



# XII<sup>th</sup> Scientific Assembly of the International Association of Hydrological Sciences (IAHS 2025)

October 05-October 10, 2025 | IIT Roorkee, India



## 5.1 Oral+ForumOral | Friday, October 10

S.No.	Abstract ID	Abstract Title	Theme	Contribution Type	Participant Name	Affiliation	Country
1	IAHS25_ABS_A8945	Integrating Reservoir Management into Hydrological Modeling: Advancing Streamflow Simulations in South Asia's Major River Basins	ICHWF	Forum Oral (1-minute flash presentation)	Mr. Prateek Sharma	IIT Delhi	India
2	IAHS25_ABS_R9739	Understanding the Spatial Patterns of Himalayan Ecosystem Services and their Valuations using a Systematic Literature Review and Meta-Analysis	ICHWF	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Prakhar Sharma	IIT Roorkee	India
3	IAHS25_ABS_W7880	UNDERSTANDING THE FAILURE RISK OF DUAL-DAM SYSTEM AND ITS DOWNSTREAM IMPACT: A CASE STUDY OF TUIRIAL RESERVOIR	ICHWF	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. SHIVENDRA JAISWAL	IIT Roorkee	India
4	IAHS25_ABS_C9124	Bridge constructions and riverscape dynamics in geo-spatial lens	ICHWF	Forum Oral (1-minute flash presentation)	Dr. MERY BISWAS	Presidency University	India
5	IAHS25_ABS_W6388	Using Agent-Based Modeling to understand changing floodplain dynamics in Indian context	ICHWF	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Apoorva Singh	IIT Delhi	India
6	IAHS25_ABS_H7076	Geospatial Assessment of Cocoa-Driven Nature Loss and Water Consumption in the Pra Basin in Ghana	ICHWF	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Moctar Dembele	International Water Management Institute (IWMI)	Ghana
7	IAHS25_ABS_X8144	Simulating human-water feedbacks for climate extreme resilience in the Dutch context	ICHWF	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Jose David Henao Casas	Vrije Universiteit Amsterdam	Netherlands
8	IAHS25_ABS_C3245	Deciphering the roles of climate and land-use changes on water resources in India	ICHWF	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Shivansh Tiwary	IIT Bombay	India
9	IAHS25_ABS_A8673	Exploring the Impacts of Hydropeaking on Riverine Ecosystems in India	ICWRS	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Anushruti Kukreja	Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)	Germany
10	IAHS25_ABS_U2566	Enhancing Drought Resilience Through Interconnected Reservoir Systems A Case Study of Sardinia's Flumendosa Basin	ICWRS	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Avijit Majhi	University of Cagliari	Italy
11	IAHS25_ABS_Q8057	Extreme floods and droughts in the Gambia River Basin at Goulombou : Impacts of climate change and the resilience of ecosystems and populations	ICWRS	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. MENDY Anastasie	Université Cheikh Anta Diop de Dakar	Senegal
12	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.	ICCE	Forum Oral (1-minute flash presentation)	Prof. Paolo Porto	University Mediterranea of Reggio Calabria	Italy



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13	IAHS25_ABS_R3864	Integrated catchment-scale sediment transport model	ICCE	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Vsevolod Moreido	Water Problems Insitute of the Russian Academy of Sciences	Russian Federation
14	IAHS25_ABS_B7402	Enabling large-scale soil erosion assessments: exploring the potential of Earth Observation and Artificial Intelligence	ICCE	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Melissa Latella	CMCC Foundation -- Euro-Mediterranean Center on Climate Change	Italy
15	IAHS25_ABS_U2978	Comparative Analysis of Machine Learning Algorithms for Predicting Local Scour Depth Around Bridge Piers	ICCE	Forum Oral (1-minute flash presentation)	Mr. Farooque Rahman	Maulana azad national institute of technology	India
16	IAHS25_ABS_T7024	Geostatistical modeling of the spatial sediment distribution in the largest Arctic drainage basin Lena Russia	ICCE	Forum Oral (1-minute flash presentation)	Mrs. EVGENIYA FINGERT	Lomonosov Moscow State University	Russian Federation
17	IAHS25_ABS_O8346	A Quantitative Assessment of Riverine Erosional Hazard and Vulnerability in Upper Tapi River India	ICCE	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Resmi S R	National Institute of Technology Calicut	India
18	IAHS25_ABS_Q3727	Hydrological Analysis and Prioritisation of Best Management Practices in the Hirakud Catchment using SWAT and ACPF	ICCE	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Hemant Kumar	IIT Delhi	India
19	IAHS25_ABS_Y7772	Evaluating the temporal dynamics of potential soil losses: Idice River Basin (Emilia Romagna Region Northern Italy) case study	ICCE	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Guido Rianna	CMCC Foundation Euromediterranean Center on Climate Change	Italy
20	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.	ICCE	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Damian Cieplowski	Kazimierz Wielki University in Bydgoszcz	Poland
21	IAHS25_ABS_L2670	Gully erosion in India: Land degradation impact geomorphic attributes and evolutionary dynamics	ICCE	Plenary Oral (15-minute oral presentation)	Mr. Anindya Majhi	The University of Manchester	United Kingdom
22	IAHS25_ABS_I5605	Long Term Variability in Low Level Jet and its Relationship with the Indian Summer Monsoon Rainfall	ICCLAS	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Karthika P P	Sathyabama Institute of Science and Technology	India
23	IAHS25_ABS_H4559	Exploring Arctic Sea Ice and Indian Summer Monsoon teleconnections using a multiscale approach	ICCLAS	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Sujata Kulkarni	IIT Roorkee	India



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24	IAHS25_ABS_A8041	Soil Moisture Dynamics under Elevated CO <sub>2</sub> : Implications for Land-Atmosphere Feedbacks in India	ICCLA S	Forum Oral with Poster and Video-Interview (1-minute flash presentation poster and 3-minute video interview)	Mr. Akash Verma	IIT Bombay	India
25	IAHS25_ABS_T2260	High-Resolution Climate Models Capture Monsoon Rainfall Changes More Accurately in the Ganga-Brahmaputra-Meghna Basin	ICCLA S	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Haider Ali	Newcastle University	United Kingdom
26	IAHS25_ABS_M8082	Investigating Coupled Land-Atmosphere Moisture Dynamics Using Rainwater Isotopes across distinct Indian Climatic Zones	ICCLA S	Forum Oral (1-minute flash presentation)	Dr. Rajaveni Sundara Pandian	Indian Institute of Tropical Meteorology Pune	India
27	IAHS25_ABS_Y1882	Atmospheric moisture linkages to flood inducing Multiday extreme precipitation in India	ICCLA S	Forum Oral with Poster and Video-Interview (1-minute flash presentation poster and 3-minute video interview)	Mr. Deepak Pandidurai	IIT Roorkee	India
28	IAHS25_ABS_G2609	Understanding the Characteristics of Western Disturbances in Changing Climate	ICCLA S	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Spandita Mitra	IIT Roorkee	India
29	IAHS25_ABS_S6155	Impact of Urbanization on Monsoon Rainfall Over Complex Terrain: A Case Study of Doon Valley	ICCLA S	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Sushmita Gouraha	IIT Roorkee	India
30	IAHS25_ABS_I3064	High-Resolution Climate Projections for Hydrological Applications in the Himalaya Using WRF-Based Dynamical Downscaling	ICCLA S	Forum Oral (1-minute flash presentation)	Dr. Kuldeep Sharma	National Institute of Hydrology	India
31	IAHS25_ABS_B6544	Science-based information for adaptation to climate change in rainfed agriculture	ICCLA S	Forum Oral with Poster and Video-Interview (1-minute flash presentation poster and 3-minute video interview)	Prof. Peter Molnar	Institute of Environmental Engineering	Switzerland
32	IAHS25_ABS_A3871	An analytical approach for quantifying the role of vapor pressure deficit in flash drought evolution	ICCLA S	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Vishal Singh	IIT Kanpur	India



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33	IAHS25_ABS_K3636	A global intercomparison and evaluation of flash drought indicators	ICCLAS	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Ivan Noguera Corral	UK Centre for Ecology and Hydrology	United Kingdom
34	IAHS25_ABS_O6857	Understanding the Spatiotemporal Variability of Precipitation Recycling in the Ganga River Basin	ICCLAS	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Sangam Yadav	IIT Hyderabad	India
35	IAHS25_ABS_X7015	Multi-Hazard Susceptibility Mapping over India through Deep Learning Technique	ICCLAS	Forum Oral (1-minute flash presentation)	Mr. Rachit Rachit	IIT Roorkee	India
36	IAHS25_ABS_H7342	Expanding Woody Encroachment - Is it a Concern for Water Yield? Case studies from South Africa under Varying Climates	ICCLAS	Forum Oral with Poster (1-minute flash presentation and poster)	Dr. Michele Toucher	South African Environmental Observation Network	South Africa
37	IAHS25_ABS_V7810	A Novel Framework for Assessing Drought-Flood Abrupt Alternation: Insights from the Columbia River Basin USA	ICCLAS	Forum Oral (1-minute flash presentation)	Mr. Prajith V	IIT Bombay	India
38	IAHS25_ABS_R3106	Disentangling the effects of aerosols on precipitation under varying meteorological conditions	ICCLAS	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Abhigyan Chakraborty	IIT Hyderabad	India
39	IAHS25_ABS_K8409	Improving farm-scale decision making on blue-green water management practices in the Vidarbha region of Maharashtra	ICWRS	Forum Oral with Poster (1-minute flash presentation and poster)	Ms. Ruth Linnaea Cahill	Faculty of Civil Engineering & Geosciences of Delft University of Technology	Netherlands
40	IAHS25_ABS_F9438	Comparative Analysis of ANN Solvers for Leakage Detection in Water Supply Systems	ICWRS	Forum Oral (1-minute flash presentation)	Dr. Priyanshu Jain	IIT Bombay	India
41	IAHS25_ABS_D5072	An Ensemble Flood Forecasting System for India	ICWRS	Forum Oral with Poster (1-minute flash presentation and poster)	Mr. Priyam Deka	IIT Delhi	India