

The 3rd International Tsunami Field Symposium -Overall schedule-

9 April, 2010

17:00- **Registration available**

17:00-19:00 **Ice Breaker Party**

10 April, 2010 (Symposium)

9:30-12:05 **Oral session (morning)**

12:05-13:30 **Lunch time**

13:30-16:45 **Oral session (afternoon)**

16:45-18:15 **Poster session**

18:15-19:30 **Banquet**

11 April, 2010 (Symposium, Sendai Trip)

9:00-11:55 **Oral Session**

12:30-18:00 **Sendai field trip**

Overall schedule –continue–

12 April, 2010 (Sanriku Trip)

<Participants who will join Sanriku Trip>

8:40 **Leave Katahira Campus**

13 April, 2010 (Sanriku Trip)

18:30 **Arrive at Katahira Campus (or Sendai Station)**

<Participants who will join Okinawa Trip>

16:59 **Leave JR Shin-Hanamaki Station (Shinkansen Super Express Hayate no.24)**

19:47 **Arrive at JR Tokyo Station (Stay near the Haneda Airport)**

14 April, 2010 (Okinawa Trip)

6:25 **Leave Haneda Airport (JAL 71)**

9:40 **Arrive at Ishigaki Airport**

15 April, 2010 (Okinawa Trip)

All day field trip

16 April, 2010 (Okinawa Trip)

14:05 **Leave Ishigaki Airport (JAL614)**

14:55 **Arrive at Naha (Okinawa) Airport**

16:10 **Leave Naha Airport (JAL 916)**

18:30 **Arrive at Haneda Airport**

Oral Session

ROOM 1

-----10 April, 2010-----

Room 1: Session 1-1 (Chair: Bruce Richmond)

Time	No.	Presentation Title	Authors
9:30-	1-1	<u>Tsunami deposit from the 7.3 ka Kikai-Akahoya eruption preserved in the Yokoo midden, north Kyushu, west Japan</u>	<i>O. Fujiwara, H. Machida, J. Shiochi</i>
9:50-	1-2	<u>Recent field data on pre-Colombian tsunamis in the Southern Caribbean</u>	<i>M. Engel, H. Brückner, D. Kelletat, A. Scheffers, A. Vött</i>
10:10-	1-3	<u>Investigations of tsunami deposits on Kamchatka and Kuril Islands, Russia</u>	<i>T. Pinegina, J. Bourgeois</i>
10:30-	1-4	<u>Geochemical parameters of tsunami deposits offshore Phang Nga Province, Thailand</u>	<i>D. Sakuna, P. Feldens, K. Schwarzer, K. Stattegger</i>

10:50-11:05 Coffee Break (15 minutes)

Room 1: Session 1-2 (Chair: Tatiana Pinegina)

11:05-	1-5	<u>Three-dimensional hydrostatic numerical simulations on tsunami-induced sediment transport in a model harbor</u>	<i>N. Kihara, M. Matsuyama</i>
11:25-	1-6	<u>Modeling of the sediment transport by the 2004 Sumatra-Andaman tsunami in Lhoknga, Banda Aceh, Indonesia</u>	<i>A. R. Gusman, Y. Tanioka, T. Takahashi</i>
11:45-	1-7	<u>Prediction of maximum possible tsunami flooding using Terrestrial Laser Scanner techniques and geomatic analysis</u>	<i>G. Mastronuzzi, D. Capolongo, S. Ferilli, A. Marsico, M. Milella, L. Pennetta, C. Pignatelli, A. Piscitelli</i>

12:05-13:30 Lunch Time (85 minutes)

Room 1: Session 1-3 (Chair: Osamu Fujiwara)

13:30-	1-8	<u>Some subjects and problems of tsunamiite sedimentology</u> <u>(Invited talk)</u>	<i>T. Shiki</i>
14:10-	1-9	<u>The state of the art of tsunami geology (Invited talk)</u>	<i>J. Bourgeois</i>

14:50-15:05 Coffee Break (15 minutes)

Room 1: Session 1-4 (Chair: Giuseppe Mastronuzzi)

15:05-	1-10	<u>Boulder deposition in the Samoa Islands from the September 29, 2009 South Pacific tsunami</u>	B. M. Richmond, M. L. Buckley, B. E. Jaffe, S. Watt, G. R. Gelfenbaum, A. A. Apotsos, S. Etienne
15:25-	1-11	<u>Boulders moved by the 29 September 2009 Tsunami: Flow-Speed Estimates at Taga, Samoa</u>	R. Weiss, H. Fritz
15:45-	1-12	<u>Discrimination of tsunami and storm wave boulders at Ryukyu Islands, Japan</u>	K. Goto, K. Miyagi, F. Imamura
16:05-	1-13	<u>Analysis of large boulders along the coast of south-eastern Sicily: storm or tsunami deposits?</u>	C. Pirrotta, M. S. Barbano, F. Gerardi
16:25-	1-14	<u>Geological evidence of tsunami inundation in south-eastern Sicily: a record of the 365 A.D. Crete earthquake?</u>	F. Gerardi, M. S. Barbano, C. Pirrotta, P. M. De Martini, A. Smedile, S. Pinzi, P. Del Carlo

16:45-18:15 Poster Session (90 minutes)

18:15-19:30 Banquet (75 minutes)

-----11 April, 2010-----

Room 1: Session 1-5 (Chair: Klaus Schwarzer)

Time	No.	Presentation Title	Authors
9:00-	1-15	<u>Tsunami recurrence along the Andaman and Nicobar Islands subduction zone</u>	A. L. Prendergast, M. L. Cupper, K. Jankaew, Y. Sawai
9:20-	1-16	<u>Tsunami deposits from the west coast of Thailand: predecessors of the 2004 Indian Ocean tsunami-identification and dating</u>	H. Brückner, D. Brill, K. Jankaew, D. Kelletat, N. Klasen, A. Vött
9:40-	1-17	<u>Impacts of the 2004 Indian Ocean tsunami backwash offshore Pakarang Cape, Thailand</u>	P. Feldens, D. Sakuna, K. Schwarzer, K. Stattegger, P. Sompongchaiyikul, S. Pongpiajun
10:00-	1-18	<u>Impacts of 2004 Indian Ocean tsunami on mid continental shelf of Andaman Sea</u>	W. Szczuciński

10:20-10:35 Coffee Break (15 minutes)

Room 1: Session 1-6 (Chair: Witold Szczuciński)

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| 10:35- | 1-19 | <u>Tracing Tsunami Impacts on- and offshore in the Andaman Sea Region (TRIAS)</u> | K. Schwarzer, A. Snidvongs, C. Richter, H. Brückner, H. Oumeraci, H. Sterr, S. Khokiattiwong, W. Weinrebe |
| 10:55- | 1-20 | <u>Sources of run-up tsunami deposits: analysis based on the transportation of foraminiferal tests and hydrodynamic verification</u> | J. Uchida, S. Hasegawa, O. Fujiwara |
| 11:15- | 1-21 | <u>Numerical evaluation of the coral damages by the 2004 Indian Ocean tsunami at Surin and Similan islands, Thailand</u> | H. Kawamata, K. Goto, F. Imamura, S. Chavanich |

ROOM 2

-----10 April, 2010-----

Room 2: Session 2-1 (Chair: Yuichi Namegaya)

Time	No.	Presentation Title	Authors
9:30-	2-1	<u>Reconstruction of the 2009 Samoa Tsunami with a two-way nested, dispersive wave model</u>	<i>Y. Yamazaki, K. F. Cheung</i>
9:50-	2-4	<u>A rapid-response field survey of the 2009 Samoa earthquake tsunami in American Samoa</u>	<i>Y. Namegaya, S. Koshimura, Y. Nishimura, G. Fryer, A. Akapo, L. S. L. Kong</i>
10:10-	2-12	<u>Inspection of building damage by the 2009 Samoa tsunami</u>	<i>S. Koshimura, H. Gokon, Y. Namegaya, Y. Nishimura, Y. Nakamura, G. Flyer, A. Akapo, L. Kong</i>

10:50-11:05 Coffee Break (15 minutes)

Room 2: Session 2-2 (Chair: Shunichi Koshimura)

11:05-	2-5	<u>Resilience and Sustainability of Port Facilities (Invited talk)</u>	<i>Masanobu Shinozuka</i>
11:45-	2-8	<u>Building Damage Estimation to Earthquakes and Tsunamis Using Satellite SAR Imagery</u>	<i>M. Matsuoka, S. Koshimura, N. Nojima</i>

12:05-13:30 Lunch Time (85 minutes)

Room 2: Session 2-3 (Chair: Shunichi Koshimura)

Special session of the 2010 Chilean tsunami

13:30-	2-23	<u>The 2010 Chilean tsunami -Searching tsunami affected area by integration of numerical modeling and GIS analysis</u>	<i>S. Koshimura</i>
13:45-	2-24	<u>Field survey of the 2010 Chilean tsunami</u>	<i>F. Imamura, K. Fujima and T. Arikawa</i>
14:00-	2-25	<u>Tsunami Damage Area Detection from Satellite SAR Remote Sensing</u>	<i>M. Matsuoka</i>
14:15-	2-26	<u>Rapid-response field surveys of the 2010 Chilean earthquake tsunami along the Pacific coast from Fukushima to Shizuoka prefectures</u>	<i>Field survey team of the 2010 Chilean earthquake tsunami in Kanto district, Japan (Y. Namegaya)</i>

*The 3rd International Tsunami Field Symposium
Program and abstracts (Sendai, Japan, 10-11 April, 2010)*

- 10:35- 2-19 Interactions of leading tsunami waves with mangrove forests: A laboratory study with numerical simulations **Z. Huang**, Y. Yao, S. Y. Sim, A. Deng, Y. Yao, Q. Qiu
- 10:55- 2-20 Tree parameterization for modeling tsunami damping performance of mangrove forest **S. Husrin**, H. Oumeraci
- 11:15- 2-21 Tsunami attenuation due to coastal forest **A. B. Strusińska**, S. Husrin, H. Oumeraci
- 11:35- 2-22 Identification of tsunami evacuation problems on highly populated areas **M. Mück**, J. Post, S. Wegscheider, K. Zosseder, T. Riedlinger, G. Strunz, A. Muhari, H. Z. Anwar

ROOM 3

-----10 April, 2010-----

Room 3: Session 3-1 (Chair: Hideo Matsutomi)

Time	No.	Presentation Title	Authors
9:30-	3-1	<u>Tsunami hazards of far-field tsunamis in the South Pacific islands</u>	<i>H. Yanagisawa, Y. Shigihara</i>
9:50-	3-2	<u>New techniques for recent tsunami source studies applied to the 2007 Bengkulu tsunami in Indonesia, and 2009 Suruga Bay tsunami in Japan</u>	<i>Y. Tanioka, A. Gusman, Y. Namegaya</i>
10:10-	3-3	<u>Simulation of the 1771 Yaeyama earthquake tsunami propagation into the Yellow Sea</u>	<i>B. H. Choi, K. O. Kim, B. I. Min</i>
10:30-	3-4	<u>Tsunami magnitudes in Samoa, Tonga and New Zealand</u>	<i>T. Hatori</i>

10:50-11:05 Coffee Break (15 minutes)

Room 3: Session 3-2 (Chair: Yuichiro Tanioka)

11:05-	3-5	<u>Tsunami-trace distribution around building and its practical use</u>	<i>H. Matsutomi, K. Harada</i>
11:25-	3-6	<u>Applying empirical relationship of tsunami height between offshore and coastal stations for real-time tsunami information</u>	<i>Y. Hayashi</i>
11:45-	3-7	<u>Method of sharing common awareness regarding particular issues under wide-area catastrophic disaster—a case study of the Tonankai–Nankai earthquake tsunami disaster</u>	<i>Y. Okumura, S. Nagamatsu, Y. Kawata</i>

12:05-13:30 Lunch Time (85 minutes)

Room 3: Session 3-3 (Chair: Hironobu Kan)

13:30-	3-8	<u>Tsunami vertical evacuation with considering of potential damage by ground shaking in Padang, Indonesia</u>	<i>A. Muhari, S. Diposaptono, F. Imamura, S. Koshimura</i>
13:50-	3-9	<u>Tsunami hazard mitigation and countermeasures in Peru</u>	<i>E. Mas, F. Imamura, S. Koshimura</i>
14:10-	3-10	<u>Coastal zoning and evacuation site planning for tsunami mitigation using spatial analyses on GIS</u>	<i>A. A. D. Oktopura, K. Murakami, T. A. Argo</i>
14:30-	3-11	<u>Community preparedness level in facing disaster: A case of tsunami disaster threat in Cilacap city</u>	<i>I. Prasetiana, K. Murakami, L. P. Subanu</i>

14:50-15:05 Coffee Break (15 minutes)

Room 3: Session 3-4 (Chair: Fumihiko Imamura)

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| 15:05- | 3-12 | <u>Smong, Local knowledge of tsunami among the Simeulue community, Nangroe Aceh Darussalam</u> | <i>E. Yulianto, H. Yogaswara</i> |
| 15:25- | 3-13 | <u>Structure-preferred countermeasures after the Chile Tsunami of 1960 (Invited)</u> | <i>N. Shuto</i> |
| 16:05- | 3-14 | <u>Tsunami forecast and warning: Impacts of 1960 and 2004 tsunamis (Invited)</u> | <i>K. Satake</i> |

16:45-18:15 Poster Session (90 minutes)

18:15-19:30 Banquet (75 minutes)

-----11 April, 2010-----

Room 3: Session 3-5 (Chair: Yutaka Hayashi)

Time	No.	Presentation Title	Authors
9:00-	3-15	<u>Tsunami height poles to visualize past and future disasters</u>	<i>M. Sugimoto, F. Imamura, M. H. Pradono, I. Febrin</i>
9:20-	3-16	<u>Experience of Maldives at the 2004 Indian Ocean tsunami: toward the hazard mitigation in atoll nations</u>	<i>H. Kan, M. Riyaz, M. Ali</i>
9:40-	3-17	<u>Long term recovery from the 2004 Indian Ocean tsunami</u>	<i>N. Maki, N. Yamamoto, K. Huda</i>
10:00-	3-18	<u>Role of regional Geoscience organization for tsunami risk reduction and hazard mitigation in South and Southeast Asia</u>	<i>N. Chaimanee</i>

10:20-10:35 Coffee Break (15 minutes)

Room 3: Session 3-6 (Chair: Eko Yulianto)

10:35-	3-19	<u>An experimental study on tsunami generation due to landslides</u>	<i>T. Kakinuma, L. Liu, K. Nakamura</i>
10:55-	3-20	<u>Written records of historical tsunamis in the northeastern South China Sea -challenges associated with developing a new database</u>	<i>A. Y. A. Lau,, A. D. Switzer; D. Dominey-Howes, Y. Zong, J. C. Aitchison</i>
11:15-	3-21	<u>Estimating Impact of Historical Tsunamis in Asian/Oceanian and their mapping</u>	<i>A. Suppasri, T. Iwasaki, T. Asada, F. Imamura</i>

- 11:35- 3-22 A Trial Calculation of Effect on Disaster Reduction at Fishing Port Using Input-Output Analysis **K. Otsuka**, F. Imamura, S. Oka, K. Satoh, N. Asakawa, M. Hosaka,

Poster Session

Number	Presentation title	Authors
P1	<u>Tsunami hazard mitigation by using coastal forest in a practical field -Case study of Iwanuma-Natori coast in Sendai Bay-</u>	K. Imai , K. Harada, F. Imamura
P2	<u>Study on effective area by coastal forest with limited length against tsunami run up</u>	K. Harada , K. Uchiyama, Y. Matsumoto
P3	<u>Analysis of the reconstruction process of urban facilities in Indonesia based on recovery curves after the 2004 Indian Ocean tsunami</u>	K. Sugiyasu , O. Murao
P4	<u>Making tsunami hazard map through pTA and evaluating recognition at Higashi-Matsushima city in Japan</u>	H. Ukawa , N. Shishido, F. Imamura
P5	<u>Installation of the GPS tsunami monitoring system in the Sanriku coast</u>	I. Abe , F. Imamura
P6	<u>Endeavor to make widely known as well as educate about the knowledge on tsunami</u>	M. Yuki
P7	<u>Near-field tsunami forecasting from ocean bottom pressure and onshore GPS data</u>	H. Tsushima , R. Hino, H. Fujimoto, Y. Tanioka, F. Imamura
P8	<u>A development of tsunami monitoring system using GPS buoy</u>	Y. Terada , T. Kato, T. Nagai, S. Koshimura, H. Yoshida
P9	<u>Tsunamis affecting New Caledonia : a catalog from 1875 to 2009 based on field investigations and archive research</u>	A. Sahal
P10	<u>Were boulders around Hashigui-iwa, pacific side of central Japan, transported by tsunamis?</u>	H. Maemoku , A. Nagai, M. Shishikura, T. Echigo, Y. Namegaya
P11	<u>Why were tsunami boulders deposited below the high-tide line at Pakarang Cape, Thailand?</u>	K. Goto , K. Okada, F. Imamura
P12	<u>Massive <i>Porites</i> coral boulders cast shore by 1771 Meiwa tsunami, demonstrated by high-precision ²³⁰Th dating</u>	D. Araoka , M. Inoue, A. Suzuki, Y. Yokoyama, R. L. Edwards, H. Cheng, H. Matsuzaki, H. Kan, N. Shikazono, H. Kawahata
P13	<u>Distribution and characteristics of tsunami boulders at Miyara Bay of Ishigaki Island, Japan</u>	T. Shinozaki , K. Goto, K. Minoura, K. Okada, D. Sugawara, F. Imamura
P14	<u>Event deposits and geomorphology of the Lefkada - Preveza</u>	S. M. May , A. Vött, H.

- coastal zone, NW Greece - evidence of tsunami-induced coastal changes *Brückner, D. Sakellariou, A. Smedile, N. Klasen*
- P15 A numerical study of tsunami-induced erosion along the coast of Painan, Indonesia *Z. Huang, L. Li, Q. Qiu*
- P16 Recovery of spits eroded by the 2004 Indian Ocean tsunami along southwestern shore of Thailand *N. Koiwa, S. Sugisawa, H. Matsumoto, M. Kasai*
- P17 Sediment records of paleo-tsunamis in the last 4000 years at Shima Peninsula, central Japan *S. Fujino, H. Kimura, M. Shishikura, Y. Sawai, J. Komatsubara, Y. Namegaya*
- P18 Post-depositional changes of onshore 2004 tsunami deposits layer in Thailand -review of five years of sedimentological and geochemical monitoring *W. Szczuciński*
- P19 Tsunami deposits and tsunami modeling: how field work contributes to our understanding of earthquakes *J. Bourgeois, B. T. MacInnes, M. E. Martin*
- P20 Radiocarbon chronology of tsunami impacts on the Apulian coast (southern Italy) *G. Mastronuzzi, G. Quarta, A. Colaianni, C. Pignatelli, A. Caramia, M. D'Elia, L. Romaniello, L. Calcagnile, L. Schiavulli*
- P21 Holocene marine terraces as an evidence of repeated great earthquakes off western Myanmar *M. Shishikura, Y. Okamura, S. Fujino, K. Satake, T. T. Aung*
- P22 Tsunami inundation history along the Pacific coast in Miyagi and Fukushima prefectures, inferred from tsunami deposits *Y. Sawai, M. Shishikura*
- P23 Fault models of the AD 869 Jogan earthquake inferred from tsunami deposit and numerical simulation *Y. Namegaya, K. Satake, Y. Sawai, M. Shishikura, S. Yamaki*
- P24 Sediment distribution and inundation area by the AD 869 Jogan tsunami in Sendai Plain, Northeast Japan *D. Sugawara, F. Imamura, H. Matsumoto, K. Goto, K. Minoura*
- P25 Probabilistic tsunami hazard analysis in Thailand perspective *A. Suppasri, F. Imamura, S. Koshimura*
- P26 Tsunami Source of the 1960 Chilean Earthquake inferred from Tide Gauge Data *Y. Fujii, K. Satake*
- P27 Fault model of the 1771 Yaeyama earthquake and interplate coupling along the Ryukyu Trench *M. Nakamura*
- P28 Effect of wide fringing reefs on the estimation of the *K. Miyazawa, K. Goto, F.*

tsunami source model: A case study for the 1771 Meiwa *Imamura*

Tsunami at Ishigaki Island, Japan

- P29 Tsunami loading signature observed by broadband
Seismometer and Borehole Strainmeters *K. Takatsuka, S. Miura, Y. Ohta, T. Sato, I. Abe, F. Imamura*
- P30 Making of high definition animation of tsunami propagation *B. I. Min, K. O. Kim, B. H. Choi*
- P31 Start-up of a SATREPS project: Enhancement of earthquake
and tsunami disaster mitigation technology in Peru *F. Yamazaki, S. Nakai, Y. Maruyama, C. Zavala, Z. Aguilar, M. Estrada, S. Koshimura, T. Saito, S. Midorikawa, H. Yamanaka, H. Miura*