

IRIDeS faculty members visited Bangkok to investigate building damages and other impacts and responses caused by the 2025 Myanmar earthquake (2025/4/15-18)

Theme: The 2025 Myanmar earthquake
Place: Bangkok, Thailand

From the 15th to the 18th of April 2025, Prof. Shinichi Kuriyama (Disaster Public Health Lab), Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab), Assoc. Prof. Ryuta Enokida (Earthquake Engineering Lab) and Assist. Prof. Naruethep Sukulthanasorn (Nippon Koei Resilient City with Digital Twin Technologies Joint Research Lab) visited Bangkok, Thailand and conducted several visits to academic institutions and both governmental and private institutions that were affected or made emergency responses according to the 2023 Myanmar earthquake in Bangkok. Our team was officially supported by Hon. Miss Ratchaneekorn Thongthip, Member of the Senate of Thailand and director of the International Tsunami Museum in Khaolak, Thailand, and Mr. Nattapon Trumikaborworn, Asian Institute of Technology and member of the Earthquake Research Center of Thailand

At Chulalongkorn University, a meeting with Burmese faculty members and students to seek out their real voices and needs was conducted by a former IRIDeS faculty member and current faculty member at Chulalongkorn University, Assoc. Prof. Natt Leelawat. We learned from the Burmese people in Bangkok regarding the current disaster situation and the difficulties of recovery and reconstruction of this disaster, as well as preparation for the next disaster.

As for the governmental offices, IRIDeS members visited the National Assembly of Thailand, Bangkok Metropolitan Administration (BMA), Department of Disaster Prevention and Mitigation (DDPM), Rajavithi hospital, the Embassy of Japan in Thailand and the United Nations Office for Disaster Risk Reduction (UNDRR). As for the private sector, IRIDeS members visited the condominiums and villas of Magnolia Quality Development Corporation Limited (MQDC), King Power Mahanakhon building (the 2nd tallest building in Thailand) with executive members from Beca (Thailand) Company Limited and the Ritz-Carlton Residences, Bangkok Bank headquarter building (the tallest building in Thailand during 1981-1987) and Thai Fukuda corporation limited.

From our visits to both governmental offices and private sectors, our main findings and possible contribution from IRIDeS or Japan can be summarized below.

- 1) Earthquake Early Warning system (EEW): Especially in Bangkok, which is about 1,000 km apart from the epicenter, such an EEW will provide a certain amount of lead time and allow people to respond before the main ground shaking arrives.
- 2) Building design codes for earthquake resistance: The low to mid-rise buildings in Bangkok were OK, mainly due to the predominance of long-period components in the ground motions. However, the high-rise buildings were severely affected by the motions, which almost reached the intensity of the design spectra.
- 3) Structural health monitoring sensors: Especially for public buildings or tall buildings, such sensors can provide quantitative information on levels of structural damage and give guidance on whether residences or users are safe or not to return to their buildings.
- 4) Emergency plan for high-rise building against earthquake: As people in Thailand had never expected such large shaking caused by long-period ground motion, people were in panic and had no idea what to do next.

- 5) Stranded commuter: Similar to Tokyo Metropolitan, every person who was working around the city center had long difficulties returning to their homes because of serious traffic jams and the shut-down of all train systems.
- 6) Disaster education: People in Thailand have a less correct understanding of earthquakes. Therefore, they had no idea what to do and must be included in a basic education in the future.
- 7) Mental health: Large numbers of people who are living and working in tall buildings have mental health-related issues which are mainly caused by not only their experience of large shaking, but also images and videos of the collapse of the under-construction 30-story building.

Text and photos : Anawat Suppasri



Left: At Chulalongkorn University with Burmese faculty member and students
Right: At the Forestias with executive members of MQDC



Left: At the National Assembly of Thailand
Right: At the Embassy of Japan in Thailand with the ambassador



Left: With the chief of UNDRR Regional Office for Asia and the Pacific
Right: At Rajavithi hospital with the hospital director

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Left: At Bangkok Metropolitan Administration with the governor of Bangkok
 Right: At the King Power Mahanakhon building with executive members of Beca (Thailand) Company Limited and the Ritz-Carlton Residences



Left: At Department of Disaster Prevention and Mitigation and Thai Meteorological Department
 Right: At Bangkok Bank with vice president



At Thai Fukuda Company Limited with the managing director

An IRIDeS faculty member visited Bangkok for courtesy visits, an alumni event and the 2025 Myanmar earthquake-related activities (2025/5/17-21)

Theme: International collaboration, The 2025 Myanmar earthquake
 Place: Bangkok, Thailand

From the 17th to the 19th of May 2025, Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) joined other delegations from Tohoku University Headquarter led by Prof. Teiji Tominaga, President and Prof. Toshiya Ueki, Executive Vice President for General Affairs, Financial Affairs and International Relations and Prof. Tetsuya Nagasaka, former Vice-President for social outreach and research collaboration for several activities in Bangkok. The delegations first attended the Tohoku University Alumni event organized by Tohoku University Alumni, Thailand (TUAT) with about 50 participants, including a welcoming address from the Embassy of Japan in Thailand. The delegations visited Mahidol Wittayanusorn School to attend the school's university fair and made courtesy visits to Chulalongkorn University with the university president. Assoc. Prof. Anawat Suppasri and Prof. Tetsuya Nagasaka also made a courtesy visit to Thammasat University with the university president.

From the 19th to the 21st of May 2025, Assoc. Prof. Anawat Suppasri and members of the Earthquake Research Center of Thailand (EARTH), namely, Hon. Miss Ratchaneekorn Thongthip, Member of the Senate of Thailand, Assist. Prof. Panon Latcharote and Mr. Nattapon Trumikaborworn joined and visited several places to update research and activities related to the 2025 Myanmar Earthquake. They had a meeting with the Department of Disaster Prevention and Mitigation and Department of Public Works and Town & Country Planning at the National Assembly of Thailand to follow up the progress of the cell broadcast for disaster early warning and design and construction of earthquake-resistant buildings. They also attended an earthquake engineering and university campus safety session organized by the Thai Red Cross Society. They also had several meetings to report on and update the collaboration between IRIDeS and EARTH on the 2025 Myanmar Earthquake with the Embassy of Japan in Thailand, the Japan International Cooperation Agency (JICA) and DTGO CampUs (MQDC's headquarter). Results from these meetings are examples of IRIDeS's international contribution to disaster science and are useful in the next IRIDeS fieldwork in the northern part of Thailand in June 2025.

Text and photos : Anawat Suppasri



At Alumni meeting Thailand



At university fair

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At Chulalongkorn University



At Thammasat University



At National Assembly of Thailand with Department of Disaster Prevention and Mitigation
and Department of Public Works and Town & Country Planning



At Thai Red Cross Society



At Embassy of Japan in Thailand



At Japan International Cooperation Agency
(JICA)



At DTGO CampUs (MQDC's headquarter)

IRIDeS faculty members visited Thailand for the 2025 Myanmar earthquake field survey and strengthened international collaboration (2025/6/3-6)

Theme: International collaboration, The 2025 Myanmar earthquake

Place: Chiang Mai, Chiang Rai and Bangkok (Thailand)

From the 3rd to the 6th of June 2025, Prof. Kohju Ikago, Assoc. Prof. Ryuta Enokida (Earthquake Engineering Lab) and Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) visited the northern part of Thailand (Chiang Mai Province and Chiang Rai Province) which is close to the epicenter of the 2025 Myanmar Earthquake for a field survey and visited Bangkok to foster international collaboration with Thailand in disaster science.

On the 3rd of June, the team visited the Faculty of Architecture, Chiang Mai University with a researcher from the Earthquake Research Center of Thailand (EARTH), Asst. Prof. Titaya Sararit to discuss the damage caused by the 2025 Myanmar Earthquake, future collaboration and visited a hospital building at the Faculty of Medicine, Chiang Mai University that installed Structural Health Monitoring (SHM) sensors. On the 4th of June, the team visited the Faculty of Associated Medical Sciences, Chiang Mai University to observe a damaged academic building in the morning. In the afternoon, the team moved to Chiang Rai province and visited two schools that were rebuilt after the 2014 Chiang Rai Earthquake with seismic reinforcement together with another Thai colleague, Asst. Prof. Mongkonkorn Srivichai. On the 5th of June, the team visited a hospital in Chiang Rai that had Structural Health Monitoring (SHM) sensors installed. We had several discussions on the safety of public buildings, the seismic reinforcement, the utilization of SHM sensors for evacuation protocol.

On the 6th of June, the team visited high-rise residential projects such as Whizdom Essence (101) projects owned by Magnolia Quality Development Corporation Limited (MQDC) with researchers from EARTH, Prof. Pennung Warnitchai (Director), Assoc. Prof. Teraphan Ornthammarath and Mr. Nattapon Trumikaborworn. We discussed the structural design, seismic reinforcement, SHM sensors installation and evacuation plan for high-rise buildings in Thailand. After that, we moved to DTGO CampUs (MQDC's headquarters) and signed an MOU for research collaboration between the Earthquake Engineering Lab (IRIDeS), the Tsunami Engineering Lab (IRIDeS), EARTH and MQDC with discussion on future contributions from Japan with the First Secretary of the Embassy of Japan in Thailand. We hope that the industry-academia collaboration between IRIDeS, EARTH and MQDC will increase earthquake resilience in Thailand in various perspectives.

Text and photos : Anawat Suppasri
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At Faculty of Architecture, Chiang Mai University



At Faculty of Medicine, Chiang Mai University



At Faculty of Associated Medical Sciences



At a school in Chiang Rai



At a school in Chiang Rai



At a hospital in Chiang Rai



At Whizdom Essence (101)



At DTGO CampUs (MQDC's headquarters)

2025 Multicultural Disaster Risk Reduction Workshop and Treasure Hunt (DRRT) (2025/6/14)

Theme: Disaster Education, Disaster Risk Reduction, Bosai

Place: Tohoku University, Espace and Katahira Area

On June 14, 2025, together with Horino Masahiro, Ryo Okazaki and Asami Chida of the Sendai Tourism, Convention and International Association (SenTIA) and Senior Lecturer Sunhee Lee of the Tohoku University Center for Diversity, Equity & Inclusion (DEI), IRIDeS faculty members organized the third international Disaster Risk Reduction Workshop and Treasure Hunt (DRRT) that was held at Tohoku University's Espace and the Katahira area. Risa Yanagiya from Sendai City and Kadan Otemachi Neighborhood Association and IRIDeS faculty members Assistant Professor Ryo Saito (Cognitive Sciences Lab), Associate Professors Elizabeth Maly (International Research Collaboration Office) and Julia Gerster (Disaster Memory Studies Lab), and Prof. Takeshi Sato (Disaster Education Research and Implementation Lab), Specially Appointed Associate Professors Miwako Kitamura and Mika Sakai of the Tohoku University Startup Incubation Center engaged in the overall organization, leading of the groups and disaster preparedness related explanations and demonstrations during the event. 49 people joined the event, including Foreign Resident Disaster Prevention Leaders, interpretation volunteers and regular participants from 21 countries. Among them were also 17 Japanese participants, who joined to learn about multicultural disaster preparedness.

The day began with an introduction to natural hazards and protective measures in Japan, and particularly in Sendai, by Assoc. Prof. Gerster. This was followed by a presentation on support services for international residents by Mr. Okazaki from SenTIA, and an explanation of the treasure hunt activity by Assoc. Prof. Maly. Participants were divided into teams and set off to solve quizzes located at various spots around the Katahira area. Each correct answer led them to the next location, where they learned about Sendai's disaster history, different types of evacuation facilities, and other useful information related to disaster preparedness. Like in the past year, one of the highlights was the Katahira Shimin Center, where Professor Sato introduced emergency supplies stocked at evacuation sites. Participants also had the opportunity to generate electricity using manual power generators and take a look at the stockpiles. After all teams reached the final checkpoint at the Katahira Campus, the event concluded with group discussions on how participants can pack their own emergency bags. The event was featured in a short report aired by NHK on June 26.

Images: Organization Team

Text: Julia Gerster (Disaster Memory Studies Lab)

Elizabeth Maly (International Research Collaboration Office)

Takeshi Sato (Disaster Education Research and Implementation Lab)

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The Team leaders introduce themselves



The participants listen to the presentations



Team Blue solving the quizzes



Prof. Sato explains stockpiles and power generators



Happy despite the rain



Searching for the next quiz



Joint seminar conducted at Cheng Shiu University and an official visit to the National Science and Technology Museum (NSTM), Kaohsiung City, Taiwan (2025/6/18-21)

Topic : Tsunami Engineering, Disaster Education, Disaster Lagacy

Venue : Cheng Shiu University, Kaohsiung City, Taiwan; Exhibition of the 2009 Typhoon Morakotflood disaster, National Science and Technology Museum (NSTM), Taiwan

In Taiwan, so as in Japan, the country has experienced natural disasters such as the 1999 Chi-Chi Earthquake and the 2009 Typhoon Morakot flood disaster. As a result, significant efforts have been made in disaster preparedness, education, and public awareness.

From June 18 to 21, Professor Fumihiko Imamura (Tsunami Engineering Lab), Associate Professor Shosuke Sato (Disaster Resilient Society Promotion Lab), Project Instructor Mari Yasuda (Earthquake Induced Tsunami Risk Evaluation Lab (Tokio Marine and Nichido Fire Insurance)), Researcher An-Chi Cheng (Tsunami Engineering Lab), Master's student Misaki Hoshi (Graduate School of Engineering), and Chieko Ito (Staff Member) visited Cheng Shiu University¹⁾ (a private university in Kaohsiung, Taiwan, established in 1965) and the National Science and Technology Museum (which features exhibits on the response and recovery from the Typhoon Morakot disaster). The team held a joint seminar and engaged in discussions on disaster prevention research and education.

On Thursday, June 19, the delegation paid a courtesy visit to Cheng Shiu University, where they were introduced to initiatives in international cooperation, global education, and restoration technologies. A meeting was held to discuss potential future collaboration. The group then moved to the Department of Civil Engineering, where a joint seminar was held with approximately 50 Taiwanese students and about 10 international students. The main program is outlined in item 2).

In the evening, they held discussions with the university's executive leadership, including President KUNG, Jui-Chang, on potential cooperation in disaster preparedness and student exchange initiatives.

On the morning of Friday, June 20, the team visited the Disaster Museum of the 2009 Typhoon Morakot Flood disaster³⁾, a permanent exhibit at the National Science and Technology Museum (NSTM) in Kaohsiung City. Following the devastating 1999 Chi-Chi Earthquake, the 2009 Typhoon Morakot disaster (commonly referred to as the "88 Flood") caused the next most significant damage. Typhoon Morakot struck on August 7, 2009, and brought heavy rainfall to central, southern, and eastern Taiwan from August 8 to 9, resulting in extensive damage.

In 2014, five years after the disaster, the "88 Flood Response and Recovery" exhibit was established within the NSTM. The content of the exhibit has since been expanded and enriched.

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During this visit, Dr. CHERN, Jen-Chuen, who served as the chair of the recovery committee for the disaster and supervised the exhibition, personally guided the group through the exhibition. He provided detailed explanations about the disaster mechanisms, damage, the difficulties faced during emergency response, and the path toward recovery.

Following the guide tour, a meeting was held with Deputy Director Dr. WU, Pei-Hsui, where discussions took place regarding future cooperation in disaster education, awareness activities, exhibitions, and international exchange. The three institutions reached a shared understanding regarding the direction of their future collaboration.

During this exchange and visit, we received tremendous support from Vice President Dr. CHENG, Shuenn-Ren and Vice Dean of International Affairs Dr. KO, Wu-Te of Cheng Shiu University. We would like to express our sincere gratitude once again.

Authors : Fumihiko Imamura (Tsunami Engineering Lab)
 Shosuke Sato (Disaster Resilient Society Promotion Lab)
 An-Chi Cheng (Tsunami Engineering Lab)



Visiting Cheng Shiu University at Kaohsiung City, Taiwan



Group photo after the joint seminar at Cheng Shiu University



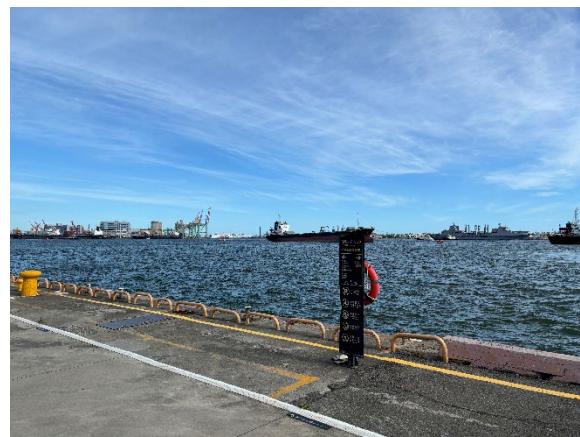
Workshop held in Cheng-Shiu University



Visiting Disaster Museum of the 2009 Typhoon Morakot flood disaster



Idea exchange after visiting the Disaster
 Museum



Visiting Kaohsiung harbor, one of the most
 important global shipping hubs

1) Cheng-Shiu University

The university was originally established in 1965 as "Cheng Shiu Short-term College of Industrial Technology." It was later reorganized with the approval of the Ministry of Education and renamed "Cheng Shiu Institute of Technology and Commerce" in 1980. In 1999, it was promoted to "Cheng Shiu Institute of Technology," and in 2003, it was further elevated to its current status as "Cheng Shiu University. Since then, the university has continuously expanded its undergraduate programs to cover a wide range of key fields in business, technology, and the liberal arts. These include civil engineering and geodesy, electronic engineering, mechanical engineering, electrical engineering, industrial engineering and management, architecture and interior design, computer science and information engineering, biomedical engineering, international business, business administration, financial management, information management, creative industry management, early childhood education, cosmetics and fashion styling, applied foreign languages, leisure and sports management, food and beverage management, tourism and recreation, modern life and creative design, and digital multimedia design.

<https://www.csu.edu.tw/p/412-1000-101.php?Lang=en>

2) Tohoku University & Cheng Shiu University Joint Seminar on Civil Engineering

Joint seminar (Morning) : Presenter

Prof. Fumihiko IMAMURA; Role of Disaster Science after the 2011 Tohoku earthquake and tsunami and transfer the lessons for future disaster mitigation

Dr. Shosuke SATO; Disaster Tradition / Memorial in Japan: Actual Situation and Scientific Research

Dr. An-Chi CHENG; Towards Advanced Tsunami Early Warning in Taiwan

Workshop (Afternoon): Report and Moderation

Fumihiko IMAMURA : Lectures; Disaster Prevention Measures of Japan

Misaki HOSHI; Lectures; Introduction of Tsunami Evacuation Behavior in 2024 Noto Peninsula Earthquake

Mari YASUDA ; Lectures; Knowledge and Practice of Disaster Prevention and Mitigation(Gensai YUI project)

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3) Cultural Revival and Museum Exhibitions in Xiaolin Village Following the 88 Flood Disaster

Following the 1999 Chi-Chi Earthquake, the most devastating disaster to strike Taiwan was the 2009 "88 Flood." On August 7, 2009, Typhoon Morakot hit Taiwan, bringing torrential rains to the central, southern, and eastern regions from August 8 to 9. As a result, six counties—Nantou, Chiayi, Tainan, Kaohsiung, Pingtung, and Taitung—suffered extensive damage from landslides and other disasters.

Approximately 90 Indigenous villages were severely affected by the 88 Flood. Disaster relief and compensation efforts were primarily led by the Council of Indigenous Peoples. However, tensions emerged, including protests by Indigenous communities and clashes with government authorities.

Demands for "dignified reconstruction" arose, including strong opposition to relocation policies and the selection of resettlement sites. In some cases, disaster-stricken communities filed administrative lawsuits against the government seeking state compensation. (呂怡屏, 2017)

http://www.initiative.soken.ac.jp/journal_bunka/13_09_lu/lu.pdf
<http://www.nstm.gov.tw/english/>
https://en.wikipedia.org/wiki/Typhoon_Morakot#Typhoon
<https://www.jss.or.jp/about/kako/typhoon.html>

4) Visiting counterparts:

Dr. KUNG, Jui-Chang, President, Chen Shiu University
 Dr. CHERN, Jen-Chuan, Board Member, The Tang Prize foundation, Prof. Emeritus National Taiwan University, Former President Chinese Institute of Engineering
 Board Member <https://www.tang-prize.org/en/publishing.php>
 Dr. WU, Pei-Hsui, Deputy director general, National Science and Technology Museum.88
 Dr. CHENG, Shuenn-Ren, Vice President international affairs, Chen Shiu University
 Dr. GONG, Ruey-Wei, Vice President academic affairs, Chen Shiu University
 Dr. Hsieh, Kun-Hung, Dean of Admissions, Chen Shiu University
 Dr. KO, Wu-Te, Vice Dean, Chen Shiu University
 Dr. LI, I-Cheng, Director of CSU Visual communication design, Chen Shiu University
 Dr. WANG, Hsin-Yi, Chairman of Civil Engineering, Chen Shiu University
 Mr. YUAN, Shi-Xun, Coordinator KANSAI Univ., Chen Shiu University
 Dr. KUO, Shih-Wen, Assistant researcher, National Science and Technology Museum.88

Lecture for the Tohoku University STEM Summer Program (2025/6/24)

Theme : Disaster science, Education, International exchange

Venue : International Research Institute of Disaster Science

On Tuesday, June 24, 2025, a class was held at the International Research Institute of Disaster Science (IRIDeS) as part of the Tohoku University STEM Summer Program (TSSP). This program is held annually at Tohoku University to welcome students from universities in the United States and the United Kingdom. This year, 30 students participated from institutions such as the University of Washington, Pennsylvania State University, University of California, University College London, University of York, and University of East Anglia.

In the first half of the class, Associate Professor Yo Fukushima (Inland Earthquake and Volcano Lab) gave a lecture titled "How earthquakes and tsunamis occur." He explained the mechanisms behind earthquakes and tsunamis, presented observational data from the 2011 Great East Japan Earthquake and Tsunami, and discussed the findings derived from data analysis.

In the latter half, Associate Professor Fukushima gave an overview of IRIDeS, followed by presentations by Associate Professors Elizabeth Maly (International Research Collaboration Office) and Sébastien Boret (Inclusive Disaster Risk Reduction Lab), who each shared their professional experiences and introduced their current research themes.

The class and research presentations were followed by an active Q&A session, demonstrating the high level of interest among the participants. The event provided a valuable opportunity for deepening understanding of the institute's work and of disaster science in Japan.



Lecture by Assoc. Prof. Fukushima



Assoc. Prof. Maly



Assoc. Prof. Boret

Report by: Yo Fukushima (Inland Earthquake and Volcano Lab)

IRIDeS co-organized a technical workshop and made field investigation with Thai governmental agencies (2025/7/14-17)

Theme: International collaboration, The 2025 Myanmar earthquake, The 2004 Indian Ocean Tsunami
 Place: Bangkok, Phang Nga, Phuket, Krabi (Thailand)

On the 14th of July 2025 the Embassy of Japan in Thailand organized a technical workshop “Toward Earthquake - Resilient Thailand: Addressing Long-Period Ground Motions and Social Infrastructure Vulnerability” at Japan International Cooperation Agency (JICA) Thailand Office. This workshop is co-organized with IRIDeS and Earthquake Research Center of Thailand (EARTH). There were several presentations by both Japanese and Thai researchers on all perspective of earthquake resilience in this workshop, including presentations from IRIDeS members, Prof. Kohju Ikago (Earthquake Engineering Lab), Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) and Assist. Prof. Naruethep Sukulthanasorn (Nippon Koei Resilient City with Digital Twin Technologies Joint Research Lab). There were about 30 participants on-site and 70 online respectively. This workshop also provided an opportunity for several exchanges of ideas, not only among academic researchers from both countries but also among other stakeholders from both countries for future collaboration.

During the 16th and 17th of July 2025, Assoc. Prof. Anawat Suppasri together with Prof. Pennung Warnitchai (Director of EARTH) and other EARTH members, including Hon. Miss Ratchaneekorn Thongthip, Member of the Senate of Thailand, Assist. Prof. Panon Latcharote and Mr. Nattapon Trumikaborworn conducted field investigations with Department of Disaster Prevention and Mitigation (DDPM), National Disaster Warning Center, Disaster Management Center and other DDPM local offices and lobal municipalities in the 2004 Indian Ocean Tsunami affected areas. We observed several issues for improvement related to the tsunami warning tower, the tsunami evacuation building, the tsunami evacuation signs and the tsunami evacuation routes.



Workshop on earthquake resilience in Thailand on the 14th of July at JICA Thailand Office



Checking tsunami evacuation map in Phang Nga



Discussing tsunami evacuation routes in Krabi

Text and photos : Anawat Suppasri (Tsunami Engineering Lab)

IRIDeS members attended the 22nd Annual Meeting AOGS2025 (2025/7/28-8/1)

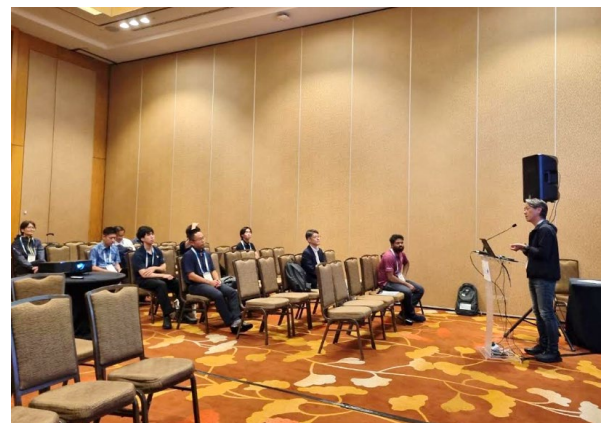
Theme: Geoscience, International collaboration, Interdisciplinary Research
Place: Marina Bay Sands, Singapore

From the 28th July to the 1st August 2025, the 22nd Annual Meeting of the Asia Oceania Geosciences Society (AOGS) 2025 was held in Singapore. IRIDeS faculty members and researchers attended this meeting and made several presentations and achievements.

Assist. Prof. Chi-Hsien Tang (Subduction Earthquake Lab) gave an award-winning lecture to the young researcher “Kamide Lecture” in the Solid Earth Science (SE) Section. Prof. Shunichi Koshimura (Disaster Geo-informatics Lab) made an invited presentation in the Interdisciplinary Geosciences (IG) Section that was organized by IRIDeS’s researcher Dr. Constance Ting Chua (Tsunami Engineering Lab). Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab), as IG section president, presented a poster related to the SATREPS Indonesia project, organized several sessions related to coastal disaster resilience and the 2025 Myanmar Earthquake and co-authored with several presentations made by researchers and students of the Tsunami Engineering Lab. This includes one poster that received the Best Student Poster Award during the closing ceremony. This international event was another example of IRIDeS’s high international reputation and successful results.



Assist. Prof. Tang receiving a plaque



Prof. Koshimura giving an invited presentation



A session organized by IRIDeS’s members



IRIDeS student receiving best poster award

Text and photos : Anawat Suppasri

AIWEST-DR 2025 Conference Report (2025/8/20-22)

Theme: *Global Partnerships Toward Future Disaster Resilience*
Venue: University College London (London, UK), onsite/online
URL: <https://aiwest-dr.usk.ac.id/>

University College London (UCL) hosted the 17th Aceh International Workshop and Expo on Sustainable Tsunami Disaster Recovery (AIWEST-DR 2025) on 20–22 August 2025. They were joined by co-organizers the Tsunami and Disaster Mitigation Research Center (TDMRC) of Syiah Kuala University, IRIDeS (Tohoku University), the National Defence University of Malaysia (UPNM), Universitas Gadjah Mada (UGM), the Indonesian Disaster Experts Association (PIT-IABI), the Indonesian Geographical Society (IGI), and the University of Sydney.

AIWEST-DR 2025 shared lessons from the human suffering, infrastructure damage, and reconstruction following the 2004 Indian Ocean Tsunami, as well as from other disasters around the globe. This year, the event focused on the theme “*Global Partnerships Toward Future Disaster Resilience*.” It was the third time that AIWEST-DR was organized outside Indonesia.

The first day featured an Opening Ceremony at UCL’s Gustav Tuck Lecture Theatre. Keynote lectures were delivered by Prof. Helene Joffe (University College London) and Dr. Ella Meilianda (TDMRC, Universitas Syiah Kuala). Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) read the Diplomatic Remarks on behalf of the Embassy of Japan in the United Kingdom. The day concluded with networking, drinks, and canapés at the Wilkins Building Japanese Garden.

The second day began with a keynote by IRIDeS Director Shinichi Kuriyama (Disaster Public Health Lab) titled “*How changes in behaviour can save lives in disasters*.” His talk drew on his article in *Nature – World View* (19 August 2025), urging the adoption of a public-health approach to disaster risk reduction. “*Disaster preparedness needs to become a social norm*,” Prof. Kuriyama emphasized, stressing that collaboration between health professionals and disaster-management officials is essential to saving lives.

Assoc. Prof. Sébastien P. Boret (Inclusive Disaster Risk Reduction Lab) chaired a session on Inclusive Community Resilience and Disaster Education. In this session, several IRIDeS members presented their research: Assist. Prof. Hyejeong Park (International Cooperation for Disaster Medicine Lab) on *Disaster preparedness of persons with disabilities in Banda Aceh: Evidence from the 2004 Indian Ocean Tsunami*; Asst. Prof. Miki Ishikawa with Research Associate Rieko Takahashi (Uehiro Disaster Risk Reduction Research Division) and Visiting Prof. Hiroyuki Sugai (Inclusive Disaster Risk Reduction Lab) on *Changing Faculty and Staff Attitudes through Contact with Hearing-Impaired Colleagues: Focusing on Disaster Response*; and Assoc. Prof. Julia Gerster (Disaster Memory Studies Lab) on *We Were Here Too! Conveying Diverse Disaster Experiences through Japanese Paper Theater (Kamishibai)*.

On the third day, Assoc. Prof. Suppasri organized a special session titled “*Sustainable System for Resilience and Innovation in Coastal Community*,” where he presented on Multi-hazard Assessment. In the session *Hazards and Their Mitigation*, Vice-Director Prof. Shunichi Koshimura (Disaster Geo-Informatics Lab) presented his latest research on *Tsunami Digital Twin: Its Concept, Progress, and Applications*.

AIWEST-DR 2025 concluded with a Closing Ceremony, including remarks from Vice-Director Prof. Koshimura and the organizers. The conference highlighted active international collaborations among participants and countries, while drawing critical lessons from past disaster experiences. Finally, it was announced that AIWEST-DR 2026 will be hosted in Chulalongkorn University in Bangkok, Thailand.

Text and Photos: Sébastien P. Boret (Inclusive Disaster Risk Reduction Lab)
Anawat Suppasri (Tsunami Engineering Lab)
Elizabeth Maly (International Research Collaboration Office)
Erick Mas (Disaster Geo-informatics Lab)

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Keynote Speech Prof Kuriyama



Sustainable System for Resilience and Innovation in Coastal Community Spec. Session



IRIDeS Group Photo



Closing speech, Prof Koshimura



Final Group Photo, AIWEST-DR 2025, "Bye and see you in Bangkok!"

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Presenters and titles from IRIDeS members

Presenters/co-authors	Affiliation	Title of Talk
Hyejeong Park, Sébastien P. Boret	International Cooperation for Disaster Medicine Lab, IRIDeS	Disaster preparedness of persons with disabilities in Banda Aceh: Evidence from the 2004 Indian Ocean Tsunami
Miki Ishikawa, Rieko Takahashi, Hiroyuki Sugai	Uehiro Disaster Risk Reduction Research Division, IRIDeS	Changing Faculty and Staff Attitudes through Contact with Hearing-Impaired Colleagues: Focusing on Disaster Response
Julia Gerster, Kaoru Ueda	Disaster Memory Studies Lab, IRIDeS	We Were Here Too! Conveying Diverse Disaster Experiences through Japanese Paper Theater (Kamishibai)
Bruno Adriano, Cesar Jimenez, Erick Mas, Shunichi Koshimura	Disaster Geo-informatics Lab, IRIDeS	Reassessing Major Earthquakes in the Central-South American Region to Enhance Tsunami Hazard Evaluations
Anawat Suppasri, Naruethep Sukulthanasorn, Ryuta Enokida, Shinichi Kuriyama, Nattapon Trumikaborworn, Ratchaneekorn Thongthip	Tsunami Engineering Lab, IRIDeS	The 2025 Myanmar Earthquake: Fact-findings for creating resilience in Thailand against future earthquakes
Anawat Suppasri, Syamsidik	Tsunami Engineering Lab, IRIDeS	Multi-hazard assessment (Special Session: "Sustainable System for Resilience and Innovation in Coastal Community")
Shunichi Koshimura, Yuichiro Tanioka, Yusaku Ohta, Erick Mas, Bruno Adriano, Ayumu Mizutani, Akihiro Musa, Yoshihiko Sato, Hiroyuki Takizawa, Hiroaki Kobayashi	Disaster Geo-informatics Lab, IRIDeS	Tsunami Digital Twin: Its Concept, Progress, and Applications
Aiko Sakurai, Mizan B.E. Bisri, Bethany Meidinger, and Rina Suryani Oktari	Kobe University, Disaster Education Research and Implementation Lab	Two Decades After the Indian Ocean Tsunami: Assessing School Disaster Preparedness in Banda Aceh
Elizabeth Maly, Takeshi Sato, Aiko Sakurai, Takashi Oda	International Research Collaboration Office, IRIDeS	Sendai Bosai Leaders: Localized community-based disaster risk reduction from Sendai
Ryo Saito, Akihiro Shibayama, Fumihiko Imamura	Cognitive Sciences Lab, IRIDeS	Mini Electric Mobility for BOSAI: Navigating Dynamic Scenarios and Phases for Inclusive Resilience in Motion
Sébastien P. Boret, Hyejeong Park	Inclusive DRR Lab, IRIDeS	Evacuation challenges of people with disabilities during disasters in Japan

The IRIDeS faculty member visited Ambon City, Indonesia to conduct international joint research under the SATREPS project (2025/9/10-12)

Theme: Tsunami, International collaboration

Place: Ambon City, Indonesia

From the 10th to the 12th of September 2025, Assoc. Prof. Anawat Suppasri and Dr. Constance Ting Chua (Tsunami Engineering Lab), together with colleagues from University of Syiah Kuala (Prof. Syamsidik and Assoc. Prof. Rina Suryani Oktari) and JICA Indonesia staffs visited Ambon City of Indonesia to conduct joint research activities under the SATREPS project. Last year, the team visited several study sites related to the historical tsunami and recognized the importance of bathymetry data for further study of the 1950 tsunami, which was potentially caused by a submarine landslide and future tsunami hazard and risk assessment in Ambon Bay. This year, the team conducted a bathymetric survey to obtain bathymetric (sea depth) data for further studies on submarine landslide tsunami. A focused group discussion on a newly developed disaster information dashboard was also conducted with participation of the mayor of Ambon City, local government and other local stakeholders. The new dashboard comprises our simulated earthquake induced tsunami results and more than 80,000 buildings data surveyed last year for use as fundamental data for a new dashboard for future risk assessment and various planning of Ambon City.



Bathymetric survey of Ambon Bay



Visiting tsunami-ready village



Focused group discussion



Assoc. Prof. Suppasri exchange conversation with the mayor of Ambon City

More details:

SATREPS project: https://www.coast.dpri.kyoto-u.ac.jp/satreps_bricc/

University of Syiah Kuala:

<https://tdmrc.usk.ac.id/2025/09/15/the-first-detailed-bathymetry-image-of-the-ambon-bay-produced-by-tdmrc-and-partners/>

Local news:

PENKOT AMBON: Buka FGD, Wattimena Tegaskan Komitmen Pemkot Perkuat Mitigasi Bencana

DINAMIKA MALUKU: Walikota : Saatnya Warga Kota Ambon Miliki Bangunan Tahan Gempa

IRIDeS faculty member was invited by UNDP to instruct Thai journalists about earthquakes and tsunamis for journalism for inclusive disaster resilience. (2025/10/18-19)

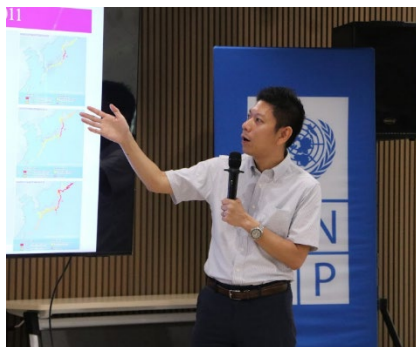
Theme: Inclusive disaster resilience, The 2025 Myanmar earthquake, The 2004 Indian Ocean Tsunami
 Place: Bangkok (Thailand)

UNDP's support to build the capacities of journalists in Thailand to report on disaster resilience is rooted in its broader commitment to disaster risk reduction and sustainable development. This support draws inspiration from the flagship regional initiative, "Partnerships for Strengthening School Preparedness for Tsunami in the Asia-Pacific region" (Tsunami Project), implemented in 24 Asia-Pacific countries, in partnership with the Government of Japan. To support and strengthen the role of journalists in advancing disaster resilience, UNDP aims to leverage the UNDP Media Fellowship on Sustainable Development titled "Frontlines of Crisis: Journalism for Inclusive Disaster Resilience", to spotlight on disaster preparedness and resilience, with particular focus on tsunamis and earthquakes.

This year the event was organized between 17-19 October in Bangkok. Associate Professor Anawat Suppasri (Tsunami Engineering Lab) was invited to give lectures on generation mechanism, disaster countermeasures of earthquakes and tsunamis and support workshops and discussions with Thai journalists throughout the event. With IRIDeS's contribution through UNDP's event, we provided correct basic knowledge related to earthquakes and tsunamis and strengthened media capacity to report on the interconnected nature of disaster risk, needs of vulnerable and marginalized groups and sustainable development, linking local stories to broader national and global contexts.



Earthquake related session on the 18th October 2025



Tsunami related session on the 19th October 2025

Text and photos : Anawat Suppasri (Tsunami Engineering Lab)

Field Visit among People with Disabilities within the Indonesian Areas Affected Cyclone Senyar in Aceh Province, Indonesia (2026/2/3-7)

Theme: Cyclone Senyar, floods disaster, disability, vulnerability, Indonesia

Venue: Aceh Province, Indonesia

In response to the ongoing floods in Aceh (2025–present) following Cyclone Senyar, two researchers from the International Research Institute of Disaster Science (IRIDeS), Associate Professor Sébastien Penmellen Boret (Inclusive Disaster Risk Reduction Lab) and Assistant Professor Hyejeong Park (International Cooperation for Disaster Medicine Lab), conducted preliminary visit in collaboration with Dr. Alfi Rahman (Universitas Syiah Kuala) and Mr. Ahmad (Kafalah Indonesia).

During the visit, the team also met with representatives of the local disaster agency (Badan Penanggulangan Bencana Aceh, BPBA) and the leaders of the Indonesian emergency responder team (BASARNAS) to gain in-depth knowledge of emergency response operations and the transition toward early recovery. The visit aimed to assess the social impacts of the floods, particularly among marginalized populations, and to situate the current crisis within the longer disaster history of the region.

The floods resulted in widespread and repeated power outages across the province. Nearly one million households temporarily lost electricity, in some cases for extended periods. Although restoration progressed gradually, recurrent flooding exposed the fragility of infrastructure and highlighted uneven coping capacities among communities. Limited access to fuel further constrained mobility and response efforts.

A central component of the fieldwork consisted of in-depth interviews with persons with disabilities. These interviews documented lived experiences of the floods, including evacuation challenges, shelter accessibility, access to information, and disruptions in care and support systems. Participants were also invited to reflect on previous disasters—particularly the 2004 Indian Ocean tsunami—and on how these past experiences shaped their present perceptions of risk, preparedness, and institutional trust.

The findings underscore recurring structural issues: barriers in evacuation support, insufficiently accessible shelter environments, communication breakdowns, and heavy reliance on informal networks. At the same time, interviewees emphasized the crucial role of family members, neighbours, religious communities, and local associations in ensuring safety and dignity during crisis situations. These insights point to persistent gaps in inclusive disaster planning and response frameworks.

The visit reaffirmed a core principle of Inclusive Disaster Risk Reduction (i-DRR): disasters are produced through the interaction of hazards, exposure, and social vulnerability. The Aceh floods illustrate how pre-existing socio-economic inequalities and patterns of exclusion significantly shape disaster outcomes. They also demonstrate the importance of integrating the voices and experiences of marginalized populations into preparedness, response, and recovery strategies.

This collaborative research contributes to ongoing efforts to strengthen inclusive disaster governance in Indonesia and to deepen long-term academic and institutional partnerships between IRIDeS and local stakeholders in Aceh.

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Further reading and local analyses:

– Universitas Syiah Kuala, “Senyar Aceh” Flood Monitoring and Analysis Platform:

<https://senyar-aceh.usk.ac.id/>

– Rahman, A., “Ingatan Tsunami, Ujian Senyar: Bagaimana Memaksimalkan Peran Kampus dalam Situasi Bencana,” The Conversation Indonesia:

<https://theconversation.com/ingatan-tsunami-ujian-senyar-bagaimana-memaksimalkan-peran-kampus-dalam-situasi-bencana-271629>



Flooded house in Pidie Jaya, 2 months after Senyar, North Aceh



Visit at the affected RSUD Pidie Jaya Hospital



Flooded house in Pidie Jaya 2 months after Senyar, North Aceh



Interviews and Distributing relief goods with Kafalah Indonesia at impacted people with disabilities

Report by: Sébastien P. Boret (Inclusive Disaster Risk Reduction Lab),
Hyejeong Park (International Cooperation for Disaster Medicine Lab)

University of Bologna-IRIDeS Winter School on “*Bōsai* and climate change: Learning from disaster experiences for disaster risk reduction in Japan and Italy” held at IRIDeS (2026/3/6~15)

Topics: Climate Change, Flood Disasters, Great East Japan Earthquake, Tsunami, and Nuclear Disaster (3.11)
Place: IRIDeS, Sendai, Ishinomaki, Natori, Futaba, Namie

From March 6 to March 15 2026, a winter school organized jointly by University of Bologna faculty, Assistant Professor Annaclaudia Martini, and IRIDeS faculty, Associate Professor Julia Gerster (Disaster Memory Studies Lab), was held at IRIDeS. The project was kindly supported by the Toshiba Foundation, F-REI, and the Disaster Resilience Co-creation Center, IRIDeS, Tohoku University and is also an outcome of ongoing co-research projects of the two researchers. In addition to Assoc. Prof. Martini, Assoc. Prof. Martina Tazzioli, Researcher Michaela De Giglio, and 10 students joined from the University of Bologna, as well as IRIDeS faculty and visiting researchers, to discuss the challenges posed by climate change, the ways in which certain aspects of past disasters are remembered and forgotten, and how lessons from Japan can be applied to other countries.

After a visit to Matsushima to experience Japanese culture and learn about local history and the impact of 3.11 on tourism guided by GOZAIN, the academic program started on March 9 with presentations about the Great East Japan Earthquake (Julia Gerster, Annaclaudia Martini), the Noto Peninsula Earthquake and Floods (Prof. James Short, Toyo University), and local impacts of 3.11 (Assoc. Prof. Elizabeth Maly (International Research Collaboration Office), Research Associate Yumiko Saito (Uehiro Disaster Risk Reduction Research Division)). In the afternoon, Assoc. Prof. Elizabeth Maly guided the group through the Shinhama area to learn about disaster mitigation, living with nature, and creative usage of tsunami and flood hazard zones. March 10 started with a guided tour by Director Richard Halberstadt at the Disaster Heritage Site Kadonowaki Elementary School in Ishinomaki, and was followed by field work in the Kadonowaki area and discussions with Hajime Chiba (Ishinomaki Senshu University) and Naomi Chiba (Ishinomaki Senshu University, IRIDeS Visiting Researcher) on the creation of the Ishinomaki recovery park, recovery policies and sea walls. The group spent March 11 in Yuriage, Natori City, where they learned about relocation policies in the new and former Yuriage area and flood-based evacuation procedures, and local impacts of 3.11 at the Natori City Disaster Memorial Museum. The group then joined local commemoration activities and the minute of silence. The final fieldwork day on March 12 was spent in Namie and Futaba, Fukushima Prefecture, where the group visited the Great East Japan Earthquake and Nuclear Disaster Museum, joined a kataribe storytelling session, conducted fieldwork in Namie and Futaba, and attended a workshop organized by the museum to reflect on the nuclear disaster and energy-related questions. Based on preparations held at the University of Bologna prior to the winter school, March 13 was spent preparing the poster presentations that were held the next day at the Sendai Bosai Mirai Forum, and included counter mapping and insights from the field. Once again, we would like to thank the sponsors and collaborators for their great support of the winter school.

Report by: Julia Gerster (Disaster Memory Studies Lab)
Elizabeth Maly (International Research Collaboration Office)
Yumiko Saito (Uehiro Disaster Risk Reduction Research Division)

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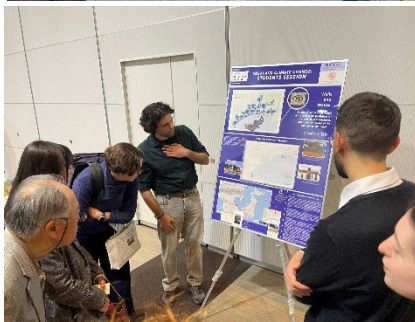
Disaster
Heritage
Site
Kadonowaki
Elementary
School.



Participating
in a
memorial
service in
Yuriage,
Natori City.



Field visits to Namie and
Shinhama.



Workshop in Futaba and
final poster presentations
at the Sendai Bosai Mirai
Forum.



The “Challenges in Disaster Education Workshop” was held at IRIDeS (2026/3/16-17)

Topics: Disaster Education, Disaster Preparedness, Disaster Memory, Disaster Definitions, International Collaboration, Great East Japan Earthquake.

Venue: IRIDeS, Arahama District, Sendai City

On March 16, 2026, TU Dortmund Prof. Lothar Wigger, Kyoto University Assoc. Prof. Yuzo Hirose, and IRIDeS faculty Assoc. Prof. Elizabeth Maly (International Research Collaboration Office), Assistant Prof. Ryo Saito (Cognitive Sciences Lab) and Research Assistant Yumiko Saito (Uehiro Disaster Risk Reduction Research Division) presented on recent issues in disaster education in Japan and Germany in a workshop organized by Assoc. Prof. Julia Gerster (Disaster Memory Studies Lab). The workshop continued with a field visit to the disaster heritage site Arahama Elementary School guided by the former principal Kawamura, a guided tour by Yumiko Saito to the former residential area and disaster memorial, a visit to the Sendai 3.11 Memoria Community Center and a research meeting among the participants.

Presentations:

Catastrophe and Pedagogy. Some remarks from a German Perspective (Prof. Lothar Wigger, TU Dortmund)

Can we trust nature, the world? Bosai education from a philosophical perspective (Assoc. Prof. Yuzo Hirose, Kyoto University)

The Disaster Picture Book Project (Assoc. Prof. Elizabeth Maly, IRIDeS)

Crossing boundaries in disaster education: time, space, and research disciplines (Assistant Prof. Ryo Saito, IRIDeS/Graduate School of Information Sciences)

Introduction to the Arahama District of Sendai City (Research Associate Yumiko Saito, IRIDeS)

Moderation and Organization: Julia Gerster (Assoc. Prof. IRIDeS)

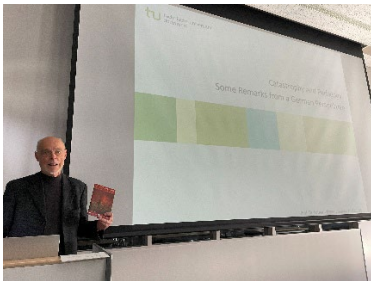
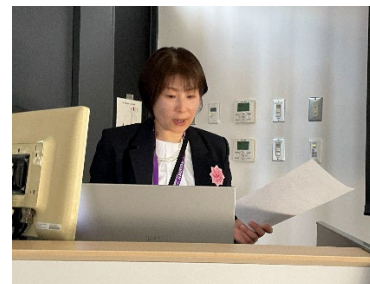
Text: Julia Gerster (Disaster Memory Studies Lab, International Research Collaboration Office)

Elizabeth Maly (International Research Collaboration Office)

Ryo Saito (Cognitive Sciences Lab/ Graduate School of Information Sciences)

Yumiko Saito (Uehiro Disaster Risk Reduction Research Division)

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Day 1. The presenters (from left to right):

Lothar Wigger, Yuzo Hirose, Elizabeth Maly, Ryo Saito, and Yumiko Saito.

Day 2. Field visit to the Arahama Area of Sendai City.

