



東北大学
災害科学国際研究所

International Research Institute of Disaster Science
Tohoku University



The Tohoku Spirit: Working with People on the Ground to Turn Ideas into Action

Fumihiko Imamura

Director and Professor of IRIDeS,
Tohoku University



The International Research Institute of Disaster Science (IRIDeS) was founded about one year after the Great East Japan Earthquake as Tohoku University's newest research institution. The 2011 Off the Pacific Coast of Tohoku Earthquake on March 11 and the accompanying tsunami devastated East Japan. About twenty thousand people died, and the magnitude of the tragedy was amplified by an accident at Fukushima Daiichi Nuclear Power Plant. The Great East Japan Earthquake became an unprecedented compound disaster on a scale hitherto never experienced in human history.

Since 2007, Tohoku University had organized the Research Group on Disaster Prevention and Management where researchers gathered to conduct multidisciplinary disaster prevention studies, considering especially the countermeasures for an earthquake off the coast of Miyagi Prefecture which was foreseen to occur in the near future. However, the reality of the 2011 disaster far exceeded all predictions and the Group was unable to respond adequately. Tohoku University undertook a major expansion of the Group to learn lessons from the disaster, resulting in the establishment of IRIDeS in April 2012. Currently, about 100 researchers in fields in the humanities, sciences, engineering, and medicine, endeavor to invent a deeper Disaster Science and more practical research on disaster risk reduction. Measurable results of IRIDeS to date include clarifying the 2011 disaster damages, exploring large-scale earthquake and tsunami mechanisms, and constructing a disaster digital archive. Moreover, making efforts in forging links with industry, government, academia, and citizens in Japan as well as abroad, IRIDeS aims at both the revival of Tohoku disaster areas and the reduction of disasters worldwide.

As society's concerns toward the disaster continue to evolve, IRIDeS continues to spearhead original initiatives true to the Tohoku spirit, working with people on the ground to turn ideas into actions. We have also created a Project Area and Unit System which fuses research fields further, to obtain a clearer picture of local needs and to contribute to society in a more hands-on manner. As befits an outward-looking research institute, IRIDeS holds regular forums and guided tours for the general public. We would appreciate your continuous support in the future.

IRIDeS History

- April 2012 • IRIDeS was established at Tohoku University, with Prof. Arata Hirakawa as its first Director
- April 2013 • Satellite office was established in Kesenuma City, Miyagi Prefecture
- April 2014 • Prof. Fumihiko Imamura became the second Director of IRIDeS
- November 2014 • The IRIDeS building was opened in the Aobayama New Campus
- March 2015 • The Third UN World Conference on Disaster Risk Reduction was held in Sendai City
• Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted
- April 2015 • IRIDeS and United Nations Development Programme (UNDP) established the Global Centre for Disaster Statistics
- April 2016 • Project Area and Unit System started
- 2017- • The "World Bosai Forum/ International Disaster Risk Conference" starts to be held in Sendai City every two years

IRIDeS Divisions and Research Fields

Hazard and Risk Evaluation Research Division

Earthquake Engineering
Tsunami Engineering
Disaster Potential Study
Remote Sensing and Geoinformatics for Disaster Management
Technology for Optimum Mitigation
Science and Technology for Low-frequency Risk Evaluation
Technology for Global Disaster Risk

Regional and Urban Reconstruction Research Division

Planning Technology for Urban Revitalization
Radiational Decontamination Science
Regional Safety Engineering
Disaster Robotics
International Strategy for Disaster Mitigation

Disaster Medical Science Division

International Cooperation for Disaster Medicine
Disaster-related Infectious Disease
Radiation Disaster Medicine
Disaster Psychiatry
Disaster Obstetrics and Gynecology
Disaster-related Public Health
Disaster Medical Informatics
Disaster-related Oral Health

Endowed Research Division

Earthquake induced Tsunami Risk Evaluation
(Tokio Marine and Nichido Fire Insurance)



Human and Social Response Research Division

Disaster-related Cognitive Science
Disaster Area Support
Preservation of Historical Materials
Social Systems for Disaster Management
Disaster Legislation
Japanese Disaster Culture
International Disaster Resilience

Disaster Science Division

Marine Geodesy
Seismic Hazard
Volcanic Hazard
Geologic Hazard
Atmospheric and Oceanic Disaster
Space Environment Disaster
Natural Disaster

Disaster Information Management and Public Collaboration Division

Disaster Digital Archive
Disaster Reconstruction design and Management
International and Domestic Liaison Office

IRIDeS Emergency Investigation

Following major disasters, IRIDeS researchers have taken immediate actions, conducting investigations and analyses, and have released their findings.

Those disasters include:

- Typhoon Haiyan, Philippines, 2013
- Gorkha Earthquake, Nepal, 2015
- Kanto-Tohoku Heavy Rainfall Disaster, Japan, 2015
- Kumamoto Earthquake, Japan, 2016



IRIDeS Promoting Domestic and International Cooperation

Bridging Tohoku and the world through IRIDeS research activities and practices

International Cooperation

- Supported The Third UN World Conference on Disaster Risk Reduction, held in Sendai in March, 2015 as a disaster research institute, advancing cooperation among academia, industry, government and citizens
- Established the Global Centre for Disaster Statistics with UNDP to advance world disaster risk reduction
- Collaborates with international academic organizations on disaster risk reduction, including those in Germany, Indonesia, Philippines, UK, USA and Taiwan
- Participates in Multi-Hazard Program of Association of Pacific Rim Universities (APRU)



The Third UN World Conference on Disaster Risk Reduction



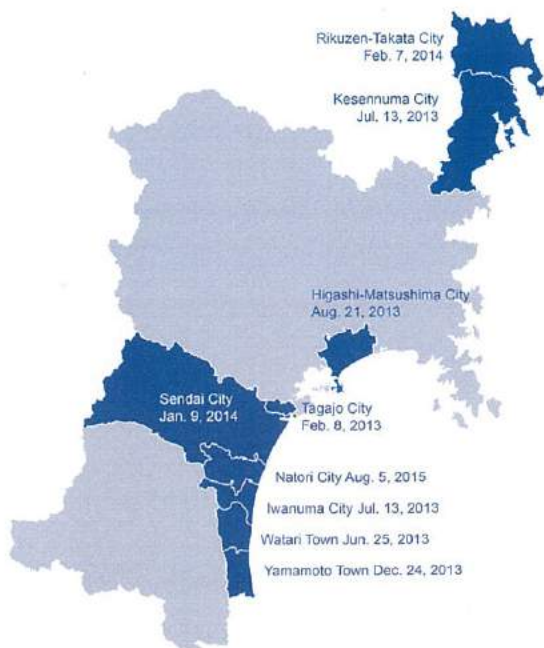
Activity of the Association of Pacific Rim Universities (APRU)



The inauguration of the Global Centre for Disaster Statistics

Domestic / Local Cooperation

- Established a satellite office in Kesennuma, Miyagi
- Has concluded comprehensive partnership agreements with 9 municipalities affected by the 2011 disaster and the National Institute of Technology, Fukushima College, and Miyagi Prefectural Tagajo High School
- Contributes to disaster risk reduction in Tohoku through public participation projects “The Power to Live” and “Disaster Prevention Notebook for Everyone”



Municipalities having partnership agreements with IRIDeS



Kesennuma Satellite Office
(on the 3rd floor of Uminoichi building)



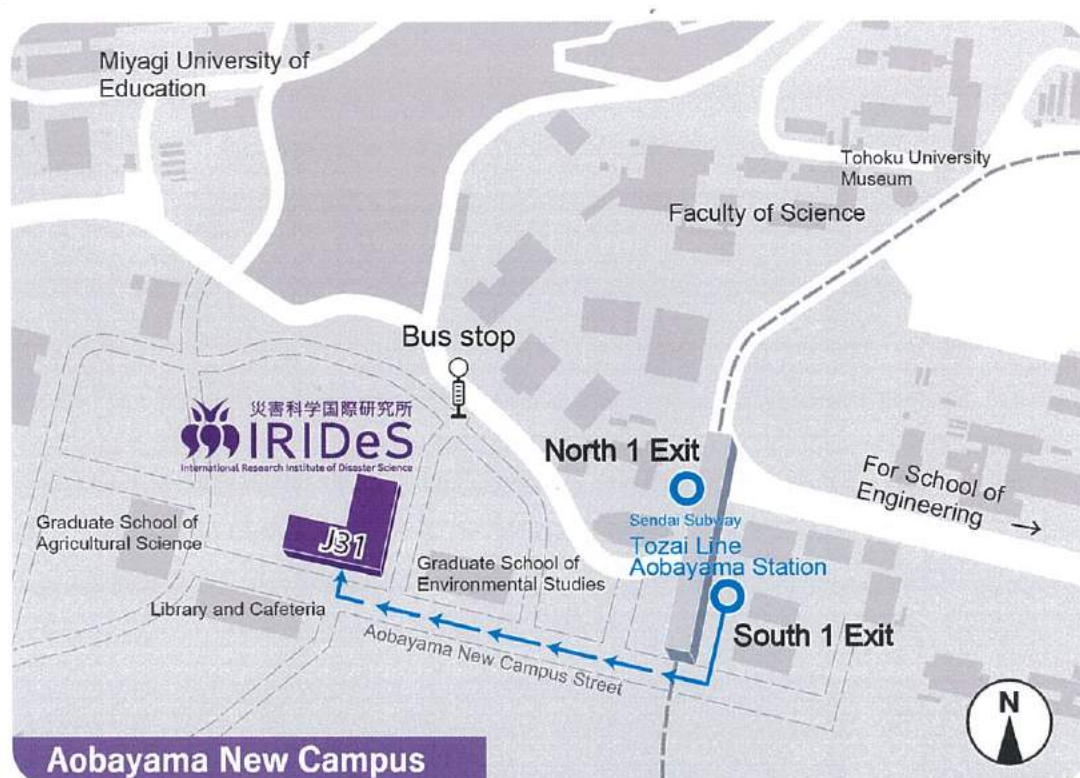
Disaster Prevention Notebook for Everyone

Partnership Agreement with Tagajo High School

IRIDeS Tour

IRIDeS has an exhibition space to introduce our research activities to the public. It is also equipped with the largest screen for 3D projection among Japanese research institutes. Upon request, IRIDeS screens the 3D documentary film "The Great Tsunami in Japan: reflecting on the 2011 disaster" (80min/25min, Japanese/English). The film was created by NHK Media Technology and supervised by IRIDeS Director and Professor Fumihiko Imamura, to pass on memories and experiences of the Great East Japan Earthquake and Tsunami.

Visitor Information



Take the Sendai Subway Touzai Line from Sendai Station to Aobayama Station.
It is 3 minutes walk from South 1 Exit.

Contact

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