

International collaborations on earth observations, big data and artificial intelligence for water security

A proposed 4-hour session for CBAS 2026

Co-Organizers:

- Gretchen Kalonji, Special Advisor and Professor
International Research Center of Big Data for Sustainable Development Goals (CBAS)
- Tibor Biro, Professor, Ludivica University of Public Service, Budapest
- Kenzo Hiroki, Professor Emeritus, Graduate Research Institute of Policy Studies, Tokyo
Coordinator, High-Level Experts and Leaders Panel on Water and Disasters (HELP)
- Lu Shanlong, Professor and Coordinator for SDG6, CBAS

Overview

This special session will address multiple aspects of the roles of emerging technologies, including remote sensing, big data and AI for water security. It will have specific foci on the challenges of floods, droughts and water quality. Underlying all of these foci will be a common theme of how international collaborations can support all of our efforts.

Section 1: Introductory Remarks

- HE Csaba Korosi, President of the 77th Session of the UN General Assembly; Blue Planet Foundation, CBAS Fellow
- Prof. Guo Huadong, Director General, CBAS, OR Prof Chen Fang, Deputy DG, CBAS

Section 2: Keynote Speeches

- Toshio Koike, Executive Director, the International Research Center for Water Hazard and Risk Management under the Auspices of UNESCO
- Dr. Johannes Cullmann, Federal Institute of Hydrology, Germany. CBAS Fellow
- Abou Amani, head of IHP Program, UNESCO (TBC)
- Moctar Toure, President, Academy of Sciences and Technology, Senegal; Vice President, the Alliance of National Science Organizations (ANSO)
- Chen Fang, Professor and Deputy Director General, International Research Center of Big Data for Sustainable Development Goals

Section 3: three sequential sessions: on floods, drought, water quality*

The format for each is a short scientific speech, outlining the key challenges, followed by a panel discussion with a moderator and questions and answers from the group.

- **Floods: ***

Scientific lead speaker: Prof. Huan Wu, Sun-Yat Sen University, OR?

Panel moderator: Prof. Du Xiaoping, CBAS

- **Droughts:**

Scientific lead speaker: Prof. Jia Li, AIR/CBAS

Panel moderator: Tibor Biro

- **Water quality: ***

Scientific lead speaker: Prof. Yang Min, Research Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences

Panel moderator: Prof. Lu Shanlong, CBAS

Section 4: Closing session and ways forward

- Gretchen Kalonji, Tibor Biro and Chen Fang

**Please note that there may be some minor modifications in these session after our special session proposal is approved.*