

**The 2nd Conference of Digital Belt and Road (DBAR 2017)**  
**The 3rd International Conference on Remote Sensing Applications in Tropical and Subtropical Areas**  
**(RSATSA 2017)**

6-8 December 2017, The Chinese University of Hong Kong

*Updated on December 4, 2017*

Conference Location: Cheng Yu Tung Building, The Chinese University of Hong Kong

<b>6 Dec 2017 (Wednesday)</b>	
<b>LT 1, G/F, Cheng Yu Tung Building (CYT)</b>	
08:45 - 09:15	Registration
<b>Opening Ceremony</b> Chair: Hui LIN	
09:15 - 10:00	<b>Opening Remarks</b>
10:00 - 11:00	Keynote Speech <b>Big Earth Data for Belt and Road Development</b> <i>Huadong GUO Chair of DBAR Program</i>
	Panel Discussion <b>Co-Chairs: John van GENDEREN &amp; Jie LIU</b>
11:00 - 11:20	<b>Tea Break</b>
<b>Keynote Addresses (1)</b> Chair: Paul UHLIR	
11:20 - 11:50	Keynote Speech <b>Earth Observation Data Analytics for Global Challenges: The DataCube Solution</b> <i>Alex HELD - CSIRO, Australia</i>
11:50 - 12:20	Keynote Speech <b>Remote Sensing of Seas and Oceans in Tropical and Subtropical Regions</b> <i>Valery BONDUR - Institute for Scientific Research of Aerospace Monitoring "AEROCOSMOS" (ISR "AEROCOSMOS"), Moscow, Russia</i>
12:20 - 14:00	<b>Lunch</b> (Venue: The Stage, 3/F., Cheng Yu Tung Building, CUHK)
13:30 - 14:00	<b>Side Event: DBAR-WATER Launching Ceremony</b>
<b>Rm 201, CYT</b>	

	<b>Session 2 – Part 1</b> <b>Remote Sensing for Agriculture Monitoring and Food Security (1)</b>  Co-Chairs: Bingfang WU & Shukri AHMED	<b>Session 3 – Part 1</b> <b>Environmental Monitoring and Analysis for Sustainable Development and Management of Coast and Sea (1)</b>  Co-Chairs: Mazlan HASHIM & Guanghui LIN	<b>Session 4 – Part 1</b> <b>Remote Sensing for Global Environment Change (1)</b>  Co-Chairs: Howard EPSTEIN & Gensuo JIA	<b>Session 6</b> <b>Big Earth Data for Disaster Risk Reduction</b>  Co-Chairs: Fang CHEN & Atta Ur RAHMAN	<b>Session 7 – Part 1</b> <b>Remote Sensing for Water Resources (1)</b>  Co-Chairs: Bob SU & Kamal LABBASSI
	<b>Rm 211, 2/F, CYT</b>	<b>LT 4, 2/F, CYT</b>	<b>LT 1, G/F, CYT</b>	<b>Rm 212, 2/F, CYT</b>	<b>Rm 201, 2/F., CYT</b>
14:00-14:15	<b>765: Shared Agronomic Information Community for One Belt and One Road</b>  <i>Bingfang WU - Institute of Remote Sensing and Digital Earth of the Chinese Academy of Sciences, SHUKRI FARAH AHMED-Food and Agriculture Organization of the United Nations, Changchui HE-National Remote Sensing Center of China</i>	<b>872: Earth Observation Science and Techniques for the Coastal Environment and Resources along the Maritime Silk Road</b>  <i>Li ZHANG - Institute of Remote Sensing and Digital Earth, CAS; Key Laboratory of Earth Observation, Hainan Province</i>	<b>794: Comparative Analysis of Ecological Environment Change in Southeast Asia and Central Asia</b>  <i>Xinwu LI, Xiaotong ZHANG, Siyang YIN, Wenjin WU - Institute of Remote Sensing and Digital Earth, CAS, Beijing &amp; Key Laboratory of Earth Observation, Hainan Province; Beijing Jiaotong University; Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences RADI, CAS</i>	<b>876: DBAR Disaster: A joint contribution to disaster risk reduction in the Belt and Road</b>  <i>Fang CHEN - Institute of Remote Sensing and Digital Earth, CAS; Key Laboratory of Earth Observation, Hainan Province</i>	<b>878: DBAR-Water: Understanding Spatial &amp; Temporal Patterns of Water Resources and Water Use by Earth Observations</b>  <i>Jia LI - Institute of Remote Sensing and Digital Earth (RADI)-Chinese Academy of Sciences (CAS)</i>
14:15-14:30	<b>690: The Comparative Research on Diseases and Insect Pests in Cotton Identification Model Based on the Wavelet Transform and Vegetation Index</b>  <i>Yubin ZHENG, Qing ZHANG, Wenjie SONG, Jiangning YANG - Xinjiang Career Technical College Institute of Remote Sensing and Digital Earth, CAS</i>	<b>806: Environmental Monitoring for Sustainable Management of Coast and Sea</b>  <i>Dewayany SUTRISNO - Geospatial information agency/Indonesian Society for Remote Sensing</i>	<b>861: Extraction of Agricultural Phenological Parameters of Central Asia using MODIS, NDVI time - series data</b>  <i>Aitekeyeva NURGUL, Xinwu LI, Huadong GUO - Institute of Remote Sensing and Digital Earth, CAS</i>	<b>850: Impact of Climate Change on Flood Factors and Extent of Damages in the Hindu Kush Region</b>  <i>Atta Ur RAHMAN<sup>(*)</sup>, Shakeel MAHMOOD<sup>(**)</sup> - <sup>*</sup>Department of Geography, University of Peshawar, <sup>**</sup>Pakistan Govt college university Lahore, Pakistan</i>	<b>879: Earth Observations for Water Accounting in Southeast Asia</b>  <i>Wim Bastiaanssen, Elga SALVADORE, Bert Coerver,, Nutchanart SRIWONGSITANON, Jia LI - UNESCO-IHE/Delft University of Technology; UNESCO-IHE/Vrije Universiteit Brussels; UNESCO-IHE/Delft University of Technology; Kasetsart University; RADI-CAS</i>
14:30-14:45	<b>870: Spatio-Temporal Changes of Agricultural Land Use in Kazakhstan During 1970-2015</b>  <i>Dr. Jie BAI - Xinjiang Institute of Ecology and Geography, CAS</i>	<b>873: Sustainable Management of Coast would only be a Miracle without Rational Baseline and Indicators : Sri Lankan Perspectives</b>  <i>Jayasingam THANGAMUTHU- Eastern University, Sri Lanka</i>	<b>733: Analysis of Ecological Quality Changes in the Typical Region of Aojiang River Basin, Fujian Province, China</b>  <i>Tingting SHI, Hanqiu XU - Fuzhou University</i>	<b>798: Fire-Caused Global Forest Loss Mapping by an Object-Based Mapping Method</b>  <i>Lei WANG - Institute of Remote Sensing and Digital Earth, CAS</i>	<b>739: Contribution to Site Selection Methodology for Water Harvesting in The Belt And Road Region</b>  <i>Altansukh OCHIR, Davaajargal BOLDBAATAR - National University of Mongolia</i>

14:45-15:00	<p><b>742: The Comprehensive Agricultural Drought Monitoring with Multiple-Source Data and Aquacrop Model</b></p> <p><i>Hongshuo WANG - China Agricultural University</i></p>	<p><b>735: Mapping Spatial Distribution and Biomass of Mangroves Using Lidar and High-Resolution Satellite Data</b></p> <p><i>Guanghui LIN, Yi ZHENG, Yiqiong LIN, Jian ZHOU, Qinghua GUO<sup>†1</sup>, Hongsheng ZHANG<sup>**1</sup> - Tsinghua University, *Institute of Botany, the CAS, **ISEIS, CUHK</i></p>	<p><b>669: An Integrated Indicator for Environmental Assessment of Critical Areas Along the Belt and Road</b></p> <p><i>Xiangzheng DENG, Zhihui LI, Siqi JIA, Feng WU Institute of Geographic Sciences and Natural Resources Research, CAS - Faculty of Social Science, CUHK</i></p>	<p><b>657: Remote Sensing-Based Assessment of Vegetation Damage by a Strong Typhoon (Meranti) in Xiamen Island, China</b></p> <p><i>Meiya WANG, Hanqiu XU - Fuzhou University</i></p>	<p><b>781: Integration of Hydrologic Planning Model and Remote Sensing Data for Estimating Water Balance Components</b></p> <p><i>Saeid HAMZEH, Ayoub NOKHASI, Farshad AMIRASLANI, Arash AZARI - University of Tehran Razi University</i></p>
<b>CUHK Public Lecture of CAE Academician</b>					
<b>LT 5, 2/F, CYT</b>					
15:00 – 17:00	<p><b>The Innovation and Development of Beidou System and Its Application Prospect (The Lecture will be in Chinese)</b></p> <p><i>Shusen TAN - Academician, Chinese Academy of Engineering</i></p>				
15:00-15:15	<p><b>751: Regional Mapping of Arable Land in the Arid Oasis of Northwestern China with Multiscale Remotely Sensed Data</b></p> <p><i>Ligang MA-College of Resource and Environmental Sciences, Xinjiang University</i></p>	<p><b>755: Salt Marsh Migration under Sea Level Rise and Land Development, South Carolina, USA</b></p> <p><i>Cuizhen WANG, Ms. Huixuan LI, Zhongchang SUN<sup>†1</sup> - University of South Carolina, *Institute of Remote Sensing and Digital Earth (RAD), CAS; Key Laboratory of Earth Observation, Hainan Province</i></p>	<p><b>859: Remotely Sensed Drought Changes over Tropical and Subtropical Areas</b></p> <p><i>Anzhi ZHANG, Gensuo JIA - Institute of Atmospheric Physics, CAS</i></p>	<p><b>877: Integration and Sharing the Information by the Service System for Marine Fishery Safety Guarantees</b></p> <p><i>Wenbo CAI - National Marine Environmental Forecasting Center, State Oceanic Administration</i></p>	<p><b>880: Analysis of 2010-Flood Causes, Nature and Magnitude in Khyber Pakhtunkhwa-Pakistan</b></p> <p><i>Atta Ur RAHMAN - Department of Geography, University of Peshawar, Pakistan</i></p>
15:15-15:30	<p><b>766: Assessment of Nitrogen Status for Winter Oilseed Rape using Reflectance Measurements from Field Spectrometer and Unmanned Aerial Vehicle</b></p> <p><i>Shishi LIU, Shanqin WANG, Qingfeng GUAN - Huazhong Agricultural University China University of Geosciences (Wuhan)</i></p>	<p><b>785: Study on the Submarine Physiographic Features in the Bay of Bengal</b></p> <p><i>Myint Myint KHAING - Technological University (Pakokku), Myanmar</i></p>	<p><b>855: Recent Vegetation Trends and Variability from AVHRR NDVI and MODIS EVI in South Asian Ecoregions</b></p> <p><i>Sangeeta SARMAH, Gensuo JIA, Anzhi ZHANG - Institute of Atmospheric Physics, CAS</i></p>	<p><b>745: Prediction Technology of Green Blooms and Harmful Algal Blooms Based on Satellite Remote Sensing</b></p> <p><i>Dan WANG, Jing YANG, Enye HE, Sisi ZHANG, Guimei LIU, Tiejun LING - Key Laboratory of Research on Marine Hazards Forecasting, National Marine Environmental Forecasting Center, State Oceanic Administration, Beijing</i></p>	<p><b>720: Hyperspectral Models for Estimating Colored Dissolved Organic Matter of Turbid Water in Poyang Lake</b></p> <p><i>Jian XU, Yeqiao WANG - Ministry of Education's Key Laboratory of Poyang Lake Wetland and Watershed Research, Jiangxi Normal University</i></p>
15:30-15:45	<p><b>871: Soil Monitoring based on Remote Sensing Data</b></p> <p><i>Igor SAVIN - People's Friendship University of Russia, and of Moscow State University</i></p>	<p><b>807: Detection of Forest Cover Changes Using Multi-Temporal Satellite Imagery</b></p> <p><i>Siow Wei JAW, Muhammad Aizat RAMLI, Fatin Nabihah Syahira RIDZUAN - Geoscience &amp; Digital Earth Centre (INSTeG), Universiti Teknologi Malaysia</i></p>	<p><b>875: Vegetation Dynamics and Responses to Recent Climate Change in Arid and Semi-Arid Regions</b></p> <p><i>Guli JIAPAER - Xinjiang Institute of Ecology and Geography, CAS</i></p>	<p><b>904: Innovative Applications of Big Data in the Mining Industry</b></p> <p><i>Mei LI, Shanjun MAO - Institute of Remote Sensing and Geographic Information System, Peking University</i></p>	<p><b>703: Anomalous tidal behavior in the South China Sea and Hong Kong with implications for peak water levels</b></p> <p><i>Dr. Adam DEVLIN - The Chinese University of Hong Kong</i></p>

15:45-16:00		<b>874: A Geospatial Insight in South Asia: Natural Resources and Environment</b> <i>Ainong LI - Institute of Mountain Hazards and Environment, CAS</i>	<b>725: Global Ecosystems and Environment Observation: Annual Report from China (GEOARC) - The Belt and Road</b> <i>Qinhuo LIU, Junjun WU, Zheng NIU - State Key Laboratory of Remote Sensing Science, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences</i>		
16:00 - 16:20	<b>Tea Break</b>				
	<u><b>Session 2 – Part 2</b></u> <b>Remote Sensing for Agriculture Monitoring and Food Security (2)</b> <b>Co-Chairs:</b> <b>Bingfang WU &amp; Shukri Farah AHMED</b>	<u><b>Session 3 – Part 2</b></u> <b>Environmental Monitoring and Analysis for Sustainable Development and Management of Coast and Sea (2)</b> <b>Co-Chairs:</b> <b>Jiaping WU &amp; Jayasingam THANGAMUTHU</b>	<u><b>Session 4 – Part 2</b></u> <b>Remote Sensing for Global Environment Change (2)</b> <b>Co-Chairs:</b> <b>Howard EPSTEIN &amp; Xinwu LI</b>	<u><b>Side Event</b></u> <b>DBAR-HiMAC Task Force Working Meeting</b>	<u><b>Session 7 – Part 2</b></u> <b>Remote Sensing for Water Resources (2)</b> <b>Co-Chairs:</b> <b>Jia LI &amp; Wim BASTIAANSEN</b>
	<b>Rm 211, 2/F., CYT</b>	<b>LT 4, 2/F., CYT</b>	<b>LT 1, G/F, CYT</b>	<b>Rm 212, 2/F, CYT</b>	<b>RM 201, 2/F, CYT</b>
16:20 - 16:35	<b>861: Extraction of Agricultural Phenological Parameters of Central Asia using MODIS, NDVI Time - Series Data</b> <i>Aitekeyeva NURGUL, Xinwu LI, Huadong GUO- Institute of Remote Sensing and Digital Earth, CAS</i>	<b>827: Spectral Reflectance Different Water Turbidity on Outer and Middle Inner Zona Spermonde Archipelago</b> <i>Nurjannah NURDIN<sup>1</sup>, Chair RANI, Djameluddin DJOMPA - Marine Science Department, Hasanuddin University, Indonesia</i>	<b>856: Effect of Climate Change on Productivity and Cultivation Distribution of Spring Maize in Northeast China</b> <i>Junfang ZHAO - Chinese Academy of Meteorological Sciences</i>	<u><b>Side Event</b></u> <b>DBAR-HiMAC Task Force Working Meeting</b>	<b>883: Land-atmosphere Interactions from the Tibetan Plateau to East Africa - In-situ observation, Remote Sensing and Modeling</b> <i>Bob SU - University of Twente</i>
16:35 - 16:50	<b>778: Remote Estimation of Crop Productivity with Satellite Data</b> <i>Yi PENG, Shenghui FANG, Yan GONG, Kan LIU, Can DAI, Anatoly GITELSON - Wuhan University; Wuhan Institute of Physics and Mathematics of CAS; Hubei University; University of Nebraska-Lincoln</i>	<b>796: Monitoring of Mangrove Forests in Hainan and Construction of Spectral Library and Backscattering Feature Database of Mangrove Forests</b> <i>Jingjuan LIAO, Jianing ZHEN, Guozhuang SHEN - Key Laboratory of Digital Earth, Institute of Remote Sensing and Digital Earth, CAS; Key Laboratory of Earth Observation, Hainan Province</i>	<b>805: Analysis of Response and Recovery of Vegetation to Forest Fire Based on GLASS Product</b> <i>Jing LI, Adu GONG, Jing LI, Jianjun WU, Jianwei YUE, Hong TANG, Yunhao CHEN, Yanling CHEN, Jingmei WANG - Beijing Normal University</i>		<b>884: EO Monitoring of Actual and Maximum ET Towards Adaptive Irrigation Water Management in Response to Climate Forcing: The Case of Doukkala, Morocco</b> <i>Fatima EZZAHRA, El GHANDOUR, S. M. ALFIERI, Nadia AKDIM, Adnane HABIB, Kamal LABBASSI, Massimo MENENTI - Chouaib Doukkali University; Delft University of Technology</i>

16:50 - 17:05	<p><b>791: Crop Classification Using Time Series Chinese Moderate Resolution Satellite Data</b>  <i>Bo ZHONG, Aixia YANG, Shanlong WU - Institute of Remote Sensing and Digital Earth</i></p>	<p><b>691: Assessment of Socio Economical Impact of Coastal Erosion and Coastal Oceanography along Pasni Fish Harbor and Shadi Kour Area</b>  <i>Muhammad SHAHZAD, Ibrahim ZIA<sup>(*)</sup>, Majid NAZEER, Muhammad ALI, Mohsin MERAJ - Earth &amp; Atmospheric Remote Sensing Lab (EARL), Department of Meteorology, COMSATS Institute of Information Technology, Islamabad Pakistan *National Institute of Oceanography, Karachi Pakistan</i></p>	<p><b>676: Reflections on Air Pollution Control Measures of China and Countries along the Belt and Road-----the ultimate goal of liberty</b>  <i>Jinhai ZHANG - Peking University's visiting scholar</i></p>		<p><b>885: Monitoring Land Surface Evapotranspiration in the Belt and Road Region based ETMonitor Driven by Earth Observations</b>  <i>Chaolei ZHENG, Jia LI, Guangcheng HU, Jing LU, Kun WANG, Jie ZHOU, Qiting CHEN - RADI-CAS</i></p>
17:05 - 17:20	<p><b>825: Rice Planting Information Retrieval at Farmland Plot Scale Using Multi-sources Satellite Data</b>  <i>Qiting HUANG, Wen DONG, Jiancheng LUO - Agricultural Science and Technology Information Research Institute, Guangxi Academy of Agricultural Sciences</i></p>	<p><b>881: Environmental Benefits of Seaweed Aquaculture in China</b>  <i>Yuhan ZHENG, Runjie JIN, Xiujuan ZHANG, Carlos M. DURATEE, Jiaiping WU - Ocean College, Zhejiang University; King Abdullah University of Science and Technology, Red Sea Research Center, Thuwal, Saudi Arabia</i></p>	<p><b>882: Strategies for Environmental Monitoring in the Belt and Road Region</b>  <i>Jinsong CHEN - Shenzhen institutes of advanced technology, CAS</i></p>		<p><b>886: Validation of Remotely Sensed ET Products for Thailand using the Water Balance of 150 Sub-Basins</b>  <i>Nutchanart SRIWONGSITANON, Sithichoet ARCHAVAKIJGOSOL, Sansarith THIANPOPIRUG, Jia LI, Wim BASTIAANSEN - Kasetsart University RADI-CAS, JCGCS UNESCO-IHE, Delft University of Technology</i></p>
17:20 - 17:35	<p><b>824: Cooperation in Grape Research and Industry Development under the Belt and Road Initiative</b>  <i>Xuefu ZHANG, Pythagoras KARAMPIPERIS, Babis THANOPOULOS - Agricultural Information Institute of Chinese Academy of Agricultural Sciences Agroknow</i></p>	<p><b>748: Significant Wave Height Retrieval using Sentinel-1 SAR : Analysis of the Wave Spectra in Offshore and Coastal Waters</b>  <i>Fabian PRAMUDYA, Jiayi PAN, Adam DEVLIN - The Chinese University of Hong Kong</i></p>	<p><b>660: Understand Global Forest Carbon Absorption using The Big Earth Data and Data Driven Method</b>  <i>Wenjin WU, Xuejing ZHAO, Xinwu LI - RADI, CAS; Shandong University of Science and Technology Institute of Remote Sensing and Digital Earth, CAS</i></p>		<p><b>887: H-TEP: A potential platform for EO water applications for DBAR Communities</b>  <i>Bernat MARTINEZ, Laia ROMERO - isardSAT</i></p>
17:35 - 17:50		<p><b>746: Numerical Simulation on Tides in The South China Sea by Assimilating Satellite Altimetry Data</b>  <i>Yanqiang WANG, Tianyu ZHANG, Yun LI Xueming ZHU - National Marine Environmental Forecasting Center</i></p>	<p><b>860: Sensitivities of Spring Greenup to Preseason Climate</b>  <i>Xiyan XU, Gensuo JIA, William RILEY, Charles KOVEN- Institute of Atmospheric Physics, CAS; Lawrence Berkeley National Laboratory</i></p>		<p><b>888: Multi-scale Modeling of Evapotranspiration: An Approach Towards Validation</b>  <i>Qiting CHEN, Jia LI, Chaolei ZHENG, Guangcheng HU - RADI-CAS</i></p>

17:50 - 18:05		<b>710: Application of Satellite Sensing Data on Regional Ocean Modeling System (ROMS)</b> <i>Zhaoyi WANG - National Marine Environmental Forecasting Center of China</i>			<b>848: Pixel Information Expert for the 21st Century Maritime Silk Road</b> <i>Xiaohua WANG - Beijing Piesat Information Technology CO., Ltd.</i>
18:30 - 21:00	<b>Welcome Banquet</b> (Regency Ballroom, Hyatt Regency Hong Kong Shatin, 18 Chak Cheung Street, Shatin, Hong Kong) <ul style="list-style-type: none"> <li>• 18:30- 19:00: Reception</li> <li>• 19:00-21:00 Dinner</li> </ul>				

## 7 Dec 2017 (Thursday)

### Keynote Addresses (2)

Chair: Changchui HE

LT 1, G/F, CYT

09:00 - 09:30	<u>Keynote Speech</u> <b>Contributing to Market Transparency - Challenges of Agricultural Monitoring Systems</b> <i>Bettina BARUTH - European Commission, Joint Research Centre</i>
09:30 - 10:00	<u>Keynote Speech</u> <b>The Major Challenges Related to Water Safety in the Northern Part of Africa; An Overview of Water Resources: Morocco as an Example</b> <i>Kamal LABBASSI - Chouaib Doukkali University, Morocco</i>
10:00 - 10:30	<u>Keynote Speech</u> <b>Remote Sensing of Sea Ice in the Arctic: From Long Time Series to Recent Developments</b> <i>Gunnar SPREEN - University of Bremen, Germany</i>
10:30 - 10:50	Tea Break
<b>Keynote Addresses (3)</b> Chair: Natarajan ISHWARAN	
Venue: LT-1, Cheng Yu Tung Building, CUHK	
10:50 - 11:10	<u>Keynote Speech</u> <b>Remote Sensing for Integrated Coastal Zone Management: UAV interventions</b> <i>Mazlan HASHIM - Universiti Teknologi Malaysia (UTM)</i>
11:10 - 11:40	<u>Keynote Speech</u> <b>Recording the Earth: Research Advances in Global Soundscape Ecology</b> <i>Bryan PIJANOWSKI - Purdue University, U.S.A</i>
11:40 - 12:10	<u>Keynote Speech</u> <b>Remote Sensing for Cultural Heritage: from Documentation to Risk Estimation and Preservation</b> <i>Rosa LASAPONARA - The Italian National Council Research</i>
12:10 - 14:00	Lunch (Venue: The Stage, 3/F., Cheng Yu Tung Building)

	<b>Session 1 – Part 1</b> <b>Digital Earth and Spatial Data Infrastructure (1)</b> Co-Chairs: Guoqing LI & Silap BUPA	<b>Session 5 – Part 1</b> <b>Natural and Cultural Heritage Conservation and Sustainable Development (1)</b> Co-Chairs: Xinyuan WANG & Rosa LASAPONARA	<b>Session 8 – Part 1</b> <b>Urban Environment and Sustainable Urban Development (1)</b> Co-Chairs: Linlin LU & Martino PESARESI	<b>Session 9 – Part 1</b> <b>Observations and Adaption to Changes in High Mountain and Arctic Cold Regions (1)</b> Co-Chairs: Massimo MENENT & Yubao QIU	Side Event DBAR-COAST Launching Ceremony
	LT 4, 2/F, CYT	Rm 211, 2/F, CYT	LT 5, 2/F, CYT	LT 1, G/F, CYT	Rm 212, 2/F, CYT
14:00-14:15	<b>889: Data Sharing to Support the DBAR Initiative</b> <i>Paul UHLIR - Information Policy and Management, Callicoon, NY, USA;</i>	<b>662: Cultural Heritage along the Belt and Road: Universal Values and the Silk Road Spirit Carrying</b> <i>Xinyuan WANG - Institute of Remote Sensing and Digital Earth, CAS; Key Laboratory of Earth Observation, Hainan Province</i>	<b>724: Interannual Variations and Trends in Remotely Sensed PM2.5 along the Maritime Silk Road from 2000 to 2014</b> <i>Linlin LU - Institute of Remote Sensing and Digital Earth, CAS</i>	<b>898: Changes in Arctic sea Ice Dynamics: Ice Thinning, Wind, and Storms</b> <i>Gunnar SPREEN - Institute of Environmental Physics, University of Bremen</i>	Side Event DBAR-COAST launching ceremony
14:15-14:30	<b>890: Big Earth Data for Disaster Risk Reduction in the Tropics: Challenges and Prospect</b> <i>Ali SELAMAT, Centre for Computing &amp; IT, UTM</i>	<b>772: Preserving the UNESCO Designated Places from Space</b> <i>Guelin DEDE - GEMINI SSC</i>	<b>767: Impervious Surface Mapping with Integration of Landsat And Nighttime Imagery from the International Space Station</b> <i>Xiaolin CHEN, Xiuping JIA - University of New South Wales, Canberra</i>	<b>721: Permafrost : Extraction of Thermal Erosion Gullies from High-Resolution Images Based on DeepLab</b> <i>Lingcao HUANG, The Chinese University of Hong Kong</i>	
14:30-14:45	<b>891: ASEAN-DBAR DATA WG Cooperation Update</b> <i>Silap BOUPHA - MOST, Lao PDR</i>	<b>896: Remote sensing for Natural and Cultural Heritage Monitoring, Preservation and Sustainable Development</b> <i>Rosa LASAPONARA - IMAA-CNR</i>	<b>752: Analysis of the Correlation between Urban Green Spaces and Land Surface Temperature in Bangkok</b> <i>Fareda ITIRIPHAN, Dr. Falin WU, Mr. Byambakhuu GANTUMUR - Beihang University</i>	<b>678: How did Annual High Temperature Extreme, Mean Temperature, and Low Temperature Extreme Chase Each Other around the Circumpolar Arctic during 1900-2013?</b> <i>Yi LIN - Peking University</i>	
14:45-15:00	<b>892: Data Cloud for Education in DBAR Big Data Platform</b> <i>Jibin WANG, Jian WANG - Jinan Supercomputer Center, China; Institute of Remote Sensing and Digital Earth , CAS &amp; Key Laboratory of Earth Observation, Hainan Province</i>	<b>769: Big Earth Data for International Cooperation Agenda 2030 for Attaining Sustainable Development Goals (Sdgs)</b> <i>Natarajan ISHWARAN - Institute of Remote Sensing and Digital Earth (RADI)</i>	<b>821: Opportunities and Challenges in Open Data for Establishing Sustainable Smart Cities: Implications for the Digital Belt and Road</b> <i>Masaru YARIME - City University of Hong Kong</i>	<b>899: Global Cryosphere Watch and its role in Arctic cryospheric service potentials</b> <i>Cunde XIAO - Beijing Normal University</i>	
15:00-15:15	<b>893: H-TEP: A Community Platform for EO Water Applications in West Africa and South-East Asia</b> <i>Bernat MARTINEZ - isardSAT Ltd, Spain</i>	<b>673: The forms and Structures of Traditional Landscape Genome Maps of Hunan Province</b> <i>Zui HU - Hengyang normal university</i>	<b>815: Land Use and Land Cover Change Analysis at County Level Using CA-Markov Model: Kun Shan City as a Case Study</b> <i>Longuan QUM, Rongrong LI, Hui LIN - Institute of Space and Earth Information Science, CUHK</i>	<b>675: Arctic Vegetation Dynamics: Tundra Greening and Browning</b> <i>Howard EPSTEIN - University of Virginia</i>	

15:15-15:30	<p><b>894: China EO Satellites and Its International Data Sharing and Service</b> <i>Zhigang WANG - CRESDA, China</i></p>	<p><b>758: Susceptibility Assessment of Karez System in Pakistan</b> <i>Shahina TARIQ, Xinyuan WANG, Zain ABEDIN - Department of Meteorology, COMSATS Institute of Information Technology (CIIT); Institute of Remote Sensing and Digital Earth, CAS; Faculty of Architecture and Design, COMSATS Institute of Information Technology (CIIT);</i></p>	<p><b>665: Analysis of the Evolution of a Typical Haze Pollution in Beijing</b> <i>Yang YANG-The Institute of Atmospheric Physics , Chinese Academy of Sciences</i></p>	<p><b>790: Barents Sea Ice Decline in Spring has Enhanced Summer Hot Drought Events over Northeastern China</b> <i>Huopo CHEN - Institute of Atmospheric Physics, CAS</i></p>	
15:30-15:45	<p><b>895: Introduction on Remote Sensing Ground Receiving Station, CUHK</b> <i>Kin YEUNG - The Chinese University of Hong Kong</i></p>	<p><b>759: New Technologies, New Challenges and New Opportunities for Management and Exploration of Natural and Cultural Heritage Sites in Pakistan</b> <i>Zain UL ABEDIN, Shahina TARIQ, Uzma NOOREEN ZAINUL ABEDIN - Faculty of Architecture and Design, COMSATS Institute of Information Technology (CIIT); Department of Meteorology, COMSATS Institute of Information Technology (CIIT); x HEC prof and Independent Consultant</i></p>	<p><b>686: Urban Expansion and Its Ecological Effects in Moscow, Russia (1975-2015),</b> <i>Yue SUI - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences</i></p>	<p><b>795-Permafrost A Map of Permafrost Thermal Stability Covering the Third Pole Obtained by Integrating Remotely Sensed Data and Ground</b> <i>Youhua RAN, Northwest Institute of Eco-environment and Resources, CAS</i></p>	
15:45-16:00	<p><b>704: Evaluation of the Development Trend of Space Geoscience in Countries Along the Belt and Road Routes</b> <i>Haiming WANG, Trends of research cooperations between the Belt and Road countries in space earth science: a bibliometric analysis using the Web of Science database</i></p>	<p><b>897: The Ancient Environment and Prehistoric Settlement around Songshan Mountain</b> <i>Peng LU, Dexian FENG, Shike QIU, Panpan CHEN - Institute of Geographical Sciences of Henan Academy of Sciences</i></p>		<p><b>907: A talk on Investigation of Snow and Sea Ice in the Polar Oceans Using Ice Mass Balance Buoy and a 1-D Thermodynamic Model</b> <i>Bin CHENG, FMI, Finland</i></p>	
16:00 - 16:20	Tea Break				

	<b>Session 1 – Part 2</b> <b>Digital Earth and Spatial Data Infrastructure (2)</b>  Co-Chairs: Guoqing LI & Silap BOUPHA	<b>Side Event</b> <b>DBAR Capacity Building</b>	<b>Session 8 – Part 2</b> <b>Urban Environment and Sustainable Urban Development (2)</b>  Co-Chairs: Hanqiu XU & Chao REN	<b>Session 9 – Part 2</b> <b>Observations and Adaption to Changes in High Mountain and Arctic Cold Regions (2)</b>  Co-Chairs: Xin LI & Juha LEMMETYINEN	<b>Side Event</b> <b>DBAR-COAST launching ceremony</b>
	<b>LT 4, 2/F, CYT</b>	<b>Rm 211, 2/F, CYT</b>	<b>LT 5, 2/F, CYT</b>	<b>LT 1, G/F, CYT</b>	<b>Rn 212, 2/F, CYT</b>
16:20 - 16:35	<b>700: Evaluation of the development trend of space geoscience in countries along the Belt and Road routes</b>  <i>Weiwei FAN - Institutes of science and development, CAS</i>	<b>Side Event</b> <b>DBAR Capacity Building</b>	<b>747: Predicted Effect of Forthcoming Population Growth on Regional Thermal Environment and Ecological Quality: Xiong'an New Area, North China</b>  <i>Hanqiu XU, Meiya WANG, Tingting SHI, Zhongli LIN - Fuzhou University</i>	<b>900: CAS Three Pole Big Earth Data Project</b>  <i>Xin LI - Northwest Institute of Eco-environment and Resources, CAS</i>	<b>Side Event</b> <b>DBAR-COAST Launching Ceremony</b>
16:35 - 16:50	<b>714: Application Potentiality and Prospects of Night-time Light Remote Sensing for the Belt and Road</b>  <i>Wei JIANG - Institute of Remote Sensing and Digital Earth , CAS</i>		<b>737: Multi-time Scale Analysis of Heat Island Effect in Guangdong - Hong Kong -Macau Greater Bay Area from 1990 to 2015</b>  <i>Jinsong CHEN, Hongzhong LI - SIAT, CAS</i>	<b>901: Satellite-derived Soil, Snow Cover and Lake Ice Characteristics as Indicators for Carbon Feedbacks</b>  <i>Juha LEMMETYINEN - Finish Meteorological Institute, Helsinki, Finland</i>	
16:50 - 17:05	<b>707: Global System of Quantitative Remote Sensing Products for Typical Applications,</b>  <i>Chunxiang CAO, Min XU - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences</i>		<b>741: Thermal Remote Sensing For Urban Heat Wave Events: Applications and Challenges</b>  <i>Feng CHEN - Xiamen University</i>	<b>685: Glacier Mass Balance Over the Central Nyainqentanglha Region, southeastern Tibetan Plateau during 1968-2013, estimated from remote sensing data</b>  <i>Liu SHIYIN - Institute of International Rivers and Eco-Security, Yunnan University</i>	
17:05 - 17:20	<b>Side Event</b> <b>DBAR-DATA Working Meeting</b>		<b>799: Identifying Socio-economic Drivers of Air Quality and Their Spatial Relationship in Yangtze River Delta</b>  <i>Qianjing YUAN, Rongrong LI, Hui LIN – The Chinese University of Hong Kong</i>	<b>902: Multi-Source Hydrological Data Products to Monitor High Asian River Basins and Regional Water Security</b>  <i>Massimo MENENTI - State Key Laboratory of Remote Sensing Science, Institute of Remote Sensing and Digital Earth</i>	
17:20 - 17:35			<b>905: Estimation of Land Surface Emissivity Using Different Vegetation Indices By Means Of ANN and SVR</b>  <i>Y. Jouybbari MOGHADDAM and M.R. SARADJIAN - University of Tehran</i>	<b>903: SMEAR Station Concept in DBAR and HiMAC Task Force</b>  <i>Kujansuu JONI - University of Helsinki, Finland</i>	

17:35 - 17:50			<p><b>719: The World Urban Database and Access Portal Tools (WUDAPT) and Its Planning Implications for Belt and Road Cities</b></p> <p><i>Chao REN – The Chinese University of Hong Kong</i></p>	<p><b>793: Multi-sphere Hydrological Modeling over the Third Pole Region</b></p> <p><i>Lei WANG - Institute of Tibetan Plateau Research, CAS</i></p>	
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## 8 Dec 2017 (Friday)

Keynote Addresses (4)

Chair: Qunli HAN

LT 1, Cheng Yu Tung Building

09:00 - 09:30	<u>Keynote Speech</u> <b>The Global Human Settlement Layer framework and the Digital Belt and Road: A Synergic Perspective</b> <i>Martino PESARESI - European Commission, Joint Research Centre</i>
09:30 - 10:00	<u>Keynote Speech</u> <b>Capacity Building of Big-Data from Earth Observation for Water and Land Management in Thailand</b> <i>Monthip SRIRATANA - National Research Council of Thailand (NRCT)</i>
10:00 - 10:30	Tea Break
10:30 - 11:30	<b>Closing Ceremony</b>

## Side Event (7)

### DBAR Agriculture and Food Security Working Group (DBAR-AGRI) Launching Ceremony

**Date & Time : 4-5 December 2017**

**Venue : Hyatt Regency Hong Kong, Sha Tin**

**Abstract :** This is a preparatory meeting of DBAR agriculture and food security (DBAR-AGRI) working group, which is an important component of DBAR. To ensure global food security and realize UN Sustainable Development Goals (SDGs), it is essential to improve global food security governance involving the entire food chains, from production, harvest, to trade, market and consumption. Information on the food chains is crucial for an open, transparent, and inclusive global food security governance. The DBAR-AGRI working group aims at creating a community of practice on comprehensive agriculture monitoring to address the information gap related to food security and nutrition, to establish a partnership community of practice to develop and implement a science plan for comprehensive agriculture monitoring, to promote up-to-date understanding and awareness on Earth Observation (EO) contributions to global and regional food and nutrition security issues, to compile and promote good practices on EO based comprehensive agricultural monitoring cloud platform, adaptation and customization of EO based agriculture monitoring cloud platform for BAR countries, capacity building for agriculture monitoring in DBAR countries. The basic tenet of the working group is to contribute to a holistic approach to address the information-gap in order to ensure food and nutrition security of a growing population. In this meeting, the draft of science plan of DBAR-AGRI will be discussed and the implementation plan for the next five years will be formulated.

### DBAR Water Working Group (DBAR-WATER) Launching Ceremony

**Date & Time : 6 December 2017, 13:30-14:00**

**Venue : Room 201, Cheng Yu Tung Building, CUHK**

**Abstract:** The DBAR-WATER Working Group promotes and coordinates science and applications within one of the nine foci of the DBAR (Digital Belt and Road) Science Program aiming at applying Earth Observations to understand the water resources and water use in the Belt and Road Countries by building joint platforms and initiate research projects. Earth Observation is very helpful for water cycle studies and water resource management to solve critical water related problems, e.g. to understand the distribution of water resources and to monitor drought and flood disasters. This meeting aims at launching the DBAR-WATER Theme that will promote Earth Observation scientific studies and applications to water resource and water use in the Belt and Road Countries. Scientists and experts from the Belt and Road region will gather and share their contributions to DBAR-WATER. Several presentations are included, which cover the understanding of spatial and temporal patterns of water resources and water use, agricultural water productivity, assessment of water related disasters analysis and monitoring of water quality. More in general, the goal of DBAR-WATER is to understand the challenging problems and to search for solutions related to water resources in the Belt and Road Countries using Earth Observation. In this meeting, the top priority issues and collaboration plans will be discussed. Finally but not least, the science plan of DBAR-WATER will be discussed and the implementation plan for the next five years will be formulated.

### DBAR High Mountain and Cold Region Task Force (DBAR-HiMAC) Working Meeting

**Date & Time: 6 December 2017, 15:40 - 18:00**

**Venue: Room 212, Cheng Yu Tung Building, CUHK**

**Abstract :** The meeting aims to call for more research topics, to inspire understanding of the remote connection of Earth poles, to promote the scientific understanding to the High Mountain and Polar Cold Regions (HiMAC), especially to the Belt and Road region of ice silk road. An effort will be settled to advocate the engagement of new participant. The content and revision to work plan and priorities will be discussed, especially to call for proposal on the joint effort with other organizations, and program.

The preliminary agenda includes:

1. Science opinions speech
2. Belt and Road relevant, especially the ice silk road
3. Progress report, and work plan consulting
4. Joint action with international program, such as GEO CRI, and etc.

### DBAR Coastal Zone Working Group (DBAR-COAST) Launching Ceremony

Date & Time : 7 December 2017, 14:00 - 18:00

Venue: Room 212, Cheng Yu Tung Building, CUHK

**Organizer:** DBAR-COAST Working Group, Key Laboratory of Earth Observation, Hainan Province

**Abstract:** The DBAR Coastal Zone Working Group (DBAR-COAST) is one of the seven working groups and mainly contributes to Maritime Silk Road development. The Maritime Silk Road traverses over thirty ports throughout Asia, Africa, Arab States and Europe. The implementation of the 21st Century Maritime Silk Road strategy will profoundly influence the further integration of these regions or countries into the global economy. Along with the construction of the Maritime Silk Road, the rapid expansion of harbours together with coastal urban population and changes in land-use practices will bring challenges to coastal ecosystems and environment. Climate Change induced changes in sea level are likely to increase the risk of inundation in many parts of the coastal zone, especially the densely populated low-lying areas. Coastal zones are areas of particular ecological, social, and economic value where many conflicting interests need to be reconciled in order to ensure sustainable development. All countries along the Maritime Silk Road have an interest in the sustainable management of their coastal and marine ecosystems. The DBAR-COAST will focus on promoting cooperation among these countries, advocate and demonstrate the applications of Big Earth Data in support of sustainable development of people and economies at local, national and regional levels. Besides, these cooperation, advocacy and demonstration envisages to deliver critical sustainable development policies and strategies for coastal or near shore environments. DBAR-COAST will work to support the development of a Maritime Silk Road network of partner countries to improve access to appropriate and up-to-date science data, technology, and knowledge. These scientific data, technology and knowledge will cover coastline and nearshore environment, coastal ecosystems, harbour and port city, carrying capacity of coastal resources & environment and conservation and management as a result of the strengthened capacities. Beside these, it also focuses to enhance collaboration between existing regional and national stakeholders (B&R partners) in knowledge generation and users of the knowledge and technology.

### DBAR Big Earth Data Working Group (DBAR-DATA) Working Meeting

Date & Time : 7 December 2017, 16:00-18:00

Venue : LT 4, Cheng Yu Tung Building, CUHK

**Organizer:** DBAR-DATA Working Group, Key Laboratory of Earth Observation, Hainan Province

**Abstract:** This meeting is aimed to review the progress of DBAR Big Data Working Group in the past months of 2017, and extend the scope of big earth data service and research for DBAR communities. Data providers and data consumers from Belt and Road region will gather and share their opinions on big earth data themes. Different with the past workshops and sessions held by DBAR Big Data WG, this meeting is designed in form of panel discussion. We want to get ideas on how to solve the priority big data issues for DBAR users. More than ten experts from Australia, China, EU, Hong Kong, Japan, Lao, Malaysia, Sri Lanka, UK and USA have been invited as panelists. The questions have been listed for experts and audiences to discuss together.

1. Identify the priority, quality, and implementable data resources and data services for B&R region
2. Recommend the most urgent data service types in this region.

### DBAR Capacity Building

Date & Time: 7 December 2017, 15:40 - 18:00

Venue: Room 211, Cheng Yu Tung Building, CUHK

**Abstract:** Implementation of the DBAR Science Plan will include multi-tiered training opportunities. Training of young scientists at master and doctoral levels can be achieved using the current system of scholarships offered by different Agencies in China. In addition training of EO technicians, observation and data analyses and interpretation technologies and tools as well as decision makers will be made feasible via online, refresher and mobile courses both in China and a selected number of B&R countries. A special session will be dedicated to Capacity Building. The goal of the Session is to initiate a dialogue among interested parties in the 65 B&R Countries, International and Chinese Agencies offering a variety of training opportunities and fellowships and academic organizations in China interested in hosting fellows under this initiative. Highlights on the achievements of current CB programs will be presented, while invited speakers from the B&R Countries will share their views on CB needs.

ICSU Regional Committee for Asia and the Pacific

Date & Time: 7-8 December 2017

Venue : Hyatt Regency Hong Kong, Sha Tin

**Abstract:** *The long term ICSU vision is for a world where science is used for the benefit of all, excellence in science is valued and scientific knowledge is effectively linked to policy-making. In such a world, universal and equitable access to high quality scientific data and information is a reality and all countries have the scientific capacity to use these and to contribute to generating the new knowledge that is necessary to establish their own development pathways in a sustainable manner. ICSU mobilizes knowledge and resources of the international science community for the benefit of society and serves to: 1) Identify and address major issues of importance to science and society; 2) Facilitate interaction amongst scientists across all disciplines and from all countries; 3) Promote the participation of all scientists in the international scientific endeavour, regardless of race, citizenship, language, political stance and gender; 4) Provide independent, authoritative advice to stimulate constructive dialogue between the scientific community and governments, civil society and the private sector. The ICSU Regional Committee for Asia and the Pacific (ICSU RCAP) leads and oversees the development and implementation of specific activities to achieve the aims and objectives of ICSU to enhance scientific understanding and capacities for research in the ICSU ROAP priority areas, and in other areas defined in the ICSU Strategic Plan, for the Asia-Pacific region. ICSU RCAP is responsible for the dissemination of information about ICSU ROAP initiatives and activities at the regional and global levels, and where appropriate in the identification and establishment of research groups and networks in areas of research relevant to the priorities of ICSU and its international programme offices. This is the 24th meeting of ICSU Regional Committee for Asia and the Pacific.*

# Poster

Date : 6 Dec 2017 (Wednesday)

## Session 10: Remote Sensing for Agriculture Monitoring and Food Security

771: **Application of Agricultural Decision Support Based on Multi - source Image Collaboration**, Wen DONG, Qiting HUANG, Yingpin YANG Institute of Remote Sensing and Digital Earth, Chinese Academy of Science; Agricultural Science and Technology Information Research Institute, Guangxi Academy of Agricultural Sciences

756: **The Fractional Vegetation Cover Estimation Using ZY-3a Data in Hilly Areas of Fujian Province, Southern China**, Mr. LIANG peng, Ms. DONG Jing, Mr. CHAI peng, Mr. DING Yixing

## Session 11: Environmental Monitoring and Analysis for Sustainable Development and Management of Coast and Sea

681: **Himawari-8 Geostationary Satellite observation of the Internal Solitary Waves in the South China Sea**, Mr. Qidong GAO, Ms. Di DONG, Prof. Xiaofeng YANG - Institute of Remote Sensing and Digital Earth, CAS; South China Sea Branch, State Oceanic Administration

731: **Spatio-temporal Variation of Winter Phytoplankton Blooms northwest of Luzon Island**, Ms. Hui GAO, Prof. Hui ZHAO, Mr. Jian ZHAO - Guangdong Ocean University

727: **The distribution of summer chlorophyll a in the Arabian Sea using remote sensing data**, Prof. Hui ZHAO, Mr. Jian ZHAO, Ms. Hui GAO - Guangdong Ocean University

728: **On the strong summer phytoplankton bloom east of Vietnam in 2007, an ElNino year**, Prof. Hui ZHAO, Mr. Jian ZHAO, Ms. Hui GAO - Guangdong Ocean University

723: **Dynamics of Mangroves during 1985-2015 in Zhangjiang Mangrove National Nature Reserve, Guangdong, P.R. China**, Ms. Yi ZHENG, Mr. Nan XU, Mr. Jian ZHOU, Prof. Guanghui LIN, - Tsinghua University

762: **Mangrove Species Classification and Biomass Retrieval at the Species Level with WorldView-2 images**, Mr. Yuanhui ZHU, Prof. Kai LIU, Prof. Lin LIU - Center of Integrated Geographic Information Analysis, School of Geography and Planning, Sun Yat-sen University

764: **Mapping Mangrove Species Based on Unmanned Aerial Vehicle Hyperspectral Image using OBIA approach**, Ms. Jingjing CAO, Ms. Wanchun LENG, Prof. Kai LIU, Prof. Lin LIU, Prof. Zhi HE - Sun Yat-sen University; Center of Integrated Geographic Information Analysis, School of Geography and Planning, Sun Yat-sen University

775: **Assessing the Gross Primary Productivity in a Subtropical Tidal Mangrove Wetland Using CO2 Eddy Flux Measurement and Remote Sensing Based Evaluation**, Mr. Jiangong LIU - Department of Geography and Resource Management, The Chinese University of Hong Kong

697: **The interannual variability of the upwelling in the northern South China Sea**, Prof. Ye qiang SHU - South China Sea Institute of Oceanology, Chinese Academy of Sciences

713: **Quantifying Mangrove Zonation Pattern Change in Mai Po Using Landscape Metrics Derived from Long Time-series Satellite Images**, Ms. Mingfeng LIU, Prof. Hongsheng ZHANG, Prof. Hui LIN - ISEIS, CUHK

823: **The monitoring and analysis of the coastal lowland subsidence in the southern Hangzhou Bay with an advanced time-series InSAR method**, Dr. Lin BAI, Prof. Liming JIANG, Dr. Qishi SUN, Mr. Yuxing CHEN, - State Key Laboratory of Geodesy and Earth, Wuhan, China

744: **Mangrove species classification using deep learning with remote sensing images and aerial photos from consumer drones**, Mr. Luoma WAN - Institute of Space and Earth Information Science

659: **Study on monitoring method of high resolution Remote Sensing in cloudy and rainy regions along the Maritime Silk Road**, Dr. Shanwei LIU - China University of Petroleum(East China)

712: **Comprehensive ground-space monitoring of anthropogenic impact on coastal water areas**, Prof. Valery BONDUR, Mr. Victor ZAMSHIN -State scientific Institution "Institute for Scientific Research of Aerospace Monitoring AEROCOSMOS

804: **Research on extraction experiment of oil spill information based on polarization decomposition**, Prof. Zou YARONG - National satellite ocean application services

655: **Unified Analysis on Compact Polarimetric SAR Features for Oil spill Classification**, Dr. Yu LI - Beijing University of

### Session 12: Remote Sensing for Global Environmental Change

674: **Land intensive utilization evaluation of the new areas—Taking 5 National New Areas as Example**, Ms. LU Xiaohui, Ms. CUI Xiaofang, Prof. LIU Zhengjun - Chinese Academy of Surveying and mapping

662: **Cultural Heritage along the Belt and Road: Universal Values and the Silk Road Spirit Carrying**, Prof. Xinyuan WANG, Dr. Lei LUO, Ms. Jie LIU - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

689: **Simulation of Moon-based Platform Viewed Earth Radiation Budget with GEOS-5 Data**, Mr. Hanlin YE, Prof. Huadong GUO, Prof. Guang LIU - Institute of Remote Sensing and Digital Earth, CAS; Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

679: **Estimation of ground-level PM2.5 concentrations in Fuzhou region using satellite-retrieved 3 km AOD**, Ms. Lijuan YANG, Prof. Hanqiu XU - Fuzhou University

740: **Ecosystem condition and change during 2010-2015 over Belt and Road area**, Dr. Jing LI - Institute of remote sensing and digital earth, CAS

701: **Glacier Variations in Headwaters of the Yangze River Based on Multi-Sources Remote Sensing**, Dr. Qingkai MENG - State Key Laboratory of Plateau Ecology and Agriculture, Qinghai University

696: **Simulation Study of Moon-based Platform Viewed Earth Radiation Budget**, Mr. Hanlin YE, Prof. Huadong GUO, Prof. Guang LIU - Institute of Remote Sensing and Digital Earth, CAS

708: **Spatio-temporal variability of air quality over the Belt and Road region by using satellite data**, Mr. Zhentao WANG, Prof. Jie GUANG - The Experimental High School Attached to Beijing Normal University; Institute of Remote Sensing and Digital Earth, CAS

730: **EFFECTS OF HUMIDITY ON AEROSOL EXTINCTION EFFICIENCY IN BEIJING**, Ms. Ying LI, Prof. Yong XUE, Ms. Jie GUANG, Ms. Lu SHE, Ms. Cheng FAN, Ms. Guili CHEN - Chinese Academy of Science

734: **Lake Mass variation of Qinghai Lake Based on Multisource Remote Sensing Data under Climate Change from 2003 to 2009**, Dr. Xiliang NI, Prof. Chunxiang CAO, Dr. Min XU, Dr. Wei CHEN, - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

736: **RETRIEVAL OF ATMOSPHERIC PARTICULATE MATTER USING SATELLITE DATA IN BEIJING AREA**, Ms. CHEN Guili, Prof. Guang JIE, Prof. Xue YONG, Ms. Li YING, Prof. GONG Shaoqi, Mr. CHE Yahui - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

715: **Policy factors impact analysis between karst landform and non-karst landform in the Lijiang River, China**, Ms. Qingwen JIN - Chinese Academy of Sciences, Institute of Remote Sensing and Digital Earth

846: **Microwave Polarimetry: a Distinctive Opportunity to Retrieve Wind Field Inside Typhoon**, Prof. Xiaobin YIN - Beijing Piesat Information Technology Co., Ltd

770: **Combination of optical and microwave remote sensing in estimating all-sky land surface longwave radiation**, Dr. Tianxing WANG - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

653: **Semi-automatic Mapping of Large Shallow Landslides based on Visual Saliency Detection and Image Segmentation for High-resolution Remote Sensing Imagery**, Dr. Hui LI, Mr. Qi YAN, Prof. Linhai JING, Dr. Yunwei TANG, Dr. Haifeng DING, Ms. Ru XU - Institute of Remote Sensing and Digital Earth; Institute of Space and Earth Information Science, The Chinese University of Hong Kong

694: **Atmospheric Observation from DSCOVR-EPIC to Moon-Based Platform**, Ms. Cheng FAN, Prof. Yong XUE, Ms. Jie GUANG - Institute of Remote Sensing and Digital Earth; University of Derby

761: **Specific Patterns of XCO<sub>2</sub> Observed by GOSAT and Assessed with Model Simulations over Chinese Mainland**, Dr. Nian BIE, Prof. Liping LEI, Mr. Changjiang WU - Key Laboratory of Digital Earth Science, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

863: **A Valuable Comparison Analysis Between Transfer Learning and Semi-supervised Learning on Land Use Classification Application**, Hongliang XIE, Chao YANG, Heng WANG, Kaijun REN - National University of Defense Technology

### Session 13: Big Earth Data for Disaster Risk Reduction

718: **Satellite monitoring of wildfires and their emissions of harmful gases and aerosols into the atmosphere**, Prof. Valery BONDUR, Ms. Kristina GORDO, Mr. Vladimir KLADOV - State scientific Institution "Institute for Scientific Research of Aerospace Monitoring "AEROCOSMOS"

711: **Short- and middle-term earthquake precursors registered from space by a seismic danger area comprehensive monitoring system**, Prof. Valery BONDUR, Ms. Marina TSIDILINA, Ms. Elena GAPONOVA, Ms. Olga VORONOVA - State scientific Institution "Institute for Scientific Research of Aerospace Monitoring "AEROCOSMOS"

#### Session 14: Remote Sensing for Water Resource

**The real time flood predictions for the Milano area**, A. Ceppi, G. Ravazzani, C. Corbari, G. Lombardi, M. Mancini - Department of Civil and Environmental Engineering (D.I.C.A.), Politecnico di Milano, Italy; Department of Civil and Environmental Engineering (D.I.C.A.), Politecnico di Milano, Italy

**Smart Irrigation From Soil Moisture Forecast Using Satellite And Hydro –Meteorological Modelling**, Prof. M. Mancini, C. Corbari, A. Ceppi, Prof. M. Menenti, Prof. L Jia, R. Romero, A. Amengual, J. Sobrino, D. Skokovic, S. Meucci, R. Salerno, G. Branca, R. Zucaro - Department of Civil and Environmental Engineering (D.I.C.A.), Politecnico di Milano, Italy; Delft、RADI-CAS; RADI-CAS

Date : 7 Dec 2017 (Thursday)

#### Session 15: Digital Earth and Spatial Data Infrastructure

666: **On a Microservice-based Platform for Big Remote Sensing Data Analytics**, Dr. Bo XIANG, Dr. Zheng LI, Prof. Yan LIU, Prof. He ZHANG - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences; State Key Laboratory of Novel Software Technology, Software Institute, Nanjing University; Faculty of Engineering and Computer Science, Concordia University

668: **Design and Analysis of Data Transmission for Moon-based Earth Observation Platform**, Dr. Zhixing RUAN, Mr. Guoqiang CHEN, Prof. Guang LIU, Dr. Yixing DING - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, School of electronic & information engineering, Beijing Jiaotong University

682: **The Design and Development of Hainan Province "Digital Ocean" Platform and Applications on Natural Disasters Prevention and Reduction**, Prof. Lei WANG, Prof. Xin ZHANG - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

693: **A New Polar Coordinate Expression for Moon-Based Earth Observation Images**, Prof. Lu ZHANG, Prof. Huadong GUO, Ms. Hui JIAO, Prof. Guang LIU - Key Laboratory of Digital Earth Sciences, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China

732: **SAR Vehicle Classification Based on Convolutional Neural Networks with Transfer Learning**, Ms. Di ZHANG, Dr. Jia LIU, Dr. Heng WANG, Prof. Kaijun REN, Prof. Junqiang SONG - National University of Defense Technology; Academy of Ocean Science and Engineering, National University of Defense Technology

809: **Geometry simulation system for moon based earth observation**, Dr. Guozhuang SHEN, Prof. Huadong GUO, Prof. Guang LIU - Key Laboratory of Digital Earth, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

810: **SAR Time-sequential Images Formation Algorithm Based on Invariant-parameter Subaperture Processing**, Mr. Baobin MA, Prof. Jie CHEN, Pengbo WANG, Wei YANG - Beihang University

816: **Range-Doppler Frequency Domain Characteristics Analysis for Lunar based SAR System**, Mr. Xinwei GU, Prof. Jie CHEN, Mr. Wei YANG, Mr. Pengbo WANG, Prof. Xinwu LI - School of Electronics and Information Engineering, Beihang University; Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, Beijing 100094

716: **Data-driven crowd behavior simulation in the digital city application**, Mr. Zhuxin XUE - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

749: **A GIS Geometric Knowledge assisted GLCM Construction method for RS Texture features**, Dr. Zeying LAN, Prof. Yang LIU - School of management, Guangdong University of Technology; Guangzhou Urban Planning & Design Survey Research Institute

789: **A new geometric correction method based GCPs for high resolution airborne SAR data**, Dr. P ZHANG – RADI, CAS

#### Session 16: Natural and Cultural Heritage Conservation and Sustainable Development

651: **Ecological function assessment of the Belt and Road region**, Mr. Chen GONG - Institute of Remote Sensing and Digital Earth

661: **Integrated OBIA and SVM to Mapping Mangrove Patches in Dongzhaigang National Natural Reserve, Hainan (China)**, Dr. Lei LUO, Prof. Xinyuan WANG, Ms. Jie LIU, Dr. Chuansheng LIU, Dr. Lanwei ZHU - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

788: **Photovoltaic Power Plants Site Suitability Analysis Using Remote Sensing Data and Multicriteria Evaluation**, Mr. Qian ZHANG, Dr. Xiao Zhou XIN, Dr. Hai Long ZHANG - Key Laboratory of Digital Earth Science, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

845: **A Study of the Ancient Route Redrawing and Virtual Construction on the Desert Silk Road (Xinjiang Section) in Han and Tang Dynasties by Using Spatial Information Techniques**, Dr. Chuansheng LIU - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

667: **Potential occurrence risk prediction of Sudden Oak Death under different future climate scenarios using SVM model**, Dr. Wei CHEN, Prof. Chunxiang CAO, Dr. Zhou FANG, Prof. Houzhi JIANG, - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences; Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

862: **Integration of Multi-parametric Fussy Analytic Hierarchy Process and GIS along the World Heritage: A Flood Hazard index, Mombasa County, Kenya**, Mr. Yves HATEGEKIMANA - institute of remote sensing and digital earth, chinese academy of science

### Session 17: Urban Environment and Sustainable Urban Development

757: **Analysis of Sanctuary Development Security Assessment Based on River Belief**, Dr. Lin ZHENGSONG, Dr. Zhang LU - China University of Geosciences

774: **Synergetic use WorldView-2 and airborne LiDAR data to extract urban impervious surfaces using a hierarchical 3D Convolutional Neural Network**, Dr. Zhongchang SUN, Mr. Mengfan WU, Dr. Cuizhen WANG, Prof. Huadong GUO, Dr. Hui LI - Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences; Hainan Key Laboratory Earth Observation, Sanya Institute of Remote Sensing, Chinese Academy of Sciences; University of South Carolina

709: **Using geostatistic techniques to analyze spatial heterogeneity in urban ecological state based on a remote sensing index**, Dr. Xisheng HU, Prof. Hanqiu XU - Fuzhou University

753: **Implication of Urban Heat Island Related to Human Activities: A Case Study in Mongolia**, Mr. Byambakhuu GANTUMUR, Dr. Falin WU, Dr. Battengel VANDANSAMBUU, Dr. Enkhjargal DALAIBAATAR, Ms. Fareda ITIRITIPHAN, Mr. Wasiu Akande AHMED, Prof. Yan ZHAO - Beihang University; National University of Mongolia

743: **Characterizing Urban Spatial Expansion of Oasis Cities around Tarim Basin using Remote Sensing and GIS Methods**, Dr. Bushra KHALID, Prof. Abdul GHAFAR, Ms. Bumairiyemu MAIMAITI, Prof. Qianli CHEN, Mr. Song LI - International Islamic University Islamabad Pakistan; COMSATS Institute of Information Technology Islamabad Pakistan; Xinjiang Agricultural University

706: **Research on fine-scale urban population spatial products based on AsiaPop data**, Dr. Min XU, Prof. Chunxiang CAO - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

800: **A temperature and emissivity separation algorithm for Chinese Gaofen-5 satellite data**, Dr. Hua LI, Mr. Yikun YANG - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

773: **The composition and configuration of urban buildings impact on seasonal urban warming**, Ms. Yuliang LAN, Prof. Qingming ZHAN - School of Urban Design, Wuhan University

### Session 18: Observations and Adaption to Changes in High Mountain and Arctic Cold Regions

663: **Mass changes of the mountain glacier detecting based on the InSAR observations**, Dr. Zhou JIANMIN, Prof. Zhen LI - institute of remote sensing and digital earth, CAS

797: **Object-oriented extraction of thermal erosion gullies from unmanned aerial vehicle image**, Ms. Linlin LIANG, Prof. Liming JIANG, Dr. Zhiwei ZHOU, Mr. Yuxing CHEN, Dr. Yafei SUN - Institute of Geodesy and Geophysics. Chinese Academy of Sciences

822: **Operational global snow cover mapping using Fengyun-3 MERSI and VIRR data**, Mr. Zhaojun ZHENG, Prof. Yujie LIU - National Satellite Meteorological Center, China Meteorological Administration

692: **Lunar influence on earth's cloud amount**, Ms. Wu JIE, Prof. Guo HUADONG, Mr. DING Yixing, Ms. DONG Jing, Prof. LIU Guang, Mr. LIU Zhiqiang - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences; China Institute of Water Resources and Hydropower Research

849-Poles: **Detection of Crevasse on Ice Sheet based on Remotely Sensed Observations**, Prof. Xinwu LI, Dr. Lei LIANG - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, Beijing 100094; State Key Laboratory of

Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, CAS

792: **Active layer thickness in permafrost regions across the northern hemisphere**, Dr. Dongliang LUO - Northwest Institute of Eco-environment and Resources, Chinese Academy of Sciences

675: **Arctic Vegetation Dynamics: Tundra Greening and Browning**, Prof. Howard EPSTEIN - University of Virginia

699: **Glacier mass balances at Karakoram-Pamir-West Kunlun during 2000-2014**, Dr. Gang LI - Institute of Space and Earth Information Science, The Chinese University of Hong Kong

763: **Influence of Moon on Earth 's Polar Brightness Temperature**, Mr. LIU Zhiqiang, Prof. PENG HONGCHUN, Mr. DING Yixing, Ms. WU JIE, Ms. RUAN Zhixing - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences; School of Geomatics and Marine Information ,Huaihai Institute of Technology

820: **High-resolution Mapping of Near-surface Soil Freeze/thaw State in China**, Dr. Tianjie ZHAO, Prof. Jiancheng SHI - Institute of Remote Sensing and Digital Earth

754: **LAND COVER PHENOLOGY CHANGE IN THE NORTH TO THE NORTH-EAST ASIA**, Dr. Bayarsaikhan UUDUS, Ms. Narantuya DAVAA, Dr. Aibek ULYKPAN - National University of Mongolia

717: **AEROSOL PROPERTIES RETRIEVED OVER LAND FROM AVHRR INSTRUMENT**, Dr. Yahui CHE, Prof. Yong XUE, Dr. Linlu MEI, Ms. Jie GUANG, Dr. Lu SHE - Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences

658: **Recent glacier change in Qilian Mountains of northwest China using multi-scale remote sensing**, Dr. Xinyang YU, Ms. Wenqian HUO - Shandong Agricultural University; Taishan International School

684: **Glacier mass changes in the western Nyainqentanglha Range from 1970–2010**, Dr. Wu Kunpeng, Liu Shiyin, Wei Junfeng, and Guo Wanqin - School of Resources and Environment, Anqing Normal University, Anqing, China; Institute of International Rivers and Eco-Security, Yunnan University, Yunnan, China; State key Laboratory of Cryospheric Sciences, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, Lanzhou, China; Department of Geography, Hunan University of Science and Technology, Xiangtan, China

908: **Modeling experiments on seasonal lake ice mass and energy balance in Qinghai-Tibet Plateau**, Wenfeng Huang, Bin Cheng Zhijun Li and Timo Vihma, ChangAn University