

GLOBAL FLOOD PARTNERSHIP ANNUAL MEETING 2025



SEPTEMBER 15 TO 17TH, 2025

Budapest University of Technology and
Economics (BME), Main building, H-1111
Budapest, Műegyetem rkp. 3, Hungary



CONFERENCE PROGRAM



DAY 1

Monday, September 15

8:30 – 9:00

Registration

1st floor Hallway

9:00 – 9:15

András Nemeslaki - BME, Vice-Rector for International Relations
Albert Kettner - Chair GFP; Univ. of Colorado, USA
Zsófia Kugler - Budapest University of Technology and Economics, Hungary
Welcome & Introduction

Pécsi Eszter lecture room, 1st floor, room 95

9:15 – 10:20

Antara Dasgupta & Lara Prades
Plenary interactive Game

10:20 – 10:40

COFFE BREAK

1st floor Hallway

PLENARY PRESENTATIONS

Pécsi Eszter lecture room, 1st floor, room 95

10:40 – 11:00

Bruno Merz - GFZ Helmholtz Centre for Geosciences, Germany
Understanding and managing Black Swans

11:00 – 11:20

Josselin Gauny - United Nations - Food and Agriculture Organization (FAO), Italy
Monitoring flood impacts on agriculture in humanitarian contexts

11:20 – 11:40

Stefania Grimaldi - European Commission Joint Research Centre, Italy
Improving hydrological forecasts at the global scale: the next major upgrade of CEMS GloFAS

11:40 – 12:00

Zsófia Kugler - Budapest University of Technology and Economics, Hungary
Passive microwave radiometry for river gauge monitoring around the globe

CONFERENCE PROGRAM



12:00 – 13:15	LUNCH BREAK	1st floor Hallway
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13:15 – 14:15 *Plenary ignite Session* (5 minute presentations)
(See below the agenda for more info)

Michael Kwame-Biney, Lahcen Goumghar, Richa, Md Humayain Kabir, Sahara Sedhain, Fancisco Lozada, Ayesha Tariq, Wanyun Shao, Michael Meadows, Eleonora Panizza, and Yared Abayneh Abebe

14:15 – 16:15	<i>Poster presentations</i> (incl. 15 min coffee break)	1st floor Hallway
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16:15 – 18:00 *GFP Marketplace* - Find out about new software, tools & ideas and discuss them at the marketplace!
(See below the agenda for more info)

Frederiek Sperna Weiland, Michael Kwame-Biney, Richa, Stefania Grimaldi & Ervin Zsoter & Patrick Matgen, Xingong Li, Dapeng Yu, Josselin Gauny & Andrea Amparore, Paolo Campanella, Paolo Tamagnone, Juseth Chancay, and Stefano Bagli

Groundfloor Main Hall

19:00	SOCIAL DINNER	(Location to be announced at event)
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DAY 2

Tuesday, September 16

PLENARY PRESENTATIONS

Pécsi Eszter lecture room, 1st floor, room 95

8:30 – 8:40

Lara Prades – Chief Analytics and Intelligence Unit, United Nations Global Service Centre – Spain
Welcome to day 2 – what to expect

8:40 – 9:00

Fabian Borg – Founder and Director, Ahead Institute and Foundation for Societal Advancement
Climate Command in Action: PHASE 2 Driving Flood Intelligence and Multilevel Preparedness

9:00 – 9:20

Jefferson Wong – Luxembourg Institute of Science and Technology (LIST), Luxembourg
A Physically Constrained Gradient-based Optimization Method for Flood Water Depth Estimation Using EO-derived Flood Inundation Maps and Topographic Information

9:20 – 9:40

Tamás Krámer – Budapest University of Technology and Economics, Hungary
Flood attenuation revisited: The role of lowland tributaries and bank storage on the Hungarian Danube

9:40 – 10:00

Jan Sodoge – UFZ Helmholtz Centre for Environmental Research, Germany
Comprehensive Assessment of Flood Socioeconomic Impacts Through Text-Mining

10:00 – 10:20

COFFE BREAK (poster presentations)

1st floor Hallway

10:20 – 12:20

WORKSHOPS

Workshop 1:

How to improve the usability of provided flood forecast information.

Lead: Ervin Zsoter

Pécsi Eszter lecture room, 1st floor, room 95

Workshop 2:

A hands-on refugee camp flood risk assessment with global data.

Lead: Mark Trigg

Oktatói Klub lecture room, 1st floor, room 97

12:20-12:40

Kovács Péter - Hydrological Agency of Central Danube region

Introduction to the Kvassay dam

Pécsi Eszter lecture room, 1st floor, room 95

12:40 – 13:40

LUNCH BREAK (poster presentations)

1st floor Hallway

13:40-16:30

Field visit

Kvassay Dam complex, Budapest – an on-site guided tour and a close-up look at how Budapest is preparing for a more resilient water future!

17:00

Early career social networking event

(Location to be announced at event)

DAY 3

Wednesday, September 17

PLENARY PRESENTATIONS

Pécsi Eszter lecture room, 1st floor, room 95

8:30 – 8:40

Antara Dasgupta – Professor RWTH, University of Aachen –
Germany

Welcome to day 3 – what to expect

8:40 – 9:00

Paul Maisey – Director of JBA Global Resilience, United Kingdom

*Go with the flow: reflections on flood modelling for
disaster risk finance*

9:00 – 9:20

Linda Obiero – University of Nairobi, Kenya

*Factors Impeding Comprehension and Inclusion of Early
Warning Messages in Kolwa East Ward, Kisumu County,
Kenya*

9:20 – 9:40

Nivedita Sairam – GFZ Helmholtz Centre for Geosciences,
Germany

Quantifying health and wellbeing impacts of flooding

9:40 – 10:00

Jannis Hoch – Fathom™, United Kingdom

*BURGER – A novel global machine learning-based dataset
for sub-daily rainfall extremes*

10:00 – 10:20

COFFE BREAK (poster presentations)

1st floor Hallway

10:20 – 12:20

WORKSHOPS

Workshop 3:

Integrating Local and Indigenous knowledge in co-designing flood management systems.

Lead: Zsófia Kugler

Pécsi Eszter lecture room, 1st floor, room 95

Workshop 4:

How can Earth Observation (EO) data contribute to improved flood resilience.

Lead: Patrick Matgen

Oktatói Klub lecture room, 1st floor, room 97

12:20 – 13:20

LUNCH BREAK (poster presentations)

1st floor Hallway

13:20 – 14:50

Panel discussion

Panel Chair: **Mandira Singh Shrestha.**

Panel Members: **Linda Obiero, Andrea Amparore, and Andrew Kruczkiewicz**

Pécsi Eszter lecture room, 1st floor, room 95

14:50 – 15:00

Closing remarks and adjourn

Call for next year meeting location

MARKETPLACE BOOTHS

Monday, September 15-afternoon

1. *FloodAdapt, a decision-support tool that seeks to advance and accelerate flooding-related adaptation planning*, by **Frederiek Sperna Weiland**, Deltares, The Netherlands
2. *Drone-Based Monitoring of Coastal Flooding and Erosion in Ghana*, by **Michael Kwame-Biney**, University of Ghana, Ghana
3. *Perceptions of Flood Adaptation Strategies: Insights from the Kosi Region*, by **Richa**, World Resources Institute India, India
4. *Kansas Operational Flood Inundation Mapping System*, by **Xingong Li**, University of Kansas, USA
5. *Surface water flood forecasting*, by **Dapeng Yu**, Previsico, United Kingdom
6. *Monitoring flood impacts on agriculture in humanitarian contexts*, by **Josselin Gauny & Andrea Amparore**, Food and Agriculture Organization of the United Nations (UN-FAO), Italy
7. *The Global Flood Awareness System and Global Flood Monitoring product of the Copernicus Emergency Management Service*, by **Stefania Grimaldi**, **Ervin Zsoter**, and **Patrick Matgen**, European Commission Joint Research Centre (JRC), Italy; ECMWF, United Kingdom; and Luxembourg Institute of Science and Technology (LIST), Luxembourg
8. *RISE by WASDI is an advanced Earth Observation tool that enables near real-time satellite environmental monitoring for sustainability, climate resilience, and disaster management*, by **Paolo Campanella**, WASDI SARL, Luxembourg
9. *RSS-Hydro's latest innovations in flood monitoring and mapping*, by **Paolo Tamagnone**, RSS-Hydro, Luxembourg
10. *Global water level forecast*, by **Juseth Chancay**, Universidad Regional Amazónica Ikiam, Ecuador
11. *Saferplaces global platform*, by **Stefano Bagli**, Saferplaces, Italy

IGNITE PRESENTATIONS

Monday, September 15-afternoon

1. *Assessing the Impact of Sea Level Rise, Precipitation, and Subsidence on Flooding Trends in Coastal Communities of Ghana*, by **Michael Kwame-Biney**, University of Ghana, Ghana
2. *Comparative Analysis of Traditional and Advanced Boosting Models for Flood-Prone Area Prediction and Model Explainability: A Case Study from the Upper Draa Basin, Morocco*, by **Lahcen Goumghar**, Ibn Tofail University, Morocco
3. *Understanding Household Migration Decisions in Response to Floods: A Case Study of North Bihar, India*, by **Richa**, World Resources Institute India, India
4. *Advancing flood resilience in Bangladesh: Transdisciplinary approaches to adaptation, policy, and practice*, by **Md Humayain Kabir**, Danube University Krems/University of Graz/Chittagong University, Austria
5. *Triggering Anticipatory Action before Floods: What is working and what is evolving?*, by **Sahara Sedhain**, Faculty of Geo-information Science and Earth Observation, University of Twente, Netherlands
6. *AI-Enhanced Multi-Sensor Flood Detection: Integrating Senti-nel-1 & Sentinel-2 for Disaster Management*, by **Fancisco Lozada**, Erasmus Mundus MSc Geospatial Technologies. Universitat Jaume I / WWU Münster / NOVA IMS), Mexico
7. *Integrating Sentinel-1 and Sentinel-2 with AI for Enhanced Flood Monitoring and Disaster Response*, by **Ayesha Tariq**, University of Münster (ERASMUS MUNDUS Student), Germany
8. *Transdisciplinary Approaches to Understand Flood Risk in Coastal Areas*, by **Wanyun Shao**, University of Alabama, USA
9. *Correcting vertical errors in a global DEM using a Mixture-of-Experts ensemble model*, by **Michael Meadows**, RMIT University, Australia
10. *Beyond Housing Damage: The Social Dynamics of Flood-Related Mobility*, by **Eleonora Panizza**, CIMA Research Foundation, Italy
11. *Flood impacts on healthcare facilities and disaster preparedness – A systematic review*, by **Yared Abayneh Abebe**, Delft University of Technology and Pandemic & Disaster Preparedness Center, Netherlands

POSTER PRESENTATIONS

1. *Increasing extreme events in the Central Himalayas*, by **Mandira Singh Shrestha**, Water Centre 21 Pahal, Nepal
2. *Flood monitoring and Assessment of Nigerian Transboundary rivers (River Benue and River Niger) Channel*, by **Sultan Kamal Abdulazeez**, National Space Research and Development Agency, Nigeria
3. *Glacial Lake Outburst Floods (GLOFs) in the Chitral Region Pakistan: Analysis, Risks, and Mitigation Strategies for Dookpal Glacial Lake*, by **Syed Hammad Ali**, Glacier Monitoring Research Centre (GMRC) WAPDA, Pakistan
4. *A Framework to Integrate Science and Technology into Early Warning Systems for effective Disaster Risk Reduction: Insights from Africa*, by **Lemonla Armel Oteko**, African Union Youth Advisory Board on Disaster Risk Reduction, Ethiopia
5. *Combining global and local data for flash flood susceptibility mapping - an example for Liguria, Italy*, by **Frederiek Sperna Weiland**, Deltares, Netherlands
6. *FloodPin*, by **Chloe Campo**, RSS-Hydro, Luxembourg
7. *Tropical Cyclone Compound Flooding in New Orleans*, by **Joshu Green**, University of Southampton, United Kingdom
8. *Improving Cyclone-Induced Rainfall Estimation in the Bay of Bengal with Machine Learning and Satellite-Reanalysis Fusion*, by **Priyanko Das**, Princeton University, USA
9. *Sensitivity assessment of riverine flood impact estimates to exposure datasets using satellite-derived flood extents*, by **Maaïke Uijtenboogaard**, The Netherlands Red Cross 510, Netherlands
10. *Bridging Science and Practice: Co-Designing CYGNSS Flood Products for Humanitarian Use*, by **Albert Kettner**, DFO - Flood Observatory at the University of Colorado, USA
11. *Recent developments in the Global Flood Awareness system*, by **Ervin Zsoter**, ECMWF, United Kingdom

POSTER PRESENTATIONS

12. *The FLDPLN model and Kansas Operational Flood Inundation Mapping System*, by **Xingong Li**, University of Kansas, USA
13. *Using Global data for Flood Risk Management in Refugee Settlements*, by **Mark Trigg**, University of Leeds, United Kingdom
14. *Groundwater flood risk mapping using probabilistic methods*, by **Beatrice Richieri**, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
15. *Surface water flood forecasting*, by **Dapeng Yu**, Previsico, United Kingdom
16. *Flood in Syria*, by **Ahmed Ekzayez**, White Helmets, Syria
17. *From Mapping to Resilience: Exploring the Limits of Earth Observation for Urban Flood Monitoring*, by **Jie Zhao**, TUM, Germany
18. *RISE by WASDI: Advancing Real-Time Satellite Data Processing for Sustainability*, by **Paolo Campanella**, WASDI SARL, Luxembourg
19. *Integrating Ecosystem-Based Approaches into Flood Risk Management: Insights from a Research Project*, by **Juliane Huth**, German Aerospace Center (DLR), Germany
20. *Enhancing GeoGLOWS ECMWF streamflow services (GESS) with a high-resolution pre-processing approach for runoff bias correction*, by **Juseth Chancay**, Universidad Regional Amazónica Ikiam, Ecuador
21. *Population Displacement and Response During Flood Events: Towards A Global Perspective*, by **Ekta Aggarwal**, Geography and Environmental Science University department in Southampton, United Kingdom
22. *Bridging the Synthetic Aperture Radar (SAR) Gap: A Deep Learning Framework for Daily Flood Mapping*, by **Ali Surojaya**, RWTH Aachen University, Germany
23. *Optimizing a Random Forest Pipeline for Accessible Flood Extent Labels from Synthetic Aperture Radar*, by **Paul Hosch**, RWTH Aachen University, Germany
24. *New insights on river floods frequencies – a global perspective*, by **Yinxue Liu**, Loughborough University, United Kingdom

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SPONSORS

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