



THEMATIC SESSION 2A

Multi-Source Observation and Perception of Water Systems

🕒 14:00-15:30, 24 September 2024, Tuesday

📍 Beijing International Convention Center, Room 201#-BC

With the development of society and technological progress, the water system observation and perception have gradually advanced from a single technical method to the direction of multi-source technology fusion. In the field of water resources management, traditional ground-based observations, as the basis for water system sensing, have been iteratively upgraded and the technology has become more mature, especially the application of acoustic, optical, radar electric wave and other technologies to become the mainstream. In the meantime, remote sensing (satellite, drone, etc.) has emerged as a powerful alternative to traditional ground-based observations, offering high-resolution and spatially comprehensive data over vast areas. This capability is exemplified by numerous space-based international hydrology satellite missions (e.g., GPM, GRACE/-FO, SMAP, SWOT, etc.) as well as recent drone application industry. This has transformed water systems, providing a window into the intricate workings of the water cycle and enabling scientists to observe and measure key hydrological variables with unprecedented accuracy and spatial coverage. This transformation has empowered us to better understand and predict water resources at local, regional, and global scales, ultimately shaping the future of water resource management in a changing climate.

SUB-THEME: Digital Transformation in Water Management

ORGANIZER(S): K-water Research Institute, K-water (Korea Water Resources Corporation); Nanjing Research Institute of Hydrology and Water Conservation Automation, Ministry of Water Resources (NIHWA)

PROGRAM

14:00-14:15	Opening	Moderator: Ran Tao
14:00-14:05	Welcome remarks and introduction of speakers	Younghyun Cho: Principal Researcher, K-water Research Institute, K-water
14:05-14:10	Opening address	Zhiyu Liu: Deputy Director , Department of Hydrology, Ministry of Water Resources

14:10-14:15	Opening address	Callum Clench: Executive Director, IWRA (International Water Resources Association); Director: The Cape Partnership Ltd.
14:15-14:45	Keynote speech	Moderator: Ran Tao
14:15-14:30	Cloud platform satellite imagery/model data-based water resources analysis application technology	Younghyun Cho: Principal Researcher, K-water Research Institute
14:30-14:45	China's operational hydrology the current situation and prospects	Zhiyu Liu: Deputy Director , Department of Hydrology, Ministry of Water Resources
14:45-15:25	Speeches and discussion	Moderator: Younghyn Cho
14:45-14:55	Youth Initiatives in Water Management: Action and Practices from International Forums	Hana Ulil Azmi: Indonesian Green Action Forum/IPB University/Asia Water Council Young Professionals
14:55-15:05	Presentation Title (TBD)	(TBD): Director General, Department of Water Resources, Thailand
15:05-15:15	Hydrologic features multi-preception: mutual verification & observation-physical model collaboration	Weihua Fang: Deputy Chief Engineer, NIHWA
15:15-15:25	Current situation and development trend of water resources monitoring and perception	Jin Lin: Director, NIHWA
15:25-15:30	Conclusion	Moderator: Ran Tao
15:25-15:30	Closing remarks *Session wrap-up & group photo	Ran Tao: Nanjing Research Institute of Hydrology and Water Conservation Automation, Ministry of Water Resources (NIHWA)

For more information about the 3rd Asia International Water Week, please visit <https://3-aiww.scimeeting.cn>.