italy*
ICCE **IAHS25_ABS_T7024**	Geostatistical modeling of the spatial sediment distribution in the largest Arctic drainage basin, Lena, Russia *Mrs. Evgeniya Fingert, Lomonosov Moscow State University, Russia*

ICCE **IAHS25_ABS_O8346**	A Quantitative Assessment of Riverine Erosional Hazard and Vulnerability in Upper Tapi River, India *Dr. Resmi S.R., National Institute of Technology - Calicut, India*
ICCE **IAHS25_ABS_Q3727**	Hydrological Analysis and Prioritisation of Best Management Practices in the Hirakud Catchment using SWAT and ACPF *Mr. Hemant Kumar, IIT Delhi, India*
ICCE **IAHS25_ABS_Y7772**	Evaluating the temporal dynamics of potential soil losses: Idice River Basin (Emilia Romagna Region, Northern Italy) case study *Dr. Guido Rianna, CMCC Foundation -- Euro-Mediterranean Center on Climate Change, Italy*
ICCE **IAHS25_ABS_K3412**	The volume of water stored in Mackenzie Delta Lakes during freshet flows and their impact on sediment dynamics. Case study of Big Lake in Inuvik, Canada *Mr. Damian Cieplowski, Kazimierz Wielki University in Bydgoszcz, Poland*
ICCE **IAHS25_ABS_L2670**	Gully erosion in India: Land degradation impact geomorphic attributes and evolutionary dynamics *Mr. Anindya Majhi, The University of Manchester, United Kingdom*
ICCLAS **IAHS25_ABS_I5605**	Long Term Variability in Low Level Jet and its Relationship with the Indian Summer Monsoon Rainfall *Ms. Karthika P.P., Sathyabama Institute of Science and Technology, India*
ICCLAS **IAHS25_ABS_H4559**	Exploring Arctic Sea Ice and Indian Summer Monsoon teleconnections using a multiscale approach *Ms. Sujata Kulkarni, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_A8041**	Soil Moisture Dynamics under Elevated CO2: Implications for Land-Atmosphere Feedbacks in India *Mr. Akash Verma, IIT Bombay, India*
ICCLAS **IAHS25_ABS_T2260**	High-Resolution Climate Models Capture Monsoon Rainfall Changes More Accurately in the Ganga-Brahmaputra-Meghna Basin *Dr. Haider Ali, Newcastle University, United Kingdom*
ICCLAS **IAHS25_ABS_M8082**	Investigating Coupled Land-Atmosphere Moisture Dynamics Using Rainwater Isotopes across distinct Indian Climatic Zones *Dr. Rajaveni Sundara Pandian, Indian Institute of Tropical Meteorology, Pune, India*
ICCLAS **IAHS25_ABS_Y1882**	Atmospheric moisture linkages to flood inducing Multiday extreme precipitation in India *Mr. Deepak Pandidurai, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_G2609**	Understanding the Characteristics of Western Disturbances in Changing Climate *Ms. Spandita Mitra, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_S6155**	Impact of Urbanization on Monsoon Rainfall Over Complex Terrain: A Case Study of Doon Valley *Ms. Sushmita Gouraha, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_I3064**	High-Resolution Climate Projections for Hydrological Applications in the Himalaya Using WRF-Based Dynamical Downscaling *Dr. Kuldeep Sharma, National Institute of Hydrology - Roorkee, India*
ICCLAS **IAHS25_ABS_B6544**	Science-based information for adaptation to climate change in rainfed agriculture *Prof. Peter Molnar, Institute of Environmental Engineering, Switzerland*
ICCLAS **IAHS25_ABS_A3871**	An analytical approach for quantifying the role of vapor pressure deficit in flash drought evolution

	Mr. Vishal Singh, IIT Kanpur, India
ICCLAS **IAHS25_ABS_K3636**	A global intercomparison and evaluation of flash drought indicators *Dr. Ivan Noguera Corral, UK Centre for Ecology & Hydrology (UKCEH), United Kingdom*
ICCLAS **IAHS25_ABS_O6857**	Understanding the Spatiotemporal Variability of Precipitation Recycling in the Ganga River Basin *Ms. Sangam Yadav, IIT Hyderabad, India*
ICCLAS **IAHS25_ABS_X7015**	Multi-Hazard Susceptibility Mapping over India through Deep Learning Technique *Mr. Rachit, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_H7342**	Expanding Woody Encroachment - Is it a Concern for Water Yield? Case studies from South Africa under Varying Climates *Dr. Michele Toucher, South African Environmental Observation Network, South Africa*
ICCLAS **IAHS25_ABS_V7810**	A Novel Framework for Assessing Drought-Flood Abrupt Alternation: Insights from the Columbia River Basin, USA *Mr. Prajith V., IIT Bombay, India*
ICCLAS **IAHS25_ABS_R3106**	Disentangling the effects of aerosols on precipitation under varying meteorological conditions *Mr. Abhigyan Chakraborty, IIT Hyderabad, India*
ICWRS **IAHS25_ABS_K8409**	Improving farm-scale decision making on blue-green water management practices in the Vidarbha region of Maharashtra *Ms. Ruth Linnaea Cahill, Delft University of Technology, Netherlands*
ICWRS **IAHS25_ABS_F9438**	Comparative Analysis of ANN Solvers for Leakage Detection in Water Supply Systems *Dr. Priyanshu Jain, IIT Bombay, India*
ICWRS **IAHS25_ABS_D5072**	An Ensemble Flood Forecasting System for India *Mr. Priyam Deka, IIT Delhi, India*

Session: 5.2 | October 10, 2025, 11:00–12:30

ICCE **IAHS25_ABS_I2446**	Digital mapping of soil degradation from water erosion in the forest-steppe zone of the East European Plain *Dr. Andrey Petrovich Zhidkin, V.V. Dokuchaev Soil Science Institute, Russia*
ICCE **IAHS25_ABS_S2195**	Multi-tool data set on Northern Eurasian Riverbank Erosion: methodology spatial variations *Prof. Sergey Chalov, Lomonosov Moscow State University, Russia*
ICCE **IAHS25_ABS_E2221**	Sediment Dynamics across the estuarine reach of the monsoon-dominated Subarnarekha Basin *Mr. Rituparna Acharyya, Kazimierz Wielki University in Bydgoszcz, Poland*
ICCE **IAHS25_ABS_Q1464**	Sediment Budget Formation in Permafrost-Affected Siberian Rivers: Ob Yenisey Lena and Kolyma *Mr. Victor Ivanov, Lomonosov Moscow State University, Russia*
ICCE **IAHS25_ABS_Y6564**	Simplified approaches to estimate rainfall erosivity from coarse temporal resolution precipitation data in the Mediterranean Belt *Prof. Paolo Nasta, University of Naples Federico II, Italy*
ICCE **IAHS25_ABS_A1559**	Assessing the impact of uncertainty in global soil property datasets on soil erosion predictions *Dr. Konstantinos X Soulis, Agricultural University of Athens, Greece*
ICCE **IAHS25_ABS_R3864**	Integrated catchment-scale sediment transport model *Dr. Vsevolod Moreido, Water Problems Insitute of the Russian Academy of Sciences, Russia*
ICCE **IAHS25_ABS_O8346**	A Quantitative Assessment of Riverine Erosional Hazard and Vulnerability in Upper Tapi River, India *Dr. Resmi S.R., National Institute of Technology - Calicut, India*
ICCE **IAHS25_ABS_Q3727**	Hydrological Analysis and Prioritisation of Best Management Practices in the Hirakud Catchment using SWAT and ACPF *Mr. Hemant Kumar, IIT Delhi, India*
ICCE **IAHS25_ABS_K3412**	The volume of water stored in Mackenzie Delta Lakes during freshet flows and their impact on sediment dynamics. Case study of Big Lake in Inuvik, Canada *Mr. Damian Cieplowski, Kazimierz Wielki University in Bydgoszcz, Poland*
ICCE **IAHS25_ABS_B7402**	Enabling large-scale soil erosion assessments: exploring the potential of Earth Observation and Artificial Intelligence *Dr. Melissa Latella, CMCC Foundation -- Euro-Mediterranean Center on Climate Change, Italy*
ICCE **IAHS25_ABS_Y7772**	Evaluating the temporal dynamics of potential soil losses: Idice River Basin (Emilia Romagna Region, Northern Italy) case study *Dr. Guido Rianna, CMCC Foundation -- Euro-Mediterranean Center on Climate Change, Italy*
ICCLAS **IAHS25_ABS_C8307**	Critical Soil Moisture thresholds of plant water stress over India in response to Atmospheric Variability *Mr. Anoop Sampelli, National Remote Sensing Centre, India*
ICCLAS **IAHS25_ABS_P4228**	Water Balance from Percolation Scaling and Ecological Optimality *Prof. Allen Gerhard Hunt, Wright State University, United States*
ICCLAS **IAHS25_ABS_V9692**	Mechanisms of onset termination and propagation of pre-monsoon heatwaves in India *Mr. Javid Ahmad Dar, IIT Kanpur, India*
ICCLAS **IAHS25_ABS_E3324**	A Novel Network-Based Methodology for Analysis of Atmospheric Rivers

	Mr. Jitendra Sharma, IIT Bombay, India
ICCLAS **IAHS25_ABS_G9574**	Root zone in the Earth system *Prof. Hongkai Gao, East China Normal University, China*
ICCLAS **IAHS25_ABS_C5554**	Assessing future changes in hydrological and vegetation resources in the agro-pastoral Sahel *Mrs. Lena Collet, IRD, France*
ICCLAS **IAHS25_ABS_N1335**	Sub-seasonal to Seasonal Soil Moisture Drought Prediction Using Deep Learning *Mr. Saurabh Verma, IIT Bombay, India*
ICCLAS **IAHS25_ABS_D2564**	Understanding Hydrological Seasonality in a Himalayan River Basin under Changing Climate *Prof. Axel Bronstert, University of Potsdam, Germany*
ICCLAS **IAHS25_ABS_O6025**	Diurnal Soil Temperature Range as a Proxy for Representing Hydrological Regimes and Land-Atmosphere Coupling Strength *Mr. Sandipan Paul, IIT Bombay, India*
ICCLAS **IAHS25_ABS_R2807**	Influence of Land Use/Land Cover and Climate Change on Hydrological Processes *Mrs. Vijayalakshmi Suliammal Ponnambalam, IISc Bangalore, India*
ICCLAS **IAHS25_ABS_R5553**	Examining the interplay between Droughts and Floods in India amidst Climate Change *Mr. Syed Bilal, IIT Mandi, India*
ICCLAS **IAHS25_ABS_O3739**	Towards Identifying the Precursors of Heatwaves in the Indo-Gangetic Plains - Perspective of Land-Atmosphere Interaction *Ms. Manali Saha, IIT Bombay, India*
ICCLAS **IAHS25_ABS_I5605**	Long Term Variability in Low Level Jet and its Relationship with the Indian Summer Monsoon Rainfall *Ms. Karthika P.P., Sathyabama Institute of Science and Technology, India*
ICCLAS **IAHS25_ABS_G2609**	Understanding the Characteristics of Western Disturbances in Changing Climate *Ms. Spandita Mitra, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_H4559**	Exploring Arctic Sea Ice and Indian Summer Monsoon teleconnections using a multiscale approach *Ms. Sujata Kulkarni, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_T2260**	High-Resolution Climate Models Capture Monsoon Rainfall Changes More Accurately in the Ganga-Brahmaputra-Meghna Basin *Dr. Haider Ali, Newcastle University, United Kingdom*
ICCLAS **IAHS25_ABS_S6155**	Impact of Urbanization on Monsoon Rainfall Over Complex Terrain: A Case Study of Doon Valley *Ms. Sushmita Gouraha, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_A3871**	An analytical approach for quantifying the role of vapor pressure deficit in flash drought evolution *Mr. Vishal Singh, IIT Kanpur, India*
ICCLAS **IAHS25_ABS_K3636**	A global intercomparison and evaluation of flash drought indicators *Dr. Ivan Noguera Corral, UK Centre for Ecology & Hydrology (UKCEH), United Kingdom*
ICCLAS **IAHS25_ABS_O6857**	Understanding the Spatiotemporal Variability of Precipitation Recycling in the Ganga River Basin *Ms. Sangam Yadav, IIT Hyderabad, India*
ICCLAS **IAHS25_ABS_H7342**	Expanding Woody Encroachment - Is it a Concern for Water Yield? Case studies from South Africa under Varying Climates

	Dr. Michele Toucher, South African Environmental Observation Network, South Africa
ICCLAS **IAHS25_ABS_R3106**	Disentangling the effects of aerosols on precipitation under varying meteorological conditions *Mr. Abhigyan Chakraborty, IIT Hyderabad, India*
ICCLAS **IAHS25_ABS_A8041**	Soil Moisture Dynamics under Elevated CO2: Implications for Land-Atmosphere Feedbacks in India *Mr. Akash Verma, IIT Bombay, India*
ICCLAS **IAHS25_ABS_Y1882**	Atmospheric moisture linkages to flood inducing Multiday extreme precipitation in India *Mr. Deepak Pandidurai, IIT Roorkee, India*
ICCLAS **IAHS25_ABS_B6544**	Science-based information for adaptation to climate change in rainfed agriculture *Prof. Peter Molnar, Institute of Environmental Engineering, Switzerland*
ICHWF **IAHS25_ABS_Y6552**	Can satellite data validate socio-hydrology models? Insights from a model application to a large reservoir *Mr. Mukesh Kumar Dey, IIT Bombay, India*
ICHWF **IAHS25_ABS_J6586**	Quantifying the impact of conjunctive use of groundwater and surface water on baseflow in the command area of a large reservoir *Mr. Vishwajit Ramesh Jaiswal, IIT Bombay, India*
ICHWF **IAHS25_ABS_D9172**	Tracing unintended consequences of interventions in coupled human-water systems using critical pathway *Dr. Yi Nan, Tsinghua University, China*
ICHWF **IAHS25_ABS_D5336**	Development of climate catchment and human action-informed model for forecasting seasonal flood probabilities *Mr. Salvadi Chetan Kumar, IIT Hyderabad, India*
ICHWF **IAHS25_ABS_V5358**	Understanding Human-Water Interactions and their Health Implications Under Changing Climate *Mr. Deepak Pandey, IIT Roorkee, India*
ICHWF **IAHS25_ABS_X3710**	Incorporating community knowledge and values within urban river restoration visions *Dr. James Christopher White, University of Birmingham, United Kingdom*
ICHWF **IAHS25_ABS_A3558**	Embedding land and water planning practices in context: A diagnostic contribution from sociology *Prof. Raffaele Vignola, Wageningen University and Research, Netherlands*
ICHWF **IAHS25_ABS_X9557**	Navigating Jordan's Water Resources Futures: Regional Hydrological Modelling Under Socio-Economic Developments and Climate Change *Dr. Nafn M. Amdar, International Water Management Institute (IWMI), Jordan*
ICHWF **IAHS25_ABS_W6388**	Using Agent-Based Modeling to understand changing floodplain dynamics in Indian context *Ms. Apoorva Singh, IIT Delhi, India*
ICHWF **IAHS25_ABS_X8144**	Simulating human-water feedbacks for climate extreme resilience in the Dutch context *Dr. Jose David Henao Casas, Vrije Universiteit Amsterdam, Netherlands*
ICHWF **IAHS25_ABS_C3245**	Deciphering the roles of climate and land-use changes on water resources in India *Mr. Shivansh Tiwary, IIT Bombay, India*

ICHWF **IAHS25_ABS_R9739**	Understanding the Spatial Patterns of Himalayan Ecosystem Services and their Valuations using a Systematic Literature Review and Meta-Analysis *Mr. Prakhar Sharma, IIT Roorkee, India*
ICHWF **IAHS25_ABS_W7880**	Understanding the failure risk of Dual-Dam system and its downstream impact: A case study of Tuirial Reservoir *Mr. Shivendra Jaiswal, IIT Roorkee, India*
ICHWF **IAHS25_ABS_H7076**	Geospatial Assessment of Cocoa-Driven Nature Loss and Water Consumption in the Pra Basin in Ghana *Dr. Moctar Dembele, International Water Management Institute (IWMI), Ghana*
ICSIH **IAHS25_ABS_W7994**	Modelling Snow Avalanche Flow Dynamics Using RAMMS: A Case Study of Solang Valley and Alaknanda Basin *Mr. Rajeev Ranjan, IIT Delhi, India*
ICSIH **IAHS25_ABS_Y7308**	Diminishing glacier melt contribution for summer droughts in an alpine catchment *Dr. Giacomo Bertoldi, Eurac Research, Italy*
ICSIH **IAHS25_ABS_F3738**	Decadal Changes in Glacier Facies and ELA in the Himalayas: Implications for Regional Hydrology *Ms. Apoorva Malviya, Indian Institute of Remote Sensing (IIRS), India*
ICSIH **IAHS25_ABS_C4700**	Aerosol-Driven Changes in Glacial and Polar Ice Melt: A Multi-Scale Analysis Using Remote Sensing and Transport Modeling *Mr. Satyajit Singh Saini, IIT Roorkee, India*
ICSIH **IAHS25_ABS_E4449**	Energy conservative solutions for coupled heat-mass transport in frozen soils and snow *Dr. Andrew Ireson, University of Saskatchewan, Canada*
ICSIH **IAHS25_ABS_Y3553**	Geocryological Conditions of Small Mountain Catchment in the Upper Kolyma Highland (Northeastern Asia) *Dr. Olga Makarieva, St. Petersburg State University, Russia*
ICSIH **IAHS25_ABS_A2441**	Impact of snow land data assimilation on hydrological processes in Community Land Model version 5 with SWEML *Mr. Jungho Seo, Yonsei University, Republic of Korea*
ICSIH **IAHS25_ABS_M9227**	Arctic Climate Variability and Its Influence on Seasonal Snow Dynamics in the Hindu Kush Himalayas *Mr. Anant Dikshit, IIT Roorkee, India*
ICSIH **IAHS25_ABS_J6735**	Giant Aufeis in the Northeast of Russia according to the historical data of 1958 and satellite images of 1973-2021 *Dr. Olga Makarieva, St. Petersburg State University, Russia*
ICSIH **IAHS25_ABS_F8214**	Impact of Spring Sea Ice Variability in the Barents-Kara Region on the Indian Summer Monsoon Rainfall *Dr. Divya Sardana, IIT Roorkee, India*
ICSIH **IAHS25_ABS_U6726**	Long-term Snow Cover Dynamics in the Indian North-Western Himalayas using Multi-Sensor Satellite Data *Ms. Sakshi Tripathi, IIT Roorkee, India*
ICSIH **IAHS25_ABS_R7668**	Seasonal Shifts in Snowpack Dynamics and Their Response to Climate Change in the Swiss Alps *Ms. Fatemeh Zakeri, University of Lausanne, Switzerland*
ICSIH **IAHS25_ABS_F9059**	Evolving snow drought impacts on the hydrological behavior of headwater catchments in the Andes Cordillera *Dr. James McPhee, University of Chile, Chile*

ICSIH **IAHS25_ABS_S2981**	Co-Creating Water Knowledge for Climate Resilience: Understanding Precipitation Shifts and Their Impacts in South Asia and China *Dr. Dhiraj Pradhananga, Tribhuvan University, Nepal*
ICCLAS **IAHS25_ABS_F8533**	Drivers of Rising Land Surface Temperature in a Lesser Himalayan Catchment *Dr. Pravin Rangrao Patil, National Institute of Hydrology - Roorkee, India*
ICHWF **IAHS25_ABS_A9443**	Modeling Hydrological Droughts in Alpine Hydropower-Influenced Basins *Dr. Diego Avesani, University of Trento, Italy*
ICCLAS **IAHS25_ABS_B7159**	Overestimation of evapotranspiration across India if not considering the impact of rising atmospheric CO2 *Ms. Nandhana Sunil, IIT Palakkad, India*
ICCLAS **IAHS25_ABS_B6736**	Hydro-Climatic Impacts of Oak-to-Pine Transition in the West-Central Himalayas: A Multi-Scale Perspective *Mr. Jyoti Ranjan Mohanty, National Institute of Science Education and Research (NISER) Bhubaneswar, India*
ICCLAS **IAHS25_ABS_J4891**	Spatio-temporal characteristics of flooding over India and their links to moisture sources *Mr. Rajat Choudhary, IIT Delhi, India*
ICCE **IAHS25_ABS_T5094**	Multi-Decadal Shoreline Dynamics in Chilika Lagoon: Progradation Retreat and Their Drivers *Ms. Sarita Sahoo, IIT Kanpur, India*
ICHWF **IAHS25_ABS_L2268**	Identification and Mapping of Paleochannels for Water Resource Management *Dr. Nikhilesh Singh, IIT (BHU) Varanasi, India*
ICCLAS **IAHS25_ABS_R1264**	Impact of Chill and Heat Accumulation on Fruit Flowering in the Northwestern Himalayas *Mr. Yash Shukla, IIT Mandi, India*

Session: 5.3 | October 10, 2025, 13:30–15:00

ICCLAS **IAHS25_ABS_R8429**	A Global Assessment of Vapor Pressure Deficit as the Primary Driver of Sap Flow Variability in Forests *Ms. Leena Khadke, IIT Bombay, India*
ICCLAS **IAHS25_ABS_B6834**	Developing a multi-risk impact-based forecasting and warnings system for India *Dr. Christopher White, University of Strathclyde, United Kingdom*
ICHWF **IAHS25_ABS_U3275**	Unravelling the interplay of hydrological extremes and socioeconomic inequalities *Prof. Giuliano Di Baldassarre, Uppsala University, Sweden*
ICWRS **IAHS25_ABS_H2100**	The Bradfield Scheme: a multi-disciplinary evaluation of Australia's controversial 1600-km inter-basin water diversion proposal *Dr. Cuan Petheram, CSIRO, Australia*
ICWRS **IAHS25_ABS_G5910**	Seasonal forecast of streamflow and suspended sediment in the Blue Nile Basin, Ethiopia *Prof. Axel Bronstert, University of Potsdam, Germany*
ICWRS **IAHS25_ABS_N4325**	Integrated water scarcity index reveals increased exposures of populations and areas to water scarcity *Mr. Zhonghao Fu, China Agricultural University, China*

Special Session

1. Stockholm Water Prize Laureates Session
2. Science for Solution (Panel Session)
3. IAHS Awards
4. IAHS Agora
5. Innovating for Sustainable Rural Water Security
6. Himalayan Freshwaters: Services and Vulnerability of Freshwater Ecosystems in the Himalayas
7. Hydrological Modelling for a Resilient Future: Innovations at the Water-Climate Nexus
8. One Health Solutions to tackle global water and health challenges
9. Advances in Assessment and Management of Groundwater Resources
10. Inter-continental comparison of current drought impacts and drought research approaches
11. Water and Climate Exploratorium: Inspiring Rural Minds through Science
12. Unlocking advances in numerical solutions for hydrological models

Side Events

The Local Organizing Committee (LOC) of the XIIth IAHS Scientific Assembly 2025 and IAHS invited applications for organizing side events during the Assembly. These events are an excellent opportunity to engage with the global hydrological community and showcase your work, project, or initiative in an interactive format.

(a) Events organized by the IAHS Management Team

(b) LOC supported side events

(c) Individual / Organization / Community / Project-led side events

(d) Sponsored side events

1.	**HSJ Editors' Retreat 2025** *Organizer*: 1. Attilio Castellarin, EiC, IAHS-HSJ, University of Bologna, Italy 2. Stacey Archfield, Co-Editor, IAHS-HSJ, USGS 3. Aldo Fiori, Co-Editor, IAHS-HSJ, University Roma Tre, Italy 4. Riddhi Singh, Co-Editor, IAHS-HSJ, IIT Bombay, India 5. Konstantinos Soulis, Co-Editor, IAHS-HSJ, University of Athens, Greece 6. Charlotte Rundall, HSJ Edit. Manager, IAHS Ltd., UK 7. Kate Hill, HSJ Submiss. & Review Coord., IAHS Ltd., UK
2.	**SYSTA Lunch** *Organizer*: 1. Claire Lupton, IAHS Executive Secretary, IAHS Ltd., UK 2. Kate Heal, The University of Edinburgh, UK
3.	**IAHS ECC & YHS India workshops for Early Career Researchers in Hydrology** *Organizer*: 1. Moctar Dembélé, International Water Management Institute (IWMI), Ghana 2. Abinesh Ganapathy, Department of Hydrology, IIT Roorkee, India and Members of IAHS ECC and YHS India
4.	**Co-Creating Water Knowledge - Working Group Meeting** *Organizer*: 1. Giulio Castelli, WG Leader and moderator, University of Florence, Italy 2. Kwok P Chun, Decolonisation WG Leader, University of the West of England, UK 3. Dhiraj Pradhananga, Head, Department of Meteorology, Tribhuvan University, Nepal 4. Anandharuban Panchanathan, Energy and Environment Institute, University of Hull, UK 5. David Gwapedza, Department of Environmental Science, University of Namibia, Namibia
5.	**Hydrological Modelling for a Resilient Future: Innovations at the Water-Climate Nexus** *Organizer*: 1. Alok Sikka, International Water Management Institute (IWMI), India 2. Mohammad Faiz Alam, International Water Management Institute (IWMI), India
6.	**Critical Writing Workshop** *Organizer*: 1. Mahua Mukherjee, Secretary General, SAADRI, India

7.	**One Health Solutions to tackle global water and health challenges** *Organizer*: 1. Stefan Krause, University of Birmingham, UK 2. Alena Bartsova, Swedish Meteorological and Hydrological Institute (SMHI), Sweden 3. Wouter Buytaert, Imperial College London, UK
8.	**Advances in Assessment and Management of Groundwater Resources** *Organizer*: 1. Mandalagiri S. Mohan Kumar, IISc Bangalore, India 2. Elango Lakshmanan, IIT Madras, India 3. YRS Rao, National Institute of Hydrology – Roorkee, India 4. Rajendra Prasad Patury, Andhra University, India
9.	**ROBIN: Workshop to Build Reference Networks from Hydrological Data and Develop Drought and Low-Flow Indicators** *Organizer*: 1. Steve Turner, Hydrologist, UK Centre for Ecology & Hydrology, UK
10.	**Advancing in situ Soil Moisture Monitoring and Utilization through Innovation and Community Building** *Organizer*: 1. Tunde Olarinoye, International Centre for Water Resources and Global Change, Koblenz, Germany 2. Justin Sheffield, University of Southampton, UK
11.	**Cool Tools for Research: What's Useful, What's Next** *Organizer*: 1. Ankit Agarwal, Department of Hydrology, IIT Roorkee, India 2. Abinesh Ganapathy, Department of Hydrology, IIT Roorkee and Members of YHS India
12.	**Inter-continental comparison of current drought impacts and drought research approaches** *Organizer*: 1. Eva Paton, Technical University of Berlin, Germany 2. Jose David Henao Casas, Vrije Universiteit Amsterdam, The Netherlands
13.	**Himalayan Freshwaters: Services and Vulnerability of Freshwater Ecosystems in the Himalayas** *Organizer*: 1. Ashutosh Sharma, Department of Hydrology, IIT Roorkee, India

14.	**Advanced 3D Vector Resistivity Method for Subsurface Mapping of Geological Inhomogeneities** *Organizer*: 1. Lagudu Surinaidu, National Institute of Hydrology – Roorkee, India
15.	**Unlocking advances in numerical solutions for hydrological models** *Organizer*: 1. Julien Lerat, Senior Research Scientist, CSIRO Environment, Australia
16.	**Young Water Champions for a Green, Prosperous, and Peaceful Sahel** *Organizer*: 1. Moctar Dembélé, International Water Management Institute (IWMI), Ghana
17.	**Introducing GEOtop and GEOframe: Open-Source Tools for Hydrological Modelling in Mountain Catchments** *Organizer*: 1. Giacomo Bertoldi, EURAC research Bolzano, Italy 2. Riccardo Rigon, University of Trento, Italy 3. John Mohd Wani, C3A, University of Trento, Italy 4. Giuseppe Formetta, University of Trento, Italy
18.	**Introducing CAMELS-IND: A Hydrometeorological and Catchment Attributes Dataset for Peninsular India** *Organizer*: 1. Ashutosh Sharma, Department of Hydrology, IIT Roorkee, India 2. Pankaj Dey, Department of Hydrology, IIT Roorkee, India
19.	**Innovation Pitch for Resilient Water Solutions** *Organizer*: 1. Mahua Mukherjee, Secretary General, SAADRI, India
20.	**IYGP 2025 and Decade of Action for Cryospheric Sciences 2025-2034** *Organizer*: 1. Dhiraj Pradhananga, Vice-President, ICSIH-IAHS 2. Melody Sandells, President, ICSIH-IAHS 3. James McPhee, President-Elect, ICSIH-IAHS 4. Timothy Link, Secretary, ICSIH-IAHS
21.	**WMO HydroHub - MOXXI Working Group IAHS co-organized Innovation Workshop** *Organizer*: 1. Sumit Sen, Department of Hydrology, IIT Roorkee, India 2. Salvatore Manfreda, University of Naples Federico II, Italy

22.	**Transformative Approaches to Integrated Flood and Drought Management: International Insights and Innovations** *Organizer*: 1. Idhaya Chandhiran Ilampooranan, WRD&M, IIT Roorkee, India 2. João Pedro Nunes, Wageningen University and Research, The Netherlands
23.	**Water and Climate Exploratorium: Inspiring Rural Minds through Science** *Organizer*: 1. Ankit Agarwal, Department of Hydrology, IIT Roorkee, India 2. Sumit Sen, Department of Hydrology, IIT Roorkee, India
24.	**Innovating for Sustainable Rural Water Security (Jal Jeevan Mission Session)** *Organizer:* 1. Himanshu Joshi, IIT Roorkee, India 2. Manoj Jain, IIT Roorkee, India 3. R. P. Pandey, IIT Roorkee, India 4. Ashutosh Sharma, IIT Roorkee, India 5. Sumit Sen, IIT Roorkee, India 6. JJM Representatives

Scientific Excursion

1. **Excursion Visit to Central Building Research Institute (CBRI), Roorkee**
   As part of the IAHS 2025 Scientific Assembly, participants are taken on an exclusive technical excursion to the Central Building Research Institute (CBRI), Roorkee—a national leader in building science and technology since 1947. This visit will provide a first-hand look into cutting-edge research, testing infrastructure, and innovative technologies developed at CBRI. Participants will have the opportunity to engage with CBRI scientists and researchers, view live demonstrations, and gain insights into the institute's role in advancing disaster-resilient and sustainable construction technologies in India.

2. **Technical Visit to National Institute of Hydrology (NIH), Roorkee**
   The IAHS 2025 Scientific Assembly, registered participants are taken to a technical visit to the National Institute of Hydrology (NIH), Roorkee—India's premier R&D organization in the domain of hydrology and water resources, functioning under the Ministry of Jal Shakti, Government of India. This exclusive visit will provide an immersive experience into NIH's ongoing efforts in water resources assessment, climate resilience, and hydrological research through state-of-the-art laboratories, field instrumentation, and decision support tools.

3. **H.B. Medlicott Museum of Geology, Department of Earth Sciences, IIT Roorkee: A Legacy of Himalayan Geological Heritage**
   The H.B. Medlicott Museum of Geology serves as both a teaching and outreach facility. It aims to inspire students and young learners to engage deeply with Earth sciences through hands-on interaction with authentic geological specimens and historic instruments. The museum provides practical exposure by enabling Earth sciences students to see and handle real-world geological materials. This vibrant educational center showcases an extensive collection of rocks, fossils, minerals, and historic instruments. Its rock and mineral specimens include globally sourced samples such as amethyst from Brazil, transparent calcite, and flexible sandstone, alongside notable Himalayan thrust zone rocks and classic folds from Rajasthan. The fossil collection features remarkable artifacts, including a 42-million-year-old whale skull, elephant thigh bones, and grinding teeth aged between 2 to 5 million years. A dedicated fluorescent mineral room offers a captivating UV-lit display of specimens such as fluorite and ruby that glow vividly under ultraviolet light. Additionally, the museum exhibits early survey microscopes dating back to circa 1857, seismograph apparatus, and a range of historic laboratory tools once used in Earth sciences research and education.

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