Agenda
The 1st ALOS-2 PI Workshop 2013
19 - 20 September 2013, Tsukuba, Japan

Thursday, 19 September 2013

08:30- Registration

Plenary Session: Chair Masanobu Shimada and Takeo Tadono

9:40-9:50: Welcome Remarks; Shizuo Yamamoto, JAXA Executive Director
9:50-10:10: ALOS-2 Science Program and RA4: Masanobu Shimada (EORC)
10:10-10:30: ALOS-2 & PALSAR-2 Status: Yukihiro Kankaku (ALOS-2)
10:30-10:50: ALOS-2 Observation Scenario: Shinnichi Suzuki (ALOS-2)
10:50-11:10: ALOS-2 User Interface Gateway: Hiroki Nishi (ALOS-2)
11:10-11:20: Data Distribution of ALOS: Tsutomu Yamanokuchi (RESTEC)
11:20-11:45: Q&A and closing

11:45-13:00 Lunch Break

13:00-18:00 Parallel Sessions

Session 1A Disaster & Earthquake (at Conference Room 201B)
Session 2A Polarimetry & Interferometry / Sensor Calibration (at Conference Room 202A)
Session 3A Vegetation, Forestry & Wetland / Land-use & Land-cover Research / Geography (at Conference Room 202B)

18:00- Reception
Friday, 20 September 2013

09:00- Registration

9:30-12:00 Parallel Sessions
Session 1B Oceanography & Coastal Zone (at Conference Room 201B)
Session 2B Polar Research / Snow & Ice (at Conference Room 202A)
Session 3B Hydrology / Agriculture / Geology / Resources related Research (at Conference Room 202B)

12:00-13:00 Lunch Break

13:00-15:00 Discussion Supersites
Site 1A Disaster & Earthquake (at Conference Room 201B)
Site 1B Oceanography & Coastal Zone (at Conference Room 201A)
Site 2A Polarimetry & Interferometry / Sensor Calibration (at Convention Hall 300)
Site 2B Polar Research / Snow & Ice (at Conference Room 202A)
Site 3A Vegetation, Forestry & Wetland / Land-use & Land-cover Research / Geography (at Conference Room 202B)
Site 3B Hydrology / Agriculture / Geology / Resources related Research (at Conference Room 301)

15:00-15:30 Break

15:30-17:30 Plenary Session
Discussion Supersite Reports

17:30-17:40 Closing Remarks
Masanobu Shimada (EORC)
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<tr>
<th>Time</th>
<th>Session 1A:</th>
<th>Presentation Title</th>
<th>Speaker(s)</th>
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<td>13:00-13:18</td>
<td>Landslide Monitoring with L-Band ALOS PALSAR Data Stacks in the Three Gorges Area of China</td>
<td>Lu ZHANG, Wuhan University PI: Mingsheng LIAO, Wuhan University CO-I: Timo BALZ</td>
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<td>13:36-13:54</td>
<td>Influence of meteorological and hydrogeological factors on ground surface vertical oscillations</td>
<td>Andrei Tronin, Scientific Research Centre for Ecological Safety by Russian Academy of Sciences</td>
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<td>13:54-14:12</td>
<td>Subsidence Estimation of the Peatland Forest in the Central Kalimantan using the PALSAR Time Series Differential Interferometry</td>
<td>Masanobu Shimada, JAXA/EORC</td>
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<td>14:12-14:30</td>
<td>Studies of Hydrologic Surface Deformation from ALOS Data</td>
<td>Howard Zebker, Stanford University</td>
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<td>14:30-14:48</td>
<td>Detection of surface displacements and liquefied areas in the 2011 Christchurch earthquake from PALSAR data</td>
<td>Fumio Yamazaki, Chiba University CO-I: Yoshihisa Maruyama, Gaku Shoji, Miguel Estrada, Wen Liu</td>
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<td>14:48-15:06</td>
<td>Ground deformation in alluvial plains detected with InSAR and its relation to active faults</td>
<td>Manabu Hashimoto, Kyoto University</td>
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<td>15:06-15:30</td>
<td>Break</td>
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Co-Chairs: Howard Zebker, Yo Fukushima and Fumio Yamazaki

15:30-15:48 [1A-08] InSAR measurements around Alpine Fault, South Island of New Zealand
Yo Fukushima, Disaster Prevention Research Institute, Kyoto University

15:48-16:06 [1A-09] Monitoring of Natural Hazards in Papua New Guinea with PALSAR
Matthew Garthwaite, Geoscience Australia
CO-I: Steve Saunders, Ima Itikarai, Chris McKee, Suame Ampana, Lae Sarah Lawrie, Shane Nancarrow, Libby Metz, Nick Horspool, Wally Johnson

16:06-16:24 [1A-10] Application of ALOS-2 InSAR to volcano deformation processes
Paul Lundgren, Jet Propulsion Laboratory, California Institute of Technology
CO-I: Akiko Tanaka, Falk Amelung, Cris Crosby, Yuri Fialko

16:24-16:42 [1A-11] Application of InSAR and GPS time series to S. California earthquake cycle deformation transients
Paul Lundgren, Jet Propulsion Laboratory, California Institute of Technology
CO-I: Rowena Lohman, Roland Burgmann, Gareth Funning, Yuri Fialko, Chris Crosby, David Schmidt, Mark Simons, Mohamed Aly, Chuck Wicks, Meng Wei, Howard Zebker

16:42-17:00 [1A-12] Quantitative comparison of methods and sensors for monitoring land subsidence based on SAR interferometric stacking with ALOS-2
Fumitaka Ogushi, Exelis VIS K.K.
CO-I: Paolo Pasquali, Alessio Cantone, Simone Atzori, Stefano Gagliano

17:00-17:18 [1A-13] Active deformation due to calderas, cone volcanoes, tectonic rifting and geothermal fields in the Taupo Volcanic Zone, New Zealand
Ian Hamling, GNS Science

17:18-17:36 [1A-14] Damage Detection for Natural Disaster Response using ALOS-1/2
Sang-Ho Yun, NASA - Jet Propulsion Laboratory

17:36-17:54 [1A-15] Investigating the seismic cycle using Interferometric Synthetic Aperture Radar (InSAR) with ALOS-2 PALSAR
Raphael Grandin, Institut de Physique du Globe de Paris
CO-I: Marie-Pierre Doin, Anne Socquet, Gilles Peltzer, Cécile Lasserre
Session 1B: Oceanography & Coastal Zone
Date & Hour: Friday, 20 September / 09:30-11:30
Room: Conference Room 201B
Co-Chairs: Osamu Isoguchi and Xiaofeng Li

09:30-09:50  [1B-01] Application of SAR data for ocean oil spill monitoring and coastline change detection
Xiaofeng Li, GST at NOAA/NESDIS

09:50-10:10  [1B-02] Inter-Calibration and Validation of ALOS-2 PALSAR, Aquarius and SMAP L-band Measurements of Ocean Surface Wind
Simon Yueh, Jet Propulsion Laboratory
CO-I: Alexander Fore, Benjamin Holt

10:10-10:30  [1B-03] Investigation of Large Internal Waves at the Lombok and Ombai Straits of Indonesia using PALSAR-2 Data
John Philip Matthews, Institute of Liberal Arts and Sciences, Kyoto University

10:30-10:50  [1B-05] Comparison of the Doppler Centroid anomalies calculated from PALSAR with ocean surface currents
Osamu Isoguchi, Remote Sensing Technology Center of Japan
CO-I: Keiko Ishii, Naoto Ebuchi, Takuji Waseda

10:50-11:10  [1B-06] L-band Oil Spill Characteristics Extraction and Analysis: Potentialities and Limitations
Giovanni Laneve, Università di Roma
CO-I: Pablo Marzialetti, Giancarlo Santilli, Roberto De Bonis, Lorenzo Fusilli
Session 2A: Polarimetry & Interferometry / Sensor Calibration

Date & Hour: Thursday, 19 September 13:00-17:10
Room: Conference Room 202A
Co-Chairs: Wolfgang Martin Boerner and Akira Hirose

13:00-13:20 [2A-01] Urban area classification and urban density estimation from polarimetric SAR images
Junichi Susaki, Kyoto University

13:20-13:40 [2A-02] InSAR local co-registration method assisted by shape-from-shading
Ryo Natsuaki, The University of Tokyo
PI: Akira Hirose, The University of Tokyo
CO-I: Donny Danudirdjo, Fang Shang, Shunichiro Fujinami

13:40-14:00 [2A-03] Snow Pack Parameter Estimation and Glacier Movement Studies Using SAR Polarimetry Data
Gopalan Venkataraman, Indian Institute of Technology Bombay
CO-I: Avik Bhattacharya, Snehmani

14:00-14:20 [2A-04] ALOS Interferometric SAR Algorithm for Mapping Taiwanese Coastal Land Displacements
Joz Wu, Center for Space and Remote Sensing Research, National Central University
CO-I: Jaan-Rong Tsay

Fang Shang, The University of Tokyo
PI: Akira Hirose, The University of Tokyo
CO-I: Donny Danudirdjo, Ryo Natsuaki, Shunichiro Fujinami

14:40-15:00 [2A-06] Observing forests with ALOS and ALOS-2: polarimetric - interferometric modeling and data processing
Marco Lavalle, Jet Propulsion Laboratory, California Institute of Technology

15:00-15:30 Break

Torbjorn Eltoft, University of Tromso
CO-I: Harald Johnsen, Gunnar Spreen, Wolfgang Dierking, Laurent Ferro-Famil
15:50-16:10 [2A-08] ALOS PALSAR interferometry results from Western North America InSAR Consortium (WInSAR)
Chris Crosby, UNAVCO
CO-I: Scott Baker, Matt Pritchard, Members of WInSAR

16:10-16:30 [2A-09] Polarimetric, Geometric and Interferometric Cross Calibration of PALSAR-2 with UAVSAR
Scott Hensley, Jet Propulsion Laboratory
CO-I: Alex Fore, Thierry Michel, Ron Muellerschoen, Bruce Chapman

16:30-16:50 [2A-10] Assessment of the potential of ALOS2 Polarimetric, Compact, and InSAR information in support of Key applications in Canada
Ridha Touzi, Canada Centre for Remote Sensing
CO-I: N. Roulet, B. Sleep, T. Shipman, S. Patterson

16:50-17:10 [2A-11] Federated archive web services provided by the Seamless SAR Archive (SSARA) project
Scott Baker, UNAVCO
Session 2B: Polar Research / Snow & Ice

Date & Hour: Friday, 20 September 09:30-12:10
Room: Conference Room 202A
Co-Chairs: Tsutomu Yamanokuchi and Sang-Eun Park

09:30-09:50 [2B-01] Investigation of sea ice floe breakup processes in 2012 summer using high resolution SAR and autonomous observing platforms
Byongjun Hwang, Scottish Association for Marine Science

09:50-10:10 [2B-02] Use of PALSAR-2 / PALSAR data for precise understanding of ice mass balance on Polar region
Tsutomu Yamanokuchi, Remote Sensing Technology Center of Japan
CO-I: Koichiro Doi, Kazuki Nakamura

10:10-10:30 [2B-03] Antarctic and Greenland ice velocity mapping with ALOS PALSAR-I
Eric Rignot, University of California Irvine
CO-I: Jeremie Mouginot, Bernd Scheuchl

10:30-10:50 [2B-04] Himalayan Glaciers Dynamics
Noel Gourmelen, University of Edinburgh
CO-I: Urs Wegmuller, EmmanuelTrouve, Xiao Cheng

10:50-11:10 [2B-05] Monitoring snowpack dynamics in temperate climates by ALOS-2 quad-pol mode
Sang-Eun Park, Niigata University

11:10-11:30 [2B-06] Advanced techniques in Polarimetric and Interferometric SAR with ALOS2 quad-pol data
Armando Marino, ETH Zurich, Institute of Environmental Engineering
CO-I: Irena Hajnsek, Onur Yuzugulu, Simon Zwieback

11:30-11:50 [2B-07] Uplift rates in the Antarctic Peninsula measured by ALOS PALSAR
Anneleen Oyen, Delft University of Technology
CO-I: A. Hooper, R. Hanssen

11:50-12:10 [2B-08] SAR geophysics by space geodesy group at Hokkaido University
Masato Furuya, Hokkaido University
CO-I: Youhei Kinoshita, Takatoshi Yasuda
Session 3A: Vegetation, Forestry & Wetland / Land-use & Land-cover Research / Geography

Date & Hour: Thursday, 19 September 13:00-17:36
Room: Conference Room 202B
Co-Chairs: Yoshio Yamaguchi, Mihai Tanase and Manabu Watanabe

13:00-13:18 [3A-01] Development of biomass retrieval algorithm by using L-band SAR
Manabu Watanabe, JAXA

To Improve Greenhouse Gas Inventory In Estonia
Aire Olesk, Tartu Observatory, University of Tartu
CO-I: Kaupo Voormansik, Karlis Zalite, Tiit Nilson, Yves-Louis Desnos

13:36-13:54 [3A-03] Validation of PALSAR's potential for forest feature extraction by
comparing with optical sensor data
Rikie Suzuki, Japan Agency for Marine-Earth Science and Technology
CO-I: Hideki Kobayashi, Shin Nagai, Reichiro Ishii, Hadi Fadaei, Ram Avtar,
Nobuko Saigusa

woodlands: Estimating above-ground forest biomass stocks and changes
Timothy Hill, University of St Andrews
PI: Casey Ryan, University of Edinburgh
CO-I: Iain Woodhouse, Mat Williams

14:12-14:30 [3A-05] Forest Biomass Mapping from PRISM Stereo Imagery and PALSAR
Radar Data
Guoqing Sun, University of Maryland
CO-I: Wenjian Ni, K Jon Ranson

14:30-14:48 [3A-06] Tropical Forest Remote Sensing of Structure and Biomass over Brazil
with TanDEM-X
Robert Treuhaft, Jet Propulsion Laboratory, California Institute of Technology
CO-I: Fabio Goncalves, João Roberto dos Santos, Michael Keller, Paulo
Mauricio de Alencastro Graça, Michael Palace

14:48-15:06 [3A-07] Quantifying and monitoring carbon dynamic in forest ecosystems
affected by wildfires using multi-temporal SAR data
Mihai A. Tanase, The University of Melbourne
CO-I: Kim Lowell, Robert Kennedy, Juan de la Riva
15:06-15:30  Break

15:30-15:48  [3A-08] Multiple monitoring of biomass and plant distribution of terrestrial ecosystem by satellite and ground observation
Kenlo Nishida Nasahara, University of Tsukuba

Akira Kato, Chiba University
CO-I: Manabu Watanabe, Yoshio Yamaguchi, Akira Osawa, Toshiya Yoshida

16:06-16:24  [3A-10] Development of ALOS-2 PALSAR polarimetric data utilization for monitoring the earth surface
Yoshio Yamaguchi, Niigata University
CO-I: Sang Eun Park, Gulab Singh, Yi Cui, Wolfgang-M. Boerner, Jian Yang, Hiroyoshi Yamada, Ryoichi Sato

Kabir Uddin, GIS and remote sensing analyst

16:42-17:00  [3A-12] Joint Utilization of High-resolution L-band SAR Interferometry and Stereoscopy for Topographic Mapping in Mountainous Areas
Lu ZHANG, Wuhan University
CO-I: Mingsheng LIAO, Timo BALZ, Teng WANG

17:00-17:18  [3A-13] Accuracy Improvement of Land Cover Classification Using ALOS and ALOS-2 Data
Atsuko Nonomura, Kagawa University
CO-I: Hitoshi Moriya, Takeo Tadono

17:18-17:36  [3A-14] Comparison of the Performance of Texture Polarization Indices of L-band SAR and C-band SAR for Forest Biomass Estimation
Md Latifur Rahman Sarker, Universiti Teknologi Malaysia
Session 3B: Hydrology / Agriculture / Geology / Resources related Research
Date & Hour: Friday, 20 September 09:30-11:50
Room: Conference Room 202B
Co-Chairs: Christian Koyama and Takeo Tadono

09:30-09:50 [3B-01] Monitoring and modeling spatial patterns and temporal dynamics of surface soil moisture
Karl Schneider, University of Cologne
CO-I: Esch, Sabrina, Christian Koyama

09:50-10:10 [3B-02] Groundwater monitoring with InSAR
Thomas G FARR, Jet Propulsion Laboratory
CO-I: Zhen LIU, Michelle SNEED, Chris CROSBY, Jessica REEVES, Francesco Zucca

10:10-10:30 [3B-03] Estimation of habitat structure of river-floodplain systems using high resolution satellite images
Shiena Okada, Tokyo Institute of Technology
PI: Chihiro Yoshimura, Tokyo Institute of Technology
CO-I: Oliver Saavedra, Takeo Tadono, Ryo Masahiro, Manabu Fujii

10:30-10:50 [3B-04] Soil Moisture Mapping and Agriculture Crop Studies using ALOS PALSAR-2 Polarimetric SAR Data
Yalamanchili Subrahmanyeswara Rao, Indian Institute of Technology Bombay
CO-I: Gopalan Venkataraman

10:50-11:10 [3B-05] Soil Moisture Estimation over the Pampa Region using ALOS-2
Marc Thibeault, CONAE
CO-I: Danilo Dadamia, Mario Azcueta, Marco Petriella

11:10-11:30 [3B-06] Application of SAR Interferometry in monitoring the Surface Deformation of Taiwan Area
Chung-Pai CHANG, Center for Space and Remote Sensing Research, National Central University
CO-I: Chein-Way Hwang, Jiun-Yee Yen, Wei-Chia Hung

Naoki Ishitsuka, National Institute for Agro-Environmental Sciences
Poster Session

Date: Thursday, 19 - Friday, 20 September
Room: In front of Convention Hall 300

Disaster & Earthquake

1A-16: Landslides, floods and land use changes monitoring for climate changes studies in Brazil using ALOS-2/PALSAR-2 images
Francisco Dourado, University of Rio de Janeiro State
CO-I: Nelson Ferreira Fernandes, Fabio Sato, Vincent Nedelec, Ryoichi Furuta

1A-17: Characterization of active unstable rock slopes along the Norwegian fjords
John F. Dehls, Geological Survey of Norway
CO-I: Tom Rune Lauknes, Yngvar Larsen, Tom Grydeland

1A-18: Analysis of multiple geohazards around metropolitan area in northern Taiwan by PS-InSAR with ALOS images
Jyr-Ching Hu, National Taiwan University
CO-I: Chia-Sheng Hsieh, Erwan Pathier, Kuan-Chuan Lin, Johann Champenois

1A-19: Geodetic imaging the great Sumatra fault, Indonesia from ALOS and ALOS-2 radar interferometry
Xiaopeng Tong, University of California San Diego
CO-I: David T. Sandwell, Yehuda Bock, Peng Fang

1A-20: Interseismic Deformation of the Sumatra fault, Indonesia from ALOS radar interferometry
Xiaopeng Tong, University of California San Diego
CO-I: David T. Sandwell, Yehuda Bock, Peng Fang, Christopher Crosby

1A-21: Study of andesitic stratovolcanoes topographic changes, eruptive deposits and deformation through L-band Synthetic Aperture Radar imagery: an insight into the magmatic plumbing system
Virginie Pinel, ISTerre-Universite de Savoie
CO-I: Akhad Solikhin, Servando De la Cruz-Reyna, Jean-Claude Thouret, Jean-Philippe Metaxian

1A-22: L-band soil moisture skin depth study by using GB-SAR data
Christian Koyama, Tohoku University
CO-I: Motoyuki Sato, Kazunori Takahashi
1A-23: Study on Geo-hazards Recognition/Risk Assessment Methods using Interferometric and Image Statistics Analysis
Ryoichi Furuta, Remote Sensing Technology Center of Japan

Oceanography & Coastal Zone

1B-07: Spatial distinction of SAR-derived coastal wind fields and relation to coastal upwelling
Tae-Sung Kim, Seoul National University
CO-I: Kyung-Ae Park, Sungwook Hong, Kum-Ran Kim

1B-08: Retrieval of sea surface wind and wave height from ALOS PALSAR data and its error characteristics
Tae-Sung Kim, Seoul National University
CO-I: Kyung-Ae Park, Jae-Jin Park, Sungwook Hong, Kum-Ran Kim

Polarimetry & Interferometry

2A-12: Feature Extraction from ALOS/PALSAR Data for Forest Monitoring and Mapping
Jian Yang, Tsinghua University
CO-I: Kui Wang, Hanwei Sun, Junjun Yin, Yoshio Yamaguchi

Sensor Calibration

2A-13: Polarimetric calibration/validation of ALOS2/PALSAR2
Toshifumi Moriyama, Nagasaki university
CO-I: Kazuki Nakamura

2A-14: Geometric and Interferometric CalVal of ALOS-2 PALSAR along the San Andreas Fault System
David Sandwell, UCSD
CO-I: Yuri Fialko, Xiaopeng Tong, Bridget Smith-Konter, Christopher Crosby

2A-15: Study for the application of earth observation technologies to art
Hiroshi Suzuki, Kanazawa College of Art
CO-I: Masato Ohki
Polar Research

2B-09: Differential interferometric SAR processing using PALSAR data in north-western Greenland
Koichiro Doi, National Institute of Polar Research
CO-I: Tsutomu Yamanokuchi, Kazuki Nakamura, Makoto Omura, Shigeru Aoki

Vegetation, Forestry & Wetland

3A-15: Detecting Seasonal Defoliation in Tropical Rubber Plantation Using PALSAR
Bambang H. Trisasongko, Bogor Agricultural University
CO-I: Dyah R. Panuju

3A-16: Polarimetric analysis of burned forest areas: the Muravera case
GiovanniLaneve, Università di Roma
CO-I: Pablo Marzialetti, Roberto De Bonis, Gerardo Fortunato, Lorenzo Fusilli

3A-17: Topographic Variation on ALOS PALSAR Vegetation Index for Estimating Stand Volume in Mountainous Forest
Choen Kim, Kookmin University, College of Forest Science
CO-I: Min-Gee Hong

Land-use & Land-cover Research

3A-18: Paddy Field Mapping for a Rotationally Irrigated Agricultural Area in the Nile Delta
Masayoshi Satoh, University of Tsukuba
CO-I: Tomoyuki Taniguchi, Kenlo N. Nasahara, Kei Fujihira

Geography

3A-19: Remote sensing applied for a study of geographical pathology for the relationships between malaria endemic and Malaria as Anthropo-Ecosystem consisting various subsystems
Sumiko Anno, Shibaura Institute of Technology
CO-I: Tamotsu Igarashi, Aya Yamamoto, Takeo Tadono, Kazuo Oki
Agriculture

3B-08: Analysis of multi-temporal ALOS PALSAR data observing tsunami damaged agricultural field by the 2011 Tohoku earthquake
Chinatsu Yonezawa, Tohoku University
CO-I: Daisuke Kunii

3B-09: Corn field detection at the Konsen region, Hokkaido, Japan using ALOS PALSAR data
Nobuhiro Tomiyama, Remote Sensing Technology Center of Japan
CO-I: Toshio Okumura

Philippe Durand, CNES
CO-I: Arnaud Sellé, Thierry Rabaute, Nicolas Baghdadi, Frédéric Baup, Marcello De Michele, Jean-Luc Froger

Geology

3B-10: Use of InSAR products for detection of geodynamic risk zones due to hydrocarbon extraction
Anton Filatov, Immanuel Kant Baltic Federal University
CO-I: Arkadiy Evtyushkin, Vitalii Bryksin

3B-11: Development of Education Programs with Direct Access to the Earth Observation Data
Tohru Takahashi, Oita National College of Technology
CO-I: Toshio Usui, Toyohisa Fujishima, Masato Ohk, Sano Hiroaki

Resources related Research

3B-12: Geodetic determination of surface deformation due to resource extraction in Australia
Matthew Garthwaite, Geoscience Australia
CO-I: Sarah Lawrie, John Dawson, Medhavy Thankappan, Mick Filmer, Will Featherstone, Linda Morgan, Andreas Schenk