



The 8th IFIP WG5.15 Conference on Information Technology in Disaster Risk Reduction (ITDRR2023)

December 4-6, 2023, Tokyo Japan

Partners and Sponsors



TOKAI UNIVERSITY



**Information Processing
Society of Japan**



November 6th, 2023



Dear members of the ITDRR2023 Participants,

Welcome to Tokyo, Japan!

On behalf of the Japan National Tourism Organization, I would like to express our appreciation to you for choosing Tokyo.

Tokyo's expertise in event organization, accessibility, unmatched blend of tradition and modernity, and broad range of accommodation options will surely contribute to the success of this important conference.

During your visit, I believe that you will be able to experience Tokyo's historic culture and rich cuisine, as well as generate new ideas for your future research in this fascinating city that successfully integrates a modern urban lifestyle with traditional culture.

As president of the Japan National Tourism Organization, I am confident that holding the 8th IFIP WG5.15 Conference on Information Technology in Disaster Risk Reduction in Japan will ensure an unforgettable and successful meeting for you all.

I look forward to welcoming each and every one of you in Tokyo, Japan.

Yours sincerely,



Atsumi Gamo
President
Japan National Tourism Organization



Timetable

	JST	CET	
Dec. 4	9:00~10:00		Registration
	10:00~10:40	2:00~2:40	Opening Remarks
	11:00~12:00	3:00~4:00	Session 1: GIS
	12:00~13:30		Lunch Break
	13:30~14:30	5:30~6:30	Keynote 1
	14:50~16:10	6:50~8:10	Session 2: Information Systems
	16:30~18:00		Welcome Reception
Dec. 5	9:30~10:30	1:30~2:30	Session 3: Social Media
	10:50~11:30	2:50~3:30	Session 4: Situational Awareness
	11:30~13:00		Lunch Break (Bento)
	13:00~14:20	5:00~6:20	Session 5: Evacuation & Emergency Management
	14:40~15:40	6:40~7:40	Keynote 2
	17:30~21:00		Excursion & Banquet (Yakatabune Boat Cruise)
Dec. 6	9:30~10:30	1:30~2:30	Keynote 3
	10:50~11:50	2:50~3:50	Late-breaking Session (Poster Introduction)
	11:50~12:30		Late-breaking Session (interactive poster presentation)*
	12:30~14:00		Lunch Break
	14:00~14:40	6:00~6:40	Session 6: Healthcare
	15:00~15:30	7:00~7:30	Closing Remarks

* on-site only

Keynote Speeches

13:30~14:30 (JST), 5:30~6:30 (CET), December 4, 2023



Keynote speech #1:

“Democratization of Geospatial Information”

Taichi Furuhashi,

Professor, Aoyama Gakuin University, Japan

14:40~15:40 (JST), 6:40~7:40 (CET), December 5, 2023



Keynote speech #2:

“Human behaviour in crisis situations – Modelling and Simulation”

Julie Dugdale,

Professor, University Grenoble Alps, France

9:30~10:30 (JST), 1:30~2:30 (CET), December 6, 2023



Keynote speech #3:

“Recovery monitoring of the disaster-damaged areas using satellite & ground observation for environmental education”

Kohei Cho,

Professor, Tokai University, Japan

December 4, 2023

10:00~10:40 (JST), 2:00~2:40 (CET)

Opening Remarks

11:00~12:00 (JST), 3:00~4:00 (CET)

Session 1: GIS

Chair: Jun Sasaki (Yamato University, Japan)

1-1 Identification of Undesignated Evacuation Sites Location by Mobile Spatial Statistics
Fumiya Nishiwaki, Michinori Hatayama and Koki Funakoshi

1-2 Evaluation of Sentinel-1 GRD data with GEE for Floods Mapping in Rubkona, South Sudan
Manzu Gerald and Kayoko Yamamoto

1-3 Derivation of Evacuation Routes to Avoid Narrow Road Adopting Physarum Solver
Rei Fujiwara and Kayoko Yamamoto

13:30~14:30 (JST), 5:30~6:30 (CET)

Keynote 1

Chair: Osamu Uchida (Tokai University, Japan)

Democratization of Geospatial Information
Taichi Furuhashi (Aoyama Gakuin University, Japan)

14:50~16:10 (JST), 6:50~8:10 (CET)

Session 2: Information Systems

Chair: Yuko Murayama (Tsuda University, Japan)

2-1 Digital Supply Chain Roles in the Power Industry

Mari Aarland

2-2 A Multi-modal Approach Towards Public Alerting and Effective Communication in Disaster Scenarios: Implementation in the Indian Context

Saurabh Basu, Suvam Suvabrata Behera, Sandeep Sharma, Anugandula Naveen Kumar, Sumit Kumar Jha, Akshay Dawar, Manish Bhaskar, Achinta Roy, Niraj Kant Kushwaha, Sabyasachi Majumdar, Smriti Sachdev and Pankaj Kumar Dalela

2-3 The Paradox of Information Systems in Crisis: Walking The Tight Rope Between Rigidity & Flexibility

Kenny Meesters

2-4 Snowed In and Cut Off: How a Norwegian Municipality Dealt with a Power Outage

Kjetil Rustenberg and Kristine Steen-Tveit

December 5, 2023

9:30~10:30 (JST), 1:30~2:30 (CET)

Session 3: Social Media

Chair: Walter Seböck (University for Continuing Education Krems, Austria)

3-1 Location Extraction in Disaster Tweets with a Model Trained on Past Data: Diverse Analysis

Toshihiro Rokuse, Keisuke Utsu and Osamu Uchida

3-2 Analysis of Japanese Tweets on the Russian Military Invasion of Ukraine Focusing on Frequently Used Words and Emotional Expressions

Keisuke Utsu, Misaki Oyama and Osamu Uchida

3-3 Archiving Social Media Discussions in Time and Space: Focusing on Syrian, Middle-East and African Refugees and Related War Conflicts During 2015

Stathis G Arapostathis

10:50~11:30 (JST), 2:30~3:30 (CET)

Session 4: Situational Awareness

Chair: Sofie Pilemalm (Linköping University, Sweden, University of Agder, Norway)

4-1 Performance Evaluation of Flood Level Estimation Method using State-space Model with Time-series Monitoring Data

Kei Hiroi, Akihito Kohiga, Sho Fukaya and Yoichi Shinoda

4-2 Situational Disabilities in Emergency Management – Validation of Realistic Scenarios for Training and Awareness-raising

Terje Gjørseter, Jaziar Radianti and Weiqin Chen

13:00~14:20 (JST), 5:00~6:20 (CET)

Session 5: Evacuation & Emergency Management

Chair: Thomas J. Lampoltshammer (University for Continuing Education Krems, Austria)

5-1 Digitalized Co-production of Emergency Response: Dispatch and on-site work by volunteer first responders

Wael Alkusaibati and Sofie Pilemalm

5-2 Proposing a Simple Method of Creating Tsunami Evacuation Simulations: Aiming to Empower Residents for Feasible Measures

Kunihiro Nakahara and Michinori Hatayama

5-3 Risk and Control Assurance Framework for Emergency Management Projects

Jaziar Radianti and Deepak Khazanchi

5-4 TeamAware: Profile-based Interoperability Framework for First Responders

Yildiray Kabak, Idil Gokalp Kose, Caglar Akman and Dave Ramscar

14:40~15:40 (JST), 6:40~7:40 (CET)

Keynote 2

Chair: Yuko Murayama (Tsuda University, Japan)

Democratization of Geospatial Information

Julie Dugdale (University Grenoble Alps, France)

December 6, 2023

9:30~10:30 (JST), 1:30~2:30 (CET)

Keynote 3

Chair: Osamu Uchida (Tokai University, Japan)

Recovery Monitoring of the Disaster-damaged Areas Using Satellite & Ground Observation for Environmental Education

Kohei Cho (Tokai University, Japan)

10:50~11:50 (JST), 2:50~3:50 (CET)

Late-breaking Session (Poster Introduction)

Chair: Keisuke Utsu (Tokai University, Japan)

P-1 Proposal of a Tourism Support System with Disaster Learning

Jun Sasaki

P-2 Aspects of Maintaining the Operational Safety of Public Transport Using Mobile Multi-sensor Systems

Walter Seböck

P-3 Augmented Reality Application to Promote Disaster Awareness for Thai Tourists Visiting Japan

Gowit Chanaken

P-4 Geospatial Modeling of Earthquake Vulnerability in the Himalayas Using Integrated MCDM Models

Sukanta Malakar

P-5 Nature and Impact of Tropical Cyclone Tauktae over Arabian Sea, May 2021

Vijay Kumar Kannaujiya

P-6 Citizen and Developer Collaborative Method for Disaster Experience App Development and a Continuous Disaster Prevention Learning Framework

Shotaro Hazeyama

11:50~12:30 (JST), 3:50~4:30 (CET)

Late-breaking Session (interactive poster presentation)*

*Only on-site

14:00~14:40 (JST), 6:00~6:40 (CET)

Session 6: Healthcare

Chair: Michinori Hatayama (Kyoto University, Japan)

6-1 Sensorized Maternal Health Interventions in Marginalized Communities: The Role of Surveillant Assemblages in Maintaining Compliance within Disaster-affected Healthcare Systems

Natalie Baker, Zeno Franco and Temitayo Okusanya

6-2 A Novel Proof of Concept Forecasting Model for Pandemics – A Case Study in New Zealand

Hamidreza Rasouli Panah, Abtin Ijadi Maghsoodi, Samaneh Madanian, Jian Yu and Kenneth Johanson

15:00~15:30 (JST), 7:00~7:30 (CET)

Closing Remarks

Organization

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