

## **Postdoctoral Researcher from Karlstad University (Sweden) Visits IRIDeS for a Research Exchange (8–20 June 2026)**

Theme: Climate risk governance, water management, social justice, disaster resilience, environmental equity, geoinformatics, and interdisciplinary approaches to disaster risk reduction

From 8 to 20 June 2026, Dr. Mathilde de Goër de Herve, Postdoctoral Researcher in Risk and Environmental Studies at Karlstad University (Sweden) and affiliated with the Centre for Societal Risk Research (CSR) and the Centre of Natural Hazards and Disaster Science (CNDS), visited the International Research Institute of Disaster Science (IRIDeS), Tohoku University, at the invitation of Professor Sébastien P. Boret (Inclusive Disaster Risk Reduction Lab), as part of an international research exchange.

Throughout the visit, Dr. de Goër de Herve and Prof. Boret met with researchers across IRIDeS and the Frontier Research Institute for Interdisciplinary Sciences (FRIS) to explore opportunities for collaboration in climate risk governance, water management, social justice, environmental equity, disaster resilience, and community-based disaster risk reduction.

### **1) Disaster Management, Education, and International Collaboration:**

The research exchange began with a meeting with Professor Takako Izumi (International Environment and Disaster Management Research Lab), where discussions focused on opportunities for collaboration between IRIDeS and CNDS, particularly in disaster management, disaster education, and future international research cooperation.

### **2) Water Management, Socio-hydrology, and Disaster Risk Governance**

The discussions continued with Professor (Specially Appointed) Daisuke Komori (Water Disaster Risk Research Lab) and Professor (Specially Appointed) Kozo Nagami (Disaster Risk Governance Research Lab), who introduced their work on socio-hydrology, water governance, and resilience. Particular attention was given to water management, resource governance, and the trade-offs involved in climate adaptation and decision-making.

### **3) Disaster Geoinformatics, Evacuation Modelling, and Spatial Planning**

An exchange with Associate Professor Erick Mas and Assistant Professor Ruben Vescovo (both Disaster Geo-informatics Lab) explored GIS-based evacuation agent modelling, flood risk management, remote sensing, and spatial planning. Drawing on her research following the 2021 floods in Belgium, Dr. de Goër de Herve discussed how geospatial technologies can support post-disaster recovery and better account for unequal vulnerabilities.

### **4) Ecosystem-based Disaster Risk Reduction and Cultural Landscapes**

The programme also included discussions with Assistant Professor Yuta Hara (2030 Global DRR Agenda Office), whose research on drought, water resources, ecosystem conservation, and resilient cultural landscapes complemented the broader themes of climate adaptation and ecosystem-based disaster risk reduction.

### **5) Environmental Equity, Social Justice, and Climate Adaptation**

The visit concluded with a meeting at the Frontier Research Institute for Interdisciplinary Sciences (FRIS) with Professor Kaoru Kakinuma, where discussions centred on environmental equity, gender disparities, health impacts of extreme events, and the contribution of both quantitative and qualitative approaches to socially just climate adaptation.

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## Field Visits

A two-day field visit was conducted in Ishinomaki, Sendai Arahama, Natori, and Iwanuma to examine long-term disaster recovery and resilience-building following the Great East Japan Earthquake. The group visited the Miyagi Tsunami Museum, the Disaster Remains of Arahama Elementary School, the Great Forest Wall Project, and the reconstruction area of Yuriage.

These visits provided opportunities to discuss disaster recovery, community resilience, risk communication, ecosystem-based protection measures, coastal reconstruction, and long-term adaptation from both Japanese and international perspectives.



Great Forest Wall, Iwanuma  
Dr. Mathilde de Goër de Herve (left) and Prof. Boret



With Prof. Izumi (right) in front of IRIDeS



Meeting with Prof. Komori & Prof. Nagami



Presenting at the Inclusive DRR Lab

Report by: Sébastien P. Boret (Inclusive Disaster Risk Reduction Lab)