45th Asian Conference on Remote Sensing 2024

17th – 21st November 2024
Colombo Sri Lanka

ACRS 2024
ASIAN CONFERENCE ON REMOTE SENSING
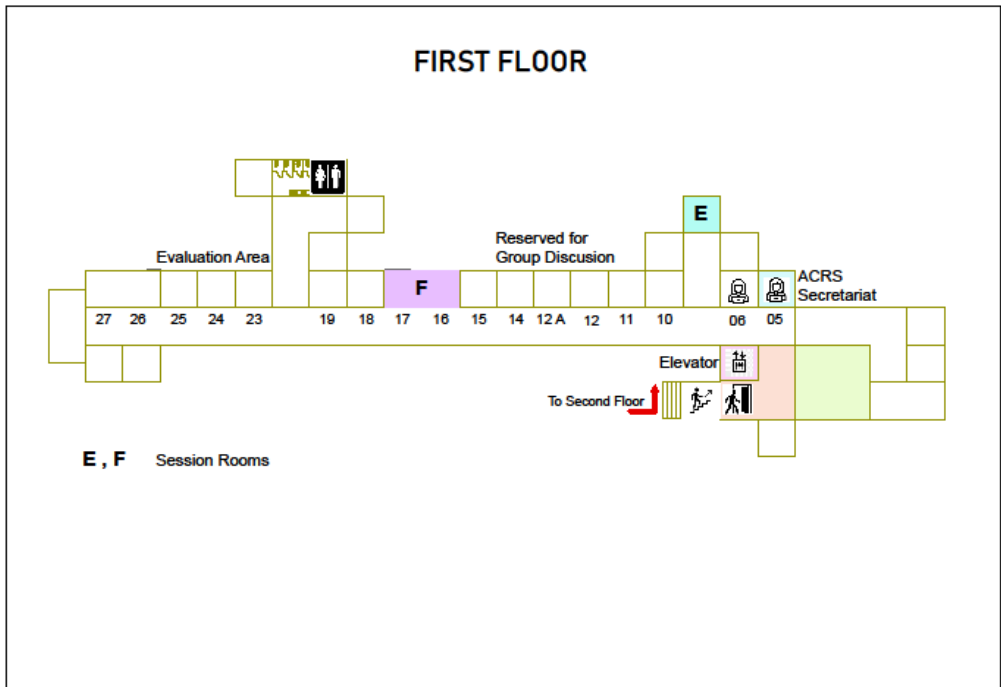**COLOMBO SRI LANKA**

www.survey.gov.lk/ACRS2024/

PROGRAM SUMMARY

Date	Time	Room A	Room B	Room C	Room D	Room E	Room F	Special Excursions
16-Nov	15.00-19.00	Registration						
Nov. 17th Sunday (1st Day)	07:00-09.30	Registration						
	09.30-11.00	Opening Ceremony						
	11.00-11.15	Coffee Break						
	11.15-12.00	Keynote Speech / Professor Jiang Jie (@ Room A, B & C Merged)						
	12.00-12.45	Keynote Speech/ Mr. S. Sivanatharajah (@ Room A, B & C Merged)						
	12.45-13.45	Lunch Break						
	13.45-15.15			C3 JAXA's Session on EO Dashboard	D3 Algorithms and Image Processing Techniques	E3 Cloud Computing, Big Data and AI in Remote Sensing	F3 Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping	
	15.15-15.30	Coffee Break						
	15.30-17.00			C4 ISPRS & AARS Joint Session on SAR	D4 Remote Sensing and its Applications	E4 Remote Sensing and its Applications	F4 White Elephant Session	
	18.00-23.00	Welcome Party-Banquet & Culture Night (@Room A , B & C Merged)						
Nov. 18th Monday (2nd Day)	09.00-10.30	Plenary Session/ Dr.Shailesh Nayak , Dr. Jagath Rajapaksha (@Room A, B & C Merged)						Technical Tour to the Surveyor General's Office from 13.30 hrs to 17.00 hrs. Picking time at the main gate of Monarch Imperial Hotel is at 13.30 hrs.
	10.30-10.45	Coffee Break						
	10.45-11.30	Keynote Speech/ Dr. Fabio Remondino (@ Room A, B & C Merged)						
	11.30-12.30	Poster Session @ Room D						
	12.30-13.30	Lunch Time						
	13.30-15.00	A3 Algorithms and Image Processing Techniques		C3 Remote Sensing and its Applications		E3 Commercial Session	F3 Sensors, Platforms and Calibration	
	15.00-15.30	Coffee Break						
	15.30-17.00			C4 Special Session on Expanding the roles of international societies in Asia		E4 Remote Sensing and its Applications	F4 Cloud Computing, Big Data and AI in Remote Sensing	
	18.00-20.00	1st General Conference (Delegates only @ Room A)						
Nov. 19th Tuesday (3rd Day)	09.00-10.30	A1 Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping	B1 Remote Sensing and its Applications	C1 WEBCON		D4 Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping	F1 Algorithms and Image Processing Techniques	Down South Excursion (start from 07.15 hrs atthe main gate of Monarch Imperial Hotel. Estimated arrival time is at 18.30 hrs)
	10.30-11.00	Coffee Break						
	11.00-12.30	A2 Satellite Program	B2 Remote Sensing and its Applications	C2 WEBCON		E2 Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping	F2 Algorithms and Image Processing Techniques	
	12.30-13.30	Lunch Time						
	13.30-15.00	Poster Session @ Room D						
	15.00-15.15	Coffee Break						
	15.15-16.45	A4 Student Session	B4 Cloud Computing, Big Data and AI in Remote Sensing			E4 Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping	F4 Photogrammetry and its Applications	
	16.30-20.00	Young Scholar Night (@ Thepanyaki room)						

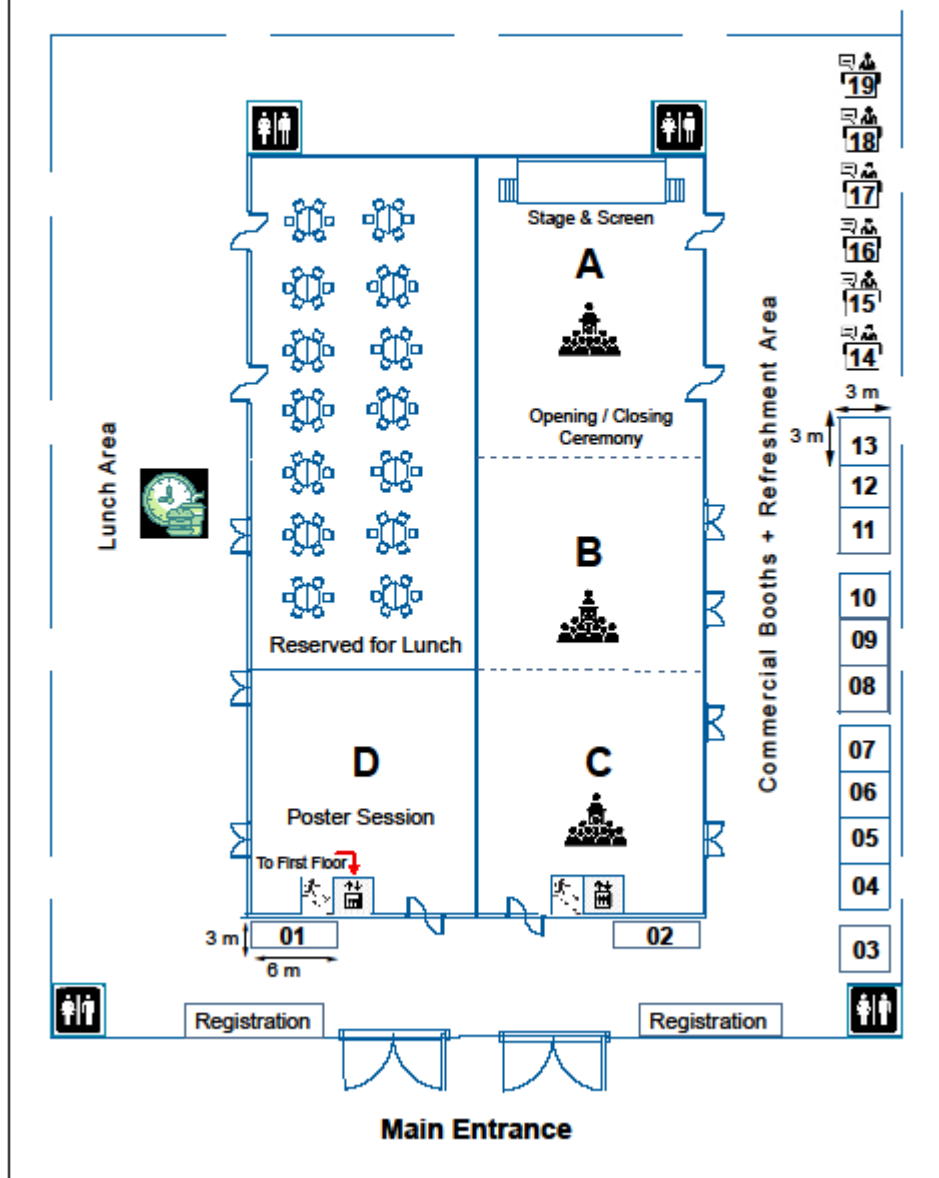| Date	Time	Room A	Room B	Room C	Room D	Room E	Room F	Special Excursions
Nov. 20th Wednsesday (4th Day)	09.00-10.30	A1 Algorithms and Image Processing Techniques / A1 Global Navigation Satellite Systems	B1 Remote Sensing and its Applications	C1 ISRO Session on EO			F1 Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping	Colombo City Tour (Start from Monarch Imperial Hotel by 15.00hrs)
	10.30-10.45	Coffee Break						
	10.45-12.30	Poster Session @ Room D						
	12.30-13.30	Lunch/ 2nd General Conference AARS (Delegates only @ Room C)						
	13.30-15.00	A3 Remote Sensing and its Applications		C3 Remote Sensing and its Applications		E3 Remote Sensing and its Applications		
	15.00-15.30	Coffee Break						
	15.30-17.00					E4 Remote Sensing and its Applications / E4 Photogrammetry and its Applications	F4 Remote Sensing and its Applications	
Nov. 21st Thursday (5th Day)	09.00-10.15					E1 Photogrammetry and its Applications	F1 Remote Sensing and its Applications	
	10.15-11.15	Keynote Speech / Prof. Jegannath Aryal (@ Room C & D Merged)						
	11.00-11.30	Coffee Break						
	11.30-12.30	Closing Ceremony (@ Room C & D Merged)						
	12.30-13.30	Lunch Time						
Nov. 22nd-26th		Post-conference summer school @ ISM,Diyatalawa						

Session Code : Room Number will be followed by Session Number (eg:-B2)

Session Number : 1 - From Morning to Morning Tea, 2 - From Morning Tea to Lunch, 3 - After Lunch to Evening Tea, 4- After Evening Tea

FLOOR PLANS

FIRST FLOOR

Evaluation Area

Reserved for
Group Discusion

E

F

ACRS
Secretariat

| 27 | 26 | 25 | 24 | 23 | | 19 | 18 | 17 | 16 | 15 | 14 | 12 A | 12 | 11 | 10 | 06 | 05 |

Elevator

To Second Floor

E , F   Session Rooms

SECOND FLOOR

Lunch Area

Reserved for Lunch

Stage & Screen

A

Opening / Closing Ceremony

B

D

Poster Session

C

To First Floor

Commercial Booths + Refreshment Area

19
18
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3 m

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02

Registration

Registration

Main Entrance

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1. Congratulatory Messages

Congratulatory Message from the President of Democratic Socialist Republic of Sri Lanka

Distinguished Delegates and Guests,

Land is the most valuable resource in a country. However, until now Sri Lanka has lacked a comprehensive national land use plan. Recognizing this gap, the National People's Power Government has prioritized the implementation of a national, scientifically-driven land use strategy, aiming to address pressing land issues for citizens and support national development initiatives. The Survey Department will spearhead this effort, collaborating with field experts to ensure timely progress.

In this context, hosting the **Asian Conference on remote sensing 2024** in Sri Lanka is a momentous achievement. Bringing together Remote Sensing experts from across Asia, this conference serves as a platform for sharing advanced knowledge and fostering cooperation within the Asia-Pacific region. It also provides an excellent opportunity to present research on essential topic such as Ecosystems, Applications and Modeling, Risk and Disaster Management and Remote Sensing for Climate Change Impacts. Such contributions are vital for sustainable development.

Sri Lanka's role as the host nation not only boosts awareness of remote sensing locally but also draws international attention, which I believe will have a positive impact on our tourism industry.

I extend my warm welcome to all participants attending the 45th Asian Conference on Remote Sensing, to be held Colombo from November 17th to 21st. I would also like to express my appreciation to the organizing committee, including the Survey General of the Sri Lanka Survey Department, for their dedication in bringing this important event to fruition.

Anura Kumara Dissanayake
President
Democratic Socialist Republic of Sri Lanka
17th November, 2024.

Message from the Prime Minister of the Democratic Socialist Republic of Sri Lanka

It is my privilege to extend my warmest congratulations on the inauguration of the 45th Asian Conference on Remote Sensing, which will be held from the 17th to the 21st of November 2024 in Sri Jayawardenepura Kotte. This occasion marks a significant milestone and is a noteworthy moment for our nation and the global scientific community.

The advancements in remote sensing technology have been remarkable and have captivated the world with their transformative potential. Today, this technology enables us to accomplish tasks that were once considered beyond reach. Its applications span numerous fields, contributing substantially to a wide array of endeavors.

The 45th Asian Conference on Remote Sensing will undoubtedly serve as an engaging and valuable forum for researchers, scientists, and professionals from Sri Lanka and across Asia. This gathering will provide a unique platform for exchanging insights and fostering collaboration, allowing participants to explore innovative strategies for the sustainable management of our natural resources.

I extend my best wishes for a successful conference and look forward to the fruitful discussions on protect, restore and promote sustainable use of land and natural resources.

Dr. Harini Amarasuriya
Prime Minister
Democratic Socialist Republic of Sri Lanka
17.11.2024

The Secretary to the Ministry of Agriculture, Lands, Livestock, Irrigation, Fisheries, and Aquatic Resources

Distinguished Delegates and Guests,

It is pleasure to issue this massage of greetings on the occasion on hosting of the 45th session of the Asian Conference on Remote Sensing in Sri Lanka. I convey my sincere thanks to the Survey Department of Sri Lanka and the Asian Association on Remote Sensing for their untiring effort in organizing this great event.

The conference themes to "Stepping towards Economic Sustainability through Spatial Data Services", which does show how scientific researches on spatial science join and relate to contribute to economic sustainability in the region. The conference trusts to be a platform to bring teams such as Students, Teachers, Professionals, Scientists, Researchers, Inventors, Policymakers and Entrepreneurs over Asia and the World to expose their innovative aspects.

I take this opportunity to congratulate all parties concerned for their enormous contribution.

Mr. M.P.N.M. Wickramasinghe
Secretary
Ministry of Agriculture, Lands, Livestock, Irrigation, Fisheries, and Aquatic Resources

Surveyor General's Massage

Distinguished Delegates and Guests,

Your warm welcome to Remote Sensing and spatial information sciences enthusiasts attending the 2024 Asian Conference on Remote Sensing (ACRS 2024) is greatly appreciated. It's wonderful to hear that the ACRS is jointly hosted by the Sri Lanka Survey Department (SLSD) and the Asian Association on Remote Sensing (AARS), making it a significant international conference in Asia.

Hosting the conference in Colombo, Sri Lanka, is a testament to the country's commitment to the field of Remote Sensing and its contributions to the ACRS. With a history of hosting ACRS since 2008, it's clear that Sri Lanka is dedicated to providing a fruitful symposium and extending its warm hospitality to all participants. Such conferences play a vital role in advancing knowledge, fostering collaboration, and addressing important global challenges through Remote Sensing and spatial information sciences.

As a leading government organization in Remote Sensing and geosciences in Sri Lanka, SLSD has long been an active partner in the associated communities. With a history of 223 years and a strong reputation, SLSD has undoubtedly made substantial contributions to these domains. Hosting the ACRS 2024 conference in Sri Lanka is an excellent opportunity to showcase the country's achievements and capabilities in these fields. I'm sure the attendees will benefit from the symposium program and enjoy their stay in Sri Lanka.

W. Sudath L.C. Perera
Surveyor General
Chairman, Local Organizing Committee

AARS General Secretary's Massage

Dear International Colleagues,

It is our great pleasure to organize the 45th Asian Conference on Remote Sensing (ACRS) from 17 to 21 November 2024 in Colombo, Sri Lanka. Last year, we organized the 44th ACRS in Taipei with 815 participants from 44 countries and regions. This year, we, the Asian Association on Remote Sensing (AARS) and the Local Organizing Committee (LOC) of Sri Lanka, are co-organizing the conference. This is our fifth time to organize ACRS in Sri Lanka. The first time in 1983, 2nd in 1996, 3rd in 2008, and 4th in 2016, this means that Sri Lanka is one of the key players in AARS. Many of us still remember the successful ACRS organized in Colombo in 2016. I visited Colombo this August and discussed with LOC on the preparation for the Conference. I was quite impressed with the good planning and teamwork of the LOC Chaired by Mr. W. Sudath L.C. Perera, Surveyor General of the Survey Department. I was pleased to know that more than 400 people had already registered for the conference. Various topics on remote sensing, including image processing, GIS, big data, small satellites, AI, and various applications, will be presented and discussed during the conference. I have no doubt about the success of the Conference. Looking forward to seeing you all at ACRS2 024 in Colombo!

Prof. Kohei Cho
General Secretary
Asian Association on Remote Sensing (AARS)

2.   Local Organizing Committee

No	Activity	Name	Designation	Email / phone
1	Secretariat	Ms. K.L.B.I. Suranganie	Deputy Surveyor General	dsggeoinfo@survey.gov.lk +94718166530
	Assistant Secretary	Ms. R.A.S.Ranatunga	Superintendent of Surveys	acrsssnsdi@gmail.com +94718280330
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3	Organizing Tours(Colombo city tour/ Technical tour/ Down south Excursion)	Mr. U.K.S.P. Wijesinghe	Additional Surveyor General (Field)	addsgfield@survey.gov.lk +94772931917
4	Special Session arrangements	Mr. K.R. Sarath	Additional Surveyor General (Title registration)	addsgtr@survey.gov.lk +94772642370
5	Transport facility management	Mr. A. Muthumala	Additional Surveyor General (Admin/HR)	snrdsgdm@survey.gov.lk +94772324888
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9	Resource management/ Poster session management	Ms. K.K.B.N. Fernando	Snr. Deputy Surveyor General	snrdsgrm@survey.gov.lk +94774111470
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12	Sponsorship management	Ms. M.A.M. Somalatha	Deputy Surveyor General	dsgtr@survey.gov.lk +94713143027
13	Visa / Invitation / Awards/ AARS general Conference organizing	Mr. H.D.N. Caldera	Deputy Surveyor General	dsggeodetic@survey.gov.lk +94718123092
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18	Coordinating international arrivals	Mr. S.M.J. Samarasinghe	Senior Superintendent of Surveys	snrsspasg@survey.gov.lk +94714742535

3. Technical Program

3.1 Keynote Speeches and Plenary Sessions

Keynote Speech 1

Spatial-temporal information technology supports the protection of architectural heritage

Prof. Dr. JIANG Jie

Secretary General, International Society for Photogrammetry and Remote Sensing
Full Professor, Beijing University of Civil Engineering and Architecture

- Biography

Prof. Dr. JIANG Jie received her BSc. and MSc. degrees in Applied Geophysics from the Changchun University of Geology, China, and PhD in Surveying Engineering from China University of Mining and Technology (Beijing). She worked as a remote sensing and GIS specialist in the Municipal Urban Planning and Management Information Center of Changzhou during 1989 to 1999, as a senior engineer in the National Geomatics Center of China during 2000 to 2018. Since October 2018, she serves as full professor in School of Geomatics and Urban Spatial Informatics, Beijing University of Civil Engineering and Architecture. She took in charge of several national-level projects on remote sensing and GIS applications, among them the most important ones included the National Platform for Geoinformation Services, Mapping with Chinese Satellite Images, the National Geodatabases for E-government, and the National Databases for In-car Navigation. Her recent research focuses on spatial-temporal modeling for smart city.

She has served the International Society for Photogrammetry and Remote Sensing (ISPRS, www.isprs.org) since 1998. She is now ISPRS Fellow, and the Secretary General of ISPRS (for term 2022-2026). She got the ISPRS President's Citations, ISPRS The Eduard Dolezal Award. She published more than 100 papers, got the National Science and Technology Progress Award of China, and more than 10 Ministry level Awards.

• Abstract

Ancient buildings embody rich historical and cultural values, and currently a significant portion of historical buildings and districts still play an important role in the process of socio-economic development. The goal of architecture heritage protection is to extend the lifespan of ancient buildings, improve their usage environment and energy efficiency, and enhance their operation and maintenance management. The objective is to ensure their permanent preservation and continued effective utilization. Spatial-temporal information technology can support for the monitoring and maintenance of ancient buildings and districts. This presentation introduces the research conducted by the team in areas such as 3D modeling of historical buildings and districts, performance evaluation and resilience enhancement, and dynamic monitoring. It also covers related academic activities organized around the protection of architectural heritage.

Keynote Speech 2

Sustainable Land Administration System (LAS) for National Development

S. Sivanantharajah
Former Surveyor General
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E-Mail: siva271.survey@gmail.com

- Biography

Mr.S. Sivanantharajah received his B.Sc. First Class Honours from University of Peradeniya in 1985 and Higher Diploma in Surveying and Mapping with Second Class honors from ISM, Diyatalawa, in 1991. While working in the Survey Department he has completed the M.Sc in Geoinformatics from ITC, The Netherlands, in 2000.

He worked in the Survey Department of Sri Lanka for last 35 years including 31 years in the head office branches in multiple disciplines such as Computer, Land Information System (LIS), Centre for Remote Sensing (CRS), Geographic Information System (GIS) & Map Publications and 4 years in the field duties. He has been the 53rd Surveyor General.
He served as part-time visiting lecturer to M.Sc in GIS & Remote Sensing at the University of Peradeniya & University of Sri Jayawardanepura on Remote Sensing (RS) & Geographic Information System (GIS). He has good working experience in GIS & RS software's mainly ArcView/ArcGIS/ArcGIS Pro and ERDAS for last 25 Years.

• Abstract

A sustainable Land Administration System (LAS) is essential for fostering balanced National Development by enabling effective land management practices to ensure that the land resources are utilized efficiently and equitably. Sustainable LAS is foundational to economic growth, environmental sustainability, social stability, and poverty reduction.

Such systems support National, development by providing secure land tenure, facilitating land-related transactions, improving land use planning, and enabling effective tax collection. By the introduction of modern technologies such as Web based Land Information Systems (WebLIS), Remote Sensing (RS), and Global Navigation Satellite System (GNSS). Sustainable LAS can improve transparency, reduce corruption, and streamline land-related administrative processes.

Furthermore, sustainable LAS initiatives play a vital role in addressing issues like urbanization, deforestation, and climate change by aligning land use practices with sustainable development goals (SDGs). With the introduction of Land Administration Domain Model (LADM), comprehensive land data and analytics, governments can make informed decisions to support agricultural productivity, affordable housing, infrastructure development, and environmental protection. Thus, a sustainable LAS not only empowers communities with secure land rights but also enables a more resilient, inclusive, and prosperous society.

Key Words: Sustainable, LAS, Land tenure, LADM, SDG

Keynote Speech 3

Integrated and complementary approaches in photogrammetry and remote sensing

Dr. Fabio Remondino
Senior researcher, head of research unit,

Bruno Kessler Foundation (FBK),

Trento, Italy.

- Biography

Dr. Fabio received a PhD in Photogrammetry from ETH Zurich in 2006 and he is now the head of the 3D Optical Metrology research unit at FBK - Bruno Kessler Foundation, a public research center located in Trento, Italy. His main research interests are in the field of reality-based surveying and 3D modeling, sensor and data fusion and 3D data classification. He is working in all automation aspects of the entire 3D reconstruction pipeline for applications in the industrial, environmental and heritage fields. He is the author of more than 250 articles in journals and conferences. He is involved in knowledge and technology transfer, organizing more than 30 conferences, 20 summer schools and 5 tutorials. He has received 10 best paper awards at international conferences, beside the D.C. Brown award, the ISPRS President's Honorary Citation and the E.H. Thomson award. Fabio was serving as President of the ISPRS Technical Commission II (2016-2020) and V (2012-2016), Vice-President of EuroSDR (2017-2023) and vice-President of CIPA Heritage Documentation (2015-2019).

- Abstract

The Geomatics and mapping communities are witnessing more and more integration and convergence of technologies, both at hardware and software level. Spatial and radiometric resolutions are continuously improving and multiple platforms and sensors are at our disposal to collect data at unprecedented quality. Processing methods are becoming more and more automated with Artificial Intelligence (AI) becoming very supporting and complementary to conventional handcrafted methods. The talk will review and discuss all these ongoing changes and advanced solutions which are making the geospatial sector one of the most lively, demanded and important at societal, environmental and economical level.

Keynote Speech 4

Earth observation images and intelligent methods in addressing environmental problems: a sustainable city planning lens

Dr Jagannath Aryal

Associate Professor, Department of Infrastructure Engineering, The University of Melbourne, Melbourne, Australia.

• Biography

Originally from Nepal, Dr Jagannath Aryal was trained and educated as a Geomatics Engineer in different parts of the world. He received his PhD degree in Optimization and Systems Modeling followed by his Professional Master in Geoinformatics (University of Twente, The Netherlands) and Master of Surveying (University of Otago, New Zealand). He is currently an Associate Professor in the Department of Infrastructure Engineering at the University of Melbourne, Australia.

He leads a research group on Earth Observation and AI. Professionally, he leads the GIS, Digital Analytics and Remote Sensing, area of practice of the Geospatial Council of Australia, the peak professional body representing the geospatial sector as a national chair. He is the program director of the Master of Digital Infrastructure Engineering and Graduate Certificate Degrees at the University of Melbourne. He currently serves to the global Remote Sensing community as a leading academic and an Associate Editor of IEEE Transactions on Geoscience and Remote Sensing (TGRS) journal.

His research focuses on optimal utilization of Earth Observation, geo-information, and geo-statistics to develop new methods in object recognition and geospatial situational awareness in disaster and emergency situations. Objects of interest derived from sensing technology (Ground / Satellite based) are applied in modeling and mapping various environmental systems taking sustainability and resilience into account.

• Abstract

"We are living in a world of biodiversity crisis and urbanization. Climate change, air pollution, habitat loss, invasive species need a clear priority and focus from different sectors of society including sensing community. Satellite, air, and ground-based sensing have shown enormous potential in sensing, mapping, monitoring and modeling these phenomena. Intelligent methods originated from various disciplines including computer vision are enablers of turning sensing data into information, knowledge and wisdom.

In this keynote speech, the importance of Earth observation data and progression we made will be covered with various case study examples. These examples will contribute to environmental sustainability and resilience. Primarily, two major elements are covered in detail. The first one is on the contribution of Earth observation images in preparing accurate inventories of urban buildings and their varieties. However, despite the efforts in designing and managing urban buildings from Earth Observation images, there is a clear gap in knowledge in developing the spatial ecosystem of existing urban building management. The second one is on the contribution of Earth observation images and intelligent methods in addressing disaster management issues.

This presentation draws a perspective by developing analytics on representative urban building footprint datasets and disaster related datasets with a focus on data quality issues. Issues such as the off-nadir imagery, omission/commission errors, and positional accuracy are considered in the analytics. These building footprint datasets are generated by the community for the public good and by the industry sectors for commercial benefits. The analytics supported in drawing perspective and the proposed spatial ecosystem ultimately helps in developing an operational framework for urban infrastructure in sustainable city planning.

Likewise, Earth observation images and intelligent methods in addressing disaster management are covered for earthquake induced landslides, fires, and floods. The mapping and preparation of inventories will be presented with capabilities, challenges and opportunities.

This keynote speech will appreciate the very high importance of location intelligence in managing the lives, infrastructure, and environmental sustainability."

Plenary Session 1

Towards Sustainable Blue Economy: Role of Remote Sensing

Shailesh Nayak
National Institute of Advanced Studies (NIAS)
Bengaluru, India.
shailesh@nias.res.in

- Biography

Dr. Shailesh Nayak is currently the Director, National Institute of Advanced Studies, Bengaluru, Chancellor, TERI School of Advanced Studies, New Delhi, and Editor-in-Chief, Journal of the Indian Society of Remote Sensing, Dehradun. He obtained his PhD degree in Geology from the M.S University of Baroda in 1980. He was Secretary, Ministry of Earth Sciences, during 2007-2015 and provided leadership for programs related to earth system sciences. His current research interest includes building strategy for blue economy, sustainable development and promoting research in the Indian Ocean and Polar Regions.

He had set up the state-of-the-art tsunami warning system for the Indian Ocean in 2007 and provided tsunami advisories to the Indian Ocean rim countries. He has pioneered the development of algorithms and methodologies for the application of remote sensing to the coastal and marine environment, and generated the baseline database of the Indian coast, and developed services for fishery and ocean state forecast. This coastal database has formed basis for managing the Indian coast. He was instrumental in creating database of the glaciers of the Indian Himalaya.

He is an Academician of the International Academy of Astronautics (IAA) Fellow of the International Society of Photogrammetry & Remote Sensing (ISPRS) and Indian National Science Academies. He is Regional Representative for Asia at the ISPRS Council. He was conferred the prestigious ISC Vikram Sarabhai Memorial Award 2012 and Bhaskara Award for 2009, for his outstanding contributions in Remote Sensing and GIS. He has published about 190 papers in peer-reviewed journals. The Government of India awarded the Civilian Honor 'Padma Shri' in recognition of his outstanding contributions in the field on Science and Engineering.

- Abstract

The 'Blue Economy' has been defined as an ocean-dependent economic development to improve quality of life of people while ensuring inclusive social development as well as environmental and ecological security (Nayak, 2020).

Oceans supply food, energy and mineral resources and are storehouses of biodiversity, influence weather and climate and provide an ecosystem for sustaining human life and other biota. The major scientific issues to be addressed for development blue economy are sustainable fisheries, conservation and preservation of coastal and marine ecosystems: Coral reefs, mangroves and sea grasses, ocean acidification, harmful algae, coastal pollution, coastal and deep-sea minerals, ocean energy, tourism, hazards and response mechanism, small islands development, shipping, industries, infrastructure. Observations of ocean from satellite and aerial platforms are critical to understand ocean processes, model and forecast weather, sea state and hazards and ensure safety of human lives and facilitate human activities. The building capacity for sustained observations is a key to understanding physics, biogeochemistry, biology and ecosystems. The idea is to develop approaches and mechanisms to promote sustainable and equitable economic development of ocean resources while ensuring a healthy ocean environment and address impacts of climate change. This is in tune with the SDG 14 and India-led global movement on Mission LiFE (Lifestyle for Environment) to protect and preserve environment. It is now certain that after 2030, when impacts of climate change are more visible, the dependence on ocean is going to increase to sustain economy and ensure livelihood. It is the need of the day to promote a "Digital Ocean" by integrating scientific data along with environmental, social and economic data to ensure ocean health and ushering blue economy. This is an opportunity to renew our commitment to the oceans, and thus of the planet Earth, for the benefit of mankind.

Plenary Session 2

Impact of climate change on ocean environment and sustainable fisheries

Dr. Jagath Rajapaksha
Senior Lecturer and Researcher
Department of Oceanography,
Ocean University of Sri Lanka

- Biography

Dr. Jagath Rajapaksha is currently a Senior Lecturer in the Department of Oceanography at the Ocean University of Sri Lanka. As an academic, he played a key role in developing the study curriculum and teaching modules for the BSc Honors Degree in Oceanography, which was launched in 2019 at the university.

He earned a BSc in Physical Science from the University of Peradeniya in 1992 and a MSc in Physical Oceanography from the University of Gothenburg, Sweden, in 1997. While mastering space technology applications in oceanography, he also completed a Postgraduate Diploma in Fisheries Stock Assessment from the United Nations University in Iceland, as part of his PhD in Fisheries Oceanography, which he obtained from the Postgraduate Institute of Science, University of Peradeniya.

• Abstract

As global economies contend with escalating environmental challenges, resource depletion, and the impacts of climate change, spatial data services have emerged as a critical tool for promoting economic sustainability. This explores how technologies such as Geographic Information Systems (GIS), remote sensing, and satellite imagery are transforming industries by providing the data-driven insights necessary for sustainable development.

Spatial data services enable real-time monitoring and analysis of land use, environmental changes, and resource availability, supporting knowledgeable decision-making. This allows industries to optimize resource management, mitigate risks, and balance economic growth with environmental preservation. Applications of spatial data span a wide range of sectors, including precision agriculture, fisheries management, urban planning, and renewable energy. Each of these sectors benefits from spatial data ability to improve efficiency, reduce waste, and foster resilience.

Through case studies such as Sri Lanka's Satellite-Based Fishing Ground Forecasting System, which supports sustainable tuna fisheries, illustrated how spatial data services are contributing to economic sustainability. The potential of spatial data in policy-making is equally significant, as governments can use it to guide land-use regulations, disaster preparedness, and climate change adaptation efforts.

Despite these benefits, there are challenges to the widespread adoption of spatial data services, including access to technology, the cost of implementation, and the need for data policies and security measures. Addressing these challenges will be essential to fully realizing the potential of spatial data for sustainable economic growth.

In conclusion, spatial data services offer a powerful path forward for achieving economic sustainability. By integrating these technologies into key industries and policy frameworks, we can pave the way for a resilient and prosperous future.

Keywords: Spatial data, Decision making, Climate change adaptation, Economic sustainability

3.2 Session Details

Understand the presentation Room Label

Room Label has been assigned as Room Number will be followed by Session Number

Example for Presentation Room Label: B2

B   - Room identification Letter (A, B, C, D, E & F)

2   - Session Number (1 - From Morning to Morning Tea, 2 - From Morning Tea to
         Lunch, 3 - After Lunch to Evening Tea, 4- After Evening Tea)

Assigned Colour	Main Topic
	Remote Sensing and its Applications
	Photogrammetry and its Applications
	Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping
	Sensors, Platforms and Calibration
	Algorithms and Image Processing Techniques
	Global Navigation Satellite Systems
	Cloud Computing, Big Data and AI in Remote Sensing

November 17, Sunday (11:15 - 12:45)

Room A, B & C Merged   **Keynote Speech**

Time		Title / Speaker(s)
11.15-12.00	Key note (1)	Spatial-temporal information technology supports the protection of architectural heritage
		Dr. Jiang Jie
12.00-12.45	Key note (2)	Sustainable Land Administration System (LAS) for National Development.
		Mr. S. Sivanantharajah

November 17, Sunday (13:45 - 15:15)

Room C3   **JAXA's Session on Earth Observation Dashboard**

Time	Title / Author(s)
13:45 - 14:00	Opening remarks and introduction to EO Dashboard
	Mr. Yuta Tochigi (JAXA)
14:00 - 15:00	Lecture and Hands on Session of Earth Observation Dashboard with OGC WMS/WMTS
	Ms. Kaori Kuroiwa (RESTEC)
15:00 - 15:15	Q&A

Room D3   **Algorithms and Image Processing Techniques**

Reg. Number	Paper Number	Title / Author(s)
ACRS0161	AB0102	Pushing Boundaries in Hyperspectral Image Classification: A Comparative Analysis of CTMixer, SF-SMF, and MAEST
		Ying-Tzu Chen, Hsuan Ren.
ACRS0108	AB0218	Cross-based Matching Constrained by the Classes of Pixels
		Yung Ching Yang and Jaw J.J.
ACRS0123	AB0247	Analysis of Object Distance Accuracy on Underwater Image Color Restoration
		Hao Wei Kuan and Jaw J.J.
ACRS0064	AB0036	Measurement Accuracy of External Deformation of Rockfill Dam By Psinsar Analysis Using Sentinel-1 SAR Data
		Hidenori Abo and Takahiro Osawa
ACRS0020	AB0057	Segmentation and Feature Classification of Point Clouds Acquired by LiDAR-SLAM in Urban Rivers
		Tetsu Yamaguchi, Naoto Kimura , Takeshi Komori , Nobuaki Kubo , Etsuro Shimizu and Masafumi Nakagawa

Room E3   **Cloud Computing, Big Data and AI in Remote Sensing**

Reg. Number	Paper Number	Title / Author(s)
ACRS0205	AB0140	Deep Learning Model for Automated Detection of Solid Waste Dumping Sites Using Satellite Imagery
		Siti Muazah Md Zin, Noryusdiana Mohamad Yusoff, Nurul Izza Zainal, Welly Anak Numpang and Hasni Halim
ACRS0057	AB0104	An Enhanced Surveillance System Integrating Pedestrian Attribute Recognition and Multi-Target Multi-Camera Tracking Technologies.
		Yi Cheng Lai, Chih-Yuan Huang and Yu-Sheng Hsu
ACRS0196	AB0132	AI-Driven Techniques for Night Time Lights Analysis to Assess Socio-Economic Parameters
		Santhoshi T, Anjani R.N, Kalyan Deep K, Nitin M, Kiranmai P.CH and Dr. S.S.Rao
ACRS0153	AB0141	Performance of Nowcasting Algorithms for Ground-based Radar Precipitation Estimates during Cloud Seeding Period in Northern Thailand
		Sarawut Arthayakun, Nattapon Mahavik, Parinya Intaracharoen, Pakdee Chantraket, Aroonroth Sricharounchot, Charoon Sarin, Pantip Klomjek, Apichaya Kangerd, Jamorn kunwilai, Charatdao Kongmuang and Sarintip Tantanee
ACRS0242	AB0277	Application of AI-based Modelling and Remote Sensing to Assess Inselberg Habitats in Gamapaha District in Sri Lanka
		Dulan Jayasekara and Herath H.M.B.
ACRS0282	AB0298	Automatic Near Real-Time Web-based Flood Monitoring System with Multitask Learned Water Detection Deep learning Model
		Hwisong Kim, Duk-jin Kim and Hyunsun Lee

Room F3   **Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping**

Reg. Number	Paper Number	Title / Author(s)
ACRS0213	AB0153	Geospatial Technologies Applications in Seawall Feasibility Study
		Florence Allado Galeon
ACRS0079	AB0055	Seasonal Water Quality Assessment in Coastal Aquifers Using GIS: Pre-Monsoon and Post-Monsoon Perspectives
		Vishal Pramod Kushe, Mishra S.S. and Charhate S.
ACRS0083	AB0190	The comparison of the damaged houses estimation method caused by heavy rainfall in July, 2020 Kuma river flood and heavy rainfall in August, 2021 in Rokkaku river flood using aerial photographs and inundation simulation
		Daichi Nakata, Yoshiyuki Imamura, Keiichi Kajiwara and Hideo Amaguchi
ACRS0346	AB0389	Development of a mobile application integrating GIS to strengthen agriculture extension services: Special reference to paddy cultivation in Athuruliya Divisional Secretariat Division in Sri Lanka
		Harshani Madhumali Gamage and Herath H.M.B.S.
ACRS0335	AB0378	Identifying the Relationship between Crime Patterns and Environmental Factors in the Colombo Municipal Council (CMC) Area of Sri Lanka
		Rashika Harshani Pathinayake, Sumanajith Kumara B.A. and Kodippili N.P.

November 17, Sunday (15:30-17:00)

Room C4   **ISPRS & AARS Joint Session on SAR**

ACRS0049	AB0027	Mapping the X-Press Pearl ship disaster oil spill drift patterns in the Indian Ocean using Sentinel 1 SAR time series
		Duminda Ranganath Welikanna
ACRS0071	AB0044	Urban Extraction Based on Scattering Decomposition Using PolSAR Data
		Yasumin Siriprathan,Susaki J., Ishii Y. and Oba T.
ACRS0136	AB0081	Microplastics Detection in Freshwater Lakes using Sentinel-1 Synthetic Aperture Radar Images
		Agilan B, Mithulesh P., Sourav Kumar N.R.S. and Dr Vani K
ACRS0081	AB0039	Wavelets for SAR Speckle Noise Filtering
		Jaan-Rong Tsay
ACRS0031	AB0040	Multimodal model-based water body extraction algorithm on SAR imagery
		Lin He, Lin Y., Song Y.F. and Zhong D.Q.
ACRS0214	AB0183	Coherence Analysis of Small Baseline Subset Displacement Model Types in Deformation Monitoring
		Mertcan Nazar, Sefercik U.G. and Gorken M.

Room D4   **Remote Sensing and its Applications**

Reg. Number	Paper Number	Title / Author(s)
ACRS0201	AB0168	Sedimentation Dynamics Analysis in the Muda Dam Watershed Using the Universal Soil Loss Equation (USLE)
		Nurul Nadia Abd Malek, Shahruddin Ahmad, Maizaituldura Mohd Isa, Nurul Suliana Ahmad Hazmi, Hana Mohamed Jamil, Bismawaty Binti Hassan, Siti Muazah Md Zin, Shahrul Ikhwan and Nasir Shoabani
ACRS0315	AB0338	Assessing the urban damage due to aerial bombing in Gaza City with use of combine Multispectral and SAR imagery
		Ananda Kumarasiri, Wijesinghe M.A.S., Welikanna D.R. and Sivanantharajah S.
ACRS0180	AB0155	Correlating GEDI and ALOS-2 Data for Biomass Assessment Over Singapore
		Tze Yen Chua, Afiq Bin SULAIMAN, Ken Yoong LEE and Soo Chin LIEW
ACRS0111	AB0060	Early Detection of Forest Fire Based on Lightning Activity and Climatic Factors Using Deep Learning
		Shanmuga Priya R and Vani K

Asian Conference on Remote Sensing

Room E4 **Remote Sensing and its Applications**

Reg. Number	Paper Number	Title / Author(s)
ACRS0218	AB0169	Carbon Dioxide (CO2) Sequestration of Mangrove Forests Using Remote Sensing in Trusan Kinabatangan Sabah, Malaysia
		Mohd Arif Shahdan Azmi, Maizaitoldura Mohd Isa, Mckreddy Yaban and Muhammad Fikri Razali
ACRS0139	AB0090	Monitoring the Mount Ruang (Indonesia) volcanic eruption of April 2024 using satellite thermal imagery and numerical simulation
		Rohit Mangla, Kurniawan Tjendra and Santo V. Salinas
ACRS0160	AB0142	Monitoring Rice Growth Stages Using Sentinel-2 Satellite Imagery in Northeastern Thailand
		Aroonroth Sricharounchot, Sarawut Arthayakun, Kittiphop Simachokchai, Rungthip Nuangtawee and Nattapon Mahavik
ACRS0008	AB0002	Evaluating the use of Sentinel-2 red-edge spectral information in estimating foliar C:N ratio within a communal rangeland ecosystem
		John O. Odindi, Arogoundade A.M., Mutanga O. and Mngadi M.
ACRS0166	AB0156	Cloud-based Geospatial Analysis to assess LULC changes and Prediction of Future Scenario Using a Coupled CA-ANN Model: Case examples from Sri Lanka
		Nimmi Nushari Kolonne, Saha J., Majumdar, M., Perera, G.A.I, Tiwari, P.S. and Pande, H.

Room F4 **White Elephant Session**

Time	Title / Speakers(s)
15:30 - 17:00	How to Give a Presentation
	Shunji Murai, Emeritus Professor, Tokyo University
	Thesis Writing
	Jiang Jie, Professor, BUCEA
	Project Proposal Writing
	Kohei Cho, Professor, Tokai University

November 18, Monday (09:00 - 10:30)

Room A, B & C Merged		Plenary Session
09:00-10:30	Plenary (1)	Towards Sustainable Blue Economy: Role of Remote Sensing
		Dr. Shailesh Nayak
	Plenary (2)	*Impact of climate change on ocean environment and sustainable fisheries*
		Dr. Jagath Rajapaksha

Room A, B & C Merged		Keynote Speech
10:45-11:30	Key note (3)	integrated and complementary approaches in photogrammetry and remote sensing
		Dr. Fabio Remondino

November 18, Monday (11:30 - 12:30)

Room D   **Poster**

Reg. Number	Paper Number	Title / Author(s)
ACRS0164	AB0163	Detection of land cover change in Mie prefecture using Sentinel-2 time series
		Hiroki Ohashi and Matsuoka M.
ACRS0329	AB0381	Soil Salinity Spatial Analysis to Develop a Machine Learning-Based Soil Resistivity Predictive Model
		Chanaka Sandaruwan Manchanayake, H.M.B.S. Herath and Indrajanaka Makalanda
ACRS0024	AB0118	Evaluation of Automatic Detection of Uncultivated Land Using Machine Learning for Japanese Municipality
		Jun Sakurai
ACRS0162	AB0137	Classification of Airborne Radar Images Using Multiscale Dense Networks and Comparative Filtering Techniques
		Zhi Xian Chen and Hsuan Ren
ACRS0258	AB0245	Detection of Marine Debris Using Hyperspectral Imaging
		HYUNWOO KO, Kong S.J., Seo W.W., Lim P.C. and Rrhee S.A.
ACRS0019	AB0078	Object-based Multi-scale Recognition Approach for Residential Landscape Classification
		lei zhang, Wu Bingfang, Liu Yu, Li Xiaosong and Yuan Quanzhi
ACRS0176	AB0113	Vehicle Detection and Accuracy Verification Using YOLOv8
		SeungChan Lim, Chansol K., Cheonggil J. and Chuluong C.
ACRS0132	AB0164	Classification of a Terrestrial Laser Scanner point cloud of a conifer forest using Object-based Image Analysis
		Naoya Maeta and Matsuoka M.
ACRS0186	AB0119	Synchronized Data-Based Back-Projection Algorithm for Stationary Receiver & Moving Transmitter SAR Imaging
		Chul Ho Jung, Ji-Hwan Hwang, Jung-Hwan Song and Kwang Ho Coi
ACRS0127	AB0200	Analysis of the Spatial Variations of Local Population Distributions from the Viewpoint of Urban Shrinkage Process
		Ayano Shiraishi and Kiichiro Kumagai
ACRS0319	AB0360	Location allocation hospitals in Perth
		Jasenthu Mestrige Udayangani Kalhari Fernando

November 18, Monday (13:30 - 15:00)

Room A3   **Algorithms and Image Processing Techniques**

Reg. Number	Paper Number	Title / Author(s)
ACRS0130	AB0075	Relative Motion Detection of Boats based on LiDAR Scan Matching
		Kazuki Ohira, Naoto Kimura, Masafumi Nakagawa, Nobuaki Kubo and Etsuro Shimizu
ACRS0214	AB0182	Improvement of Virtual Tour Depiction Potential Utilizing Active and Passive Sensing Data Fusion
		Mertcan Nazar and Sefercik U.G.
ACRS0128	AB0124	Single Comprehensive Digital Elevation Model for Sri Lanka: Modified Advanced Land Observing Satellite (ALOS) Radiometrically Terrain Corrected (RTC) Products
		Nilanka Sudarshani, Wanasingha W.A.K.I., Jayasumana D.T.N. and Priyadarshani W.V.D.
ACRS0033	AB0014	Early Detection of Fire in Videos using Computer Vision and Deep Learning
		Charanya Manivannan, Shivaani Suseendran
ACRS0059	AB0030	Development of a Web Application through a Mobilized Crowdsourcing Platform to Enable Participatory Risk Sensitive Urban Development
		Nuwani Kangana, Kankanamge N. , De Silva C. , Goonetilleke A. , Ranasinghe D. and Mahamood R.

Room C3   **Remote Sensing and its Applications**

Reg. Number	Paper Number	Title / Author(s)
ACRS0049	AB0026	Evidence of ground deformation in Sri Lanka: A study using SBAS InSAR Time-series
		Duminda Ranganath Welikanna
ACRS0219	AB0175	Dominant Tree Species Extraction Algorithm Using Machine Learning based on multi-temporal high-resolution data
		Heyi Guo, LiangW., ZhangZ.D., WangS.H.,Xu M. and CaoC.X.
ACRS0248	AB0222	Modelling the global and regional niches of major invasive alien plant species of India
		Sudhakar Reddy Chintala, Ramshida K., Jyoti Kumari, Shijila P.S., Gulzar R. and Khuroo Anzar A.
ACRS0221	AB0314	Assessment of aboveground biomass using data from Unmanned Aerial Vehicles (UAVs) and Terrestrial Laser Scanning (TLS) in the Ban Nong Hai community forest project area in Chiang Mai Province.
		Kairop Pongphiboonkiat, Kampanat Deeudomchan and Kativich Kantha
ACRS0340	AB0386	China Forest
		zijia li, Wenjian Ni, Zhiyu Zhang and Zhifeng Guo

Room E3   **Commercial Session**

Time	Company
13:30 - 13:50	Gaia3D , Inc
	Silver Sponsor
13:50 - 14:10	*Esri, Environmental Systems Research Institute, Inc*
	Silver Sponsor
14:10 - 14:40	*Sri Lanka Convention Bureau*
	Other Sponsors

Room F3   **Sensors, Platforms and Calibration**

Reg. Number	Paper Number	Title / Author(s)
ACRS0323	AB0358	Mapping the Geometric Characteristics of a Landslide using Airborne Lidar Data
		Indunil Sanjeewa, Udayakantha P.M.A.K, Jayasinghe R.J.M.R and Welikanna D.R.
ACRS0246	AB0219	Enhancing Tiepoint Extraction Performance in Multispectral UAV Images Using LightGlue algorithm
		Sunghyeon Kim, Park M. and Kim T.
ACRS0124	AB0069	Safety Visualization in Cooperative Operation with Workers and Construction Vehicle using Temporal LiDAR Data
		Kenta Ishizuka, Masafumi Nakagawa and Masahiro Miyo
ACRS0098	AB0095	Evaluation Method of Spherical Marker Arrangement for LiDAR-SLAM using a Robot Simulator
		Tomoki Sugihara, Rikako Shigefuji, Keitaro Kitamura , Masanori Takigawa , Takahiro Hiramatu , Taizo Kobayashi and Masafumi Nakagawa
ACRS0135	AB0100	Performance Evaluation of a Lightweight and Low-Cost LiDAR Sensor for Mobile Scanning in Forest Plots
		Fangming Wu, Jinchen W., Lu X., Xuan M. and Dan Z.

November 18, Monday (15:30 -17:00)

Room C4	Special Session on Expanding the roles of international societies in Asia
Time	**Title / Speaker (s)**
15:30 - 15:50	Activities of AARS/ACRS
	Kohei Cho, AARS
15:50 - 16:15	*Activities of GRSS*
	Hong Tat, GRSS
16:15 - 16:45	Activities of ISPRS
	Jiang Jie, Stapel Gordon, ISPRS
16:45 - 17:00	*Q & A*

Room E4		Remote Sensing and its Applications
Reg. Number	**Paper Number**	**Title / Author(s)**
ACRS0177	AB0115	Study the Effect if Human Activities on Air Quality of Sri Lanka using Satellite Images (Sentinel 5P)
		Chiranjeewa Bandara Kulasinghe and Ranasinghe A.K.R.N.
ACRS0149	AB0224	A Spatio-Temporal Analysis of Land Cover Change Detection Using Geo-spatial Technologies on Muthurajawela Marsh-Negombo Lagoon Wetland Complex
		Kumanga Ashali and Geethalankara A.M.A.R.
ACRS0063	AB0278	An Open-Source Geospatial Approach for Demarcating Landslide Susceptible and Risk Zones in Rathnapura District
		Isini Thisara Hewa Kokawalage and Jayasinghe K.D.D.P.
ACRS0263	AB0250	Rice Crop Loss and Damage Estimation Due to Flood Using Remote Sensing Imageries
		Bhogendra Mishra, Shobha Poudel, Krishna Chandra Devkota and Bhoj Raj Ghimire
ACRS0060	AB0029	Is GRACE Data Capable of Simulating The Groundwater Level Fluctuation in Anuradhapura Region of Sri Lanka?
		Suzanne Malsha Fernando
ACRS0118	AB0101	Rice Yield Estimation Using Sentinel-2 with Remote Sensing and Machine Learning in Thailand
		Pramet Kaewmesri, Jinnawat T., Phukrit S., Yutthaphum K., Sasithon C., Panu, N. and Sukji S.

Room F4		Cloud Computing, Big Data and AI in Remote Sensing
Reg. Number	**Paper Number**	**Title / Author(s)**
ACRS0285	AB0303	Segmentation Quality Analysis Using Segment Anything Model in Very High-Resolution Imagery
		Cengizhan Ipbuker, Atik S. O. and Seker D. Z.
ACRS0032	AB0009	Detection of Marine Debris by Surveillance of Coral Bleaching and Temperature Anomaly using Satellite Imagery
		Shivaani Suseendran, Charanya Manivannan, Jovina Virgin and Dr. Vani K.
ACRS0030	AB0011	Machine Learning-Driven Solar Panel Site Selection and Rooftop Potential Estimation for Sustainable Development Goals
		Rishitha N, K Muthu Reshmi, R. Srishti Gulecha and Dr. Vani K.
ACRS0045	AB0020	Realtime Flood Forecasting: River flow analysis using Machine Learning Techniques
		Himal Sudasingha and Koswatte S.
ACRS0069	AB0034	Site Suitability for Essential Services and Digital Connectivity in India using Machine Learning
		Muthu Reshmi K, Rishitha N. , Srishti Gulecha R. and Dr Vani K.
ACRS0133	AB0073	Artificial Neural Network Approach for Predicting the Land Values for Blocking-Out Diagrams
		Heva Dewa Supun Udayantha Somaratne and Piyasena N.M.P.M.

November 19, Tuesday (09:00 - 10:30)

Room A1   **Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping**

Reg. Number	Paper Number	Title / Author(s)
ACRS0148	AB0251	Spatiotemporal Modeling of Heat and Cold Waves in Northeast Syria Between 2000 and 2023
		Dursun Zafer Seker, Sara Essoussi and Abdullah Sukkar
ACRS0129	AB0323	Assessment of shape changes subsidence and risk map by remote sensing and GIS in hyper-arid lands, Iran
		Fatemeh Mohammadzadeh, Elhadi Adam and Mohammad Reza Ekhtesasi
ACRS0279	AB0356	Flood Analysis Based on the Influence of Geomorphology and Rainfall Patterns in the Tallo River Flow Area, Makassar City, South Sulawesi Province, Indonesia
		Hendra Pachri, Ilham A. and Intan A.
ACRS0067	AB0241	Free and Open-Source Geospatial Datasets for Early Damage Assessment: A Case of Melamchi Flood Nepal
		Bhoj Raj Ghimire, Bijay Maharjan., Pratikshya Sharma., Shova Paudel and Bhogendra Mishra
ACRS0086	AB0042	Spatial Measurement Quality of Ground-Based Weather Radar Using Surrounding Terrain with Open-Source Radar Library
		Nattapon Mahavik, Fatah Masthawee, Sarawut Arthayakun, Apichaya Kangerd, Jamorn kunwilai, Wirachart Promta, Chanin Umponstira, Charatdao Kongmuang and Sarintip Tantanee

Room B1   **Remote Sensing and its Applications**

Reg. Number	Paper Number	Title / Author(s)
ACRS0336	AB0380	Optimizing Agricultural Insurance Assessments: A Remote Sensing Framework for Evaluating Flood-Induced Damage
		Kaluthanthrige Dona Heshani Upendra
ACRS0202	AB0148	A Feasibility Study of Precision Monitoring for Rice Field using Nanosatellites PlanetScope in Yangon Region, Myanmar
		Shinya Odagawa, Kaneko A., Cho Thanda N. and Kageyama K.
ACRS0076	AB0049	Developing an Ecotourism Master Plan for Udawattakele Forest: Integrating Remote Sensing, GIS, and Community Insights
		Ajith Rohana Gunawardena, Aluwihare W.S. and Fernando T.T.
ACRS0138	AB0098	Estimation of the Deforestation Through the Forest Canopy Density Model Derived from Remote Sensing
		Siwon Madusha Roshini Abeywardhana Pathirathna, Ranasinghe A.K.R.N. and BandaraH.R.S.
ACRS0056	AB0107	*Development of a Framework for Mapping the Potential for Farmer-Led Irrigated Areas in Southeast Asia*
		Darshana Wickramasinghe, Leh M., Minh T., Kamal M., Timothy J. K. and Pavelic P.

November 19, Tuesday (09:00 - 10:30 & 11:00 - 12:30)

Room C1 & C2 **WEBCON**

Reg. Number	Title / Author(s)
ACRS0173	Development of Web-Based Metadata Service for Geospatial Data
	Amila Madushan Manamperi, Sri Lanka
ACRS0400	Smartphone Application for Detecting and Visualizing Ganoderma Disease Stages in Oil Palm
	Daranagama Arachchige Samitha Daranagama, Sri Lanka
ACRS0391	One Globe, Endless Check-ins
	YU TONG SUN, Taiwan
ACRS0371	Islands in Flux, Life Thriving Continuously
	Chun Chuan Huang, Taiwan
ACRS0058	Digital Twin Urban Flood Forecast and Navigation System
	Meng-Yuan Chen, Taiwan
ACRS0020	*Smart trash box: Trash box management system using remote sensing technology*
	Tetsu YAMAGUCHI, Japan
ACRS0119	*Camera-based weight estimation system*
	Kantaro Kanai, Japan
ACRS0289	Using Open-Source Tools to Build a Sophisticated Spatial Application and Database – A Case Study on School Locator System
	Mafaz Fareez, Sri Lanka

Room E1 **Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping**

Reg. Number	Paper Number	Title / Author(s)
ACRS0256	AB0240	Assessment of Spatio temporal variation of Raifall over Semi-Arid, Sabarmati River Basin, Western India, Using GIS and MATLAB
		Rina Kumari, Saurabh Choubey. and Shard Chander
ACRS0052	AB0047	Assessing the Feasibility for Paddy Cultivation sites through Multi-Criteria Evaluation and GIS Approach: A Case Study of Ampara District, Sri Lanka
		Cheshini Gimhani Malavipathirana, Sandamali J. , Chathuranga K. and Hasara K.S.L.S.
ACRS0059	AB0030	Development of a Web Application through a Mobilized Crowdsourcing Platform to Enable Participatory Risk Sensitive Urban Development
		Nuwani Kangana, Kankanamge N. , De Silva C. , Goonetilleke A. , Ranasinghe D. and Mahamood R.
ACRS0188	AB0160	Exploring Monsoonal Rainfall Patterns in Trincomalee District, Sri Lanka Using Thiessen Polygon Method
		Evanjalin Delina Jesudasan Prince and Uthayashangar K. K
ACRS0119	AB0077	Urban River Modeling based on CityGML using Water-borne MMS Point Clouds
		Kantaro Kanai, Naoto Kimura, Masafumi Nakagawa, Nobuaki Kubo and Etsuro Shimizu

Room F1   **Algorithms and Image Processing Techniques**

Reg. Number	Paper Number	Title / Author(s)
ACRS0046	AB0024	A Deep Learning and UAV Technology-Based Approach to Wildlife Monitoring
		Wei Luo, Guoqing Zhang, Wei Luo, Guohong Li, Ruiyin Tang, Xuqing Li and Bin Wen
ACRS0197	AB0324	Sugar Apple Fruit Bags Detection using Geometric Feature in MLS Point Cloud Data
		Mohamad Bagas Setiawan, Lee C.C. and Wang C.K
ACRS0338	AB0384	Geospatial and AI-Based Modelling to Assess Temporal and Spatial Dynamics of Forest Fragmentation.
		Herath H.M.B.S.,Nayanajith J., and Jayasinghe K.D.P.P

November 19, Tuesday (11:00 - 12:30)
Room A2   **Satellite Program**

Time	Title / Speaker (s)
11:00 – 11:15	DR PRAKASH CHAUHAN
	Indian Space Research Organisation (ISRO), India
11:15 – 11:30	DR. TOCHIGI YUUTA
	Japan Aerospace Exploration Agency (JAXA), Japan
11:30 – 11:45	DR HYO-SUK LIM
	Korea Aerospace Research Institute (KARI), Korea
11:45 – 12:00	*DR. MICHELLE*
	Taiwan's Space Program for Remote Sensing, China- Taipei
12:00 – 12:15	*WAITING FOR PRESENTER*
	GISTDA, Thailand
12:15 – 12:30	Q/A

Room B2   **Remote Sensing and its Applications**

Reg. Number	Paper Number	Title / Author(s)
ACRS0262	AB0254	Quantifying and Mapping the Ecosystem Carbon Stock of Mangrove Forests in the Philippines using machine learning and new-generation remote sensing data
		Jose Alan alip Castillo and Castillo Judith F.
ACRS0148	AB0092	Investigating the relationship between Seismic Events and Air Quality: A Case Study of the Türkiye earthquake 2023
		Dursun Zafer Seker, Abdullah Sukkar, Sara Essoussi and Ugur Alganci
ACRS0225	AB0177	*Advancements in Weed Mapping and Herbicide Spraying: A Comprehensive Review of Unmanned Aeriel Vehicle Technologies and Applications*
		Thirumalaikumar Ramasamy, Charles Wesley J., Sneka K. and Saravanan S.

Room E2 | **Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping**

Reg. Number	Paper Number	Title / Author(s)
ACRS0146	AB0094	Analysis of Spatial Bias of Precipitation Estimated from Weather Radar Data During Storm Dissipation with Geographic Information System in Central Thailand
		Apichaya Kangerd, Nattapon Mahavik, Fatah Masthawee, Sarawut Arthayakun, Rangsan Ket-Ord, Ukrit Samaksaman, Chanin Umponstira, Jamorn kunwilai, Wirachart Promta, Charatdao Kongmuang and Sarintip Tantanee
ACRS0113	AB0087	WEB GIS DEVELOPMENT FOR DROUGHT RISK AND DAMAGE MANAGEMENT AT THE FARM LEVEL IN THAILAND
		Sukkarin Auntanon, Chansury W., Nueangjumnong P., Buengklai S., Rattanaburi P., Ratanasupa S. and Warrawatsupparat S.
ACRS0028	AB0007	An Open-Source Approach for Measuring Level of Urbanity
		Kavindi Tharusha Kasthurisinghe, Bandara N.S. and Jayasinghe A.B.
ACRS0033	AB0013	Prediction Of Origin and Trajectory of Marine Debris
		Charanya Manivannan, useendran, Jovina Virgin and Dr. Vani K.
ACRS0199	AB0139	Morphometric Characteristics of Beli Ul Oya Sub-basin of Mahaweli River Basin, Sri Lanka
		Rajapaksha R.M.V.M.,Withanage N.S., Nawarathna R.A.G.C.N.M.and Ekanayake E.R.M.S. and Thrimawithana A.M
ACRS0061	AB0031	Developing a Decision Framework Driven by Land Use Simulation to Evaluate Sri Lanka's National Physical Policies: A Case Study of the National Physical Plan (2023-2048)
		Chathuranga U.D.S.,Warusavitharana E.J.

Room F2 | **Algorithms and Image Processing Techniques**

Reg. Number	Paper Number	Title / Author(s)
ACRS0255	AB0237	Feasibility Analysis of Generating Simulated CAS500-4 Images
		Hongjin Kim and Kim T.
ACRS0167	AB0136	Assessing the performance of feature selection approach for urban Land Use/Cover Classification in Kolkata Metropolitan Area, India
		Prosenjit Barman and Sk. Mustak
ACRS0245	AB0230	Evaluation Method for Geometric Correction Accuracy of Geostationary Environment Monitoring Spectrometer Images
		Seunghyeok Choi, Ban S. and Kim T.
ACRS0062	AB0032	How Has The Port City Construction in Colombo, Sri Lanka, Impacted The Spatial and Temporal Dynamics of The Adjacent Coastline?
		Geethya Thathsarani Fernando and Ranmalee Bandara
ACRS0039	AB0021	Detection, Collection and Management Of Marine Garbage through the Development of an Automated Collector
		Jovina Virgin, Shivaani Suseendran, Charanya Manivannan, Dr. Vani K. and Dr. Balaganesan G.

November 19, Tuesday (13:30 - 15:00)

Room D **Poster**

Reg. Number	Paper Number	Title / Author(s)
ACRS0226	AB0294	Implementation of a Digital Twin for the Management and Monitoring of Transmission Facilities in Mountainous Areas
		AJeong JEON, Lee C.H. and Kim H.G.
ACRS0319	AB0353	Spatial Distribution of pH & Cd in Surface Water Around an Open Landfill
		JASENTHU MESTRIGE UDAYANGANI KALHARI FERNANDO
ACRS0116	AB0070	Geographic Information Data Supporting Development Platform for Smart City Management in Sam Phran, Nakhon Pathom Province, Thailand
		Kunlaporn Kunlayapo, Supaphorn Phumdee and Nattapon Mahavik
ACRS0117	AB0071	Geographic Information Database Platform to Support Decision Making on Forest Fire Extinguishing in Wildlife Sanctuary Thailand
		Supaphorn Phumdee, Kunlaporn Kunlayapo and Nattapon Mahavik
ACRS0043	AB0019	Spatial-Temporal Analysis of Urban Growth in the Suburban Area; Special Reference to the Homagama Divisional Secretariat Division from 1992 to 2022
		Guwani Erangi Kavirathna
ACRS0040	AB0126	Enhancement of chlorophyll-a concentration south of Luzon Strait induced from bio-physical interaction during the PDO cold phase
		Yu-Hao Tseng, Ho C.R.
ACRS0014	AB0122	Castle Investigation Using UAV LiDAR Surveying
		Hideyuki Haijima, Takuya Okamoto and Hajime Nakasha
ACRS0087	AB0322	Constructing High-Level-of-Detail 3D Urban Models Using UAV Data and Ground Scanning, A Case Study in Ha Long City, Quang Ninh Province, Vietnam
		Hung The Pham and Long H.N.
ACRS0273	AB0274	Analyse the Surface Temperature Fluctuation in Matara Municipal Council, Sri Lanka by Utilizing Remote Sensing and GIS
		Nipuna Bhanuka Abeygunawardhana, Janaki Sandamali and Manjula Chathuranga
ACRS0125	AB0174	A generative adversarial network-based anomaly detection in Japanese paddy fields using Sentinel-2
		Shohei Ogawa and Matsuoka M.
ACRS0283	AB0300	*Forest change detection using multi-temporal Sentinel-2 data and 3D-CNN*
		Victor Fedoseev, Shapiro D. and Korchikov E.
ACRS0307	AB0345	*Comparison of Gap-filling algorithms of Sentinel-2A/B NDVI images for monitoring in rice paddy fields*
		Jeong Eun, Sun-Hwa Kim and Tae Ho Kim
ACRS0273	AB0274	Analyse the Surface Temperature Fluctuation in Matara Municipal Council, Sri Lanka by Utilizing Remote Sensing and GIS
		N.B. Abeygunawardhana, Janaki Sandamali and Manjula Chathuranga
ACRS0041	AB0105	*Variation of Chlorophyll-a in the East Asian Continental Margin Seas*
		Chung-Ru Ho and Lu C.Y
ACRS0239	AB0202	*An estimation of chlorophyll-a concentration using Landat-8/OLI data in Hiroshima Bay*
		Seiji Ito, Yoshinari Oguro and Tomohisa Konishi

November 19, Tuesday (15:15 - 16:45)

Room A4   **Student Session**

Coordinator	Mr.S. Sivanantharajh

The student session will provide a platform for participants to exchange ideas and showcase innovations related to geospatial technologies, fostering collaboration and knowledge-sharing among young professionals in the field.

Room B4   **Cloud Computing, Big Data and AI in Remote Sensing**

Reg. Number	Paper Number	Title / Author(s)
ACRS0178	AB0151	Assessing the Performance of Dynamic World Features in Regional Mangrove Mapping Leveraging Google Earth Engine
		Nyein Soe Thwal, Chia A.S. and Liew S.C.
ACRS0244	AB0310	Web-Based AI Model as a Decision Support System to Enhance Precision Farming for Smart Agriculture: Special Reference to Paddy Crop in the Wet Zone of Sri Lanka
		Lakshani Panditharathne and Herath H.M.Badra S.
ACRS0042	AB0018	A Review of Convolutional Neural network-based Object Detection in UAV Thermal Infrared Videos for Human-Elephant Conflict Response
		Kumudu Pathmadewa
ACRS0165	AB0235	Comparison of inpainting methods for generating true orthoimages from single satellite images
		Seunghee Kim and Kim T.
ACRS0131	AB0072	Drought Prediction using Landsat-8 Images and Remote Sensing
		Mithulesh Ponraj, Agilan B., Sourav Kumar N.R.S. and Dr. Vani K
ACRS0236	AB0260	Performance Analysis of CNN and Separable CNN for Land Use and Land Cover Classification in VHR Images Using Object-Oriented Approach with eXplainable Artificial Intelligence
		Elif Ozlem Yilmaz and Kavzoglu T.

Room E4   **Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping**

Reg. Number	Paper Number	Title / Author(s)
ACRS0152	AB0162	Visualization of Multiple Spatial Data using a Game Engine for Route Navigation Planning of Autonomous Boats in Urban Rivers
		Makoto Ishiwata, Nozomi Sadachika, Naoto Kimura, Nobuaki Kubo, Etsuro Shimizu and Masafumi Nakagawa
ACRS0208	AB0161	Identification and Classification of Wetlands to Prioritise Considering the Importance for Flood Mitigation - Western Province, Sri Lanka
		Sulakshi Uthpala, Fernando G.M.T.S., Dayananda H. N., Edussuriya C.H, Hemakumara M. A. A.N., Muthuwatta L.P, Gunawardena A. R., Fernando T.T., Maduwanthi R. G. I, and Stalin T. S.
ACRS0072	AB0035	Geographic Information System And Machine Learning-Based Expressway Accident Modelling
		Harshani MKH Dilshara and Koswatte S.
ACRS0077	AB0038	Geomatics Data Modelling for Integrated Heritage Information System to boost the Archeological Exploration in Sri Lanka
		Nelson Jasin Wijenayake, Prof. Mingyi DU and Prof. Jie JIANG
ACRS0082	AB0059	Spatial Similarity-based Multiple LiDAR Synchronization and Data Falsification Detection for Reliable 3D Mapping
		Arata Nagasaka and Masafumi Nakagawa

Room F4	Photogrammetry and its Applications	
Reg. Number	Paper Number	Title / Author(s)
ACRS0120	AB0076	Trajectory Recovery of Visual Odometry at Corners by Temporal Stereo Point Cloud Registration
		Yusuke Eshima, Kazuha Saito and Masafumi Nakagawa
ACRS0096	AB0056	Efficiency Improvement of SfM/MVS by Omni-directional Camera Network Estimation for Water-borne MMS
		Teruhiko Meguro, Naoto Kimura , Masafumi Nakagawa, Takeshi Komori, Nobuaki Kubo and Etsuro Shimizu
ACRS0183	AB0347	Simultaneous Relative Geometric Orientation and Pseudo DEM Generation from Uncorrected Satellite Images
		Seunghwan Ban and Kim T.
ACRS0078	AB0058	Adjustment of Alignment Error of Disparity Images Around a Crane Generated from Moving Images
		Kojiro Kazama, Susaki J. and Ishii Y.
ACRS0115	AB0068	Real-time 3D Mapping of Construction Sites Using ORB SLAM and Stereo Cameras
		Ryunosuke Ishiguro
ACRS0247	AB0221	Performance Evaluation of Monocular Visual Odometry in Low-light Conditions and Narrow Field of View
		Hongjun Youn and Kim T.

November 20, Wednesday (09:00 - 10:30)

Room A1	Algorithms and Image Processing Techniques	
Reg. Number	Paper Number	Title / Author(s)
ACRS0203	AB0325	Extracting Wood Point Cloud from Terrestrial Laser Scanner Data of a Giant Tree
		Michael Vashni Immanuel Ryadi, Setiawan M.B., Lee C.C., Wang C.K. and Hsu R.C.C
ACRS0211	AB0149	Exploring the Capability of TransUNet Model for Landslide Classification
		Shang Nien Tsai and Fuan Tsai
ACRS0240	AB0211	Estimation of land deformation using the PSInSAR technique in Taiwan
		Yun Chiao Chang and Kuo-Hsin Tseng
ACRS0182	AB0188	Geodetic monitoring of hydraulic structures using remote sensing data
		Marzhan Melsovna Toguzova, Rakhymberdina M.Ye., Assylkhanova Zh.A., Apshikur B., Kapasov A.K. and Kolpakova V.P.
ACRS0274	AB0282	Creating of a geological GIS database of Eastern Kazakhstan using the Kalba-Narym Zone as an example
		Marzhan Yessenbekovna Rakhymberdina, Bekishev Ye.T., Levin E., Assylkhanova Zh.A. and Kapasov A.K.

Room B1	Remote Sensing and its Applications	
Reg. Number	Paper Number	Title / Author(s)
ACRS0169	AB0279	Mapping Cropland Soil Nutrients Contents Based on Multi-Spectral Remote Sensing and Machine Learning
		LIANG ZHU and Bingfang Wu
ACRS0090	AB0165	Detection of Bamboo by Sentinel-2: Evaluation of Algorithm, Seasonality and Spectral Band
		Masayuki Matsuoka and Higo K.
ACRS0236	AB0252	Integrating Deep Learning with eXplainable AI for Wildfire Severity Analysis Using USGS FIREMON dNBRs in Turkey
		Elif Ozlem Yilmaz and Kavzoglu T.

Room C1 **ISRO Session on Earth Observation**

Time	Title / Speaker (s)
09:00 - 09:30	Overview of ISRO's Earth Observation Program
	Dr. Prakash Chauhan Director - NRSC, ISRO
09:30 - 10:00	ISRO EO Data Application for Societal Benefits
	Dr. Sameer Saran DGM - RRSC North, NRSC, ISRO
10:00 - 10:30	Demonstration on ISRO EO Portals
	Ms. Anjani RN Group Head, NRSC, ISRO

Room F1 **Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping**

Reg. Number	Paper Number	Title / Author(s)
ACRS0144	AB0091	Assessing the Future Vulnerability of Coastal Salinity Intrusion Using the GALDIT Model and R: A Case Study from Negombo to Galle, Sri Lanka
		Egoda Gamage Dilmi Sithara and Ranasinghe A.K.R.N.
ACRS0204	AB0158	Development of Sarawak Land Cover System with Space Technologies (LIMPAS)
		Hana Mohamed Jamil, Shahruddin Ahmad, Nur Amani Yusoff, Nurul Suliana Ahmad Hazmi, Norimaniah Mazelan, Hazil Sardi Soliano, Zuraimi Suleiman, Ramzi Abdillah, Stephen Ling Jin Hua and Tony Octovius Ajol
ACRS0058	AB0267	A Digital Twin Urban Flood Forecasting System Integrating a Weather Forecast Model and an Urban Flood Model
		Meng-Yuan Chen, Chih-Yuan Huang, Chian-Yi Liu, Jiun-Huei Jang, Tien-Hao Chang and Shen-Cha Hsu
ACRS0150	AB0093	The study of the physical characteristics of thunderstorm clouds that cause hailstorms during the summer season using weather radar data in northern Thailand with geographic information systems
		jamorn Kunwilia, Nattapon Mahavik, Fatah Masthawee, Sarawut Arthayakun, Rangsan Ket-Ord, Ukrit Samaksaman, Apichaya Kangerd, Wirachart Promta, Chanin Umponstira, Charatdao Kongmuang and Sarintip Tantanee
ACRS0173	AB0355	Development of Web Based Geospatial Application Using FOSS4G for Matara District of Sri Lanka
		Amila Madushan Manamperi
ACRS0292	AB0334	Mapping of Multiple Hazards Using Remote Sensing and GIS in Gandaki Province, Nepal
		Krishna Prasad Bhandari, Bikash Sherchan, Nabaraj Neupane and Sujan Subedi

November 20, Wednesday (10:45 - 12:30)
Room D **Poster**

Reg. Number	Paper Number	Title / Author(s)
ACRS0040	AB0126	Enhancement of chlorophyll-a concentration south of Luzon Strait induced from bio-physical interaction during the PDO cold phase
		Tseng Y.H., Ho, C.R.
ACRS0041	AB0105	Variation of Chlorophyll-a in the East Asian Continental Margin Seas
		Ho C.R.,Lu C.Y.
ACRS0317	AB0346	Inter-comparison of Aerosol Optical Depth values measured by Portable Sunphotometer and AERONET/SKYNET ground stations
		INKWON BAEK,Choi J.H., Kim S.H., Jung J.H. and Jeon W.J.
ACRS0316	AB0344	Improvement of GK-2B GOCI-II sensor-based Land products to Enhance Usability
		sun ae KIM, Baek I.K., Eun J. , Choi J.H. and Kim S.A.
ACRS0318	AB0361	Develop of Cloud Detection Method For PlanetScope Imagery
		Sung HeeWoo, W.W. Seo, J.H. Son, S.M.Park, Y.S. Kim andT.J.Kim
ACRS0210	AB0306	Analysis of Long-term Ground Subsidence Displacement of a Transmission Facilities using Multi-temporal SAR Imagery and PSInSAR
		Yongjae Chu, Seo W.W., Kim H.G. and Rhee S.A.
ACRS0154	AB0096	Drone Technology Deployment in Landslide Emergencies: A Case Study of Major Landslides Recorded in Sri Lanka During the Second Inter Monsoon of 2023
		Pasindu Bhathiya Wickramasinghe, Kumarasiri W.K.C., Jayaprakash S., Silva C.D. and Sabeshan L.
ACRS0015	AB0109	Earthquake disaster investigation using a Compact MMS
		Takuya Okamoto, Hideyuki Haijima, and Teruyoshi Hatano
ACRS0200	AB0197	Monitoring Electrical Substations Using Land Surface Temperature Derived from Time-Series Landsat Satellite Imagery with Google Earth Engine
		YUN JAE CHOUNG, Ho-Kyeong Jang and Myung-Hee Jo
ACRS0251	AB0225	Application of InSAR technology to investigate the surface deformation of the 0403 Hualien seismic series
		TSAI YUN HSIEH, Hsuan Ren and Chung Pai Chang
ACRS0283	AB0305	Analysis of Phytoplankton in the Volga River Using Satellite Monitoring with Sentinel-2 Data
		Victor Fedoseev, Ivanova Yu.S., Gorbunov M.Yu., Tarasova N.G. and Umanskaya M.
ACRS0200	AB0189	Development of a Regression Model to Estimate Water Quality in Riverine Wetlands Using Sentinel-2 Satellite Imagery
		YUN JAE CHOUNG, Myung-Hee Jo and Seon Woo Kim
ACRS0287	AB0308	Sensor Fusion-Based Motion Compensation in 3D LiDAR Point Clouds
		Mukesh Kumar Verma, Yadav M., Singh D. and Singh D.P.
ACRS0175	AB0116	Calibration of UAV Multispectral Images for Uniform Reflectance Using Vignette and BRDF
		Chansol Kim, Seungchan L., Cheonggil Jin and Chuluong C.
ACRS0254	AB0236	Underwater Image Mosaic of AUV System Using Photogrammetry
		Cheolwook Kim, Ko H.W., Lim P.C., Yoon W.S. and Kim T.J.
ACRS0158	AB0117	Flood Assessment Method for Heritage Conservation at the Site Scale: A Case Study of PuZhou Ancient City Site, China
		Zhu Z.X. , Dong Y.Q. and Hou M.L.

November 20, Wednesday (13:30 - 15:00)

Room A3   Remote Sensing and its Applications

Reg. Number	Paper Number	Title / Author(s)
ACRS0216	AB0166	Water Conservation Function and Sustainability Assessment of the Yellow River Source Region in China
		Weili Jiao, Du Y.H. and Long T.F.
ACRS0308	AB0342	Utilizing LiDAR Technology for Archaeological Surveys: Unveiling Hidden Insights.
		Piyawan Charubhummika,Rerkchai Natheenam, Norachet Auggima & Sirikul Hutasavi and Siam Lawawirojwong
ACRS0101	AB0152	Applicability Assessment of Drone Mapping for Causal Analysis in Landslide Damage Sites
		Eontaek Lim, ung Y.H. and Kim S.S.
ACRS0112	AB0085	Heat Risk Mapping of Vulnerable Population using Multi-temporal Satellite Observations in Nakhon Ratchasima Province, Thailand
		Kulapach Lhapawong, Kitratporn N., Kaewmesri P., Pleebut M., Chaikampa A., and Sukawattanavijit C.
ACRS0094	AB0045	Impacts of Land cover changes on the rainfall-runoff and sediment transport processes in the Kelani River
		Pavithra Sudeshika Dissanayaka Mudiyanselage, Imamura Y., Harada D. and Egashira S.

Room C3   Remote Sensing and its Applications

Reg. Number	Paper Number	Title / Author(s)
ACRS0286	AB0307	Assessment of Extreme Temperature Changes in Chauk Township, Central Myanmar, Using Remote Sensing and GIS
		Khin Mar Yee, Mu Mu Than, Thidar Shwe, Aung Aung , Wai Yan Soe and Win Htun Paing
ACRS0056	AB0108	Developing a Novel Remote Sensing-Based Framework for sustainable irrigation water use
		Darshana Wickramasinghe, Wang S.H., Wang L. , Tian H.J. , Liu Z.J., Xu M. and Cao C.X.
ACRS0289	AB0312	A Modern Approach to Land Area Estimation in Sri Lanka Using Sentinel-2 Images and Google Earth Engine
		Mafaz Fareez
ACRS0181	AB0144	Evaluation of Deformation Detection Performance of Highway Slope Using SAR Image Simulator
		Naoya Iwaki, Susaki J., Ishii Y. and Oba T.
ACRS0155	AB0185	Revealing Hidden Spatial Relationships in Urban Areas Using Remote Sensing: Functional Boundary Delineation of Dambulla
		Nilan Shalinda Abeysiriwardhana, Thashmila S.A.C., Warusavitharana E.J. and Munasinghe J.N.

Room E3   **Remote Sensing and its Applications**

Reg. Number	Paper Number	Title / Author(s)
ACRS0017	AB0261	Geological Surface Conditions Mapping of 2021 Post-Earthquake of Mamuju-Majene using satellite images and field observations
		Ilham Alimuddin, Jamrud Aminuddin, A. Bahrul Hidayah, Arifuddin Jamil, Nur Alfia Hidayah, Intan Azizah Putri, Taufiq Alibrah, Rayhan Ramadhan and Muh. Ichsan
ACRS0328	AB0369	Multi-frequency Observation of Soil Moisture and Vegetation Optical Depth from Space
		Tianjie Zhao, Zhiqing Peng , Lu Hu and Jiancheng Shi
ACRS0095	AB0048	Deep Learning based Approach to Assess the Impact of Cyclone Ockhi on Coconut Tree Populations using Satellite Images
		Heltin Genitha Cyril, Athira A.R., Gokula Lakshmi K. and Tamizhselvi A.
ACRS0104	AB0054	MANGROVE FOREST EXTRACTION FROM COSMO-SKYMED SECOND GENERATION X-BAND MULTI-POLARIZATION DATA
		Chenghua Shi, Ken Yoong Lee, Chenguang Hou, Kim Hwa Lim and Soo Chin Liew
ACRS0227	AB0186	Sea Ice Experiment for Examining the Relationship Between Sea Ice Thickness and Its Reflectance
		Kohei Cho
ACRS0114	AB0089	Modelling Bio-Optical Properties of Singapore Waters: A Comparison between Field Spectral Measurements and Synthetic Reflectance Spectra
		Ryan Tan, Amihan Yson Manuel, Sandric C. Y. Leong, and Soo Chin Liew

Room F3   **Global Navigation Satellite Systems**

Reg. Number	Paper Number	Title / Author(s)
ACRS0231	AB0238	Assessing the Impact of Base Station Proximity on Continuous Operating Reference Stations (CORS) Accuracy and Its Implications for Geospatial Surveying in Sri Lanka
		Nishamani Tharunika, Perera A.L.S.C., Dissanayaka D.M.A.P.,Nethsara M.G.S. and Perera N.S.W.
ACRS0291	AB0313	Determination of Orthometric Heights by GNSS Observations through an Accurate Geoid Undulation Model for Sri Lanka
		Hiranya Lakshani, Maduwanthi L. R. A. and Kekulawala K. V. S. P.
ACRS0306	AB0329	Improving Accuracy of Geoid Undulation Model Using Machine Learning Approaches for Sri Lanka
		Shameera Sampath Udayanga Jayawardana, Jayasinghe U.D.T.M. and Kekulawala K.V.S.P
ACRS0361	AB0413	The Performance and Clock Error Prediction Analysis of BDS Satellite Clock: A Comparison between BDS-2 and BDS-3
		Zhenghua Dong
ACRS0314	AB0337	Estimation of forest stereoscopic above-ground biomass based on airborne LiDAR in Daxinganling, China
		Xuan Mu
ACRS0357	AB0404	Assessment of Land Use Land Cover Accuracy Using Geospatial Technology
		Sowmya and Raju Krishna Chalannavar

November 20, Wednesday (15:30 - 17:00)
Room E4   Photogrammetry and its Applications

Reg. Number	Paper Number	Title / Author(s)
ACRS0073	AB0046	Streaming Point Cloud Segmentation of GNSS/SLAM-LiDAR and Multi-beam Scanning Sonar Data for Urban River Mapping
		Masafumi Nakagawa, Naoto Kimura, Nozomi Sadachika, Takeshi Komori, Nobuaki Kubo and Etsuro Shimizu
ACRS0109	AB0205	Applying Fisheye and Dual-Fisheye Camera in Rain Gauge Exposure Estimation
		MIENYU PENG and Jaw J.J.
		Remote Sensing and its Applications
ACRS0303	AB0327	Spatiotemporal Distribution and Occurrence of Surface Phytoplankton Blooms Using Spectral Indices Derived from Sentinel-2 Imagery in the Upper Gulf of Thailand
		Teerawat Suwanlertcharoen, Siam Lawawirojwong and Kampanat Deeudomchan
ACRS0054	AB0028	Precipitable Water Vapor observation using CLAS augmented signal with a view to real-time estimation
		Junichi Takiguchi, Yuichiro Tsukamoto and Mikiko Fujita

Room F4   Remote Sensing and its Applications

Reg. Number	Paper Number	Title / Author(s)
ACRS0353	AB0401	*Stand density mapping by integrating Airborne Laser scanning data, Sentinel-1, Sentine-2 and topographic information in Daxinganling forests*
		Jinchen Wu, Xuan M. and Dan Z.
ACRS0036	AB0150	Collapse Accident Site Investigation using Terrestrial LiDAR Surveying
		Yonghan Jung, Lim E.T., Koo S. and Kim S.S.
ACRS0038	AB0017	Remote Sensing-Based Risk Assessment Indexing of Potential Threats to Drinking Water Sources
		Sourav Kumar N R S, Agilan B., Mithulesh P. and Dr. Vani K.
ACRS0018	AB0003	Fluctuations in turbidity in response to rainfall and land use associated to river basins experiencing elevated flood levels
		Gavindya Kawshani, Jayakody S., WanasinghaW.A.K.I., Sisira H.D., Jiwei Li and Shapiro A.C.
ACRS0156	AB0233	Analyzing Methane (CH4) Emissions in Rice Fields Using Satellite Data (Case study: Suphan Buri Province, Thailand)
		Petjaraj Techakriangkaikul, Nattharika Khamhiang, Phanuwat Jansri, Jongphon Chantharangsee, Ratchada Kamching, Theerasak Ooppakarn, Wissawa Jenjob and Khruewan Champangern

November 21, Thursday (09:00 - 10:15)

Room E1   Photogrammetry and its Applications

Reg. Number	Paper Number	Title / Author(s)
ACRS0122	AB0258	Mesh Models as Enhancements to Point Clouds-Based Surveying and Mapping
		JHIH SYUAN JHUANG and Jaw J.J.
ACRS0209	AB0154	System Calibration of LiDAR-Vision Multiple Sensors Module Mounted on A Ground Disaster Investigation Robot
		SeongSam Kim, Jung Y.H., Lim E.T. and Koo S.
ACRS0029	AB0066	Point Cloud Generation by Gimbal-mounted LiDAR and Multi-directional Camera for Lunar Surveying
		Rikako Shigefuji, Masafumi Nakagawa, Keitaro Kitamura, Masanori Takigawa and Taizo Kobayashi
ACRS0107	AB0209	Self-Adaptive Point Cloud Simplification with Feature Preservation
		LIN HSUAN HUANG and Jaw J.J.

Room F1   Remote Sensing and its Applications

Reg. Number	Paper Number	Title / Author(s)
ACRS0249	AB0226	Building Change Detection Based on Roof Feature Analysis Using Single Satellite Imagery and Building Database
		Hyeona Kim and Kim T.
ACRS0034	AB0289	Geology of Iron Ores in Arabic Countries and importance its study by Remote Sensing Techniques
		Mohamad Fajr Rukieh
ACRS0140	AB0083	Observed Precipitation Patterns of Flash Floods in Hindu Kush Himalaya and Swiss Alps
		Maung Moe Myint
ACRS0084	AB0099	GROUND DEFORMATION MONITORING OF LEWOTOBI VOLCANO BASED ON TIME SERIES INSAR METHOD
		Agustan, Estu Kriswati, Marina C.G. Frederik, Ilham Alimuddin and Takeo ITO
ACRS0143	AB0129	The Landslide Detection in Kaohsiung City using the Integration of Sudden Landslide Identification Product and Remote Sensing Data
		Sheng Yun Yan, Hsu Yi-Yun,Chang Li-Yu and Chang, Michelle
ACRS0037	AB0012	Effect of the Eco-Based Flood Mitigation Projects on Urban Flooding: A Case Study in Sri Jayawardenepura Kotte
		Wijesooriya H.S.,Manjula Chathuranga and Dinusha K.A.

Room G1   Remote Sensing and its Applications
Geo-Spatial Science, Geographic Information Systems (GIS), Web GIS and Mapping

Reg. Number	Paper Number	Title / Author(s)
ACRS0267	**AB0263**	Enhanced Cloud Removal in Sentinel-2 Imagery using Hybrid Spatiotemporal and Cycle Consistent Generative Adversarial Networks
		Lathaselvi G., Lingeswaran A. and Melvin Fredrick J.S.
ACRS0037	AB0012	Effect of the Eco-Based Flood Mitigation Projects on Urban Flooding: A Case Study in Sri Jayawardenepura Kotte
		Wijesooriya H.S.,Manjula Chathuranga and Dinusha K.A.
ACRS0163	AB0110	Geospatial Analysis of the Coastline Changes in the Southwestern Belt in Sri Lanka.
		Maneesha Tajmini Pavithrani and Arunashantha H.A.S.
ACRS0172	AB0147	"Assessing the Transferability of Forest Volume Estimation Models between Hokkaido and Kyoto Using Remote Sensing Data
		Iizuka K., ,Nakata Y., and Ishiyama N."
ACRS0302	AB0330	Smart Urban and Rural Development with Digital Twins and GIS
		Deepaksakthi V K, Farhan Akthar K., Tamizhselvi A. and Javid Ali L.

Room C & D Merged		Keynote Speech
10:15 - 11:15	Key note (4)	Earth Observation data and intelligent methods for Disaster Management: supporting resilience.
		Prof. Jegannath Aryal

3.3 Special Session

There are number of special sessions organized in this ACRS 2024 excluding Four (4) Keynote Speeches, two (2) Plenary Sessions. They are,

1. WEBCON
2. JAXA session on EO dash board
3. ISPRS & AARS Joint Session on SAR
4. White Elephant Session
5. Commercial Session
6. Special Session on "Expanding the roles of international societies in Asia"
7. Satellite Program
8. Student Session
9. ISRO Session on EO

These sessions are designed to offer deep insights into emerging trends, innovations, and global initiatives within the Remote Sensing and geospatial community with the diversity of speakers and the international scope of the event.

WEBCON Session

In today's interconnected world, internet-based services provide easy access to satellite/aerial images and other specialized scientific information globally. As we navigate this landscape, our focus shifts to what lies ahead.

We are delighted to announce the return of WEBCON at ACRS 2024, seeking innovative and creative ideas in sustainable development and artificial intelligence (AI) within remote sensing and spatial information sciences and applications.

This will be a very good opportunity to young scientist have innovative and creative ideas in web based applications under the theme "Stepping towards economic sustainability through Spatial Data Services". Those who wish to join this competition will be awarded by selecting the best three web applications.

To foster the engagement of students and young scientists in the field, AARS will host a web contest at the 45th ACRS. Students, young scientists, and all "makers" registered for ACRS 2024 can be submitted innovative projects. These projects should leverage internet-enabled devices, digital fabrication technologies, virtual and augmented reality or other tools to create smart solutions. These solutions should address the world's most demanding problems envision the future of sustainable development, AI in Remote Sensing and spatial information sciences.

JAXA's Session on Earth Observing Dashboard

November 17th 2024
Session Room Number: C
Moderator: Mr. Yuta Tochigi (JAXA)

Time	Session / Title	Speaker
13:45 - 14:00 [15min]	Opening remarks and introduction to EO Dashboard	Mr. Yuta Tochigi (JAXA)
14:00 - 15:00 [60min]	Lecture and Hands on Session of EO Dashboard with OGC WMS/WMTS	Ms. Kaori Kuroiwa (RESTEC)
15:00 - 15:15 [15min]	Q&A	

* Participants can do hands-on exercises with their own PCs in this session.

SAR Session

The working group on "Active microwave remote sensing" of Commission III (Remote Sensing) of ISPRS aims to foster the visibility and impact of research in the field of active microwave remote sensing, most notably represented by synthetic aperture radar (SAR) and radar altimetry technologies, in the ISPRS. In this context, we focus both on methodological developments, as well as relevant applications in the field of Earth observation.

In ACRS 2024, we organize this special session and invite SAR related presentations to share the experience and foster the SAR research activities.

Satellite Program

This session will be held on November 19th 2024 and the session will be coordinated by Prof. Sameer Saran. In this session, special speech will be delivered by Dr. Hyo-Suk Lim on Space Program of KARI

Technical and recreational gathering of young Students (Students Session)

This gathering will bring together young students participating in the ACRS, all under the age of 35. It will provide an excellent opportunity for them to share knowledge and foster stronger international collaboration among experts in the field. This session has been scheduled on November 19th 2024 from 16:30 to 20:00 at the Thepanyaki Room, Hotel Monarch Imperial. This exclusive event is open to young scholars under 35 years of age, with a maximum of 35 participants. The event will feature engaging discussions on the latest advancements in Remote Sensing.

To conclude the evening, attendees will have the chance to enjoy a variety of authentic Sri Lankan traditional foods, offering a delicious taste of local culture. Don't miss this unique opportunity to network, learn, and celebrate the future of Remote Sensing.

ISRO Session on Earth Observation

This session will be held on 20th November 2024. This will be coordinated by Prof. Sameer Saran.

Special session on "Expanding the roles of international Societies in Asia"

Date: November 18th 2024

Time: 15:30-17:00

Room: C

Activities of AARS/ACRS	Prof Kohei Cho, AARS	(20 min)
Activities of GRSS	Dr. Hong Tat, GRSS	(25 min)
Activities of ISPRS	Prof. Jiang Jie, Stapel Gordon, ISPRS (30 min)	
Q & A	(15 min)	

White Elephant Session

White Elephant Session will be conducted on 17th November 2024 by leading professionals in the field of Remote Sensing. The coordinator is Prof. Kohei Cho. Prof. Shunji Murai will join the session online.

White elephant session offers a platform for attendees to gain insights from industry leaders learn about cutting edge advancements and connected with peers.

Commercial Session

LOC has provided opportunity to sponsors to promote /present their latest products among the participants. 15 minutes is allocated for each presentation and will be conducted on18th November. This opportunity is given only for Platinum, Gold and Silver category sponsors.

Time	Presenter
13.30-13.45	Presentation by Gaia3D
13.45 – 14.00	Presentation by ESRI Inc.

4 Exhibition and Sponsors

There are number of exhibitors and sponsors' put their hands together with us for success the event. They have allocated spaces for their activities in number of rooms according to the category, in second floor of the following map.
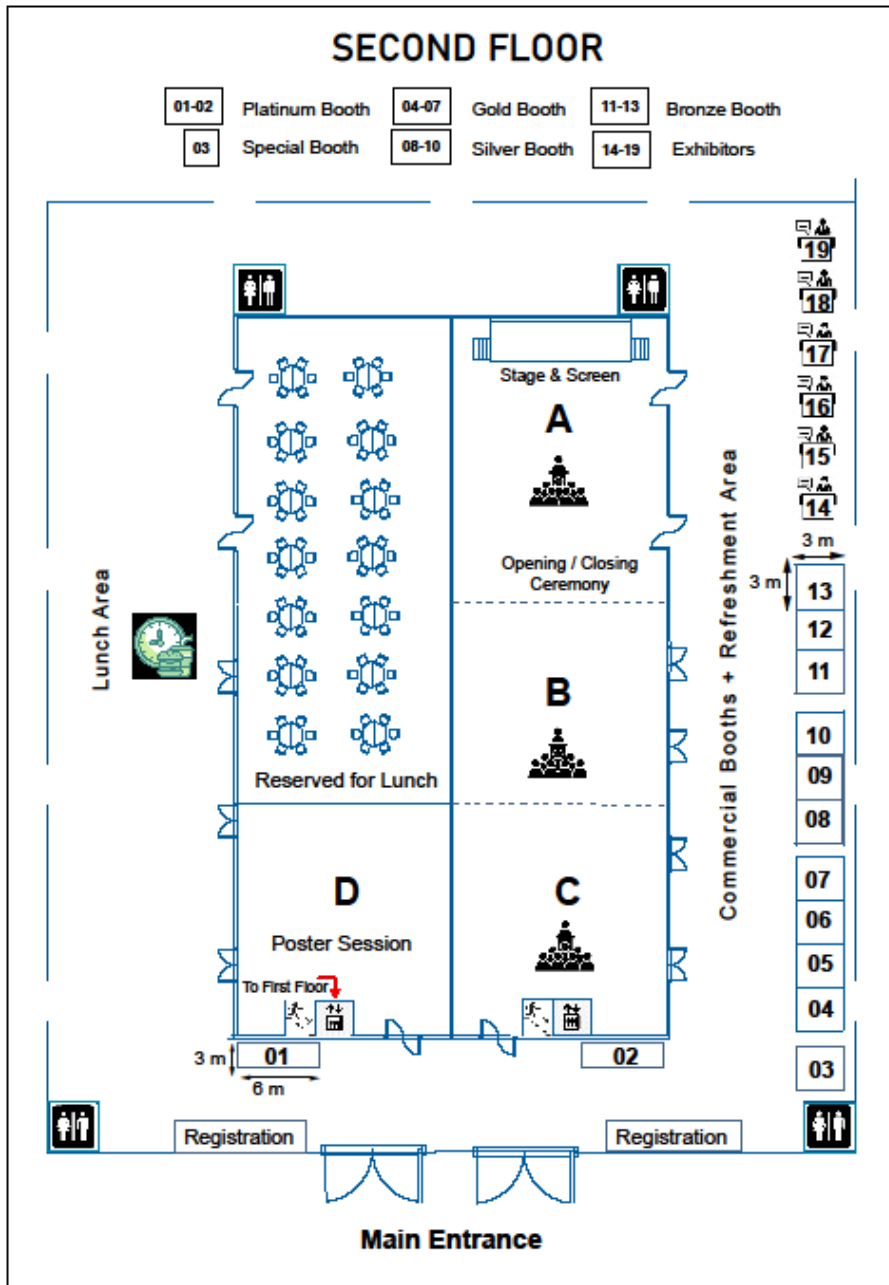
We extend our heart full gratitude to our esteemed sponsors for their generous support and commitment

Special Sponsor

Japan Aerospace Exploration Agency (JAXA)

2-1-1 Sengen, Tsukuba, Ibaraki 305-8505, Japan
https://earth.jaxa.jp/

Silver Sponsor

Gaia3D,Inc

#313 Hanshin S-MECA 65 Techno 3-ro, Yuseong-gu, Daejeon, Republic of Korea.

https://www.gaia3d.com/

Environmental Systems Research Institute, Inc.(Esri)
https:// www.esri.com

GIS Solutions (Private) Limited
(Sole authorized distributor for Esri, in Sri Lanka)
370, Galle Road, Colombo 3, Sri Lanka.

Exhibitor

**Remote Sensing
Technology Center of Japan**

TOKYU REIT Toranomon Bldg.
3F, 3-17-1 Toranomon, Minato-
ku, Tokyo 105-0001
https://www.restec.or.jp

Genesiis Software (Pvt) Ltd.
No.16 , 5th Lane, Colombo 3,
Tp. 011 7765600

5   General Information

5.1 Official and Social Events

Opening Ceremony

The ACRS 2024 Opening Ceremony will formally launch the conference, welcoming esteemed speakers, distinguished guests, and participants. This event will set the tone for an inspiring week of knowledge exchange and collaboration in the field of remote sensing. Opening Ceremony Program on 17th November 2024

09.30	Welcoming guests & Lighting Oil Lamp, National Anthem, Display ACRS History Video
09.55	Welcome Address & Opening Remarks by Chairman of Local organizing committee, Surveyor General Mr. W. Sudath L.C. Perera
10.05	Address by AARS General Secretary Prof. Kohei Cho
10.10	Address by Chief Guest Hon. Prime Minister of Democratic Socialist Republic of Sri Lanka, Dr. Harini Amarasuriya
10.20	Address by ISPRS Secretary General Dr. Jiang Jie
10.25	Address by GRSS President Dr. Mariko Burgin
10.30	Dr. Lal Samarakoon Memorial video
10.33	Awards Session

- Shunji Murai Award by Japan
- Green Asia Award by Chinese Taipei
- Choen Kim Award by KSRS Korea
- Chen Shupen Award by China

10.50	Vote of Thank by Additional Surveyor General, Mr. U.M.A.B. Alahakoon
10.55	Group Photo
11.00	Coffee Break

Closing Ceremony

The Closing Ceremony will mark the conclusion of ACRS 2024, celebrating the achievements of the conference and recognizing key contributors. Highlights from the week will be recapped, along with remarks on future directions for the ACRS community.

Closing Ceremony program on November 21st , 2024

11.00	Beginning Announcement
11.05	Present the Report of 45th ACRS, by Chairman Local Organizing Committee, Surveyor General, Mr. W. Sudath L.C. Perera
11.15	Words of Encouragement by AARS General Secretary Prof. Kohei Cho
11.20	Awards Session

- JSPRS Award by Japan
- ISRS Geospatial Award by India
- AARS Innovation Award by China
- Young Scientist 10 Awards by Sri Lanka
- WEBCON 3 Awards by Sri Lanka

12.15	Promotion of ACRS 2025 by Indonesian General Chair of ACRS 2025
12.30	Vote of thanks by Secretary to the Local Organizing Committee, Deputy Surveyor General, Ms. K.L.B.I. Surangani

Award Ceremony

This ceremony will recognize and honor exceptional research contributions and presentations made during the conference. Awards will be presented to individuals and teams whose work has made a significant impact in the field of Remote Sensing.

ISRS Asian Geospatial Award (2024)

The ISRS Asian Geospatial Award 2024, established by the Indian Society of Remote Sensing (ISRS), recognizes outstanding contributions in Remote Sensing and GIS Technology. It includes a prize of INR 25,000, highlighting the importance of innovative research and applications in the geospatial field. This award aims to encourage further advancements and excellence in these critical areas of study, promoting the development of new technologies and methodologies within the discipline.

Shunji Murai Award

The Shunji Murai Award, presented at the Asian Conference on Remote Sensing (ACRS), honors young scientists for exceptional papers. The award includes a certificate and travel support of USD 1000, provided by the Japan Society of Photogrammetry and Remote Sensing (JSPRS), to facilitate attendance at ACRS. Selection is made by an Evaluation Committee of four to seven distinguished professionals from AARS Ordinary and Associate Members. This initiative aims to encourage and support emerging talent in the field of remote sensing, fostering future advancements in the discipline.

Choen Kim Award of the KSRS

The Choen Kim Award of the KSRS fosters academic and social bonds among AARS members by recognizing contributions to friendship during ACRS events. The awardee receives $1,000, donated by Prof. Choen Kim. Nominations are submitted by AARS members, and the Award Selection Board comprising Prof. Choen Kim and board members from the Korean Society of Remote Sensing-evaluates candidates to choose the recipient. This initiative promotes collaboration and camaraderie within the remote sensing community and strengthening connections among scientists.

CSPRS Green Asia Award (2024)

The CSPRS Green Asia Award 2024, sponsored by the Chinese (Taipei) Society of Photogrammetry and Remote Sensing (CSPRS), promotes research aimed at creating a greener Asia through remote sensing and spatial information technologies. The award consists of USD $300 (or equivalent gifts) and a certificate, with two winners to be selected. One winner will be chosen from papers published in the Asian Journal of Geo-informatics (AJG) in 2023-2024, while the other will be selected from submissions to the 2024 Asian Conference on Remote Sensing (ACRS-2024).

JSPRS Award 2024

The JSPRS Award 2024 is designed to encourage young scientists and students by recognizing authors aged 35 or younger who submit outstanding first-author papers and deliver excellent presentations at the Asian Conference on Remote Sensing (ACRS). Each awardee will receive a certificate during the ACRS closing ceremony. Sponsored by the Japan Society

of Photogrammetry and Remote Sensing (JSPRS), the award highlights the contributions of emerging talent in the field. The committee is chaired by Professor Junichi Susaki from Kyoto University, Japan, reflecting the award's commitment to fostering the development of young researchers in Remote Sensing and geo-informatics.

CHEN Shupeng Award

The CHEN Shupeng Award, initiated by the Chinese National Committee for Remote Sensing (CNCRS) in 2009, honors an individual each year for significant contributions to AARS and/or ACRS. The award covers travel expenses up to USD 2000, enabling the recipient to attend the upcoming ACRS. Its purpose is to recognize and celebrate the efforts of retired members who have greatly impacted the success of AARS and ACRS, allowing them to reconnect with the community.

Student Award- 2024

The Student Award 2024 aims to encourage young scientists and students by recognizing 10 authors under 35 who present outstanding papers or posters at ACRS 2024. This will be sponsored by the Local Organizing Committee (LOC). Each awardee receives a certificate and a memorable gift, presented during the closing ceremony of ACRS 2024. This initiative fosters the growth of young talent in the field of Remote Sensing and Geo-informatics.

AARS Innovation Award

The AARS Innovation Award was initiated by the Chinese National Committee for Remote Sensing (CNCRS) in 2009. Each year, the award will be given to two persons whose papers have obvious innovation in theory, method, and applications.

The purpose of this award is to encourage the young remote sensing scientists or students from Asian countries or regions to make the innovative research works in the field of Remote Sensing science and technologies.

The winners will be granted the certificates of AARS Innovation Award with a gift as encouragement. At the same time, the winners will receive the right to publish their papers after peer review on the Journal of Remote Sensing without charge. In addition, the winners will be present one year free subscriptions for Journal of Remote Sensing. The prize will be supported by Chinese National Committee for Remote Sensing (CNCRS).

Special Event: Tribute to Dr. Lal Samarakoon

As a heartfelt tribute, ACRS 2024 will feature a special event honoring the late Dr. Lal Samarakoon for his invaluable contributions to the field of Rmote Snsing and Gospatial science. A commemorative video presentation will celebrate Dr. Samarakoon's life, highlighting his pioneering research, dedication to capacity building, and significant impact on advancing Remote Snsing applications in Asia and beyond. This tribute aims to recognize his legacy and express gratitude for the lasting influence he has had on both the scientific community and numerous individuals in the field.

Colombo City Tour

ACRS 2024 attendees are invited to explore the vibrant city of Colombo through an organized Colombo City Tour, offering a perfect blend of cultural heritage and modern attractions. As Sri Lanka's bustling commercial capital, Colombo is a city of rich history, dynamic markets, and stunning architecture. The guided tour will take participants to key landmarks such as:

Visit Old Parliament of Sri Lanka and, Explore Town Hall and Dutch Wolvendaal Church, Nelum Pokuna (Lotus Pond) and Gangaramaya Temple: One of the most important temples in Colombo, blending Sri Lankan, Thai, Indian, and Chinese architectural styles, showcasing stunning religious relics and a museum.

Participants will experience Colombo's diverse culture, rich history, and modern charm, all while enjoying the company of fellow ACRS attendees. This tour promises a memorable experience, allowing visitors to immerse them in the unique atmosphere of this fascinating city.

Complementary Excursion to Down South

This event will be sponsored by Sri Lanka Convention Bureau.

The Complementary Excursion to Down South offers ACRS 2024 participants an enriching journey through some of Sri Lanka's most captivating destinations. After departing from Monarch Imperial, the adventure begins with a scenic drive via the Southern expressway to Ahangama, where participants will visit the Virgin White Tea Plantation. Here, they will experience firsthand the unique tea-making process of Sri Lanka's famed white tea, known for its exquisite taste and meticulous harvesting methods. The journey continues to the historic Galle Fort, a UNESCO World Heritage Site. Attendees will explore the well-preserved colonial architecture and fascinating history of the fort through a guided walking tour, which includes a visit to the Galle Fort Museum. Following lunch at a local restaurant within the fort, participants will head to Ambalangoda, known for its rich cultural heritage in traditional mask-making. A stop at a Sri Lankan Traditional Mask and Handicraft shop will offer insights into the artistry behind these colorful creations, deeply rooted in Sri Lankan folklore and rituals. The day concludes with a relaxing drive back to Monarch Imperial, providing a perfect blend of historical exploration, cultural discovery, and natural beauty along Sri Lanka's southern coast.

Technical Tour to the Survey Department (SD)

As part of ACRS 2024, participants are invited to engage in a Technical Tour to the Survey Department (SD), where they will have a valuable opportunity to gain insights into the department's essential functions and modern practices. This tour will encompass several key areas:

Activities of the Survey Department:

Participants will be introduced to the diverse range of activities undertaken by the SD, including national mapping, cadastral surveys, land administration, and the provision of geodetic control. This overview will highlight the critical role the SD plays in the development and management of national land resources.

Use of Modern Technology by SD:

The tour will showcase the integration of cutting-edge technologies within the Survey Department, such as Geographic Information Systems (GIS), Global Navigation Satellite Systems (GNSS), and advanced Remote Sensing tools. Attendees will learn how these technologies enhance the accuracy and efficiency of surveying operations.

Methods of Spatial Data Capturing and Storage:

Participants will explore the sophisticated methods employed by SD for spatial data collection, including the use of drones for aerial surveys, satellite imagery, and traditional ground-based surveying techniques. Additionally, the tour will provide insights into the

robust data storage systems and Spatial Data Infrastructure (SDI) utilized by the SD to maintain comprehensive national geospatial databases.

Production Processes: The visit will also cover the production processes involved in generating maps and other geospatial products. Participants will gain an understanding of how the SD updates and distributes these resources to support various sectors, including urban planning, disaster management, and environmental monitoring.

This Technical Tour to the Survey Department during ACRS 2024 will equip attendees with a deeper understanding of the innovative practices and contributions of the Survey Department, emphasizing its pivotal role in advancing geospatial science and technology in Sri Lanka.

Cultural night

The Cultural Night at ACRS 2024 promises an immersive journey through the vibrant traditions, music, and dance of Asia, celebrating the rich cultural heritage of the region. As an integral part of the Asian Conference on Remote Sensing, this event brings together participants from diverse backgrounds, offering a unique opportunity to share in each other's customs and artistic expressions. It's an evening designed not only to highlight the spirit of collaboration but also to foster a deeper appreciation for the unique cultures represented at the conference. From traditional performances to contemporary displays, the Cultural Night will create an environment where attendees can connect, relax, and enjoy a memorable evening showcasing the rich tapestry of Asian culture.

5.2 Transportation

Free shuttle services will be provided as published in ACRS 2024 official web link. *https://www.survey.gov.lk/ACRS2_024/shuttle_service.php* Additional information about local public transportation options will also be available for participants wishing to explore the area independently.

5.3   Other Useful Information

ACRS 2024 aims to make your experience enjoyable and seamless. Information on local dining, currency exchange, emergency contacts, and nearby attractions will be available in the conference booklet and website. Conference staff will be present on-site to provide assistance with any additional questions or concerns.

Location Map