

NEWSLETTER

HEADLINE: 6th Climate, Weather and Water Forum Concludes in Hong Kong

The 6th Climate, Weather and Water Forum (CWWF2026) was held successfully from July 7 to 9, 2026, bringing together 18 leading experts from top universities, research institutions, and government agencies around the world. The three-day event advanced the global response to mounting climate risk through cutting-edge research, engineering innovation, and evidence-based decision-making.



Photo from CWWF 2026

The Forum was chaired by **Professor LU Mengqian**, Director of the Otto Poon Center for Climate Resilience and Sustainability at the Hong Kong University of Science and Technology (HKUST), and co-convened by **Professor Jing Yang** of Beijing Normal University and **Dr. Ping Liang**, Chief Forecast Expert at the Shanghai Meteorological Service.

The program centered on two core themes. The first day, dedicated to Earth System Science and Engineering, explored the deepening convergence of physics-based and artificial intelligence (AI) approaches to understanding the Earth system. The second day turned to Disaster Prevention and Mitigation and Sustainable Development, examining how climate science can be translated into actionable tools, services, and policies that protect communities and support long-term resilience.



Prof. Upmanu Lall delivered his Otto Poon Lecture.

A highlight of the Forum was the prestigious Otto Poon Lecture Series 2026, delivered by **Professor Upmanu Lall**, Director of the Water Institute at the Julie Ann Wrigley Global Futures Laboratory at Arizona State University. In his lecture, titled "Taming the Storm: Can We Predict, Engineer, and Reduce Losses from Climate and Weather Extremes?", Professor Lall examined how prediction, engineering, and management strategies can work together to curb the growing toll of climate and weather extremes.

Across the three days, CWWF2026 featured invited talks, seven panel discussions, a flash-talk session for early-career researchers, and a poster showcase of 30 presentations. The format was designed to bridge fundamental science with applied practice, fostering cross-disciplinary collaboration and investing in the next generation of climate researchers.

The Forum closed with remarks by Professor Lu and the presentation of flash-talk awards recognizing outstanding young researchers.

Looking ahead, the organizers expressed their anticipation for the 7th Climate, Weather and Water Forum (CWWF2027), which will build on this year's momentum to further advance international dialogue and cooperation on climate resilience and sustainable development.

For more details, photos, and highlights from CWWF2026, please visit: https://mp.weixin.qq.com/s/nLS_E7_UHWhgomfaQaqhNQ

HKUST Hosts the International AI Industrial Innovation Network at WAIC 2026 and Signs the Industrial Innovation Practice Center Project Agreement with MetaX

On July 19, 2026, during the World Artificial Intelligence Conference (WAIC) 2026, HKUST and MetaX Integrated Circuits (Shanghai) Co., Ltd. officially signed an agreement to jointly establish the "HKUST–MetaX Industrial Innovation Practice Center." Building on their existing joint laboratory collaboration, the Center will deepen GPU+AI technology synergy and extend AI applications into climate change and sustainable development, with a focus on empowering aviation, shipping, new energy, and smart ports. The Center is executed by HKUST's World Sustainable Development Institute (WSDI), with **Professor LU Mengqian** serving as Director.

On the sidelines of the forum, Professor LU moderated a roundtable on "From Hong Kong: The Innovation Ecosystem and Investment Path of Chinese AI," which reached consensus on AI's potential to tackle complex systems in earth and life sciences, the importance of positive value orientation in AI development, opportunities for global expansion along the Belt and Road, and the need to address compliance challenges in cross-border deployment — with Hong Kong serving as a core bridge connecting mainland China's AI industry with the world.

The partnership marks a significant step in advancing the deep integration of AI with sustainable development and green computing.



At the signing ceremony: Yike Guo (third from left), International Member of the Chinese Academy of Engineering and Provost of HKUST; Xiaofang Zhou (second from left), Head and Chair Professor of the Department of Computer Science and Engineering at HKUST; Mengqian Lu (first from left), Director of the WSDI at HKUST; Weiliang Chen (second from right), Founder, Chairman and CEO of MetaX; and Guoliang Sun (first from right), Senior Vice President of MetaX, jointly witnessed the signing ceremony.

WAIC 2026 in Review: Meteorological AI Moves from National Strategy to Industry Implementation



Professor Mengqian Lu delivering a keynote report at the WAIC 2026 Meteorology Special Session.

At the opening ceremony of the 2026 World Artificial Intelligence Conference (WAIC 2026) held in Shanghai from July 17–20, **President Xi Jinping stated in his keynote address that China will "promote the deployment and application of the 'Mazu' meteorological AI early-warning solution in 30 countries, watching over the lights of countless homes and safeguarding peace across the world's seas."** Meteorological AI early warning thereby became a major initiative through which China supports global AI development.

At the WAIC Meteorology Special Session on July 17, Professor LU Mengqian, Director of HKUST's World Sustainable Development Institute (WSDI), presented the first deployment of the "Mazu" platform in South America — a subseasonal multi-hazard early-warning assistant agent system developed in Brazil under the SEPRESS programme, marking "Mazu"'s inaugural South-South cooperation application in the region. The full video is here: <https://mp.weixin.qq.com/s/co4ekMlXntlmehalmNTWaA>

On July 19, HKUST and MetaX signed an agreement to establish the "HKUST–MetaX Industry Innovation Practice Center," directed by Professor Lu, focusing on GPU+AI applications in climate change and sustainable development. HKUST Provost Yike Guo noted that AI's greatest potential lies in tackling complex systems — particularly the Earth system itself.

WAIC 2026 demonstrated meteorological AI's coordinated advancement across strategic deployment, scientific research, and industrial implementation.

CGTN Interview | Typhoon Bavi Weakens = Danger Over: The "Hidden Risks" After the Storm

As Typhoon Bavi swept through eastern China in mid-July 2026, forcing mass flight cancellations and disrupting millions of lives, Prof. Lu Mengqian, Director of the HKUST Otto Poon Center for Climate Resilience and Sustainability, joined CGTN Europe live from Shanghai on July 12 to offer her expert perspective.



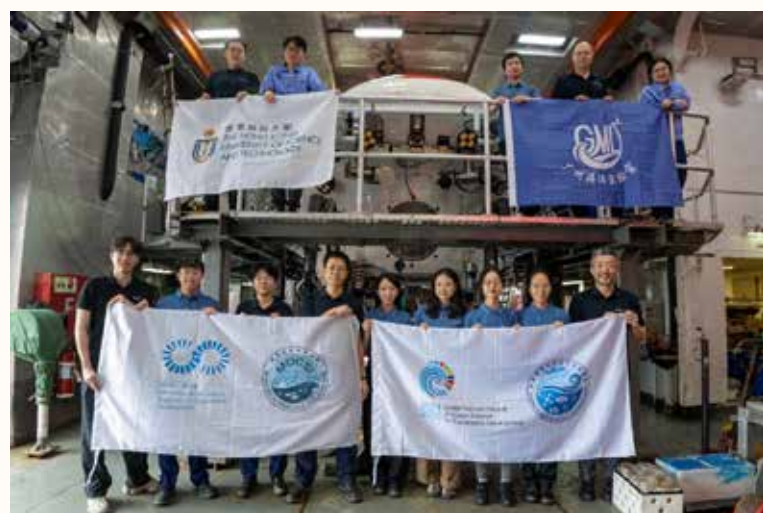
Professor Mengqian Lu delivering a keynote report at the WAIC 2026 Meteorology Special Session.

Speaking amid strong gusts still battering the city, Prof. Lu warned: "I don't think the danger has fully passed." She explained that Bavi remains a massive system continuously transporting moisture, meaning heavy rainfall, flooding, and landslide risks persist and may even expand in scope. She highlighted a commonly overlooked threat — the lag effect of hydrological processes: days after peak rainfall, catchments continue channeling water into rivers, potentially triggering delayed flooding, while saturated soils may give way to landslides well after the storm's core has moved on.

In the days that followed, Bavi tracked northward through Jiangsu and Shandong before transitioning into an extratropical cyclone, bringing heavy rainfall to northeastern China — validating Prof. Lu's warning.

Watch the full interview: <https://www.youtube.com/watch?v=bougxOzRX-U>

HKUST Successfully Completes Deep-Sea Scientific Expedition to the Haima Cold Seep in the South China Sea



Group Photo of HKUST Participants with Chief Scientist Dr. Hao Wang (first on the right, ground row)

From April to May 2026, a research team from HKUST's Department of Ocean Science, led by Chair Professor Pei-Yuan Qian, successfully completed a deep-sea scientific expedition to the Haima cold seep in the South China Sea. The expedition is officially endorsed under the UN "Ocean Decade" programme CliMetS and "Science Decade" programme MOCSI, leveraging resources from HKUST's Otto Poon Center for Climate Resilience and Sustainability and the Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou). The mission was strategically managed by the China Deep Ocean Affairs Administration and operationally executed by the National Deep Sea Center (MNR).

Using the research vessel Shenhai Yihao and the manned submersible Jiaolong, the team conducted in situ observations and collected a variety of valuable biological, sediment, and water samples at depth. The subsequent research outcomes are expected to significantly advance the scientific community's understanding of South China Sea cold seep ecosystems and global deep-sea methane cycling — a critical area of study for understanding both marine biodiversity and climate-relevant greenhouse gas dynamics.

Remarkably, 11 of the 15 early-career researchers from HKUST carried out diving operations aboard Jiaolong — the first time such a large cohort of young Hong Kong scholars has participated in manned deep-diving at this intensity. This milestone provides a strong foundation for cultivating the next generation of marine science talent and further strengthening Hong Kong's deep-sea research capabilities. It also represents a major step forward for Hong Kong researchers in engaging with China's national deep-sea research platforms and international programmes, demonstrating the city's growing role in frontier ocean science.