

Integrated Research on Disaster Risk (IRDR)

Newsletter

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Enabling the Full Operation of IRDR Phase II

Announcing the results of the recent review of IRDR ICoEs in Phase I

On 28 July 2025, IRDR International Programme Office (IPO) organised a meeting of the International Centres of Excellence (ICoEs) at which the results of the review of IRDR ICoEs in Phase I were announced.

Following the decision made at the 27th meeting of the IRDR Scientific Committee (SC27) held in October 2024, the ICoEs launched in Phase I were reviewed to ensure their continued engagement in Phase II. Based on the newly adopted Terms of Reference for IRDR ICoEs, the evaluation panel for this review was established in May 2025, consisting of five members representing the Scientific Committee, IRDR Fellows, IPO staff, and IRDR partners. The review results were agreed by the evaluation panel members on 30 June 2025, and adopted by the Scientific Committee on 5 July 2025.

IRDR ICoE RIA, hosted by the UCL Department for Risk and Disaster Reduction, [featured the news](#) and looked forward to partnering with other ICoEs and the wider family of IRDR community.

The full list of the current 14 ICoEs can be found [here](#).



ICoE RIA Summer Meeting (source: ICoE RIA)

Coordination of International Research Cooperation

AI for urban sustainability, air quality, and climate governance

On 16 July 2025, IRDR participated in a seminar organised by the Shanghai Institute of Science and Intelligence focusing on [“AI Enabling International Urban Sustainable Development Implementation”](#). As a core supporter of the event, IRDR helped shape discussions on AI’s transformative potential for resilient cities, reinforcing its commitment to science-based disaster risk reduction. The seminar was co-organised by the Fudan University

and the United Nations World Meteorological Organisation (WMO), and benefited from partnerships with the Global Atmosphere Watch (GAW) Programme and the MAP-AQ project. The spotlight was on the AI for Urban Integration on Air Quality, Climate, and Ecosystems (AI4UIAQCE) initiative, an AI-powered framework designed to strengthen urban climate adaptation, emissions monitoring, and ecosystem governance.

Safeguarding ASEAN's UNESCO Sites

During the ASEAN Sustainable Urbanisation Forum (ASUF), held during the period 12-14 August 2025 in Kuala Lumpur, Malaysia, IRDR co-organised a special session on 13 August 2025, focusing on [Resilient Heritage: Safeguarding ASEAN's UNESCO Sites for a Sustainable Future](#). This was convened and moderated by IRDR Scientific Committee Member Dr. Khamarrul Azahari Razak, who is also the Director of the Disaster Preparedness and Prevention Center.

The fully attended session brought together experts from UNICEF, UNESCO, Universitas Gadjah Mada Indonesia, Asian Civil Engineering Coordinating Council Japan, George Town World Heritage Incorporated, and others. The discussions drew attention to heritage's dual role as cultural treasure and economic driver in ASEAN. The session reinforced IRDR's commitment to science-based solutions that protect both cultural heritage and urban resilience across ASEAN.



Onsite panelists at the session (source: Khamarrul Azahari Razak)

ICoE REaL: Climate efforts in Southern Africa

IRDR ICoE REaL, hosted by Periperi U, participated in the 31st Southern Africa Climate Outlook Forum (SARCOF-31), the Climate Experts Meeting (CEM), and the Validation Workshop of the SADC Multi-Hazard Early Warning System from 1 to 11 September 2025, in Lusaka, Republic of Zambia. [These meetings](#) were convened by the Southern African Development Community (SADC), in collaboration with the Government of the Republic of Zambia, and with financial support from the European Union (EU) under the Intra-ACP Climate Services and related Applications (ClimSA) Programme. These high-level

engagements aimed to strengthen regional collaboration in disaster preparedness and to enhance the management of weather- and climate-related risks.

Big Data for DRR and SDGs

The [5th International Forum on Big Data for Sustainable Development Goals](#) (FBAS 2025) was held in Beijing from 6–8 September 2025. IRDR attended the Forum as one of the supporting organisers, and presented its efforts on the application of big data and artificial intelligence in enhancing early warning systems, risk assessments, and resilience strategies.

AI solutions for DRR

The [International Symposium on Open Science Clouds 2025](#) (ISOSC 2025) was held from 2–4 September 2025 at Nanjing University’s Suzhou Campus. IRDR highlighted its pioneering work in applying AI to address systemic risks characterised by cascading effects and instability across interconnected systems. Importantly, IRDR also called for transformative governance frameworks to ensure open science clouds operate with inclusivity, ethics, and equity at their core. Through the active participation in ISOSC 2025, IRDR reinforced its commitment to advancing disaster risk reduction in the AI era, addressing how open science and data-driven innovation can accelerate progress toward a safer, more sustainable, and inclusive future.

Technology-driven solutions for disaster resilience

The [2nd International Conference on Smart Informatics and Multi-Hazard Reduction](#) (SIMR 2025), organized by the UNESCO Chair in Informatics and Multi-Hazard Risk Reduction and other international partners, took place from 11–16 September 2025, at the Chengdu University of Technology, China. Guided by the theme “Empowering Resilience: Transferring Technologies into Solutions for Effective Disaster Risk Reduction”, the conference focused on addressing the challenges of climate change, extreme weather events, and multi-hazard risks, while exploring how technology can advance effective disaster resilience strategies. IRDR shared its innovative work in data and technology, including the Global Disaster Data Platform for real-time disaster monitoring, and a recent joint project on artificial intelligence and large language models to analyse complex disaster data.

Knowledge production and outreach

UNDRR and ISC launch updated Hazard Information Profiles (HIPs) to tackle evolving global risks

The [virtual launch](#) of the 2025 update to the UNDRR–ISC Hazard Information Profiles (HIPs) was held on 18 August 2025. The complete *Hazard Information Profiles (2025 Edition)* is now available for [download](#). The IRDR community played a significant role in shaping this landmark update. Contributions came from leading experts including IRDR Fellows Prof.

Virginia Murray, Dr. Bapon SHM Fakhruddin, and others who provided specialist input across multiple hazard domains.

IRDR ICoE CI&SP published new digital climate atlas for Stuttgart region

[The new digital climate atlas for the Stuttgart](#) region in Germany has been published, which is a key product of the ISAP project funded by the Federal Ministry of Research, Technology and Space, and led by the Institute for Regional and Spatial Planning (IREUS) at the University of Stuttgart, the host of IRDR ICoE CI&SP. “The Said Prof. Jörn Birkmann, the head of IRDR ICoE CI&SP and IREUS, indicated that the “climate atlas bridges the gap between local and state levels, providing a foundation for the proactive management of climate risks across municipal boundaries.”

Empowerment of young DRR professionals

ICoE Taipei advanced capacity building through trainings

IRDR International Centre of Excellence in Taipei (ICoE–Taipei) continues to advance disaster risk research and capacity building across Asia through the organisation of [advanced institutes in 2025](#). These programmes provide early-career researchers with intensive training, practical field experience, and seed grants to support applied research initiatives. These initiatives not only enhance technical expertise but also foster regional collaboration and long-term partnerships in disaster risk reduction. IRDR ICoE–Taipei remains committed to supporting the next generation of researchers and strengthening science-based disaster risk governance across the region.



2025 Advanced Institute on Natural Hazards in Western Pacific Islands (source: ICoE Taipei)

ICoE Fudan organised 2025 International Summer School on Climate Change and Related Risks

[The 2025 International Summer School Program on Climate Change and Related Risks](#) was held at Fudan University’s Jiangwan campus from 29 June to 18 July 2025, focusing on

Human Activity and Weather/Climate Extremes. This summer school was supported by the IRDR in collaboration with the WMO and the MAP-AQ programme. Participants engaged with world-renowned experts across four critical modules: climate extremes, anthropogenic influences, land-ocean-atmosphere interactions, and risk governance. Highlights included lectures from renowned experts, fieldwork at the Yangtze Estuary Wetland Ecosystem Research Station, and collaborative team projects addressing real-world challenges. A new “Talk & Connect” forum enabled valuable peer-to-peer knowledge exchange.

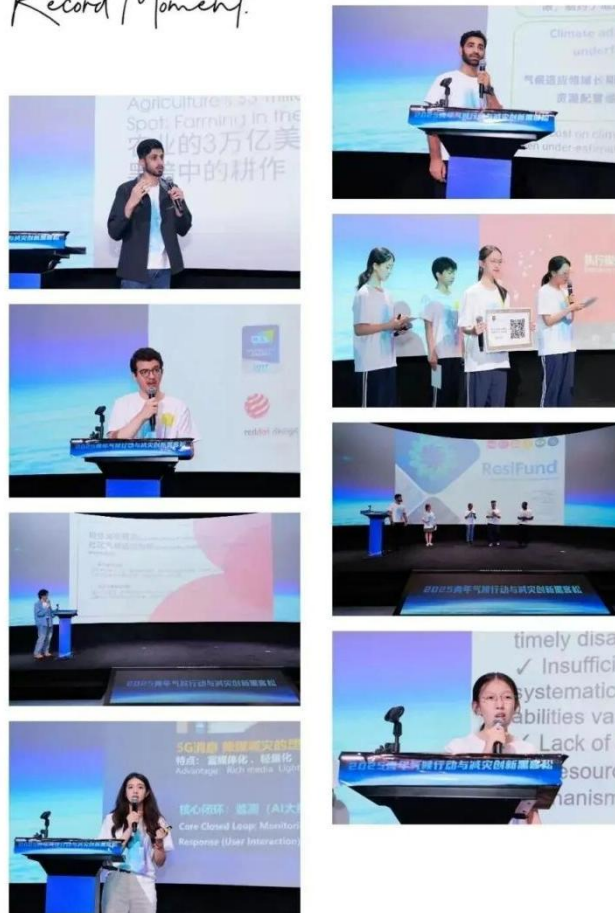


Lectures from renowned experts (source:IRDR)

2025 Youth Climate Action and Disaster Risk Reduction Hackathon

The closing ceremony of the [2025 Youth Climate Action and Disaster Risk Reduction Hackathon](#) was held in Beijing, China on 29 July 2025. Co-organised with UNESCO, the Horizon Global Youth Development Program and other partners, the Hackathon, under the theme “Empowering Youth for a Healthy Planet”, brought together over 300 young innovators from 15 countries to co-develop solutions to urgent environmental challenges. A total of 16 innovations were awarded at the closing ceremony.

Record Moment.



Record moment from the hackathon (Source: Horizon)

3rd IRDR Young Scientists Lumos: Cultural Heritage Meets Resilience

On 18 August 2025, UNESCO and IRDR jointly [organised a webinar](#) on cultural heritage, climate change adaptation and disaster risk reduction to raise the discussion among young professionals and showcase their innovations. Four speakers from Australia, Bangladesh, China and Uganda presented their efforts in safeguarding cultural heritages, transforming traditional knowledge, and advanced technology application. IRDR SC member, Dr. Maria Soledad Garcia Ferrari and UNESCO consultant Dr. Chris Ballard, provided guidance and suggestions to the young scientists.

Building disaster resilience in SIDS

A Capacity Building Workshop for Small Island Developing States (SIDS) took place in Beijing, China, from 31 August to 9 September 2025. The event was organised by a consortium of international organisations, including the United Nations Department of Economic and Social Affairs (UN DESA), the International Research Center of Big Data for Sustainable Development Goals (CBAS), and other key partners. The theme of the workshop explored how Big Earth Data and geospatial technologies can accelerate the achievement of the

Sustainable Development Goals (SDGs).

Of special note was the focus on how digital platforms and geospatial innovations can enhance disaster resilience, support climate action, and improve the tracking of SDG progress in vulnerable island nations. IRDR addressed its efforts on promoting DRR capacity building for SIDS.



At the Workshop of Capacity Building for Small Island Developing States (Source: IRDR)

Further news

Risk KAN visited IRDR IPO

Dr. Kai Kornhuber, Co-Chair of the Steering Committee of the Knowledge-Action Network on Emergent Risks and Extreme Events (Risk KAN), [visited the IRDR IPO on 4 July 2025](#), to enhance the connection between the two communities and to discuss potential collaborations in disaster risk reduction and extreme event governance. During the meeting, Dr. Kornhuber provided an overview of Risk KAN's newly established working groups, which align closely with IRDR's research priorities as outlined in its action plan. He also extended an invitation to IRDR to participate in an upcoming Steering Committee meeting to explore joint activities and research synergies.



At IRDR IPO. From left to right: Saini Yang, Dr. Kai Kornhuber

Explore DDR Research Collaboration

On 8 August 2025, Professor Deliang Chen, Chair Professor at Tsinghua University, along with Dr. Siqian Yang, Director of the National Institute of Natural Hazards, visited the IRDR IPO to discuss strategic collaborations in disaster risk reduction (DRR). The delegation met with IRDR Executive Director, Professor Saini Yang, to explore ways to strengthen IRDR's global leadership in DRR research.

IRDR ICoE Coherence expanded its international partners

From 18-20 August 2025, the National Research Institute for Earth Science and Disaster Resilience (NIED), one of the members of the IRDR ICoE Coherence, welcomed delegations from the Universiti Teknologi Malaysia, and Universiti Teknologi MARA and the National Hydraulic Research Institute of Malaysia. The group participated in the [Joint Seminar on Geotechnical Engineering and Adaptive Solutions](#).

On 21 August 2025, a delegation from the NIED visited the Earth Observatory of Singapore (EOS) at Nanyang Technological University. The visit reaffirmed the long-standing collaboration between the two institutes in volcanic disaster research and marked a step toward expanding cooperation into a broader range of research fields.

Upcoming Events

28th Meeting of the IRDR Scientific Committee

The 28th meeting of the [IRDR Scientific Committee \(SC\)](#) will be held during the period 15-17 October 2025 in Chengdu ,China. The meeting will review the implementation of the IRDR Action Plan since the 27th SC meeting held in October 2024, discuss the research priorities and collaboration mechanism, and propose expected deliverables of 2026.

Celebrations of International Days

IRDR will celebrate the 2025 International Day for Disaster Risk Reduction (13 October) and 2025 World Science Day for Peace and Development (10 November) by presenting IRDR's contributions toward an inclusive, resilient, safe and sustainable development. Please contact Science Officer Fang Lian (fang.lian@irdrinternational.org) to submit related efforts, activities and events.



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