## Timetable

<table>
<thead>
<tr>
<th>Time: UTC+9 (Tokyo/Seoul)</th>
<th>Room A</th>
<th>Room B</th>
<th>Room C</th>
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<th>POSTER</th>
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<tbody>
<tr>
<td><strong>Day1</strong></td>
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<td>Monday, 16 May 2022</td>
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<td>13:00-13:30 (Taipei 12:00-12:30)</td>
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<td>Opening Ceremony</td>
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<td>13:30-13:40 (Taipei 12:30-12:40)</td>
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<td>Break</td>
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<tr>
<td>13:40-14:40 (Taipei 12:40-13:40)</td>
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<td></td>
<td>Plenary Session</td>
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<tr>
<td>14:40-15:00 (Taipei 13:40-14:00)</td>
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<td>16:30-18:30 (Taipei 15:30-17:30)</td>
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<td>[P1] Poster Session</td>
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<td><strong>Day2</strong></td>
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<td>Tuesday, 17 May 2022</td>
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<td>10:20-10:30 (Taipei 09:20-09:30)</td>
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<td>Break</td>
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<td>10:30-12:30 (Taipei 09:30-11:30)</td>
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<td>[P2] Poster Session</td>
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<td>12:30-13:30 (Taipei 11:30-12:30)</td>
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<td>Break</td>
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<tr>
<td>14:50-15:00 (Taipei 13:50-14:00)</td>
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<td>Break</td>
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<td>15:00-17:00 (Taipei 14:00-16:00)</td>
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<td>[P3] Poster Session</td>
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<td>17:00-17:30 (Taipei 16:00-16:30)</td>
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<td>Break</td>
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<tr>
<td>17:30- (Taipei 16:30-)</td>
<td>Young Scholar's Night &amp; Business Meeting</td>
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**Day1**: Meeting to be held in Room A

**Day2**: Meeting to be held in Room B
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<tr>
<th>Time: UTC+9 (Tokyo/Seoul)</th>
<th>Room A</th>
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<tr>
<td>12:00-12:10 (Taipei 11:00-11:10)</td>
<td>Break</td>
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<tr>
<td>12:10-12:40 (Taipei 11:10-11:40)</td>
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<td>Closing Ceremony</td>
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</table>
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

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 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
**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

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

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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
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</thead>
</table>
| 13:30 | A3-01   | HYPERSPECTRAL IMAGER SUITE (HISUI): OPERATIONAL OBSERVATION IN 2020-2021 AND EARLY ACHIEVEMENTS | Tsuneo Matsunaga  
Akira Iwasaki  
Tetsushi Tachikawa, Jun Tani, Osamu Kashihura, Koichiro Mouri and Hitomi Inada  
Satoshi Tsuchida, Ryosuke Nakamura, Hirokazu Yamamoto and Koki Iwao |
| 13:45 | A3-02   | KOMPSAT STANDARD DATA PRODUCTS: REFINING THE WAY TO SOCIETAL BENEFITS                      | Yongseung Kim, Dochul Yang, Gabho Jeun and Sun-gu Lee  
National Satellite Operation & Application Center, Korea Aerospace Research Institute, Korea |
| 14:00 | A3-03   | MULTIPLE SEGMENTATION METHOD FOR DETECTION OF WORLD-WIDE IMPACT CRATERS FOR ADAPTIVE OBJECT ORIENTED | HABIMANA Emmanuel and Jaehyung Yu  
Chungnam National University, Korea |
| 14:15 | A3-04   | 20 YEARS OF MIGRATION TO THE CAPITAL: IMPACTS ANALYSIS CONCERNING PEOPLE’S WELFARE AND SUSTAINABLE DEVELOPMENT IN ULAANBAATAR, MONGOLIA | YAN Guanyu  
The University of Tokyo, Japan |
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)*

<table>
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<tr>
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<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
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<tbody>
<tr>
<td>09:00</td>
<td>A4-01</td>
<td>DROUGHT ASSESSMENT USING INTEGRATED CROP DROUGHT INDEX (ICDI) IN THE US CORN BELT</td>
<td>Soo-Jin Lee and Yangwon Lee</td>
<td>Pukyong National University, Korea</td>
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<tr>
<td>09:15</td>
<td>A4-02</td>
<td>DINSAR-DERIVED SURFACE DISPLACEMENT AND FAULT INVERSION FOR THE 2021 HOVSGOL EARTHQUAKE IN MONGOLIA</td>
<td>Taewook Kim and Hyangsun Han</td>
<td>Kangwon National University, Korea</td>
</tr>
<tr>
<td>09:30</td>
<td>A4-03</td>
<td>TIME-SERIES ANALYSIS OF THE SURFACE DISPLACEMENT BEFORE AND AFTER THE 2017 POHANG EARTHQUAKE, SOUTH KOREA, USING SENTINEL-1 PSINSAR TECHNIQUE</td>
<td>Da-woon Jung and Hoonyol Lee</td>
<td>Kangwon National University, Korea</td>
</tr>
<tr>
<td>09:45</td>
<td>A4-04</td>
<td>DEEP LEARNING-BASED OIL SPILL DETECTION FROM PLANETSCOPE SATELLITE IMAGES</td>
<td>Jonggu Kang and Yangwon Lee</td>
<td>Pukyong National University, Korea</td>
</tr>
<tr>
<td>10:00</td>
<td>A4-05</td>
<td>FIRE SMOKE DETECTION USING A FALSE COLOR COMPOSITE FROM UV-VIS IMAGE</td>
<td>Yemin Jeong and Yangwon Lee</td>
<td>Pukyong National University, Korea</td>
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</tbody>
</table>
## A5 GIS & New Technology 10:30-12:00 (Taipei 09:30-11:00)

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

<table>
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors and Affiliations</th>
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</table>
| 10:30 | A5-01   | THE DAMAGE ASSESSMENT OF BUILDINGS DURING THE TOHOKU EARTHCACHE USING DEEP LEARNING | Kaisei Takita, Daiki Hidaka, Joui Mizuno, Takashi Nonaka, Tomohito Asaka, Toshiro Sugimura and Keishi Iwashita  
*Nihon University, Japan* |
| 10:45 | A5-02   | SOFTWARE-AS-A-SERVICE FOR GENERATION OF TOA AND TOC REFLECTANCE PRODUCTS FOR KOMPSAT-3/3 | Kwangseob Kim and Kiwon Lee  
*Hansung University, Korea* |
| 11:00 | A5-03   | CURRENT INTERNATIONAL STATUS OF ARD AND DIRECTION OF K-ARD DEVELOPMENT | DongHan Lee and Seok-Won Choi  
*Korea Aerospace Research Institute, Korea* |
| 1:15  | A5-04   | EMULATE THE SPATIAL DISTRIBUTION OF INVASIVE ALIEN SPECIES THROUGH SPECIES DISTRIBUTION MODELS BASED ON A FIELD SURVEY FRAME | 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* |
| 1:30  | A5-05   | EVALUATION OF MACHINE LEARNING MODEL FOR DISASTER VICTIM ESTIMATION IN SOUTH KOREA USING REMOTE SENSING DATASET | Reza Asriandi Ekaputra  
*Dong-A University, Korea, Intitut Teknologi Sumatera, Indonesia*  
Changkye Lee, Seong-Hoon Kee and Jung-Jae Yee  
*Dong-A University, Korea* |
## Remote Sensing Application 2  
**Room B**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors/Institutions</th>
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</table>
| 15:00  | B1-01   | REPRESENTATION OF FINE PARTICLE MASS CONCENTRATION DISTRIBUTION AT THE KOREAN PENINSULA USING INTEGRATED AERONET, SATELLITE, AND LIDAR DATA | Naghmeh Dehkhoda and Youngmin Noh  
Pukyong National University, Korea |
| 15:15  | B1-02   | STUDY ON THE CLASSIFICATION OF AEROSOLS TO WATER VAPOR AND HIGH CONCENTRATION FINE PARTICLE USING HIGH-RESOLUTION SCANNING LIDAR AT DANGJIN PORT (SOUTH KOREA) | Sohee Joo and Youngmin Noh  
Pukyong National University, Korea |
| 15:30  | B1-03   | ATMOSPHERIC CORRECTION FOR SENTINEL-2 IMAGES USING 6S AND RASTER AOD DATA | Seoyeon Kim and Yangwon Lee  
Pukyong National University, Korea |
| 15:45  | B1-04   | MACHINE LEARNING-BASED PRECIPITATION ESTIMATION USING REMOTE SENSING DATA FOR KOREAN PENINSULA IN SUMMER | Yeji Shin, Daehyeon Han and Jungho Im  
Ulsan National Institute of Science and Technology, Korea |
| 16:00  | B1-05   | EVALUATION OF HIMAWARI-8 AHI AEROSOL PRODUCTS WITH GROUND-BASED SKYNET MEASUREMENTS | 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*
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 ❅ 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 ❅ 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 TECHNIQUE ❅ 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 USING SATELLITE IMAGES ❅ 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 ❅ Yu Hosaka, Takanori Sasaki, Yasuo Koshiuji and Syota Akamatsu Hachinohe Institute of Technology, Japan
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-1 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  [060023] 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
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
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
Sota Hirayama, Takeo Tadono, Masato Ohki and Yousei Mizukami  Japan Aerospace Exploration Agency (JAXA), Japan
Kenlo Nishida Nasahara  University of Tsukuba, Japan
Kenoi 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
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 HYPERSONL SPECTRAL IMAGING TECHNIQUES AND MACHINE LEARNING ALGORITHMS
Grace Malvine Moughoa Boussougou 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
Young-Woong Yoon, Won-Kyung Baek and Hyung-Sup Jung  University of Seoul, Korea
### Room C

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

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

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<th>Time</th>
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<tr>
<td>15:00</td>
<td><strong>C1-01</strong> RELATIONSHIP BETWEEN OCEAN COLOR AND VOLCANIC ACTIVITY AROUND SUBMARINE VOLCANO USING GCOM-C SGLI DATA</td>
<td>Yuji Sakuno and Sakito Hirao</td>
<td>Hiroshima University, Japan</td>
</tr>
<tr>
<td>15:15</td>
<td><strong>C1-02</strong> GCOM-C/SGLI OCEAN COLOR ATMOSPHERIC CORRECTION VERSION 2 AND VERSION 3 COMPARISON ON REMOTE SENSING REFLECTANCE AND CHLOROPHYLL-A CONCENTRATION</td>
<td>Mitsuhiro Toratani and Kazunori Ogata, Hiroshi Murakami</td>
<td>Tokai University, Japan, EORC/JAXA, Japan</td>
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<td><strong>C1-03</strong> HARMFUL ALGAL BOOM OFF HOKKAIDO IN FALL 2021 DETECTED BY OCEAN COLOR SATELLITE DATA</td>
<td>Joji Ishizaka, Eko Siswanto</td>
<td>Nagoya University, Japan, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan</td>
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<td>Hiroto Higa and Kanako Fujita</td>
<td>Yokohama National University, Japan</td>
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International Symposium on Remote Sensing 2022
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 M. L. R. Lagahit and M. Matsuoka *Tokyo Institute of Technology, Japan*

09:15 C2-02 059518 GAP-FILLING OF CLOUD-CONTAMINATED SENTINEL-2 IMAGES USING GAUSSIAN PROCESS REGRESSION FOR CROP MONITORING Soyeon Park and No-Wook Park *Inha University, Korea*

09:30 C2-03 059615 ANALYSIS OF SUBGLACIAL LAKES OF DAVID GLACIER IN EAST ANTARCTICA USING SENTINEL-1 DDINSAR Hyunsoo Kim and Hyangsun Han *Kangwon National University, Korea*

09:45 C2-04 060311 LONG TERM MONITORING OF GROUNDING LINE ON SHIRASE GLACIER BY DOUBLE DIFFERENTIAL INSAR Tsutomu Yamanokuchi *Remote Sensing Technology Center of Japan, Japan*  
Chiyuki Narama *Niigata University, Japan*  
Shin Sugiyama *Hokkaido University, Japan*
**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

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

Daehoon Yoo and Hongtaek 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

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

Lim Taeyang  
*Dankook University, Korea*

**14:30 C3-05** [060043] AN IMPROVED SCENE-BASED NUC FOR AIRBORNE IR CAMERA USING PATCH-BLOCK IMAGE ENTROPY

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*
**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)

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<td>Atsuko Nonomura and Shuichi Hasegawa <em>Kagawa University, Japan</em></td>
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<td>C4-03 REFINEMENT OF LAND COVER CLASSIFICATION WITH TIME-SERIES HIGH-RESOLUTION SATELLITE IMAGES</td>
<td>Keigo Fujii and Akira Iwasaki <em>The University of Tokyo, Japan</em></td>
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<td>C4-04 EXTRACTION OF VEGETATION FRACTION FOR RICE BY GROWTH STAGE WITH UNMANNED AERIAL VEHICLE-BASED MULTI-SPECTRAL IMAGERY</td>
<td>Byeonghan Lee, Deokgyeong Seong, Seongtae Lee and Younggwang Kim <em>Gyeongsangnamdo Agricultural Research and Extension Services, Korea</em></td>
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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)*

10:30 **C5-01** [059802] MEASURING ATMOSPHERIC INFORMATION USING A CAMERA AND COMPARISON WITH LIDAR DATA

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

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

Sihun Ju and Jungho Im  Ulsan National Institute of Science and Technology (UNIST), Korea

11:15 **C5-04** [060351] UNSUPERVISED HETEROGENEOUS CHANGE DETECTION ON LANDSLIDE DISASTER USING AUTOENCODER-BASED NETWORK

Yuya Akutsu and Akira Iwasaki  The University of Tokyo, Japan
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<td>Jaese Lee, Woohyeok Kim and Jungho Im Ulsan National Institute of Science and Technology (UNIST), Korea</td>
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<td>Ki-mook Kang and Euiho Hwang K-water Research Institute, Korea, Yeji Kim and Hyun-Ok Kim Korea Aerospace Research Institute, Korea</td>
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**Room D**

**D2-01 [059190]** OVERVIEW OF OCEAN OBSERVATIONS BY AMSR2 ON GCOM-W AND DEVELOPMENT OF AMSR3 ON GOSAT-GW

*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*

**10:30**

**D2-02 [059295]** KOMPSAT-6 CALIBRATION TEST WITH SIMULATED IMAGE DATASET

*Do-chul Yang and Dong-hyun Kim*  
*Korea Aerospace Research Institute, Korea*

**10:45**

**D2-03 [059542]** TEST OF BIDIRECTIONAL REFLECTANCE DISTRIBUTION FUNCTION ON CROP SURFACE USING THE GONIOMETER INSTALLED WITH HYPERSONTICAL INSTRUMENT

*Hyun-Dong Moon, Hyunki Kim, Euni Jo and Yuna Cho*  
*Chonnam National University, Korea*

*Jae-Hyun Ryu, Ho-yong Ahn, Sang-II Na, Kyung-Do Lee and Chan-Won Park*  
*National Institute of Agricultural Sciences (NAS), Rural Development Administration (RDA), Korea*

**11:00**

**D2-04 [059855]** ALOS-2 7 YEARS OPERATION ACCOMPLISHMENT

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

**11:15**

**D2-05 [059949]** STUDY OF THE HIGH-LEVEL PRODUCTS OF ALOS-3 FOR PRACTICAL APPLICATIONS

*Takeo Tadono, Yousei Mizukami and Sota Hirayama*  
*Japan Aerospace Exploration Agency, Japan*

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

**11:30**

**D2-06 [060068]** CHARACTERIZATION OF EARTH OBSERVATION SENSORS FOR SMALLSATS BASED ON PERFORMANCE SIMULATION

*Takahiro Kawashima and Akira Iwasaki*  
*The University of Tokyo, Japan*

*Toshiyoshi Kimura and Tadahito Mizutani*  
*Aerospace Exploration Agency, Japan*
May 16 (Mon.) 2022

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Hyunyoung Choi  
Ulsan National Institute of Science and Technology, Korea
Seonyoung Park  
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Yang Yu and Wataru Takeuchi  
The University of Tokyo, Japan

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Dae-Woon Shin  
Korea Institute of Ocean Science & Technology, Korea, Korea Maritime and Ocean University, Korea
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Kwan-Young Oh, Kwang-Jae Lee and Moung-Jin Lee  
Korea Aerospace Research Institute (KARI), Korea

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Chungbuk National University, Korea

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Indian Institute of Technology Jammu, India

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Chang-Uk Hyun  
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Hyun-Cheol Kim and Jeong-Hoon Kim  
Korea Polar Research Institute, Korea

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Midori Nawano, Toyonobu Fujii, Hiroki Murata and Chinatsu Yonezawa  
Tohoku University, Japan

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Sun-Hwa Kim and Jeong Eun  
UST21, Korea