

J01. Monitoring of the cryosphere

Session: **J01-1**
 Session title: Monitoring of the cryosphere I
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 08:30 - 10:00
 Room: Room 403
 Chairs: Paul Winberry (Central Washington University)
 Masaki Kanao (National Institute of Polar Research)

Time	Title	Program No.
08:30	Seismic Tremors and their Relation to Cryosphere Dynamics in April 2015 around the Lutzow-Holm Bay, East Antarctica <u>Masaki Kanao</u>	J01-1-01
08:45	Repetitive cryoseismicity at the Fimbulisen Ice Shelf, East Antarctica <u>Myrto Pirli</u> , Sebastian Hainzl, Andreas Koehler, Johannes Schweitzer	J01-1-02
09:00	Seismology reveals ice sheet basal conditions <u>Genti Toyokuni</u> , Hiroshi Takenaka, Ryota Takagi, Masaki Kanao, Seiji Tsuboi, Yoko Tono, Dean Childs, Dapeng Zhao	J01-1-03
09:15	Complex Behavior of Glacial Earthquakes Reveal Subglacial Conditions <u>J. Paul Winberry</u> , Audrey Huerta, Richard Aster, Howard Conway, Michelle Koutnik, Sridhar Anandakrishnan, Andrew Nyblade, Douglas Wiens	J01-1-04
09:30	Advances in Design and Deployment of Seismic Arrays for Polar Regions <u>Audrey Huerta</u> , J. Paul Winberry, Bruce Beaudoin, Paul Carpenter, Doug Wiens, Andrew Nyblade, Rick Aster, Sridhar Anandakrishnan, Jason Hebert, Philip Chung, Kent Anderson, Susan Bilek, Terry Wilson	J01-1-05
09:45	Absolute Gravity Measurements in Antarctica from 2009 to 2015 <u>Larry Hothem</u> , Y. Rogister, A. Memin, J. OBrien, M. Amos, P. Gentle, T. Wilson, A. Capra	J01-1-06

Session: **J01-2**
 Session title: Monitoring of the cryosphere II
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 10:30 - 12:00
 Room: Room 403
 Chairs: Erik Ivins (Jet Propulsion Lab, California Institute of Technology)
 Masato Furuya (Hokkaido University)

Time	Title	Program No.
10:30	Inter-annual modulation of seasonal glacial velocity changes in the Eastern Karakorum detected by ALOS-1/2 data <u>Muhammad Usman</u> , Masato Furuya	J01-2-01
10:45	The influence of the Antarctic lithosphere on glacial isostatic adjustment modelling <u>Jorg Ebbing</u> , Folker Pappa, Valentina Barletta, Rene Forsberg, Fausto Ferraccioli, Bas Blank, Wouter V. D. Wal, Michael Kern	J01-2-02
11:00	Geodetic studies of GIA and ice sheet changes by JARE <u>Yoichi Fukuda</u> , Yuichi Aoyama, Koichiro Doi, Hideaki Hayakawa, Jun'ichi Okuno, Jun Nishijima, Takahito Kazama, Keiko Yamamoto, Toshihiro Higashi, Kazuo Shibuya	J01-2-03 invited
11:30	Using geodetic data to constrain contemporary GIA signals in Scandinavia and North America <u>K. Simon</u> , R. E. M. Riva	J01-2-04
11:45	5000 Year Advance and Retreat Models for West Antarctica and a Geodetically Based Solution for Mantle Viscosity and More Recent and Accelerated Cryospheric Loss <u>Erik Ivins</u> , Helene Seroussi, Lambert Caron, Surendra Adhikari, Eric Larour, Douglas Wiens, Andrew Lloyd, Mirko Scheinert	J01-2-05

Session: **J01-3**
 Session title: Monitoring of the cryosphere III
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 13:30 - 15:00
 Room: Room 403
 Chairs: Eric Larour (Jet Propulsion Laboratory/California Institute of Technology/NASA)
 Takahiro Abe (Hokkaido University)

Time	Title	Program No.
13:30	High resolution gradient fingerprint mapping and its impact on urban planning Eric Larour, <u>Erik Ivins</u> , Surendra Adhikari	J01-3-01
13:45	Sea level rise from the Greenland and Antarctica ice sheet melt from combined CryoSat and GRACE inversion <u>Rene Forsberg</u> , Sabastian Simonsen, Valentina Barletta	J01-3-02

14:00	A 25-year Arctic Sea-level Record (1991-2016) and first look at Arctic Sea Level Budget Closure <u>Ole Andersen</u> , Stine K. Rose, Marcello Passaro, Jerome Benveniste	J01-3-03
14:15	The regional high-precision ice flow velocity mapping using DInSAR and offset tracking methods <u>Kaoru Shiramizu</u> , Koichiro Doi, Yuichi Aoyama	J01-3-04
14:30	Glacier surge mechanism of Steele Glacier in Yukon, Canada: the 2011-2016 surging episode <u>Takahiro Abe</u> , Masato Furuya, Daiki Sakakibara	J01-3-05
14:45	Present-Day Ice Reservoir Mass Balance Estimates <u>C. K. Shum</u> , Jian Sun, Kun Shang, Junyi Guo, Yuchan Yi, Vibhor Agarwal, Chunli Dai, Santiago de La Pena, Ian Howat, Qiang Shen, Guoqing Zhang, Alexander Braun, Graham Cogley, Xiaoli Ding, Linghong Ke, Chungyen Kuo, Hyongki Lee	J01-3-06

Session: **J01-P**
Type: Poster
Date: Tuesday, August 1/ Wednesday, August 2, 2017
Time: 15:30 - 16:30
Room: Shinsho Hall

Title	Program No.
Classification of ice tremor recorded at Syowa Station in Antarctica <u>Yuya Tanaka</u> , Yoshihiro Hiramatsu, Yoshiaki Ishihara, Masaki Kanao	J01-P-01
GROUND DEFORMATION MAPPING BY ALOS1/2 INSAR: CASE STUDIES AT HERSCHEL ISLAND, CANADA, AND BATAGAIKA CRATER, SIBERIA <u>Kazuki Yanagiya</u> , Masato Furuya	J01-P-02
Temperature dependent seismic-frequency attenuation in ice and permafrost <u>Seth Saltiel</u> , Brian Bonner, Shan Dou, Jonathan Ajo-Franklin	J01-P-03

J02. Recent large and destructive earthquakes

Session: **J02-1**
Session title: Recent large earthquakes I
Type: Oral
Date: Wednesday, August 2, 2017
Time: 08:30 - 10:00
Room: Intl Conf Room (301)
Chairs: Manabu Hashimoto (Kyoto University)
Thorne Lay (University of California Santa Cruz)

Time	Title	Program No.
08:30	Complex seismicity and hypocenter distribution of the 2016 Kumamoto earthquakes, Kyushu, Japan, and their relation to the stress field and crustal structure <u>Hiroshi Shimizu</u> , Group for urgent joint seismic observation of the 2016 Kumamoto earthquakes	J02-1-01 invited
09:00	Detailed crustal deformation and fault ruptures of the 2016 Kumamoto Earthquake revealed by ALOS-2 SAR data <u>Tomokazu Kobayashi</u> , Hiroshi Yarai, Yu Morishita, Satoshi Kawamoto, Satoshi Fujiwara, Takayuki Nakano	J02-1-02
09:15	Ground motion simulation during the 2016 Kumamoto earthquake mainshock in near-fault area and Aso caldera <u>Kimiyuki Asano</u> , Tomotaka Iwata	J02-1-03
09:30	Simultaneous estimation of the dip angles and slip distribution on the two active faults of the 2016 Kumamoto earthquake through a weak non-linear inversion of InSAR data based on ABIC <u>Yukitoshi Fukahata</u> , Manabu Hashimoto	J02-1-04
09:45	Postseismic deformation of 2016 Kumamoto earthquake by the dense GNSS continuous observation <u>Shigeru Nakao</u> , Takeshi Matsushima, Takao Tabei, Makoto Okubo, Tadashi Yamashina, Takahiro Ohkura, Takuya Nishimura, Takuo Shibutani, Masahiro Teraishi, Takeo Ito, Takeshi Sagiya, Kenjiro Matsuhiro, Teruyuki Kato, Jun'ichi Fukuda, Atsushi Watanabe, Yusaku Ohta, Satoshi Miura, Tomotsugu Demachi, Hiroaki Takahashi, Mako Ohzono, Teruhiro Yamaguchi, Kazumi Okada	J02-1-05

Session: **J02-2**
 Session title: Recent large earthquakes II
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 10:30 - 12:00
 Room: Intl Conf Room (301)
 Chairs: Thorne Lay (University of California Santa Cruz)
 Manabu Hashimoto (Kyoto University)

Time	Title	Program No.
10:30	Comparison of macroseismic studies of two similar megathrust earthquakes in Ecuador <u>Juan-Carlos Singaucha</u> , Celine Beauval	J02-2-01
10:45	The 2016 Mw 7.8 Pedernales, Ecuador earthquake: aftershock sequence analysis using a minimum 1D velocity model Sergio Leon-Rios, Ana Luiza Martins, Amaya Fuenzalida-Velasco, Lidong Bie, Tom Garth, Pablo Gonzalez, James Holt, <u>Andreas Rietbrock</u> , Benjamin Edwards, Marc Regnier, Diego Mercerat, Michel Pernoud, Matthieu Perrault, Javier Santo, Alexandra Alvarado, Susan Beck, Anne Meltzer	J02-2-02
11:00	The 2015 Nepal earthquake: Evidence for a horizontal underthrusting of India beneath the Himalaya <u>Qi Wang</u> , Xuejun Qiao	J02-2-03
11:15	Is the 2013 Lushan earthquake (Mw=6.6) an independent event or a strong aftershock of the 2008 Wenchuan, China mainshock (Mw=7.9)? <u>Shoubiao Zhu</u>	J02-2-04
11:30	Coseismic deformation associated with the 2001 Ms 8.1 Kunlun earthquake from GPS and its tectonic implications <u>Kaihua Ding</u> , Qi Wang, Jeffrey Freymueller, Ping He, Shuiping Li, Yunguo Chen, Yangmao Wen, Caijun Xu, Shaomin Yang, Xuejun Qiao	J02-2-05

Session: **J02-3**
 Session title: Recent large earthquakes III
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 13:30 - 15:00
 Room: Intl Conf Room (301)
 Chairs: Thorne Lay (University of California Santa Cruz)
 Manabu Hashimoto (Kyoto University)

Time	Title	Program No.
13:30	Shattering a plate boundary: Complex multi-fault rupture during the 2016 Mw 7.8 Kaikoura earthquake, New Zealand <u>Ian Hamling</u> , Sigrun Hreinsdottir, Stephen Bannister, Eric Fielding, Bill Fry, Caroline Holden, Ana Kaiser, Nicola Litchfield, Christof Mueller, Laura Wallace, Tim Wright	J02-3-01 invited

14:00 **Surface Ruptures that could have been caused by aftershocks of the 2016 Kaikoura earthquake**
Sidao Ni

J02-3-02

14:15 **Crustal deformation of the 2016 Kaikoura earthquake, New Zealand, revealed by ALOS-2**
Yu Morishita, Tomokazu Kobayashi, Satoshi Fujiwara, Hiroshi Yarai

J02-3-03

14:30 **Complex rupture of the 2016 Kaikoura earthquake, New Zealand**
Simone Cesca, Joachim Saul, Yong Zang, Rongjiang Wang, Sebastian Hainzl, Vasiliki Mouslopoulou, Onno Oncken, Torsten Dahm

J02-3-04

14:45 **Seafloor displacement of the 13 November 2016 New Zealand earthquake estimated from tsunami waveforms and GPS data**
Aditya Gusman, Kenji Satake, Endra Gunawan

J02-3-05

Session: **J02-4**
 Session title: Recent large earthquakes IV
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 16:30 - 18:00
 Room: Intl Conf Room (301)
 Chairs: Shin-Chan Han (University of Newcastle)
 Thorne Lay (University of California Santa Cruz)

Time	Title	Program No.
16:30	Postseismic deformation following the 2016 Mw 7.8 Kaikoura earthquake, New Zealand <u>Sigrun Hreinsdottir</u> , Ian Hamling, Susan Ellis, Laura Wallace, Paul Denys, Neville Palmer, Lara Bland, Phaedra Upton, Charles Williams, Elisabetta D'Anastasio	J02-4-01
16:45	Intraslab rupture triggering megathrust rupture co-seismically in the December 17, 2016 Solomon Islands Mw 7.9 earthquake <u>Thorne Lay</u> , Lingling Ye, Charles Ammon, Hiroo Kanamori	J02-4-02
17:00	Anatomy of the source zones of large earthquakes in Japan <u>Dapeng Zhao</u> , Zhouchuan Huang, Xin Liu	J02-4-03
17:15	From Sumatra 2004 to Today, through Tohoku-Okii 2011: what we learn about Tsunami detection by ionospheric sounding <u>Giovanni Occhipinti</u> , Lucie Rolland, Julian Eisenbeis, Shingo Watada, Pierdaviide Coisson, Jonathan Makela, Philippe Lognonné, H��l��ne Hebert	J02-4-04
17:30	Linking Oceanic Tsunamis and Geodetic Gravity Changes of Large Earthquakes Yuning Fu, <u>Y. Tony Song</u> , Richard Gross	J02-4-05

17:45 **Postseismic gravity changes caused by viscoelastic relaxation after recent great earthquakes since 2004** J02-4-06
Shin-Chan Han, Jeanne Sauber, Fred Pollitz

Session: **J02-P**
 Type: Poster
 Date: Thursday, August 3/ Friday, August 4, 2017
 Time: 15:30 - 16:30 / 15:00 - 16:00
 Room: Shinsho Hall

Title	Program No.
Fault source model for the 2016 Kumamoto earthquake sequence based on ALOS-2/PALSAR-2 pixel-offset data: evidence for dynamic slip partitioning <u>Yuji Himematsu</u> , Masato Furuya	J02-P-01
Crustal deformation of the 2016 Kumamoto earthquake sequence (1) - Foreshocks - <u>Tomokazu Kobayashi</u> , Satoshi Kawamoto, Yohei Hiyama	J02-P-02
Crustal deformation of the 2016 Kumamoto earthquake sequence (2) - Mainshock - <u>Hiroshi Yarai</u> , Tomokazu Kobayashi, Yu Morishita, Satoshi Fujiwara	J02-P-03
Crustal deformation of the 2016 Kumamoto earthquake sequence (3) - Small displacement linear surface ruptures detected by ALOS-2 SAR - <u>Satoshi Fujiwara</u> , Hiroshi Yarai, Tomokazu Kobayashi, Yu Morishita, Takayuki Nakano, Basara Miyahara, Hiroyuki Nakai, Yuji Miura, Haruka Ueshiba, Yasuaki Kakiage, Hiroshi Une	J02-P-04
Relationship between subsurface structure and large-scale fissures in the northwestern region in Aso valley caused by the 2016 Kumamoto earthquake <u>Issei Doi</u> , Toshitaka Kamai, Satoshi Goto, Ryokei Azuma, Takahiro Ohkura, Hidehiko Muraio, Kenji Mima	J02-P-05
New Guidelines for the Seismic Forecast Information after Big Earthquakes in Japan <u>Noriko Kamaya</u> , Kiyoshi Takeda, Tetsuo Hashimoto	J02-P-06
Characterized Source Model of 2016 Meinong Earthquake, Taiwan, Inferred by the Empirical Green's Function Method <u>Yin-Tung Yen</u> , Yi-Ying Wen, Ming-Che Hsieh	J02-P-07
Slip Distribution of the 2015 Lefkada Earthquake and its Implications for Fault Segmentation Lidong Bie, Pablo Gonzalez, <u>Andreas Rietbrock</u>	J02-P-08
Characterized source model for estimating strong ground motions during 2016 Tottori-ken Chubu Earthquake <u>Susumu Kurahashi</u> , Kojiro Irikura, Ken Miyakoshi	J02-P-09

Changes of S-wave velocity and polarization anisotropy associated with the 2011 Tohoku Earthquake detected by the observation of the seismic ACROSS signals J02-P-10
Takahiro Kunitomo, Yasuhiro Asai, Hiroshi Ishii

A coupled model of stress-driven frictional afterslip and viscoelastic relaxation following the 2011 Tohoku-oki earthquake J02-P-11
Junichi Fukuda, Kaj Johnson

Tidal triggering of earthquakes after the 2011 Tohoku earthquake J02-P-12
Sachiko Tanaka

The ISC Event Bibliography: an update J02-P-13
Domenico Di Giacomo, Elizabeth Ball, Dmitry Storchak

The seismotectonic implications of source models of M-7 class earthquakes before and after the 2011 Tohoku-Oki Earthquake using offshore tsunami records J02-P-14
Tatsuya Kubota, Ryota Hino, Yusaku Ohta, Syuichi Suzuki

J03. Deformation of the lithosphere: Integrating seismology and geodesy through modelling

Session: **J03-1**
 Session title: Deformation of the lithosphere: Integrating seismology and geodesy through modelling I
 Type: Oral
 Date: Monday, July 31, 2017
 Time: 08:30 - 10:00
 Room: Room 401
 Chairs: Rob Govers (Utrecht University)
 Kevin Furlong (Penn State University)

Time	Title	Program No.
08:30	Pre-, Co-, and Post-seismic deformation of the 2016 Oct 21th M 6.6 Central Tottori earthquake <u>Takuya Nishimura</u> , Manabu Hashimoto, Yoshinobu Hosoi, Hiromu Sakaue, Yuji Ito	J03-1-01 invited

09:00	Postseismic deformation following the 1995 Kobe earthquake detected by space geodesy <u>Manabu Hashimoto</u> , Takuya Nishimura, Taku Ozawa, Hiroshi Mune Kane, Mikio Tobita	J03-1-02
09:15	Slow Slip Events in Cascadia: Observation and Hazard Analysis Derived from Sentinel-1 InSAR <u>Howard Zebker</u> , Yujie Zheng	J03-1-03
09:30	Hidden Earthquake Potential in Plate Boundary Transition Zones <u>Kevin Furlong</u> , Matthew Herman	J03-1-04
09:45	Interseismic Strain Partitioning in Nankai Subduction Zone, Southwest Japan: Block Movement and Internal Deformation of the Forearc Sliver <u>Takao Tabei</u> , Masahiko Shiomi, Takeo Ito, Makoto Okubo	J03-1-05

Session: **J03-2**
 Session title: Deformation of the lithosphere: Integrating seismology and geodesy through modelling II
 Type: Oral
 Date: Monday, July 31, 2017
 Time: 10:30 - 12:00
 Room: Room 401
 Chairs: Kevin Furlong (Penn State University)
 Rob Govers (Utrecht University)

Time	Title	Program No.
10:30	Postseismic Deformation Following the 2002 Mw7.9 Denali Fault Earthquake <u>Jeffrey Freymueller</u> , Hugh Harper, Yan Hu	J03-2-01 invited
11:00	Estimation of spatiotemporal distribution of interplate slip after the 2003 Tokachi-oki earthquake incorporating viscoelastic relaxation <u>Yuji Itoh</u> , Takuya Nishimura	J03-2-02
11:15	Reconciling short and long term observations of megathrust cycles at subduction zones <u>Rob Govers</u> , Kevin Furlong	J03-2-03
11:30	Heterogeneous interseismic coupling along the Peruvian subduction zone and rigid motion of the Peruvian Sliver <u>Juan Carlos Villegas-Lanza</u> , Mohamed Chlieh, Olivier Cavalie, Hernando Tavera, Patrice Baby, Jose Chire, Jean-Mathieu Nocquet	J03-2-04
11:45	Crustal deformation and surface kinematics after the 2010 earthquakes in Latin America <u>Laura Sanchez</u> , Hermann Drewes	J03-2-05

Session: **J03-3**
 Session title: Deformation of the lithosphere: Integrating seismology and geodesy through modelling III
 Type: Oral
 Date: Tuesday, August 1, 2017
 Time: 08:30 - 10:00
 Room: Room 401
 Chairs: Rob Govers (Utrecht University)
 Kevin Furlong (Penn State University)

Time	Title	Program No.
08:30	Modeling lithospheric tectonics with space geodesy: the problem of timescales <u>Mian Liu</u>	J03-3-01
08:45	Anisotropic horizontal thermal contraction of young oceanic lithosphere inferred from stress release by oceanic intraplate earthquakes <u>Ryohei Sasajima</u> , Takeo Ito	J03-3-02
09:00	GPS observation of Biot's slow wave in the Earth's crust triggered by Hurricane Sandy's storm surge <u>Geoffrey Blewitt</u> , Jinhai Zhang, William E. Holt, Zhenxing Yao	J03-3-03
09:15	Performance of 3-D Surface Displacement Measurement from Sub-pixel Correlation of Optical Imagery and InSAR: a Multi-Sensor Approach <u>Dewan Mohammad Enamul Haque</u> , Yasser Magsoudi Mehrani, ASM Maksud Kamal	J03-3-04
09:30	Lithosphere dynamics and earthquake simulation: implication for seismic hazard analysis <u>Alik Ismail-Zadeh</u> , Alexander Soloviev, Vladimir Sokolov	J03-3-05

Session: **J03-P**
 Type: Poster
 Date: Tuesday, August 1/ Wednesday, August 2, 2017
 Time: 15:30 - 16:30
 Room: Shinsho Hall

Title	Program No.
Intraplate Seismicity in Fennoscandian Shield <u>Annakaisa Korja</u> , Marja Uski, <u>Timo Tiira</u>	J03-P-01
Analysis of Detailed Crustal Strains due to the Dense GNSS Array in the Tokai Region, Central Japan <u>Teruyuki Kato</u> , Hiromu Sakaue, Takuya Nishimura, Ryoya Ikuta, Yasushi Harada	J03-P-02
The topography of the lithosphere-asthenosphere boundary beneath the Korean Peninsula from S receiver functions <u>Sang-Hyun Lee</u> , Junkee Rhie, Tae-Seob Kang, Seongryong Kim, Hyun Jae Yoo, Won Sang Lee, Yongcheol Park	J03-P-03

J04. Geohazard early warning systems

Session: **J04-1**
 Session title: Geohazard early warning systems I
 Type: Oral
 Date: Thursday, August 3, 2017
 Time: 08:30 - 10:00
 Room: Intl Conf Room (301)
 Chairs: Yih-Min Wu (National Taiwan University)
 Mitsuyuki Hoshiba (Meteorological Research
 Institute, JMA)

Time	Title	Program No.
08:30	ShakeAlert@taiwan <u>Yih-Min Wu</u> , Ming Yang, TC Huang	J04-1-01 invited
09:00	Challenges for implementing Earthquake Early Warning: A Case Study in Nicaragua Frederick Massin, <u>John Francis Clinton</u> , Maren Boese, Carlo Virgilio Cauzzi, Wilfried Strauch	J04-1-02
09:15	Reducing Digitiser Latency for Earthquake Early Warning: New Strategies for Seismic Hardware <u>Clare Sweeney</u> , Neil Watkiss	J04-1-03
09:30	A new methodology for Earthquake Early Warning (EEW) by a high-dense seismic network deployed at interstation distance of less than 5 km <u>Kenji Kanjo</u>	J04-1-04

Session: **J04-2**
 Session title: Geohazard early warning systems II
 Type: Oral
 Date: Thursday, August 3, 2017
 Time: 10:30 - 12:00
 Room: Intl Conf Room (301)
 Chairs: Yusaku Ohta (Tohoku University)
 Yih-Min Wu (National Taiwan University)

Time	Title	Program No.
10:30	Magnitude scaling relationships from the first 3s of P-wave arrivals in Mainland of China <u>Jindong Song</u> , Dongwang Tao, Shanyou Li, Qiang Ma, Haiying Yu	J04-2-01
10:45	A Fast Algorithm for Earthquake Early Warning Systems Based on the Energy release of P Waves in the Interval tS-tP Armando Cuellar, <u>Gerardo Suarez</u> , Juan Manuel Espinosa-Aranda	J04-2-02
11:00	Seismogeodesy for Rapid Earthquake Magnitude Estimation <u>Dara Goldberg</u> , Yehuda Bock, Diego Melgar	J04-2-03

11:15 **Determination of warning earthquake magnitude from the initial P-wave recordings based on half periods and characteristic periods**
Dongwang Tao, Qiang Ma, Jindong Song, Haiying Yu, Jiang Wang, Shanyou Li

J04-2-04

11:30 **Prediction of the Magnitude and Epicentral Distance from a Single Seismic Record, a Case Study of Ahar-Varzaghan Earthquake**
Majid Mahood

J04-2-05

Session: **J04-3**
 Session title: Geohazard early warning systems III
 Type: Oral
 Date: Thursday, August 3, 2017
 Time: 13:30 - 15:00
 Room: Intl Conf Room (301)
 Chairs: Mitsuyuki Hoshiba (Meteorological Research
 Institute, JMA)
 Hiroaki Tsushima (Meteorological Research
 Institute, Japan Meteorological Agency)

Time	Title	Program No.
13:30	Testing of GMPEs for absolute velocity response spectra for earthquake early warning of long-period ground motion intensity in Japan <u>Yadab P. Dhakal</u> , Wataru Suzuki, Takashi Kunugi, Shin Aoi	J04-3-01
13:45	Real-time prediction of ground shaking without source information: Data assimilation and simulation of seismic wave propagation for Earthquake Early Warning <u>Mitsuyuki Hoshiba</u> , Masashi Ogiso	J04-3-02
14:00	Real-Time Ground Motion Prediction based on Radiative Energy Transfer using Front-Site Waveform Information and Data Assimilation for the Application to Regional Earthquake Early Warning <u>Mike Lindner</u> , Masato Motosaka	J04-3-03
14:15	Propagation of local undamped motion (PLUM) method and its improvement using P-phase discrimination for more rapid earthquake early warning based on wavefield-estimation approaches <u>Yuki Kodera</u>	J04-3-04
14:30	Recent advances in tsunami warning and earthquake early warning of the Japan Meteorological Agency after the 2011 Great Tohoku Earthquake and Tsunami <u>Satoshi Harada</u>	J04-3-05 invited

Session: **J04-4**
 Session title: Geohazard early warning systems IV
 Type: Oral
 Date: Thursday, August 3, 2017
 Time: 16:30 - 18:00
 Room: Intl Conf Room (301)
 Chairs: Hiroaki Tsushima (Meteorological Research Institute, Japan Meteorological Agency)
 Naotaka Yamamoto (NIED)

Time	Title	Program No.
16:30	Geo-hazard early warning systems: A UNESCO perspective Jair Torres, Margherita Fanchiotti, John Clinton	J04-4-01
16:45	Real-Time Tsunami Inundation Forecast System using NIED S-net Shin Aoi , Naotaka Yamamoto, Wataru Suzuki, Kenji Hirata, Hiromitsu Nakamura, Takashi Kunugi, Tomohiro Kubo	J04-4-02 invited
17:15	New Insights on Tsunami Genesis and Energy Source Y. Tony Song , Soomon Yim, Ali Mohtat	J04-4-03
17:30	Synthesis of Offshore Tsunami Records and Inundation Including Seismic Waves and Tsunami: Anticipated Nankai Trough Earthquakes, Southwest, Japan Tatsuhiko Saito , Toshitaka Baba, Shunsuke Takemura, Eiichi Fukuyama	J04-4-04
17:45	Rapid estimation of tsunami source location based on Tsunami Centroid Location (TCL) using NIED oceanfloor observation networks Naotaka Yamamoto , Takeshi Nakamura, Shin Aoi, Wataru Suzuki, Narumi Takahashi	J04-4-05

Session: **J04-5**
 Session title: Geohazard early warning systems V
 Type: Oral
 Date: Friday, August 4, 2017
 Time: 08:30 - 10:00
 Room: Intl Conf Room (301)
 Chairs: Naotaka Yamamoto (NIED)
 Y. Tony Song (NASA Jet Propulsion Laboratory)

Time	Title	Program No.
08:30	Tsunami data assimilation including effects of coseismic deformation for real-time tsunami forecasting using pressure gauges Takuto Maeda	J04-5-01
08:45	A fast tsunami data assimilation approach on the 2012 Haida Gwaii earthquake: based on the employment of Green's function Yuchen Wang , Kenji Satake, Takuto Maeda	J04-5-02
09:00	Evaluating the efficiency of a tsunami warning system to recover a tsunami source based on the r-resolution method Tatyana Voronina , Alex Romanenko, Artem Loskutov	J04-5-03

09:15 **Improvement of tsunami-forecasting method based on tsunami inversion: small-size and large-amplitude tsunamis**
[Hiroaki Tsushima](#)

09:30 **Near-field tsunami forecasting from offshore pressure data in association with the earthquake early warning**
Akiko Horiuchi, Ryota Hino, [Yusaku Ohta](#), Hiroaki Tsushima

09:45 **Airborne observations with a nadir-pointing radar altimeter for a great tsunami detection**
[Tomoyuki Hirobe](#), Niwa Yoshihiro, Takahiro Endoh, Daisuke Inazu, Takero Yoshida, Hidee Tatehata, Akitsugu Nadai, Takuji Waseda, Toshiyuki Hibiya

Session: **J04-6**
 Session title: Geohazard early warning systems VI
 Type: Oral
 Date: Friday, August 4, 2017
 Time: 10:30 - 12:00
 Room: Intl Conf Room (301)
 Chairs: Y. Tony Song (NASA Jet Propulsion Laboratory)
 Jianghui Geng (Wuhan University)

Time	Title	Program No.
10:30	Developing a Rapid Tsunami Response System: Application to South America Region Bruno Adriano , Shunichi Koshimura	J04-6-01
10:45	The Operational Result for GEONET Real-time Analysis System for Rapid Finite Fault Modeling Naofumi Takamatsu , Satoshi Kawamoto, Yohei Hiyama, Satoshi Abe, Yusaku Ohta, Takuya Nishimura	J04-6-02
11:00	Real-time multi-GNSS precise point positioning for earthquake and tsunami early warning over Asia-Pacific regions Jianghui Geng , Shaoming Xin, Xiaotao Li, Jiang Guo, Xingyu Chen	J04-6-03
11:15	Real-Time Detection of Tsunami Ionospheric Disturbances with Stand-Alone GNSS Receivers Giorgio Savastano , Attila Komjathy, Olga Verkhoglyadova, Yong Wei, Augusto Mazzoni, Mattia Crespi	J04-6-04
11:30	Inversion of tsunami and sea level uplift from GNSS-TEC: toward a breakthrough for tsunami monitoring systems? Philippe Lognonne , Virgile Rakoto, Khaled Khelifi, Lucie Rolland, Elvira Astafyeva, Pierdavide Coisson, Giovanni Occhipinti, Carene Larmat, Dimitri Komatitsch	J04-6-05
11:45	Possibility of real-time volcanic plume monitoring using GNSS phase residual and SNR data Yusaku Ohta , Masato Iguchi	J04-6-06

Session: **J04-7**
 Session title: Geohazard early warning systems VII
 Type: Oral
 Date: Friday, August 4, 2017
 Time: 13:30 - 15:00
 Room: Intl Conf Room (301)
 Chairs: Jianghui Geng (Wuhan University)
 Yusaku Ohta (Tohoku University)

Time	Title	Program No.
13:30	Withdrawn	J04-7-01
13:45	Dynamic of aquifer compaction: Insight from continental-scale Sentinel-1 InSAR survey <u>Mahmud Haghshenas Haghghi</u> , Mahdi Motagh	J04-7-02
14:00	Panel Discussion The Promise and Challenges of Seismo-Geodesy for Earthquake and Tsunami Early Warning (IUGG GeoRisk Commission Sponsorship) Moderators: John LaBrecque, John Rundle Panelists: Gerald Bawden, Jeffrey Freymuller, Jianghui Geng, Yusaku Ohta, Diego Melgar, Sebastien Riquelme	

Session: **J04-P**
 Type: Poster
 Date: Thursday, August 3/ Friday, August 4, 2017
 Time: 15:30 - 16:30 / 15:00 - 16:00
 Room: Shinsho Hall

Title	Program No.
Real-Time Seismological Monitoring System in Northern Sakhalin <u>Igor V. Matveev</u> , Vera V. Bykova, Alexander G. Mikhin, Ruben E. Tatevossian	J04-P-01
An Earthworm based Earthquake Early Warning System with Integrated GMPEs and IPEs for Southwest Iberian Peninsula <u>Jose Antonio Jara</u> , Nuria Romeu, Xavier Goula, Yolanda Colom, Antoni Roca	J04-P-02
Numerical shake prediction incorporating heterogeneous structure: the 2016 Kumamoto Earthquake <u>Masashi Ogiso</u> , Mitsuyuki Hoshiba, Azusa Shito, Satoshi Matsumoto	J04-P-03
Waveform matching for the ocean bottom pressure data toward real-time tsunami forecast <u>Wataru Suzuki</u> , Shin Aoi, Naotaka Yamamoto	J04-P-04
Development of semi-real-time tsunami calculation system for ocean-bottom pressure gauge stations in southwestern and northeastern Japan <u>Takeshi Nakamura</u> , Narumi Takahashi, Wataru Suzuki, Naotaka Yamamoto	J04-P-05

Sea level observations in the coasts of the Mexican Pacific of the tsunami caused by the 2011 Tohoku Earthquake
Octavio Gomez-Ramos, Jorge Zavala-Hidalgo, Angel Ruiz-Angulo, Felipe Hernandez-Maguey, Miriam Zarza-Alvarado, Jose Santiago-Santiago, Valente Gutierrez-Quijada

J04-P-06

Decay Properties of Bay Oscillations Induced by the Tsunami of Nankai-Trough Earthquake
Yusuke Oishi, Takashi Furumura, Fumihiko Imamura, Kei Yamashita, Daisuke Sugawara

J04-P-07

Real-time correction of tsunami site effect by frequency-dependent tsunami-amplification factor
Hiroaki Tsushima

J04-P-08

Revisiting the 1985 M8.1 Michoacan earthquake: Tsunami simulations and synthetic GPS data to test rapid response
Angel Ruiz-Angulo, Diego Melgar, Carlos Mendoza

J04-P-09

REGARD: GNSS-based rapid finite fault modeling system
Satoshi Kawamoto, Yohei Hiyama, Satoshi Abe, Naofumi Takamatsu, Yusaku Ohta, Takuya Nishimura, Masaru Todoriki

J04-P-10

Accuracy of a continuous/on-demand GPS/Acoustic seafloor positioning using a slackly moored buoy in the Kuroshio region
Misae Imano, Motoyuki Kido, Yusaku Ohta, Narumi Takahashi, Tatsuya Fukuda, Hiroshi Ochi, Chie Honsho, Ryota Hino

J04-P-11

J05. Crustal dynamics: Multidisciplinary approach to seismogenesis

Session: **J05-1**
 Session title: Crustal dynamics: Multidisciplinary approach to seismogenesis I
 Type: Oral
 Date: Tuesday, August 1, 2017
 Time: 13:30 - 15:00
 Room: Room 501
 Chairs: Takeshi Sagiya (Nagoya University)
 Kuo-Fong Ma (National Central University)

Time	Title	Program No.
13:30	Southern Costa Rica and the Next Decade: A Spatial and Temporal Opportunity for an International Subduction Zone Observatory <u>Marino Protti</u> , Cyril Muller	J05-1-01
13:45	Spatio-temporal variation of the postseismic deformation of the 2011 off the Pacific coast of Tohoku Earthquake (M9.0) detected by means of terrestrial and seafloor observations <u>Takeshi Iinuma</u> , Yusaku Ohta, Satoshi Miura, Jun Muto, Fumiaki Tomita, Motoyuki Kido, Ryota Hino	J05-1-02
14:00	Stress field around fault zones of the 2016 Kumamoto earthquake sequence (Mj7.3) inferred from moment tensor data from 1996 to 2016 <u>Satoshi Matsumoto</u> , Yusuke Yamashita, Manami Nakamoto, Masahiro Miyazaki, Shin-ichi Sakai, Yoshihisa Iio, Kazuhiko Goto, Tomomi Okada, Mako Ohzono, Toshiko Terakawa, Masahiro Kosuga, Masayuki Yoshimi, Youichi Asano	J05-1-03
14:15	Effects of Postseismic Stress Redistribution of the 2011 Tohoku Earthquake on Fault Activities <u>Yan Hu</u> , Roland Burgmann, Naoki Uchida, Brent Delbridge, Kelin Wang	J05-1-04
14:30	Modeling deformation processes of the island arc crust and mantle during the postseismic period of the Tohoku-oki earthquake <u>Bunichiro Shibazaki</u> , Satoshi Miura, Akemi Noda, Takeshi Iinuma, Takumi Matsumoto	J05-1-05
14:45	Frictional strength of plate interfaces inferred from numerical simulations of stress fields for oceanic plates: Application to the North American-Pacific plate interface off northeast Japan <u>Akemi Noda</u> , Mitsuhiro Matsu'ura	J05-1-06

Session: **J05-2**
 Session title: Crustal dynamics: Multidisciplinary approach to seismogenesis II
 Type: Oral
 Date: Tuesday, August 1, 2017
 Time: 16:30 - 18:00
 Room: Room 501
 Chairs: Hiroyuki Noda (Kyoto University)
 Takeshi Sagiya (Nagoya University)

Time	Title	Program No.
16:30	A unified representation of Earth's quasi-dynamic deformation processes <u>Sylvain Barbot</u>	J05-2-01 invited
17:00	Rheological Structure Beneath Java Island after the 2006 Java Tsunami Earthquake Based on GPS Data <u>Endra Gunawan</u> , Irwan Meilano, Hasanuddin Z. Abidin, N. Rahma Hanifa, Rio Raharja, Susilo Susilo, Joni Efendi	J05-2-02
17:15	Afterslip and Viscoelastic Relaxation Model Following The 2010 Mentawai Earthquake Deduced from Postseismic Surface Deformation <u>Mohammad Yuzariyadi</u> , Irwan Meilano, Endra Gunawan, Kosuke Heki	J05-2-03
17:30	Reciprocal relationship between seismically estimated slip rates and geodetically estimated slip-deficit rates at plate interfaces: Physical interpretation and logical consequence <u>Mitsuhiro Matsu'ura</u> , Shunichi Nomura, Yoshihiko Ogata, Naoki Uchida	J05-2-04
17:45	Characteristics of spatiotemporal variation of hypocenters and the diversity of waveforms of deep low-frequency earthquakes in northeastern Japan <u>Masahiro Kosuga</u>	J05-2-05

Session: **J05-3**
 Session title: Crustal dynamics: Multidisciplinary approach to seismogenesis III
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 08:30 - 10:00
 Room: Room 501
 Chairs: Kuo-Fong Ma (National Central University)
 Takeshi Sagiya (Nagoya University)

Time	Title	Program No.
08:30	Spatial heterogeneity of crustal stress <u>Yoshihisa Iio</u>	J05-3-01 invited
09:00	Fault rocks and paleostress fields in the San-in shear zone, western Japan <u>Hideto Uchida</u> , Hideki Mukoyoshi	J05-3-02

09:15	Three-dimensional seismic velocity structure beneath the northern South Island, New Zealand from dense seismic observation <u>Tomomi Okada</u> , Yoshihisa Iio, Satoshi Matsumoto, Stephen Bannister, Shiro Ohmi, Masumi Yamada, Shintaro Horiuchi, Tsutomu Miura, Tadashi Sato, Jarg Pettinga, Francesca Ghisetti, Richard Sibson	J05-3-03
09:30	3d distribution of fluids and their origins in a seismogenic zone, Northern Miyagi, NE Japan Zenshiro Saito, <u>Yasuo Ogawa</u> , Masahiro Ichiki, Hideyuki Satoh	J05-3-04
09:45	A new temperature proxy on faults during earthquake by using maturity of carbonaceous materials: Kinetic effect on the maturation <u>Shunya Kaneki</u> , Tetsuro Hirono	J05-3-05

Session: **J05-4**
 Session title: Crustal dynamics: Multidisciplinary approach to seismogenesis IV
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 10:30 - 12:00
 Room: Room 501
 Chairs: Takeshi Sagiya (Nagoya University)
 Kuo-Fong Ma (National Central University)

Time	Title	Program No.
10:30	GPS VELOCITY FIELD IN THE NORTHWESTERN CORNER OF SOUTH AMERICA <u>Hector Mora-Paez</u> , James Kellogg, Jeff Freymueller, Dave Mencin, Rui Fernandes da Silva, Leonardo Cardona-Piedrahita, Sindy Lizarazo, Leidy Giraldo, Fredy Diaz-Mila	J05-4-01 invited
11:00	Taiwan vertical velocity field from precise leveling observations, 2000-2015 <u>Kwo-Hwa Chen</u> , Kuo-En Ching	J05-4-02
11:15	Observation of aseismic crustal deformation in Taiwan by analysis of InSAR and GPS data <u>Kotaro Tsukahara</u> , Youichiro Takada	J05-4-03
11:30	Rapid crustal deformation in SW Taiwan caused by the interaction between active faults and reactivated mud diapirs <u>Kuo-En Ching</u> , Yuan-Hsi Lee, Ruey-Juin Rau, Ming Yang, Yi-Jhen Hung, Song-Chuen Chen, Lingho Chung, Jei-Ching Hung, Chien-Liang Chen	J05-4-04
11:45	Performance of VADASE single-frequency GPS solutions in the 2016 M 6.5 Meinong, Taiwan, earthquake <u>Ruey-Juin Rau</u> , Choon-Muar Ker, Giorgio Savastano, Mattia Crespi	J05-4-05

Session: **J05-5**
 Session title: Crustal dynamics: Multidisciplinary approach to seismogenesis V
 Type: Oral
 Date: Wednesday, August 2, 2017
 Time: 13:30 - 15:00
 Room: Room 501
 Chairs: Hiroyuki Noda (Kyoto University)
 Kuo-Fong Ma (National Central University)

Time	Title	Program No.
13:30	Early recurrence of an M6 intraplate earthquake (5.8 years) observed in northern Kanto region, Japan, after the 2011 Tohoku-oki earthquake <u>Yo Fukushima</u> , Shinji Toda, Satoshi Miura	J05-5-01
13:45	Crustal deformation process in Mid-Niigata as observed by dense GPS network before and after the 2011 Tohoku-oki earthquake <u>Angela Meneses-Gutierrez</u> , Takeshi Sagiya, Shutaro Sekine	J05-5-02
14:00	Crustal deformation in and around the Atotsugawa fault before and after the Tohoku-Oki earthquake <u>Tomomi Inamatsu</u> , Youichiro Takada, Takeshi Sagiya, Takuya Nishimura	J05-5-03
14:15	The role of the lower crust in crustal deformation of the Japan island arc <u>Takeshi Sagiya</u> , Angela Meneses-Gutierrez, Xuelei Zhang, Yumi Shimoyama, Kouki Kumagai	J05-5-04
14:30	Importance of fault rheology around brittle-plastic transition in long-term slip rate of major faults <u>Hiroyuki Noda</u>	J05-5-05
14:45	Seismicity and Geothermal activities in the Upemba Rift Basin (SE of the DR Congo) <u>Kadima Kabongo</u> , Kipata Mwabanua	J05-5-06

Session: **J05-P**
 Type: Poster
 Date: Tuesday, August 1/ Wednesday, August 2, 2017
 Time: 15:30 - 16:30
 Room: Shinsho Hall

Title	Program No.
Investigation of remote earthquake triggering after the 2011 M9.0 Tohoku-oki earthquake <u>Anca Opris</u> , Bogdan Enescu, Yuji Yagi	J05-P-01
Simulation of postseismic deformation caused by the 2011 Tohoku-Oki earthquake <u>Hisashi Suito</u>	J05-P-02
Spatiotemporal distribution of locking and aseismic slips prior to the 2011 Tohoku-oki earthquake <u>Momo Tanaka</u> , Shoichi Yoshioka, Yukiko Nishino	J05-P-03
Source processes of the M6-class repeating earthquakes which occurred in northern Ibaraki Prefecture, Japan, on 2011 and 2016 <u>Kazuhito Hikima</u>	J05-P-04

Numerical Simulation of Plate Deformation and Stress in the Andaman Subduction Zone R. Yadav, VM Tiwari	J05-P-05	The gravity anomalies analysis over the active reverse fault zones in Japan Nayuta Matsumoto , Yoshihiro Hiramatsu, Akihiro Sawada, Shinsuke Okada, Ryo Honda, Toshiyuki Tanaka	J05-P-15
The 2016 M6.5 Pidie Jaya Earthquake, Aceh Province, Indonesia; Which Fault? N. Rahma Hanifa , Irwan Meilano, Masyhur Irsyam, Agustan Agustan, Daryono Daryono, Danny H. Natawidjaja, Wahyu Triyoso, Sri Widiyantoro, Sri Hidayati, Mohamad Ridwan, Susilo Susilo, Endra Gunawan, Amir H. Isa, Supartoyo Supartoyo, Andri C. Utomo, Gayatri I. Marliyani, Bagoes D. Ramdhani, Refi R. Ramadian, Suchi Rahmadani, Alwidya A. Safitri	J05-P-06	Influence of water on rheological properties of feldspar aggregates under the lower crustal temperature and pressure Masanori Kido , Jun Muto, Sanae Koizumi, Hiroyuki Nagahama	J05-P-16
Regional stress field inferred from focal mechanisms obtained by dense seismic observation in the northern South Island, New Zealand Tadashi Sato , Tomomi Okada, Yoshihisa Iio, Satoshi Matsumoto, Stephen Bannister, Shiro Ohmi, Masumi Yamada, Tsutomu Miura, Jarg Pettinga, Francesca Ghisetti, Richard Sibson	J05-P-07		
Crustal stress and strain inversion of the Taiwan orogen using a mixed linear-nonlinear Bayesian approach Ray Y. Chuang	J05-P-08		
Afterslip and viscoelastic components observed in surface gravity change after the 2011 Great Tohoku earthquake Shuheii Okubo , Xinlin Zhang, Yoshiyuki Tanaka, Yuichi Imanishi, Satoshi Miura, Sadato Ueki, Hiromitsu Oshima, Tokumitsu Maekawa, Kazumi Okada, Miwako Ando	J05-P-09	Session: J06-1 Session title: The spectrum of fault-zone deformation processes (from slow slip to earthquake) I Type: Oral Date: Monday, July 31, 2017 Time: 08:30 - 10:00 Room: Intl Conf Room (301) Chairs: Tadafumi Ochi (AIST) Hitoshi Hirose (Kobe University)	
The spatial distribution of the stress ratio in the aftershock area of the 2000 Western Tottori Earthquake Takaki Iwata	J05-P-10		
Seismic velocity structure in the lower crust beneath the seismic belt in the San-in district, Japan Hiroo Tsuda , Yoshihisa Iio, Takuo Shibutani	J05-P-11		
Depth dependence of stress field investigated from microseismicity in northwestern Kii Peninsula, southwestern Japan Sumire Maeda , Toru Matsuzawa, Keisuke Yoshida, Shinji Toda, Hiroshi Katao	J05-P-12		
Tectonic Loading of the Atera Fault inferred from Dense GNSS Observation Koki Kumagai , Takeshi Sagiya, Nobuhisa Matta	J05-P-13		
Spatio-temporal variation in Coda Q in the northeastern part of Niigata-Kobe Tectonic Zone in 2009-2014 Masanobu Dojo , Yoshihiro Hiramatsu	J05-P-14		
		J06. The spectrum of fault-zone deformation processes (from slow slip to earthquake)	
		Time	Program No.
		08:30	J06-1-01
		Numerical experiments on estimation of frictional properties and slip evolution on the Bungo Channel Long-term SSE fault with Ensemble Kalman Filter Kento Nishikiori , Kazuro Hirahara	
		08:45	J06-1-02
		Long-term slow slip events in the Tokai region, central Japan, before 2000 Tadafumi Ochi	
		09:00	J06-1-03
		Correlation between Coulomb Stress Rate Change Imparted by Two Slow Slip Events and Seismic Rate Change in Lower Cook Inlet of the Alaska-Aleutian Subduction Zone Shanshan Li, Jeffrey Freymueller , Jianjun Wang, Natalia Ruppert	
		09:15	J06-1-04
		Insights into the Causal Relationship between Slow Slip Events and Tectonic Tremors in Guerrero, Mexico Carlos Villafuerte , Victor Cruz-Atienza	

- 09:30 **EFFECTS OF THE GEOMETRY OF THE MEXICAN SUBDUCTION ZONE TECTONIC-INTERFACE ON THE STRESS TRANSFER DUE TO INTERPLATE SLIP EVENTS.** J06-1-05
Miguel Angel Santoyo, Vladimir Kostoglodov, Carlos Mendoza
- 09:45 **Laboratory observations of slow stick slip: implications for slow earthquakes and the spectrum of fault slip behavior** J06-1-06
 invited
Marco Maria Scuderi, Elisa Tinti, Cristiano Collettini

Session: **J06-2**
 Session title: The spectrum of fault-zone deformation processes (from slow slip to earthquake) II
 Type: Oral
 Date: Monday, July 31, 2017
 Time: 10:30 - 12:00
 Room: Intl Conf Room (301)
 Chairs: Naoki Uchida (Tohoku University)
 Kimihiro Mochizuki (University of Tokyo)

Time	Title	Program No.
10:30	Completing the Seismic Cycle: Approaching 100% slip recovery along the subduction megathrust beneath Nicoya Peninsula, Costa Rica <u>Andrew Newman</u> , Christodoulos Kyriakopoulos, Tiegan Hobbs	J06-2-01
10:45	Anomalous gravity changes observed during long-term slow slip events and a possible interpretation based on fluid flow <u>Yoshiyuki Tanaka</u> , Yuichi Imanishi, Shuhei Okubo, Kazunari Nawa, Yoshiaki Tamura, Kenji Yoshida	J06-2-02
11:00	Meaning and prospect for science of slow earthquakes <u>Kazushige Obara</u>	J06-2-03 invited
11:15	Emergence and disappearance of interplate repeating earthquakes after the 2011 Tohoku-oki earthquake: transition between slow slip and earthquakes <u>Naoki Uchida</u> , Norishige Hatakeyama, Toru Matsuzawa, Wataru Nakamura	J06-2-04
11:30	Spatio-temporal distribution of earthquakes around the subducted seamount off Ibaraki in response to the largest Mw7.8 aftershock of the 2011 Tohoku-oki earthquake <u>Kimihiro Mochizuki</u> , Shinji Yoneshima, Tomoaki Yamada, Masanao Shinohara	J06-2-05
11:45	Seismic quiescence of deep very low frequency earthquakes from later 2014 in western Shikoku, Japan <u>Satoru Baba</u> , Akiko Takeo, Aitaro Kato, Takuto Maeda, Kazushige Obara, Takanori Matsuzawa	J06-2-06

Session: **J06-3**
 Session title: The spectrum of fault-zone deformation processes (from slow slip to earthquake) III
 Type: Oral
 Date: Tuesday, August 1, 2017
 Time: 08:30 - 10:00
 Room: Intl Conf Room (301)
 Chairs: Natalia Poiata (National Institute for Earth Physics, Romania)
 Yoshihiro Ito (Kyoto University)

Time	Title	Program No.
08:30	Rapid Tremor Migration Induced by Pore Pressure Waves <u>Victor M. Cruz-Atienza</u> , Carlos Villafuerte, Harsha Bhat	J06-3-01
08:45	Comprehensive detection of low frequency tremor triggered by teleseismic surface waves in northern Kii and western Shikoku, southwest Japan <u>Ryo Kurihara</u> , Kazushige Obara, Akiko Takeo, Takuto Maeda	J06-3-02
09:00	Analyzing tectonic tremor and low-frequency earthquakes' activity in western Shikoku using automatic detection and location scheme <u>Natalia Poiata</u> , Jean-Pierre Vilotte, Kazushige Obara, Pascal Bernard	J06-3-03
09:15	Continuous S-wave signals following 2014 Mw 6.8 SSE in the Hikurangi subduction margin offshore New Zealand <u>Yuriko Iwasaki</u> , Kimihiro Mochizuki, Motoko Ishise, Erin Todd, Susan Schwartz, Stuart Henrys, Martha Savage, Anne Sheehan, Yoshihiro Ito, Laura Wallace, Spahr Webb, Tomoaki Yamada, Masanao Shinohara	J06-3-04
09:30	Micro low-frequency tremor activity near Japan Trench <u>Satoshi Katakami</u> , Yoshihiro Ito, Kazuaki Ohta, Ryota Hino, Shuichi Suzuki, Masanao Shinohara	J06-3-05
09:45	Rheologically controlled spatial separation of the megathrust seismogenic zone and the zone of Episodic Tremor and Slip <u>Kelin Wang</u> , Xiang Gao	J06-3-06 invited

Session: **J06-4**

Session title: The spectrum of fault-zone deformation processes (from slow slip to earthquake) IV

Type: Oral

Date: Tuesday, August 1, 2017

Time: 10:30 - 12:00

Room: Intl Conf Room (301)

Chairs: Aitaro Kato (University of Tokyo)

Chris Marone (Pennsylvania State University)

Time	Title	Program No.
10:30	Renovated 3D image of Nankai accretionary wedge and shallow seismogenic zone off Kumano through reprocessing of 3D seismic data <u>Masataka Kinoshita</u> , Kazuya Shiraishi, Greg Moore, Yasuhiro Yamada, Gaku Kimura	J06-4-01
10:45	Evaluation of rock evolution process in seismogenic fault: Dynamic wave propagation modeling to the digitalized fault rocks <u>Chandoeun Eng</u> , Tatsunori Ikeda, Takeshi Tsuji	J06-4-02
11:00	Down-dip variations in a subducting low-velocity zone linked to episodic tremor and slip <u>Aitaro Kato</u> , Mitsuhiro Toya, Takuto Maeda, Kazushige Obara, Tetsuya Takeda, Koshun Yamaoka	J06-4-03
11:15	Interplate thermal regime and slab dehydration at the source region of episodic tremor and slow slip events in the Cascadia subduction zone <u>Yingfeng Ji</u> , Shoichi Yoshioka	J06-4-04
11:30	The dynamic stiffness as the indicator of slip mode and transition of the fault to a metastable stage. <u>Gevorg Kocharyan</u> , Alexey Ostapchuk, Dmitry Pavlov	J06-4-05
11:45	1972 Slow Mega Slip Event in Mexico Recoded with Tide Gauges <u>Vladimir Kostoglodov</u> , Nathalie Cotte, Andrea Walpersdorf, Jose Antonio Santiago	J06-4-06

Session: **J06-P**

Type: Poster

Date: Tuesday, August 1/ Wednesday, August 2, 2017

Time: 15:30 - 16:30

Room: Shinsho Hall

Title	Program No.
Real-time slow slip monitoring with the Geodetic Data Stacking (GDS) method <u>Kazuki Miyaoka</u> , Takahiro Tsuyuki, Hisao Kimura	J06-P-01
Construction of short-term slow slip event catalog detected automatically from tilt and strain data within the Nankai subduction zone, Japan <u>Takeshi Kimura</u> , Satoshi Itaba, Takanori Matsuzawa, Hisanori Kimura	J06-P-02

Shallow Slow Slip Event Off the Kii Peninsula, Japan
Satoshi Itaba, Satoshi Annoura, Tetsuo Hashimoto, Noriko Kamaya, Akio Katsumata

J06-P-03

Spatio-temporal evolution of recurrent slow slip events from 2010 to 2013 along the Ryukyu Trench, southwestern Japan
Masayuki Kano, Jun'ichi Fukuda, Shin'ichi Miyazaki, Mamoru Nakamura

J06-P-04

Estimation of the spatiotemporal evolution of slow slip events in the Tokai region, central Japan, since 2013 using GNSS data
Hiromu Sakaue, Jun'ichi Fukuda, Teruyuki Kato, Takuya Nishimura

J06-P-05

Estimating long-term and short-term slow slip events in the Bungo Channel area by MCMKF-based inversion
Takatoshi Yokoi, Shinichi Miyazaki, Hiromu Sakaue, Jun'ichi Fukuda

J06-P-06

A trial to find long-term variation in slip-deficits in the Bungo Channel region, Nankai Trough
Shinichi Miyazaki, Takatoshi Yokoi, Hiromu Sakaue, Jun'ichi Fukuda

J06-P-07

Slip velocities of early afterslips in northeastern Japan
Shunsuke Morikami, Yuta Mitsui

J06-P-08

Low-frequency earthquake distribution covered with undrained layer of the overlying plate along Tokai plate boundary of the Nankai subduction zone
Sadaomi Suzuki, Makoto Okubo, Kazutoshi Imanishi, Junichi Nakajima

J06-P-09

Variation of deep low frequency tremor activity along dip direction in western Shikoku, southwest Japan
Akira Hikita, Akiko Takeo, Takuto Maeda, Aitaro Kato, Takanori Matsuzawa, Kazushige Obara

J06-P-10

Seismic anisotropy monitoring and detection of tremor activity in the southwest Japan subduction zone
Motoko Ishise, Kiwamu Nishida, Kimihiro Mochizuki

J06-P-11

Low frequency tremor activity in the Tohoku subduction zone based on ocean bottom seismograms
Hidenobu Takahashi, Ryota Hino, Masanao Shinohara, Yukihiko Nakatani, Syuichi Suzuki

J06-P-12

Low-frequency tremor activity in the shallow part of Nankai Trough and Ryukyu Trench revealed by long-term ocean bottom observation
Yusuke Yamashita, Masanao Shinohara, Hiroshi Yakiwara, Tomoaki Yamada, Kazuo Nakahigashi, Hajime Shiobara, Kimihiro Mochizuki, Takuto Maeda, Kazushige Obara

J06-P-13

Network-MT survey in the vicinity of area with a forthcoming slow slip event in the SW part of Shikoku Island, SW Japan <u>Makoto Uyeshima</u> , Maki Hata, Hiroshi Ichihara, Ryohei Yoshimura, Koki Aizawa	J06-P-14	08:45	Interseismic seafloor GPS-A data used for tsunami generation modeling along the Nankai trough, Japan <u>Shun-Ichi Watanabe</u> , Yehuda Bock, Diego Melgar, Tadashi Ishikawa, Yusuke Yokota, Keiichi Tadokoro	J07-1-02
Moment tensor inversion of tectonic tremors in the Guerrero subduction zone <u>Emmanuel Caballero-Leyva</u> , Victor M. Cruz-Atienza	J06-P-15	09:00	Postseismic deformation of the 2011 Tohoku Earthquake measured by GPS/Acoustic observations <u>Fumiaki Tomita</u> , Motoyuki Kido, Yusaku Ohta, Takeshi Iinuma, Ryota Hino	J07-1-03
Anisotropy in the subducted oceanic crust and the overlying continental crust coincides with slow slip phenomena in the flat portion of the Mexican subduction zone <u>Allen Husker</u> , Jorge Castillo, Xyoli Perez-Campos, William Frank	J06-P-16	09:15	Preliminary Results of Realistic Interseismic Modeling and GPS-Acoustics Measurements on the Continental Slope of the Cascadia Subduction Zone <u>Diego Melgar</u> , David Chadwell, David Schmidt	J07-1-04
The long duration, April 18, 2002 (Mw 6.7), Mexico earthquake; a small tsunami earthquake next to the Guerrero Gap <u>Ketzallina Flores</u> , Vala Hjorleifsdottir, Shri Singh, Arturo Iglesias	J06-P-17	09:30	Short-period ocean fluctuation induced by internal wave and its effect on GNSS/acoustic analysis <u>Motoyuki Kido</u> , Ryo Matsui, Misae Imano, Chie Honsho	J07-1-05
Trench-parallel sliver motion in the Mexican oblique subduction zone <u>Ekaterina Kazachkina</u> , Vladimir Kostoglodov, Allen Husker, Jose Antonio Santiago, Nathalie Cotte, Andrea Walpersdorf	J06-P-18	09:45	Refining ship navigation with precise point positioning to measure seafloor displacement using repeated sidescan sonar surveys <u>John DeSanto</u> , David Sandwell, David Chadwell	J07-1-06
Drilling into Active Faults - In-situ Investigations on the Mechanics and Structure of Faults in Central Japan <u>Kentarō Omura</u>	J06-P-19			

Session: **J07-2**
Session title: Tracking the sea floor in motion II
Type: Oral
Date: Thursday, August 3, 2017
Time: 10:30 - 12:00
Room: Room 401
Chairs: Ryota Hino (Tohoku University)
C. K. Shum (Ohio State University)

J07. Tracking the sea floor in motion

Session: **J07-1**
Session title: Tracking the sea floor in motion I
Type: Oral
Date: Thursday, August 3, 2017
Time: 08:30 - 10:00
Room: Room 401
Chairs: Tadashi Ishikawa (Japan Coast Guard)
Diego Melgar (University of California, Berkeley)

Time	Title	Program No.
08:30	Observational Results of Seafloor Crustal Deformation Near the Nankai Trough Axis <u>Keiichi Tadokoro</u> , Mitsuru Kado, Hiroshi Kimura, Motoyuki Kido, Kenjiro Matsuhira	J07-1-01 invited

Time	Title	Program No.
10:30	New Technologies for Seafloor Deformation: Optical Fiber Strainmeters and Self-Calibrating Pressure Recorders <u>Mark Zumberge</u> , Glenn Sasagawa, William Hatfield, Matthew Cook	J07-2-01 invited
10:45	Initial characteristics of LTBMS borehole sensors installed in the Nankai Trough, Japan <u>Toshinori Kimura</u> , Eiichiro Araki, Yuya Machida	J07-2-02
11:00	Laboratory experiments for evaluating long-term characteristics of pressure sensors used for seafloor pressure monitoring <u>Hiroaki Kajikawa</u> , Tokihiko Kobata	J07-2-03
11:15	Mega Earthquake Seismic Deformation Detection and Modeling Using GRACE and Ocean Bottom Pressure Measurements Chunli Dai, <u>C. K. Shum</u> , Junyi Guo, Kun Shang, Ting-yi Yang, Yoshihiro Ito, Ryota Hino, Rongjiang Wang	J07-2-04

11:30	Studying fault slip during and after the 2012 M 7.6 Costa Rica earthquake using land-based GNSS and near-trench fluid pressure observations <u>Tianhaozhe Sun</u> , Kelin Wang, Earl Davis, Yan Jiang, Martin Heesemann	J07-2-05 invited	14:45	Slip rate of the North Anatolian Fault at the western part of the Sea of Marmara through seafloor geodetic measurement for two years <u>Ryusuke Yamamoto</u> , Motoyuki Kido, Yusaku Ohta, Narumi Takahashi, Yojiro Yamamoto, Dogan Kalafat, Ali Pinar, Haluk Ozener, Sinan Ozeren, Yoshiyuki Kaneda	J07-3-06
11:45	On the Interpretation of oceanic variations in terms of ocean bottom pressure <u>Tomoya Muramoto</u> , Yoshihiro Ito, Daisuke Inazu, Stuart Henrys, Laura Wallace, Stephen Bannister, Ryota Hino, Syuichi Suzuki, Kimihiro Mochizuki	J07-2-06			

Session: **J07-P**
Type: Poster
Date: Thursday, August 3/ Friday, August 4, 2017
Time: 15:30 - 16:30 / 15:00 - 16:00
Room: Shinsho Hall

Session: **J07-3**
Session title: Tracking the sea floor in motion III
Type: Oral
Date: Thursday, August 3, 2017
Time: 13:30 - 15:00
Room: Room 401
Chairs: Narumi Takahashi (NIED/JAMSTEC)
John DeSanto (University of California, San Diego)

Time	Title	Program No.
13:30	New buoy platform system for crustal displacement observation <u>Narumi Takahashi</u> , Kentaro Imai, Yasuhisa Ishihara, Tatsuya Fukuda, Hiroshi Ochi, Misae Imano, Yusaku Ohta, Motoyuki Kido, Shuichi Kodaira	J07-3-01
13:45	S-net project: Large-scale seismic and tsunami observation system on seafloor along the Japan Trench <u>Kenji Uehira</u> , Masashi Michizuki, Toshihiko Kanazawa, Takashi Shinbo, Katsuhiko Shiomi, Takashi Kunugi, Shin Aoi, Takumi Matsumoto, Shoji Sekiguchi, Narumi Takahashi, Naotaka Yamamoto, Masanao Shinohara, Tomoaki Yamada	J07-3-02
14:00	Real-time observation system of pressure gauges and accelerometers on seafloor using ICT through seafloor fiber cable installed in the off-Sanriku region, Japan <u>Masanao Shinohara</u> , Tomoaki Yamada, Shin'ichi Sakai, Hajime Shiobara, Toshihiko Kanazawa	J07-3-03
14:15	Seafloor deformation due to ocean tidal loading observed by seafloor cabled network <u>Eiichiro Araki</u>	J07-3-04
14:30	Monitoring submarine fault deformation using direct-path ranging <u>Florian Petersen</u> , Heidrun Kopp, Dietrich Lange, Katrin Hannemann, Morelia Urlaub	J07-3-05 invited

Title	Program No.
Towards an Ocean Bottom Geodetic Observatory In Mexico: The First Steps <u>Vala Hjorleifsdottir</u> , Yoshihiro Ito, Victor Manuel Cruz-Atienza	J07-P-01
Quantitative evaluation of error sources for the GPS-A seafloor geodesy <u>Yusuke Yokota</u> , Tadashi Ishikawa, Shun-ichi Watanabe	J07-P-02
Recent seafloor movement in and around the rupture zone of the 2011 Tohoku-oki earthquake detected by GPS-Acoustic seafloor geodesy <u>Tadashi Ishikawa</u> , Yusuke Yokota, Shun-ichi Watanabe	J07-P-03
Detection of offshore vertical displacements after the 2011 Tohoku-oki Earthquake using GPS/A observations <u>Fumiaki Tomita</u> , Chie Honsho, Motoyuki Kido	J07-P-04
Little evidence of shortening motion across the Japan Trench after the 2011 Tohoku-oki earthquake from direct-path acoustic ranging <u>Ryusuke Yamamoto</u> , Ryota Hino, Motoyuki Kido, Chie Honsho	J07-P-05
Characteristics of a quartz pressure sensor assuming an ocean bottom environment for highly accurate measurements of small and long-term crustal deformation <u>Yuya Machida</u> , Shuhei Nishida, Eiichiro Araki, Toshinori Kimura	J07-P-06
Investigation of long period behaviors of seafloor pressure records based on field data and laboratory test results <u>Ryota Hino</u> , Syuichi Suzuki, Makiko Sato, Yusaku Ohta, Yoshihiro Ito, Hiroaki Kajikawa, Tokihiko Kobata	J07-P-07
Reexamination of the fault model for transient slow slip event in the Japan Trench before the 2011 Tohoku-Oki earthquake Yui Nishimagi, Yusaku Ohta, <u>Ryota Hino</u>	J07-P-08

Changes in physical properties of the Nankai Trough megasplay fault induced by earthquakes, detected by continuous pressure monitoring J07-P-09
Chihiro Kinoshita, Demian Saffer, Achim Kopf, Rosner Alexander, Laura Wallace, Eiichiro Araki, Toshinori Kimura, Yuya Machida, Reiji Kobayashi, Earl Davis, Sean Toczko

Possibility of tilt observation at the seafloor by a mobile ocean bottom seismometer J07-P-10
Hajime Shiobara, Aki Ito, Hiroko Sugioka, Yoshio Fukao, Masanao Shinohara

Monitoring of the shallow tremors around the source areas of the Nankai and Tonankai earthquakes by ocean bottom observations J07-P-11
Kensuke Suzuki, Eiichiro Araki, Toshinori Kimura, Yuya Machida, Demian Saffer, Narumi Takahashi, Shuichi Kodaira

Site amplification at Nankai seafloor observation network DONET1 in Japan evaluated by spectral inversion J07-P-12
Hisahiko Kubo, Takeshi Nakamura, Wataru Suzuki, Takeshi Kimura, Takashi Kunugi, Narumi Takahashi, Shin Aoi

J08. Imaging and interpreting lithospheric structures using seismic and geodetic approaches

Session: **J08-1**

Session title: Imaging and interpreting lithospheric structures using seismic and geodetic approaches I

Type: Oral

Date: Wednesday, August 2, 2017

Time: 16:30 - 18:00

Room: Room 501

Chairs: Brian Boston (Japan Agency for Marine-Earth Science and Technology)
 Takaya Iwasaki (Earthquake Research Institute, the University of Tokyo)

Time	Title	Program No.
16:30	3-D S-wave velocity structure under the Changbaishan volcanic area in Northeast China inverted with dense NECsaids array <u>Qi-Fu Chen</u> , Xing-Li Fan, Wu Wang	J08-1-01
16:45	First insights into the deep structure of the eastern Australian passive margin using wide-angle seismic data: Crustal segmentation from the Tasman Basin to the northern Lord Howe Rise <u>Flora Gallais</u> , Gou Fujie, Shuichi Kodaira, Seiichi Miura, Brian Boston, Yasuyuki Nakamura, Ron Hackney, Saneatsu Saito, Kazuya Shiraishi, Yuka Kaiho, Yasuhiro Yamada, Scott Nichol, Georges Bernardel, Cameron Mitchell	J08-1-02
17:00	Formation of the Lord Howe Rise continental ribbon during eastern Gondwana breakup from multi-channel seismic reflection data <u>Brian Boston</u> , Yasuyuki Nakamura, Shuichi Kodaira, Seiichi Miura, Flora Gallais, Gou Fujie, Yuka Kaiho, Ron Hackney, Yasuhiro Yamada, Saneatsu Saito, Kazuya Shiraishi, Scott Nichol, George Bernardel, Cameron Mitchell	J08-1-03
17:15	Coupled anisotropic and isotropic body-wave tomography of the upper mantle beneath northern Fennoscandia - Application of a novel code AniTomo to data from passive seismic experiment LAPNET (Finland) <u>Helena Munzarova</u> , Jaroslava Plomerova, Eduard Kissling, Ludek Vecsey, Vladislav Babuska	J08-1-04

17:30 **Waveform-based estimation of velocity heterogeneity for prestack imaging from multifold wide-aperture seismic data**
Susumu Abe, Takao Nibe, Hiroshi Sato, Tatsuya Ishiyama J08-1-05

17:45 **Seismic Imagings of Sub-Crustal Reflectors Beneath the Iberia Microplate**
 Imma Palomeras, Puy Ayarza, Jordi Diaz, Juan Carlos Afondo, Ramon Carbonell J08-1-06

Session: **J08-2**

Session title: Imaging and interpreting lithospheric structures using seismic and geodetic approaches II

Type: Oral

Date: Thursday, August 3, 2017

Time: 08:30 - 10:00

Room: Room 501

Chairs: Ryosuke Azuma (RCPEVE, Tohoku University)
 Shuichi Kodaira (Japan Agency for Marine-Earth Science and Technology)

Time	Title	Program No.
08:30	Tomographic imaging of the seismic velocity structure in southern Hokkaido, Japan: Implications for distributions of the crustal deep low-frequency earthquakes <u>Takahiro Shiina</u> , Hiroaki Takahashi, Tomomi Okada, Toru Matsuzawa	J08-2-01
08:45	Structural heterogeneities around inland earthquake areas in Hokkaido Island based on magnetotelluric observations <u>Hiroshi Ichihara</u> , Yusuke Yamaya, Toru Mogi	J08-2-02
09:00	Structure of the incoming/subducting Pacific Plate in the central part of the Japan Trench: Results from repeated ocean bottom seismograph observations <u>Koichiro Obana</u> , Gou Fujie, Tsutomu Takahashi, Takashi Tonegawa, Yojiro Yamamoto, Shuichi Kodaira, Masanao Shinohara	J08-2-03
09:15	Seismic structure around the slow slip source in the northeastern Japan forearc by an airgun-ocean bottom seismometer survey <u>Ryosuke Azuma</u> , Ryota Hino, Kimihiro Mochizuki, Yoshio Murai, Hiroshi Yakiwara, Toshinori Sato, Masanao Shinohara	J08-2-04
09:30	Structural variation in the rupture zone of the 2011 Tohoku-oki earthquake and its implications for depth-dependent seismic-slip behaviors <u>Shuichi Kodaira</u> , Yasuyuki Nakamura, Yojiro Yamamoto, Koichiro Obana, Gou Fujie, Tetsuo No, Yuka Kaiho, Takeshi Sato, Seiichi Miura	J08-2-05

09:45 **Investigation of seismicity and subsurface structure around northern Tohoku using seismic data recorded by AS-net**
Shinako Noguchi, Yoshihiro Sawada, Keiji Kasahara, Shutaro Sekine, Yoshihiro Tazawa, Hiroshi Yajima, Shunji Sasaki, Kimiko Ishida J08-2-06

Session: **J08-3**

Session title: Imaging and interpreting lithospheric structures using seismic and geodetic approaches III

Type: Oral

Date: Thursday, August 3, 2017

Time: 10:30 - 12:00

Room: Room 501

Chairs: James Moore (Earth Observatory of Singapore)
 Ryo Honda (Mount Fuji Research Institute)

Time	Title	Program No.
10:30	Failed rift system in northern Honshu, Japan, imaged by improved seismic velocity structure using offshore earthquake events <u>Makoto Matsubara</u> , Hiroshi Sato	J08-3-01
10:45	Geometry and spatial variations of seismic reflection intensity of the upper surface of the Philippine Sea plate off the Boso Peninsula, Japan <u>Akihiro Kono</u> , Toshinori Sato, Masanao Shinohara, Kimihiro Mochizuki, Tomoaki Yamada, Kenji Uehira, Takashi Shimbo, Yuya Machida, Ryota Hino, Ryosuke Azuma	J08-3-02
11:00	Hydrocarbon accumulation controlled by tectonic activity in the subduction zone: Insight from advanced seismic velocity analysis Chanmaly Chhun, <u>Takeshi Tsuji</u> , Arata Kioka	J08-3-03
11:15	Imaging of the subducted Philippine Sea plate and the overriding SW Japan arc - Reinterpretation of the wide-angle reflection data in the Kii Peninsula, SW Japan - <u>Takaya Iwasaki</u> , Susumu Abe, Eiji Kurashimo, Ken Yokota, Takashi Iidaka, Hiroshi Katao, Motonori Higashinaka, Ayako Nakanishi, Yoshiyuki Kaneda	J08-3-04
11:30	Three dimensional attenuation structure in and around the source region of low frequency earthquakes beneath the Kii Peninsula, southwest Japan, revealed by dense seismic array observation <u>Noriko Tsumura</u> , Hiroki Nakasako, Eri Umeyama, Naoki Mizuno, Eiji Kurashimo, Aitaro Kato, Shinichi Sakai, Takashi Iidaka, Takaya Iwasaki	J08-3-05
11:45	Imaging the distribution of transient viscosity following the 2016 Mw 7.1 Kumamoto earthquake James Moore, Hang Yu, Chi-Hsien Tang, Teng Wang, Sylvain Barbot, Dongju Peng, Sagar Masuti, Justin Dauwels, Ya-Ju Hsu, Valere Lambert, Bunichiro Shibazaki	J08-3-06

Session: **J08-P**
 Type: Poster
 Date: Thursday, August 3/ Friday, August 4, 2017
 Time: 15:30 - 16:30 / 15:00 - 16:00
 Room: Shinsho Hall

Title	Program No.		
Multicore parallelization of 3D ray tracing algorithm using OpenMP Madineh Banihashem Kalibar, Hossein Sadeghi , Sayyed Keivan Hosseini	J08-P-01	Detailed crustal and upper mantle structure of the subducting Philippine Sea plate and the overlying southwestern Japan arc, revealed by dense seismic array observation Eiji Kurashimo , Takashi Iidaka, Noriko Tsumura, Takaya Iwasaki	J08-P-11
Waveform inversion to image laterally inhomogeneous crustal structure - comparison among waveform inversion, travelttime inversion, and seismic migration - Takeshi Sato , Gou Fujie, Kazuya Shiraishi, Shuichi Kodaira, Seiichi Miura, Eiichi Asakawa, Takao Nibe, Norimitsu Yui, Susumu Abe, Romain Brossier, Jean Virieux	J08-P-02	3D seismic velocity structure beneath Kii Peninsula, southwestern Japan derived from receiver function analysis and seismic tomography Takuo Shibutani , Kazuro Hirahara	J08-P-12
Feasibility of the waveform analysis to the existing conventional wide-angle seismic survey data - Ocean Bottom Seismometer (OBS) and controlled-source seismic surveys in the Nankai subduction zone - Gou Fujie , Ayako Nakanishi, Takeshi Sato, Shuichi Kodaira	J08-P-03	Crustal velocity structure and configuration of the subducting Philippine Sea plate beneath the Japanese Islands identified from receiver function analysis Toshihiro Igarashi , Takashi Iidaka	J08-P-13
Inversion of Gravity Anomalies Using Primal-Dual Interior Point Methods Azucena Zamora , Aaron Velasco	J08-P-04	Geometry of the frontal thrust at the trench axis around the Hyuga-nada region revealed by high-resolution seismic reflection imaging Mikiya Yamashita , Ayako Nakanishi, Ryuta Arai, Shuichi Kodaira, Yasuyuki Nakamura, Seiichi Miura, Yoshiyuki Kaneda	J08-P-14
Gravitational signal produced by global shallow-Earth density model Litho1.0 Josef Sebera, Roger Haagmans, Rune Floberghagen, Diego Fernandez Pietro, Joerg Ebbing, Michael Kern	J08-P-05	Three-dimensional P- and S-wave attenuation tomography in the Ryukyu Arc, Japan Masanao Komatsu , Hiroshi Takenaka	J08-P-15
Deep Conductive Structure beneath the Kutcharo Caldera, Revealed by 3-D Inversion Analysis Ryo Honda , Hiroshi Ichihara, Yusuke Yamaya, Hideaki Hase, Toru Mogi, Makoto Uyeshima, Mitsuhiro Nakagawa	J08-P-06	Inhomogeneous rifting structure in the northern Okinawa Trough, an active backarc basin southwest of the Japan Islands Chiaki Okada , Azusa Nishizawa, Kentaro Kaneda, Mitsuhiro Oikawa, Daishi Horiuchi, Yukari Fujioka, Kosaku Arai	J08-P-16
Crustal structure beneath the eastern foot of the Japan Trench outer rise by airgun-ocean bottom seismometer survey Shuhei Otomo , Ryosuke Azuma, Ryota Hino, Gou Fujie, Shuichi Kodaira	J08-P-07	Mantle heterogeneity in the oceanic lithosphere of the southwest sub-basin, South China Sea, from the wide-angle seismic and the gravimetric model Chuanchuan Lu , Tianyao Hao, Jian Lin	J08-P-17
Velocity structure and Earthquake Distribution in Nagaoka Region Shutaro Sekine , Yoshihiro Sawada, Keiji Kasahara, Shunji Sasaki, Yoshihiro Tazawa	J08-P-08	The 3-D velocity structure of the 2008 Taoyuan Earthquake Sequence in Kaohsiung, Taiwan Min Hung Shih , Bor-Shouh Huang	J08-P-18
Plate boundary property of the Philippine Sea plate revealed from later phase analysis beneath southwestern Ibaraki and northwestern Chiba prefectures, central Japan Hisanori Kimura , Naoshi Hirata	J08-P-9	The shallow structure of Tatun Volcano Group from residual gravity and magnetic data Hsien-Hsiang Hsieh , Benjamin Fong Chao, Horng-Yuan Yen	J08-P-19
Heterogeneous structure in the incoming Philippine Sea plate along the Nankai Trough Ayako Nakanishi , Mikiya Yamashita, Yojiro Yamamoto, Gou Fujie, Seiichi Miura, Shuichi Kodaira, Yoshiyuki Kaneda, Nomukazu Seama	J08-P-10		

J09. Geodesy and seismology general contributions

Session: **J09-1**
 Session title: Geodesy and seismology general contributions I
 Type: Oral
 Date: Tuesday, August 1, 2017
 Time: 13:30 - 15:00
 Room: Intl Conf Room (301)
 Chairs: Tomokazu Kobayashi (Geospatial Information Authority of Japan)
 Takeo Ito (Nagoya University)

Time	Title	Program No.
13:30	Normal-faulting earthquakes in the northern area of Ibaraki Prefecture, Japan in 2011 and 2016 - Duplicate events detected by InSAR observations - <u>Tomokazu Kobayashi</u>	J09-1-01
13:45	Recent findings on dual tsunami sources: November 1945 Makran (NW Indian Ocean) and December 1908 Messina (Italy) tsunamis Mohammad Heidarzadeh, <u>Kenji Satake</u> , Sebastian Krastel, David Tappin	J09-1-02
14:00	Determining the Kaki Earthquake properties with using InSAR Method, 2013, Kaki, southwest Iran <u>Ramak Heidari</u> , Maryam Sedghi, Mohamadreza Gheitanchi	J09-1-03
14:15	Tsunami source of the 1979 Tumaco Earthquake estimated from historical tide gauge records and geodetic data <u>Bruno Adriano</u> , Yushiro Fujii, Masahiro Yoshimoto, Shunichi Koshimura	J09-1-04
14:30	Crustal blocks motion model and interplate coupling in Colombia based on GNSS observation network (GEORED) <u>Takeo Ito</u> , Hector Mora Paez, Juan Ramon Pelaez Gaviria, Takeshi Sagiya	J09-1-05
14:45	Rise Time of Coseismic Tectonic Deformation during Megathrust Earthquakes, as estimated from Observed Low-Frequency Acoustic-Gravity Waves <u>Takeshi Mikumo</u>	J09-1-06

Session: **J09-2**
 Session title: Geodesy and seismology general contributions II
 Type: Oral
 Date: Tuesday, August 1, 2017
 Time: 16:30 - 18:00
 Room: Intl Conf Room (301)
 Chairs: Koji Masuda (Geological Survey of Japan, AIST)
 Ryohei Sasajima (Nagoya University)

Time	Title	Program No.
16:30	Resolution analysis for earthquake kinematics inversion <u>Josue Tago Pacheco</u> , Ludovic Metivier, Romain Brossier, Victor Cruz Atienza, Jean Virieux	J09-2-01
16:45	Effect of frictional properties of minerals in the crust on the depth of seismic faulting <u>Koji Masuda</u>	J09-2-02
17:00	Flexural mechanics and curvature evolution of the bending-unbending transition zone of subducting oceanic lithosphere <u>Ryohei Sasajima</u> , Takeo Ito	J09-2-03
17:15	Vertical Deformation Following Groundwater Drawdown by Excavating of 500 m Depth Shafts in Granite in Mizunami, central Japan in 2004-2016 <u>Fumoaiko Kimata</u> , Tasuhiro Asai, Ryo Honda, Hiroshi Ishii	J09-2-04
17:30	ISC-EHB: Reconstructing the EHB Earthquake Database Jennifer Weston, Bob Engdahl, <u>Domenico Di Giacomo</u> , James Harris, Dmitry Storchak	J09-2-05
17:45	The ISC Bulletin and the derivative datasets for Geoscience research <u>Dmitry Storchak</u> , Domenico Di Giacomo, James Harris, Konstantinos Lentas, Jennifer Weston	J09-2-06

Session: **J09-3**
 Session title: Geodesy and seismology general contributions III
 Type: Oral
 Date: Thursday, August 3, 2017
 Time: 16:30 - 18:00
 Room: Room 401
 Chairs: Koshun Yamaoka (Nagoya University)
 Shuhei Tsuji (Nagoya University)

Time	Title	Program No.
16:30	Temporal change in transfer function using ACROSS associated with magma intrusive event in 2015 in Sakurajima volcano, Japan <u>Koshun Yamaoka</u> , Masashi Watanabe, Hiroki Miyamachi, Takahiro Kunitomo, Toshiki Watanabe, Hiroshi Yakiwara, Yuta Maeda, Takeshi Tameguri, Ryoya Ikuta, Masato Iguchi	J09-3-01

16:45	Secular and co-seismic velocity changes in Tokai region detected by ACROSS <u>Shuhei Tsuji</u> , Ryoya Ikuta, Koshun Yamaoka, Takahiro Kunitomo, Toshiki Watanabe, Yasuhiro Yoshida, Akio Katsumata	J09-3-02
17:00	Tracking of water level of dam reservoir by using a broadband seismometer <u>Kazunari Nawa</u> , Takeshi Kimura	J09-3-03
17:15	About 38mHz (26 s) oscillation in northeastern Japan after the 2011 Tohoku megathrust earthquake <u>Yuta Mitsui</u> , Kosuke Heki	J09-3-04
17:30	Different Application of Ultrasonic Underwater Particle-Tracing Probes at Deep Ocean Floor <u>Dursun Acar</u> , Bedri Alpar, Tuncay Taymaz, Seda Yolsal Cevikbilen, Sinan Ozeren, Denizhan Vardar, Tuna Eken, Namik Cagatay, Sebnem Elbek, Erol Sari, K.Kadir Eris	J09-3-05

Session: **J09-4**
 Session title: Geodesy and seismology general contributions IV
 Type: Oral
 Date: Friday, August 4, 2017
 Time: 08:30 - 10:00
 Room: Room 401
 Chairs: Jan Michalek (University of Bergen)
 Przemyslaw Dykowski (Institute of Geodesy and Cartography)

Time	Title	Program No.
08:30	CURRENT IMPORTANCE OF THE CHILEAN NATIONAL GEODESIC NETWORK IN A COUNTRY SUBJECT TO EARTHQUAKES <u>Cristian Iturriaga</u> , Hector Parra, <u>Carlos Prado</u>	J09-4-01
08:45	Estimation of coupling ratio on subducting plate interface and block boundary in southwest Japan using MCMC method <u>Hiroshi Kimura</u> , Takeo Ito, Keiichi Tadokoro	J09-4-02
09:00	EPOS-Norway - GNSS and seismological data from Norway in a common e-infrastructure <u>Jan Michalek</u> , Kuvvet Atakan, Xiaoliang Wang, Christian Ronnevik, Tormod Kvaerna, Michael Röth, Halfdan Pascal Kierulf, Tor Langeland, Ove Daae Lampe	J09-4-03
09:15	Expanding seismic surface waves measurements towards low periods with gravity measurements <u>Przemyslaw Dykowski</u> , Marek Grad, Andrzej Krankowski, Jan Krynski, Tomasz Olszak, Marcin Polkowski, Marcin Rajner, Marcin Sekowski, Monika Wilde-Piorko	J09-4-04
09:30	Withdrawn	J09-4-05

09:45	Sampling Frequency – the key to capturing anomalies of groundwater before earthquakes <u>Fuqiong Huang</u> , Youliang Shu, Shimin Zhang	J09-4-06
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Session: **J09-5**
 Session title: Geodesy and seismology general contributions V
 Type: Oral
 Date: Friday, August 4, 2017
 Time: 10:30 - 12:00
 Room: Room 401
 Chairs: Hiroshi Munekane (Geospatial Information Authority of Japan)
 Ting Chen (Wuhan University)

Time	Title	Program No.
10:30	A prototype system for PPP kinematic positioning of Japanese GEONET stations <u>Hiroshi Munekane</u>	J09-5-01
10:45	Detection and Measurement of Land Subsidence Using InSAR and GPS in the Sabana de Bogota, Colombia, South America <u>Hector Mora-Paez</u> , Takeshi Sagiya, Takeo Ito, Estelle Chaussard, Shimon Wdowinski	J09-5-02
11:00	Surface deformation of a mud volcano in Azerbaidzhan detected by InSAR and its source medeling <u>Kento Iio</u> , Masato Furuya	J09-5-03
11:15	Crustal deformation and a fault model of the 2016 central Tottori prefecture earthquake <u>Hiroshi Yurai</u> , Tomokazu Kobayashi, Yu Morishita, Yohei Hiyama, Yuji Miura	J09-5-04
11:30	Two methods of three-dimensional surface deformation field derivation with the integration of InSAR and GNSS measurements <u>Haipeng Luo</u> , <u>Ting Chen</u>	J09-5-05
11:45	Using TerraSAR-X Interferometry and GPS to study slowly moving landslide in a vegetated terrain <u>Sara Mirzaee</u> , Mahdi Motagh, Bahman Akbari, <u>Mahmud Haghshenas</u> , <u>Haghighi</u> , Sigrid Roessner, Hans.Ulrich Wetzel	J09-5-06

Session: **J09-6**
 Session title: Geodesy and seismology general contributions VI
 Type: Oral
 Date: Friday, August 4, 2017
 Time: 13:30 - 15:00
 Room: Room 401
 Chairs: Raju Sarkar (College of Science and Technology, Royal University of Bhutan)
 Meen Bahadur Poudyal Chhetri (Institute of Crisis Management Studies)

Time	Title	Program No.
13:30	Withdrawn	J09-6-01

13:45	Geodetic and Seismological Risk of Operation of Nuclear Power Plants in Japan <u>Shuzo Takemoto</u>	J09-6-02	Aftershock Observation of Mw 6.5 Pidie Jaya, Aceh, Indonesia Earthquake: Preliminary Results <u>Andri Dian Nugraha</u> , Muksin Umar, Muzli Muzli, Zulfakriza Zulhan, Riskiray Ryannugroho, Kadek Hendrawan Palgunadi, Supendi Pepen, Sri Widiyantoro, Nanang T Puspito, Wahyu Triyoso, Daryono Daryono, Kemal Erbas, Rachmat Sule, Irwan Meilano, Mahsyur Irsyam, Philippe Jousset	J09-P-07
14:00	Issues of Resettlement in Context of Housing - Lessons Learnt in Nepal after 2015 Gorkha Earthquake <u>Raju Sarkar</u> , Ritesh Kurar	J09-6-03		
14:15	Gorkha, Nepal Earthquake 2015 – Causes, Consequences, Socio-Economic Impacts, Lessons Learned and Way Forward <u>Meen Bahadur Poudyal Chhetri</u>	J09-6-04	Estimation of the seismic-motion-generated changes in permeability structure nearby a fault fracture zone by means of a groundwater migration model <u>Atsushi Mukai</u> , Shigeaki Otsuka, Yoichi Fukuda	J09-P-08

Session: **J09-P**
Type: Poster
Date: Thursday, August 3/ Friday, August 4, 2017
Time: 15:30 - 16:30 / 15:00 - 16:00
Room: Shinsho Hall

Title	Program No.
InSAR analysis all over Japan by ALOS-2 (Daichi-2) / PALSAR-2 data <u>Yuji Miura</u> , Basara Miyahara, Hiroyuki Nakai, Masaki Honda, <u>Yasuaki Kakiage</u> , Yu Morishita	J09-P-01
EPOS-Norway – Integration of Norwegian geoscientific data into a common e-infrastructure <u>Jan Michalek</u> , Kuvvet Atakan, Xiaoliang Wang, Christian Ronnevik, Karen Tellefsen, Tor Langeland, Ove Daae Lampe	J09-P-02
Comparison of Superconducting and Spring Gravimeters at the Mizusawa VLBI Observatory of the National Astronomical Observatory of Japan <u>Satoshi Miura</u> , Tae-Hee Kim, Hiroshi Ikeda, Yoshiaki Tamura	J09-P-03
Exponential pore pressure/ groundwater level changes associated with the 2016 Kumamoto Earthquake (Mj7.3) observed at Tono region, central Japan <u>Yasuhiro Asai</u> , Hiroshi Ishii, Osamu Murakami	J09-P-04
A possible mechanism of Omori-Utsu'slawthrough an example of the great Tangshan earthquake Caibo Hu, <u>Yongen Cai</u>	J09-P-05
Updating Hypocenter Location around Indonesia Region Derived from 3D Seismic Velocity Structure: Time Period of April 2009-July 2016 <u>Andri Dian Nugraha</u> , Hasbi Ash Shiddiqi, Sri Widiyantoro, Shindy Roslia, Mohamad Ramdhan, Wandono Wandono, Daryono Daryono, Samsul Wiyono, Mahsyur Irsyam	J09-P-06

INTAROS – INTEGRATED ARCTIC OBSERVATION SYSTEM <u>P. H. Voss</u> , T. Dahl-Jensen, M. B. Sorensen, P. Knudsen, O. B. Andersen, S. A. Khan	J09-P-09
Simulation of Hayabusa2 crossover orbit analysis using laser altimeter data <u>Keiko Yamamoto</u> , Koji Matsumoto, Toshimichi Otsubo, Noriyuki Namiki, Hayabusa2 Astrodynamics Team	J09-P-10
GOCE User Toolbox and Tutorial <u>Per Knudsen</u> , Jerome Benveniste	J09-P-11