

## Day 2 (2 July)

Room 1

### Hazard and risk assessment

Chair: Phil R. Cummins

9:00-9:15

**e90055**

#### **Uncertainty quantification of earthquake-tsunami hazard and risk in Kuroshio Town, Kochi prefecture, Japan using the Nankai-Tonankai megathrust rupture scenarios**

**Katsuichiro Goda**

Department of Earth Sciences, Western University

9:15-9:30

**e90189**

#### **Assessment and prediction of tsunami-induced debris for coastal building design**

**Yong Wei**

University of Washington/CICOES, Seattle, Washington, USA / NOAA Pacific Marine Environmental Laboratory, Seattle, Washington, USA

9:30-9:45

**e90207**

#### **A decade of applying lessons learned to enhance tsunami hazard products in California**

**Rick Wilson**

California Department of Conservation, California Geological Survey

9:45-10:00

**e90191**

#### **Combining tsunami observations and precomputed simulations to forecast tsunamis in New Zealand**

**Aditya Gusman**

Tectonophysics, GNS Science

### Sources and uncertainties

Chair: Aditya Gusman

10:15-10:30

**e90168**

#### **Earthquakes and tsunamis caused by low-angle normal faulting in the Banda Sea, Indonesia**

**Phil R. Cummins**

Research School of Earth Sciences, Australian National University / Place, Space and Communities Div., Geoscience Australia / Institut Teknologi Bandung, Bandung, Indonesia

- 10:30-10:45 **e90119**  
**Lessons learnt from the comparisons of 14 coseismic slip models of the great 2004 Sumatra-Andaman earthquake**  
**Gui Hu**  
Guangdong Provincial Key Laboratory of Geodynamics and Geohazards, School of Earth Sciences and Engineering, Sun Yat-sen University, Zhuhai, China
- 10:45-11:00 **e90095**  
**Unexpected tsunamis generated by volcanic earthquakes at the submarine Smith Caldera, Japan**  
**Osamu Sandanbata**  
Earthquake and Tsunami Research Division, National Research Institute for Earth Science and Disaster Resilience, Ibaraki, Japan / Earthquake Research Institute, the University of Tokyo, Tokyo, Japan
- 11:00-11:15 **e90173**  
**Probabilistic tsunami inundation assessment of Vanimo, Papua New Guinea: In support of national tsunami guidelines**  
**Kaya Max Wilson**  
Regional Development/ Hazards, Geoscience Australia, Canberra, Australia

#### Poster Presentation Viewing

- 11:30-12:30 **Poster Presentation Viewing in front of Room2**

#### Instrumentation, forecasting and early warning 1 Chair: Bruno Adriano

- 14:00-14:15 **e90039**  
**Estimation of tsunami response functions considering bathymetry in the pacific coast of Japan**  
**Takuya Miyashita**  
Disaster Prevention Research Institute, Kyoto University
- 14:15-14:30 **e90203**  
**Feasibility of space-based tsunami early warning system**  
**Masashi Kamogawa**  
Global Center for Asian and Regional Research, University of Shizuoka
- 14:30-14:45 **e90234**  
**25th March 2020 tsunami: Registration and numerical simulation**  
**Andrey Zaytsev**  
Special Research Bureau for Automation of Marine Researches FEB RAS, Yuzhno-Sakhalinsk, Russia

14:45-15:00

**e90110**

**An integrated simulation for estimation of casualties from earthquake and tsunami**

**Dawn Chenxi Han**

Department of Civil and Environmental Engineering, Waseda University

**Instrumentation, forecasting and early warning 2**

**Chair: Takuya Miyashita**

15:15-15:30

**e90211**

**Deep-learning meets tsunami forecasting:  
Predicting tsunami inundation features using deep-neural networks**

**Bruno Adriano**

Geoinformatics Unit, RIKEN Center for Advanced Intelligence Project (AIP)

15:30-15:45

**e90133**

**Operational use of tsunami source inversion in near-field tsunami warning by JMA**

**Hiroaki Tsushima**

Department of Seismology and Tsunami Research, Meteorological Research Institute, Japan Meteorological Agency

15:45-16:00

**e90206**

**Faster than real time tsunami warning with associated hazard uncertainties**

**Daniel Giles**

School of Mathematics and Statistics, University College Dublin, Dublin, Ireland /  
Department of Statistical Science, University College London, London, United Kingdom

16:00-16:15

**e90096**

**Tsunami damage assessment of bridges using single post-event SAR images**

**Fumio Yamazaki**

Disaster Resilience Research Division, National Research Institute for Earth Science and Disaster Resilience

**IUGG session**

16:30-16:40

**IUGG session-1  
Report from "Terminology WG"**

16:40-16:50

**IUGG session-2  
Report from "Science-based Tsunami Warning WG"**

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- 16:50-17:00    **IUGG session-3**  
**Report from "Tsunami Magnitude WG"**
- 17:00-17:10    **IUGG session-4**  
**Report from "GNSS Data for Tsunami Warning WG"**
- 17:10-17:20    **IUGG session-5**  
**Report from "Meteotsunami WG"**
- 17:20-17:30    **IUGG session**  
**Report from "Tsunami Data WG"**

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Room 2

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**Experimental methods**

**Chair: Taro Arikawa**

9:00-9:15

**e90012**

**Soil instability by tsunami inundation: Effects of an impermeable layer**

**Harry Yeh**

Civil Engineering, OregonState University

9:15-9:30

**e90092**

**New system for tsunami experiment using a pump-driven flow method**

**Rafael Aranguiz**

Department of Civil Engineering, UCSC / CIGIDEN

9:30-9:45

**e90057**

**Experimental study on effect of coastal dune against tsunami action to seawall**

**Tetsuya Okutani**

Graduate School of Engineering, Kyoto University, Kyoto, Japan

9:45-10:00

**e90043**

**Reproducibility of tsunami overflow experiments using Open FOAM**

**Daisuke Sawabe**

Faculty of Civil and Environmental Engineering, University of Waseda, Tokyo, Japan

**Interaction with structures**

**Chair: Taro Arikawa**

10:15-10:30

**e90182**

**On the flow conditions requiring detailed tree modeling to estimate the tsunami mitigation performance**

**Reika Nomura**

International Research Institute of Disaster Science, Tohoku University

10:30-10:45

**e90142**

**Experimental study on statistical characteristics of debris motion with different shapes**

**Riko Morita**

Department of Civil Engineering, Chuo University, Tokyo, Japan

10:45-11:00 **e90152**  
**ASCE 7-22 updated foundation provisions for tsunami resistant design of structures**  
**Mathew J Francis**  
Resilient Infrastructure, AECOM Technology Corporation

11:00-11:15 **e90088**  
**Laboratory study on effect of raising ground height behind dike on tsunami behavior**  
**Daiki Suzuki**  
Department of Civil and Environmental Engineering, Waseda University

### Poster Presentation Viewing

11:30-12:30 **Poster Presentation Viewing in front of Room2**

### Tsunami deposits and geological perspectives Chair: Daisuke Sugawara

14:00-14:15 **e90014**  
**Micropaleontological record of tsunami uprush and backwash in Holocene lagoon sequence facing the Nankai (Suruga) Trough coast, central Japan**  
**Osamu Fujiwara**  
Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology

14:15-14:30 **e90159**  
**Evidence of past tsunamis from mega and large earthquakes in Indian Ocean: Records from the last 8000 years, Andaman Islands India**  
**Javed N Malik**  
Department of Earth Sciences, Indian Institute of Technology Kanpur / ERI, University of Tokyo, Japan

14:30-14:45 **e90093**  
**Ainu livelihoods and the 1640 volcanic eruption and tsunami of Mt. Hokkaido-Komagatake**  
**Yukihito Nagaya**  
Date City Institute of Funkawan Culture, Date, Japan

14:45-15:00 **e90083**  
**Tohoku-oki's hidden tsunami deposits**  
**Piero Bellanova**  
Institute for Neotectonics and Natural Hazards, RWTH Aachen University / Institute for Geology and Geochemistry of Petroleum and Coal, RWTH Aachen University

## Field surveys

Chair: Ocal Necmioglu

- 15:15-15:30 **e90157**  
**Field survey findings of the October 30<sup>th</sup>, 2020 tsunami along the Turkish coast in the Eastern Aegean**  
**Gozde Guney Dogan**  
Civil Engineering Department, Middle East Technical University (METU), Ankara, Turkey
- 15:30-15:45 **e90034**  
**A fine-tuned pottery typoschronology for detailing prehistoric tsunamis: From Sanriku Coast of NE Japan as an example**  
**Mizuho Saitoh**  
Faculty of Humanities, Kyushu University, Fukuoka, Japan
- 15:45-16:00 **e90107**  
**Archaeological survey of the disaster in AD 869 Jōgan Tsunami in Kumanosaku and Sanno sites, in Miyagi, Japan**  
**Junichi Aihara**  
Department of liberal arts (Archaeology), Tohoku History Museum
- 16:00-16:15 **e90033**  
**Tsunami damage evaluation of Utatsu Ohashi Bridge**  
**Kenji Kosa**  
Civil Engineering, Kyushu Institute of Technology

## Sources and uncertainties

Chair: Gozde Guney Dogan

- 16:30-16:45 **e90227**  
**Landslide induced tsunami hazard at volcanoes – The case of Santorini Island**  
**Ocal Necmioglu**  
Kandilli Observatory and Earthquake Research Institute, Bogazici University, Istanbul, Turkey
- 16:45-17:00 **e90048**  
**Mass instabilities along the Nile deep-sea fan margin and their consequences in the Eastern Mediterranean Sea**  
**Filippo Zaniboni**  
Department of Physics and Astronomy "Augusto Righi", University of Bologna
- 17:00-17:15 **e90205**  
**Probabilistic quantification of tsunami current hazard using statistical emulation**  
**Devaraj Gopinathan**  
Department of Statistical Science, University College London

17:15-17:30

**e90085**

**Tsunami hazards in East Indonesia: Recent progress in earthquake/tsunami resilience and future directions**

**Mohammad Heidarzadeh**

Department of Civil & Environmental Engineering, Brunel University London, Uxbridge, UK