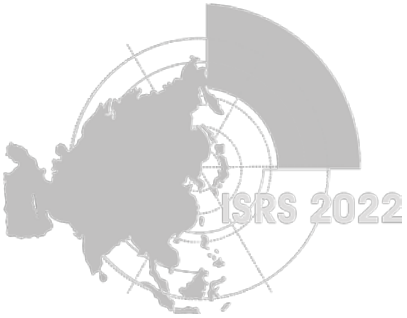
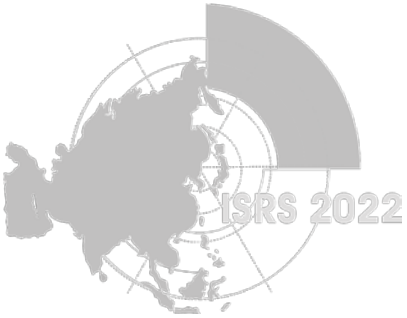


Timetable

Time: UTC+9 (Tokyo/Seoul)		Room A	Room B	Room C	Room D	POSTER
Day1 Monday, 16 May 2022	13:00-13:30 (Taipei 12:00-12:30)	Opening Ceremony				
	13:30-13:40 (Taipei 12:30-12:40)	Break				
	13:40-14:40 (Taipei 12:40-13:40)	Plenary Session				
	14:40-15:00 (Taipei 13:40-14:00)	Break				
	15:00-16:20 (Taipei 14:00-15:20)	[A1] Remote Sensing Application 1	[B1] Remote Sensing Application 2	[C1] Special Session - Ocean	—	—
	16:20-16:30 (Taipei 15:20-15:30)	Break				
	16:30-18:30 (Taipei 15:30-17:30)	—	—	—	—	[P1] Poster Session
Day2 Tuesday, 17 May 2022	09:00-10:20 (Taipei 08:00-09:20)	[A2] Remote Sensing Application 3	[B2] Remote Sensing Application 4	[C2] Remote Sensing Application 5 &Method Development and IP 1	—	—
	10:20-10:30 (Taipei09:20-09:30)	Break				
	10:30-12:30 (Taipei 09:30-11:30)	—	—	—	—	[P2] Poster Session
	12:30-13:30 (Taipei 11:30-12:30)	Break				
	13:30-14:50 (Taipei 12:30-13:50)	[A3] Remote Sensing Application 6	[B3] Remote Sensing Application 7	[C3] Method Development and IP 2	—	—
	14:50-15:00 (Taipei 13:50-14:00)	Break				
	15:00-17:00 (Taipei 14:00-16:00)	—	—	—	—	[P3] Poster Session
	17:00-17:30 (Taipei 16:00-16:30)	Break				
	17:30- (Taipei 16:30-)	Young Scholar's Night & Business Meeting				



Time: UTC+9 (Tokyo/Seoul)		Room A	Room B	Room C	Room D	
Day3 Wednesday, 18 May 2022	09:00-10:20 (Taipei 08:00-09:20)	[A4] Remote Sensing Application 8	[B4] Remote Sensing Application 9	[C4] Method Development and IP 3	[D1] Remote Sensing Application 10 &Sensor and Platform 1	—
	10:20-10:30 (Taipei 09:20-09:30)	Break				
	10:30-12:00 (Taipei 09:30-11:00)	[A5] GIS & New Technology	[B5] Mapping	[C5] Method Development and IP 4	[D2] Sensor and Platform 2	—
	12:00-12:10 (Taipei 11:00-11:10)	Break				
	12:10-12:40 (Taipei 11:10-11:40)	Closing Ceremony				

Opening Ceremony

Chairperson: Prof. Masashi Matsuoka
Monday, 16 May 2022 13:00 – 13:30 (Taipei 12:00 – 12:30)

Welcome Messages

Prof. Akira Iwasaki
The University of Tokyo, Japan

Prof. Sachiko Hayashida
President of RSSJ, Research Institute for Humanity and Nature
Faculty of Science, Nara Women's University, Japan

Prof. Hoonyol Lee
President of KSRS, Kangwon National University, Korea

Prof. Jen-Jer Jaw
President of CSPRS, National Taiwan University, Taiwan

Introduction to the Technical Program

Prof. Masayasu Maki
Chair, Technical Program Committee

Plenary Session

Chairperson: Prof. Masashi Matsuoka
Monday, 16 May 2022 13:40 – 14:40 (Taipei 12:40 – 13:40)

Dr. Shinichi Sobue
Japan Aerospace Exploration Agency, Japan

Prof. Daewon Chung
Executive Director, Professor
National Satellite Operations and Application Center,
Korea Aerospace Research Institute, Rep. of Korea

Prof. Ming-Der Yang
Distinguished Professor & Dean of College of Engineering,
Department of Civil Engineering, National Chung Hsing University, Taiwan

Closing Ceremony

Chairperson: Prof. Masashi Matsuoka
Wednesday, 18 May 2022 12:10 – 12:40 (Taipei 11:10 – 11:40)

Review of ISRS 2022 Technical Program
Prof. Yuji Sakuno
Co-chair, Technical Program Committee

Announcement of Student Award
Prof. Wataru Takeuchi
Co-chair, Local Organizing Committee

Announcement of ISRS 2023
Prof. Sang-Eun Park
Executive Director of KSRS

Closing Remarks
Prof. Sachiko Hayashida
President of RSSJ, Research Institute for Humanity and Nature
Faculty of Science, Nara Women's University, Japan

Technical Sessions
May 16 (Mon.) 2022

Room A

A1 Remote Sensing Application 1 15:00-16:20 (Taipei 14:00-15:20)

Chair: Prof. Akira Iwasaki (The University of Tokyo, Japan)

15:00 **A1-01** 【058559】DETECTING OF DATE PALM TREE USING HIGH RESOLUTION RGB SATELLITE IMAGERY AND SINGLE SHOT DETECTION・・・・・・・・ 001
Muneera J. Almalki *The National Space Science Agency, Korea*

15:15 **A1-02** 【059529】YIELD ESTIMATION OF PADDY RICE BASED ON DIFFERENCES IN RICE GROWTH CURVES・・・・・・・・・・・・・・・・・・・・・・ 005
Yuki Sofue, Chiharu Hongo and Naohiro Manago *Chiba University, Japan*
Gunardi Sigit *Provincial Office of Food Crops and Horticulture of West Java Province, Indonesia*

15:30 **A1-03** 【059534】INTERPRETATION OF GROUND-BASED CROP MONITORING USING THE STANDARD TEMPORAL PATTERN OF SPECTRAL VEGETATION INDICES AND CROP WATER STRESS INDEX TO ACCUMULATED TEMPERATURE
・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 009
Bokyeong Kim, Euni Jo, Hyun-Dong Moon, Hyunki Kim and Yuna Cho *Chonnam National University, Korea*
Hoejeong Jeong, Dong-Won Kwon, Jae-Kyeong Baek and Myung-Chul Seo *National Institute of Crop Science (NICS), Rural Development Administration (RDA), Korea*
Jaeil Cho *Chonnam National University, Korea*

15:45 **A1-04** 【059541】AGRICULTURAL APPLICATION OF CANOPY LIGHT EXTINCTION RATIO FOR CROP GROWTH MONITORING・・・・・・・・・・・・・・・ 010
Euni Jo, Yuna Cho, Hyun-Dong Moon and Hyunki Kim *Chonnam National University, Korea*
Hoejeong Jeong, Dong-Won Kwon and Myung-Chul Seo *National Institute of Crop Science (NICS), Rural Development Administration (RDA), Korea*
Jaeil Cho *Chonnam National University, Korea*

16:00 **A1-05** 【059672】JUDGMENT METHOD FOR DEAD JAPANESE RED PINE IN THE SANPACHI AREA OF AOMORI PREFECTURE USING AERIAL IMAGES FOR A SMALL NUMBER OF BANDS・・・・・・・・・・・・・・・・・・・・・・・・・・・ 011
Syota Akamatsu, Takanori Sasaki and Shunsuke Koshita *Hachinohe Institute of Technology, Japan*

May 17 (Tue.) 2022

Room A

A2 Remote Sensing Application 3 09:00-10:20 (Taipei 08:00-09:20)

Chair: Prof. Jaehyung Yu (Chungnam National University, Korea)

09:00 **A2-01** 【058740】MIDTERM EVALUATION FOR THE TEN-YEAR FOREST RESTORATION BATTLE IN NORTH KOREA・・・・・・・・・・・・・・・・ 015
Bruce Songhak Chung and Joowon Park *Kyungpook National University, Korea*

09:15 **A2-02** 【058956】A PRELIMINARY STUDY FOR EXTRACTING WINDBREAK FOREST FROM AERIAL PHOTOGRAPHS USING A DEEP LEARNING APPROACH IN MIYAGI PREFECTURE, JAPAN・・・・・・・・・・・・・・・・・・・・・・・・ 019
Chinatsu Yonezawa and Takashi Okubo *Tohoku University, Japan*

09:30 **A2-03** 【059476】ESTIMATION OF URBAN CARBON STORAGE USING MACHINE LEARNING AND REMOTE SENSING DATA・・・・・・・・・・・・・・・ 023
Bokyung Son, Yeonsu Lee and Jungho Im *Ulsan National Institute of Science and Technology (UNIST), Korea*

09:45 **A2-04** 【059597】ESTIMATION OF CARBON STORAGE AND ANALYSIS USING LOCAL CLIMATE ZONE CLASSIFICATION: A CASE STUDY OF SUWON, SOUTH KOREA・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 024
Yeonsu Lee, Bokyung Son and Jungho Im *Ulsan National Institute of Science and Technology, Korea*

10:00 **A2-05** 【060375】IDENTIFICATION OF BLUE CARBON ECOSYSTEM USING MACHINE LEARNING APPROACH AND SENTINEL IMAGERY 2A・・・・ 025
Nirmawana Simarmata *Institut Teknologi Bandung, Indonesia, Institut Teknologi Sumatera, Indonesia*
Ketut Wikantika *Institut Teknologi Bandung, Indonesia*
Soni Darmawan *Institut Teknologi Nasional, Indonesia*

May 17 (Tue.) 2022

Room A

A3 Remote Sensing Application 6 13:30-14:50 (Taipei 12:30-13:50)

Chair: Prof. Yuji Sakuno (Hiroshima University, Japan)

13:30 **A3-01** 【059556】HYPERSPECTRAL IMAGER SUITE (HISUI): OPERATIONAL OBSERVATION IN 2020-2021 AND EARLY ACHIEVEMENTS・・・・・ 029
Tsuneo Matsunaga *National Institute for Environmental Studies, Japan*
Akira Iwasaki *The University of Tokyo, Japan*
Tetsushi Tachikawa, Jun Tanii, Osamu Kashimura, Koichiro Mouri and Hitomi Inada *Japan Space Systems, Japan*
Satoshi Tsuchida, Ryosuke Nakamura, Hirokazu Yamamoto and Koki Iwao *National Institute of Advanced Industrial Science and Technology, Japan*

13:45 **A3-02** 【059570】KOMPSAT STANDARD DATA PRODUCTS: REFINING THE WAY TO SOCIETAL BENEFITS・・・・・・・・・・・・・・・・・・・・・・・・・・・ 030
Yongseung Kim, Dochul Yang, Gabho Jeun and Sun-gu Lee *National Satellite Operation & Application Center, Korea Aerospace Research Institute, Korea*

14:00 **A3-03** 【060230】MULTIPLE SEGMENTATION METHOD FOR DETECTION OF WORLD-WIDE IMPACT CRATERS FOR ADAPTIVE OBJECT ORIENTED CLASSIFICATION・・・・・・・・・・・・・・・・・・・

May 18 (Wed.) 2022

Room A

A4 Remote Sensing Application 8 09:00-10:20 (Taipei 08:00-09:20)

Chair: Prof. Wataru Takeuchi (The University of Tokyo, Japan)

09:00 **A4-01** 【059576】DROUGHT ASSESSMENT USING INTEGRATED CROP DROUGHT INDEX (ICDI) IN THE US CORN BELT ・・・・・・・・・・・・・・・・・ 036
Soo-Jin Lee and Yangwon Lee *Pukyong National University, Korea*

09:15 **A4-02** 【059603】DINSAR-DERIVED SURFACE DISPLACEMENT AND FAULT INVERSION FOR THE 2021 HOVSGOL EARTHQUAKE IN MONGOLIA ・・ 037
Taewook Kim and Hyangsun Han *Kangwon National University, Korea*

09:30 **A4-03** 【059630】TIME-SERIES ANALYSIS OF THE SURFACE DISPLACEMENT BEFORE AND AFTER THE 2017 POHANG EARTHQUAKE, SOUTH KOREA, USING SENTINEL-1 PSINSAR TECHNIQUE ・・・・・・・・・・・・・・・・ 038
Da-woon Jung and Hoonyol Lee *Kangwon National University, Korea*

09:45 **A4-04** 【059633】DEEP LEARNING-BASED OIL SPILL DETECTION FROM PLANETSCOPE SATELLITE IMAGES ・・・・・・・・・・・・・・・・・ 039
Jonggu Kang and Yangwon Lee *Pukyong National University, Korea*

10:00 **A4-05** 【059644】FIRE SMOKE DETECTION USING A FALSE COLOR COMPOSITE FROM UV-VIS IMAGE ・・・・・・・・・・・・・・・・・・・・・・・・ 040
Yemin Jeong and Yangwon Lee *Pukyong National University, Korea*

May 18 (Wed.) 2022

Room A

A5 GIS & New Technology 10:30-12:00 (Taipei 09:30-11:00)

Chair: Prof. Kanako Muramatsu (Nara Women's University, Japan)

10:30 **A5-01** 【059293】THE DAMAGE ASSESSMENT OF BUILDINGS DURING THE TOHOKU EARTHQUAKE USING DEEP LEARNING・・・・・・・・・・・・・・・・・041
Kaisei Takita, Daiki Hidaka, Joui Mizuno, Takashi Nonaka, Tomohito Asaka, Toshiro Sugimura and Keishi Iwashita *Nihon University, Japan*

10:45 **A5-02** 【059299】SOFTWARE-AS-A-SERVICE FOR GENERATION OF TOA AND TOC REFLECTANCE PRODUCTS FOR KOMPSAT-3/3・・・・・・・・・・・・・ 042
Kwangseob Kim and Kiwon Lee *Hansung University, Korea*

11:00 **A5-03** 【059546】CURRENT INTERNATIONAL STATUS OF ARD AND DIRECTION OF K-ARD DEVELOPMENT・・・・・・・・・・・・・・・・・・・・・・・・・ 046
DongHan Lee and Seok-Won Choi *Korea Aerospace Research Institute, Korea*

11:15 **A5-04** 【059701】EMULATE THE SPATIAL DISTRIBUTION OF INVASIVE ALIEN SPECIES THROUGH SPECIES DISTRIBUTION MODELS BASED ON A FIELD SURVEY FRAME・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 047
Chin Rou Hsu and Chen-I Hsu *National Chung-Hsing University, Taiwan*
Bao-Hua Shao *Forestry Bureau, Council of Agriculture, Executive Yuan, Taiwan*
Nan-Chang Lo *Experimental Forest Management Office, Taiwan*
Kai-Yi Huang *National Chung-Hsing University, Taiwan*

11:30 **A5-05** 【060339】EVALUATION OF MACHINE LEARNING MODEL FOR DISASTER VICTIM ESTIMATION IN SOUTH KOREA USING REMOTE SENSING DATASET・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 048
Reza Asriandi Ekaputra *Dong-A University, Korea, Intitut Teknologi Sumatera, Indonesia*
Changkye Lee, Seong-Hoon Kee and Jurng-Jae Yee *Dong-A University, Korea*

May 16 (Mon.) 2022

Room B

B1 Remote Sensing Application 2 15:00-16:20 (Taipei 14:00-15:20)

Chair: Prof. Su-Fen Wang (National Changhua University of Education, Taiwan)

15:00 **B1-01** 【059071】REPRESENTATION OF FINE PARTICLE MASS CONCENTRATION DISTRIBUTION AT THE KOREAN PENINSULA USING INTEGRATED AERONET, SATELLITE, AND LIDAR DATA・・・・・・・・・・・・・・・・ 049
Naghmeh Dehkhoda and Youngmin Noh *Pukyong National University, Korea*

15:15 **B1-02** 【059524】STUDY ON THE CLASSIFICATION OF AEROSOLS TO WATER VAPOR AND HIGH CONCENTRATION FINE PARTICLE USING HIGH-RESOLUTION SCANNING LIDAR AT DANGJIN PORT (SOUTH KOREA)・・ 050
Sohee Joo and Youngmin Noh *Pukyong National University, Korea*

15:30 **B1-03** 【059639】ATMOSPHERIC CORRECTION FOR SENTINEL-2 IMAGES USING 6S AND RASTER AOD DATA・・・・・・・・・・・・・・・・・・・・・・・・ 053
Seoyeon Kim and Yangwon Lee *Pukyong National University, Korea*

15:45 **B1-04** 【060159】MACHINE LEARNING-BASED PRECIPITATION ESTIMATION USING REMOTE SENSING DATA FOR KOREAN PENINSULA IN SUMMER・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 054
Yeji Shin, Daehyeon Han and Jungho Im *Ulsan National Institute of Science and Technology, Korea*

16:00 **B1-05** 【060243】EVALUATION OF HIMAWARI-8 AHI AEROSOL PRODUCTS WITH GROUND-BASED SKYNET MEASUREMENTS・・・・・・・・・・・ 055
Hirokazu Yamamoto National Institute of Advanced Industrial Science and technology, *Japan*
Hitoshi Irie *Chiba University, Japan*

May 17 (Tue.) 2022

Room B

B2 Remote Sensing Application 4 09:00-10:20 (Taipei 08:00-09:20)

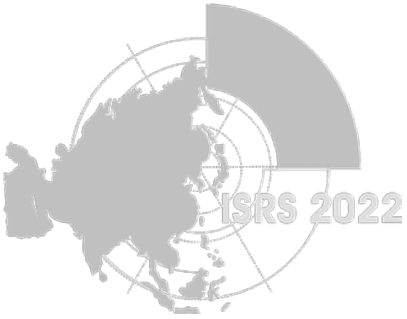
Chair: Prof. Joowon Park (Kyungpook National University, Korea)

09:00 **B2-01** 【058551】RELATIONSHIP OF NDVI AND LAND SURFACE TEMPERATURE IN JEJU ISLAND: A CASE OF SPRING 2017 · · · · · · · · · · · · · · · · · · 058
Jihyun Lee, Kwangseob Kim and Kiwon Lee *Hansung University, Korea*

09:15 **B2-02** 【059618】RELATIONSHIPS BETWEEN ENVIRONMENTAL FACTORS AND THE AREA OF TERRA NOVA BAY POLYNYA MEASURED FROM SATELLITE IMAGERY · 062
Jinyeong Kim *Kangwon National University, Korea*
Sanghee Kim *Korea Polar Research Institute, Korea*
Hyangsun Han *Kangwon National University, Korea*

09:30 **B2-03** 【059685】SPATIOTEMPORAL SEA LEVEL VARIATIONS AROUND THE NORTHWEST PACIFIC · 063
Do-Hyun Hwang and Hahn Chul Jung *Korea Ocean Satellite Center, Korea Institute of Ocean Science and Technology, Korea*

09:45 **B2-04** 【059904】SEASONAL AND GEOGRAPHICAL ANALYSES OF THE ACCURACY OF THE SEA WIND ESTIMATED FROM SENTINEL-1 SAR IMAGES USING DEEP NEURAL NETWORKS · 064
Sung-uk Joh and Yangwon Lee *Pukyong National University, Korea*



May 17 (Tue.) 2022

Room B

B3 Remote Sensing Application 7 13:30-14:50 (Taipei 12:30-13:50)

Chair: Prof. Tomohito Asaka (Nihon University, Japan)

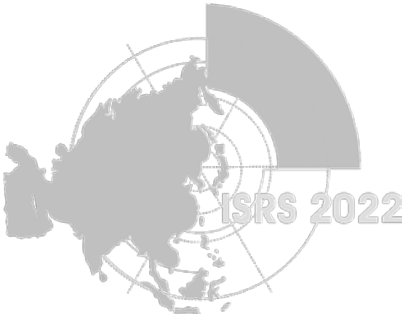
13:30 **B3-01** 【059451】D-INSAR AND PS-INSAR MONITOR CO-SEISMIC AND POST-SEISMIC GROUND SURFACE DISPLACEMENT ・・・・・・・・・・・・・・・・・・・・ 065
Lu-ting Chen and Fuan Tsai *National Central University, Taiwan*

13:45 **B3-02** 【059575】RADIOMETRIC CALIBRATION FOR ONC-T ONBOARD HAYABUSA2 BASED ON SIMULTANEOUS EARTH OBSERVATION WITH HIMAWARI-8/AHI ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 066
Toru Kouyama *National Institute of Advanced Industrial Science and Technology, Japan*
Manabu Yamada *Chiba Institute of Technology, Japan*
Eri Tatsumi *Instituto de Astrofísica de Canarias*
Hidehiko Suzuki *Meiji University, Japan*
Tomokatsu Morota *The University of Tokyo, Japan*
Rie Honda *Kochi University, Japan*
Yasuhiro Yokota *Japan Aerospace Exploration Agency, Japan*
Shingo Kameda and Naoya Sakatani *Rikkyo University, Japan*
Masahiro Hayakawa *Japan Aerospace Exploration Agency, Japan*
Yuichiro Cho *The University of Tokyo, Japan*
Moe Matsuoka *Observatoire de Paris*
Chikatoshi Honda *Aizu University, Japan*
Kazuo Yoshioka *The University of Tokyo, Japan*
Hirotaka Sawada *Japan Aerospace Exploration Agency, Japan*
Gaku Nishiyama and Seiji Sugita *The University of Tokyo, Japan*

14:00 **B3-03** 【059621】OBSERVATION OF SURFACE DISPLACEMENT OF A SUBGLACIAL LAKE IN ANTARCTICA USING PSINSAR TECHIQUE ・・・・・・・・・・ 067
Jihyun Moon and Hoonyol Lee *Kangwon National University, Korea*

14:15 **B3-04** 【059640】INVESTIGATION OF EFFECT OF IMAGE FILTERS FOR DETECTION METHOD FOR MOATS ON RUINS OF CASTLE UNDER THE VEGETATION IN JAPAN USIN SATELLITE IMAGES ・・・・・・・・・・・・・・・・・・・ 068
Takanori Sasaki, Yasuo Koshiuji, Yu Hosaka and Syota Akamatsu *Hachinohe Institute of Technology, Japan*

14:30 **B3-05** 【059657】INVESTIGATION OF EFFECT OF SMOOTHING FILTERS FOR RESULT OF DETECTION BY ANALYZING METHOD FOR MOATS ON RUINS OF CASTLE IN NORTH-EAST REGION OF JAPAN USING SATELLITE IMAGES ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 069
Yu Hosaka, Takanori Sasaki, Yasuo Koshiuji and Syota Akamatsu *Hachinohe Institute of Technology, Japan*



May 18 (Wed.) 2022

Room B

B4 Remote Sensing Application 9 09:00-10:20 (Taipei 08:00-09:20)

Chair: Prof. Chul-Soo Ye (Far East University, Korea)

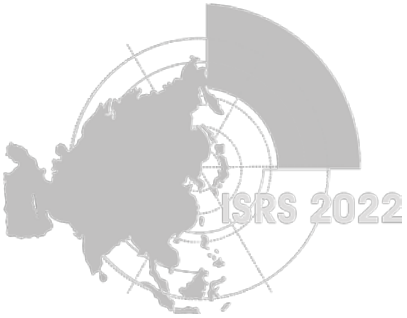
09:00 **B4-01** 【059338】COHERENCE CHANGE DETECTION BETWEEN INFERRED AND OBSERVED SAR IMAGES WITH THE SAME IMAGING CONDITIONS・・・ 070
Yuki Yamaguchi, Taichi Tanaka and Masato Toda *NEC Corporation, Japan*

09:15 **B4-02** 【059413】SPATIAL GAP-FILLING OF GK2A DAILY SST AROUND SOUTH KOREA USING STATISTICAL TECHNIQUES・・・・・・・・・・・・・・・・ 074
Jihye Ahn and Yangwon Lee *Pukyong National University, Korea*

09:30 **B4-03** 【059462】BACKSCATTERING CHARACTERISTICS OF SAR IMAGES IN DAMAGED BUILDINGS DUE TO THE 2016 KUMAMOTO EARTHQUAKE・ 075
Shinki Cho, Haoyi Xiu and Masashi Matsuoka *Tokyo Institute of Technology, Japan*

09:45 **B4-04** 【059869】COMPARATIVE STUDY ON GAP-FILLING OF GOCI-I CHLOROPHYLL-A PRODUCT USING KRIGING AND RANDOM FOREST・・076
Ho-Kun Jeon and Hong Yeon Cho *Korea Institute of Ocean Science and Technology,* University of Science and Technology(UST), *Korea Maritime & Ocean University, Korea*

10:00 **B4-05** 【060323】COMPARISON OF LIGHTGBM-BASED AOD RETRIEVAL USING VARIOUS SPATIAL RESOLUTION OF MODIS PRODUCTS・・・・・・・・・ 077
Eunjin Kang *Ulsan National Institute of Science and Technology, Korea*
Seonyoung Park *Seoul National University of Science and Technology, Korea*
Miae Kim, Cheolhee Yoo and Jungho Im *Ulsan National Institute of Science and Technology, Korea*



May 18 (Wed.) 2022

Room B

B5 Mapping 10:30-12:00 (Taipei 09:30-11:00)

Chair: Prof. Masashi Matsuoka (Tokyo Institute of Technology, Japan)

10:30 **B5-01** 【059682】ON THE CONJUGATE TRAJECTORY OF FLAT-REFRACTIVE STEREO-PAIR ・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 078
Szu-Han Wang and Jen-Jer Jaw *National Taiwan University, Taiwan*

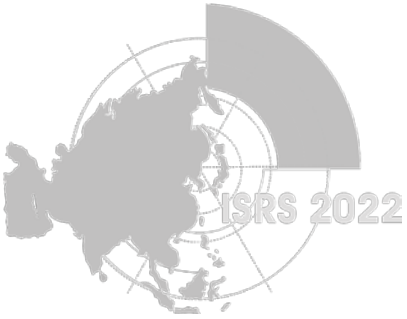
10:45 **B5-02** 【059958】CROSS-VALIDATION APPROACHES FOR EVALUATING LANDSLIDE SUSCEPTIBILITY MAP ACCURACY ・・・・・・・・・・・・・・・・・・ 079
Van-Trung Chu *National Central University,Taiwan, Thai Nguyen University of Agriculture and Forestry, Vietnam*
Shou-Hao and Tang-Huang Lin *National Central University,Taiwan*

11:00 **B5-03** 【060173】VALIDATION OF JAXA HIGH-RESOLUTION LAND-USE AND LAND-COVER MAP IN JAPAN VERSION 21.11 ・・・・・・・・・・・・・・・・・・・・・・ 080
Sota Hirayama, Takeo Tadono, Masato Ohki and Yousei Mizukami *Japan Aerospace Exploration Agency (JAXA), Japan*
Kenlo Nishida Nasahara *University of Tsukuba, Japan*
Koichi Imamura, Naoyoshi Hirade, Fumi Ohgushi, Masanori Dotsu and Tsutomu Yamanokuchi *Remote Sensing Technology Center of Japan (RESTEC), Japan*

11:15 **B5-04** 【060229】A TEST OF SATELLITE STEREO PIPELINE FOR DSM GENERATION ・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 081
Jaewang Lee *Korea Maritime and Ocean University, Korea*
Changno Lee *Seoul National University of Science and Technology, Korea*
Jaehong Oh *Korea Maritime and Ocean University, Korea*

11:30 **B5-05** 【060231】IDENTIFICATION AND CLASSIFICATION OF ASBESTOS- BEARING ROCKS USING HYPERSPECTRAL IMAGING TECHNIQUES AND MACHINE LEARNING ALGORITHMS ・・・・・・・・・・・・・・・・・・・・・・・・ 085
Grace Malvine Moughoa Boussoughou Ngolo, Jaehyung Yu and Huy Hoa Huynh *Chungnam National University, Korea*

11:45 **B5-06** 【060342】ENHANCEMENT OF FOREST VERTICAL STRUCTURE MAPPING PERFORMANCE THROUGH A MULTI-KERNEL CONVOLUTIONAL NEURAL NETWORK BY INTEGRATING HIGH-RESOLUTION UAV AND SENTINEL-2 IMAGES ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 086
Young-Woong Yoon, Won-Kyung Baek and Hyung-Sup Jung *University of Seoul, Korea*



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Room C

C1 Special Session – Ocean 15:00-16:20 (Taipei 14:00-15:20)

Chair: Prof. Naoto Ebuchi (Hokkaido University, Japan)

15:00 **C1-01** 【059527】RELATIONSHIP BETWEEN OCEAN COLOR AND VOLCANIC ACTIVITY AROUND SUBMARINE VOLCANO USING GCOM-C SGLI DATA・・・

May 17 (Tue.) 2022

Room C

C2 Remote Sensing Application 5

& Method Development and IP 1 09:00-10:20 (Taipei 08:00-09:20)

Chair: Prof. Tee-Ann Teo (National Yang Ming Chiao Tung University, Taiwan)

09:00 **C2-01** 【059412】IMPROVING CLASSIFICATION ON SPARSE MOBILE LIDAR POINT CLOUD DERIVED IMAGES BY MERGING RESULTS OF MULTIPLE CLASS DEDICATED NEURAL NETWORK MODELS TRAINED WITH FOCAL LOSS・・・

May 17 (Tue.) 2022

Room C

C3 Method Development and IP2 13:30-14:50 (Taipei 12:30-13:50)

Chair: Dr. Tsutomu Yamanokuchi (Remote Sensing Technology Center of Japan, Japan)

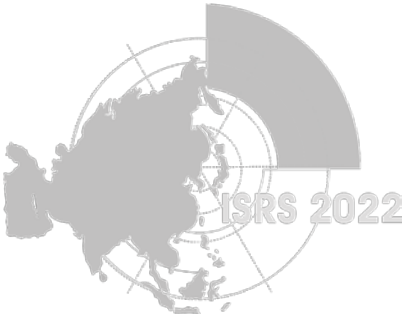
13:30 **C3-01** 【059077】EXPERIMENT OF KOMPSAT-3/3A ABSOLUTE RADIOMETRIC CALIBRATION COEFFICIENTS ESTIMATION USING FLARE TARGET・・・104
Kyoung-Wook Jin and Dae-Soon Park *Korea Aerospace Research Institute, Korea*

13:45 **C3-02** 【059559】STRUCTURE-TEXTURE DECOMPOSITION BASED EDGE ENHANCEMENT OF INFRARED IMAGE USING PANCHROMATIC IMAGE・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・105
Daehoon Yoo and Hongtak Lee *Korea Aerospace Research Institute, Korea*

14:00 **C3-03** 【059600】EVALUATING ROBUSTNESS OF DEEP LEARNING BASED IMAGE MATCHING MODEL BY DATASET CONFIGURATION WITH MULTI-SENSOR VHR SATELLITE IMAGES・・・・・・・・・・・・・・・・・・・・・・・・106
Wonbin Kang, Minyoung Jung and Yongil Kim *Seoul National University, Korea*

14:15 **C3-04** 【059693】GEOMETRIC PROCESSING AND EVALUATION OF HYPERSPECTRAL IMAGES BASED ON ORHTOPHOTO・・・・・・・・・107
Lim Tai yang *Dankook University, Korea*

14:30 **C3-05** 【060043】AN IMPROVED SCENE-BASED NUC FOR AIRBORNE IR CAMERA USING PATCH-BLOCK IMAGE ENTROPY・・・・・・・・・・・・・・・・108
Myung-Ho Kang *Agency for Defense Development, Korea, Chungnam National University, Korea*
Eun-Suk Yoon and Ka-Young Park *Agency for Defense Development, Korea*
Yeong Jun Koh *Chungnam National University, Korea*



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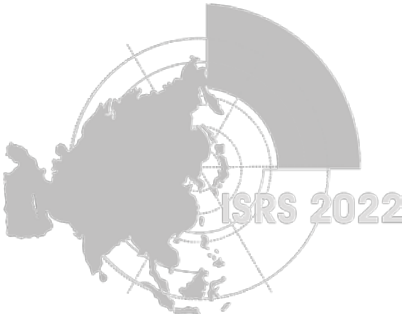
Room C

C4 Method Development and IP 3 09:00-10:20 (Taipei 08:00-09:20)

Chair: Prof. Ming-Der Yang (National Chung Hsing University, Taiwan)

09:00 **C4-01** 【059888】FAULT DISPLACEMENT ESTIMATION FROM SATELLITE IMAGERY・・・



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Room C

C5 Method Development and IP 4 10:30-12:00 (Taipei 09:30-11:00)

Chair: Prof. Junhwa Chi (Korea Polar Research Institute, Korea)

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Juhyeon Sim *Pukyong National University, Korea*
Dukhyeon Kim *Hanbat National University, Korea*
Jaewon Kim, Yuseon Lee and Youngmin Noh *Pukyong National University, Korea*

10:45 **C5-02** 【060315】LANDSLIDE DETECTION BASED ON CHANGE IN SAR INTENSITY IMAGERY・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・120
Taku Teshima and Akira Iwasaki *The University of Tokyo, Japan*

11:00 **C5-03** 【060332】RECONSTRUCTION OF HOURLY SEA SURFACE TEMPERATURE USING GENERATIVE ADVERSARIAL NETWORK THROUGH COMBINING NUMERICAL MODEL AND GEOSTATIONARY SATELLITE DATA・・・・121
Sihun Jung and Jungho Im *Ulsan National Institute of Science and Technology (UNIST), Korea*

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Yuya Akutsu and Akira Iwasaki *The University of Tokyo, Japan*

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Room D

D1 Remote Sensing Application 10

& Sensor and Platform 1 09:00-10:20 (Taipei 08:00-09:20)

Chair: Prof. Fuan Tsai (National Central University, Taiwan)

09:00 **D1-01** 【059766】ADVANCED ALERTING MECHANISM FOR SLOPE & GROUND INSTABILITY BASED ON SPATIO-TEMPORAL ANALYSIS OF ANOMALOUS LAND DISPLACEMENT BEHAVIOUR FROM TIME-SERIES INSAR PROCESSING・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・123
Abhinandan Arya, Bujed Pamungkas, Rishabh Chavhan and Prakhar Misra *Synspective Inc., Japan*

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Wanyub Kim and Minha Choi *Sungkyunkwan University, Korea*

09:30 **D1-03** 【060288】REAL-TIME DETECTION OF WILDFIRE USING GK-2A SATELLITE DATA AND MACHINE LEARNING APPROACHES・・・・・・・・・・・125
Taejun Sung, Yoojin Kang and Jung-Ho Im *Ulsan National Institute of Science and Technology (UNIST), Korea*

09:45 **D1-04** 【060337】BURNED AREA DETECTION USING MACHINE LEARNING WITH THE APPLICATION OF UNIFORM MANIFOLD APPROXIMATION AND PROJECTION (UMAP)・・・・・・・・・・・・・・・・・・・・・・・・126
Jaese Lee, Woohyeok Kim and Jungho Im *Ulsan National Institute of Science and Technology (UNIST), Korea*

10:00 **D1-05** 【060346】FLOOD MANAGEMENT ON THE ACTIVATION OF THE INTERNATIONAL CHARTER SPACE AND MAJOR DISASTERS: A CASE STUDY IN SOUTH KOREA, 2020・・・・・・・・・・・・・・・・・・・・・・・・127
Ki-mook Kang and Euiho Hwang *K-water Research Institute, Korea*
Yeji Kim and Hyun-Ok Kim *Korea Aerospace Research Institute, Korea*

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Room D

D2 Sensor and Platform 2 10:30-12:00 (Taipei 09:30-11:00)

Chair: Prof. Chao-Hung Lin (National Cheng Kung University, Taiwan)

10:30 **D2-01** 【059190】OVERVIEW OF OCEAN OBSERVATIONS BY AMSR2 ON GCOM-W AND DEVELOPMENT OF AMSR3 ON GOSAT-GW・・・・・・・・・・・・ 128
Naoto Ebuchi *Hokkaido University, Aerospace Exploration Agency (JAXA), Japan*
Misako Kachi, Rigen Shimada, Eri Yoshizawa, Hideyuki Fujii, Keiichi Ohara, Marehito Kasahara, Kazuya Inaoka, and Yasushi Kojima *Japan Aerospace Exploration Agency (JAXA), Japan*

10:45 **D2-02** 【059295】KOMPSAT-6 CALIBRATION TEST WITH SIMULATED IMAGE DATASET・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 129
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Jae-Hyun Ryu, Ho-yong Ahn, Sang-Il Na, Kyung-Do Lee and Chan-Won Park *National Institute of Agricultural Sciences (NAS), Rural Development Administration (RDA), Korea*
Jaeil Cho Chonnam *National University, Korea*

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Shinichi Sobue, Yuuta Tochigi and Akiko Noda *Aerospace Exploration Agency (JAXA), Japan*

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Junichi Takaku, Taichiro Hashiguchi and Fumi Ohgushi *Remote Sensing Technology Center of Japan, Japan*

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Toshiyoshi Kimura and Tadahito Mizutani *Japan Aerospace Exploration Agency, Japan*

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16:30-18:30 (Taipei 15:30-17:30)

P1-01 【059416】VIRTUAL CIRRUS OBSERVATION OF HIMAWARI SATELLITE USING DEEP LEARNING TECHNIQUE WITH GEO_KOMPSAT-2A OBSERVATIONS ・・・

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P1-10 【059826】EFFECT ANALYSIS OF PANCHROMATIC IMAGES WITH DIFFERENT SPATIAL RESOLUTIONS ON HYPERSHARPENING OF WORLDVIEW-3 SWIR IMAGES · · ·

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Poster Session 2

10:30-12:30 (Taipei 09:30-11:30)

P2-01 【059511】A CASE STUDY OF SPATIO-TEMPORAL DATA FUSION FOR MONITORING OF WILDFIRE ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 189
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Chul-Soo Ye *Far East University, Korea*

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Ira Karrel San Jose and Wataru Takeuchi *The University of Tokyo, Japan*

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Hong Yeon Cho *Korea Institute of Ocean Science and Technology (KIOST), University of Science and Technology (UST), Korea, Korea Maritime and Ocean University, Korea*

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Won-Jun Choi *Korea Institute of Ocean Science & Technology, Korea Maritime and Ocean University, Korea*
Jeong-Eun Bank *Korea Institute of Ocean Science & Technology, Korea*
Dae-Woon Shin *Korea Institute of Ocean Science & Technology, Korea Maritime and Ocean University, Korea* Ahmed Harun-Al-Rashido *Korea Institute of Ocean Science & Technology, Korea, Sylhet Agricultural University, Bangladesh*
Chan-Su Yang *Korea Institute of Ocean Science & Technology, Korea Maritime and Ocean University, the University of Science & Technology, Korea*

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